BOARD OF SUPERVISORS AGENDA ITEM REPORT
AWARDS / CONTRACTS / GRANTS

Award • Contract Grant

Requested Board Meeting Date: 11/1/2022

** = Mandatory, information must be provided*

or Procurement Director Award: ☐

***Contractor/Vendor Name/Grantor (DBA):**

SFPP, L.P

***Project Title/Description:**

SFPP Facility Adjustment & Reimbursement Agreement – Gardner Lane UPRR Culverts

***Purpose:**

Pima County Regional Flood Control District (District) is partnering with SFPP/Kinder Morgan to relocate an active 12" petroleum products pipeline and two abandoned pipelines that are blocking construction of culverts beneath the Union Pacific Railroad (UPRR) along the Gardner Lane alignment. A culvert at this location was proposed by the Ruthrauff Basin Management Study to relieve flooding, improve public safety, and alleviate public health hazards created by ponding stormwater. The District and the Arizona Department of Transportation constructed downstream infrastructure to accept this flow. The Board of Directors adopted the Ruthrauff Basin Management Study on October 3, 2017 (Resolution No. 2017-FC3).

***Procurement Method:**

This contract is a non-Procurement contract and not subject to Procurement rules.

***Program Goals/Predicted Outcomes:**

Relocate SFPP/Kinder Morgan petroleum pipelines in preparation for construction of the Ruthraff/Gardner Lane UPRR culvert to relieve flooding as outlined in the Ruthrauff Basin Management Study.

***Public Benefit:**

This relocation is necessary to construct a culvert beneath the railroad tracks to alleviate flooding along the Gardner Lane alignment.

***Metrics Available to Measure Performance:**

Relocated petroleum pipeline allowing culvert construction to progress.

***Retroactive:**

No

TO: COB 10/3/22 (1)
vers: 1
pgs: 14

OCT03'22PM1204 PO

THE APPLICABLE SECTION(S) BELOW MUST BE COMPLETED

Click or tap the boxes to enter text. If not applicable, indicate "N/A". Make sure to complete mandatory (*) fields

Contract / Award Information

Document Type: CT Department Code: FC Contract Number (i.e., 15-123): 23*125

Commencement Date: 11/1/2022 Termination Date: 11/1/2024 Prior Contract Number (Synergen/CMS): _____

☒ Expense Amount $ 1,308,591.00 * ☐ Revenue Amount: $ _____

***Funding Source(s) required:** Flood Control Non-Bond Projects

Funding from General Fund? ○ Yes ◉ No If Yes $ _____ % _____

Contract is fully or partially funded with Federal Funds? ○ Yes ◉ No

If Yes, is the Contract to a vendor or subrecipient? _____

Were insurance or indemnity clauses modified? ○ Yes ◉ No

If Yes, attach Risk's approval.

Vendor is using a Social Security Number? ○ Yes ◉ No

If Yes, attach the required form per Administrative Procedure 22-10.

Amendment / Revised Award Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____

Amendment No.: _____ AMS Version No.: _____

Commencement Date: _____ New Termination Date: _____

Prior Contract No. (Synergen/CMS): _____

○ Expense ○ Revenue ○ Increase ○ Decrease Amount This Amendment: $ _____

Is there revenue included? ○ Yes ○ No If Yes $ _____

***Funding Source(s) required:** _____

Funding from General Fund? ○ Yes ○ No If Yes $ _____ % _____

Grant/Amendment Information (for grants acceptance and awards) ○ Award ○ Amendment

Document Type: _____ Department Code: _____ Grant Number (i.e., 15-123): _____

Commencement Date: _____ Termination Date: _____ Amendment Number: _____

☐ Match Amount: $ _____ ☐ Revenue Amount: $ _____

***All Funding Source(s) required:** _____

***Match funding from General Fund?** ○ Yes ○ No If Yes $ _____ % _____

***Match funding from other sources?** ○ Yes ○ No If Yes $ _____ % _____

***Funding Source:** _____

***If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)?**

_____

Contact: Janice Hughes (M. Guzman 4-4611 for P/U)

Department: Regional Flood Control District Telephone: (520) 724-4635

Department Director Signature: _____ Date: 9/28/22

Deputy County Administrator Signature: _____ Date: 9/28/2022

County Administrator Signature: _____ Date: 9/29/2022

SFPP Facility Adjustment & Reimbursement Agreement
(Gardner Lane UPRR Culverts)

THIS SFPP FACILITY ADJUSTMENT & REIMBURSEMENT AGREEMENT ("Agreement") is made and entered into as of this 1st day of November, 2022, by and between SFPP, L.P., a Delaware limited partnership ("**SFPP**"), with an office at 1001 Louisiana, Houston, TX 77002, and Pima County Regional Flood Control District, a political taxing subdivision of the State of Arizona ("District") whose address is 201 N. Stone Ave, 6th Floor, Tucson, AZ 85701.

WHEREAS, the District is proposing to construct and maintain five (5) new 54" Drainage Culverts crossing Interstate 10 at Gardner Lane, in Tucson, Arizona (hereinafter referred to as the "**Project**") which will necessitate: (a) the relocation (by lowering) of SFPP's active 12" petroleum products pipeline (the "**LS-117**") within the same horizontal alignment, for approximately 150', (b) the removal of approximately 60' of the abandoned 6" pipeline (the "**LS-53/54**"), and (c) the removal of approximately 60' of the abandoned 8" pipeline (the "**LS-6/7**"). The three pipelines are also individually and collectively referred to herein as the "**Pipeline Facilities**". The Project is located on the Union Pacific Railroad ("**UPRR**") right of way, on the LS-117 at MP 303, in Tucson, Pima County, Arizona ("**Location**").

WHEREAS, based on pre-engineering work done by SFPP and the design paid for by District, District and SFPP agree that the Project would best be facilitated and both parties would best be served by SFPP relocating and removing segments of the Pipeline Facilities, as described herein to allow for the construction of the Project.

WHEREAS, District has agreed to reimburse SFPP for One Hundred percent (100%) of the total cost of such relocation and removal, as described herein.

NOW THEREFORE, for and in consideration of the Location and the mutual benefits to all parties, and intending hereby to be legally bound, it is understood and agreed as follows:

1. SFPP will relocate by lowering an approximately 150-foot (150') segment of the 12" LS-117 within the same horizontal alignment; will remove an approximately 60-foot (60') segment of the 6" LS-53/54, and (c) will remove an approximately 60-foot (60') segment of the 8" LS-6/7 to accommodate the Project in a manner that will meet SFPP design standards and District construction requirements, all hereinafter referred to as the "**Pipeline Work**."

2. Cost Reimbursement. District shall pay SFPP for 100 percent (100%) of the actual costs and expenses incurred by SFPP to complete the Pipeline Work ("**Reimbursement Expenses**"). Such Reimbursement Expenses shall include allocable overheads, taxes, and fees incurred by SFPP.

a. Estimated Amount. SFPP estimates that the Reimbursement Expenses to be incurred by SFPP and paid by District are $1,308,591.00 (the "**Estimated Amount**"), as described in **Exhibit "A"** attached hereto. The Estimated Amount is a budgetary estimate only, and neither it, nor any of the other estimated cost figures herein, shall in any way constitute a limit upon the amount of the total actual cost of the Pipeline Work, including overheads and taxes, incurred by SFPP, for which District shall be liable to pay hereunder. Such cost estimate is based on the costs of materials and labor current at the time of preparation of the estimate, and is subject to revision by and at the discretion of SFPP to reflect any changes in such costs that may occur prior to the completion of the Pipeline Work. Such cost estimate makes no provision of encountering unforeseen rock, water, bad weather, or any other unforeseen contingencies in connection with the Pipeline Work and such contingencies will be included and accounted for in the total actual cost of the Pipeline Work, for which District agrees to reimburse SFPP in full.

b. Pre-Payment. Upon full execution of this Agreement, District shall pay SFPP $800,000.00 of the Estimated Amount (the "First Installment"). The District shall pay SFPP the remainder of the Estimated Amount after July 1, 2023 and before construction begins on the Pipeline Work.

All payments due hereunder shall be in the form of either a wire transfer to:

Account Name:	SFPP, LP
Bank Routing Number:	021000021
Swift Code:	CHASUS33
General Bank Reference Address:	JPMORGAN CHASE NEW YORK, NY 10004
Account Number:	216875986

or by check made out to SFPP, L.P. and sent by Courier to:

Lockbox Name:	SFPP, LP
Lockbox Address:	P.O. Box 734033 Dallas, TX 75373-4033

c. Upon receipt of the First Installment, SFPP will make arrangements to begin the Pipeline Work as soon thereafter as reasonably possible. SFPP shall be under no obligation to commence any activities relative to the Pipeline Work until District has paid SFPP the First Installment. SFPP shall be under no obligation to commence any construction activities relative to the Pipeline Work until District has paid SFPP the entire Estimated Amount and SFPP receives all authorizations and permits necessary to complete the Pipeline Work, including a Permit from the UPRR.

d. Accounting Reconciliation & Invoice or Refund. As promptly as reasonably possible, but no sooner than ninety (90) days following completion of the Pipeline Work, SFPP shall provide District an accounting for any variance between the Estimated Amount and the total Reimbursement Expenses ("Final Accounting");

provided, however, that District shall be obligated to pay SFPP for the total Reimbursement Expenses regardless of whether the Reimbursement Expenses are more or less than the Estimated Amount. In the event District owes SFPP additional payment to cover the Reimbursement Expenses, SFPP will provide a final invoice to District within thirty (30) days after the Final Accounting. Should District fail to make payment of such invoice within (60) days after its receipt of the Final Accounting, SFPP shall be entitled to collect from District the amount of said invoice together with interest at a rate equal to the then-applicable Federal Energy Regulatory Commission ("FERC") refund interest rate as specified in Section 340.1(c)(2) of FERC's regulations. Such interest shall accrue on unpaid amounts, including on unpaid interest, compounded monthly, beginning on the payment due date of SFPP's invoice to District and terminating when such invoice is paid. In the event that SFPP owes District a refund of amounts paid, SFPP agrees to make that refund to District within sixty (60) days after providing the Final Accounting to District.

e. SFPP will provide all cost records pertaining to the Pipeline Work to the District within ninety (90) days after Pipeline Work completion. Should the Actual Costs exceed the Estimated Amount, and District disputes the reasonableness of such additional costs, such additional costs will be subject to review and agreed settlement by the Management of both Parties.

3. District agrees to perform the Project in accordance with the Project Plans entitled Gardner Lane UPRR Culverts - Phase 1 (5RUPRR) Preliminary 60% Review Plans, in effect on the date this Agreement is executed and attached hereto as **Exhibit "B"**; and District will not make any changes to the Project where the Pipeline Facilities are involved without prior written notification to SFPP. If changes to the Project are made or future changes are made to District's development that affect the Pipeline Facilities such that additional adjustments to the Pipeline Facilities are necessary within SFPP's Location, then SFPP will make said adjustments at District's expense.

4. District acknowledges and understands that SFPP or its contractor(s) must perform maintenance, repairs, or construction operations on its Pipeline Facilities from time to time. During these endeavors, it may be necessary for SFPP to excavate and expose its Pipeline Facilities to make necessary maintenance, repairs, or construction activities, and in the course of doing so, the Project's culverts may be damaged. SFPP shall exercise reasonable care and follow industry best practices to minimize any such damage to the Project. District understands, agrees, and accepts that any costs for curing such damage to the Project, if any, within SFPP's Location will be borne by District except in the event such damages are caused by negligence of SFPP or its contractor(s). SFPP understands, agrees, and accepts that any costs for curing damage to the Project caused by SFPP, if any, outside of SFPP's easement will be borne by SFPP. SFPP, by agreeing to the construction of the Project, does not relinquish any of its rights, titles, or interest in or to its existing easement.

5. SFPP and District acknowledge and agree that nothing in this Agreement shall operate or be construed as a representation or guarantee that the activities of SFPP shall result in the

Project being successful, or that such activities will be completed by any specific or anticipated date, and SFPP shall have no liability whatsoever to District for the failure to complete the Pipeline Work by a certain date, provided however, while recognizing this is an accommodation without financial incentive to SFPP, SFPP will undertake the Pipeline Work in its normal course of business. In no event shall SFPP be liable to District with respect to SFPP's Pipeline Work or for any losses, costs, liabilities, obligations, or damages arising out of or in connection with such Pipeline Work, whether arising in contract, tort, (including, but not limited to, negligence or strict liability) or otherwise. IT IS SPECIFICALLY AGREED THAT SFPP SHALL HAVE NO OBLIGATION WHATSOEVER FOR, AND DISTRICT EXPRESSLY WAIVES, ANY LOST PROFITS, CONSEQUENTIAL, INDIRECT, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, DELAY DAMAGES WITH RESPECT TO THE PIPELINE WORK, OR THIS AGREEMENT, REGARDLESS OF HOW CAUSED.

6. To the extent permitted by law, District agrees to protect, indemnify, and hold harmless SFPP, its officers, employees, representatives, agents, contractors, and subcontractors (collectively, "***Indemnitees***") from and against any and all claims, demands, actions, expenses (including court costs and attorneys' fees), losses, damages, causes of action, and liability, arising out of actual or alleged injury of any person (including death) or loss for damage to property caused, or alleged to be caused, in whole or in part, by any act or omission of District, its agents or employees in connection with the performance of the Work, except to the extent said claims, demands, actions, expenses, losses, damages, causes of action, and liabilities are caused by the negligence or willful misconduct of SFPP or Indemnitees. This indemnification obligation shall survive expiration or termination of this Agreement. Insurance Requirements. District shall carry, and cause its contractors and subcontractors to carry, at its and their own expense, in reliable insurance companies satisfactory to SFPP, insurance to cover its obligations and liabilities under this Agreement, including, but not limited to Worker's Compensation Insurance with Employer's Liability coverage, General Liability Insurance with Contractual Liability coverage, and Automobile Liability Insurance. District further agrees that all policies of insurance that are intended to cover any liabilities, expenses, losses, claims, costs (including attorneys' fees), suits, and causes of action incurred hereunder shall be properly endorsed to waive the insurer's rights of subrogation, under any such policies, against SFPP. This requirement may be alternatively met through self-insurance pursuant to A.R.S. §§ 11-261 and 11-981.

7. This Agreement shall be effective as of the date first written above upon execution by both Parties hereto and shall remain in full force and effect thereafter until the date that the Parties' rights and obligations under Section 2 of this Agreement, including the right to payment and refund, have been fully satisfied. SFPP shall have the right to terminate this Agreement in the event District has failed to make timely payment of the Estimated Amount in accordance with the payment provisions herein, or District causes the proposed construction described herein to be delayed, such that the Pipeline Work cannot reasonably be completed within two (2) years of the date of this Agreement. This Agreement is subject to cancellation for conflict of interest pursuant to A.R.S. § 38-511, the pertinent provisions of which are incorporated into this Agreement by reference.

8. This Agreement shall be construed in accordance with the laws of the State of Arizona, is subject to all valid laws, rules or regulations of any governmental authority having jurisdiction, incorporates the entire agreement between the parties, may only be changed or amended by written agreement of the parties hereto, and shall be binding on the parties hereto as well as their successors and assigns.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the date first written above.

AGREED TO AND ACCEPTED BY:

Pima County Regional Flood Control District, a political taxing subdivision of the State of Arizona

_____
Chair
Board of Directors

ATTEST

_____
Clerk of the Board

APPROVED AS TO FORM

_____
Deputy County Attorney

SFPP, L.P., a Delaware limited partnership

By: Kinder Morgan Operating LLC "D", its General Partner
a Delaware limited liability company

_____
By: Christa Robbins

Title: Vice President

KINDER MORGAN

LS-117 Relocation, Pima County Flood Control

Estimate Date: 1-27-2022
** Estimate shelf life is 6 months.

Scope:
Third Party (Pima County Flood Control) is installing drainage culverts in conflict with Products LS-117, LS-53/54 and LS-6/7, approximate location (32.282414, -111.020289). Relocate {lower} approximately 150LF of the 12in LS-117 (same/similar horizontal alignment, deeper vertical alignment.). Remove replaced LS-117. Remove approximately 60LF the 6in LS-53/54. Remove approximately 60LF the 8in LS-6/7.

Cost Summary:

Description	Amount
Materials and Supplies	22,110
Company Labor	37,290
Outside Services	1,025,200
Right of Way	23,210
Permitting	-
Administrative Overhead	110,781
Damage Prevention Inspection	90,000
Project Total	**1,308,591**

Assumptions/Risks:

- Construction
  - Cooper E-80 shoring required for railroad proximity
  - Assumes existing pipelines have no asbestos coating
- Permitting
  - All required environmental, building, or development permits, consultations, or surveys permits to be secured by third party
- Right of Way
  - KM to relocate LS-117 within existing easement.
  - ROW is easily accessible and easily acquired from a reasonable landowner (no attorney) and in a timely manner
  - Third Party to provide temp work space
  - ROW/Encroachment Permit and daily flagger required from UPRR
  - Assumes daily traffic control required and temporary lane closure on WB I-10 frontage rd.
- Third Party's representative estimated drainage culvert construction in proximity to KM facilities will take 90-120 days. Daily rate for Damage Prevention inspection during Third Party construction is $1,000. Direct costs may include wages, benefits, living expenses, and vehicle and equipment expenses.
- Outside Service costs may include primary construction contractor, secondary contractor(s), professional engineering, inspection, survey, equipment, and instrumentation.

EXHIBIT "A"

GARDNER LANE
UPRR CULVERTS - PHASE 1

GENERAL DESCRIPTION OF PROJECT

THIS PROJECT WILL PROVIDE DRAINAGE CONNECTIVITY FROM THE EAST SIDE OF THE UNION PACIFIC RAILROAD (UPRR) AND INTERSTATE-10 (I-10) TO THE REGIONAL OPTIMIZATION MASTER PLAN (ROMP) CHANNEL ON THE WEST SIDE OF I-10. AT GARDNER LANE, THE PROJECT WILL INSTALL NEW CULVERTS UNDER UPRR.

PIMA COUNTY
FLOOD CONTROL

PROJECT NUMBER
5RUPRR

GILA SUB MP 978.81

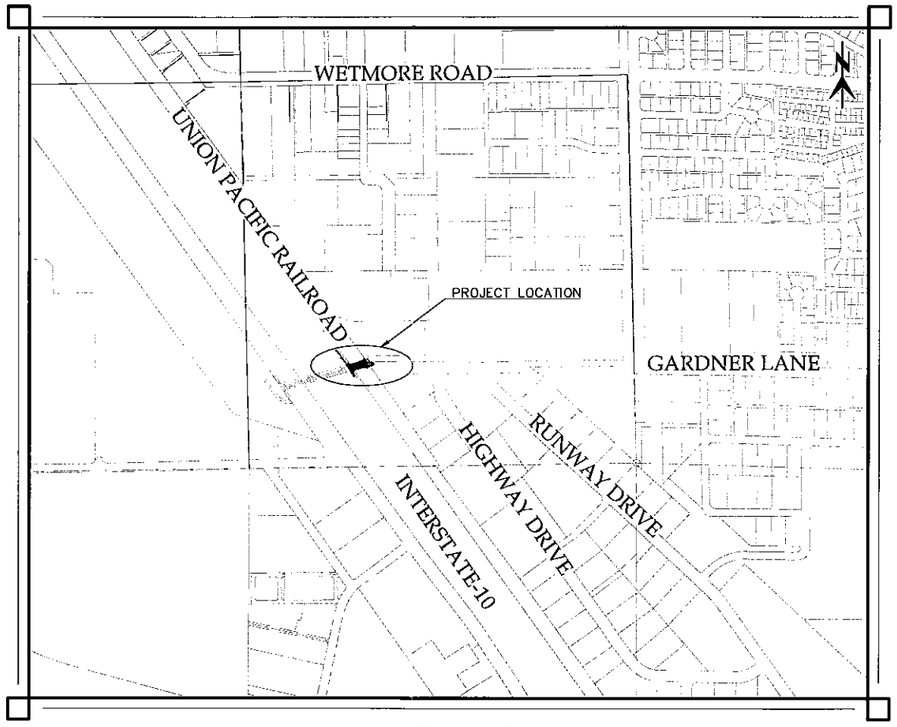
PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT BOARD OF DIRECTORS

SHARON BRONSON, CHAIR, DISTRICT 3
ADELITA GRIJALVA, VICE CHAIR, DISTRICT 5
REX SCOTT, DISTRICT 1
MATT HEINZ, DISTRICT 2,
STEVE CHRISTY, DISTRICT 4

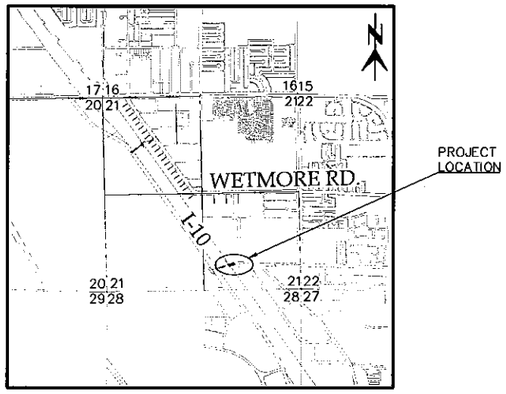
PROJECT IN SUPERVISOR DISTRICT 3

SHEET INDEX

PAGE NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	DEMOLITION & UTILITY PLAN
4	HORIZONTAL CONTROL AND SHEET INDEX
5	RIGHT-OF-WAY AND EASEMENT PLAN
6	PLAN AND PROFILE
7	DETAILS - OUTLET
8	DETAILS - INLET



KEY MAP
1" = 500'



LOCATION MAP
1" = 2000'

SECTION 21
T-13-S, R-13-E
GILA AND SALT RIVER MERIDIAN
TUCSON AND UNINCORPORATED PIMA COUNTY, ARIZONA

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

EXHIBIT "B"

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
333 EAST WETMORE ROAD, SUITE 280
TUCSON, ARIZONA 85705 (520) 615-9191

NO.	REVISIONS	ENGINEER	DATE

NO.	AS BUILT	ENGINEER	DATE

PRELIMINARY
60%
REVIEW
NOT FOR CONSTRUCTION OR RECORDING

PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT
201 N. STONE AVE, 9TH FLOOR TUCSON, ARIZONA 85701
PHONE NUMBER: 520-724-4600
SUZANNE SHIELDS, P.E. DIRECTOR

REVIEWED BY	ENGINEER	DATE
MGR. DESIGN ENGR.		
MGR. FIELD ENGR.		

APPROVED:_____20__
DIRECTOR

PROJECT NO. 5RUPRR

SHEET 1 OF 8

FILE NAME: H098022053CV01.DWG

GENERAL NOTES

1. CONSTRUCTION SHALL CONFORM TO THE PAG STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC IMPROVEMENTS, 2015 EDITION AND LATEST UPDATES AMENDING THE 2015 EDITION, EXCEPT AS MODIFIED BY THE CONTRACT.

2. EXISTING ABOVE AND BELOW GROUND UTILITIES HAVE BEEN DELINEATED ON THESE PLANS BASED ON AS-BUILT DRAWINGS AND THEREFORE THE ENGINEER MAKES NO GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE UTILITY LOCATIONS OR OF THE EXISTENCE OR NONEXISTENCE OF ANY UTILITY OR UNDERGROUND STRUCTURES SHOWN. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES WITH THE APPROPRIATE ORGANIZATIONS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEANS NECESSARY TO PROTECT ANY UTILITY. THE CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. CONTACT ARIZONA 811 AT 1-800-782-5348 TWO (2) FULL WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR DAMAGE TO EXISTING ABOVE OR UNDERGROUND UTILITIES, INCLUDING THOSE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL NOTIFY THE PIMA COUNTY FLOOD REGIONAL FLOOD CONTROL DISTRICT PROJECT MANAGER AND THE ENGINEER IN WRITING OF ANY UTILITY LOCATIONS DISCOVERED DIFFERING FROM THE PLAN INFORMATION IN A TIMELY MANNER.

3. RIGHT-OF-WAY ENCROACHMENTS SHALL BE REMOVED ONLY BY THE 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.(ARS SECTION 3-901, ET. SEQ) AND THE PIMA COUNTY NATIVE PLANT PRESERVATION ORDINANCE.

5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS.

6. SOILS INFORMATION WILL BE MADE AVAILABLE TO PROSPECTIVE BIDDERS IN THE GEOTECHNICAL REPORT. SOILS INFORMATION SO PROVIDED SHALL BE FOR INFORMATION 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 PRESERVE ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE OWNER OR HIS/HER REPRESENTATIVE. ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR HIS SUBORDINATES MAY HAVE FAILED TO PRESERVE SHALL BE CHARGED TO THE CONTRACTOR.

8. 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.

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

10. EXISTING UTILITIES SHALL BE PROTECTED IN-PLACE UNLESS OTHERWISE NOTED AND SHOWN IN THESE PLANS.

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

12. EXISTING TOPOGRAPHIC CONDITIONS SHOWN ON PLAN SHEETS REFLECT CONDITIONS AS OF MAY 2017.

13. IN THE EVENT THAT HUMAN REMAINS, INCLUDING HUMAN SKELETAL REMAINS, CREMATIONS, AND/OR CEREMONIAL OBJECTS AND FUNERARY OBJECTS ARE FOUND DURING EXCAVATION OR CONSTRUCTION, GROUND DISTURBING ACTIVITIES MUST CEASE IN THE IMMEDIATE VICINITY OF THE DISCOVERY. STATE LAWS ARS 41-865 AND ARS 41-844, REQUIRE THAT THE ARIZONA STATE MUSEUM BE NOTIFIED OF THE DISCOVERY AT (520)-621-4795 SO THAT CULTURAL OR RELIGIOUS AFFINITY TO THEM CAN MAKE APPROPRIATE ARRANGEMENTS FOR THE REPATRIATION AND REBURIAL OF THE REMAINS. THE HUMAN REMAINS WILL BE REMOVED FROM THE SITE BY A PROFESSIONAL ARCHAEOLOGIST PENDING CONSULTATION AND REVIEW BY THE ARIZONA STATE MUSEUM AND THE CONCERNED CULTURAL GROUPS.

14. THE REMOVAL, SALVAGE, OR PROTECTION OF VEGETATION SHALL BE IN ACCORDANCE WITH THE DISTURBANCE AND PRESERVATION FENCING LIMITS AS SHOWN ON THE PROJECT PLANS. EXISTING VEGETATION IDENTIFIED FOR PRESERVATION IN PLACE SHALL BE PROTECTED IN PLACE WITH FENCING INSTALLED AT THE DRIP-LINE OF THE TREE CANOPY. PRESERVATION FENCING SHALL BE INSTALLED PRIOR TO PROJECT CLEARING. THIS PROTECTED VEGETATION AND VEGETATION BEYOND THE PROJECT LIMITS SHALL NOT BE DISTURBED BEYOND THOSE LIMITS ACTUALLY NEEDED FOR CONSTRUCTION PURPOSES. THOSE ITEMS IN THESE AREAS WHICH ARE DAMAGED SHALL BE REPAIRED, REMEDIED, OR REPLACED AT THE CONTRACTOR'S EXPENSE.

15. NATIVE PLANT SPECIES PROTECTED UNDER THE ARIZONA NATIVE PLANT LAW SHALL BE REMOVED IN ACCORDANCE WITH ARIZONA DEPARTMENT OF AGRICULTURE REQUIREMENTS AND APPLICABLE LOCAL ORDINANCES.

16. OVERHANGING BRANCHES WITHIN THE GRADING LIMITS THAT MAY IMPACT CONSTRUCTION SHALL BE PRUNED BY A LICENSED ARBORIST PRIOR TO INITIATING WORK.

17. ANY EXCESS EXCAVATED MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM SITE BY CONTRACTOR.

18. VEGETATION AND OTHER ORGANIC MATERIAL DISTURBED DURING CONSTRUCTION SHALL BE REMOVED FROM SITE BY CONTRACTOR AND PROPERLY DISPOSED OF.

19. IF VEGETATION CLEARING WILL OCCUR DURING THE MIGRATORY BIRD BREEDING SEASON (MARCH 1 – AUGUST 31), ALL TREES AND OTHER SUITABLE NESTING HABITAT WITHIN THE LIMITS OF WORK SHALL BE SURVEYED BY THE PROJECT LANDSCAPE ARCHITECT FOR ACTIVE BIRD NESTS PRIOR TO INITIATING CONSTRUCTION RELATED ACTIVITIES. THE CONTRACTOR SHALL AVOID ANY ACTIVE BIRD NESTS. IF ACTIVE NESTS CANNOT BE AVOIDED, THE CONTRACTOR SHALL NOTIFY THE PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT TO EVALUATE THE SITUATION. DURING NON-BREEDING SEASON (SEPTEMBER 1 – FEBRUARY 28), VEGETATION REMOVAL IS NOT SUBJECT TO THIS RESTRICTION.

20. CONSTRUCTION ZONE TRAFFIC CONTROL SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" 2009 EDITIONS AND SUBSEQUENT REVISIONS.

21. ADJACENT BUSINESSES WILL REQUIRE ACCESS ROUTES BE MAINTAINED BY THE CONTRACTOR.

GRADING AND CONSTRUCTION NOTES:

1. FILL MATERIAL SHALL BE STORED ON SITE IN LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. DRAINAGE SHALL ROUTE AROUND THESE STOCKPILES FOR THE DURATION OF THE GRADING OPERATIONS. EROSION CONTROL MEASURES SHALL PREVENT THE LOSS OF STOCKPILED MATERIAL.
2. STRUCTURAL FILL AREAS SHALL BE SCARIFIED AND COMPACTED PER THE GEOTECHNICAL REPORT.
3. ELEVATIONS SHOWN ON THE PLANS IS THE FINISHED GRADE ELEVATION.
4. GRADING SHALL BE SEQUENCED SO THAT AGGREGATE BASE IS PLACED WITHIN 10 CALENDAR DAYS OF ACHIEVING OPTIMUM SUBGRADE COMPACTION.
5. CONTRACTOR SHALL EMPLOY A QUALIFIED SOILS TESTING LABORATORY/ENGINEER TO OBSERVE THE EARTHWORK AND MAKE TESTS AS REQUIRED.
6. CONTRACTOR SHALL HAVE EARTH BORROW FILL, AGGREGATE, TOPSOIL, AND STRUCTURAL FILL TESTED AND APPROVED BY DESIGNATED LABORATORY BEFORE MOVING IT TO THE JOB SITE.
7. THE SOILS ENGINEER'S AND TESTING LABORATORY'S FEES SHALL BE PAID BY THE CONTRACTOR.
8. PROTECTION FENCING SHALL BE INSTALLED AND MAINTAINED THROUGHOUT PROJECT CONSTRUCTION.
9. POST BARRICADES SHALL BE "TYPE A" PER SD 106 & 107.
10. BARRICADE RAILING SHALL USE "STANDARD LOWER RAIL LOCATION" PER PAG SD 105.

ADOT GENERAL NOTES:

1. THE ROADWAY PLANS HAVE BEEN DESIGNED UTILIZING THE 2012 CONSTRUCTION STANDARD DRAWINGS (C-SERIES) AND 2016 STRUCTURE DETAIL DRAWINGS (SD-SERIES) AND CURRENT REVISIONS.
2. WHERE ONLY THE HORIZONTAL LOCATION OF AN EXISTING UTILITY IS SHOWN, THE LOCATION IS APPROXIMATE. WHERE BOTH THE HORIZONTAL AND VERTICAL LOCATIONS OF AN EXISTING UTILITY ARE SHOWN, THE LOCATIONS HAVE BEEN VERIFIED BY FIELD SURVEY RECORDS (UNLESS NOTED). THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT BLUE STAKE LAWS AND SECTION 107 OF THE SPECIFICATIONS.
3. ADOT UTILITIES (FMS, ELECTRICAL, IRRIGATION) MAY NEED RELOCATING. CONTRACTOR TO COORDINATE WITH ADOT FOR ANY MODIFICATIONS TO THE ENCROACHMENT PERMIT.
4. THE AVERAGE PROJECT ELEVATION IS 2264.
5. SLOPE ROUNDING SHALL BE APPLIED PER ADOT CONSTRUCTION STANDARD DRAWINGS STANDARD C-02 SERIES UNLESS OTHERWISE NOTED.
6. NEW RIGHT OF WAY IS NOT REQUIRED. AN ADOT ENCROACHMENT PERMIT IS REQUIRED FOR THIS PROJECT. SEE PLANS AND APPENDIX IN SPECIAL PROVISIONS.

UPRR GENERAL NOTES:

1. PROJECT LOCATED AT GILA SUB MP 978.83.
2. RIGHT OF ENTRY APPLICATION FOLDER NUMBER ____________

ABBREVIATIONS NOT INCLUDED IN PAG STD. DTL. 101

ANGLE	∠
PLUS OR MINUS	±
AGGREGATE BASE	AB
ASPHALTIC CONCRETE	AC
ARIZONA DEPARTMENT OF TRANSPORTATION	ADOT
AMERICAN SOCIETY FOR TESTING AND MATERIALS	ASTM
BEGINNING POINT	BP
CONSTRUCTION CENTERLINE	CST ℄
EAST OR EASTING	E
END POINT	EP
GRADE BREAK	GB
NORTH OR NORTHING	N
OFFSET	OFF
PIMA ASSOCIATION OF GOVERNMENTS	PAG
POINT OF VERTICAL CURVE	PVC
PAVEMENT	PVMT
PIMA COUNTY REGIONAL WASTEWATER RECLAMATION DEPARTMENT	RWRD
SECTION	SCT
STANDARD DETAIL	SD
STRUCTURAL	STR
UNDERGROUND ELECTRIC	UGE
UNION PACIFIC RAILROAD	UPRR
VERTICAL CURVE	VC

LEGEND

SYMBOLS

- EXISTING CONCRETE
- EXISTING RIPRAP
- CONCRETE
- RIPRAP

LINETYPES

- STORM DRAIN
- WELDED WIRE FABRIC
- S — S — SEWER
- OHE — OHE — OVERHEAD ELECTRIC
- P — P — UNDERGROUND ELECTRIC
- FO — FO — FIBER OPTIC
- W — W — WATER
- 36" — RW — 36" RECLAIMED WATER
- GAS — GAS — GAS
- GAS — GAS — ABANDONED GAS
- UG — COMM — UNDERGROUND COMMUNICATIONS
- OH — COMM — OVERHEAD COMMUNICATIONS
- FMS — FREEWAY MANAGEMENT SYSTEM
- MAJOR CONTOUR
- MINOR CONTOUR
- EXIST GRADE
- FINISHED GRADE
- C — LIMIT OF CUT SLOPE
- EXISTING RIGHT-OF-WAY
- EASEMENT
- HANDRAIL
- x — x — CHAIN LINK FENCE
- X — X — PRESERVATION FENCE

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SUZANNE SHIELDS, P.E., DIRECTOR

NO.	REVISION DESCRIPTION	DIV/SECT.ENGR.	DATE

PRELIMINARY 60% REVIEW NOT FOR CONSTRUCTION OR RECORDING

		DATE
DESIGNED	B. YURS	01/2021
DRAWN	V. CHU	01/2021
CHECKED	K. PAYNE	01/2021
PROJ ENGR	B. YURS	01/2021

PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT

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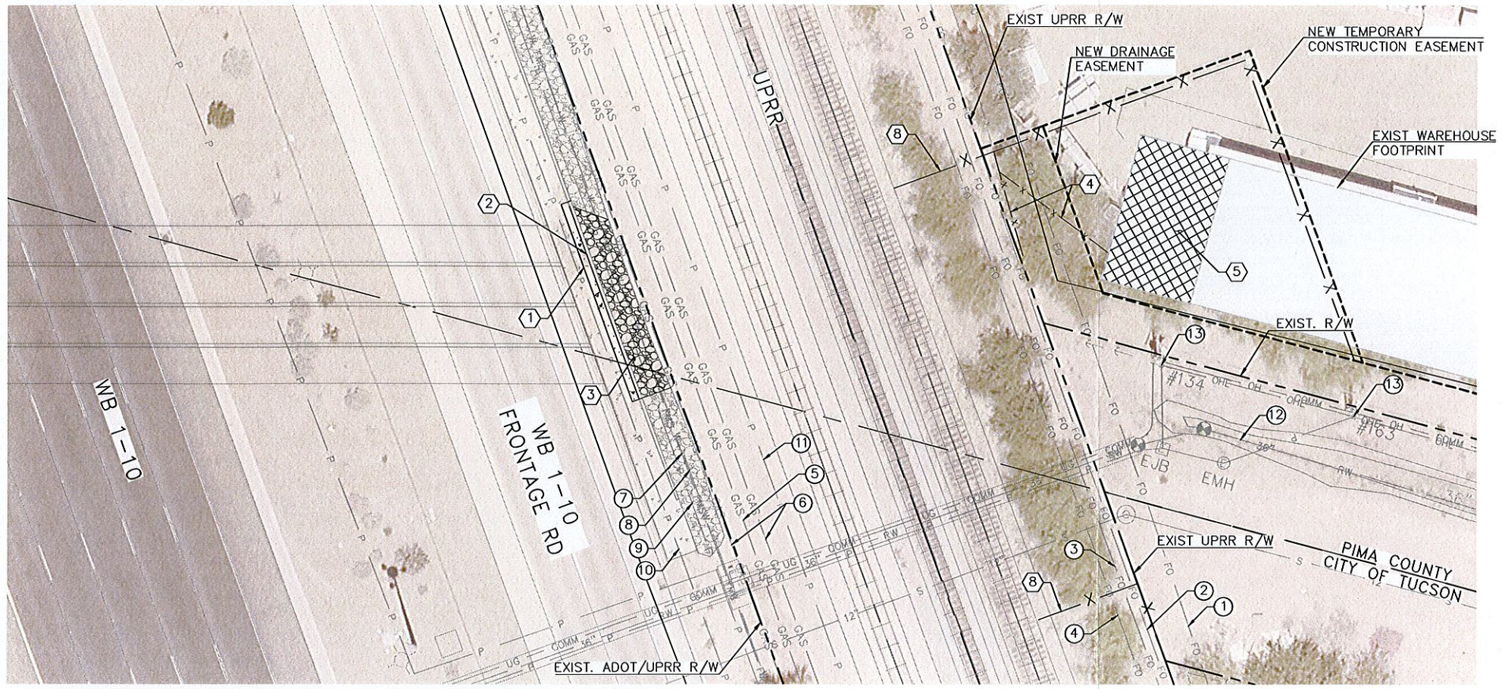
GENERAL NOTES

GARDNER LANE, UPRR CULVERTS - PHASE 1

SCALES: HORIZ. N/A VERT. N/A

PIMA COUNTY W.O. 5RUPRR

K:\TUC_WaterResources\098022073_GardnerLane_FinalDesign\CADD\h098022073gn_PH1.dwg GN01 Last Saved: Mon, 02 Aug 2021 By: Vicki.Chu Plotted: Monday, August 2, 2021 8:25:49 AM



0 20' 40'
SCALE: 1"=20'

DEMOLITION NOTES

1. SAWCUT CONCRETE 2' FROM WALL BASE AND REMOVE CONCRETE
   BID ITEM# 2020001
2. SAWCUT AND REMOVE CONCRETE RETAINING WALL
   BID ITEM# 2020001
3. REMOVE AND SALVAGE RIPRAP
   BID ITEM# 2020132
4. REMOVE FENCING
   BID ITEM# 2020101
5. REMOVE WAREHOUSE BUILDING AS NECESSARY FOR CONSTRUCTION
   SEE SPECIAL PROVISIONS
   BID ITEM# 9300111
8. ADD PRESERVATION FENCING (TYPE A)
   BID ITEM# 2010004

UTILITY NOTES

1. SPRINT FIBER OPTIC – PROTECT IN PLACE
2. QWEST/MCI FIBER OPTIC – PROTECT IN PLACE
3. CENTURY LINK/LEVEL3 FIBER OPTIC – TO BE ADJUSTED BY OTHERS
4. CENTURY LINK/WILTEL FIBER OPTIC – TO BE ADJUSTED BY OTHERS
5. 12" KINDER MORGAN PIPELINE – TO BE RELOCATED BY OTHERS
6. 8" AND 6" ABANDONED GAS PIPELINES – TO BE REMOVED BY OTHERS
7. ADOT FMS – RELOCATE BELOW CONCRETE APRON (AS REQUIRED)
   INCLUDED IN BID ITEM# 5150101
8. ADOT IRRIGATION – RELOCATE AT BACK OF HEADWALL
   INCLUDED IN BID ITEM# 5150101
9. ADOT (ASSUMED OWNER) ELECTRIC – RELOCATE BELOW CONCRETE APRON (AS REQUIRED)
   INCLUDED IN BID ITEM#5150101
10. ADOT (ASSUMED OWNER) ELECTRIC – PROTECT IN PLACE
11. UPRR ELECTRIC – TO BE ADJUSTED BY OTHERS
12. 36" RECLAIMED WATER – PROTECT IN PLACE
13. JOINT UTILITY POLE – TO BE RELOCATED BY OTHERS

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PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT

DEMOLITION & UTILITY PLAN

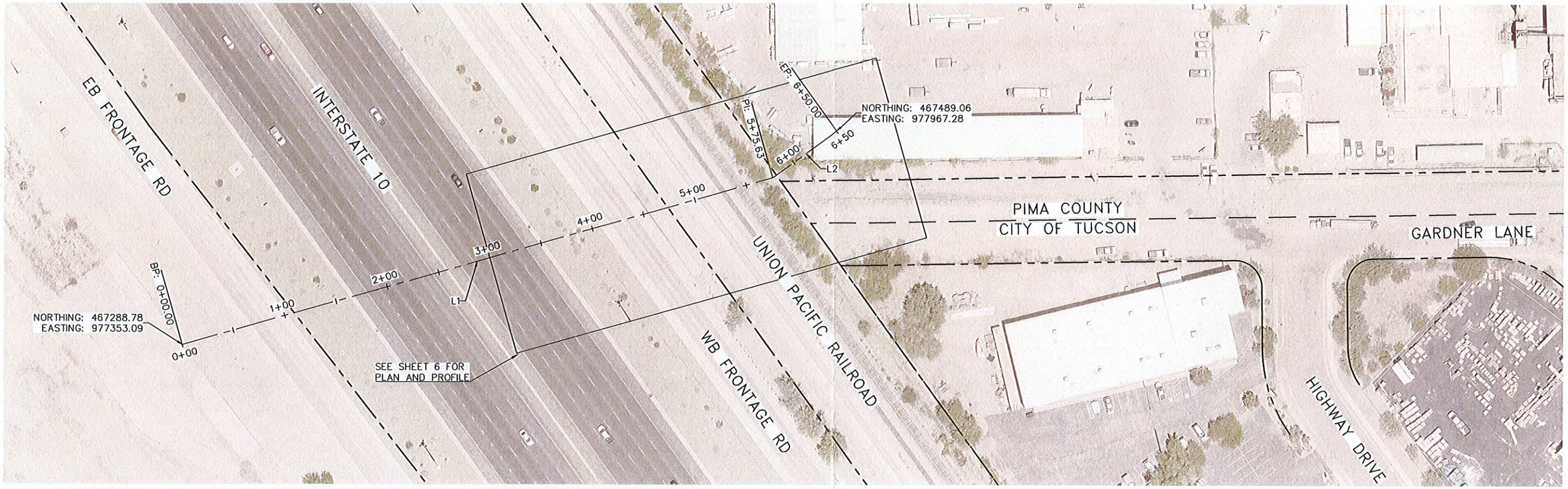
GARDNER LANE, UPRR CULVERTS - PHASE 1

SCALES: HORIZ. 1"= 20' VERT. N/A

SHEET 3 OF 8

PIMA COUNTY W.O. 5RUPRR

K:\TUC_WaterResources\098022073_GardnerLane_FloodDesign\CADD\N098022073demo_PH1.dwg DEMOLITION & UTILITY PLAN Last Saved: Mon, 02 Aug 2021 By: VokiChu Plotted: Monday, August 2, 2021 9:26:05 AM



LINE TABLE		
LINE	LENGTH	BEARING
L1	575.63	N74°11'39.15"E
L2	74.37	N54°12'21.51"E

BASIS OF BEARING:

The Basis of Bearing for this project was established using the Arizona Coordinate System, NAD 1983 (2011), Central Zone 0202. Bearing was observed between a found 5/8 inch rebar with a plastic cap marked "PLS 19817" at the center of Section 21, and a 2 inch brass cap in concrete, down 0.4', with a punch and stamped 21/22 at the east quarter corner of Section 21. Said bearing being N 88°58'52"E.

BASIS OF ELEVATION:

The Basis of Elevation for this project is Pima County OPUS control point "13S13E_P11". Control point "13S13E_P11" is a chiseled "X" on a manhole rim 38' north of the iron fence for 4389 W. Wetmore, and 41' west of the entrance drive. Said control point has an NAVD88 elevation of 2257.97 feet, as computed using GEOID12B.

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PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT

HORIZONTAL CONTROL

GARDNER LANE, UPRR
CULVERTS - PHASE 1

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SCALES: HORIZ. 1"= 50' VERT. N/A

SHEET 4 OF 8

PIMA COUNTY W.O. 5RUPRR

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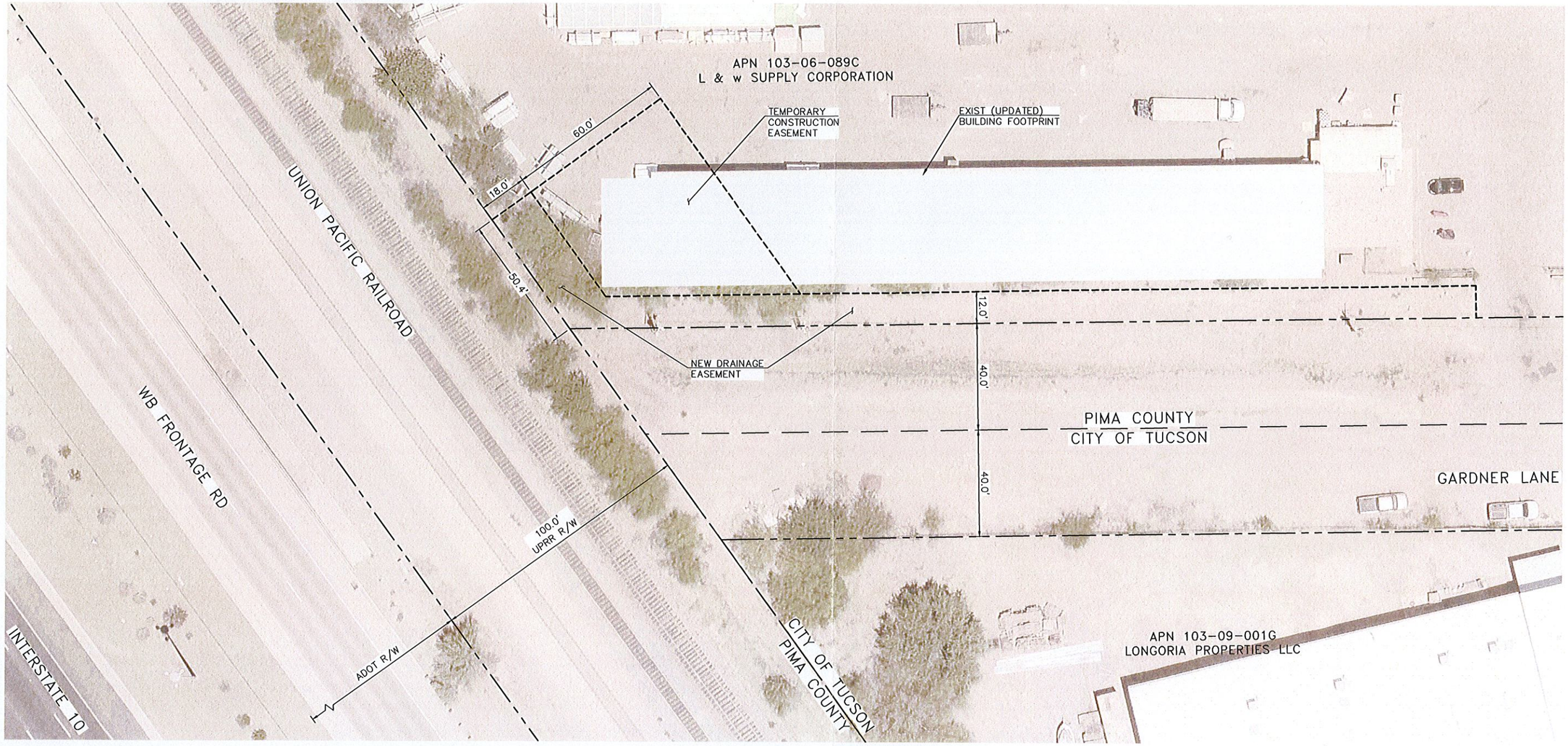

N

0 20' 40'
SCALE: 1"=20'

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PROJ ENGR	01/2021
B. YURS	
V. CHU	
K. PAYNE	
B. YURS	

PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT

RIGHT-OF-WAY AND EASEMENT PLAN

GARDNER LANE, UPRR CULVERTS - PHASE 1

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SCALES: HORIZ. 1"= 20' VERT. N/A

SHEET 5 OF 8

PIMA COUNTY W.O. 5RUPRR

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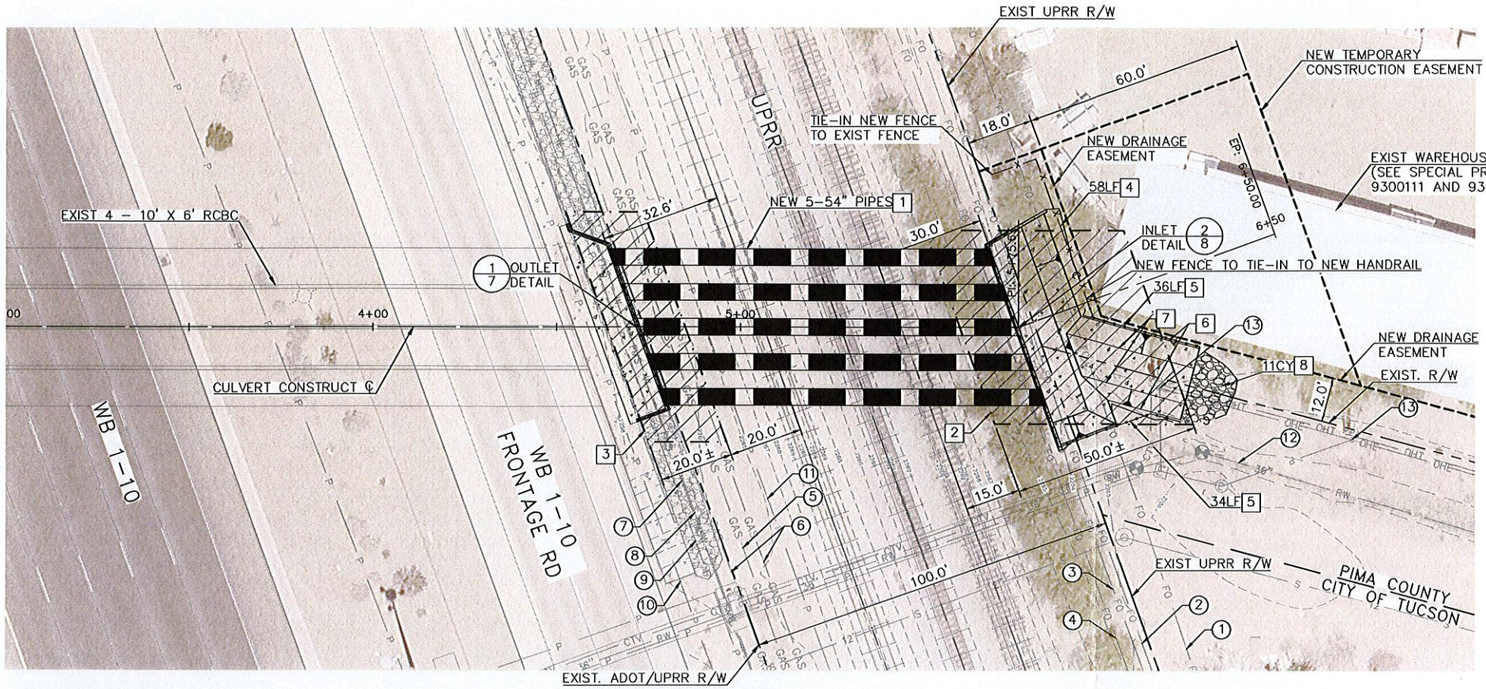

Q50 = 680 cfs
EXIST 50-YR WSEL = 2267.4'
PROP 50-YR HEADWATER = 2264.4'
Q100 = 800 cfs
EXIST 100-YR WSEL = 2267.6'
PROP 100-YR HEADWATER = 2265.5'
PROP 100-YR EGL = 2267.4'

0 20' 40'
SCALE: 1"=20'

CONSTRUCTION NOTES

1. STEEL PIPE, TH=0.875", D=54"
   BID ITEM#S 5019054 & 9290020
2. BORE PIT LIMITS (APPROX.) SHORING ON UPRR SIDE (MIN)
   BID ITEM# 9290020
3. RECEIVING PIT LIMITS (APPROX.) SHORING ON UPRR & ADOT SIDES (MIN)
   BID ITEM# 9290020
4. TYPE 2 CHAIN LINK FENCE PER ADOT C-12.20
   BID ITEM# 9020021
5. HANDRAIL PER PAG SD 105
   BID ITEM# 9330008
6. TOP OF CONCRETE CHANNEL
7. TOE OF CONCRETE CHANNEL
8. DUMP SALVAGED RIPRAP, 2 LAYERS OVER HIGH SURVIVABILITY FILTER FABRIC
   INCLUDED IN BID ITEM# 2020132

UTILITY NOTES

1. SPRINT FIBER OPTIC – PROTECT IN PLACE
2. QWEST/MCI FIBER OPTIC – PROTECT IN PLACE
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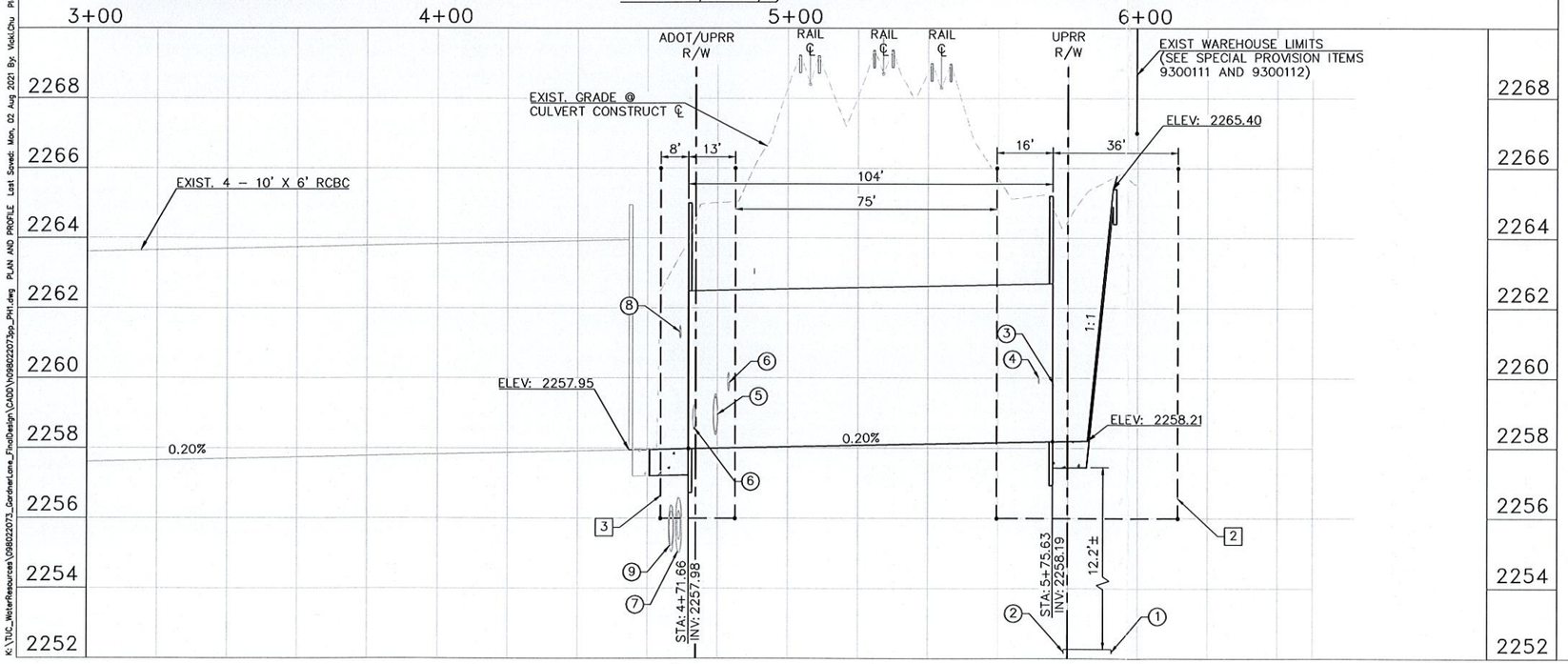

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PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT

PLAN AND PROFILE

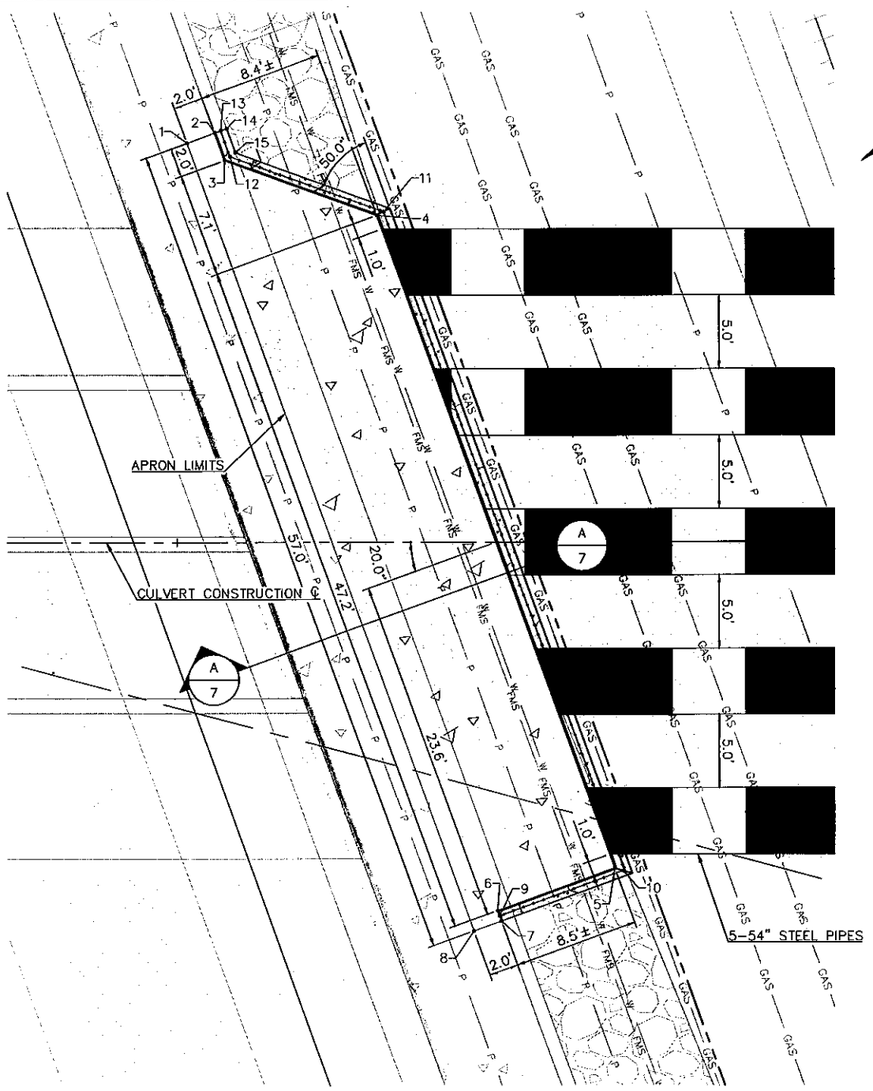
GARDNER LANE, UPRR
CULVERTS - PHASE 1

SCALES: HORIZ. 1"= 20' VERT. 1"=2'

SHEET 6 OF 8

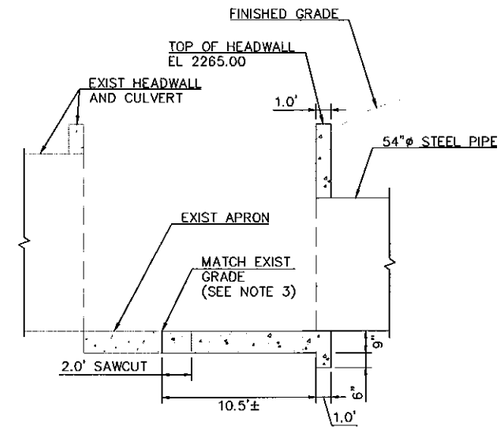
PIMA COUNTY W.O. 5RUPRR

K:\TUC_WaterResources\09802207\3_GardnerLane_FloodDesign\CADD\09802207Sp_PH.dwg PLAN AND PROFILE Last Saved: Mon, 02 Aug 2021 By: Vicki.Chu Plotted: Monday, August 2, 2021 9:27:07 AM



1 OUTLET DETAIL

SCALE: 1"=5'



TYPICAL SECTION A–A – CULVERT OUTLET

POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
1	4+50.69	−27.136'	2,257.96	CONCRETE APRON, MATCH EXIST
2	4+52.57	−27.817'	2,257.97	CONCRETE APRON, MATCH EXIST
3	4+53.24	−25.957'	2,257.97	CONCRETE APRON
4	4+63.59	−22.190'	2,257.98	CONCRETE APRON
5	4+79.73	22.190'	2,257.98	CONCRETE APRON
6	4+71.77	25.087'	2,257.97	CONCRETE APRON
7	4+72.02	25.791'	2,257.97	CONCRETE APRON, MATCH EXIST
8	4+70.15	26.475'	2,257.96	CONCRETE APRON, MATCH EXIST
9	4+71.90	25.439'	2,257.97	TOP OF WINGWALL CL
10	4+80.33	22.371'	2,265.00	TOP OF HEADWALL CL
11	4+64.05	−22.422'	2,265.00	TOP OF HEADWALL CL
12	4+53.61	−26.222'	2,262.60	TOP OF WINGWALL CL
13	4+52.98	−27.966'	2,262.60	TOP OF WINGWALL CL
14	4+53.39	−28.115'	2,262.60	EDGE OF WINGWALL, MATCH EXIST
15	4+53.98	−26.487'	2,262.60	EDGE OF WINGWALL, MATCH EXIST

NOTES:

1. CULVERT HEADWALL, WINGWALLS, AND APRON TO BE CONSTRUCTED PER ADOT SD 6.30 EXCEPT WHERE MODIFIED AS SHOWN ON THIS DETAIL. HEADWALL, WINGWALLS, AND APRON INCLUDED IN BID ITEM# 6016095
2. CONCRETE HEADWALL/WINGWALL CONNECTIONS TO EXISTING CONCRETE WALLS SHALL CONSIST OF #4 X 24" DOWELS @ 12" OC, CENTERED IN WALL. DRILL ¾" DIAMETER HOLE, 6" DEEP FOR #4 DOWEL. EPOXY DOWEL IN HOLE WITH AN APPROVED EPOXY ADHESIVE. EPOXY ANCHORAGE SHALL DEVELOP A MINIMUM TENSILE STRENGTH OF 6 KIPS.
3. CONCRETE APRON CONNECTIONS TO EXISTING CONCRETE APRON SHALL CONSIST OF #4 X 24" DOWELS @ 24" OC, CENTERED IN APRON. DRILL ¾" DIAMETER HOLE, 6" DEEP FOR #4 DOWEL. EPOXY DOWEL IN HOLE WITH AN APPROVED EPOXY ADHESIVE. EPOXY ANCHORAGE SHALL DEVELOP A MINIMUM TENSILE STRENGTH OF 6 KIPS.
4. HEADWALL, WINGWALL, AND APRON CONNECTIONS SHALL BE CONSIDERED INCIDENTAL TO BID ITEM# 6016095

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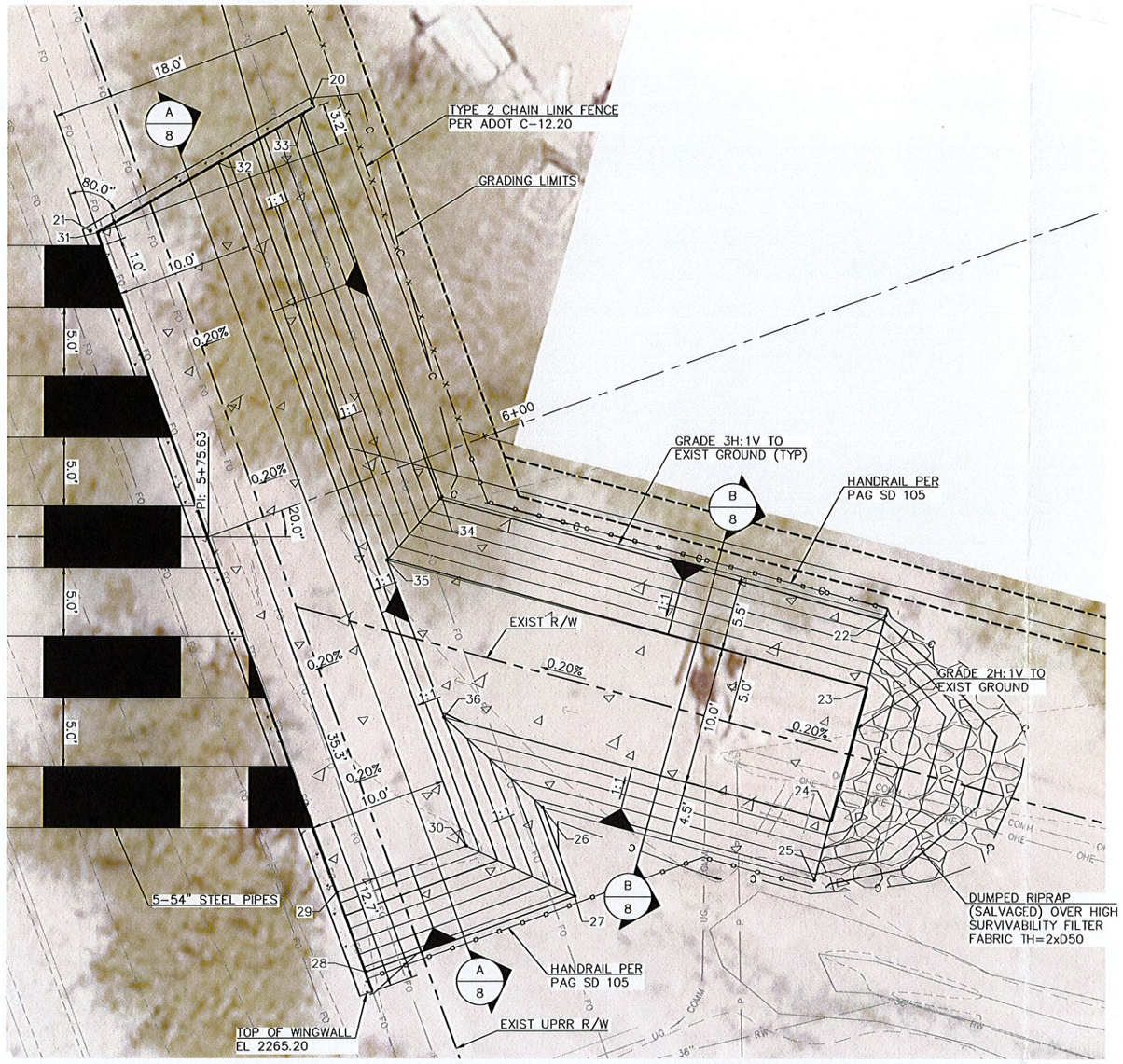
DETAILS - OUTLET

GARDNER LANE, UPRR
CULVERTS - PHASE 1

SCALES: HORIZ. 1"= 5' VERT. N/A

PIMA COUNTY W.O. 5RUPRR

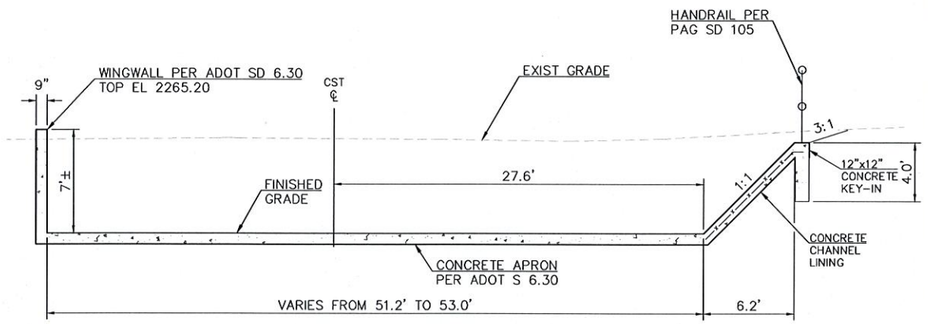
K:\TUC_Water\Resources\096802073_Gardner Lane_Final Design\CADD\Hydrology\096802073dt11_PH1.dwg DETAIL-01 Last Saved: Mon, 02 Aug 2021 By: Vicki.Chu Plotted: Monday, August 2, 2021 9:27:30 AM



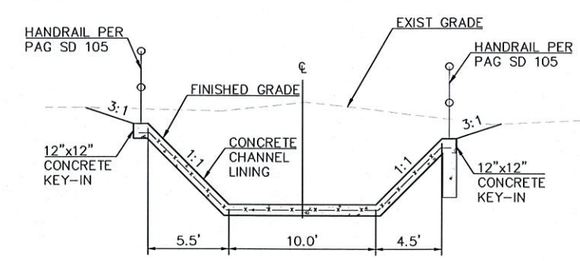
2 INLET DETAIL

0 5' 10'
SCALE: 1"=5'

POINT	STATION	OFFSET	ELEVATION	DESCRIPTION
20	5+93.55	-27.153'	2,265.20	TOP OF WINGWALL CL
21	5+66.99	-22.294'	2,265.20	TOP OF HEADWALL CL
22	6+20.12	22.243'	2,265.38	TOP OF INLET CHANNEL
23	6+16.97	26.753'	2,259.95	INLET CHANNEL TOE
24	6+11.25	34.952'	2,259.95	INLET CHANNEL TOE
25	6+08.67	38.641'	2,264.45	TOP OF INLET CHANNEL
26	5+91.83	26.884'	2,264.40	TOP OF INLET CHANNEL
27	5+91.83	33.805'	2,264.40	TOP OF DROP INLET 1:1 SLOPE
28	5+75.63	33.805'	2,264.37	TOP OF DROP INLET 1:1 SLOPE
29	5+75.63	27.605'	2,258.19	APRON TOE
30	5+85.63	27.605'	2,258.21	APRON TOE
31	5+67.56	-22.190'	2,258.19	APRON TOE
32	5+85.63	-25.375'	2,258.21	APRON TOE
33	5+92.63	-26.610'	2,265.20	TOP OF DROP INLET 1:1 SLOPE
34	5+92.63	3.049'	2,265.20	TOP OF INLET CHANNEL
35	5+87.30	6.033'	2,259.87	INLET CHANNEL TOE
36	5+87.30	18.229'	2,260.00	INLET CHANNEL TOE



TYPICAL SECTION A-A – CULVERT DROP INLET



TYPICAL SECTION B-B – CULVERT INLET CHANNEL

NOTES:

1. CULVERT HEADWALL, WINGWALLS, AND APRON TO BE CONSTRUCTED PER ADOT SD 6.30 EXCEPT WHERE MODIFIED AS SHOWN ON THIS DETAIL. HEADWALL, WINGWALLS, AND APRON INCLUDED IN BID ITEM# 6016090
2. CONCRETE CHANNEL LINING SHALL BE REINFORCED WITH 6"X6" W2.1XW2.1 W.W.F. OR #4 REBAR @ 12" OC EACH DIRECTION. BID ITEM# 9130100
3. 12" X 12" CONCRETE KEY-IN CONSIDERED INCIDENTAL TO THE COST OF THE CHANNEL LINING.
4. COST OF SALVAGED RIP RAP (BID ITEM# 2020132) SHALL INCLUDE FINAL PLACEMENT OF SALVAGED MATERIAL. FILTER FABRIC CONSIDERED INCIDENTAL TO THE PLACEMENT OF THE SALVAGED RIP RAP.

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DETAILS - INLET

GARDNER LANE, UPRR
CULVERTS - PHASE 1

SCALES: HORIZ. 1"= 5' VERT. N/A

SHEET 8 OF 8

PIMA COUNTY W.O. 5RUPRR

K:\TUC_WaterResources\096022073_GardnerLane_FloodDesign\CADD\V096022073HI2_PH1.dwg DETAIL-02 Last Saved: Mon, 02 Aug 2021 By: Vicki.Chu Plotted: Monday, August 2, 2021 9:27:51 AM