



November 1, 2021

Attention: Tim Haile/ John Hoang/  
Director of Planning/Executive Director  
Contra Costa Transportation Authority (CCTA)  
2999 Oak Street, Suite 100  
Walnut Creek, CA 94596

**Reference: Shadelands/Ygnacio Valley Road Multi-Modal Transportation Modernization Feasibility Study**

Dear Mr. Haile,

Advanced Mobility Group (AMG) is pleased to provide a scope and budget for the subject project as discussed in our call Monday, September 13, 2021.

**Background**

The City of Walnut Creek, Shadelands Steering Committee, and the Walnut Creek Chamber of Commerce & Visitors Bureau are interested in collaborating with CCTA and conducting a feasibility study for improved access circulation to the Shadelands Business Park and development of Ygnacio Valley Road as an innovative transportation corridor. To improve access and circulation to the Shadelands Business Park, it is critical to understand how people are moving today and accessing the area. With a better understanding of travel patterns, AMG would suggest innovative strategies to improve both external access to the Shadelands business community as well as improve internal circulation within the community. The modernization of Ygnacio Valley Road will evaluate innovative transportation improvements including Smart Signals and preparing the arterial and the business community for future potential deployment of Autonomous Vehicles technologies and Connected Vehicles applications (AV/CV) and connection to the BART Station. The project would look at opportunities for modernization of the new advanced mobility option and enhancing transit accessibility and connectivity along Ygnacio Valley Road. The transportation modernization feasibility study, as per the attached outline, will define the steps necessary to achieve these objectives -- which is to provide the Shadelands business community and residents better accessibility and a blueprint and roadmap to implement a new transportation infrastructure and services along Ygnacio Valley Road over time, as funding becomes available.

**Task Description**

Successful development of the Shadelands/Ygnacio Valley Road Multi-Modal Transportation Modernization will greatly benefit from this collaboration for planning, programming, and deployment of new advanced AV/CV mobility options and supporting technologies. The strategy for application and deployment of new AV/CV technologies will consider the future

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growth of this arterial and surrounding business community. It would also reflect the needs and vision of future transportation infrastructure as AV/CV technologies continue to evolve. The infrastructure improvements will be aligned with supporting digital infrastructure and other smart city services as appropriate.

Our approach is driven by conducting a comprehensive feasibility study to start with, evaluating CV/AV mobility and technology options along with improved access and circulation to the business park, strategic planning, visioning, needs assessment, conceptual corridor design and business case feasibility. The feasibility study would be built on several joint meetings and two workshops to be conducted before mid-December 2021. At the first workshop we will focus on our understanding of corridor/community needs, and transportation services. In the second workshop we will discuss the City's future vision, innovative transportation options, business case analysis, and its overarching strategies for achieving them. Upon completion of two workshops, we will submit the draft of feasibility study for Shadelands Community Multi Modal Subcommittee review and considerations as per attached outline, followed by final report that incorporates comments received.

### **Consulting Fee**

The estimated fee is a total of \$250,000, with a cost sharing between CCTA), City of Walnut Creek, and Shadelands PBID fund. The study will include the following activities and deliverables:

- Prepare for and conduct two workshops for needs assessment for Shadelands Business Community and future arterial advanced transportation planning
- Post workshop review and analysis
- Draft Transportation Modernization Feasibility Study
- Final Transportation Modernization Feasibility Study

We expect to complete this effort within 12 weeks, not later than January 30, 2022. The schedule provided is an estimate based on receiving Acknowledgement/NTP by November 15, 2021. If you should have any questions or need additional information, please feel free to contact me at (415) 505-5866.

Advanced Mobility Group

Habib Shamskhov  
President  
Habib@amobility.com

Acknowledged and Accepted:

\_\_\_\_\_ Date \_\_\_\_\_

### **Proposed Outline of Feasibility Study**

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Reference: Shadelands/Ygnacio Valley Road Multi-Modal Transportation Modernization Feasibility Study

Executive Summary

Introduction

The purpose of the Study

Goals and Objectives

Context and AV/CV for Shadelands and Advanced Technology Feasibility

### **Part A Shadelands Business Park Strategies**

Existing Conditions Analysis

Improved Access and Circulation to Shadelands Business Park - Strategies

Mobility Options

AV/CV Improvements

Evaluation of Travel Patterns and Circulation

Technology Mobility Options and Concept Design

Concept of future transportation operation

AV/CV System Requirement

Potential Benefits to Community

Concept Design

Potential Future Technology Evaluation

Evolution Assessment of Future AV/CV and Mobility Options for Shadelands

Evaluation Criteria to Meet 25-50 Years Demand

Conceptual Design of System and Infrastructure

Environmental Constraints

System Implementation

Operation and Maintenance

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Technical Issues

Institutional and Societal Issues

Evaluation Criteria Matrix

Model Deployment and Potential Business Model

Estimated Capital Cost

Implementation Plan and Funding Plan (Grant Applications)

Conclusion and Recommendations and Next Steps

### **Part B Ygnacio Valley Road Strategies**

Existing Conditions Analysis

Corridor Modernization Analysis and Technology Mobility Options

Smart Signals Implementation

Upgrades to communications backbone

Connection options to BART Station

Evaluation of Travel Patterns and Circulation

Concept of future transportation operations

Enhanced Transit Accessibility

AV/CV System Requirement

Potential Benefits to Community

Concept Design

Potential Future Technology Evaluation

Evaluation Criteria to meet 25-50 year demand

Corridor Modernization Planning and Programming

Conceptual Design of System and Infrastructure

Environmental Constraints

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System Implementation

Operations and Maintenance

Technical Issues

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