

6.0 SERVICE INVOLVEMENT SHEET

TRACS Number: 0000 PM PPM SH 652 01C
 Federal ID Number: HSIP-PPM-0(254)D
 Pima County Project Number: CTR.4HSBSP

Project Name: Speedway Boulevard: Camino de Oeste to Painted Hills Road – Paved Shoulders

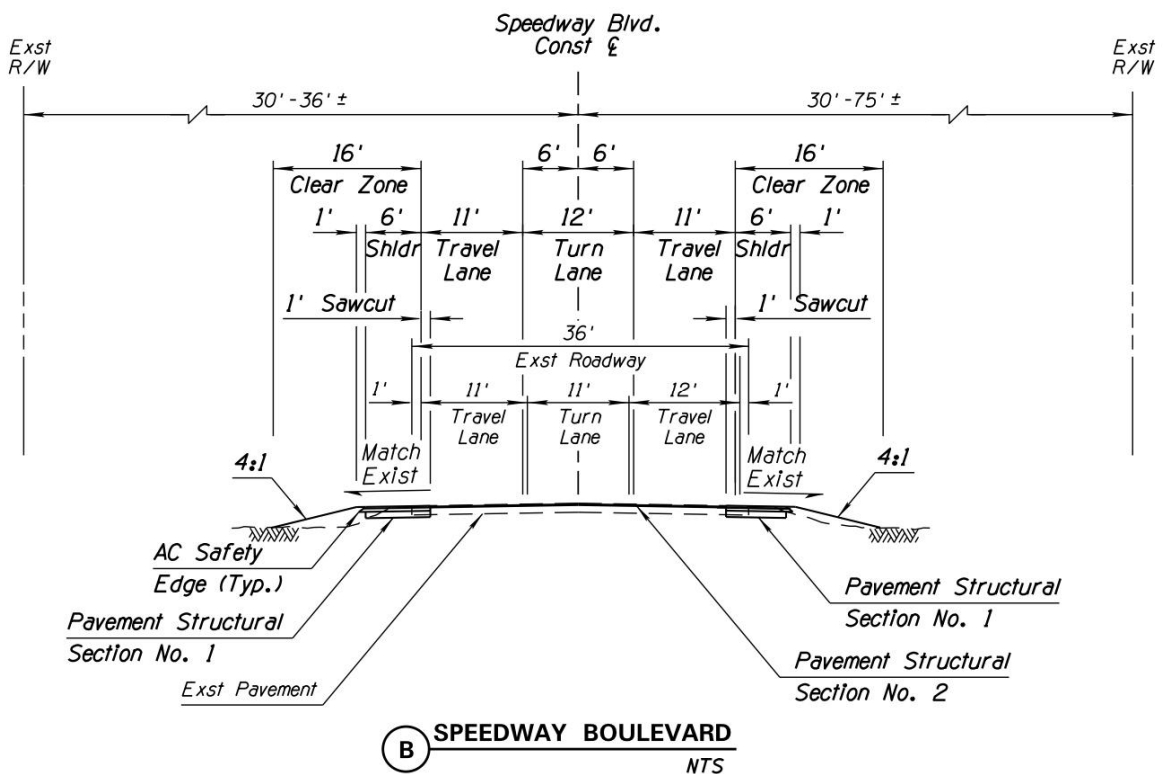
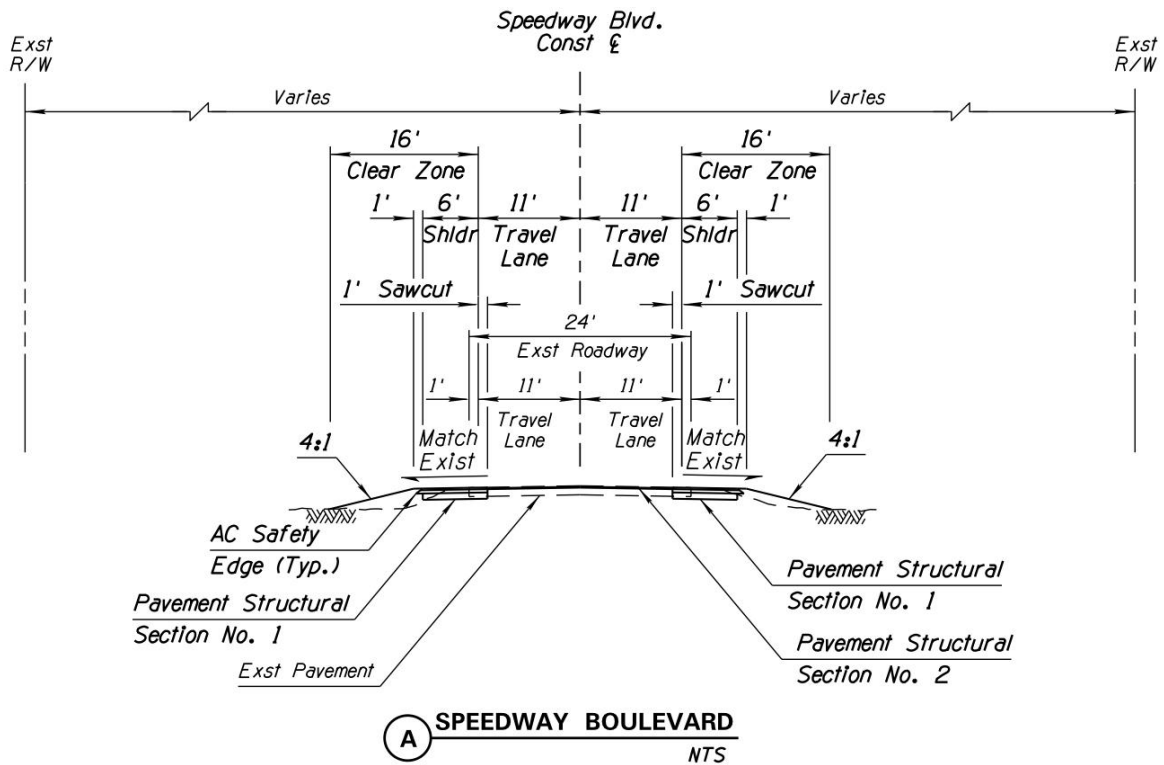
ORGANIZATION	INVOLVEMENT				COMMENTS (ISSUES WHICH MAKE INVOLVEMENT SIGNIFICANT OR MINIMAL)
	SIGNIFICANT	MINIMUM	NONE	UNKNOWN	
Pima County Department of Transportation.	X				Administer/Review Design and Construction.
ADOT Southcentral District			X		
ADOT Local Government Project Management		X			Design Coordination
ADOT Roadway Design			X		
ADOT Traffic Design			X		
ADOT Drainage Design			X		
ADOT Bridge Design			X		
ADOT Pavement Design			X		
ADOT Materials			X		
ADOT Roadside Development			X		
ADOT Environmental	X				Review/Approve Environmental Clearance Documents
ADOT Utilities & Railroad		X			Review/Approval
ADOT Right-of-Way		X			Review Clearance Letter
ADOT Engineering Survey			X		Completed by Consultant
ADOT Photogrammetry & Mapping			X		Completed by Consultant
ADOT Contracts & Specifications		X			Review Final Plans
ADOT MPD Data Section			X		
Federal Highway Administration (FHWA)		X			Review/Approve Environmental Clearance Documents
ADOT Communications			X		

Table 5 – Service Involvement Sheet

7.0 APPENDIX A – PROJECT AERIAL LOCATION MAP



8.0 APPENDIX B – TYPICAL PROJECT CROSS SECTIONS



9.0 APPENDIX C – ESTIMATED CONSTRUCTION COSTS

Funding for the project is a mix of Highway Safety Improvement Program (HSIP) funds, Grant funds, Local DOT 57 funds, and 4PPP18 Pavement Preservation funds.

The Design budget of \$300,000 will be funded using HSIP funds (\$225,074) and 4PPP18 Pavement Preservation funds (\$74,926).

The Right-of-Way (\$50,000), Utilities (\$10,000), and Public Art (\$24,000) budgets will be funded using \$84,000 of Local DOT 57 funds.

The estimated construction cost of \$2,462,675 will be funded using \$1,579,000 of Grant funds, \$542,000 of Local DOT 57 funds, and \$341,675 of 4PPP18 Pavement Preservation funds (based on the 1" mill and 2" fill/overlay).

In summary, \$225,074 of HSIP, \$1,579,000 of Grant, \$700,926 of Local DOT 57 and \$341,675 of 4PPP18 Pavement Preservation funds have been secured for the project; resulting in a total amount of \$2,846,675.

1. The estimated construction cost for the project is \$2,462,675.
2. Right-of-Way acquisition is anticipated to be 0.69 AC. Using a per acre unit cost of \$72,450/AC, the anticipated Right-of-Way acquisition cost is estimated to be \$50,000. The Temporary Construction Easements required at driveways and private side roads are not anticipated to require a fee. Therefore, the total acquisition fee estimated to be \$50,000.
3. Utilities costs are anticipated to be limited to manhole and water valve adjustments to match finished grade. At this time, 20 water valves and 6 sanitary sewer manholes have been estimated for adjustment (estimated cost is \$10,000).
4. Preliminary Engineering costs (Design) are estimated to be \$300,000.
5. Total cost for design and construction of the project is estimated at \$2,846,675.

**FINAL PROJECT ASSESSMENT
CONSTRUCTION COST ESTIMATE**

SPEEDWAY BOULEVARD: CAMINO DE OESTE TO PAINTED HILLS ROAD – PAVED SHOULDERS

ADOT TRACS NUMBER: 0000 PM PPM SH652 01C

FEDERAL ID NUMBER: HSIP-PPM-0(254)D

PIMA COUNTY PROJECT NUMBER: CTR.4HSBSP

June 26, 2018

Item #	Description	Quantity	Unit	Unit Price	Total Cost
2010001	CLEARING AND GRUBBING	1	LS	\$15,000.00	\$15,000
2010004	PRESERVATION FENCING	5,000	LF	\$2.75	\$13,750
2010010	CLEARING AND GRUBBING (NOXIOUS AND INVASIVE SPECIES CONTROL ALLOWANCE)	15,000	USD	\$1.00	\$15,000
2020001	REMOVAL OF STRUCTURES & OBSTRUCTIONS	1	LS	\$20,000.00	\$20,000
2020029	REMOVAL OF BITUMINOUS PAVEMENT	5,598	SY	\$8.00	\$44,784
2020030	REMOVAL OF BITUMINOUS PAVEMENT BY MILLING	21,449	SY	\$2.00	\$42,898
2020034	REMOVAL OF SIGNS AND DELINEATORS	1	LS	\$7,600.00	\$7,600
2020040	REMOVAL OF PIPE	30	LF	\$30.00	\$900
2020061	RELOCATE MAILBOX	20	EACH	\$250.00	\$5,000
2020071	REMOVAL OF GUARD RAIL	1,000	LF	\$5.50	\$5,500
2030300	ROADWAY EXCAVATION	7,100	CY	\$14.00	\$99,400
2030501	EXCAVATION (ROCK EXCAVATION)	1,500	CY	\$45.00	\$67,500
2030901	BORROW	350	CY	\$22.33	\$7,816
2030907	BORROW (DISCRETIONARY)	2,000	CY	\$22.33	\$44,660
3030003	AGGREGATE BASE	1,600	CY	\$35.00	\$56,000
4040111	TACK COAT	10	TON	\$700.00	\$7,000
4060001	ASPHALTIC CONCRETE (NO. 1)	2,050	TON	\$75.00	\$153,750
4060002	ASPHALTIC CONCRETE (NO. 2)	4,250	TON	\$90.00	\$382,500
4060510	BITUMINOUS MATERIAL PRICE ADJUSTMENT ALLOWANCE	10,000	USD	\$1.00	\$10,000
5010007	PIPE, CORRUGATED METAL, 18"	30	LF	\$100.00	\$3,000
5010025	PIPE, CORRUGATED METAL, 36"	87	LF	\$110.00	\$9,570
5010048	PIPE, CORRUGATED METAL, 48"	46	LF	\$150.00	\$6,900
5014018	FLARED END SECTION, 18" (ADOT C-13.25)	2	EACH	\$600.00	\$1,200
5014036	FLARED END SECTION, 36" (ADOT C-13.25)	1	EACH	\$750.00	\$750
5014048	FLARED END SECTION, 48" (ADOT C-13.25)	1	EACH	\$850.00	\$850
5090100	SEWER MANHOLE, RECONSTRUCT	18	LF	\$450.00	\$8,100
5090110	SEWER MANHOLE, ADJUSTMENT	4	EACH	\$800.00	\$3,200
5103101	POTABLE WATER, ADJUST EXISTING VALVE BOX AND COVER	20	EACH	\$550.00	\$11,000
5150005	UTILITY POTHOLING, DEPTH < 12'	30	EACH	\$250.00	\$7,500
5150007	UTILITY POTHOLING, DEPTH > 12'	8	EACH	\$350.00	\$2,800
5150101	UTILITY IMPACT ALLOWANCE	10,000	USD	\$1.00	\$10,000
6010712	CONCRETE CUT-OFF WALL	205	LF	\$40.00	\$8,200
6016087	PIPE CULVERT HEADWALL	2	EACH	\$4,900.00	\$9,800
6070010	SIGN POST (PERFORATED) (SINGLE)	1,013	LF	\$10.00	\$10,130
6070040	SLIP BASE ASSEMBLY (TYPE 2S) (SINGLE)	9	EACH	\$140.00	\$1,260
6070110	FOUNDATION FOR SIGN POST (PERFORATED)	92	EACH	\$140.00	\$12,880
6080020	SIGN PANEL (TRAFFIC CONTROL) (PERMANENT) (DIAMOND GRADE)	588	SF	\$30.00	\$17,640
7010001	MAINTENANCE AND PROTECTION OF TRAFFIC (8% OF CONSTRUCTION COSTS)	1	LS	\$145,000.00	\$145,000
7040005	PAVEMENT MARKING (WHITE EXTRUDED THERMOPLASTIC) (0.090")	26,400	LF	\$0.80	\$21,120
7040006	PAVEMENT MARKING (YELLOW EXTRUDED THERMOPLASTIC) (0.090")	17,700	LF	\$0.80	\$14,160
7060025	PAVEMENT MARKER, REFLECTIVE, (TYPE D, YELLOW, TWO-WAY)	443	EACH	\$5.00	\$2,215
7060040	PAVEMENT MARKER, REFLECTIVE, (TYPE F, BLUE, TWO-WAY)	1	EACH	\$5.00	\$5
7080001	PAINTED PAVEMENT MARKING	44,100	LF	\$0.30	\$13,230
8050009	SEEDING (CLASS II)	3	ACRE	\$4,500.00	\$13,500
8050010	SEEDING (CLASS II) (2ND APPLICATION)	3	ACRE	\$4,100.00	\$12,300
8061700	LANDSCAPE PRUNING	200	HOUR	\$100.00	\$20,000
8070001	LANDSCAPE ESTABLISHMENT	1	LS	\$15,000.00	\$15,000
8090046	TRANSPLANT CACTUS	20	EACH	\$60.00	\$1,200

**FINAL PROJECT ASSESSMENT
CONSTRUCTION COST ESTIMATE**

SPEEDWAY BOULEVARD: CAMINO DE OESTE TO PAINTED HILLS ROAD – PAVED SHOULDERS

ADOT TRACS NUMBER: 0000 PM PPM SH652 01C

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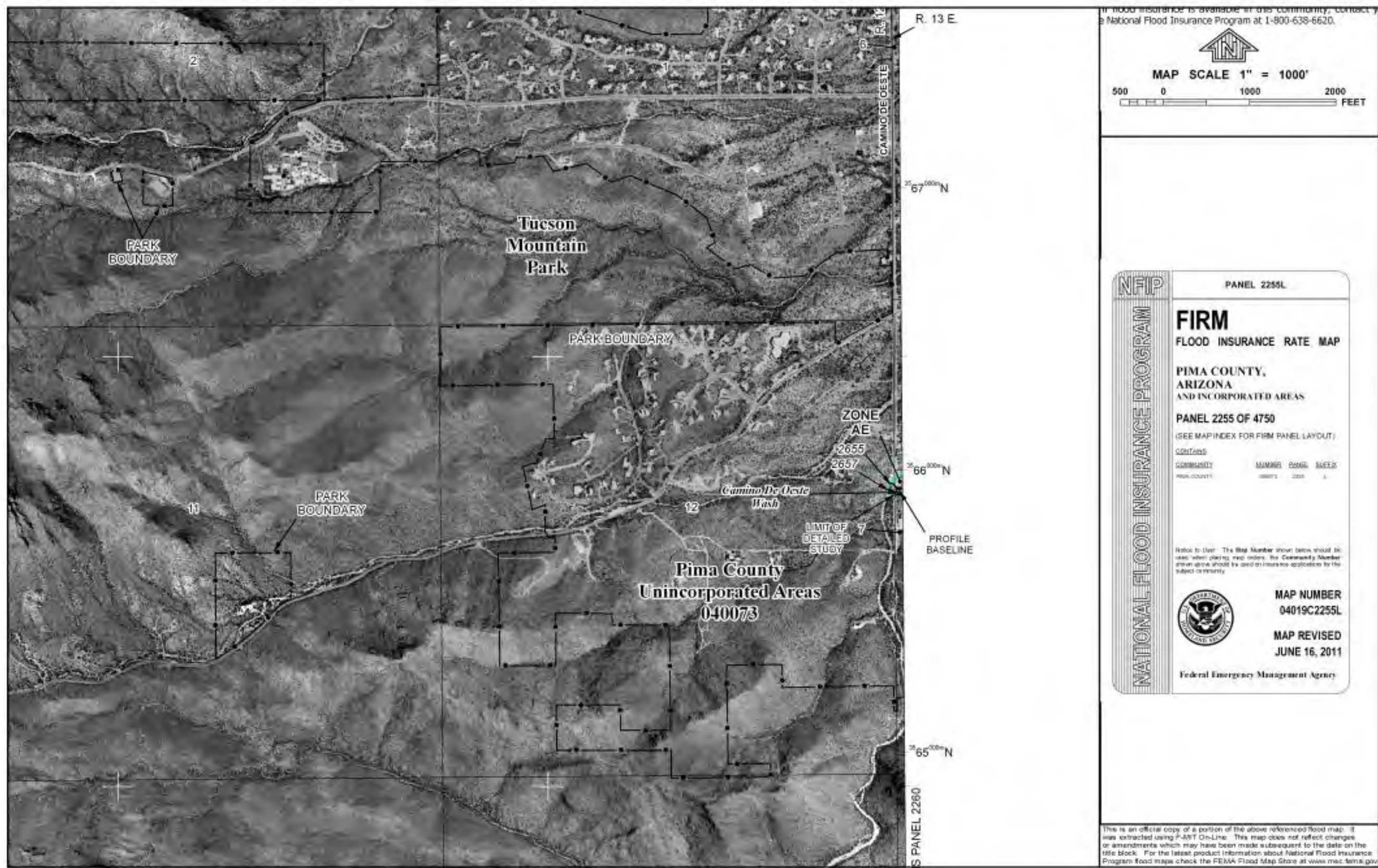
PIMA COUNTY PROJECT NUMBER: CTR.4HSBSP

June 26, 2018

Item #	Description	Quantity	Unit	Unit Price	Total Cost
8100001	AZPDES/NPDES (ORIGINAL)	1	LS	\$30,000.00	\$30,000
8100005	SEDIMENT LOG (DISCRETIONARY)	750	LF	\$5.00	\$3,750
8100006	SEDIMENT WATTLE (DISCRETIONARY)	1,800	LF	\$2.50	\$4,500
8100012	AZPDES/NPDES ALLOWANCE (MODIFIED)	7,500	USD	\$1.00	\$7,500
9010001	MOBILIZATION (5% OF CONSTRUCTION COSTS)	1	LS	\$90,000.00	\$90,000
9050001	GUARDRAIL (W-BEAM, SINGLE FACE)	3,759	LF	\$20.00	\$75,178
9050020	GUARDRAIL TERMINAL (SKT 350)	9	EACH	\$4,250.00	\$38,250
9050036	GUARDRAIL, ANCHOR ASSEMBLY	9	EACH	\$750.00	\$6,750
9080005	CONCRETE CURB (STD. DTL. 209) (TYPE 2)	50	LF	\$15.00	\$750
9080090	CONCRETE CURB TERMINAL SECTION (STD. DTL. 212)	2	EACH	\$30.00	\$60
9080402	CONCRETE HEADER	1,355	LF	\$15.00	\$20,325
9130001	RIPRAP (DUMPED)	650	CY	\$150.00	\$97,500
9130009	RIPRAP (HAND PLACED) (GROUTED)	200	SY	\$110.00	\$22,000
9260001	ENGINEER'S FIELD OFFICE	1	LS	\$34,000.00	\$34,000
9300100	INCIDENTAL ITEMS ALLOWANCE	50,000	USD	\$1.00	\$50,000
				Construction Subtotal	\$1,862,130.70
				Contingency (15%)	\$279,319.61
				Construction with Contingency	\$2,141,450.31
				Construction Mgmt. & Admin. (15%)	\$321,217.55
				Construction Total	\$2,462,667.85
				Construction Total	\$2,462,675.00

10.0 APPENDIX D – FEMA MAPS





11.0 APPENDIX E – PROJECT SCHEDULE

ID	Task Name	Duration	Start	Finish	Predecessors	3rd Quarter JulOct		1st Quarter JanApr		3rd Quarter JulOct		1st Quarter JanApr		3rd Quarter JulOct		1st Quarter JanApr		3rd Quarter JulOct					
1	DATA COLLECTION	536 days	Tue 1/3/17	Tue 1/22/19		<div></div>																	
2	Set Aerial Panels - Urban Engineering (UE)	10 days	Tue 1/3/17	Mon 1/16/17		<div></div>																	
3	Corridor Mapping - AeroTech Mapping	15 days	Tue 1/17/17	Mon 2/6/17	2	<div></div>																	
4	Field Survey with Bluestake Utilities - UE	15 days	Tue 1/17/17	Mon 2/6/17	2	<div></div>																	
5	Geotechnical Engineering - Terracon	90 days	Wed 9/19/18	Tue 1/22/19		<div></div>																	
6	Permits	15 days	Wed 9/19/18	Tue 10/9/18	50	<div></div>																	
7	Drilling	15 days	Wed 10/10/18	Tue 10/30/18	6	<div></div>																	
8	Prelim. Analysis	15 days	Wed 10/31/18	Tue 11/20/18	7	<div></div>																	
9	Prelim. Findings to Design Team	1 day	Wed 11/21/18	Wed 11/21/18	8	<div></div>																	
10	Draft Geotech. & Pvmt. Design Report	15 days	Wed 11/21/18	Tue 12/11/18	8	<div></div>																	
11	Final Geotech. & Pvmt. Design Report	15 days	Wed 1/2/19	Tue 1/22/19	10FS+15 days	<div></div>																	
12	Existing ROW - UE	25 days	Tue 2/7/17	Mon 3/13/17	4	<div></div>																	
13						<div></div>																	
14	SCOPING DOCUMENT	381 days?	Tue 4/4/17	Tue 9/18/18		<div></div>																	
15	Initial PA	189 days	Tue 4/4/17	Fri 12/22/17		<div></div>																	
16	Conceptual Layout/Footprint	10 days	Tue 4/4/17	Mon 4/17/17	3FS+40 days	<div></div>																	
17	Draft Traffic Memo	15 days	Tue 4/18/17	Mon 5/8/17	16	<div></div>																	
18	Define Design Alternatives	18 days	Tue 4/18/17	Thu 5/11/17	16	<div></div>																	
19	Landscape Concept - Wheat Design Group	18 days	Tue 4/18/17	Thu 5/11/17	16	<div></div>																	
20	Review Alternatives with PCDOT	10 days	Fri 5/12/17	Thu 5/25/17	18	<div></div>																	
21	Document Preferred Alternatives	20 days	Fri 5/26/17	Thu 6/22/17	20	<div></div>																	
22	Revise Initial PA per Revised Scope	13 days	Wed 11/15/17	Fri 12/1/17	21FS+103 days	<div></div>																	
23	Revise Concept Plans per Revised Scope	13 days	Wed 11/15/17	Fri 12/1/17	21FS+103 days	<div></div>																	
24	Submit Initial PA w/ Revised Scope to PC	1 day	Mon 12/4/17	Mon 12/4/17	23	<div></div>																	
25	Submit Initial PA w/ Revised Scope to ADOT	1 day	Fri 12/22/17	Fri 12/22/17	24FS+13 days	<div></div>																	
26	Public Open House #1	1 day	Wed 12/6/17	Wed 12/6/17		<div></div>																	
27	Environmental - Harris/PCDOT	170 days	Mon 4/17/17	Fri 12/8/17		<div></div>																	
28	Environmental Overview - for PA	20 days	Mon 4/17/17	Fri 5/12/17		<div></div>																	
29						<div></div>																	
30	Final PA	179 days?	Mon 12/25/17	Thu 8/30/18		<div></div>																	
31	PCDOT/ADOT Review of Initial PA	20 days	Mon 12/25/17	Fri 1/19/18	25	<div></div>																	
32	Prepare Final PA	35 days	Mon 1/22/18	Fri 3/9/18	31	<div></div>																	
33	Update Plans	35 days	Mon 1/22/18	Fri 3/9/18	31	<div></div>																	
34	Submit Final PA	1 day	Mon 5/28/18	Mon 5/28/18	33FS+55 days	<div></div>																	
35	PCDOT Review of Final PA	9 days	Tue 5/29/18	Fri 6/8/18	34	<div></div>																	
36	Revise Final PA	11 days	Mon 6/11/18	Mon 6/25/18	35	<div></div>																	
37	Submit Final PA to Pima County	1 day	Tue 6/26/18	Tue 6/26/18	36	<div></div>																	
38	Submit Final PA to ADOT	1 day	Wed 6/27/18	Wed 6/27/18	37	<div></div>																	
<div>Speedway Blvd: Camino de Oeste to Painted Hills Pima County W.O. No. 4HSBSP Date: Tue 6/26/18</div>		Task	<div></div>	Inactive Milestone	<div></div>	Start-only	<div></div>	Path Predecessor Summary Task	<div></div>														
		Split	<div></div>	Inactive Summary	<div></div>	Finish-only	<div></div>	Path Predecessor Normal Task	<div></div>														
		Milestone	<div></div>	Manual Task	<div></div>	External Tasks	<div></div>	Progress	<div></div>														
		Summary	<div></div>	Duration-only	<div></div>	External Milestone	<div></div>	Manual Progress	<div></div>														
		Project Summary	<div></div>	Manual Summary Rollup	<div></div>	Deadline	<div></div>																
		Inactive Task		Manual Summary	<div></div>	Path Predecessor Milestone Task	<div></div>																
<div>\\USTUZ200CIFS01\jobs\11583 PimaCountySpeedwayBlvd\3-0 PROJECTCONTROL\3-5 ^Schedule\2018-06-26 PC-Speedway Schedule Revised Scope.mpp</div>																							
<div>Page 1 of 2</div>																							
<div>Tue 6/26/18</div>																							

ID	Task Name	Duration	Start	Finish	Predecessors	3rd Quarter		1st Quarter		3rd Quarter		1st Quarter		3rd Quarter		1st Quarter		3rd Qu	
						Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	
39	ADOT PA Final Review	45 days	Thu 6/28/18	Wed 8/29/18	38														
40	ADOT PA Final Acceptance	1 day	Thu 8/30/18	Thu 8/30/18	39														
41																			
42	Environmental - Harris/PCDOT	156 days?	Tue 2/13/18	Tue 9/18/18															
43	Agency/Public Scoping - Letters/Comments	80 days	Tue 2/13/18	Mon 6/4/18	24FS+50 days														
44	Lead/Asbestos Testing	80 days	Tue 2/13/18	Mon 6/4/18	24FS+50 days														
45	Cultural Resources Report	80 days	Tue 2/13/18	Mon 6/4/18	24FS+50 days														
46	Biological Evaluation Short Form	80 days	Tue 2/13/18	Mon 6/4/18	24FS+50 days														
47	PISA - Pima County (Not Harris Env.)	80 days	Tue 2/13/18	Mon 6/4/18	24FS+50 days														
48	Environmental Commitments Memorandum	55 days	Tue 6/5/18	Mon 8/20/18	47														
49	Environmental Clearance (Cat. Ex.)	65 days	Tue 6/19/18	Mon 9/17/18	47FS+10 days														
50	Submit Env. Clearance (Cat. Ex.)	1 day	Tue 9/18/18	Tue 9/18/18	49														
51																			
52	FINAL DESIGN	219 days	Thu 7/26/18	Tue 5/28/19															
53	Initial Design Phase (60%)	42 days	Thu 7/26/18	Fri 9/21/18	38FS+20 days														
54	Utility Meeting #1	1 day	Thu 7/26/18	Thu 7/26/18	38FS+20 days														
55	Guardrail Assessment	20 days	Thu 8/9/18	Wed 9/5/18	38FS+30 days														
56	Submit 60% Plans	1 day	Mon 9/24/18	Mon 9/24/18	53														
57	Submit Plans for Utilities Through Pima County	5 days	Tue 10/16/18	Mon 10/22/18	61														
58	Utility Mitigation Design Schedule Meeting	15 days	Tue 10/23/18	Mon 11/12/18	57														
59	Utility Relocation Planning/Clearance	120 days	Tue 11/13/18	Mon 4/29/19	58														
60	Utility Clearance	5 days	Tue 4/30/19	Mon 5/6/19	59														
61	OTS Review	15 days	Tue 9/25/18	Mon 10/15/18	56														
62	Right-of-Way Acquisition	125 days	Fri 10/19/18	Thu 4/11/19	61														
63	Final Design Phase (95%)	37 days	Tue 10/16/18	Wed 12/5/18	61														
64	Submit 95% Plans	1 day	Thu 12/6/18	Thu 12/6/18	63														
65	OTS Review	15 days	Fri 12/7/18	Thu 12/27/18	64														
66	Final PS&E Phase	33 days	Fri 12/28/18	Tue 2/12/19	65														
67	Submit Final PS&E	1 day	Wed 2/13/19	Wed 2/13/19	66														
68	Public Open House #2	5 days	Fri 1/25/19	Thu 1/31/19	65FS+20 days														
69	Final PS&E OTS Review	15 days	Wed 2/13/19	Tue 3/5/19	66														
70	Sign & Seal PS&E Package	14 days	Wed 3/6/19	Mon 3/25/19	69														
71	Submit Signed PS&E Package	1 day	Tue 3/26/19	Tue 3/26/19	70														
72	Set Pins/Record of Survey - Urban Engineering	30 days	Wed 3/27/19	Tue 5/7/19	71														
73	ADOT Final Review & Acceptance	15 days	Tue 3/26/19	Mon 4/15/19	70														
74	ADOT Authorization	30 days	Tue 4/16/19	Mon 5/27/19	73														
75	Final ADOT Authorization	1 day	Tue 5/28/19	Tue 5/28/19	73														

Speedway Blvd: Camino de Oeste to Painted Hills

Pima County W.O. No. 4HSBSP

Date: Tue 6/26/18

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Path Predecessor Milestone Task

Path Predecessor Summary Task

Path Predecessor Normal Task

Progress

Manual Progress

12.0 APPENDIX F – PROJECT PHOTOGRAPHS





Looking West on Speedway Boulevard.



Looking Northwest on Speedway Boulevard approaching sharp curve at Dusty Hollow Court.



Looking Southeast on Speedway Boulevard approaching sharp curve at Enclave Place.



Looking Northwest on Speedway Boulevard just east of Anklam Road.



Looking Southwest on Speedway Boulevard at sharp curve east of Enclave Place.



Memorial marker east of Enclave Place.



Fill slope concern beyond existing barrier limit.



Guardrail and width concerns at Coral Bells Drive.

13.0 APPENDIX G – PRELIMINARY ROADWAY PLANS



SPEEDWAY BOULEVARD: CAMINO DE OESTE TO PAINTED HILLS
PAVED SHOULDERS

ADOT TRACS NUMBER – 0000 PM PPM SH 652 01C
FEDERAL ID NUMBER – HSIP PPM-0(254)D
PIMA COUNTY PROJECT NUMBER – CTR.4HSBSP

General Project Description

Construct Paved Shoulders on Speedway Boulevard Between Camino De Oeste
and Painted Hills Road. Total Project Length is
Approximately 1.7 Miles.

Pima County Board Of Supervisors

Richard Elias, Chair
District 3

Ally Miller
District 1

Ramon Valadez
District 2

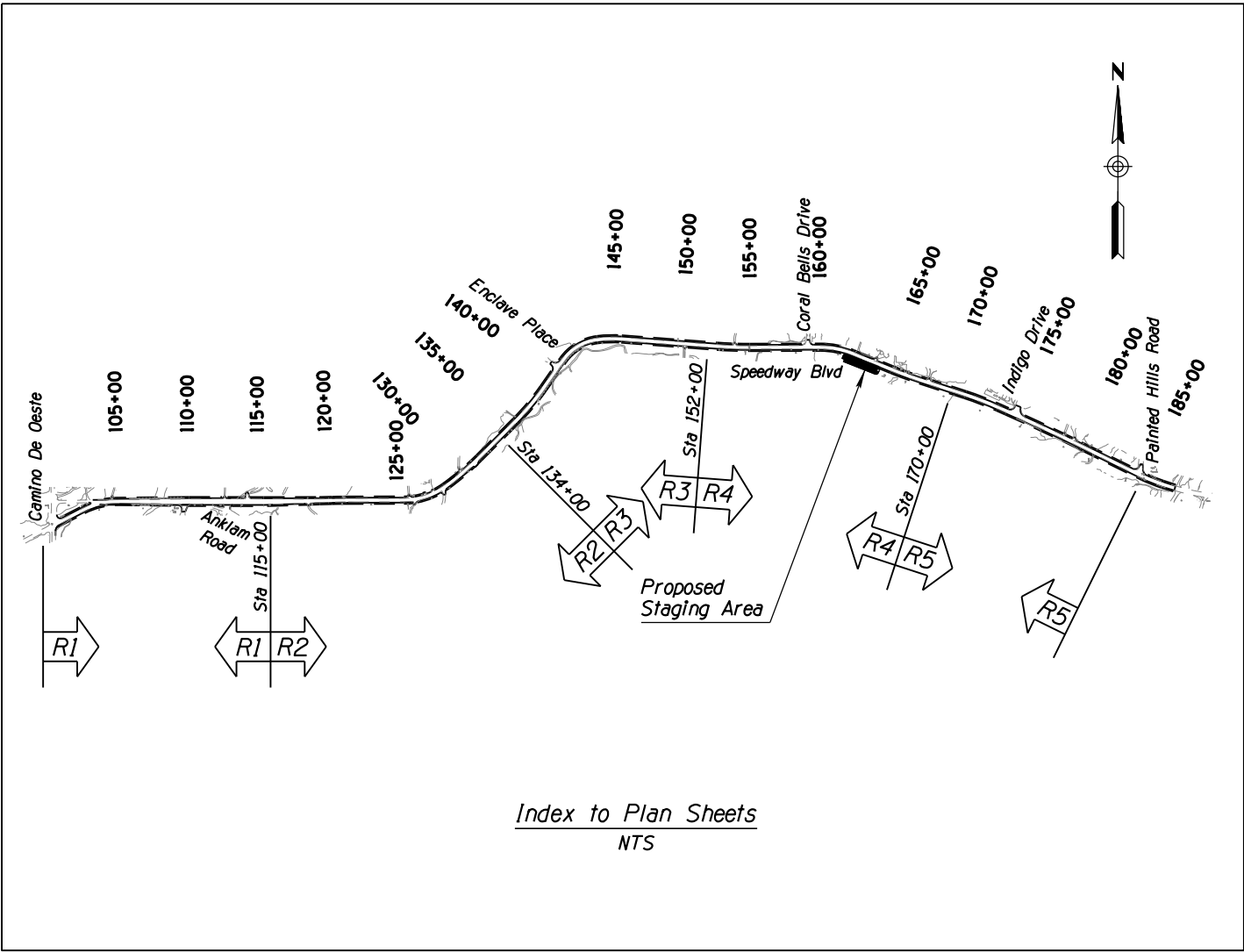
Sharon Bronson
District 4

Steve Christy
District 5

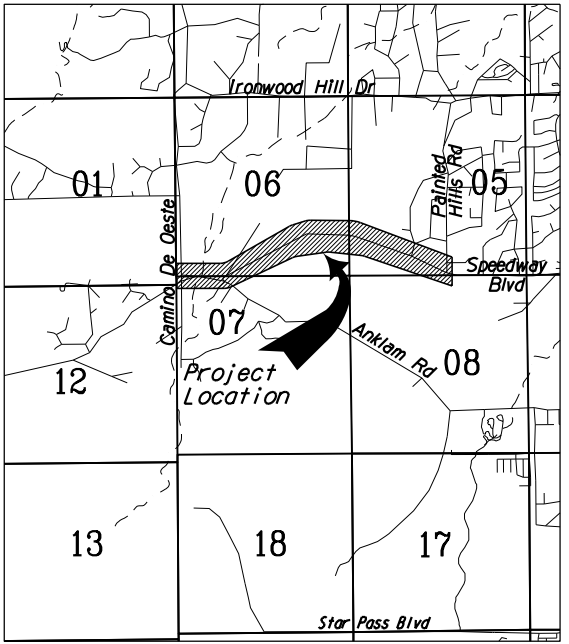
This Project Is Located Within Supervisor District 2.

Sheet Index

Page No.	Sheet No.	Description
1	C1	Cover Sheet
2	C2	General Notes
3	C3	Design Data
4	TY1	Roadway Typical Sections
5-9	D1-D5	Demolition Plans
10-14	R1-R5	Roadway Plans
15-23	RW1-RW9	ROW Plans



Index to Plan Sheets
NTS



Location Map
NTS

Section 5 & 6
T-14-S, R-13-E
Pima County, Arizona
G and S R M

Pima County Department of Transportation

201N. Stone Ave. Tucson, Arizona 85701
Ana M. Oliveras, P.E., Director

No.	Revisions	Engineer	Date
No.	As Built	Engineer	Date
Project No. CTR.4HSBSP			

PRELIMINARY
STAGE I
NOT FOR
CONSTRUCTION
OR RECORDING

Reviewed By	Engineer	Date
Mgr. Design Engr.		
Mgr. Traffic Engr. Div.		
Mgr. Field Engr.		
Approved _____ 20____		
Director		
Sheet C1 of C3 Page 1 of 23		



WSP USA Inc.
2045 N. Forbes Blvd.
Suite 103
Tucson, AZ 85745
TEL: + 1 520.882.6424

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	PPM-0(254)D			
		SH 652 01C			

GENERAL NOTES

1. Construction shall be in conformance with the specifications and details listed in the special provisions.
2. Utility locations shown on the plans were compiled based on the best information available to the Department. Utility locations are not intended to be exact or complete. Prior to commencing construction, the Contractor shall verify the location of all utilities with the appropriate organizations. Contact "Blue Stake" at 1-800-782-5348 Two Full Working Days prior to beginning construction (Saturdays and Sundays are not considered working days).
3. Right-of-Way encroachments shall be removed only by order of Pima County, unless otherwise noted.
4. Removal of all cacti and native plants shall be in accordance with the provisions of the "Arizona Native Plant Law" A.R.S., Chapter 7.
5. The Basis of Bearing for this project is the south line of the southeast quarter (SE 1/4) of Section 5, Township 14 South, Range 13 East, G&SRM, Pima County. Said bearing being North 89°46'41" East (Based on NAD 83 State Plane Coordinates per Pima County DOT - City of Tucson DOT Geodetic Control Points E07 and E09).
6. The Basis of Elevation for this project is the Pima County DOT - City of Tucson DOT Geodetic Control Point E01, said point being a 2" brass cap with punch only in concrete, flush with pavement and located at the intersection of Speedway Boulevard and Camino de Oeste. Said elevation being 2621.90 feet (NAVD 88).
7. Bases of Coordinates: The coordinate system for this project is based on NAD 83, Arizona State Plane coordinates, Central Zone, based upon Pima County DOT - City of Tucson DOT Geodetic Control Points E01, E07, E09 and G01 using a combined scale factor for E01. Project coordinates can be converted to State Plane values by adding 400,000 to the Northings and 900,000 to the Eastings and multiplying by 0.9998544150.
8. Basis of Stationing: Stations for Speedway Boulevard increase from west to east. Stations for side streets and driveways increase from south to north.
9. Soils Information will be made available to prospective bidders in the Geotechnical Report. Soils Information so provided shall be for Information Purposes Only. This information was developed as accurately as possible by the methods used. Pima County accepts no responsibility for any conditions encountered which vary from the Information Provided.
10. The Contractor shall maintain access to all driveways, alleys, and mailboxes during construction. The Contractor will not restrict emergency vehicles, U.S. postal delivery, solid waste collections, and/or access to the adjacent properties, except as approved by the Engineer.
11. Omissions or conflicts between the various elements of the drawings, notes, or details shall be brought to the attention of the Engineer and resolved before proceeding with the work.
12. All stationing shown on the plans and profiles is along the construction centerline, unless otherwise noted.
13. Existing utilities include, but may not be limited to, overhead and underground electric, telephone, television, communication, sewer, gas, and water, and shall be moved by others unless otherwise noted and shown in these plans.
14. The Contractor's attention is called to the limited area available on the site for excavation, embankment and other construction activities.
15. Existing topographic conditions shown on the plan sheets reflect conditions as of February 2017.
16. The Contractor shall be responsible for submitting a proposed sequence of operations and a compatible method of maintaining traffic that shall be in accordance with Section 701 of the Standard Specifications, the overview of traffic control sheets contained in the plan set, and the Manual on Uniform Traffic Control Devices, 2009 w/ 2012 revisions edition.
17. The Right-of-Way lines shown herein are based on record documents and a Right-of-Way survey.
18. The posted speed for Speedway Boulevard is 35 MPH from Camino de Oeste to Indigo Drive and 40 MPH from Indigo Drive to Painted Hills Road.
19. The site shall be treated for buffelgrass and other invasive species prior to initiation of work. See Special Provision 201-3.04 (PC/COT Standard Specifications for Public Improvements, 2003 edition).
20. The contractor is responsible for the preservation of existing plant materials according to Special Provisions Section 201-3.02 (PC/COT Standard Specifications for Public Improvements, 2003 edition).

GENERAL NOTES - CONT.


21. *Overhanging Branches within the Right-of-Way that may impact construction shall be pruned in accordance with Special Provision Section 201-3.05 and shall be paid using Bid Item Number 8061700.*
22. *Existing trees and other plants on adjacent private property may have overhanging branches that will require pruning. See Special Provisions Section 201-3.05. No pruning shall be performed Without the notification of Pima County Community Relations.*
23. *Contractor is to stay within project limits, which are defined as pavement edge and adjacent grading necessary to meet existing grade. No other areas shall be disturbed.*

WASTEWATER NOTES

1. Construction shall maintain access to all sanitary sewer manhole structures at all times.
2. House or business connection sewers (HCS or BCS) are not part of the public sanitary sewer conveyance system. Private connection sewers constructed prior to January 2006 are not required to be Bluestaked. Any HCS/BCS encountered during construction shall be protected, repaired, or rerouted, as the situation dictates per PCRWRD SSDC 2012, Standard Detail RWRD 400.
3. Immediately report any of the following to either PCRWRD Field Engineering (520-740-2651) or PCRWRD Conveyance Division (520-724-3400): any release of sewage, any damage to the public sanitary sewage system, or the dropping of debris into the public sanitary sewage system. On weekends, holidays, or between 5:00 P.M. and 7:00 A.M., immediately call PCRWRD Operations Control Center at (520-724-6048) and request a PCRWRD representative to be dispatched to the site. Take immediate action to contain the sanitary sewage outflow (SSO) from the sewer system. The Contractor shall be responsible for all costs to repair the system, for all expenses to mitigate the release and to disinfect the release areas and for any regulatory penalties levied on PCRWRD because the SSO entered a natural drainageway or storm water drainage system. The Contractor shall repair all damage as directed and approved by PCRWRD.

EARTHWORK NOTES

1. For estimating purposes, it is assumed that all on-site materials are acceptable for use as roadway embankment and trench backfill.
2. For estimating purposes, it is assumed that all on-site materials ARE NOT acceptable for use as pipe bedding, pipe shading, or structure backfill.
3. The volume of existing pavement, including asphaltic concrete and aggregate base, is included in the calculation for roadway excavation per Section 109 of the Special Provisions. No adjustment has been made to the existing ground surface to account for pavement removal as this material can be used for embankments, as described in Section 203-9 of the Standard Specifications.
4. Pipe Excavation and Backfill Limits are per PAG Std. Dtl. 108.
5. Excavation and Backfill Limits for Drainage Structures (Headwalls) are per ADOT SD 6.01, Sheet 4 of 5.
6. Ground compaction and shrink factors were obtained from the Geotechnical Report.

Pima County Department of Transportation		 WSP WSP USA Inc. 2045 N. Forbes Blvd. Suite 103 Tempe, AZ 85745 TEL: +1 520-882-6424	
<p>GENERAL NOTES</p> <p>SPEEDWAY BLVD CAMINO DE OESTE TO PAINTED HILLS PAVED SHOULDERS</p> <p>PROJECT NO. CTR.4H5BSP</p>		<p>PRELIMINARY</p> <p>STAGE I</p> <p>NOT FOR CONSTRUCTION PROOF COPY</p>	
		<i>And M. Oliveras, P.E., Director</i>	
No.	Revision Description	Engineer	Date
		Designed FF	05/2008
		Drawn CPG	05/2008
		Checked JJK	05/2008
		Pre-J. Engr. FF	05/2008

DESIGN DATA			
ROADWAY	LIMITS	2018 ADT	2038 ADT
Speedway Blvd	--	--	--
Speedway Blvd	--	--	--

PROJECT LENGTH SUMMARY		
ROADWAY	LIMITS	LENGTH
Speedway Blvd	100+00.00 - 188+00.00	8,800 FT = 1.7 Miles +/-

DESIGN SPEEDS	
ROADWAY SEGMENT	DESIGN SPEED MPH
Speedway Blvd - Arterial	40
Camino De Oeste - Side Street	50
Painted Hills Rd - Side Street	35

EARTHWORK QUANTITIES		
ITEM NO.	TYPE	AMOUNT (CY)
2030300	Roadway Excavation *	
	Shrink	
2030401	Drainage Excavation	
	Shrink	
	Structural Excavation	
	Shrink	
	Riprap Excavation	
	Shrink	
	Pipe Excavation	
	Shrink	
	Total Excavation	
	Roadway Embankment ***	
	Ground Compaction	
	** Structure Backfill	
	** Pipe Backfill	
	Trench Backfill (Pipe Culvert)	
	** Pipe Bedding	
	Total Embankment	
	Waste (Total Excavation - Total Embankment)	

- * Earthwork was calculated from the existing top of pavement. See Earthwork Notes 3 & 3A above. Removal of existing pavement shall be paid under Bid Item No. 2020001.
- ** Assumed to be Imported Material and therefore Subtracted from the Embankment Need.
- *** Excludes Volume of Culvert Materials & Volume of Voids Created by Culverts.

EARTHWORK FACTORS	
Shrinkage Factor	x%
Ground Compaction	x'

DESIGN VEHICLE	
ROADWAY SEGMENT	TYPE
Design Arterial	WB-62
Side Streets	SU-30
Driveways - Commercial	SU-30

- | ABBREVIATIONS | | | |
|---------------|--|--------|--|
| AB | = Aggregate Base | IP | = Iron Pin |
| AC | = Asphaltic Concrete | M&P | = Maps and Plats |
| ACE | = Access Control Easement | NTS | = Not to Scale |
| ADOT | = Arizona Department of Transportation | PC | = Point of Curvature |
| ADT | = Average Daily Traffic | PC/COT | = Pima County/City of Tucson |
| BCR | = Begin Curb Return | PCDOT | = Pima County Department of Transportation |
| BCSM | = Brass Cap Survey Monument | PG | = Page |
| BK | = Book | PI | = Point of Intersection |
| BVC | = Begin Vertical Curve | POB | = Point of Beginning |
| CORR | = Correction Factor | POE | = Point of Ending |
| Cst | = Construction | PRC | = Point of Reverse Curvature |
| CY | = Cubic Yard | PT | = Point of Tangency |
| DESC | = Description | PVI | = Point of Vertical Intersection |
| DKT | = Docket | PVMT | = Pavement |
| DWY | = Driveway | PVRC | = Point of Vertical Reverse Curve |
| EA | = Each | R | = Radius |
| ECR | = End Curb Return | R/W | = Right of Way |
| EG | = Existing Grade | SEC | = Section |
| Elev | = Elevation | SHLD | = Shoulder |
| EP | = Edge of Pavement | Sta | = Station |
| ESMT | = Easement | SW | = Sidewalk |
| EVC | = End Vertical Curve | TCE | = Temporary Construction Easement |
| Exst | = Existing | UTIL | = Utility |
| FG | = Finished Grade | VC | = Vertical Curve |
| FND | = Found | Vert | = Vertical |
| FT | = Feet | WV | = Water Valve |
| G | = Grade | TOR | = Top of Rail |
| Grnd | = Ground | TWLTL | = Two-Way Left-Turn Lane |
| GU | = Gutter | | |
| Horiz | = Horizontal | | |

AVERAGE ELEVATION

2,554 FT

EXISTING

P.P.

—□—

—OP—

—UGE—

—UGT—

—W—

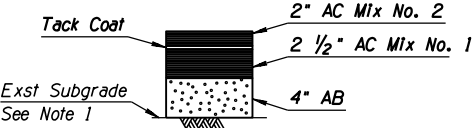
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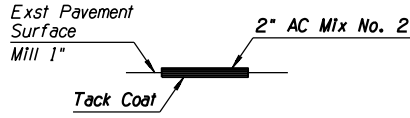
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PAVEMENT STRUCTURAL SECTION
SECTION NO. 1
N.T.S.

Speedway Blvd

▲ Proposed Pavement Structural Sections are estimated at this time for calculation of pavement quantities. Final Pavement Structural Section recommendations will be provided in the Geotechnical Report to be provided during Final Design.



PAVEMENT STRUCTURAL SECTION
SECTION NO. 2
N.T.S.

Speedway Blvd Mill and Fill

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	PPM-0(254)D			

SH 652 OIC

LEGEND

Sheet Number

Horizontal Curve No.

Power Pole

Overhead Power

Underground Power

Underground Telephone

Underground Water

Sewer

Sewer Manhole

Note Reference No.

Water Valve

Street Light Pole

Utility Manhole

Storm Drain

Right-of-Way Line

Property Line

Section Line

Construction Centerline

Easement Line

Benchmark

R/W Monument (1/2" Rebar)
to be set & Tagged by
AZ RLS

Survey Monument Per
Std. Dtl. 103

And M. Oliveras, P.E., Director

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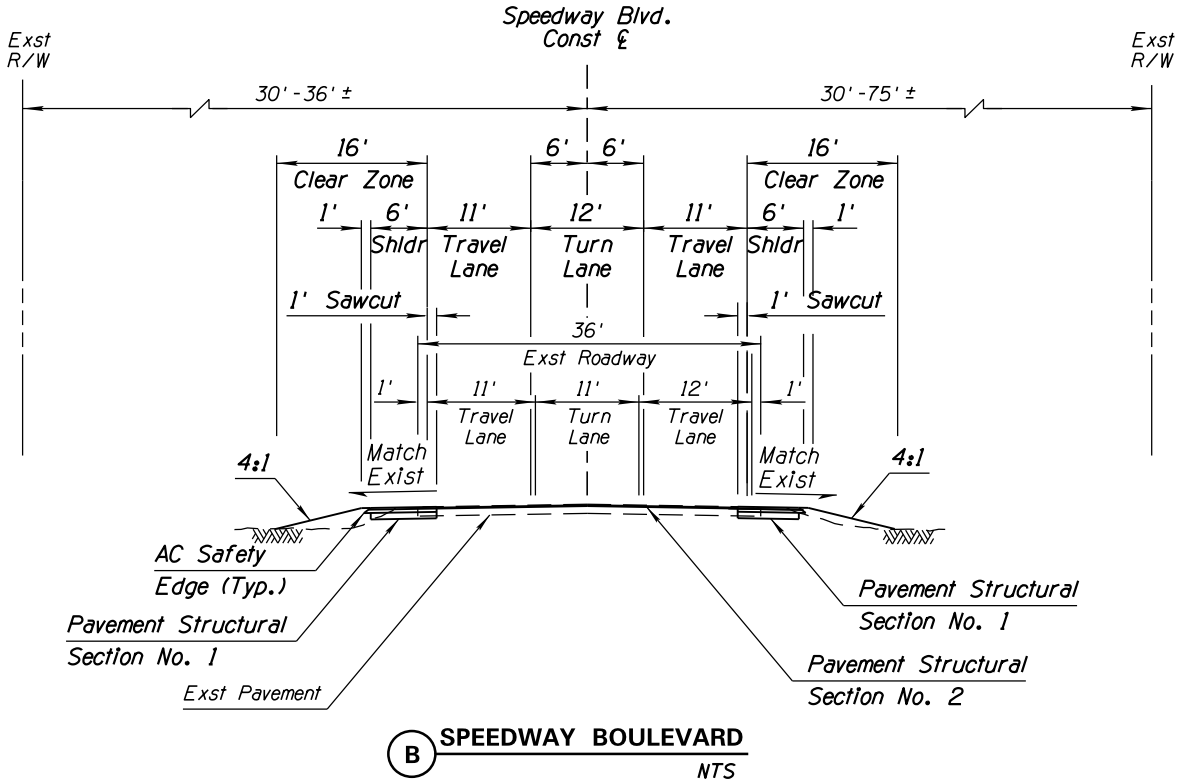
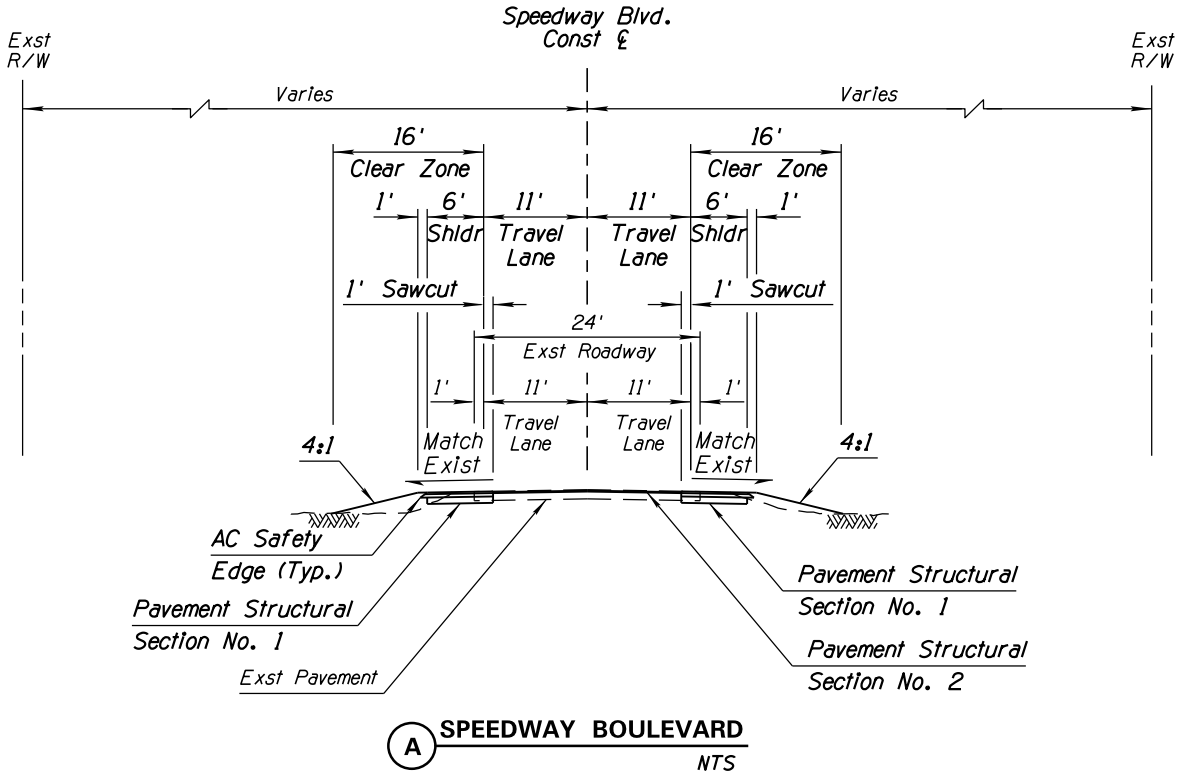
GENERAL NOTES

Pima County Department of Transportation
SPEEDWAY BLVD
CAMINO DE OESTE TO PAINTED HILLS
PAVED SHOULDERS
PROJECT NO. CTR-4HSBSP

WSP
WSP USA Inc.
2035 Forbes Blvd.
Suite 103
Tucson, AZ 85745
TEL: +1 520.882.6424

Arizona
Professional Engineer
License No. 12345
Exp. 12/31/2025

SLOPE EXCEPTION TABLE			
<i>Slope Left</i>	<i>Begin Station</i>	<i>Begin Station</i>	<i>Slope Right</i>
<i>X:Y</i>	<i>XXX + XX.XX</i>	<i>XXX + XX.XX</i>	<i>X:Y</i>



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	PPM-0(254)D			
		SH 652 OIC			

KEYNOTES:

Designed	FF				05/2018
Drawn	CPC				05/2018
Checked	JUK				05/2018
Proj. Engr.	FF				05/2018

No.	Revision Description	Engineer	Date

Ana M. Oliveras, P.E., Director

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Call at least two full working days before you begin excavation.

ARIZONA
Arizona Blue State, Inc.

Call 1-800-514-6111 (782-5146)
In Maricopa County: (602) 263-1100

ROADWAY TYPICAL SECTIONS

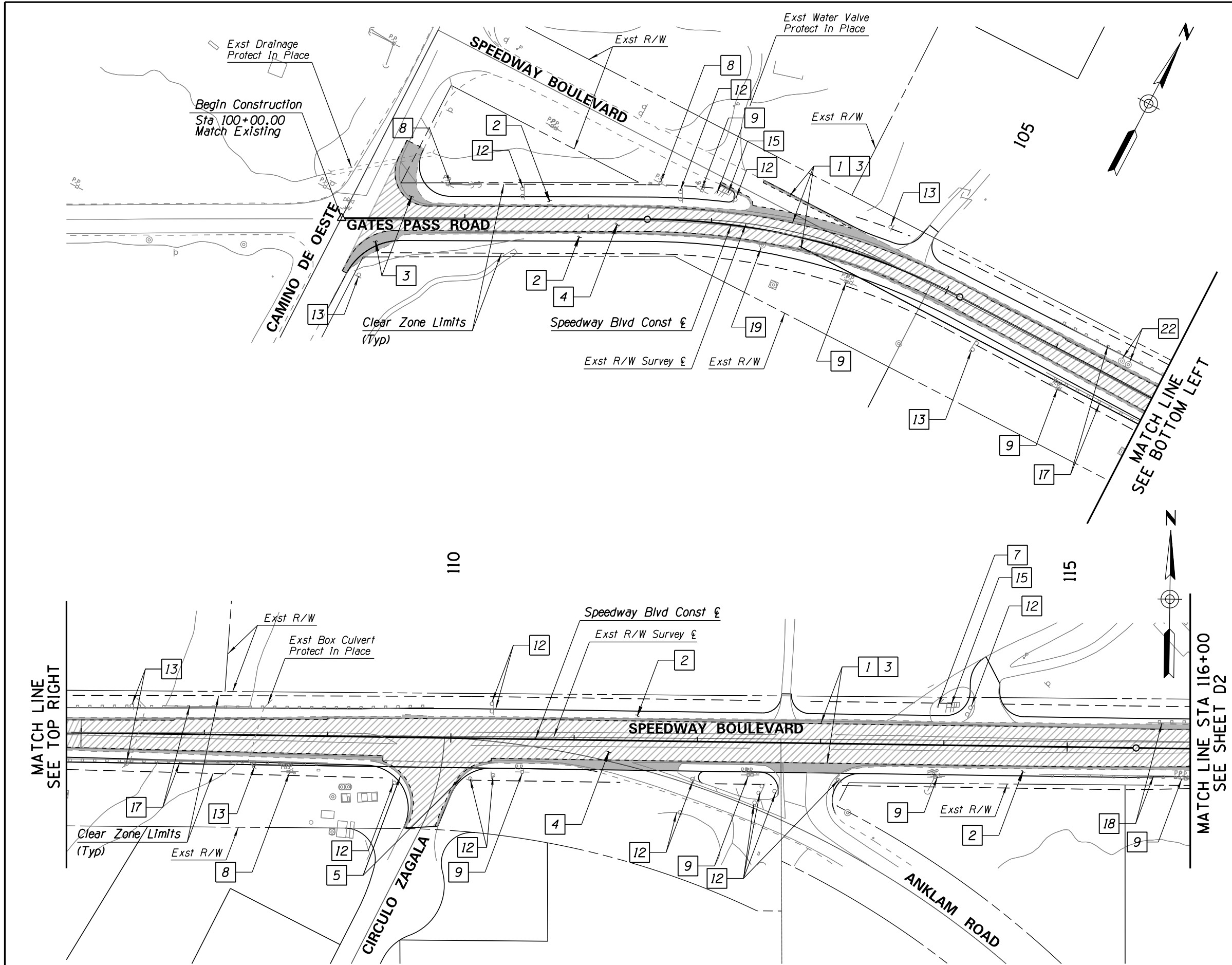
SPEEDWAY BLVD
CAMINO DE OESTE TO PAINTED HILLS
PAVED SHOULDERS

PROJECT NO. CTD 4USR50

SPEEDWAY BLVD: CAMINO DE OESTE TO PAINTED HILLS – PAVED SHOULDERS – PROJECT NO. CTR.4HSBSP

Notes

1. See Geometric Data & Staking Plans for Final Grade Elevations.



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	PPM-0(254)D			
SH 652 OIC					

DEMOLITION KEYNOTES	
1	Sawcut xxx LF.
2	Roadway Excavation xx CY.
3	Remove xx SY Existing Bituminous Pavement.
4	Remove xx SY Existing Bituminous Pavement by Milling.
5	Remove XX SY Existing Concrete Header Curb.
7	Remove XX Delineators.
8	Existing Utility Pole, Protect In Place.
9	Existing Utility Pole, Relocate.
12	Existing Sign, Remove & Salvage.
13	Existing Sign, Protect in Place.
15	Existing Mailbox, Relocate.
17	Existing Guardrail, Protect in Place.
18	Existing Guardrail, Remove XX LF.
19	Existing Manhole, Adjust to Grade.
22	Existing Valve, Adjust to Grade.

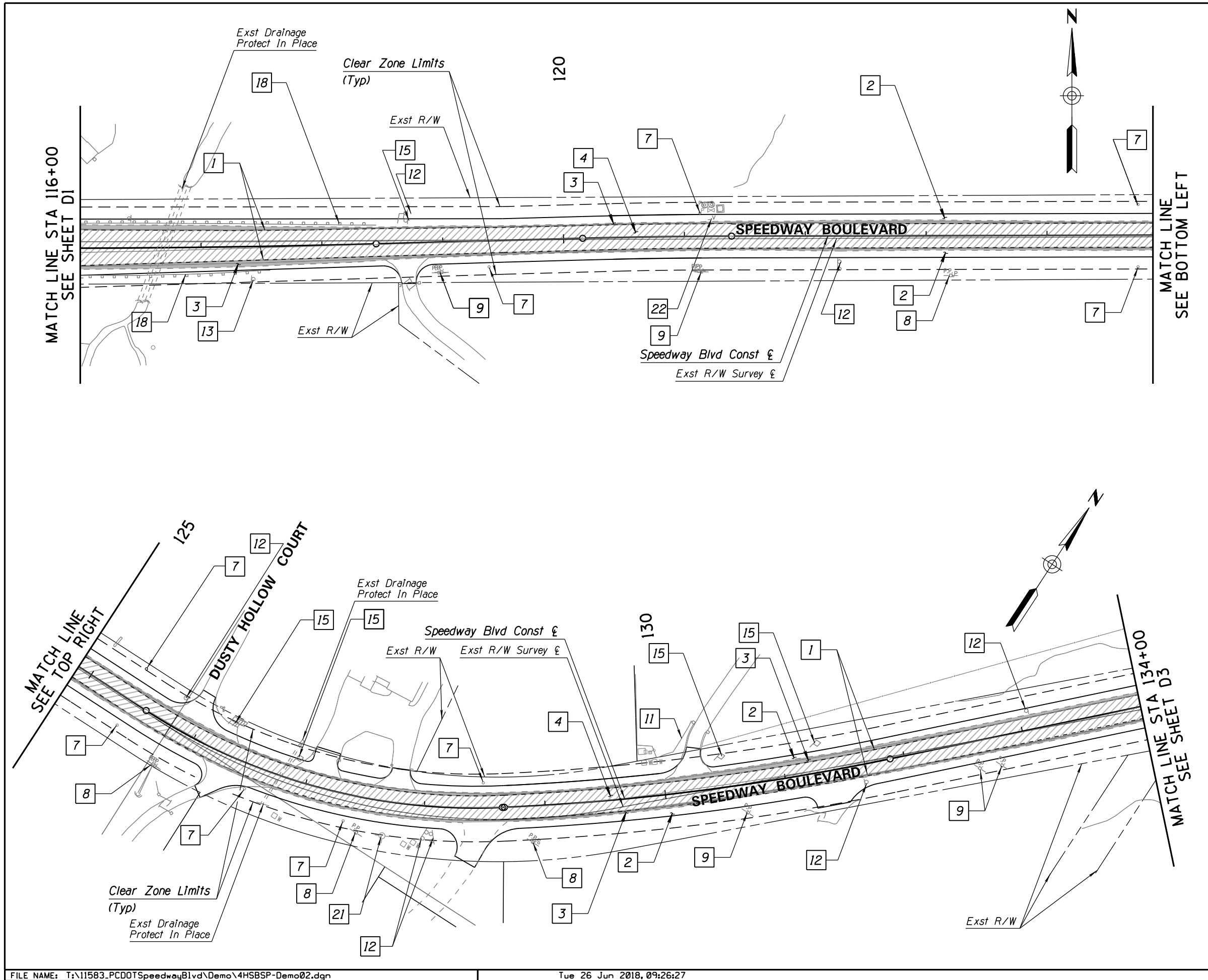
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WSP



DEMOLITION PLAN
SPEEDWAY BLVD
CAMINO DE OESTE TO PAINTED HILLS
PAVED SHOULDERS
PROJECT NO. CTR-4HSBSP



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	PPM-0(254)D			
SH 652 OIC					

- DEMOLITION KEYNOTES
- 1 Sawcut xxx LF.
 - 2 Roadway Excavation xx CY.
 - 3 Remove xx SY Existing Bituminous Pavement.
 - 4 Remove xx SY Existing Bituminous Pavement by Milling.
 - 7 Remove XX Delineators.
 - 8 Existing Utility Pole, Protect in Place.
 - 9 Existing Utility Pole, Relocate.
 - 11 Existing Fence, Protect in Place.
 - 12 Existing Sign, Remove & Salvage.
 - 13 Existing Sign, Protect in Place.
 - 15 Existing Mailbox, Relocate.
 - 17 Existing Guardrail, Protect in Place.
 - 18 Existing Guardrail, Remove XX LF.
 - 21 Existing Fire Hydrant, Protect in Place.
 - 22 Existing Valve, Adjust to Grade.

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Demolition Plan
SPEEDWAY BLVD
CAMINO DE OESTE TO PAINTED HILLS
PAVED SHOULDERS

Scale: 1"=40' Horiz. Sheet D2 of D5 Page 6 of 23

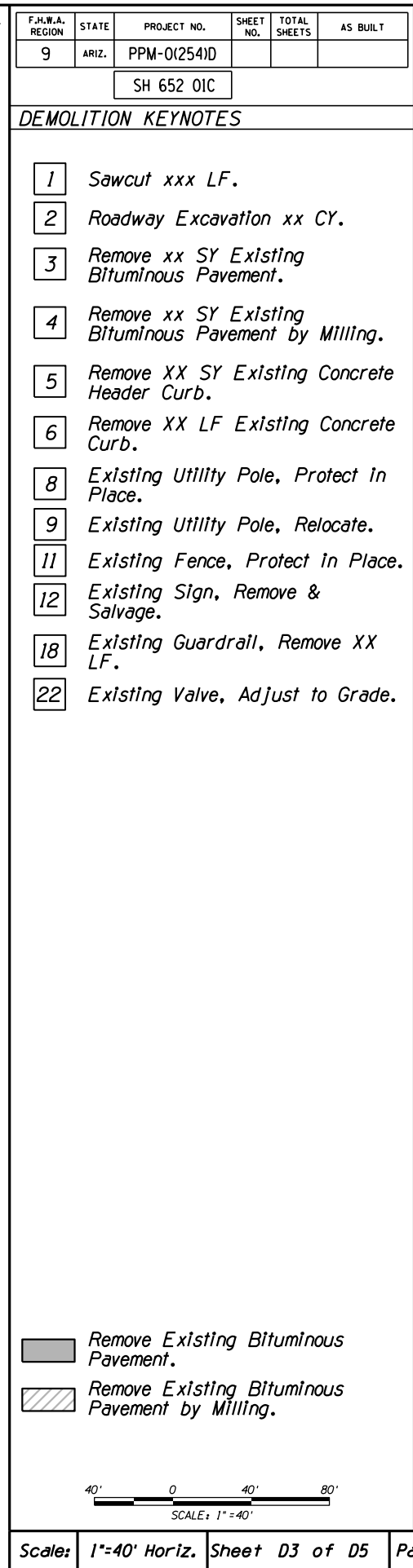
And M. Oliveras, P.E., Director

Date	FF	CPG	JJK	FF
05/2008				
05/2008				
05/2008				
05/2008				

PRELIMINARY
STAGE I
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CONSTRUCTION
PROOF COPY

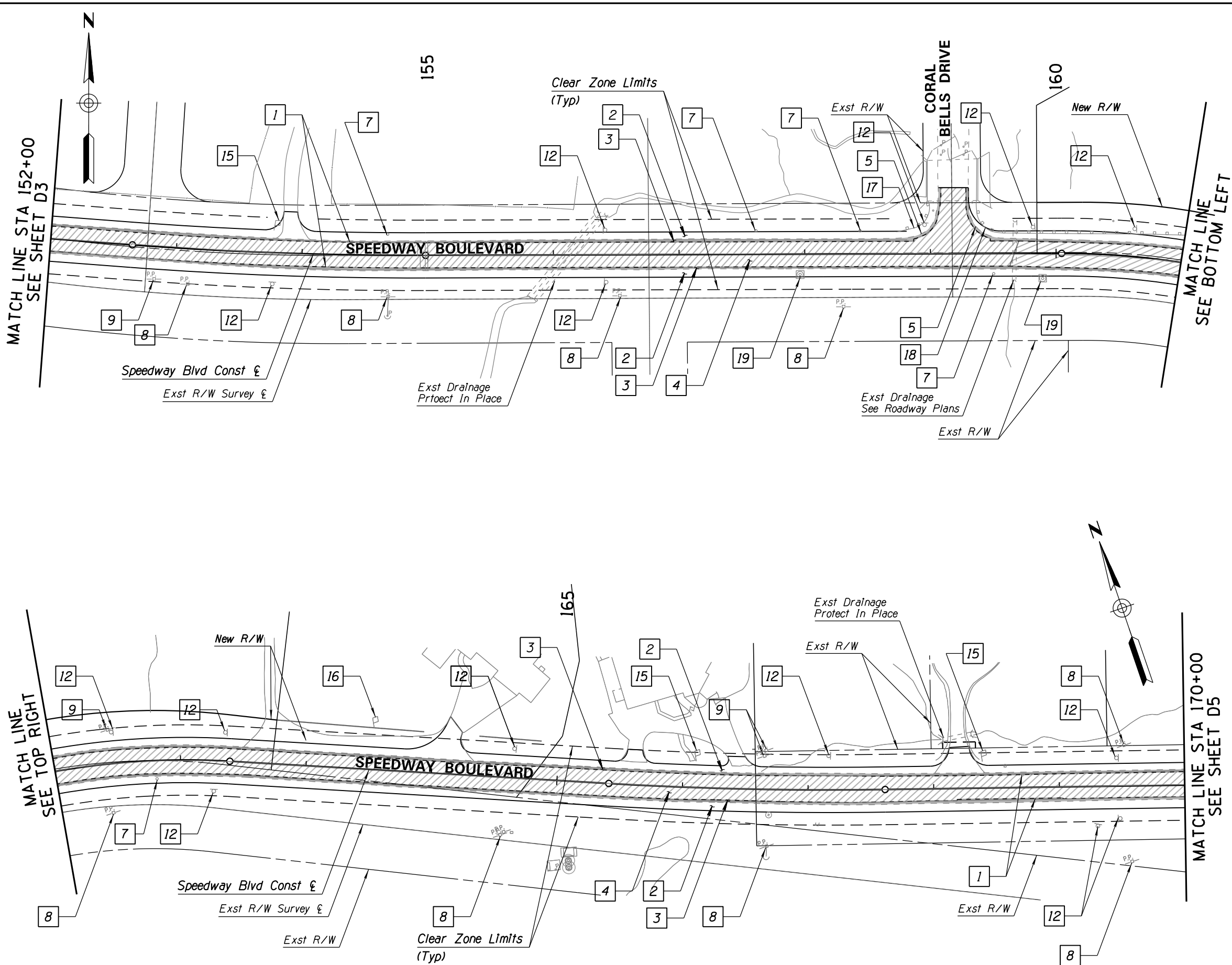
Pima County Department of Transportation

PROJECT NO. CTR-4HSBSP



Pima County Department of Transportation		PRELIMINARY		Ana M. Oliveras, P.E., Director	
DEMOLITION PLAN		STAGE I			
SPEEDWAY BLVD CAMINO DE OESTE TO PAINTED HILLS PAVED SHOULDERS		NOT FOR CONSTRUCTION			
PROJECT NO. CTR 4HSRSP		PROOF COPY			
<div><div><div>WSP USA Inc. 2045 N. Forbes Blvd. Suite 103 Tucson, AZ 85745 TEL: + 1 520.892.6424</div></div><div><div><div>Arizona</div><div>Department of Transportation</div><div>Arizona State Highway Department</div></div><div><div>1000 North Central Avenue, Suite 1000 Phoenix, Arizona 85004-2100</div><div>1-800-441-4600</div></div></div></div>					

SPEEDWAY BLVD: CAMINO DE OESTE TO PAINTED HILLS - PAVED SHOULDERS - PROJECT NO. CTR.4HSBSP



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	PPM-0(254)D			
SH 652 OIC					

DEMOLITION KEYNOTES

- 1 Sawcut xxx LF.
- 2 Roadway Excavation xx CY.
- 3 Remove xx SY Existing Bituminous Pavement.
- 4 Remove xx SY Existing Bituminous Pavement by Milling.
- 5 Remove XX SY Existing Concrete Header Curb.
- 7 Remove XX Delineators.
- 8 Existing Utility Pole, Protect In Place.
- 9 Existing Utility Pole, Relocate.
- 12 Existing Sign, Remove & Salvage.
- 15 Existing Mailbox, Relocate.
- 16 Existing Mailbox, Protect In Place.
- 17 Existing Guardrail, Protect In Place.
- 18 Existing Guardrail, Remove XX LF.
- 19 Existing Manhole, Adjust to Grade.

Scale: 1"=40' Horiz. Sheet D4 of D5 Page 8 of 23

PRELIMINARY STAGE I NOT FOR CONSTRUCTION PROOF COPY

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DEMOLITION PLAN
SPEEDWAY BLVD
CAMINO DE OESTE TO PAINTED HILLS
PAVED SHOULDERS

PROJECT NO. CTR-4HSBSP

And M. Oliveras, P.E., Director

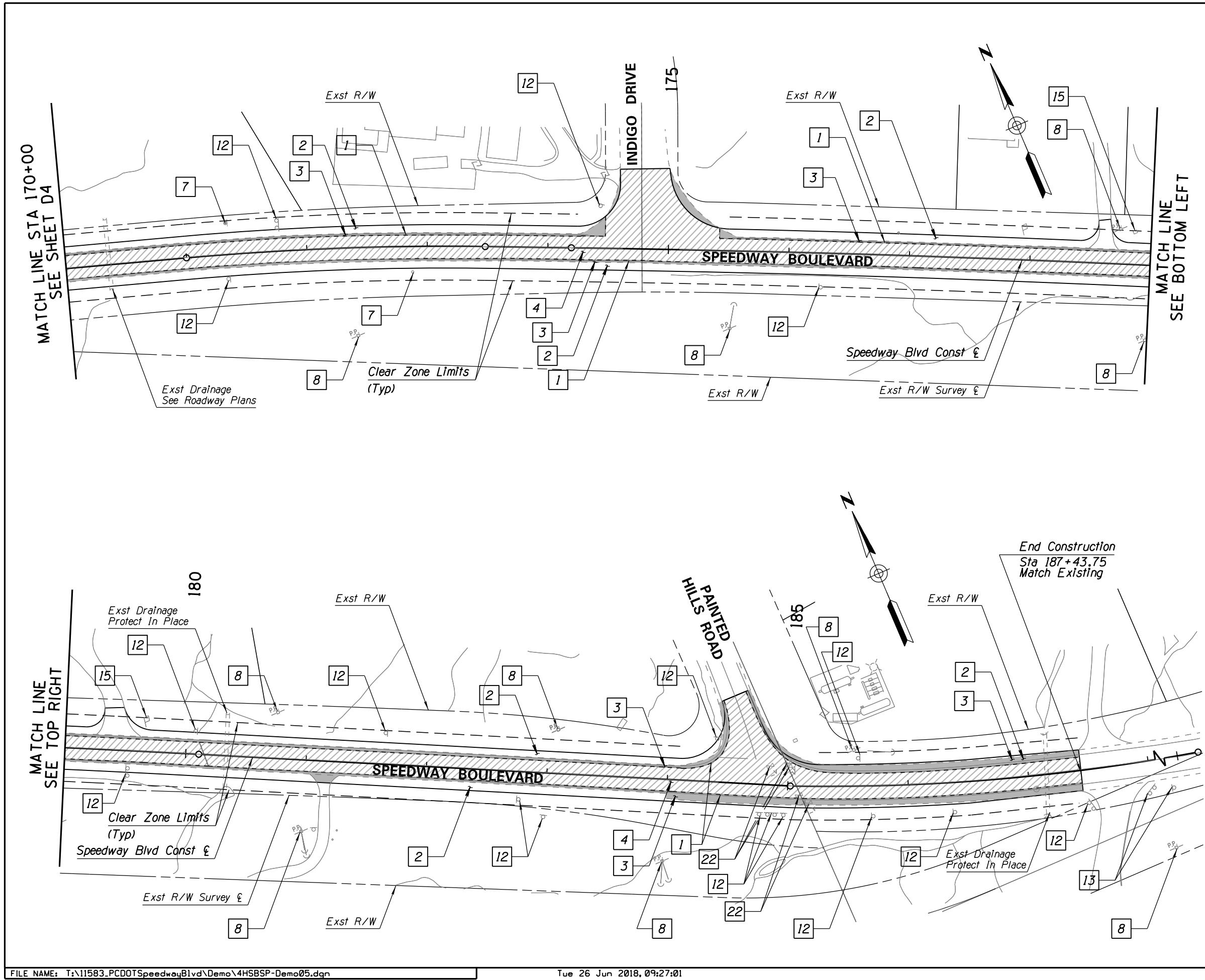
DATE
05/2008
05/2008
05/2008
05/2008

DESIGNED
FF
DRAWN
CPC
CHECKED
JJK
PROJECT ENGR.
FF

NO. REVISION DESCRIPTION ENGINEER

FILE NAME: T:\11583.PCDOTSpeedwayBlvd\Demo\4HSBSP-Demo04.dgn Tue 26 Jun 2018, 09:26:49

SPEEDWAY BLVD: CAMINO DE OESTE TO PAINTED HILLS - PAVED SHOULDERS - PROJECT NO. CTR-4HSBSP



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	PPM-0(254)D			
SH 652 OIC					

DEMOLITION KEYNOTES

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- 9 Existing Utility Pole, Relocate.
- 12 Existing Sign, Remove & Salvage.
- 13 Existing Sign, Protect In Place.
- 15 Existing Mailbox, Relocate.
- 22 Existing Valve, Adjust to Grade.

Scale: 1"=40' Horiz. Sheet D5 of D5 Page 9 of 23

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DEMOLITION PLAN SPEEDWAY BLVD CAMINO DE OESTE TO PAINTED HILLS PAVED SHOULDERS PROJECT NO. CTR-4HSBSP

