

# FINAL LANDSCAPE & IRRIGATION PLAN RESIDENCES AT MORNING VISTA

**2102029**  
**GRADING PERMIT**  
**#2501679**

# LANDSCAPE NOTES

1. Landscape shall conform to Oro Valley Landscape Code.
2. Mitigation of surveyed plants in the Native Plant Preservation Plan will be incorporated into the landscape design.
3. Front yard landscape areas shall be depressed 6" for water harvest.
4. All landscape planting areas (not including hydroseeded areas) are to have 2" of decomposed granite or screened landscape rock as the groundplane treatment. Color to be desert tan.
5. Water harvest basin groundplane treatment to be raked earth in the bottom and decomposed granite or screened landscape rock on the side slopes and top areas.
6. All 3:1 slopes will be hydroseeded with approved mix (see sheet # L-2 for hydroseed mix).
7. The property is 3.51 acre (152,761 SF), is zoned PAD (Rancho Vistoso) and is currently free of any development.
8. Total graded area: 3.10 acres (135,427 SF).
9. Total undisturbed area: 0.40 acres (17,337 SF).
10. Required Open Space: 1.05 acres (45,895 SF).
11. Total acres of Natural Open Space and Landscape area: 0.97 acres (42,283 SF).
12. Total Recreational area: 0.10 acres (4,227 SF).
13. Total Open Space: 1.06 acres (46,510 SF) or 30.4% of the site.
14. Landscaped buffer yards are appropriately labeled per OVZCR Table 27.7 and are shown on plan. Information as follows:

follows:

(1) BUFFERYARD #1 (Type "B")  
300 LF x 25' Width requires:  
12 Trees, 21 Shrubs or Cacti, 36 Accents or Cacti

(2) BUFFERYARD #2 (Type "A")  
271 LF x 15' Width requires:  
11 Trees, 11 Shrubs or Cacti, 22 Accents or Cacti

(3) BUFFERYARD #3 (Type "A")  
200 LF x 15' Width requires:  
8 Trees, 8 Shrubs or Cacti, 16 Accents or Cacti

15. Perimeter Setbacks:  
Front Provided: 25'  
Sides Provided: 15'

16. There are no applicable General Plan, rezoning, conditional use permit (CUP, or annexation conditions and associated case number impacting the project, including any applicable Pima County case numbers.

17. There are no zoning variances or modification that are applicable to the project, such as Board of Adjustment variance or interpretation.

18. Assurances for landscaping and re-vegetation bonds must be posted prior to issuance of grading permits. A landscape bond in the amount of 10% of the original landscape bond shall remain in place for a period of one year from the complete installation of landscape materials and any replacement materials.

19. Property owner shall maintain bufferyard plantings to ensure unobstructed visibility to motorists. All shrubs, accents, and groundcovers shall not exceed thirty (30") inches in height within sight visibility triangles. Trees within site visibility triangles will be maintained to ensure that branches/foliage is not below a height of six (6') feet and the diameter should not exceed 1-foot when fully mature.

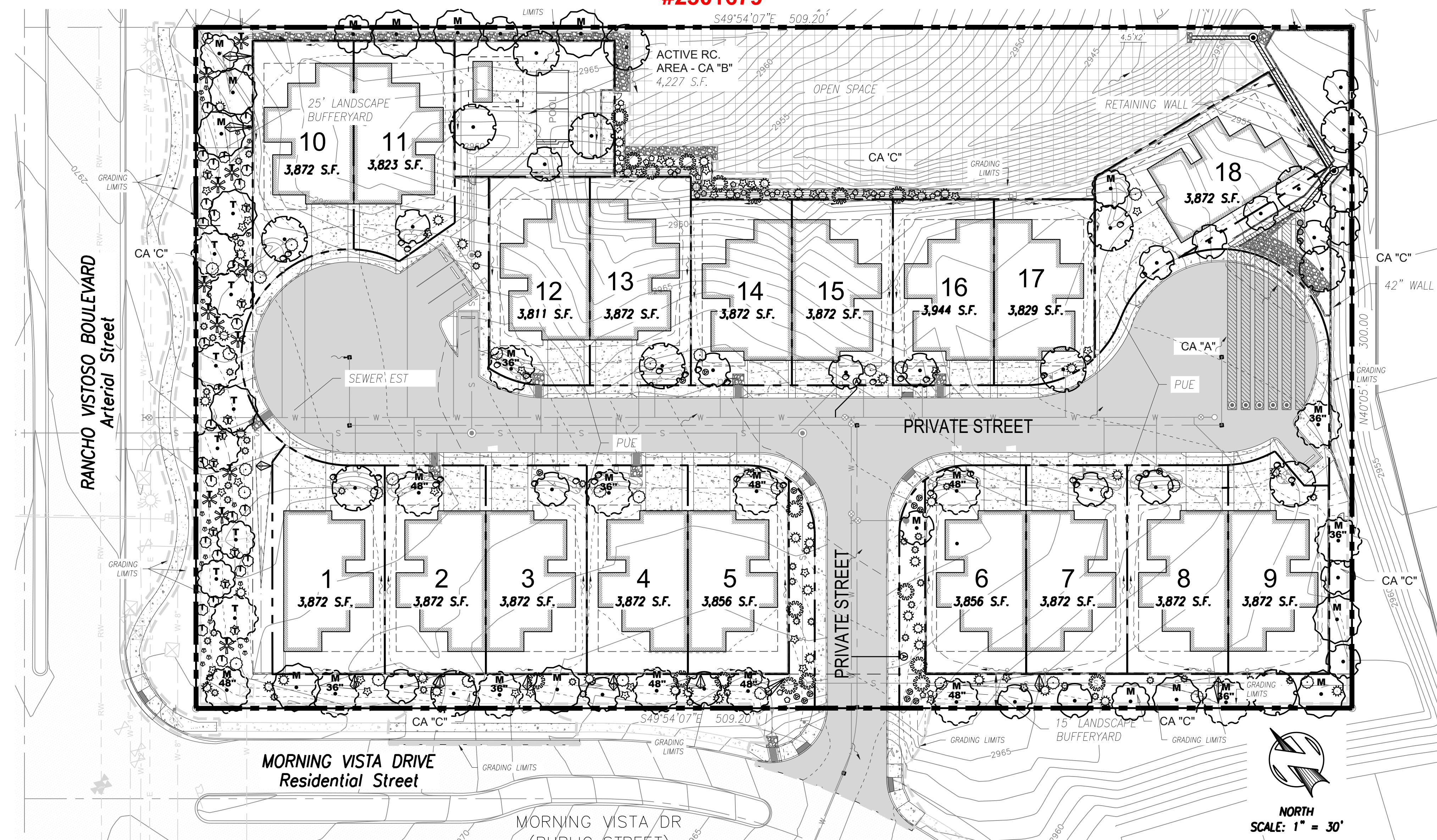
20. In the event of abandonment of the site after grading/disturbance of natural areas, disturbed areas shall be re-vegetated with a non-irrigated hydroseed mix from OVZCR Addendum D: Approved revegetation seed mix.

21. All plant material shall meet the minimum standards contained in the current editions of the Arizona Nursery Association's Growers Committee Recommended Tree Specifications and the American Association of Nurserymen as to size, condition, and appearance.

22. Property owner is responsible for maintaining the temporary irrigation system as long as necessary in order to transition plants over to natural sources. Any plant material that die in transition, for any reason, shall be replaced in accordance with Sec. 27.6.E.4, Maintenance.

23. Any spaded or boxed tree transplanted on site that dies due to neglect or lack of maintenance shall be replaced with the same size and species of the original salvaged tree, as required by the salvage plan.

24. The limits of grading shall be staked in the field, in accordance with Section 27.6.B.7.c.ii of the Zoning Code. Disturbance outside the approved grading limits shall not be permitted.



25. The developer shall replace removed or damaged plant materials with like size and species, and shall maintain and guarantee (in accordance with Section 26.6.C and I) the replacement of plant materials for a period of three (3) years.
26. No salvage of plants regulated by the Endangered Species Act and/or the Arizona Native Plant Law may occur without the issuance of the appropriate permit by the State Department of Agriculture.
27. Landscape materials shall not obstruct sight distances or vehicle turning movements.
28. Landscaped areas that are susceptible to damage by pedestrian or auto traffic shall be protected by appropriate curbs, tree guards or other devices.
29. Landscape shall be designed to minimize sediment, sand and gravel being carried into the streets from storm water or other runoff.
30. Landscape plan enables adequate plant spacing to ensure survivability at plant maturity.
31. Deep rooted vegetation and trees shall not be planted closer than 7.5' from a public water line. Exceptions for alternative design solutions such as root barriers shall be considered on a case by case basis.
32. Water harvest basin groundplane treatment to be raked earth in the bottom and decomposed granite or screened landscape rock on the side slopes and top areas.
33. Landscape to conform to Oro Valley Landscape Code.
34. All 3:1 slopes will be hydroseeded with approved mix (see sheet #L-2 for hydroseed mix).
35. Property owners, lessees, and occupants shall maintain required landscape, irrigation, buffering, screening and rainwater harvesting system improvements per the approved plan
36. Property owner is responsible for maintaining the temporary irrigation system as long as necessary in order to transition plants over to natural sources. Irrigation shall be reduced three years after issuance of the first certificate of occupancy.
36. Metered water use for landscape irrigation shall be reduced by fifty percent, five years from the date of the issuance of the certificate of occupancy.

## OWNFR/DFVFI OPFR

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## CIVIL ENGINEER

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## LANDSCAPE ARCHITECT

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4574 North First Avenue #100 Tucson, AZ 85718  
Phone 520.206.0591 • Fax 520.882.3006

A detailed site plan map showing the location of the Project Site. The map includes several labeled roads and areas:

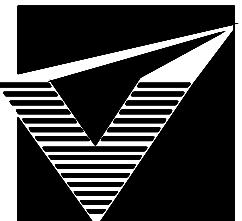
- PROJECT SITE:** Indicated by a black rectangle with an arrow pointing to it from the text label.
- Streets:** N SUN CITY BLD, E DEL WEBB BLD, E RANCHO VISTOSO BLD, E INNOVATION PARK RD, N ORACLE RD, E RANCHO VISTOSO BLD, and MOORE RD.
- Landmarks:** N SUN CITY BLD, E DEL WEBB BLD, E RANCHO VISTOSO BLD, E INNOVATION PARK RD, N ORACLE RD, and MOORE RD.

LOCATION MAP  
INTERSECTION OF RANCHO VISTOSO BLVD. AND  
URNING VISTA DR., TOWN OF ORO VALLEY, PIMA

SHEETS	
LANDSCAPE COVER	L-1
LANDSCAPE PLAN	L-2
LANDSCAPE DETAILS	L-3
IRRIGATION PLAN	L-4
IRRIGATION DETAILS & NOTES	L-5
WATER HARVEST PLAN	L-6

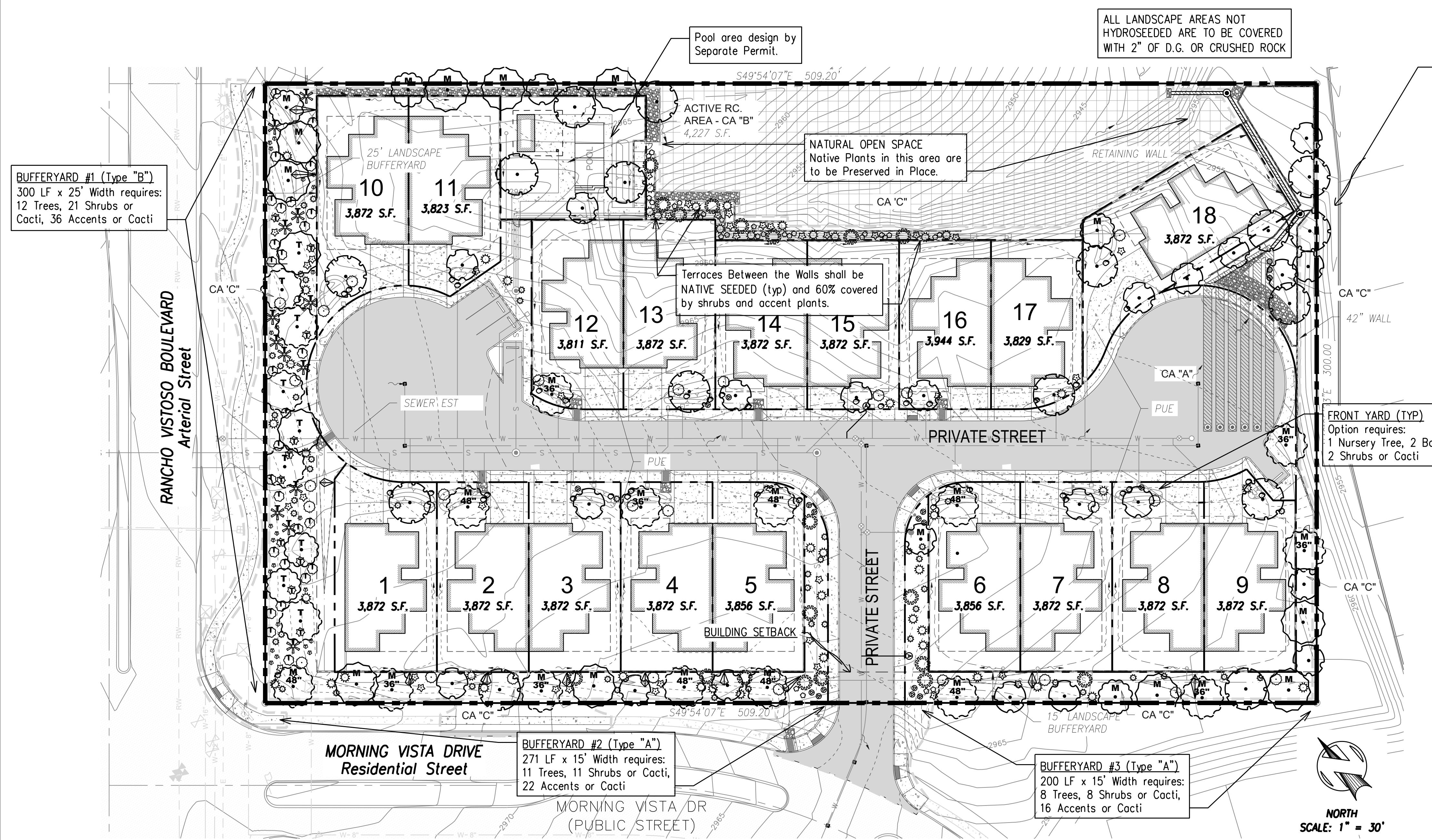
<u>Approval Block:</u>	<p>Digitally signed by Bayer Vella DN: C=US, E=bvella@orovalleyaz.gov, O=Town of Oro Valley, OU=Planning Division, CN=Bayer Vella Date: 2023.09.26 14:05:11-07'00'</p>
 The logo for Bayer Vella, featuring the name in a large, bold, sans-serif font. A blue vertical bar is positioned to the left of the letter 'B'.	<p>Bayer Vella</p>
Planning & Zoning Administration	Planning & Zoning Administration

2102029  
Reference Case 2003075 Pre-Application

1	8-29-22	1ST SUBMITTAL	
2	2-17-23	2ND SUBMITTAL - REVISIONS FROM 1ST SUBMITTAL COMMENTS	
3	5-31-23	3RD SUBMITTAL - ADD WATER HARVESTING	
4	8-15-23	#4 SUBMITTAL - WATER HARVEST REVISIONS	
Rev #	Date	Description	
		<b>GRENIER</b> <b>ENGINEERING, INC.</b> <i>Structural &amp; Civil Engineering Consultant</i>	
<b>6300 E. El Dorado Plaza Suite A120, Tucson, Arizona 85715</b> <b>Phone: 520.326.7082 ~ Fax: 520.326.7508</b>		Job Number: NE 21024 Designed By: TC/RA Drawn By: RA Checked By: KC Date: MAY. 2023 Scale Vt: N/A Hz:	
Sheet Name <b>LANDSCAPE PLAN</b>		Sheet Number: <b>L-1</b>	
Project <b>RESIDENCES AT MORNING VISTA</b>		Sheet 1 of 6	

# LANDSCAPE PLAN

## 2102029

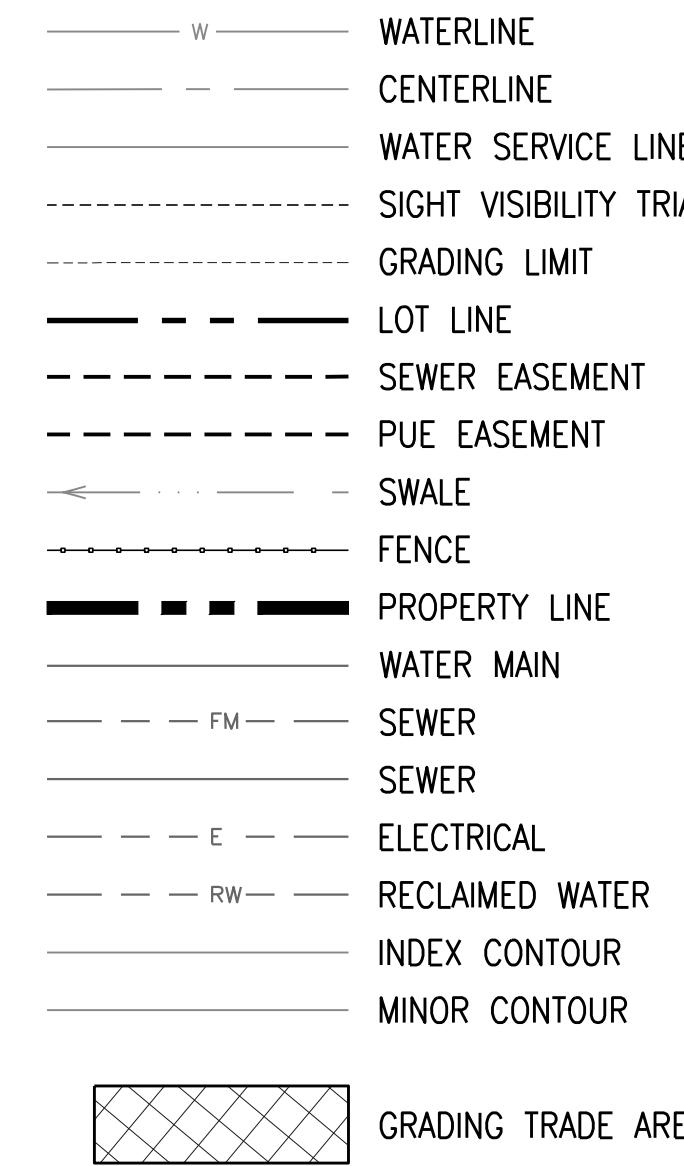


## NATIVE SEED MIX

Category	Botanical Name	Common Name	Pounds PLS per Acre
Shrubs			
Small Perennials	<i>Atriplex canescens</i>	Four Wing Saltbush	1.0
	<i>Calliandra eriophylla</i>	Fairy Duster	2.0
	<i>Encelia farinosa</i>	Brittlebush	3.0
	<i>Larrea tridentata</i>	Creosote Bush	1.0
Perennial Grasses			
Annual Herbs and Grasses	<i>Baileya multiradiata</i>	Desert Marigold	1.5
	<i>Cassia covesii</i>	Desert Senna	1.5
	<i>Glandularia gooddingii</i>	Goodding's Verbena	1.0
	<i>Sphaeralcea ambigua</i>	Globe Mallow	1.5
TOTAL			20.5

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## LEGENDA

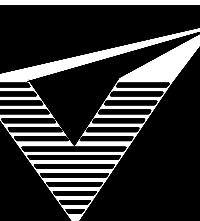


GRADING TRADE ARE

## LANDSCAPE WATER PL



ovak Environmental, Inc.  
74 North First Avenue #100 Tucson, AZ 85718  
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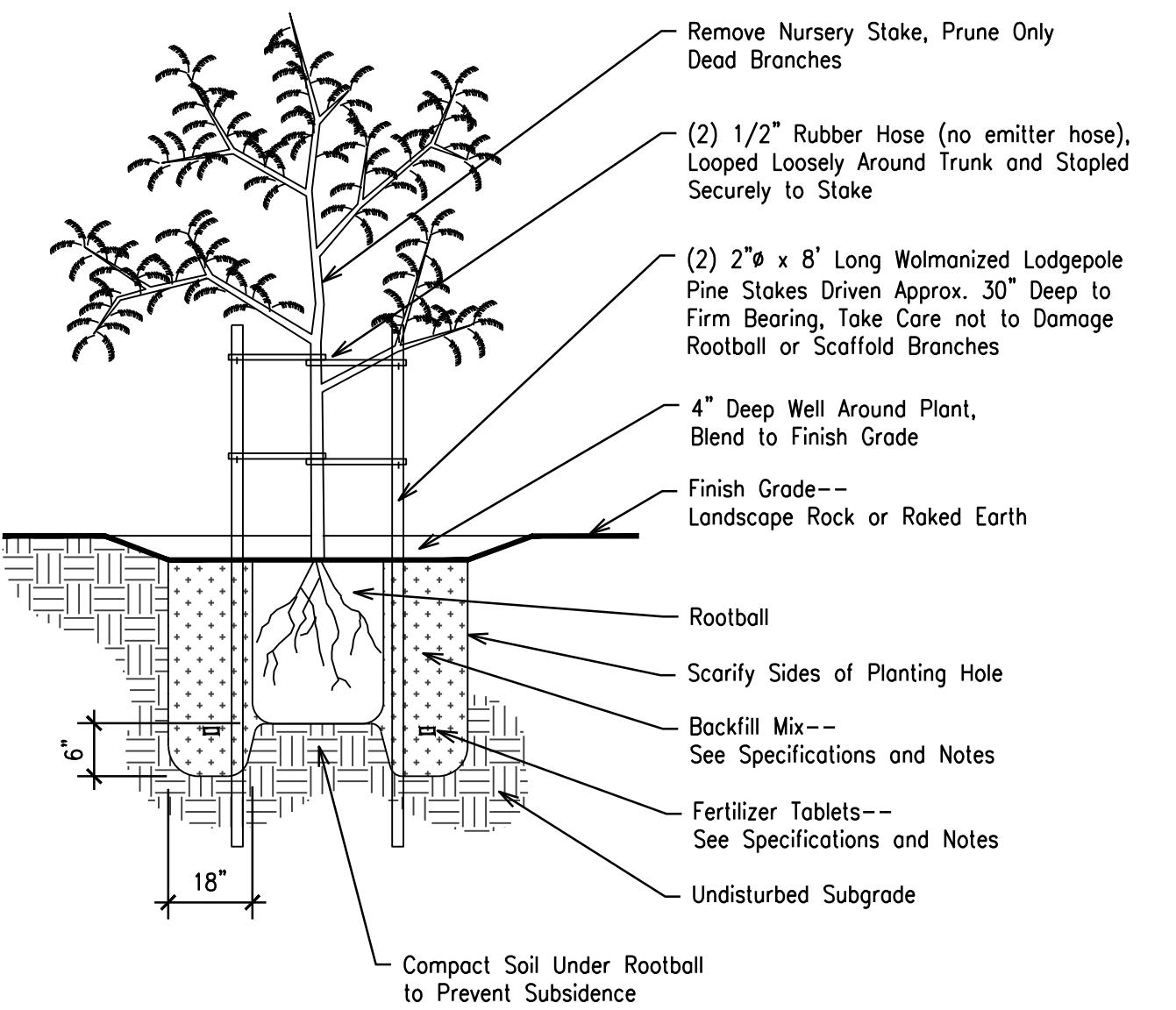
102029		Reference Case 2003075 Pre-Application	
Rev #	Date	Description	
		 <p><b>GRENIER</b> <b>ENGINEERING, INC.</b> Structural &amp; Civil Engineering Consultant</p>	
<p>6300 E. El Dorado Plaza Suite A120, Tucson, Arizona 85715  <b>Phone:</b> 520.326.7082 ~ <b>Fax:</b> 520.326.7508</p> <p>Sheet Name: <b>LANDSCAPE PLAN</b></p> <p>Project: <b>RESIDENCES AT MORNING VISTA</b></p>		 <p>Job Number: <b> </b></p> <p>Designed By: <b> </b></p> <p>Drawn By: <b> </b></p> <p>Checked By: <b> </b></p> <p>Date: <b> </b></p> <p>Scale: <b>N/A</b></p> <p>Sheet Number: <b>L-2</b></p> <p>Sheet <b>2</b> of <b>1</b></p>	

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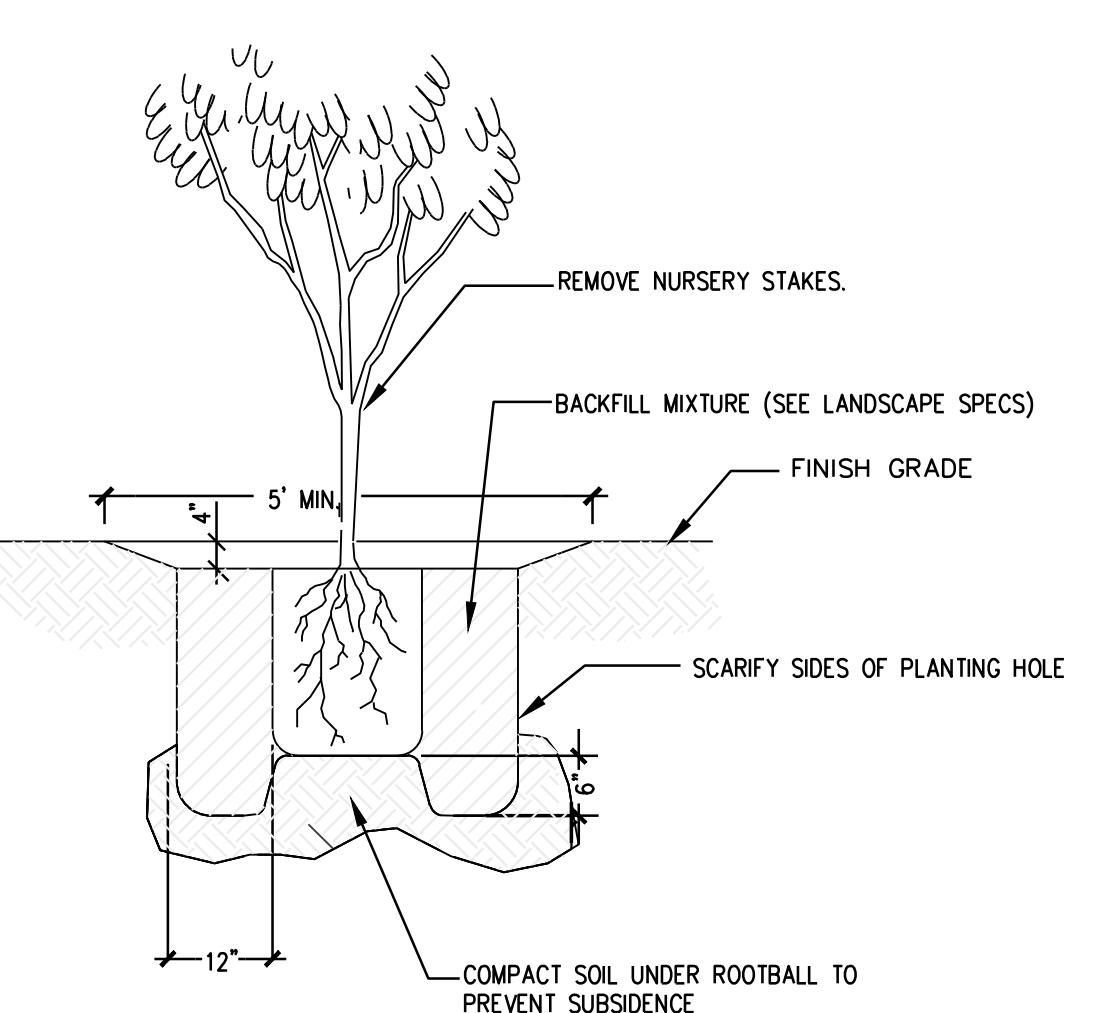
**GRADING PERMIT #2501679**

# LANDSCAPE DETAILS

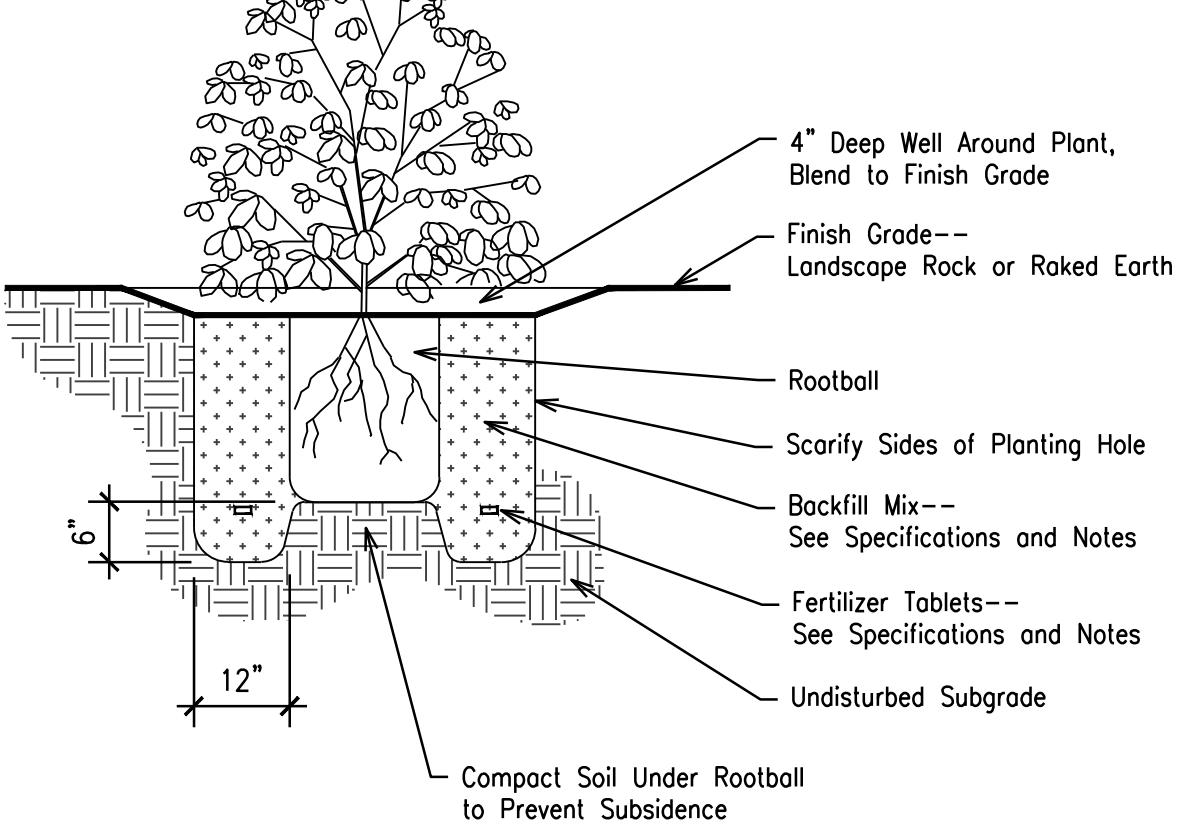
## 2102029



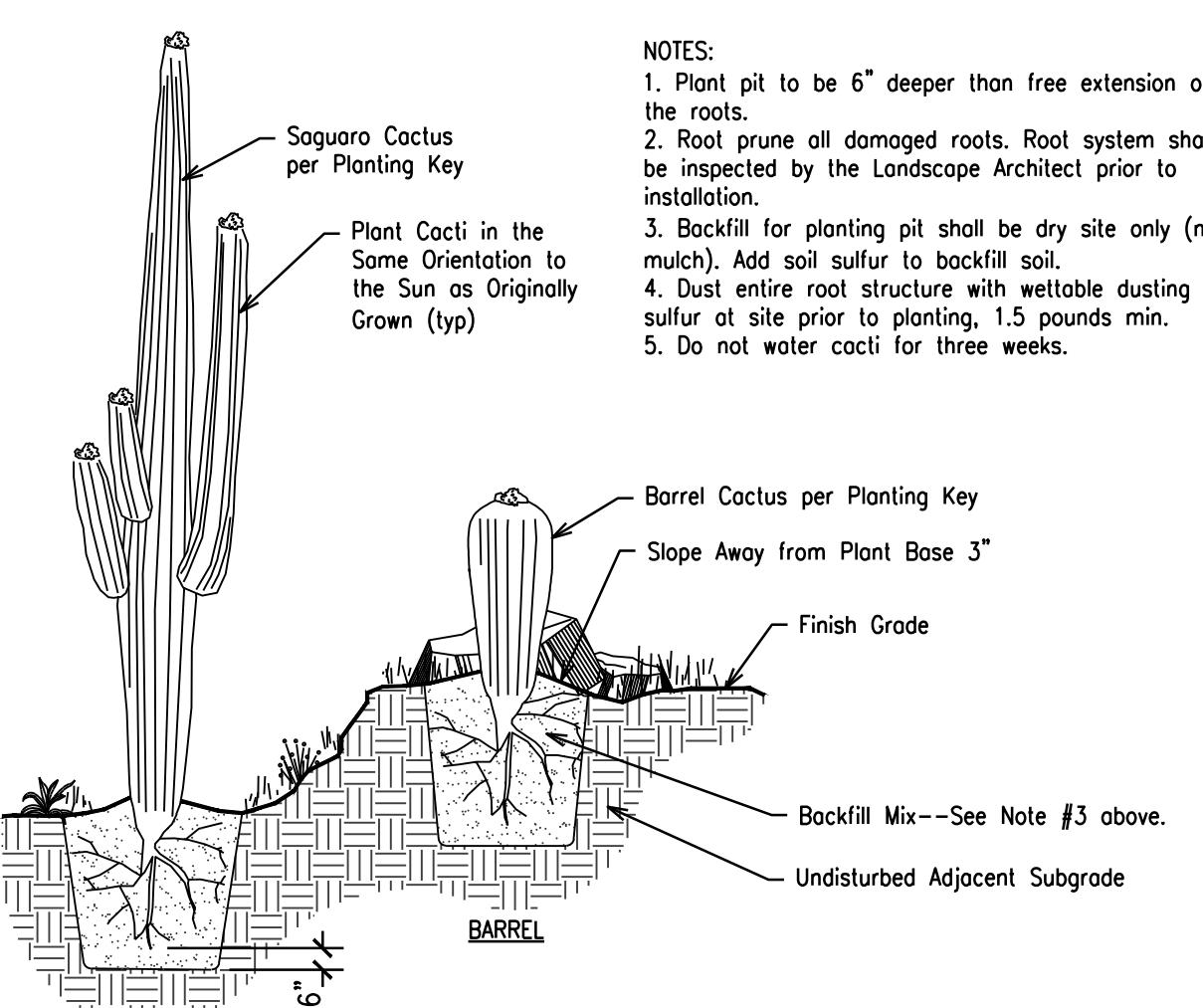
1 TREE PLANTING & STAKING  
Not to Scale



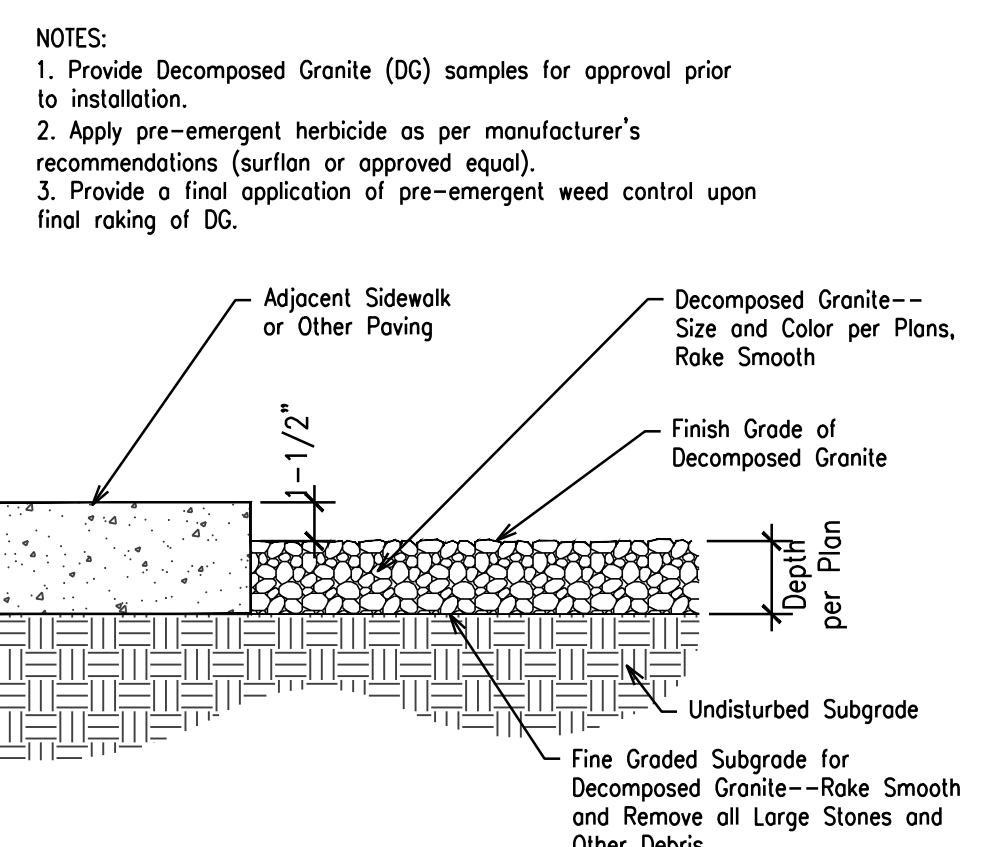
2 MULTI-TRUNK TREE PLANTING  
NTS



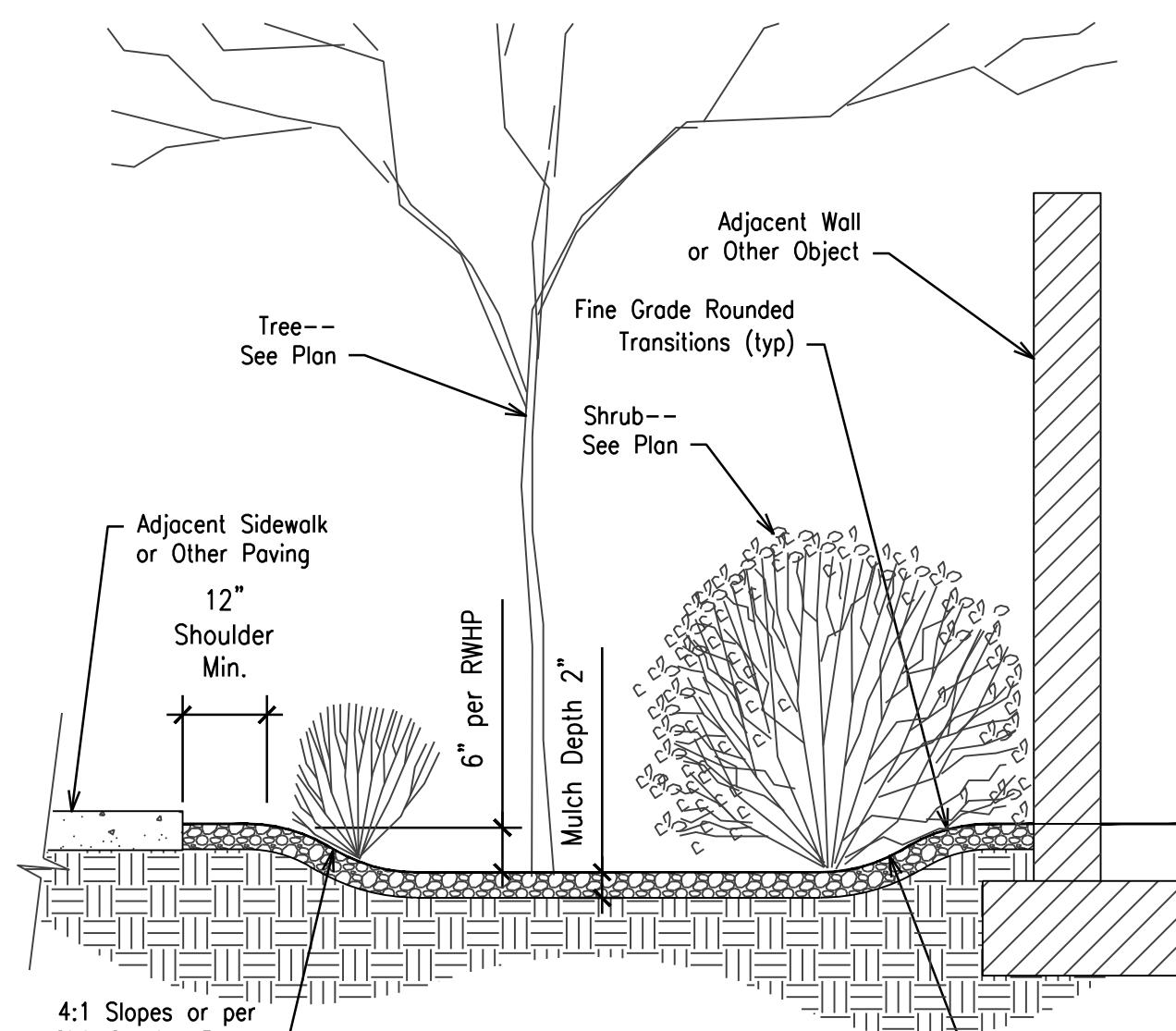
3 SHRUB PLANTING  
Not to Scale



4 CACTI PLANTING  
Not to Scale



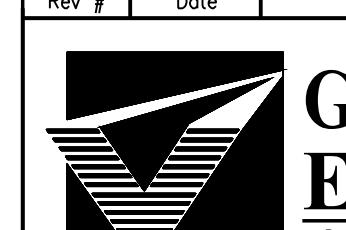
5 DECOMPOSED GRANITE  
Not to Scale

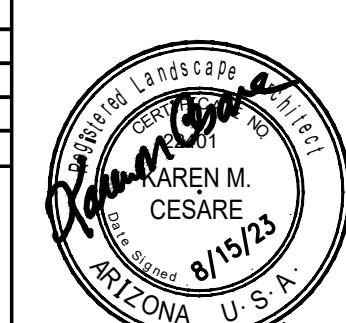


6 WATER HARVEST BASIN SCHEMATIC  
Not to Scale

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Job Number: NE 21024  
Designed By: TC/SS  
Drawn By: TC/SS/RA  
Sheet Name: LANDSCAPE DETAILS  
Checked By: KC  
Date: AUG. 2022  
Scale: Vt: N/A Hz: Sheet Number:

Project: RESIDENCES AT MORNING VISTA  
Sheet 3 of 6



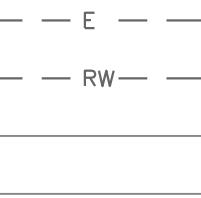
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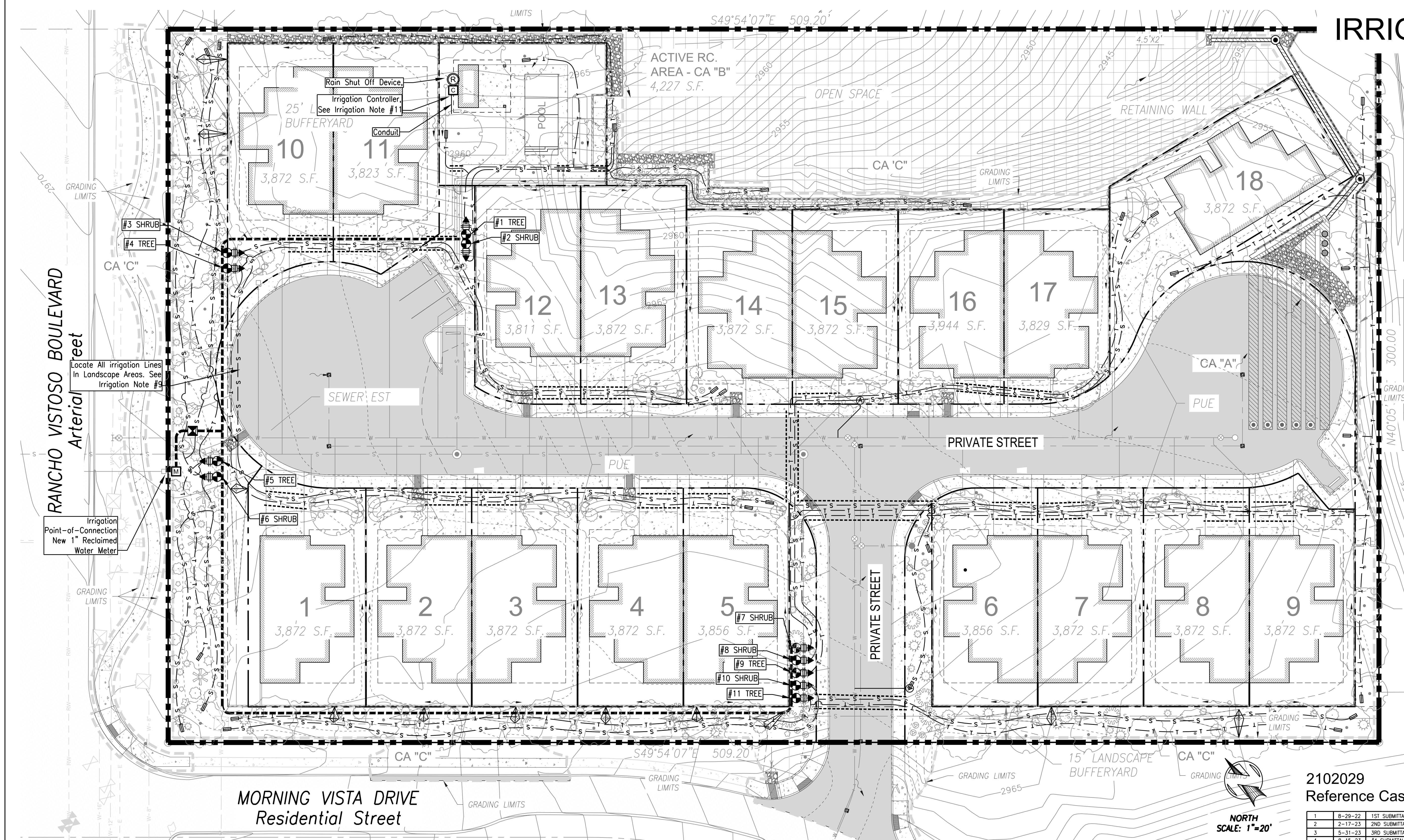
# IRRIGATION PLAN

A technical line drawing of an irrigation system. It features a vertical black pipe on the left with a horizontal branch line extending to the right. From this branch, several thin, wavy lines representing irrigation spray patterns are shown. The drawing is minimalist, using only black lines on a white background.

## 2102029

## LEGEND

W	WATERLINE
— — — — —	CENTERLINE
— — — — —	WATER SERVICE LINE
-----	SIGHT VISIBILITY TRIANGLE
-----	GRADING LIMIT
— — — — —	LOT LINE
-----	SEWER EASEMENT
-----	PUE EASEMENT
← — — — — —	SWALE
— — — — —	FENCE
— — — — —	PROPERTY LINE
— — — — —	WATER MAIN
— — — FM — —	SEWER
— — — — —	SEWER
— — — E — —	ELECTRICAL
— — — RW — —	RECLAIMED WATER
— — — — —	INDEX CONTOUR
— — — — —	MINOR CONTOUR
	GRADING TRADE AREA



2102029  
Reference Case 2003075 Pre-Application

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# GRENIER ENGINEERING, INC.

Structural & Civil Engineering Consultant

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Plaza Suite A120, Tucson, Arizona 85715  
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## INTEGRATION PLAN

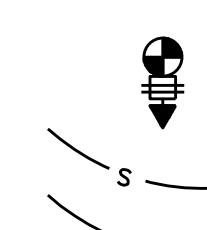
# IRRIGATION PLAN

# CES AT MORNING VISTA

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## IRRIGATION LEGEND

Equipment	Manufacturer & Model	Size
Irrigation Point-of-Connection	Connect to New 1" Reclaimed Water Meter	1"
Irrigation Mainline	Sch. 40 PVC (PURPLE) with Solvent Weld Joints	3/4"
Irrigation Pipe Sleeve	Sch. 40 PVC with Solvent Weld Joints	3"
Irrigation Controller	Rainbird #TM2-12-120V	12 stations
Rain Shut Off Device	Rainbird #RSD Series	



Not Show

Equipment	Manufacturer & Model	Size
<b>Drip Control Zone Kit</b>	Rainbird #XCZ-100-PRBR (40 psi, 200 mesh screen)	1"
<b>Drip Laterals</b>	Polyethylene SDR Rated Tubing-- (PURPLE COLOR) "T" Indicates Tree Lines, "S" Indicates Shrub Lines	3/4"
<b>Drip Lateral Flush End</b>	Install at all Drip Lateral Ends (PURPLE COLOR)	3/4"
<b>Emitters (see Emitter Schedule)</b>	Rainbird #XB-20PC (single outlet), Rainbird #XB-20-6 (multi-outlet)	2 gph

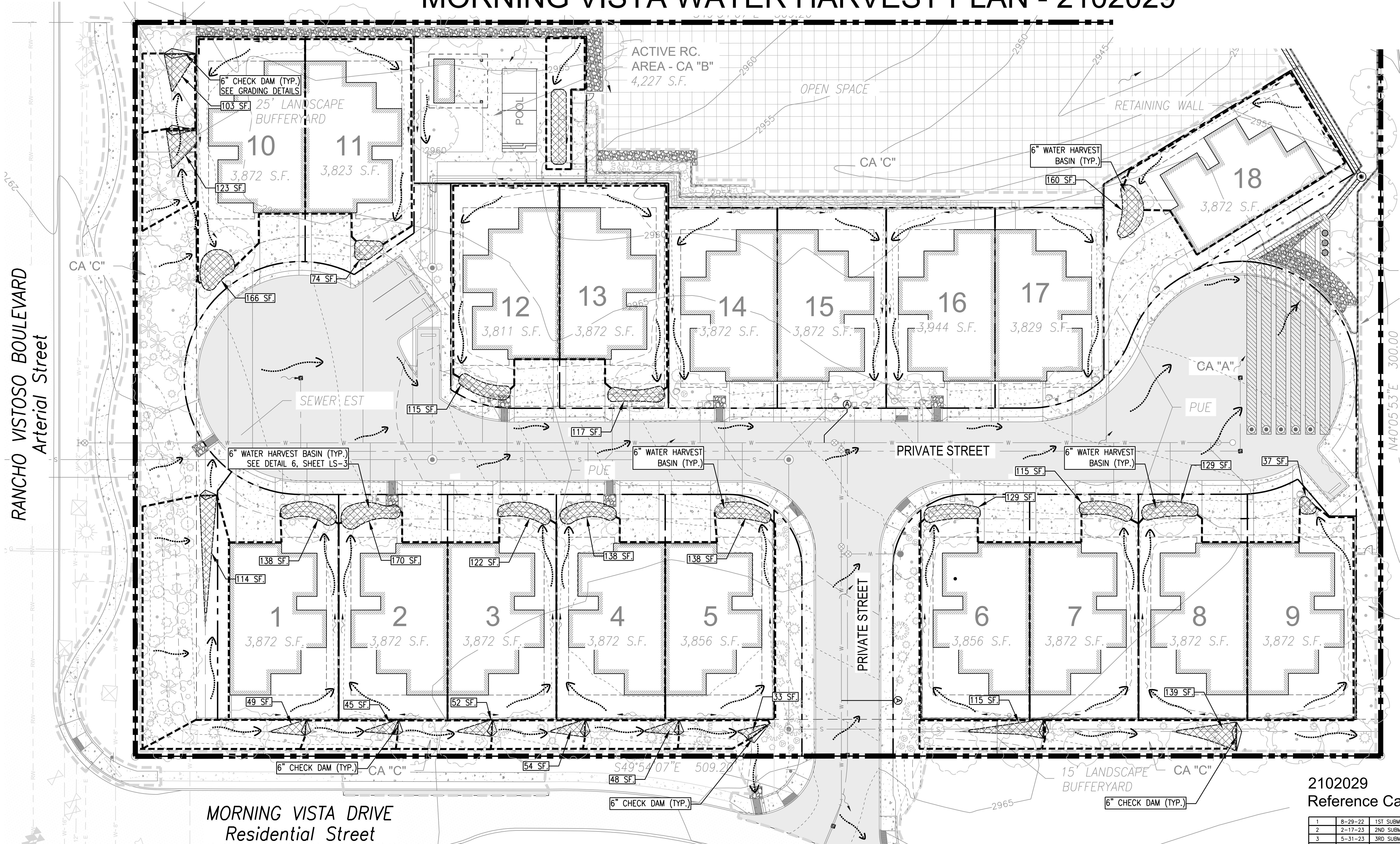


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# MORNING VISTA WATER HARVEST PLAN - 2102029



## WATER HARVEST NOTES

- This project will use a passive rainwater harvest methodology to supplement irrigated landscape planting. Landscape areas will be depressed 6" (including mulch if applicable) or more per plan (with suitable transitions) for rainwater infiltration whenever possible.
- The site's water harvest infiltration areas will have catchment areas consisting of adjacent sloped landscape and paved areas. Building roof drainage will be directed to water harvest basin/infiltration areas.
- The soil in the landscape planting areas shall be prepared for proper rain water infiltration as needed. This might include caliche removal, "ripping" of compacted soils, or mixing site soil with sand.
- The irrigation system shall include a rain shut off device for the irrigation controller.
- Water Harvest Basins located in front yards and in common areas are to be 6" in depth and are to have a slope of 4:1 (typ). A slope of 3:1 may be used in locations where basin width requires that a steeper slope be used to

reach the 6" depth.

- Check Dams in the Buffer Yard areas are to be 6" in height and to be armored on both sides of the dam with 6" riprap. The dashed line on the plan indicated the surface area of the catchments when full.
- See Landscape Detail 6, Sheet LS-3, for a Water Harvest Basin Schematic.
- Total area of all new impervious surfaces including pavements, sidewalks, hardscape areas and buildings is 88,564 SF.
- Total volume of rainwater harvesting provided is 625 CF.
- Rainwater harvesting measures employed for this development consist of the following: (15) 6" water harvest basins in front yards and common areas and (11) 6" rip rap armored check dams along the landscape border.
- All rainwater harvesting measures shown on this plan shall be integrated into both the landscape installation as well as the site grading construction.
- The site soils report had 2 infiltration tests on the site. The worst of the infiltration rates is 8.5 minutes per inch. A 6" deep harvesting basin will infiltrate in 0.85 hours.

Approval Block:

**Bayer Vella**  
Digitally signed by Bayer Vella  
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OU: E-BayerVella@corporateaz.gov  
OU: Planning  
Division: ChkBayerVella  
Date: 2023.09.26 14:05:44-07'00'

Planning & Zoning Administrator	Date
<i>R. K.</i>	2023.09.26 08:59:19-07'00'
Town Engineer	Date



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## LEGEND

W	WATERLINE
—	CENTERLINE
—	WATER SERVICE LINE
—	SIGHT VISIBILITY TRIANGLE
—	GRADING LIMIT
—	LOT LINE
—	SEWER EASEMENT
—	PUE EASEMENT
—	SWALE
—	FENCE
—	PROPERTY LINE
—	WATER MAIN
—	SEWER
—	SEWER
—	ELECTRICAL
—	RECLAIMED WATER
—	INDEX CONTOUR
—	MINOR CONTOUR
—	GRADING TRADE AREA

## WATER HARVEST LEGEND

6" WATER HARVEST BASIN	
6" CHECK DAM	
6" BUFFER YARD	
FLOW LINE	
PROPOSED CONTOUR	
PROPOSED CONTOUR	
LOT FLOW LINE	
WATER HARVEST INFILTRATION AREA	
SUB-WATERSHED AREA	
DRAINAGE FLOW LINES	

2102029  
Reference Case 2003075 Pre-Application

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Designed By:	TC/SS
Drawn By:	TC/SS/RA
Checked By:	
Date:	AUG. 2023
Scale Vt:	N/A
Sheet Number:	

## IRRIGATION PLAN

Project	RESIDENCES AT MORNING VISTA
Sheet Number:	L-6