ADOT Intermodal Transportation

PROJECT DETERMINATION FORM

Project Number	County and ADOT District	Project Name and Highway	Final Project Assessment Date
303 MA 100 H6870 01L	MA / Central	Loop 303; MC 85 – Van Buren St	11/13/2018

Project Description: Location/DCR	Construction Fiscal Year FY 2020
Pavement Preservation	

Existing Program	
Yes	No
X	

Program Year	Programmed Budget
FY2020	$93,800,000 (Phase 1)
	PA Construction Cost Estimate
	$139.6M (Phase 1)

Operating Partnership Category					
S	F	T	D	Z	N/A
X					

Public Hearing: In the Highway Development Process, at least one public hearing or the opportunity for a hearing will be offered for any project that:

X	Requires a significant amount of new right-of-way:
X	Substantially changes the layout or function of connecting roadway or the facility being improved;
X	Has a significant adverse impact on abutting real property;

X	Otherwise has a significant social, economic, environmental or other effect
X	Is controversial on environmental grounds;
X	Or has significant floodplain encroachment
	None of the above conditions apply

Recommends:

Yes:	No:				
	X	Public Forum	Environmental Category		
	X	Offer a combined Location / Design Hearing	Class 1	Class II	Class III
	X	Offer Separate Location/Design Hearing			X
	X	Hold a Design Public Hearing			

Concur:

DocuSigned by: Reed Henry 13677DAC22F445B... 11/26/2018

Reed Henry — Manager, Roadway Predesign Section 605 E — Date

DocuSigned by: Paul O'Brien C44E3DEFE42B423... 12/5/2018

Paul O'Brien — Manager, Environmental Planning Group EM02 — Date

DocuSigned by: Tricia Brown A494AD649C9D44B... 11/13/2018

Tricia Brown — Project Manager, Statewide Project Management Group 614E — Date

DocuSigned by: David Eberhart 0982C40D1CF54F5... 12/5/2018

David Eberhart — Bridge Group Manager — Date

Approved:

DocuSigned by: Mike DenBleyker 8F51D09EA7284F0... 12/7/2018

Michael DenBleyker — State Roadway Engineer, Roadway Engineering Group 605 E — Date

DocuSigned by: Randy Everett 465E125CB703429... 12/5/2018

Randy Everett — Sr. Division Administrator, Central District — Date

ADOT PROJECT NO **303 MA 100 H6870 01L**

FEDERAL PROJECT NO **STP-303-A(ASO)S**

NOVEMBER 2018

SR303L, SR30 TO I-10
LOCATION/DESIGN CONCEPT REPORT

PREPARED FOR ADOT

PREPARED BY WSP

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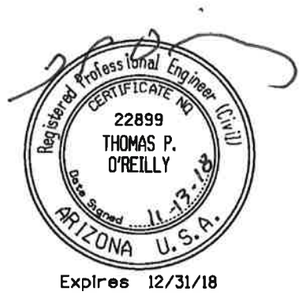

Expires 12/31/18

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A. EXECUTIVE SUMMARY

A.1 INTRODUCTION

The SR303L, SR30 to I-10 Location Design Concept Report (L/DCR) and accompanying Environmental Assessment (EA) address the proposed southerly extension of State Route Loop 303 (SR303L) from Interstate 10 (I-10) to the future SR30 freeway in the vicinity of Maricopa County Route 85 (MC85). Project No. 303 MA 100 H6870 01L begins at the future SR30 system traffic interchange (TI) and proceeds approximately four miles north to Van Buren Street. The project lies within Maricopa County and Arizona Department of Transportation (ADOT) Central District approximately 18 miles west of downtown Phoenix and south of I-10 (Figure A-1). The purpose of the L/DCR study and report was to develop a long-range plan that will guide future decisions regarding improvements required to improve capacity, traffic operations, and safety for the 2040 design year and beyond.

The SR303L study process involved two phases of development. Phase 1 was complete and included agency and public scoping, environmental studies, conceptual corridor alternatives development, evaluation and recommendations. The Alternative Selection Report (ASR) 2008 and associated Environmental Overview (EO) documented the development process and recommendations of Phase 1. Phase 2 included detailed engineering and environmental analyses of the recommended Phase 1 alternatives. This document, the Final L/DCR and associated Final EA present the results of the Phase 2 study. The L/DCR provides a single document, summarizing the existing features, project information, technical analysis, alternative solutions, selected alternative and corridor implementation plan. The EA was prepared in conformance with the requirements of the National Environmental Policy Act (NEPA). The Final EA identified and evaluated the social, economic and environmental impacts associated with the project. A Finding of No Significant Impact (FONSI) was issued by the Federal Highway Administration (FHWA) November 6, 2018.

The ASR study area is shown in Figure A-2. The study area can be described in two segments. In the northern portion of the study area, a one mile wide corridor centered on Cotton Lane between Van Buren Street and Yuma that flares to two miles at Lower Buckeye Road, and the area between Sarival Avenue and Jackrabbit Trail between Lower Buckeye Road and the Gila River. Except for the westernmost mile of the southern study area the project study area lies entirely within the planning limits of the City of Goodyear. Consideration is given of a future extension of SR303L to the south as defined in the *I-8 and I-10 Hidden Valley Transportation Framework Study (2009)* and the *I-10 Hassayampa Valley Roadway Framework Study (2008)*. The SR303L/I-10 interchange is not part of this study as it was included in a separate Environmental Assessment addressing SR303L between I-10 and US60 and has been constructed.

The project involves the ultimate construction of a 10-lane divided, access-controlled urban freeway that provides four general purpose lanes and a High Occupancy Vehicle (HOV) lane (4+1) in each direction between I-10 and the proposed SR30 freeway near MC85 and for SR30 within the study limits. The new facility includes a diamond interchange at Yuma Road and SR303L, half- diamond interchanges at Van Buren Street and Elwood Street, and grade separations at Lilac/Canyon Trails Blvd., Lower Buckeye Road,

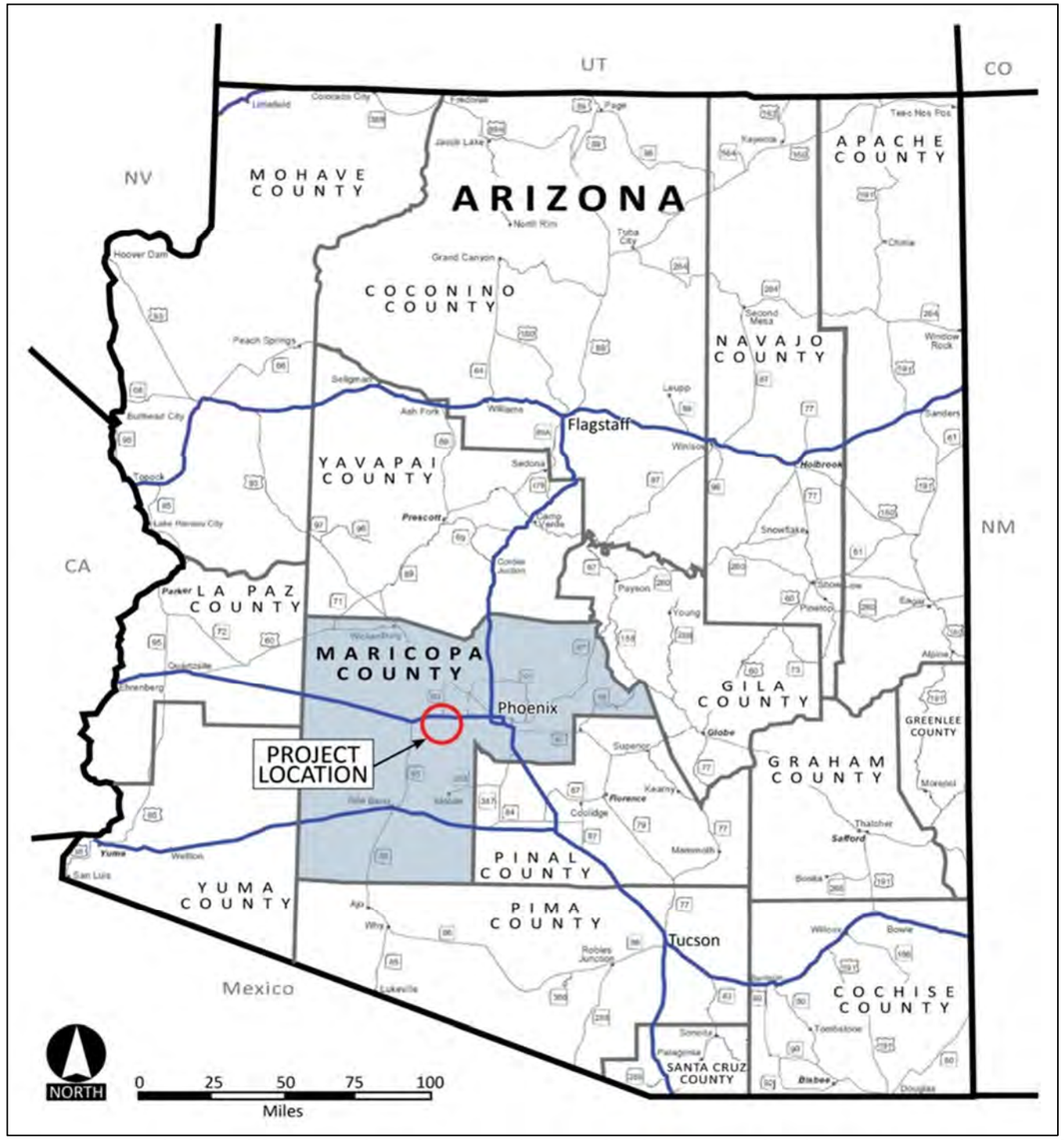


Figure A-1: Project Location

Union Pacific Railroad (UPRR) and MC85 when encountered. Auxiliary lanes are provided between interchanges and one-way frontage roads are provided where the freeway alignment falls on existing Cotton Lane. The project includes a freeway-to-freeway system interchange between SR303L and the future SR30 north of the Gila River. Two SR30 alignments were developed to evaluate the impact of major utility relocations. The SR30 alignments are consistent for all System TI alternatives, include a diamond interchange at Cotton Lane, and were developed to avoid direct impacts to Section 4(f) properties. The L/DCR and accompanying EA include the ultimate system interchange and SR30 between Perryville Road and Sarival Avenue. An L/DCR and EA for SR30 from SR202L to SR303L (Sarival Avenue) is currently underway with an estimated completion in Fall 2019. Phased construction of SR303L from Van Buren Street to MC85 is anticipated to begin in Fall 2020.

The Federal Highway Administration (FHWA) was the lead federal agency for the study. Other agencies involved with the study included the US Environmental Protection Agency (EPA), Arizona Department of Environmental Quality (ADEQ), Arizona Game and Fish Department (AGFD), Arizona Department of Public Safety (DPS), Maricopa Association of Governments (MAG), Flood Control District of Maricopa County (FCDMC), Maricopa County Department of Transportation (MCDOT), and the City of Goodyear.

FHWA will review and support implementation of projects that are identified in a Transportation Improvement Plan (TIP). SR303L to the north and SR30 to the east are defined within the current Regional Transportation Plan Freeway Program (RTPFP) and these corridor sections are the near-term basis of the System TI concept layout. Studies underway to extend SR303L to the south and SR30 to the west are considered long range planning actions. The system TI defines a geometric layout, environmental footprint and considers both ultimate, phased and interim improvements. Interim improvements include connections between SR303L and Cotton Lane. This footprint was the basis of the SR303L, SR30 to I-10 L/DCR and EA.

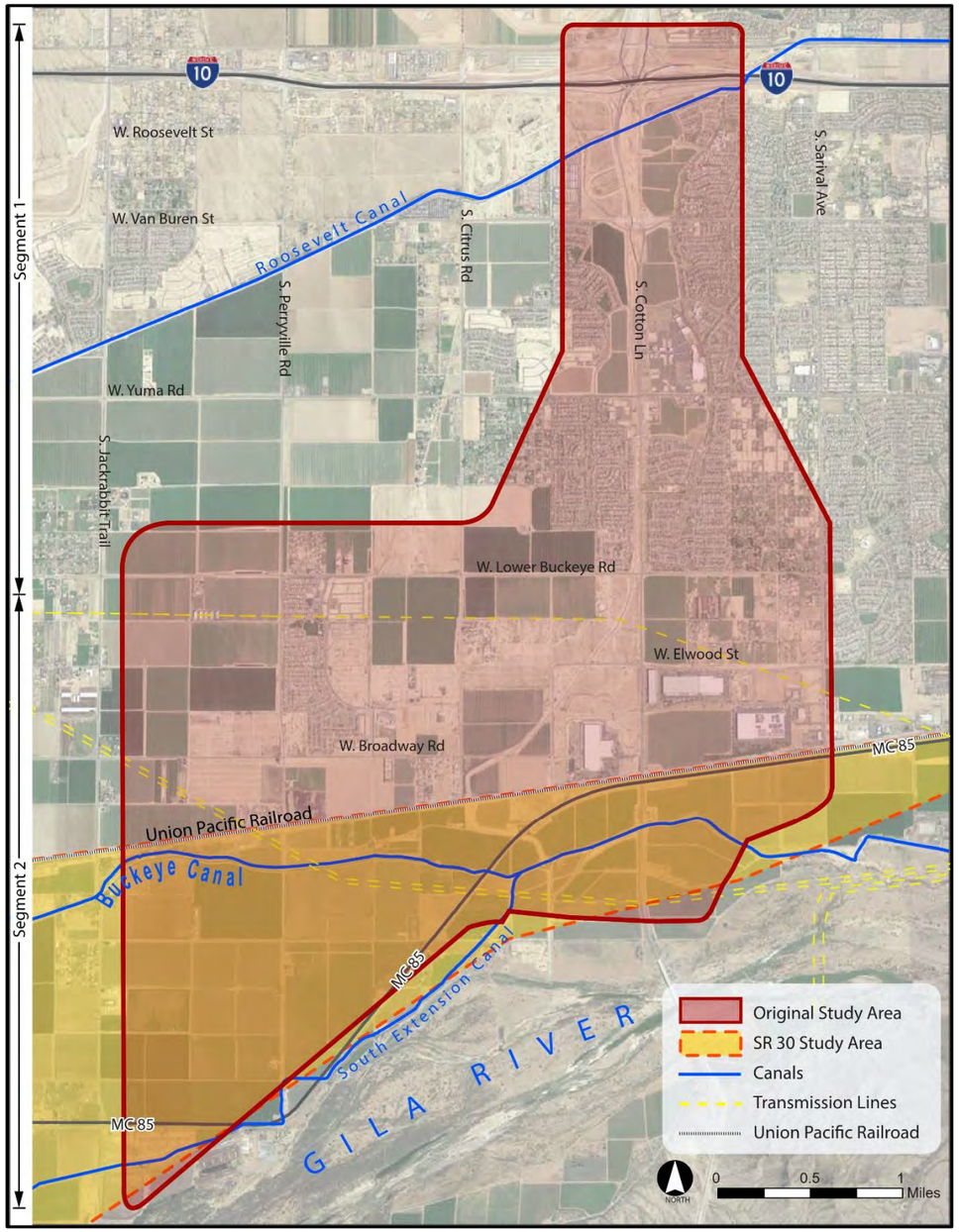


Figure A-2: ASR Study Area

A.2 SR303L CORRIDOR

The ASR identified six corridors within the study limits (Figure A-3). For alternative evaluation purposes, the corridors were divided into two Segments; Segment 1 (Van Buren Street to Lower Buckeye Road) and Segment 2 (Lower Buckeye Road to SR30). Segment 1 is the same for all alternatives.

All six corridor alternatives began at Van Buren Street and extend south along Cotton Lane to Lower Buckeye Road, where they diverged with alternatives leading to the south, southwest or southeast to tie into a system TI at the proposed SR30. The corridors were shown as broad band widths that contained the entire freeway footprint including frontage roads, service interchanges, a FCDMC drainage channel (constructed 2015), and the SR303L/SR30 system interchange. The corridors were identified on a basis of avoiding existing and planned development and compatibility with land use and transmission corridors. Table A-1 describes each corridor alternative location. Each corridor was evaluated using broad engineering and environmental criteria.

Table A-1. Corridor Alternatives Developed

Alternative	*Description*	*Develop in More Detail*
Segment 2: Lower Buckeye Road to SR30		
1	Proceeds west from Cotton Lane between Lower Buckeye Road and an APS transmission line, and then turns south along the mid-section line between Perryville Road and Jackrabbit Trail to SR30	No
2A	Proceeds west-southwest from Cotton Lane at Lower Buckeye Road to Broadway Road, then parallels the south side of Broadway Road to 191st Avenue, where it would turn south to SR30	No
2B	Proceeds west-southwest from Cotton Lane at Lower Buckeye Road to Broadway Road, where it would turn south to follow 183rd Avenue to SR30	No
2C	Proceeds southwest from Cotton Lane at Lower Buckeye Road to Elwood Road, where it turns south midway between 175th Avenue and Citrus Road and continues to SR30	Yes
3	Follows the Cotton Lane corridor from Lower Buckeye Road to SR30	Yes
4	South of Lower Buckeye Road, the corridor heads southeast to SR30	No
5	A hybrid combining Alternatives 2C and 3. SR303L follows 2C while directional ramps connecting to SR30 to and from the east utilize the Alternative 3 corridor	Yes

The Final Alternatives Selection Report identified alternatives (2C and 5) for further consideration. Corridors 1, 2A and 2B were removed from consideration due to out-of-direction travel for the south to east movement from SR303L to SR30, creation of a parallel facility with SR30 and I-10, and increased corridor length with increased costs over the shorter corridors. Corridor 1 impacted a newly planned large residential development throughout the Cotton Lane to Perryville segment and Corridor 4 impacted major new warehousing development south of Elwood Street. Corridors 3 and 4 lacked continuity with assumed future southern extension of SR303 in the Hidden Valley Framework Study.

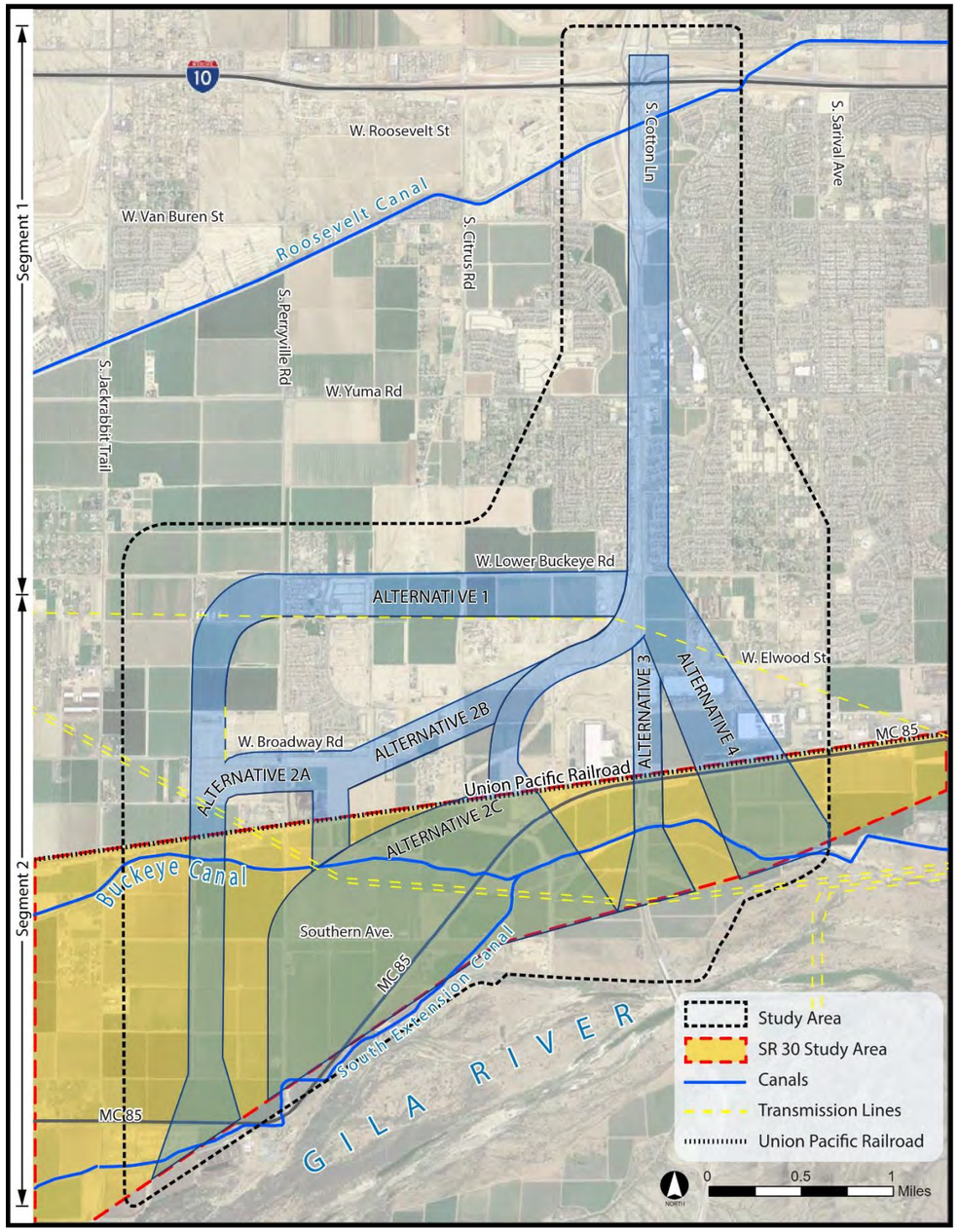


Figure A-3: ASR Alternatives

A.3 DCR DEVELOPED ALTERNATIVES

While coordinating the development of the SR303/SR30 system interchange, concerns were raised relative to the siting of the SR 303L southern extension crossing of the Gila River due to environmental restrictions limiting crossing locations. A separate river crossing analysis was performed showing two possible corridors across the river. One crossing, identified as the Rainbow Valley crossing, was consistent with Alternatives 2C and 5. The other location was along the Cotton Lane corridor, which would require utilization of the previously discarded ASR Alternative 3 corridor. To ensure that the alternative selected north of SR30 did not preclude the southern extension of SR303, a feasibility analysis was performed utilizing the two potential Gila River crossing corridors. The results indicated that either corridor was viable. To ensure proper vetting of alternative corridors, Alternative 3 was added back into the L/DCR analysis.

A.4 DESIGN CONCEPT ALTERNATIVES

In the spring of 2013, a new study area was defined to focus on the alternatives retained for further study (Figure A-4). The revised study area was reduced to an 850-foot corridor following Cotton Lane starting at Van Buren Street proceeding south to MC85. From Lower Buckeye Road the western boundary runs southwesterly to Broadway Road. Below the UPRR the boundaries are the Gila River to the south, Sarvial Avenue to the east and Perryville Road to the west.

Concept level alignment alternatives were developed for the recommended corridors, 2C, 3 and 5 (Figures A-5 thru 7) to help evaluate the operational issues associated with the recommended corridors. The horizontal and vertical alignments for these alignment alternatives were preliminary and subject to further refinement throughout the development process. Geometrics for each SR303L/SR30 system interchange were developed for each corridor alternative.

Following multi-agency field review meetings in 2017 regarding impacts to potential 4(f) properties, revised alignments for SR30 were developed. Additionally, meetings were held with utility representatives from the Buckeye Water Conservation and Drainage District (BWCDD), Arizona Public Service (APS) and Salt River Project (SRP) relative to cost and shutdown restrictions required for adjustments to their facilities and the need was highlighted to avoid or minimize impacts to those facilities. At that time two SR30 concept alignments were developed. In general, the SR30 Variation 1 alignment runs south of the powerlines, while Variation 2 runs north of the powerlines. Due to the potential cost and implementation impacts associated with relocating these major utility facilities, Alternatives 2C, 3, and 5 each have SR30 north (n) and SR30 south (s) variations.

A matrix comparing major differentiating items of the six alternatives developed in the L/DCR was presented to the study team. Alternative 2Cs is the selected build alternative as it is consistent with local and regional planning, maintains local access along Cotton Lane south of Elwood Street, utilizes land acquired by City of Goodyear, avoids potential 4(f) impacts, and minimizes conflicts with Buckeye Canal system and APS Palo Verde water line.

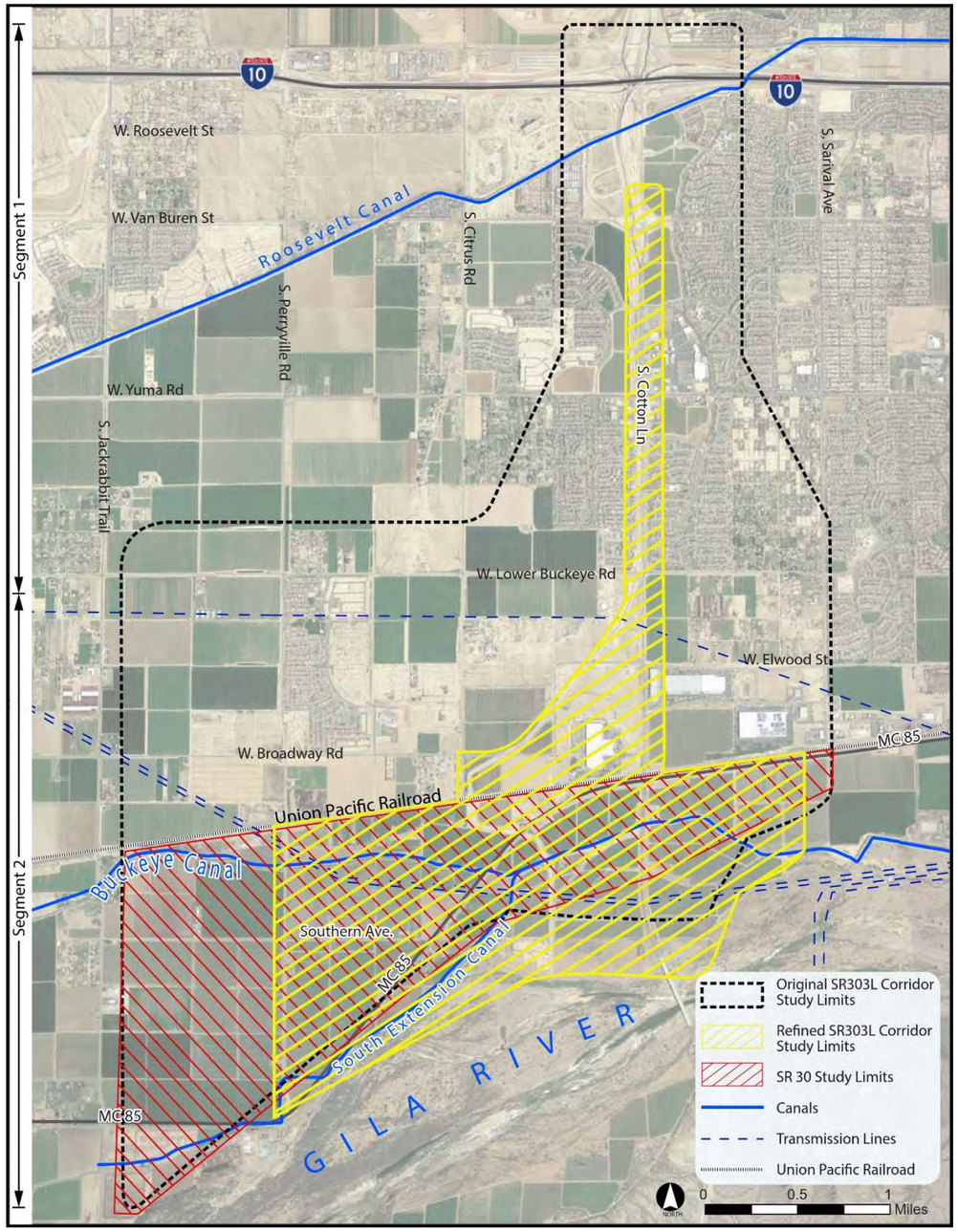


Figure A-4. Revised Study Area

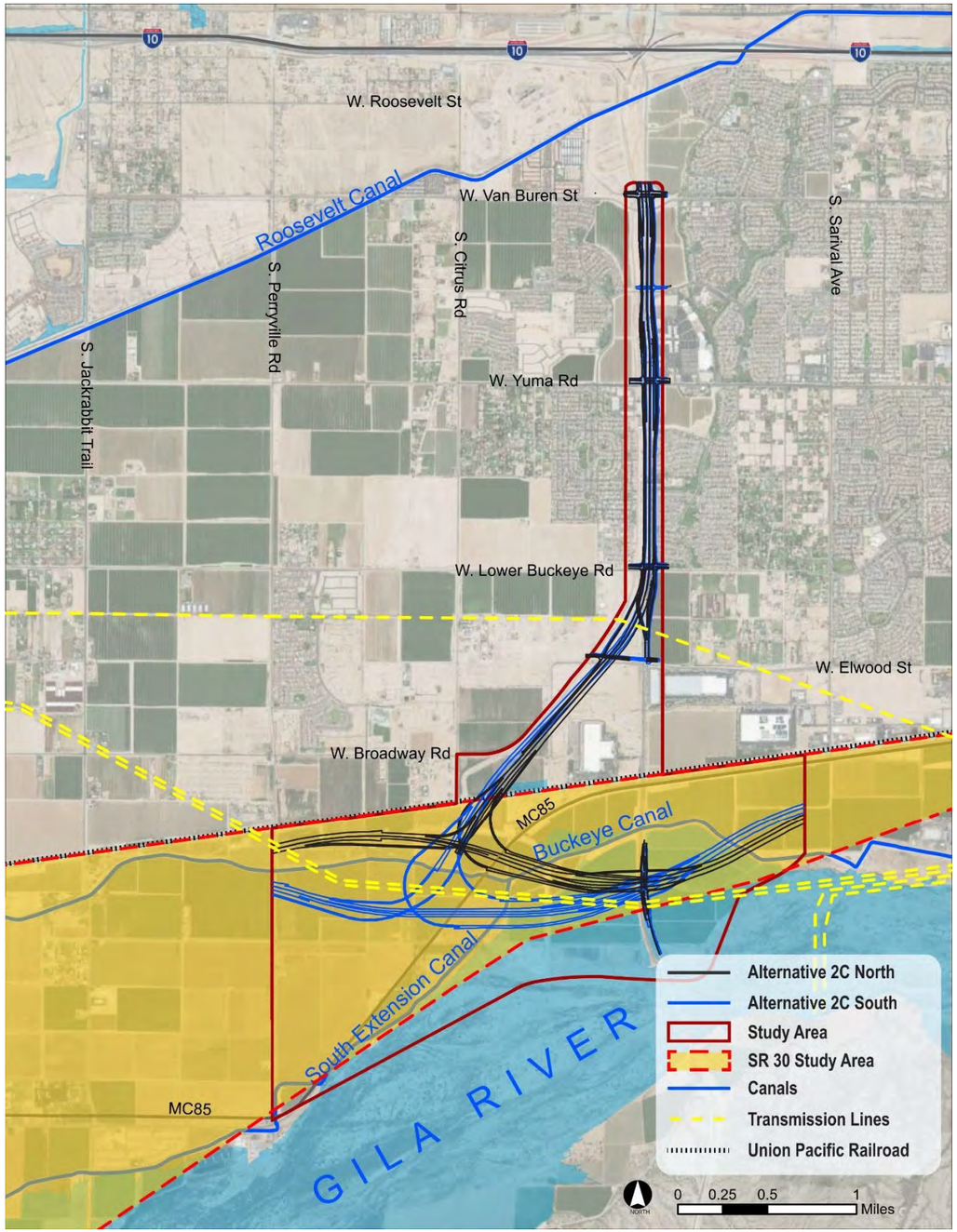


Figure A-5: Alternative 2C

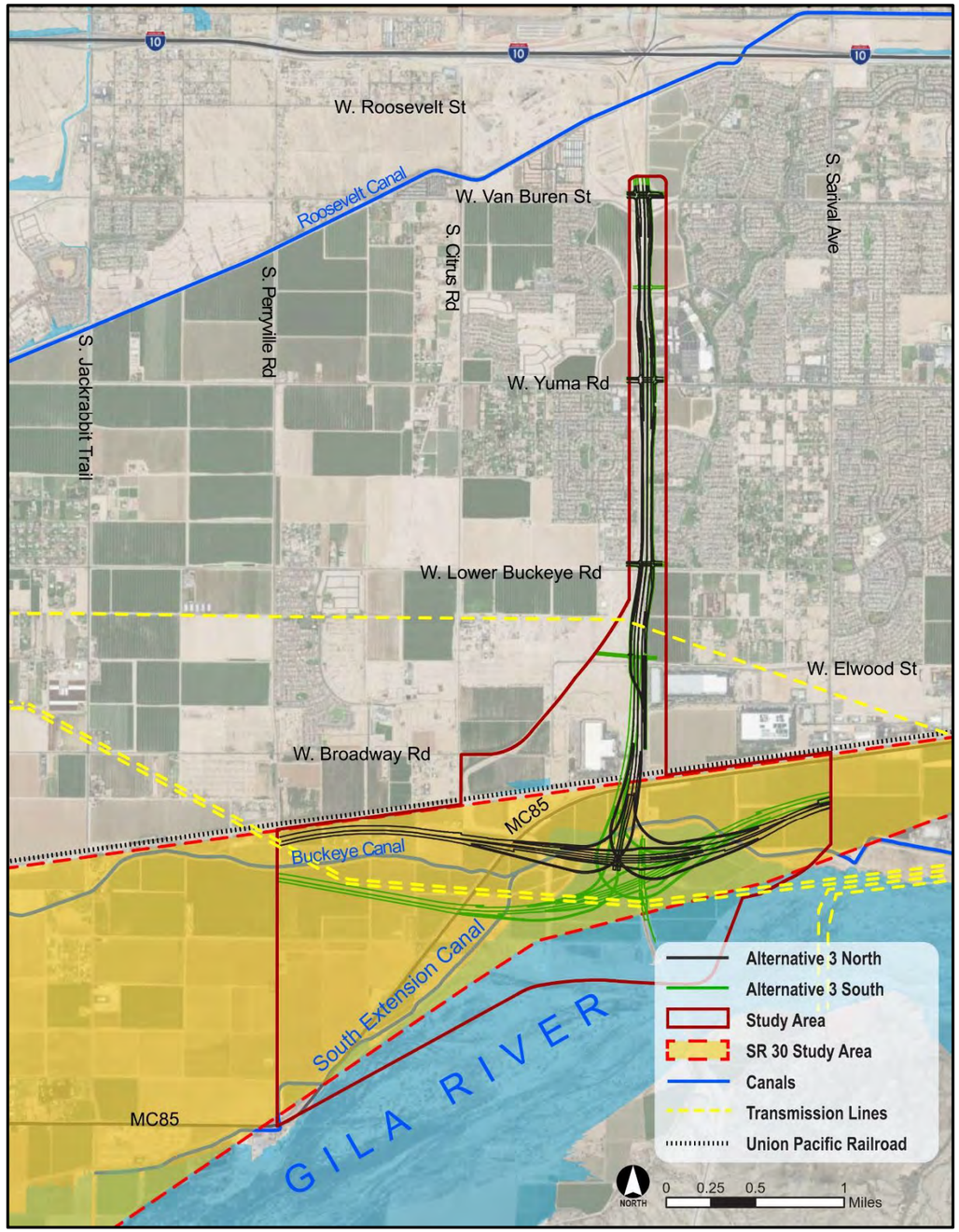


Figure A-6: Alternative 3

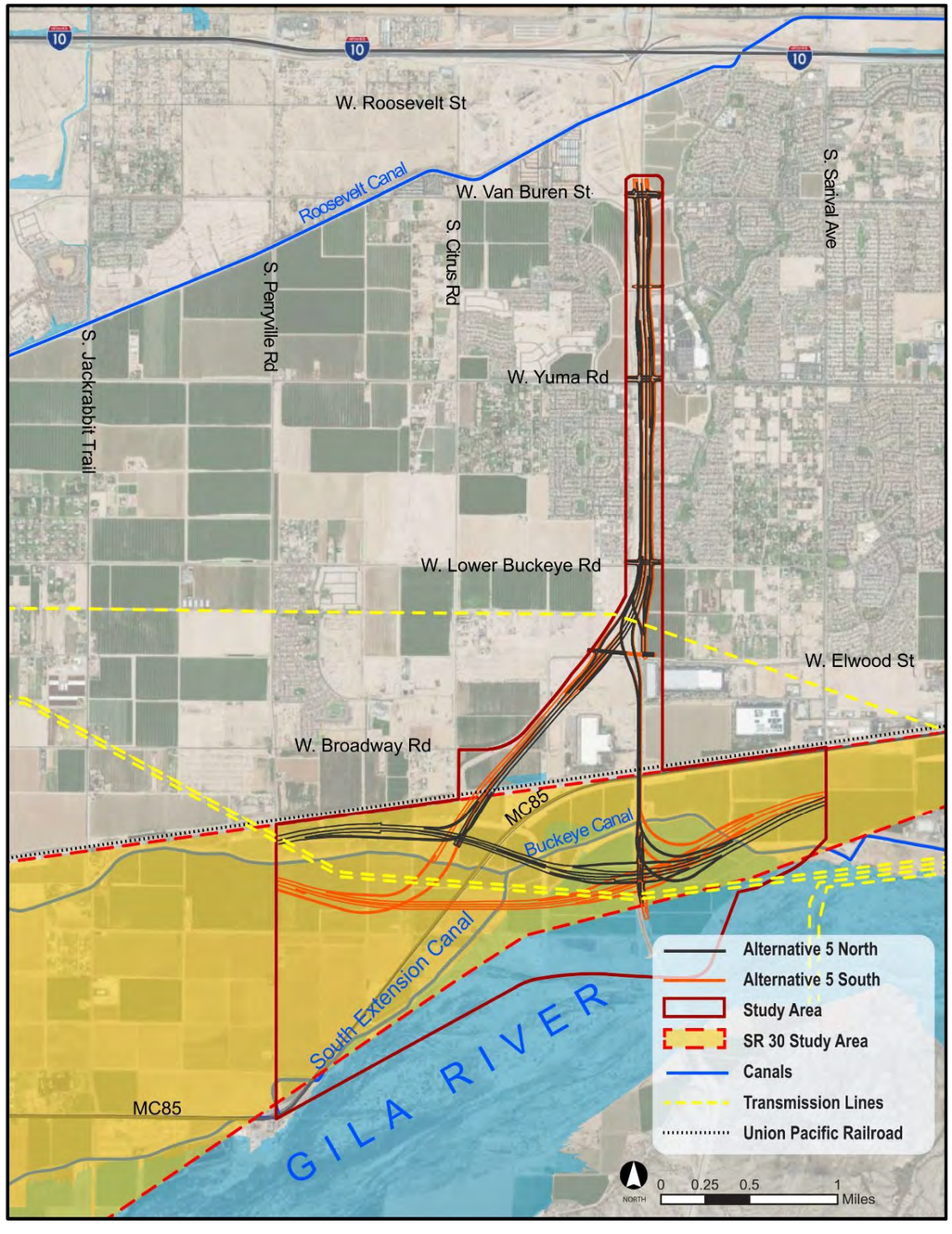


Figure A-7: Alternative 5

A.5 IMPLEMENTATION PLAN

The total project cost of the Selected Alternative 2Cs utilizing the 3+0 freeway section for both SR303L and SR30 within the project limits is estimated at $767.9 million. The currently approved 2040 RTPFP includes the provision for a six-lane divided freeway and no high-occupancy vehicle lanes on SR303L north of SR30 and on SR30 between SR303L and SR202L. SR30 from SR303L to SR85 would be an interim facility. The RTPFP envisions an ultimate 10-lane facility, with four travel lanes and a HOV lane in each direction of travel. Detailed estimates for the six alternatives analyzed are included in Appendix A.

Phase 1 of the project includes construction of SR303L between Van Buren Street and Lower Buckeye Road, where the freeway will transition back into Cotton Lane to the south. Phase 2 involves the continuation of the six-lane SR303L freeway south to connect to the proposed SR30 freeway to the east as it is constructed. Phase 3 involves the remaining construction of SR30 to the west with directional connection to the north leg of SR303L. Phases 2 and 3 are proposed in the 2027 – 2040 MAG long range plan which is currently unfunded. Table A-2 summarizes design, right-of-way and construction costs for the phased implementation plan of the selected alternative. Detailed estimates for this phasing are included in Appendix B.

Table A-2. Preliminary Costs for the Selected Alternative 2Cs and Phasing

Selected Alternative Phasing	*Design*	*R/W*	*Construction*	*Total*
Phase 1	$7.0 M	$20.4 M	$139.6 M	$167.0 M
Phase 2	$16.7 M	$45.3 M	$334.1 M	$396.2 M
Phase 3	$7.7 M	$43.4 M	$153.7 M	$204.7 M
Total	$31.4 M	$109.1 M	$627.4 M	$767.9 M

Funding for design, right-of-way and construction of Phase 1 is included in ADOT's 2019-2023 Transportation Facilities Construction Program as follows:

- Design FY 2019 = $15,000,000
- Right-of-Way and Utilities FY 2019 = $10,700,000
- Construction FY 2020 = $93,800,000

1 INTRODUCTION

1.1 PREFACE

This Location/Design Concept Report (L/DCR) and related Environmental Assessment (EA) define and evaluate the extension of State Route (SR) 303L south from Interstate 10 (I-10) to the proposed east-west SR30 freeway in Goodyear, Arizona. Project No. 303 MA 100 H6870 01L begins at the SR303L/SR30 system traffic interchange (TI) and proceeds approximately four miles north to Van Buren Street. The project study area is shown in Figure 1-1. The project lies within western Maricopa County and Arizona Department of Transportation (ADOT) Central District.

The concept for SR303L was developed initially in the West Area Transportation Analysis prepared for the Maricopa Association of Governments (MAG) in 1984. This analysis identified a need for a north/south transportation corridor in the southwest Phoenix metropolitan area connecting to I-10. Development in the study corridor requires a transportation network consistent with MAG's Regional Transportation Plan (RTP) and the land use and transportation components of the City of Goodyear's General Plan. This long-term need is for a freeway in the west Phoenix metropolitan area that would extend from MC85 to Interstate 17 (I-17). It was named the Estrella Freeway in 1986. The State Transportation Board re-designated the Estrella Freeway as SR303L in 1987 and adopted the Cotton Lane alignment from MC85 to I-10 in 1988. In 1994, Maricopa County voters defeated Proposition 400, which would have extended and increased sales tax funding for MAG's Regional Freeway system. At the Governor's request in 1995, the proposed freeway was removed from the funded program and the MAG long-range plan due to the absence of an identified funding source.

ADOT, MAG, and key local transportation agencies, however, have been actively planning and expanding the metropolitan Phoenix freeway system to address regional travel needs in the future. In 2002, the Maricopa County Department of Transportation (MCDOT) and the City of Goodyear completed a study on SR303L between MC85 and Indian School Road that included a preliminary location and concept for a system TI between I-10 and SR303L. In 2003, MAG approved a $15.8 billion Regional Transportation Plan (RTP). An important part of the RTP is the Regional Transportation Plan Freeway Program (RTPFP), which was adopted by MAG in November 2003 (Figure 1-2). This program included construction of new freeways, including SR303L, as well as improvements to existing freeways. In 2004, Maricopa County voters approved Proposition 400 which provided the funding necessary to implement the RTP.

In the RTPFP, SR303L is planned as a 40-mile-long freeway in the western and northwestern portions of the greater Phoenix metropolitan area. It extends from the proposed SR30 near MC85, north to I-10, north across US 60, and connects with I-17 to the northeast. It also includes the future southerly extension of SR303 to the Hassayampa Freeway and addition of SR30 from SR202L to SR85. SR303L and SR30 are planned as access-controlled freeways and would ultimately have ten lanes; i.e., four general purpose lanes and one high occupancy vehicle (HOV) lane in each direction. The RTPFP funds the initial installation of three general purpose lanes and no HOV lanes in each direction.

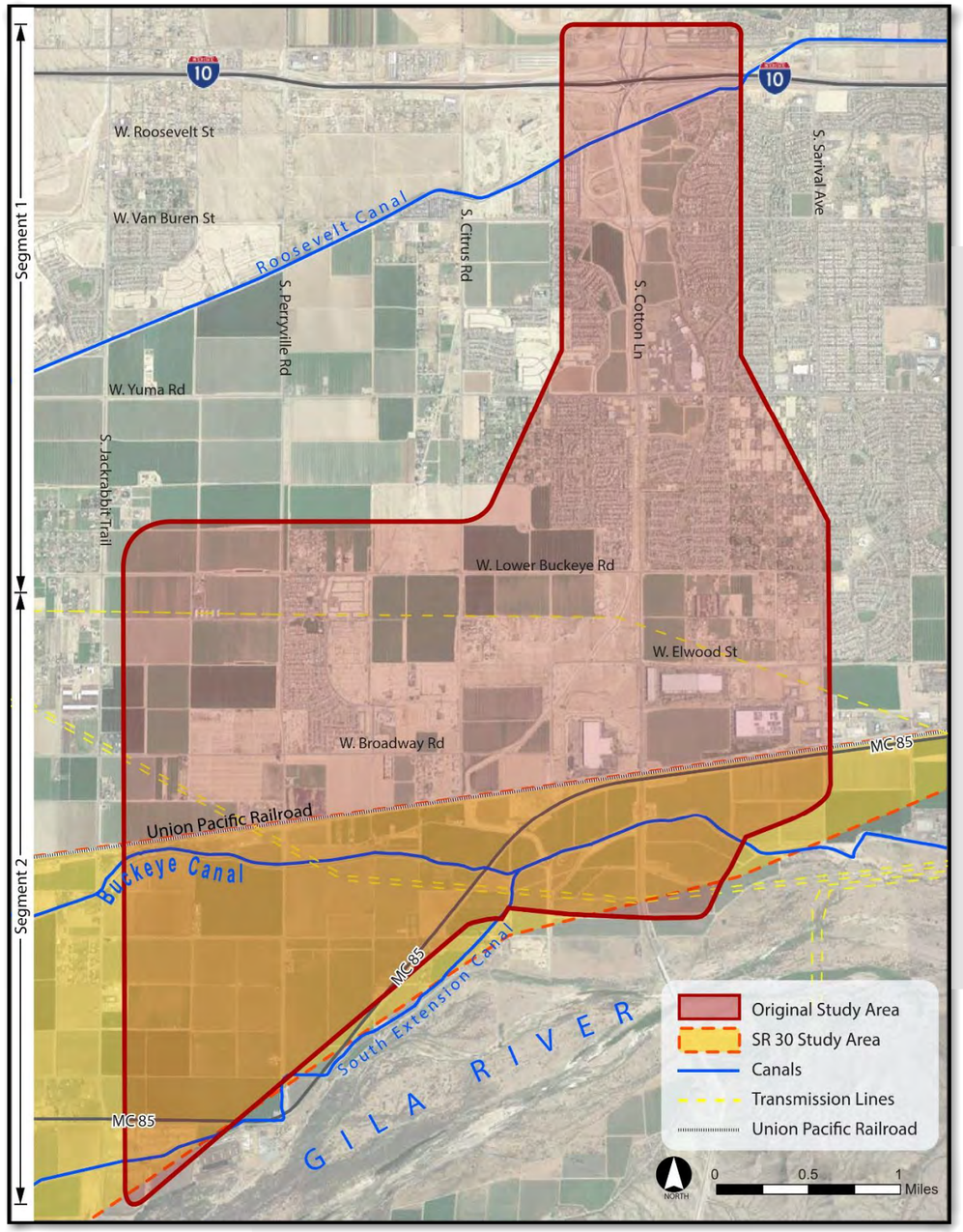


Figure 1-1. Study Area

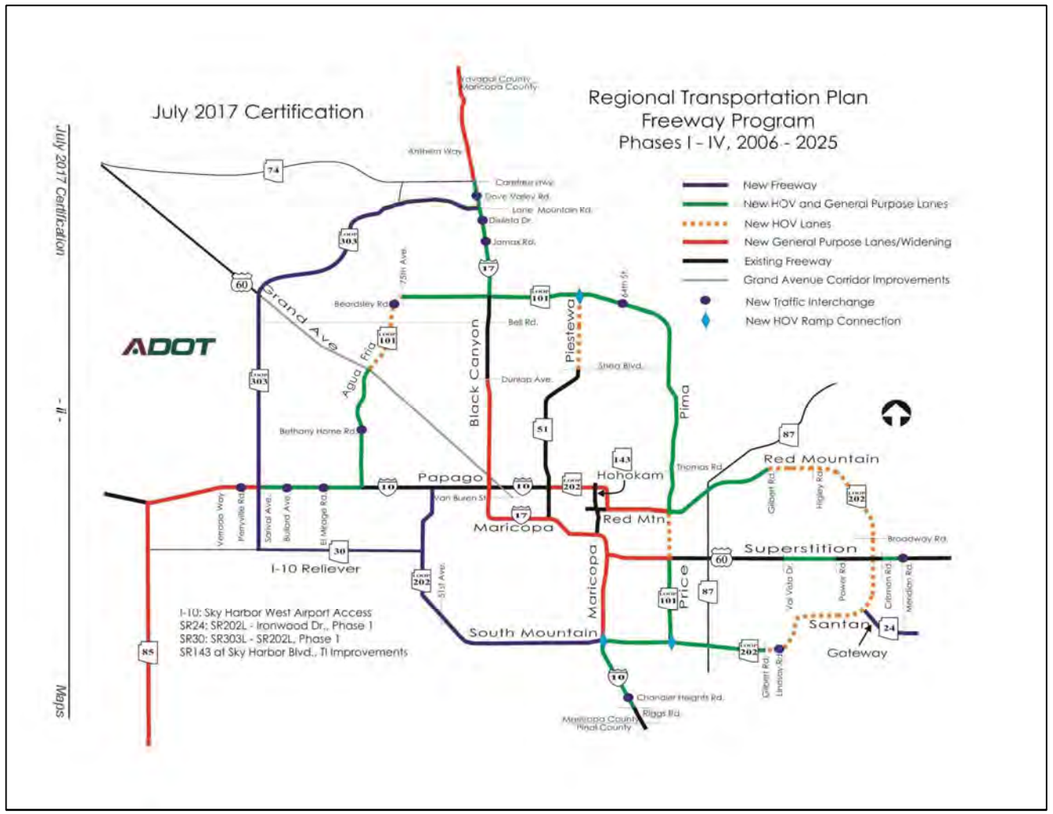


Figure 1-2. Regional Transportation Plan Freeway Program

Source: ADOT

The project involves the ultimate construction of a 10-lane divided, access-controlled urban freeway that provides four general purpose lanes and a high occupancy vehicle (HOV) lane in each direction between I-10 and the proposed SR30 freeway near MC85. The new facility includes a diamond interchange at Yuma Road and SR303L, half-diamond interchanges at Van Buren Street and Elwood Street, and grade separations at Lilac/Canyon Trails Blvd., Lower Buckeye Road, Union Pacific Railroad (UPRR) and MC85. Auxiliary lanes are provided between interchanges and one-way frontage roads are provided where the freeway alignment falls on existing Cotton Lane. The project includes a freeway-to-freeway system interchange between SR303L and the proposed SR30 north of the Gila River.

Two SR30 alignments were developed to evaluate the impact of major utility relocations. The SR30 alignments are consistent for all System TI alternatives, include a diamond interchange at Cotton Lane, and were developed to minimize impacts to utilities and direct impacts to Section 4(f) properties.

The SR303L study process involved two phases of evaluation. Phase 1 included agency and public scoping, environmental studies, and alternative corridor conceptual development, evaluation and recommendations. The 2008 Alternative Selection Report (ASR) and associated Environmental Overview (EO) documented the development process and recommendations of Phase 1. Phase 2, this document, included detailed engineering and environmental analyses of the Phase 1 recommended corridor alternatives. The Final L/DCR and associated Final Environmental Assessment (EA) present the results of the study. The L/DCR provides a single document, summarizing the existing features, project information, technical analysis, alternative solutions, selected alternative, corridor and implementation. The EA was prepared concurrently and in conformance with the requirements of the National Environmental Policy Act (NEPA). The EA identified and evaluated the social, economic and environmental impacts associated with the proposed improvements. The Final L/DCR and associated Final Environmental Assessment also address the review and comment period and public hearing held for the project.

The Federal Highway Administration (FHWA) was the lead federal agency for the study. Other agencies involved with the study include the US Environmental Protection Agency (EPA), Arizona Department of Environmental Quality (ADEQ), the Arizona Game and Fish Department (AGFD), Arizona Department of Public Safety (DPS), Flood Control District of Maricopa County (FCDMC), MAG, MCDOT, and the City of Goodyear.

1.2 NEED FOR THE PROJECT

The 2010 U.S. Census data shows that the western Phoenix metropolitan area added 300,000 residents since 2000, which represents a 69 percent increase in population. Within the southwestern cities of Goodyear, Buckeye, and Avondale, the population was 192,399 (Census 2010). Within the SR303L corridor, the 2017 estimated population was 47,609. This number is projected to grow by 145% to a population of 116,657 persons by 2030, and 226% to a population of 154,989 persons by 2040.

Substantial growth in employment is also projected for the SR303L corridor. Since 2012, new businesses have moved into the industrial area near the Cotton Lane/MC85 intersection. Within the SR303L corridor, the 2017 estimated employment was 16,427, which is projected to grow to 24,524 and 38,196 by 2030 and 2040, respectively

Land use elements of adopted comprehensive general plans for the cities within the SR303L study area were used as the basis for the traffic forecasts for the proposed SR303L extension to SR30 as these plans recognized that future growth would increase the transportation demand beyond what existing facilities could accommodate. The MAG Traffic Data Forecasts and Modeling Group provided travel forecasting for this project utilizing the 2040 design year. The traffic model also utilized Year 2040 socioeconomic data and included all MAG RTP improvements in the area (Figure 1-2), as well as roadway improvements planned by the local jurisdictions. The City of Goodyear has developed a roadway classification map as a part of its General Plan (Figure 1-3). This map shows arterial crossings of SR303L, with traffic interchanges (TI) at Van Buren Street and Yuma Road. The results of these forecasts indicated travel demand will increase in both the region and the study area. Thus, transportation improvements are needed to meet the demand.

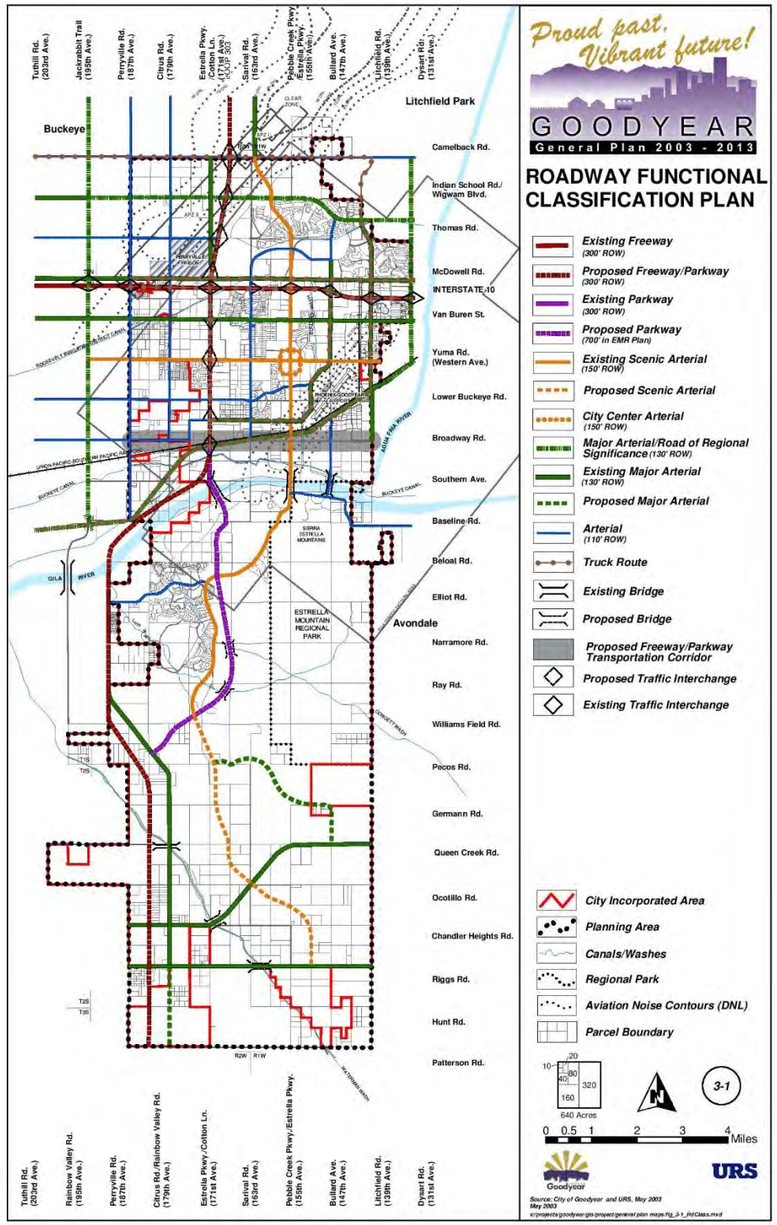


Figure 1-3. City of Goodyear Roadway Classification Map

Source: City of Goodyear General Plan (2003 – 2013)

The 2008-2015 Average Daily Traffic (ADT) volumes on arterial streets within the study area are shown in Table 1-1. These numbers represent existing conditions when the traffic analysis was originally initiated in 2008, as well as updated existing conditions from 2013 and 2015.

Table 1-1. Existing Traffic Volumes in Study Area

Roadway	From	To	Year	ADT (vehicles per day)
Cotton Lane	I-10	Van Buren Street	2015	6,350
Cotton Lane	Van Buren Street	Yuma Road	2015	8,800
Cotton Lane	Yuma Road	Lower Buckeye Road	2008	3,505
Cotton Lane	Lower Buckeye Road	MC85	2008	3,418
Van Buren Street	Perryville Road	Cotton Lane	2015	3,750
Van Buren Street	Cotton Lane	Sarival Avenue	2015	11,440
Yuma Road	Perryville Road	Cotton Lane	2013	5,340
Yuma Road	Cotton Lane	Sarival Avenue	2008	5,958
Lower Buckeye Road	Perryville Road	Cotton Lane	2008	1,232
Lower Buckeye Road	Cotton Lane	Sarival Avenue	2013	1,130
Elwood Street	Cotton Lane	Sarival Avenue	2015	460

ADT: Average Daily Traffic

Source: City of Goodyear Transportation Master plan. Dated 3/17/2015

Substantial growth in both population and employment is projected to occur within the SR303L study area in the next 20 to 25 years. As a result, the 2040 ADT volumes in the Cotton Lane corridor are projected to exceed the future six-lane arterial capacity of approximately 50,000 vehicles per day, indicating increased traffic congestion and delay for the traveling public. MAG updated the travel demand forecast volumes for the SR303L study area in 2017. The study area is divided into Segment 1 (Van Buren Street to Lower Buckeye Road) and Segment 2 (Lower Buckeye Road to the proposed SR30). Table 1-2 shows the two segments and the associated Average Daily Traffic (ADT) volumes for different analysis years.

Table 1-2. Projected ADT Through Design Year 2040

Road Segment	Existing Cotton Lane	ADT 2030	ADT 2040	ADT 2040 No-Build	ADT Build-out
SR303L (Segment 1)	12,305*	57,830	114,030	72,508	191,640
SR303L (Segment 2)	3,418*	39,210	61,130	55,940	162,200

Source: City of Goodyear Transportation Master Plan dated 3/17/2015

Maricopa Association of Governments Travel Demand Model 07/31/2017

The SR303L is a planned freeway in the western portion of the greater Phoenix metropolitan area. Long range/build-out transportation studies such as the *I-8 and I-10 Hidden Valley Transportation Framework Study (2009)* and the *I-10 Hassayampa Valley Framework Study (2008)* have defined the transportation network for the region. Both studies acknowledged the SR303L project as an integral component of MAG's RTPFP.

Cotton Lane currently serves as a major arterial providing limited regional connectivity south of I-10 in the City of Goodyear. In addition to serving local traffic, Cotton Lane handles traffic resulting from new development and population growth occurring south of MC85 and the Gila River.

The purpose of this project is to provide a transportation facility that would accommodate local and regional development and existing transportation/land use plans, while meeting MAG's RTP objectives and ADOT's long-range goals of providing an improved transportation facility and maintaining efficient connectivity along state routes. The project will also improve the movement of people, goods, and services through Goodyear and the western portion of the Phoenix metropolitan area.

- Accommodate regional growth: The RTPFP identifies implementation of SR303L to support projected population and employment growth. Voters passed Proposition 400 in November 2004, which authorizes the continuation of the existing 1/2-cent sales tax through 2025 to fund the RTP. Implementation of SR303L is included in the RTPFP.
- Improve capacity to accommodate future traffic demand: Development in the SR303L corridor is expected to increase substantially in the next two decades. This growth would generate higher traffic volumes than currently exist in the study area or could be accommodated on Cotton Lane as a six-lane arterial street.
- Expand regional connectivity and improve freeway linkages in the MAG freeway system: In addition to its connection to I-10, SR303L would connect to SR30. SR30 would parallel I-10, relieving future congestion on I-10 by providing a connection between SR85 to the west and the future SR202L in the east. An integral part of proposed SR303L includes southward extension in the MAG Long Term Transportation Plan providing a north-south connection for Rainbow and Hidden Valley areas blocked by the Estrella Mountains.

A long-term plan is needed to help guide decisions in the future regarding improvements as funding becomes available. This L/DCR identifies an improvement implementation plan for SR303L along with the associated cost estimates. Funding for design and right-of-way (ROW) and Phase 1 construction (MC85 to Van Buren) is included in ADOT's 2019-2023 Transportation Facilities Construction Program.

1.3 DESCRIPTION OF THE PROJECT

1.3.1 PROJECT LIMITS

The study area begins on Cotton Lane at Van Buren Street, south of the I-10/SR303L system traffic interchange (TI) and proceeds south for approximately four miles to an interchange with the proposed east-west SR30 freeway. The study area lies entirely within the planning limits of the City of Goodyear.

1.3.2 STUDY SEGMENTS

Two segments were defined within the project limits, as shown in Figure 1-4 and described below.

- Segment 1: The northern portion of the project is defined by Van Buren Street on the north and Lower Buckeye Road to the south.
- Segment 2: The southern portion of the study area begins at Lower Buckeye Road and extends to the proposed TI with the SR30 freeway.

This section of SR303L is a southern extension from the second phase of the I-10/SR303L TI, Phase II project which opened to traffic in October 2017.

1.3.3 PROPOSED IMPROVEMENTS

Continued urbanization and regional growth will result in an undesirable level of service on existing Cotton Lane, even if it was expanded to three lanes in each direction. Additional capacity will be necessary to meet future transportation requirements of the corridor. For both SR303L and SR30, three general purpose lanes (3+0) in each direction are needed to meet the 2040 design year criteria, however the build out condition will provide four general purpose lanes plus a HOV lane (4+1) for each freeway. All newly constructed roadways will meet current design standards while providing additional needed capacity. The initial construction will involve the construction of 3+0 facilities. SR303L will have a full diamond TI at Yuma Road and half diamond TIs at Van Buren Street and Elwood Street with grade separations over Lilac Street/Canyon Trails Boulevard, Lower Buckeye Road, the UPRR, Broadway Road and MC85 if encountered. Where the SR303L is constructed on top of existing Cotton Lane, one-way frontage roads will be constructed to maintain existing access points. SR30 will have a full diamond TI at Cotton Lane and grade separations at Sarival Avenue, MC85, SR303L and Perryville Road. Additional bridges will be used for the crossings of the Loop 303 Outfall Channel and the Buckeye Water Conservation Drainage District (BWCDD) canals.

The existing Loop 303 Outfall Channel between the Gila River and Van Buren Road was constructed by the FCDMC in cooperation with ADOT in 2015. It intercepts eastward and westward overland flow and will provide on site freeway drainage outlets. Off site drainage facilities east of Cotton Lane are mostly those

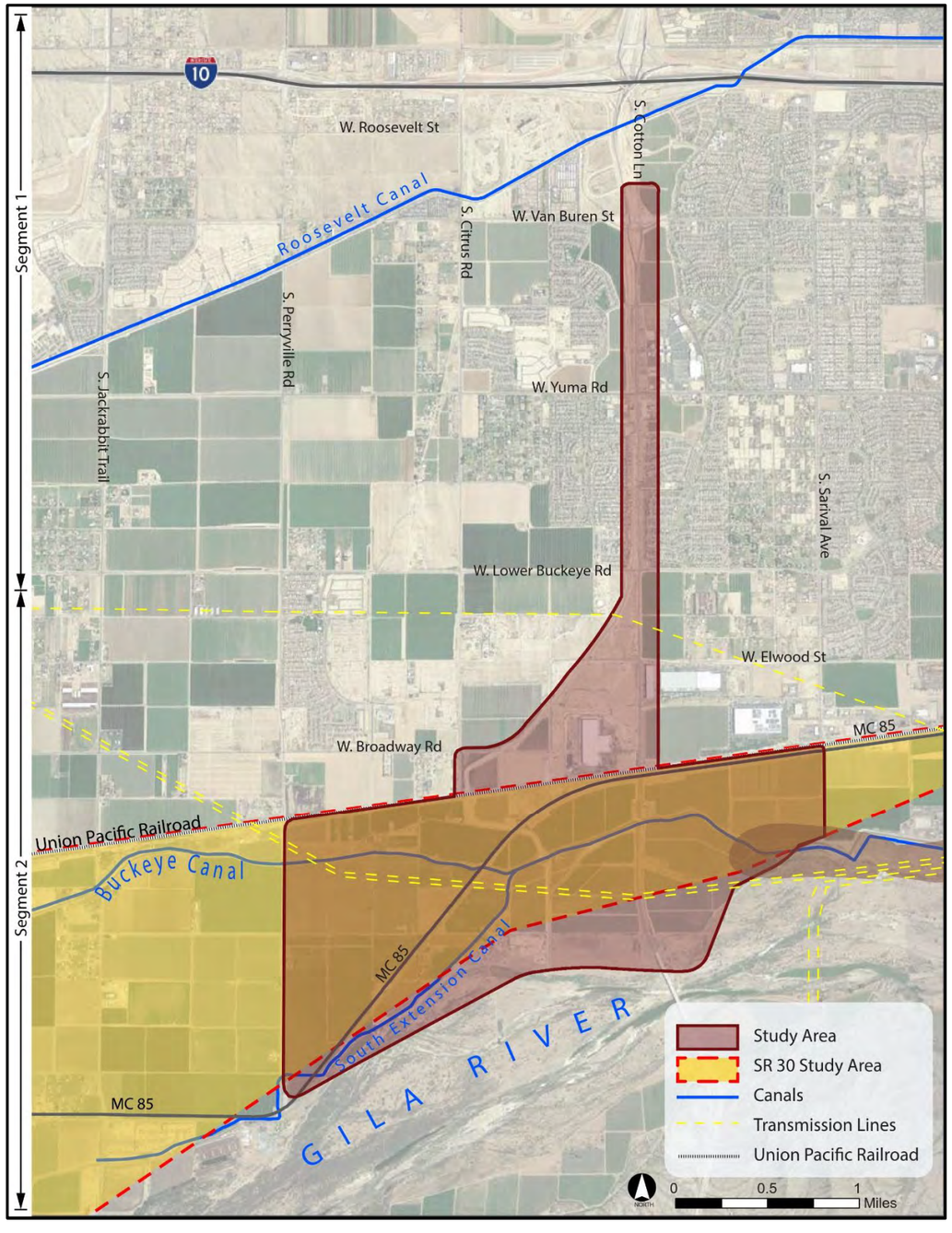


Figure 1-4. Project Segments 1 and 2

developed in association with residential and commercial developments. The major provision for drainage is a large earthen channel constructed for the Canyon Trails Subdivision to provide a drainage outfall for several phases of the development. This channel begins at the southwest corner of I-10 and Sarival Avenue and winds southward eventually reaching Cotton Lane near Lower Buckeye Road with no outlet. A portion of the Canyon Trails Channel is inside the proposed SR303L ROW. Replacement of neighborhood retention basins, agricultural tailwater ditches, connection of the Canyon Trails channel to the Loop 303 Outfall Channel and development of first flush basins are required.

Utility relocations are required. Utilities in conflict include overhead power, overhead and underground telephone, fiber optic lines, and sewer and water facilities. Utilities exist within the existing Cotton Lane ROW as well as in arterial street crossings. Avoidance or minimization of conflicts with major transmission lines and Buckeye Canal/APS reclaimed water line in the SR303L/SR30 interchange area is critical.

Maintaining traffic throughout construction has been a major consideration in developing the overall recommended implementation and phasing for the corridor. It is anticipated that traffic can remain on Cotton Lane until the frontage roads are constructed. Traffic will then utilize the new frontage roads for the remainder of construction duration. Temporary detours will be required at various locations while construction proceeds, particularly at the TIs and overpasses.

1.4 CHARACTERISTICS OF THE CORRIDOR

1.4.1 ROADWAY FEATURES

In addition to adding directional ramps from the SR303L south leg to I-10, Phase II of the I-10/SR303L interchange extended SR303L south of I-10 and over Van Buren Street with a temporary connection to Cotton Lane south of Van Buren Street. Also included with that project, two lane one-way frontage roads were completed between McDowell Road and Van Buren Street which also connect to Cotton Lane south of Van Buren Street. Cotton Lane is currently a four-lane arterial street from I-10 to Yuma Road, where it transitions into a two-lane roadway that continues to MC85. The existing local roadway network is a traditional mile arterial grid system. Within the study limits, this system is disrupted by the UPRR and the Gila River. Currently the existing arterial streets are generally two-lane roadways. The City of Goodyear Roadway Functional Classification Plan 2010 Amended Plan is shown on Figure 1-3.

Intersections within the study limits are controlled by traffic signals and stop signs. The following intersections on Cotton Lane are controlled by traffic signals:

- Van Buren Street*
- Lilac Street/Canyon Trails Boulevard
- Canyon Trails Shopping Center
- Yuma Road*
- Lower Buckeye Road*
- Commerce Drive
- MC85*

The following intersections listed below are controlled by stop signs:

- Pima Street
- Elwood Street*

*Major Collectors

Source: Field Review

1.4.2 RIGHT-OF-WAY

ADOT currently owns right-of-way along the west side of Cotton Lane between Van Buren Street and Yuma Road which was acquired as part of a cost sharing effort with FCDMC when they constructed the Loop 303L Outfall Channel. Additionally, ADOT owns right-of-way on the east side of Cotton Lane between Van Buren Street and Canyon Trails Boulevard which was acquired as part of the I-10/SR303L TI, Phase II project. The City of Goodyear has either acquired or used development agreements to set aside areas for potential right-of-way use through the project area. Along Cotton Lane this includes areas in front of Canyon Trails Towne Center, Cottonflower commercial and residential development, as well as the residential developments of Canyon Trails South and Sin Lomas. A 500-foot wide corridor southwest of the intersection of Lower Buckeye Road and Cotton Lane and extending to Broadway Road was acquired by the City of Goodyear for consideration as the SR303L corridor.

No right-of-way has been acquired for the SR303L/SR30 TI or for the SR30 corridor at this time.

1.4.3 DRAINAGE

The project watershed lies entirely within the study area of the Loop 303 Corridor/White Tanks Area Drainage Master Plan. Generally, storm water runoff collects within roadside ditches along Cotton Lane from both the east and west, outfalling to the Gila River. There are no natural drainageways within the study area as the majority of the area is or was under agricultural use. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) indicate numerous floodplains located adjacent and parallel to manmade features, such as the Buckeye Canal and the UPRR. The area between the Buckeye Canal and the Gila River is located within the Gila River floodplain (Figure 1-5). The El Rio Watercourse

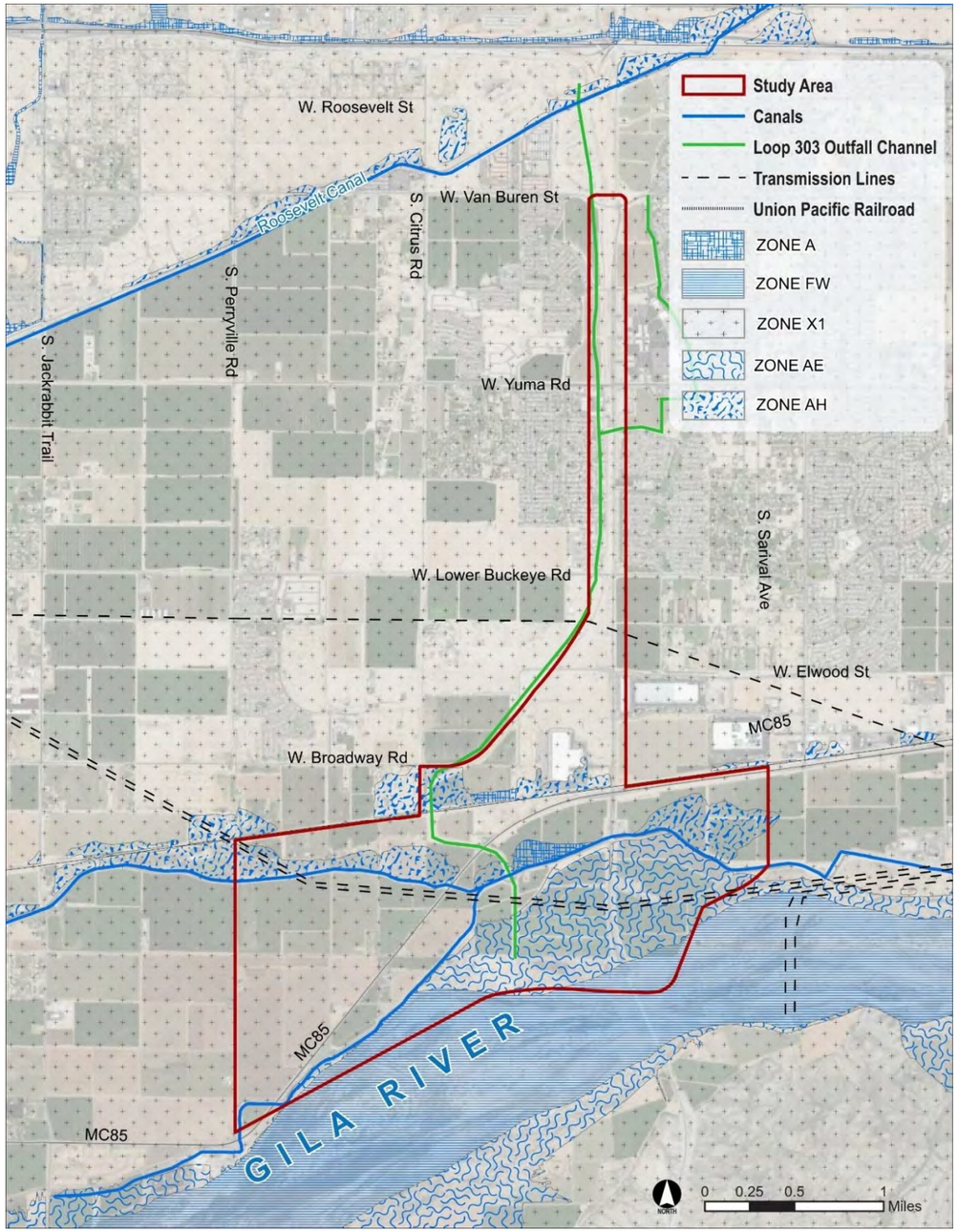


Figure 1-5. FEMA Floodplain

Source: FEMA 2018

Master Plan envisions developer implemented levees along the 100-year floodway boundary within the study area. The study area south of the UPRR is agricultural while north of the UPRR, industrial, residential and commercial development is occurring rapidly. A drainage basin and channel system within the Canyon Trails development has been constructed to handle the increased runoff due to development east of Cotton Lane. In 2015, the FCDMC completed construction of a regional drainage channel (Loop 303 Outfall Channel) on the west side of Cotton Lane between Van Buren Street and the Gila River.

Topography of the area is primarily alluvial plains with floodplain and riparian areas at the south end of the project area near the Gila River. Soils present in the project watershed are sandy loam, loam, and clay loam on old alluvial fans, valley plains, and low stream terraces. Numerous manmade obstacles interrupt the historical flow patterns within the project watershed, including Buckeye Canal, MC 85, and the UPRR. There are two existing major drainage crossings under the UPRR located approximately 2,000 feet east of Cotton Lane and approximately 120 feet east of Citrus Road. The FCDMC channel also crosses the UPRR approximately 300 feet east of Citrus Road. In addition, cultivation has modified historical flow patterns to the extent that runoff now follows irrigation ditch patterns, which in turn follow roadway patterns.

1.4.4 STRUCTURES

Other than the Loop 303 Outfall Channel structures at crossroads, no roadway or drainage structures are present within the project limits.

1.4.5 UTILITIES

Numerous utilities are located within the SR303L study area. The existing utility inventory has been gathered from existing facility maps, utility companies and GIS inventories. GIS inventories were obtained from the City of Goodyear for water and sewer facilities and from Arizona Public Service for power facilities up to 69kV. Transmission lines (greater than 69kV) have been superimposed from aerial mapping. The following inventory lists the utility type, owner, and description of facility within the limits of the study.

POWER

- Arizona Public Service (APS) - 230kV Transmission, 69kV sub-transmission, 12kV and secondary power services.
- Western Area Power Administration (WAPA) - two 230kV Transmission lines
- Salt River Project (SRP) - 500kV Transmission

IRRIGATION AND WELL FACILITIES

- Roosevelt Irrigation District (RID) - Wells and irrigation infrastructure
- Buckeye Water Conservation & Drainage District (BWCDD) - Wells and irrigation infrastructure
- Private Irrigation Ownership - Wells and irrigation infrastructure

COMMUNICATIONS (Fiber Optics and Cable)

- Sprint Communications - Fiber Optics
- CenturyLink Communications - Fiber Optics and Cable
- American Telegraph & Telephone (AT&T) - Fiber Optics
- Cox Communications - Fiber Optic and Cable TV
- Broadwing Communications - Fiber Optic

COMMUNICATIONS IN UPRR CORRIDOR (Right-of-Way)

- Level 3 - Fiber Optics
- MCI/Verizon- Fiber Optics
- CenturyLink Communications- Fiber Optics

SEWER, WATER AND RECLAIMED WATER

- City of Goodyear - Sewer and water services
- APS – 96-inch-Reclaimed water line on the north side of the Buckeye Irrigation Canal. The line is crucial for supplying water to the nuclear generating plant at Palo Verde.

NATURAL GAS AND PETROLEUM PRODUCTS

- Southwest Gas (SWG)
- El Paso Natural Gas
- Kinder Morgan (Petroleum) 20” Gas line in the UPRR right-of-way

The Roosevelt and BWCDD canals, UPRR including all underground utilities inside the railroad right-of-way, and power transmission lines run across the entire study area and were encountered for all corridor alternatives. Utilities located within the study area are displayed in Figure 1-6 and Figure 1-7.

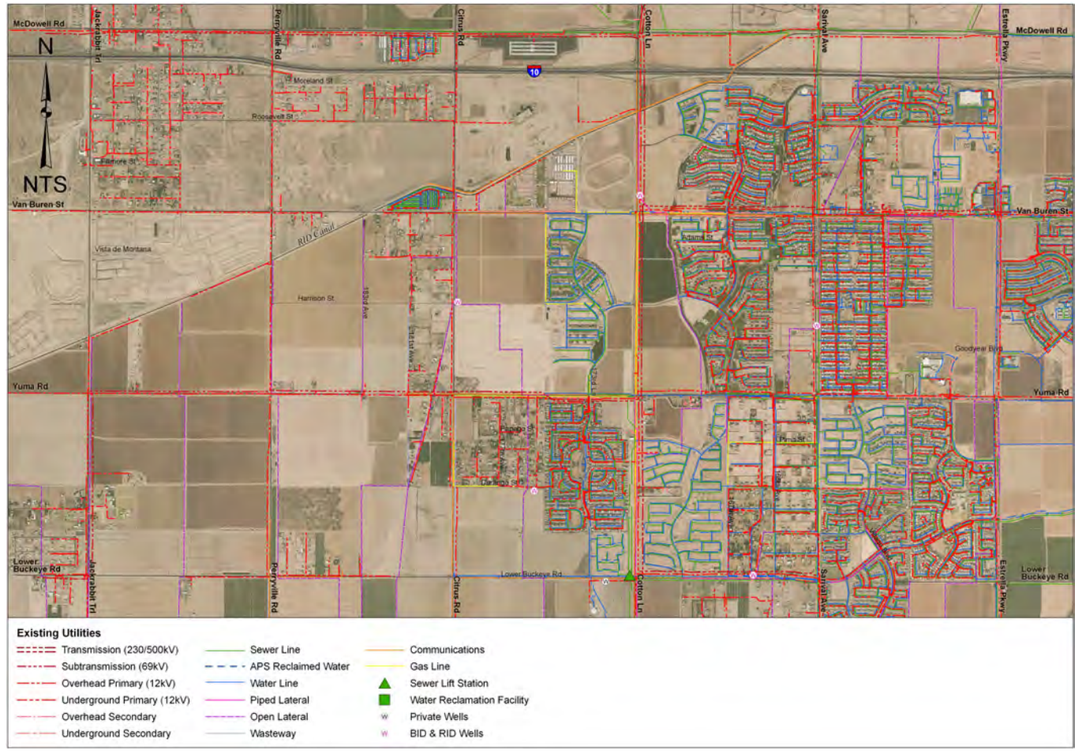


Figure 1-6. Existing Utilities in Segment 1

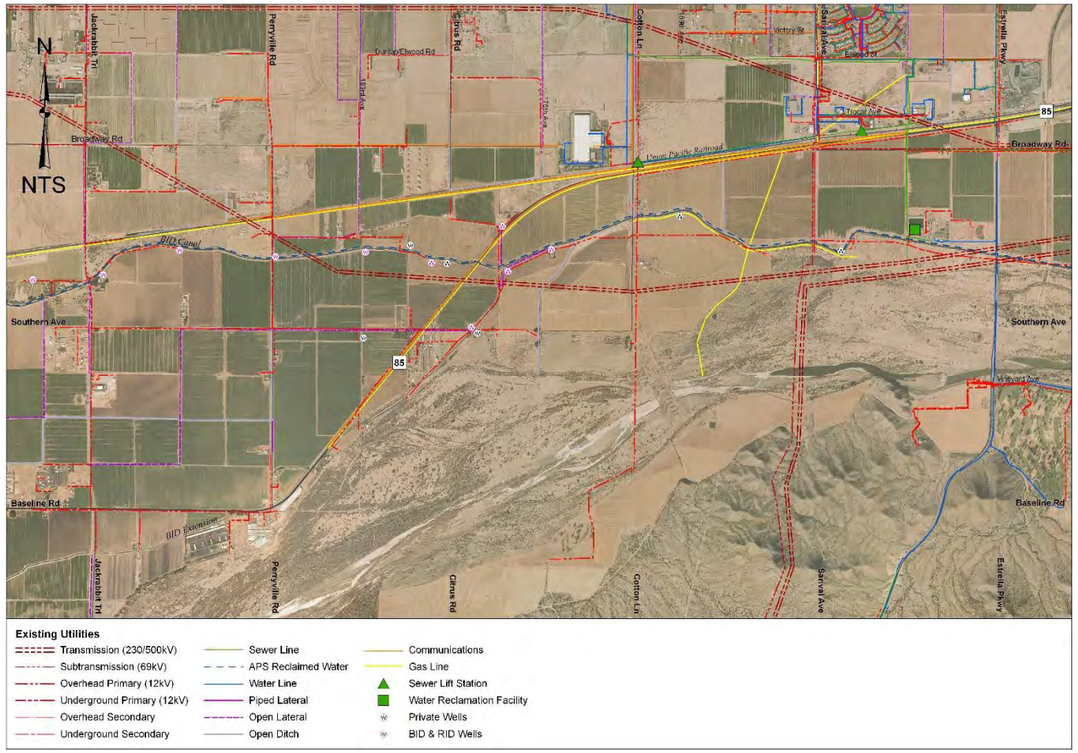


Figure 1-7. Existing Utilities in Segment 2

1.4.7 LAND USE

Within the study area, the City of Goodyear is rapidly changing from agricultural land use to residential, commercial, and industrial usage. The City of Goodyear Land Use Plan May 2003, amended 2009 (Figure 1-8) indicates future development will result in the long-term elimination of agricultural use. Proposed land uses in the study area are generally residential with light industrial in the southwest quadrant of SR303L/I-10 interchange area and along the UPRR. Regional commercial areas are located in the Cotton Lane/Yuma Road area with the Canyon Trails Towne Center development in the northeast corner and the Cottonflower Marketplace in the southwest corner. There are three major residential developments within the study area: Canyon Trails development along the east side of Cotton Lane from I-10 to Lower Buckeye Road, and Cottonflower and Sin Lomas along the west side of Cotton Lane between Yuma Road and Lower Buckeye Road.

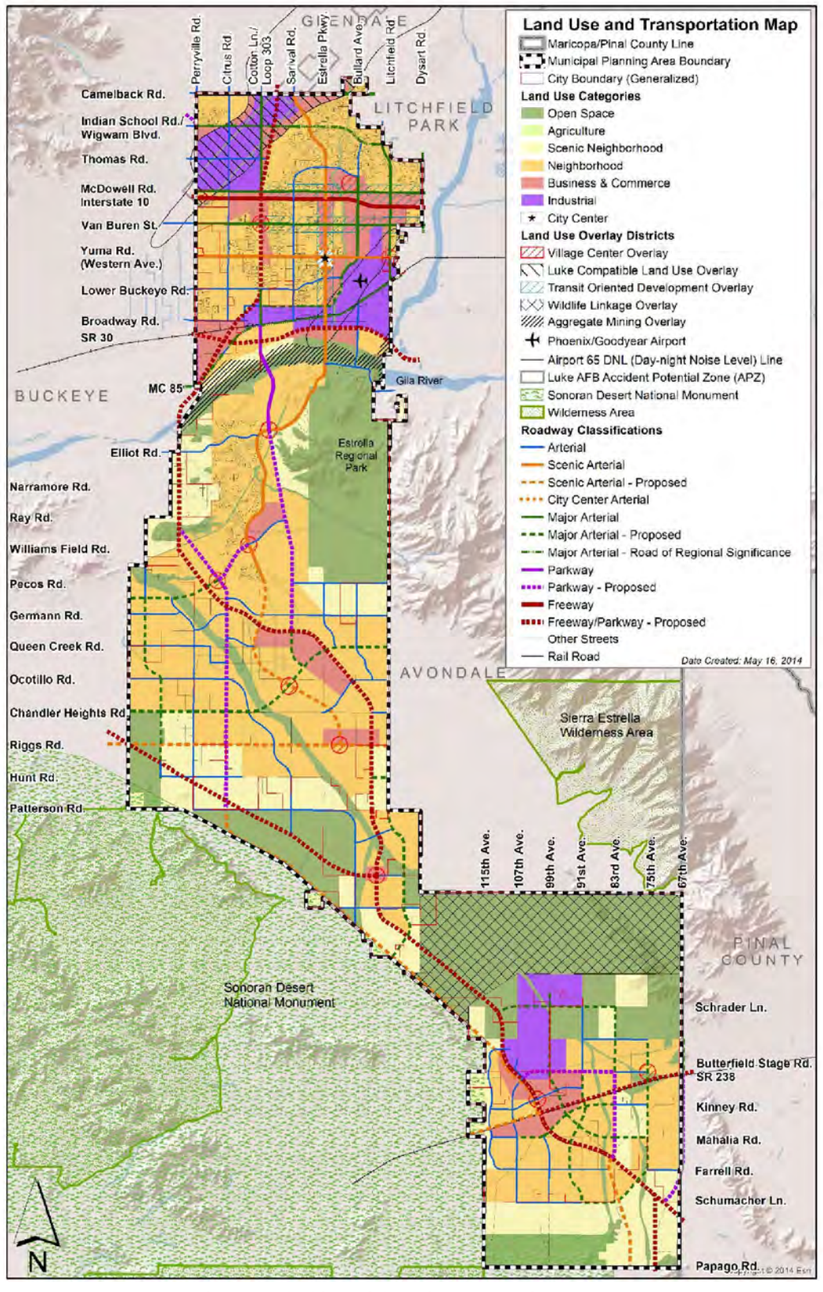


Figure 1-8. City of Goodyear Land Use Map

Source: City of Goodyear General Plan (2003 – Amended 2009)

2 TRAFFIC ANALYSIS

2.1 INTRODUCTION

The purpose of this section is to document the existing and future traffic conditions on SR303L between I-10 and the Gila River within the City of Goodyear. This Traffic Analysis supplements the L/DCR and the EA and was prepared for the roadway project to build an ultimate ten-lane access controlled freeway from I-10 to proposed SR30.

A separate Traffic Report dated September 1, 2017 has also been prepared that provides more details into the traffic analysis. Additionally, a Traffic Report Addendum dated January 22, 2018 was created to compare the 2040 run of the July 2017 MAG Conformity Model (basis of the traffic analysis) and the 2040 run of the October 2017 MAG Conformity Model (basis of the air quality analysis). The findings of this addendum were that the differences between the conformity models were negligible within this project's study area.

To date, the section of SR303L from Van Buren Street to Happy Valley Parkway is built as a six-lane access controlled freeway with both Phases of the freeway-to-freeway interchange between SR303L and I-10 completed with interim connections to Cotton Lane south of Van Buren Street. The northern section of SR303L, from Happy Valley Parkway to I-17, has been constructed as an interim four-lane divided roadway. This project, I-10 to proposed SR30, will complete the segment of SR303L identified in the RTRFP. Long Range Regional planning studies beyond 2040 envision the future extension of SR303L south of SR30 to the proposed Hassayampa Freeway.

Within the traffic study area, the SR303L alignment will replace the current Cotton Lane facility; an arterial street intersecting at grade with Van Buren Street, Canyon Trails Boulevard/ Lilac Street, Yuma Road, Lower Buckeye Road, Elwood Street, and MC85. The SR303L alignment will replace Cotton Lane from Van Buren Street to Elwood Street.

The SR303L will include the latest Intelligent Transportation Systems (ITS) infrastructure as defined in the ITS Design Guide. There is existing FMS infrastructure at the I-10 and SR303L traffic interchange, and the limits of this project design will eventually include fiber connection and integration to this infrastructure.

2.1.1 EXISTING ROADWAY NETWORK

SR303L currently exists as a six-lane freeway from I-10 north to Happy Valley Parkway, continuing as a four-lane divided highway from Happy Valley Parkway north and east to I-17. SR303L currently has directional ramps with the I-10 freeway and I-17 (access at the Lone Mountain Blvd interchange). SR303L is currently constructed south of I-10 to Van Buren Street with an interim connection to Cotton Lane south of Van Buren Street.

Cotton Lane is currently a four-lane arterial roadway from Van Buren Street south to Yuma Road, a two-lane arterial from Yuma Road south to MC85, and a four-lane divided roadway from MC85 south across the Gila River. Cotton Lane's intersection at MC85 and the UPRR has been improved to accommodate an ultimate six-lane facility.

Van Buren Street is an east-west arterial south of I-10, which starts as a two-lane road at Jackrabbit Trail, transitions to four lanes ¼-mile west of Cotton Lane, and continues east through Tolleson and Phoenix as a major arterial. It has been improved to a 6-lane arterial at the SR303L as part of the I-10/SR303L Phase II project completed in 2017.

Canyon Trails Blvd/ Lilac Street is a two-lane discontinuous half-mile crossing of Cotton Lane located between Van Buren Street and Yuma Road.

Yuma Road is an east-west arterial, which enters the study area from the west as a two-lane road at Jackrabbit Trail, transitions to six lanes at Sarival Avenue, and continues east as a major arterial through Avondale.

Lower Buckeye Road is an east-west arterial, entering the project area as a two-lane road at Jackrabbit Trail and continues to Bullard Avenue west of the Phoenix Goodyear Airport.

Elwood Street is a two-lane half-mile street between 175th Avenue and Estrella Parkway.

MC85 is an east-west arterial that starts as a two-lane road at SR85 in Buckeye, and extends east of Cotton Lane and continues through Phoenix as a major arterial. MC85 at the Cotton Lane intersection consists of two-lane approaches in both directions with exclusive turn lane bays, and then transitions back to a two-lane roadway in each direction following the intersection.

2.1.2 EXISTING TRAFFIC VOLUMES

The existing Average Daily Traffic (ADT) volumes on arterial streets within the study area are shown in Table 2-1 and on Figure 2-1. Cotton Lane experienced an average daily traffic of 8,800 vehicles per day south of Van Buren Street in 2015. The roadways in the study area currently operate under their capacity.

Table 2-1: Existing Traffic Volumes

Roadway	From	To	Year	ADT (vehicles per day)
Cotton Lane	I-10	Van Buren Street	2015	6,350
Cotton Lane	Van Buren Street	Yuma Road	2015	8,800
Cotton Lane	Yuma Road	Lower Buckeye Road	2008	3,505
Cotton Lane	Lower Buckeye Road	MC 85	2008	3,418
Cotton Lane	MC 85	Estrella Pkwy	2015	3,160
Van Buren Street	Perryville Rd	Cotton Lane	2015	3,750
Van Buren Street	Cotton Lane	Sarival Avenue	2015	11,440
Yuma Road	Perryville Rd	Cotton Lane	2013	5,340
Yuma Road	Cotton Lane	Sarival Avenue	2008	5,958
Lower Buckeye Road	Perryville Rd	Cotton Lane	2008	1,232
Lower Buckeye Road	Cotton Lane	Sarival Avenue	2013	1,130
MC85*	Perryville Rd	Cotton Lane	2015	6,763
MC85*	Cotton Lane	Sarival Avenue	2015	9,413

Source : City of Goodyear Transportation Master Plan Dated 3/17/2015
** Maricopa County Department of Transportation, 2015 MCDOT Traffic Counts*

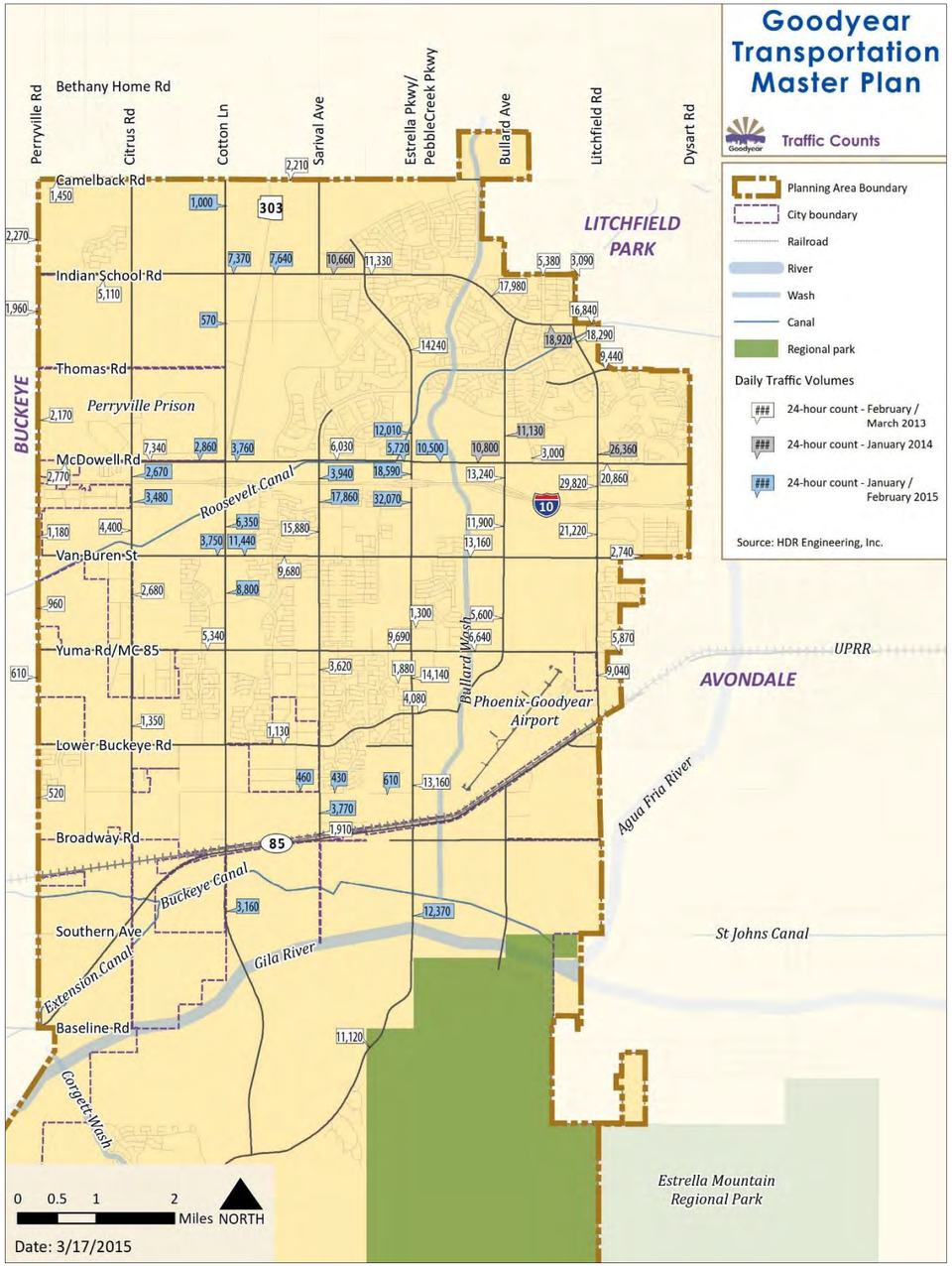


Figure 2-1: Existing Traffic Volumes Map (City of Goodyear)

2.1.3 ROADWAY NETWORK

The traffic analysis completed for this report included traffic volumes for the following analysis years and associated projections of socioeconomic characteristics that drive the traffic growth in the study area.

- 2040 No Build
- 2023 Opening Network
- 2030 Interim Roadway Network
- 2040 Build
- Build-out

2.1.4 BUILD NETWORKS

Substantial growth in both population and employment is projected to occur within the influence area of the SR303L corridor by the 2040 design year, as shown in the previous section. The region's transition to working households, and the fact that job growth will keep pace with population growth (on a percentage basis), would most likely increase the vehicle miles traveled per person in the SR303L study area.

The build network scenario would replace Cotton Lane with a freeway and parallel frontage road system, on the same alignment as Cotton Lane from Van Buren Street to Lower Buckeye Road. A system TI is included with directional ramps to and from SR30. The traffic analysis utilized the city of Goodyear's arterial network, as identified earlier in the City of Goodyear General Plan Roadway Future Functional Classification Plan (June 12, 2017) to be completed by 2040 and identified in the MAG RTP.

All build scenarios replaced Cotton Lane with three general purpose lanes in each direction (Segment 1), with a full diamond TI at Yuma Road, half diamond TIs at Van Buren Street and Elwood Street, and parallel frontage roads extending from Van Buren Street to Elwood Street. These were common features for all build scenarios.

2040 No-Build Roadway Network

- The No-Build scenario assumed that Cotton Lane would be upgraded to a six-lane arterial configuration with at-grade intersections at Lilac Street/ Canyon Trails Boulevard, Yuma Road, Lower Buckeye Road, Elwood Street, and MC 85. Two models were developed for the No-Build scenario, one with and one without the SR30. The remaining roadway network was included as planned in the MAG RTP network.

2023/2030 Roadway Network

- The 2023/2030 network included the arterial/freeway roadway network programmed in MAG's RTP to be completed by 2023. SR303L from I-10 to SR30 was modeled as three general purpose lanes (3+0) in each direction. The freeway transitions back to Cotton Lane as an arterial street at Elwood Street. I-10 has four travel lanes and one HOV lane in each direction east of SR303L, and three travel lanes in each direction west of SR303L. SR30 is not planned to be completed by 2030.

2040 Roadway Network

- The 2040 network for SR303L is a six-lane (3+0 in each direction) freeway between I-10 and SR30. SR30 is planned as six-lane freeway (3+0 in each direction) from SR202L to SR85, with direct ramp connections between the north leg of SR303L and the east and west legs of SR30. Cotton Lane provides access to SR30 with a full diamond service interchange.

BUILD-OUT Roadway Network

- The Build-Build-Out network was modeled in 2013 using MAG's Hidden Valley Framework Study (September 2009) roadway network and socio-economic estimates. The Build-Out analysis was to evaluate the impacts of the future Hassayampa Freeway connection and extension of SR30 west to SR85 to the SR303L corridor alternatives. SR303L from I-17 south to Hassayampa Freeway was modeled as four general purpose lanes and one HOV lane (4+1) in each direction. SR30 was modeled as four general purpose lanes and one HOV lane (4+1) in each direction from SR303L east to SR202L with direct ramp connections to and from these freeways. The Hassayampa Freeway was modeled as a six-lane freeway between the Papago Freeway (I-10) south of Maricopa and the Maricopa Freeway (I-10) west of SR85, as shown in Hidden Valley Framework Study (September 2009).

- All the directional ramps at the SR30/SR303L traffic interchange were modeled as two-lane ramps. SR303L was modeled as terminating at the Hassayampa Freeway with direct ramp connectors.

- The Build-Out network uses the Build-Out population and employment projections. The Hidden Valley Transportation Framework Study estimated that Build-Out of Population and employment within the study area would occur by 2050.

2.1.5 FUTURE DAILY TRAFFIC VOLUMES

The study area daily traffic projections for the above defined alternatives are shown in Figure 2-2 thru Figure 2-9 and described below.

2040 No-Build (SR303L) ADT Volumes

As shown in Figure 2-2, without the SR303L extension between I-10 and proposed alignment of SR30 (no-build condition), six-lane Cotton Lane with at-grade intersections at Lilac Street/ Canyon Trails Boulevard, Yuma Road, Lower Buckeye Road, Elwood Street and MC85 is projected to carry ADT volumes ranging from 64,220 vehicles per day (vpd) south of Van Buren Street to 40,980 vpd north of the proposed SR30 alignment. I-10 east of the proposed SR303L alignment experiences more traffic compared to 2040 SR303L build alternatives.

2040 No-Build (SR303L and SR30) ADT Volumes

As shown in Figure 2-3, without the SR303L extension between I-10 and SR30 (no-build condition), six-lane Cotton Lane with at-grade intersections at Lilac Street/ Canyon Trails Boulevard, Yuma Road, Lower Buckeye Road, and Elwood Street is projected to carry ADT volumes ranging from 72,508 vpd south of

Van Buren Street to 41,780 vpd north of MC85. I-10 east of SR303L experiences more traffic compared to 2040 SR303L build alternatives. The east-west arterial streets will carry more traffic without SR30.

2023 ADT Volumes

The 2023 opening year traffic projections for the proposed roadway network are presented in Figure 2-4. As shown in the figure, the SR303L is extended south to Lower Buckeye Rd in the interim condition. This also assumes that the SR30 has not yet been constructed by 2023. The 2023 ADT traffic volumes on SR303L range from 32,450 vpd south of I-10 to 18,950 north of Lower Buckeye Rd. SR303L experiences the highest volumes of 37,710 vpd between Van Buren Street and Yuma Road. The freeway transition to Cotton Lane south of Lower Buckeye Road experiences daily traffic of 20,180 vpd.

2030 ADT Volumes

The 2030 interim traffic projections are presented on Figure 2-5. The SR303L freeway network is the same as for 2023. The 2030 ADT traffic volumes on SR303L range from 51,560 vpd south of I-10 to 30,710 at Yuma Rd. SR303L experiences the highest volumes of 57,830 vpd between Van Buren Street and Yuma Road. The freeway transition to Cotton Lane south of Lower Buckeye Road experiences daily traffic of 35,300 vpd.

2040 ADT Volumes

The 2040 traffic volume forecasts with 2040 socioeconomic projections and SR303L Freeway network alternatives are presented in Figure 2-6 through Figure 2-8. All 2040 traffic analysis utilized output from the MAG July 2017 conformity model. Detailed comparison of freeway volumes is provided in the following section.

Build-Out ADT Volumes

The Build-Out traffic volume projections with Build-Out socioeconomic projections are presented in Figure 2-9. The Build-Out ADT traffic volumes on SR303L range from 195,160 vpd south of I-10 to 162,220 vpd south of SR30. SR303L experiences the highest volumes of 200,660 vpd between Van Buren Street and Yuma Road. The traffic volumes on SR30 range from 165,480 vpd west of SR303L to 200,030 east of SR303L. The traffic volumes on MC85 at Cotton Lane decrease significantly with the construction of SR30 west of SR303L.

2.1.6 SR303L FREEWAY NETWORK ALTERNATIVES DESCRIPTION

Traffic was modeled for three different SR303L freeway study alignments. Figure 2-11 thru Figure 2-13 show the SR303L freeway alignment for each alternative and analysis year with associated traffic volumes. A brief description of the differences between alternatives is presented below.

Alternative 2C:

Figure 2-11 shows the Alternative 2C freeway alignment from Lower Buckeye Road south for various analysis years (2040 and Build-Out). The SR303L/SR30 system interchange is located approximately one mile west of Cotton Lane. The system interchange would include HOV direct connectors between the east leg of SR30 and the south leg SR303L.

The exit ramp to southbound Cotton Lane develops before Lower Buckeye Road, then would cross Lower Buckeye Road and SR303L to connect to Cotton Lane at the Elwood Street intersection east of SR303L. The southbound frontage road would terminate at the Elwood TI. A slip ramp from the southbound frontage road crossing under the SR303L freeway to connect to the intersection at Elwood Street would provide access from the frontage road to Cotton Lane. A service ramp north of Elwood Street would provide direct access to northbound SR303L.

Alternative 3:

Figure 2-12 shows the Alternative 3 freeway alignment from Lower Buckeye Road south for the two analysis years. The SR303L/SR30 system interchange would be located just west of Cotton Lane. The system interchange would include HOV direct connectors between the east leg of SR30 and the south leg of SR303L.

Elwood Street would provide access to and from SR303L to the north, with service ramps north of Elwood Street. The frontage roads would extend to Elwood Street. The southbound frontage road would transition to existing Cotton Lane under SR303L and tie into Cotton Lane north of MC 85.

Alternative 5:

Figure 2-13 shows the Alternative 5 freeway alignment from Lower Buckeye Road south for the two analysis years. The SR303L/SR30 system interchange would be located approximately one mile west of Cotton Lane. However, the directional ramps connecting the north leg of SR303L and the east leg of SR30 would parallel the Cotton Lane corridor.. The system interchange would include HOV direct connectors between the east leg of SR30 and the south leg SR303L..

The southbound frontage road would cross SR303L to intersect Elwood Street at grade and on the Cotton Lane alignment. A full TI at Elwood Street would provide access to both north and south SR303L.

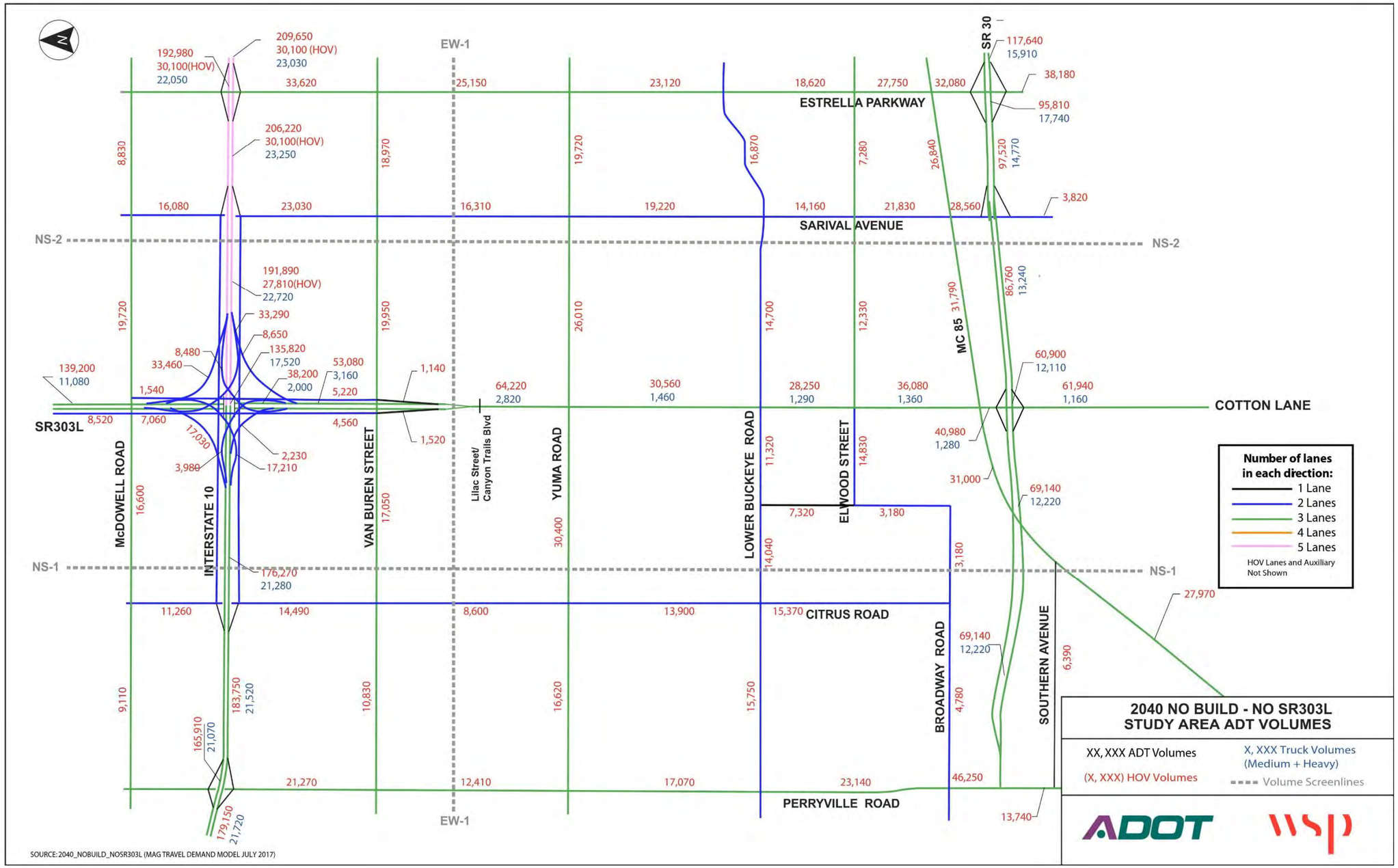


Figure 2-2: Study Area No Build (SR303L) Roadway Network and 2040 Daily Traffic Volumes

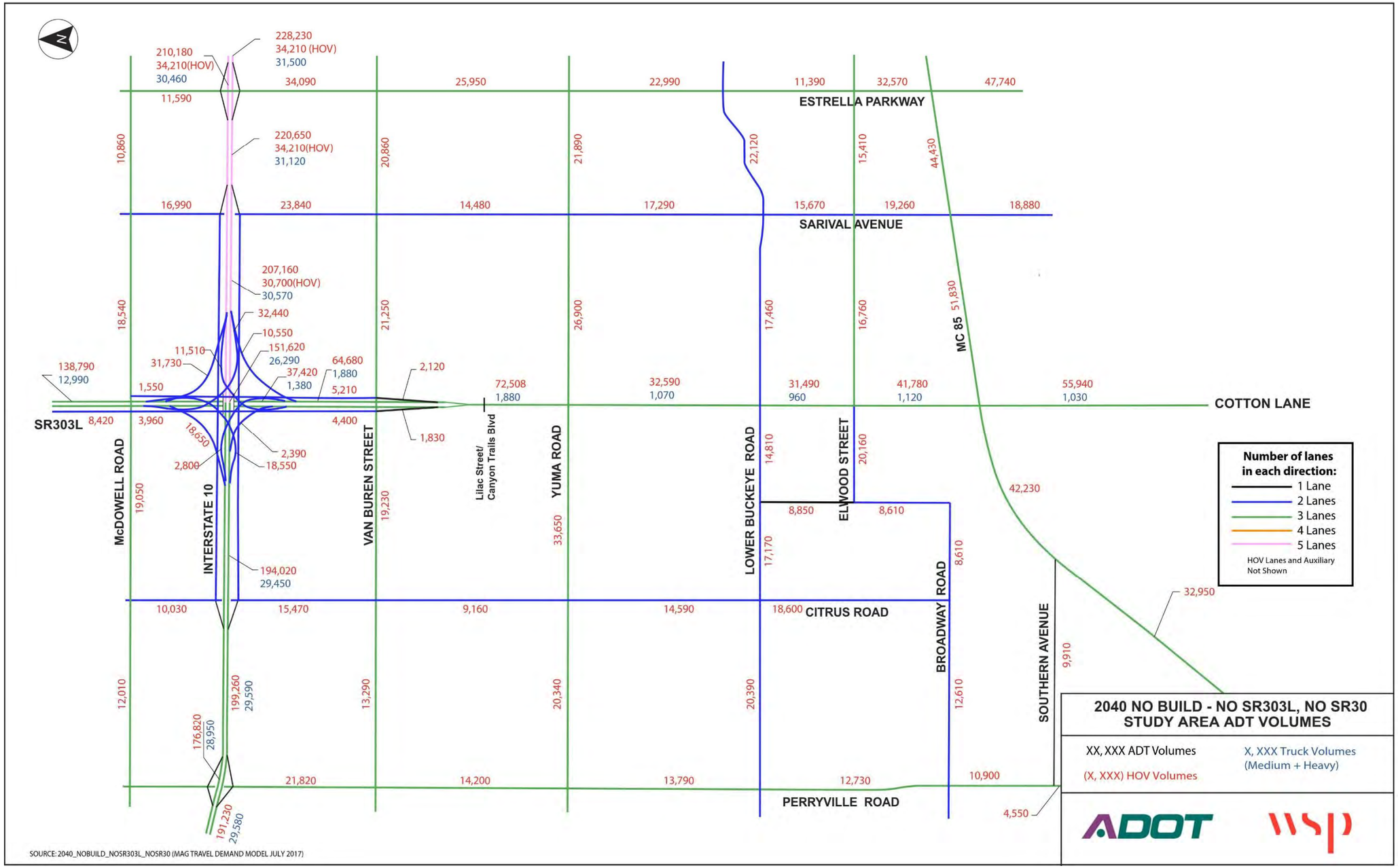


Figure 2-3: Study Area No Build (SR303L and SR30) Roadway Network and 2040 Daily Traffic Volumes

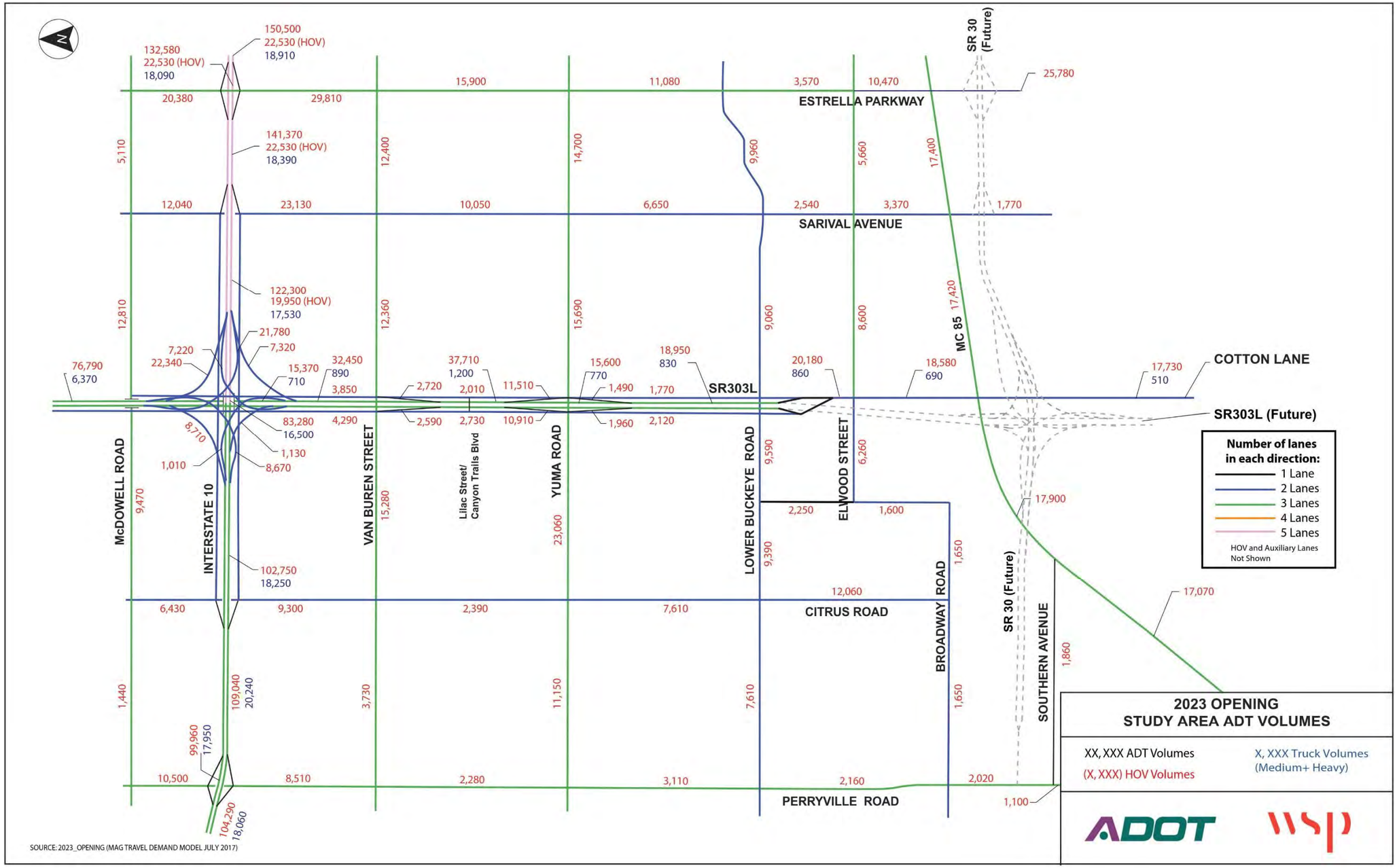


Figure 2-4: Study Area 2023 Opening Year Roadway Network and Daily Traffic Volumes

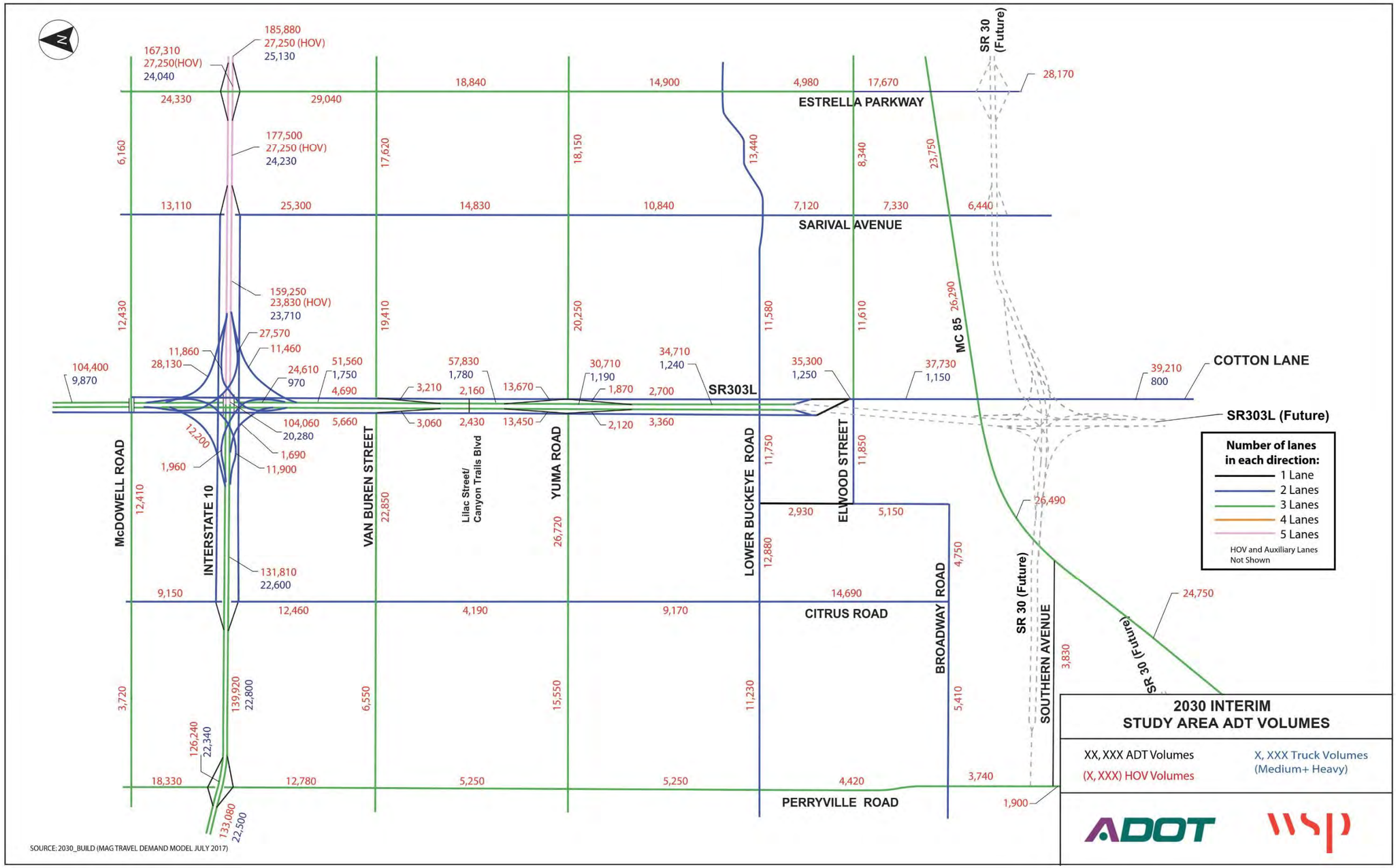


Figure 2-5: Study Area 2030 Interim Roadway Network and Daily Traffic Volumes

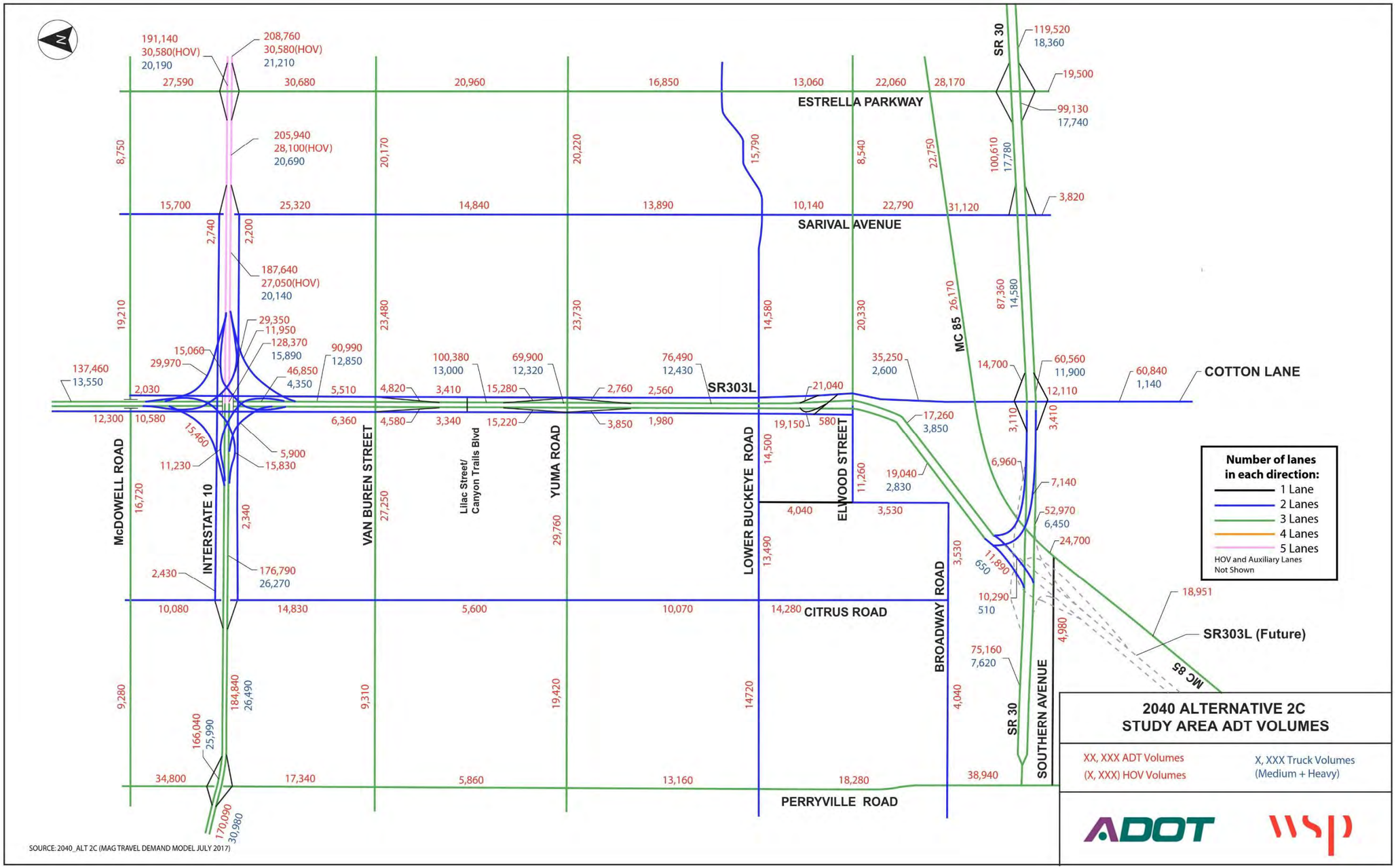


Figure 2-6: Study Area 2040 Build Alternative 2C Roadway Network and Daily Traffic Volumes

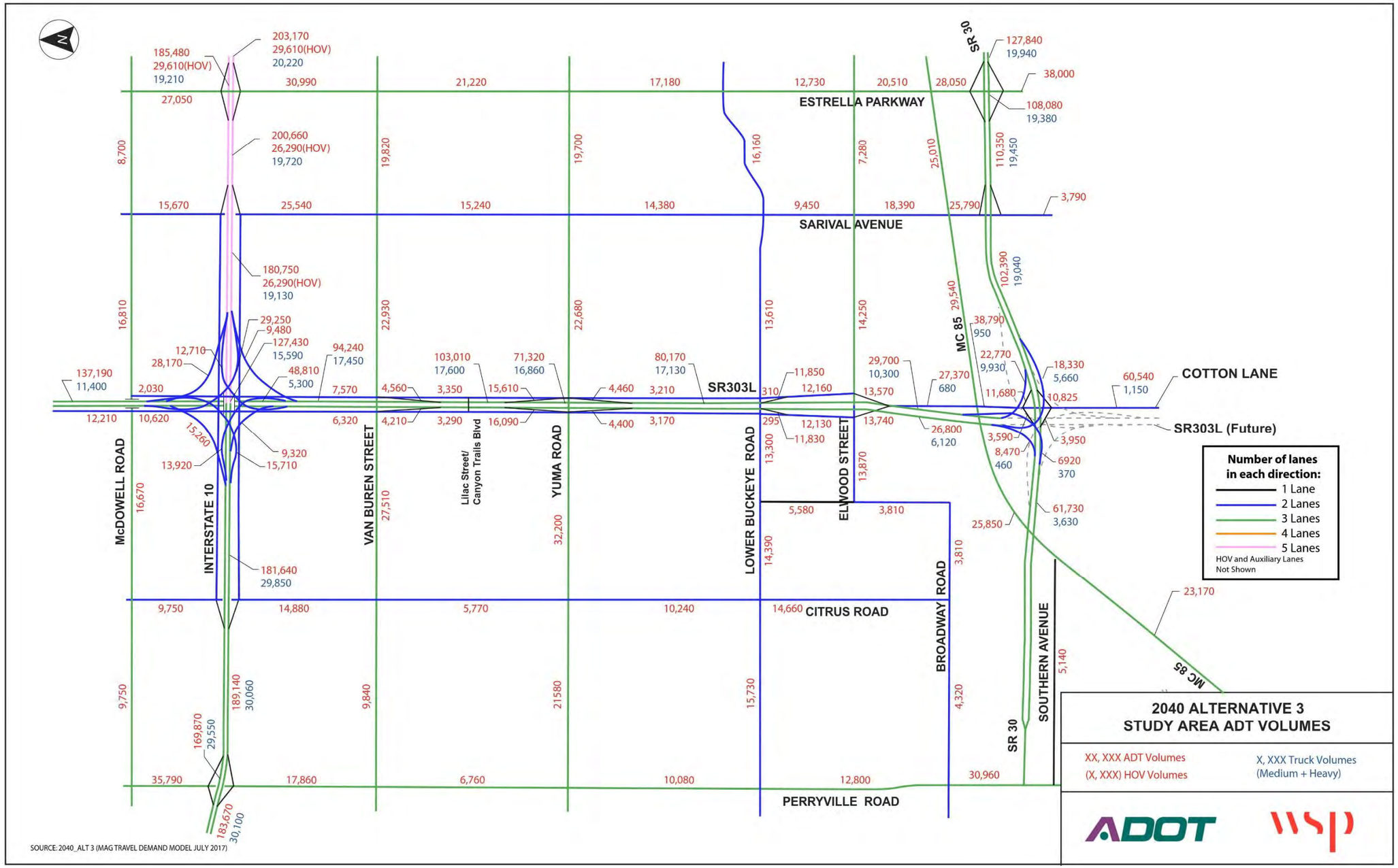


Figure 2-7: Study Area 2040 Alternative 3 Roadway Network and Daily Traffic Volumes

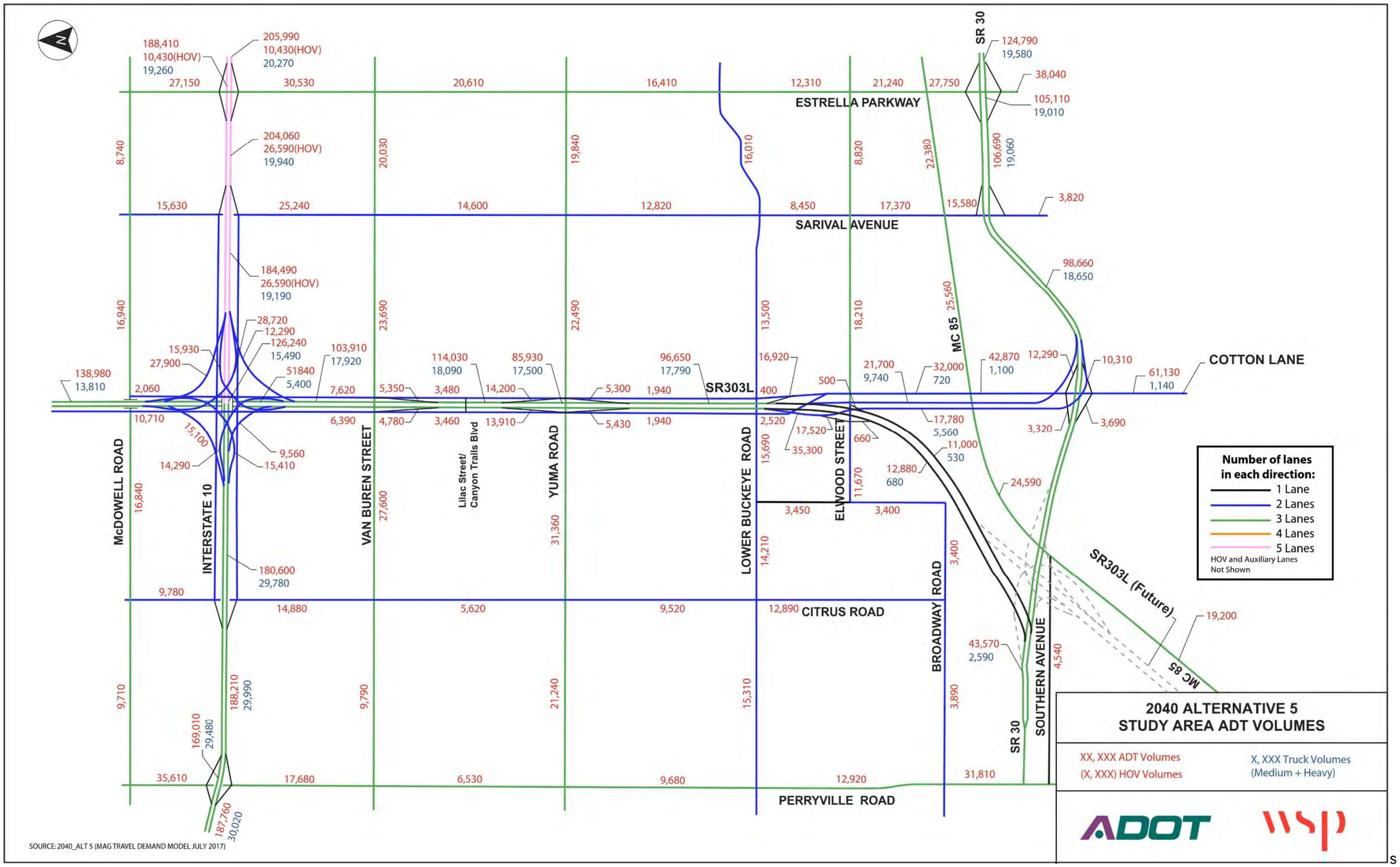


Figure 2-8: Study Area Alternative 5 Roadway Network and Daily Traffic Volumes

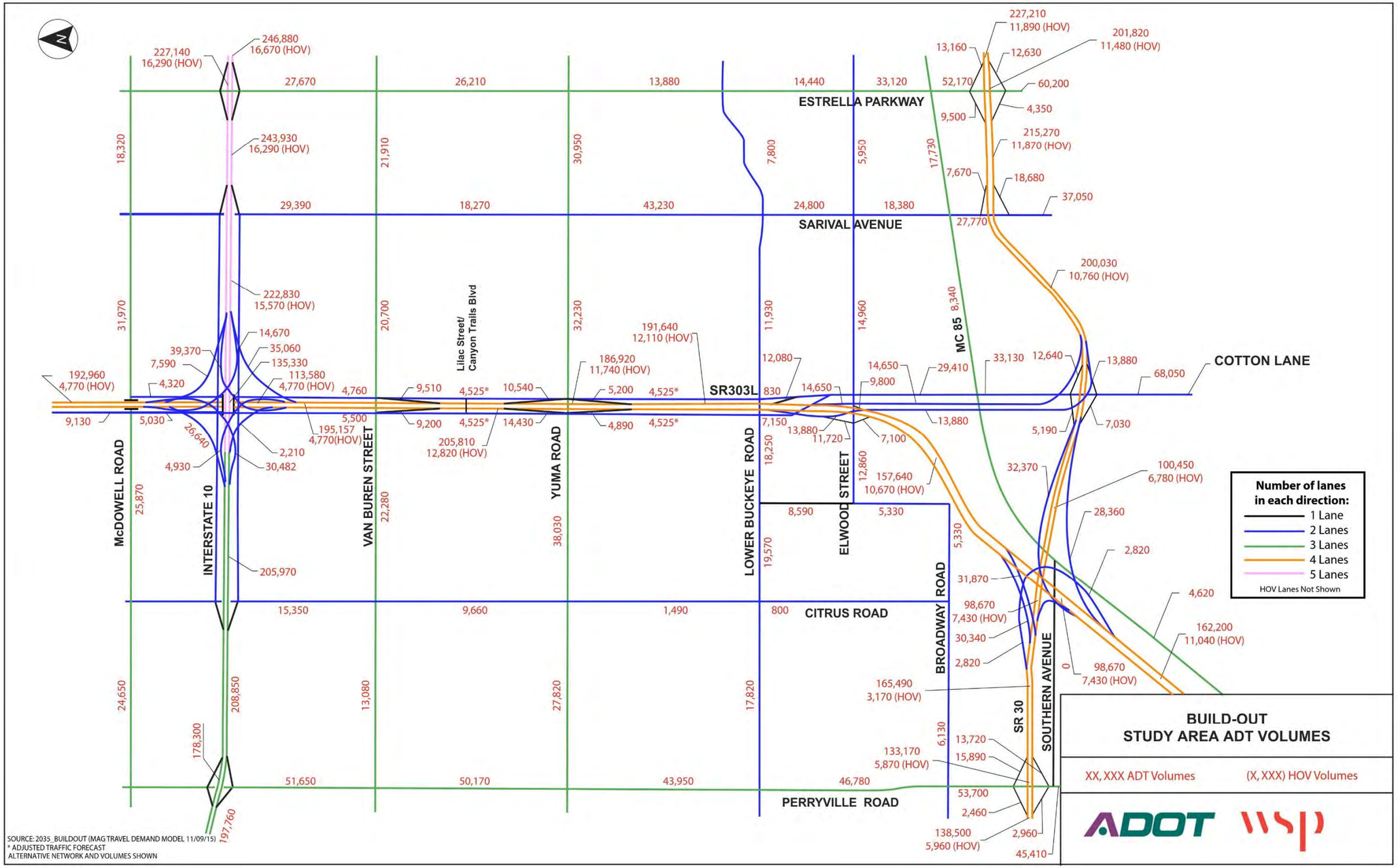


Figure 2-9: Study Area BUILD-OUT Roadway Network and Daily Traffic Volumes

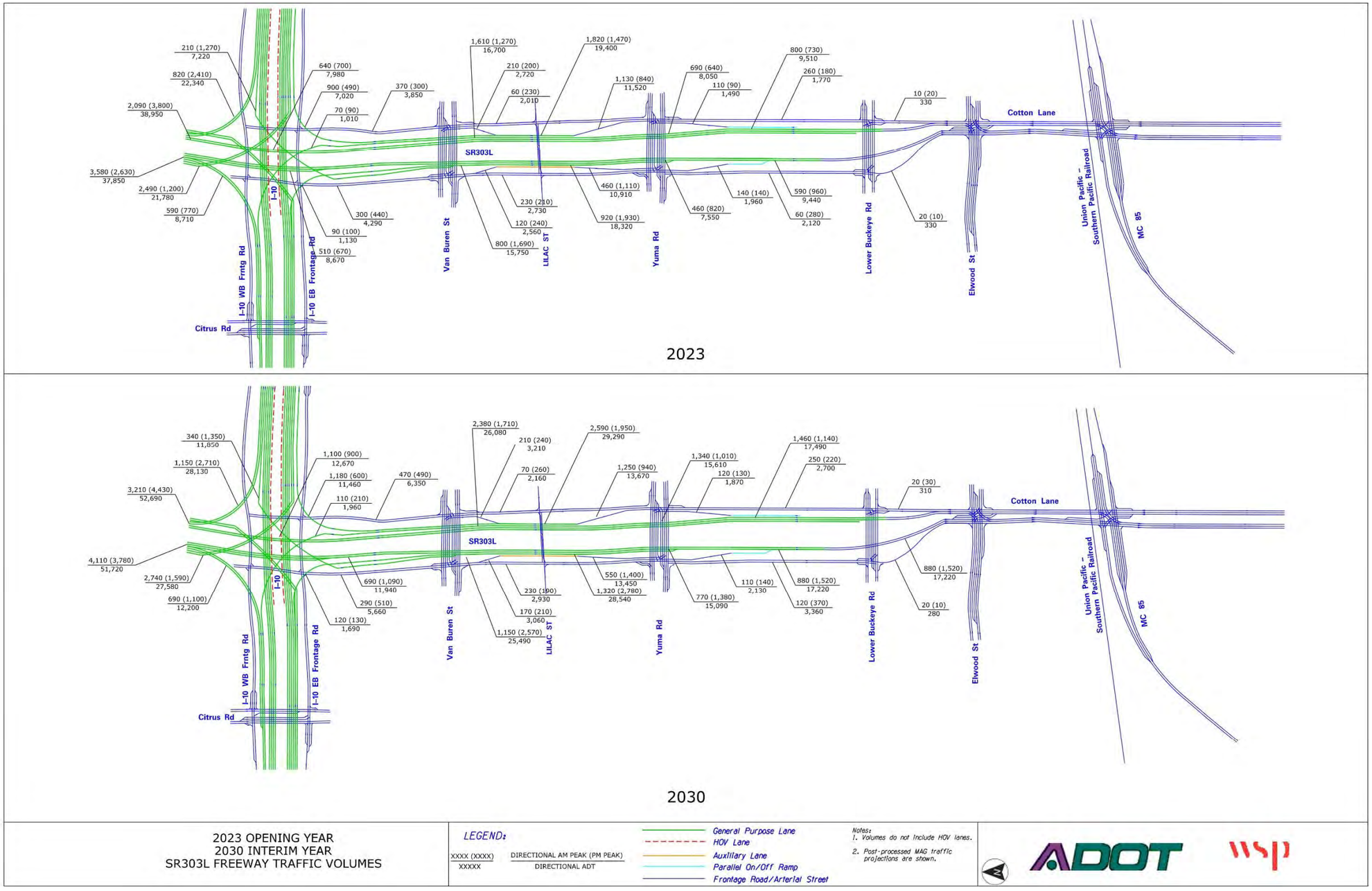


Figure 2-10: SR303L 2023/2030 Freeway Corridor Traffic Volumes

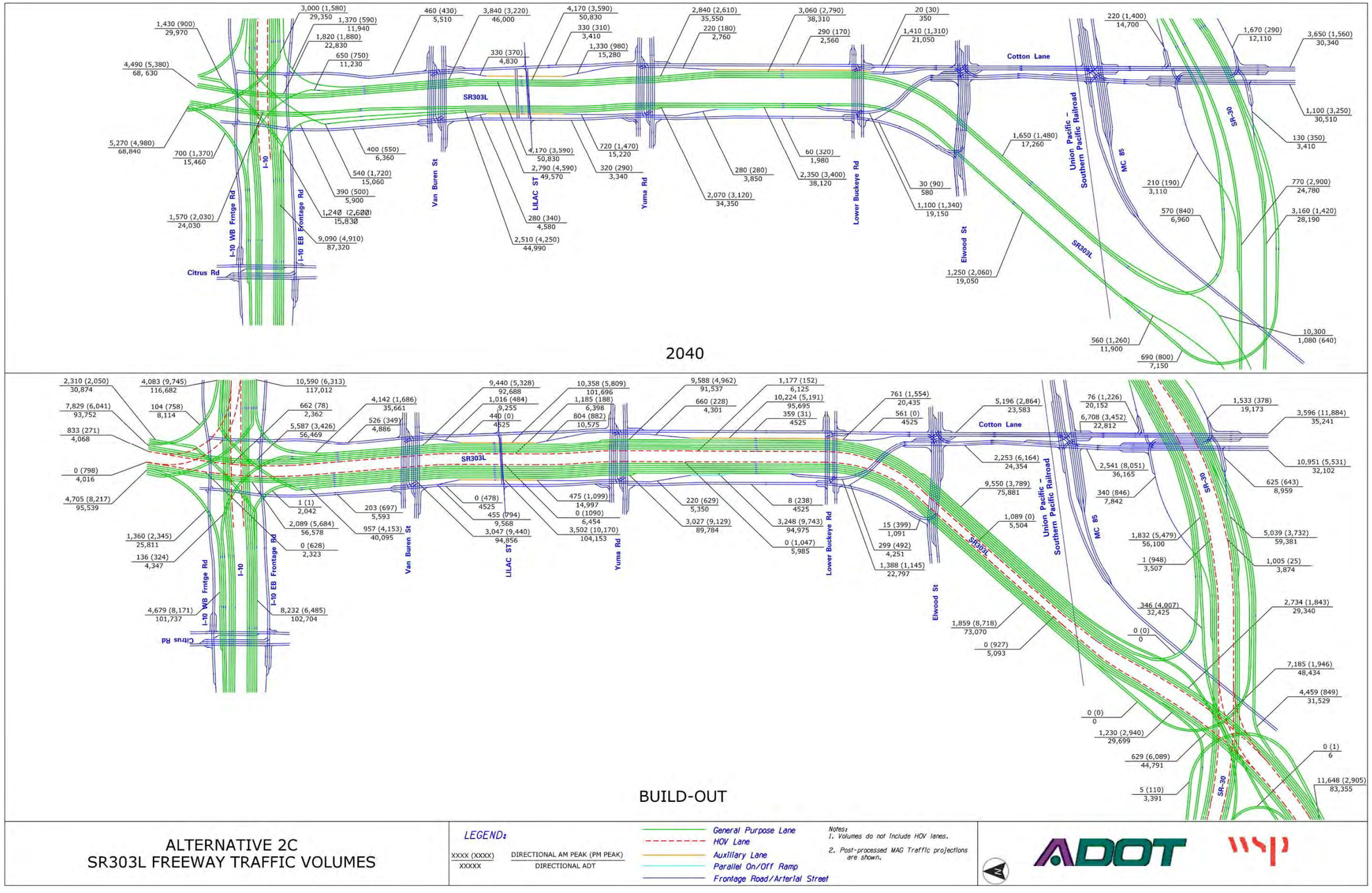


Figure 2-11: SR303L Alternative 2C Freeway Corridor Traffic Volumes

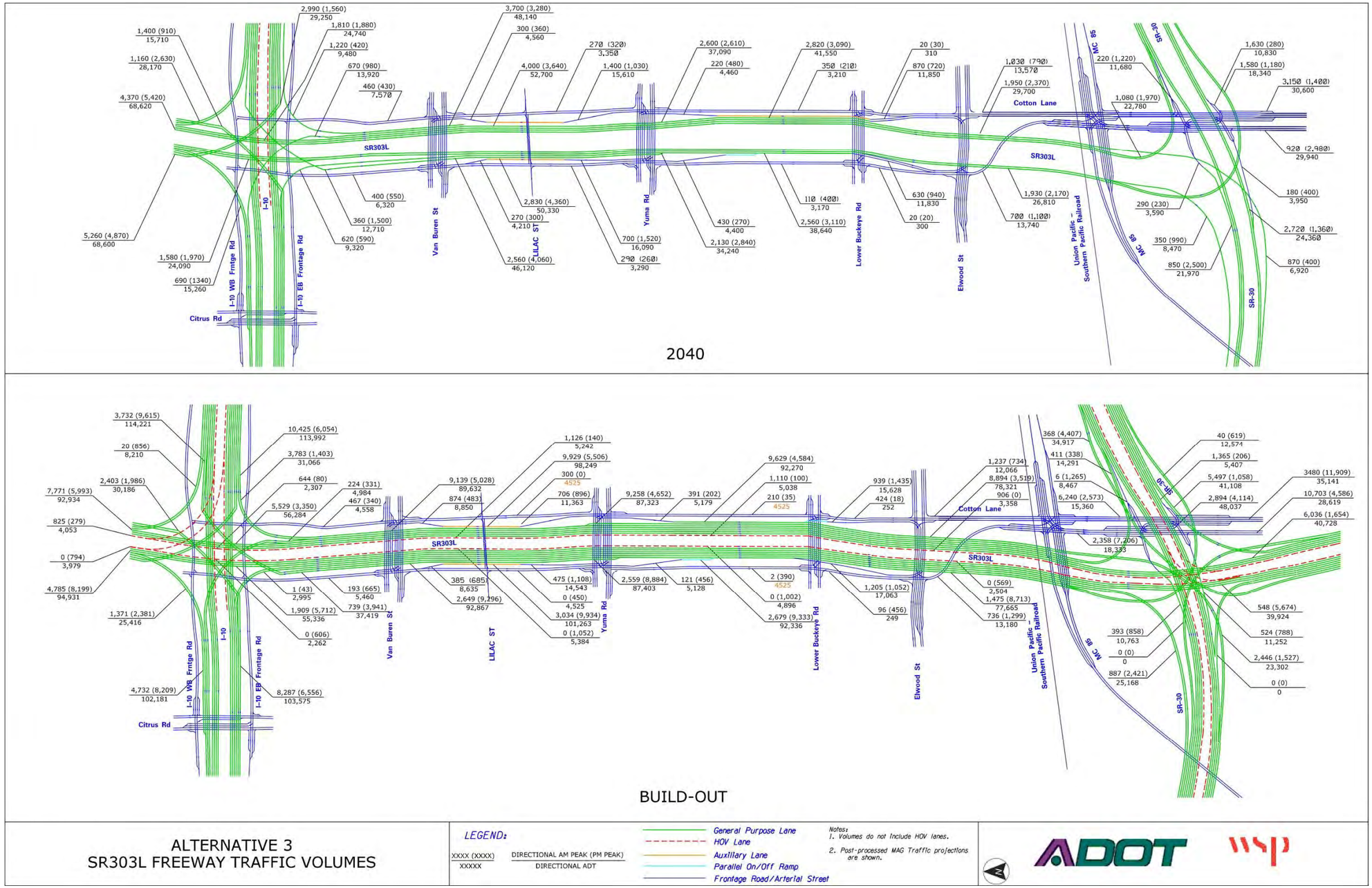


Figure 2-12: SR303L Alternative 3 Freeway Corridor Traffic Volumes

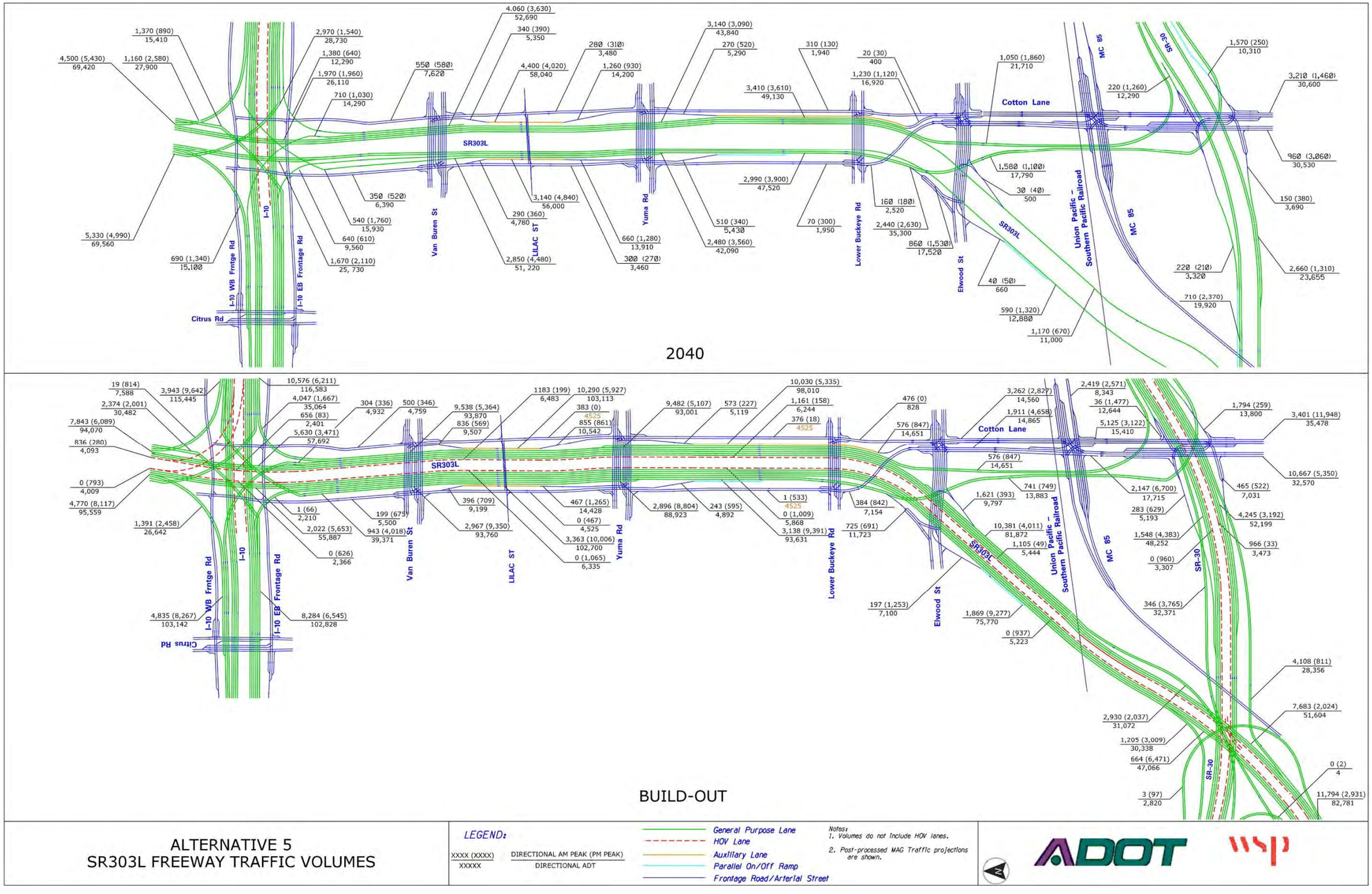


Figure 2-13: SR303L Alternative 5 Freeway Corridor Traffic Volumes

2.2 PEAK HOUR TRAFFIC OPERATIONS

This section documents the design hour freeway traffic volumes for the 2023, 2030 and 2040 traffic conditions. 2040 peak hour turning movement volumes were also developed at all interchange ramp terminal intersections.

The Truck Factor (T) is the percentage of trucks (medium and heavy trucks, FHWA classification of Class 5 through class 13) in the traffic stream. The peak hour truck volume percentages from the MAG Travel Demand Model were used for the peak hour traffic analysis. The Peak Hour Factor (PHF) is calculated as the ratio of the hourly volume to four times the peak 15-minute volume. A PHF of 0.94 was used in the traffic analyses for all future year analyses.

2.2.1 DIRECTIONAL DESIGN HOUR TRAFFIC VOLUMES

The MAG traffic volume projections were reviewed to identify the peak direction of flow in the morning and evening peak hours. MAG provides the peak traffic volumes in periods: 3 hours (AM peak) and 4 hours (PM peak). The peak hour conversion factor was applied to these peak period volumes to obtain directional peak hour traffic volumes for use in the traffic analysis.

2.2.2 SR303L FREEWAY PEAK HOUR TRAFFIC VOLUMES

In the morning peak hour, which generally occurs between 6:00 and 9:00 AM, the peak travel directions were identified as northbound and eastbound. In the evening peak hour, which generally occurs between 2:00 and 6:00 PM, the predominant travel directions were identified to be southbound and westbound. The peak hour volumes presented in Figure 2-11 through Figure 2-13 were used in the freeway peak hour analysis.

2.2.3 RAMP TERMINAL PEAK HOUR TRAFFIC VOLUMES

Figure 2-14 through Figure 2-16 present the 2040 AM and PM peak hour turning movement volumes for the study intersections. The figures also show the turn lane geometry serving the 2040 peak hour traffic volumes.

Level of Service

The level of service (LOS) of a roadway segment is a measure of driver delay, and is a function of traffic volumes, traffic composition, roadway geometry, and intersection traffic control. The methodology utilized to estimate LOS is described in the Transportation Research Board's *Highway Capacity Manual*, Fourth Edition, 2010 Update (HCM). LOS is reported as a letter designation of A through F, which are generally defined as follows:

LEVEL OF SERVICE A represents free flow.

LEVEL OF SERVICE B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable.

LEVEL OF SERVICE C is in the range of stable flow, but marks the beginning of the range in which the operation of individual users becomes significantly affected by others.

LEVEL OF SERVICE D represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience.

LEVEL OF SERVICE E represents operating conditions at or near the capacity level. All speeds are reduced to a low but relatively uniform value.

LEVEL OF SERVICE F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount that can traverse the point.

Figure 2-3, Figure 2-4, and Figure 2-5 show the LOS criteria for freeway basic segments, merge/diverge areas, and signalized intersections, respectively.

The future peak hour operational analysis was completed for the study corridor and intersections using the methodologies of the HCM 2010. The purpose of this analysis is to provide an objective and thorough evaluation of the traffic operations of the proposed SR303L freeway and interchanges within the study corridor.

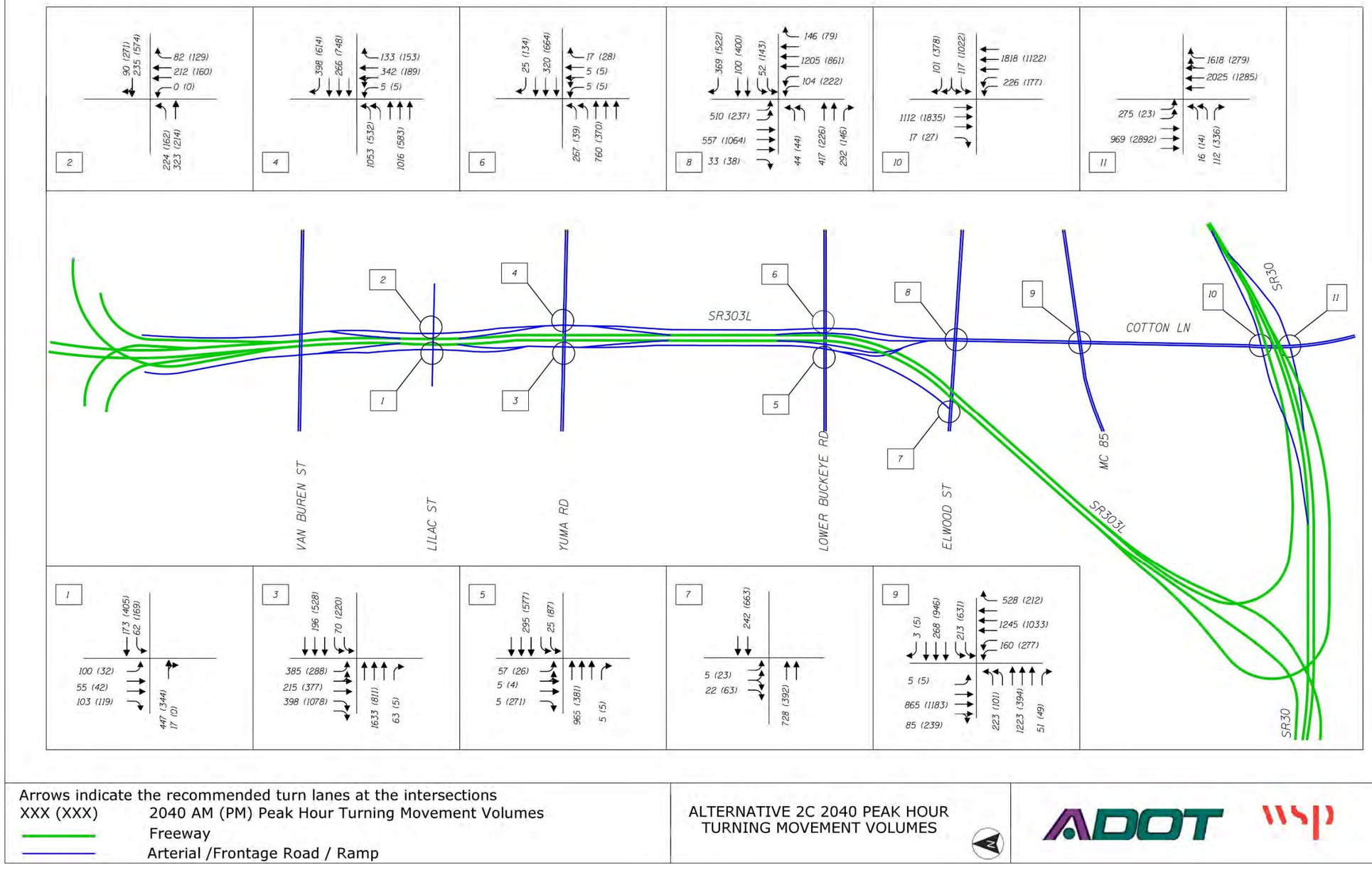


Figure 2-14: SR303L Alternative 2C Ramp Terminal 2040 Peak Hour Traffic Volumes

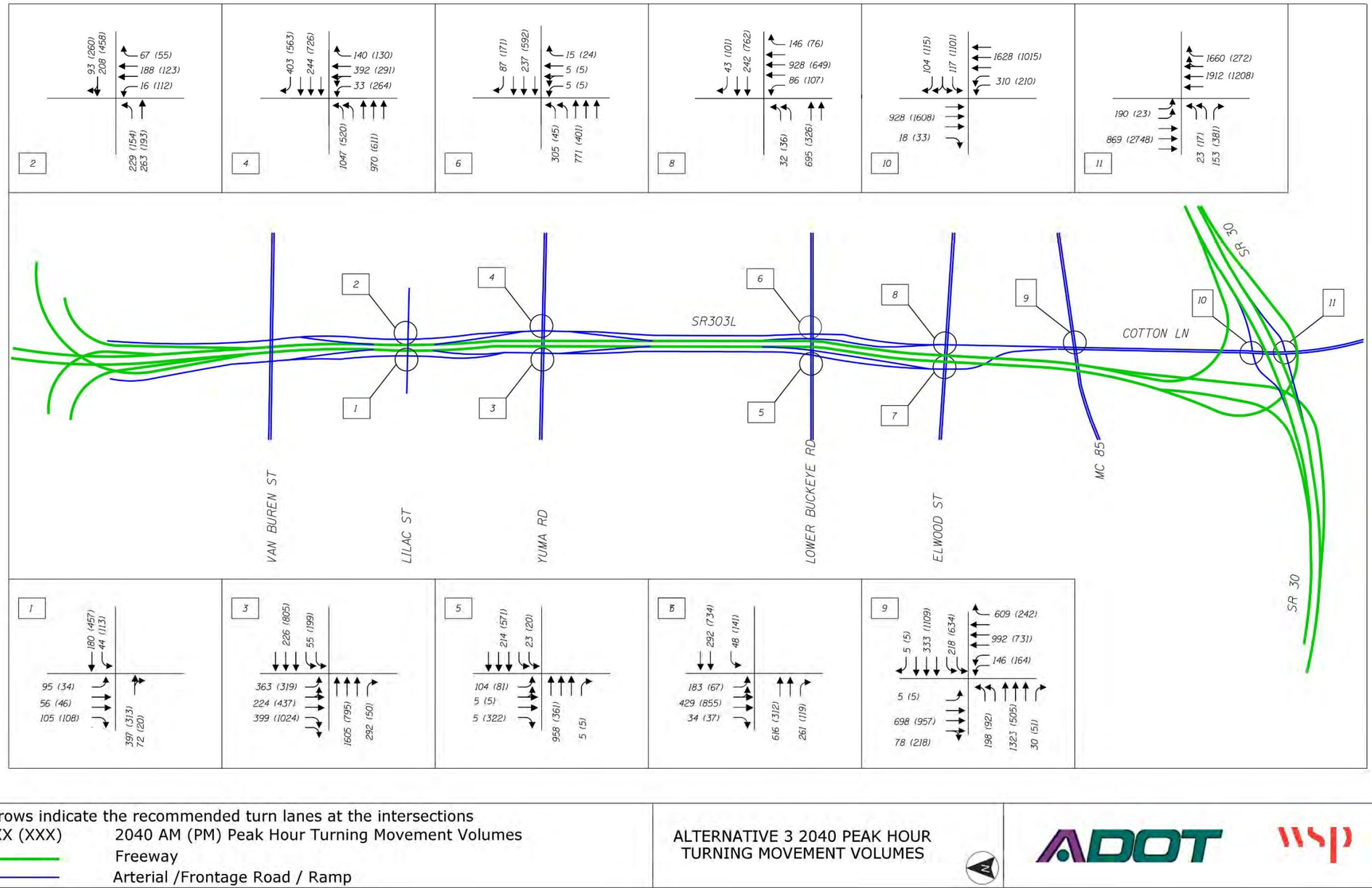


Figure 2-15: SR303L Alternative 3 Ramp Terminal 2040 Peak Hour Traffic Volumes

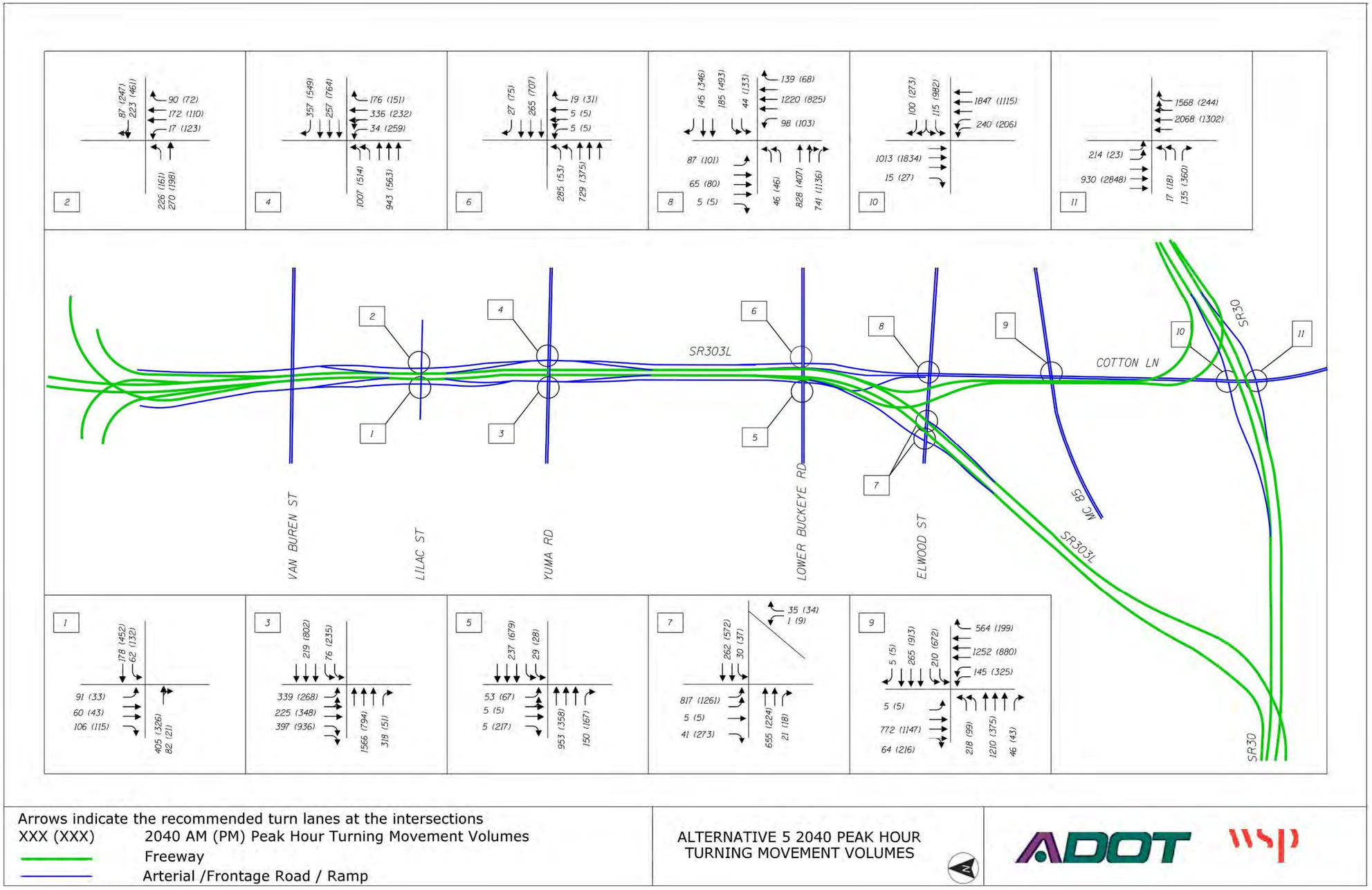


Figure 2-16: SR303L Alternative 5 Ramp Terminal 2040 Peak Hour Traffic Volumes

Table 2-2: Basic Freeway Segment LOS Criteria

Level of Service	*Density (pc/mi/ln)**
A	≤ 11
B	11-18
C	18-26
D	26-35
E	35-45
F	Demand Exceeds Capacity

**passenger cars per mile per lane*

Table 2-3: Ramp Junction Merge/Diverge LOS Criteria

Level of Service	*Density (pc/mi/ln)**
A	≤ 11
B	11-18
C	18~26
D	26-35
E	35-45
F	> 45

**passenger cars per mile per lane*

Table 2-4: Signalized Intersection LOS Criteria

Level of Service	*Density (pc/mi/ln)**
A	<=10
B	>10 - <=20
C	>20 - <=35
D	>35 - <=55
E	>55 - <=80
F	>80

**passenger cars per mile per lane*

2.3 SR303L FREEWAY OPERATIONAL ANALYSIS

2.3.1 2023/2030 SR303L FREEWAY TRAFFIC OPERATIONS

Table 2-5 shows the HCM results for operational analysis with 2023 opening year and 2030 interim year traffic volumes. As shown in the table, SR303L freeway segments including basic, weaving, merge, and diverge areas are projected to operate at LOS C or better during both the morning and evening peak hours for both study years.

2.3.2 2040 SR303L FREEWAY TRAFFIC OPERATIONS

Table 2-6 shows the HCM results for operational analysis with 2040 traffic volumes for each freeway alternative. As shown in the table, SR303L freeway segments including basic, weaving, merge, and diverge areas are projected to operate at a LOS C or better during both the morning and evening peak hour for 2040 traffic volumes.

2.3.3 RAMP TERMINAL 2040 TRAFFIC OPERATIONS

The peak hour signalized intersection analysis was completed for the 2040 peak hour traffic volumes using Synchro 10 traffic analysis software, which applies HCM methodologies. The through lanes on the arterial streets were determined using the City of Goodyear Roadway Functional Class Map. Left-turn and right-turn lanes were identified to provide acceptable level of service at the ramp terminal intersections. A maximum of two turn lanes (left or right) were considered to be required based on the projected traffic demand. The projected operations of ramp terminal intersections were analyzed assuming tight diamond interchanges utilizing the peak hour volumes previously illustrated in Figure 2-1 through Figure 2-16.

Table 2-8 summarizes the freeway peak hour LOS for 2040 build alternative freeway segments. With all the alternatives, the ramp terminals of SR303L and/or frontage road intersection with the arterials of Lilac Street, Yuma Road, Lower Buckeye Road, and Elwood Street are projected to operate at LOS D or better with AM and PM peak hour traffic volumes. The intersection of Cotton Lane and MC85 is projected to operate at LOS D or better with the 2040 traffic volumes. The ramp terminals of SR30 with Cotton Lane will operate at LOS D or better with 2040 traffic volumes.

Table 2-5: SR303L Freeway 2023/2030 Traffic Operations

Segment No.	Segment	Segment Type	2023		2030	
			AM LOS	PM LOS	AM LOS	PM LOS
SOUTHBOUND						
1	Under I-10 to I-10 ES Ramp	Basic	A	A	A	A
2	I-10 ES Ramp to I-10 WS Ramp	Basic	A	A	A	A
3	I-10 WS Ramp	Merge	A	B	B	C
4	I-10 WS Ramp to Lane Drop Over Van Buren St	Basic	A	A	A	A
5	Lane Drop Over Van Buren St to Van Buren St On-Ramp	Basic	A	A	A	B
6	Btwn Van Buren St and Yuma St	Weave	A	A	A	B
7	Yuma Rd Off-Ramp to Lane Drop Over Yuma Rd	Basic	A	A	A	A
8	Lane Drop Over Yuma Rd to Yuma Rd On-Ramp	Basic	A	A	A	A
9	Yuma Rd On-Ramp	Merge	A	A	A	A
10	Yuma Rd On-Ramp Merge to Cotton Lane	Basic	A	A	A	A
NORTHBOUND						
20	Cotton Lane to Lane Add N of Lower Buckeye Rd	Basic	A	A	A	A
21	Lane Add N of Lower Buckeye Rd to Yuma Rd Off-Ramp	Basic	A	A	A	A
22	Yuma Rd Off-Ramp	Diverge	A	A	A	A
23	Under Yuma Rd	Basic	A	A	B	A
24	Yuma Rd On-Ramp	Merge	A	A	A	A
25	Btwn Yuma Rd and Van Buren Rd	Basic	A	A	B	A
26	Van Buren St Off-Ramp	Diverge	A	A	A	A
27	Over Van Buren St	Basic	A	A	A	A
28	I-10 NE Ramp	Diverge	A	A	B	A
29	Btwn I-10 NE Ramp and I-10 NW Ramp	Basic	A	A	A	A
30	I-10 NW Ramp	Diverge	A	A	A	A
31	N of I-10 NW Ramp Diverge	Basic	A	A	A	A

Table 2-6: SR303L Freeway 2040 Traffic Operations

Segment No.	Segment	Segment Type	2040 ALt 2c		2040 alt 3		2040 alt 5	
			AM LOS	PM LOS	AM LOS	PM LOS	AM LOS	PM LOS
SOUTHBOUND								
1	Under I-10 to I-10 ES Ramp	Basic	B	B	B	B	B	B
2	I-10 ES Ramp to I-10 WS Ramp	Basic	A	B	A	B	B	B
3	I-10 WS Ramp to Van Buren On-Ramp	Basic	A	B	A	B	A	B
4	Btwn Van Buren St and Yuma Rd	Weave	B	C	B	B	B	C
5	Yuma Rd Off-Ramp to Lane Drop Over Yuma Rd	Basic	A	B	A	A	A	B
6	Lane Drop Over Yuma Rd to Yuma Rd On-Ramp	Basic	A	B	A	B	B	C
7	Yuma Rd On-Ramp	Merge	B	B	B	B	B	C
8	Yuma Rd On-Ramp to Elwood St Off-Ramp	Basic	B	B	B	B	-	-
8(Alt 5)	Yuma Rd On-Ramp to SR30 EB Ramp	Basic	-	-	-	-	B	C
9*	Elwood St Off-Ramp	Diverge	B	C	B	C	-	-
10*	Elwood St Off-Ramp to SR30 EB Off-Ramp	Basic	A	B	A	B	-	-
11	SR30 EB Off-Ramp	Diverge	B	B	B	B	B	C
12(Alt 5)	SR30 EB Off-Ramp	Basic	-	-	-	-	B	A
12	SR30 WB Off-Ramp	Basic	A	A	A	A	A	A
NORHBOUND								
20	SR30 WB On-Ramp	Basic	A	A	A	B	A	B
21	SR30 EB On-Ramp	Basic	A	A	A	A	A	A
22	Btwn SR30 EB On-Ramp and Elwood St On-Ramp	Basic	A	A	A	B	A	A
23	Elwood St On-Ramp	Merge	B	B	B	B	B	B
24	Btwn Elwood St and Yuma Rd	Basic	A	A	A	A	A	B
25	Yuma Rd Off-Ramp	Diverge	A	A	A	B	B	B
26	Over Yuma Rd	Basic	A	A	A	A	B	B
27	Btwn Yuma Rd On and Van Buren St Off-Ramp	Weave	B	B	B	B	B	B
28	Van Buren Off-Ramp to Lane Add Over Van Buren St	Basic	B	B	B	B	B	B
29	Lane Add Over Van Buren St to I-10 NE Ramp	Basic	B	A	B	A	B	B
30	I-10 NE Ramp	Diverge	B	A	B	A	B	A
31	Btwn I-10 NE Ramp and I-10 NW Ramp	Basic	B	B	B	B	B	B
32	I-10 NW Ramp	Diverge	A	A	A	B	B	B
33	N of I-10 NW Ramp Diverge	Basic	B	B	B	B	B	B

Table 2-7: Ramp Terminal Signalized Intersection Traffic Operations

Intersection		2040 ALT 2C		2040 ALT 3		2040 ALT 5	
		AM LOS	PM LOS	AM LOS	PM LOS	AM LOS	PM LOS
SR303L Southbound Frontage Road	Lilac St//Canyon Trails Blvd	B	B	B	B	B	B
SR303L Northbound Frontage Road	Lilac St/Canyon Trails Blvd	B	C	B	C	C	C
SR303L Southbound Ramps	Yuma Rd	C	C	C	C	C	C
SR303L Northbound Ramps	Yuma Rd	C	C	C	C	C	C
SR303L Southbound Frontage Rd	Lower Buckeye Rd	B	C	B	B	A	B
SR303L Northbound Frontage Rd	Lower Buckeye Rd	B	B	B	B	B	B
SR303L Southbound Frontage Rd	Elwood St	B	A	B	C	-	-
SR303L Southbound Ramps	Elwood St	-	-	-	-	B	A
SR303L Northbound Off Ramp	Elwood St	-	-	-	-	B	B
SR303L Northbound Frontage Rd	Elwood St	C	C	C	B	D	C
Cotton Lane	MC85	C	D	C	C	D	D
SR30 Westbound Ramps	Cotton Lane	A	C	A	C	A	C
SR30 Eastbound Ramps	Cotton Lane	B	D	B	D	B	D

2.4 HISTORICAL CRASH DATA

A crash analysis was completed to evaluate the crash patterns and trends on the roadways within the study limits. Crash data were obtained from ADOT for the most recent five-year period between January 1, 2012, and December 31, 2016. Crash data were researched for the Cotton Lane corridor from Interstate 10 to the Buckeye Canal.

A total of 84 crashes were reported within the study area. Table 2-8 provides a summary of the crash data. Two reported fatalities occurred in 2015 within the study area. The first fatal crash was an angle collision at the intersection of MC 85 and Cotton Lane. The second crash was a single vehicle collision on Cotton Lane near I-10. A total of 30 injury-related crashes took place. The remaining 52 crashes resulted in property damage. Cotton Lane experienced a peak crash rate of 1.62 crashes per million vehicle miles traveled (MVMT), within the five-year study period. This is lower than the statewide average of 1.78 crashes per MVMT (data from Arizona Motor Vehicle Crash Facts 2012). The highest number of crashes occurred in 2015 and 2016.

Table 2-8: Cotton Lane Crash and Severity Summary, 2012-2016

Severity	2012	2013	2014	2015	2016	Total
Property Damage Only	12	5	11	13	11	52
Minor/ Non-Incapacitating Injury	6	3	5	4	9	27
Incapacitating Injury	1	-	1	1	-	3
Fatalities	-	-	-	2	-	2
Total Crashes	19	8	17	20	20	84
Crash Rate	1.54	0.65	1.38	1.62	1.62	1.36

Note: Crash rate equals the number of crashes per million vehicle miles travelled (MVMT) for the period between January, 2012, and December 2016. MVMT were calculated using the average ADT of Cotton Lane from I-10 to MC85 (8,800 vehicles per day).

The crash data were also categorized by collision manner, first harmful contact, and environmental conditions to see if any apparent trends could be identified. As shown in Table 2-10 the most common type of accidents included rear-end collisions followed by left-turn collisions, angle collisions, and single-vehicle collisions. First harmful contact is defined as the first hazard encountered by the initiating vehicle in a crash. As presented in Table 2-10, the most common first harmful contact along Cotton Lane was another vehicle (56 percent). As shown in Table 2-11, a majority of crashes occurred in daylight (70 percent), and during clear weather (90 percent).

Table 2-9: Cotton Lane Crashes by Harmful Contact, 2012-2016

Collision Manner	2012	2013	2017	2015	2016	Total
Rear End	8	1	5	6	8	28
Left Turn	4	2	6	5	2	19
Angle	4	1	3	6	4	18
Single Vehicle	3	-	3	2	2	10
Sideswipe Same Direction	-	1	-	1	2	4
Sideswipe Opposite Direction	-	1	-	-	2	3
Unknown	-	1	-	-	-	1
Other	-	1	-	-	-	1
Total	19	8	17	20	20	84

Table 2-10: Cotton Lane Crashes by First Harmful ContactContact, 2012-2016

First Harmful	2012	2013	2017	2015	2016	Total
Motor Vehicle In Transport	10	5	6	13	13	47
Not Reported	7	3	9	5	6	30
Overturn Rollover	1	-	-	-	1	2
Concrete Traffic Barrier	1	-	-	1	-	2
Traffic Sign Support	-	-	1	-	-	1
Fence	-	-	-	1	-	1
Traffic Signal Support	-	-	1	-	-	1
Total	19	8	17	20	20	84

Table 2-11: Cotton Lane Crashes by Environmental Conditions, 2012-2016

Environmental Conditions	2012		2013	2017	2015	2016	Total
Daylight Conditions							
Daylight	12		7	13	15	12	59
Dark Lighted	4		-	3	1	7	15
Dark Not Lighted	2		-	1	1	1	5
Dusk	1		1	-	1	-	3
Dawn	-		-	-	2	-	2
Weather Conditions							
Clear	18		8	16	16	17	75
Cloudy	1		-	-	2	3	6
Rain	-		-	1	2	-	3
Total	19		8	17	20	20	84

2.5 CONCLUSIONS

This Traffic Analysis documented the existing traffic conditions in the study area and presented an analysis of the future traffic conditions for the SR303L freeway with 2023 opening year, 2030 interim year, and 2040 design year traffic volumes, and traffic volumes with Build-Out population and employment. The following observations were made from the traffic analysis:

- The existing roadway network in the study area operates below its current capacity. However, with the completion of the SR303L freeway north of I-10 and planned development in and adjacent to the study area, traffic volumes in the study area arterials will increase.
- A review of crash records for the Cotton Lane corridor revealed a total of 84 crashes in a five-year period (2012-2016) with two fatal and 34 crashes resulting in injuries. A crash rate of 1.62 on Cotton Lane is lower than the statewide average crash rate of 1.78.
- Substantial growth is anticipated in the study area, as planned by the City of Goodyear. The population in the study area regional analysis zones is projected to grow by more than 226 percent from 2017 to 2040. Employment in the study area regional analysis zones is projected to grow more than by 133 percent from 2017 to 2040.
- With the construction of the SR303L freeway, the 2040 daily traffic volumes on the north-south arterials would be reduced by 76,530 vpd and by at least 41,200 vpd on the east-west arterials. This indicates a driver would prefer free-flowing freeway travel over the arterials with interrupted flow conditions.
- The proposed frontage roads will maintain the required access to local neighborhoods and Cotton Lane south of Elwood Street.
- Alternatives 2C and 5 provide a direct ramp connection for southbound off-ramp traffic to Cotton Lane. With Alternative 3, traffic accessing Cotton Lane would use the Elwood Street TI southbound ramp terminal to turn onto Elwood Street to connect to Cotton Lane.
- During the morning peak hour, the northbound SR303L freeway and ramps will experience highest traffic volumes; and during the evening peak hour, the southbound SR303L freeway and ramps will experience highest traffic volumes.
- The SR303L freeway with three general purpose lanes in each direction will operate within the planned capacity for a LOS D or better until 2045. Additional freeway capacity will be needed after 2045.
- The MAG Travel Demand Model runs for the Build-Out population and employment conditions indicated higher traffic volumes between the south leg of SR303L and the east leg of SR30 at the SR303L/SR30 system TI.
- The SR303L freeway segments are expected to operate at LOS C or better with the interim SR303L freeway network for the 2023 opening year and through year 2030 projected traffic volumes.
- The SR303L freeway segments are expected to operate at LOS C or better with 2040 traffic volumes and the SR30 freeway connection.
- All the study area intersections are expected to operate at LOS D or better with the proposed intersection capacity and 2040 peak hour traffic volumes.
- There is not a significant peak hour LOS difference between the three alternatives.

3 ASR LOCATION ANALYSIS

3.1 INTRODUCTION

The SR303L study process involved two phases of development. Phase 1, an Alternative Selection Report (ASR) and an Environmental Overview (EO), included agency and public scoping, environmental studies, conceptual corridor alternatives development, and evaluation. Phase 1 is complete and the recommendations were carried forward to Phase 2.

Phase 2, a Location and Design Concept Report (L/CDR), associated with the Environmental Assessment (EA), refined and evaluated the selected alternatives and selected a Build Alternative with an implementation plan.

A summary of the Phase 1 results is presented in this section. The Phase 2 analysis and results are presented in Section 4.

3.2 DESCRIPTION OF STUDY SEGMENTS

For alternative evaluation purposes, the study corridor was divided into two Segments; Segment 1 (Van Buren Street to Lower Buckeye Road) and Segment 2 (Lower Buckeye Road to SR30). To begin the Phase 1 study process, corridors 1,000 to 1,200 feet wide were placed within the study limits that met the design criteria requirements. The corridors were shown as broad band widths that contain the entire freeway footprint including frontage roads, service interchanges, Loop 303 Outfall Channel, and the SR303L/SR30 system interchange. The additional space also allows for different alignments to be considered and refined during the DCR process.

3.3 ASR 2008 BUILD ALTERNATIVES

The SR303L and SR30 are planned to be a fully access-controlled, grade-separated, multi-lane freeways. The ultimate facilities will provide four general purpose lanes and one HOV lane in each direction, and auxiliary lanes (where needed) between interchanges. Cotton Lane will be reconfigured as frontage roads between Van Buren Street and Lower Buckeye Road. South of Lower Buckeye Road, the southbound frontage road will transition to the existing Cotton Lane and northbound Cotton Lane will transition to the frontage road. Initial funding under the RTP would provide for six-lane urban freeways with auxiliary lanes between interchanges. The SR303L extension south of SR30 was assumed to be along a Rainbow Valley corridor, although funding for its construction is not included in the RTP.

3.3.1 ASR STUDY AREA

The study area, shown in Figure 3-1 can be described by its two segments. For Segment 1 in the northern portion of the study area, the limits are defined by I-10 to the north, 165th Avenue on the east, 176th Avenue on the west, and Lower Buckeye Road to the south. For Segment 2 in the southern portion of the study, the limits are defined as Lower Buckeye Road to the north, Sarival Avenue on the east and Jackrabbit Trail on the west with the southern limit being the Gila River.

3.3.2 ASR CORRIDOR ALTERNATIVES

For Segment 1 between Van Buren Street and Lower Buckeye Road, the Cotton Lane corridor is common for all segments.

For Segment 2 from Lower Buckeye Road to the Gila River, six corridors were identified within the study limits. At Lower Buckeye Road, the corridors diverge from Cotton Lane with alternatives leading to the south, southwest or southeast to tie into the future SR30 freeway. The corridor location of SR30 had not been finalized; however, all alternatives had a common corridor location crossing Cotton Lane south of the Buckeye Canal and north of the APS/SRP transmission lines. The location of the westward extension of SR30 had not been established.

The six alternative corridors for Segment 2 are displayed in Figure 3-1. The corridors were identified on a basis of avoidance of existing and planned development and compatibility with land use and transmission corridors. Initial evaluations were based on out-of-direction travel, parallel freeway length, overall freeway length, and land use impacts. The six corridors are described in Table 3.1.

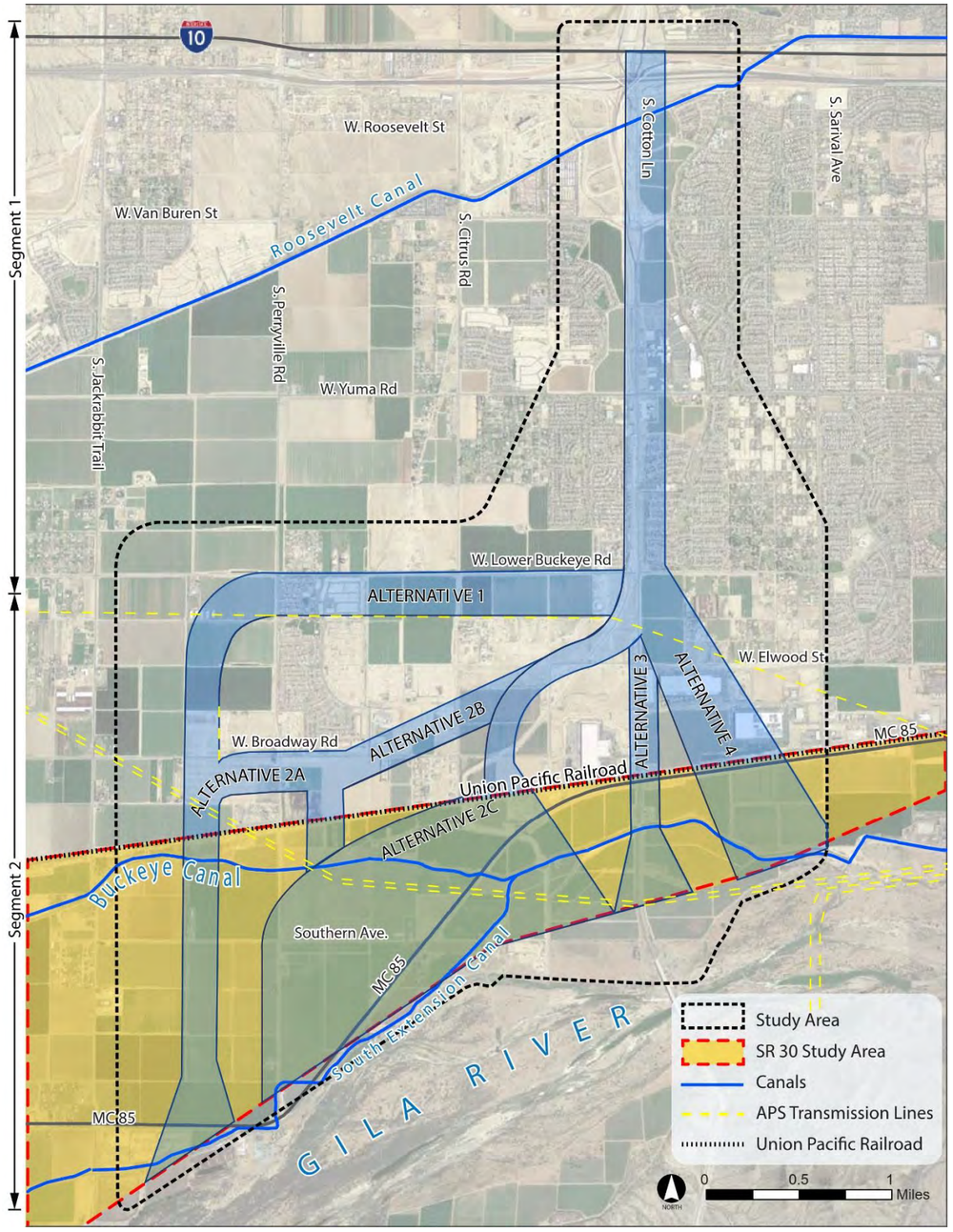


Figure 3-1: ASR Study Area and Corridor Alternatives

Table 3-1: Initial ASR Alternatives – Segment 2

Alternative	Description	Develop in More Detail
Segment 2: Lower Buckeye Road to SR30		
1	Proceeds west from Cotton Lane between Lower Buckeye Road and an APS transmission line, and then turns south along the mid-section line between Perryville Road and Jackrabbit Trail to SR30	No
2A	Proceeds west-southwest from Cotton Lane at Lower Buckeye Road to Broadway Road, then parallels the south side of Broadway Road to 191st Avenue, where it would turn south to SR30	No
2B	Proceeds west-southwest from Cotton Lane at Lower Buckeye Road to Broadway Road, where it would turn south to follow 183rd Avenue to SR30	No
2C	Proceeds southwest from Cotton Lane at Lower Buckeye Road to Elwood Road, where it turns south midway between 175th Avenue and Citrus Road and continues to SR30	Yes
3	Follows the Cotton Lane corridor from Lower Buckeye Road to SR30	Yes
4	South of Lower Buckeye Road, the corridor heads southeast to SR30	No
5	A hybrid combining Alternatives 2C and 3. SR303L follows 2C while directional ramps connecting to SR30 to and from the east utilize the Alternative 3 corridor	Yes

3.3.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER STUDY IN THE ASR

After preliminary evaluation of the six corridors, Corridors 1, 2A, and 2B were removed from further consideration due to the extent of out-of-direction travel required for the South-to-East and West-to-North movements, and an additional hybrid Alternative 5 was added for consideration. This alternative uses the Alternative 2C SR303L alignment, with system ramps for South to East and West to North movements added within the Alternative 3 corridor.

Alternatives 1, 2A, and 2B were removed from further consideration for the following reasons:

- All three alternatives would result in lengthy out-of-direction travel for the South to East and West to North movements from SR303L to SR30.
- Each of these alternatives would create a two- to three-mile parallel facility between SR30 and I-10, which would reduce the intended purpose of SR30 to serve as a reliever route for I-10 traffic.
- The greater roadway length of each of these alternatives would have higher costs compared to the other shorter alternatives.
- Alternative 1 would substantially impact a planned large residential development throughout its Cotton Lane to Perryville Road segment.
- None of these alternatives would be consistent with the Goodyear General Plan.

An Evaluation Matrix for Alternatives 2C, 3, 4, and 5 was developed. Alternatives 3 and 4 were eliminated. Alternatives 2C and 5 were recommended to be carried forward in the L/DCR.

Alternative 3 was not carried forward into detailed study for the following reasons:

- The location of the TI at SR30 under this alternative would not provide route continuity with a potential future extension of SR303L from SR30 to MAG's proposed Hassayampa Freeway south of the Gila River, as proposed in the RTPFP.
- Poor connectivity between HOV lanes north and south of SR30 would result because of the split traffic interchanges.
- Alternative 3 would not be consistent with the Goodyear General Plan relative to ongoing and future development plans east of Cotton Lane.

Alternative 4 was not carried forward into detailed study for the following reasons:

- The location of the system TI at SR30 for this alternative would not provide route continuity with a potential future extension of SR303L from SR30 to MAG's proposed Hassayampa Freeway south of the Gila River, as proposed in the RTPFP.
- Poor connectivity between HOV lanes north and south of SR30 would result because of the split traffic interchanges.
- Recently constructed industrial development would be displaced, thus increasing overall project costs.
- Alternative 4 would not be consistent with the Goodyear General Plan relative to ongoing and future development plans east of Cotton Lane.

Alternative 2C was carried forward for the following reasons:

- Utilizes the reserved right-of-way corridor.
- Reduces impacts to commercial and residential development plans.
- The Stack system TI provides SR303L continuity to the south.
- Supported by local planning and governmental agencies.

Alternative 5 was carried forward for the following reasons:

- Utilizes the reserved right-of-way corridor.
- Allows for the south half of a TI at Elwood Street.
- Reduces impacts to commercial and residential development plans.
- Eliminates out of direction travel.
- The Stack system TI provides SR303L continuity to the south.
- Supported by local planning and governmental agencies.

4 DESIGN CONCEPT ALTERNATIVES

4.1 INTRODUCTION

The SR303L study process involved two phases of development. Phase 1, an Alternative Selection Report and an Environmental Overview, included agency and public scoping, environmental studies, conceptual corridor alternatives development, and evaluation. Phase 1 is complete and the recommendations were carried forward to Phase 2.

Phase 2, a Location and Design Concept Report associated with the Environmental Assessment refined and evaluated the recommended alternatives and selected a Build Alternative with an implementation plan.

A summary of the Phase 1 results presented in Section 3. The Phase 2 analysis and results are presented in this section.

4.2 LOCATION AND DESIGN CONCEPT REPORT ALTERNATIVES DEVELOPMENT

Following completion of the ASR, a more detailed engineering concept was developed for Alternatives 2C and 5. While coordinating the development of the SR303L/SR30 system interchange, concerns were raised relative to the siting of the SR303L southern extension crossing of the Gila River due to environmental restrictions limiting crossing locations. A separate river crossing analysis was performed showing two possible corridors across the river. One crossing, identified as the Rainbow Valley crossing, was consistent with Alternatives 2C and 5. The other location was along the Cotton Lane corridor, which would require utilization of the previously discarded ASR Alternative 3 corridor. To ensure that the alternative selected north of SR30 did not preclude the southern extension of SR303L, a feasibility analysis was performed utilizing the two potential Gila River crossing corridors. The results indicated that either corridor was viable. To ensure proper vetting of alternative corridors, Alternative 3 was added to the L/DCR analysis.

The L/DCR further evaluated the build alternatives as well as the no build. Alternative alignments were further evaluated considering local TI access opportunities, grade separation crossings, phased implementation, 4(f) issues, system interchange options and future extension of SR303L.

4.3 LOCATION AND DESIGN CONCEPT REPORT ALTERNATIVES STUDIED

4.3.1 NO-BUILD ALTERNATIVE

The No-Build Alternative would not result in the design or construction of any portion of SR303L south of Van Buren Street and would leave SR303L in an end-of-freeway condition as exists today south of Van Buren Street. This alternative would not construct this section of SR303L identified and funded in the RTPFP, thereby not providing a freeway connection between I-10 and SR30. No major improvements would be made by ADOT in the Cotton Lane corridor south of Van Buren Street. However, maintenance of the existing roadway would continue by the City of Goodyear, and future widening of Cotton Lane could be pursued by either Goodyear or MCDOT.

Under the No-Build Alternative, traffic flow would continue to deteriorate on local arterial streets south of I-10 due to increasing traffic volumes. This congestion would intensify in future years, generated by ongoing land development and urbanization. While this alternative would not meet the project's purpose and need, it was retained as a baseline for comparison with the Build Alternatives throughout the NEPA process.

4.3.2 BUILD ALTERNATIVES

Segment 1

Segment 1 begins at Van Buren Street and continues south two miles to Lower Buckeye Road along Cotton Lane and is the same for all Build Alternatives. Segment 1 replaces the existing Cotton Lane roadway and require the construction of frontage roads for the entire length of the segment to provide for local access. Roadway width greater than the standard 4+1 will be required to provide auxiliary lanes necessary for the SR303L/I-10 interchange. The Segment 1 alignment is depicted in all build alternative figures. The following design issues were encountered associated with Segment 1.

Canyon Trails Blvd./Lilac St. SR303L Access

Background Data:

- The FHWA approved I-10/SR303L Change of Access Report established access for SR303L and is consistent with the Environmental Assessment (EA) and the Goodyear Transportation Plan (half diamond south of Van Buren). A southbound off ramp to Canyon Trails Blvd./Lilac St. was determined not to be consistent with these documents.
- The directional ramp flyover bridge frames for the SR303L/I-10 interchange movements to the south were under construction which constrained any changes to their geometrics.
- Canyon Trails Blvd./Lilac St. is a discontinuous two lane half-mile crossing of Cotton Lane.

Design Criteria:

- AASHTO recommends a minimum 2000' separation between System Interchange on ramps and local access off-ramps. Based upon the current construction of I-10/SR303L TI and Canyon Trails Blvd./Lilac St., the maximum possible separation available to achieve an off ramp was between 600' to 700'.
- If a 2000' separation is attained, only 600' remains to Canyon Trail Blvd./Lilac St. which was insufficient to develop a ramp to design standards.

Options generated by developer (Hilby Group) and ADOT VPM.

- Option 1 – Single Ramp SB: Add southbound off ramp to Canyon Trails Blvd./Lilac St. and remove southbound on ramp from Van Buren.
  - Insufficient ramp spacing: Off ramp too close to I-10 System TI Ramp WS
  - Does not meet ADOT Gore Sight Distance requirement
  - Depressing the SR303L mainline at Canyon Trails is possible to provide for an underpass. This depressed section requires a pump station or gravity drain of 4500' to out-fall, require 250K cubic yards of excavation and additional retaining walls.
  - ADOT's access control standard of 300' (Now 600' 2014 RDG) from radius return at the interchange would prohibit access from Lilac to the parcel on the north. Additionally, no access to the parcel north of Lilac would be allowed to the frontage road between the ramp tie-in to the frontage road and Lilac to the south.
  - Canyon Trails Blvd. and Lilac Street are not classified as Arterials but as Minor Collectors. Canyon Trails/Lilac is a discontinuous half-mile street that does not connect to Sarival Avenue to the east and indirectly connects to Citrus Road to the west.
- Option 2 – Braided Ramps SB & NB between Van Buren & Mid-Mile: Adds southbound off ramp to Canyon Trails Blvd./Lilac St. braided with southbound on ramp from Van Buren
  - All the same issues as in Option 1
  - The ramp gore and design and undulating mainline profile do not allow for ramp braiding.
- Option 3 – Reverse Ramps/TI @ Canyon Trails Blvd./Lilac:
  - The north half of the service TI has the same issues as Option 2 without the braided ramp issue
  - May result in increased residential cut through traffic within neighborhoods.

Conclusions:

- All of the options evaluated were fatally flawed due to the inadequate ramp separation as recommended by AASHTO. Implementing these access changes would have an adverse impact to the operations of the I-10/SR303L system TI.

Grade Separation at Canyon Trails Blvd./Lilac St. w/no other access changes:

- Developer (Hilby Group) asked if a grade separation at the Canyon Trails Blvd./Lilac St. mid-mile could be added. Based upon initial analysis the SR303L mainline could be either depressed or elevated with Canyon Trails Blvd./Lilac St. remaining at-grade. ADOT, the City of Goodyear and MAG agreed that a Canyon Trails Blvd./Lilac St. overpass would be added to the design concept.

Eliminate FCDMC Channel by Using Canyon Trails Channel between Van Buren and Lower Buckeye:

- The developer (Hilby Group) requested that the proposed FCDMC channel be eliminated using the existing Canyon Trails channel east of Cotton Lane for regional drainage. The developer provided concept plans and requested a review of their proposal. As this is a proposed FCDMC facility, the request was forwarded to FCDMC for evaluation. FCDMC maintained their concept, which has since been constructed.

Avondale Cotton Gin 4(f) avoidance alternatives

Background

- The Avondale Cotton Gin property located in the southeast quadrant of the Cotton Lane/Yuma Road intersection was initially identified as a 4(f) property which included three existing structures (Figure 4-1). Four avoidance alternative alignments were developed and impacts evaluated. The avoidance alignments effected the proposed alignment between Van Buren Street and Lower Buckeye Road (Figures 4-2 thru 5). Alt 1 shifted SR303L to the west. Alt 2 shifted SR303L to the east. Alt 4 hifted to the west enough to avoid the 4(f) structures but not the 4(f) property. Alt 5 provided a viaduct to carry a bridged SR303L with the TI and frontage roads were pushed under the viaduct. Alt. 5 also reduced the roadway typical section to 3 general purpose lanes in each direction without any HOV lane. Subsequent re-evaluation and SHPO consultation resulted in the utilization of the initial base alignment. More detailed information can be found in the environmental documents.

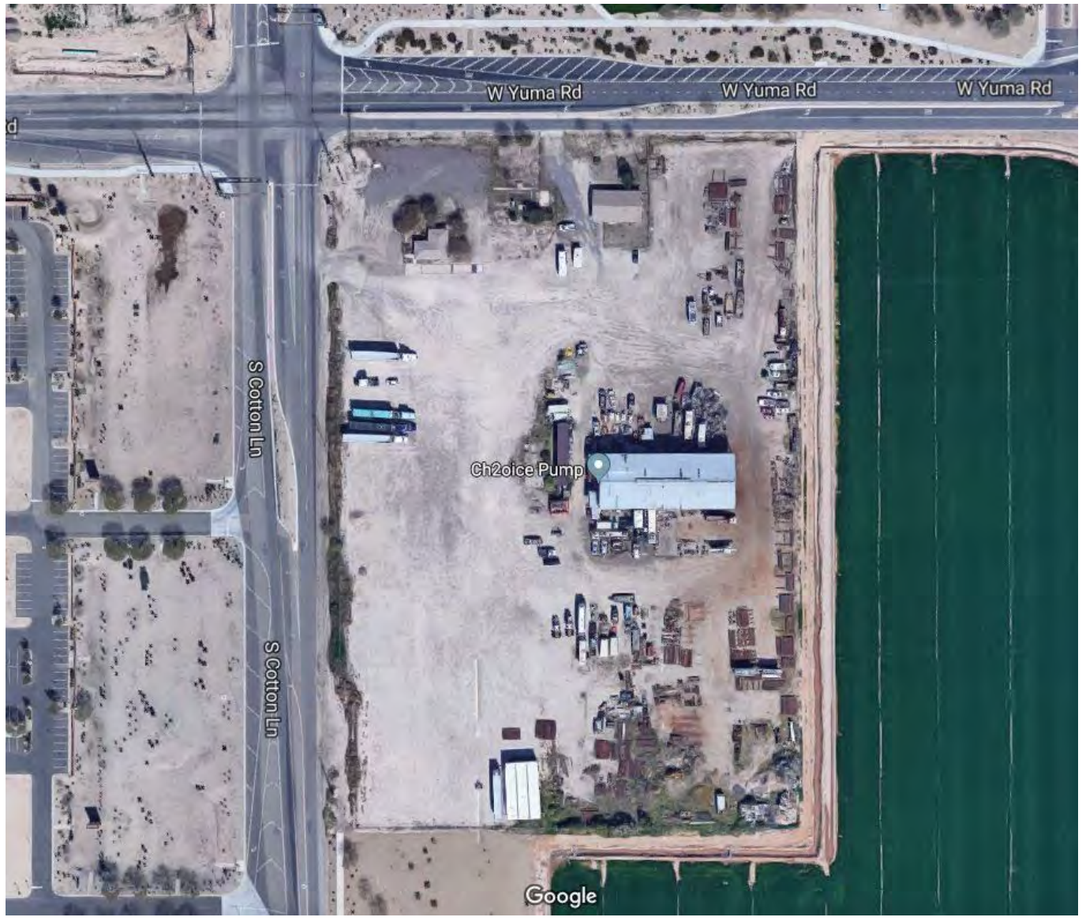


Figure 4-1. Avondale Cotton Gin Property

Source: Google Maps

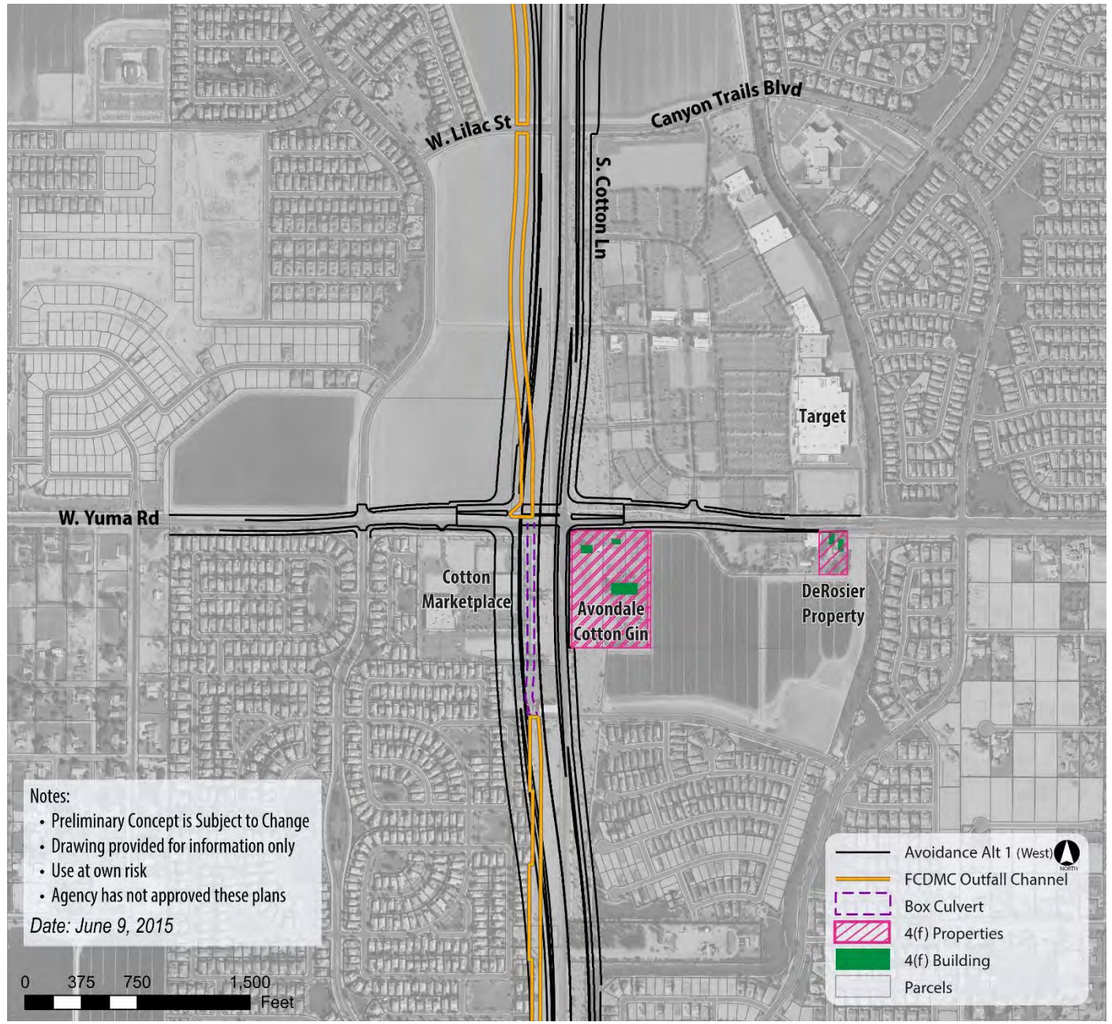


Figure 4-2. Avoidance Alt 1 (West)

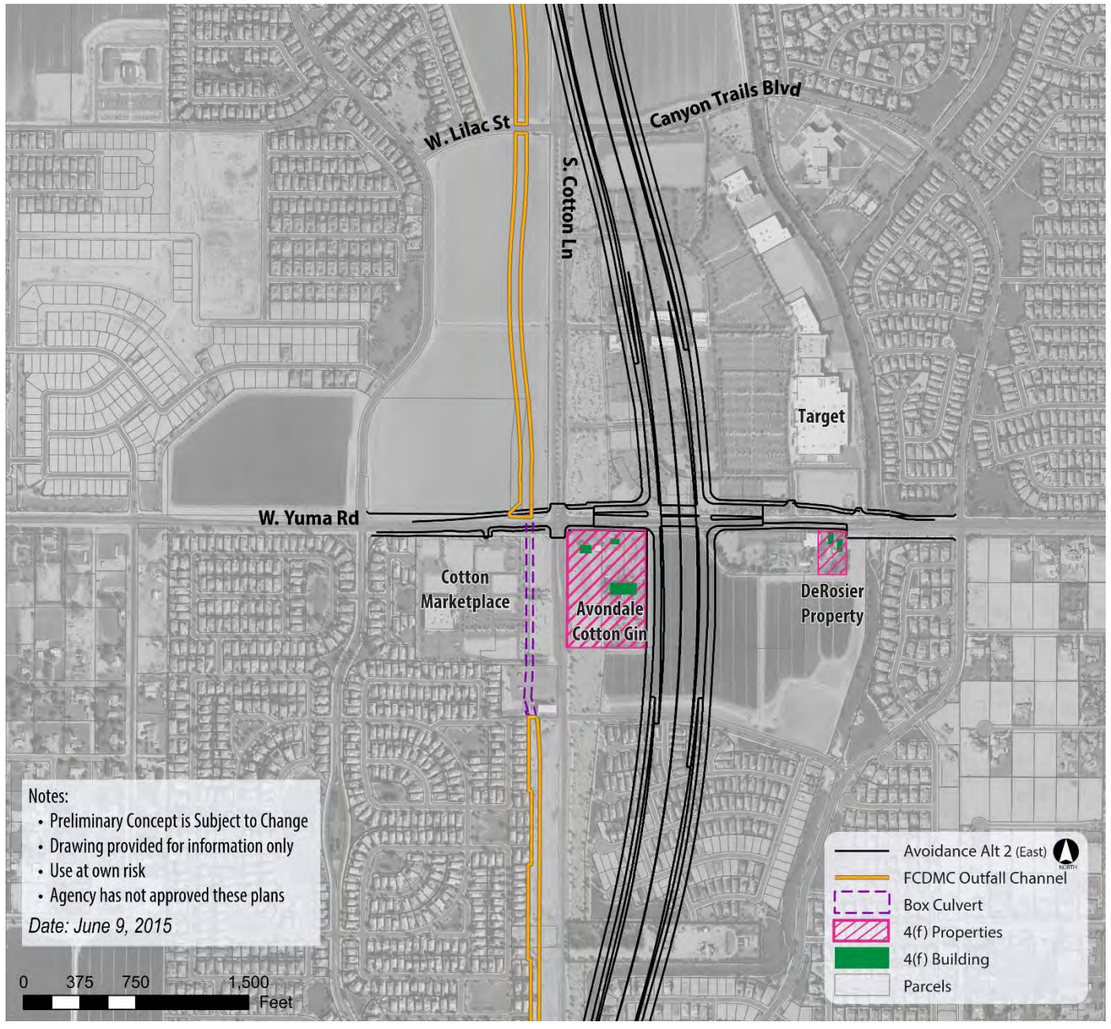


Figure 4-3. Avoidance Alt 2 (East)

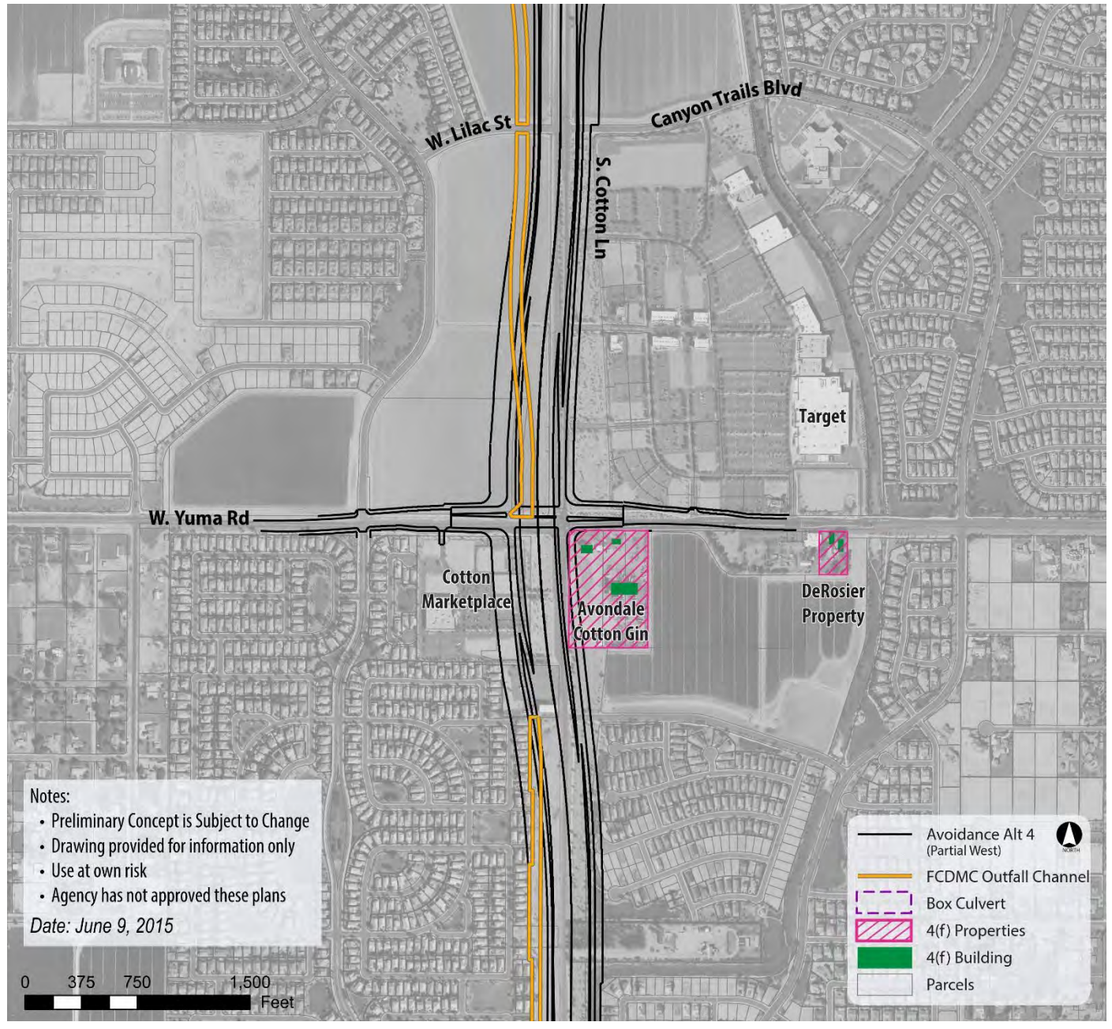


Figure 4-4. Avoidance Alt 4 (Partial Avoidance to West)

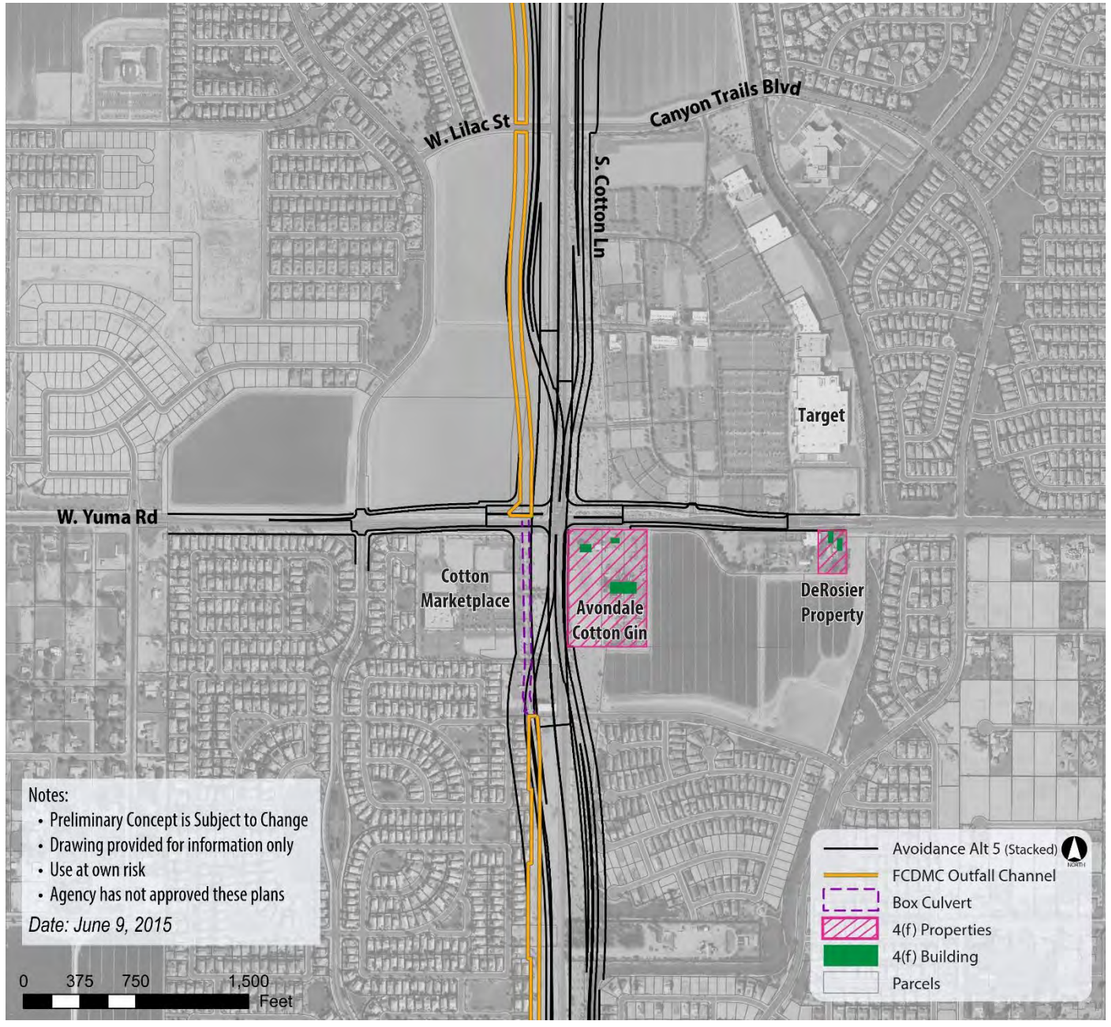


Figure 4-5. Avoidance Alt 5 (Stacked Roadway)

Segment 2

Segment 2 begins at Lower Buckeye Road and extends southward connecting with the future SR30. For purposes of this study, the section of SR30 between Sarival Road and Perryville Road with the SR303L/SR30 interchange was also included. The SR30 alignment was consistent for all alternatives and was developed to minimize impacts to 4(f) properties. All alternatives include a half diamond connection for SR303L to the north side at Elwood Street, frontage road connections to existing Cotton Lane, a full diamond TI for SR30 at Cotton Lane, a full directional interchange between SR303L and SR30 that will accommodate a direct future southerly extension of SR303L and HOV connection, a first flush basin in the southeast quadrant of Broadway Road and Citrus Road, and grade separations of MC85, the Buckeye Canal and Loop 303 Outfall Channel, and UPRR. Based on MAG system build-out traffic volumes SR303L north to east with return and SR30 east to north with return are the highest demand movements and likely candidates for direct HOV movements. Either movement can be accommodated. All alternatives utilize the FCDMC drainage channel for drainage outfall, and provide a utility corridor along the west side between Lower Buckeye Road and Broadway Road.

Alternative 2C

Alternative 2C diverges to the southwest from the Cotton Lane alignment at Lower Buckeye Road, crossing over Elwood Street about ¼ mile west of Cotton Lane and continuing southwest along the reserved ROW corridor acquired by the City of Goodyear, crossing UPRR on a skew and intersecting SR30 also on a skew resulting in a 5-level "X"-shaped stack interchange just north of Southern Avenue and west of MC85. The southern extension of SR303L under Alternative 2C is consistent with a Rainbow Valley corridor alignment.

Alternative 2C is consistent with the MAG Regional Planning Hassayampa Valley and Hidden Valley Transportation Framework Studies and the Goodyear General Plan. It utilizes right-of-way preserved by the City of Goodyear. Furthermore, it allows unfettered access from west-side development to Cotton Lane between Elwood Street and UPRR. However, it limits access to the area in the northwest quadrant of the SR303L/SR30 "X"-shaped stack interchange, results in long directional ramps and bridge structures, and additional ramp grade separation structures. Constructability and maintenance of traffic are good under Alternative 2C due to the new alignment and ramp spread of the skewed SR303L/SR30 TI.

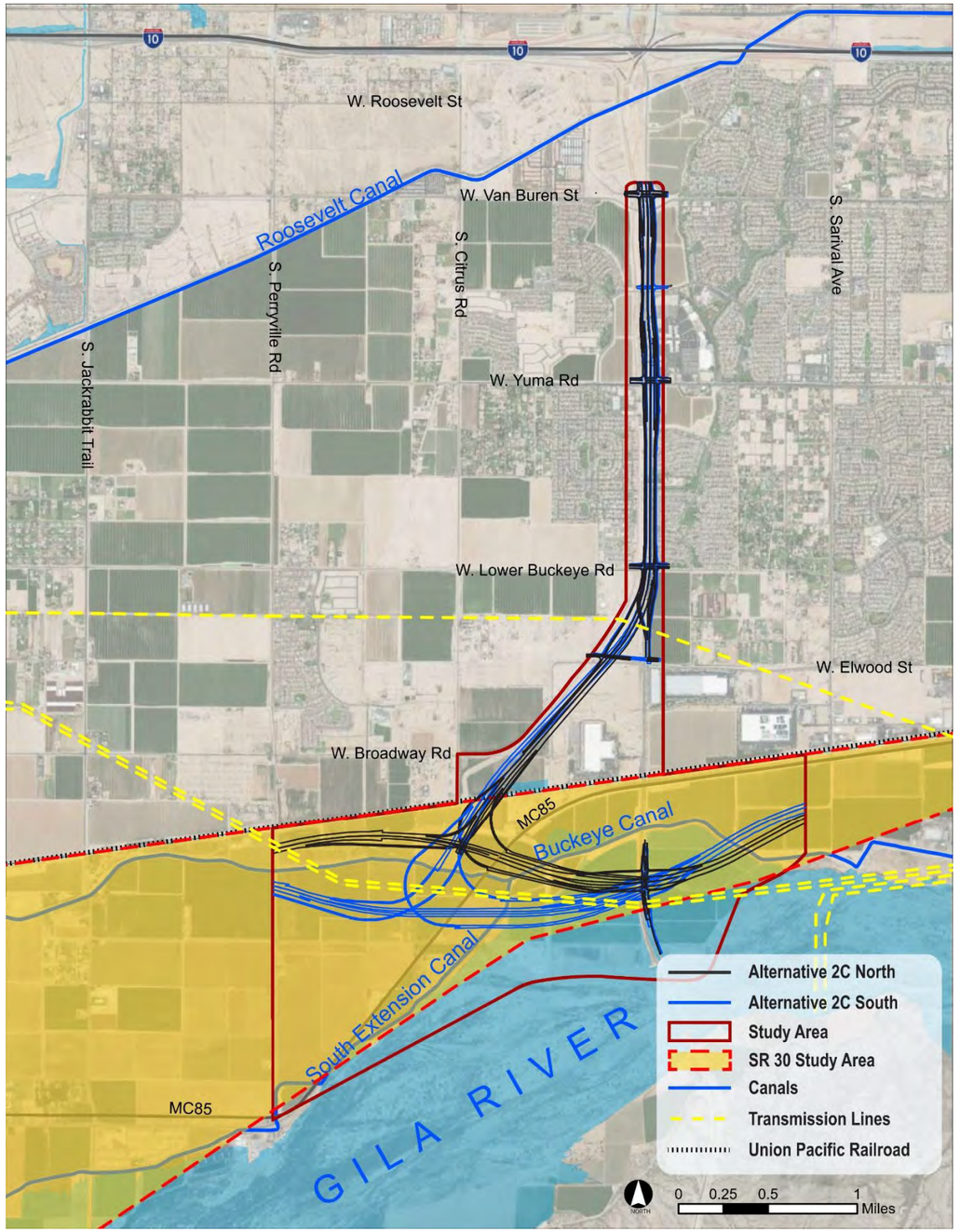


Figure 4-6: Alternative 2C

Alternative 3

From Lower Buckeye Road, Alternative 3 continues south along the Cotton Lane alignment with frontage roads extending south past Elwood Street. This alignment crosses between the Huhtamaki property and Cotton Lane, extending south over the UPRR and MC85 and intersecting SR30 south of MC85, north of the Gila River and just east of Cotton Lane. The SR30/Cotton Lane TI is embedded in a SR303L/SR30 five-level "+"-shaped stack TI. The extension of SR303L south of SR 30 would utilize a corridor paralleling Cotton Lane across and south of the Gila River.

Alternative 3 is not consistent with MAG Regional Planning Hassayampa Valley and Hidden Valley Transportation Framework Studies or the Goodyear General Plan. It does not utilize the ROW corridor preserved by Goodyear between Lower Buckeye and Broadway Road, would require additional right-of-way from the Huhtamaki property, and would restrict access to locations on Cotton Lane. However, Alternative 3 would occupy less acreage than the other alternatives due to the shorter distance from Lower Buckeye Road to SR30 along Cotton Lane. The "+"-shaped TI would provide a more compact directional interchange, with fewer ramp grade separation structures; however, this same tight configuration would require more difficult phased construction.

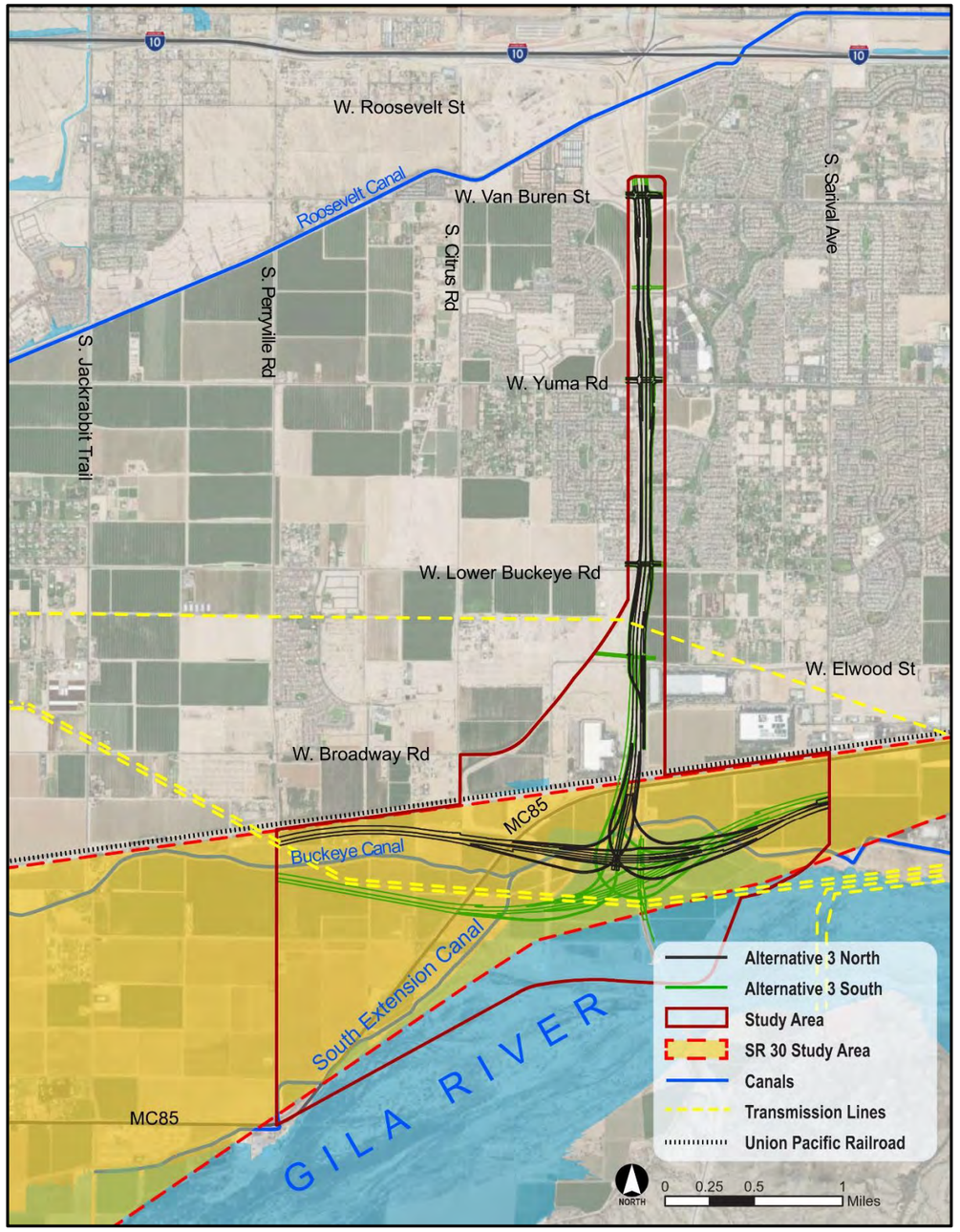


Figure 4-7: Alternative 3

Alternative 5

Alternative 5 is a hybrid of the Alternative 2C and 3 alignments. This alternative has SR303L along the 2C alignment, while locating the south-to-east and west-to-north ramps of the SR303L/SR30 stack TI in the Alternative 3 alignment. The resulting system TI is split, with 2-level directional ramps S-E and W-N at Cotton Lane and the remaining movements occurring within the Alternative 2C five-level "X"-shaped stack interchange. The southern extension of SR303L under Alternative 5 would be consistent with a Rainbow Valley corridor alignment.

The Alternative 5 alignment of SR303L is consistent with MAG Regional Planning Hassayampa Valley and Hidden Valley Transportation Framework Studies; however, it is only partially consistent with the City of Goodyear General Plan. It utilizes the right-of-way acquired by the City of Goodyear, but would also require right-of-way from the Huhtamaki property. It restricts access between the Huhtamaki property and Cotton Lane and limits access to the area in the NW quadrant of the SR303L/SR30 interchange. The skewed "X"-shaped stack interchange, results in long directional ramps and bridge structures, and additional ramp grade separation structures. Alternative 5 would add a south half diamond TI at Elwood Street. Phased implementation, maintenance of traffic, and constructability under Alternative 5 would be easier than with Alternative 3, as SR303L is on a new alignment and the "X"-shaped stack TI would be spread out due to the skewed crossing of SR30. A freeway-to-freeway connection of SR303L and SR30 east of Cotton Lane is possible without constructing SR303L south of Lower Buckeye Road, allowing for an initial low implementation cost, high-speed connection without dumping regional traffic onto Cotton Lane. Alternative 5 would require long directional ramps due to the skew of the crossing at the "X"-shaped TI and for the W-N and S-E ramps between SR30 to connect back to the SR303L near Lower Buckeye Road.

Variations 1 & 2

Following multi-agency field review meetings in 2017 regarding impacts to potential 4(f) properties, revised alignments for SR30 were developed. Additionally, meetings with utility representatives from the Buckeye Water Conservation and Drainage District (BWCDD), Arizona Public Service (APS) and Salt River Project (SRP) relative to cost and shutdown restrictions required for adjustments to their facilities, highlighted the need to avoid or minimize impacts to those facilities. Two SR30 concept alignments were developed. In general, the SR30 Variation 1 alignment runs south of the powerlines, while Variation 2 runs north of the powerlines. Due to the potential cost and implementation impacts associated with relocating these major utility facilities, Alternatives 2C, 3, and 5 each have a SR30 north (n) and SR30 south (s) variation.

The potential cost and implementation impacts associated with relocating these major utility facilities is significant. The alternative evaluation statements above do not change with the exception to power line and canal impacts. Graphics showing the variations for each alternative are shown in Figures 4-6 thru 8. Segment 1 is included on all Segment 2 Alternative figures.

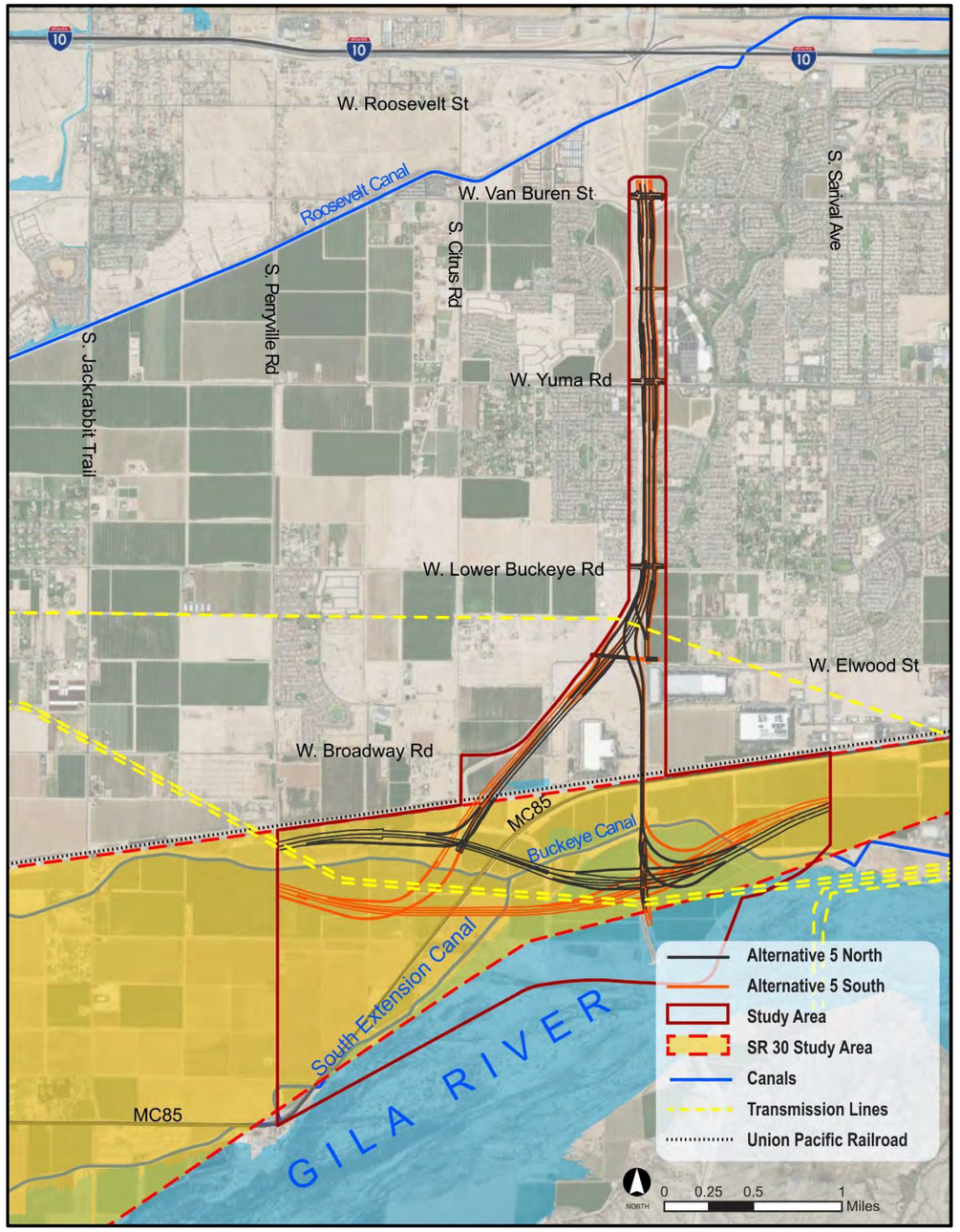


Figure 4-8: Alternative 5

4.4 EVALUATION OF ALTERNATIVES

4.4.1 EVALUATION FACTORS

The project purpose and need set forth the basis for the evaluation process. The alternatives were developed to meet the project purpose and need, satisfy design criteria and guidelines, and minimizing environmental impacts, while accounting for agency and public input.

Engineering factors that were considered in scoring the criteria for the alternatives study process include:

- Route Length
- Roadway Geometrics
- System Interchange Configuration and Number of Levels
- Drainage Implementation
- Number of Structures Required
- Number of Service Interchanges and Their Locations
- Out-of-Direction Travel
- HOV Connections
- Connectivity to Local Street Network
- Constructability
- Construction Cost
- Right-of-Way
- Potential Business and Residential Displacements
- Utility Crossings and Conflicts

Environmental factors that were considered in scoring the criteria for the alternatives study process include:

- Land Use Impacts
- Consistency with Local Land Use Plan
- Threatened, Endangered, or Sensitive Species
- Community Cohesion
- Visual Impacts
- Archaeological Resources
- Built Environment (Historic Buildings and Structures)
- Prime and Unique Farmland
- Water Quality
- Noise Impacts
- Hazardous Materials

4.4.2 EVALUATION MATRIX

A matrix comparing major differentiating criteria of the six alternatives developed in the L/DCR was presented to the study team (Table 4-1) scoring potential severity of impacts or favorability with 1 being a low impact or more favorable and 5 being a high impact or less favorable based on preliminary engineering and environmental assessment. Alternative 2C South (2Cs) emerged as the Preferred and now Selected Alternative in the L/DCR as it is consistent with local and regional planning, maintains local access along Cotton Lane south of Elwood Street, minimizes impacts to 4(f) resources and minimizes conflicts with the Buckeye Canal system and APS Palo Verde reclaimed water line. Discussion of how the ratings were developed follow Table 4-1.

Table 4-1: L/DCR Alternatives Comparison Matrix

Criteria	*2Cn*	*2Cs*	*3n*	*3s*	*5n*	*5s*
Air/Noise Impacts	3	3	3	3	4	4
Visual Impact	4	3	5	5	4	4
Archaeological Resource Impacts	3	1	5	3	5	1
Section 4(f) Impacts	3	1	5	5	5	3
Local Access	2	2	4	4	4	4
Traffic Operations	3	3	3	3	2	2
Construction Cost*	3	3	4	3	4	4
Right-of-Way	3	4	3	2	3	4
Utilities – Canal/APS Reclaimed Water Line	4	2	4	3	4	2
Utilities - Power Lines	3	4	3	5	3	4
Public/Agency Input	3	3	3	3	3	3
Planning Consistency	1	1	5	5	2	2
TOTALS	35	30	47	44	43	37

1 = Low Impact or More Favorable, 5 = High Impact or Less Favorable
**Construction Costs do not include major utility relocation/protection costs*

Air/Noise Impacts

Air quality and noise impacts are a function of traffic volumes. Air quality is also affected by congestion. For Alternatives 2C and 3, traffic volumes were very similar while Alternative 5 volumes were over 10% higher. Based upon the increased traffic volumes and congestion, Alternative 5 was scored higher for Air Quality and Noise impacts.

Visual Impacts

Visual impacts are evaluated based upon the built environment and setting integrity. The area between Van Buren Street and MC85 has experienced rapid growth over the past 15 years. The elevated-to-at-grade SR303L is considered to have greater impacts to residential land uses than to commercial and industrial uses. All three alternatives were scored equally through this segment. South of MC85 the Study Area is mainly agricultural with farmsteads. Section 4(f) resources in this area are adversely affected by the three alternatives that align SR30 farther north, i.e. the Buckeye Canal Farmstead Historic District and the Buckeye Canal Upper Zanjero House. Alternatives 3S and 5S move the SR30 alignment further away from the Upper Zanjero House but are still close to the Buckeye Canal Farmstead. Alternative 3S and 3N places their 5- level stacked interchanges very close to both of these resources increasing its visual impacts. Alternative 2CS is farthest away from these sensitive resources.

Archaeological Resource Impacts

Detailed archaeological analysis was undertaken for all six Build Alternatives to determine their likelihood to adversely affect archaeological resources. Known archaeological sites were weighted in the scoring based on their eligibility for listing on the National Register of Historic Places, as well as their relative significance; i.e., impacts to a habitation site were ranked higher (more severe) that impacts to an artifact scatter. Alternative 2CS and 5S were determined to have the least impacts to the resources while Alternative 3N and 5N had the most.

Section4(f) Impacts

The Build Alternatives' effects on historic resources were ranked, not only physical impacts but other, lasting consequences of building near a protected resource; e.g., visual and audio intrusion on the property.

Local Access

Maintaining local access and establishing access control is an important factor in the L/DCR analysis. Local access between Van Buren Street to Lower Buckeye Road is the same for Alternatives 2C, 3 and 5. South of Lower Buckeye Road Alternatives 3 and 5 continue parallel to existing Cotton Lane after the frontage roads to and from the north merge back to existing Cotton Lane. This creates an access issue to properties on the west side of Cotton Lane. The ramps and/or freeway would need to remain elevated to provide access crossing via bridge or large box structure. For this reason, Alternative 2C was scored more favorable than Alternatives 3 and 5.

Traffic Operations

Traffic volumes and operations for Alternatives 2C and 3 were very similar while Alternative 5 volumes were over 10% higher. Based upon Alternative 5's ability to attract higher volumes while maintaining adequate levels of service, Alternative 5 was scored as more favorable than Alternatives 2C and 3.

Construction Costs

In analyzing construction costs, the relocations/protections of major utilities were not included, instead they were identified as their own criterion. Construction costs include earthwork, paving, drainage features, bridges/structures, signing, marking, signals landscaping, walls and other roadway appurtenances. The differences in construction costs for all alternatives were in a range of 5%. Alternatives 3N, 5N and 5S costs were at the higher range due to a greater overall square footage of bridge structures.

Right-of-Way

Differences in right-of-way costs for all alternatives were in a range of 36%. Alternative 3N was the lowest cost while Alternative 2CS and 5S were the highest. All estimates included the cost for acquiring portions of property owned by the City of Goodyear south of Lower Buckeye Road.

Canal/APS Reclaimed Water Line

All canal crossings are to be grade separated to allow for maintenance; however, APS requires the reclaimed water line that lies within the canal right-of-way to be encased when within the proposed freeway right-of-way. The ratings are based on the length of encasement necessary. Work to encase the pipe is limited to the time when the water line is shut down for other planned, yearly maintenance periods. Generally, only 500-feet of encasement can be accomplished in a shutdown. The southern alignment alternatives have approximately 1400 feet of potential impacts , one half to one quarter the potential impact as the northern alternatives.

SRP/APS/WAPA Power Lines

This criterion evaluates the potential impacts to major transmission lines, 230kV and above. As the impact to the APS 230KV line crossing Cotton Lane between Lower Buckeye Road and Elwood Street is the same for all alternatives it is excluded from the ranking evaluation. The evaluation considers the length of required adjustment, number of poles/towers impacted and need for new powerline easement. The northern alignment alternatives have limited impact to the powerlines except for the crossing near Perryville Road and any southern extension of the SR303L south of SR30. The southern alignment alternatives impact the power lines at SR30 and cotton Lane and SR303/SR30 interchange area. impacting approximately two to four sets of additional poles/towers. Alternative 3S requires more vertical and horizontal adjustments..

Public Input

Public meetings were held to gather input from the public and other interested parties. Public input and questions for this project have centered around noise walls, elevation of the proposed facility, timing for construction, and which direction the SR303L will go south of Lower Buckeye Road. Residents from the area southwest of Lower Buckeye Road and Cotton Lane preferred Alternative 3 while residents to the south preferred alternative 2C or 5. Agency input was also received from local municipalities, the county, as well as state agencies. Their input and questions included project timing, impacts to utilities and developments, access considerations, and which direction SR303L will go south of Lower Buckeye Road. All agencies have expressed a preference for Alternative 2C.

Planning Consistency

Several long-range planning efforts have been completed that include the SR303L and SR30. MAG completed two studies, Interstate 10 – Hassayampa Valley Roadway Framework Study and Interstate 8 and Interstate 10 Hidden Valley Transportation Framework Study. Also, the City of Goodyear's planning documents identify corridors for the SR303L and SR30. Alternative 2C is consistent with these studies. Alternative 5 is mostly consistent except for the directional ramps that will connect the north leg of SR303L to the east leg of SR30 which continue down Cotton Lane to the SR30. Alternative 3 is not consistent with local or regional planning.

4.4.3 AGENCY AND PUBLIC OUTREACH

An agency scoping meeting was conducted on June 27, 2006 in the ADOT Phoenix Maintenance District Office conference room at 2140 West Hilton Avenue, Phoenix, Arizona. The meeting was attended by 24 agency representatives from the US Army Corps of Engineers; FHWA; AGFD; ADOT Environmental Planning, Communications, Valley Project Management, and Utilities; City of Goodyear; Town of Buckeye, Public Works Department; and Valley Metro Transit. The corridor study limits and facility type were presented and input requested on issues, concerns, and opportunities (ICOs).

A public scoping meeting was conducted on June 29, 2006 from 6:00 p.m. to 8:00 p.m. at the Desert Edge High School in Goodyear, Arizona. Seventy-eight people signed the attendance sheets for this meeting. The corridor study limits and facility type were presented and input requested on ICOs

A joint SR303L and SR30 presentation was given to city of Goodyear staff on November 13, 2006. Alternatives 2C, 3, and 4 were outlined, with Goodyear expressing its preference for Alternative 2C that would follow land acquired by the City of Goodyear.

A public information meeting was held on November 30, 2006 at the Liberty Elementary School, 19818 West Highway 85, Buckeye, Arizona. This meeting was conducted to discuss the seven alternatives under consideration, including the No-Build Alternative, and to obtain public input on these alternatives. Alternatives 2C, 3, and 4 were identified as the alternatives being retained for further study.

A second public information meeting was held on November 15, 2007 at the Liberty Elementary School. The purpose of the meeting, which was attended by 147 people, was to present updated information about the alternatives analysis subsequent to the 2006 public meeting. A comparison of the engineering and environmental issues associated with Corridor Alternatives 2C, 3, 4, and 5 was presented. Based on this information, Alternatives 3 and 4 were removed from further consideration due to roadway design and operation issues and potential environmental impacts that would be greater than those associated with Alternatives 2C and 5. Thus, the study team suggested these alternatives should be advanced to more detailed analysis.

A public meeting was held on December 6, 2017 at Copper Trails School (16875 W. Canyon Trails Boulevard, Goodyear, AZ 85338) from 6:00 pm to 8:00 pm to provide the public with an update on Loop 303 south of Van Buren Street to the proposed State Route 30. The presentation included Alternatives 2C, 3 and 5 with both n & s SR30 variations. There were approximately 200 people in attendance. A total of 28 comment cards were submitted. Project team members were in attendance including ADOT Project Management Group, ADOT Environmental Planning, ADOT Right-of-Way, ADOT Communications, FHWA, WSP, and Gunn Communications.

Two public forums were held on January 30 and 31, 2018. The first was held at the Buckeye Valley Fire District Station 326 (19937 West Arlington Road, Buckeye, AZ 85326) from 2:00 pm to 6::00 pm. There were 53 attendees and 24 comment cards submitted. The second was held at the Estrella Mountain Ranch, Starpointe Residents Club (17665 W Elliot Road, Goodyear, AZ 85338) from 2:00 pm to 6:00 pm. There were 532 attendees and 131 comment cards submitted. The six alternatives under consideration were available for discussion as well as the display boards from the previous public meeting.

Additional public involvement information can be found in the Environmental Assessment.

4.4.4 DRAFT EA REVIEW, HEARING, AND COMMENT PERIOD

The Draft Environmental Assessment for the SR303L, SR30 to I-10 was made available for public review and comment beginning on June 12, 2018. The comment period extended to July 15, 2018. The Draft EA was posted online on the project website, www.azdot.gov/Loop303southofvanburen, and a copy was available for review during normal business hours until July 15, 2018 at the following locations:

Goodyear Public Library
14455 W. Van Buren Street
C-101
Goodyear, AZ 85338

Starpointe Residents Club
17665 W. Elliot Road
Goodyear, AZ 85338

Buckeye Valley Fire District
19937 W. Arlington Road
Buckeye, AZ 85326

A Public Hearing for review and comment on the findings of the Draft EA, presenting Alternative 2CSouth (2Cs) as the Preferred Build Alternative, was held on Wednesday, June 27, 2018 from 3:00 p.m. to 7:00 p.m. at the Goodyear Ballpark, 1933 S. Ballpark Way, Goodyear, AZ 85338. Meeting advertisements were published in various local and regional newspapers (Table 4-2).

Table 4-2: Publication of Newspaper Advertisements, Spring 2018

Publication	Date Published
Arizona Republic Community Section Zone 5	6/13/2018, 6/15/2018, 6/16/2018, 6/20/2018, 6/22/2018, and 6/23/2018
West Valley View	6/13/2018 and 6/20/2018
La Voz	6/8/2018 and 6/22/2018

The Public Hearing was an open house format, and included an informational video, an interactive visual presentation, and an opportunity to provide oral remarks before a formal study panel (three-minute time limit). Comment forms and court reporters were also available to document input for the study record from

members of the public. Project team members were on site to address questions and concerns. A total of 280 members of the public signed in at the Public Hearing. Event information, live coverage, and follow-up media coverage appeared as follows:

- June 18, American Association of State Highway and Transportation Officials, http://news.transportation.org/Pages/StateDotNewsDetail.aspx?MessageId=59016
- June 27, Nextdoor, https://nextdoor.com/events/az/goodyear/public-invited-to-formal-public-hearing-for-proposed-loop-303-south-of-van-buren-street-2213608
- June 27, Twitter, https://twitter.com/arizonadot/status/1012087550263980032?lang=en
- June 27, ABC15 Arizona, https://www.abc15.com/news/region-west-valley/goodyear/adot-asking-public-to-weigh-in-on-loop-303-extension-in-west-valley
- June 27, Facebook, https://www.facebook.com/AZDOT/videos/2029401283798231/
- June 28, ABC15 Arizona, MSN.com, https://www.msn.com/en-us/video/w/adot-holds-public-meeting-on-loop-303-expansion/vp-AAzgzdr
- June 28, ABC15 Arizona, MSN.com, https://www.msn.com/en-us/video/null/adot-to-hold-open-house-on-loop-303-expansion/vp-AAzgtVM
- July 6, West Valley View* https://www.westvalleyview.com/news/adot-hosts-public-hearing-on-loop-extension/article_6f61912c-8075-11e8-a1ec-6b9dc03b97d5.html

4.4.5 PUBLIC COMMENT SUMMARY

Comments could be submitted any time during the comment period using any of the following methods:

- Mail to: ADOT Community Relations
  Loop 303 Study
  1655 W. Jackson Street, MD 126 F
  Phoenix, AZ 85007
- Telephone: 1.855.712.8530
- Email to: Loop303@azdot.gov
- Online via the project website: www.azdot.gov/Loop303southofvanburen

The Public Hearing comment period was open June 12 through July 15, 2018. During this time, 78 comments were received by mail, email/online, and in person at the Public Hearing via comment cards or as documented by a court reporter (Table 4-3).

Table 4-3: Comments on the Draft EA by Participation Method

Participation Method	Number of Responses
Mail	3
Email/online	33
Public Hearing: Comment Cards	37
Public Hearing: Court Reporter	5

The Air Quality Report was finalized with the PM_{10} Hot-Spot analysis added based on updated receptor placement and newer background monitoring data. Interagency consultation extended to August 31, 2018. Upon completion of the interagency review, the revised air quality report was posted on the project website for additional public review and comment until September 25, 2018. Two additional comments were received on the air quality report during this time.

Public comments received on the Draft Environmental Assessment at the public hearing and throughout the comment period were tabulated by subject matter of the comment. A quantification of comments by subject matter is provided in Table 4-4. (Comments that address more than one subject are included in the counts for each subject addressed.)

Table 4-4: Comments on the Draft EA by Subject

Comment Category	Number of Responses
General	33
Purpose and Need	1
Alignment	25
Noise	13
Traffic Operations	3
Access	2
Geotechnical	1
Programming	1
Schedule	1
Right-of-Way	3
Design	1
Environmental	1
Air Quality	2

The project team reviewed the Public Hearing Report and took these comments into consideration. It was concluded that the public comments did not affect the overall scoring of the Selected Alternative in comparison to the other build alternatives or to the No-build Alternative.

4.5 PRELIMINARY COST ESTIMATES

The total project cost of the Selected Alternative 2Cs utilizing the 3+0 freeway section for both SR303L and SR30 within the project limits is estimated at $767.9 million. The currently approved 2040 RTPFP includes the provision for a six-lane divided freeway and no HOV lanes on SR303L north of SR30 and on SR30 between SR303L and SR202L. SR30 from SR303L to SR85 would be an interim facility. The RTPFP envisions an ultimate 10-lane facility, with four travel lanes and a HOV lane in each direction of travel. Detailed estimates for the overall project alternatives analyzed are included in Appendix A.

Phase 1 of the project includes construction of SR303L between Van Buren Street and Lower Buckeye Road, where the freeway will transition back into Cotton Lane to the south. Phase 2 involves the continuation of the six-lane SR303L freeway south to connect to the proposed SR30 freeway to the east as it is constructed. Phase 3 involves the remaining construction of SR30 to the west with directional connection to the north leg of SR303L. Phases 2 and 3 are proposed in the 2027 – 2040 timeframe. Table 4-5 summarizes design, right-of-way and construction costs for the phased implementation plan of the selected alternative. Detailed estimates for this phasing are included in Appendix B.

Table 4-5. Preliminary Costs for the Selected Alternative 2Cs and Phasing

Selected Alternative Phasing	*Design*	*R/W*	*Construction*	*Total*
Phase 1	$7.0 M	$20.4 M	$139.6 M	$167.0 M
Phase 2	$16.7 M	$45.3 M	$334.1 M	$396.1 M
Phase 3	$7.7 M	$43.4 M	$153.7 M	$204.8 M
Total	$31.4 M	$109.1 M	$627.4 M	$767.9 M

Funding for design, right-of-way and construction of Phase 1 is included in ADOT's 2019-2023 Transportation Facilities Construction Program as follows:

- Design FY 2019 = $15,000,000
- Right-of-Way and Utilities FY 2019 = $10,700,000
- Construction FY 2020 = $93,800,000

4.6 CONCLUSIONS

Based upon engineering analyses, environmental analyses, agency input and public input, Alternative 2Cs is the selected alternative. A FONSI was issued by FHWA on November 6, 2018.

5 MAJOR DESIGN FEATURES

5.1 INTRODUCTION

This section describes the major design features of the alternatives considered. These alternatives were fully evaluated in the Final EA prepared as part of the overall design concept study.

5.2 DESIGN CONTROLS

The SR303L is planned to be a fully access-controlled grade separated multi-lane freeway. The mainline design criteria are presented in Table 5-1, the ramp criteria in Table 5-2 and the crossroad criteria in Table 5-3. The mainline minimum design speed is 65 mph, and design standards will adhere to the current edition of ADOT's Roadway Design Guidelines. The RTPFP is funding the initial construction of a six-lane urban freeway with auxiliary lanes and one-way frontage roads, as required. This facility has been studied for an ultimate four general purpose lanes and one HOV lane (4+1) in each direction. All alternatives were designed to meet the design criteria shown in Tables 5-1 to 5-3.

Table 5-1: Design Criteria - SR303L and SR30 Mainline

Description	*SR 303L Mainline*
Design Year:	2040
Design Vehicle:	WB-67
Design Speed:	65 mph
Stopping Sight Distance Criteria:	3.5 ft. Eye Height 2.0 ft. Object Height
Superelevation:	0.06 '/ft. maximum
Minimum Vertical Curve Length:	800 ft.
Maximum Gradient:	3%
Travel Lane Width:	12 ft.
Left Shoulder Width: (In Direction of Travel)	12 ft. interim, 12 ft. ultimate
Right Shoulder Width: (In Direction of Travel)	10 ft. + 2-ft offset to barrier, 12 ft. desirable with truck traffic DDHV>250
Minimum Recovery Area Width:	30 ft.
Normal Cross Slope:	0.02'/ft.
Vertical Clearance:	16.5 ft. Over Mainline 16.5 ft. Over Roadways 16 ft. to Falsework Over Traffic 23 ft. 6 in. Over UPRR
Pavement Design Life:	20 years
Barrier Type:	ADOT Std. C-10.52 ADOT Std. C-10.53
Curb and Gutter Types:	ADOT Std. C-5.10

Table 5-2: Design Criteria - Ramps

Description	*SR 303L Ramps*
Design Year:	2040
Design Vehicle:	WB-67
Design Speed:	55 mph (Entrance Ramp Gore Area) 60 mph (Exit Ramp Gore Area) 55 mph (System Ramp Body) 50 mph (Service Ramp Body) 35 mph (Intersection)
Stopping Sight Distance Criteria:	3.5 ft. Eye Height 2.0 ft. Object Height
Superelevation:	0.06 '/ft. maximum
Minimum Vertical Curve Length:	400 ft.
Maximum Gradient:	4% Upgrade 5% Downgrade
Travel Lane Width:	12-ft
Left Shoulder Width: (In Direction of Travel)	6 ft. (One-Lane System Ramps – no offset to barrier) 4 ft. (2-Lane System Ramps) 2 ft. (Service Ramps) Add 2-ft offset to barrier (All Ramps except One-Lane System)
Right Shoulder Width: (In Direction of Travel)	10 ft. (One-Lane System Ramps) 8 ft. (2-Lane System Ramps) 8 ft. (One-Lane Service Ramps) 8 ft. (Multi-Lane Service Ramps) 2 ft. (2-Lane Dual Metered Ramps) Add 2-ft offset to barrier (All Ramps except One-Lane System)
Minimum Recovery Area Width:	30 ft.
Normal Cross Slope:	0.02'/ft.
Vertical Clearance:	16.5 ft. Over Mainline 16.5 ft. Over Roadways 16 ft. to Falsework Over Traffic 23 ft. 6 in. Over Railroad
Pavement Design Life:	20 years
Barrier Type:	ADOT Std. C-10.53 ADOT Std. C-10.52
Curb and Gutter Types:	ADOT Std. C-5.10

Table 5-3: Design Criteria - Crossroads

Description	*Crossroads*
Design Year:	2040
Design Vehicle:	WB-67*
Design Speed:	45 mph at Intersection
Stopping Sight Distance Criteria:	3.5 ft. Eye Height 2.0 ft. Object Height
Superelevation:	None
Minimum Vertical Curve Length:	150 ft.
Maximum Gradient:	4%
Travel Lane Width:	12 ft.
Minimum Recovery Area Width:	1.5 ft. (Minimum) 3 ft. from curb face (Desirable)
Normal Cross Slope:	0.02'/ft.
Vertical Clearance:	16.5 ft. Over Mainline 16.5 ft. Over Roadways 16 ft. to Falsework Over Traffic 23 ft. 6 in. Over UPRR
Pavement Design Life:	20 years
Curb and Gutter Types:	ADOT Std. C-5.10 MAG Std. Detail 220

* Crossroad located at Service TI

5.3 HORIZONTAL AND VERTICAL ALIGNMENTS

The SR303L typical section for the RTP funded freeway shall consist of three general purpose lanes and an auxiliary lane in each direction with an open median. It is planned that the ultimate configuration will widen within the median and provide for the addition of one general purpose and one HOV lane in each direction. Typical sections for SR303L and SR30 are shown in Figure 5-1.

The study area consists of level terrain that slopes southward toward the Gila River. As part of the *SR30, (SR 303L to SR202L) Alternatives Selection Report* by HDR for ADOT, a groundwater analysis was performed to determine the feasibility of a depressed freeway profile. An additional cost of $7 million was identified for the construction of each depressed crossing when compared to an elevated crossing. This cost includes construction of dewatering wells, as well as outfall and right-of-way impacts. Therefore, the presence of a high water table makes a depressed freeway option cost prohibitive for proposed SR30. Each alternative alignment has similar profile characteristics that follow this general profile description. Beginning at the existing Van Buren Street OP, SR303L utilizes a rolling elevated profile over Canyon Trails Blvd./Lilac Street, Yuma Street and Lower Buckeye Road. South of Lower Buckeye Road all alternatives would be elevated over Elwood Street, Broadway Road (when applicable), 175th Avenue (when applicable), the UPRR, MC85, the Loop 303 Outfall Channel, and the Buckeye Canal (where applicable). The City of Goodyear has requested that the arterial crossroads remain at grade to accommodate local access and development.

The SR30 profile is rolling elevated and starts by crossing over Perryville Road and is as close to at-grade as possible except when crossing over SR303L (future extension), MC85, Cotton Lane, the Buckeye Canal, Loop 303 Outfall channel and Sarival Avenue.

Design Exceptions and Design Variances

No Design Exceptions or Variances are anticipated for the mainline of SR303L; however, SR303L/SR30 directional ramps are likely to require exceptions for horizontal sight distance

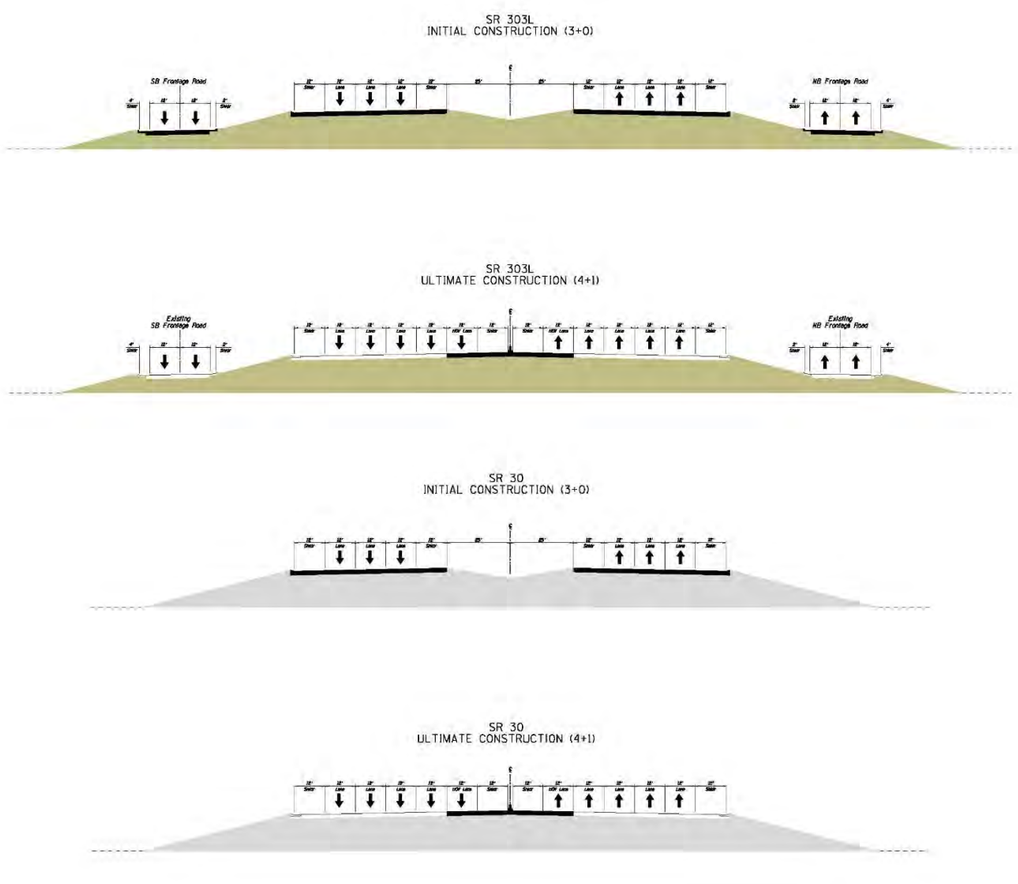


Figure 5-1: SR303L & SR30 Initial and Ultimate Typical Sections

5.4 ACCESS MANAGEMENT

The SR303L freeway will be fully access controlled. ADOT's 2014 Roadway Design Guidelines identifies access control requirements as 660 feet east and west of the ramp radius returns at service TIs. Two variances should be considered at Yuma Road. At the northeast quadrant of Yuma Road and Cotton Lane, a bi-directional access roadway to the Canyon Trails Towne Center commercial development is located approximately 530 feet from the northbound on-ramp radius return. Similarly, at the southwest quadrant of Yuma Road and Cotton Lane, a bi-directional access roadway to the Cottonflower Marketplace commercial development is located approximately 580 feet from the southbound on-ramp radius return.

5.5 RIGHT-OF-WAY

ADOT currently owns right-of-way along the west side of Cotton Lane between Van Buren Street and Yuma Road which was acquired as part of a cost sharing effort with FCDMC when they constructed the Loop 303L Outfall Channel. Additionally, ADOT owns right-of-way on the east side of Cotton Lane between Van Buren Street and Canyon Trails Boulevard which was acquired as part of the I-10/SR303L TI, Phase II project. The City of Goodyear has either acquired or used development agreements to set aside areas for potential right-of-way use through the project area. Along Cotton Lane this includes areas in front of Canyon Trails Towne Center, Cottonflower commercial and residential development, as well as the residential developments of Canyon Trails South and Sin Lomas. A 500-foot wide corridor southwest of the intersection of Lower Buckeye Road and Cotton Lane and extending to Broadway Road was acquired for the potential consideration as the SR303L corridor. No right-of-way has been acquired for the SR303L/SR30 TI or for the SR30 corridor.

The remaining right-of-way requirements have been identified for Alternatives 2C, 3, 5 and both their north and south variations to determine the number and size of parcels that would require total or partial acquisition. A cost analysis session was conducted with ADOT Right-of-Way Group March 20, 2018 to prepare right-of-way costs for the SR303L, MC85 to Van Buren Street segment which is the only portion of the corridor that has funding in the current program. The assessment was conducted on a parcel by parcel basis. For undeveloped agricultural areas throughout the southern extent of the project limits a unit price of $2.50/square foot was implemented based upon guidance from ADOT R/W Group. Table 5-4 represents the overall project alternatives' acreage required and estimated cost.

Table 5-4: Right-of-Way Summary

	ALT 2Cs	*ALT 2Cn*	*ALT 3s*	*ALT 3n*	*ALT 5s*	*ALT 5n*
Total Acreage	788	645	680	589	805	693
Estimated Cost	$109.1 M	$92.9 M	$94.0 M	$83.1 M	$109.0 M	$95.6 M

5.6 DRAINAGE

This section describes results of drainage analyses and proposed drainage improvements recommended for the three corridor alternatives. Detailed drainage analyses and design recommendations are included in the Draft Drainage Design Memorandum for SR303L, SR30 to I-10 (2018), a stand-alone document prepared in conjunction with this study.

A regional drainage facility is in place for SR303L from US60 to the Gila River. Through a joint cost sharing agreement, ADOT and FCDMC partnered to construct the Loop 303 Outfall Channel. ADOT constructed and now maintains the channel from US 60 to just south of Van Buren Street. FCDMC constructed and maintains the channel from south of Van Buren Street to its outfall at the Gila River. The channel accommodates both off site development and on site SR303L storm water runoff from the areas north and south of I-10.

The drainage evaluation is in accordance with the current drainage design criteria listed on ADOT's website (https://www.azdot.gov/business/engineering-and-construction/roadway-engineering/drainage-design/manuals). SR303L is classified as an Operational Drainage Frequency Class 1 roadway requiring a 50-year storm frequency for the design of the proposed off site drainage structures. However, because the Loop 303 Corridor/White Tanks ADMPU Area Hydrologic Analysis hydrology was used in the FCDMC drainage channel design, the same storm frequency (i.e., 100-year, 24-hour event) will be used for the off site drainage design. For structures located within the FEMA 100-year floodplain, the impact of the proposed SR30 and SR303L to the FEMA floodplain will need to be evaluated in the final design.

The off site design drainage criteria for cross road culverts and detention basins are:

- A one percent minimum cross slope, perpendicular to the low flow channel, shall apply for detention basin bottom.
- Bleed-off facility (pipe) should drain detention basins within 36 hours
- Maintenance roads should be provided along the perimeter of detention basins
- Detention basin side slopes should be 4:1
- Headwater level of cross culverts should not significantly increase the flood damage potential on areas outside of ADOT ROW
- Headwater depth to culvert height ratio should not exceed 1.5

The on site drainage was evaluated for a 10-year event. The SR303L gravity drain outfall pipe extension from the I-10/SR303 sump was evaluated for a 50-year event.

The proposed off site drainage systems include cross culverts, storm drains, and retention basins. Table 5-5 lists the summary of design discharges for the proposed drainage facilities. The selected HEC-1 outputs from the Loop 303 Corridor/White Tanks Hydrology and Delineation Update, Phase 1 – Updating the Existing Hydrology Model, Final Hydrology Report for both existing land use conditions with projects in place and future land use conditions with projects in place were taken into account in the conceptual drainage design.

The off site hydrology will need to be updated and refined to reflect any proposed revisions to drainage facilities. When making the refinements to the hydrologic model, the final designer shall consult with the City of Goodyear and Maricopa County for any development expansion or proposed development information.

Table 5-5. Summary of Design Discharges for Proposed Drainage Facilities

Drainage Facility	*Structure Location*	*Design Discharge (cfs)*	*Design Event*
72" x 1,904' Storm Drain	From temporary first flush basin to approximately 500 feet south of Lilac Street (for Alternatives 2C, 3, and 5)	177	50-year
42" x 470' Pipe Culvert	At the northeast corner of SR303L and Yuma Road (for Alternatives 2C, 3, and 5)	37	100-year
10' x 6' x 950' Box Culvert	Under SR303L at approximate 0.6 mile south of Yuma Road to convey Canyon Trails Channel to the FCDMC Channel (for Alternatives 2C, 3, and 5)	268	100-year
48" x 490' Pipe Culvert	At the northeast corner of SR303L and Lower Buckeye Road (for Alternatives 2C, 3, and 5)	86	100-year
42" x 1,614' Storm Drain	Along Elwood Street (for Alternative 3)	98	10-year
54-in x 1100-ft pipe	Under SR303L at north side of UPRR, between Citrus Road and 175th Avenue	76	100-yr

The first flush basin located at the southeast corner of Citrus Road and Broadway Road has been sized to retain the first 0.5-inch rainfall on the ultimate pavement width. The parameters of the first flush basin for Alternatives 2C, 3, and 5 are listed in Table 5-6.

Table 5-6. Parameters for Proposed First Flush Basin

	Alternative 2C	*Alternative 3*	*Alternative 5*
Pavement Area (acre)	266.8	205.3	256.5
Required Volume (ac-ft)	11.1	8.6	10.7
Provided Volume (ac-ft)	15.8	12.4	15.1
Percolation Rate (ft^3/hour/ft^2)	0.45	0.45	0.45
Basin Empty Times (hour)	13.7	13.7	13.8

For roadway Alternatives 3 and 5, an additional retention basin is proposed at the northwest corner of Cotton Lane and the UPRR to retain the first flush and on site drainage from Elwood Street to UPRR. The parameters of the proposed retention basin for roadway Alternatives 3 and 5 are listed in Table 5-7.

Table 5-7. Parameters for Proposed Retention Basin

	Alternative 3	*Alternative 5*
Pavement Area (acre)	32.5	9.1
Required Volume (ac-ft)	5.9	1.7
Provided Volume (ac-ft)	7.5	3.0
Percolation Rate ($ft^3/hour/ft^2$)	0.45	0.45
Basin Empty Times (hour)	32.4	11.9

The capacities and headwater elevations for the proposed pipes and box culvert were estimated using CulvertMaster software. The proposed culvert connecting Canyon Trails Channel has more capacity than the flows from Loop 303 Corridor/White Tanks ADMPU AHA HEC-1 model. The final designer should further evaluate it during the final design stage and the size may be reduced subject to FCDMC and Goodyear approval. The outputs for culvert hydraulic analysis are included in the Draft Drainage Design Memorandum for SR303L, SR30 to I-10 (2018).

The gravity system which drains the SR303L sump under I-10 was analyzed during Phase II of the SR 303L/I-10 TI project using StormCAD software. The 72" pipe should be extended to approximately 500 feet south of Lilac Street and the StormCAD model updated during final design. The water surface elevation of the FCDMC Channel at the tie-in should be used as the tailwater condition for the model. The final designer should further evaluate this system by considering all the junction losses.

On site runoff from the SR303L extension would be collected and conveyed by a storm drain system and outfall into the FCDMC channel on the west side of the freeway or to proposed detention basins east of SR303L. Additional on site basins are expected to be developed within the SR303/SR30 TI area. Additional SR30 outfall drainage facilities may be required. Based on the analyses conducted to date, the following drainage concepts are proposed for the three roadway alternatives.

Alternative 2C (Figure 5-2):

- Construct 72-in x 1,904-ft to extend the gravity pipe drain of the SR303L sump under I-10 and outfall to the FCDMC Channel south of Lilac Street.
- Construct a 42-in x 470-ft pipe culvert to drain the existing retention area located at the northeast corner of SR303L and Yuma Road and outfall to the FCDMC Channel.
- Construct a 10-ft x 6-ft x 950-ft box culvert at Canyon Trails Channel approximately 0.6 mi south of Yuma to convey the flow from Canyon Trails Channel to the southwest and outfall to the FCDMC Channel.
- Construct a 42-in x 1,614-ft storm drain trunk line at Elwood Street to convey the on site flows for SR303L from Lower Buckeye Road to Elwood Street west to the FCDMC Channel.
- Extend 2-8-ft x 6-ft x 96-ft box culvert at FCD Channel and realigned Elwood Street crossing and reconstruct inlet and spillway.
- Construct a first flush basin (Citrus Road Basin) at the southeast corner of Citrus Road and Broadway Road to retain the first flush from the pavement of the SR303L mainline, frontage roads, and crossroads from I-10 to UPRR. A portion of SR303L/SR30 TI Ramp SE and Ramp EN would also drain into this basin. The volume required is 11.1 acre-ft and the volume provided is 15.8 acre-ft.

Alternative 3 (Figure 5-3):

- The proposed drainage facilities north of Lower Buckeye Road are the same as those of Alternative 2C.
- Construct a 42-in x 1,614-ft storm drain trunk line at Elwood Street to convey the on site flows for SR303L from Lower Buckeye Road to Elwood Street west to the FCDMC Channel.
- Extend 2-8' x 6' x 96' box culvert at FCD Channel and realigned Elwood Street crossing and reconstruct inlet and spillway.
- Construct a first flush basin (Citrus Road Basin) at the southeast corner of Citrus Road and Broadway Road to retain the first flush from the pavement of the proposed SR303L mainline, frontage roads, and crossroads from I-10 to Elwood Street. The volume required is 8.6 acre-ft and the volume provided is 12.4 acre-ft.
- Construct a retention basin (UPRR Basin) at the northwest corner of Cotton Lane and the UPRR to retain the first flush and on site drainage of the proposed SR303L mainline from Elwood Street to UPRR, and SR303L/SR 30 TI Ramp SE and Ramp EN. The volume required is 5.9 acre-ft and the volume provided is 7.5 acre-ft.

Alternative 5 (Figure 5-4):

- The proposed drainage facilities north of Lower Buckeye Road are the same as those of Alternative 2C.
- Construct a first flush basin (Citrus Road Basin) at the southeast corner of Citrus Road and Broadway Road to retain the first flush from the pavement of the proposed SR303L mainline, frontage roads, and crossroads from I-10 to the UPRR. The volume required is 10.7 acre-ft and the volume provided is 15.1 acre-ft.
- Extend 2-8' x 6' x 96' box culvert at FCD Channel and realigned Elwood Street crossing and reconstruct inlet and spillway.
- Construct a 42-in x 1614-ft storm drain trunk line at Elwood Street to convey the on site flows for SR303L from Lower Buckeye Road to Elwood Street west to the FCDMC Channel.
- Construct a retention basin (UPRR) at the northwest corner of the UPRR and Cotton Lane to retain the first flush and on site drainage of the proposed SR303L from Elwood Street to the UPRR. The volume required is 1.7 acre-ft and the volume provided is 3.0 acre-ft.

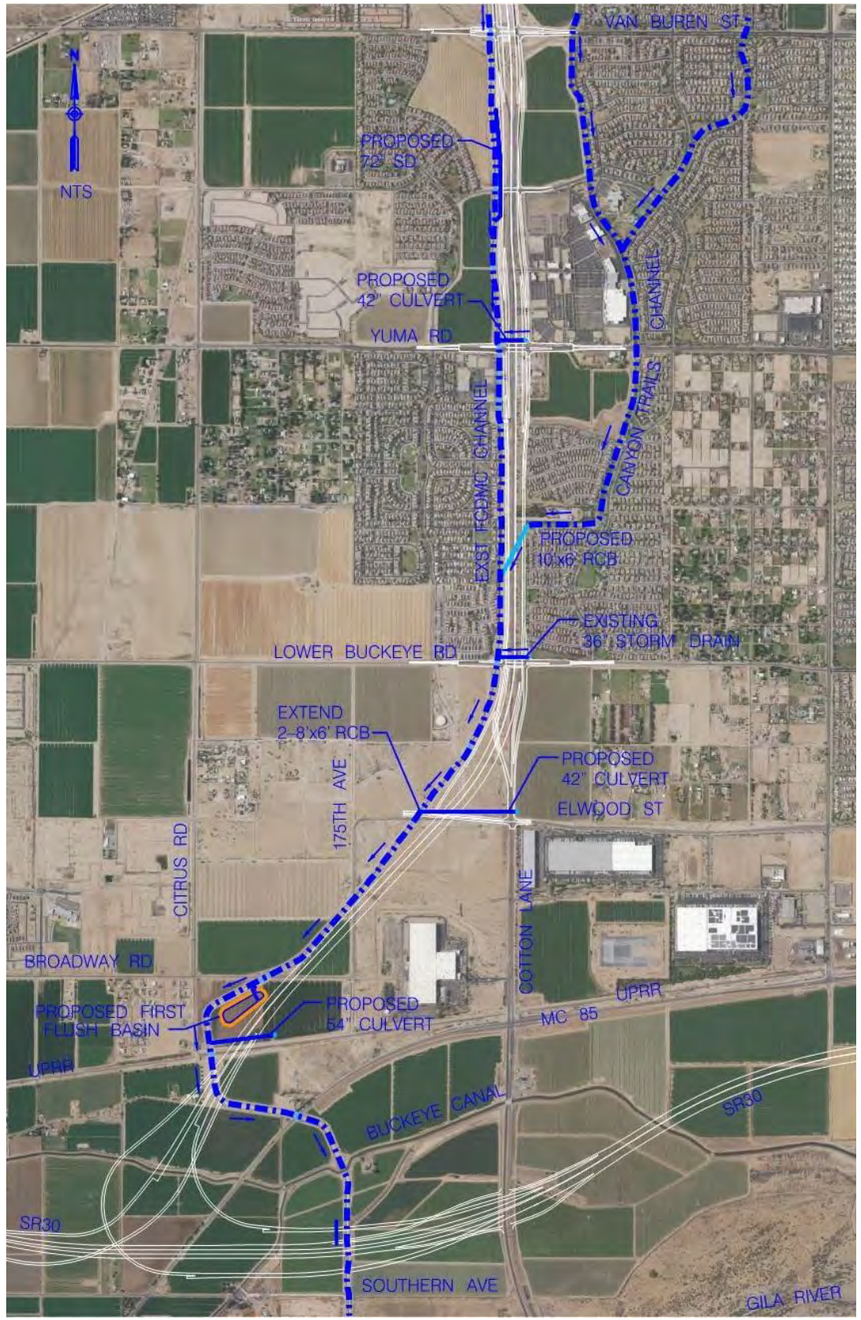


Figure 5-2: Drainage Concepts for Alternative 2C

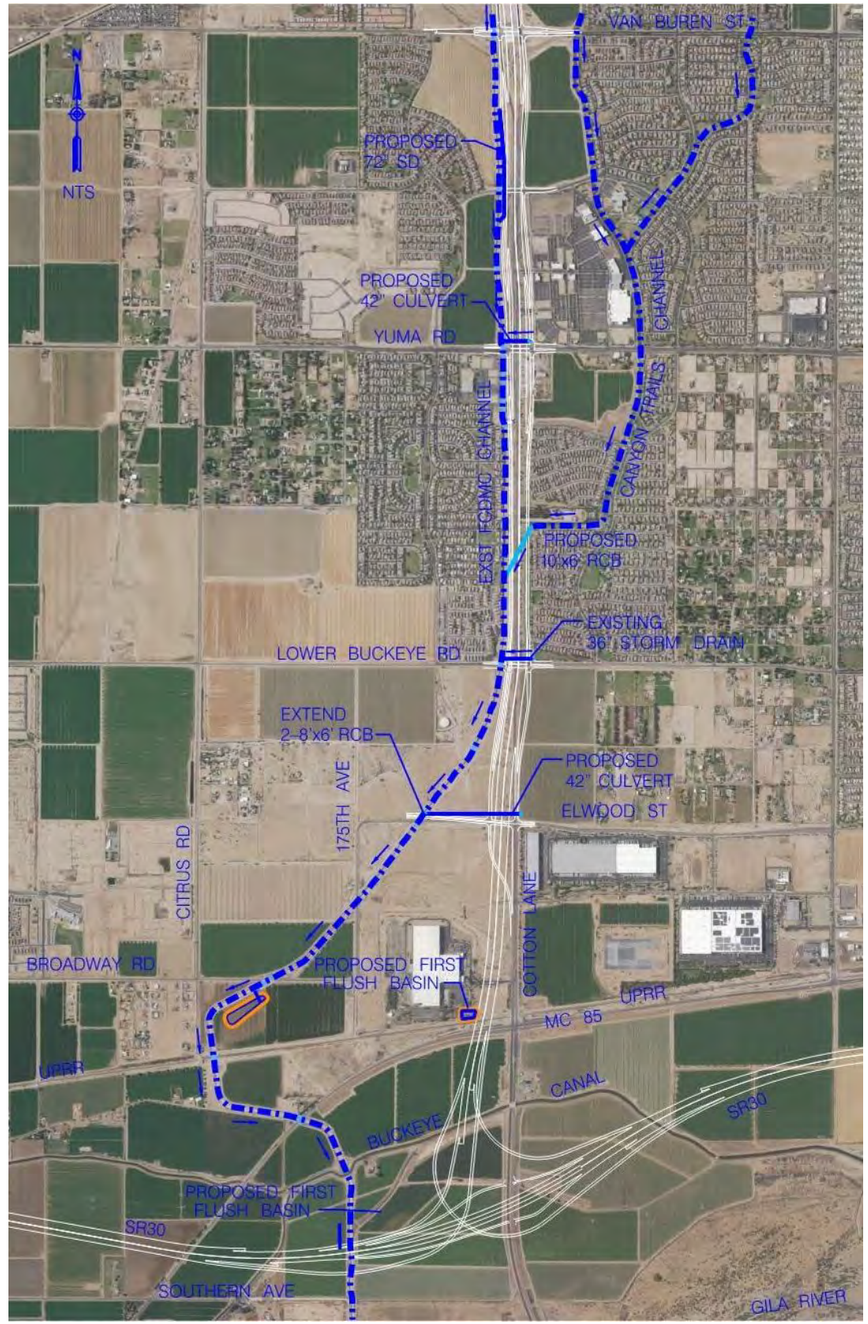


Figure 5-3: Drainage Concepts for Alternative 3

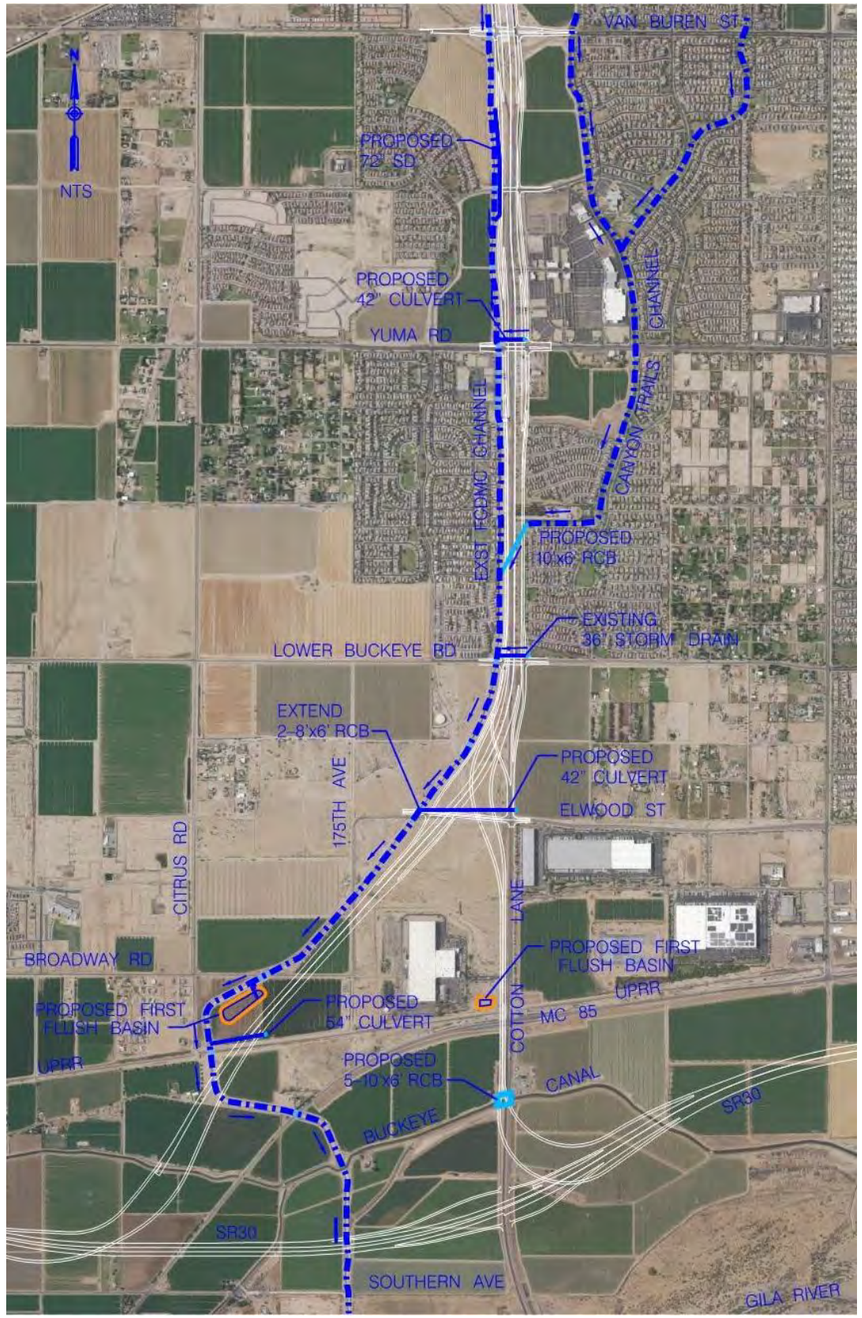


Figure 5-4: Drainage Concepts for Alternative 5

5.7 WATER QUALITY

5.7.1 FLOODPLAINS

The project was evaluated for potential impacts to the floodplains in the study area, in accordance with CFR, Title 23, Part 650, Subpart A, which stipulates FHWA policies and procedures for the location and hydraulic design of highway encroachments on floodplains. This regulation calls for the assessment of federally funded highway projects in terms of impacts on flood risk, where such projects must avoid hazardous or incompatible use and development of floodplains, avoid longitudinal or substantial floodplain encroachment, minimize negative impacts on base flood elevations, restore and preserve natural and beneficial floodplain values, and be consistent with Federal Emergency Management Agency (FEMA), state, and local government standards for the administration of the National Flood Insurance Program.

The existing FEMA Zone X area located at the north side of UPRR between Citrus Road and Cotton Lane, along with the Zone A area located on the north side of the Buckeye Canal and east of MC 85, will be changed or eliminated due to the FCDMC channel.

The SR303L/SR30 TI for Alternatives 2, 3 and 5 southern variations will encroach into the Gila River floodplain. Thus, the roadway embankments should be protected to an elevation one foot above the 100-year water surface elevation for the Gila River.

A Conditional Letter of Map Revision (CLOMR) will need to be prepared by the final designer for ADOT to pass on to the City of Goodyear for the City to submit to FEMA for review, comments, and approval prior to beginning construction of the project.

5.7.2 DRAINAGE FINDINGS

The FCDMC channel was completed in June 2015 and is fully operational, providing a regional outfall to the Gila River for the SR303L corridor's drainage.

The drainage issues and proposed solutions for Alternatives 2C, 3, and 5 are:

- The portion of northbound (NB) SR303L and the NB frontage road from Canyon Trails Boulevard to Yuma Road would occupy the existing retention area located west of Canyon Trails Town Center. This area has been used for outfall of the on site drainage from Cotton Lane and local streets connecting Cotton Lane and the Town Center. The proposed solution is to minimize impacts to the retention area and provide an outfall to the FCDMC Channel.
- The NB frontage road would occupy a portion of the existing Canyon Trails drainage channel from 0.6 mile south of Yuma Road to Lower Buckeye Road. Because no outfall exists for the Canyon Trails channel at Lower Buckeye Road, a 10'x6' box culvert would be constructed under the SR303L mainline and frontage roads to convey this drainage to the FCDMC channel.

- With the removal of the basin at the UPRR in construction of the FCDMC channel, there are no facilities for first flush retention along SR303L from I-10 to SR30. The proposed solution is to construct a first flush basin at the southeast corner of Citrus Road and Broadway Road.
- The original drainage concept for SR303L sump under I-10 was to construct a pump station. A gravity drain pipe connecting to the FCDMC Channel was proposed during the I-10/SR303L TI, Phase II study and was constructed with the I-10/SR303L TI, Phase II project.
- Off site drainage from the west of the SR303L corridor will be intercepted by the FCDMC channel.

The concept of the off site and on site drainage for SR303L from Van Buren Street to SR30 has been investigated and preliminarily designed with the intent of providing a quality stormwater management system for ADOT, other agencies and the traveling public. As with any project in its concept design stages, further evaluation and refinements during final design will be necessary. Special attention should continue to achieve further cost saving through hydraulic efficiency and through minimizing temporary improvements.

5.8 MATERIALS

5.8.1 GEOTECHNICAL ANALYSES

Key geotechnical items that will require analysis during final design include the following:

- Bridge abutments and piers
- Borrow sources
- Use of excavated materials
- Earthwork shrink/swell factors

5.8.2 PAVEMENT DESIGN

The preliminary pavement sections assumed for the project include PCCP with AR-ACFC for the mainline and ramps, PCCP for the crossroads within ADOT access control and maintenance limits, and AC pavement for frontage roads and crossroad tie-ins to existing roadways outside of ADOT access control and maintenance limits.

5.9 EARTHWORK

All alternatives result in a borrow condition for the project due to the elevated nature of the project along with the Gila River floodplain issues for SR30 and the system TI. The earthwork quantities were calculated using INROADS modeling with ADOT standard slope criteria. Earthwork quantity estimates for the alternative analysis are shown in Table 5.8.

Table 5-8. Earthwork Summary Table

	ALT 2Cs	*ALT 2CN*	*ALT 3s*	*ALT 3n*	*ALT 5s*	*ALT 5n*
Roadway Excavation (CY)	115,000	112,000	80,000	75,000	120,000	110,000
Drainage Excavation (CY)	500,000	500,000	500,000	500,000	500,000	500,000
Borrow (CY)	11,520,000	11,330,000	10,530,000	10,430,000	14,130,000	13,930,000

5.10 CONSTRUCTABILITY AND TRAFFIC CONTROL

Where frontage roads are planned, traffic would be maintained on Cotton Lane during construction of the northbound and southbound frontage roads. Upon completion, both directions of traffic would be shifted to the frontage roads with temporary connection to SR303L south of Van Buren Street while the SR303L mainline is constructed.

The Lilac Street/Canyon Trails Boulevard crossing of the proposed SR303L mainline would be closed during construction of the SR303L mainline and the planned grade separation at this location. Lilac Street traffic would utilize the southbound frontage road to Yuma Road where they could proceed south or make a left turn on Yuma Road and another left to access the northbound frontage road. Likewise, Canyon Trails Boulevard traffic would utilize the northbound frontage road to Van Buren Street where they could proceed north or make a left turn on Van Buren Street and another left to access the southbound frontage road. The Lilac Street/Canyon Trails Boulevard intersection would be reopened upon completion of the SR303L overpass structure.

Traffic would be maintained on Yuma Road during construction of the SR303L overpass structure. Some temporary lane closures may be required during placement of AASHTO girders.

Traffic using Lower Buckeye Road could be maintained in the same manner as at Yuma Road. However, at this time there is the potential to provide a temporary shoofly detour on the south side of Lower Buckeye Road as the east and west quadrants on the south side are currently undeveloped.

Elwood Street, 175th Avenue and Broadway Road have similar conditions as Lower Buckeye Road where the use of AASHTO girders or concrete box girder type bridges could be constructed. Current development would allow for detours. Another option is to close these roads during construction of the overpasses as their traffic volumes and regional flow are not as important. In the case of closure, a detour of Broadway Road traffic to Citrus Road up to Lower Buckeye Road would be used.

Construction of the SR30 and directional ramps for the system TI over MC85 could be constructed using falsework or detours.

Cotton Lane traffic at SR30 could also be maintained in a similar fashion to Lower Buckeye Road although a detour in this area would require significant fill material as Cotton Lane is elevated above the surrounding terrain due to Gila River floodplain.

5.11 UTILITIES

All known utility companies within the corridor were contacted to obtain utility information and to identify any potential conflicts with the utility. A summary of the existing utilities within the corridor is presented in Section 1.4.5. Utility relocations were necessary for all alternatives.

Utility relocations, adjustments and/or protections required for all alternatives include the following:

- APS 69kV located along the east side of exiting Cotton Lane between Van Buren Street and Lower Buckeye Road.
- City of Goodyear gravity sewer line south of Yuma Road near the Moose Lodge.
- APS 230kV ¼ mile south of Lower Buckeye Road.
- APS 96-inch reclaimed water line that provides cooling water for the Palo Verde Nuclear Power Plant.
- SRP 500kV, APS 230kV and WAPA 230kV twin power lines south of the UPRR.
- City water and sewer, fiber optics, and gas lines in crossroads.
- RID, BWCDD, and private irrigation wells and infrastructure.
- UPRR and facilities within their right-of-way.

A meeting was held September 27, 2017 with SRP to discuss the major power lines crossing through the project area south of the UPRR. SRP has 500kV lines on towers shared with APS 230kV lines. Parallel to their facilities, WAPA has towers which carry 230kV lines. Relocation of these facilities will require vertical and horizontal relocations. The horizontal relocations will remain within the project area but will require a public siting process for approvals. Relocations and costs vary by alternative. Order-of-magnitude costs were developed by the study team.

A meeting was held December 12,2017 with BWCDD and APS Water to discuss their facilities in the project area south of the UPRR. BWCDD facilities include the Buckeye Canal and its Southern Extension as well as irrigation laterals and well sites throughout the area serving the predominantly agricultural area. Their canal facilities' rights-of-way will be crossed by bridges to provide continuous access along their maintenance roads. Additionally, at these crossings, BWCDD requires the canals to be lined for a length determined by them as well as requiring that permits be obtained and fees paid. APS Water operates a 96" reclaimed water line that runs within the Buckeye Canal right-of-way. Locations of the water line that fall within the new ADOT right-of-way will require the encasement of the facility. Encasement costs for the waterline were estimated at $13,700 per linear foot based upon APS guidance. The potential to construct a bypass pipe only requiring disruptions at the tie-in points may be considered, however it is not an idea approved by APS or APS Engineering and would require further evaluation.

Relocations of these power lines and encasement of the APS reclaimed water line will require advanced planning and long duration to implement due to restrictions to downtime.

5.12 STRUCTURES

This section describes the features of the structural elements needed to support the selected alternative and includes recommendations for the new bridge structures and retaining walls.

The design of the new structures of the selected alternate follows the current edition of the AASHTO LRFD Bridge Design Specifications as adopted and amended by the Arizona Department of Transportation (ADOT) Bridge Group. The structural design considers the HL-93 live load configuration and 25 psf future wearing surface.

ADOT Standard Drawings (SD) becomes part of the design where applicable for all structures.

The Department experience in the design and construction of bridges throughout the state of Arizona results in a knowledge base of economical, practical, and constructible bridge configurations for system interchange directional ramps, including freeway overpass and underpass structures.

This L/DCR considered the following types of structures:

- Cast-in-place Post-Tensioned Concrete Box Girders.
- Precast-Prestressed Concrete AASHTO Girders.
- Pre-cast Prestressed Concrete Bulb-Tee Girders

The L/DCR did not consider the use of concrete segmental, hybrid and/or spliced girder bridges at this stage of project design development. However, precast segmental construction becomes more cost competitive when large numbers of repetitive precast segments are required on a project. In addition, a configuration using spliced precast girders spanning directly over traffic in combination with a post-tensioned box girder bridge system has been successful on the Regional Freeway System and can be a viable option for longer spans.

Bridge design concepts and costs were developed for each of the six alignment alternatives evaluated. This report provides cost estimate summaries for the overall project alternatives 2Cn, 2Cs, 3n, 3s, 5n and 5s. See Table 5-9 Alternatives Structures Comparison for a summary of the findings which includes comparisons for total construction costs, total bridge areas and number of bridges for each alternative.

Table 5-9: Alternatives Structures Comparison

	Stage	Total Construction Cost ($)	Total Area of Bridges (Sq. Ft.)	Number of Bridges
Alternative 2C	Alternative 2Cn	$ 131,481,020	1,195,282 ft²	38
	Alternative 2Cs	$ 131,481,020	1,195,282 ft²	38
Alternative 3	Alternative 3n	$ 149,588,120	1,359,892 ft²	39
	Alternative 3s	$ 129,254,070	1,175,037 ft²	39
Alternative 5	Alternative 5n	$ 100,206,040	910,964 ft²	34
	Alternative 5s	$ 100,206,040	910,964 ft²	34

Table 5-10 summarizes the required bridges for selected alternative 2Cs and are shown below including structure type, length, width, total number spans and area. Figure 5-5 shows a project map the bridge numbering system.

Table 5-10: **Structures for Selected Alternate 2Cs**

	Structure Name	Structure Type	Length	Width	Spans	Area
2C-1	Lilac St - Canyon Trails Blvd	Precast AASHTO	100.00'	245.17'	1	24517 ft²
2Cs-2	Yuma Rd TI OP (Bridge 1 & 2)	Precast AASHTO	178.00'	233.17'	2	41504 ft²
2Cs-3	Lower Buckeye Rd OP	Precast AASHTO	154.25'	268.32'	1	41388 ft²
2Cs-4	SB 303L Frontage Rd/Elwood Exit Ramp OP	Precast BT	572.25'	98.59'	4	56418 ft²
2Cs-5	NB 303L Frontage Rd/Elwood Exit Ramp OP	Precast BT	572.25'	122.59'	4	70152 ft²
2Cs-6	Elwood Road OP	Precast AASHTO	145.16'	221.17'	1	32104 ft²
2Cs-7	Broadway Rd. OP	Precast AASHTO	116.82'	221.17'	1	25837 ft²
2Cs-8	SB 303L UPRR OP	CIP PT BOX	305.00'	101.10'	2	30836 ft²
2Cs-9	NB 303L UPRR OP	CIP PT BOX	320.00'	93.74'	2	29997 ft²
2Cs-10	Ramp S-E	CIP PT BOX	5222.00'	43.17'	26	225434 ft²
2Cs-11	Ramp E-N	CIP PT BOX	8620.00'	43.17'	42	372125 ft²
2Cs-12	Ramp W-N	CIP PT BOX	875.00'	43.17'	6	37774 ft²
2Cs-14	Ramp SE Canal Extension	Precast AASHTO	164.00'	67.17'	2	11015 ft²
2Cs-15	Ramp SE Canal	Precast AASHTO	200.00'	67.17'	3	13433 ft²

Table 5.10: Structures on Selected Alternate 2Cs (Cont.)

	Structure Name	Structure Type	Length	Width	Spans	Area
2Cs-16	Ramp SE	Precast AASHTO	1089.00'	67.17'	7	73144 ft²
2Cs-17	WB SR30/Cotton Ln	Precast AASHTO	229.00'	75.17'	2	17213 ft²
2Cs-18	EB SR30/Cotton Ln	Precast AASHTO	229.00'	137.63'	2	31516 ft²
2Cs-19	WB SR30/MC85	Precast AASHTO	150.90'	75.17'	1	11343 ft²
2Cs-21	EB SR30/MC85	Precast AASHTO	150.90'	75.17'	1	11343 ft²
2Cs-22	NB SR303/Buckeye Canal	CIP PT BOX	433.76'	97.50'	3	42292 ft²
2Cs-23	SB SR303/Buckeye Canal	CIP PT BOX	432.47'	87.50'	3	37841 ft²
2Cs-25	SB SR303/Canal Bridge	Precast Box Girder	96.00'	121.00'	1	11910 ft²
2Cs-26	EN Ramp/Cotton Ln WB	Precast AASHTO	222.00'	55.17'	2	12247 ft²
2Cs-27	EB SR30/Canal Extension	Precast BT	156.50'	75.17'	1	11764 ft²
2Cs-29	WB SR30/Canal Extension	Precast BT	135.50'	87.17'	1	11811 ft²
2Cs-30	EB SR30/Canal Bridges	Precast BT	142.00'	85.17'	1	12094 ft²
2Cs-32	CL Ramp A/ Canal	Precast AASHTO	138.50'	35.17'	1	4871 ft²
2Cs-33	SR30/Canal Bridges	CIP PT BOX	363.50'	245.17'	3	89118 ft²
2Cs-34	EN/Ramp A	Precast AASHTO	560.00'	55.17'	4	30893 ft²
2Cs-35	EN/Canal	Precast AASHTO	105.00'	55.17'	1	5792 ft²
2Cs-36	EN Ramp/Canal Extension	Precast AASHTO	141.00'	75.96'	1	10710 ft²
2Cs-37	Ramp WN / MC85 Canal	Precast AASHTO	112.17'	43.17'	1	4842 ft²
2Cs-45	WB SR30 Bridge/SR303	CIP PT BOX	501.5	75.17'	3	37696 ft²
2Cs-46	EB SR30 Bridge/SR303	CIP PT BOX	501.5	75.17'	3	37696 ft²
2Cs-47	SR30/Perryville	Precast AASHTO	143.67	228.70'	1	32857 ft²

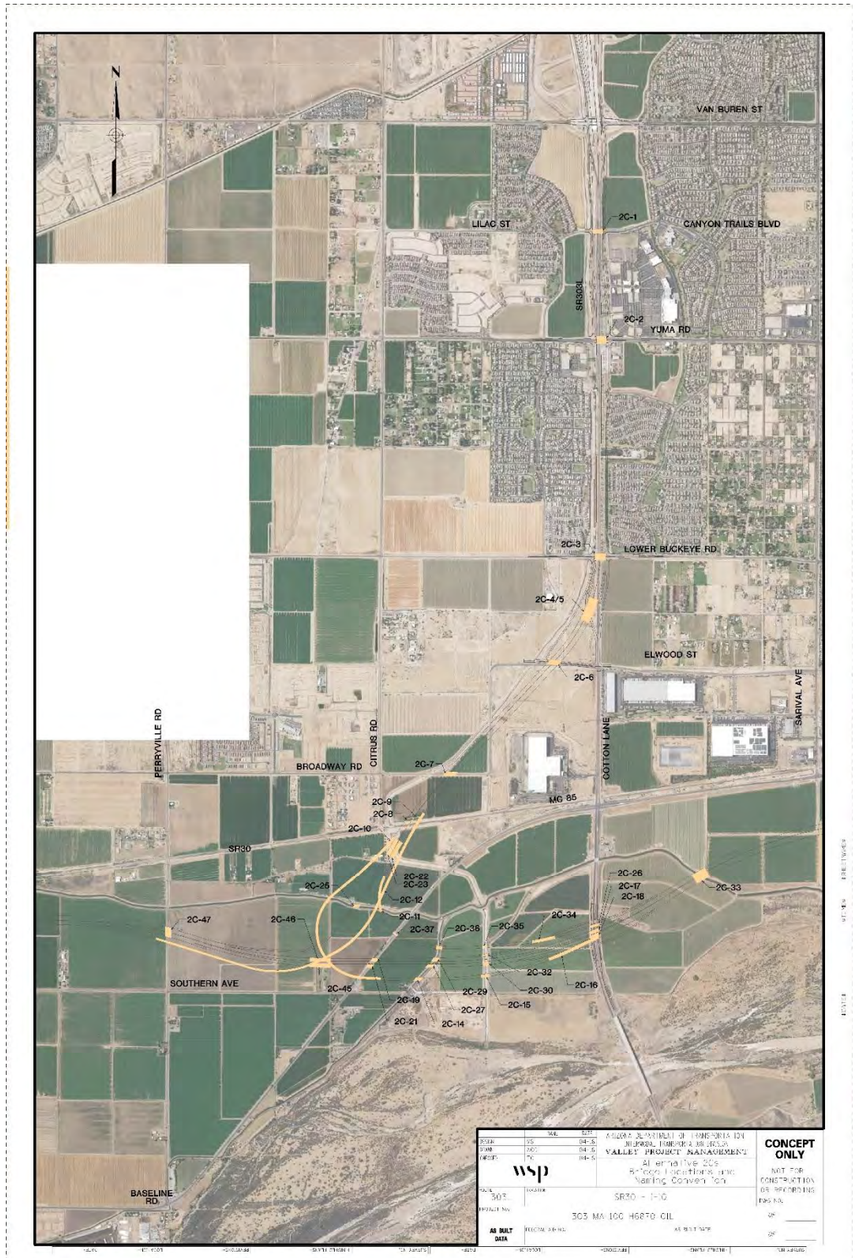


Figure 5-5: Bridge Numbering System – Selected Alternative 2Cs

Alternative 2C Structures Description

Van Buren Street to Elwood Street (Segment 1)

For the crossings at Lilac Street/Canyon Trails Boulevard, Yuma Road, Lower Buckeye Road, and Elwood Street, the overpass bridges will have separate northbound and southbound single-span structures. These bridges will use precast AASHTO girders to facilitate their construction and minimize traffic disruption on the underpass road.

Southbound & Northbound 303L Frontage Road/Elwood Exit Ramp

The bridge's superstructure at Southbound and Northbound 303L Frontage Road/Elwood Exit Ramp consists of a cast-in-place post-tensioned concrete box girder over four continuous spans. Cast-in-place post-tensioned concrete box girder bridges are very efficient bridge types that are constructed on either soffit fill or falsework. This structure type can accommodate varying bridge geometry and is commonly used for span openings of 300 feet or less. See Figure 5-6.

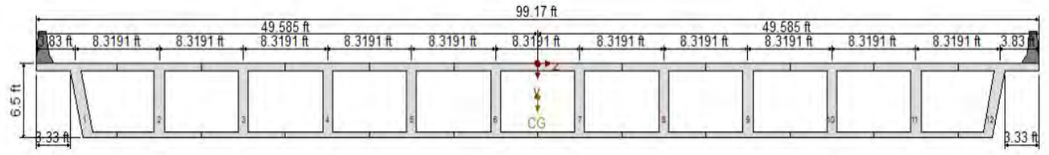


Figure 5-6: Bridges on SB and NB SR303L Frontage Road - Typical Section

Union Pacific Railroad (UPRR) overpass Bridges

The UPRR railway horizontal clearance requirements, along with the skew angle of SR303L relative to the railroad tracks, result in an approximate span length of 160 ft. for the overpass bridges. A preliminary analysis indicates that closely spaced (6'-8") precast prestressed BT-72 concrete girders are feasible with a 28-day concrete strength of 8,500 psi and a release strength of 6,500 psi. See Figure 5-7.

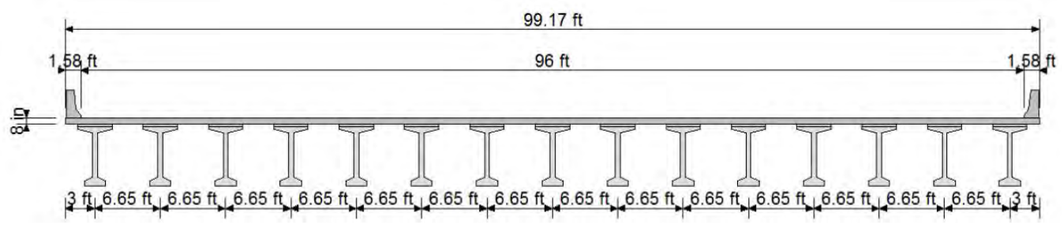


Figure 5-7: UPRR Overpass Bridges – NB Bridge Typical Section

Broadway Rd. Bridge

The Broadway Bridge is a simple span (118 ft) bridge using AASHTO Type IV girders spaced at 6'-8" from centers. The girders should have a 28-days concrete strength of 7500 psi and a release strength of 6000 psi. See Figure 5-8.

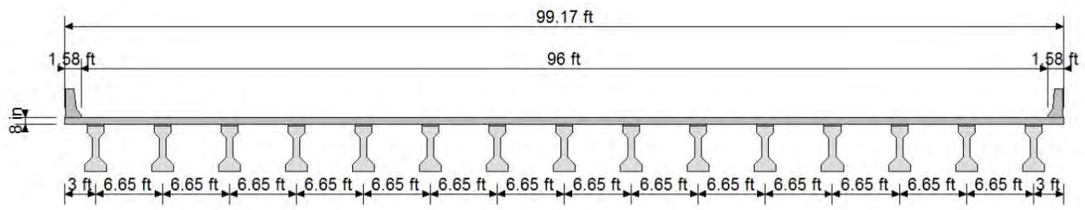


Figure 5-8: Broadway Rd. Bridge – Typical Section

Flyover Ramps: EN, SE and WN

The predominant superstructure type for the flyover ramps is the cast-in-place post-tensioned box girder with an overall width of 43'-2", including two exterior barriers of 1'-7". The minimum depth of the superstructure is 6'-6" and the maximum depth of the superstructure is 10'-0". The supporting substructure for these ramps consist of hammerhead piers and multi-column bents/straddle bents, distributed as needed to avoid interference with other structures / underpass roadways. For these structures the minimum span length is 155'-0", and the maximum span length is 250'-0". See Figure 5-9.

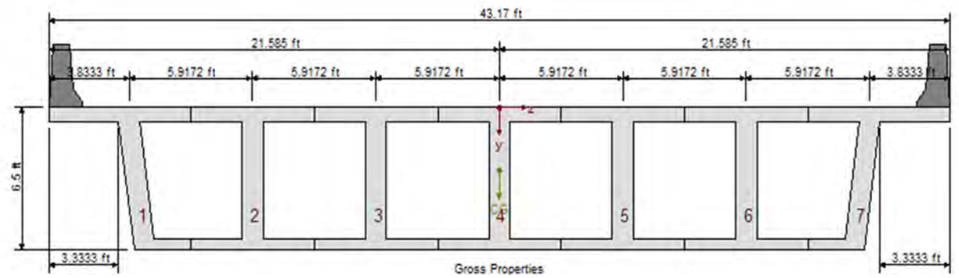


Figure 5-9: Flyover Ramps: EN, SE, WN – Typical Section

SR303 over existing Canals:

The bridges on SR303 over existing canals will consist of a combination of both simple and multi-span continuous structures. Bridges 2C-22 and 2C-23 are 3-span continuous structures using a cast-in-place post-tensioned box girder superstructure supported on hammerhead piers. Bridges 2C-24 and 2C-25 are simple span precast prestressed BIV-48 box girder bridges with a maximum span length of 122ft. See Figure 5-10.

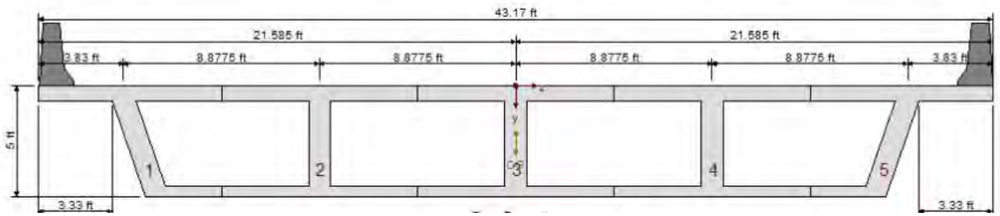


Figure 5-10: Bridges on SR303 over existing canals, 2C-22 and 2C23- Typical Section

SR30 over existing Canals

The conceptual design for the bridges crossing over the existing canals on SR30 proposes simple span bridges with a maximum span length of 140 ft. Due to the span length, the recommended superstructure type for these structures is an BT72 girder with a minimum superstructure depth of 7'-0".

SR 30 Bridges over Perryville Rd.

The bridge is a simple span AASHTO Type VI girder bridges. The maximum span length is 145 ft and the girders have a minimum spacing of 6'-3". This configuration is feasible with a 28-days concrete strength of 7,500 psi and a release strength of 6,000 psi. See Figure 5-11.

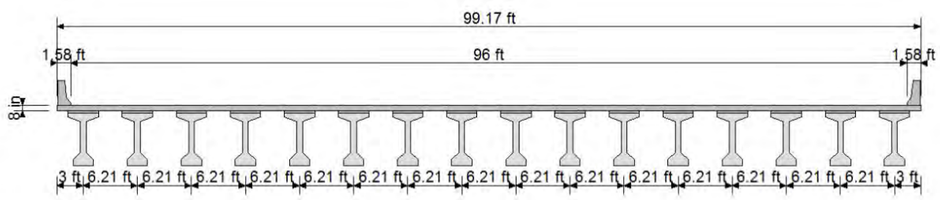


Figure 5-11: Perryville Rd. Bridge Half – Typical Section

Ramp SE Bridge

The conceptual design for this bridge considers simple span cast-in-place post-tensioned concrete box girders. The maximum span length is 200 feet with an average 36-degrees skew. All the bridges use standard ADOT F-shape barriers resulting in a bridge configuration of 1'-7" barrier, 12'-0" outside shoulder, four 12'-0" lanes, a 6'-0" inside shoulder and a 1'-7" barrier. The overall out-to-out width of the bridges is 67'-2". The minimum superstructure depth is 9'-0". See Figure 5-12.

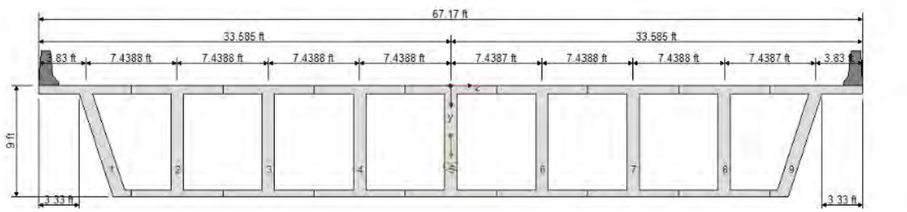


Figure 5-12: Ramp SE, Bridge Typical Section

SR30 over Cotton Lane

The bridges on SR 30 over Cotton Lane are two-span prestressed concrete AASHTO Type IV girder bridges with a typical span length of 114.50 ft and 21-degree skew. Both bridges have four 12'-0" lanes and two 12'-0" shoulders. A preliminary analysis shows the feasibility of the superstructure with a girder minimum spacing of 5'-5", a 28-days concrete strength of 7,500 psi, and a release strength of 6,000 psi. Bridge 2C-18 extends wider to include the Ramp SW crossing the canal to provide a wider cross section. See Figure 5-13.

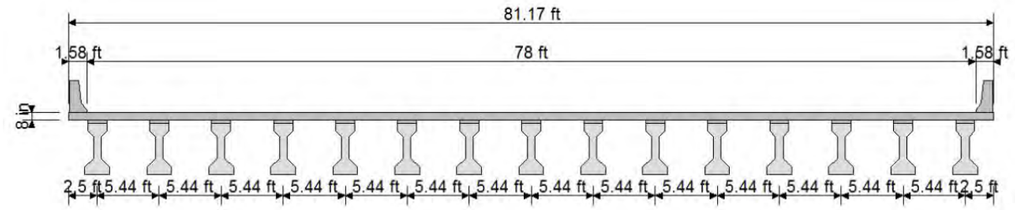


Figure 5-13: SR30 over Cotton Lane, Typical Section (AASHTO Type IV)

SR30 over MC85

The bridges on SR 30 over MC85 are single span prestressed concrete AASHTO Type VI girder bridges with a typical span length of 150 ft. and 68-degree skew. Both SR 30 bridges have four 12'-0" lanes and two 12'-0" shoulders with a total width of 75'-2". A preliminary analysis shows the feasibility of the superstructures with a girder minimum spacing of 5'-4", a 28-days concrete strength of 7,500 psi and a release strength of 6,000 psi. See Figure 5-14.

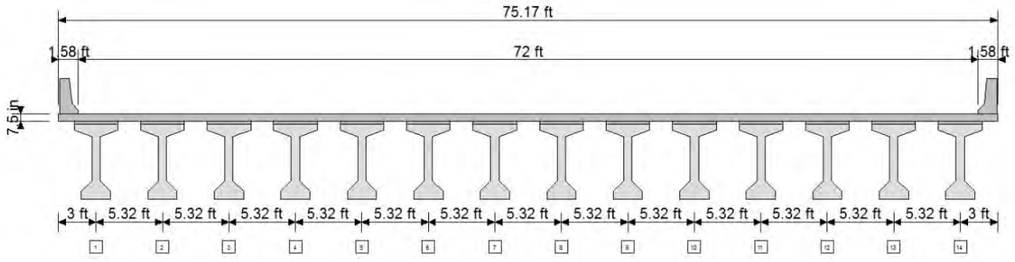


Figure 5-14: SR30 over MC85- Typical Section (AASHTO Type VI)

Ramp WN over Cotton Lane

The bridge on Ramp WN-WS over Cotton Lane has same configuration as the bridges on SR30 over Cotton Lane. This is a two span prestressed concrete AASHTO Type IV girder superstructure. The bridge overall width is 55'-2", the typical span length is 111'-0" with 26-degrees skew and a 6'-2" superstructure depth.

Ramp WN over MC85

This bridge has the same configuration as the bridges on SR303 over existing canals. Ramp WN has a span length of 112'-0". The structural type is a simple span prestressed concrete AASHTO Type IV girder bridge with a 6'-2" superstructure depth.

Ramp WN: Bridges over existing Canal, MC85, and Ramp (A)

The conceptual design for these bridges considers both simple and multi-spans (bridge over Ramp A) prestressed concrete BT72 girder bridges with a 6'-11" superstructure depth. The maximum span length is 140 feet with an average 26-degree skew. All the bridges use standard ADOT F-shape barriers resulting in a bridge configuration of 1'-7" barrier, 12'-0" outside shoulder, four 12'-0" lanes, a 6'-0" inside shoulder and a 1'-7" barrier. The overall out-to-out width of the bridges is 55'-2".

SR30 over SR303

The conceptual design for these bridges considers 3-span continuous cast-in-place post-tensioned concrete box girder bridges. The maximum span length is 167'-2" with no skew. Both bridges use standard ADOT F-shape barriers resulting in a bridge configuration of 1'-7" barrier, 12'-0" outside shoulder, four 12'-0" lanes, a 6'-0" inside shoulder and a 1'-7" barrier. The overall out-to-out width of the bridges is 75'-2". The minimum superstructure depth is 8'-0". See Figure 5-15.

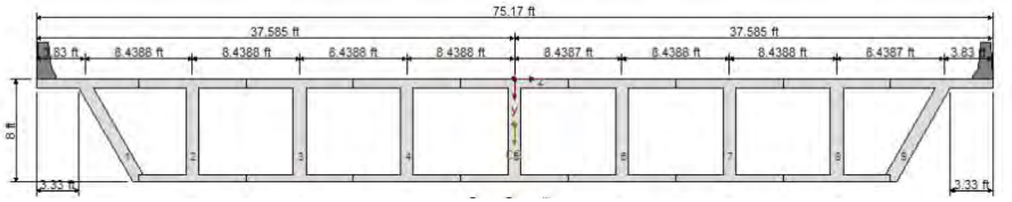


Figure 5-15: Bridges on SR30 over SR 303 - Typical Section

5.12.2 PROPOSED WALLS

Due to existing development and constrained right-of-way including ramps and frontage roads, retaining walls will be utilized through much of Segment 1 from Van Buren to Lower Buckeye Road.

Noise wall requirements have been identified in the Noise Report which is part of the EA. Figures 5-16 thru 5-22 identify the general location of these walls for the selected Alternative 2Cs.

Figure 5-16: General Noise Wall Requirements

Figure 5-17. General Noise Wall Requirements

Figure 5-18. General Noise Wall Requirements

Figure 5-19. General Noise Wall Requirements

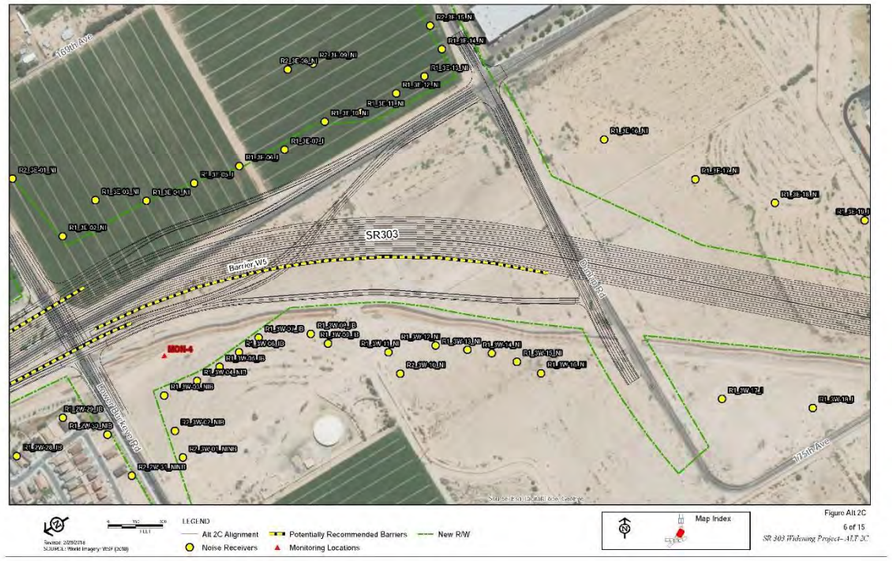


Figure 5-20. General Noise Wall Requirements

Figure 5-21: General Noise Wall Requirements

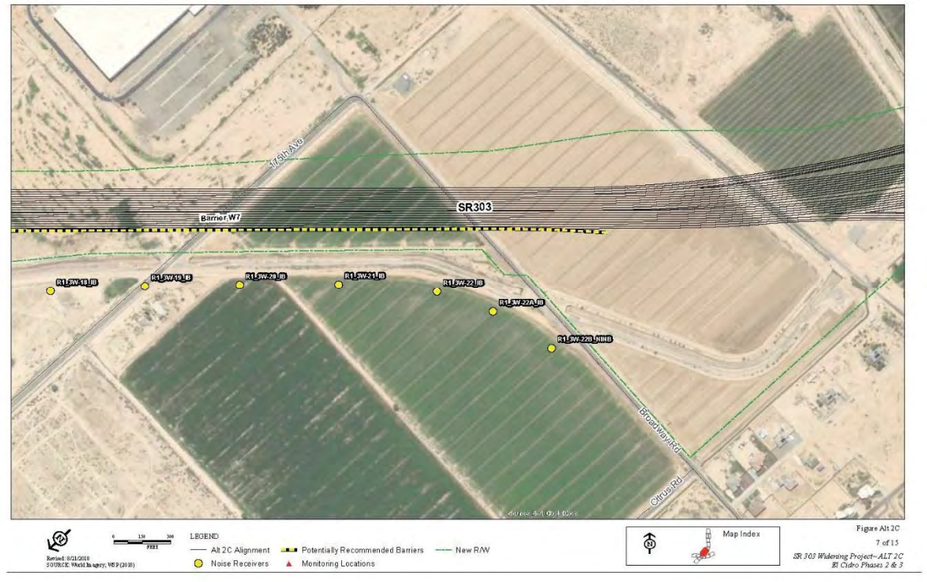


Figure 5-22: General Noise Wall Requirements

5.13 DESIGN EXCEPTIONS

No design exceptions will be required for the SR303L freeway. Design exceptions for horizontal sight distance will likely be necessary for some of the directional ramps in the SR303L/SR30 System Interchange due to sight restrictions created by concrete safety barriers.

5.14 LANDSCAPING AND AESTHETICS

This project will include landscaping work including inventory and salvaging of native plant materials, irrigation systems, plantings, decomposed granite and landform graphics. Other aesthetic features will include enhancements to retaining walls, sound walls, bridge piers, bridge abutments, bridge fencing and other fencing. The final design team will develop these features with coordination between ADOT Roadside Development and local agencies. Costs for wall and bridge features are included in those items and an allowance to provide for landscaping, irrigation systems and landform graphics is included in the estimate. The landscaping, irrigation, and landform graphics have historically been put in place immediately following roadway construction under a separate contract. For this L/DCR those costs are included in the estimates for the overall project alternatives and implementation projects.

5.15 RELATED IMPROVEMENTS

There are currently no projects listed in the MAG FY 2018-2022 Transportation Improvement Program (TIP) for the SR303L, SR30 to I-10 project area. The City of Goodyear has one project listed in their FY 2018-2027 Capital Improvement Program (CIP) to Improve Yuma Road from Cotton Lane to Sarival Avenue in FY 2022. In accordance with its future land use plan, additional commercial and residential development is occurring and is planned by the City of Goodyear along the Cotton Lane corridor south of I-10.

A variety of recreational resources are located either within or proximate to the study area. Both the City of Goodyear and The Town of Buckeye have identified the MC85 corridor as a primary recreational opportunity for bicycling and trail networks. The City of Goodyear has proposed trails in or adjacent to drainage channels and washes that align with arterial corridors as well as canal alignments and the Gila River corridor. There are a number of bike lanes in the study area that are primarily within the roadway of adjacent collector streets (Figure 5-23).

The Maricopa County Parks and Recreation Department developed the Maricopa Trail, which connects the major parks throughout Maricopa County via a continuous network of pathways and trails. This trail system is located adjacent to the eastern border of the study area and provides access to Estrella Mountain Regional Park to the southeast. There are no public parks located in the study area.

A recreational corridor is proposed in the project vicinity as part of the El Rio Watercourse Master Plan. The El Rio vision is a 17-mile plan along the Gila River that includes trails for biking, hiking, and bird watching, plus wildlife habitat enhancements, that extend from the confluence of the Agua Fria River to SR85. The El Rio Watercourse Master Plan project began as a restoration effort to return the Gila River to its natural state and improve flood control. With the efforts of the FCDMC, the cities of Avondale, Goodyear, and Buckeye, the Master Plan's vision is to develop a recreational corridor that generates development in West Valley communities.

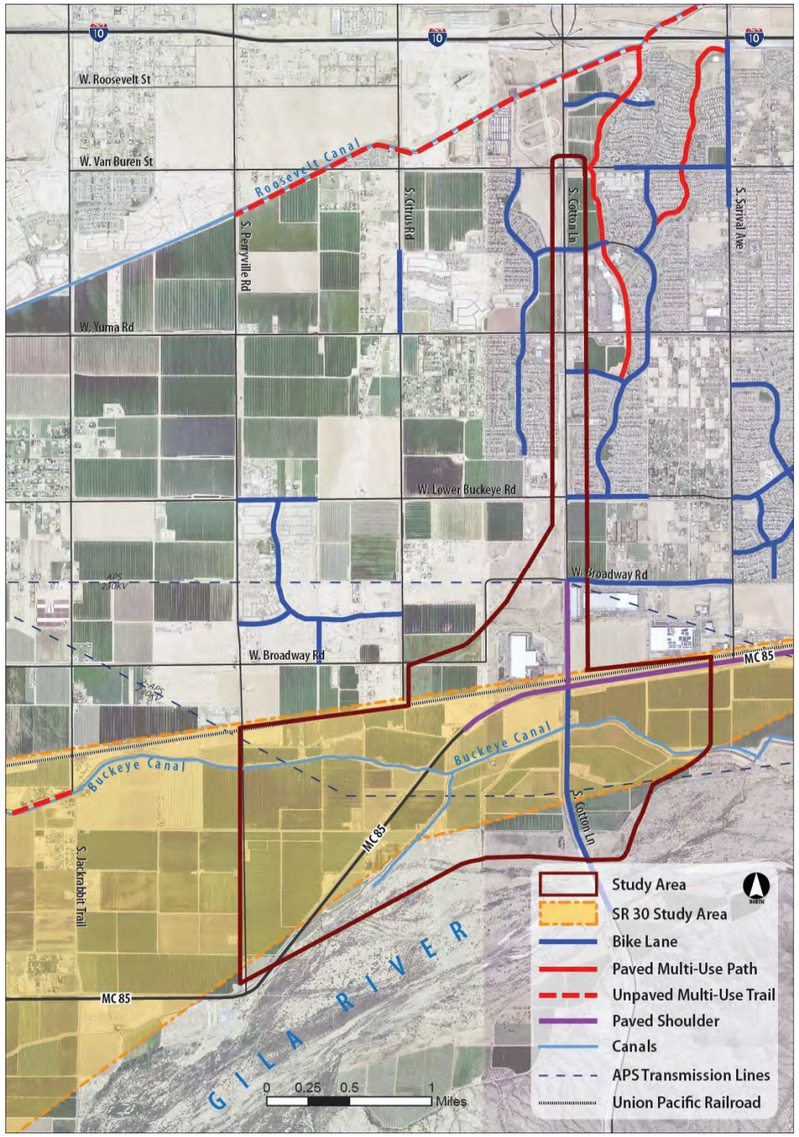


Figure 5-23. Bike Facilities

Source: City of Goodyear and MAG Bikeways

5.16 OTHER TRANSPORTATION STUDIES

The ADOT SR30, SR202L to SR303L (Sarival Ave.) EA and DCR is currently underway. This study will define a new RTPFP freeway from SR202L, South Mountain Freeway to the limits of this study at Sarival Avenue. The full freeway is currently unfunded in the current Proposition 400 in the MAG 20-year RTPFP. Current MAG roadway networks show this full freeway in place in their 2040 models. The potential for a short-term interim roadway along with right-of-way preservation within the corridor are under consideration. The ADOT 2019–2023 5-Year Construction Program includes Design, R/W and Utility funding in 2020 and construction funding in 2022 for Phase 1 improvements. Additional information can be found at https://www.azdot.gov/planning/transportation-studies/state-route-30/overview.

The ADOT SR30, SR303L to SR85 study is currently on hold. This study was initiated to define a recommended corridor for the extension of SR30 to SR85. MAG initiated a Public and Environmental Linkages (PEL) study for this portion of the corridor but that was also put on hold due to activities associated with the Interstate 11 Corridor Tier 1 Environmental Impact Statement. Information on the I-11 project can be found at http://i11study.com/Arizona/index.asp. The SR30, SR303L to SR85 segment is currently unfunded in the current Proposition 400 in the MAG 20-year RTPFP. Current MAG roadway networks show this full freeway in place in their 2040 models.

A SR303L, Hassayampa Freeway to SR30 Corridor Feasibility Study began in 2013 to look at potential corridors for a southerly extension of SR303L south of SR30. Crossings of the Gila River were vetted and identified two potential crossings of the Gila River immediately south of SR30. The draft report found both crossings and the corridors presented to be viable. With the selection of Alternative 2Cs the initial southerly extension of SR303L will head in a Rainbow Valley direction; however, no location for a Gila River Crossing or extension of the corridor has been determined. Continuation of the study has been cancelled at this time..

6 ENVIRONMENTAL

6.1 ENVIRONMENTAL MITIGATION MEASURES

The effects of the Build Alternatives have been assessed and are documented in the project EA which had the FONSI approved by FHWA on November 6, 2018. The mitigation commitments provided below have been taken from the Final EA. This list applies to the southerly extension of SR303L between I-10 and the proposed SR30 freeway. Where required, site specific mitigation measures may be developed through consultation among ADOT, FHWA, MAG, the City of Goodyear, and local residents. ADOT will implement the mitigation measures by incorporating details into the construction plans, specifications and special provisions, and by construction monitoring. ADOT will also direct all activities performed by the construction contractor(s).

Mitigation measures have been defined to avoid or minimize the environmental impacts of the selected alternative. These mitigation measures are not subject to change without prior written approval from the FHWA.

Design Responsibilities

- A right-of-way acquisition program will be implemented in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), the Uniform Relocation Act Amendments of 1987 (Public Law 100-17), and Title VI of the Civil Rights Act of 1964. Private property owners will be compensated at fair market value for land acquired for project right-of-way. Landowners required to move to a new home may be eligible for relocation benefits. These payments may include a housing supplement, moving costs, reestablishment costs, incidental expenses, and closing costs. Renters may also be eligible for relocation benefits.
- Prior to Final Design of the SR303L-SR30 Traffic Interchange, the Engineer will arrange with the ADOT Environmental Planning Historic Preservation Team for boundary testing and possible data recovery to be performed per the stipulations set forth in the June 2013 Programmatic Agreement developed for this project.
- Noise Abatement eligibility for the benefited properties will be readdressed in relation to the Date of Public Knowledge and Public Involvement process, and evaluated at the Final Design stage based on the selected Alternative, as the Preliminary Design Concept is subject to change.
- During final design, the project manager will contact the Arizona Department of Transportation Environmental Planning noise coordinator (602.712.6161 or 602.712.7767) to arrange for qualified personnel to review and update the noise analysis.
- Where avoidance of utilities is not possible or feasible during final design, the utilities will be encased or relocated. Utility work related to the freeway will need to be closely coordinated with the utility owners, particularly when severe outages will be required. Power outages related to power line relocations should generally be scheduled between November and February. Any outages for the Arizona Public Service pipeline serving the Palo Verde Nuclear Generating Station will be coordinated with Arizona Public Service and may need to occur during the April or October "dry-ups."

Design Responsibilities (continued)

- Should a utility relocation be required, the Arizona Department of Transportation will coordinate with the utility owner to determine the need for new right-of-way of the same size as the previous right-of-way for that utility.
- The use of earth colors for lighting standards, overpasses, abutments, retaining and screening walls, and noise barriers will be evaluated by the Arizona Department of Transportation. The colors and finishes should be sensitive to the context of the rural surroundings and mountain views.
- The Arizona Department of Transportation will evaluate the use of aesthetic treatments and patterning on noise barriers, screen walls, piers, concrete barriers, retaining walls, and highly visible headwalls.
- Retention basins and associated landscape treatments will blend into the surrounding landscape to the extent possible.
- Where the freeway will encroach on the Gila River, the design team will evaluate bridge options that will reduce impacts on the 100-year floodplain.
- Where the freeway will cross flood control features such as SR303L Outfall Channel, the design team will evaluate bridge options to reduce impacts on such features.
- The design team will coordinate with the City of Goodyear and the Flood Control District of Maricopa County to identify and reduce potential impacts any levees and will consider mitigation measures for any floodplains that will be affected by the freeway.
- The Maricopa County Floodplain Manager at (602.506.1501) will be provided an opportunity to review and comment on the design plans.
- All disturbed soils that will not be landscaped or otherwise permanently stabilized by construction will be seeded using species native to the project vicinity.

Roadside Development Responsibilities

- Protected native plants within the project limits will be impacted by this project; therefore, the Department Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Department Roadside Development Section will send the notification at least 60 calendar days prior to the start of construction.
- The Arizona Department of Transportation Roadside Development Section will during final design provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the project limits.

District Responsibilities

- Access to adjacent businesses and residences will be maintained throughout construction.
- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor shall stop work immediately at that location notify the Engineer and shall take all reasonable steps to secure the preservation of those resources. The Engineer will contact the Arizona Department of Transportation Environmental Planning Group,

Historic Preservation Team, (602.712.8636 or 602.712.7767) immediately, and make arrangements for proper treatment of those resources.

District Responsibilities (continued)

- The Engineer will review and approve the contractor's Stormwater Pollution Prevention Plan, Notice of Intent, and Notice of Termination prior to submission to the Arizona Department of Environmental Quality.
- If active bird nests are identified within the project limits, construction activities will avoid disturbing any active nest. Avoidance areas, if necessary, will be marked in the field with temporary fencing or t-posts with flagging by an ADOT-approved biologist. The Engineer will confer with the approved biologist to determine the appropriate avoidance strategies until the nestlings have fledged from the nest and the nest is no longer active.
- If any active bird nests cannot be avoided by vegetation clearing or construction activities, the Engineer will contact the Environmental Planning Group Biologist (602.712.7134 or 602.712.6819) to evaluate the situation.

Contractor Responsibilities

- Access to adjacent businesses and residences shall be maintained throughout construction.
- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor shall stop work immediately at that location notify the Engineer and shall take all reasonable steps to secure the preservation of those resources. The Engineer will contact the Arizona Department of Transportation Environmental Planning Group, Historic Preservation Team, (602.712.8636 or 602.712.7767) immediately, and make arrangements for proper treatment of those resources.
- The contractor shall comply with all local air quality and dust control rules, regulations, permits, and ordinances which apply to any work performed pursuant to the contract.
- The contractor shall comply with all local sound control and noise rules, regulations, permits, and ordinances which apply to any work pursuant to the contract.
- During the construction phase, utility work related to the freeway shall continue to be closely coordinated with utility owners, particularly when severe outages will be required.
- The contractor shall develop a Stormwater Pollution Prevention Plan, Notice of Intent, and Notice of Termination, and submit it to the Engineer for approval.
- The contractor, upon approval from the Engineer, shall submit the Stormwater Pollution Prevention Plan, Notice of Intent, and Notice of Termination to the Arizona Department of Environmental Quality.
- This project is located within a designated municipal separate storm sewer system. Therefore, the contractor shall send a copy of the Notice of Intent and Notice of Termination to the City of Goodyear.
- All disturbed soils that will not be landscaped or otherwise permanently stabilized by construction shall be seeded using species native to the project vicinity.

Contractor Responsibilities (continued)

- The contractor shall develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled shall include those listed in the State and Federal Noxious Weed and the State Invasive Species list in accordance with State and Federal Laws and Executive Orders. The plan and associated treatments shall include all areas within the project right-of-way and easements as shown on the project plans. The treatment and control plan shall be submitted to the Engineer for the Arizona Department of Transportation Construction Professional Landscape Architect to review and approve prior to implementation by the contractor.
- The contractor shall employ a biologist to complete a preconstruction survey for burrowing owls 96 hours prior to construction in all suitable habitat that will be disturbed. The biologist shall possess a burrowing owl survey protocol training certificate issued by the Arizona Game and Fish Department. Upon completion of the survey, the contractor shall contact the Arizona Department of Transportation Environmental Planning Biologist (602.712.6819 or 602.712.7767) to provide survey results.
- If any burrowing owls were located during preconstruction surveys or construction, the contractor shall employ a biologist holding a permit from the US Fish and Wildlife Service to relocate all burrowing owls from the project area, as appropriate.
- If burrowing owls or active burrows were identified during the preconstruction surveys or during construction, no construction activities shall take place within 100 feet of any active burrow until the owls are relocated.
- Prior to the start of ground-disturbing activities, the contractor shall arrange for and perform the control of noxious and invasive species in the project area.
- If clearing, grubbing, or tree/limb removal will occur between March 1 and August 31, the contractor shall employ a qualified biologist to conduct a migratory bird nest search of all vegetation within the 10 (ten) days prior to removal. Vegetation may be removed if it has been surveyed and no active bird nests are present. If active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the non-breeding season (September 1 – February 28), vegetation removal is not subject to this restriction.
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction equipment and remove all attached plant/vegetation and soil/mud debris prior to leaving the construction site.
- To prevent the introduction of invasive species seeds, the contractor shall inspect all earthmoving and hauling equipment at the equipment storage facility and the equipment shall be washed prior to entering the construction site.
- The contractor shall employ a biologist to complete a preconstruction survey for invasive plant species immediately prior to ground-disturbance activities. Upon completion of the survey, the contractor shall contact the Arizona Department of Transportation Environmental Planning Biologist (602.712.7134 or 602.712.7767) to provide survey results.

Contractor Responsibilities (continued)

- If suspected hazardous materials are encountered during construction, work shall cease at that location and the Engineer shall be notified. The Engineer will contact the Arizona Department of Transportation Environmental Planning Group hazardous materials coordinator (602.920.3882 or 602.712.7767) immediately, and make arrangements for assessment, treatment and disposal of those materials.
- The contractor shall ensure that appropriate Occupational Safety & Health Administration recommendations are followed for levels of personal protective equipment (i.e. dust masks and protective eyewear to minimize contact with airborne dust) to be used by all persons entering or working in the project area.

7 ITEMIZED COST ESTIMATES

7.1 ESTIMATES

Detailed cost estimates have been developed for the alternatives for comparison purposes. A summary of the estimates is included below and the detailed estimates are included in Appendix A. All estimates utilize recent ADOT bid results for unit prices while factoring in adjustment for project location and constructability issues.

Additional information regarding estimation is provided for the following items:

- Clearing and Removals: Costs include $3,000/acre for clearing disturbed areas outside existing pavement and removal of AC pavement, curb, sidewalks, etc.
- Earthwork: Earthwork has been calculated using Inroads modeling. The earthwork numbers are un-factored. Accounting for earthwork shrink or swell is accounted for in the contingencies.
- Furnish Water: Furnish Water is calculated on a per mile basis using a unit cost of $150,000/mile.
- Pavement Related Items: Mainline, ramps and crossroad within ADOT access control will be PCCP. A unit cost of $45/square foot includes subbase, PCCP and AR-ACFC for the mainline and ramps. Frontage roads and crossroad transitions will be AC. A unit cost of $30/square foot includes subbase and AC pavement.
- On site Drainage: On site drainage is calculated on a per mile basis using $800,000/mile based upon recently constructed segments of SR303L north of I-10.
- Off site Drainage: Most of the SR303L off site drainage is provided by the Loop 303 Outfall Channel constructed by FCDMC. A culvert taking flows from the Canyon Trail development channel to the FCDMC channel is included and estimated on a linear foot basis. Off site drainage for SR30 is based upon an assumed extent of channel. The overall cost for off site drainage is shown in the estimate as a Lump Sum item.
- Bridges: Deck square footage was calculated for every bridge. A unit cost of $110/square foot was used in the estimates.
- Traffic Control: Traffic control is shown as a lump sum item. Costs per crossroad were developed based upon recent information from the SR303L segments north of I-10. An order of magnitude estimate for the Cotton Lane corridor was also assumed to maintain traffic where the SR303L will be constructed on top of Cotton Lane.
- Signing and Marking: Signing and Marking is calculated on a per mile basis using $1,000,000/mile which is slightly higher than recently constructed segments of SR303L north of I-10. This higher unit cost is to account for the greater number of sign bridges due to the I-10/SR303L TI and SR303L/SR30 TI near and within the project.
- Lighting: Lighting is calculated on a per mile basis using $600,000/mile based which is slightly higher than recently constructed segments of SR303L north of I-10 due to the high mast lighting associated with the SR303L/SR30 TI.
- Traffic Signals: Traffic signals have been calculated on an at each basis per interchange/intersection. This includes 2 sets of signals at these locations estimated at a cost of $250,000 per location. Traffic signals for all alternatives are located at Liliac St./Canyon Trails Blvd., Yuma Road, Lower Buckeye Road, Elwood Street, and Cotton Lane.
- FMS: The cost include for FMS is calculated on a per mile basis using $400,000/mile based upon recently constructed segments of SR303L north of I-10. These costs are for conduit and pull boxes only. No costs are included for full FMS implementation.
- Landscaping: Landscaping costs are calculated on a per mile basis using $1,200,000/mile. These costs include irrigation, planting, decomposed granite and landform graphics.
- Erosion Control: Erosion control costs are calculated on a per mile basis using $75,000/mile based upon recently constructed segments of SR303L north of I-10.
- Utilities: Utility costs associated with City water and sewer relocations that will be performed by the contractor were estimated based upon other recent similar work.
- Mobilization: Mobilization costs are calculated as 8% of the estimated contractor's bid.
- Retaining Walls: Square footage of retaining walls has been calculated using Inroads modeling. A unit cost of $60/square foot for exposed face of wall is based upon data from recently constructed segments of SR303L north of I-10.
- Sound Walls: Square footage of sound walls is based upon the results of the noise study conducted as part of the EA. A unit cost of $35/square foot is based upon data from recently constructed segments of SR303L north of I-10.
- Roadway Appurtenances: This item includes curb and gutter, barrier, sidewalks, impact attenuators and other items associated constructed adjacent and around the roadway paving. Based upon recently constructed segments of SR303L north of I-10 and taking into account frontage roads and the SR303L/SR30 system TI directional ramps, a per mile cost of $1,400,000 per mile has been used.
- Contractor Quality Control: Contractor quality control costs are calculated as 0.75% of Subtotal B which represents the estimated amount of the contractor's bid.
- Contractor Surveying: Contractor Surveying costs are calculated as 1% of Subtotal B which represents the estimated amount of the contractor's bid.
- Construction Engineering: Construction engineering includes the costs to ADOT to oversee and administer the construction project. It is calculated as 9% of Subtotal B for RTPFP projects.
- Construction Contingencies: Construction contingencies includes the costs for material changes to the project during construction such as change orders. It is calculated as 5% of Subtotal B for RTPFP projects.
- Prior Rights Utility Relocations: Relocation costs for the large transmission lines and the APS reclaimed water line were developed with guidance from the utility companies.
- ICAP: Indirect Cost Allocation Percentage is applied to all federally funded ADOT design, right-of-way and construction projects. It accounts for the cost of ADOT to operate as an agency on federal projects. ICAP is adjusted annually based upon audits. The FY 2019 ICAP is 10.02%.

- Design: The cost of final design for the project is estimated at 5% of the Total Estimated Construction Cost.
- Right-of-way: Right-of-way costs were developed during an ADOT Right-of-Way Group workshop March 20, 2018. The funded project from MC85 to Van Buren Street was estimated on a parcel by parcel basis. Right-of-way costs for the undeveloped/agricultural areas south of Lower Buckeye Road were based upon a unit cost of $2.50 per square foot based upon guidance from ADOT R/W Group.

The overall project costs for the six alternatives evaluated are summarized in Table 7-1. Detailed estimates are included in Appendix A.

Table 7-1. Alternatives Project Cost Summary

Cost Category	*ALT 2Cs*	*ALT 2Cn*	*ALT 3s*	*ALT 3n*	*ALT 5s*	*ALT 5n*
Design	$31.4 M	$31.8 M	$30.6 M	$34.0 M	$31.9 M	$33.0 M
R/W	$109.1 M	$92.9 M	$94.0 M	$83.1 M	$109.0 M	$95.6 M
Construction	$627.4 M	$635.3 M	$610.8 M	$679.0 M	$638.1 M	$660.2 M
TOTAL	$767.9 M	$759.9 M	$735.4 M	$796.1 M	$779.0 M	$788.8 M

7.2 ESTIMATE OF FUTURE MAINTENANCE COSTS

Based upon recent guidance from the ADOT Central District Maintenance Group, an estimated $20,000 per lane mile is used to account for maintenance costs for the alternatives developed in this study. The additional maintenance costs for a 25-year maintenance life are shown in Table 7-2 for each of the overall alternatives evaluated. Differences between the alternatives studied is insignificant.

Table 7-2: Estimate of Future Maintenance Costs

	ALT 2Cs	*ALT 2CN*	*ALT 3s*	*ALT 3n*	*ALT 5s*	*ALT 5n*
Lane-Miles	108.4	107.9	108.5	108.1	101.5	100.9
Maintenance Cost	$2,168,000	$2,158,000	$2,170,000	$2,162,000	$2,030,000	$2,018,000

8 PROJECT IMPLEMENTATION

8.1 INTRODUCTION

Based on the SR303L corridor functionality, future southern extension and relationship with SR30, it is recommended that the SR303L improvements be divided into several construction projects. The sequencing and length of each segment will be based on functional need and available funding.

8.2 IMPLEMENTATION PLAN

SR303L, MC85 to Van Buren
This project would extend SR303L south from Van Buren Street to Lower Buckeye Road with connection to existing Cotton Lane at Elwood Road. This will provide improved connection to I-10 and SR303L north of I-10 for warehouse distribution centers located near MC85, Estrella Mountain Ranch development and MC85 traffic. Opening of this segment to traffic is expected in 2022.

SR30, Sarival Avenue to SR303L
This project provides a free flow connection between the east leg of SR30 and the north leg of SR303L. It would also include the east half of the SR30 Cotton Lane TI. The timing for this project is subject to SR30 implementation between SR303L and SR202L to the east.

SR30, SR303L to Perryville Road
This extends SR30 west to Perryville Road and includes the west half of the SR30 Cotton Lane TI. It would also provide a free flow connection between the west leg of SR30 and the north leg of SR303L. The timing for this project is subject to westward extension of SR30 currently identified in the MAG 2040 Regional Transportation Network.

Table 8-1. Preliminary Costs for the Selected Alternative 2Cs and Phasing

Selected Alternative Phasing	*Design*	*R/W*	*Construction*	*Total*
Phase 1	$7.0 M	$20.4 M	$139.6 M	$167.0 M
Phase 2	$16.7 M	$45.3 M	$334.1 M	$396.2 M
Phase 3	$7.7 M	$43.4 M	$153.7 M	$204.7 M
Total	$31.4 M	$109.1 M	$627.4 M	$767.9 M

Cost estimates for the phased implementation projects are included in Appendix B.

SR303L Southerly Extension
This extends the SR303L south and completes the remaining elements of the SR303L/SR30 TI providing connections between the east and west legs of SR30 to the south leg of SR303L. The timing for this project is subject to the southerly extension of SR303L currently not included in the MAG 2040 Regional Transportation Network.

8.3 FUNDING

Improvements to SR303L from MC85 to Van Buren Street are currently programmed in ADOT's FY 2019-2023 Five-Year Transportation Facilities Construction Program.

- Design FY 2019 = $15,000,000
- Right-of-Way and Utilities FY 2019 = $10,700,000
- Construction FY 2020 = $93,800,000

Increases of 5% or more in programmed amounts must be justified and approved by ADOT and MAG.

9 APPENDICES

Appendix A: Cost Estimates – Alternatives

Appendix B: Selected Alternative 2Cs – Cost Estimates Overall and Implementation

Appendix C: Final L/DCR Plans – Selected Alternative – 2Cs

Appendix A: Cost Estimates – Alternatives

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 2Cs
SEGMENT: SR30 to I-10 L/DCR
LENGTH: 8.23 Miles
PROJECT DESCRIPTION: New Freeway
ESTIMATE SUMMARY LEVEL: Level 1
TRACS NO.: 303 MA 100 H6870 01C
DATE: September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	835	3,000	2,505,000
	ROADWAY EXCAVATION	CU.YD.	115,000	6.00	690,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	11,520,000	8.00	92,160,000
	FURNISH WATER SUPPLY	MILE	8.23	150,000	1,234,500
	TOTAL ITEM 200				99,089,500
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	1,021,000	45.00	45,945,000
	ASPHALT PAVEMENT	SQ.YD.	109,000	30.00	3,270,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				49,215,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	8.23	800,000	6,584,000
	OFF-SITE DRAINAGE	L.SUM	1	2,910,000	2,910,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				9,494,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 35	SQ.FT.	1,195,282	110.00	131,481,020
	OTHER:	EACH			0
	TOTAL ITEM 600				131,481,020
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	3,575,000	3,575,000
	SIGNING & PAVEMENT MARKING	MILE	8.23	1,000,000	8,230,000
	LIGHTING	MILE	8.23	600,000	4,938,000
	TRAFFIC SIGNAL	EACH	5	250,000	1,250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	8.23	400,000	3,292,000
	TOTAL ITEM 700				21,285,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	8.23	1,200,000	9,876,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	8.23	75,000	617,250
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				12,993,250
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	35,890,000	35,890,000
	RETAINING WALLS	SQ.FT.	307,000	60.00	18,420,000
	SOUND WALLS	SQ.FT.	304,000	35.00	10,640,000
	ROADWAY APPURTENANCES	MILE	8.23	1,400,000	11,522,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	3,360,000	3,360,000
	CONSTRUCTION SURVEYING	L.SUM	1	4,490,000	4,490,000
	TOTAL ITEM 900				84,322,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$407,879,770**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	40,787,977
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$448,667,747**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$22,433,387
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	40,380,097
	TOTAL ESTIMATED CONSTRUCTION COST				**$511,481,232**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				1,000,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				55,500,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				2,291,000
	SUBTOTAL OTHER PROJECT COSTS				**$58,791,000**
	SUBTOTAL ESTIMATED PROJECT COST				**$570,272,232**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	57,141,278
	TOTAL CONSTRUCTION COST				**$627,413,509**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%		28,500,000
INDIRECT COST ALLOCATION	10.02%		2,855,700
TOTAL DESIGN ENGINEERING COSTS			**$31,355,700**
RIGHT-OF-WAY COST			
RIGHT-OF-WAY COST			99,150,220
INDIRECT COST ALLOCATION	10.02%		9,934,852
TOTAL RIGHT-OF-WAY COSTS			**$109,085,072**
CONSTRUCTION COST			
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)			$570,272,232
INDIRECT COST ALLOCATION	10.02%		57,141,278
TOTAL CONSTRUCTION COSTS			**627,413,509**
TOTAL PROJECT COST (INCLUDING ICAP)			**$767,854,281**

Alternative 2Cs

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 2Cn
SEGMENT: SR30 to I-10 L/DCR
LENGTH: 8.12 Miles
PROJECT DESCRIPTION: New Freeway
ESTIMATE SUMMARY LEVEL: Level 1
TRACS NO.: 303 MA 100 H6870 01C
DATE: September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	700	3,000	2,100,000
	ROADWAY EXCAVATION	CU.YD.	112,000	6.00	672,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	11,330,000	8.00	90,640,000
	FURNISH WATER SUPPLY	MILE	8.12	150,000	1,218,000
	TOTAL ITEM 200				97,130,000
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	1,035,000	45.00	46,575,000
	ASPHALT PAVEMENT	SQ.YD.	81,000	30.00	2,430,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				49,005,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	8.12	800,000	6,496,000
	OFF-SITE DRAINAGE	L.SUM	1	2,910,000	2,910,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				9,406,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 35	SQ.FT.	1,195,282	110.00	131,481,020
	OTHER:	EACH			0
	TOTAL ITEM 600				131,481,020
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	3,575,000	3,575,000
	SIGNING & PAVEMENT MARKING	MILE	8.12	1,000,000	8,120,000
	LIGHTING	MILE	8.12	600,000	4,872,000
	TRAFFIC SIGNAL	EACH	5	250,000	1,250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	8.12	400,000	3,248,000
	TOTAL ITEM 700				21,065,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	8.12	1,200,000	9,744,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	8.12	75,000	609,000
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				12,853,000
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	35,620,000	35,620,000
	RETAINING WALLS	SQ.FT.	307,000	60.00	18,420,000
	SOUND WALLS	SQ.FT.	304,000	35.00	10,640,000
	ROADWAY APPURTENANCES	MILE	8.12	1,400,000	11,368,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	3,340,000	3,340,000
	CONSTRUCTION SURVEYING	L.SUM	1	4,450,000	4,450,000
	TOTAL ITEM 900				83,838,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$404,778,020**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	40,477,802
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$445,255,822**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$22,262,791
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	40,073,024
	TOTAL ESTIMATED CONSTRUCTION COST				**$507,591,637**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				1,000,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				66,500,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				2,311,300
	SUBTOTAL OTHER PROJECT COSTS				**$69,811,300**
	SUBTOTAL ESTIMATED PROJECT COST				**$577,402,937**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	57,855,774
	TOTAL CONSTRUCTION COST				**$635,258,711**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%		28,900,000
INDIRECT COST ALLOCATION	10.02%		2,895,780
TOTAL DESIGN ENGINEERING COSTS			**$31,795,780**
RIGHT-OF-WAY COST			
RIGHT-OF-WAY COST			84,400,000
INDIRECT COST ALLOCATION	10.02%		8,456,880
TOTAL RIGHT-OF-WAY COSTS			**$92,856,880**
CONSTRUCTION COST			
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)			$577,402,937
INDIRECT COST ALLOCATION	10.02%		57,855,774
TOTAL CONSTRUCTION COSTS			**635,258,711**
TOTAL PROJECT COST (INCLUDING ICAP)			**$759,911,371**

Alternative 2Cn

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 3s **PROJECT DESCRIPTION:** New Freeway
SEGMENT: SR30 to I-10 L/DCR **ESTIMATE SUMMARY LEVEL:** Level 1
LENGTH: 7.72 Miles **TRACS NO.:** 303 MA 100 H6870 01C **DATE:** September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	735	3,000	2,205,000
	ROADWAY EXCAVATION	CU.YD.	80,000	6.00	480,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	10,530,000	8.00	84,240,000
	FURNISH WATER SUPPLY	MILE	7.72	150,000	1,158,000
	TOTAL ITEM 200				90,583,000
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	1,161,000	45.00	52,245,000
	ASPHALT PAVEMENT	SQ.YD.	98,000	30.00	2,940,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				55,185,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	7.72	800,000	6,176,000
	OFF-SITE DRAINAGE	L.SUM	1	3,200,000	3,200,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				9,376,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 39	SQ.FT.	1,175,037	110.00	129,254,070
	OTHER:	EACH			0
	TOTAL ITEM 600				129,254,070
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	4,000,000	4,000,000
	SIGNING & PAVEMENT MARKING	MILE	7.72	1,000,000	7,720,000
	LIGHTING	MILE	7.72	600,000	4,632,000
	TRAFFIC SIGNAL	EACH	5	250,000	1,250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	7.72	400,000	3,088,000
	TOTAL ITEM 700				20,690,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	7.72	1,200,000	9,264,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	7.72	75,000	579,000
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				12,343,000
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	35,480,000	35,480,000
	RETAINING WALLS	SQ.FT.	380,000	60.00	22,800,000
	SOUND WALLS	SQ.FT.	255,400	35.00	8,939,000
	ROADWAY APPURTENANCES	MILE	7.72	1,400,000	10,808,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	3,330,000	3,330,000
	CONSTRUCTION SURVEYING	L.SUM	1	4,440,000	4,440,000
	TOTAL ITEM 900				85,797,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$403,228,070**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	40,322,807
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$443,550,877**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$22,177,544
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	39,919,579
	TOTAL ESTIMATED CONSTRUCTION COST				**$505,648,000**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				1,000,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				46,000,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				2,501,000
	SUBTOTAL OTHER PROJECT COSTS				**$49,501,000**
	SUBTOTAL ESTIMATED PROJECT COST				**$555,149,000**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	55,625,930
	TOTAL CONSTRUCTION COST				**$610,774,930**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%	27,800,000
INDIRECT COST ALLOCATION	10.02%	2,785,560
TOTAL DESIGN ENGINEERING COSTS		**$30,585,560**
RIGHT-OF-WAY COST		
RIGHT-OF-WAY COST		85,467,020
INDIRECT COST ALLOCATION	10.02%	8,563,795
TOTAL RIGHT-OF-WAY COSTS		**$94,030,815**
CONSTRUCTION COST		
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)		$555,149,000
INDIRECT COST ALLOCATION	10.02%	55,625,930
TOTAL CONSTRUCTION COSTS		**610,774,930**
TOTAL PROJECT COST (INCLUDING ICAP)		**$735,391,305**

Alternative3s

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 3n **PROJECT DESCRIPTION:** New Freeway
SEGMENT: SR30 to I-10 L/DCR **ESTIMATE SUMMARY LEVEL:** Level 1
LENGTH: 7.63 Miles **TRACS NO.:** 303 MA 100 H6870 01C **DATE:** September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	644	3,000	1,932,000
	ROADWAY EXCAVATION	CU.YD.	75,000	6.00	450,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	10,430,000	8.00	83,440,000
	FURNISH WATER SUPPLY	MILE	7.63	150,000	1,144,500
	TOTAL ITEM 200				89,466,500
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	1,149,000	45.00	51,705,000
	ASPHALT PAVEMENT	SQ.YD.	98,000	30.00	2,940,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				54,645,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	7.63	800,000	6,104,000
	OFF-SITE DRAINAGE	L.SUM	1	3,200,000	3,200,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				9,304,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 35	SQ.FT.	1,359,892	110.00	149,588,120
	OTHER:	EACH			0
	TOTAL ITEM 600				149,588,120
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	4,000,000	4,000,000
	SIGNING & PAVEMENT MARKING	MILE	7.63	1,000,000	7,630,000
	LIGHTING	MILE	7.63	600,000	4,578,000
	TRAFFIC SIGNAL	EACH	5	250,000	1,250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	7.63	400,000	3,052,000
	TOTAL ITEM 700				20,510,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	7.63	1,200,000	9,156,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	7.63	75,000	572,250
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				12,228,250
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	37,280,000	37,280,000
	RETAINING WALLS	SQ.FT.	380,000	60.00	22,800,000
	SOUND WALLS	SQ.FT.	255,400	35.00	8,939,000
	ROADWAY APPURTENANCES	MILE	7.63	1,400,000	10,682,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	3,490,000	3,490,000
	CONSTRUCTION SURVEYING	L.SUM	1	4,660,000	4,660,000
	TOTAL ITEM 900				87,851,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$423,592,870**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	42,359,287
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$465,952,157**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$23,297,608
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	41,935,694
	TOTAL ESTIMATED CONSTRUCTION COST				**$531,185,459**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				1,000,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				82,500,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				2,434,000
	SUBTOTAL OTHER PROJECT COSTS				**$85,934,000**
	SUBTOTAL ESTIMATED PROJECT COST				**$617,119,459**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	61,835,370
	TOTAL CONSTRUCTION COST				**$678,954,829**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%	30,900,000
INDIRECT COST ALLOCATION	10.02%	3,096,180
TOTAL DESIGN ENGINEERING COSTS		**$33,996,180**
RIGHT-OF-WAY COST		
RIGHT-OF-WAY COST		75,557,120
INDIRECT COST ALLOCATION	10.02%	7,570,823
TOTAL RIGHT-OF-WAY COSTS		**$83,127,943**
CONSTRUCTION COST		
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)		$617,119,459
INDIRECT COST ALLOCATION	10.02%	61,835,370
TOTAL CONSTRUCTION COSTS		**678,954,829**
TOTAL PROJECT COST (INCLUDING ICAP)		**$796,078,952**

Alternative 3n

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 5s
SEGMENT: SR30 to I-10 L/DCR
LENGTH: 9.89 Miles
TRACS NO.: 303 MA 100 H6870 01C
PROJECT DESCRIPTION: New Freeway
ESTIMATE SUMMARY LEVEL: Level 1
DATE: September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	860	3,000	2,580,000
	ROADWAY EXCAVATION	CU.YD.	120,000	6.00	720,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	14,130,000	8.00	113,040,000
	FURNISH WATER SUPPLY	MILE	9.89	150,000	1,483,500
	TOTAL ITEM 200				120,323,500
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	1,122,000	45.00	50,490,000
	ASPHALT PAVEMENT	SQ.YD.	77,000	30.00	2,310,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				52,800,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	9.89	800,000	7,912,000
	OFF-SITE DRAINAGE	L.SUM	1	3,450,000	3,450,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				11,362,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 34	SQ.FT.	910,964	110.00	100,206,040
	OTHER:	EACH			0
	TOTAL ITEM 600				100,206,040
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	4,075,000	4,075,000
	SIGNING & PAVEMENT MARKING	MILE	9.89	1,000,000	9,890,000
	LIGHTING	MILE	9.89	600,000	5,934,000
	TRAFFIC SIGNAL	EACH	5	250,000	1,250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	9.89	400,000	3,956,000
	TOTAL ITEM 700				25,105,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	9.89	1,200,000	11,868,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	9.89	75,000	741,750
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				15,109,750
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	36,700,000	36,700,000
	RETAINING WALLS	SQ.FT.	380,000	60.00	22,800,000
	SOUND WALLS	SQ.FT.	308,900	35.00	10,811,500
	ROADWAY APPURTENANCES	MILE	9.89	1,400,000	13,846,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	3,440,000	3,440,000
	CONSTRUCTION SURVEYING	L.SUM	1	4,590,000	4,590,000
	TOTAL ITEM 900				92,187,500
	SUBTOTAL A (ITEMS 200 THRU 900)				**$417,093,790**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	41,709,379
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$458,803,169**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$22,940,158
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	41,292,285
	TOTAL ESTIMATED CONSTRUCTION COST				**$523,035,613**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				1,000,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				53,500,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				2,393,500
	SUBTOTAL OTHER PROJECT COSTS				**$56,893,500**
	SUBTOTAL ESTIMATED PROJECT COST				**$579,929,113**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	58,108,897
	TOTAL CONSTRUCTION COST				**$638,038,010**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%	29,000,000
INDIRECT COST ALLOCATION	10.02%	2,905,800
TOTAL DESIGN ENGINEERING COSTS		**$31,905,800**
RIGHT-OF-WAY COST		
RIGHT-OF-WAY COST		99,079,520
INDIRECT COST ALLOCATION	10.02%	9,927,768
TOTAL RIGHT-OF-WAY COSTS		**$109,007,288**
CONSTRUCTION COST		
CONSTRUCTION COST (WITHOUT UTILITY RELOCATION COSTS)		$579,929,113
INDIRECT COST ALLOCATION	10.02%	58,108,897
TOTAL CONSTRUCTION COSTS		**638,038,010**
TOTAL PROJECT COST (INCLUDING ICAP)		**$778,951,098**

Alternative 5s

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 5n
SEGMENT: SR30 to I-10 L/DCR
LENGTH: 9.78 Miles
TRACS NO.: 303 MA 100 H6870 01C
PROJECT DESCRIPTION: New Freeway
ESTIMATE SUMMARY LEVEL: Level 1
DATE: September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	748	3,000	2,244,000
	ROADWAY EXCAVATION	CU.YD.	110,000	6.00	660,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	13,930,000	8.00	111,440,000
	FURNISH WATER SUPPLY	MILE	9.78	150,000	1,467,000
	TOTAL ITEM 200				118,311,000
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	1,100,000	45.00	49,500,000
	ASPHALT PAVEMENT	SQ.YD.	77,000	30.00	2,310,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				51,810,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	9.79	800,000	7,832,000
	OFF-SITE DRAINAGE	L.SUM	1	3,450,000	3,450,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				11,282,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 34	SQ.FT.	910,964	110.00	100,206,040
	OTHER:	EACH			0
	TOTAL ITEM 600				100,206,040
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	4,075,000	4,075,000
	SIGNING & PAVEMENT MARKING	MILE	9.78	1,000,000	9,780,000
	LIGHTING	MILE	9.78	600,000	5,868,000
	TRAFFIC SIGNAL	EACH	5	250,000	1,250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	9.78	400,000	3,912,000
	TOTAL ITEM 700				24,885,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	9.89	1,200,000	11,868,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	9.78	75,000	733,500
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				15,101,500
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	36,360,000	36,360,000
	RETAINING WALLS	SQ.FT.	380,000	60.00	22,800,000
	SOUND WALLS	SQ.FT.	308,900	35.00	10,811,500
	ROADWAY APPURTENANCES	MILE	9.78	1,400,000	13,692,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	3,410,000	3,410,000
	CONSTRUCTION SURVEYING	L.SUM	1	4,550,000	4,550,000
	TOTAL ITEM 900				91,623,500
	SUBTOTAL A (ITEMS 200 THRU 900)				**$413,219,040**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	41,321,904
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$454,540,944**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$22,727,047
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	40,908,685
	TOTAL ESTIMATED CONSTRUCTION COST				**$518,176,676**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				1,000,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				78,500,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				2,360,500
	SUBTOTAL OTHER PROJECT COSTS				**$81,860,500**
	SUBTOTAL ESTIMATED PROJECT COST				**$600,037,176**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	60,123,725
	TOTAL CONSTRUCTION COST				**$660,160,901**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%	30,000,000
INDIRECT COST ALLOCATION	10.02%	3,006,000
TOTAL DESIGN ENGINEERING COSTS		**$33,006,000**
RIGHT-OF-WAY COST		
RIGHT-OF-WAY COST		86,882,720
INDIRECT COST ALLOCATION	10.02%	8,705,649
TOTAL RIGHT-OF-WAY COSTS		**$95,588,369**
CONSTRUCTION COST		
CONSTRUCTION COST (WITHOUT UTILITY RELOCATION COSTS)		$600,037,176
INDIRECT COST ALLOCATION	10.02%	60,123,725
TOTAL CONSTRUCTION COSTS		**660,160,901**
TOTAL PROJECT COST (INCLUDING ICAP)		**$788,755,270**

Alternative 5n

Appendix B: Selected Alternative 2Cs – Cost Estimates Overall and Implementation

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 2Cs **PROJECT DESCRIPTION:** New Freeway
SEGMENT: SR30 to I-10 L/DCR **ESTIMATE SUMMARY LEVEL:** Level 1
LENGTH: 8.23 Miles **TRACS NO.:** 303 MA 100 H6870 01C **DATE:** September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	835	3,000	2,505,000
	ROADWAY EXCAVATION	CU.YD.	115,000	6.00	690,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	11,520,000	8.00	92,160,000
	FURNISH WATER SUPPLY	MILE	8.23	150,000	1,234,500
	TOTAL ITEM 200				99,089,500
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	1,021,000	45.00	45,945,000
	ASPHALT PAVEMENT	SQ.YD.	109,000	30.00	3,270,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				49,215,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	8.23	800,000	6,584,000
	OFF-SITE DRAINAGE	L.SUM	1	2,910,000	2,910,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				9,494,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 36	SQ.FT.	1,195,282	110.00	131,481,020
	OTHER:	EACH			0
	TOTAL ITEM 600				131,481,020
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	3,575,000	3,575,000
	SIGNING & PAVEMENT MARKING	MILE	8.23	1,000,000	8,230,000
	LIGHTING	MILE	8.23	600,000	4,938,000
	TRAFFIC SIGNAL	EACH	5	250,000	1,250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	8.23	400,000	3,292,000
	TOTAL ITEM 700				21,285,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	8.23	1,200,000	9,876,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	8.23	75,000	617,250
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				12,993,250
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	35,890,000	35,890,000
	RETAINING WALLS	SQ.FT.	307,000	60.00	18,420,000
	SOUND WALLS	SQ.FT.	304,000	35.00	10,640,000
	ROADWAY APPURTENANCES	MILE	8.23	1,400,000	11,522,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	3,360,000	3,360,000
	CONSTRUCTION SURVEYING	L.SUM	1	4,490,000	4,490,000
	TOTAL ITEM 900				84,322,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$407,879,770**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	40,787,977
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$448,667,747**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$22,433,387
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	40,380,097
	TOTAL ESTIMATED CONSTRUCTION COST				**$511,481,232**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				1,000,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				55,500,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				2,291,000
	SUBTOTAL OTHER PROJECT COSTS				**$58,791,000**
	SUBTOTAL ESTIMATED PROJECT COST				**$570,272,232**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	57,141,278
	TOTAL CONSTRUCTION COST				**$627,413,509**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%		28,500,000
INDIRECT COST ALLOCATION	10.02%		2,855,700
TOTAL DESIGN ENGINEERING COSTS			**$31,355,700**
RIGHT-OF-WAY COST			
RIGHT-OF-WAY COST			99,150,220
INDIRECT COST ALLOCATION	10.02%		9,934,852
TOTAL RIGHT-OF-WAY COSTS			**$109,085,072**
CONSTRUCTION COST			
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)			$570,272,232
INDIRECT COST ALLOCATION	10.02%		57,141,278
TOTAL CONSTRUCTION COSTS			**627,413,509**
TOTAL PROJECT COST (INCLUDING ICAP)			**$767,854,281**

Alternative 2Cs – Full Estimate

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - 2Cs **PROJECT DESCRIPTION:** New Freeway
SEGMENT: MC85 to Van Buren Street - L/DCR **ESTIMATE SUMMARY LEVEL:** Level 1
LENGTH: 2.15 Miles **TRACS NO.:** 303 MA 100 H6870 01C **DATE:** September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	120	3,000	360,000
	ROADWAY EXCAVATION	CU.YD.	71,000	6.00	426,000
	DRAINAGE EXCAVATION	CU.YD.	500,000	5.00	2,500,000
	BORROW	CU.YD.	1,470,000	8.00	11,760,000
	FURNISH WATER SUPPLY	MILE	2.15	150,000	322,500
	TOTAL ITEM 200				15,368,500
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	268,000	45.00	12,060,000
	ASPHALT PAVEMENT	SQ.YD.	96,000	30.00	2,880,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				14,940,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	2.15	800,000	1,720,000
	OFF-SITE DRAINAGE	L.SUM	1	510,000	510,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				2,230,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 3	SQ.FT.	107,408	110.00	11,814,880
	OTHER:	EACH			0
	TOTAL ITEM 600				11,814,880
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	2,075,000	2,075,000
	SIGNING & PAVEMENT MARKING	MILE	2.15	1,000,000	2,150,000
	LIGHTING	MILE	2.15	600,000	1,290,000
	TRAFFIC SIGNAL	EACH	4	250,000	1,000,000
	FREEWAY MANAGEMENT SYSTEM	MILE	2.15	400,000	860,000
	TOTAL ITEM 700				7,375,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	2.15	1,200,000	2,580,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	2.15	75,000	161,250
	UTILITY RELOCATION	L.SUM	1	2,500,000	2,500,000
	TOTAL ITEM 800				5,241,250
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	8,500,000	8,500,000
	RETAINING WALLS	SQ.FT.	291,000	60.00	17,460,000
	SOUND WALLS	SQ.FT.	250,000	35.00	8,750,000
	ROADWAY APPURTENANCES	MILE	2.15	1,400,000	3,010,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	800,000	800,000
	CONSTRUCTION SURVEYING	L.SUM	1	1,060,000	1,060,000
	TOTAL ITEM 900				39,580,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$96,549,630**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	9,654,963
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$106,204,593**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	55,310,230
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	9,558,413
	TOTAL ESTIMATED CONSTRUCTION COST				**$121,073,236**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				300,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				5,000,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				562,300
	SUBTOTAL OTHER PROJECT COSTS				**$5,862,300**
	SUBTOTAL ESTIMATED PROJECT COST				**$126,935,536**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	12,718,941
	TOTAL CONSTRUCTION COST				**$139,654,477**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%		6,300,000
INDIRECT COST ALLOCATION	10.02%		631,260
TOTAL DESIGN ENGINEERING COSTS			**$6,931,260**
RIGHT-OF-WAY COST			
RIGHT-OF-WAY COST			18,515,300
INDIRECT COST ALLOCATION	10.02%		1,855,233
TOTAL RIGHT-OF-WAY COSTS			**$20,370,533**
CONSTRUCTION COST			
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)			$126,935,536
INDIRECT COST ALLOCATION	10.02%		12,718,941
TOTAL CONSTRUCTION COSTS			**139,654,477**
TOTAL PROJECT COST (INCLUDING ICAP)			**$166,956,270**

Phase I – MC85 to Van Buren Street

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - Alt 2Cs **PROJECT DESCRIPTION:** New Freeway
SEGMENT: SR30 @ Sarival Ave to SR303L @ Lower Buckeye Road **ESTIMATE SUMMARY LEVEL:** Level 1
LENGTH: 2.96 Miles **TRACS NO.:** 303 MA 100 H6870 01C **DATE:** September 6, 2018

ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	369	3,000	1,107,000
	ROADWAY EXCAVATION	CU.YD.	16,000	6.00	96,000
	DRAINAGE EXCAVATION	CU.YD.	0	5.00	0
	BORROW	CU.YD.	6,310,000	8.00	50,480,000
	FURNISH WATER SUPPLY	MILE	2.96	150,000	444,000
	TOTAL ITEM 200				52,127,000
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	427,000	45.00	19,215,000
	ASPHALT PAVEMENT	SQ.YD.	13,000	30.00	390,000
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				19,605,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	2.96	800,000	2,368,000
	OFF-SITE DRAINAGE	L.SUM	1	1,600,000	1,600,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				3,968,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 21	SQ.FT.	880,114	110.00	96,812,540
	OTHER:	EACH			0
	TOTAL ITEM 600				96,812,540
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	1,000,000	1,000,000
	SIGNING & PAVEMENT MARKING	MILE	2.96	1,000,000	2,960,000
	LIGHTING	MILE	2.96	600,000	1,776,000
	TRAFFIC SIGNAL	EACH	1	250,000	250,000
	FREEWAY MANAGEMENT SYSTEM	MILE	2.96	400,000	1,184,000
	TOTAL ITEM 700				7,170,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	2.96	1,200,000	3,552,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	2.96	75,000	222,000
	UTILITY RELOCATION	L.SUM			0
	TOTAL ITEM 800				3,774,000
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	18,730,000	18,730,000
	RETAINING WALLS	SQ.FT.	8,000	60.00	480,000
	SOUND WALLS	SQ.FT.	54,000	35.00	1,890,000
	ROADWAY APPURTENANCES	MILE	2.96	1,400,000	4,144,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	1,760,000	1,760,000
	CONSTRUCTION SURVEYING	L.SUM	1	2,340,000	2,340,000
	TOTAL ITEM 900				29,344,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$212,800,540**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	21,280,054
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$234,080,594**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$11,704,030
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	21,067,253
	TOTAL ESTIMATED CONSTRUCTION COST				**$266,851,877**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				300,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				35,500,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				1,025,500
	SUBTOTAL OTHER PROJECT COSTS				**$36,825,500**
	SUBTOTAL ESTIMATED PROJECT COST				**$303,677,377**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	30,428,473
	TOTAL CONSTRUCTION COST				**$334,105,850**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%	15,200,000
INDIRECT COST ALLOCATION	10.02%	1,523,040
TOTAL DESIGN ENGINEERING COSTS		**$16,723,040**
RIGHT-OF-WAY COST		
RIGHT-OF-WAY COST		41,215,000
INDIRECT COST ALLOCATION	10.02%	4,129,743
TOTAL RIGHT-OF-WAY COSTS		**$45,344,743**
CONSTRUCTION COST		
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)		$303,677,377
INDIRECT COST ALLOCATION	10.02%	30,428,473
TOTAL CONSTRUCTION COSTS		**334,105,850**
TOTAL PROJECT COST (INCLUDING ICAP)		**$396,173,633**

Phase II – SR30 (Sarival Avenue to SR303L (Lower Buckeye Road)

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT MANAGEMENT GROUP
CONSTRUCTION COST ESTIMATE SUMMARY

ROUTE: SR 303L - 2Cs **PROJECT DESCRIPTION:** New Freeway
SEGMENT: SR30 @ SR303L to Perryville Road - T/DCR **ESTIMATE SUMMARY LEVEL:** Level 1
LENGTH: 3.12 Miles **TRACS NO.:** 303 MA 100 H6870 01C **DATE:** September 6, 2018

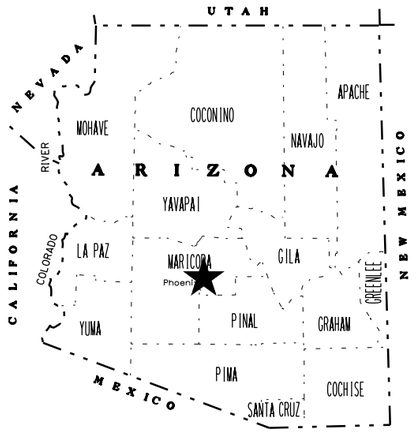
ITEM	MAJOR ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
200	**EARTHWORK**				
	CLEARING & REMOVALS	ACRE	346	3,000	1,038,000
	ROADWAY EXCAVATION	CU.YD.	28,000	6.00	168,000
	DRAINAGE EXCAVATION	CU.YD.	0	5.00	0
	BORROW	CU.YD.	3,740,000	8.00	29,920,000
	FURNISH WATER SUPPLY	MILE	3.12	150,000	468,000
	TOTAL ITEM 200				31,594,000
300 & 400	**BASE AND SURFACE TREATMENT**				
	CONCRETE PAVEMENT WITH ARACFC OVERLAY	SQ.YD.	326,000	45.00	14,670,000
	ASPHALT PAVEMENT	SQ.YD.	0	30.00	0
	OTHER:	SQ.YD.			0
	TOTAL ITEM 300 & 400				14,670,000
500	**DRAINAGE**				
	ON-SITE DRAINAGE	MILE	3.12	800,000	2,496,000
	OFF-SITE DRAINAGE	L.SUM	1	800,000	800,000
	PUMP STATION	EACH	0	0	0
	OTHER:	L.SUM			0
	TOTAL ITEM 500				3,296,000
600	**STRUCTURES**				
	NUMBER OF STRUCTURES: 11	SQ.FT.	207,760	110.00	22,853,600
	OTHER:	EACH			0
	TOTAL ITEM 600				22,853,600
700	**TRAFFIC ENGINEERING**				
	TRAFFIC CONTROL	L.SUM	1	500,000	500,000
	SIGNING & PAVEMENT MARKING	MILE	3.12	1,000,000	3,120,000
	LIGHTING	MILE	3.12	600,000	1,872,000
	TRAFFIC SIGNAL	EACH			0
	FREEWAY MANAGEMENT SYSTEM	MILE	3.12	400,000	1,248,000
	TOTAL ITEM 700				6,740,000
800	**ROADSIDE DEVELOPMENT**				
	LANDSCAPING	MILE	3.12	1,200,000	3,744,000
	TOPSOIL	CU.YD.			0
	EROSION CONTROL	MILE	3.12	75,000	234,000
	UTILITY RELOCATION	L.SUM			0
	TOTAL ITEM 800				3,978,000
900	**INCIDENTALS**				
	MOBILIZATION	L.SUM	1	8,670,000	8,670,000
	RETAINING WALLS	SQ.FT.	8,000	60.00	480,000
	SOUND WALLS	SQ.FT.	0		0
	ROADWAY APPURTENANCES	MILE	3.12	1,400,000	4,368,000
	CONTRACTOR QUALITY CONTROL	L.SUM	1	810,000	810,000
	CONSTRUCTION SURVEYING	L.SUM	1	1,080,000	1,080,000
	TOTAL ITEM 900				15,408,000
	SUBTOTAL A (ITEMS 200 THRU 900)				**$98,539,600**
	UNIDENTIFIED ITEMS (X% OF SUBTOTAL A)			10.0%	9,853,960
	SUBTOTAL B (SUBTOTAL A + UNIDENTIFIED ITEMS)				**$108,393,560**
	CONSTRUCTION CONTINGENCIES (X% OF SUBTOTAL B)			5.0%	$5,419,678
	CONSTRUCTION ENGINEERING (X% OF SUBTOTAL B)			9.0%	9,755,420
	TOTAL ESTIMATED CONSTRUCTION COST				**$123,568,658**
	OTHER PROJECT COSTS				
	DPS TRAFFIC CONTROL				400,000
	PRIOR RIGHT UTILITY RELOCATIONS AND SERVICE AGREEMENTS				15,000,000
	JOINT PROJECT AGREEMENT ITEMS				0
	BID ITEM PRICE ESCALATION				0
	CONTRACTOR INCENTIVES				703,200
	SUBTOTAL OTHER PROJECT COSTS				**$16,103,200**
	SUBTOTAL ESTIMATED PROJECT COST				**$139,671,858**
	INDIRECT COST ALLOCATION (X% OF SUBTOTAL B)			10.02%	13,995,120
	TOTAL CONSTRUCTION COST				**$153,666,979**

TOTAL PROJECT COST ESTIMATE

DESIGN ENGINEERING COST			
ENGINEERING DESIGN INC. GEOTECH. AND SURVEY (X% OF EST. CONST. COST)	5.00%	7,000,000
INDIRECT COST ALLOCATION	10.02%	701,400
TOTAL DESIGN ENGINEERING COSTS		**$7,701,400**
RIGHT-OF-WAY COST		
RIGHT-OF-WAY COST		$39,419,920
INDIRECT COST ALLOCATION	10.02%	3,949,876
TOTAL RIGHT-OF-WAY COSTS		**$43,369,796**
CONSTRUCTION COST		
CONSTRUCTION COST (WITH UTILITY RELOCATION COSTS)		$139,671,858
INDIRECT COST ALLOCATION	10.02%	13,995,120
TOTAL CONSTRUCTION COSTS		**153,666,979**
TOTAL PROJECT COST (INCLUDING ICAP)		**$204,738,175**

Phase III – SR303L to SR30 (Perryville Road)

Appendix C: Final L/DCR Plans – Selected Alternative 2Cs

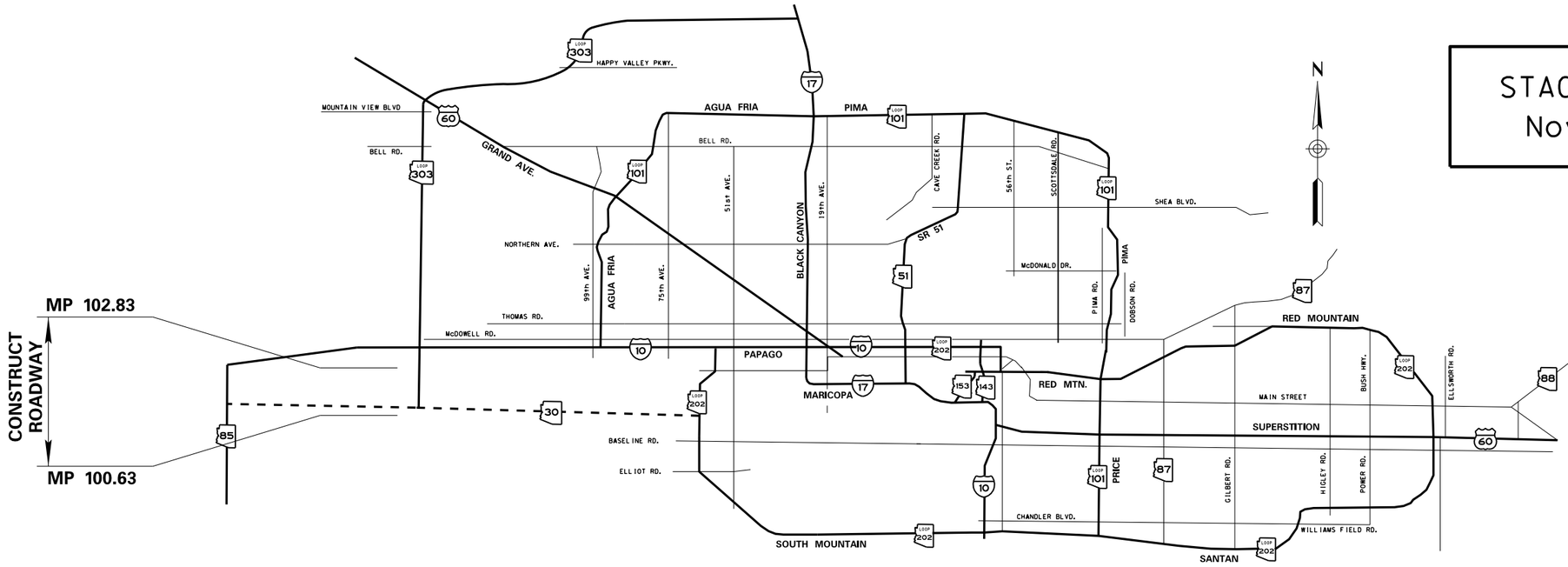


STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION

PROJECT PLANS

ADOT

STATE HIGHWAY
ESTRELLA FREEWAY
SR 303L



STAGE I (Final L/DCR)
November 8, 2018

SR 303L, SR 30 to I–10
SELECTED ALTERNATIVE – 2CS
PROJECT NO. 303 MA 100 H6870 01L
FEDERAL AID NO. STP–303–A(AS0)S

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
DALLAS HAMMIT, P.E., STATE ENGINEER

AS BUILT DATA	AS BUILT DATE		____ OF ____

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

INDEX OF SHEETS

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

INDEX OF SHEETS

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE: 303L
LOCATION: SR303L, SR30 TO I-10
DWG NO. G-1.01

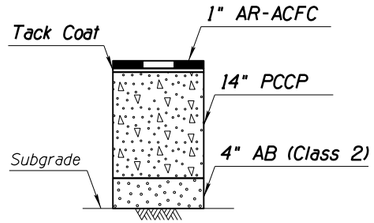
TRACS NO. H6870 01 L
STP-303-A-(ASO)S
1 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\DESIGN_DATA\H6870DS01.DGN

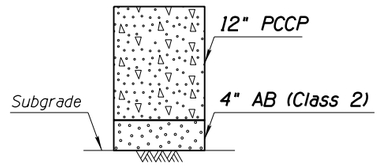
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



Total Thickness = 18"+1"

SECTION NO. 1

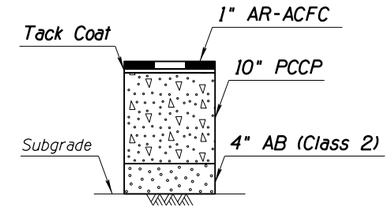
SR 303L Mainline
SR 30 Mainline
Van Buren Ramps A &B
Yuma Rd Ramps A, B, C & D



Total Thickness = 16"

SECTION NO. 2

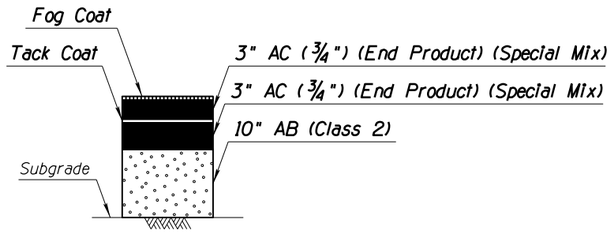
Ramp NE
Ramp NW
Ramp WN
Ramp WS
Ramp SE
Ramp SW
Ramp EN
Ramp ES



Total Thickness = 14"

SECTION NO. 3

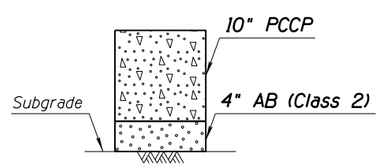
Van Buren Ramps A &B
Yuma Rd Ramps A, B, C & D
Cotton Lane Ramps A, B, C & D



Total Thickness = 16"

SECTION NO. 4

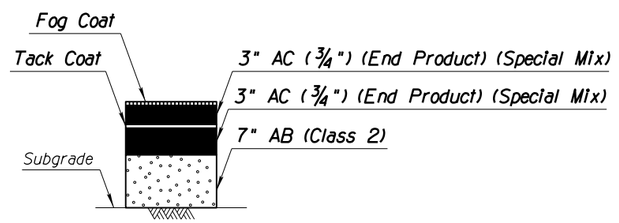
SR 303L NB and SB Frontage Roads
NB and SB Transitions



Total Thickness = 14"

SECTION NO. 5

Crossroads PCCP



Total Thickness = 13"

SECTION NO. 6

Crossroads AC

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVEMENT STRUCTURAL SECTIONS

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-1.02

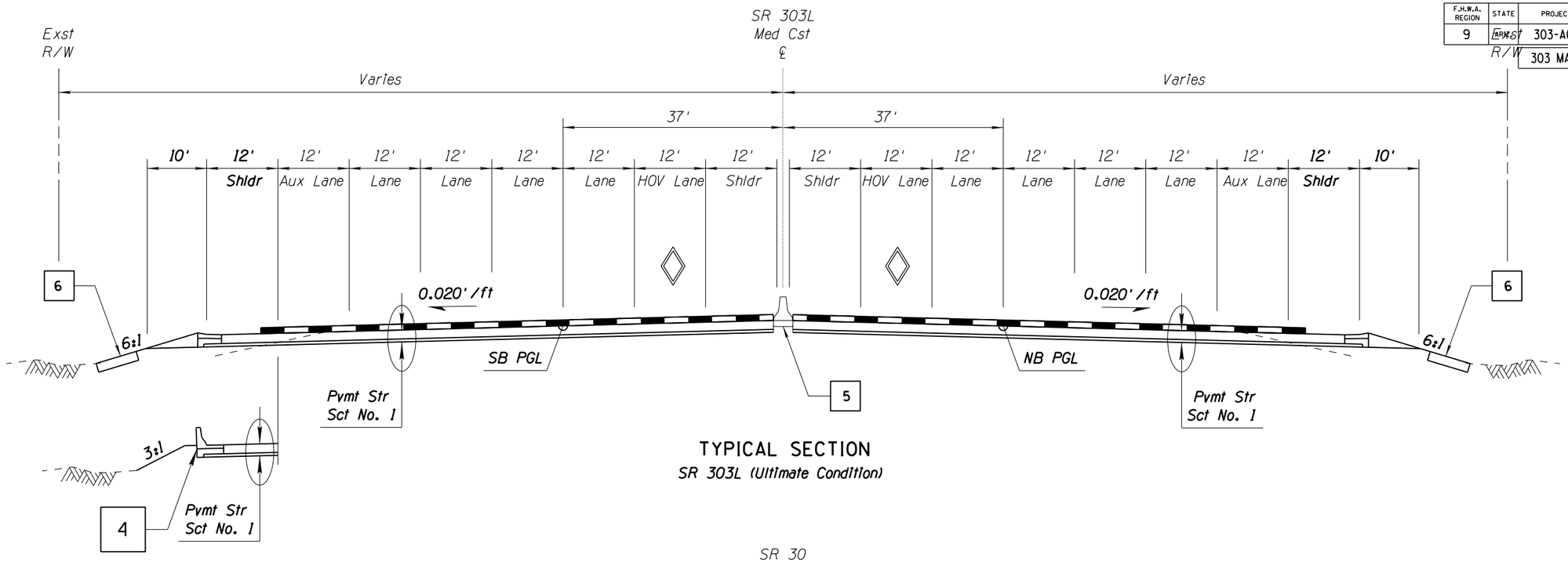
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 2 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

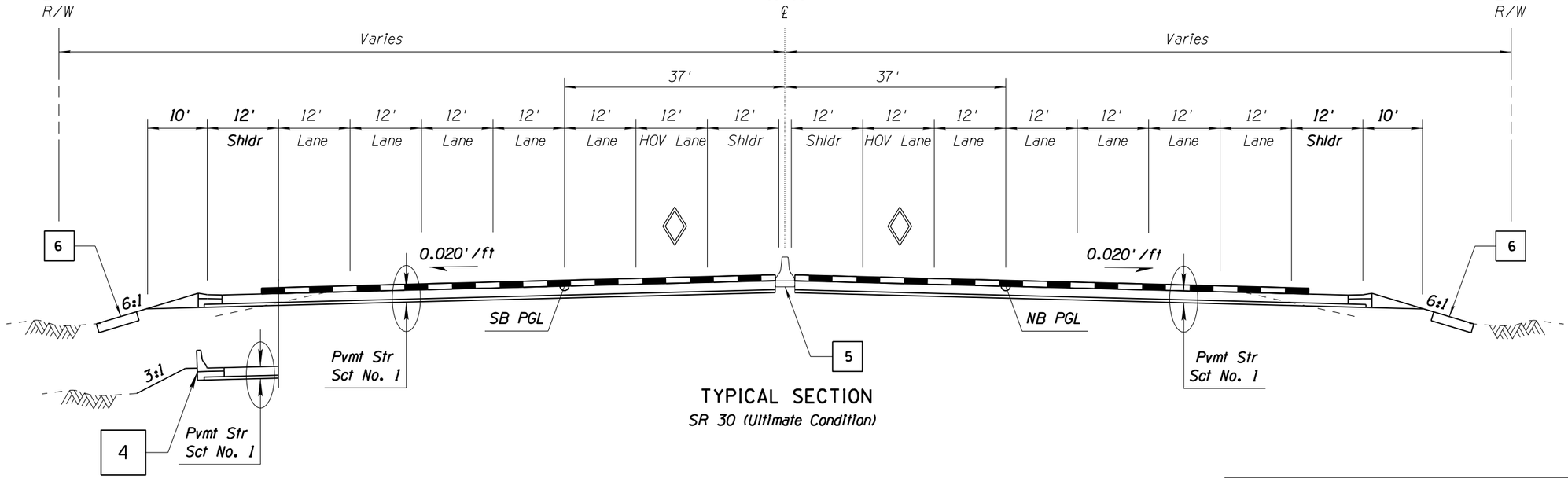
T:\H6870_01C\DESIGN_DATA\H6870DS03.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	~~Exst~~ ARZ	303-A(ASO)S			
		303 MA 100			



TYPICAL SECTION

SR 303L (Ultimate Condition)



TYPICAL SECTION

SR 30 (Ultimate Condition)

4	*Conc. Half Barrier (See Plans for Locations)*
5	*42" Conc. Median Barrier (See Plans for Locations)*
6	*24" Thick Topsoil Plating*

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TYPICAL SECTIONS
I-10 MAINLINE

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-1.03

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 3 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

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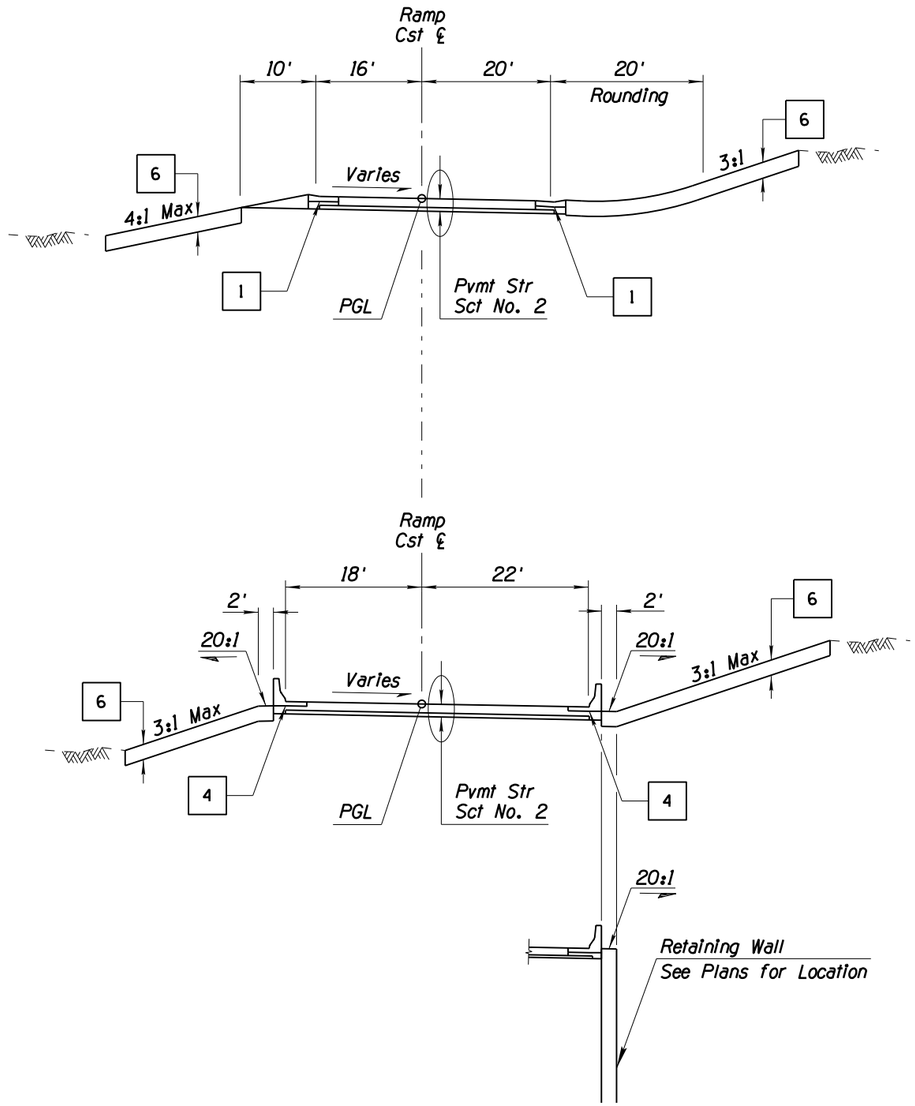
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



TYPICAL SECTION
SR 30/SR 303L TI RAMPS

Ramp ES
Ramp WS
Ramp NE
Ramp NW
Ramp EN
Ramp WN
Ramp SW
Ramp SE

1	Conc. Curb and Gutter (See Plans for Locations)
4	Conc. Half Barrier (See Plans for Locations)
6	24" Thick Topsoil Plating

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TYPICAL SECTIONS
SYSTEM TI RAMPS

ROUTE 303L

LOCATION SR303L, SR30 TO I-10

TRACS NO. H6870 01 L

STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. G-1.04

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SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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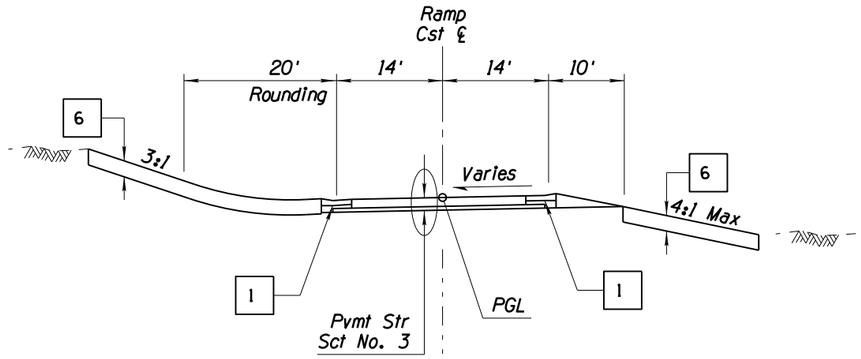
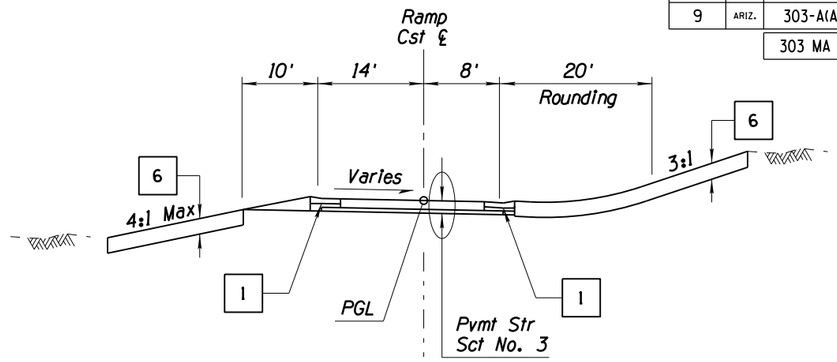
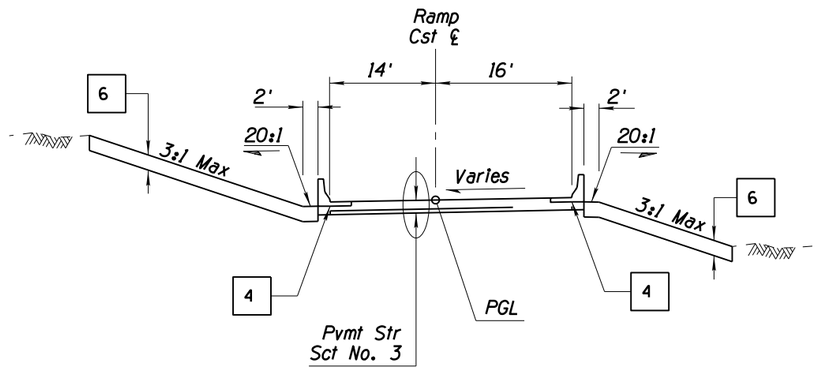
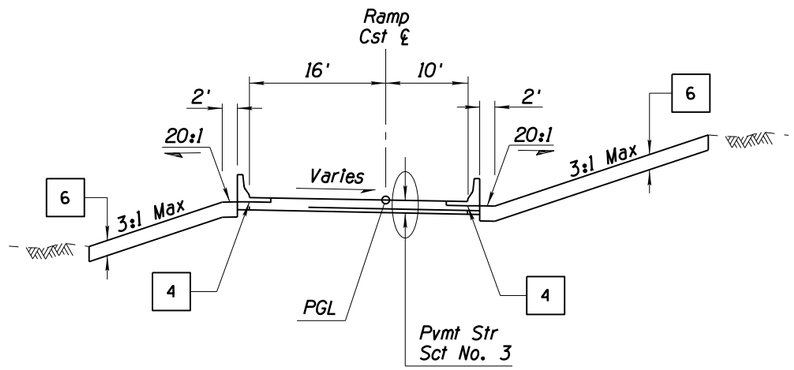
		303 MA 100			









Exit Ramps

Van Buren Rd Ramp B
Yuma Rd Ramp B
Yuma Rd Ramp D
Cotton Lane Ramp B
Cotton Lane Ramp D

Entrance Ramps

Van Buren Ramp A
Yuma Rd Ramp A
Yuma Rd Ramp C
Cotton Lane Ramp A
Cotton Lane Ramp C

TYPICAL SECTION
SR 30/SR 303L TI RAMPS

1	*Conc. Curb and Gutter (See Plans for Locations)*
4	*Conc. Half Barrier (See Plans for Locations)*
6	*24" Thick Topsoil Plating*

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TYPICAL SECTIONS
SERVICE TI RAMPS

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-1.05

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 5 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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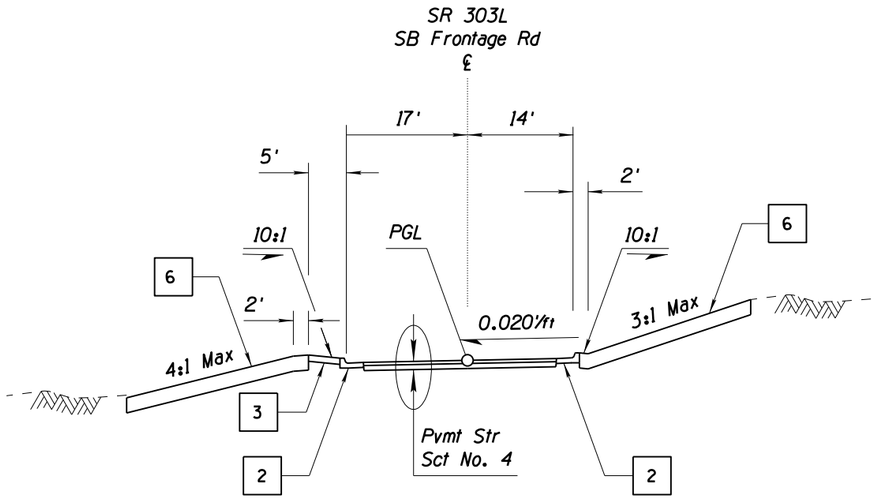
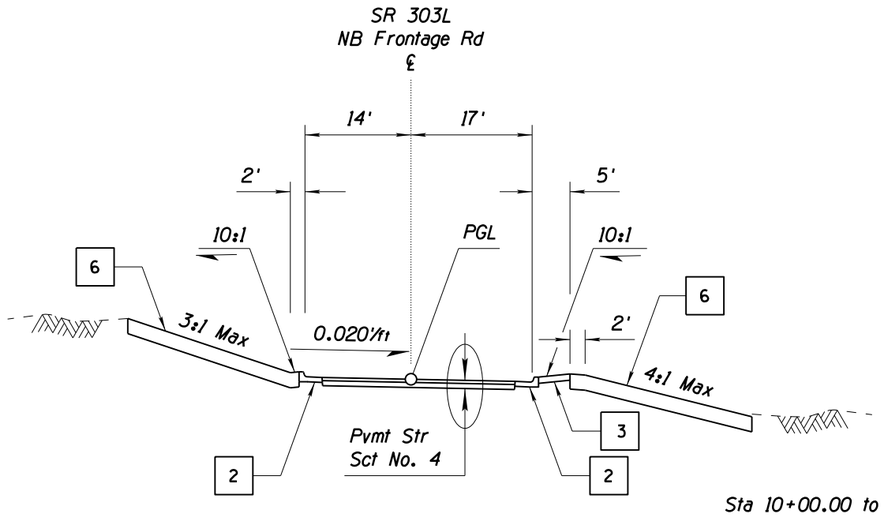
		303 MA 100			



Sta 10+00.00 to Sta 55+06.55
Sta 17+83.17 to Sta 56+35.91



Sta 10+00.00 to Sta 52+17.35
Sta 10+00.00 to Sta 55+74.38

TYPICAL SECTION
FRONTAGE ROADS

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TYPICAL SECTIONS
FRONTAGE ROADS

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	DWG NO. G-1.06
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

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SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

10/22/2018

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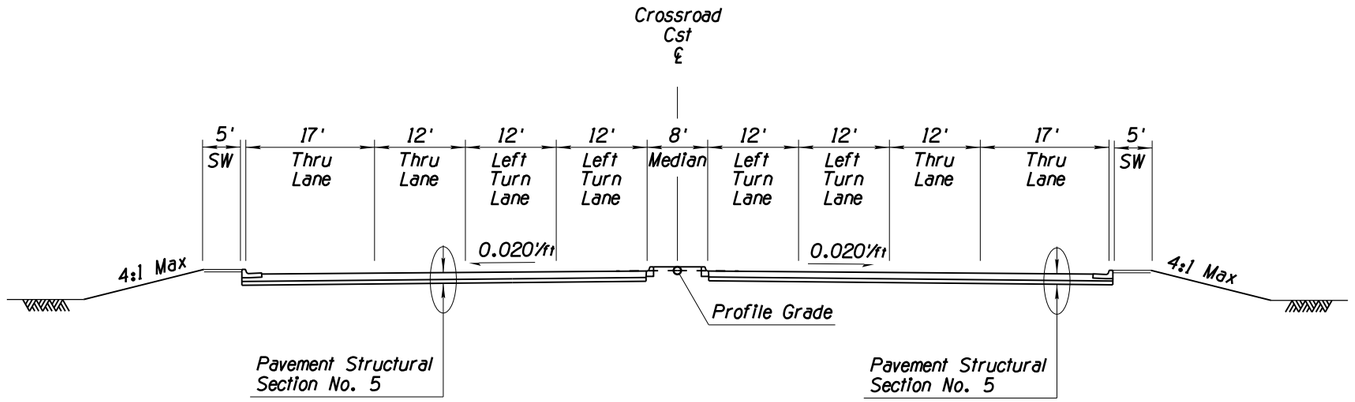
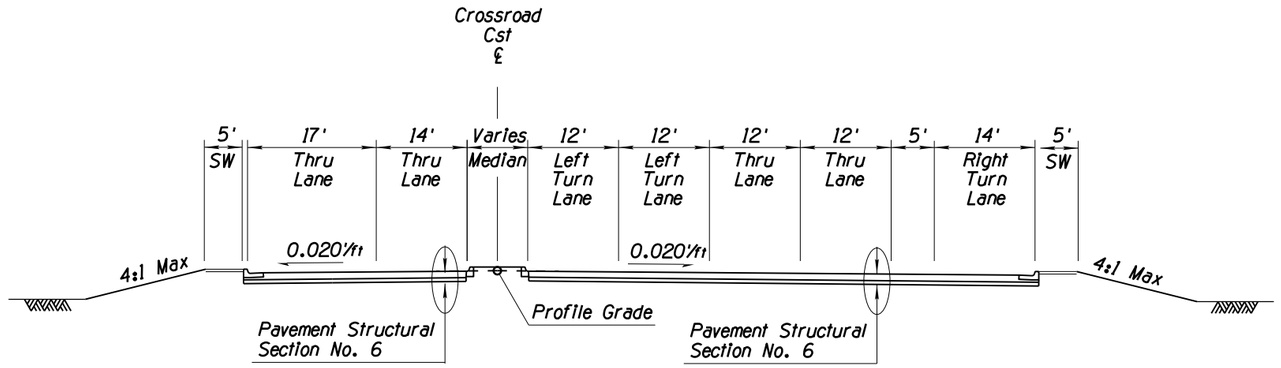
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



TYPICAL SECTION

Lower Buckeye Road
(Under SR303L)



TYPICAL SECTION

Lower Buckeye Road
(Approach to Ramps)

1	*Conc. Curb and Gutter (See Plans for Locations)*
4	*Conc. Half Barrier (See Plans for Locations)*
6	*24" Thick Topsoil Plating*

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TYPICAL SECTIONS
CROSSROADS

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-1.07

TRACS NO.			SHEET
H6870 01 L		STP-303-A-(ASO)S	7 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\DESIGN_DATA\H6870TS06.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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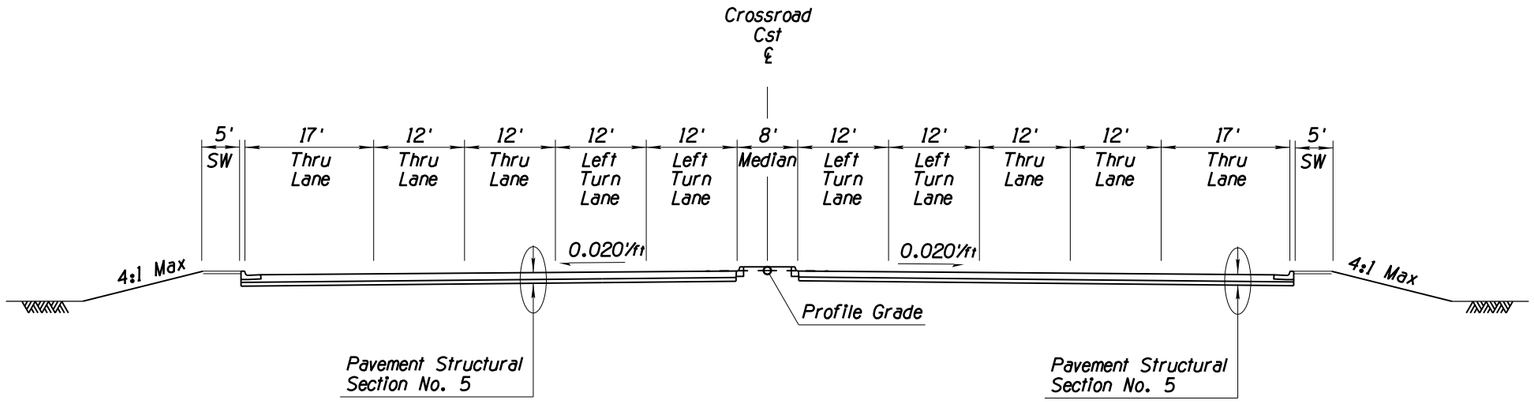
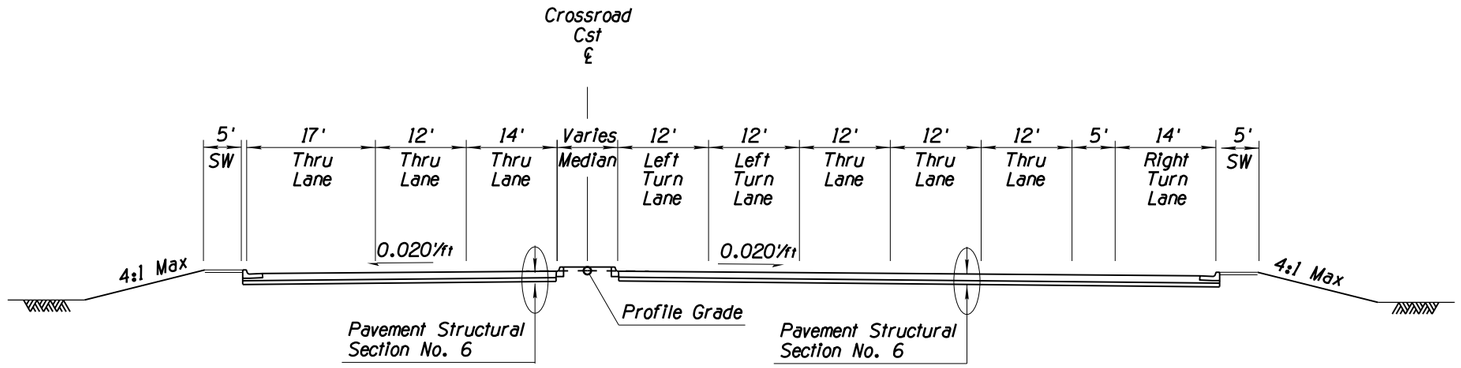
		303 MA 100			



TYPICAL SECTION

Yuma Road
Cotton Lane
(Under SR303L/SR30)



TYPICAL SECTION

Yuma Road
Cotton Lane
(Approach to Ramps)

1	*Conc. Curb and Gutter (See Plans for Locations)*
4	*Conc. Half Barrier (See Plans for Locations)*
6	*24" Thick Topsoil Plating*

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TYPICAL SECTIONS
CROSSROADS

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-1.08

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 8 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\DESIGN_DATA\H6870TS06A.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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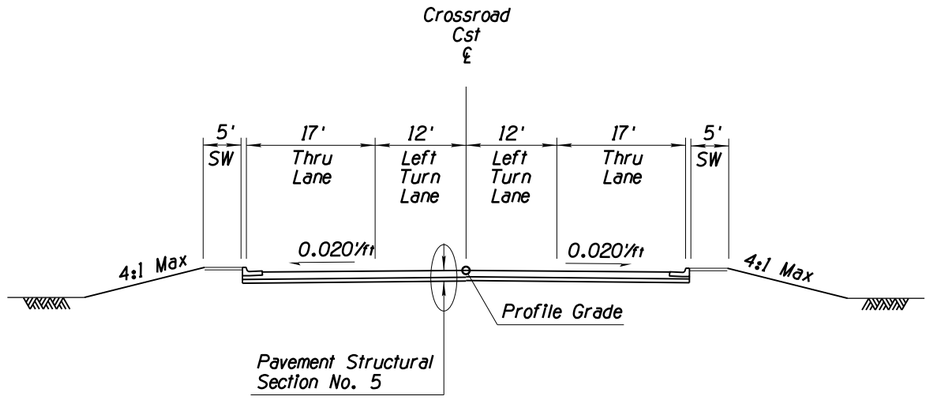
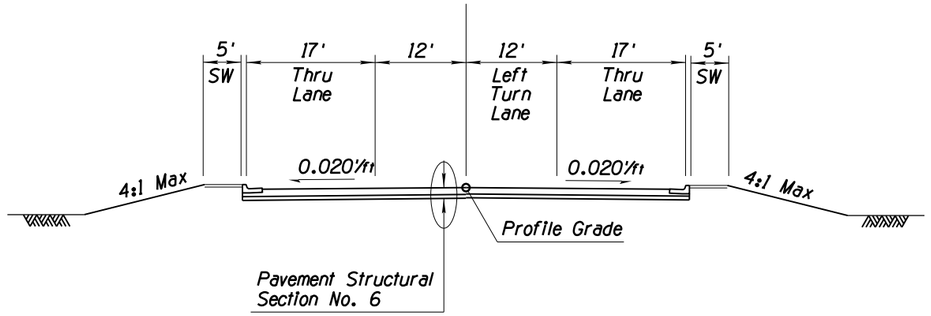
		303 MA 100			



TYPICAL SECTION

Lilac St/Canyon Trails Blvd
(Under SR303L)



TYPICAL SECTION

Lilac St/Canyon Trails Blvd
(Approach to Ramps)

1	Conc. Curb and Gutter (See Plans for Locations)
4	Conc. Half Barrier (See Plans for Locations)
5	42" Conc. Median Barrier (See Plans for Locations)
6	24" Thick Topsoil Plating

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TYPICAL SECTIONS
CROSSROADS

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-1.09

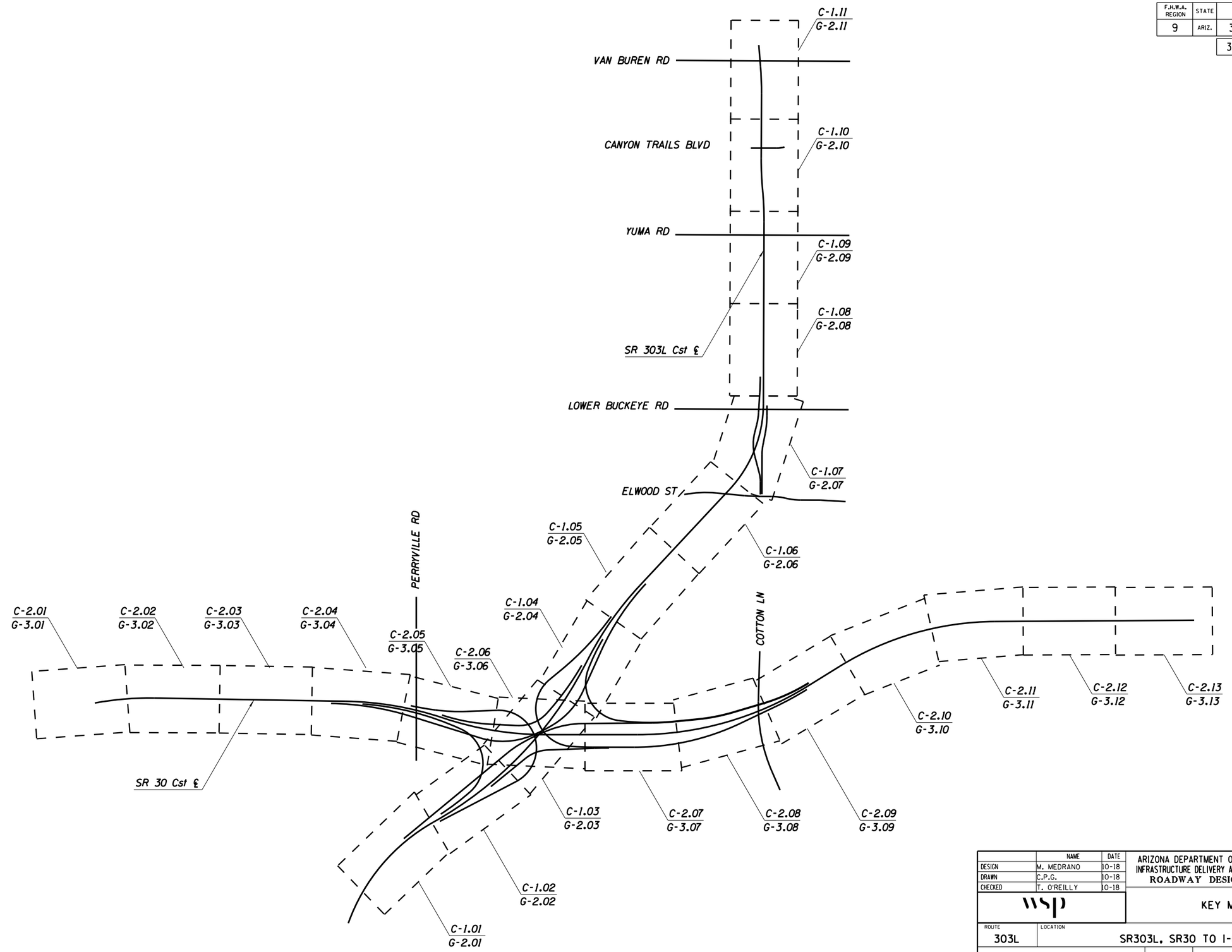
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 9 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\DESIGN_DATA\H6870TS07.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

KEY MAP

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-1.10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 10 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

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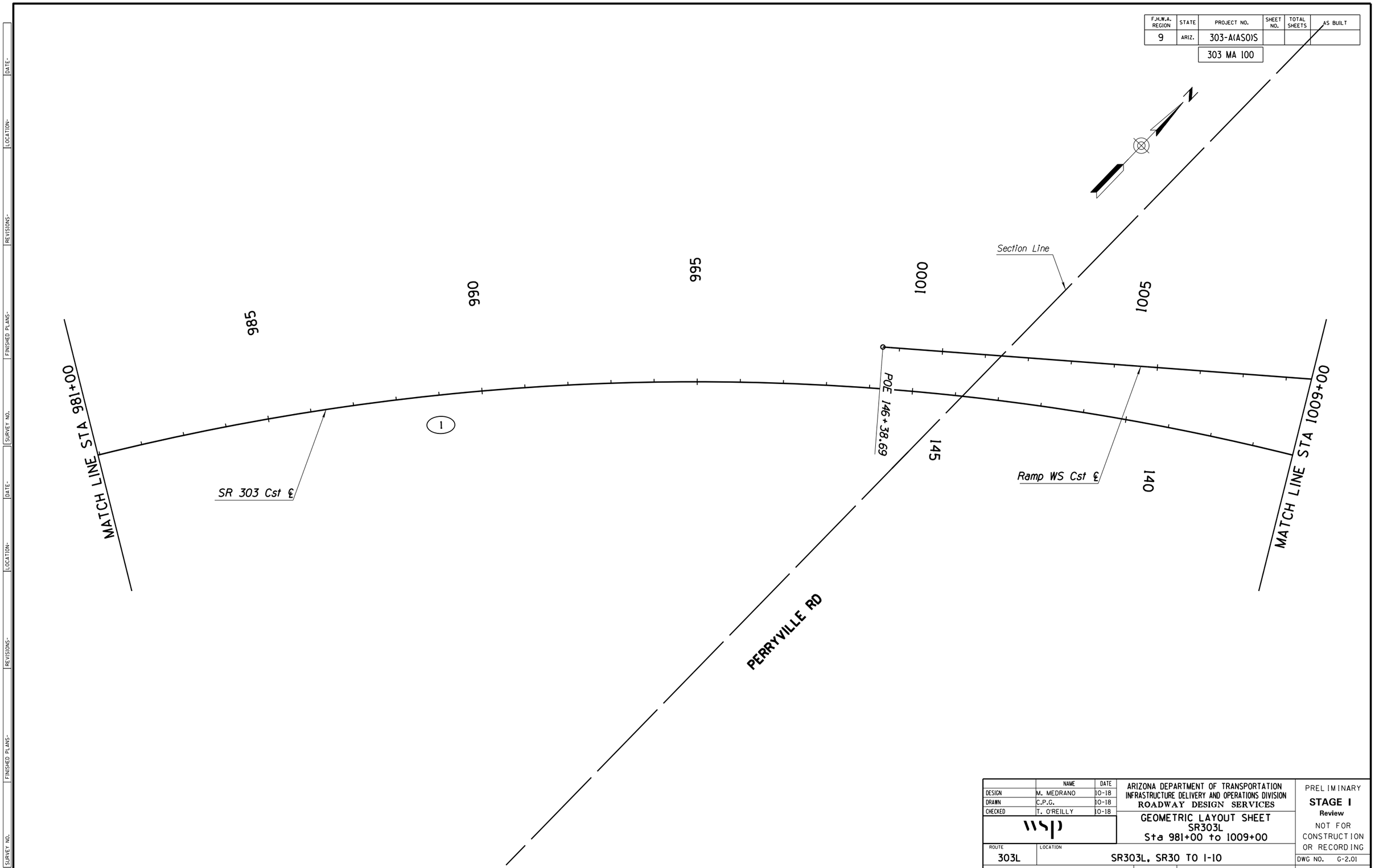
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 981+00 to 1009+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-2.01

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 11 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G14.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

Section Line

Ramp ES Cst ℄

Ramp WS Cst ℄

Ramp EN Cst ℄

Ramp NW Cst ℄

SR 303 Cst ℄

S50°24'59"W

N50°48'37"E

N62°25'36"E

MATCH LINE STA 1009+00

MATCH LINE STA 1037+00

POB 10+00.00

POB 10+00.00

PRC 1009+52.84

PT 75+80.60

PCC 93+79.64

PC 36+14.09

21

22

2

55

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1009+00 to 1037+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE: 303L
LOCATION: SR303L, SR30 TO I-10
DWG NO. G-2.02

TRACS NO. H6870 01 L
STP-303-A-(ASO)S
12 OF 160

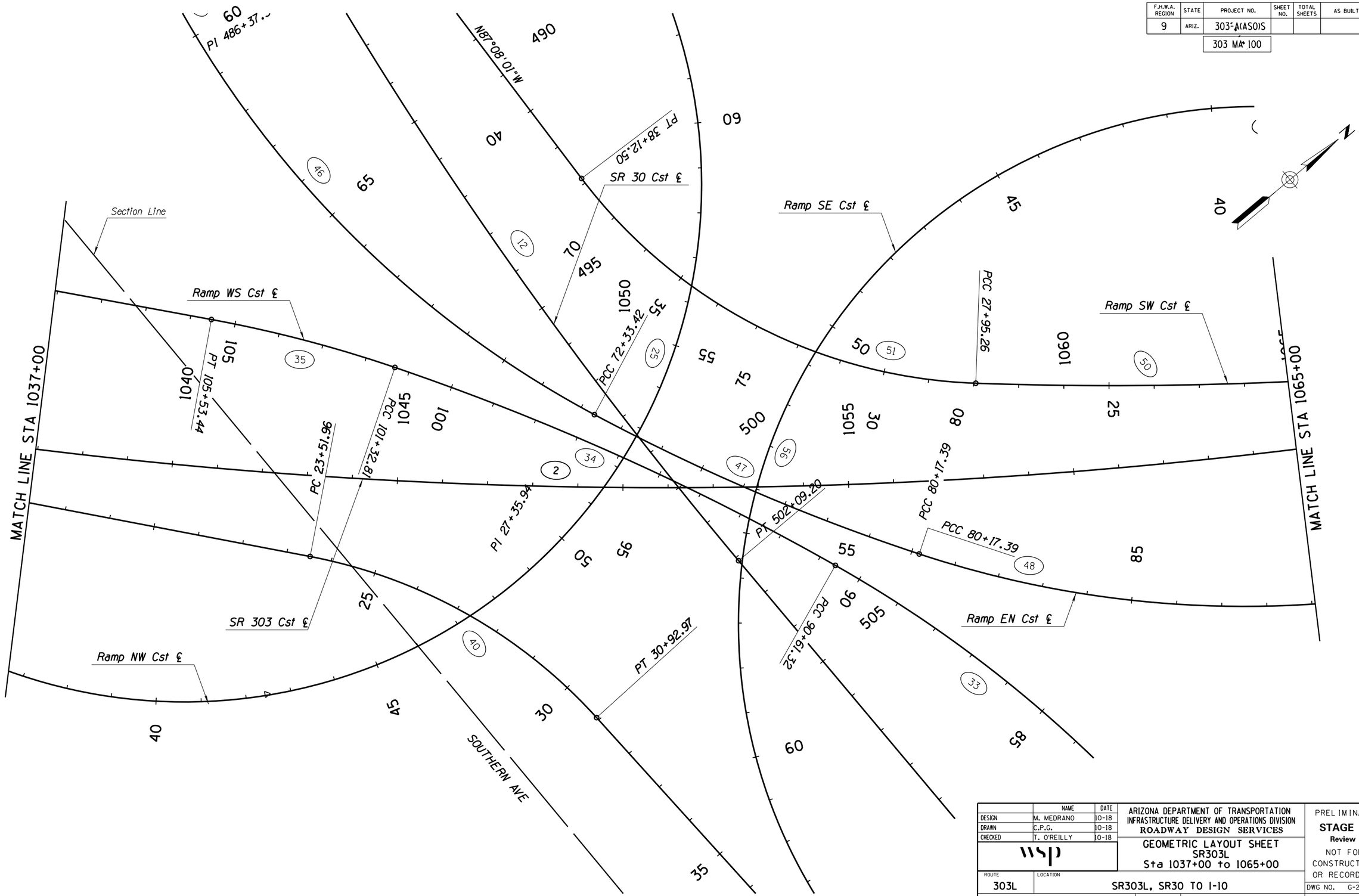
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G15.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1037+00 to 1065+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE 303L | LOCATION SR303L, SR30 TO I-10 | DWG NO. G-2.03

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 13 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G16.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

UNION PACIFIC RAILROAD

Section Line

MATCH LINE STA 1065+00

MATCH LINE STA 1093+00

PC 36+92.82

PT 32+14.45

S50°26'34"W

Ramp SE Cst ℄

Ramp WS Cst ℄

SR 303 Cst ℄

PC 10+00.00

N27°46'06"E

PT 93+75.97

PCC 90+34.67

N24°20'22"E

Ramp EN Cst ℄

PC 107+35.05

PT 100+70.86

Ramp WN Cst ℄

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1065+00 to 1093+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-2.04

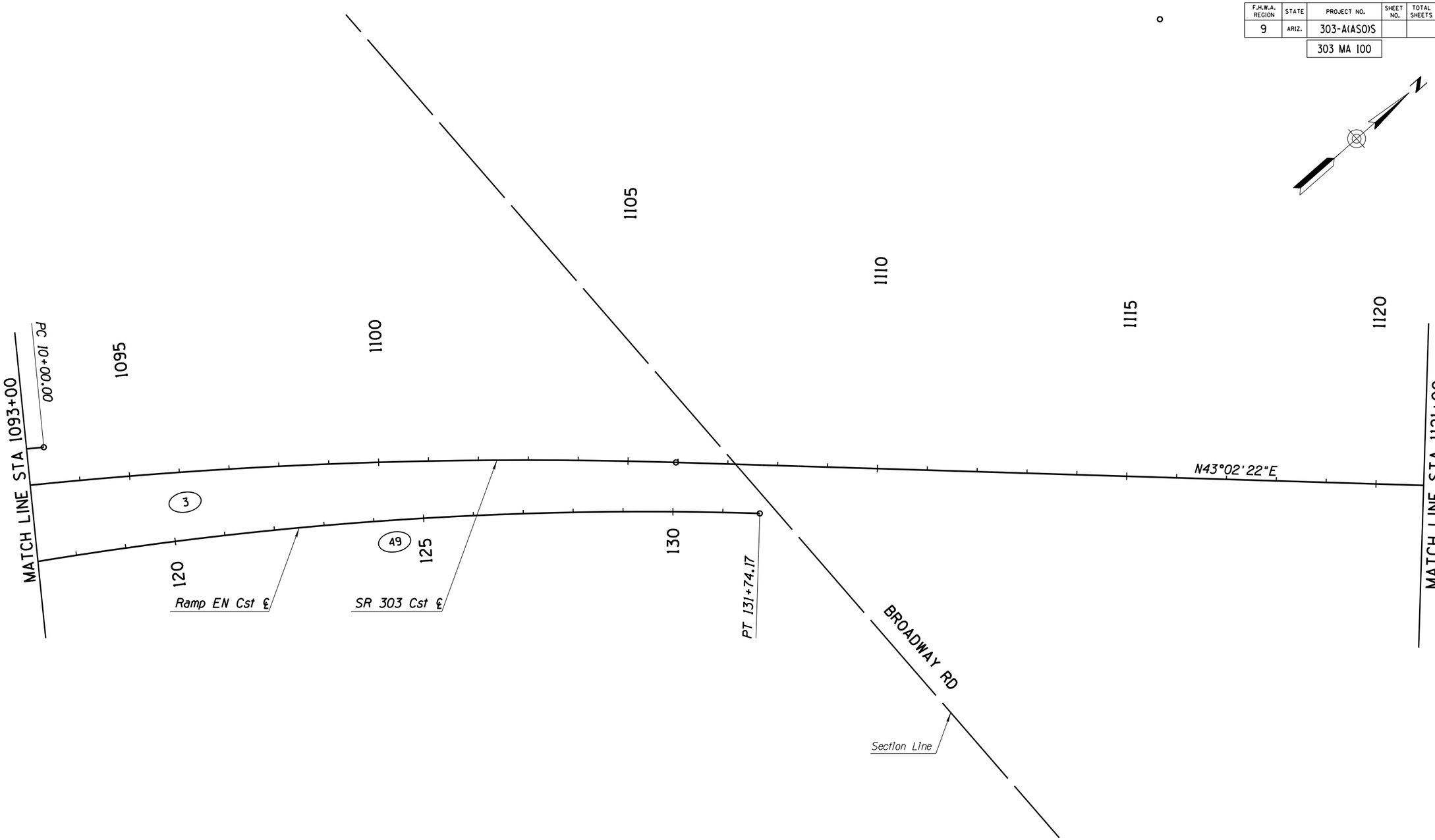
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 14 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G17.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1093+00 to 1121+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

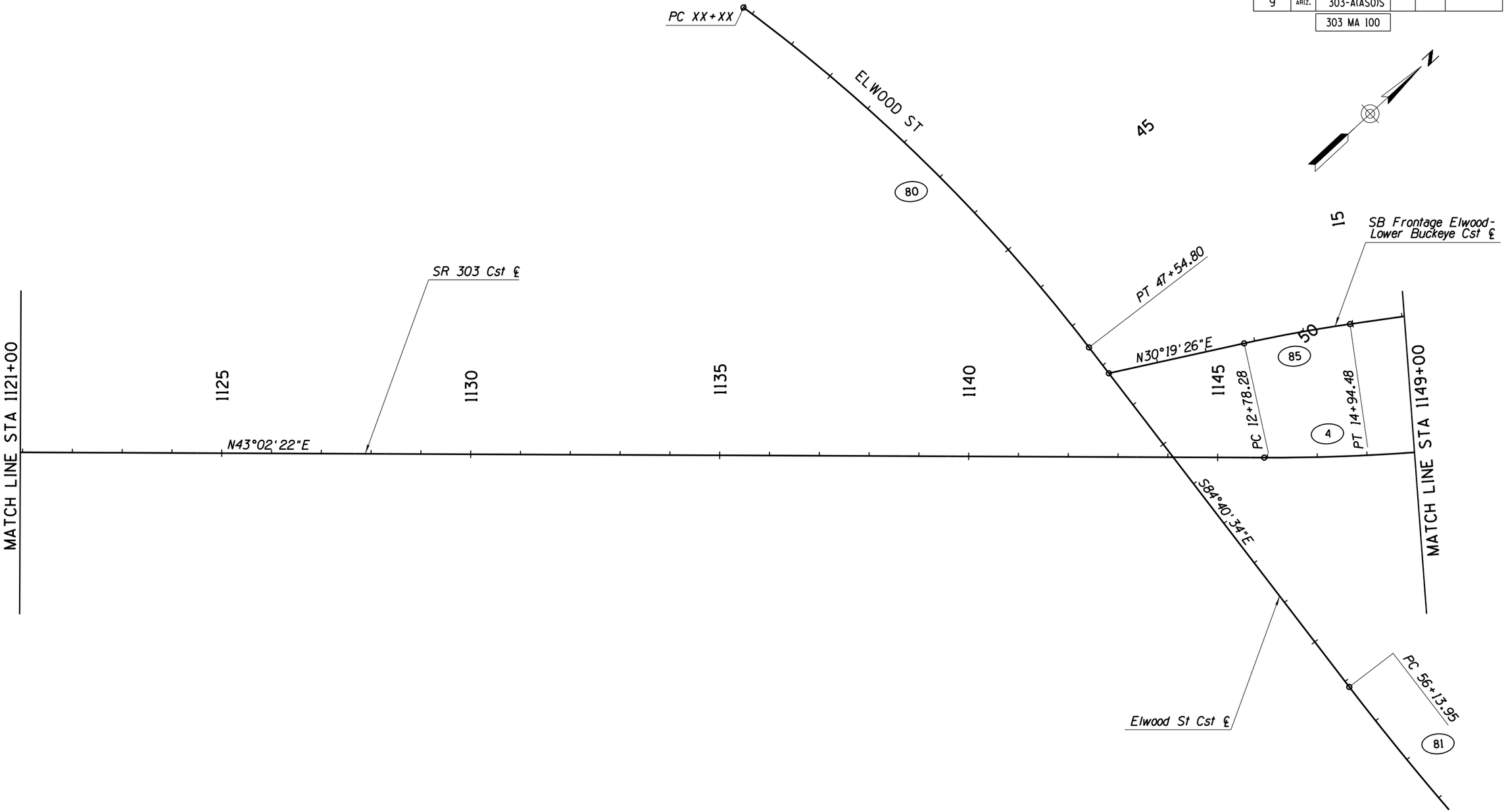
DWG NO. G-2.05

ROUTE	LOCATION		
303L	SR303L, SR30 TO I-10		
TRACS NO. H6870 01 L		STP-303-A-(ASO)S	15 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G18.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1121+00 to 1149+00

ROUTE 303L | LOCATION SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. G-2.06

16 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G19.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

LOWER BUCKEYE RD

S89°45'42"E

MATCH LINE STA 1149+00

N34°38'52"E

PC 20+44.97

PT 23+10.80

SB Frontage Elwood-Lower Buckeye Cst ℄

PC 28+58.75

N26°40'22"E

SBFR to Cotton Ln Connector Cst ℄

POE 21+51.29

PC 31+61.19

PT 35+57.51

N12°12'44"E

N14°07'25"E 27+07.55

PRC 1166+70.54

PT 35+17.01

N5°42'36"E

POB 10+00.00

POE 38+45.12

PC 12+15.68

Elwood Rd Ramp C Cst ℄

PT 13+48.42

N73°26'56"E

PT 50+00.00

POE 37+04.41

MATCH LINE STA 1177+00

PT 29+04.42

PC 23+37.14

PT 17+19.59

PT 33+86.25

PC 28+44.58

N0°12'58"E

POB 10+00.00

PC 10+90.51

PC 28+43.74

PT 30+56.00

N0°13'45"E

S89°46'15"E

SR 303 Cst ℄

POB 10+00.00

N20°03'03"W

PC 21+84.12

PC 12+50.88

PT 16+40.92

N14°41'19"W

N11°03'58"E

PC 13+92.97

POB 10+00.00

N0°11'18"E

COTTON LN

PC 22+16.36

PT 24+89.64

PRC 27+23.25

Elwood Rd Ramp D Cst ℄

NB Frontage Elwood-Lower Buckeye Cst ℄

PT 61+18.84

N0°11'18"E

POB 10+00.00

PC 13+88.18

S89°43'30"E

PC 64+33.76

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1149+00 to 1177+00

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

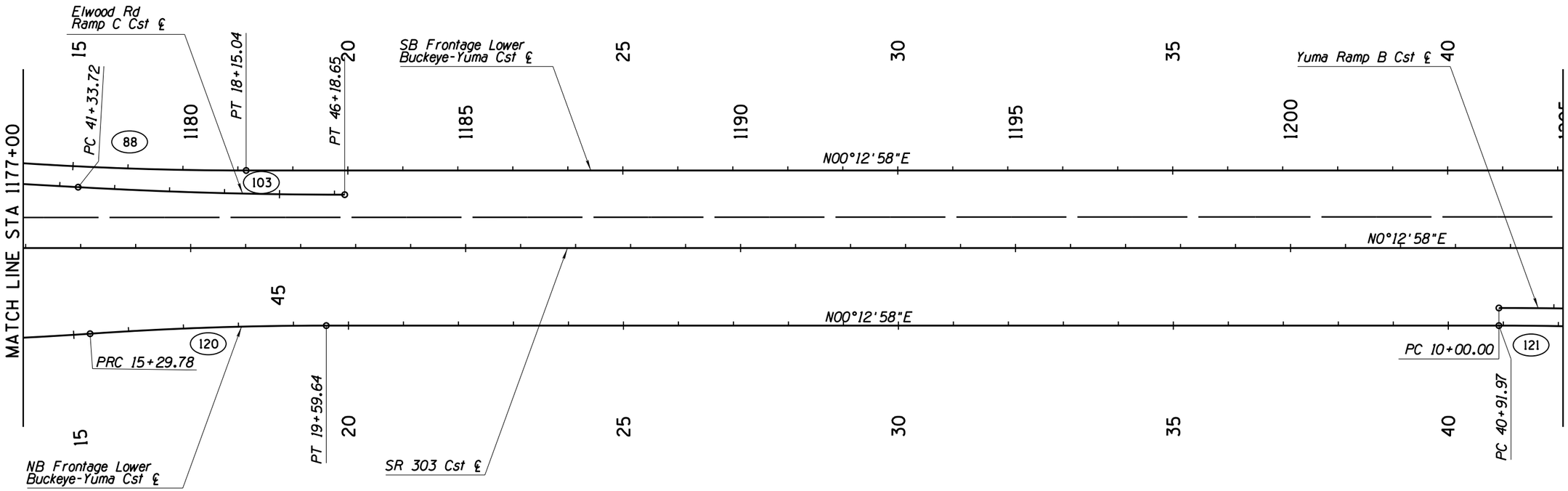
DWG NO. G-2.07

17 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G20.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1177+00 to 1205+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-2.08

TRACS NO.			SHEET
H6870 01 L		STP-303-A-(ASO)S	18 OF 160

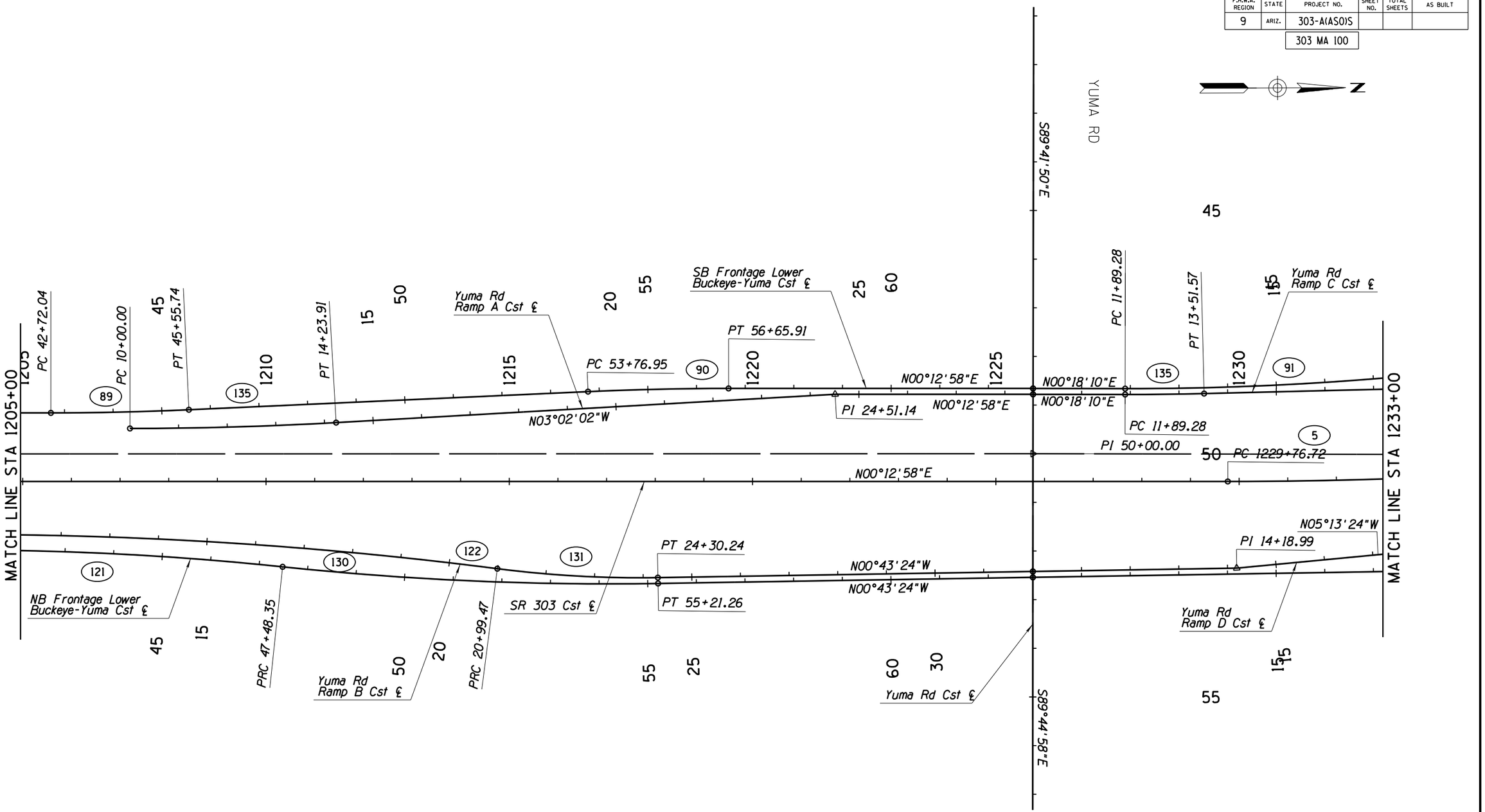
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G21.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1205+00 to 1233+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-2.09

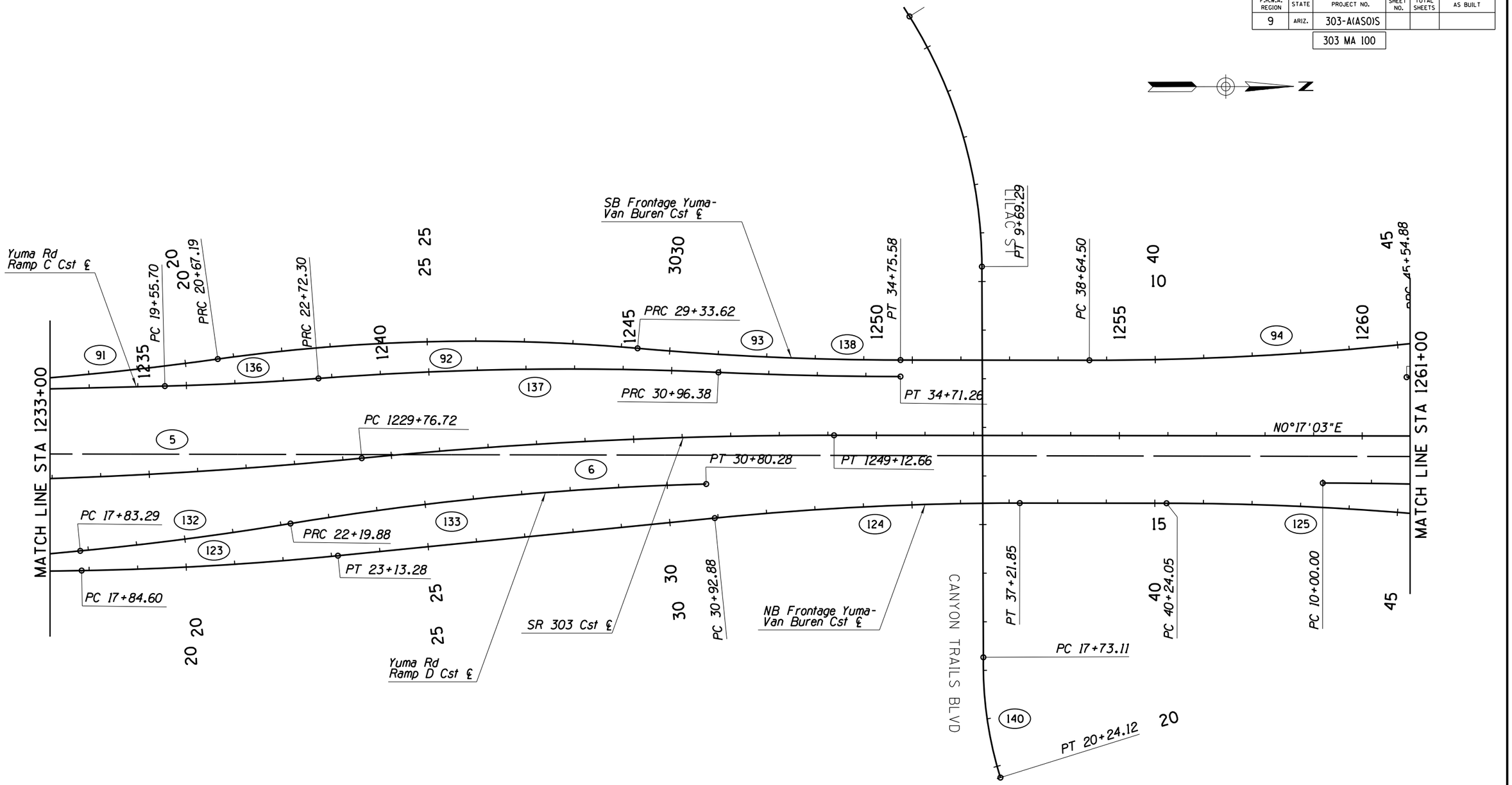
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 19 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G22.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1233+00 to 1261+00

ROUTE 303L | LOCATION SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. G-2.10

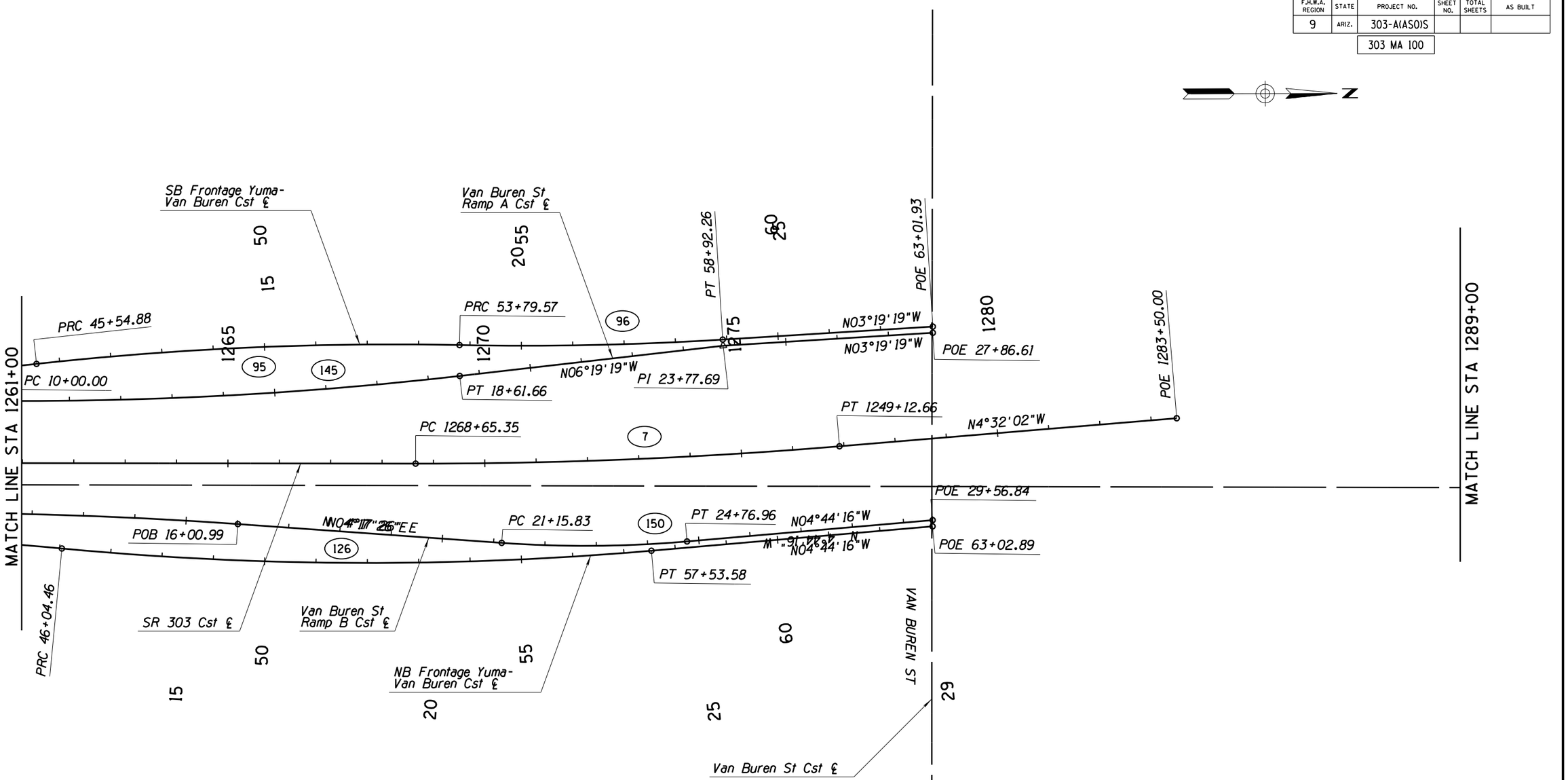
20 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G23.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR303L
Sta 1261+00 to 1289+00

ROUTE 303L | LOCATION SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. G-2.11

21 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G24.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			

303 MA 100

365

370

Section Line

PC 364+05.32

SR 30 Cst ℄

10

MATCH LINE STA 374+00

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 364+05.32 to 374+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-3.01

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 22 OF 160

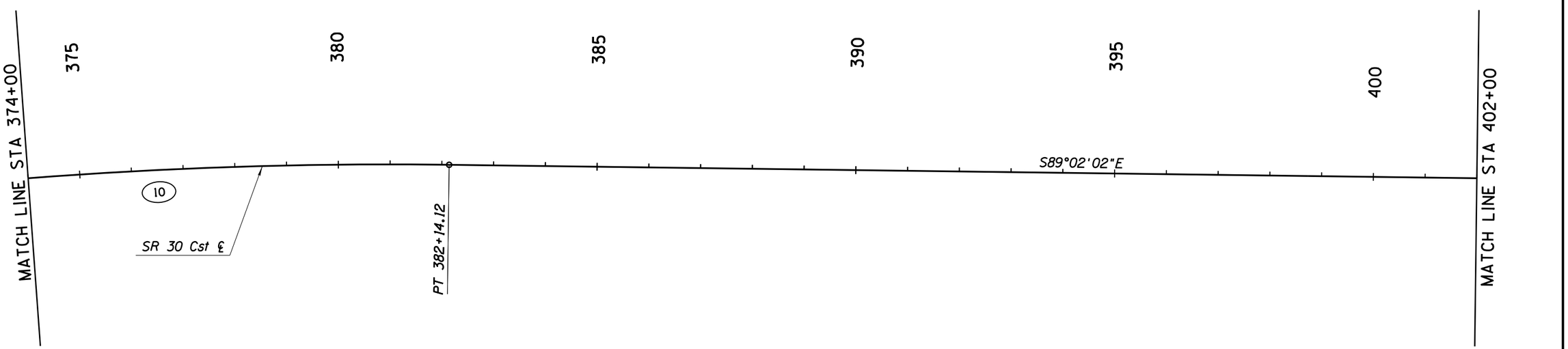
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			

303 MA 100



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 374+00 to 402+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	DWG NO. G-3.02
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	23 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G02.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

MATCH LINE STA 402+00

405

410

415

420

425

MATCH LINE STA 430+00

S89°02'02"E

SR 30 Cst ℄

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 402+00 to 430+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	DWG NO. G-3.03
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

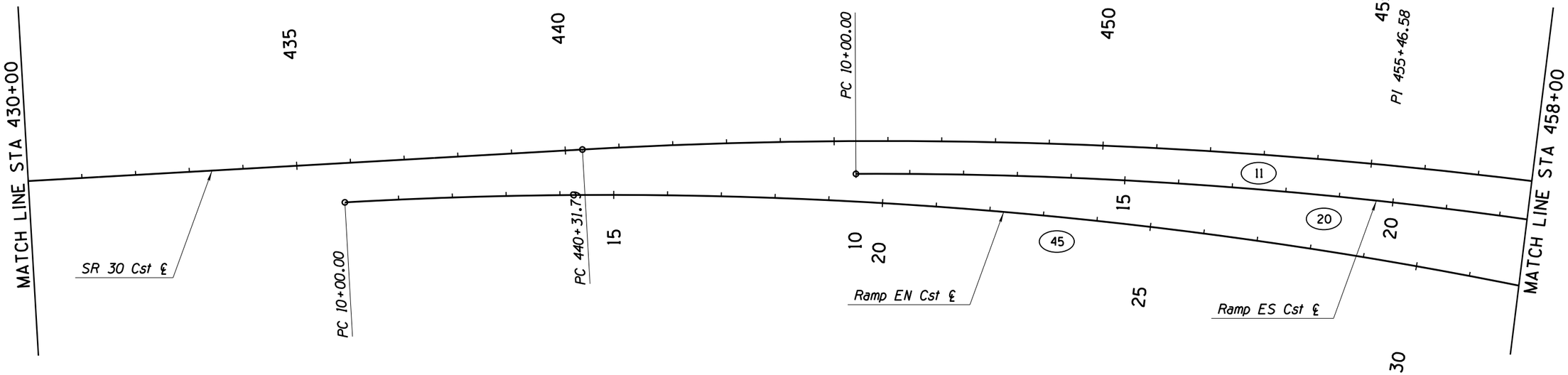
24 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G03.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 430+00 to 458+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-3.04

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 25 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G04.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 458+00

MATCH LINE STA 486+00

PERRYVILLE RD

PT 93+47.71

PCC 85+85.81

PT 61+19.37

Ramp NW Cst ℄

S87°54'36"W

PC 45+89.20

Ramp SW Cst ℄

PC 76+41.70

SR 30 Cst ℄

PRC 470+37.69

S72°41'21"E

PCC 41+03.16

PC 56+65.14

PT 34+51.70

Ramp EN Cst ℄

Ramp ES Cst ℄

Section Line

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 458+00 to 486+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE: 303L
LOCATION: SR303L, SR30 TO I-10
DWG NO. G-3.05

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 26 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G05.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

MATCH LINE STA 486+00

PI 486+37.37

PT 67+04.43

PT 38+12.50

N87°08'01"W

Ramp NW Cst ℄

Ramp SW Cst ℄

Ramp SE Cst ℄

PCC 27+95.26

PCC 72+33.42

PT 502+09.20

PCC 80+17.39

PCC 80+17.39

SR 303 Cst ℄

Ramp WS Cst ℄

PC 80+64.11

MATCH LINE STA 514+00

SR 30 Cst ℄

Ramp EN Cst ℄

PI 27+35.94

PCC 101+32.81

PC 23+51.96

PT 105+53.44

PT 30+92.97

PCC 90+61.32

PCC 64+20.86

Ramp NE Cst ℄

N87°51'38"E

Section Line

N

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 486+00 to 514+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE 303L | LOCATION SR303L, SR30 TO I-10

DWG NO. G-3.06

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

10/22/2018

T:\H6870_01C\GEO\H6870 G06.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

N

Section Line

Ramp WN Cst ℄

PCC 69+69.76

PT 59+55.88

Cotton Ln
Ramp A Cst ℄

PC 52+81.91

PT 19+92.12

PC 52+87.38

S89°29'17"W

Ramp WS Cst ℄

PC 10+00.00

PC 529+86.40

MATCH LINE STA 514+00

MATCH LINE STA 542+00

N90°00'00"E

SR 30 Cst ℄

PT 70+82.17

PC 45+07.06

PI 47+28.33

PT 49+49.54

PC 83+46.06

Ramp SE Cst ℄

S89°55'37"E

Ramp NE Cst ℄

Section Line

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 514+00 to 542+00

ROUTE 303L | LOCATION SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. G-3.07

28 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G07.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

N

COTTON LN

MATCH LINE STA 542+00

MATCH LINE STA 570+00

Ramp WN Cst ℄

Ramp WS Cst ℄

Cotton Ln Ramp A Cst ℄

SR 30 Cst ℄

Cotton Ln Ramp B Cst ℄

Cotton Ln Ramp D Cst ℄

Ramp NE Cst ℄

Section Line

S84°22'16"W

N80°22'44"E

N65°57'33"E

N76°33'07"E

N84°06'01"E

N64°32'14"E

N76°33'07"E

N69°56'59"E

PC 25+46.61

PT 45+55.51

PT 45+60.99

PT 32+67.60

PC 39+38.43

PC 34+68.83

PC 34+72.03

PT 44+68.07

POE 47+74.24

PT 25+28.64

PT 25+31.84

PC 17+73.89

PT 21+51.31

PT 116+76.83

POE 33+82.90

POB 10+00.00

PC 10+00.00

PT 13+31.81

61

31

66

67

13

70

71

58

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 542+00 to 570+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-3.08

TRACS NO.			SHEET
H6870 01 L		STP-303-A-(ASO)S	29 OF 160

10/22/2018

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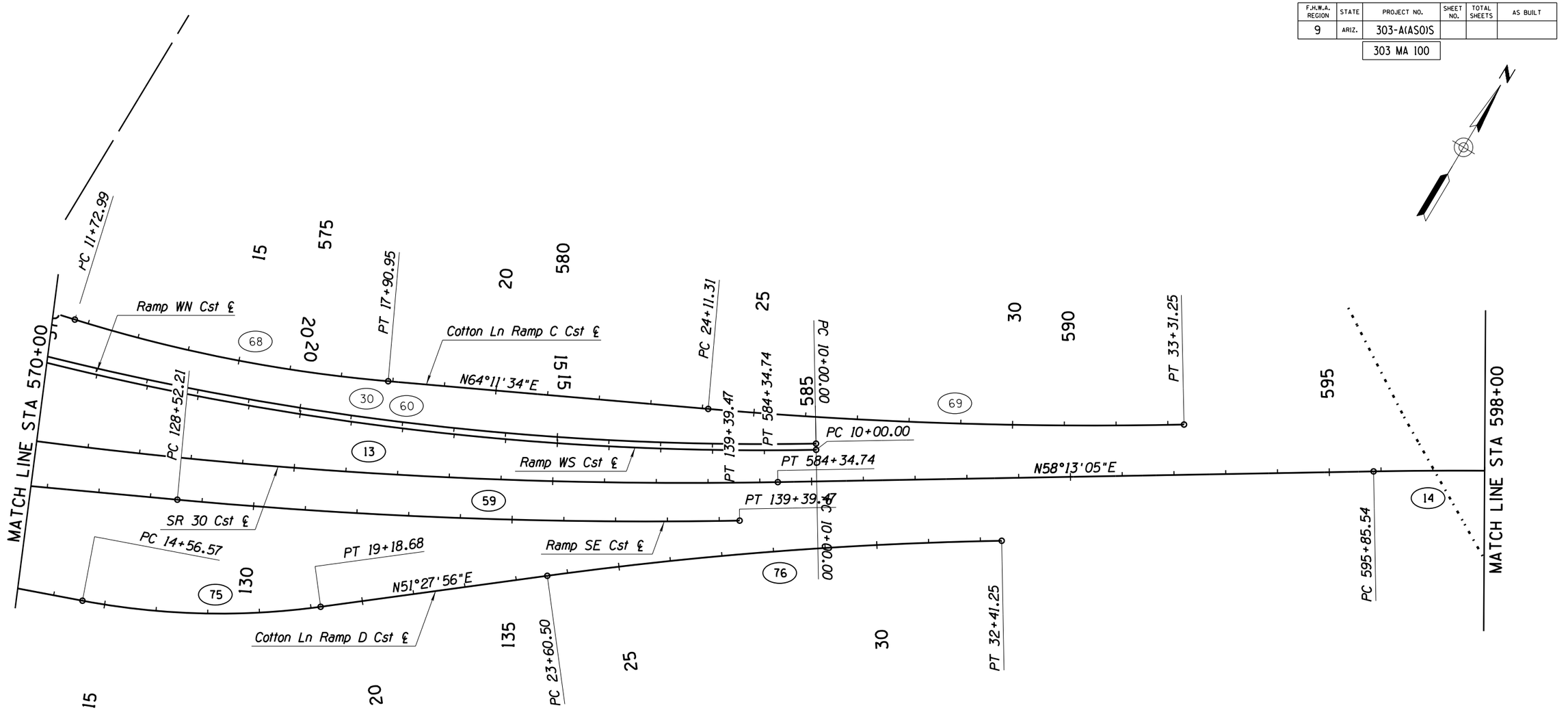
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 570+00 to 598+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-3.09

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 30 OF 160

10/22/2018

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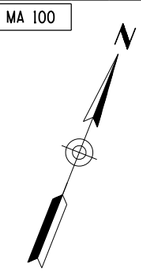
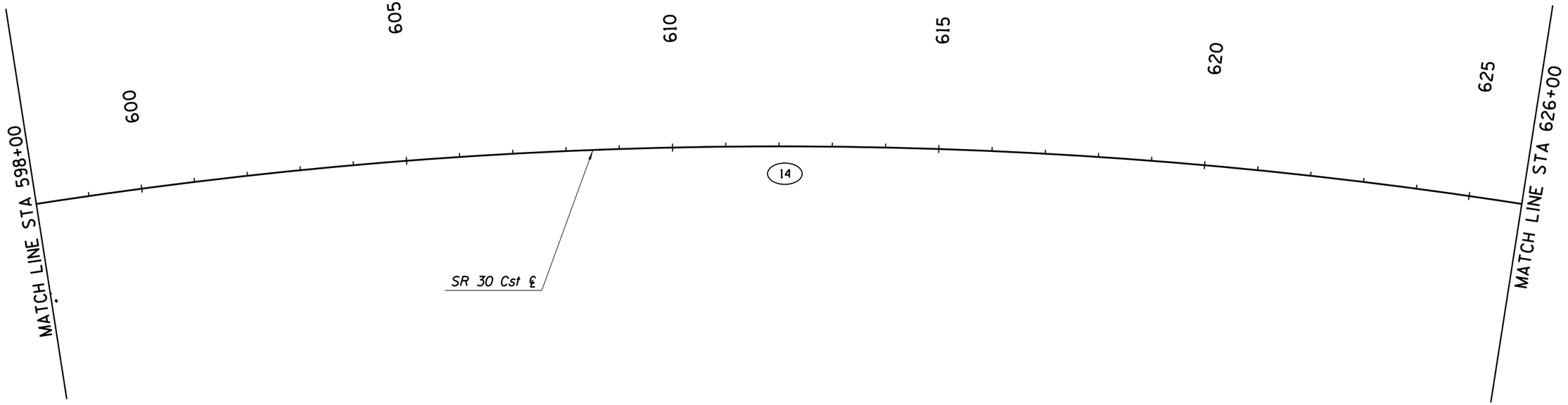
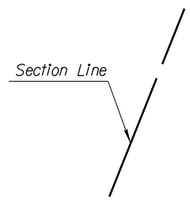
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			







	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 598+00 to 626+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-3.10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 31 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G10.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

630 635 640 645 650

MATCH LINE STA 626+00

14

N89°38'16"E

SR 30 Cst ℄

PT 645+46.57

MATCH LINE STA 654+00

Section Line

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 626+00 to 654+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-3.11

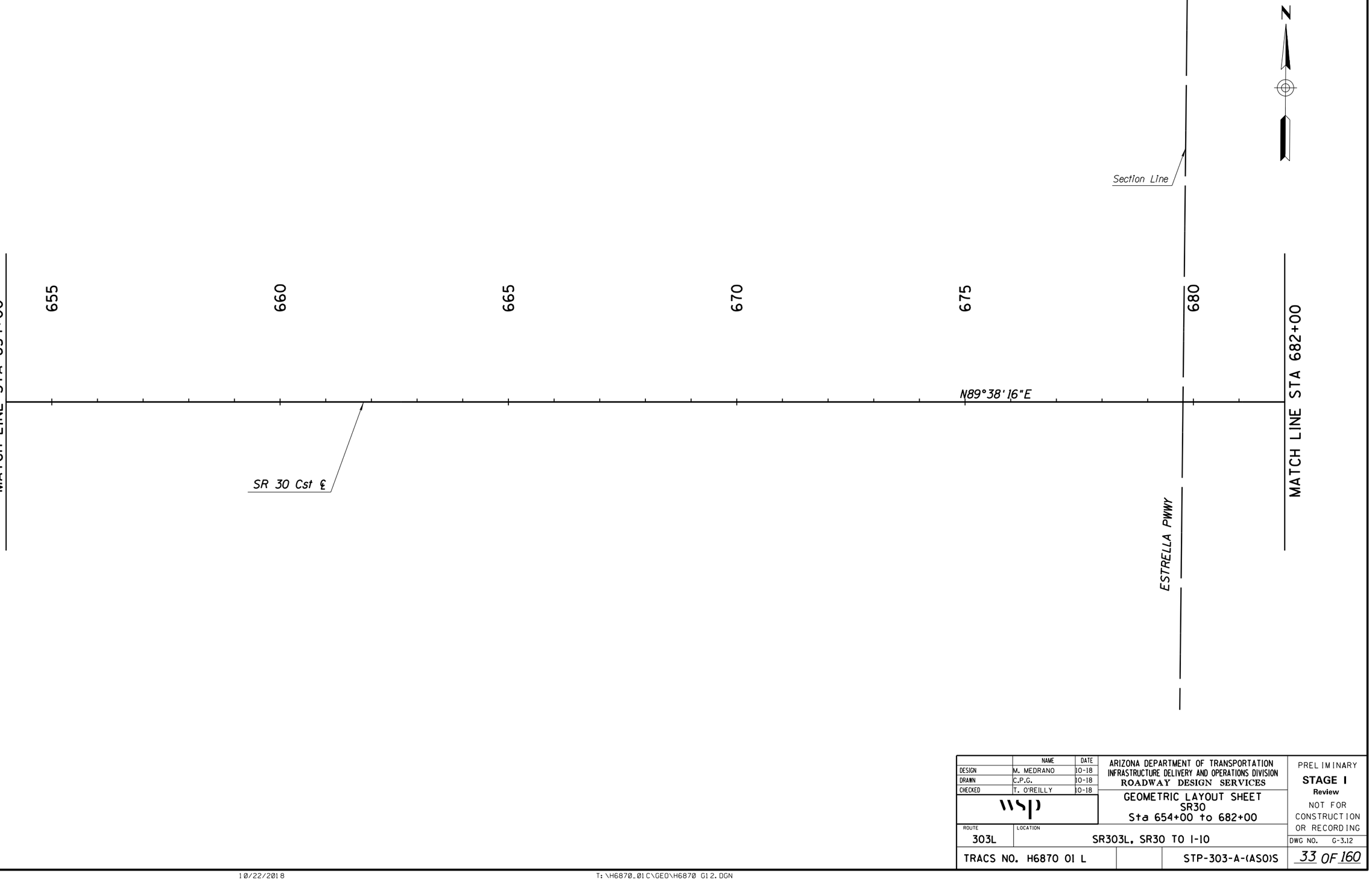
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 32 OF 160

10/22/2018

T:\H6870_01C\GEO\H6870 G11.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			

303 MA 100



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 654+00 to 682+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-3.12

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 33 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

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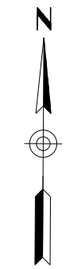
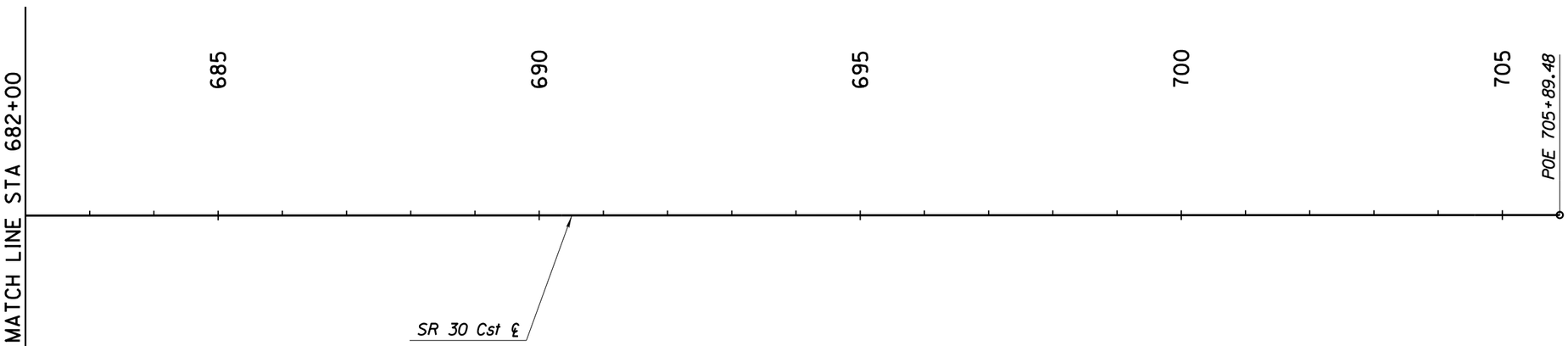
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			





BULLARD DRAINAGE CHANNEL

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC LAYOUT SHEET
SR30
Sta 682+00 to 705+89.48

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	DWG NO. G-3.13
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	34 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\GEO\H6870 G13.DGN

DATE:
LOCATION:
REVISIONS:
FINISHED PLANS:
SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	SR 303L Cst ℄	POB	784+34.74	847680.516	533787.995																
(1a)	SR 303L Cst ℄	PI	876+48.09	856893.757	533831.922						21°44'57"Lt	1°00'00"	5729.58'	2174.91'	1100.71'	104.77'					
	SR 303L Cst ℄	PC	865+47.38	855793.064	533826.674																
	SR 303L Cst ℄	PT	887+22.29	857918.041	533428.942																
(1)	SR 303L Cst ℄	PI	977+31.31	866301.570	530130.645						82°10'48"Rt	1°00'00"	5729.58'	8218.00'	4996.47'	1872.58'					
	SR 303L Cst ℄	PC	927+34.84	861652.002	531959.905																
	SR 303L Cst ℄	PRC	1009+52.84	868746.448	534488.082																
(2)	SR 303L Cst ℄	PI	1043+40.21	870403.960	537442.218						32°56'09"Lt	0°30'00"	11459.16'	6587.15'	3387.37'	490.18'					
	SR 303L Cst ℄	PRC	1009+52.84	868746.448	534488.082																
	SR 303L Cst ℄	PT	1075+39.99	873401.236	539020.382																
(3)	SR 303L Cst ℄	PI	1092+94.98	874954.120	539838.027						15°16'16"Rt	0°35'00"	9822.13'	2617.90'	1316.75'	87.87'					
	SR 303L Cst ℄	PC	1079+78.22	873789.004	539224.555																
	SR 303L Cst ℄	PT	1105+96.12	875916.517	540736.712																
(4)	SR 303L Cst ℄	PI	1160+91.36	879932.900	544487.212						42°49'24"Lt	1°30'00"	3819.72'	2854.89'	1497.83'	283.18'					
	SR 303L Cst ℄	PC	1145+93.53	878838.159	543464.942																
	SR 303L Cst ℄	PT	1174+48.42	881430.718	544492.858																
(5)	SR 303L Cst ℄	PI	1234+58.17	887440.429	544515.515						5°36'45"Lt	0°35'00"	9822.13'	962.14'	481.46'	11.79'					
	SR 303L Cst ℄	PC	1229+76.72	886958.977	544513.700																
	SR 303L Cst ℄	PRC	1239+38.86	887919.751	544470.236																
(6)	SR 303L Cst ℄	PI	1244+26.16	888404.893	544424.406						5°40'50"Rt	0°35'00"	9822.13'	973.80'	487.30'	12.08'					
	SR 303L Cst ℄	PRC	1239+38.86	887919.751	544470.236																
	SR 303L Cst ℄	PT	1249+12.66	888892.189	544426.822																
(7)	SR 303L Cst ℄	PI	1272+78.57	891258.067	544438.551						4°49'05"Lt	0°35'00"	9822.14'	825.95'	413.22'	8.69'					
	SR 303L Cst ℄	PC	1268+65.35	890844.854	544436.502																
	SR 303L Cst ℄	PT	1276+91.30	891669.992	544405.886																
	SR 303L Cst ℄	POE	1283+50.00	892326.632	544353.815																

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. G-4.01

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

Centerline Geometric Data Sheet

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
(10)	SR 30 Cst ℄	PI	373+12.74	872522.148	525095.598						11°27'21"Rt	0°38'00"	9046.71'	1808.80'	907.43'	45.40'					
	SR 30 Cst ℄	PC	364+05.32	872356.942	524203.336																
	SR 30 Cst ℄	PT	382+14.12	872506.849	526002.896																
(11)	SR 30 Cst ℄	PI	455+46.58	872383.224	533334.311						17°32'04"Rt	0°35'00"	9822.13'	3005.90'	1514.79'	116.12'					
	SR 30 Cst ℄	PC	440+31.79	872408.764	531819.734																
	SR 30 Cst ℄	PRC	470+37.69	871902.562	534770.820																
(12)	SR 30 Cst ℄	PI	486+37.37	871394.964	536287.829						18°30'02"Lt	0°35'00"	9822.13'	3171.51'	1599.68'	129.41'					
	SR 30 Cst ℄	PRC	470+37.69	871902.562	534770.820																
	SR 30 Cst ℄	PT	502+09.20	871394.964	537887.507																
(13)	SR 30 Cst ℄	PI	557+82.64	871394.964	543460.945						31°46'55"Lt	0°35'00"	9822.13'	5448.35'	2796.24'	390.27'					
	SR 30 Cst ℄	PC	529+86.40	871394.964	540664.703																
	SR 30 Cst ℄	PT	584+34.74	872867.713	545837.912																
(14)	SR 30 Cst ℄	PI	621+30.15	874814.043	548979.223						31°25'12"Rt	0°38'00"	9046.70'	4961.03'	2544.61'	351.06'					
	SR 30 Cst ℄	PC	595+85.54	873473.827	546816.159																
	SR 30 Cst ℄	PT	645+46.57	874830.126	551523.778																
	SR 30 Cst ℄	POE	705+89.48	874868.320	557566.560																
	Ramp NE Cst ℄	POB	10+00.00	869819.247	536222.407																
(40)	Ramp NE Cst ℄	PI	27+35.94	870916.168	537567.865						37°03'01"Rt	5°00'00"	1145.92'	741.00'	383.98'	62.62'					
	Ramp NE Cst ℄	PC	23+51.96	870673.538	537270.260																
	Ramp NE Cst ℄	PT	30+92.97	870930.502	537951.573																
(41)	Ramp NE Cst ℄	PI	47+28.33	870991.551	539585.793						2°12'45"Rt	0°30'00"	11459.16'	442.49'	221.27'	2.14'					
	Ramp NE Cst ℄	PC	45+07.06	870983.291	539364.676																
	Ramp NE Cst ℄	PT	49+49.54	870991.269	539807.064																
	Ramp NE Cst ℄																				

	NAME	DATE
DESIGN	M. MEDRANO	10-18
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wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE: 303L
LOCATION: SR303L, SR30 TO I-10

DWG NO. G-4.02

TRACS NO. H6870 01 L

STP-303-A-(ASO)S

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10/22/2018

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DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	Ramp NW Cst ℄	POB	10+00.00	868763.763	534673.352																
(25)	Ramp NW Cst ℄	PI	86+81.72	872319.502	541482.581						154°31'00"Lt	5°00'00"	1145.92'	3090.33'	5067.63'	4049.66'					
	Ramp NW Cst ℄	PC	36+14.09	869973.782	536990.536																
	Ramp NW Cst ℄	PT	67+04.43	872134.697	536418.322																
(26)	Ramp NW Cst ℄	PI	81+14.83	872083.263	535008.857						9°26'28"Rt	1°00'00"	5729.58'	944.11'	473.13'	19.50'					
	Ramp NW Cst ℄	PC	76+41.70	872100.517	535481.671																
	Ramp NW Cst ℄	PCC	85+85.81	872143.801	534539.618																
(27)	Ramp NW Cst ℄	PI	89+67.01	872192.576	534161.552						5°04'46"Rt	0°40'00"	8594.37'	761.90'	381.20'	8.45'					
	Ramp NW Cst ℄	PCC	85+85.81	872143.801	534539.618																
	Ramp NW Cst ℄	PT	93+47.71	872274.631	533789.290																
(60)	Ramp WN Cst ℄	PI	17+68.89	872564.351	545209.695						15°17'11"Rt	1°00'00"	5729.58	1528.64	768.89	51.36'					
	Ramp WN Cst ℄	PC	10+00.00	872969.315	545863.293																
	Ramp WN Cst ℄	PT	25+28.64	872346.032	544472.455																
(61)	Ramp WN Cst ℄	PI	40+13.80	871924.332	543048.417						10°52'01"Rt	1°00'00"	5729.58	1086.68	544.98	25.86'					
	Ramp WN Cst ℄	PC	34+68.83	872079.073	543570.962																
	Ramp WN Cst ℄	PT	45+55.51	871870.879	542506.07																
(62)	Ramp WN Cst ℄	PI	61+29.44	871716.503	540939.73						12°56'25"Rt	0°46'00"	7473.36	1687.85	847.53	47.90'					
	Ramp WN Cst ℄	PC	52+81.91	871799.632	541783.176																
	Ramp WN Cst ℄	PCC	69+69.76	871824.362	540099.089																
(63)																					
	Ramp WN Cst ℄	PI	84+16.72	872008.505	538663.893						103°14'43"Rt	5°00'00"	1145.92	2064.91	1446.96	699.84'					
	Ramp WN Cst ℄	PCC	69+69.76	871824.362	540099.089																
	Ramp WN Cst ℄	PCC	90+34.67	873363.331	539171.971																
(64)	Ramp WN Cst ℄	PI	95+54.18	873849.765	539354.391						10°21'43"Rt	1°00'00"	5729.58	1036.2	519.51	23.50'					
	Ramp WN Cst ℄	PCC	90+34.67	873363.331	539171.971																
	Ramp WN Cst ℄	PT	100+70.86	874295.456	539621.328																
(30)	Ramp WS Cst ℄	PI	17+70.50	872553.302	545214.65						15°17'11"Rt	0°59'52"	5741.6	1531.8	770.5	51.47'					
	Ramp WS Cst ℄	PC	10+00.00	872959.114	545869.61																
	Ramp WS Cst ℄	PT	25+31.84	872334.526	544475.86																
(31)	Ramp WS Cst ℄	PI	40+18.15	871912.502	543050.73						10°52'01"Rt	0°59'52"	5741.6	1089	546.12	25.91'					
	Ramp WS Cst ℄	PC	34+72.03	872067.567	543574.37																
	Ramp WS Cst ℄	PT	45+60.99	871858.937	542507.25																
(32)	Ramp WS Cst ℄	PI	56+21.85	871754.884	541451.5						5°07'01"Rt	0°45'56"	7485.4	668.49	334.47	7.47'					
	Ramp WS Cst ℄	PC	52+87.38	871787.69	541784.35																
	Ramp WS Cst ℄	PT	59+55.88	871751.896	541117.04																

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
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DWG NO. G-4.03

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DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

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Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
(33)	Ramp WS Cst ℄	PI	85+67.81	871728.56	538505.22						19°56'39"Lt	2°00'00"	2864.8	997.21	503.7	43.94'					
	Ramp WS Cst ℄	PC	80+64.11	871733.06	539008.9																
	Ramp WS Cst ℄	PCC	90+61.32	871552.52	538033.28																
(34)	Ramp WS Cst ℄	PI	95+98.63	871364.734	537529.84						10°42'54"Lt	1°00'00"	5729.6	1071.5	537.31	25.14'					
	Ramp WS Cst ℄	PCC	90+61.32	871552.52	538033.28																
	Ramp WS Cst ℄	PCC	101+32.81	871086.623	537070.11																
(35)	Ramp WS Cst ℄	PI	103+43.50	870977.57	536889.83						8°24'45"Lt	2°00'00"	2864.8	420.63	210.69	7.74'					
	Ramp WS Cst ℄	PCC	101+32.81	871086.623	537070.11																
	Ramp WS Cst ℄	PT	105+53.44	870843.317	536727.45																
	Ramp WS Cst ℄	PT	105+53.44	870843.317	536727.45																
	Ramp WS Cst ℄	POE	146+38.69	868240.179	533578.97																
(55)	Ramp SE Cst ℄	PI	21+13.39	874079.899	539228.465						14°45'47"Rt	0°40'00"	8594.37'	2214.45'	1113.39'	71.82'					
	Ramp SE Cst ℄	PC	10+00.00	874984.296	539877.858																
	Ramp SE Cst ℄	PT	32+14.45	873370.838	538370.049																
(56)	Ramp SE Cst ℄	PI	65+57.96	871241.536	535792.241						136°24'07"Lt	5°00'00"	1145.92'	2728.04'	2865.14'	1939.88'					
	Ramp SE Cst ℄	PC	36+92.82	873066.190	538001.232																
	Ramp SE Cst ℄	PCC	64+20.86	871039.633	538650.253																
(57)	Ramp SE Cst ℄	PI	67+51.65	871016.323	538980.219						3°58'04"Lt	0°36'00"	9549.30'	661.31'	330.79'	5.73'					
	Ramp SE Cst ℄	PCC	64+20.86	871039.633	538650.254																
	Ramp SE Cst ℄	PT	70+82.17	871015.901	539311.006																
(58)	Ramp SE Cst ℄	PI	100+39.57	871012.131	542268.404						25°32'09"Lt	0°46'00"	7473.36'	3330.77'	1693.51'	189.48'					
	Ramp SE Cst ℄	PC	83+46.06	871014.290	540574.897																
	Ramp SE Cst ℄	PT	116+76.83	871740.213	543797.413																
(59)	Ramp SE Cst ℄	PI	133+96.39	872479.496	545349.945						6°19'09"Lt	0°34'52"	9858.13'	1087.26'	544.18'	15.01'					
	Ramp SE Cst ℄	PC	128+52.21	872245.538	544858.622																
	Ramp SE Cst ℄	PT	139+39.47	872766.111	545812.532																
(50)	Ramp SW Cst ℄	PI	19+00.91	872719.645	538526.927						11°58'06"Rt	0°40'00"	8594.37'	1795.26'	900.91'	47.09'					
	Ramp SW Cst ℄	PC	10+00.00	873499.572	538977.866																
	Ramp SW Cst ℄	PCC	27+95.26	872050.183	537924.055																
(51)	Ramp SW Cst ℄	PI	33+40.14	871645.281	537559.428						50°51'44"Rt	5°00'00"	1145.92'	1017.25'	544.88'	122.95'					
	Ramp SW Cst ℄	PCC	27+95.26	872050.183	537924.055																
	Ramp SW Cst ℄	PT	38+12.50	871672.529	537015.225																
(52)	Ramp SW Cst ℄	PI	53+58.87	871749.857	535470.795						15°18'06"Rt	1°00'00"	5729.58'	1530.18'	769.67'	51.46'					
	Ramp SW Cst ℄	PC	45+89.20	871711.369	536239.500																
	Ramp SW Cst ℄	PT	61+19.37	871989.845	534739.499																

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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-4.04

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 38 OF 160

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DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

DATE-
LOCATION-
REVISIONS-
FINISHED PLANS-
SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
(45)	Ramp EN Cst ℄	PI	22+34.23	872322.491	532606.237						16°20'41"Rt	0°40'00"	8594.37	2451.7	1234.23	88.17'					
	Ramp EN Cst ℄	PC	10+00.00	872343.300	531372.180																
	Ramp EN Cst ℄	PT	34+51.70	871955.241	533784.565																
(46)	Ramp EN Cst ℄	PI	64+81.38	871053.749	536677.014						39°12'25"Lt	2°30'00"	2291.83	1568.28	816.24	141.02'					
	Ramp EN Cst ℄	PC	56+65.14	871296.625	535897.742																
	Ramp EN Cst ℄	PCC	72+33.42	871358.15	537434.373																
(47)	Ramp EN Cst ℄	PI	76+26.36	871504.69	537798.972						9°47'59"Lt	0°40'00"	4583.66	783.97	392.95	16.81'					
	Ramp EN Cst ℄	PCC	72+33.42	871358.15	537434.373																
	Ramp EN Cst ℄	PCC	80+17.39	871711.148	538133.308																
(48)	Ramp EN Cst ℄	PI	87+17.30	872078.889	538728.824						33°57'52"Lt	2°30'00"	2291.83	1358.58	699.91	104.49'					
	Ramp EN Cst ℄	PCC	80+17.39	871711.148	538133.308																
	Ramp EN Cst ℄	PT	93+75.97	872716.589	539017.285																
(49)	Ramp EN Cst ℄	PI	119+65.55	875076.003	540084.557						18°42'00"Rt	0°46'00"	7473.36	2439.12	1230.5	100.62'					
	Ramp EN Cst ℄	PC	107+35.05	873954.868	539577.416																
	Ramp EN Cst ℄	PT	131+74.17	875975.359	540924.375																
(20)	Ramp ES Cst ℄	PI	25+68.66	872218.603	533888.504						20°41'16"Rt	0°40'00"	8594.37'	3103.16'	1668.66'	141.98'					
	Ramp ES Cst ℄	PC	10+00.00	872326.179	532323.539																
	Ramp ES Cst ℄	PCC	41+03.16	871565.101	5535314.556																
(21)	Ramp ES Cst ℄	PI	58+61.80	870832.450	536913.324						113°49'27" Rt	5°00'00"	1145.92'	2276.49'	1758.65'	953.12'					
	Ramp ES Cst ℄	PCC	41+03.16	871565.101	5535314.556																
	Ramp ES Cst ℄	PCC	63+79.64	869665.857	535597.308																
(22)	Ramp ES Cst ℄	PI	69+45.20	869920.701	535174.099						8°39'19" Rt	0°46'00"	7473.36'	1128.95'	565.55'	21.37'					
	Ramp ES Cst ℄	PCC	63+79.64	869665.857	535597.308																
	Ramp ES Cst ℄	PT	75+08.60	868983.505	534699.252																

	NAME	DATE
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INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
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ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

DWG NO. G-4.05

10/22/2018

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DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	Elwood Rd Ramp C Cst ℄	POB	10+00.00	878686.002	544400.627																
(100)	Elwood Rd Ramp C Cst ℄	PI	15+17.64	879203.642	544402.328						14°52'37"Lt	6°00'00"	954.93'	247.95'	124.68'	8.10'					
	Elwood Rd Ramp C Cst ℄	PC	13+92.97	879078.967	544401.918																
	Elwood Rd Ramp C Cst ℄	PT	16+40.92	879324.242	544370.714																
(101)	Elwood Rd Ramp C Cst ℄	PI	25+52.06	880205.606	544139.680						28°48'44"Rt	4°00'00"	1432.39'	720.30'	367.94'	46.50'					
	Elwood Rd Ramp C Cst ℄	PC	21+84.12	879849.693	544232.977																
	Elwood Rd Ramp C Cst ℄	PT	29+04.42	880562.421	544229.462																
(102)	Elwood Rd Ramp C Cst ℄	PI	32+82.73	880929.290	544321.773						9°54'51"Lt	3°00'00"	1909.86'	330.47'	165.65'	7.17'					
	Elwood Rd Ramp C Cst ℄	PC	31+17.08	880768.648	544281.352																
	Elwood Rd Ramp C Cst ℄	PT	34+47.55	881094.493	544333.932																
(103)	Elwood Rd Ramp C Cst ℄	PI	43+18.57	881963.161	544397.865						3°59'36"Lt	0°40'00"	8594.37'	599.00'	299.62'	5.22'					
	Elwood Rd Ramp C Cst ℄	PC	40+18.94	881664.348	544375.873																
	Elwood Rd Ramp C Cst ℄	PT	46+17.94	882262.780	544398.995																
	Elwood Rd Ramp C Cst ℄																				
	Elwood Rd Ramp D Cst ℄	POB	10+00.00	878695.499	544448.658																
(110)	Elwood Rd Ramp D Cst ℄	PI	23+54.08	880049.568	544453.108						10°52'41"Rt	4°00'00"	1432.39'	271.95'	136.38'	6.48'					
	Elwood Rd Ramp D Cst ℄	PC	22+17.69	879913.185	544452.660																
	Elwood Rd Ramp D Cst ℄	PT	24+89.64	880183.416	544479.286																
(111)	Elwood Rd Ramp D Cst ℄	PI	31+15.80	880797.937	544599.474						10°51'01"Lt	2°00'00"	2864.79'	542.51'	272.07'	12.89'					
	Elwood Rd Ramp D Cst ℄	PC	28+43.74	880530.927	544547.252																
	Elwood Rd Ramp D Cst ℄	PT	33+86.25	881070.003	544600.499																
	Elwood Rd Ramp D Cst ℄	POE	37+04.41	881388.166	544601.699																
(135)	Yuma Rd Ramp A Cst ℄	PI	12+12.01	884915.101	544396.994						3°15'00"Lt	0°46'00"	7473.36'	423.91'	212.01'	3.01'					
	Yuma Rd Ramp A Cst ℄	PC	10+00.00	884703.089	544396.195																
	Yuma Rd Ramp A Cst ℄	PT	14+23.91	885126.817	544385.772																
	Yuma Rd Ramp A Cst ℄	POE	28+57.94	886559.405	544332.937																

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ARIZONA DEPARTMENT OF TRANSPORTATION
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PRELIMINARY
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ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-4.06

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DATE:
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FINISHED PLANS:
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Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
(130)	Yuma Rd Ramp B Cst ℄	PI	15+50.49	884911.296	544614.981						7°19'47"Rt	0°40'00"	8594.37'	1099.47'	550.49'	17.61'					
	Yuma Rd Ramp B Cst ℄	PC	10+00.00	884360.813	544612.906																
	Yuma Rd Ramp B Cst ℄	PRC	20+99.47	885457.016	544687.271																
(131)	Yuma Rd Ramp B Cst ℄	PI	22+65.14	885621.254	544709.027						8°16'09"Lt	2°30'00"	2291.83'	330.77'	165.67'	5.98'					
	Yuma Rd Ramp B Cst ℄	PRC	20+99.47	885457.016	544687.271																
	Yuma Rd Ramp B Cst ℄	PT	24+30.24	885786.913	544706.935																
	Yuma Rd Ramp B Cst ℄	POE	32+01.09	886557.701	544697.203																
	Yuma Rd Ramp C Cst ℄	POB	10+00.00	886559.404	544333.067																
(135)	Yuma Rd Ramp C Cst ℄	PI	12+70.43	886829.831	544334.496						1°29'05"Lt	0°54'54"	6262.45'	162.29'	81.15'	0.53'					
	Yuma Rd Ramp C Cst ℄	PC	11+89.28	886748.682	544334.067																
	Yuma Rd Ramp C Cst ℄	PT	13+51.57	886910.964	544332.822																
(136)	Yuma Rd Ramp C Cst ℄	PI	21+14.04	887673.269	544317.095						2°54'08"Lt	0°55'00"	6250.45'	316.60'	158.33'	2.01'					
	Yuma Rd Ramp C Cst ℄	PC	19+55.70	887514.968	544320.361																
	Yuma Rd Ramp C Cst ℄	PRC	22+72.30	887831.200	544305.818																
(137)	Yuma Rd Ramp C Cst ℄	PI	26+84.84	888242.686	544276.437						6°52'02"Rt	0°50'00"	6875.49'	824.08'	412.53'	12.36'					
	Yuma Rd Ramp C Cst ℄	PRC	22+72.30	887831.200	544305.818																
	Yuma Rd Ramp C Cst ℄	PRC	30+96.38	888654.732	544296.469																
(138)	Yuma Rd Ramp C Cst ℄	PI	32+83.85	888841.978	544305.572						2°29'57"Lt	0°40'00"	8594.37'	374.88'	187.47'	2.04'					
	Yuma Rd Ramp C Cst ℄	PRC	30+96.38	888654.732	544296.469																
	Yuma Rd Ramp C Cst ℄	PT	34+71.26	889029.444	544306.501																
	Yuma Rd Ramp C Cst ℄																				
	Yuma Rd Ramp D Cst ℄	POB	10+00.00	886557.701	544697.203																
(132)	Yuma Rd Ramp D Cst ℄	PI	20+01.67	887556.919	544638.866						3°55'45"Lt	0°54'00"	6366.20'	436.59'	218.38'	3.74'					
	Yuma Rd Ramp D Cst ℄	PC	17+83.29	887339.447	544658.747																
	Yuma Rd Ramp D Cst ℄	PRC	22+19.88	887772.517	544604.130																
(133)	Yuma Rd Ramp D Cst ℄	PI	26+50.76	888197.913	544535.591						7°53'13"Rt	0°55'00"	6250.45'	860.40'	430.88'	14.83'					
	Yuma Rd Ramp D Cst ℄	PRC	22+19.88	887772.517	544604.130																
	Yuma Rd Ramp D Cst ℄	PT	30+80.28	888628.690	544526.074																
	Yuma Rd Ramp D Cst ℄																				

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ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	DWG NO. G-4.07
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	41 OF 160

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DATE:
LOCATION:
REVISIONS:
FINISHED PLANS:
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Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
(145)	Van Buren Rd Ramp A Cst ℄	PI	14+31.31	890502.698	544313.805						6°36'22"Lt	0°46'00"	7473.36'	861.66'	431.31'	12.44'					
	Van Buren Rd Ramp A Cst ℄	PC	10+00.00	890071.397	544311.666																
	Van Buren Rd Ramp A Cst ℄	PT	18+61.66	890931.381	544266.311																
	Van Buren Rd Ramp A Cst ℄	POE	27+86.61	891852.510	544185.792																
(149)	Van Buren Ramp B Cst ℄	PI	13+00.62	890198.679	544530.300						4°00'24"Rt	0°40'00"	8594.37'	600.99'	300.62'	5.26'					
	Van Buren Ramp B Cst ℄	PC	10+00.00	889898.065	544528.810																
	Van Buren Ramp B Cst ℄	PT	16+00.99	890498.454	544552.791																
(150)	Van Buren Ramp B Cst ℄	PI	22+96.77	891192.286	544604.847						9°01'42"Lt	2°30'00"	2291.83'	361.13'	180.94'	7.13'					
	Van Buren Ramp B Cst ℄	PC	21+15.83	891011.851	544591.309																
	Van Buren Ramp B Cst ℄	PT	24+76.96	891372.609	544589.902																
	Van Buren Ramp B Cst ℄	POE	29+56.84	891850.842	544550.267																
(65)	Cotton Ln Ramp A Cst ℄	PI	14+82.19	871501.964	541191.238						9°37'16"Lt	1°00'00"	5729.58'	962.12'	482.19'	20.25'					
	Cotton Ln Ramp A Cst ℄	PC	10+00.00	871501.964	540709.045																
	Cotton Ln Ramp A Cst ℄	PT	19+62.12	871582.554	541666.650																
(66)	Cotton Ln Ramp A Cst ℄	PI	29+09.02	871740.813	542600.229						14°25'11"Lt	2°00'00"	2864.79'	720.99'	362.41'	22.83'					
	Cotton Ln Ramp A Cst ℄	PC	25+46.61	871680.242	542242.919																
	Cotton Ln Ramp A Cst ℄	PT	32+67.60	871888.454	542931.201																
(67)	Cotton Ln Ramp A Cst ℄	PI	42+04.00	872269.936	543786.377						10°35'34"Rt	2°00'00"	2864.79'	529.64'	265.58'	12.28'					
	Cotton Ln Ramp A Cst ℄	PC	39+38.43	872161.743	543543.838																
	Cotton Ln Ramp A Cst ℄	PT	44+68.07	872331.700	544044.672																
	Cotton Ln Ramp A Cst ℄	POE	47+74.24	872402.905	544342.452																
(70)	Cotton Ln Ramp B Cst ℄	PI	11+65.93	871410.009	542175.651						2°12'44"Rt	0°40'00"	8594.37'	331.81'	165.93'	1.60'					
	Cotton Ln Ramp B Cst ℄	PC	10+00.00	871386.596	542011.384																
	Cotton Ln Ramp B Cst ℄	PT	13+31.81	871427.064	542340.699																
(71)	Cotton Ln Ramp B Cst ℄	PI	19+62.87	871491.929	542968.416						7°32'55"Lt	2°00'00"	2864.79'	377.42'	188.99'	6.23'					
	Cotton Ln Ramp B Cst ℄	PC	17+73.89	871472.504	542780.431																
	Cotton Ln Ramp B Cst ℄	PT	21+51.31	871535.880	543152.220																
	Cotton Ln Ramp B Cst ℄	POE	33+82.90	871822.306	544350.042																

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

DWG NO. G-4.08

10/22/2018

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DATE:
LOCATION:
REVISIONS:
FINISHED PLANS:
SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	Cotton Ln Ramp C Cst ℄	POB	10+00.00	872402.905	544342.452																
(68)	Cotton Ln Ramp C Cst ℄	PI	14+83.17	872515.275	544812.376						12°21'33"Lt	2°00'00"	2864.79'	617.96'	310.18'	16.74'					
	Cotton Ln Ramp C Cst ℄	PC	11+72.99	872443.137	544510.699																
	Cotton Ln Ramp C Cst ℄	PT	17+90.95	872650.311	545091.622																
(69)	Cotton Ln Ramp C Cst ℄	PI	28+71.72	873120.821	546064.602						6°07'58"Lt	0°40'00"	8594.37'	919.94'	460.41'	12.32'					
	Cotton Ln Ramp C Cst ℄	PC	24+11.31	872920.384	545650.114																
	Cotton Ln Ramp C Cst ℄	PT	33+31.25	873364.393	546455.305																
	Cotton Ln Ramp C Cst ℄																				
	Cotton Ln Ramp D Cst ℄	POB	10+00.00	871827.724	544371.989																
(75)	Cotton Ln Ramp D Cst ℄	PI	16+89.65	872064.165	545019.842						18°29'03"Lt	4°00'00"	1432.39'	462.11'	233.08'	18.84'					
	Cotton Ln Ramp D Cst ℄	PC	14+56.57	871984.256	544800.890																
	Cotton Ln Ramp D Cst ℄	PT	19+18.68	872209.370	545202.163																
(76)	Cotton Ln Ramp D Cst ℄	PI	28+01.38	872759.282	545892.646						6°45'09"Rt	0°46'00"	7473.36'	880.75'	440.89'	12.99'					
	Cotton Ln Ramp D Cst ℄	PC	23+60.50	872484.617	545547.770																
	Cotton Ln Ramp D Cst ℄	PT	32+41.25	872991.492	546267.425																
	Cotton Ln Ramp D Cst ℄																				
	NBFR Elwood-Lower Buckeye Cst ℄	POB	10+00.00	878690.163	544460.641																
(115)	NBFR Elwood-Lower Buckeye Cst ℄	PI	20+58.75	879748.910	544464.120						13°21'03"Rt	1°00'00"	5729.58'	1335.07'	670.57'	39.11'					
	NBFR Elwood-Lower Buckeye Cst ℄	PC	13+88.18	879078.340	544461.916																
	NBFR Elwood-Lower Buckeye Cst ℄	PRC	27+23.25	880400.848	544621.106																
(116)	NBFR Elwood-Lower Buckeye Cst ℄	PI	28+90.38	880563.330	544660.232						13°18'36"Lt	4°00'00"	1432.39'	332.75'	167.13'	9.72'					
	NBFR Elwood-Lower Buckeye Cst ℄	PRC	27+23.25	880400.848	544621.106																
	NBFR Elwood-Lower Buckeye Cst ℄	PT	30+56.00	880730.455	544660.900																
	NBFR Elwood-Lower Buckeye Cst ℄	POE	35+95.36	881269.807	544663.056																

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

DWG NO. G-4.09

10/22/2018

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DATE-
LOCATION-
REVISIONS-
FINISHED PLANS-
SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	SBFR Elwood-Lower Buckeye Cst ℄	POB	10+00.00	878724.282	543128.578																
(85)	SBFR Elwood-Lower Buckeye Cst ℄	PI	13+86.43	879057.845	543323.683						4°19'26"Rt	2°00'00"	2864.79'	216.20'	108.15'	2.04'					
	SBFR Elwood-Lower Buckeye Cst ℄	PC	12+78.28	878964.491	543269.079																
	SBFR Elwood-Lower Buckeye Cst ℄	PT	14+94.48	879146.816	543385.170																
(86)	SBFR Elwood-Lower Buckeye Cst ℄	PI	21+78.10	879709.202	543773.828						7°58'30"Lt	3°00'00"	1909.86'	265.83'	133.13'	4.63'					
	SBFR Elwood-Lower Buckeye Cst ℄	PC	20+44.97	879599.680	543698.138																
	SBFR Elwood-Lower Buckeye Cst ℄	PT	23+10.80	879828.167	543833.590																
(87)	SBFR Elwood-Lower Buckeye Cst ℄	PI	32+12.08	880633.541	544238.172						20°57'46"Lt	3°00'00"	1909.86'	698.76'	353.33'	32.41'					
	SBFR Elwood-Lower Buckeye Cst ℄	PC	28+58.75	880317.811	544079.564																
	SBFR Elwood-Lower Buckeye Cst ℄	PT	35+57.51	880985.118	544273.327																
	SBFR Elwood-Lower Buckeye Cst ℄	POE	38+45.12	881271.296	544301.942																
	NBFR Lower Buckeye-Yuma Cst ℄	POB	10+00.00	881269.313	544663.054																
(119)	NBFR Lower Buckeye-Yuma Cst ℄	PI	13+10.23	881579.546	544664.295						3°57'12"Lt	0°54'00"	6366.20'	439.27'	219.72'	3.79'					
	NBFR Lower Buckeye-Yuma Cst ℄	PC	10+90.51	881359.825	544663.416																
	NBFR Lower Buckeye-Yuma Cst ℄	PRC	15+29.78	881798.804	544650.022																
(120)	NBFR Lower Buckeye-Yuma Cst ℄	PI	17+44.80	882013.363	544636.056						3°56'25"Rt	0°55'00"	6250.45'	429.86'	215.01'	3.70'					
	NBFR Lower Buckeye-Yuma Cst ℄	PRC	15+29.78	881798.804	544650.022																
	NBFR Lower Buckeye-Yuma Cst ℄	PT	19+59.64	882228.374	544636.867																
(121)	NBFR Lower Buckeye-Yuma Cst ℄	PI	44+20.46	884689.181	544646.144						6°01'00"Rt	0°55'00"	6250.45'	656.38'	328.49'	8.63'					
	NBFR Lower Buckeye-Yuma Cst ℄	PC	40+91.97	884360.692	544644.906																
	NBFR Lower Buckeye-Yuma Cst ℄	PRC	47+48.35	885015.730	544681.808																
(122)	NBFR Lower Buckeye-Yuma Cst ℄	PI	51+35.28	885400.374	544723.816						6°57'22"Lt	0°54'00"	6366.20'	772.91'	386.93'	11.75'					
	NBFR Lower Buckeye-Yuma Cst ℄	PRC	47+48.35	885015.730	544681.808																
	NBFR Lower Buckeye-Yuma Cst ℄	PT	55+21.26	885787.275	544718.931																
	NBFR Lower Buckeye-Yuma Cst ℄	POE	62+91.70	886557.648	544709.204																

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

DWG NO. G-4.10

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

Centerline Geometric Data Sheet

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	SBFR Lower Buckeye-Yuma Cst ℄	POB	10+00.00	881270.779	544301.890																
88	SBFR Lower Buckeye-Yuma Cst ℄	PI	15+15.60	881783.819	544353.189						5°29'38"Lt	0°55'00"	6250.45'	599.35'	299.90'	7.19'					
	SBFR Lower Buckeye-Yuma Cst ℄	PC	12+15.69	881485.403	544323.350																
	SBFR Lower Buckeye-Yuma Cst ℄	PT	18+15.04	882083.720	544354.319																
89	SBFR Lower Buckeye-Yuma Cst ℄	PI	44+13.91	884682.573	544364.117						2°36'02"Lt	0°55'00"	6250.45'	283.71'	141.88'	1.61'					
	SBFR Lower Buckeye-Yuma Cst ℄	PC	42+72.04	884540.696	544363.582																
	SBFR Lower Buckeye-Yuma Cst ℄	PT	45+55.74	884824.328	544358.214																
90	SBFR Lower Buckeye-Yuma Cst ℄	PI	55+21.45	885789.201	544318.033						2°36'02"Rt	0°54'00"	6366.20'	288.96'	144.51'	1.64'					
	SBFR Lower Buckeye-Yuma Cst ℄	PC	53+76.95	885644.821	544324.045																
	SBFR Lower Buckeye-Yuma Cst ℄	PT	56+65.91	885933.705	544318.578																
	SBFR Lower Buckeye-Yuma Cst ℄	POE	62+91.67	886559.468	544320.937																
	NBFR Yuma-Van Buren Cst ℄	POB	10+00.00	886557.648	544709.204																
123	NBFR Yuma-Van Buren Cst ℄	PI	20+49.09	887606.655	544695.959						4°45'29"Lt	0°54'00"	6366.20'	528.68'	264.49'	5.49'					
	NBFR Yuma-Van Buren Cst ℄	PC	17+84.60	887342.185	544699.298																
	NBFR Yuma-Van Buren Cst ℄	PT	23+13.28	887869.936	544670.694																
124	NBFR Yuma-Van Buren Cst ℄	PI	34+07.63	888959.288	544566.156						5°45'56"Rt	0°55'00"	6250.45'	628.97'	314.75'	7.92'					
	NBFR Yuma-Van Buren Cst ℄	PC	30+92.88	888645.979	544596.223																
	NBFR Yuma-Van Buren Cst ℄	PT	37+21.85	889274.034	544567.717																
125	NBFR Yuma-Van Buren Cst ℄	PI	43+14.46	889866.636	544570.655						5°19'13"Rt	0°55'00"	6250.45'	580.41'	290.41'	6.74'					
	NBFR Yuma-Van Buren Cst ℄	PC	40+24.05	889576.227	544569.215																
	NBFR Yuma-Van Buren Cst ℄	PRC	46+04.46	890155.660	544599.016																
126	NBFR Yuma-Van Buren Cst ℄	PI	51+80.59	890729.035	544655.281						10°20'32"Lt	0°54'00"	6366.20'	1149.13'	576.13'	26.02'					
	NBFR Yuma-Van Buren Cst ℄	PRC	46+04.46	890155.660	544599.016																
	NBFR Yuma-Van Buren Cst ℄	PT	57+53.58	891303.196	544607.696																
	NBFR Yuma-Van Buren Cst ℄	POE	63+02.89	891850.629	544562.326																

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. G-4.11

10/22/2018

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DATE:
LOCATION:
REVISIONS:
FINISHED PLANS:
SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	SBFR Yuma-Van Buren Cst ℄	POB	10+00.00	886559.468	544321.067																
91	SBFR Yuma-Van Buren Cst ℄	PI	16+28.96	887188.415	544324.392						8°02'51"Lt	0°55'00"	6250.45'	877.91'	439.68'	15.44'					
	SBFR Yuma-Van Buren Cst ℄	PC	11+89.28	886748.745	544322.068																
	SBFR Yuma-Van Buren Cst ℄	PRC	20+67.19	887624.080	544265.142																
92	SBFR Yuma-Van Buren Cst ℄	PI	25+02.27	888055.198	544206.511						12°59'48"Rt	1°30'00"	3819.72'	866.44'	435.09'	24.70'					
	SBFR Yuma-Van Buren Cst ℄	PRC	20+67.19	887624.080	544265.142																
	SBFR Yuma-Van Buren Cst ℄	PRC	29+33.62	888488.457	544246.337																
93	SBFR Yuma-Van Buren Cst ℄	PI	32+04.77	888758.467	544271.157						4°58'05"Lt	0°55'00"	6250.45'	541.96'	271.15'	5.88'					
	SBFR Yuma-Van Buren Cst ℄	PRC	29+33.62	888488.457	544246.337																
	SBFR Yuma-Van Buren Cst ℄	PT	34+75.58	889029.612	544272.501																
94	SBFR Yuma-Van Buren Cst ℄	PI	42+10.04	889764.061	544276.142						6°19'43"Lt	0°55'00"	6250.45'	690.38'	345.54'	9.54'					
	SBFR Yuma-Van Buren Cst ℄	PC	38+64.50	889418.522	544274.429																
	SBFR Yuma-Van Buren Cst ℄	PRC	45+54.88	890107.684	544239.757																
95	SBFR Yuma-Van Buren Cst ℄	PI	49+67.80	890518.309	544196.276						7°25'20"Rt	0°54'00"	6366.20'	824.69'	412.92'	13.38'					
	SBFR Yuma-Van Buren Cst ℄	PRC	45+54.88	890107.684	544239.757																
	SBFR Yuma-Van Buren Cst ℄	PRC	53+79.57	890931.110	544206.204																
96	SBFR Yuma-Van Buren Cst ℄	PI	56+36.05	891187.525	544212.370						4°41'59"Lt	0°55'00"	6250.45'	512.69'	256.49'	5.26'					
	SBFR Yuma-Van Buren Cst ℄	PRC	53+79.57	890931.110	544206.204																
	SBFR Yuma-Van Buren Cst ℄	PT	58+92.26	891443.584	544197.508																
	SBFR Yuma-Van Buren Cst ℄	POE	63+01.93	891852.565	544173.768																

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ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
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ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

DWG NO. G-4.12

10/22/2018

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DATE:
LOCATION:
REVISIONS:
FINISHED PLANS:
SURVEY NO.

Centerline Geometric Data Sheet

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

PLAN REF NO.	DESCRIPTION	Point Type	STATION	COORDINATES		Spiral Total					Spiral Main or Circular Curve							Spiral Curve			
				Northing	Easting	Total Delta	T	L	R+o	Ext	Δ	D	R	L	T	Ext	Super	Δ	L	o	t
	Lilac/Canyon Trails Cst ℄	POB	3+59.35	889015.390	543508.633																
(140)	Lilac/Canyon Trails Cst ℄	PI	7+05.12	889197.924	543802.297						31°51'51"Rt	5°52'14"	976.00'	542.79'	278.61'	38.99'					
	Lilac/Canyon Trails Cst ℄	PC	4+26.51	889050.844	543565.672																
	Lilac/Canyon Trails Cst ℄	PT	9+69.29	889197.924	544080.909																
(141)	Lilac/Canyon Trails Cst ℄	PI	18+99.71	889194.894	545011.293						18°28'00"Lt	7°21'26"	778.78'	251.00'	126.60'	10.22'					
	Lilac/Canyon Trails Cst ℄	PC	17+73.11	889197.924	544884.729																
	Lilac/Canyon Trails Cst ℄	PT	20+24.12	889232.108	545132.299																
	Yuma Rd Cst ℄	POB	23+64.85	886572.689	541820.022																
	Yuma Rd Cst ℄	POE	76+46.71	886547.190	547101.815																
	Lower Buckeye Rd Cst ℄	POB	23+53.81	881281.228	541790.737																
	Lower Buckeye Rd Cst ℄	POE	76+43.24	881259.649	547080.120																
(80)	Elwood Rd Cst ℄	PI	42+69.71	878775.954	542574.079						15°59'11"Rt	1°38'13"	3500.00'	976.55'	491.47'	34.34'					
	Elwood Rd Cst ℄	PC	37+78.24	878685.020	542091.096																
	Elwood Rd Cst ℄	PT	47+54.80	878730.353	543063.429																
(81)	Elwood Rd Cst ℄	PI	58+66.56	878627.198	544170.397						5°02'56"Lt	1°00'00"	5729.58'	504.89'	252.61'	5.57'					
	Elwood Rd Cst ℄	PC	56+13.95	878650.636	543918.879																
	Elwood Rd Cst ℄	PT	61+18.84	878625.985	544423.001																
(82)	Elwood Rd Cst ℄	PI	66+55.99	878623.407	544960.142						13°20'33"Rt	3°00'56"	1900.00'	442.45'	222.23'	12.95'					
	Elwood Rd Cst ℄	PC	64+33.76	878624.474	544737.913																
	Elwood Rd Cst ℄	PRC	68+76.21	878571.085	545176.127																
(83)	Elwood Rd Cst ℄	PI	70+99.11	878518.605	545392.764						13°22'57"Lt	3°00'56"	1900.00'	443.78'	222.90'	13.03'					
	Elwood Rd Cst ℄	PRC	68+76.21	878571.085	545176.127																
	Elwood Rd Cst ℄	PT	73+19.99	878517.691	545615.664																
(84)	Elwood Rd Cst ℄	PI	79+16.52	878515.243	546212.189						3°08'52"Rt	5°32'48"	1033.00'	56.75'	28.38'	0.39'					
	Elwood Rd Cst ℄	PC	78+88.13	878515.360	546183.807																
	Elwood Rd Cst ℄	PT	79+44.88	878513.568	546240.521																
	Elwood Rd Cst ℄	POE	86+95.09	878469.302	546989.425																

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GEOMETRIC DATA SHEET

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	G-4.13

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 47 OF 160

10/22/2018

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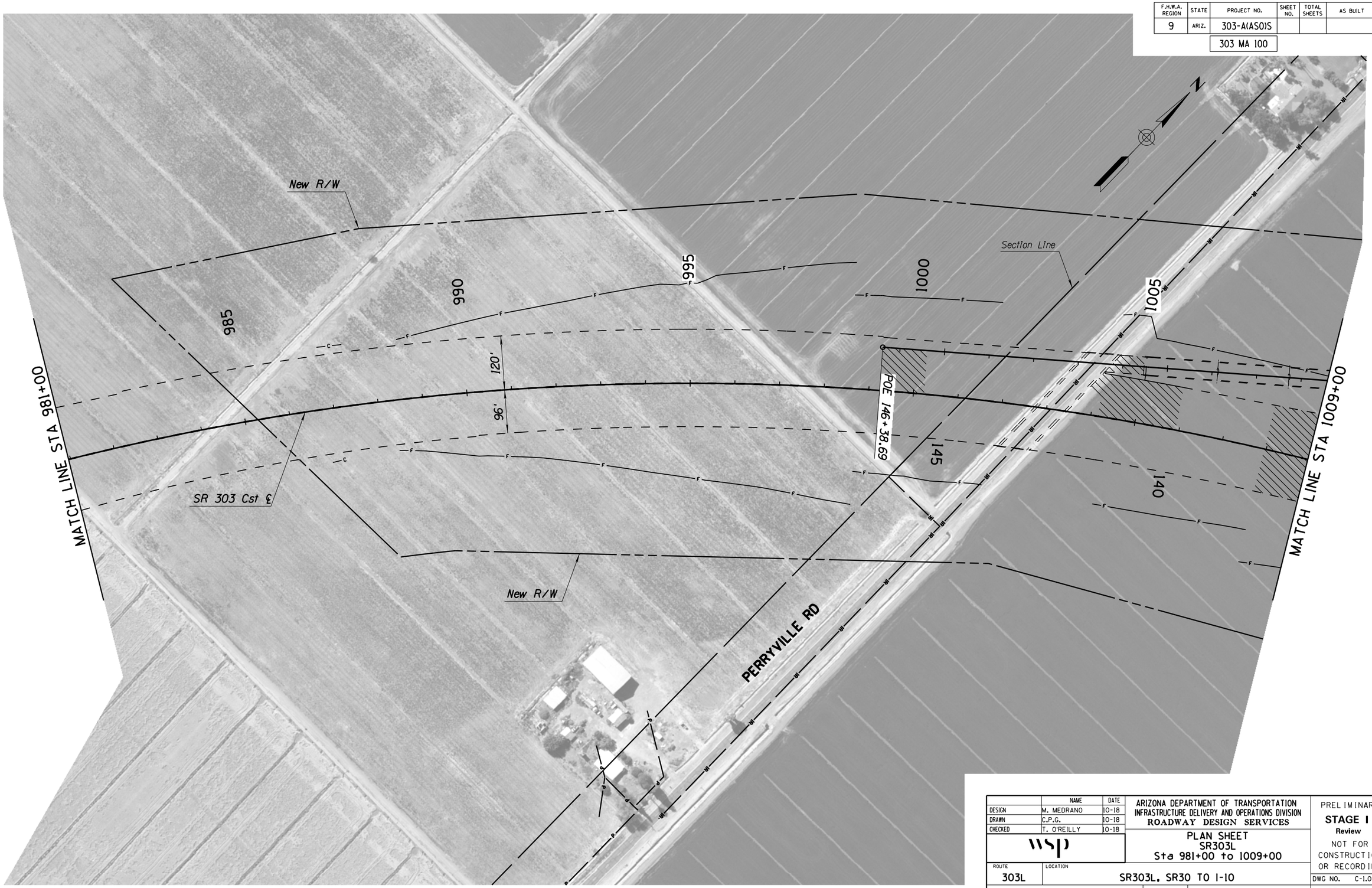
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 981+00 to 1009+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-1.01
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	48 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR303_PL01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 1009+00

MATCH LINE STA 1037+00

New R/W

Ramp WS Cst ℄

Section Line

Ramp ES Cst ℄

SR 303 Cst ℄

Ramp NW Cst ℄

New R/W

POB 10+00.00

PRC 1009+52.84

PT 75+08.60

PCC 63+79.64

POB 10+00.00

PC 36+44.08

N62°25'36"E

N50°48'37"E

Varies

Varies

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1009+00 to 1037+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-1.02
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	49 OF 160

10/22/2018

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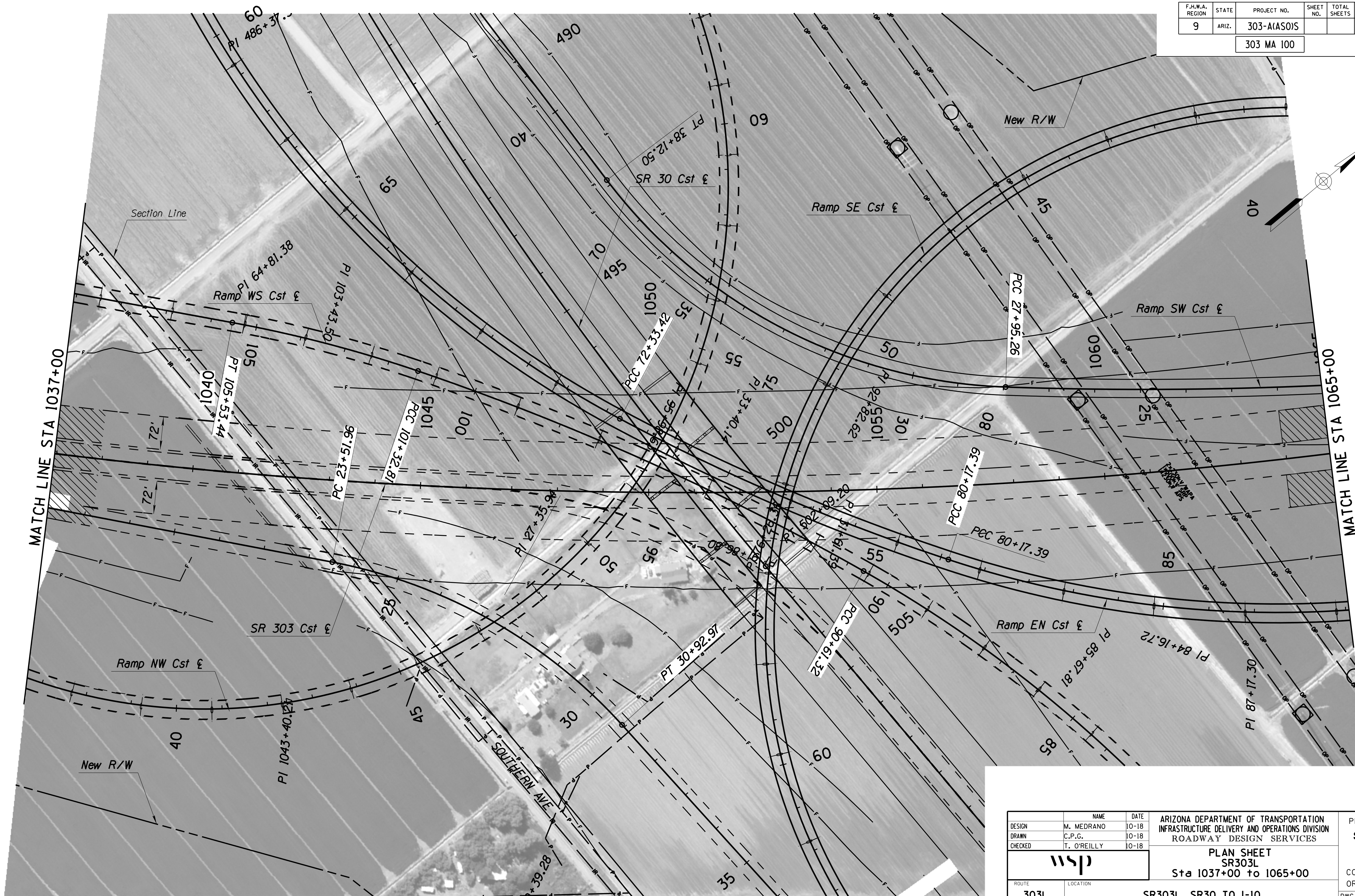
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1037+00 to 1065+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

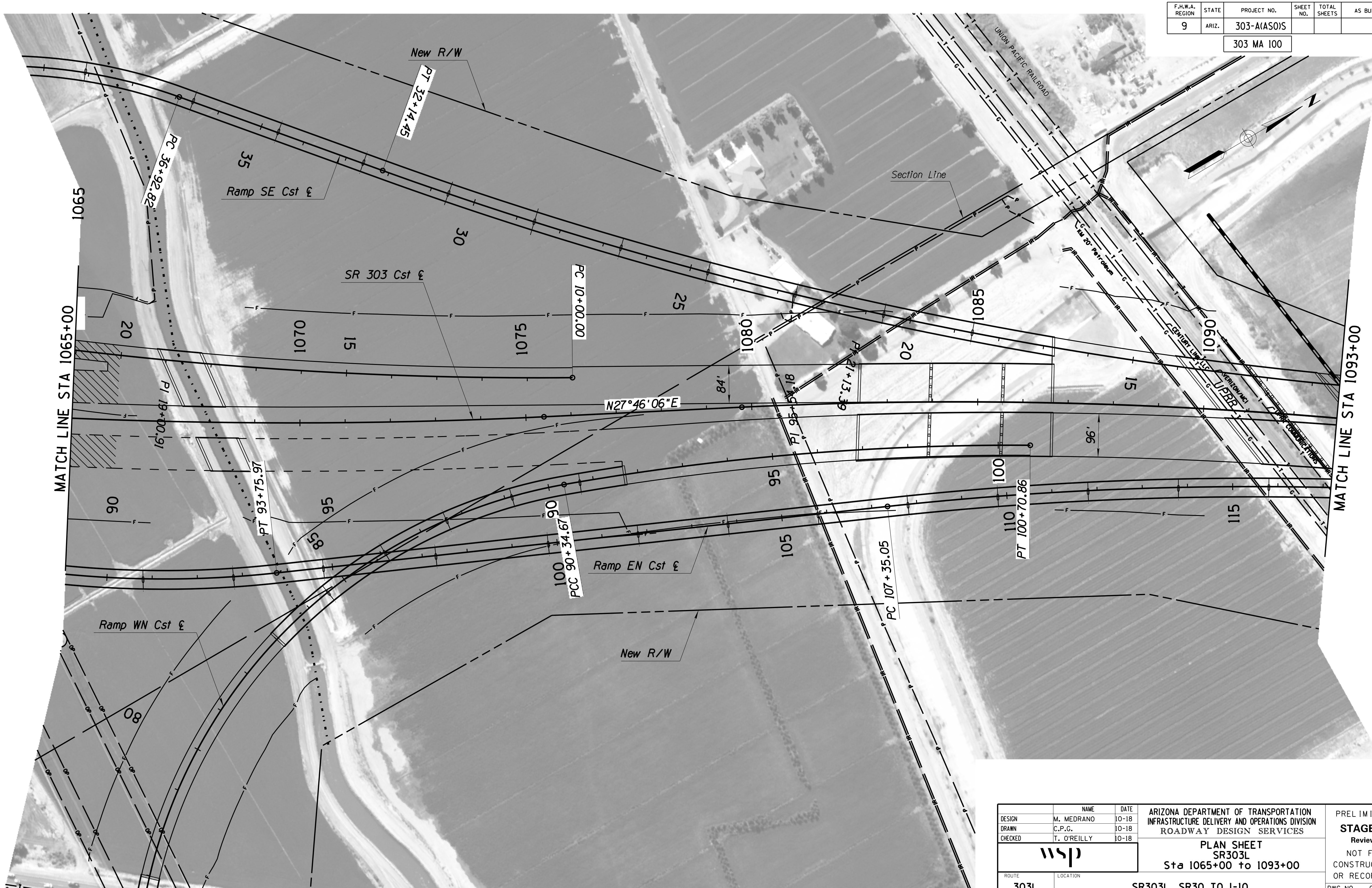
ROUTE: 303L
LOCATION: SR303L, SR30 TO I-10
DWG NO. C-1.03

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

10/22/2018 T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR303_PL03.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			

303 MA 100



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1065+00 to 1093+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE: 303L
LOCATION: SR303L, SR30 TO I-10
DWG NO. C-1.04

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 51 OF 160

10/22/2018 T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR303_PL04.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 1093+00

MATCH LINE STA 1121+00

PC 10+00.00

PI 119+65.55

PT 131+74.17

New R/W

Exst R/W

SR 303 Cst ℄

BROADWAY RD

Section Line

FORCEMAIN

1095 1100 1105 1110 1115 1120 125 130

120' 96'

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1093+00 to 1121+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-1.05

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 52 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

MATCH LINE STA 1121+00

175th Ave

SR 303 Cst ℄

Exst R/W

FORCEMAIN

8" PVC

1125

1130

1135

1140

1145

1150

N43°02'22"E

96'

120'

New R/W

ELWOOD ST

PI 42+69.71

45

PT 47+54.80

PI 13+86.43

50

15

N30°19'26"E

PC 12+78.28

PT 14+94.48

S84°40'34"E

Exst R/W

Elwood St Cst ℄

MATCH LINE STA 1149+00

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1121+00 to 1149+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	DWG NO. C-1.06
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

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10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

MATCH LINE STA 1149+00

MATCH LINE STA 1177+00

LOWER BUCKEYE RD

SR 303 Cst ℄

SB Frontage Rd Cst ℄

NB Frontage Rd Cst ℄

COTTON LN

Exst R/W

New R/W

PC 20+44.97

PT 23+10.80

PI 21+78.10

PC 28+58.75

PI 14+91.55

25+52.06

POE 21+51.29

PC 31+61.19

PT 35+57.51

PT 35+17.01

POE 38+45.12

PC 12+15.69

POE 37+04.41

PT 29+04.42

PC 23+37.14

PT 17+19.59

PI 32+12.06

PRC 1166+70.54

PI 27+07.55

PI 23+39.68

PC 28+44.58

PC 28+43.74

PT 35+80.56

PC 10+90.51

PC 13+92.97

PT 16+40.92

PC 20+58.12

PT 23+54.08

PC 13+88.18

PT 61+18.84

PI 22+60.91

PI 24+89.64

PRC 27+23.25

PI 28+30.38

PI 31+

PC 64+33.76

POB 10+00.00

N34°38'52"E

N26°40'55"E

N12°12'44"E

N14°07'25"E

N5°42'56"E

N0°12'58"E

N0°13'45"E

N11°03'58"E

N0°11'18"E

S89°43'30"E

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1149+00 to 1177+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-1.07

TRACS NO.			
H6870 01 L		STP-303-A-(ASO)S	54 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 1177+00

MATCH LINE STA 1205+00

PC 41+33.72

PT 18+15.04

PT 46+18.65

SB Frontage Rd Cst ℄

ABANDONED

24" VCP

30" VCP

LV3

FO

CENTURY LINK

PI 43+76.25

120'

108'

N0°12'58"E

45

PRC 15+29.78

PT 19+59.64

NB Frontage Rd Cst ℄

SR 303 Cst ℄

New R/W

PC 10+00.00

PC 40+91.97

15 20 25 30 35 40

1180 1185 1190 1195 1200

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1177+00 to 1205+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-1.08

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 55 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 1205+00

MATCH LINE STA 1233+00

YUMA RD

PC 42+72.04
PC 10+00.00
PT 45+55.74
PT 14+23.91
Yuma Rd Ramp A Cst ℄
SB Frontage Rd Cst ℄
PT 56+65.91
PC 53+76.95
PT 24+51.14
PC 11+89.28
PT 13+51.57
Yuma Rd Ramp C Cst ℄
PT 50+00.00
PC 1229+76.72
PT 24+30.24
PT 14+18.99
NB Frontage Rd Cst ℄
PRC 47+48.35
Yuma Rd Ramp B Cst ℄
SR 303 Cst ℄
PRC 20+99.47
PT 55+21.26
New R/W
Yuma Rd Cst ℄
Yuma Rd Ramp D Cst ℄

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1205+00 to 1233+00

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.09

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10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 1233+00

MATCH LINE STA 1261+00

Yuma Rd Ramp C Cst ℄

SB Frontage Rd Cst ℄

PC 19+55.70

PRC 20+67.19

PRC 22+72.30

PRC 29+33.62

PI 1244+26.16

PRC 30+96.38

PT 34+75.58

PT 34+71.26

PI 7+05.12

PT 9+69.29

PC 38+64.50

PC 1229+76.72

PT 30+80.28

PI 1244+12.66

N0°17'03"E

132'

PC 17+83.29

PRC 22+19.88

PC 23+13.28

PC 17+84.60

SR 303 Cst ℄

PC 30+92.88

NB Frontage Rd Cst ℄

Yuma Rd Ramp D Cst ℄

CANYON TRAILS BLVD

PT 37+21.85

PC 40+24.05

PC 10+00.00

PC 17+73.11

PI 18+99.71

PT 20+24.12

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1233+00 to 1261+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-1.10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 57 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 1261+00

MATCH LINE STA 1289+00

SB Frontage Rd Cst ℄

Van Buren St
Ramp A Cst ℄

PRC 53+79.57

PC 10+00.00

PT 18+61.66

PI 23+77.69

PT 58+92.26

POE 63+04.93

POE 27+86.61

PT 1249+12.66

PC 1268+65.35

N4°32'02"W

Varies

94'

POE 1283+50.00

118'

CENTURY LINK

COX

APS

PUE 29+56.84

N 4°17'26" E

PC 21+15.83

PT 24+76.96

POB 16+00.99

PUE 63+02.89

PT 57+53.58

PRC 46+04.46

SR 303 Cst ℄

Van Buren St
Ramp B Cst ℄

NB Frontage Rd Cst ℄

VAN BUREN ST

Van Buren St Cst ℄

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR303L
Sta 1261+00 to 1289+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-1.11

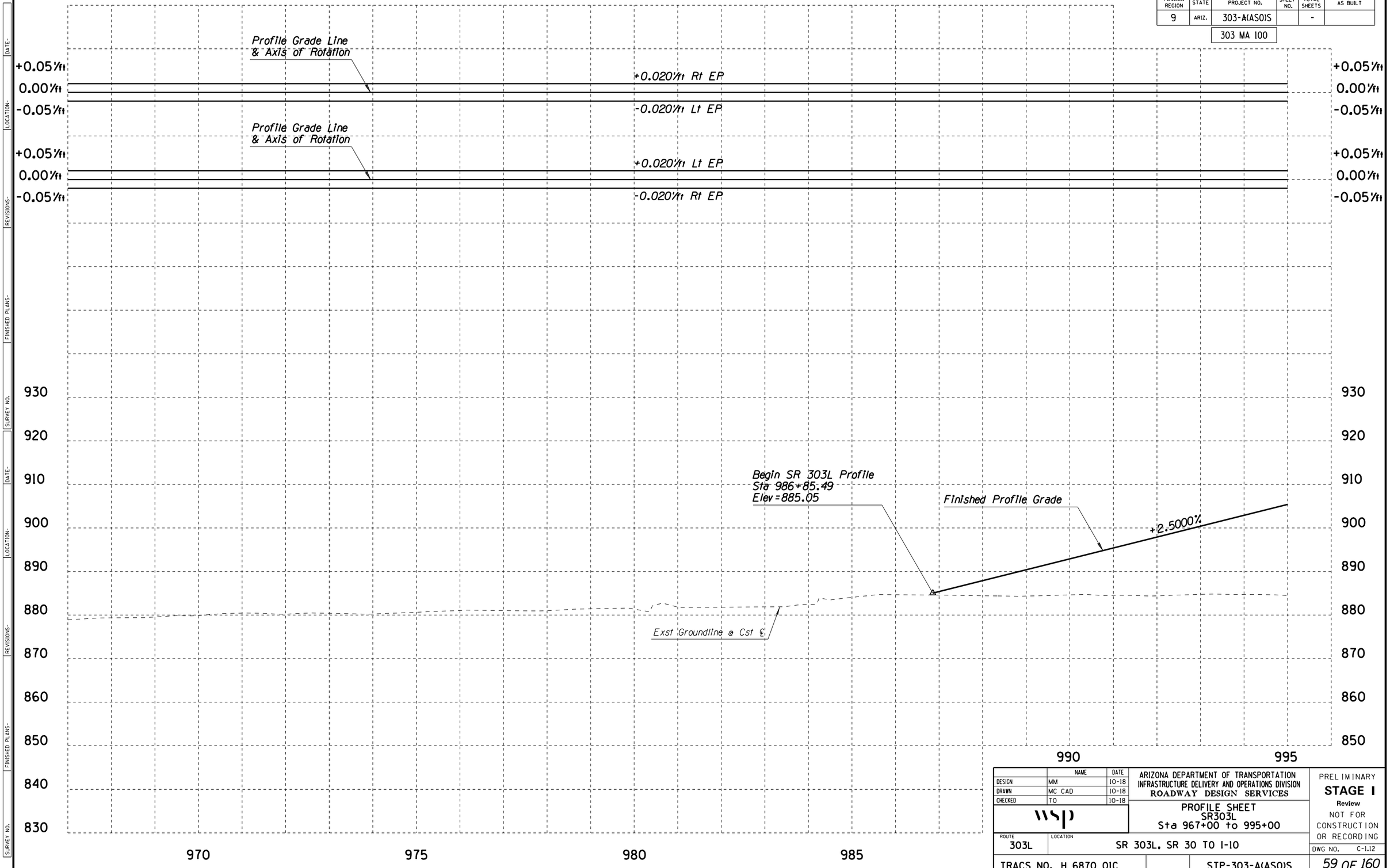
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 58 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR303_PL11.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 967+00 to 995+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.12

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10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05'/ft
0.00'/ft
-0.05'/ft

+0.020'/ft Rt EP
-0.020'/ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05'/ft
0.00'/ft
-0.05'/ft

+0.020'/ft Lt EP
-0.020'/ft Rt EP

Finished Profile Grade

PI 1003+05.86
Elev=925.56
Corr=-5.04'

+06

+06

-1.5345%

+97

1000' VC
SSDs=1344'

1000' VC
SSDs=731'

Perryville Rd

Exst Groundline @ Cst ℄

PI 1022+97.14
Elev=895.00
Corr=3.78'

940
930
920
910
900
890
880
870
860
850
840
830

995
1000
1005
1010
1015
1020

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 995+00 to 1023+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10 | DWG NO. C-1.13

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 60 OF 160

10/22/2018

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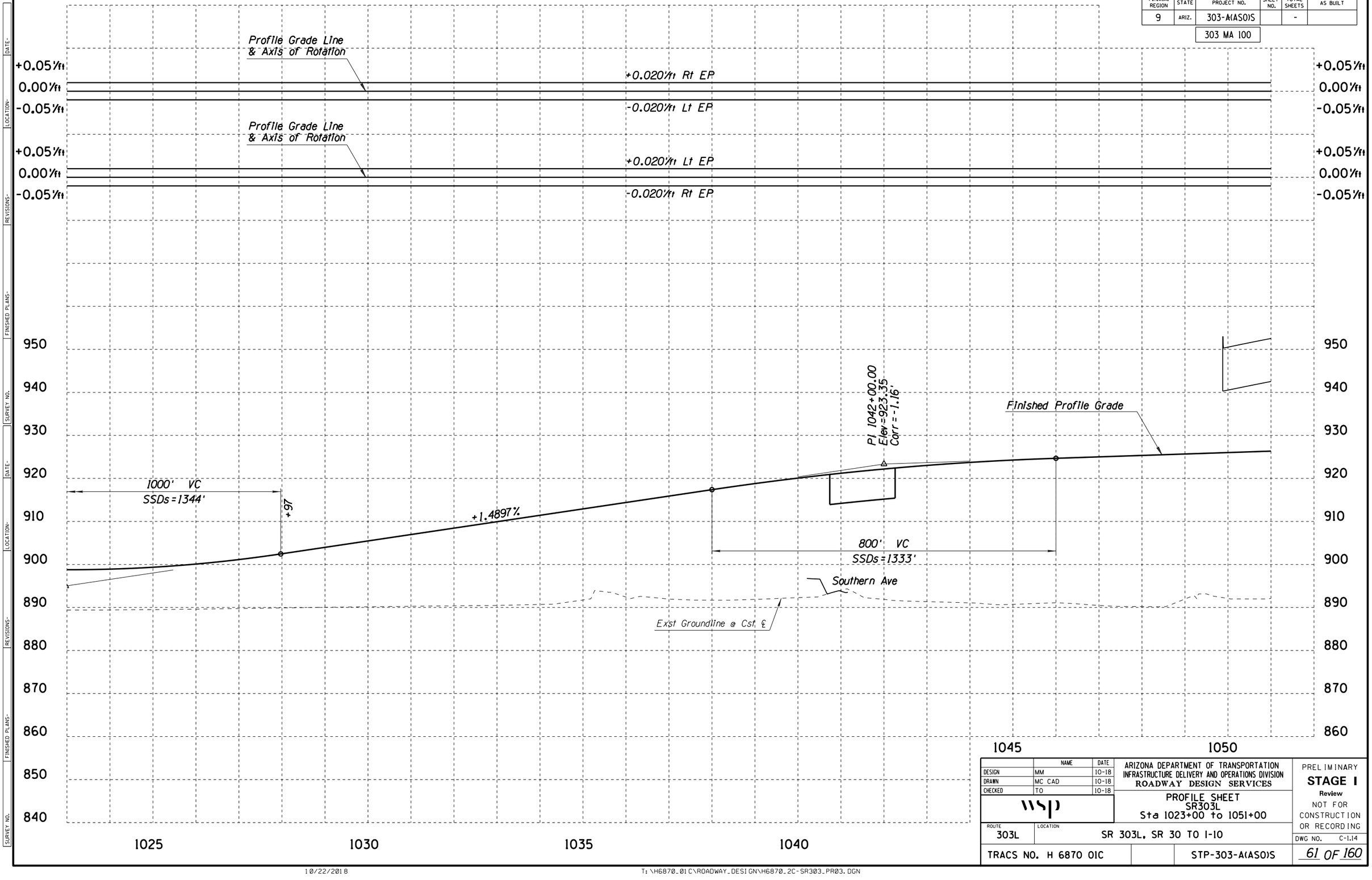
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 1023+00 to 1051+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-1.14

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 61 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

960
950
940
930
920
910
900
890
880
870
860
850

Finished Profile Grade

+0.3333%

Buckeye Canal

Exst Groundline @ Cst ℄

1055 1060 1065 1070 1075 1080

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 1051+00 to 1079+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.15

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 62 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR303_PR04.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

960
950
940
930
920
910
900
890
880
870
860
850

Finished Profile Grade

PI 1091+96.30
Elev=940.00
Corr=-0.85'

-0.5149%

800' VC
SSDs=2277'

+96

800' VC
SSDs=1672'
Corr=-0.85'

+96

PI 1106+00.00
Elev=932.71
Corr=1.29'

UPRR

FCDMC Channel

Broadway Rd

Exst Groundline @ Cst ℄

1080
1085
1090
1095
1100
1105

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 1079+00 to 1107+00

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.16

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 63 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

800' VC
SSDs = 227.7'

Finished Profile Grade

+0.7764%

Broadway Rd

Exst Groundline @ Cst ℄

960 950 940 930 920 910 900 890 880

1110 1115 1120 1125 1130 1135

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 1107+00 to 1135+00

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.17

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 64 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

1000
990
980
970
960
950
940
930
920
910
900
890

800' VC
SSDs=572.14'

Finished Profile Grade

+0.8254%

+00

PI 1147+00.00
Elev=964.60
Corr=0.05'

800' VC
SSDs=795'

Elwood St
Cst ℄

Exst Groundline @ Cst ℄

1135 1140 1145 1150 1155 1160

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 1135+00 to 1163+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-1.18

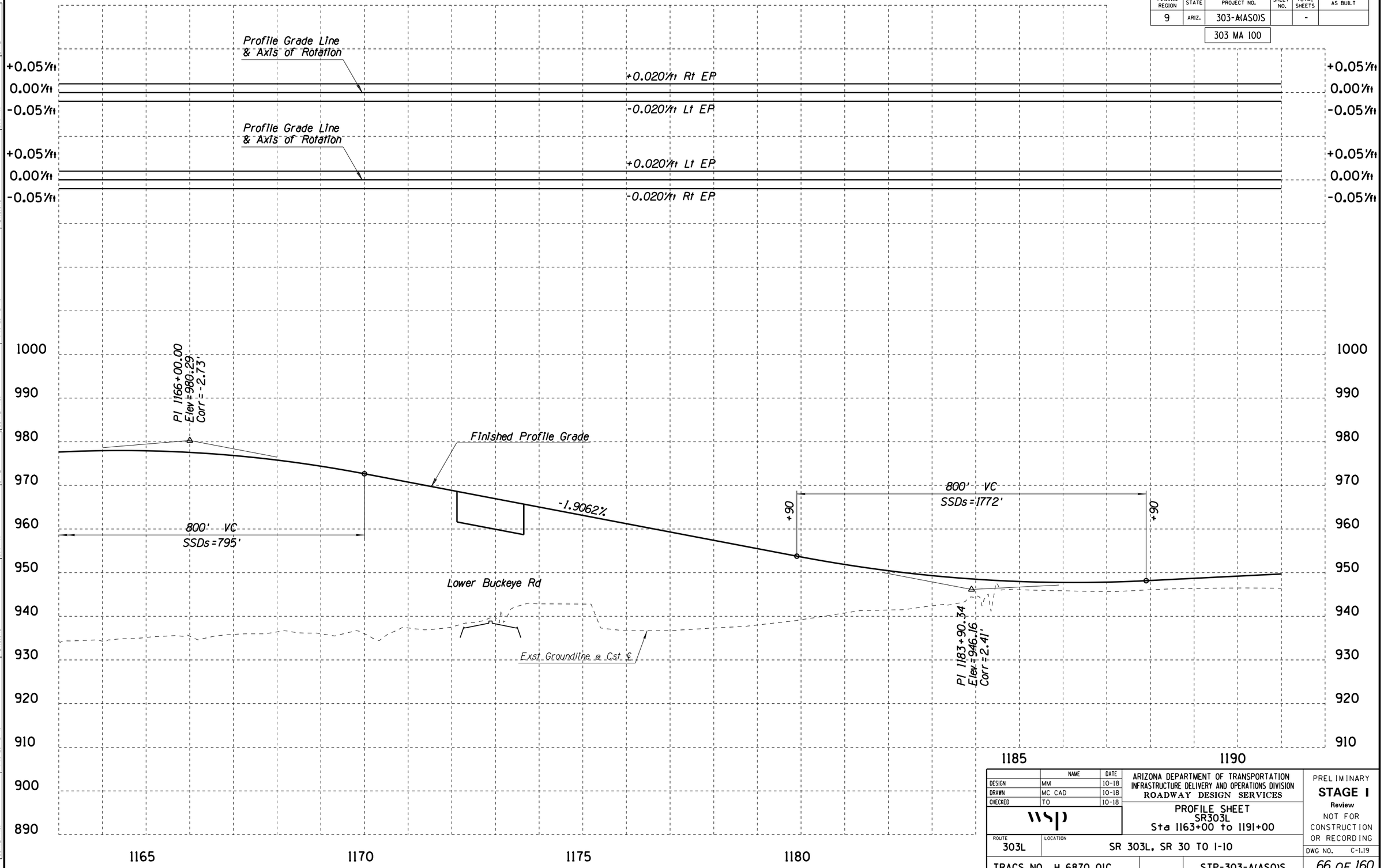
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 65 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR303_PR07.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE-
LOCATION-
REVISIONS-
FINISHED PLANS-
SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
Sta 1163+00 to 1191+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.19

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

1000
990
980
970
960
950
940
930
920
910
900

800' VC
SSDs=1789.4'

+58

+58

+2.301 4%

Finished Profile Grade

+0.5000%

PI 1210+58.04
Elev=959.50
Corr=1.80'

1195
1200
1205
1210
1215

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
STA 1191+00 TO STA 1219+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-1.20

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 67 OF 160

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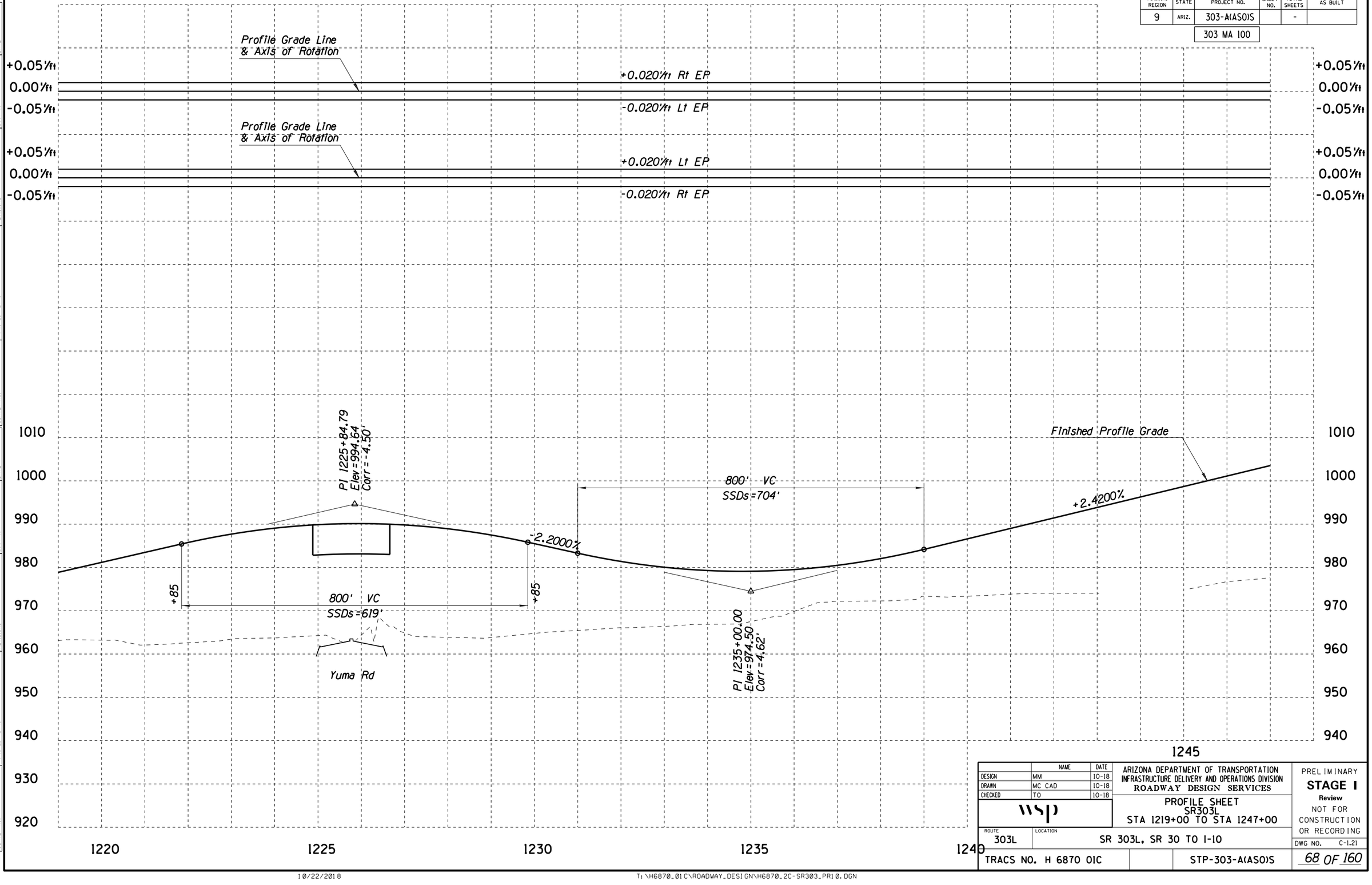
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
STA 1219+00 TO STA 1247+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-1.21

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 68 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05'/ft
0.00'/ft
-0.05'/ft

+0.020'/ft Rt EP
-0.020'/ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05'/ft
0.00'/ft
-0.05'/ft

+0.020'/ft Lt EP
-0.020'/ft Rt EP

PI 1251+11.86
Elev=1013.51
Corr=-3.92'

800' VC
SSDs=664'

+12

+12

-1.5000%

Finished Profile Grade

+71

800' VC
SSDs=819'

+71

+2.4000%

+50

PI 1265+71.46
Elev=991.61
Corr=3.90'

Canyon Trails Blvd/
Lilac St

1010
1000
990
980
970
960
950
940
930
920

1250
1255
1260
1265
1270
1275

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
STA 1247+00 TO STA 1275+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.22

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10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP
-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP
-0.020%ft Rt EP

PI 1278+00.00
Elev=1021.10
Corr=-5.40

Finished Profile Grade

End SR 30L Profile
Sta 1286+00.00
Elev=1008.91

-1.5236%

1100' VC
SSDs=778'

+50

Van Buren St

1010
1000
990
980
970
960
950
940
930

1275
1280
1285
1290
1295
1300

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR303L
STA 1275+00 TO STA 1303+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-1.23

70 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR303_PRI2.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 364+05.32 to 374+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	
303L	SR303L, SR30 TO I-10	
TRACS NO. H6870 01 L		STP-303-A-(ASO)S

DWG NO. C-2.01

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SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

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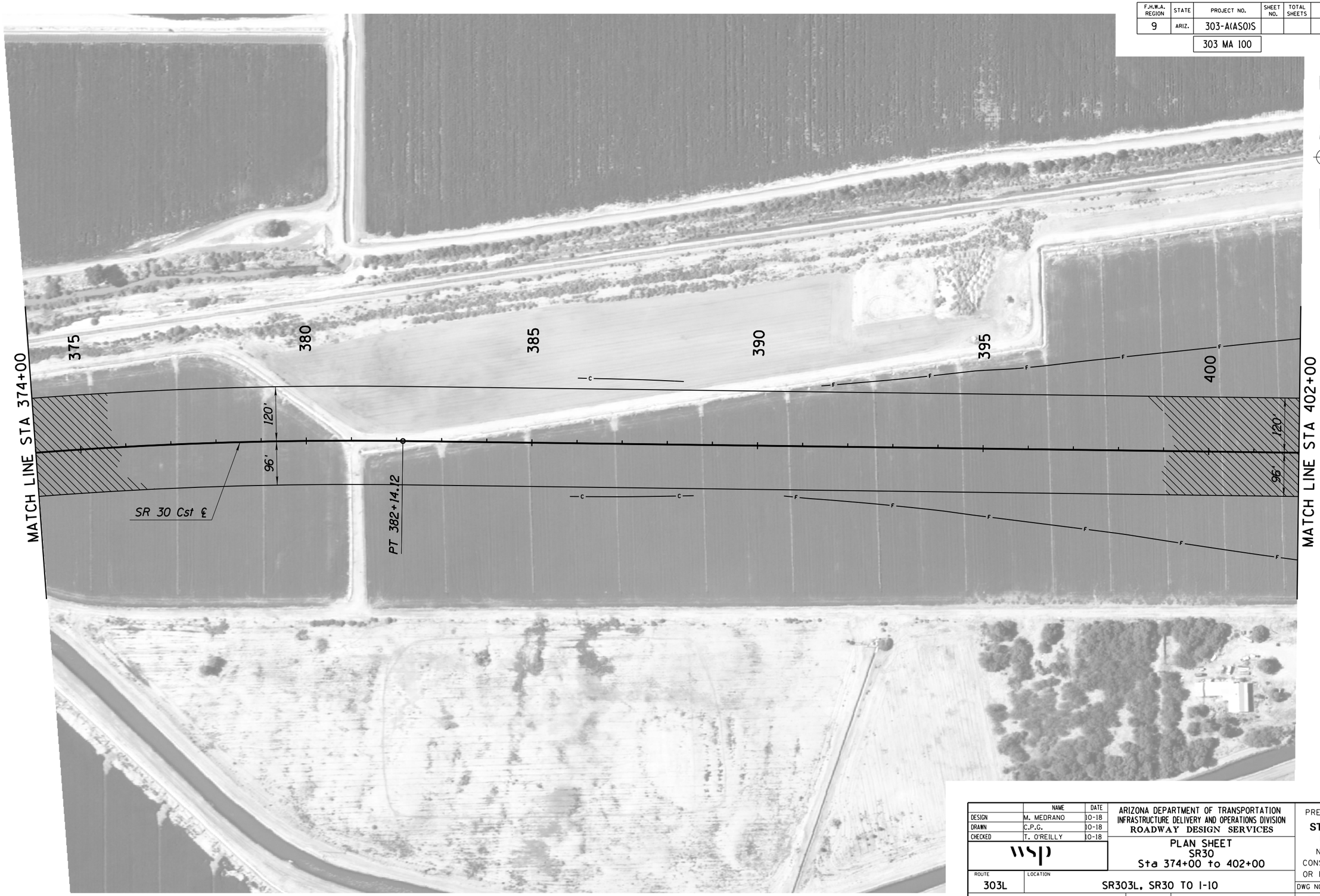
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 374+00 to 402+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.02

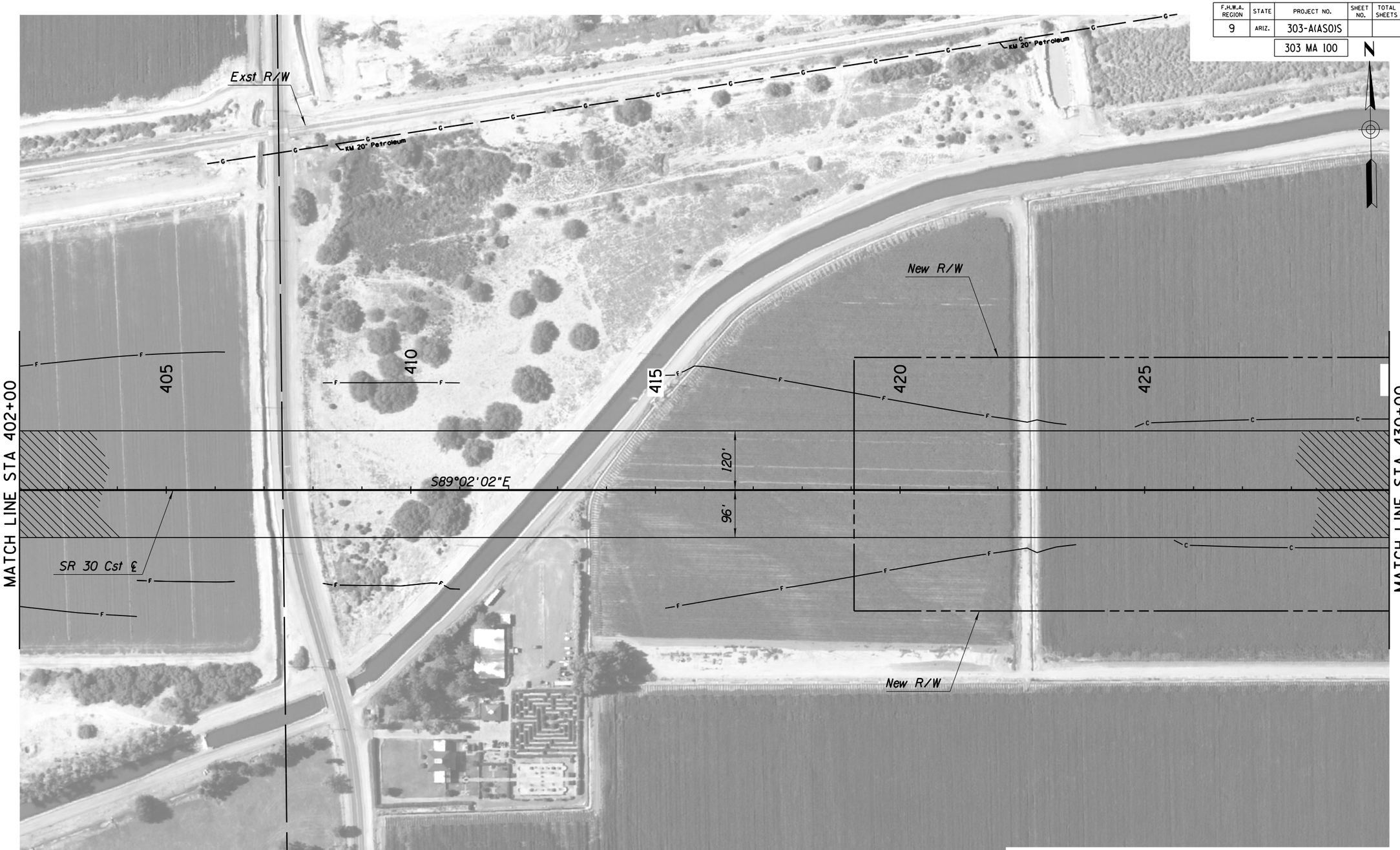
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 72 OF 160

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL02.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 402+00 to 430+00

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-2.03

73 OF 160

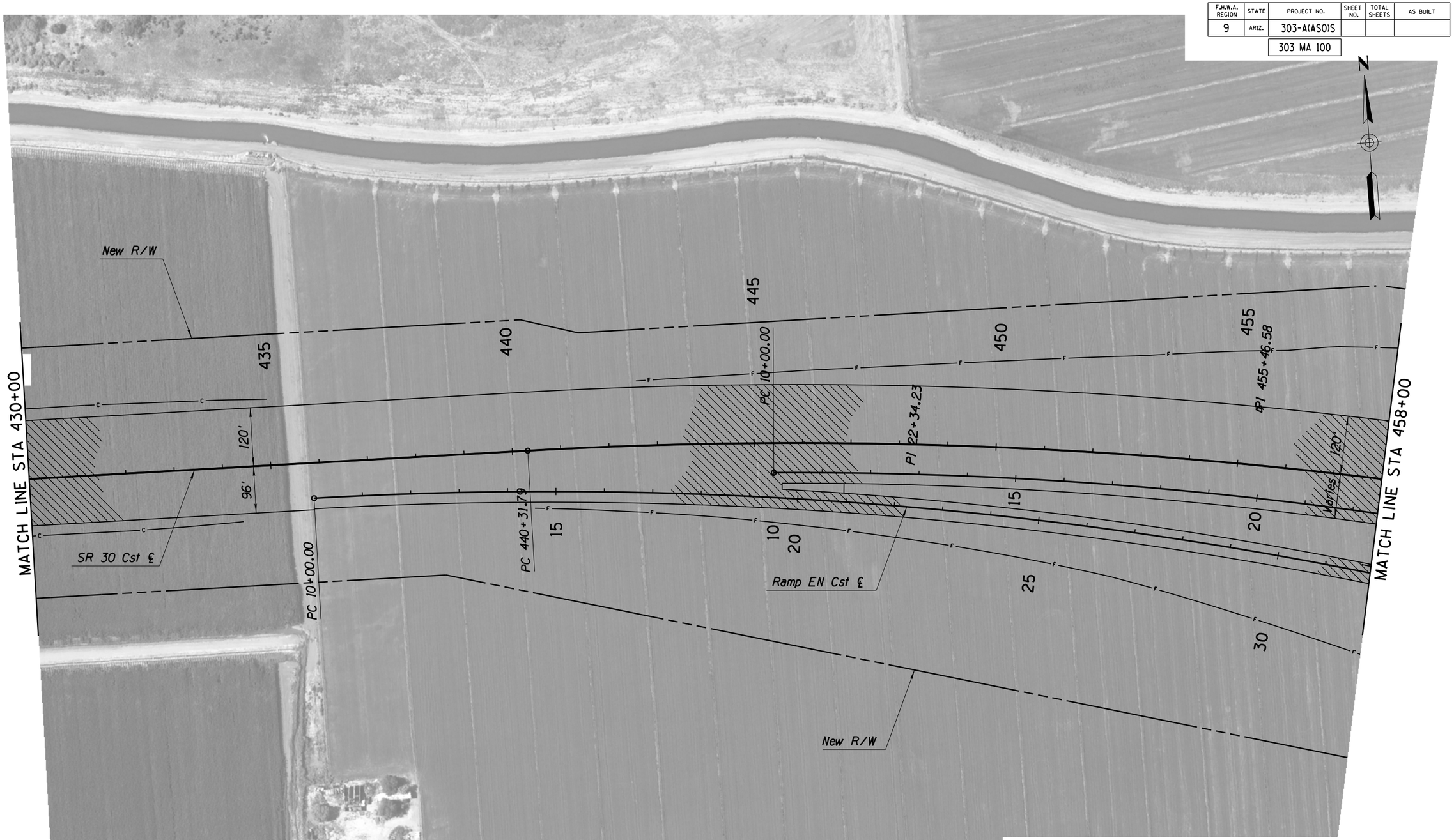
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL03.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 430+00 to 458+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.04

TRACS NO.			SHEET
H6870 01 L		STP-303-A-(ASO)S	74 OF 160

10/22/2018

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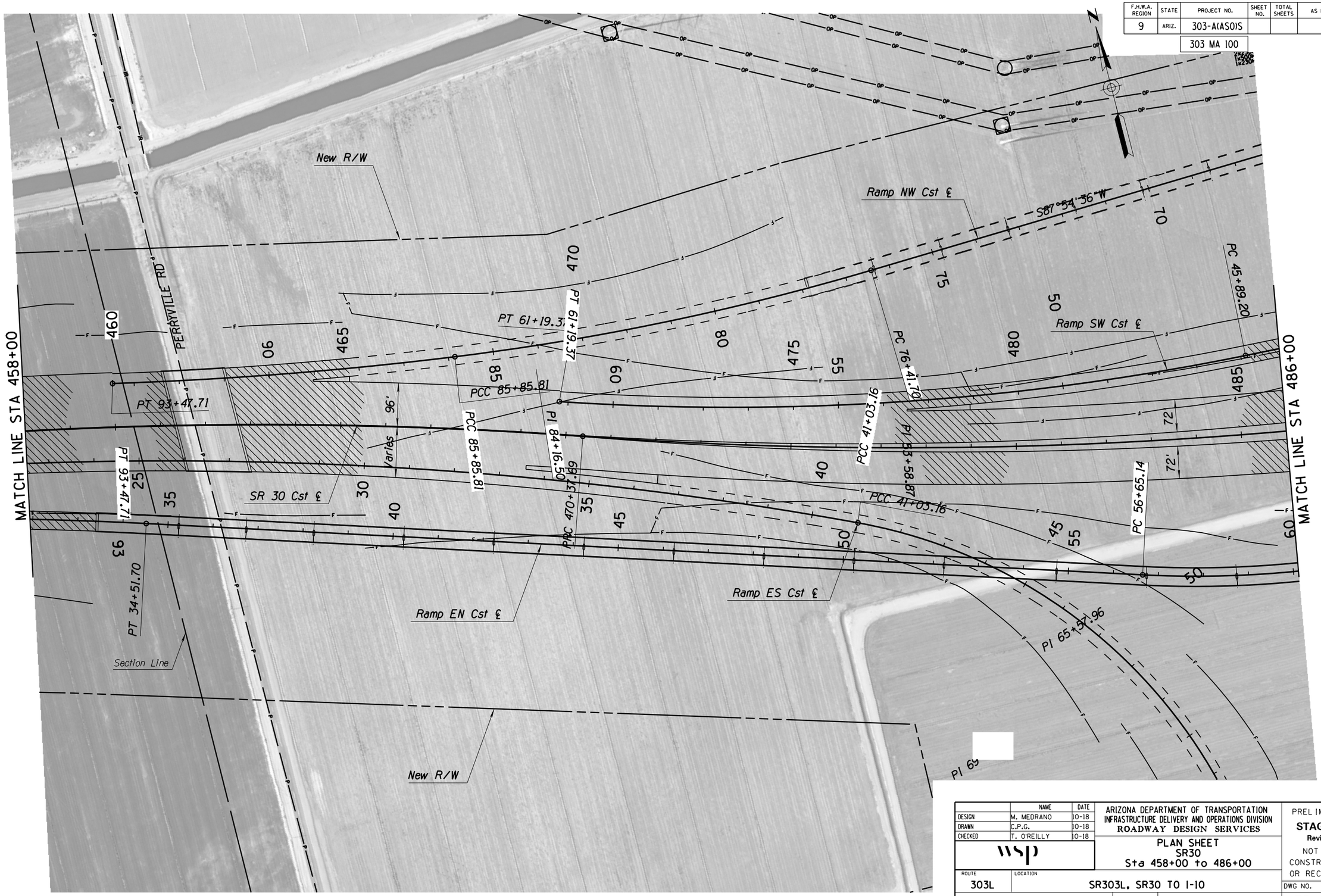
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 458+00 to 486+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

DWG NO. C-2.05

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 75 OF 160

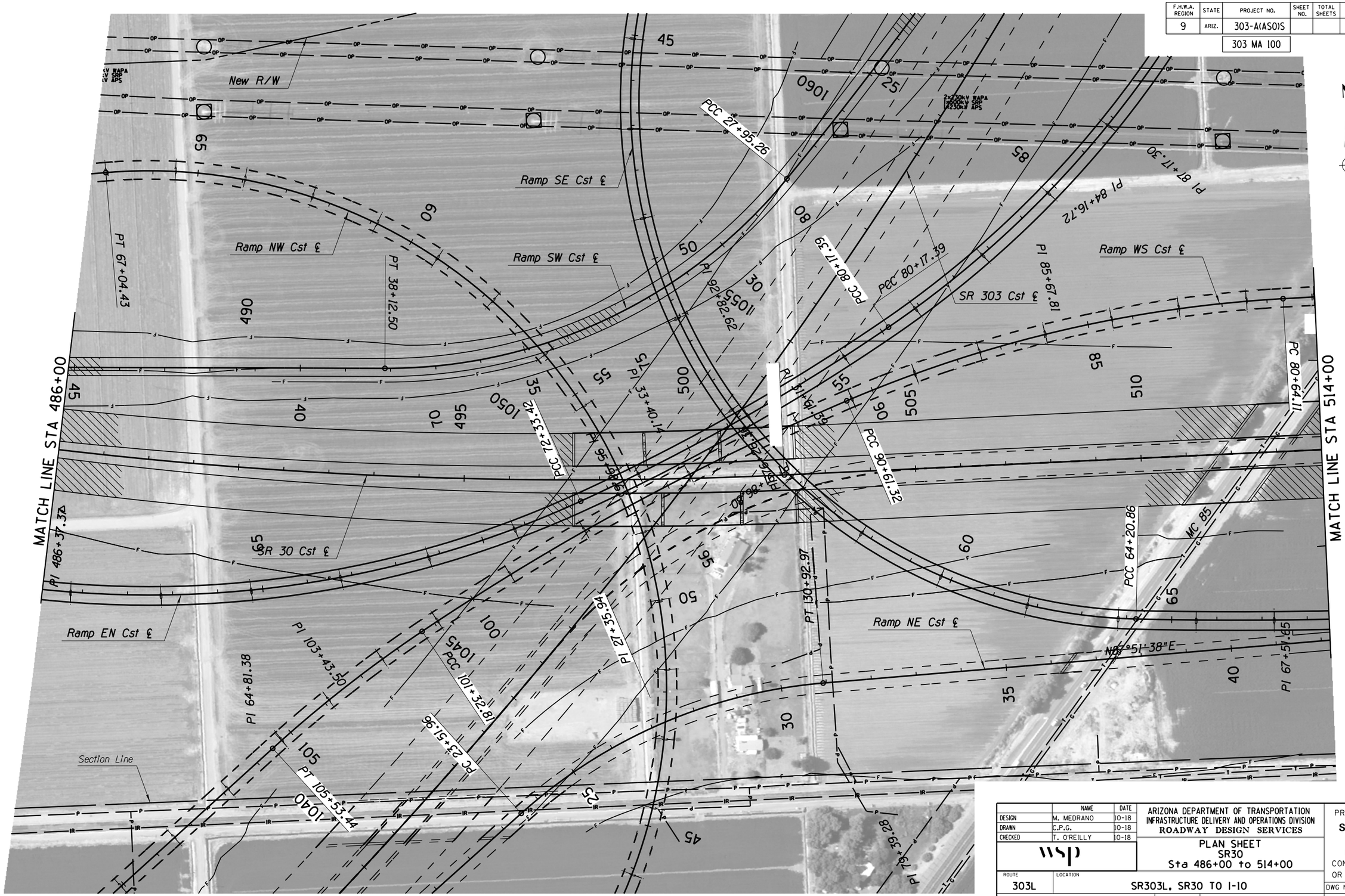
SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL05.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 486+00 to 514+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.06

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 76 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

MATCH LINE STA 514+00

MATCH LINE STA 542+00

N90°00'00"E

Section Line

Ramp WN Cst ℄

Ramp WS Cst ℄

SR 30 Cst ℄

Ramp SE Cst ℄

Ramp NE Cst ℄

New R/W

New R/W

PCC 69+89.76

PT 70+82.17

PC 45+07.06

PI 47+28.33

PT 49+49.54

PC 529+86.40

PC 10+00.00

PI 61+29.44

PI 14+82.19

PC 83+46.06

PT 59+55.88

PI 56+21.85

PT 2+38.19

PC 52+87.38

PC 52+81.91

84'

2x230kV WAPA
1x500kV SRP
1x230kV APS

CenturyLink

515 520 525 530 535 540 545 70 75 80 85 90 95 45

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 514+00 to 542+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.07

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 77 OF 160

10/22/2018

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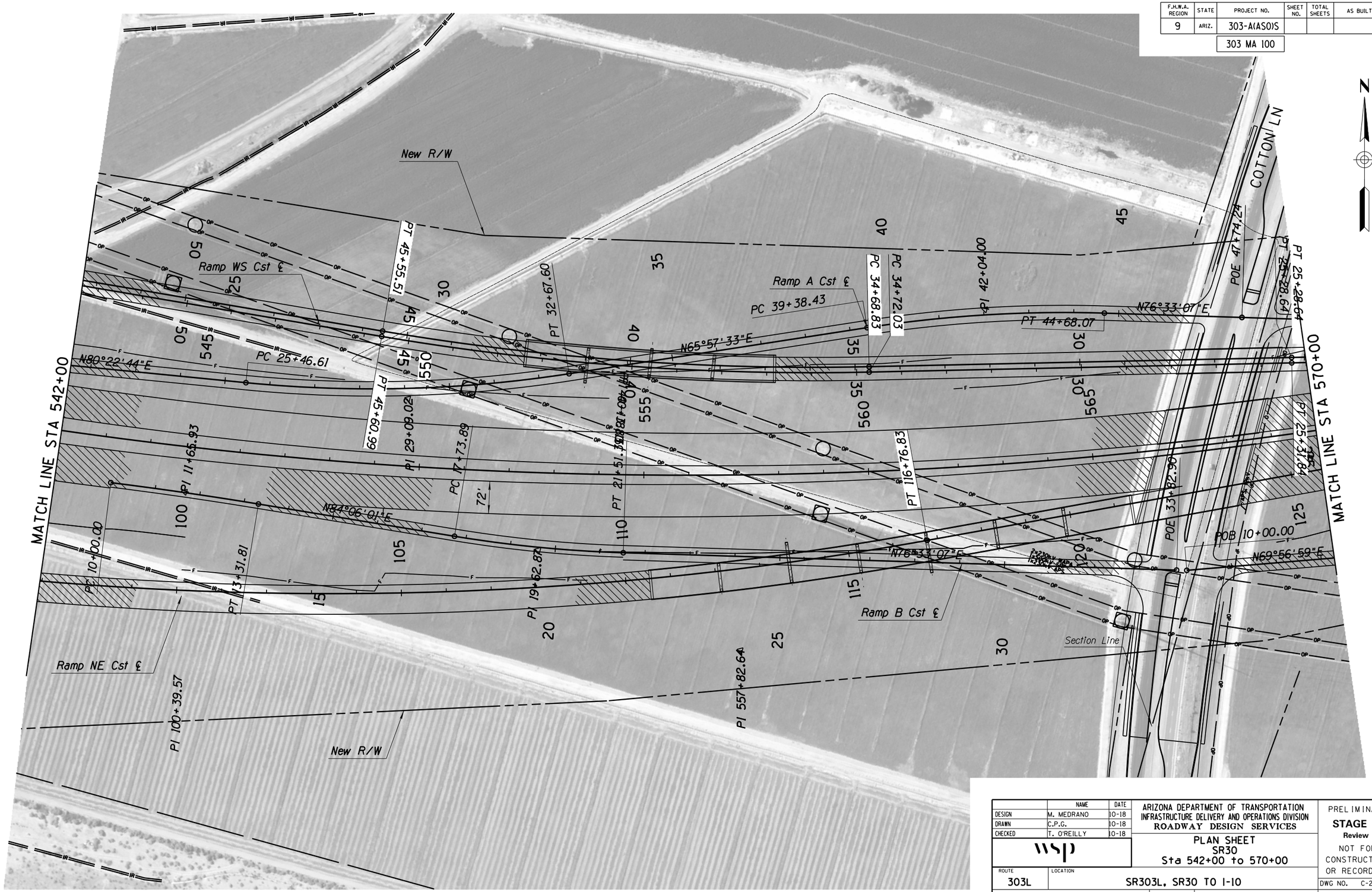
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 542+00 to 570+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.08

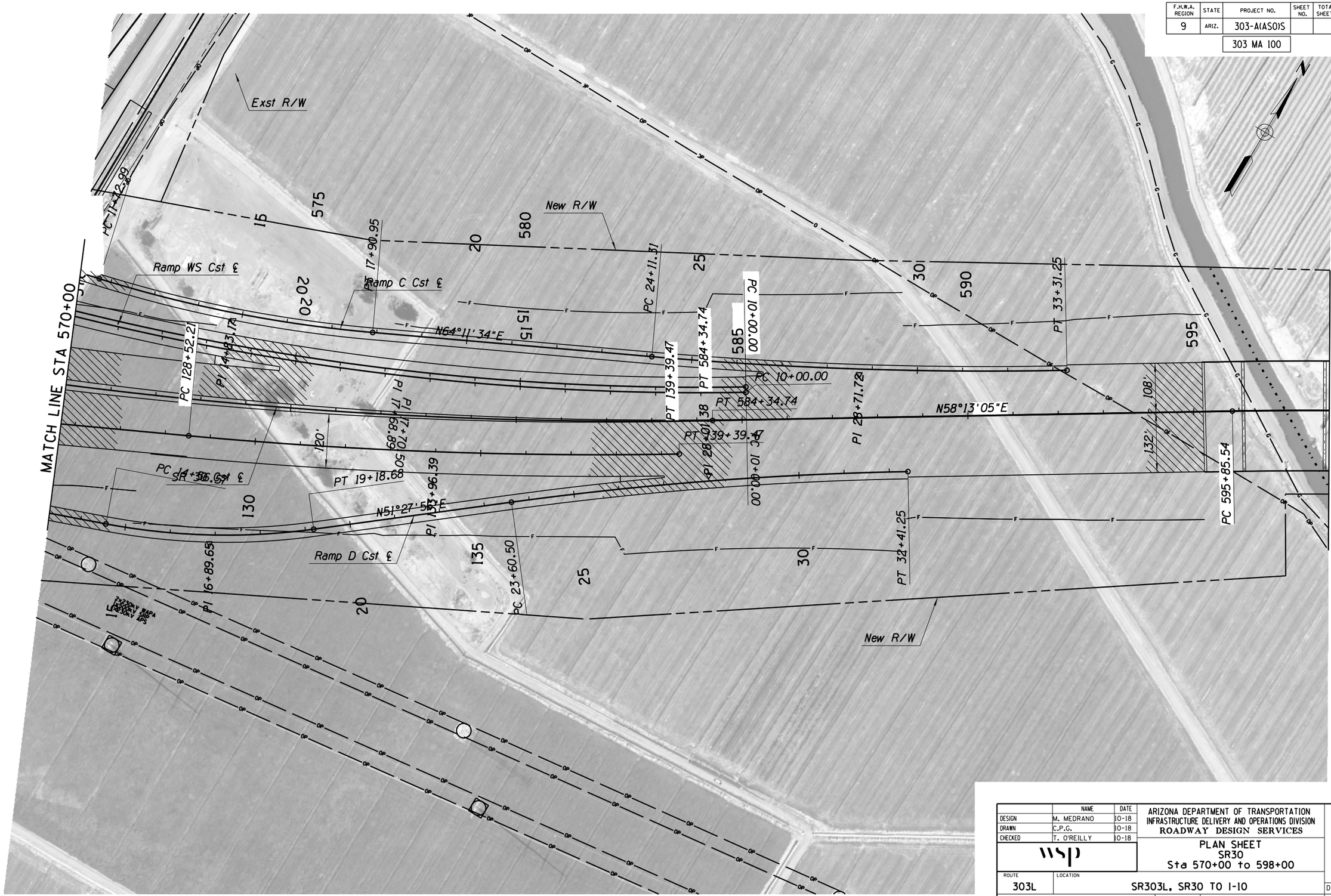
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 78 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL08.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 570+00 to 598+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

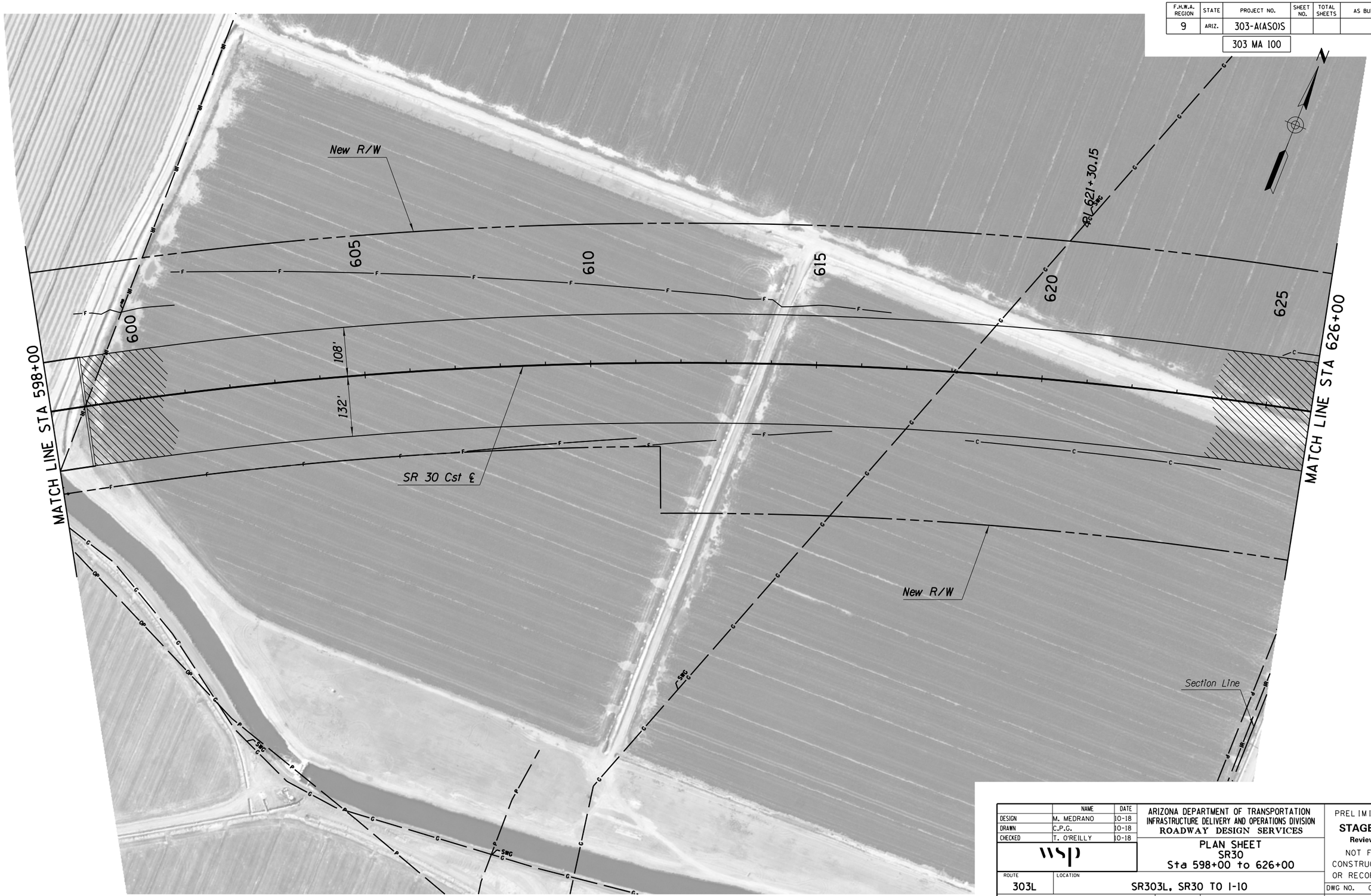
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.09

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 79 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL09.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

wsp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 598+00 to 626+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 80 OF 160

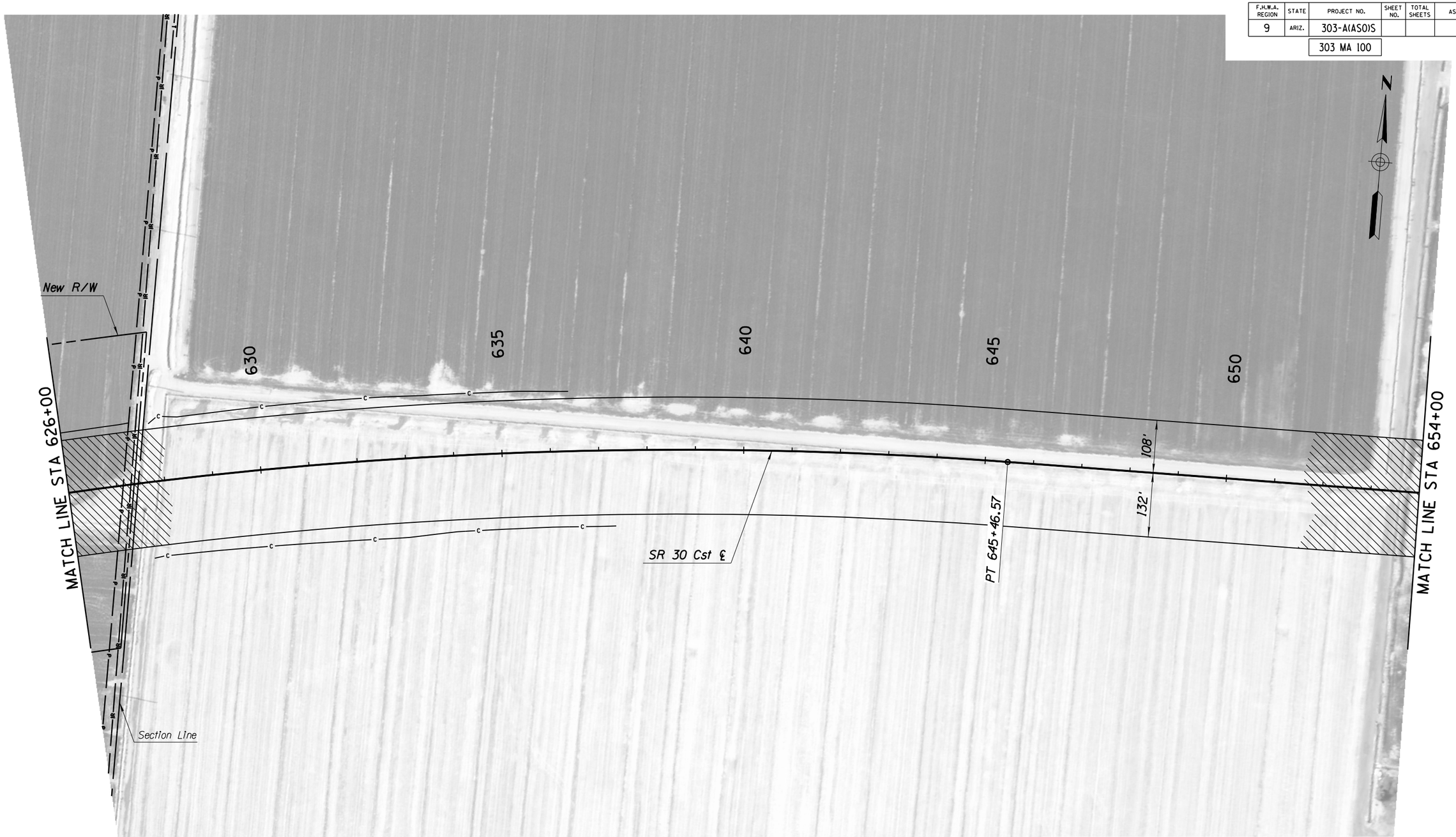
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL10.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 626+00 to 654+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.11

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 81 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL11.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 654+00 to 682+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.12

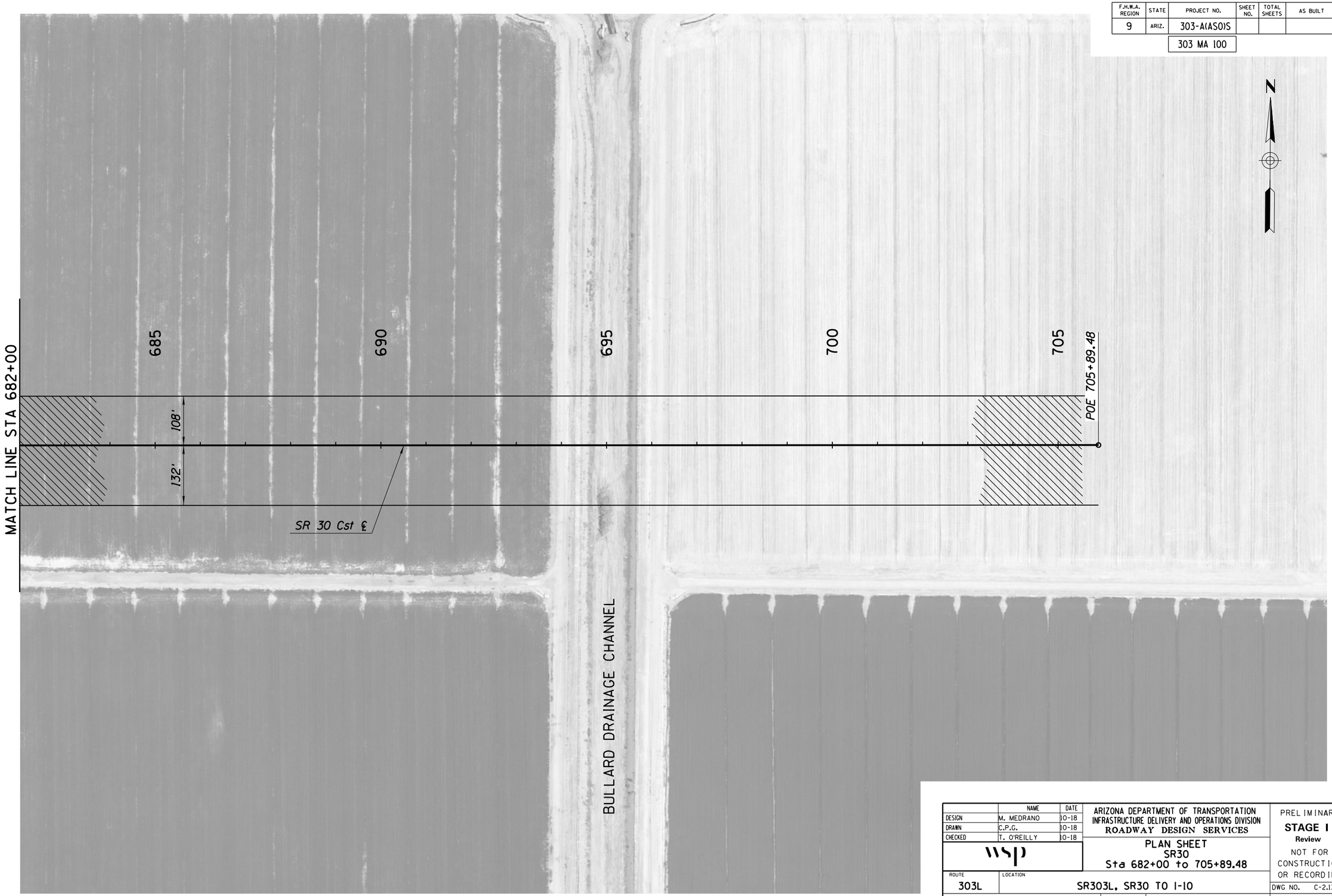
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 82 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SR30_PL12.DGN

SURVEY NO.	FINISHED PLANS	REVISIONS	LOCATION	DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	M. MEDRANO	10-18
DRAWN	C.P.G.	10-18
CHECKED	T. O'REILLY	10-18

msp

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PLAN SHEET
SR30
Sta 682+00 to 705+89.48

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	C-2.13

TRACS NO.			83 OF 160
H6870 01 L		STP-303-A-(ASO)S	

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

950
940
930
920
910
900
890
880
870
860
850
840
830

Begin SR 30 Profile
Sta 385+85.77
Elev=900.25

800' VC
SSDs=2021'

+14

-0.2855%

+14

+2.0199%

Finished Profile Grade

Exst Groundline @ Cst ℄

PI 390+13.67
Elev=899.03
Corr=2.31'

375 380 385 390 395 400

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 374+00 to 402+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-2.14

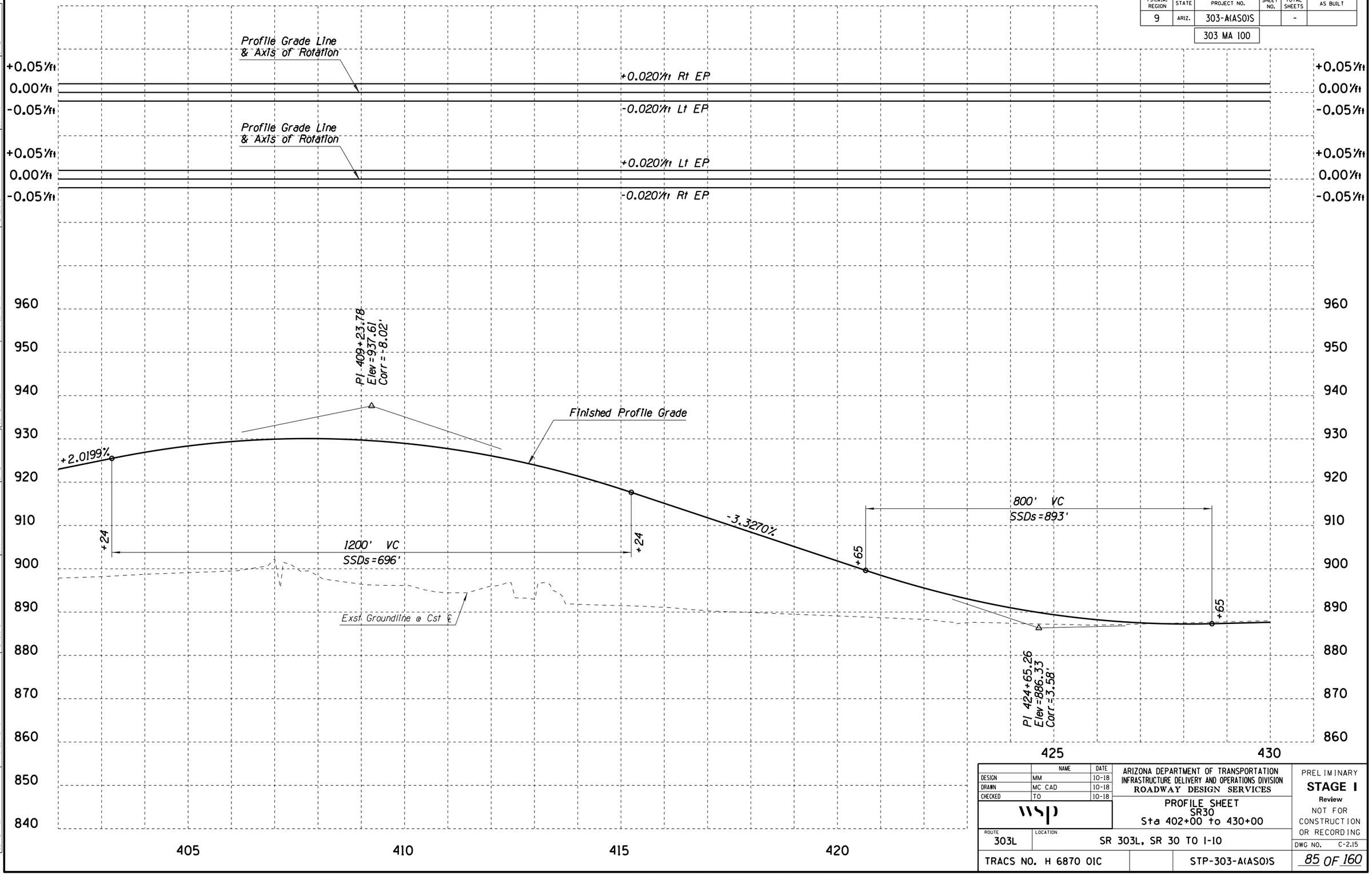
84 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 402+00 to 430+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-2.15

ROUTE	LOCATION	
303L	SR 303L, SR 30 TO I-10	
TRACS NO. H 6870 01C		STP-303-A(ASO)S

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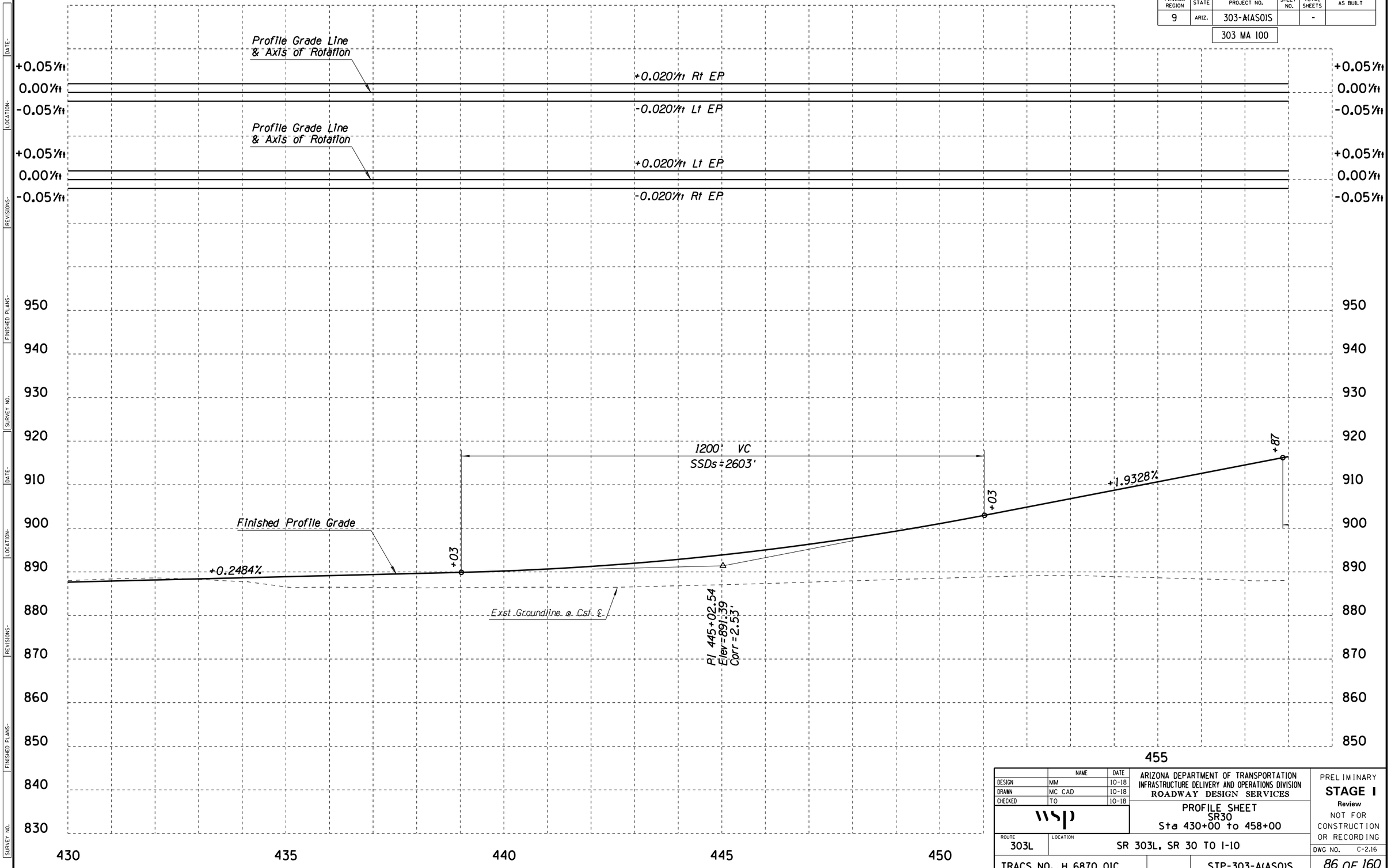
10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR02.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 430+00 to 458+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-2.16

TRACS NO.		STP-303-A(ASO)S	SHEET
H 6870 01C			86 OF 160

10/22/2018

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

950
940
930
920
910
900
890
880
870
860
850
840
830

PI 461+86.86
Elev=923.95
Corr=-4.17'

Finished Profile Grade

+87

-2.240%

800' VC
SSDs=643'

Perryville Rd

+27

800' VC
SSDs=619'

+27

Exst Groundline @ Cst ℄

PI 477+27.47
Elev=889.44
Corr=-5.36

460 465 470 475 480 485

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 458+00 to 486+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-2.17

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 87 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR04.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Rt EP

-0.020%ft Lt EP

Profile Grade Line & Axis of Rotation

+0.05%ft
0.00%ft
-0.05%ft

+0.020%ft Lt EP

-0.020%ft Rt EP

PI: 500+40.54
Elev=961.65
Corr=-8.41'

Finished Profile Grade

+41

+41

+3.1220%

-2.4867%

1200' VC
SSDs=680'

800' VC
SSDs=875'

+77

SR303L

MC85

Exst Groundline @ Cst ℄

960
950
940
930
920
910
900
890
880
870
860

490
495
500
505
510
515

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 486+00 to 514+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-2.18

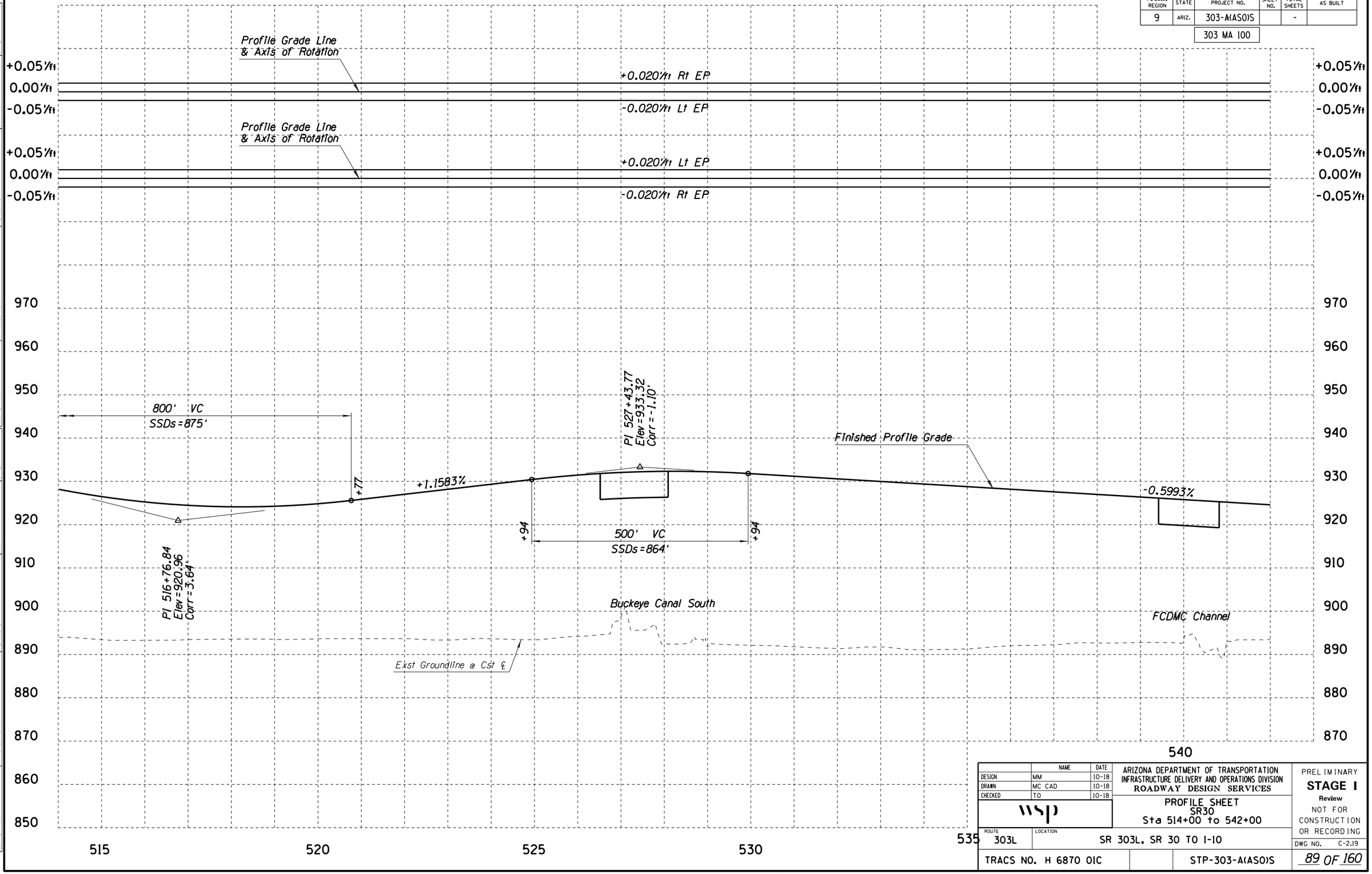
TRACS NO.			
H 6870 01C		STP-303-A(ASO)S	88 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR05.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 514+00 to 542+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10 | DWG NO. C-2.19

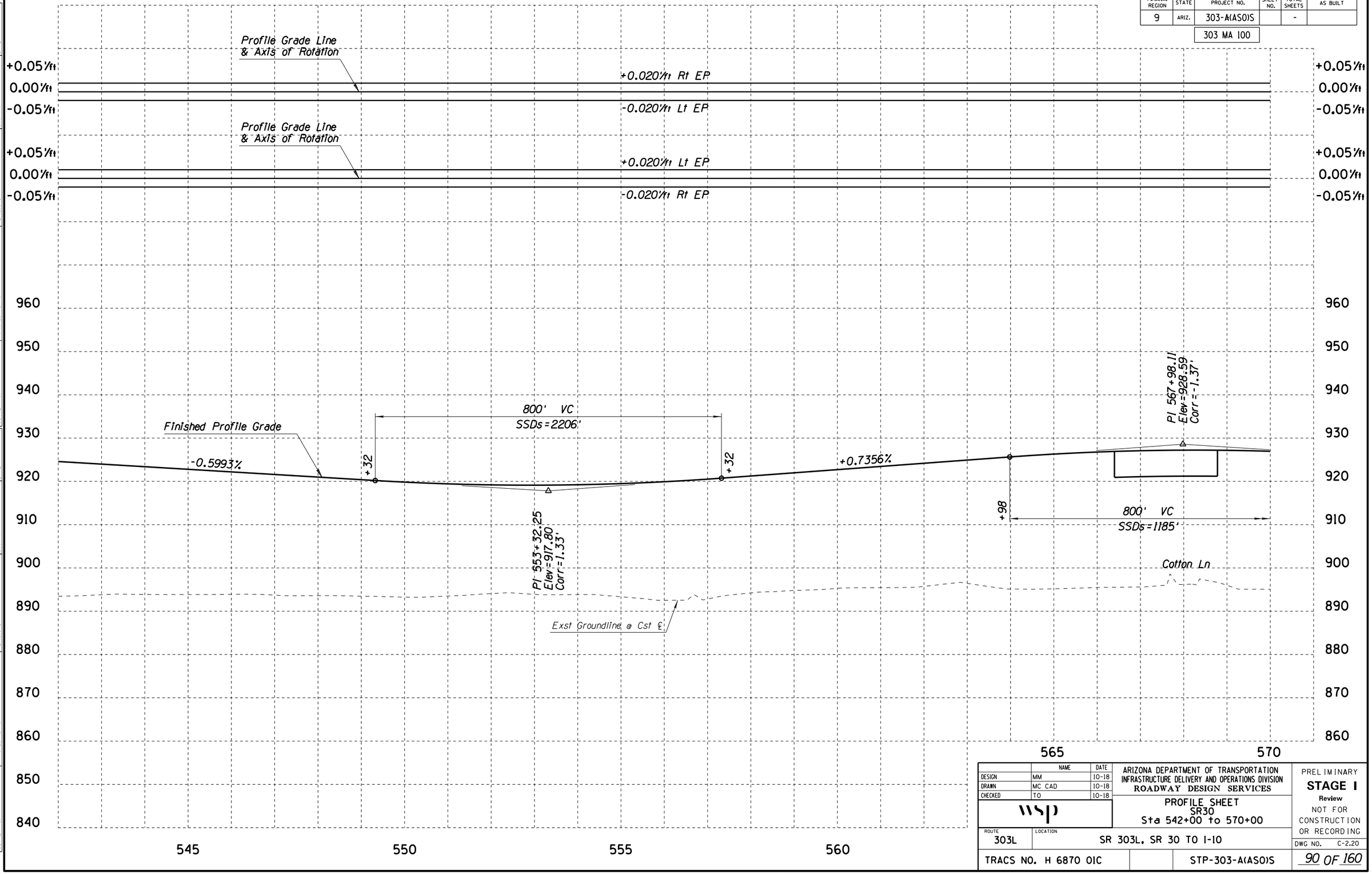
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 89 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR06.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 542+00 to 570+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-2.20

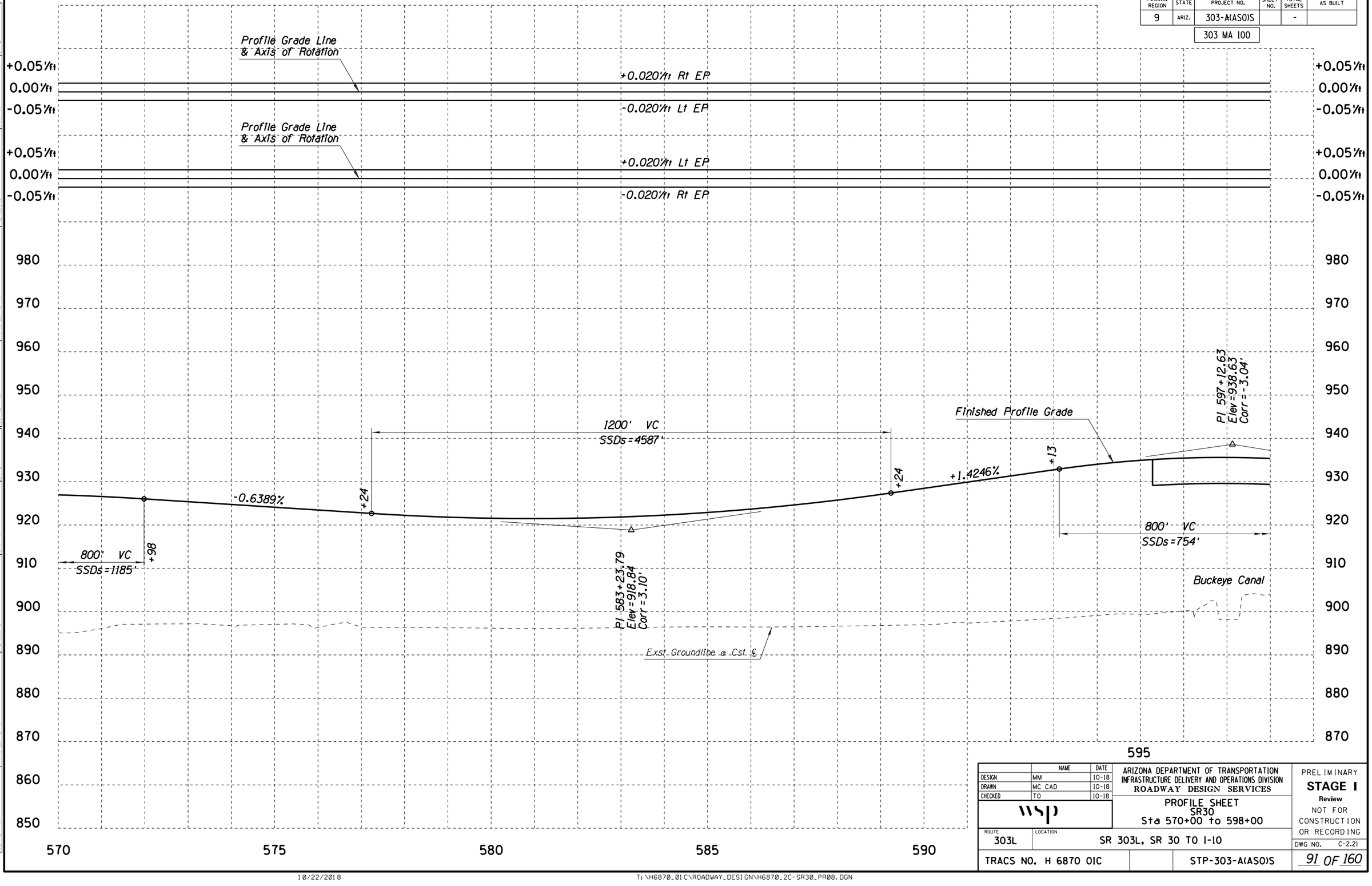
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 90 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR07.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 570+00 to 598+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-2.21

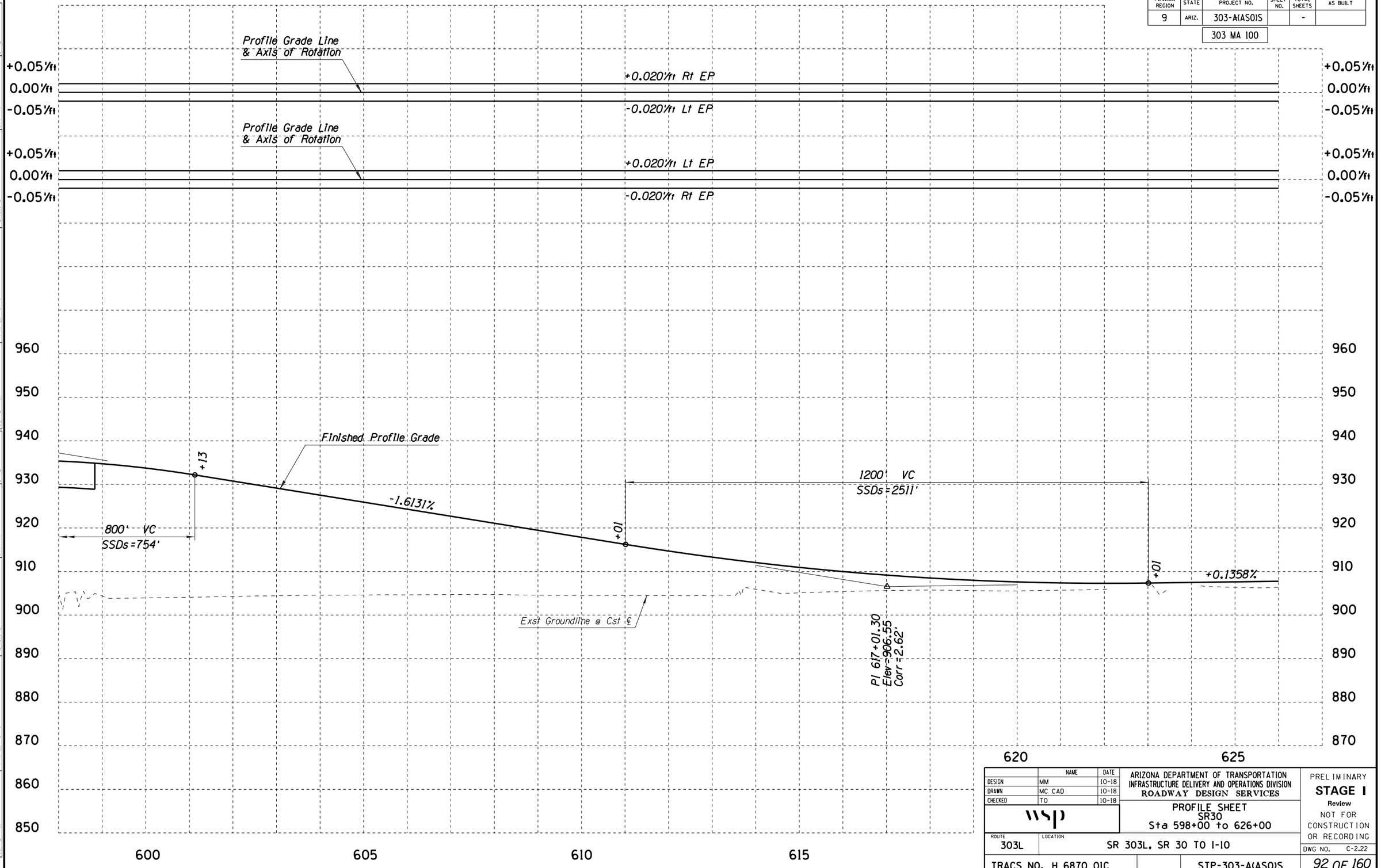
91 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR08.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SR30
Sta 598+00 to 626+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

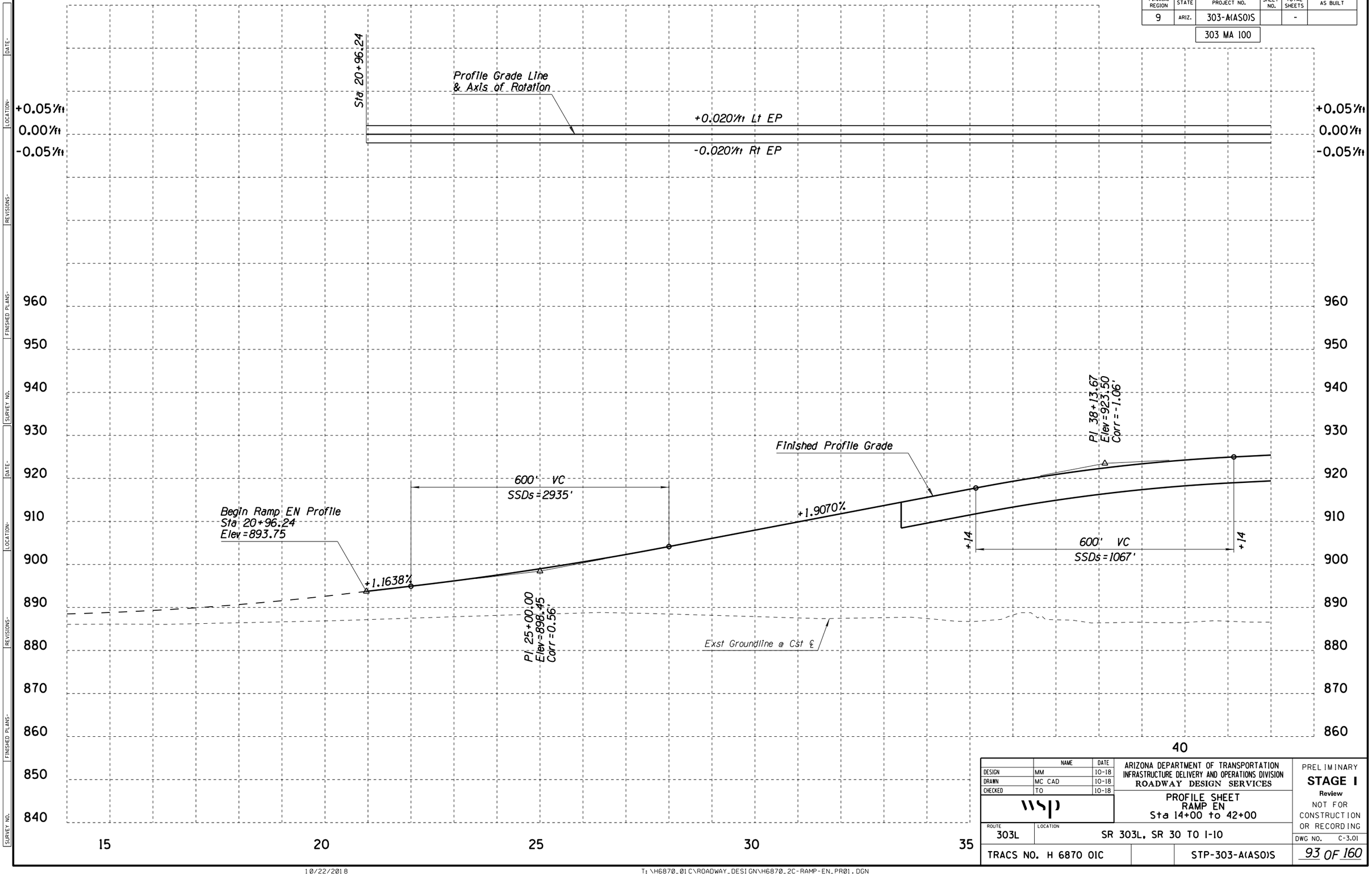
DWG NO. C-2.22

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-SR30_PR09.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP EN
Sta 14+00 to 42+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-3.01

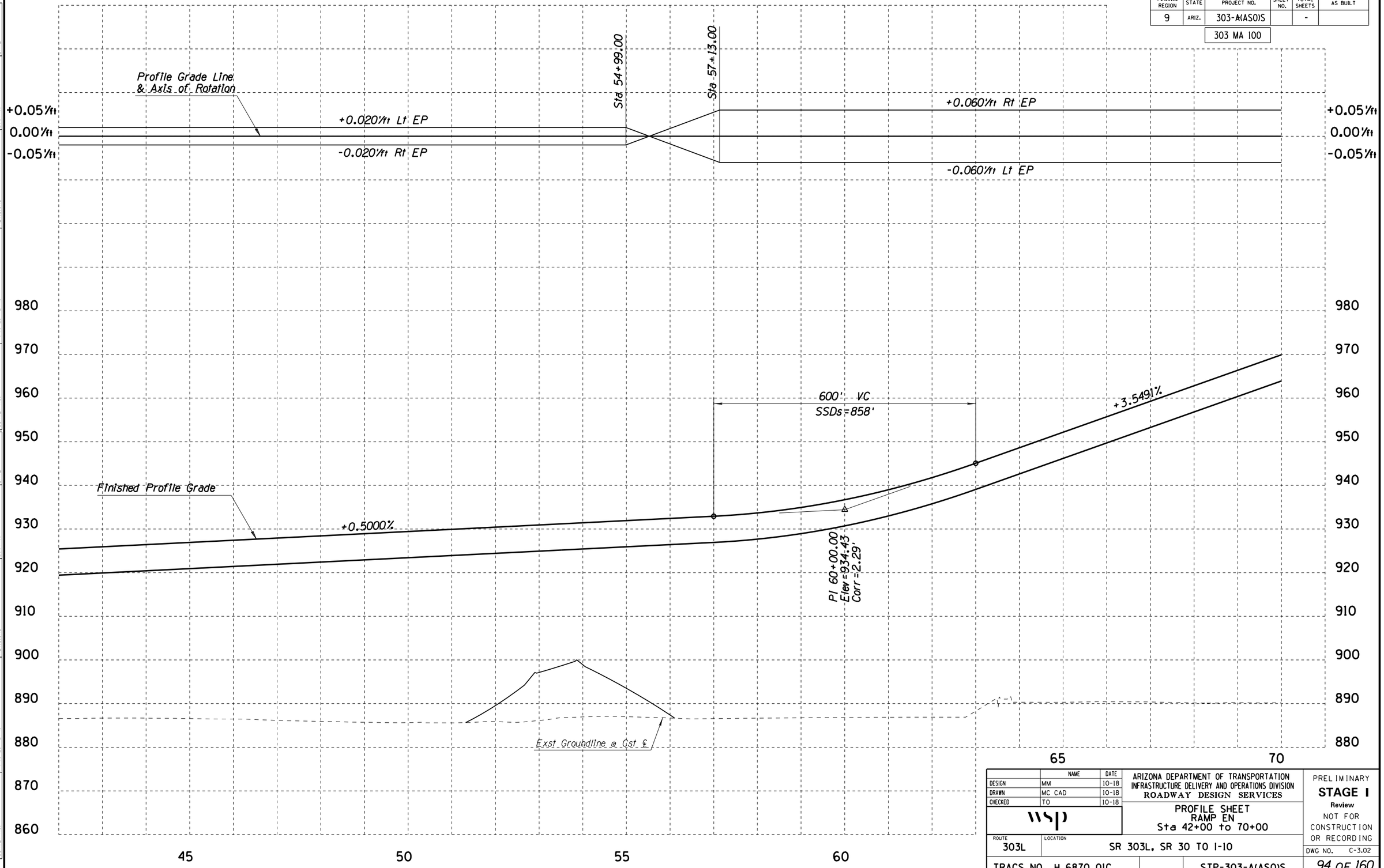
ROUTE	LOCATION		
303L	SR 303L, SR 30 TO I-10		
TRACS NO. H 6870 01C		STP-303-A(ASO)S	93 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-EN_PR01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP EN
Sta 42+00 to 70+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-3.02

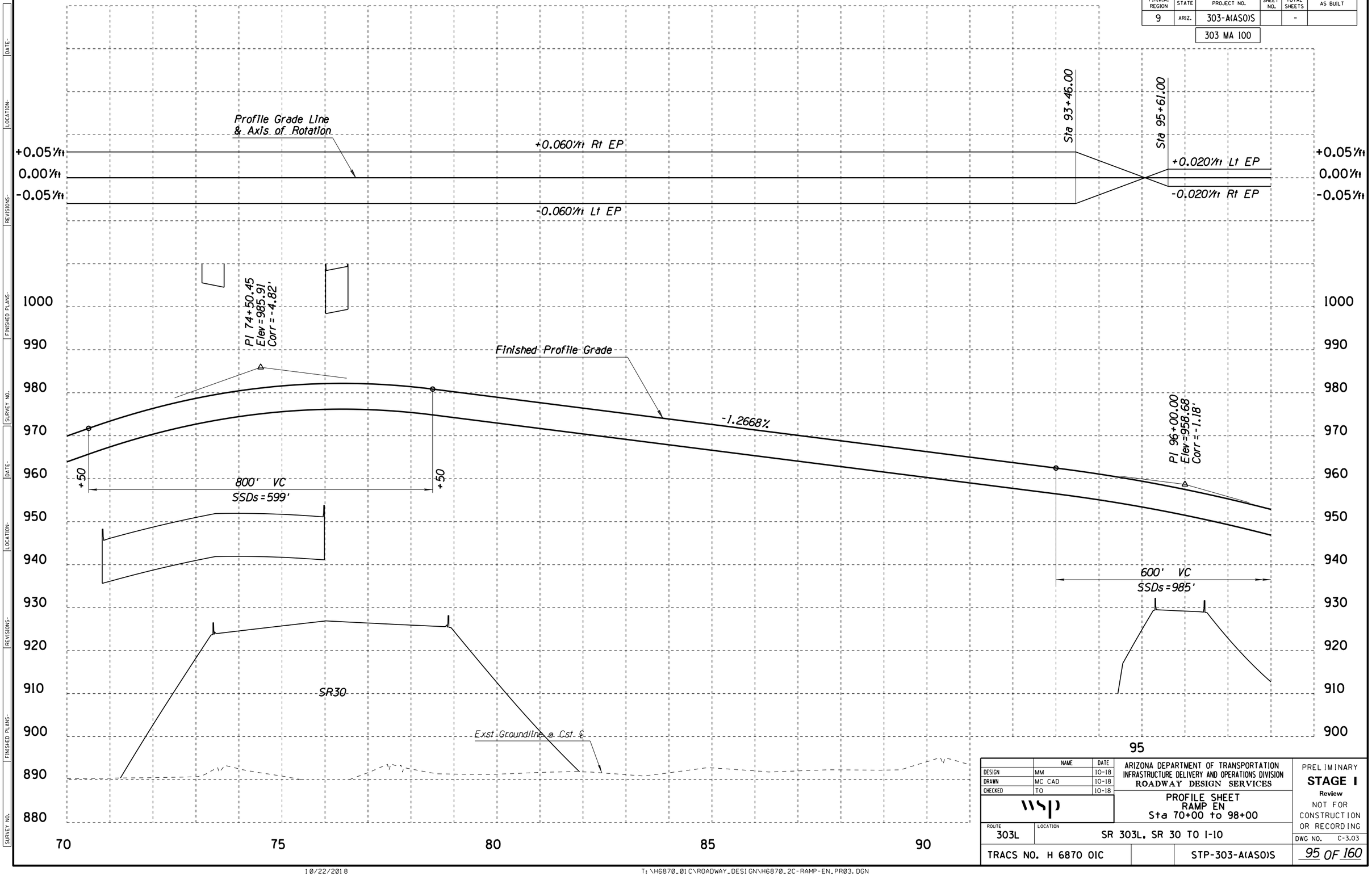
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 94 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-EN_PR02.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP EN
Sta 70+00 to 98+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-3.03

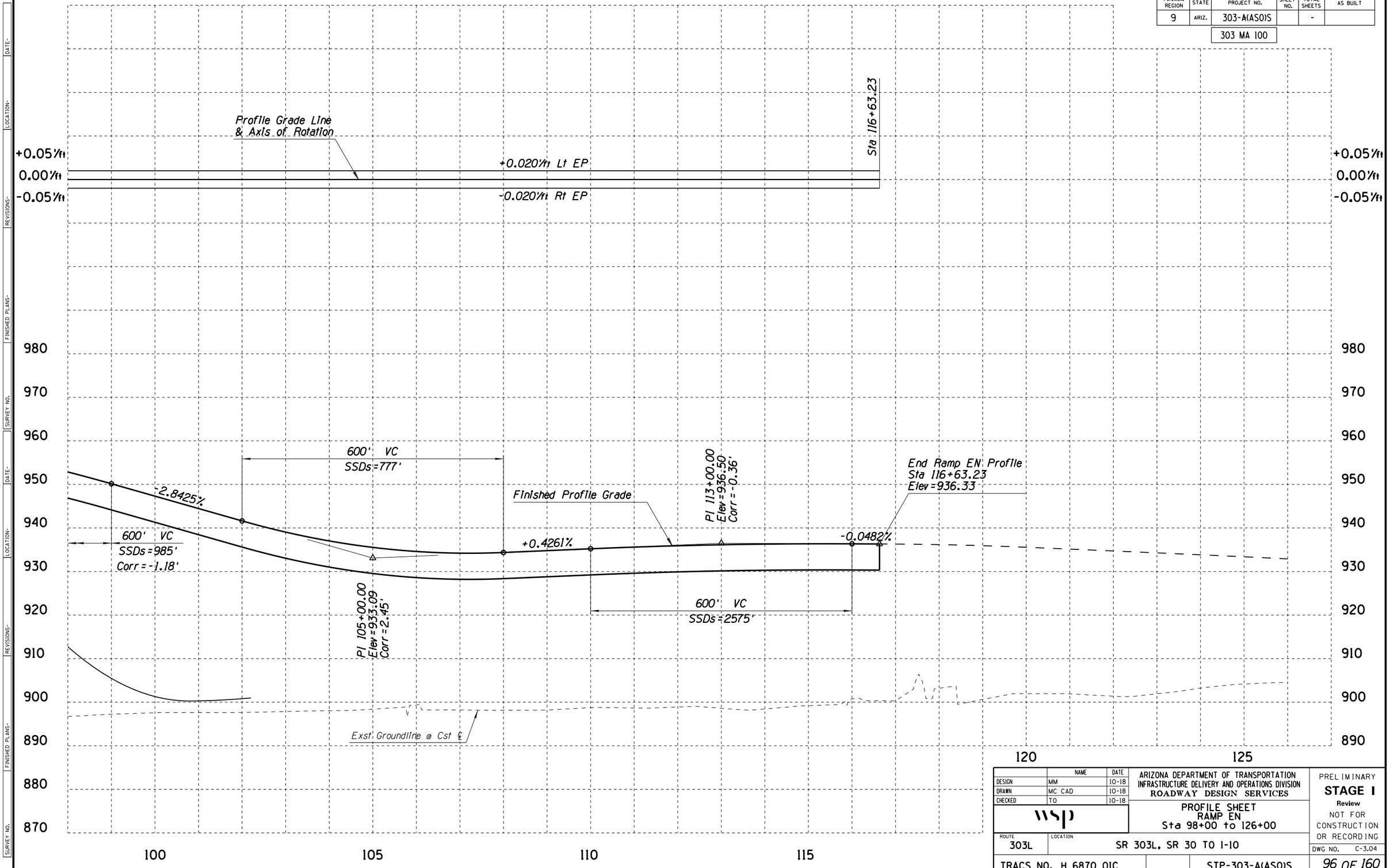
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 95 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-EN_PR03.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP EN
Sta 98+00 to 126+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-3.04

10/22/2018

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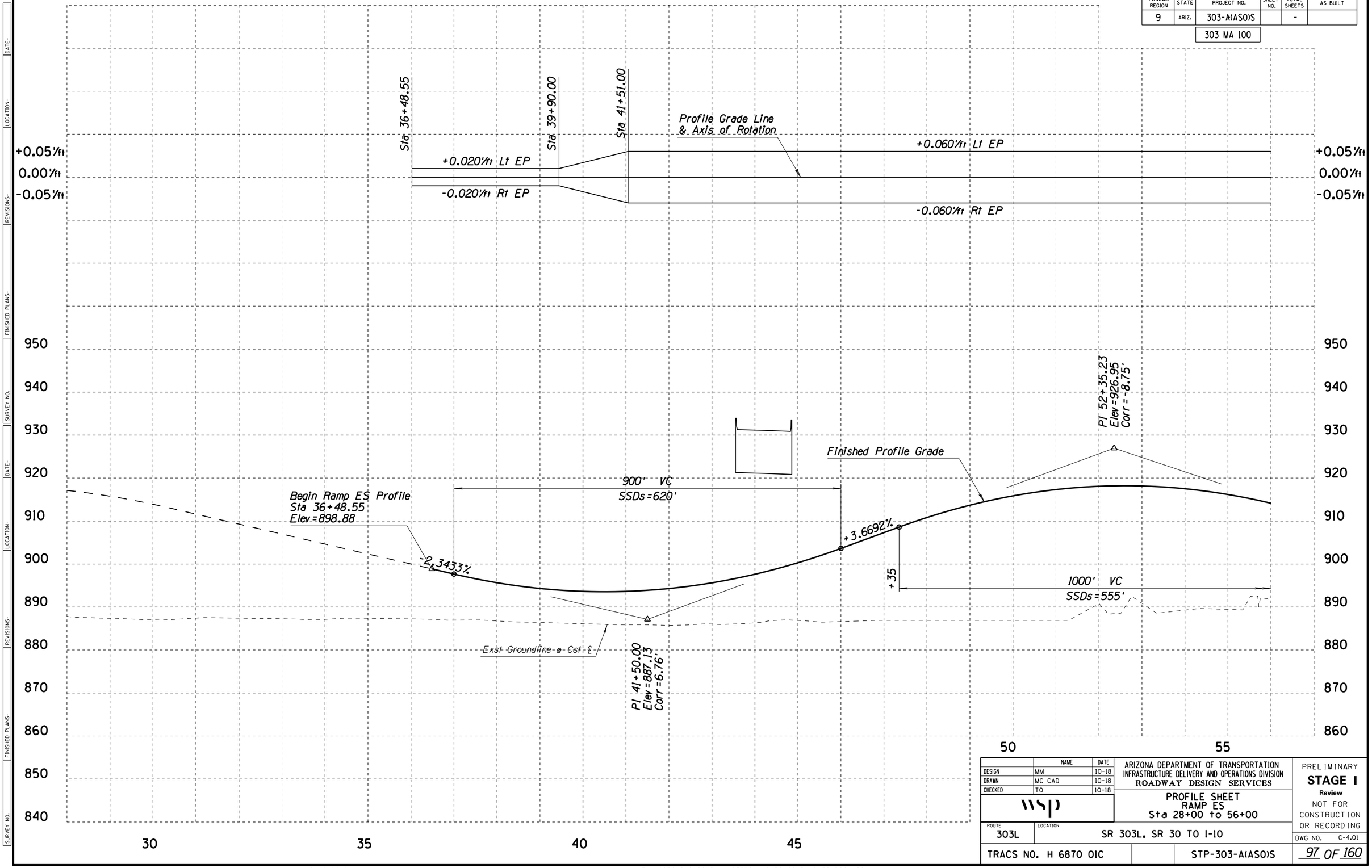
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP ES
Sta 28+00 to 56+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-4.01

97 OF 160

10/22/2018

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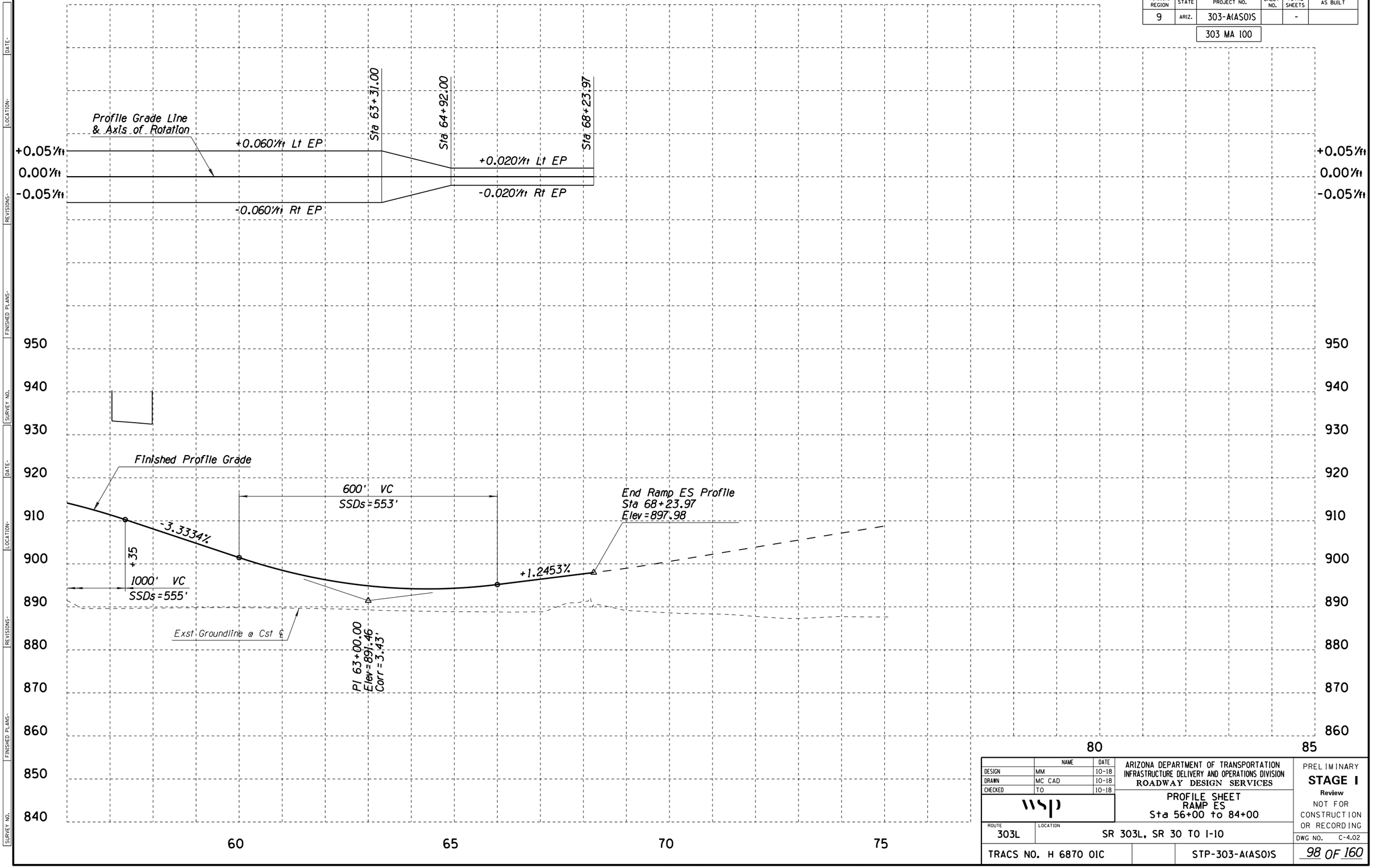
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP ES
Sta 56+00 to 84+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-4.02

TRACS NO.			
H 6870 01C		STP-303-A(ASO)S	98 OF 160

10/22/2018

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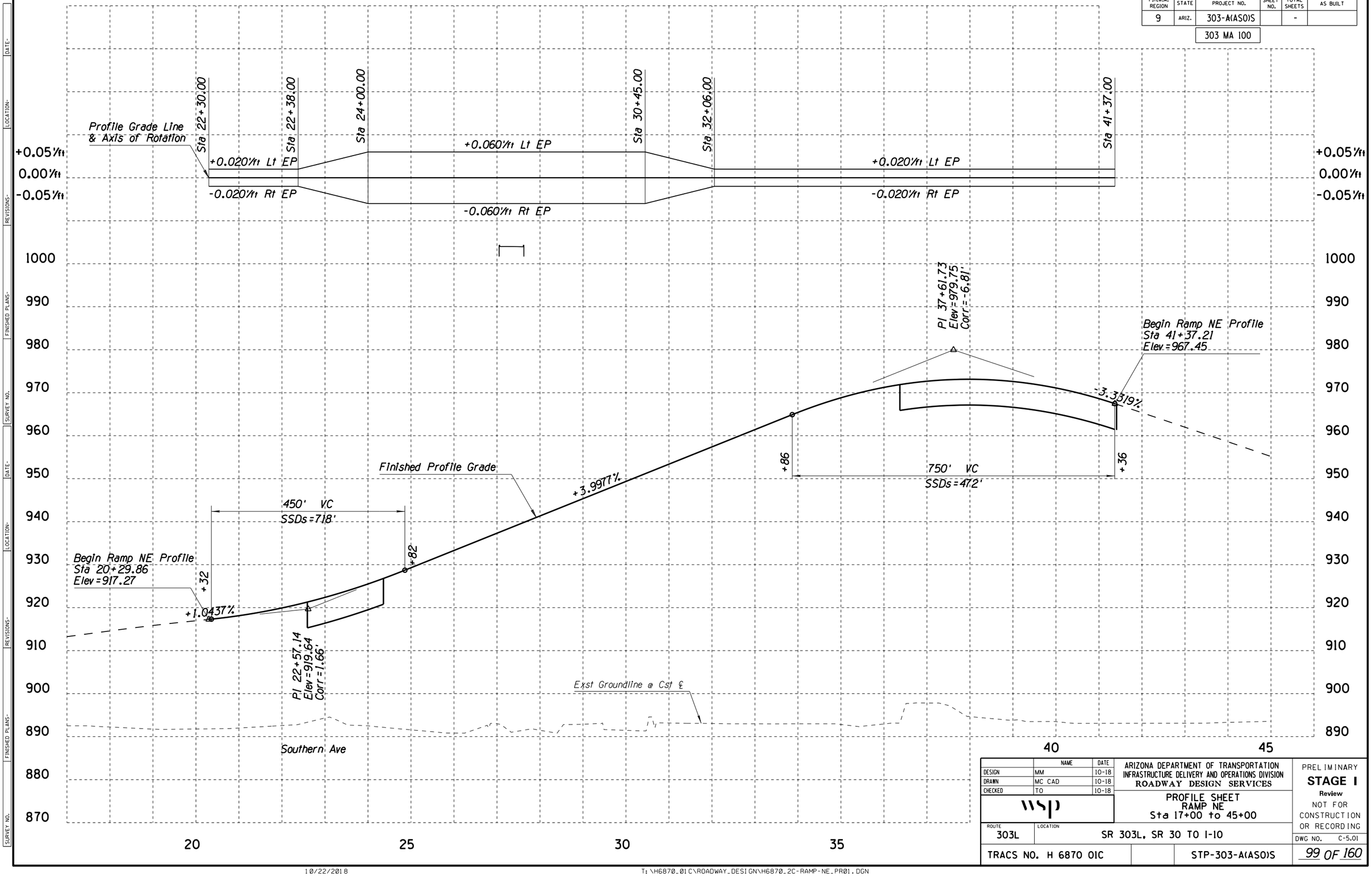
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP NE
Sta 17+00 to 45+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

DWG NO. C-5.01

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 99 OF 160

10/22/2018

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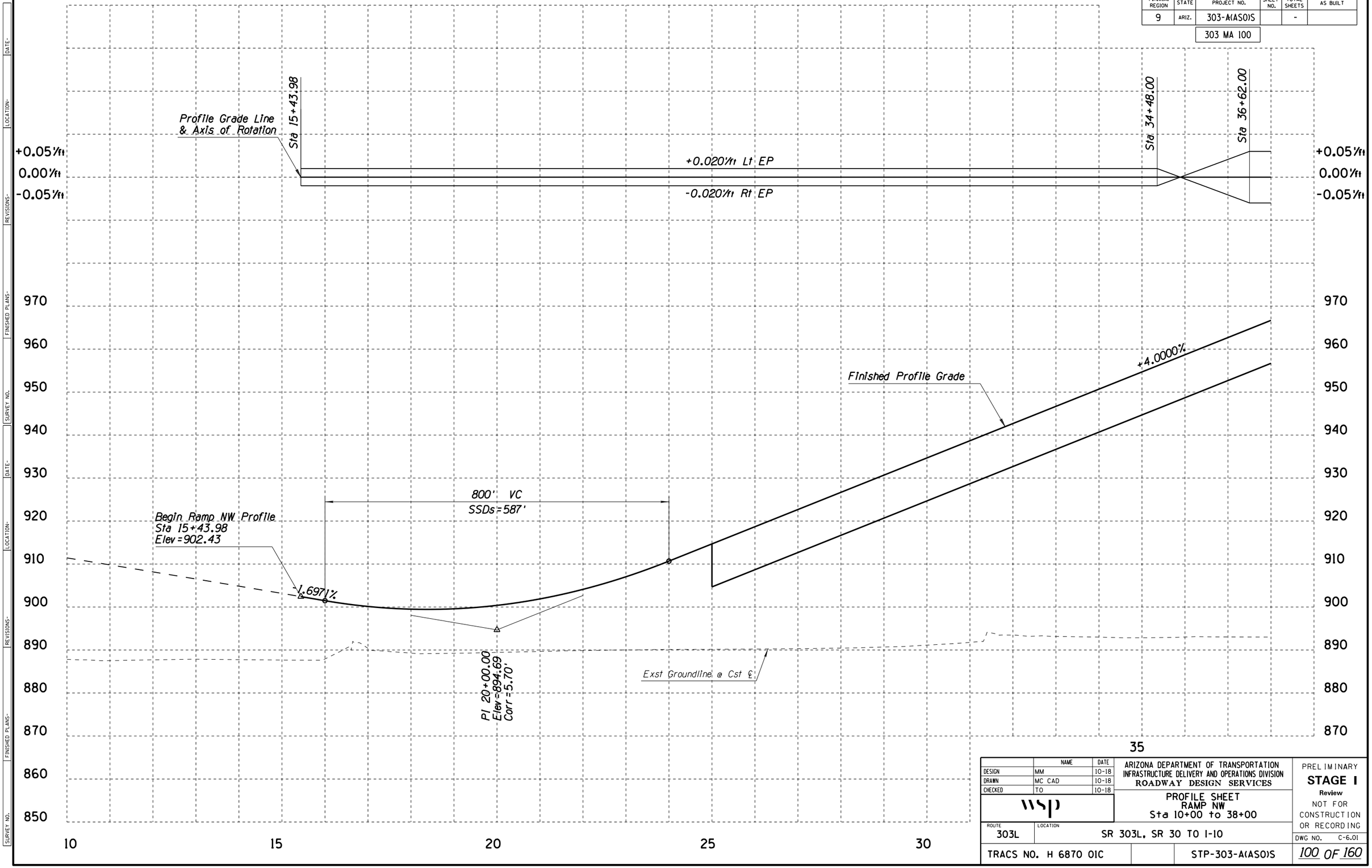
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP NW
Sta 10+00 to 38+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-6.01

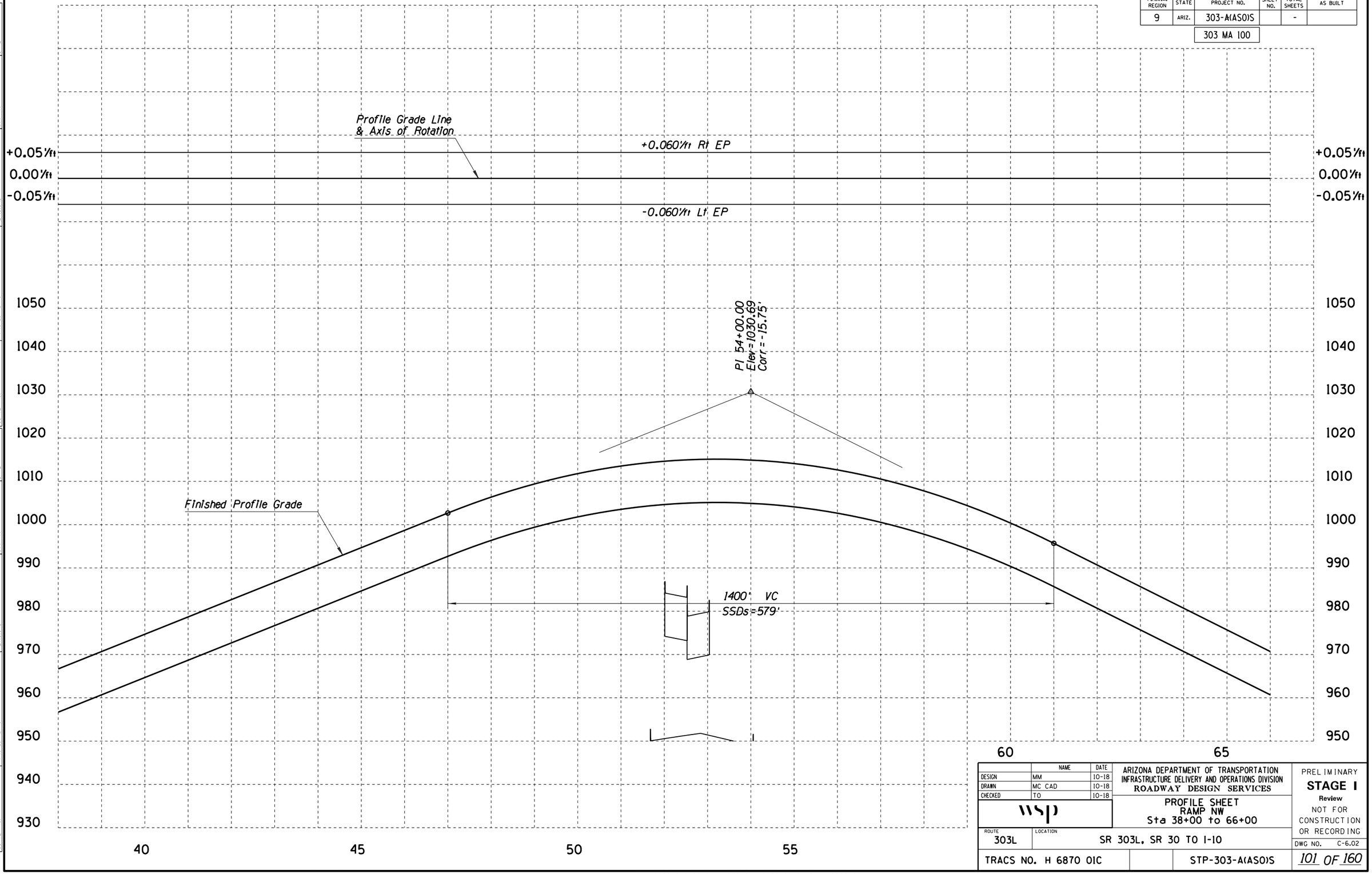
100 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-NW_PR01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP NW
Sta 38+00 to 66+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-6.02

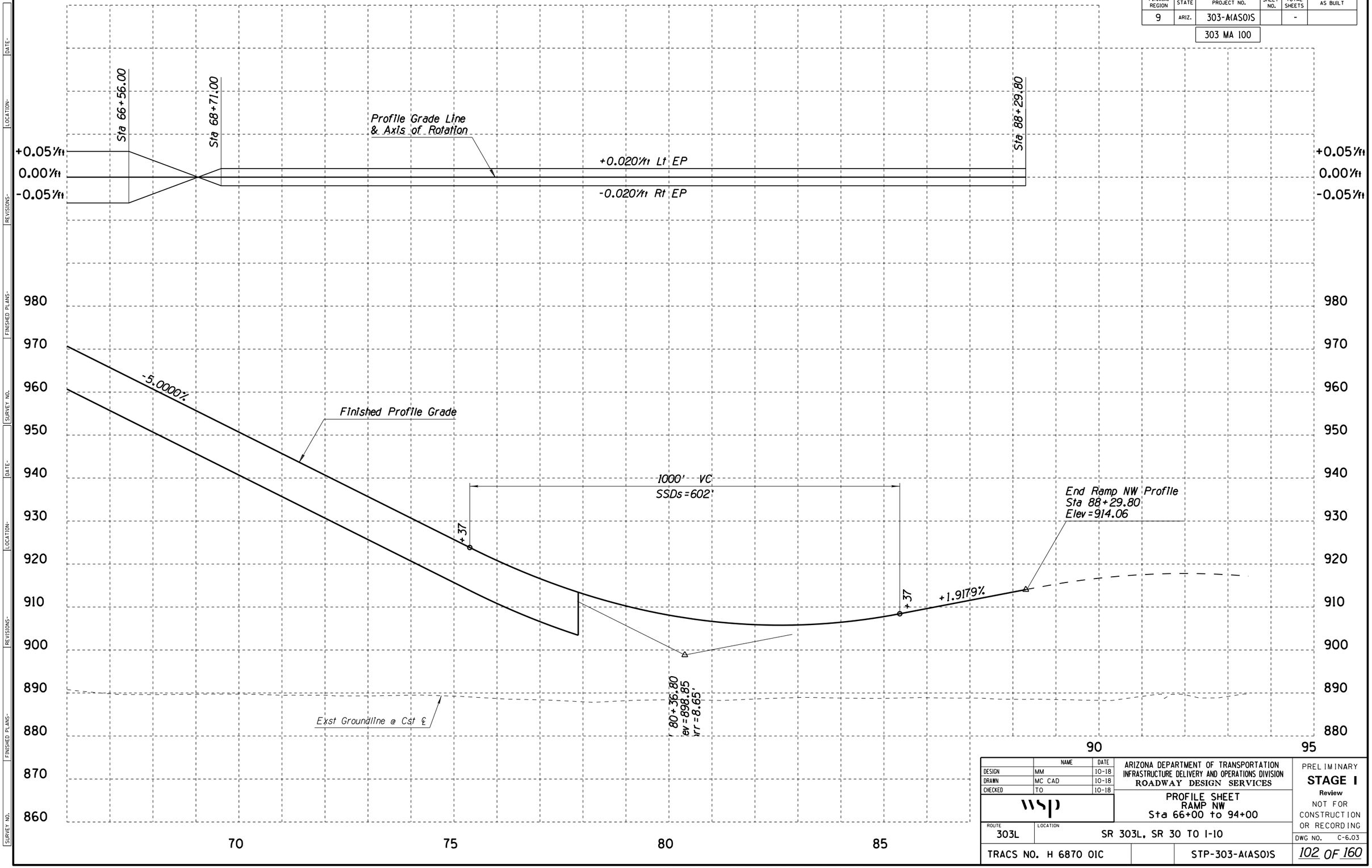
TRACS NO.			
H 6870 01C		STP-303-A(ASO)S	101 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-NW_PR02.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP NW
Sta 66+00 to 94+00

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-6.03

10/22/2018

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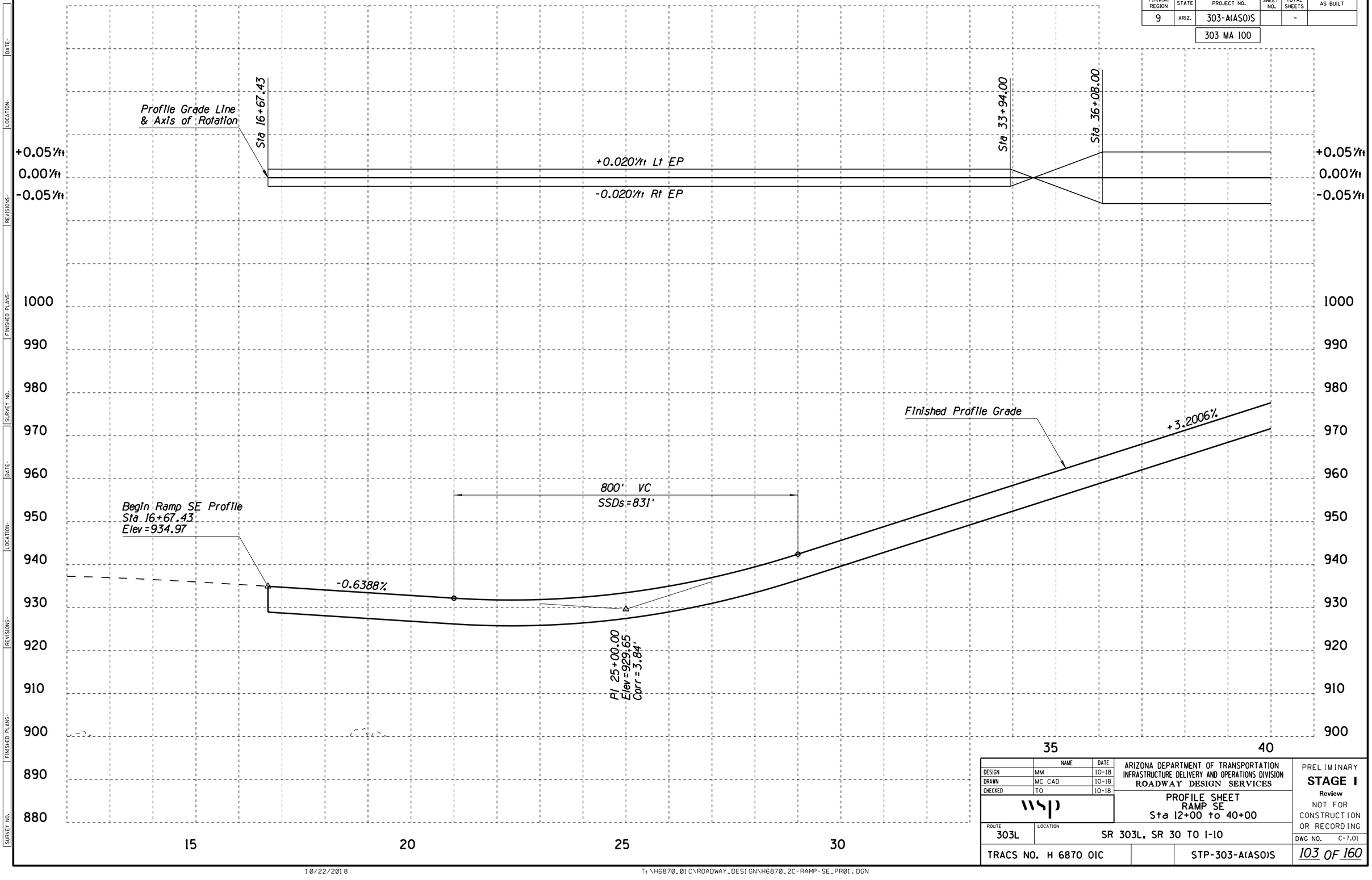
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP SE
Sta 12+00 to 40+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-7.01

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

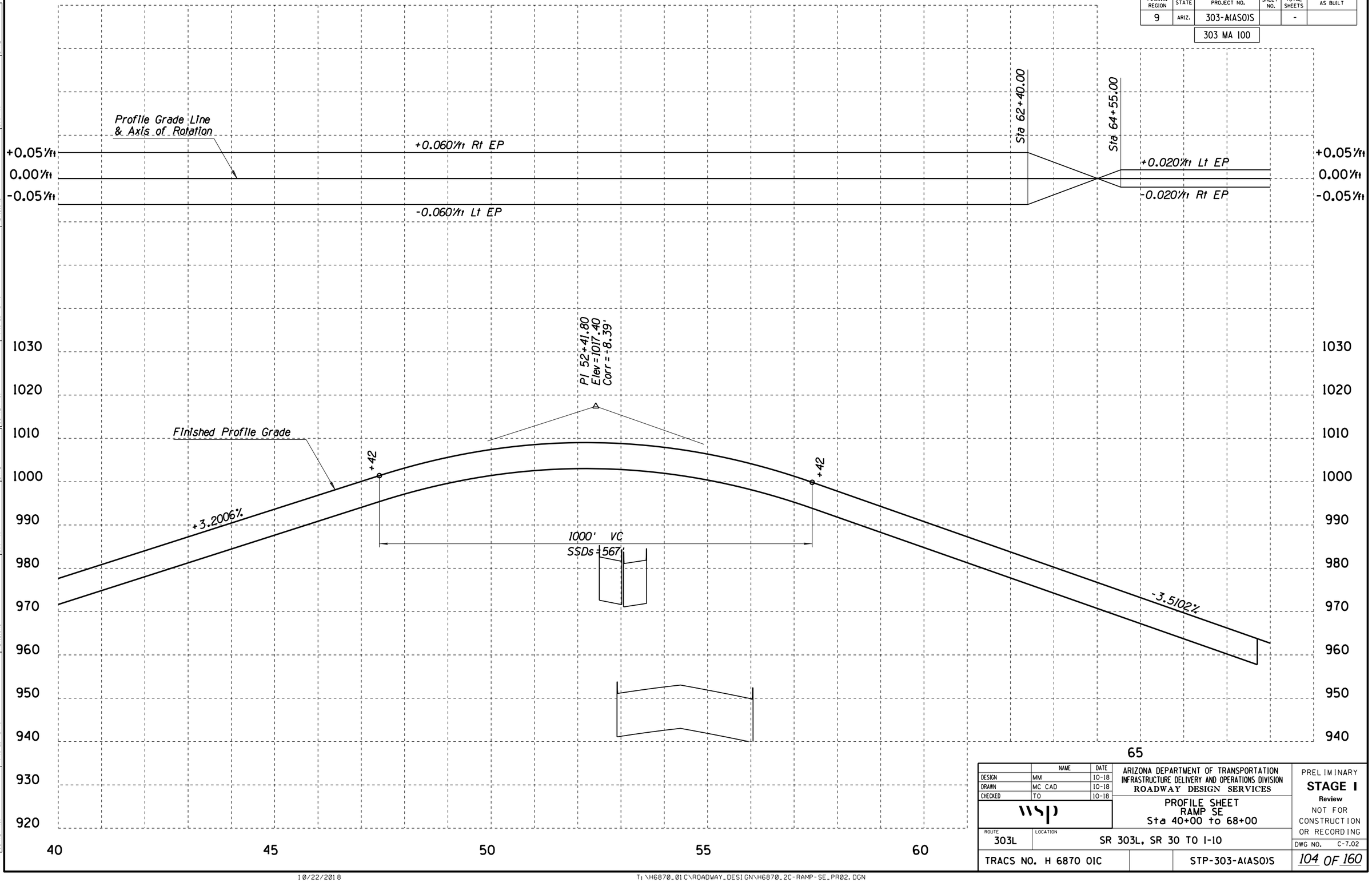
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 103 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-SE_PR01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP SE
Sta 40+00 to 68+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-7.02

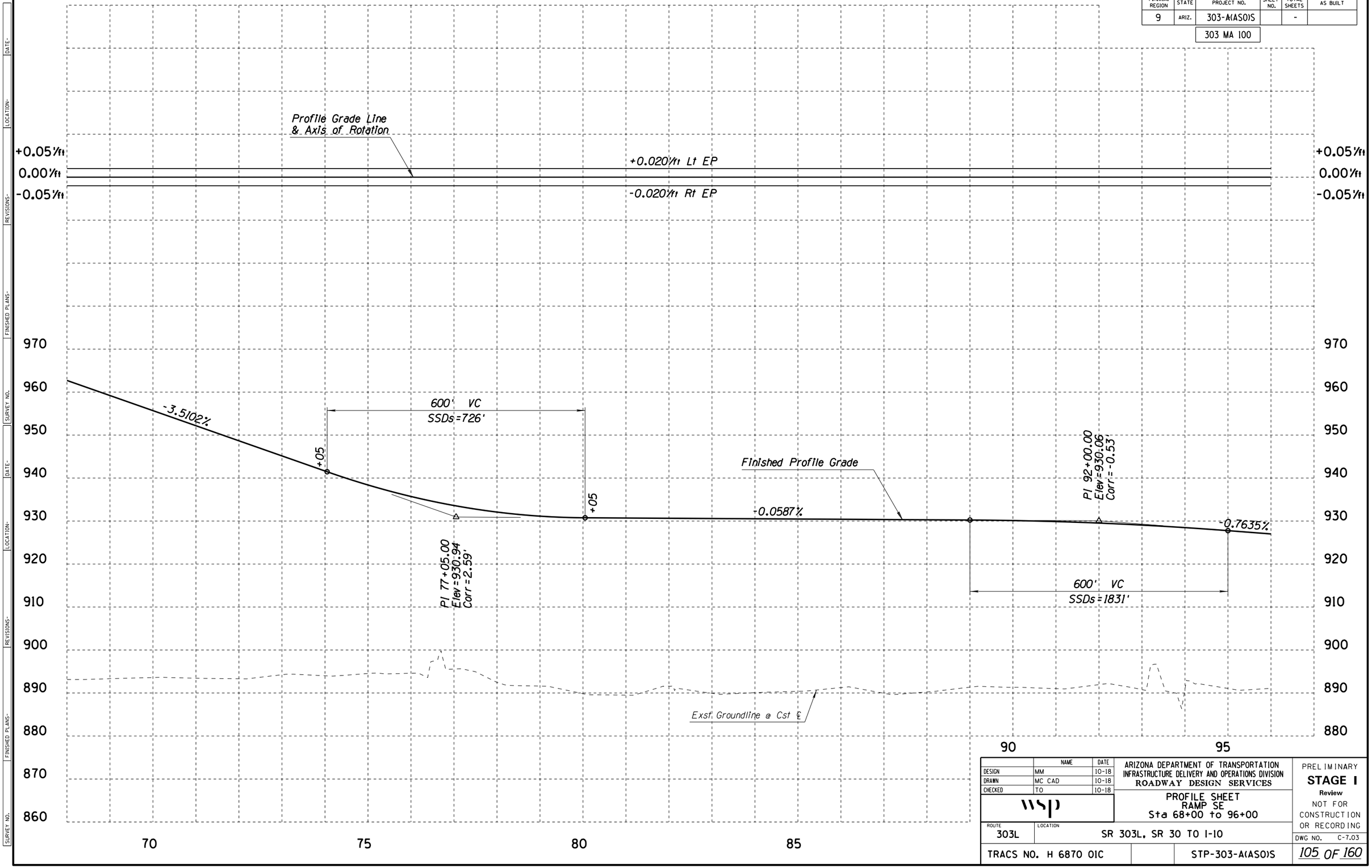
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 104 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-SE_PR02.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP SE
Sta 68+00 to 96+00

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-7.03

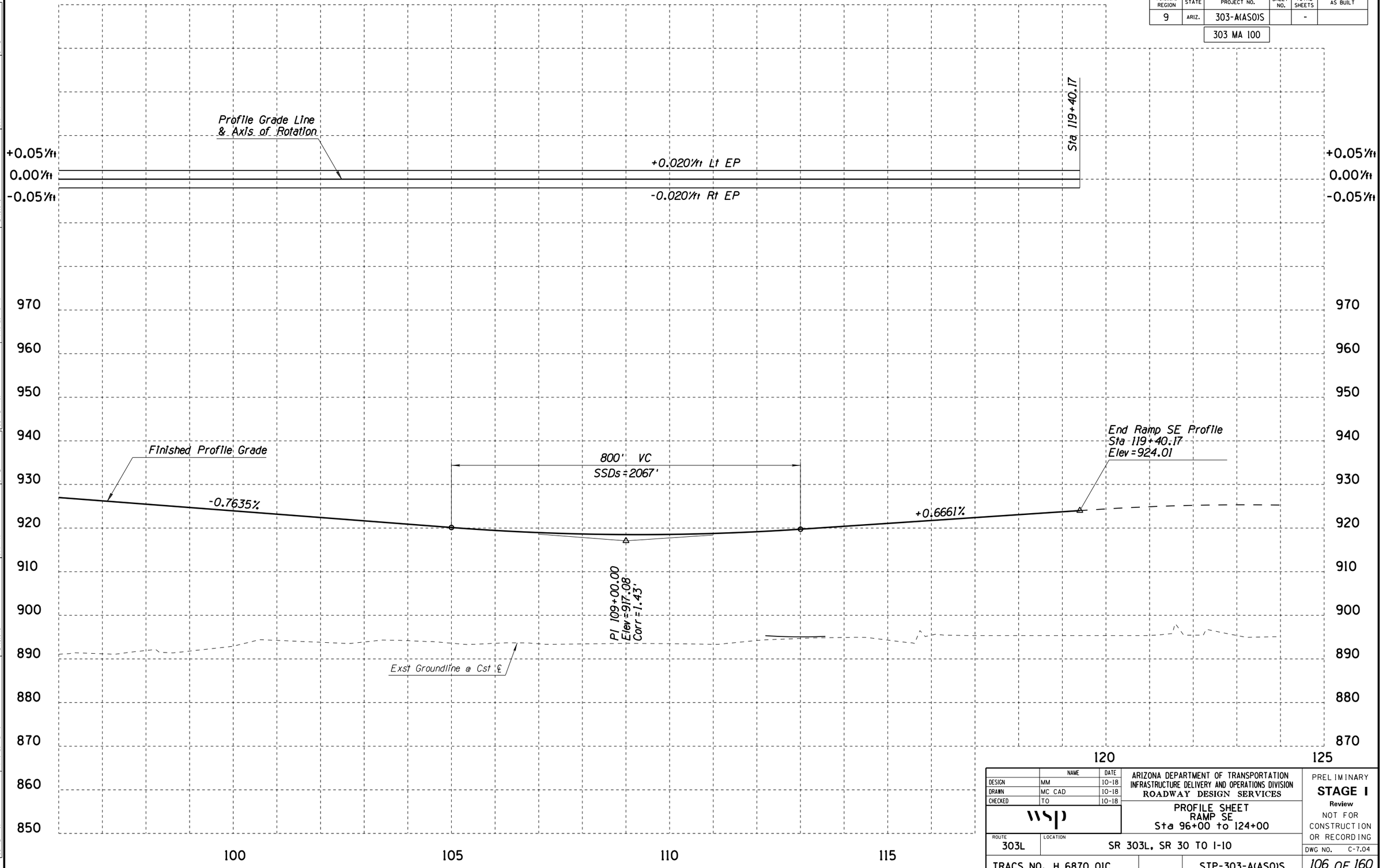
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 105 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-SE_PR03.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP SE
Sta 96+00 to 124+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-7.04

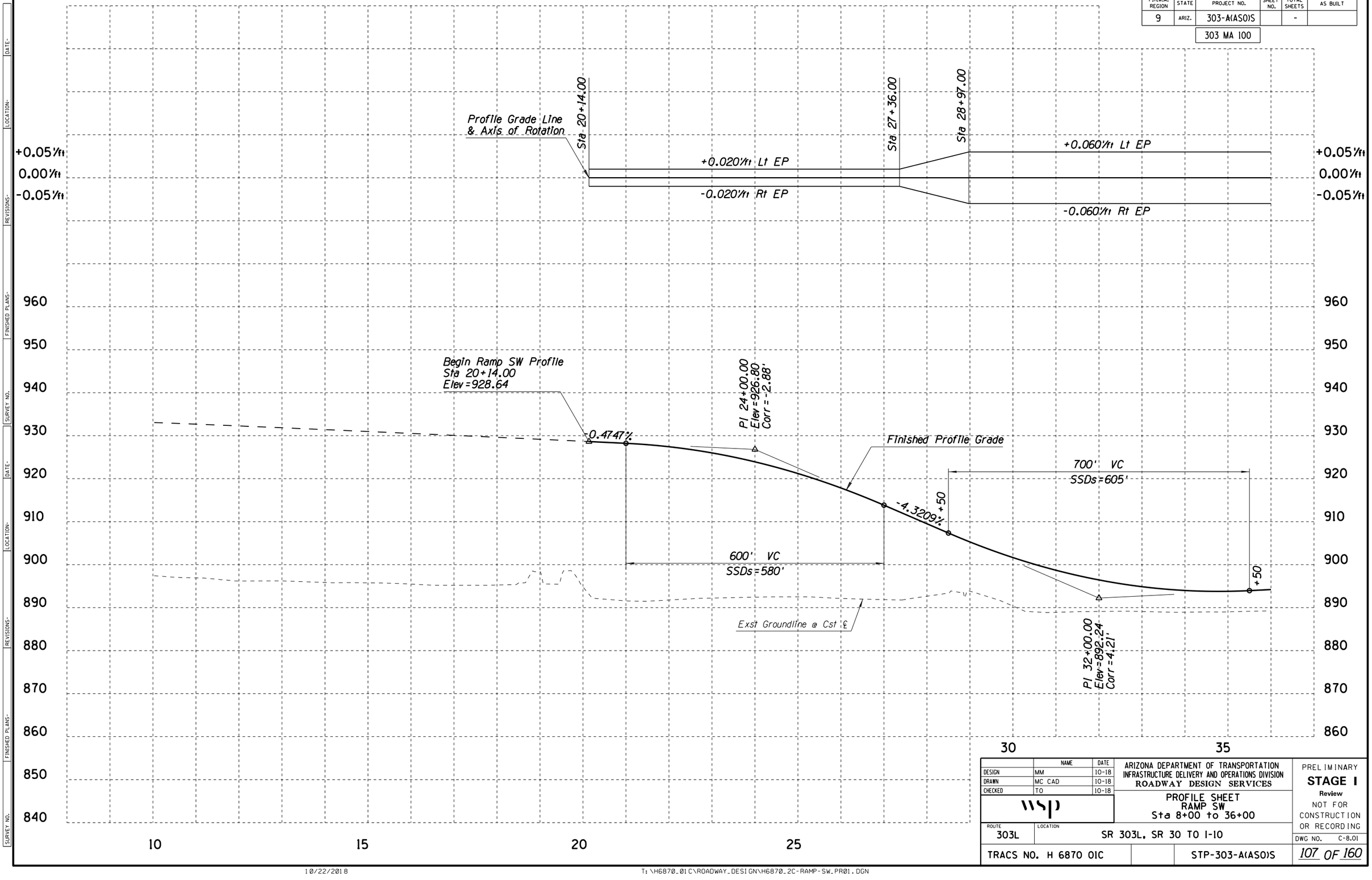
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 106 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-SE_PR04.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP SW
Sta 8+00 to 36+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-8.01

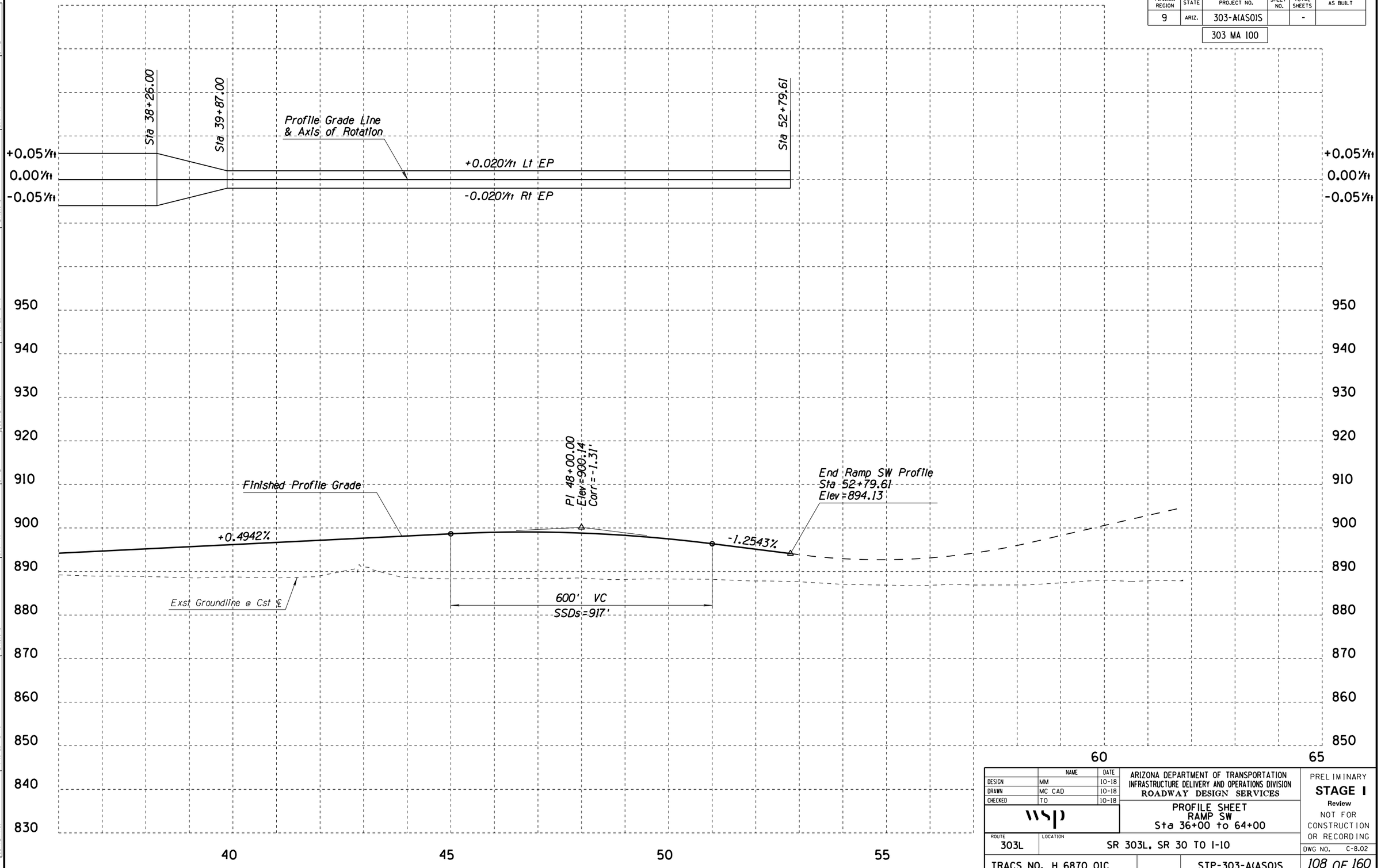
TRACS NO. H 6870 01C | STP-303-A(ASO)S | 107 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-SW_PR01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP SW
Sta 36+00 to 64+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-8.02

10/22/2018

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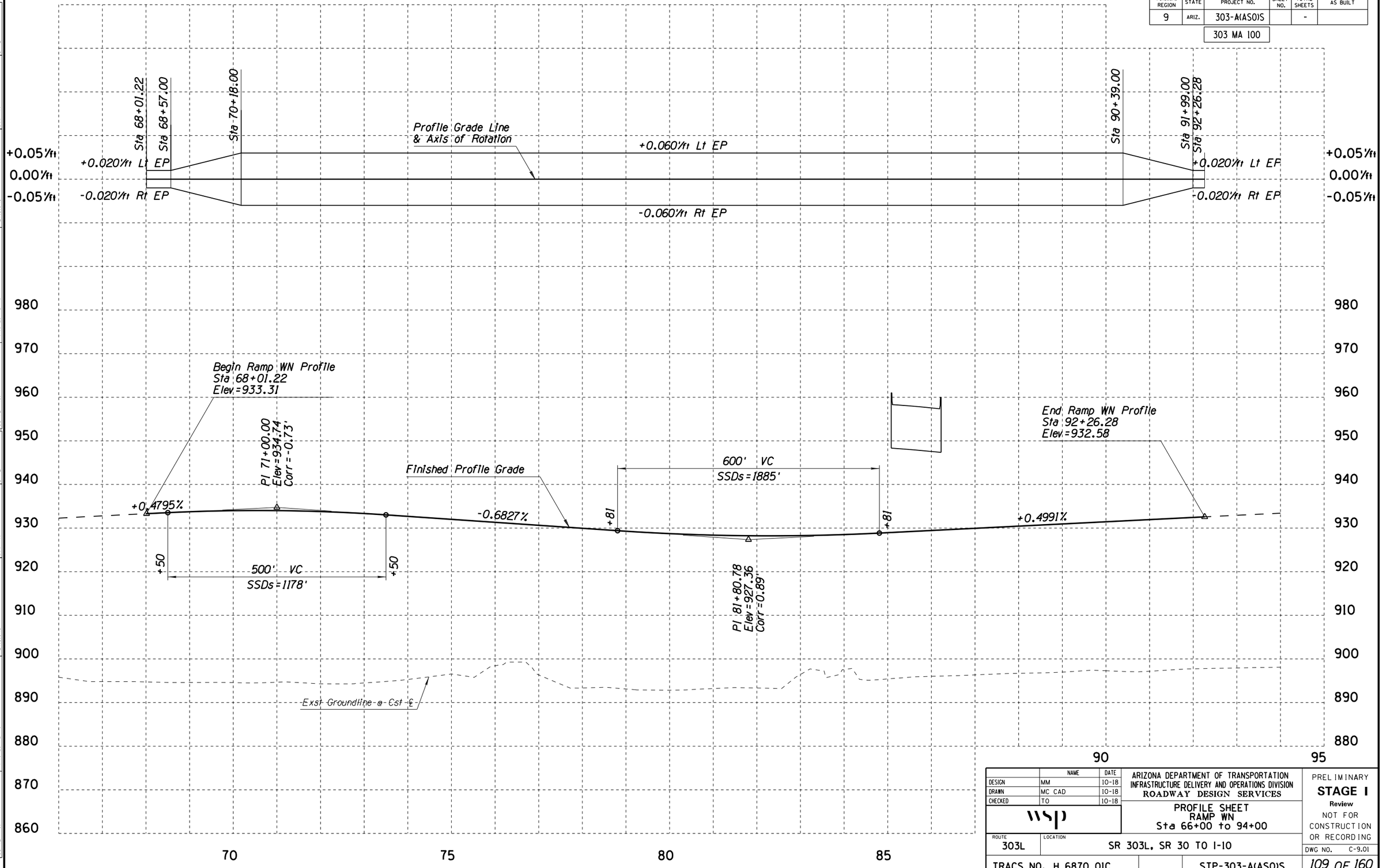
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP WN
Sta 66+00 to 94+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-9.01

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 109 OF 160

10/22/2018

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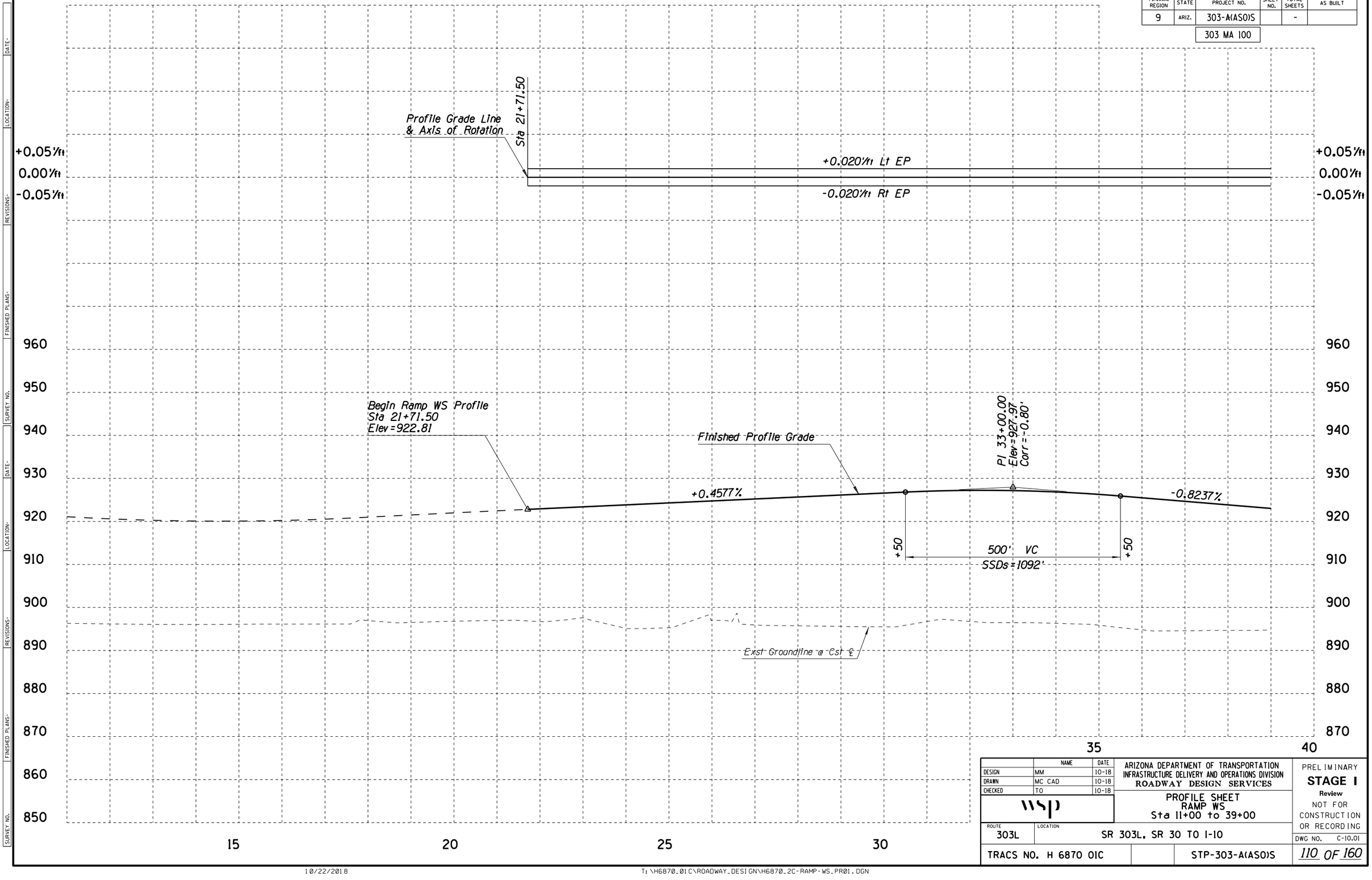
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | DATE- | LOCATION- | REVISIONS- | FINISHED PLANS-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP WS
Sta 11+00 to 39+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-10.01

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 110 OF 160

10/22/2018

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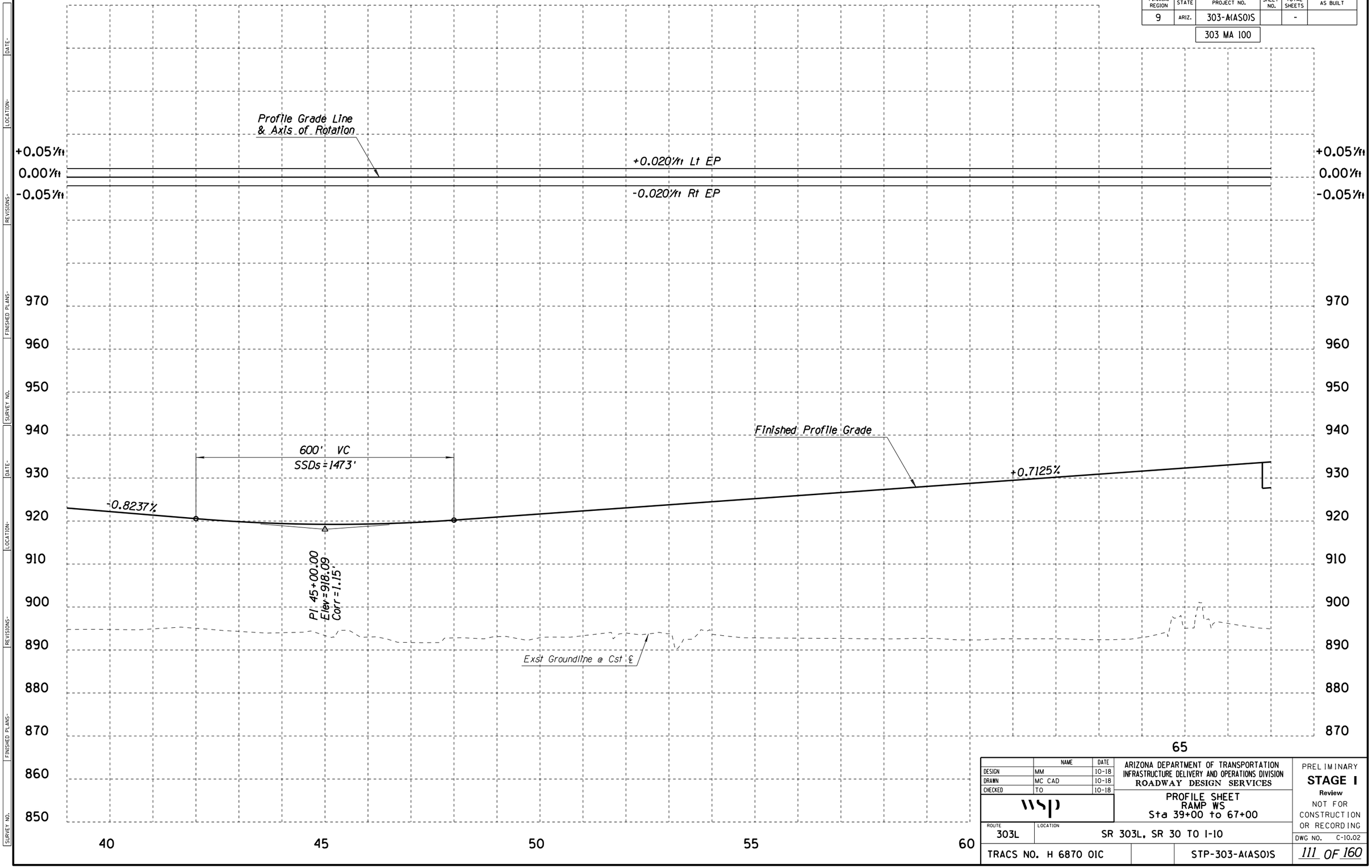
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE-
LOCATION-
REVISIONS-
FINISHED PLANS-
SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP WS
Sta 39+00 to 67+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-10.02

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10/22/2018

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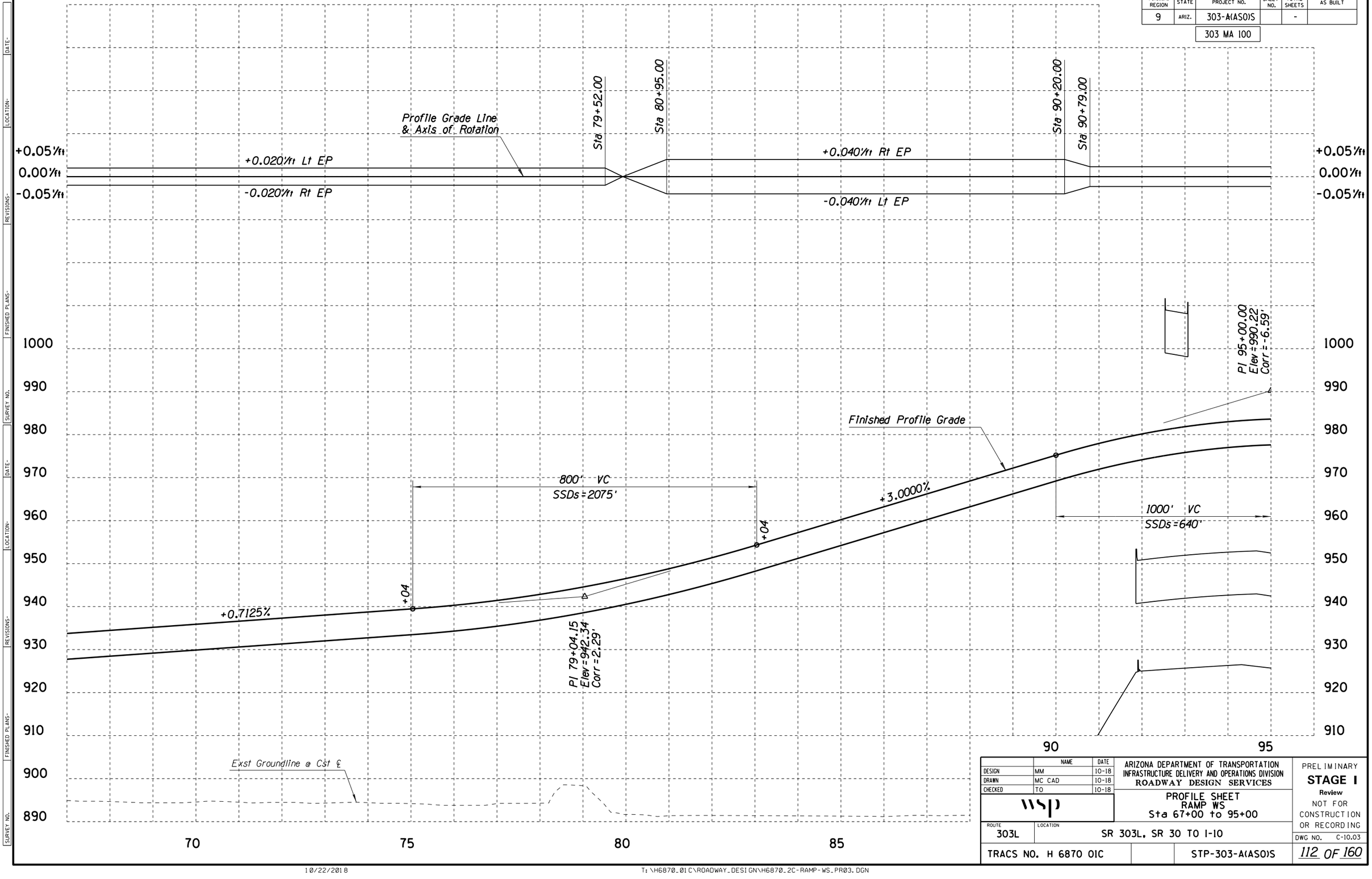
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP WS
Sta 67+00 to 95+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-10.03

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 112 OF 160

10/22/2018

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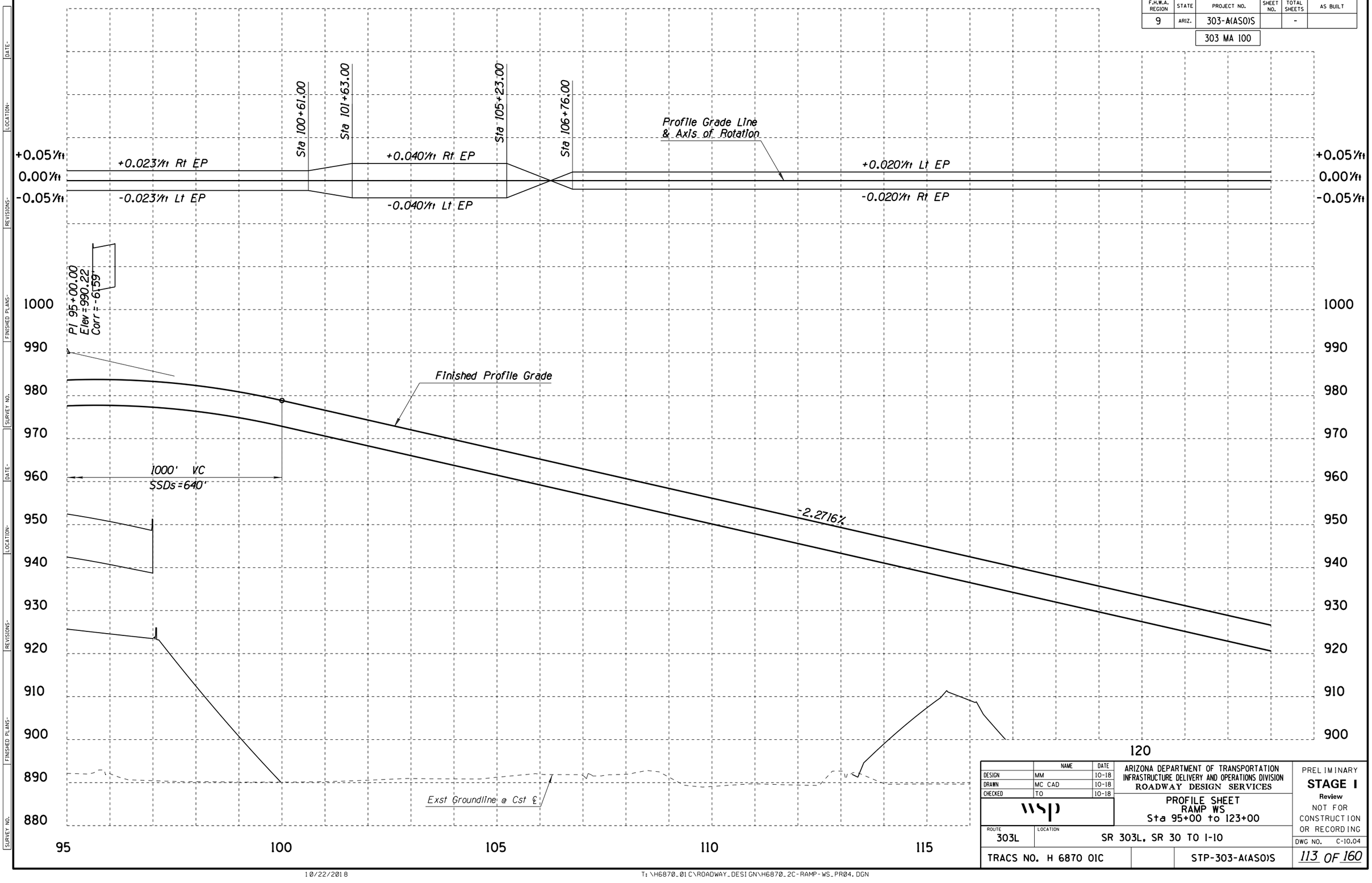
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP WS
Sta 95+00 to 123+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-10.04

TRACS NO.			
H 6870 01C		STP-303-A(ASO)S	113 OF 160

10/22/2018

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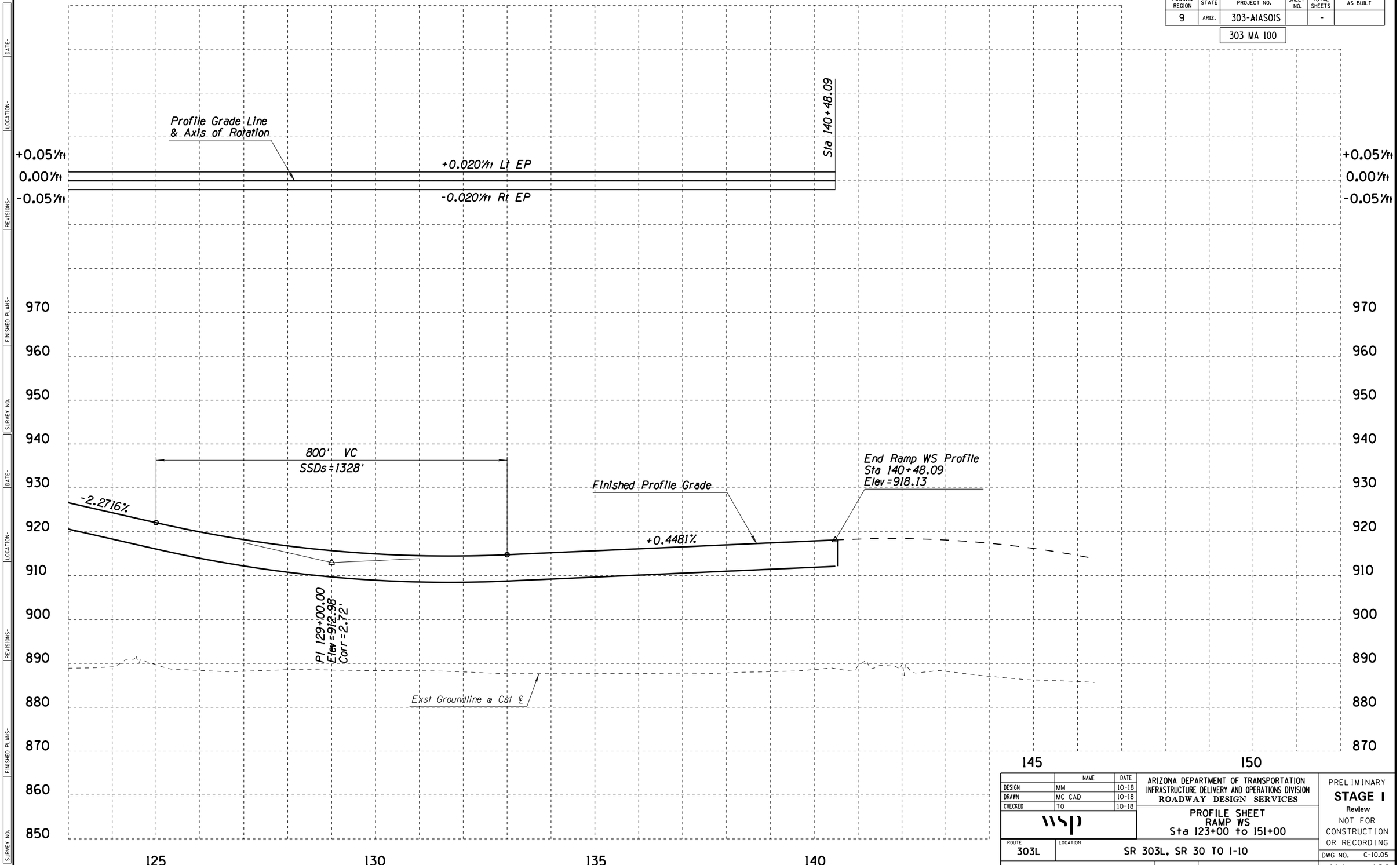
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE-
LOCATION-
REVISIONS-
FINISHED PLANS-
SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
RAMP WS
Sta 123+00 to 151+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

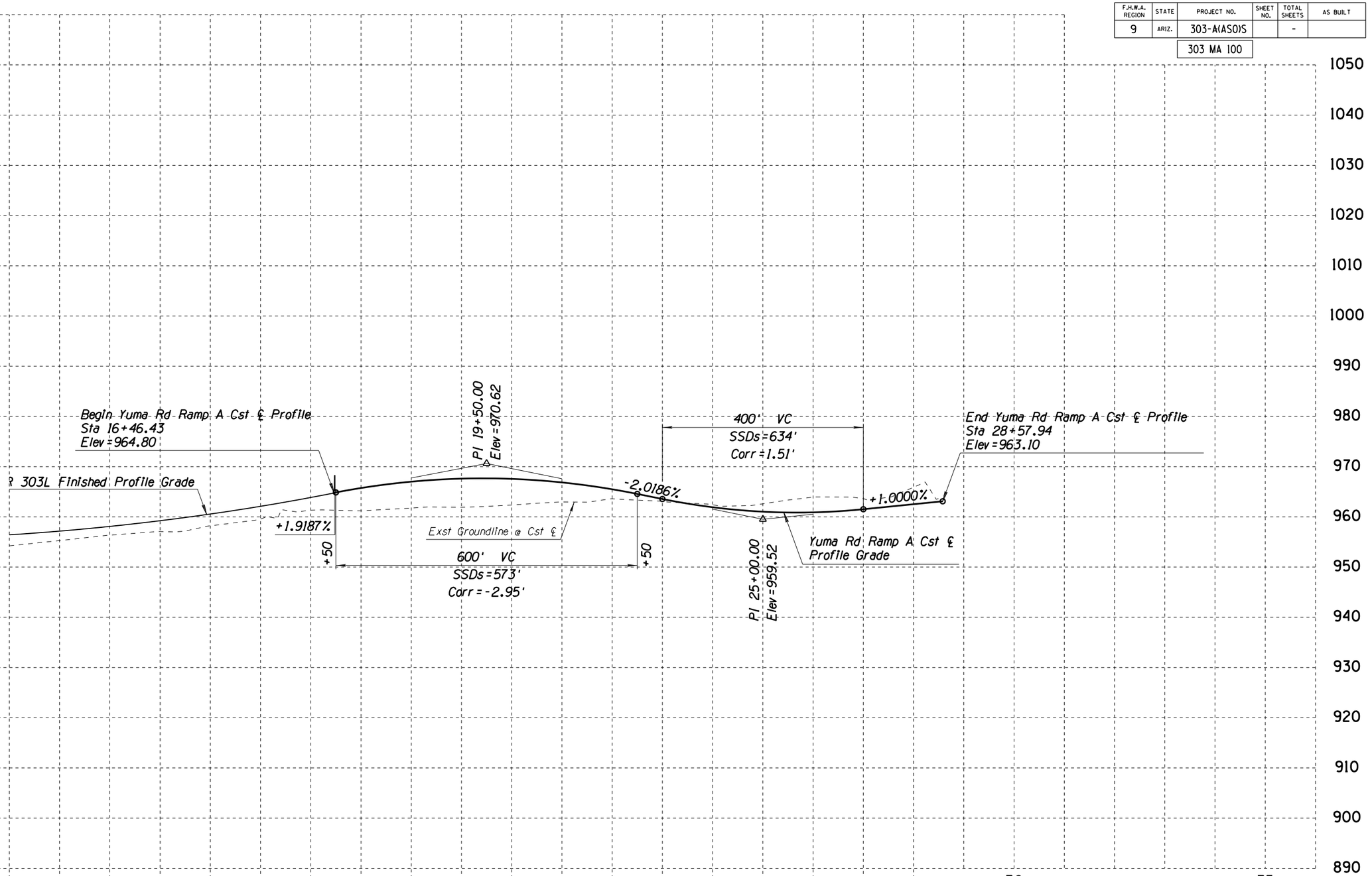
DWG NO. C-10.05

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_2C-RAMP-WS_PR05.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
YUMA RD RAMP A
STA 16+46.43 to 28+57.94

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.01

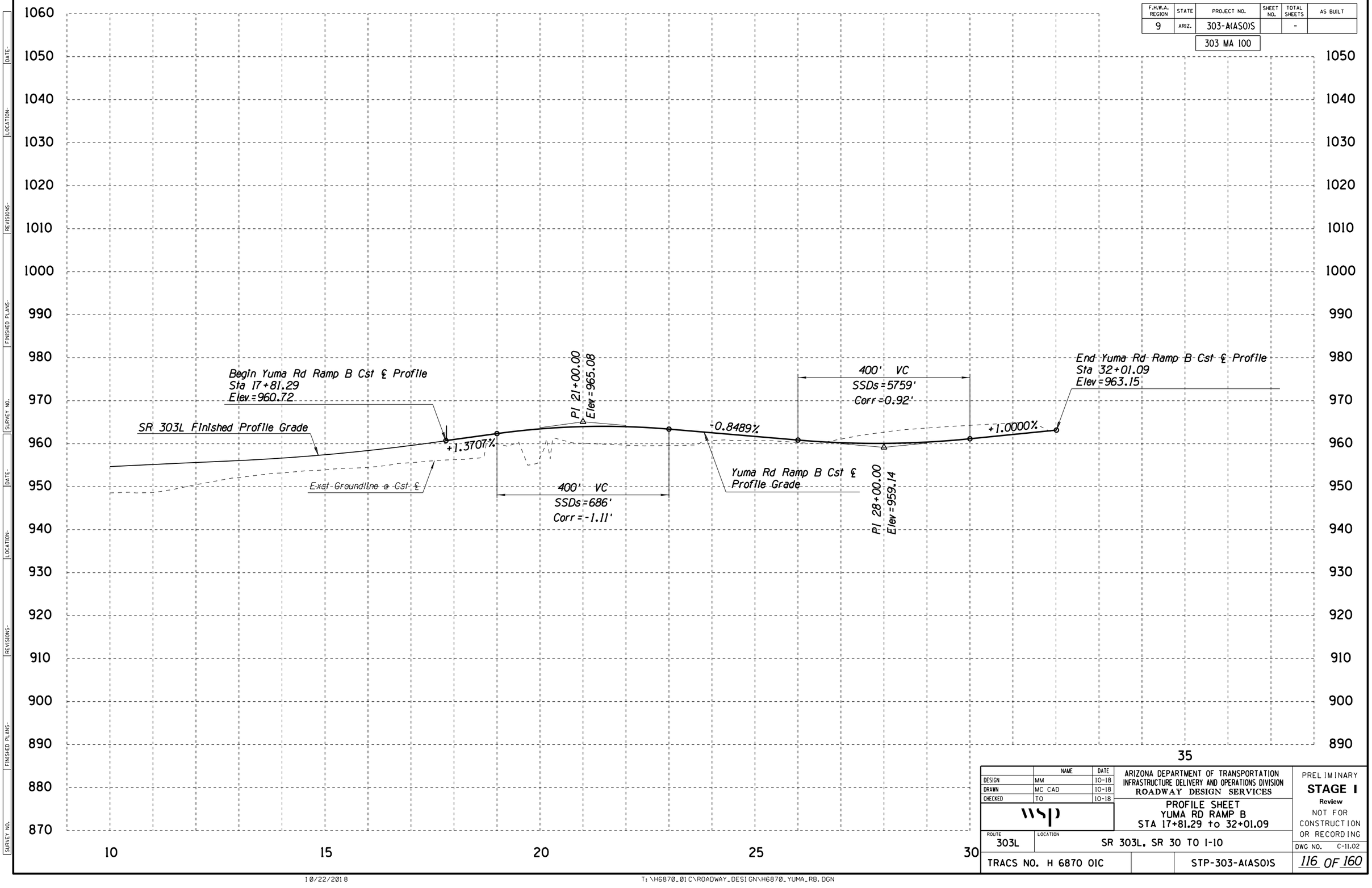
TRACS NO.			
H 6870 01C		STP-303-A(ASO)S	115 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_YUMA_RA.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
YUMA RD RAMP B
STA 17+81.29 to 32+01.09

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.02

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 116 OF 160

10/22/2018

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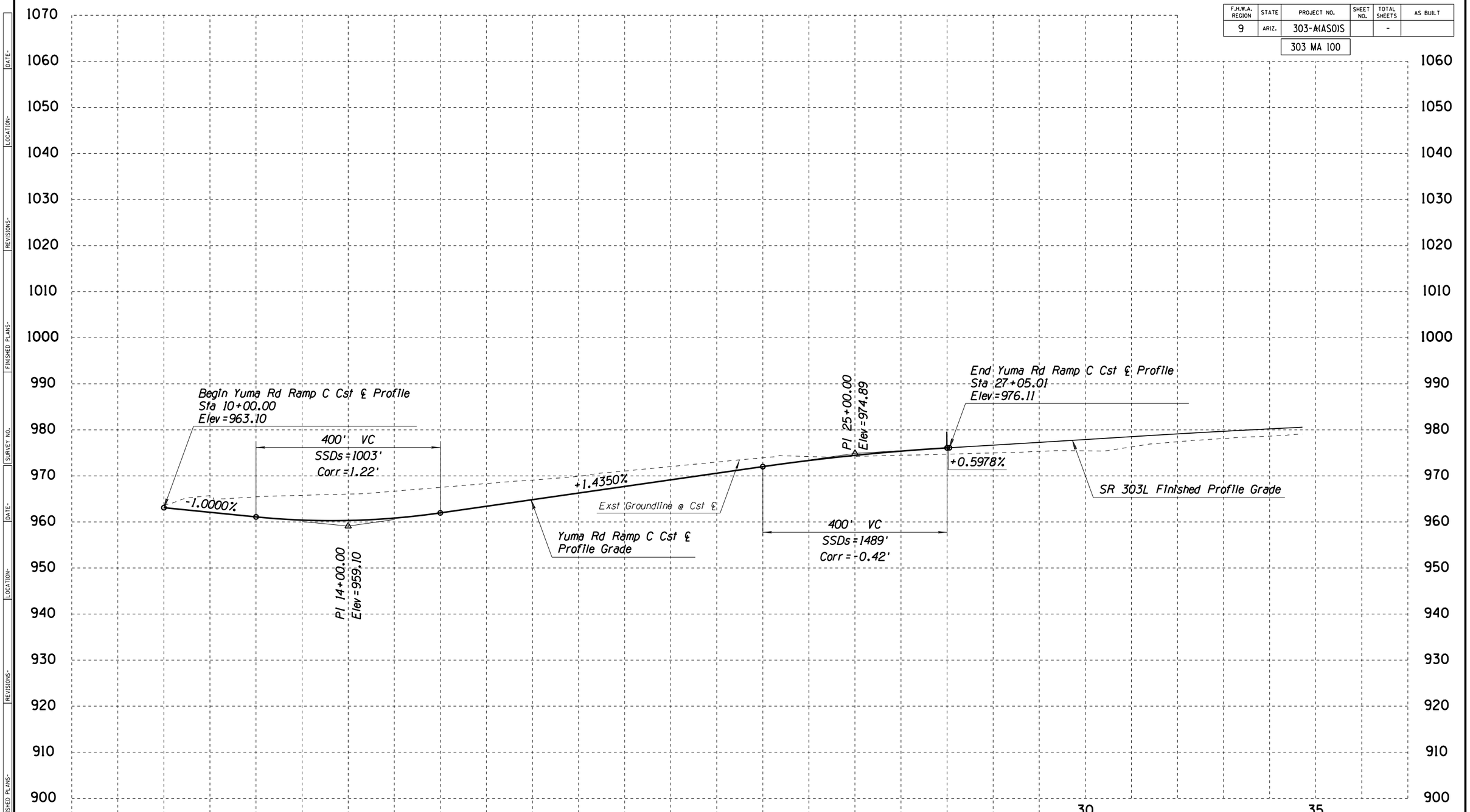
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
YUMA RD RAMP C
STA 10+00.00 to 27+05.01

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.03

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 117 OF 160

10/22/2018

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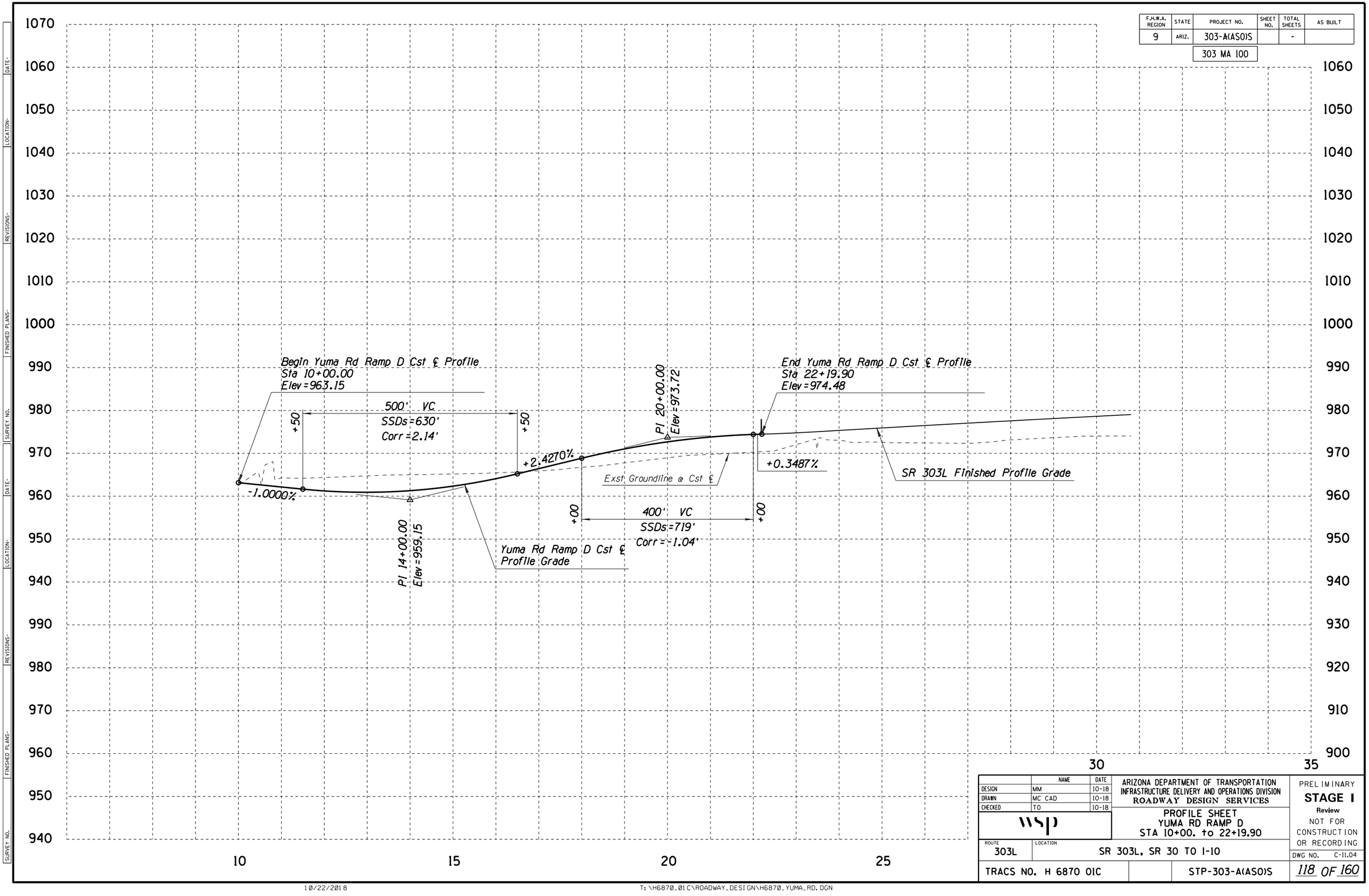
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
YUMA RD RAMP D
STA 10+00. to 22+19.90

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.04

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 118 OF 160

10/22/2018

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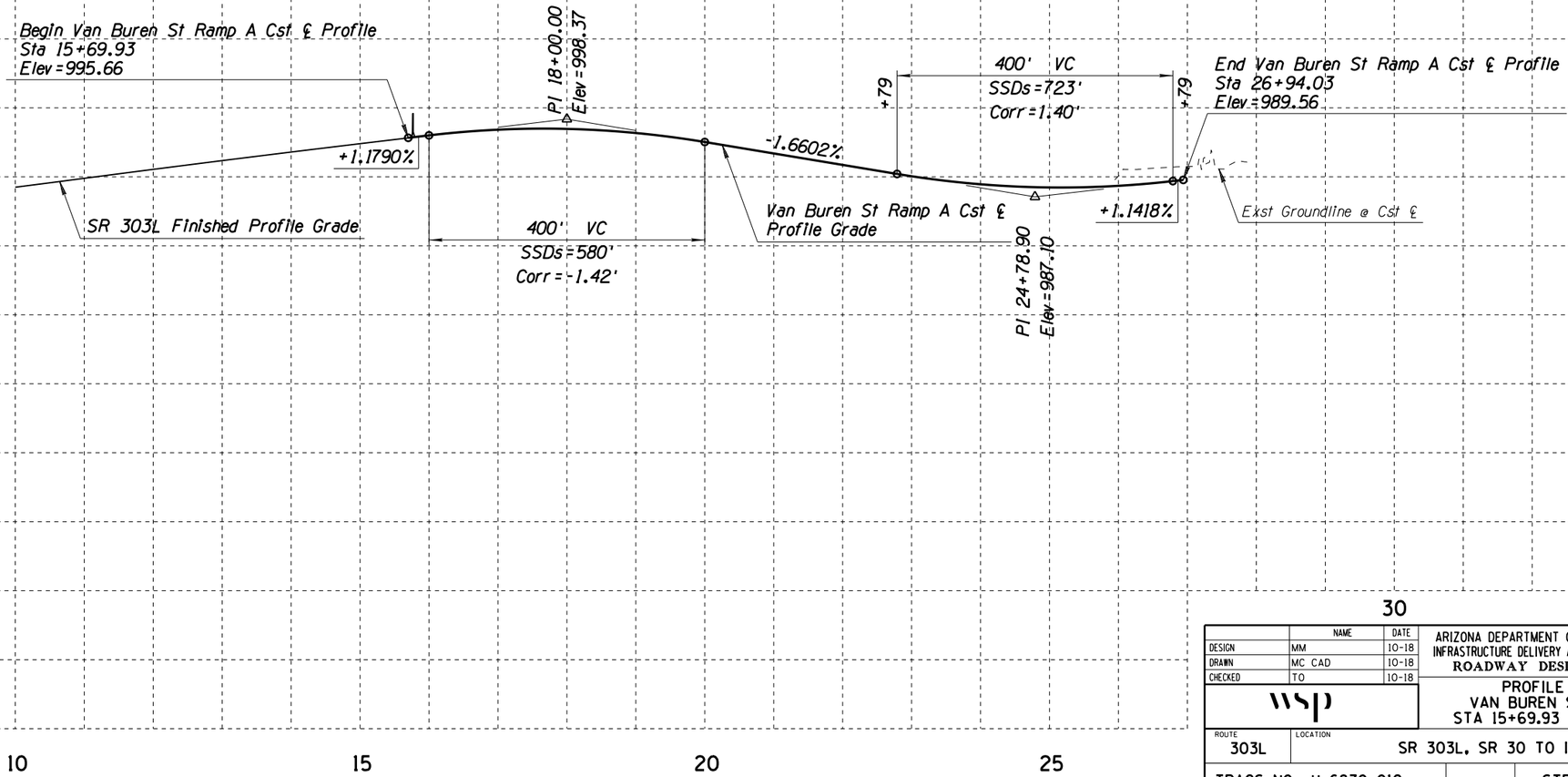
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
VAN BUREN ST RAMP A
STA 15+69.93 to 26+94.03

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.05

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 119 OF 160

10/22/2018

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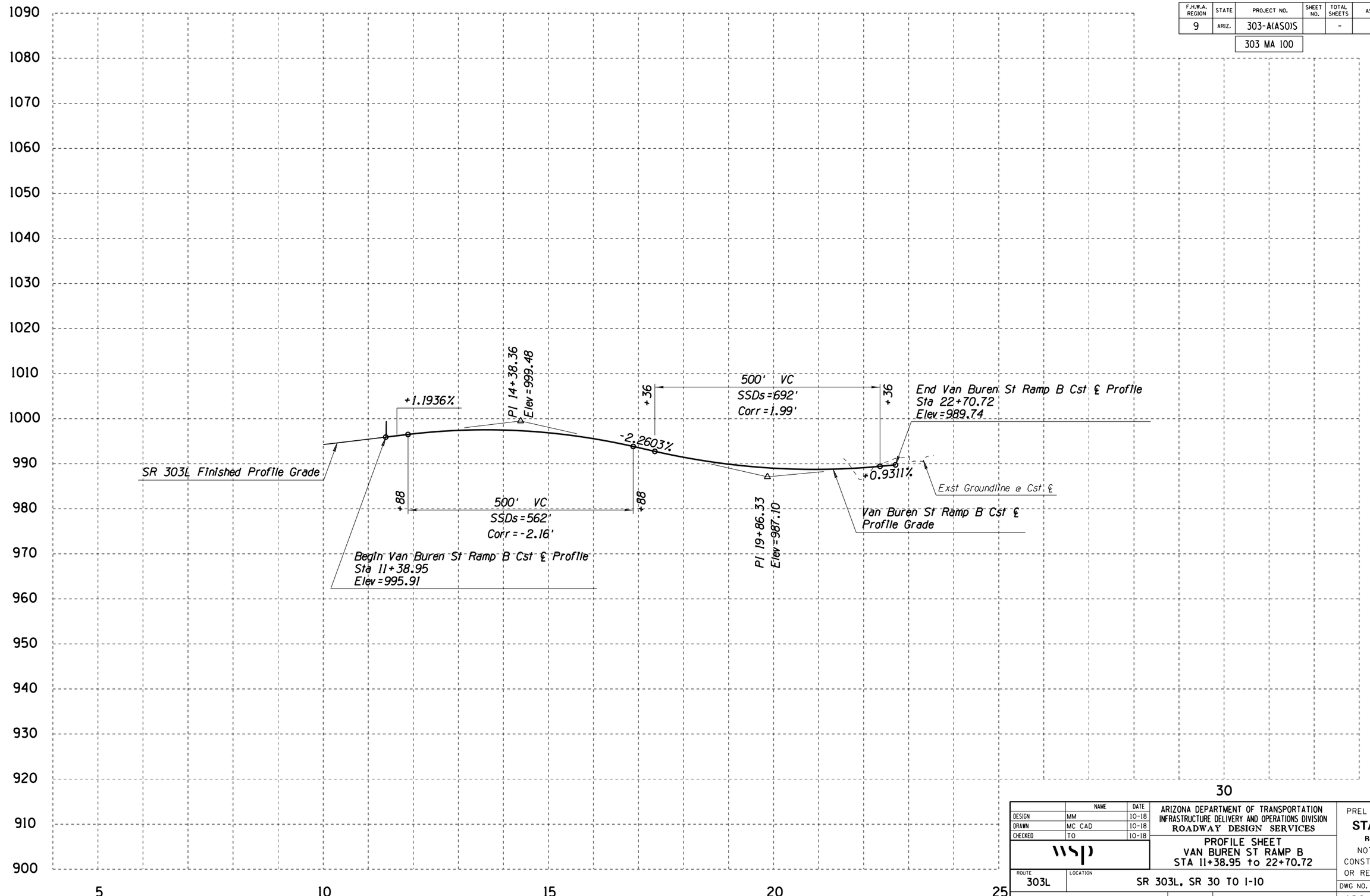
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | LOCATION- | REVISIONS- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
VAN BUREN ST RAMP B
STA 11+38.95 to 22+70.72

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.06

TRACS NO.			
H 6870 01C		STP-303-A(ASO)S	120 OF 160

10/22/2018

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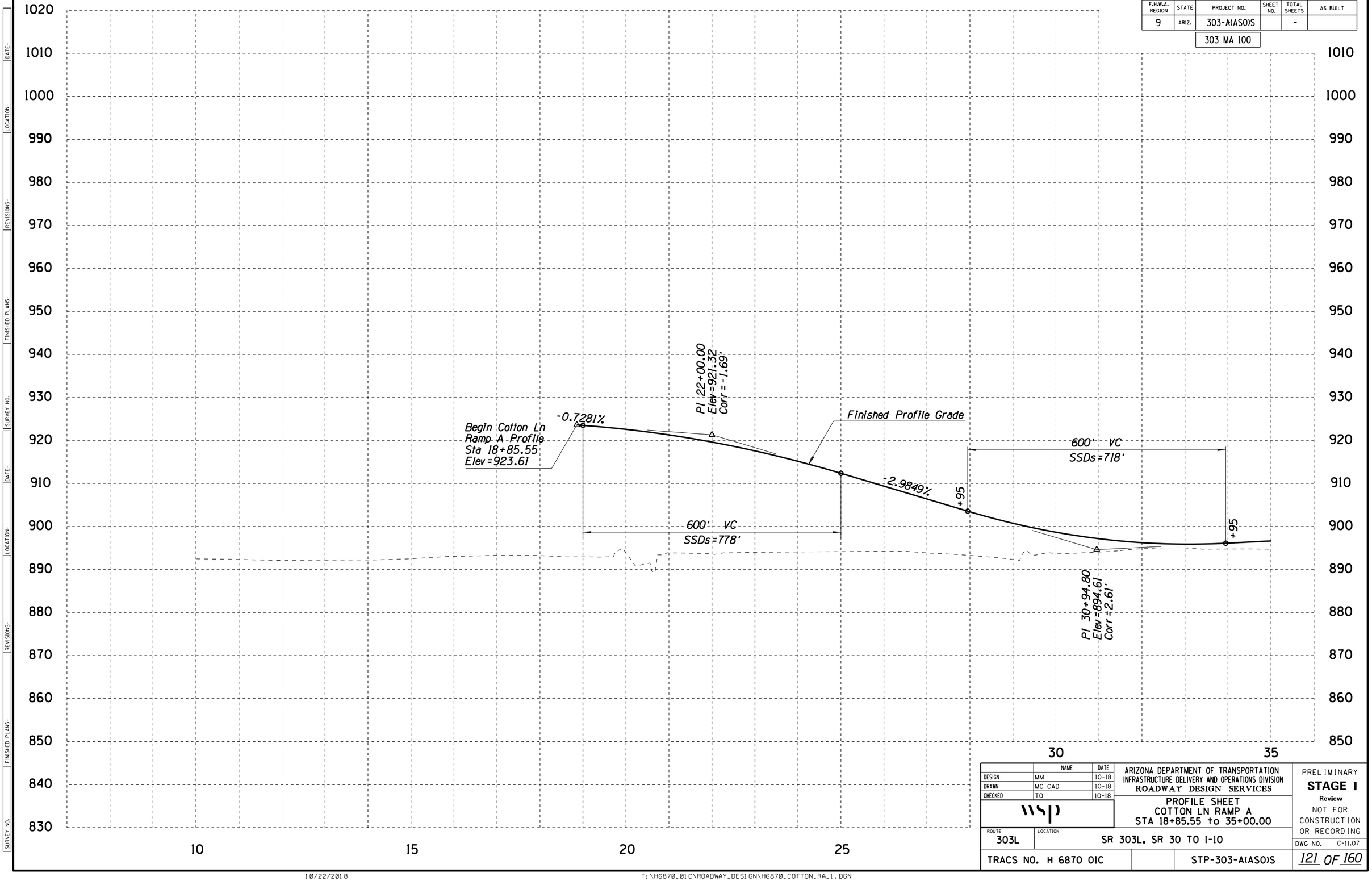
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
COTTON LN RAMP A
STA 18+85.55 to 35+00.00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.07

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 121 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

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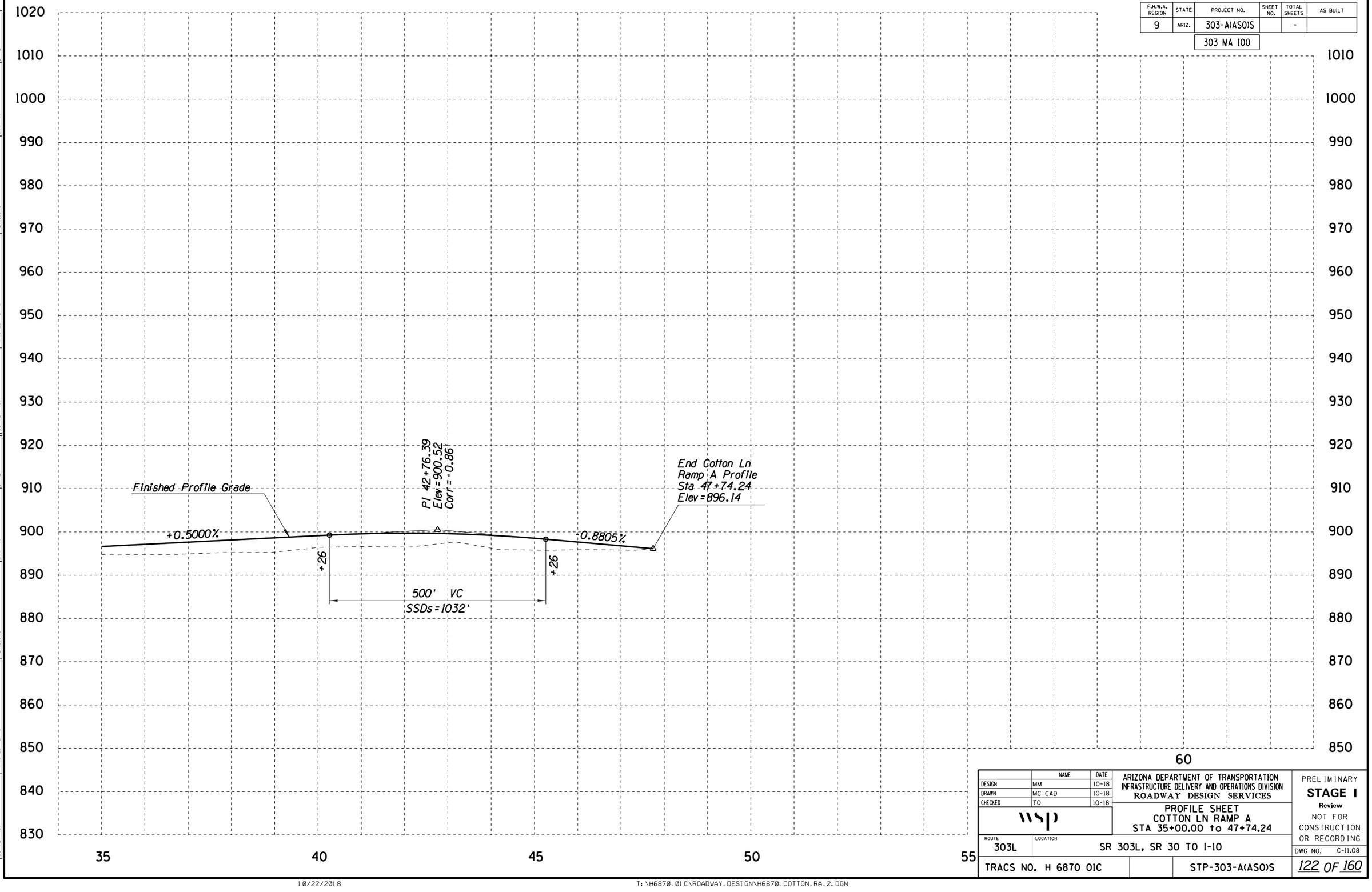
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
COTTON LN RAMP A
STA 35+00.00 to 47+74.24

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.08

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 122 OF 160

10/22/2018

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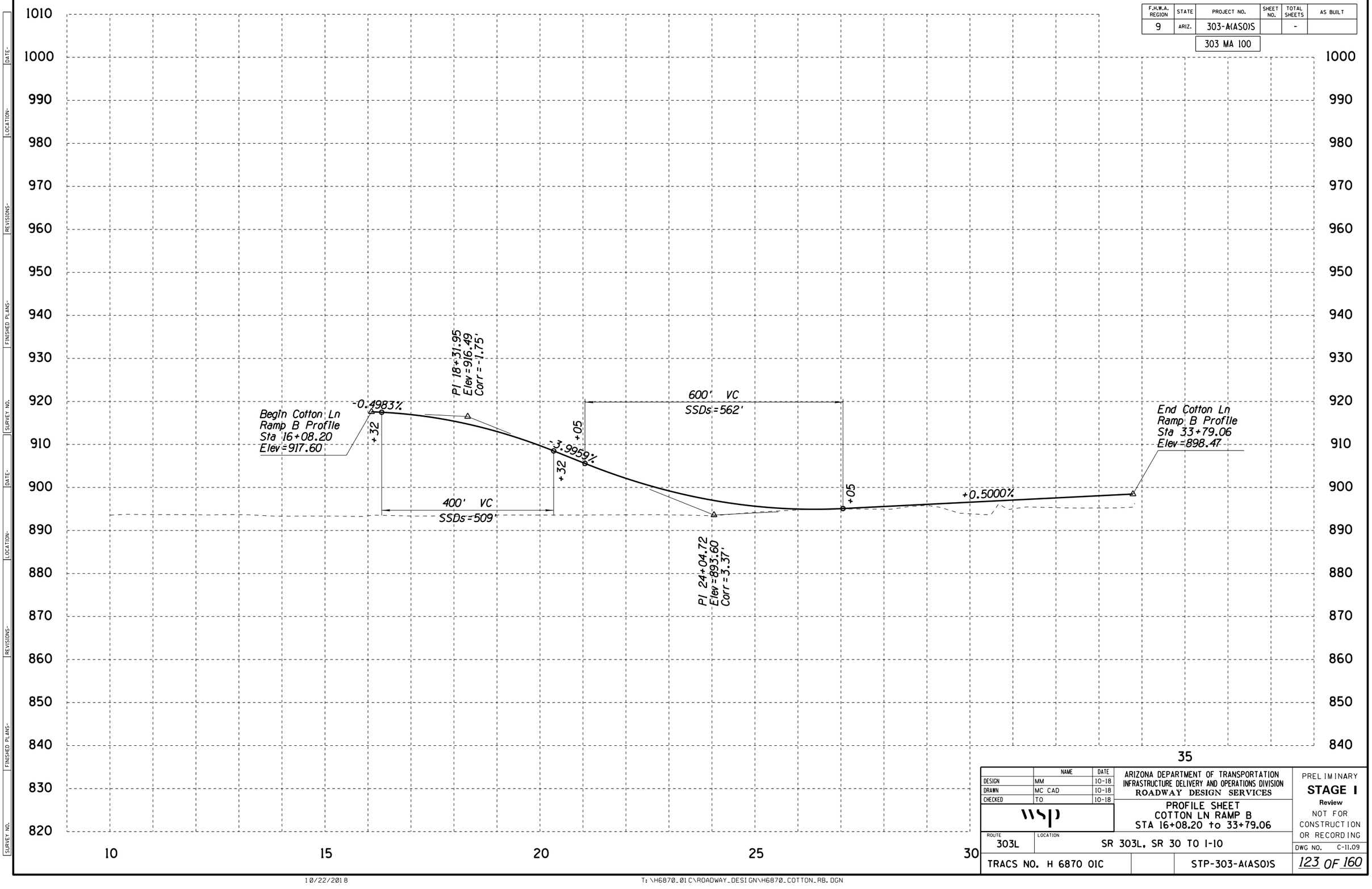
DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
COTTON LN RAMP B
STA 16+08.20 to 33+79.06

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

DWG NO. C-11.09

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 123 OF 160

10/22/2018

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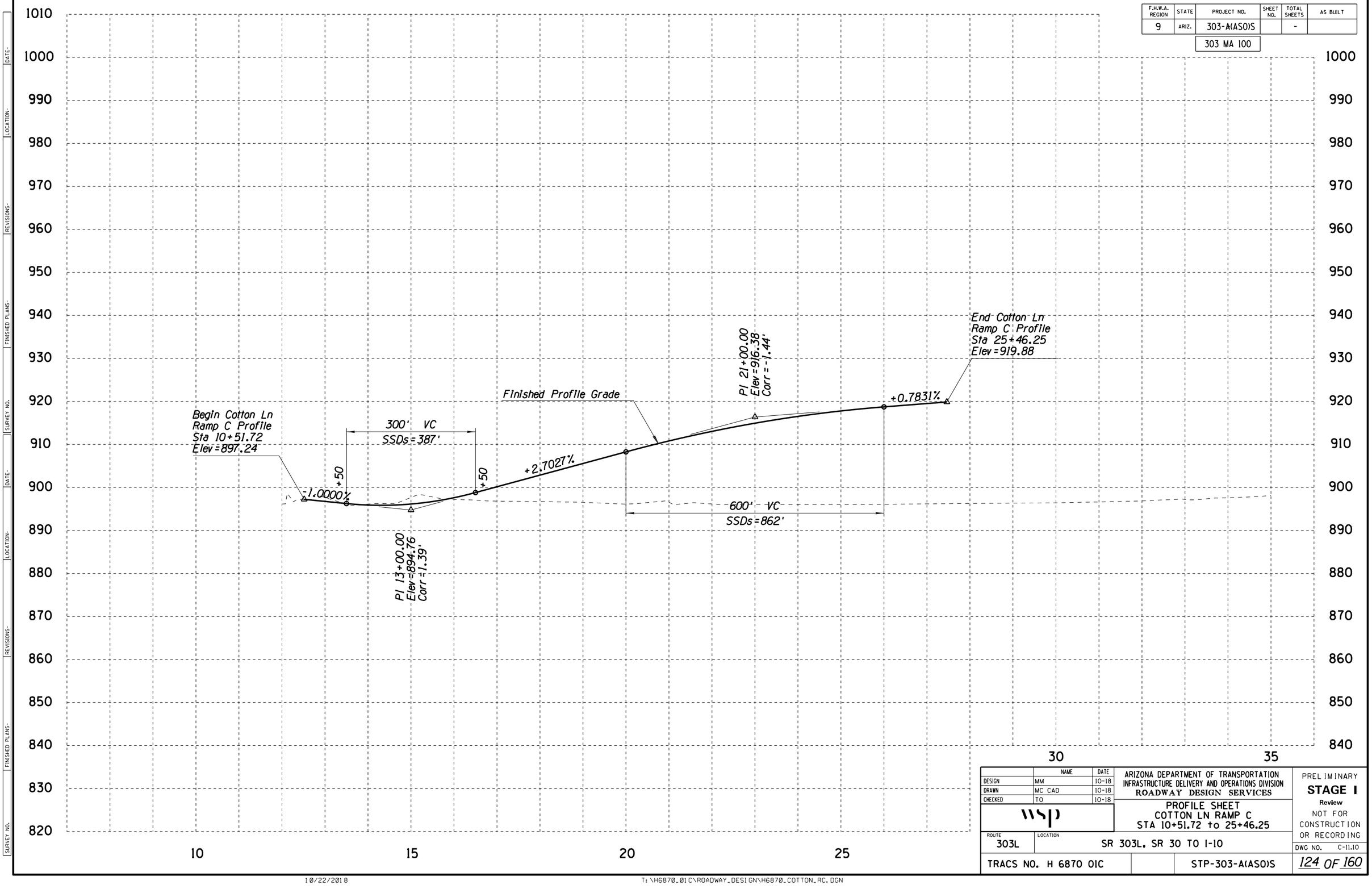
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
COTTON LN RAMP C
STA 10+51.72 to 25+46.25

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.10

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 124 OF 160

10/22/2018

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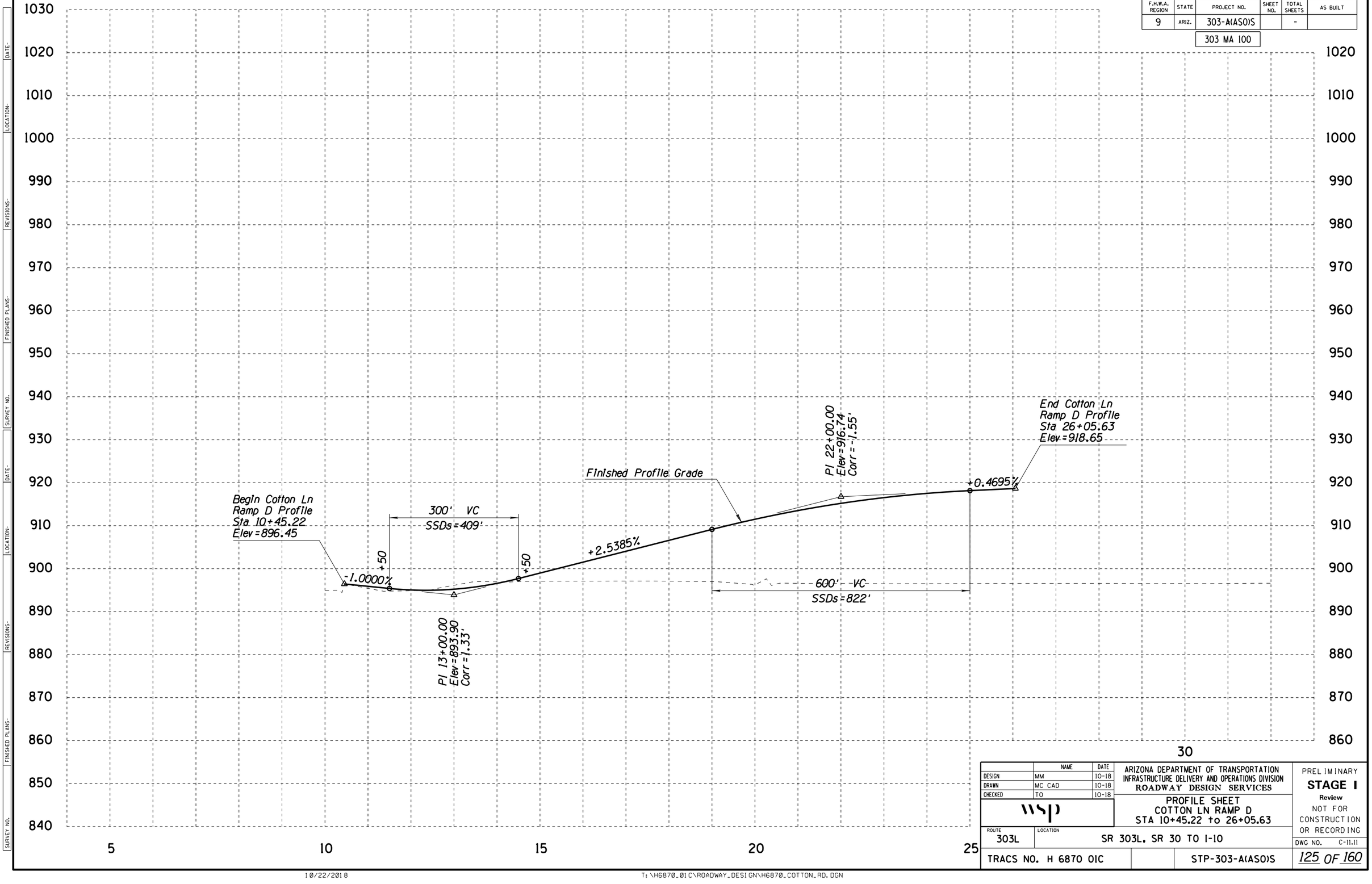
DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
COTTON LN RAMP D
STA 10+45.22 to 26+05.63

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.11

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 125 OF 160

10/22/2018

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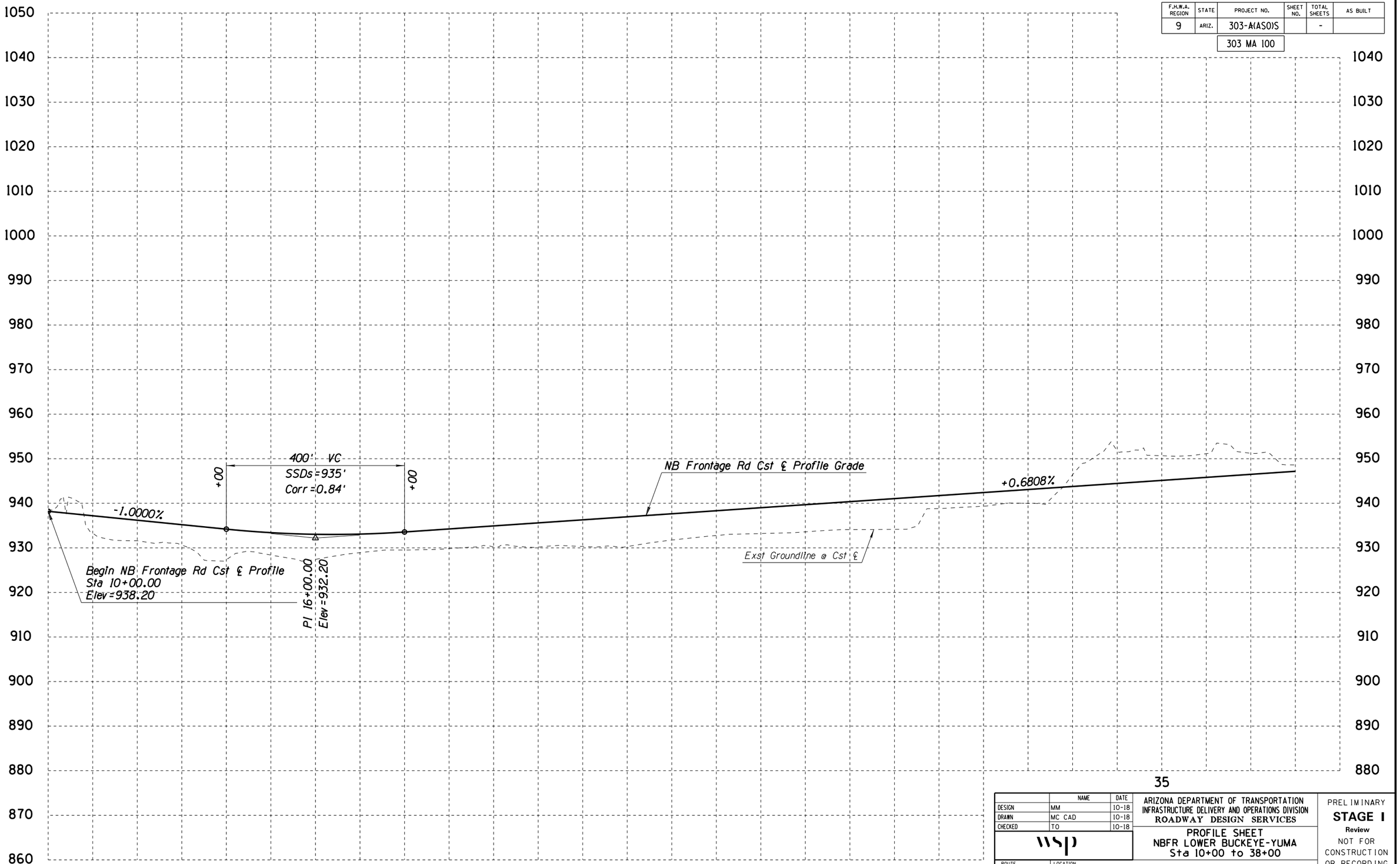
DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
NBFR LOWER BUCKEYE-YUMA
Sta 10+00 to 38+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.12

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 126 OF 160

10/22/2018

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SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

NB Frontage Rd Cst ℄ Profile Grade

+0.6808%

PI 47+00.00
Elev=953.31

+50

300' VC
SSDs=516'
Corr=-1.10'

+50

+3.2583%

+00

200' VC
SSDs=553'
Corr=0.64'

+00

PI 50+00.00
Elev=963.08

+0.3117%

End NB Frontage Rd Cst ℄ Profile
Sta 52+17.35
Elev=963.76

Exst Groundline @ Cst ℄

1050 1040 1030 1020 1010 1000 990 980 970 960 950 940 930 920 910 900 890 880 870 860

40 45 50 55 60 65

	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
NBFR LOWER BUCKEYE - YUMA
Sta 38+00 to 66+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-11.13

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10/22/2018

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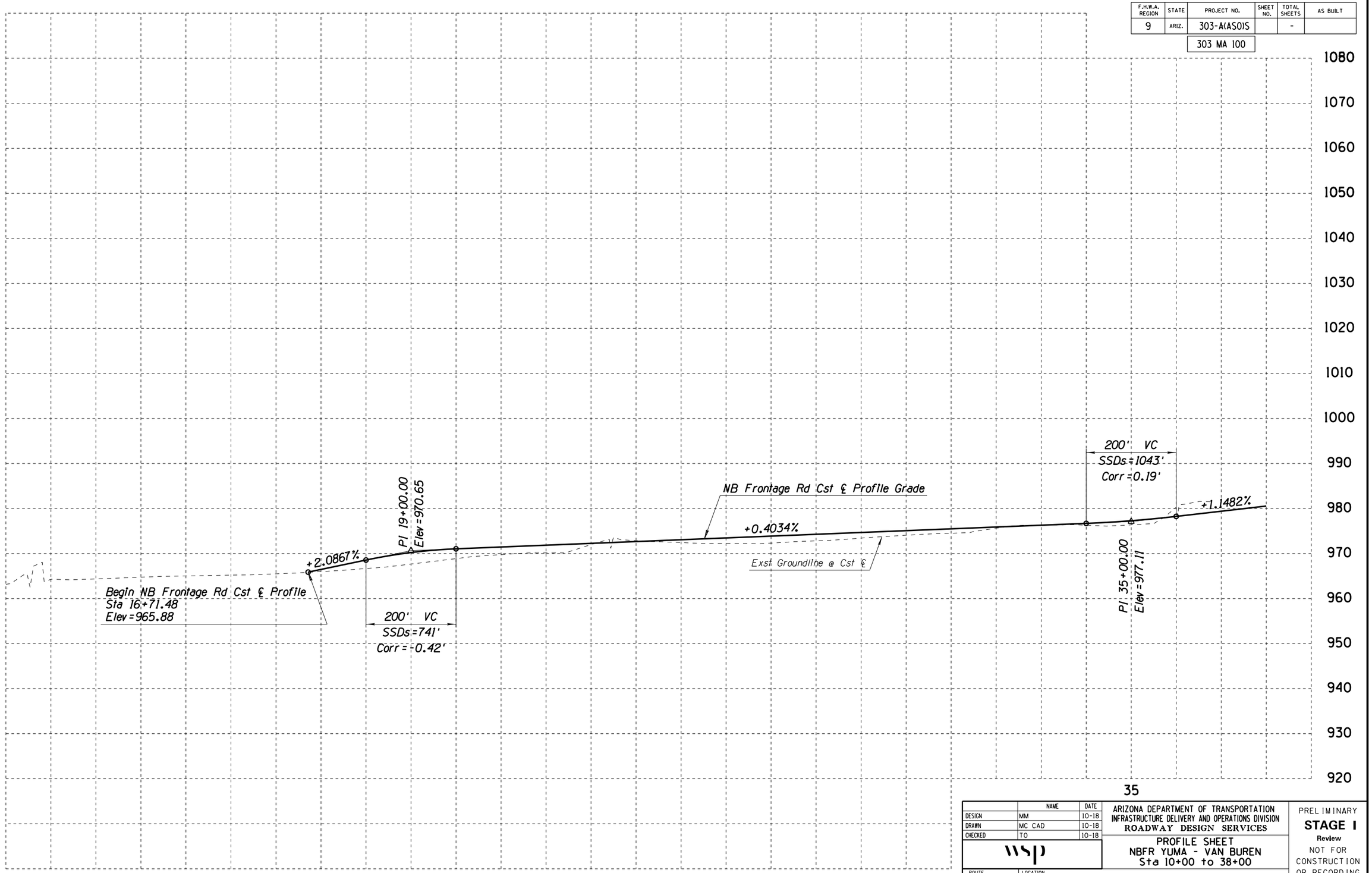
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
NBFR YUMA - VAN BUREN
Sta 10+00 to 38+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.14

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 128 OF 160

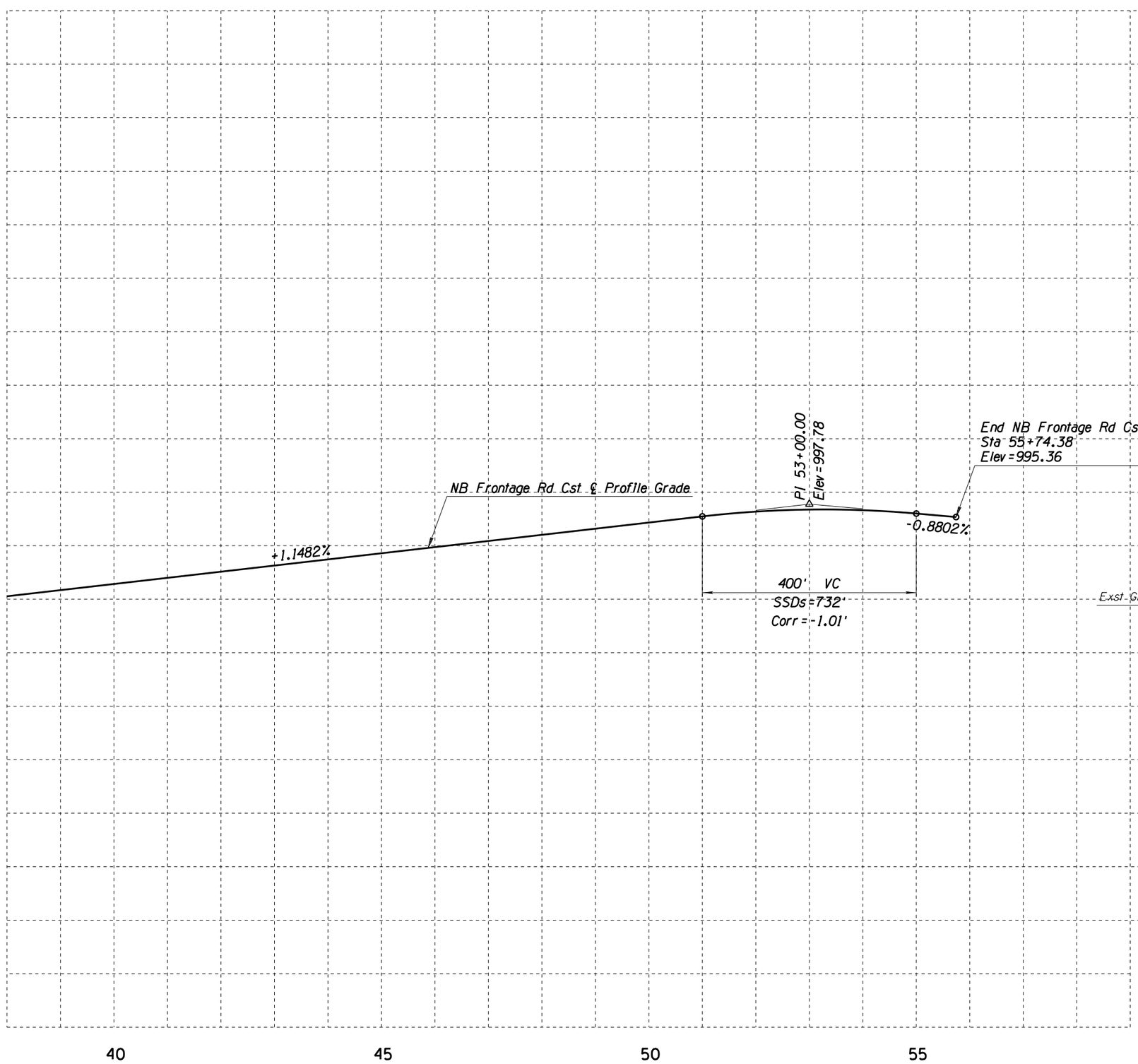
10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_NBFR_3.DGN

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
NBFR YUMA - VAN BUREN
Sta 38+00 to 66+00

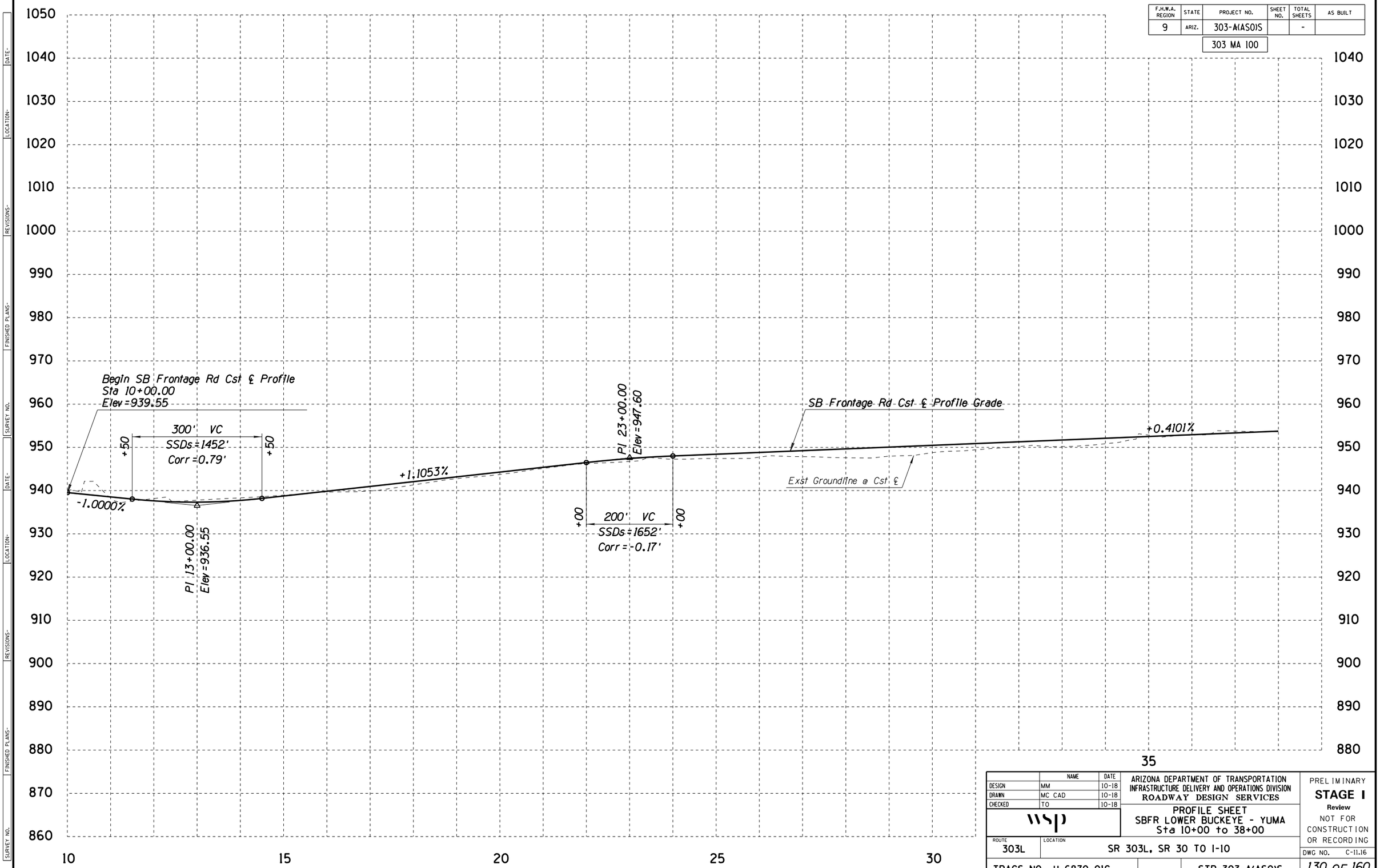
PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10 | DWG NO. C-11.15

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 129 OF 160

10/22/2018 T:\H6870_01C\ROADWAY_DESIGN\H6870_NBFR_4.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SBFR LOWER BUCKEYE - YUMA
Sta 10+00 to 38+00

ROUTE 303L | LOCATION SR 303L, SR 30 TO I-10

TRACS NO. H 6870 01C | STP-303-A(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-11.16

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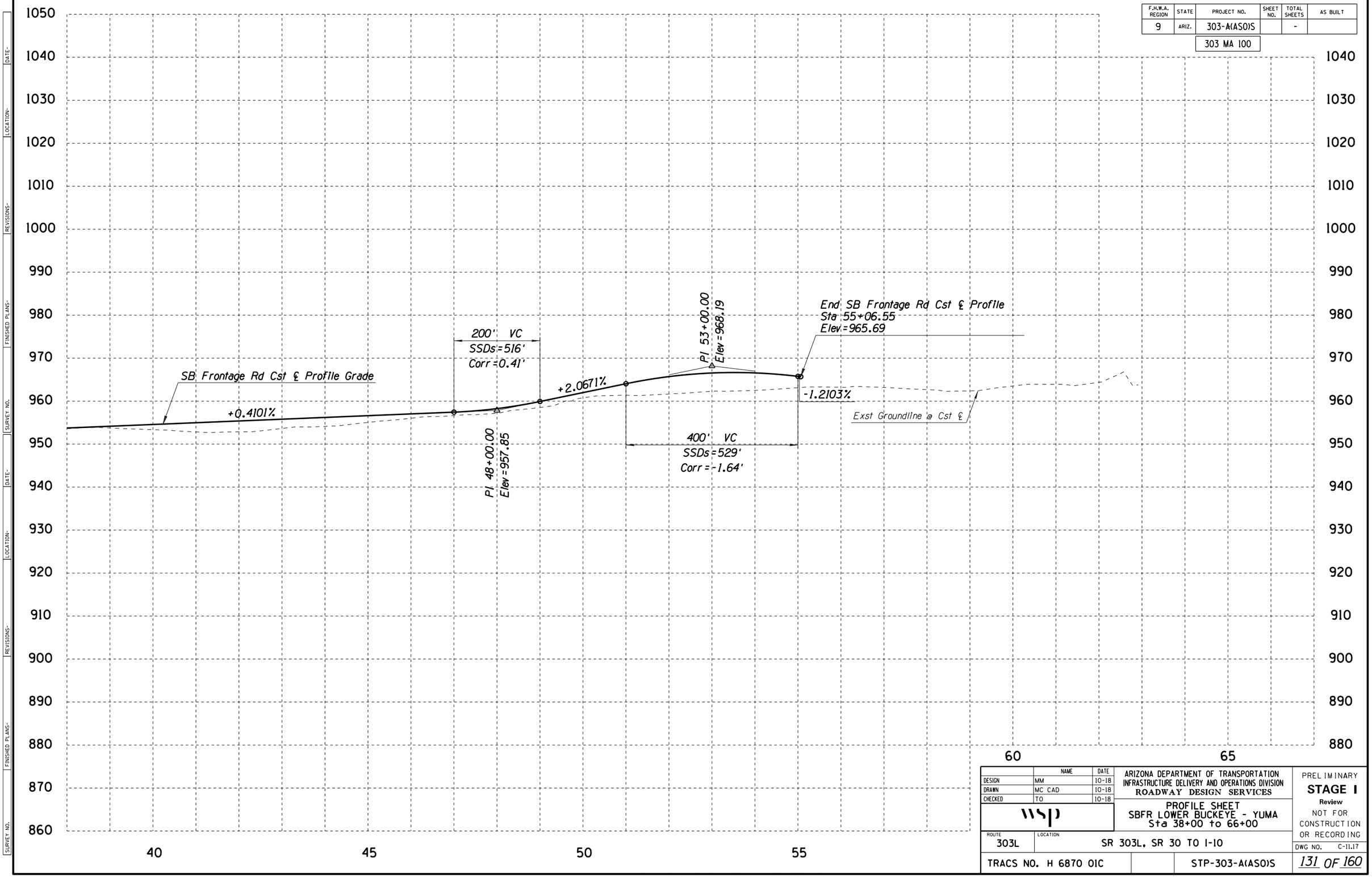
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SBFR_1.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SBFR LOWER BUCKEYE - YUMA
Sta 38+00 to 66+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.17

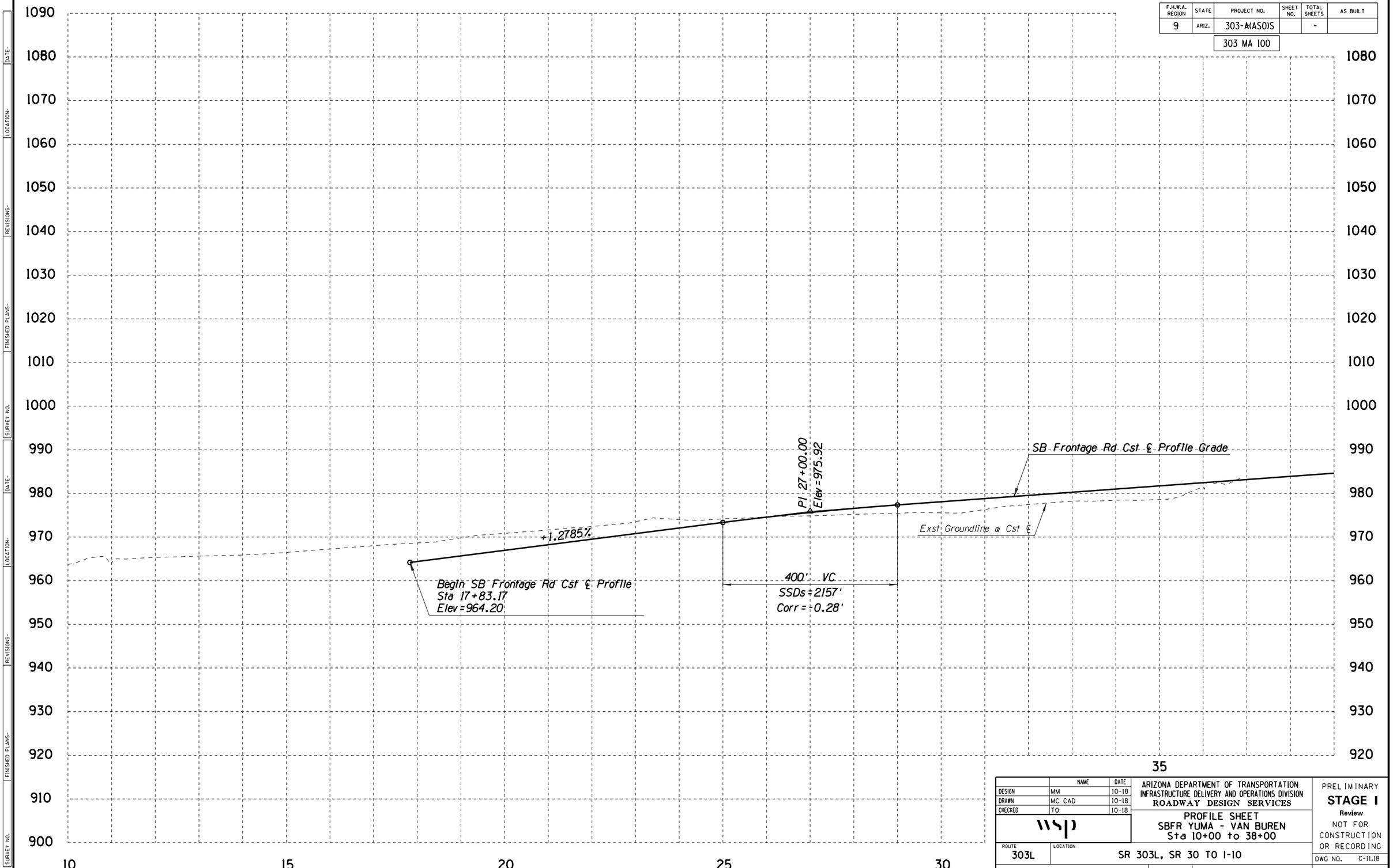
TRACS NO.			
H 6870 01C		STP-303-A(ASO)S	131 OF 160

10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SBFR_2.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SBFR YUMA - VAN BUREN
Sta 10+00 to 38+00

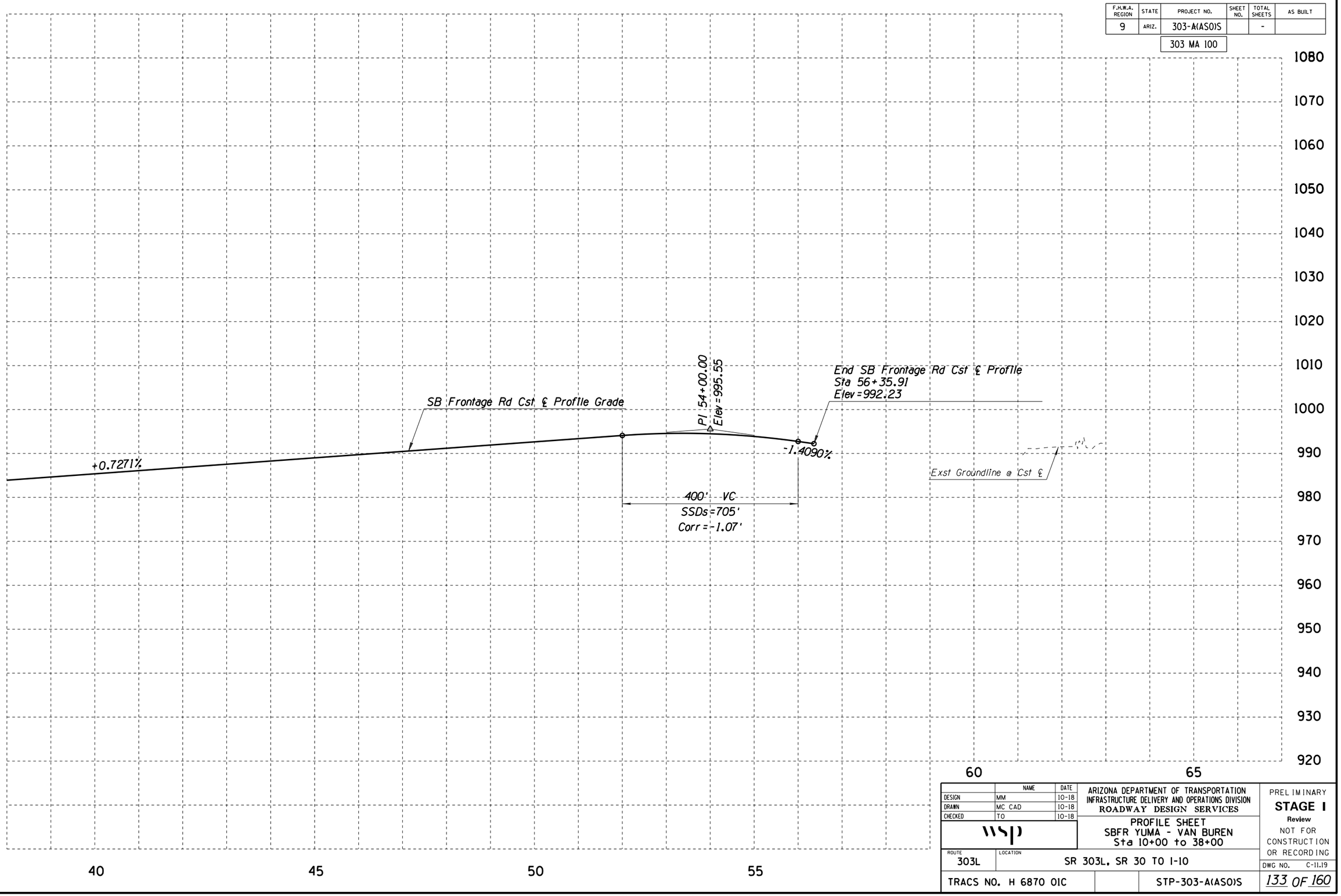
PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR 303L, SR 30 TO I-10	C-11.18

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 132 OF 160

10/22/2018 T:\H6870_01C\ROADWAY_DESIGN\H6870_SBFR_3.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S		-	
		303 MA 100			



	NAME	DATE
DESIGN	MM	10-18
DRAWN	MC CAD	10-18
CHECKED	TO	10-18

WSP

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PROFILE SHEET
SBFR YUMA - VAN BUREN
Sta 10+00 to 38+00

ROUTE	LOCATION
303L	SR 303L, SR 30 TO I-10

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. C-11.19

TRACS NO. H 6870 01C | STP-303-A(ASO)S | 133 OF 160

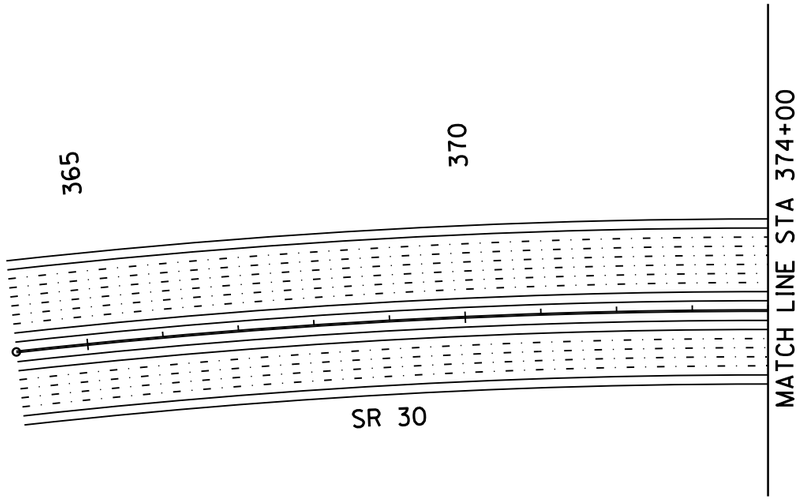
10/22/2018

T:\H6870_01C\ROADWAY_DESIGN\H6870_SBFR_4.DGN

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO. | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			

303 MA 100



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 364+05.32 to 374+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T 1.01

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 134 OF 160

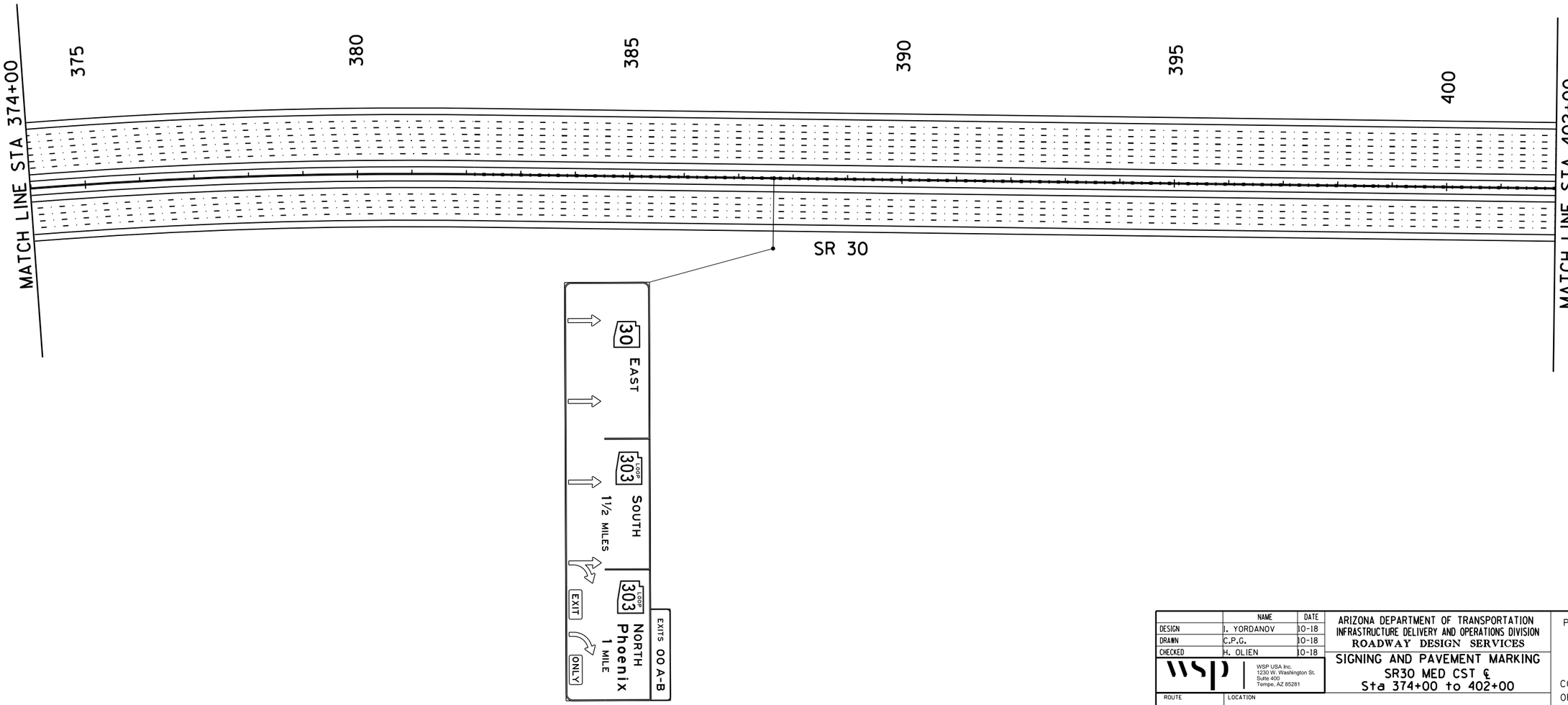
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS01.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

N



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 374+00 to 402+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T 1.02

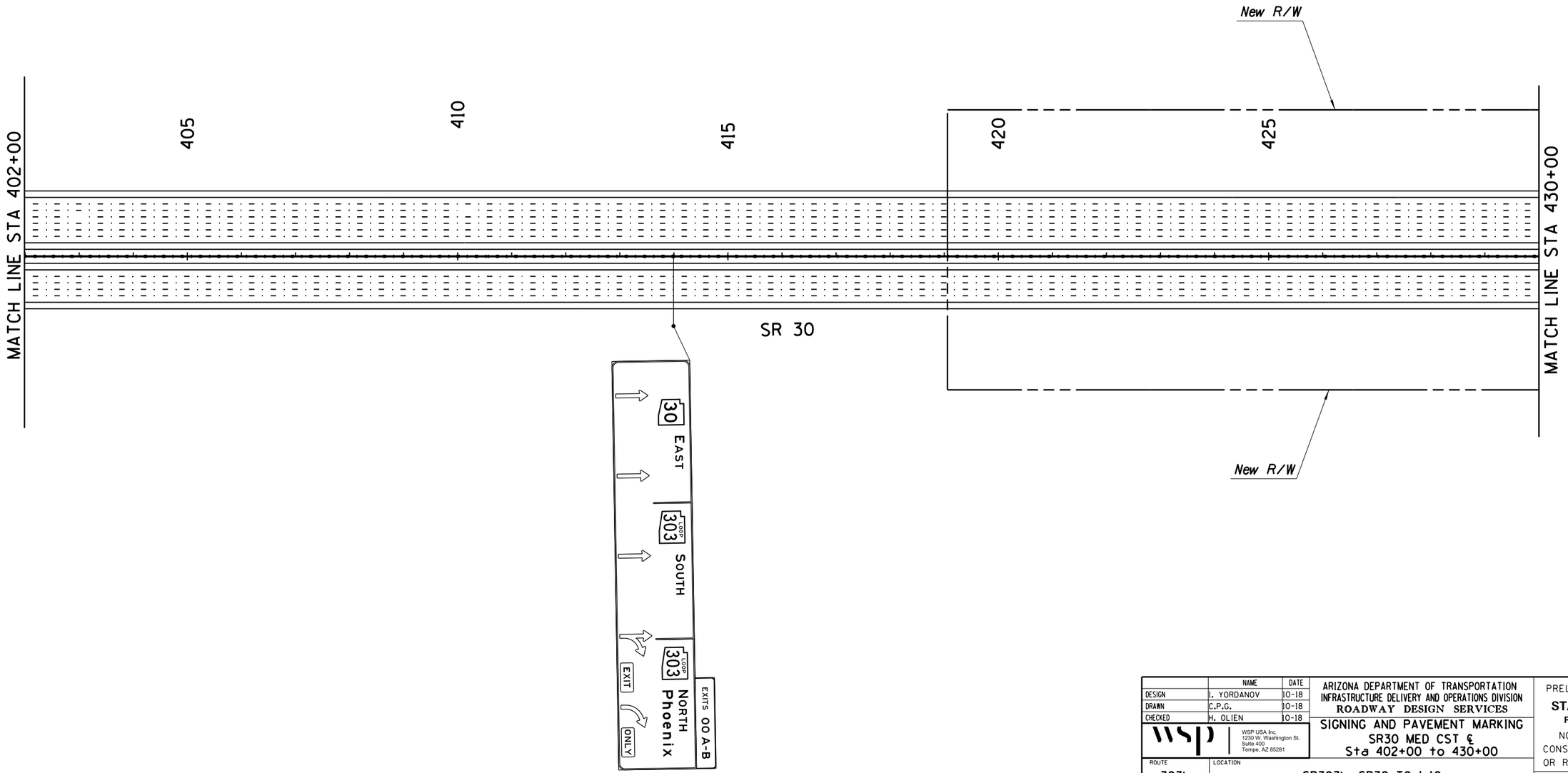
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 135 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE- | SURVEY NO. | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS02.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 402+00 to 430+00

ROUTE 303L

LOCATION SR303L, SR30 TO I-10

TRACS NO. H6870 01 L

STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. T 1.03

136 OF 160

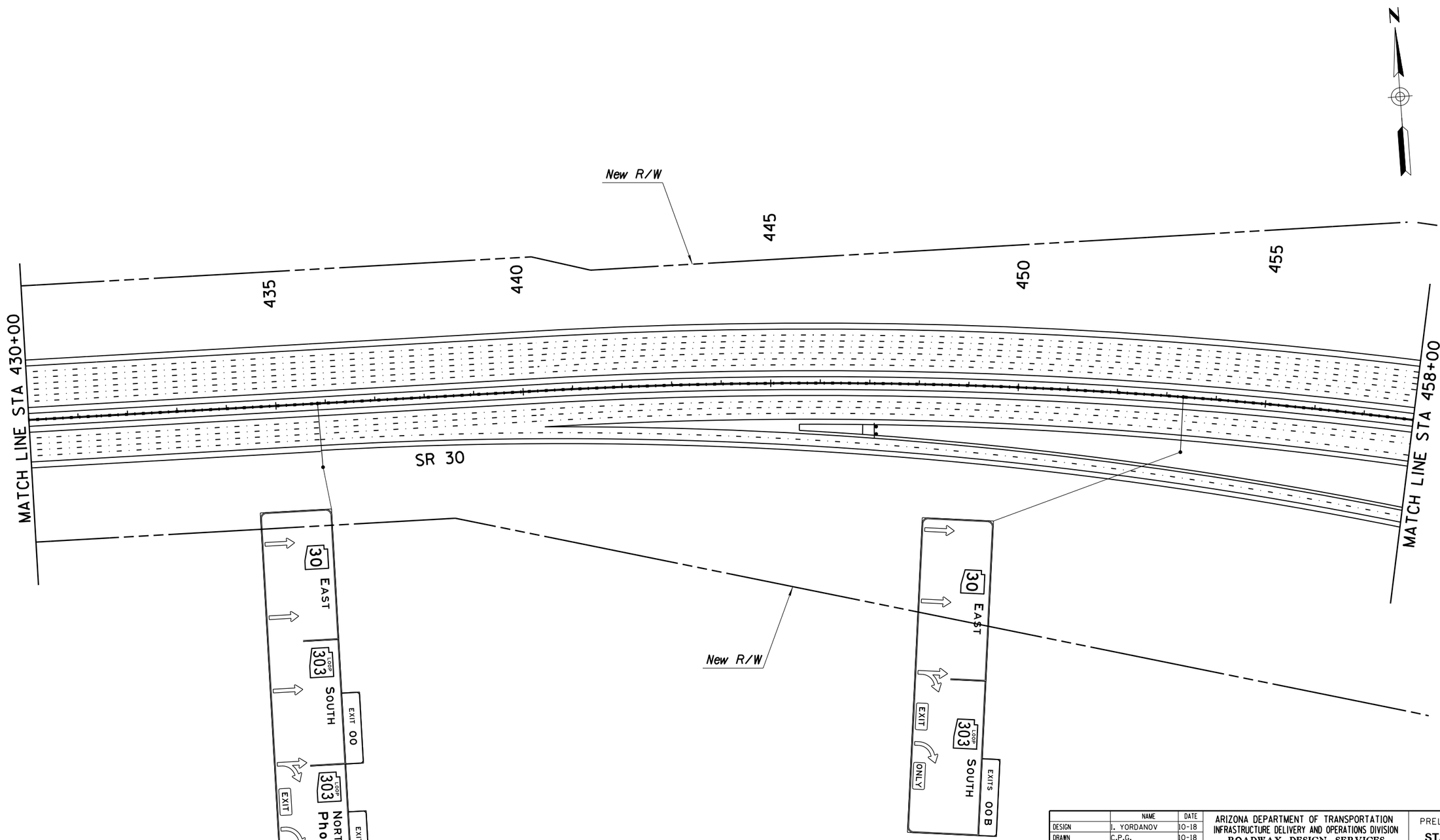
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS03.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

DATE- | SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 430+00 to 458+00

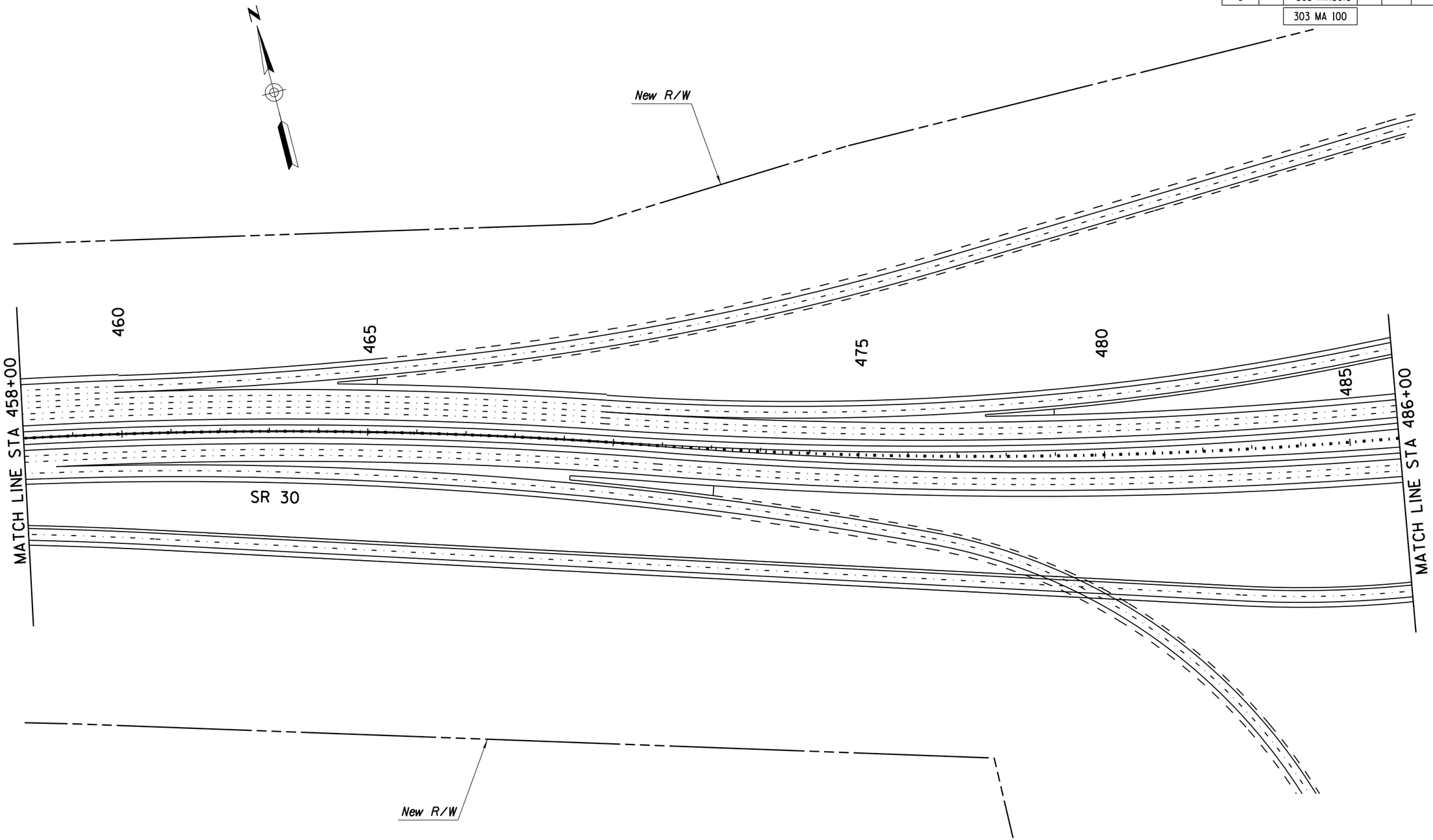
PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T 1.04
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	137 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS04.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 458+00 +486+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

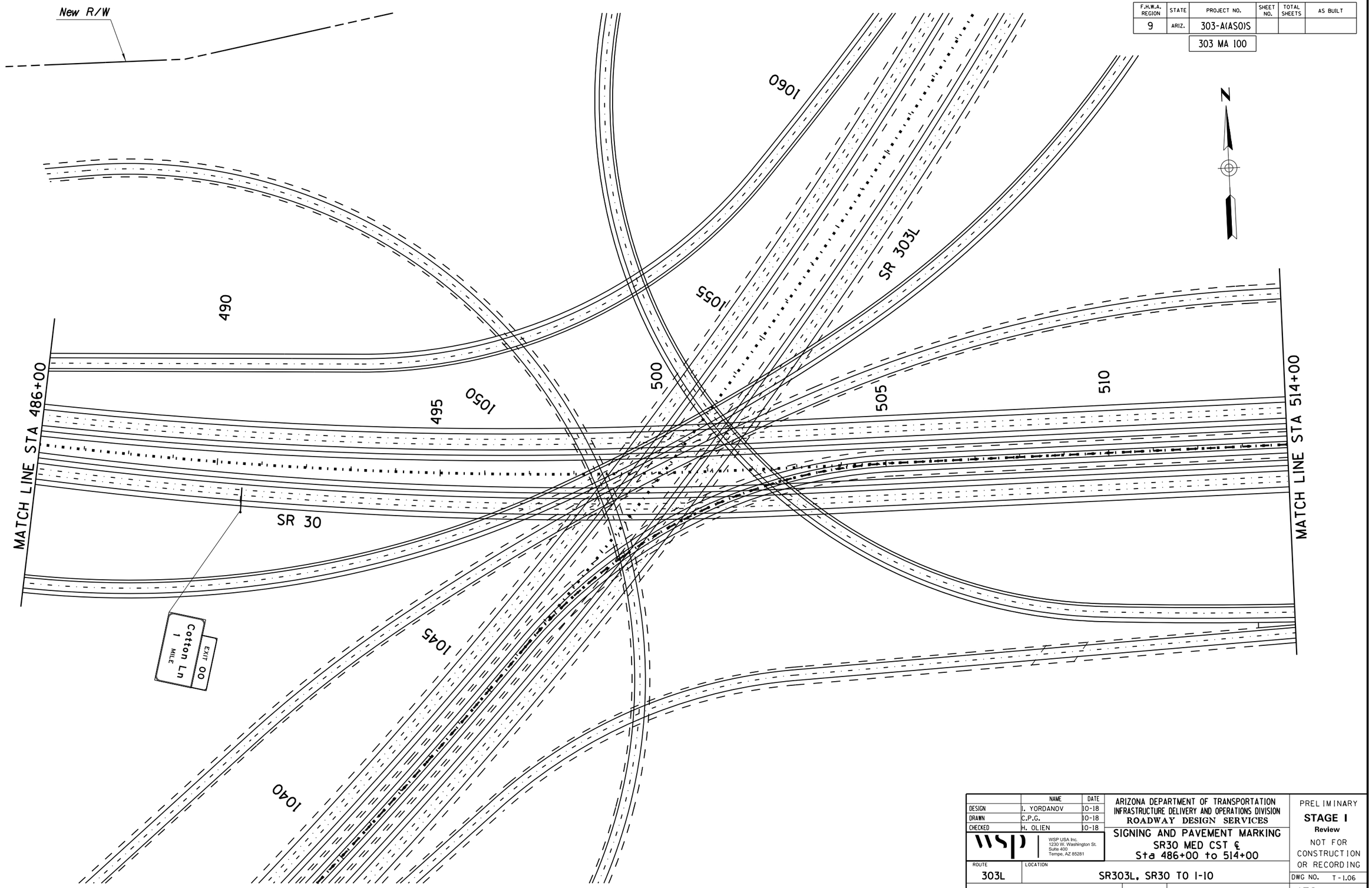
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.05
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	138 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS05.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 486+00 to 514+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.06

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 139 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS06.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

New R/W

LOOP 303 SOUTH

LOOP 303 NORTH Phoenix

EXIT ONLY

N

MATCH LINE STA 514+00

515

520

525

530

535

540

MATCH LINE STA 542+00

SR 30

Cotton Ln ½ MILE

EXIT 00

Cotton Ln

EXIT 00

New R/W

	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

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Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 514+00 to 542+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

DWG NO. T-1.07

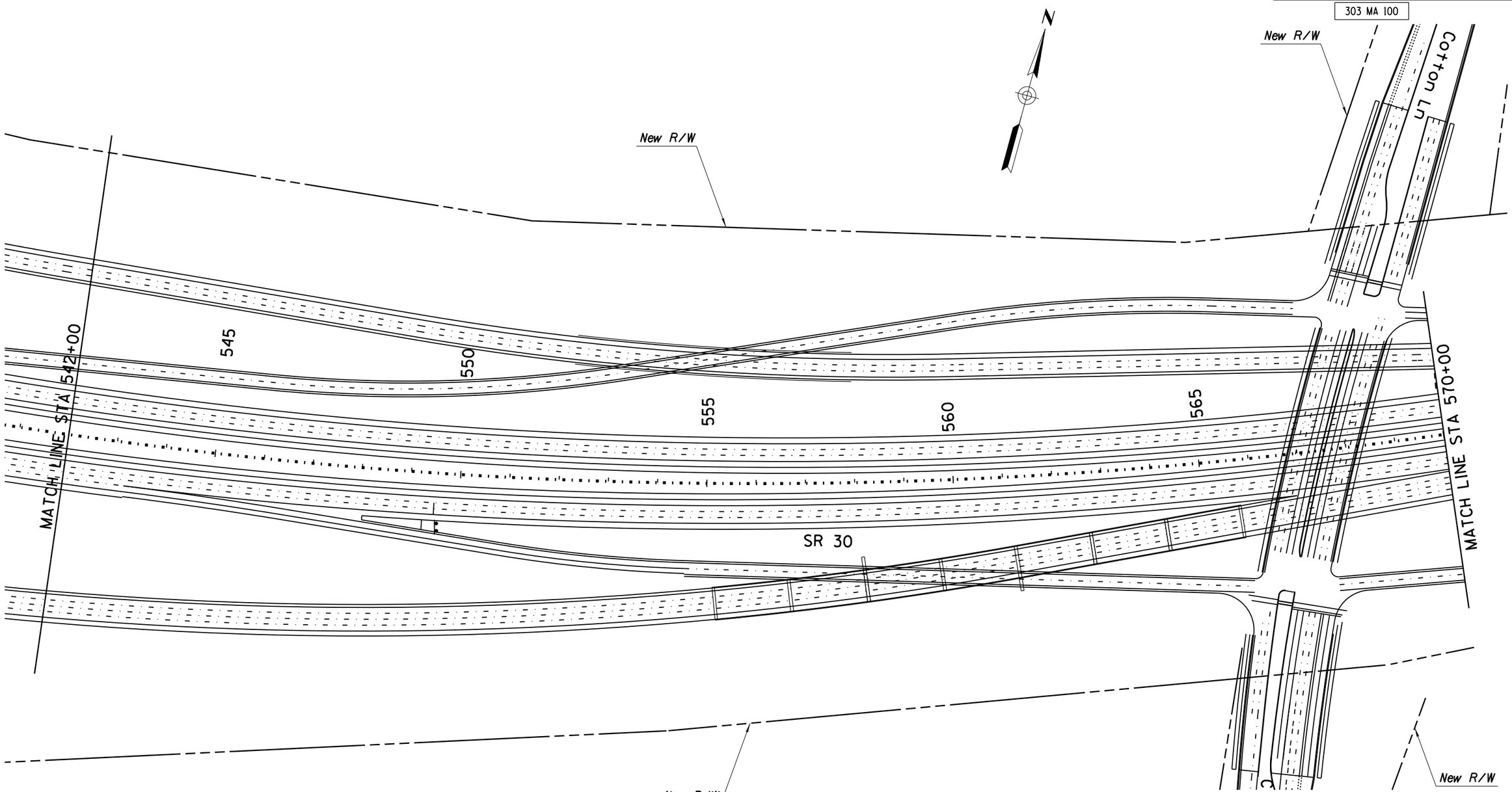
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 140 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS07.DGN

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 542+00 to 570+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.08

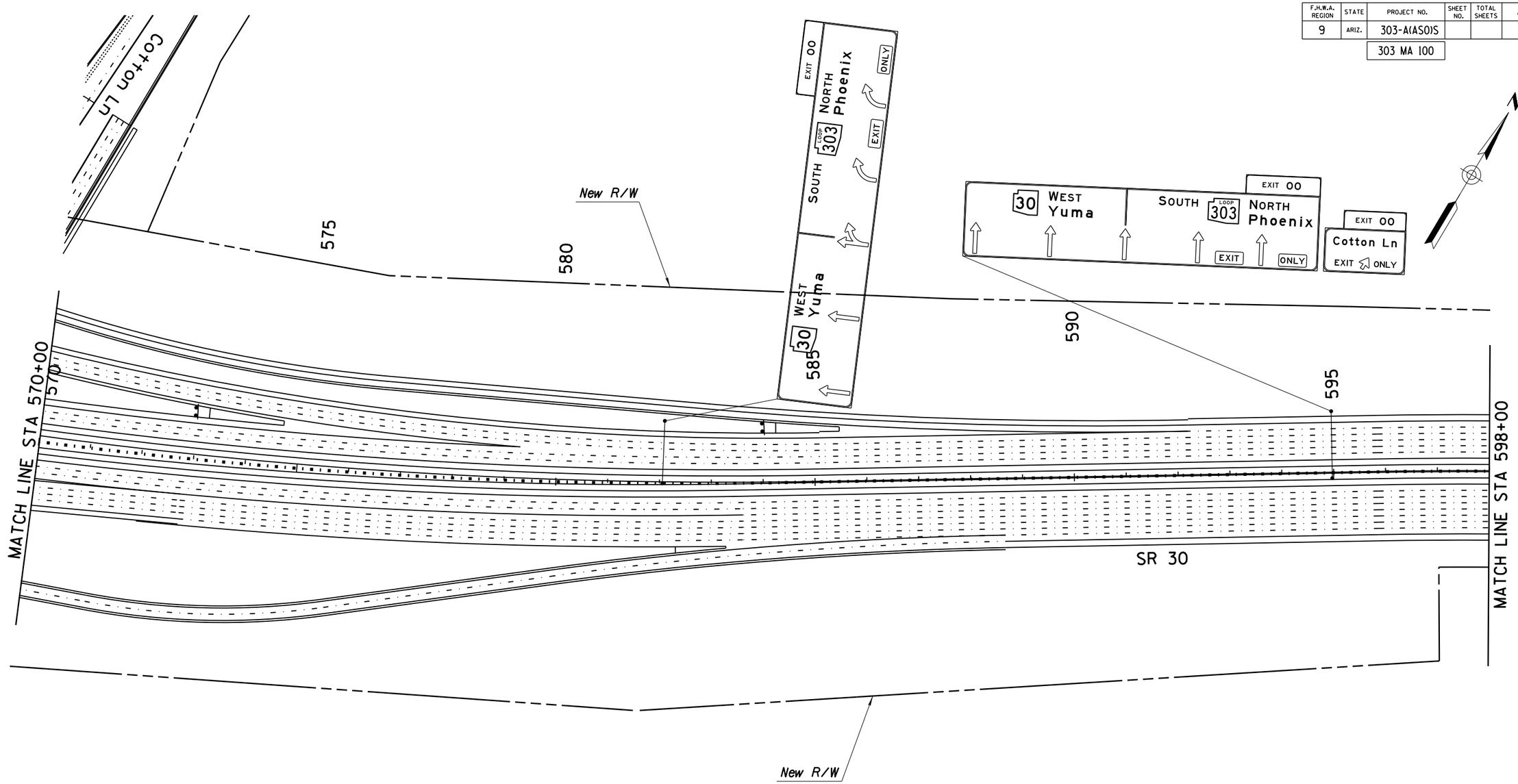
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 141 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS08.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 570+00 to 598+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

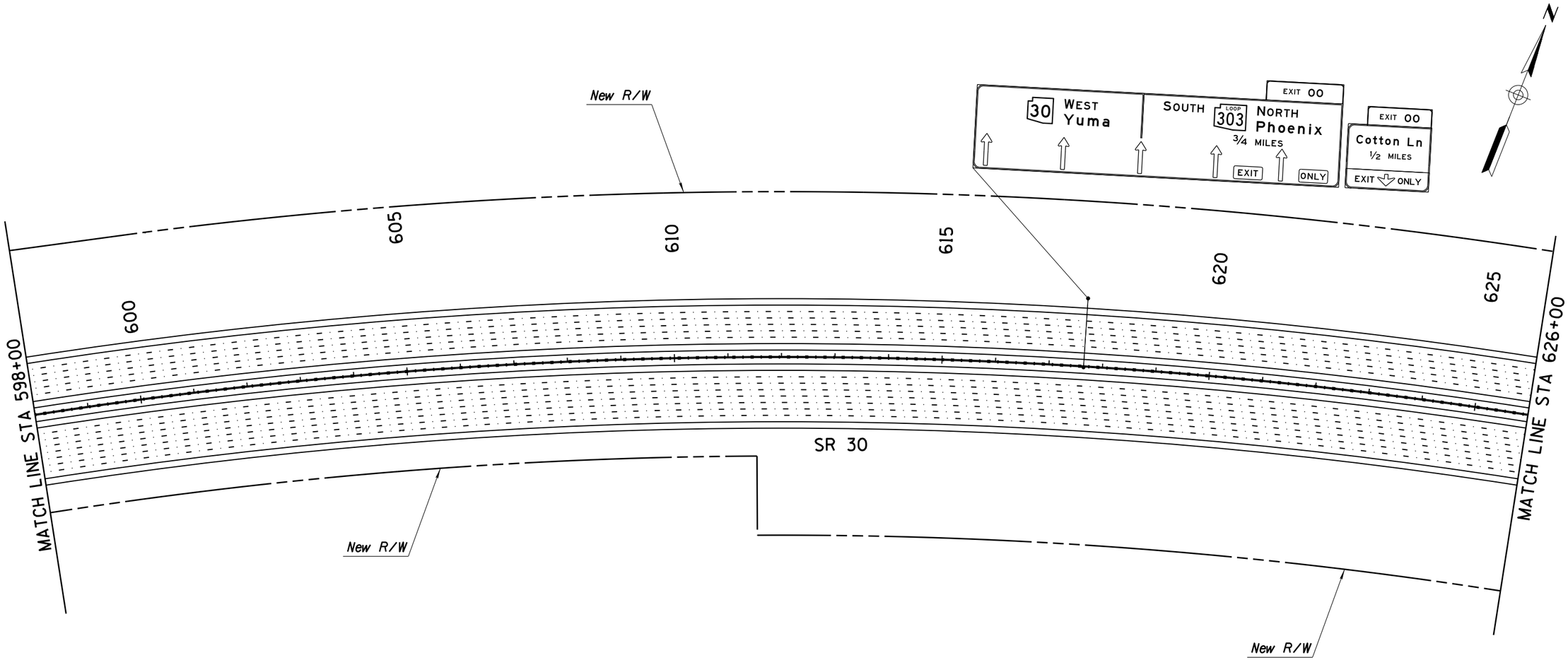
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.09
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	142 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS09.DGN

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 598 to 626+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.10

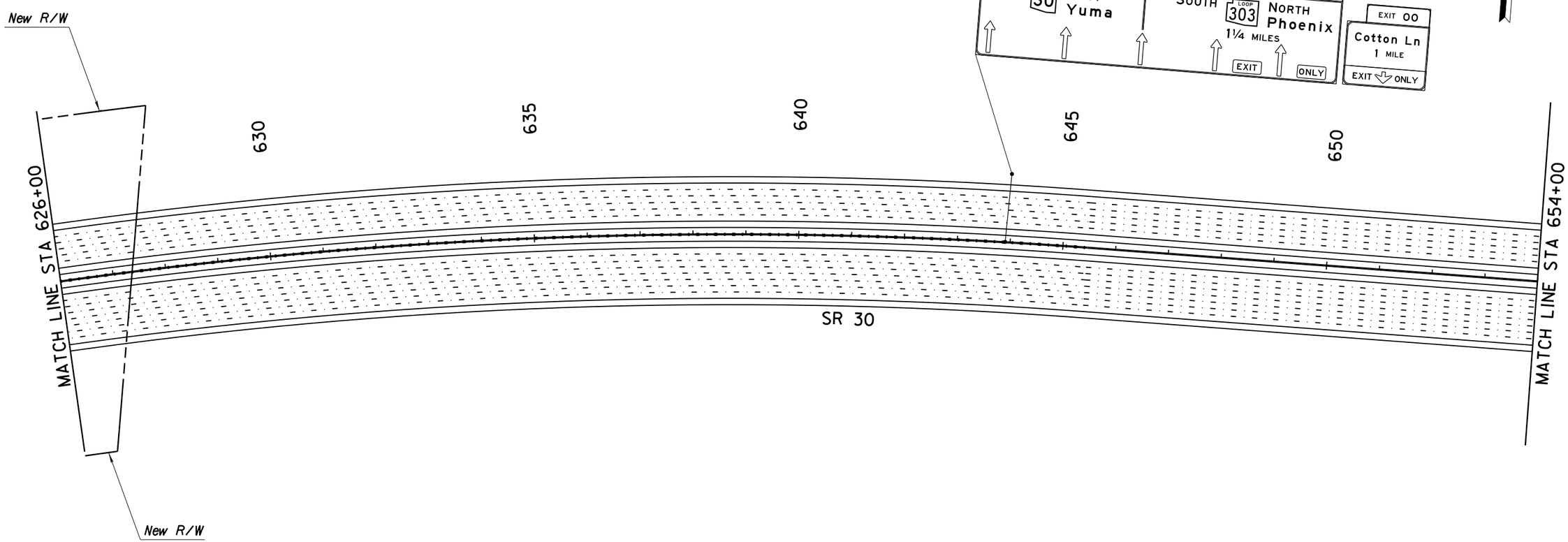
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 143 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS10.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 626 to 654+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.11

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 144 OF 160

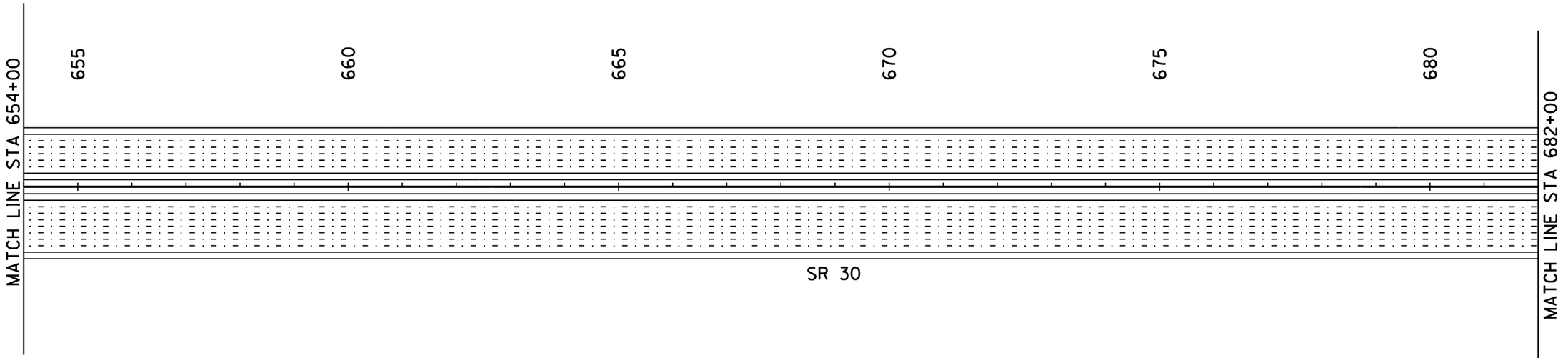
10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS11.DGN

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

N



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 654+00 to 682+00

ROUTE 303L

LOCATION SR303L, SR30 TO I-10

TRACS NO. H6870 01 L

STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. T-1.12

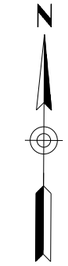
145 OF 160

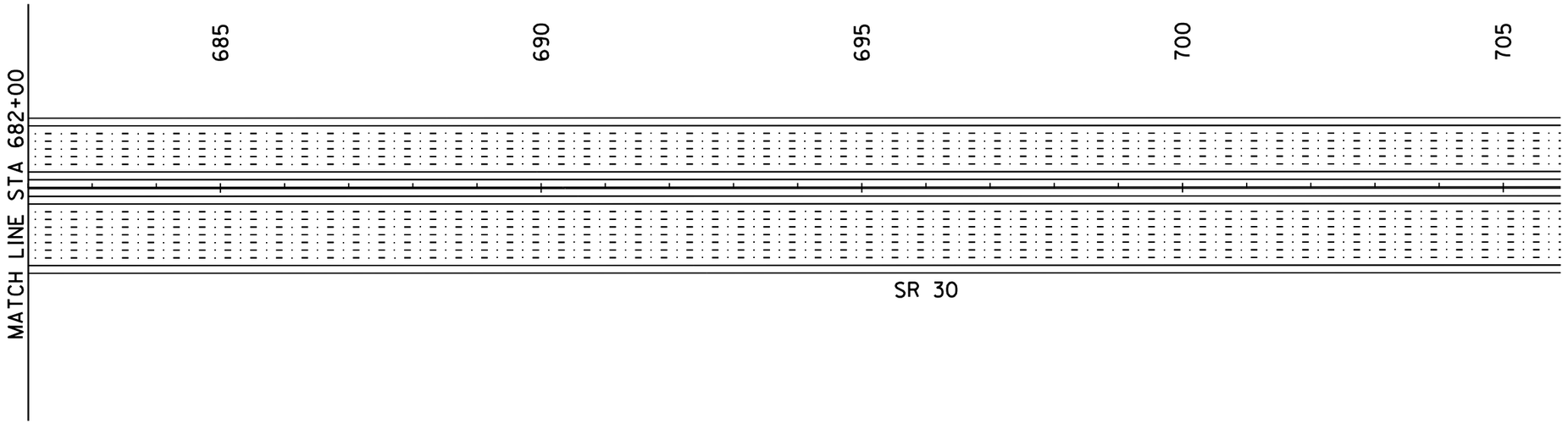
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS12.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			





	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR30 MED CST ℄
Sta 682+00 to 705+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.13

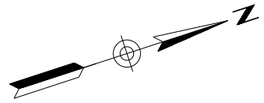
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 146 OF 160

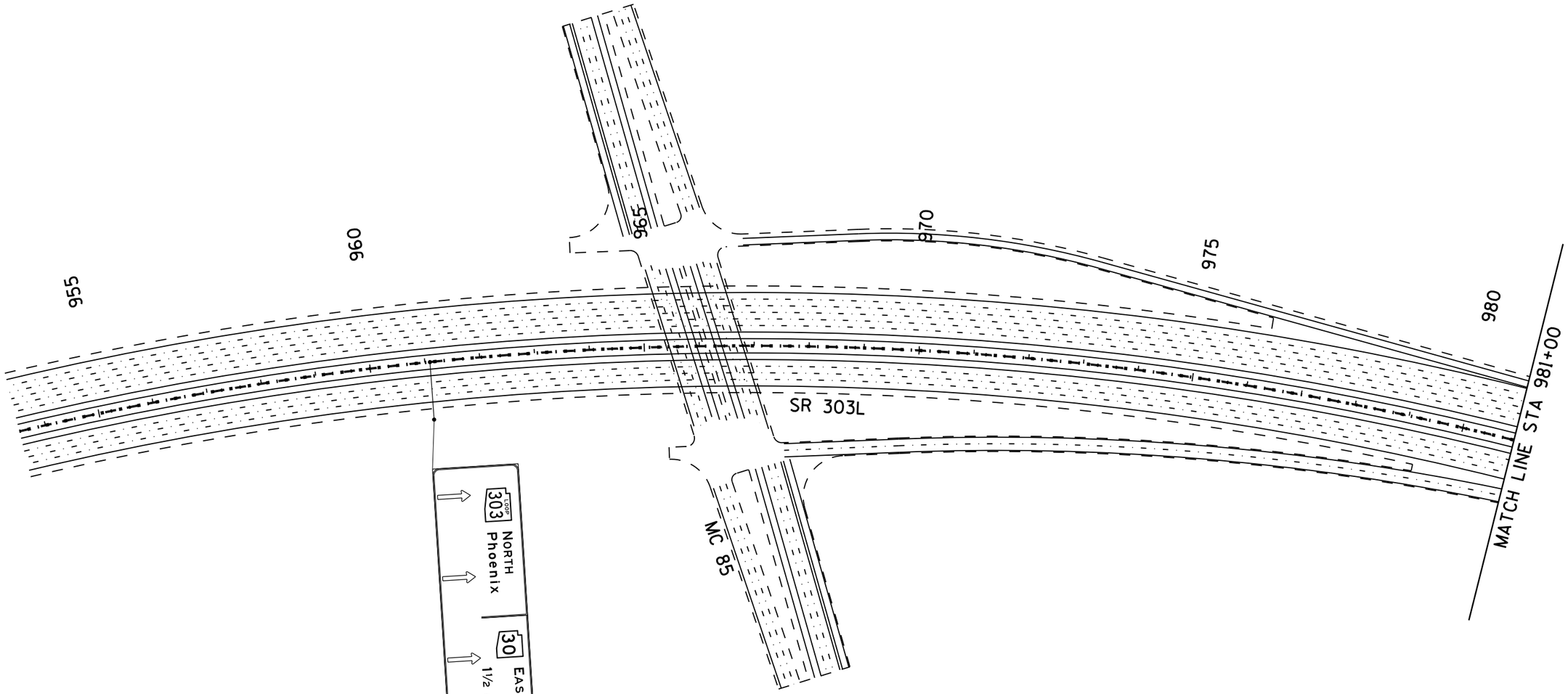
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS13.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			





	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta 953+00 to 981+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

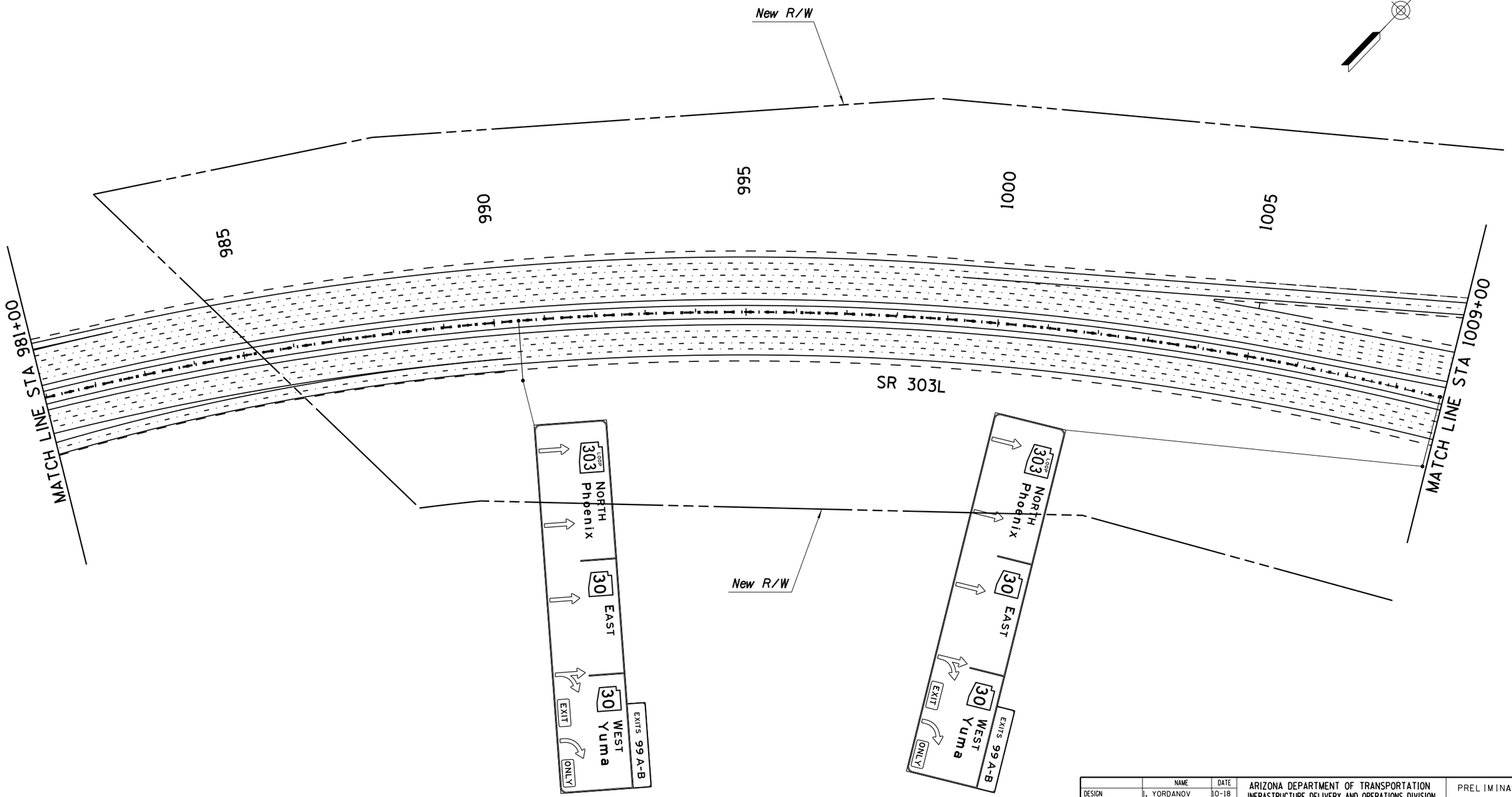
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.14
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	147 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS14A.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

WSP USA Inc.
1230 W. Washington St.
Suite 400
Tempe, AZ 85281

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta 981+00 to 1009+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

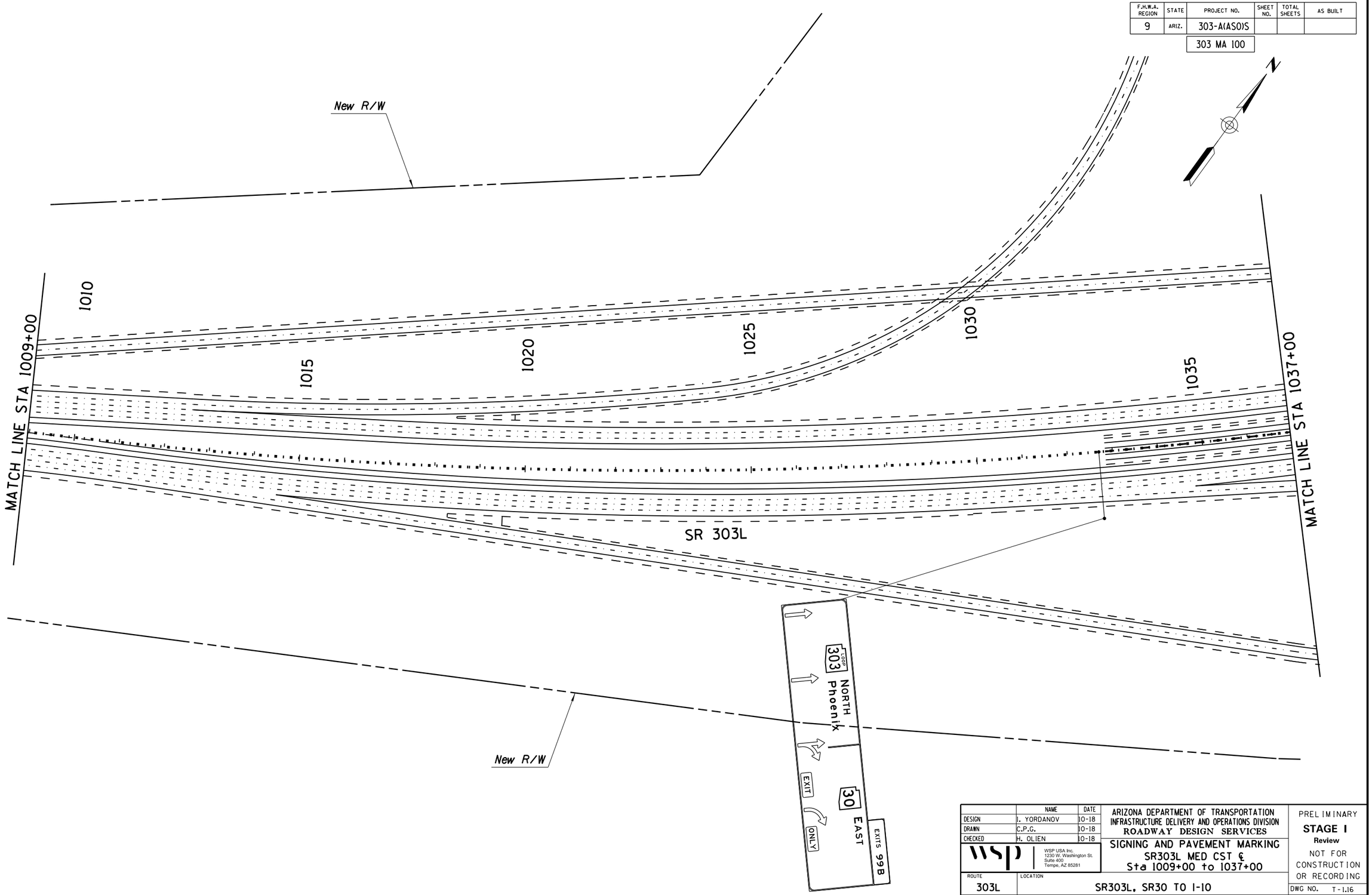
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.15
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	148 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS14B.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

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SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta 1009+00 to 1037+00

ROUTE	LOCATION
303L	SR303L, SR30 TO I-10

TRACS NO. H6870 01 L | STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. T-1.16

149 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS15.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

490

New R/W

EXIT 00
Cotton Ln
1 MILE

SR 30

495

1050

1060

1040

1045

1055

500

MATCH LINE STA 1037+00

MATCH LINE STA 1065+00

SR 303L

505

New R/W

	NAME	DATE
DESIGN	I. YORDANOV	10-18
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SIGNING AND PAVEMENT MARKING
SR303L MED CST &
Sta 1037+00 to 1065+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

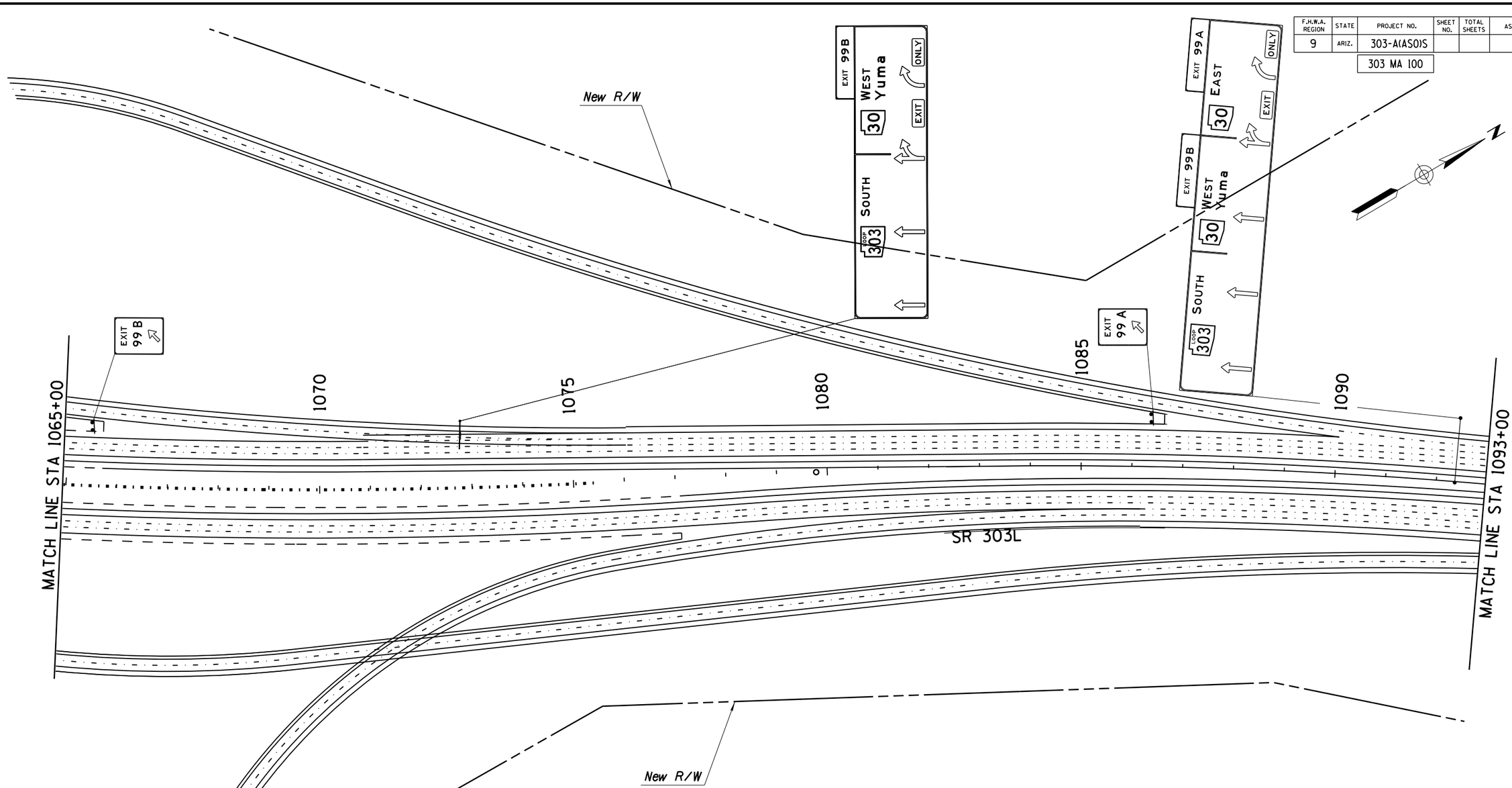
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.17

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 150 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLSI6.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta 1065+00.00 to 1093+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.18
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	151 OF 160

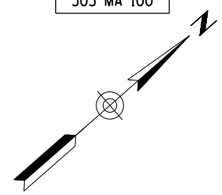
SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

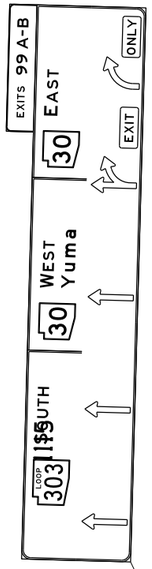
10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLSI7.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			

303 MA 100





	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

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INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
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SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta 1093+00 to 1121+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.19

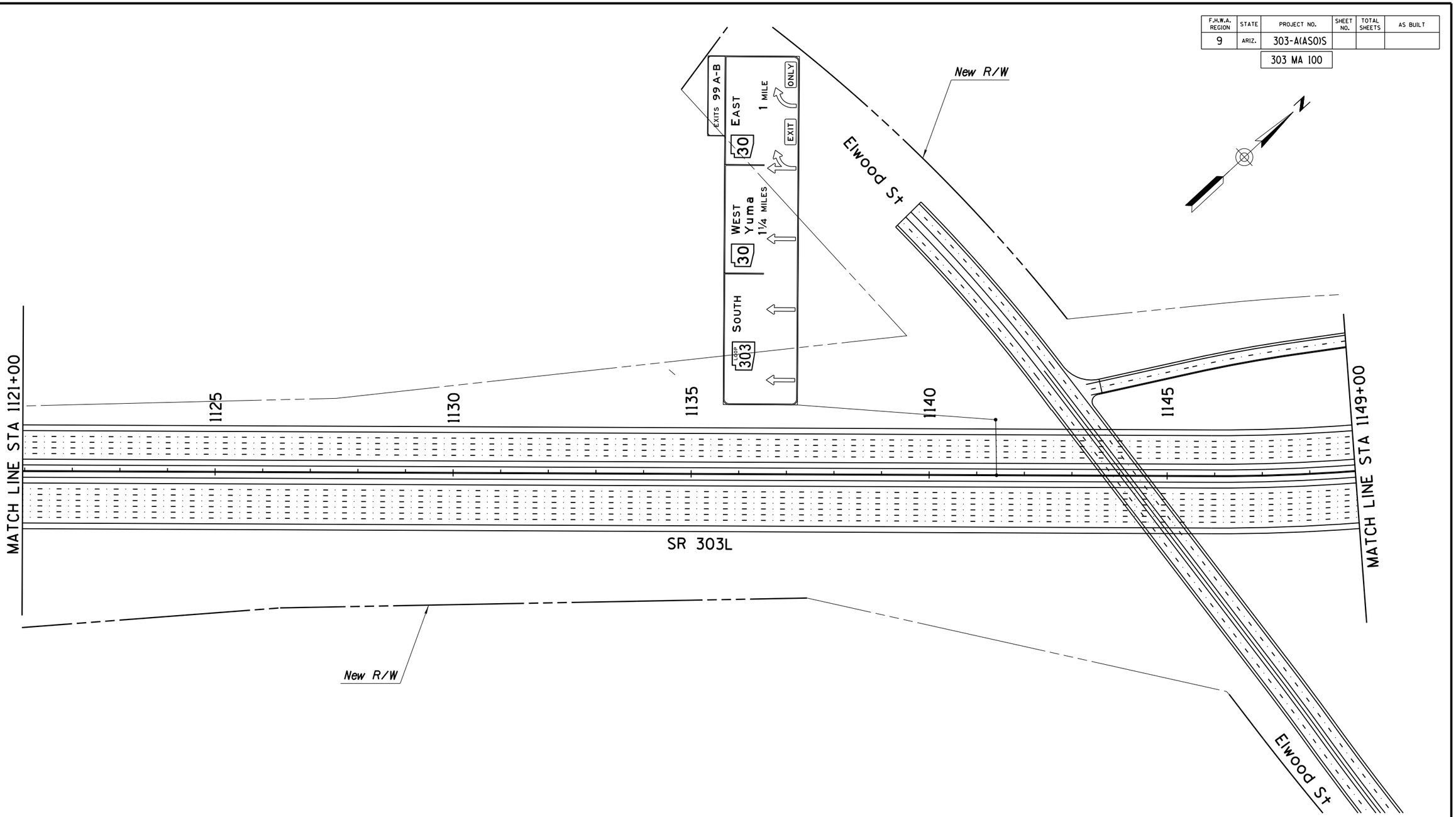
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 152 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS18.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

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INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta 1121+00 to 1149+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.20

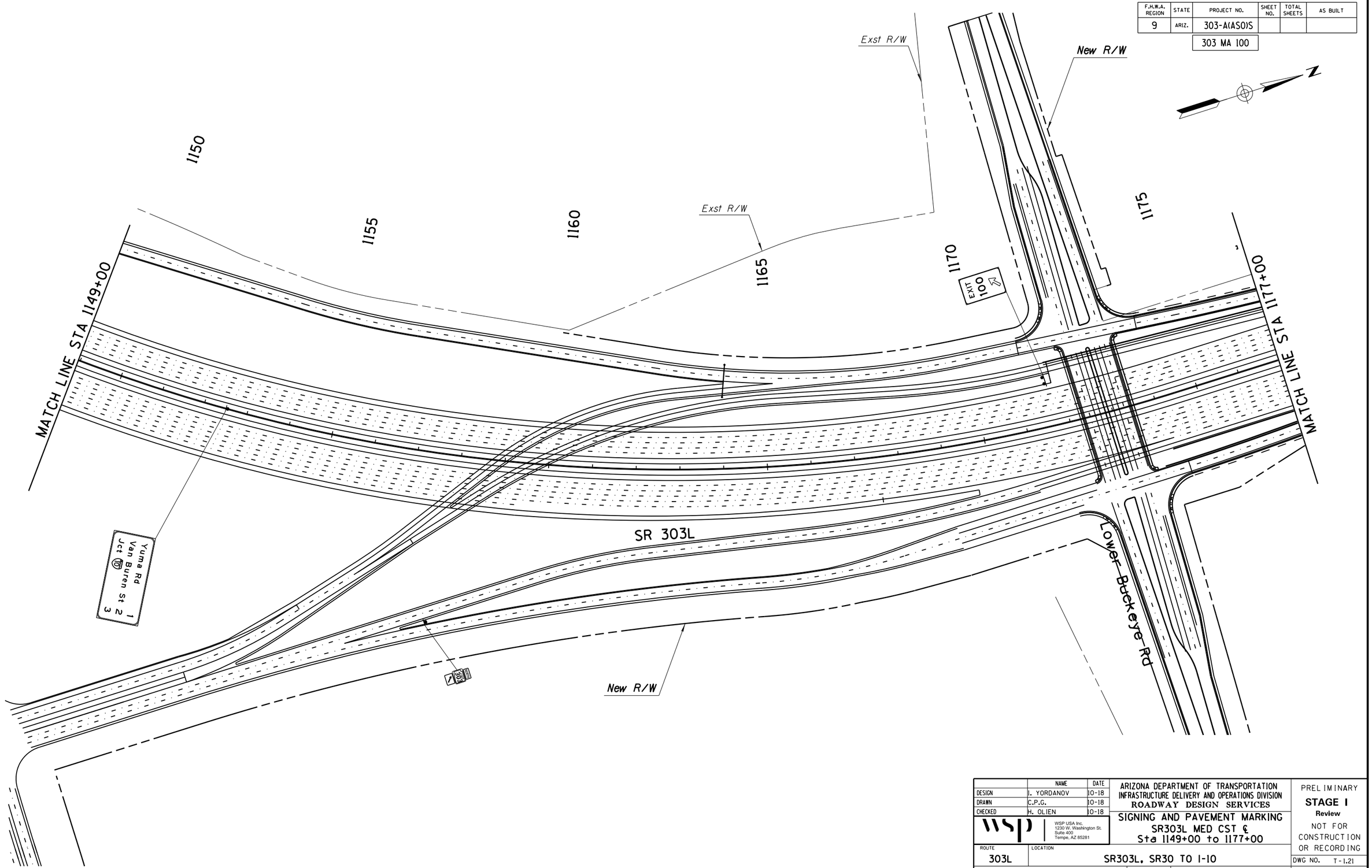
TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 153 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS19.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
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CHECKED	H. OLIEN	10-18

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Suite 400
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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST &
Sta 1149+00 to 1177+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

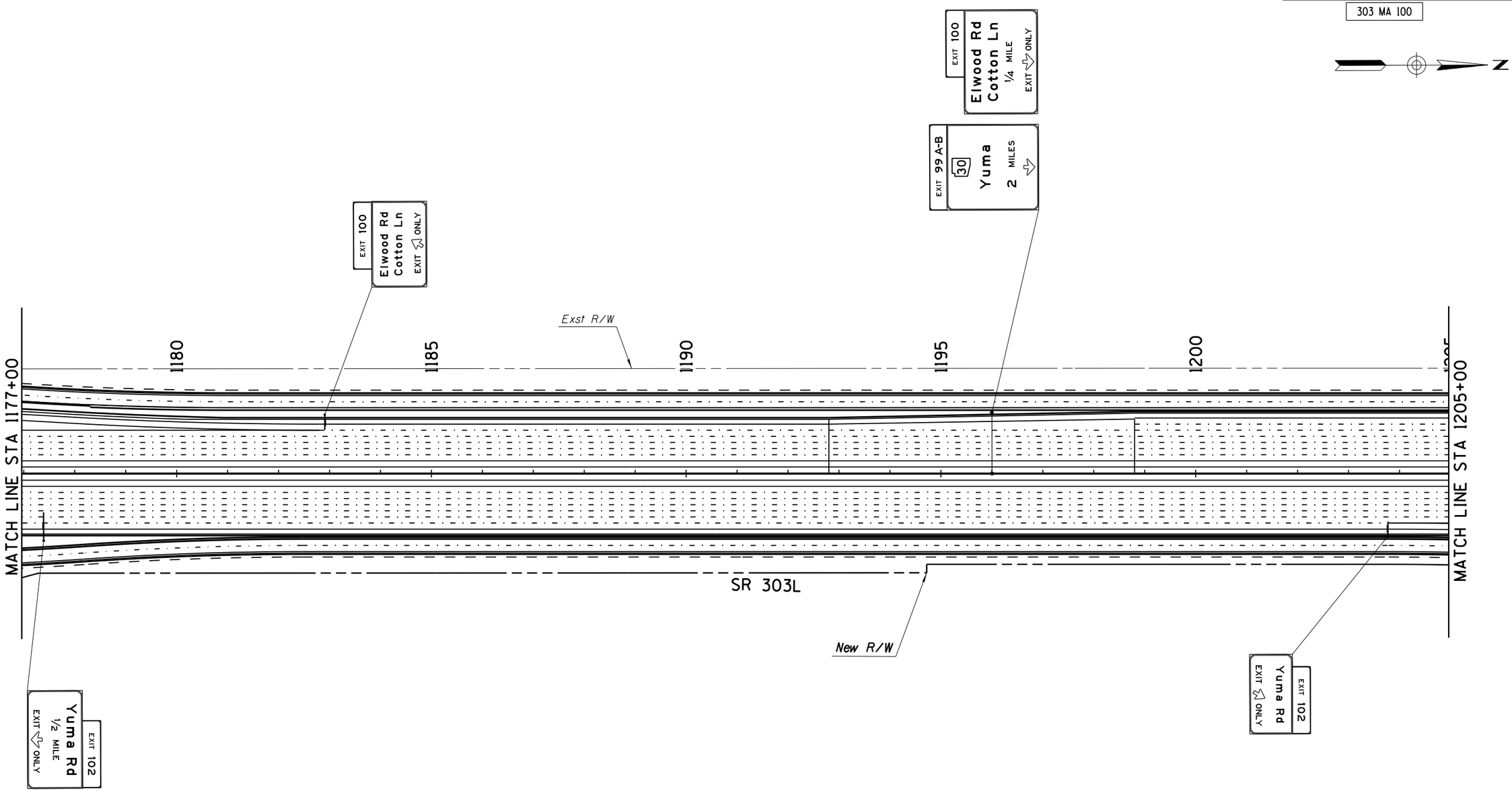
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.21
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	154 OF 160

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS20.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
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INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta: 1177+00 to 1205+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.22

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 155 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS21.DGN

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

N

MATCH LINE STA 1205+00

MATCH LINE STA 1233+00

1205

1210

1215

1220

1225

1230

Exst R/W

SR 303L

New R/W

Yuma Rd

EXIT 102

Van Buren St 1
Jct (10) 1 ½
Indian School Rd 4

Phoenix
Los Angeles
1 MILE

EXITS 104 A-B

	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

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Suite 400
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ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta: 1205+00 to 1233+00

ROUTE: 303L

LOCATION: SR303L, SR30 TO I-10

TRACS NO. H6870 01 L

STP-303-A-(ASO)S

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

DWG NO. T-1.23

156 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS22.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

N

EXIT 100
Elwood Rd
Cotton Ln
1 MILE

EXIT 102

EXIT 102
Yuma Rd
Lower Buckeye Rd
EXIT ONLY

EXIT 102
Yuma Rd
Lower Buckeye Rd
1/4 MILE
EXIT ONLY

Exst R/W

MATCH LINE STA 1233+00

235 240 245 1250 1255 260

MATCH LINE STA 1261+00

SR 303L

Lilac St

Exst R/W

New R/W

303

EXIT 103
Van Buren St
1/4 MILE
EXIT ONLY

EXITS 104 A-B

LOOP 303	INTERSTATE 10	INTERSTATE 10
NORTH	EAST Los Angeles 1 3/4 MILE	WEST Phoenix 1/2 MILE
	EXIT	EXIT ONLY

EXIT 103
Van Buren St
EXIT ONLY

	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
CHECKED	H. OLIEN	10-18

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INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta: 1233+00 to 1261+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

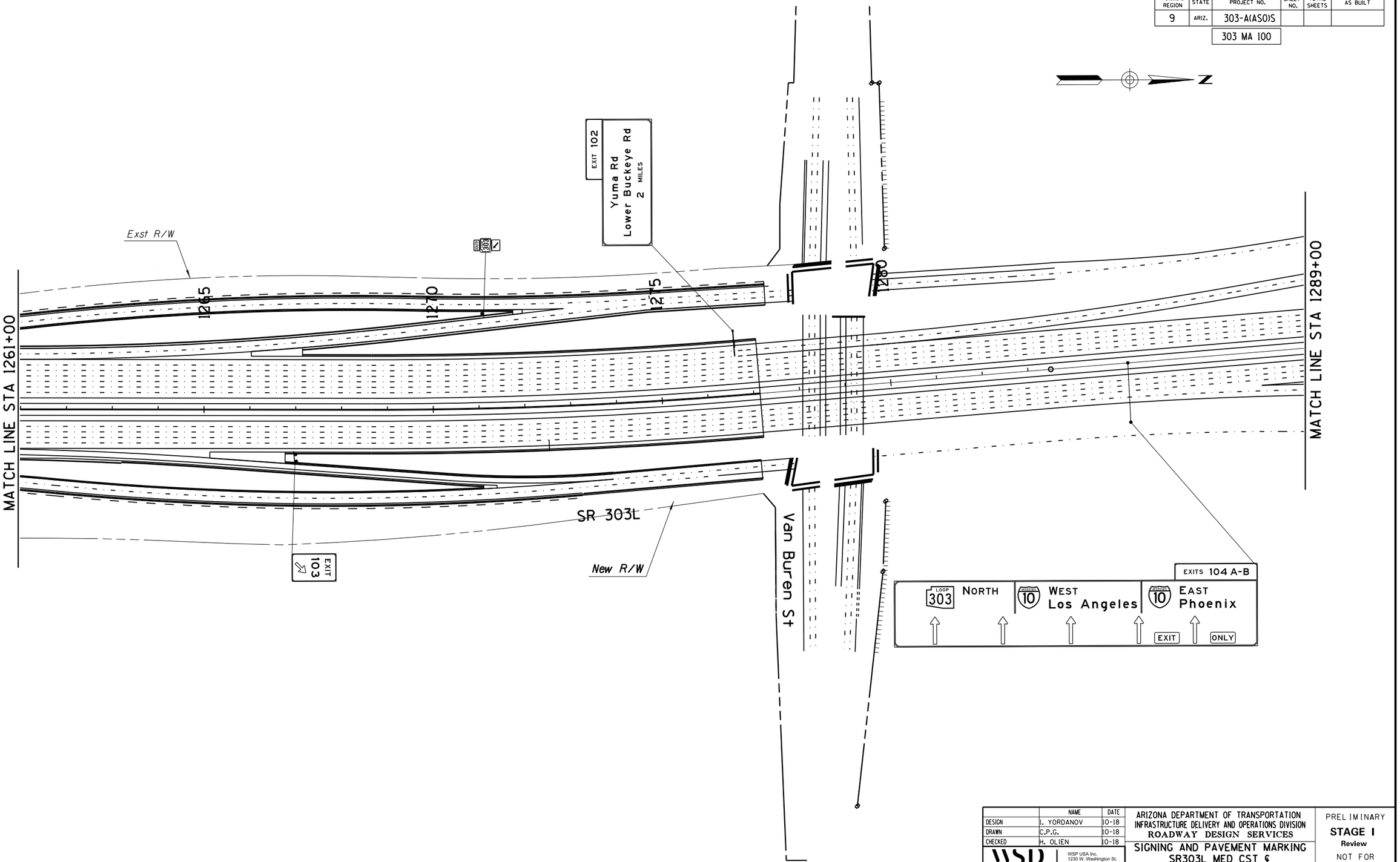
ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.24

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 157 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS23.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
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ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST &
Sta: 1261+00 to 1289+00

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.25

TRACS NO.		STP-303-A-(ASO)S	SHEET NO.
H6870 01 L			158 OF 160

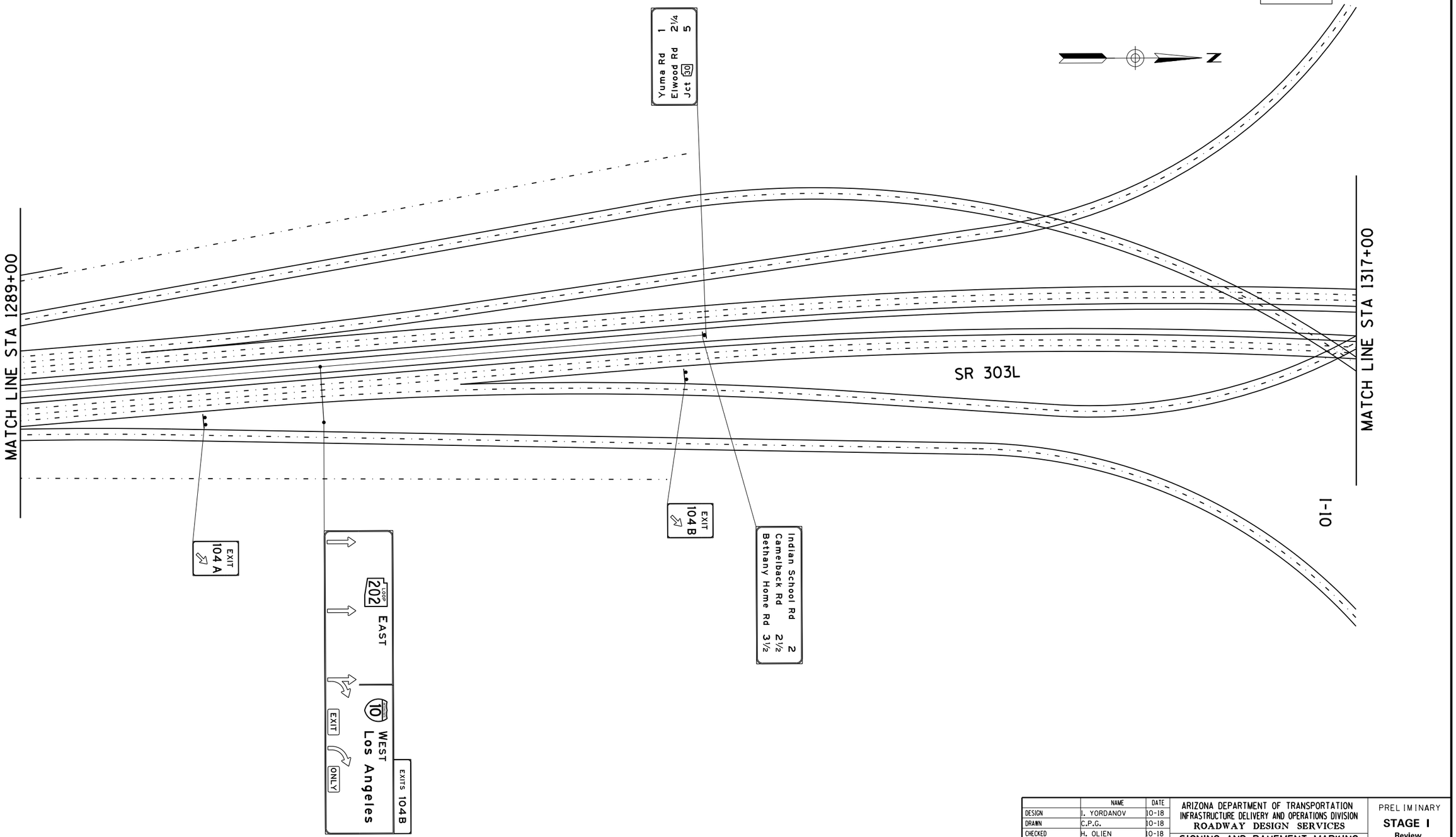
SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS24.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



	NAME	DATE
DESIGN	I. YORDANOV	10-18
DRAWN	C.P.G.	10-18
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ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta: 1289+00 to 1317+00

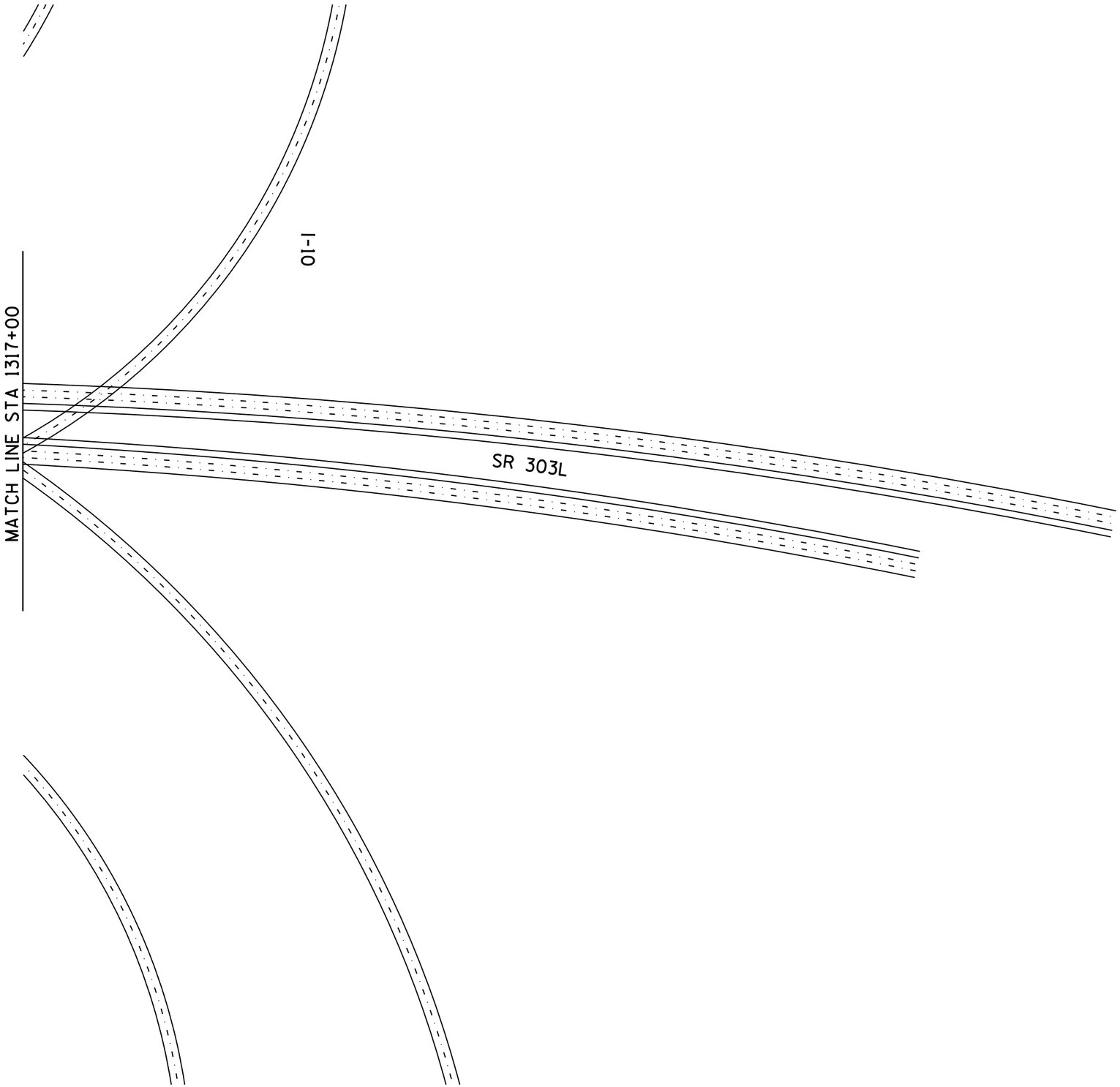
PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.26
TRACS NO. H6870 01 L	STP-303-A-(ASO)S	159 OF 160

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS25.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	303-A(ASO)S			
		303 MA 100			



	NAME	DATE
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ROADWAY DESIGN SERVICES

SIGNING AND PAVEMENT MARKING
SR303L MED CST ℄
Sta: 1317+00 to End

PRELIMINARY
STAGE I
Review
NOT FOR CONSTRUCTION OR RECORDING

ROUTE	LOCATION	DWG NO.
303L	SR303L, SR30 TO I-10	T-1.27

TRACS NO. H6870 01 L | STP-303-A-(ASO)S | 160 OF 160

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

10/22/2018

T:\H6870_01C\PVMRK_SIGNING\H6870 SLS26.DGN