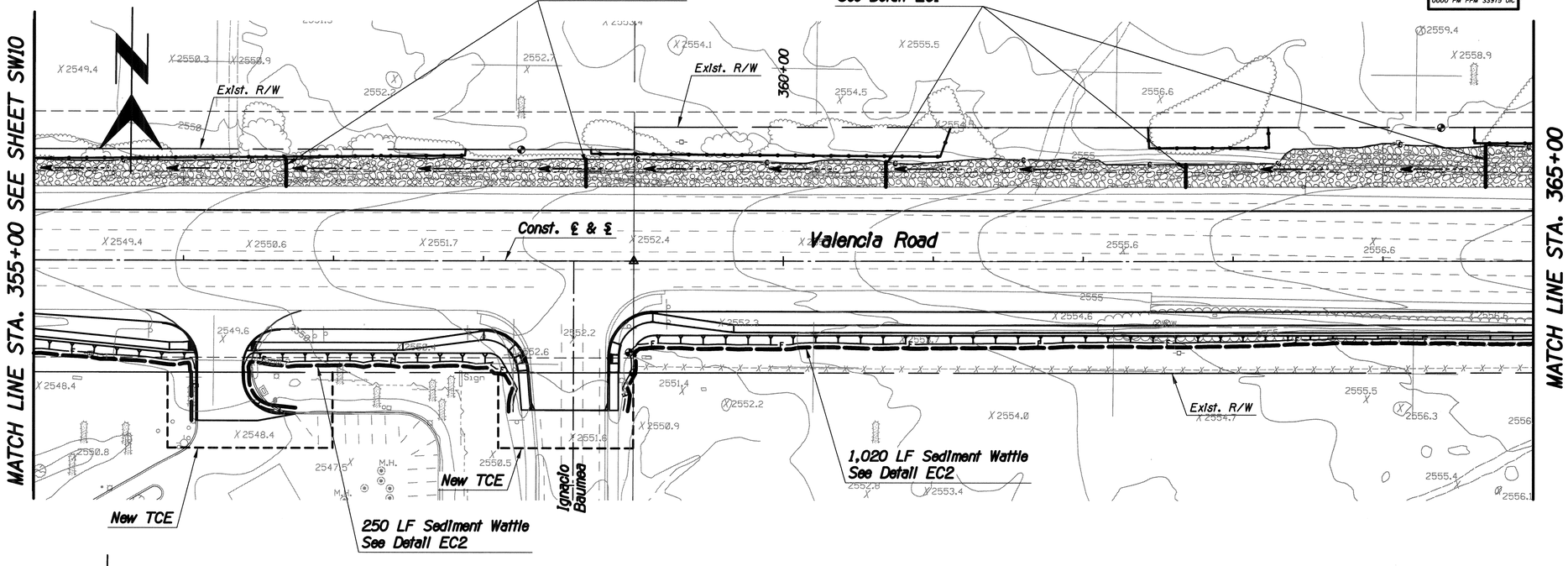
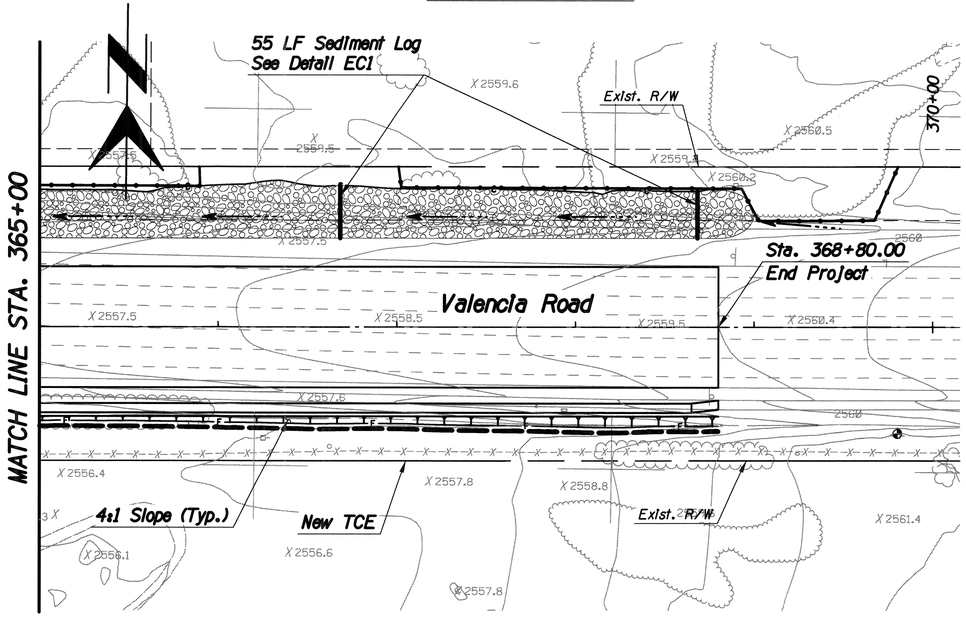
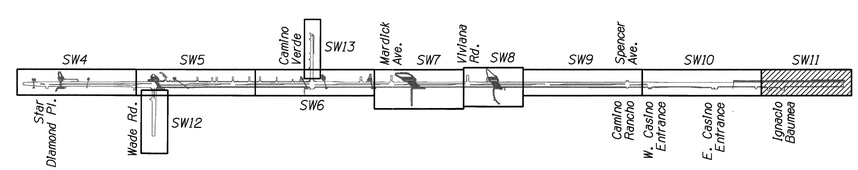
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			





NOTE:

SEE SHEET SW13 FOR LEGEND.



STORMWATER POLLUTION PREVENTION PLANS

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	JMF	03/2014
Drawn	JMF	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-17

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 594-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVWW

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet SW11 of SW16	Page 141 of 281

TRACS No. SS975 01C

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_BW_PDF.plt

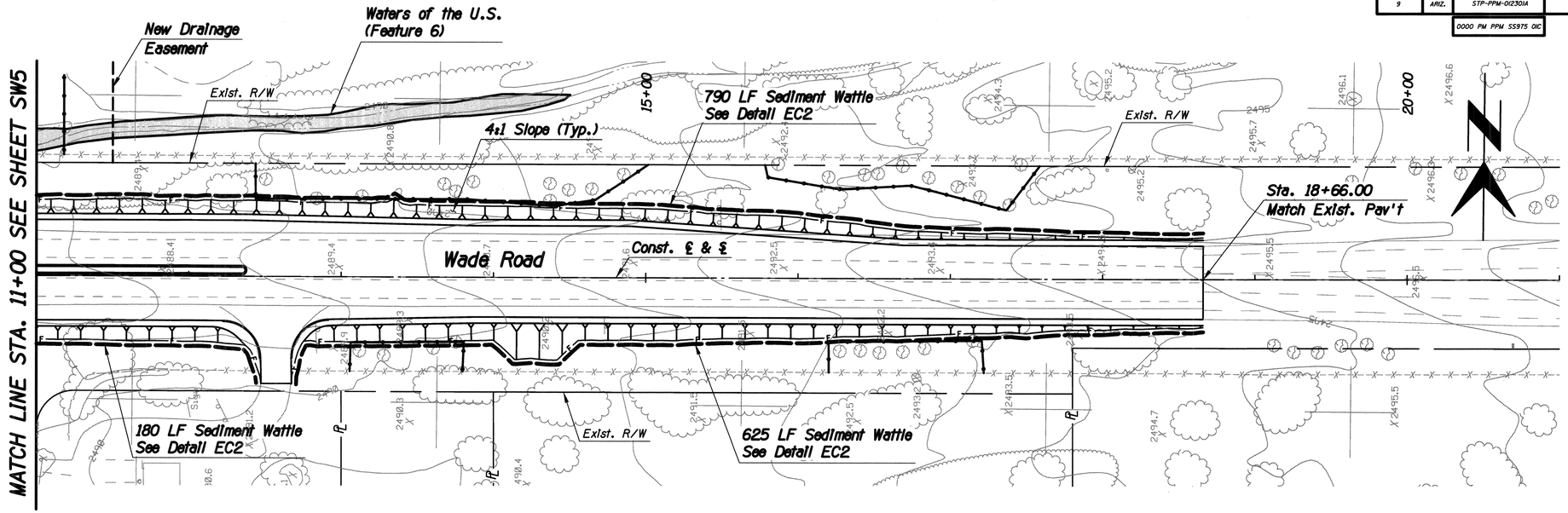
Project ID: 0000000015226
Client Number: 012145

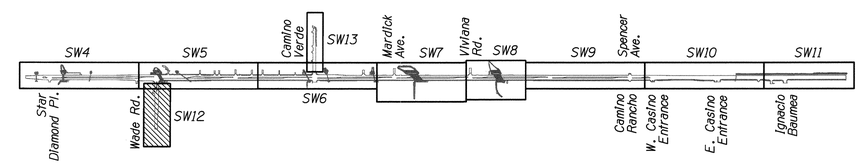
ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\12C-01.dgn
Model: B12C010B

Printed By: jefrey Date: 7/21/2014 3:28:37 PM

Print Scale: 1:40

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			





NOTE:

SEE SHEET SW13 FOR LEGEND.

STORMWATER POLLUTION PREVENTION PLANS

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet SW12 of SW16	Page 142 of 281

TRACS No. SS975 01C

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

	Date
Designed JMF	03/2014
Drawn JMF	03/2014
Checked RDB	03/2014
Proj. Engr. RDB	03/2014

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 13763 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-17

HDR Engineering, Inc. 5210 East Williams Circle, Suite 530 Tucson, AZ 85711-4459 (520) 394-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Project ID: 0000000052226
Client Number: 012145

Pentable: 152226_PLOTDRR.TBL
Plotdriver: 152226_VBFULL_B&W_PDF.pll

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\12C-01.dgn
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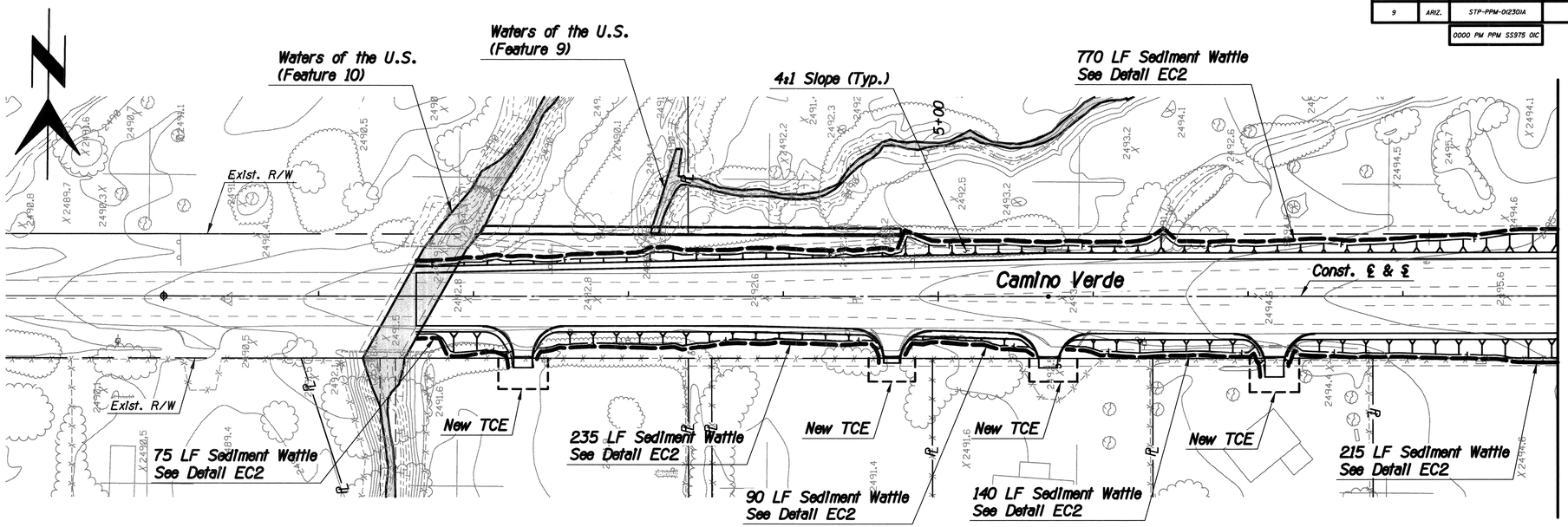
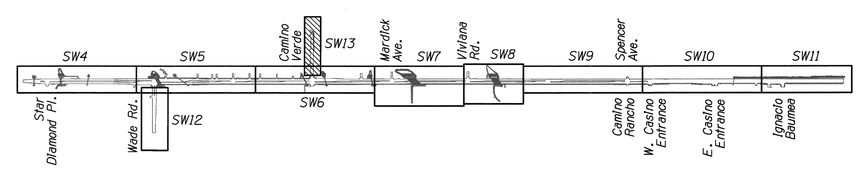


LEGEND

- Direction of Flow
- Sediment Log
- Sediment Wattle
- Preservation Fencing (See Demolition Plans)
- Rock Riprap (See Culvert Plans)
- Waters of the U.S.
- Pipe Culvert No.
- Box Culvert No.



STORMWATER POLLUTION PREVENTION PLANS

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet SW13 of SW16	Page 143 of 281

TRACS No. SS975 01C

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	JMF	03/2014
Drawn	JMF	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-15

HDR Engineering, Inc. 5210 East Williams Circle, Suite 530 Tucson, AZ 85711-4459 (520) 394-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Project ID: 0000000000152226
Client Number: 012145

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_VBFULL_B&W_PDF.plt

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\12C-01.dgn
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Print Scale: 1:40

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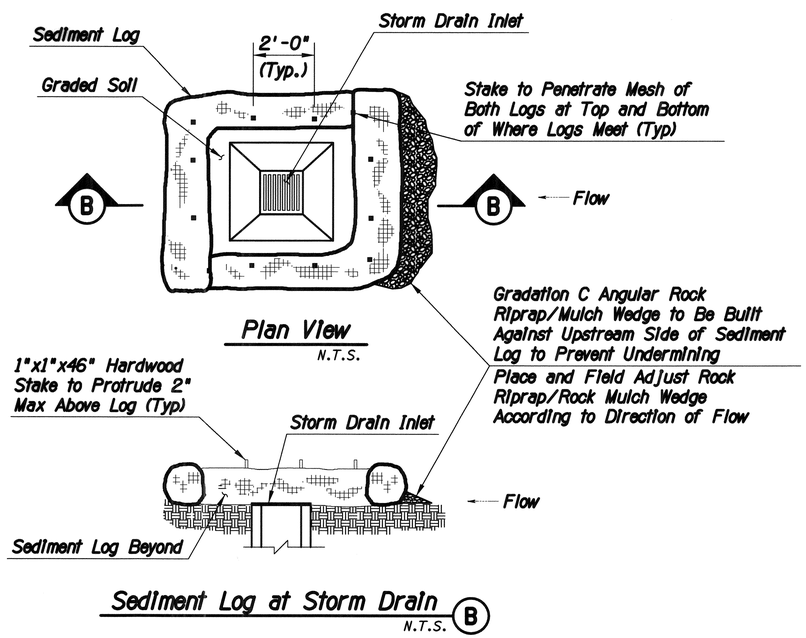
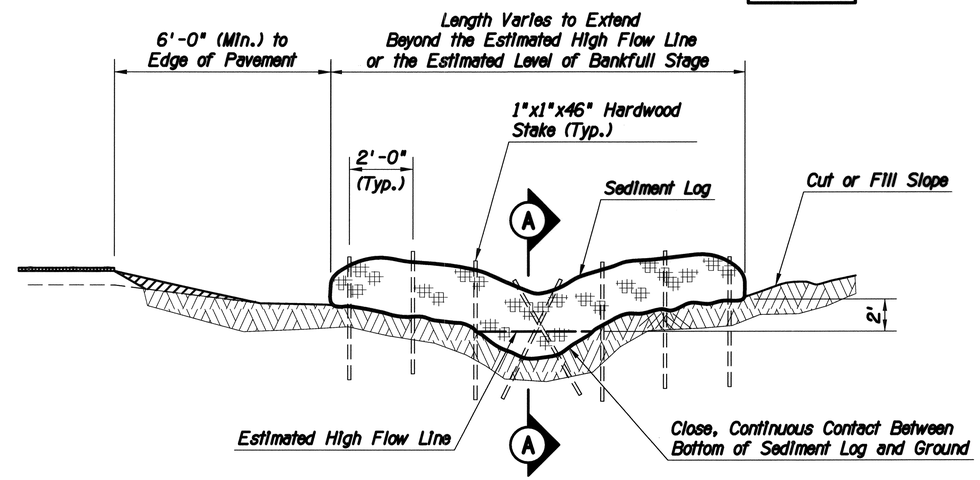
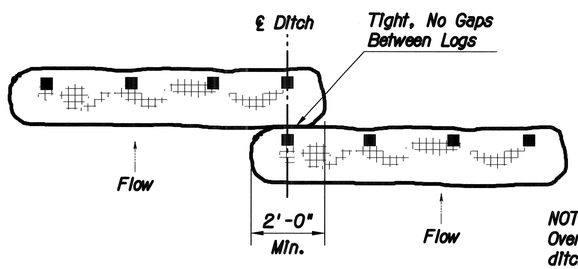


Plan View
N.T.S.

Sediment Log at Storm Drain (B)
N.T.S.

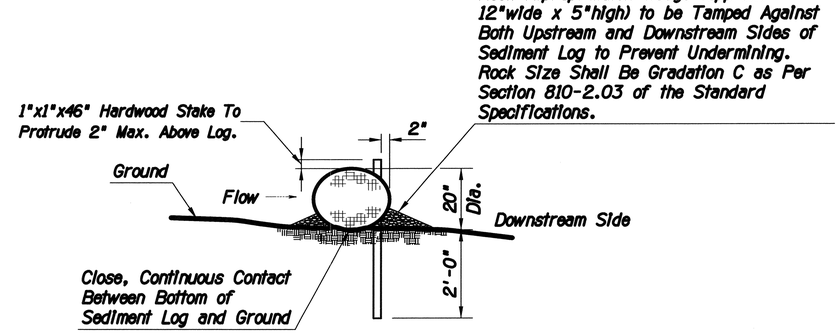


Sediment Log in Ditch/Channel
N.T.S.



Typical Overlap
N.T.S.

NOTE:
Overlap applies to situations where ditch/channel is wider than length of single Sediment Log. Two or multiple Sediment Logs may be necessary.



Section (A)
N.T.S.

Notes:

1. Sediment Logs shall not be installed in the urban freeway medians, nor where cable barrier systems are employed.
2. Locate Sediment Logs as indicated in plans, SWPPP or as directed by the Engineer.
3. Select, install and maintain Logs per manufacturers' specifications and good engineering practices.
4. Lay sediment log across prepared ditch or channel. Trenching or burial of Sediment Logs is not required. The close, continuous 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.
5. Stake Log as shown. Stakes shall be placed through downstream side only as shown.
6. DO NOT drive stakes through center of the log. Stakes must be driven into the ground as shown.
7. Ensure that no gaps exist between soil and bottom of Sediment Log. Repair any rills or undercuts promptly.
8. Placement of Sediment Logs shall be evaluated by the Engineer in rocky soil conditions.
9. Remove Sediment Log BMPs within the ditches/channels and around the storm drain inlets as per the Direction of the Engineer or as soon as practicable upon stabilization of the construction disturbed area.
10. Dispose of Sediment Logs and trapped sediment material and fill trench created by Sediment Log.
11. The installation and maintenance of Sediment Log BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities. Sediment Logs shall be installed and maintained to carry the stormwater of at least 2-year, 24-hour events.
12. Field adjust and correct Sediment Log BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
13. Install rock mulch/riprap for channel/ditch lining or rock check dams for longitudinal ditch slopes that exceed 5% and/or for soil conditions not suitable for log installation.
14. The Sediment Log BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, maintenance, final removal, and disposal, as well as returning the area to an acceptable condition as approved by the Engineer.
15. Refer to Standard Specification Section 810-2.06(B) for Sediment Log material specifications.

DETAIL EC1

Sediment Log

SWPPP DETAILS

Scales	Horiz. 1"=NA	Sheet SW14 of SW16	Page 144 of 281
	Vert. 1"=NA		

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	JMF	05/2011
Drawn	JMF	05/2011
Checked	RDB	05/2011
Proj. Engr.	RDB	05/2011

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-15

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 394-3500

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVWW

TRACS No. SS975 01C

Pentable: 152226_PLOTDRR.TBL
Plotdriver: 152226_V8FULL_BW_PDF.plt

Project ID: 0000000001152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\17C-02.dgn
Model: 17C0201

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Print Scale: 1:40

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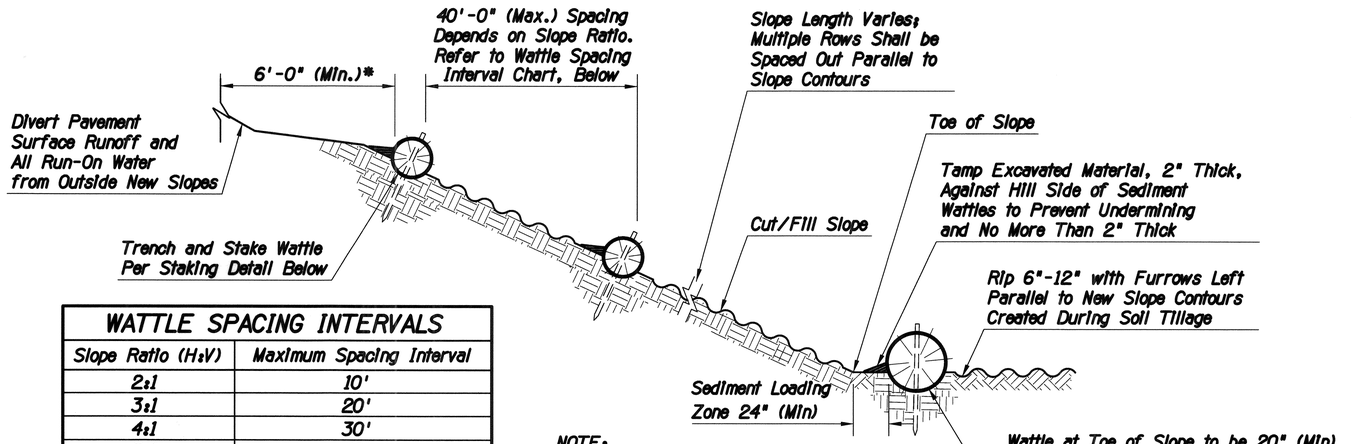
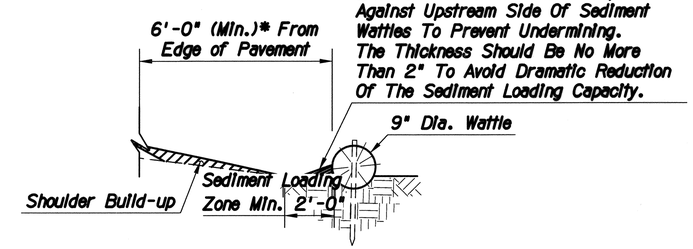


WATTLE SPACING INTERVALS	
Slope Ratio (H:V)	Maximum Spacing Interval
2:1	10'
3:1	20'
4:1	30'
5:1	40'
6:1	40'

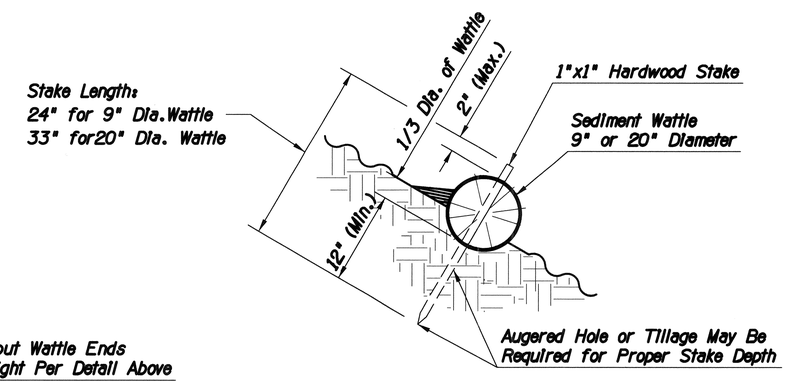
*Notes:
1. Top Row Shall Not be Placed within 6'-0" of Edge of Pavement and 9'-0" from Outside Surface of Barrier.
2. For erosive soils, place rows of wattles closer together.
3. For soils with low erosive potential, place rows of wattles further apart.
4. Lowest three Wattles to be 20" Dia. (Min.) when slope exceeds 100'.

NOTE:
Construct bottom wattle above estimated bankfull level of roadside ditch, when the ditch is installed at toe of new slope.

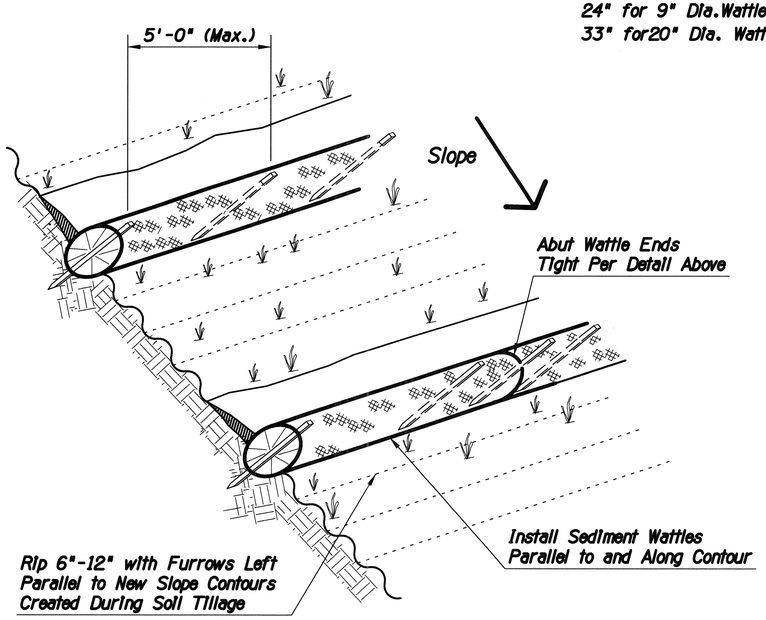
Section View
N.T.S.



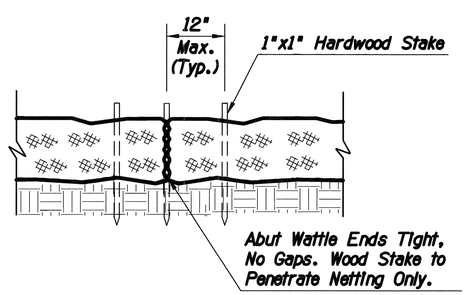
New Shoulder Buildup Protection
N.T.S.



Sediment Wattle Staking Detail
N.T.S.



Sediment Wattle Layout
N.T.S.



Sediment Wattle Overlap
N.T.S.

Notes:
1. Install Sediment Wattles as slopes are constructed to grade or as directed by the Engineer. Select, Install and maintain in conformance with manufacturers' specifications to meet site conditions for slope protection and in accordance with good engineering practices. No Sediment Wattles shall be installed in urban freeway medians, nor where cable barrier systems are employed.
2. Sediment Wattles shall be in continuous contact with trench bottom and sides. Do not overlap wattle ends on top of each other. A 20" Dia. wattle may be made from 2-3 rolled excelsior or straw blankets.
3. Butt adjoining wattles tightly against each other. Drive the first end stake of the second wattle at an angle toward the first wattle to help abut them tightly.
4. Repair any rills or gullies promptly. Field adjust and correct Wattle BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
5. Construction of cut slopes 2:1 and steeper in soil and rock materials that can be ripped shall be constructed, whenever possible, by Minibenching. Refer to Slope Minibenching Detail.
6. Loosening surface soil is not required where Minibenches are used. For seeded areas, tillage shall be performed to form minor ridges and furrows parallel to new slope contours and as specified in Section 805 of the Standard Specifications.
7. Divert and direct run-on water from outside of the slopes to the spillways and/or rock riprap/rock mulch. Diversion dikes and/or ditches are necessary on natural undisturbed slopes beyond the top limits of new slopes to divert run-on water.
8. Installation and maintenance of Sediment Wattle BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities.
9. Install and maintain Sediment Wattle BMPs to carry the stormwater of at least 2-year, 24-hour events.
10. The Sediment Wattle BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, maintenance, final removal, and disposal of this temporary BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
11. Refer to ADOT Standard Specification Section 810-2.06(C) for Sediment Wattles material specifications.

DETAIL EC2
Sediment Wattle

SWPPP DETAILS

No.	Revision Description	Engineer	Date

		Date
Designed	JMF	05/2011
Drawn	JMF	05/2011
Checked	RDB	05/2011
Proj. Engr.	RDB	05/2011

Priscilla S. Cornelio, P.E., Director

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-17

HDR Engineering, Inc. 5210 East Williams Circle, Suite 530 Tucson, AZ 85711-4459 (520) 394-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1"=NA Vert. 1"=NA	Sheet SW15 of SW16	Page 145 of 281

Print Scale: 1:40

TRACS No. SS975 0IC

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_V8FULL_BW_PDF.pltt

Project ID: 0000000000152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\17C-02.dgn
Model: 17C0202

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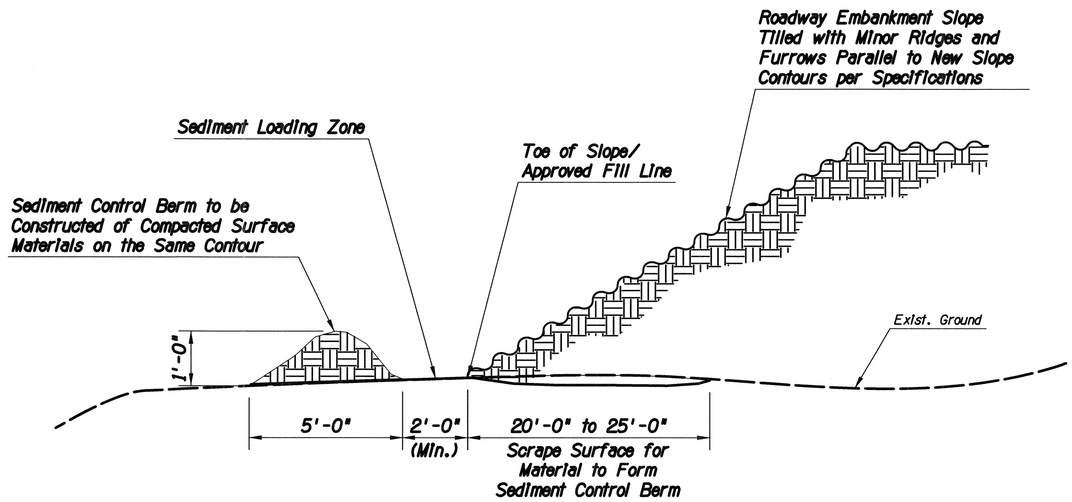

Sediment Control Berm

N.T.S.

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 minimum 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 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 EC3

Sediment Control Berm

SWPPP DETAILS

Designed	JMF	05/2011
Drawn	JMF	05/2011
Checked	RDB	05/2011
Proj. Engr.	RDB	05/2011

No.	Revision Description	Engineer	Date

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A.

Expires 3-31-17

HDR Engineering, Inc.
4210 E. Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1"=NA Vert. 1"=NA	Sheet SW16 of SW16	Page 146 of 281

TRACS No. SS975 01C

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000000152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\17C-02.dgn
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

GENERAL NOTES

1. All equipment/materials and construction shall meet or exceed the requirements contained in the current City of Tucson/Pima County (COT/PC) Standard Specifications and Standard Details for Public Improvements, the Special Provisions and the approved plans.

2. Pullboxes and vaults shown on the plans are diagrammatic representations. The exact locations of each vault or pullbox shall be approved by the Traffic Engineer prior to installation.

3. Vaults shall be used for long runs of conduit. The maximum spacing between vaults is 1,500 feet. A vault shall be installed on one corner of every signalized or future signalized intersection as shown on approved plans.

4. Every signalized intersection or future signalized intersection shall be ringed with interconnect conduit. On the three corners of the intersection not containing the vault, ITS pullboxes shall be utilized. The maximum spacing between ITS pullboxes or between an ITS pullbox and a vault shall be 600 feet.

5. At all signalzed intersections, a 1.5 inch PVC conduit shall be installed from the traffic signal controller to the adjacent ITS pullbox or vault.

6. The top of the vaults and pullboxes shall be level with the surrounding finished grade. If the slope or shoulder drops off from finished grade, the contractor shall grade around pole foundation. The top of the foundation shall extend no more than 4 inches above surrounding finished grade.

7. Vaults shall maintain a minimum of six (6) feet horizontal distance from existing water mains, measured from outside of the wall of the vault to the outside of pipe wall.

8. ITS pullboxes shall be a 30 inches x 48 inches Pencell box or approved equal.

9. Vaults shall be precast concrete with a minimum outside dimension of 48 inches long by 48 inches wide by 50 inches high.

10. Pullboxes shall not be installed within concrete curb access ramps or landings. In addition, any pullboxes installed behind curbs shall be installed between the curb and the proposed/future sidewalk or beyond the proposed/future sidewalk. An exception to this note would be pullboxes installed in a median. Any pullboxes installed along an uncurbed roadway shall be installed 10 feet from edge of pavement to edge of pullbox where right-of-way permits or as far from pavement as practical when there is insufficient right-of-way to provide the 10-foot offset.

11. A three-quarter (3/4) inch x ten (10) foot ground rod shall be installed in every ITS vault and ITS pullbox. Two (2) ground rod clamps shall be furnished and installed for each ground rod for clamping the ground wire.

12. The conduit locations shown on the approved plans are diagrammatic representations only. The location of the conduit may be adjusted in the field to avoid conflicts. The contractor shall obtain approval prior to installation. All conduits shall be installed within existing right-of-way unless otherwise approved.

13. Conduit installed under existing paved driveways, that are not scheduled to be reconstructed as part of this project, shall be installed by means of boring.

14. All conduit shall be installed a minimum of 36 inches below finished grade, except when conduits cross culverts or are routed along bridge and wing walls. Any conduit installed less than 36 inches deep shall be encased in concrete per PC/COT Standard Specifications.

15. Only new conduit shall be installed. All ITS interconnect conduit shall be four (4) inch PVC Schedule 40 unless noted otherwise. Conduit adjacent to curb shall be installed six (6) inch behind the back of curb and 42 inches below the top of curb.

16. All conduits shall be cleaned by compressed air. A properly sized conduit piston or mandrel shall be pulled through the conduit prior to innerduct installation.

17. When shown on the plans, four (4) each - one (1) inch innerducts shall be installed within interconnect conduit.

18. When included on the plans, innerducts shall be pre-lubricated with smooth exterior walls and longitudinally ribbed interior walls. Internal spacers which expand and contract at the same rate as the interconnect conduit shall be installed. Anti-reversing gaskets and an o-ring gasket at the bell base are required. Innerducts shall be Claron Telecom Systems Multi-Gard brand or equivalent. Each innerduct within a single conduit shall be of a different color (orange, brown, blue, and black).

19. If innerducts are installed, all integral innerducts shall have a continuous, non-spliced, unknotted detectable 1,250 pound test mule tape installed.

20. Conduits for future use shall be sealed with a properly sized tapered polyethylene duct plug at each termination point. The #8 bare bond wire shall be looped through the plug pull tab and two feet of slack doubled back into the conduit.

21. When the conduit is installed by open trenching, an electronically detectable six (6) inch fiber warning tape shall be installed 18 inches above the interconnect conduit. The tape shall be orange and have the inscription "Caution - fiber optic cable buried below".

22. A green tracer conductor shall be installed within each interconnect conduit. The conductor shall be a continuous unspliced stranded CU 6 AWG, rated for 600 volts and shall have THW or XHHW insulation. The tracer conductor shall be installed on the outside of the innerducts if innerducts are installed.

23. For all conduit installed, a minimum horizontal separation of 6 feet shall be maintained from landscape irrigation mainlines or water lines.

24. A minimum horizontal separation of 24 inches shall be maintained from all gas lines.

25. The traffic signal operation at existing signalized intersections shall be maintained throughout the duration of the project.

26. Upon commencement of work, traffic control devices shall be posted and maintained by the contractor until such a time as the work is complete. All traffic control devices shall be in accordance with the most recent edition of the Manual of Uniform Traffic Control Devices as adopted by Pima County and approved by the Engineer. All traffic control devices on federally funded projects shall be in accordance with the most recent edition of the Manual of Uniform Traffic Control Devices as adopted by ADOT and approved by the Engineer.

RESPONSIBILITIES

1. The contractor shall obtain all permits required by all governmental agencies.

2. The contractor shall contact Blue Stake at 1-800-782-5348, a minimum of 2 working days prior to any excavation.

3. The contractor shall maintain and allow access to all Pima County Waste Water manholes located within the ROW. Access must be maintained 24 hours per day, seven days per week. No electrical utilities may be placed within six feet of a force main.

4. The location of utilities shown on the plans is approximate. The contractor is responsible for verifying/potholing underground utilities in the vicinity of the proposed pole foundations.

5. Any equipment and/or utilities within the project limits that are damaged or destroyed by the contractor shall be repaired or replaced at the sole expense of the contractor.

6. The contractor shall supply and install all equipment and materials as specified on the approved plans and in the project specifications.

7. Unless specifically identified for removal as part of this project, it is the contractor's responsibility to repair/restore any landscaping, irrigation, or hardscape that may have been damaged or disturbed by the construction activities. The contractor shall obtain prior approval from the Operations Division Public Works Supervisor (740-5969) before any plants are moved.

ITS CONSTRUCTION NOTES

1. Furnish & Install ITS vault per Standard Detail F0-301.
2. Furnish & Install ITS pull box per Standard Detail F0-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

LEGEND

Symbol	Description
	ITS Pullbox
	ITS Vault
- - - - -	ITS Conduit

ITS PLANS

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	ABL	03/2014
Drawn	ABL, JMF	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A.

Expires 7-31-17

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 594-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

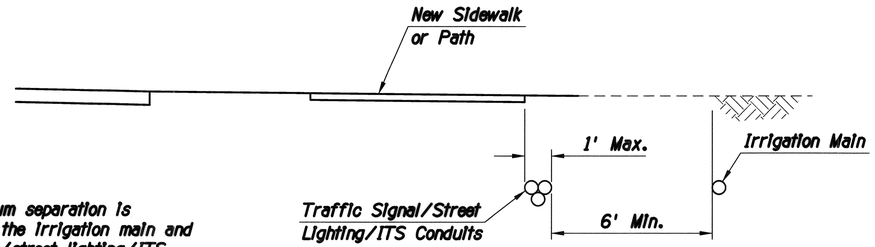
Scales	Horiz. N/A Vert. N/A	Sheet IT1 of IT11	Page 147 of 281

TRACS No. SS975 01C

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_VORULL_B&W_PDF.pll

Project ID: 0000000001S2226
Client Number: 012145

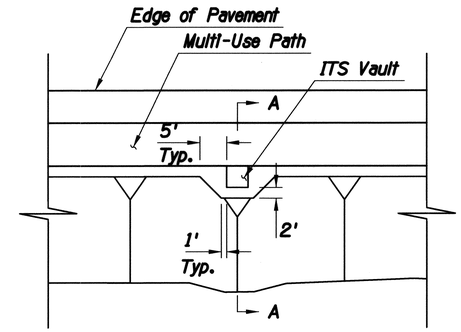
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			



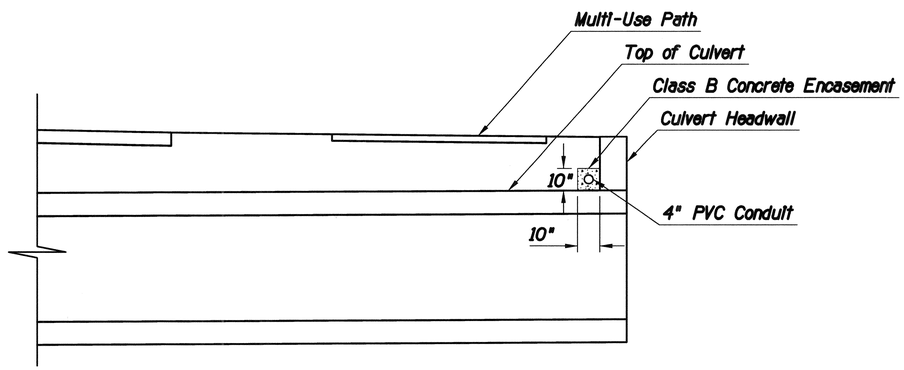
Note:

A six foot minimum separation is required between the irrigation main and the traffic signal/street lighting/ITS conduit.

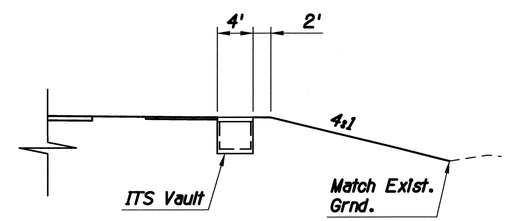
TYPICAL CONDUIT SPACING DETAIL



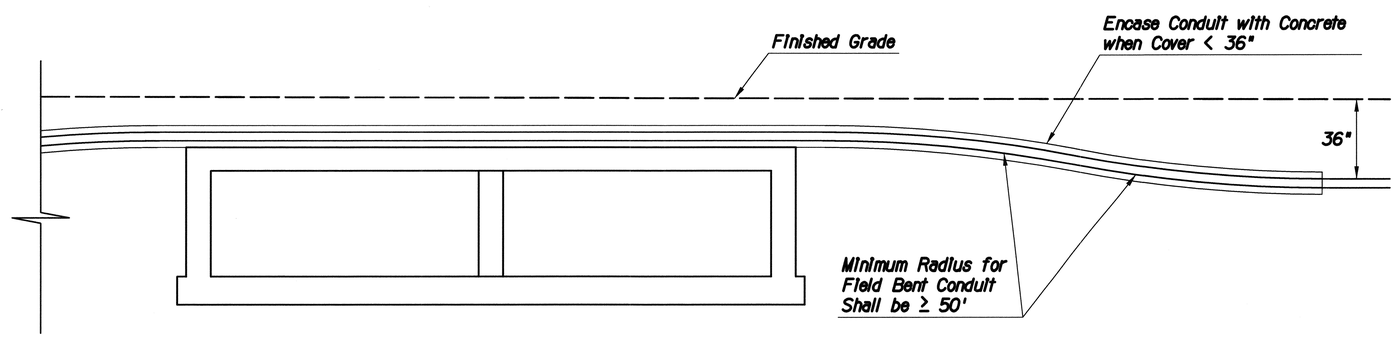
PLAN VIEW - GRADING AT ITS VAULTS



SECTION AT CULVERT CROSSING



SECTION A-A



PROFILE AT CULVERT CROSSING

ITS PLANS

No.	Revision Description	Engineer	Date

		Date
Designed	ABL	03/2014
Drawn	ABL, JMF	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornelio, P.E., Director

Registered Professional Engineer (Civil)
CERTIFICATE NO. 13762
ROBERT DEAN BRITTAIN
Date Signed 7-25-14
ARIZONA U.S.A.
Exp. Date 3-31-15

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Project ID: 0000000000152226
Client Number: 01245

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Scales	Horiz. N/A Vert. N/A	Sheet IT2 of IT11	Page 148 of 281

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
Model: B30C01

Printed By: jefrey Date: 7/21/2014 3:29:13 PM

Print Scale: 1:40

TRACS No. SS975 01C

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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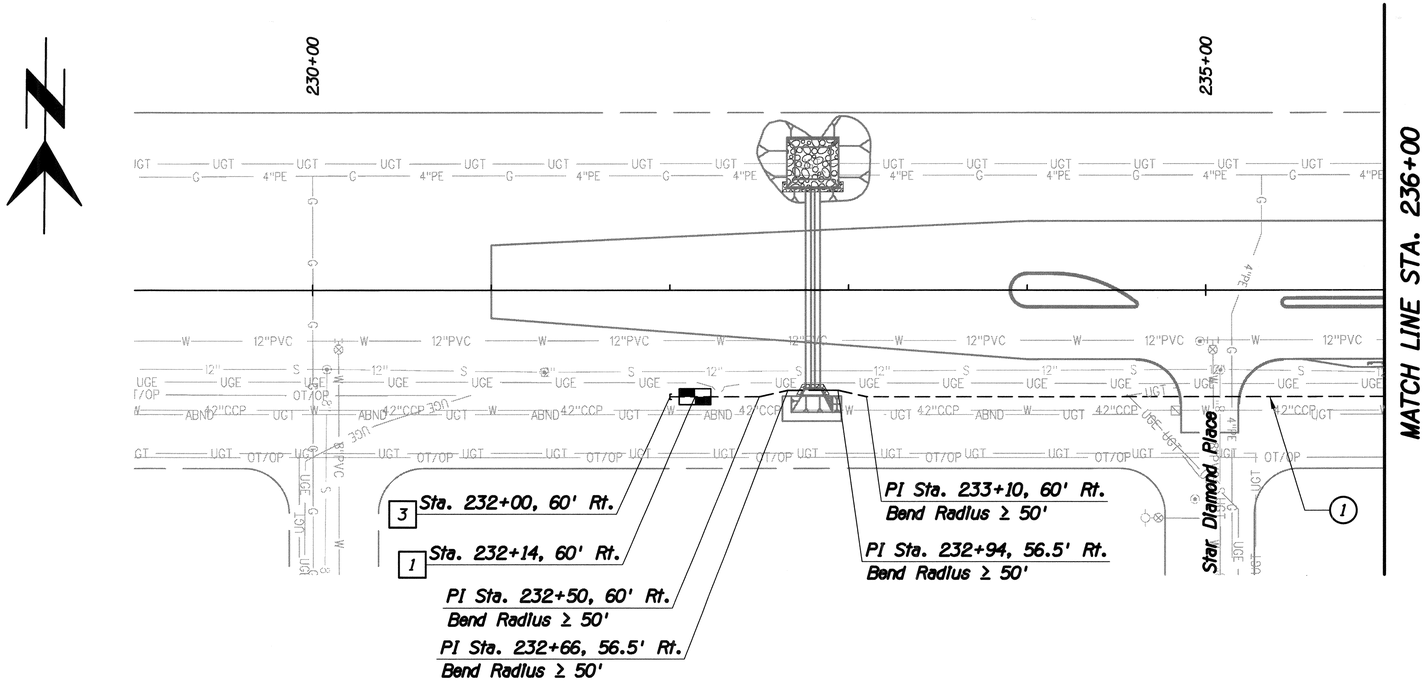
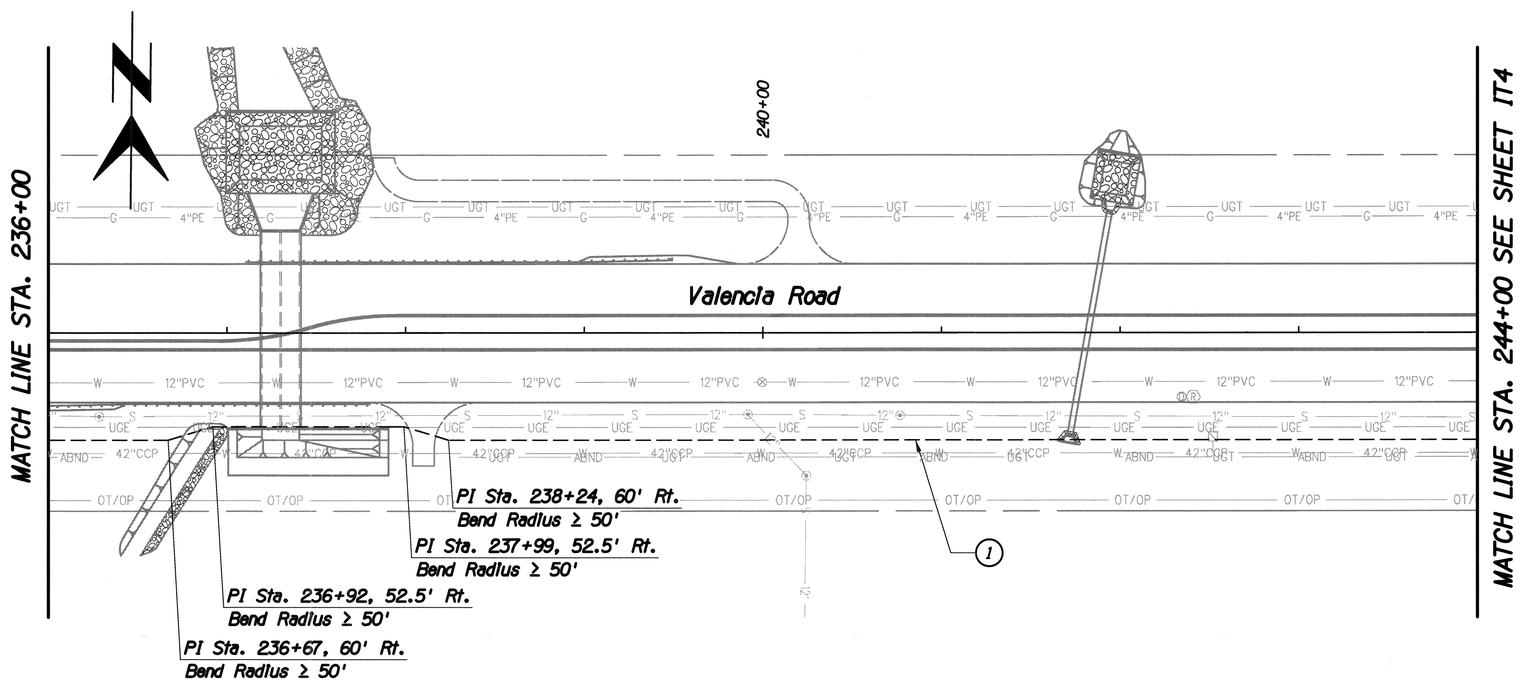
		0000 PM PPM SS975 01C			





1. Furnish & Install ITS vault per Standard Detail FO-301.
2. Furnish & Install ITS pull box per Standard Detail FO-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

No.	Revision Description	Engineer	Date

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornelio, P.E., Director

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN ARIZONA U.S.A. Date Signed 2-28-14 Expires 3-31-17

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 364-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT3 of IT11	Page 149 of 281

Print Scale: 1:40

TRACS No. SS975 01C

Project ID: 0000000015226
Client Number: 012145

Pentable: 152226_PLOTDROP.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
Model: B30C02

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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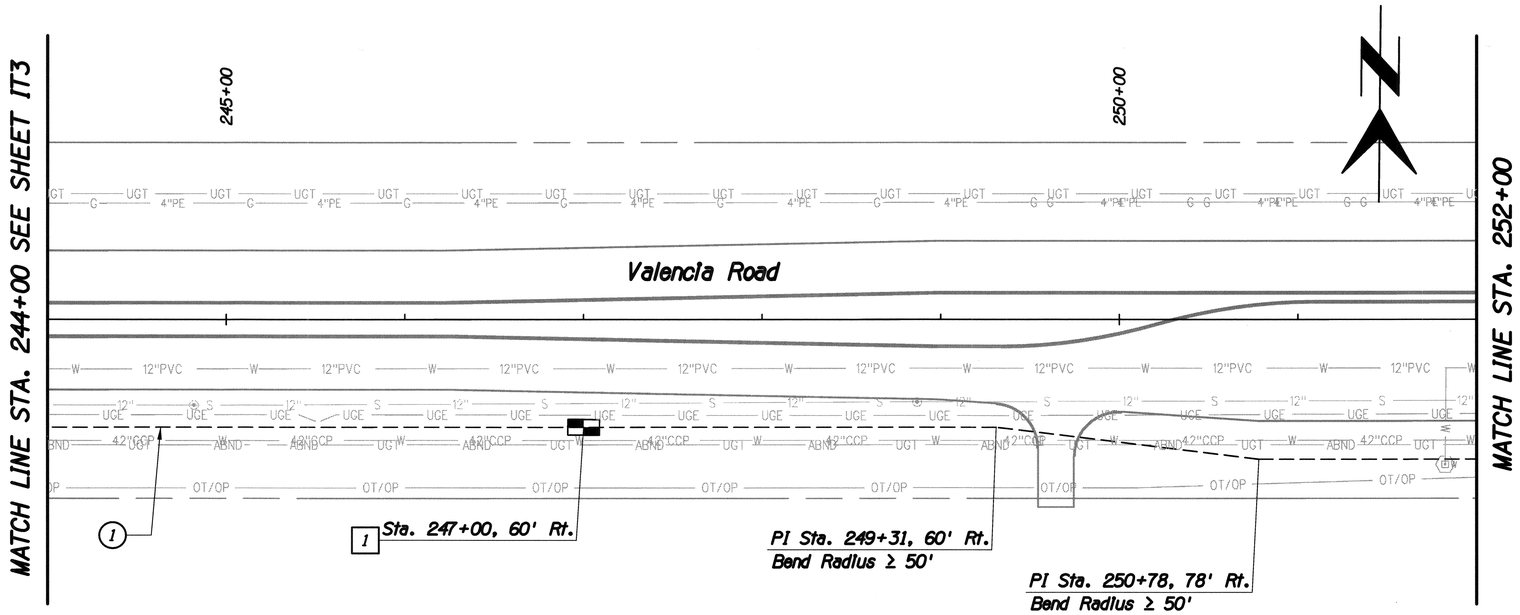
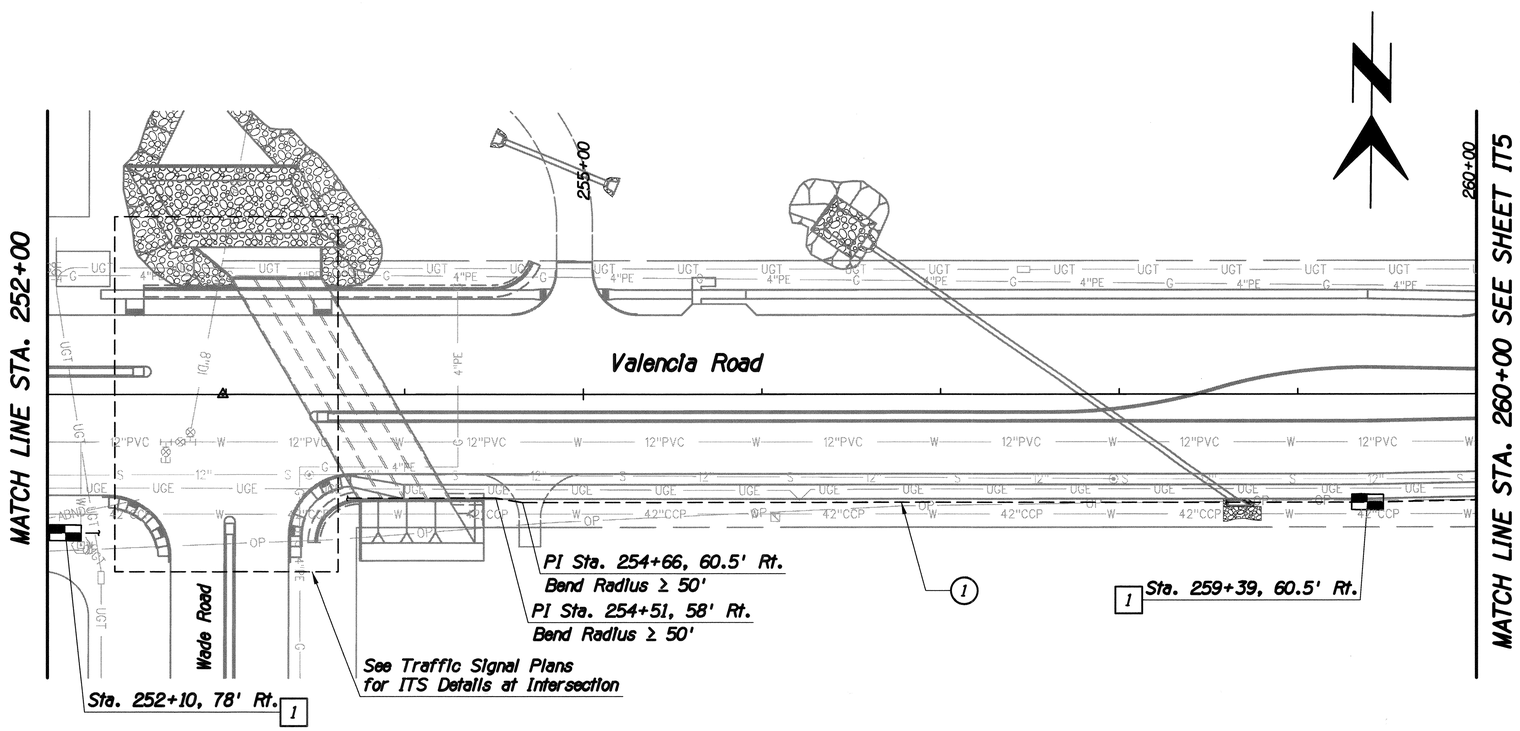
		0000 PM PPM SS975 01C			





1 Furnish & Install ITS vault per Standard Detail FO-301.

2 Furnish & Install ITS pull box per Standard Detail FO-300.

3 Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT4 of IT11	Page 150 of 281

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-17

HDR

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

TRACS No. SS975 01C

Print Scale: 1:40

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_V8IVLL_BW_PDF.pll

Project ID: 0000000000152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
Model: B30C03

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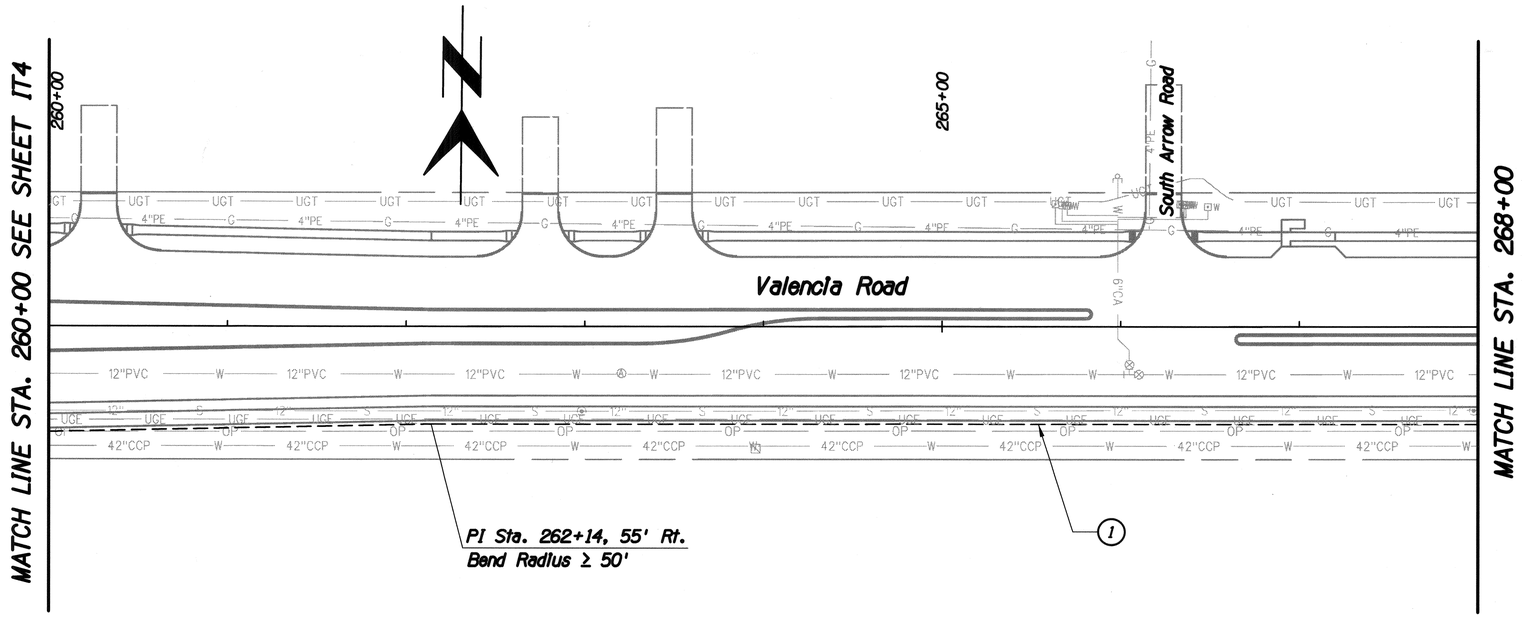

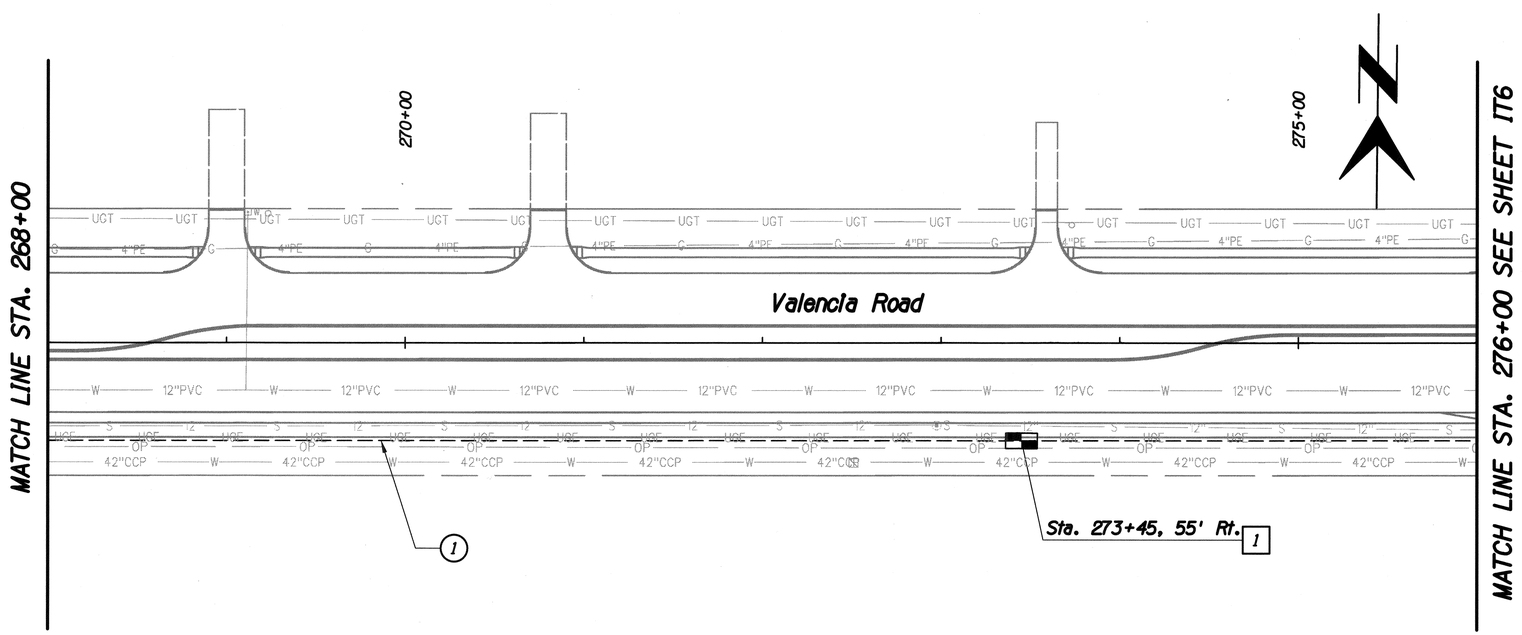

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

1. Furnish & Install ITS vault per Standard Detail F0-301.
2. Furnish & Install ITS pull box per Standard Detail F0-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-15

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT5 of IT11	Page 151 of 281

TRACS No. SS975 01C

Print Scale: 1:40

Project ID: 00000000152226
Cadm Number: 012145

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_V8FULL_BW_PDF.pll

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
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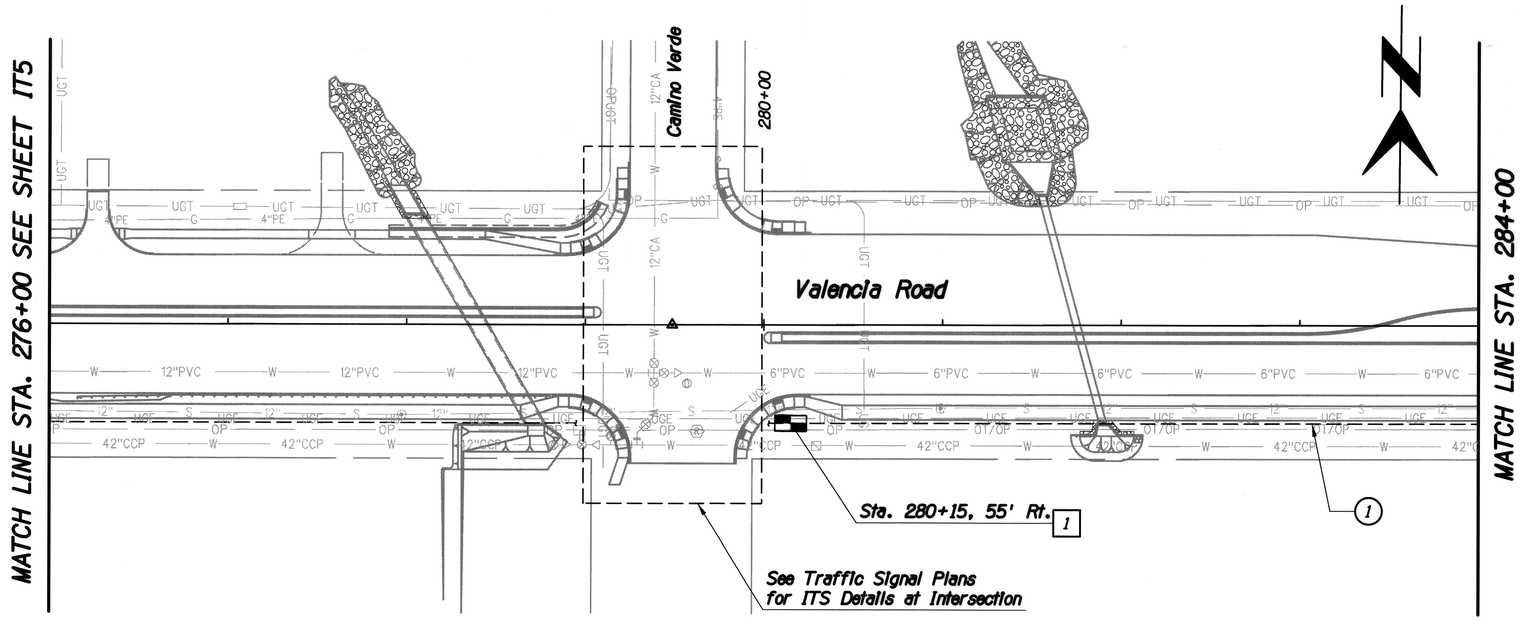

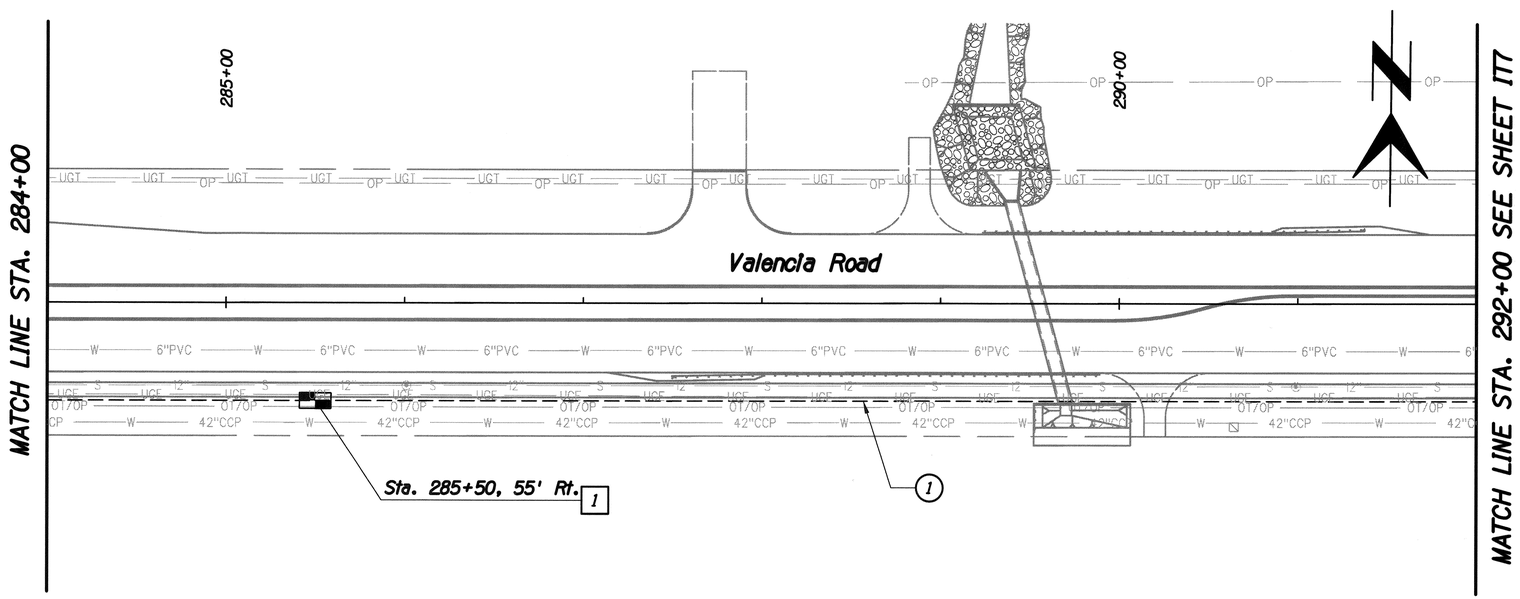

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

1. Furnish & Install ITS vault per Standard Detail FO-301.
2. Furnish & Install ITS pull box per Standard Detail FO-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A. Expires 3-31-17

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT6 of IT11	Page 152 of 281

TRACS No. SS975 01C

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000000152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
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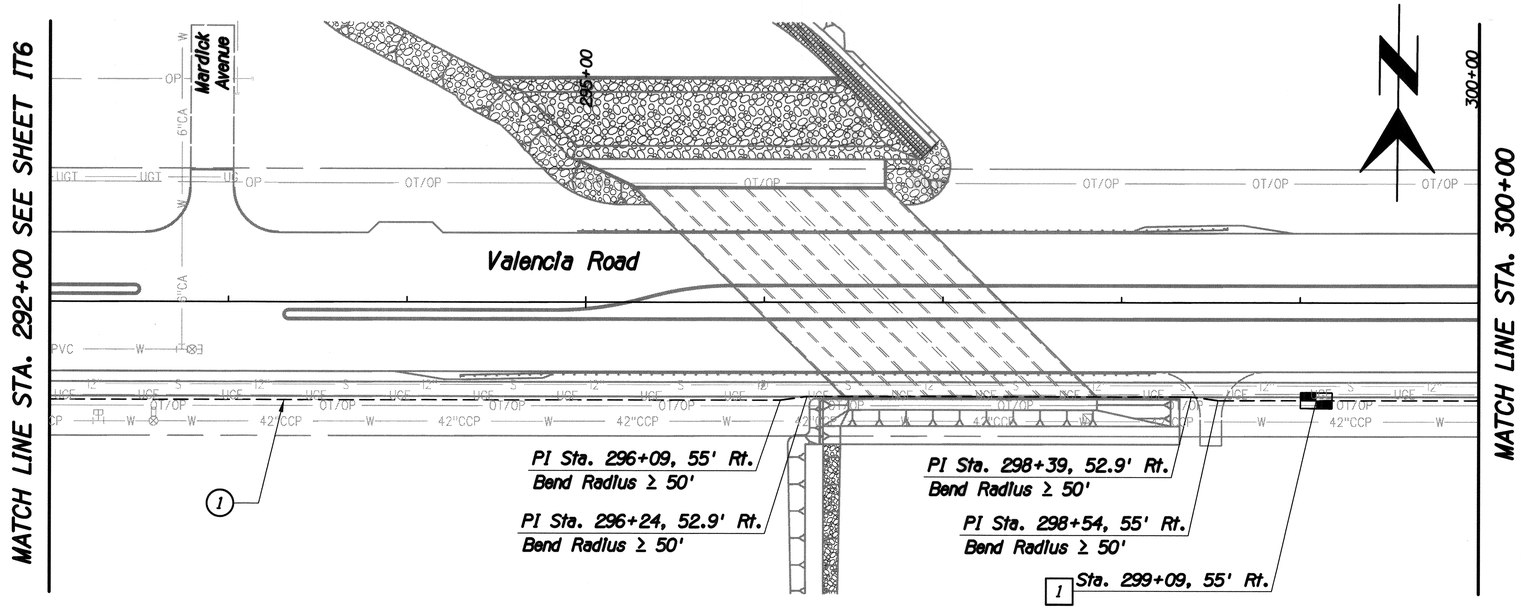

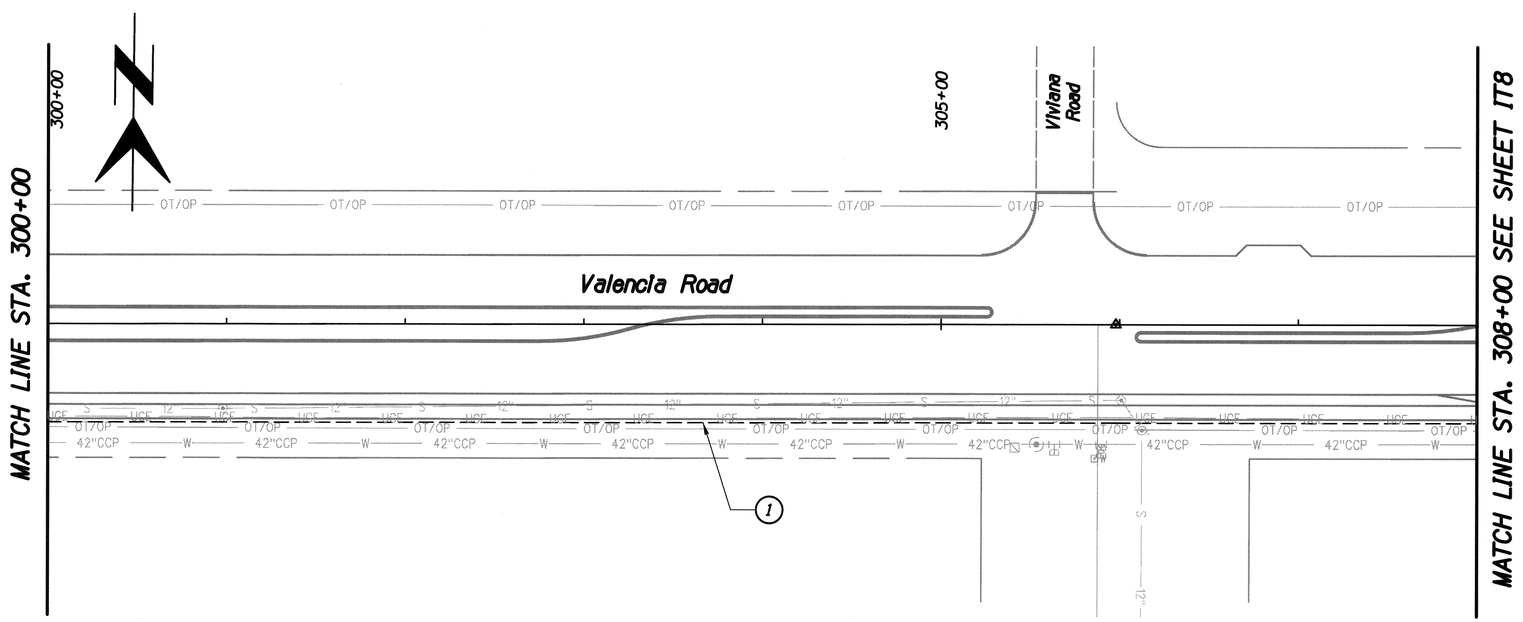

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

1. Furnish & Install ITS vault per Standard Detail FO-301.
2. Furnish & Install ITS pull box per Standard Detail FO-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

No.	Revision Description	Engineer	Date

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornello, P.E., Director

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 3-31-14 ARIZONA U.S.A.

Exp. 3-31-17

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT7 of IT11	Page 153 of 281

Print Scale: 1:40

TRACS No. SS975 01C

Project ID: 0000000000152226
Client Number: 012145

Pentable: 152226_PLOTDROP.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
Model: B30C06

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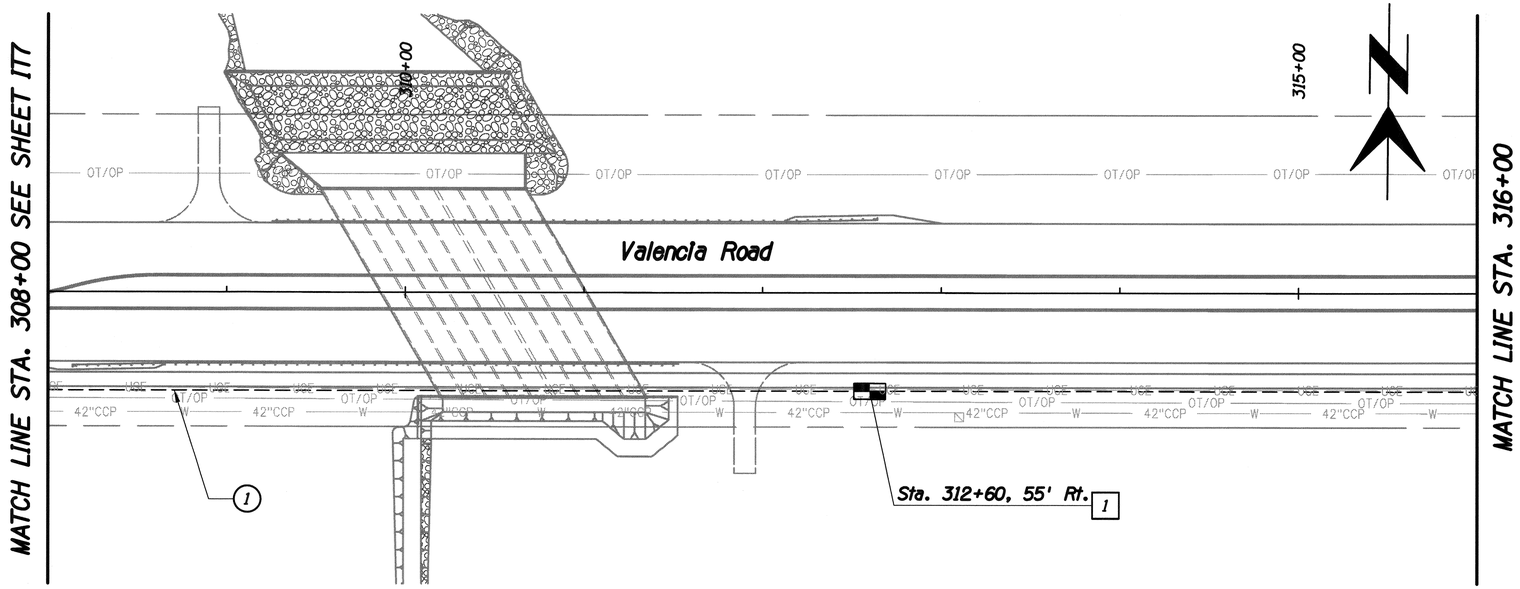

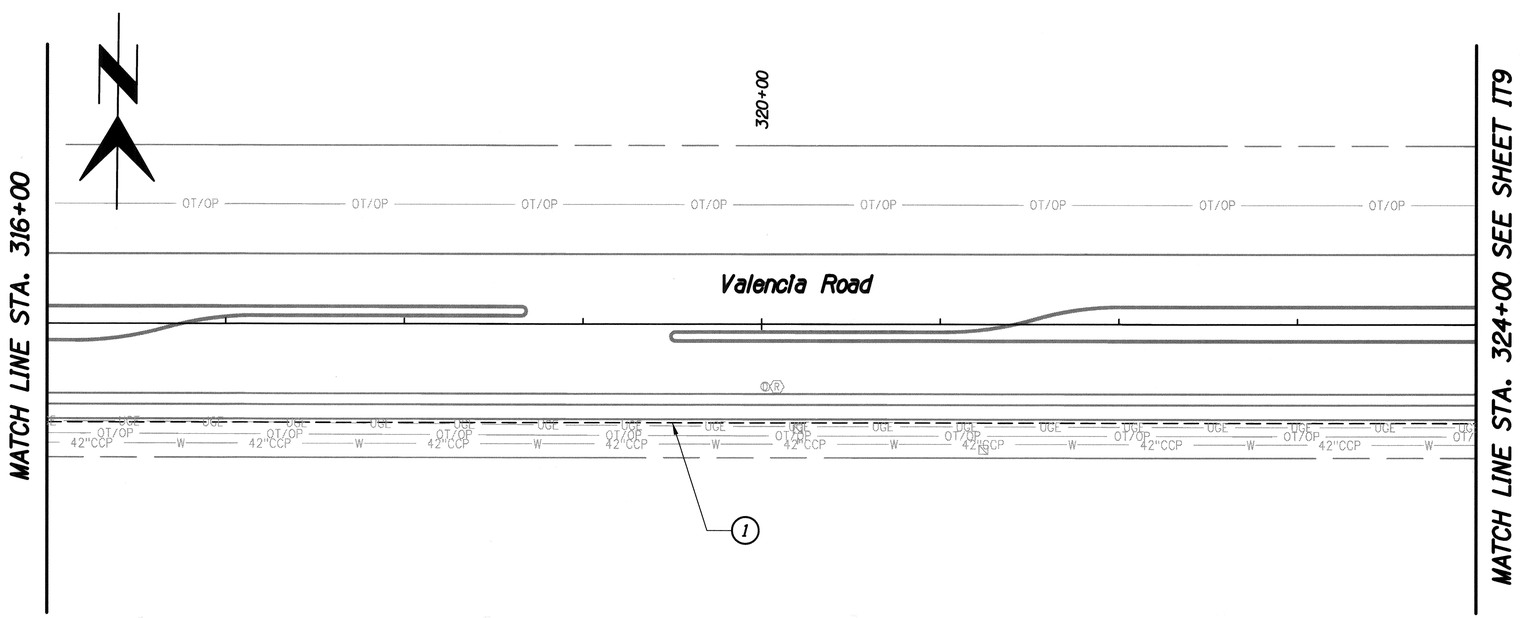

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0123(01A			
		0000 PM PPM SS975 01C			

1. Furnish & Install ITS vault per Standard Detail FO-301.
2. Furnish & Install ITS pull box per Standard Detail FO-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

No.	Revision Description	Engineer	Date

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Registered Professional Engineer (Civil)
CERTIFICATE NO. 13762
ROBERT DEAN BRITTAIN
Date Signed 7-21-14
ARIZONA U.S.A.
Expires 3-31-15

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 394-3600

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT8 of IT11	Page 154 of 281

TRACS No. SS975 01C

Project ID: 0000000000152226
Client Number: 002145

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8UL_BW_PDF.plt

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
Model: B30C07

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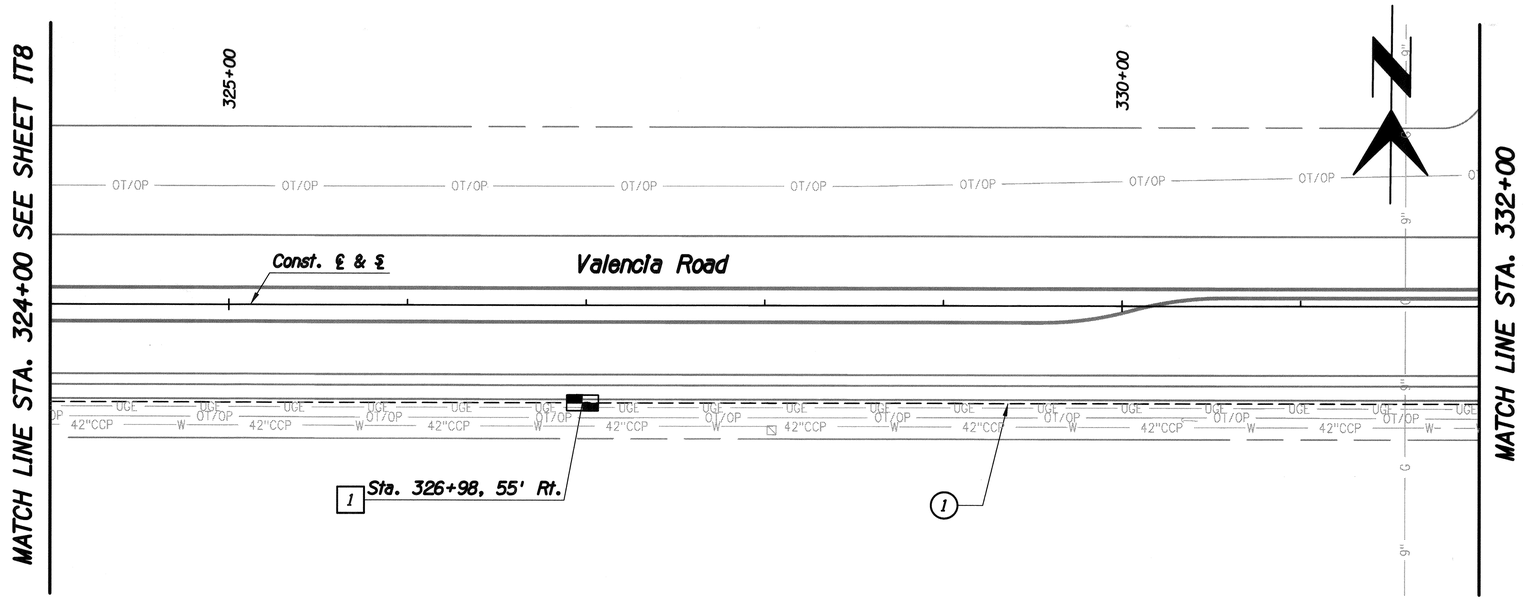

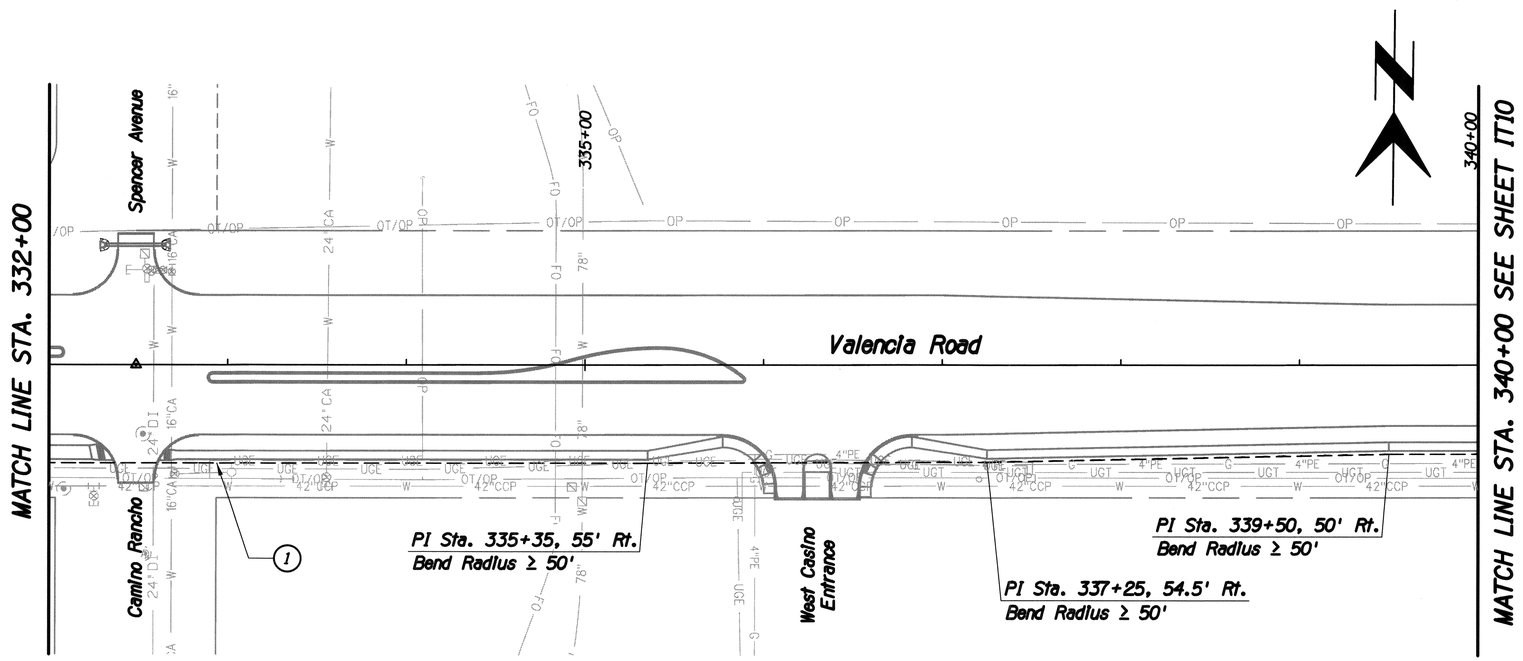

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0123011A			
		0000 PM PPM SS975 01C			

1. Furnish & Install ITS vault per Standard Detail FO-301.
2. Furnish & Install ITS pull box per Standard Detail FO-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

No.	Revision Description	Engineer	Date

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 7-21-14 ARIZONA U.S.A.

Expires 3-31-17

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 394-3600

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales Horiz. 1"=40' Vert. 1"=4'

Sheet IT9 of IT11

TRACS No. SS975 01C

Print Scale: 1:40

Project ID: 0000000000152226
Client Number: 012145

Pentable: 152226_PLOTGROR.TBL
Plotdriver: 152226_VBFULL_B&W_PDF.plt

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
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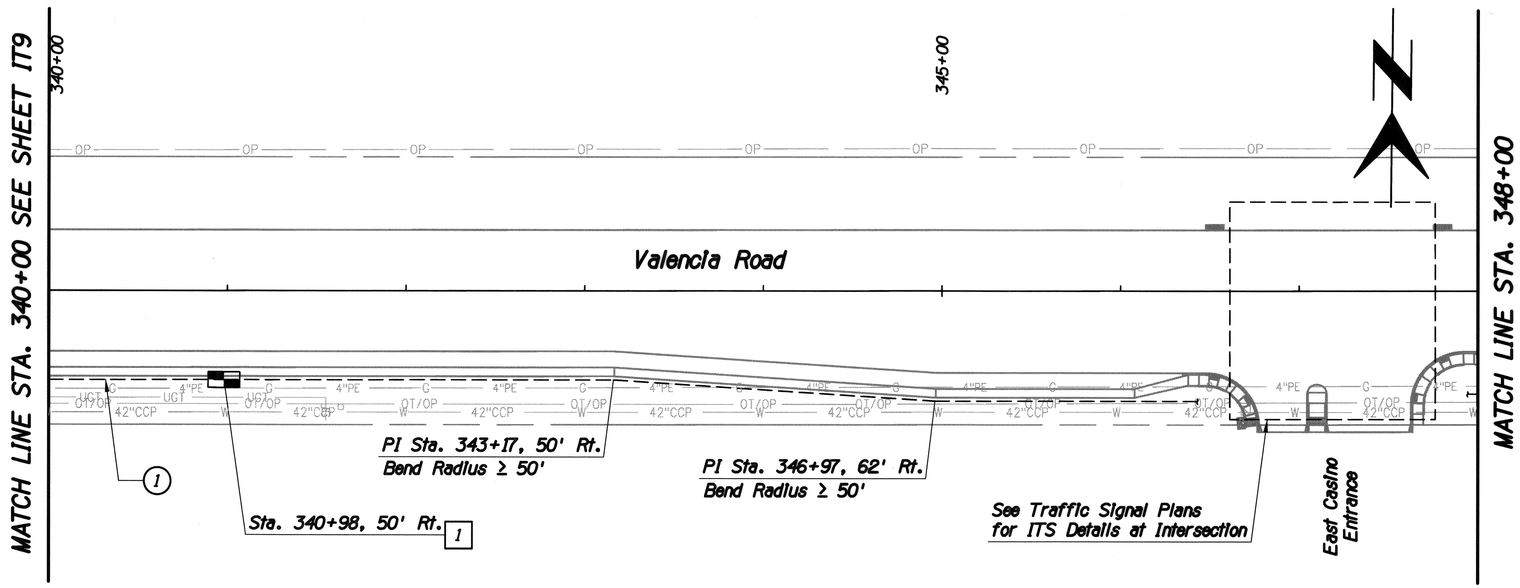

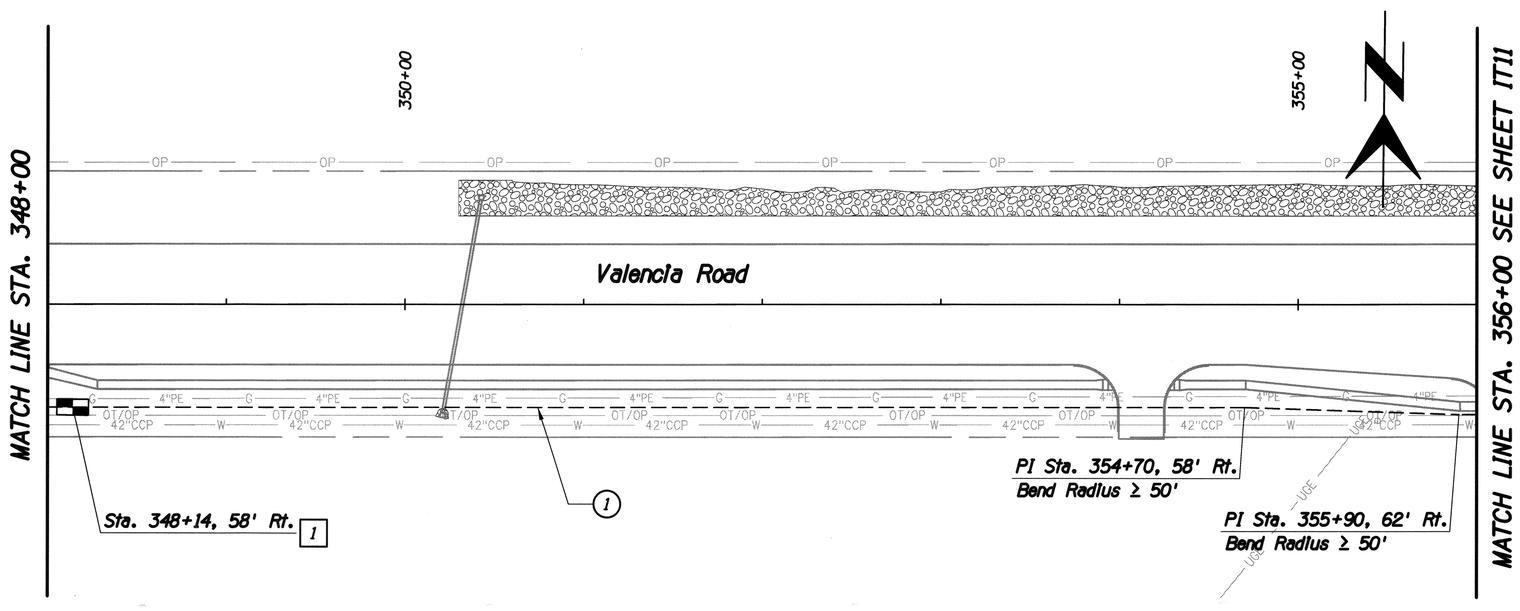

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

1. Furnish & Install ITS vault per Standard Detail F0-301.
2. Furnish & Install ITS pull box per Standard Detail F0-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

No.	Revision Description	Engineer	Date

Priscilla S. Cornelio, P.E., Director

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

Registered Professional Engineer (Civil)
CERTIFICATE NO. 13762
ROBERT DEAN BRITTAIN
Date Signed 8-21-17
ARIZONA U.S.A.

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT10 of IT11	Page 156 of 281

Print Scale: 1:40

TRACS No. SS975 01C

Project ID: 00000000152226
Client Number: 012145

Pentable: 152226_PLOTDROR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
Model: B30C09

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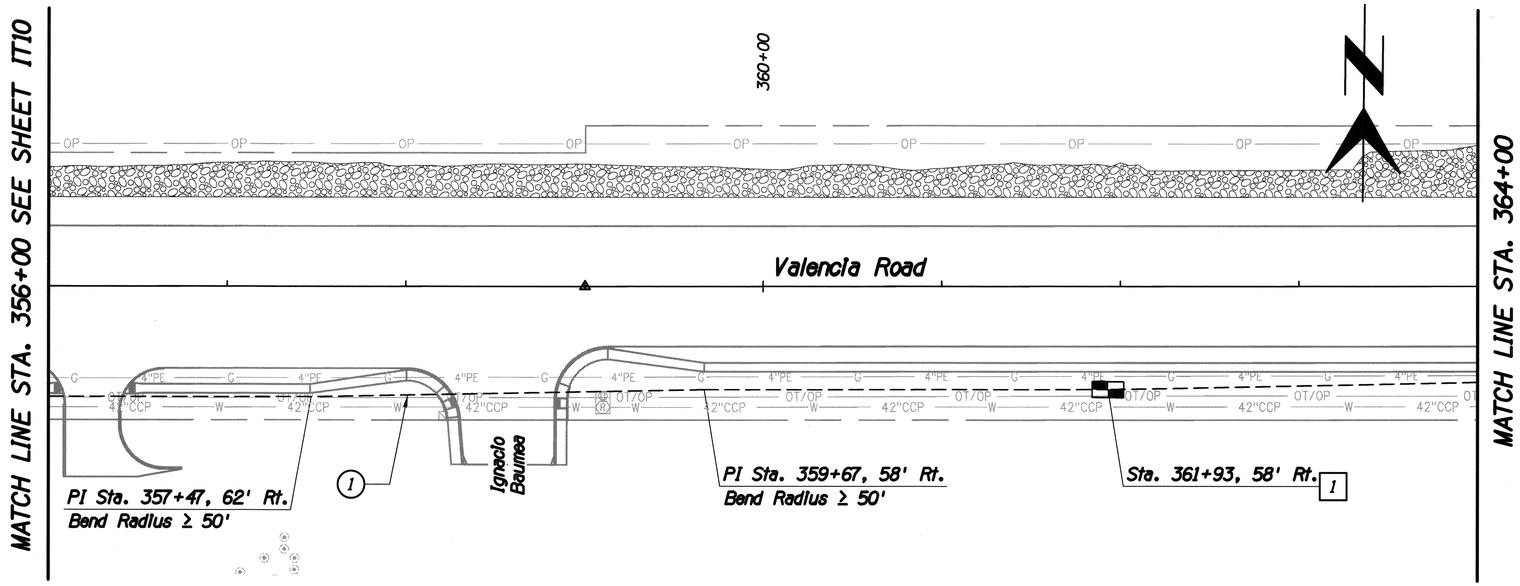

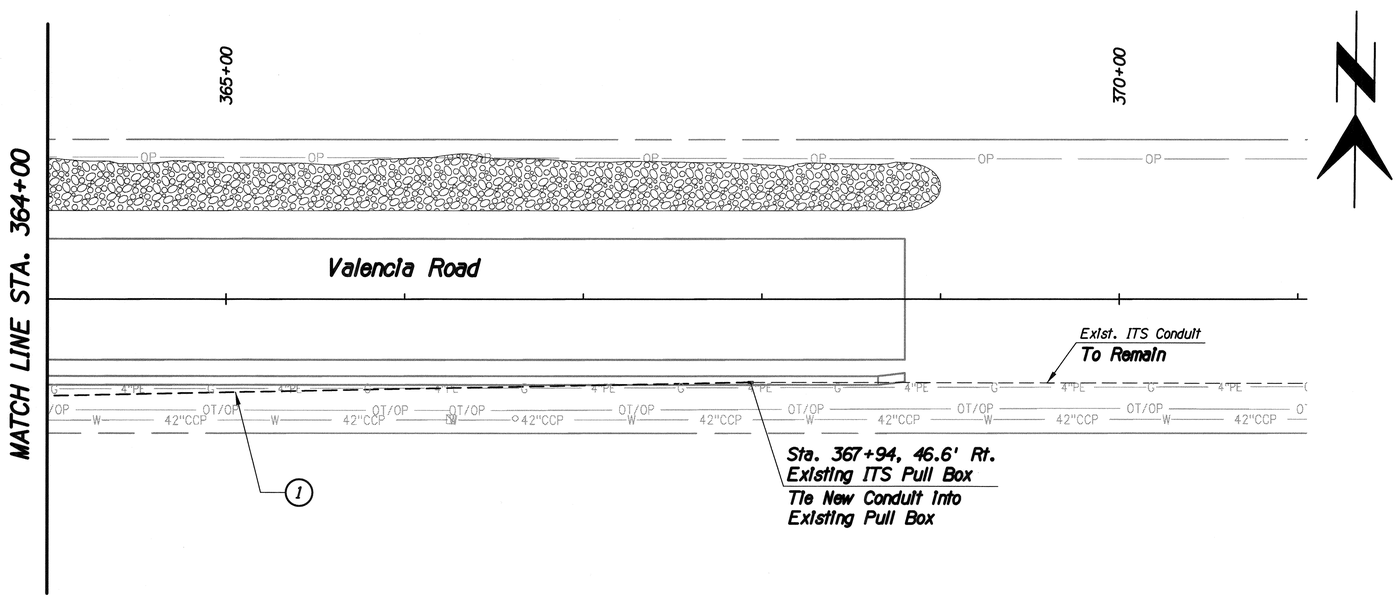

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

1. Furnish & Install ITS vault per Standard Detail FO-301.
2. Furnish & Install ITS pull box per Standard Detail FO-300.
3. Furnish & Install ITS conduit stub-out. Stub-out shall extend two feet minimum beyond pull box or vault.

(1) Furnish & Install 4" PVC conduit with No. 6 AWG insulated green bond conductor.

		Date
Designed	ABL	03/2014
Drawn	ABL	03/2014
Checked	RDB	03/2014
Proj. Engr.	RDB	03/2014

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 13762 ROBERT DEAN BRITTAIN Date Signed 3-31-14 ARIZONA U.S.A. Exp Date 3-31-17

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

ITS PLANS

40 0 40 80

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet IT11 of IT11	Page 157 of 281

TRACS No. SS975 01C

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000000152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\30C-01.dgn
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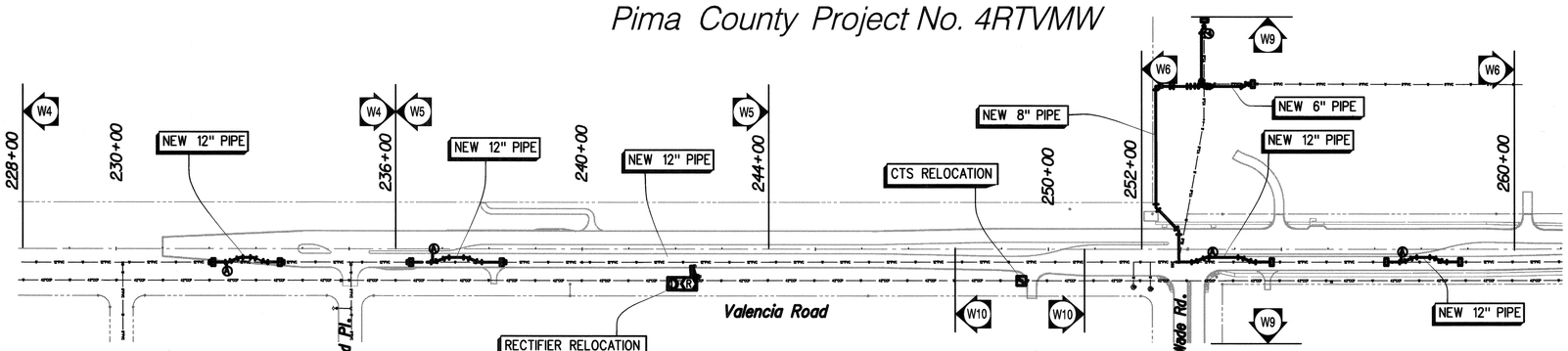
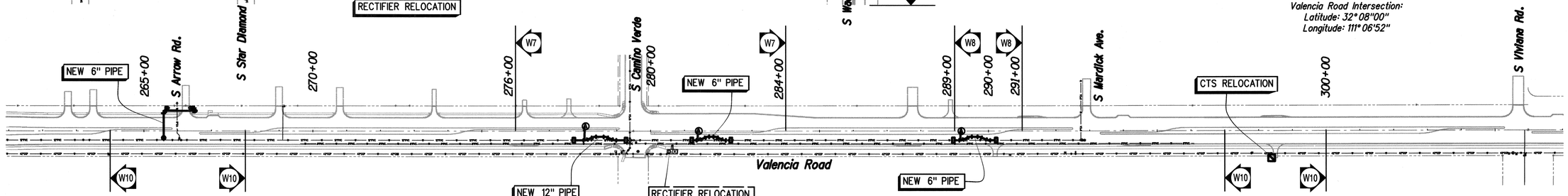
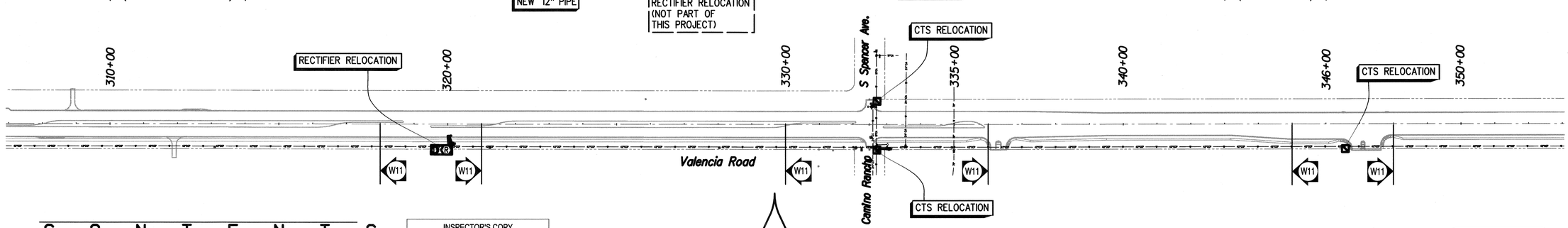
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0123(01A			
		0000 PM PPM			

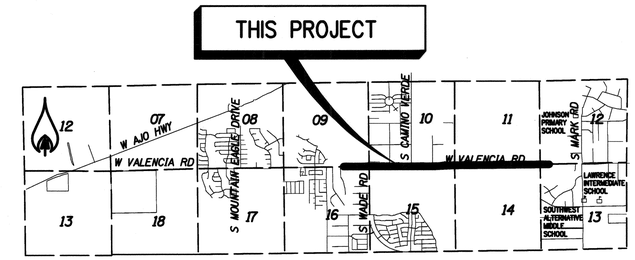
VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Pima County Project No. 4RTVMW









Location Map

Sections 9, 10, 11, 12, 13, 14, 15, & 16
T-15-S, R-12-E,
G & S R M
Pima County, Arizona
N.T.S.
Wade Road and
Valencia Road Intersection:
Latitude: 32° 08"00"
Longitude: 111° 06'52"

Index to Plan Sheets
1"=150'

C O N T E N T S

Page No.	Sheet No.	Description
158	W1	Cover Sheet
159	W2	Notes and Legend Sheet
160	W3	Material Quantity Summary Sheet
161 - 166	W4 - W9	Plan and Profile Sheets
167 - 168	W10 - W11	Appurtenance Modification Sheets
169 - 170	W12 - W13	Details Sheet
171	W14	Modified W-711 Cabinet Mounted Rectifier Detail

INSPECTOR'S COPY
INSPCT. _____
CONTR. _____
START _____ FINAL _____
PIPE _____ DI☐ HDPE☐ PVC☐
SVC LINE MAT _____
B.F.'S _____
GATES _____
F.H.'S BRAND _____ MAT _____
MAGNETIC TAPE INST YES ☐ NO ☐
REBAR RINGS INST YES ☐ NO ☐
ZONE _____ PSI _____
MAPPING INFO
PLOTTED _____ ON VM _____
checked _____ date _____
ALL VALVES WERE INSTALLED PER PLAN .
Signature _____
Date _____

FOR ACCEPTANCE CONDITIONS SEE THE WATER SYSTEM MODIFICATIONS NOTES, NOTE 1, SHEET 159 OF 281

CITY OF TUCSON, WATER DEPARTMENT — DATE 7/25/2014

HDR
HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

No.	Revisions	Engineer	Date

No.	As Built	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 48793 JONATHAN M. BOITANO Date Signed 7/21/14 ARIZONA, U.S.A. Expires 12-31-2014

PN 5-142-2012

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
Department of Transportation
201 N. Stone Avenue Tucson, Arizona 85701
Priscilla S. Cornelio, P.E., Director

Reviewed by	Engineer	Date
Mgr. Design Engr.		
Mgr. Traffic Engr.		
Mgr. Field Engr.		
Accepted by PCRWRD		

Approved: _____ 20__
Priscilla S. Cornelio, P.E.

Project No. 4RTVMW — Sheet No. W1 of W14 — Page No. 158 of 281

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt
Project ID: 0000000000152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-01.dgn
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

WATER SYSTEM MODIFICATION NOTES

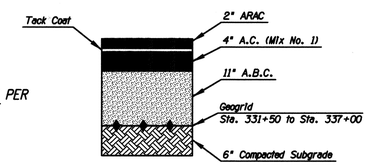
1. ACCEPTANCE CONDITIONS:
   A. THIS PROJECT IS ACCEPTED BY THE CITY OF TUCSON WATER DEPARTMENT FOR SUBSTANTIAL CONCURRENCE WITH STANDARD SPECIFICATIONS AND DETAILS.
   B. ACCEPTANCE OF THESE PLANS IS VALID FOR 3 YEARS AFTER THE DATE OF THE SIGNATURE.
   C. THE WARRANTEE AND GUARANTEE DURATION FOR ALL WATER WORK ON THIS PROJECT SHALL BE TWO (2) YEARS COMMENCING ON THE DATE OF FINAL ACCEPTANCE OF THE WATER WORK BY THE CITY OF TUCSON WATER DEPARTMENT.
2. CURRENT STANDARDS:
   ALL WATER SYSTEM MODIFICATION CONSTRUCTION WORK SHALL CONFORM TO THE FOLLOWING STANDARDS AND SPECIAL PROVISIONS:
   A. THE PIMA COUNTY / CITY OF TUCSON STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, 2003 EDITION.
   B. THE WATER SYSTEM MODIFICATIONS SPECIAL PROVISIONS FOR THIS PROJECT.
   C. TUCSON WATER STANDARD SPECIFICATIONS AND DETAILS, 2011 EDITION, AS NOTED HEREIN.
3. WATER SYSTEM MODIFICATION PRECONSTRUCTION PROCEDURE:
   A. THE CONTRACTOR SHALL CONTACT THE CITY OF TUCSON WATER DEPARTMENT, CONSTRUCTION SECTION (791-2665), A MINIMUM OF THREE (3) CALENDAR DAYS PRIOR TO ANY WATER WORK. THE CONTRACTOR SHALL REFER TO THE CITY OF TUCSON WATER DEPARTMENT PLAN NO. 5-142-2012
   B. THE CITY OF TUCSON WATER DEPARTMENT CONSTRUCTION SECTION WILL SCHEDULE THE TIME AND PLACE FOR THE MEETING.
   C. NO WATER SYSTEM CONSTRUCTION SHALL BEGIN UNTIL A "NOTICE TO PROCEED" HAS BEEN ISSUED BY THE CITY OF TUCSON WATER DEPARTMENT.
   D. ANY WATER WORK INSTALLED PRIOR TO THE NOTICE TO PROCEED DATE SHALL BE REMOVED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
4. SHUT DOWN OF DISTRIBUTION MAINS:
   A. CONSTRUCTION ON THE WATER MAINS SHALL TAKE PLACE ONLY IN THE OFF PEAK SEASON BETWEEN OCTOBER 1 AND MARCH 30.
   B. THE WORK INVOLVING THE EIGHT INCH (8") LATERAL MAIN SHALL NOT BE DONE AT THE SAME TIME AS THE WORK INVOLVING THE TWELVE INCH (12") MAIN.
   C. THE MAXIMUM SHUTDOWN TIME FOR THE 8" LATERAL MAIN IS TWO (2) DAYS (48 HOURS).
   D. THE MAXIMUM SHUTDOWN TIME FOR THE 12" MAIN IS TWO (2) DAYS (48 HOURS).
   E. IF THE FOURTY-TWO INCH (42") TRANSMISSION MAIN REQUIRES SHUTDOWN, THEN THE 12" MAIN MUST REMAIN IN SERVICE. AT NO POINT DURING CONSTRUCTION SHALL THE 42" TRANSMISSION MAIN AND THE 12" MAIN BE OUT OF SERVICE AT THE SAME TIME.
5. DIMENSIONS SLOPES AND GRADES:
   ALL DIMENSIONS, SLOPES AND GRADES OF EXISTING WATER LINES ARE TAKEN FROM "AS BUILT" DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXACT INFORMATION BEFORE ORDERING ANY SPECIAL FITTINGS OR EQUIPMENT. EXACT TIE-IN LOCATIONS AND DEPTHS SHOULD BE VERIFIED BY THE CONTRACTOR.
6. SHUT DOWN OF DISTRIBUTION MAINS:
   SHUT-DOWN OF THE EXISTING WATER SYSTEM REQUIRING THE OPERATION OF TUCSON WATER VALVES SHALL BE COORDINATED THROUGH A CITY OF TUCSON WATER DEPARTMENT CONSTRUCTION INSPECTOR.
7. DEPTH OF NEW WATER MAINS:
   A. NEW WATER MAINS SHALL BE INSTALLED AT A MINIMUM DEPTH OF THREE FEET (3.0') FROM THE BOTTOM OF ANY EXCAVATION OR SCARIFICATION TO THE TOP OF THE NEW PIPE. THIS DEPTH SHALL BE MAINTAINED FOR FIVE FEET (5.0') BEYOND ANY EXCAVATION, MEASURED PERPENDICULAR TO THE PROPOSED STRUCTURE OR EDGE OF THE PROPOSED ROADWAY.
   B. IN NO CASE SHALL NEW WATER MAINS BE INSTALLED LESS THAN THREE AND SIXTY SEVEN HUNDREDTHS OF A FOOT (3.67') DEEP FROM THE FINISHED GRADE TO THE TOP OF THE NEW PIPE.
   C. WATER MAINS INSTALLED WITHIN EXISTING PIMA COUNTY RIGHT-OF-WAYS THAT ARE NOT AT FINAL GRADE (FINAL GRADE SHALL BE DEFINED AS AN EXISTING OR PROPOSED ROADWAY THAT INCLUDES PERMANENT CURBS), SHALL BE INSTALLED WITH MINIMUM 60" (SIXTY INCHES) OF COVER FROM THE FUTURE FINAL GRADE EXCEPT AS OTHERWISE NOTED ON THE APPROVED PLANS.
   D. THESE MINIMUMS SHALL APPLY TO ALL WATER MAINS UNLESS OTHERWISE NOTED ON THE PLANS.
8. DEPTH OF NEW SERVICE LINES:
   A. NEW SERVICE LINES, TWO INCH (2") AND SMALLER, SHALL BE INSTALLED AT A MINIMUM DEPTH OF TWO FEET (2.0') FROM THE BOTTOM OF ANY EXCAVATION OR SCARIFICATION TO THE TOP OF THE NEW SERVICE LINE. THIS DEPTH SHALL BE MAINTAINED FOR FIVE FEET (5.0') BEYOND ANY EXCAVATION, MEASURED PERPENDICULAR TO THE PROPOSED STRUCTURE OR EDGE OF THE PROPOSED ROADWAY.
   B. IN NO CASE SHALL NEW SERVICE LINES BE INSTALLED LESS THAN THREE FEET (3.0') DEEP FROM THE FINISHED GRADE TO THE TOP OF THE NEW SERVICE LINE.
   C. THESE MINIMUMS SHALL APPLY TO ALL SERVICE LINES UNLESS OTHERWISE NOTED ON THE PLANS.
9. WATER METERS AND METER BOXES:
   THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER METERS AND METER BOXES IN THE CONSTRUCTION AREA. THIS WILL INCLUDE BUT NOT BE LIMITED TO:
   A. REMOVAL OF EXISTING METERS, REPLACEMENT COORDINATION AND INSTALLATION OF THE NEW AUTOMATIC METER READING (AMR) WATER METERS.
   B. DURING THIS OPERATION, EXISTING METERS SHALL BE TAGGED WITH THE CORRECT ADDRESS AND RETURNED TO TUCSON WATER. ALL EXISTING WATER METERS THAT ARE TO BE RELOCATED AS PART OF THIS PROJECT THAT ARE NOT ALREADY AUTOMATED, ARE TO BE REPLACED WITH AMR TYPE METERS AT LOCATIONS/ADDRESSES SPECIFIED ON THE PLANS.
   C. PROTECTION OF METERS. AT ALL TIMES THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID ANY DAMAGE TO METERS. THE CONTRACTOR SHALL PROVIDE FOR THEIR SAFE STORAGE AND THE PROPER EQUIPMENT FOR THEIR HANDLING.
   D. ACCESS TO METERS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL IN-SERVICE METERS DURING CONSTRUCTION. AT THE CLOSE OF THE PROJECT THE CONTRACTOR SHALL ENSURE THAT ALL METERS ARE LEFT ACCESSIBLE AND THAT ALL METER BOXES ARE ADJUSTED TO FINAL GRADE.
   E. TUCSON WATER SHALL SUPPLY ALL NEW AMR WATER METERS TO BE INSTALLED AS PART OF THIS PROJECT.
10. FIRE PROTECTION SHUT DOWN:
    FORTY-EIGHT (48) HOURS PRIOR TO SHUT-DOWN OF ANY FIRE HYDRANTS OR FIRE PROTECTION SERVICE LINES THE CONTRACTOR SHALL PROVIDE THE CITY OF TUCSON WATER DEPARTMENT CONSTRUCTION INSPECTOR WITH A WRITTEN REPORT INDICATING THE LOCATION AND DURATION OF ANY FIRE HYDRANT OR FIRE PROTECTION SERVICE SHUT-DOWNS.
    THE CONTRACTOR SHALL NOTIFY THE CITY OF TUCSON WATER DEPARTMENT CONSTRUCTION INSPECTOR WHEN FIRE HYDRANTS OR FIRE PROTECTION SERVICES ARE BACK IN SERVICE.
11. MAINTAIN SERVICE TO CUSTOMERS:
    A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SERVICE TO ALL WATER CUSTOMERS DURING CONSTRUCTION.
    B. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHICH SERVICES WILL BE EFFECTED BY THIS PROJECT.
    C. IT MAY BE NECESSARY TO ACCOMPLISH TIE-OVERS, RE-CONNECTIONS, ETC.. WHILE BUSINESS CUSTOMERS ARE CLOSED.
    D. IF INTERRUPTION OF SERVICE IS UNAVOIDABLE THE CONTRACTOR SHALL NOTIFY THE WATER INSPECTOR A MINIMUM OF 48 HOURS IN ADVANCE TO COORDINATE SHUT-DOWNS. EVERY EFFORT SHALL BE MADE TO MINIMIZE DISRUPTION TO THE CUSTOMER.
    E. IF THE CONTRACTOR CHOOSES TO ABANDON ANY PORTION OF THE EXISTING WATER SUPPLY SYSTEM WITHOUT CONCURRENT NEW CONSTRUCTION AS CALLED FOR ON THE PLANS, THE CONTRACTOR SHALL PROVIDE ANY AND ALL MATERIALS AND CONSTRUCTION OF A TEMPORARY OR PERMANENT WATER SYSTEM TO MAINTAIN CONTINUED WATER SERVICE TO CUSTOMERS AT NO ADDITIONAL COST.
12. SPECIAL USE WATER PERMITS:
    PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL APPLY FOR TWO (2) SPECIAL WATER USE PERMITS FROM THE CITY OF TUCSON WATER DEPARTMENT COMMERCIAL SECTION.
    A. CONSTRUCTION WATER SPECIAL PERMIT:
       THERE WILL BE NO CHARGE FOR THIS PERMIT, BUT THE CONTRACTOR MUST PAY THE SUM OF $ 80.70 PLUS TAX AS THE ESTIMATED COST OF THE WATER TO BE USED. THIS WATER MAY ONLY BE USED FOR TRENCH SETTLING, DISINFECTION AND TESTING.
    B. METERED FIRE HYDRANT ONLY PERMIT:
       THIS NON-TRANSFERABLE PERMIT WILL ENTITLE THE CONTRACTOR TO USE WATER THROUGH A METER FROM EXISTING FIRE HYDRANTS AT APPROVED LOCATIONS. WATER USED UNDER THIS PERMIT IS FOR GENERAL CONSTRUCTION PURPOSES SUCH AS DUST CONTROL, SITE PREPARATION, ETC.
13. NEW MATERIAL:
    ALL MATERIALS, FITTINGS, AND APPURTENANCES CALLED FOR ON THE PLANS, OR REQUIRED FOR A COMPLETE INSTALLATION, SHALL BE NEW. NO REFURBISHED ITEMS OR MATERIALS WILL BE ALLOWED.
14. VALVE BOXES:
    THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL NEW AND EXISTING WATER VALVE BOXES TO THE FINISHED GRADE PER STANDARD DETAIL W-300.
15. JOINT RESTRAINT:
    THE CONTRACTOR SHALL USE MECHANICALLY RESTRAINED JOINTS AT ALL CHANGES OF DIRECTION IN THE WATER MAINS. THE LENGTHS OF RESTRAINED PIPE ON BOTH SIDES OF THE RESTRAINED JOINT SHALL BE AS CALLED FOR ON THE PLANS OR AS PER STANDARD DETAIL W-600. WITH THE APPROVAL OF THE ENGINEER AND THE CITY OF TUCSON WATER DEPARTMENT, THE CONTRACTOR MAY USE CONCRETE THRUST BLOCKING IN LIEU OF MECHANICALLY RESTRAINED JOINTS. CONCRETE THRUST BLOCKING SHALL COMPLY WITH STANDARD DETAIL W-610.
16. MARKING TAPE:
    IF ANY EXISTING DETECTABLE MARKING TAPE IS DISTURBED OR DESTROYED DURING CONSTRUCTION, THE CONTRACTOR SHALL FURNISH AND INSTALL APPROPRIATE NEW TAPE. THERE SHALL BE NO ADDITIONAL CHARGE FOR THIS REINSTALLATION.
17. CORROSION CONTROL:
    THIS PROJECT HAS CORROSION CONTROL/MONITORING WORK INCLUDED AS PART OF THE CONTRACT. THE CONTRACTOR SHALL PROVIDE ALL SUBMITTALS, COMPONENTS, AND REPORTS OF THE CORROSION WORK AS CALLED FOR ON THESE PLANS AND IN THE SPECIAL PROVISIONS.
18. TRACER WIRE:
    A. THIS PROJECT WILL HAVE TRACER WIRE INSTALLED. IF ANY EXISTING TRACER WIRE IS DISTURBED OR DESTROYED DURING CONSTRUCTION, THE CONTRACTOR SHALL FURNISH AND INSTALL NEW TRACER WIRE TO REPLACE THE EXISTING. THERE SHALL BE NO ADDITIONAL CHARGE FOR THIS REINSTALLATION.
    B. THE TRACER WIRE SHALL BE CERTIFIED BY A LICENSED ELECTRICAL CONTRACTOR FOR CONTINUITY PRIOR TO FINAL ROADWAY PAVEMENT. FINAL ACCEPTANCE WILL NOT BE GRANTED UNTIL CERTIFICATION IS RECEIVED BY TUCSON WATER.
19. PVC PIPE DEFLECTION
    THE CONTRACTOR MAY NOT DEFLECT PVC PIPE AT GASKETED BELL AND SPIGOT JOINTS. THE CONTRACTOR MAY USE THE FOLLOWING METHODS TO DEFLECT PVC PIPE:
    A. STANDARD DUCTILE IRON BENDS OR FITTINGS. PVC PIPE MAY BE DEFLECTED AT BENDS OR FITTINGS PROVIDED THE DEFLECTION IS WITHIN THE MANUFACTURERS' ALLOWABLE DEFLECTION FOR THAT BEND OR FITTING.
    B. LONGITUDINAL BENDING. PVC PIPE MAY BE BENT WITHIN THE BENDING LIMITS DESCRIBED IN AWWA PUBLICATION, M23 PVC PIPE - DESIGN AND INSTALLATION MANUAL.
    C. SPECIFICALLY DESIGNED PVC PIPE INTENDED FOR JOINT DEFLECTION AT GASKETED JOINTS. THE USE OF THIS PIPE FOR JOINT DEFLECTION SHALL REQUIRE APPROVAL BY THE CITY OF TUCSON WATER DEPARTMENT AND THE PROJECT ENGINEER.

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

WATER SYSTEM MODIFICATION LEGEND

EXISTING	NEW	PLAN SYMBOLS
12"PVC—W—		WATERMAIN
		GATE VALVE
		BUTTERFLY VALVE
A	A	AIR RELEASE VALVE
		BENDS, VERT & HORIZ
		SERVICE LINE & METER BOX
D R	D R	DEEP WELL ACCESS AND RECTIFIER ON 6-FOOT BY 3-FOOT CONCRETE PAD
		FIRE HYDRANT
		CTS
		REDUCER
		DRAIN VALVE ASSEMBLY
		END CAP
	S	SERVICE STUB
	4	WATER METER RELOCATION, SERVICE LINE RENEWAL
	1	WATER METER IDENTIFICATION NUMBER
	558	SURVEY CONTROL POINT

EXISTING	NEW	PROFILE SYMBOLS
		POTABLE WATERMAIN
		POTABLE GATE VALVE
		REDUCER



PAVEMENT STRUCTURE NO. 1
Valencia Road N.T.S.

ABBREVIATIONS

ARV	AIR RELEASE VALVE
B.C.	BOX AND COVER
BCSM	BRASS CAP SURVEY MONUMENT
C.A.	CEMENT ASBESTOS
C.C.P.	CONCRETE CYLINDER PIPE
Conc.	CONCRETE
Cu	COPPER
D.I.P.	DUCTILE IRON PIPE
Exist.	EXISTING
G.V.	GATE VALVE
HZ.	HORIZONTAL
Inv. El.	INVERT ELEVATION
MJ	MECHANICAL JOINT
P.V.C.	POLYVINYL CHLORIDE
RO.	ROTATED
R.C.B.C.	REINFORCED CONCRETE BOX CULVERT
S.R.S.P.	SPIRAL RIB STEEL PIPE
T.S.	TAPPING SLEEVE
VT.	VERTICAL

SURVEY CONTROL

BASIS OF BEARING:
The North Line of the Northwest Quarter of Section 15, T-15-S, R-12-E, G & S.R.M., Pima County, Arizona. Said Bearing Is North 89°25'17" East, 2650.46 feet measured between the Northwest corner of said Section 15, being a found 2" Brass Disc In concrete stamped "T15S, R12E, 9, 10, 16, 15, PCHD" and the North Quarter Corner of said Section 15, being a found 2" Brass Disc In concrete with no marks.

BASIS OF ELEVATION:
The vertical control for this project is based on Pima County benchmark designation MBP 78.

Based on NAVD 88 DATUM having an elevation of 2505.59 feet.

Station Mark Is 2" BRASS DISK stamped PCHD 10/11/15/14.

Located 14 Feet South of the centerline of Valencia Road near Vivianna Road.

SURVEY CONTROL COORDINATE TABLE

NO.	STATION, OFFSET	NORTHING	EASTING	DESCRIPTION
558	226+49.61, 0'	413195.9388	945766.0566	½" Rebar, No Tag
559	252+98.18, 0'	413222.4226	948414.4968	2" BCSM In Conc., Stamped T15S R12E, 9 10 16 15
560	279+48.64, 0'	413249.1914	951064.8202	2" BCSM In Conc., No Stamping
561	305+97.77, 0'	413276.8973	953713.8024	2" BCSM In Conc., Stamped T15S R14E, 10 11 15 14
562	332+48.70, 0'	413300.9878	956364.6229	½" Rebar with Tag, Stamped Cap 39325
563	359+00.27, 0'	413328.7137	959016.0505	2" BCSM In Conc., Stamped T15S R14E, 11 12 13 14
3025	252+91.69, 2643.21' Rt.	410579.2792	948434.4286	½" Rebar, No Tag

No.	Revision Description	Engineer	Date

		Date
Designed	EB	03/2014
Drawn	EB	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornello, P.E., Director
Pima County Department of Transportation

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales: Horiz. N/A, Vert. N/A | Sheet W2 of W14 | Page 159 of 281

TRACS No. SS975 01C

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt
Project ID: 0000000015222 6
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-02.dgn
Model: B23C02
Printed By: jefrey Date: 7/22/2014 4:21:40 PM Print Scale: 1:40

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

MATERIAL QUANTITIES SUMMARY

ITEM NUMBER	ITEM DESCRIPTION	SHEET W4		SHEET W5		SHEET W6		SHEET W7		SHEET W8		SHEET W9		SHEET W10		SHEET W11		TOTAL	
		EST.	AS BUILT	EST.	AS BUILT	EST.	AS BUILT	EST.	AS BUILT	EST.	AS BUILT	EST.	AS BUILT	EST.	AS BUILT	EST.	AS BUILT	EST.	AS BUILT
5101106	PIPE, DUCTILE IRON (DI), 6" (CLASS 350)	-		-		-		113		303		108		-		10		534	
5101108	PIPE, DUCTILE IRON (DI), 8" (CLASS 350)	-		-		-		-		-		636		-		-		636	
5101112	PIPE, DUCTILE IRON (DI), 12" (CLASS 350)	157		191		355		151		-		-		-		-		854	
5101604	PIPE, COPPER, 1" WITH FITTINGS	10		30		60		60		20		5		210		-		395	
5101608	PIPE, COPPER, 2" WITH FITTINGS	-		-		-		-		-		-		30		135		165	
5102111	TAPPING SLEEVE AND VALVE, 12" x 6"	-		-		-		-		1		-		-		-		1	
5102112	TAPPING SLEEVE AND VALVE, 16" x 6"	-		-		-		-		-		-		-		1		1	
5102208	GATE VALVE, 8"	-		-		-		-		-		2		-		-		2	
5102604	COMBINATION AIR RELEASE VALVE, 1"	1		1		2		2		1		1		-		-		8	
5102802	DRAIN VALVE ASSEMBLY, 2"	-		-		-		-		1		-		-		-		1	
5103101	VALVE BOX ADJUSTMENT	1		1		2		4		2		1		1		4		16	
5103110	MANHOLE ADJUSTMENT	-		-		-		-		-		-		-		1		1	
5105010	NON-CEMENT-ASBESTOS WATER PIPE REMOVAL AND DISPOSAL, 10" AND SMALLER	-		-		-		108		119		200		-		-		427	
5105012	NON-CEMENT-ASBESTOS WATER PIPE REMOVAL AND DISPOSAL, 12" AND LARGER	153		187		347		147		-		-		-		-		834	
5105110	CEMENT-ASBESTOS WATER PIPE REMOVAL AND DISPOSAL, 10" SMALLER	-		-		-		-		110		414		-		-		524	
5106006	CONNECTIONS, 6"	-		-		-		2		2		1		-		-		5	
5106008	CONNECTIONS, 8"	-		-		-		-		-		2		-		-		2	
5106012	CONNECTIONS, 12"	2		2		4		2		-		-		-		-		10	
5107110	NEW CTS, ABOVE GROUND AND FINAL REPORT	-		-		-		-		-		-		2		3		5	
5107305	RECTIFIER RELOCATION AND FINAL REPORT	-		1		-		-		-		-		-		1		2	
5108114	METER RELOCATION, SERVICE LINE RENEWAL (M/R), 1"	-		-		-		-		-		-		7		-		7	
5108118	METER RELOCATION, SERVICE LINE RENEWAL (M/R), 2"	-		-		-		-		-		-		1		-		1	
5108158	STUBS, 2"	-		-		-		-		-		-		-		2		2	

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 Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	ET	03/2014
Drawn	ET	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

No.	Revision Description	Engineer	Date

HDR Engineering, Inc.
6720 E. Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales	Horiz. N/A	Sheet W3 of W14	Page 160 of 281
	Vert. N/A		

TRACS No. SS975 01C

Print Scale: 1:40

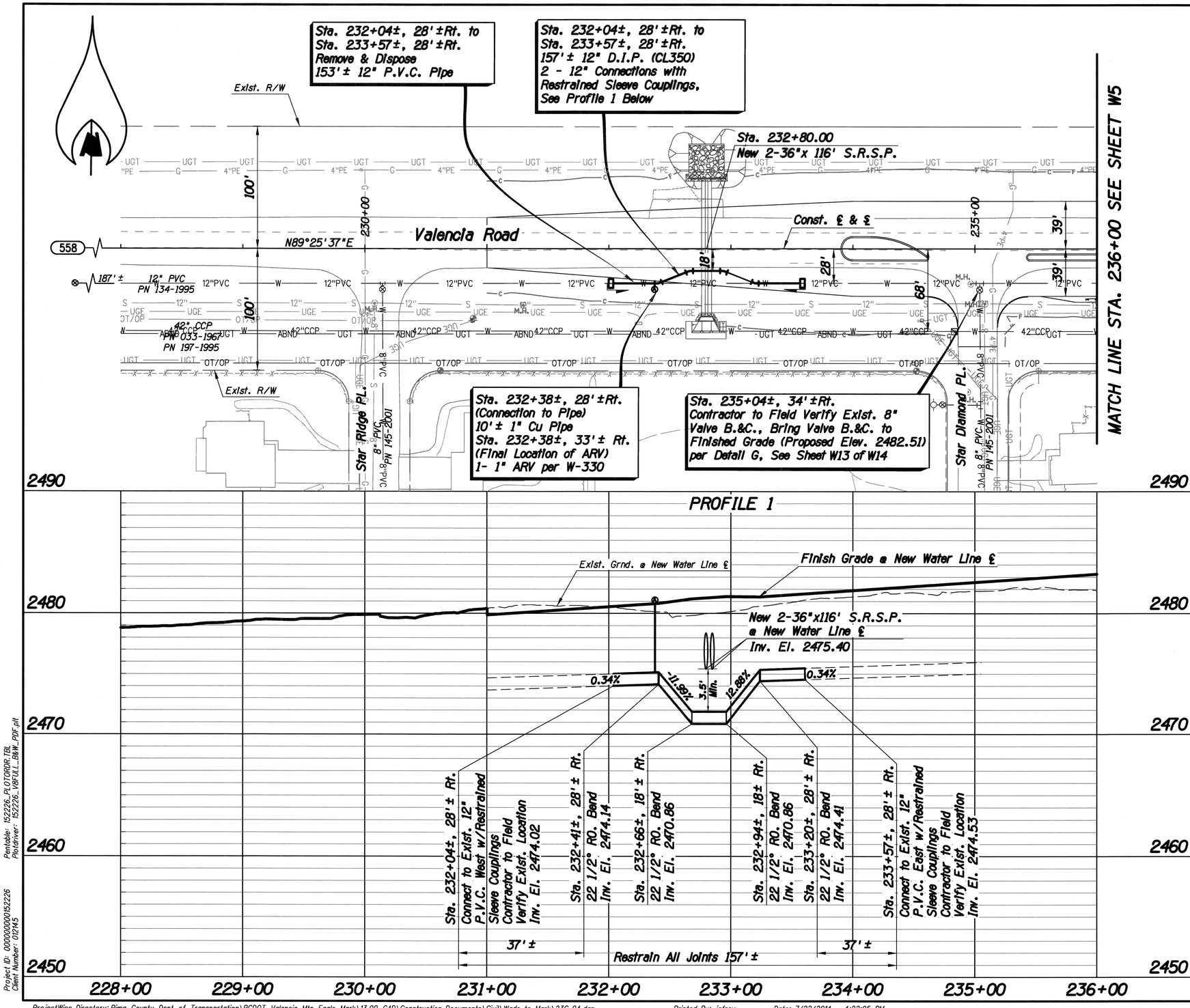
Project ID: 0000000001152226
Client Number: 012145

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-03.dgn
Model: B23C03

Printed By: jefrey Date: 7/22/2014 4:21:49 PM

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			



Notes:
1. Slope of rotated bends/offsets for lowered Water Lines are calculated as true slopes from horizontal.

2. The horizontal separation between the outside edge of a cast-in-place storm drain structure (i.e. Box Culverts) and the nearest lowered fitting shall be 10' minimum measured perpendicular to the storm drain alignment. For storm drain pipes, a minimum horizontal separation of 5' shall be provided between edge of trench and the nearest lowered fitting measured perpendicular to the storm drain alignment.

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

WATER SYSTEM MODIFICATIONS

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	ET	03/2014
Drawn	ET, AS	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 46793 JONATHAN M. BOITANO Date Signed 7/31/14 ARIZONA, U.S.A. Expires 12/31/14

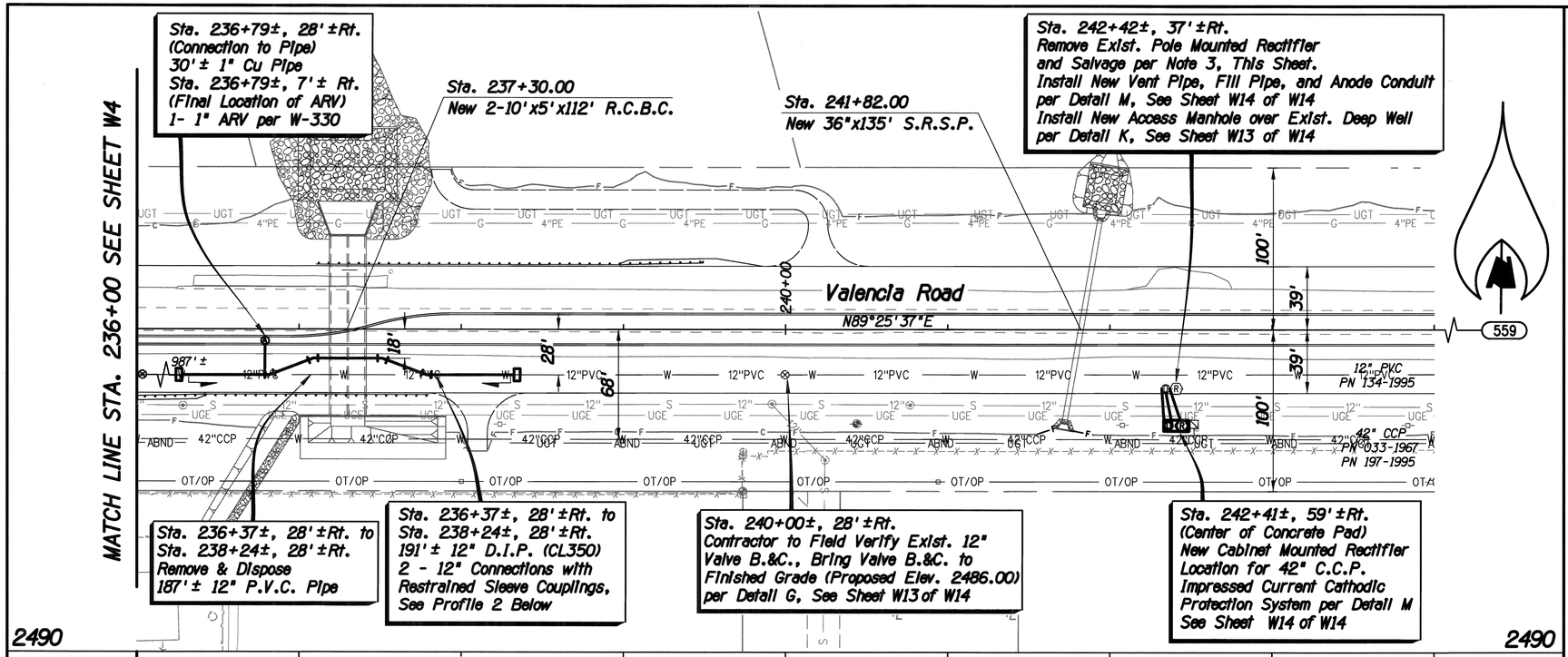
HDR Engineering, Inc. 5210 East Williams Circle, Suite 530 Tucson, AZ 85711-4459 (520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales: Horiz. 1"=40' Vert. 1"=4' | Sheet W4 of W14 | Page 161 of 281

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt
Project ID: 0000000015222 6
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C04
Printed By: jefrey Date: 7/22/2014 4:22:05 PM
Print Scale: 1:40
TRACS No. SS975 01C



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

Notes:

1. Slope of rotated bends/offsets for lowered Water Lines are calculated as true slopes from horizontal.

2. The horizontal separation between the outside edge of a cast-in-place storm drain structure (i.e. Box Culverts) and the nearest lowered fitting shall be 10' minimum measured perpendicular to the storm drain alignment. For storm drain pipes, a minimum horizontal separation of 5' shall be provided between edge of trench and the nearest lowered fitting measured perpendicular to the storm drain alignment.

3. Existing Rectifier shall be salvaged and delivered to Plant One (510 W. 18th Street. Attention: Mr. Britt Klein 520-349-4031).

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

WATER SYSTEM MODIFICATIONS

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	ET	03/2014
Drawn	ET, AS	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 46793 JONATHAN M. BORTANO DATE SIGNED 12/21/14 ARIZONA, U.S.A. Expires 12/31/14

HDR Engineering, Inc.
4250 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales: Horiz. 1"=40' Vert. 1"=4'

Sheet W5 of W14

TRACS No. SS975 01C

Print Scale: 1:40

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000015226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C05

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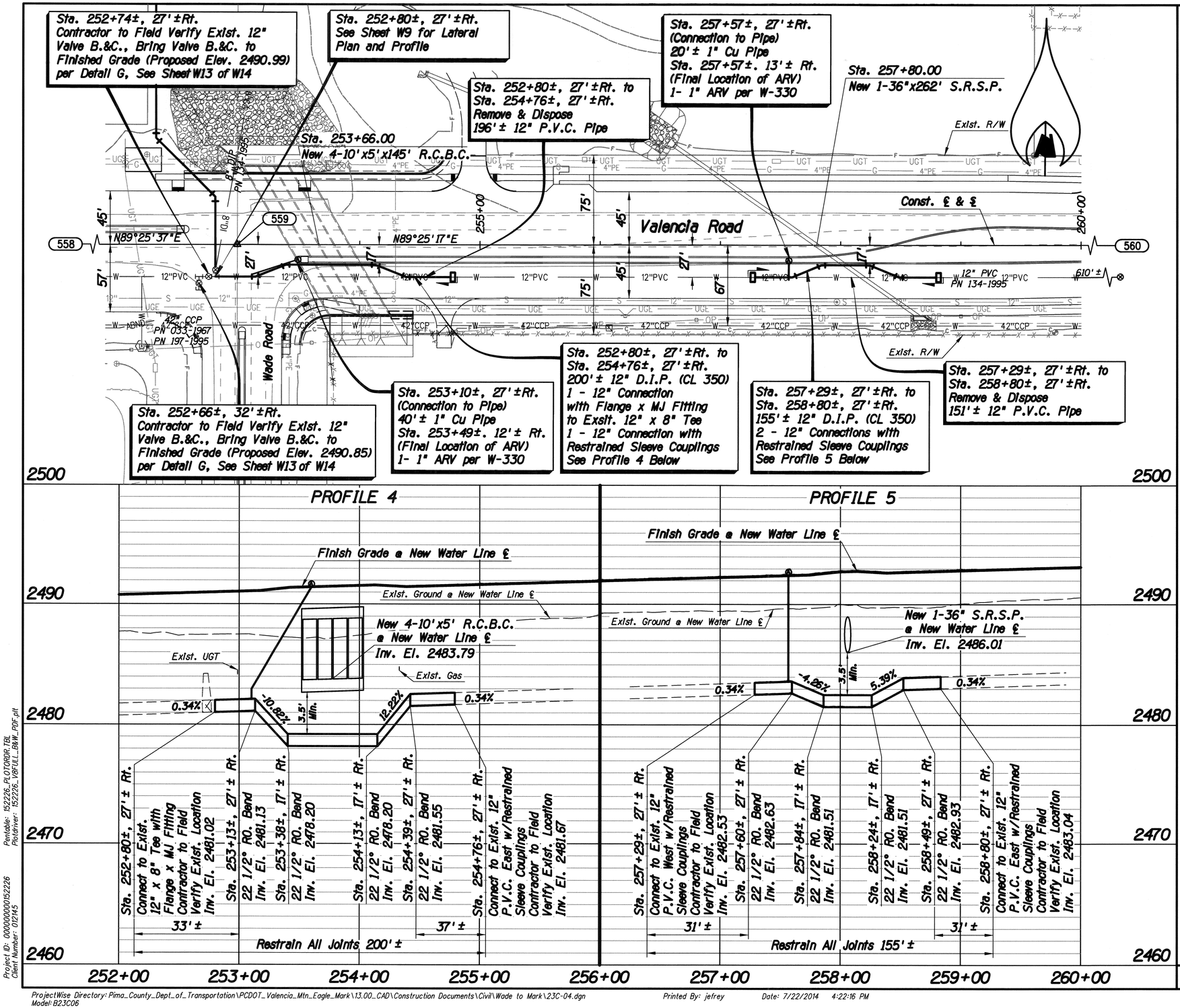
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			



Notes:

1. Slope of rotated bends/offsets for lowered Water Lines are calculated as true slopes from horizontal.

2. The horizontal separation between the outside edge of a cast-in-place storm drain structure (i.e. Box Culverts) and the nearest lowered fitting shall be 10' minimum measured perpendicular to the storm drain alignment. For storm drain pipes, a minimum horizontal separation of 5' shall be provided between edge of trench and the nearest lowered fitting measured perpendicular to the storm drain alignment.

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

WATER SYSTEM MODIFICATIONS

Designed	ET
Drawn	ET, AS
Checked	JMB
Proj. Engr.	RDB

Date
03/2014
03/2014
03/2014
03/2014

No.	Revision Description	Engineer	Date

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

HDR Engineering, Inc. 6300 East Willcox Circle, Suite 530 Tucson, AZ 85711-4459 (520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet W6 of W14	Page 163 of 281

Print Scale: 1:40

TRACS No. SS975 01C

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_BW_PDF.plt

Project ID: 0000000015222 6
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C06

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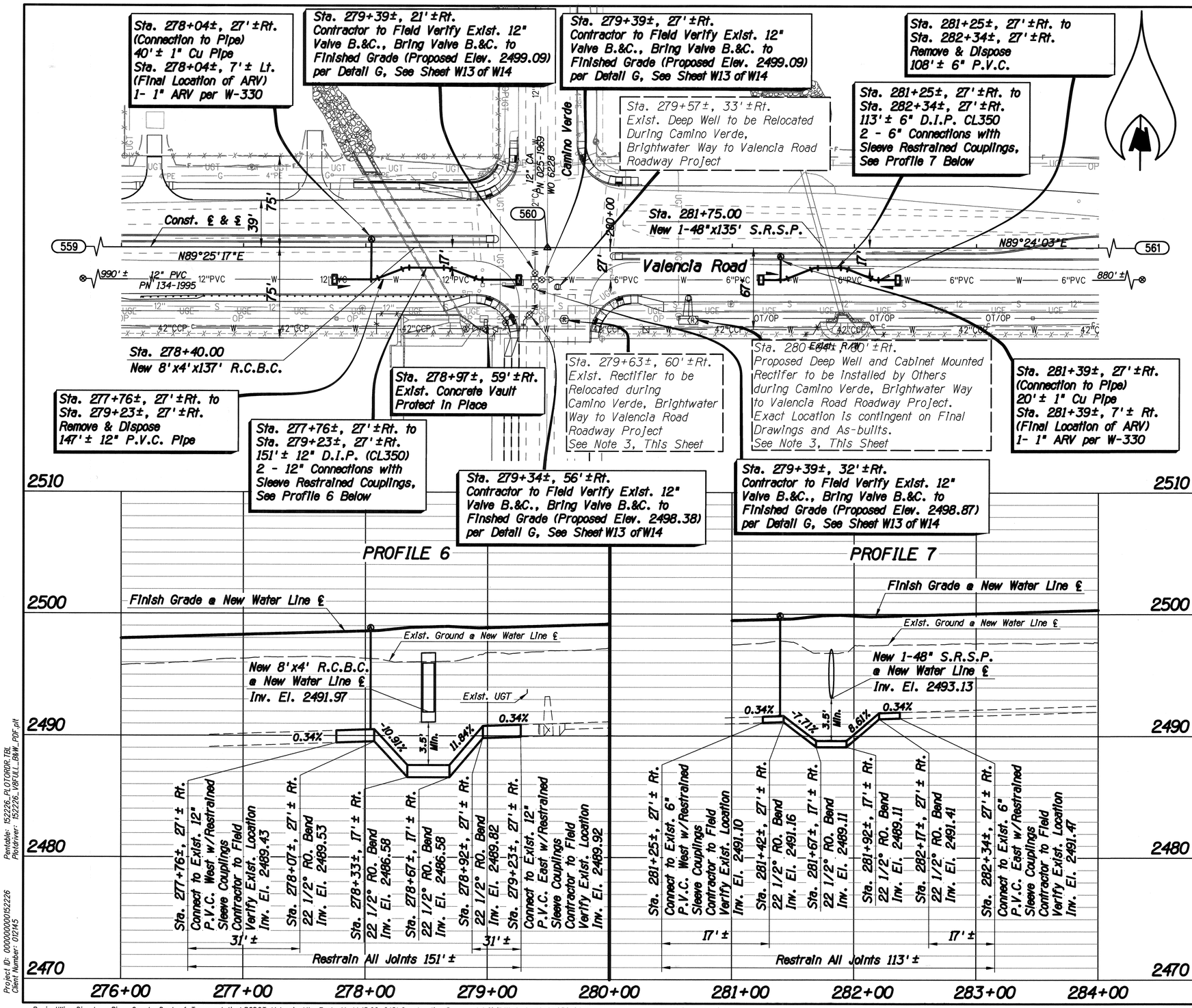

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

Notes:

1. Slope of rotated bends/offsets for lowered Water Lines are calculated as true slopes from horizontal.

2. The horizontal separation between the outside edge of a cast-in-place storm drain structure (i.e. Box Culverts) and the nearest lowered fitting shall be 10' minimum measured perpendicular to the storm drain alignment. For storm drain pipes, a minimum horizontal separation of 5' shall be provided between edge of trench and the nearest lowered fitting measured perpendicular to the storm drain alignment.

3. Contractor to coordinate work with Camino Verde, Brightwater Way to Valencia Roadway Project Improvements and to ensure continuation of cathodic protection. Contractor is to verify potential impacts of work adjacent to rectifier and deep well on function of these facilities. The existing rectifier is not to be taken out of service until new deep well and new rectifier are ready for service.

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

WATER SYSTEM MODIFICATIONS

No.	Revision Description	Engineer	Date

		Date
Designed	ET	03/2014
Drawn	ET, AS	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet W7 of W14	Page 164 of 281

TRACS No. SS975 01C

Print Scale: 1:40

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000015222 6
Client Number: 012745

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C07

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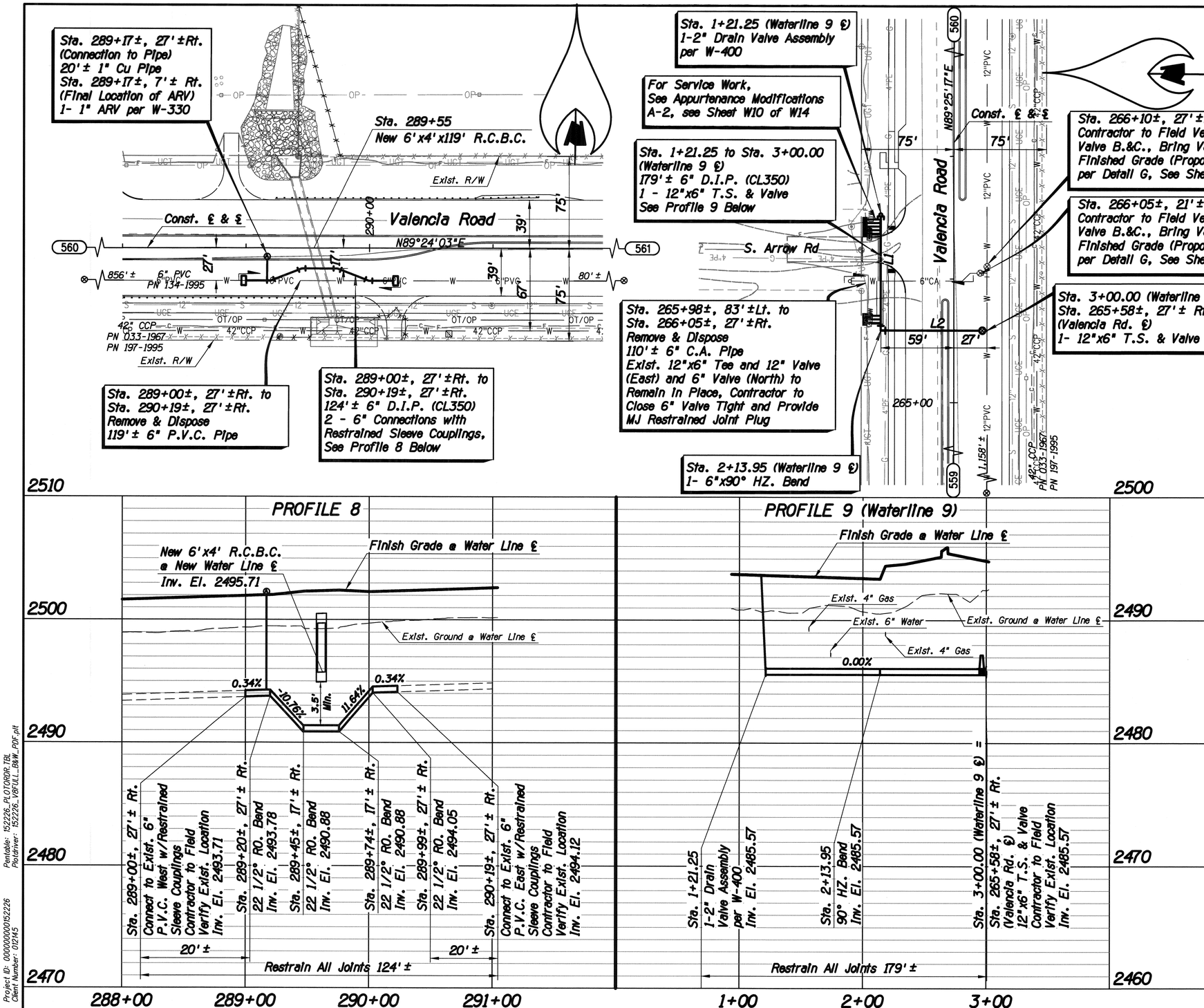

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
0000 PM PPM SS975 01C					

Waterline Annotation Table

No.	Direction	Length
L1	N0°34'45"W	92.70'
L2	S89°25'15"W	79.80'

Notes:
1. Slope of rotated bends/offsets for lowered Water Lines are calculated as true slopes from horizontal.

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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

WATER SYSTEM MODIFICATIONS

No.	Revision Description	Engineer	Date

Priscilla S. Cornelio, P.E., Director

		Date
Designed	ET	03/2014
Drawn	ET, AS	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

REGISTERED PROFESSIONAL ENGINEER (CIVIL) CERTIFICATE NO. 46793 JONATHAN M. BOITANO ARIZONA, U.S.A. Expires 12/31/14

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales: Horiz. 1"=40' Vert. 1"=4'

Sheet W8 of W14

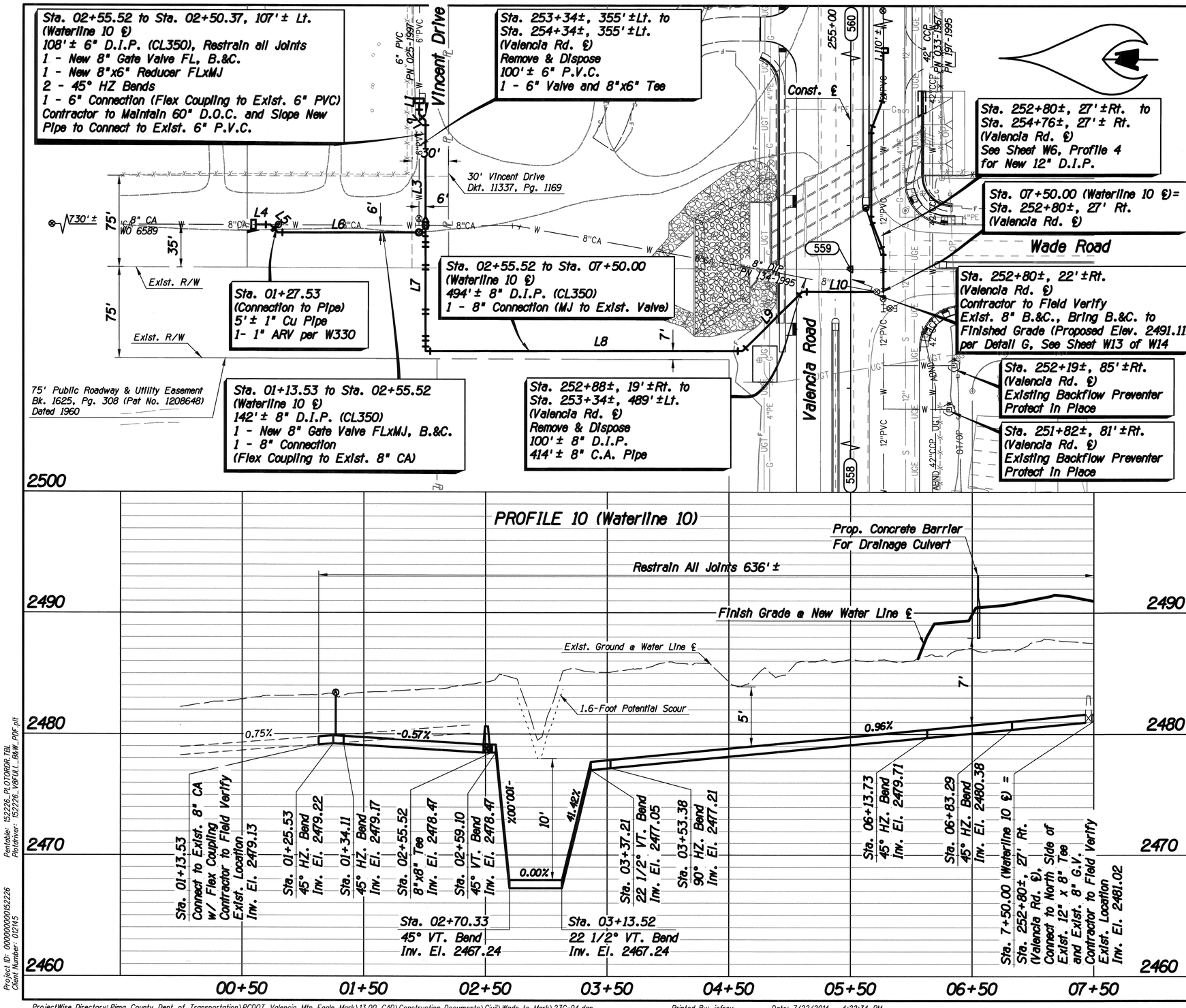
TRACS No. SS975 01C

Print Scale: 1:40

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_R&W_PDF.plt
Project ID: 0000000015226
Client Number: 01245

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C08

Printed By: jefrey Date: 7/22/2014 4:22:28 PM



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			

Waterline Annotation Table

No.	Direction	Length
L1	N0°27'22"W	9.00'
L2	N45°36'06"W	7.33'
L3	N0°36'06"W	91.67'
L4	S89°35'13"W	12.00'
L5	N45°24'47"W	8.58'
L6	S89°23'55"W	121.42'
L7	N0°36'06"W	97.86'
L8	S89°23'54"W	260.35'
L9	N44°23'55"E	69.56'
L10	S89°23'54"W	66.71'

Notes:

1. Slope of rotated bends/offsets for lowered Water Lines are calculated as true slopes from horizontal.

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

WATER SYSTEM MODIFICATIONS

No.	Revision Description	Engineer	Date

		Date
Designed	ET	03/2014
Drawn	ET, AS	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales	Horiz. 1"=40' Vert. 1"=4'	Sheet W9 of W14	Page 166 of 281

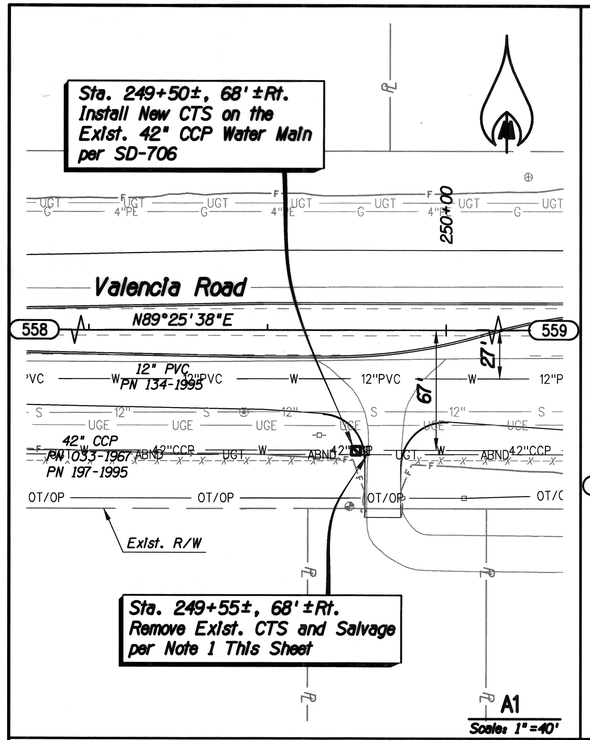
Print Scale: 1:40

TRACS No. SS975 01C

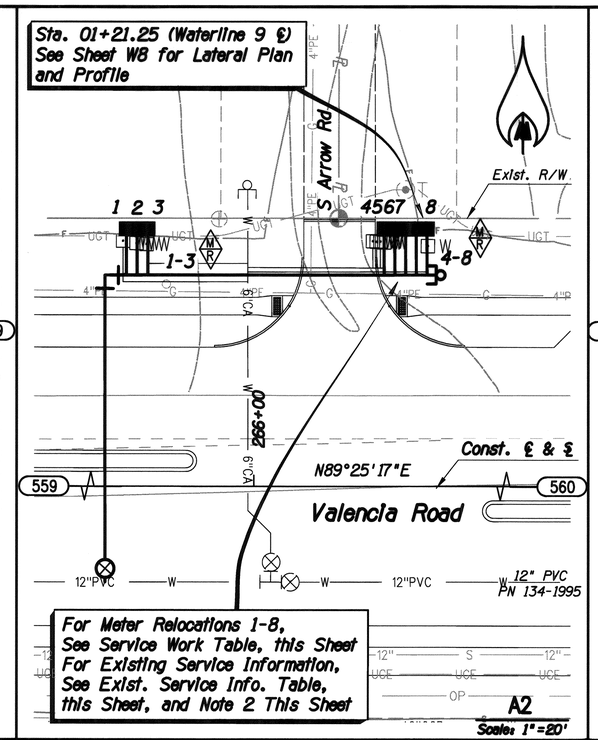
Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt
Project ID: 0000000001522 26
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C09

Printed By: jefrey Date: 7/22/2014 4:22:34 PM



A1
Scale: 1"=40'



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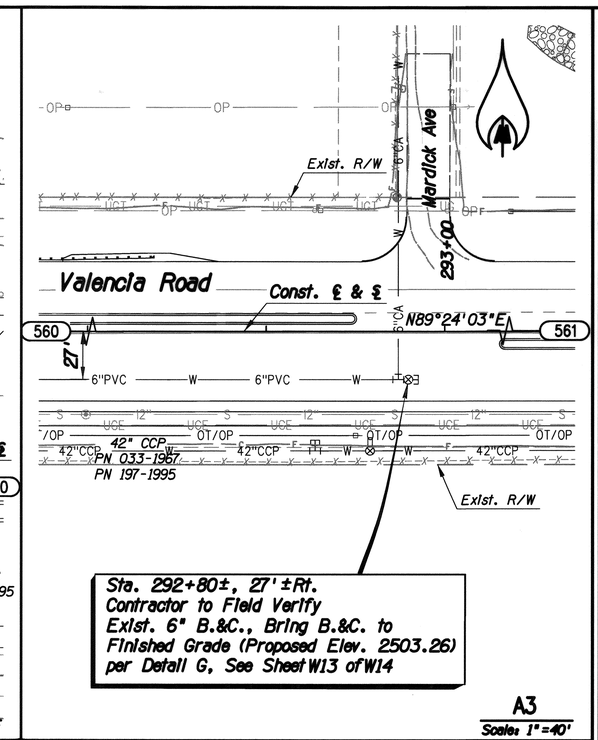
Scale: 1"=20'



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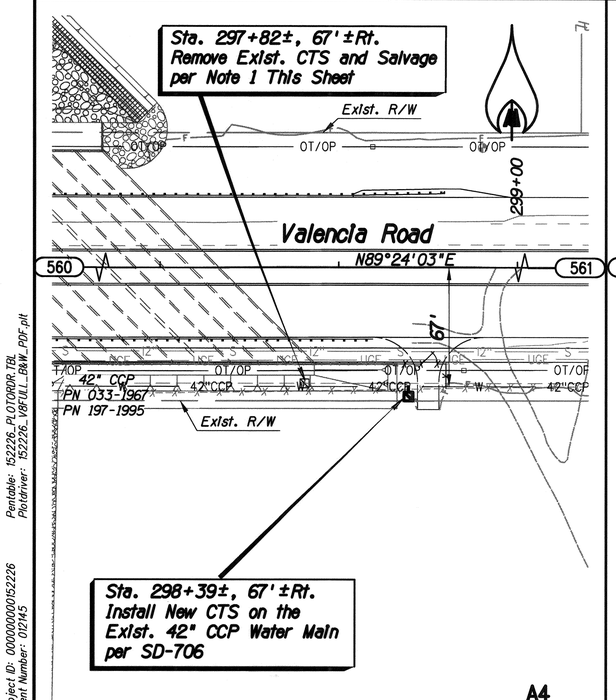
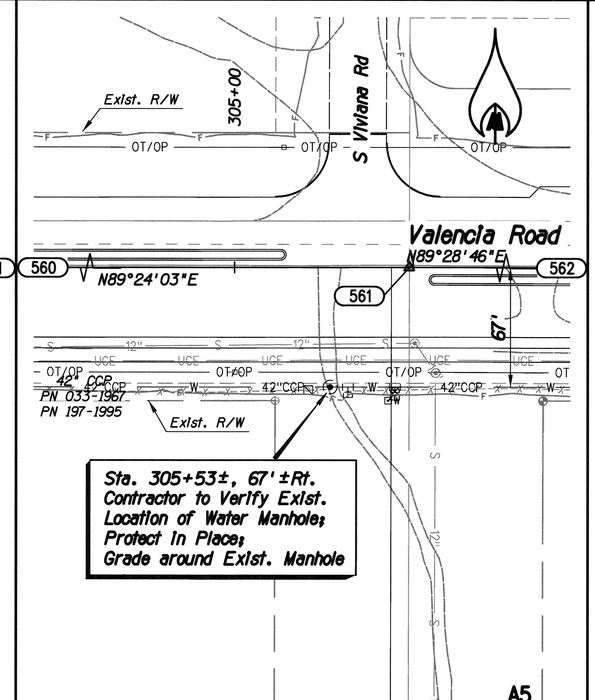
Scale: 1"=40'



A4
Scale: 1"=40'



A5
Scale: 1"=40'

Exist. Service Info.

Code	Address	
	Meter Number & Size	
1	03192765	
	6802 W. Valencia	2"
2	44239291	
	6802 W. Valencia, *B	1"
3	92211734	
	6803 W. Valencia, *3	5/8"
4	92018885	
	6750 W. Valencia, *A	5/8"
5	21074343	
	6750 W. Valencia, *B	5/8"
6	08036611	
	6750 W. Valencia, *C	5/8"
7	12444481	
	6750 W. Valencia, *D	5/8"
8	11511955	
	6784 W. Valencia	5/8"

Note:
1. Existing Service Information is Provided for Clarification of New Meter and Existing Private Service Connections.

EXISTING SERVICES FOR A2

Service Work

Code		Address		Pipe Size & Qty. (Ft.) 1"	2"
		Meter Number & Size			
1	M	Sta. 2+07.95 (Waterline 9 ℄)			
	R	New Service Meter	2"		30
2	M	Sta. 2+04.95 (Waterline 9 ℄)			
	R	New Service Meter	1"	30	
3	M	Sta. 2+01.95 (Waterline 9 ℄)			
	R	New Service Meter	1"	30	
4	M	Sta. 1+35.78 (Waterline 9 ℄)			
	R	New Service Meter	1"	30	
5	M	Sta. 1+32.78 (Waterline 9 ℄)			
	R	New Service Meter	1"	30	
6	M	Sta. 1+29.78 (Waterline 9 ℄)			
	R	New Service Meter	1"	30	
7	M	Sta. 1+26.78 (Waterline 9 ℄)			
	R	New Service Meter	1"	30	
8	M	Sta. 1+23.78 (Waterline 9 ℄)			
	R	New Service Meter	1"	30	
TOTAL PIPE LENGTH				210	30

* New Meter Boxes to be offset 26'± from Tap Location

Note:
1. Existing CTS shall be salvaged and delivered to Plant One (510 W. 18th Street. Attention: Mr. Britt Klein 520-349-4031).

2. Tucson Water Construction Inspector will verify proposed meter locations and connections to private plumbing prior to tapping and installation of meters and make field adjustments to proposed meter locations as necessary.

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

APPURTENANCE MODIFICATIONS
A1 - A5

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			

0000 PM PPM SS975 01C

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	ET	03/2014
Drawn	ET, AS	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 48793 JONATHAN M. BONTANO ARIZONA, U.S.A. Expires 12/31/14

HDR Engineering, Inc.
4210 E. Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

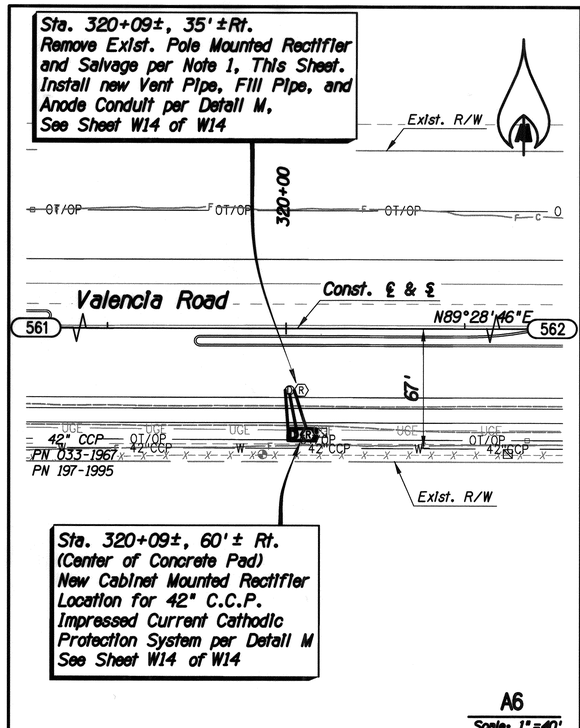
Scales: Horiz. Varies, Vert. N/A | Sheet W10 of W14 | Page 167 of 281

TRACS No. SS975 01C

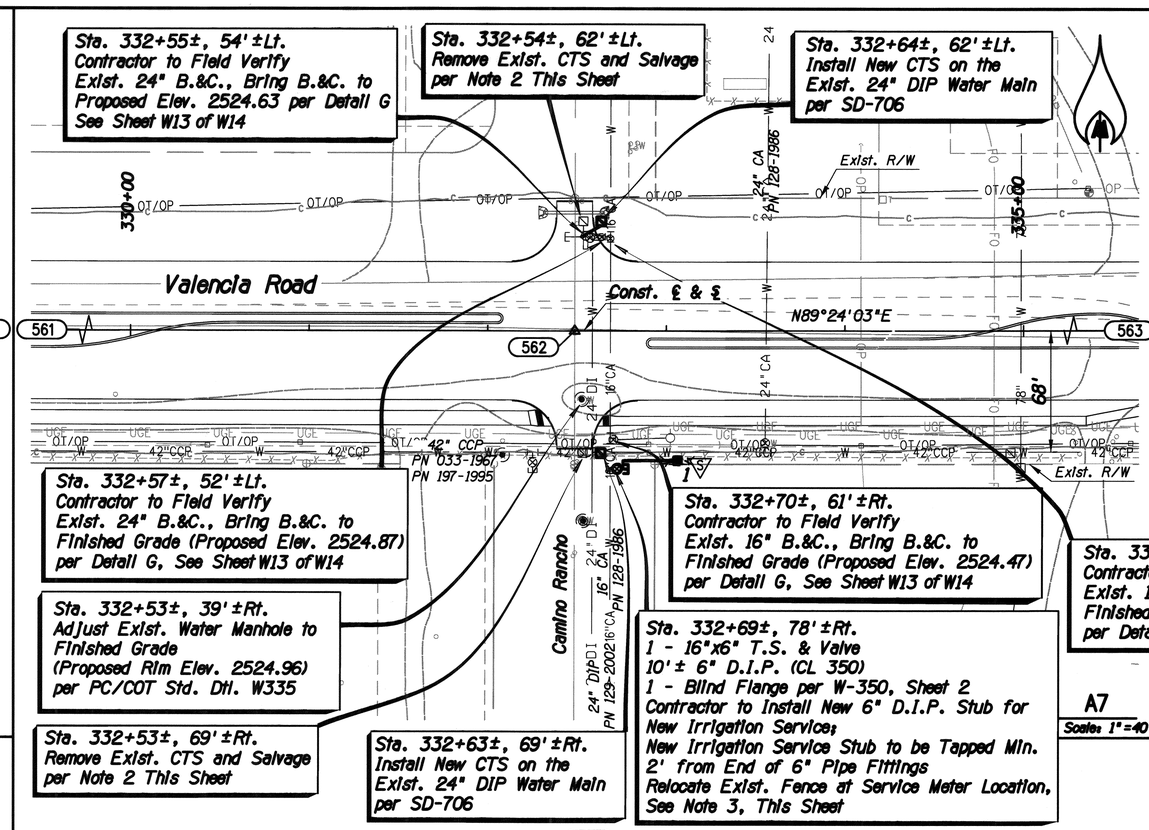
Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000015226
Client Number: 01245

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C10
Printed By: jefrey Date: 7/22/2014 4:22:40 PM
Print Scale: 1:40



A6
Scale: 1"=40'



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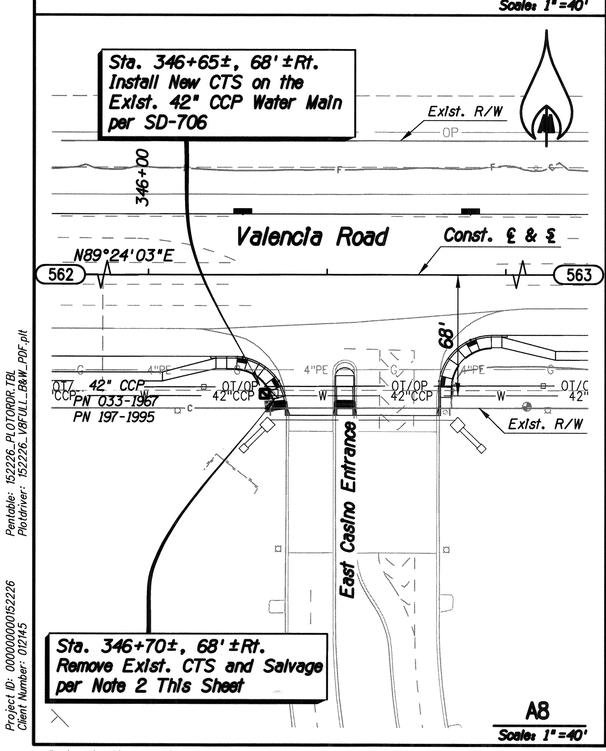

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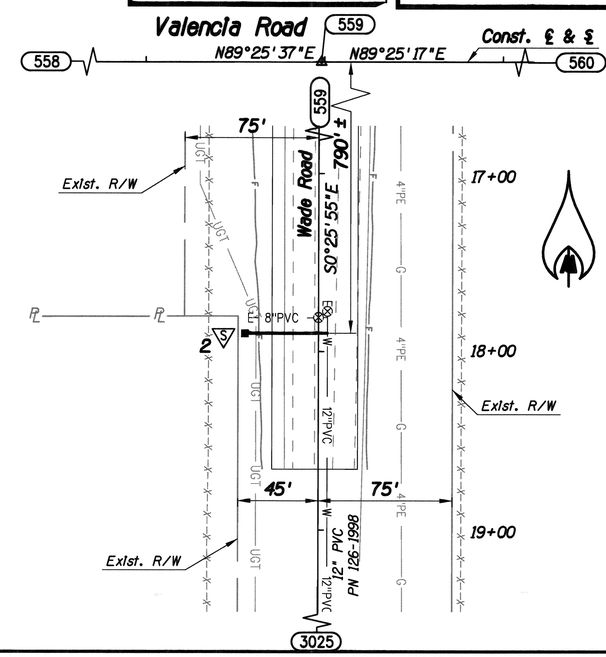
Scale: 1"=40'



A9
Scale: 1"=40'

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
0000 PM PPM SS975 01C					

Service Work

Code		Address	Pipe Size & Quantity (Ft.)	
		Meter Number & Size	1"	2"
1	S	Sta. 332+76±, 78'±Rt.		
		New Irrigation	2"	35
2	S	Sta. 17+90±, 5'±Lt.		
		New Irrigation	2"	50
TOTAL PIPE LENGTH				85

* Service #1: New Meter Box to be offset 31'± from Tap Location at Sta. 333+06±, 73'± Rt. Maintain minimum 3-foot Clearance from Outside Edge of 42" CCP.

* Service #2: New Meter Box to be offset 46'± from Tap Location.

Notes:
1. Existing Rectifier shall be salvaged and delivered to Plant One (510 W. 18th Street. Attention: Mr. Britt Klein 520-349-4031).

2. Existing CTS shall be salvaged and delivered to Plant One (510 W. 18th Street. Attention: Mr. Britt Klein 520-349-4031).

3. Relocate Existing Fence at Proposed Service Meter Location (Sta. 333+06±, 73'± Rt.). Fence should be relocated to ROW Line to allow for access to the Service Meter.

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

APPURTENANCE MODIFICATIONS
A6 - A9

No.	Revision Description	Date

Engineer

		Date
Designed	ET	03/2014
Drawn	ET, AS	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

Priscilla S. Cornelio, P.E., Director

Registered Professional Engineer (Civil)
CERTIFICATE NO. 46783
JONATHAN M. BORTANO
Date Signed 7/23/14
ARIZONA, U.S.A.
Expires 12/31/14

HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 594-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Scales	Horiz. 1"=40' Vert. N/A	Sheet W11 of W14	Page 168 of 281

TRACS No. SS975 01C

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt
Project ID: 0000000001152226
Client Number: 012145

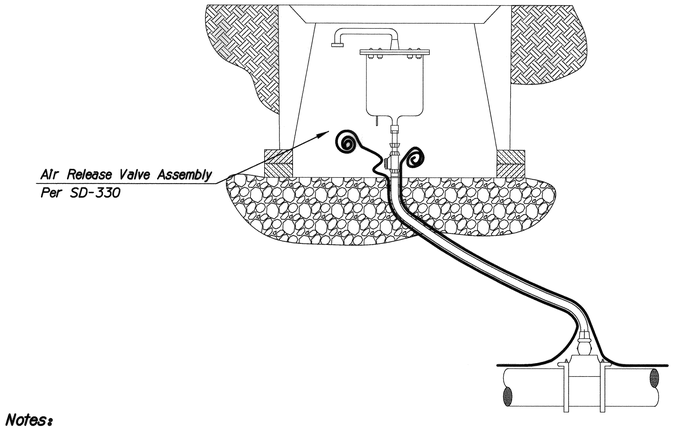
ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-04.dgn
Model: B23C11
Printed By: jefrey Date: 7/22/2014 4:22:46 PM
Print Scale: 1:40

Notes:

1. All new Water Mains require Detectable Locator Tape Per W-115. In addition, a Tracer Wire shall be UF, THWN, THW, or RHW/RHH Solid 12 Gauge Wire. The Tracer Wire shall be laid directly on top of the Pipe in continuous lengths between Valves, Air Release Valves (ARV), Drain Valve Assemblies (DVA), and Lateral Connections to existing Water Mains.
2. The Tracer Wire shall be secured to the top of the Pipe with adhesive tape at intervals not greater than 10 ft. The intent is to keep the Tracer Wire in place during back fill, not to permanently fix the Tape to the Pipe.
3. The Tracer Wire shall be secured to Vertical Components, i.e. Valve Risers, Air Release Valve (ARV) Lines, etc., by wrapping the Pipe Circumference with 10 mil PVC Pipe Tape or Zip Ties with a tensile strength of not less than 50 lbs. At intervals not greater than 1-foot.
4. For DIP Water Mains, Tracer Wire shall be attached to the Pipe outside of the Polyethylene Encasement.
5. The Continuity of each segment of Tracer Wire Installed shall be verified by the Electrical Contractor. Final Acceptance of the Project will not be granted until Written Certification, signed by the Electrical Contractor, is received by the Construction Section of the City of Tucson Water Department.
6. The Insulation on Tracer Wire Installed on Potable Mains shall be colored blue. The Insulation on Tracer Wire on Reclaimed Water Lines shall be colored purple.
7. Where the ends of new Tracer Wire terminate below ground, the end of the new Tracer Wire shall be tables with two half lapped layers of Polyethyloene or Polyvinyl Chloride Tape (Electrician's Tape).
8. Metallic Tags shall be One Inch (1") wide by a minimum of One and One Half Inches Long (1½") and a minimum of One Sixteenth Inch (1/16") Thick with a One Eighth Inch (1/8") hole at one corner of the Tag. It shall be attached to the Tracer Wire with Twelve Gauge (12 GA.) wire. The direction shall be stamped with a Half Inch (1/2") Letter Marking Punch.

Tracer Wire - Notes — DETAIL A

N.T.S.



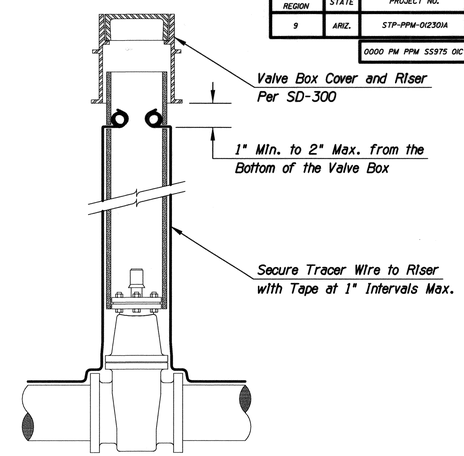
Notes:

1. The Tracer Wire shall be attached to the Air Release Line with Tape or Zip Ties at a maximum of 1-foot intervals. A 3-foot coil of wire shall be left in the Meter Box for each Tracer Wire Installed.
2. Tracer Wire shall be located on the same side of the Meter Box as the Pipe it is attached to. The coiled Tracer Wire shall be permanently labeled with a metallic tag stating the direction (i.e. North, East, etc.) of the Pipe it is attached to.
3. This Detail applies to Air Release Valves in W-330.

Tracer Wire - Air Release Valves — DETAIL B

N.T.S.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 OIC			



Notes:

1. Thread Tracer Wires through 1/4-Inch Holes drilled in the Riser Pipe 2" to 4" Below the Valve Box.
2. A knot shall be tied in the Tracer Wire inside the Riser Pipe and a 3" coil of wire left neatly inside the Riser.
3. The Tracer Wire shall enter the Rise Pipe in the same side as the Water Pipe to be traced.

Tracer Wire - In Line Valves — DETAIL C

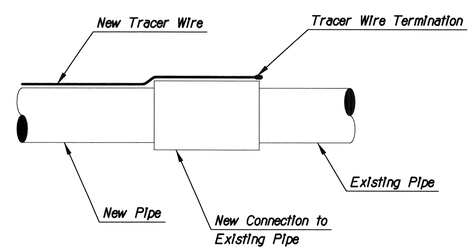
N.T.S.

Splices in the Tracer Wire shall be performed as follows:

1. The Insulation shall be stripped from the Wire exposing enough bare wire to extend approximately½" beyond the end of the Copper Sleeve.
2. The Copper Sleeve shall be of the appropriate size for 12 Gauge (12 Ga.) wire and intended for this purpose.
3. Crimp the Sleeve on the Wire with a crimping tool a minimum of 4 times.
4. After crimping the Copper Sleeve, bend the Wire back over the Sleeve.
5. Clean and dry the exposed section of the Wire. Wrap the connection with two half-lapped layers of Polyethylene or Polyvinyl chloride tape (Electrician's Tape).

Tracer Wire - Splice Detail — DETAIL D

N.T.S.

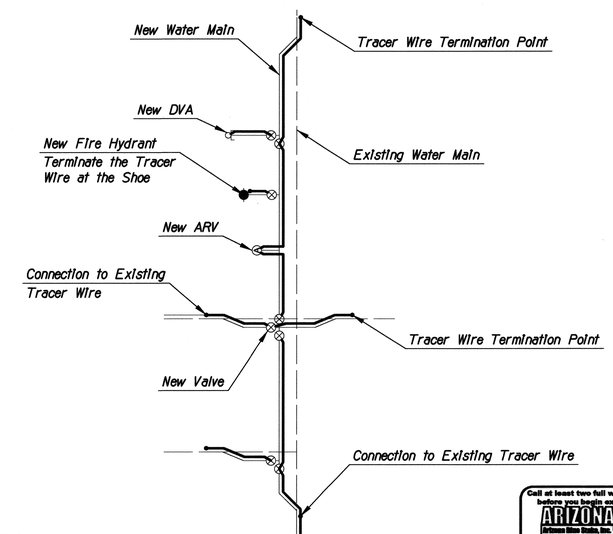


Note:

1. At connections to existing pipe with no Tracer Wire, the new Tracer Wire shall be terminated at the end of the Connection Device.

Tracer Wire - Existing Water Main — DETAIL E

N.T.S.



Note:

1. Existing Water Valves are not shown for clarity.

Tracer Wire - Scenarios — DETAIL F

N.T.S.

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

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	EB	03/2014
Drawn	EB	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

Registered Professional Engineer (Civil) CERTIFICATE NO. 48793 JONATHAN M. BORTANO Date Signed 12/9/14 ARIZONA, U.S.A. Expires 12/31/14

HDR Engineering, Inc.
4210 E. Williams Circle, Suite 530
Tucson, AZ 85711-4459
(520) 584-3600

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

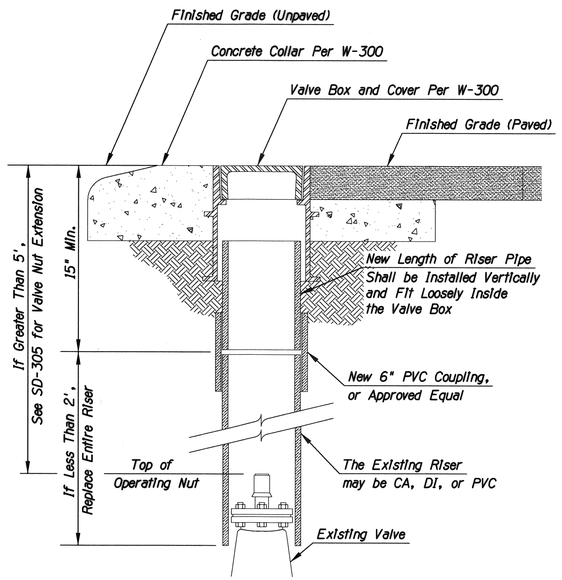
Scales	Horiz. N/A Vert. N/A	Sheet W12 of W14	Page 169 of 281

Print Scale: 1:40

TRACS No. SS975 01C

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

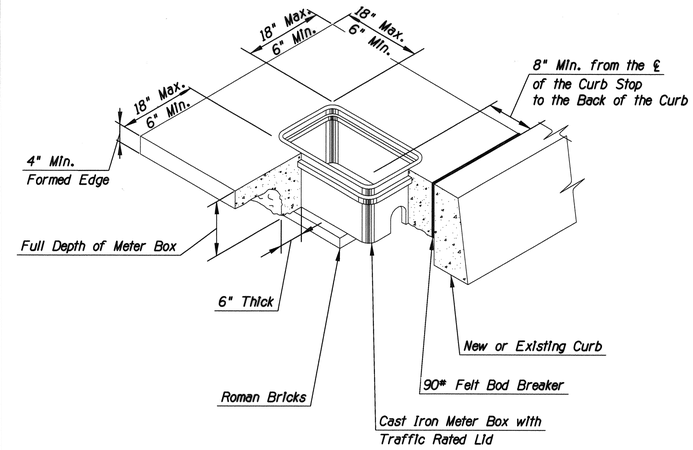
Project ID: 0000000000152226
Client Number: 012145



Valve Box Adjustment - Raised Pavement Grades

N.T.S.

DETAIL G



Notes:
1. All new Meter Boxes for ¾", 1", and 2" Meters to be Installed with Water System Modification Projects shall be new cast iron meter boxes per Special Provision 5108302.
2. All new Meter Boxes shall be Installed as Traffic Rated (H-20).
3. The Concrete Collar may be extended to the maximums shown to coordinate with the finished surface treatment module.

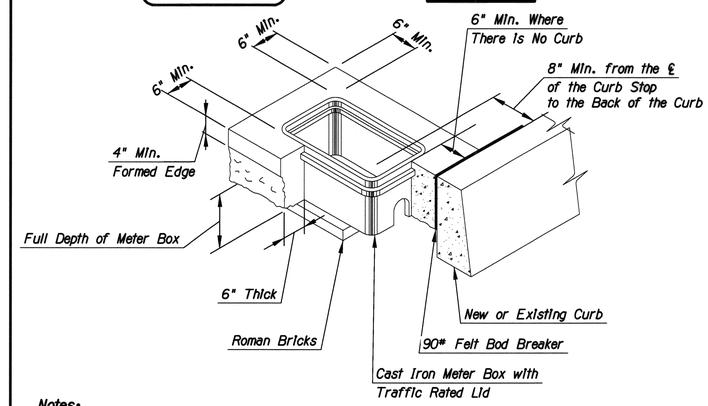
Meter Box - Hardscaped Areas

N.T.S.

DETAIL H

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

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 OIC			

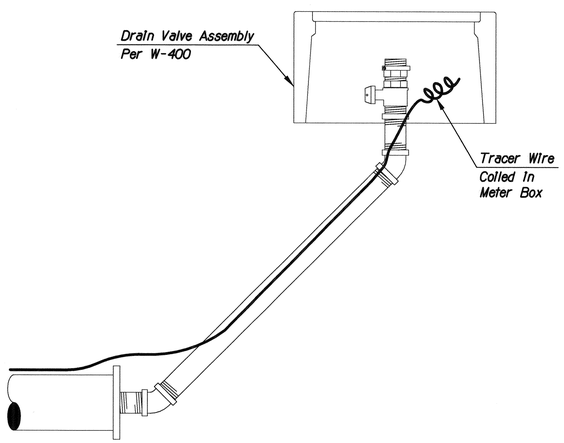


Notes:
1. All new Meter Boxes for ¾", 1", and 2" Meters to be Installed with Water System Modification Projects shall be new cast iron meter boxes per Special Provision 5108302.
2. All new Meter Boxes shall be Installed as Traffic Rated (H-20).
3. The top of Meter Boxes not adjacent to curbs shall be Installed ½" to 1" above the Finished Grade. The surrounding collar shall be sloped to meet the Finished Grade per Special Provision 5108302.

Meter Box - Unpaved Areas

N.T.S.

DETAIL I

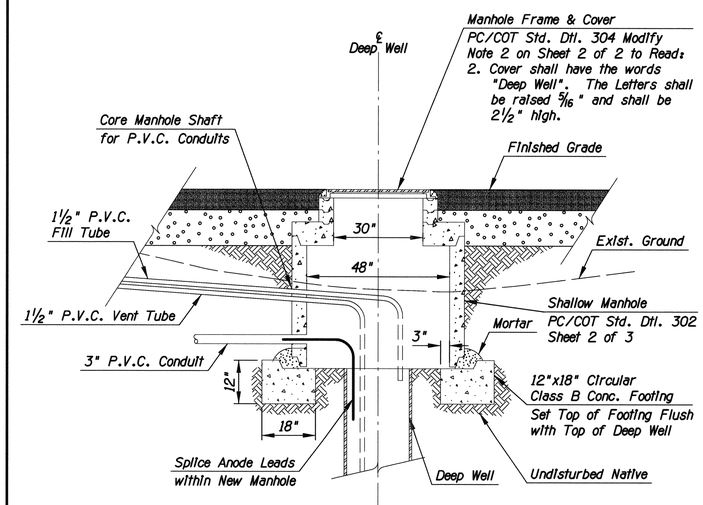


Notes:
1. The Tracer Wire shall be attached to the Drain Valve Assembly Line with tape or zip ties at a maximum of 1' Intervals. A 3' coil of wire shall be left in the Meter Box for each Tracer Wire Installed.
4. This Detail applies to the Drain Valve Assembly in W-400.

Tracer Wire - DVA Assembly

N.T.S.

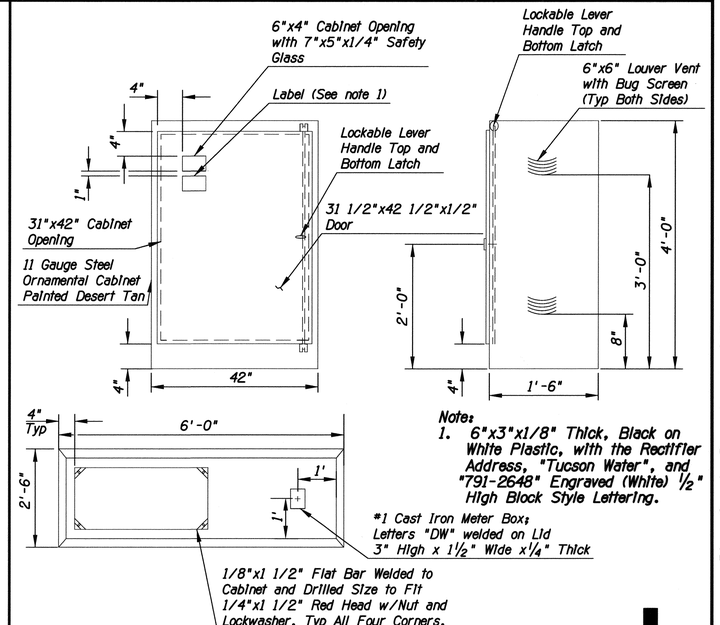
DETAIL J



Deep Well

N.T.S.

DETAIL K



Note:
1. 6"x3"x1/8" Thick, Black on White Plastic, with the Rectifier Address, "Tucson Water", and "791-2648" Engraved (White) ½" High Block Style Lettering.

Ornamental Rectifier Cabinet

N.T.S.

DETAIL L

Scales	Horiz. N/A	Sheet W13 of W14	Page 170 of 281
	Vert. N/A		

TRACS No. SS975 01C

Print Scale: 1:40

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	EB	03/2014
Drawn	EB	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

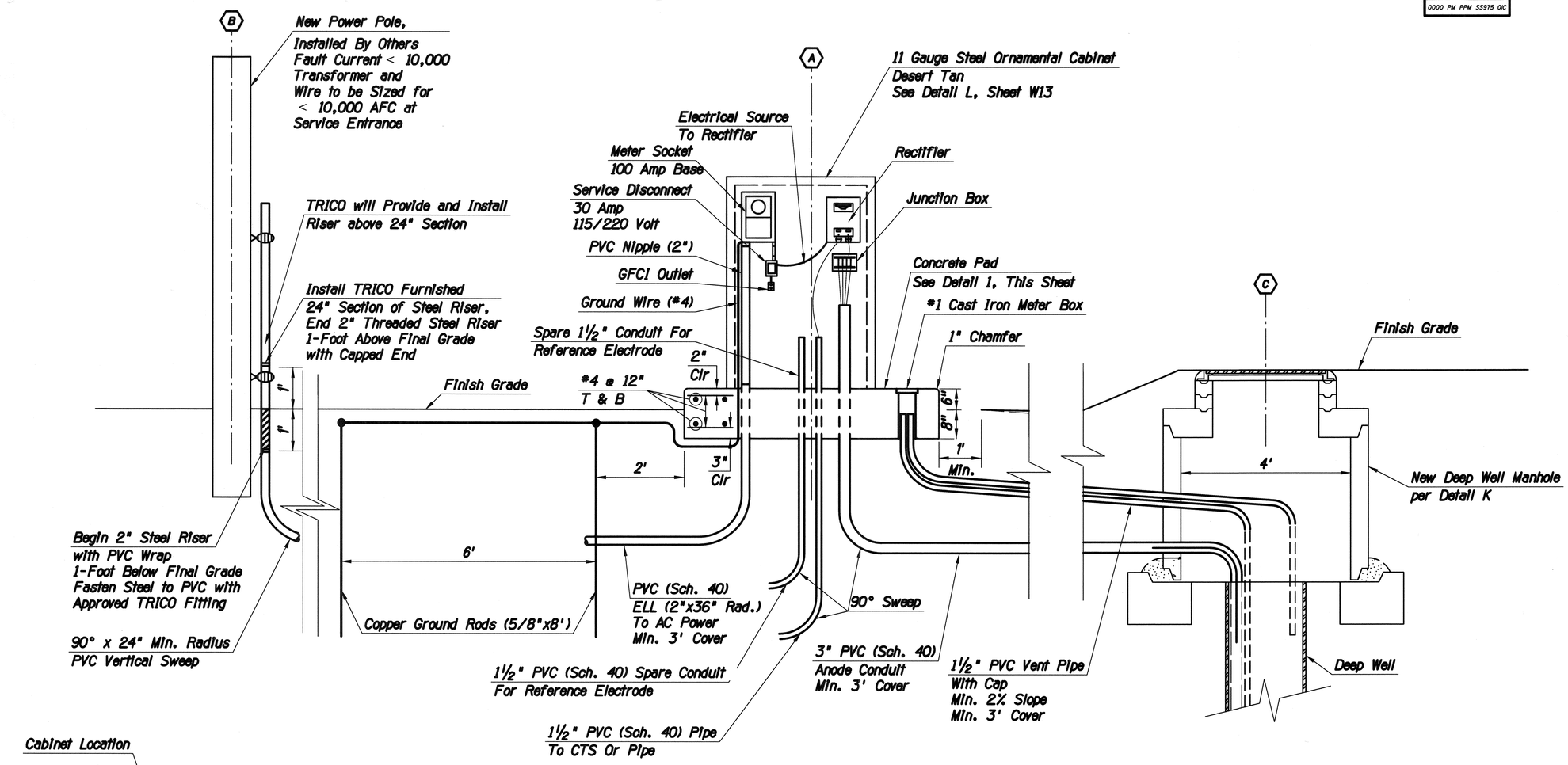
HDR Engineering, Inc.
7250 E. Broadway Circle, Suite 530
Tucson, AZ 85710-4459
(520) 584-3600

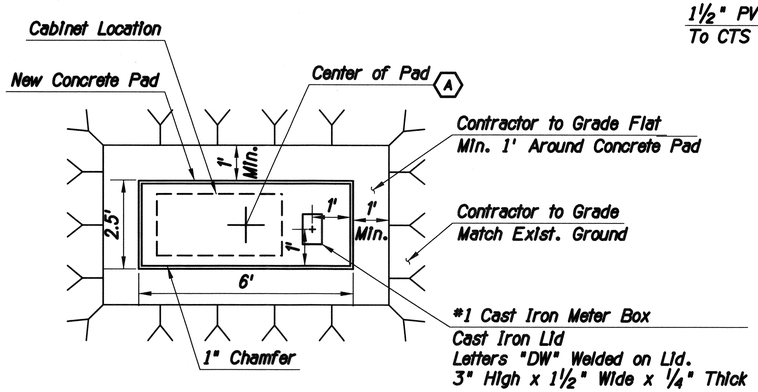
VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Pentable: 152226_PLOTORDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000015226
Client Number: 012145

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A			
		0000 PM PPM SS975 01C			





Detail 1 - Concrete Pad Plan View

N.T.S.

Plan Sheet	A	B	C
W5	Sta. 242+41±, 59'± Rt.	Sta. 242+08±, 89'± Rt.	Sta. 242+37±, 36'± Rt.
W11	Sta. 320+09±, 60'± Rt.	Sta. 319+97±, 63'± Rt.	Sta. 320+05±, 35'± Rt.

Note:

Contractor is Responsible for Locating and Avoiding Existing Utilities along the Installation of the New Extended Fill Pipe, Vent Pipe, and Anode Conduit Piping and Box.

Rewiring and Recalibration of the Rectifier shall be Performed by a Certified Cathodic Protection Specialist and in Compliance with Tucson Water Corrosion Control Design Standards and Corrosion Monitoring System Notes, W-700.

Modified W-711

Cabinet Mounted Rectifier

N.T.S.

DETAIL M

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

Scales	Horiz. N/A Vert. N/A	Sheet W14 of W14	Page 171 of 281

Print Scale: 1:40

TRACS No. SS975 01C

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	EB	03/2014
Drawn	EB	03/2014
Checked	JMB	03/2014
Proj. Engr.	RDB	03/2014

Registered Professional Engineer (Civil)
CERTIFICATE NO. 46793
JONATHAN M. BOITANO
Date Signed 7/22/14
ARIZONA, U.S.A.
Expires 12/31/14

HDR Engineering, Inc.
4120 E. Broadway Circle, Suite 530
Tucson, AZ 85711-4459
(520) 564-3600

VALENCIA ROAD
WADE ROAD TO MARK ROAD
WATER SYSTEM MODIFICATIONS

Pentable: 152226_PLOTDRDR.TBL
Plotdriver: 152226_V8FULL_B&W_PDF.plt

Project ID: 0000000000152226
Client Number: 012145

ProjectWise Directory: Pima_County_Dept_of_Transportation\PCDOT_Valencia_Mtn_Eagle_Mark\13.00_CAD\Construction Documents\Civil\Wade to Mark\23C-05.dgn
Model: B23C14

Printed By: jefrey Date: 7/22/2014 4:23:12 PM

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	172	281	
		0000 PM PPM			

PAVEMENT MARKING GENERAL NOTES

1. ALL EQUIPMENT/MATERIALS AND CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS CONTAINED IN THE CURRENT CITY OF TUCSON / PIMA COUNTY (COT/PC) 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.

2. THE STRIPING CONTRACTOR SHALL CONTACT THE PIMA COUNTY PAVEMENT MARKING SUPERVISOR (520-740-2624) AT LEAST THREE WORKING DAYS IN ADVANCE OF ANY PAVEMENT MARKING INSTALLATION TO SCHEDULE INSPECTION AND APPROVAL OF PAVEMENT MARKING LAYOUT.

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 MARKINGS.

4. THE PERMANENT PAVEMENT MARKINGS MAY BE MODIFIED AS DIRECTED AND APPROVED BY THE TRAFFIC ENGINEER OR THEIR DESIGNEE.

5. THE DESIGN SPEED FOR VALENCIA ROAD, WADE ROAD, AND CAMINO VERDE IS 50 MPH. THE DESIGN VEHICLE IS A WB-50. THE POSTED SPEED LIMIT IS 45 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. PAINTED LAYOUT STRIPING SHALL BE INSTALLED WITHIN FIVE 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 60 MIL (0.060") THICK HOT SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED OVER THE PAINTED LAYOUT STRIPING 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 SHALL BE HOT-SPRAYED THERMOPLASTIC 90 MIL (0.090") THICK INCLUDING SYMBOLS AND LEGENDS WITH THE EXCEPTION OF BIKE LANE SYMBOLS WHICH MAY BE EXTRUDED THERMOPLASTIC OR COLD PREFORMED THERMOPLASTIC.

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 RAISED PAVEMENT MARKERS (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 PAVEMENT MARKERS SHALL BE INSTALLED SO THAT THE CLEAR REFLECTIVE FACE OF EACH MARKER IS FACING APPROACHING TRAFFIC AND PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW.

15. ALL RAISED PAVEMENT MARKERS (RPMs) SHALL BE INSTALLED PER THE CURRENT EDITION OF THE PC/COT PAVEMENT MARKING MANUAL.

16. BLUE RAISED PAVEMENT MARKERS SHALL BE PLACED ADJACENT TO FIRE HYDRANTS AS SHOWN ON SHEET 7-1 OF THE PC/COT PAVEMENT MARKING DESIGN MANUAL.

17. 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.

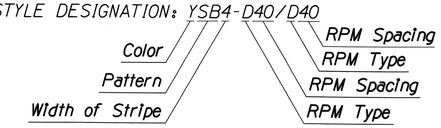
18. UNLESS OTHERWISE NOTED, ALL PAVEMENT MARKINGS SHALL BE INSTALLED BY THE CONTRACTOR.

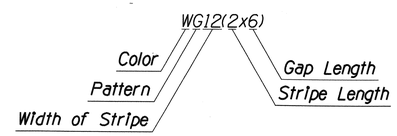
19. UPON FINAL INSPECTION A WRITTEN ACCEPTANCE OR ITEMIZED PUNCHLIST OF MISSING OR UNACCEPTABLE PAVEMENT MARKINGS SHALL BE SUBMITTED TO THE CONTRACTOR AND PIMA COUNTY BY THE TRAFFIC ENGINEER OR THEIR DESIGNEE.

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 PUNCH LIST ITEMS ARE COMPLETED, AND ONE YEAR WARRANTEES BEGIN).

21. THE PC/DOT PAVEMENT MARKING MANUAL IS AVAILABLE ONLINE AT http://dot.pima.gov/trafeng/DesignManual/PavementManual.pdf.

LINE STYLE DESIGNATION: YSB4-D40/D40





See 2008 PC/COT Pavement Marking Design Manual for Further Descriptions

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

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333 E. Wetmore Road
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Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

REGISTERED PROFESSIONAL ENGINEER (CIVIL) 43315 RICARDO P. SOLIS DATE SIGNED 3-14-2014 ARIZONA U.S.A.

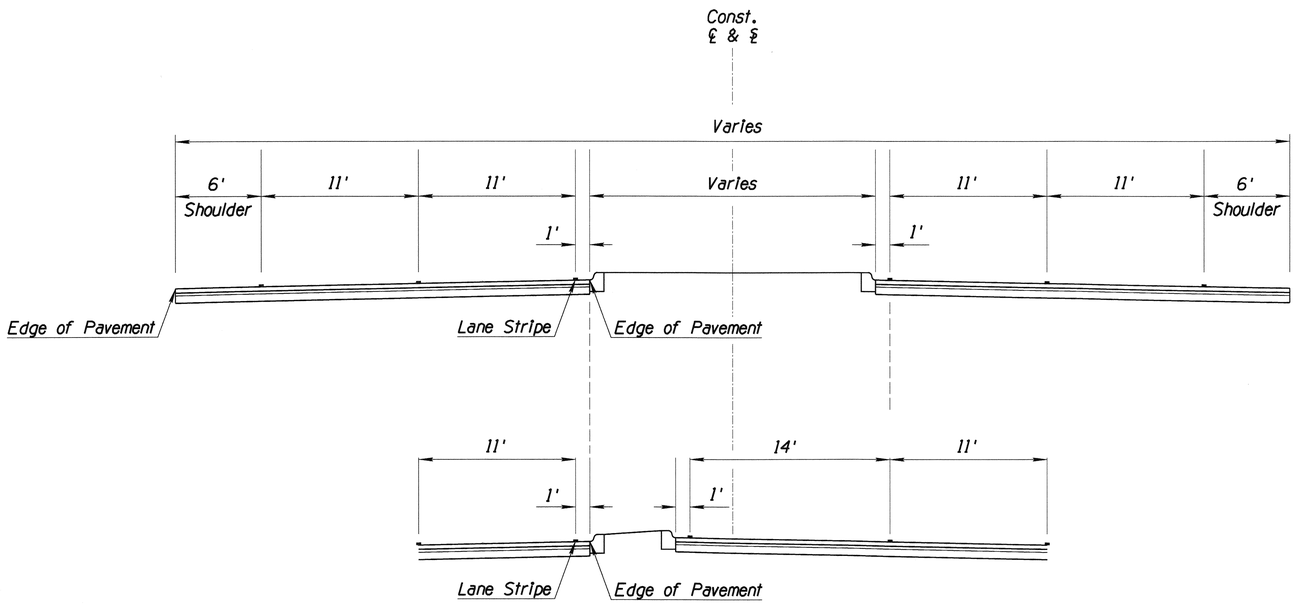
Expires 9/30/2014

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVWW

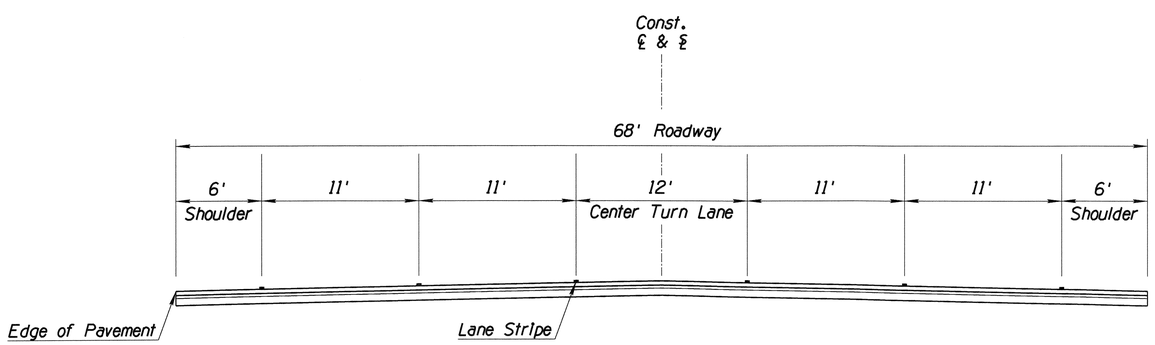
Scales	Horiz. NA	Sheet P1 of P13	Page 172 of 281
	Vert. NA		

TRACS No. SS975 01C

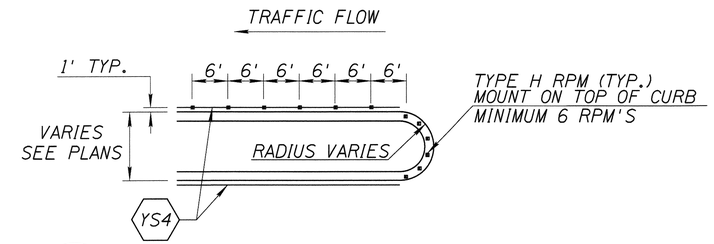
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	173	281	
		0000 PM PPM			



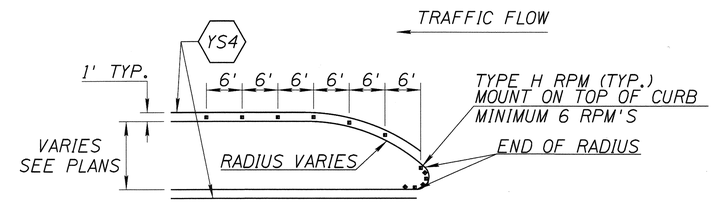
VALENCIA ROAD
TYPICAL PAVEMENT MARKING SECTION
Sta 235+50 to Sta 336+00



VALENCIA ROAD
TYPICAL PAVEMENT MARKING SECTION
Sta 339+50 to Sta 368+80



D1 TYPICAL MEDIAN END TREATMENT
NTS



D2 TYPICAL MEDIAN END TREATMENT
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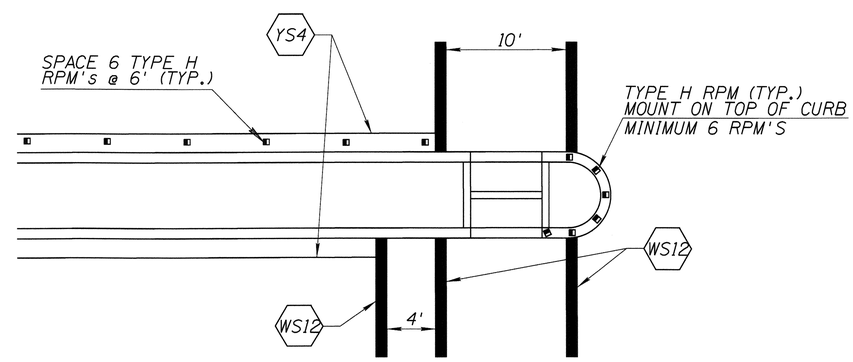

D3 DEPRESSED MEDIAN END TREATMENT
WITH CROSSWALK
NTS

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

			Date
Designed	KMW		03/2014
Drawn	KMW		03/2014
Checked	RPS		03/2014
Proj. Engr.	RPS		03/2014

43315 RICARDO P. SOLIS
Date Signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

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333 E. Wetmore Road
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Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1"=8' Vert. NA	Sheet P2 of P13	Page 173 of 281

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
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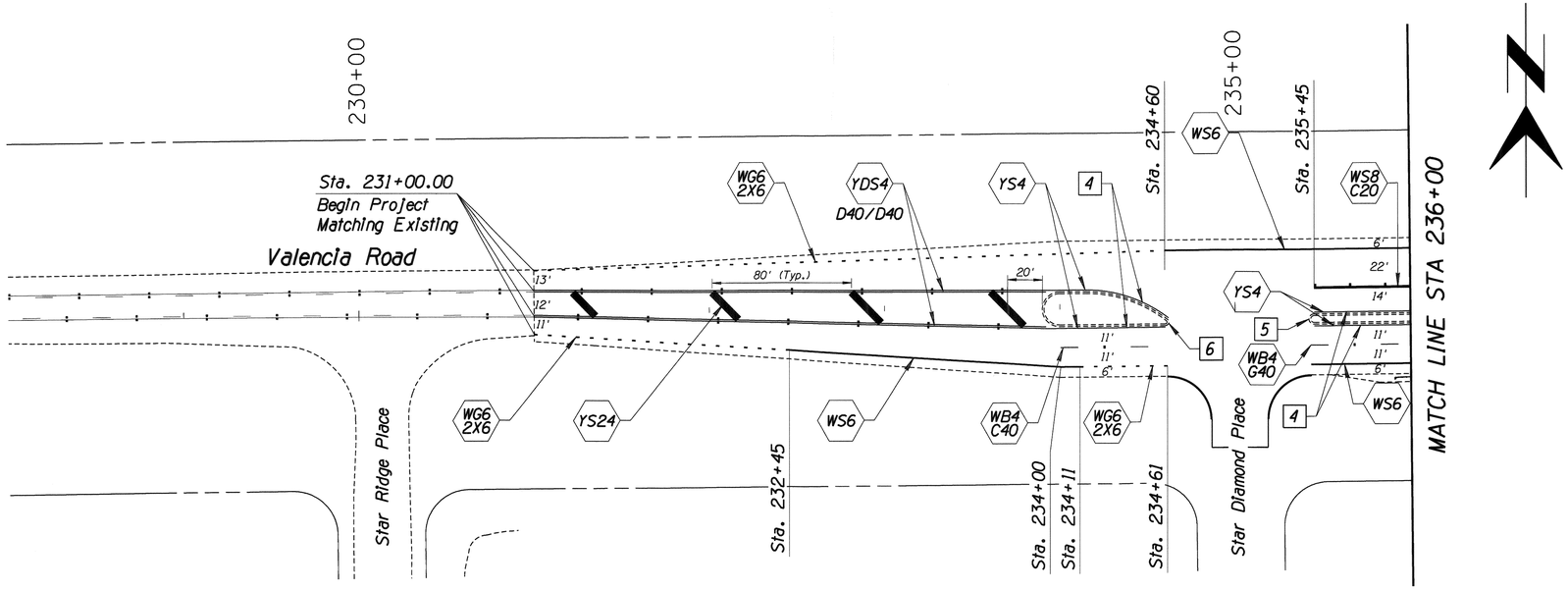
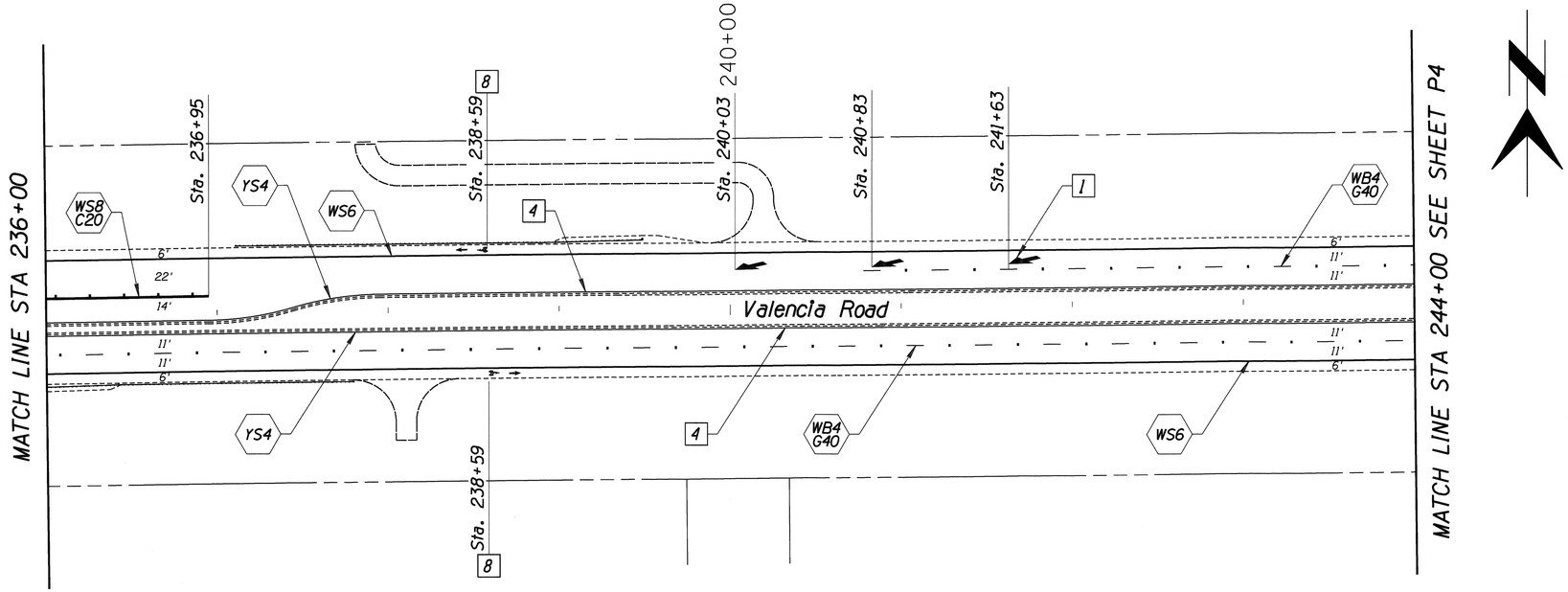
		0000 PM PPM			





NOTES:

1. Install new merge arrows per Sheet No. 4-15 of the PC/COT Pavement Marking Design Manual.
4. Install Marking at 1-ft from edge of pavement.
5. Install RPM's per Median End Treatment per Detail 1 on page P2.
6. Install RPM's per Median End Treatment per Detail 2 on page P2.
8. Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.

PAVEMENT MARKING

40 0 40 80

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS
Date signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

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Engineers, Architects, and Planners, LLC
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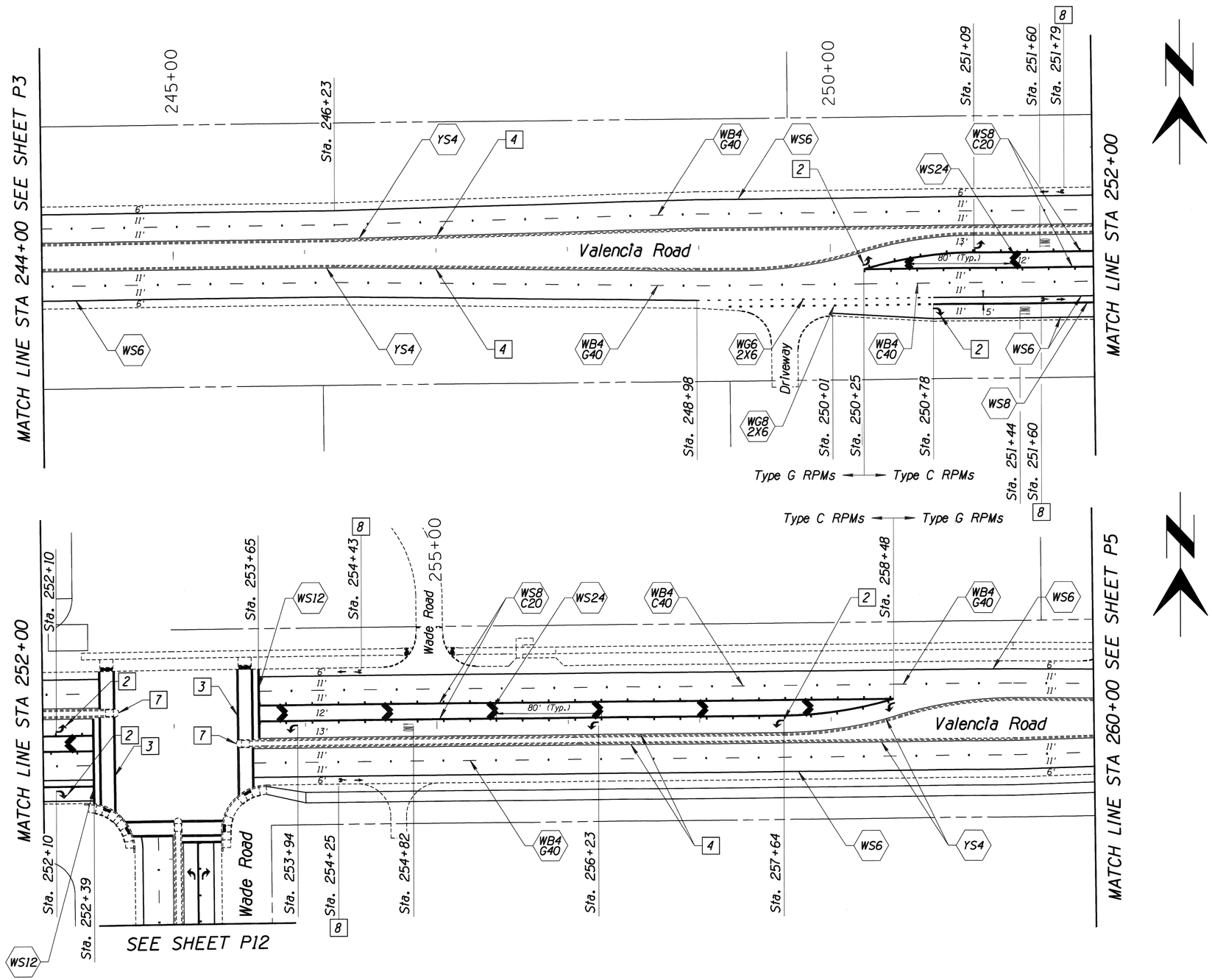
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1" = 40' Vert. NA	Sheet P3 of P13	Page 174 of 281

TRACS No. SS975 01C

11:55:09 AM 3/14/2014 ALLEN. HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005PM03.DGN



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	175	281	

0000 PM PPM

NOTES:

2 Install new pavement arrows and legends per Sheet No.'s 2-9, 2-10, and 4-12 of the PC/COT Pavement Marking Design Manual.

3 Install new standard 10' wide crosswalk per Sheet No.'s 2-8 and 5-12 of the PC/COT Pavement Marking Design Manual.

4 Install Marking at 1-ft from edge of pavement.

7 Install RPM's per Median End Treatment per Detail 3 on page P2.

8 Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A.

Expires 9/30/2014

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(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

PAVEMENT MARKING

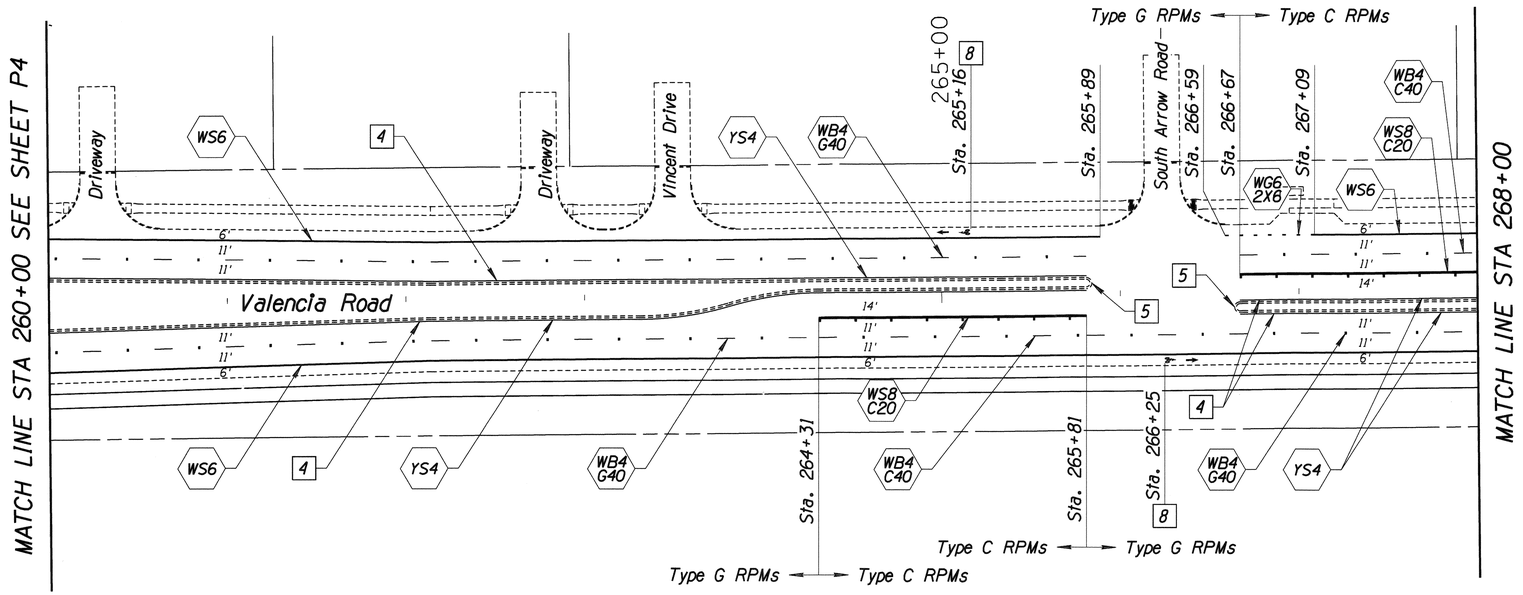
40 0 40 80

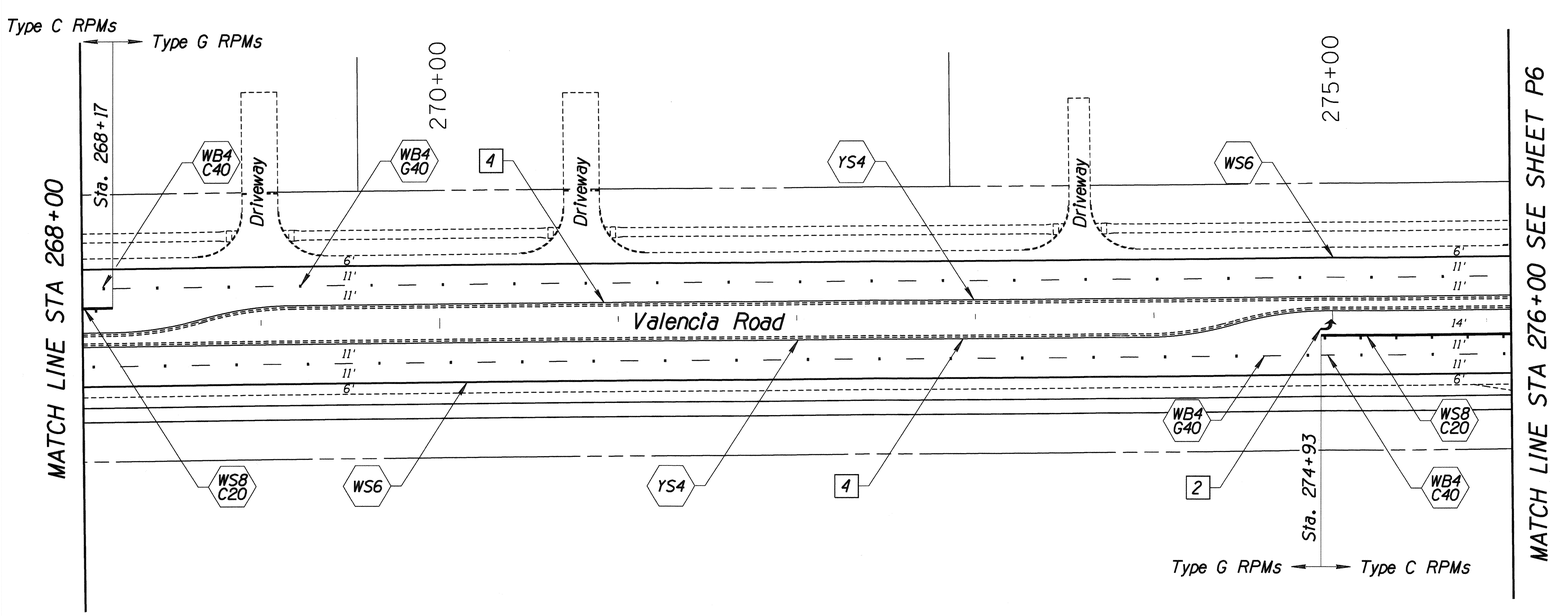
Scales	Horiz. 1" = 40' Vert. NA	Sheet P4 of P13	Page 175 of 281

TRACS No. SS975 01C

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	176	281	

0000 PM PPM





NOTES:

2 Install new pavement arrows and legends per Sheet No.'s 2-9, 2-10, and 4-12 of the PC/COT Pavement Marking Design Manual.

4 Install Marking at 1-ft from edge of pavement.

5 Install RPM's per Median End Treatment per Detail 1 on page P2.

8 Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.

PAVEMENT MARKING

40 0 40 80

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Expires 9/30/2014

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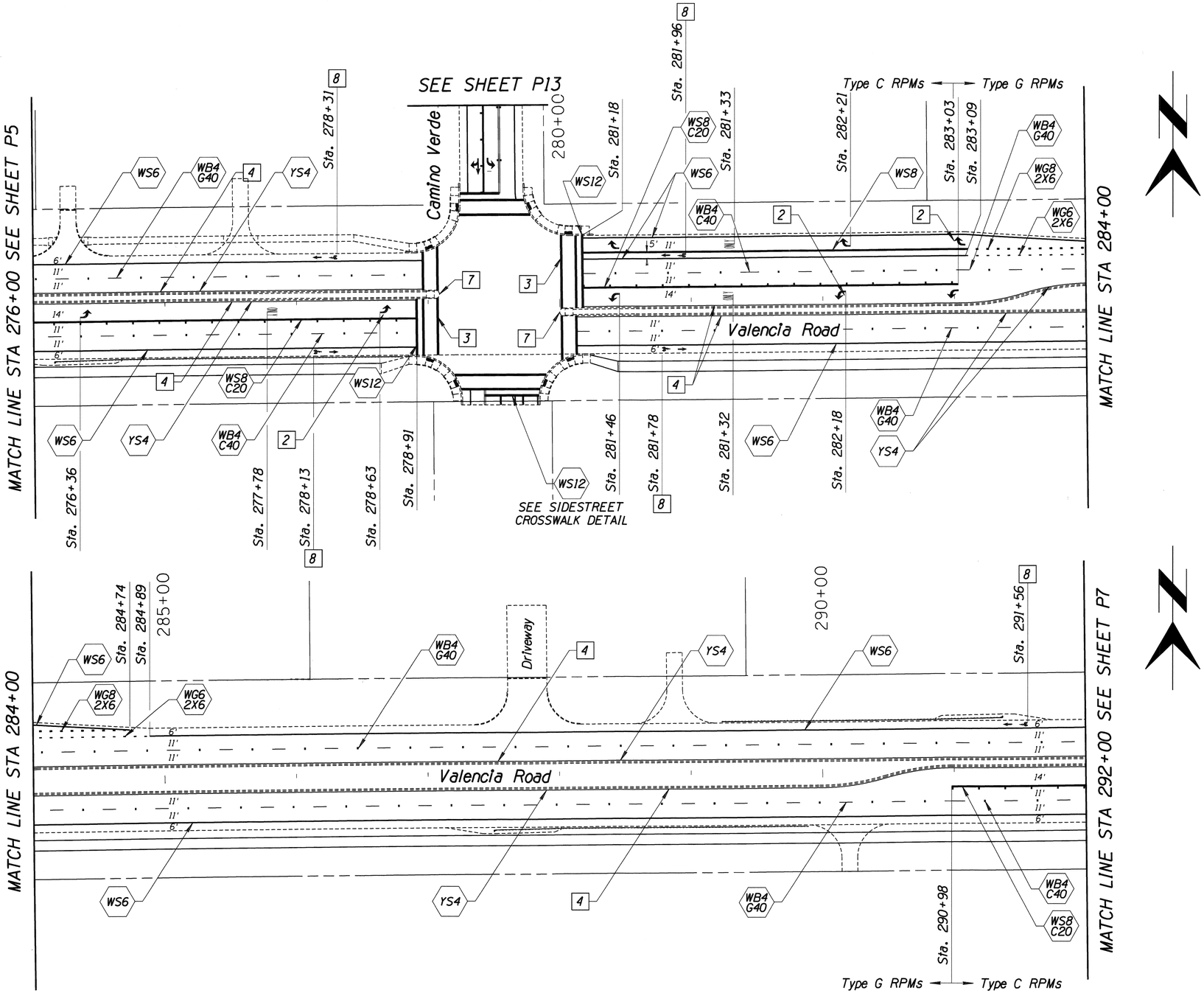
Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1"=40' Vert. NA	Sheet P5 of P13	Page 176 of 281

TRACS No. SS975 01C



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	177	281	

0000 PM PPM

NOTES:

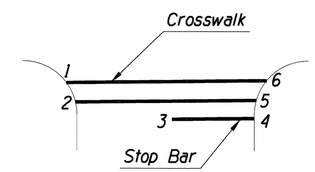
2 Install new pavement arrows and legends per Sheet No.'s 2-9, 2-10, and 4-12 of the PC/COT Pavement Marking Design Manual.

3 Install new standard 10' wide crosswalk per Sheet No.'s 2-8 and 5-12 of the PC/COT Pavement Marking Design Manual.

4 Install Marking at 1-ft from edge of pavement.

7 Install RPM's per Median End Treatment per Detail 3 on page P2.

8 Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.



Control Point	Station	Offset
1	279+19	54' Rt
2	279+24	65' Rt
3	279+42	71' Rt
4	279+84	71' Rt
5	279+84	66' Rt
6	279+89	55' Rt

Sidestreet Crosswalk Detail

PAVEMENT MARKING

40 0 40 80

Scales: Horiz. 1" = 40' Vert. NA

Sheet P6 of P13

Page 177 of 281

TRACS No. SS975 01C

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

43315 RICARDO P. SOLIS, ARIZONA, U.S.A. Date Signed 3-14-2014

Expires 9/30/2014

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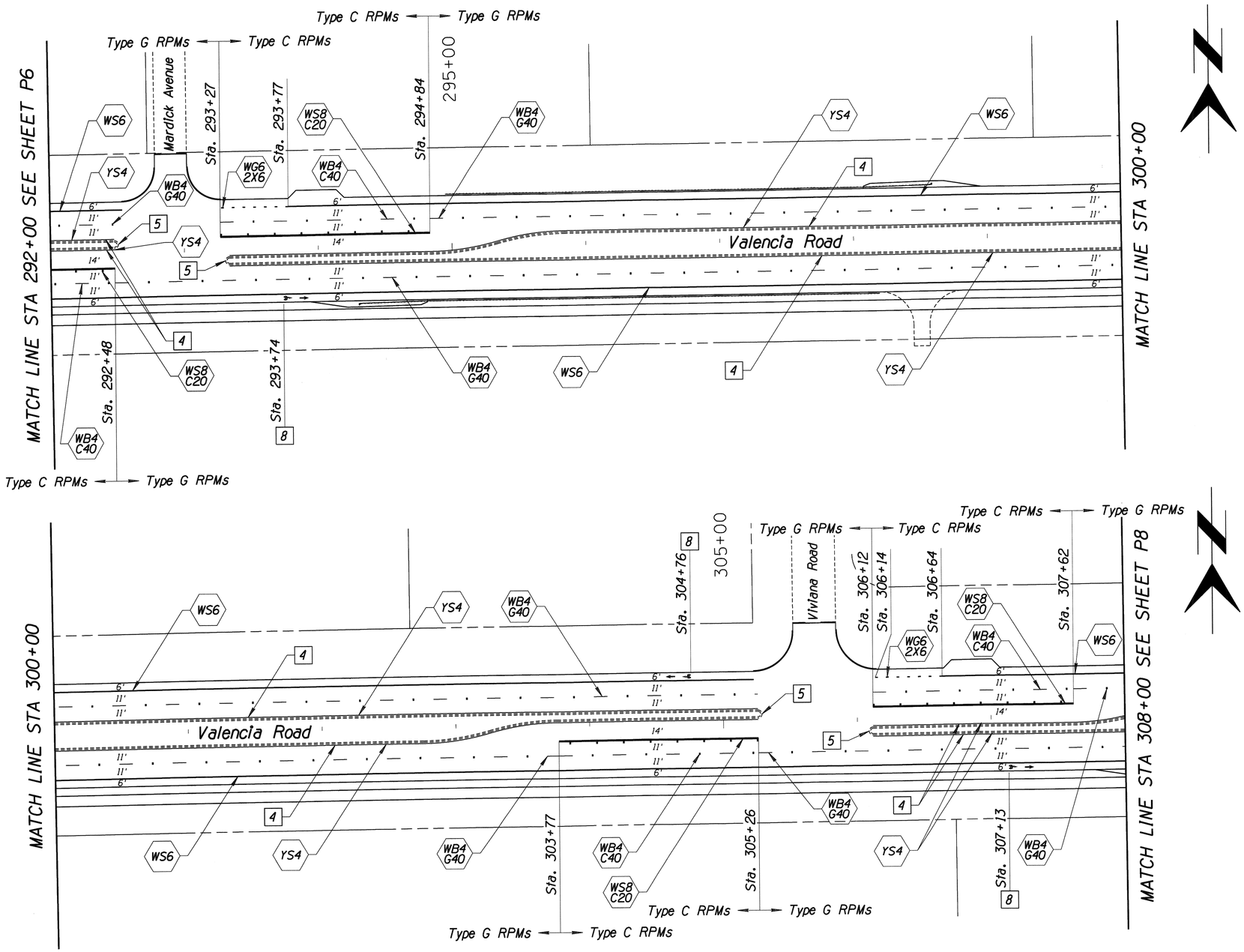
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

11:55:14 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005PM06.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	178	281	

0000 PM PPM



NOTES:

4 Install Marking at 1-ft from edge of pavement.

5 Install RPM's per Median End Treatment per Detail 1 on page P2.

8 Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

43315 RICARDO P. SOLIS ARIZONA, U.S.A. Date Signed 3-14-2014

Expires 9/30/2014

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Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

PAVEMENT MARKING

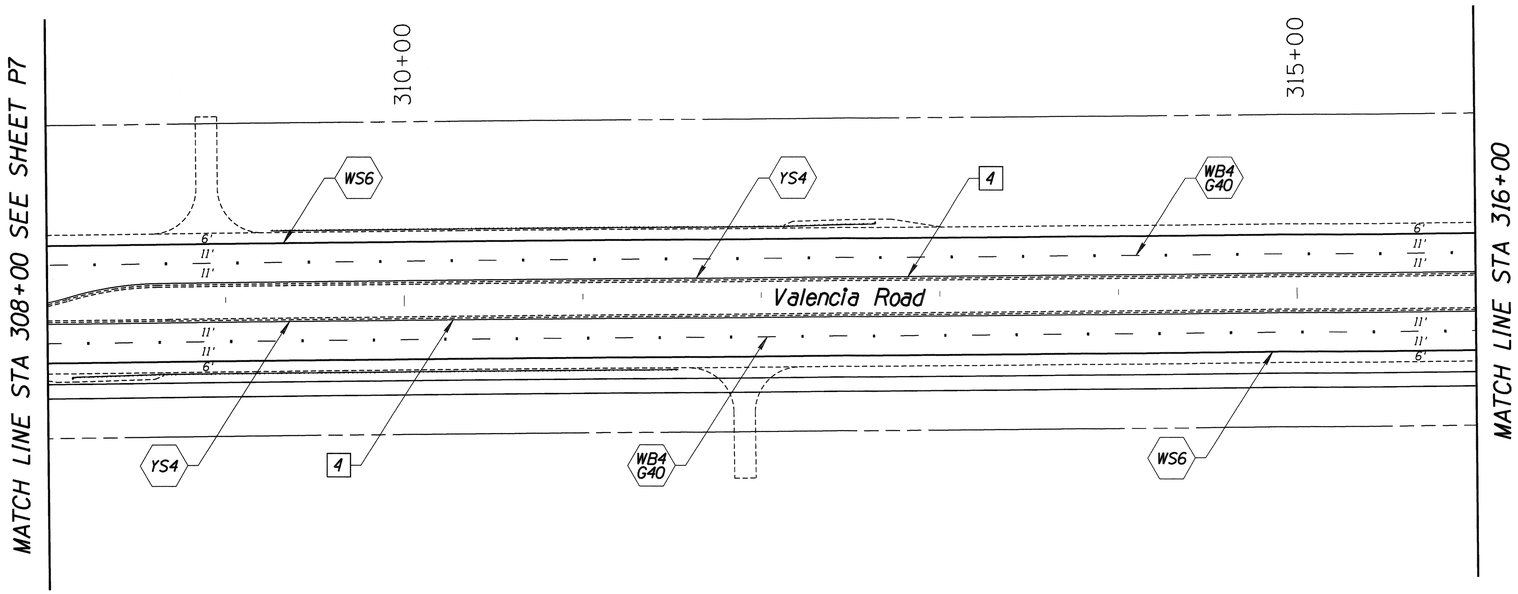
40 0 40 80

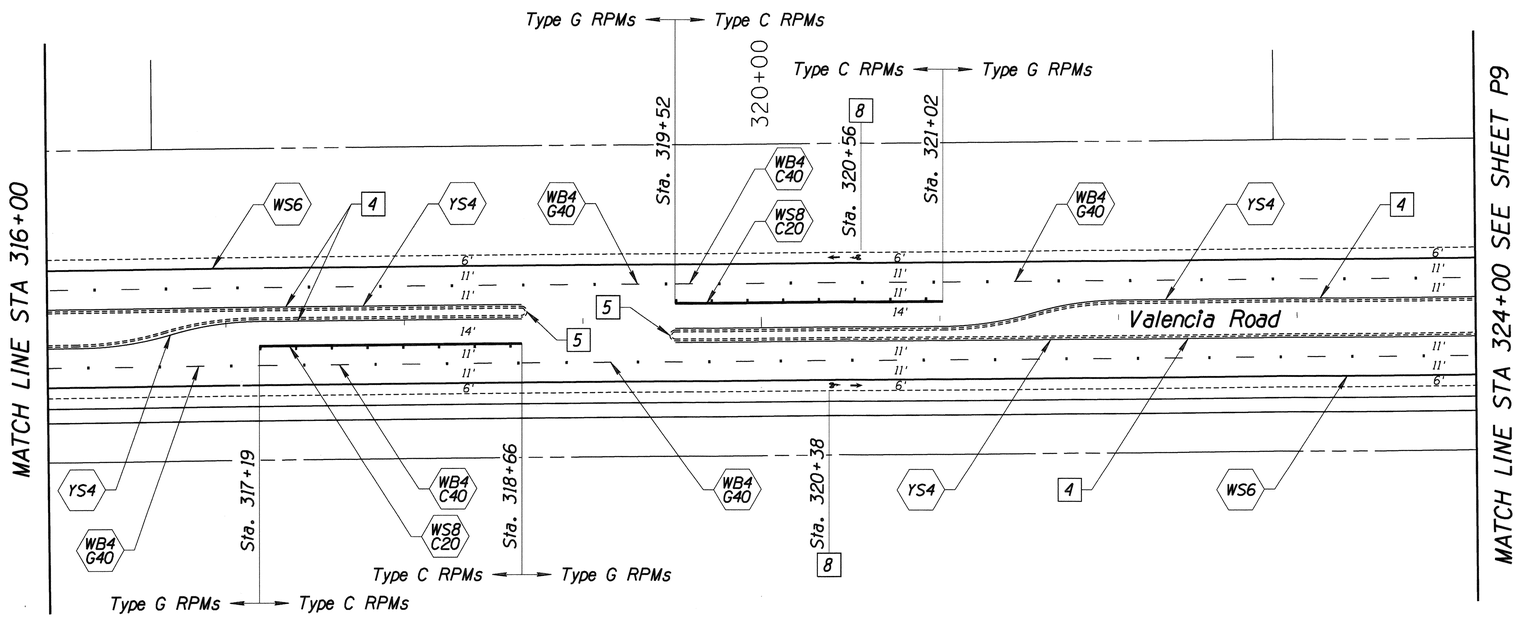
Scales	Horiz. 1" = 40' Vert. NA	Sheet P7 of P13	Page 178 of 281

TRACS No. SS975 01C

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	179	281	

0000 PM PPM





NOTES:

4 Install Marking at 1-ft from edge of pavement.

5 Install RPM's per Median End Treatment per Detail 1 on page P2.

8 Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.

PAVEMENT MARKING

40 0 40 80

Scales: Horiz. 1" = 40'; Vert. NA

Sheet P8 of P13

Page 179 of 281

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

RICARDO P. SOLIS 43315 ARIZONA, U.S.A. Date Signed 3-14-2014

Expires 9/30/2014

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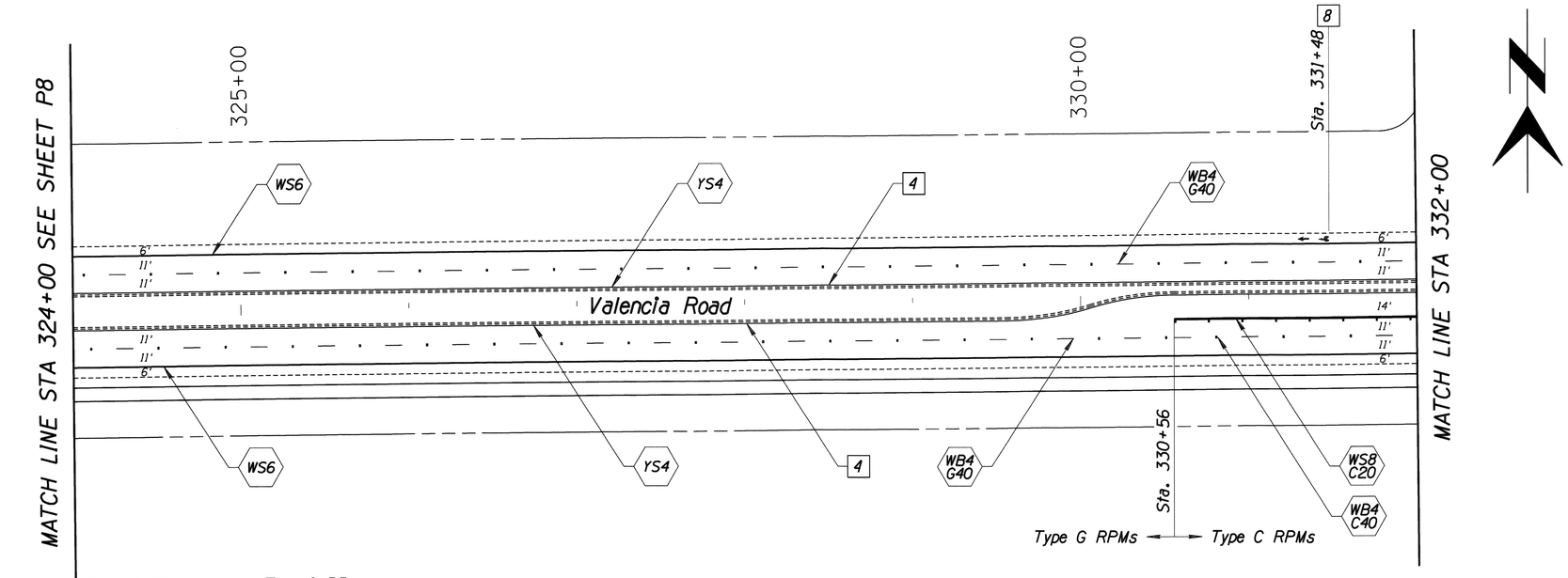
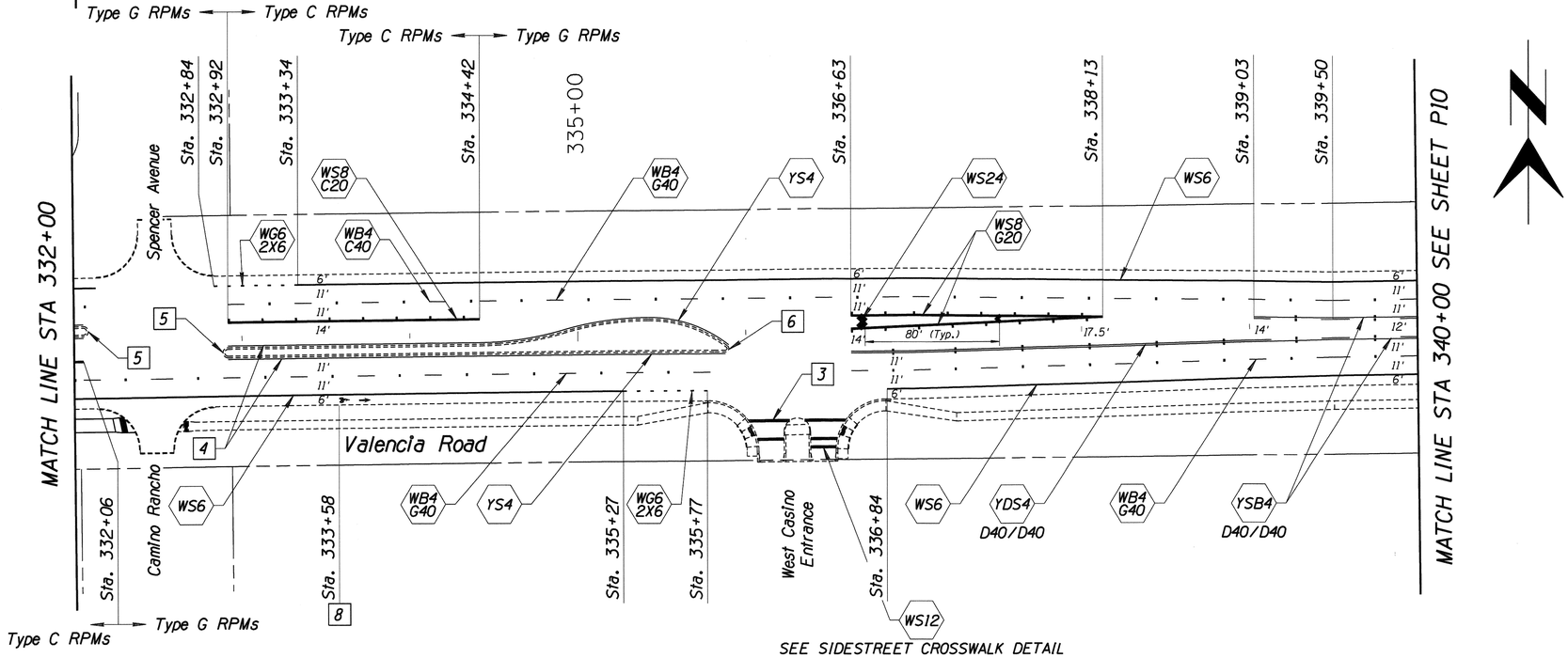
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

TRACS No. SS975 01C

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	180	281	
0000 PM PPM					





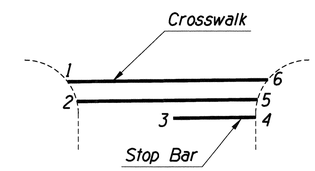
NOTES:

3 Install new standard 10' wide crosswalk per Sheet No.'s 2-8 and 5-12 of the PC/COT Pavement Marking Design Manual.

4 Install Marking at 1-ft from edge of pavement.

5 Install RPM's per Median End Treatment per Detail 1 on page P2.

6 Install RPM's per Median End Treatment per Detail 2 on page P2.



Control Point	Station	Offset
1	336+01	51' Rt
2	336+06	62' Rt
3	336+38	67' Rt
4	336+53	67' Rt
5	336+54	62' Rt
6	336+59	51' Rt

Sidestreet Crosswalk Detail

PAVEMENT MARKING

40 0 40 80

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

43315 RICARDO P. SOLIS ARIZONA, U.S.A. Date Signed 3-14-2014 Expires 9/30/2014

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333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-1423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

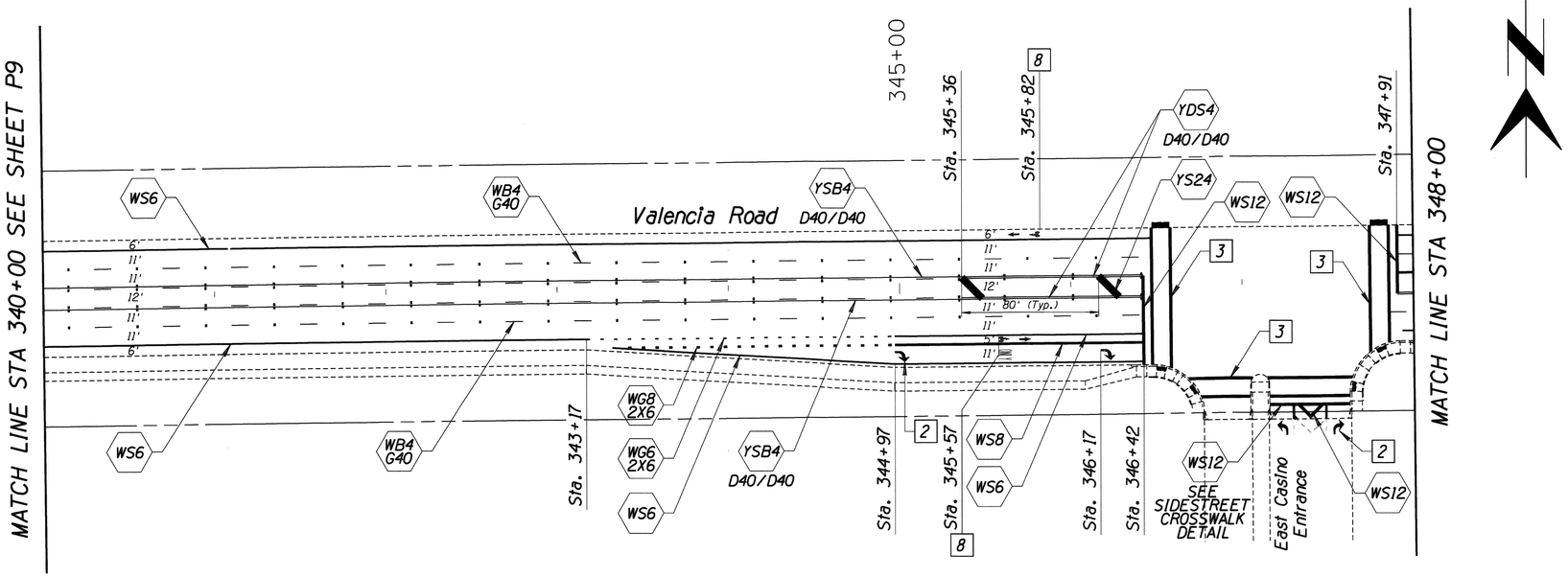
Scales: Horiz. 1" = 40' Vert. NA

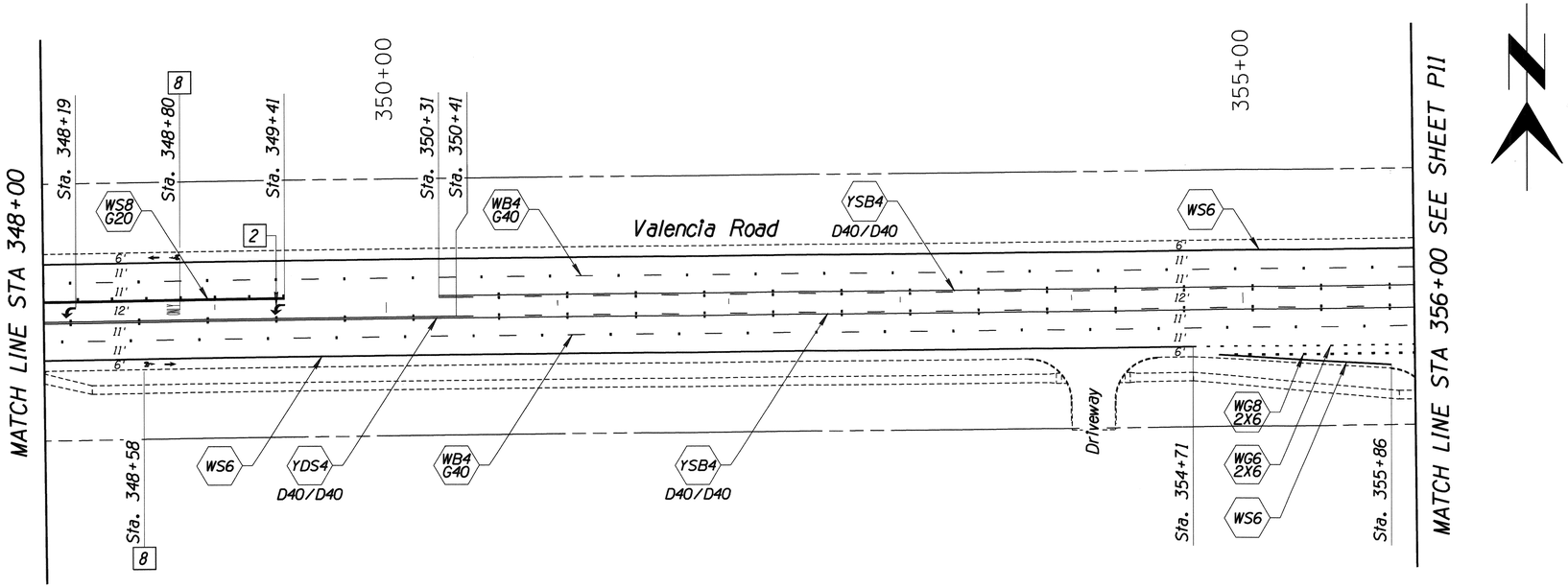
Sheet P9 of P13

TRACS No. SS975 01C

11:55:20 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005PM09.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	181	281	
0000 PM PPM					



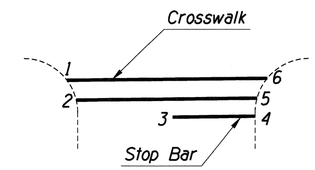


NOTES:

2 Install new pavement arrows and legends per Sheet No.'s 2-9, 2-10, and 4-12 of the PC/COT Pavement Marking Design Manual.

3 Install new standard 10' wide crosswalk per Sheet No.'s 2-8 and 5-12 of the PC/COT Pavement Marking Design Manual.

8 Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.



Control Point	Station	Offset
1	346+68	55' Rt
2	346+76	66' Rt
3	347+15	71' Rt
4	347+62	71' Rt
5	347+62	66' Rt
6	347+64	55' Rt

Sidestreet Crosswalk Detail

PAVEMENT MARKING

40 0 40 80

No.	Revision Description	Date

		Date
Designed	KWW	03/2014
Drawn	KWW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Priscilla S. Cornelio, P.E., Director

Engineer

43315 RICARDO P. SOLIS
Date Signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

Pima County Department of Transportation

Kinley-Horn and Associates, Inc.
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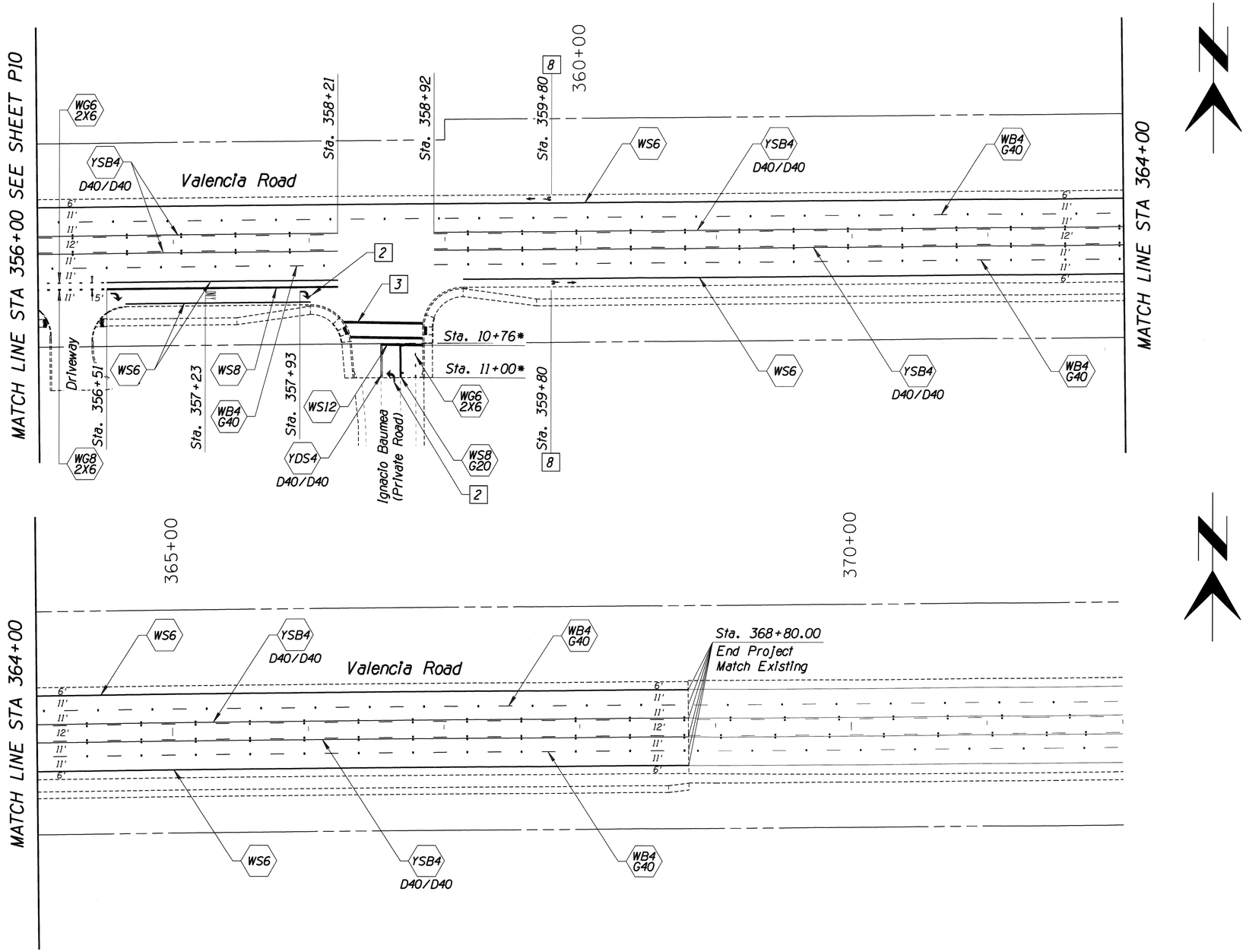
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1" = 40'	Sheet P10 of P13	Page 181 of 281
	Vert. NA		

TRACS No. SS975 01C



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	182	281	
0000 PM PPM					

NOTES:

2 Install new pavement arrows and legends per Sheet No.'s 2-9, 2-10, and 4-12 of the PC/COT Pavement Marking Design Manual.

3 Install new standard 10' wide crosswalk per Sheet No.'s 2-8 and 5-12 of the PC/COT Pavement Marking Design Manual.

8 Install new bike lane symbol per Sheet No. 6-1.1 of the PC/COT Pavement Marking Design Manual.

* Stationing along Ignacio Baumea ℄

PAVEMENT MARKING

40 0 40 80

Scales: Horiz. 1" = 40' Vert. NA

Sheet P11 of P13

Page 182 of 281

TRACS No. SS975 01C

Priscilla S. Cornello, P.E., Director

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

No.	Revision Description	Engineer	Date

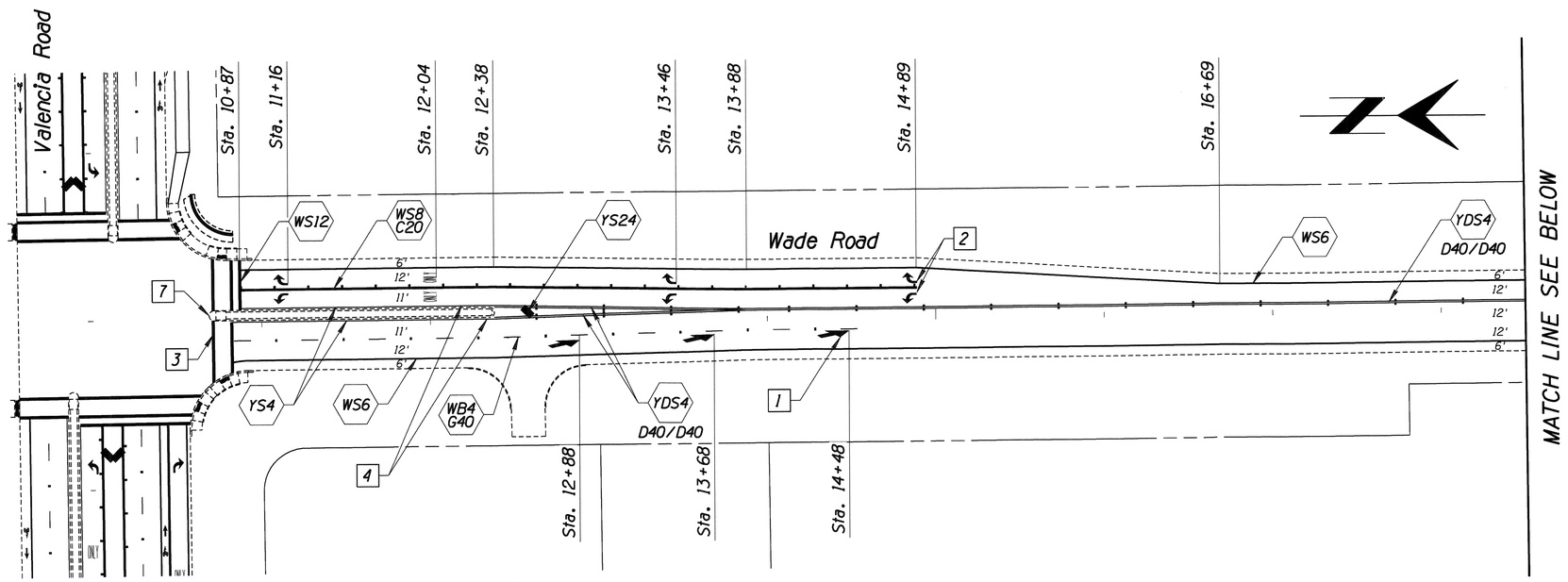
43315 RICARDO P. SOLIS ARIZONA, U.S.A. Date Signed 3-14-2014

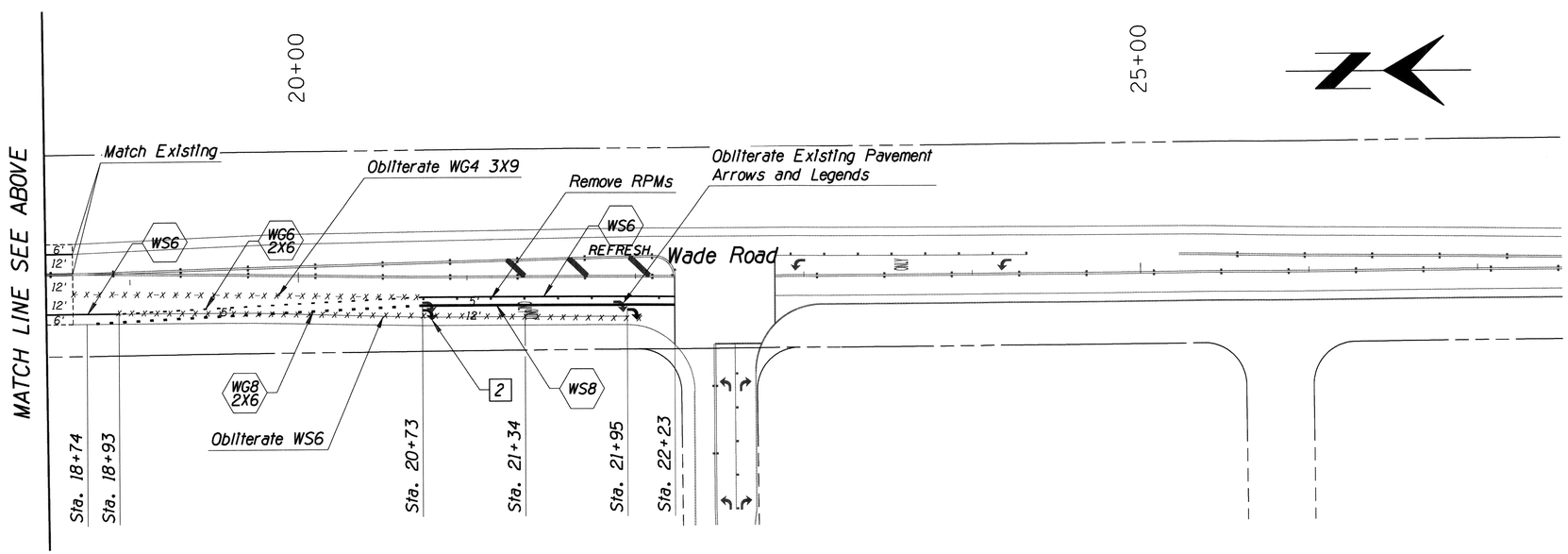
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	183	281	

0000 PM PPM

NOTES:

1. Install new merge arrows per Sheet No. 4-15 of the PC/COT Pavement Marking Design Manual.
2. Install new pavement arrows and legends per Sheet No.'s 2-9, 2-10, and 4-12 of the PC/COT Pavement Marking Design Manual.
3. Install new standard 10' wide crosswalk per Sheet No.'s 2-8 and 5-12 of the PC/COT Pavement Marking Design Manual.
4. Install Marking at 1-ft from edge of pavement.
7. Install RPM's per Median End Treatment per Detail 3 on page P2.

REMOVAL NOTE:

x x x x x RPM and Pavement Marking Removals Shall be performed per Section 701-3.09 of the Standard Specifications and paid under Item 7010001.

PAVEMENT MARKING

40 0 40 80

Scales	Horiz. 1" = 40'	Sheet P12 of P13	Page 183 of 281
	Vert. NA		

TRACS No. SS975 01C

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

	Date
Designed KMW	03/2014
Drawn KMW	03/2014
Checked RPS	03/2014
Proj. Engr. RPS	03/2014

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) 43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A.

Expires 9/30/2014

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Civil Engineers and Consultants, Inc.
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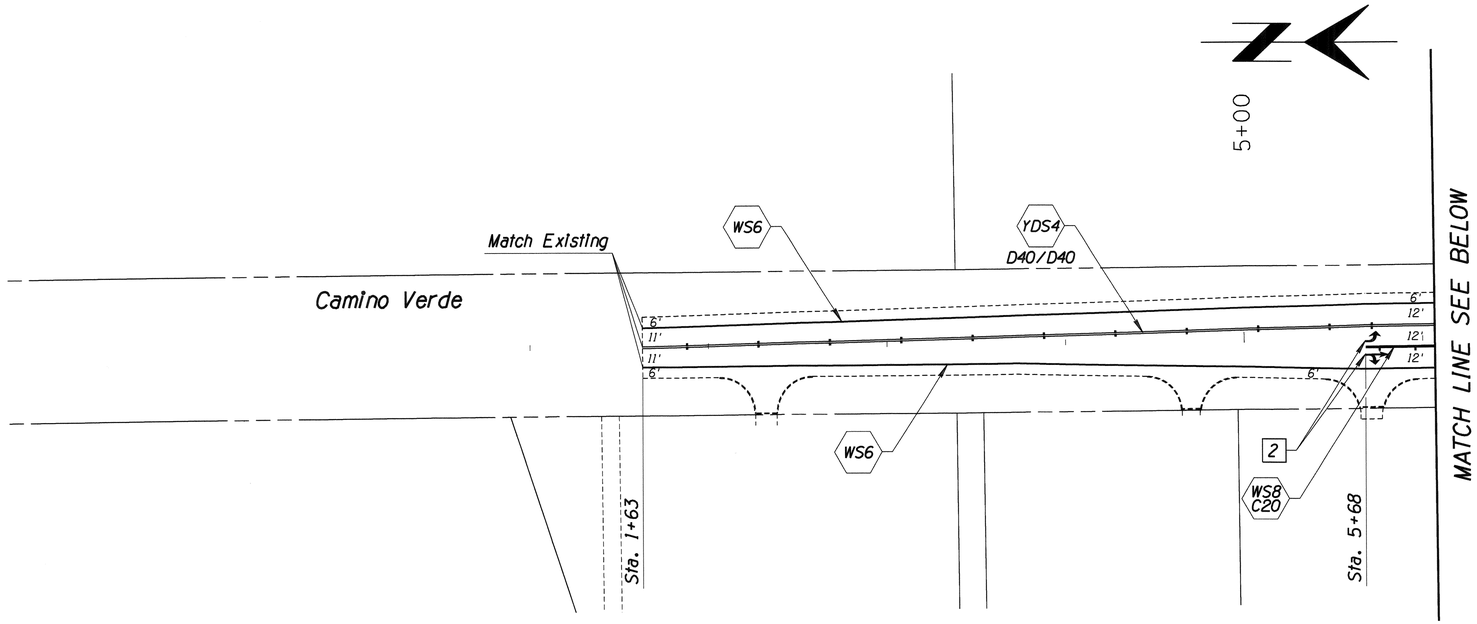
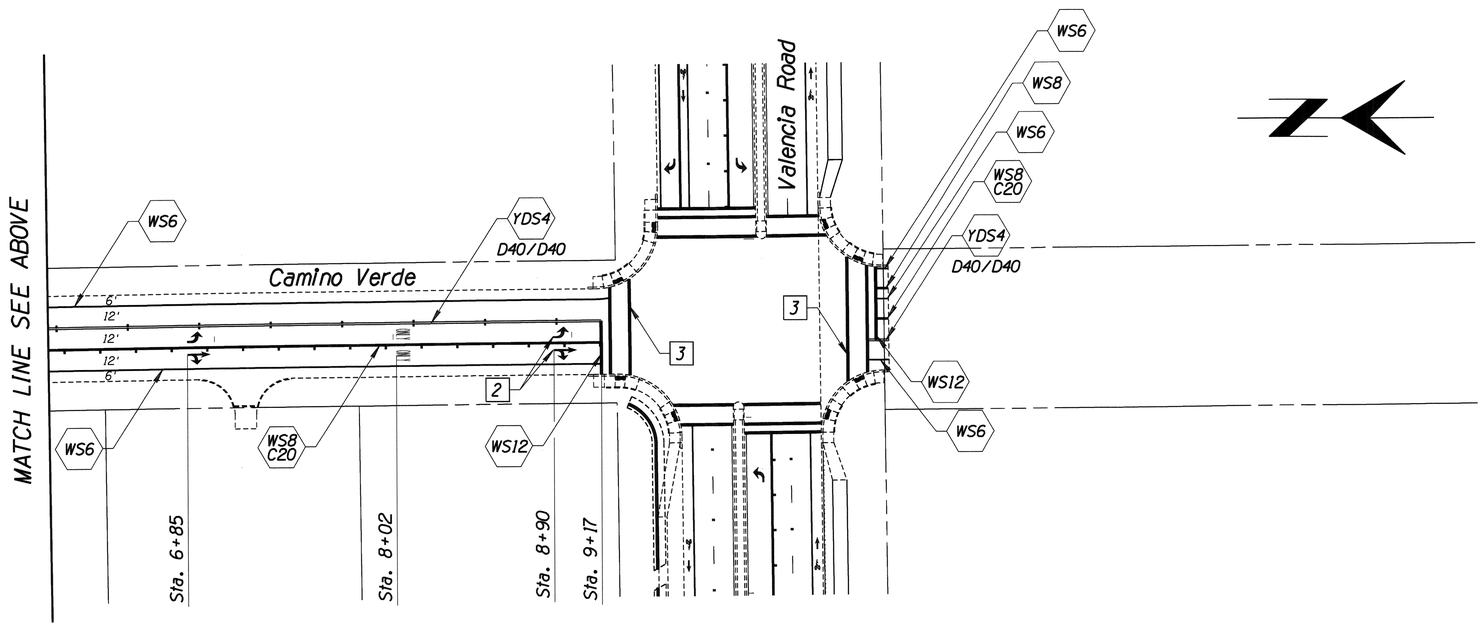
VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	184	281	

0000 PM PPM





NOTES:

2 Install new pavement arrows and legends per Sheet No.'s 2-9, 2-10, and 4-12 of the PC/COT Pavement Marking Design Manual.

3 Install new standard 10' wide crosswalk per Sheet No.'s 2-8 and 5-12 of the PC/COT Pavement Marking Design Manual.

PAVEMENT MARKING

40 0 40 80

Priscilla S. Cornelio, P.E., Director

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

No.	Revision Description	Engineer	Date

43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A.
Expires 9/30/2014

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Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1" = 40'	Sheet P13 of P13	Page 184 of 281
	Vert. NA		

TRACS No. SS975 01C

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	185	281	
		0000 PM PPM			

SIGNING GENERAL NOTES

1. ALL EQUIPMENT, MATERIALS AND CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS CONTAINED IN THE CURRENT CITY OF TUCSON / PIMA COUNTY (COT/PC) "STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS"AND THE "STANDARD DETAILS FOR PUBLIC IMPROVEMENTS,"THE SPECIAL PROVISIONS AND THE PLANS.

2. ALL SIGNS SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE LATEST EDITION OF THE PIMA COUNTY/CITY OF TUCSON TRAFFIC SIGNING DESIGN MANUAL, THESE PLANS, AND THE SPECIAL PROVISIONS.

3. SIGNS MAY BE MODIFIED AND LOCATIONS ADJUSTED TO FIT CONDITIONS AT THE DISCRETION OF THE TRAFFIC ENGINEER.

4. THE DESIGN SPEED FOR VALENCIA ROAD, WADE ROAD AND CAMINO VERDE IS 50 MPH. THE POSTED SPEED LIMIT IS 45 MPH. SIGN PLACEMENT SHALL BE BASED ON THE POSTED SPEED LIMIT.

5. POST LENGTHS INDICATED ON SIGN SUMMARY SHEETS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ACTUAL POST LENGTHS.

6. ALL PERFORATED POSTS SHALL BE INSTALLED IN A CONCRETE FOUNDATION, UNLESS OTHERWISE DIRECTED BY THE TRAFFIC ENGINEER.

7. ALL SIGN STATION LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY ACTUAL SIGN LOCATIONS WITH THE TRAFFIC ENGINEER PRIOR TO THE INSTALLATION OF ALL SIGNS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH BLUE STAKE, 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 ONE YEAR WARRANTEES BEGIN).

9. ALL OVERHEAD MOUNTED SIGNS SHALL BE DIAMOND GRADE SHEETING, TYPE XI. ALL SCHOOL SIGNS SHALL BE FLOURSCENT YELLOW/GREEN, DIAMOND GRADE SHEETING, TYPE XI. ALL OTHER SIGNS SHALL BE HIGH INTENSITY PRISMATIC SHEETING, TYPE IV. ALL GROUND MOUNTED SIGNS SHALL HAVE AN ANTI GRAFFITI COATING APPLIED TO SIGN FACE, 3M #1160 FILM OR EQUIVALENT.

10. ALL NEW SIGNS SHALL HAVE 0.080 GAUGE, RADIUS CORNER, ALUMINUM BACKING UNLESS OTHERWISE NOTED.

11. PRIOR TO DISTURBING ANY TRAFFIC SIGNS, A SIGN CONDITION INVENTORY OF ALL EXISTING SIGNING SHALL BE CONDUCTED BY THE CONTRACTOR AND PROVIDED TO THE SIGN SHOP SUPERVISOR (520-740-2631). INVENTORY SHALL INDICATE CURRENT SIGN LOCATION AND CONDITION, INCLUDING ANY EXISTING DAMAGE OR DEFICIENCIES.

12. 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 FOR DAMAGE TO STOCKPILE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

13. ALL SIGNS AND POSTS NOT BEING RE-USED ON THE PROJECT SHALL BE DISMANTLED, STACKED, AND DELIVERED TO THE OWNER (CITY OR COUNTY) 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 WORKING DAYS PRIOR TO DELIVERY. PIMA COUNTY SIGN SHOP 1313 S. MISSION ROAD (520-740-2631). NO FRIDAY DELIVERIES.

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

REGISTERED PROFESSIONAL ENGINEER (CIVIL) 43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A.
Expires 9/30/2014

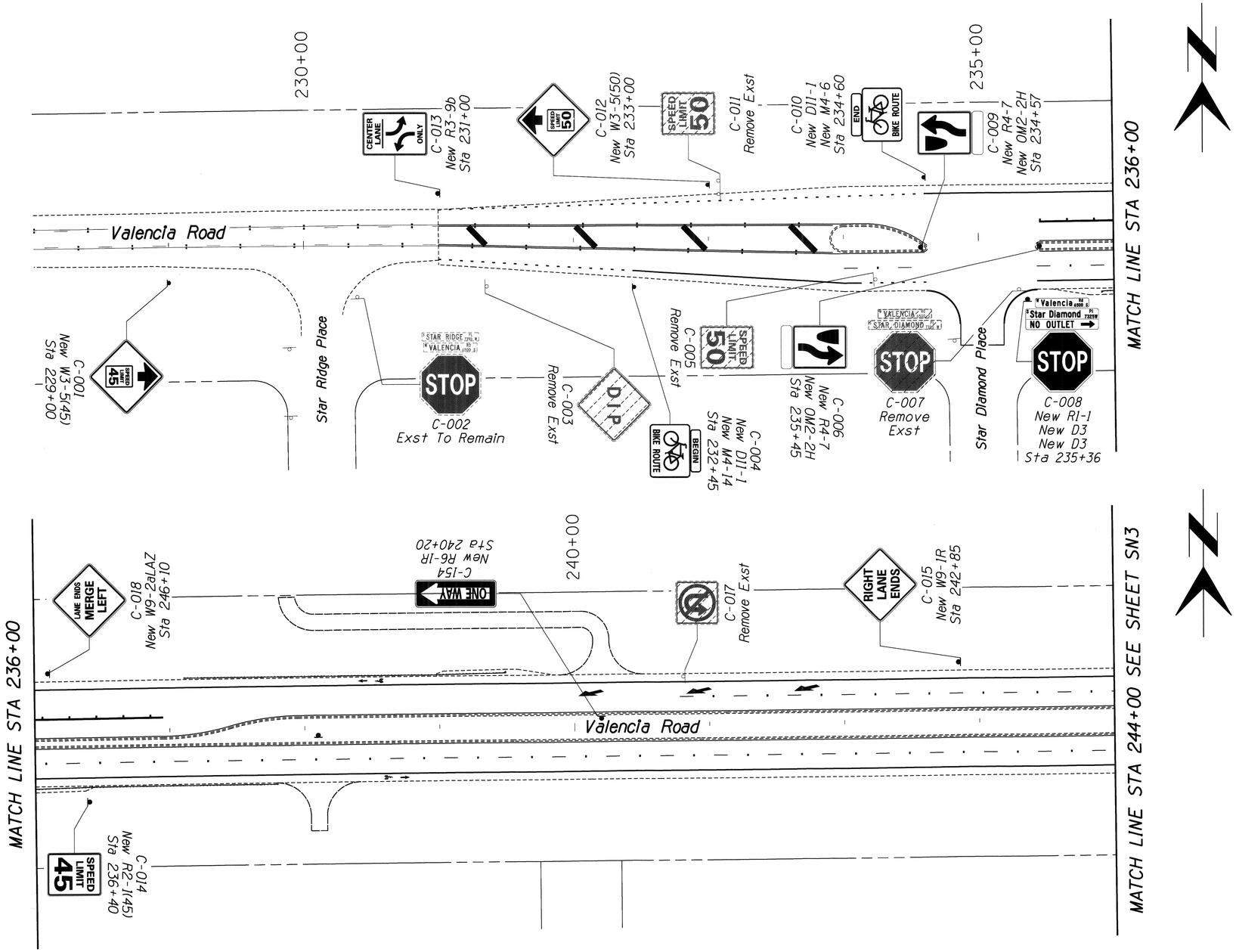
Pima County Department of Transportation

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9991 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. NA	Sheet SN1 of SN26	Page 185 of 281
	Vert. NA		

TRACS No. SS975 01C



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	186	281	
		0000 PM PPM			

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	KWW	03/2014
Drawn	KWW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Date

No.	Revision Description	Engineer	Date

43315 RICARDO P. SOLIS ARIZONA, U.S.A. 3-14-2014

Expires 9/30/2014

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

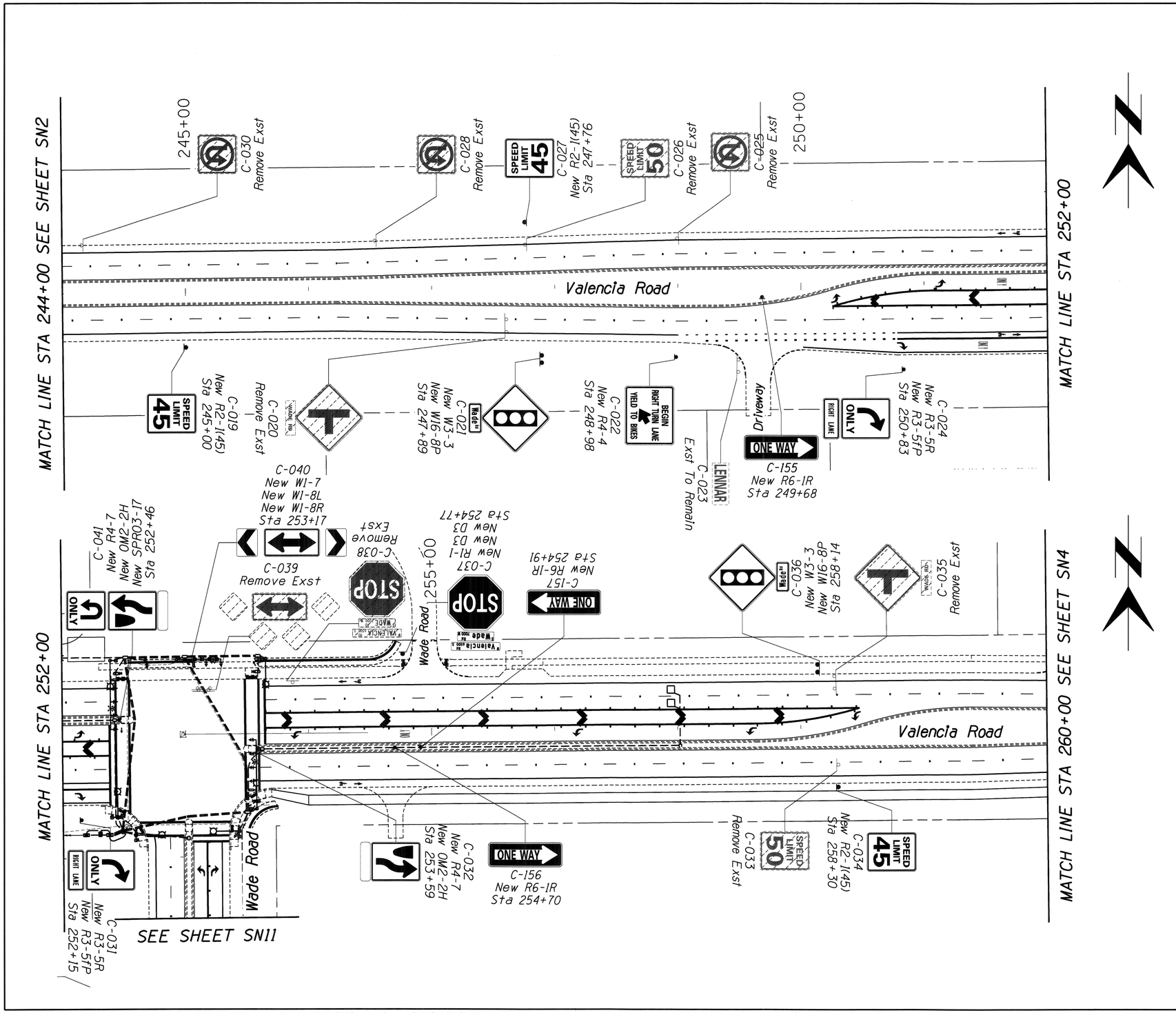
SIGNING

40 0 40 80

Scales	Horiz. 1"=40' Vert. NA	Sheet SN2 of SN26	Page 186 of 281

TRACS No. SS975 01C

11:55:32 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN02.DGN



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	187	281	
		0000 PM PPM			

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS — ARIZONA, U.S.A. — Date Signed 3-14-2014 — Expires 9/30/2014

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1"=40' Vert. NA	Sheet SN3 of SN26	Page 187 of 281

TRACS No. SS975 01C

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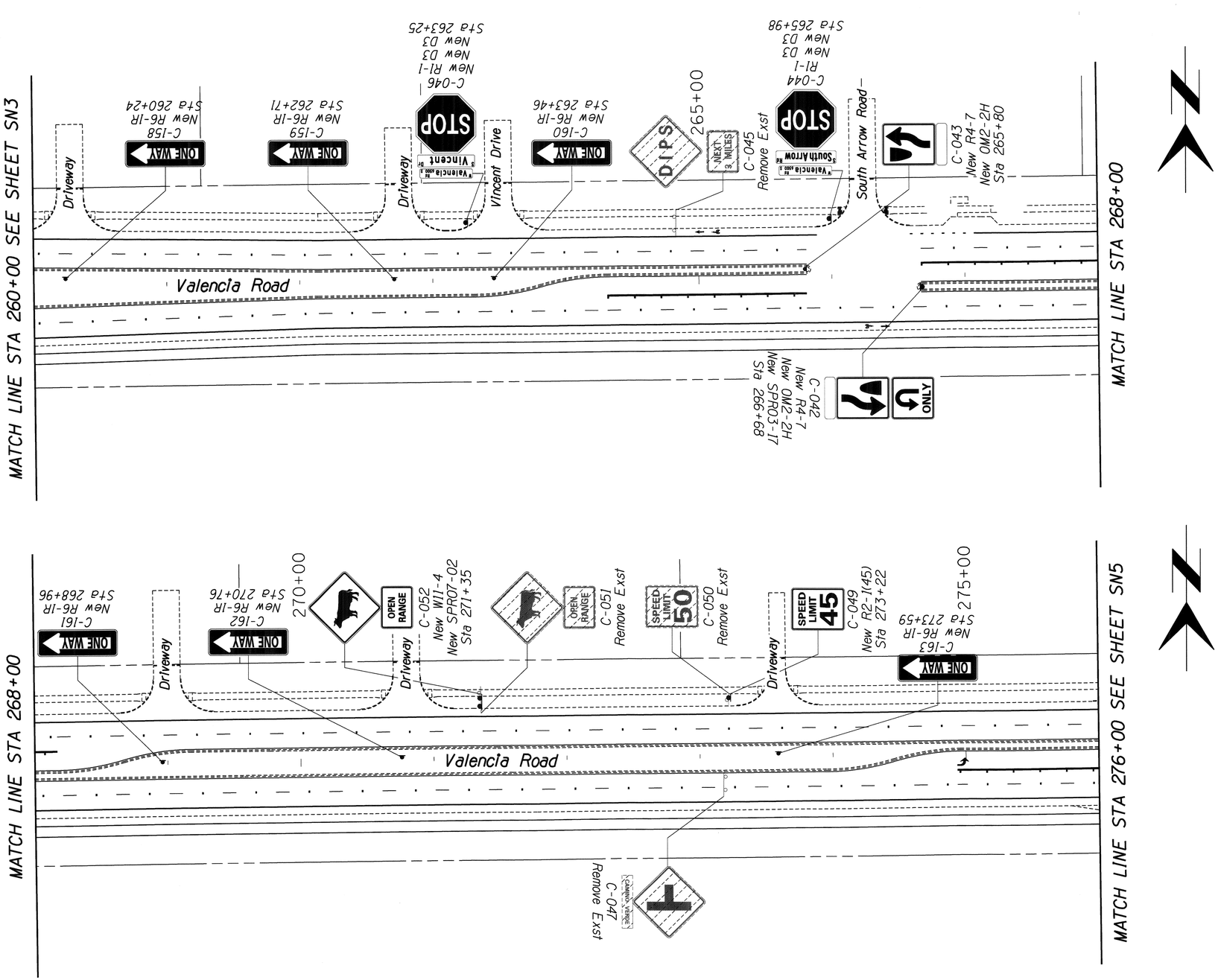

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	188	281	
0000 PM PPM					

Priscilla S. Cornelio, P.E., Director

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

No.	Revision Description	Engineer	Date

43315 RICARDO P. SOLIS
Date Signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

Pima County Department of Transportation

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333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-1423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

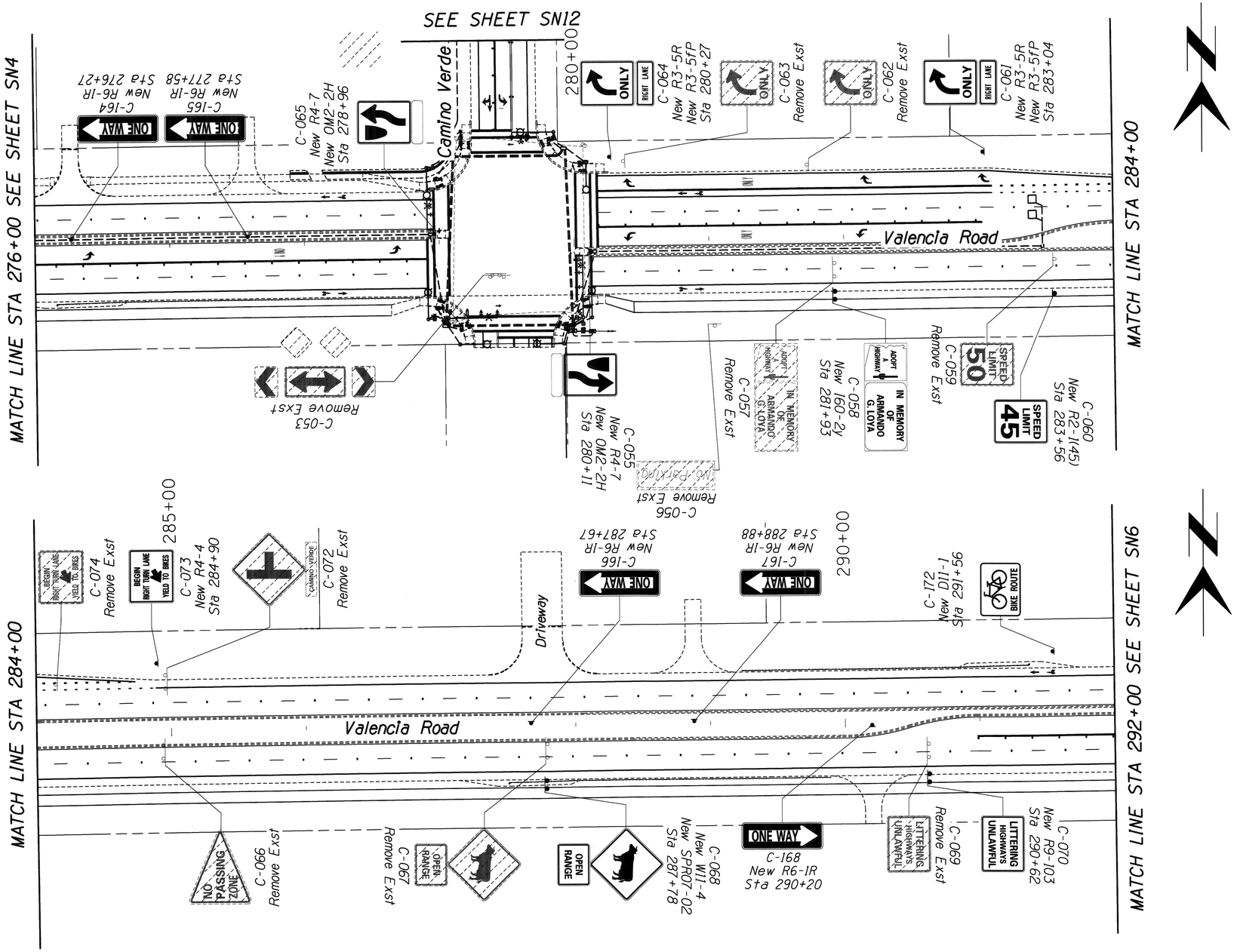
SIGNING

40 0 40 80

Scales	Horiz. 1"=40' Vert. NA	Sheet SN4 of SN26	Page 188 of 281

TRACS No. SS975 01C

11:55:36 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN04.DGN



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	189	281	

0000 PM PPM

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

43315 RICARDO P. SOLIS
ARIZONA, U.S.A.
3-14-2014
Expires 9/30/2014

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333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

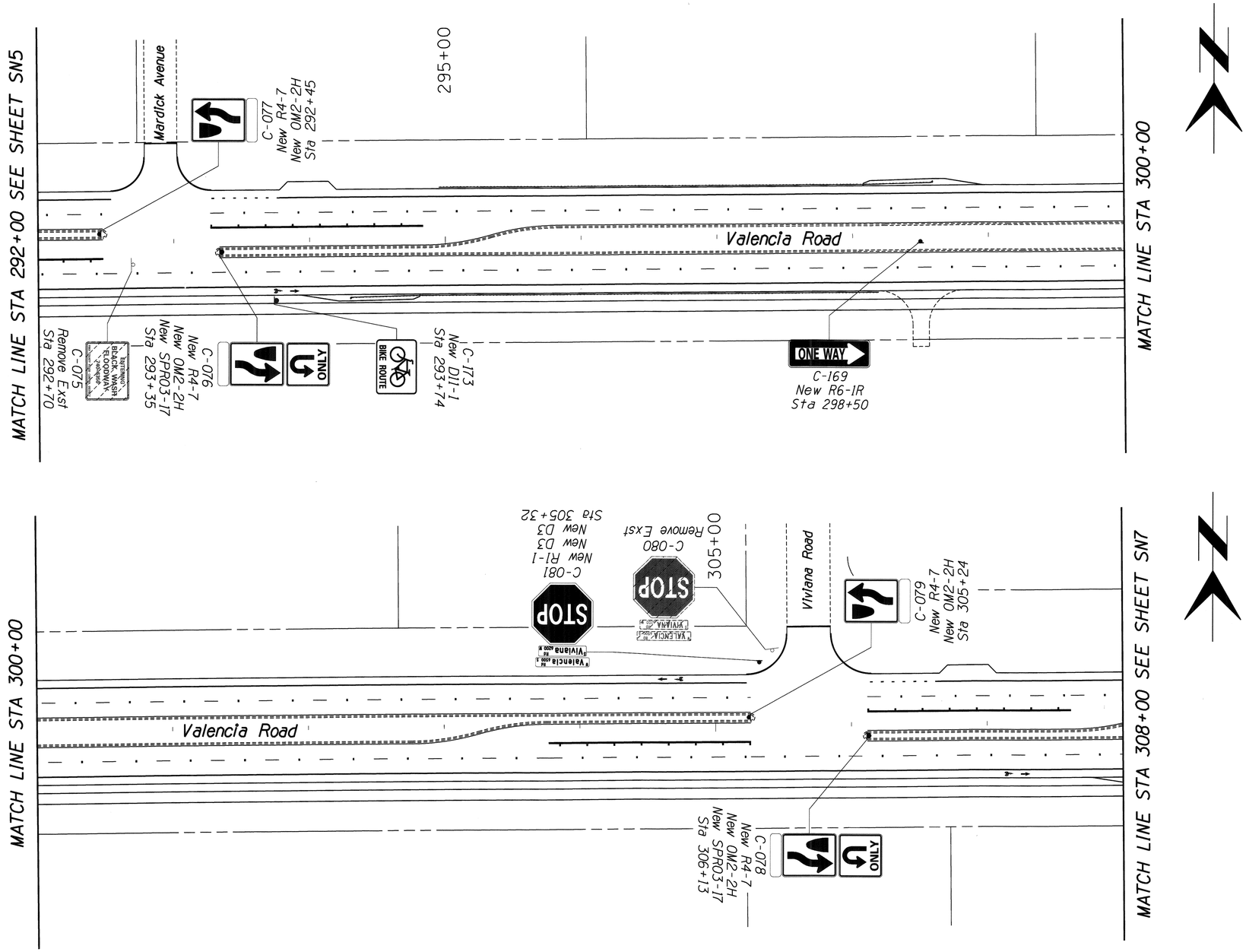
SIGNING

40 0 40 80

Scales	Horiz. 1"=40' Vert. NA	Sheet SN5 of SN26	Page 189 of 281

TRACS No. SS975 01C

11:55:38 AM 3/14/2014 ALLEN. HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN05.DGN



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	190	281	
		0000 PM PPM			

SIGNING

40 0 40 80

Scales: Horiz. 1" = 40' Vert. NA

Sheet SN6 of SN26

TRACS No. SS975 01C

No.	Revision Description	Engineer	Date

Priscilla S. Cornello, P.E., Director

Pima County Department of Transportation

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS ARIZONA, U.S.A.

Expires 9/30/2014

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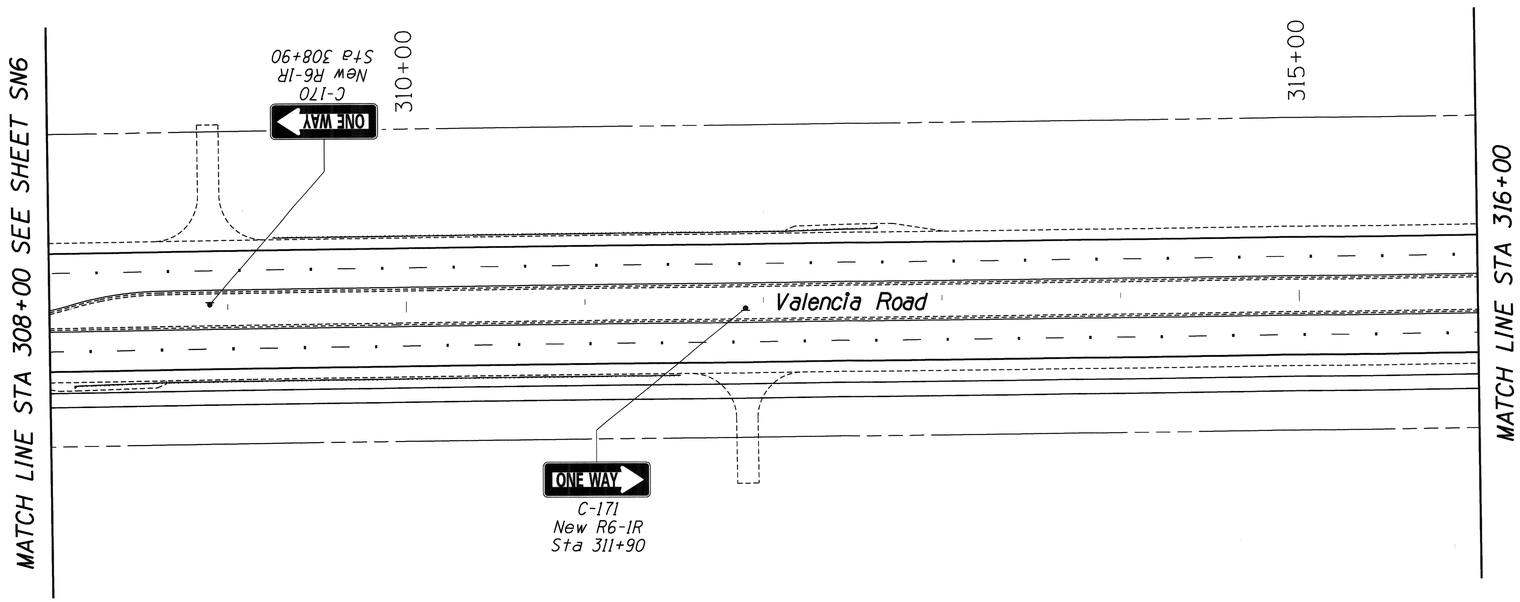
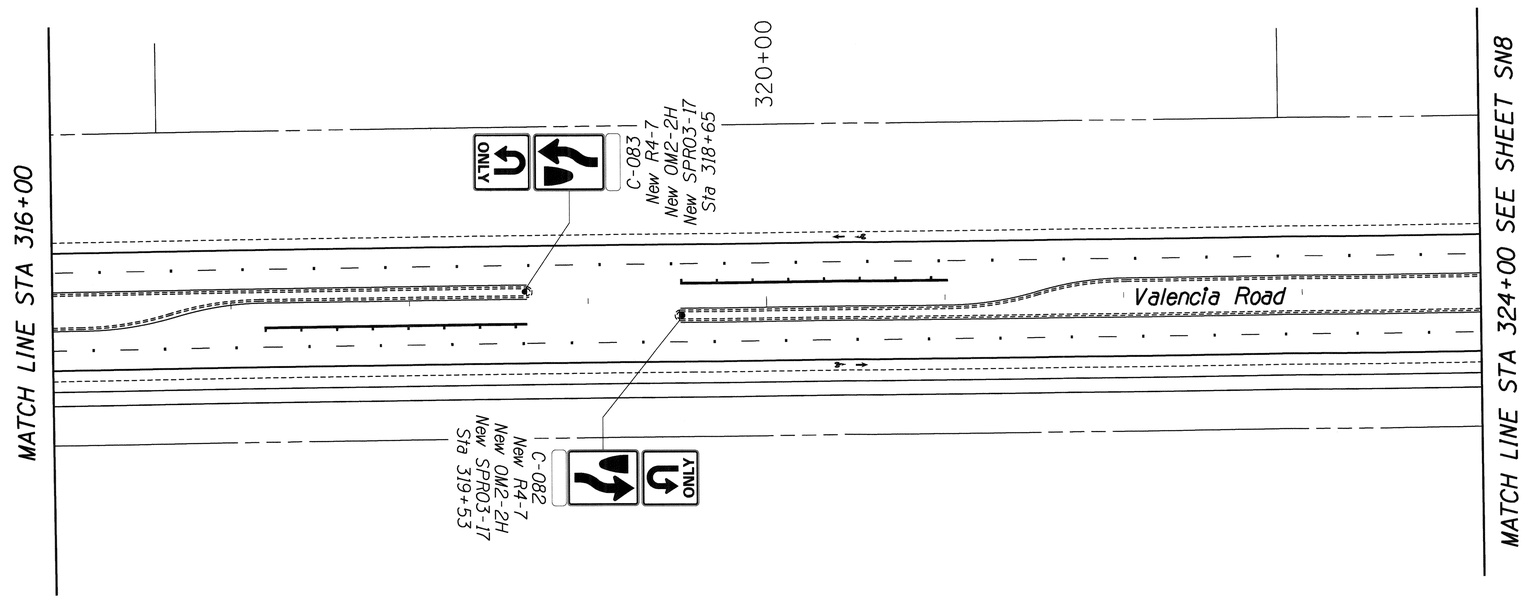
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW





SIGNING

40 0 40 80

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	191	281	

0000 PM PPM

Priscilla S. Cornelio, P.E., Director

Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

No.	Revision Description	Engineer	Date

43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A. Expires 9/30/2014

Pima County Department of Transportation

Kimley-Horn and Associates, Inc.
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333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

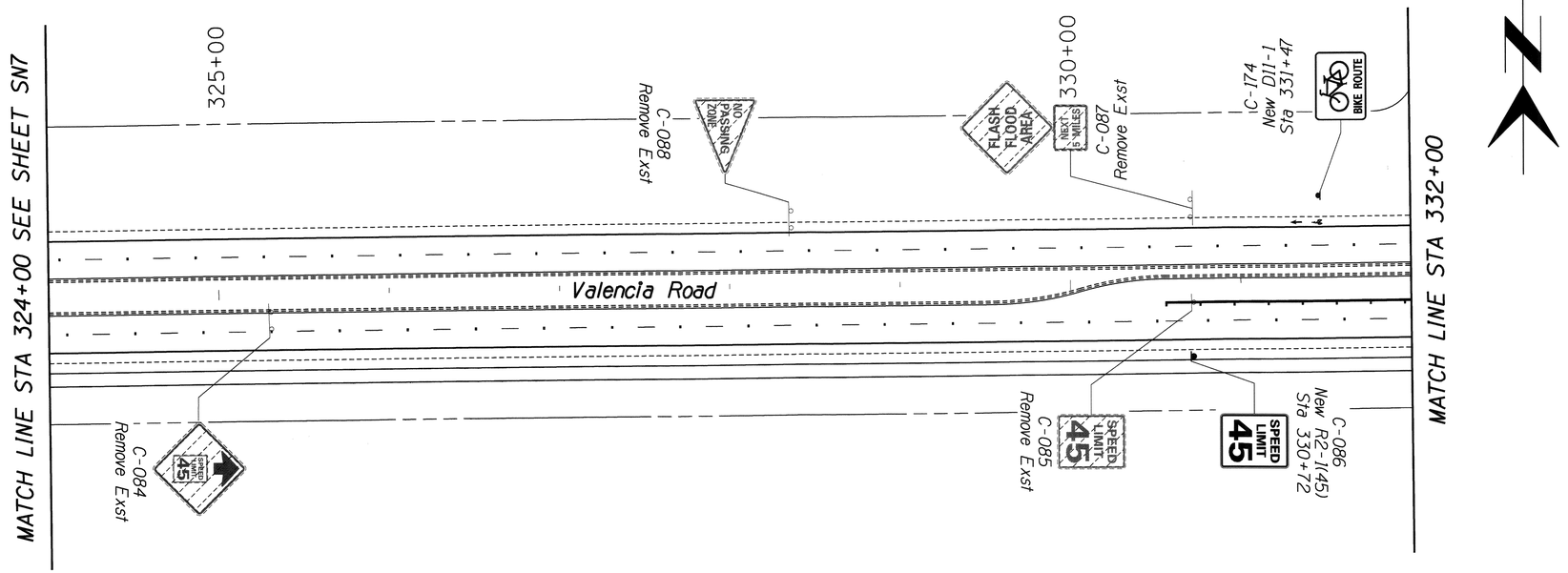
VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

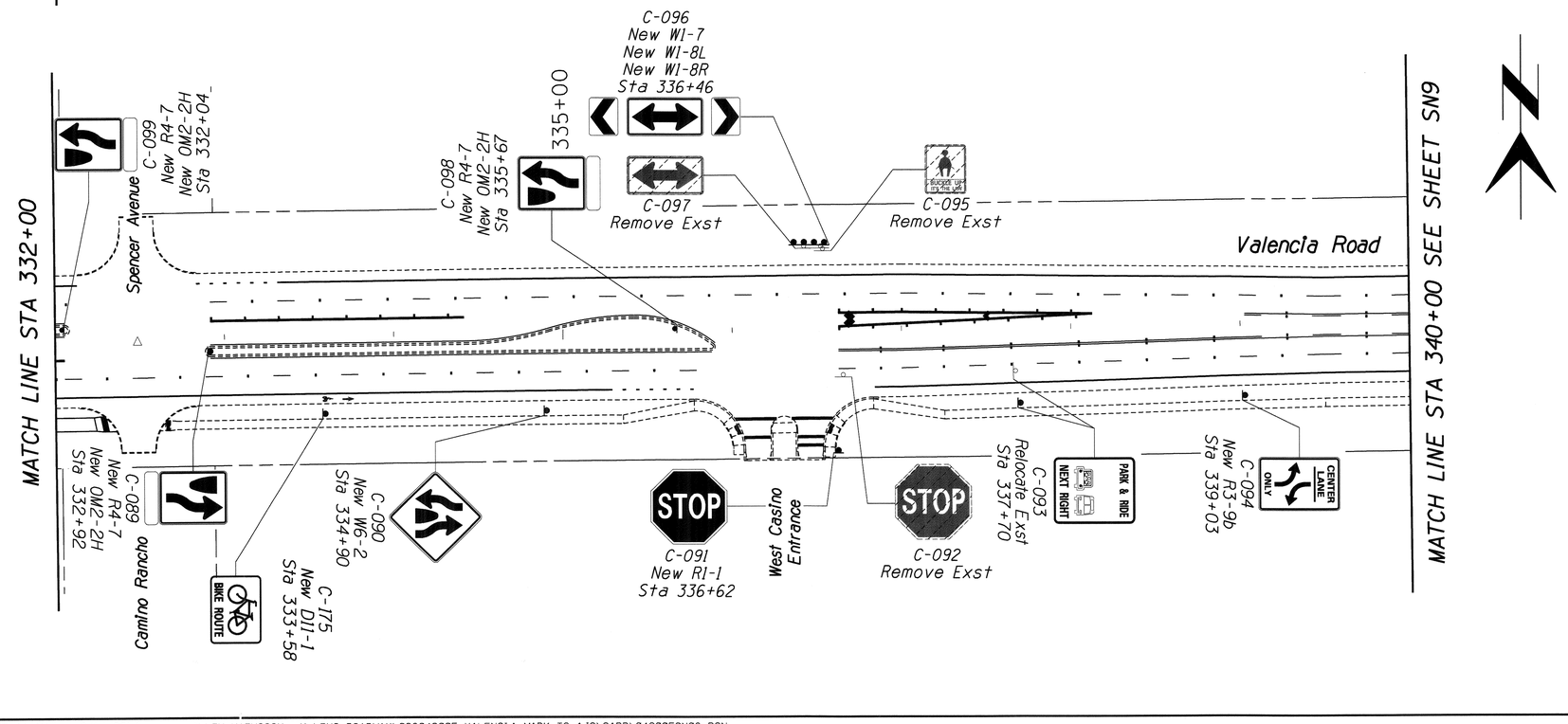
Scales	Horiz. 1"=40' Vert. NA	Sheet SN7 of SN26	Page 191 of 281

TRACS No. SS975 01C

11:55:42 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN07.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	192	281	
		0000 PM PPM			





SIGNING

40 0 40 80

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	APS	03/2014
Proj. Engr.	APS	03/2014

43315 RICARDO P. SOLIS ARIZONA, U.S.A. Date signed 3-17-2014

Expires 9/30/2014

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

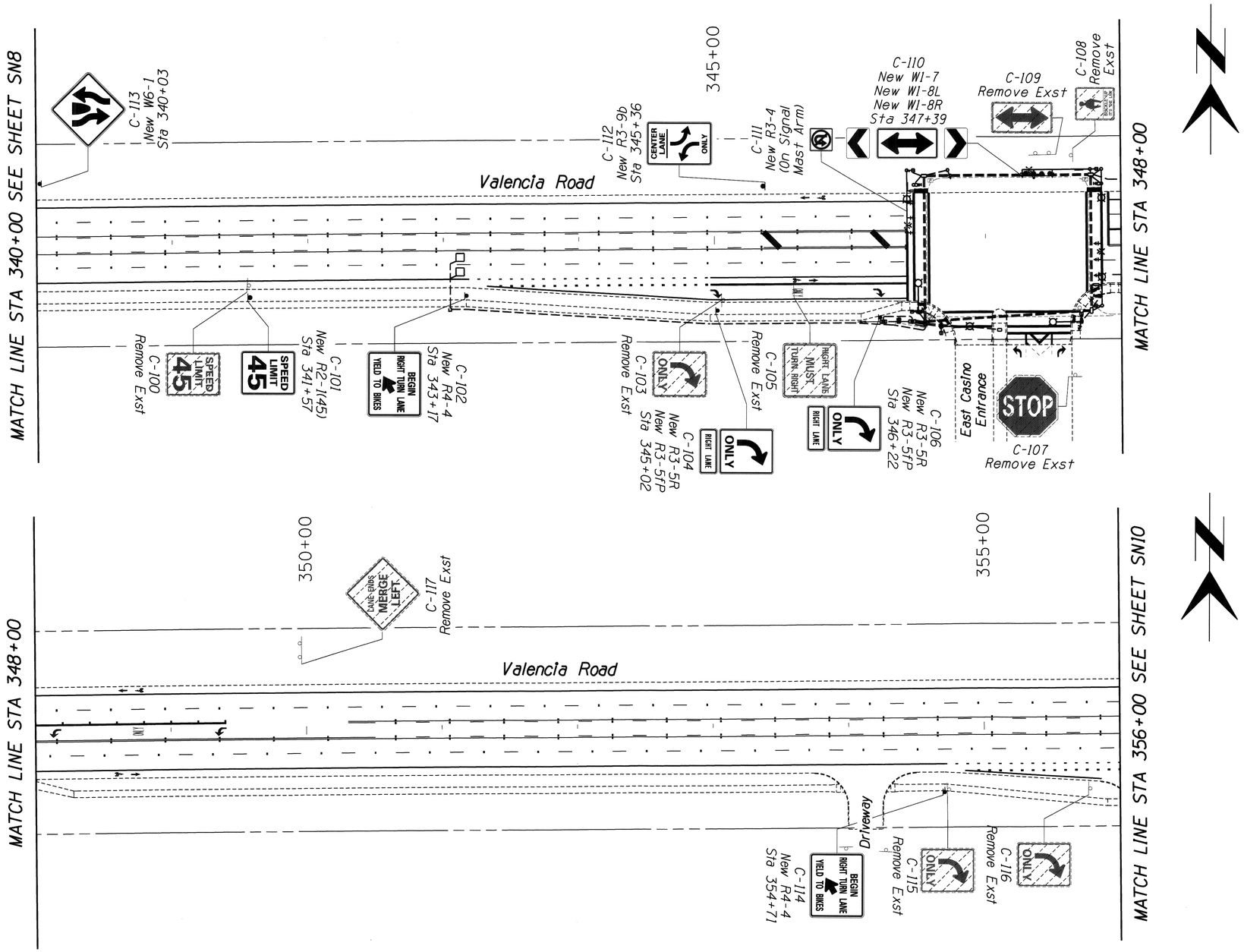
Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1"=40' Vert. NA	Sheet SN8 of SN26	Page 192 of 281

TRACS No. SS975 01C

11:55:44 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN08.DGN



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	193	281	
0000 PM PPM					

SIGNING

40 0 40 80

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS
Date Signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (520) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

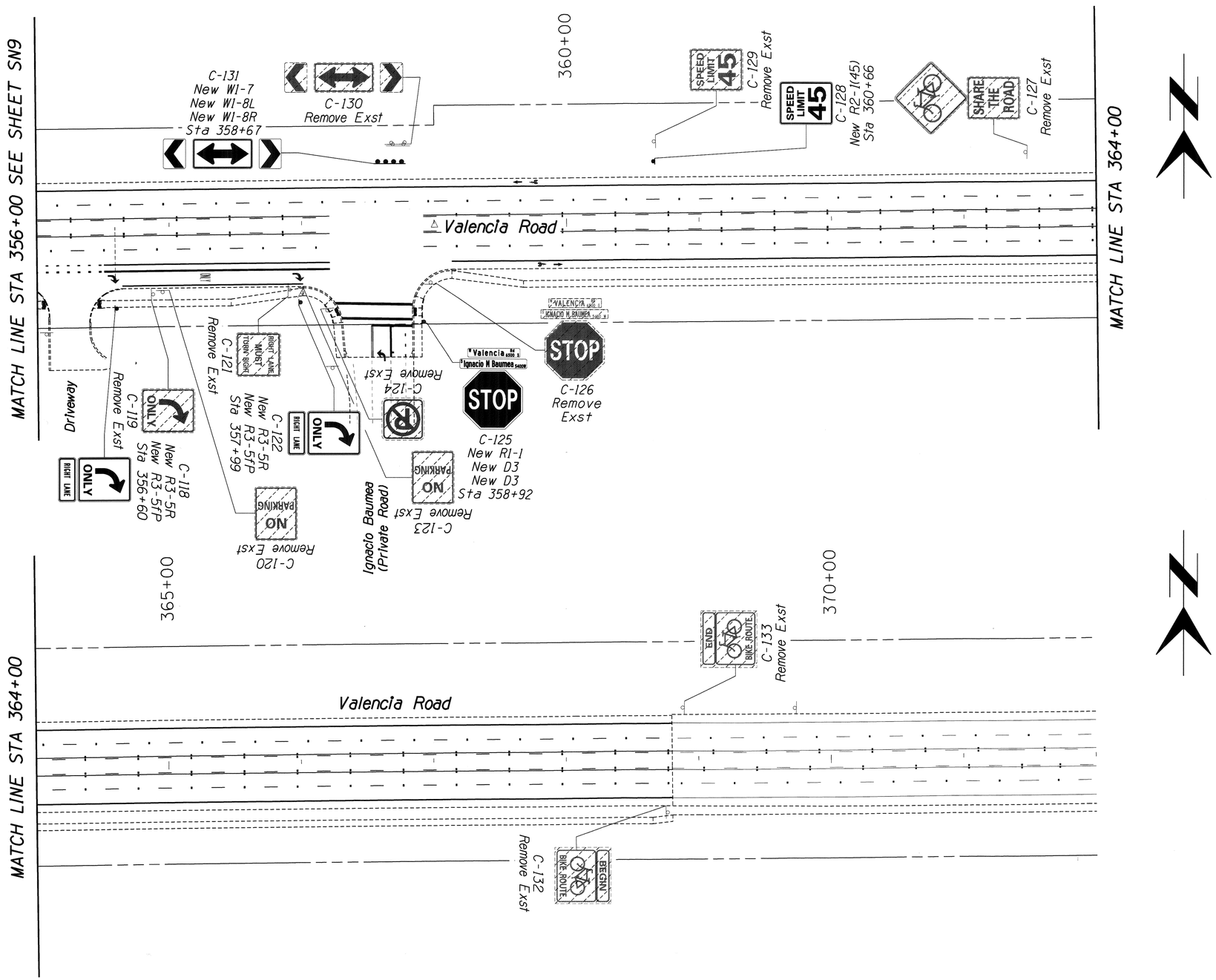
Scales	Horiz. 1" = 40' Vert. NA	Sheet SN9 of SN26	Page 193 of 281

TRACS No. SS975 01C

11:55:47 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN09.DGN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	194	281	

0000 PM PPM



SIGNING

40 0 40 80

Scales: Horiz. 1" = 40' Vert. NA

Sheet SN10 of SN26

TRACS No. SS975 01C

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS REGISTERED PROFESSIONAL ENGINEER ARIZONA, U.S.A. DATE SIGNED 3-14-2014

Expires 9/30/2014

Kimley-Horn and Associates, Inc.
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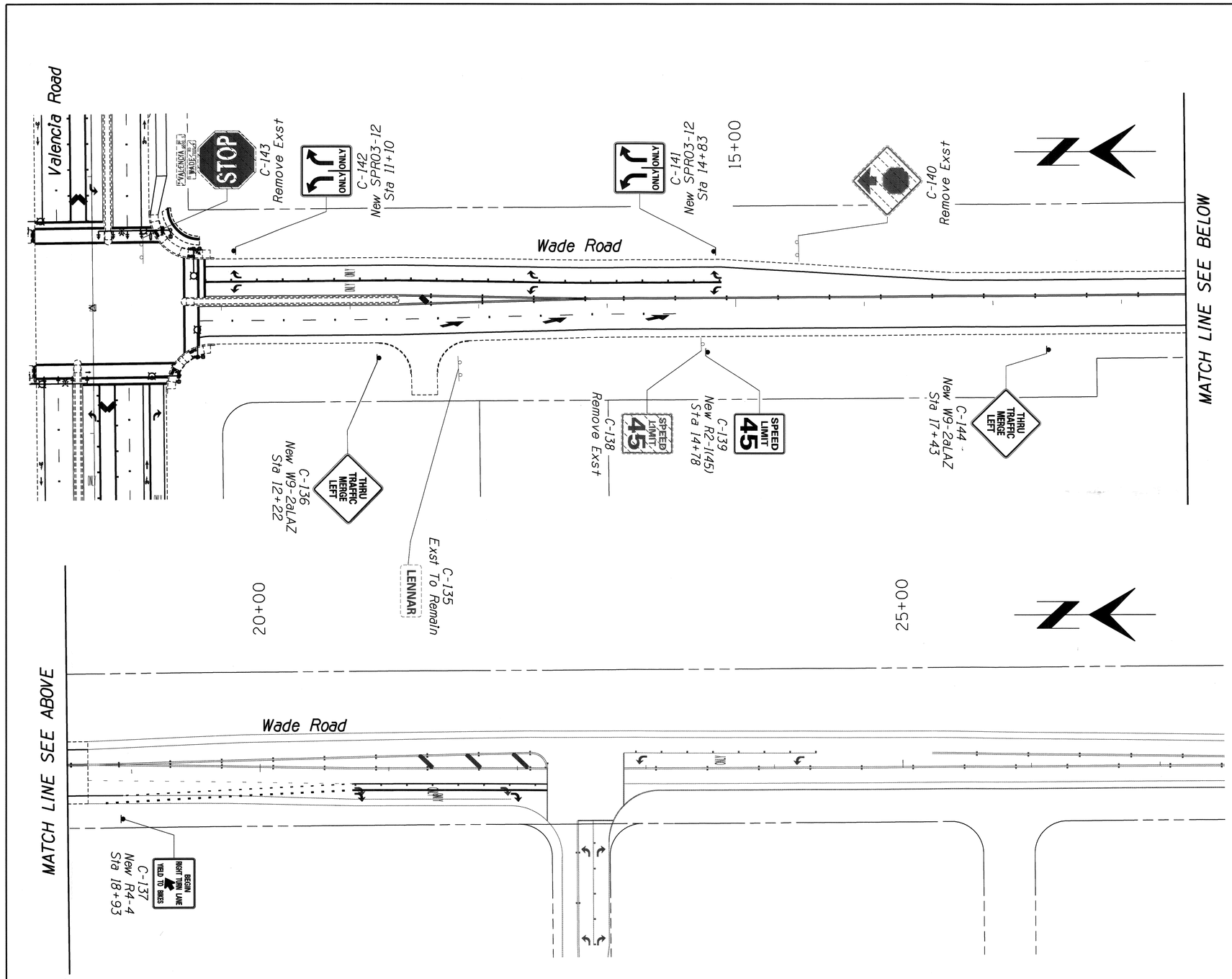
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	195	281	
		0000 PM PPM			



SIGNING

40 0 40 80

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

RICARDO P. SOLIS 43315 ARIZONA U.S.A. Date Signed 3-14-2014

Expires 9/30/2014

Pima County Department of Transportation

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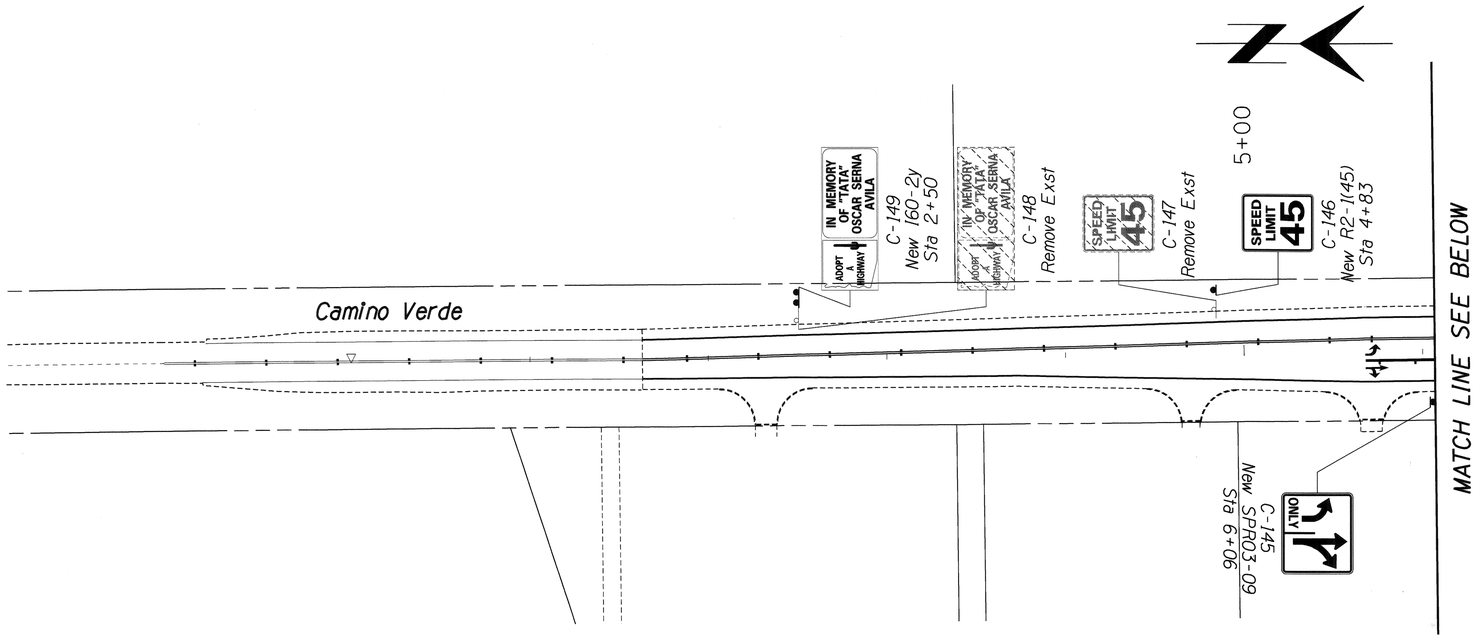
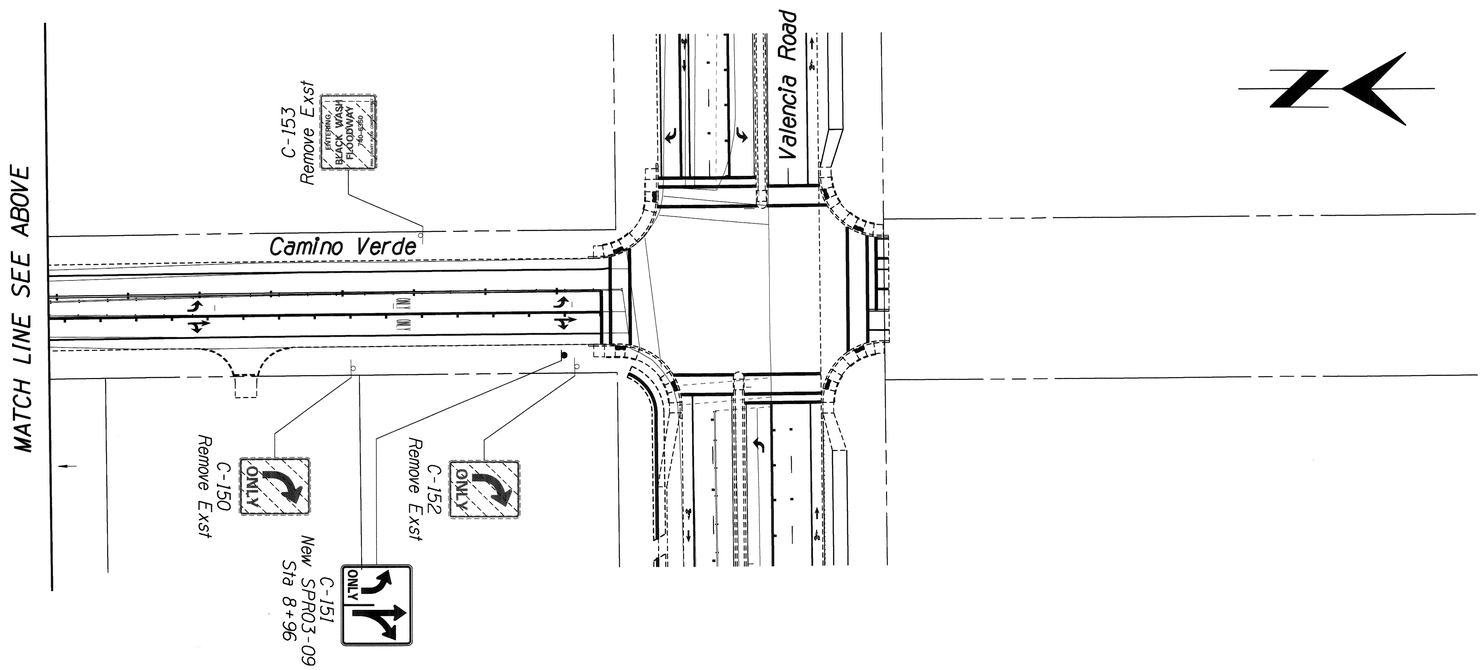
VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. 1"=40' Vert. NA	Sheet SN11 of SN26	Page 195 of 281

TRACS No. SS975 01C

11:55:51 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN11.DGN





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	196	281	
		0000 PM PPM			

SIGNING

40 0 40 80

Scales: Horiz. 1" = 40'; Vert. NA

Sheet SN12 of SN26

Page 196 of 281

TRACS No. SS975 01C

Priscilla S. Cornello, P.E., Director

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

RICARDO P. SOLIS 43315 ARIZONA U.S.A. Date Signed 3-14-2014

Expires 9/30/2014

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Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN2	C-001	W3-5(45)	X						12	7	YL	Speed Limit Change Ahead	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN2	C-002	R1-1						X				STOP															
SN2	+	D3						X				VALENCIA RD															
SN2	+	D3						X				STAR RIDGE PL															
SN2	C-003	W8-2					X					DIP						6070210									
SN2	C-004	D11-1	X						12	7	GR	(Bike Symbol) BIKE ROUTE	30	24	5.0	F-DA	IV	6080016	1	2S	11						
SN2	+	M4-14	X								GR	BEGIN	24	6	1.0	RWM	IV	6080016									
SN2	C-005	R2-1(50)					X					SPEED LIMIT 50						6070210									
SN2	C-006	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN2	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN2	C-007	R1-1					X					STOP						6070210									
SN2	+	D3					X					VALENCIA RD						6070210									
SN2	+	D3					X					STAR DIAMOND PL						6070210									
SN2	C-008	R1-1	X						15	7	RD	STOP	36	36	9.0	RWM	IV	6080016	1	2S	13						REVERSE NO OUTLET
SN2	+	D3	X								GR	Valencia Rd	36	6	1.5	F-DA	IV	6080016									DIRECTION ON BACK
SN2	+	D3	X								GR	Star Diamond Pl / NO OUTLET	42	12	3.5	F-DA	IV	6080016									OF SIGN
SN2	C-009	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN2	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN2	C-010	D11-1	X						12	7	GR	(Bike Symbol) BIKE ROUTE	30	24	5.0	F-DA	IV	6080016	1	2S	11						
SN2	+	M4-6	X								WH	END	24	6	1.0	RWM	IV	6080016									
SN2	C-011	R2-1(50)					X					SPEED LIMIT 50						6070210									
SN2	C-012	W3-5(50)	X						12	7	YL	Speed Limit Change Ahead	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN2	C-013	R3-9b	X						12	7	WH	CENTER LANE Two-Way Turn ONLY	24	36	6.0	RWM	IV	6080016	1	2S	12						

NOTES:

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NOTES (CONT):

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U: Perforated U-channel post

STRINGER TYPES:

P: Square tube post

Priscilla S. Cornelio, P.E., Director
Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

Registered Professional Engineer (Civil) 43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A.
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
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VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. NA	Sheet SN13 of SN26	Page 197 of 281
	Vert. NA		

TRACS No. SS975 01C

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN2	C-014	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN2	C-015	W9-1R	X						12	7	YL	RIGHT LANE ENDS	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN2	C-016											NOT USED															
SN2	C-017	R3-4					X					No U-Turn Symbol						6070210									
SN2	C-018	W9-2aLAZ	X						12	7	YL	THRU TRAFFIC MERGE LEFT	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN3	C-019	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN3	C-020	W2-2R					X					Right Side Road Symbol						6070210									
SN3	+	W16-8P					X					WADE RD						6070210									
SN3	C-021	W3-3	X						12	7	YL	Signal Ahead Symbol	30	30	6.3	RWM	IV	6080016	2	2S	24						
SN3	+	W16-8P	X								YL	Wade Rd	18	8	1.0	RWM	IV	6080016									
SN3	C-022	R4-4	X						12	7	WH	BEGIN RIGHT TURN LANE Arrow / YIELD TO BIKES	36	30	7.5	RWM	IV	6080016	1	2S	11						
SN3	C-023	SPECIAL						X																			
SN3	C-024	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN3	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									
SN3	C-025	R3-4					X					No U-Turn Symbol						6070210									
SN3	C-026	R2-1(50)					X					SPEED LIMIT 50						6070210									
SN3	C-027	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN3	C-028	R3-4					X					No U-Turn Symbol						6070210									
SN3	C-029											NOT USED															

NOTES:

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NOTES (CONT):

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U: Perforated U-channel post

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P: Square tube post

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS ARIZONA, U.S.A. Date Signed 3-14-2014

Expires 9/30/2014

Kimley-Horn and Associates, Inc.
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333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales: Horiz. NA; Vert. NA

11:55:57 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN14.DGN

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN3	C-030	R3-4					X					No U-Turn Symbol						6070210									
SN3	C-031	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN3	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									
SN3	C-032	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN3	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN3	C-033	R2-1(50)					X					SPEED LIMIT 50						6070210									
SN3	C-034	R2-1(45)	X						10	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN3	C-035	W2-2L					X					Left Side Road Symbol						6070210									
SN3	+	W16-8P					X					WADE RD						6070210									
SN3	C-036	W3-3	X						12	7	YL	Signal Ahead Symbol	30	30	6.3	RWM	IV	6080016	2	2S	24						
SN3	+	W16-8P	X								YL	Wade Rd	18	8	1.0	RWM	IV	6080016									
SN3	C-037	R1-1	X						15	7	RD	STOP	36	36	9.0	RWM	IV	6080016	1	2S	13						
SN3	+	D3	X								GR	Valencia Rd	36	6	1.5	F-DA	IV	6080016									
SN3	+	D3	X								GR	Wade Rd	36	9	2.3	F-DA	IV	6080016									
SN3	C-038	R1-1					X					STOP						6070210									
SN3	+	D3					X					VALENCIA RD						6070210									
SN3	+	D3					X					WADE RD						6070210									
SN3	C-039	W1-7					X					Double-headed Arrow						6070210									
SN3	+	OM1-3					X					Object Marker						6070210									
SN3	+	OM1-3					X					Object Marker						6070210									
SN3	+	OM1-3					X					Object Marker						6070210									
SN3	+	OM1-3					X					Object Marker						6070210									
SN3	C-040	W1-7	X						12	7	YL	Double-headed Arrow	48	24	8.0	RWM	IV	6080016	2	2S	29		P	14			
SN3	+	W1-8L	X						12	7	YL	Left Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						
SN3	+	W1-8R	X						12	7	YL	Right Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						

NOTES:

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Scales	Horiz. NA	Vert. NA	Sheet SN15 of SN26	Page 199 of 281

TRACS No. SS975 01C

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A. Expires 9/30/2014

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Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN3	C-041	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN3	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN3	-	SPR03-17	X								WH	U-Turn Symbol ONLY	24	24	4.0	RWM	IV	6080016									BACK TO BACK
SN4	C-042	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN4	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN4	-	SPR03-17	X								WH	U-Turn Symbol ONLY	24	24	4.0	RWM	IV	6080016									BACK TO BACK
SN4	C-043	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN4	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN4	C-044	R1-1	X						15	7	RD	STOP	36	36	9.0	RWM	IV	6080016	1	2S	13						
SN4	+	D3	X								GR	Valencia Rd	36	6	1.5	F-DA	IV	6080016									
SN4	+	D3	X								GR	South Arrow Rd	42	9	2.6	F-DA	IV	6080016									
SN4	C-045	W8-2					X					DIPS						6070210									
SN4	+	SPECIAL					X					NEXT 3 MILES						6070210									
SN4	C-046	R1-1	X						15	7	RD	STOP	36	36	9.0	RWM	IV	6080016	1	2S	13						
SN4	+	D3	X								GR	Valencia Rd	36	6	1.5	F-DA	IV	6080016									
SN4	+	D3	X								GR	Vincent Dr	42	9	2.6	F-DA	IV	6080016									
SN4	C-047	W2-2L					X					Left Side Road Symbol						6070210									
SN4	+	W16-8P					X					CAMINO VERDE						6070210									
SN4	C-048											NOT USED															
SN4	C-049	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN4	C-050	R2-1(50)					X					SPEED LIMIT 50						6070210									
SN4	C-051	W11-4					X					Cattle Crossing Symbol						6070210									
SN4	+	SPW07-02					X					OPEN RANGE						6070210									
SN4	C-052	W11-4	X						12	7	YL	Cattle Crossing Symbol	36	36	9.0	RWM	IV	6080016	2	2S	26						

NOTES:

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Scales	Horiz. NA	Sheet SN16 of SN26	Page 200 of 281
	Vert. NA		

TRACS No. SS975 01C

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

REGISTERED PROFESSIONAL ENGINEER (CIVIL) 43315 RICARDO P. SOLIS DATE SIGNED 3-14-2014 ARIZONA, U.S.A.

Expires 9/30/2014

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VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN4	+	SPW07-02	X								YL	OPEN RANGE	24	18	3.0	RWM	IV	6080016									
SN5	C-053	W1-7					X					Double-headed Arrow						6070210									
SN5	+	W1-8L					X					Left Chevron						6070210									
SN5	+	W1-8R					X					Right Chevron						6070210									
SN5	+	OM1-3					X					Object Marker						6070210									
SN5	+	OM1-3					X					Object Marker						6070210									
SN5	C-054											NOT USED															
SN5	C-055	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN5	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN5	C-056	SPECIAL					X					NO PARKING						6070210									
SN5	C-057	I60-2y					X					ADOPT A HIGHWAY SPONSORED BY						6070210									
SN5	C-058	I60-2y	X						10	7	BL	ADOPT A HIGHWAY SPONSORED BY	60	24	10.0	F-DA	IV	6080016	2	2S	21		P	8			
SN5	C-059	R2-1(50)					X					SPEED LIMIT 50						6070210									
SN5	C-060	R2-1(45)	X						10	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN5	C-061	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN5	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									
SN5	C-062	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN5	C-063	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN5	C-064	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN5	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									
SN5	C-065	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN5	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									

NOTES:

1. The Contractor shall verify post lengths and elevations for the Engineer's approval.
2. The Engineer may shift a sign in order to achieve a more desirable location.
3. Quantities are approximate and for the Contractor's information only.

NOTES (CONT):

4. The Contractor shall provide Engineer with shop drawings of all signs. Shop drawings shall be approved by the Engineer prior to fabrication.

* Stringer materials and labor are considered incidental to the sign panel.
* Offset is measured from traveled way edgeline stripe to nearest edge of panel.

PANEL TYPES:

RWM: Regulatory, Warning or Marker
F-DA: Flat-sheet aluminum with direct-applied or silk-screened characters

POST TYPES:

S: Non-telescoping perforated square post
U: Perforated U-channel post

STRINGER TYPES:

P: Square tube post

Scales	Horiz. NA	Sheet SN17 of SN26	Page 201 of 281
	Vert. NA		

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KWW	03/2014
Drawn	KWW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

REGISTERED PROFESSIONAL ENGINEER (CIVIL) 43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A.
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
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333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (520) 944-1423

Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

TRACS No. SS975 01C

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN5	C-066	W14-3					X					NO PASSING ZONE						6070210									
SN5	C-067	W11-4					X					Cattle Crossing Symbol						6070210									
SN5	+	SPW07-02					X					OPEN RANGE						6070210									
SN5	C-068	W11-4	X						10	7	YL	Cattle Crossing Symbol	36	36	9.0	RWM	IV	6080016	2	2S	26						
SN5	+	SPW07-02	X								YL	OPEN RANGE	24	18	3.0	RWM	IV	6080016									
SN5	C-069	R9-103					X					LITTERING HIGHWAYS UNLAWFUL						6070210									
SN5	C-070	R9-103	X						10	7	WH	LITTERING HIGHWAYS UNLAWFUL	48	36	12.0	RWM	IV	6080016	2	2S	23						
SN5	C-071											NOT USED															
SN5	C-072	W2-2R					X					Right Side Road Symbol						6070210									
SN5	+	W16-8P					X					CAMINO VERDE						6070210									
SN5	C-073	R4-4	X						12	7	WH	BEGIN RIGHT TURN LANE Arrow / YIELD TO BIKES	36	30	7.5	RWM	IV	6080016	1	2S	11						
SN5	C-074	R4-4					X					BEGIN RIGHT TURN LANE Arrow / YIELD TO BIKES						6070210									
SN6	C-075	SPECIAL					X					ENTERING BLACK WASH FLOODWAY						6070210									
SN6	C-076	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN6	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN6	-	SPR03-17	X								WH	U-Turn Symbol ONLY	24	24	4.0	RWM	IV	6080016									BACK TO BACK
SN6	C-077	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN6	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN6	C-078	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN6	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN6	-	SPR03-17	X								WH	U-Turn Symbol ONLY	24	24	4.0	RWM	IV	6080016									BACK TO BACK

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S: Non-telescoping perforated square post
U: Perforated U-channel post

STRINGER TYPES:

P: Square tube post

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KWW	03/2014
Drawn	KWW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS
Date Signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

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VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. NA	Sheet SN18 of SN26	Page 202 of 281
	Vert. NA		

TRACS No. SS975 01C

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN6	C-079	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN6	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN6	C-080	R1-1					X					STOP						6070210									
SN6	+	D3					X					VALENCIA RD						6070210									
SN6	+	D3					X					VIVIANA RD						6070210									
SN6	C-081	R1-1	X						15	7	RD	STOP	36	36	9.0	RWM	IV	6080016	1	2S	13						
SN6	+	D3	X								GR	Valencia Rd	36	6	1.5	F-DA	IV	6080016									
SN6	+	D3	X								GR	Viviana Rd	42	9	2.6	F-DA	IV	6080016									
SN7	C-082	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN7	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN7	-	SPR03-17	X								WH	U-Turn Symbol ONLY	24	24	4.0	RWM	IV	6080016									BACK TO BACK
SN7	C-083	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN7	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN7	-	SPR03-17	X								WH	U-Turn Symbol ONLY	24	24	4.0	RWM	IV	6080016									BACK TO BACK
SN8	C-084	W3-5(45)					X					Reduced Speed Limit Ahead						6070210									
SN8	C-085	R2-1(45)					X					SPEED LIMIT 45						6070210									
SN8	C-086	R2-1(45)	X						10	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN8	C-087	W8-18aAZ					X					FLASH FLOOD AREA						6070210									
SN8	+	SPECIAL					X					NEXT 5 MILES						6070210									
SN8	C-088	W14-3					X					NO PASSING ZONE						6070210									
SN8	C-089	R4-7	X						12		WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN8	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN8	C-090	W6-2	X						12	7	YL	Divided Highway Ends Symbol	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN8	C-091	R1-1	X						15	7	RD	STOP	36	36	9.0	RWM	IV	6080016	1	2S	12						

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U: Perforated U-channel post

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Scales	Horiz. NA	Sheet SN19 of SN26	Page 203 of 281
	Vert. NA		

TRACS No. SS975 01C

Pima County Department of Transportation
Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS
Date signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
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Tucson, AZ 85705
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VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN8	C-092	R1-1					X					STOP						6070210									
SN8	C-093	SPECIAL			X				12	7	BL	PARK & RIDE NEXT RIGHT						6070220	1	2S	12						
SN8	C-094	R3-9b	X						12	7	WH	CENTER LANE Two-Way Turn ONLY	24	36	6.0	RWM	IV	6080016	1	2S	12						
SN8	C-095	R16-1					X					BUCKLE UP IT'S THE LAW						6070210									
SN8	C-096	W1-7	X						12	7	YL	Double-headed Arrow	48	24	8.0	RWM	IV	6080016	2	2S	29		P	14			
SN8	+	W1-8L	X						12	7	YL	Left Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						
SN8	+	W1-8R	X						12	7	YL	Right Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						
SN8	C-097	W1-7					X					Double-headed Arrow						6070210									
SN8	C-098	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN8	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN8	C-099	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	IV	6080016	1	2S	12						CENTER IN MEDIAN
SN8	+	OM2-2H	X								YL	Object Marker	24	6	1.0	RWM	IV	6080016									
SN9	C-100	R2-1(45)					X					SPEED LIMIT 45						6070210									
SN9	C-101	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN9	C-102	R4-4	X						12	7	WH	BEGIN RIGHT TURN LANE Arrow / YIELD TO BIKES	36	30	7.5	RWM	IV	6080016	1	2S	11						
SN9	C-103	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN9	C-104	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN9	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									
SN9	C-105	R3-7R					X					RIGHT LANE MUST TURN RIGHT						6070210									
SN9	C-106	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN9	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									

NOTES:

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S: Non-telescoping perforated square post
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Scales	Horiz. NA	Sheet SN20 of SN26	Page 204 of 281
	Vert. NA		

Priscilla S. Cornelio, P.E., Director
Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
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43315 RICARDO P. SOLIS
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SN9	C-107	R1-1					X					STOP						6070210									
SN9	C-108	R16-1					X					BUCKLE UP IT'S THE LAW						6070210									
SN9	C-109	W1-7					X					Double-headed Arrow						6070210									
SN9	C-110	W1-7	X						12	7	YL	Double-headed Arrow	48	24	8.0	RWM	IV	6080016	2	2S	29		P	14			
SN9	+	W1-8L	X						12	7	YL	Left Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						
SN9	+	W1-8R	X						12	7	YL	Right Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						
SN9	C-111	R3-4	X								WH	No U-Turn Symbol	24	24	4.0	RWM	XI	6080020									MOUNT ON SIGNAL MAST ARM
SN9	C-112	R3-9b	X						12	7	WH	CENTER LANE Two-Way Turn ONLY	24	36	6.0	RWM	IV	6080016	1	2S	12						
SN9	C-113	W6-1	X						12	7	YL	Divided Highway Symbol	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN9	C-114	R4-4	X						12	7	WH	BEGIN RIGHT TURN LANE Arrow / YIELD TO BIKES	36	30	7.5	RWM	IV	6080016	1	2S	11						
SN9	C-115	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN9	C-116	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN9	C-117	W9-2L					X					LANE ENDS MERGE LEFT						6070210									
SN10	C-118	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN10	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									
SN10	C-119	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN10	C-120	R8-3a					X					NO PARKING						6070210									
SN10	C-121	R3-7R					X					RIGHT LANE MUST TURN RIGHT						6070210									

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WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. NA	Sheet SN21 of SN26	Page 205 of 281
	Vert. NA		

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN10	C-122	R3-5R	X						12	7	WH	Right Turn Arrow ONLY	30	36	7.5	RWM	IV	6080016	1	2S	13						
SN10	+	R3-5fP	X								WH	RIGHT LANE	30	12	2.5	RWM	IV	6080016									
SN10	C-123	R8-3a					X					NO PARKING						6070210									
SN10	C-124	R8-3					X					No Parking Symbol						6070210									
SN10	C-125	R1-1	X						15	7	RD	STOP	36	36	9.0	RWM	IV	6080016	1	2S	13						
SN10	+	D3	X								GR	Valencia Rd	36	6	1.5	F-DA	IV	6080016									
SN10	+	D3	X								GR	Ignacio M Baumea	42	6	1.8	F-DA	IV	6080016									
SN10	C-126	R1-1					X					STOP						6070210									
SN10	+	D3					X					VALENCIA RD						6070210									
SN10	+	D3					X					IGNACIO M BAUMEA						6070210									
SN10	C-127	W11-1					X					Bicycle Advance Crossing Symbol						6070210									
SN10	+	W16-1P					X					SHARE THE ROAD						6070210									
SN10	C-128	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN10	C-129	R2-1(45)					X					SPEED LIMIT 45						6070210									
SN10	C-130	W1-7					X					Double-headed Arrow						6070210									
SN10	+	W1-8L					X					Left Chevron						6070210									
SN10	+	W1-8R					X					Right Chevron						6070210									
SN10	C-131	W1-7	X						12	7	YL	Double-headed Arrow	48	24	8.0	RWM	IV	6080016	2	2S	29		P	14			
SN10	+	W1-8L	X						12	7	YL	Left Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						
SN10	+	W1-8R	X						12	7	YL	Right Chevron	18	24	3.0	RWM	IV	6080016	1	2S	15						
SN10	C-132	D11-1					X					(Bike Symbol) BIKE ROUTE						6070210									
SN10	+	M4-11					X					BEGIN						6070210									
SN10	C-133	D11-1					X					(Bike Symbol) BIKE ROUTE						6070210									
SN10	+	M4-12					X					END						6070210									

NOTES:

1. The Contractor shall verify post lengths and elevations for the Engineer's approval.
2. The Engineer may shift a sign in order to achieve a more desirable location.
3. Quantities are approximate and for the Contractor's information only.

NOTES (CONT):

4. The Contractor shall provide Engineer with shop drawings of all signs. Shop drawings shall be approved by the Engineer prior to fabrication.

* Stringer materials and labor are considered incidental to the sign panel.
* Offset is measured from traveled way edgeline stripe to nearest edge of panel.

PANEL TYPES:

RWM: Regulatory, Warning or Marker
F-DA: Flat-sheet aluminum with direct-applied or silk-screened characters

POST TYPES:

S: Non-telescoping perforated square post
U: Perforated U-channel post

STRINGER TYPES:

P: Square tube post

Scales: Horiz. NA; Vert. NA

Sheet SN22 of SN26

TRACS No. SS975 01C

Priscilla S. Cornelio, P.E., Director
Pima County Department of Transportation

Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

No.	Revision Description	Engineer	Date

43315 RICARDO P. SOLIS, date signed 3-14-2014, ARIZONA, U.S.A.
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

© 2014 KIMLEY-HORN AND ASSOCIATES, INC.

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN11	C-134											NOT USED															
SN11	C-135	SPECIAL						X				LENNAR															
SN11	C-136	W9-2aLAZ	X						12	7	YL	THRU TRAFFIC MERGE LEFT	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN11	C-137	R4-4	X						12	7	WH	BEGIN RIGHT TURN LANE Arrow / YIELD TO BIKES	36	30	7.5	RWM	IV	6080016	1	2S	11						
SN11	C-138	R2-1(45)					X					SPEED LIMIT 45						6070210									
SN11	C-139	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN11	C-140	W3-1					X					Stop Ahead Symbol						6070210									
SN11	C-141	SPR03-12	X						12	7	WH	Left Turn Arrow ONLY Right Turn Arrow ONLY	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN11	C-142	SPR03-12	X						12	7	WH	Left Turn Arrow ONLY Right Turn Arrow ONLY	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN11	C-143	R1-1					X					STOP						6070210									
SN11	+	D3					X					VALENCIA RD						6070210									
SN11	+	D3					X					WADE RD						6070210									
SN11	C-144	W9-2aLAZ	X						12	7	YL	THRU TRAFFIC MERGE LEFT	36	36	9.0	RWM	IV	6080016	1	2S	12						
SN12	C-145	SPR03-09	X						12	7	WH	Left Turn Arrow ONLY Thru and Right Turn Arrow	36	30	7.5	RWM	IV	6080016	1	2S	12						
SN12	C-146	R2-1(45)	X						12	7	WH	SPEED LIMIT 45	30	36	7.5	RWM	IV	6080016	1	2S	12						
SN12	C-147	R2-1(45)					X					SPEED LIMIT 45						6070210									
SN12	C-148	I60-2y					X					ADOPT A HIGHWAY SPONSORED BY						6070210									

NOTES:

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2. The Engineer may shift a sign in order to achieve a more desirable location.
3. Quantities are approximate and for the Contractor's information only.

NOTES (CONT):

4. The Contractor shall provide Engineer with shop drawings of all signs. Shop drawings shall be approved by the Engineer prior to fabrication.

* Stringer materials and labor are considered incidental to the sign panel.

* Offset is measured from traveled way edgeline stripe to nearest edge of panel.

PANEL TYPES:

RWM: Regulatory, Warning or Marker
F-DA: Flat-sheet aluminum with direct-applied or silk-screened characters

POST TYPES:

S: Non-telescoping perforated square post
U: Perforated U-channel post

STRINGER TYPES:

P: Square tube post

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS
Date Signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-3191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales: Horiz. NA, Vert. NA

TRACS No. SS975 01C

11:56:13 AM 3/14/2014 ALLEN.HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN23.DGN

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK: NEW	WORK: EXISTING: REPLACE PANEL	WORK: EXISTING: RELOCATE PANEL	WORK: EXISTING: MODIFY LEGEND	WORK: EXISTING: REMOVE EXISTING	WORK: EXISTING: EXST TO REMAIN	OFFSET (FT) **	MOUNTING HEIGHT	PANEL: BACKGROUND COLOR	PANEL: LEGEND	PANEL: WIDTH (IN)	PANEL: HEIGHT (IN)	PANEL: AREA (SQ FT)	PANEL: TYPE	PANEL: MIN. SHEETING TYPE	PANEL: BID ITEM NUMBER	GROUND MOUNTED: FOUNDATIONS	GROUND MOUNTED: POSTS: TYPE	GROUND MOUNTED: POSTS: TOTAL LENGTH (FT)	GROUND MOUNTED: NEW SLIPBASES	GROUND MOUNTED: STRINGER*: TYPE	GROUND MOUNTED: STRINGER*: TOTAL LENGTH (FT)	OVERHEAD: STRUCTURE TYPE	OVERHEAD: NUMBER OF LIGHTS	REMARKS
SN12	C-149	I60-2y	X						12	7	BL	ADOPT A HIGHWAY SPONSORED BY	60	24	10.0	F-DA	IV	6080016	2	2S	21		P	8			
SN12	C-150	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN12	C-151	SPR03-09	X						12	7	WH	Left Turn Arrow ONLY Thru and Right Turn Arrow	36	30	7.5	RWM	IV	6080016	1	2S	12						
SN12	C-152	R3-5R					X					Right Turn Arrow ONLY						6070210									
SN12	C-153	SPECIAL					X					ENTERING BLACK WASH FLOODWAY						6070210									
SN2	C-154	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN3	C-155	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN3	C-156	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN3	C-157	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN4	C-158	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN4	C-159	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN4	C-160	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN4	C-161	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN4	C-162	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN4	C-163	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN5	C-164	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN5	C-165	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN5	C-166	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						

NOTES:

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S: Non-telescoping perforated square post
U: Perforated U-channel post

STRINGER TYPES:

P: Square tube post

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

REGISTERED PROFESSIONAL ENGINEER 43315 RICARDO P. SOLIS Date Signed 3-14-2014 ARIZONA, U.S.A.

Expires 9/30/2014

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333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. NA Vert. NA	Sheet SN24 of SN26	Page 208 of 281

SIGN SUMMARY

PLAN SHEET NUMBER	SIGN NUMBER	SIGN CODE	WORK						OFFSET (FT) **	MOUNTING HEIGHT	PANEL								GROUND MOUNTED						OVERHEAD		REMARKS
				EXISTING																POSTS			STRINGER*				
			NEW	REPLACE PANEL	RELOCATE PANEL	MODIFY LEGEND	REMOVE EXISTING	EXST TO REMAIN			BACKGROUND COLOR	LEGEND	WIDTH (IN)	HEIGHT (IN)	AREA (SQ FT)	TYPE	MIN. SHEETING TYPE	BID ITEM NUMBER	FOUNDATIONS	TYPE	TOTAL LENGTH (FT)	NEW SLIPBASES	TYPE	TOTAL LENGTH (FT)	STRUCTURE TYPE	NUMBER OF LIGHTS	
SN5	C-167	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN5	C-168	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN6	C-169	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN7	C-170	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN7	C-171	R6-1R	X						2	4	BK	ONE WAY (Right)	54	18	6.8	RWM	IV	6080016	1	2S	7						
SN5	C-172	D11-1	X						12	7	GR	(Bike Symbol) BIKE ROUTE	24	18	3.0	F-DA	IV	6080016	1	2S	10						
SN6	C-173	D11-1	X						10	7	GR	(Bike Symbol) BIKE ROUTE	24	18	3.0	F-DA	IV	6080016	1	2S	10						
SN8	C-174	D11-1	X						12	7	GR	(Bike Symbol) BIKE ROUTE	24	18	3.0	F-DA	IV	6080016	1	2S	10						
SN8	C-175	D11-1	X						12	7	GR	(Bike Symbol) BIKE ROUTE	24	18	3.0	F-DA	IV	6080016	1	2S	10						

NOTES:

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NOTES (CONT):

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U: Perforated U-channel post

STRINGER TYPES:

P: Square tube post

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

43315 RICARDO P. SOLIS
Date Signed 3-14-2014
ARIZONA, U.S.A.
Expires 9/30/2014

Kimley-Horn and Associates, Inc.
© 2014 KIMLEY-HORN AND ASSOCIATES, INC.
333 E. Wetmore Road
Suite 280
Tucson, AZ 85705
(520) 615-9191 Fax (602) 944-7423

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. NA	Sheet SN25 of SN26	Page 209 of 281
	Vert. NA		

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	STP-PPM-0(230)A	210	281	
		0000 PM PPM			

D3; 1.0" Radius, 0.0" Border, White on Green;
[W] C; [Valencia] C; [Rd] C; [6500 S] C;

C-008
Sta 235+36

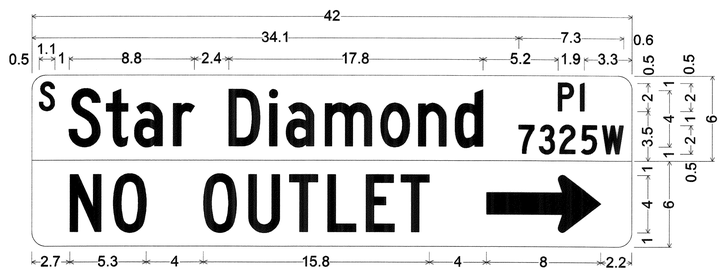
C-047
Sta 263+25

C-038
Sta 254+77

C-081
Sta 305+32

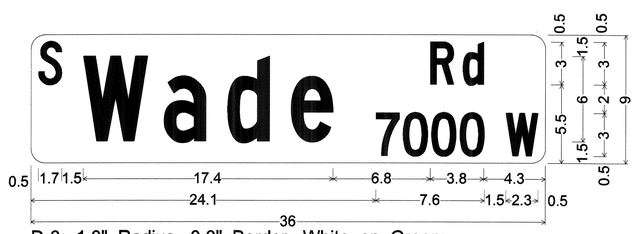
C-045
Sta 265+98

C-125
Sta 358+92



D3; 1.0" Radius, No border, White on Green;
[S] C; [Star Diamond] C 60% spacing; [Pl] C; [7325W] C;
1.0" Radius, No border, Black on Yellow;
[NO OUTLET] C; Standard Arrow Custom 8.0" X 4.0" 0°;

C-008
Sta 235+36

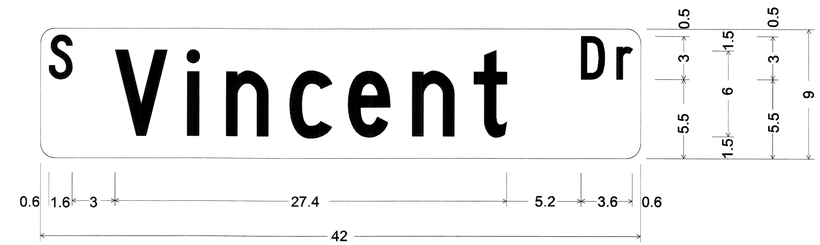


D-3; 1.0" Radius, 0.0" Border, White on Green;
[S] C; [Wade] C; [Rd] C; [7000 W] C 50% spacing;

C-038
Sta 254+77

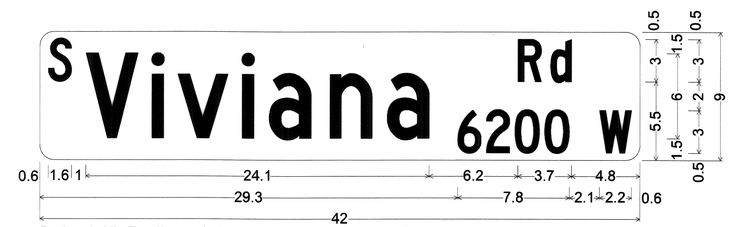
D-3; 1.0" Radius, 0.0" Border, White on Green;
[S] C; [SouthArrow] B 60% spacing; [Rd] C;

C-045
Sta 265+98



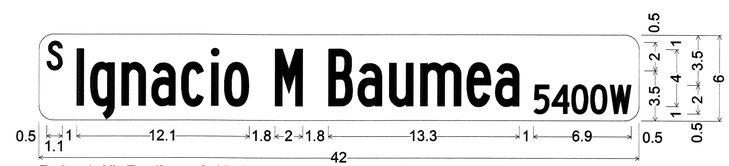
D-3; 1.0" Radius, 0.0" Border, White on Green;
[S] C; [Vincent] C; [Dr] C;

C-047
Sta 263+25



D-3; 1.0" Radius, 0.0" Border, White on Green;
[S] C; [Viviana] C 70% spacing; [Rd] C; [6200 W] C 70% spacing;

C-081
Sta 305+32



D-3; 1.0" Radius, 0.0" Border, White on Green;
[S] C; [Ignacio M Baumea] B 45% spacing; [5400W] C 50% spacing;

C-125
Sta 358+92

Priscilla S. Cornello, P.E., Director

Designed	KMW	03/2014
Drawn	KMW	03/2014
Checked	RPS	03/2014
Proj. Engr.	RPS	03/2014

No.	Revision Description	Engineer	Date

43315 RICARDO P. SOLIS ARIZONA, U.S.A. Date Signed 3-14-2014
Expires 9/30/2014

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Tucson, AZ 85705
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Pima County Department of Transportation

VALENCIA ROAD
WADE ROAD TO MARK ROAD
PROJECT NO. 4RTVMW

Scales	Horiz. NA	Sheet SN26 of SN26	Page 210 of 281
	Vert. NA		

TRACS No. SS975 01C

11:56:20 AM 3/14/2014 ALLEN. HATHCOCK K:\TUC_ROADWAY\098042005_VALENCIA-MARK TO AJO\CADD\042005SN26.DGN