WILMOT ROAD IMPROVEMENTS

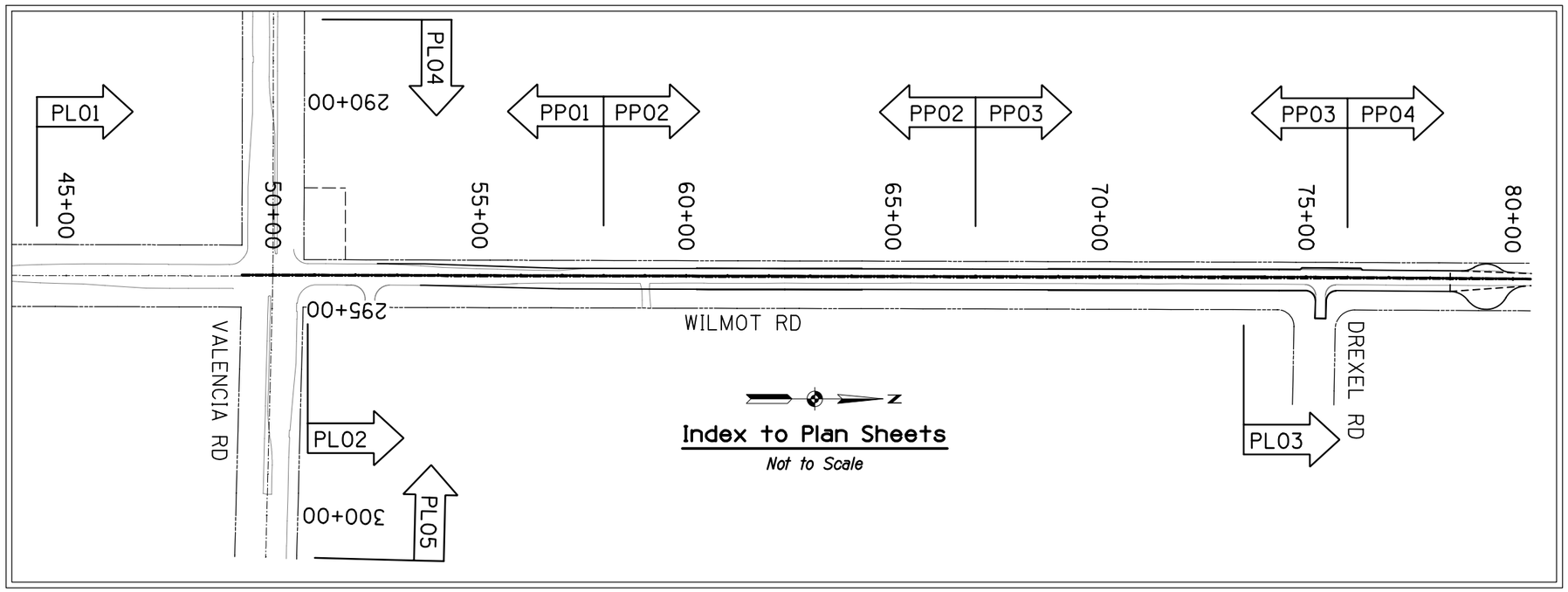
VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

GENERAL DESCRIPTION OF PROJECT

IMPROVEMENTS TO 0.6 MILES OF WILMOT ROAD, FROM VALENCIA ROAD TO DAVIS MONTHAN AIR FORCE BASE SOUTH GATE ENTRANCE. IMPROVEMENTS INCLUDE TWO NORTHBOUND TRAVEL LANES, A SOUTHBOUND TRAVEL LANE, INTERSECTION IMPROVEMENTS, PAVED SHOULDERS, SIGNING AND PAVEMENT MARKING.

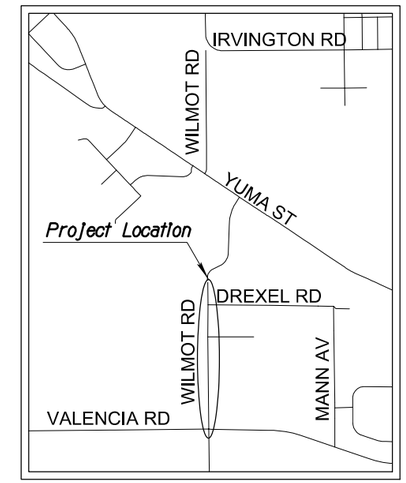
PROJECT NUMBER

4WVDME



Index to Plan Sheets

Not to Scale



Project Location Map

Not to Scale

Sections 1 & 12
T-15-S, R-14-E

Sections 6 & 7
T-15-S, R-15-E

SHEET INDEX

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PL01-PL05	10-14	STAKING PLAN SHEETS
PMGN	15	PAVEMENT MARKING & SIGNING GENERAL NOTES
PM01-PM02	16-17	PAVEMENT MARKING PLAN SHEETS
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SW1-SW8	19-26	STORM WATER POLLUTION PROTECTION PLAN

EARTHWORK QUANTITIES SUMMARY

EARTHWORK QUANTITIES	QUANTITY
Roadway Cut	3,163 CY
Roadway Fill	367 CY

NOTE: Quantities for Cut and Fill are Included for Estimating Purposes Only

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

PIMA COUNTY RWRD NO UPC-2018-081

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

Designed	KW	Date 09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

No.	Revision Description	Engineer	Date

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

COVER SHEET
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

Scale	Horiz N/A	Sheet CS01 of CS01	Page 01 of 26
	Vert N/A		

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GENERAL NOTES

1. Construction shall be in conformance with the Specifications and Details listed in the Special Provisions.

2. Utility locations shown on 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 AZ811 (formerly "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 cacti and native plants shall be in accordance with the provisions of the "Arizona Native Plant Law" A.R.S., Chapter 7.

5. Basis of Bearing: The basis of bearing for this project was established using the Arizona Coordinate System, NAD83 (2011), Central Zone 0202, as observed from Pima County OPUS control point "15S15E_K01", being a 3/4" steel rod in an aluminum casting southeast of the intersection of Wilmot Rd. and the UPRR tracks. The bearing held for this project is between the east quarter corner of Section 12, being a 2" brass cap, in a casting, with a punch and stamped "PCDOT", and the northeast corner of Section 12, being a 2" brass cap, flush, with a punch and stamped "T15S R14E R15E 1-6-12-7 PCDOT". Said bearing being N 00°28'52" W.

6. Basis of Elevation: The basis of elevation for this project is Pima County OPUS control point "15S15E_K01" having an NAVD88 elevation of 2755.00 feet, as determined by the OPUS solution dated July 26, 2014 using the GEOID12A geoid model.

7. Basis of Coordinates: The basis of coordinates are derived from state plane values using the following formulas. The published combined scale factor for Pima County OPUS control point "15S15E_K01" was used to convert grid coordinates to surface coordinates for this project. Surface northing coordinates were derived by dividing the grid coordinates by 0.99989579 and then subtracting 400,000. Surface easting coordinates were derived by dividing the grid coordinates by 0.99989579 and then subtracting 1,000,000. For Pima County OPUS control point "15S15E_K01" the surface coordinates are:
Northing: (412,295.515/0.99989579) - 400,000 = 12,338.485
Easting: (1,027,763.750/0.99989579) - 1,000,000 = 27,870.864.

8. Section Line Basis of Stationing: Stations for Wilmot Road increase from south to north. Stationing at the south end of Wilmot Road starts at Station 49+25.05. See plans for information on Wilmot Road construction centerline stationing.

9. Soils information will be made available to prospective bidders in the Geotechnical Report. Soils information so provided shall be for information purposes only, and is not to be considered part of the contract documents. 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 various elements of the drawings, notes and 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, 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 and profile sheets reflect conditions as of August, 2018.

16. Any excess excavated material shall become the property of the contractor, and shall be removed from the project site by the contractor at no additional cost to the Pima County DOT.

17. The design speed for Wilmot Road is 35 mph and the posted speed limit is 35 mph from beginning of project to Station 72+42. The design speed is 25 mph and the posted speed is 25 mph from Station 72+42 to end of project.

18. Profile grades for Wilmot Road are shown to the finished grade of the A.C. section.

19. Site shall be treated for buffalegrass and other invasive species prior to initiation of work. See Special Provisions Section 201-3.04.

20. Where construction impacts existing landscape or irrigation encroachments within the right of way, the contractor shall coordinate required adjustments with the Project Engineer and adjacent property owners.

LEGEND

EXISTING		NEW
UGE	Undergound Electric	UGE
8" G	Gas	8" G
FO	Fiber Optic	FO
12" S	Sewer	12" S
8" W	Water	8" W
S	Sewer Manhole	S
	Water Meter Box	
	Water Valve	
	Right-of-Way	
x	Fence Boundary	x
	Sight Visibility Triangle	

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ARIZONA 811
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Scale	Horiz N/A Vert N/A	Sheet GN01 of GN01	Page 02 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

CONSTRUCTION GENERAL NOTES
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 KEVIN D. SCHLESINGER Date Signed 09/20/19 ARIZONA U.S.A. Expires 06/30/20

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

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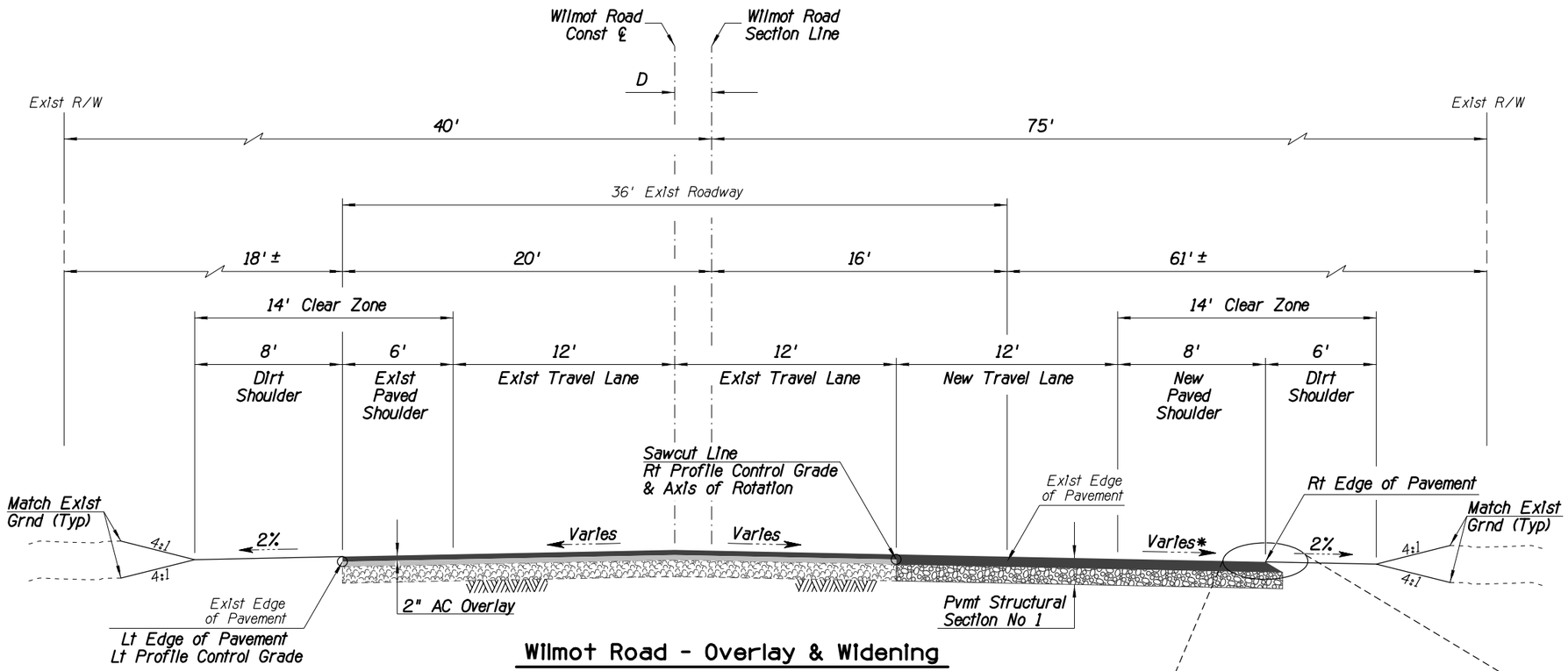


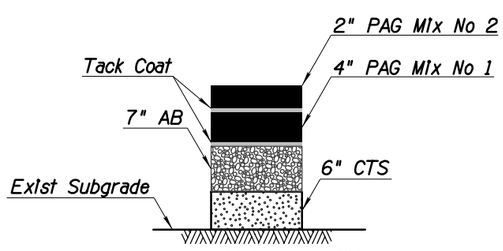
Wilmot Road - Overlay & Widening

NOT TO SCALE

Wilmot Rd Const ℄ Sta 56+92 to Sta 71+85.56

*See Superelevation Diagram for Further Information

Const ℄ Station	D (ft)
49+25.05 to 56+92.06	3.00'
56+92.06 to 75+22.53	Varies 3.00' to 3.98'
75+22.53 to 79+35.57	Varies 3.98' to 2.61'
79+35.57 to 80+42.85	Varies 2.61' to 1.84'



Pavement Structural Section No 1

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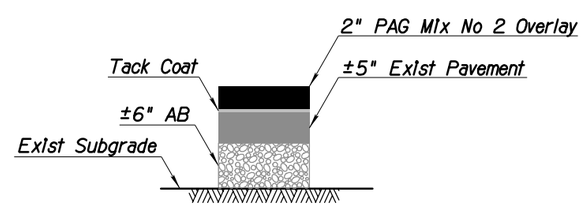
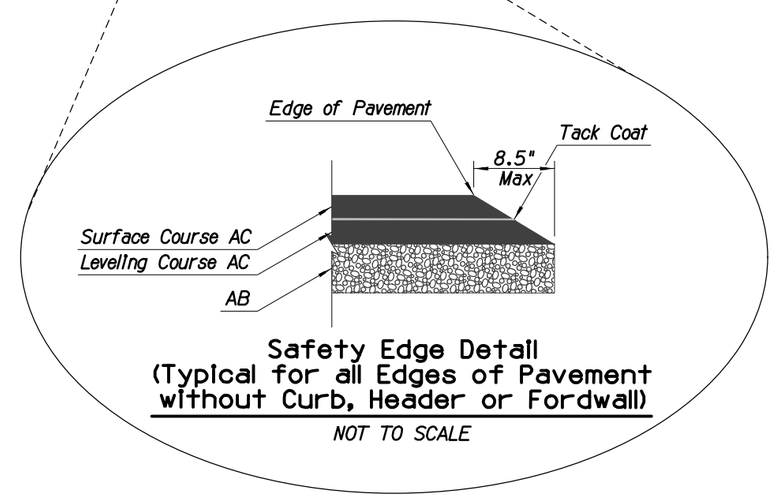


2" Overlay Structural Section

NOT TO SCALE



Safety Edge Detail (Typical for all Edges of Pavement without Curb, Header or Fordwall)

NOT TO SCALE

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ARIZONA 811
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Scale	Horiz N/A
	Vert N/A

Sheet TYP1 of TYP3

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

TYPICAL SECTION - OVERLAY & WIDENING

WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE

PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

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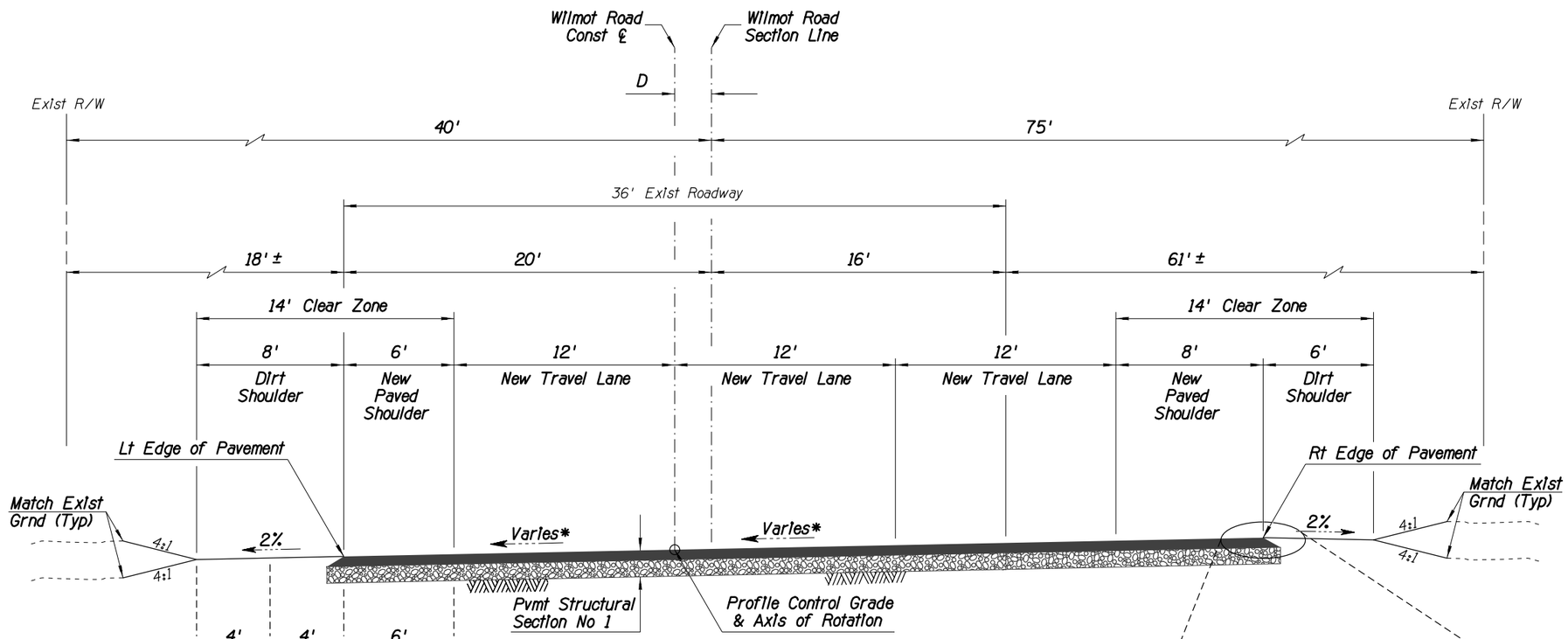


Wilmot Road - Reconstruction

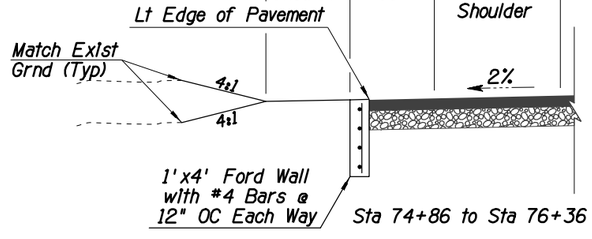
NOT TO SCALE

Wilmot Rd Const ℄ Sta 71+85.56 to Sta 78+48.48**

*See Superelevation Diagram for Further Information

**See Staking Plan for Cul-de-Sac, Sta 78+48.48 to Sta 80+44.65

Const ℄ Station	D (ft)
49+25.05 to 56+92.06	3.00'
56+92.06 to 75+22.53	Varies 3.00' to 3.98'
75+22.53 to 79+35.57	Varies 3.98' to 2.61'
79+35.57 to 80+42.85	Varies 2.61' to 1.84'



Bump Out Detail

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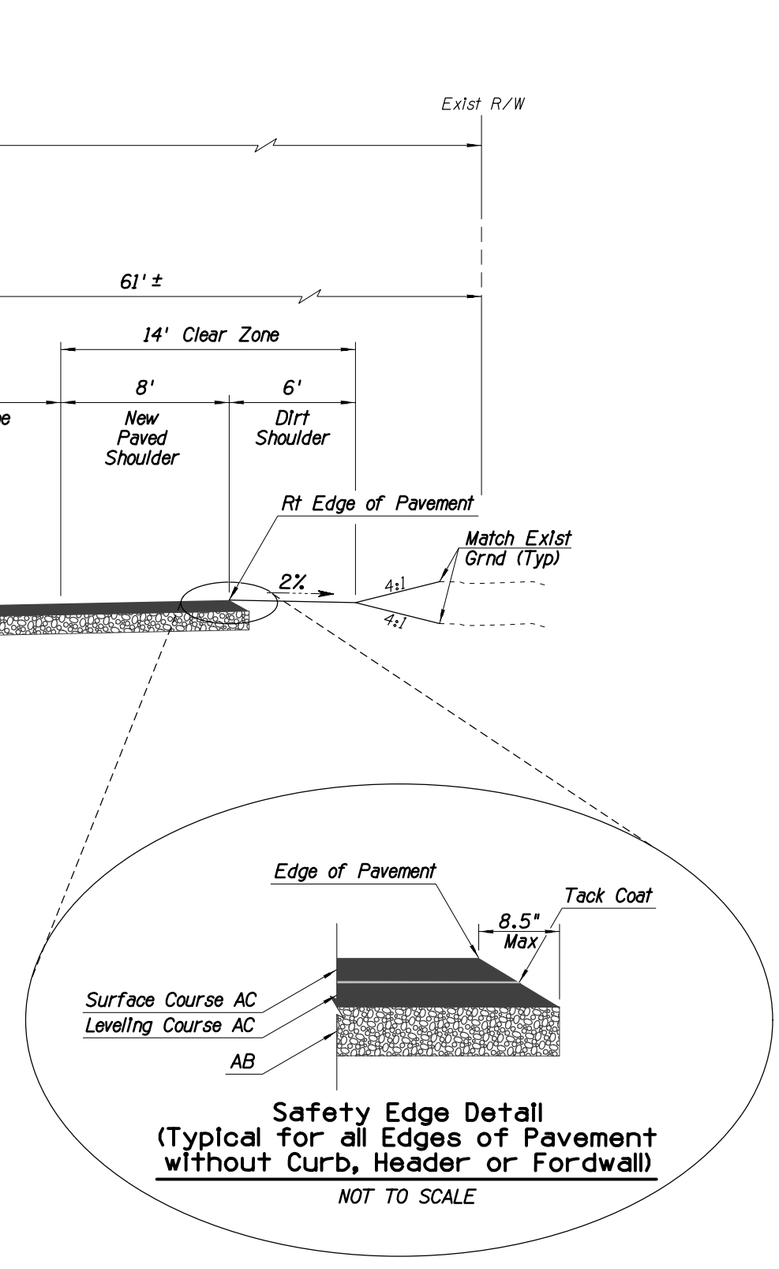
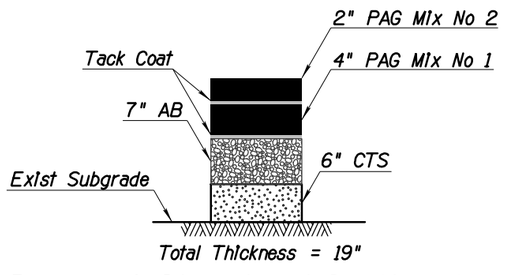


Safety Edge Detail (Typical for all Edges of Pavement without Curb, Header or Fordwall)

NOT TO SCALE



Pavement Structural Section No 1

NOT TO SCALE

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ARIZONA 811
Arizona Blue Stake, Inc.
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Scale	Horiz N/A	Sheet TYP2 of TYP3
	Vert N/A	

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

TYPICAL SECTION - NEW PAVEMENT
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 WILLIAM D. SCHLESINGER Date Signed 09/09/19 ARIZONA U.S.A. Expires 06/30/20

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

No.	Revision Description	Engineer	Date

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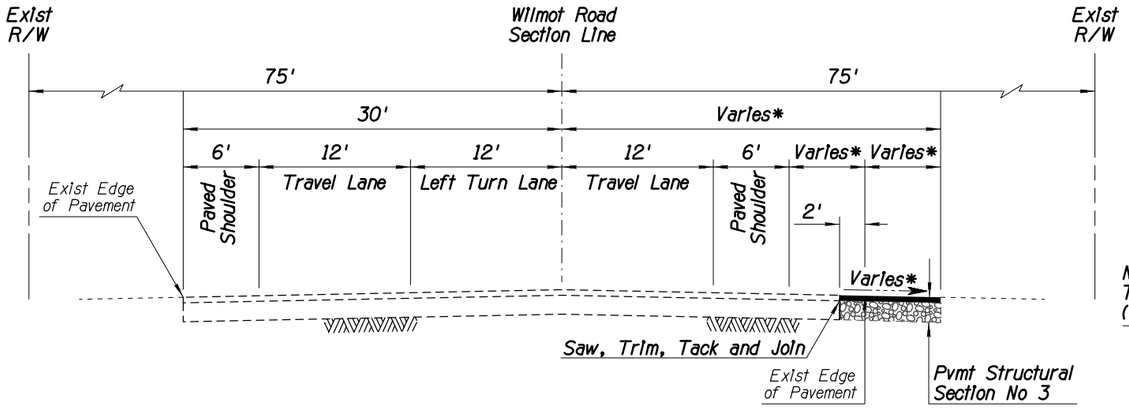
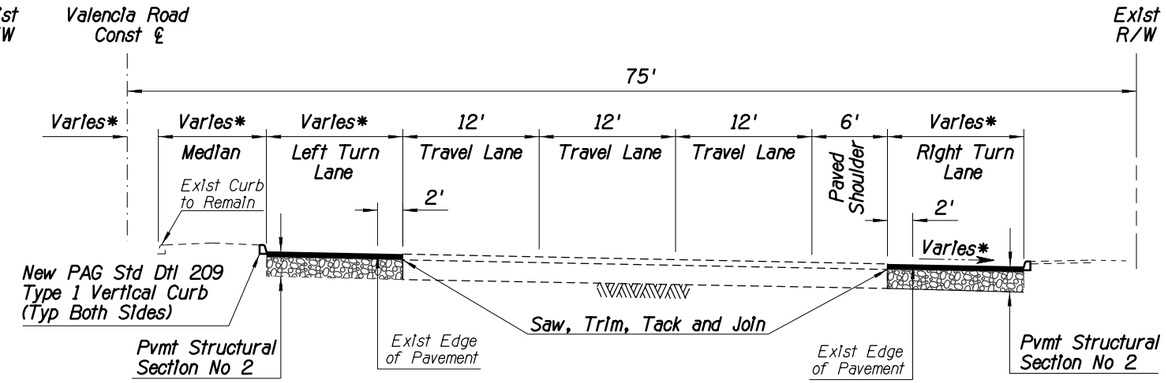


Wilmot Road - NB Widening

NOT TO SCALE
Wilmot Rd Section Line Sta 44+59.71 to Sta 46+93.37

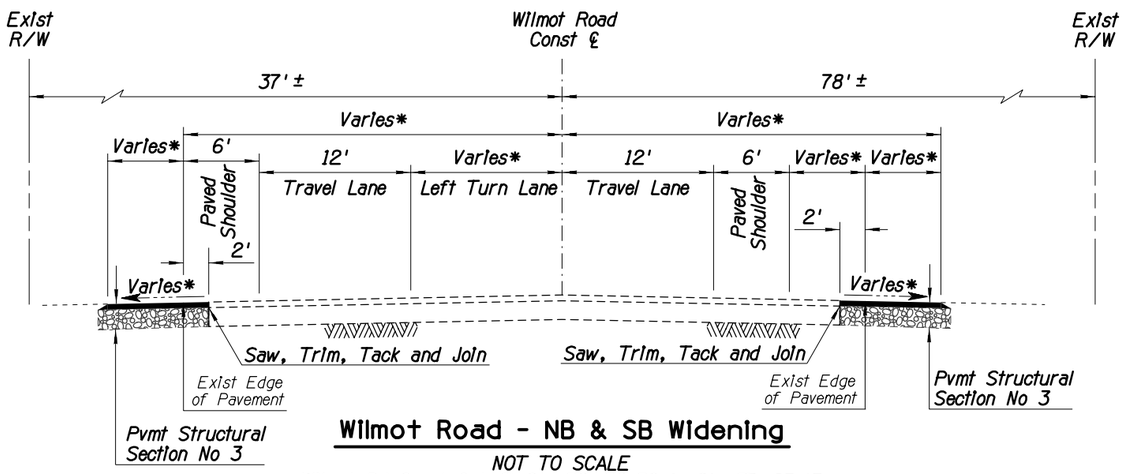
*See Staking Plan for Further Information



Valencia Road - EB Widening

NOT TO SCALE
Valencia Rd Const ℄ Sta 288+47.08 to Sta 290+94.32
Valencia Rd Const ℄ Sta 289+22.90 to Sta 292+04.88

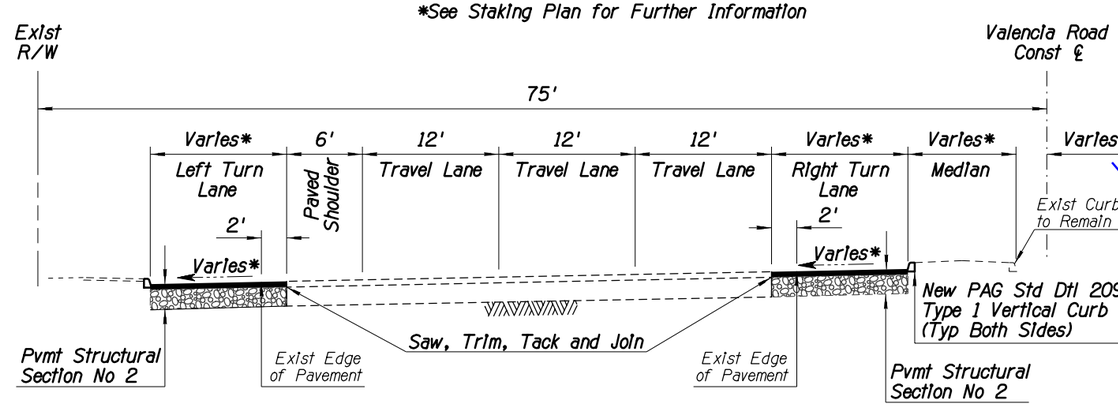
*See Staking Plan for Further Information



Wilmot Road - NB & SB Widening

NOT TO SCALE
Wilmot Rd Const ℄ Left Sta 52+52.56 to Sta 57+65.13
Wilmot Rd Const ℄ Right Sta 53+56.70 to Sta 56+92.08

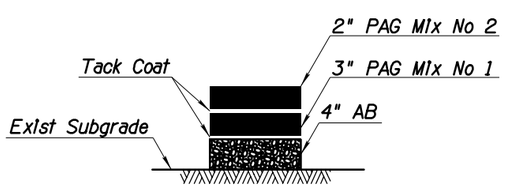
*See Staking Plan for Further Information



Valencia Road - WB Widening

NOT TO SCALE
Valencia Rd Const ℄ Sta 296+34.56 to Sta 299+09.55
Valencia Rd Const ℄ Sta 297+48.46 to Sta 300+42.09

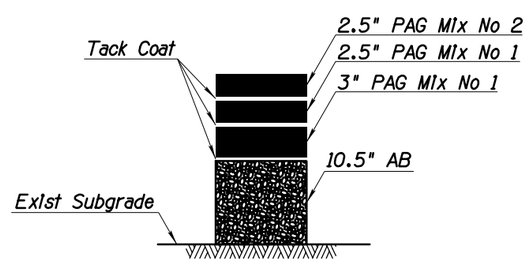
*See Staking Plan for Further Information



Total Thickness = 9"

Pavement Structural Section No 3

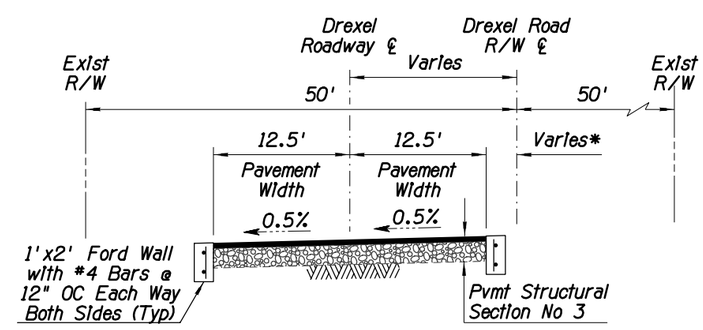
NOT TO SCALE



Total Thickness = 18.5"

Pavement Structural Section No 2 (Turn Bay Widening)

NOT TO SCALE



Drexel Road Reconstruction

NOT TO SCALE
Drexel Rd R/W ℄ Sta 10+25.48 to Sta 10+93.10

*See Staking Plan for Further Information

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Scale	Horiz N/A	Sheet TYP3 of TYP3
	Vert N/A	

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

TYPICAL SECTION - PAVEMENT WIDENINGS
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

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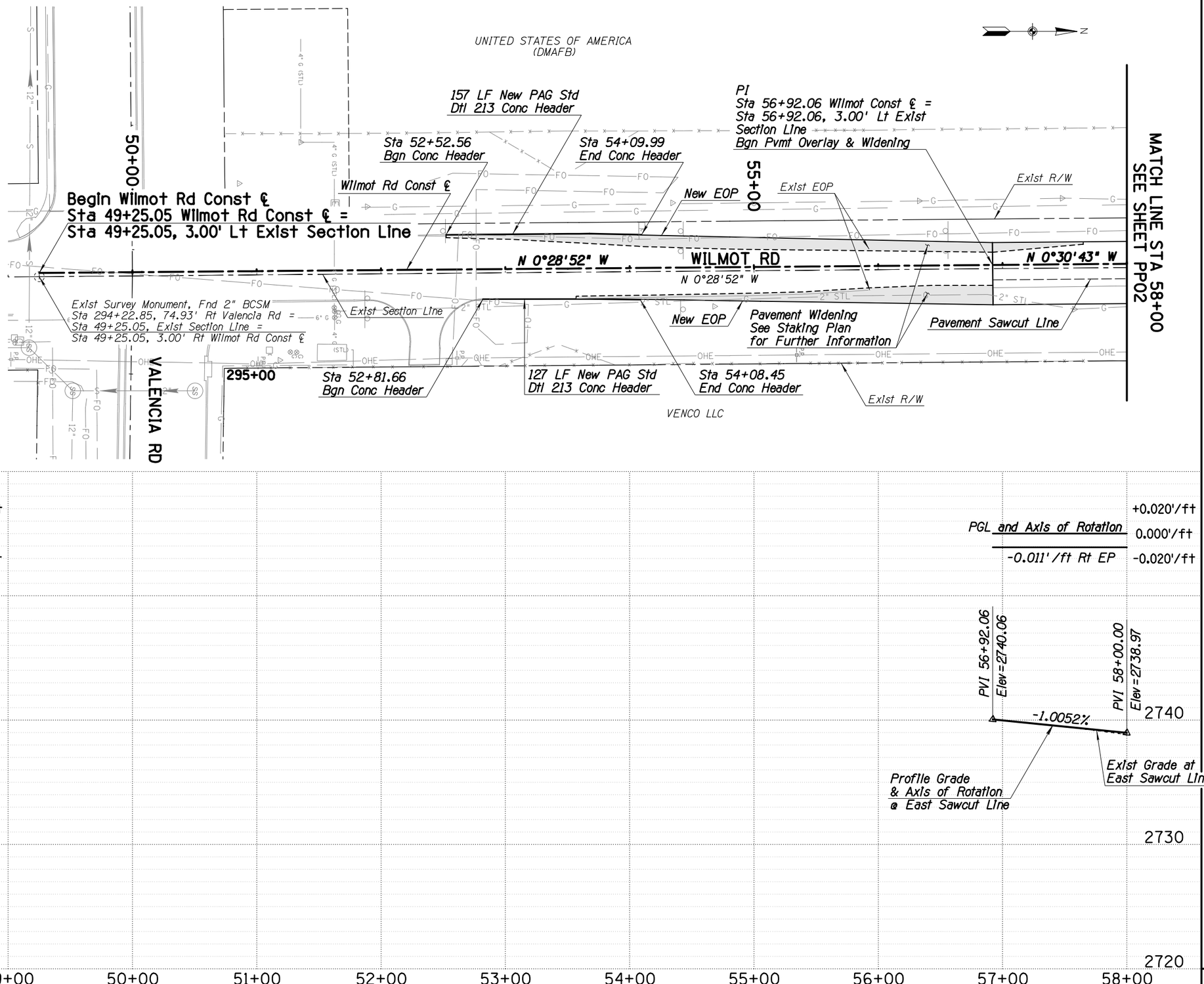

Note: All Stationing Is along Construction Centerline

Call at least two full working days before you being excavation.
ARIZONA 811
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40' 0 40' 80'

Scale	Horiz 1"=40' Vert 1"=4'	Sheet PP01 of PP04	Page 06 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

ROADWAY PLAN AND PROFILE
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 WILLIAM D. SCHLESINGER Date Signed 09/20/19 ARIZONA U.S.A. Expires 06/30/20

Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

No.	Revision Description	Engineer	Date

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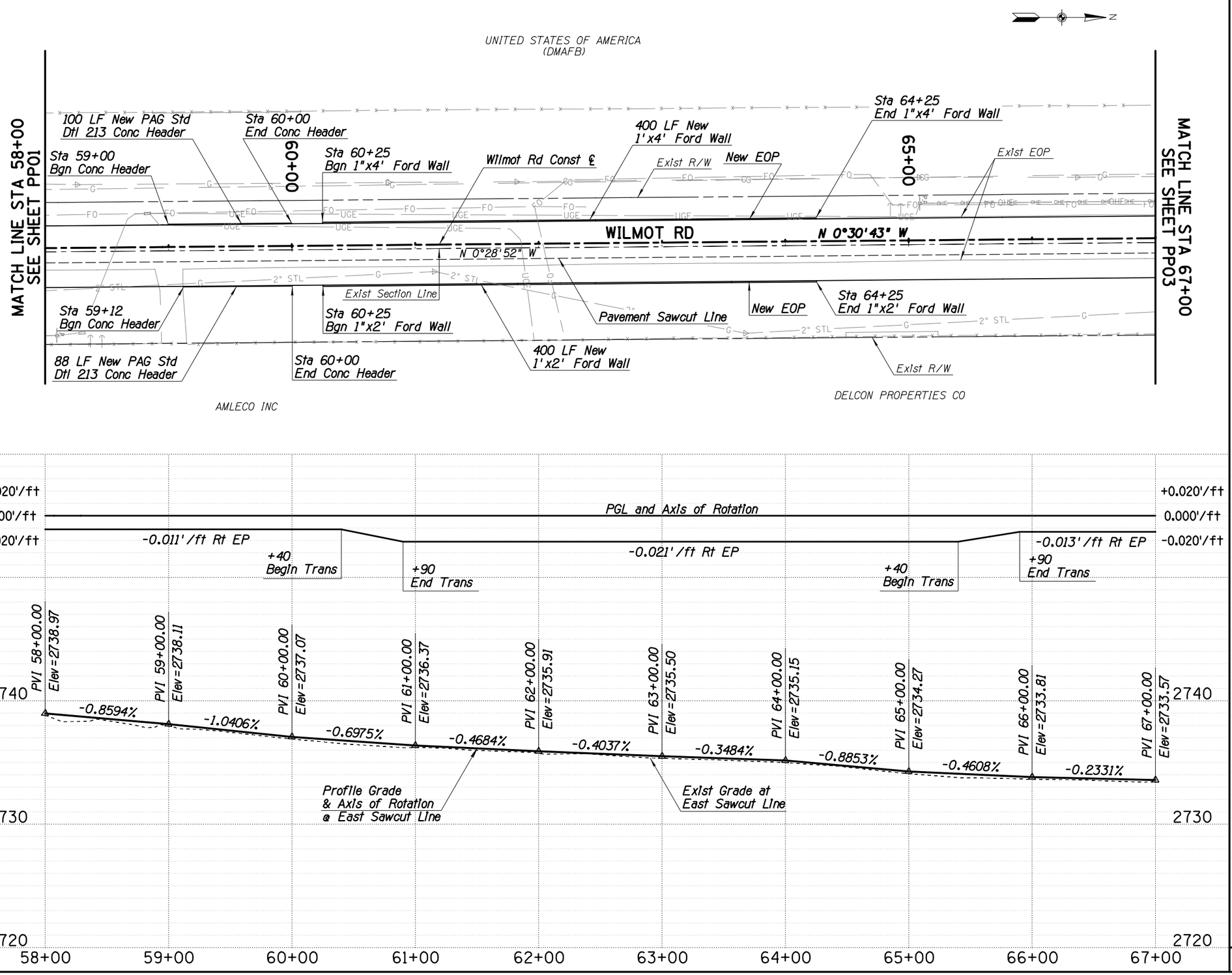

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ARIZONA 811
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In Maricopa County: (602)263-1100

40' 0 40' 80'

Scale	Horiz 1"=40' Vert 1"=4'	Sheet PP02 of PP04	Page 07 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

ROADWAY PLAN AND PROFILE
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

Registered Professional Engineer (Civil)
CERTIFICATE NO. 18164
WILLIAM D. SCHLESINGER
Date Signed 09/20/19
ARIZONA U.S.A.
Expires 06/30/20

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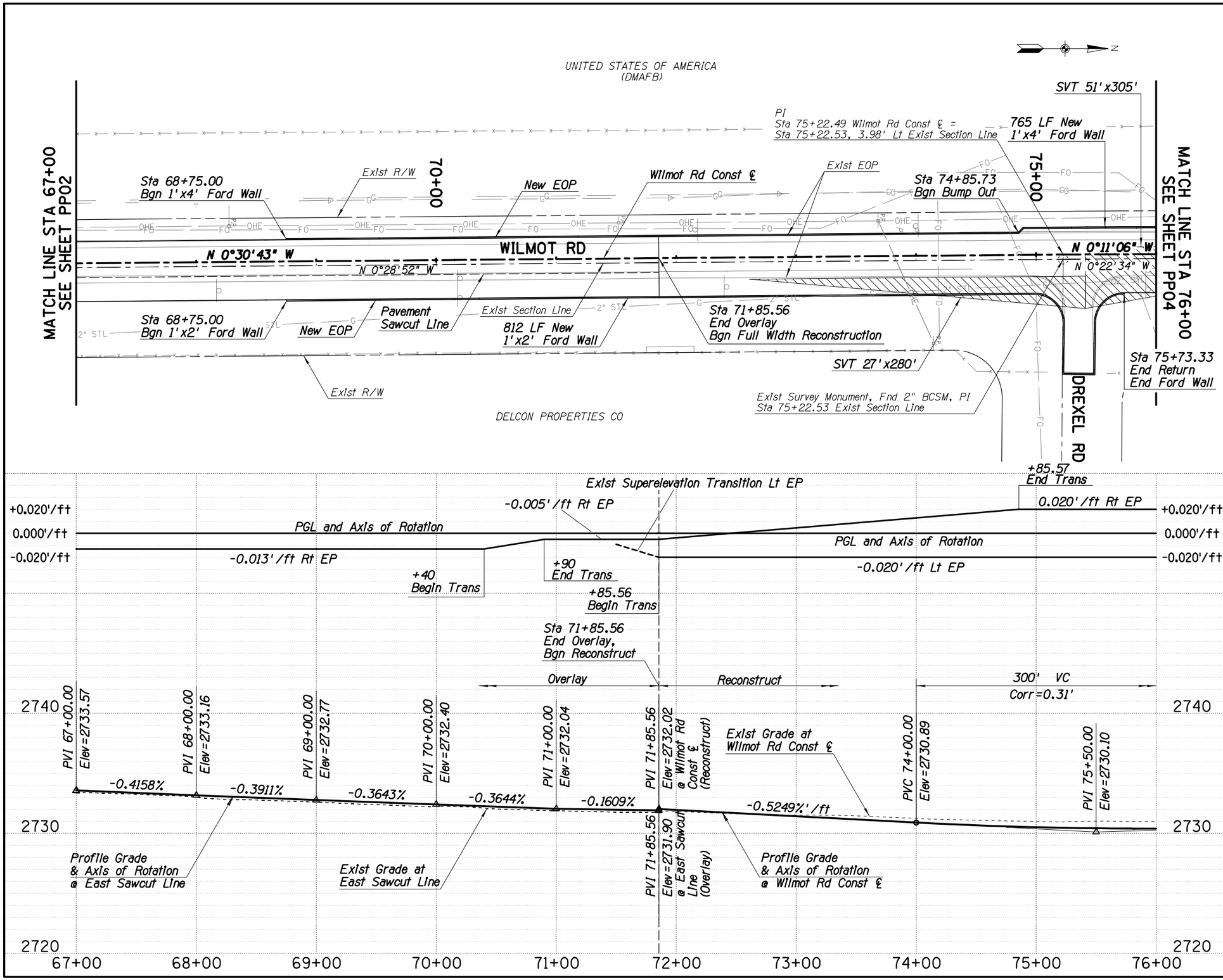

Note: All Stationing Is along Construction Centerline

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ARIZONA 811
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Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

40' 0 40' 80'

Scale	Horiz 1"=40'	Sheet PP03 of PP04
	Vert 1"=4'	

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 WILLIAM D. SCHLESINGER Date Signed 09/19/19 Expires 06/30/20 ARIZONA U.S.A.

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

ROADWAY PLAN AND PROFILE
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

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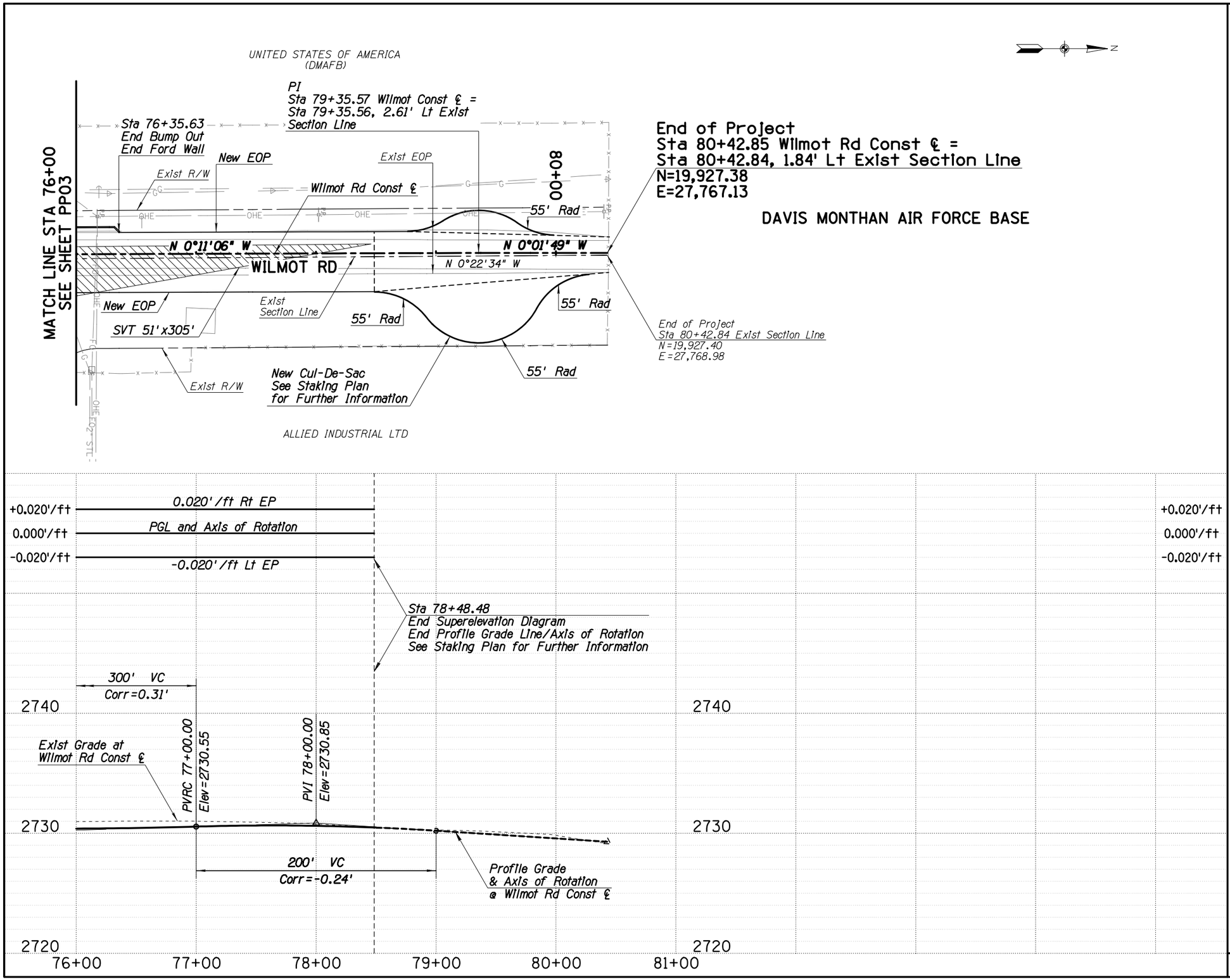

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40' 0 40' 80'

Scale	Horiz 1"=40' Vert 1"=4'	Sheet PP04 of PP04	Page 09 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

ROADWAY PLAN AND PROFILE
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 WILLIAM D. SCHLESINGER Date Signed 09/19/19 ARIZONA U.S.A. Expires 06/30/20

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

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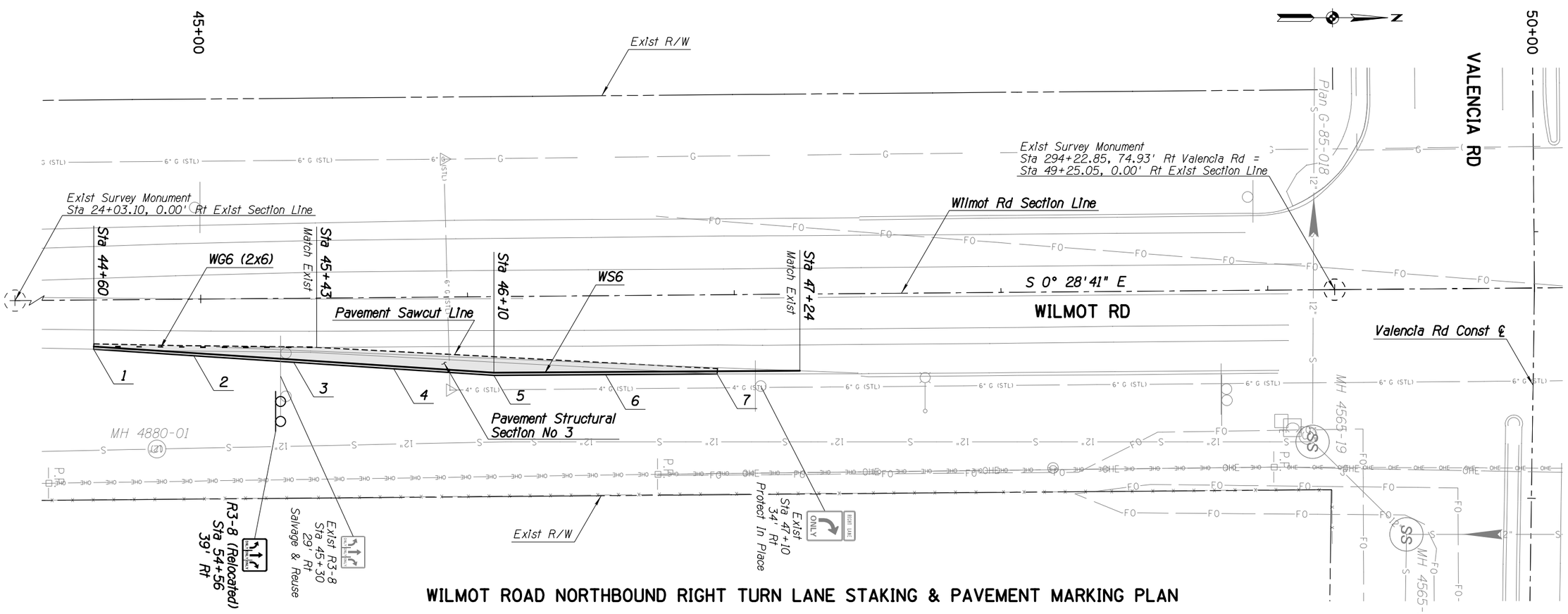

WILMOT ROAD NORTHBOUND RIGHT TURN LANE STAKING & PAVEMENT MARKING PLAN

RIGHT TURN LANE HORIZONTAL CONTROL TABLE

Point ID	Northing	Easting	Elevation	Station	Offset	Description
1	16,344.54	27,816.58	2743.29	44+59.71	18.49' Rt	EP, Match Exist
2	16,382.04	27,819.03	2743.58	44+97.19	21.25' Rt	EP
3	16,419.54	27,821.47	2743.78	45+34.67	24.01' Rt	EP
4	16,457.04	27,823.91	2743.95	45+72.14	26.77' Rt	EP
5	16,494.54	27,826.36	2743.92	46+09.62	29.52' Rt	EP, Angle Pt
6	16,536.41	27,826.09	2743.94	46+51.49	29.61' Rt	EP
7	16,578.28	27,825.83	2743.78	46+93.37	29.70' Rt	EP, Match Exist

* All Stations and Offsets are Measured from Wilmot Rd Section Line Unless Otherwise Noted.

Note: Relocate Landscaping and Irrigation at the direction of the Engineer

Call at least two full working days before you being excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

20' 0 20' 40'

Scale	Horiz 1"=20' Vert N/A	Sheet PL01 of PL05	Page 10 of 26

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

Registered Professional Engineer (Civil)
CERTIFICATE NO. 18164
WILLIAM D. SCHLESINGER
Date Signed 09/19/19
ARIZONA U.S.A.
Expires 6/30/20

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TUCSON, AZ 85705
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PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT RD NB RTL STAKING PLAN

WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE

PROJECT NO 4WVDME

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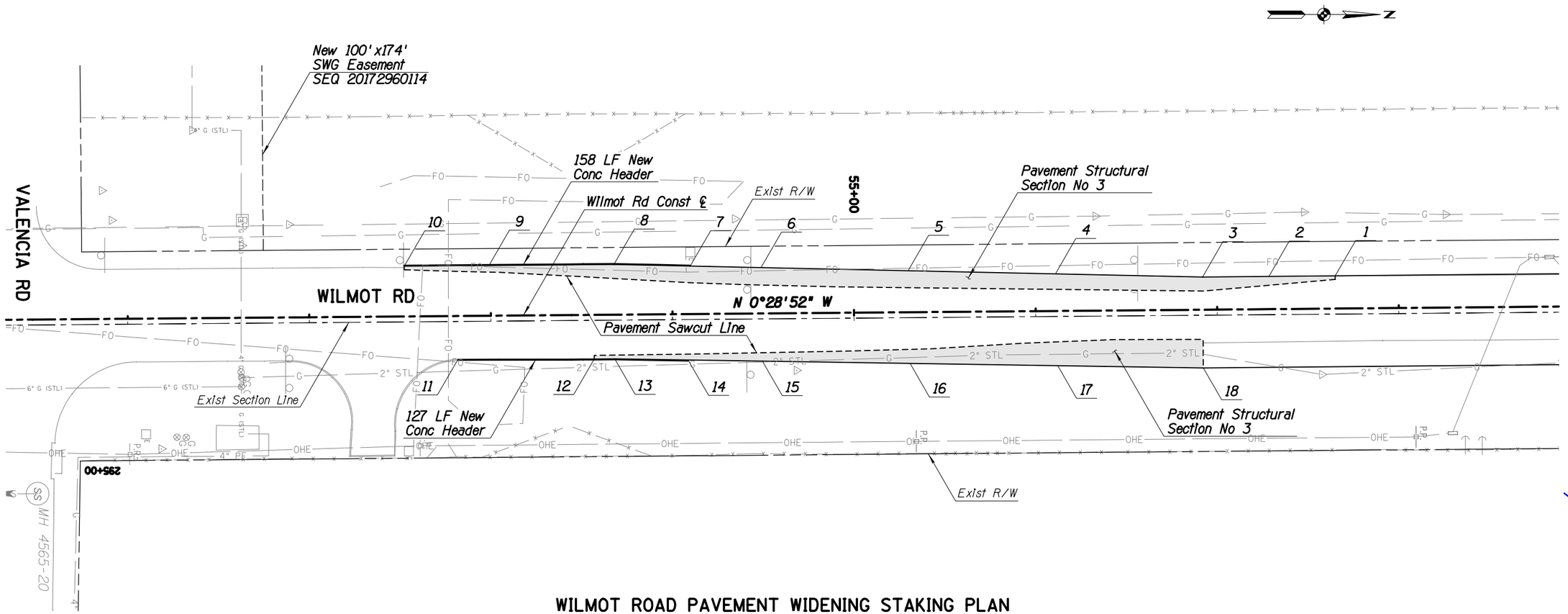

WILMOT ROAD PAVEMENT WIDENING STAKING PLAN

PAVEMENT WIDENING HORIZONTAL CONTROL TABLE						
Point ID	Northing	Easting	Elevation	Station	Offset	Description
1	17,649.57	27,766.11	2738.84	57+65.13	18.00' Lt	EP, End Pavement Widening Lt
2	17,613.04	27,766.44	2739.17	57+28.59	18.00' Lt	EP, Pavement Widening Lt
3	17,576.51	27,766.77	2739.58	56+92.05	18.00' Lt	EP/PT, Pavement Widening Lt
4	17,495.47	27,765.03	2740.63	56+11.04	20.42' Lt	EP, Pavement Widening Lt
5	17,414.44	27,763.29	2741.75	55+30.02	22.84' Lt	EP, Pavement Widening Lt
6	17,333.40	27,761.55	2742.61	54+49.00	25.25' Lt	EP, Pavement Widening Lt
7	17,294.38	27,760.72	2743.14	54+09.99	26.42' Lt	EP/End Header, Pavement Widening Lt
8	17,252.37	27,759.82	2743.50	53+67.99	27.67' Lt	EP/Angle Point Header, Pavement Widening Lt
9	17,183.62	27,760.41	2744.12	52+99.24	27.66' Lt	EP/Header, Pavement Widening Lt
10	17,136.94	27,760.81	2744.49	52+52.56	27.65' Lt	EP/Bgn Header, Pavement Widening Lt
11	17,166.48	27,812.06	2744.17	52+81.66	23.85' Rt	EP/Bgn New Header, Match Exist
12	17,241.52	27,811.91	2743.87	53+56.70	24.33' Rt	EP, Bgn Pavement Widening Rt
13	17,252.82	27,811.81	2743.75	53+68.00	24.33' Rt	EP/Angle Point/Header, Pavement Widening Rt
14	17,293.27	27,812.43	2743.27	54+08.44	25.29' Rt	EP/End Header, Pavement Widening Rt
15	17,334.14	27,813.06	2742.76	54+49.30	26.25' Rt	EP, Pavement Widening Rt
16	17,415.46	27,814.30	2741.65	55+30.61	28.18' Rt	EP, Pavement Widening Rt
17	17,496.78	27,815.54	2740.54	56+11.92	30.10' Rt	EP, Pavement Widening Rt
18	17,576.95	27,816.76	2739.87	56+92.06	32.00' Rt	EP, End Pavement Widening Rt

* All Stations and Offsets are Measured from Wilmot Rd Const ℄ Unless Otherwise Noted.

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ARIZONA 811
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In Maricopa County: (602)263-1100

30' 0 30' 60'

Scale	Horiz 1"=30' Vert N/A	Sheet PL02 of PL05	Page 11 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT RD WIDENING STAKING PLAN
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

		Date
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Proj. Mgr.	WDS	09/19

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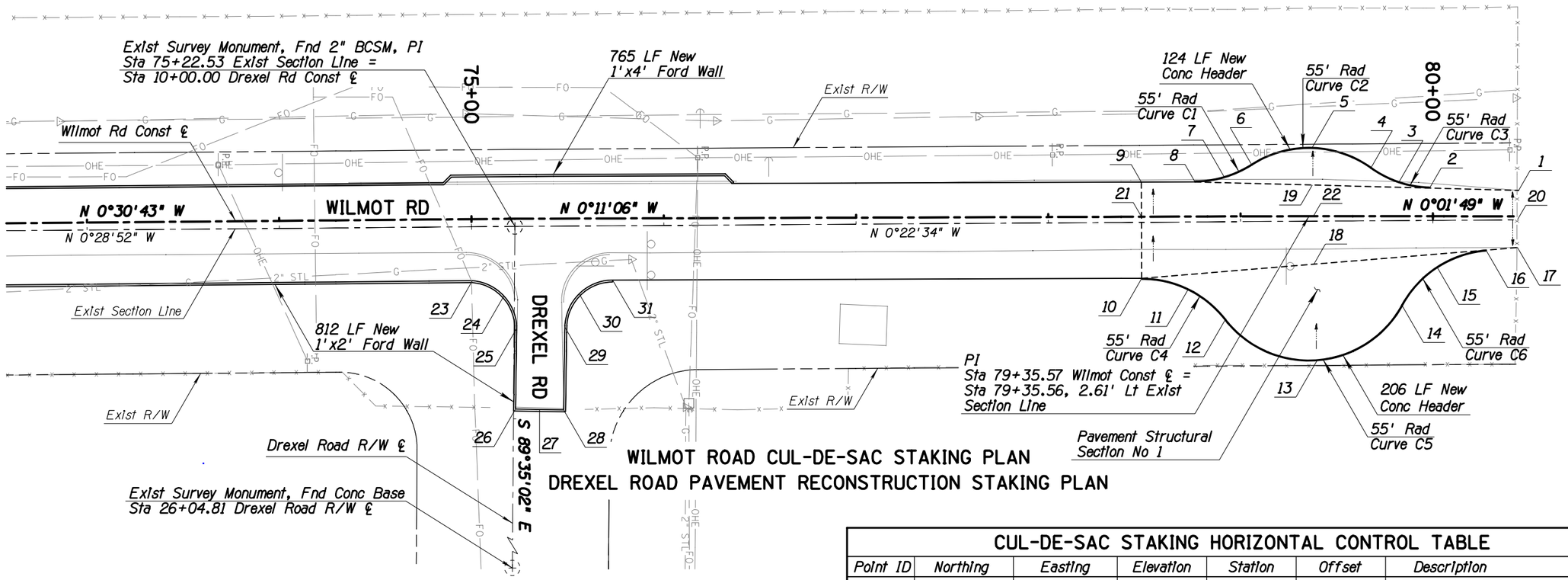

WILMOT ROAD CUL-DE-SAC STAKING PLAN
DREXEL ROAD PAVEMENT RECONSTRUCTION STAKING PLAN

DREXEL ROAD STAKING HORIZONTAL CONTROL TABLE

Point ID	Northing	Easting	Elevation	Station	Offset	Description
23	19,385.02	27,800.61	2731.14	10+28.37	21.87' Rt	EP, PC, 25' Rad
24	19,401.38	27,808.51	2731.20	10+36.16	5.45' Rt	EP, Midpoint Return, 25' Rad
25	19,408.07	27,825.41	2731.26	10+53.00	1.36' Lt	EP, PT, 25' Rad
26	19,407.47	27,867.33	2731.45	10+94.93	1.07' Lt	EP, Angle Pt
27	19,419.97	27,867.51	2731.41	10+95.02	13.57' Lt	EP, Midpoint
28	19,432.47	27,867.68	2731.36	10+95.10	26.07' Lt	EP, Angle Pt
29	19,433.08	27,824.74	2731.15	10+52.16	26.37' Lt	EP, PC, 25' Rad
30	19,440.54	27,807.43	2731.09	10+34.79	33.70' Lt	EP, Midpoint Return, 25' Rad
31	19,457.97	27,800.25	2731.03	10+27.48	51.08' Lt	EP, PT, 25' Rad

* All Stations and Offsets are Measured from Drexel Rd Const ℄ Unless Otherwise Noted.

CUL-DE-SAC CURVE DATA TABLE

Curve #	Radius	Length	Tangent	Delta	Bearing In	Bearing Out
C1	55'	31.21'	16.04'	32°31'03"	N 0°11'06" W	N 32°42'09" W
C2	55'	65.66'	37.38'	68°24'05"	N 32°42'09" W	N 35°41'56" E
C3	55'	32.82'	16.91'	34°11'22"	N 35°41'56" E	N 01°30'34" E
C4	55'	50.22'	27.01'	52°18'54"	N 0°11'06" W	N 52°07'48" E
C5	55'	108.96'	83.91'	113°30'42"	N 52°07'48" E	N 61°22'54" W
C6	55'	54.43'	29.68'	56°42'12"	N 61°22'54" W	N 04°40'42" W

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In Maricopa County: (602)263-1100

30' 0 30' 60'

CUL-DE-SAC STAKING HORIZONTAL CONTROL TABLE

Point ID	Northing	Easting	Elevation	Station	Offset	Description
1	19,929.19	27,753.70	2729.06	80+44.65	13.43' Lt	EP, Match Exist
2	19,882.87	27,752.48	2729.29	79+98.33	14.63' Lt	EP, PT, End Header
3	19,866.77	27,749.63	2729.36	79+82.23	17.47' Lt	EP, Midpoint Return, 55' Rad
4	19,852.22	27,742.16	2729.42	79+67.68	24.93' Lt	EP, PRC, 55' Rad
5	19,821.56	27,731.85	2729.55	79+37.01	35.23' Lt	EP, Midpoint Return, 55' Rad
6	19,790.41	27,740.55	2729.77	79+05.97	26.62' Lt	EP, PRC, 55' Rad
7	19,776.27	27,747.02	2729.88	78+91.80	20.20' Lt	EP, Midpoint Return, 55' Rad
8	19,760.88	27,749.27	2729.99	78+76.40	18.00' Lt	EP, PC, 55' Rad, Bgn Header
9	19,732.96	27,749.36	2730.12	78+48.48	18.00' Lt	EP
10	19,733.12	27,799.36	2731.12	78+48.48	32.00' Rt	EP, PC, 55' Rad, Bgn Header
11	19,757.38	27,804.91	2730.93	78+72.73	37.63' Rt	EP, PC, 55' Rad, Bgn Header
12	19,776.71	27,820.60	2730.73	78+92.01	53.38' Rt	EP, PRC, 55' Rad
13	19,824.56	27,841.65	2730.33	79+39.79	74.57' Rt	EP, Midpoint Return, 55' Rad
14	19,868.41	27,813.18	2729.69	79+83.90	46.07' Rt	EP, PRC, 55' Rad
15	19,886.71	27,793.41	2729.37	80+02.20	26.30' Rt	EP, Midpoint Return, 55' Rad
16	19,912.20	27,784.70	2729.04	80+27.68	17.58' Rt	EP, PT, End Header
17	19,928.58	27,783.36	2728.88	80+44.06	16.23' Rt	EP, Match Exist
18	19,822.66	27,792.03	2730.08	79+38.14	24.95' Rt	Point on Grade Break
19	19,821.87	27,750.88	2729.64	79+37.33	16.20' Lt	Point on Grade Break
20	19,928.59	27,768.82	2729.08	80+44.06	1.69' Rt	Match Exist
21	19,733.01	27,767.36	2730.48	78+48.48	0.00' Rt	Const Centerline
22	19,822.40	27,767.08	2729.84	79+37.87	0.00' Rt	Const Centerline

* All Stations and Offsets are Measured from Wilmot Rd Const ℄ Unless Otherwise Noted.

Scale	Horiz 1"=30' Vert N/A	Sheet PL03 of PL05

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT RD WIDENING STAKING PLAN
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 STEVEN D. WILLENBER Date Signed 09/09/19 ARIZONA U.S.A. Expires 06/30/20

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

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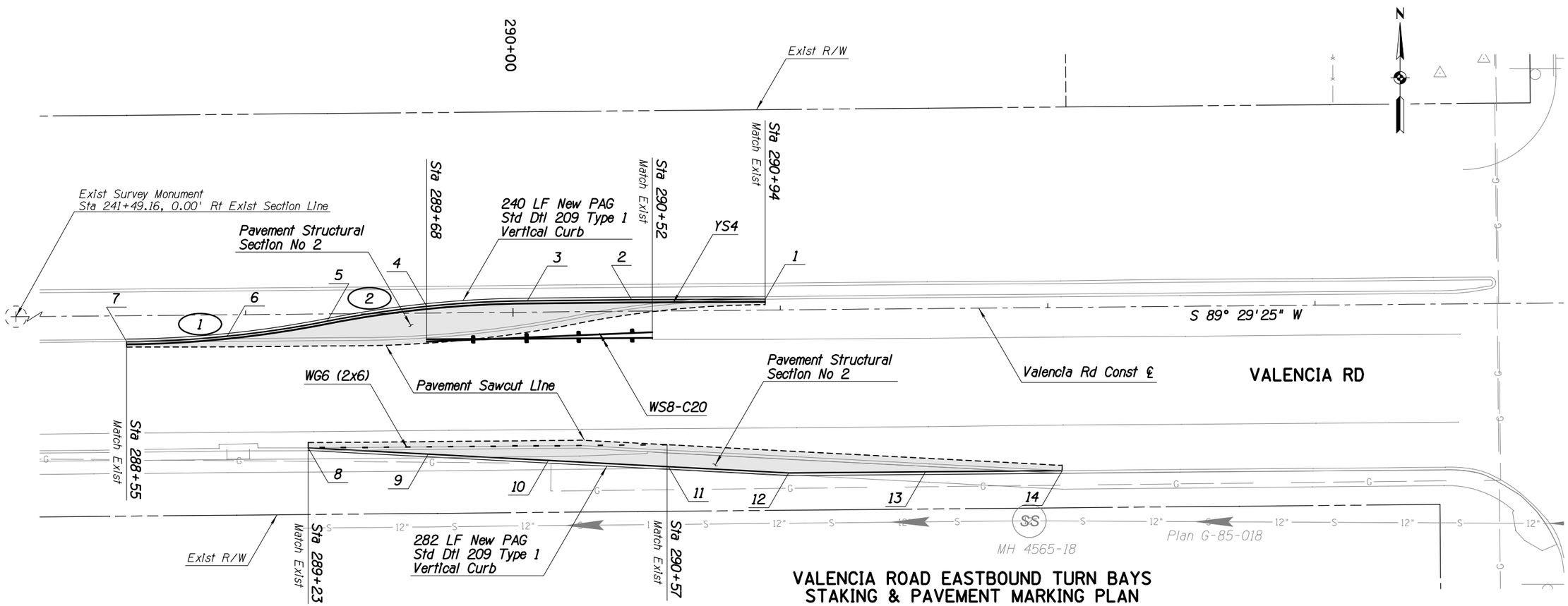

VALENCIA ROAD EASTBOUND TURN BAYS STAKING & PAVEMENT MARKING PLAN

TURN BAY HORIZONTAL CONTROL TABLE

Point ID	Northing	Easting	Elevation	Station	Offset	Description
1	16,885.79	27,466.78	2742.41	290+94.32	4.04' Lt	EP, Match Exist
2	16,885.56	27,416.83	2742.13	290+44.37	4.26' Lt	EP
3	16,885.22	27,377.85	2741.94	290+05.40	4.27' Lt	EP, PC
4	16,883.14	27,340.21	2741.78	289+67.73	2.51' Lt	EP, Midpoint PC
5	16,877.56	27,302.92	2741.49	289+30.40	2.73' Rt	EP, PRC
6	16,871.98	27,265.63	2741.12	288+93.06	7.98' Rt	EP, Midpoint PC
7	16,869.89	27,227.98	2740.77	288+55.39	9.73' Rt	EP, Match Exist
8	16,830.16	27,295.85	2740.47	289+22.90	50.06' Rt	EP, Match Exist
9	16,827.81	27,340.78	2740.66	289+67.82	52.81' Rt	EP
10	16,825.46	27,385.72	2740.95	290+12.73	55.56' Rt	EP
11	16,823.12	27,430.66	2741.16	290+57.65	58.31' Rt	EP
12	16,820.77	27,475.60	2741.28	291+02.57	61.06' Rt	EP, Angle Pt
13	16,821.20	27,526.76	2741.48	291+53.72	61.07' Rt	EP
14	16,821.64	27,577.91	2741.76	292+04.88	61.09' Rt	EP, Match Exist

* All Stations and Offsets are Measured from Valencia Rd Construction ℄ to Face of Vertical Curb Unless Otherwise Noted.

CURVE DATA

(1) Radius =405.29'
Length =75.43'
Tangent =37.83'
Delta =10°39'52"

(2) Radius =405.29'
Length =75.43'
Tangent =37.83'
Delta =10°39'52"

Note: Relocate Landscaping and Irrigation at the direction of the Engineer

Call at least two full working days before you being excavation.
ARIZONA 811
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Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

20' 0 20' 40'

Scale	Horiz 1"=20' Vert N/A	Sheet PL04 of PL05	Page 13 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

VALENCIA RD EB STAKING PLAN
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
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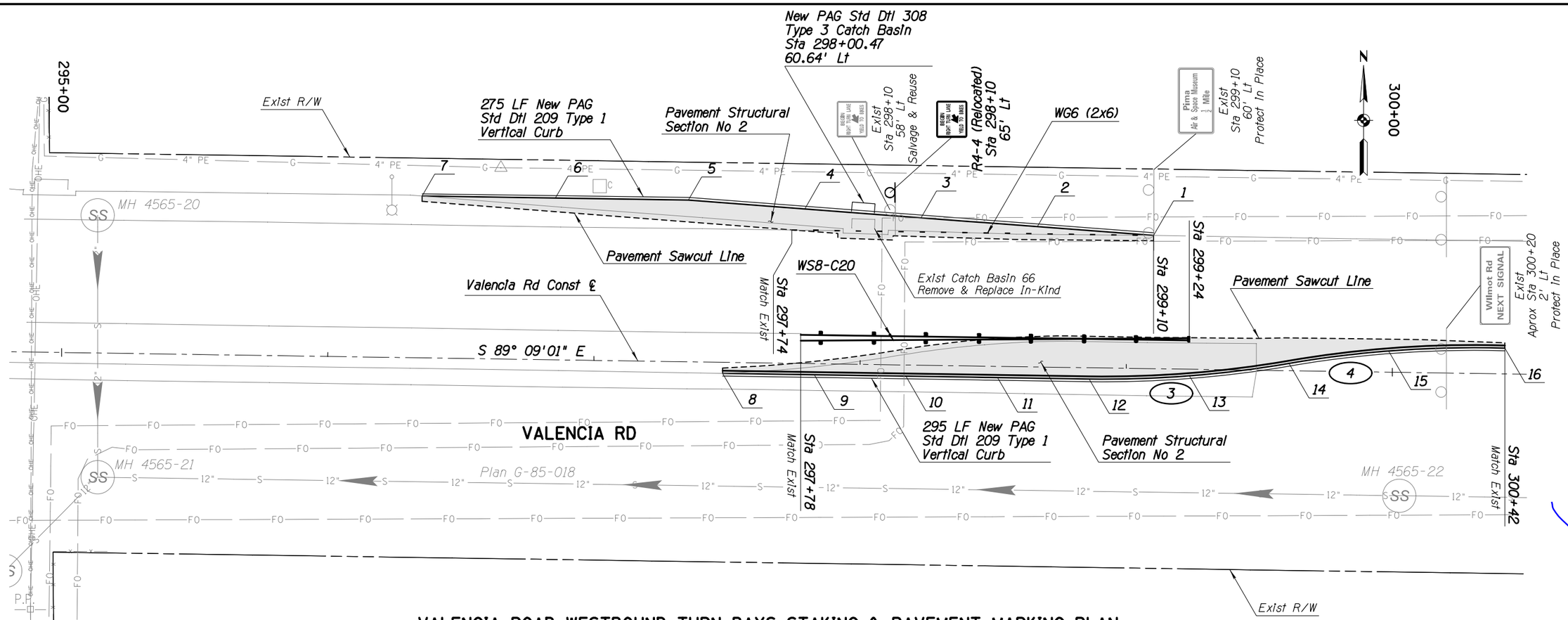

VALENCIA ROAD WESTBOUND TURN BAYS STAKING & PAVEMENT MARKING PLAN

TURN BAY HORIZONTAL CONTROL TABLE

Point ID	Northing	Easting	Elevation	Station	Offset	Description
1	16,927.43	28,282.72	2745.49	299+09.55	50.03' Lt	EP, Match Exist
2	16,930.76	28,239.03	2745.17	298+65.82	52.70' Lt	EP
3	16,934.08	28,195.34	2744.81	298+22.08	55.38' Lt	EP
4	16,937.41	28,151.65	2744.47	297+78.35	58.06' Lt	EP
5	16,940.74	28,107.96	2744.60	297+34.62	60.74' Lt	EP, Angle Pt
6	16,941.50	28,057.97	2744.41	296+84.62	60.76' Lt	EP
7	16,942.27	28,007.92	2743.79	296+34.56	60.79' Lt	EP, Match Exist
8	16,875.66	28,120.84	2745.68	297+48.46	4.15' Rt	EP, Match Exist
9	16,875.13	28,155.26	2745.84	297+82.89	4.16' Rt	EP
10	16,874.60	28,189.69	2746.03	298+17.31	4.18' Rt	EP
11	16,874.07	28,224.11	2746.13	298+51.74	4.20' Rt	EP
12	16,873.54	28,258.53	2746.29	298+86.17	4.22' Rt	EP, PC
13	16,874.71	28,296.22	2746.49	299+23.84	2.49' Rt	EP, Midpoint PC
14	16,879.39	28,333.63	2746.63	299+61.18	2.74' Lt	EP, PRC
15	16,884.06	28,371.05	2746.69	299+98.52	7.97' Lt	EP, Midpoint PC
16	16,885.14	28,414.70	2746.86	300+42.15	9.70' Lt	EP, Match Exist

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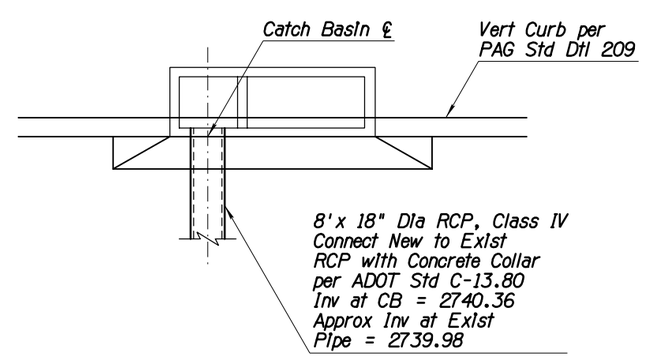

CATCH BASIN 66 PLAN

NTS

CURVE DATA

(3) Radius =405.29'
Length =75.43'
Tangent =37.83'
Delta =10°39'52"

(4) Radius =405.29'
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20' 0 20' 40'

Scale	Horiz 1"=20' Vert N/A	Sheet PL05 of PL05	Page 14 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

VALENCIA RD WB STAKING PLAN
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
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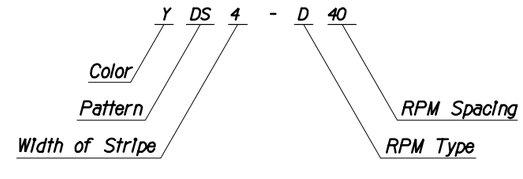
PAVEMENT MARKING GENERAL NOTES:

1. All equipment/materials and construction shall meet or exceed the requirements contained in the current Pima Association of Governments (PAG) Standard Specifications and the Standard Details for Public Improvements, the Special Provisions and the Approved Plans. All pavement markings shall be installed in accordance with the PC/COT Pavement Marking Design Manual and applicable amendments.
2. The striping Contractor shall contact the Pima County pavement marking supervisor (520-724-2624) at least 3 working days in advance of any pavement marking layout being installed to schedule inspection and approval of pavement markings during normal business hours Monday through Friday, State holidays excluded.
3. Upon approval of the pavement marking layout, the Pima County pavement marking supervisor will issue written authorization to the Contractor to proceed with installing all pavement markings and associated reflective raised pavement markers.
4. The permanent pavement markings may be modified as directed and approved by the Traffic Engineer or their Designee.
5. The design speed for the road is 35 MPH. The design vehicle is NA. The posted speed limit is 35 MPH.
6. All lane dimensions are measured from the center of lane line, center of double lane line, or edge of pavement unless otherwise noted.
7. The pavement marking drawings are schematic only. The Contractor shall follow all dimensions, applicable marking details, and specified Pima County standards when installing pavement striping, symbols, legends, and markers.
8. Painted layout striping shall be 15 mil (0.015") thick, water based paint placed on the final pavement surface with 8 pounds per gallon of AASHTO M 247-13 Type I glass beads with adhesion/moisture proof coating. Painted layout striping shall be installed within five (5) working days of the final pavement surface being completed.
9. Painted symbols and legends shall be applied at the same time as the painted striping, with the exception of bike lane symbols and words (such as STOP, AHEAD, ONLY, etc.).
10. The final longitudinal striping shall be 90 mil (0.090") thick ribbon extruded thermoplastic reflectorized striping placed over the painted layout striping with a single drop of 10 pounds per 100 square feet of AASHTO M 247-13 glass beads. The final longitudinal striping shall be placed within 21 to 30 calendar days of the final pavement surface being completed. All previously exempted longline markings shall be applied during the final longitudinal striping.
11. All final transverse striping, including symbols and legends, shall be 90 mil (0.090") alkyd hand cart extruded thermoplastic with 10 pounds per 100 square foot of AASHTO M 247-13 Type I glass beads.
12. The Contractor shall be responsible for the layout and installation of pavement markings on the final surface course following one control line per direction of travel consisting of control points that have been set to no more than 50 feet apart on curve sections and 200 feet in tangent sections where the pavement marking pattern does not change.
13. It is the Contractor's responsibility to ensure that the final surface course is placed so that the construction joint is no more than one foot offset from the final striping.
14. All retroreflective raised pavement markers (RRPMs or RPMs) shall be installed so that the reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow. Type C or G pavement markers shall be installed so that the clear (or white) reflective face of each marker is facing approaching traffic and perpendicular to the direction of traffic flow to which it applies.
15. All retroreflective raised pavement markers (RRPMs or RPMs) shall be installed per the current edition of the PC/COT Pavement Marking Manual and applicable amendments.
16. All removal of existing pavement markings shall be accomplished in accordance with Section 701 of the PC/COT Standard Specifications. Painting over existing striping does not constitute approved striping obliteration.
17. For private development projects, the Design Consultant/Project Manager shall be required to provide as-built striping plans within 90 days of striping completion.
18. Unless otherwise noted, all pavement markings shall be installed by the Contractor.
19. Upon final inspection, a written acceptance or itemized punchlist of missing or unacceptable pavement markings shall be submitted to the Contractor and Pima County by the Traffic Engineer or Designated Representative.
20. The Contractor shall be responsible for maintaining all striping until Project is approved for 'Construction Acceptance' by Pima County (Fully open to traffic. All punchlist items are completed, and the one year minimum warranty begin). If the pavement marking material manufacturer offers a longer warranty, the Contractor shall transfer that warranty to Pima County.
21. The PC/COT Pavement Marking Manual is available online.

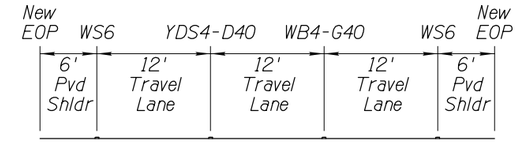
SIGNING GENERAL NOTES:

1. All equipment/materials and construction shall meet or exceed the requirements contained in the current Pima Association of Governments (PAG) Standard Specifications and Standard Details for Public Improvements, the Special Provisions, the Supplemental Specifications, and the approved plans. All signing shall be installed in compliance with the latest edition of the Manual on Uniform Traffic Control Devices and the Pima County/City of Tucson (PC/COT) Signing Design Manual and applicable amendments.
2. The signing contractor shall contact the Pima County signing supervisor at (520) 724-2630 at least three (3) working days in advance of sign installation to schedule inspection and approval of sign locations. Sign shop hours are Monday through Thursday 6:00 am to 3:30 pm, state holidays excluded.
3. Prior to disturbing any traffic signs, a sign condition inventory of all existing signing shall be conducted by the Contractor and provided to the Pima County sign shop supervisor (520) 724-2630. The inventory shall indicate current sign locations and conditions, including any existing damage or deficiencies.
4. Signs may be modified and locations adjusted to fit field conditions as directed and approved by the County Engineer or their designee.
5. The design speed for Wilmot Road is 35 MPH. The posted speed limit for Wilmot Road is 35 MPH. Sign placement shall be based on the posted speed limit.
6. Post lengths indicated on sign summary sheets are approximate. The Contractor shall verify actual post lengths.
7. All perforated posts shall be installed in a concrete foundation, unless otherwise directed by the County Engineer or their designee.
8. All sign station locations are approximate, the Contractor shall verify actual sign locations with the Pima County sign supervisor or the Pima County Inspector.
9. All signs shall have Type XI sheeting or an equivalent. All warning signs having yellow backgrounds shall use fluorescent yellow sheeting. All school signs shall use fluorescent yellow/green sheeting. All ground mounted signs shall have an anti graffiti coating applied to sign face, 3M #1160 film or equivalent.
10. A 3"x2" pressure sensitive, UV resistant label indicating the sign manufacturer's name and date of manufacture shall be placed in the upper right corner of the back of all signs except street name signs at the time of installation. Street name signs shall include a sign identification decal as shown on Pima County Signing Detail 9-22A.
11. All new signs shall have 0.080 gauge, radius corner, aluminum backing unless otherwise noted.
12. Upon final inspection, a written acceptance or itemized punch list of missing or unacceptable sign installations shall be submitted to the Contractor by Pima County.
13. The Contractor shall be responsible for coordinating all work with Arizona 811 for installing all traffic signs in the field and for maintaining all signing until project is approved for "Construction Acceptance" by Pima County (fully open to traffic, all punch list items are completed, and the one year warranties begin).
14. Any signs and posts being re-used on this project shall be stockpiled in a manner to avoid damage and maintain the integrity of the signs. Safe storage of stockpile and payment of damage to the stockpile shall be the responsibility of the Contractor.
15. All signs and posts not being re-used on this project shall be dismantled, stacked and delivered to the sign shop by the Contractor. The Contractor is responsible for the safe storage at the construction site until delivery and the safe unloading of the salvaged material. Notification of delivery shall be made at least two (2) working days prior to delivery. The Pima County sign shop is located at 1313 S. Mission Road (520) 724-2630. No Friday deliveries.
16. The PC/COT Signing Manual is available online.



LINE STYLE DESIGNATION

See 2008 Pima County and City of Tucson Pavement Marking Design Manual for Further Descriptions.



PAVEMENT STRIPING TYPICAL SECTION

NTS

Call at least two full working days before you being excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Scale	Horiz N/A	Sheet PMGN of PMGN	Page 15 of 26
	Vert N/A		

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

PAVEMENT MARKING AND SIGNING GENERAL NOTES
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 WILLIAM D. SCHLESINGER Date Signed 09/09/19 ARIZONA U.S.A. Expires 06/30/20

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

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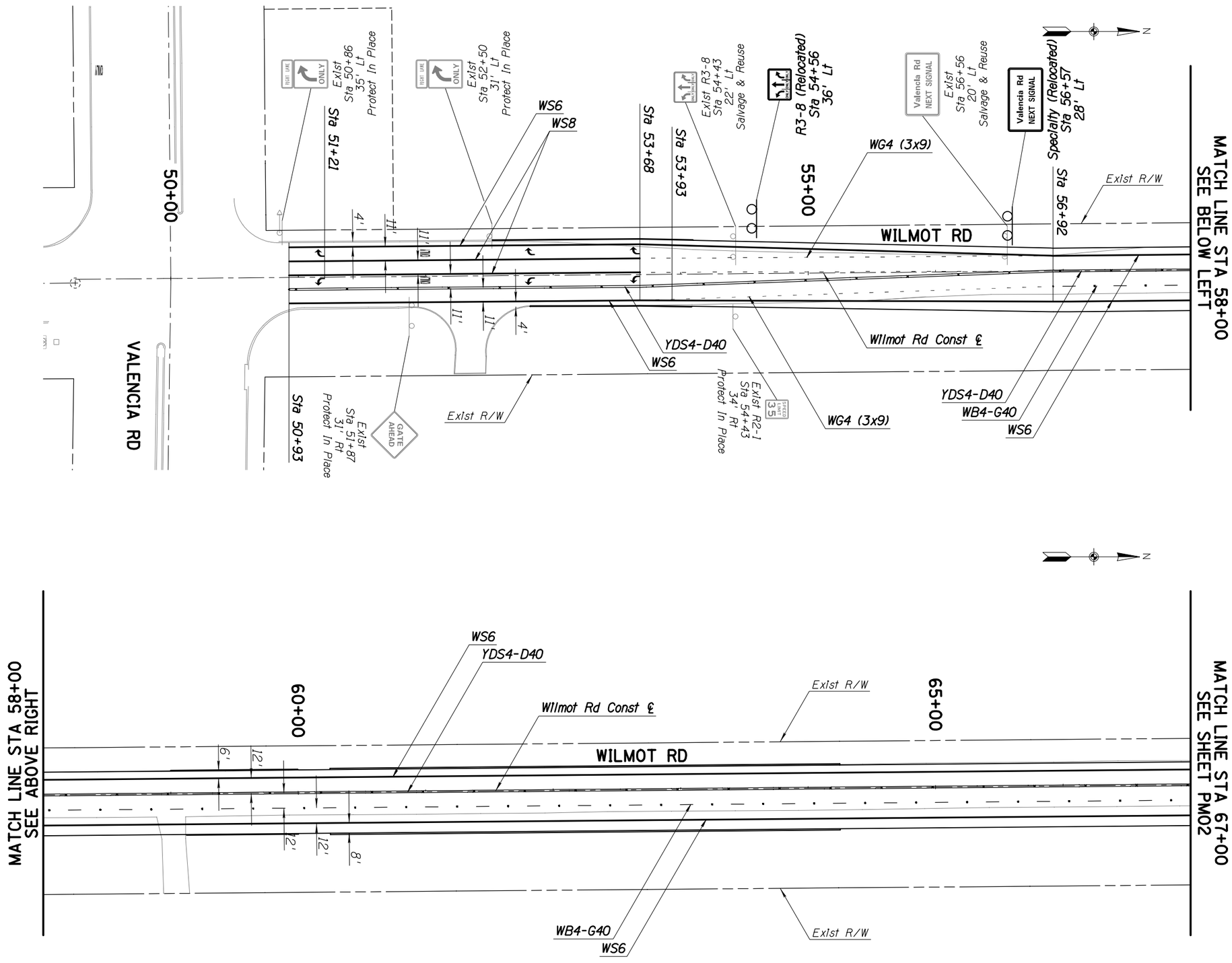

Note: See Staking Plans for Pavement Markings on Valencia Road and Wilmot Road South of Valencia Road.

Call at least two full working days before you being excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

40' 0 40' 80'

Scale	Horiz 1"=40'	Sheet PM01 of PM02
	Vert N/A	

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

PAVEMENT STRIPING PLAN
WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

Page 16 of 26

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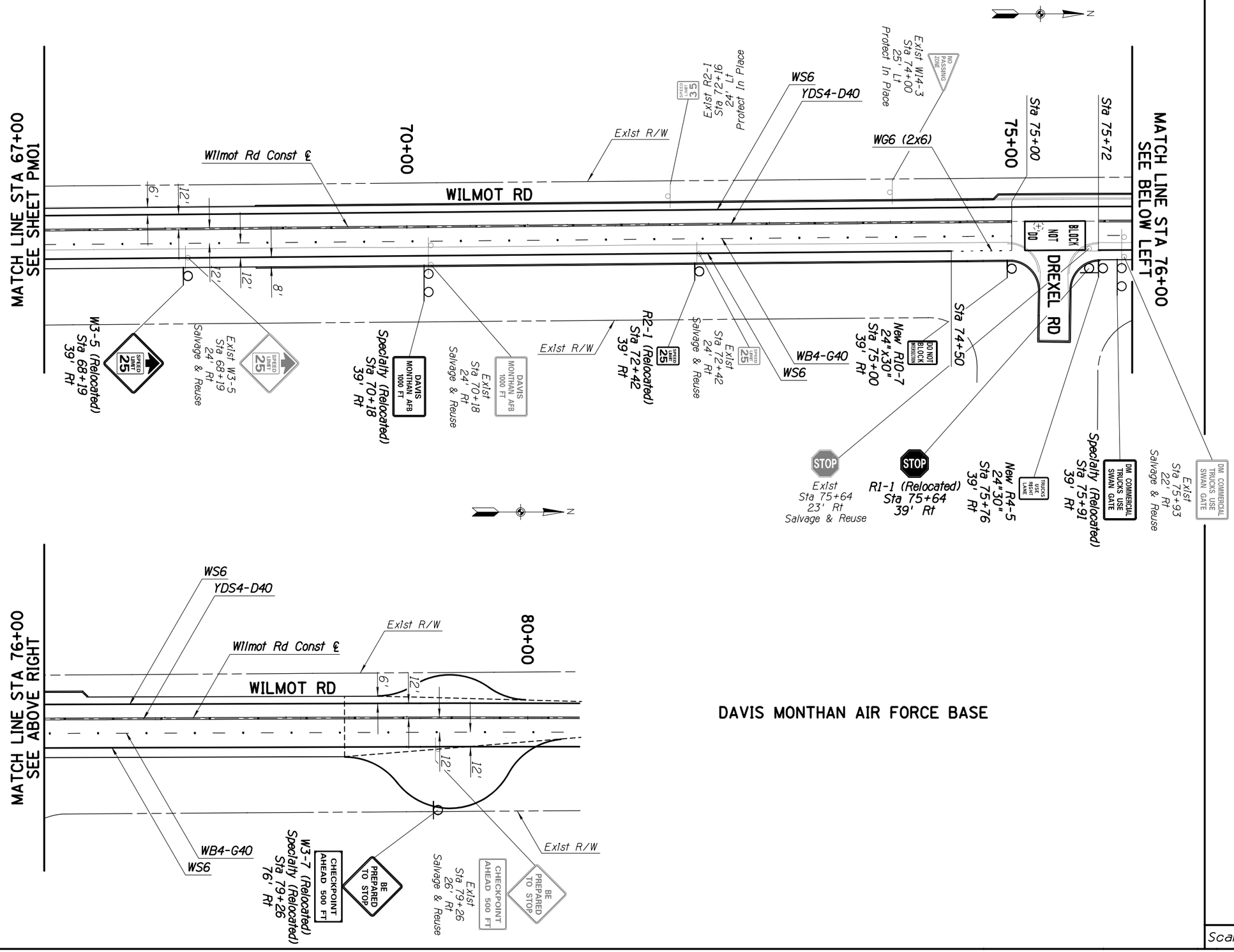

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ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

40' 0 40' 80'

Scale	Horiz 1"=40' Vert N/A	Sheet PM02 of PM02	Page 17 of 26

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

No.	Revision Description	Engineer	Date

		Date
Designed	KW	09/19
Drawn	KW	09/19
Checked	WDS	09/19
Proj. Mgr.	WDS	09/19

Registered Professional Engineer (Civil) CERTIFICATE NO. 18164 WILLIAM D. SCHLESINGER Date Signed 9/16/20 ARIZONA U.S.A. Expires 12/31/20

SCE ENGINEERING
510 E 4TH STREET
TUCSON, AZ 85705
520-405-7353

PAVEMENT STRIPING PLAN
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

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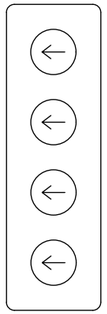
CONSTRUCTION NOTES

1. Remove and Salvage Existing F Head on Existing Type II Mount. Install New Modified G Head on New Type II Mount.
2. Remove and Salvage Existing F Head on Existing Type VII Mount. Install New Modified G Head on New Type VII Mount.



Modified G Head Detail
N.T.S.

NO.	REVISION DESCRIPTION	DIV. ENGINEER	DATE

		DATE
DESIGNED:	LMW	09/19
DRAWN:	LMW	09/19
CHECKED:	FLG	09/19
PROJ. ENG.:	FLG	09/19

Registered Professional Engineer (Civil) CERTIFICATE NO. 49936 FILIPE LADRON DE GUEVARA Date Signed 9/20/2019 ARIZONA, U.S.A. Expires 9/30/2021

KITTELSON & ASSOCIATES
2 E CONGRESS STREET, SUITE 705
TUCSON, AZ 85701
P 520.544.4067 F 520.544.9616

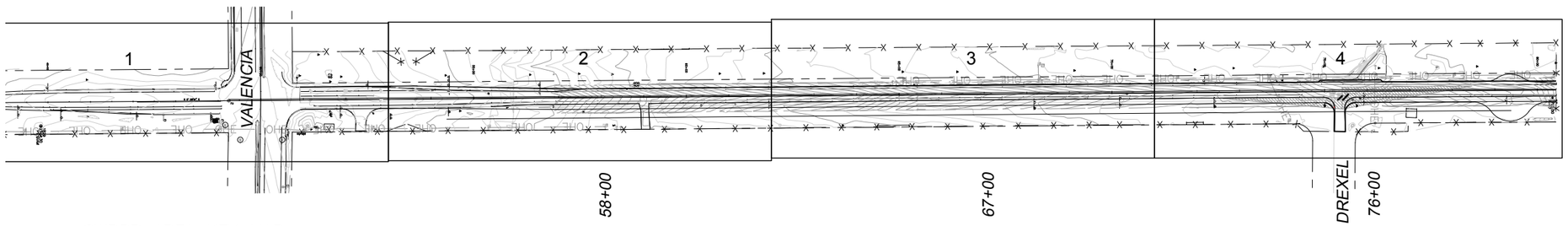
PIMA COUNTY DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL PLAN SHEET
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

Contact Arizona 811 at least two full working days before you begin excavation. ARIZONA 811 Call 811 or click Arizona811.com

Scales:	Horiz. 1"=20'	Sheet TS01 of TS01	Page 18 of 25
	Vert. N/A		

H:\22\22778 - Wilmot Road - Traffic Engineering\design_CD\22778-CD-SIGNAL_M00.dwg TS01 Last Saved: Wed, 11 Sep 2019 By:LeWilmon Plotted: Wednesday, September 11, 2019 10:17:11 AM



SWPPP AREA KEY MAP

SCALE: 1" = 150'-0"

UPLAND SEED MIX SCHEDULE

DESERT UPLAND SEED MIX

BOTANICAL NAME	COMMON NAME	MINIMUM #/ACRE	MAXIMUM #/ACRE	PURE LIVE SEED (PLS) RATE
SHRUBS AND SUBSHRUBS				
LARREA TRIDENTATE	CREOSOTE	3	4	AT LEAST 2 SPECIES FROM THIS CATEGORY FOR A MINIMUM 2 PLS/ACRE.
ATRIPLEX CANESCENS	FOURWING SALTBUSH	1/2	1	
ENCELIA FARINOSA	BRITTLEBUSH	1/2	1	
ERIOGONUM FASCICULATUM VAR. POLIFOLIUM	ARIZONA SHRUBBY BUCKWHEAT	1/2	1	
GUTIERREZIA SAROTHRAE	SNAKEWEED	1/4	1/2	
SMALL PERENIALS AND ANNUAL HERBS				
BAILEYA MULTIRADIATA	DESERT MARIGOLD	1	2	AT LEAST 10 SPECIES FROM THIS CATEGORY FOR A MINIMUM 10 PLS/ACRE.
ESCHSCHOLZIA CALIFORNICA SSP. MEXICANA	MEXICAN GOLDPOPPY	1	3	
LESQUERELLA GORDONI	GORDON BLADDERPOD	1	2	
LUPINUS SPARSIFLORUS	DESERT LUPINE	1	2	
PHACELIA DISTANS	PHACELIA	1	2	
PLANTAGO OVATA, P. PATAGONICA	INDIAN WHEAT	2	4	
SALVIA COLUMBRIAE	CHIA	1/2	1	
SENNA COVESII	DESERT SENNA	1	3	
SPHAERALCEA SPP. (S. AMBIGUA S. LAXA AND/OR S. EMORYI)		1	2	
VERBENA GOODDINGII	GOODING'S VERBENA	1/2	1	
ZINNIA ACEROSA (ZINNIA PUMILA)	DESERT ZINNIA	1/2	1	
GRASSES				
ARISTIDA PURPUREA	PURPLE THREEAWN	1	2	AT LEAST 7 SPECIES FROM THIS CATEGORY FOR A MINIMUM 7 PLS/ACRE.
BOUTELOUA ARISTIDOIDES	NEEDLE GRAMA	1	2	
BOUTELOUA BARBATA	SIXWEEKS GRAMA	1/2	1	
BOUTELOUA CURTIPENDULA	SIDEOATS GRAMA	1	2	
BOUTELOUA ROTHROCKII	ROTHROCK GRAMA	1/2	1	
DIGITARIA CALIFORNICA	AZ COTTONTOP	1/2	1	
MUHLENBERGIA PORTERI	BUSH MUHLY	1/4	1/2	
SETARIA MACROSTACHYA	PLAINS BRISTLEGRASS	1	2	

XERORIPARIAN SEED MIX SCHEDULE

XERORIPARIAN SEED MIX

BOTANICAL NAME	COMMON NAME	MINIMUM #/ACRE	MAXIMUM #/ACRE	PURE LIVE SEED (PLS) RATE
TREES AND LARGE SHRUBS				
ACACIA CONSTRICTA	WHITETHORN ACACIA	1/2	1	AT LEAST 7 SPECIES FROM THIS CATEGORY FOR A MINIMUM 5 PLS/ACRE.
ACACIA GREGGII	CATCLAW ACACIA	1	2	
CELTIS PALLIDA	DESERT HACKBERRY	2	3	
CHILOPSIS LINEARIS	DESERT WILLOW	1/2	1	
LARREA TRIDENTATE	CREOSOTE	2	4	
PARKINSONIA FLORIDUM	BLUE PALO VERDE	2	3	
PROSOPIS PUBESCENS	SCREWBEAN MESQUITE	1/4	1/2	
PROSOPIS VELUTINA	VELVET MESQUITE	1/4	1/2	
SHRUBS				
ATRIPLEX CANESCENS	FOURWING SALTBUSH	1/2	1	AT LEAST 4 SPECIES FROM THIS CATEGORY FOR A MINIMUM 4 PLS/ACRE.
ATRIPLEX POLYCARPA	DESERT SALTBUSH	1/4	1/2	
CALLIANDRA ERIOPHYLLA	FAIRY DUSTER	1	2	
ENCELIA FARINOSA	BRITTLEBUSH	1/2	1	
HYMENOCLEA SALISOLA	COMMON BURROBRUSH	1/2	1	
LYCIUM SPP.	WOLFBERRY	1/2	1	
FORBS AND SUBSHRUBS				
BAILEYA MULTIRADIATA	DESERT MARIGOLD	1	2	AT LEAST 12 SPECIES FROM THIS CATEGORY FOR A MINIMUM 9 PLS/ACRE.
DYSSODIA SPP.	DYSSODIA	1/4	1/2	
ERIOGONUM FASCICULATUM VAR. POLIFOLIUM	ARIZONA SHRUBBY BUCKWHEAT	1/2	1	
GLANDULARIA (VERBENA) GOODDINGII	GOODDING'S VERBENA	1/2	1	
KALLSTROEMIA GRANDIFLORA	ARIZONA POPPY	1	2	
LUPINUS ARIZONICUS	ARIZONA LUPINE	1	2	
PENSTEMON PARRYI	PARRY'S PENSTEMON	1/2	1	
PHACELIA CAMPANULARIA	DESERT BLUEBELL	1	2	
SALVIA COLUMBRIAE	CHIA	1/2	1	
SENNA COVESII	DESERT SENNA	1	2	
SPHAERALCEA SPP. (S. AMBIGUA S. LAXA AND/OR S. EMORYI)		1	2	
GRASSES				
ARISTIDA PURPUREA	PURPLE THREEAWN	1	2	AT LEAST 9 SPECIES FROM THIS CATEGORY FOR A MINIMUM 9 PLS/ACRE.
BOUTELOUA ARISTIDOIDES	NEEDLE GRAMA	1	2	
BOUTELOUA BARBATA	SIXWEEKS GRAMA	1/2	1	
BOUTELOUA CURTIPENDULA	SIDEOATS GRAMA	1	2	
BOUTELOUA ROTHROCKII	ROTHROCK GRAMA	1/2	1	
DIGITARIA CALIFORNICA	AZ COTTONTOP	1/2	1	
ERAGROSTIS INTERMEDIA	PLAINS LOVEGRASS	1/2	1	
LEPTOCHLOA DUBIA	GREEN SPRANGLE TOP	1/2	1	
MUHLENBERGIA PORTERI	BUSH MUHLY	1/4	1/2	
SPOROBOLUS CRYPTANDRUS	SAND DROPSEED	1/4	1/2	

Call at least two full working days before you being excavation.
ARIZONA 811
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Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

SWPPP LEGEND & NOTES

(ITEMS IN LEGEND NOT TO SCALE)

- UPLAND HYDROSEED MIX AREA CLASS II
- XERORIPARIAN HYDROSEED MIX AREA CLASS II
- ROCK MULCH SPECIAL OVER SEED MIX
- DUMPED RIP-RAP OVER SEED MIX
- PERIMETER CONTROL OR SEDIMENT CONTROL BERM (ES6) OR SEDIMENT LOG (20") (E1) SHEET SW4
- ROCK CHECK DAM (ES9) SHEET SW7 OR SEDIMENT LOG (20") (E1) SHEET SW4
- SEDIMENT CONTROL AT WASH CROSSINGS SEDIMENT LOG (20") (E1) SHEET SW4
- PRESERVATION FENCE
  ORANGE FENCE TO BE INSTALLED AROUND PERIMETER OF PRESERVE -IN-PLACE PLANTS, PRIOR TO DEMOLITION, TO PROTECT DRIP LINE
- PRESERVE IN PLACE TREE
- LIMITS OF DISTURBANCE (AREA OUTSIDE TO REMAIN UNDISTURBED)
- FLOW ARROW

NOTES:

1. DISTURBED AREAS WHERE CONSTRUCTION HALTS FOR A PERIOD GREATER THAN 14 DAYS REQUIRE TEMPORARY STABILIZATION MEASURES.
3. NO BMP SHALL BE PLACED SUCH THAT INGRESS AND EGRESS ACCESS TO INDIVIDUAL LOTS IS RESTRICTED.
4. RIGHT-OF-WAY AND EASEMENTS ARE THE PROJECT LIMITS OF DISTURBANCE. AREAS OUTSIDE OF DESIGNATED "LIMITS OF DISTURBANCE" SHALL REMAIN UNDISTURBED.
5. THERE ARE NO WETLANDS WITHIN THE PROJECT LIMITS OF DISTURBANCE AND NO WETLANDS LOCATED OFFSITE WITH THE POTENTIAL TO RECEIVE STORMWATER RUNOFF FROM THIS SITE.
6. FIELD MODIFICATIONS TO THIS PLAN ARE EXPECTED TO BE MADE THROUGHOUT THE LIFE OF THIS PROJECT UNDER THE DIRECTION OF THE STORMWATER TEAM, IN ACCORDANCE WITH THE PROJECT ADEQ PERMIT.
7. EROSION/SEDIMENT CONTROLS SHALL BE PLACED ON ALL SIDE SLOPE BOUNDARIES ONLY WHEN ADJACENT SIDE SLOPE IS AT LOWER ELEVATION THAN PROJECT AREA AND HAS POTENTIAL TO RECEIVE STROMWATER RUNOFF. ADJACENT SLOPES AT HIGHER ELEVATION THAN PROJECT AREA DO NOT REQUIRE PERIMETER CONTROL.

SYMBOL	TEMPORARY BMP	QTY/SHEET
	VELOCITY DISSAPATION DEVICE SEDIMENT LOG (20") (E1, SC6) OR ROCK CHECK DAM (ES9, RC6)	N/A
	SEDIMENT CONTROL AT WASH CROSSINGS SEDIMENT LOG (20") (E1)	13.33 L.F. SHEET SW3
	STABILIZED CONSTRUCTION ENTRANCE / EXIT GRAVEL PAD	8,700 SF SHEET SW8

Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

No.	Revision Description	Engineer	Date

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 34779
RONALD K. McGANN
Date Signed 09/19/19
ARIZONA, U.S.A.
Expires 09/30/2021

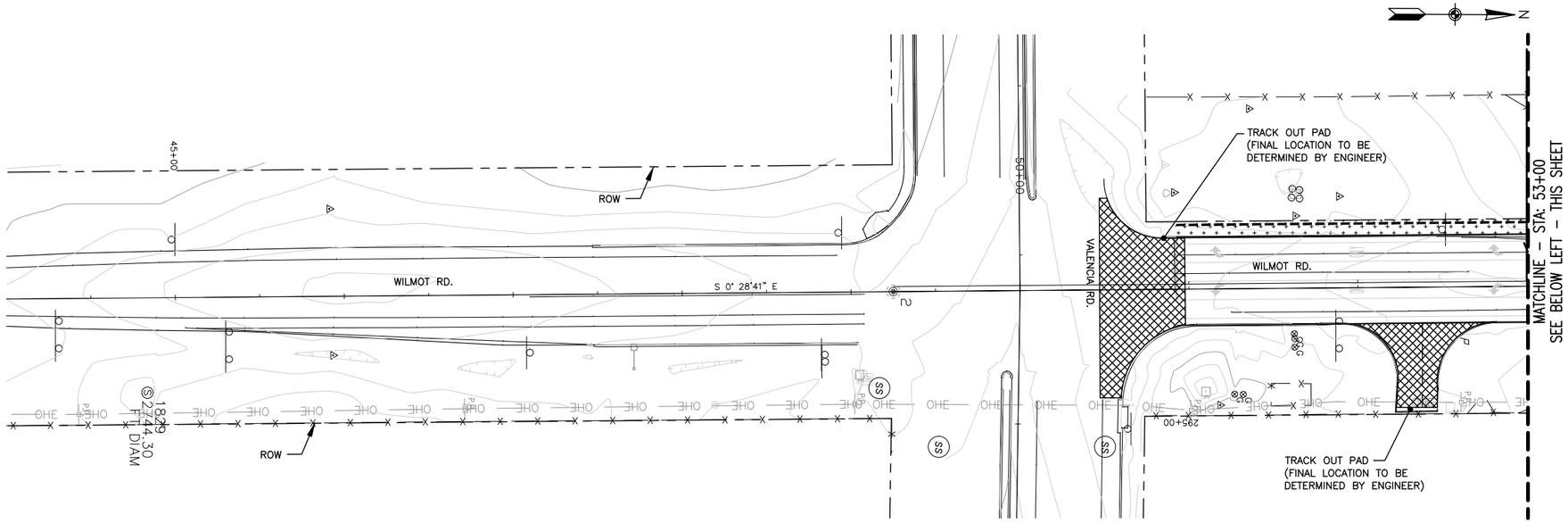
McGann & Associates
Landscape Architects and Planners
8014 N. Oracle Road, Suite 210
Oro Valley, Arizona 85704
Telephone: (520) 297-9545 Fax: (520) 297-9545

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

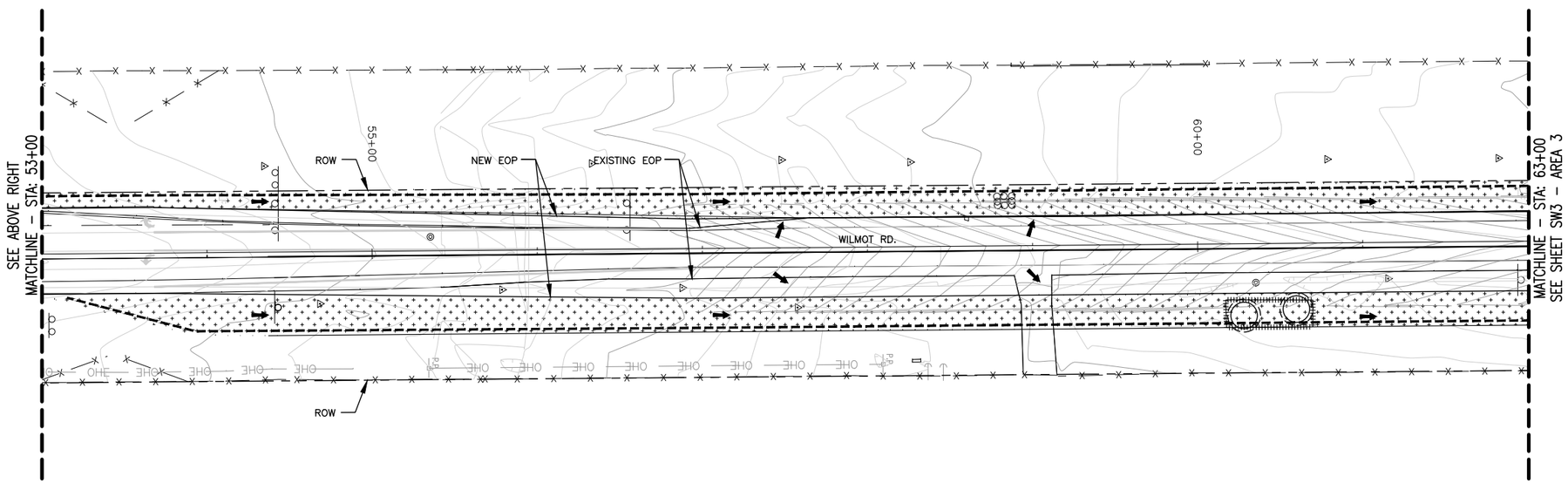
Scale | Sheet SW1 of SW8

$FILE$ $DATE$ $TIME$



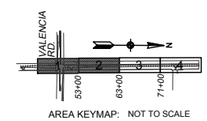
STORMWATER POLLUTION PROTECTION PLAN – AREA 1 – BEGINNING OF PROJECT TO STA: 53+00

SCALE: 1" = 40'-0"



STORMWATER POLLUTION PROTECTION PLAN – AREA 2 – STA: 53+00 TO 63+00

SCALE: 1" = 40'-0"



AREA KEYMAP: NOT TO SCALE

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SWPPP LEGEND & NOTES

(ITEMS IN LEGEND NOT TO SCALE)

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- XERORIPARIAN HYDROSEED MIX AREA CLASS II
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- SEDIMENT CONTROL AT WASH CROSSINGS SEDIMENT LOG (20") (E1) SHEET SW4
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- LIMITS OF DISTURBANCE (AREA OUTSIDE TO REMAIN UNDISTURBED)
- FLOW ARROW

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3. NO BMP SHALL BE PLACED SUCH THAT INGRESS AND EGRESS ACCESS TO INDIVIDUAL LOTS IS RESTRICTED.
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6. FIELD MODIFICATIONS TO THIS PLAN ARE EXPECTED TO BE MADE THROUGHOUT THE LIFE OF THIS PROJECT UNDER THE DIRECTION OF THE STORMWATER TEAM, IN ACCORDANCE WITH THE PROJECT ADEQ PERMIT.
7. EROSION/SEDIMENT CONTROLS SHALL BE PLACED ON ALL SIDE SLOPE BOUNDARIES ONLY WHEN ADJACENT SIDE SLOPE IS AT LOWER ELEVATION THAN PROJECT AREA AND HAS POTENTIAL TO RECEIVE STROMWATER RUNOFF. ADJACENT SLOPES AT HIGHER ELEVATION THAN PROJECT AREA DO NOT REQUIRE PERIMETER CONTROL.

SYMBOL	TEMPORARY BMP	QTY/SHEET
	VELOCITY DISSAPATION DEVICE SEDIMENT LOG (20") (E1, SC6) OR ROCK CHECK DAM (ES9, RC6)	N/A
	SEDIMENT CONTROL AT WASH CROSSINGS SEDIMENT LOG (20") (E1)	13.33 L.F. SHEET SW3
	STABILIZED CONSTRUCTION ENTRANCE / EXIT GRAVEL PAD	8,700 SF SHEET SW8

No.	Revision Description	Engineer	Date

		Date
Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 34479
RONALD K. McGANN
Date Signed 09/19/19
ARIZONA, U.S.A.
Expires 09/30/2021

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Landscape Architects and Planners
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Tucson, Arizona 85704
Telephone: (520) 297-9545 Fax: (520) 297-9545

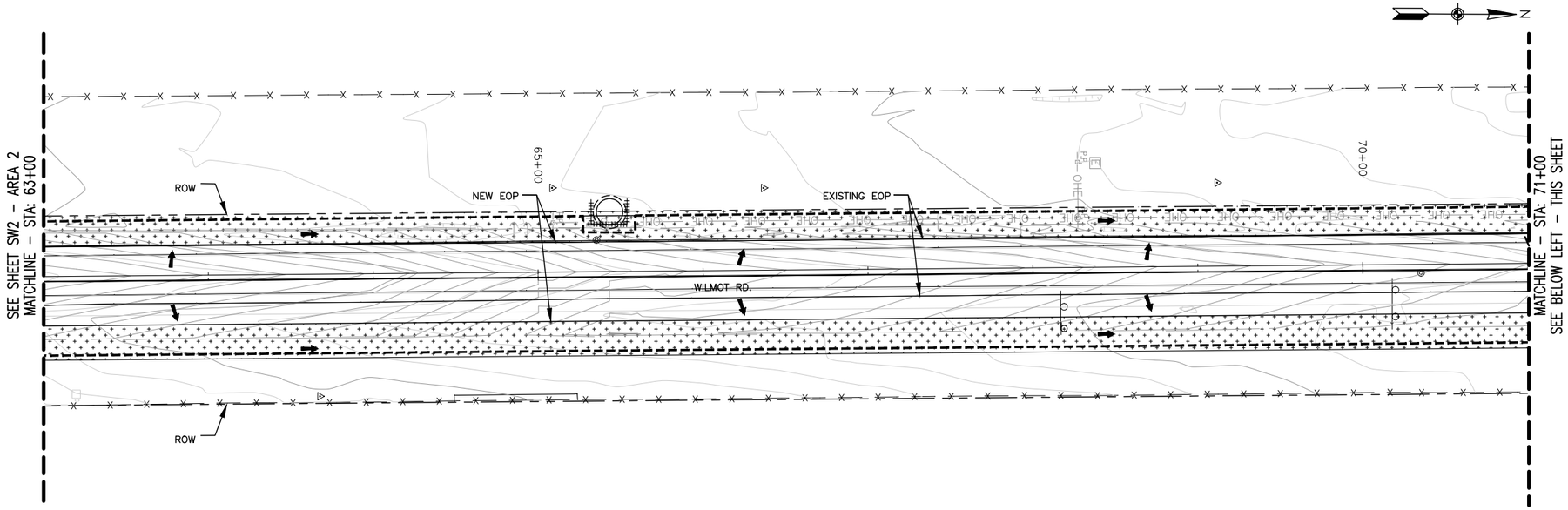
PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

STORMWATER POLLUTION PROTECTION PLAN – AREAS 1 AND 2
B.O.P TO STA: 63+00

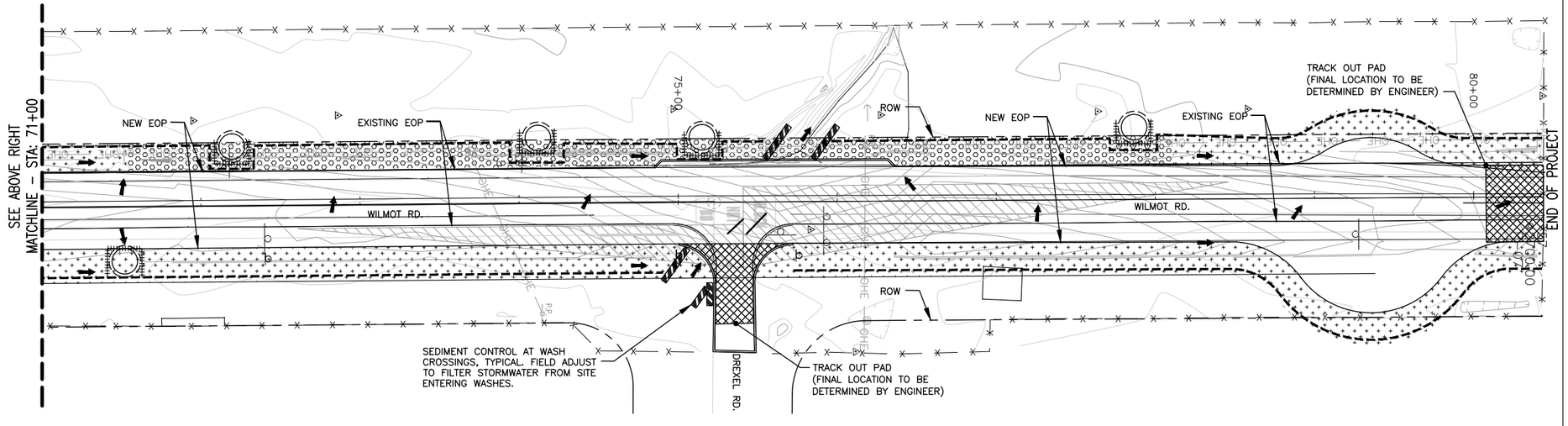
Scale Horiz 1"=40'

$FILE$ $DATE$ $TIME$



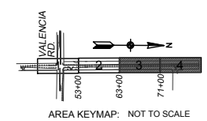
STORMWATER POLLUTION PROTECTION PLAN – AREA 3 –STA: 63+00 TO STA: 71+00

SCALE: 1" = 40'–0"



STORMWATER POLLUTION PROTECTION PLAN – AREA 4 – STA: 71+00 TO END OF PROJECT

SCALE: 1" = 40'–0"



AREA KEYMAP: NOT TO SCALE

Call at least two full working days before you being excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

SWPPP LEGEND & NOTES

(ITEMS IN LEGEND NOT TO SCALE)

- UPLAND HYDROSEED MIX AREA CLASS II
- XERORIPARIAN HYDROSEED MIX AREA CLASS II
- ROCK MULCH SPECIAL OVER SEED MIX
- DUMPED RIP–RAP OVER SEED MIX
- PERIMETER CONTROL OR SEDIMENT CONTROL BERM (ES6) OR SEDIMENT LOG (20") (E1) SHEET SW4
- ROCK CHECK DAM (ES9) SHEET SW7 OR SEDIMENT LOG (20") (E1) SHEET SW4
- SEDIMENT CONTROL AT WASH CROSSINGS SEDIMENT LOG (20") (E1) SHEET SW4
- PRESERVATION FENCE
  ORANGE FENCE TO BE INSTALLED AROUND PERIMETER OF PRESERVE –IN–PLACE PLANTS, PRIOR TO DEMOLITION, TO PROTECT DRIP LINE
- PRESERVE IN PLACE TREE
- LIMITS OF DISTURBANCE (AREA OUTSIDE TO REMAIN UNDISTURBED)
- FLOW ARROW

NOTES:

1. DISTURBED AREAS WHERE CONSTRUCTION HALTS FOR A PERIOD GREATER THAN 14 DAYS REQUIRE TEMPORARY STABILIZATION MEASURES.
3. NO BMP SHALL BE PLACED SUCH THAT INGRESS AND EGRESS ACCESS TO INDIVIDUAL LOTS IS RESTRICTED.
4. RIGHT–OF–WAY AND EASEMENTS ARE THE PROJECT LIMITS OF DISTURBANCE. AREAS OUTSIDE OF DESIGNATED "LIMITS OF DISTURBANCE" SHALL REMAIN UNDISTURBED.
5. THERE ARE NO WETLANDS WITHIN THE PROJECT LIMITS OF DISTURBANCE AND NO WETLANDS LOCATED OFFSITE WITH THE POTENTIAL TO RECEIVE STORMWATER RUNOFF FROM THIS SITE.
6. FIELD MODIFICATIONS TO THIS PLAN ARE EXPECTED TO BE MADE THROUGHOUT THE LIFE OF THIS PROJECT UNDER THE DIRECTION OF THE STORMWATER TEAM, IN ACCORDANCE WITH THE PROJECT ADEQ PERMIT.
7. EROSION/SEDIMENT CONTROLS SHALL BE PLACED ON ALL SIDE SLOPE BOUNDARIES ONLY WHEN ADJACENT SIDE SLOPE IS AT LOWER ELEVATION THAN PROJECT AREA AND HAS POTENTIAL TO RECEIVE STROMWATER RUNOFF. ADJACENT SLOPES AT HIGHER ELEVATION THAN PROJECT AREA DO NOT REQUIRE PERIMETER CONTROL.

SYMBOL	TEMPORARY BMP	QTY/SHEET
	VELOCITY DISSAPATION DEVICE SEDIMENT LOG (20") (E1, SC6) OR ROCK CHECK DAM (ES9, RC6)	N/A
	SEDIMENT CONTROL AT WASH CROSSINGS SEDIMENT LOG (20") (E1)	13.33 L.F. SHEET SW3
	STABILIZED CONSTRUCTION ENTRANCE / EXIT GRAVEL PAD	8,700 SF SHEET SW8

Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

No.	Revision Description	Engineer	Date
1			
2			
3			
4			
5			
6			
7			

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 34079
DONALD K. McGANN
Date Signed 09/19/19
ARIZONA, U.S.A.
Expires 09/30/2021

McGann & Associates
Landscape Architects and Planners
6014 N. Mesa Drive, Suite 210
Tucson, Arizona 85704
Telephone: (520) 297-9545 Fax: (520) 297-9545

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

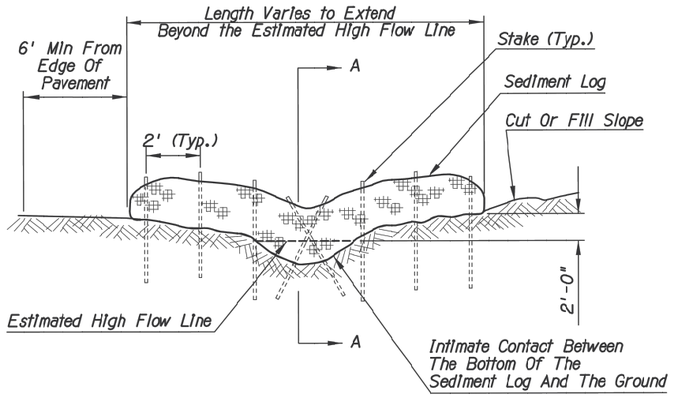
WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

STORMWATER POLLUTION PROTECTION PLAN – AREAS 3 AND 4
STA: 63+00 TO END OF PROJECT

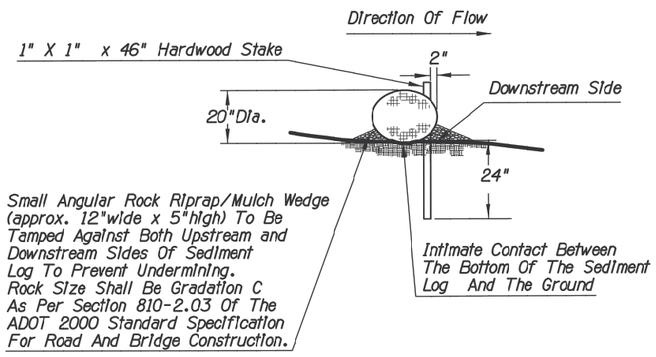
Scale Horiz 1"=40' | Sheet SW3 of SW8

$TIME$ $DATE$ $FILEA$

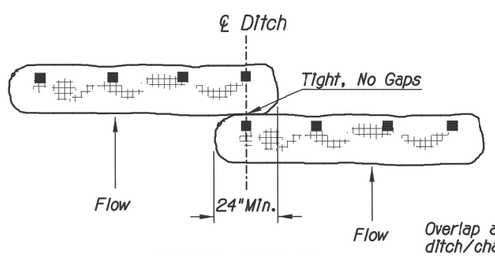
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



SEDIMENT LOG IN DITCH/CHANNEL
SECTIONAL ELEVATION (NTS)

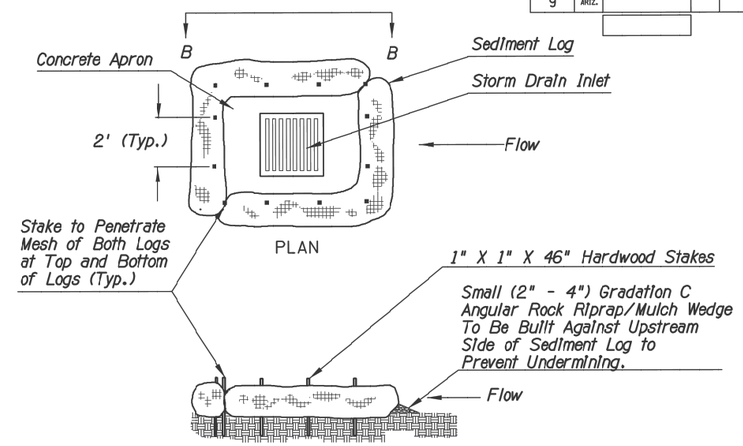


SECTION A-A (NTS)



TYPICAL OVERLAP
PLAN (NTS)

Overlap applies to situations where ditch/channel is wider than length of single Sediment Log.



During Construction

SEDIMENT LOG AT STORM DRAIN
SECTION-ELEVATION B-B (NTS)

NOTES

1. Sediment Logs shall be located as indicated in plans SWPPP or as directed by the Engineer.
2. Logs shall be selected, installed, and maintained with manufacturers' specifications and good engineering practices.
3. Lay sediment log across prepared ditch or channel. Trenching or burial of Sediment Logs is not required. The intimate contact between the bottom of the Log and the ground is mandatory. The Logs shall be installed in the ditch, swale or channel bottom perpendicular to the flow of water as shown on detail this sheet.
4. Stake Log as shown. Stakes shall be placed through downstream side only as shown. DO NOT drive stakes through center of the log. Stakes must be driven into the ground as shown.
5. Ensure that no gaps exist between soil and bottom of Sediment Log. Repair any rills or undercuts promptly.
6. In rock conditions the Engineer will evaluate placement of Sediment Logs.
7. For ditch slopes that exceed 8%, install rock riprap for channel/ditch lining or rock check dams in place of Sediment Logs.
8. Remove Sediment Log and stakes once final stabilization requirements are met. Contractor to dispose of Sediment Logs and dispose of trapped sediment material and to fill shallow trench created by Sediment Log.

DETAIL E1

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADSIDE DEVELOPMENT SECTION	
DESIGN	E LEROY BRADY	8-2005		
DESIGN	ZITAO FANG	8-2005		
DRAWN	ZITAO FANG	8-2005		
CHECKED	E LEROY BRADY	8-2005	EROSION AND SEDIMENT CONTROL DETAILS	
TEAM LEADER	E LEROY BRADY	8-2005		
ROUTE	MP	LOCATION		SHEET OF
TRACS NO.				___ OF ___

s:\rdwyeng\users\a3956\ 02:50:05 PM 08/15/2005 S:\RdwyEng\RdsdDev\BMPs\Sediment_Log.dgn

Call at least two full working days before you being excavation.
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Dial 8-1-1 or 1-800- STAKE-IT (782-5348)
In Maricopa County: (602)263-1100

Scale

Sheet SW4 of SW8

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

STORMWATER POLLUTION PROTECTION
PLAN – DETAILS

		Date
Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

No.	Revision Description	Engineer	Date
1			
2			
3			
4			
5			
6			

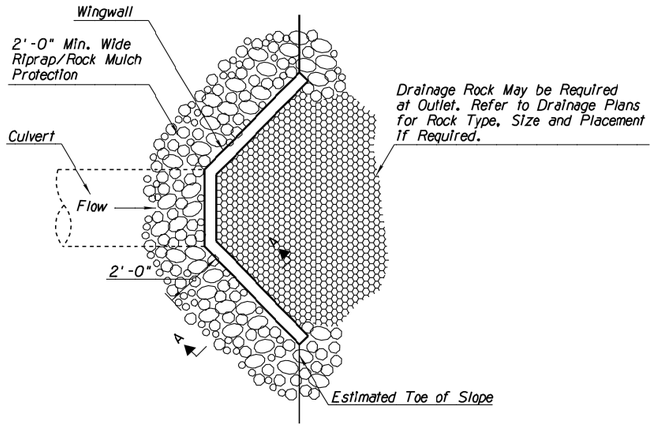
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 34975
RONALD K. McGANN
Date Signed 09/13/19
ARIZONA, U.S.A.
Expires 09/30/2021

McGann & Associates
Landscape Architects and Planners
6151 N. Oracle Road, Suite 210
Tucson, Arizona 85704
Telephone: (520) 297-5640 Fax: (520) 297-5645

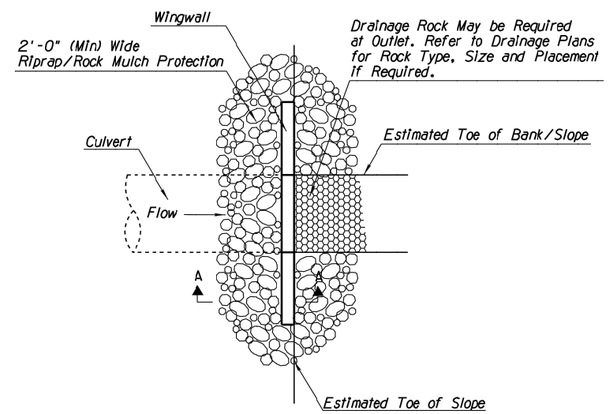
$TIME$ $DATE$ $FILE$

DATE | MADE BY | NO.2 | DESCRIPTION OF REVISION | DATE | MADE BY | NO.1 | DESCRIPTION OF REVISION

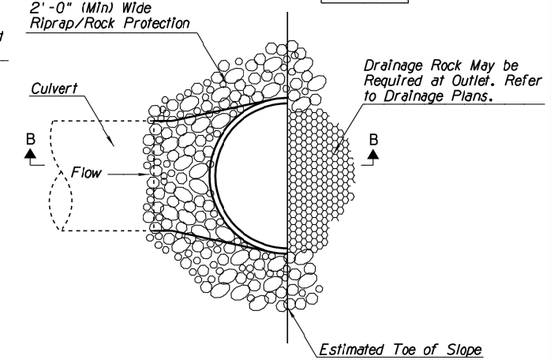
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



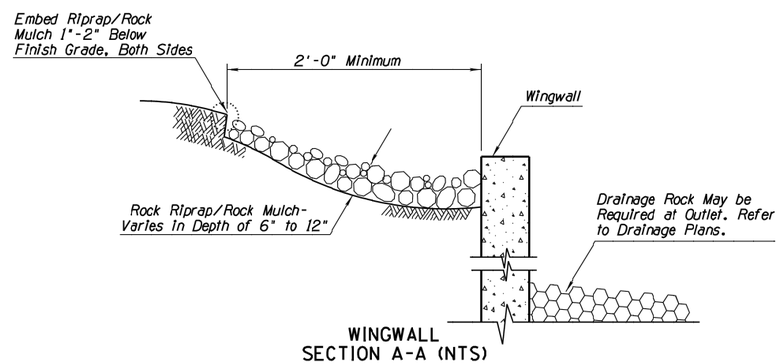
ANGLED HEADWALL
PLAN VIEW (NTS)



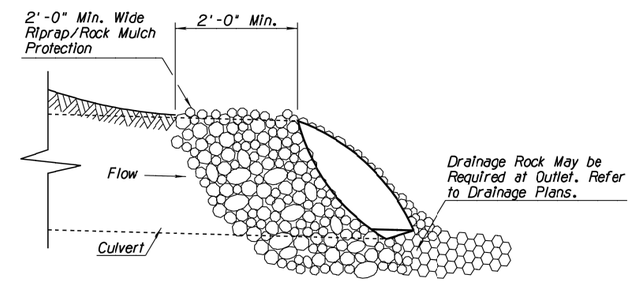
FLUSH HEADWALL
PLAN VIEW (NTS)



FLARED END
PLAN VIEW (NTS)



WINGWALL
SECTION A-A (NTS)



FLARED END
SECTION B-B (NTS)

NOTES:
1. Rock Riprap/Rock Much shall be angular shaped, crushed rock materials.
2. Rock Riprap/Rock Mulch within the traffic Clear Zone shall conform to the requirements of Section 810-2.03 Sieve Size Gradation A and/or Gradation C, and Section 913 of the Standard Specifications.
3. Imbed rock within traffic recovery area/clear zone into the finished grade so that any portion of the rock above the grade will be less than 4" in height.
4. The Installation and maintenance of Rock Protection BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities. Rock Protection BMPs shall be installed and maintained to carry the stormwater of at least 2-year, 24-hour events.
5. Field adjust and correct Rock Protection BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
6. The Rock Protection BMP's pay/bid Item shall Include all materials used for this BMP: all ground preparation, furnishing, Installing, maintaining as well as returning the area to an acceptable condition as approved by the Engineer.

DETAIL ES2

ROCK PROTECTION FOR INLETS, OUTLETS AND HEADWALL TRANSITION

	NAME	DATE
DESIGN	TAO ZI FONG	5-2011
DESIGN	HAN MENG	5-2011
DRAWN	TAO ZI FONG	5-2011
DRAWN	HAN MENG	5-2011
CHECKED	E LEROY BRADY	5-2011
TEAM LEADER	E LEROY BRADY	5-2011
ROUTE	MP	LOCATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADSIDE DEVELOPMENT SECTION
STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS

SHEET OF

TRACS NO.

___ OF ___

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Scale

Sheet SW5 of SW8

No.	Revision Description	Engineer	Date

		Date
Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 35979
RONALD K. McGANN
Date Signed 09/19/19
ARIZONA, U.S.A.
Expires 09/30/2021

McGann & Associates
Landscape Architects and Planners
6151 N. Oracle Road, Suite 210
Tucson, Arizona 85704
Telephone: (520) 297-9540 Fax: (520) 297-9545

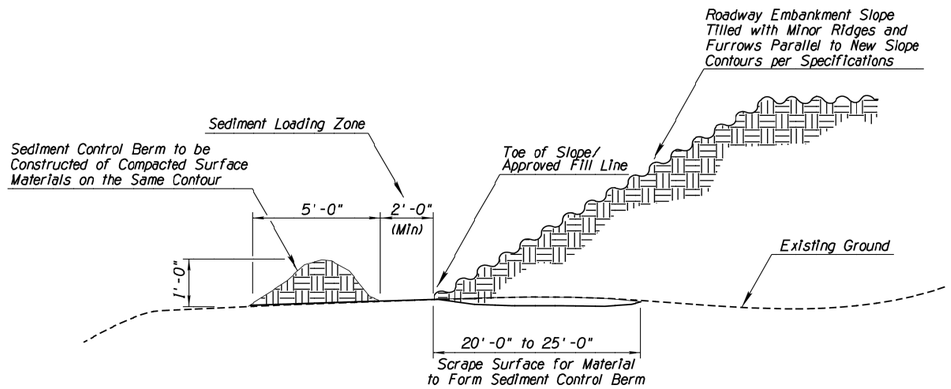
PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

STORMWATER POLLUTION PROTECTION PLAN – DETAILS

$FILE$ $DATE$ $TIME$

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



SEDIMENT CONTROL BERM
SECTION (NTS)

NOTES:

1. Locate Sediment Control Berms as indicated on plans or as directed by the Engineer.
2. Surface materials i.e. soil, rock, branches, leaves, slash and chips shall be scraped from the existing grade as needed to construct the berm prior to placement of roadway embankment. After scraping material into berm, compact berm as shown. Rock and slash shall extend no more than 4" above the surface.
3. Construct Sediment Control Berm on the same contour as the toe of new slope and a miniumum of 2'-0" beyond the toe of new slope. For the seeded areas, till to form minor ridges and furrows parallel to new slope contours and as specified in Section 805 of the Standard Specifications.
4. The installation and maintenance of Sediment Control Berm BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities. For erosion/sediment control purposes, Sediment Control Berm BMPs shall be installed and maintained to carry the stormwater of at least 2-year, 24-hour events.
5. Remove Sediment Control Berms per the direction of the Engineer or as soon as practicable upon stabilization of the construction disturbed area.
6. Field adjust and correct Sediment Control Berm BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
7. Sediment Control Berms may be paid as a part of slope construction/ roadway excavation. When paid separately, the Sediment Control Berm BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, final removal, and disposal of this temporary BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
8. OPTION TO SEDIMENT CONTROL BERM: When shown on layout plans and/or called for in Special Provisions, for urban situations, or where surface materials are not available, use wattles. Wattles shall be selected, installed, and maintained in accordance with manufacturers' specifications and good engineering practices. Refer to Sediment Wattle BMP.

DETAIL ES5
SEDIMENT CONTROL BERM

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADSIDE DEVELOPMENT SECTION	
DESIGN	TAO ZI FONG	05-2011		
DESIGN	HAN MENG	05-2011		
DRAWN	TAO ZI FONG	05-2011	STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS	
DRAWN	HAN MENG	05-2011		
CHECKED	E LEROY BRADY	05-2011		
TEAM LEADER	E LEROY BRADY	05-2011		
ROUTE	MP	LOCATION		SHEET OF
TRACS NO.				___ OF ___

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Scale		Sheet SW6 of SW8

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

STORMWATER POLLUTION PROTECTION PLAN – DETAILS

No.	Revision Description	Engineer	Date

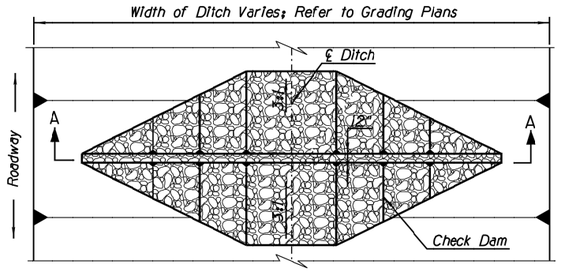
		Date
Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 33979
RONALD K. McGANN
Date Signed 09/11/19
ARIZONA, U.S.A.
Expires 09/30/2021

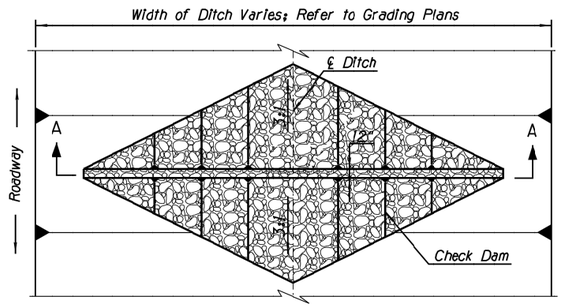
McGann & Associates
Landscape Architects and Planners
4014 N. Campbell Ave., Suite 210
Tucson, Arizona 85704
Telephone: (520) 297-9545 Fax: (520) 297-9545

$TIME$
$DATE$
$FILEA$

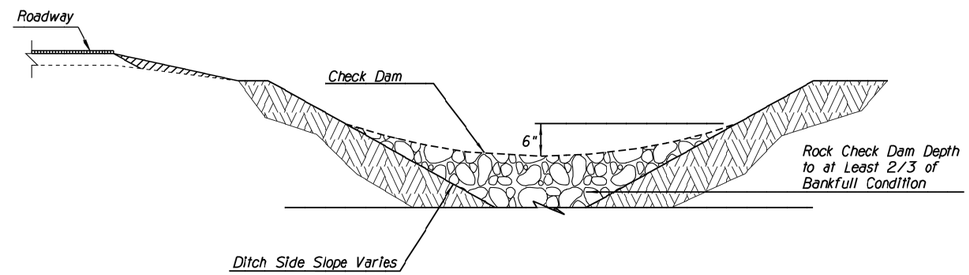
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.				



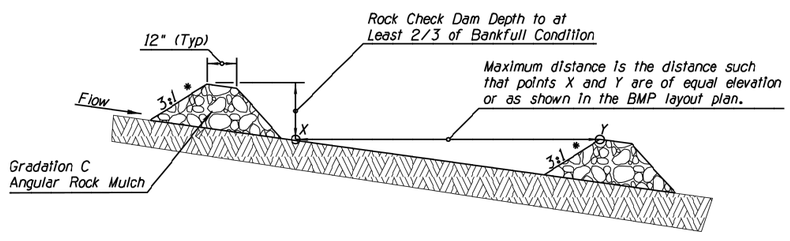
TRAPEZOIDAL DITCH PLAN (NTS)



V-DITCH PLAN (NTS)



SECTION A-A
TRAPEZOIDAL- OR V-DITCH
(NTS)



ELEVATION ALONG DITCH SLOPE
(NTS)

NOTES:

1. Construct Rock Check Dams with angular-shaped Gradation C Rock Mulch as defined in Section 810-2.03 of the Standard Specifications. Natural river-run materials, especially the rounded natural river rocks are not acceptable.
2. * Slope shall be 1(V):6(H) or flatter if Check Dam is within the traffic clear zone/recovery areas as defined in ADOT Roadway Design Guidelines (303.2 to 303.3 Roadside Recovery Area 2007).
3. Field-adjust sizing and spacing of Rock Check Dams as necessary for traffic safety as well as proper functioning of the drainage facilities.
4. Flatten and re-grade Rock Check Dams to the finished grade, level within the ditch, as soon as practicable after Final Stabilization.
5. Field adjust and correct Rock Check Dam BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
6. Field adjust to ensure the top of the Rock Check Dam is approximately 2/3 height of the estimated ditch bankfull level.
7. When paid separately, the Rock Check Dam BMP pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, maintenance, flattening/grading back to the finished grade, as well as returning the area to an acceptable condition as approved by the Engineer.

DETAIL ES9
ROCK CHECK DAM

	NAME	DATE
DESIGN	TAO ZI FONG	05-2011
DESIGN	HAN MENG	05-2011
DRAWN	TAO ZI FONG	05-2011
DRAWN	HAN MENG	05-2011
CHECKED	E LEROY BRADY	05-2011
TEAM LEADER	E LEROY BRADY	05-2011
ROUTE	LOCATION	

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADSIDE DEVELOPMENT SECTION

STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS

SHEET OF

TRACS NO.

___ OF ___

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NO.	DESCRIPTION OF REVISION	MADE BY	DATE	NO.2	DESCRIPTION OF REVISION	MADE BY	DATE

$TIME$
$DATE$
$FILEA$

		Date
Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

No.	Revision Description	Engineer	Date

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 43979
RONALD K. McGANN
Date Signed 09/11/19
ARIZONA, U.S.A.
Expires 09/30/2021

McGann & Associates
Landscape Architects and Planners
6879 N. Oracle Road, Suite 210
Tucson, Arizona 85704
Telephone: (520) 297-0540 Fax: (520) 297-8545

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT ROAD,
VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

STORMWATER POLLUTION PROTECTION PLAN – DETAILS

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Scale

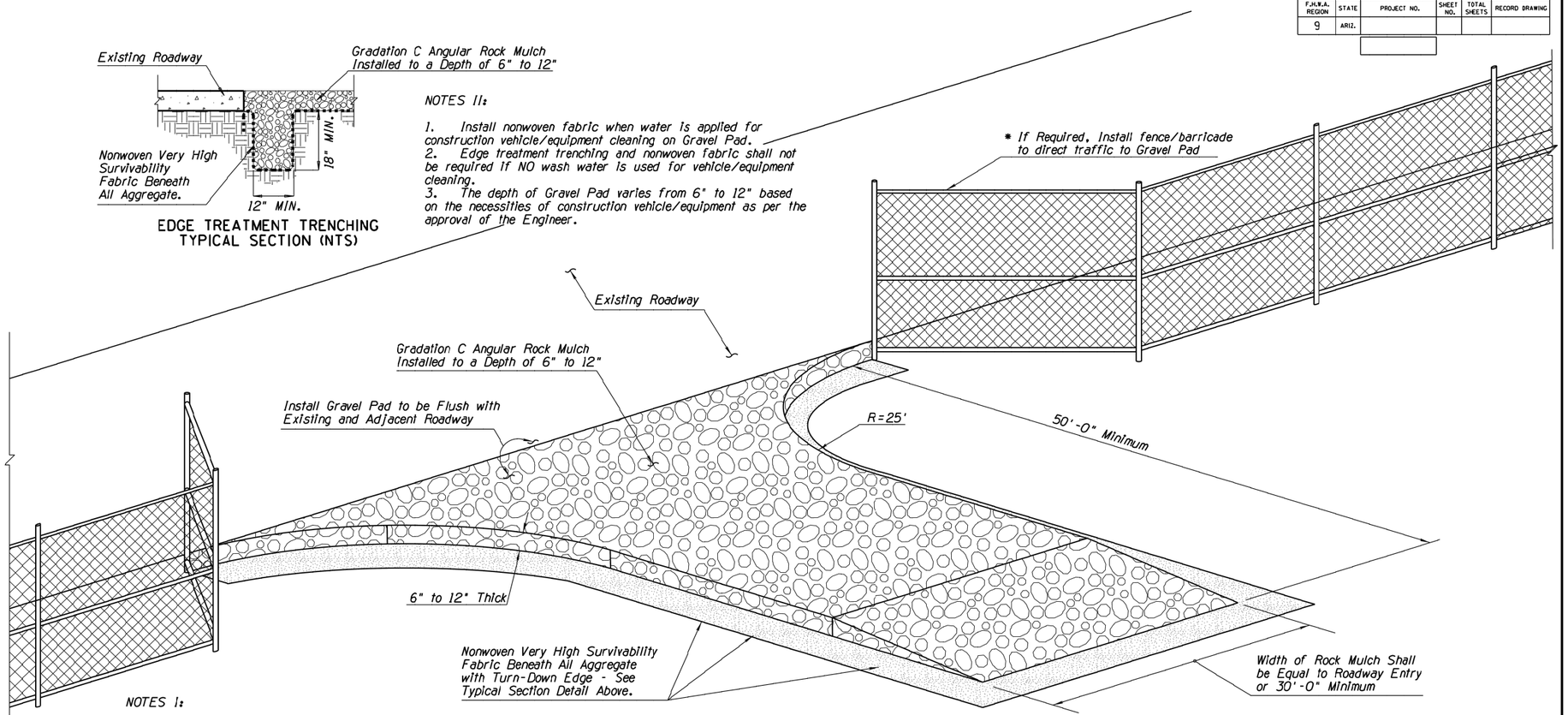
Sheet SW7 of SW8

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

EDGE TREATMENT TRENCHING TYPICAL SECTION (NTS)

NOTES II:

1. Install nonwoven fabric when water is applied for construction vehicle/equipment cleaning on Gravel Pad.
2. Edge treatment trenching and nonwoven fabric shall not be required if NO wash water is used for vehicle/equipment cleaning.
3. The depth of Gravel Pad varies from 6" to 12" based on the necessities of construction vehicle/equipment as per the approval of the Engineer.



BIRD'S EYE VIEW (NTS)

NOTES I:

1. Install Stabilized Construction Entrance/Exit Gravel Pad BMP for traffic entering or exiting a construction site where sedimentation, clay, silt or other pollutants can be tracked onto public roads and/or adjacent water bodies, as approved by the Engineer. It may also be applied for construction entrance/exit wind erosion/dust control, as approved by the Engineer.
2. Locate new Construction Entrance(s)/Exit(s) at appropriate project entrance/exit points as determined in field with the approval of the Engineer. Relocate Stabilized Construction Entrance/Exit Gravel Pad BMP as needed as project progresses. Replace Rock Mulch materials in drive paths when dirt or mud accumulates.
3. Nonwoven Very High Survivability Fabric shall conform to the standards of Sub-section 1014-4.04 of the Standard Specifications.
4. Rock Mulch materials shall be fractured/crushed rocks in angular shape and as defined in the Sub-section 810-2.03 of the Standard Specifications. Natural river-run materials, especially rounded natural river rocks are not acceptable.
5. Make field adjustments and corrections of Construction Entrance/Exit Gravel Pad BMP immediately if it is causing flooding and/or affecting roadway safety.
6. When paid separately, the Stabilized Construction Entrance/Exit Gravel Pad BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, final removal, and disposal of this temporary BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
7. * Fence/barricade pay/bid item shall not be included as a component of the Stabilized Construction Entrance/Exit Gravel Pad BMP pay/bid item.
8. Make field adjustments and corrections to ensure NO sensitive biological resources (native species / habitats) will be adversely impacted.

DETAIL ES11

STABILIZED CONSTRUCTION ENTRANCE/EXIT GRAVEL PAD

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADSIDE DEVELOPMENT SECTION	
DESIGN	TAO ZI FONG	7-2016		
DESIGN	HAN MENG	7-2016		
DRAWN	TAO ZI FONG	7-2016	STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS	
DRAWN	HAN MENG	7-2016		
CHECKED	JOHN R. HUCKO	7-2016		
TEAM LEADER	E LEROY BRADY	7-2016		
ROUTE	MP	LOCATION		SHEET OF
TRACS NO.				___ OF ___

V:/Roadway\users\a3956\ 12:35:31 PM 7/5/2016 V:\Roadside\RdsdDev\ERO_BMPs\2016_Updated_BMPs\ES11_Stabilized_Const_Entrance_Exit-2.dgn

No.	Revision Description	Engineer	Date
1			
2			
3			
4			
5			

		Date
Designed	SM	09/19
Drawn	MV	09/19
Checked	SM	09/19
Proj. Mgr.	WDS	09/19

REGISTERED LANDSCAPE ARCHITECT CERTIFICATE NO. 43079 DONALD K. McGANN Date Signed 09/11/19 ARIZONA, U.S.A.
Expires 09/30/2021

McGann & Associates
Landscape Architects and Planners
4014 N. Campbell Ave., Suite 210
Tucson, Arizona 85718
Telephone: (520) 297-9540 Fax: (520) 297-9545

PIMA COUNTY DEPARTMENT OF TRANSPORTATION – WILMOT ROAD, VALENCIA TO DAVIS MONTHAN AIR FORCE BASE ENTRANCE

WILMOT ROAD, VALENCIA TO DMAFB ENTRANCE
PROJECT NO 4WVDME

STORMWATER POLLUTION PROTECTION PLAN – DETAILS

Call at least two full working days before you being excavation. ARIZONA 811 Arizona Blue Stake, Inc. Dial 8-1-1 or 1-800- STAKE-IT (782-5348) In Maricopa County: (602)263-1100

Scale

Sheet SW8 of SW8

$FILE$ $DATE$ $TIME$