# **BASIS OF BEARINGS**

THE BASIS OF BEARING FOR THIS PROJECT IS THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 9. T-12-S, R-13-E PER RECORD OF SURVEY RECORDED IN BOOK 75 AT PAGE 99. BEARING = N 89°56'53" W.

#### **BASIS OF ELEVATION**

BASIS OF ELEVATION: DESIGNATION LAMB 2N PID UCD0715 CHISELED "X" IS LOCATED ON THE NORTHEAST CORNER OF A CONCRETE PAD FOR A 5.5 FOOT TALL US WEST PEDESTAL APPROXIMATELY 65.5 FEET SOUTH OF LAMBERT LANE AND 96 FEET WEST OF THE CENTERLINE OF SHANNON ROAD. ELEVATION = 2579.09 FEET NAVD 88 DATUM.

## **BENCHMARK #1**

FOUND 2 1/2" ALUMINUM CAP SURVEY MONUMENT AT THE INTERSECTION OF NARANJA DRIVE AND LA CHOLLA **BOULEVARD. SAID ELEVATION BEING** 2696.18 (NAVD 88)

#### **BENCHMARK #2**

**ABBREVIATIONS** 

AΡ

**APPROX** 

AR-AC

**ASTM** 

**BCSM** 

BVC

BW

C.A.

C&G

CFS

CMP

CP

CST

DG

DKT

DTL

EG

**ELEC** 

**ELEV** 

EOP

**ESMT** 

EVC

FND

FFE

FG

FPE

EX or EXIST

CTRL

CONC

IS A BRASS CAP SURVEY MONUMENT STAMPED RLS 36235 BEING THE SOUTH QUARTER CORNER OF SECTION 4, SAID ELEVATION BEING 2685.19 (NAVD 88)

### **ENGINEER'S STANDARD DETAILS** DISCLAIMER:

COMPLYING WITH THE ARIZONA STATE BOARD OF TECHNICAL REGISTRATION'S SUBSTANTIVE POLICY STATEMENT REGARDING SEALING OF STANDARD DETAILS, THE STANDARD DETAILS USED IN THE DESIGN OF THIS PROJECT HAVE BEEN FORMALLY ADOPTED BY THE AGENCIES THAT PREPARED THEM. IN VIEW OF THEIR LONG HISTORY OF USE. APPLICABILITY. AND/OR SOUNDNESS THE ENGINEER ACCEPTS THEIR USE FOR THIS PROJECT AND FINDS NO NEED FOR AN ALTERNATION.

AGGREGATE BASE

ANGLE POINT

ASPHALTIC CONCRETE

BEGIN VERTICAL CURVE

CUBIC FEET PER SECOND

**CONCENTRATION POINT** 

**DECOMPOSED GRANITE** 

**ELECTRIC OR ELECTRICAL** 

CORRUGATED METAL PIPE

**BOTTOM OF WALL** 

CURB AND GUTTER

COMMON AREA

CONCRETE

CONTROL

DOCKET

DETAIL

ELEVATION

**EASEMENT** 

FACE OF CURB

FINAL GRADE

**EXISTING** 

FOUND

DEFLECTION

CONSTRUCTION

**EXISTING GRADE** 

**EDGE OF PAVEMENT** 

**END VERTICAL CURVE** 

FINISHED FLOOR ELEVATION

FINISHED PAD ELEVATION

APPROXIMATE OR APPROXIMATELY

**BRASS CAP SURVEY MONUMENT** 

ASPHALT RUBBER-ASPHALTIC CONCRETE

AMERICAN SOCIETY FOR TESTING & MATERIALS

# OFF-SITE IMPROVEMENT PLAN FOR SHANNON ROAD

STA 40+21 TO STA 60+36 1901572

50+00

224-19-110A

WARREN F &

PATRICIA REYNOLDS

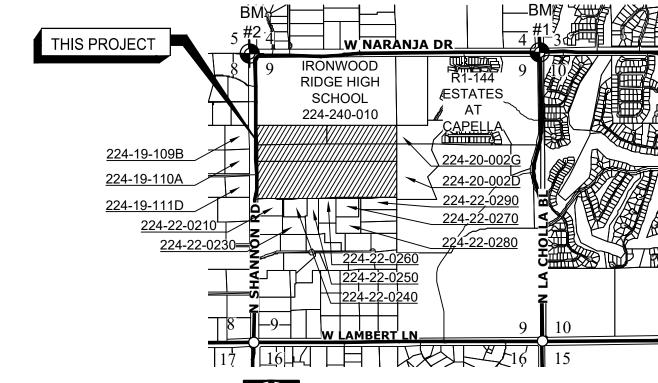
FEMA FLOODPLAIN

2643.81'

SHANNON ROAD-1152

ROAD MAPS BOOK 10 PAGE 4

PUBLIC ROAD



#### **LOCATION MAP** 224-19-108B A PORTION OF THE NORTHWEST SHAPIRO STEVEN A QUARTER OF SECTION 9. BRAMLETT-SHAPIRO T. 12 S., R. 13 E., G&SRB, TOWN OF WYNIMA JT/RS ORO VALLEY, PIMA COUNTY, ARIZONA

SCALE:3"=1 MILE FND 2 1/2" BCSM 1913

# CST CONTROL TIE

- N1°34'49"W

1170.63'

NW COR SEC 9

**OWNER** TOWN OF ORO VALLEY 11000 N. LA CANADA DR. ORO VALLEY, AZ 85737 (520) 229-4894

## **DEVELOPER**

SHANNON 80, LLC ATTN: DAVID WILLIAMSON 3037 W. INA ROAD TUCSON, AZ 85741 (520) 404-7681 DAVIDW@FAIRFIELDHOMES.NET

# **ENGINEER**

THE WLB GROUP, INC. 4444 E. BROADWAY BLVD. TUCSON, AZ. 85711 (520) 881-7480 ATTN: BILL WALKER, PE bwalker@wlbgroup.com

# SHEET INDEX

- COVER SHEET
- 2. GENERAL NOTES & TYPICAL SECTIONS
- 3. EXISTING CONDITIONS & DEMOLITION PLAN
- 4. PAVING PLAN & PROFILE
- 5. PAVING PLAN & PROFILE
- 6. SIGNING & MARKING PLAN

# **APPROVED**

HYDROLOGIC CROSS SECTION

224-19-109B

**CRUMP BRIAN &** 

RAMIREZ-CRUMP

DINA CP / RS

C.A.

\"B"

**LEGEND** 

—— -- — CONSTRUCTION CONTROL LINE

— --- RIGHT-OF-WAY

—X — —X— — EXISTING FENCE

────────────── SILT FENCE

——— - - - — FEMA FLOODPLAIN

SHEET MATCH LINE

— GRADING LIMITS

PROPERTY BOUNDARY

**EXISTING PAVEMENT** 

**DEMOLITION & REMOVAL** 

**CONCENTRATION POINT** 

CONCRETE HEADER

**EXISTING SIGNS** 

**EXISTING MAJOR CONTOUR** 

**EXISTING MINOR CONTOUR** 

RIGHT-OF-WAY CENTERLINE

ASPHALTIC CONCRETE (AC) PAVEMENT

SHANNON 80 LOTS 1 THRU 80 &

COMMON AREAS

"A" (PRIVATE STREETS) &

"B" (LANDSCAPED AND NATURAL

OPEN SPACE, DRAINAGE &

RECREATION AREA)

- NORTH RANCH WASH

(REF 1900400)

Q<sub>100</sub> (TOOV) = 1567 CFS

- FEMA FLOODPLAIN

END NEW PAVEMENT

CST CONTROL LINE

60+00 60+60

STA 60+36

END NEW-

STRIPING

224-21-0010

**AMPHITHEATER** 

SCHOOL DIST. 10

FLOW DIRECTION TOWN OF ORO VALLEY, TOWN **ENGINEER** 

DATE

1900400, OV1701617 & OV1701072

# SHANNON 80 LOTS 1 THRU 80 & COMMON AREAS "A" (PRIVATE STREETS) & "B" (LANDSCAPED AND NATURAL OPEN SPACE, DRAINAGE & 224-22-0210 RECREATION AREA) **ROBERT & BEVERLY** 1900400 BUSSE JT/RS PROJECT OVERVIEW

PSI

PVC

R/W

RCP

RT

SF

SHT

SRP

STA

STD

SVT

S/W

THK

TS

TW

TYP

**WSEL** 

ST

**REINF** 

**RWRD** 

SDMH

FND 2" ACSM

JW 1/4 COR SEC 9

N8°39'41"E

D=8°47'14"

C.A. "B"

LS 27755

224-19-0112C

& CATHERINE L

BEGIN PROJECT

STA 40+21

**ECR** 

HT or H

INV

TC

WTR

МН

MIN

P.A.D

PAG

PC

PCC

PCC

PG

PT

PROP

**PVMT** 

MITCHELL STANLEY E

JT / RS N12°18'27"W

**IMPROVEMENTS** 

PER 1900400 ----

POINT OF REVERSE CURVATURE POUNDS PER SQUARE INCH POLYVINYL CHLORIDE **RADIUS** 

224-19-111D

MACK PETER &

JOSEPHINE M CP / RS

RIGHT OF WAY REINFORCED CONCRETE PIPE REINFORCED

REGIONAL WASTEWATER RECLAMATION DEPARTMENT SLOPE OR SOUTH STORM DRAIN MANHOLE

SQUARE FEET SHEET SANITARY SEWER MANHOLE SPIRAL RIBBED PIPE

STREET STATION STANDARD SIGHT VISIBILTY TRIANGLE

SIDEWALK THICK/THICKNESS TRAFFIC SIGNAL TOP OF WALL

WELDED WIRE FABRIC

TYPICAL WIDTH, WEST OR WATERLINE WATER SURFACE ELEVATION

Contact Arizona 811 at least two full BLUE STAKE, INC.

PLANNED AREA DEVELOPMENT

PIMA ASSOCIATION OF GOVERNMENTS

POINT OF COMPOUND CURVATURE

PORTLAND CEMENT CONCRETE

**BEGINNING OF CURB RETURN** 

END OF CURB RETURN

**GRADE BREAK** 

SANITARY SEWER

DUCTILE IRON PIPE

**EASTING OR EAST** 

NORTHING OR NORTH

POINT OF CURVATURE

POINT OF INTERSECTION

POINT OF TANGENCY

TOP OF CURB

CENTERLINE

LINEAR FEET

**LOW POINT** 

**MAXIMUM** 

**MANHOLE** 

**MINIMUM** 

PROPOSED

**PAVEMENT** 

LEFT

**HIGH POINT** 

HEIGHT

LENGTH

INVERT

**GUTTER** 

WATER

Landscape Architecture Urban Design Offices located in Tucson, Phoenix, & Flagstaff, AZ, and Las Vegas, NV. 4444 East Broadway Tucson, AZ 85711

Call 811 or click Arizona811.com

JOB NO. 116028-A002 Q:\116028 Shannon 80\A-002 - Platting\07 IPs\05 Offsite\01-SH80-OS-CVR.dwg Plotted: Jun 04, 2020

**COVER SHEET** 

**SCALES** 

AS SHOWN

PROJ#: 1901572

SHEET 1

OF 6

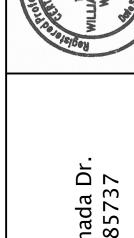
OF

S

RK

FOR

VEMENT F HANNON VALLEY,







#### **GENERAL EARTHWORK AND PAVING NOTES:**

- ALL MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH PIMA ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (P.A.G. SSPI), EDITION OF 2015, EXCEPT AS MODIFIED HEREBY
- ALL CONSTRUCTION AND TESTING METHODS SHALL BE IN CONFORMANCE WITH P.A.G. SSPI, EDITION OF 2015, EXCEPT AS MODIFIED HEREBY.
- EXCAVATION AND BACKFILL FOR STRUCTURES SHALL CONFORM TO P.A.G. SSPI, SECTION 203-5.
- EARTHWORK, EXCEPT AS MODIFIED BY THE SOILS REPORT OF RECORD, SHALL CONFORM TO P.A.G. SSPI SECTION 203.
- AGGREGATE BASE COURSE SHALL CONFORM TO P.A.G. SSPI, SECTION 303.
- ASPHALTIC CONCRETE SHALL CONFORM TO P.A.G. SSPI, SECTION 406, ASPHALTIC CONCRETE MIXTURE
- ALL CONCRETE SHALL CONFORM TO P.A.G. SSPI, SECTION 1006, CLASS S, 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS OTHERWISE SPECIFIED.
- A STAMPED SET OF APPROVED PLANS SHALL BE KEPT IN AN EASILY ACCESSIBLE LOCATION ON THE JOB SITE
- AT ALL TIMES OR DURING CONSTRUCTION.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
- CONTRACTOR SHALL CALL BLUE STAKE (ARIZONA 811) TO VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, A MINIMUM OF TWO (2) FULL WORKING DAYS PRIOR TO EXCAVATION.
- CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY GOVERNMENTAL AGENCIES.
- CONTRACTOR SHALL INSTALL STREET SIGNS IN ACCORDANCE WITH THE PIMA COUNTY DEPARTMENT OF TRANSPORTATION SIGNING MANUAL.
- 13. PAVING CONTRACTOR SHALL ADJUST BOTH EXISTING AND NEW WATER VALVES, BOX COVERS, WATER METER BOXES, SANITARY SEWER MANHOLES AND CLEANOUT RINGS AND COVERS, TELEPHONE AND ELECTRIC MANHOLE RING AND COVERS TO THE NEW FINISHED GRADE. ALL WORK SHALL COMPLY WITH THE APPLICABLE UTILITY'S STANDARDS.
- UPON COMMENCEMENT OF WORK, TRAFFIC CONTROL DEVICES SHALL BE POSTED AND MAINTAINED BY THE CONTRACTOR IN CONFORMANCE WITH THE CONTRACTOR'S TRAFFIC CONTROL PLAN AS ACCEPTED BY THE TOWN OF ORO VALLEY UNTIL SUCH TIME AS THE WORK IS COMPLETED. ALL WARNING SIGNS, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE STATE OF ARIZONA PURSUANT TO A.R.S. 28-650.
- IF UNANTICIPATED CONDITIONS ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION AND ARE BEYOND THE SCOPE OF THE DESIGN, THE ENGINEER SHALL SUBMIT THE NECESSARY REVISED OR SUPPLEMENTAL IMPROVEMENT PLANS FOR REVIEW AND APPROVAL BY THE TOWN OF ORO VALLEY ENGINEER'S OFFICE PRIOR TO SUCH REVISIONS/CHANGES BEING MADE IN THE FIELD.
- ALL STATIONING SHOWN ON PLAN AND PROFILES ARE ALONG CENTERLINE OF RIGHT OF WAY UNLESS OTHERWISE NOTED.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE AND MAINTENANCE OF EXISTING IMPROVEMENTS AND VEGETATION IN THE WORK AREA. PAVEMENT, CURBS, CART PATHS AND ANY OTHER EXISTING FEATURES DAMAGED DURING CONSTRUCTION ARE TO BE REPLACED BY THE CONTRACTOR. ANY UNDERGROUND PIPES, IRRIGATION LINES, IRRIGATION CONTROLS, DRAINS, STRUCTURES, OR OTHER EXISTING FEATURES NOT SHOWN ON THESE PLANS SHALL BE MOVED, ALTERED, OR REPAIRED BY THE CONTRACTOR WHEN ENCOUNTERED, AS DIRECTED BY THE ENGINEER AND IS A DEFINITE PART OF THIS PROJECT
- THE CONTRACTOR SHALL GIVE FORTY-EIGHT (48) HOURS NOTICE WHEN THEY SHALL REQUIRE THE SERVICES OF THE ENGINEER OR ANY OTHER PERSON PROPERLY AUTHORIZED FOR SUCH PURPOSE FOR LAYING OUT ANY PORTION OF THE WORK. THEY SHALL ALSO DIG ALL STAKE HOLES NECESSARY TO GIVE LINE AND LEVELS AND SHALL PROVIDE ASSISTANCE CALLED FOR BY THE ENGINEER OR HIS ASSISTANTS UPON ANY PART OF THE WORK WHENEVER SO REQUESTED, AND SHALL PRESERVE ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEER. ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR THEIR SUBCONTRACTORS MAY HAVE FAILED TO PRESERVE SHALL BE CHARGED TO THE CONTRACTOR
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AN AIR POLLUTION PERMIT.
- 20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FULLY COMPLY WITH A.D.E.Q. STORMWATER POLLUTION PREVENTION PERMITS IN ACCORDANCE WITH THE REPORT AND POLLUTION PLANS PREPARED BY THE ENGINEER. THE COST THEREOF TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.
- STREETS AND PARKING AREAS SHALL BE CONSTRUCTED TO WITHIN ±0.10 FEET OF FINISH SUBGRADE AS STAKED BY THE ENGINEER.
- 22. A REPORT OF SOILS INVESTIGATION, INCLUDING RECOMMENDATIONS FOR GRADING PROCEDURE HAS BEEN PREPARED BY WRIGHT ENGINEERS DATED DECEMBER 2018, PROJECT NO. 182916. ALL EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS CONTAINED IN SAID REPORT AND ANY AMENDMENTS MADE THERETO
- THE SOILS ENGINEER SHALL OBSERVE, INSPECT AND TEST ALL CONSTRUCTION OPERATIONS, INCLUDING BUT NOT LIMITED TO: CLEARING, GRUBBING, SUBGRADE PREPARATION, STRUCTURAL, TRENCH EXCAVATION AND BACKFILL, MATERIAL TESTING, TOGETHER WITH PLACEMENT OF FILL. SAID ENGINEER SHALL CERTIFY IN WRITING, THAT ALL SOILS OPERATIONS AND MATERIALS USED FOR THIS DEVELOPMENT WERE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AS SET FORTH IN THE GEOTECHNICAL INVESTIGATION OF RECORD AND ARE IN CONFORMANCE WITH THE ACCEPTED PLANS AND SPECIFICATIONS. CERTIFICATION, IN WRITING, IS TO BE RECEIVED BY THE TOWN OF ORO VALLEY PRIOR TO THE REQUEST FOR FINAL INSPECTION AND RELEASE OF ASSURANCES.
- GRADING BOUNDARIES SHALL BE CLEARLY MARKED, AND ALL WORK WILL BE CONFINED TO APPROVED PROJECT LIMITS AS SHOWN ON THESE PLANS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE SURVEYOR PROVIDING THE CONSTRUCTION LAYOUT TO VERIFY THE BENCHMARK AND COMPARE THE SITE CONDITIONS WITH THE PLANS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OBSERVED. SHOULD ANY BENCHMARK, GRADE OR DESIGN INDICATED ON THE PLANS BE SUSPECT, THE ENGINEER SHALL BE NOTIFIED OF SAID BENCHMARK GRADE OR DESIGN PROBLEM AT LEAST TWENTY-FOUR HOURS BEFORE CONSTRUCTION IS SCHEDULED TO BEGIN ON THE AFFECTED AREA.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER(S), THEIR SUCCESSORS OR ASSIGNS, (AND/OR THEIR CONTRACTOR, THEIR SUCCESSORS OR ASSIGNS AS APPLICABLE) TO PURSUE ANY NEGOTIATIONS, OBTAIN ANY AGREEMENTS AND/OR PERMITS, ETC., FROM ALL NECESSARY OWNERS, PRIVATE AND/OR GOVERNMENTAL AGENCIES IN CHARGE OF PROPERTIES AND/OR RIGHTS-OF-WAY ADJACENT TO (OR NEIGHBORING) THIS PROJECT, THAT MAY BE REQUIRED TO DO ANY WORK (CONSTRUCTION, ACCESS MODIFICATIONS, GRADING, DRAINAGE, STRUCTURES, ROADS, ETC.) ENCROACHING OR AFFECTING -DIRECTLY OR INDIRECTLY - ON THESE ADJACENT PROPERTIES AND RIGHTS-OF-WAY IN ANY CONCEIVABLE MANNER, REGARDLESS OF WHETHER OR NOT THIS WORK IS SHOWN OR DESCRIBED ON THESE PLANS

- 27. THE TOWN OF ORO VALLEY WILL, UPON RECEIPT OF ALL NECESSARY CERTIFICATIONS AS OUTLINED ON THE IMPROVEMENT PLANS, PERFORM A FIELD REVIEW OF THE DEVELOPMENT. FIELD CONDITIONS, DESIGN OVERSIGHTS, ETC., MAY REQUIRE ADDITIONAL WORK AND/OR IMPROVEMENTS AS A RESULT OF SAID REVIEW.
- 28. ALL WORK SHALL BE IN CONFORMANCE TO GRADING STANDARDS, CHAPTER 27-SECTION 27.9 OF THE ORO VALLEY ZONING CODE REVISED, YEAR 2005.
- THE PROFESSIONAL ENGINEER OF RECORD SHALL SUBMIT AS-BUILT RECORD DRAWINGS AND CERTIFY IN WRITING THAT ALL IMPROVEMENTS, WHETHER PRIVATE OR PUBLIC, HAVE BEEN CONSTRUCTED, PLACED, INSTALLED, ETC. IN SUBSTANTIAL CONFORMANCE WITH THE ACCEPTED PLANS FOR THIS DEVELOPMENT. CERTIFICATIONS IN WRITING AND THE AS-BUILT RECORD DRAWINGS ARE TO BE RECEIVED BY THE TOWN OF ORO VALLEY A MINIMUM OF TWO (2) WEEKS PRIOR TO THE REQUEST FOR CERTIFICATES OF OCCUPANCY AND/OR FINAL INSPECTION BY THE DEPARTMENT OF PUBLIC WORKS AND THE RELEASE OF ASSURANCES, EXCEPT FOR MODEL HOMES INTENDED TO BE USED FOR SALES PURPOSES. IF THE PROJECT IS PHASED THE ABOVE PERTAINS TO EACH PHASE.
- 30. ALL EASEMENTS MUST BE ACQUIRED BY OWNER/BUILDER PRIOR TO CONSTRUCTION.
- 31. A FLOODPLAIN USE PERMIT SHALL BE REQUIRED FOR IMPROVEMENTS IMPACTING A FEMA FLOODPLAIN.

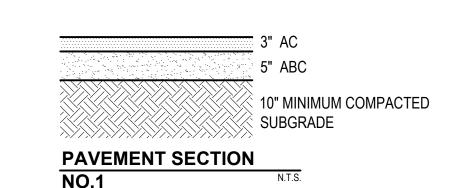
# **GENERAL PAVEMENT MARKING & STRIPING NOTES:**

MARKINGS.

- 1. ALL PAVEMENT MARKING MATERIALS, EQUIPMENT AND CONSTRUCTION SHALL CONFORM TO THE LATEST PIMA ASSOCIATION OF GOVERNMENTS (PAG) STANDARD SPECIFICATIONS (2015). ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH THE PC/COT PAVEMENT MARKING DESIGN MANUAL. 2008 REVISION AND ANY UPDATE THERETO.
- 2. THE PERMANENT PAVEMENT MARKINGS MAY BE MODIFIED AS DIRECTED BY THE TOWN ENGINEER OR DESIGNEE.
- 3. THE POSTED SPEED LIMIT FOR SHANNON ROAD IS 45 MPH. THE DESIGN SPEED IS 50 MPH AND THE DESIGN VEHICLE IS WB-40.
- 4. ALL LANE DIMENSIONS ARE FROM CENTER OF LANE LINE, CENTER OF DOUBLE LANE LINE FACE OF CURB, OR
- EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. 5. THE PAVEMENT MARKING DRAWINGS ARE SCHEMATIC ONLY. THE CONTRACTOR SHALL FOLLOW ALL
- DIMENSIONS, DETAILS, AND STANDARDS WHEN INSTALLING PAVEMENT STRIPING, MARKINGS AND MARKERS. LONGITUDINAL STRIPING SHALL CONSIST OF WATER BASE TRAFFIC PAINT, 15 MILS (0.015") THICK, PLACED WITH AASHTO M 247-13 TYPE 1 GLASS BEADS HAVING AN ADHESION/MOISTURE PROOF COATING. REFLECTIVE BEADS
- SHALL BE PLACED AT A MINIMUM RATE OF 6 POUNDS PER GALLON. 7. TRAFFIC PAINT FOR LONGITUDINAL STRIPING SHALL BE APPLIED ONCE AFTER PAVING AND AGAIN 30 DAYS LATER, OR AS OTHERWISE DIRECTED BY THE TOWN ENGINEER OR DESIGNEE. THE INITIAL STRIPING SHALL BE
- BY THE TOWN ENGINEER OR DESIGNEE. 8. TRAFFIC CONTROL DEVICES, AS NOTED ON THE ACCEPTED TRAFFIC CONTROL PLAN, SHALL BE IN PLACE FOR THE PERIOD BETWEEN THE START OF PAVING OPERATIONS AND INITIAL INSTALLATION OF PAVEMENT

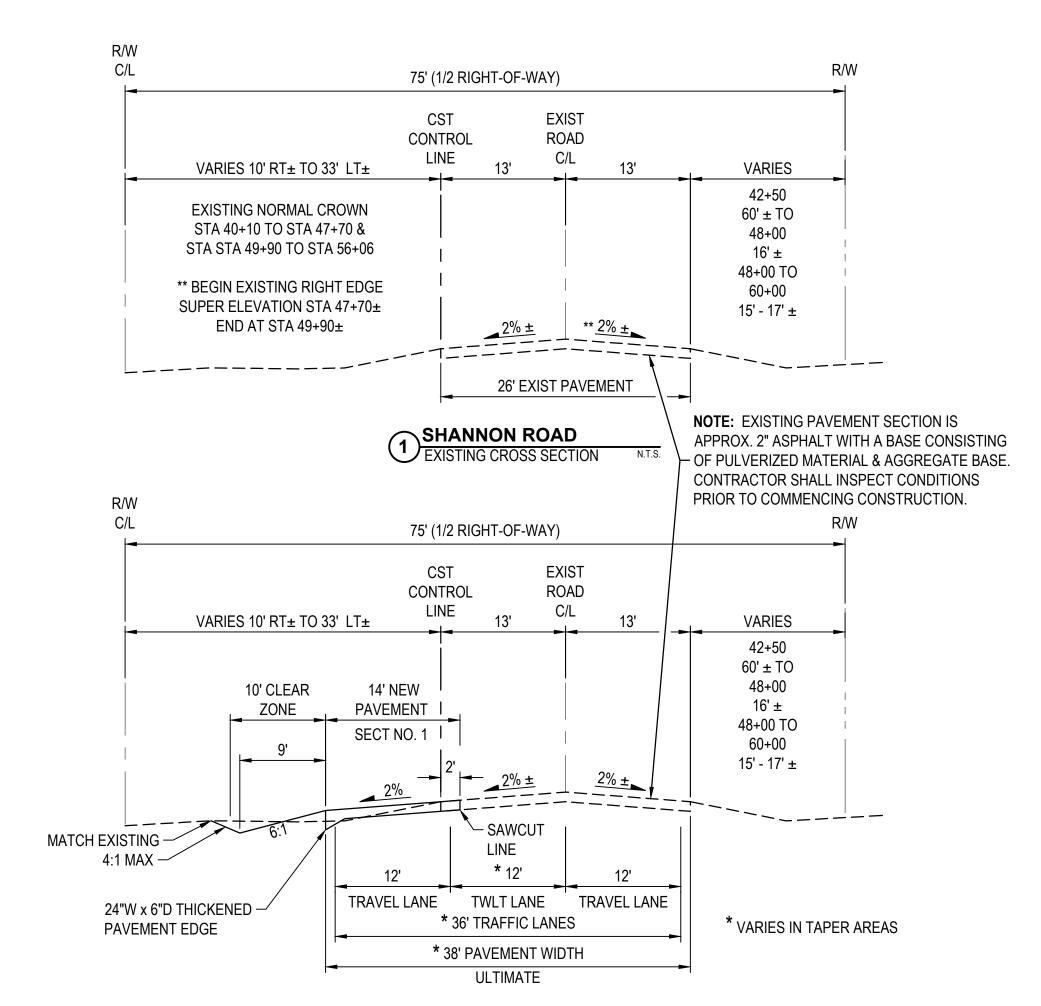
INSTALLED WITHIN 72 HOURS FOLLOWING COMPLETION OF THE FINAL PAVEMENT SURFACE OR AS DIRECTED

- 9. TRANSVERSE STRIPING, ARROWS AND LETTERING SHALL CONSIST OF WATER BASE TRAFFIC PAINT, 15 MILS (0.015") THICK, PLACED WITH AASHTO M 247-13 TYPE 1 GLASS BEADS HAVING AN ADHESION/MOISTURE PROOF COATING. REFLECTIVE BEADS SHALL BE PLACED AT A MINIMUM RATE OF 6 POUNDS PER GALLON.
- 10. TRAFFIC PAINT FOR TRANSVERSE STRIPING, ARROWS AND LETTERING SHALL BE APPLIED ONCE AFTER PAVING AND AGAIN 30 DAYS LATER, OR AS OTHERWISE DIRECTED BY THE TOWN ENGINEER OR DESIGNEE. THE INITIAL STRIPING SHALL BE INSTALLED WITHIN 72 HOURS FOLLOWING COMPLETION OF THE FINAL PAVEMENT SURFACE OR AS DIRECTED BY THE TOWN ENGINEER OF DESIGNEE.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF PAVEMENT MARKINGS ON FINAL SURFACE COURSE FOLLOWING CONTROL POINTS THAT HAVE BEEN SET NO MORE THAN 50 FEET APART ALONG THE LINES TO BE STRIPED. IN TANGENT SECTIONS OF A ROAD WHERE THE PAVEMENT MARKING PATTERN DOES NOT CHANGE, CONTROL POINTS CAN BE SET AT 200 FEET APART. THE LAYOUT AND INSPECTION OF ALL PAVEMENT MARKINGS SHALL BE APPROVED BY THE TOWN ENGINEER OR DESIGNEE PRIOR TO THE APPLICATION OF MATERIALS.
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE FINAL SURFACE COURSE IS PLACED SO THAT THE STRIPING IS OFFSET NO MORE THAN ONE FOOT CLEAR OF THE CONSTRUCTION JOINT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 13. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE TO THE SATISFACTION OF THE TOWN ENGINEER OR DESIGNEE BY SWEEPING AND AIR-JET BLOWING IMMEDIATELY PRIOR TO THE PLACEMENT OF ALL PAVEMENT MARKINGS. THE TEMPERATURE SHALL NOT BE LESS THAN 40 DEGREES FAHRENHEIT FOR THE PLACEMENT OF
- 14. ALL RAISED PAVEMENT MARKERS (RPMS) SHALL BE INSTALLED SO THAT THE REFLECTIVE FACE OF EACH MARKER IS FACING THE DIRECTION OF TRAFFIC AND PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW TYPE C PAVEMENT MARKERS (RPMS) SHALL BE INSTALLED SO THAT THE CLEAR REFLECTIVE FACE OF EACH MARKER IS FACING APPROACHING TRAFFIC AND IS PERPENDICULAR TO THE DIRECTION OF TRAFFIC FLOW.
- 15. AT INTERSECTION APPROACHES ON ROADWAYS WITH MEDIANS, TYPE C RPMS SHALL BE PLACED AS PER PC/COT STANDARDS OR AS DIRECTED BY THE TOWN ENGINEER OR DESIGNEE.
- 16. ALL REMOVAL OF EXISTING PAVEMENT MARKING SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTION 701 OF THE PAG STANDARDS AND SPECIFICATIONS. PAINTING OVER EXISTING STRIPING DOES NOT CONSTITUTE APPROVED STRIPING OBLITERATION.
- 17. THE ENGINEER OF RECORD SHALL BE REQUIRED TO PRODUCE AS-BUILT STRIPING PLANS, USING INFORMATION FROM THE CONTRACTOR, WITHIN 90 DAYS OF STRIPING COMPLETION. 18. 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. 19. FOR ALL CONSTRUCTION, ALL PAVEMENT MARKINGS AND SIGNING SHALL BE INSTALLED AND SHALL BE PAID
- FOR BY THE PROJECT OWNER/DEVELOPER. 20. FINAL INSPECTION/ACCEPTANCE OF PAVEMENT MARKINGS SHALL BE PERFORMED BY THE TOWN ENGINEER OR
- 21. THE PC/COT PAVEMENT MARKING DESIGN MANUAL IS AVAILABLE ONLINE AT: http://dot.pima.gov/trafeng/DesignManual/PavementManual.pdf



#### SIGNING GENERAL NOTES:

- 1. ALL EXISTING SIGNS AND POSTS 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 (PC/COT TSDM) AND THESE SIGNING NOTES. EXISTING SIGNS WHICH DO NOT MEET THE SPECIFIED REQUIREMENTS SHALL BE REPLACED BY THE CONTRACTOR WITH SIGNS WHICH COMPLY WITH THESE STANDARDS.
- SIGN LOCATIONS NOTED ON THE PLANS ARE APPROXIMATE AND MAYBE ADJUSTED TO FIT CONDITIONS AS DIRECTED BY THE TOWN ENGINEER OR DESIGNEE. THE CONTRACTOR SHALL VERIFY ACTUAL SIGN LOCATIONS WITH THE TOWN ENGINEER OR DESIGNEE PRIOR TO INSTALLATION. VERTICAL AND LATERAL SIGN INSTALLATION SHALL COMPLY WITH SHEET NO. 5-7 OR 5-8 OF THE PC/COT TSDM.
- EXISTING POSTS SHALL BE SALVAGED AND REUSED UNLESS THEY DO NOT MEET THE REQUIREMENTS OF THE PC/COT TSDM FOR PERFORATED, SQUARE TUBE POST (SEE SHEET 8-2-A OF THE PC/COT TSDM). EXISTING POSTS NOT MEETING THIS REQUIREMENT OR POSTS WHICH HAVE BEEN DAMAGED SHALL BE REPLACED WITH POSTS MEETING THE SPECIFIED PC/COT TSDM REQUIREMENTS.
- 4. ALL SALVAGED SIGNS OR THEIR REPLACEMENT SHALL BE INSTALLED ON SQUARE TUBE POST PER DETAIL #2 SHEET 6. POSTS SHALL BE INSTALLED IN A CONCRETE FOUNDATION IN CONFORMANCE WITH SHEET 8-2A OF THE PC/COT TSDM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ARIZONA 811 AT LEAST TWO FULL WORKING DAYS IN ADVANCE OF EXCAVATING FOR ANY SIGN POST.
- 6. ALL WARNING AND REGULATORY SIGNS SHALL BE TYPE IX (HIP) SHEETING, UNLESS OTHERWISE DETERMINED BY THE TOWN ENGINEER OR DESIGNEE. STREET NAME SIGNS AND ADVANCE STREET NAME SIGNS (SHEET 9-22A AND SHEET 9-22B OF THE PC/COT TSDM RESPECTIVELY) SHALL BE FABRICATED USING TYPE III (HIP)
- 7. SALVAGED SIGNS SHALL BE 0.080 GUAGE ALUMINUM BACKING WITH RADIUS CORNERS, SIGNS NOT MEETING THIS REQUIREMENT SHALL BE REPLACED. BY THE CONTRACTOR, WITH CONFORMING SIGNS
- SALVAGED SIGNS AND POSTS THAT ARE TO BE REUSED SHALL BE DISMANTLED, HANDLED AND STORED IN A MANNER THAT WILL PROTECT THE SIGN AND POST FROM DAMAGE OF ANY KIND WHATSOEVER. SALVAGED ITEMS WHICH ARE NOT INCORPORATED INTO THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND REMOVED FROM THE PROJECT SITE.
- ANY SALVAGED SIGN THAT IS TO BE REUSED SHALL BE TEMPORARILY STORED IN A SAFE LOCATION UNTIL REINSTALLATION.
- 10. REMOVAL SHALL BE IN ACCORDANCE WITH SECTION 202-3.06 OF THE LATEST PAG STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS.
- 11. FINAL INSPECTION/ACCPECTANCE OF SIGNING SHALL BE PERFORMED BY THE TOWN ENGINEER OR DESIGNEE.



SHANNON ROAD ULTIMATE CROSS SECTION

> RELATED CASE # PROJ#: 1901572 1900400, OV1701617 & OV1701072

> > SHEET 2

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andscape Architecture Urban Design

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**GENERAL NOTES & TYPICAL SECTIONS** 

HORZ. N.T.S **SCALES** 

OF 6

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PLAN ROAL ARIZO

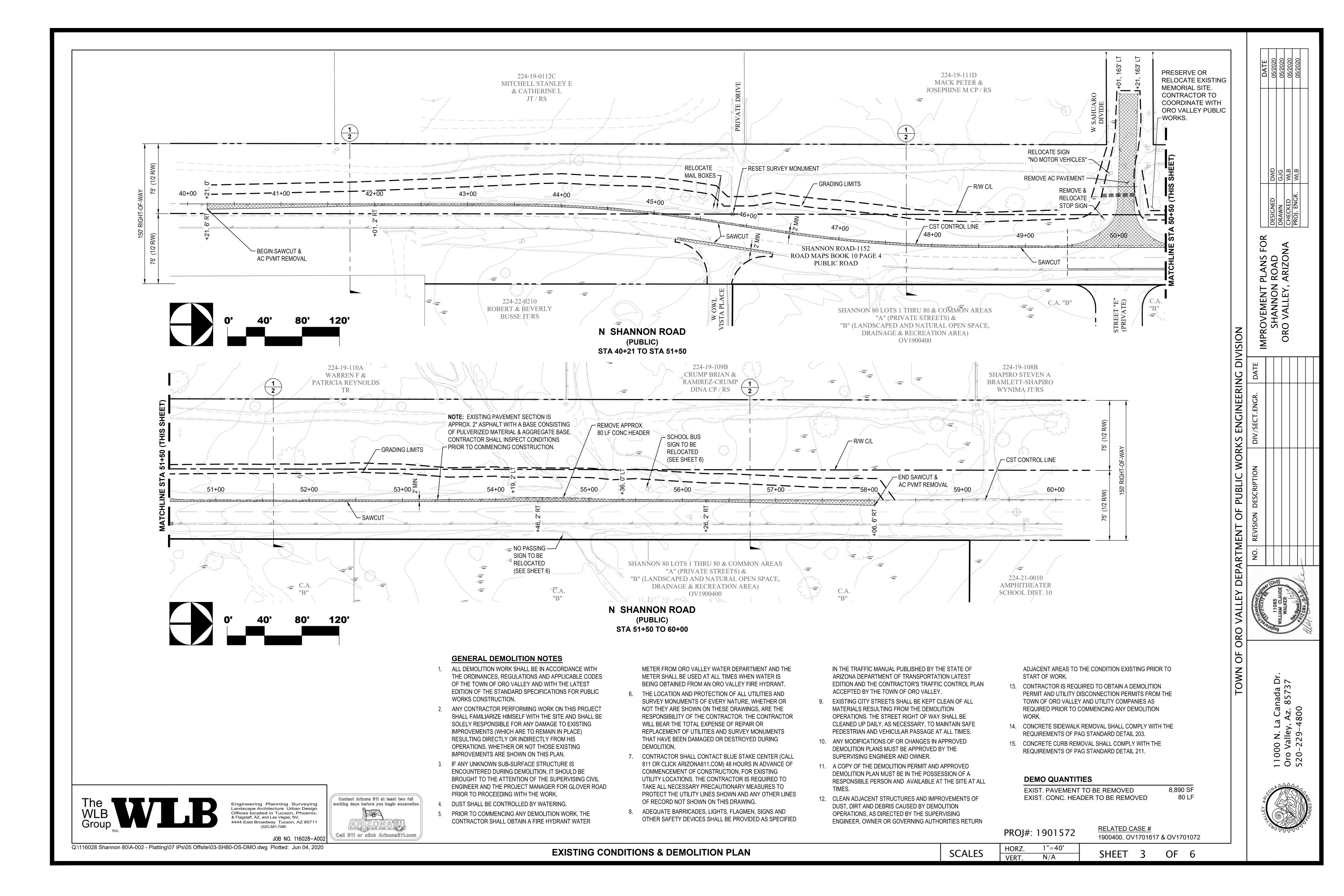


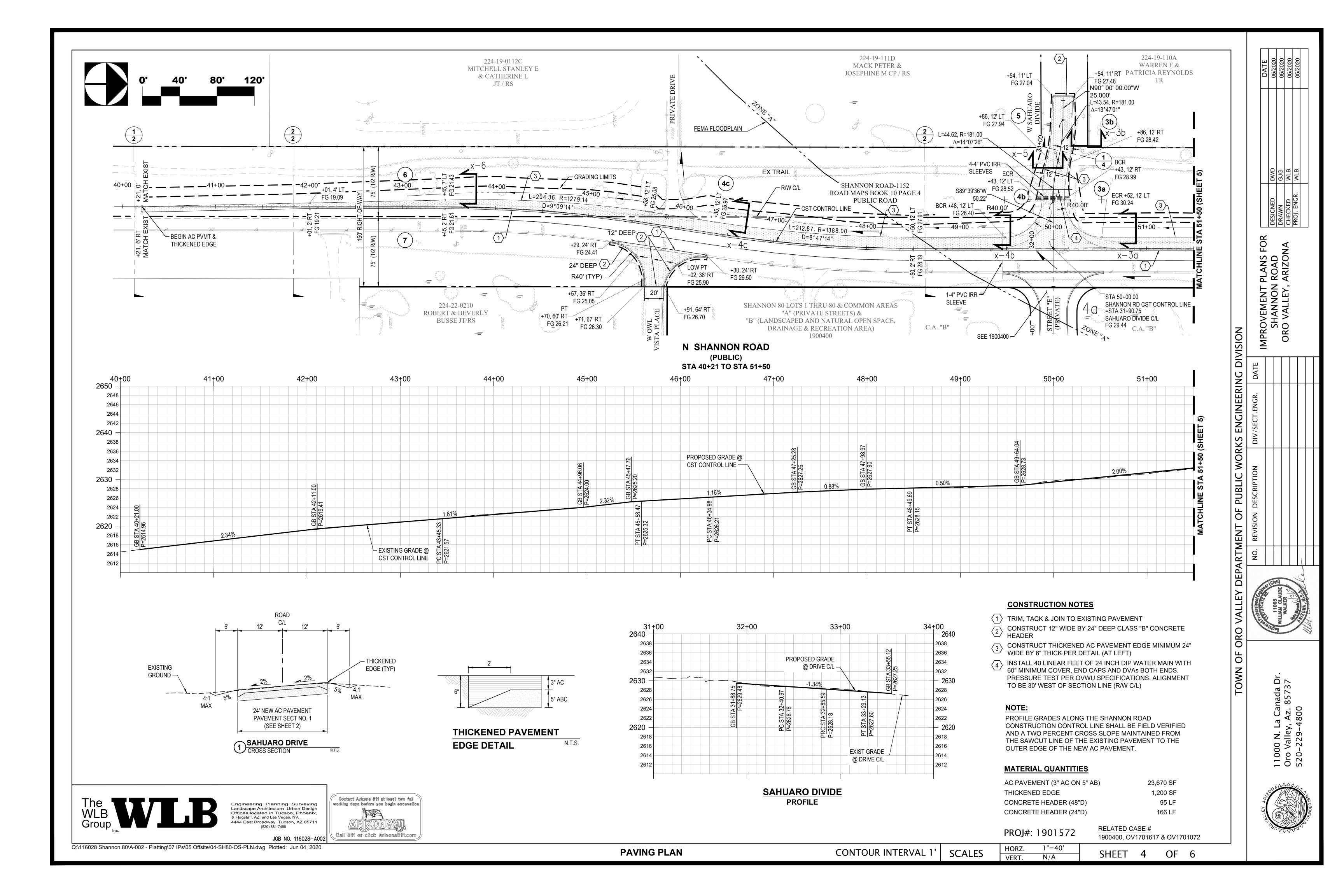


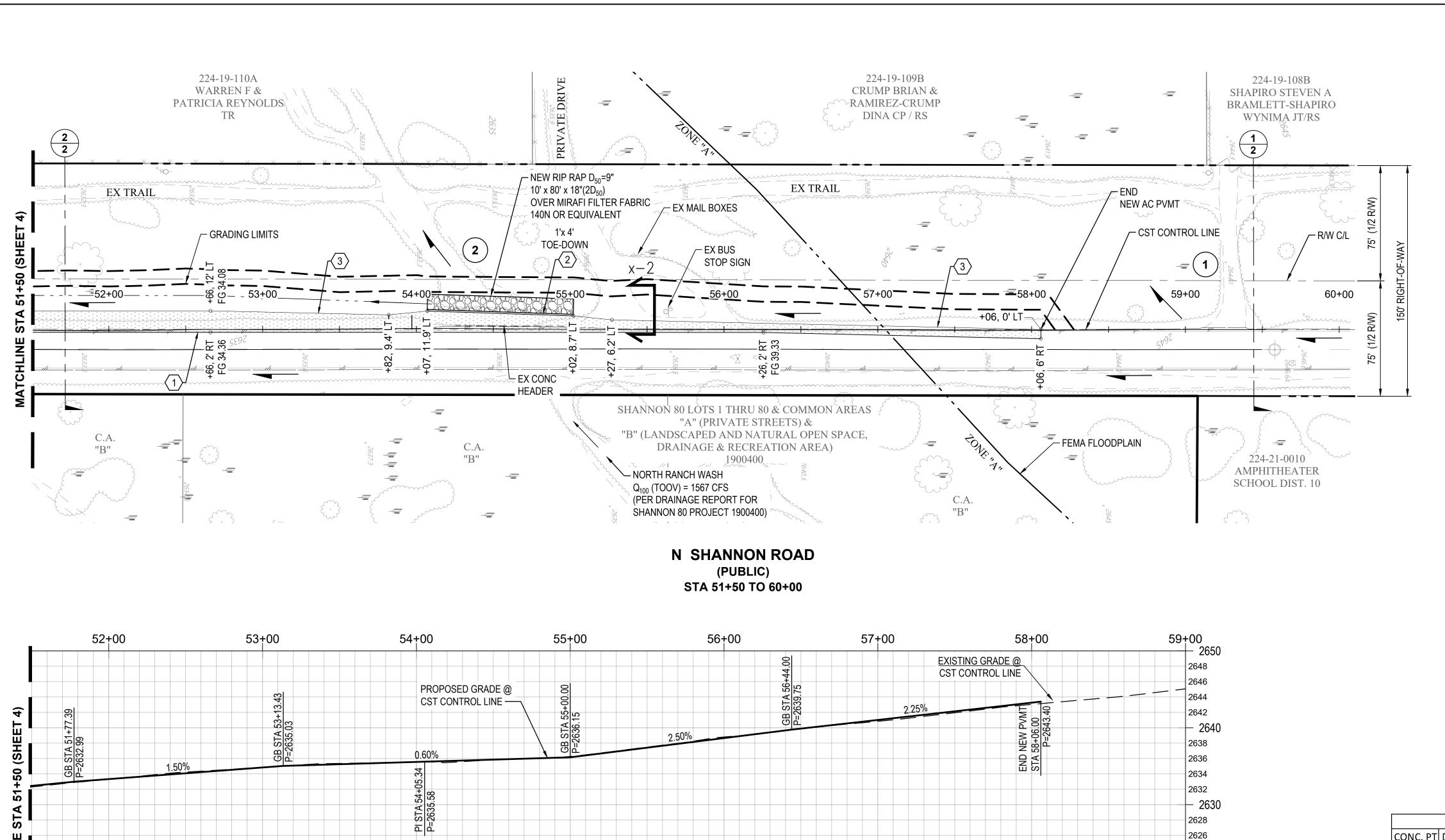
Contact Arizona 811 at least two full

BLUE STAKE, INC.

Call 811 or click Arizona811.com







0'	40'	80'	12

# **CONSTRUCTION NOTES**

- $\langle 1 \rangle$  TRIM, TACK & JOIN TO EXISTING PAVEMENT
- CONSTRUCT 12" WIDE BY 48" DEEP CLASS "B" CONCRETE HEADER
- CONSTRUCT THICKENED AC PAVEMENT EDGE MINIMUM 24" WIDE BY 6" THICK PER DETAIL BELOW

	TABLE OF POST-DEVELOPED PEAK DISCHARGES						
CC	NC. PT	DRAINAGE AREA (ac)	Q2 (cfs)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs	
	1	0.04	0.1	0.2	0.3	0.3	
	2	0.31	0.6	1.3	2.0	2.3	
	3a	0.39	0.8	1.7	2.5	2.9	
	3b	0.42	0.8	1.8	2.7	3.1	
	4a	0.60	1.0	2.4	3.7	4.3	
	4b	0.76	1.3	3.0	4.7	5.5	
	4c	1.06	1.6	3.9	6.3	7.4	
	5	0.07	0.2	0.4	0.5	0.6	
	6	0.26	0.5	1.1	1.6	1.9	
	7	0.19	0.6	1.0	1.4	1.6	

# NOTE:

PROFILE GRADES ALONG THE SHANNON ROAD CONSTRUCTION CONTROL LINE SHALL BE FIELD VERIFIED AND A TWO PERCENT CROSS SLOPE MAINTAINED FROM THE SAWCUT LINE OF THE EXISTING PAVEMENT TO THE OUTER EDGE OF THE NEW AC PAVEMENT.

TABLE OF CONSTRUCTED CHANNELS									
X-SEC	Q100 (cfs)	V100 (fps)	fb (ft)	d (ft)	D (ft)	SLOPE (%)	Bw (ft)	SS	n
x-2	2.3	2.66	0.09	0.42	0.51	2.4	-	6 & 4	0.030
x-3a	2.9	2.47	0.10	0.48	0.58	1.7	-	6&4	0.030
x-3b	3.1	1.94	0.07	0.36	0.43	1.5	-	20 & 4	0.030
x-4b	5.5	1.84	0.14	0.77	0.91	0.5	-	6&4	0.030
x-4c	7.4	2.56	0.14	0.76	0.90	1.0	-	6&4	0.030
x-5	0.6	1.26	0.04	0.2	0.24	1.4	-	4 & 20	0.030
x-6	1.9	2.12	0.08	0.42	0.50	1.5	_	6&4	0.030

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PROJ#: 1901572

1900400, OV1701617 & OV1701072



**PAVING PLAN** 

CONTOUR INTERVAL 1

2612

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SHEET 5

11000 N. La Canada D Oro Valley, Az. 85737 520-229-4800

FOR

NORKS

