ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT
I-15 Concrete Lane Replacement (11-43051)

Resolution SHOPP-P-1920-09B
(will be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☒ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

2.1 This Project Baseline Agreement (Agreement) for the *I-15 Concrete Lane Replacement (11-43051)*, effective on, June 24, 2020 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

3. RECITAL

3.2 Whereas at its March 22, 2018 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *I-15 Concrete Lane Replacement (11-43051)*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.

3.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.

4.2 To adhere, as applicable, to the provisions of the Commission:

- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Active Transportation Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☒ Resolution G-18-13, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated March 22, 2018
- ☐ Resolution *Insert Number*, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

4.3 All signatories agree to adhere to the Commission's State Highway Operation and Protection Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.

4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.

4.5 Caltrans agrees to secure funds for any additional costs of the project.

4.6 Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.

4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.

4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.

4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

Attachments:

Exhibit A: Project Programming Request Form
Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

I-15 Concrete Lane Replacement (11-43051)

Resolution SHOPP-P-1920-09B

Brooke Emery — Date: 4-30-2020

Project Manager

Project Applicant

Clint Peace — Date: 5/2/2020

Acting Deputy District Director, TPM

Implementing Agency

Gustavo Dallarda — Date: 5-5-2020

District Director

California Department of Transportation

Toks Omishakin — Date: 6.9.20

Director

California Department of Transportation

Mitchell Weiss — Date

Executive Director

California Transportation Commission

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT

Date:	05/22/20 12:00:01 PM

District	EA	Project ID	PPNO	Project Manager
11	43051	1119000008	1350	EMERY, BROOKE V

County	Route	Begin Postmile	End Postmile	Implementing Agency	
SD	15	R 31.3	R 37.1	PA&ED	Caltrans
				PS&E	Caltrans
				Right of Way	Caltrans
				Construction	Caltrans

Project Nickname

I-15 CONCRETE LANE REPLACEMENT

Location/Description

In and near Escondido, from 0.2 mile south of Route 78 to 0.5 mile north of Deer Springs Road. Rehabilitate pavement by replacing sections of the existing pavement and the outside shoulder with Continuously reinforced Concrete Pavement (CRCP), pavement slab replacement, bridge approach slab replacement, bridge joint seal work, and sign panel replacement.

Legislative Districts

Assembly:	75	Senate:	38	Congressional:	50

PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Pavement		12.1			12.1	Lane-miles
Programmed Condition	Pavement	12.1				12.1	Lane-miles

Project Milestone	Actual	Planned
Project Approval and Environmental Document Milestone	05/15/20	
Right of Way Certification Milestone		01/08/21
Ready to List for Advertisement Milestone		04/26/21
Begin Construction Milestone (Approve Contract)		03/18/22

FUNDING (Allocated amounts are shaded)

Component	Fiscal Year	SHOPP					Total
PA&ED	18/19	2,749					2,749
PS&E	19/20	5,497					5,497
RW Support	19/20	200					200
Const Support	20/21	10,994					10,994
RW Capital							0
Const Capital	20/21	55,420					55,420
Total		74,860					74,860

11 - SD - 15 – R31.3/R37.1
11-430510 - 1119000008 – PPNO 1350
20.XX.201.120 SHOPP
January 2020

Project Report

For Project Approval

Pavement Rehabilitation

On Route I-15

BETWEEN 0.2 MILE SOUTH OF ROUTE 15/78 SEPARATION

AND 0.5 MILE NORTH OF DEER SPRINGS ROAD OVERCROSSING

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:

MARK PHELAN, District Division Chief, Right of Way

APPROVAL RECOMMENDED:

BROOKE EMERY, Project Manager

APPROVAL RECOMMENDED:

KAREN JEWEL, Corridor Director

APPROVAL RECOMMENDED:

for BRUCE APRIL, Deputy District Director. Environmental

PROJECT APPROVED:

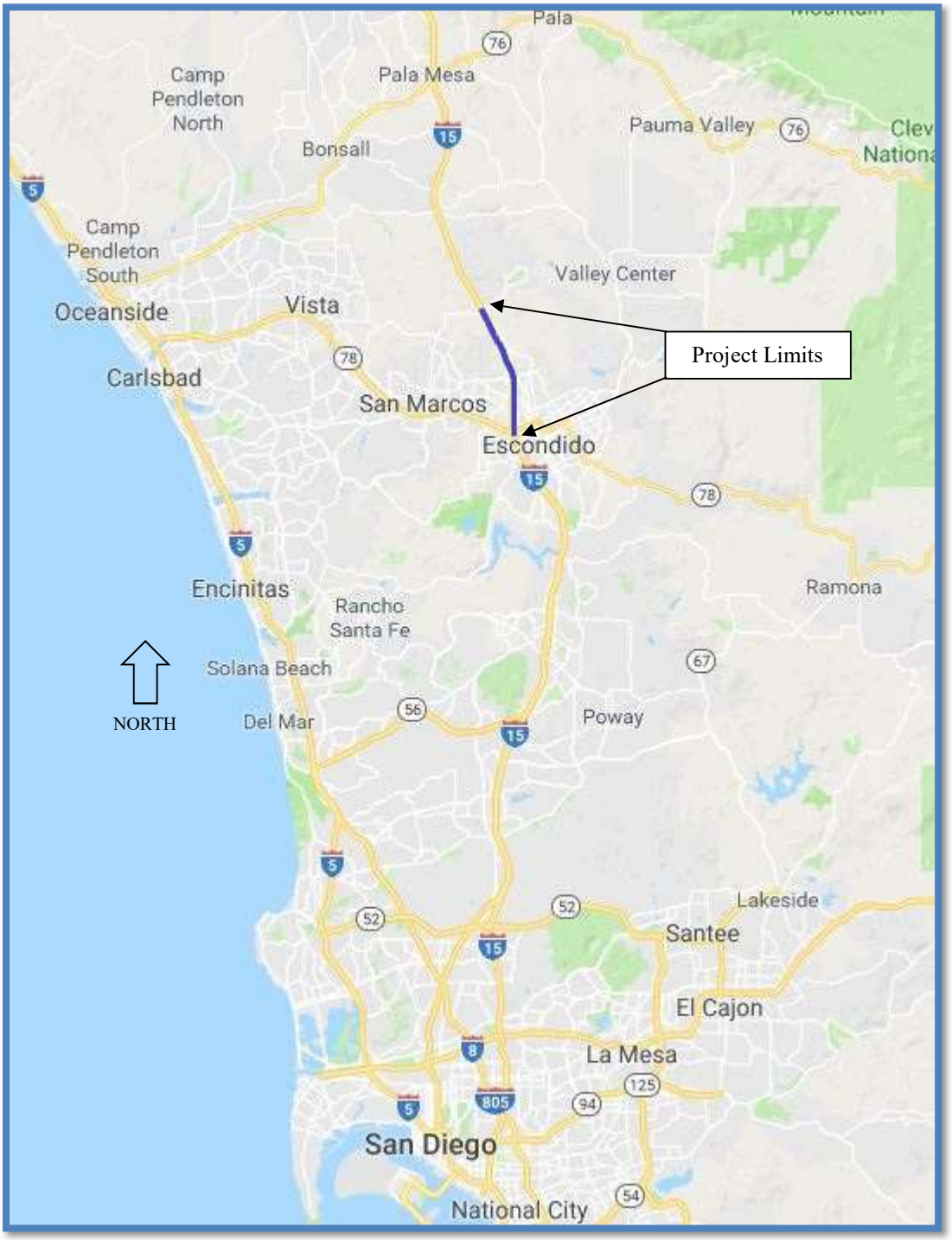
Clint Peace — 5/4/2020

~~JOE HULL, Deputy District Director~~, Project Management — *DATE*

Clint Peace, Acting Deputy District Director

Vicinity Map

IN SAN DIEGO COUNTY NEAR ESCONDIDO FROM 0.2 MILE SOUTH OF ROUTE 15/78 SEPARATION TO 0.5 MILE NORTH OF DEER SPRINGS ROAD OVERCROSSING



This project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED CIVIL ENGINEER *DATE*

Table of Contents

1. INTRODUCTION

Project Description:
This Project Report (PR) proposes to rehabilitate mainline existing concrete pavement on Interstate 15 (I-15) in both directions from the Mission Avenue Undercrossing (UC) to north of the Deer Springs Road Overcrossing (OC) (Post Mile R31.3 to Post Mile R37.1). The project will replace pavement in the #3 and #4 lanes with a combinations of Continuously Reinforced Concrete Pavement (CRCP) and Individual Slab Replacement (ISR). Pavement in the #1 and #2 lanes in poor condition will be replaced with ISR. The project includes mainline shoulder rehabilitation/replacement and Bridge approach slab and joint seal work. Existing mainline Asphalt Concrete (AC) shoulder to remain will be cold planed and overlaid with Rubberized Hot Mix Asphalt (Type G) (RHMA-G).

The project proposes to extend Fiber-Optic Communication (FO) from an existing hub on I-15 (PM R31.5z) at the Route 15/78 Separation to the northern project limit (R37.1), install new Closed-Circuit Television (CCTV) cameras and 2 new census count stations north of the 15/78 Separation (northbound and southbound PM R31.7) and 3 new Maintenance Vehicle Pullouts (MVP). Additional improvements include roadside sign panel replacement, Enhanced visibility Crosswalks (EVCW), pedestrian curb ramp upgrades to comply with current American with Disabilities Act (ADA) standards, vehicle detection elements, traffic signal modifications, as well as guardrail and median barrier upgrades.

This project will be funded from an amendment candidate in the 2018 State Highway Operation and Protection Program (SHOPP) in fiscal year 2021 (FY21) using 2018 SHOPP Reserve funds.

Project Limits	11-SD-15 R31.3/R37.1	
	Current Cost Estimate:	**Escalated Cost Estimate:**
Capital Outlay Support	-	$14,377,000
Capital Outlay Construction	$50,030,000	$55,421,000
Capital Outlay Right-of-Way	$0	$0
Funding Source	20.XX.201.120	
Funding Year	2021	
Type of Facility	8-lane Conventional Freeway	
Number of Structures	3	
SHOPP Project Output	Pavement Assets: 12.1 Lane Miles	
Environmental Determination	Categorical Exemption/Categorical Exclusion (CE/CE)	
Legal Description	IN SAN DIEGO COUNTY NEAR ESCONDIDO FROM 0.2 MILE SOUTH OF ROUTE 15/78 SEPARATION TO 0.5 MILE NORTH OF DEER SPRINGS ROAD OVERCROSSING	
Project Development Category	Category 5	

2. RECOMMENDATION

This Project Report is recommended for approval to proceed to the design phase.

3. BACKGROUND

PROJECT HISTORY

The segments of I-15 included in this project were constructed between 1977 and 1979. Many of the AC ramps within the segment were rehabilitated in 2006 (Contract No. 11-077304). The mainline pavement was rehabilitated in 2013 via Portland Cement Concrete (PCC) grinding and spall repairs and overlay of AC shoulders and installation of rumble strips (Contract No. 11-2M5504).

A Project Initiation Report EA 43051K was approved for this project in September 2018.

COMMUNITY INTERACTION

There has been no community interaction for this project. There is no anticipated community opposition to the project.

EXISTING FACILITY

Mainline Pavement Condition

Visual evaluation of the 2016 Automated Pavement Condition Survey (APCS) pavement images and multiple field visits have identified severe longitudinal distress and spalling of the outer lanes that were confirmed by the District Maintenance Division. The Pavement Condition Summary Report (PCR) shows 0% for the SHOPP and Rehabilitation effectiveness for FY 2022 (**Attachment K**). The SHOPP Tool Data (**Attachment R**) shows 12.1 lane miles of mainline existing concrete pavement in Fair Condition with no pavement in Poor Condition.

	Caltrans Performance Measures					AP-21 Condition (lane-miles)				Effectiveness %	
Year/ Condition Lane Miles	Green	Yellow	Blue	Orange	Red	Good	Fair	Poor	Total Lane Miles	SHOPP Effectiveness ((Red+ Orange)/ Total Lane Miles) %	Rehab Effectiveness (Red/ Total Lane Miles) %
2016	35.318	8.952	0.000	0.000	0.000	12.500	31.760	0.000	44.260	0.00	0.00
2021	15.174	29.086	0.000	0.000	0.000	6.187	38.073	0.000	44.260	0.00	0.00

Traffic Volumes

Northbound	*Southbound*
ADT (2014) =62,330 Vehicles	ADT (2014) =66,170 Vehicles
ADT (2040) =82,000 Vehicles	ADT (2040) =83,060 Vehicles

4. Purpose and NEED

Purpose:

The purpose of this project is to replace PCC pavement and outside shoulders on Interstate 15 (I-15) within the project limits to improve ride quality, extend the service life of the facility, and reduce maintenance expenditures.

Need:

Within the project limits, the #3 and #4 lanes are experiencing extensive slab settlement, large number of spalls and longitudinal cracking. These lanes are at the end of their service life and ride quality continues to deteriorate.

Additional transportation asset needs within the project limits include the following Safety, Mobility, Bridge, Complete Streets, and Sustainability elements:

- Guardrail Upgrades
- Median Barrier Upgrades
- Bridge Approach Slab Replacement
- Bridge Joint Seal Replacement
- FO Extension
- CCTV Cameras
- Vehicle Detection Systems (VDS)
- Traffic Signal Modifications
- Sign Panel Replacement
- EVCW
- ADA Curb Ramp Improvements
- Use of Reclaimed Materials

5. ASSET MANAGEMENT

The performance objectives for this project, identified by the Headquarters (HQ) SHOPP Tool include Pavement and Safety as listed in Table 5A. The proposed needs and improvements are in accordance with Caltrans' Strategic Management Plan goals.

Table 5A
SHOPP Performance Measure Targets

SHOPP Performance Measures Category	SHOPP Performance Measure	SHOPP Target Qty.	Alt. 1 Qty.	Reason for Differences from SHOPP Target
Pavement	**Mainline Existing Pavement** (LANE MILES)	**12.1**	12.1	Visual evaluation of the 2016 APCS pavement images and field visits have identified severe longitudinal distress and spalling of the outer lanes that were confirmed by the District Maintenance Division. The pavement quantity includes actual pavement to be rehabilitated.
	Estimate in $1,000s	***$20,719***	*$11,400*	
	Existing Shoulders (LINEAR MILES)	**0**	20.8	Freeway shoulders are showing distress signs and are recommended for replacement with CRCP where adjacent #4 lane pavement will be replaced with CRCP. Existing AC shoulders that are used as detour pavement and distressed AC shoulders are recommended for rehabilitation (cold plane and overlay).
	Estimate in $1,000s	***$0***	*$10,100*	
Safety	**Sign Panel Replacement** (EACH)	**5**	70	Additional roadside sign panels were identified within the project limits.
	Estimate in $1,000s	***$12***	*$100*	
Complete Streets	**Enhanced Visibility Crosswalks (EVCW)** (EACH)	**2**	8	Additional crosswalks are included following a Complete Streets review. (4 at El Norte Parkway and 4 at Deer Springs Road)
	Estimate in $1,000s	***$10***	*$20*	
Bridge	**Bridge Approach Slabs** (EACH)	**1**	1	Replace Rock Springs Road Bridge 57-0817R Approach Slab (Northbound)
	Estimate in $1,000s	***$44***	*$44*	
	Joint Seal (EACH)	**2**	2	Replace Rock Springs Road Bridge 57-0817L Joint Seal Replace El Norte Parkway Bridge 57-0818L Joint Seal (Southbound)
	Estimate in $1,000s	***$23***	*$23*	

Table 5A Cont'd.
SHOPP Performance Measure Targets

SHOPP Performance Measures Category	SHOPP Performance Measure	SHOPP Target Qty.	Alt. 1 Qty.	Reason for Differences from SHOPP Target
Mobility	**Vehicle Detection** (EACH)	**0**	9	2 New Census VDS Stations, 1 Existing Ramp Meter VDS Inductive Loops Detectors, and 6 Existing Stand Alone VDS Inductive Loop Detectors. Some Vehicle Detection Elements included in the SHOPP target will be replaced with project 11-429701 due to be in construction the year 2020.
	Estimate in $1,000s	***$195***	*$285*	
	FO Communication (LINEAR MILES)	**0**	5.6	Install 5.6 Linear miles of New FO Cable and Conduit. Initial SHOPP Target only included conduit.
	Estimate in $1,000s	***$1,500***	*$4,000*	
	Closed Circuit Television (CCTV) (EACH)	**0**	7	Replace 1 Existing and Install 6 New CCTV Cameras
	Estimate in $1,000s	***$260***	*$400*	
	Traffic Signals (Each)	**0**	2	Modify 2 Existing Traffic Signal at El Norte Parkway
	Estimate in $1,000s	***$0***	*$40*	
	ADA Curb Ramp (EACH)	**0**	8	ADA ramp upgrade needs were identified at El Norte Parkway.
	Estimate in $1,000s	***$0***	*$60*	
Sustainability	**Use of Reclaimed Materials** (LANE MILES)	**0**	3	RHMA will be used to overlay shoulders and Maintenance Vehicle Pullouts (MVPs).
	Estimate in $1,000s	***$0***	*$440*	
	Total *(Not Escalated)*		*$27,000*	
	Total Project Cost Estimate *(Not Escalated)*		***$52,100***	
	Total Project Cost Estimate *(Escalated to 2022)*		***$58,173***	

6. ALTERNATIVES

6A. Viable Alternatives

Alternative 1

The project includes 12.1 Lane Miles of mainline existing concrete pavement replacement. It also includes improvements within the project limits based on deficiencies identified in the corridor. The pavement work proposed in is divided into 7 segments as summarized in Table 6.1.

Table 6.1
Pavement Work Summary

	Segment Description	Inside Shoulder	#1 & #2 Lanes	#3 Lane	#4 Lane	Outside Shoulder
Segment 1	MISSION AVENUE UC TO 15/78 SEPARATION (0.13 Miles)	Cold Plane and Overlay[1]	5% ISR	10% ISR	CRCP	CRCP
Segment 2	15/78 SEPARATION TO ROCK SPRINGS ROAD UC (0.44 Miles)	Cold Plane and Overlay[1]	5% ISR	10% ISR	CRCP	CRCP
Segment 3	ROCK SPRINGS ROAD UC TO EL NORTE PARKWAY UC (0.83 Miles)	Cold Plane and Overlay[1]	5% ISR	10% ISR	CRCP	CRCP
Segment 4	EL NORTE PARKWAY UC TO COUNTRY CLUB LANE UC (0.68 Miles)	Cold Plane and Overlay[1]	5% ISR	10% ISR	CRCP	CRCP
Segment 5	COUNTRY CLUB LANE TO NUTMEG STREET UC (0.61 Miles)	Cold Plane and Overlay[1]	5% ISR	10% ISR	CRCP	CRCP
Segment 6	NUTMEG STREET TO FRONTAGE ROAD UC (0.64 Miles)	Cold Plane and Overlay[1]	5% ISR	10% ISR	CRCP	CRCP
Segment 7	FRONTAGE ROAD TO DEER SPRINGS ROAD OC (1.82 Miles)	Cold Plane and Overlay[1]	5% ISR	10% ISR	CRCP	CRCP

1. Cold Plane and Overlay AC Shoulder Sections with RHMA-G

Segments 1-7

Pavement in the #4 Lane and outside shoulder will be replaced with CRCP from the Mission Avenue (UC) to past Deer Springs Road OC. Pavement in the #3 lane identified as fair to poor condition (approximately 10%) will be replaced with ISR. ISR may also be used at locations where long-term closures are not feasible. Pavement in the #1 and #2 lanes identified in poor condition during construction should be replaced with ISR (approximately 5%). Existing mainline AC shoulder to remain will be cold planed and overlaid with RHMA-G. There is existing temporary concrete barrier (Type K) in the median of Segment 1 that will be replaced with Concrete Barrier (Type 60M) (Modified with Scuppers). There is no detour pavement included in this segment.

Construction staging requires I-15 traffic lanes to be reduced from 4 general purpose (GP) lanes to 3 GP lanes for various stages. Detour pavement (2 feet wide) will be constructed adjacent to the existing edge of pavement of the inside shoulder to accommodate the shifted traffic for Segments 5, 6, and 7. The detour pavement will be obliterated in place at the end of construction. An Executive Constructability Review was completed for this project in October 2019. Traffic Delays were determined reasonable for reducing these segments to 3 lanes; they are included in **Attachment G**. Updated delays will be calculated by the District Traffic Management (DTM) Branch during the Design phase to confirm delays are still reasonable. Any delay above 30 minutes requires approval of either a District or Headquarters Lane Closure Review Committee.

All asset improvements included in in the project are listed in Section 5 – Asset Management in Table 5A; it includes:

Pavement Elements

- Replace 12.1 Linear Miles of Mainline Existing Concrete Pavement
- Replace 10.4 Linear Miles of Mainline Existing Shoulder
- Rehabilitate 10.4 Linear Miles of Mainline Existing Shoulder

Safety Elements

- Replace 70 Existing Sign Panels with Retroreflective Type XI Sheeting

Complete Streets Elements

- Install 8 new EVCW (4 at El Norte Parkway and 4 at Deer Springs Road)

Bridge Elements

- Replace 1 Approach Slab at Rock Springs Road UC
- Replace Joint Seals at 2 locations; Rock Springs Road UC and El Norte Parkway UC

Mobility Elements

- Install 2 New Census Vehicle Detection Elements
- Replace 1 Existing Ramp Meter VDS (inductive loop detectors) at Southbound I-15 Onramp from El Norte Parkway
- Replace 6 Existing mainline stand-alone VDS (inductive loop detectors)
- Install 5.6 linear miles of New FO Conduit and Cable
- Update 1 Existing and Install 6 New CCTV
- Update 2 Existing Traffic Signals at El Norte Parkway
- Update 8 ADA ramps at El Norte Parkway

Sustainability Elements

- Use RHMA-G for 3 MVPs and to overlay shoulders

Other proposed work in this project includes:

- Replace existing non-standard metal beam guard railing (MBGR) installations with current Midwest Guardrail System (MGS) including end anchor blocks and new end treatments.

6B. Rejected Alternatives

Alternative 2 – No Build Alternative

The No Build Alternative retains the existing conditions and will not address the purpose and need of the project. This alternative would result in continued deterioration of the pavement which will result in increased maintenance efforts and expenditures.

7. CONSIDERATIONS REQUIRING DISCUSSION

7A. Hazardous Waste

A Hazardous Waste Study was completed for the project in April 2019. The study determined there is no Aerially Deposited Lead (ADL) contaminated soil associated with the project. The was found to be unregulated and non-hazardous (i.e., "clean") throughout the project limits in the proposed areas of disturbance; *Non-Standard Special Provision* (*NSSP) 7-1.02K(6)(j)(iii) Unregulated Earth Material Containing Lead* must be followed. Treated wood waste associated with metal beam guardrail removal will be disposed of per *NSSP 14-11.14 Treated Wood Waste*. Thermoplastic Traffic Stripe removal that contains lead from paint will be removed per *NSSP 36-4 Residue Containing Lead from Paint and Thermoplastic*. A lead Compliance Plan (LCP) is required for the project.

The Hazardous Waste Review Memo is included in **Attachment D**.

7B. Value Analysis

Deputy Directive 92-RI requires an approved Federal Highway Administration (FHWA) Value Analysis (VA) study be performed on all projects over $50 million ($40 million for bridge projects). A VA study must be considered for all projects over $25 million. A project below the FHWA threshold of $50 million ($40 million for bridge projects) can be granted an exception by the District Director if that project is unlikely to benefit from performance of a VA study. A VA Study Report was completed for this project in June 2019. Cost and time saving staging concepts and design features included in the VA Study are included in this project. The VA Study Summary Sheet is included as **Attachment Q**.

7C. Resource Conservation

Recycled material will be used wherever possible in accordance with current Caltrans Standard Specifications and Standard Special Provisions, which encourage use of salvaged or recycled materials.

Some or all of the following measures to reduce resource consumption may be utilized as appropriate for the project:

- Minimize construction lighting by placing only where needed for safety reasons
- Maximize use of materials found on-site.
- Allow concrete and base material preparation at on-site batch plants to reduce haul distances
- Maximize use of local disposal sites
- Provide usable excess material to local material plants
- Utilize existing equipment and facilities to the maximum extent during construction staging
- Minimize construction period through efficient staging
- Reduce construction equipment emissions through contract specifications
- Minimize utility relocation
- Utilize video detection
- Utilize native vegetation to reduce water use and invasive species issues
- Construct as close as possible to existing facility to reduce the consumption and conversion of new resources

7D. Right-of-Way Issues

The Right of Way Data Sheet prepared for the project is included as **Attachment B.** All proposed work included in this project will be within Caltrans Right of Way. Railroad are located just outside the project limits. A Railroad Clearance Letter and Standards clauses will be required at PS&E. No utility relocation is anticipated.

7E. Utilities

There are no utilities impacts anticipated for this project.

7F. Environmental Issues

This project has been determined to be Categorically Exempt under Class 1 of California Environmental Quality Act (CEQA) and categorically excluded from the National Environmental Policy Act (NEPA) (**Attachment C**).

7G. Air Quality Conformity

This SHOPP project is exempt from Air Quality Conformity under Code of Federal Regulations, Protection of Environment (CFR40- Section 93.126).

7H. Title VI Considerations

Title VI of the Civil Rights Act entails that no persons be excluded from, denied the benefits of, or discriminated by any federal aid activity because of race, color, religion, national origin, gender, age or handicap. The Caltrans and FHWA policies demonstrate commitment to this requirement.

7I. Noise Abatement Decision Report

The proposed project does not qualify as a Type 1 project and therefore does not require noise analysis. Mumble strips and diamond PCC grinding will be considered for this project to reduce noise.

7J. Storm Water Pollution Prevention

This project will be designed in conformance with National Pollution Discharge Elimination System (NPDES) Permit requirements and Appendix E of the Caltrans Project Planning and Design Guide (PPDG), which consists of documentation for storm water quality design issues through the development of a Storm Water Data Report (SWDR) and an Evaluation Documentation Form for incorporation of treatment of Best Management Practices (BMPs). A SWDR, which identifies site data and storm water quality design issues, has been prepared for the project in the current phase (**Attachment E**). The project is Risk Level 2. The SWDR prepared for the project identifies the project as not required to implement treatment BMPs. A Storm Water Pollution Prevention Plan (SWPPP) is required prior to the start of construction.

The use of construction site BMPs will minimize potential short-term impacts to water quality during construction. Funds were allocated for these BMPs based on Appendix F of the PPDG. Construction site BMPs include temporary drainage inlet protection, temporary construction entrance, temporary concrete washouts, street sweeping, and temporary fiber rolls.

7K. Traffic Management Plan (TMP)

Per Deputy Directive- 60 (DD-60), a TMP is required to address minor congestion during construction (**Attachment F**). Some congestion is anticipated during construction of this project. Long-term closures at ramps are not anticipated but will be considered during the design phase for the proposed work. The project will be staged to maximize lane reconstruction with CRCP and utilize existing pavement to avoid long-term ramp closures. Weekend lane closures may be required at undercrossings and ramp and connector merges to replace pavement with longer-life ISR options. Most ISR is anticipated to be constructed at night. Construction strategies to minimize traffic disruptions and avoid potential safety problems will be used including lane/ramp closure charts and Speed Reduction as required. The cost estimate includes funds for use of Portable Changeable Message Signs, construction area signs, Traffic Control Systems, Public Information as well as Construction Zone Enhanced Enforcement Program (COZEEP) as needed during the construction of the project.

7L. Traffic Management Systems (TMS)

Existing TMS elements within the project limits include inductive loop detectors and Microwave Vehicle Detection Stations (MVDS). Inductive loops affected by the pavement rehabilitation will be replaced. FO extension with CCTV and the addition of two census count stations will fill in gaps in data collection within this segment of the corridor. All existing and new TMS elements within the project limits will be connected to FO.

7M. Back Office System for New Intelligent Transportation Systems (ITS) Elements

This project upgrades field elements for FO communication and CCTV. Consideration will be given to upgrade the back-office systems controlling these field elements at the District Traffic Management Center (TMC) during design.

7N. Irrigation and Planting

Existing landscape irrigation facilities affected by this project will be repaired or replaced. Landscape irrigation facilities and irrigation conduit will be evaluated during the design phase. Trenching associated with this project is expected to be minimal disturbance. Any affected irrigation systems will be repaired or replaced.

A portion of the median within the project limits from North of the Route 15/78 Separation to West Country Club Lane includes mature oleander that serve as visual barrier to opposing traffic; it will not be affected by the project. There will be minimal impacts to existing established natural vegetation.

7O. Structures

A Structures work and cost estimate was requested during the project initiation phase. The Structure Cost Estimate (September 2018) is included in **Attachment O**. The bridge approach slab at Rock Springs Road UC (57-0817R) needs to be replaced and bridge joint seals at Rock Springs Road UC (57-0817L) and El Norte Parkway UC (57-0818L) need to be replaced per Structures recommendation.

7P. Roadside Sign Panels

The existing roadside signs do not meet the current California Manual of Uniform Traffic Control Devices (CA MUTCD) standards for minimum levels of reflectivity and high-performance type of reflectivity sheeting. These signs will be replaced with retroreflective sheeting per Caltrans current standard.

7Q. Guardrail

Existing guardrail installations within the project limits do not meet the current Traffic Safety Systems guidance; these installations will be replaced with MGS.

7R. Median Barrier

The existing median barrier is concrete barrier with scuppers in the southern portion of the project limits, and thrie beam barrier on the north end of the project. There is a portion of the median where existing temporary concrete barrier (Type K) will be replaced with permanent Type 60 (Modified with Scuppers) barrier. All other median barrier will not be affected by the project.

7S. Hydraulic Facilities

A portion of the project includes concrete barrier with scuppers at the inside edge of shoulder allowing the roadway to drain to existing median. Existing drainage inlets and slotted pipe located in the outside shoulder will be modified or replaced as a result of replacing the outside shoulder with CRCP. Culverts within the project limits are in good to poor condition based on inspections conducted in the years 2014, 2018, and 2019. Culverts in poor condition require invert repair; those repairs that can be made within Caltrans right of way will be included in this project. An effort will be made to inspect all culverts within the project limits during the design phase.

7T. Complete Streets

The concept of complete streets is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit riders, and motorists appropriate to the function and context of the facility. Caltrans directive DD-64-R1 is to ensure that travelers of all ages and abilities can move safely and efficiently along and across the network of "complete streets." This project includes reconstructing eight existing ADA curb ramps to current code and adding eight new EVCW, four at El Norte Parkway and four at Deer Springs Road. There are no bicycle facility improvements included in this project.

7U. Lights

The existing lights do not have a known impact to the project's cost or program's requirements.

8. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

A public hearing process is not applicable to this project because it has minimal social, economic, and environmental impacts.

Route Matters

No freeway agreements, route adoptions, or relinquishments are required for this project.

Permits

This project does not require any permits.

Cooperative Agreements

This project does not require any cooperative agreements.

Reversible Lanes:

This project does not qualify as a capacity increasing or a major street or highway realignment project and reversible lanes have not been considered.

Stage Construction

This project requires I-15 to be reduced from four to three lanes for various construction stages. Traffic will be shifted to the inside of bridge undercrossings to maximize work area through undercrossings. Temporary detour pavement (two feet wide) will be constructed adjacent to the existing edge of pavement of the inside shoulder to accommodate the shifted traffic for Segments 5, 6, and 7. The detour pavement will be obliterated in place at the end of construction. Zoneguard Barrier system will be used to separate traffic from construction activities in the #4 lane and outside shoulder. Additional detailed staging will be developed during design. An effort will be made to avoid long term ramp closures. Reducing four GP lanes to three GP lanes maximizes the amount of long-life CRCP to be constructed, helps reduce the construction schedule, and reduces the amount of temporary detour pavement to be constructed. Preliminary Staging Typical Concept Cross-Sections are included in **Attachment H**.

Incentive/Disincentive Clause
An Incentive/Disincentive Clause will be considered at final design to reduce the time the roadway is reduced to three lanes of traffic and minimize the impact to the traveling public.

9. FUNDING, PROGRAMMING AND ESTIMATE

Funding
It has been determined that this project is eligible for Federal-aid funding.

Programming
The project is programmed in the 2018 SHOPP for FY21. For programming details and Support Cost Estimate please see **Attachment T**.

Estimate
The current support cost ratio for this project is 26%. Construction support cost ratio for 450 working days is 20%. The 11-Page Estimate for this project is included in **Attachment I**.

10. DELIVERY SCHEDULE

The Project Milestones are included in **Attachment S**.

11. RISKS

A Risk Register has been prepared for the project which focuses on several unknowns which may be encountered during the design and construction phases. Due to the larger number of spot work locations identified in this project. The Risk Register is included in **Attachment P**.

12. EXTERNAL AGENCY COORDINATION

Caltrans has assumed responsibility regarding FHWA review and oversight per the Stewardship and Oversight Agreement between FHWA and Caltrans (previously defined as “Delegated”).

13. PROJECT REVIEWS

Project Manager	Brooke Emery	Date 03/2020
Corridor Director	Karen Jewel	Date 03/2020
District Design Liaison	Rachel Mueller	Date 09/2019
District Pavement Asset Manager	Shawn Rizzutto	Date 02/2020
HQ SHOPP Program Advisor	Robert Hogan	Date 10/2019

14. PROJECT PERSONNEL

1.	Karen Jewel, Corridor Project Director, 805/52 Corridor	619-688-6738
2.	Shawn Rizzutto, Pavement Asset Manager	619-688-6208
3.	Brooke Emery, Project Manager and Design Manager	619-606-6495
4.	Cynthia Hoffman-Paz, Project Engineer, 805/52 Corridor	619-688-6406
5.	Mervin Fullenwider	619-688-3141
6.	Debra Soifer, Environmental	619-688-0229
7.	Christine Senteno, Right of Way	619-688-3359
8.	Carol Vu, Right of Way	619-688-6063
9.	San Li, Environmental	619-688-3139
10.	Roy Santos, NPDES	619-688-3645

15. ATTACHMENTS (Number of Pages)

A. Title Sheet (1)
B. Right of Way Data Sheet (4)
C. Categorical Exemption/Exclusion (CE/CE) (5)
D. Hazardous Material Memo (6)
E. Stormwater Data Report Cover Sheet (1)
F. Transportation Management Plan (3)
G. Traffic Delay Summary (2)
H. Conceptual Staging Typical Cross-Sections (3)
I. 11-Page Estimate (11)
J. Pavement Structural Section Recommendation (3)
K. Pavement Condition Report (PCR) (2)
L. Safety Assets (1)
M. Complete Streets Assets (1)
N. Mobility Assets (1)
O. Structures Cost Estimate (2)
P. Risk Register (1)
Q. VA Study Summary (2)
R. SHOPP Tool Output (2)
S. Project Milestones (1)
T. Support Cost Estimate Summary (1)