



BOARD OF SUPERVISORS AGENDA ITEM SUMMARY

Requested Board Meeting Date: August 6th, 2013

ITEM SUMMARY, JUSTIFICATION &/or SPECIAL CONSIDERATIONS:

The property owners, Tim and Marnie Walcker, have constructed a fill pad extension and fence on the residential property located at 10235 North Blue Bonnet Road. The property is located in the Tortolita Alluvial Fan, within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area Zone AO-Alluvial Fan 1 floodplain. This development has impacted greater than 1/3 acre Important Riparian Area with Underlying Xeroriparian Class C and Xeroriparian Class C Habitat, subsequently the applicant is subject to compliance with Chapter 16.30 of the Pima County Floodplain and Erosion Hazard Management Ordinance No. 2010-FC5 (Ordinance). Due to site constraints, the applicants are proposing to perform mitigation partially onsite while contributing an in-lieu fee (ILF) for the remaining amount. Because more than five percent of the regulated riparian habitat mapped on the site will be disturbed and a portion of the disturbance will be mitigated through contribution of an ILF, the mitigation proposal requires Flood Control District Board of Directors (Board) review and approval.

In order to comply with the Ordinance, the applicant is submitting a partial onsite riparian habitat mitigation plan and partial ILF for Board approval. The mitigation proposal must be approved prior to issuance of a Floodplain Use Permit which specifies floodplain and building requirements for the existing fence and fill pad extension on the residential property.

CONTRACT NUMBER (If applicable): N/A

STAFF RECOMMENDATION(S):

Conceptually, the combination onsite mitigation plan and in-lieu fee presented conforms to the Ordinance and, as such, can be approved.

CLERK OF BOARD USE ONLY: BOS MTG. _____

ITEM NO. _____

PIMA COUNTY COST: 0.0 and/or REVENUE TO PIMA COUNTY: \$ 2,913.15

FUNDING SOURCE(S): N/A
(i.e. General Fund, State Grant Fund, Federal Fund, Stadium D. Fund, etc.)

Advertised Public Hearing:

☐

YES

☒

NO

Board of Supervisors District:

1 ☒

2 ☐

3 ☐

4 ☐

5 ☐

All ☐

IMPACT:

IF APPROVED:

Per the plan, habitat mitigation will occur onsite within the specifically designated areas and will be performed in compliance with Board approved mitigation standards with the remaining amount of mitigation contributed to the mitigation bank as an in-lieu fee in the amount of \$2,913.15. By performing a combination of onsite and offsite mitigation, the development will be in compliance with the Ordinance.

IF DENIED:

The applicant will not be able to continue with developing the property as currently planned and an alternative mitigation proposal will be required.

DEPARTMENT NAME: Regional Flood Control District

CONTACT PERSON: Eric Shepp/Patricia Gilbert TELEPHONE NO.: 4-4610/4606

DIRECTOR'S SIGNATURE: _____



Suzanne Shields, P.E.



MEMORANDUM

Director's Office
Regional Flood Control District



DATE: July 22nd, 2013

TO: Flood Control District Board of Directors

FROM: Suzanne Shields, P.E.
Director

SUBJECT: **Approval of a Riparian Habitat Mitigation Proposal for 10235 North Blue Bonnet Road, Located within Important Riparian Area with Underlying Xeroriparian Class C and Xeroriparian Class C Habitat (District 1)**

Background

Chapter 16.30 of the Pima County Floodplain and Erosion Hazard Management Ordinance No. 2010-FC5 (Ordinance) requires mitigation when greater than one third acre Regulated Riparian Habitat (RRH) is disturbed. Flood Control District Board of Directors (Board) review and approval of the Riparian Habitat Mitigation Plan (RHMP) is required when disturbance of Important Riparian Areas (IRA) or Class H (H) habitat exceeds 1/3 of an acre and also exceeds five percent of the mapped IRA or H on the subject parcel.

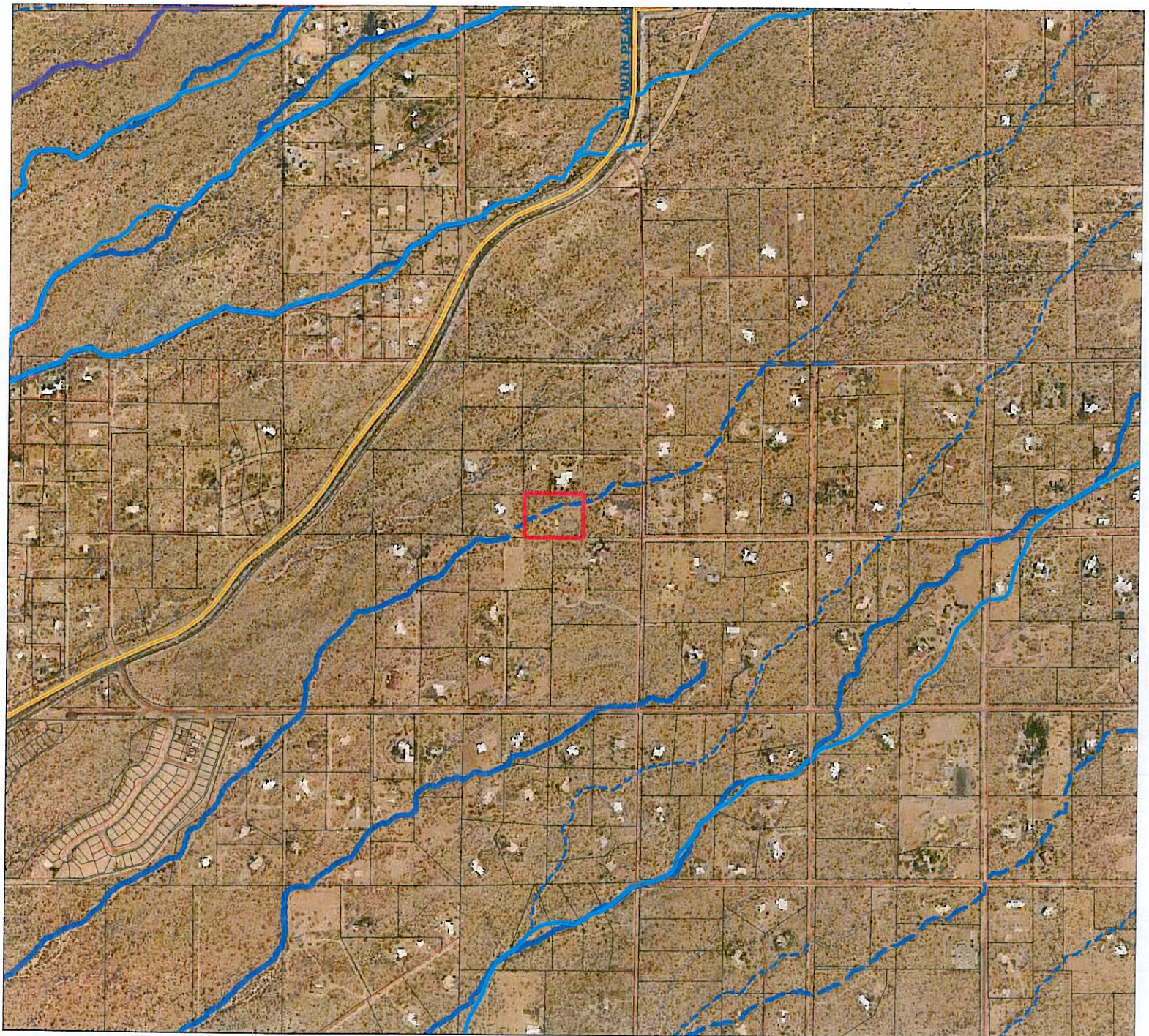
If a project site contains suitable area(s) for riparian restoration, enhancement, or establishment, onsite mitigation occurs in accordance with the adopted *Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines*, which govern the type, amount, and location of required mitigation. When onsite mitigation is not feasible, offsite mitigation options become available in accordance with the adopted *Regulated Riparian Habitat Offsite Mitigation Guidelines for Unincorporated Pima County*. All offsite mitigation proposals require Board review and approval.

Report

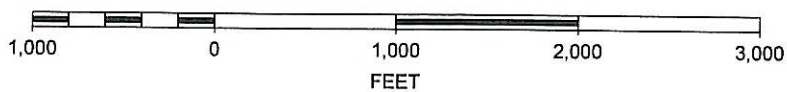
The owners, Mr. and Mrs. Tim Walcker constructed a fence and fill pad extension without a permit on property located at 10235 North Blue Bonnet Road (Exhibit A). Initially, the owners applied for a pool permit. Upon review of the project, staff determined that previous unpermitted improvements had disturbed greater than one third acre RRH. Once notified of the requirement, the owners withdrew the pool permit and submitted a RHMP to mitigate for the constructed improvements. The property is mapped Important Riparian Area with underlying Xeroriparian Class C (IRA/XC) habitat and Xeroriparian Class C (XC) habitat (Exhibit B) and is located in the Tortolita Alluvial Fan, within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area, Zone AO-Alluvial Fan 1 floodplain.

Most of the property contains mapped RRH, therefore, partial or total avoidance of riparian habitat is not possible. The owners assessed the project site for suitable onsite mitigation areas and determined that completing mitigation entirely onsite is not possible due to the size of the parcel, extent of disturbance, and presence of existing vegetation. Therefore, to achieve compliance with the Ordinance, the owner will install a portion of the mitigation requirement onsite, while converting the remaining acreage to a dollar amount, which will be contributed to the mitigation bank as a fee in-lieu of onsite mitigation.

Exhibit A



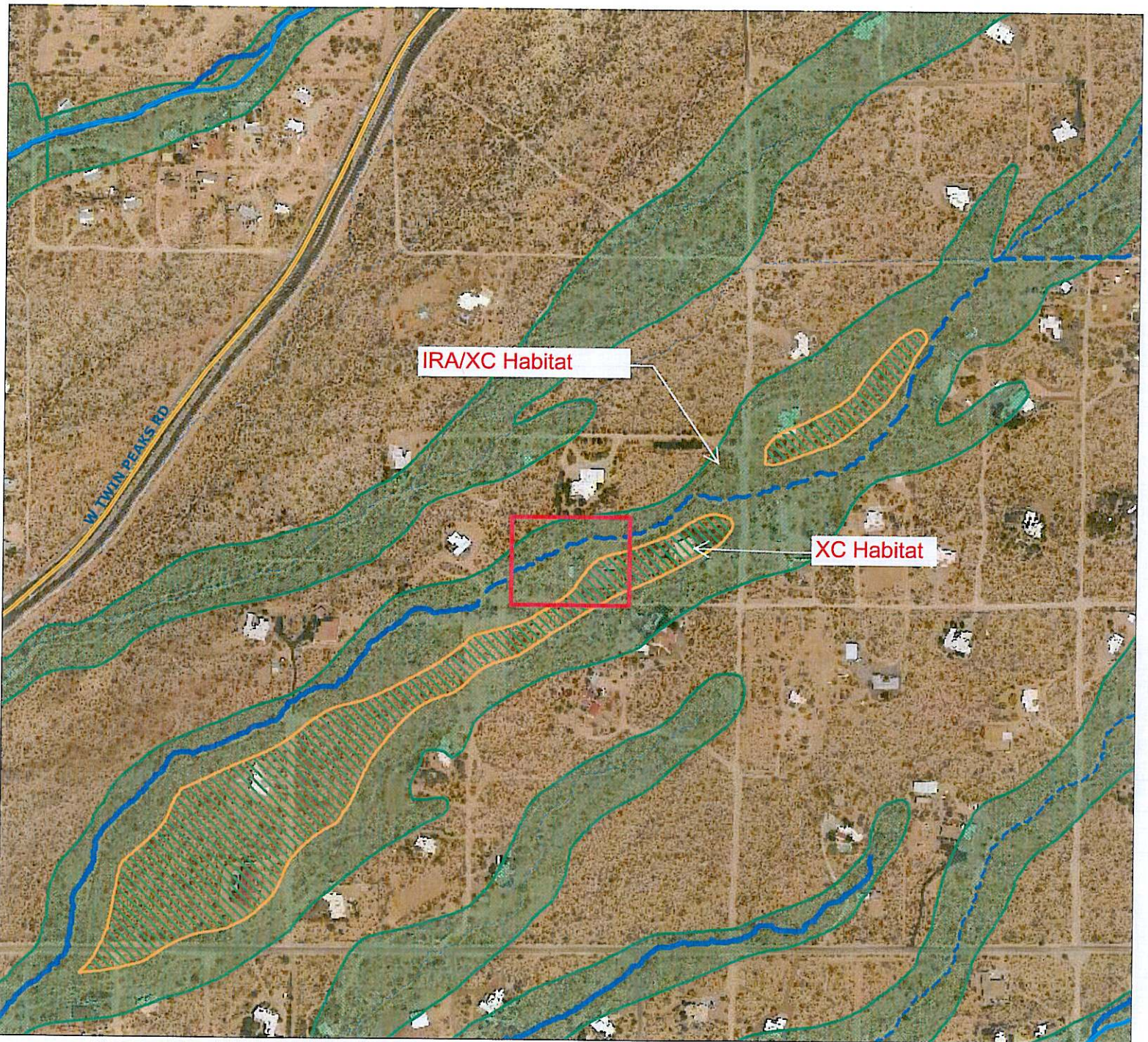
SCALE 1 : 12,000



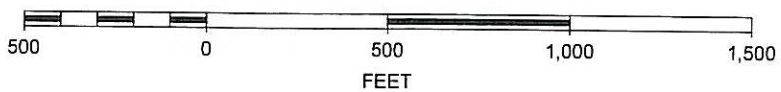
Walcker Residence
10235 N. Blue Bonnet Road
T12SR12E14
BOS Meeting Date 8/06/13



Exhibit B



SCALE 1 : 6,000



Walcker Residence
10235 N. Blue Bonnet Road
T12SR12E14
BOS Meeting Date 8/06/13

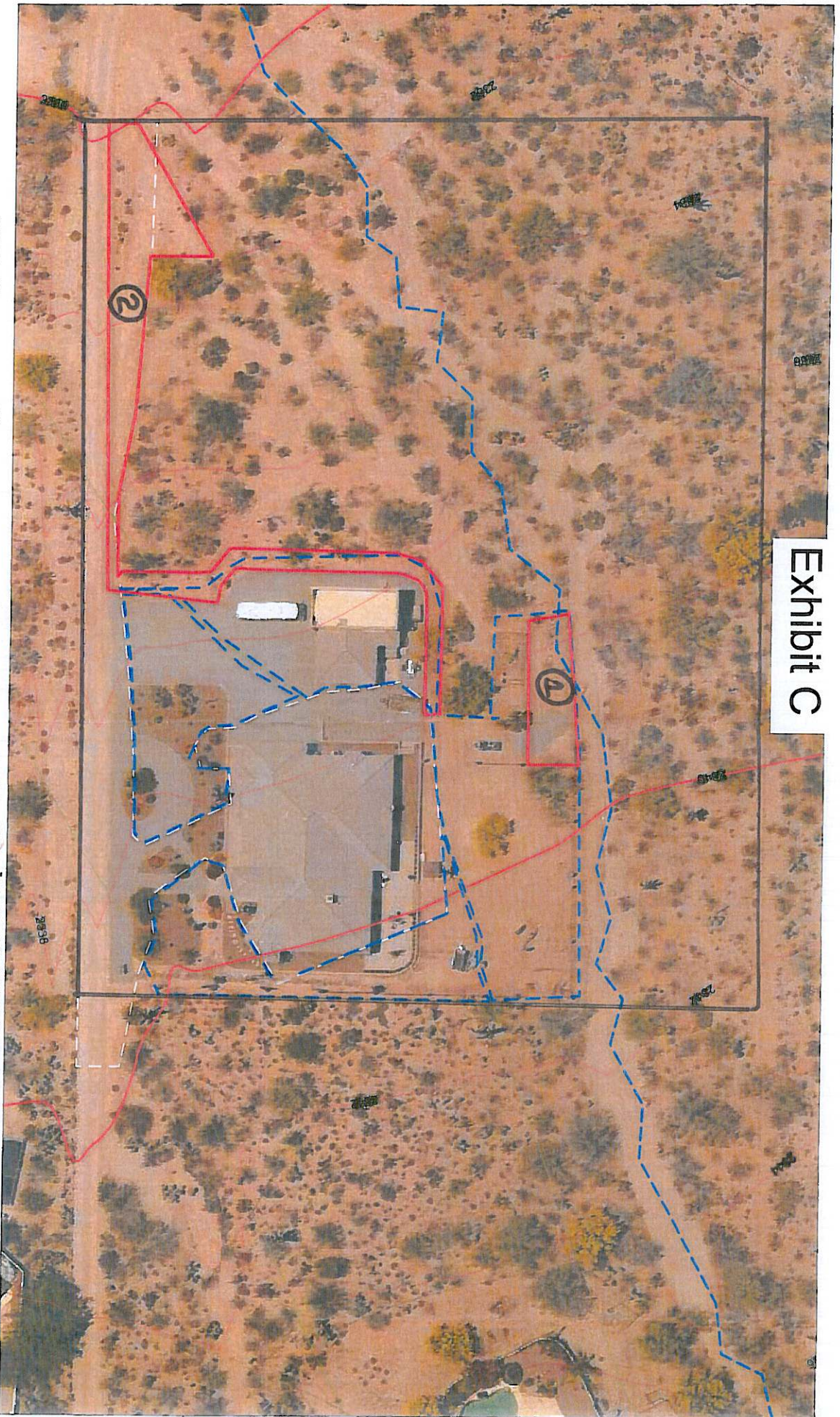


Exhibit C



- ① = MITIGATION AREA 1 (Red outlined)
- ② = MITIGATION AREA 2 (Red outlined)

WHITE DASHED LINE IS .57 ACRES OCCURRING PRIOR TO ADOPTION OF 2005 RCM
 BLUE DASHED LINE IS .77 ACRES DISTURBED RWH



Plant Schedule

Trees

Species	Quantity	Size
Velvet Mesquite (Prosopis Velutina)	4	50% 5 gal/50% 15 gal.
Blue Palo Verde (Parkinsonia Florida)	4	50% 5 gal/50% 15 gal.
Catclaw Acacia (Acacia Greggii)	3	50% 5 gal/50% 15 gal.

Shrubs

Species	Quantity	Size
Creosote Bush (Larrea Tridentata)	4	50% 5 gal/50% 1 gal
Prickley pear cactus (Opuntia sp.)	4	50% 5 gal/50% 1 gal
Brittle Bush (Encelia Farinosa)	3	50% 5 gal/50% 1 gal
Triangle Leaf Bursage (Ambrosia Deltoidea)	3	50% 5 gal/50% 1 gal
Desert Hackberry (Celtis Ehrenbergiana)	3	50% 5 gal/50% 1 gal

Calculations

This site contains Important Riparian Area with underlying Xeroriparian Class C habitat (IRA/XC) and Xeroriparian Class C (XC) habitat

Total Regulated Riparian Habitat (RRH) – IRA/XC onsite = 2.35 acres

Total Regulated Riparian Habitat (RRH) – XC onsite = 0.75 acres

Total Regulated Riparian Habitat (RRH) onsite = 3.10 acres

Area of disturbed RRH occurring prior to adoption of the 2005 RCM* = 0.57 acre

Area of disturbed RRH (IRA/XC) = 0.36 acres

Area of disturbed RRH (XC) = 0.23 acres

Total Area of disturbed RRH = 0.59 acres**

Area of mitigation (IRA/XC) = 0.36 acres x 1.5 = 0.54 acres

Area of mitigation (XC) = 0.23 acres

Total area of mitigation = 0.23 acres + 0.54 acres = 0.77 acres

Minimum mitigation area required (area of mitigation x 0.7) = 0.77 acres x 0.7 = 0.54 acres

Actual mitigation area provided onsite (provide if different from minimum mitigation area) = 0.17 acres

Total # of trees required (tree/ac plant quantity x area of mitigation) = 45 trees/acre x 0.77 acres = 35 trees

Total # of shrubs required (shrub/ac plant quantity x area of mitigation) = 70 shrubs/acre x 0.77 acres = 54 shrubs

35 trees – 11 trees = 24 trees mitigated with in-lieu fee

54 shrubs – 17 shrubs = 37 shrubs mitigated with in-lieu fee

Area to be mitigated offsite → Minimum mitigation area required (0.54 acres) – mitigation area onsite (0.17 acres) = 0.37 acres

*Riparian Classification Maps (RCM)

**Disturbance permitted under FPUP nos. 06-374ER (garage) and 06-290ER (SFR) = 0.19 acres

Mitigation Areas

Area 1 = 1,870 square feet/0.04 acres = 2 trees, 5 shrubs

Area 2 = 5,610 square feet/0.13 acres = 9 trees, 12 shrubs

All Mitigation Areas shall be seeded with approved seed mix. Correct seeding rate (lbs./acre) shall be determined when seed is purchased from vendor and included in 1st annual monitoring report.

1. Aristida purpurea– Purple Three-Awn 2.0 lbs/acre	Total: 2 Lbs x .17 acre = .34 Lbs
2. Aster tanacetifolius- Purple Aster 3.0 lbs/acre	Total: 3 Lbs x .17 acre = .51 Lbs
3. Baileya multiradiata-Desert Marigold 1.5 lbs/acre	Total: 1.5 Lbs x .17 acre = .25 Lbs
4. Ericameria laricifolia– Turpentine Bush 1.0 lbs/acre	Total: 1 Lbs x .17 acre= .17 Lbs
5. Erigonum fasciculatum– Flat top buckwheat 1.0 lbs/acre	Total: 1 Lbs x .17 acre= .17 Lbs
6. Hyptis emoryi-Desert Lavender 4.0 lbs/acre	Total: 4 Lbs x .17 acre = .68 Lbs
7. Leptochloa dubia-Green Sprangletop 4.0 lbs/acre	Total: 4 Lbs x .17 acre = .68 Lbs
8. Lycium spp.– Wolfberry 3.0 lbs/acre	Total: 3 Lbs x .17 acre = .51 Lbs
9. Larrea tridentata– Creosote 2.0 lbs/acre	Total: 2 Lbs x .17 acre = .34 Lbs
10. Parthenium incanum– Mariola 2.0 lbs/acre	Total: 2 Lbs x .17 acre = .34 Lbs
11. Sphaeralcea ambigua– Globemallow 3.0 lbs/acre	Total: 3 Lbs x .17 acre = .51 Lbs
12. Sporobolus cryptandrus– Sand Dropseed 2.0 lbs/acre	Total: 2 Lbs x .17 acre= .34 Lbs

Total Seed Mix: 4.84 Lbs

List of Riparian Habitat Mitigation Plan (RHMP) General Notes:

1. Mitigation area(s) to be left in a natural state. No disturbance shall occur within the mitigation area(s) without RFCDD review and approval. Such disturbance includes but is not limited to secondary impacts such as the presence of livestock, fencing, intensive landscaping, outdoor play areas, etc.
2. Mitigated area will be (Broadcast seeding and raking into seedbed with straw or mulch) with a minimum of 12 species from the approved Xeroriparian plant list found in Appendix B of the "Regulated Riparian Habitat Mitigation Standards and Implementation Guidelines." If plant species listed on the mitigation plan are unavailable, replacement species from the approved plant list may be selected based upon availability. Of the 12 species, 4 shall be shrubs, 4 shall be annuals/perennials/vines, and 4 shall be grasses.
3. Mitigation area to be irrigated with an *existing drip* irrigation system.
4. Once plants have established, supplemental irrigation will be decreased in accordance with Appendix C of the Guidelines.
5. All mitigation areas will be maintained on a regular basis under supervision of the property owner. Maintenance shall include activities listed in the "mitigation planting maintenance" schedule found in Appendix C of the *Riparian Habitat Mitigation Standards and Implementation Guidelines* (Guidelines).
6. Riparian Habitat Mitigation plan implementation shall be completed by the first growing season following completion of construction, which is projected to be June-September, 2013.
7. A monitoring plan, in accordance with the monitoring schedule outlined in Section 3 of the Guidelines, will be submitted over a five year period following implementation of the riparian habitat mitigation plan (RHMP). Any changes from the approved RHMP shall be noted on the monitoring plan submittal. Label submittals "Annual Monitoring Report for FPUP No. 13-055RP" and send submittals to the following address:

Pima County Regional Flood Control District
ATTN: WRD Riparian Review Staff
97 E. Congress Street, 2nd floor
Tucson, AZ 85701
8. The project owner and/or the Owner's successors, agree to preserve and protect the Mitigation Area for the duration of the project. Further, the project owner and/or their successors agree to actively maintain the mitigated area for a period of not less than five years. Maintenance activities shall include, but not be limited

to, the regular operation of the irrigation system, the replacement of dead trees and shrubs, and the removal of noxious and/or invasive plant species.

9. Riparian habitat to be preserved shall be fenced for protection during construction using minimum 4-foot high orange mesh barricade fencing. Protective fencing must remain in place throughout the construction and development process.

Calculating In-Lieu Fee Costs for Single-lot Development

Xeroriparian Class A Habitat (XA)**

	(Acres)	(Vegetation)
Total mapped habitat onsite		
Area of disturbed RRH	Acre(s)	
Area of mitigation	0.00 Acre(s)	
Total number of trees required (75 trees/ac)	0 Trees	Trees
Total number of shrubs required (90 shrubs/ac)	0 Shrubs	Shrubs

Xeroriparian Class B Habitat (XB)**

Total mapped habitat onsite		Acre(s)	
Area of disturbed RRH		Acre(s)	
Area of mitigation	0.00	Acre(s)	
Total number of trees required (60 trees/ac)	60	0	Trees
Total number of shrubs required (80 shrubs/ac)	80	0	Shrubs

Xeroriparian Class C Habitat (XC)**

Total mapped habitat onsite		Acre(s)	
Area of disturbed RRH		Acre(s)	
Area of mitigation	0.00	Acre(s)	
Total number of trees required (45 trees/ac)	45	0	Trees
Total number of shrubs required (70 shrubs/ac)	70	0	Shrubs

Xeroriparian Class D Habitat (XD)**

	Acres(s)		
Total mapped habitat onsite			
Area of disturbed RRH			
Area of mitigation			
Total number of trees required (30 trees/ac)	0.00	Acres(s)	
Total number of shrubs required (x shrubs/ac)*	30	0 Trees	Trees
	50	0 Shrubs	Shrubs

ILF Calculation

15-gallon trees	12	\$960.00
5-gallon trees	12	\$300.00
5-gallon shrubs	19	\$437.00
1-gallon shrubs	18	\$108.00
Hydrosced	0.37 Acre(s)	\$327.45
Irrigation	0.37 Acre(s)	\$555.00
5-year maintenance***	0.37 Acre(s)	\$225.70
Total Cost		\$2,913.15

Average Costs (Costs shown for plants do not include installation costs)	15-gallon tree	5-gallon tree	5-gallon shrub	1-gallon shrub	seeding (per acre)	irrigation (per acre)	5-year maintenance (per acre)
	\$80	\$25	\$23	\$6	\$685	\$1,500	\$610

****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.