CMNO DE LA TIERRA / HIGHWAY DR / CURTIS

GENERAL DESCRIPTION OF PROJECT

The Cmno De La Tierra - Highway Dr - Curtis project will include new paved shoulders within the 0.84 mile project corridor. Portions of the two curves within the corridor will be reconstructed to increase super-elevation.

FEDERAL PROJECT NO.
HSIP PPM-0(251)D
ADOT TRACS NO.
0000 PM PPM SH640 01C
PROJECT NO.
4CHDCR

PROJECT IN SUPERVISOR DISTRICTS 1 & 3
Richard Elias, Chairman, District 5
Sharon Bronson, District 3
Steve Christy, District 4

PIMA COUNTY BOARD OF SUPERVISORS

RICHARD ELIAS, CHAIRMAN, DISTRICT 5
ALLY MILLER, DISTRICT 1 RAMÓN VALADEZ, DISTRICT 2
SHARON BRONSON, DISTRICT 3 STEVE CHRISTY, DISTRICT 4

PIMA COUNTY TRANSPORTATION

PROJECT IN SUPERVISOR DISTRICTS 1 & 3

LOCATION MAP
NOT TO SCALE

Sections 8 & 17
T-13-E, R-13-E,
G & S R M
Pima County, Arizona

Sheet No.       of

CV1 COVER SHEET
D61-D63 GENERAL NOTES
D64 LEGEND & DESIGN DATA
T51-T53 TYPICAL SECTIONS
DT1 DRIVEWAY DETAILS SHEET
Q1-03 GEOMETRIC CONTROL PLANS
C1-CS CONSTRUCTION PLANS
SM1-SM3 SIGNING & PAVEMENT MARKING PLANS
BA1 MATERIAL STORAGE, STAGING,
AND STOCKPILE AREA PLAN
EC1-EC5 EROSION CONTROL PLANS
XS1-XS13 CROSS SECTIONS

INDEX TO PLAN SHEETS
NOT TO SCALE

Kimley-Horn
331 S. Merano Road
Suite 300
Tucson, AZ 85705
(520) 818-8947 Fax (520) 944-7423

Pima County
Department of Transportation
291 N. Stone Ave., 4th Floor
Tucson, Arizona 85701
Phone Number: 520-724-6410

signed:

Timothy J. Rhine
P.E. Director

Approved:

Timothy J. Rhine
P.E. Director

Sheet No. 4CHDCR

Project No. 4CHDCR
Page No. 1 of 55
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.


5. THE CONTRACTOR SHALL ADJUST ALL WATER METERS, VALVE BOXES, STORM DRAIN MANHOLES, AND SEWER MANHOLES AND CLEANOUTS TO FINISH GRADE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE OTHER ITEMS OF WORK, EXCEPT WHEN THE BIDDING SCHDULE CONTAINS SPECIFIC ITEMS ON A UNIT BASIS.

6. SOILS INFORMATION WILL BE MADE AVAILABLE TO PROSPECTIVE BIDDERS IN THE GECOTHEICAL REPORT. SOILS INFORMATION SO PROVIDED SHALL BE FOR INFORMATIONAL PURPOSES ONLY. THIS INFORMATION WAS DEVELOPED AS ACCURATELY AS POSSIBLE BY THE METHODS USED. PIMA COUNTY ACCEPTS NO RESPONSIBILITY FOR ANY CONDITIONS ENCOUNTERED WHICH VARY FROM THE INFORMATION PROVIDED.

7. 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.

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

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

10. EXISTING UTILITIES INCLUDE, BUT MAY NOT BE LIMITED TO, OVERHEAD AND UNDERGROUND ELECTRIC, TELEPHONE, TELEVISION, SEWER, GAS, WATER, AND SHALL BE MOVED BY OTHERS UNLESS OTHERWISE NOTED and shown in these plans.


CONSTRUCTION NOTES

1. CONSTRUCTION SHALL TAKE PLACE BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M.

SURVEY CONTROL NOTES

1. THIS MAP WAS PREPARED BASED ON DATA OBTAINED DURING PIMA COUNTY SURVEY COMPLETED NOVEMBER 21, 2016.

2. BEARINGS ARE BASED ON GRID NORTH PER THE ARIZONA COORDINATE SYSTEM, NAD 83, CENTRAL ZONE 0202.

3. ELEVATIONS ARE BASED ON PIMA COUNTY OPUS CONTROL POINT 135151E, 487932N, HAVING AN NAVD88 ORTHOMETRIC HEIGHT OF 2236.61 FEET.

4. GROUND COORDINATES WERE DERIVED BY MULTIPLYING THE GRID COORDINATES BY THE INVERSE SCALE FACTOR FOR CONTROL POINT 135151E, 487932N.

5. REFERENCE DOCUMENTS:
   - DOCKET 11833, PAGE 2466, WARRANTY DEED
   - DOCKET 11514, PAGE 5393, WARRANTY DEED
   - DOCKET 11833, PAGE 5393, WARRANTY DEED

SIGNING GENERAL NOTES

1. ALL EQUIPMENT, MATERIALS AND CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS CONTAINED IN THE CURRENT PIMA ASSOCIATION OF GOVERNMENTS (PAG) STANDARD SPECIFICATIONS AND THE STANDARD DETAILS FOR PUBLIC IMPROVEMENTS, THE SPECIAL PROVISIONS AND THE APPROVED PLANS.


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

4. THE POSTED SPEED FOR CAMINO DE LA TIERRA POSTED IS 45 MPH. THE DESIGN SPEED FOR THE NORTH CURVE (CAMINO DE LA TIERRA TO HIGHWAY DRIVE) IS 30 MPH AND THE POSTED ADVISORY SPEED IS 25 MPH. THE POSTED SPEED FOR HIGHWAY DRIVE IS 40 MPH. THE DESIGN SPEED FOR THE SOUTH CURVE (HIGHWAY DRIVE TO CURTIS ROAD) IS 25 MPH AND THE POSTED ADVISORY SPEED 20 MPH. THE POSTED SPEED FOR CURTIS ROAD IS 35 MPH. SIGN PLACEMENT SHALL BE BASED ON THE POSTED SPEED LIMIT.

5. POST LENGTHS INDICATED ON SIGN SHEETS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY THE COUNTY OF THE ACTUAL POST LENGTH PRIOR TO INSTALLATION.

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

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

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH ARIZONA 811 FOR INSTALLING ALL TRAFFIC SIGNS IN THE FIELD AND FOR MAINTAINING ALL SIGNS UNTIL THE PROJECT IS APPROVED FOR "CONSTRUCTION ACCEPTANCE" BY PIMA COUNTY IF FULLY OPEN TO TRAFFIC. ALL PUNCH LIST ITEMS ARE COMPLETED, AND ONE YEAR WARRANTIES BEGIN.

9. ALL SIGNS SHALL HAVE TYPE XI SHEETING, OR AN EQUIVALENT. ALL WARNING SIGNS HAVING YELLOW BACKGROUND SHALL USE FLUORESCENT YELLOW/GREEN SHEETING. ALL STREET NAME SIGNS SHALL USE FLUORESCENT YELLOW/GREEN SHEETING, TYPE XI. ALL GROUND MOUNTED SIGNS SHALL HAVE AN ANTI GRAFFITI COATING APPLIED TO SIGN FACE, 3M #1160 FILM OR EQUIVALENT.

10. THE POSTED SPEED FOR CAMINO DE LA TIERRA POSTED IS 45 MPH. THE DESIGN SPEED FOR THE NORTH CURVE (CAMINO DE LA TIERRA TO HIGHWAY DRIVE) IS 30 MPH AND THE POSTED ADVISORY SPEED IS 25 MPH. THE POSTED SPEED FOR HIGHWAY DRIVE IS 40 MPH. THE DESIGN SPEED FOR THE SOUTH CURVE (HIGHWAY DRIVE TO CURTIS ROAD) IS 25 MPH AND THE POSTED ADVISORY SPEED 20 MPH. THE POSTED SPEED FOR CURTIS ROAD IS 35 MPH. SIGN PLACEMENT SHALL BE BASED ON THE POSTED SPEED LIMIT.

11. ALL NEW SIGNS SHALL HAVE 0.080 GAUGE, RADUIS CORNER, ALUMINUM BACKING UNLESS OTHERWISE NOTED.

12. PRIOR TO DISTURBING ANY TRAFFIC SIGNS, A SIGN CONDITION INVENTORY OF ALL EXISTING SIGNS SHALL BE CONDUCTED BY THE CONTRACTOR AND PROVIDED TO THE PIMA COUNTY SIGN SHOP SUPERVISOR 520-724-2630. INVENTORY SHALL INDICATE CURRENT SIGN LOCATION AND CONDITION, INCLUDING ANY EXISTING DAMAGE OR DEFICIENCIES.

13. ANY SIGNS AND SIGNS NOT 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 THE STOCKPILE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

14. ALL SIGNS AND SIGNS NOT BEING RE-USED ON THIS 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 MATERIALS. DELIVERY SHALL BE MADE ON FRIDAYS, NO DELIVERIES, PIMA COUNTY SIGN SHOP 1313 S. MISSION ROAD (520-724-2630, NO FRIDAY DELIVERIES).

15. ALL MATERIALS AND LABOR TO MOUNT W-1L OR W-1R SIGNS TO POLES SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE SIGN PANEL ITEM.
PAVEMENT MARKING GENERAL NOTES

1. ALL EQUIPMENT/MATERIALS AND CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS CONTAINED IN THE CURRENT PIMA ASSOCIATION OF GOVERNMENTS (PAG) STANDARD SPECIFICATIONS AND THE STANDARD DETAILS FOR PUBLIC IMPROVEMENTS, THE SPECIAL PROVISIONS AND THE APPROVED PLANS. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE PC/COT PAVEMENT MARKING DESIGN MANUAL.

2. THE STRIPING CONTRACTOR SHALL CONTACT THE PIMA COUNTY PAVEMENT MARKING SUPERVISOR (520-724-2624) AT LEAST 3 WORKING DAYS IN ADVANCE OF ANY PAVEMENT MARKING LABEL BEING INSTALLED TO SCHEDULE INSPECTION AND APPROVAL OF PAVEMENT MARKING.

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 BY HIS DESIGNEE.

5. THE POSTED SPEED FOR CAMINO DE LA TIERRA POSTED IS 45 MPH. THE DESIGN SPEED FOR THE NORTH CURVE (CAMINO DE LA TIERRA TO HIGHWAY DRIVE) IS 50 MPH AND THE POSTED ADVISORY SPEED IS 25 MPH. THE POSTED SPEED FOR HIGHWAY DRIVE IS 40 MPH. THE DESIGN SPEED FOR THE SOUTH CURVE (HIGHWAY DRIVE TO CURTIS ROAD) IS 25 MPH AND THE POSTED ADVISORY SPEED 20 MPH. THE POSTED SPEED FOR CURTIS ROAD IS 35 MPH. SIGN PLACEMENT SHALL BE BASED ON THE POSTED SPEED LIMIT.

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 STANDARD MARKERS.


9. PAINTED SYMBOLS AND LEGENDS SHALL BE APPLIED AT THE SAME TIME AS THE PAINTED STRIPING, WITH THE EXCEPTION OF BIKE LANE STAGING AND WORDS SUCH AS STOP, AHEAD, ONLY, ETC.

10. THE FINAL LONGITUDINAL STRIPING SHALL BE 90 MIL (0.090") THICK RIBBON EXTRUDED THERMOPLASTIC REFLECTORIZED STRIPING PLACED OVER THE PAINTED LAYOUT STRIPING WITH A SINGLE DROP OF 10 POUND S PER 100 SQUARE FEET OF ASPHALT 247-13 CLASS BEADS. THE FINAL CONSTRUCTION STRIPING SHALL BE PLACED WITHIN 2 TO 30 CALENDAR DAYS OF THE FINAL PAVEMENT SURFACE BEING COMPLETED. ALL PREVIOUSLY EXEMPTED LONG STRIPING SHALL BE APPLIED DURING THE FINAL LAYOUT PHASE. PREVIOUSLY EXEMPTED LONG STRIPING SHALL BE INSTALLED WITHIN FIVE (5) WORKING DAYS OF THE FINAL PAVEMENT SURFACE BEING COMPLETED.

11. ALL FINAL TRANSVERSE STRIPING SHALL BE HOT-SPRAYED THERMOPLASTIC 90 MILS (0.090") THICK INCLUDING SYMBOLS AND LEGENDS WITH THE EXCEPTION OF BIKE LANE SYMBOLS WHICH MAY BE EXTRUDED THERMOPLASTIC OR COLD PREFORMED THERMOPLASTIC.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF PAVEMENT MARKINGS ON THE FINAL SURFACE COURSE FOLLOWING ONE CONTROL LINE PER DIRECTION OF TRAVEL CONSISTING OF CONTROL POINTS THAT HAVE BEEN SET TO NO MORE THAN 50 FEET APART ON CURVE SECTIONS AND 200 FEET IN TANGENT SECTIONS WHERE THE PAVEMENT MARKING PATTERN DOES NOT CHANGE.

13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE FINAL SURFACE COURSE IS PLACED SO THAT THE CONSTRUCTION JOINT IS NO MORE THAN ONE FOOT OFFSET FROM THE FINAL STRIPING.

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

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

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

17. ALL REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTION 70 OF THE PAG STANDARD SPECIFICATIONS. PAINTING OVER EXISTING STRIPING DOES NOT CONSTITUTE APPROVED STRIPING OBLITERATION.

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

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

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL STRIPING UNTIL PROJECT IS APPROVED FOR "CONSTRUCTION ACCEPTANCE" BY PIMA COUNTY (FULLY OPEN TO TRAFFIC, ALL PUNCHLIST ITEMS ARE COMPLETED, AND ONE YEAR WARRANTIES BEGIN).

GENERAL SEWER NOTES

1. **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, 2016 (IDS 2016) and the standard specifications and details for construction 2016 SSDC 2016. Said documents are available through the PCRWRD website.

2. The Contractor shall contact "Arizona 811" (DIAL 811 or 1-800-727-5438) a minimum of two (2) business days prior to commencing construction activities. The Contractor shall keep all underground facility location requests up-to-date and comply with Arizona Revised Statutes (A.R.S.), Title 40, Chapter 1, Article 6.5, Section 40-550.22, Concerns regarding the accuracy between the underground facility markings and the project plans shall be immediately reported to the Pima County Project Design Engineer.

3. **Contractor shall maintain access to all sanitary sewer manholes at all times.**

4. **Immediately report any of the following to the PCRWRD Operations Center (OCC) at (520) 724-3400:** Any release of sewage, any damage to the public sanitary sewer system, or the dropping of debris into a public sanitary sewer manhole. A PCRWRD representative will be dispatched to the site. The Contractor shall be held responsible for all costs to repair the system, the cleaning of the sewage, obtaining the releases, and any and all penalties levied on PCRWRD for sewage entering a natural drainage way or storm water drainage system. The Contractor shall repair all damage as directed and approved by the PCRWRD Field Representative.

5. **Modification to or adjustment of existing Pima County sewer facilities shall not commence until:**(a) the Contractor has obtained a PCRWRD public sewer construction permit contact the PCRWRD permits section at (520) 724-8469 for permit application requirements; or (b) the Contractor's flow plan management has been submitted thirty (30) calendar days prior to the pre-construction meeting and approved by PCRWRD Field Engineering and (c) a pre-construction meeting with the assigned Pima County Project Field Inspector is scheduled at least three (3) Full business days prior to commencing with sewer construction.

6. The Contractor shall adjust or reconstruct all sanitary sewer manholes to finished grade. All frames and cover adjustments shall be in accordance with PCRWRD SSDC 2016, Detail No. RWRD-305. Prior to commencing any work after the manhole and removed the cover, the Contractor shall ensure that frames and covers are clean and free from any and all attached materials (asphalt, concrete, etc.) and that all vent holes are open and clear of obstructions, as approved by the field representative. Existing frames and/or covers that are damaged or cannot be completely replaced shall be replaced with a new frame and cover in accordance with PCRWRD SSDC 2016, Detail No. RWRD-306. Costs associated with existing frames and covers that are lost or damaged due to the Contractor's operations shall be the responsibility of the Contractor.

7. The Contractor shall submit a flow management plan (FMP) to PCRWRD Field Engineering for approval before proceeding with any work that may affect live sewers. The FMP shall identify and include all flow management GSPs in the construction bid. The FMP shall be submitted thirty (30) calendar days prior to the sewer pre-construction meeting. Field Engineering will review the FMP within ten (10) business days to accommodate review and revision options. Refer to PCRWRD SSDC 2016, Section 9 for FMP requirements. Please contact PCRWRD Field Engineering at (520) 724-2651 for any questions regarding flow management.

8. **Existing sewer force mains and abandoned sewer lines shall be identified and marked per PCRWRD standard specifications and details for construction 2016, standard detail RWRD-903. Existing sewer lines and force mains to be abandoned-in-place shall be filled with grout per PCRWRD SSDC 2016, Section 3.2.3H.

9. **All storm water pollution prevention measures shall be installed to prevent all storm water pollution, chemical spills, and chemical releases.** Storm water pollution prevention devices may be directed or directed into or on any sanitary sewer facilities protection or sanitary sewer facilities protection devices shall be installed and maintained around any potentially affected sanitary sewer facilities within the project limits. Additional measures shall include, but are not limited to, the use of rain stoppers and manhole covers as deemed necessary by PCRWRD.

10. **After the completion of pavement work, 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. Prior to the pre-construction meeting with PCRWRD, the Contractor shall identify all existing sanitary sewer manhole covers having foreign materials attached. 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 shall replace the manhole cover and cover and salvaged items shall be delivered to Pima County Conveyance at 3551 N. Dodge Blvd., Tucson, AZ. The Contractor shall coordinate with the PCRWRD Inspector to schedule a time to deliver the salvaged frames and covers.

11. **Any work inside or around an existing sanitary sewer manhole, including manholes that are located within the rough grading limits for a project, shall be protected from falling debris by installing a temporary flow channel cover per PCRWRD standard specifications and details for construction, standard detail RWRD-306. The Contractor shall remove any debris that enters a manhole during construction. Failure by the Contractor to promptly remove debris from a manhole shall result in PCRWRD taking corrective action that will then be billed to the Contractor.

12. **Prior to commencing with manhole adjustment work (i.e., removal of the manhole frame and cover), the Contractor shall visually inspect the condition of the manhole frame, cover, and grade rings to identify any special coatings, linings or other conditions that may require additional work and inspection by PCRWRD. If such conditions are identified, the Contractor shall immediately notify field engineering at (520) 724-2651 for further direction.

13. **Any house connection sewer (HCS) or business connection sewer (BCS) lines encountered during construction shall be protected, repaired, or rerouted, as the standard dictates that PCRWRD SSDC 2016 detail no. RWDD-400 and at no expense to the property owner or PCRWRD. HCS and BCS lines are not owned or maintained by PCRWRD. Private connection sewers constructed prior to January 2006 are not required to be located and marked.**
### HIGHWAY DRIVE/FOG COAT TYPICAL SECTION

**Existing R/W**

**Sheet No. 1**

**SITE**: Highway Drive/Curtis Road

**Sta 29+05.42 to 42+31.04**

**Pvmt Str**

**See Wedge Type 1 on Sheet DS4**

**Super Elevation Axes of Rotation**

- **Pass #1**: Begin at Existing Crown Line (60) on the center line. Set mill depth to 2.5 inches and a +4.0% correction angle. At super-elevation transition areas, the milled correction slope varies, grade check throughout process. This pass will result in varying milled widths. Sta 42+31.04 to 46+96.05.

- **Pass #2**: At Const. 6', set mill depth to 2.5 inches and a +4.0% correction angle. At super-elevation transition areas, the milled correction slope varies, grade check throughout process. This pass finishes the correction. Sta 42+31.04 to 46+96.05.

**MILLING CORRECTION**

- **Pass *1**: Begin at Existing Crown Line (60) on the center line. Set mill depth to 2.5 inches and a +4.0% correction angle. At super-elevation transition areas, the milled correction slope varies, grade check throughout process. This pass will result in varying milled widths. Sta 42+31.04 to 46+96.05.

- **Pass *2**: At Const. 6', set mill depth to 2.5 inches and a +4.0% correction angle. At super-elevation transition areas, the milled correction slope varies, grade check throughout process. This pass finishes the correction. Sta 42+31.04 to 46+96.05.

- **Pass *3**: From Sta 46+96.00 to 46+25.00, set Pass *2 at 6 ft from Const. 6'.

- **Pass *4**: From Sta 42+31.04 to 46+31.04, set Pass *2 at 6 ft from Const. 6'.

**SEQUENCE OF MILLING CORRECTION**

- **Gravel roadway width and Place A.B.C. layer.**
- **Inlay 2.5 inches atop milled surface and A.B.C. Tack Coat of A.B.C. Tack Coat (6" A.C.) over the milled correction.**

**Inlay**

- **SB Travel Lane**
- **SB/EB Travel Lane**

**MILLING CORRECTION**

- **Pass *1**: Begin at Existing Crown Line (60) on the center line. Set mill depth to 2.5 inches and a +4.0% correction angle. At super-elevation transition areas, the milled correction slope varies, grade check throughout process. This pass will result in varying milled widths. Sta 42+31.04 to 46+96.05.

- **Pass *2**: At Const. 6', set mill depth to 2.5 inches and a +4.0% correction angle. At super-elevation transition areas, the milled correction slope varies, grade check throughout process. This pass finishes the correction. Sta 42+31.04 to 46+96.05.

- **Pass *3**: From Sta 46+96.00 to 46+25.00, set Pass *2 at 6 ft from Const. 6'.

- **Pass *4**: From Sta 42+31.04 to 46+31.04, set Pass *2 at 6 ft from Const. 6'.
CURTIS ROAD FOG COAT
TYPICAL SECTION
Sta 46+96.05 to 49+19.05

CURTIS ROAD WIDENING
TYPICAL SECTION
Sta 49+19.05 to 58+32.74

* Structural Sections That Contain A, B, C, or Fill Require Roadway Grading Paid Under Bid Item #2050003

See XS Sheets for staking points

Tie In Pavement Widen At Existing Speed Humps
Sta 50+56.00 to 50+79.00 and
Sta 55+10.00 to 55+32.00

See Safety Edge Detail on Sheet DS4 (Typical)
### Description

Drawn: 02/2018

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#### Item

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**NOTES:**

1. Public sewer facilities shall be protected from fog seal application unless noted otherwise.
2. All water valves in pavement to be protected in place.
3. All trees in project limits to be protected in place.
4. Existing trees with overhanging branches may require pruning to accommodate construction. See Special Provisions 201-3.02.
5. Additional crack sealing may be necessary per the direction of the Engineer.

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*Camino De La Tierra*

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**Scales:**

- Highway Drive: 2" = 100'-0"
- Structures: 2" = 10'-0"
- Pavement & Safety: 2" = 4'-0"
Fog Coat

NOTES:
1. Public sewer facilities shall be protected from fog seal application unless noted otherwise.
2. All water valves in pavement to be protected in place.
3. All trees in project limits to be protected in place.
4. Additional crack sealing may be necessary per the direction of the Engineer.
See Note 4

NOTES:

1. Public sewer facilities shall be protected from fog seal application unless noted otherwise.
2. All water valves in pavement to be protected in place.
3. All trees in project limits to be protected in place.
4. Existing trees with overhanging branches may require pruning to accommodate construction. See Special Provisions 201-3.05.
5. Additional crack sealing may be necessary per the direction of the Engineer.
1. The placement of all Erosion Control Features shown in the plans shall be subject to change and may be adjusted by the Resident Engineer.
**New Shoulder Buildup**

**Protection Section (NTS)**

1. Install Sediment Wattles as slopes are constructed to grade or as directed by the Engineer, in accordance with manufacturers' specifications to meet site conditions for slope protection and in accordance with good engineering practices. No Sediment Wattles shall be installed prior to new slope construction, 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' (6 m) wattle may be made from 2-3 rolls of 12" (300 mm) in diameter wattle biaxial, but adjusting wattles tightly against each other. Drive the first end stakes of the second wattle at an angle toward the first wattle to help them tightly.

3. Repair any fills or gullies promptly. Make field adjustments and corrections of Wattle BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.

4. 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 Wattle BMP Detail.

5. Loosening surface soil is not required where Minibenching is used. For seeded areas, a topsoil overlay may be required to form major ridges that can be ripped shall be constructed, whenever possible, by Minibenching. Refer to Slope Wattle BMP Detail.

6. 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 Wattle BMP Detail.

7. Ditch 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 Wattles BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities.

9. Install and maintain Sediment Wattles 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 remediation, and disposal of this temporary BMP, as well as ensuring the area to an acceptable condition as approved by the Engineer.

11. Refer to Standard Specification Section 810-2.6(c) for Sediment Wattles material specifications.

12. Make field adjustments and corrections to ensure NO sensitive biological resources (native species/habitats) will be adversely impacted.
NOTES:
1. Sediment log/wattle storm drain inlet protection BMPs shall not be applied in the area of open traffic.
2. The installation and maintenance of sediment log/wattle storm drain inlet protection BMPs shall not negatively impact traffic safety, as well as the designed function of roadway or bridge drainage facilities. For erosion/sediment control purposes, sediment log/wattle storm drain inlet protection BMPs shall be installed and maintained to carry the storm water of at least 2-year, 24-hour events.
3. The sediment log/wattle storm drain inlet protection BMP's pay/bid item shall include all materials used for this BMP, all ground preparation, furnishing, installing, maintenance during construction operations, final removal, and disposal of this temporary BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
4. Do not place gravelbags in shoulder areas or paved traffic lanes.
5. Overlap logs/wattles on top of curb and gutters only.
6. Logs/wattles are to remain in place during construction as directed in details above until seeding takes place.

NOTE:
Use this detail prior to roadway paving.