MANZANITA ELEMENTARY SCHOOL
PEDESTRIAN IMPROVEMENT PROJECT

PROJECT DESCRIPTION:

MANZANITA ELEMENTARY SCHOOL PEDESTRIAN IMPROVEMENT PROJECT IS LOCATED IN UNINCORPORATED PIMA COUNTY ALONG CAMPBELL AVENUE FROM LA ENCANTADA SHOPPING CENTER TO PLAZA ENCANTADA. THE PRIMARY PURPOSE OF THIS PROJECT IS TO PROVIDE SIDEWALK/PAVED PEDESTRIAN PATH AND ASSOCIATED IMPROVEMENTS ALONG CAMPBELL AVENUE TO PROVIDE A PEDESTRIAN ROUTE TO MANZANITA ELEMENTARY SCHOOL.

PROJECT NUMBER
4RTMES

PIMA COUNTY
TRANSPORTATION

PIMA COUNTY BOARD OF SUPERVISORS
SHARON BRONSON, CHAIRMAN, DISTRICT 3
ALLY MILLER, DISTRICT 1
RAMON VALADEZ, DISTRICT 2
RAY CARROLL, DISTRICT 4
RICHARD ELIAS, DISTRICT 5

PROJECT IN SUPERVISOR DISTRICT 1

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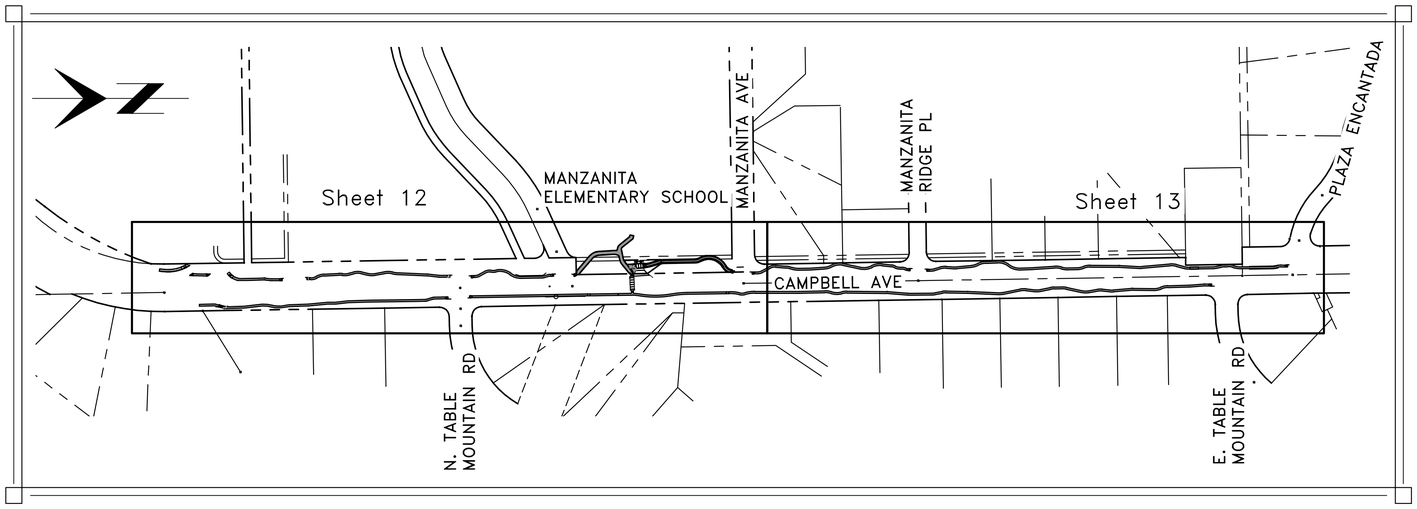
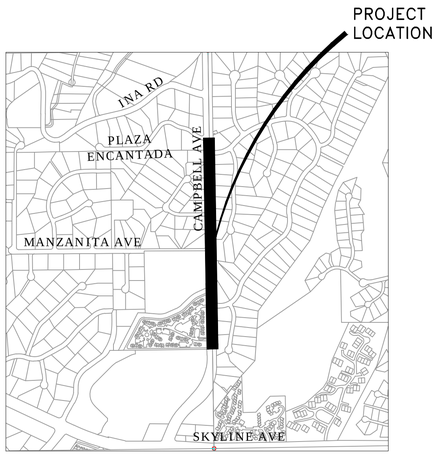


INDEX TO PLAN SHEETS
NTS



LOCATION MAP
NTS

T13SR14E,
SECTION 4&5
PIMA COUNTY ARIZONA

Manzanita Elementary School Pedestrian Improvement Project - Project No. 4RTMES

Pima County Department of Transportation
201 N. Stone Ave. 4th floor Tucson, Arizona 85701
Phone Number: 724-6410
Priscilla S. Cornelio, P.E. Director

PCRWRD #UPC-2015-039

Kimley»Horn

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333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

No.	Revisions	Engineer	Date

No.	As Built	Engineer	Date

Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

Reviewed by	Engineer	Date
Mgr. Trans Engr.		
Mgr. Traffic Engr.		
Mgr. Field Engr.		

Approved: _____20__
Director

Project No. 4RTMES | Sheet No. 1 of 19 | Page No. 1 of 19

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

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\02202SCV.dwg Apr 16, 2015 sean.hays
XREFS: x02202SVA x02202SBD x02202SBM x02202SVB x02202SVTP-2D x02202SVS T13S-R14E-S5 T13S-R14E-S4 x02202SGL-4D x02202SRW

GENERAL NOTES:

1. CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS AND DETAILS LISTED IN THE SPECIAL PROVISIONS.

2. UTILITY LOCATIONS SHOWN ON THE PLANS WERE COMPILED BASED ON THE BEST INFORMATION AVAILABLE TO THE DEPARTMENT, UTILITY LOCATIONS ARE NOT INTENDED TO BE EXACT OR COMPLETE. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES WITH THE APPROPRIATE ORGANIZATIONS. CONTACT "BLUE STAKE" AT 1-800-782-5348 TWO FULL WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION (SATURDAYS AND SUNDAYS ARE NOT CONSIDERED WORKING DAYS.)

3. RIGHT-OF-WAY ENCROACHMENTS SHALL BE REMOVED ONLY BY ORDER OF PIMA COUNTY, UNLESS OTHERWISE NOTED.

4. REMOVAL OF ALL CACTI AND NATIVE PLANTS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE "ARIZONA NATIVE PLANT LAW" A.R.S, CHAPTER 7.

5. BASIS OF ELEVATIONS:
THE ELEVATION DATUM FOR THIS SURVEY IS NAVD88. THE PROJECT BENCHMARK IS A 2 INCH DIAMETER BRASS CAP IN CONCRETE STAMPED "RLS 31038", DESIGNATED "BE09" BY THE PIMA ASSOCIATION OF GOVERNMENTS JOINT MAPPING PROJECT, WHICH LIES 5.93 FEET NORTH OF A 2 INCH DIAMETER BRASS CAP IN CONCRETE STAMPED "RLS 31038" MARKING THE SOUTHEAST CORNER OF SECTION 5, TOWNSHIP 13 SOUTH RANGE 14 EAST, GILA AND SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA. THE ELEVATION IS 2730.60 FEET.

6. BASIS OF BEARINGS:
THE REFERENCE MERIDIAN FOR THIS PROJECT IS GRID NORTH, ARIZONA STATE PLANE COORDINATE SYSTEM, NAD1983 (HARN92), CENTRAL ZONE. THE BASIS OF BEARINGS FOR THIS PROJECT IS THE GRID BEARING OF NORTH 87°24'24" WEST BETWEEN A 2 INCH DIAMETER BRASS CAP IN CONCRETE STAMPED "RLS 31038", DESIGNATED "BE09" BY THE PIMA ASSOCIATION OF GOVERNMENTS JOINT MAPPING PROJECT, WHICH LIES 5.93 FEET NORTH OF A 2 INCH DIAMETER BRASS CAP IN CONCRETE STAMPED "RLS 31038" MARKING THE SOUTHEAST CORNER OF SECTION 5, TOWNSHIP 13 SOUTH, RANGE 14 EAST, GILA AND SALT RIVER MERIDIAN, PIMA COUNTY, ARIZONA, AND A 1.5 INCH DIAMETER ALUMINUM CAPPED REBAR STAMPED "CITY OF TUCSON, GPS, BE07, RLS 20373", DESIGNATED "BE07" BY THE PIMA ASSOCIATION OF GOVERNMENTS JOINT MAPPING PROJECT, WHICH IS LOCATED AT THE EAST END OF A CUL-DE-SAC APPROXIMATELY 250 FEET EASTERLY OF THE INTERSECTION AND MIRAVAL PRIMERO AND CAMINO MIRAVAL.

7. BASIS OF COORDINATES:
THE ARIZONA STATE PLANE COORDINATES, NAD83 (HARN92), CENTRAL ZONE, INTERNATIONAL FEET (ASPIF) WERE SCALED TO CREATE A "MODIFIED" COORDINATE SYSTEM AT SURFACE VALUES. THE INVERSE OF THE COMBINED GRID FACTOR, 0.999887972 (1/X = 1.000112041) WAS APPLIED AT PIMA ASSOCIATION OF GOVERNMENTS POINT "BE09" TO PRODUCE THE FINAL SURFACE COORDINATES.

   BE09 (ASPIF) NORTHING = 482,525.684
   BE09 (ASPIF) EASTING = 1,005,720.745

   BE07 (ASPIF) NORTHING = 482,657.760
   BE07 (ASPIF) EASTING = 1,002,804.727

8. SOILS INFORMATION IS NOT AVAILABLE FOR THIS PROJECT.

9. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS, ALLEYS, AND MAILBOXES DURING CONSTRUCTION. THE CONTRACTOR WILL NOT RESTRICT EMERGENCY VEHICLES, U.S. POSTAL DELIVERY, SOLID WASTE COLLECTIONS, AND/OR ACCESS TO THE ADJACENT PROPERTIES, EXCEPT AS APPROVED BY THE ENGINEER.

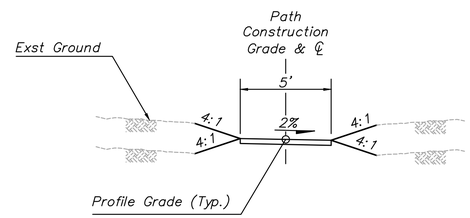
10. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, OR DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.

11. ALL STATIONING SHOWN ON THE PLANS AND PROFILES IS ALONG THE CONSTRUCTION CENTERLINE UNLESS OTHERWISE NOTED.

12. EXISTING UTILITIES INCLUDE, BUT MAY NOT BE LIMITED TO, OVERHEAD AND UNDERGROUND ELECTRIC, TELEPHONE, TELEVISION, SEWER, GAS, AND WATER, AND SHALL BE MOVED BY OTHERS UNLESS OTHERWISE NOTED AND SHOWN IN THESE PLANS.

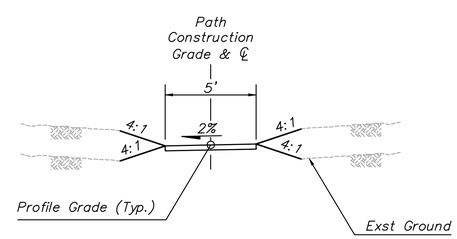
13. THE CONTRACTOR'S ATTENTION IS CALLED TO THE LIMITED AREA AVAILABLE ON THE SITE FOR EXCAVATION, EMBANKMENT AND OTHER CONSTRUCTION ACTIVITIES.

14. EXISTING TOPOGRAPHIC CONDITIONS SHOWN ON PLAN SHEETS REFLECT CONDITIONS AS OF JUNE 9TH, 2011.



PATH TYPICAL SECTION
SLOPING RIGHT

Start Sta	End Sta
0+00.00	7+91.69
13+41.07	29+40.00
57+14.59	76+86.21



PATH TYPICAL SECTION
SLOPING LEFT

Start Sta	End Sta
8+43.01	13+15.29
29+40.00	30+94.94
50+00.00	56+63.44

EARTHWORK TABLE

ITEM NO.	DESCRIPTION	VOL (C.Y.)
	EXCAVATIONS	
2050010	PATHWAY GRADING (WEST PATH)	190
	PATHWAY GRADING (EAST PATH)	191
	NET-EXCAVATION (AVAILABLE FOR EMBANKMENTS)	381
	EMBANKMENTS	
	WEST PATH EMBANKMENT	136
	EAST PATH EMBANKMENT	40
	NET - EMBANKMENT	176
	WASTE	205

* NO SHRINK APPLIED

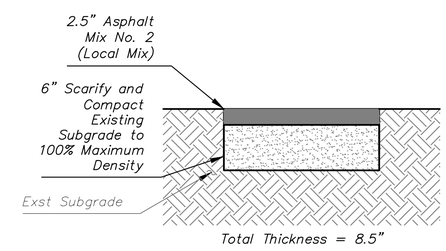
NOTE:

EARTHWORK TO BE PAID FOR UNDER BID ITEM 2050010 (PATHWAY GRADING). APPROXIMATE VALUES ARE PRESENTED FOR INFORMATION ONLY.

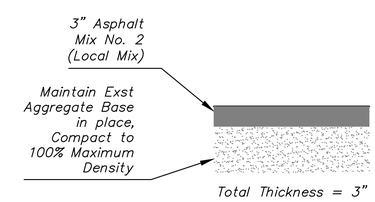
ALL EARTHWORK FOR DRIVEWAY RECONSTRUCTION, INCLUDING SCARIFICATION AND RECOMPACTION TO BE PAID FOR UNDER BID ITEM 2050003 (ROADWAY GRADING).

LEGEND

- EXISTING SIGN
- RELOCATED SIGN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- SURVEY MARKER
- TEMP. BENCH MARK
- EXISTING MANHOLE
- EXISTING WATER METER
- EXISTING VEGETATION
- W — WATER
- SS — PUBLIC SEWER
- G — GAS
- CATV — COMMUNICATION
- T — TELEPHONE
- P — UNDERGROUND POWER
- X — EXISTING CHAIN LINK FENCE
- PROPOSED CHAIN LINK FENCE
- PROPOSED RAILING
- AC PATH CENTER LINE
- SECTION LINE/ MONUMENT LINE
- RIGHT OF WAY
- PROPERTY LINE
- CTL EASEMENT
- EXISTING VERTICAL CURB
- NEW VERTICAL CURB
- NEW AC PATH
- NEW CONCRETE
- NEW RIPRAP



PAVEMENT STRUCTURAL SECTION NO. 1
PAVED PEDESTRIAN PATH



PAVEMENT STRUCTURAL SECTION NO. 2
DRIVEWAY

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

Scale:	N/A N/A	Sheet 2 of 19

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

Kimley»Horn

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333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

MANZANITA ELEMENTARY
SCHOOL BICYCLE AND
PEDESTRIAN IMPROVEMENT
PROJECT
GENERAL NOTES

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025GN01.dwg Apr 16, 2015 sean.hays
XREFS: x022025VA x022025BD x022025BM x022025TP-2D x022025TB x022025EL-40 x022025TP x022025PR x022025US x022025RW

SIGNING CONSTRUCTION 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 CAMPBELL AVENUE IS 40 MPH. THE POSTED SPEED LIMIT IS 35 MPH. SIGN PLACEMENT SHALL BE BASED ON THE POSTED SPEED LIMIT.
5. POST LENGTHS INDICATED ON SUMMARY TABLE 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 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 WARRANTIES BEGIN).
9. ALL OVERHEAD MOUNTED SIGNS SHALL BE DIAMOND GRADE SHEETING, TYPE XI. ALL SCHOOL SIGNS SHALL BE FLUORESCENT 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.

PAVEMENT MARKING CONSTRUCTION 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 MARKING 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 CAMPBELL AVENUE IS 40 MPH. THE DESIGN VEHICLE IS A WB-50. THE POSTED SPEED LIMIT IS 35 MPH.
6. ALL LANE DIMENSIONS ARE MEASURED FROM THE CENTER OF LANE LINE, CENTER OF DOUBLE LANE LINE, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
7. THE PAVEMENT MARKING DRAWINGS ARE SCHEMATIC ONLY. THE CONTRACTOR SHALL FOLLOW ALL DIMENSIONS, APPLICABLE MARKING DETAILS, AND SPECIFIED PIMA COUNTY STANDARDS WHEN INSTALLING PAVEMENT STRIPING, SYMBOLS, LEGENDS, AND MARKERS.
8. PAINTED LAYOUT STRIPING SHALL BE 15 MIL (0.015") THICK, WATER BASED PAINT PLACED ON THE FINAL PAVEMENT SURFACE. 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 90 MIL (0.090") 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 FINAL STRIPING.
14. 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.
15. UNLESS OTHERWISE NOTED, ALL PAVEMENT MARKINGS SHALL BE INSTALLED BY THE CONTRACTOR.
16. 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.
17. 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 WARRANTIES BEGIN).
18. THE PC/COT PAVEMENT MARKING MANUAL IS AVAILABLE ONLINE AT HTTP://DOT.PIMA.GOV/TRAFENG/DESIGNMANUAL/PAVEMENTMANUAL.PDF.

PAVEMENT MARKING CONSTRUCTION NOTES:

1. ALL DESIGN STANDARDS, MATERIALS AND WORKMANSHIP FOR PUBLIC SANITARY SEWERS SHALL BE IN ACCORDANCE WITH THE PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT (PCRWRD) ENGINEERING DESIGN STANDARDS 2012 (EDS 2012) AND THE PCRWRD STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION 2012 (SSDC 2012). SAID DOCUMENTS ARE AVAILABLE THROUGH THE PCRWRD WEBSITE.
2. THE CONTRACTOR SHALL CALL "BLUE STAKE" (1-800-782-5348) A MINIMUM OF TWO (BUSINESS) DAYS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL KEEP ALL "BLUE STAKE" REQUESTS UP-TO-DATE AND COMPLY WITH APPLICABLE ARIZONA REVISED STATUTES (A.R.S.), TITLE 40, CHAPTER 1, ARTICLE 6.3, SECTION 40-360.22 PERTAINING TO "BLUE STAKE". ERRORS IN B"BLUE STAKE" SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SANITARY SEWER MANHOLE STRUCTURES AT ALL TIMES.

SEWER NOTES:

4. THE CONTRACTOR SHALL FIELD-VERIFY EXISTING SEWER LINE ELEVATIONS AND ALIGNMENTS PRIOR TO CONSTRUCTION AND IMPLEMENTATION. VERIFICATION MAY REQUIRE POTHOLING.
5. HOUSE OR BUSINESS CONNECTION SEWERS (HCS OR BCS) ARE NOT PART OF THE PUBLIC SANITARY SEWER CONVEYANCE SYSTEM. PRIVATE CONNECTION SEWERS CONSTRUCTED PRIOR TO JANUARY 2006 ARE NOT REQUIRED TO BE BLUESTAKED. ANY HCS/BCS ENCOUNTERED DURING CONSTRUCTION SHALL BE PROTECTED, REPAIRED OR REROUTED, AS THE SITUATION DICTATES PER PCRWRD SSDC 2012, STANDARD DETAIL RWRD 400.
6. IMMEDIATELY REPORT ANY OF THE FOLLOWING TO EITHER PCRWRD FIELD ENGINEERING (520-740-2651) OR PCRWRD CONVEYANCE DIVISION (520-724-3400): ANY RELEASE OF SEWAGE, ANY DAMAGE TO THE PUBLIC SANITARY SEWAGE SYSTEM, OR THE DROPPING OF DEBRIS INTO THE PUBLIC SANITARY SEWAGE SYSTEM. ON WEEKENDS, HOLIDAYS, OR BETWEEN 5:00 P.M. AND 7:00 A.M. , IMMEDIATELY CALL PCRWRD OPERATIONS CONTROL CENTER AT (520-724-6048) AND REQUEST A PCRWRD REPRESENTATIVE TO BE DISPATCHED TO THE SITE. TAKE IMMEDIATE ACTION TO CONTAIN THE SANITARY SEWAGE OVERFLOW (SSO) FROM THE SEWER SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS TO REPAIR THE SYSTEM, FOR ALL EXPENSES TO MITIGATE THE RELEASE AND TO DISINFECT THE RELEASE AREAS AND FOR ANY REGULATORY PENALTIES LEVIED ON PCRWRD BECAUSE THE SSO ENTERED A NATURAL DRAINAGEWAY OR STORM WATER DRAINAGE SYSTEM. THE CONTRACTOR SHALL REPAIR ALL DAMAGE AS DIRECTED AND APPROVED BY PCRWRD.
7. SEWER CONSTRUCTION SHALL NOT COMMENCE UNTIL: (A) CONTRACTOR HAS OBTAINED A PUBLIC SEWER CONSTRUCTION PERMIT FROM PCRWRD (520-724-6369) AND (B) A PRE-CONSTRUCTION MEETING WITH THE ASSIGNED PIMA COUNTY PROJECT INSPECTOR IS SCHEDULED, AT LEAST THREE (3) FULL WORKING DAYS PRIOR TO THE START OF SEWER CONSTRUCTION. FLOW MANAGEMENT PLANS SHALL BE SUBMITTED TO FIELD ENGINEERING THIRTY (30) DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADJUST OR RECONSTRUCT ALL SANITARY SEWER MANHOLES TO FINISHED GRADE. ALL FRAME AND COVER ADJUSTMENTS SHALL BE IN ACCORDANCE WITH PCRWRD SSDC 2012, STANDARD DETAILS RWRD-211, -212, -304 OR -305, AS APPLICABLE. THE CONTRACTORS SHALL PROTECT THE BENCH AND FLOW CHANNELS WITH A COVER PER RWRD-306. WHILE ADJUSTING THE MANHOLE TO FINISHED GRADE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE FRAME AND COVER ARE CLEANED OF ANY AND ALL ATTACHED MATERIALS (ASPHALT, CONCRETE, ETC) AND THAT ALL VENT HOLES ARE OPEN AND CLEAR OF OBSTRUCTIONS. IF THE FRAME AND COVER ARE DAMAGED OR CANNOT BE COMPLETELY CLEANED, THEY SHALL BE REPLACED WITH A NEW AND EQUIVALENT FRAME AND COVER PER STANDARD DETAILS RWRD-213, -214, -215, -216, -217, OR -218. COSTS ASSOCIATED WITH THESE ACTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. FOR WASTEWATER FLOW MANAGEMENT PLAN REQUIREMENTS, SEE THE PCRWRD SSDC 2012, SECTION 2. CALL PCRWRD FIELD ENGINEERING AT (520-740-2651) FOR ALL QUESTIONS REGARDING THE PREPARATION OF FLOW MANAGEMENT PLANS. PCRWRD SSDC 2012, SECTION 2.2.1 APPLIES TO ANY PROJECT THAT REQUIRES TRENCHING WITHIN SIC (6) FEET HORIZONTALLY AND/OR TWO (2) FEET VERTICALLY OF AN EXISTING PUBLIC SEWER LINE. PRECEDING ANY THAT MAY AFFECT A LIVE SEWER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO: (A) IDENTIFY AND INCLUDE ALL FLOW MANAGEMENT COSTS IN THE CONSTRUCTION BID AND (B) PROVIDE A FLOW MANAGEMENT PLAN THIRTY (30) DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.
10. ALL LANDSCAPING LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF THE PUBLIC SANITARY SEWER AND MANHOLES AND/OR WITHIN THE PUBLIC SEWER EASEMENTS SHOWN HERON SHALL BE IN ACCORDANCE WITH THE PLANTING GUIDELINES CONTAINED WITHIN PCRWRD EDS 2012, SECTION 7.7.
11. ALL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES SHALL BE INSTALLED SO AS TO PREVENT ALL STORM WATER, CONSTRUCTION WATER, FUELS, CHEMICALS, OR LIQUIDS TO BE DIRECTED INTO OR ONTO ANY SANITARY SEWER FACILITIES. PROTECTION OF SANITARY SEWER FACILITIES SHALL BE A PART OF THE APPROVED CONSTRUCTION SWPPP AND BEST MANAGEMENT PRACTICES. PROTECTION DEVICES SHALL BE INSTALLED AND MAINTAINED AROUND ALL POTENTIALLY AFFECTED SANITARY SEWER FACILITIES WITHIN THE PROJECT LIMITS. ADDITIONAL MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO THE USE OF RAIN STOPPERS AND MANHOLE COVERS AS DEEMED NECESSARY BY PCRWRD.
12. THE CONTRACTOR SHALL VERIFY THAT ALL SANITARY SEWER MANHOLE COVERS AND PICK HOLES ARE CLEAN AND FREE OF ANY CONSTRUCTION MATERIALS, DEBRIS, AND/OR OBSTRUCTIONS AFTER THE COMPLETION OF PAVING WORK. FOREIGN MATERIALS SHALL BE REMOVED FROM THE EXISTING MANHOLE COVERS REGARDLESS OF EXISTING OR NEW CONDITIONS. IF BUILD-UP IS TOO HEAVY TO BE REMOVED, THE CONTRACTOR THE CONTRACTOR SHALL REPLACE THE MANHOLE FRAME AND COVER.
13. THE CONTRACTOR SHALL REMOVE ANY DEBRIS THAT ENTERS A SEWER MANHOLE DURING THE CONSTRUCTION PROCESS. FAILURE FROM THE CONTRACTOR TO PROMPTLY REMOVE DEBRIS FROM THE MANHOLE SHALL RESULT IN PCRWRD TAKING CORRECTIVE ACTION THAT WILL THEN BE BILLED TO THE CONTRACTOR.

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

Scale: N/A N/A

Sheet 3 of 19

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 47513 ALLEN R. HATHCOCK Date Signed 04/16/15 ARIZONA U.S.A.
Exp. Date 03/31/2017

Kimley»Horn
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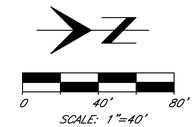
333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
GENERAL NOTES

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025GN02.dwg, Apr 16, 2015, sean.hays
XREFS: x022025VA x022025BD x022025BM x022025TP-2D x022025TB x022025SG-4D x022025TP x022025PR x022025US x022025RW

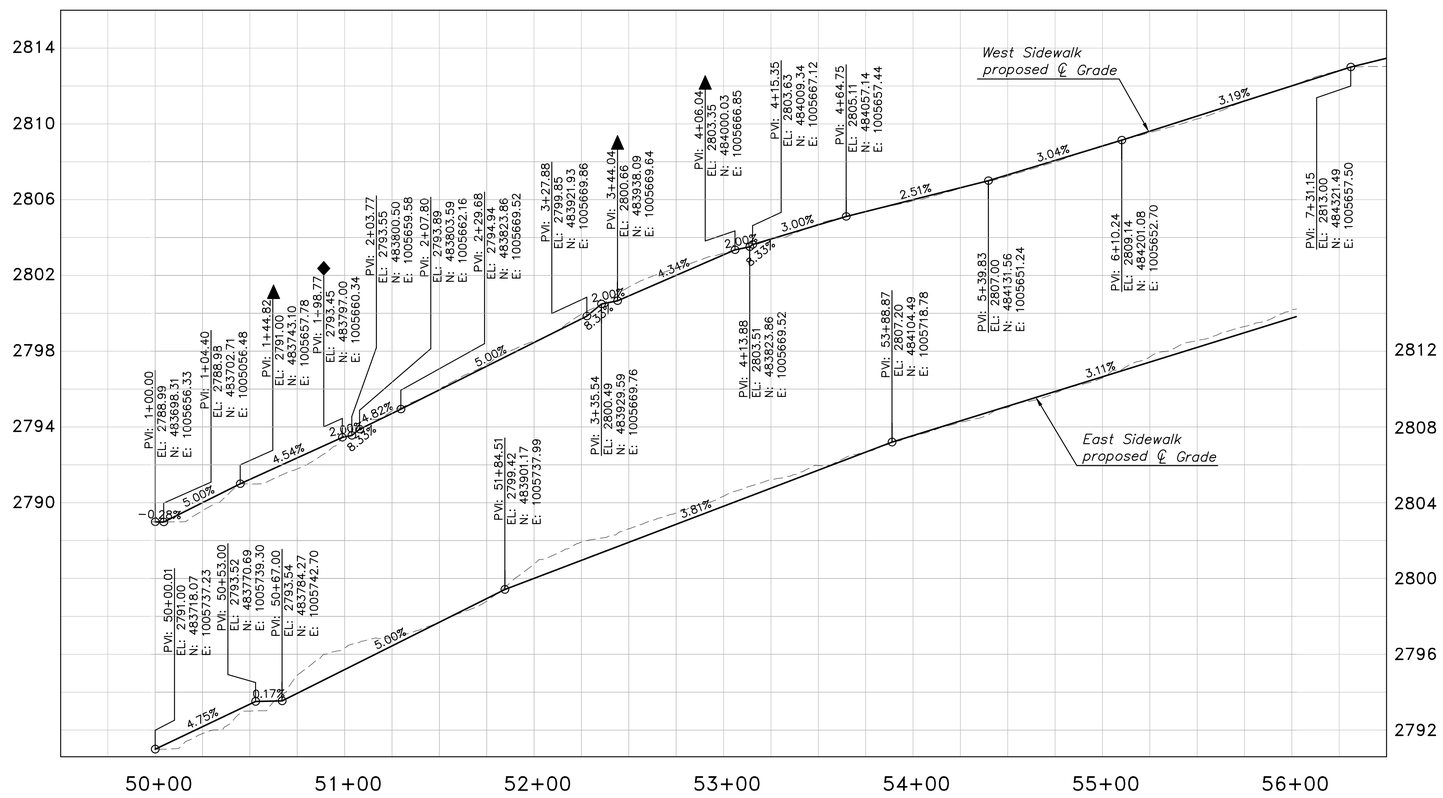


NOTES

SEE SHEET 8 FOR LINE AND CURVE DATA

◆ ACCESS RAMP CONTROL POINT

▲ CONCRETE LANDING WITH DETECTABLE WARNING STRIP CONTROL POINT



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In Maricopa County: (602) 263-1100

Scale: 1" = 40' H
1" = 4' V

Sheet 4 of 19

Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
CONTROL SHEET 1

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Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

No.	Revision Description	Engineer	Date

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

Priscilla S. Cornelio, P.E., Director

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025C01.dwg Apr 16, 2015 sean.hays
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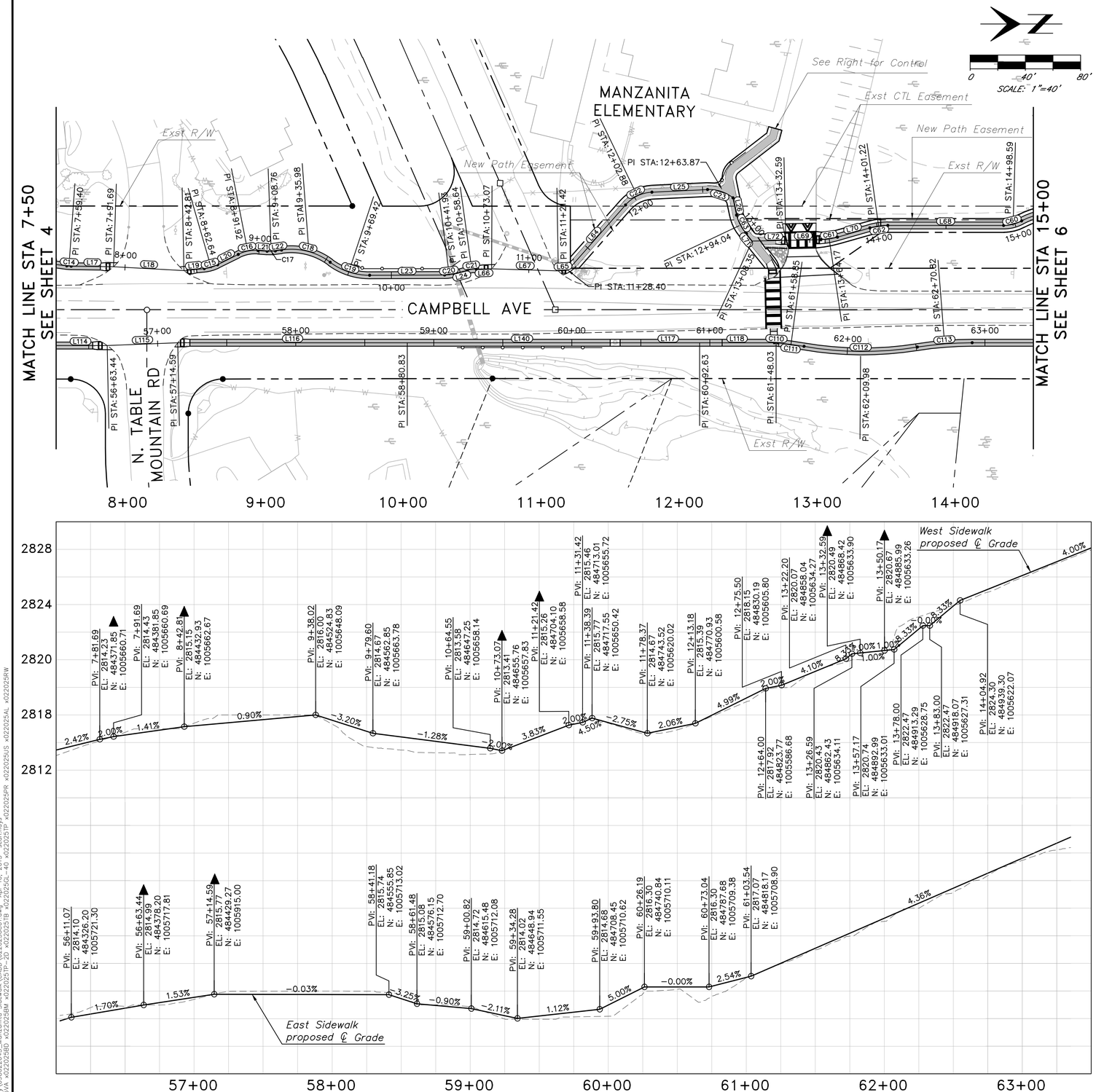

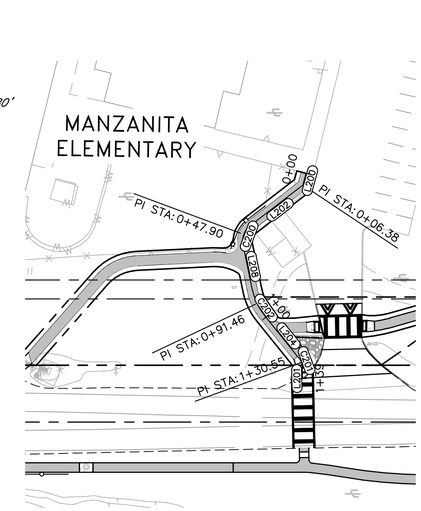

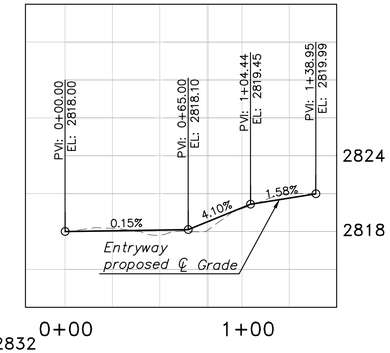

NOTES

SEE SHEET 8 FOR LINE AND CURVE DATA

▲ CONCRETE LANDING WITH DETECTABLE WARNING STRIP CONTROL POINT

Call at least two full working days before you begin excavation.
ARIZONA 811
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In Maricopa County: (602) 263-1100

Scale: 1" = 40' H, 1" = 4' V

Sheet 5 of 19

Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
CONTROL SHEET 2

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Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/20/15
ARIZONA, U.S.A.
Exp. Date 03/31/2017

No.	Revision Description	Engineer	Date

Priscilla S. Cornelio, P.E., Director

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

K:\TUC_Roadway\098022043_Manzanita_Sidewalk\CADD\022025CC01.dwg Apr 16, 2015 sean.hays
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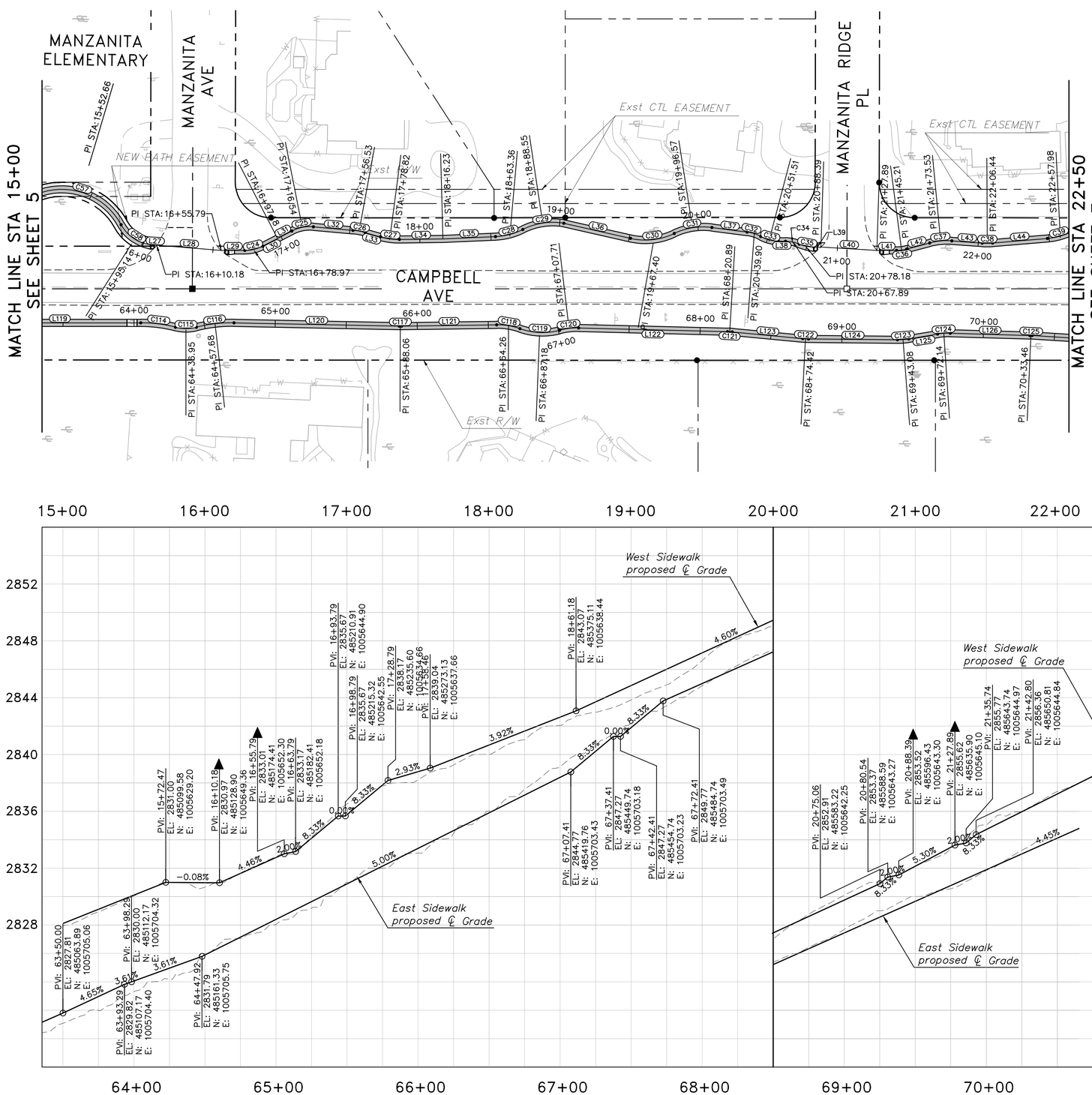

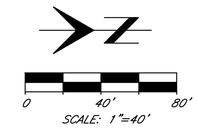

NOTES

SEE SHEET 8 FOR LINE AND CURVE DATA

▲ CONCRETE LANDING WITH DETECTABLE WARNING STRIP CONTROL POINT

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

Scale: 1" = 40' H
1" = 4' V

Sheet 6 of 19

Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
CONTROL SHEET 3

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Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

Priscilla S. Cornelio, P.E., Director

Designed	T. Rhine
Drawn	S. Hays
Checked	A. Hathcock
Proj. Engr.	A. Hathcock

Date: 04/2015, 04/2015, 04/2015, 04/2015

No.	Revision Description	Engineer	Date

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025CC01.dwg Apr 16, 2015 seon.hoya
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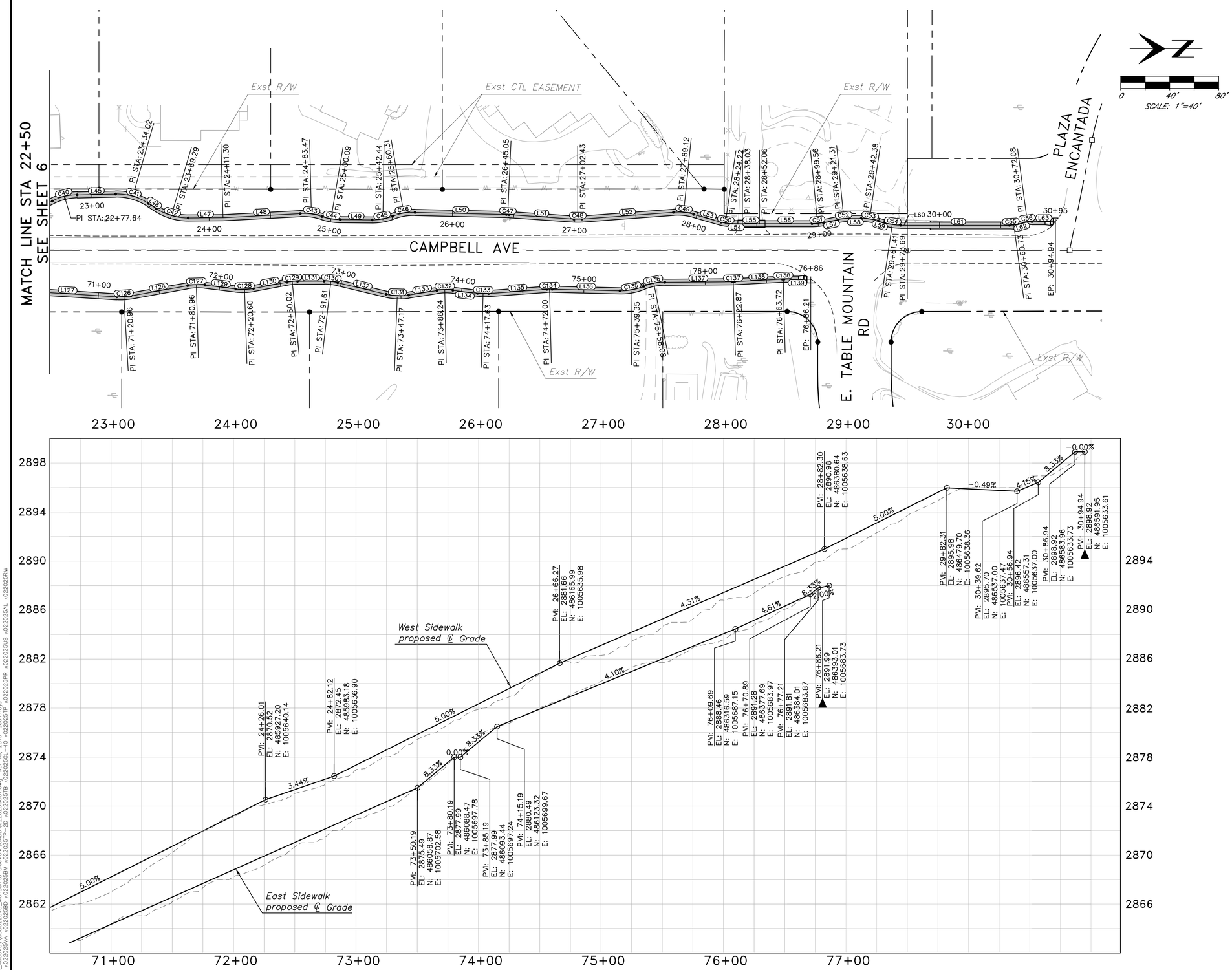

NOTES

SEE SHEET 8 FOR LINE AND CURVE DATA

▲ CONCRETE LANDING WITH DETECTABLE WARNING STRIP CONTROL POINT

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In Maricopa County: (602) 263-1100

Scale: 1" = 40' H, 1" = 4' V

Sheet 7 of 19

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 47513 ALLEN R. HATHCOCK Date Signed 04/26/15 ARIZONA, U.S.A.
Exp. Date 03/31/2017

Kimley»Horn

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MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT

CONTROL SHEET 4

K:\TUC_Roadway\098022043_Manzanita_Sidewalk\CADD\022025CC01.dwg Apr 16, 2015 sean.hays
XREFS: x022025VA x022025BD x022025BM x022025TP-2B x022025TB x022025GL-40 x022025TP x022025PR x022025VIS x022025AL x022025PM

LINE TABLE

LINE	LENGTH	BEARING
L1	24.75	N60°04'04.74"E
L2	47.62	N1°51'01.97"E
L3	53.95	N2°42'52.57"E
L4	3.00	N46°03'57.04"W
L5	52.57	N1°26'41.15"W
L6	11.64	N0°53'56.85"W
L7	15.09	N6°22'48.14"E
L8	28.20	N0°46'47.15"W
L9	62.00	N2°34'48.60"W
L10	12.48	N1°37'41.65"E
L11	38.95	N2°54'44.56"W
L12	12.35	N13°53'33.19"W
L13	17.67	N12°07'11.50"E
L14	26.59	N9°57'18.92"W
L15	79.90	N2°17'23.97"E
L16	27.78	N6°38'55.70"E
L17	30.66	N0°09'06.49"W
L18	51.12	N2°13'22.16"E
L19	14.72	N6°27'17.02"W
L20	16.69	N27°31'20.66"W
L21	6.60	N3°19'22.22"E
L22	4.56	N9°13'42.73"W
L23	54.33	N1°05'33.07"W
L24	10.07	N15°26'02.95"W
L25	40.32	N3°42'25.50"W
L26	12.80	N77°24'48.12"E
L27	2.39	N2°15'19.59"E
L28	45.60	N3°42'00.92"E
L29	16.59	N0°53'39.07"W
L30	11.87	N27°51'26.54"W
L31	11.30	N28°24'54.65"W
L32	27.98	N4°15'35.79"E
L33	11.09	N14°48'49.25"E
L34	30.68	N1°32'31.94"W
L35	37.01	N3°26'24.33"W
L36	48.07	N11°48'51.40"E
L37	25.03	N6°30'53.63"E
L38	4.96	N0°20'54.07"E
L39	4.99	N0°53'39.07"W
L40	39.50	N2°36'25.10"E
L41	13.71	N0°53'55.30"W
L42	16.78	N15°49'42.48"W
L43	21.38	N3°14'56.09"E
L44	38.71	N5°38'43.94"W
L45	31.35	N2°02'25.18"W
L46	7.20	N32°17'58.95"E
L47	28.55	N1°09'32.14"W
L48	63.02	N3°57'55.48"W
L49	25.96	N0°33'21.20"W
L50	74.64	N0°24'24.48"E
L51	52.93	N3°01'49.20"E
L52	74.91	N5°04'25.86"W
L53	23.18	N15°01'58.17"E
L54	10.17	N0°12'42.66"W
L55	14.03	N0°53'52.66"W
L56	42.86	N0°53'55.30"W
L57	12.49	N12°03'55.47"W
L58	9.49	N0°53'55.30"W

LINE TABLE

LINE	LENGTH	BEARING
L59	5.18	N15°48'31.77"E
L60	5.40	N0°53'55.30"W
L61	83.36	N0°53'39.26"W
L62	4.02	N16°09'54.05"W
L63	19.22	N0°53'39.26"W
L64	62.96	N49°29'21.76"W
L65	6.98	N4°38'47.56"W
L66	11.24	N2°05'39.82"W
L67	48.35	N0°53'49.32"E
L68	83.88	N0°53'58.35"W
L69	25.45	N2°03'50.88"W
L70	24.36	N16°46'40.34"W
L71	6.73	N50°09'17.02"E
L72	24.24	N2°05'06.67"W
L100	40.84	N1°13'45.72"W
L101	31.27	N14°01'52.29"E
L102	42.96	N1°53'04.95"W
L103	48.12	N6°27'07.49"W
L104	20.16	N10°59'46.60"E
L105	18.02	N8°25'57.74"W
L106	43.38	N2°00'26.15"W
L107	48.67	N5°29'19.21"W
L108	20.42	N0°31'10.40"W
L109	31.11	N6°30'01.71"W
L110	51.17	N1°37'46.21"W
L111	119.86	N0°40'43.97"W
L112	25.27	N0°53'58.86"W
L113	12.41	N16°47'30.88"W
L114	38.82	N0°53'58.86"W
L115	51.15	N3°08'34.68"W
L116	166.24	N0°53'58.86"W
L117	45.55	N0°53'47.95"W
L118	54.09	N0°53'58.35"W
L119	113.95	N0°52'14.75"W
L120	116.31	N0°12'40.03"E
L121	66.95	N1°41'03.04"W
L122	104.82	N0°30'25.59"E
L123	49.79	N4°33'06.61"E
L124	62.55	N0°25'30.72"W
L125	20.56	N10°08'46.92"W
L126	56.03	N0°38'29.76"E
L127	80.92	N2°39'55.02"E
L128	47.13	N11°06'43.35"W
L129	25.24	N6°05'28.13"E
L130	27.92	N11°25'59.50"W
L131	21.65	N1°05'20.29"W
L132	40.51	N12°30'28.70"E
L133	23.25	N9°58'19.16"W
L134	20.37	N5°53'13.52"E
L135	47.70	N4°54'19.39"W
L136	55.24	N0°26'16.33"E
L137	54.86	N1°21'18.30"W
L138	39.10	N3°51'58.27"W
L139	21.77	N0°53'55.30"W
L140	166.24	N0°53'58.86"W
L200	6.38	S75°48'12.08"E
L201	5.23	N87°53'55.33"E
L202	35.23	S38°36'55.91"E

LINE TABLE

LINE	LENGTH	BEARING
L203	24.75	N77°24'48.12"E
L204	28.67	N50°09'17.02"E
L208	24.75	N77°24'48.12"E

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	PI NORTHING	PI EASTING
C1	136.55'	26.04'	10°55'38"	13.06'	483625.6793	1005647.1269
C2	101.84'	46.41'	26°06'46"	23.62'	483662.3364	1005645.9328
C3	27.50'	3.49'	7°16'47"	1.75'	483889.7318	1005667.9889
C4	27.50'	3.44'	7°09'35"	1.72'	483908.1762	1005670.0513
C5	27.50'	14.64'	30°30'12"	7.50'	484019.9945	1005667.4207
C6	47.50'	21.52'	25°57'46"	10.95'	484036.1491	1005658.5120
C7	47.50'	8.83'	10°38'58"	4.43'	484090.4074	1005655.7516
C8	47.50'	17.93'	21°37'46"	9.07'	484103.7854	1005657.5692
C9	47.50'	21.57'	26°00'45"	10.97'	484135.2286	1005649.7921
C10	47.50'	18.30'	22°04'30"	9.27'	484172.2888	1005657.7506
C11	47.50'	20.64'	24°54'02"	10.49'	484217.9367	1005649.7384
C12	47.50'	10.49'	12°39'19"	5.27'	484233.1583	1005653.8014
C13	27.50'	2.09'	4°21'32"	1.05'	484319.3039	1005657.2463
C14	27.50'	3.26'	6°48'02"	1.63'	484349.5565	1005660.7728
C15	27.50'	10.11'	21°04'04"	5.11'	484452.6362	1005660.4405
C16	27.50'	14.80'	30°50'43"	7.59'	484478.6999	1005646.8596
C17	27.50'	6.02'	12°33'05"	3.02'	484495.8784	1005647.8570
C18	47.50'	37.28'	44°58'25"	19.66'	484522.7757	1005643.4868
C19	47.50'	30.54'	36°50'15"	15.82'	484551.5728	1005664.2139
C20	27.50'	6.88'	14°20'30"	3.46'	484625.1657	1005662.8105
C21	27.50'	6.40'	13°20'23"	3.22'	484641.3081	1005658.3538
C22	27.50'	21.82'	45°28'19"	11.52'	484759.4349	1005601.3903
C23	27.59'	19.84'	41°12'22"	10.37'	484821.5149	1005597.3429
C24	27.50'	12.94'	26°57'47"	6.59'	485197.5885	1005651.9392
C25	27.50'	15.68'	32°40'30"	8.06'	485230.9374	1005634.1004
C26	47.50'	8.75'	10°33'13"	4.39'	485271.2567	1005637.1037
C27	47.50'	13.56'	16°21'21"	6.83'	485292.8212	1005642.8068
C28	47.50'	19.93'	24°02'04"	10.11'	485377.3563	1005638.9696
C29	47.50'	29.75'	35°53'09"	15.38'	485399.9739	1005627.2085
C30	47.50'	31.59'	38°06'13"	16.40'	485478.3020	1005642.6597
C31	47.50'	27.20'	32°48'15"	13.98'	485505.5447	1005629.2019
C32	27.50'	10.06'	20°57'28"	5.09'	485549.3631	1005634.2059
C33	27.50'	13.02'	27°07'27"	6.63'	485559.7615	1005639.6127
C34	27.50'	9.98'	20°46'58"	5.04'	485576.3952	1005639.7138
C35	27.50'	10.57'	22°01'32"	5.35'	485586.0910	1005643.4612
C36	27.50'	7.17'	14°55'47"	3.60'	485653.2124	1005644.8249
C37	47.50'	15.82'	19°04'39"	7.98'	485680.4978	1005637.0893
C38	47.50'	7.37'	8°53'40"	3.69'	485713.4998	1005638.9626
C39	47.50'	18.09'	21°49'25"	9.16'	485764.8114	1005633.8903
C40	47.50'	21.08'	25°25'43"	10.72'	485782.4450	1005624.7229
C41	47.50'	28.47'	34°20'24"	14.68'	485839.1494	1005622.7028
C42	47.50'	27.74'	33°27'31"	14.28'	485869.7071	1005642.0204
C43	47.50'	18.08'	21°48'23"	9.15'	485984.5193	1005636.1634
C44	47.50'	15.25'	18°23'49"	7.69'	486000.5512	1005641.3233
C45	47.50'	17.45'	21°03'09"	8.83'	486043.0298	1005640.9112
C46	47.50'	18.25'	22°00'55"	9.24'	486059.8259	1005634.2583
C47	47.50'	2.17'	2°37'25"	1.09'	486144.7957	1005634.8616
C48	47.50'	6.72'	8°06'15"	3.36'	486202.0984	1005637.8951
C49	47.50'	16.67'	20°06'24"	8.42'	486288.4551	1005630.2277
C50	27.50'	7.32'	15°14'41"	3.68'	486322.5250	1005639.3776
C51	47.50'	9.26'	11°10'00"	4.64'	486397.8981	1005638.3615
C52	47.50'	9.26'	11°10'00"	4.64'	486419.1940	1005633.8095
C53	47.50'	13.85'	16°42'27"	6.98'	486440.2966	1005633.4785
C54	47.50'	13.85'	16°42'27"	6.98'	486458.7043	1005638.6904
C55	27.50'	7.33'	15°16'15"	3.69'	486558.1114	1005637.1378

CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	PI NORTHING	PI EASTING
C56	27.50'	7.33'	15°16'15"	3.69'	486569.0514	1005633.9667
C57	47.50'	74.53'	89°53'39"	47.41'	485080.3833	1005593.9485
C58	27.50'	28.02'	58°22'53"	15.36'	485111.1649	1005648.6593
C59	37.19'	27.84'	42°53'19"	14.61'	483809.2079	1005668.7042
C60	27.50'	13.61'	28°21'27"	6.95'	485032.9578	1005620.5159
C61	47.50'	12.20'	14°42'49"	6.13'	484899.9839	1005632.7590
C62	47.50'	13.16'	15°52'42"	6.62'	484935.5174	1005622.0458
C63	31.15'	15.48'	28°28'21"	7.90'	484834.4925	1005623.8277
C100	47.50'	3.79'	4°34'03"	1.89'	483834.0639	1005742.4597
C101	47.50'	14.47'	17°26'54"	7.29'	483891.0084	1005736.0200
C102	47.50'	16.11'	19°25'44"	8.13'	483925.9407	1005742.8078
C103	47.50'	5.33'	6°25'32"	2.67'	483954.4446	1005738.5821
C104	47.50'	2.89'	3°28'53"	1.44'	484001.9053	1005736.9187
C105	47.50'	4.12'	4°58'09"	2.06'	484053.8377	1005731.9285
C106	47.50'	4.96'	5°58'51"	2.48'	484078.8016	1005731.7021
C107	47.50'	4.04'	4°52'15"	2.02'	484114.1887	1005727.6700
C108	27.50'	7.63'	15°53'32"	3.84'	484316.3134	1005724.2803
C109	27.50'	7.63'	15°53'32"	3.84'	484335.5421	1005718.4778
C110	27.50'	2.61'	5°26'03"	1.31'	484862.6588	1005708.2002
C111	250.00'	19.03'	4°21'41"	9.52'	484873.4499	1005709.0561
C112	250.00'	82.49'	18°54'15"	41.62'	484923.9756	1005716.9647
C113	250.00'	39.87'	9°08'15"	19.98'	484984.6363	1005706.2597
C114	100.00'	24.69'	14°08'46"	12.41'	485130.9568	1005704.0358
C115	30.00'	14.86'	28°23'21"	7.59'	485150.4185	1005708.6275
C116	100.00'	26.75'	15°19'30"	13.45'	485170.7328	1005703.1409
C117	47.50'	1.57'	1°53'43"	0.79'	485301.2791	1005703.6220
C118	47.50'	16.75'	20°12'05"	8.46'	485377.4469	1005701.3824
C119	47.50'	28.38'	34°14'15"	14.63'	485399.3430	1005708.7160
C120	47.50'	13.45'	16°13'38"	6.77'	485419.9442	1005702.9174
C121	47.50'	3.35'	4°02'41"	1.68'	485533.2095	1005703.9200
C122	47.50'	4.13'	4°58'37"	2.06'	485586.5772	1005708.1687
C123	47.50'	8.06'	9°43'16"	4.04'	485655.2338	1005707.6591
C124	47.50'	8.94'	10°47'17"	4.49'	485683.8608	1005702.5360
C125	47.50'	1.68'	2°01'25"	0.84'	485745.2070	1005703.2230
C126	47.50'	11.42'	13°46'38"	5.74'	485832.6098	1005707.2917
C127	47.50'	14.26'	17°12'11"	7.19'	485891.5414	1005695.7169
C128	47.50'	14.53'	17°31'28"	7.32'	485931.0612	1005699.9342
C129	47.50'	8.58'	10°20'39"	4.30'	485969.8174	1005692.0962
C130	47.50'	11.27'	13°35'49"	5.66'	486001.4230	1005691.4954
C131	47.50'	18.64'	22°28'48"	9.44'	486055.7118	1005703.5389
C132	47.50'	13.15'	15°51'33"	6.62'	486094.4283	1005696.7317
C133	47.50'	8.95'	10°47'33"	4.49'	486125.7373	1005699.9600
C134	47.50'	4.43'	5°20'36"	2.22'	486179.9434	1005695.3078
C135	47.50'	19.50'	23°31'18"	9.89'	486247.2909	1005695.8225
C136	47.50'	18.01'	21°43'43"	9.12'	486264.7748	1005688.3708
C137	47.50'	2.08'	2°30'40"	1.04'	486329.7695	1005686.8334
C138	27.50'	1.42'	2°58'03"	0.71'	486370.5263	1005684.0790

Call at least two full working days before you begin excavation.
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In Maricopa County: (602) 263-1100

Scale: 1" = 40' H, 1" = 4' V

Sheet 8 of 19

Priscilla S. Cornelio, P.E., Director

Pima County Department of Transportation

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

Kimley»Horn

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333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

MANZANITA ELEMENTARY
SCHOOL BICYCLE AND
PEDESTRIAN IMPROVEMENT
PROJECT
CONTROL SHEET 5

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025CC01.dwg, Apr 16, 2015, sean.hays
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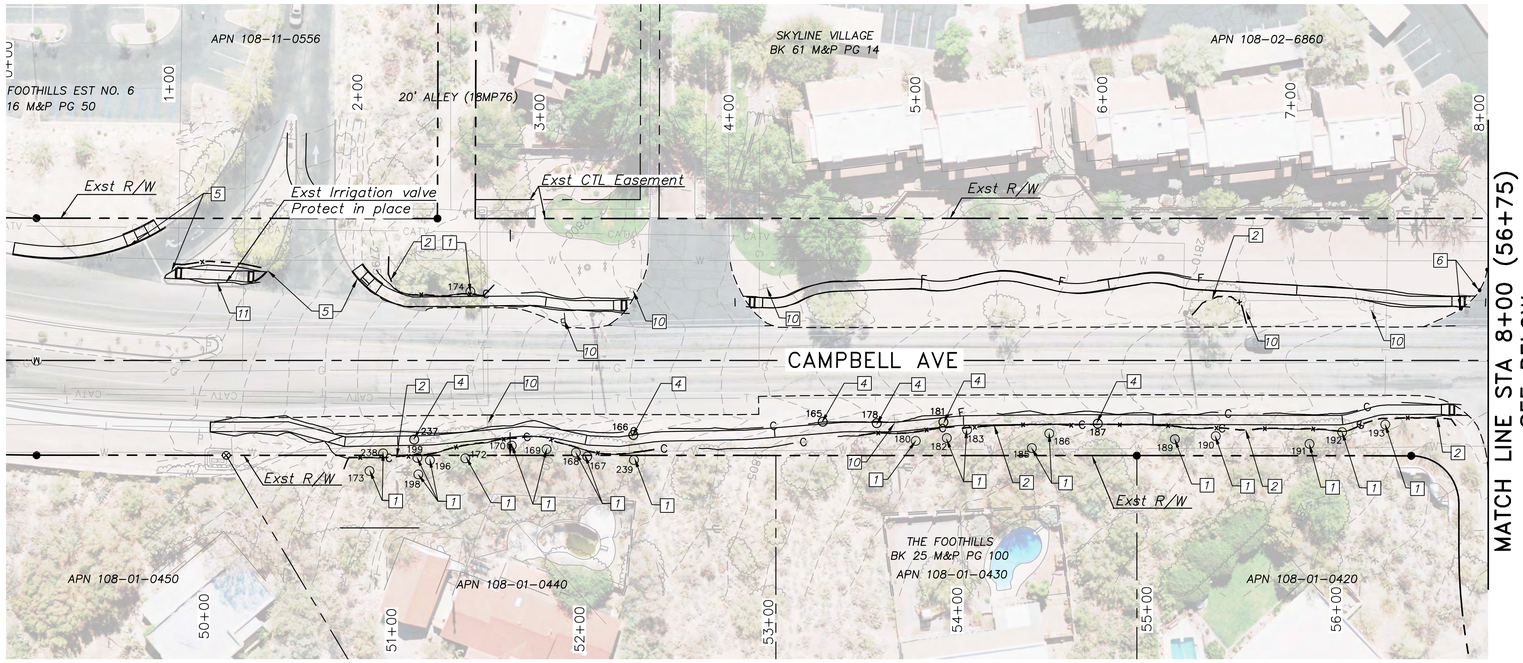

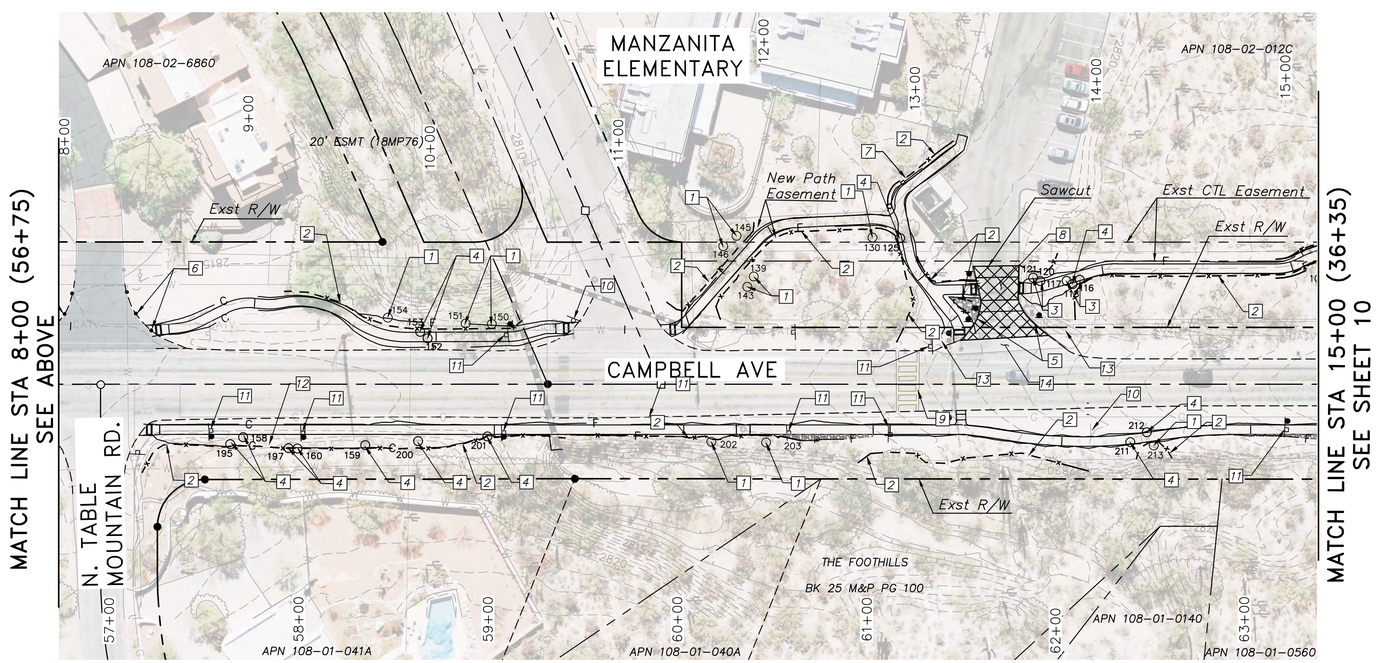

CALLOUTS:

1. EXISTING VEGETATION WITHIN THE R.O.W. WITH OVERHANGING BRANCHES THAT MAY IMPACT CONSTRUCTION. PRUNE WITH ACCORDANCE IN SPECIAL PROVISIONS 201-3.05 AND ITEM #806100.
2. PRESERVATION FENCING. ITEM #2010004
3. RELOCATE CACTUS SPECIES TO CACTUS TRANSPLANT AREA. TRANSPLANT AREA IS WITHIN THE R.O.W. AT E. PLAZA ENCANTADA. SEE SHEET 10. ENGINEER IS TO LAYOUT CACTUS PRIOR TO PLANTING. ITEM #8060046, #8060049, AND #8090047
4. REMOVE PLANT FROM SITE. (RFS) ITEM #2010001
5. REMOVE EXISTING CURB SEE DETAIL E. ITEM #2020001
6. REMOVE EXISTING VERTICAL DELINEATORS. ITEM #2020001
7. REMOVE EXISTING FENCE SEE DETAIL H. ITEM #2020101
8. REMOVE EXISTING PAVEMENT AND SPEED BUMP. ITEM #2020001
9. OBLITERATE EXISTING STRIPING. ITEM #7010005
10. EXISTING SIGN, PROTECT IN PLACE.
11. REMOVE AND SALVAGE EXISTING SIGN. ITEM #2020001
12. REMOVE AND STOCKPILE EXISTING RIPRAP. ITEM #9300117
13. EXISTING RIPRAP, PROTECT IN PLACE.
14. EXISTING VALLEY GUTTER, PROTECT IN PLACE.

LEGEND

- PRESERVATION FENCING
- SECTION LINE/ MONUMENT LINE
- RIGHT OF WAY
- PROPERTY LINE
- EXISTING TREE/CACTUS (xx = Inventory Number, see Sheet 11)
- PAVEMENT REMOVAL LIMITS

PRESERVATION AND CLEARING NOTES

1. SITE SHALL BE TREATED FOR FOUNTAIN GRASS, BUFFELGRASS AND OTHER INVASIVE SPECIES PRIOR TO INITIATION OF WORK. SEE SPECIAL PROVISIONS 201-3.04.
2. CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF EXISTING PLANT MATERIALS ACCORDING TO SPECIAL PROVISIONS SECTION 201-3.02. OVERHANGING BRANCHES WITHIN THE RIGHT OF WAY THAT MAY IMPACT CONSTRUCTION SHALL BE PRUNED IN ACCORDANCE WITH SPECIAL PROVISIONS SECTION 201-3.05 AND ITEM #806100
3. EXISTING TREES ON ADJACENT PRIVATE PROPERTY MAY HAVE OVERHANGING BRANCHES THAT WILL REQUIRE PRUNING. SEE SPECIAL PROVISIONS 201-3.05. NO PRUNING SHALL BE PERFORMED WITHOUT THE NOTIFICATION OF PIMA COUNTY COMMUNITY RELATIONS.
4. WHERE CONSTRUCTION IMPACTS EXISTING LANDSCAPE OR IRRIGATION ENCROACHMENTS WITHIN RIGHT OF WAY, CONTRACTOR SHALL COORDINATE REQUIRED ADJUSTMENTS WITH PROJECT ENGINEER AND ADJACENT PROPERTY OWNERS. SEE ALSO SPECIAL PROVISIONS, ITEM #2020004.
5. CONTRACTOR IS TO INSTALL PRESERVATION FENCING AS DIRECTED BY ENGINEER PRIOR TO CLEARING. LOCATIONS SHOWN ON PLANS SHALL BE ADJUSTED IN THE FIELD AS REQUIRED. PRESERVATION FENCING IS TO REMAIN DURING DURATION OF PROJECT.
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Scale: 1" = 40' H
N/A

Sheet 9 of 19

Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
DEMOLITION PLAN SHEET 1

Kimley»Horn
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TUCSON, ARIZONA 85705 (520) 615-9191

Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025_DEM001.dwg Apr 16, 2015 sean.hays
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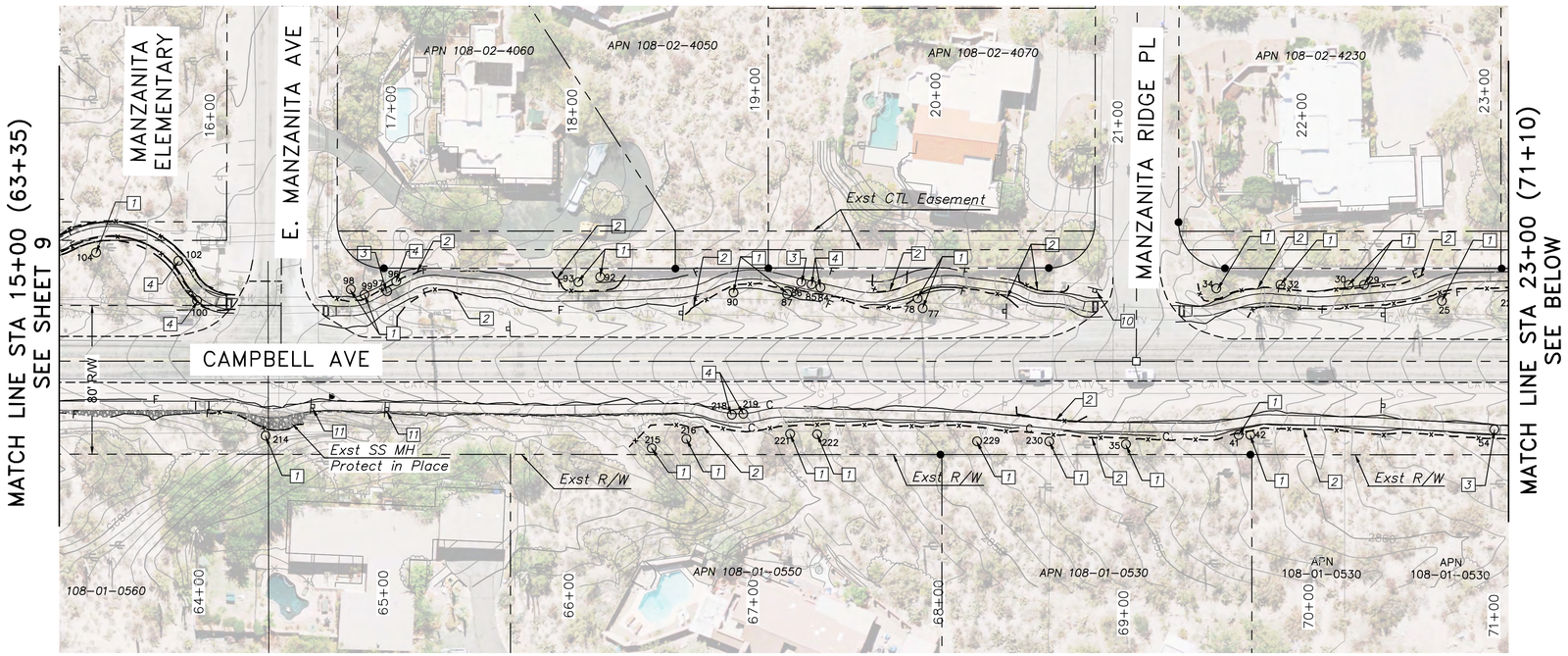

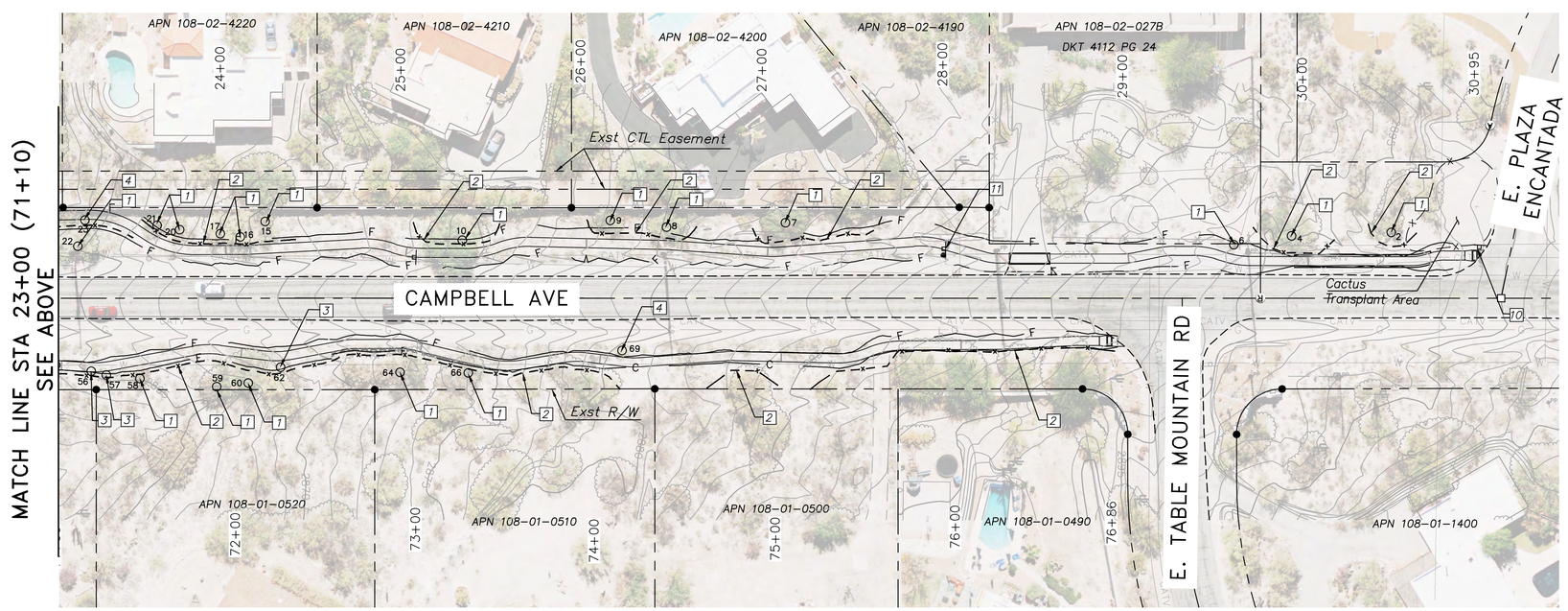

0 40' 80'
SCALE: 1"=40'

0 40' 80'
SCALE: 1"=40'

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Scale: 1" = 40' H
N/A

Sheet 10 of 19

Pima County Department of Transportation

No.	Revision Description	Engineer	Date

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

Priscilla S. Cornelio, P.E., Director

Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

Kimley»Horn
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333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
DEMOLITION PLAN SHEET 2

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025_DEM002.dwg Apr 16, 2015 sean.hays
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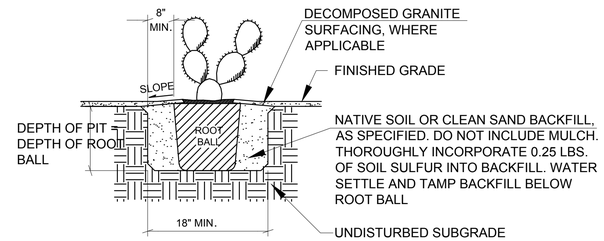
NATIVE PLANT INVENTORY

SHEET 9

ID #	Species	Caliper "	Height '	Comments	Disposition
116	Ferocactus wislizenii				TOS
117	Ferocactus wislizenii		3		TOS
118	Acacia constricta	2	5		RFS
120	Ferocactus wislizenii		2		TOS
121	Ferocactus wislizenii		1		TOS
125	Parkinsonia microphylla	4	6		RFS
130	Parkinsonia microphylla	4	8	trim if necessary	PIP
139	Zizyphus obtusifolia	4	7	trim if necessary	PIP
143	Acacia greggii	6	7	trim if necessary	PIP
145	Parkinsonia florida	6	15	trim if necessary	PIP
146	Propopis velutina	6	8	trim if necessary	PIP
150	Parkinsonia florida	8	15	trim if necessary	PIP
151	Parkinsonia florida	20	20	trim if necessary	PIP
152	Parkinsonia florida	4	7		RFS
153	Parkinsonia florida	6	10		RFS
154	Parkinsonia florida	4	7	trim if necessary	PIP
158	Parkinsonia microphylla	4	5		RFS
159	Acacia constricta	4	5	in slope w/2 small LLPV <3"	RFS
160	Parkinsonia microphylla	4	3	on slope, mixed with prickypear	RFS
165	Parkinsonia florida	3	5	in path	RFS
166	Parkinsonia microphylla	5	7		RFS
167	Lycium sp.	9	6		PIP
168	Parkinsonia florida	3	7	trim if necessary	PIP
169	Parkinsonia florida	9	15	trim if necessary	PIP
170	Parkinsonia microphylla	<3	4	trim if necessary	PIP
172	Parkinsonia florida	8	18	trim if necessary	PIP
173	Parkinsonia microphylla	6	10	trim if necessary	PIP
174	Acacia constricta	4	8	mistletoe, trim	PIP
178	Acacia constricta	3	5		RFS
180	Acacia constricta	6	8	can be trimmed	PIP
181	Acacia constricta	3	6	mixed with staghorn	RFS
182	Lycium sp.	3	6	in clump w/staghorn and acacia, trim	PIP
183	Parkinsonia microphylla	3	3	several WTA, LLPV <1' tall	PIP
185	Parkinsonia microphylla	20	18	trim up by path if needed	PIP
186	Zizyphus obtusifolia	6	10	trim up by path if needed	PIP
187	Acacia constricta	3	3		RFS
189	Acacia constricta	8	10	trim up by path if needed	PIP
190	Parkinsonia microphylla	<3	6	trim if necessary	PIP
191	Celtis pallida	10	10	trim if necessary	PIP
192	Acacia constricta	6	9	trim if necessary	PIP
193	Parkinsonia microphylla	4	8	trim if necessary	PIP
195	Parkinsonia microphylla	3	5	on slope	RFS
196	Parkinsonia microphylla			trim if necessary	PIP
197	Parkinsonia microphylla	3	5	mixed w/PP	RFS
198	Parkinsonia microphylla			trim if necessary	PIP
199	Zizyphus obtusifolia			trim if necessary	PIP
200	Parkinsonia microphylla	3	5	on slope	RFS
201	Parkinsonia florida	4	5		RFS
202	Parkinsonia microphylla	4	6	trim if needed	PIP
203	Parkinsonia microphylla	4	6	trim if needed	PIP
211	Parkinsonia microphylla	3	5		RFS
212	Acacia constricta	<3	4		RFS
213	Acacia constricta	3	5	trim if needed	PIP
237	Parkinsonia florida	3	6		RFS
238	Parkinsonia microphylla			trim if necessary	PIP
239	Parkinsonia microphylla	9	15	trim up by path if necessary	PIP

SHEET10

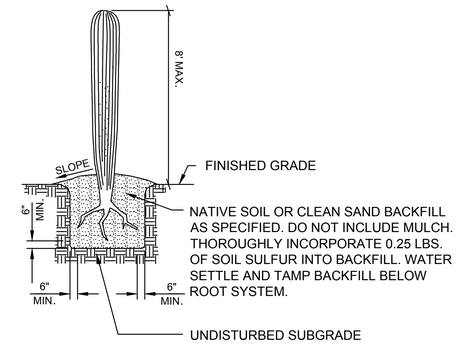
ID #	Species	Caliper "	Height '	Comments	Disposition
2	Celtis pallida	3	8	trim if needed	PIP
4	Prosopis velutina	12	20	trim if needed	PIP
6	Acacia constricta	4	6	trim if needed	PIP
7	Acacia constricta	12	15	trim up if needed	PIP
8	Acacia constricta	12	12	trim up, leans toward wall	PIP
9	Acacia constricta	11	10	trim if needed	PIP
10	Prosopis velutina	24	20	trim up if needed	PIP
15	Acacia constricta	6	10	trim if needed	PIP
16	Parkinsonia microphylla	18	15	light trim	PIP
17	Parkinsonia microphylla	14	15	trim up	PIP
20	Acacia constricta	6	6	trim if needed	PIP
21	Acacia constricta	6	7	trim if needed	PIP
22	Parkinsonia florida	20	12	mistletoe, major trim, several small BPV under 3" cal	PIP
23	Acacia constricta	5	8	REMOVE, poor health	RFS
25	Parkinsonia microphylla	18	12	mistletoe, trim	PIP
29	Acacia constricta	5	6	trim if needed	PIP
30	Acacia constricta	5	6	trim if needed	PIP
32	Parkinsonia microphylla	18	15	mistletoe,major trim	PIP
34	Acacia constricta	8	10	trim - END WEST	PIP
35	Parkinsonia microphylla	15	15	trim up - END EAST, many Mammillaria microcarpa along this stretch	PIP
41	Acacia constricta	8	7	trim if needed	PIP
42	Acacia constricta	6	7	trim if needed	PIP
54	Ferocactus wislizenii		1-2	cluster of 3	TOS
56	Ferocactus wislizenii		1.5		TOS
57	Ferocactus wislizenii		2		TOS
58	Acacia constricta	6	6	trim if needed	PIP
59	Prosopis velutina	12	10	trim if needed	PIP
60	Prosopis velutina	14	12	trim if needed	PIP
62	Carnegiea gigantea		2	in path	TOS
64	Acacia constricta	12	12	trim if needed	PIP
66	Acacia constricta	6	8	trim if needed	PIP
69	Acacia constricta	3			RFS
77	Acacia constricta	4	5	mistletoe, trim	PIP
78	Acacia greggii	4	5	trim if needed	PIP
84	Acacia constricta	4	5		RFS
85	Acacia constricta	5	6		RFS
86	Fouquieria splendens		2		TOS
87	Acacia constricta	8	8	trim if needed	PIP
90	Parkinsonia microphylla	5	7	trim if needed	PIP
92	Acacia greggii	5	8	trim if needed	PIP
93	Parkinsonia microphylla	9	12	trim if needed	PIP
96	Zizyphus obtusifolia	6	10		RFS
97	Ferocactus wislizenii		2		TOS
98	Acacia constricta	10	15	trim if needed	PIP
99	Acacia constricta	3	4	trim if needed	PIP
100	Acacia constricta	6	7		RFS
102	Acacia constricta	4	6		RFS
104	Parkinsonia microphylla	8	10	trim if needed	PIP
214	Parkinsonia florida	12	15	NICE. Trim by path, trunk in wash	PIP
215	Parkinsonia microphylla	16	12	trim if needed	PIP
216	Acacia constricta	9	10	trim, dead wood	PIP
218	Acacia greggii	2	5	in path alignment	RFS
219	Acacia constricta	3	5	in path alignment	RFS
221	Acacia constricta	9	10	trim if needed	PIP
222	Parkinsonia microphylla	12	8	trim up if needed	PIP
229	Parkinsonia microphylla	12	8	trim up if needed	PIP
230	Acacia constricta	3	5	trim up if needed	PIP



NOTES:

1. DO NOT CREATE A BASIN AT BASE OF PLANT. SLOPE BACKFILL AWAY FROM STEM.
2. SET STEM SUCCULENT SO THAT TOP OF ROOT BALL MATCHES ADJACENT GRADE.
3. THIS DETAIL APPLIES TO NURSERY GROWN STOCK OF THE GENUS OPUNTIA AND FOUQUIERIA.

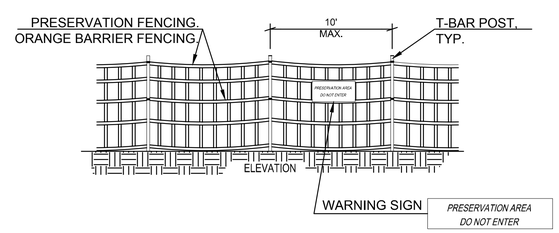
1 PLANTING - NURSERY STOCK: PRICKLY PEAR, CHOLLA, AND OCOTILLO (CONTAINER GROWN)
SCALE: NTS PCDOT 2/03/2012

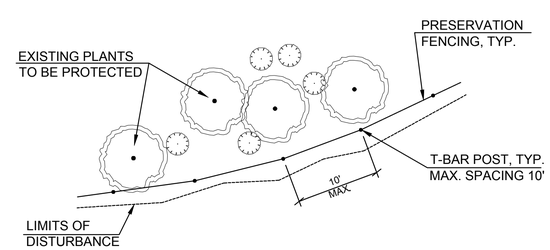


NOTES:

1. SET MAIN STEM OF CACTUS PLUMB AS VIEWED FROM ALL SIDES.
2. DO NOT CREATE A BASIN AT BASE OF CACTUS. SLOPE BACKFILL AWAY FROM STEM.
3. PLANT SAGUARO WITH SAME ORIENTATION AS IN ORIGINAL LOCATION. MARK NORTH SIDE OF SAGUARO WITH WATER BASED PAINT PRIOR TO START OF SALVAGE WORK.
4. ROOT PRUNE ALL SHREDDED OR DAMAGED ROOTS. TREAT ENTIRE ROOT SYSTEM WITH WETTABLE SULPHUR AND AGRI-MYCIN 17.
5. MOUND AT BASE OF SAGUARO TO BE 4-6" MAXIMUM IN HEIGHT.

2 SAGUARO / BARREL PLANTING
SCALE: NTS PCDOT 5/2012





1. MATERIALS FOR FENCING AND WARNING SIGNS SHALL BE PER BID ITEM 2010004.
2. PLACE WARNING SIGNS ON PRESERVATION FENCING, PER BID ITEM 2010004.
3. PAYMENT PROVIDED UNDER BID ITEM 2010004.
4. WARNING SIGNS TO BE ATTACHED SECURELY TO THE FENCE FABRIC AND AT 50 FOOT MAXIMUM INTERVALS.

3 PRESERVATION FENCING DETAIL 201
SCALE: NTS PCDOT 3/20/2014

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

Scale: N/A N/A

Sheet 11 of 19

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

Registered Professional Engineer (Civil) CERTIFICATE NO. 47513 ALLEN R. HATHCOCK Date Signed 04/16/15 ARIZONA U.S.A. Exp. Date 03/31/2017

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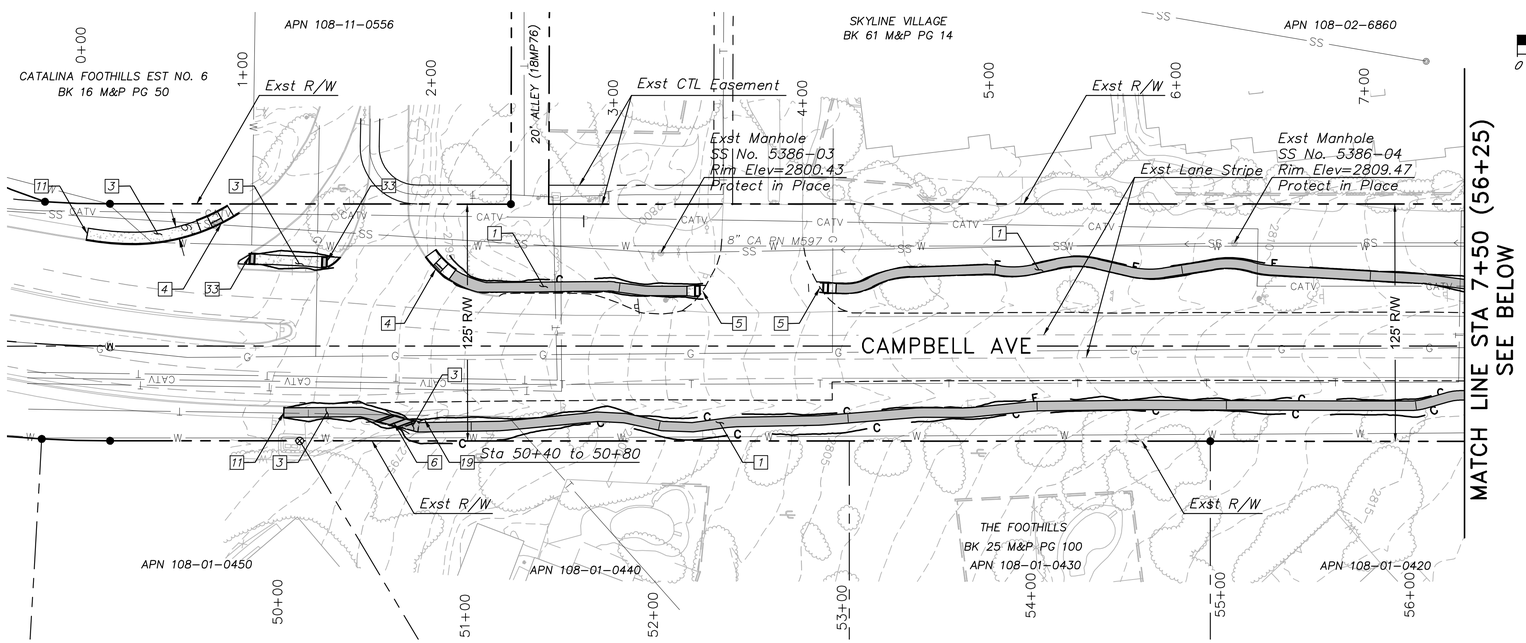
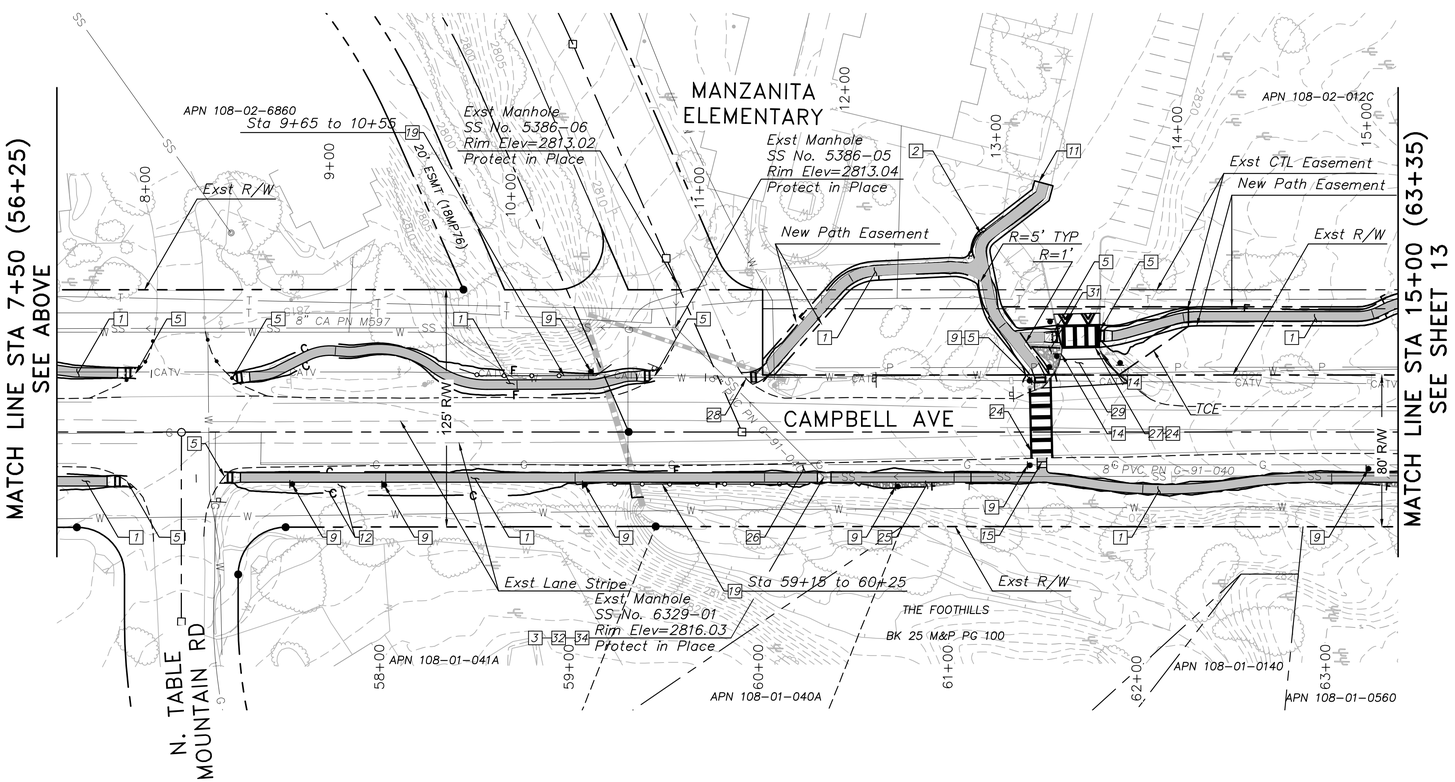
TUCSON, ARIZONA 85705 (520) 615-9191

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
NATIVE PLANT SUMMARY

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025_DEMO03.dwg Apr 16, 2015 sean.hays
XREFS: X022025TB X022025M





CONSTRUCTION NOTES

1. INSTALL NEW ASPHALT PER PAVEMENT STRUCTURAL SECTION NO. 1, PAVED PEDESTRIAN PATH
   ITEM #4060002
2. INSTALL CHAINLINK FENCE PER DETAIL H, SHEET 15
   ITEM #9020002
3. INSTALL CONCRETE SIDEWALK PER PC STD DTL 200*.
   ITEM #9080201
4. INSTALL TYPE 1 CURB ACCESS RAMP PER PC STD DTL 207* HORIZONTAL SAWCUT EXIST CURB.
   ITEM #9080280
5. INSTALL CONCRETE LANDING WITH DETECTABLE WARNING STRIP PER DETAIL A, SHEET 14
   ITEM #9080292
6. 6" SCUPPER PER DETAIL D, SHEET 14
   ITEM #5030082
9. INSTALL NEW SIGN. SEE TABLE ON SHEET 16 FOR APPROXIMATE LOCATIONS AND QUANTITIES
11. CONNECT TO EXISTING SIDEWALK PER PC STD DTL 203*.
    ITEM #9080201
12. INSTALL RIPRAP ON NEW CUT SLOPE STA 57+15.00 TO STA 57+60.00. USE NEW AND STOCKPILED RIPRAP, MATCH EXISTING.
    ITEM #9300117
14. INSTALL NEW TYPE 2 CURB PER PC STD DTL 209*.
    ITEM #9080005
15. INSTALL 5' CONCRETE LANDING WITH DETECTABLE WARNING STRIP
    ITEM #9080292
19. INSTALL BARRICADE RAIL PER PC STD DTL 105*. RAIL SHALL BE 6" FROM EDGE OF PATH
    ITEM #9330001
24. INSTALL HIGH VISIBILITY SCHOOL CROSSWALK PER DETAILS ON PC PAVEMENT MARKING STANDARDS SHEET 2-8
    ITEM #7040110 - WHITE
    ITEM #7040120 - YELLOW
25. INSTALL RIPRAP (HAND PLACED) PER DETAIL B, SHEET 14
    ITEM #9130008
26. GRADE SHOULDER PER DETAIL C, SHEET 14
    ITEM #2050010
27. INSTALL SPEED TABLE PER DETAIL E, SHEET 15
    ITEM# 4060201
28. INSTALL CONCRETE LANDINGS PER DETAIL F, SHEET 15
    ITEM #9080292
29. INSTALL NEW ASPHALT PER PAVEMENT STRUCTURAL SECTION NO. 2
    ITEM #4060002
31. INSTALL RIPRAP (HAND PLACED), GRADATION PER TABLE SHOWN IN DETAIL B, SHEET 14
    ITEM #9130008
32. SIDEWALK TO BE FLUSH WITH EXISTING SEWER MANHOLE. CONCRETE SIDEWALK SHALL EXTEND A MINIMUM OF 2' BEYOND EDGE OF MANHOLE.
33. INSTALL TYPE 2 CURB ACCESS RAMP PER PC STD DTL 207*.
    ITEM #9080281
34. REPLACE EXISTING WITH BOLTED MANHOLE FRAME AND COVER PER STD DTL RWRD-215, 218
    ITEM #5090201

*REFER TO APPENDIX A OF THE SPECIAL PROVISIONS FOR CURRENT PC STANDARD DETAILS

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
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In Maricopa County: (602) 263-1100

Scale: 1" = 40' H
N/A

Sheet 12 of 19

Priscilla S. Cornelio, P.E., Director

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA, U.S.A.
Exp. Date 03/31/2017

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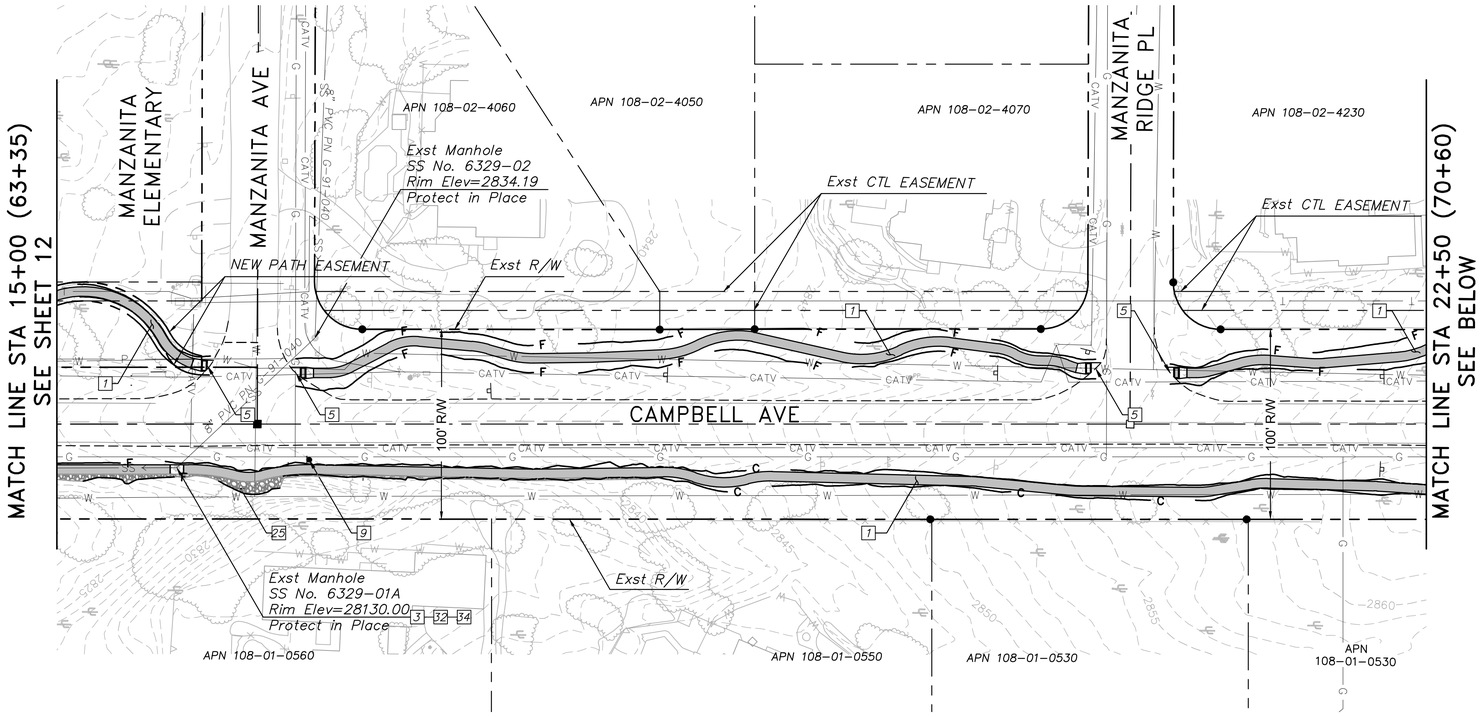
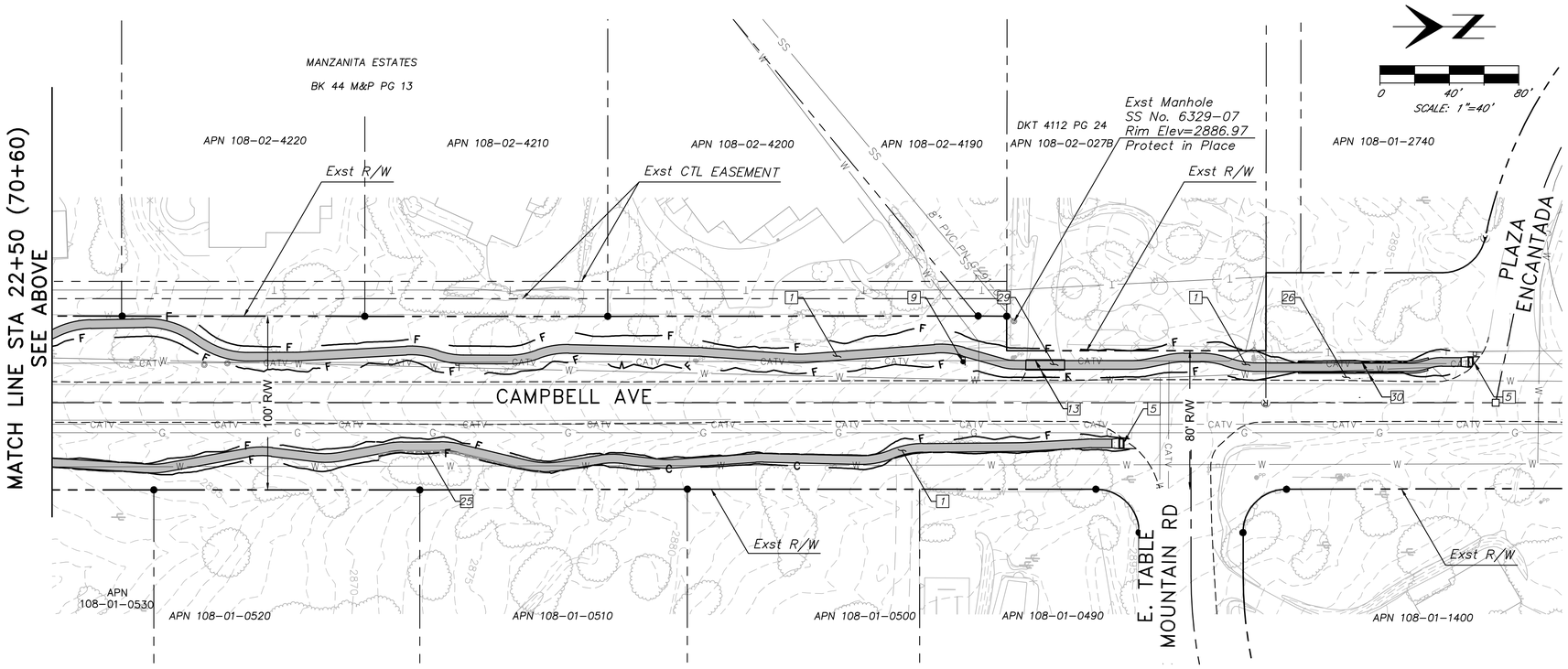
Pima County Department of Transportation

MANZANITA ELEMENTARY
SCHOOL BICYCLE AND
PEDESTRIAN IMPROVEMENT
PROJECT
CONSTRUCTION PLAN SHEET 1

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025PP01.dwg Apr 16, 2015 sean.hays
WPS: x022025VA x022025BD x022025BM x022025TB x022025TP-2D x022025TB x022025EL-4D x022025TP x022025PR x022025LS x022025CF x022025EA x022025EW





CONSTRUCTION NOTES

1. INSTALL NEW ASPHALT PER PAVEMENT STRUCTURAL SECTION NO. 1, PAVED PEDESTRIAN PATH
   ITEM #4060002
3. INSTALL CONCRETE SIDEWALK PER PC STD DTL 200*.
   ITEM #9080201
5. INSTALL CONCRETE LANDING WITH DETECTABLE WARNING STRIP PER DETAIL A, SHEET 14
   ITEM #9080292
9. INSTALL NEW SIGN. SEE TABLE ON SHEET 16 FOR APPROXIMATE LOCATIONS AND QUANTITIES
13. INSTALL CONCRETE HEADER PER PC STD. DTL. 213*, STA 28+34 TO STA 28+57.
   ITEM #9080402
25. INSTALL RIPRAP (HAND PLACED) PER DETAIL B, SHEET 14
   ITEM #9130008
26. GRADE SHOULDER PER DETAIL C, SHEET 14
   ITEM #2050010
29. INSTALL NEW ASPHALT PER PAVEMENT STRUCTURAL SECTION NO. 2. STA 28+34 TO STA 28+57.
   ITEM #4060002
30. INSTALL CUT OFF WALL PER DETAIL G, SHEET 15
   ITEM #6010712
   ITEM #6010713
32. SIDEWALK TO BE FLUSH WITH EXISTING SEWER MANHOLE. CONCRETE SIDEWALK SHALL EXTEND A MINIMUM OF 2' BEYOND EDGE OF MANHOLE.
34. REPLACE EXISTING WITH BOLTED MANHOLE FRAME AND COVER PER STD DTL RWRD-215, 218
   ITEM #5090201

*REFER TO APPENDIX A OF THE SPECIAL PROVISIONS FOR CURRENT PC STANDARD DETAILS

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Arizona Blue Stake, Inc.
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In Maricopa County: (602) 263-1100

Scale: 1" = 40' H
N/A

Sheet 13 of 19

Priscilla S. Cornelio, P.E., Director

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

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ARIZONA, U.S.A.
Exp. Date 03/31/2017

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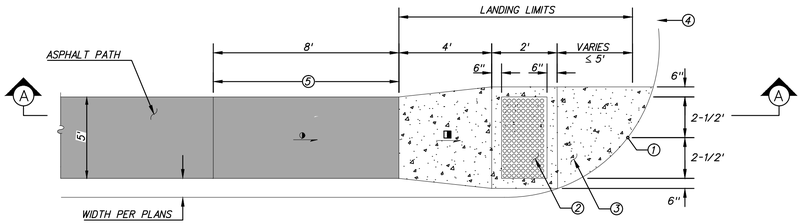
Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
CONSTRUCTION PLAN SHEET 2

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\02025PP02.dwg Apr 16, 2015 sean.hays
SHEETS: 402025VA 402025BD 402025BM 402025TP-2B 402025TP-2A 402025TB 402025EL-40 402025TP 402025PR 402025US 402025DC 402025AL 402025RW



◐ SLOPE: 8.33% (12:1) MAX.
◧ SEE PROFILE FOR GRADE. 2% MAX, ANY DIRECTION

CONCRETE LANDING
N.T.S.

NOTES:
SEE PC DTL. 207 FOR GENERAL AND CONSTRUCTION NOTES. LANDING SHALL BE CLASS B CONCRETE

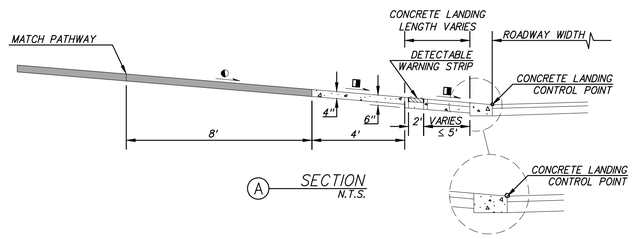
① CONCRETE LANDING CONTROL POINT. SEE PLANS FOR LOCATION.

② DETECTABLE WARNING STRIP PER PC DTL 207. REFER TO APPENDIX A OF THE SPECIAL PROVISIONS FOR PC/COT STD DTLS.

③ ROUGH BROOM FINISH. USE RIPPLE PATTERN (TYP).

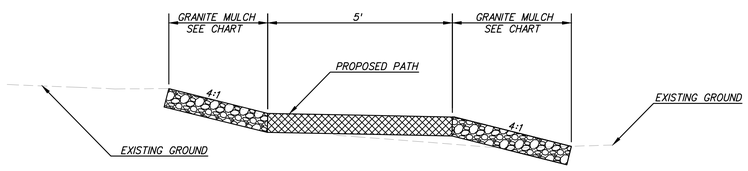
④ EXIST ROADWAY/RADIUS.

⑤ TRANSITION GRADING TO MATCH TYPICAL SECTION.



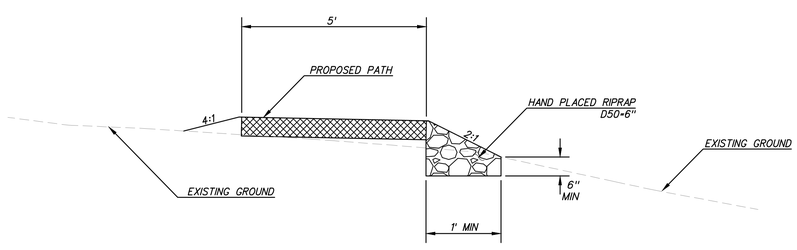
A SECTION
N.T.S.

DETAIL A
CONCRETE LANDING WITH DETECTABLE WARNING STRIP
ITEM # 9080292



GRANITE MULCH GRADATION CHART	
ROCK SIZE (in)	PERCENT PASSING (%)
1	100
7/8	80-100
1/2	0-10

GRANITE MULCH NOTES:
PLACE GRANITE MULCH 1" DEEP, IN ALL DISTURBED AREAS BETWEEN PATH AND CUT/FILL LIMITS. COLOR TO BE APACHE BROWN. GRANITE MULCH, ITEM #8030040. SEE TABLE ABOVE FOR GRADATION. FINAL COLOR AND GRADATION TO BE APPROVED BY ENGINEER. COST FOR GRANITE MULCH EXCAVATION IS INCLUDED IN PAY ITEM.



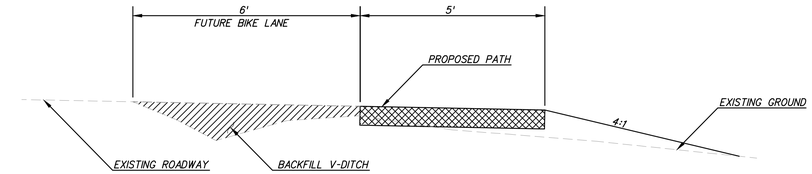
RIPRAP GRADATION CHART	
ROCK SIZE (in)	PERCENT GRADATION SMALLER THAN (%)
10	100
6	50
3	15

RIPRAP LOCATION CHART				
LOCATION	PATH	START STATION	END STATION	SIDE OF PATH
1	EAST	60+50	61+00	EAST
2	EAST	63+50	66+50	EAST
3	EAST	72+50	73+50	EAST

NOTE: SEE CONTROL SHEET FOR PATH STATIONING

HAND PLACED RIPRAP NOTES:
1. COLOR TO BE APACHE BROWN. RIPRAP (HAND PLACED), ITEM #9130008. SEE TABLE ABOVE FOR GRADATION. FINAL COLOR AND GRADATION TO BE APPROVED BY ENGINEER. COST FOR RIPRAP EXCAVATION IS INCLUDED IN PAY ITEM.
2. HIGH SURVIVABILITY GEOTEXTILE FABRIC, PER THE REQUIREMENTS OF SECTION 1014-4 OF THE 2003 STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, SHALL BE INSTALLED UNDER ALL RIPRAP. COST FOR FABRIC IS INCLUDED IN PAY ITEM.

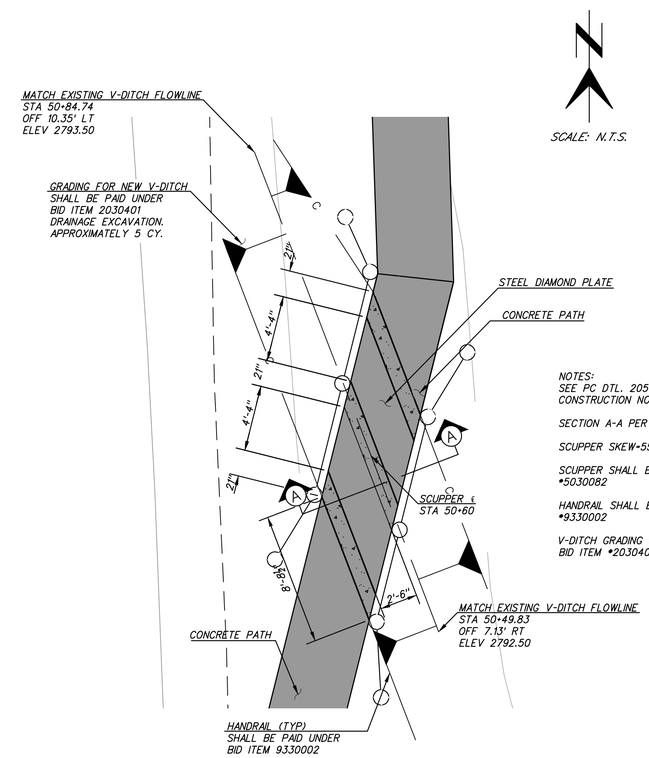
DETAIL B
SLOPE STABILIZATION



NOTES:
SHOULDER GRADING IS CONSIDERED INCIDENTAL TO AND INCLUDED IN THE COST OF ITEM #2050010 PATHWAY GRADING

LOCATION	PATH	START STATION	END STATION
1	WEST	28+00	30+50
2	EAST	57+15	61+50

DETAIL C
SHOULDER GRADING FOR FUTURE BIKE LANE



SCALE: N.T.S.

NOTES:
SEE PC DTL. 205 FOR GENERAL AND CONSTRUCTION NOTES.

SECTION A-A PER PC DTL. 205 SHEET 2 OF 3.

SCUPPER SKEW=55°.

SCUPPER SHALL BE PAID FOR UNDER BID ITEM #5030082

HANDRAIL SHALL BE PAID FOR UNDER BID ITEM #9330002

V-DITCH GRADING SHALL BE PAID FOR UNDER BID ITEM #2030401

DETAIL D
TYPE 2 SCUPPER (MODIFIED)

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

Scale: AS SHOWN | Sheet 14 of 19

Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
CONSTRUCTION DETAILS A,B,C,D

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Priscilla S. Cornelio, P.E., Director

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
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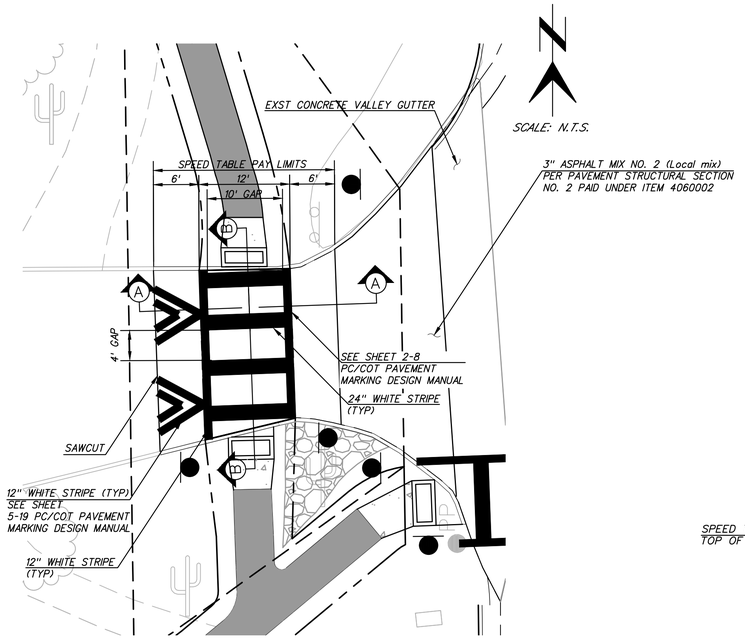
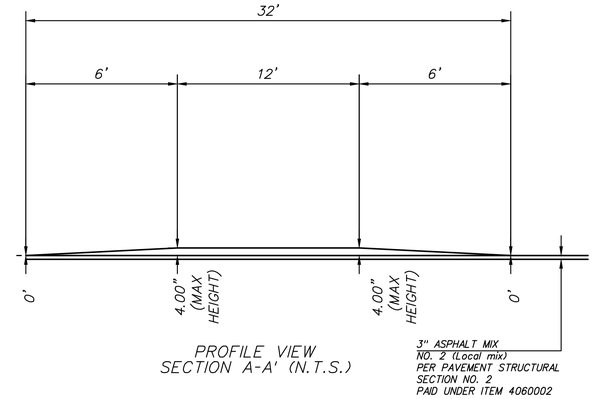
ARIZONA, U.S.A.
Exp. Date 03/31/2017

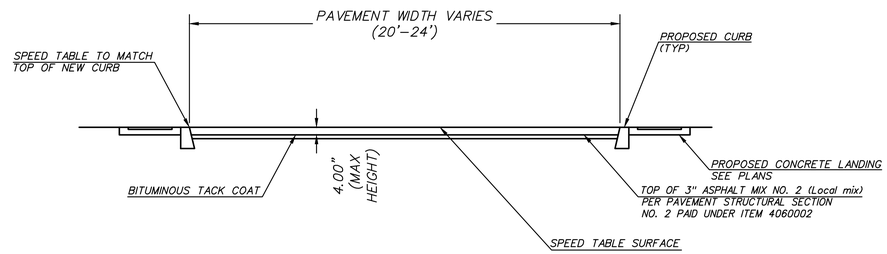
K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025010T.dwg Apr 16, 2015 scan.hays
WEES: K022025TB K022025CL -40 K022025BD K022025BM K022025TA K022025TP-20 K022025RN



DETAIL E
SPEED TABLE



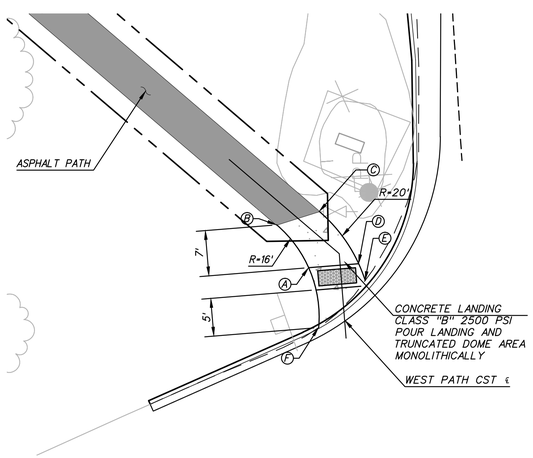
PROFILE VIEW
SECTION A-A' (N.T.S.)



CROSS SECTION VIEW
SECTION B-B' (N.T.S.)

GENERAL SPEED TABLE NOTES:

1. ASPHALTIC CONCRETE FOR ALL SPEED HUMP AND SPEED TABLE CONSTRUCTION SHALL BE CITY PAG MIX #2 LOCAL.
2. COMPACTION SHALL BE BY STANDARD METHODS TO 100%. ALL ROLLING SHALL BE IN A DIRECTION PARALLEL WITH ROADWAY. IT IS RECOMMENDED THAT A PLATE TAMPER BE USED FOR FINISH ROLLING. NO VIBRATING ROLLERS SHALL BE ALLOWED FOR ANY OF THE ROLLING.
3. SURFACE PREPARATION SHALL CONSIST OF WEED REMOVAL. STANDARD TACK COAT IS TO BE APPLIED TO THE ENTIRE SURFACE AREA ENCOMPASSED BY THE SPEED HUMP OR SPEED TABLE.
4. SPEED TABLE PROFILE MUST BE A PARABOLIC SHAPE WITH THE COMPACTED HEIGHT OF THE HIGH POINT TO BE 4 INCHES AND THE EDGES TAPERED OFF TO ZERO THICKNESS. LAYOUT OF THE SPEED TABLE SHALL BE A RECTANGULAR SHAPE WITH A WIDTH OF 12 FEET.
5. OUTER 12 INCHES OF EACH SPEED TABLE EDGE IN THE TRAVELWAY SHALL BE RAKED FREE OF LARGE AGGREGATE PRIOR TO ANY COMPACTION.
6. SPEED TABLES SHALL NOT BE PLACED OVER MANHOLES, WATERGATES, JUNCTION CHAMBERS, ETC.
7. CONTRACTOR RESPONSIBLE TO STRIPE SPEED TABLES.
8. CONTRACTOR RESPONSIBLE TO MAINTAIN PROPER ROAD CONSTRUCTION, WARNING SIGNS, AND BARRICADING DURING CONSTRUCTION AND UNTIL PERMANENT SIGNING AND STRIPING IS INSTALLED.
9. CONTRACTOR TO SAWCUT EXISTING ASPHALT AT THE WEST LIMIT OF THE SPEED TABLE, REMOVE AND REPLACE ALL ASPHALT FROM THE SAWCUT LINE TO THE EXISTING CONCRETE VALLEY GUTTER. THIS WORK TO BE PAID UNDER BID ITEM #2020001 REMOVAL OF STRUCTURES AND OBSTRUCTIONS.
10. SPEED TABLE, COMPLETE IN PLACE, SHALL BE PAID UNDER BID ITEM #4060201.
11. ALL EARTHWORK FOR DRIVEWAY RECONSTRUCTION, INCLUDING SCARIFICATION AND RECOMPACTION TO BE PAID FOR UNDER BID ITEM 2050003 GRADING ROADWAY.

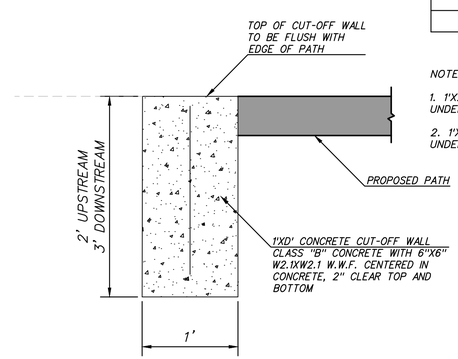


SCALE: N.T.S.

POINT	NORTHING	EASTING
A	484709.1852	1005653.9528
B	484714.8476	1005649.7269
C	484716.6116	1005655.3596
D	484709.7220	100566.5570
E	484707.5011	1005661.4164
F	484701.2844	1005655.2722

DETAIL F
CONCRETE LANDING

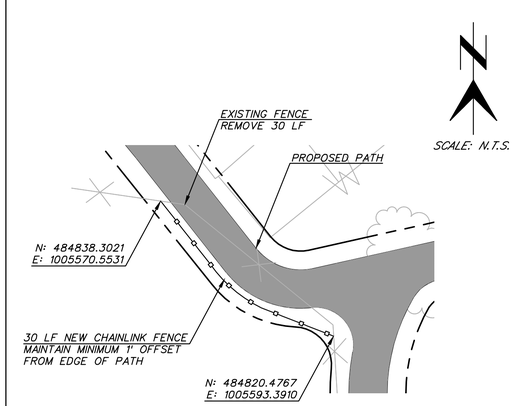
LOCATION	DEPTH	START STATION	END STATION	SIDE OF PATH
1	2'	29+93	30+67	EAST
2	3'	29+93	30+67	WEST



NOTES:

1. 1'X2' CUT OFF WALL SHALL BE PAID FOR UNDER ITEM #6010712
2. 1'X3' CUT OFF WALL SHALL BE PAID FOR UNDER ITEM #6010713

DETAIL G
CUT OFF WALL



DETAIL H
FENCE LIMITS

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) 263-3100

Scale: AS SHOWN | Sheet 15 of 19

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

No.	Revision Description	Engineer	Date

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

Registered Professional Engineer (Civil) CERTIFICATE NO. 47513 ALLEN R. HATHCOCK Date Signed 04/30/15 ARIZONA U.S.A.
Exp. Date 03/31/2017

Kimley»Horn
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333 EAST METMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
CONSTRUCTION DETAILS E,F,G,H

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025DT01.dwg Apr 16, 2015 sean.hays
SHEETS: 022025TB 022025CL-40 022025BD 022025BM 022025SIA 022025TP-20 022025PN

NOTES:

1. SIGN LOCATIONS ARE APPROXIMATE ONLY. CONTACT MICHAEL MOORE WITH PCDOT TRAFFIC (520) 740-6410 FOR ENGINEER TO LOCATE IN FIELD PRIOR TO INSTALLATION.

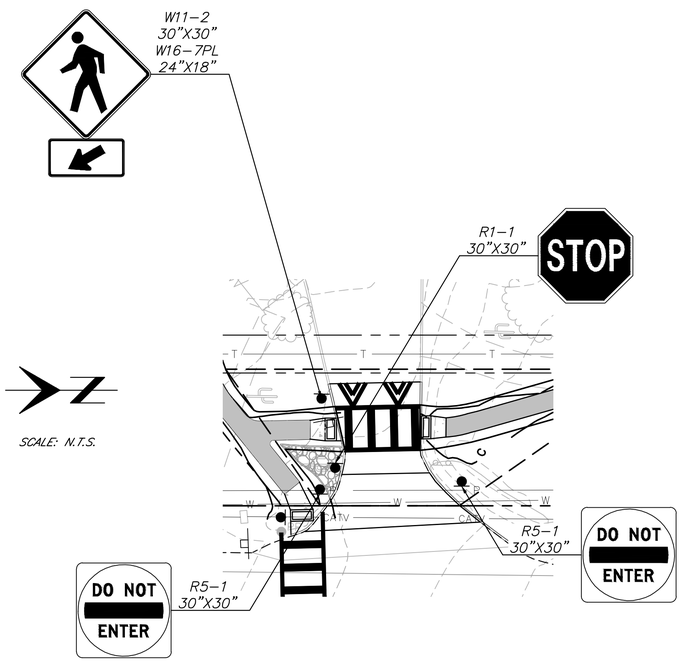
2. PERFORATED POSTS SHALL BE PAID UNDER ITEM #6070010

3. POST FOUNDATIONS SHALL BE PAID UNDER ITEM #6070110

4. SIGN PANELS SHALL BE PAID UNDER ITEM #6080016

SIGNING TABULATION

	STATION	SIGN CODE	DESCRIPTION	PERF. POST (LF)	POST FND. (EA)	SIGN PANEL (SF)
SHEET 12	10+50	SPR08-01	NO PARKING	11	1	1.50
		SPR07	TIMES OF DAY			0.50
	13+00	S1-1	SCHOOL CROSSING	11	1	6.25
		W16-7P	DIAGONAL ARROW			3.00
	57+50	SPR08-01	NO PARKING	11	1	1.50
		SPR07	TIMES OF DAY			0.50
	58+00	S1-1	SCHOOL CROSSING	11	1	6.25
		W16-9P	AHEAD			3.00
	59+00	SPR08-01	NO PARKING	11	1	1.50
		SPR07	TIMES OF DAY			0.50
	60+50	SPR08-01	NO PARKING	11	1	1.50
		SPR07	TIMES OF DAY			0.50
	61+50	S1-1	SCHOOL CROSSING	11	1	6.25
		W16-7P	DIAGONAL ARROW			3.00
	63+25	SPR08-01	NO PARKING	11	1	1.50
		SPR07	TIMES OF DAY			0.50
SHEET 13	28+00	SPR08-01	NO PARKING	11	1	1.50
		SPR07	TIMES OF DAY			0.50
	64+00	SPR08-01	NO PARKING	11	1	1.50
		SPR07	TIMES OF DAY			0.50
SHEET 16	13+00	W11-2	CROSSING	11	1	6.25
		W16-7P	DIAGONAL ARROW			3.00
	13+00	R1-1	STOP	11	1	6.25
	13+00	R5-1	DO NOT ENTER	11	1	6.25
	13+50	R5-1	DO NOT ENTER	11	1	6.25
	TOTAL			154	14	69.75



SCALE: N.T.S.

DETAIL S

MANZANITA ELEMENTARY DRIVEWAY SIGNING DETAIL

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) 263-2100

Scale: N/A N/A

Sheet 16 of 19

Pima County Department of Transportation

Priscilla S. Cornelio, P.E., Director

Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 47513 ALLEN R. HATHCOCK Date Signed 04/20/15 ARIZONA U.S.A.
Exp. Date 03/31/2017

Kimley»Horn

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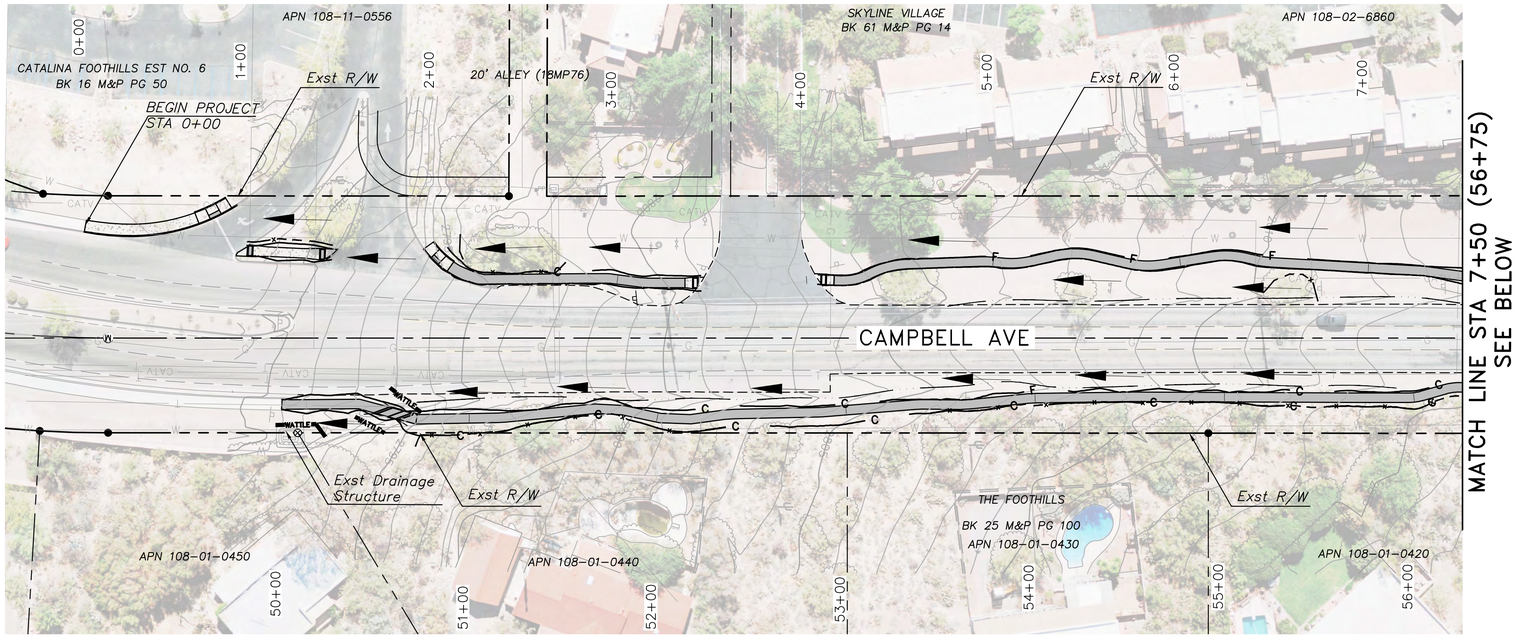
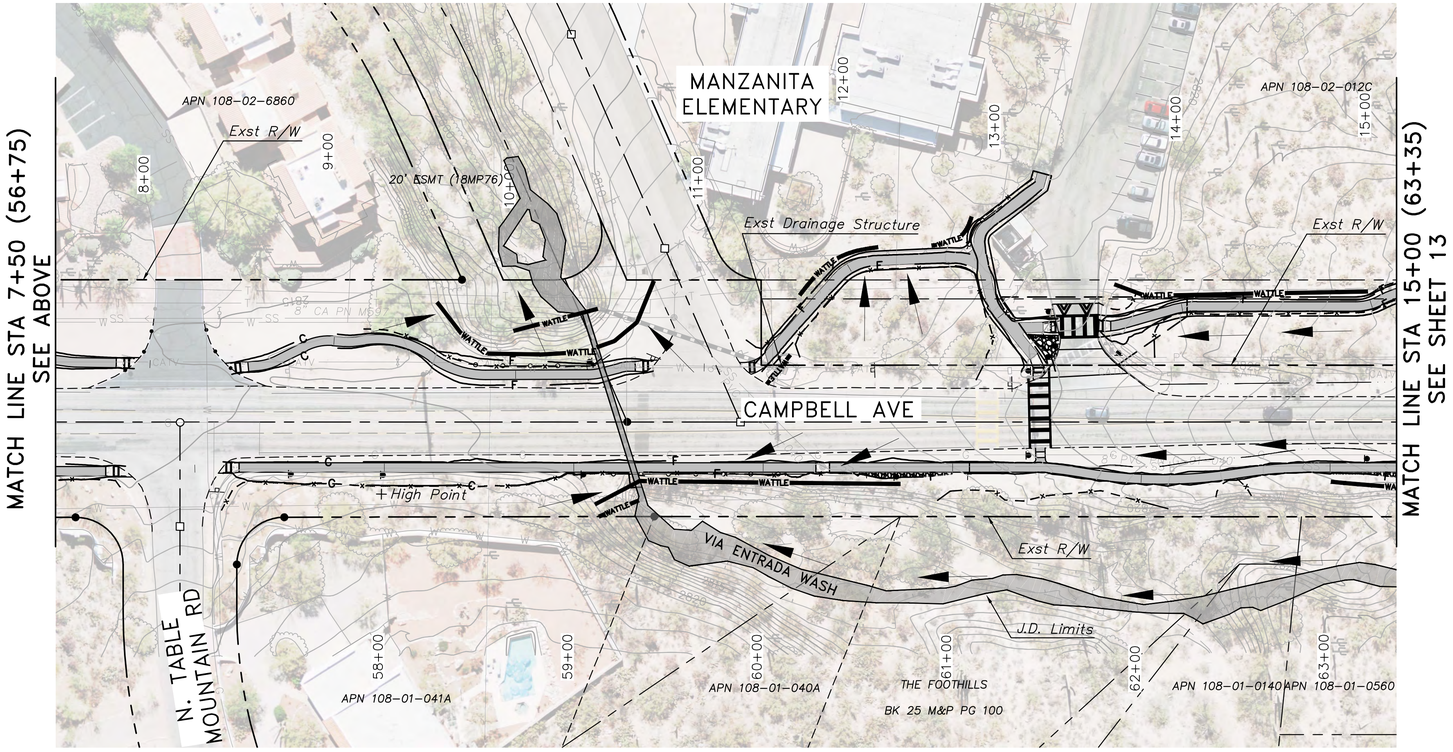
333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

MANZANITA ELEMENTARY
SCHOOL BICYCLE AND
PEDESTRIAN IMPROVEMENT
PROJECT
SIGNING DETAILS

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\02202SPP01.dwg Apr 16, 2015 scon.hays
WEPS: k02202SVA k02202SBD k02202SBW k02202STP-20 k02202STB k02202SQL-40 k02202STP k02202SPR k02202SVS k02202SCF k02202SAL k02202SRW





0 40' 80'
SCALE: 1"=40'

LEGEND

- PRESERVATION FENCING
  SEE DEMOLITION PLAN SHEETS 9-10
- SEDIMENT WATTLE
  9" DIAMETER - ADOT DETAIL ES3
  USE ES1 AT DRAINAGE STRUCTURES
- DIRECTION OF FLOW
- EXISTING NATURAL DRAINAGE/SWALE
- JURISDICTIONAL WASH LIMITS
- RIPRAP (HAND PLACED), REFER ALSO TO CONSTRUCTION PLANS (SHEETS 12-13) ITEM #9130008

NOTES

1. AT START OF PROJECT, LOCATIONS OF CONTROL MEASURES (EG. SEDIMENT WATTLES, LOGS, BERMS, ETC.) SHALL BE DETERMINED IN FIELD WITH PIMA COUNTY SWPPP INSPECTOR PRIOR TO INSTALLATION.
2. REFER TO DETAILS FOR INSTALLATION OF SEDIMENT WATTLES. INCLUDED AS APPENDIX B OF THIS SWPPP.
3. REFER TO SPECIFICATIONS FOR GRANITE MULCH AND RIPRAP. GRANITE MULCH TO BE INSTALLED IN ALL DISTURBED AREAS OF RIGHT-OF-WAY.
4. FOR PRESERVATION FENCING, REFER TO DEMOLITION PLANS.
5. EROSION/SEDIMENT CONTROLS SHALL BE PLACED ON ALL SIDE SLOPE BOUNDARIES ONLY WHEN ADJACENT SIDE SLOPE IS AT LOWER ELEVATION THAN PROJECT AREA AND HAS POTENTIAL TO RECEIVE STORMWATER RUNOFF. ADJACENT SLOPES AT HIGHER ELEVATION THAN PROJECT AREA DO NOT REQUIRE PERIMETER CONTROL.
6. CONTROL MEASURES SHALL BE PLACED TO MANAGE RUN-ON STORMWATER FLOWS WHERE APPLICABLE.
7. THERE ARE NO DRYWELLS WITHIN PROJECT VICINITY.
8. THERE ARE NO IMPAIRED WATERS WITHIN ¼ MILE OF PROJECT.

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) 263-2380

Scale: 1" = 40' H
N/A

Sheet 17 of 19

Pima County Department of Transportation

MANZANITA ELEMENTARY
SCHOOL BICYCLE AND
PEDESTRIAN IMPROVEMENT
PROJECT
SWPP SHEET 1

Kimley»Horn

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333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

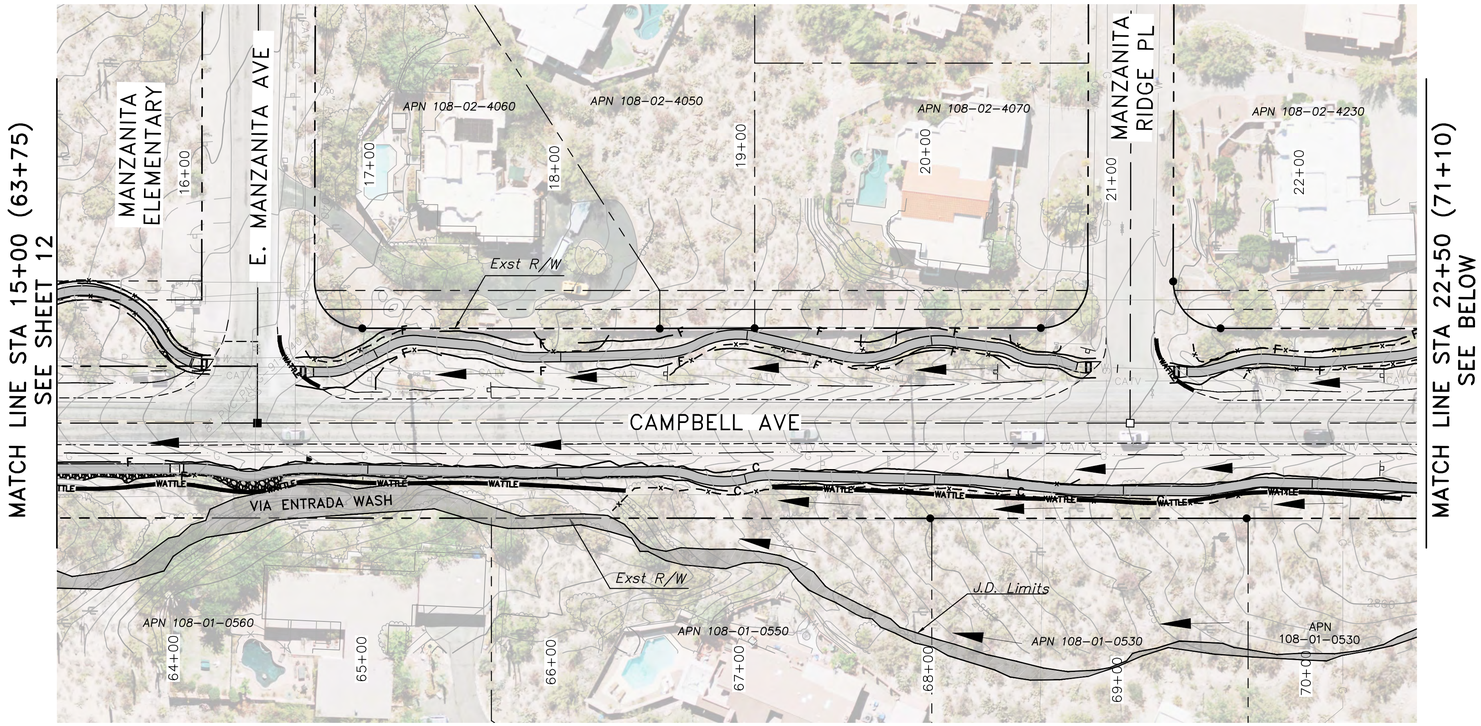
Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

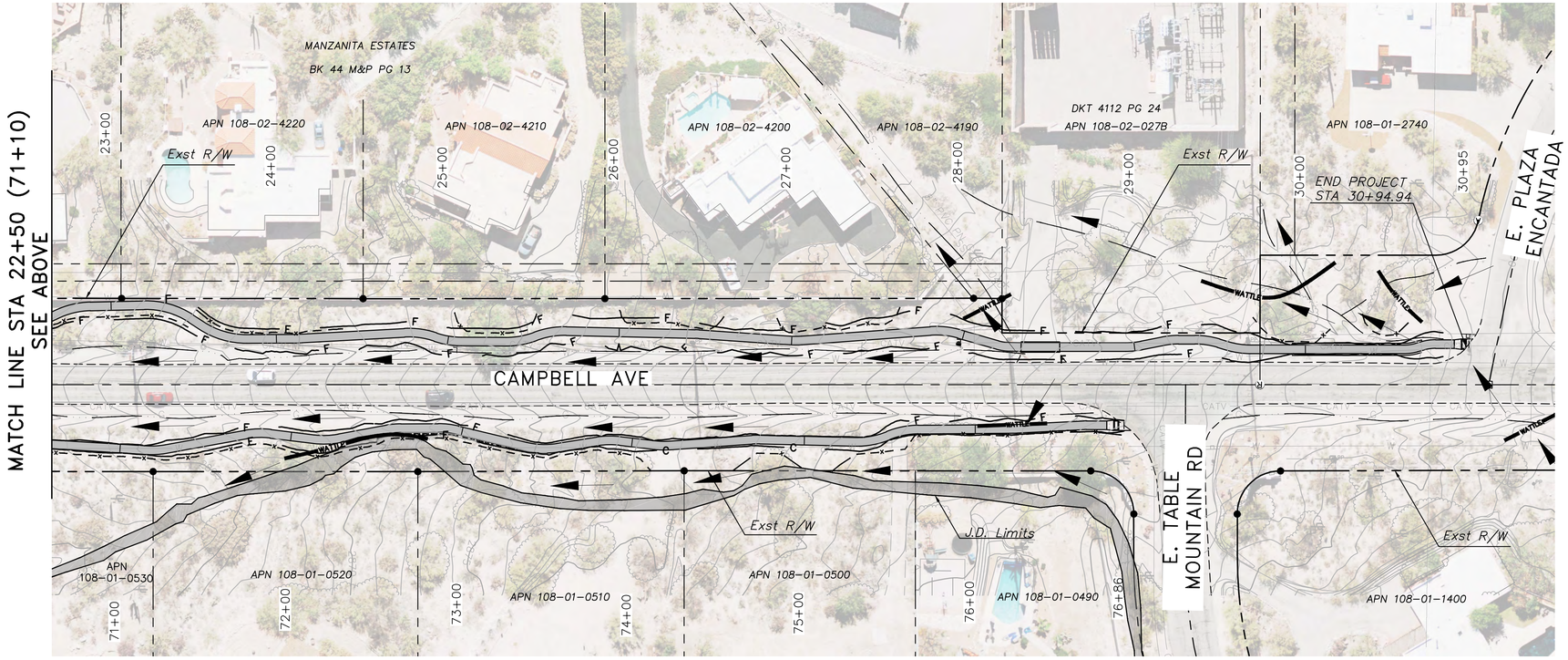
No.	Revision Description	Engineer	Date

Priscilla S. Cornelio, P.E., Director

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

K:\TUC_Roadway\098022043_Manzanita_Sidewalk\CADD\022025SWPP01.dwg Apr 16, 2015 sean.hays
SHEETS: 022025VA 022025BD 022025BM 022025TP-20 022025TP-19 022025GL-40 022025TP 022025PR 022025BVS 022025GT 022025AL 022025SWPP 022025EM 022025NPP 022025RW





0 40' 80'
SCALE: 1"=40'

LEGEND

- PRESERVATION FENCING
  SEE DEMOLITION PLAN SHEETS 9-10
- SEDIMENT WATTLE
  9" DIAMETER - ADOT DETAIL ES3
  USE ES1 AT DRAINAGE STRUCTURES
- DIRECTION OF FLOW
- EXISTING NATURAL DRAINAGE/SWALE
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NOTES

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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

Scale: 1" = 40' H
N/A

Sheet 18 of 19

Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
SWPP SHEET 2

Kimley»Horn

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333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

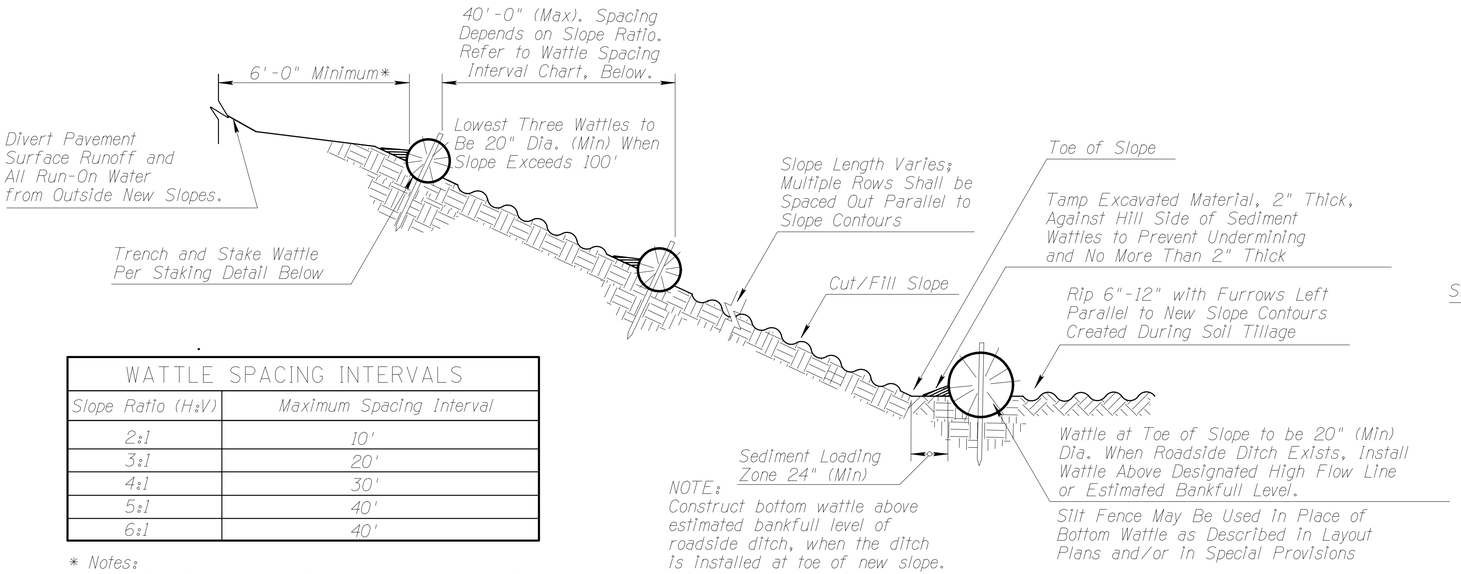
Registered Professional Engineer (Civil)
CERTIFICATE NO. 47513
ALLEN R. HATHCOCK
Date Signed 04/16/15
ARIZONA U.S.A.
Exp. Date 03/31/2017

No.	Revision Description	Engineer	Date

Priscilla S. Cornelio, P.E., Director

		Date
Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025SWPP02.dwg Apr 16, 2015 sean.hays
SHEETS: 022025VA 022025BG 022025BM 022025TP-2B 022025TB 022025BL-4b 022025TP 022025PR 022025PUS 022025ef 022025aL 022025swp 022025rip 022025m 022025m

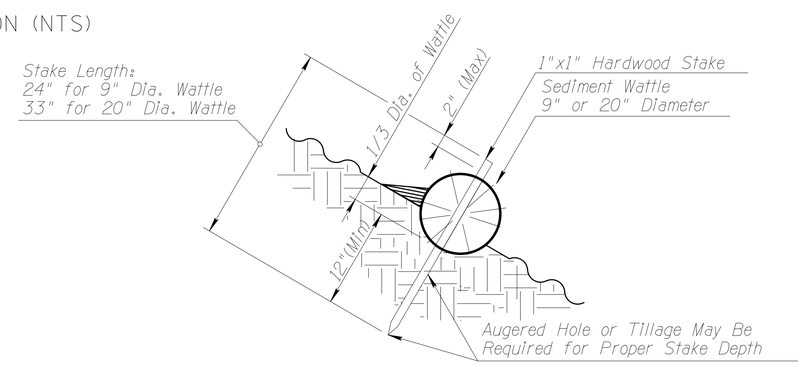


NOTE:
Construct bottom wattle above estimated bankfull level of roadside ditch, when the ditch is installed at toe of new slope.

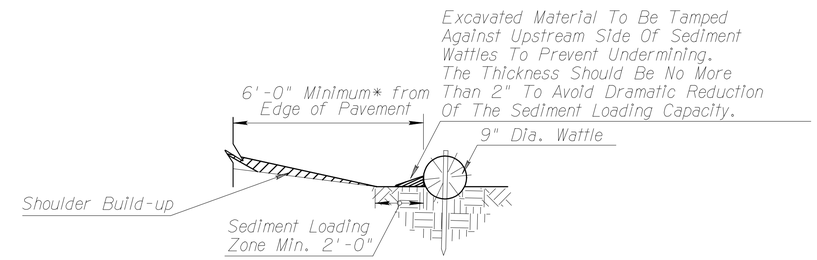
SECTION (NTS)

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.

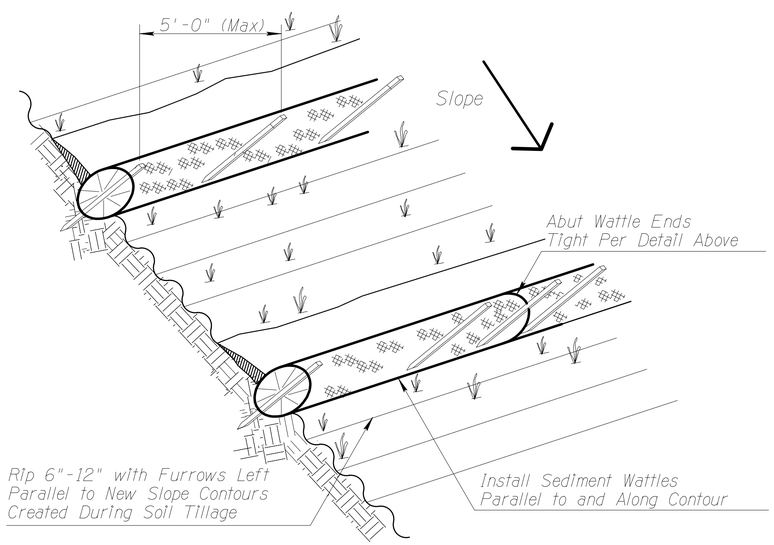


SEDIMENT WATTLE STAKING DETAIL (NTS)

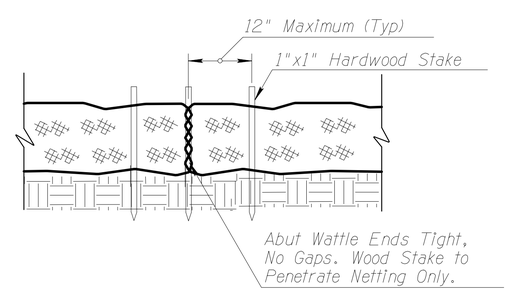


NEW SHOULDER BUILDUP PROTECTION SECTION (NTS)

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 Standard Specification Section 810-2.06(C) for Sediment Wattle material specifications.



SEDIMENT WATTLE LAYOUT (NTS)



SEDIMENT WATTLE OVERLAP (NTS)

DETAIL ES3
SEDIMENT WATTLE

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

Scale: AS SHOWN | Sheet 19 of 19

Priscilla S. Cornelio, P.E., Director

Designed	T. Rhine	04/2015
Drawn	S. Hays	04/2015
Checked	A. Hathcock	04/2015
Proj. Engr.	A. Hathcock	04/2015

No.	Revision Description	Engineer	Date

Registered Professional Engineer (Civil) CERTIFICATE NO. 47513 ALLEN R. HATHCOCK Date Signed 04/16/15 ARIZONA U.S.A.
Exp. Date 03/31/2017

Kimley»Horn
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333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

Pima County Department of Transportation

MANZANITA ELEMENTARY SCHOOL BICYCLE AND PEDESTRIAN IMPROVEMENT PROJECT
SWPP DETAILS

K:\TUC_Roadway\098022043_Manzanita Sidewalk\CADD\022025SWPPD102.dwg Apr 16, 2015 - seton.hays
XREFS: X022025TB X022025SL-4G X022025BD X022025BM X022025TA X022025TP-2D X022025PN