Site Resource Inventory Plan for Oro Valley Church of the Nazarene

WITH DIRECT TREE SPADING IN THIS 2002978 **BUFFERYARD AREA** VEGETATION OUTSIDE THE GRADING LIMIT WILI BE PRESERVED IN PLACE GRADING LIMÍTS PROPERTY LINE E.S.L. CORE RESOURCE AREA 415PV 423OT 421OT. SCALE: 1 INCH = 70 FEET

VEGETATION WILL

BE AUGMENTED

VEGETATION WILL

PROJECT OVERVIEW

- 1. THIS PROJECT COMPRISES APPROXIMATELY 26.56 ACRES OF SONORAN DESERT SCRUB. THE INVENTORY WAS CONDUCTED WITHIN THE PROPOSED LIMITS OF DISTURBANCE FOR THE PROJECT. THERE IS DISTURBANCE FROM PREVIOUS CLEARING INCLUDING A HOUSE, SEVERAL OUTBUILDINGS, AND THE EXISITING CHURCH DEVELOPMENT. THE SITE CONTAINS 3.04+/- ACRES OF E.S.L. CRITICAL RESOURCE AREA.
- 2. THE GROSS AREA OF DEVELOPMENT IS 26.56 ACRES. THE GROSS AREA TO BE GRADED IS 15.4+/- ACRES THE TOTAL UNDISTURBED AREA IS 3.04+/- ACRES
- 3. THE MOST PREVALENT TREES CONSISTS PRIMARILY OF NATIVE MESQUITE. PALO VERDE AND LIMITED IRONWOOD. THE UNDERSTORY CONSISTS PRIMARILY OF OF PRICKLY PEAR, CHOLLA, AND BARREL CACTUS. THE DOMINANT SHRUBS ARE: BRUSAGE, CAT CLAW ACACIA AND DESERT HACKBERRY.

GENERAL NOTES

- THE SITE RESOURCE INVENTORY (SRI) WAS CONDUCTED IN COMPLIANCE WITH TOWN OF ORO VALLEY CODE REQUIREMENTS (TOV ZONING SECTION 27.6.B.3). PLANTS MEETING THE CRITERIA FOR SIGNIFICANT VEGETATION ARE SHOWN ON THE SRI.
- 2. SIGNIFICANT VEGETATION AS DEFINED IN SECTION 27.6.B.3b) ON SITE: 2.1. NO STANDS OF SIGNIFICANT VEGETATION WERE NOTED. 2.2 NO CRESTED SAGUAROS WERE OBSERVED. ALL SAGUAROS INVENTORIED AS SIGNIFICANT QUALIFIED BY HEIGHT GREATER THAN 15' TALL AND MINIMUM OF TWO ARMS.

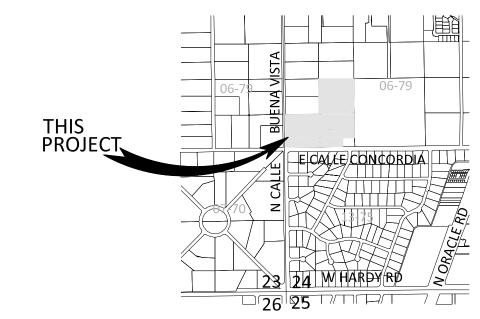
ORO VALLEY CRITERIA FOR SALVAGEABILITY

THE FOLLOWING CRITERIA FROM THE ORO VALLEY CODE WERE USED IN THE PLANT TABLES TO INDICATE PLANTS WHICH DO NOT MEET THE SALVAGE CRITERIA AND ARE RECOMMENDED AS NON-SALVAGEABLE (NS):

- A. PLANT HEALTH IS GOOD TO EXCELLENT WITH NO MAJOR INFESTATIONS OR APPARENT DISEASES. PLANT HEALTH IS DEFINED AS A PLANT IN A SOUND STATE, FREE FROM DISEASE AND EXPECTED TO SURVIVE FOR FIVE (5) OR
- B. THE PLANT IS A SIZE AND AGE TO SUGGEST A LIKELY CHANCE OF TRANSPLANT SURVIVAL.
- C. PLANT IS UNDAMAGED AND IS CONDUCIVE TO BOX OR SPADE TRANSPLANTING (UPRIGHT BRANCHING).
- D. SOILS CAN BE EXCAVATED AND ARE COHESIVE, AND APPEAR CAPABLE OF SUPPORTING A BOXED OR SPADED ROOT BALL
- E. SURROUNDING TOPOGRAPHY PERMITS ACCESS WITH THE APPROPRIATE EQUIPMENT NEEDED TO BOX OR SPADE AND REMOVED PLANT.
- F. ADJACENT PLANTS DO NOT POSE A LIKELY INTERFERENCE WITH ROOT SYSTEMS OR INTERFERE WITH PLANT REMOVAL
- G. THE OVERALL FORM AND CHARACTER IS NOT REPRESENTATIVE OF THE SPECIES AND IS NOT A VALUABLE SPECIMEN FOR LANDSCAPE OR HABITAT PURPOSES.

PROJECT PHASING

- 1. PHASE 1 OF THE PROJECT WLL CONSIST OF THE FIELD AND PARKING ON THE NORTHERN END OF THE PROJECT INCLUDING AN ACCESS ROAD THAT WILL BORDER THE EXISTING CHURCH PROPERT TO THE WEST OF THIS DEVELOPMENT SAGUAROS WILL BE TRANSPLANTED TO THE SOUTH OF THE EXISTING CHURCH PROPERTY. TREES WILL BE DIRECT SPADED INTO THE BUFFERYARD AREAS ON UNDEVELOPED PROPERTY WHERE GRADING HAS ALREADY OCCURED. THERE WILL BE ADDITIONAL AREA IF REQUIRED IN THE AREA TO THE SOUTHEAST OF PHASE 1 AS DESIGNATED ON PLAN.
- 2. PHASE 2 IS THE REMAINDER OF THE DEVELOPMENT. THE TRANSPLANTED TREE NURSERY WILL BE ON THE SOUTH OF THE SITE AS DESIGNATED ON PLAN.



IN THE SW $\frac{1}{4}$ OF THE NW $\frac{1}{4}$ OF SECTION 24, T. 12 S., R. 13 E., G.&S.R.M., CITY OF ORO VALLEY, PIMA COUNTY, ARIZONA

LOCATION MAP

LEGEND

- **EXISTING NATIVE PLANTS TO BE** TRANSPLANTED ON SITE (BLUE FLAGGING)
- EXISTING NATIVE PLANTS TO REMOVED FROM SITE (RED FLAGGING)
- **EXISTING NATIVE PLANTS TO** PRESERVED IN PLACE (WHITE FLAGGING)

SHEET INDEX

- SRI INVENTORY
- SRI TABLES

PROTECTIVE FENCING

- 1. THE LIMITS OF GRADING SHALL BE STAKED IN THE FIELD, IN ACCORDANCE WITH SECTION 27.6.B.7.c.ii. DISTURBANCE OUTSIDE THE APPROVED GRADING LIMITS SHALL NOT BE PERMITTED.
- 2. GRADING LIMIT FENCING SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO ANY SITE CLEARING OR GRADING OPERATIONS. THE FENCE WILL BE INSTALLED ALONG THE GRADING LIMITS SHOWN ON THE APPROVED SITE GRADING PLANS AND NATIVE PLANT PRESERVATION PLAN, AND SHALL BE CONTINUOUSLY MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS. SEE DETAIL 1 SHEET 2.

APPROVAL

PLANNING AND ZONING ADMINISTRATOR DATE

LANDSCAPE ARCHITECT

ENSIGN DESIGN LLC 801 E. PLACITA DE ARNOLDO TUCSON, ARIZONA 85718 (520) 490-7722 ATTN: YVETTE ENSIGN ensign@usa.net

OWNER/DEVELOPER

ORO VALLEY CHURCH OF THE NAZARENE

500 W CALLE CONCORDIA TUCSON, ARIZONA 85704 ATTN: Ms. JEANNIE HAYWARD PH: (520) 297-8297 X110 E: JEANNIE@OVCN.CHURCH SITE ADDRESS 500 W CALLE CONCORDIA 520.490.7722 801 E. PLACITA DE ARNOLDO TUCSON, AZ 85718 ORO VALLEY, ARIZONA 85704



A PORTION OF LOT 37 & LOT 48 OF "LINDA VISTA CITRUS TRACTS NO. 2", BOOK 6, PAGE 79 OF MAPS AND PLATS, IN THE NORTHWEST $\frac{1}{4}$ OF SECTION 24T. 12 S., R. 13 E., G.&S.R.M., PIMA COUNTY,

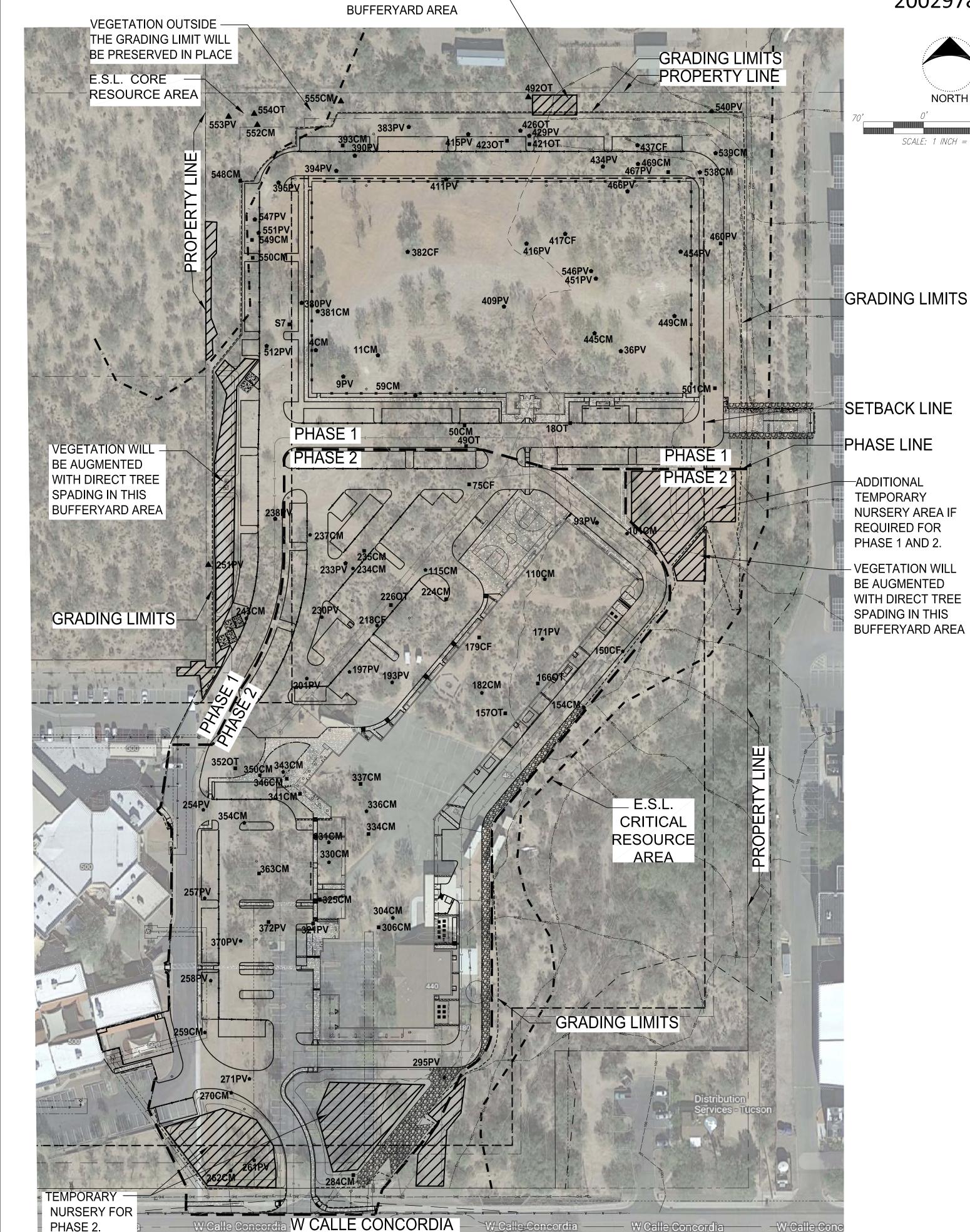
REVISION DESCRIPTION

SITE RESOURCE INVENTORY ORO VALLEY CHURCH OF THE NAZARENE

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O H



PHASE 1 SIGNIFICANT VEGETATION

Cercio	lium mi	crophy	llum, Foot	thill Palo Verd	e	
TAG#	CAL.	HT.	VIABILITY (H,M,L)			OV CRITERIA for REMOVAL
4	12	18	L	RFS	TD,DW,NS	Α
11	15	15	М	RFS	BC,TD,NS	A,B,C,G
50	16	13	М	TOS		
59	24	14	L	RFS	DW,BL,TD,NS	A,B,C
243	14	16	М	TOS		
381	12	16	L	RFS	DY,TD,NS	A,B
393	12	18	М	TOS		
445	12	14	М	TOS		
449	30	16	L	RFS	NS,SZ,TM	В
469	12	17	М	TOS	100000000000000000000000000000000000000	
471	12	15	L	PIP		
501	12	14	М	TOS		
538	12	12	М	TOS		
539	18	12	L	RFS	OT,NS	A,B,C
548	16	15	М	TOS	8	2 100
549	15	13	М	TOS		
550	18	13		TOS		
552	24	16		PIP		
555	16	14		PIP		

Proso	pis velu	tina, Ve	elvet Mesq	uite		
TAG#	CAL.	HT.	VIABILITY (H,M,L)	RECOMMEND (RFS or TOS)	NOTES	OV CRITERIA for REMOVAL
9	36	15	L	RFS	DW,TD,NS	B,C
36	30	15	L	RFS	NS, SZ,OT,TM	A,B,C
238	16	15	L	RFS	DW,BL,NS	A,B,C
251	16	13		PIP		
380	24	25	L	RFS	LE,NS,SZ	A,B
383	18	25	L	RFS	DY,OT,SZ,NS	A,B,C,G
394	12	20	L	RFS	DW,SZ,NS	A
395	12	20	L	RFS	DY,SZ,NS	A,B
390	36	16	L	RFS	LB,NS,SZ	A,B
409	14	14	L	RFS	BL,TD,NS	A,G
411	30	17	L	RFS	LB,NS,SZ	A,B
415	12	13	L	RFS	DW,TD,DY,NS	A,G
416	24	18	L	RFS	LE,NS,SZ	A,B,C
429	16	20	M	TOS		
431	30	15		PIP		
434	12	13	L	RFS	BL,DW,NS,SZ	A
451	30	16	L	PIP	NS,RD	A,B
454	30	18	L	RFS	LB,DW, NS	A,B
460	12	15	M	TOS		
466	19	15	L	RFS	BL,DW,NS,RT	A,B
467	14	14	L	RFS	DW,TD,BL,NS	A,B,C
512	18	15	L	RFS	LB, NS	G
546	16	13	L	RFS	LB,TM,OT,NS	A,B,C
547	13	13	L	RFS	LB,OT,NS	A,B,C
551	12	14	L	RFS	LB,OT,NS	A,B,C
553	14	13		PIP		

Cercid	Cercidium floridum, Blue Palo Verde									
TAG#	CAL.	HT.	VIABILITY	RECOMMEND	NOTES	OV CRITERIA				
			(H,M,L)	(RFS or TOS)		for REMOVAL				
382	18	35	L	RFS	BL,NS,,PD,SZ	A,B				
417	18	16	L	RFS	DY,NS	A,B,C				
437	20	16	L	RFS	DY,NS	A,C				

Olneya tesota, Ironwood									
TAG#	CAL.	HT.	VIABILITY (H,M,L)	RECOMMEND (RFS or TOS)	NOTES	OV CRITERIA for REMOVAL			
18	12	14	М	TOS					
49	12	15	М	TOS					
421	24	19	М	TOS					
423	12	19	M	TOS					
426	18	15	L	RFS	DW,BL,NS	A,B			
492	18	16		PIP					
554	12	12		PIP					

Carnegiea gigantea, Saguaro								
TAG#	NO. ARMS	HT.	VIABILITY (HML)	NOTES	RECOMMEND (RFS or TOS)			
7	5	18	М		TOS			

PHASE 2 SIGNIFICANT VEGETATION

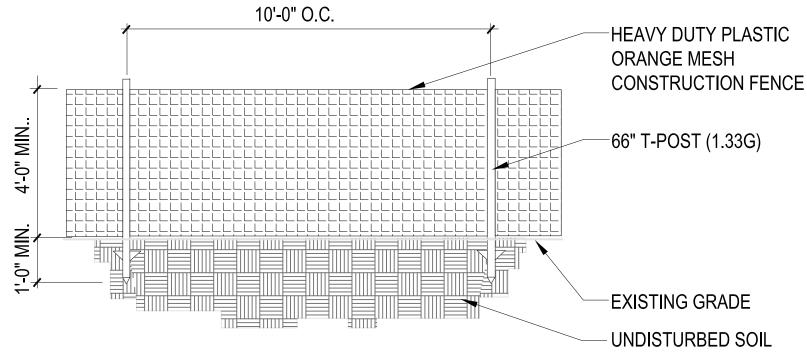
Cercio	lium mi	crophy	llum, Foot	hill Palo Verd	е	
TAG#	CAL.	HT.	VIABILITY (H,M,L)	RECOMMEND (RFS or TOS)	NOTES	OV CRITERIA for REMOVAL
101	24	15	М	TOS		
110	12	14	М	TOS		
115	20	15	L	RFS	TM,NS,SZ	A,C,G
154	12	12	L	RFS	DY,NS	A,B
182	22	13	L	RFS	BL,OT,NS	A,B,C
224	16	15	М	TOS	Weight 250	W 88
234	14	13	М	TOS		
235	16	15	М	TOS		
237	12	12	L	RFS	DY,PROX,NS	A,F
259	16	13	L	RFS	DW,LB,NS	A,B,C
262	20	16	L	RFS	TM,OT,NS	A,B,C
270	17	13	L	RFS	OT,TM,NS	A,B,C
284	18	18	М	TOS		
304	18	15	L	RFS	TM,SZ,NS	В
306	16	15	М	TOS	50 P1000	
325	14	13	М	TOS		
330	12	15	L	TOS		
331	14	15	L	TOS		
334	12	15	М	TOS		
336	16	18	М	TOS		
337	12	14	М	TOS		
341	12	15	М	TOS		
343	18	15	L	RFS	DW,NS,RD	A,C
346	14	15	М	TOS	81 50	10
350	16	15	L	RFS	TD,NS,SZ	A,B,C
354	14	14		RFS	DY,TD,NS	A,B,C
363	12	13	М	TOS		

Proso	Prosopis velutina, Velvet Mesquite									
TAG#	CAL.	HT.	VIABILITY (H,M,L)	RECOMMEND (RFS or TOS)	NOTES	OV CRITERIA for REMOVAL				
93	16	13	L	RFS	OT,SZ,NS	A,B				
171	20	13	L	RFS	OT,SZ,NS	A,B				
193	24	13	L	RFS	MT,TM,NS	A,B,C				
197	14	12	L	RFS	LB,DW,NS	A,B,C				
201	20	12	L	RFS	OT,SZ,NS	A,B,C				
230	16	12	L	RFS	TM,PROX,NS	A,B,C				
233	30	12	L	RFS	TM,SZ,NS	A,B,C				
238	12	13	L	RFS	TD,NS	A,B,C				
254	18	12	L	RFS	TD,NS	A,G				
257	18	12	L	RFS	PD,NS	A,B,C				
258	24	14	L	RFS	RD,NS	A,B,C				
261	16	15	L	RFS	MT,BL,NS	A,C,G				
271	24	18	M	TOS						
295	15	14	L	RFS	OT,TM,NS	A,B,C				
321	12	15	М	TOS	BL,DW,DY,NS	A,B,C				
370	16	13	L	RFS	OT,NS	A,B				
372	13	15	L	RFS	MT,NS	Α				

Cercidium floridum, Blue Palo Verde									
TAG#	CAL.	HT.	VIABILITY (H,M,L)	RECOMMEND (RFS or TOS)	NOTES	OV CRITERIA for REMOVAL			
75	12	14	L	RFS	DW,NS,RD	A,B			
150	18	15	L	RFS	SZ,TM,NS	С			
179	12	15	M	TOS					
218	12	15	L	RFS	DW,NS	Α			
218 237	12	15	L	RFS	DW,BL,NS	A,B,C			

Olney	Olneya tesota, Ironwood									
TAG#	CAL.	HT.	VIABILITY (H,M,L)	RECOMMEND (RFS or TOS)	NOTES	OV CRITERIA for REMOVAL				
157	12	15	М	TOS						
166	12	15	М	TOS						
226	12	15	М	TOS						
352	12	15	М	TOS						

NOTE: E.S.O.S. AREAS SHALL BE FENCED PER THIS DETAIL. VEGETATION OUTSIDE OF THE GRADING LIMITS THAT IS AT RISK OF DISTURBANCE BY CONSTRUCTION SHALL BE FENCED PER THIS DETAIL



PROTECTIVE FENCE FOR PLANTS PRESERVED IN PLACE & ALONG GRADING LIMITS NTS

ABBREVIATIONS

The following abbreviations were used in the plant tables:

- BL Broken Limbs; Tree has significant broken branches DW - Dead wood; Tree has significant die back or dead/broken limbs
- DY Dying; Tree is dying
- LB Low Branched: Tree has many low branches that will need to be removed for salvage and salvage removal will destroy structure of tree
- LE Leaning; Tree is leaning to the point where salvage will be difficult
- MG Marginal salvage; used during field inventory to identify less desirable salvage candidates to be used if needed to meet % requirements
- MT Mistletoe: Tree has significant mistletoe infestation
- NS Not Salvageable: These are trees not included in the calculations for the site because they are not in a salvageable condition, per Section 27.6.4.C.iii of the Oro Valley Code
- OT Tree has an old trunk indicating dieback
- PD Pruning damage
- PROX Other vegetation in the vicinity will make salvage difficult
- RD Rodent Damage; Rodents have damaged the base
- SR Surface Roots are evident making salvage difficult
- TD Trunk Damage
- TM Too multi Tree has multiple trunks coming out of the ground that will make moving the tree difficult without significant damage
- SZ size of the tree, either spread caliper of height is not conducive to salvage.
- RFS Remove from Site
- TOS Transplant on Site
- PIP Preserved in Place

SIGNIFICANT VEGETATION MITIGATION TABLE PHASE 1

Required mitigation is per table 27-1 and % of Significant Vegetation Disturbance. 54 Significant Trees and one Significant Saguaro were inventoried; 30 trees (all non-viable) are proposed for removal. Percentage of Significant Vegetaion to be removed from site (measured as the square footage of the ground cover area) is 56%.

BOTANICAL NAME	COMMON NAME	QTY REMOVED	QTY VIABLE	MITIGATION RATIO		REPLACEMENT TREES (48" BOX) 30%	UNDERSTORY PLANTS REQUIRED
CERCIDIUM FLORIDUM	BLUE PALO VERDE	3	0		0	0	0
CERCIDIUM MICROPHYLLUM	FOOTHILLS PALO VERDE	5	1		1	1	10
OLNEYA TESOTA	OLNEYA TESOTA	1	0	2:1	0	0	0
PROSOPIS VELUTINA	VELVET MESQUITE	20	2		2	2	20
CARNEGIEA GIGANTEA	SAGUARO	0	1				
TOTAL ALL SPECIES		29	4		3	3	30

SIGNIFICANT VEGETATION MITIGATION TABLE PHASE 2

Required mitigation is per table 27-1 and % of Significant Vegetation Disturbance. 53 Significant Trees were inventoried; 30 (all non-viable) are proposed for removal. Percentage of Significant Vegetaion to be removed from site (measured as the square footage of the ground cover area) is 57%.

BOTANICAL NAME	COMMON NAME	QTY REMOVED	QTY VIABLE	MITIGATION RATIO	REPLACEMENT TREES (36"BOX)	REPLACEMENT TREES (48" BOX)	UNDERSTORY PLANTS REQUIRED
CERCIDIUM FLORIDUM	BLUE PALO VERDE	4	1		1	1	10
CERCIDIUM MICROPHYLLUM	FOOTHILLS PALO VERDE	11	1		1	1	10
OLNEYA TESOTA	OLNEYA TESOTA	0	0	2:1	0	0	0
PROSOPIS VELUTINA	VELVET MESQUITE	15	0		0	0	0
CARNEGIEA GIGANTEA	SAGUARO	0					
TOTAL ALL SPECIES		30	5		2	2	30

NATIVE PLANT SUMMARY TABLE - SIGNIFICANT VEGETATION PHASE 1

BOTANICAL NAME	COMMON NAME	TRANSPLANT (BLUE FLAGGING)	REMOVE FROM SITE (RED FLAGGING)	PRESERVED IN PLACE (WHITE FLAGGING)	TOTAL PER SPECIES
CERCIDIUM FLORIDUM	BLUE PALO VERDE	0	3	0	4
CERCIDIUM MICROPHYLLUM	FOOTHILLS PALO VERDE	10	6	3	19
OLNEYA TESOTA	OLNEYA TESOTA	4	1	2	7
PROSOPIS VELUTINA	VELVET MESQUITE	2	20	2	24
CARNEGIEA GIGANTEA	SAGUARO	1			1
TOTAL ALL SPECIES		17	30	7	55

NATIVE PLANT SUMMARY TABLE - SIGNIFICANT VEGETATION PHASE 2

BOTANICAL NAME	COMMON NAME	TRANSPLANT (BLUE FLAGGING)	REMOVE FROM SITE (RED FLAGGING)	PRESERVED IN PLACE (WHITE FLAGGING)	TOTAL PER SPECIES
CERCIDIUM FLORIDUM	BLUE PALO VERDE	1	4		5
CERCIDIUM MICROPHYLLUM	FOOTHILLS PALO VERDE	16	11		27
OLNEYA TESOTA	OLNEYA TESOTA	4			4
PROSOPIS VELUTINA	VELVET MESQUITE	2	15		17
CARNEGIEA GIGANTEA	SAGUARO				
TOTAL ALL SPECIES		23	30		53

MITIGATION OF SIGNIFICANT VEGETATION

- 1. MITIGATION OF SIGNIFICANT VEGETATION SHALL BE IN ACCORDANCE WITH TOV ZONING CODE SECTION 27.6.B.4.j.
- 2. AMOUNT OF SIGNIFICANT VEGETATION ON SITE IS APPROXIMATELY: PHASE 1 = 26,460 SF
- PHASE 2 = 25,970 SF 3. AMOUNT OF SIGNIFICANT VEGETATION BEING REMOVED: PHASE 1 = 14,700 SF
- PHASE 2 = 14,700 SF
- 4. TOTAL PERCENTAGE DISTURBED: PHASE 1 = 56%
 - PHASE 2 = 57%

(ASSUMES AVERAGE 25' CANOPY DIAMETER FOR CERCIDIUM MICROPHYLLUM AND CERCIDIUM FLORIDA, OLNEYA TESOTA AND PROPOSOPIS VELUTINA)



DATE: 2/28/22 **SCALE:** AS NOTED

A PORTION OF LOT 37 & LOT 48 OF "LINDA VISTA CITRUS TRACTS NO. 2", BOOK 6, PAGE 79 OF MAPS AND PLATS, IN THE NORTHWEST $\frac{1}{4}$ OF SECTION 24T. 12 S., R. 13 E., G.&S.R.M., PIMA COUNTY,

YVETTE E.

REVISION DESCRIPTION

ORO VALLEY CHURCH OF THE NAZARENE 500 W CALLE CONCORDIA TUCSON, ARIZONA 85704 ATTN: Ms. JEANNIE HAYWARD PH: (520) 297-8297 X110 E: JEANNIE@OVCN.CHURCH SITE ADDRESS 500 W CALLE CONCORDIA 520.490.7722 801 E. PLACITA DE ARNOLDO TUCSON, AZ 85718

ORO VALLEY, ARIZONA 85704

LANDSCAPE ARCHITECT

801 E. PLACITA DE ARNOLDO

OWNER/DEVELOPER

TUCSON, ARIZONA 85718

ATTN: YVETTE ENSIGN

ENSIGN DESIGN LLC

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SITE RESOURCE INVENTORY ORO VALLEY CHURCH OF THE NAZARENE

OV200297 REF: 0V1602