



BOARD OF SUPERVISORS AGENDA ITEM REPORT

Requested Board Meeting Date: May 21, 2019

Title: Approval of a Riparian Habitat Mitigation In-Lieu Fee Proposal for Placement of a Water Utility Line for Harrison Road (District 4)

Introduction/Background:

Chapter 16.30 of the Pima County Floodplain Management Ordinance No. 2010-FC5 (Ordinance) requires mitigation when cumulative disturbance of more than 1/3 acre of mapped riparian habitat occurs. If a project site contains suitable area(s) for mitigation, restoration, or enhancement, then on-site mitigation is required in accordance with the adopted Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines. The Ordinance contains a provision for mitigation banking when on-site mitigation is not feasible. All off-site mitigation proposals require Flood Control District Board of Directors (Board) review and approval.

Discussion:

The City of Tucson Water Department (Tucson Water) proposes to install approximately 4,600 linear feet of 12-inch diameter water transmission main within the South Harrison Road right-of-way (ROW) from West Grantham Street south to East Camino Aurelia. The property is mapped within Regulated Riparian Habitat (RRH) and is classified in two different habitat types; Xeroriparian Class C and Xeroriparian Class D. The disturbance from this project is 0.71 acres, therefore requires a Riparian Habitat Mitigation plan (RHMP). McGann & Associates Inc. was hired by Tucson Water to prepare an RHMP. Tucson Water will mitigate for the disturbance by paying a fee in-lieu of on-site mitigation. The Riparian Habitat Mitigation In-Lieu Fee Proposal will contribute a fee of \$9,896.64.

Conclusion:

Acceptance of mitigation banking funds in-lieu of on-site mitigation is allowed under the Ordinance. Contributions to the mitigation bank for disturbance of this habitat will provide funds to be used toward purchase of high value resources or towards restoration of degraded riparian habitat within Pima County.

Recommendation:

The ILF proposal presented conforms with the Ordinance and, as such, the District recommends approval.

Fiscal Impact:

\$9,894.64

Board of Supervisor District:

☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5 ☐ All

Department: Regional Flood Control District Telephone: 724-4600

Department Director Signature/Date: *J. Spuler*

Deputy County Administrator Signature/Date: *[Signature]* 4/29/19

County Administrator Signature/Date: *C. Delaney* 4/29/19

DATE: April 25, 2019

TO: Flood Control District Board of Directors

FROM: Suzanne Shields, P.E.
Director

SUBJECT: Approval of a Riparian Habitat Mitigation In-Lieu Fee Proposal for Placement of a Water Utility Line for Harrison Road (District 4)

Background

Chapter 16.30 of the Pima County Floodplain Management Ordinance No. 2010-FC5 (Ordinance) requires mitigation for mapped riparian habitat disturbances greater than 1/3 acre. If a project site contains suitable area(s) for riparian restoration, enhancement, or establishment, onsite mitigation occurs in accordance with the adopted *Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines*. The Ordinance contains a provision for mitigation banking, when on-site mitigation is not feasible. All offsite mitigation proposals require Flood Control District Board of Directors (Board) review and approval.

Report

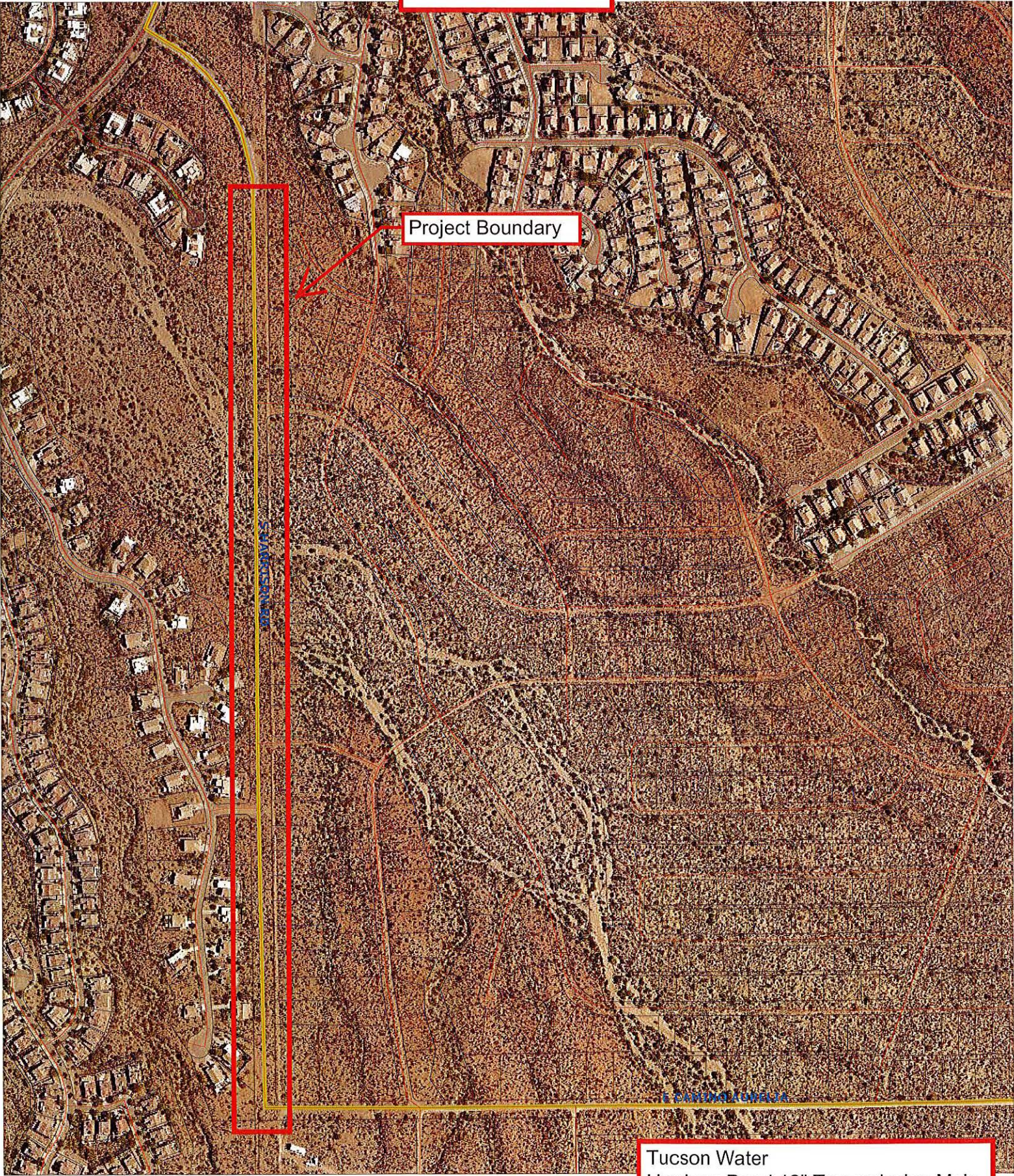
The City of Tucson Water Department (Tucson Water) proposes to install approximately 4,600 linear feet of 12-inch diameter water transmission main within the South Harrison Road right-of-way (ROW) from West Grantham Street south to East Camino Aurelia (Exhibit A). The property is mapped within Regulated Riparian Habitat (RRH) and is classified in two different habitat types; Xeroriparian Class C and Xeroriparian Class D (Exhibit B). The disturbance from this project is 0.71 acres, therefore requires a Riparian Habitat Mitigation plan (RHMP). McGann & Associates Inc. was hired by Tucson Water to prepare an RHMP. The development of the rights of way and extension of Harrison Road is unknown at this point in time. Additionally the exact alignment for the pavement has not been determined consequently designating mitigation areas for onsite planting could be relocated in the future. As a result, the Tucson Water will mitigate for the disturbance by paying a fee in-lieu of on-site mitigation. The Riparian Habitat Mitigation In-Lieu Fee Proposal will contribute a fee of \$9,896.64 (Sheet R-1 of Exhibit C).

Recommendation

Acceptance of mitigation banking funds in-lieu of onsite mitigation is allowed under the Ordinance. Contributions to the mitigation bank for disturbance of this habitat will provide funds to be used toward purchase of high value resources or towards restoration of degraded riparian habitat within Pima County

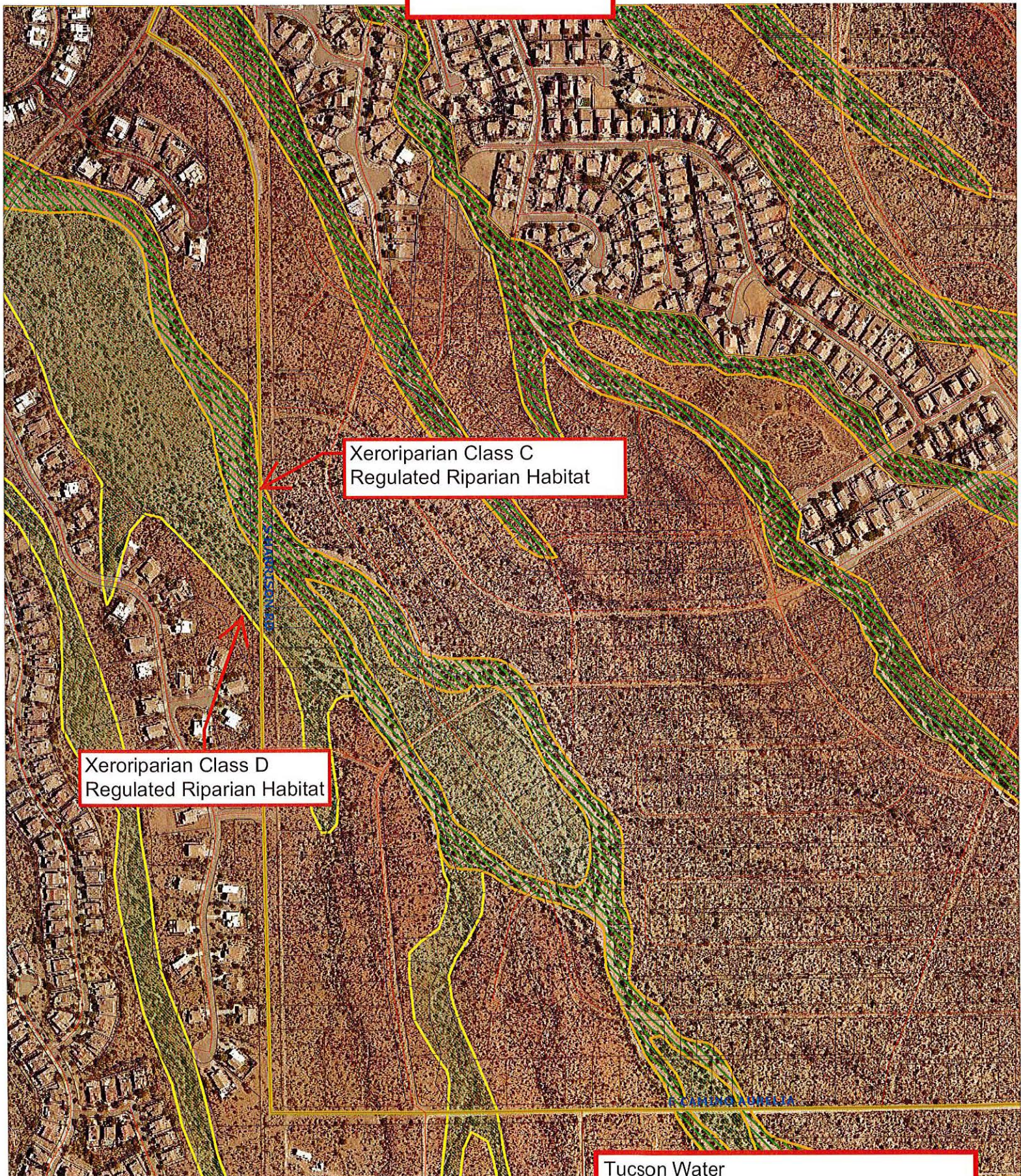
Attachments: Exhibit A – Project Location
Exhibit B – Project Site – Riparian Classification Map
Exhibit C – Mitigation Banking In-lieu Fee Proposal

Exhibit A



Tucson Water
Harrison Road 12" Transmission Main
BOS Hearing 5/21/2019

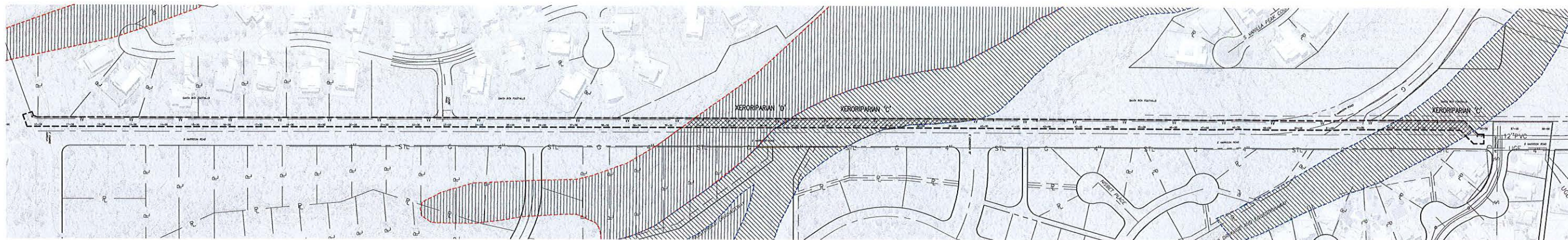
Exhibit B



Xeroriparian Class C
Regulated Riparian Habitat

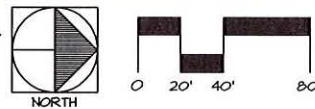
Xeroriparian Class D
Regulated Riparian Habitat

Tucson Water
Harrison Road 12" Transmission Main
BOS Hearing 5/21/2019

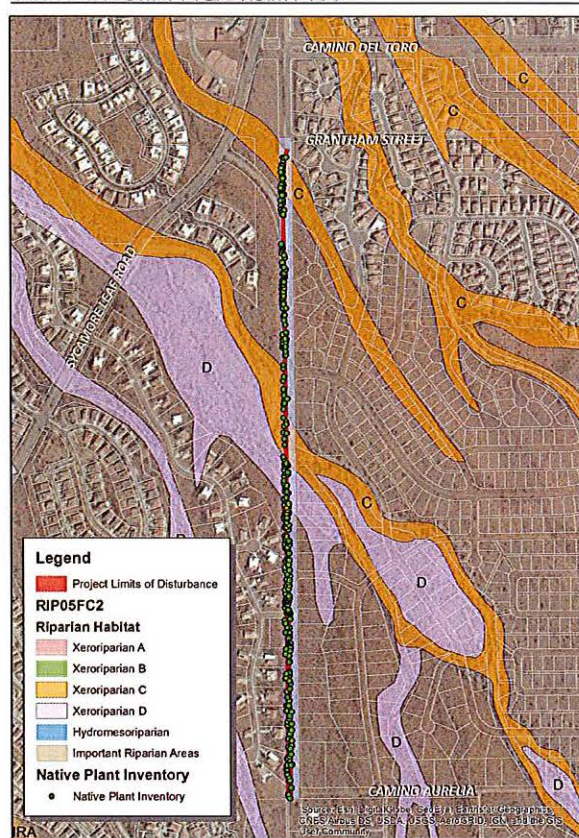


RIPARIAN HABITAT AREA MAP

SCALE: 1" = 150'-0"



RIPARIAN HABITAT AREA VICINITY MAP



Harrison Rd - Water Line Extension

0 0.05 0.1 0.2 Miles

RIPARIAN HABITAT AREA CALCULATIONS

AREA DESCRIPTION	SIZE (ACRES)
TOTAL PROJECT AREA*	9.55
TOTAL DISTURBED AREA	3.2
TOTAL XERORIPARIAN C AREA ON SITE**	3.1
TOTAL XERORIPARIAN D AREA ON SITE**	1.2
TOTAL DISTURBED XERORIPARIAN C AREA ON SITE	0.51
TOTAL DISTURBED XERORIPARIAN D AREA ON SITE	0.21
TOTAL DISTURBED XERORIPARIAN C AREA / TOTAL XERORIPARIAN C AREA	16.4%
TOTAL DISTURBED XERORIPARIAN D AREA / TOTAL XERORIPARIAN D AREA	17.5%

*PROJECT AREA INCLUDES HARRISON RIGHT OF WAY BETWEEN GRANTHAM AND E CAMINO AURELIA.

** TOTAL AREA DOES NOT INCLUDE PRE-MAP DISTURBANCES (RIP05FC2). PRE-MAP DISTURBANCES WERE NOT LOCATED WITHIN PROPOSED DISTURBED AREA.

RIPARIAN HABITAT AREA - IN LIEU FEE CALCULATIONS

Xeroriparian Class C Habitat (XC)**		Option to Basic Requirement (Xeroriparian)***	
Total mapped habitat onsite	3.10 Acre(s)		
Area of disturbed RRH	0.51 Acre(s)		
Area of mitigation	0.51 Acre(s)		
Total number of trees required (45 trees/ac)	45	23 Trees	18
Total number of shrubs required (70 shrubs/ac)	70	35.7 Shrubs	29
Xeroriparian Class D Habitat (XD)**			
Total mapped habitat onsite	1.20 Acre(s)		
Area of disturbed RRH	0.21 Acre(s)		
Area of mitigation	0.21 Acre(s)		
Total number of trees required (30 trees/ac)	30	6.3 Trees	5
Total number of shrubs required (x shrubs/ac)*	81	17.01 Shrubs	14
ILF calculation			
15-gallon trees	15	\$1,116.67	
5-gallon trees	14	\$384.00	
5-gallon shrubs	27	\$609.43	
1-gallon shrubs	26	\$305.50	
Hydroseed	0.71 Acre(s)	\$2,474.35	
Irrigation	0.71 Acre(s)	\$724.68	
5-year maintenance	0.71 Acre(s)	\$1,087.02	
Monitoring Report	3 at years 1, 3 & 5	\$3,195.00	
Total Cost		\$9,896.64	

Average Costs (Costs shown for plants are installed costs)	15-gallon tree	5-gallon tree	5-gallon shrub	1-gallon shrub	Hydroseed (per ac)	Irrigation (per acre)	5-year maintenance (per acre)	5-year monitoring (per acre per year)
	\$74	\$27	\$23	\$12	\$3,485	see notes	see notes	\$1,506

*determined by onsite plant survey.

**Guideline plant density requirements have been provided. The applicant may choose to perform an onsite plant survey in accordance with TECH-116 to determine plan.

***Option to basic requirement for Xeroriparian Classes A-D: Reduce total plant quantity by 20% if 100% 15 gallon trees and 100% 5 gallon shrubs are used.

*Irrigation calculated as 30% the cost of plant material (trees and shrubs)

*Maintenance calculated as 45% the cost of plant material (trees and shrubs)

LINE TYPE LEGEND	
SEE COVER SHEET 6-1 FOR CALCULATIONS	
R.O.W.	
NEW 12" WATER TRANSMISSION MAIN	
LIMITS OF DISTURBANCE	
XERORIPARIAN 'C' LIMITS	
XERORIPARIAN 'D' LIMITS	
UNDISTURBED XERORIPARIAN AREA C	
UNDISTURBED XERORIPARIAN AREA D	
DISTURBED XERORIPARIAN AREAS	



NO	BY	DATE	REVISION	APPR	DATE

		CITY OF TUCSON HARRISON ROAD 12" TRANSMISSION MAIN	
		RIPARIAN HABITAT MITIGATION PLAN AND IN-LIEU FEE CALCULATION R-1	
DESIGNED BY:	DATE:	SURVEY REQUEST NO:	SHEET 18 OF 20
SRM	2/19	SR3055	
DRAWN BY:	DATE:	SCALE:	PLAN NO:
MV	11/18	NOTES: NTS	
CHECKED BY:	DATE:	NOTES: NTS	1-090-2017
SRM	11/18		