

CONCEPT DRAINAGE REPORT FOR FAIRMONT SCOTTSDALE PRINCESS CONFERENCE CENTER & EVENT LAWN

November 22, 2023 WP# 215319.30

Prepared by Robert G. Saunders, EIT



EXPIRES 06-30-25

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_		Sewer Plan by Wood, Patel & Associates, Inc., dated November 22, 2023.

# **EXHIBITS**

EXHIBIT 1 Vicinity Map

EXHIBIT 2 FEMA FIRM

EXHIBIT 3 Existing Drainage Map

EXHIBIT 4 Proposed Drainage Map

EXHIBIT 5 Storm Pipe Layout

EXHIBIT 6 Aerial Map



**EXPIRES 06-30-25** 

#### 1.0 INTRODUCTION

## 1.1 General Background

The Fairmont Scottsdale Princess Conference Center & Event Lawn (Site) is a proposed commercial/retail building as well as event space. This Site is on approximately 10.95 acres of two (2) parcels with an approximate area of 44.4 acres of the Fairmont Scottsdale Princess in the City of Scottsdale (APN#215-08-693 & 215-08-695). The project will include hardscape, landscape, parking, and utility improvements to support the development. The Site is located approximately 1,300-feet to the east of Scottsdale Road and 50-feet north of East Hacienda Way within Section 35, Township 4 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona. Refer to Exhibit 1 – *Vicinity Map* for the project location. The existing property, currently zoned C-2, is primarily developed with buildings, parking lots, sidewalks, and a variety of landscaping (desert and grass).

This concept Drainage Report has been prepared in accordance with Wood, Patel & Associates, Inc.'s (WOODPATEL's) understanding of the City of Scottsdale technical drainage requirements (Ref. 1) and the *Drainage Design Manuals for Maricopa County Hydrology and Hydraulics (2018)*, as applicable to the Site.

## 1.2 FEMA Regulated Flood Zones

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Map (FIRM) information for communities that adhere to FEMA regulations. The FEMA FIRM panel for this Site is 04013C1320L, effective date October 16, 2013, and indicates the Site falls within "Zone AO" shaded (Refer to Exhibit 2 – FEMA FIRM).

"Zone AO" shaded is defined by FEMA as follows:

"Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined".

It is the understanding of WOODPATEL, based on past experience and interpretations of the City of Scottsdale floodplain ordinance that development of land within FEMA Zone "AO" is acceptable as long as, in general, the lowest finish floor elevation is above or properly protected from the anticipated 100-year water surface elevations. This Site will be designed in accordance with the City floodplain ordinance to meet Federal and State regulations.

## 2.0 HYDROLOGY ANALYSIS

# 2.1 Offsite Hydrology

The proposed Site does not receive offsite flows. An existing regional drainage ditch along the north side of Princess Boulevard proposed with *Final Offsite Improvements Drainage Report Hayden 50 by Kimley Horn* (Ref.2), in conjunction with improvements to Princess Drive at the round-a-bout at Princess Boulevard proposed with Appendix F - *Fairmont Scottsdale* - *Ballroom Addition by Wood, Patel & Associates, Inc., dated September 2, 2011*, routes stormwater flows west to an existing regional drainage channel parallel to Scottsdale Road. Stormwater is routed south by the existing regional channel to the

November 22, 2023

TPC Golf Course. The City approved Drainage Report for Fairmont Scottsdale Princess Privado Welcome Building and Parking Modifications by Wood, Patel & Associates, Inc., dated February 21, 2023 (Ref.3) provides a history of the offsite drainage and retention.

In 2018, the Hayden 50 (Ref. 2) development altered the channel on the north side of Princess Boulevard which has altered the overtopping location of approximately 109 cfs from east of the round-a-bout as shown in the Pinnacle Peak South ADMS from TY Lin (Ref. 5) to west of the round-a-bout found in the Off-Site Improvement Plans for Princess Hayden (Ref. 8). This has the effect of sending 109 cfs away from Princess Drive and sending it in Princess Boulevard west toward the channel along Scottsdale Road to ultimately go to the TPC Golf Course.

#### 2.2 **Onsite Hydrology**

Per the existing stormwater waiver approved for the Site, no stormwater retention is provided. Refer to Appendix E - Storm Water Storage Waiver / Proposed Drainage Improvements Exhibit. Although retention is not required, the City of Scottsdale does require the First Flush (FF) volume to be treated to meet Federal and State regulations. This will be accomplished with the Contech DSBB-10-20-108 treatment system. See Appendix D - Contech DSBB-10-20-108 Treatment System for manufacturer details and Appendix H - Fairmont Scottsdale Princess Conference Center - Concept Grading, Drainage, Water, and Sewer Plan by Wood, Patel & Associates, Inc. Runoff from the proposed building is designed to direct stormwater away from the proposed building and drain overland to existing catch basins connected to the existing storm drain system within Cottage Terrace. Flows into the existing system are calculated to be 38.3 cfs and 61.0 cfs for the 10-year and 100-year conditions, respectively. See Appendix C - Hydrologic and Hydraulic Calculations for the existing and proposed drainage calculations.

Onsite peak flow estimates for the proposed development were generated using the Rational Method, as outlined in the Drainage Design Manual for Maricopa County, Arizona: Volume I – Hydrology (Ref 4). NOAA Atlas 14 precipitation data was obtained and utilized to develop Intensity-Duration-Frequency (I-D-F) curves for the Site. Rational Method peak flows were computed at concentration points within the Site at key design locations. Runoff coefficients were estimated to reflect post-development land use conditions for the 2-year, 10-year, and 100-year events (Refer to Appendix C - Hydrologic and Hydraulic Calculations).

Ref.3 provides a history of the current onsite drainage and retention. Based on the information above, the proposed site improvements mimic current drainage patterns and areas of retention for onsite with minimal alteration.

#### 2.3 **Establishing Lowest Finish Floor (LF88 Elevations)**

The Grading and Drainage Plan has been designed to comply with the City of Scottsdale floodplain ordinance for a Zone "AO" floodplain. It is our understanding, unless other floodproof measures are presented and approved, the proposed Lowest habitable Finished Floor (LFF) elevation must be designed a minimum of 1 foot above the anticipated 100-year flood elevation. Scottsdale currently

November 22, 2023 WOODPATEL Page 2 requires the lowest finished floor elevation of 1-foot above the flood depth, which results in a finished floor elevation of 2-feet above the Highest Adjacent natural Grade (HAG) to the proposed building which would be the regulatory flood elevation. Due to the Site being disturbed after the Zone "AO" Special Flood Hazard was established, the current condition of the Site cannot determine the HAG. Due to this change the HAG must be established using topographical information showing the pre-disturbed condition of the Site.

According to Curry's Corner 7.5-minute Topographic Survey Map by USGS from 1964 with a contour interval of 10-feet, the approximate highest natural grade of this Site prior to development must be changed from the NAVD29 datum to the NAVD88 datum. This change consists of an elevation increase of 1.749-feet determined using surveyed elevations of a nearby monument on both vertical datums.

Using Auto CAD Civil 3D, the quad map was aligned to the Site using common monument lines (section lines) contained within the quad map and previously surveyed by WOODPATEL. The 10-foot interval contours were digitized, adjusted to NAVD88 and applied to a TIN surface model. The surface model was supplemented with break lines at estimated ridge and flowline locations. The surface was used to display interpolated 1-foot contours for the pre-disturbed condition, the proposed building limits were overlaid on the contour map and the HAG was determined for the proposed building. The proposed building lowest finished floor elevation is a minimum of 2-feet above the HAG. Refer to Appendix A - Regional Contour Map / Highest Natural Grade Elevation Calculation and Appendix B - Curry's Corner Quadrangle Map. Overlaying the building over the adjusted digitized lowest finish floor elevation map was determined to be 1561.26 making it 2.00-feet above the regulatory flood elevation of 1559.26 calculated by adding 2-feet to the HAG of 1557.26.

In addition, using the same Curry's Corner 7.5-minute Topographic Survey Map, the Lowest Adjacent Grade (LAG) at the building was determined to be 1551.12, 10.14-feet below the lowest finished floor.

## 2.4 Review of Pinnacle Peak South Area Master Drainage Study

The Site is located within the study limits of the Pinnacle Peak South Drainage Master Study (PPS-ADMS), as prepared by TY LIN International, dated July 26, 2013 (Ref. 5), which utilized FLO-2D to analyze the 100-year, 24-hour storm event for the regional study area. Refer to Appendix G – 122 Pinnacle Peak South Flo-2D Study.

WOODPATEL reviewed the findings of the PPS-ADMS specific to the proposed Site area and due to more recent improvements as discussed in Section 2.1, the regional model does not accurately reflect site-specific drainage improvements designed and constructed to protect the Fairmont Scottsdale Princess property. Site-specific improvements include an east-west flood wall along the north edge of the Site to direct stormwater runoff away from the Fairmont Scottsdale Princess property. Refer to Appendix F - Fairmont Scottsdale - Ballroom Addition by Wood, Patel & Associates, Inc., dated September 2, 2011, and Appendix E - Storm Water Storage Waiver / Proposed Drainage Improvements.

WOODPATEL
Fairmont Scottsdale Princess – Conference Center & Event Lawn
Page 3

Based on the above, we believe offsite flows are incorrectly reported in the PPS-ADMS and do not truly impact the proposed Site.

## 3.0 HYDRAULIC ANALYSIS

The proposed Site is designed to convey stormwater by overland flow to existing and proposed catch basins. At the time of this Report, the roof drain locations are not known. However, they will be connected to the existing storm drain system. The contribution of the proposed Site removes 5.9 cfs and 9.5 cfs for the 10- and 100-year conditions, respectively. Refer to Appendix C- *Hydrologic and Hydraulic Calculations*. The proposed drainage values for the Site are 32.4 cfs and 51.5 cfs for the 10- and 100-year conditions, respectively. These flows will be collected in the existing stormwater infrastructure and will be treated as outlined in Section 2.1.

## 4.0 MAINTENANCE

Ongoing maintenance of the designed or recommended drainage systems is required to preserve the design integrity and purpose of the drainage system. Failure to provide maintenance can prevent the drainage system from performing to its intended design purpose and can result in reduced performance. Maintenance within the public right-of-way is the responsibility of the governing municipality. However, it is the responsibility of landowners (such as private developers or property owners' associations) for facilities on private property. Prior to ultimate condition build-out upstream of drainage structures, additional maintenance may be required due to an increase in sedimentation build-up. A regular maintenance program is required to have drainage systems perform to the level of protection or service, as presented in this report and the project plans and specifications.

### 5.0 CONCLUSIONS

Based on our analysis of the Site, the following conclusions can be made:

- 1. This concept Drainage Report has been prepared in accordance with WOODPATEL's understanding of the City of Scottsdale technical drainage requirements and the *Drainage Design Manuals for Maricopa County Hydrology and Hydraulics (2018)*, as applicable to the Site.
- 2. The Site is within a FEMA designated 100-year floodplain (Zone "AO-Depth 1 foot") in both pre- and post-development conditions.
- 3. The Site is protected from offsite flows from the north by improvements previously designed and constructed specifically to protect this property, including recent improvements to the existing channel along the north side of Princess Boulevard.
- 4. No stormwater retention has been provided for this project, per the approved stormwater storage waiver.
- 5. The onsite 100-year storm event is to be conveyed south, by existing storm drain and overland flow, to the existing TPC Golf Course.

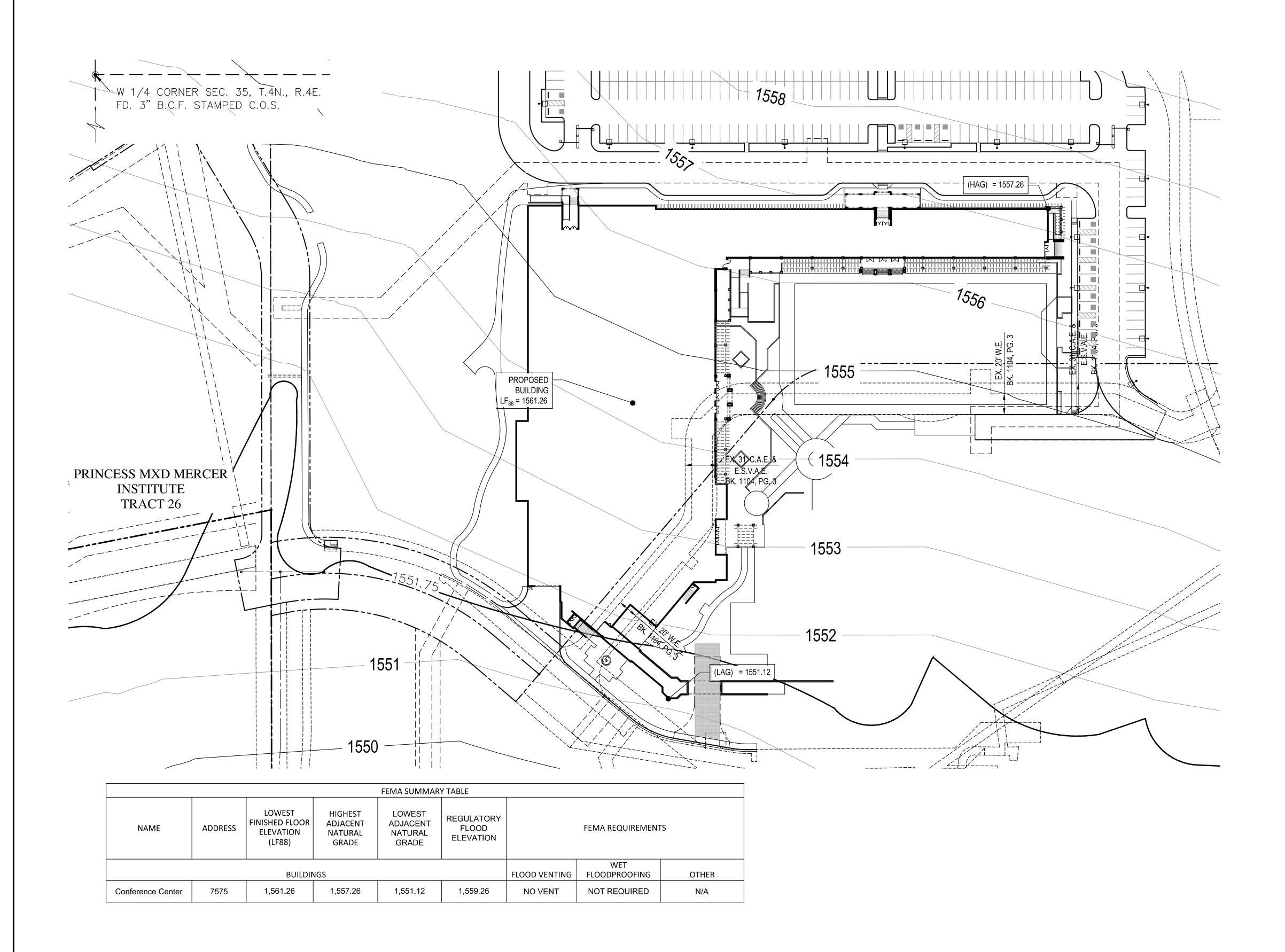
WOODPATEL November 22, 2023

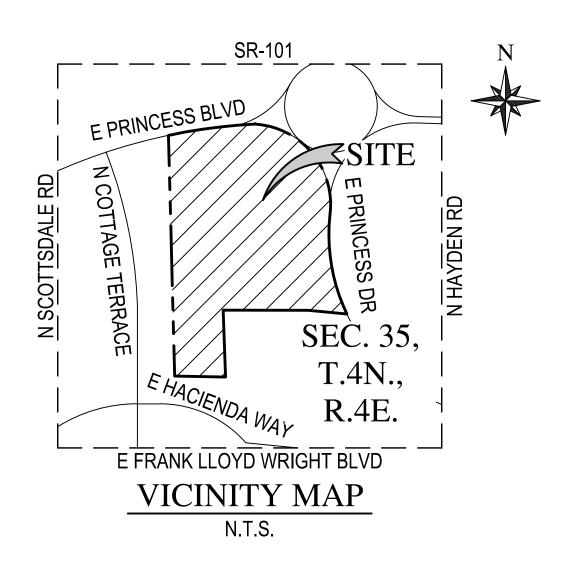
- 6. The 100-year high water elevation is 1557.26 in the adjacent TPC golf course. This is 4.00 feet below the proposed Conference Center lowest finish floor elevation of 1561.26. It is our understanding this complies with the City of Scottsdale floodplain ordinance, which requires the lowest finished floor to be a minimum of 2-feet above (1 foot for AO and 1 foot of freeboard) the natural highest grade.
- 7. The estimated low natural ground elevation is 1551.12 which is 10.14-feet below the proposed Conference Center lowest finished floor elevation of 1561.26. It is our understanding this complies with the City of Scottsdale floodplain ordinance.
- 8. Ongoing maintenance is required for the existing drainage systems to maintain design performance. Maintenance is the responsibility of the private parties involved.

#### 6.0 REFERENCES

- 1. Design Standards & Policies Manual, City of Scottsdale, 2018.
- 2. Final Offsite Improvements Drainage Report Hayden 50, by Kimley Horn, dated December 2018.
- 3. Drainage Report for Fairmont Scottsdale Princess Privado Welcome Building and Parking Modifications by Wood, Patel & Associates, Inc., dated February 21, 2023.
- Drainage Design Manual for Maricopa County, Arizona: Volume I Hydrology.
- 5. Pinnacle Peak South Area Drainage Master Study Draft Hydrology and Hydraulics Report Volume 1, by TY Lin International, dated July 26<sup>th</sup>, 2013.
- 6. Curry's Corner Quadrangle, 7.5 Minute Series Topographic Map, USGS, 1964.
- 7. 78th Street & Princess Boulevard Apartments Preliminary Drainage Report, by 3 Engineering, dated October 28, 2020.
- Off-Site Improvement Plans for Princess Hayden NWC Hayden Road and Princess Boulevard, by Kimley Horn, dated December 20, 2018

APPENDIX A -	- REGIONAL CON CALCULATION	TOUR MAP / HIC	GHEST NATURA	AL GRADE ELEVAT	TON





# LEGEND

PROPOSED BUILDING OUTLINE

BOUNDARY LINE
SECTION LINE

— 1550 — ESTIMATED 5' CONTOUR NAVD88 DATUM

HAG HIGHEST ADJACENT NATURAL GRADE
LAG LOWEST ADJACENT NATURAL GRADE

RFD REGULATORY FLOOD DEPTH = HAG +2' (ZONE AO DEPTH (1') = 1' FREEBOARD)

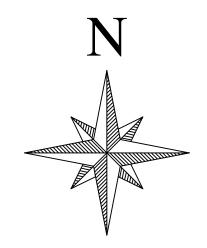
GF LOWEST GARAGE FLOOR

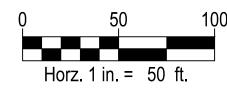
# **ELEVATION STATEMENT**

THE WORK PRODUCT PRESENTED IS THE RESULT OF OBTAINING BEST AVAILABLE HISTORICAL ELEVATION INFORMATION, AND EMPLOYING PROFESSIONAL JUDGMENT TO BEST PRESENT IN SITE GROUND ELEVATIONS. ELEVATIONS ARE BASED ON 1964 CURRYS CORNER NGVD29 DATUM CONVERTED TO NAVD88 USING MARICOPA LAND SURVEY CONVERSION OF 1.749 FT.

# BENCHMARK

THE VERTICAL DATUM FOR THIS EXHIBIT IS BASED ON GDACS POINT 43017-1, 3 INCH CITY OF SCOTTSDALE BRASS CAP FLUSH LOCATED ON SCOTTSDALE ROAD SOUTH OF PRINCESS DRIVE HAVING AN ELEVATION OF 1552.985, CITY OF SCOTTSDALE NAVD88 DATUM.





- 1) WHEN REQUIRED AS INDICATED ABOVE, FLOOD VENTS SHALL BE PROVIDED ON AT LEAST 2 SEPARATE WALLS. THE FLOOD VENTS SHALL HAVE ONE SQUARE INCH OF OPENING SPACE FOR EVERY SQUARE FOOT OF ENCLOSED SPACE BELOW THE REGULATORY FLOOD ELEVATION, OR AS NOTED ABOVE. SEE ARCHITECTURAL PLANS FOR VENTS OPENINGS. PROPOSED GRADE ADJACENT TO BUILDING MAY EFFECT VENT LOCATIONS, CONSULT ENGINEER PRIOR TO CONSTRUCTION WITH ANY QUESTIONS.
- 2) WHEN REQUIRED AS INDICATED ABOVE, WET FLOODPROOFING SHALL BE PROVIDED UP TO THE REGULATORY FLOOD DEPTH. WET FLOODPROOFING CONSIST OF CONSTRUCTION WITH FLOOD RESISTANT MATERIALS.
- 3) WHEN REQUIRED AS NOTED ABOVE, ELECTRICAL AND MECHANICAL EQUIPMENT SHALL BE ELEVATED ABOVE THE REGULATORY FLOOD DEPTH.
- 4) PROPOSED BUILDING M1 WILL BE A STRUCTURALLY INDEPENDENT NON-RESIDENTIAL STRUCTURE.
- 5) FEMA DEFINES DRY FLOODPROOFING AS A COMBINATION OF MEASURES THAT RESULT IN A STRUCTURE, INCLUDING THE ATTENDANT UTILITIES AND EQUIPMENT, BEING WATERTIGHT WITH ALL ELEMENTS SUBSTANTIALLY IMPERMEABLE TO THE ENTRANCE OF FLOODWATER AND WITH STRUCTURAL COMPONENTS HAVING THE CAPACITY TO RESIST FLOOD LOADS.

NOT
FOR
CONSTRUCTION
OR RECORDING

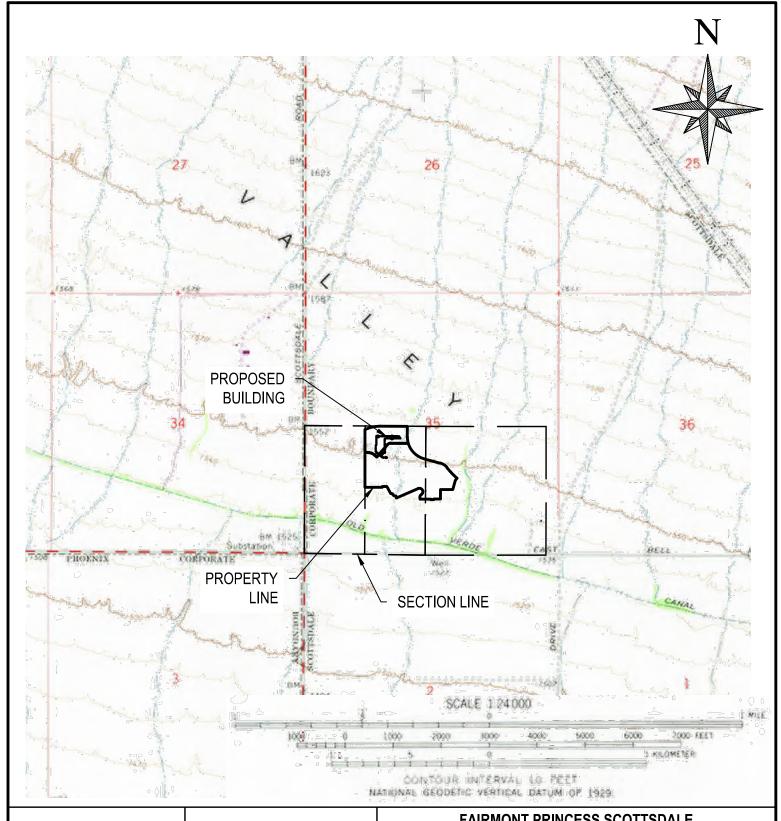


# FAIRMONT SCOTTSDALE PRINCESS

CONFERENCE CENTER & EVENT LAWN LOWEST FINISHED FLOOR

JOB NO 215319 DESIGN AJS DRAWN A	DATE	11/22/2023	SCALE	1" = 50'	SHEET	01 OF 02
DESIGN ASSISTANTIA	JOB NO	215319	DESIGN	AJS	DRAWN	AJS

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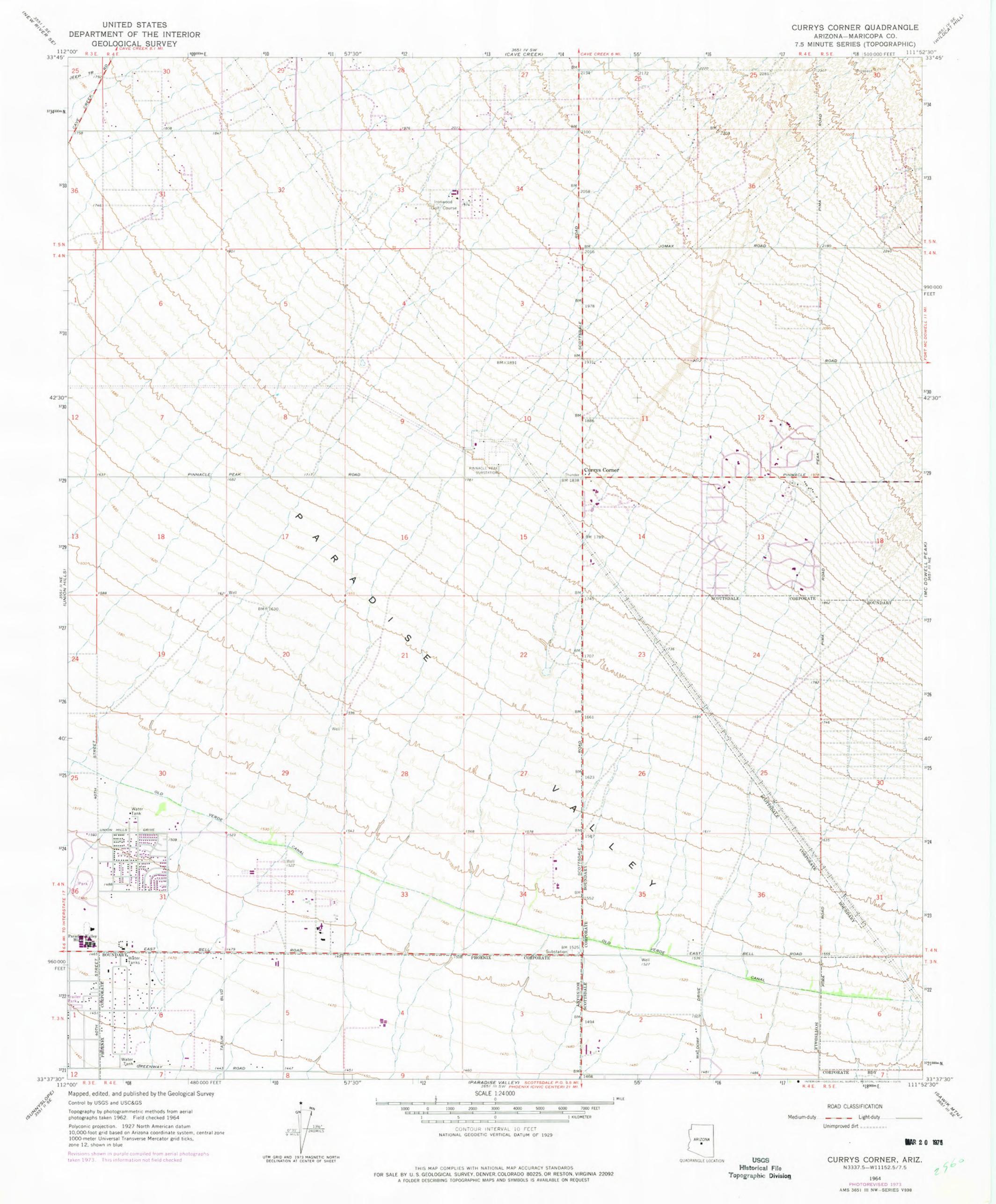
# FAIRMONT PRINCESS SCOTTSDALE CONFERENCE CENTER & EVENT LAWN

# REGIONAL CONTOUR MAP/OPINION OF EXISTING HIGHEST NATURAL GRADE ELEVATION

DATE	11/22/2023	SCALE	1" = 1'	SHEET	2 OF 2
JOB NO.	215319.30	DESIGN	AJS	CHECK	RGS
		DRAWN	AJS	RFI#	N/A
	·			•	,

Z:\2021\215319\Project Support\Reports\Rezoning\Conference Center & Event Lawn\Drainage\Exhibits\5319.30 - Regional Contour Map.dwg





APPENDIX C - HYDROLOGIC AND HYDRAULIC CALCULATIONS	

IDF DATA FROM FCDMC NOAA – ATLAS 14 PRECIPITATION DATA	





Project Fairmont Scottsdale Princess - Conference Center & Event Lawn

**Location** Scottsdale AZ **Project Number** 215319.3

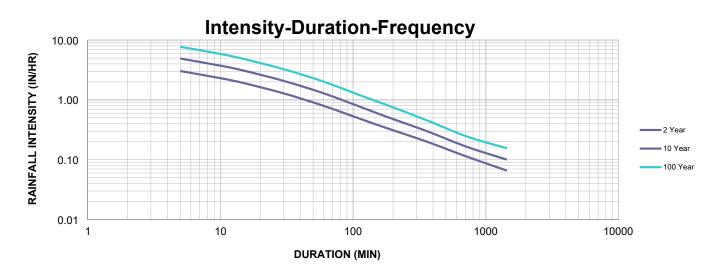
Project Engineer Andrew Sanchez, E.I.T.

## **RAINFALL DEPTHS, INCHES**

Duration	Average Rec	Average Reccurence Interval (years)													
Duration	2	5	10	25	50	100									
5-min	0.253	0.341	0.409	0.501	0.571	0.643									
10-min	0.385	0.520	0.623	0.762	0.869	0.978									
15-min	0.478	0.644	0.772	0.945	1.080	1.210									
30-min	0.643	0.867	1.040	1.270	1.450	1.630									
60-min	0.796	1.070	1.290	1.580	1.800	2.020									
2-hr	0.921	1.230	1.460	1.780	2.020	2.270									
3-hr	1.010	1.320	1.560	1.910	2.180	2.460									
6-hr	1.200	1.530	1.800	2.150	2.440	2.730									
12-hr	1.350	1.700	1.970	2.350	2.630	2.930									
24-hr	1.580	2.040	2.410	2.920	3.320	3.740									

# RAINFALL INTENSITY, INCHES/HOUR

Duration	Frequency, y	/ears				
minutes	2	5	10	25	50	100
5	3.04	4.09	4.91	6.01	6.85	7.72
10	2.31	3.12	3.74	4.57	5.21	5.87
15	1.91	2.58	3.09	3.78	4.32	4.84
30	1.29	1.73	2.08	2.54	2.90	3.26
60	0.80	1.07	1.29	1.58	1.80	2.02
120	0.46	0.62	0.73	0.89	1.01	1.14
180	0.34	0.44	0.52	0.64	0.73	0.82
360	0.20	0.26	0.30	0.36	0.41	0.46
720	0.11	0.14	0.16	0.20	0.22	0.24
1440	0.07	0.09	0.10	0.12	0.14	0.16







# COMPOSITE WEIGHTED "C" FACTOR CALCULATIONS 100 YEAR

Project Fairmont Scottsdale Princess - Conference Center & Event Lawn

LocationScottsdale AZProject Number215319

Project Engineer Andrew Sanchez, E

# Existing C Factor

Drainage Subbasin ID	Area	Desert		Paved		Roof	Roof		Grass		Commercial		
(Description/ID)	(Acres)	%	"C"	%	"C"	%	"C"	%	"C"	%	"C"	"C"	
B1	2.26	93	0.45	7	0.95		0.95		0.30		0.86	0.49	
B2	0.88		0.45	100	0.95		0.95		0.30		0.86	0.95	
B3	0.93		0.45	100	0.95		0.95		0.30		0.86	0.95	
B4	0.94		0.45	100	0.95		0.95		0.30		0.86	0.95	
B5	0.91		0.45	100	0.95		0.95		0.30		0.86	0.95	
B6	1.99	29	0.45	71	0.95		0.95		0.30		0.86	0.81	
B7	0.79		0.45		0.95		0.95		0.30	100	0.86	0.86	
N1	0.54	0	0.45	100	0.95		0.95		0.30		0.86	0.95	
N2	0.40	0	0.45	100	0.95		0.95		0.30		0.86	0.95	





# COMPOSITE WEIGHTED "C" FACTOR CALCULATIONS

**100 YEAR** 

Project Fairmont Scottsdale Princess - Conference Center & Event Lawn

**Location** Scottsdale AZ

Project Number 215319

Project Engineer Andrew Sanchez, E

## Proposed C Factor

Drainage Subbasin ID	Area Desert Paved R		Roof		Grass		100 YR Runoff Coefficient			
(Description/ID)	(Acres)	%	"C"	%	"C"	%	"C"	%	"C"	"C"
B1	2.16	77.6	0.45	4.4	0.95	18	0.95		0.30	0.56
B2	1.53		0.45	100	0.95		0.95		0.30	0.95
B3	1.17	3	0.45	97	0.95		0.95		0.30	0.94
B4	1.03		0.45	65.7	0.95		0.95	34.3	0.30	0.73
B5	1.44	28.4	0.45	50	0.95		0.95	21.6	0.30	0.67
B6	0.41	20	0.45	80	0.95		0.95		0.30	0.85
R1	2.10		0.45		0.95	100	0.95		0.30	0.95





# **RATIONAL METHOD SUMMARY**

100 YEAR, 10 YEAR

**Project** Fairmont Scottsdale Princess - Conference Center & Event Lawn

**Location** Scottsdale AZ **Project Number** 215319.3

Project Engineer Andrew Sanchez, E.I.T.

ATERSHEDS									100 YEAR				10 YEAR			
1		Drainage Area 'A'	Drainage Area 'A'	' <b>K</b> b'	Watershed Resistance Coefficient	Top Elevation	Bottom Elevation	Basin Slope 'S'	Q100 'Tc'	Intensity	Runoff	Q100 Flow		Intensity	Runoff	Q10 Flow
(ft)	(mi)	(sf)	(Acres)		'K <sub>b'</sub>			(ft/mi)	(min)	(in/hr)	'C'	(cfs)	(min)	(in/hr)	'C'	(cfs)
571	0.108	98439	2.26	Α	0.0378	58.5	54.0	41.6	6.0	7.35	0.49	8.1	7.4	4.35	0.49	4.8
209	0.040	38479	0.88	В	0.0807	59.5	56.3	80.8	5.0	7.72	0.95	6.5	5.2	4.86	0.95	4.1
209	0.040	40583	0.93	Α	0.0402	60.0	57.2	70.7	5.0	7.72	0.95	6.8	5.0	4.91	0.95	4.3
218	0.041	41039	0.94	Α	0.0402	58.0	54.7	79.9	5.0	7.72	0.95	6.9	5.0	4.91	0.95	4.4
204	0.039	39679	0.91	Α	0.0403	59.0	55.5	90.6	5.0	7.72	0.95	6.7	5.0	4.91	0.95	4.2
397	0.075	86513	1.99	Α	0.0381	57.4	53.0	58.5	5.0	7.72	0.95	14.6	5.3	4.84	0.95	9.1
227	0.043	34517	0.79	А	0.0406	59.0	54.9	95.4	5.0	7.72	0.81	4.9	5.0	4.91	0.81	3.1
214	0.041	23664	0.54	А	0.0417	59.0	55.0	98.7	5.0	7.72	0.86	3.6	5.0	4.91	0.86	2.3
177	0.034	17431	0.40	А	0.0425	56.9	54.0	86.5	5.0	7.72	0.95	2.9	5.0	4.91	0.95	1.9
	Longest Watercourse 'L' (ft) 571 209 209 218 204 397 227	Longest Watercourse 'L'     Longest Watercourse 'L'       (ft)     (mi)       571     0.108       209     0.040       209     0.040       218     0.041       204     0.039       397     0.075       227     0.043       214     0.041	Longest Watercourse 'L'         Longest Watercourse 'L'         Drainage Area 'A'           (ft)         (mi)         (sf)           571         0.108         98439           209         0.040         38479           209         0.040         40583           218         0.041         41039           204         0.039         39679           397         0.075         86513           227         0.043         34517           214         0.041         23664	Longest Watercourse 'L'         Longest Watercourse 'L'         Drainage Area 'A'         Drainage Area 'A'           571         0.108         98439         2.26           209         0.040         38479         0.88           209         0.040         40583         0.93           218         0.041         41039         0.94           204         0.039         39679         0.91           397         0.075         86513         1.99           227         0.043         34517         0.79           214         0.041         23664         0.54	Longest Watercourse 'L'         Longest Watercourse 'L'         Drainage Area 'A'         Drainage Area 'A'         'Kb' Type¹           571         0.108         98439         2.26         A           209         0.040         38479         0.88         B           209         0.040         40583         0.93         A           218         0.041         41039         0.94         A           204         0.039         39679         0.91         A           397         0.075         86513         1.99         A           227         0.043         34517         0.79         A           214         0.041         23664         0.54         A	Longest Watercourse 'L'         Longest Watercourse 'L'         Drainage Area 'A'         Drainage Area 'A'         'Kb' Type¹         Watershed Resistance Coefficient 'Kb'           571         0.108         98439         2.26         A         0.0378           209         0.040         38479         0.88         B         0.0807           209         0.040         40583         0.93         A         0.0402           218         0.041         41039         0.94         A         0.0402           204         0.039         39679         0.91         A         0.0403           397         0.075         86513         1.99         A         0.0381           227         0.043         34517         0.79         A         0.0406           214         0.041         23664         0.54         A         0.0417	Longest Watercourse 'L'         Longest Watercourse 'L'         Drainage Area 'A'         Drainage Area 'A'         'Kb' Type¹         Watershed Resistance Coefficient 'Kb'         Top Elevation           571         0.108         98439         2.26         A         0.0378         58.5           209         0.040         38479         0.88         B         0.0807         59.5           209         0.040         40583         0.93         A         0.0402         60.0           218         0.041         41039         0.94         A         0.0402         58.0           204         0.039         39679         0.91         A         0.0403         59.0           397         0.075         86513         1.99         A         0.0381         57.4           227         0.043         34517         0.79         A         0.0406         59.0           214         0.041         23664         0.54         A         0.0417         59.0	Longest Watercourse 'L' (fft)         Longest Watercourse 'L' (sf)         Drainage Area 'A'         Jumper (Acres)         "Kb" (Acres)         Watershed Resistance Coefficient 'Kb"         Top Elevation         Bottom Elevation           571         0.108         98439         2.26         A         0.0378         58.5         54.0           209         0.040         38479         0.88         B         0.0807         59.5         56.3           209         0.040         40583         0.93         A         0.0402         60.0         57.2           218         0.041         41039         0.94         A         0.0402         58.0         54.7           204         0.039         39679         0.91         A         0.0403         59.0         55.5           397         0.075         86513         1.99         A         0.0406         59.0         54.9           227         0.043         34517         0.79         A         0.0417         59.0         55.0           214         0.041         23664         0.54         A         0.0417         59.0         55.0	Longest Watercourse 'L'         Longest Watercourse 'L'         Drainage Area 'A'         Drainage Area 'A'         "Kb' Type1         Watershed Resistance Coefficient 'Kb'         Top Elevation Slope 'S'         Bottom Elevation Slope 'S'         Basin Slope 'S'           571         0.108         98439         2.26         A         0.0378         58.5         54.0         41.6           209         0.040         38479         0.88         B         0.0807         59.5         56.3         80.8           209         0.040         40583         0.93         A         0.0402         60.0         57.2         70.7           218         0.041         41039         0.94         A         0.0402         58.0         54.7         79.9           204         0.039         39679         0.91         A         0.0403         59.0         55.5         90.6           397         0.075         86513         1.99         A         0.0381         57.4         53.0         58.5           227         0.043         34517         0.79         A         0.0406         59.0         54.9         95.4           214         0.041         23664         0.54         A         0.0417	Longest Watercourse Vatercourse (I')         Longest Watercourse (I')         Drainage Area 'A'         'Kb' Type¹         Watershed Resistance Coefficient (Kb')         Top Elevation         Bottom Elevation         Basin Slope 'S'         Calculated Q100 'Tc' (See Note 2)           571         0.108         98439         2.26         A         0.0378         58.5         54.0         41.6         6.0           209         0.040         38479         0.88         B         0.0807         59.5         56.3         80.8         5.0           209         0.040         40583         0.93         A         0.0402         60.0         57.2         70.7         5.0           218         0.041         41039         0.94         A         0.0402         58.0         54.7         79.9         5.0           204         0.039         39679         0.91         A         0.0403         59.0         55.5         90.6         5.0           397         0.043         34517         0.79         A         0.0406         59.0         54.9         95.4         5.0           214         0.041         23664         0.54         A         0.0417         59.0         55.0         98.7         5.0     <	Longest Watercourse   Calculated Caefficient   Caeff	Longest Watercourse Watercourse   Longest Watercourse   L'   Watershed Krea 'A'   Watershed Krea 'A' ' Watershed Krea 'A'   Watershed Krea 'A' ' Watershed Krea ' Watershed ' Watershed Krea '	Longest Watercourse   Watercourse   Watercourse   Union   Coefficient   Coefficient	Longest Watercourse   Watercourse   Watercourse   U'   Sf)   Calculated   Calcula	Longest Watercourse   Longest Watercourse	Longest Watercourse   Vatercourse   Vaterc

Total 420344 9.65 61.0 38.3

## Notes

1. Per Drainage Design Manual for Maricopa County, Vol. I, Hydrology (2013), Table 3.1: Equation for Estimating Kb in the Tc Equation

2. Minimum Tc is 5 minutes.





# STORMCEPTOR RATIONAL METHOD SUMMARY

51.5

100 YEAR, 10 YEAR

32.4

Fairmont Scottsdale Princess - Conference Center & Event Lawn **Project** 

Location Scottsdale AZ **Project Number** 215319.3

**Project Engineer** Andrew Sanchez, E.I.T.

PROPOSED ON-SITE	WATERSHEDS									100 YEAR				10 YEAR			
Drainage Subbasin ID	Longest Watercourse 'L'	Longest Watercourse 'L'	Drainage Area 'A'	Drainage Area 'A'	'K <sub>b</sub> ' Type <sup>1</sup>	Watershed Resistance Coefficient	Elevation	Bottom Elevation	Basin Slope 'S'		1	100 YR Runoff Coefficient	Q100 Flow	Calculated Q10 'Tc' (See Note 2)	10 YEAR Intensity 'i'		Q10 Flow
	(ft)	(mi)	(sf)	(Acres)		'K <sub>b'</sub>			(ft/mi)	(min)	(in/hr)	'C'	(cfs)	(min)	(in/hr)	'C'	(cfs)
B1	317	0.060	94,266	2.16	Α	0.0379	61.3	52.0	154.2	5.0	7.72	0.56	9.4	5.0	4.91	0.56	6.0
B2	269	0.051	66,759	1.53	Α	0.0388	61.3	56.4	96.1	5.0	7.72	0.95	11.2	5.0	4.91	0.95	7.1
B3	184	0.035	50,869	1.17	Α	0.0396	61.3	57.1	118.5	5.0	7.72	0.95	8.6	5.0	4.91	0.95	5.4
B4	226	0.043	44,858	1.03	Α	0.0399	61.3	58.0	76.7	5.0	7.72	0.73	5.8	5.0	4.91	0.73	3.7
B5	247	0.047	62,597	1.44	Α	0.0390	61.3	56.0	112.3	5.0	7.72	0.67	7.4	5.0	4.91	0.67	4.7
B6	159	0.030	17,955	0.41	Α	0.0424	61.3	56.4	160.8	5.0	7.72	0.85	2.7	5.0	4.91	0.85	1.7
R1	289	0.055	91,613	2.10	А	0.0380	0.0	0.0	0.2	31.8	3.19	0.95	6.4	39.2	1.84	0.95	3.7

# Total Notes

1. Per Drainage Design Manual for Maricopa County, Vol. I, Hydrology (2013), Table 3.1: Equation for Estimating Kb in the Tc Equation

9.85

428,918

2. Minimum Tc is 5 minutes.





#### DEBRIS SEPARATING BAFFLE BOX SCREEN FLOW RATE CALCULATOR

Project ID:	742047
Project Name:	Fairmont Scottsdale Princess – Sunset \
Project Location:	Scottsdale, AZ
Unit ID:	
Date:	6/12/2023

EOR/ Contractor:	Robert Saunders
Designed By:	David Hopkins
CONTECH Rep:	Zach Hubard

Dina Diameter D	36	in.
Pipe Diameter, D	3.00	ft.
Safety Factor, SF	1	unitless
Treatment Flow Rate	1.70	cfs
Treatment Flow Nate	763	gpm
Water Depth in Pipe, d	5	in.
water beptir in ripe, a	0.42	ft.
Radius, r	18	in.
radius, i	1.50	ft.
% full	13.89%	
Total Area, A	1017.88	in^2
Total Alea, A	7.07	ft^2
Total Perimeter, C	113.10	in.
Total Fermineter, C	9.42	ft
Wetted Area, Aw	85.62	in^2
Welled Area, Aw	0.59	ft^2
Wetted Perimeter, P	27.50	in.
Wetter Fermicies, F	2.29	ft
Hydraulic Radius, R	3.11	in.
riyurauno Radius, R	0.259	ft
Elevation	Below	
ф	1.53	radians
s	27.50	in.

Step 1:
Input Project Information above in Blue
Step 2:
Input Design Variables into the Green cells to the left. Input the Pipe Diameter and Safety Factor first followed by the required Treatment Flow Rate last. The Cell for the Treatment Flow Rate
initiates a looped calculation once the cell value is changed. This

variable should always be the last input.

Constants		
Gravity, g	32.174	ft/s <sup>2</sup>
Discharge Coefficient, C <sub>d</sub>	0.66	unitless
Screen Open Area, OA	0.37	%

HGL <sub>0</sub> , HGL at Entrance of Outlet Pipe
φ, Central Angle (Theta)
T, Top Water Surface Width
A, Area of Section Flow
h <sub>m</sub> , Mean Depth of Flow
V <sub>o</sub> , Velocity at Entrance of Outlet Pipe
Q <sub>o</sub> , Volumetric Flow Rate of Outlet Pipe
Froude Number

0.42	ft
****	-
43.76	deg
2.07	ft
0.59	ft <sup>2</sup>
0.29	ft
3.04	ft/s
1.81	ft³/s
1	unitless

Model HGL (ft) Rate (ft3/s)	
HGL (ft)	
Rate (ft3/s)	

						RES	ULTS					
lel	2.5-4-66	2.5-4-66	2.5-4-66	2.5-4-66	2.5-4-66	4-8-84	5-10-84	6-12-84	8-16-96	10-20-108	11-24-132	11-34-136
(ft)	N/A	N/A	N/A	N/A	N/A	0.46	0.45	0.44	0.43	0.42	0.42	0.42
/s)	N/A	N/A	N/A	N/A	N/A	1.81	1.81	1.81	1.81	1.81	1.81	1.81

This spreadsheet performs iterative calculations to determine the screened treatment flow rate and the associated maximum HGL inside of the DSBB at this treatment flow rate. The user only needs to input the required pipe size, safety factor and desired volumetric treatment flow rate. The spreadsheet is designed to incrementally increase the water elevation of the outlet pipe until the desired treatment flow rate is achieved. A simultaneous set of calculations is performed during this incremental step to determine the headloss through the DSBB as a result of the water passing through the box and the screen. The basis for these calculations is the Bernoulli Energy Equation combined with an empirically determined equation for the losses associated with the screen. Flow rate, velocity, flow area, and constants are direct factors to the outcome of these calculations.

# Limitations and Restrictions on Use (Assumptions required for calculations to be valid)

- 1. Inlet and outlet pipe sizes are the same diameter.
- 2. Inlet-pipe flow is subcritical.
- 3. Flow in outlet-pipe at the exit is critical (no further restrictions down stream).
- 4. Tops of sediment partitions, inlet-pipe inverts, and outlet-pipe inverts are at the same elevation.
- 5. The DSBBB ceiling height is always above the water level.
- 6. Sediment in final chamber does not significantly restrict flow under skimmer panel (if present).
- 7. The DSBB screen channel is not significantly wider than outlet pipe diameter.
- 8. Top of basket is above water height. (This requirement does not affect these head loss calculations, but affects retention of floatable debris.)

Revision: DSBB Screen Flow Calculator Full Capture round pipe.xlsm

#### Calculation of Head Loss in DSBB Unit

In bypass, if screens are completely clogged.

Project Name
Project # 742047
Location Scottsdale, AZ
Completed By DAH

Fairmont Scottsdale Princess – Sunset Villas & Bung.
742047
Scottsdale, AZ
DAH

#### Inputs:

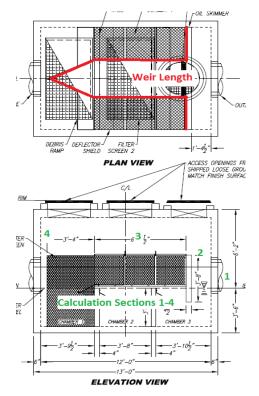
DSBB Size	DSBB-10-20	(Dropdown)
Inlet		
Flow (cfs)	66.8	

# Step 1: Input design information on left in blue Step 2: Change light green cell in Sections 1, 2 and 3 until "OK"

#### Outlet

Pipe Material		(Dropdown)
Pipe Shape	Round	(Dropdown)
Pipe Diameter (in)	36	
Box Width (in)	24	
Box Height (in)	42	

Section 1: 0	utlet Pipe	Within 5%?	% Error	
Depth in Pipe (ft)	2.18	ОК	2.98%	
Velocity in Pipe (fps)	12.14			
EGL in Pipe (ft)	4.47			
Section 2: Ex	it Chamber	Within 5%?	% Error	
HGL in Exit Chamber (ft)	5.52	ОК	1.12%	
Velocity in Exit Chmbr (fps)	1.21			
Entrance Loss	1.13			
EGL in Exit Chamber (ft)	5.60			
		_		
Section 3: Hea	d Over Weir	Within 5%?	% Error	
Length of Weir (ft)	41.80	*Note: Must	be larger than	
		Section 2 HGL		
Weir Submerged?	Submerged	Sectio	n 2 HGL	
, ,	Submerged 5.523	Sectio	n 2 HGL 4.40%	
Weir Submerged?				
Weir Submerged?	5.523			
Weir Submerged? HGL Before Weir (ft)*	5.523			
Weir Submerged? HGL Before Weir (ft)* Section 4: Inl	5.523 et Chamber			
Weir Submerged? HGL Before Weir (ft)*  Section 4: Inl HGL at Entrance Chamber (ft)	5.523 et Chamber 5.52			



## **Limitations and Restrictions on Use**

#### (Assumptions required for calculations to be valid)

(EGL

- 1. Inlet and outlet pipe sizes are the same diameter.
- 2. Inlet-pipe flow is subcritical.

Total Head Loss (ft)

Weir-EGL Pipe)\*1.3

- 3. Flow in outlet-pipe at the exit is critical (no further restrictions down stream).
- 4. Tops of sediment partitions, inlet-pipe inverts, and outlet-pipe inverts are at the same elevation.

1.40

- 5. Baffle-box ceiling height is always above the water level.
- 6. Sediment in final chamber does not significantly restrict flow under skimmer panel (if present).
- 7. Baffle Box is significantly wider than outlet pipe diameter.
- 8. Top of basket is above water height. (This requirement does not affect these head loss calcuations, but affects retention of flatable debris).

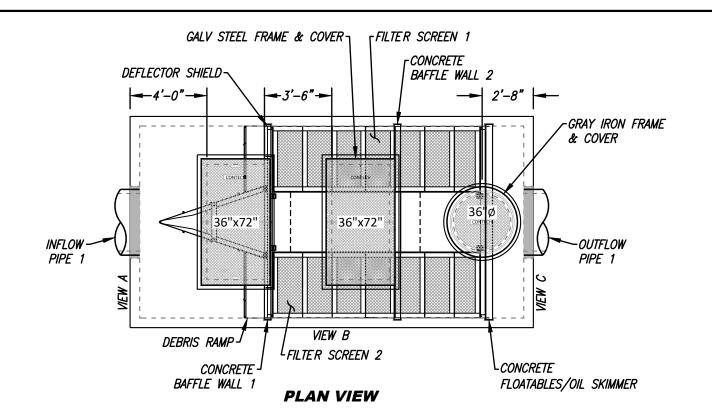
CINTECH ENGINEERED SOLUTIONS

If you have any questions, please contact:
Scott Sertich

scott.sertich@conteches.com

SITE SPECIFIC DATA*  PROJECT NUMBER 742047					
PROJECT NAME	FA	FAIRMONT SCOTTSDALE PRINCESS			
PROJECT LOCATION	/	SCOTTS	DALE,	AZ	
STRUCTURE ID		025			
WATER QUALITY FL	FLOW RATE (CFS)			1.70	
WATER QUALITY FLOW RATE MAX (CFS)			25.79		
PEAK FLOW RATE (CFS)			66.80		
PEAK STORM DURATION (YEARS)				10.00	
PIPE DATA	1.E.	I.E. MATERIAL		DIAMETER	
INFLOW PIPE 1	1546.5	546.5 HDPE			
OUTFLOW PIPE 1	1546.5	HDF	HDPE 36		
RIM ELEVATION		1537.9			
SURFACE LOADING REQUIREMENT			HS20		
FRAME AND COVER (2) 36"x72			?" (1) 36"ø		
CORROSIVE SOIL CONDITIONS			NA		
KNOWN GROUNDWATER ELEVATION			NA		

DSBB PERFORMANCE DATA						
SETTLING A	200.00					
LOADING R	PATE (GPM/	(SF)		3.81		
SCREEN S	YSTEM STO	RAGE CAPA	CITY (CF)	163.88		
SEDIMENT	STORAGE C	CAPACITY (C	CF)	580.00		
80% TSS REMOVAL @ 231 MICRON						
DSBB STORAGE CAPACITIES						
CAGE SCREEN CAPACITY						
	TOTAL (CF)					
SCREEN 1	11.50	3.17	2.25	81.94		
SCREEN 2	SCREEN 2 11.50 3.17 2.25					
SEDIMENT CHAMBER CAPACITY						
CHAMBER 1 6.50 10.00		3.00	195.00			
CHAMBER 2	HAMBER 2 6.42 10.00 3.00		3.00	192.50		
CHAMBER 3	192.50					



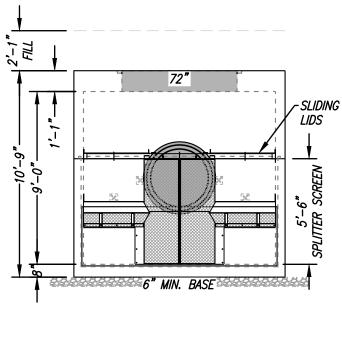
# **GENERAL NOTES**

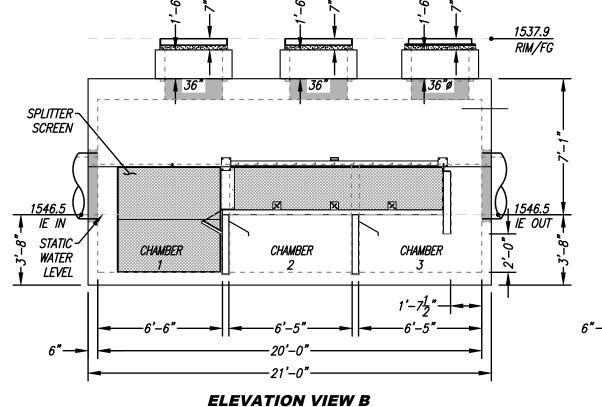
\*PER ENGINEER OF RECORD

- 1. CONTECH TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
- 2. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS, AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS, AND ACCESSORIES PLEASE CONTACT CONTECH.

## **INSTALLATION NOTES**

- 1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE DEBRIS SEPARATING BAFFLE BOX AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
- 2. MANUFACTURER RECOMMENDS A 6" LEVEL ROCK BASE UNLESS SPECIFIED BY THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PROJECT ENGINEER'S RECOMMENDED BASE SPECIFICATIONS.
- 3. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE (PIPES CANNOT INTRUDE BEYOND FLUSH).
- 4. ALL GAPS AROUND PIPES SHALL BE SEALED WATERTIGHT WITH A NON-SHRINK GROUT PER MANUFACTURER'S STANDARD CONNECTION DETAIL AND SHALL MEET OR EXCEED REGIONAL PIPE CONNECTION STANDARDS.
- 5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL PIPES, RISERS AND COVERS. ALL COVERS SHALL BE SHIPPED LOOSE. CONTRACTOR TO USE GROUT AND/OR BRICKS TO MATCH COVERS WITH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.





THIS PRODUCT MAY BE PROTECTED BY

INLET

**ELEVATION VIEW A** 

PROPRIETARY AND CONFIDENTIAL:

THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE SOLE PROPERTY OF CONTECH AND ITS COMPANIES. THIS DOCUMENT, NOR ANY PART THEREOF, MAY BE USED, REPRODUCED OR MODIFIED IN ANY MANNER WITH OUT THE WRITTEN CONSENT OF CONTECH.



DSBB-10-20-108 DUAL STAGE HYDRODYNAMIC SEPARATOR STANDARD DETAIL

36"ø

**OUTLET** 

**ELEVATION VIEW C** 

ONE OR MORE OF THE FOLLOWING US PATENTS: 6,428,692; 7,294,256; 7,846,327; 7,153,417; 7,270,747. RELATED FOREIGN PATENTS OR OTHER PATENTS PENDING

1:60 SCALE

APPENDIX E -	- STORM STORA EXHIBIT	AGE WAIVER /	PROPOSED I	DRAINAGE IMP	ROVMENTS

# Request for Stormwater Storage Waiver

292.5A.2007	City of Scottsdale Case Numbers:	
PAZN	- UP DR	-PP- PC#6332-6
The applicant/developer must complete an	d submit this form to the city for processing and of the waiver may require the developer to subm	obtain approval of waiver request before nit a revised site plan to the Development
Date 7/14/08 Project Nam	e Fairmont Scottsdale Princess Resort	
Project Location 7575 East Princess Drive Sc	cottsdale, AZ 85255	
Applicant Contact John Bulka	Company Name Wood	Patel & Associates
Phone 480-834-3300	Fax 480-634-3320 E-mail jbulka@wo	odpatel.com
Address 1855 N. Stapley Mesa, AZ 85203		
consider waiving some or all required stor supporting engineering analyses that dem potential for flooding on any property.	of a claim or right. A project must meet at least rmwater storage. Check the applicable box and nonstrate the project meets the criteria and that as been included in a storage facility at a	d provide a signed engineering report and the effect of a waiver will not increase the
must demonstrate that the s	stormwater storage facility was specifical and that the runoff will be conveyed to this	ly designed to accommodate runoit
2. The development is adjacer and constructed to handle the subject property or to any of	nt to a watercourse or channel that an en he additional runoff without increasing th ther properly.	gineering analysis shows is designed e potential for flood damage to the
3. The development is on a pademonstrates there is no significant.	rcel less than one-half acre in size in an gnificant increase in potential for flood da	area where the engineering analysis mage due to its development.
Ordinance (ESLO). The ap to the subject property or to	ments conflict with requirements of the E plicant must demonstrate there is no inc any other property. Such conflicts with	reased potential for flood damage ESLO may include:
allowable footprint per z  Topography prevents be	uilding storage basin.	, and NAOS prevent building
<ul><li>Creating a storage facili</li><li>Instances where the Zo</li></ul>	ity requires wash modification. ning Administrator cannot allow a modifi	cation to ESL requirements.
Council Resolution #6238 (	n the Downtown Fee Reduction Area as see map). The applicant must demonstr operty. Even if the project is located in the for increased flood damage, the developent the damage.	ate there is no increased potential e Downtown area, if the project
Community (SRPMIC) (see	n a watershed that drains directly to the S map). The project must provide the pre a flows over and above pre-development	-development peak discharge flow to
attached documentation.	ated project meets the waiver criteria selec	7-16-08
Developer or Engineer (circle one)		Late
Planning 8	& Development Services	Department
7447 E Indian School Road, Sui	ite 105, Scottsdale, AZ 85251 + Phone: 48	30-312-7000 • Fax: 480-312-7088



# Request for Stormwater Storage Waiver

- DR -

- PP

PC#

City of Scottsdale Case Numbers:

- UP -

- ZN -

EAVOUS DE EMONTEREY

Figure 1. Designated Area for Downtown Stormwater Storage Waivers

# Planning & Development Services Department

7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 + Phone: 480-312-7000 + Fax: 480-312-7088

NOT APPLICABLE



- PA

- ZN -

# Request for Stormwater Storage Waiver

City of Scottsdale Case Numbers:
-UP - - DR - - PP - PC#\_\_\_\_

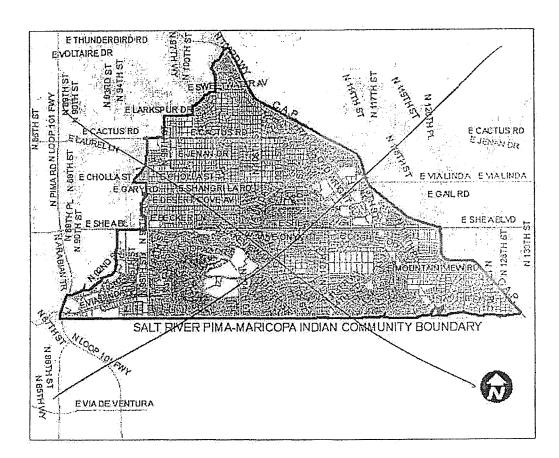


Figure 2. Watersheds Draining to Salt River Pima-Maricopa Indian Community

# Planning & Development Services Department

7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 + Phone: 480-312-7000 + Fax: 480-312-7088

NOT APPLICABLE



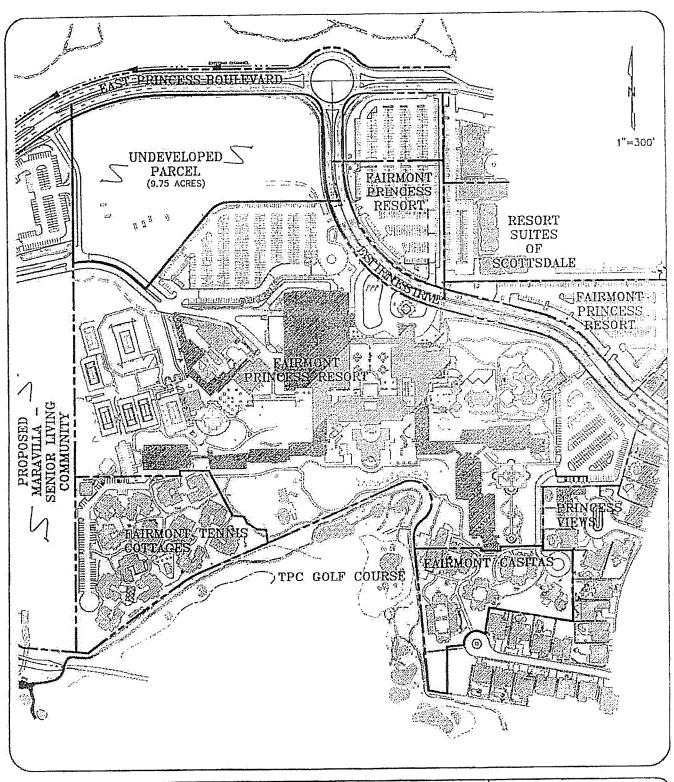
# Request for Stormwater Storage Waiver

	City of Scottsdale Case Numbers:		
P	City of Scottsdale Case Numbers: A ZN UP DR	PP	PC#
Project	Name GAIRMONT SCOTTS ONE PLINCES PESONET	,	
<u>Check</u>	Appropriate Boxes:		
	Meets waiver criteria (specify): □1 □2 □3 □4 □5	□ 6	
ā	Recommend approve waiver.		
	Recommend deny waiver:  None of waiver criteria met.  Downstream conditions prohibit waiver of any storage.  Other:  Explain:		
	Return waiver request:  Insufficient data provided.  Other:  Explain:		
図回	ommended Conditions of Waiver: All storage requirements waived. Pre development conditions must be maintained. Other: Diain: In land improvements exact as in law lee.		
[3] ·	Waiver <u>approved</u> per above conditions.		
	Waiver denied.  ( ) Ashly (w) 10/7	3/08	
	Floodplain Administrator or Designee Date	······	

7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 + Phone: 480-312-7000 + Fax: 480-312-7088

ITY AND COTTSDALE	Request	for	Stormv	<i>r</i> ater	Storage	Waiver
	4.2007		of Scottsdale Cas - UP -	e Numbers: - DR -	- PP -	PC#
PA	ZN		-01			
		In-Lieu I	Fee and In-Kind C	ontribution	าร	
it would c construct For FY 20 annually,	grants a waiver, the do ost the city to provide to ion, landscaping, design 007/2008, this cost is \$ but the city reserves the	the waive yn, constr 3.22 per ne right to	d storage volume, uction managemer cubic foot of storm revise the unit co	including cont.  and main  water store  st at any tim	osts such as land acc stenance over a 75-y d. This unit cost will e at its sole discretion	quisition, ear design life. be updated on.
contributi designee	dplain Administrator co on can serve as part o must approve in-lieu f	f or instea ees and i	ad of the calculated n-kind contribution	l In-lieu fee. s.	The Floodplain Adr	n-kind ministrator or
Project N	ame Fairmont	Scot	tsdale Prin	icess Re	sort	
The waiv	ed stormwater storage	volume i	s calculated as foll	ows:		
V = CRA; where V = stormwater storage volume required, in cubic feet, C = weighted average runoff coefficient over disturbed area, R = 100-year/2-hour precipitation depth, in feet (2.82 inches, or 0.235 feet, for all regions of Scottsdale), and A = area of disturbed ground, in square feet						
Furtherm	ore,		X O			
$V_w = volun$ V = volun	V <sub>p</sub> ; where me waived, ne required, and me provided		C = 0, 9 A = 424, 7.5 V = 89, 83 $V_{\nu} = 0$ $V_{w} = 40, 9$	53 16 326		
☐ An In-Lieu Fee will be paid, based on the following calculations and supporting documentation: In-lieu fee (\$) = V <sub>w</sub> (cu. ft.) x \$3.22 per cubic foot = <u>\(\mathcal{L}\text{D}\text{Q}\)</u>						
5	-Kind Contribution will ee attachment: th approvery plans	PORE	, as follows: SS Drive Bridge	Reconstru	epion, in quaevalenc	£:
☐ No In-Lieu Fee is required. Reason:						
Approve	d by: C. Jalle	ix Corl	~:		10/23/	<i>78</i>
Floodplain	Administrator or Designee	**	44 August 1997		Date	

Planning & Development Services Department
7447 E Indian School Road, Suite 105, Scottsdale, AZ 85251 • Phone: 480-312-7000 • Fax: 480-312-7088



# EXHIBIT 1

FAIRMONT SCOTTSDALE PRINCESS RESORT

ENGINEER
J. Bulka
DESIGNER
J. Heywood
CAD TECHNICIAN
J. Sonchez

 SCALE
 1 \*= 3.00\*

 DATE
 07/14/08

 JOHN MUMBER
 07910

 REF. SHEET
 1 OF 1

1855 North Stapley Drive Mesa, Arizona 85203 (480) 834-3300 (480) 834-3320 FAX

# WOOD/PATEL & ASSOCIATES INC.

Civil Engineers, Hydrologists and Land Surveyors

# Attachment to Stormwater Storage Waiver Request for Fairmont Scottsdale Princess Resort & Regional Flood Control

The Fairmont Scottsdale Princess Resort (Site) is a 60 acre resort located near the southwest corner of Princess Boulevard and Princess Drive. The Site is bounded by the Princess Blvd. to the north, the Maravilla Scottsdale Senior Living Community to the east, the TPC Golf Course to the south and existing residential developments to the west (see Exhibit 1, attached). The existing Fairmont Scottsdale Princess Resort consists of multiple hotel buildings, a ballroom, spa, tennis cottages, tennis courts, and parking. A majority of the site is developed and portions are being updated and renovated. At the north end of the site there is a 9.75 acre portion of the property that has yet to be developed, and other portions are scheduled for upgrades.

It is Wood/Patel's understanding that the ownership of the Fairmont Scottsdale Princess Resort, Strategic Hotels and Resorts, has agreed to fund regional flood control improvements to the public road/channel crossing at Princess Blvd and Scottsdale Road, in return for the City approving this waiver and it being applicable to the entire site. The improvements consist of removing the existing concrete box culvert crossing and replacing it with a bridge structure. The cost of a new bridge structure is estimated at \$1,053,000.

City of Scottsdale In-Lieu Fees:

V(req) Volume required = CRA = (0.90) x (0.235 feet) x (9.75 acres) = 89,826 cu-ft.

C (Runoff Coefficient) = 0.90

R (100-year/2-hour precipitation depth) = 0.235 feet

Site area = 9.75 acres

City of Scottsdale In-Lieu Fees =  $V(req) \times \$3.22 = (89,826 \text{ cu-ft}) \times \$3.22 = \$289,240$ 

Summary:

Public Drainage Improvements = \$1,053,000 (\*) City of Scottsdale in Lieu Fee = \$289,240

(\*) See Sheet 2 of 2 Engineering Preliminary Opinion of Probable Cost

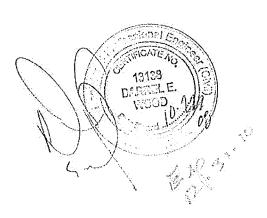
# Attachment to Stormwater Storage Waiver Request for Fairmont Scottsdale Princess Resort & Regional Flood Control

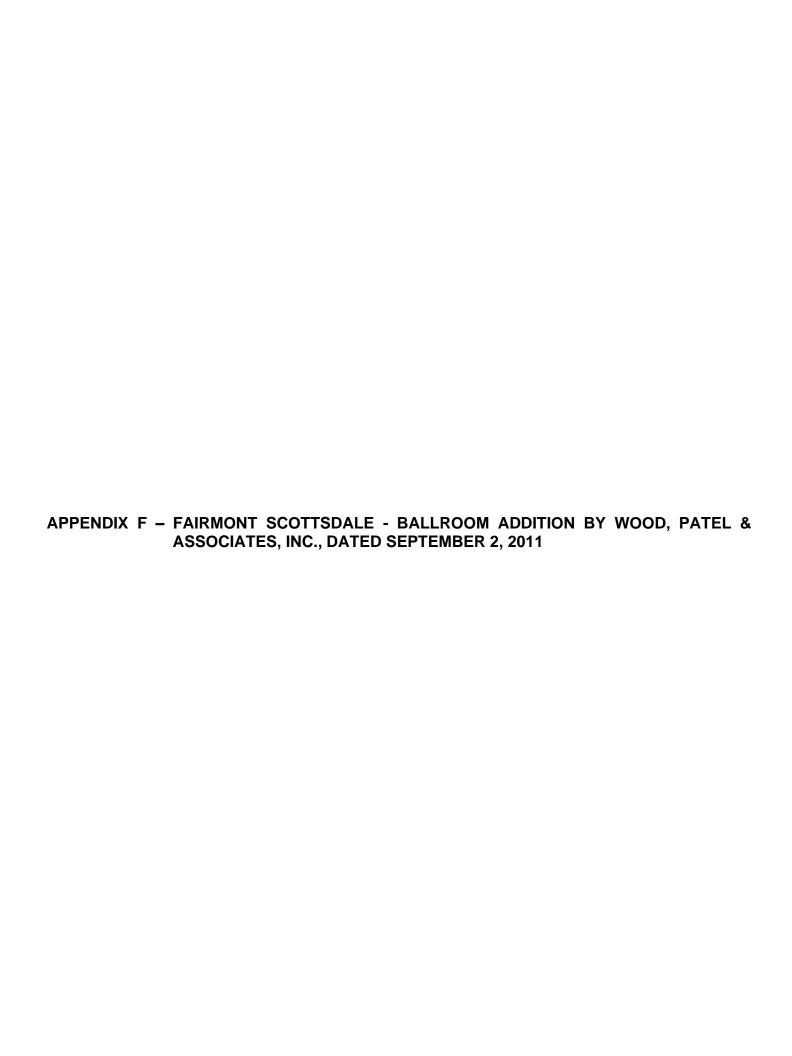
# Engineering Preliminary Opinion of Probable Cost (\*)

Prepared Bridge Structure at Princess Drive, just east of Scottsdale Road serving unnamed wash.

Estimated Bridge Surface = 8,100 square feet x \$130/s.f. \$1,053,000

(\*) Offered without the benefit of construction documents and specifications.





1. ALL CONSTRUCTION IN THE PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF SCOTTSDALE SUPPLEMENTAL STANDARD SPECIFICATIONS AND SUPPLEMENTAL STANDARD DETAILS. IF THERE IS A CONFLICT, THE CITY'S SUPPLEMENTAL STANDARD DETAILS WILL GOVERN.

2. THE CITY ONLY APPROVES THE SCOPE, NOT THE DETAIL, OF ENGINEERING DESIGNS; THEREFORE, IF CONSTRUCTION QUANTITIES ARE SHOWN ON THESE PLANS, THEY ARE NOT VERIFIED BY THE CITY.

3. THE APPROVAL OF PLANS IS VALID FOR SIX (6) MONTHS. IF AN ENCROACHMENT PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN SIX MONTHS. THE PLANS MUST BE RESUBMITTED TO THE CITY

4. A PUBLIC WORKS INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF SCOTTSDALE RIGHTS-OF-WAY AND IN EASEMENTS. NOTIFY INSPECTION SERVICES 24 HOURS PRIOR TO BEGINNING CONSTRUCTION BY CALLING 480-312-5750.

WHENEVER EXCAVATION IS NECESSARY, CALL THE BLUE STAKE CENTER. 602-263-1100, TWO WORKING DAYS BEFORE EXCAVATION BEGINS. THE CENTER WILL SEE THAT THE LOCATION OF THE UNDERGROUND UTILITY LINES IS IDENTIFIED FOR THE PROJECT. CALL "COLLECT" IF NECESSARY

ENCROACHMENT PERMITS ARE REQUIRED FOR ALL WORK IN PUBLIC RIGHTS-OF-WAY AND EASEMENTS GRANTED FOR PUBLIC PURPOSES. AN ENCROACHMENT PERMIT WILL BE ISSUED BY THE CITY ONLY AFTER THE REGISTRANT HAS PAID A BASE FEE PLUS A FEE FOR INSPECTION SERVICES. COPIES OF ALL PERMITS MUST BE RETAINED ON-SITE AND BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS WILL RESULT IN IMMEDIATE SUSPENSION OF ALL WORK UNTIL THE PROPER PERMIT DOCUMENTATION IS OBTAINED.

ALL EXCAVATION AND GRADING THAT IS NOT IN THE PUBLIC RIGHTS-OF-WAY OR NOT IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO CHAPTER 70, EXCAVATION AND GRADING, OF THE LATEST EDITION OF THE UNIFORM BUILDING CODE PREPARED BY THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS. A PERMIT FOR THIS GRADING MUST BE SECURED FROM THE CITY FOR A FEE ESTABLISHED BY THE UNIFORM BUILDING CODE.

8. SIGNS REQUIRE SEPARATE APPROVALS AND PERMITS.

#### FIRE NOTE:

ALL PRIVATE STREETS AND DRIVES SHALL CONFORM TO THE FIRE DEPARTMENT GUIDELINES FOR EMERGENCY VEHICLE ACCESS.

#### SEWER NOTE:

1. THE SEWER SYSTEM CONSTRUCTED BY THIS PLAN SET IS A PRIVATE SYSTEM AND WILL NOT BE MAINTAINED BY THE CITY OF SCOTTSDALE. 2. MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER.

#### WATER NOTE:

1. THE WATER SYSTEM SHOWN HEREIN HAS BEEN DESIGNED TO ADEQUATELY FIRE REQUIREMENTS.

### **UTILITY NOTES:**

1. THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES AND THE WORK CONTAINED IN THESE PLANS HAS BEEN APPROVED BY THESE COMPANIES WITHIN THEIR AREA OF INTEREST. THE SIZE AND LOCATIONS, AS SHOWN, OF THE GAS, TELEPHONE AND POWER LINES, AND CONNECTIONS AGREE WITH THE INFORMATION CONTAINED IN THE UTILITY COMPANY'S RECORDS. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL PROVISIONS AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

2. THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR UTILITY

### **ACCESSIBILITY NOTES:**

1. ACCESSIBLE ENTRANCES TO THE BUILDING SHALL BE IDENTIFIED BY THE

INTERNATIONAL SYMBOL OF ACCESSIBILITY. 2. EXTERIOR EXITS WHICH ARE LOCATED ADJACENT TO ACCESSIBLE AREAS

AND WITHIN 6 FT. OF ADJACENT GROUND LEVEL SHALL BE ACCESSIBLE. 3. ACCESSIBLE RAMPS REQUIRED BY ANSI SHALL NOT HAVE SLOPES THAT

EXCEED 1FT. IN 12 FT. 4. THE SURFACE OF RAMPS AND GROUND SURFACES SHALL BE

1:20 AND A MAXIMUM CROSS SLOPE OF 1:50.

ROUGHENED OR SHALL BE OF SLIP RESISTANT MATERIALS. 5. AN ACCESSIBLE ROUTE OF TRAVEL 3 FT. WIDE MIN. MUST BE PROVIDED TO ALL PORTIONS OF THE BUILDING, BETWEEN THE BUILDING AND THE

PUBLIC WAY. ACCESSIBLE ROUTES SHALL HAVE A MAXIMUM SLOPE OF

THRESHOLD MUST BE 6 INCHES IN HEIGHT OR LESS.

7. THE PRIMARY ENTRANCE TO THE BUILDING MUST BE ACCESSIBLE. ALL OTHER REQUIRED ENTRANCES MUST BE ACCESSIBLE.

8. ALL ACCESSIBLE PARKING SPACES SHALL HAVE A SLOPE NOT EXCEEDING 1:50.

9. ALL ACCESSIBLE PARKING SPACES SHALL BE OUTLINED ON ALL FOUR SIDES. HAVE A CONTRASTING COLOR AND THE INTERNATIONAL WHEELCHAIR SYMBOL ON THE GROUND WITHIN THE SPACE.

10. ALL ACCESSIBLE PARKING SPACES SHALL HAVE A SIGN (MINIMUM 5 FT. ABOVE FINISH GRADE IN FRONT OF THE SPACEO WHICH INCLUDED THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.

11. SIGNS DESIGNATING PERMANENT ROOMS AND SPACES SHALL MEET

ACCESSIBILITY REQUIREMENTS. 12. ALL ELECTRICAL RECEPTACLES AND CONTROLS SHALL BE 18 INCHES

MINIMUM AND 48 INCHES MAXIMUM ABOVE FINISHED FLOOR.

13. ALL ALARMS SHALL BE AUDIBLE AND VISUAL, MEETING ACCESSIBILITY

REQUIREMENTS. 14. ACCESSIBLE ROUTE SHALL BE WITHOUT STEPS OF CHANGES IN LEVEL

GREATER THAN 6 INCHES WITHOUT AN APPROVED RAMP.

15. ACCESSIBLE ROUTES SHALL SERVE AS EXITS OR CONNECT TO AREAS OF RESCUE ASSISTANCE.

### **LEGEND**

EXISTING	DESCRIPTION LEASE BOUNDARY LINE	PROPOSED
	SURVEY MARKER	<b>○</b>
	TRACT/LOT LINE	
	CURB & GUTTER	
. 240	CONTOURS INDEX	1240
1244	CONTOURS INTER.	1244
·1241		124
s	LOWEST FINISH FLOOR PAD ELEVATION GARAGE ELEVATION SANITARY SEWER	LF <sub>88</sub> =XXXX.XX PAD=XXXX.XX GF=XXXX.XX
— W — — — — — — — — — — — — — — — — — —	WATER LINE GAS LINE ELECTRIC LINE	
	TELCO LINE COMMUNICATION TRENCH OVERHEAD ELECTRIC LINE IRRIGATION LINE	
	STORM DRAIN	
	SCREEN/SITE WALL	
	RETAINING WALL	
	RETAINING WALL W/ CMU ABOVE	
	RETAINING WALL W/ FENCE/HANDRAIL ABOVE	<u> </u>
	RAISED STEMWALL DROP FOOTING	
	UNDERGROUND GARAGE LIMITS	
<b>*</b>	PARKING / AREA LIGHTS	10-
	FLOW ARROW SEWER CLEANOUT	
<b>⊗</b>	WATER METER WATER VALVE BACK FLOW PREVENTOR	© 8 ©©
(S) <b>⊕</b>	SEWER MANHOLE FIRE HYDRANT	
	FIRE DEPT. CONNECTION	
	STORM DRAIN MANHOLE	$\bigcirc$
	CATCH BASIN	
	AREA DRAIN	
	HEAD WALL	
	ROOF DRAIN BUBBLE UP	
E	ELECTRIC MANHOLE	
	SIGN S.E.S.	S.E.S.
	GAS METER	<u>C≥</u> ≤3 G.M.
	ELECTRIC CABINET	EC/PAD= XX.XX
	TRANSFORMER	T/PAD= XX.XX
	TOP OF CURB	TC 81.00
	PAVEMENT ELEVATION	<u>P 81.00</u>
	GUTTER ELEVATION	<u>G 81.00</u>
	FINISH GRADE	FG 81.00 CO 81.00
	CURB OPENING WALL OPENING	WO 81.00
	CONCRETE ELEVATION	C 81.00
	TOP OF RETAINING WALL	TRW 81.00
	TOP OF WALL	TW 81.00
NO 04 00	TOP OF FENCE	<u>TF 81.00</u>
NG 81.00 TC 81.00	NATURAL GRADE	
x 10 01.00	EXISTING ELEVATION	 
	SHADE STRUCTURE	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

C.J.B. CABLE TV J-BOX C.L.F. CHAIN LINK FENCE C.P.S. COTTON PICKER SPINDLE C.T.R. CABLE TV RISER D.E. DRAINAGE EASEMENT D.W. DRYWELL E.C. ELECTRIC CABINET E.J.B. ELECTRIC JUCTION BOX	(M) M.C.R. PG. P.O.B. P.O.C. P.L. P.P. PU&FE  (R) R/W	POWER POLE PUBLIC UTILITY AND FACILITIES EASEMENT RECORD DATA
E.M. ELECTRIC METER E.P. EDGE OF PAVEMENT		SEWER CLEANOUT
F.D.C. FIRE DEPT. CONNECTION		ELECTRIC SERVICE
F.H. FIRE HYDRANT	S.L.	STREET LIGHT
FND. FOUND	T.L.M.	TELCO LINE MARKER
F.O.C. FACE OF CURB	T.R.	TELEPHONE RISER
F.P. FINAL PLAT	T.S.	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
G.B.P. GAS BACKFLOW PREVENTOR		VERTICAL CURB & GUTTER
G.F. GARAGE FLOOR		WATER BLOW OFF
G.L.M. GAS LINE MARKER	W.B.P.	
G.M. GAS METER	W.M.	WATER METER
G.R. GAS REGULATOR		WATER VALVE
	*** * * * * * * * * * * * * * * * * * *	WATER VAULT
I.V. IRRIGATION VALVE I.V.B. IRRIGATION VALVE BOX	۷۷. ۲.	WATERLINE EASEMENT (PUBLIC)

E.S.V.A.E. EMERGENCY SERVICE VEHICLE ACCESS EASEMENT

C.A.E. CROSS ACCESS EASEMENT

R.W.E. ROADWAY EASEMENT

# FAIRMONT SCOTTSDALE BALLROOM ADDITION

LOCATED IN

A PORTION OF SECTION 35, T.4.N., R.4.E., OF THE G. & S.R.M., MARICOPA COUNTY, ARIZONA 7501 EAST PRINCESS BOULEVARD, SCOTTSDALE, AZ. 85255

### **INDEMNITY**

CITY OF SCOTTSDALE WILL NOT BE RESPONSIBLE FOR REMOVAL REPAIR, OR REPLACEMENT OF SIDEWALKS, LANDSCAPING OR ANY OTHER IMPROVEMENTS LOCATED WITHIN CITY EASEMENT(S) AS A RESULT OF ACCESS TO MAINTENANCE OF, OR REPAIRS TO THE WATERLINE SHOWN ON THESE PLANS.

2. CITY OF SCOTTSDALE WILL NOT BE RESPONSIBLE FOR REMOVAL REPAIR, OR REPLACEMENT OF THE RETAINING WALLS OR OTHER IMPROVEMENTS WITHIN CITY EASEMENT(S) AS A RESULT OF ACCESS TO, MAINTENANCE OF, OR REPAIRS TO THE RETAINING WALLS SURROUNDING THE DETENTION BASINS SHOWN ON THESE PLANS.

#### AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT" MEASUREMENTS AS SHOWN OR NOTED HEREON WERE MADE BY MYSELF OF UNDER MY SUPERVISION AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Allega and the same	and the first of the same	and the control of th			
SIGNATURE				DATE	
SEAL					

### **ENGINEER'S CERTIFICATION:**

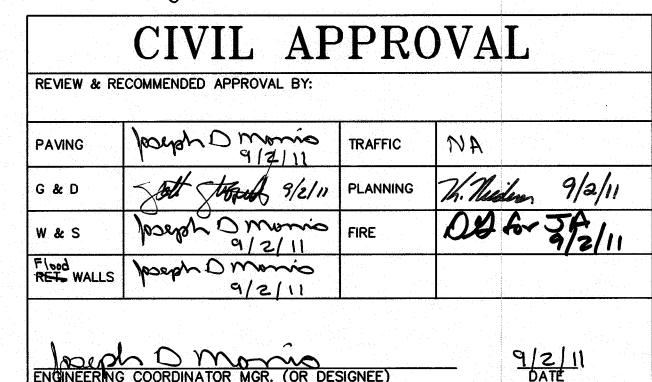
ENGINEER'S CERTIFICATION: THE LOWEST FLOOR ELEVATION(S) AND/OR FLOOD PROOFING ELEVATION(S) ON THIS PLAN ARE SUFFICIENTLY HIGH TO PROVIDE PROTECTION FROM FLOODING CAUSED BY ONE-HUNDRED YEAR STORM, AND ARE IN ACCORDANCE WITH CITY OF SCOTTSDALE REVISED CODE, CHAPTER 37-FLOODWAYS & FLOOD PLAINS ORDINANCE.

"THE ENGINEER OF RECORD ON THESE PLANS HAS RECEIVED A COPY OF THE APPROVED STIPULATIONS FOR THIS PROJECT AND HAS DESIGNED THESE PLANS IN CONFORMANCE WITH THE APPROVED STIPULATIONS."

# enginker: Scott/Audsley, P.E.

	NO CONFLICT	SIGNATURE	BLOCK	
UTILITY	UTILITY COMPANY	NAME OF COMPANY REPRESENTATIVE	TELEPHONE NUMBER	DATE SIGNEI
ELECTRIC	ARIZONA PUBLIC SERVICE	SCOTT TIMAR	602-493-4421	8-1-1
TELEPHONE	QWEST COMMUNICATIONS	JOHN NEVLIS	602-630-6891	8-3-1
NATURAL GAS	SOUTHWEST GAS	ZACH STEVENSON	602-861-1899	7-28-1
CABLE TV	COX COMMUNICATIONS	TRAFFIC MANAGEMENT	623-322-7086	7-28-1
	SALT RIVER PROJECT	MATT STREEPER	<del>-</del> .	7-28-1
		-	<del>-</del>	

ENGINEER'S CERTIFICATION \_, BEING THE ENGINEER OF RECORD FOR THIS DEVELOPMENT, HEREBY CERTIFY THAT ALL UTILITY COMPANIES LISTED ABOVE HAVE BEEN PROVIDED FINAL IMPROVEMENT PLANS FOR REVIEW, AND THAT ALL CONFLICTS IDENTIFIED BY THE UTILITIES HAVE BEEN RESOLVED. IN ADDITION, "NO CONFLICT" FORMS HAVE BEEN OBTAINED FROM EACH UTILITY COMPANY AND ARE INCLUDED IN THIS SUBMITTAL.



### M.C.E.S.D. APPROVAL:

all potable waterlines and fittings shall HAVE A NSF-PW SEAL. ALL MATERIALS AND PRODUCTS USED IN THE POTABLE WATER SYSTEM SHALL CONFORM TO NSF STANDARDS 60 AND 61 IN ACCORDANCE WITH AAC R18-4-213. ALL MATERIALS SHALL BE LEAD FREE AS DEFINED IN AAC R18-5-504 AND R18-4-101. ARCHITECT:

lot # wwR-11-00115 MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

DATE:

### SHEET INDEX

COVER SHEET **NOTES** INDEX SHEET DEMOLITION PLAN 14-19 WATER AND SEWER PLAN 20-24 OFFSITE IMPROVEMENT PLAN STRIPING PLAN

GRADING AND DRAINAGE PLAN

DETAIL SHEET

#### CONTACT: MR. PAUL ALTOMARE, AIA PH: (562) 597-8760 ENGINEER: WOOD/PATEL AND ASSOCIATES 2051 WEST NORTHERN AVENUE PHOENIX, ARIZONA 85021 CONTACT: DARIN L. MOORE, P.E. PH: (602) 335-8500

UNION | HILLS DF

PRINCESS BLVD

GENTRAL ARIZONA PROJECT COR

VICINITY MAP

N.T.S.

**DEVELOPER:** 

PH: (312) 658-6016

STRATEGIC HOTELS AND RESORTS

200 W. MADISON, SUITE 1700

CONTACT: MR. MICHAEL DALTON

KOLLIN ALTOMARE ARCHITECTS

LONG BEACH, CALIFORNIA 90804

1350 CORONADO AVENUE

CHICAGO, ILLINOIS 60606

### PROJECT DATA

FAX: (602) 335-8580

ADDRESS - 7501 E. PRINCESS BLVD SCOTTSDALE, AZ 85255

APN # - 215-08-001 Y, 215-08-001 X 215-08-133, 215-08-001 M

ZONING - C-2 PCD GROSS LOT (PARCEL) AREA - 34.87 ACRES NET PROJECT AREA - 14± ACRES



REVISED F.F. ELEVATION, SERVICE AREA, PRIVATE SANITARY SEWER & PRIVATE STORM DRAIN. 10-07-2011

#### **BENCHMARK**

THE VERTICAL DATUM FOR THIS SURVEY IS BASED ON CITY OF SCOTTSDALE BRASS CAP FLUSH, LOCATED APPROXIMATELY 450-FEET NORTH OF THE INTERSECTION OF PRINCESS DRIVE AND SCOTTSDALE ROAD HAVING AN ELEVATION OF 1553.217, CITY OF SCOTTSDALE DATUM.

BENCHMARK CERTIFICATION STATEMENT I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON THE ELEVATION DATUM FOR THE CITY OF SCOTTSDALE BENCHMARK PROVIDED ABOVE.

# FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

-	COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	FIRM ZONE	BASE FLOOD (IN AO ZONE,	
4	04013C	1245	H	09/30/2005	AO	1	

FLOOD NOTES

ACCORDING TO FEMA FLOOD INSURANCE RATE MAP NO. 04013C1245H DATED SEPTEMBER 30, 2005, THE SUBJECT PROPERTY IS LOCATED IN ZONE AO. ZONE AO IS DESCRIBED AS: "FLOOD DEPTHS OF 1 TO 3 FEET (USUALLY SHEET FLOW ON SLOPING TERRAIN): AVERAGE DEPTHS TO BE DETERMINED. FOR AREAS OF ALLUVIAL FAN FLOODING VELOCITIES ALSO DETERMINED."

BEFORE YOU DIG (602) 263-1100 1-800-STAKE-IT (OUTSIDE MARICOPA COUNTY)

CALL TWO WORKING DAYS

Q 1350 coronado avenue, long beach, ca 90804



tel 562.597.8760





WOOD/PATEL CIVIL ENGINEERS **HYDROLOGISTS** 

LAND SURVEYORS (602) 335-8500

PHOENIX • MESA • TUCSON **ENGINEER** S. AUDSLEY DESIGNER CAD TECHNICIAN SCALE (HORIZONTAL) SCALE (VERTICAL)

JOB NUMBER

SHEET 26

#### **ENGINEERS NOTES**

- 1. MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION INCLUDING LATEST REVISION AND CURRENT SUPPLEMENTALS THEREOF PER THE LOCAL TOWN OR CITY) ARE INCORPORATED INTO THIS PLAN IN THEIR ENTIRETY.
- 2. ALL WORK REQUIRED TO COMPLETE THE CONSTRUCTION COVERED BY THIS PLAN SHALL BE IN ACCORDANCE WITH THE M.A.G. STANDARD SPECIFICATIONS AND DETAILS AND CURRENT SUPPLEMENTS THEREOF PER THE LOCAL CITY OR TOWN UNLESS SPECIFIED OTHERWISE IN THESE PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL REQUIRED STANDARD SPECIFICATIONS, DETAILS AND SUPPLEMENTS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ALL METHODS, SEQUENCING, AND SAFETY CONCERNS ASSOCIATED WITH THIS PROJECT DURING CONSTRUCTION, UNLESS SPECIFICALLY ADDRESSED OTHERWISE IN THIS PLAN OR ELSEWHERE IN THE CONTRACT.
- 4. THE CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION COVERED BY THIS PLAN
- 5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS
- 6. THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE SUBJECT TO ERROR AND OMISSION. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
- 7. A REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL CALL 48 HOURS IN ADVANCE FOR BLUE STAKE (1–800–STAKE—IT) PRIOR TO ANY EXCAVATION.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
- 9. ALL PAVING, GRADING, EXCAVATION, TRENCHING, PIPE BEDDING, CUT FILL AND BACKFILL SHALL COMPLY WITH THE RECOMMENDATIONS SET FORTH IN THE SOILS (GEOTECHNICAL) REPORT FOR THIS PROJECT IN ADDITION TO THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL BE AWARE THAT CERTAIN UTILITIES REQUIRE PROPER ATTENTION AND CAREFUL PLANNING DURING SITE CONSTRUCTION. PLEASE NOTE THAT UTILITIES ON THESE PLANS MAY NOT EXHIBIT THE FULL PROTECTIVE COVER REQUIRED DURING THE SUBGRADE PREPARATION PHASE OF THE CONSTRUCTION. IN SUCH INSTANCES, THE CONTRACTOR SHALL PROVIDE ADDITIONAL PROTECTION (SUCH AS RAMPING) OR INCREASED PIPE STRENGTH TO PROVIDE THE NECESSARY PROTECTION REQUIRED TO PREVENT DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL HOLD THE ENGINEER HARMLESS IN ALL CASES FOR DAMAGES TO UTILITIES WHERE INADEQUATE PROTECTIVE MEASURES OCCUR.
- 10. THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES AT POINTS OF TIE—IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AGENT.
- 11. CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND SITE LAYOUT WITH ARCHITECT'S FINAL SITE PLAN AND FINAL BUILDING DIMENSIONS BEFORE STARTING WORK. REPORT DISCREPANCIES TO OWNER'S AGENT.
- 12. COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
  13. CONTRACTOR IS RESPONSIBLE FOR PROJECT AND SITE CONDITIONS, AND TO WORK WITH WEATHER CONDITIONS AS THE PROJECT SITE MAY BE LOCATED IN A FLOOD PRONE AREA AND SUBJECT TO FLOODING AND ITS
- 14. THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION, CONDITION, AND PAVEMENT CROSS—SLOPE OF ALL EXISTING SURFACES AT POINTS OF TIE—IN AND MATCHING, PRIOR TO COMMENCEMENT OF GRADING, PAVING, CURB AND GUTTER, OR OTHER SURFACE CONSTRUCTION. SHOULD EXISTING LOCATIONS, ELEVATIONS, CONDITION, OR PAVEMENT CROSS—SLOPE DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THESE PLANS NOT ABLE TO BE CONSTRUCTED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AGENT IMMEDIATELY FOR DIRECTION ON HOW TO PROCEED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL COSTS ASSOCIATED WITH CORRECTIVE ACTION IF THESE PROCEDURES ARE NOT FOLLOWED.
- 15. CONTRACTOR IS RESPONSIBLE TO COORDINATE UTILITY CROSSINGS AT CULVERT CROSSINGS BEFORE STARTING WORK ON CULVERT. COORDINATE WITH OWNER REPRESENTATIVE. VERIFY UTILITY LINES AND/OR CONDUITS ARE IN PLACE BEFORE STARTING CULVERT WORK.
- 16. CONSTRUCT RETENTION BASIN AS SHOWN. CONTRACTOR TO SCARIFY
  BOTTOM OF BASIN TWO FEET DEEP AND NOT ALLOW COMPACTION OVER
- 17. THIS PROJECT REQUIRES A REGULAR ONGOING MAINTENANCE PROGRAM FOR THE DESIGNED DRAINAGE SYSTEM(S) TO PRESERVE THE DESIGN INTEGRITY AND THE ABILITY TO PERFORM ITS OPERATIONAL INTENT. FAILURE TO PROVIDE MAINTENANCE WILL JEOPARDIZE THE DRAINAGE SYSTEM(S)' PERFORMANCE AND MAY LEAD TO IT'S INABILITY TO PERFORM PROPERLY AND/OR CAUSE DAMAGE ELSEWHERE IN THE PROJECT.
- 18. SEWER LINES DESIGNED IN PROFILE AND PUBLIC WATER LINES ARE REQUIRED TO BE ASBUILT AND THE INSTALLATION AND TESTING WITNESSED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODES R18-9-E301 "4.01 GENERAL PERMIT: SEWAGE COLLECTIONS SYSTEMS" AND R18-5-507 AND 508 "APPROVAL OF CONSTRUCTION" AND "RECORD DRAWINGS", RESPECTIVELY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY OWNER 72 HOURS IN ADVANCE WHEN THOSE SYSTEMS ARE READY TO BE WITNESSED.
- 19. THE WORK PRODUCT PRESENTED IS BELIEVED TO BE COMPLIANT WITH THE INTENT OF THE CURRENT AMERICANS DISABILITIES ACT (ADA) REQUIREMENTS AS INTERPRETED BY THE REVIEWING AGENCY(S). IF CONSTRUCTION OF THE PROJECT IS DELAYED, THIS WORK PRODUCT SHOULD BE UPDATED TO ACCOUNT FOR ANY RELEVANT ADA UPDATES BEFORE CONSTRUCTION BEGINS.
- 20. LOWEST FLOOR (LF) REFERS TO EITHER FLOOR/SLAB ELEVATION OR TOP OF BASEMENT SLAB. LF ELEVATIONS ON THE GRADING AND DRAINAGE PLANS FOR RESIDENTIAL UNITS REFLECT SLAB ON GRADE CONDITIONS AND CANNOT BE LOWERED WITHOUT AGENCY APPROVAL IN LOCATIONS WHERE 'SPECIAL FLOOD HAZARD AREAS' EXIST. IN NON-FLOOD HAZARD LOCATIONS, TO ENSURE THAT ADEQUATE RESIDENTIAL LOT DRAINAGE CAN BE ACHIEVED, A PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF THE LF FOR THE SLAB IS PROPOSED TO BE LOWERED, OR IF A BASEMENT IS TO BE CONSTRUCTED.

#### SOILS REPORT NOTE

1. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT PREPARED BY ALPHA GEOTECHNICAL & MATERIALS, INC. DATED FEBRUARY 4, 2011 & ALL SUBSEQUENT ADDENDUMS FOR ALL PAVING, GRADING, EXCAVATION, TRENCHING, PIPE BEDDING, CUT, FILL AND BACKFILL.

#### SIGNS & MARKING NOTES

- 1. ALL PAVEMENT MARKINGS, SIGNING AND WORK ZONE TRAFFIC CONTROL TYPE AND LAYOUT NEED TO CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, HTTP://MUTCD.FHWA.DOT.GOV/INDEX.HTM.
- 2. WORK ZONE TRAFFIC CONTROL NEEDS TO CONFORM TO THE CITY OF PHOENIX TRAFFIC BARRICADE MANUAL AND/OR AS DIRECTED BY THE CITY PUBLIC WORKS INSPECTOR OR TRAFFIC ENGINEERING DIVISION
- CITY PUBLIC WORKS INSPECTOR OR TRAFFIC ENGINEERING DIVISION.

  3. SIGNS ARE TO BE INSTALLED ON TELESPAR PREPUNCHED SQUARE STEEL TUBING POSTS PER COS STANDARD DETAIL NO. 2131,
- WWW.SCOTTSDALEAZ.GOV/DESIGN/COSMAGSUPP.
  4. DIMENSIONS TO SIGNS NEED TO INCLUDE THE SIGN POST, OR IN THE
- CASE OF MULTIPLE POSTS, THE PLAN VIEW CENTER OF THE SIGN.
  5. 'NO PARKING" SIGNS SHALL ONLY BE USED WHEN THE FOLLOWING SITE CONDITIONS EXIST.
- A. WHEN ANY RIGHT HAND LANE (CURB LANE) IS 16 FEET OR WIDER, OR IF A PAVED SHOULDER AREA IS PRESENT.
- B. WHERE ON-STREET PARKING COULD BE EXPECTED TO OCCUR, SUCH AS COMMERCIAL AREAS WHERE BUSINESSES HAVE DIRECT FRONTAGE ON THE STREET. WHEN THE ABOVE CRITERIA EXISTS 'NO PARKING" SIGNS (R8-3A 12 INCH X 18 INCH) WITH AN ARROW (SINGLE DIRECTION OR BI-DIRECTIONAL) BELOW THE 'P" SYMBOL ON THE SIGN TO DESIGNATE THE DIRECTION OF THE RESTRICTION SHALL BE INSTALLED APPROXIMATELY EVERY 350-400 FEET ALONG THE LENGTH OF THE PROJECT. NO PARKING SIGNS SHALL BE INSTALLED APPROXIMATELY 5 FEET FROM THE BACK OF CURB AT A 45 DEGREE ANGLE TO THE CURB. STREET LIGHT POLES SHOULD BE USED FOR SIGN MOUNTING WHEN A LIGHT POLE IS WITHIN 50 FEET OF THE PROPOSED SIGN LOCATION.
- 6. ALL LONGITUDINAL STRIPING (EDGE LINE, LANE LINE AND CENTERLINE)
  SHALL BE .090"(90 MIL) EXTRUDED THERMOPLASTIC, UNLESS OTHERWISE
  NOTED ON THE PLANS.
- 7. ALL TRANSVERSE STRIPING (STOP LINES, CROSSWALK LINES) SHALL BE A MINIMUM OF .090" (90 MIL) EXTRUDED THERMOPLASTIC, UNLESS NOTED OTHERWISE ON THE PLANS.
- 8. ALL PLAN VIEW STRIPING DIMENSIONS ARE MEASURED TO THE CENTER OF THE LINE OR CENTER OF THE DOUBLE LINE.
- 9. ALL PAVEMENT SYMBOLS, ARROWS AND LEGENDS SHALL BE TYPE 1
  PERMANENT, HIGH PERFORMANCE PREFORMED PAVEMENT TAPE. (TAPE
  MUST PERFORM AS 3M 380I—ES SERIES OR EQUIVALENT.)
- 10. RAISED PAVEMENT MARKERS (RPMS) SHALL BE USED ON ALL STRIPED STREETS. RPMS SHALL BE INSTALLED PER COS STANDARD DETAIL NO. 2132, WWW.SCOTTSDALEAZ.GOV/DESIGN/COSMAGSUPP, AND ADOT STANDARD DRAWING M-19, WITH A CITY APPROVED BITUMINOUS
- 11. BLUE TYPE F (2-WAY REFLECTIVE) RPMS SHALL BE USED TO INDICATE THE LOCATION OF ALL FIRE HYDRANTS AND REMOTE FIRE DEPARTMENT CONNECTIONS, PER COS STANDARD DETAIL NO. 2363,
- WWW.SCOTTSDALEAZ.GOV/DESIGN/COSMAGSUPP.

  12. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED MARKINGS SHALL BE REMOVED BY SANDBLASTING, HYDROBLASTING OR GRINDING PRIOR TO THE INSTALLATION OF NEW PAVEMENT MARKINGS.
- REMOVALS SHALL BE TO THE SATISFACTION OF THE CITY INSPECTOR.

  13. ASTM TYPE IV SHEETING (MINIMUM) SHALL BE USED FOR ALL WARNING AND REGULATORY AND STREET NAME SIGNS. ALL ADVANCE STREET NAME SIGNS SHALL BE PROPOSED TYPE XI SHEETING. SCHOOL WARNING SIGNS AND ACCOMPANYING PLACARDS MUST BE ASTM PROPOSED TYPE XI FLUORESCENT YELLOW GREEN SHEETING. ALL METRO SIGNS SHALL COMPLY WITH THE COS STANDARD DETAIL NO. 2134-4.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR LAYOUT OF ALL PAVEMENT MARKINGS USING CONTROL POINTS SPACED NO MORE THAN 50 FEET APART. PAVEMENT MARKING LAYOUT SHALL BE APPROVED BY TRAFFIC ENGINEERING PRIOR TO THE APPLICATION OF THE FINAL PRODUCT. ALL PAVEMENT MARKING DRAWINGS ARE SCHEMATIC ONLY. THE CONTRACTOR SHALL FOLLOW ALL DIMENSIONS, DETAILS AND STANDARDS WHEN INSTALLING PAVEMENT STRIPING, MARKING AND MARKERS.

$\mathbf{C}$	IVIL REA	PPROVAL
REAPPROVAL #	REVISED SHEET NO.(S)	DESCRIPTION OF REVISION(S)
$\triangle$	1-3, 8-19	REVISED F.F. ELEVATION, SERVICE AREA, PRIVATE SANITARY SEWER & PRIVATE STORM DRAIN.
PAVING		TRAFFIC
G & D		PLANNING
W & S		FIRE
RET. WALLS		

ENGINEERING COORDINATOR MGR. (OR DESIGNEE)

AGRICULTURE

AGRICATE

AUDSLEY

APLONA, U.S.P.

APLONA, U.S.P.

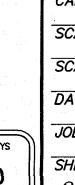
DATE

REVISED F.F. ELEVATION, SERVICE AREA,
PRIVATE SANITARY SEWER & PRIVATE
STORM DRAIN. 10-07-2011

	ESTIMATED QUANTITI	ES	
	DESCRIPTION	UNITS	QNTY.
	EXCAVATION:		
	CUT	CY	20,635
$\bigwedge$ 1	FILL	CY	38,978
-			
	SITE WALLS		
	SCREEN WALL/FLOODWALL	<u>LF</u>	985
	PUBLIC WATER:		
	2" DOMESTIC WATER SERVICE LINE	LF	56
	2" WATER METER	EA	2
	2" BACKFLOW PREVENTOR	EA	2
	3"x2" REDUCER 3" DOMESTIC WATER SERVICE LINE	EA. LF	62
	4" D.I.P. CLASS 350 WATERLINE	LF	138
	8" D.I.P. CLASS 350 WATERLINE	LF	1651
	12"x8" T.S. & V.	EA	2
	W.V.,B. & C.	EA.	8
	8"x6" REDUCER	EA.	1
	FIRE HYDRANT COMPLETE FIRE DEPT. CONNECTION (F.D.C.)	EA.	4
	SAWCUT, REMOVE & REPLACE EX PAVEMENT	SY	98
	PRIVATE SEWER:		
. /	6" P.V.C. SEWERLINE	LF	164
	8" P.V.C. SEWERLINE	LF	189
(	SEWER CLEANOUT SEWER MANHOLE	EA.	1 2
	SAWCUT, REMOVE & REPLACE EX PAVEMENT	SY	8
	PRIVATE STORM DRAIN:		
	6" HDPE STORM DRAIN PIPE	<u>LF</u>	260
	8" HDPE STORM DRAIN PIPE  18" HDPE STORM DRAIN PIPE	LF	158
^		LF	904
1	24" HDPE STORM DRAIN PIPE	LF _	224
	30" HDPE STORM DRAIN PIPE	LF	313
$\triangle$	36" HDPE STORM DRAIN PIPE	LF	697
	CATCH BASINS (MAG 535)	EA.	6
	CATCH BASINS (CURB INLET TYPE 'M')	EA.	1
	STORM DRAIN CLEANOUT	EA.	3
$\Lambda$	STORM DRAIN MANHOLE	EA.	8
	ADS JUNCTION	EA.	1
	12" ADS CATCH BASIN AND GRATE	EA.	4
<b>A</b>	RIPRAP	CY	116
1	SAWCUT, REMOVE & REPLACE EX PAVEMENT	SY	24
	OFFCITE DAVING		
	OFFSITE PAVING: RIBBON CURB (MODIFIED TO 1' WIDTH)	LF	212
	4" ROLL CURB	LF	189
	6" VERTICAL CURB	LF	242
	6" VERTICAL CURB & GUTTER	LF	441
	SIDEWALK	SF	7638
	SAWCUT & REMOVE AC PAVEMENT  3" ON 6" AC PAVEMENT	SY SY	1461 1500
	6' VALLEY GUTTER	SF	774
		·	<del></del>

### NOTES:

- 1. QUANTITIES SHOWN HEREON ARE FOR PERMIT PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO BIDDING.
- 2. EARTHWORK QUANTITIES ARE IN PLACE ESTIMATES, NO SHRINK OR SWELL ASSUMED.



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46844
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AUDSLEY
APIZONA, U.S.P.

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DESIGNER

S. AUDSLEY

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P. JIROUT

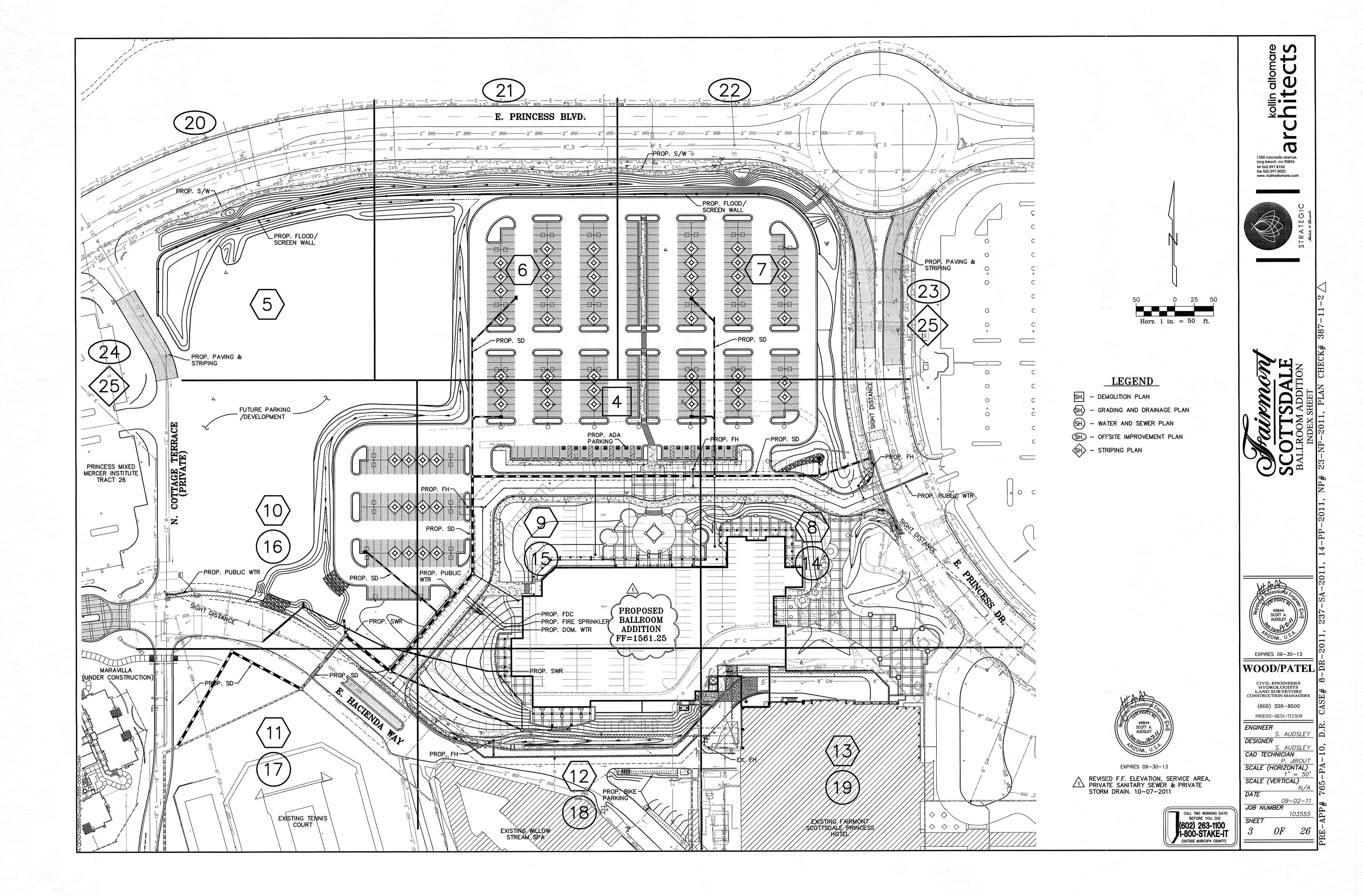
SCALE (HORIZONTAL)

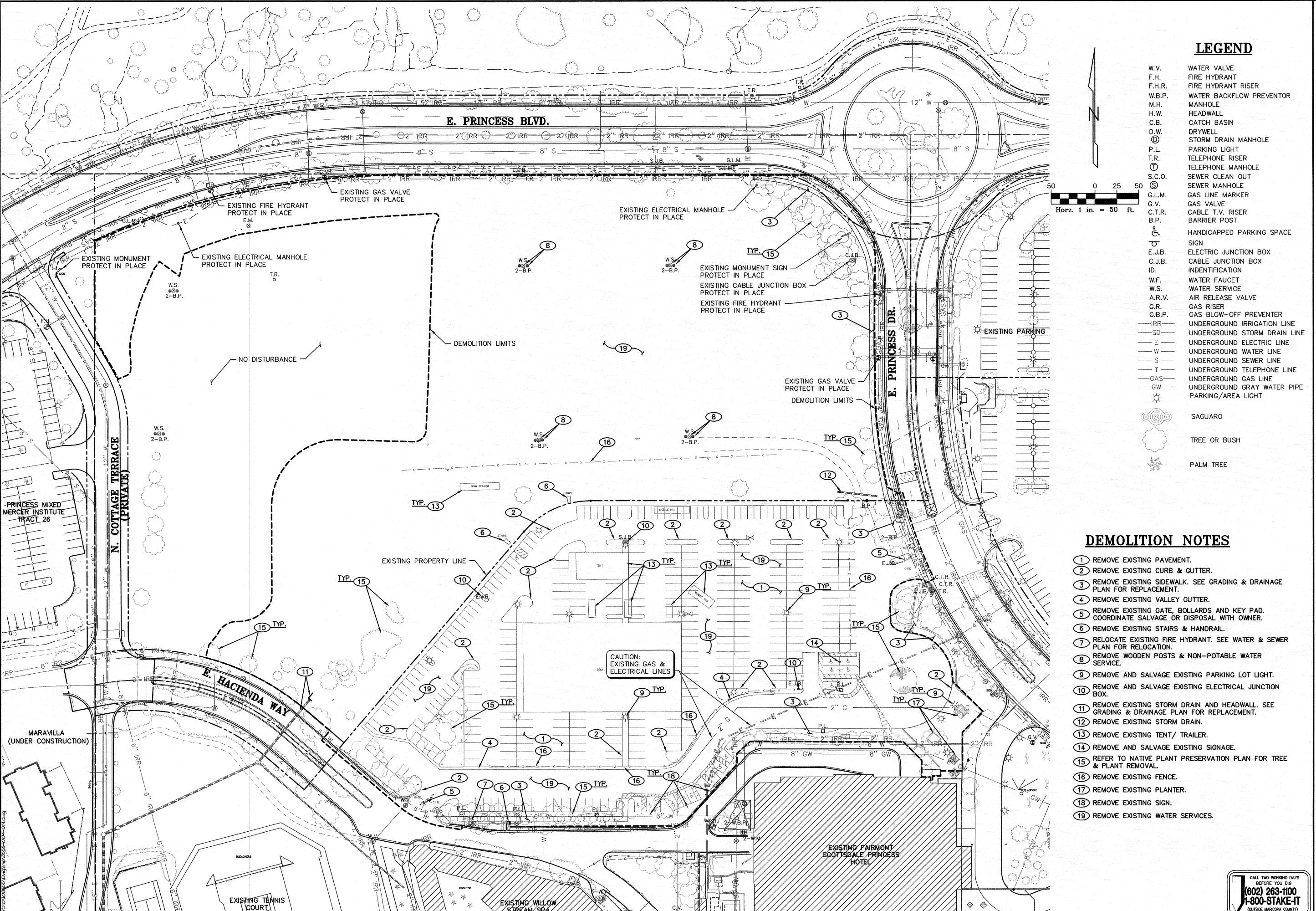
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SCALE (VERTICAL)

N/A

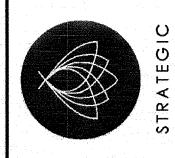
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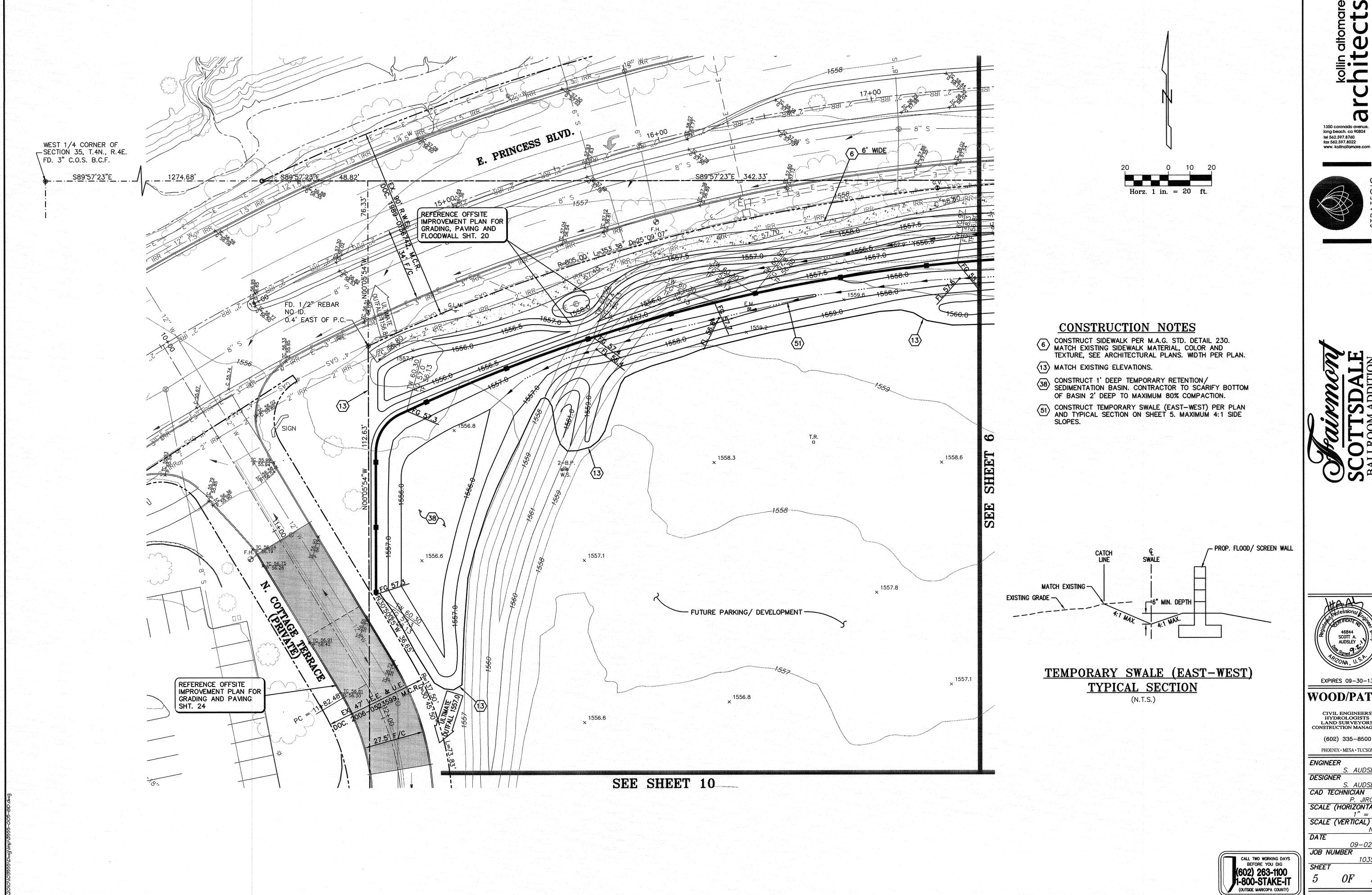
SCALE (HORIZONTAL)

1" = 50'

SCALE (VERTICAL)

DATE 09-02-1 JOB NUMBER 10355

HEET A OF 2



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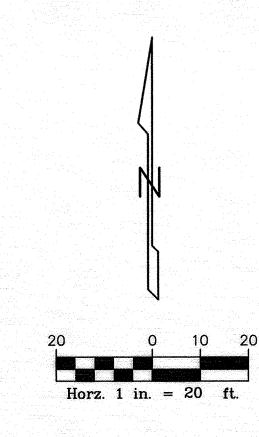
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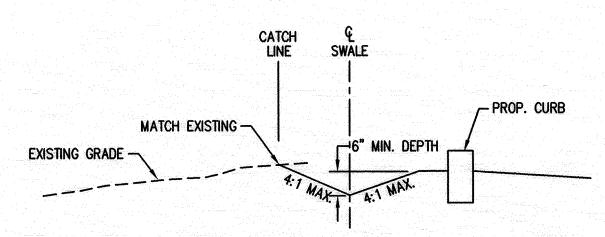
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DESIGNER S. AUDSLEY
CAD TECHNICIAN
P. JIROUT
SCALE (HORIZONTAL)



- CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.
- CONSTRUCT 6" VERTICAL CURB AND GUTTER PER C.O.S. STD. DET. 2220 TYPE 'A'.
- CONSTRUCT 2" OF A.C. OVER 6" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. PARKING STALLS ONLY. SEE ARCHITECTURAL SITE PLAN FOR PARKING STALL LAYOUT.
- CONSTRUCT 3" OF A.C. OVER 4" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. DRIVE LANES ONLY.
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230.
  MATCH EXISTING SIDEWALK MATERIAL, COLOR AND
  TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- (13) MATCH EXISTING ELEVATIONS.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- (17) PARKING/ AREA LIGHTS PER ARCHITECTURAL SITE PLAN.
- 21) INSTALL 24" ADVANCED DRAINAGE SYSTEMS (ADS) CATCH BASIN WITH M.A.G. STD. DETAIL 535 GRATE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING.
- install 18" ads H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- (29) INSTALL HDPE STORM DRAIN WYE, SIZE PER PLAN.
- 39 INSTALL PERMEABLE PARKING PAVERS PER DETAIL ON SHEET 26.
- CONSTRUCT TEMPORARY SWALE (EAST-WEST) PER PLAN AND TYPICAL SECTION ON SHEET 5. MAXIMUM 4:1 SIDE SLOPES.
- 52) CONSTRUCT TEMPORARY SWALE (NORTH-SOUTH) PER PLAN AND TYPICAL SECTION ON SHEET 6. MAXIMUM 4:1 SIDE SLOPES.
- CONSTRUCT 6" VERTICAL CURB PER M.A.G. STD. DETAIL 222, TYPE 'A'.
- (60) CONSTRUCT CLEANOUT PER M.A.G. STD. DET. 441.



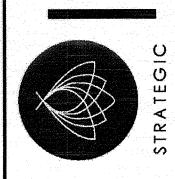
TEMPORARY SWALE (NORTH-SOUTH)

TYPICAL SECTION

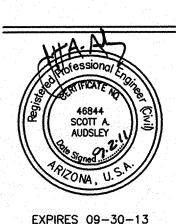
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SCALE (HORIZONTAL)

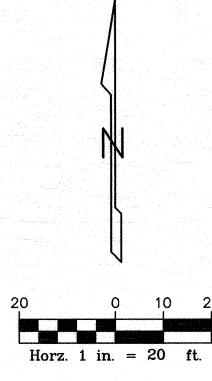
1" = 20

SCALE (VERTICAL)

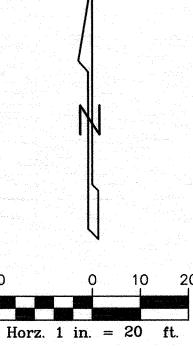
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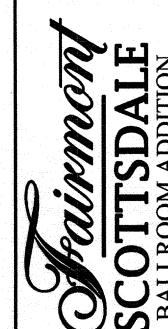
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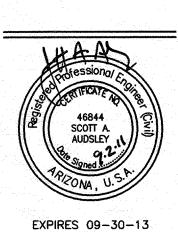
SHEET 6 OF



- CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.
- CONSTRUCT 6" VERTICAL CURB AND GUTTER PER C.O.S. STD. DET. 2220 TYPE 'A'.
- CONSTRUCT 2" OF A.C. OVER 6" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. PARKING STALLS ONLY. SEE ARCHITECTURAL SITE PLAN FOR PARKING STALL LAYOUT.
- CONSTRUCT 3" OF A.C. OVER 4" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. DRIVE LANES
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230.
  MATCH EXISTING SIDEWALK MATERIAL, COLOR AND
  TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- (13) MATCH EXISTING ELEVATIONS.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- (17) PARKING/ AREA LIGHTS PER ARCHITECTURAL SITE PLAN.
- CONSTRUCT A.D.A. APPROVED SIDEWALK RAMP. ALL RAMPS MUST MEET A.D.A. ACCESSIBILITY GUIDELINES (ADAAG) STANDARDS; 2% MAX CROSS SLOPES AND 12:1 LONGITUDINAL SLOPES. SEE ARCHITECTURAL PLAN FOR DETAILS.
- INSTALL 24" ADVANCED DRAINAGE SYSTEMS (ADS) CATCH BASIN WITH M.A.G. STD. DETAIL 535 GRATE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING.
- INSTALL 18" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- (29) INSTALL HDPE STORM DRAIN WYE, SIZE PER PLAN.
- INSTALL PERMEABLE PARKING PAVERS PER DETAIL ON SHEET 26.
- (58) CONSTRUCT 6" VERTICAL CURB PER M.A.G. STD. DETAIL 222, TYPE 'A'.
- CONSTRUCT TRAFFIC RATED DECORATIVE CONCRETE PAVERS PER C.O.S. STD. DETAIL 2239, TYPE 'B'. SEE ARCHITECTURAL PLAN FOR PAVER TYPE AND COLOR...
- (60) CONSTRUCT CLEANOUT PER M.A.G. STD. DET. 441.







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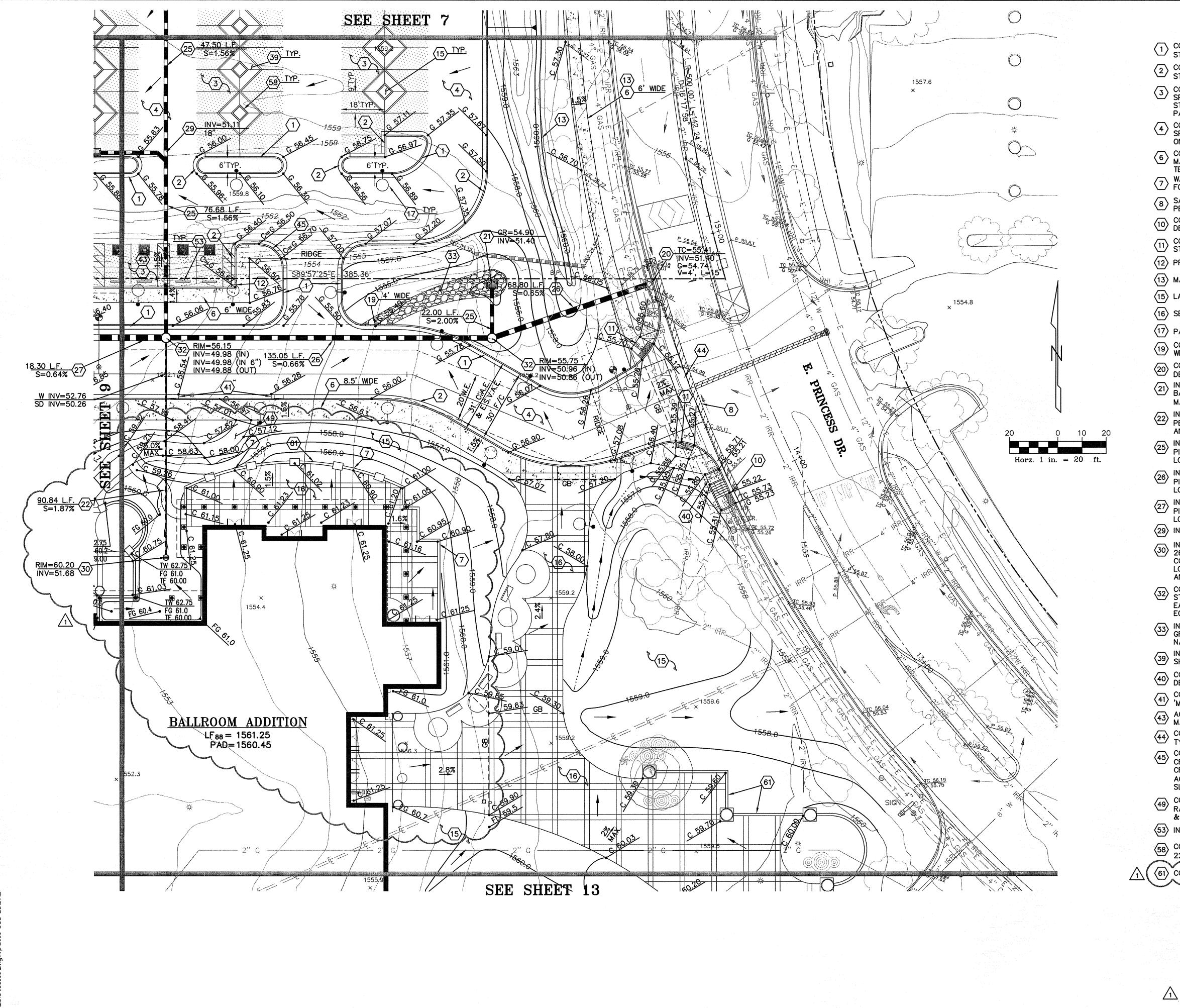
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- CONSTRUCT 6" VERTICAL CURB AND GUTTER PER C.O.S. STD. DET. 2220 TYPE 'A'.
- CONSTRUCT 2" OF A.C. OVER 6" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. PARKING STALLS ONLY. SEE ARCHITECTURAL SITE PLAN FOR PARKING STALL LAYOUT.
- CONSTRUCT 3" OF A.C. OVER 4" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. DRIVE LANES
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230. MATCH EXISTING SIDEWALK MATERIAL, COLOR AND TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- (7) WALL OPENING FOR DRAINAGE, SEE STRUCTURAL PLAN FOR DETAIL.
- 8 SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT 2' MIN. PER C.O.S. STD. DETAIL 2200.
- CONSTRUCT MID-BLOCK SIDEWALK RAMP PER C.O.S. STD. DETAIL 2235-2.
- CONSTRUCT SHARED CURB SIDEWALK RAMP PER C.O.S. STD. DETAIL 2234.
- (12) PROVIDE 2' CURB TRANSITION FROM 6" TO 0".
- (13) MATCH EXISTING ELEVATIONS.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- (16) SEE ARCHITECTURAL PLANS FOR HARDSCAPE.
- PARKING/ AREA LIGHTS PER ARCHITECTURAL SITE PLAN.
- CONSTRUCT CURB OPENING PER DETAIL ON SHEET 26. WIDTH PER PLAN.
- CONSTRUCT TYPE 'M' CATCH BASIN PER C.O.P. STD. DETAIL P1569-1 M-2, L=6'.
- INSTALL 24" ADVANCED DRAINAGE SYSTEMS (ADS) CATCH BASIN WITH M.A.G. STD. DETAIL 535 GRATE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING.
- install 6" ads h.d.p.e. (or equal) storm drain Pipe per manufacturer's specifications for h20 loading AND WATERTIGHT JOINTS.
- INSTALL 18" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- 26 INSTALL 24" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- install 30" ads h.d.p.e. (or equal) storm drain pipe per manufacturer's specifications for h20 LOADING AND WATERTIGHT JOINTS.
- (29) INSTALL HDPE STORM DRAIN WYE, SIZE PER PLAN.
- INSTALL STORM DRAIN AIR BREAK PER DETAIL ON SHEET 26. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- CONSTRUCT 4' DIA. STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522. COVER SHALL BE NON-ROCKING EAST JORDAN IRON WORKS #00222459, OR APPROVED
- 33 INSTALL 2' THICK LOOSE ROCK RIP-RAP, D50=8" PER GRADATION TABLE ON SHEET 26. ALL RIP-RAP TO BE NATIVE INDIGENOUS STONE.
- install permeable parking pavers per detail on sheet 26.
- CONSTRUCT 4' CONCRETE SCUPPER PER M.A.G. STD. DETAIL 206-1, MODIFIED TO OUTLET ONTO PAVEMENT.
- CONSTRUCT MOUNTABLE MEDIAN CURB & GUTTER, TYPE 'M' PER C.O.S. STD. DETAIL 2221.
- ACCESSIBLE PARKING, PER DETAIL ON SHEET 26.
  MAXIMUM SLOPE OF 2% IN ALL DIRECTIONS.
- CONSTRUCT DRIVEWAY PER C.O.S. STD. DETAIL 2257
  TYPE 'CH-1' (MODIFIED FOR 30' WIDTH).
- CONSTRUCT FLUSH A.D.A. APPROVED SIDEWALK CROSSING, 2' CURB TRANSITION ON EACH SIDE OF CROSSING. A.D.A. SIDEWALK CROSSING MUST MEET A.D.A. ACCESSIBILITY GUIDELINES (ADAAG). 2% MAX. CROSS
- CONSTRUCT A.D.A. APPROVED SIDEWALK / VEHICULAR RAMP. 6" PCC OVER 4" ABC PER M.A.G. STD. SPEC 702 & 725 AND GEOTECH REPORT.
- (53) INSTALL WHEEL STOP PER M.A.G. STD. DETAIL 150.
- CONSTRUCT 6" VERTICAL CURB PER M.A.G. STD. DETAIL 222, TYPE 'A'.
- 61) CONSTRUCT 2' GARDEN WALL PER ARCHITECTURAL PLAN.



EXPIRES 09-30-13

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46844 SCOTT A. AUDSLEY

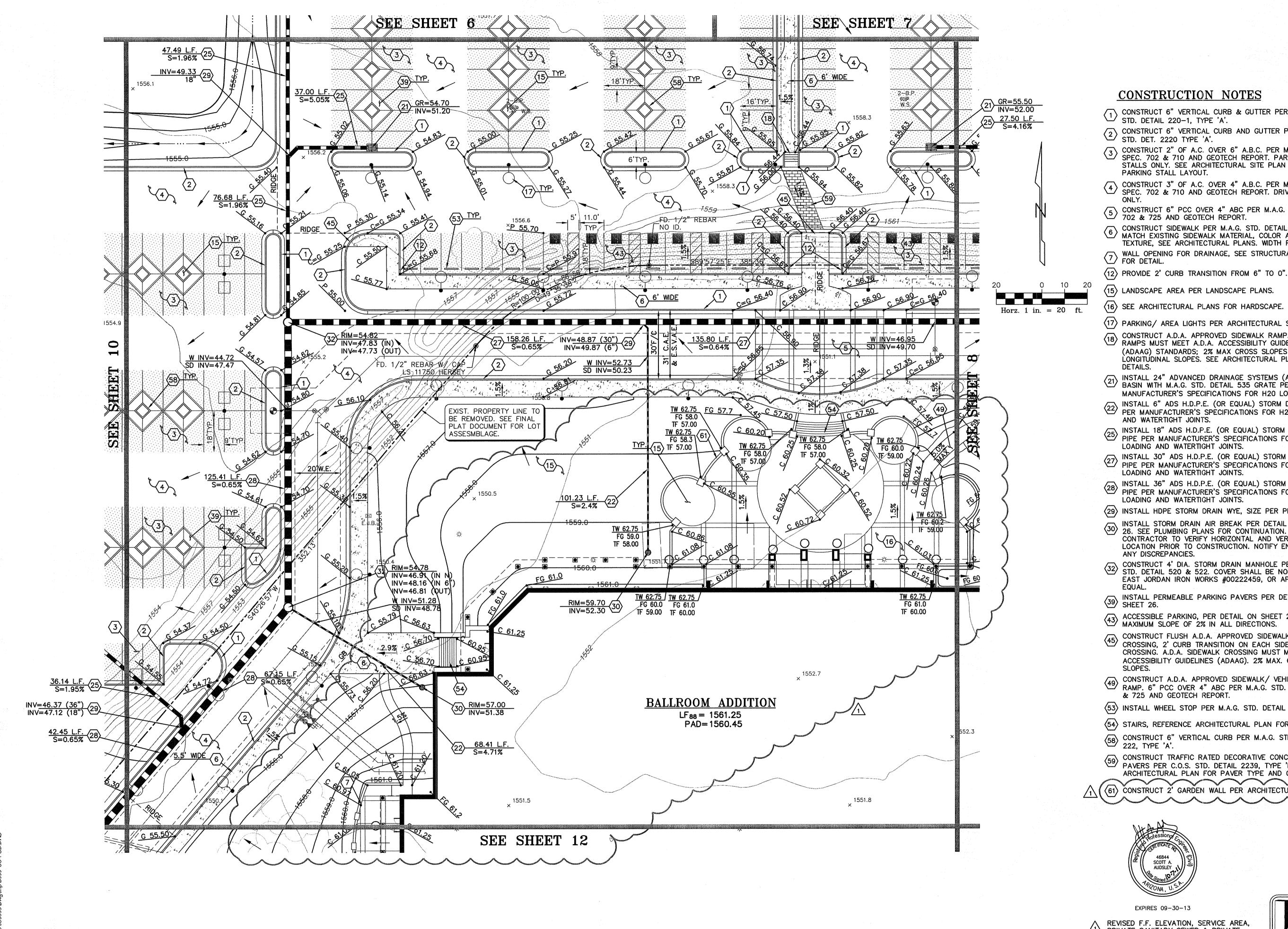
EXPIRES 09-30-13 WOOD/PATEL

CIVIL ENGINEERS HYDROLOGISTS LAND SURVEYORS CONSTRUCTION MANAGERS

(602) 335-8500 PHOENIX • MESA • TUCSON

**ENGINEER** . AUDSLEY DESIGNER CAD TECHNICIAN

SCALE (HORIZONTAL) SCALE (VERTICAL)



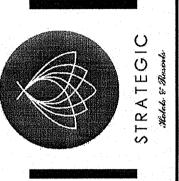
- CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.
- CONSTRUCT 6" VERTICAL CURB AND GUTTER PER C.O.S. STD. DET. 2220 TYPE 'A'.
- CONSTRUCT 2" OF A.C. OVER 6" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. PARKING STALLS ONLY. SEE ARCHITECTURAL SITE PLAN FOR PARKING STALL LAYOUT.
- CONSTRUCT 3" OF A.C. OVER 4" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. DRIVE LANES
- 5 CONSTRUCT 6" PCC OVER 4" ABC PER M.A.G. STD. SPEC 702 & 725 AND GEOTECH REPORT.
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230. MATCH EXISTING SIDEWALK MATERIAL, COLOR AND TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- WALL OPENING FOR DRAINAGE, SEE STRUCTURAL PLAN FOR DETAIL.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- (17) PARKING/ AREA LIGHTS PER ARCHITECTURAL SITE PLAN.
- CONSTRUCT A.D.A. APPROVED SIDEWALK RAMP. ALL RAMPS MUST MEET A.D.A. ACCESSIBILITY GUIDELINES (ADAAG) STANDARDS; 2% MAX CROSS SLOPES AND 12:1 LONGITUDINAL SLOPES. SEE ARCHITECTURAL PLAN FOR
- 21) INSTALL 24" ADVANCED DRAINAGE SYSTEMS (ADS) CATCH BASIN WITH M.A.G. STD. DETAIL 535 GRATE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING.
- 22 INSTALL 6" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- 25 INSTALL 18" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- 27) INSTALL 30" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- INSTALL 36" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S COSCIONATION LOADING AND WATERTIGHT JOINTS.
- (29) INSTALL HDPE STORM DRAIN WYE, SIZE PER PLAN.
- 30 INSTALL STORM DRAIN AIR BREAK PER DETAIL ON SHEET 26. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- CONSTRUCT 4' DIA. STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522. COVER SHALL BE NON-ROCKING EAST JORDAN IRON WORKS #00222459, OR APPROVED
- 39 INSTALL PERMEABLE PARKING PAVERS PER DETAIL ON SHEET 26.
- ACCESSIBLE PARKING, PER DETAIL ON SHEET 26.
  MAXIMUM SLOPE OF 2% IN ALL DIRECTIONS.
- CONSTRUCT FLUSH A.D.A. APPROVED SIDEWALK CROSSING, 2' CURB TRANSITION ON EACH SIDE OF CROSSING. A.D.A. SIDEWALK CROSSING MUST MEET A.D.A. ACCESSIBILITY GUIDELINES (ADAAG). 2% MAX. CROSS
- CONSTRUCT A.D.A. APPROVED SIDEWALK/ VEHICULAR RAMP. 6" PCC OVER 4" ABC PER M.A.G. STD. SPEC 702 & 725 AND GEOTECH REPORT.
- (53) INSTALL WHEEL STOP PER M.A.G. STD. DETAIL 150.
- 54 STAIRS, REFERENCE ARCHITECTURAL PLAN FOR DETAILS.
- CONSTRUCT 6" VERTICAL CURB PER M.A.G. STD. DETAIL 222, TYPE 'A'.
- CONSTRUCT TRAFFIC RATED DECORATIVE CONCRETE PAVERS PER C.O.S. STD. DETAIL 2239, TYPE 'B'. SEE ARCHITECTURAL PLAN FOR PAVER TYPE AND COLOR..
- (61) CONSTRUCT 2' GARDEN WALL PER ARCHITECTURAL PLAN.



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**ENGINEER** *AUDSLEY* DESIGNER CAD TECHNICIAN SCALE (HORIZONTAL)

SCALE (VERTICAL)

- CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.
- CONSTRUCT 6" VERTICAL CURB AND GUTTER PER C.O.S. STD. DET. 2220 TYPE 'A'.
- CONSTRUCT 2" OF A.C. OVER 6" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. PARKING STALLS ONLY. SEE ARCHITECTURAL SITE PLAN FOR PARKING STALL LAYOUT.
- CONSTRUCT 3" OF A.C. OVER 4" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. DRIVE LANES
- SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT 2' MIN. PER C.O.S. STD. DETAIL 2200.
- (13) MATCH EXISTING ELEVATIONS.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- CONSTRUCT CURB OPENING PER DETAIL ON SHEET 26. WIDTH PER PLAN.
- 21) INSTALL 24" ADVANCED DRAINAGE SYSTEMS (ADS) CATCH BASIN WITH M.A.G. STD. DETAIL 535 GRATE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING.
- 25 INSTALL 18" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20
- LOADING AND WATERTIGHT JOINTS.

  INSTALL 24" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- INSTALL 36" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- CONSTRUCT 4' DIA. STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522. COVER SHALL BE NON-ROCKING EAST JORDAN IRON WORKS #00222459, OR APPROVED
- 33 INSTALL 2' THICK LOOSE ROCK RIP-RAP, D50=8" PER GRADATION TABLE ON SHEET 26. ALL RIP-RAP TO BE NATIVE INDIGENOUS STONE.
- CONSTRUCT 1' DEEP TEMPORARY RETENTION/ SEDIMENTATION BASIN. CONTRACTOR TO SCARIFY BOTTOM OF BASIN 2' DEEP TO MAXIMUM 80% COMPACTION.
- INSTALL PERMEABLE PARKING PAVERS PER DETAIL ON SHEET 26.
- (46) INSTALL STEEL BOLLARD PER M.A.G. STD. DETAIL 140, TYPE '1'.
- (47) INSTALL HDPE STORM DRAIN PLUG, SIZE PER PLAN.
- CONSTRUCT TEMPORARY SWALE (NORTH-SOUTH) PER PLAN AND TYPICAL SECTION ON SHEET 6. MAXIMUM 4:1 SIDE SLOPES.
- CONSTRUCT 6" VERTICAL CURB PER M.A.G. STD. DETAIL 222, TYPE 'A'.

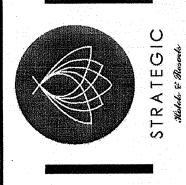


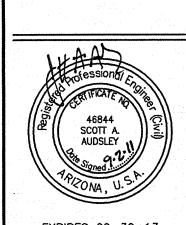
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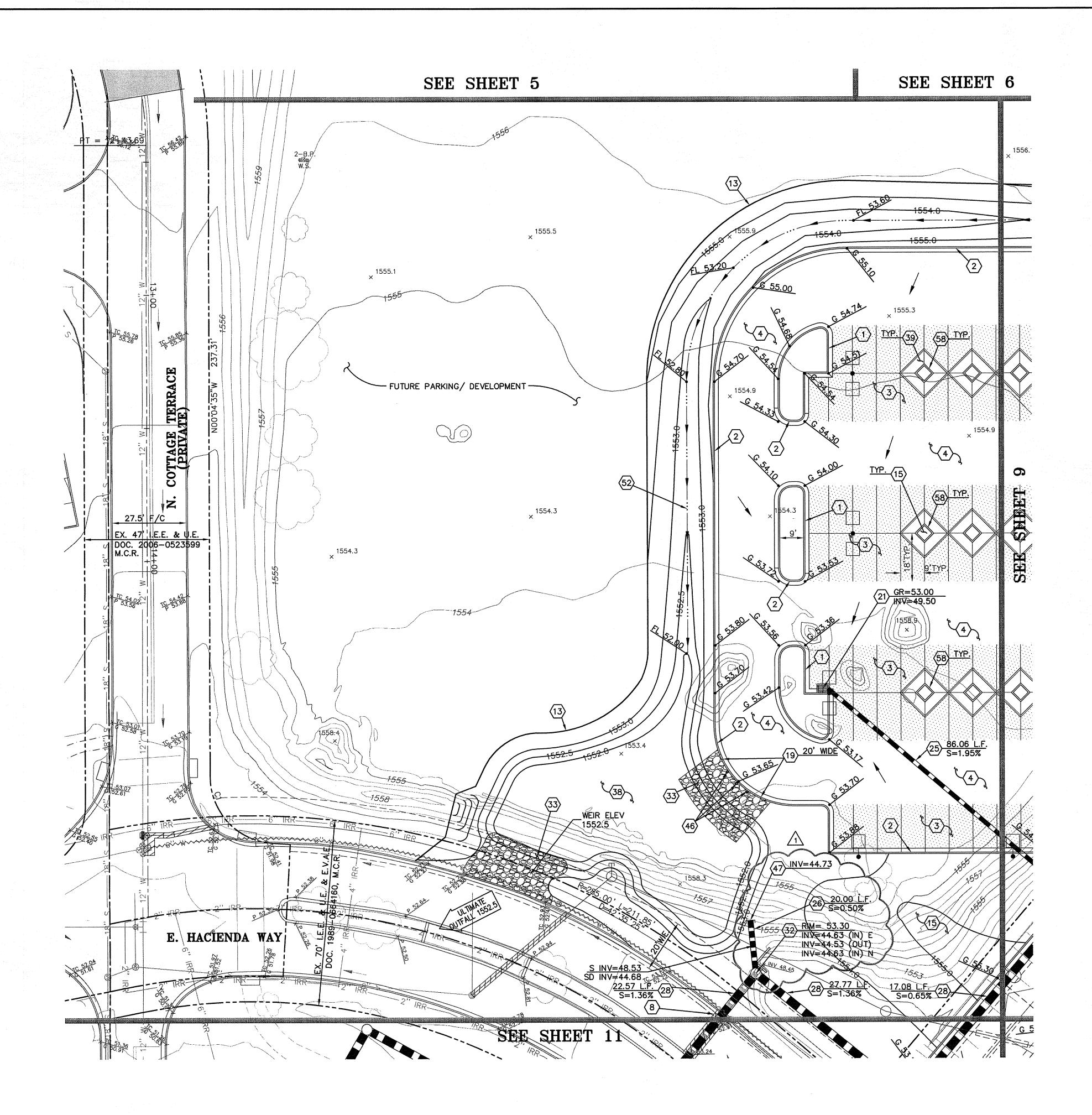
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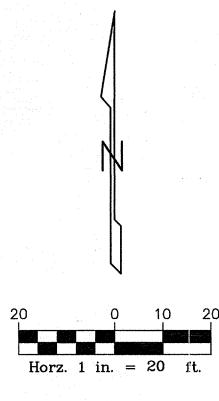
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**ENGINEER** DESIGNER

CAD TECHNICIAN SCALE (HORIZONTAL) SCALE (VERTICAL)

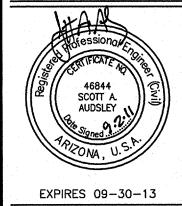
JOB NUMBER





- CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.
- CONSTRUCT 6" VERTICAL CURB AND GUTTER PER C.O.S. STD. DET. 2220 TYPE 'A'.
- CONSTRUCT 3" OF A.C. OVER 4" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. DRIVE LANES
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230. MATCH EXISTING SIDEWALK MATERIAL, COLOR AND TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- 8 SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT 2' MIN. PER C.O.S. STD. DETAIL 2200.
- (13) MATCH EXISTING ELEVATIONS.
- install 18" ads H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- INSTALL 36" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- CONSTRUCT 4' DIA. STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522. COVER SHALL BE NON-ROCKING EAST JORDAN IRON WORKS #00222459, OR APPROVED
- CONNECT TO EXISTING STORM DRAIN MANHOLE.

  CONTRACTOR TO FIELD VERIFY EXACT LOCATION/INVERT PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- CONSTRUCT DRIVEWAY PER C.O.S. STD. DETAIL 2257
  TYPE 'CH-1' (MODIFIED FOR 30' WIDTH).
- INSTALL RIBBON CURB PER M.A.G. STD. DETAIL 220-1, TYPE 'B'. MODIFIED WIDTH TO MATCH EXISTING.



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**ENGINEER** DESIGNER

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CONSTRUCT 6" VERTICAL CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.

Horz. 1 in. = 20 ft.

- CONSTRUCT 6" VERTICAL CURB AND GUTTER PER C.O.S. STD. DET. 2220 TYPE 'A'.
- CONSTRUCT 3" OF A.C. OVER 4" A.B.C. PER M.A.G. STD. SPEC. 702 & 710 AND GEOTECH REPORT. DRIVE LANES
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230. MATCH EXISTING SIDEWALK MATERIAL, COLOR AND TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- WALL OPENING FOR DRAINAGE, SEE STRUCTURAL PLAN FOR DETAIL.
- 8 SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT 2' MIN. PER C.O.S. STD. DETAIL 2200.
- CONSTRUCT MID-BLOCK SIDEWALK RAMP PER C.O.S. STD. DETAIL 2235-2.
- (13) MATCH EXISTING ELEVATIONS.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- (16) SEE ARCHITECTURAL PLANS FOR HARDSCAPE.
- install 8" ads H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- INSTALL 18" ADS H.D.P.E. (OR EQUAL) STORM DRAIN PIPE PER MANUFACTURER'S SPECIFICATIONS FOR H20 LOADING AND WATERTIGHT JOINTS.
- (29) INSTALL HDPE STORM DRAIN WYE, SIZE PER PLAN.
- (31) INSTALL HDPE 45° BEND, SIZE PER PLAN.
- install 12" Advanced drainage systems (ADS) CATCH BASIN WITH PEDESTRIAN RATED GRATE PER MANUFACTURER SPECIFICATIONS.
- CONSTRUCT 4' CONCRETE SCUPPER PER M.A.G. STD. DETAIL 206-1, MODIFIED TO OUTLET ONTO PAVEMENT.
- INSTALL 24" NYLOPLAST DRAIN BASIN BY ADVANCED DRAINAGE SYSTEMS (A.D.S) WITH SOLID, BOLTED, WATER-TIGHT COVER AT GRADE. ADAPTER ANGLE PER
- BICYCLE PARKING, SEE ARCHITECTURAL PLAN FOR DETAILS.
- (60) CONSTRUCT CLEANOUT PER M.A.G. STD. DET. 441.

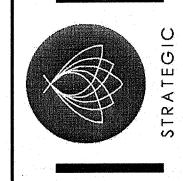


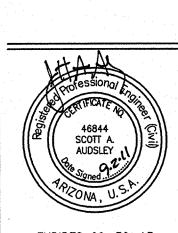
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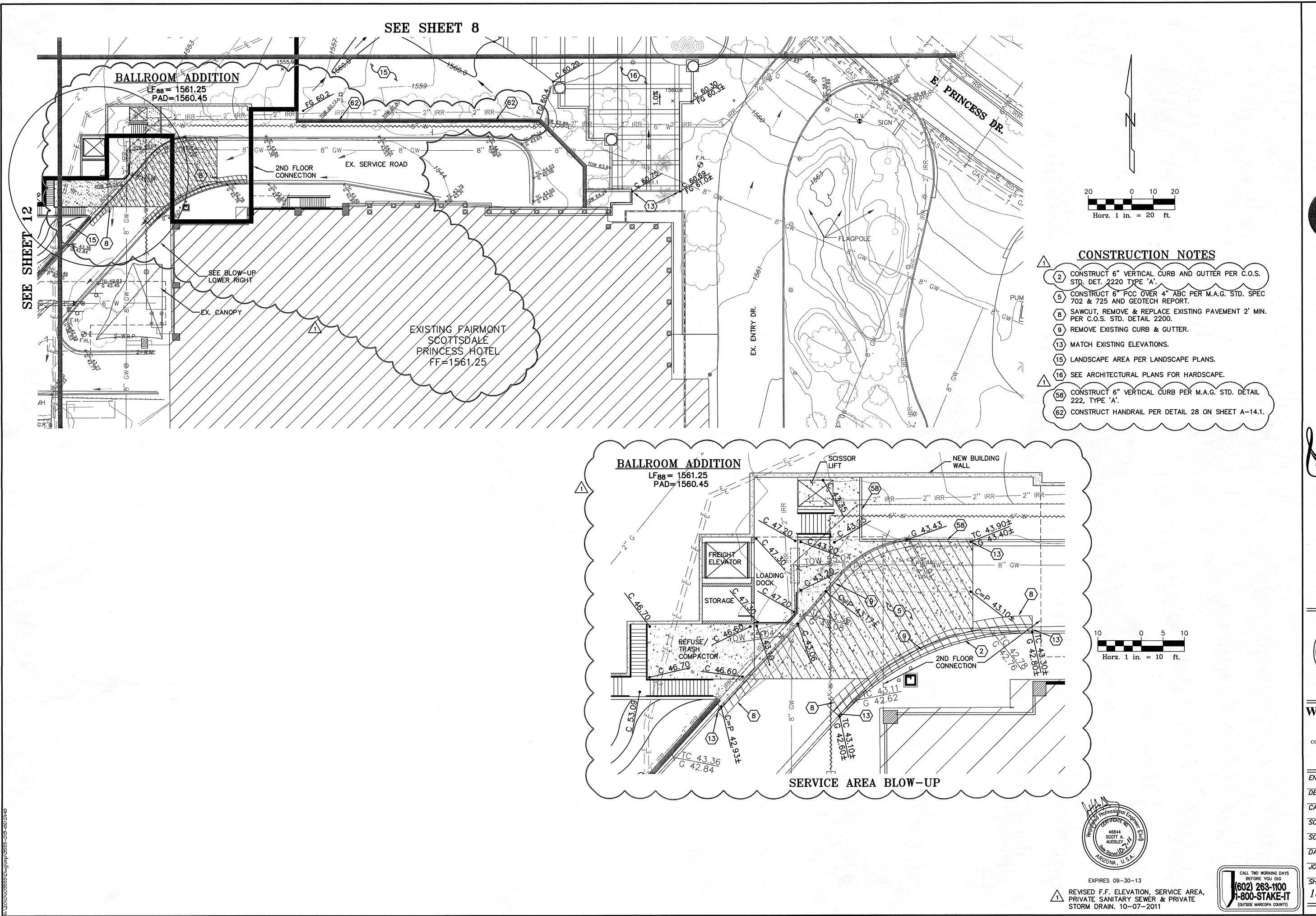
**ENGINEER DESIGNER** CAD TECHNICIAN SCALE (HORIZONTAL)

SCALE (VERTICAL)

LF<sub>88</sub> = 1561.25 PAD=1560.45 MECHANICAL YARD EX. RETAINING WALL TO REMAIN SEEET EX. SERVICE/ROAD (56) **69** 1547.0 ROOFTOP EXISTING WILLOW STREAM SPA

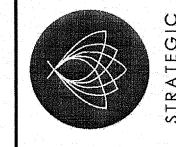
SEE SHEET 9

**BALLROOM ADDITION** 



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BALLROOM ADD

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SCOTT A.
AUDSLEY
APIZONA, U.S.A.

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S. AUDSLEY

DESIGNER

S. AUDSLEY

CAD TECHNICIAN

P. JIROUT

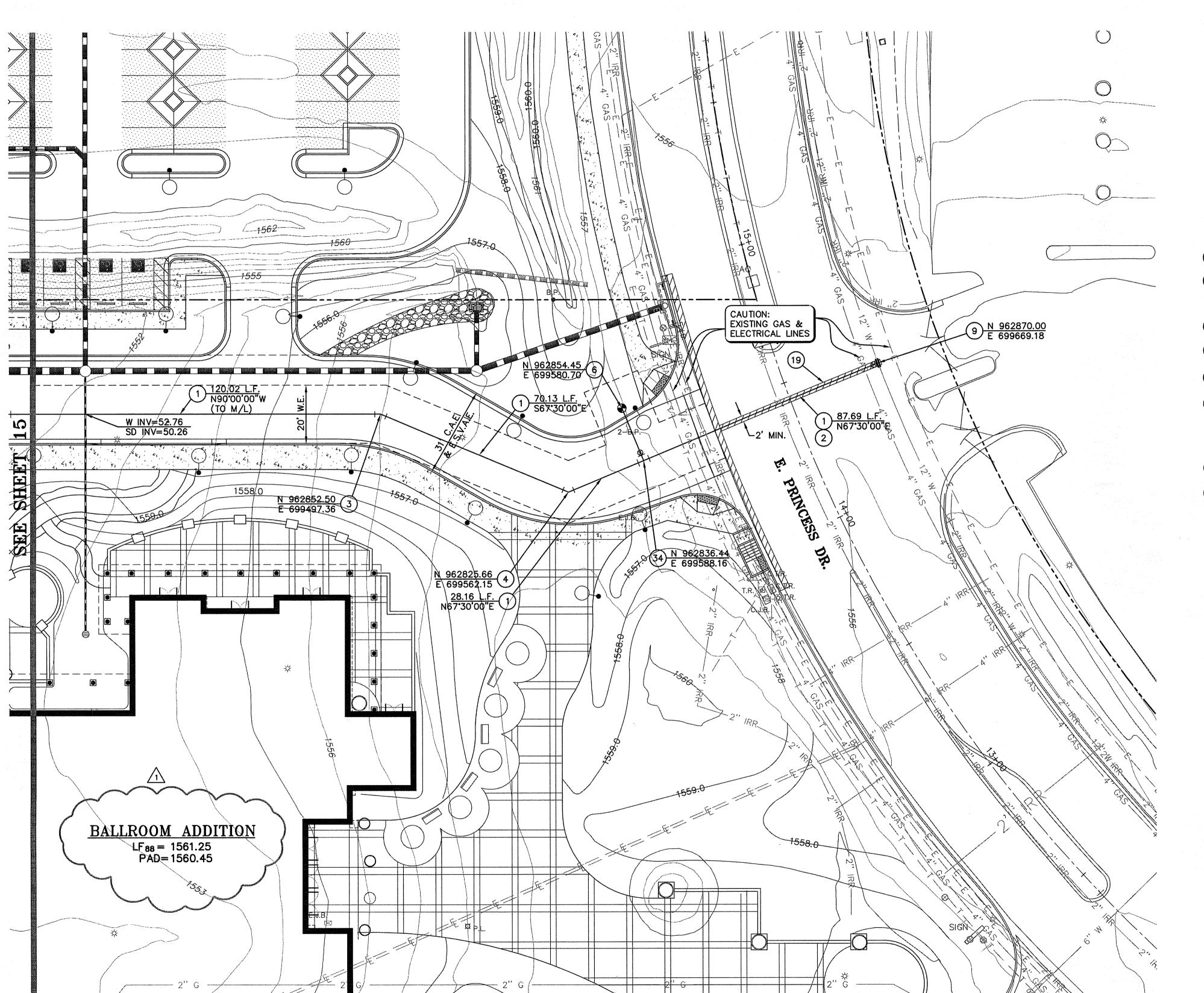
SCALE (HORIZONTAL)

1" = 20'

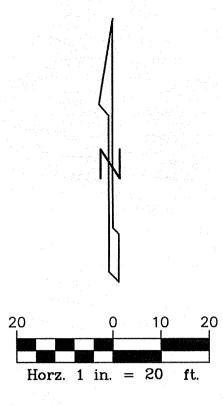
SCALE (VERTICAL)

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SHEET 13 OF 2

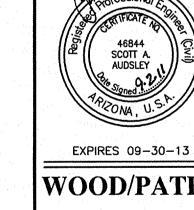


SEE SHEET 19



### WATER CONSTRUCTION NOTES

- INSTALL 8" D.I.P. PRESSURE CLASS 350 FIRELINE WITH RESTRAINED JOINTS (3' MIN. COVER).
- 2 MAINTAIN 4' OF COVER ON PROPOSED 8" WATERLINE ACROSS PRINCESS DRIVE TO AVOID VERTICAL CONFLICTS WITH EXISTING DRY UTILITIES. ONCE ONSITE, TRANSITION COVER BACK TO 3' MIN.
- 3 INSTALL 22.5° BEND WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 AND 303-2.
- 4) INSTALL 45° BEND WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 AND 303-2, SIZE PER PLAN.
- 6 INSTALL FIRE HYDRANT COMPLETE PER M.A.G. STD. DETAIL 360, WITH PAVEMENT MARKER PER C.O.S. DETAIL 2363.
- 9 INSTALL 12"x 8" TAPPING SLEEVE AND VALVE ON EXISTING 12" WATERLINE PER M.A.G. STD. DETAIL 340 & 391-1, TYPE 'C' WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 & 303-2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION AND NOTIFY OWNERS AGENT OF ANY DISCREPANCIES.
- 19 SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT PER C.O.S. STD. DET. 2200 & 2201.
- 34 INSTALL 8" x 6" TEE WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 & 303-2.



WOOD/PATEL A

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CONSTRUCTION MANAGERS

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**ENGINEER** DESIGNER CAD TECHNICIAN

SCALE (HORIZONTAL) SCALE (VERTICAL)

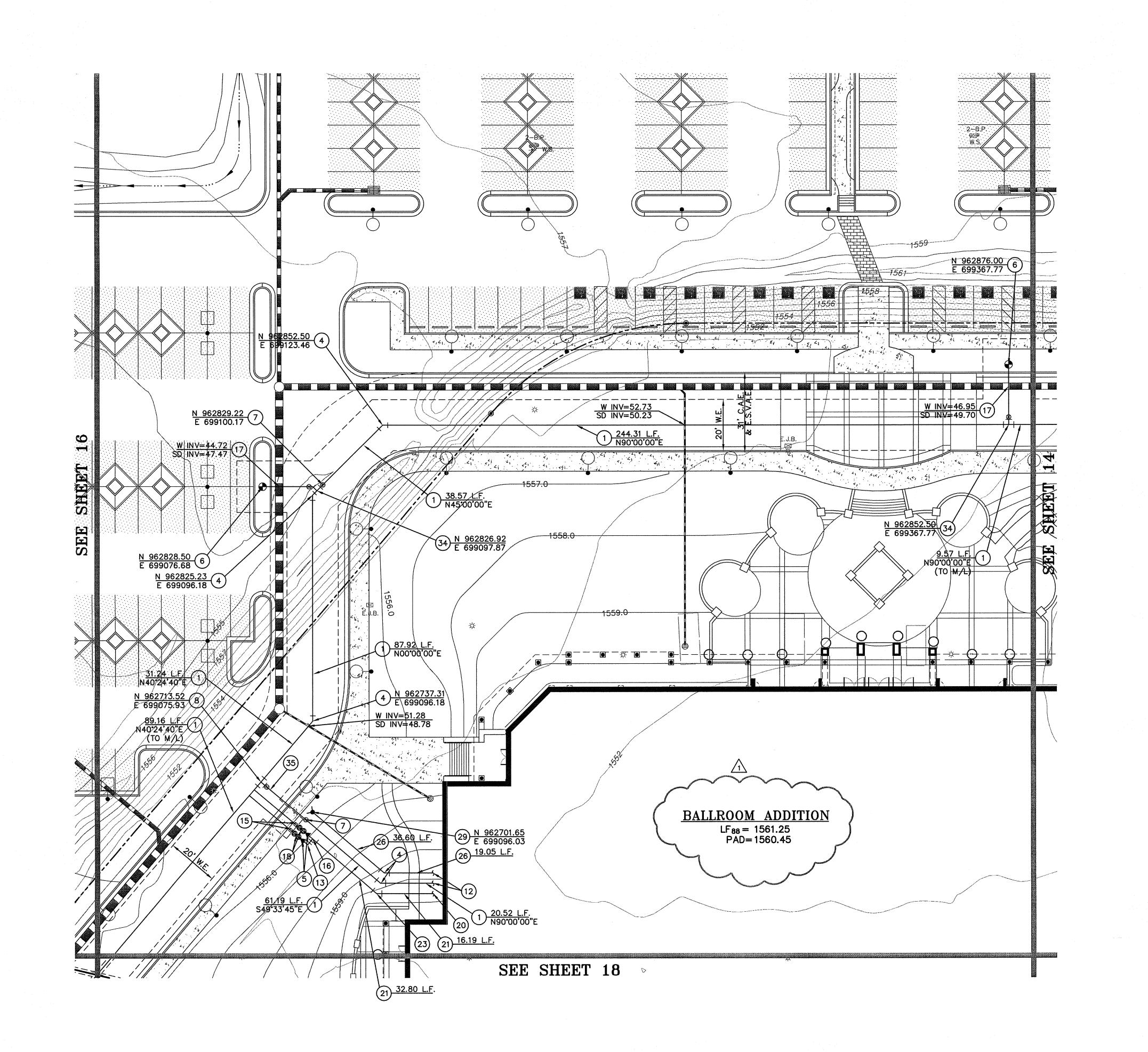
EXPIRES 09-30-13

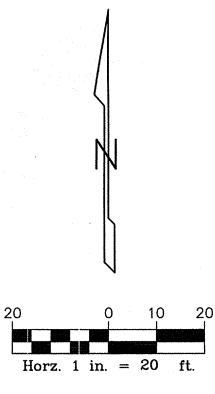
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### WATER CONSTRUCTION NOTES

- 1 INSTALL 8" D.I.P. PRESSURE CLASS 350 FIRELINE WITH RESTRAINED JOINTS (3' MIN. COVER).
- INSTALL 45° BEND WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 AND 303-2, SIZE PER PLAN.
- 5 INSTALL 3" x 2" PVC SCH. 40 REDUCER.
- 6 INSTALL FIRE HYDRANT COMPLETE PER M.A.G. STD. DETAIL 360, WITH PAVEMENT MARKER PER C.O.S. DETAIL 2363.
- 7 INSTALL 8" VALVE, BOX & COVER PER M.A.G. STD. DETAIL 391-1, TYPE 'C' WITH JOINT RESTRAINT PER M.A.G STD. DETAIL 303-1 & 303-2.
- 8 INSTALL 8"  $\times$  8" TEE WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 & 303-2.
- SEE FIRE PROTECTION PLANS FOR CONTINUATION.
  CONTRACTOR TO COORDINATE LOCATION AND ELEVATION.
- 13) INSTALL 3" x 3" PVC SCH. 40 TEE.
- INSTALL 2" DOMESTIC WATER METER AND SERVICE PER C.O.S. STD. DETAIL 2330. SEE ARCHITECTURAL PLANS TO VERIFY. CONTACT ENGINEER WITH ANY DISCREPANCIES.
- 16 INSTALL 3" PVC SCH. 40 90' BEND.
- PROVIDE VERTICAL REALIGNMENT OF WATER MAIN PER C.O.S. STD. DETAIL 2370.
- 18 INSTALL 2" BACKFLOW PREVENTION DEVICE PER C.O.S. STD. DETAIL 2354 IMMEDIATELY AFTER WATER METER BOX.
- SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO COORDINATE EXACT LOCATION & ELEVATION WITH PLUMBING PLANS.
- 21) INSTALL 3" PVC SCH. 40 WATER PIPE (3' MIN. COVER). BEDDING AND BACKFILL PER MANUFACTURES SPECIFICATION.
- (23) INSTALL 3" PVC SCH. 40 45' BEND.
- 26 INSTALL 4" D.I.P. PRESSURE CLASS 350 FIRELINE WITH RESTRAINED JOINTS (3' MIN. COVER).
- install remote fire department connection per c.o.s. std. detail 2367.
- INSTALL 8"  $\times$  6" TEE WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 35) INSTALL 8" FIRE LINE CONNECTION PER C.O.S. STD. DETAIL 2362-2.



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SCOTT A.
AUDSLEY
APIZONA, U.S.A.

WOOD/PATEL

LAND SURVEYORS
CONSTRUCTION MANAGERS
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ENGINEER
S. AUDSLEY

DESIGNER
S. AUDSLEY

CAD TECHNICIAN
P. JIROUT

SCALE (HORIZONTAL)

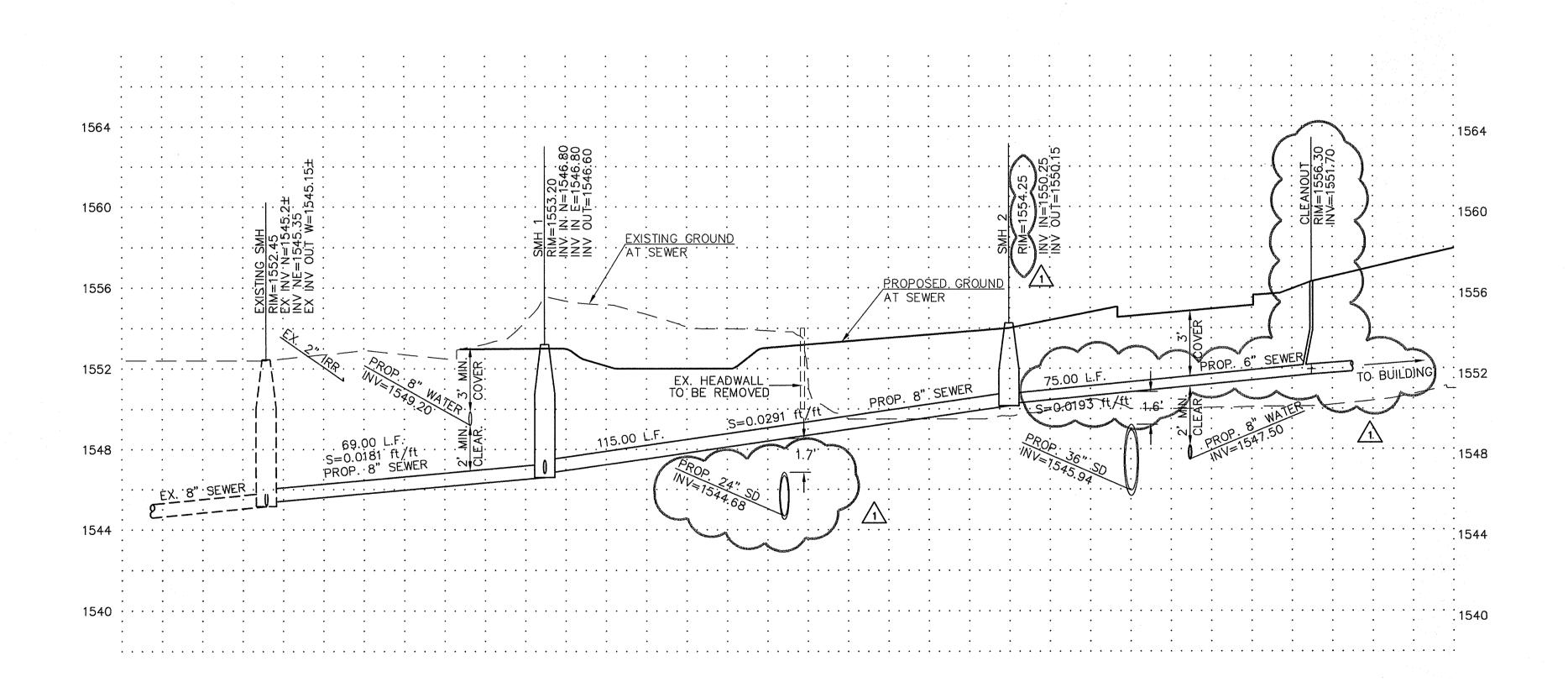
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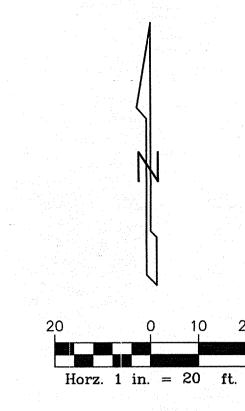
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09-02JOB NUMBER

10355

SHEET 15 OF





### PRIVATE SANITARY SEWER NOTES

- CONNECT TO EXISTING SANITARY SEWER MANHOLE WITH ADEKA ULTRA SEAL MC-2005T GASKET. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION AND NOTIFY OWNERS AGENT OF ANY DISCREPANCIES.
- REMOVE EXISTING 8" SEWER STUB AND PATCH EXISTING MANHOLE SIDEWALL. CONNECT NEW 8" SEWER STUB FOR FUTURE DEVELOPMENT TO EXISTING MANHOLE WITH ADEKA ULTRA SEAL MC-2005T GASKET. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION AND NOTIFY OWNERS AGENT OF ANY DISCREPANCIES.
- INSTALL 8" PVC SDR35 SANITARY SEWER PIPE. LENGTH PER PLAN. SEE PROFILE ON SHT. 18 FOR SLOPE.
- CONSTRUCT 4' DIA. MANHOLE PER M.A.G. STD. DETAIL 420 & 424 WITH SEWERSHIELD 100 EPOXY LINING BY ENVIRONMENTAL COATINGS OR APPROVED EQUAL.
- SAWCUT, REMOVE 2' MIN. OF PAVEMENT, CURB & GUTTER, AND REPLACE PER C.O.S. STD. DET. 2200 & 2201.
- PROVIDE WATER & SEWER SEPARATION & PROTECTION PER M.A.G. STD. DETAIL 404-1.
- 14 STUB OUT AND PLUG SEWER PER M.A.G. STD. DET. 427.

### WATER CONSTRUCTION NOTES

- 1 INSTALL 8" D.I.P. PRESSURE CLASS 350 FIRELINE WITH RESTRAINED JOINTS (3' MIN. COVER).
- 9 INSTALL 12"x 8" TAPPING SLEEVE AND VALVE ON EXISTING 12" WATERLINE PER M.A.G. STD. DETAIL 340 & 391-1, TYPE 'C' WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 & 303-2. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION AND NOTIFY OWNERS AGENT OF ANY DISCREPANCIES.
- 19 SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT PER C.O.S. STD. DET. 2200 & 2201.
- (24) CUT EXISTING 6" WATERLINE AND INSTALL 6" CAP.
- (27) REMOVE EXISTING 6" WATERLINE.
- (33) INSTALL 11.25° BEND WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 AND 303-2.



EXPIRES 09-30-13

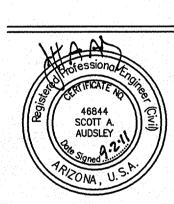
REVISED F.F. ELEVATION, SERVICE AREA, PRIVATE SANITARY SEWER & PRIVATE STORM DRAIN. 10-07-2011







SCOTTSDALE
BALLROOM ADDITION
WATER AND SEWER PLAN



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ENGINEER

S. AUDSLE

DESIGNER

S. AUDSLE

CAD TECHNICIAN

P. JIROU

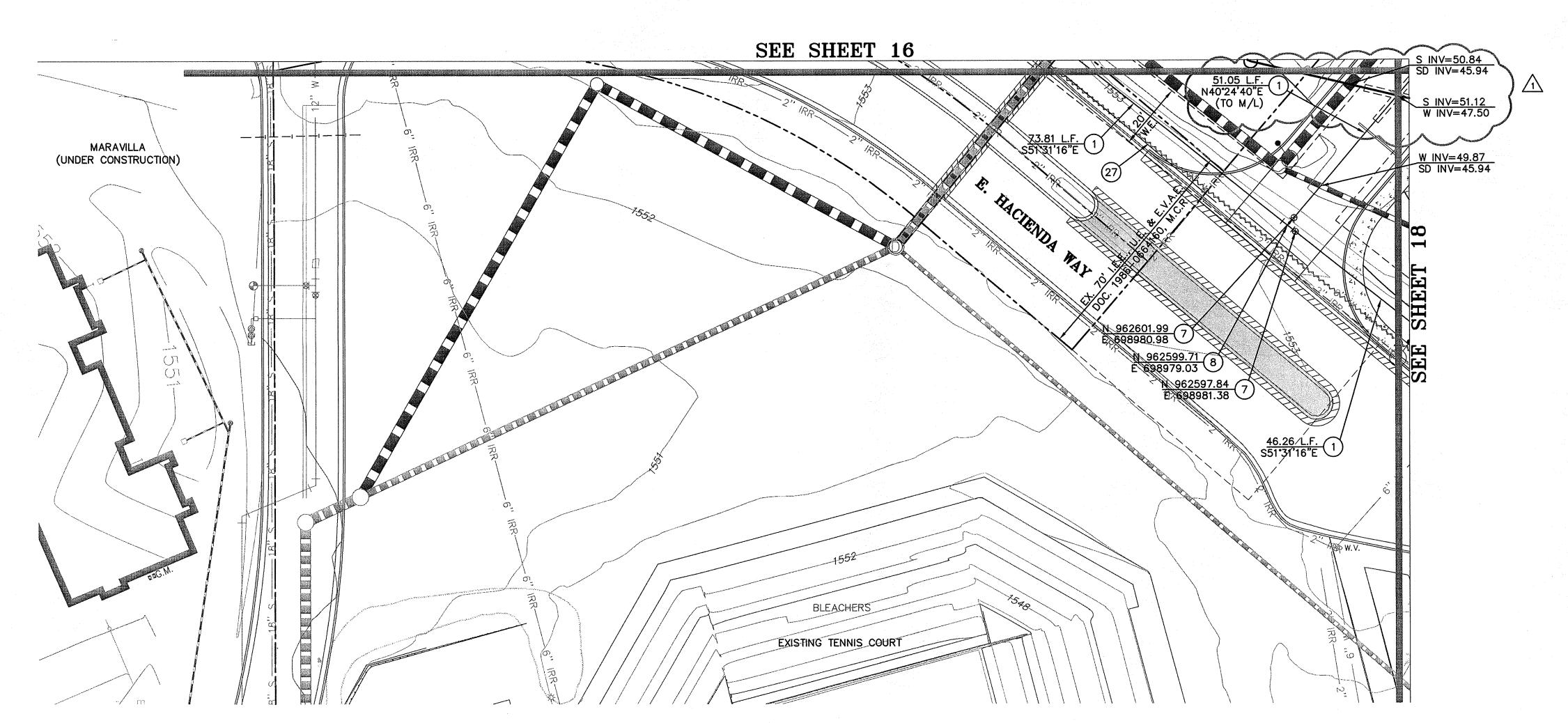
SCALE (HORIZONTAL)

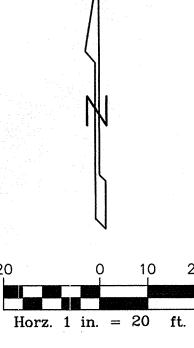
1" = 20

N) DATE 09-02-IOB NUMBER

SHEET

16 OF 2





### WATER CONSTRUCTION NOTES

- INSTALL 8" D.I.P. PRESSURE CLASS 350 FIRELINE WITH RESTRAINED JOINTS (3' MIN. COVER).
- 7 INSTALL 8" VALVE, BOX & COVER PER M.A.G. STD. DETAIL 391-1, TYPE 'C' WITH JOINT RESTRAINT PER M.A.G STD. DETAIL 303-1 & 303-2.
- 8 INSTALL 8" x 8" TEE WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 & 303-2.
- PROVIDE VERTICAL REALIGNMENT OF WATER MAIN PER C.O.S. STD. DETAIL 2370.
- (27) REMOVE EXISTING 6" WATERLINE.



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**ENGINEER** DESIGNER CAD TECHNICIAN SCALE (HORIZONTAL)

09-02-11 JOB NUMBER

SHEET

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**ENGINEER** DESIGNER CAD TECHNICIAN

SCALE (VERTICAL) 09-02-11 JOB NUMBER

SCALE (HORIZONTAL)

SHEET

HEET

SEE SHEET 15

34 N 962505.77 E 699109.65 T N89'38'08"E

ÉXIŞTING/WILLOW/

STREAM SPA

N 962506.27 E 699188.29

**BALLROOM ADDITION** 

LF<sub>88</sub> = 1561.25 PAD=1560.45

MECHANICAL YARD

EX. RETAINING WALL TO REMAIN

EX. SERVICE ROAD

1547.0

159.39 L.F. N 962507.28 4 N 89'38'08"E E 699347.68

-- *1548*--

RIM=1558.00 7

5 24.15 L.F. \$=0.0147FT/FT

N90.00,00 E

10 N 962702.47 E 699143.03

INV=53.00

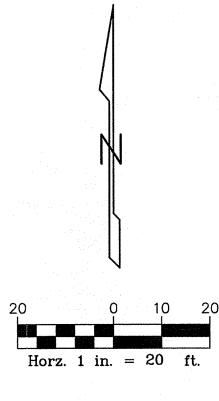
5 64/50 L.F. 5 \$\frac{2}{5}0.0147FT/ N76\*36'58"W

N 962616.34 16 E 699103.88 16 NV=52.65

ROOFTOP

15 N 962631.2 E 699041.1

75.00 L.F. S=0.0193FT/FT RIM=56.30 INV=51.70



- INSTALL 6" PVC SDR35 SANITARY SEWER PIPE. LENGTH AND SLOPE PER PLAN.
- SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO COORDINATE EXACT LOCATION & ELEVATION WITH PLUMBING PLANS.
- PROVIDE WATER & SEWER SEPARATION & PROTECTION PER M.A.G. STD. DETAIL 404-1.
- 15 CONSTRUCT CLEANOUT PER M.A.G. STD. DETAIL 441. 16 INSTALL 11.25° BEND.

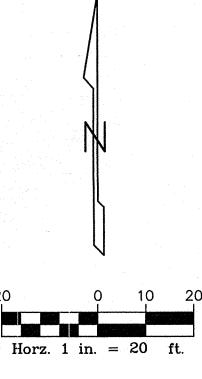
### WATER CONSTRUCTION NOTES

- 1 INSTALL 8" D.I.P. PRESSURE CLASS 350 FIRELINE WITH RESTRAINED JOINTS (3' MIN. COVER).
- install 45° bend with joint restraint per M.A.G. STD. detail 303-1 and 303-2, size per plan.
- 10 INSTALL 8"x 6" TEE AND CONNECT EXISTING 6" WATERLINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. PROVIDE VERTICAL REALIGNMENT OF WATER MAIN PER C.O.S. STD. DETAIL 2370.
  - (24) CUT EXISTING 6" WATERLINE AND INSTALL 6" CAP.
  - 25 CONTRACTOR SHALL IDENTIFY EXISTING PIPE MATERIAL. IF PVC, ABANDON EXISTING WATERLINE IN PLACE AS SPECIFIED BY C.O.S. WATER OPERATIONS INSPECTOR. IF ACP, REMOVE AND DISPOSE OF AS SPECIFIED BY C.O.S. WATER OPERATIONS INSPECTOR.
  - (27) REMOVE EXISTING 6" WATERLINE.
  - 28) INSTALL 6" VALVE, BOX & COVER PER M.A.G. STD. DETAIL 391-1, TYPE 'C'.
  - 30 RELOCATE EXISTING FIRE HYDRANT COMPLETE PER M.A.G. STD. DETAIL 360, WITH PAVEMENT MARKER PER C.O.S.
  - 34 INSTALL 8" x 6" TEE WITH JOINT RESTRAINT PER M.A.G. STD. DETAIL 303-1 & 303-2.



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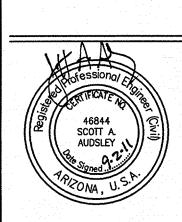


### WATER CONSTRUCTION NOTES

- INSTALL 8"x 6" TEE AND CONNECT EXISTING 6" WATERLINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.
- 22) INSTALL 8" x 6" REDUCER.
- 24) CUT EXISTING 6" WATERLINE AND INSTALL 6" CAP.
- CONTRACTOR SHALL IDENTIFY EXISTING PIPE MATERIAL. IF PVC, ABANDON EXISTING WATERLINE IN PLACE AS SPECIFIED BY C.O.S. WATER OPERATIONS INSPECTOR. IF ACP, REMOVE AND DISPOSE OF AS SPECIFIED BY C.O.S. WATER OPERATIONS INSPECTOR.
- 28 INSTALL 6" VALVE, BOX & COVER PER M.A.G. STD. DETAIL 391-1, TYPE 'C'.
- CONNECT EXISTING 6" WATER SERVICE LINE TO NEW WATERLINE. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION.
- (32) REMOVE EXISTING GRAY WATER FIRE HYDRANT.



S m ≥ line



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**ENGINEER** DESIGNER CAD TECHNICIAN

SCALE (HORIZONTAL)

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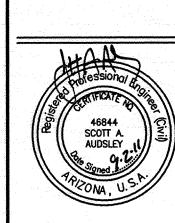
REVISED F.F. ELEVATION, SERVICE AREA, PRIVATE SANITARY SEWER & PRIVATE STORM DRAIN. 10-07-2011

- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230.
  MATCH EXISTING SIDEWALK MATERIAL, COLOR AND
  TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- CONSTRUCT 3' FLOOD/ SCREEN WALL PER DETAIL ON SHEET 26. SEE ARCHITECTURAL PLAN FOR COLOR AND FINISH.



Q

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CAD TECHNICIAN

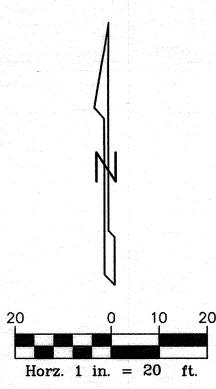
P. JIROUT

SCALE (HORIZONTAL)

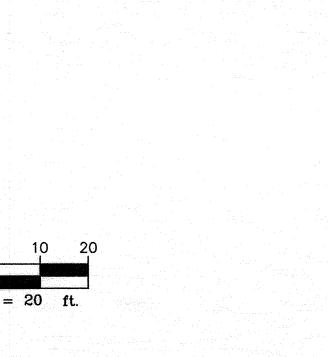
1" = 20'

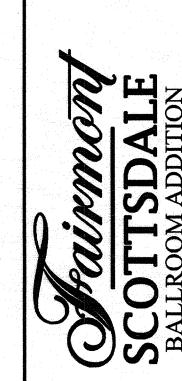
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Horz. 1 in. = 20 ft. (13) MATCH EXISTING ELEVATIONS.



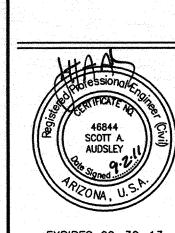
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230.
  MATCH EXISTING SIDEWALK MATERIAL, COLOR AND
  TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- CONSTRUCT 3' FLOOD/ SCREEN WALL PER DETAIL ON SHEET 26. SEE ARCHITECTURAL PLAN FOR COLOR AND FINISH.





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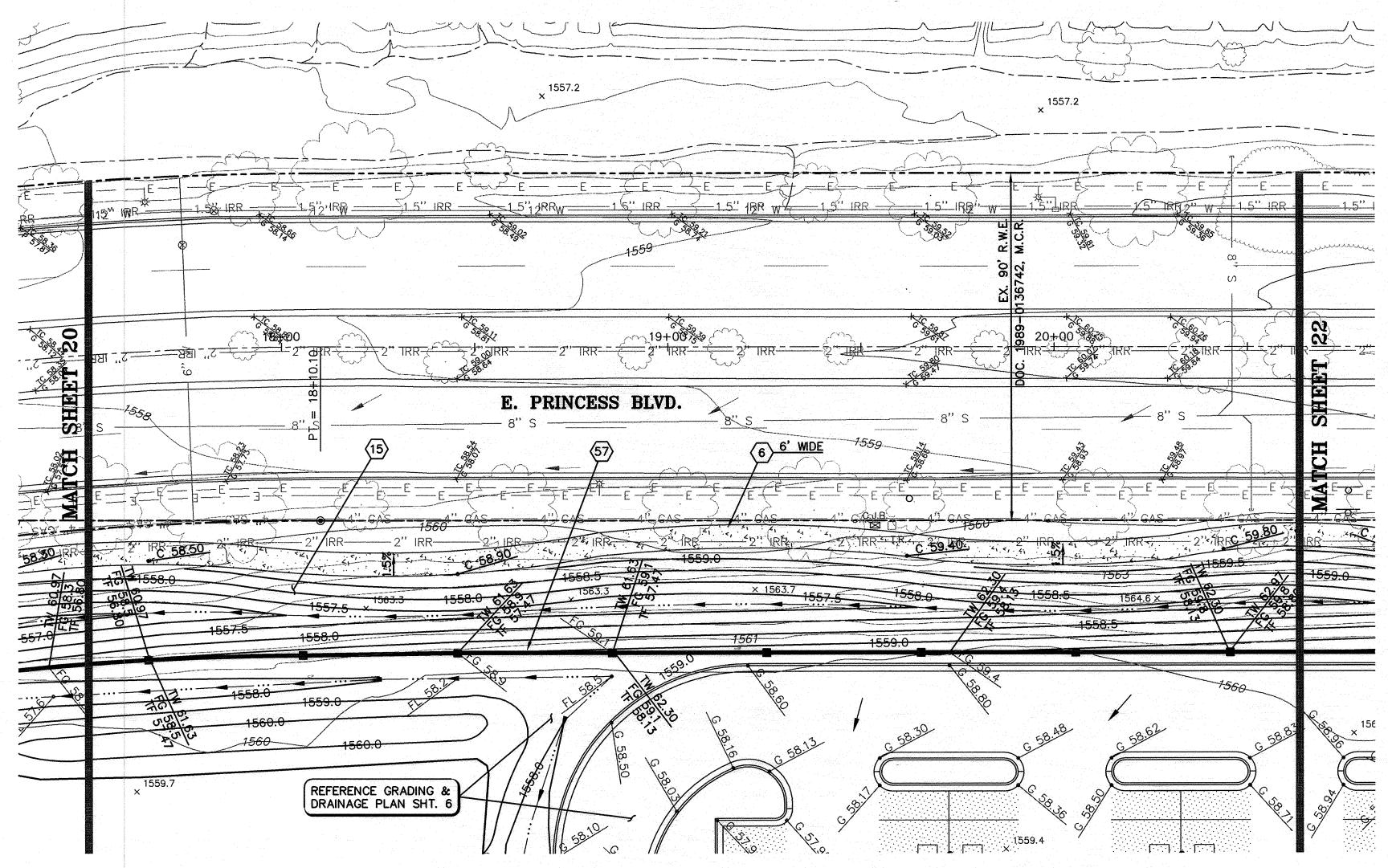
WOOD/PATEL

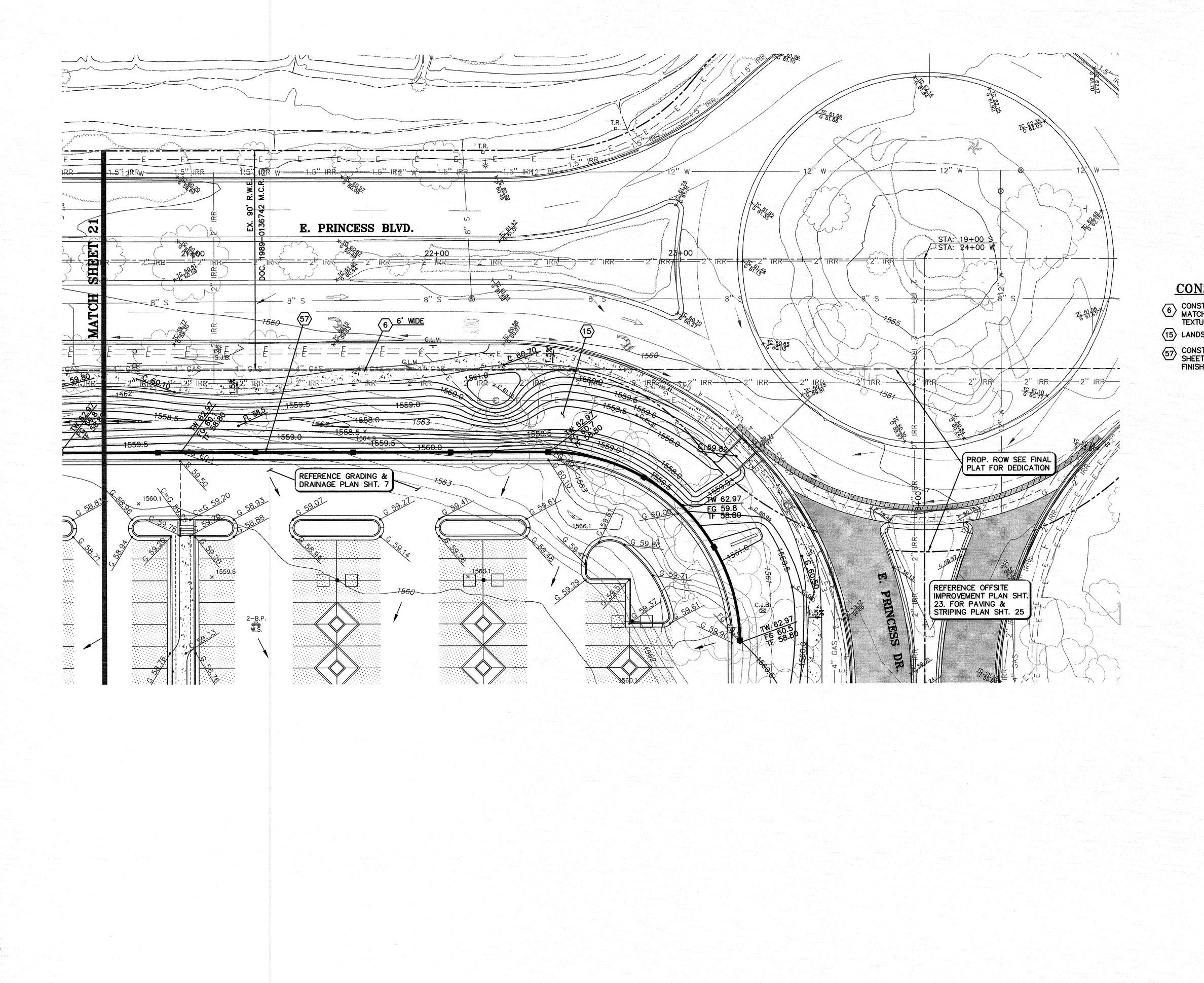
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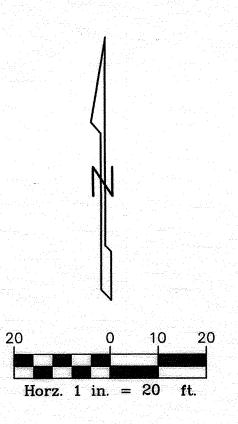
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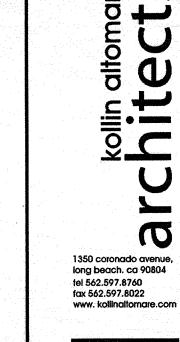
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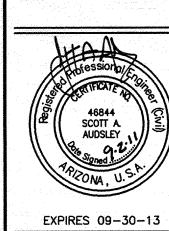
- 6 CONSTRUCT SIDEWALK PER M.A.G. STD. DETAIL 230.
  MATCH EXISTING SIDEWALK MATERIAL, COLOR AND
  TEXTURE, SEE ARCHITECTURAL PLANS. WIDTH PER PLAN.
- (15) LANDSCAPE AREA PER LANDSCAPE PLANS.
- 57 CONSTRUCT 3' FLOOD/ SCREEN WALL PER DETAIL ON SHEET 26. SEE ARCHITECTURAL PLAN FOR COLOR AND







D

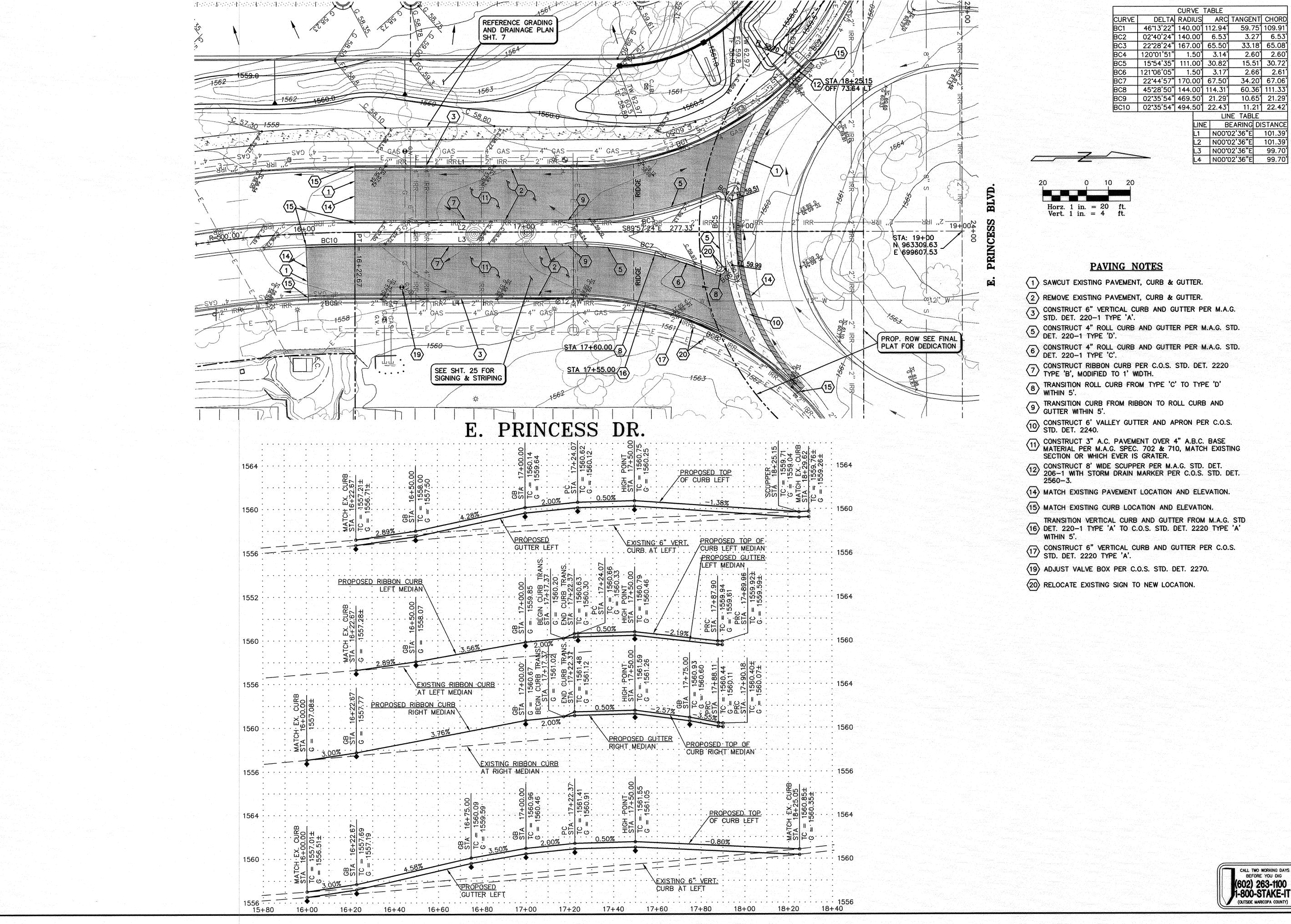


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CURVE DELTA RADIUS ARC TANGENT CHORD 46'13'22" 140.00' 112.94' 59.75' 109.91 02°40'24" 140.00' 6.53' 3.27' 6.53' BC3 22'28'24" 167.00' 65.50' 33.18' 65.08' BC4 120'01'51" 1.50' 3.14' 2.60' 2.60' 15'54'35" 111.00' 30.82' 15.51' 30.72' 
 BC6
 121°06'05"
 1.50'
 3.17'
 2.66'
 2.61'

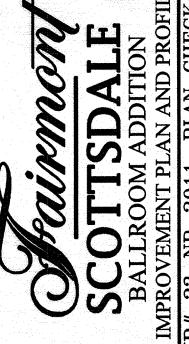
 BC7
 22°44'57"
 170.00'
 67.50'
 34.20'
 67.06'

 BC8
 45°28′50″
 144.00′
 114.31′
 60.36′
 111.33′

 BC9
 02°35′54″
 469.50′
 21.29′
 10.65′
 21.29′

 BC10
 02°35′54″
 494.50′
 22.43′
 11.21′
 22.42′

 LINE TABLE LINE BEARING DISTANCE



kollin altomare: hitects

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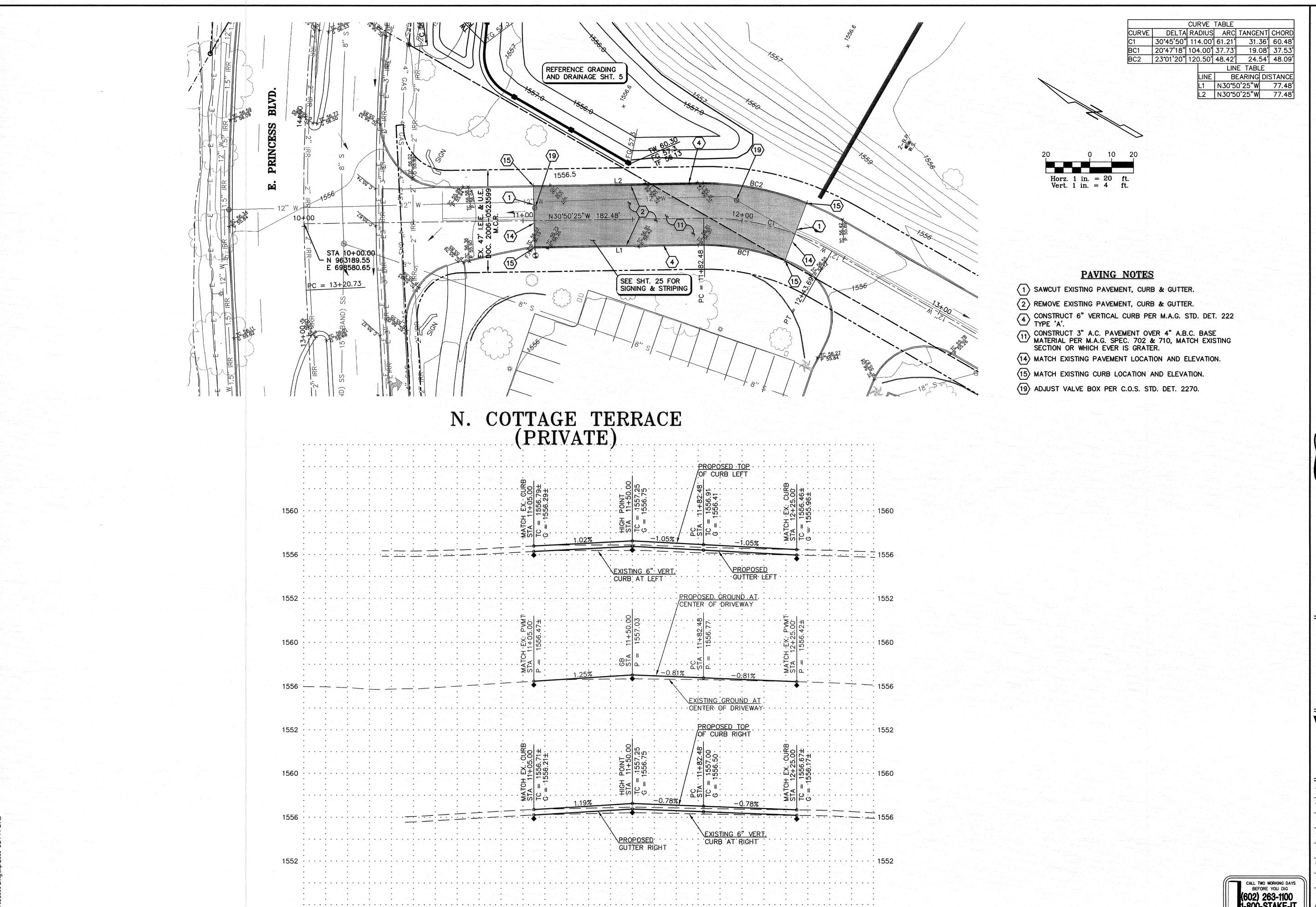
tel 562.597.8760



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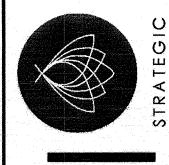
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10+80 11+00 11+20 11+40 11+60

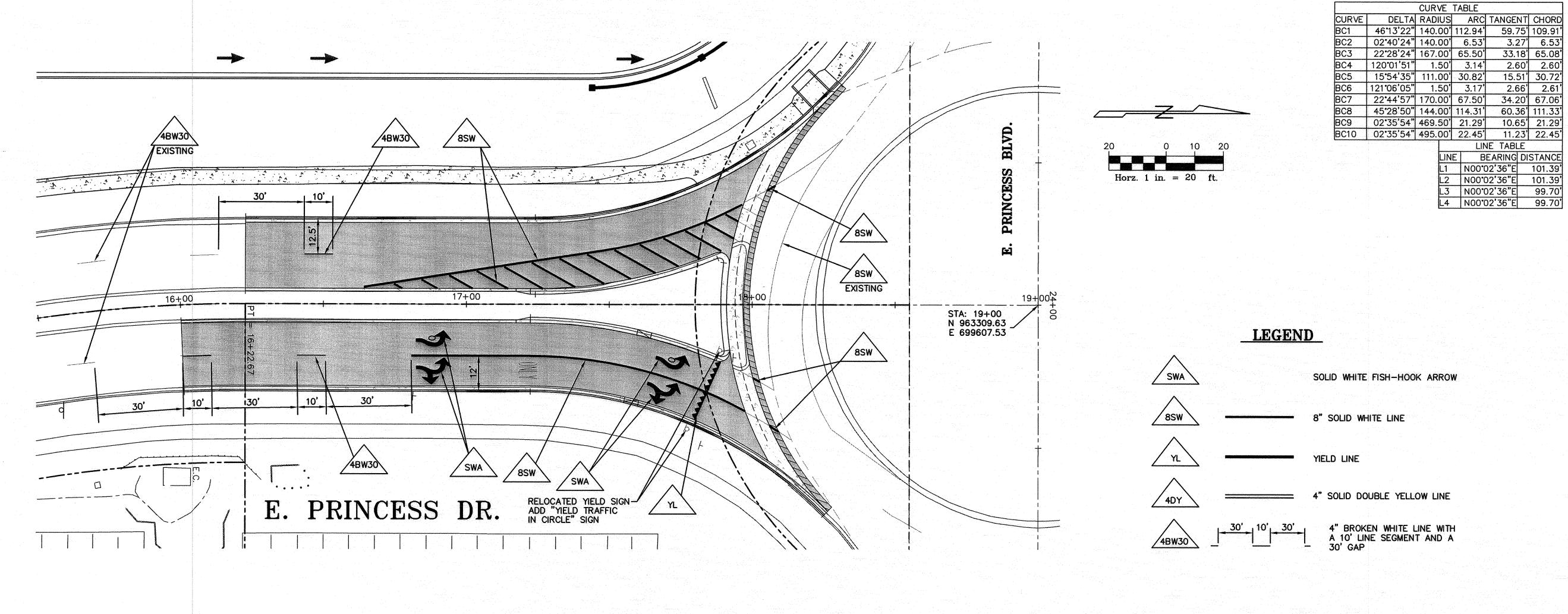
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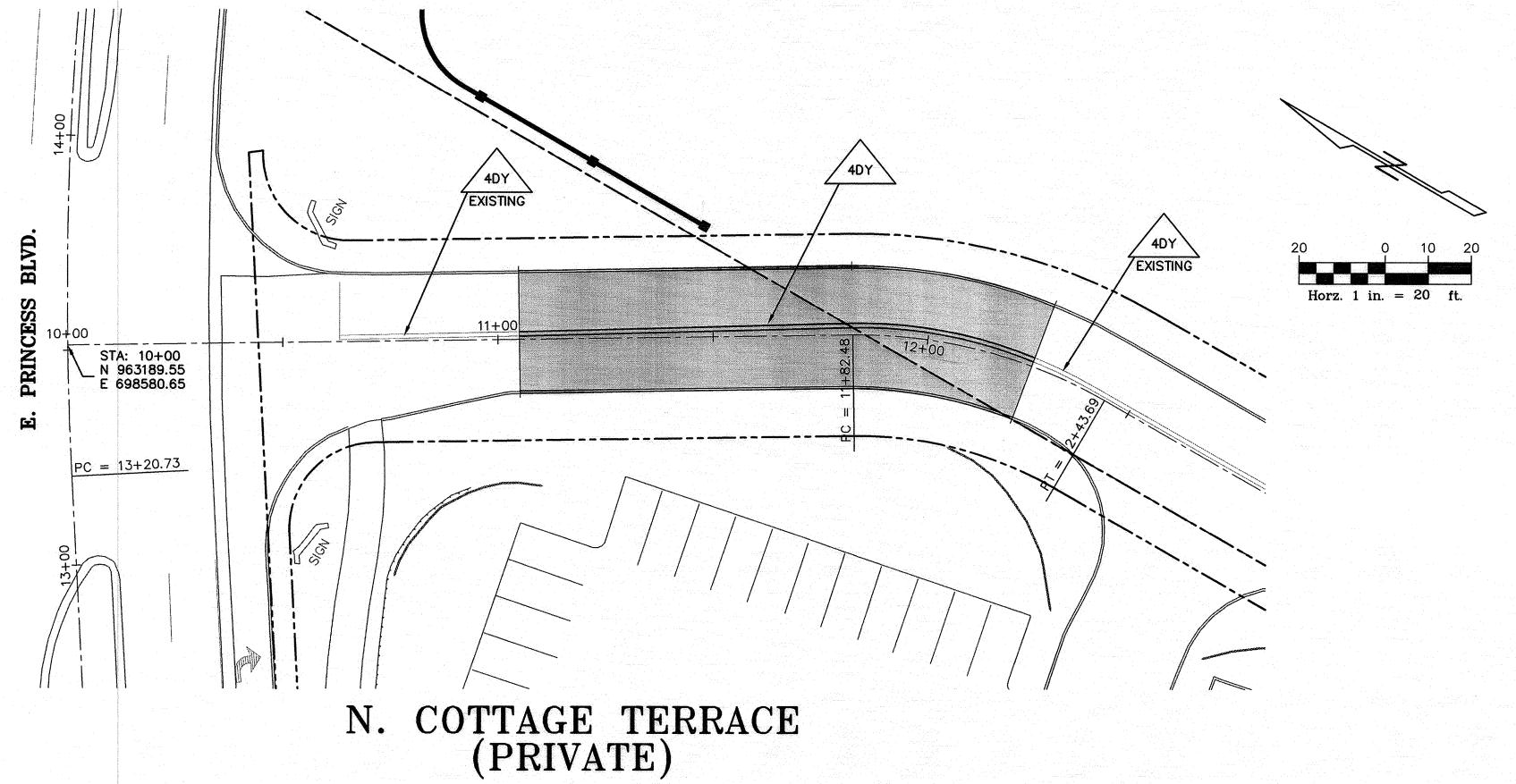


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09-02-11

MODIFY CURB & GUTTER DEPTH AS SHOWN UNLESS OTHERWISE NOTED STONE PER GRADATION TABLE UNGROUTED: D<sub>50</sub>=8" CURB OPENING AND SPILLWAY DETAIL (N.T.S.)

30" (TYP)

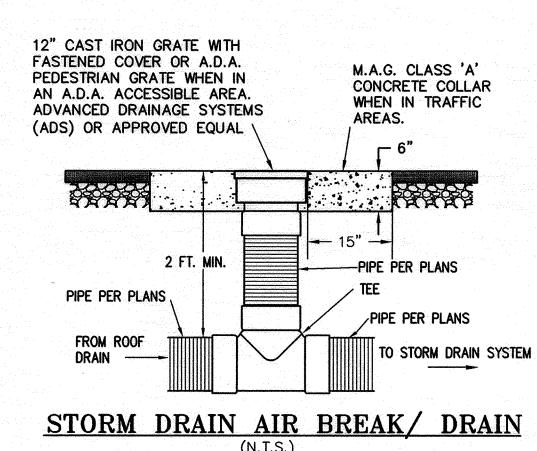
A.D.A. ACCESSIBLE PARKING SPACE

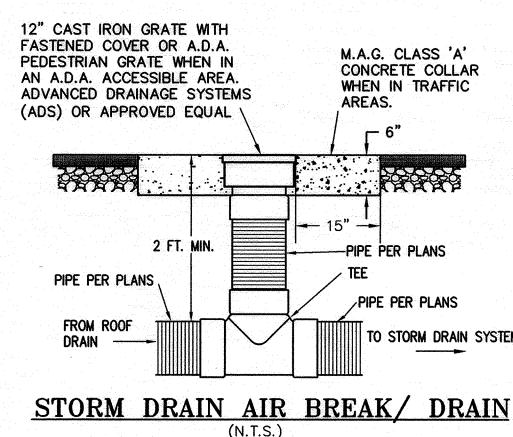
20'

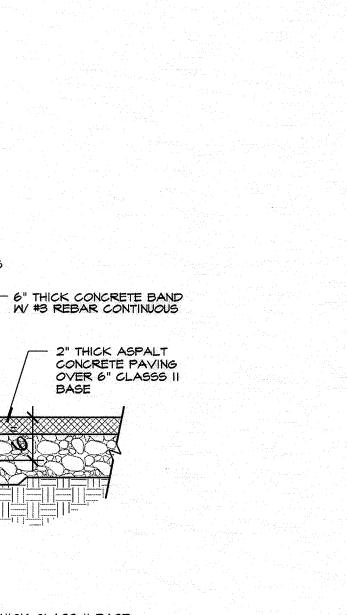
N.T.S.

*	PERCENT PASSING	D <sub>50</sub> =6" (LAYER THICKNESS=12") ROCK SIZE (IN.)	D <sub>50</sub> =8"	(LAYER THICKNESS=16") ROCK SIZE (IN.)	D50=12"	(LAYER THICKNESS=24") ROCK SIZE (IN.)
	100 TO 90	12		16		24
	85 TO 70	9		12		18
	50 TO 30	6		8		12
	15 TO 5	4		5		8
I	5 TO 0	2		3		4

**GRADATION TABLE** \*NATIVE INDIGENOUS STONE







PARKING LOT PERMEABLE PAVERS

✓ € WALL, FOOTING

PER SOILS
REPORT (TYP)

2-#4 CONTINUOUS IN 8" DEEP BOND BEAM

3-#5 CONTINOUS —

ALTERNATE TAILS

1. SPECIAL INSPECTION REQUIRED.

N.T.S.

2. CONCRETE SHALL BE CLASS A AS SPECIFIED BY MAG. 3. REINFORCING SHALL BE ASTM A615, GD60.
4. MASONRY SHALL BE MEDIUM WEIGHT, F'<sub>M</sub>=1,500 PSI.

FLOOD/ SCREEN WALL

#5 @ 48" O.C. IN SOLID GROUTED CELLS —

SOLID GROUT WALL — BELOW GRADE

- FINISH WALL PER

(BOTH SIDES)

ARCHITECTURAL PLANS.

- DURO-WIRE REINFORCEMENT @ 16" VERTICAL SPACING

HW (100 YEAR)

PREPARE SUBGRADE PER SOILS REPORT

EXPIRES 06-30-12

6" THICK CLASS II BASE.

#5 @ 48" O.C.

- 6" THICK CONCRETE CURB PER CIVIL DRAWINGS

- 1/2" TOOLED EDGE ALL AROUND.

COMPACTED SUBGRADE.

80 mm PERMEABLE CONCRETE PAVERS OVER I" SAND BED

N.T.S.

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- A.D.A. ACCESSIBLE
PARKING SIGN.
SEE ARCHITECTURAL
PLAN FOR DETAILS.

- SYMBOL OF ACCESSIBILITY PARKING SPACE MARKING PER M.U.T.C.D FIG. 3B-18. EXPIRES 09-30-13

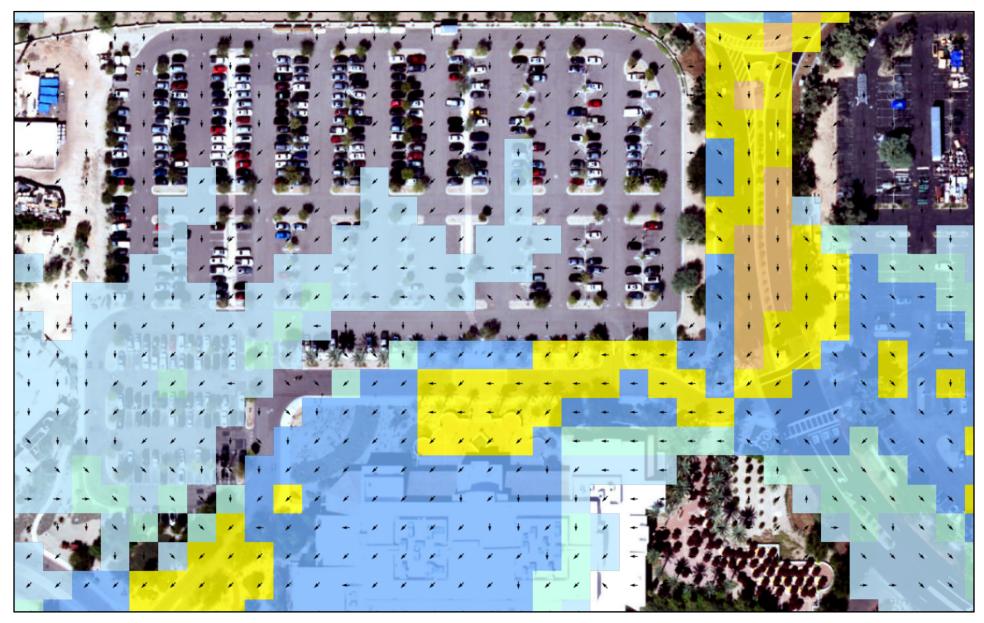
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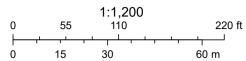
SCALE (VERTICAL)



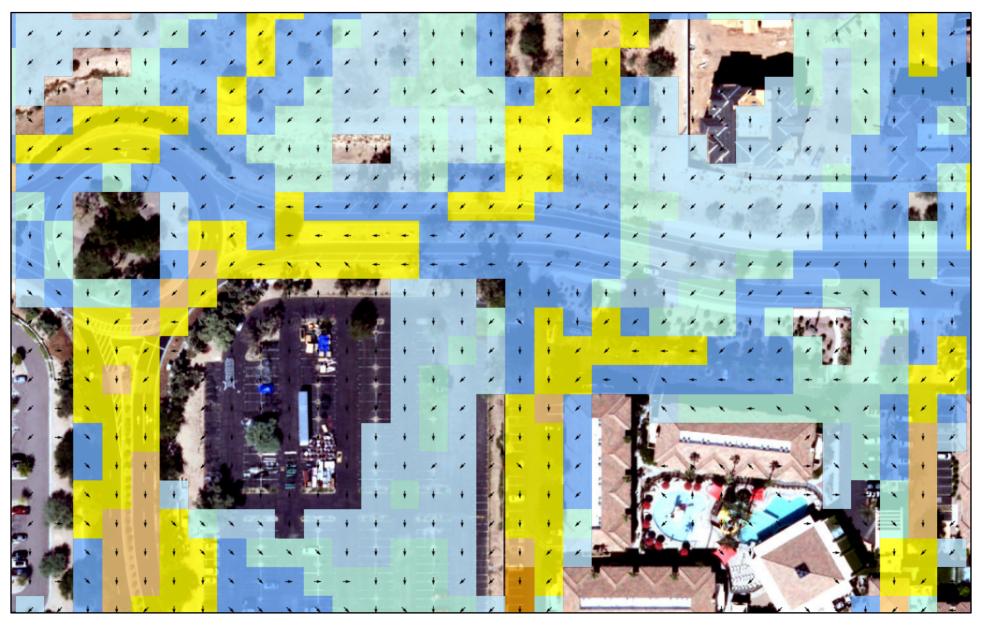
### 122\_PinnaclePeakSouth - 100YR24HR



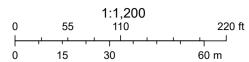
December 4, 2023



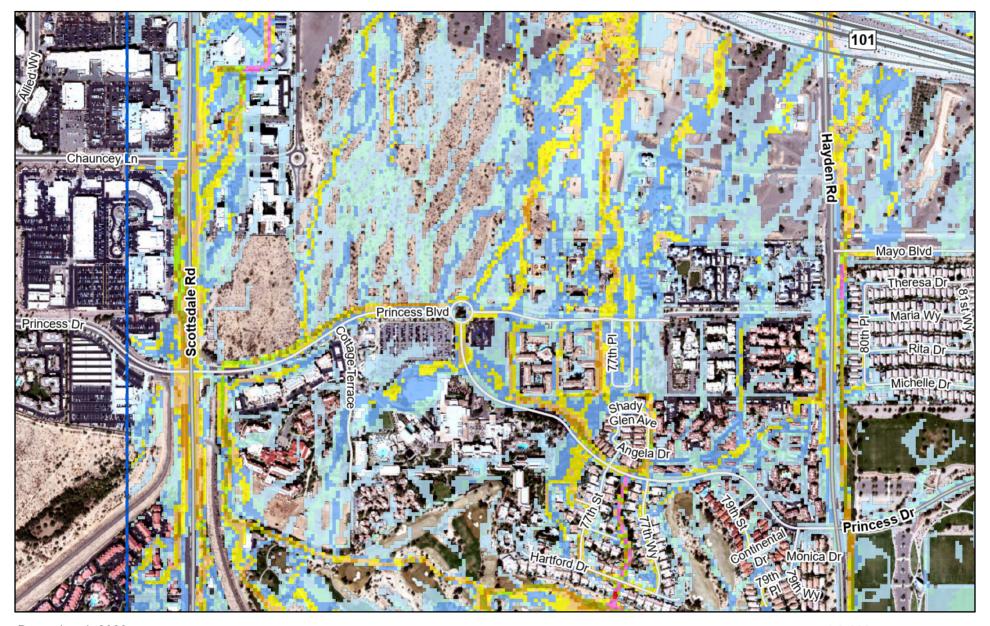
### 122\_PinnaclePeakSouth - 100YR24HR



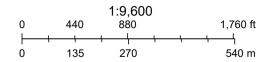
December 4, 2023



### 122\_PinnaclePeakSouth - 100YR24HR



December 4, 2023



#### Flood Control District of Maricopa County Web Access Tool Data Legend

Model Boundary

— Grid Boundaries

Flow Direction @ Peak Discharge

✓ North

✓ West

North

✓ West

North

✓ Solution The Maricopa County Web Access

Peak Discharge

(cfs)

✓ 1

✓ 1 - 5

✓ > 5 - 10

West >5 - 10 >10 - 25

East >25 - 50

Northeast >50 - 75

Southeast >75 - 100

Southwest >100 - 150
Northwest >150 - 200

Labels >200 - 500

#### **Pre-Defined Flow Direction**

Maximum Water Surface Elevation

>500

Max Elev (Varies per model)
Min Elev (Varies per model)

**←** 4

Floodplain X-Section

7



#### **ENGINEER'S NOTES**

- MARICOPA ASSOCIATION OF GOVERNMENTS (M.A.G.) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION INCLUDING LATEST REVISION AND CURRENT SUPPLEMENTALS THEREOF
- SHALL BE IN ACCORDANCE WITH THE M.A.G. STANDARD SPECIFICATIONS AND DETAILS AND CURRENT SUPPLEMENTS THEREOF PER THE LOCAL CITY OR TOWN UNLESS SPECIFIED OTHERWISE IN THESE PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS, CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL REQUIRED STANDARD SPECIFICATIONS, DETAILS AND SUPPLEMENTS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN
- THE CONTRACTOR IS RESPONSIBLE FOR ALL METHODS, SEQUENCING, AND SAFETY CONCERNS ASSOCIATED WITH THIS PROJECT DURING CONSTRUCTION, UNLESS
- THE CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO THE CONSTRUCTION COVERED BY THIS PLAN.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK COVERED BY THIS PLAN
- THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR GENERAL INFORMATIONAL PURPOSES ONLY AND MIGHT NOT REFLECT ACTUAL QUANTITIES AND SITE CONDITIONS. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THIS PLAN.
- A REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL CALL 48 HOURS IN ADVANCE FOR BLUE STAKE (1-800-STAKE-IT) PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
- ALL PAVING, GRADING, EXCAVATION, TRENCHING, PIPE BEDDING, CUT FILL AND BACKFILL SHALL COMPLY WITH THE RECOMMENDATIONS SET FORTH IN THE SOILS (GEOTECHNICAL) REPORT FOR THIS PROJECT IN ADDITION TO THE REFERENCED REQUIRED SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL BE AWARE THAT CERTAIN UTILITIES REQUIRE PROPER ATTENTION AND CAREFUL PLANNING DURING SITE CONSTRUCTION. PLEASE NOTE THAT UTILITIES ON THESE PLANS MAY NOT EXHIBIT THE FULL PROTECTIVE COVER REQUIRED DURING THE SUBGRADE PREPARATION PHASE OF THE CONSTRUCTION. IN SUCH INSTANCES, THE CONTRACTOR SHALL PROVIDE ADDITIONAL PROTECTION (SUCH AS RAMPING) OR INCREASED PIPE STRENGTH TO PROVIDE THE NECESSARY PROTECTION REQUIRED TO PREVENT DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL HOLD THE ENGINEER HARMLESS IN ALL CASES FOR DAMAGES TO UTILITIES WHERE INADEQUATE PROTECTIVE MEASURES OCCUR
- 10. THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES AT POINTS OF TIE-IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION, SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONTACT THE OWNER'S
- CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS AND SITE LAYOU WITH ARCHITECT'S FINAL SITE PLAN AND FINAL BUILDING DIMENSIONS BEFORE
- STARTING WORK. REPORT DISCREPANCIES TO OWNER'S AGENT. COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
- 13. CONTRACTOR IS RESPONSIBLE FOR PROJECT AND SITE CONDITIONS, AND TO WORK WITH WEATHER CONDITIONS AS THE PROJECT SITE MAY BE LOCATED IN A FLOOD PRONE AREA AND SUBJECT TO FLOODING AND ITS HAZARDS.
- 14. THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION, CONDITION, AND PAVEMENT CROSS-SLOPE OF ALL EXISTING SURFACES AT POINTS OF TIE-IN AND MATCHING, PRIOR TO COMMENCEMENT OF GRADING, PAVING, CURB AND GUTTER, OR OTHER SURFACE CONSTRUCTION. SHOULD EXISTING LOCATIONS, ELEVATIONS, CONDITION, OR PAVEMENT CROSS-SLOPE DIFFER FROM THAT SHOWN ON THESE PLANS, RESULTING IN THE DESIGN INTENT REFLECTED ON THESE PLANS NOT ABLE TO BE CONSTRUCTED, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AGENT IMMEDIATELY FOR DIRECTION ON HOW TO PROCEED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ALL COSTS ASSOCIATED WITH CORRECTIVE ACTION IF THESE PROCEDURES ARE NOT FOLLOWED.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE UTILITY CROSSINGS AT CULVERT CROSSINGS BEFORE STARTING WORK ON CULVERT. COORDINATE WITH OWNER REPRESENTATIVE. VERIFY UTILITY LINES AND/OR CONDUITS ARE IN PLACE BEFORE STARTING CULVERT WORK.
- 16. CONSTRUCT RETENTION BASIN AS SHOWN. CONTRACTOR TO SCARIFY BOTTOM OF BASIN TWO FEET DEEP AND NOT ALLOW COMPACTION OVER 80%.
- 17. THIS PROJECT REQUIRES A REGULAR ONGOING MAINTENANCE PROGRAM FOR THE DESIGNED DRAINAGE SYSTEM(S) TO PRESERVE THE DESIGN INTEGRITY AND THE ABILITY TO PERFORM ITS OPERATIONAL INTENT. FAILURE TO PROVIDE MAINTENANCE WILL JEOPARDIZE THE DRAINAGE SYSTEM(S)' PERFORMANCE AND MAY LEAD TO IT'S INABILITY TO PERFORM PROPERLY AND/OR CAUSE DAMAGE ELSEWHERE IN THE PROJECT.
- 18. SEWER LINES DESIGNED IN PROFILE AND PUBLIC WATER LINES ARE REQUIRED TO BE ASBUILT AND THE INSTALLATION AND TESTING WITNESSED BY A PROFESSIONAL ENGINEER IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODES R18-9-E301 "4.01 GENERAL PERMIT: SEWAGE COLLECTIONS SYSTEMS" AND R18-5-507 AND 508 "APPROVAL OF CONSTRUCTION" AND "RECORD DRAWINGS", RESPECTIVELY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY OWNER 72 HOURS IN ADVANCE WHEN THOSE SYSTEMS ARE READY TO BE WITNESSED.
- THE WORK PRODUCT PRESENTED IS BELIEVED TO BE COMPLIANT WITH THE INTENT OF THE CURRENT AMERICANS DISABILITIES ACT (ADA) REQUIREMENTS AS INTERPRETED BY THE REVIEWING AGENCY(S). IF CONSTRUCTION OF THE PROJECT IS DELAYED, THIS WORK PRODUCT SHOULD BE UPDATED TO ACCOUNT FOR ANY RELEVANT ADA UPDATES BEFORE CONSTRUCTION BEGINS.
- 20. LOWEST FLOOR (LF) REFERS TO EITHER FLOOR/SLAB ELEVATION OR TOP OF BASEMENT SLAB. LF ELEVATIONS ON THE GRADING AND DRAINAGE PLANS FOR RESIDENTIAL UNITS REFLECT SLAB ON GRADE CONDITIONS AND CANNOT BE LOWERED WITHOUT AGENCY APPROVAL IN LOCATIONS WHERE 'SPECIAL FLOOD HAZARD AREAS' EXIST. IN NON-FLOOD HAZARD LOCATIONS, TO ENSURE THAT ADEQUATE RESIDENTIAL LOT DRAINAGE CAN BE ACHIEVED, A PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF THE LF FOR THE SLAB IS PROPOSED TO BE LOWERED, OR IF A BASEMENT IS TO BE CONSTRUCTED.

#### PARCEL DESCRIPTION

#### PARCEL NO. 1

(HOTEL PARCEL

LOT 3 AND A PORTION OF LOT 2, OF FAIRMONT SCOTTSDALE PRINCESS, ACCORDING TO BOOK 1104 OF MAPS, PAGE 3, RECORDS OF MARICOPA COUNTY, ARIZONA, TOGETHER WITH A PART OF THE SOUTHWEST QUARTER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, ALL BEING MORE PARTICULARLY DESCRIBED AS

COMMENCING AT THE SOUTH ONE-QUARTER CORNER OF SECTION 35; THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST ALONG THE NORTH-SOUTH MIDSECTION LINE OF SECTION 35, 1206.58 FEET TO THE POINT OF

THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 111.62 FEET; THENCE NORTH 05 DEGREES 04 MINUTES 10 SECONDS WEST, 34.51 FEET TO THE

BEGINNING OF A CURVE CONCAVE TO THE EAST HAVING A RADIUS OF 75.00 FEET; THENCE NORTHERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 60 DEGREES 29 MINUTES 58 SECONDS, 79.19 FEET TO A POINT OF REVERSE CURVATURE WITH A CURVE CONCAVE SOUTHWEST HAVING A RADIUS OF 75.00 FEET: THENCE NORTHEASTERLY, NORTHERLY AND SOUTHWESTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 168 DEGREES 47 MINUTES 48 SECONDS. 220.95

#### THENCE SOUTH 66 DEGREES 38 MINUTES 00 SECONDS WEST, 521.45 FEET

- THENCE NORTH 07 DEGREES 07 MINUTES 02 SECONDS WEST, 47.49 FEET; THENCE NORTH 88 DEGREES 18 MINUTES 25 SECONDS WEST, 29.86 FEET
- THENCE NORTH 58 DEGREES 07 MINUTES 53 SECONDS WEST, 43.04 FEET
- THENCE NORTH 26 DEGREES 47 MINUTES 27 SECONDS WEST, 26.35 FEET
- THENCE NORTH 83 DEGREES 46 MINUTES 19 SECONDS WEST, 39.13 FEET
- THENCE NORTH 27 DEGREES 44 MINUTES 13 SECONDS WEST, 177.75 FEET THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 103.52 FEET
- THENCE SOUTH 00 DEGREES 01 MINUTES 45 SECONDS WEST, 18.00 FEET;
- THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 377.78 FEET;
- THENCE NORTH 00 DEGREES 01 MINUTE 45 SECONDS EAST, 756.50 FEET; THENCE NORTH 78 DEGREES 51 MINUTES 20 SECONDS EAST, 4.33 FEET TO THE
- BEGINNING OF A CURVE CONCAVE SOUTH HAVING A RADIUS OF 250.00 FEET THENCE EASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 51 DEGREES 43 MINUTES 26 SECONDS, 225.69 FEET
- THENCE SOUTH 49 DEGREES 25 MINUTES 14 SECONDS EAST, 59.77 FEET;
- THENCE NORTH 40 DEGREES 34 MINUTES 36 SECONDS EAST, 352.13 FEET TO THE
- BEGINNING OF A CURVE CONCAVE SOUTHEAST HAVING A RADIUS OF 100.00 FEET; THENCE NORTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 49 DEGREES 35 MINUTES 38 SECONDS, 86.56 FEET
- THENCE SOUTH 89 DEGREES 49 MINUTES 46 SECONDS EAST, 385.35 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE EAST HAVING A RADIUS OF 500.00 FEET, AND A RADIAL BEARING TO THE BEGINNING OF SOUTH 73 DEGREES 52 MINUTES 17 SECONDS WEST;
- THENCE NORTHERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 16 DEGREES 17 MINUTES 57 SECONDS, 142.24 FEET;
- THENCE SOUTH 89 DEGREES 49 MINUTES 46 SECONDS EAST, 55.5 FEET TO THE BEGINNING OF A NON-TANGENT CURVE CONCAVE NORTHEAST HAVING A RADIUS OF 444.50 FEET AND A RADIAL BEARING TO THE BEGINNING OF NORTH 89 DEGREES 46 MINUTES 46 SECONDS WEST;
- THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 75
- DEGREES 09 MINUTES 12 SECONDS, 583.04 FEET; THENCE SOUTH 74 DEGREES 58 MINUTES 57 SECONDS EAST, 6.41 FEET TO THE
- NORTH-SOUTH MIDSECTION LINE OF SECTION 35; THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, ALONG THE MIDSECTION LINE, 57,42 FEET:
- THENCE SOUTH 74 DEGREES 58 MINUTES 57 SECONDS EAST, 337.32 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHWEST HAVING A RADIUS OF 300.00 FEET; THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 35
- DEGREES 25 MINUTES 14 SECONDS, 185.46 FEET; THENCE SOUTH 39 DEGREES 33 MINUTES 43 SECONDS EAST, 125,23 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHEAST HAVING A RADIUS OF 1000.00 FEET;
- THENCE SOUTHEASTERLY ALONG THE CURVE THROUGH A CENTRAL ANGLE OF 11 DEGREES 27 MINUTES 33 SECONDS, 200,00 FEET;

BENCHMARK

NORTH, RANGE 4 EAST

ELEVATION=1553.22'.

CITY OF SCOTTSDALE DATUM, NAVD88 DATUM

**ENGINEER'S CERTIFICATION** 

AND STORMWATER REGULATIONS.

ARM L. MORE

**ENGINEER SIGNATURE** 

CITY OF SCOTTSDALE BRASS CAP FLUSH 450'± NORTH OF PRINCESS DRIVE ON

SCOTTSDALE ROAD, BEING THE WEST QUARTER CORNER OF SECTION 35, TOWNSHIP 4

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON

PROTECTION FROM FLOODING CAUSED BY A ONE-HUNDRED YEAR STORM, AND ARE IN

11/22/2023

DATE

ACCORDANCE WITH CITY OF SCOTTSDALE REVISED CODE, CHAPTER 37-FLOODPLAIN

NAVD 1988, MCDOT, AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA.

ENGINEER'S CERTIFICATION: THE LOWEST FLOOR ELEVATION(S) AND/OR FLOOD

PROOFING ELEVATION(S) ON THIS PLAN ARE SUFFICIENTLY HIGH TO PROVIDE

- THENCE SOUTH 38 DEGREES 58 MINUTES 44 SECONDS WEST, 55.50 FEET; THENCE SOUTH 16 DEGREES 17 MINUTES 23 SECONDS WEST, 211.79 FEET;
- THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 270.00 FEET;
- THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, 208.40 FEET;
- THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 148.26 FEET;
- THENCE SOUTH 00 DEGREES 08 MINUTES 41 SECONDS WEST, 14.66 FEET;
- THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 67.83 FEET; THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST, 10.06 FEET;
- THENCE NORTH 89 DEGREES 51 MINUTES 19 SECONDS WEST, 122.29 FEET TO THE POINT OF BEGINNING; EXCEPT ONE-HALF OF ALL OIL AND MINERAL RIGHTS AS RESERVED IN DOCKET 124, PAGE 39, RECORDS OF MARICOPA COUNTY, ARIZONA;
- EXCEPT ALL OIL, GAS, OTHER HYDROCARBON SUBSTANCES, HELIUM OR OTHER SUBSTANCES OF A GASEOUS NATURE, COAL, METALS, MINERALS, FOSSILS, FERTILIZER OF EVERY NAME AND DESCRIPTION; AND
- EXCEPT ALL URANIUM, THORIUM OR ANY OTHER MATERIAL WHICH IS OR MAY BE DETERMINED TO BE PECULIARLY ESSENTIAL TO THE PRODUCTION OF FISSIONABLE MATERIALS WHETHER OR NOT OF COMMERCIAL VALUE, AS SET FORTH IN SECTION 37-231, ARIZONA REVISED STATUTES.

#### PARCEL NO. 7:

A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS AND UTILITIES BY OR PURSUANT TO THAT CERTAIN "RECIPROCAL EASEMENT AGREEMENT, CONSTRUCTION AND MAINTENANCE AGREEMENT, AND COVENANTS, CONDITIONS AND RESTRICTIONS" DATED APRIL 19, 2006 AND RECORDED APRIL 19, 2006 IN RECORDING NO. 20060523599, RECORDS OF MARICOPA COUNTY, ARIZONA.

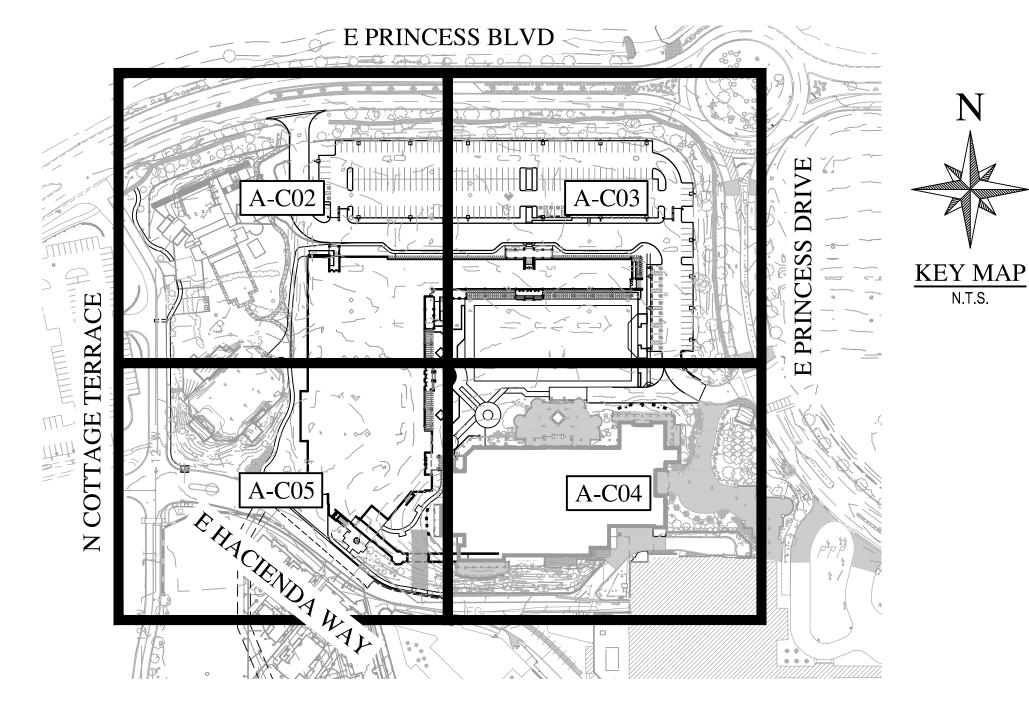
#### PARCEL NO. 9:

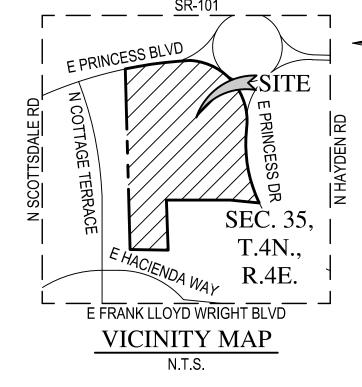
A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS BY OR PURSUANT TO THAT CERTAIN "MASTER DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR SCOTTSDALE PRINCESS/EAGLE" DATED AUGUST 19, 1986, AND RECORDED AUGUST 20, 1986 IN RECORDING NO. 86-444862, RECORDS OF MARICOPA COUNTY, ARIZONA.

# FAIRMONT SCOTTSDALE PRINCESS CONFERENCE CENTER

# CONCEPT GRADING, DRAINAGE, WATER & SEWER SCOTTSDALE, ARIZONA

A PORTION OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA





#### OWNER / DEVELOPER STRATEGIC HOTELS & RESORTS

150 NORTH RIVERSIDE PLAZA, SUITE 4270 CHICAGO, IL 60606 CONTACT: TIMOTHY TAYLOR PHONE: (312) 658-6038

#### **ENGINEER**

WOOD, PATEL & ASSOCIATES, INC 2051 WEST NORTHERN AVENUE, SUITE 100 PHOENIX, ARIZONA 85021 CONTACT: DARIN MOORE, P.E. PHONE: (602) 335-8500 FAX: (602) 335-8580

#### **ARCHITECT**

**KOLLIN ALTOMARE ARCHITECTS** 4265 E. CONANT STREET, SUITE 101 LONG BEACH, CA 90808 **CONTACT: PAUL ALTOMARE** PHONE: (562) 597-8760

### PROJECT SITE DATA

ASSESSOR PARCEL NUMBER(S): 215-08-003C PROJECT SITE ADDRESS: 7575 E PRINCESS BLVD SCOTTSDALE, ARIZONA 85255 PROJECT SITE AREA(S): NET AREA = 17.0 AC DISTURBED AREA = 8.1± AC ZONING:

#### SHEET INDEX

A-C01	COVER SHEET
A-C02	CONCEPT GRADING, DRAINAGE, WATER, & SEWER
A-C03	CONCEPT GRADING, DRAINAGE, WATER, & SEWER
A-C04	CONCEPT GRADING, DRAINAGE, WATER, & SEWER
A-C05	CONCEPT GRADING, DRAINAGE, WATER, & SEWER

# FINISH FLOOR

#### **ELEVATION CALCULATION** HAG = 1557.26

LAG = 1551.12 FF=1561.26 RFD=1559.26

ALL ELECTROMECHANICAL EQUIPMENT SHALL BE ELEVATED TO RFD ELEVATION

#### FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

ACCORDING TO FEMA FLOOD INSURANCE RATE MAPPING, THE SUBJECT PROPERTY IS

LOCATED IN 'SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL

CHANCE FLOOD' "ZONE AO". ZONE AO IS DESCRIBED AS: "FLOOD DEPTHS OF 1 TO 3 FEET

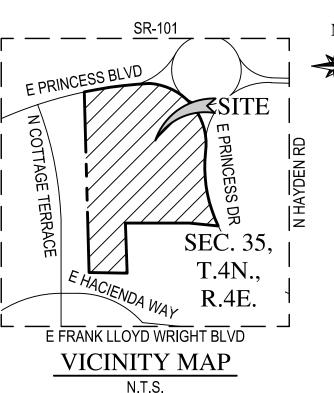
(USUALLY SHEET FLOW ON SLOPING TERRAIN); AVERAGE DEPTHS DETERMINED. FOR

AREAS OF ALLUVIAL FAN FLOODING, VELOCITIES ALSO DETERMINED."

FEMA FIRM NOTE (ZONE AO)

COMMUNITY NUMBER	PANEL NUMBER	SUFFIX	DATE OF FIRM	INDEX DATE	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONE, USE DEPTH
04013C	1320	L	10/16/2013	07/20/2021	AO	1

		LEGEND			
EXISTING SURVEY	PROPOSED	GRADING, DRAINAGE & PAVING	ABBREVIATIONS		
RIGHT OF WAY PROPERTY LINE ROAD CENTERLINE EASEMENT SURVEY MARKER GAS LINE SEWER LINE WATERIAL) — SEWER LINE CURB SIDEWALK VEGETATION SEWER MANHOLE JUNCTION BOX/RISER WATER VALVE STREET LIGHT	PROPOSE  PROPOSE  I Section 1.	STORM DRAIN PIPE STORM DRAIN CATCH BASIN DRYWELL  D FIRELINE, WATER & SEWER  WATER LINE WATER LINE FITTINGS BACKFLOW PREVENTION DEVICE WATER VALVE FIRE HYDRANT WATER METER PLUG TAPPING SLEEVE & VALVE SEWER LINE SEWER MANHOLE CLEANOUT	A.E. PVT. SMH E.J.B. S.L. INV I.V.B. LFF W.V.	ACCESS EASEMENT PRIVATE SEWER MANHOLE ELECRICAL JUNCTION BOX STREET LIGHT INVERT ELEVATION IRRIGATION VALVE BOX LOWEST FINISHED FLOOR ELEVATION WATER VALVE	



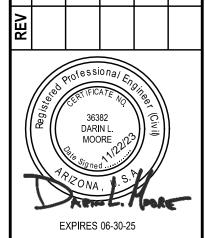
Wood, Patel & Associates, In Water Resources Land Survey Construction Management 602.335.8500 www.woodpatel.com

WOOD

PATEL

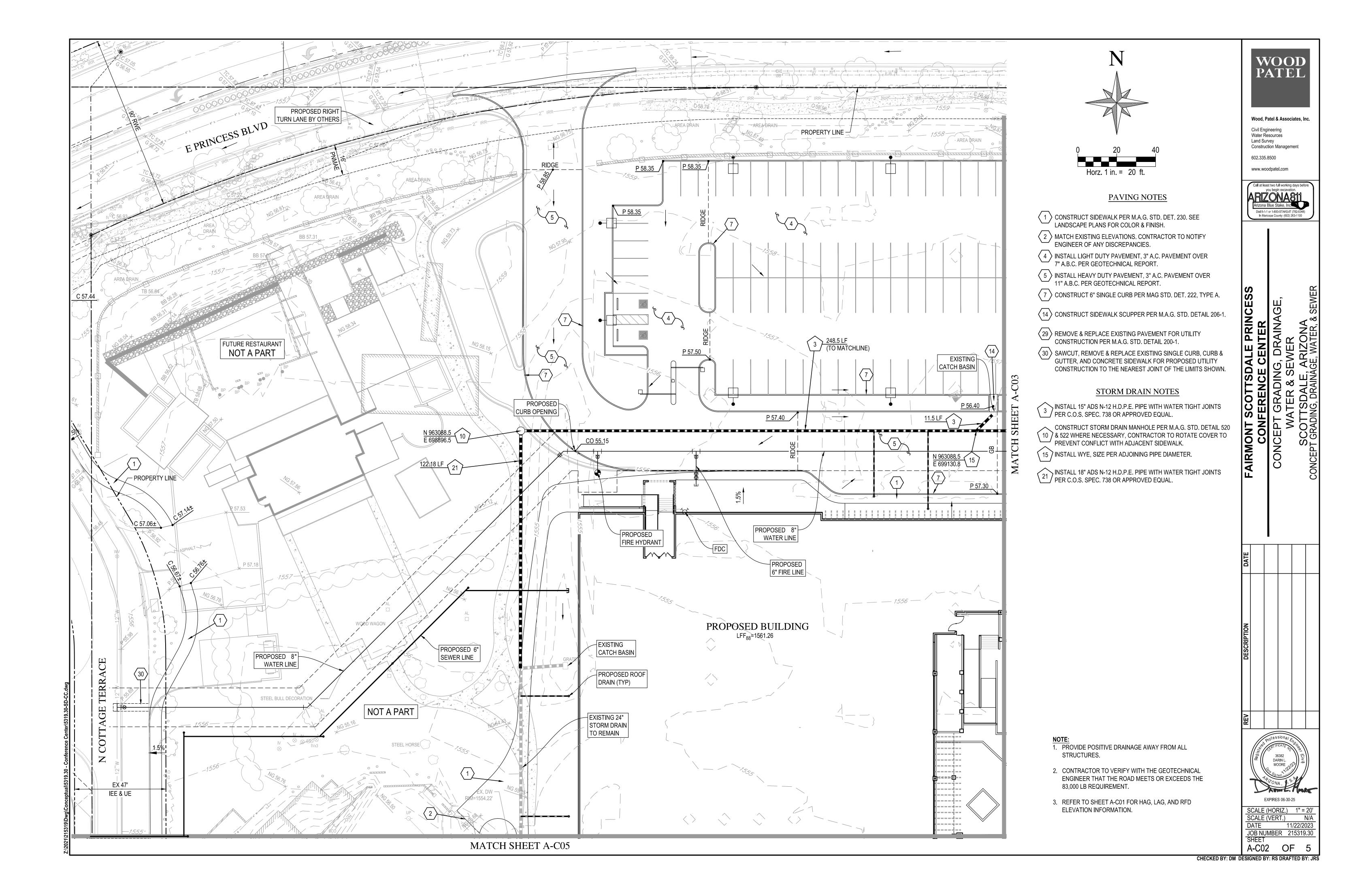
Call at least two full working days before ARIZONA811
Arizona Blue Stake, Inc.

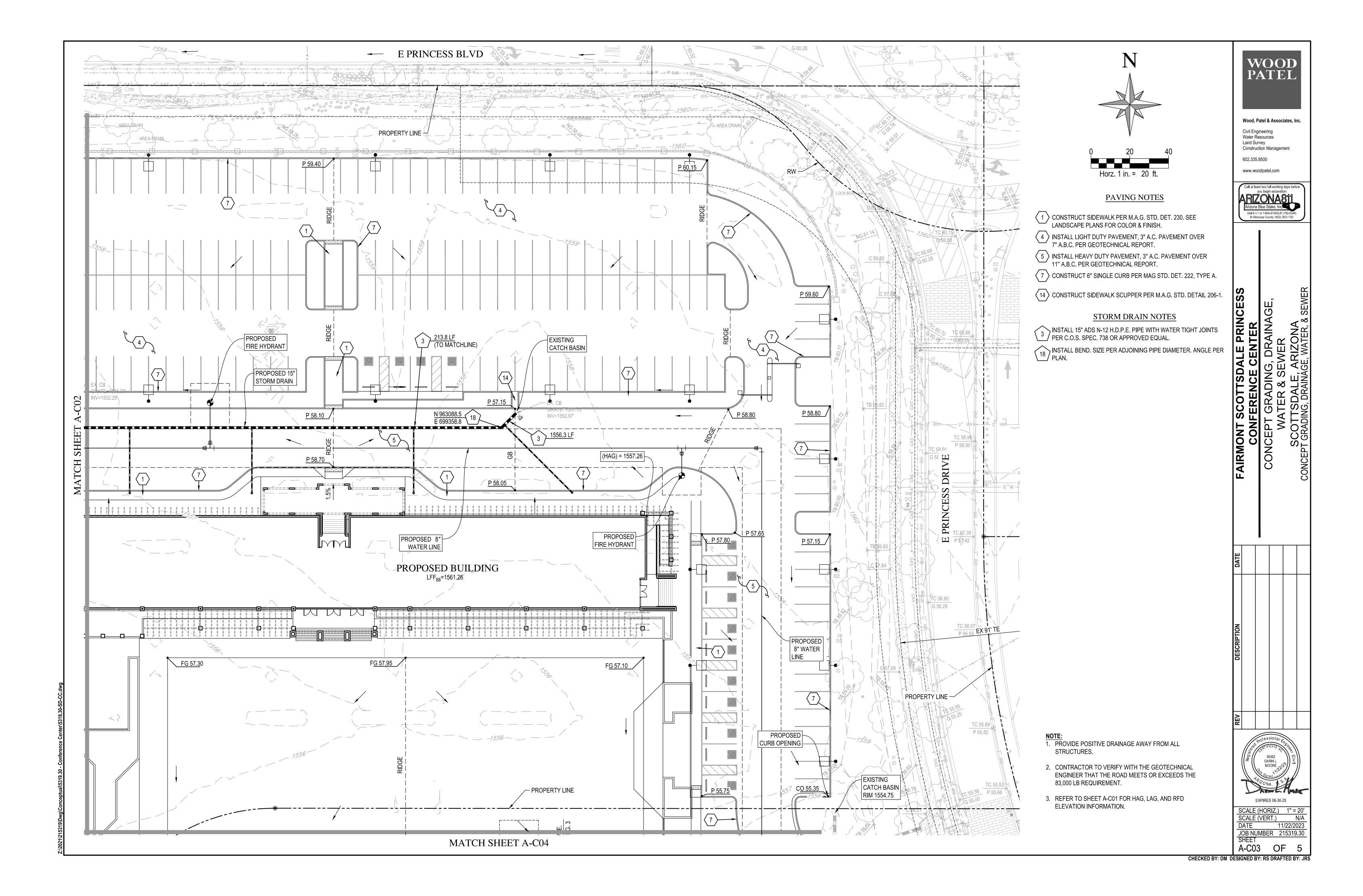
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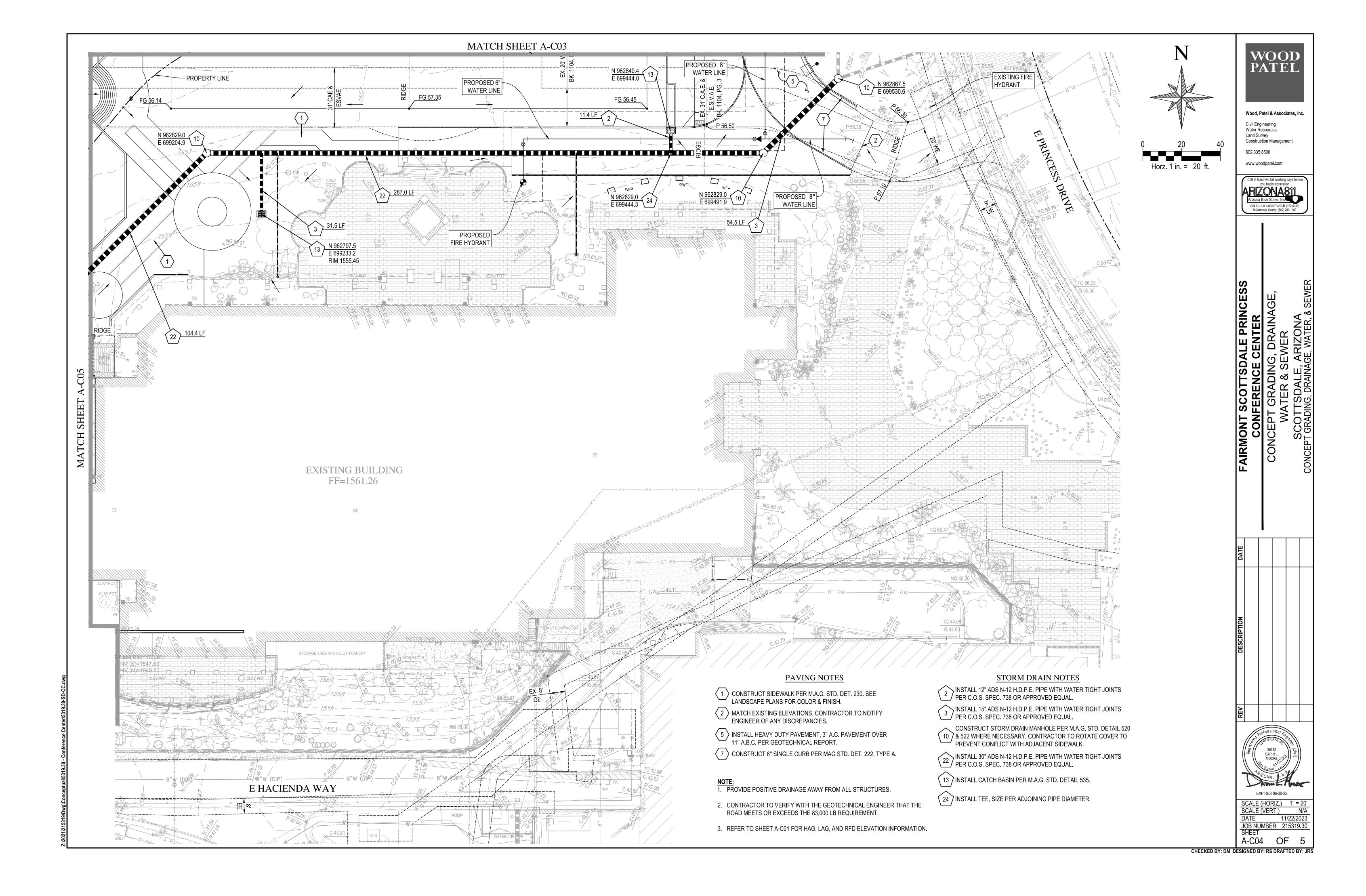


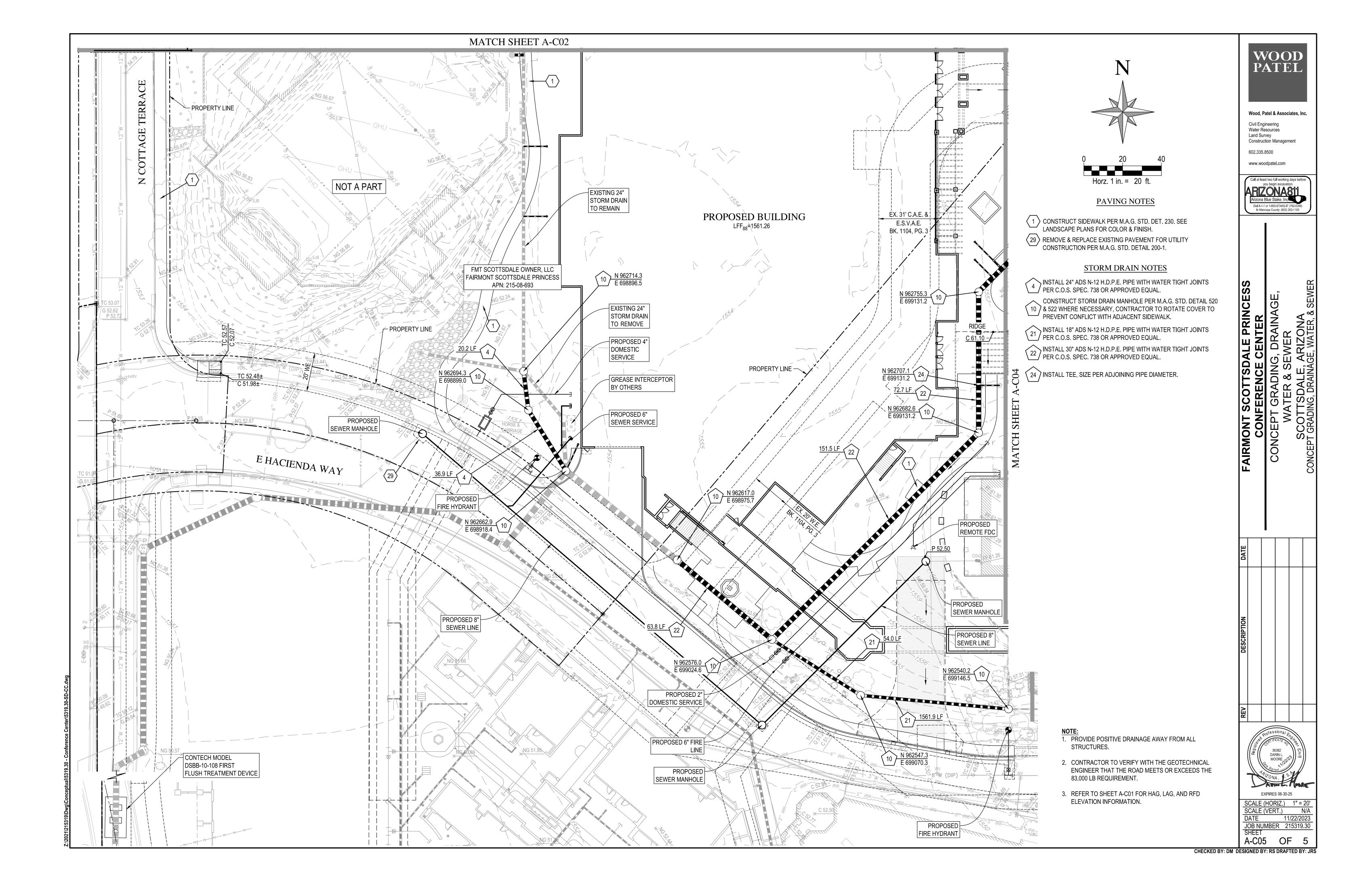
SCALE (HORIZ.) SCALE (VERT.) N/A 11/22/202 JOB NUMBER 215319.30 OF 5

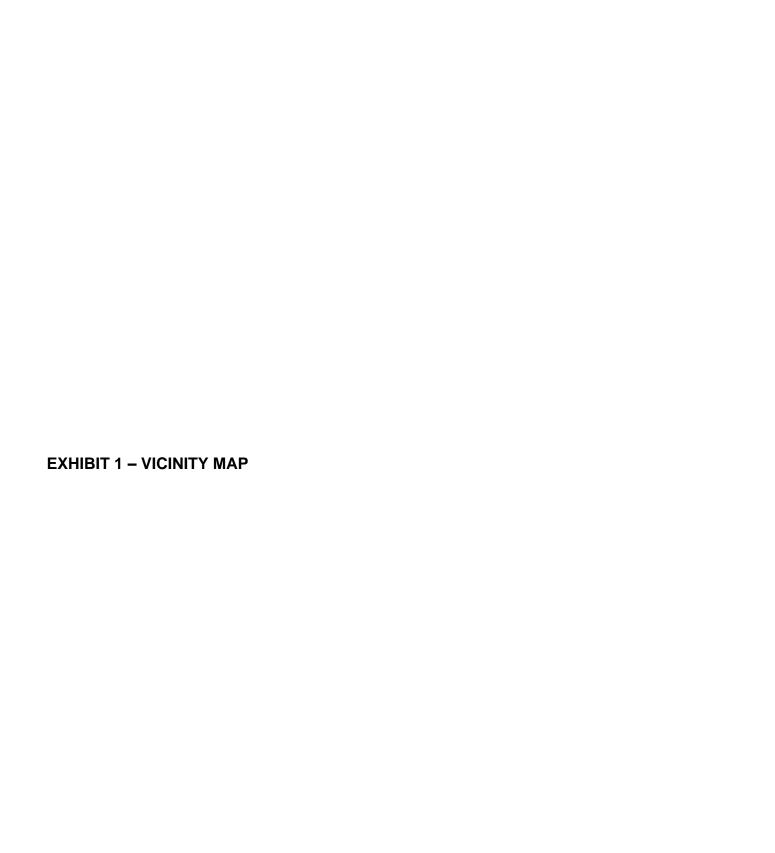
CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS

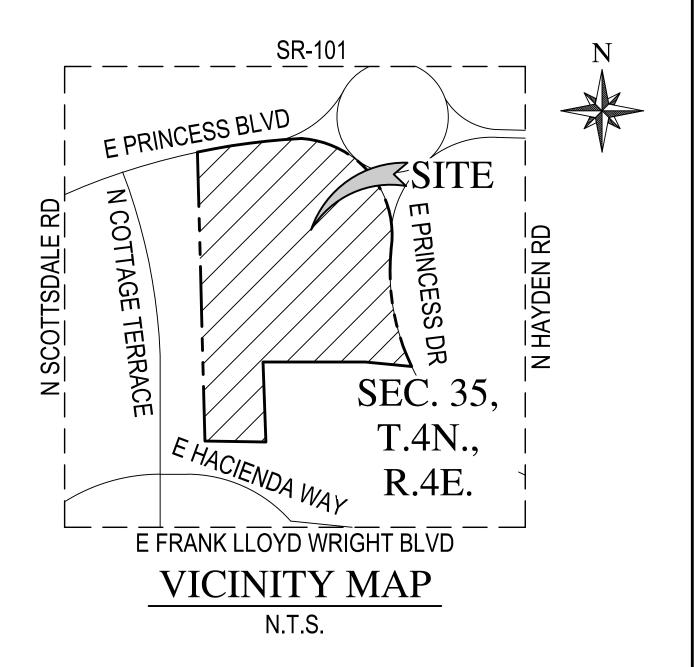












FOR CONSTRUCTION OR RECORDING



FAIRMONT SCOTTSDALE PRINCESS

## CONFERENCE CENTER & EVENT LAWN VICINITY MAP EXHIBIT

DATE	11/22/2023	SCALE	N.T.S	SHEET	1 OF 1
JOB NO.	215319	DESIGN	AJS	CHECK	AJS
		DRAWN	DLH	RFI#	

Z:\2021\215319\Project Support\Reports\Rezoning\Conference Center & Event Lawn\Drainage\Exhibits\5319.30-EXH1-VM.dwg



## National Flood Hazard Layer FIRMette



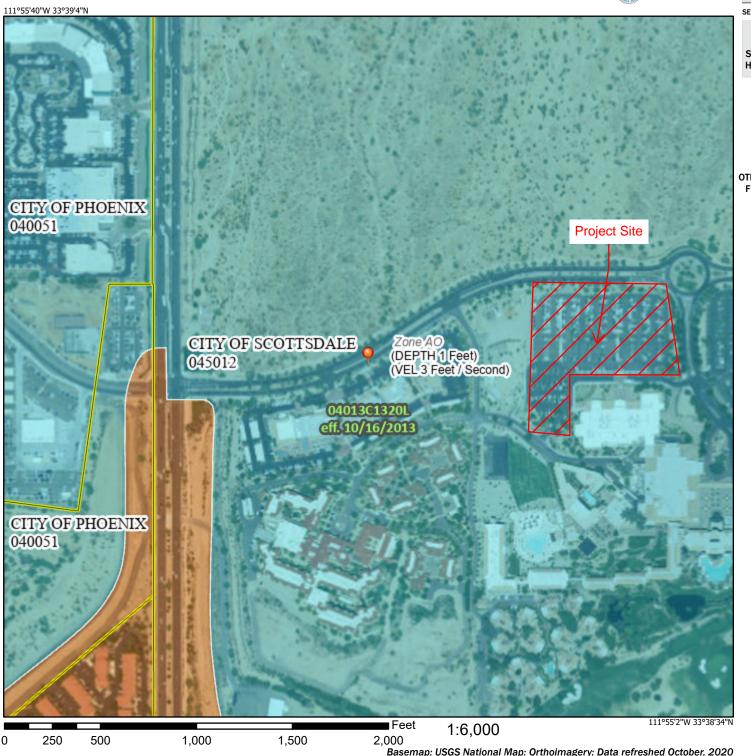
## Legend SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD **HAZARD AREAS** Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF FLOOD HAZARD Area with Flood Risk due to Levee Zone D NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLI Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** ---- 513---- Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary **Coastal Transect Baseline** OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

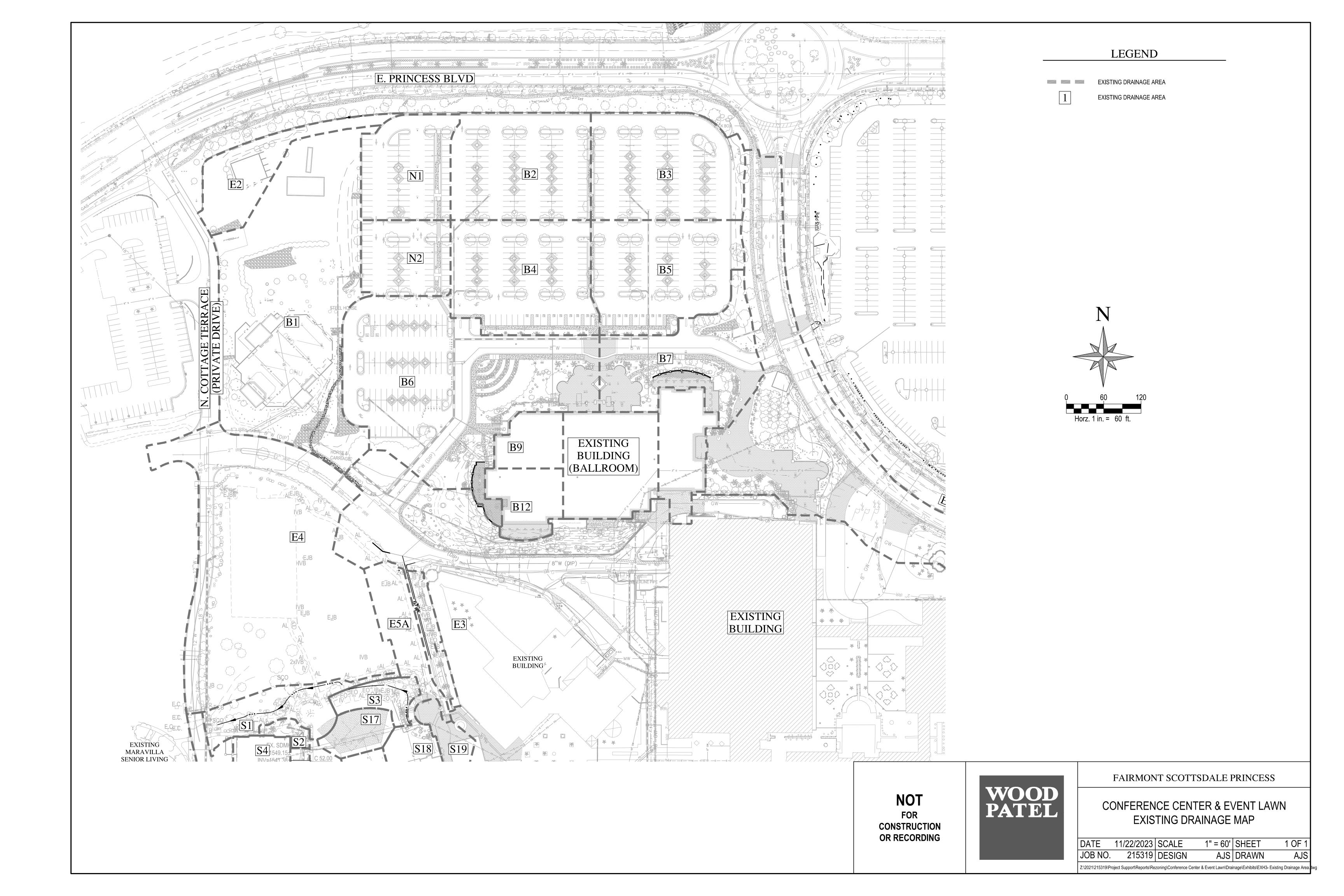
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/31/2021 at 1:10 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

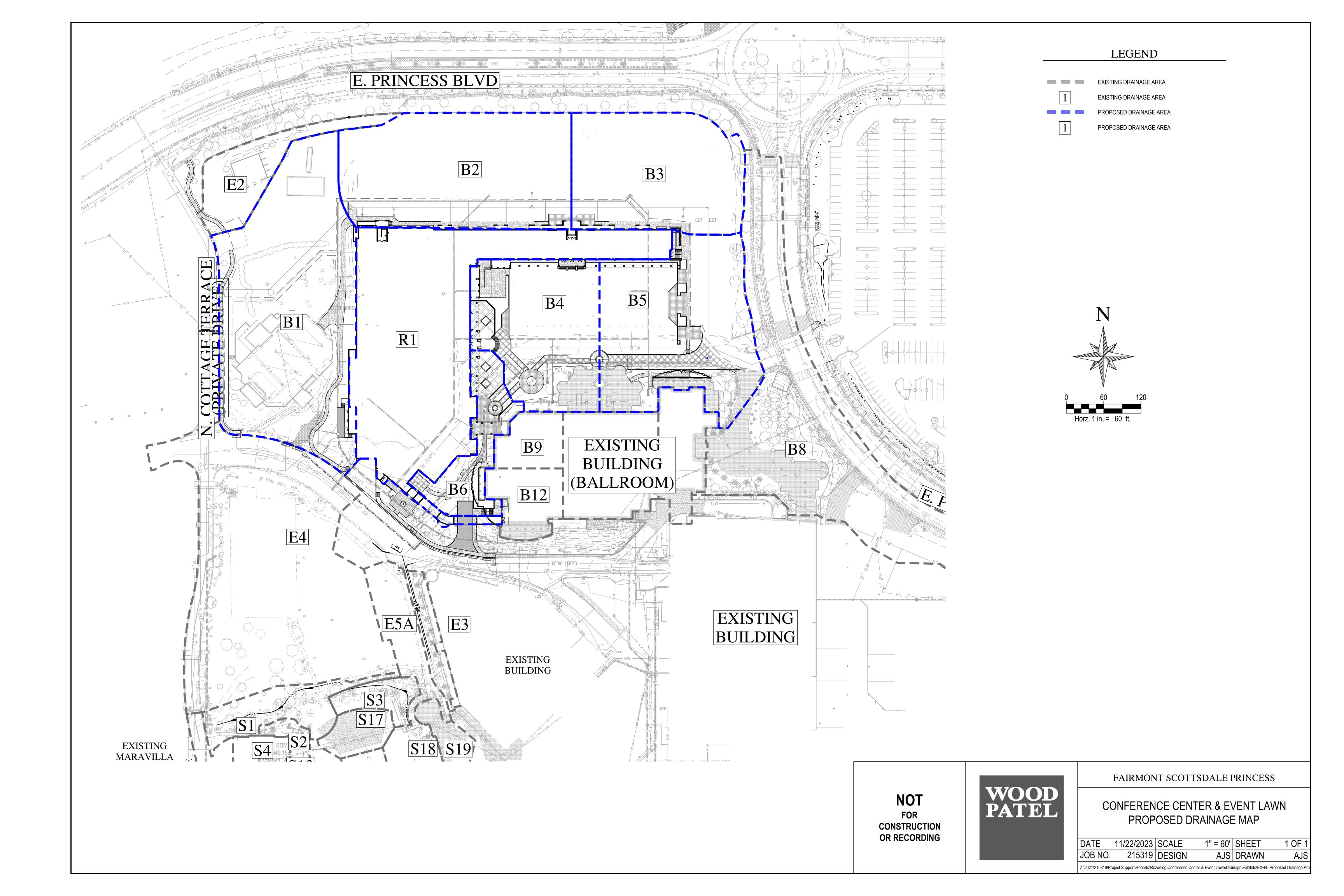
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



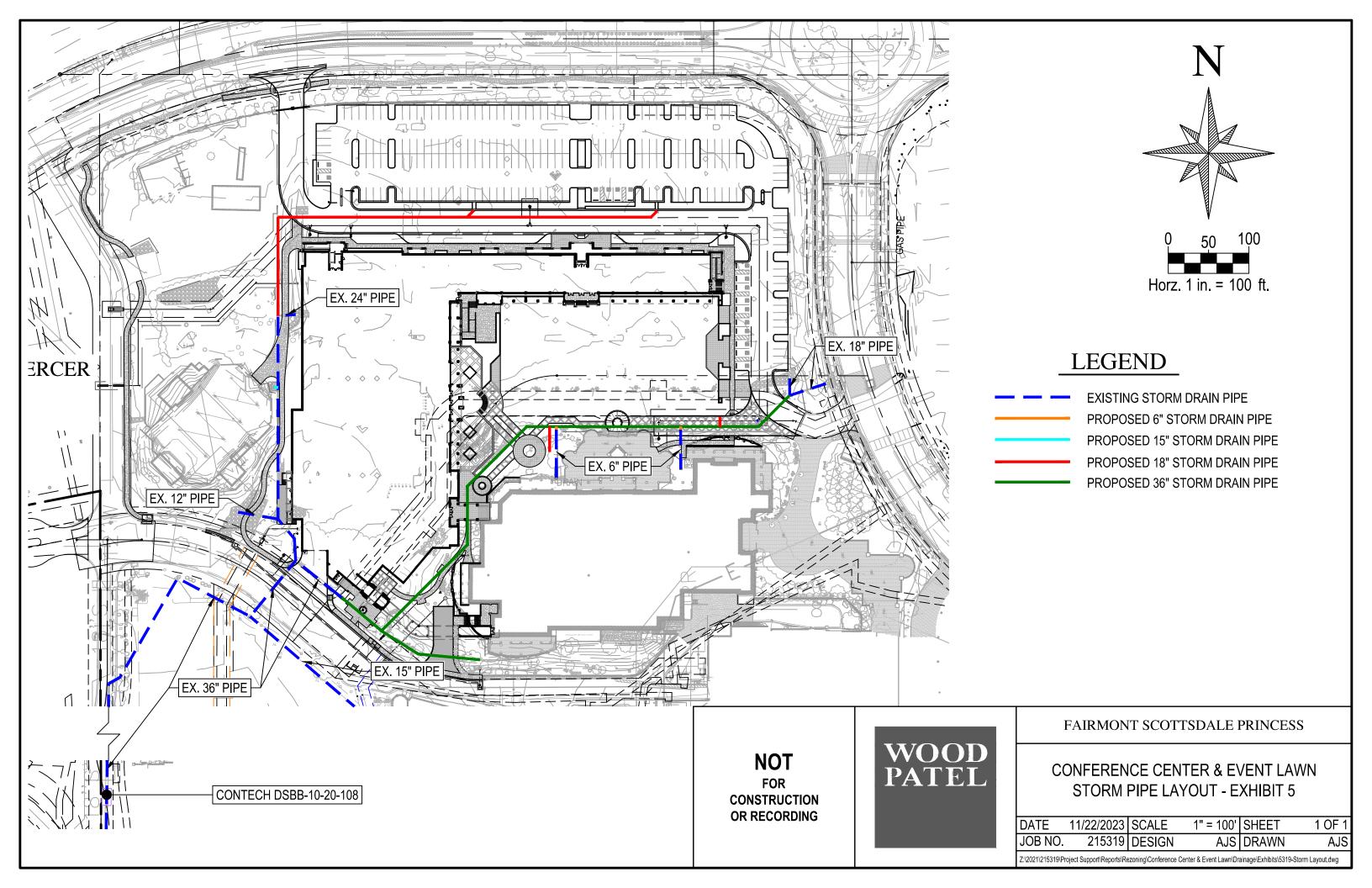






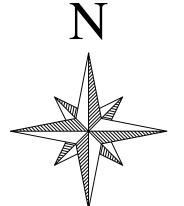


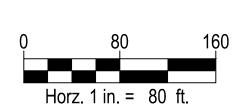












NOT
FOR
CONSTRUCTION
OR RECORDING



## PRINCESS CONFERENCE CENTER

EXHIBIT 6 AERIAL MAP

 DATE
 11/22/2023
 SCALE
 1" = 80'
 SHEET
 01 OF 01

 JOB NO
 215319
 DESIGN
 AJS
 DRAWN
 AJS

 Z:\2021\215319\Project Support\Reports\5319.30 - Conference Center\Drainage\Exhibits\5319.30 - Aerial Map.dwg