

STAFF REPORT

DATE: June 30, 2015

TO: City Council

FROM: Robert A. Clarke, Public Works Director/City Engineer
Michael Mitchell, Principal Civil Engineer

SUBJECT: Plans, Specifications and Estimate Approval and Award for 2015 Pavement Rehabilitation Project, CIP 8250

Recommendation:

1. Approve the plans, specifications, and estimate for the 2015 Pavement Rehabilitation Project, CIP 8250; and
2. Approve the attached Resolution awarding the project to Teichert Construction in the amount of \$3,980,743.32 with a construction contingency of \$400,000 and authorizing the City Manager to execute the contract; and
3. Introduce Ordinance Amending Section 22.08.310 of the Municipal Code Relating to Parking Prohibited at All Times, which prohibits parking on L Street between Second and Third Streets.

Fiscal Impact:

Funding for this work will come from funds allocated to street maintenance via CIP 8250, Transportation Infrastructure Rehabilitation, which is primarily funded by the General Fund with additional monies from Roadway Impact Fees and Construction Tax. Total project cost is estimated at \$4,490,743.32 (see table below). There is approximately \$3,500,000 of funds remaining in FY 2014/15 in this program. Due to the project award coming at the end of the fiscal year and the fact that the total project cost exceeds the remaining available funds, these funds will be carried over into fiscal year 2015/16. The combined available funding in FY 2015/16 will be \$6,723,000.00, which will be sufficient to cover the construction costs.

Item	Amount	Previously Budgeted Amount
Design, Engineering, Specifications (95% complete, previously encumbered)		\$277,100
Construction Contract	\$3,980,743.32	
Estimated Construction Contingency	\$400,000	
Estimated Construction Management and Inspection	\$75,000	
Materials Testing (Estimated)	\$35,000	
Total Estimated Project Cost	\$4,490,743.32	\$277,100

Council Goal(s):

This project is consistent with the City Council's Goal 6 to Fund, Maintain and Improve the Infrastructure of the City.

Background & Analysis:

In 2013, City Council approved an agreement between the City of Davis and a consulting team led by Nichols Consulting Engineers (NCE) to design approximately \$25 million in street improvements. The original concept was to have two large projects designed by the firm. Due to funding limitations, the process has been modified and two smaller projects were designed by the firm. The first project was completed this winter and consisted of base repairs on several streets. The subject project is the second project in this series and includes: street maintenance (i.e., paving), bike path reconstruction, curb ramp replacement to meet current ADA requirements, sidewalk, curb, and gutter repairs and re-striping of the corridors.

Streets were selected based on their current condition and the class of street (collector and arterial streets were prioritized for treatment over local streets). The plans for the project include six streets for maintenance. The streets included in the project are shown in the attached Location Map and listed below:

- East Covell Blvd: from Birch Lane to Alhambra Drive
- L Street: Second Street to Fifth Street
- West Eighth Street: Anderson Road to A Street
- East Eighth Street: J Street to L Street
- Lillard Drive: Farragut Circle to 2761 Lillard Drive
- Lake Blvd: Arlington Blvd to West Covell Blvd

After street maintenance, streets will be re-stripped. The striping plan for L Street includes removal of most of the on-street parking along L Street from the intersection of Second and L Streets to the north end of Third Street to allow for the inclusion of a left-turn pocket from northbound L Street to westbound Third Street. The areas where on-street parking is proposed to be eliminated are adjacent to the PG&E's substation and corporation yard. There are no residences immediately adjacent to the parking areas being eliminated.

In addition, the project will perform crack sealing on streets that were patched with this winter's base repair project but will not be resurfaced with the current project. Those streets are: West Covell Blvd, Drake Drive, Catalina Drive, Russell Blvd, A Street, Oak Avenue and Richards/Cowell Blvd.

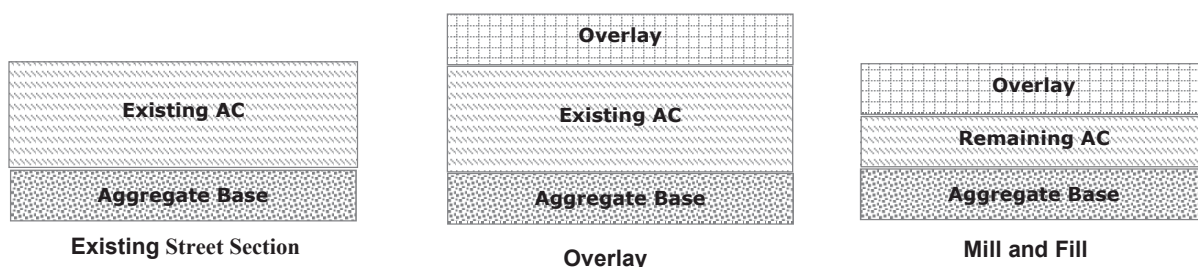
Finally, the project will include reconstruction of a portion of the bike path within Community Park. The existing AC path from the tennis courts to the south side of the Covell overcrossing will be replaced with a Portland cement concrete path. Pathway lights that are close to the path

will be relocated to provide the City’s standard 2-foot clearance. It is Staff’s intent to complete a replacement of the AC paths with concrete for the balance of the paths in Community Park in subsequent years.

Staff has developed an outreach program for the project. Outreach will include announcements on the City’s website and social media and notifications via the City’s communication tools, Nextdoor and Facebook.

Pavement Rehabilitation

Some of the streets in the project have existing cross-slopes that are steeper than desired. Since a traditional overlay is placed on top of the existing AC, this would result in even steeper cross-slopes. Alternatively, milling (grinding) the existing AC prior to placing the overlay (Mill and Fill, where the height of the street is not changed) could be performed. A Mill and Fill would not increase cross-slopes.

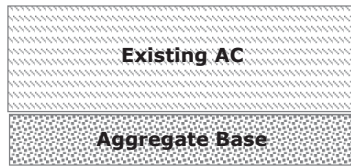


However, older City streets with multiple, or even single, overlays are also exhibiting underlying cracks and delamination of the AC sections. The above-mentioned Overlay and Mill and Fill processes do not address the issues with the underlying AC as it remains untouched.

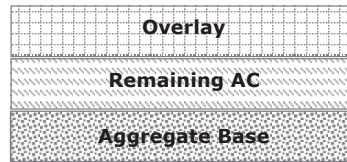
In order to address the issues of existing steep crowns and deteriorated underlying AC, our consultant NCE has proposed an alternative maintenance strategy for the project on four of the six selected streets. Three of the streets – West Eighth Street, East Eighth Street, and L Street – have higher than desired crowns. The fourth street, Lake Boulevard, does not have a street crown issue; however, it does suffer from significant thermal and block cracking.

The alternative treatment method included in the bid documents is called cold-in-place recycling (CIR). CIR involves milling of existing AC, pulverizing and processing the milled AC materials to specified material size, adding emulsion, mixing and then placing and compacting the recycled material back onto the roadway. Since this method re-uses existing materials in place, it reduces the need for new materials and reduces haul trips, thus is a greener, more sustainable process. After the CIR has been accomplished, an overlay would be placed.

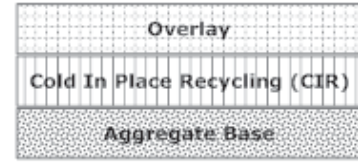
In order to maintain current cross-slopes, our project would also require milling of the street prior to the CIR process. This process would not increase existing cross-slopes but also would not improve (flatten out) cross-slopes; cross-slopes would remain the same.



Existing Street Section



Mill and Fill



Cold in Place Recycling with Mill

Performing the grind and CIR will allow cross-slopes to remain the same and will remove underlying thermal and block cracking and delamination of old overlays. This is anticipated to improve the finished road surface and increase the life of the pavement.

The bid documents allowed contractors to bid on conventional grinding and paving (Mill and Fill) on all project streets as the Base Bid and bid on the CIR method as an Alternative Bid on the four selected streets. City Staff wanted to review the process and the finished product to determine if CIR is a viable alternative for future street paving.

The structure of the bid items (Base Bid and Alternative Bid) provided City Staff comparative cost data for the two processes.

On June 16, 2015, at 1:00 PM, bids were publicly opened by City Staff with the following results:

	Company	Base Bid	Alternate Bid	Total Bid	Combined Bid
1	Teichert Construction, Stockton	\$3,774,147.54	\$1,759,226.38	\$5,533,373.92	\$3,980,743.32
2	Martin Brothers Construction, Sacramento	\$4,121,730.26	\$2,500,396.85	\$6,622,127.11	\$4,314,631.91
<i>Engineer's Estimate</i>					\$3,379,000

As noted above, the Base Bid was Mill and Fill on all project streets; the Alternate Bid was the CIR process on the four selected streets. The low bidder was selected based on the addition of the Base Bid and the Alternate Bid and the bid documents specifically stated this. Selecting the low bidder based on the sum of Base Bid and Alternate Bid is the fairest way of determining the low bidder. In this case, Teichert Construction is the low bidder using the Total Bid column above.

Since the Base Bid and the Alternative Bid are mutually exclusive for the four selected streets, the Combined Bid should be considered for use of the CIR process. The Combined Bid is produced from the Base Bid (Mill and Fill) of the streets not selected for CIR and the Alternate Bid for the four selected streets receiving CIR. As seen in the table, Teichert Construction is also the low bidder for the Combined Bid.

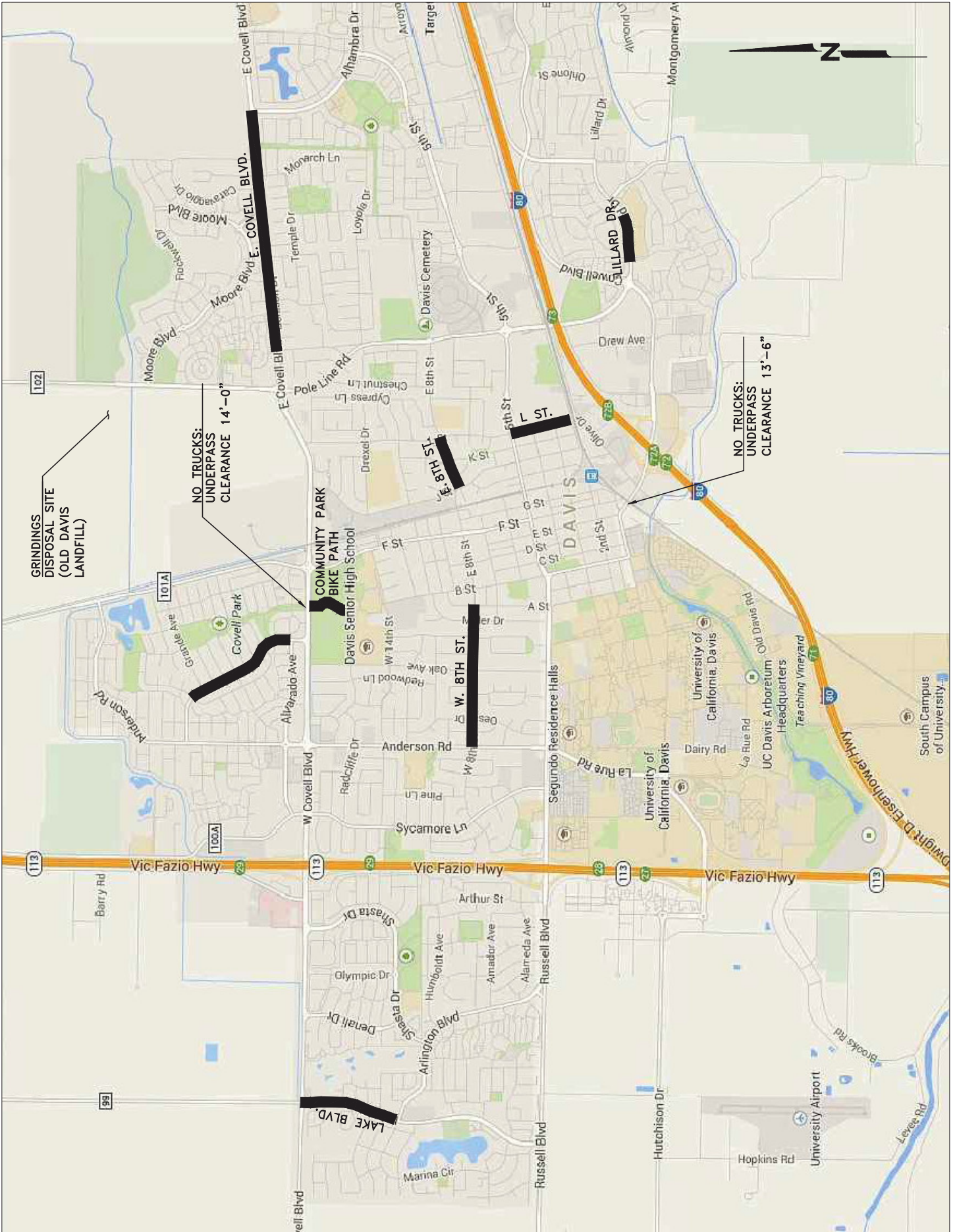
Therefore, for the award of the project, Staff has looked at Teichert Construction's Base Bid (Mill and Fill of all project streets) and their Combined Bid (the combination of Mill and Fill for the two streets and CIR for four streets). The difference between Teichert Construction's two totals is \$206,595.78.

For a project of this size, this is not an overly significant difference. Staff recommends moving forward with the CIR process on the four streets and awarding the project to Teichert Construction with the Combined Bid amount of \$3,980,743.32 with a construction contingency of \$400,000.

Construction is scheduled to begin this summer.

Attachments

1. Location Map
2. Portion of Contract Book
3. Resolution
4. Ordinance



LOCATION MAP

Notice Inviting Bids

1. **Notice Is Hereby Given** that sealed bids (Proposals) will be received by the City Clerk of the City of Davis for the following **Project**:

2015 Pavement Rehabilitation Project, CIP No. 8250

2. **Requesting Plans and Specifications:** Plans and specifications (not including State Specifications or other documents included by reference), and proposal forms, may be obtained by logging on to **www.blueprintexpress.com/davis** or by calling BPXpress Reprographics at (707)745-3593. The cost is \$120 per set (plus shipping and handling) and is non-refundable. All bidders must purchase a complete set from BPXpress in order to be considered responsive and to receive addenda notifications.

Contract documents will not be available for inspection or purchase from the City.

3. **Description Of The Work:** The work shall include road and sidewalk improvements on various streets and bike path construction within Davis as follows depending on the bid alternative selected: pavement planning (milling), asphalt patching (dig outs), crack sealing, asphalt overlay, cold-in-place recycling, full depth reclamation, utility adjustments, striping and pavement markers, curb, gutter and sidewalk repairs and replacements, tree/root trimming and pathway light relocation and associated electrical work including labor, materials, equipment and incidentals to completely install an operating facility in accordance with the project plans and specifications included herein.
4. **Engineer's Estimate:** **\$3,379,000** **Project Engineer:** Michael Mitchell
5. **Contractor's License Classification:** In accordance with the Provisions of California Public Contract Code Section 3300, the City of Davis has determined that the Contractor shall possess a valid **Class [A] General Engineering Contractor's License** or a **Class [C-12] Earthwork and Paving Contractor's License** at the time of the bid opening. Failure to possess the specified license shall render the bid as non-responsive and shall act as a bar to award the contract to any bidder not possessing said license at the time of the bid opening.
6. **Bid Bond:** Each Bid must be accompanied by a Certified or Cashier's Check or Bidder's Bond payable to the City of Davis, in an amount not less than 10 percent of the Bid, as a guarantee that the bidder will enter into a contract if awarded the work. **The Bid Bond submitted shall be provided by a surety duly authorized by the Insurance Commissioner to transact surety business in the State of California.**

Deliver Bids To: CITY OFFICES - CITY CLERK'S OFFICE

23 Russell Boulevard, Davis, CA 95616-3896

(Building is located on the corner of Russell Boulevard & B Street)

Note If you choose to mail your Bid Proposal via any of the overnight/express services, the outside envelope **MUST** be clearly marked as **[SEALED BID FOR: 2015 Pavement Rehabilitation Project, CIP No. 8250]**

DELIVER IMMEDIATELY TO CITY CLERK'S OFFICE

Date And Time: June 11, 2015 2:00 p.m.

PROPOSAL

2015 Pavement Rehabilitation Project CIP No. 8250

Base Bid Items					
Item	Description	Units	Estimated Quantity	Item Price	Total
1	Mobilization	LS			\$
2	Water Pollution Control	LS			\$
3	Traffic Control System	LS			\$
4	Remove Traffic Striping, Markings, and Lane Markers	LS			\$
5	Replace and Adjust Monuments, Valves, and Handholes to Grade	EA	120	\$	\$
6	Adjust Manhole Frames and Covers to Grade	EA	72	\$	\$
7	Remove and Replace Traffic Detector Loops	EA	46	\$	\$
8	Asphalt Concrete Base Repair (6" Depth)	SF	4,249	\$	\$
9	Over-excavation (Revocable Item)	CY	26	\$	\$
10	Demolish and Remove PCC	SY	5,390	\$	\$
11	PCC Curb and Gutter	LF	1,287	\$	\$
12	PCC Sidewalk and Island Passageway	SF	5,775	\$	\$
13	PCC Sidewalk Grinding/Patching	LF	450	\$	\$
14	PCC Curb Ramp	SF	15,870	\$	\$
15	Curb Ramp Detectable Warning Strip Retrofit	SF	560	\$	\$
16	PCC Bike Pathway	SF	19,120	\$	\$
17	Cold Planing Asphalt Concrete (2" and 2.5" Depth)	SY	63,026	\$	\$
18	Cold Planing Asphalt Concrete (3.5" and 4" Depth)	SY	32,108	\$	\$
19	Wedge and Conform Grind	LF	5,196	\$	\$
20	Crack Sealing (Revocable Item)	LS			\$
21	Crack Filling and Sealing (W. Covell, Richards/Cowell, Russell, Oak, and Drake)	LS			\$

Base Bid Items					
Item	Description	Units	Estimated Quantity	Item Price	Total
22	Hot Mix Asphalt Overlay	TON	6,324	\$	\$
23	Rubberized Hot Mix Asphalt Overlay (Gap Graded)	TON	10,364	\$	\$
24	Thermoplastic Traffic Stripe - Detail 2	LF	3,000	\$	\$
25	Thermoplastic Traffic Stripe - Detail 10	LF	9,300	\$	\$
26	Thermoplastic Traffic Stripe - Detail 22	LF	975	\$	\$
27	Thermoplastic Traffic Stripe - Detail 26	LF	9,550	\$	\$
28	Thermoplastic Traffic Stripe - Detail 29	LF	375	\$	\$
29	Thermoplastic Traffic Stripe - Detail 32	LF	2,838	\$	\$
30	Thermoplastic Traffic Stripe - Detail 38A	LF	1,020	\$	\$
31	Thermoplastic Traffic Stripe - Detail 39	LF	8,323	\$	\$
32	Thermoplastic Traffic Stripe - Detail 39A	LF	3,211	\$	\$
33	Thermoplastic Traffic Stripe - 12" Solid White	LF	2,500	\$	\$
34	Thermoplastic Traffic Stripe - 4" Solid White	LF	8,710	\$	\$
35	Thermoplastic Traffic Stripe - Triple Quad Crosswalk	EA	3	\$	\$
36	Thermoplastic Traffic Stripe - Bike Buffer	LF	13,385	\$	
37	Thermoplastic Traffic Stripe - Bike Conflict Boxes	SF	696	\$	
38	Thermoplastic Pavement Marking	SF	974	\$	
39	Blue Raised Fire Hydrant Pavement Marker	EA	23	\$	\$
40	Red Curb Marking	LF	400	\$	\$
41	Relocate Pedestrian Push Button	EA	3	\$	\$
42	Relocate Chain Link Fence	LF	200	\$	\$
43	Planting and Irrigation	LS			\$
44	Pathway Light Relocation and Circuitry	LS			\$
TOTAL BASE BID:					\$

The Bid Alternative below provides for the following substitutions:

STREET NAME	BASE BID	BID ALTERNATE
	TREATMENT	TREATMENT
E. Covell Blvd	2" Mill with 2" RHMA-G Overlay	2" Mill with 2" RHMA-G Overlay
L St	4" Mill with 2" RHMA-G over 2" HMA Overlay	2.5" Mill and 3" CIR with 2" RHMA-G Overlay
W. 8th St	3.5" Mill with 2" RHMA-G over 1.5" HMA Overlay	2.5" Mill and 3" CIR with 2" RHMA-G Overlay
E. 8th St	4" Mill with 2" RHMA-G over 2" HMA Overlay	2.5" Mill and 3" CIR with 2" RHMA-G Overlay
Lillard Dr	2" Mill with 2.5" RHMA-G over 2" HMA Overlay	2" Mill with 2.5" RHMA-G over 2" HMA Overlay
Lake Blvd	2" Mill with 3" HMA Overlay	3" CIR with 2" RHMA-G Overlay

Bid Alternate Items					
Item	Description	Units	Estimated Quantity	Item Price	Total
45	Cold Planing Asphalt Concrete (2" and 2.5" Depth)	SY	65,113	\$	\$
46	Cold Planing Asphalt Concrete (> 4" Depth) (Revocable Item)	SY	17,491	\$	\$
47	Cold In-Place Recycling (3" Depth)	SY	44,639	\$	\$
48	Hot Mix Asphalt Overlay	TON	565	\$	\$
49	Rubberized Hot Mix Asphalt Overlay (Gap Graded)	TON	11,914	\$	\$
TOTAL BID ALTERNATE					\$
TOTAL BASE BID PLUS BID ALTERNATE					\$

Notice to Bidders: THE APPARENT LOW BID WILL BE BASED ON THE SUM OF THE BASE BID AND THE ALTERNATE BID. HOWEVER THE AWARDED AMOUNT TO THE CONTRACTOR WILL BE SOME COMBINATION OF BASE BID AND THE ALTERNATE BID USING THE APPARENT AWARDED CONTRACTOR'S BID ITEM AMOUNTS. WE EXPECT THE AWARD AMOUNT TO BE CLOSE TO THE ENGINEER'S ESTIMATE OF \$3,379,000.

RESOLUTION NO. 15-XXX, SERIES 2015

**RESOLUTION AWARDING CONTRACT
TO TEICHERT CONSTRUCTION FOR CONSTRUCTION OF THE 2015
PAVEMENT REHABILITATION PROJECT, CIP 8250 AND AUTHORIZING
CITY MANAGER TO EXECUTE CONTRACT**

WHEREAS, the City of Davis' consultant, NCE, did prepare plans, specifications and estimate, and the City of Davis did call for bids for the 2015 Pavement Rehabilitation Project, CIP 8250; and

WHEREAS, City Staff did publicly open and read said bids at 1:00 p.m., on June 16, 2015; and

WHEREAS, it has been determined that the lowest responsible bidder responsive to the plans and specifications is Teichert Construction, whose Total Bid (Base Bid plus Alternate Bid) is \$5,533,373.92; and

WHEREAS, the City Council of the City of Davis has authorized that the Cold-in-Place Recycling (CIR) process should be used on four selected streets within the project and that the project award will be based on the Combined Bid, combining the Alternate Bid with the Base Bid.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Davis does hereby approve the plans, specifications and estimate for the 2015 Pavement Rehabilitation Project, CIP 8250; and

BE IT FURTHER RESOLVED that the City Council of the City of Davis does hereby accept the bid received from Teichert Construction, in the amount of \$3,980,743.32 (Combined Bid) for the 2015 Pavement Rehabilitation Project, CIP 8250; and

BE IT FURTHER RESOLVED that the sum of \$400,000 be and it is hereby allocated from project funds for contingency purposes; and

BE IT FURTHER RESOLVED that the City Manager is authorized to execute the contract; and

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

PASSED AND ADOPTED by the City Council for the City of Davis on this thirtieth day of June 2015 by the following votes:

AYES:

NOES:

ABSENT:

Daniel M. Wolk
Mayor

ATTEST:

Zoe S. Mirabile, CMC
City Clerk

ORDINANCE NO.

**ORDINANCE AMENDING SECTION 22.08.310
OF THE MUNICIPAL CODE OF THE CITY OF DAVIS
RELATING TO PARKING PROHIBITED AT ALL TIMES**

WHEREAS, the 2015 street striping plan for L Street includes removal of on-street parking along L Street from the intersection of Second and L Streets to the north end of Third Street to allow for the inclusion of a left-turn pocket from north-bound L Street to westbound Third Street.

THE CITY COUNCIL OF THE CITY OF DAVIS DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Section 22.08.310. Parking prohibited at all times. is hereby amended by the addition of the following item:

- a. L Street, between Second and Third Street, both sides

INTRODUCED on the 30th of June, 2015, and PASSED AND ADOPTED by the City Council of the City of Davis on the day of , 2015, by the following vote:

AYES:

NOES:

Daniel M. Wolk
Mayor

ATTEST:

Zoe S. Mirabile, CMC
City Clerk