CITY OF WEST SACRAMENTO
REGULAR MEETING OF THE TRANSPORTATION, MOBILITY & INFRASTRUCTURE COMMISSION
MARCH 4, 2019 AGENDA

Alex Hirsch, Chair

Ashley Christman-Kaufman, Vice-Chair
Jameson Parker, Commissioner
Vincent Wetzel, Commissioner

Merlin Love, Commissioner
Mark Polhemus, Commissioner
Valerie Zimmer, Commissioner
Ash Roughani, Alternate Commissioner

Denix Anbiah, Director, Public Works Department
Gary Predoehl, Engineering and Transportation Manager
Jason McCoy, Supervising Transportation Planner

6:00 PM PLEDGE OF ALLEGIANCE

The meeting will be held at City Hall, City Council Chambers, 1110 West Capitol Ave., West Sacramento

Anyone wishing to address the Commission, or any agenda item, should fill out the Request to Speak card and present it to the Clerk prior to the completion of staff presentation. Items on the Consent Agenda will be considered in one motion and the card should be turned in prior to the first item on Consent.

GENERAL ADMINISTRATION FUNCTION – PART I

1A. OATH OF ALLEGIANCE FOR PUBLIC OFFICERS

1B. INTRODUCTION OF COMMISSIONER WETZEL

1C. PRESENTATIONS BY THE PUBLIC ON MATTERS NOT ON THE AGENDA WITHIN THE JURISDICTION OF THE COMMISSION. The Commission is prohibited by law from discussing issues not on the agenda brought to them at this time.

1D. COMMISSIONER COMMUNICATIONS

CONSENT AGENDA

2. CONSIDERATION OF APPROVAL OF THE MINUTES OF THE JANUARY 7, 2019, TRANSPORTATION, MOBILITY & INFRASTRUCTURE COMMISSION MEETING (SCHMIDT)

3. CONSIDERATION OF APPROVAL OF THE MINUTES OF THE FEBRUARY 19, 2019, SPECIAL BOARD AND COMMISSION ORIENTATION MEETING (RANKIN)

REGULAR AGENDA

4. UPDATE ON THE NEW DOCK AT RALEY'S LANDING PROJECT (STRAND)

Comment: The City of West Sacramento strongly identifies as a River City yet lacks a public boat dock of its own. Staff obtained a $1.5 million grant from the Boating Infrastructure Grant Tier II program of the Department of Boating and Waterways to construct a new dock at Raley's Landing. The purpose of this report is to provide the Transportation, Mobility and Infrastructure (TMI) Commission with an informational update on the new dock at Raley's Landing Project.

Recommendation: Staff respectfully recommends that the Commission receive the information on the Update for the New Dock at Raley's Landing Project.

5. REGULAR UPDATE ON THE PILOT ON-DEMAND RIDESHARE SERVICE (STRAND)

Comment: The West Sacramento On-Demand Rideshare Pilot is an innovative public transportation model being tested by the City as an early action item of the broader Mobility Action Plan (MAP). A Contract for Services was awarded to NoMad Transit LCC, a wholly owned subsidiary of Via Transportation Inc., January 17, 2018, to operate the Pilot. Launched on May 14, 2018, the one-year pilot service has quickly grown in popularity with over 4,500 account holders and over 50,000 rides completed to-date. The purpose of this item is to provide a regular project update to the Commissioners and review recent program activities, including the result of a 6-Month User Survey and feedback provided by City Council at the February 20 workshop to consider contract renewal scenarios. This item is informational only.

If you need special assistance to participate in this meeting, please contact the Public Works Department, (916) 617-4850. Notification of at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting. Assisted listening devices are available at this meeting.

Recommendation: Staff respectfully recommends that the Commission receive the provided informational update on the Pilot On-Demand Rideshare service.

6. CONSIDERATION OF THE BROADWAY BRIDGE PROJECT UPDATE (MCCOY)

Comment: The Broadway Bridge project is a cooperative effort with the City of Sacramento initiated after acceptance of the joint Sacramento Riverfront Master Plan in 2003 and the 2011 Sacramento River Crossings Alternatives Study. The Project Approval and Environmental Document (PA/ED) phase is a continuation of the Broadway Bridge Feasibility Study completed and accepted by both cities in December 2015, which identified feasible crossing alternatives south of US 50/Pioneer Bridge. The PA/ED phase currently in-progress evaluates alternative alignments, identifies a preferred crossing location, documents environmental impacts, and completes the preliminary engineering necessary to move the project toward final design. Construction and bridge opening are anticipated between 2030 and 2035. The item before the Commission is a status report and presentation on the Broadway Bridge project scope of work.

Recommendation
Staff respectfully recommends that the Commission hear the presentation, discuss the project and provide feedback to staff and the consultant team.

GENERAL ADMINISTRATION FUNCTION – PART II

7. A. Transportation, Mobility & Infrastructure Commission Calendar. The next regular meeting of the Transportation, Mobility & Infrastructure Commission is scheduled for May 6, 2019.
   B. Reports from City Staff.
   C. Future Agenda Item Requests by the Transportation, Mobility & Infrastructure Commission.
   D. Adjournment.

I, Jennifer Schmidt, Commission Clerk, declare under penalty of perjury that the foregoing agenda for the Monday, March 4, 2019, regular meeting of the Transportation, Mobility & Infrastructure Commission was posted on Wednesday, February 27, 2019, in the office of the City Clerk, 1110 West Capitol Ave., West Sacramento, CA, and was available for public review.

Jennifer Schmidt.

Jennifer Schmidt, Clerk of the Transportation, Mobility & Infrastructure Commission

All public materials related to an item on this agenda submitted to the Transportation, Mobility & Infrastructure Commission after distribution of the agenda packet are available for public inspection in the Public Works Office at 1110 West Capitol Avenue during normal business hours. Any document provided at the meeting by staff will also be available to the public. Any document provided at the meeting by the public will be available the next business day following the meeting.

The Transportation, Mobility & Infrastructure Commission meetings are broadcast live on AT&T Channel 99 and Wave Cable Channel 20. This meeting will be repeated the following day at 12:00 p.m. and the following Friday at 7 p.m. The agenda and agenda reports are also available on the City's website at www.cityofwestsacramento.org.

ITEM # 2

DRAFT

REGULAR MEETING OF THE
CITY OF WEST SACRAMENTO
TRANSPORTATION, MOBILITY & INFRASTRUCTURE COMMISSION
January 7, 2019
Minutes

The regular meeting was called to order at 6:26 p.m. and was delayed due to technical difficulties in the Council Chambers, 1110 West Capitol Avenue, West Sacramento, California. Commissioner Wetzel was absent, and all other commissioners were present. Jason McCoy presided until a chairperson was selected by the commission.

The Pledge of Allegiance was led by Jason McCoy.

Entry No. 1
Heard the General Administration Function – Part I as follows:

Commissioners Hirsch, Parker, Love, Christman-Kaufman, Polhemus, Zimmer and Roughani were given their oaths and sworn in.

Jason McCoy welcomed the commissioners to the Transportation, Mobility & Infrastructure Commission and requested each commissioner to provide a brief background of themselves.

Election of Commission Chair:

Commissioner Parker nominated Commissioner Hirsch for chairperson. There were no other nominations.

MOTION: Polhemus. SECOND: Parker. AYES: Hirsch, Love, Christman-Kaufman, Zimmer, Roughani.

NOES: None. ABSTAIN: None. ABSENT: Wetzel.

Election of Commission Vice-Chair:

Commissioner Parker nominated Commissioner Christman-Kaufman for vice-chair. There were no other nominations.

MOTION: Parker. SECOND: Roughani. AYES: Hirsch, Love, Polhemus, Christman-Kaufman, Zimmer.

NOES: None. ABSTAIN: None. ABSENT: Wetzel.

The commission voted unanimously on maintaining a 1-year term for chair and vice-chair.

MOTION: Polhemus. SECOND: Love. AYES: Hirsch, Christman-Kaufman, Zimmer, Parker, Roughani.

NOES: None. ABSTAIN: None. ABSENT: Wetzel.

There were no presentations by the public on matters not on the agenda.

There were no commissioner communications.

Entry No. 2
Acted on the Consent Agenda as follows:

Approved the minutes of the December 3, 2018, meeting of the Transportation, Mobility & Infrastructure Commission.

MOTION: Christman-Kaufman. SECOND: Parker. AYES: Hirsch, Love, Polhemus, Zimmer, Roughani.

NOES: None. ABSTAIN: None. ABSENT: Wetzel.

Entry No. 3
Heard the Update on the West Capitol Avenue Road Rehabilitation and Safety Improvement Project. Commissioners discussed, provided comments and voted unanimously to move staff's recommendations to Council for direction on the three project elements: 1) To not provide limited on-street parking on West Capitol Avenue; 2) To not provide Class II bike lanes along Jefferson Boulevard; instead, signage should be added to direct bicycle users to alternative bike routes; and 3) Support the overall proposed travel lane configurations throughout the project.

MOTION: Roughani. SECOND: Christman-Kaufman. AYES: Hirsch, Love, Polhemus, Zimmer, Parker.

NOES: None. ABSTAIN: None. ABSENT: Wetzel.

Entry No. 4
Heard the General Administration Function – Part II as follows:

The next regular meeting of the Transportation, Mobility & Infrastructure Commission is scheduled for Monday, March 4, 2019.

There were no reports from City staff.

There were no future item requests by the commission.

The meeting adjourned at 7:58 p.m.

MOTION: Christman-Kaufman. SECOND: Polhemus. AYES: Hirsch, Love, Parker, Zimmer, Roughani.

NOES: None. ABSTAIN: None. ABSENT: Wetzel.

Jennifer Schmidt, Commission Clerk

Minutes approved as presented by a majority vote of the Commission on March 4, 2019.

Jennifer Schmidt, Commission Clerk

ITEM # 3

DRAFT

City of West Sacramento
Special Board and Commission Orientation Meeting

Arts, Culture & Historic Preservation Commission; Board of Appeals; City Council; Disaster Council; Economic Development & Housing Commission; Environment & Utilities Commission; Parks, Recreation & Intergenerational Services Commission; Planning Commission; Transportation, Mobility & Infrastructure Commission

February 19, 2019
Minutes

Mayor Cabaldon conducted an Introduction to City Commission Service and Orientation at City Hall, 1110 West Capitol Avenue, in which all City Boards & Commissions Members appointed to the 2019-2020 term were encouraged to attend.

The session convened at 4:10 PM in the Council Chambers of City Hall. The Boards & Commissions Members heard Mayor Cabaldon's presentation on the Role of a City Commissioner and an Overview of City Goals and Strategies.

At 6:05 PM the session continued in Galleria Rooms 157/160. Boards & Commissions Members met with the Mayor, City Department Directors, and Commission Staff for commission-specific discussions regarding the scope and duties of the commissions as advisory bodies to the City Council.

The session adjourned at 7:05 PM.

_____
Kryss Rankin, City Clerk

Minutes approved as presented by a majority vote of the Transportation, Mobility & Infrastructure Commission on
_____ ___, 2019.

_____
Jennifer Schmidt, Commission Clerk

TRANSPORTATION, MOBILITY & INFRASTRUCTURE COMMISSION **AGENDA REPORT**

MEETING DATE: March 4, 2019	**ITEM # 4**
SUBJECT: **UPDATE ON THE NEW DOCK AT RALEY'S LANDING PROJECT**	
INITIATED OR REQUESTED BY: **[ ] Council [X] Staff** **[ ] Other**	**REPORT COORDINATED OR PREPARED BY:** James Strand, Project Manager I Denix Anbiah, Director Public Works Department
ATTACHMENT [X] Yes [ ] No	**[X] Information [ ] Direction [ ] Action**

OBJECTIVE
The purpose of this report is to provide the Transportation, Mobility and Infrastructure (TMI) Commission with an informational update on the new dock at Raley's Landing Project.

RECOMMENDED ACTION
Staff respectfully recommends that the TMI Commission receive the provided informational update on the new dock at Raley's Landing Project.

BACKGROUND
In 1981, Tom Raley installed steel pilings, a floating wood dock, gangway, and timber walkway from the top of the levee to the Sacramento River under a lease from the State Lands Commission (SLC). Originally serving as a personal dock, Raley's Dock went on to serve other uses, such as a mooring and boarding area for the tour boat Elizabeth Louise and stop for the River Otter Water Taxi Service. By 2000, the dock was in disrepair and in 2008 was deemed hazardous and all uses were discontinued.

The following timeline chronologically provides descriptions of project relevant actions that the City and consultant team have taken to ensure project success between 2011 and those pending in present day:

August 19, 2011
Staff met with representatives from the Central Valley Regional Water Quality Control Board (CVRWQCB), the SLC, and Raley's Corporation (Raley's) to discuss the lease and a Notice of Violation issued by the CVRWQCB. The lease was scheduled to expire on December 14, 2011. Raley's indicated they did not want to retain the lease or the improvements. The SLC, which holds the river lands in public trust, requested that the City enter into a new lease rather than assume the existing lease from Raley's.

September 21, 2011
Council adopted Resolution 11-71 authorizing a lease from the SLC for the Dock at Raley's Landing. Staff has since prepared an application and submitted it to the SLC for the new lease. The intent is for the City to replace the dock and gangway with a modern facility that is fully accessible and available for public use.

October 14, 2011
The CVRWQCB issued a Notice of Violation for the immediate removal of the floating docks and gangways because they posed a threat to public safety and to the state's flood control system. The steel pilings were allowed to remain in the floodway, provided they were properly marked for visibility and for boat traffic. The CVRWQCB required the responsible party to take action towards removing the structures before the start of the flood season. Raley's did not want to invest further in abating the hazards so the City Council approved a contract to do so. The City agreed to assume repair and maintenance responsibilities of the dock from Raley's under the First Amendment to an Option Agreement for the River One Site, executed in December 2010.

November 16, 2011
The City Council awarded the contract for demolition of the dock. Removal was completed on January 12, 2012.

January 24, 2012
The California State Lands Commission approved a new lease to the City of West Sacramento.

August 20, 2012
The City of West Sacramento requested from the SLC, and was granted, an extension of time to complete the final dock rehabilitation plans to 65% design phase until December 31, 2013.

May 8, 2013
The City Council awarded a contract to GHD Inc., for engineering design, environmental assessment and permits for the Raley's Dock and the Mill Street Pier.

October 16, 2013
An update and workshop were held on the design and layout of the replacement dock and the Mill Street Pier. Council directed staff to pursue grant funding opportunities for the project.

October 31, 2014
City Staff met with State Parks and the SLC to discuss challenges with federal grant funding for the dock. As a result of this meeting, SLC agreed to execute the required documentation to support the City's grant application for U.S. Department of Interior Land and Water Conservation Program funds, administered by the state.

December 19, 2014
The City was notified that Army Corps of Engineers considered the improvements built by Mr. Raley, to be unpermitted. The Army Corps of Engineers required additional hydrology analysis and in 2015 required modifications to the improvements. City staff recorded a Notice of Determination (NOD) with the Office of Planning and Research for the Council approved Mitigated Negative Declaration for the replacement dock and the Mill Street Pier.

February 12, 2015
The City entered into a Streambed Alteration Agreement with the Department of Fish and Wildlife.

November 18, 2016
The CVWQCB issued the City a Clean Water Act Section 401 Water Quality Certification and Order.

May 30, 2018
City staff received an extension for Streambed Alteration Agreement with the Department of Fish and Wildlife through 2020.

September 20, 2018
Working with the Army Corps of Engineers, Department of the Interior Fish and Wildlife Service, U.S. Department of Commerce National Oceanic and Atmospheric Administration's National Marine Fisheries Service, City staff received issuance of the Central Valley Flood Protection Board Permit No 19032.

September 28, 2018
City staff received the official Letter of Permission from the Army Corps of Engineers to move ahead with the project.

October 30, 2018
Taber Drilling, subcontractor to GHD Inc, completed gathering geotechnical samples from specified areas within the project footprint.

December 3, 2018
California State Lands Commission Review approved the City's Lease Application to construct the new dock.

December 19, 2018
Council approved contracts through construction with design engineering consultants GHD and environmental consultant ECORP.

February 20, 2019
Council approved purchase contract of required environmental mitigation credits through Liberty Island Conservation Bank.

Present Day
City staff, along with design engineering consultants GHD and environmental consultant ECORP, continue to meet the lengthy regulatory and permitting process with federal, state and local agencies. This extensive

process has been necessary to meet rigorous design and permit obligations as well as to seize upon funding opportunities in the development of a new City owned dock. Due to the extended timeline of the project, staff has asked engineering consultant GHD to update project plans to ensure they comply with the most current design code and regulatory statutes. Environmental consultant ECORP has provided City Staff with guidance on mitigation requirements and a milestone matrix of ongoing project environmental requirements. Additionally, City Staff is currently reviewing the award letter and guidelines for using the Department of Boating and Waterways (DBAW), BIG Program Tier II grant funding which will inform final design and implementation requirements which will be synthesized with a design code compliance update of the original 2014 design to current code standards, allowing the project to successfully proceed to construction.

ANALYSIS

The project site location in the Sacramento River places it within overlapping bounds of several federal, state, and local jurisdictional authorities. Thus, the work of the transition to a new dock since has largely been in managing and meeting the needs of the project's various governmental stakeholders, adjusting the design and aligning the project timeline accordingly. Parsing out the regulatory process to understand design and environmental requirements has proven to be lengthy, producing often fluid objectives.

The projected construction window is August 1 through October 31, 2019. Once complete and per the DBAW BIG grant requirement, the new public dock will provide up to 15 days of berthing for up to 6 non-trailerable recreational vessels whose length is no less than 26 feet and up to 4 smaller recreational vessels whose length is no greater than 25 feet.

Commission Recommendation

This project has been presented to the Parks and Recreation Commission and Arts, Culture and Historic Preservation Commission as part of the Washington Realized Plan in 2015.

Environmental Considerations

The Raley's Dock Improvement Project will require work in water and below the low water mark at the facility. A Mitigated Negative Declaration has been prepared for the replacement dock and the Mill Street Pier and approved by Council on November 14, 2014. This Mitigated Negative Declaration was prepared to address the potential environmental impacts of the proposed improvements to the Raley's Dock and the Mill Street Pier. The Mitigated Negative Declaration concludes that, with the implementation of the recommended mitigation measures, the proposed project will not cause significant adverse impacts on the environment.

Strategic Plan Integration

Approving funding for Engineering and Environmental services for the new dock at Raley's Landing Project aligns with Vision 2027 *Guiding Principle B, "Riverfront: A Regional Destination,"* providing public access for recreational use with the River Walk. This project would also meet the objectives of Goal 2 ("Riverfront Alive") of the City's Strategic Plan 2012, by implementing the Joint Riverfront Master Plan and enhancing public access, recreational and cultural opportunities.

Alternatives

1) Receive this informational update concerning the new dock at Raley's Landing.
2) Elect not to accept this informational item at this time.

Coordination and Review

This report was prepared by the Construction Management and Facilities Development Divisions of the Public Works Department with assistance from the Community Development, Economic Development and Finance Departments.

Budget/Cost Impact

The match funding for this project is approved through fund 406 of Measure G and appropriated to Work Order 62126, Raley's Dock Improvement. $2.6 million was approved by the City Council for this project in the Capital Improvement Program Budget with $1.5 million of Federal Boating Infrastructure Grant revenue.

ATTACHMENT(S)

None

TRANSPORTATION, MOBILITY & INFRASTRUCTURE COMMISSION **AGENDA REPORT**

MEETING DATE: March 4, 2019	**ITEM # 5**
SUBJECT: **REGULAR UPDATE ON THE PILOT ON-DEMAND RIDESHARE SERVICE**	
INITIATED OR REQUESTED BY: **[ ] Commission [X] Staff** **[ ] Other**	**REPORT COORDINATED OR PREPARED BY:** Sarah Strand, Associate Transportation Planner Denix Anbiah, Director Public Works Department
ATTACHMENT [X] Yes [ ] No	**[X] Information [ ] Direction [ ] Action**

OBJECTIVE
The purpose of this report is to provide the Transportation, Mobility and Infrastructure (TMI) Commission a regular update on the West Sacramento On-Demand Rideshare Pilot.

RECOMMENDED ACTION
Staff respectfully recommends that the TMI Commission receive the provided informational update on the Pilot On-Demand Rideshare service.

BACKGROUND
The Pilot On-Demand Rideshare service is an innovative public transportation model being tested for one year as an early action item of the broader Mobility Action Plan (MAP). On January 17, 2018, the City Council awarded a contract for services to Nomad Transit LLC, a wholly-owned subsidiary of Via Transportation Inc., to assist with the planning, marketing, launch, operation, maintenance and performance evaluation of the service.

Launched May 14, 2018, the Pilot has been operating for 9 months using a fleet of dedicated, co-branded Mercedes Benz Metris vans to provide on-demand share rides for a flat fare. Ongoing performance monitoring and data collection from the Pilot will inform broader transportation planning efforts, including opportunities to optimize bus service and increase mobility for underserved communities.

Per Council direction, regular updates have been provided since launch. At the end of the 1-Year Pilot term, a final performance evaluation report conducted by the UC Berkeley Transportation Sustainability Research Center (TSRC) will be submitted and the City Council may elect to continue or terminate the Via Rideshare program, with or without modifications, for an additional year of service.

This report is submitted for TMI Commission consideration to provide an update on the Pilot program, as well as to provide new commissioners with an opportunity to ask questions or provide general feedback and recommendations for staff to consider moving forward.

ANALYSIS
Additional details of project performance in terms of ridership, levels of service, and customer satisfaction are included in Attachment 1 – Via Ridership Report. Ridership has continued to grow on a weekly basis, with the exception of dips in ridership resulting from the air quality impacts of the Camp Fire in November 2018, followed by expected drops in ridership at major holidays. Ridership has seen a strong rebound since the holidays, with records set for both weekly ridership and average daily ridership.

As of February, over 50,000 rides had been completed to-date. More than 4,500 accounts have been created. Since launching in May 2018, growth in ridership has continued naturally, without any major marketing of the service in recent months. More than 2,000 rides were completed the week of January 28th, and a record setting 418 rides completed in one day on Thursday, February 7th. Average daily ridership has been trending well above 350 rides on most weekdays and nearing 250 on Saturdays. This indicates a trajectory beyond what was previously reported as 50% surpassing of expectations, as ridership is now approaching double (100% greater) the original estimates of average daily ridership, which were closer to 200-250 average daily rides. Similarly, the service has been averaging 3.75 passengers per service hour based upon the most recent month's operations, and rates of shared rides (2+ passengers per vehicle) and shared bookings have risen to over 60% and 40%, respectively.

Challenges & Solutions
Overall customer satisfaction has remained at a 4.9/5.0 star rating. However, some challenges have persisted. Staff and the Via team are aware of the critical importance of addressing overarching issues of reliability, which have manifested through the three primary issues related to: a "Demand Error" occasionally received by some riders (currently less than 1.3% of ride requests); phone support issues which have been resolved by switching to a new vendor; and ongoing efforts to make the process for requesting "door-to-door" service less cumbersome for riders with physical impairments.

Recent Events
On February 20th, staff presented a Contract Amendment to City Council requesting approval to relinquish up to $90,000 in revenue recovered from fares to NoMad Transit LLC (Via Transportation Inc.) to continue operating the pilot service through May 2019. These funds were necessary to make up for a budget shortfall resulting from higher than expected demand for service earlier in the Pilot term. The City Council approved Amendment No. 1 to the contract, alongside a resolution to amend the budget as a book keeping measure.

Results from a 6-Month User Survey were also presented, providing an early indication of how the Pilot program may be impacting travel behaviors and quality of life for users. Attachment 2 includes the full 6-Month User Survey Findings. Staff will provide an overview of the survey findings to the Commissioners, as well. As part of the Final Performance Evaluation Report, a more rigorous survey will be launched in March by the UC Berkeley TSRC to help further quantify some of the impacts identified through the 6-Month User Survey. Results will be brought back to the TMI Commission at its next planned meeting.

Staff also conducted a workshop to solicit early input on alternatives to be explored in advance of requesting City Council's consideration of a contract renewal for an additional year of service no later than May 2019. The scenarios that were presented to City Council are shown below:

Year 2 Scenarios (#Vehicles & Annual Operating Hours)	**Gross Est. Cost**	**Net Est. Cost***
1) Status Quo, No Growth (7 Vehicles, ~27,500 hrs/yr)	$1.2M	**$1.0M**
2) Natural Growth, No Time/Geo Expansion (11 vehicles, ~41,300 hrs/yr)	$1.7M	**$1.4M**
3) Natural Growth, +1 Hr Earlier & Later (11 vehicles, ~44,700hrs/yr)	$1.8M	**$1.5M**
4) Natural Growth + Sunday Service (11 Vehicles, ~44,700 hrs/yr)	$1.8M	**$1.5M**
5) Natural Growth, Combo Scenario 3 + 4 (11 Vehicles, ~50,700 hrs/yr)	$2.0M	**$1.7M**
6) Natural Growth + $5 Late Night Service (11 vehicles, ~55,000hrs/yr)	$2.2M	**$1.8M**
7) Downtown + Premium Fares (Kaiser & Amtrak, 17 vehicles, ~64,200 hrs/yr)	$2.5M	**$2.0M**
8) Downtown + Standard Fares (Kaiser & Amtrak, 17 vehicles, ~64,200 hrs/yr)	$2.5M	**$2.1M**

**Net Costs assume all revenues recovered from fares will be automatically re-invested into the service.*
☐ = Staff recommended for further analysis and consideration.
☐ = Not recommended by staff for further analysis or consideration.

The cost estimates and service scenarios represented are approximations and may be subject to change pending additional detailed analysis. City Council approved of staff's recommendation to proceed with further analysis focused on a Year 2 Scenario that accommodates for natural growth and explores some temporal expansion without making any changes to the service coverage area at this time.

As part of this report, staff will review the rationale for the recommendation approved by Council and solicit input from the TMI Commissioners for consideration alongside the development of a contract renewal option that will be brought back to City Council no later than May 2019. TMI Commissioners are requested to ask any clarifying questions or provide comments or recommendations, at their discretion, for consideration by staff and City Council moving forward.

Commission Recommendations
N/A

Environmental Considerations
On January 17, 2018, the City Council approved a Categorical Exemption for this project under Class 6, Guidelines Section 15306 (Information Collection) of CEQA, since the Pilot will focus on data collection, research and evaluation activities which do not result in a serious or major disturbance to an environmental resource and will inform the City's consideration of approving and funding the service for additional years. A Notice of Exemption has been submitted to the County Clerk's Office. Should the City Council elect to continue the service beyond a Pilot term, additional environmental documentation may need to be prepared.

Strategic Plan Integration
This project advances the Strategic Plan Management Agenda item, "Mobility Action Plan."

Alternatives
1) Accept this informational item about the Pilot On-Demand Rideshare service.
2) Elect not to accept this informational item at this time.

Coordination and Review
This report was prepared by the Transportation Section of the Public Works Department.

Budget/Cost Impact
A total of $749,000 was originally allocated to the Pilot On-Demand Rideshare program in the FY18/19 CIP Budget, comprised of a $149,999 SACOG Transportation Demand Management (TDM) Innovations Grant and an allocation of $599,001 in Transportation Development Act funds (Fund 202). The Contract for Services with NoMad Transit LLC (Via Transportation Inc.) executed by City Council on January 17, 2018 was for a total amount payable of $720,000. On February 20th, City Council approved an amendment to allow NoMad Transit LLC to bill against revenues recovered from fares in an amount not to exceed $90,000, raising the total amount payable to $810,000 and the total project budget to $839,000.

Potential budget impacts quoted in the Year 2 Scenarios have been presented solely for information and to solicit early input from TMI Commissioners and the City Council which will help guide staff efforts in the development of a contract renewal option.

ATTACHMENT(S)
1) Via Ridership Report
2) 6-Month User Survey Findings

ATTACHMENT 1

CITY OF WEST SACRAMENTO

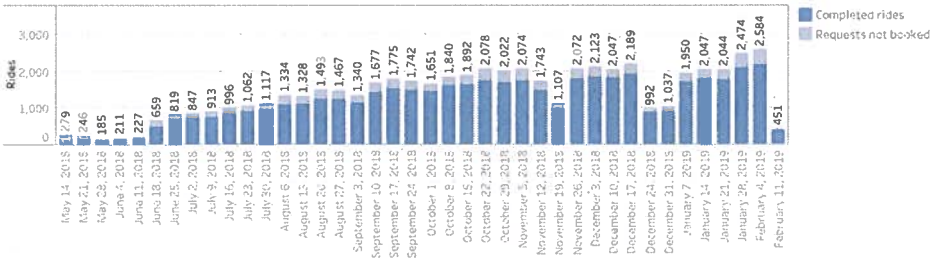
Overall Ridership Since Launch

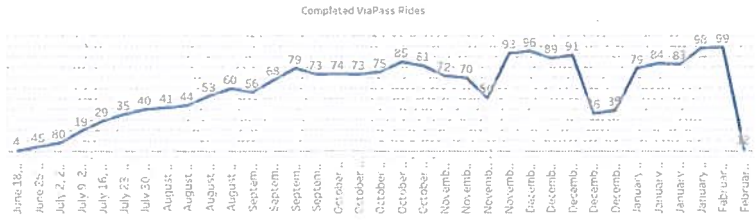
May 14, 2018 - February 11, 2019

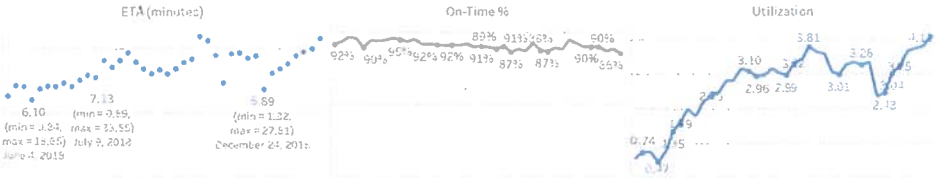
47,681 completed rides since launch

Look back weeks
42

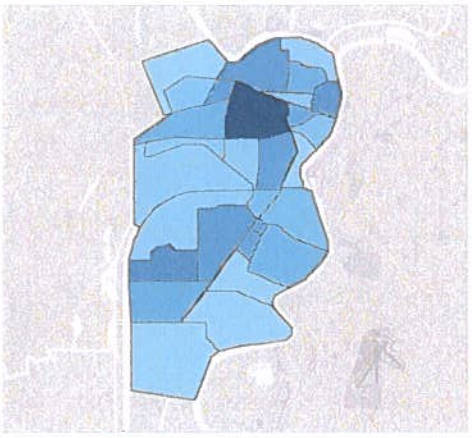
RIDES	DRIVERS	QUALITY OF SERVICE
47,681 completed rides	2.84 utilization	8.91 minute ETAs 91% pickups on-time
20,920 completed Viapass rides	44 active drivers	85% requested rides completed
9.54 minutes per ride	16,667 driver hours	4.91 average rider rating
2.92 miles per ride		





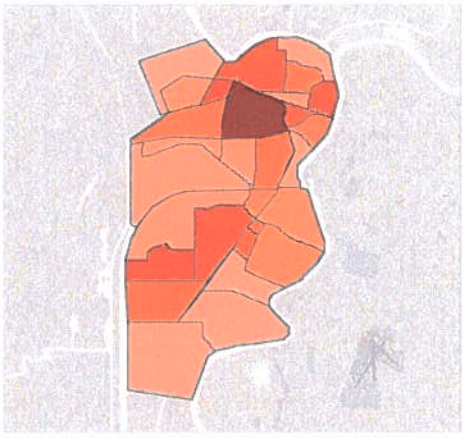


Pickup Requests



Requests 10 7,238

Dropoff Requests



Requests 12 7,199

Top Pickup Intersections

	Requests
Walmart SuperCenter	1,864
Southport Parkway	1,213
Town Center Plaza	990
West Capitol Avenue & Jefferson Boulevard	803
West Capitol Avenue & Harbor Boulevard	714

Top Dropoff Intersections

	Requests
Town Center Plaza	2,317
Walmart SuperCenter	1,898
Southport Parkway & Promenade Street	1,074
West Capitol Avenue & Harbor Boulevard	921
River City High School, Raider Lane, West Sacr..	677

- a driver is active if he/she gave at least one ride in the specified time period
- a pickup is on-time if the actual pickup time was less than 5 min. earlier or later than the ETA
- Rides metrics consider all completed rides
- Quality of service metrics consider all sessionized requests

CITY OF WEST SACRAMENTO

12-Week Ridership Report

November 19 2018 - February 11, 2019

47,681 completed rides since launch

Look back weeks
12

RIDES

19,994 completed rides

9,433 completed Viapass rides

9.98 minutes per ride

2.90 miles per ride

DRIVERS

3.28 utilization

30 active drivers

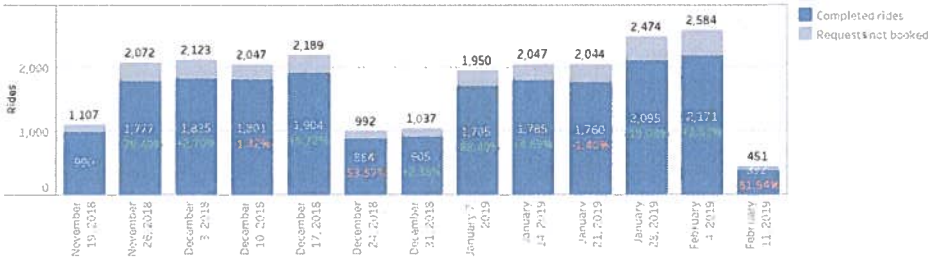
5,977 driver hours

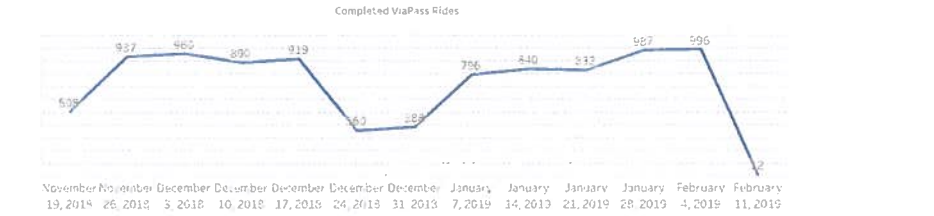
QUALITY OF SERVICE

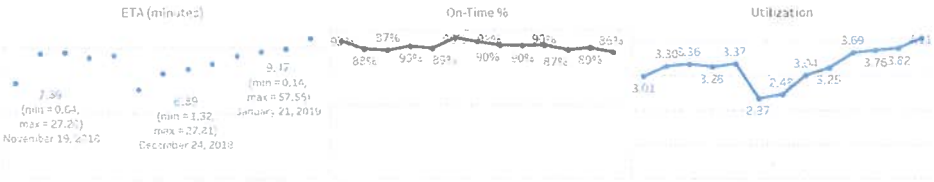
9.16 minute ETAs 90% pickups on-time

86% requested rides completed

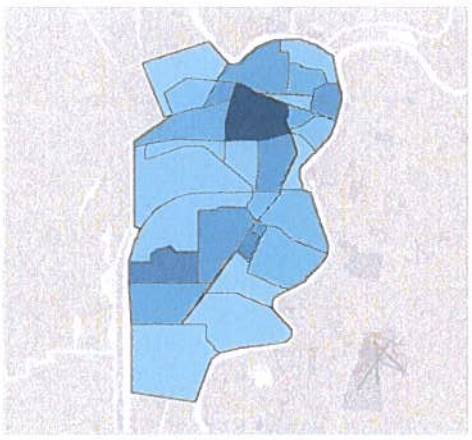
4.92 average rider rating





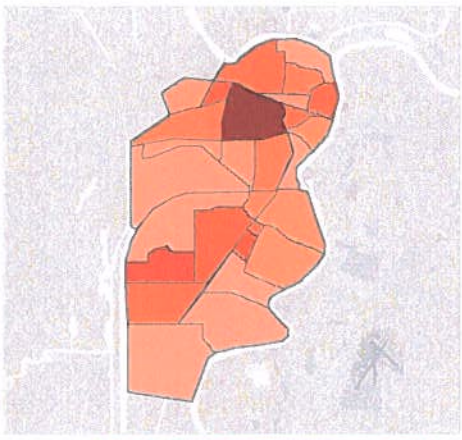


Pickup Requests



Requests 4 3,120

Dropoff Requests



Requests 18 3,241

Top Pickup Intersections

	Requests
Walmart SuperCenter	766
Southport Parkway	659
Town Center Plaza	645
West Capitol Avenue & Harbor Boulevard	214
West Capitol Avenue & Jefferson Boulevard	194

Top Dropoff Intersections

	Requests
Town Center Plaza	999
Walmart SuperCenter	826
Southport Parkway & Promenade Street	539
River City High School, Raider Lane, West Sacr..	458
West Capitol Avenue & Harbor Boulevard	343

- a driver is active if he/she gave at least one ride in the specified time period
- a pickup is on-time if the actual pickup time was less than 5 min. earlier or later than the ETA
- Rides metrics consider all completed rides
- Quality of service metrics consider all accepted requests

CITY OF WEST SACRAMENTO

4-Week Ridership Report

January 14, 2019 - February 11, 2019

47,681 completed rides since launch

Look back weeks
4

RIDES

8,203 completed rides

3,675 completed ViaPass rides

10.12 minutes per ride

2.90 miles per ride

DRIVERS

3.63 utilization

22 active drivers

2,152 driver hours

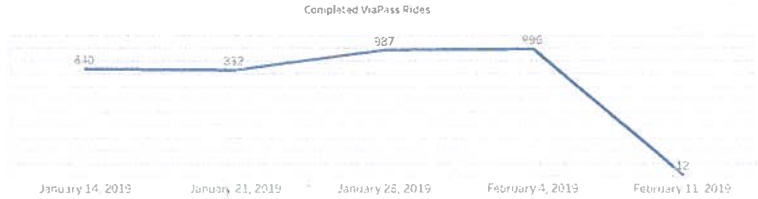
QUALITY OF SERVICE

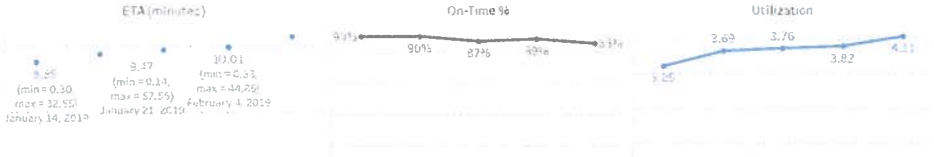
9.56 minute ETAs

89% pickups on-time

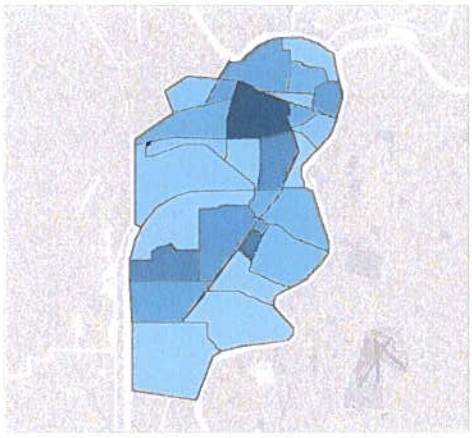
85% requested rides completed

4.91 average ride rating



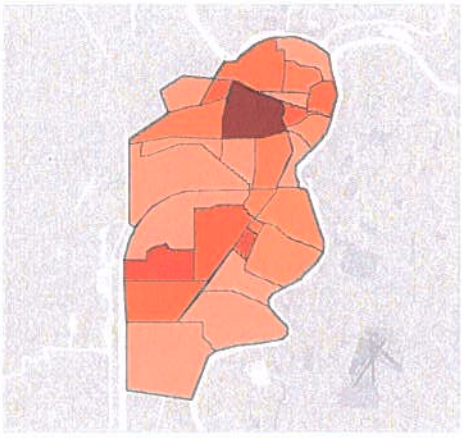


Pickup Requests



Requests 3 1,223

Dropoff Requests



Requests 10 1,347

Top Pickup Intersections

	Requests
Walmart SuperCenter	300
Southport Parkway	245
Town Center Plaza	225
West Capitol Avenue & Harbor Boulevard	72
West Capitol Avenue & Jefferson Boulevard	70

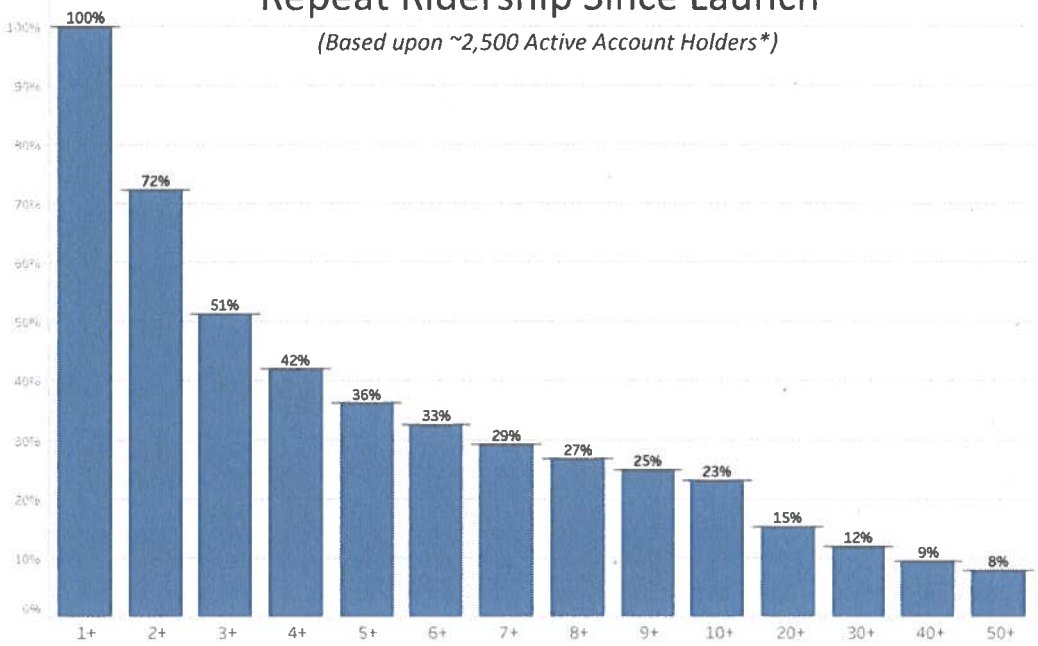
Top Dropoff Intersections

	Requests
Town Center Plaza	364
Walmart SuperCenter	314
River City High School, Raider Lane, West Sacr...	222
Southport Parkway & Promenade Street	207
West Capitol Avenue & Harbor Boulevard	118

- a driver is active if he/she gave at least one ride in the specified time period
- a pickup is on-time if the actual pickup time was less than 5 min. earlier or later than the ETA
- Rides metrics consider all completed rides
- Quality of service metrics consider all successized requests

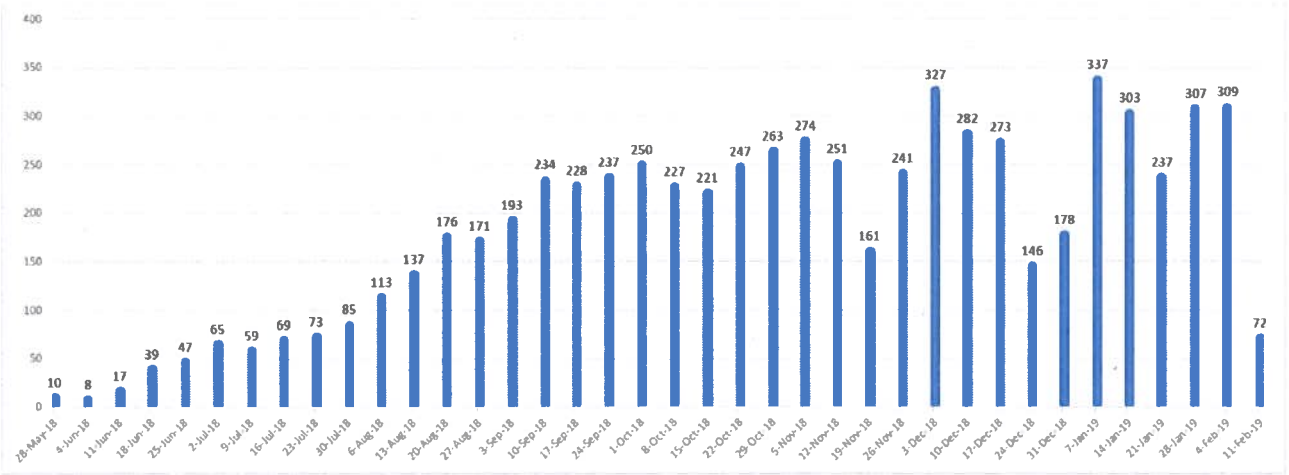
Repeat Ridership Since Launch

(Based upon ~2,500 Active Account Holders)*

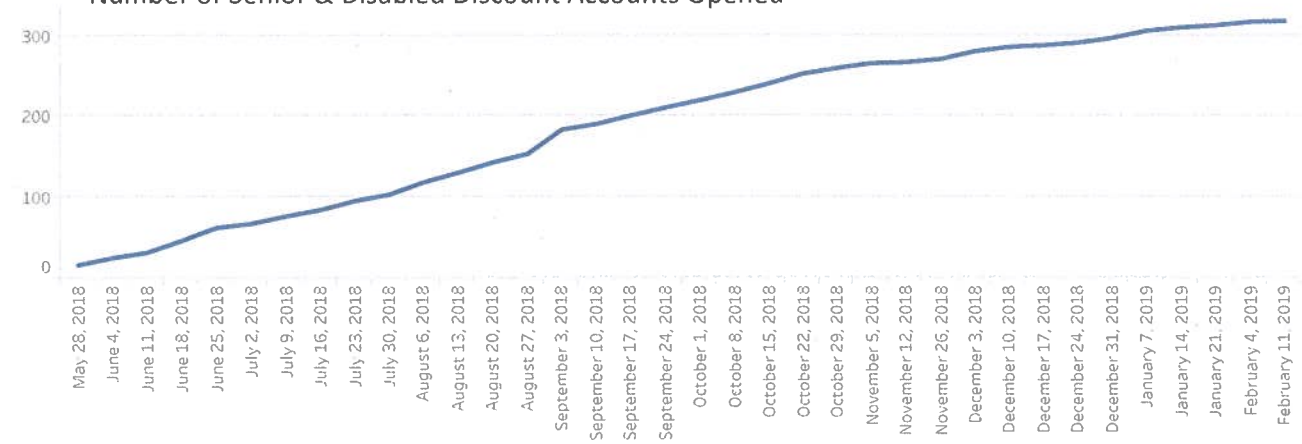


*Active account holders have taken 1+ ride

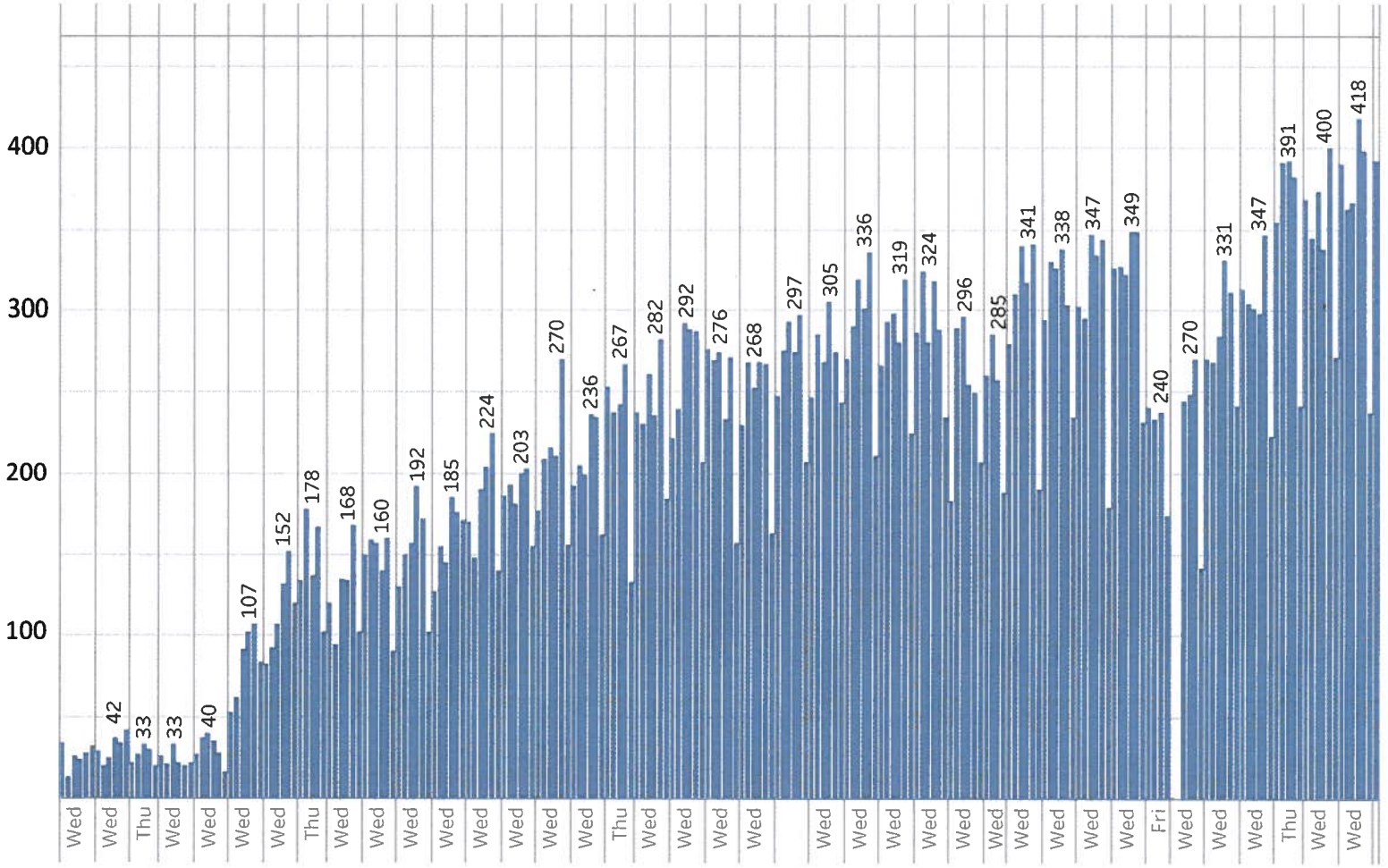
Weekly Senior & Disabled Discount Rides



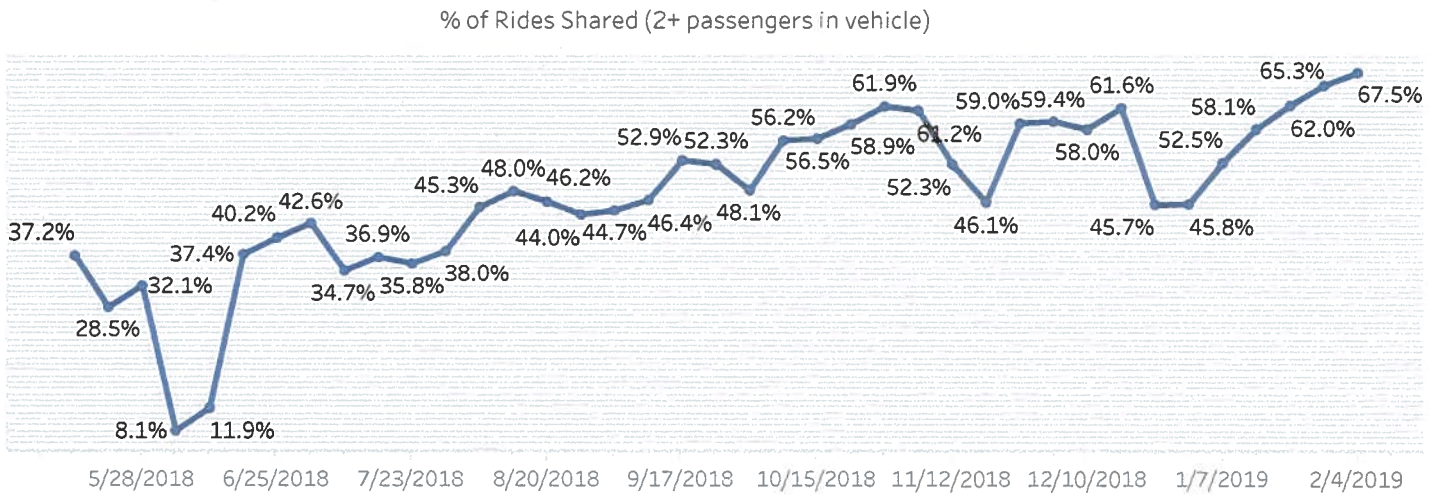
Number of Senior & Disabled Discount Accounts Opened

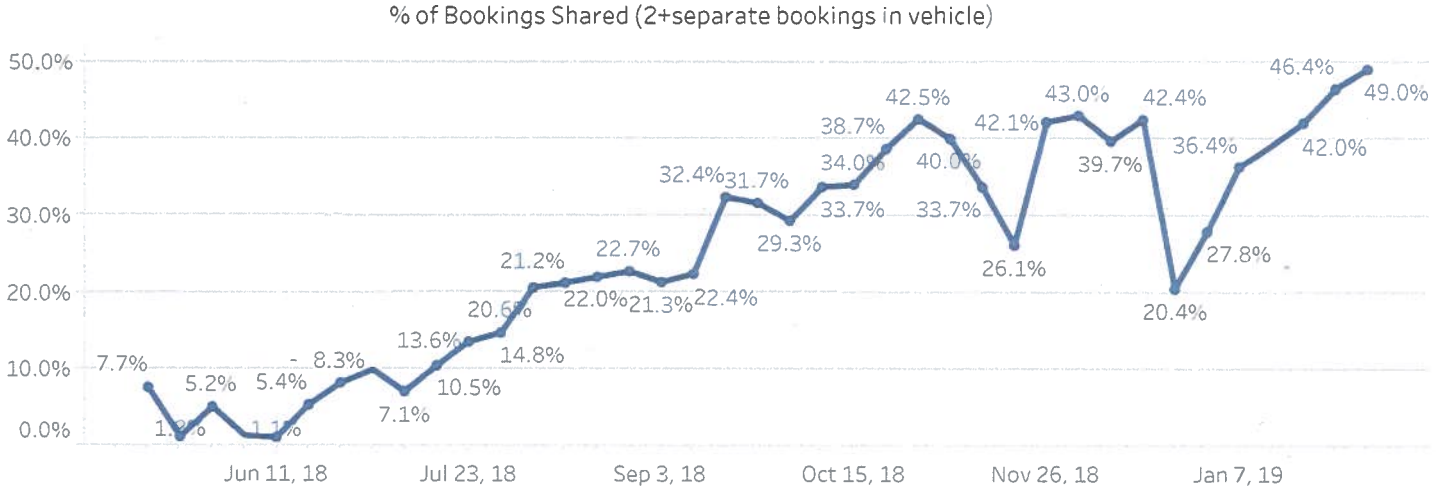


Overall Ridership Since Launch (42 Weeks)
Rides per Day



Percentage of Shared Rides & Bookings by Week





ATTACHMENT 2

2019 | City of West Sacramento

WEST SACRAMENTO'S ON-DEMAND RIDESHARE PILOT

A Summary of 6-Month User Survey Findings

February 2019

Staff Contact: Sarah Strand, Associate Transportation Planner, sarahs@cityofwestsacramento.org

Table of Contents

Executive Summary

Background

In May 2018, the City of West Sacramento began piloting an innovative on-demand rideshare service in partnership with NoMad Transit LLC, a wholly owned subsidiary of Via Transportation Inc. Halfway through the Pilot year (November 2018), a survey was conducted to help the City better understand who was using the service, how they were using it, and what potential impacts it was having on the travel behavior or quality of life of riders. The survey was intended to capture high level trends and will be followed by a more rigorous academic evaluation in partnership with UC Berkeley toward the end of the Pilot term.

The survey received a **14% response rate** (152 respondents) and a **92% completion rate.** Respondents generally reflected the West Sacramento community, with a few exceptions. Relative to the general population (2017 ACS), a slightly higher response was received from young men aged 13-17, men and women aged 40-49, older women aged 60-79, from households earning less than $10,000 a year, and from people who have attended some college, but did not obtain a degree.

Who is using the On-Demand Rideshare service?

Community members of all ages, incomes, educational backgrounds and genders are using the service, however young people **under the age of 21** appear to be the **most frequent users**, followed by **older adults (50+).** Riders are more likely to come from households with between **$15,000 and $35,000 household income** and are slightly more likely to be **women.**

What is the On-Demand Rideshare service being used for?

Highschool students are regularly using the service to **commute to school**, work and social or recreational activities. Users in their **twenties** are also **commuting**, but also take rideshare for more **errands**, like groceries and shopping. Conversely, **Seniors** that tend to be retired are not commuting at all but appear to depend on the service for **daily goods and services**, like groceries, medical or dental appointments, and going to **social or recreational activities.**

Although some **middle aged users** (30-59) use rideshare to commute, they do so at much **lower rates** than riders under 30. Rather, middle aged riders, especially those from middle or upper income households, are more likely to be taking rideshare to **connect with local bars and restaurants**, for **social and recreational** purposes, or to **transport family members**, such as children or elderly parents.

A small portion of riders say they view the service as more of a **safety net** for when their car or bike is broken down or is in the shop for maintenance. They use it infrequently but are very happy to have it as a **back-up plan.**

Is the On-Demand Rideshare service changing how people choose to get around?

Half of respondents said they were using the rideshare service instead of taking Uber/Lyft and 34% said they were using it instead of driving alone or catching a ride from a friend or family member. These responses may be early indications of potential reductions in vehicle miles travelled associated with ride-hailing, driving alone, or getting rides form others, but more analysis will be necessary to quantify impacts.

Middle-aged respondents from households with slightly higher incomes were more likely to say they are **driving alone less** because of the rideshare service, which may be correlated with higher rates of auto-ownership among middle and upper income households. Interestingly, a fair number of **Seniors (60+)** also said they were driving alone less, possibly indicating that the rideshare service facilitates the decision of older adults to **give up driving sooner.** Those **switching from Uber/Lyft** were primarily between the age of **18-60** but were evenly represented across gender and household income.

Riders who said they would have gotten a **ride from a friend or family member** if the rideshare service was unavailable were most likely to be **Youth (18 or under) and Seniors (60+)**, which may be partly explained by age-restrictions preventing minors from using ride-hailing services, and a slightly lower technological literacy or trust among Seniors in regard to services like Uber or Lyft. Similarly, respondents aged **13-17 and aged 70+ were most likely to have not taken the trip at all** if the rideshare service was unavailable. This may indicate that the rideshare service is helping to meet latent demand for transportation among both the youngest and oldest members of the community.

Those reporting the greatest **drop in bus use** were predominantly **women** (32% females greatly decreasing bus use compared to only 17% male), households making **less than $35,000** a year, and were more likely to be **younger** (13-17, 20-29) **or older** (70+).

People who said they were **walking or biking less** were predominantly **men**, were more likely to be **under 30** or **over 60** and to come from **slightly lower income** households. However, **respondents in their 30's,** especially those from middle or upper income households, said they are **walking or biking more** because of the rideshare service.

Is the On-Demand Rideshare service impacting the quality of life of its users?

66% of respondents feel safer getting around town and 59% had a greater sense of independence, and 41% said their access to healthy foods and medical care had increased, especially among women, younger (under 21) and older (60+) riders, and households earnings less than $35,000 a year.

More than **half of respondents,** especially women, said they were **visiting local businesses or participating in social activities more** often due to their use of the rideshare service.

Monthly transportation expenses were reported fairly consistently across gender, age and income categories. **Seniors** (age 60+) and **respondents in their 20's** were slightly more likely to be benefiting from **monthly savings.** Those **aged 13-17** were most likely to say they are **paying more** because of the rideshare service, possibly indicating that a latent demand for youth mobility options may exist in the community.

Introduction

A Survey of Pilot On-Demand Rideshare Service Users

Background

In 2016, the West Sacramento City Council directed staff to explore innovative public transportation options with the potential of encouraging more shared rides and enhancing accessibility and mobility for underserved communities. Subsequently, the City conducted a competitive solicitation to select a partner to assist in the deployment, operations, and performance evaluation of a one (1) year Pilot program to assess the costs and benefits of offering a more flexible, on-demand public transportation service.

NoMad Transit LLC, a wholly owned subsidiary of Via Transportation Inc. ("Via"), was awarded a contract to operate the Pilot service using Via's proprietary technology to dynamically route a dedicated fleet of Mercedes Benz Metris vans in real-time to provide on-demand, corner-to-corner, shared rides throughout the City. The Pilot service is also sometimes referred to as "Via Rideshare" by users. The service offers a flat-rate public transportation option with the same convenience as a ride-hailing service, but with the added benefit of sharing the ride with neighbors, which contributes toward environmental goals and increasing social interaction between community members. Service was launched May 14, 2018 with expectations of roughly 200 to 250 average daily rides. By Fall 2018, ridership had surpassed these early ridership estimates by 50% and continued growing.

Through the City's partnership with Via, the UC Berkeley Transportation Sustainability Research Center (TSRC) was recruited to conduct a Final Performance Evaluation toward the end of the one-year Pilot term, which would assist the City in understanding the degree to which, or if at all, the Pilot On-Demand Rideshare service had impacted travel behaviors and quality of life factors for the community. However, in the interim, the City elected to conduct a mid-term survey of users to better understand who was riding the service and what types of trips they were using it for, termed here as the "6-Month User Survey".

Survey Objectives

The 6-Month User Survey was designed to collect data that would help the City better understand who was riding the service (i.e., demographics), how they were using the service (i.e., trip purpose), and how, if at all, the program had impacted their travel behaviors or quality of life (i.e., drive less, sense of safety). The survey instrument is included in this report as **Appendix 1**.

Survey Approach

The 6-Month User Survey was designed to collect information from existing Via account holders about their use of the service. At the time of survey deployment, the population of Via Account Holders was roughly 3,750 individuals. The survey was open for three (3) weeks, from November 26 to December 17, 2018.

An online survey format was designed using the "SurveyMonkey" platform and was expected to take roughly 5 minutes to complete. All questions were optional, but were not advertised as such, allowing Respondents to skip any question they felt uncomfortable responding to. Survey links were emailed to all Via account holders.

Paper surveys were also designed using age-friendly best practices to ensure legibility and ease of completion among the older adult community. Paper surveys were distributed in all rideshare vehicles and Drivers were asked to encourage riders to take the survey, if they hadn't already done so online. Paper surveys were also made available at City Hall, the Community Center, and the Recreation Center.

Fliers encouraging community members that had signed up for the rideshare service were also distributed at the Community Center and were advertised on the City's social media and webpage venues. Local organizations such as the Broderick Bryte Community Action Network (BBCAN) and the West Sacramento Chamber of Commerce assisted in spreading the word through word-of-mouth and on social media. Respondents were incentivized to take the survey with the chance to win one of four $25 Visa Gift Cards.

A **total of 521 surveys were completed** with a 92% completion rate (480 fully completed surveys and 41 partial responses). 467 (90%) of Respondents completed the survey online and 54 (10%) in hard copy. Respondents took an average 4 minutes to complete the online survey. Relative to the number of accounts that had been created at the time of survey deployment (3,750), the response rate represented **14% of all account holders**. As of the writing of this report (February 2019), total accounts opened had grown to 4,500.

Figure 1. Survey Recruitment Flyer

Survey flyers were posted on the City's webpage and social media account. Local organizations such as BBCAN and the West Sacramento Chamber of Commerce helped to spread the word.

Hard copies were also broadly distributed on tables at the Community Center, including at the front counter and on tables in the Senior Lounge area.

Key Findings & Analysis

A Survey of On-Demand Rideshare Users

Demographics

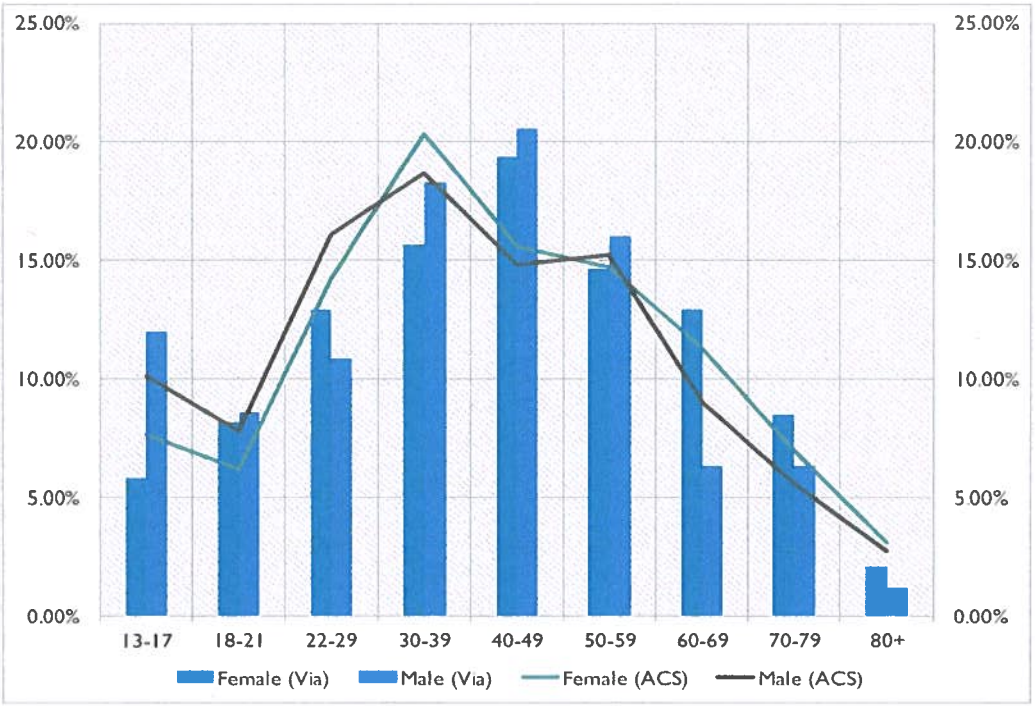
Generally, respondents were fairly reflective of the West Sacramento community relative to the 2017 5-Year American Communities Survey (2017 ACS), with some exceptions. Respondents were almost entirely local, with 95% of respondents providing a zip code within the City of West Sacramento.

Age & Gender

Overall, slightly more women responded than men, with about 62% of respondents identifying as female and 36% identifying as male. 1.5% declined to state and .5% identified as gender non-binary.

Relative to the City's overall demographic make-up (2017 ACS), a slightly higher response was received from young men (13-17), adults aged 40-49, and older women (60-79), as illustrated in **Figure 2** below.

Figure 2. Age & Gender of Respondents vs. General Population (2017 ACS) (482 Responses)



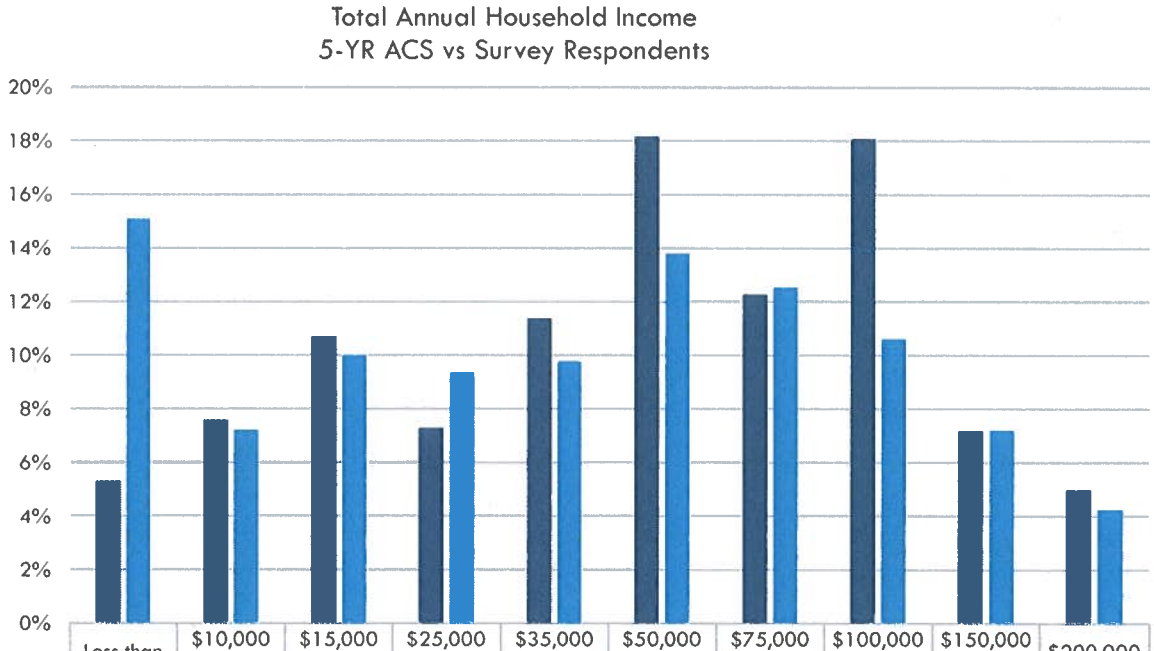
Annual Household Income

Respondents significantly mirrored the total household incomes of the community. However, a greater response came from individuals reporting annual household incomes of less than $10,000, and a slightly lower response came from households between $50,000-$74,999 and $100,000-$149,999 relative to the general population.

Households with annual incomes of less than $10,000 responded at a disproportionally greater rate. However, further analysis *by age* showed that 33% of respondents selecting this response were under the age of 21 and another 30% were under the age of 29. Staff suspects that this oversampling is likely attributable to a respondent error attributable at least in part to some younger respondents, especially those under 18, indicating their *personal* income rather than their household's total income.

A majority of respondents reporting annual household incomes ranging from $50,000-$74,999 and $100,000-$149,999 fell between the ages of 30 and 59. Generally, and as further supported in this report, this age and income group has access to a personal vehicle, suggesting that they may be less likely to use the On-Demand Rideshare service for compulsory trips, such as commuting or going to appointments. Staff suspects this is why a smaller sample was obtained from this subpopulation.

Figure 3. Household Income of Respondents vs. General Population (2017 ACS) (470 Responses)



	Less than $10,000	$10,000 to $14,999	$15,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 to $99,999	$100,000 to $149,999	$150,000 to $199,999	$200,000 or more
5-YR ACS	5%	8%	11%	7%	11%	18%	12%	18%	7%	5%
SURVEY RESPONDENTS	15%	7%	10%	9%	10%	14%	13%	11%	7%	4%

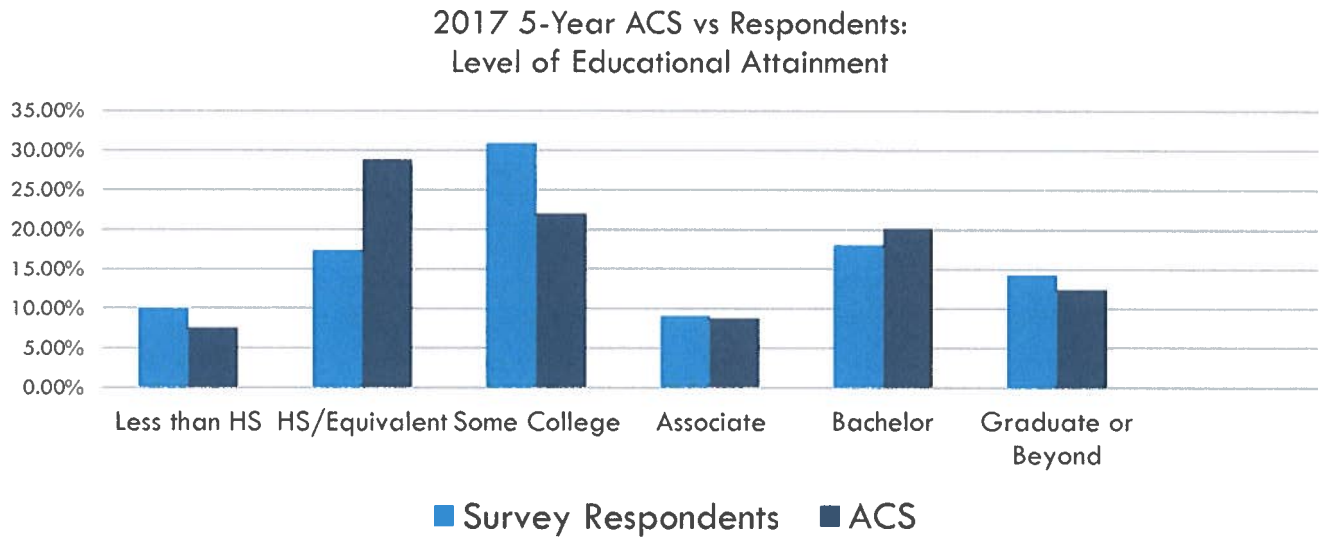
Educational Attainment

Relative to the 2017 5-Year ACS, a higher proportion of respondents indicated their level of educational attainment as either "Some College, but No Degree" or "Less Than High School".

Of the 148 respondents who reported having "Some College, but No Degree", respondents were fairly equally distributed across age and income groups. Individuals with this level of education represented 30% of all survey respondents, compared to only 22% of the general population.

Of the 48 individuals who reported having a less than High School education, roughly 69% (33 respondents) reported being at or around high school age (13-17 or 18-21). Conversely, the remaining 31% (15 respondents) were aged 22 or older. Individuals with this level of education represented roughly 10% of survey respondents, compared to about 7.5% of the general population.

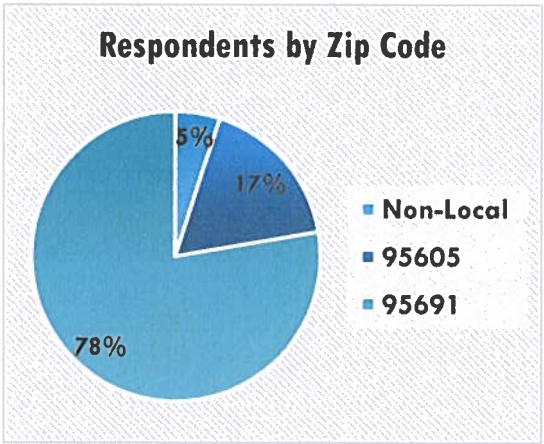
Figure 4. Level of Educational Attainment (481 Responses)



Geographic Distribution of Respondents

An 85% response rate was received when respondents were asked to provide zip code information. Out of **444 responses,** almost all (95%) reported a zip code in the City of West Sacramento. Only 5% reported living in a non-local zip code.

78% (346 respondents) reported a 95691 zip code and roughly 17% (75 respondents) reported a 95605 zip code. According to the 2017 5-Year ACS, roughly 72% of the general population resides in the 95691 area and 28% reside in the 95605 area.



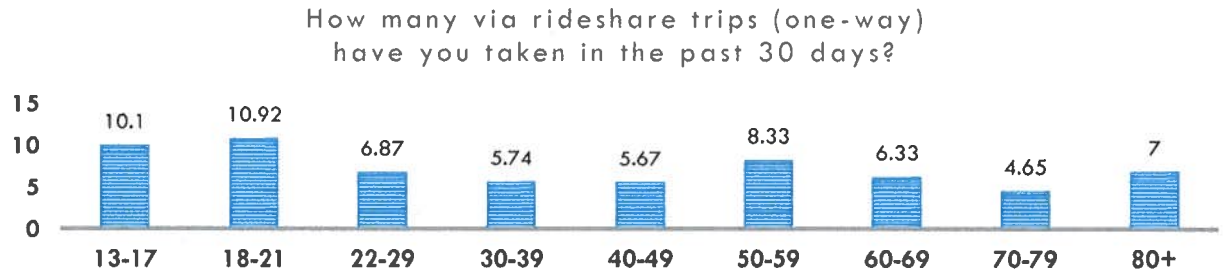
Travel Behavior Impacts

Multiple survey questions were included to learn if and to what extent On-Demand Rideshare users were changing their travel behaviors as a result of the Pilot service. Questions were designed to obtain general indications of ridership, trip purposes and mode shifts. **Although the 6-Month User survey provides some significant insights, additional analysis will be necessary to quantify the degree to which users may be shifting from other modes of transportation onto the rideshare service.**

Recent Ridership

Respondents were asked to estimate how many rides they had taken in the past 30 days to provide a general indication of their frequency of use. Although anonymized data is already collected on overall ridership and repeat ridership using the Via technology platform, responses to this question enabled staff to evaluate estimated ridership levels across subgroups to better understand how different people are riding. Beyond averages, different types of riders have also emerged, ranging from the occasional user who views the rideshare option as more of a back-up plan, to the "super-user" who report riding up to 120 times a month.

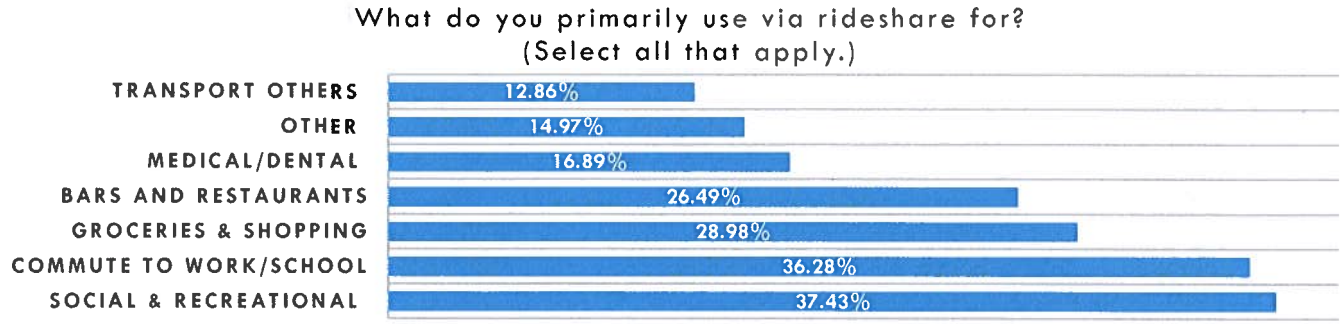
Figure 5. Average Number of Trips Completed in Past 30-Days by Age



Overall Trip Purpose

The top selected trip purposes were "Social or Recreational" and "Commuting to School or Work", followed by a significant response of "Groceries & Shopping" and "Local Bars and Restaurants". Roughly 15% (78 Respondents) selected "Other", of which 27% were individuals who signed up but hadn't ridden yet, and 21% described their primary use as a "Plan B" for when their car or bike is unavailable. 19% specified other errand or non-medical appointments and the remaining 33% made general comments or elaborated on their selections to identify specific locations, such as the library or visiting friend's homes.

Figure 6. Trip Purpose (521 Responses)



Overall Trip Purpose, Continued

Although this question provided a general sense of the primary trip purposes associated with the rideshare service, it is important to note that this data does not capture the *frequency* of trips across each trip purpose. No less, it provides a cross-section of how community members say they are using the service and provided a basis for conducting additional analyses to examine trip purpose across subpopulations, as discussed below.

Trip Purpose by Gender

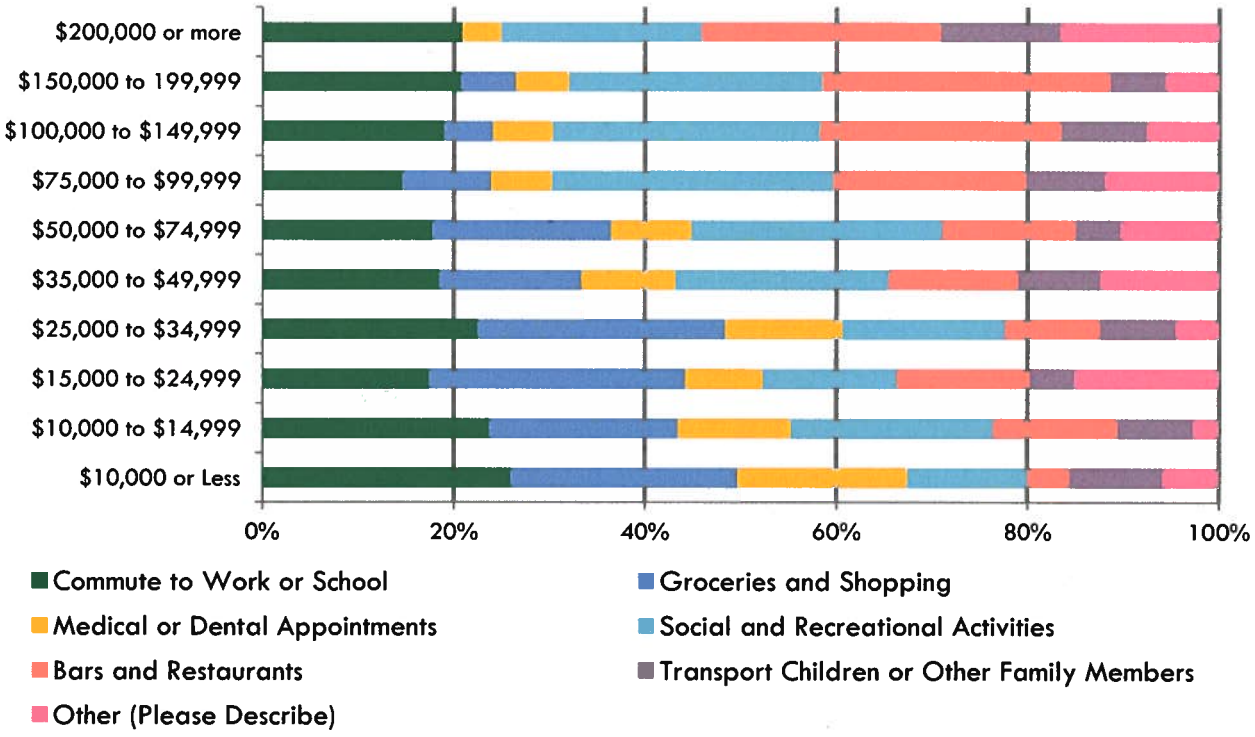
Trip purpose was fairly consistent across genders, however female respondents were significantly more likely than male respondents to say they used the On-Demand Rideshare service for "Groceries and Shopping", "Medical or Dental Appointments", and "Transporting Children or Other Family Members".

Trip Purpose by Income

Households with annual incomes of $35,000 or less reported using the On-Demand Rideshare service for "Groceries and Shopping" at a significantly higher rate. Households making $35,000 - $74,000 annually also use the service for "Groceries and Shopping", but with only 30% of respondents in this income category reporting as such compared to 50% of respondents with household incomes less than $35,000. Further, households with annual incomes less than $10,000 indicated a greater use for "Medical or Dental Appointments".

Conversely, households with annual incomes of $50,000 and above indicated using the service for "Social and Recreational Activities" and "Bars and Restaurants" at higher rates. Respondents across all income categories selected "Commuting to Work or School" and "Transporting Children or Other Family Members" at similar rates.

Figure 7. Reported Trip Purposes by Annual Household Income (470 Responses)



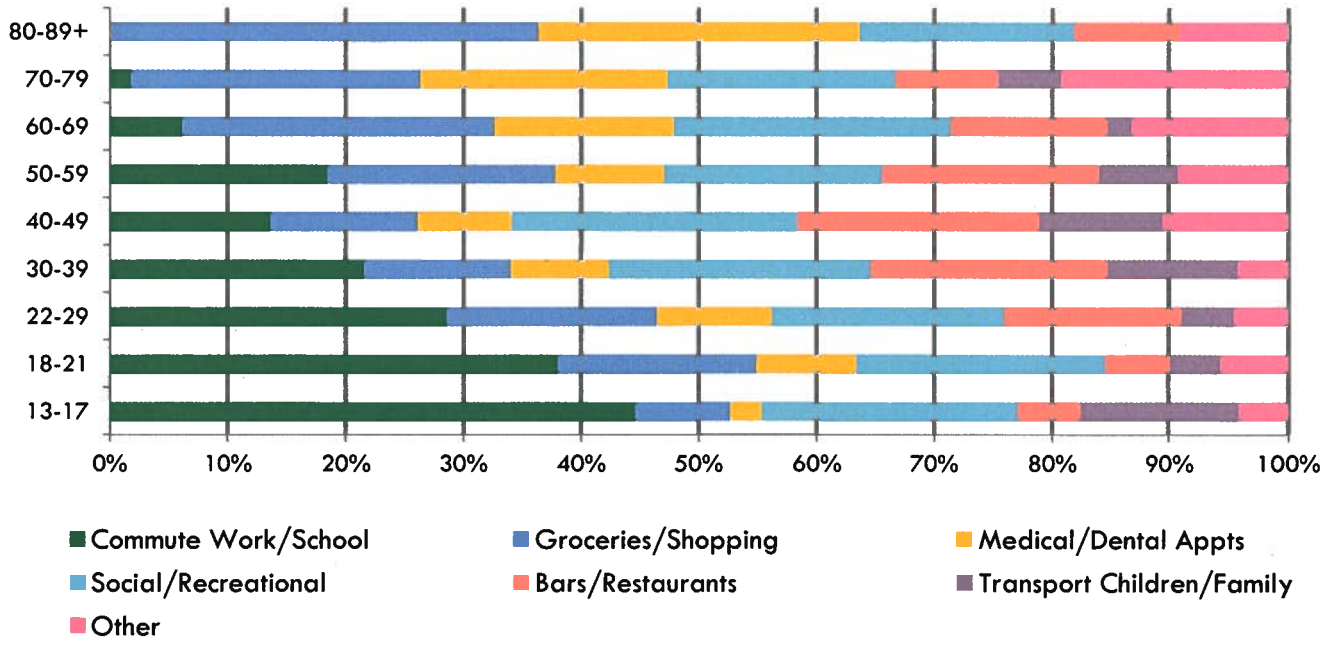
Trip Purpose by Age

Clear patterns emerged when trip purpose was examined across age categories. Younger ages groups (13-29), especially High School aged respondents, appear to be using the service at significantly higher rates (50%-80%) for compulsory trips ("Commuting to Work or School"), as well as for non-compulsory trips ("Social and Recreational Activities"). Young adults (ages 18-29) appear to use the service at a slightly higher rate for "Groceries and Shopping" than High School aged respondents. Generally, this may indicate that younger people gain independence and increased access to jobs, education, and daily amenities through use of the service.

At the other end of the age spectrum, older adults demonstrated a distinctly different profile of trip purposes using the On-Demand Rideshare service, especially for those at or around the standard retirement age (~60+). As would be expected, use of the service for commuting dramatically plummets for respondents in these age groups. On the contrary, Seniors appear to be primarily using the service for daily goods and services such as "Groceries and Shopping" and attending "Medical or Dental Appointments", alongside some social and recreational trips. A majority of older adults who selected "Other" as one of their responses chose to do so in order to provide additional detail on their trips, specifying non-medical appointments and visits to the library or the homes of friends and family as examples. This indicates that the older adult community is using the service to connect with daily goods and services, while also better accessing civic resources and social opportunities.

Respondents in middle age groups (30-59) indicated that their primary use of the rideshare service is for non-compulsory trips, especially "Bars and Restaurants" and "Social and Recreational". Unsurprisingly, since they are more likely to have dependent children and/or aging parents, these age groups also reported using the service to "Transport Children or Other Family Members" at higher rates. Middle aged respondents indicated slightly lower use of the service for commuting, groceries or appointments.

Figure 8. Reported Trip Purposes by Age (482 Responses)



Overall Mode Shift

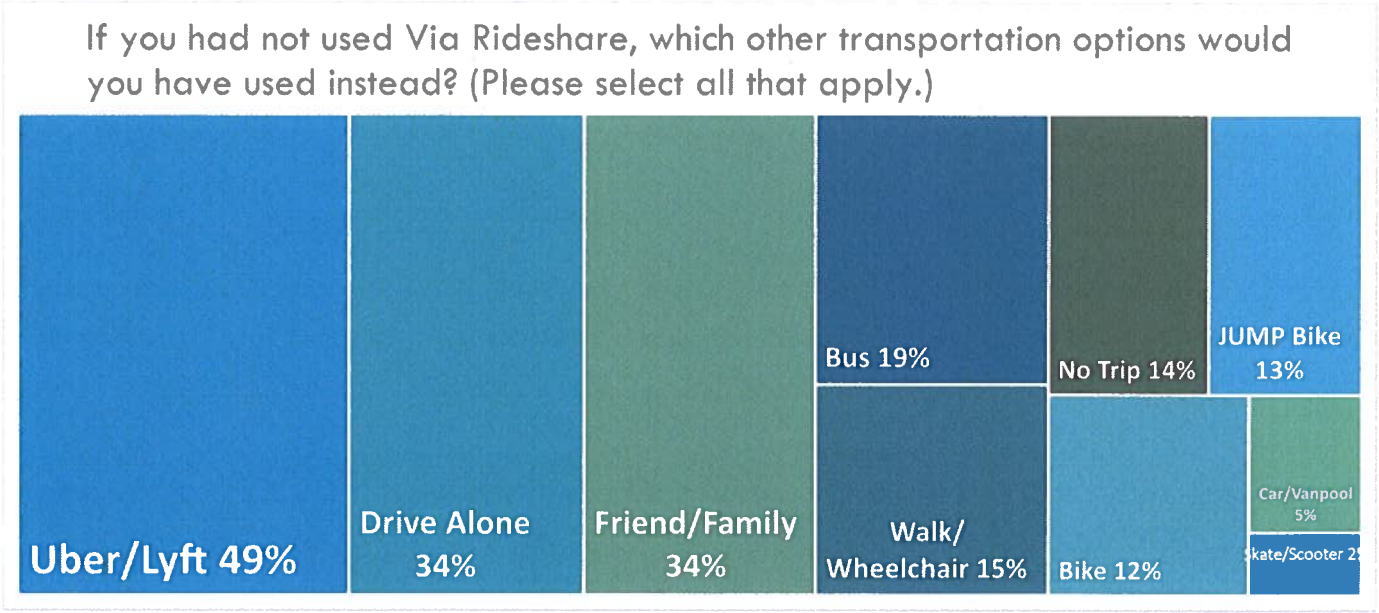
Two questions were included to learn more about potential impacts of the service on travel behaviors. The first asked respondents to identify which other modes they would have used instead if the rideshare service was unavailable, and the other asked respondents to estimate the degree to which they have altered their use of certain modes.

Clear patterns emerged across all respondents when asked which mode they would have taken if the rideshare service was unavailable. This question allowed respondents to select all that applied, which also helped to create a modal profile of respondents, particularly when cross-referenced with age, gender, and household income. However, it is important to note that this question **did not** provide an indication of the *quantity or frequency* of trips replaced on each mode selected by respondents. The results of this question do, however, provide insights on which modes a majority of respondents said they were shifting from, in general.

By a significant majority, the top three modes respondents said they would have used if the rideshare service was unavailable were "Uber/Lyft", "Drive Alone", and "Driven by a Friend or Family Member", as shown below. Of 521 responses, almost **50% (234 respondents) said they would have used Uber/Lyft** for some trips if the City's rideshare service wasn't an option. The rideshare service appears to be used by the community as a substitute good by providing a more affordable service with a similar level of convenience as Uber/Lyft. Similarly, **30% (159) said they would have driven alone or gotten a ride** from a friend or family member.

These responses may signal reductions in vehicle miles travelled (VMT) resulting from the On-Demand Rideshare pilot, however additional analysis will be required to more precisely quantify the potential magnitude of such impacts. Similarly, net VMT impacts will need to be considered alongside potential reductions in the use of lower VMT modes, such as riding a bus or walking. For example, nearly **20% of respondents said they may have taken the bus, if rideshare was unavailable.** Additional research will work to better understand the degree to which bus users may be switching to rideshare, and which routes they may be riding less often.

Figure 9. Overall Mode Shift (521 Responses)



Overall Mode Shift, Continued

14% (65 respondents) said they may not have taken a trip at all if the rideshare service wasn't available. This may imply a latent demand for transportation, possibly from mobility-underserved communities, which may also signal a resulting increase in VMT. Additional analysis with UC Berkeley will also help assess the net impact of the pilot rideshare service on overall VMT alongside improved mobility for underserved communities.

Mode Shift by Gender

No significant differences were observed between men and women in terms of mode shift responses, except that **men were 2.5 times more likely to shift from biking.** This is best explained by the fact that men are generally more likely than women to choose biking as a mode of transportation, as evidenced by several other studies.

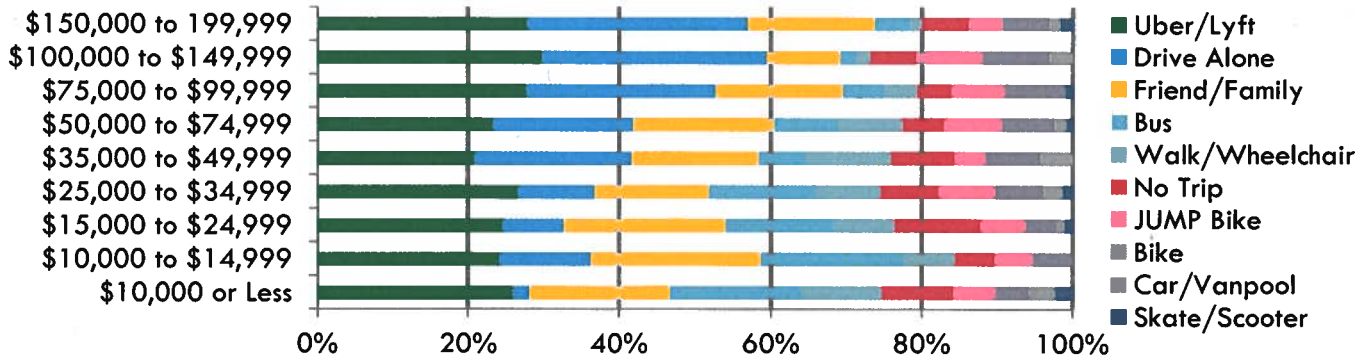
Mode Shift by Annual Household Income

A clear relationship was observed between household income and mode shift. Perhaps unsurprisingly, higher income households, especially those making more than $75,000, stated that they would have driven alone instead of taking the rideshare service at a significantly higher rate than lower income households. Similarly, respondents from lower income households, especially those making less than $25,000 a year, were significantly more likely to have taken the bus, walked, or not taken the trip at all.

These results may indicate that **traditional "choice" transit riders from higher income households may be more likely to switch from their personal vehicle to the City's rideshare service** over traditional fixed route service. Combined with the trip purpose findings discussed above, it also seems feasible that these riders are driving alone less for non-compulsory trips, such as visits to local bars and restaurants.

On the other hand, these results also indicate that **traditionally transit-dependent households lacking access to a personal automobile may be switching to the rideshare service from less convenient or less comfortable modes to complete compulsory trips,** such as commuting to school or work, or running errand for groceries or other amenities. Although there may be some health benefits lost where respondents are walking less, it is equally important to acknowledge potentially significant savings in both time and financial costs.

Interestingly, shifts from other options including Uber/Lyft or getting rides from friends or family were fairly static across all income categories, indicating that demand for a more affordable service of this type may have existed in the community prior to the launch of the On-Demand Rideshare pilot. ***Figure 10. Mode Shift by Annual Household Income***



Mode Shift by Age

As was the case for trip purpose, age was a determining factor in which modes respondents said they were shifting from. **Shifts from Uber/Lyft were largely attributable to respondents aged 18-59**, with over 50% in each age group selecting this response. Uber & Lyft do not allow riders under 18 to ride alone, which explains a significantly lower response from respondents age 13-17. In some cases, older adults were less likely to use Uber/Lyft due to the required use of a Smartphone. However, some older adults may also have fixed incomes, making these services potentially inaccessible to them and explaining why fewer respondents age 60+ selected this response.

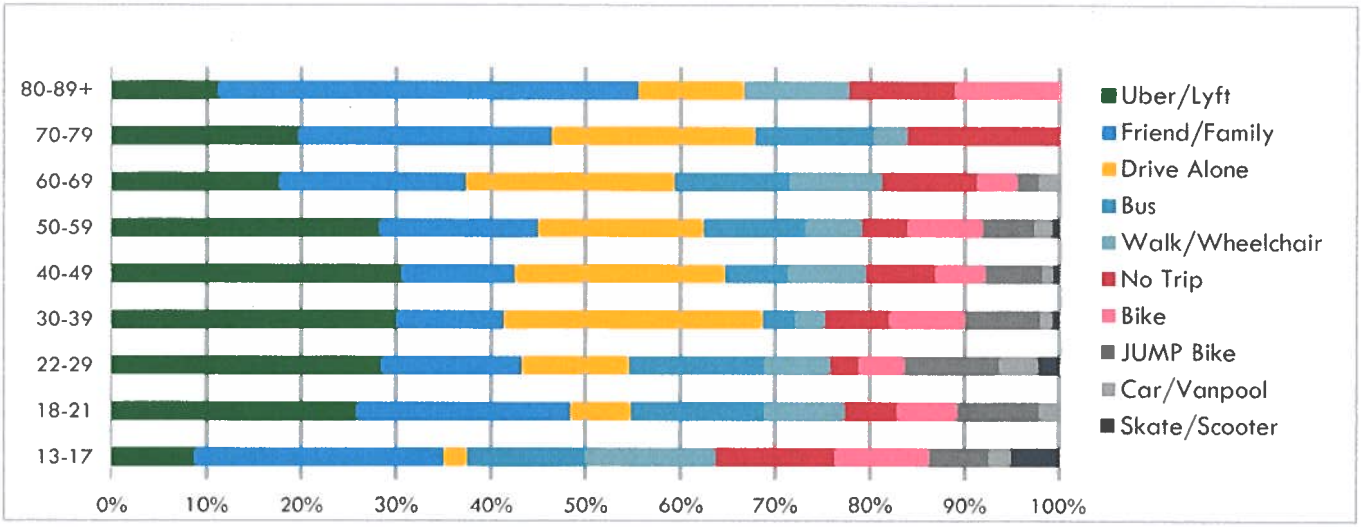
Not unsurprisingly, age groups that tend to be more dependent on others for transportation reported a higher rate of shifting from rides from friends and family, namely younger respondents that either cannot legally drive or may not own a car, and especially older adults (70+) who may have physical limitations that prevent them from driving or perhaps can't afford a car. This was especially pronounced among respondents aged 80+.

Respondents aged 30-79 reported shifting from driving alone at a significantly higher rate than other age groups. **Over half of respondents age 30-39 said they would have driven alone instead**, along with roughly 30-40% of subsequent older age groups. Interestingly, and in line with anecdotal evidence received regarding the rideshare program, many older adults expressed that they were more willing to give up driving a personal vehicle as often because of having the rideshare service as an option. Responses to this question seem to support this shift, especially among those aged 70+.

Respondents most likely to report switching from the bus tended to be younger, specifically under the age of 30, or older (70+). Younger respondents (age 18-20) were significantly more likely to have used JUMP bikes, and respondents aged 13-17 were the most likely to have walked, ridden their own bike, skateboard or scooter.

Respondents aged 13-17 and aged 70-79+ were the most likely across all age groups (about 25% from both age groups) to have not taken the trip at all. This may indicate that the rideshare service is improving the range of mobility options for the youngest and oldest members of the West Sacramento community.

Figure 11. Mode Shift by Age (521 Respondents)



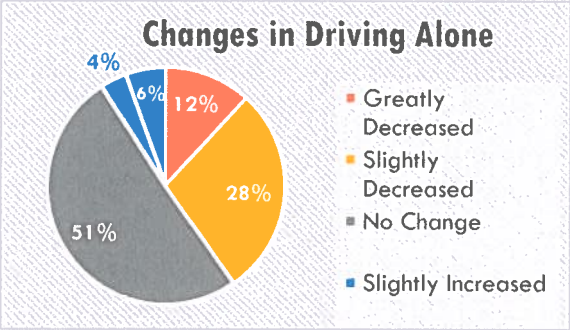
Changes in Transportation Choices: Direction and Degree of Shift from Key Modes

In addition to a general question about mode shift, a secondary question was included to better understand the *extent* to which respondents felt their transportation choices were being impacted. The question was designed as a matrix that focused on four (4) key modes of interest: driving alone, riding the bus, using paratransit services, and walking or biking. It also included a question asking if the rideshare service had impacted how often they left their home to provide an indication of latent or induced demand for transportation resulting from the service.

Lastly, respondents were asked to indicate the extent to which their overall satisfaction with the City's transportation system had changed. Responses options were provided on a 5-point Likert scale ranging from Greatly Decreased, Slight Decreased, No Change/Stayed the Same, Slightly Increased, or Greatly Increased. An "N/A" option was provided for responses that respondents felt did not apply to them, such as paratransit.

As a result of your Via Rideshares use, how have your transportation choices changed, if at all? If an answer doesn't apply to you, select "N/A".

Figure 12. Changes in Driving Alone (487 Respondents)



Of 306 respondents that indicated driving alone applied to them, **40% said the amount they drive alone slightly decreased** (28% or 87 respondents) **or greatly decreased** (12% or 36 respondents) as a result of the rideshare service. Half said there was no change to how often they drive alone. Respondents most likely to say they're driving less **tended to be middle aged (30-69) and earn $35,000+ a year.** Changes in driving alone did not vary by gender.

Notably, 181 respondents indicated that this option did not apply ("N/A" response), which may imply to some extent that they a lack access to use an automobile for transportation. Respondents selecting "N/A" were evenly represented across age and gender but came predominantly from households making less than $35,000 a year.

Changes in Transit Use (Bus & Paratransit)

Out of 276 respondents that indicated that riding the bus applied to them, **41% of respondents said their use of the bus has slightly decreased** (16% or 44 respondents) **or greatly decreased** (25% or 70 respondents). Interestingly, **12% of respondents** (31 respondents) **said their bus use has slightly increased** (6%) **or greatly increased** (6%) as a result of the rideshare service. Half said they haven't changed their bus use at all.

Those who report the greatest decrease in their bus use were predominantly women (32% females greatly decreasing bus use compared to only 17% male), households making less than $35,000 a year, and tended to be either younger or older, between the ages of 13-17, 20-29 or over the age of 70.

Although most indicated this option did not apply (326 "N/A" responses), a small number indicated changes to use of paratransit. However, the exact same number of people (24%) cited an increase as those that cited a decrease, indicating no impact on demand for paratransit. Many paratransit trips are destined to medical facilities in adjacent cities, so these findings are generally in line with expectations.

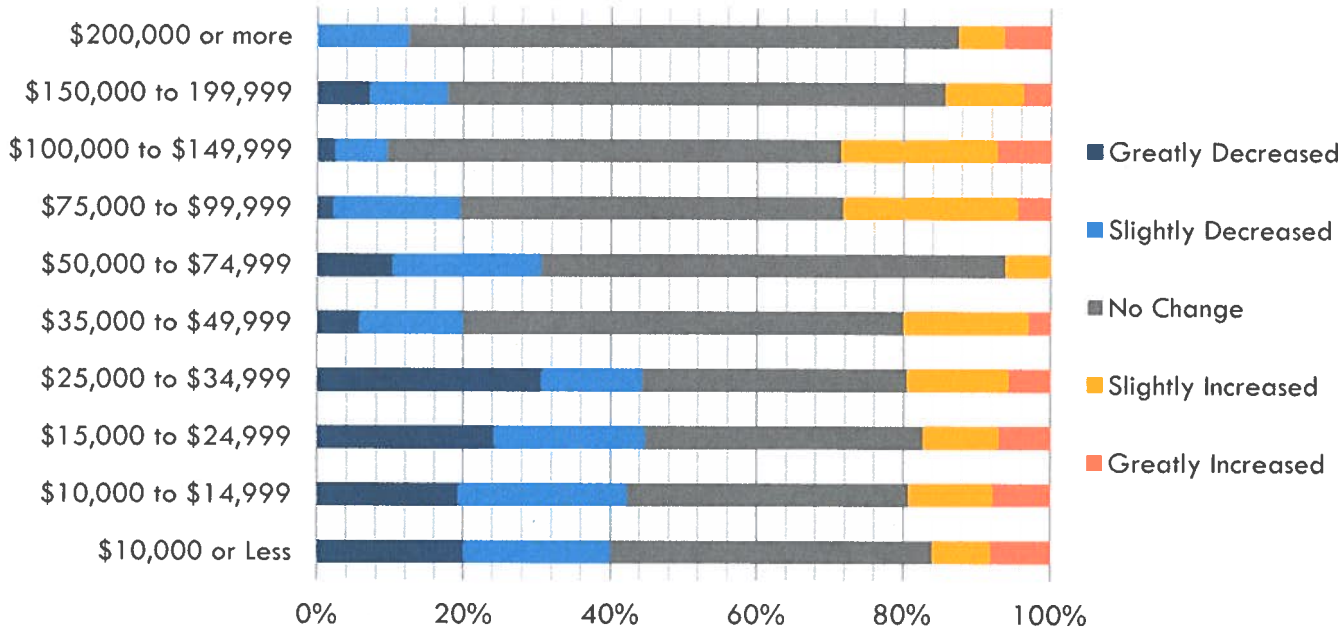
Changes in Walking or Biking

Out of 381 respondents who said this option applied to them, **most (54%) said they have had no change to how often they choose to walk or bike.** 28% said their walking and biking has slightly decreased (16% or 59 respondents) or greatly decreased (12% or 59 respondents), yet the remaining 18% said they have slightly increased (13% or 48 respondents) or greatly decreased (5% or 18 respondents) how often they walk and bike.

Although some respondents appear to be replacing active transportation trips with the rideshare service, others may actually be linking their trips by using a mix of walking or biking on either end of their trip. Since the rideshare service uses a "Virtual Stop" model that requires users to walk up to 200-500 feet, this may be a contributing factor to respondents making this selection. However, ample data has also suggested that some users make trips Downtown using rideshare service to connect with a JUMP bike or on foot.

Respondents who said they are **walking and biking less** tended to be on the slightly **younger or older** side (under 30 or over 60) and were significantly more likely to come from households **making less than $35,000** a year. Interestingly, those who said they are **walking or biking more** often because of the rideshare service were significantly more likely to be **in their 30's** and from household's earning an annual income of **between $75,000-$149,999 or less than $10,000 a year,** as shown in Figure 13 below.

Figure 13. Changes in Walking or Biking by Annual Household Income (486 Respondents)



Changes in Demand for Transportation

Out of 424 responses, many respondents (45%) said there was no change to how often they left their home as a result of the rideshare service. However, exactly half **(50%) said that the rideshare service has slightly increased (29%) or greatly increased (21%) how often they leave their home.** Some of these increases may be attributable to accommodating latent demand from underserved communities, while others may be induced by the introduction of the rideshare service as an option. This response was **consistent across all incomes, ages, and genders,** although younger people (age 13-17) were slightly more likely to select "Greatly Increased".

Changes in Overall Satisfaction

Out of 446 respondents, three out of four (75%) of all respondents said their satisfaction with the City's transportation system had grown because of the rideshare service, with an impressive **55% (244 respondents) saying it has greatly increased, and another 22% saying it had slightly increased.**

In other words, respondents across all ages, incomes, and genders said they were overwhelmingly pleased by the addition of rideshare service to the City's menu of mobility options.

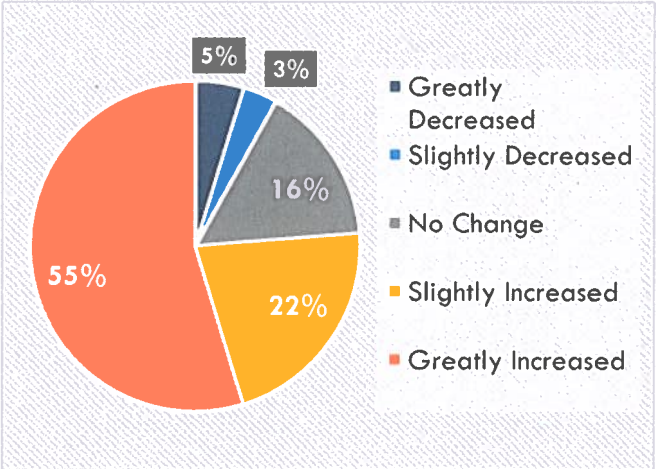


Figure 14. Satisfaction with the City's Transportation System

Summary of Travel Behavior Impacts

Riders are less reliant on Uber/Lyft, driving alone, and getting rides from others because of the rideshare program. Half of respondents said they are using the rideshare service instead of taking Uber/Lyft, and 34% said they use it instead of driving alone or catching a ride from a friend or family member. These responses may be early indications of potential reductions in vehicle miles travelled associated with ride-hailing, driving alone, or getting rides from others, but more analysis will be necessary to quantify impacts.

Middle-aged respondents from households with slightly **higher incomes** were more likely to say they are **driving alone less often** because of the rideshare service, which may be correlated with higher rates of auto-ownership among middle and upper income households. Interestingly, a fair number of **Seniors (60+)** also said they were driving alone less, possibly indicating that the rideshare service facilitates the decision of older adults to **give up driving sooner.** Those switching from Uber/Lyft were primarily between the age of 18-60 but were evenly represented across gender and income.

Rideshare gives Youths and Seniors more independence and more convenient mobility options.
Riders who said they would have gotten a **ride from a friend or family member** if the rideshare service was unavailable were most likely to be **Youth (18 or under) or Seniors (60+).** Similarly, respondents aged **13-17 and 70+** were most likely to have **not taken the trip at all** if rideshare was unavailable. This may indicate that rideshare is helping to meet latent demand for mobility among the youngest and oldest community members.

Those reporting the greatest drop in bus use were predominantly women (32% females greatly decreasing bus use compared to 17% male), households making less than $35,000 a year, and were more likely to be younger (13-17, 20-29) or older (70+).

Minor decreases in walking and biking, especially among men.
People who said they were walking or biking less were predominantly men, were more likely to be under 30 or over 60 and to come from slightly lower income households. However, respondents in their 30's, especially those from middle or upper income households, said they are walking or biking more because of the rideshare service.

Quality of Life Impacts

Questions were also included to obtain a sense of how the rideshare service may be impacting factors that contribute to overall quality of life, such as access to healthy foods or one's sense of independence.

As a result of your Via Rideshares use, how have the following aspects of your life changed, if at all? If an answer doesn't apply to you, select "N/A".

Overall Quality of Life Impacts

Respondents were asked to use a 5 point Likert scales to indicate the degree to which various aspects of their quality of life had greatly decreased, slightly decreased, stayed the same (no change), slightly increased, or greatly increased. Respondents had the option of marking "N/A" if they did not feel a response applied to them. The key variables for which respondents were asked to describe direct impacts resulting from their use of the rideshare program included: how safe they feel getting around town, their sense of independence, visits to local businesses, participation in social activities, civic or community engagement, access to healthy foods or medical care, and monthly transportation costs. An increase in any category would be viewed as an increased quality of life, except for transportation costs.

Generally, a majority of respondents said they felt safer getting around town and experienced greater sense of independence as a result of using the rideshare service. **Specifically, 66% said they feel safer getting around town and 59% had a greater sense of independence. More than half said they are visiting local businesses more often or participating in social activities as a result of their use of the rideshare service, and around 40% said they are more civically engaged, have better access to healthy foods or medical care, and are spending less on transportation expenses every month.**

Sense of Safety

One of the biggest takeaways related to quality of life was that the On-Demand Rideshare service has increased how safe riders feeling getting around town. Out of 432 respondents, 66% said their sense of safety had grown, with 31% (132 respondents) saying they felt slightly safer and 35% (153 respondents) said their sense of safety had greatly increased. Roughly one-third said they experienced no change, and less than 2% said they experienced a decrease.

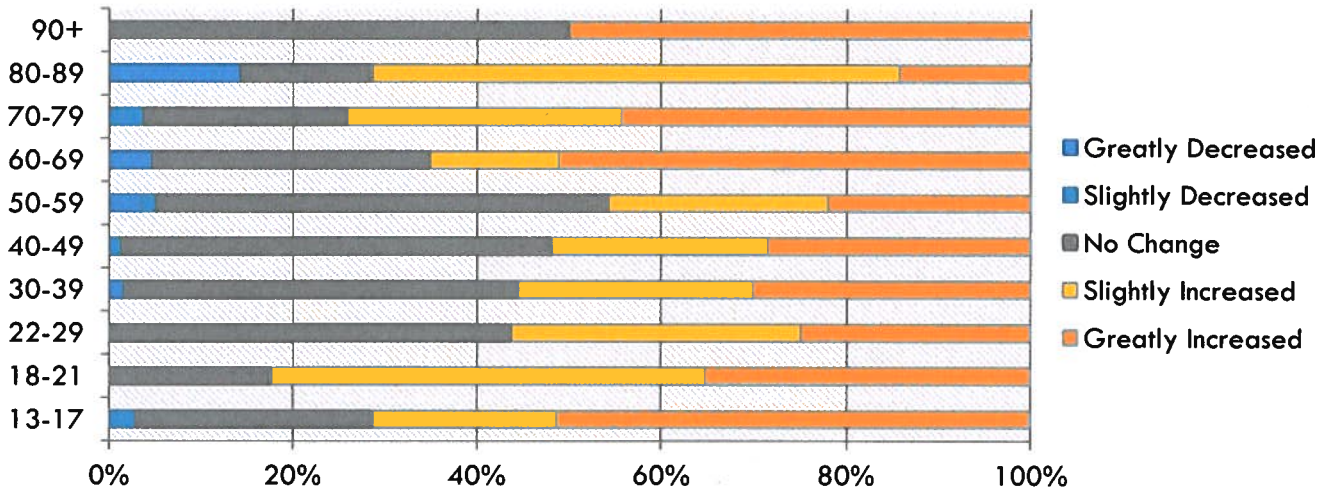
Respondents who cited an increased sense of safety were slightly more likely to be female, with **12% more women reporting a "Greatly Increased" sense of safety compared to men.** 30% of respondents in all income categories said their sense of safety felt greatly increased. However, this was especially pronounced among households making less than $35,000 a year. This response was fairly consistent across age groups, but with slightly higher responses from those under the age of 21 or over the age of 70.

Sense of Independence

Similarly, a significant number of respondents (59%) reported an increased sense of independence resulting from their use of the rideshare service. Out of 403 responses, 26% (105 respondents) said they felt slightly more independent and 33% (133 respondents) said their independence was greatly increased. A little bit more than a third said they experienced no change and less than 3% said they felt they experienced a decreased.

Although increases in independence were reported across age, income, and gender categories, **those who appeared to benefit the most from increased independence tended to be women** (10% more women said their independence was "Greatly Increased" compared to men), respondents from **households earning $10,000-$35,000 a year**, and respondents **under the age of 21 or over the age of 60.**

Figure 15. Changes in Sense of Independence by Age (403 Respondents)



Visits to Local Businesses

Out of 394 responses, about **56% said their visits to local businesses had slightly increased** (35% or 133 respondents) **or greatly increased** (21% or 83 respondents). 41% reported no change, and less than 4% reported a decrease. This response was fairly consistent across age, income, and gender categories, however, respondents in the 30's-40's and those over 80+ were most likely to report a slight increase, while those over 60+ were most likely to report their outings as "Greatly Increased".

Participation in Social Activities

Out of 387 responses, about **55% said their participation in social activities had slightly increased** (33% or 129 respondents) **or greatly increased** (22% or 84 respondents). 43% reported no change, and less than 2% reported a decrease. Women were twice as likely as men to report that their participation in social activities had "Greatly Increased". Responses were slightly mixed, but generally consistent across ages and household incomes.

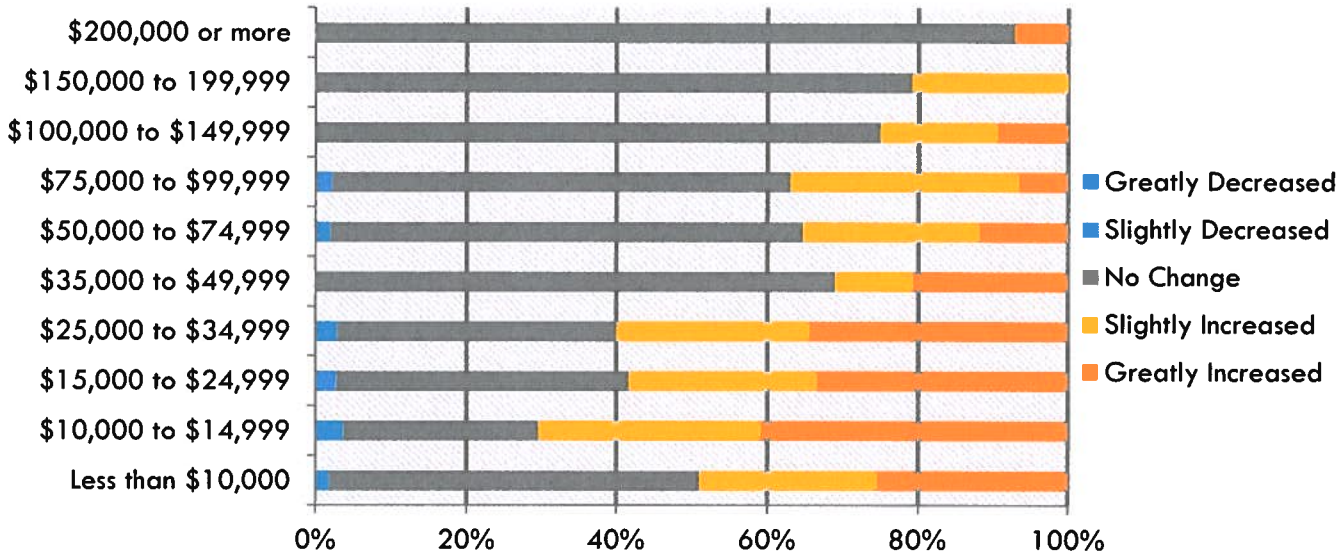
Civic or Community Engagement

Out of 350 responses, about **43% said their civic or community engagement had slightly increased** (27% or 96 respondents) **or greatly increased** (15% or 53 respondents). 55% reported no change, and less than 2% reported a decrease. Women were more than twice as likely to say their civic or community engagement had "Greatly Increased". Responses were slightly mixed, but generally consistent across ages and household incomes.

Access to Healthy Foods or Medical Care

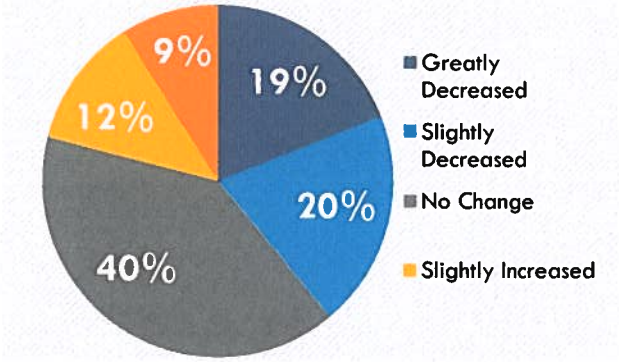
Out of 362 responses, about **41% said their access to healthy foods or medical care had slightly increased** (22% or 81 respondents) **or greatly increased** (19% or 69 respondents). 57% reported no change, and less than 2% reported a decrease. Respondents most likely to report an increase in access to healthy foods or medical care were slightly **more likely to be under the age of 21 or between ages 60-80,** were **twice as likely to be women,** and were significantly more likely to be from a household earning **less than $35,000 a year.**

Figure 16. Changes in Access to Healthy Foods or Medical Care by Annual Household Income



Monthly Transportation Costs

Of 403 responses, about **40% said their monthly transportation expenses had slightly decreased** (20% or 82 respondents) **or greatly increased** (19% or 78 respondents). 40% reported no change. 12% (47 respondents) cited a slight increase and another 9% (36 respondents) reported that their monthly expenses greatly increased. This may be indicative of the service supporting latent demand for this type of transportation option or could be reflective of an induced demand effect of more options being made available.



Generally, cost savings were reported fairly consistently across gender, age and income categories. **Seniors (age 60+) and respondents in their 20's were slightly more likely to be benefiting from monthly savings.** Those aged **13-17 were more likely to be paying more,** possibly indicating that a latent demand for youth mobility options may have existed in the community.

Figure 17. Overall Changes in Monthly Transportation Costs

Summary of Quality of Life Impacts

The On-Demand Rideshare service makes users feel safer getting around town and provides a greater sense of independence, especially for youth and Seniors.
66% of respondents feel safer getting around town and 59% had a greater sense of independence, and 41% said their access to healthy foods and medical care had increased, especially among women, younger (under 21) and older (60+) riders, and those from households earnings less than $35,000 a year.

Via riders are frequenting local businesses and participating in social activities more often.
More than half of respondents, especially women, said they are visiting local businesses or participating in social activities more often due to their use of the rideshare service.

Most riders are saving on monthly transportation expenses, but teenagers say they're spending more.
Monthly transportation expenses were reported fairly consistently across gender, age and income categories. Seniors (age 60+) and respondents in their 20's were slightly more likely to be benefiting from monthly savings. Those who said they are paying more because of the rideshare service were more likely to be aged 13-17, indicating a latent demand for youth mobility options may exist in the community.

Conclusion

Community members of all ages greatly enjoy using the On-Demand Rideshare service and are very satisfied with its addition to the City's transportation network. A multitude of benefits ranging from independence for youth and seniors, a greater sense of safety for women, and potential reduction in VMT from riders shifting from Uber/Lyft or driving alone hint at the success of the Pilot. As additional research is conducted with UC Berkeley, more depth will be added to an understanding of the scale and magnitude of travel behavior impacts. Ultimately, this information may help guide City Council's decision on whether to continue the program.

TRANSPORTATION, MOBILITY & INFRASTRUCTURE COMMISSION **AGENDA REPORT**

MEETING DATE: March 4, 2019 **ITEM # 6**

SUBJECT:

PRESENTATION BY CITY STAFF ON THE PROGRESS OF THE BROADWAY BRIDGE PROJECT

INITIATED OR REQUESTED BY:

[ ] Commission [X] Staff

[ ] Other

REPORT COORDINATED OR PREPARED BY:

Jason McCoy, Supervising Transportation Planner

Denix Anbiah, Director
Public Works Department

ATTACHMENT [X] Yes [ ] No **[X] Information [ ] Direction [ ] Action**

OBJECTIVE

The purpose of this report is to facilitate a presentation by staff and the Broadway Bridge engineering consultant on the current status of the Broadway Bridge project.

RECOMMENDED ACTION

Staff respectfully recommends that the Commission hear the presentation, discuss the project and provide feedback to staff and the consultant team.

BACKGROUND

In December 2013, the City of West Sacramento, with support of the City of Sacramento, obtained $442,700 in funding from the Sacramento Area Council of Governments (SACOG) Regional Funding Program to prepare a feasibility study for the Broadway Bridge Project. Building on that successful grant application, the City Council, in April 2014, directed staff to submit a $1.5 million federal discretionary Transportation Investment Generating Economic Recovery (TIGER) grant application for the Project Approval / Environmental Document (PA/ED) phase of the project. This was also successful and subsequently appropriated by the Federal Highway Administration (FHWA) for the Broadway Bridge in September 2014.

Four years ago, on March 4, 2015, a Cooperative Agreement with the City of Sacramento was executed managing cost-sharing and reimbursements associated with the preparation of the Broadway Bridge Feasibility Study, and the West Sacramento City Council approved the professional engineering services contract with the firm CH2M. The scope of work included those tasks necessary to prepare the Broadway Bridge Feasibility Study and move the project forward through Caltrans' project development process in preparation for the PA/ED phase, the preliminary engineering phase in which we are currently proceeding.

The first phase of the Broadway Bridge project, the Feasibility Study, analyzed and evaluated a potential Sacramento River low-level crossing with a movable span to facilitate river transportation while accommodating multimodal connectivity across the river, linking Broadway in the City of Sacramento with 5th Street/South River Road in West Sacramento (Attachment 1), consistent with the Sacramento River Crossings Alternatives Study (2011) and adopted goals and policies of both cities. Objectives included: identifying fatal flaws; providing information about alignment alternatives; bridge approach connections and bridge types; gathering community feedback; and supporting environmental scoping. Consistent with the purpose of a Feasibility Study, the Feasibility Study did not recommend a preferred alignment, bridge approach configuration, lane configuration or preferred bridge type. Rather, the Feasibility Study consisted of a series of technical memos with data to facilitate the more refined technical engineering and environmental analysis in the subsequent PA/ED phase. All technical data and memos are currently available on the City's project website.

Workshops on the Broadway Bridge Feasibility Study were held to present, evaluate, discuss, and receive comments and direction on required conceptual bridge location alternatives, alignment and roadway network alternatives, bridge type selection, and preliminary traffic analysis results. Informational workshops were presented to the Transportation, Mobility and Infrastructure (TMI) Commission and the West Sacramento City Council, and a community open house was hosted at Leataata Floyd Elementary School in the City of Sacramento. The open house was attended by over 80 community members from both the City of West Sacramento and City of Sacramento and yielded information beneficial to analyzing alternative bridge location

and design alternatives, with community members emphasizing the need for a bridge that accommodates multi-modal use including emphasis on bicycle and pedestrian facilities.

Alternative Alignments and Connections Explored
Alternative alignments were extensively analyzed in the course of this Feasibility Study within the parameters of connecting Broadway in the City of Sacramento with West Sacramento in the vicinity of 15th Street and 5th Street/South River Road. Initially three primary alignments were explored across the Sacramento River (originally presented to the West Sacramento City Council on July 15, 2015). These alignments were conceived following a field investigation on the Sacramento River in the project area with the Eleventh U.S. Coast Guard District (USCG), City of West Sacramento, the City of Sacramento, and the consultant team in attendance to evaluate the navigable waters of the Sacramento River. This field visit resulted in a determination by the USCG that a minimum movable span horizontal clearance of 170-feet will be required for navigation purposes.

A 30-day notice was issued requesting comments from waterway users concerning these alternative alignments and USCG's proposed horizontal and vertical clearance requirements. The USCG's comment period closed July 6, 2015. Although no public comments were received by the USCG for the initial bridge crossings, additional coordination between the two cities resulted in the need to advance a total of four primary conceptual alignments A through D (Attachment 2). These alignments were further refined in the current project phase (Attachments 3-6). These alignments represent a broad range of potential feasible alternatives from the furthest north (Alignment A) at approximately 550-feet south of the existing US 50/Bus 80 Pioneer Bridge to the furthest south (Alignment D) at approximately 1,500-feet south of Pioneer Bridge. It is important to note that as alternative alignments move south, a corresponding increase in the movable span horizontal clearance is required due to the increasingly skewed position across the Sacramento River and proximity to the river bend.

In the City of Sacramento, the bridge approach for all alignments will connect directly to Broadway west of Interstate 5 as there are no competing alternative east-west connections between Interstate 5 and the Sacramento River in the project area, and alignments south of Broadway were eliminated by City of Sacramento staff early in the Feasibility Study for their potential to impact Miller Park recreation uses and circulation.

Lane Configuration (Bridge Cross Section)
The cross section for Broadway Bridge was determined in the Feasibility Study phase through coordination with the Federal Highway Administration, Caltrans, and City of Sacramento on the I Street Bridge Replacement Project. The two bridges now share identical cross section designs. Analysis of alternative bridge configurations that included both two and four lane bridge cross sections, with transit-only lane options, were found to be consistent with the 2011 Sacramento River Crossings Study. Recommendations from the West Sacramento TMI Commission and City Councils for both cities required developing bridge cross sections that accommodate several mobility options. As such, the "two- to four-lane convertible concept" was developed with a) Buffered commuter bicycle lanes; b) Two 12-foot off-street bicycle and pedestrian paths flanking the bridge; c) Two dedicated vehicle lanes; and d) A center median that could be used for future dedicated transit (such as Light Rail or Bus Rapid Transit). (Attachment 7)

At the same time, the travel lanes could be reconfigured to four travel lanes should traffic conditions require. This could include two dedicated transit lanes with two vehicle lanes, four vehicle lanes, or any combination of vehicle, transit or bicycle lanes as necessary. This was strongly supported by all agencies involved in the project as vehicle technology, travel modes, and transit are likely to change over the next 75 to 100 years, but the bridge itself is expected to remain intact well into the future.

ANALYSIS
The City of West Sacramento has been working closely with the City of Sacramento's Economic Development staff through the PA/ED phase to ensure continuous coordination between the Broadway Bridge project and its proposed alignments and landings, with the City of Sacramento waterfront as they prepare the West Broadway Specific Plan. In addition, City of West Sacramento Public Works staff have been working closely with West Sacramento's Economic Development staff as deindustrialization of the waterfront progresses, and circulation infrastructure design proceeds in support of future land uses within the Pioneer Bluff and Stone Lock Reuse Master Plan.

In January 2018, the West Sacramento City Council reviewed and provided recommendations for developing circulation infrastructure in the Pioneer Bluff and Stone Lock planning areas. This circulation was developed

independent of the Broadway Bridge, but was designed to accommodate each of the alternative bridge landings (Attachment 8). As bridge planning and engineering progresses, it is expected that modifications to the approved road network will be required. This may include potential widening of approach roadways to accommodate turning movements, additional turning lanes or medians, additional traffic signals, and other road and intersection modifications in accordance with traffic infrastructure recommendations required to maintain acceptable traffic circulation and mobility associated with the future Broadway Bridge. It is expected that as alignment alternatives move forward through the environmental process, the TMI Commission and City Council will be asked to review these circulation modifications with respect to proposed development policies in the Pioneer Bluff and Stone Lock Reuse Master Plan.

In July 2015, the TMI Commission recommended that the Broadway Bridge traffic analysis consider Vehicle Miles Traveled (VMT) and multi-modal Level of Service (LOS) data. Staff worked with the consultant team to determine potential east-west traffic patterns on both sides of the Sacramento River, and to develop and analyze traffic volume forecasts using a refined version of Sacramento Area Council of Governments (SACOG) Sacramento Metropolitan (SACMET) travel demand model (TDM) that incorporates the current SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy that includes growth anticipated in each city's General Plan. The traffic model was enhanced with area specific land use and road network details for Pioneer Bluff and will be incorporated into the Draft Environmental Assessment/Environmental Impact Report (EA/EIR) for the project. Both the Broadway business district and Pioneer Bluff are similar in their goal to create walkable, attractive and economically vibrant neighborhoods, and both anticipate instituting a "road diet" to preserve pedestrian and multimodal accessibility. The traffic analysis will take into account the urban standards developed in these districts, as well as the street hierarchy and road network design that distinguishes local through trips from local destination trips including bicycle, pedestrian and transit.

In West Sacramento, alternative approaches include connections onto 15th Street and direct connections to Jefferson Boulevard, as well as one alternative connection directly to 5th Street/South River Road. Bridge approach connections, either to 15th Street/Jefferson or directly to 5th Street/South River Road in West Sacramento have corresponding traffic impacts on surrounding infrastructure. Road users tend to take a path of least resistance and opt for shorter, convenient routes. Therefore, it was determined early in the feasibility study phase that traffic impacts in Pioneer Bluff are significantly reduced when a direct connection with access to both Jefferson Boulevard and South River Road are provided. As such, the West Sacramento City Council, in January 2018, approved of additional future connections to Jefferson Boulevard between 15th Street and the previously planned connection at Stone Boulevard. The Broadway Bridge EA/EIR will provide a comprehensive assessment of the mobility and environmental impacts associated with these future connections and localized traffic impacts.

In April 2017, Initial Environmental Field Studies, an extensive evaluation of the Feasibility Study Alternatives (Alternatives Analysis), and subsequent Risk Assessment processes were initiated for the project. Following this, a major milestone occurred, in May 2017, when the Port of West Sacramento secured an option to purchase the Shell Oil Property. Located near the intersection of 15th Street and 5th Street/South River Road, the Shell Oil Tank Farm contains one of the alignments proposed for the project, facilitating access for environmental studies, and easing future right-of-way acquisition and construction should that alignment (Alignment B) prove to be the preferred option.

It is important to note that advancement of other projects affect the timeline and feasibility of Broadway Bridge. Specifically, selection of alternative alignments C and D are constrained by the freight rail operations along Jefferson Boulevard. The City Council's recent prioritization of the Rail Relocation Project (relocating freight rail operations from the Jefferson Boulevard corridor to the Port of West Sacramento by way of Tule Jake Road near the Enterprise Boulevard corridor) facilitates future bridge connectivity with Jefferson Boulevard for all alignment alternatives. In addition, the timeline for Broadway Bridge must be sensitive to other pending projects including continued deindustrialization of the waterfront, the Downtown Riverfront Streetcar, and planned streetscape improvements for South River Road.

Current Work-In-Progress
Preliminary engineering, environmental documentation, and community outreach are proceeding on the four selected alignments (A-D):

- Alternatives Analysis (Completed). Conceptual bridge alignments and approach configurations were screened. A risk analysis workshop was held with Caltrans, FHWA and both cities.
- The project description is being finalized to include type selection, traffic information, and geometric modifications.
- Preliminary traffic analysis is complete.

- Stakeholder and public outreach will continue throughout the development of 30% design.
- Assembly Bill 52 (Tribal Consultation) responses have been received and consultation will begin this quarter.
- Preparation of technical studies has commenced, and the studies are in progress. The draft Bridge Type Selection Report for the bridge structure was completed August 2018, was reviewed by staff and is currently being revised. The Hydraulic Study Report is now in progress.
- Preparation of Geometric Approval Drawings (GAD) and structural studies was completed September 2018, including development of conceptual geometrics (10%), and draft preliminary bridge concepts (Attachment 9). Cities have provided comments and GADs are currently being updated.
- Traffic analysis modeling based on the January 2018 City Council-approved Pioneer Bluff and Stone Lock Reuse Master Plan's layout has been completed.
- Environmental Documentation – This task included the preparation of the Preliminary Environmental Study (PES) form, publication of the project Notice of Preparation (NOP) and a public scoping meeting was held; all of which have been completed.
- Preparation of the technical environmental studies continues including a natural environment study, hydro-acoustic study, essential fish habitat evaluation, high water mark and wetland delineation, biological assessment, historic resources evaluation, cultural findings, Section 4(f) evaluation, visual and community resource assessment, noise study, and air quality analysis.
- A joint Draft Environmental Impact Report/Environmental Assessment (EIR/EA) following Caltrans annotated outline and direction from the City of West Sacramento (with support from the City of Sacramento) will be prepared. Environmental documentation will include (as required): Preparation of Findings, Statement of Overriding Considerations, Notice of Determination, Mitigation Monitoring Plan, Administrative Draft and Final EIR/EA. This task will also include permitting agency coordination, environmental base mapping and community outreach. These tasks are in-progress.

Project Report and Approvals
30% geometrics and results from preliminary engineering tasks identified above will serve as the basis for the Project Report; the final deliverable for the PA/ED phase that is anticipated to be completed June 2020. (See Estimated Project Schedule (Attachment 10). The Project Report will be consistent with current City of West Sacramento and City of Sacramento standards and will include traffic analysis, structure type analysis, preliminary geometrics, conceptual aesthetics (for environmental analysis purposes), and long-term maintenance approach. The approved Project Report will be included as part of the documentation for the Caltrans Preliminary Engineering Evaluation Report (PEER). This task will include overall project management including state, federal and local agency coordination, public presentations and public relations. The City of West Sacramento is the lead agency for the Project and, as such, will be tasked with certifying the Final EIR/EA in coordination with the City of Sacramento that serves as a Responsible Agency. As the environmental document advances, information will be presented to the TMI Commission and City Council, including the Draft EIR/EA for review and comment.

Community Outreach
Broadway Bridge is a significant regional project requiring extensive community outreach. The West Sacramento City Council has received updates on the project during key milestones including identification of alternative alignments, completion of the Feasibility Study, execution of the PA/ED phase engineering contract, with development of Pioneer Bluff and Stone Lock circulation, and most recently with FHWA approval of a modified project schedule for the executed grant agreement. The TMI Commission also receives regular staff updates, workshops, and presentations on the project, including this report. A community open house was hosted at Leataata Floyd Elementary School in the City of Sacramento on July 23, 2015. The open house was attended by over 80 community members from both the City of West Sacramento and Sacramento. Another large outdoor community event publicized as "Riverfront Renaissance" was held and attended by more than 235 community members, community leaders, and several news media outlets. Additional community events, workshops, Council and Commission meetings, and press releases are expected between now and the close of this project.

Future Broadway Bridge Phases
It is anticipated that the PA/ED Phase of the Broadway Bridge Project will conclude in 2020, with administrative project close-out to be completed in 2021. With other project priorities including the Enterprise Bridge in West Sacramento and a new American River Bridge prioritized in Sacramento, it is likely that funding for future phases of the Broadway Bridge will be limited. The General Plan and SACOG assume that Broadway Bridge will be completed within the 2035 timeframe. As such, it is anticipated that grant funding for final design will be pursued and appropriated between 2022 and 2027, with final design and right-of-way acquisition completed by

2030. Funding for construction will likely be pursued and funded between 2030 and 2032 to facilitate construction for an approximate bridge opening date in 2035.

Alternatives
As an alternative to the recommended action, the Commission could:
1) Decline to hold the workshop and presentation; or
2) Direct the workshop and presentation be moved to a later meeting.

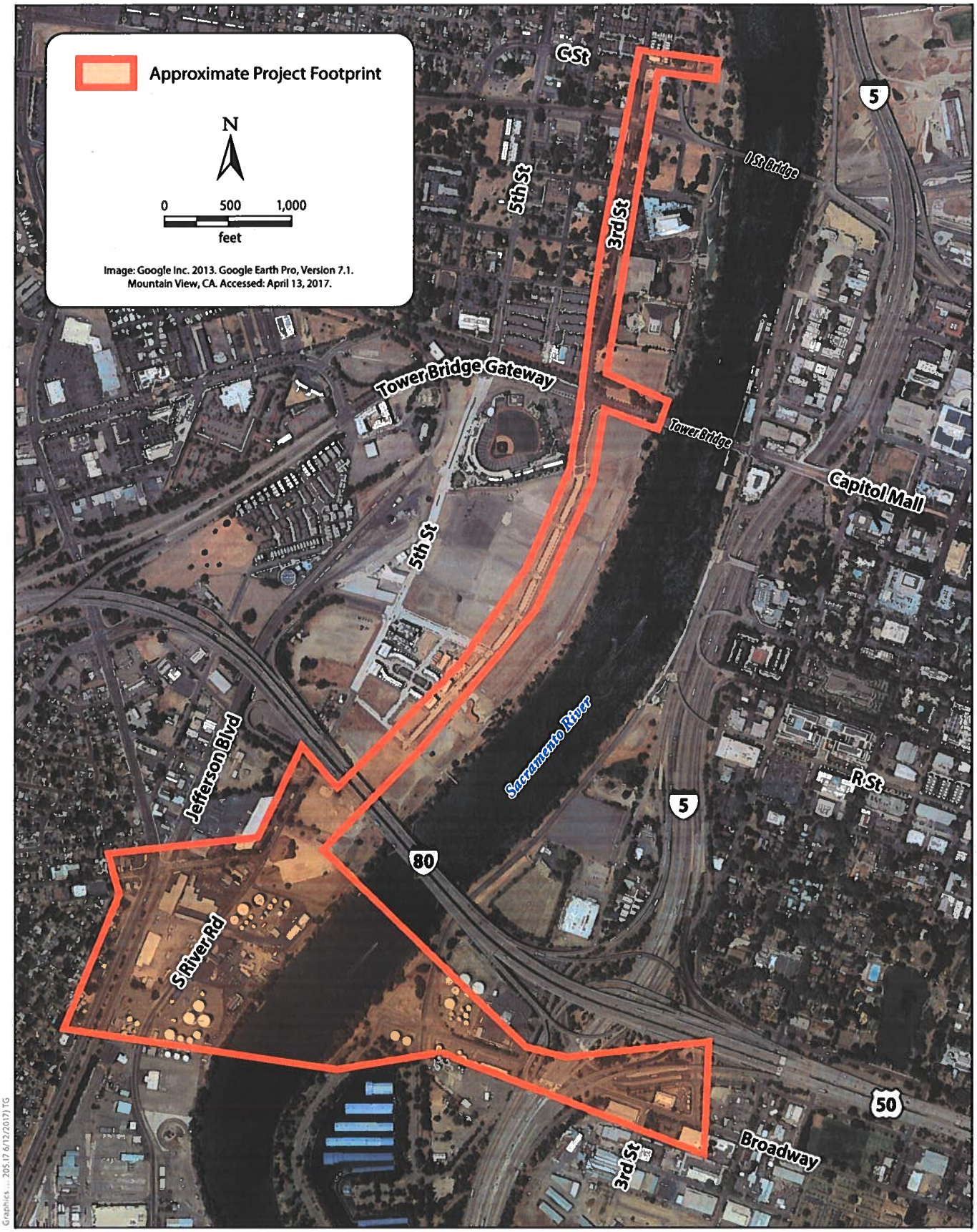
Coordination and Review
Under agreement with the City of Sacramento, the City of West Sacramento has assumed the lead role of the Broadway Bridge Feasibility Study, with the City of Sacramento providing support. Elements of the project are being coordinated internally with both West Sacramento and Sacramento Economic Development, Community Development, and externally with the California Department of Transportation (Caltrans), the USCG and FHWA.

An initial workshop was held with the Transportation, Mobility and Infrastructure Commission on July 6, 2015. Since that initial meeting, the Commission has received periodic updates of the project and solicited recommendations/comments on evaluation of traffic performance metrics, multi-modal design elements, and technical studies. Staff will continue to seek direction and comments from the Commission as the project advances.

Budget/Cost Impact
On April 16, 2014, the West Sacramento City Council approved Resolution 14-16 directing staff to submit an application for $1.5 million in federal funding under the TIGER VI Discretionary Grants Program for the PA/ED phase of the Broadway Bridge Project. On April 23, 2014, the City of Sacramento Director of Public Works submitted a letter to the U.S. Department of Transportation supporting "the initiation of the Project Approval and Environmental Document (PA/ED) phase of the Broadway Bridge Project through a $1.5 million request from the TIGER program" and committed "50% of the matching funds or $750,000 towards the 1:1 match for this project." In September 2014, $1.5 million in federal funds were awarded to the City of West Sacramento. City staff worked with Caltrans and the Federal Highway Administration (FHWA) to finalize the grant agreement for the PA/ED Phase on April 18, 2016 and received Caltrans Authorization to Proceed on June 10, 2016. Completion of the final engineering design, right-of-way acquisition and construction are dependent on identification of future funding sources and allocation of those funds to the project. Estimated final design and right-of-way acquisition, and construction costs are programmed in SACOG Regional Transportation Plan (est. $10 million and $238 million respectively). Alternatives will be further evaluated, potentially eliminated, and associated costs further refined as a result of the PA/ED phase.

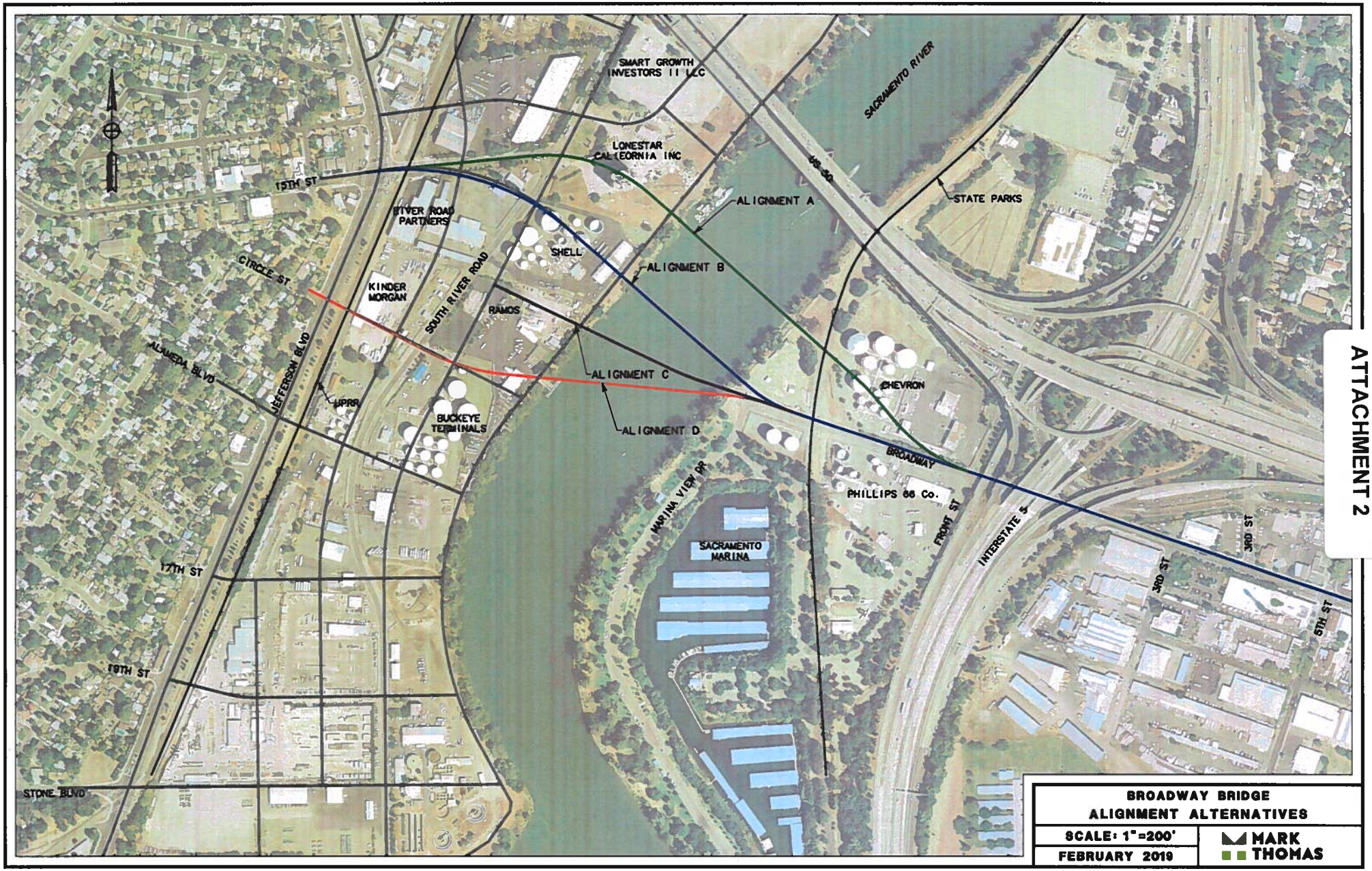
ATTACHMENT(S)
1) Location Map
2) Conceptual Alignments A-D
3) Geometric Approval Drawing – Alignment A
4) Geometric Approval Drawing – Alignment B
5) Geometric Approval Drawing – Alignment C
6) Geometric Approval Drawing – Alignment D
7) Broadway Bridge Cross Section
8) Pioneer Bluff and Stone Lock Reuse Master Plan Circulation
9) Broadway Bridge Type Selection Report Drawings
10) FHWA Approved Estimated Project Schedule

ATTACHMENT 1



Graphics ... 205.17 6/12/2017) TG

Broadway Bridge
Project Location



ATTACHMENT 2

ATTACHMENT 3

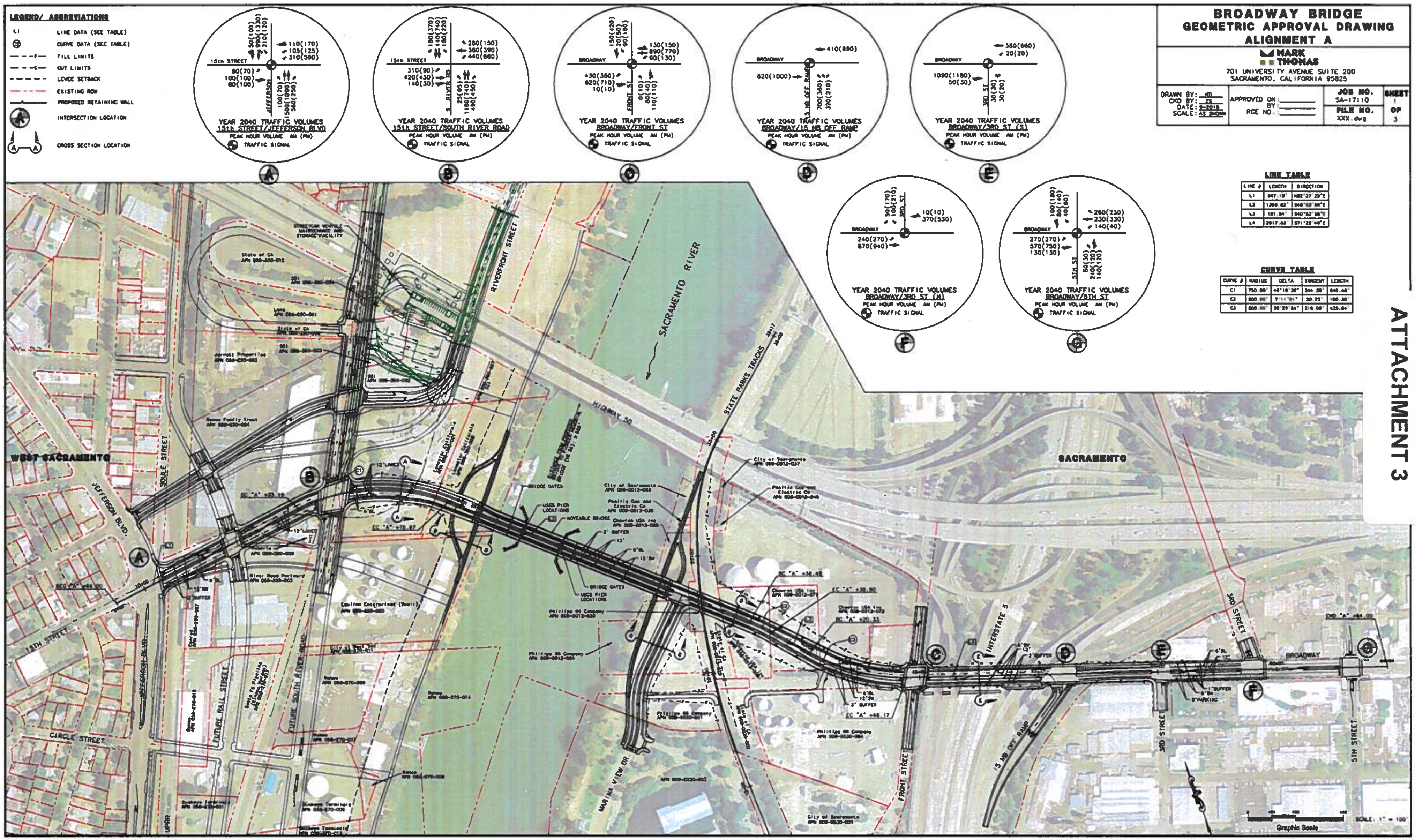
BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT A

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

DRAWN BY: KD
CKD BY: ZS
DATE: 9-2018
SCALE: AS SHOWN

APPROVED ON: ______
BY: ______
RCE NO.: ______

JOB NO. SA-17110
FILE NO. XXX.dwg
SHEET 1 OF 3



LINE TABLE

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L2	1330.83'	S40°03'06"E
L3	181.54'	S40°52'66"E
L4	2017.63'	S71°22'49"E

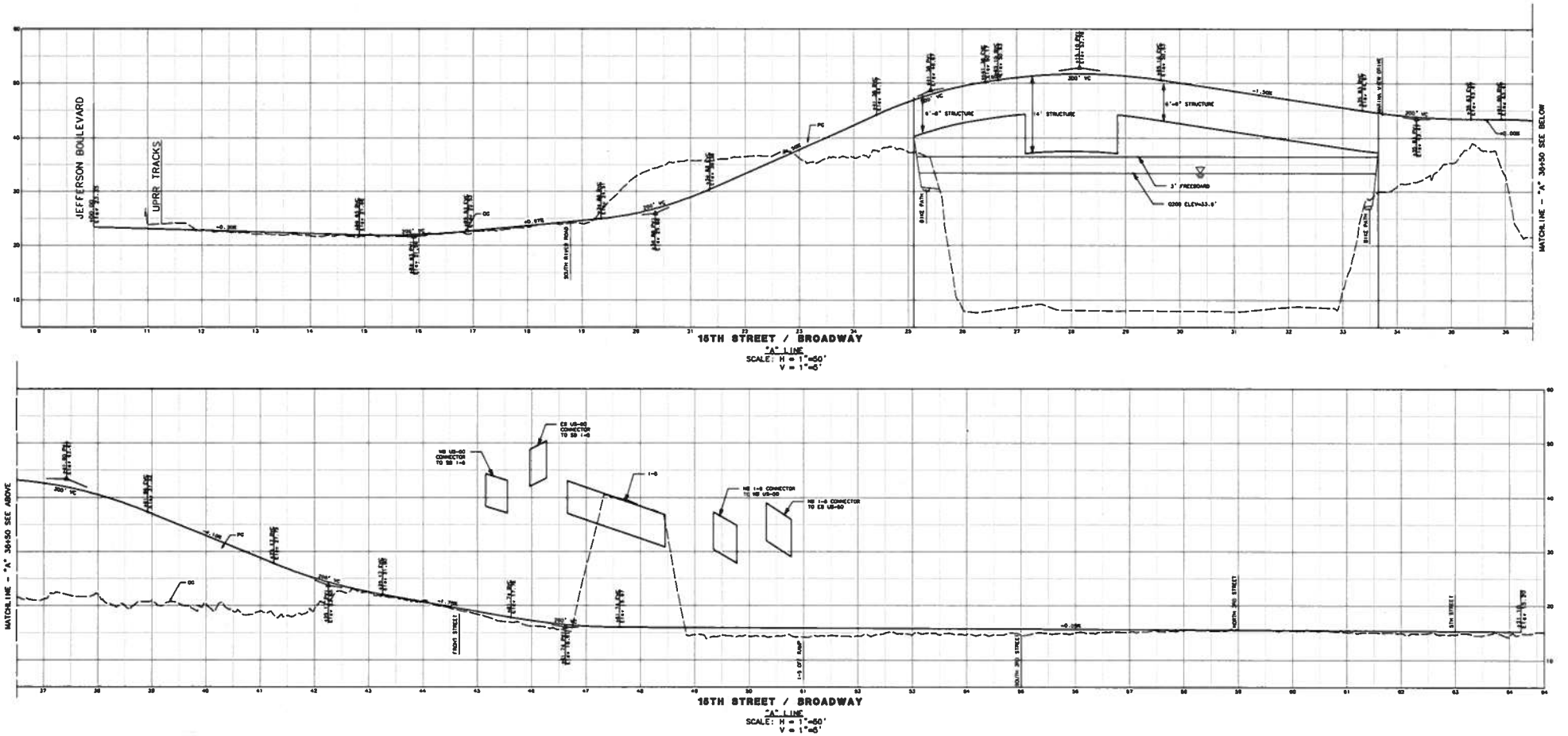
CURVE TABLE

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C1	750.00'	49°18'30"	344.25'	645.48'
C2	800.00'	7°11'01"	50.23'	100.30'
C3	800.00'	30°29'04"	216.00'	425.84'

BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT A

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

DRAWN BY: JKD CKD BY: JS DATE: 5-2018 SCALE: AS SHOWN	APPROVED ON: _____ BY: _____ RCE NO.: _____	JOB NO. SA-17110 FILE NO. XXX.dwg	SHEET 2 OF 3



BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT A

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

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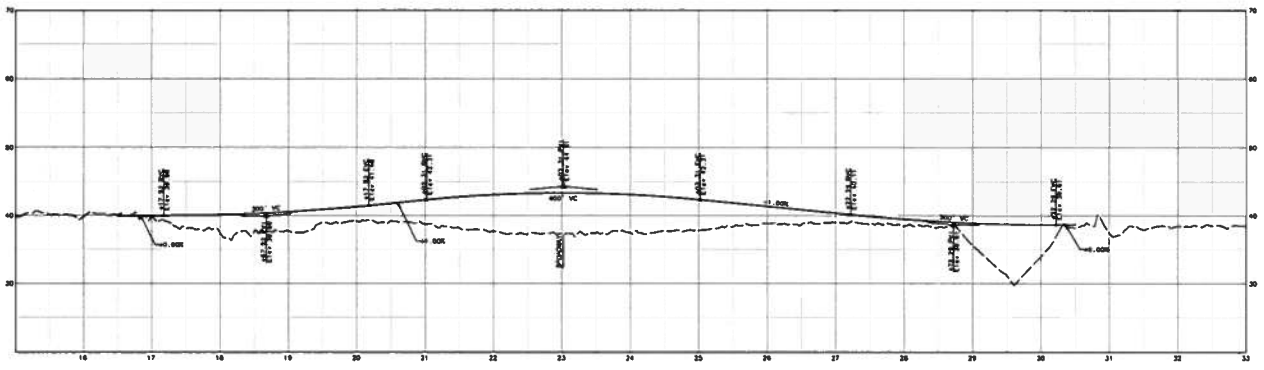

STATE PARKS TRACKS
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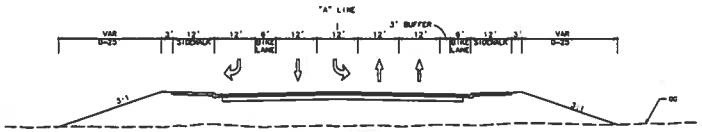
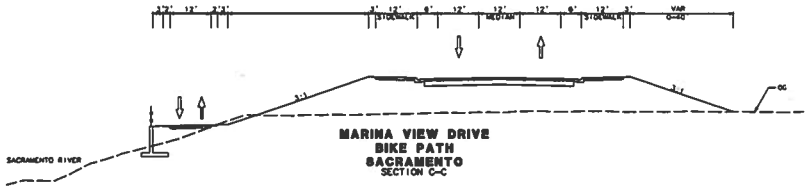
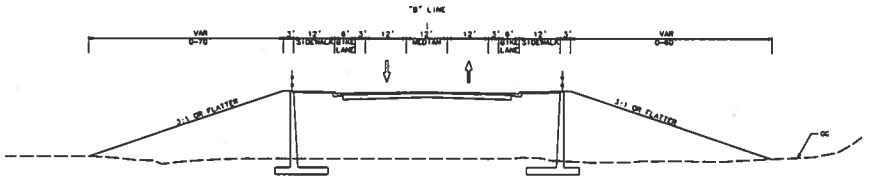


15TH STREET
WEST SACRAMENTO
SECTION A-A

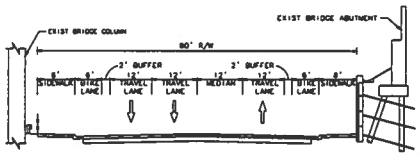
BIKE PATH
WEST SACRAMENTO
SECTION B-B



MARINA VIEW DRIVE
BIKE PATH
SACRAMENTO
SECTION C-C



BROADWAY
SACRAMENTO
SECTION D-D



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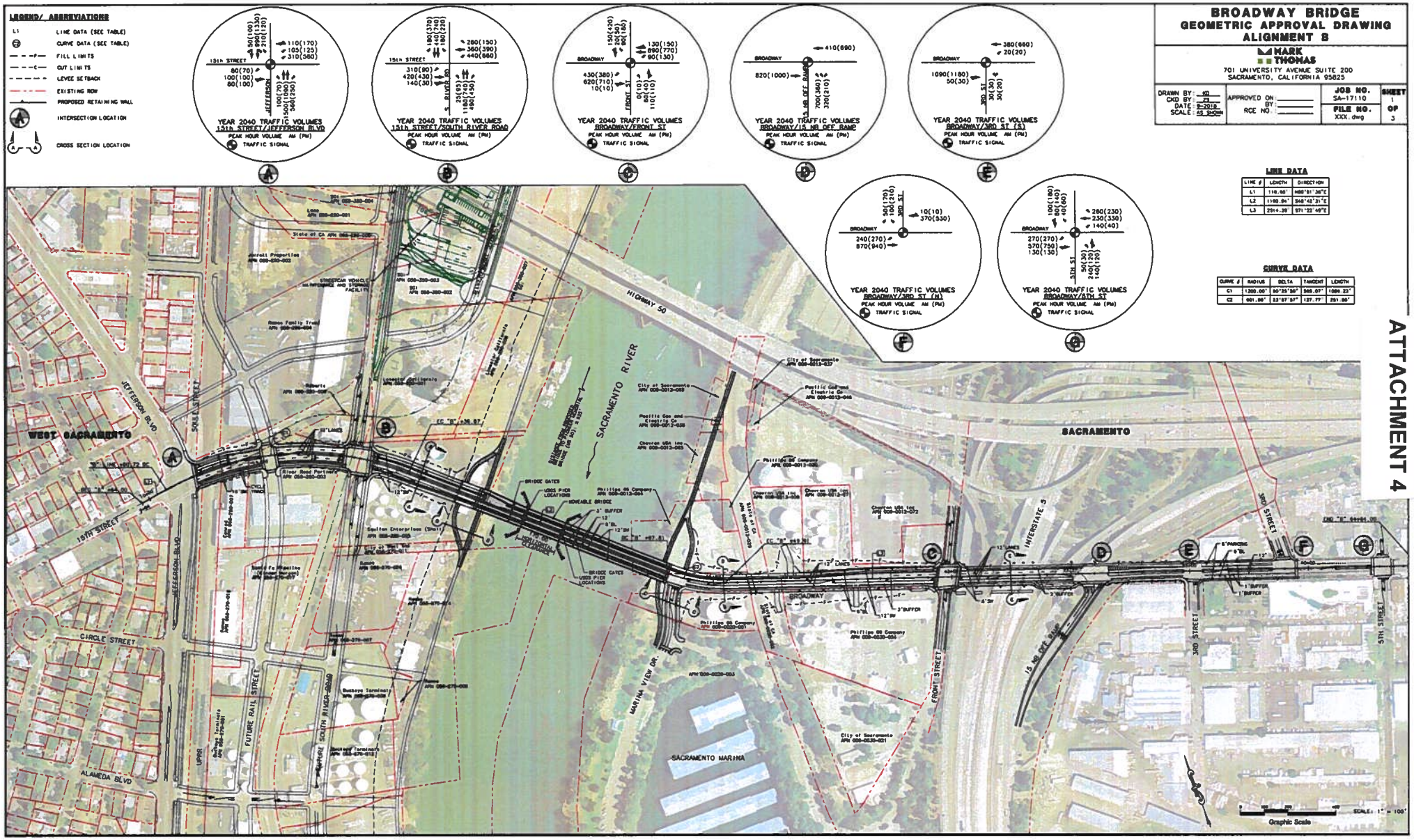
SACRAMENTO
SECTION D-D



BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT 8

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

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CKD BY: KS	BY:		OF 3
DATE: 5-2019	RCE NO:	FILE NO. XXX.dwg	
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LINE DATA

LINE #	LENGTH	DIRECTION
L1	116.66'	N85°51'38"E
L2	1192.94'	S48°43'31"E
L3	2914.39'	S71°22'48"E

CURVE DATA

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C1	1200.00'	50°25'56"	565.07'	1056.23'
C2	601.00'	33°57'57"	127.77'	251.80'

ATTACHMENT 4

BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT B

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

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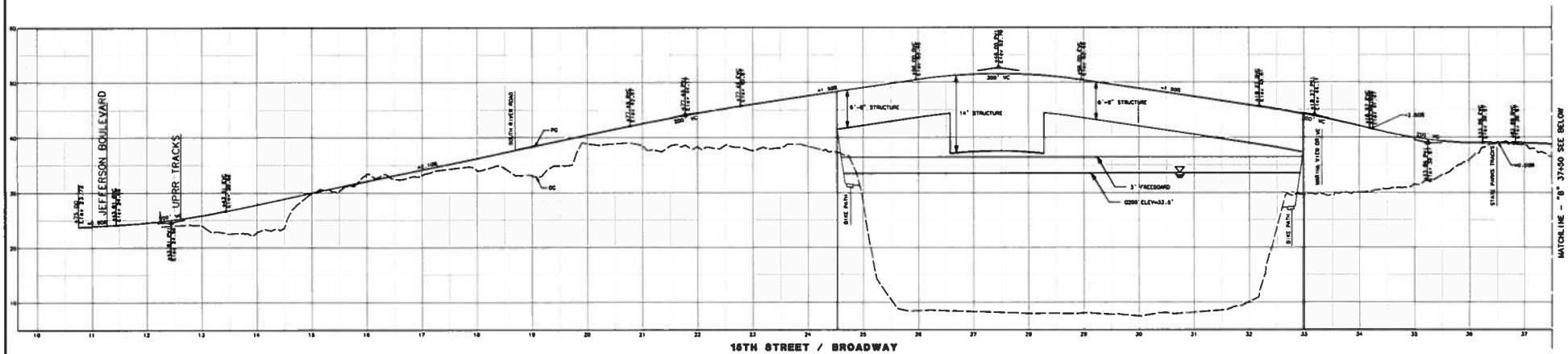

16TH STREET / BROADWAY
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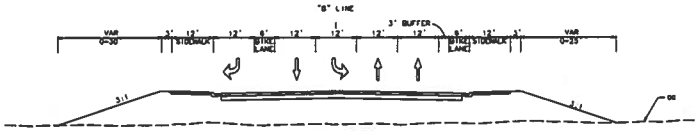
V = 1"=5'

16TH STREET / BROADWAY
"A" LINE
SCALE: H = 1"=50'
V = 1"=5'

BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT B

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

DRAWN BY: MD CKD BY: ZS DATE: 8-2018 SCALE: AS SHOWN	APPROVED ON: BY: RCE NO:	JOB NO. SA-17110 FILE NO. XXX.dwg	SHEET 3 OF 3



15TH STREET
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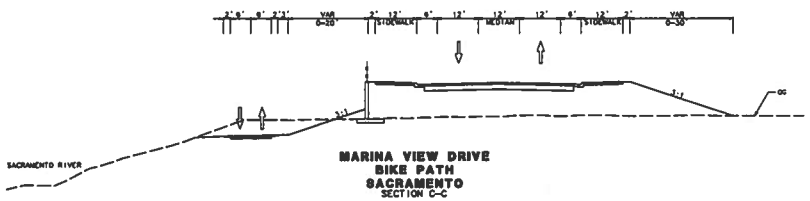
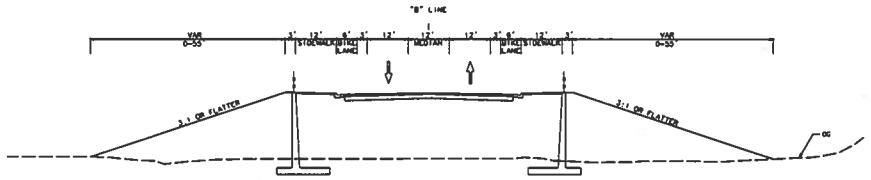
SECTION A-A

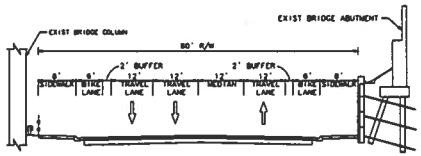
BIKE PATH
WEST SACRAMENTO
SECTION B-B



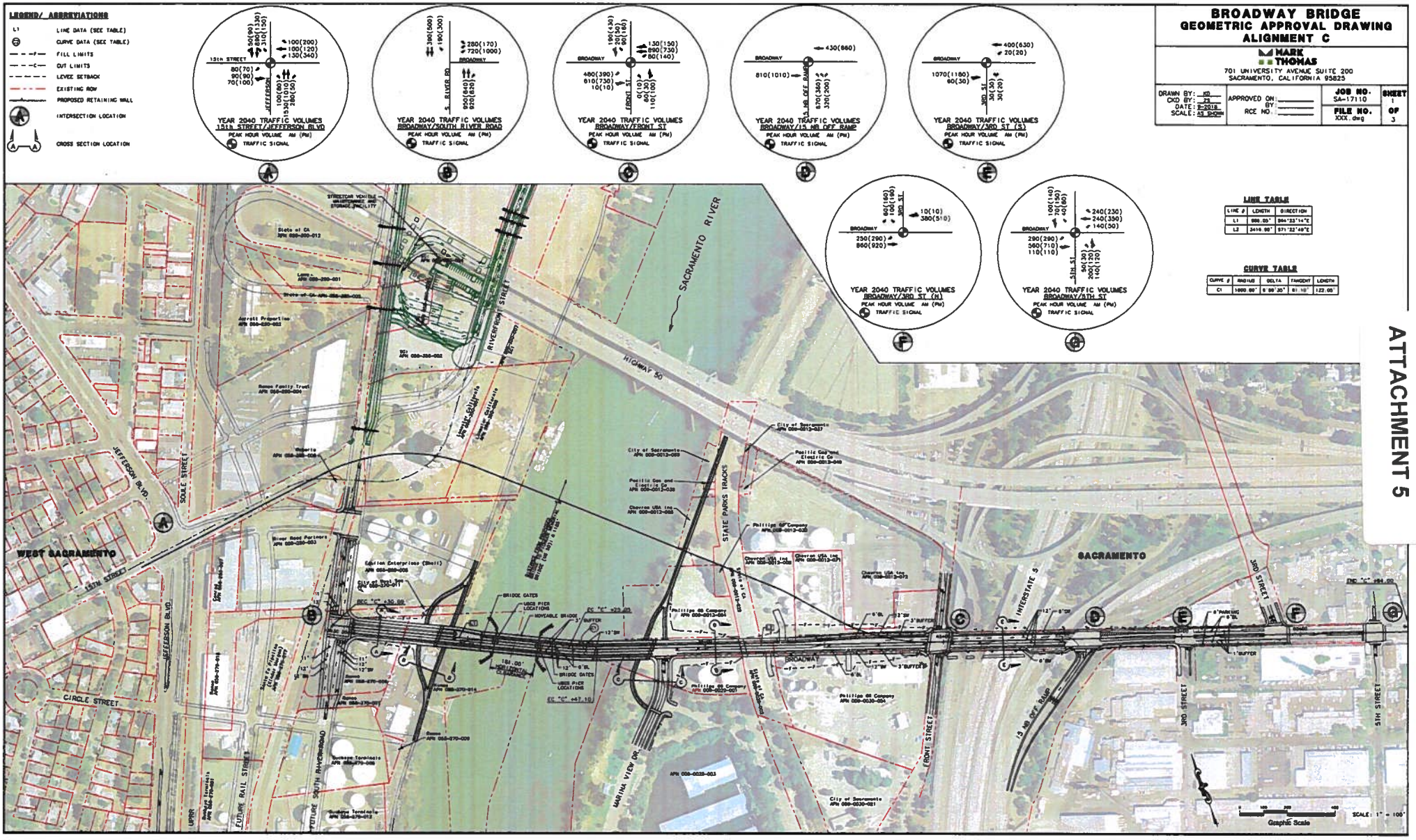
MARINA VIEW DRIVE
BIKE PATH
SACRAMENTO
SECTION C-C



BROADWAY
SACRAMENTO
SECTION D-D



BROADWAY UNDER I-5
SACRAMENTO
SECTION D-D



ATTACHMENT 5

BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT C

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

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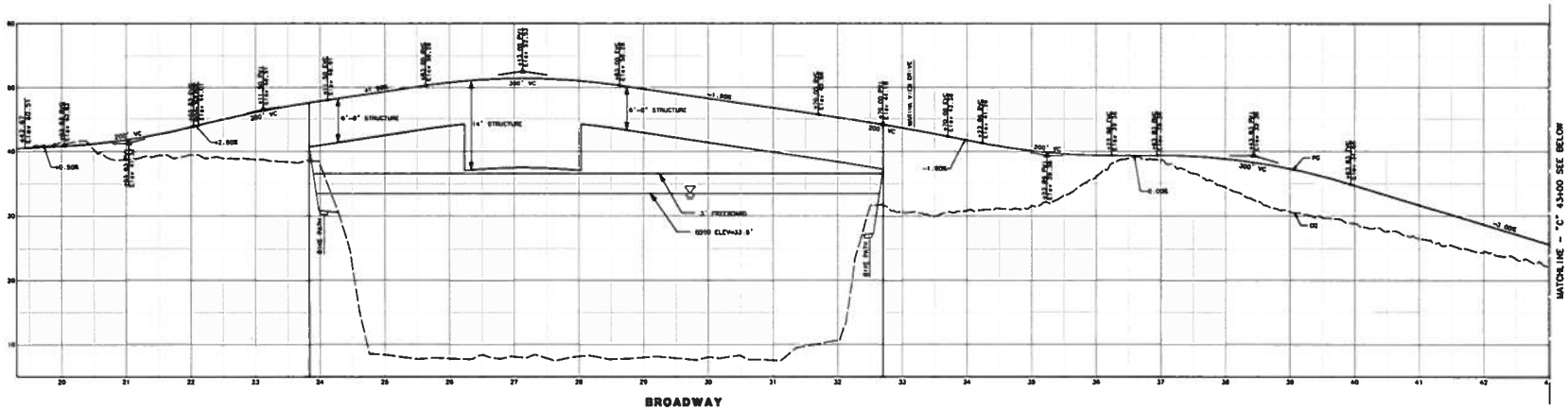

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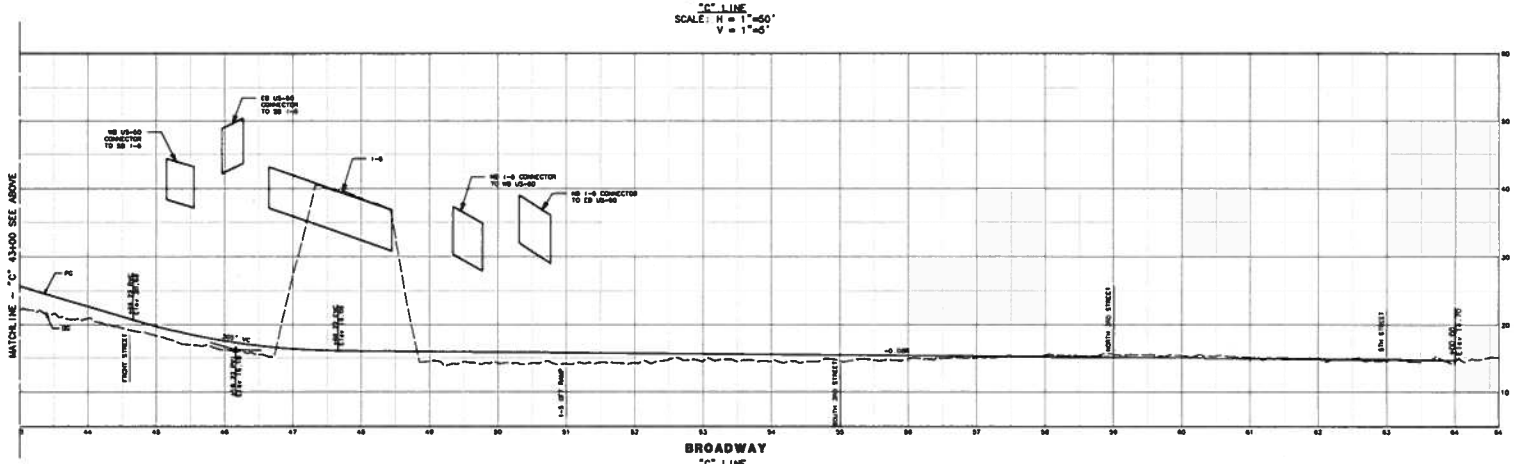

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BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT C

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

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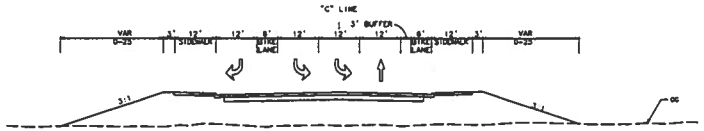

16TH STREET
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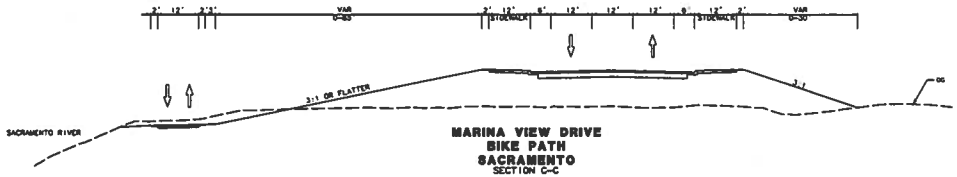
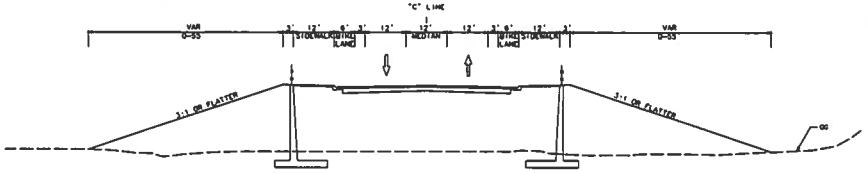
SECTION A-A

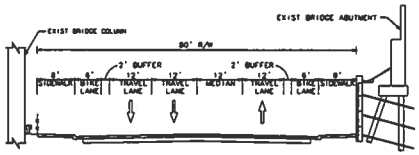
BIKE PATH
WEST SACRAMENTO
SECTION B-B



MARINA VIEW DRIVE
BIKE PATH
SACRAMENTO
SECTION C-C



BROADWAY
SACRAMENTO
SECTION D-D



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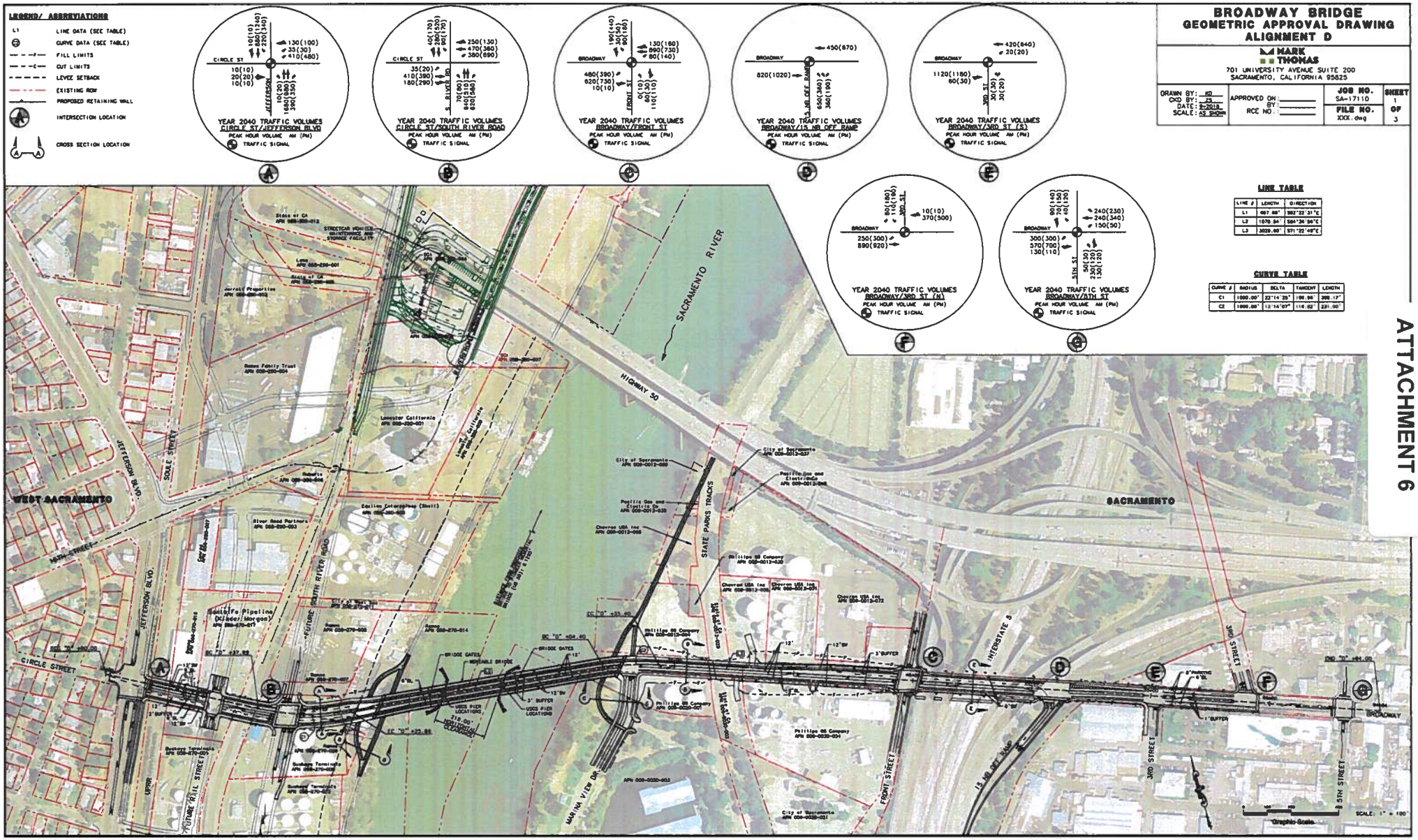
SACRAMENTO
SECTION D-D

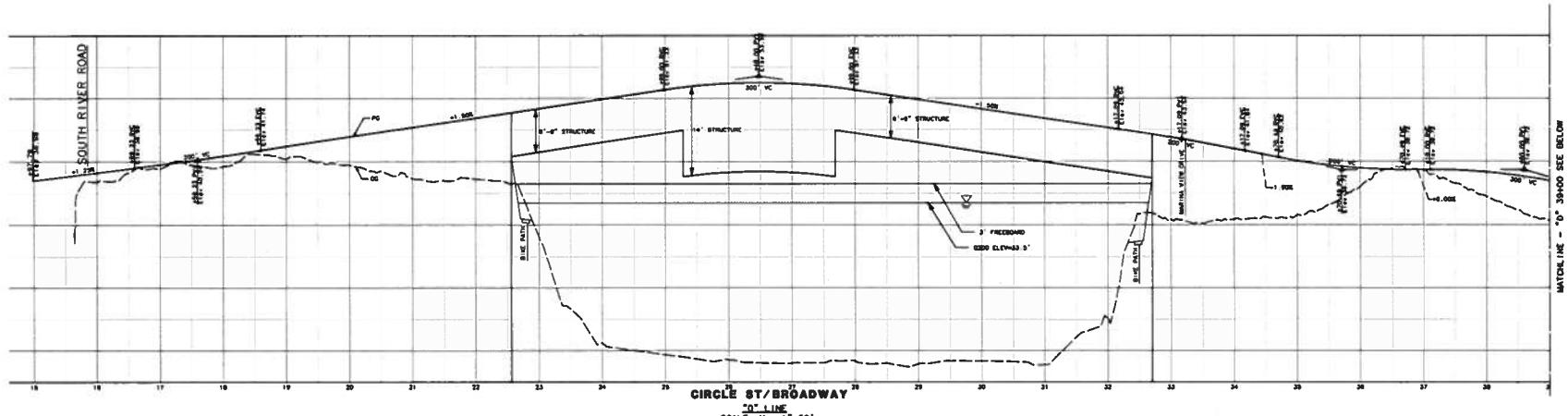


ATTACHMENT 6

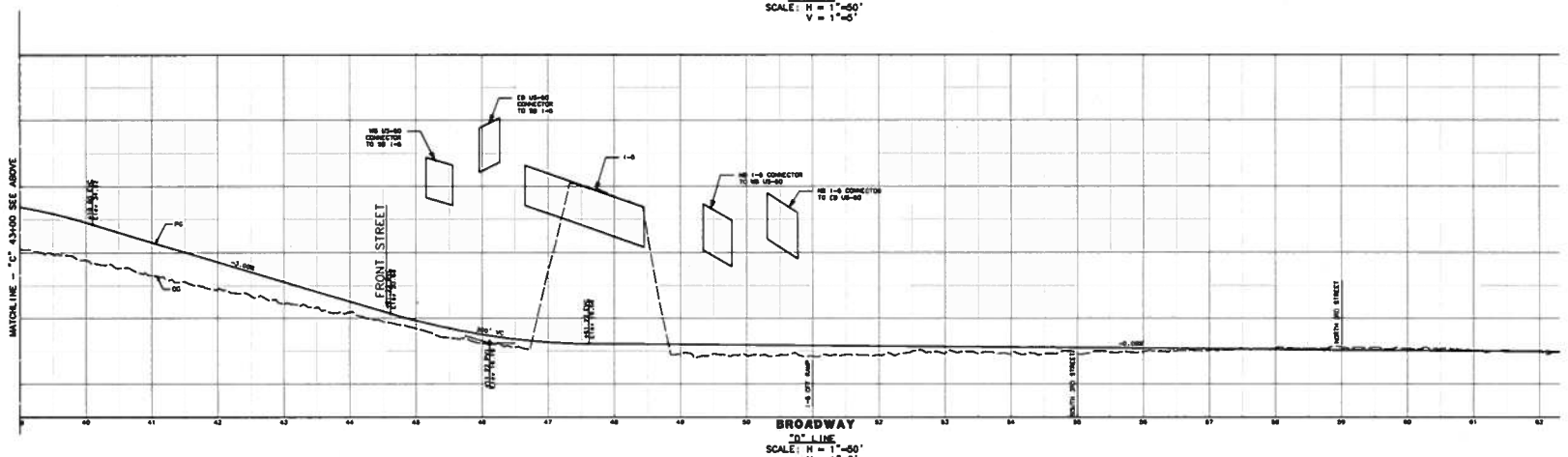
BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT D

MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

DRAWN BY: KD CKD BY: ZS DATE: 9-2018 SCALE: AS SHOWN	APPROVED ON: BY: RCE NO:	JOB NO. SA-17110 FILE NO. XXX.dwg	SHEET 2 OF 3



CIRCLE ST/BROADWAY
"D" LINE
SCALE: H = 1"=50'
V = 1"=5'

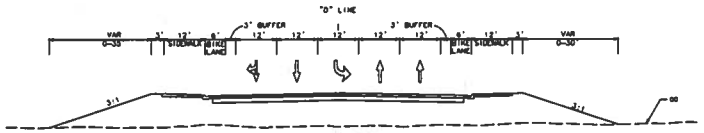


BROADWAY
"D" LINE
SCALE: H = 1"=50'
V = 1"=5'

BROADWAY BRIDGE
GEOMETRIC APPROVAL DRAWING
ALIGNMENT D

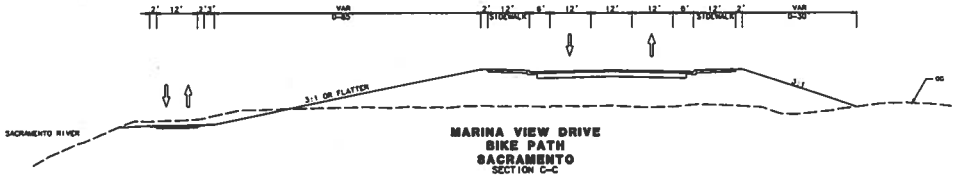
MARK THOMAS
701 UNIVERSITY AVENUE SUITE 200
SACRAMENTO, CALIFORNIA 95825

DRAWN BY: KD CKD BY: ZH DATE: 9-2018 SCALE: AS SHOWN	APPROVED ON: BY: RCE NO:	JOB NO. SA-17110 FILE NO. XXX.dwg	SHEET 3 OF 3

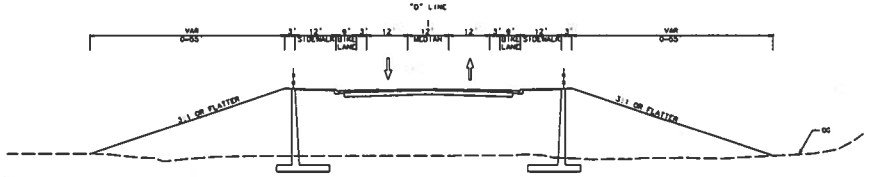


16TH STREET
WEST SACRAMENTO
SECTION A-A

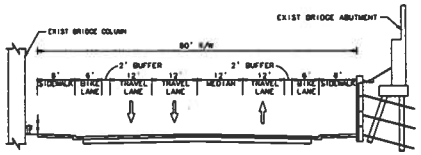
BIKE PATH
WEST SACRAMENTO
SECTION B-B



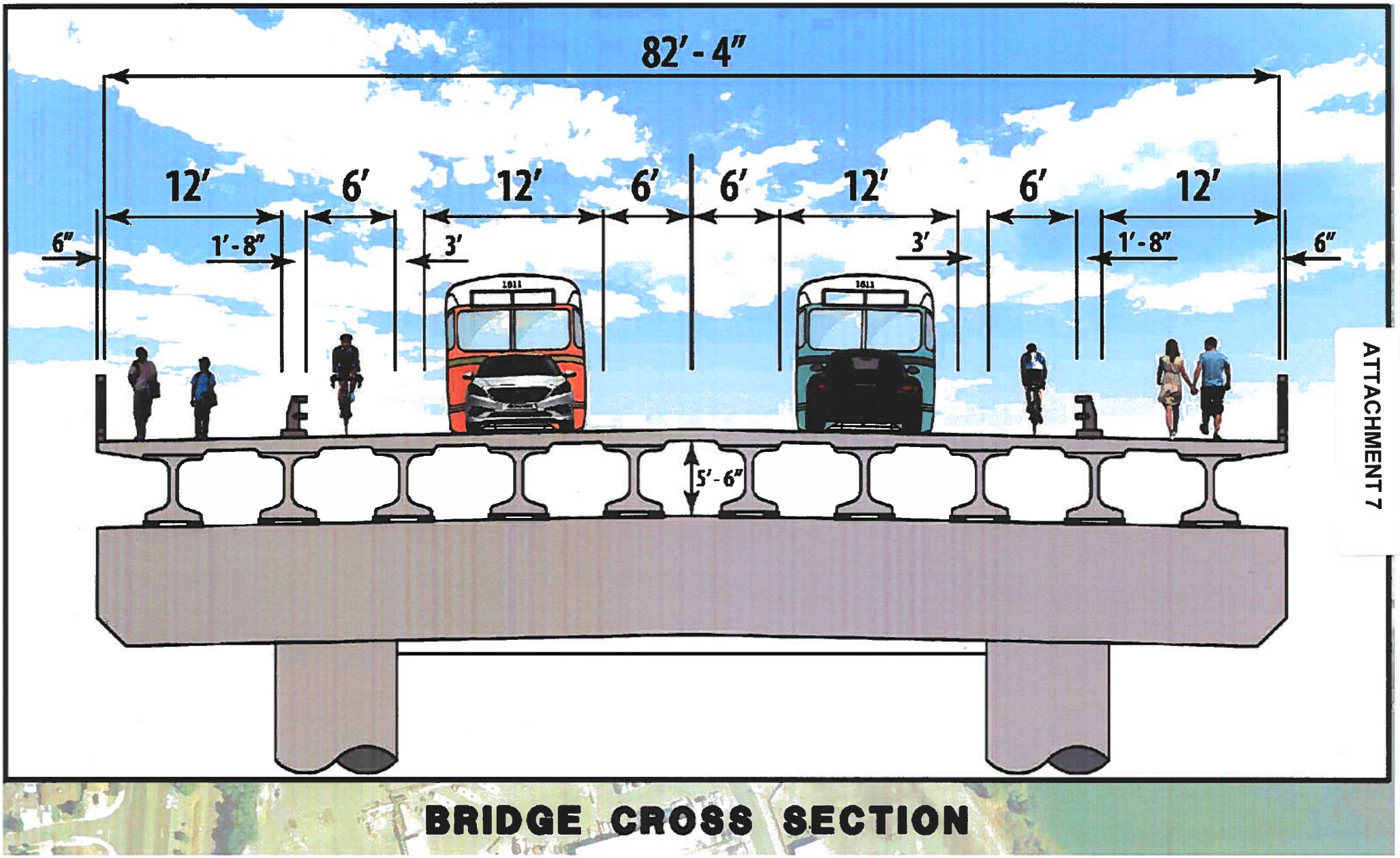
MARINA VIEW DRIVE
BIKE PATH
SACRAMENTO
SECTION C-C



BROADWAY
SACRAMENTO
SECTION D-D

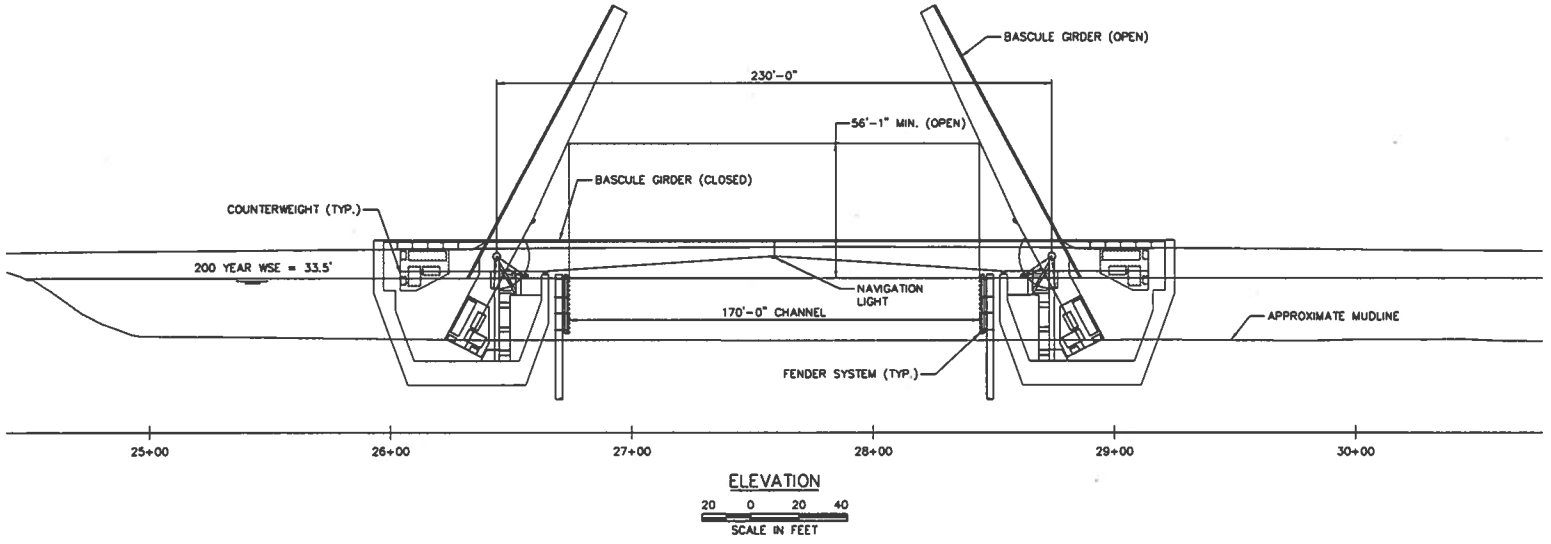


BROADWAY UNDER I-5
SACRAMENTO
SECTION D-D



BRIDGE CROSS SECTION

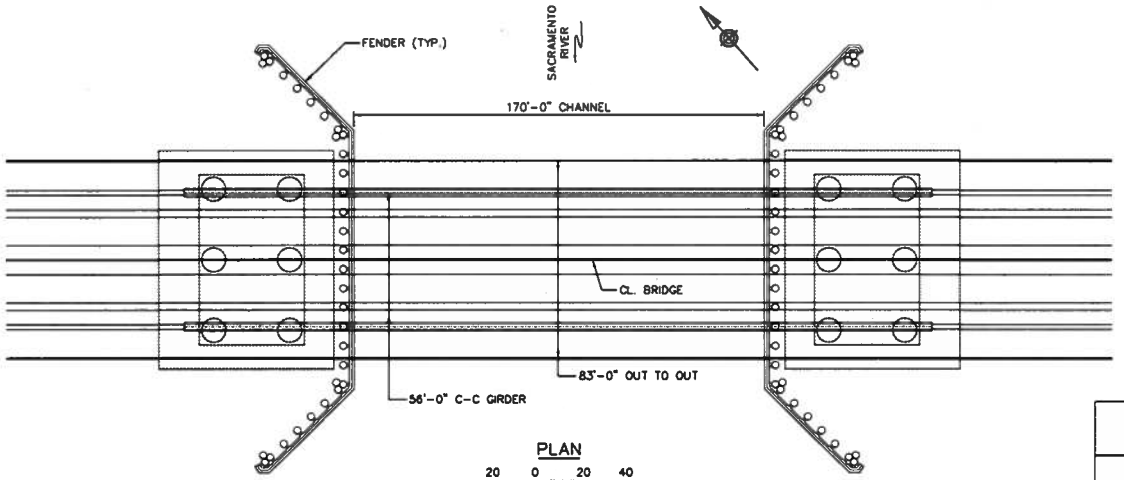
ATTACHMENT 7



ELEVATION

20 0 20 40

SCALE IN FEET



PLAN

20 0 20 40

SCALE IN FEET

BROADWAY BRIDGE PROJECT

ALTERNATIVE A
FULLY COUNTERWEIGHTED
BASCULE GIRDER SPAN
GENERAL PLAN AND ELEVATION

MODJESKI—MASTERS

SHEET 1 OF 21

JANUARY 2018

ATTACHMENT 8

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OPERATOR: sdhaney
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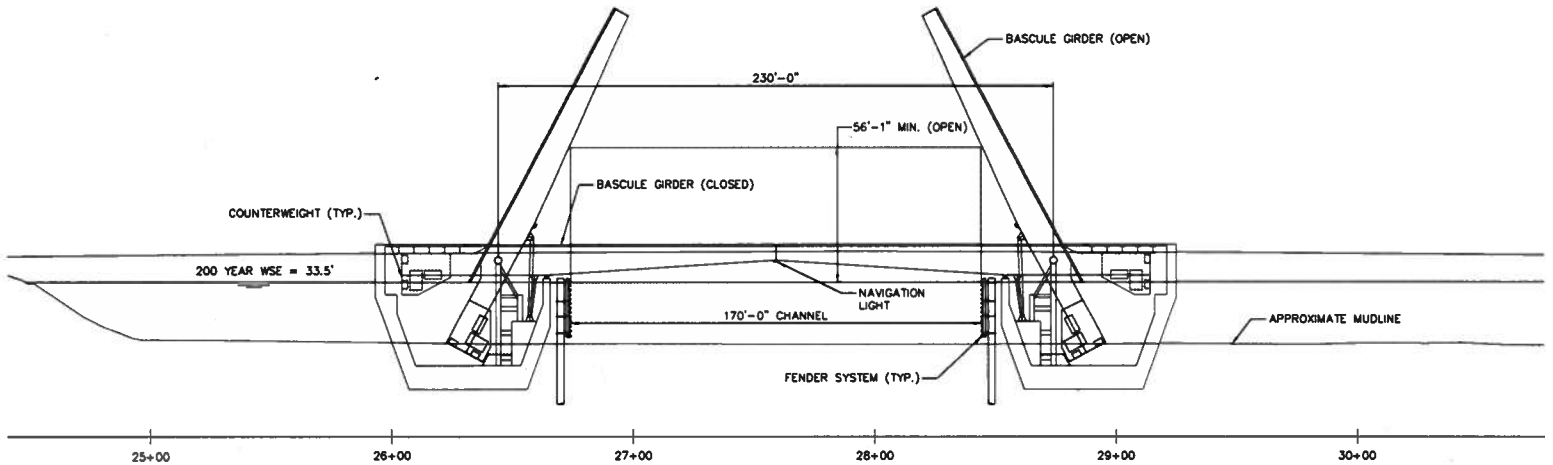
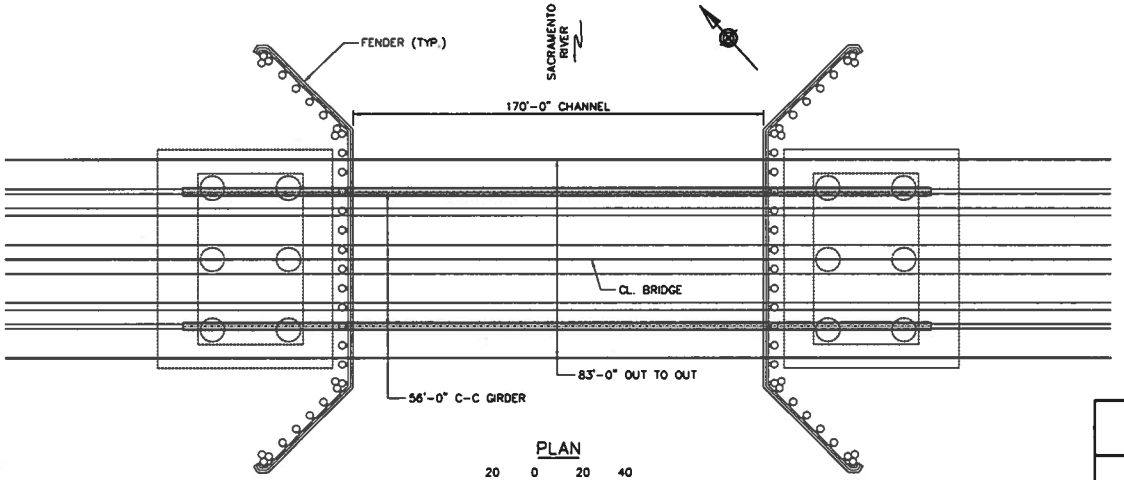


ELEVATION

20 0 20 40

SCALE IN FEET



PLAN

20 0 20 40

SCALE IN FEET

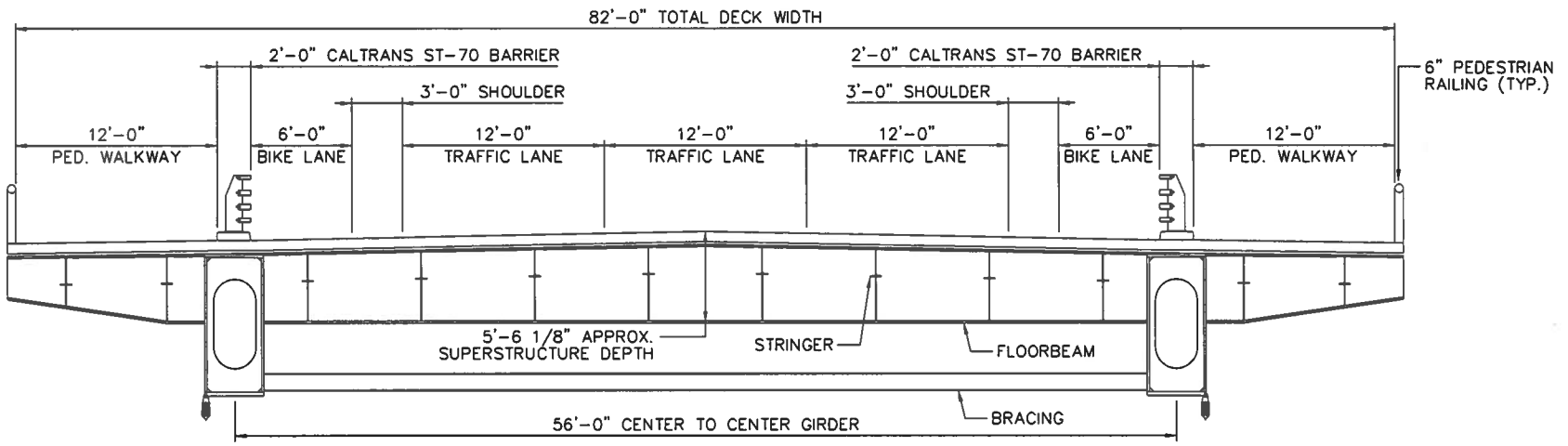
BROADWAY BRIDGE PROJECT

ALTERNATIVE B
PARTIALLY COUNTERWEIGHTED
BASCULE GIRDER SPAN
GENERAL PLAN AND ELEVATION

MODJESKI and MASTERS

SHEET 2 OF 21

JANUARY 2018



BASCULE GIRDER SPAN CROSS SECTION

5 0 5 10

SCALE IN FEET

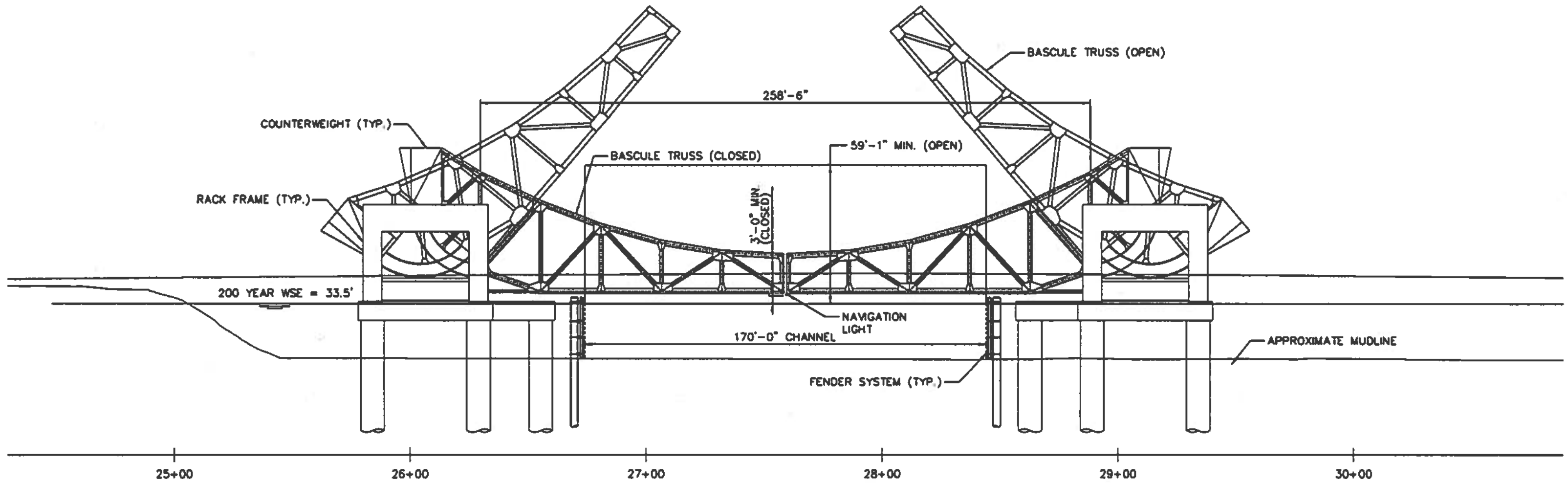
BROADWAY BRIDGE PROJECT

ALTERNATIVES A AND B
BASCULE GIRDER SPAN
TYPICAL SECTIONS

MODJESKI—MASTERS

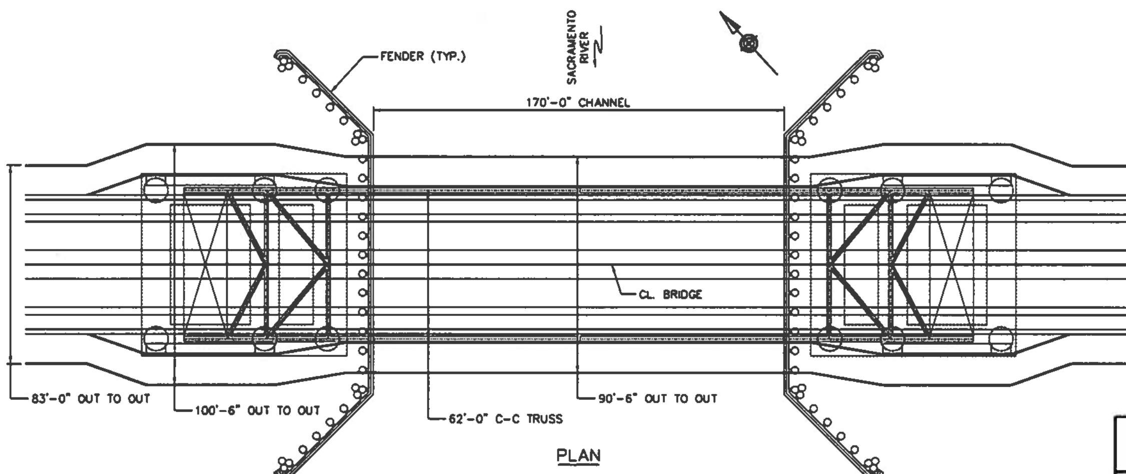
SHEET 3 OF 21

JANUARY 2018



ELEVATION

20 0 20 40
SCALE IN FEET



PLAN

20 0 20 40
SCALE IN FEET

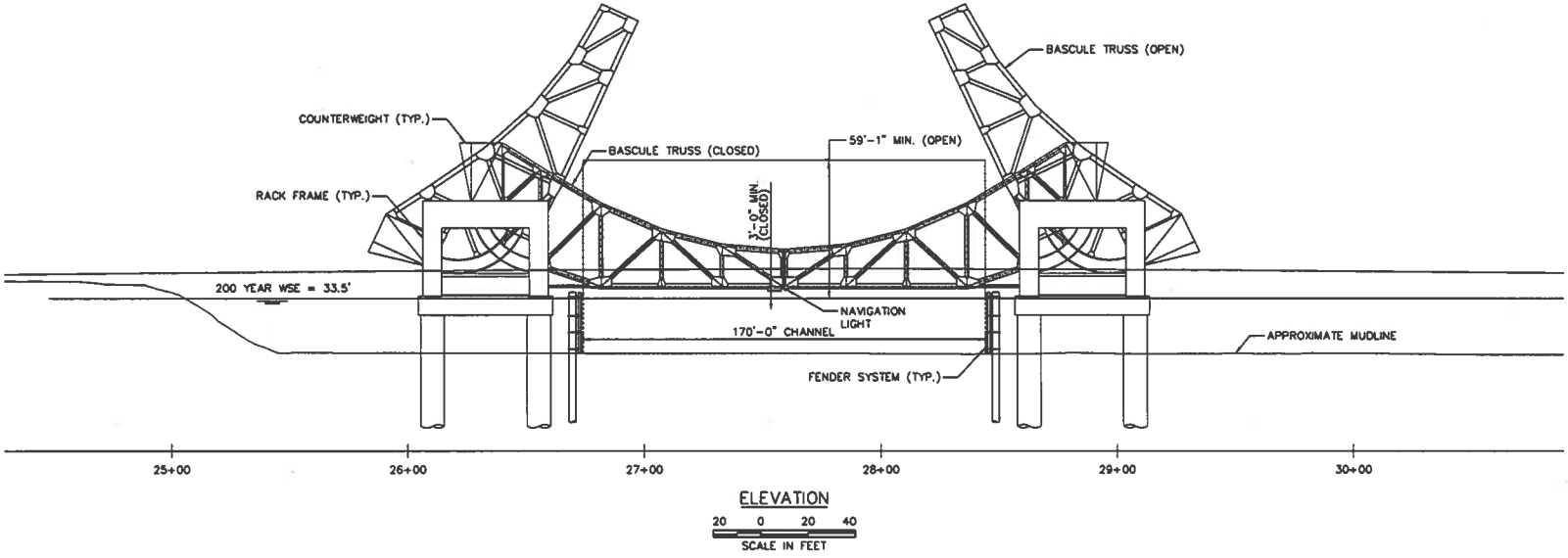
BROADWAY BRIDGE PROJECT

ALTERNATIVE C-1
FULLY COUNTERWEIGHTED
TWO LEAF ROLLING BASCULE TRUSS
GENERAL PLAN AND ELEVATION

MODJESKI and MASTERS

SHEET 4 OF 21

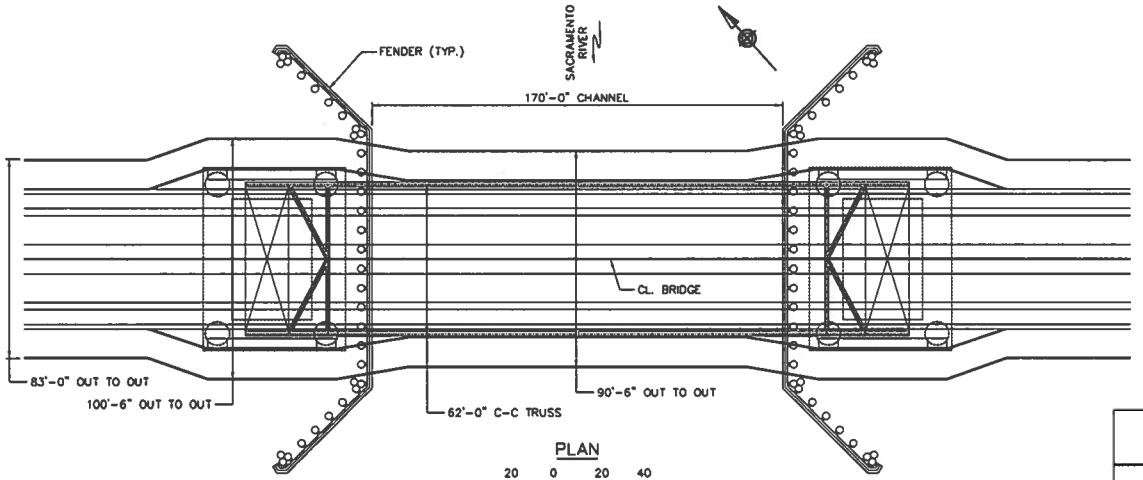
JANUARY 2018



ELEVATION

20 0 20 40

SCALE IN FEET



PLAN

20 0 20 40

SCALE IN FEET

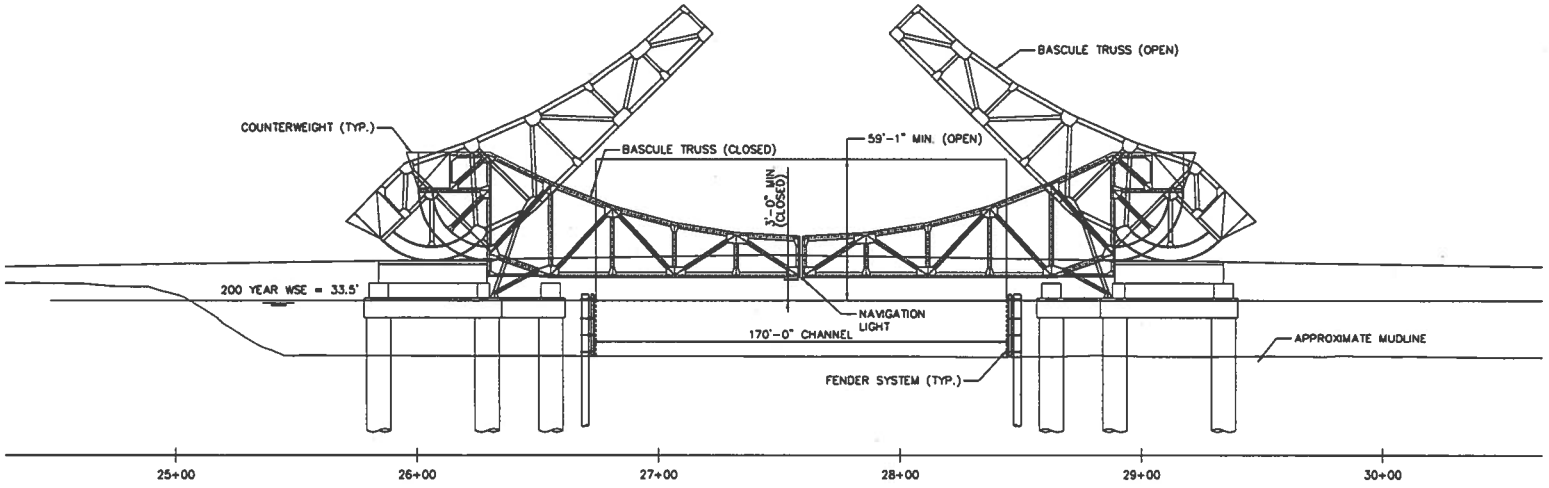
BROADWAY BRIDGE PROJECT

ALTERNATIVE C-2
FULLY COUNTERWEIGHTED
TWO LEAF ROLLING BASCULE TRUSS
GENERAL PLAN AND ELEVATION

MODJESKI—MASTERS

SHEET 5 OF 21

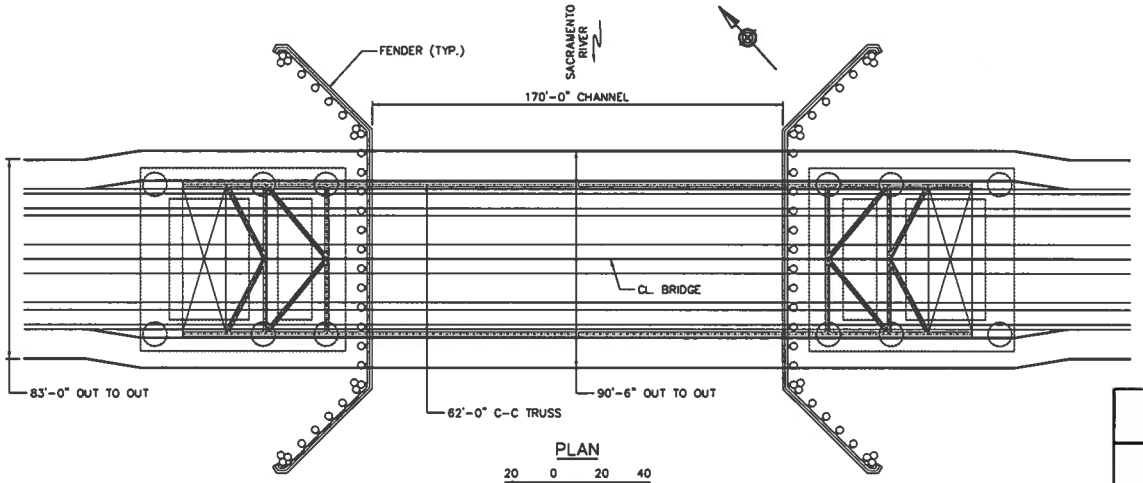
JANUARY 2018



ELEVATION

20 0 20 40

SCALE IN FEET



PLAN

20 0 20 40

SCALE IN FEET

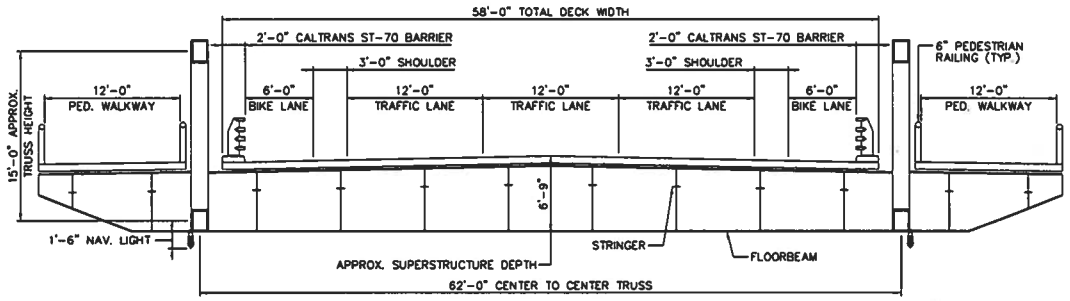
BROADWAY BRIDGE PROJECT

ALTERNATIVE D
PARTIALLY COUNTERWEIGHTED
TWO LEAF ROLLING BASCULE TRUSS
GENERAL PLAN AND ELEVATION

MODJESKI—MASTERS

SHEET 6 OF 21

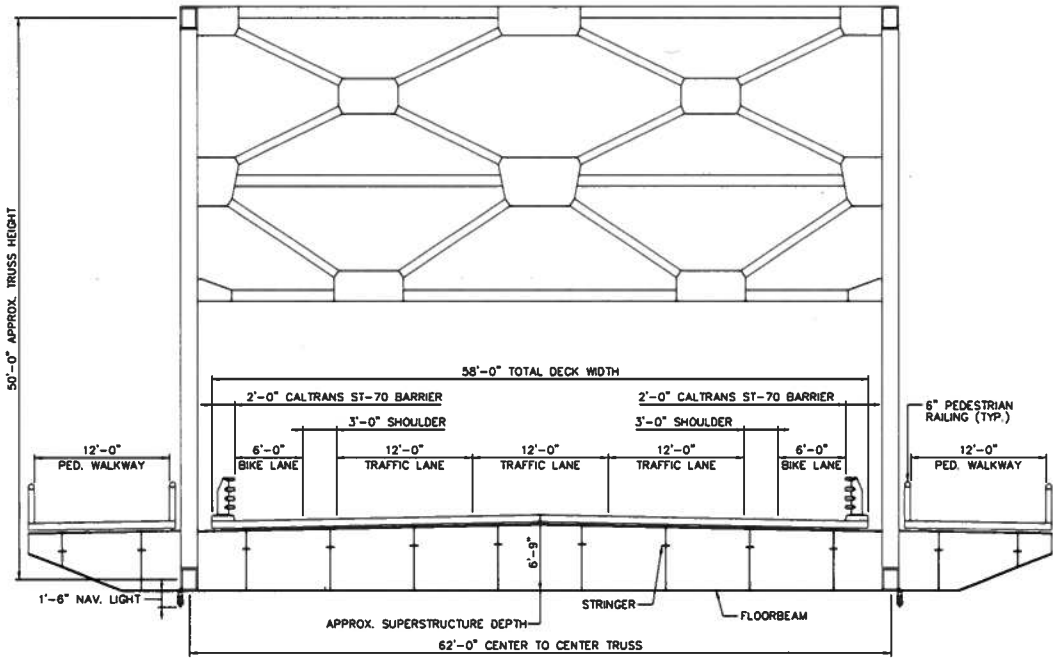
JANUARY 2018



TWO LEAF BASCULE THROUGH TRUSS CROSS SECTION AT CENTER SPAN

5 0 5 10

SCALE IN FEET



TWO LEAF BASCULE THROUGH TRUSS CROSS SECTION AT END SPAN

5 0 5 10

SCALE IN FEET

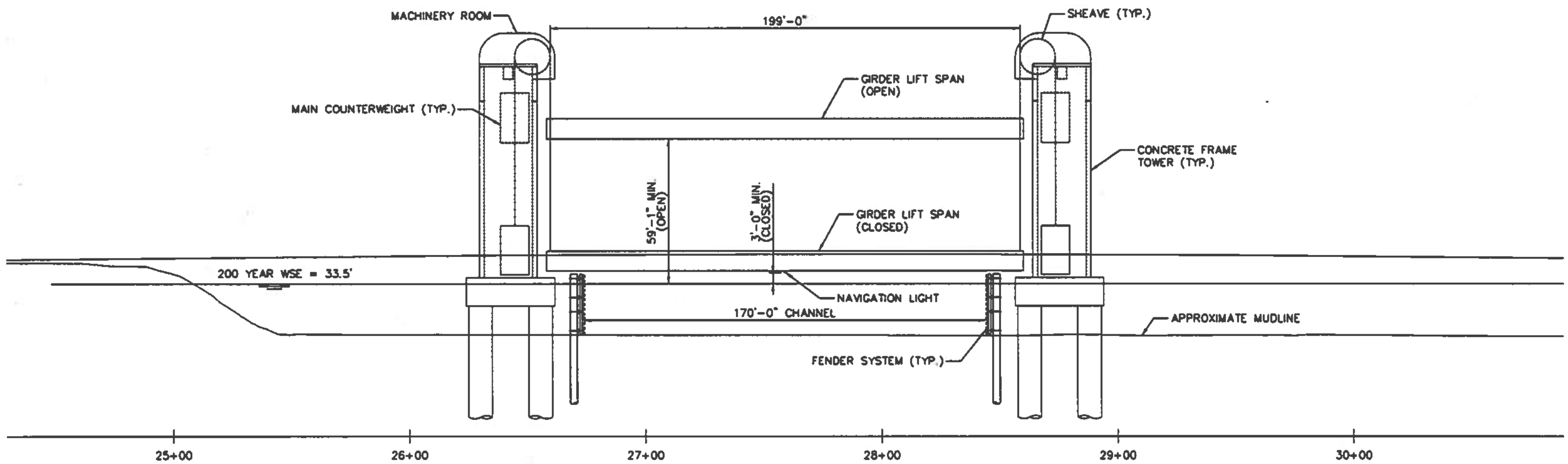
BROADWAY BRIDGE PROJECT

ALTERNATIVES C AND D
TWO LEAF ROLLING BASCULE TRUSS
TYPICAL SECTIONS

MODJESKI—MASTERS

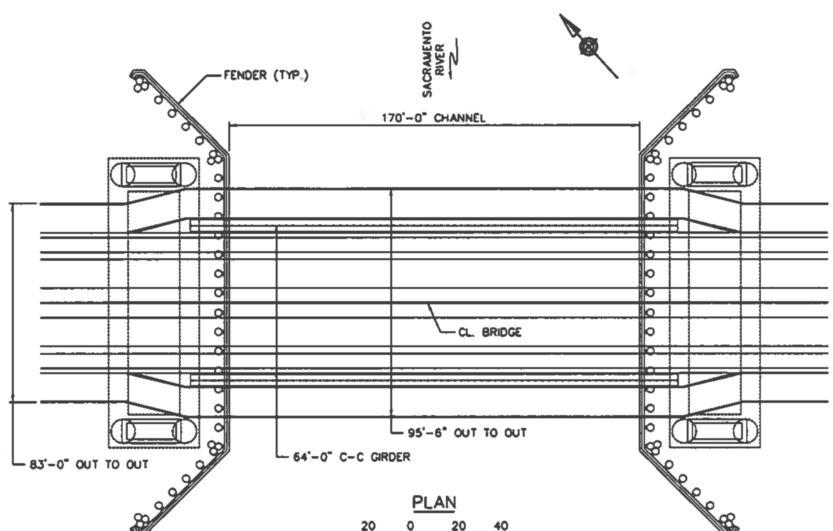
SHEET 7 OF 21

JANUARY 2018



ELEVATION

20 0 20 40
SCALE IN FEET



PLAN

20 0 20 40
SCALE IN FEET

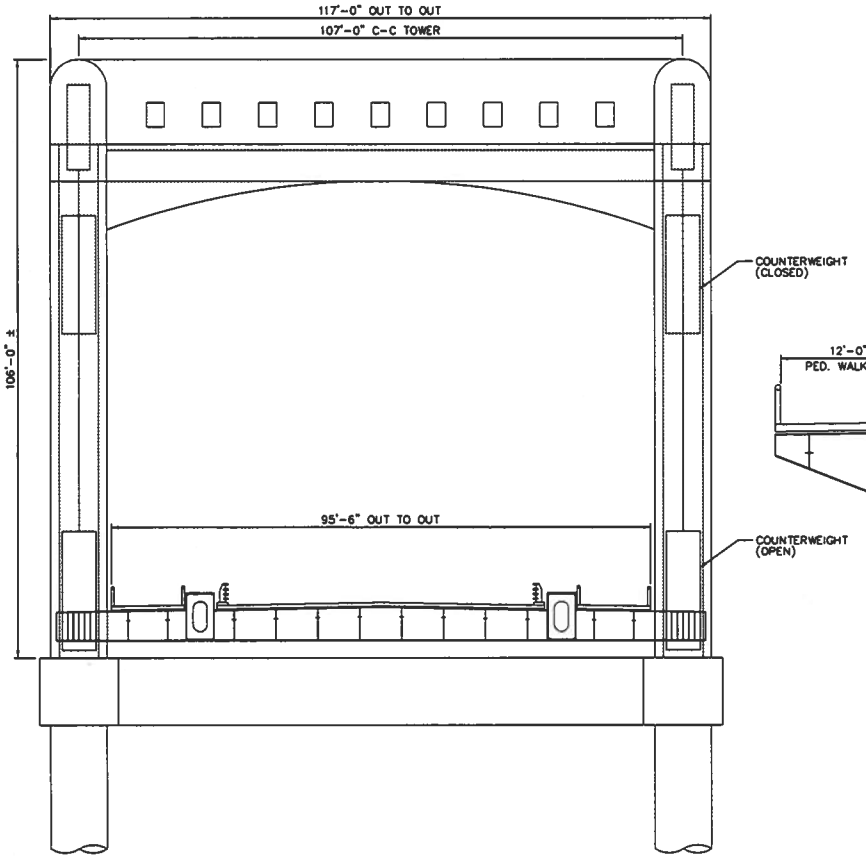
BROADWAY BRIDGE PROJECT

ALTERNATIVE E
VERTICAL LIFT GIRDER SPAN WITH
CONCRETE FRAME TOWERS
GENERAL PLAN AND ELEVATION

MODJESKI—MASTERS

SHEET 8 OF 21

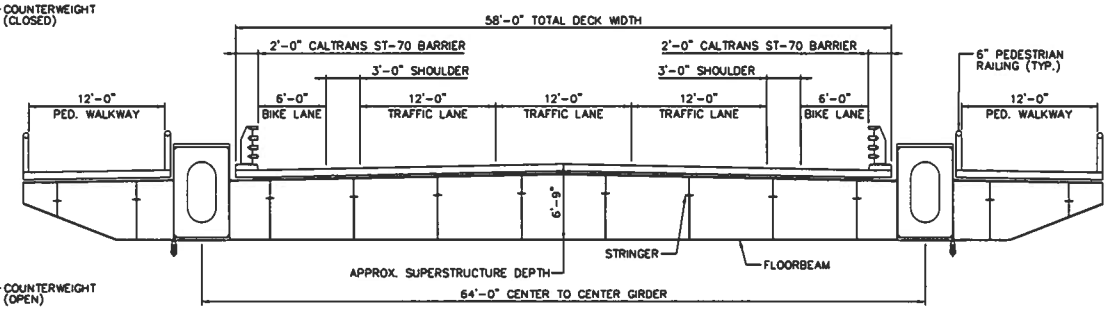
JANUARY 2018



VERTICAL LIFT CONCRETE FRAME TOWER CROSS SECTION

10 0 10 20

SCALE IN FEET



VERTICAL LIFT GIRDER SPAN CROSS SECTION

5 0 5 10

SCALE IN FEET

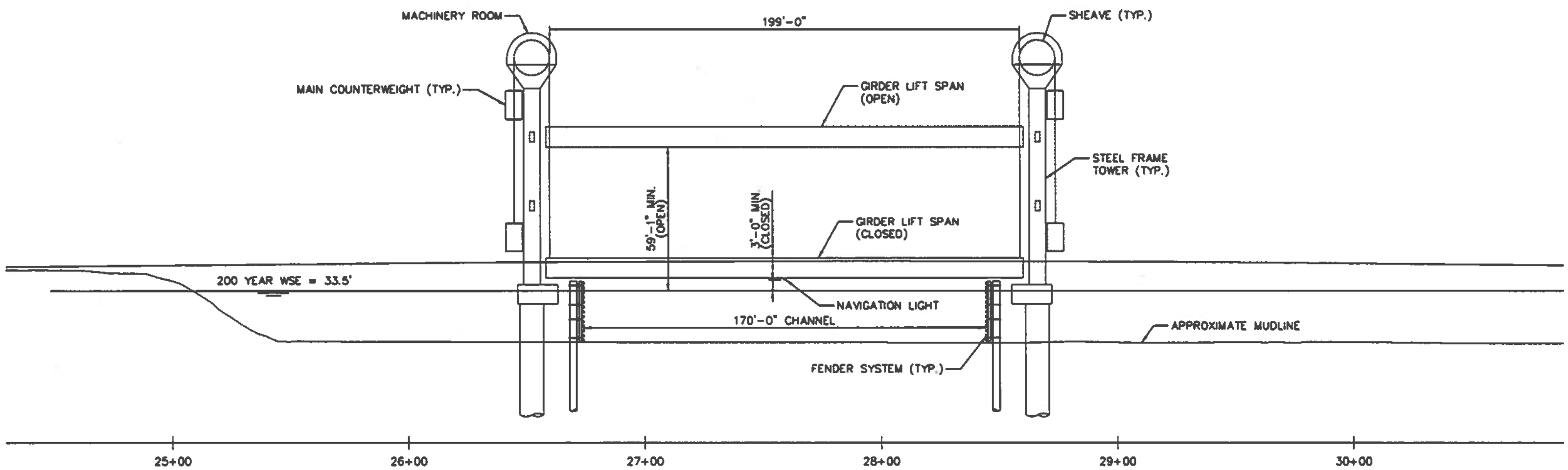
BROADWAY BRIDGE PROJECT

ALTERNATIVE E
VERTICAL LIFT GIRDER SPAN WITH CONCRETE FRAME TOWERS
TYPICAL SECTIONS

MODJESKI—MASTERS

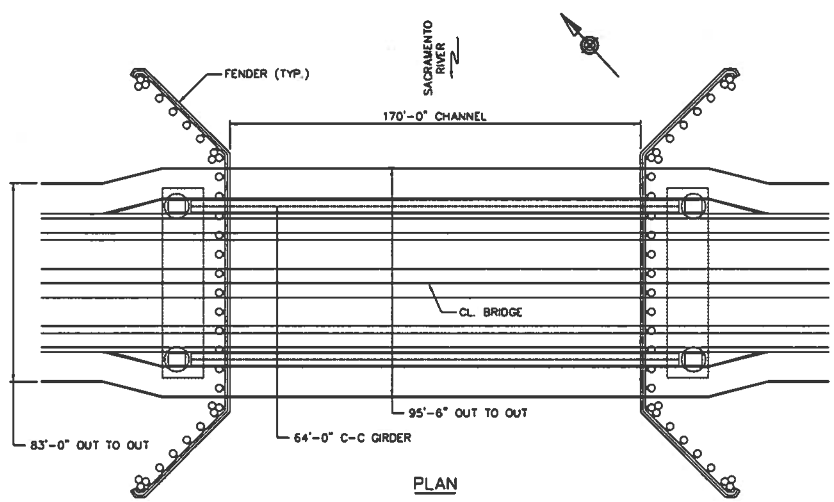
SHEET 9 OF 21

JANUARY 2018



ELEVATION

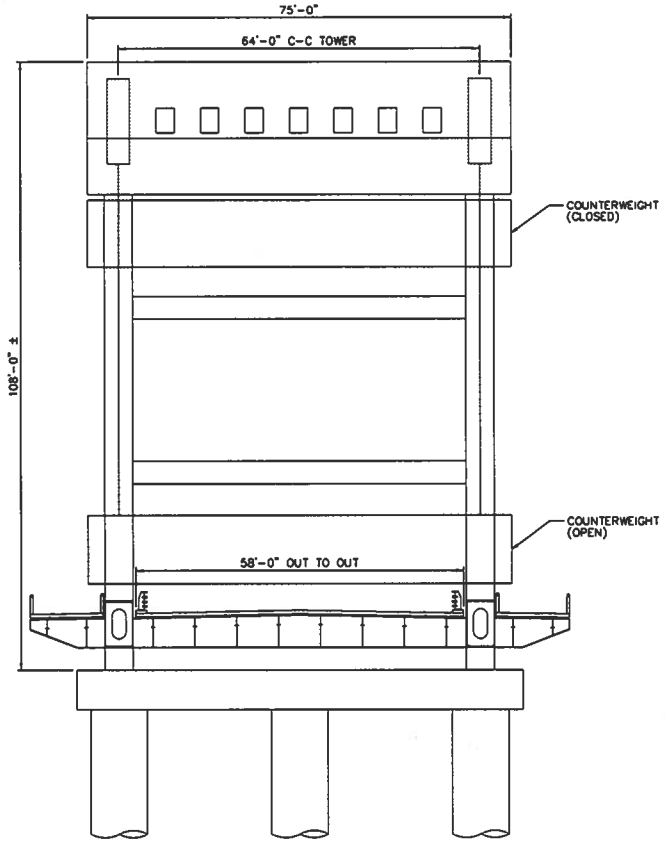
20 0 20 40
SCALE IN FEET



PLAN

20 0 20 40
SCALE IN FEET

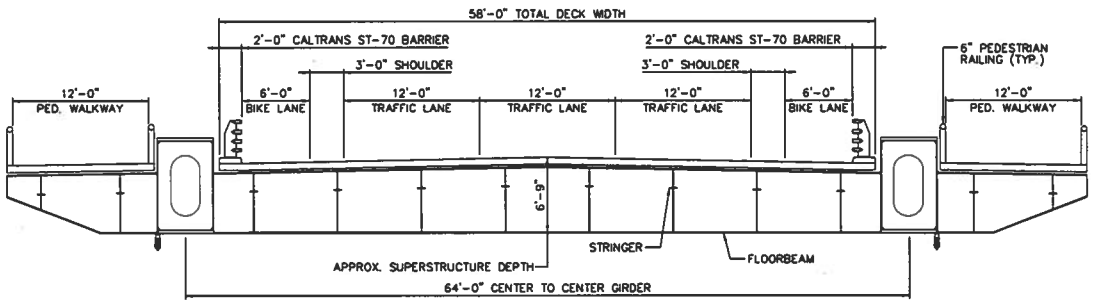
BROADWAY BRIDGE PROJECT	
ALTERNATIVE F VERTICAL LIFT GIRDER SPAN WITH STEEL FRAME TOWERS GENERAL PLAN AND ELEVATION	
MODJESKI-MASTERS	SHEET 10 OF 21
	JANUARY 2018



VERTICAL LIFT STEEL FRAME TOWER CROSS SECTION

10 0 10 20

SCALE IN FEET



VERTICAL LIFT GIRDER SPAN CROSS SECTION

5 0 5 10

SCALE IN FEET

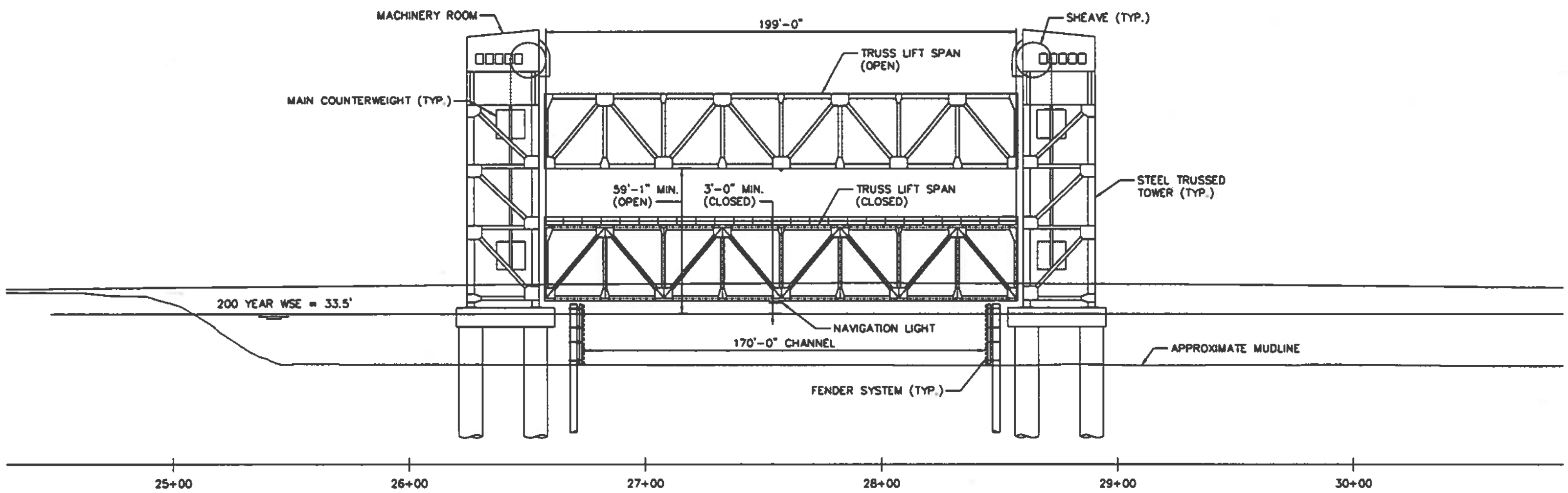
BROADWAY BRIDGE PROJECT

ALTERNATIVE F
VERTICAL LIFT GIRDER SPAN
WITH STEEL FRAME TOWERS
TYPICAL SECTIONS

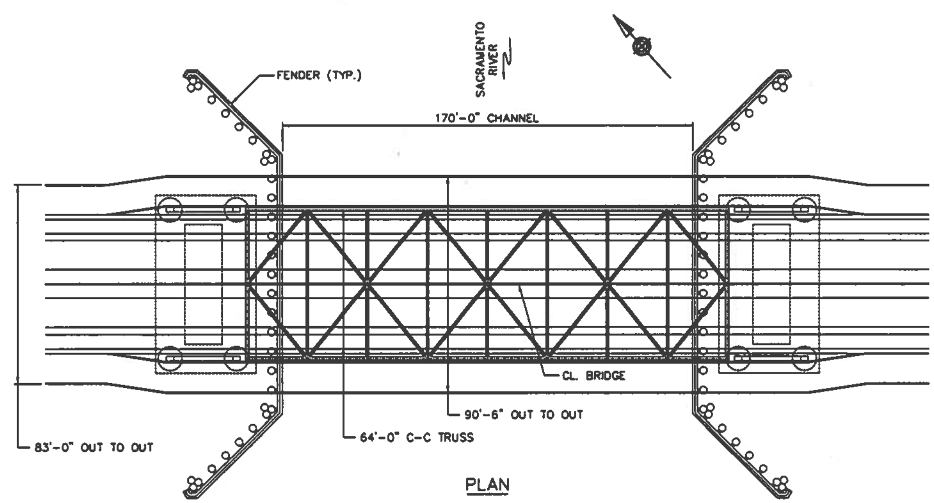
MODJESKI—MASTERS

SHEET 11 OF 21

JANUARY 2018

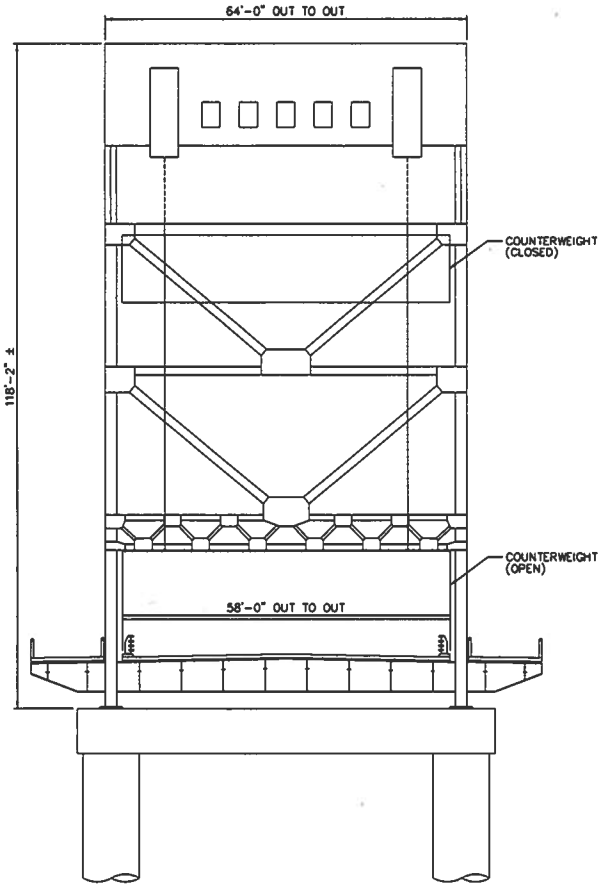


ELEVATION



PLAN

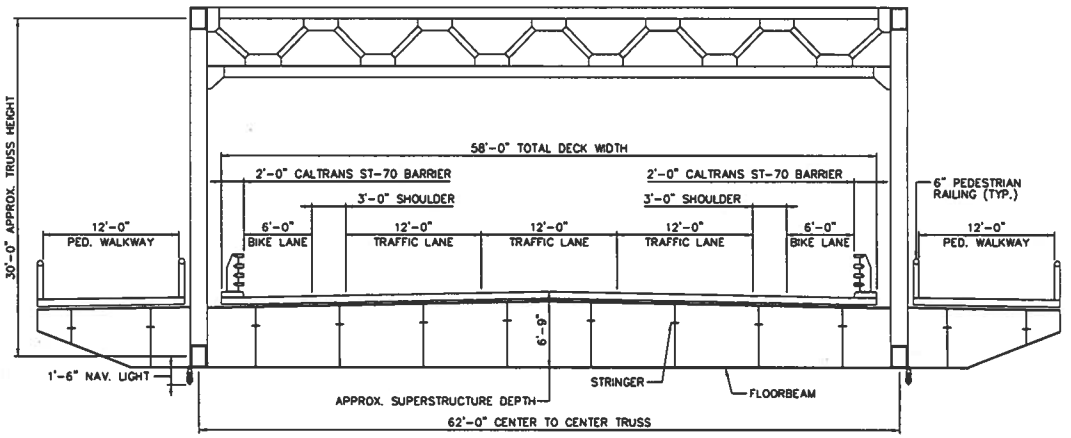
BROADWAY BRIDGE PROJECT	
ALTERNATIVE G VERTICAL LIFT TRUSS SPAN WITH TRUSSED TOWERS GENERAL PLAN AND ELEVATION	
MODJESKI–MASTERS	SHEET 12 OF 21
	JANUARY 2018



VERTICAL LIFT STEEL TRUSSED TOWER CROSS SECTION

10 0 10 20

SCALE IN FEET



THROUGH TRUSS CROSS SECTION

5 0 5 10

SCALE IN FEET

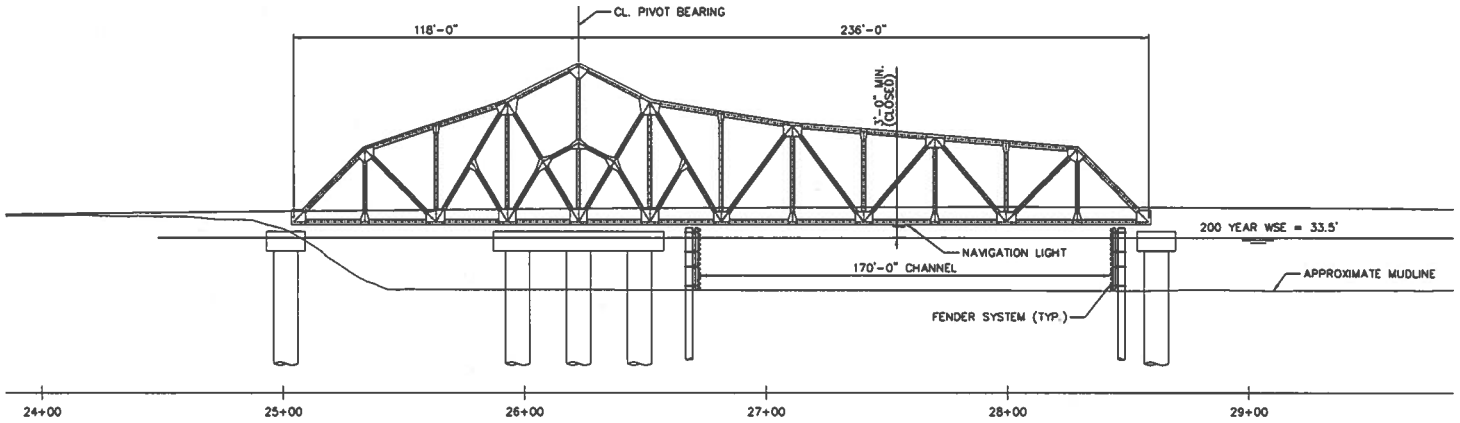
BROADWAY BRIDGE PROJECT

ALTERNATIVE G
VERTICAL LIFT TRUSS SPAN
WITH TRUSSED TOWERS
TYPICAL SECTIONS

MODJESKI—MASTERS

SHEET 13 OF 21

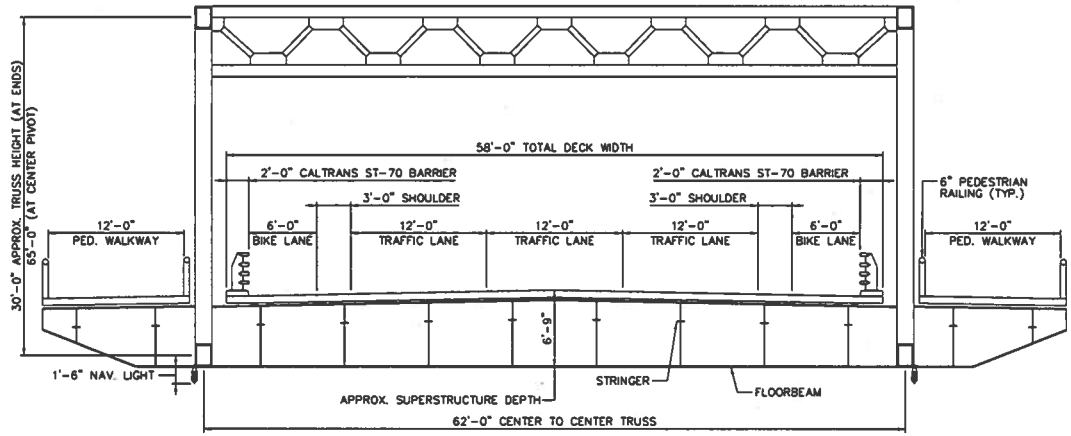
JANUARY 2018



ELEVATION

20 0 20 40

SCALE IN FEET



THROUGH TRUSS CROSS SECTION

(BOBTAIL SWING TRUSS END SECTION SHOWN VISUALLY, BOBTAIL SWING TRUSS AT CENTER PIVOT SIMILAR AS NOTED)

5 0 5 10

SCALE IN FEET

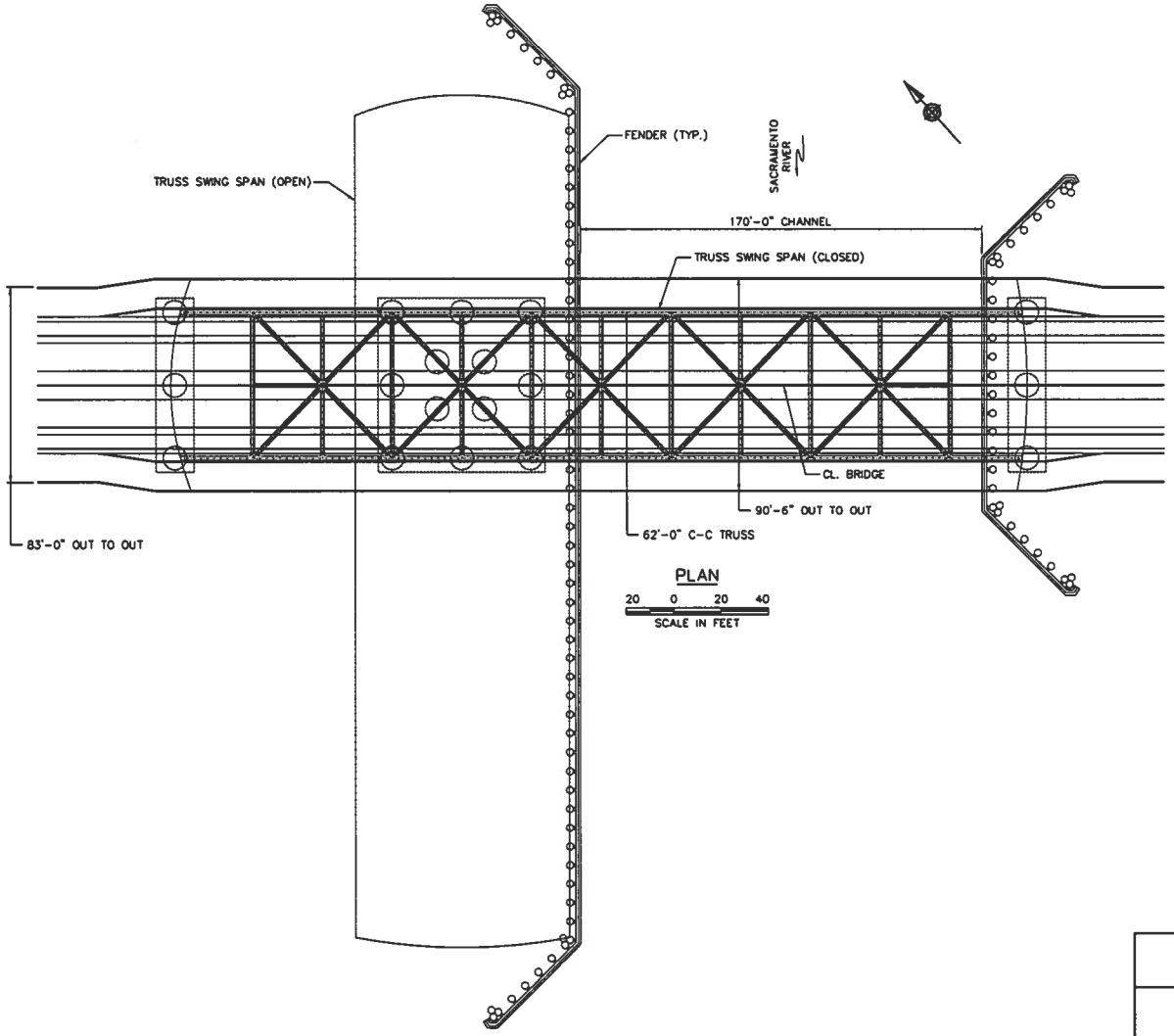
BROADWAY BRIDGE PROJECT

ALTERNATIVE H-1
BOBTAIL SWING THROUGH TRUSS SPANS
ELEVATION AND TYPICAL SECTION

MODJESKI—MASTERS

SHEET 14 OF 21

JANUARY 2018



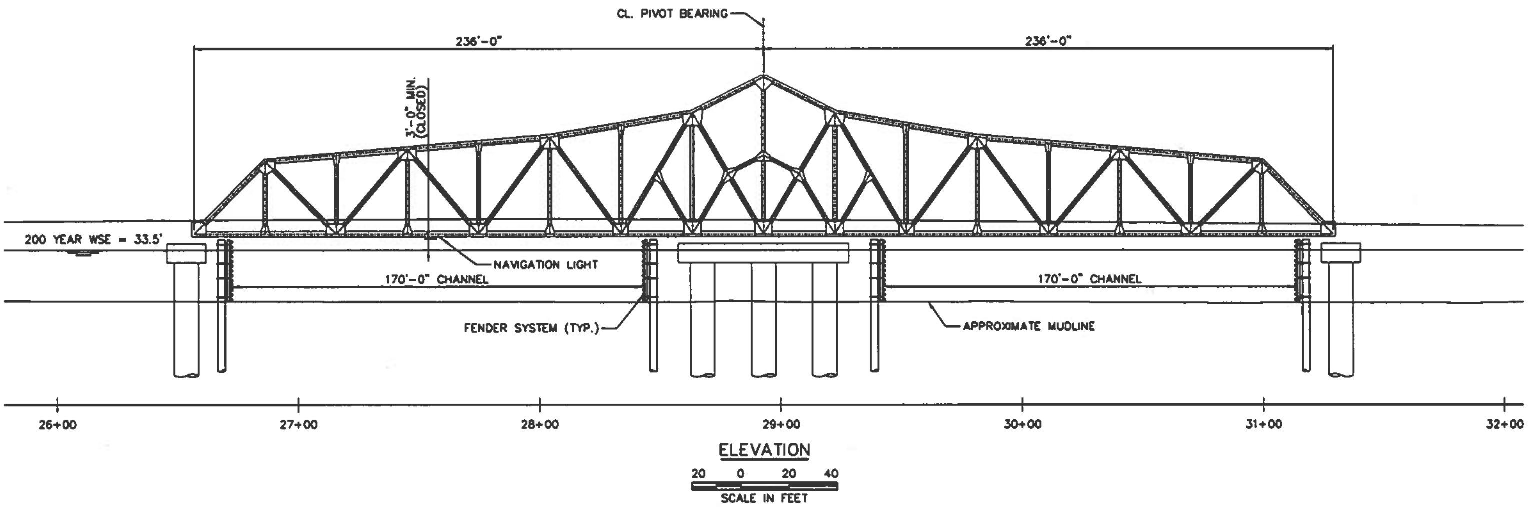
BROADWAY BRIDGE PROJECT

ALTERNATIVE H-1
BOBTAIL SWING THROUGH
TRUSS SPANS
GENERAL PLAN

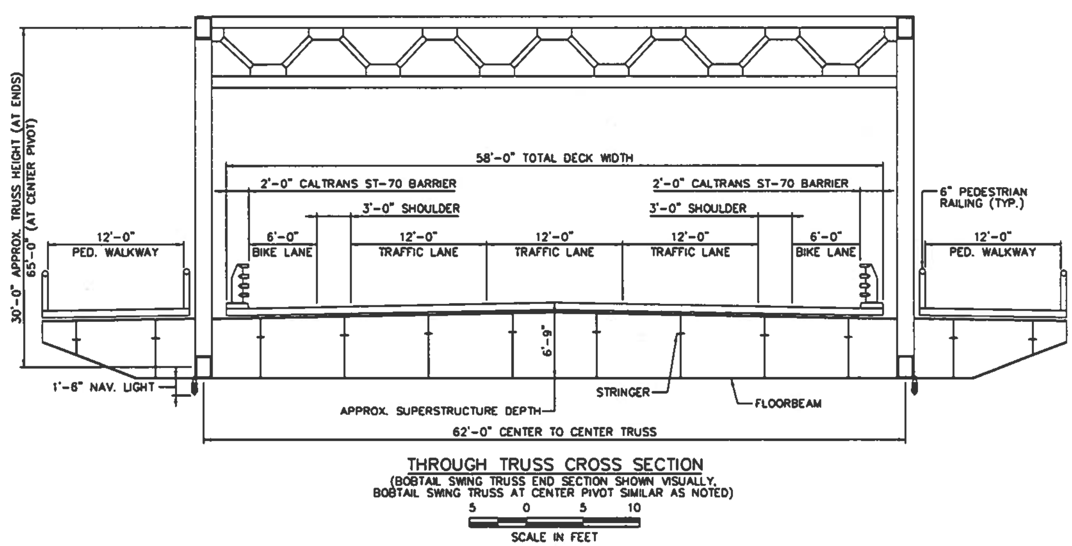
MOFFATT & NICHOL

SHEET 15 OF 21

JANUARY 2018



ELEVATION



THROUGH TRUSS CROSS SECTION
(BOBTAIL SWING TRUSS END SECTION SHOWN VISUALLY, BOBTAIL SWING TRUSS AT CENTER PIVOT SIMILAR AS NOTED)

BROADWAY BRIDGE PROJECT

ALTERNATIVE H-2
SWING THROUGH
TRUSS SPANS
ELEVATION AND TYPICAL SECTION

MODJESKI–MASTERS

SHEET 16 OF 21

JANUARY 2018

OPERATOR: ALPalmer
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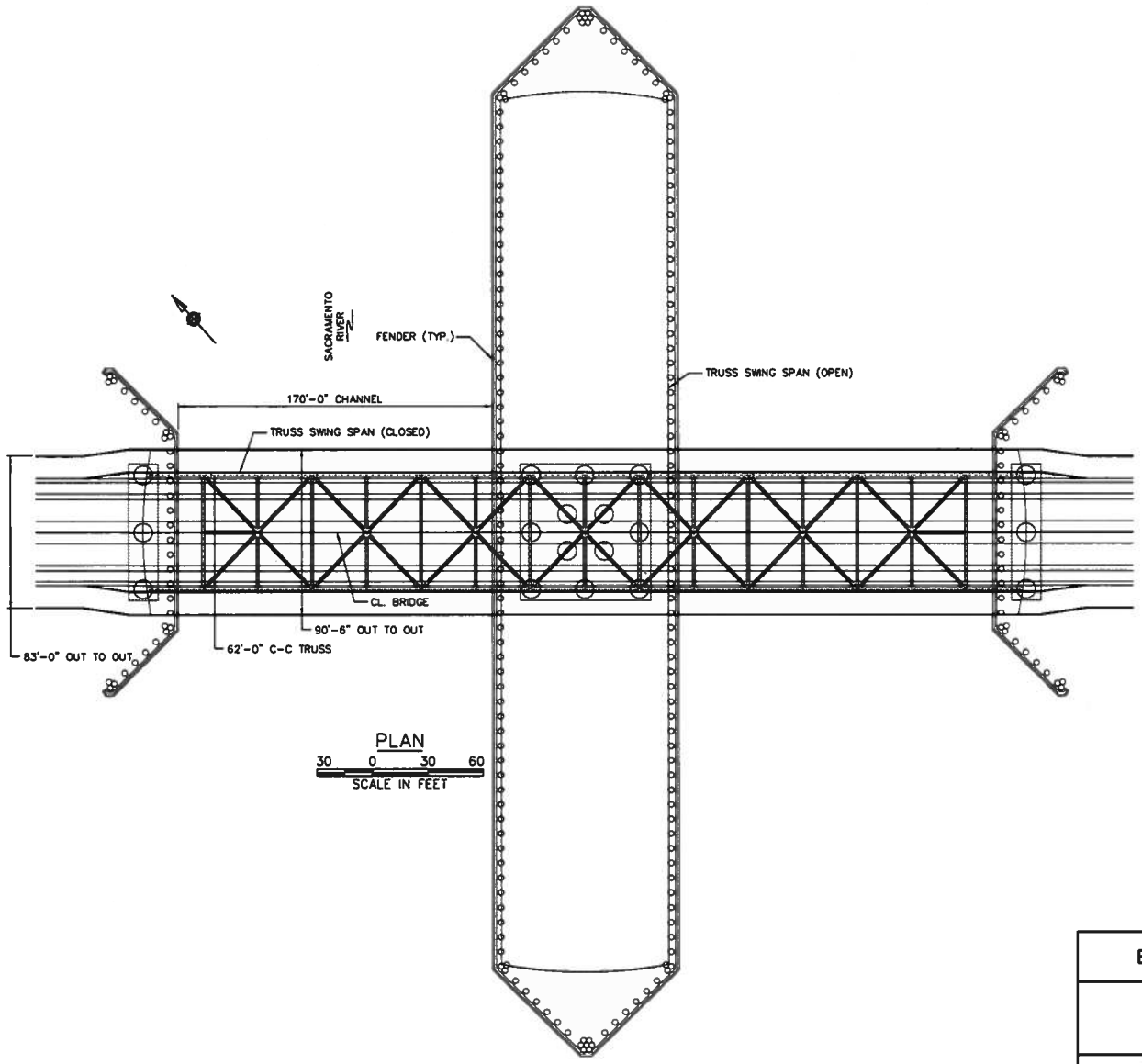


PLAN

30 0 30 60

SCALE IN FEET

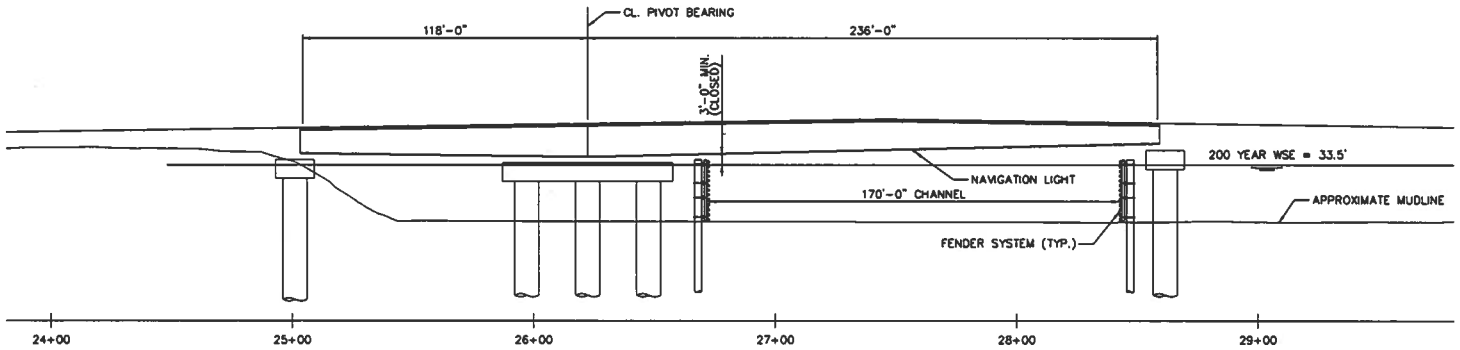
BROADWAY BRIDGE PROJECT

ALTERNATIVE H-2
SWING THROUGH
TRUSS SPANS
GENERAL PLAN

MODJESKI—MASTERS

SHEET 17 OF 21

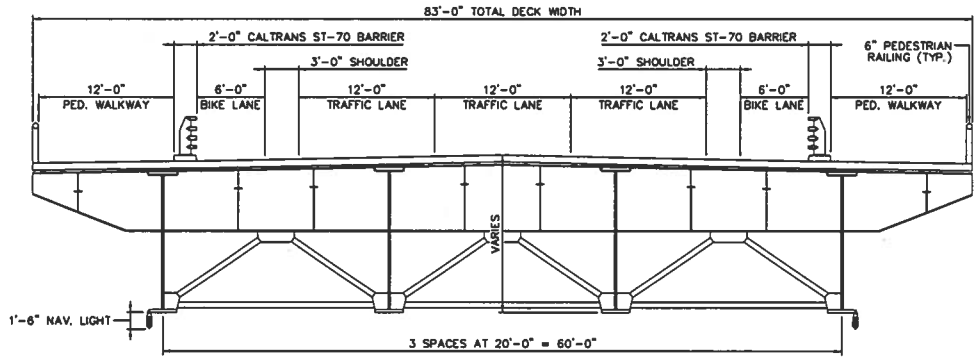
JANUARY 2018



ELEVATION

20 0 20 40

SCALE IN FEET



BOBTAIL SWING DECK GIRDER CROSS SECTION

5 0 5 10

SCALE IN FEET

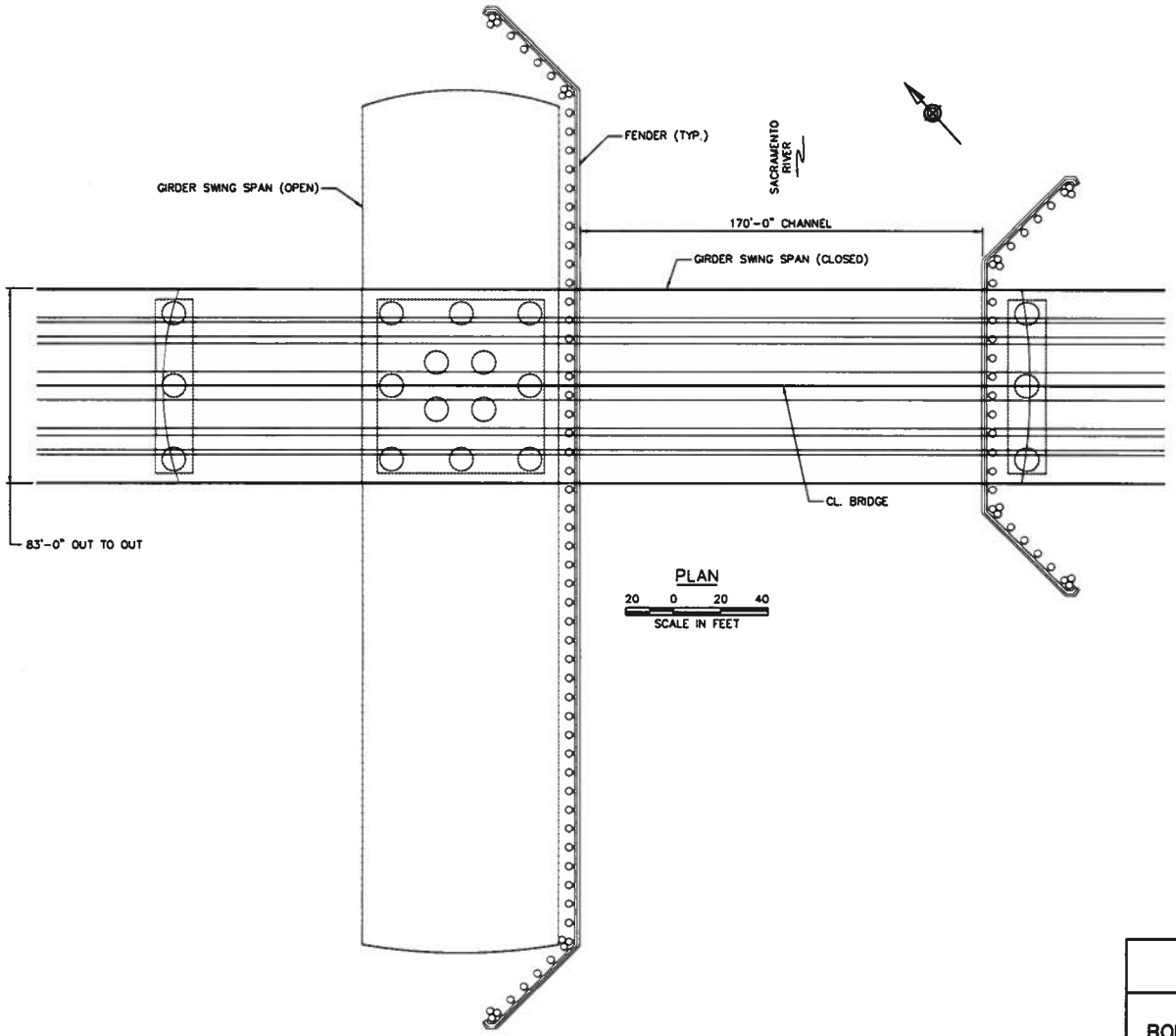
BROADWAY BRIDGE PROJECT

ALTERNATIVE 1-1
BOBTAIL SWING DECK GIRDER SPANS
ELEVATION AND TYPICAL SECTION

MODJESKI—MASTERS

SHEET 18 OF 21

JANUARY 2018



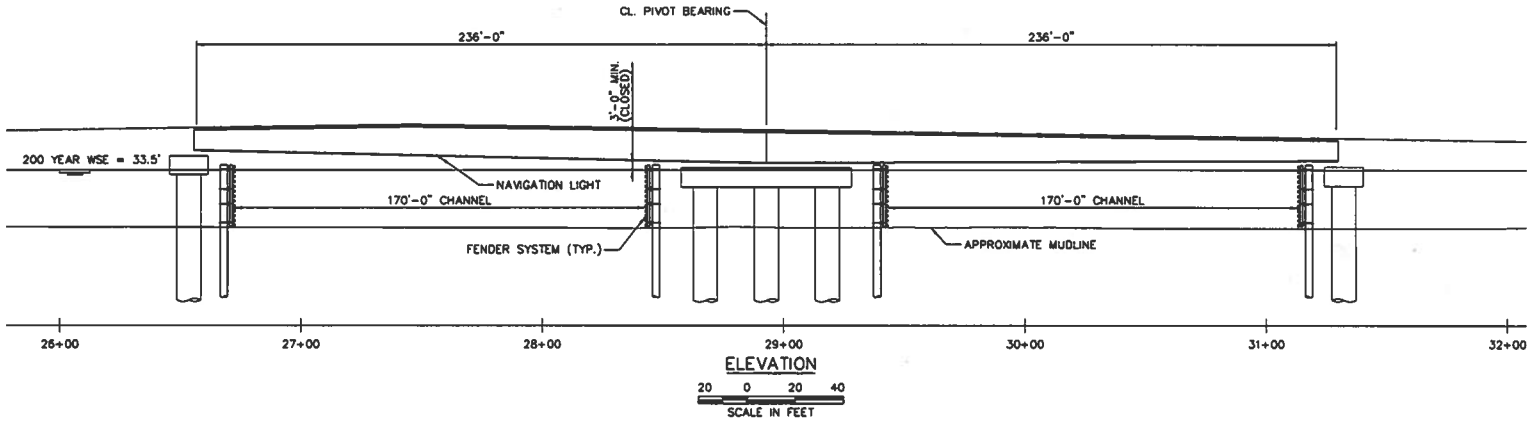
BROADWAY BRIDGE PROJECT

ALTERNATIVE 1-1
BOBTAIL SWING DECK GIRDER SPANS
GENERAL PLAN

MODJESKI—MASTERS

SHEET 19 OF 21

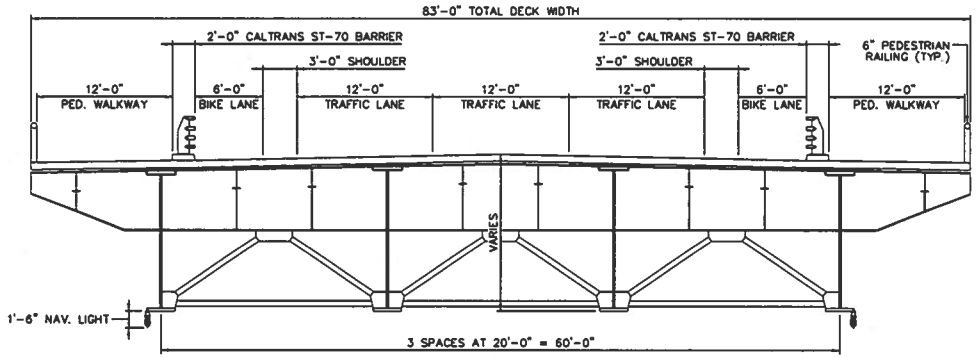
JANUARY 2018



ELEVATION

20 0 20 40

SCALE IN FEET



BOBTAIL SWING DECK GIRDER CROSS SECTION

5 0 5 10

SCALE IN FEET

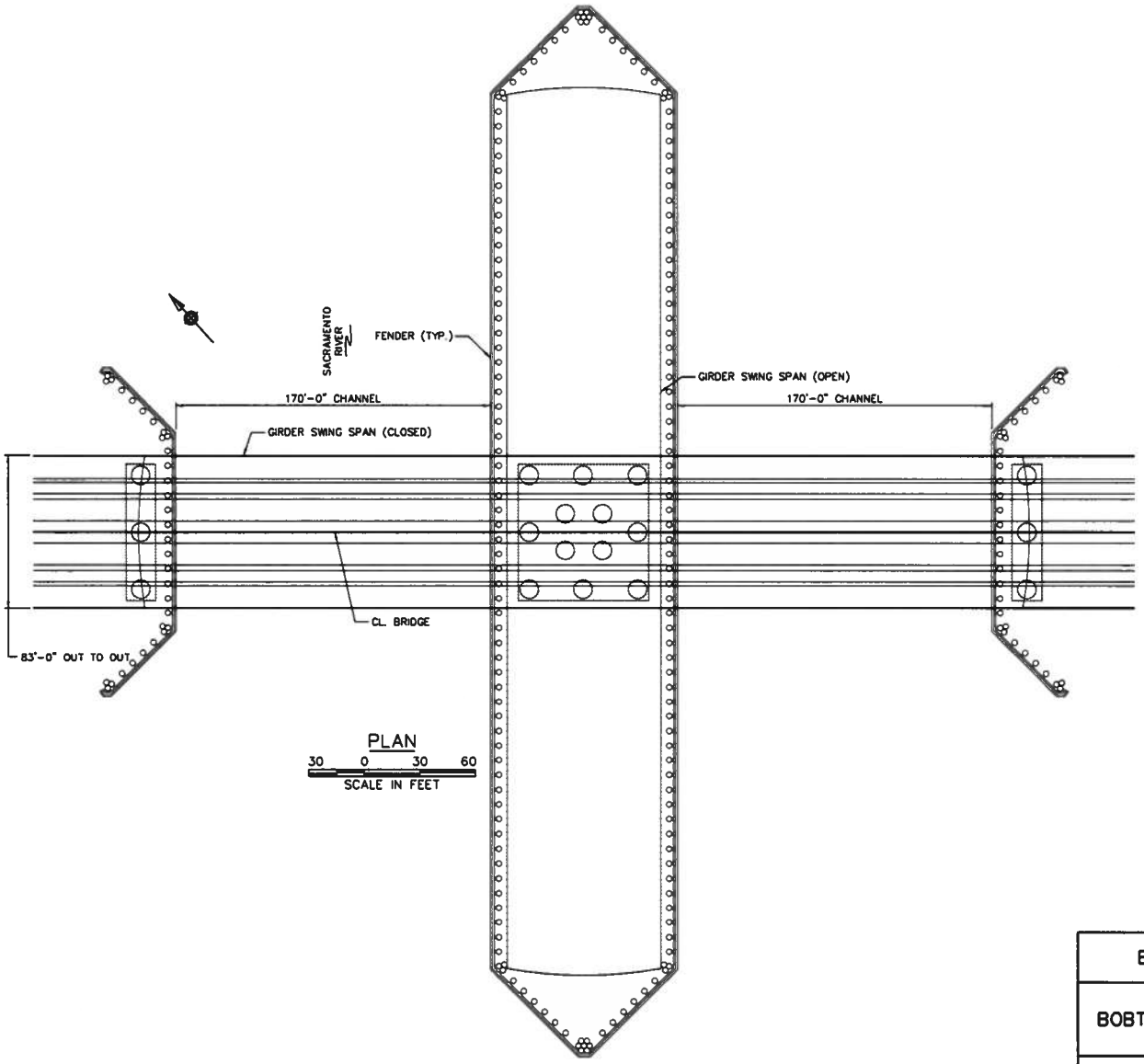
BROADWAY BRIDGE PROJECT

ALTERNATIVE I-2
SWING DECK GIRDER SPANS
ELEVATION AND TYPICAL SECTION

MODJESKI—MASTERS

SHEET 20 OF 21

JANUARY 2018



BROADWAY BRIDGE PROJECT

ALTERNATIVE I-2
BOBTAIL SWING DECK GIRDER SPANS
GENERAL PLAN

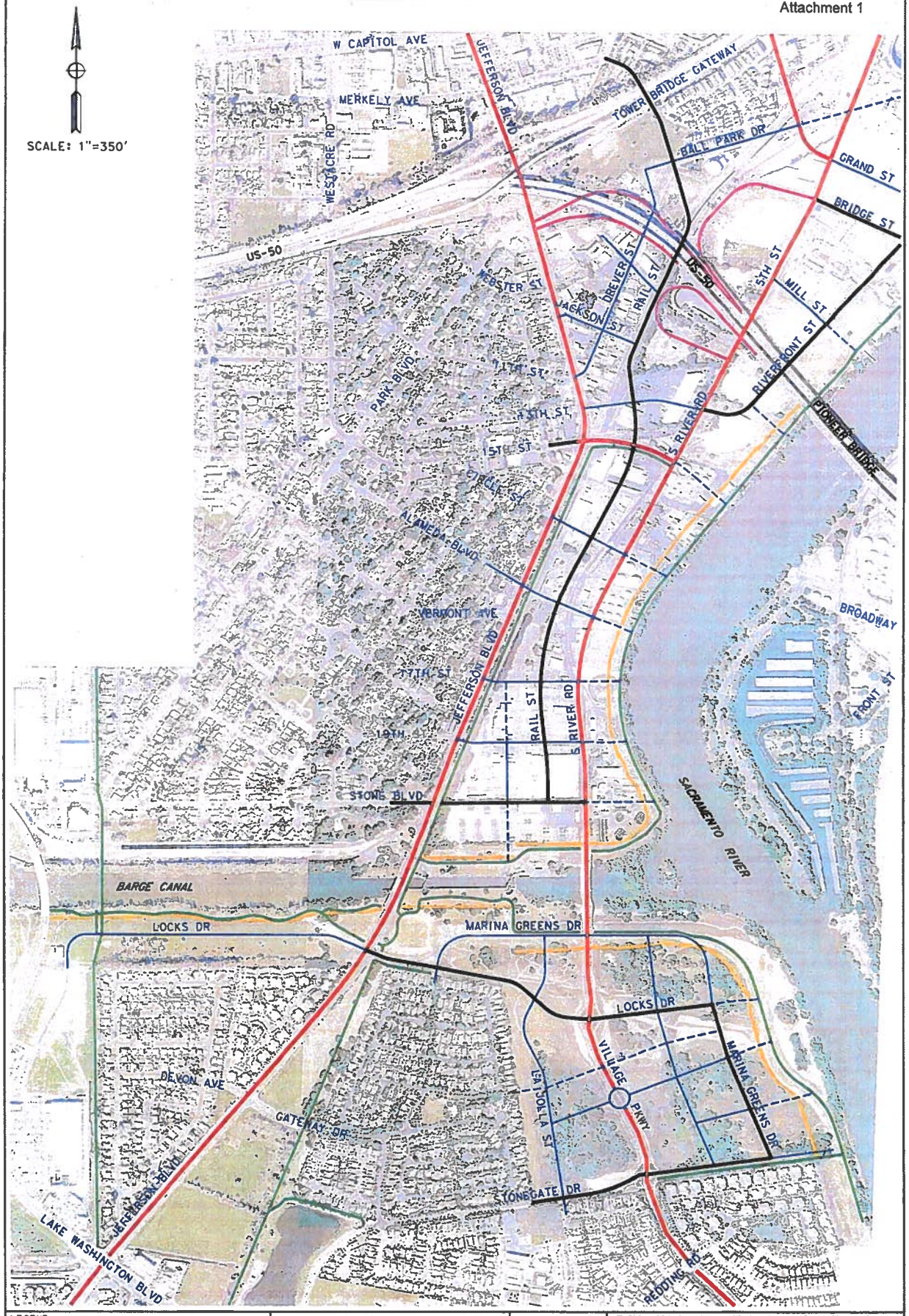
MODJESKI-MASTERS

SHEET 21 OF 21

JANUARY 2018

ATTACHMENT 9

Attachment 1



ATTACHMENT 10

FHWA APPOVED
ESTIMATED PROJECT SCHEDULE

Actual RFQ/RFP Advertisement Date	January 21, 2016
Actual Consultant Selection Date	March 23, 2016
Actual Start of Project Date	April 4, 2016
Actual Alternatives Analysis Start Date	April 3, 2017
Actual Preliminary Engineering Start Date	March 27, 2017
Actual Alternatives Analysis End Date	September 8, 2017
Actual Environmental Document Start Date	April 3, 2017
Planned Preliminary Engineering End Date	June 29, 2018
Planned Project Report and Approvals Start	May 27, 2019
Date Planned Approval Final Environmental	May 18, 2020
Document Planned Draft Project Report Date	April 2, 2020
Planned Final Project Report Date	June 1, 2020
Planned Project Completion Date	August 3, 2020
Planned Project Closeout Date	September 3, 2021