



FINAL Basis of Design Report

☐ APPROVED

☒ APPROVED AS NOTED

☐ REVISE AND RESUBMIT



Disclaimer: If approved; the approval is granted under the condition that the final construction documents submitted for city review will match the information herein. Any subsequent changes in the water or sewer design that materially impact design criteria or standards will require re-analysis, re-submittal, and approval of a revised basis of design report prior to the plan review submission.; this approval is not a guarantee of construction document acceptance. For questions or clarifications contact the Water Resources Planning and Engineering Department at 480-312-5685.

BY ugrossthal

DATE 8/20/2025

FINAL WATER DISTRIBUTION SYSTEM BASIS OF DESIGN REPORT FOR FAIRMONT SCOTTSDALE PRINCESS CONFERENCE CENTER & EVENT LAWN

Review 1 – March 29, 2024
Review 2 – February 7, 2025
Review 3 – May 23, 2025

July 18, 2025
WP# 215319.30

COS# 38-DR-2022#3

Prepared by
Robert G. Saunders, EIT



EXPIRES 06-30-28

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EXPIRES 06-30-28

1.0 INTRODUCTION

The Fairmont Scottsdale Princess Conference Center & Event Lawn (Site) is a proposed commercial/retail building with a kitchen and an open 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, and/or & 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, pools, sidewalks, and a variety of landscaping (desert and grass).

The design criteria used to estimate water demands and evaluate system hydraulics are based on Wood, Patel & Associates, Inc.'s (WOODPATEL's) understanding of the requirements listed in the *City of Scottsdale Design Standards and Policies Manual, 2018*.

The following is a summary of the primary design criteria utilized:

Average Day Water Demand, Commercial/Retail:	0.8 gpd / sf
Average Day Water Demand, Restaurant:	1.3 gpd / sf
Maximum Day Flow Factor:	2 x ADD
Peak Hour Factor:	3.5 x ADD
Peak Hour Factor, Restaurant:	6.0 x ADD

Abbreviations: gpd = gallons per day; sf = square feet; ADD = average day demand

*Includes both inside and outside use, per Figure 6-1.2, City of Scottsdale *Design Standards and Policies Manual*

2.0 EXISTING WATER INFRASTRUCTURE

Existing water infrastructure adjacent to the Site includes an existing 12-inch public water line in Cottage Terrace and an existing 8-inch public water line adjacent to East Hacienda Way which turns north and wraps around the existing Palomino Ballroom to connect to the existing 12-inch water main in Princess Drive. Refer to Exhibit 2 – *Water Exhibit* for the layout of existing water infrastructure.

3.0 PROPOSED WATER INFRASTRUCTURE

Water demands for the proposed project can be found in Appendix A – *Water Demand Calculations*. Average Day, Max Day, and Peak Hour demands were calculated according to their land use within the City of Scottsdale Design Standards and Policies Manual (COS DSPM) for Scenarios 1, 2, and 3 (Ref. 1). For Scenario 4, the Water Service Fixture Units (WSFU) provided by the plumbing engineer is 522, which equates to a demand of 146 gpm. Refer to Appendix B – *Plumbing Fixture Counts FSP – Conference Center IMEG #22005433.00, by IMEG* of fixture unit demands from the plumbing engineer.

There are multiple projects being proposed in the area of the Site. The Construction schedule for them will overlap at some point where all the projects will be in construction at the same time. The changes to the water main infrastructure in particular for all the projects will be done together to avoid multiple shutdowns.

3.1 Onsite Water Infrastructure

The proposed infrastructure to serve this Site will require the removal of a portion of the existing 8-inch water main on the north side of the existing Palomino Ballroom and reroute it with a proposed 8-inch waterline around the north side of the proposed building and make a new connection to the existing 12-inch water main in Cottage Terrace. The proposed improvements include relocating two (2) existing fire hydrants, one (1) on the north side of the existing Palomino Ballroom and one (1) on the southwest corner of the existing Palomino Ballroom, four (4) proposed fire hydrants, a 6-inch fire service, and a 4-inch domestic meter, vault, and backflow preventer. Existing services to the existing Palomino Ballroom will be relocated to the existing 8-inch water main in Hacienda Way. Those services will include a 6-inch fire service and a 2-inch domestic water service. Refer to Exhibit 2 – *Water Exhibit* for the proposed water infrastructure.

The initial service design according to COS DSPM Section 6-1.416 can serve the Site with a 4-inch meter and backflow. This was determined by applying a 1.5 safety factor to the WSFU demand of 146 gpm, which is 219 gpm. This is lower than the limit of 600 gpm shown in Figure 6-1.4 of the COS DSPM (Ref. 1).

3.2 Water Demand Calculations

Demands for the Site include only the square footage of the Conference Center and its kitchen as the Event Lawn will not be used simultaneously with the equivalent space in the Conference Center or existing Palomino Ballroom. If a weather-related incident forces guests using the Event Lawn to relocate indoors, the equivalent space required for those guests will already be available for them in the Conference Center or existing Palomino Ballroom and the Event Lawn will no longer be in use. In addition, the kitchen component of the Site will require the use of restaurant demand and peaking factor values.

The Average Day, Maximum Day, and Peak Hour demands for the proposed Site have been calculated to be 110.7 gallons per minute (gpm), 221.3 gpm, and 401.7 gpm, respectively. (Refer to Appendix A – *Water Demand Calculations*). Modeling results using the fire flow test done on Cottage Terrace (Appendix C- Fire Hydrant Flow Test Results and Calculations) determined that the velocities for the Peak hour Flow Condition are below 9.85 fps with pressures ranging from 53 to 68 psi. The modeling for the Max Day + Fire Flow results show pressures ranging from 30 to 46 psi. Refer to Exhibit 3 – *WaterCAD Layout* for water modeling layout. These results exclude junctions J-78 and J-82 as these only apply to Scenario 3 and 4 respectively. Based on this information, there is sufficient supply to meet the demands for the Site. (Refer to Appendix C – *Fire Hydrant Flow Test Results and Calculations*)

The fire flow required for the Site is 1,625 gpm at a minimum 30 psi for a building with 97,576 sf, a fire sprinkler system, and a building type of I-B for everything except the kitchen which will be V-B. Since a fire sprinkler system is being utilized, the reduction of 50% was applied to the required fire flow rate of 3,250 gpm.

A 3rd Scenario has been modeled by analyzing the max day flow in conjunction with the fire flow at the "worst hydraulic case domestic demand node", junctions J-78 and J-82, at the finished floor of the proposed building (Ref. 1). Junction J-78 is the domestic demand node and junction J-82 is the fire flow node that was modeled at the highest finished floor. Modeling results show pressures above 34 psi at all domestic demand nodes and pressures above 39 psi at the fire flow node and all applicable fire hydrant locations. This exceeds the minimum limits of 15 psi and 30 psi respectively according to the COS DSPM (Ref.1). Refer to Appendix E – *WaterCAD Modeling Results* for modeling results.

Lastly, a 4th scenario has been modeled by analyzing the WSFU demand (219 gpm) at the highest finished floor) at the "worst hydraulic case domestic demand node". Modeling results show a pressure of 52-psi which is above the 50-psi requirement. Refer to Exhibit 2 – *Water Exhibit* for the layout of the proposed water infrastructure and Exhibit 3 – *WaterCAD Layout* for modeling done for the overall Fairmont Scottsdale Princess Development.

4.0 CONCLUSIONS

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

1. The design criteria used to estimate potable water demands and evaluate system hydraulics are based on the design criteria listed in the *City of Scottsdale Design Standards and Policies Manual, 2018*.
2. The proposed water infrastructure described is adequate to serve the domestic and fire flow requirements for the Site.
3. The minimum required pressure of 30 psi has been achieved for the fire flow at each building per City of Scottsdale requirements.
4. The combined Average Day Demand, of 110.7 gpm or 79,723 gpd at a minimum of 61 psi for the proposed Site exceeds the minimum pressure requirement of 50 psi and does not exceed the maximum of 120 psi per the City of Scottsdale standards.
5. The combined Max Day Demand, of 221.3 gpm or 159,394 gpd at a minimum of 58 psi for the proposed Site exceeds the minimum of 50 psi and does not exceed the maximum of 120 psi per the City of Scottsdale standards.
6. The combined Peak Hour Demand, of 401.7 gpm or 289,363 gpd at a minimum of 53 psi for the proposed Site exceeds the minimum of 50 psi and does not exceed the maximum of 120 psi per the City of Scottsdale standards.

7. The required fire flow of 1,625 gpm is met with the proposed water infrastructure at a minimum pressure of 30 psi.
8. The minimum required pressures of 15 psi and 30 psi for all domestic demand nodes and fire hydrant nodes, respectfully, has been met for Scenario 3.
9. The minimum required pressure when analyzing the system for Scenario 4 has resulted in a pressure above the 50 psi requirement. A booster pump will not be required for the proposed building.

5.0 REFERENCES

1. City of Scottsdale Design Standards and Policies Manual, 2018
2. *Master Water Report for Fairmont Scottsdale Princess, Scottsdale, AZ*, by Wood, Patel & Associates, Inc. November 2023.
3. *International Fire Code by the International Code Council, Inc., 2021*

APPENDIX A – WATER DEMAND CALCULATIONS

TABLE 1
WATER DISTRIBUTION SYSTEM DESIGN CRITERIA

Project Fairmont Scottsdale Princess - Conference Center & Event Lawn
Location Scottsdale AZ
Project Number 215319.3
Project Engineer Andrew J. Sanchez, E.I.T.
References City of Scottsdale Design and Policies Manual (2018)

RESIDENTIAL WATER DEMANDS			
LAND USE	AVERAGE DAILY DEMAND (ADD)		NOTES
	VALUE	UNITS	
High Density Condominium	185	gpd/DU	Note 1
Resort Hotel	446	gpd/DU	Note 1

NON-RESIDENTIAL WATER DEMANDS			
LAND USE	AVERAGE DAILY DEMAND (ADD)		NOTES
	VALUE	UNITS	
Restaurant	1.3	gpd/sf	Note 1
Commercial/Retail	0.8	gpd/sf	Note 1
Commercial High Rise	0.6	gpd/sf	Note 1
Office	0.6	gpd/sf	Note 1
Institutional	1340	gpd/acre	Note 1
Industrial	1027	gpd/acre	Note 1
Research and Development	1284	gpd/acre	Note 1

HYDRAULIC MODELING CRITERIA			
DESCRIPTION	VALUE	UNITS	NOTES
PEAK FLOW			
Peak Flow = Peaking Factor (PF) x ADD	3.5 x ADD	gpd	Note 1
Peak Flow = Peaking Factor(Restaurant) x ADD	6.0 x ADD	gpd	Note 1
Max Flow = Peaking Factor (PF) x ADD	2.0 x ADD	gpd	Note 1
HYDRAULICS ☐			
Residual Pressure Range, Peak Flow	50-120	psi	Note 1
Minimum Residual Pressure, Peak Flow + Fire Flow	30	psi	Note 1
Maximum Velocity, Peak Flow	5	ft/sec	Note 1
Maximum Velocity, Peak Day + Fire Flow	10	ft/sec	Note 1
Minimum Pipe Diameter, Looped System	8	in	Note 1
Hazen-Williams C-value	120	-	Note 1

Notes

1. Per City of Scottsdale Design and Policies Manual (2018)
2. Per 2018 International Fire Code
3. Residential limited to one- and two-family dwellings, assumes Type V-B construction, and has a 1-hour fire duration, with 50% sprinkler reduction
4. Residential limited to one- and two-family dwellings, assumes Type V-B construction, and has a 2-hour fire duration, with 50% sprinkler reduction



WATER DEMAND DESIGN FLOWS

Project Fairmont Scottsdale Princess - Conference Center & Event Lawn
Location Scottsdale AZ
Project Number 215319.3
Project Engineer Andrew J. Sanchez, E.I.T.
References City of Scottsdale Design and Policies Manual (2018)

LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION														FIRE FLOW		
Building Demand	LAND USE	AREA (SF)	DEMAND VALUE	UNITS	AVERAGE DAILY DEMAND			MAX FLOW			PEAK FLOW			FIRE FLOW AREA (sf)	FIRE FLOW TYPE	FIRE - FLOW (gpm)
					(gpm)	(gpd)	Total (gpm)	(gpm)	(gpd)	Total (gpm)	(gpm)	(gpd)	Total (gpm)			
Conference Center	Commercial/Retail	94,357	0.8	gpd/sf	104.8	75,486	75,486	209.6	150,972	150,972	366.8	264,201	264,201	97,576	I-B	1,625
Kitchen	Restaurant	3,219	1.3	gpd/sf	5.8	4,185	79,671	11.6	8,370	159,342	34.8	25,110	289,311			
Landscape	*Fountain	N/A	N/A	N/A	0.1	52		0.1	52		0.1	52				
Ballroom Total		97,576			110.7	79,723		221.3	159,394		401.7	289,363				
Event Lawn	Commercial/Retail	39,400	--	gpd/sf	--	--	--	--	--	--	--	--	--	39,400	N/A	1,500
Event Lawn Total		39,400			--	--		--	--		--	--				
Total		136,976			110.7	79,723		221.3	159,394		401.7	289,363				

* Additional water demands calculated by City of Scottsdale Development Water Demand Exhibit.

APPENDIX B – PLUMBING FIXTURE COUNTS FSP – CONFERENCE CENTER IMEG
#22005433.00, BY IMEG



July 14, 2025

Robert Saunders
Wood Patel
2051 West Northern Ave, Suite 100
Phoenix, Arizona 85021

RE: Plumbing Fixture Counts
FSP – Conference Center
IMEG #22005433.00

Dear Robert Saunders:

In response to the City of Scottsdale's request for updated total GPM values for the Conference Building, IMEG conducted a detailed analysis to determine the total water demand. The summary below outlines the methodology used to arrive at this figure. This approach adheres to the guidelines set forth in the 2015 edition of the International Plumbing Code. Fixture demand was first established using Appendix E – Table E103.3(2), which provides values in Water Supply Fixture Units (WSFU). These values were then converted to GPM using Appendix E – Table E103.3(3), based on the assumption that the project primarily utilizes flush valve fixtures.

Conference Center			
Fixture	QTY	Total Water Supply Fixture Units (Public Occupancy)	Fixture Unit Total
Dishwashing Machine	2	5.0	10.0
Drinking Fountain	2	0.25	0.5
Hose Bib	1	2.5	2.5
Hose Bib (each additional)	4	1.0	4.0
Kitchen Sink	2	4.0	8.0
Hand Sink	6	2.0	12.0
3-Comp Sink	1	8.0	8.0
Cooking Appliance	3	1.0	3.0
Beverage Dispenser	21	1.0	21.0
Ice Maker	6	1.0	6.0
Soiled Breakdown System	1	12.0	12.0
Lavatory	26	2.0	52.0
Mop Sink	6	3.0	18.0
Urinal (Flush Valve)	9	5.0	45.0
Water Closet (Flush Valve)	32	10	320.0
Total			522.00
GPM Equivalent			146.0

Robert
July 14, 2025

IMEG #
Page 2 of 2

Please feel free to contact us should you need any additional information or clarification.

Sincerely,

Jonathan Fernandez

Jonathan Fernandez
Mechanical Engineering Graduate - Designer 2
Jonathan.Fernandez@imegcorp.com

JF/admin_initials
Document4



APPENDIX C – FIRE HYDRANT FLOW TEST RESULTS AND CALCULATIONS

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT 1

Project Name:	Fairmont Scottsdale Princess
Project Address:	7575 East Princess Blvd., Scottsdale, Arizona 85255
Client Project No.:	Not Provided
Arizona Flow Testing Project No.:	24990
Flow Test Permit No.:	C77219
Date and time flow test conducted:	December 9, 2024 at 6:50 AM
Data is current and reliable until:	June 9, 2025
Conducted by:	Floyd Vaughan – Arizona Flow Testing, LLC (480-250-8154)
Witnessed by:	Chris Mendez – City of Scottsdale-Inspector (602-9028-9046)

Raw Test Data

Static Pressure: **92.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **70.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **42.0 PSI**
(Measured in pounds per square inch)

Diffuser Orifice Diameter: One 4-inch Pollard Diffuser
(Measured in inches)

Coefficient of Diffuser: 0.9

Flowing GPM: **2,785 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **5,282 GPM**

Data with 20 PSI Safety Factor

Static Pressure: **72.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **50.0 PSI**
(Measured in pounds per square inch)

Approx distance between hydrants: 810 Feet

Main size: Not Provided

Flowing GPM: **2,785 GPM**

GPM @ 20 PSI: **4,431 GPM**

Scottsdale requires a maximum Static Pressure of 72 PSI for AFES Design.

Flow Test Location

North ↑





EXISTING WATER SYSTEM PRESSURES

Project Fairmont Scottsdale Princess - Conference Center & Event Lawn
Location Scottsdale AZ
Project Number 215319.3
Project Engineer Andrew J. Sanchez, E.I.T.

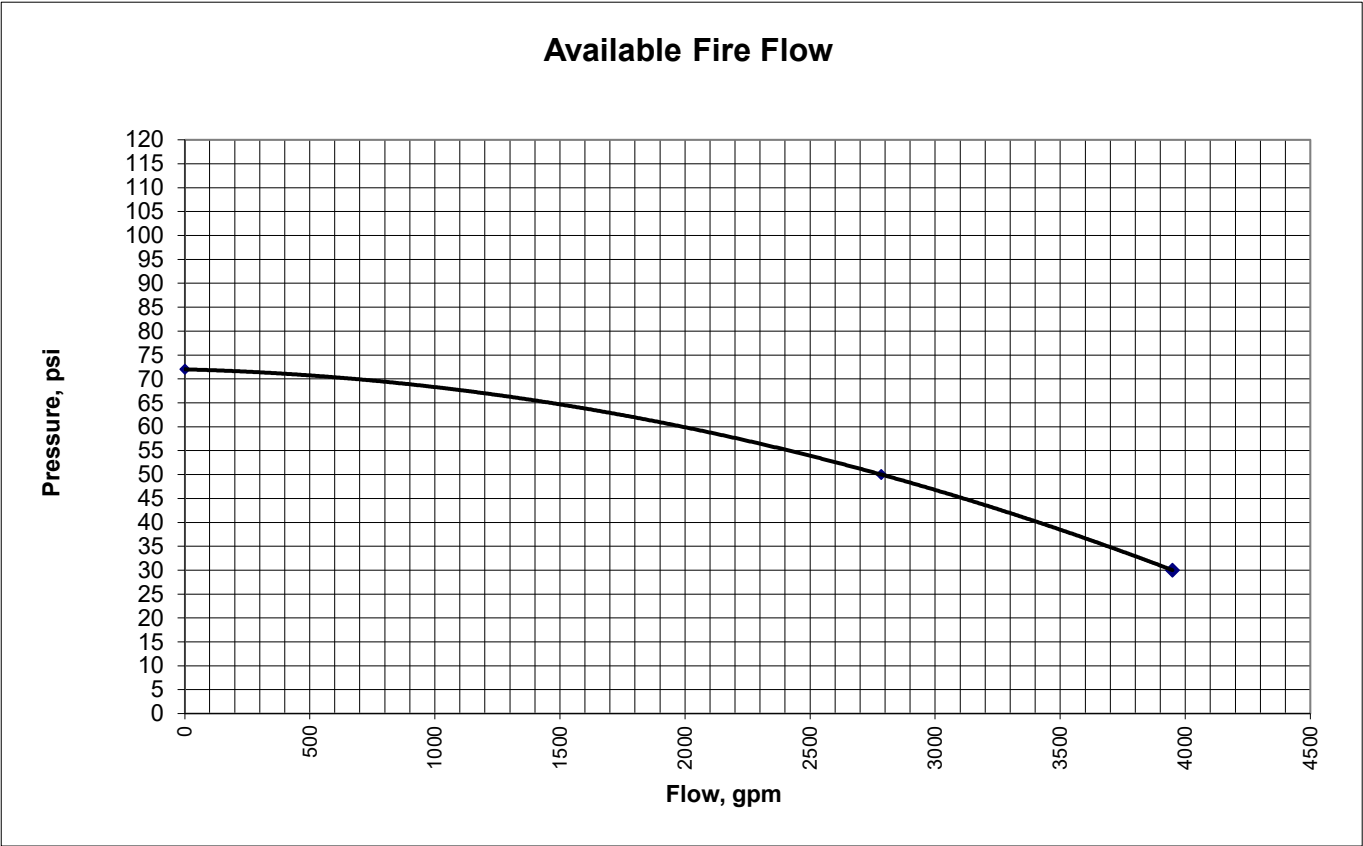
Flow Test Location
Date of Flow Test

Pressure Hydrant

Static Pressure (psi) 72.0
Residual Pressure (psi) 50.0
Calculated Flow at 30 psi 3949 gpm

Flow Hydrant

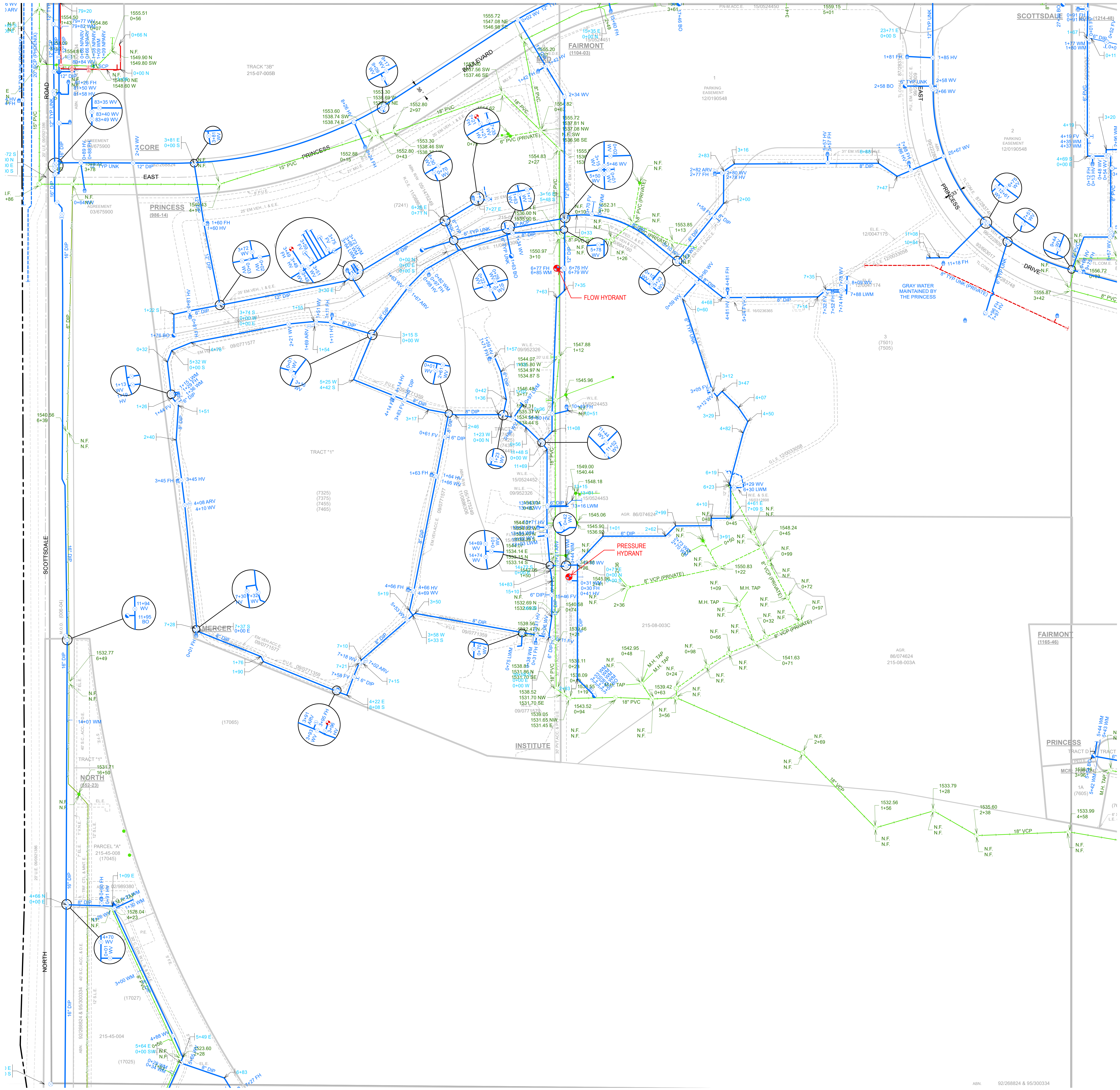
Flow (gpm) 2785
Calculated Flow at 30 psi



Discharge (gpm)	Pressure (psi)	Head (ft)
0	72	166.2
2785	50	115.5
3949	30	69.3

Notes

1. Values provided from a flow test by Arizona Flow Testing LLC



GENERAL NOTES:

- THIS IS A COMPUTER GENERATED DRAWING. FOR ANY REVISIONS PLEASE CONTACT THE CITY OF SCOTTSDALE GIS DEPARTMENT AT (480) 312-7792.
- THE SECTION LINE BEARING AND DISTANCES ARE BASED ON THE CITY OF SCOTTSDALE GPS SURVEY OF SEPTEMBER, 1991. BEARINGS ARE NAD 83 GRID AND DISTANCES ARE FLATTENED TO GROUND. WHERE NO CORNER WAS FOUND THE DIMENSIONS ARE GIVEN TO CALCULATED SECTION CORNERS AND ARE NOTED AS "CALCULATED" ON THE MAP.

LEGEND:

Water Valve	
Non-potable Water Valve	
Fire Hydrant	
Water Blowoff	
Water Main Reducer	
Water Sample Station	
Water Air Release Valve	
Non-potable Water Air Release Valve	
Water Pressure Reducing Valve	
Water Vault	
Water Manhole	
Non-Potable Water Manhole	
Water Pump	
Water Main	
Non-Potable Water Main	
Fire Line	
Water Service	
Non-Scottsdale Water Main	
Sewer Manhole	
Sewer Cleanout	
Sewer Lift Station	
Sewer Treatment Plant	
Sewer Main - Gravity	
Sewer Main - Force	
Non-Scottsdale Sewer Main	
Sewer Service	

VICINITY MAP

NORTH

SCALE: 1" = 100'

The map scale of 1" = 100' is based on a full size print of 30" x 36"

WATER & SEWER

QUARTER SECTION MAP

37-45

SW 1/4 SEC. 35 T4N R4E

**APPENDIX D – FAIRMONT SCOTTSDALE PRINCESS CONFERENCE CENTER & EVENT
LAWN IMPROVEMENT PLANS BY WOOD, PATEL & ASSOCIATES, INC.,
DATED MAY 9, 2025**

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 PER THE LOCAL TOWN OR CITY) ARE INCORPORATED INTO THIS PLAN IN THEIR ENTIRETY.
- 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.
- 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.
- 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.
- 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.
- 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.
- COORDINATION BETWEEN ALL PARTIES IS ESSENTIAL PART OF CONTRACT.
- 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.
- 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.
- CONSTRUCT RETENTION BASIN AS SHOWN. CONTRACTOR TO SCARIFY BOTTOM OF BASIN TWO FEET DEEP AND NOT ALLOW COMPACTION OVER 80%.
- 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 ITS INABILITY TO PERFORM PROPERLY AND/OR CAUSE DAMAGE ELSEWHERE IN THE PROJECT.
- 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.
- 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.

FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS
SCOTTSDALE, ARIZONA

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

EARTHWORK QUANTITIES (ESTIMATED)

RAW CUT:	6,373 CY
RAW FILL:	24,850 CY

QUANTITIES ARE ESTIMATED IN PLACE. NO PRECOMPACTION, SHRINK OR SWELL IS ASSUMED.

CITY OF SCOTTSDALE NOTES

PLEASE REFER TO SHEET C2 FOR CITY OF SCOTTSDALE NOTES.

QUANTITIES

PLEASE REFER TO SHEET C2 FOR ESTIMATED QUANTITIES FOR WORK IN PUBLIC RIGHTS-OF-WAY AND EASEMENTS.

LEGEND

PLEASE REFER TO SHEET C2 FOR LEGEND AND LIST OF ABBREVIATIONS.

UTILITY NOTES

- THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES FOR APPROVAL WITHIN THEIR AREA OF INTEREST. THE SIZE AND LOCATIONS, AS SHOWN, OF THE GAS, TELEPHONE AND POWER LINES, AND CONNECTIONS AGREE WITH THE FURNISHED 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.
- THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR UTILITY RELOCATION.

FEMA FIRM NOTE (ZONE AO)

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."

FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

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

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 A ONE-HUNDRED YEAR STORM, AND ARE IN ACCORDANCE WITH CITY OF SCOTTSDALE REVISED CODE, CHAPTER 37-FLOODPLAIN AND STORMWATER REGULATIONS.

Darin L. Moore 05/09/2025
ENGINEER SIGNATURE DATE

AS-BUILT CERTIFICATION

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

REGISTERED ENGINEER/ LAND SURVEYOR DATE

SEAL

PARCEL DESCRIPTION

PARCEL NO. 2: (TENNIS COTTAGES PARCEL)
THAT PORT OF THE SOUTHWEST ONE-QUARTER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTH ONE-QUARTER CORNER OF SAID SECTION 35;
THENCE NORTH 00 DEGREES 08 MINUTES 41 SECONDS EAST, ALONG THE NORTH-SOUTH MED-SECTION LINE OF SAID SECTION 35, A DISTANCE OF 1486.58 FEET;
THENCE NORTH 89 DEGREES 49 MINUTES 06 SECONDS WEST, 840.00 FEET OF THE POINT OF BEGINNING;
THENCE SOUTH 27 DEGREES 44 MINUTES 13 SECONDS EAST, 177.75 FEET;
THENCE SOUTH 83 DEGREES 46 MINUTES 19 SECONDS EAST, 39.13 FEET;
THENCE SOUTH 26 DEGREES 47 MINUTES 27 SECONDS EAST, 26.35 FEET;
THENCE SOUTH 58 DEGREES 07 MINUTES 53 SECONDS EAST, 43.04 FEET;
THENCE SOUTH 88 DEGREES 18 MINUTES 25 SECONDS EAST, 29.86 FEET;
THENCE SOUTH 07 DEGREES 07 MINUTES 02 SECONDS EAST, 47.49 FEET;
THENCE SOUTH 66 DEGREES 38 MINUTES 00 SECONDS WEST, 275.66 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 150.00 FEET;
THENCE SOUTH WESTERLY ALONG SAID CURVE THOUGH A CENTRAL ANGLE OF 12 DEGREES 08 MINUTES 15 SECONDS, AN ARCH DISTANCE OF 31.78 FEET;
THENCE SOUTH 54 DEGREES 29 MINUTES 46 SECONDS WEST, 446.31 FEET;
THENCE NORTH 84 DEGREES 49 MINUTES 13 SECONDS WEST, 43.57 FEET;
THENCE NORTH 00 DEGREES 01 MINUTES 45 SECONDS EAST, 619.54 FEET;
THENCE SOUTH 89 DEGREES 49 MINUTES 06 SECONDS EAST, 377.78;
THENCE NORTH 00 DEGREES 01 MINUTES 45 SECONDS EAST, 18.00 FEET;
THENCE SOUTH 89 DEGREES 49 MINUTES 06 SECONDS EAST, 103.52 FEET TO THE POINT OF BEGINNING.
EXCEPT ONE-HALF OF ALL OIL AND MINERAL RIGHTS AS RESERVED IN INSTRUMENT RECORDED IN BOOK 124, PAGE 39, RECORDS OF MARICOPA COUNTY, ARIZONA; AND ALSO
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 ALSO
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.

SOILS REPORT NOTE

A SOILS GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT TITLED FAIRMONT CASITAS ADDITION BY ALPHA GEOTECHNICAL & MATERIALS, INC. DATED DECEMBER 15, 2021. REPORT NO. 21-G-12692.

STIPULATION CONFORMANCE STATEMENT

"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."

Darin L. Moore 05/09/2025
ENGINEER SIGNATURE DATE

SHEET INDEX

- C1 COVER SHEET
- C2 NOTES AND QUANTITIES
- C3 INDEX MAP
- C4-C7 DEMOLITION PLAN
- C8-C11 GRADING AND DRAINAGE PLAN
- C12-C15 PAVING PLAN
- C16-C19 STORM DRAIN PLAN
- C20-C23 WATER AND SEWER PLAN
- C24-C26 SIGNING AND STRIPING PLAN
- C27-C28 DETAILS AND SECTIONS

BENCHMARK

CITY OF SCOTTSDALE BRASS CAP FLUSH 450'± NORTH OF PRINCESS DRIVE ON SCOTTSDALE ROAD, BEING THE WEST QUARTER CORNER OF SECTION 35, TOWNSHIP 4 NORTH, RANGE 4 EAST.
CITY OF SCOTTSDALE DATUM, NAVD88 DATUM
ELEVATION=1553.22'.

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON NAVD 1988, MCDOT, AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA.

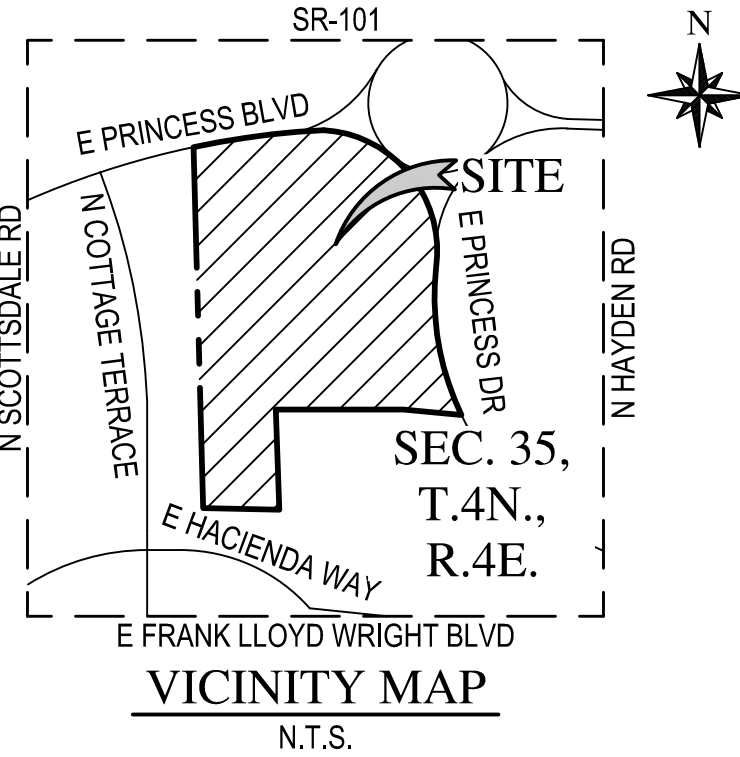
PUBLIC UTILITIES

WATER	CITY OF SCOTTSDALE
SEWER	CITY OF SCOTTSDALE
ELECTRIC	APS
TELEPHONE	LUMEN
NATURAL GAS	SOUTHWEST GAS
CABLE TV	COX COMMUNICATIONS

M.C.E.S.D. APPROVAL

ALL POTABLE WATERLINES AND FITTINGS SHALL HAVE A NFS-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.

BY: MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPT. DATE



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):
215-08-693 & 215-08-695
PROJECT SITE ADDRESS:
7575 E PRINCESS BLVD
SCOTTSDALE, ARIZONA 85255
PROJECT SITE AREA(S):
NET AREA = 9.94 AC
DISTURBED AREA = 8.01± AC
ZONING:
C2

WOOD
PATEL

Wood, Patel & Associates, Inc.
Civil Engineering
Water Resources
Land Survey
Construction Management

602.335.8500

www.woodpatel.com

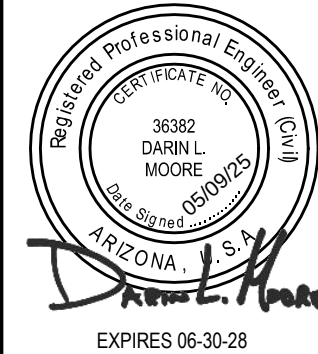
ARIZONA
Professional Engineer
Darin L. Moore
No. 36382
Exp. 05/30/28
In Maricopa County (R02 763-110)

FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS
SCOTTSDALE, ARIZONA
COVER SHEET

DATE					
DESCRIPTION					
REV					

CITY OF SCOTTSDALE CIVIL APPROVAL

REVIEW & RECOMMENDED APPROVAL BY:			
PAVING		SIGNS & MARKINGS	
GRADING & DRAINAGE		PLANNING	
WATER & SEWER		FIRE	
RETAINING WALLS		SIGNALS & STREET	
ENGINEERING DEPARTMENT MANAGER		DATE	



SCALE (HORIZ.) N/A
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C1 OF 28

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

CITY OF SCOTTSDALE NOTES

GENERAL CONSTRUCTION NOTES FOR CAPITAL PROJECTS

- ALL IMPROVEMENT CONSTRUCTION SHALL COMPLY WITH THE 2020 MARICOPA COUNTY ASSOCIATION OF GOVERNMENTS STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF SCOTTSDALE SUPPLEMENTAL STANDARD SPECIFICATIONS AND DETAILS AND CITY OF SCOTTSDALE'S DESIGN STANDARDS & POLICIES MANUAL (DS&PM). IF THERE IS A CONFLICT, THE LATTER SHALL APPLY. ALL FACILITIES CONSTRUCTION SHALL COMPLY WITH THE LATEST BUILDING CODES AS AMENDED AND ADOPTED BY THE CITY OF SCOTTSDALE.
- THE ENGINEERING DESIGNS ON THESE PLANS ARE APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. IF CONSTRUCTION QUANTITIES ARE SHOWN ON THESE PLANS, THEY ARE NOT VERIFIED BY THE CITY.
- BASED ON THE INFORMATION SUBMITTED ON THE PLANS AND ASSOCIATED DOCUMENTS, THE CITY HAS REVIEWED AND FOUND THEM TO BE IN ACCORDANCE WITH THE SCOTTSDALE REVISED CODE AND ARE ACCEPTABLE FOR PERMIT ISSUANCE. THIS ACCEPTANCE BY THE CITY DOES NOT AUTHORIZE VIOLATIONS OF ANY APPLICABLE CODE, ORDINANCE OR STANDARD AS ADOPTED BY THE SCOTTSDALE REVISED CODE.
- APPROVAL OF THE PLANS BY THE CITY IS VALID FOR SIX MONTHS. IF A PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN SIX MONTHS OF REVIEW, THE PLANS SHALL BE RESUBMITTED TO THE CITY FOR REAPPROVAL.
- ANY DEVIATION FROM THE APPROVED PLANS SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO THAT CHANGE BEING INCORPORATED INTO THE PROJECT.
- A CITY CAPITAL PROJECTS INSPECTOR WILL INSPECT ALL WORK WITHIN THE CITY RIGHTS-OF-WAY, EASEMENTS AND FACILITIES.
- ANY SPECIAL INSPECTION REQUIRED SHALL BE IN ADDITION TO ANY ROUTINE INSPECTION BY THE CITY.
- CITY ENCROACHMENT AND BUILDING PERMITS ARE REQUIRED FOR WORK IN PUBLIC RIGHTS-OF-WAY, EASEMENTS GRANTED FOR PUBLIC PURPOSES AND FACILITIES. PERMITS WILL BE ISSUED BY THE CITY THROUGH THE CITY'S ONE STOP SHOP. COPIES OF ALL PERMITS SHALL BE RETAINED ON-SITE AND SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS WILL RESULT IN IMMEDIATE WORK STOPPAGE UNTIL THE PROPER PERMIT DOCUMENTATION IS OBTAINED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR SALVAGING PROTECTED NATIVE PLANTS PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR SHALL CONTACT AZ 811 TWO FULL WORKING DAYS PRIOR TO BEGINNING EXCAVATION.
- ALL EXCAVATION AND GRADING WHICH IS NOT IN PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC PURPOSES MUST CONFORM TO SECTION 1803 AND APPENDIX J OF THE LATEST INTERNATIONAL CODE COUNCIL AS ADOPTED AND AMENDED BY THE CITY OF SCOTTSDALE. A PERMIT FOR THIS GRADING MUST BE SECURED FROM THE CITY.
- THRUST RESTRAINT, WHERE REQUIRED, ON ALL CITY WATER LINES SHALL BE PROVIDED USING MEGALUG MECHANICAL JOINT RESTRAINTS OR CITY-APPROVED EQUAL.
- ANY ASPHALT MIX DESIGN USED ON CITY PROJECTS SHALL HAVE BEEN APPROVED FOR THAT USE PER SECTION 5-10 OF THE CITY'S DS&PM AND APPEAR ON THE "APPROVED LIST OF ASPHALT MIXES" AS DISTRIBUTED BY THE EAST VALLEY ASPHALT COMMITTEE (EVAC).
- THE CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE AND REPLACE, AT NO ADDITIONAL COST TO THE CITY, ANY AND ALL PAVEMENT, SIDEWALK, CURB AND GUTTER, DRAINAGE STRUCTURES, ETC. OUTSIDE THE PAY LIMIT THAT ARE DAMAGED DUE TO THEIR ACTIVITIES ON THE PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO, THE REMOVAL AND REPLACEMENT OF NEWLY CRACKED ROADWAY INFRASTRUCTURE, THE REMOVAL AND REPLACEMENT OF EXISTING CRACKED ROADWAY INFRASTRUCTURE WHERE THE CRACKS HAVE BEEN ENLARGED DUE TO THE CONTRACTOR'S OPERATIONS, THE REMOVAL AND REPLACEMENT OF DEFORMED ROADWAY INFRASTRUCTURE. ALL SAWCUTS USED FOR THE REMOVAL OF THESE ITEMS SHALL BE PERPENDICULAR AND PARALLEL TO THE CENTERLINE CONTROLLING THAT ITEM, OR AT THE DIRECTION OF THE CITY'S CAPITAL PROJECTS INSPECTOR.
- ALL CAPITAL IMPROVEMENT PROJECTS SHALL MEET THE PROCEDURES AND STANDARDS FOR THE USE OF TEMPORARY/SECURITY FENCING AROUND THE PERIMETER OF CONSTRUCTION SITES, AS DEFINED IN THE CITY'S ZONING ORDINANCE, ARTICLE VII, SECTION 7.700.

GENERAL NOTES FOR PUBLIC WORKS CONSTRUCTION

- ALL CONSTRUCTION IN THE PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST 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.
- 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.
- THE APPROVAL OF PLANS IS VALID FOR SIX (6) MONTHS. IF A RIGHT-OF-WAY PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN THIS TIME FRAME, THE PLANS MUST BE RESUBMITTED TO THE CITY FOR REAPPROVAL.
- A CITY INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF SCOTTSDALE. NOTIFY INSPECTION SERVICES 72 HOURS BEFORE BEGINNING WORK.
- WHENEVER EXCAVATION IS NECESSARY, CALL THE BLUE STAKE CENTER, 811, TWO WORKING DAYS BEFORE EXCAVATION BEGINS.
- PERMISSION TO WORK IN THE RIGHT-OF-WAY (PWR) PERMITS ARE REQUIRED FOR ALL WORKS WITHIN THE RIGHTS-OF-WAY AND EASEMENTS GRANTED FOR PUBLIC PURPOSES. 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.

FIRE NOTE:

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

SEWER NOTE:

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

WATER NOTE:

- THE WATER SYSTEM SHOWN HEREIN HAS BEEN DESIGNED TO ADEQUATELY SUPPLY WATER IN SUFFICIENT QUANTITY AND PRESSURE TO MEET LOCAL FIRE REQUIREMENTS.

PAVING QUANTITIES (ESTIMATED)

3" A.C. OVER 7" A.B.C.	SY
3" A.C. OVER 11" A.B.C.	SY
6" VERTICAL CURB & GUTTER	LF
6" P.C.C OVER 4" A.B.C. OVERCOMPACTED	SY
6" SINGLE CURB	LF
CONCRETE SIDEWALK	SF
CONCRETE APRON	SF
VALLEY GUTTER	LF
SIDEWALK RAMP	EA
SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT	SY

PRIVATE WATER QUANTITIES (ESTIMATED)

2" DOMESTIC WATER SERVICE & METER	EA
2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION	EA
4" DOUBLE CHECK BACK FLOW RETENTION	EA
FIRE HYDRANT	EA
6" GATE VALVE	EA
45° BEND	EA
2" SCH 80 PVC WATER LINE	LF
4" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATER LINE	LF
6" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATER LINE	LF
CONNECT TO EXISTING WATERLINE	EA

PRIVATE SEWER QUANTITIES (ESTIMATED)

CONNECT TO EXISTING SEWER LINE	EA
6" PVC SDR 35 SANITARY SEWER PIPE	LF
SANITARY SEWER CLEAN OUT	EA
WYE OR WYE WITH 45° BEND	EA
30" SANITARY SEWER MANHOLE	EA

LEGEND	
EXISTING SURVEY	PROPOSED GRADING, DRAINAGE & PAVING
SECTION LINE	MAJOR CONTOUR
RIGHT OF WAY	MINOR CONTOUR
PROPERTY LINE	SPOT ELEVATIONS
ROAD CENTERLINE	STORM DRAIN PIPE
EASEMENT	STORM DRAIN CATCH BASIN
SURVEY MARKER	SLOPE ARROW
UG ELECTRIC (BURIED CABLE)	GRADE BREAK/RIDGE
UG ELECTRIC (CONDUIT)	RIP RAP
UG ELECTRIC (DUCT BANK)	WALL ELEVATION
OVERHEAD ELECTRIC	ROOF DRAIN/DRAIN ARROW
OVERHEAD TELEPHONE	DRYWELL
UG TELEPHONE	SITE ULTIMATE OUTFALL LOCATION & ELEVATION
CABLE TELEVISION	WALL
OVERHEAD CABLE TELEVISION	CONCRETE SIDEWALK
TELEPHONE DUCT BANK	CONCRETE PAVEMENT
BARBED WIRE FENCE	LIGHT DUTY ASPHALT PAVEMENT
CHAIN LINK FENCE	HEAVY DUTY ASPHALT PAVEMENT
WOOD FENCE	STREET/PARKING LIGHT
BLOCK WALL	ADA PARKING SYMBOL
4" G (MATERIAL)	
8" S (MATERIAL)	
STORM DRAIN PIPE	
IRRIGATION LINE	
WATER LINE	
CURB	
SIDEWALK	
MAJOR CONTOUR	
MINOR CONTOUR	
VEGETATION	
BUILDING	
SEWER MANHOLE	
STORM DRAIN MANHOLE	
TELEPHONE MANHOLE	
SPOT ELEVATION	
SIGN	
JUNCTION BOX/RISER	
FIRE HYDRANT	
WATER VALVE	
STREET/PARKING LIGHT	
UTILITY POLE	
CATCH BASIN	

ABBREVIATIONS

AL	AREA LIGHT	MIN	MINIMUM
BB	BOTTOM OF BANK	N.T.S.	NOT TO SCALE
C	CONCRETE ELEVATION	NG	NATURAL GRADE
CB	CATCH BASIN	P	PAVEMENT ELEVATION
COS	CITY OF SCOTTSDALE	PL	PARKING LIGHT
CTR	CABLE TV RISER	RD	ROOF DRAIN
CTV	CABLE TV	RIM	RIM ELEVATION
DW	DRYWELL	S	SLOPE
E.S.V.A.E.	EMERGENCY VEHICLE ACCESS EASEMENT	SCO	SEWER CLEANOUT
ECB	ELECTRICAL CABINET BOX	SD	STORM DRAIN
EJB	ELECTRICAL JUNCTION BOX	SE	SEWER EASEMENT
EO	ELECTRICAL OUTLET	SL	STREET LIGHT
EVT	ELECTRICAL VAULT	SLM	STREET LIGHT MAST ARM
EX	EXISTING	SS	SANITERY SEWER
FF	FINISH FLOOR	STD	STANDARD
FG	FINISH GRADE	TB	TOP OF BANK
FH	FIRE HYDRANT	TC	TOP OF CURB
FL	FLOWLINE	TF	TOP OF FOOTING
G	GUTTER ELEVATION	TW	TOP OF WALL
GB	GRADE BREAK	U.E.	UTILITY EASEMENT
GR	GAS REGULATOR	UG	UNDERGROUND
JB	IRRIGATION JUNCTION BOX	W.I.	WROUGHT IRON
INV	INVERT	WF	WIRE FENCE
IRR	IRRIGATION	WM	WATER METER
IV	IRRIGATION VALVE	WV	WATER VALVE
IVB	IRRIGATION VALVE BOX		
LF	LENIER FEET		
LFF	LOWEST FINISH FLOOR		



Wood, Patel & Associates, Inc.

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602.335.8500

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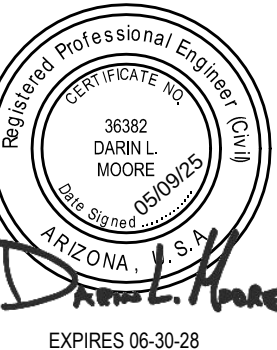
Call at least two full working days before you begin excavation.



Call 8-1-1 or 1-800-STATENET (782-7246)
In Maricopa County, (602) 963-1100

FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS
SCOTTSDALE, ARIZONA
NOTES AND QUANTITIES

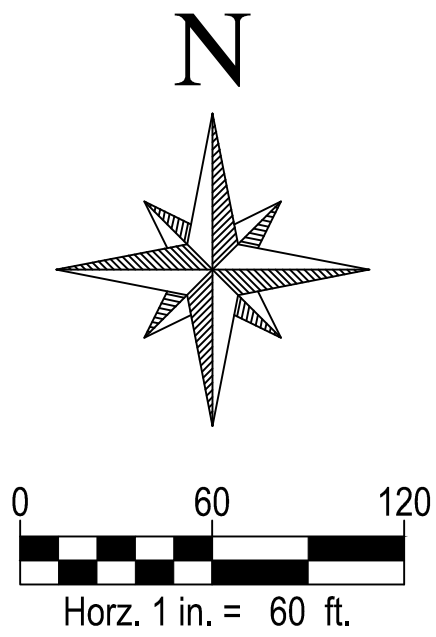
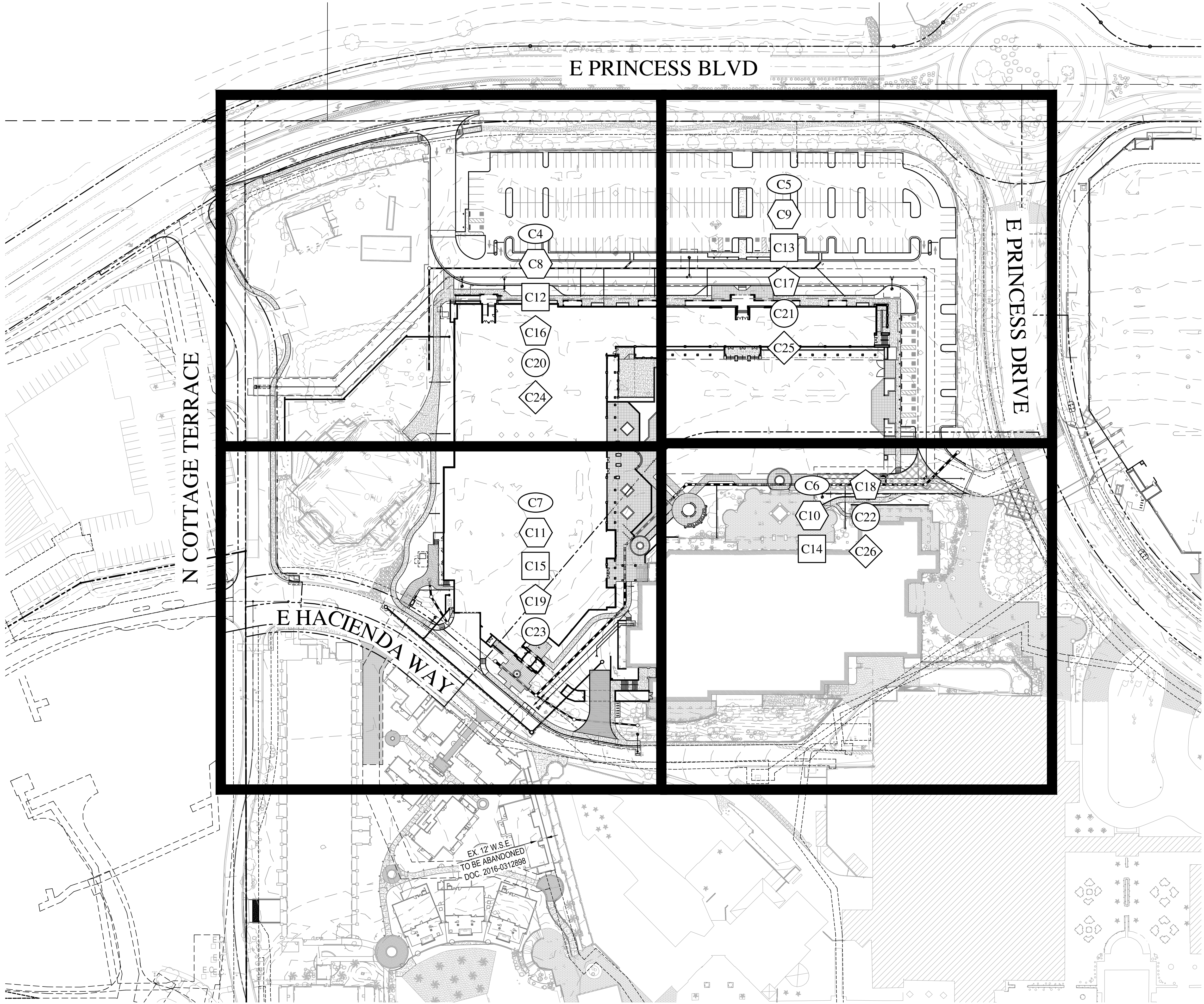
DATE					
DESCRIPTION					
REV					



SCALE (HORIZ.)	N/A
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.30
SHEET	
C2	OF 28

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

Z:\2022\12\15\19\DWG\Imp\5319.30 - Conference Center\5319.30-NY-CC.dwg



INDEX MAP LEGEND

-  DEMOLITION
-  GRADING & DRAINAGE
-  PAVING
-  STORM DRAIN
-  WATER & SEWER
-  SIGNING & STRIPING

WOOD PATEL

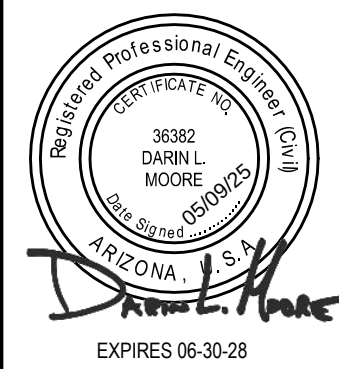
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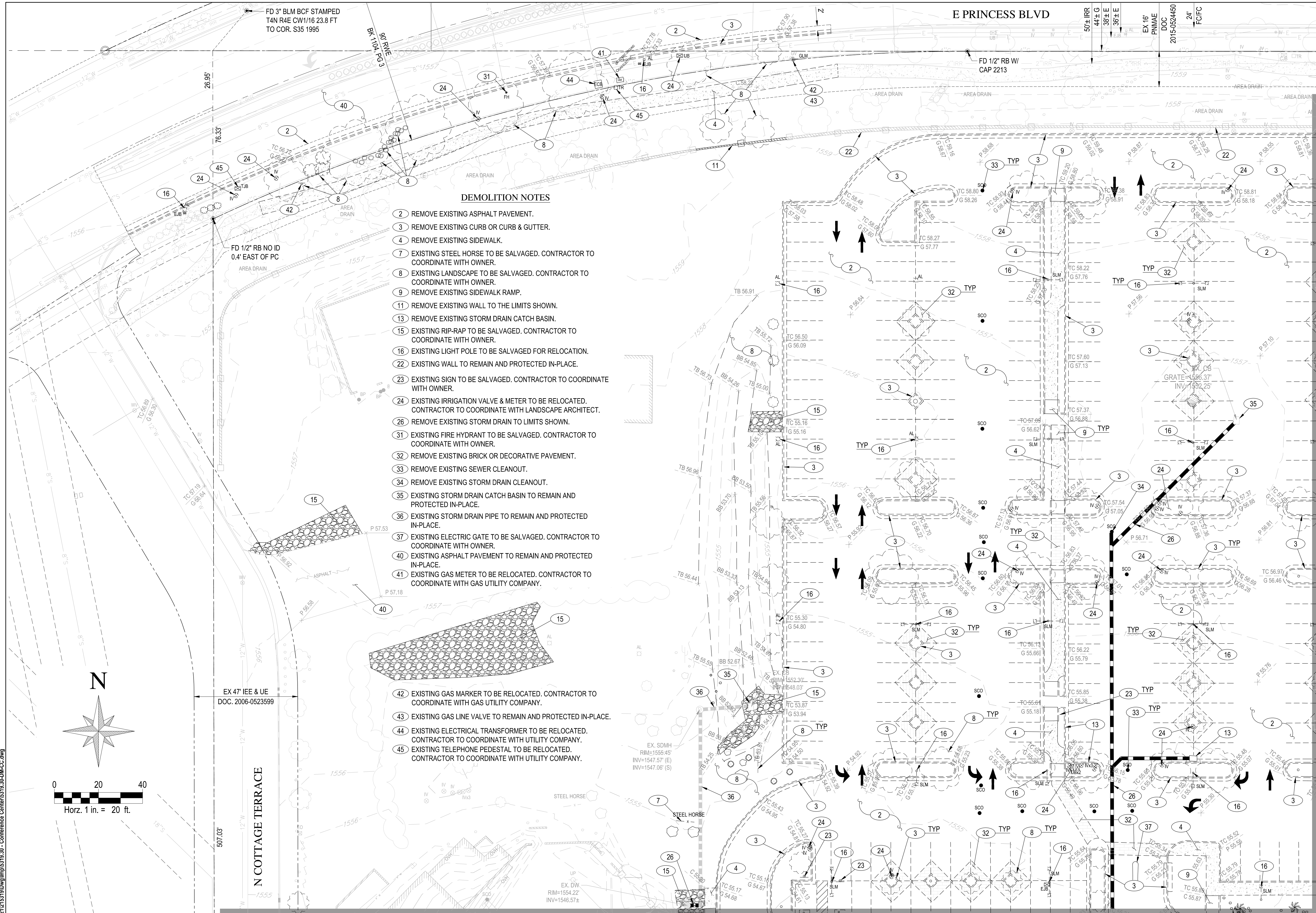
ARIZONA
Arizona State Seal
Professional Engineer
DANIEL S. WOOD
No. 8-11 or 1-800-STAKE-IT (762-7246)
In Maricopa County: (602) 953-1100

**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
INDEX MAP

REV	DESCRIPTION	DATE



SCALE (HORIZ.) 1"=60'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C3 OF 28



Wood, Patel & Associates, Inc.
Civil Engineering
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602.335.8500
www.woodpatel.com

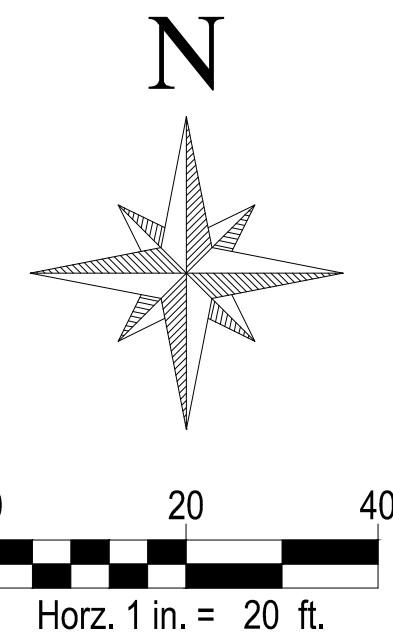
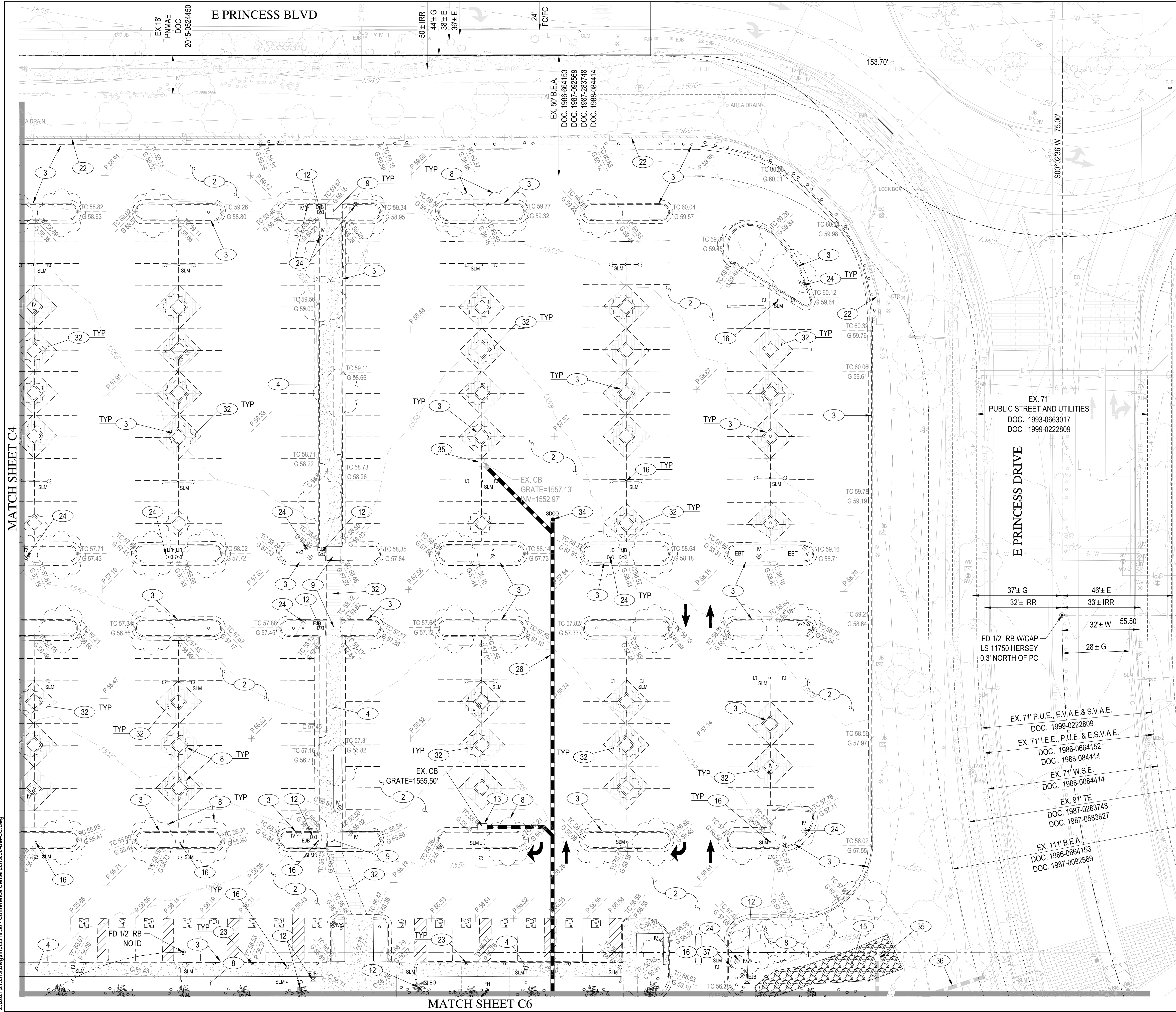


**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
DEMOLITION PLAN

REV	DESCRIPTION	DATE

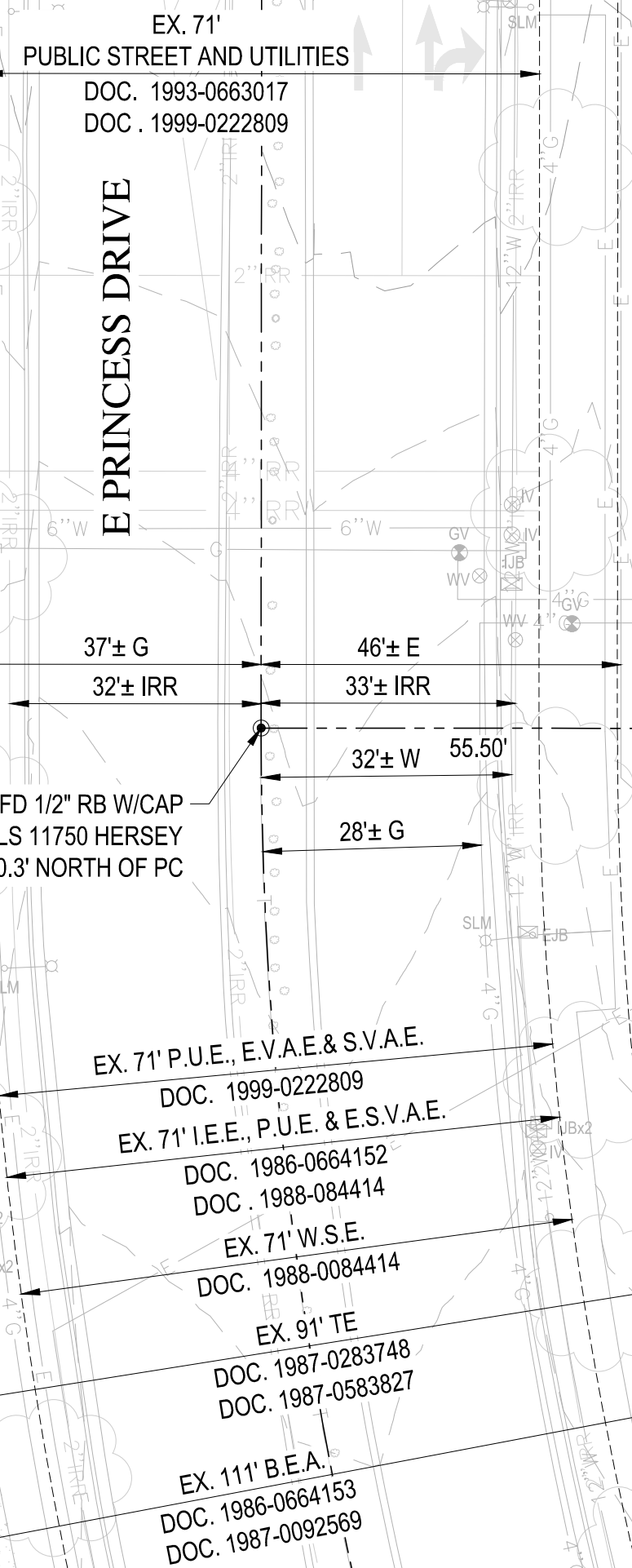
SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C4 OF 28

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



DEMOLITION NOTES

- 2 REMOVE EXISTING ASPHALT PAVEMENT.
- 3 REMOVE EXISTING CURB OR CURB & GUTTER.
- 4 REMOVE EXISTING SIDEWALK.
- 8 EXISTING LANDSCAPE TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 9 REMOVE EXISTING SIDEWALK RAMP.
- 12 EXISTING ELECTRICAL LINE AND EQUIPMENT TO BE REMOVED. CONTRACTOR TO COORDINATE WITH APS PRIOR TO REMOVALS.
- 13 REMOVE EXISTING STORM DRAIN CATCH BASIN.
- 15 EXISTING RIP-RAP TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 16 EXISTING LIGHT POLE TO BE SALVAGED FOR RELOCATION.
- 22 EXISTING WALL TO REMAIN AND PROTECTED IN-PLACE.
- 23 EXISTING SIGN TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 24 EXISTING IRRIGATION VALVE & METER TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT.
- 26 REMOVE EXISTING STORM DRAIN TO LIMITS SHOWN.
- 32 REMOVE EXISTING BRICK OR DECORATIVE PAVEMENT.
- 34 REMOVE EXISTING STORM DRAIN CLEANOUT.
- 35 EXISTING STORM DRAIN CATCH BASIN TO REMAIN AND PROTECTED IN-PLACE.
- 37 EXISTING ELECTRIC GATE TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.



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Call at least two full working days before you begin excavation.

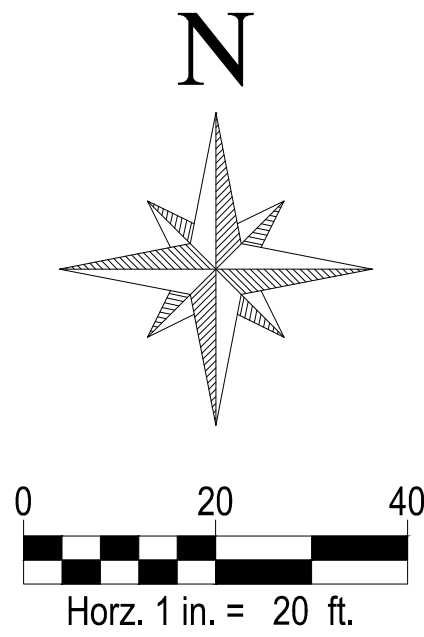
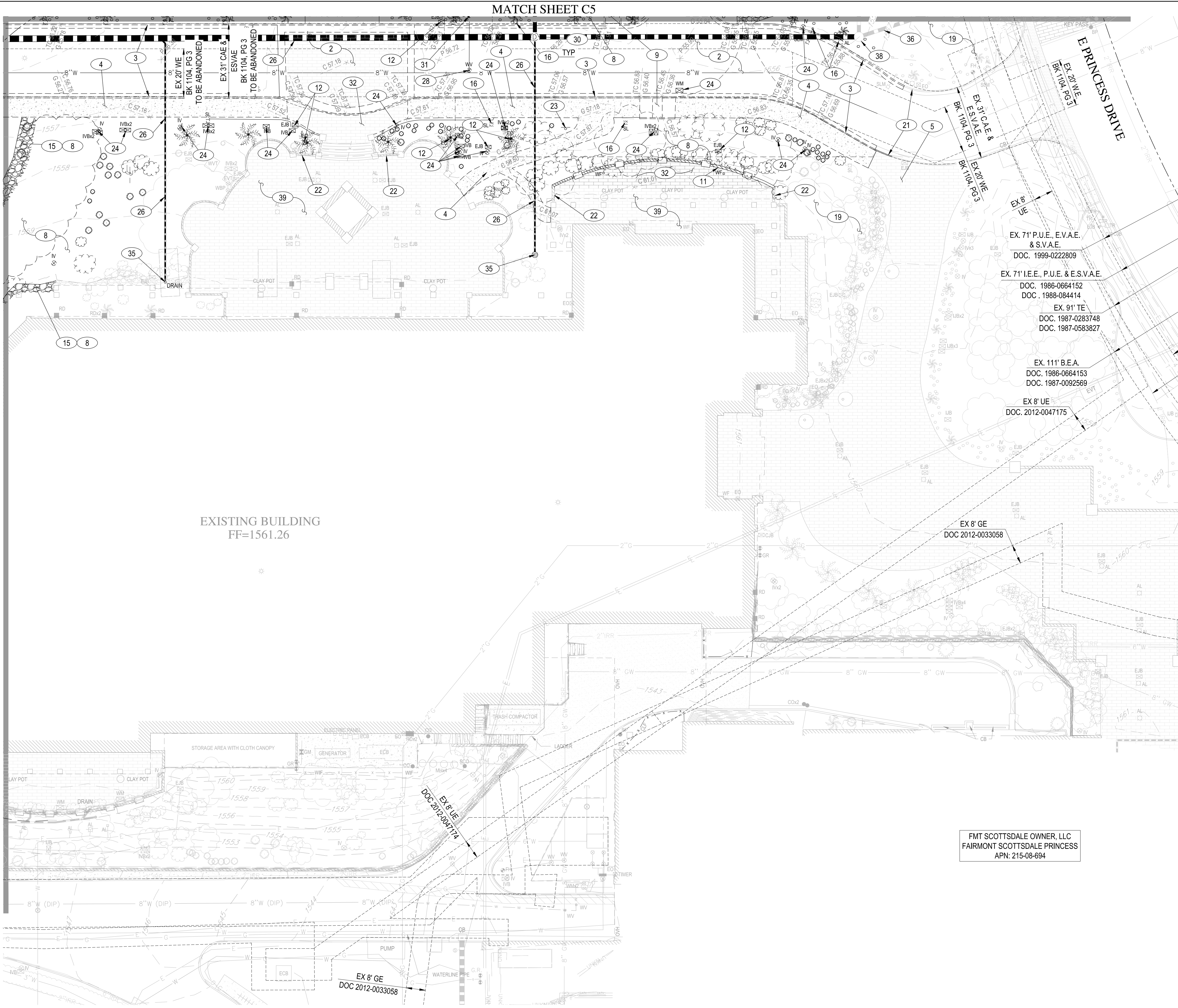
ARIZONA
Arizona State Seal, Inc.
Dual 6-1/2" x 14-00" STATE #1 (102-248)
In Maricopa County (R22 263-110)

**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
DEMOLITION PLAN

DATE	
DESCRIPTION	
REV	
SCALE (HORIZ.) 1" = 20'	
SCALE (VERT.) N/A	
DATE 05/09/2025	
JOB NUMBER 215319.30	
SHEET C5 OF 28	

MATCH SHEET C7

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DEMOLITION NOTES

- 2 REMOVE EXISTING ASPHALT PAVEMENT.
- 3 REMOVE EXISTING CURB OR CURB & GUTTER.
- 4 REMOVE EXISTING SIDEWALK.
- 5 EXISTING SIDEWALK TO REMAIN AND PROTECTED IN-PLACE.
- 8 EXISTING LANDSCAPE TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 9 REMOVE EXISTING SIDEWALK RAMP.
- 11 REMOVE EXISTING WALL TO THE LIMITS SHOWN.
- 12 EXISTING ELECTRICAL LINE AND EQUIPMENT TO BE REMOVED. CONTRACTOR TO COORDINATE WITH APS PRIOR TO REMOVALS.
- 15 EXISTING RIP-RAP TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 16 EXISTING LIGHT POLE TO BE SALVAGED FOR RELOCATION.
- 19 EXISTING LANDSCAPE TO REMAIN AND PROTECTED IN-PLACE.
- 21 EXISTING CURB OR CURB AND GUTTER TO REMAIN AND PROTECTED IN-PLACE.
- 22 EXISTING WALL TO REMAIN AND PROTECTED IN-PLACE.
- 23 EXISTING SIGN TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 24 EXISTING IRRIGATION VALVE & METER TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT.
- 26 REMOVE EXISTING STORM DRAIN TO LIMITS SHOWN.
- 28 REMOVE EXISTING WATER VALVE & METER.
- 30 REMOVED EXISTING STORM DRAIN MANHOLE.
- 31 EXISTING FIRE HYDRANT TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 32 REMOVE EXISTING BRICK OR DECORATIVE PAVEMENT.
- 36 EXISTING STORM DRAIN PIPE TO REMAIN AND PROTECTED IN-PLACE.
- 38 EXISTING STORM DRAIN MANHOLE TO REMAIN AND PROTECTED IN-PLACE.
- 39 EXISTING BRICK OR DECORATIVE PAVEMENT TO REMAIN AND PROTECTED IN-PLACE.

FMT SCOTTSDALE OWNER, LLC
FAIRMONT SCOTTSDALE PRINCESS
APN: 215-08-694



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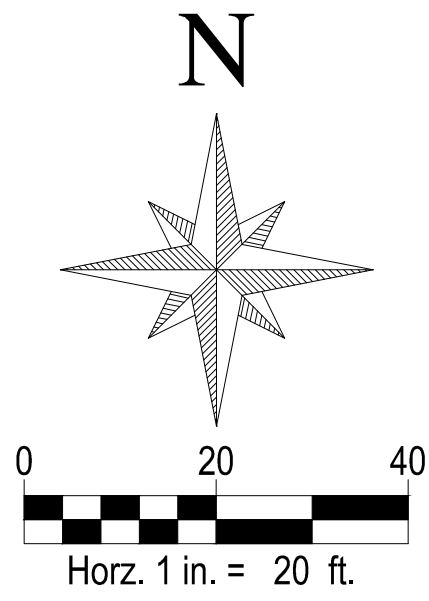
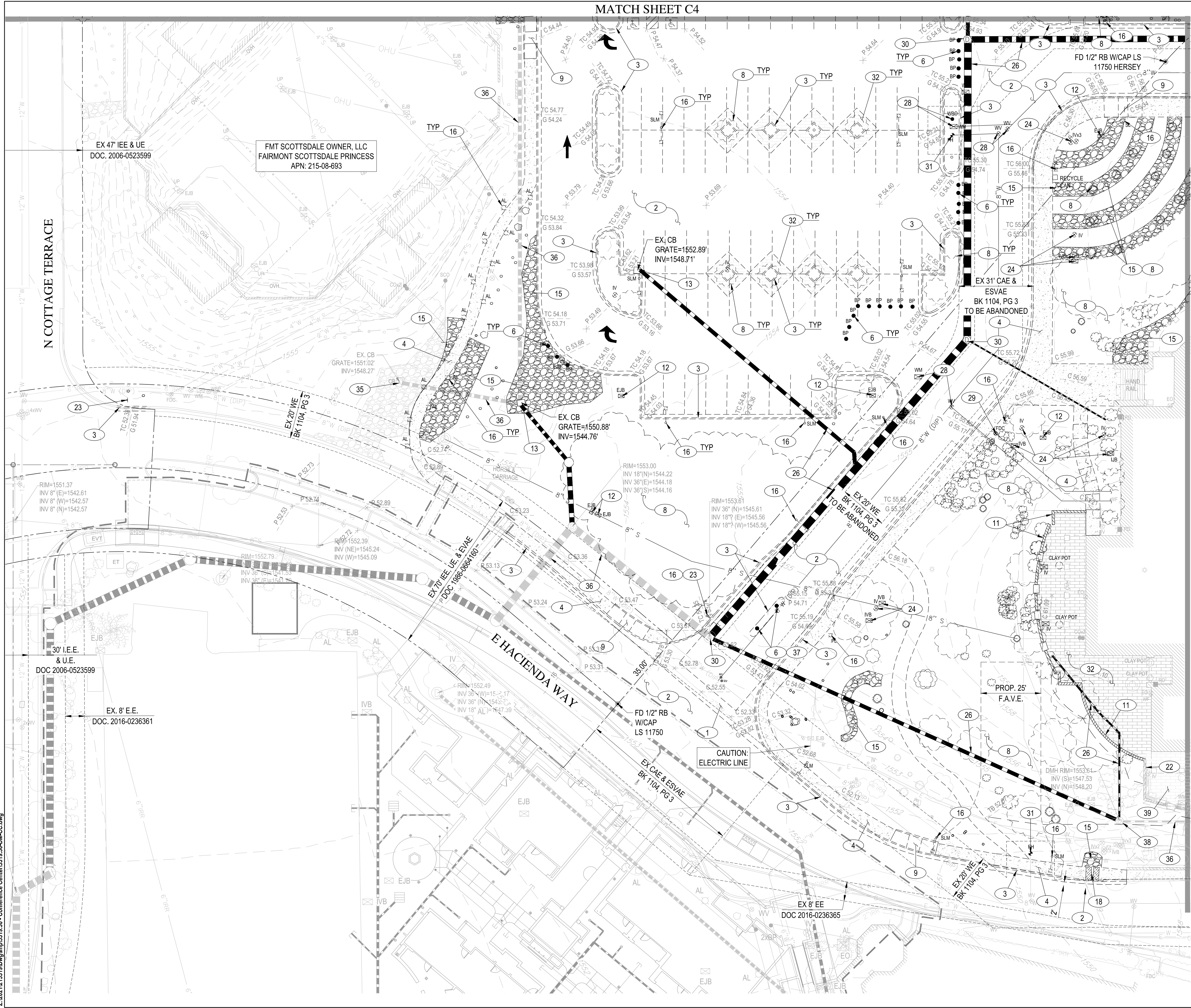


FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS
SCOTTSDALE, ARIZONA
DEMOLITION PLAN

REV	DESCRIPTION	DATE



SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C6 OF 28



DEMOLITION NOTES

- 1 REMOVE EXISTING VALLEY GUTTER.
- 2 REMOVE EXISTING ASPHALT PAVEMENT.
- 3 REMOVE EXISTING CURB OR CURB & GUTTER.
- 4 REMOVE EXISTING SIDEWALK.
- 6 REMOVE EXISTING BOLLARDS.
- 8 EXISTING LANDSCAPE TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 9 REMOVE EXISTING SIDEWALK RAMP.
- 12 EXISTING ELECTRICAL LINE AND EQUIPMENT TO BE REMOVED. CONTRACTOR TO COORDINATE WITH APS PRIOR TO REMOVALS.
- 13 REMOVE EXISTING STORM DRAIN CATCH BASIN.
- 15 EXISTING RIP-RAP TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 16 EXISTING LIGHT POLE TO BE SALVAGED FOR RELOCATION.
- 18 REMOVE EXISTING SCUPPER.
- 23 EXISTING SIGN TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 24 EXISTING IRRIGATION VALVE & METER TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH LANDSCAPE ARCHITECT.
- 26 REMOVE EXISTING STORM DRAIN TO LIMITS SHOWN.
- 28 REMOVE EXISTING WATER VALVE & METER.
- 29 REMOVE EXISTING FDC.
- 30 REMOVED EXISTING STORM DRAIN MANHOLE.
- 31 EXISTING FIRE HYDRANT TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 32 REMOVE EXISTING BRICK OR DECORATIVE PAVEMENT.
- 35 EXISTING STORM DRAIN CATCH BASIN TO REMAIN AND PROTECTED IN-PLACE.
- 36 EXISTING STORM DRAIN PIPE TO REMAIN AND PROTECTED IN-PLACE.
- 37 EXISTING ELECTRIC GATE TO BE SALVAGED. CONTRACTOR TO COORDINATE WITH OWNER.
- 38 EXISTING STORM DRAIN MANHOLE TO REMAIN AND PROTECTED IN-PLACE.
- 39 EXISTING BRICK OR DECORATIVE PAVEMENT TO REMAIN AND PROTECTED IN-PLACE.

MATCH SHEET C6

WOOD PATEL

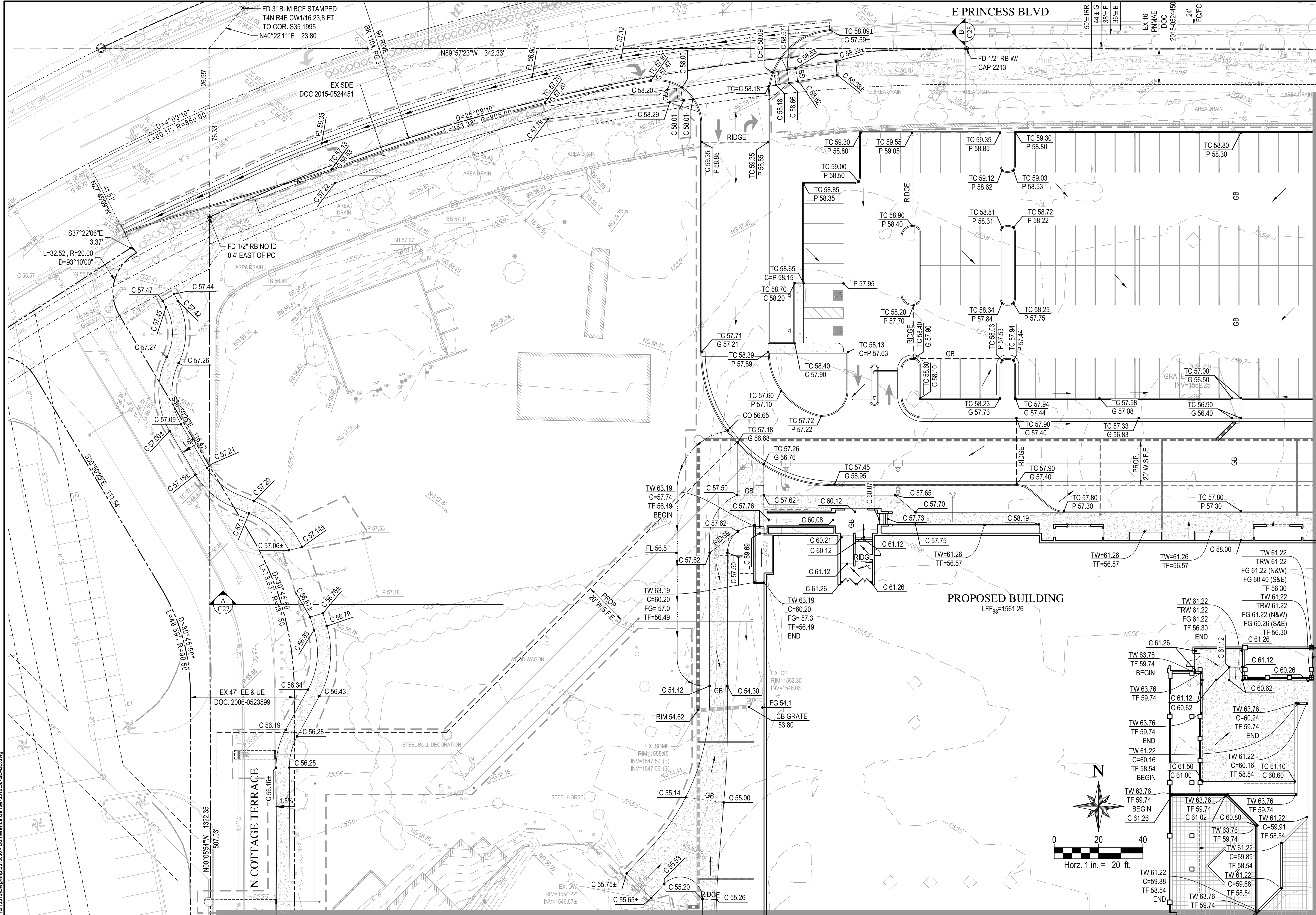
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Call at least two full working days before you begin excavation.

ARIZONA
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**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
DEMOLITION PLAN

DATE	
DESCRIPTION	
REV	
36382 DARIN L. MOORE 05/09/2025 ARIZONA EXPIRES 06-30-28	
SCALE (HORIZ.) 1" = 20' SCALE (VERT.) N/A DATE 05/09/2025 JOB NUMBER 215319.30 SHEET C7 OF 28	



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MATCH SHEET C11

MATCH SHEET C9

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ARIZONA
Arizona State Seal
Dated 8-1-11 or 1-800-STATEWIDE (782-2346)
In Maricopa County, (602) 963-1100

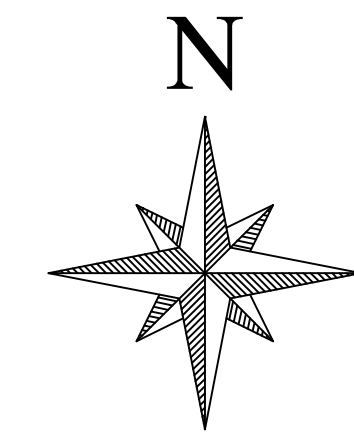
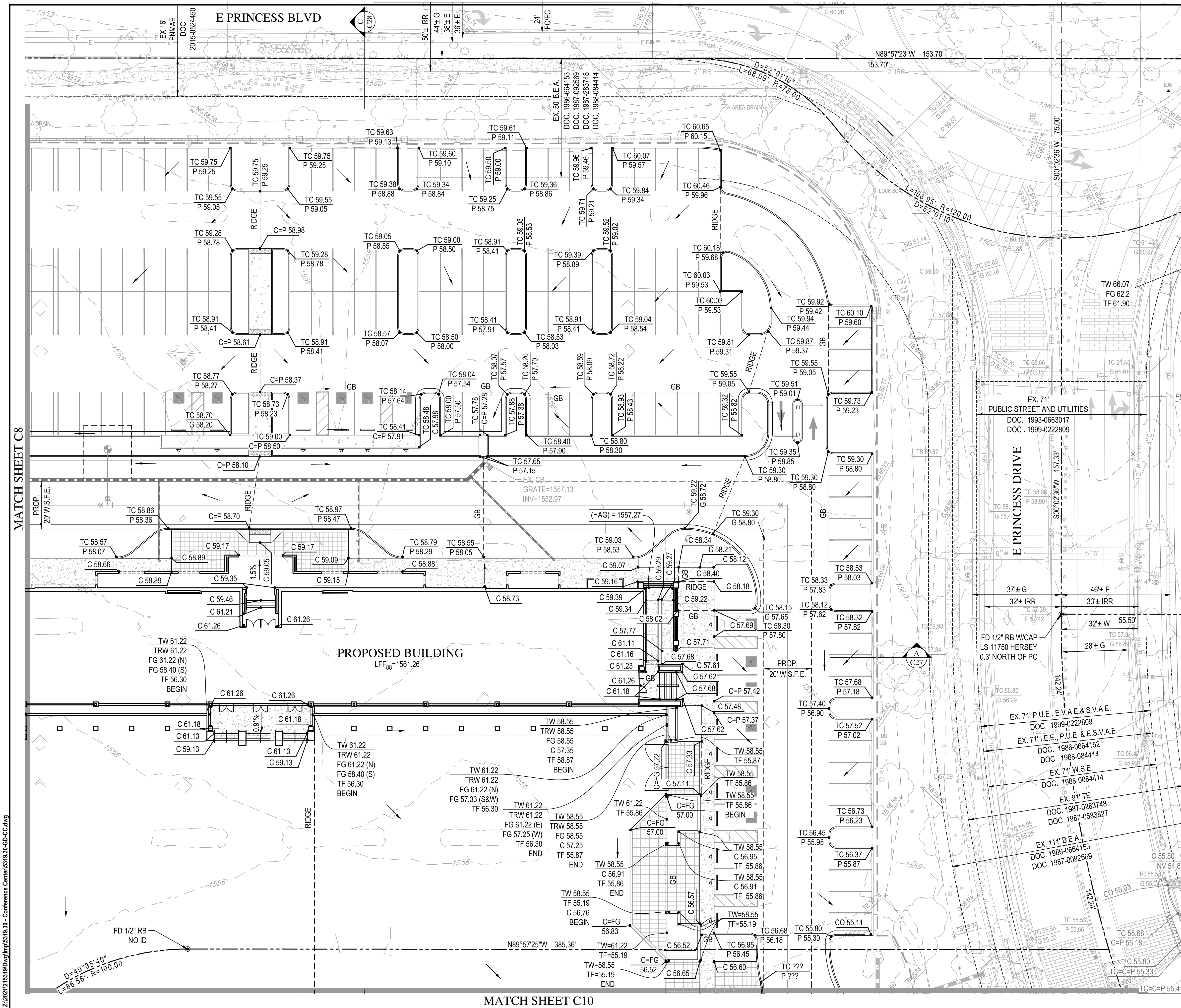
**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
GRADING AND DRAINAGE PLAN

REV	DESCRIPTION	DATE

Professional Engineer
36382
DARIN L. MOORE
ARIZONA
EXPIRES 06-30-28

SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C8 OF 28

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

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PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
GRADING AND DRAINAGE PLAN

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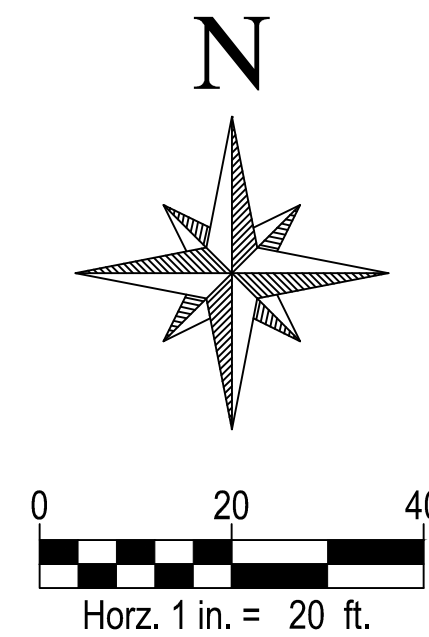
**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
GRADING AND DRAINAGE PLAN

REV	DESCRIPTION	DATE



SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.30
SHEET	
C10	OF 28

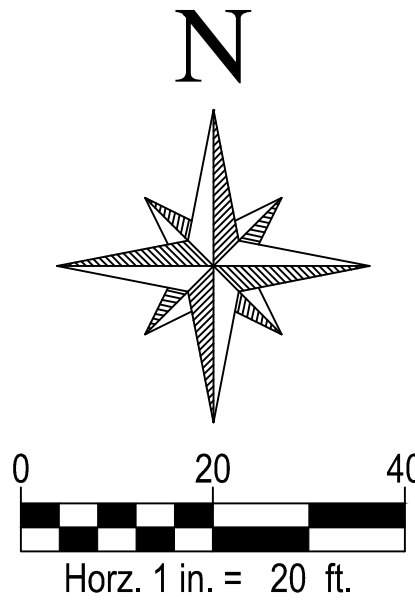
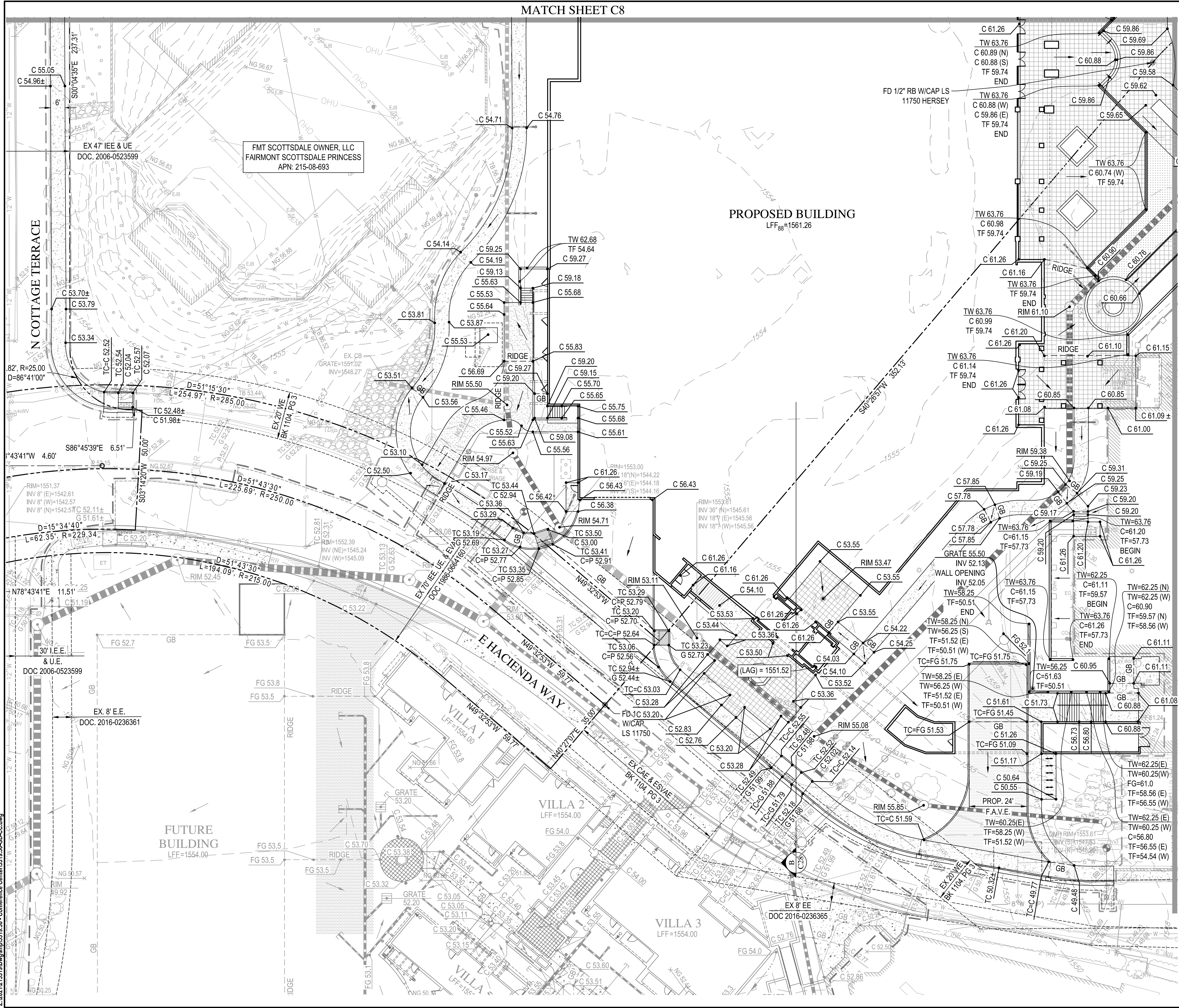
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MATCH SHEET C9

MATCH SHEET C11

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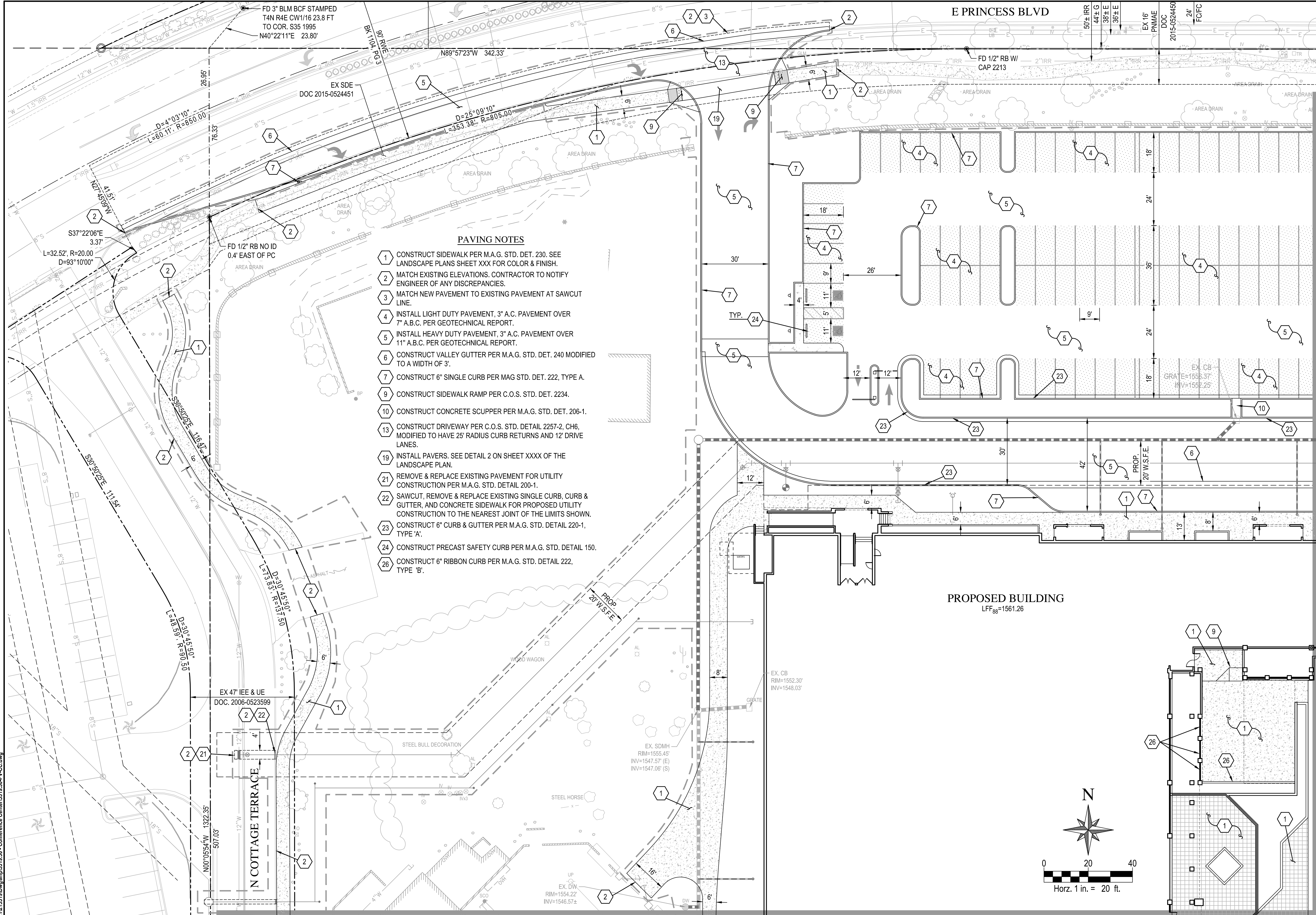


**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
GRADING AND DRAINAGE PLAN

REV	DESCRIPTION	DATE

SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C11 OF 28

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



- PAVING NOTES**
1. CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE LANDSCAPE PLANS SHEET XXX FOR COLOR & FINISH.
 2. MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
 3. MATCH NEW PAVEMENT TO EXISTING PAVEMENT AT SAWCUT LINE.
 4. INSTALL LIGHT DUTY PAVEMENT, 3" A.C. PAVEMENT OVER 7" A.B.C. PER GEOTECHNICAL REPORT.
 5. INSTALL HEAVY DUTY PAVEMENT, 3" A.C. PAVEMENT OVER 11" A.B.C. PER GEOTECHNICAL REPORT.
 6. CONSTRUCT VALLEY GUTTER PER M.A.G. STD. DET. 240 MODIFIED TO A WIDTH OF 3'.
 7. CONSTRUCT 6" SINGLE CURB PER MAG STD. DET. 222, TYPE A.
 9. CONSTRUCT SIDEWALK RAMP PER C.O.S. STD. DET. 2234.
 10. CONSTRUCT CONCRETE SCUPPER PER M.A.G. STD. DET. 206-1.
 13. CONSTRUCT DRIVEWAY PER C.O.S. STD. DETAIL 2257-2, CH6, MODIFIED TO HAVE 25' RADIUS CURB RETURNS AND 12' DRIVE LANES.
 19. INSTALL PAVERS. SEE DETAIL 2 ON SHEET XXXX OF THE LANDSCAPE PLAN.
 21. REMOVE & REPLACE EXISTING PAVEMENT FOR UTILITY CONSTRUCTION PER M.A.G. STD. DETAIL 200-1.
 22. SAWCUT, REMOVE & REPLACE EXISTING SINGLE CURB, CURB & GUTTER, AND CONCRETE SIDEWALK FOR PROPOSED UTILITY CONSTRUCTION TO THE NEAREST JOINT OF THE LIMITS SHOWN.
 23. CONSTRUCT 6" CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.
 24. CONSTRUCT PRECAST SAFETY CURB PER M.A.G. STD. DETAIL 150.
 26. CONSTRUCT 6" RIBBON CURB PER M.A.G. STD. DETAIL 222, TYPE 'B'.

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ARIZONA
Professional Engineer
Dated 8-1-11 or 1-30-2015 STATE 1702-2346
In Maricopa County (R02) 263-1110

**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
PAVING PLAN

REV	DESCRIPTION	DATE

Professional Engineer
36382
DARIN L. MOORE
05/09/2025
ARIZONA
EXPIRES 05-30-28

SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C12 OF 28

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- ARIZONA811**
- Arizona Blue Stake, Inc.
- Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

DATE	DESCRIPTION	REV

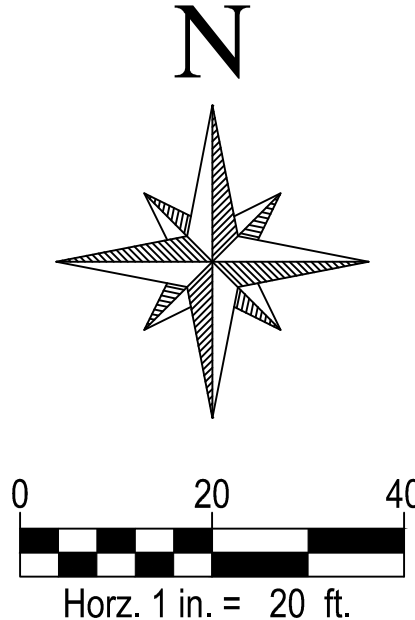
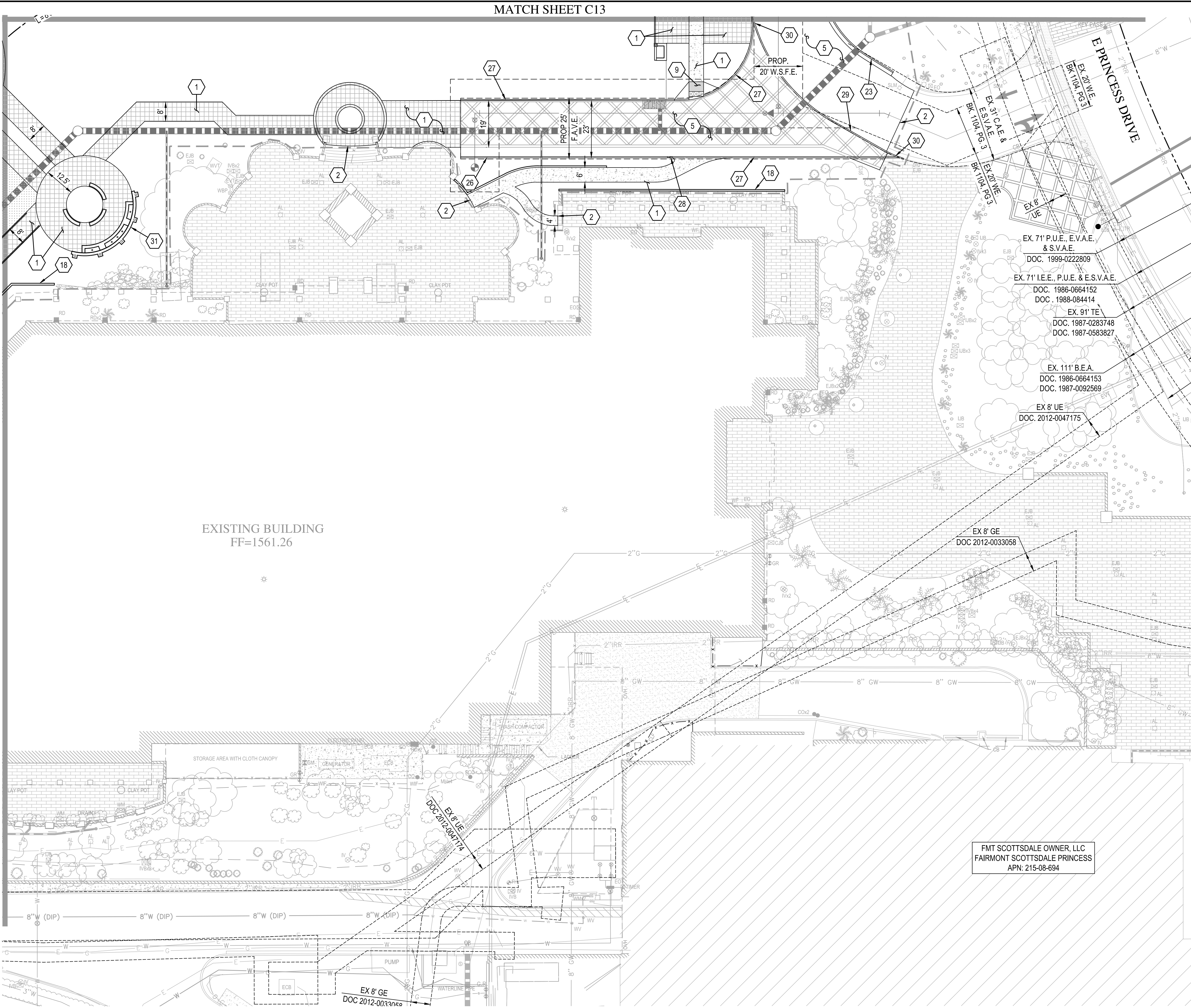
EXPIRES 06-30-28

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.30
SHEET	

C13 OF 28

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MATCH SHEET C15



PAVING NOTES

- 1 CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE LANDSCAPE PLANS SHEET XXX FOR COLOR & FINISH.
- 2 MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 3 MATCH NEW PAVEMENT TO EXISTING PAVEMENT AT SAWCUT LINE.
- 5 INSTALL HEAVY DUTY PAVEMENT, 3" A.C. PAVEMENT OVER 11" A.B.C. PER GEOTECHNICAL REPORT.
- 7 CONSTRUCT 6" SINGLE CURB PER MAG STD. DET. 222, TYPE A.
- 9 CONSTRUCT SIDEWALK RAMP PER C.O.S. STD. DET. 2234.
- 18 CONSTRUCT RETAINING WALL. SEE DETAIL XX ON SHEET XXX OF THE ARCHITECTURAL PLANS.
- 19 INSTALL PAVERS. SEE DETAIL 2 ON SHEET XXXX OF THE LANDSCAPE PLAN.
- 23 CONSTRUCT 6" CURB & GUTTER PER M.A.G. STD. DETAIL 220-1, TYPE 'A'.
- 26 CONSTRUCT 6" RIBBON CURB PER M.A.G. STD. DETAIL 222, TYPE 'B'.
- 27 CONSTRUCT RIBBON CURB MODIFIED TO BE FLUSH WITH PAVEMENT PER M.A.G. STD. DETAIL 222, TYPE 'B'.
- 28 CONSTRUCT CURB TERMINATION PER M.A.G. STD. DETAIL 222.
- 29 CONSTRUCT MOUNTABLE CURB MODIFIED BY REMOVING THE GUTTER PER M.A.G. STD. DETAIL 220-2, TYPE 'E'.
- 30 CONSTRUCT MOUNTABLE CURB TRANSITION PER M.A.G. STD. DETAIL 220-2, TYPE 'E' TO TYPE 'A'.
- 31 CONSTRUCT WATER FEATURE. SEE LANDSCAPE PLAN FOR DETAILS.

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FAIRMONT SCOTTSDALE PRINCESS
APN: 215-08-694



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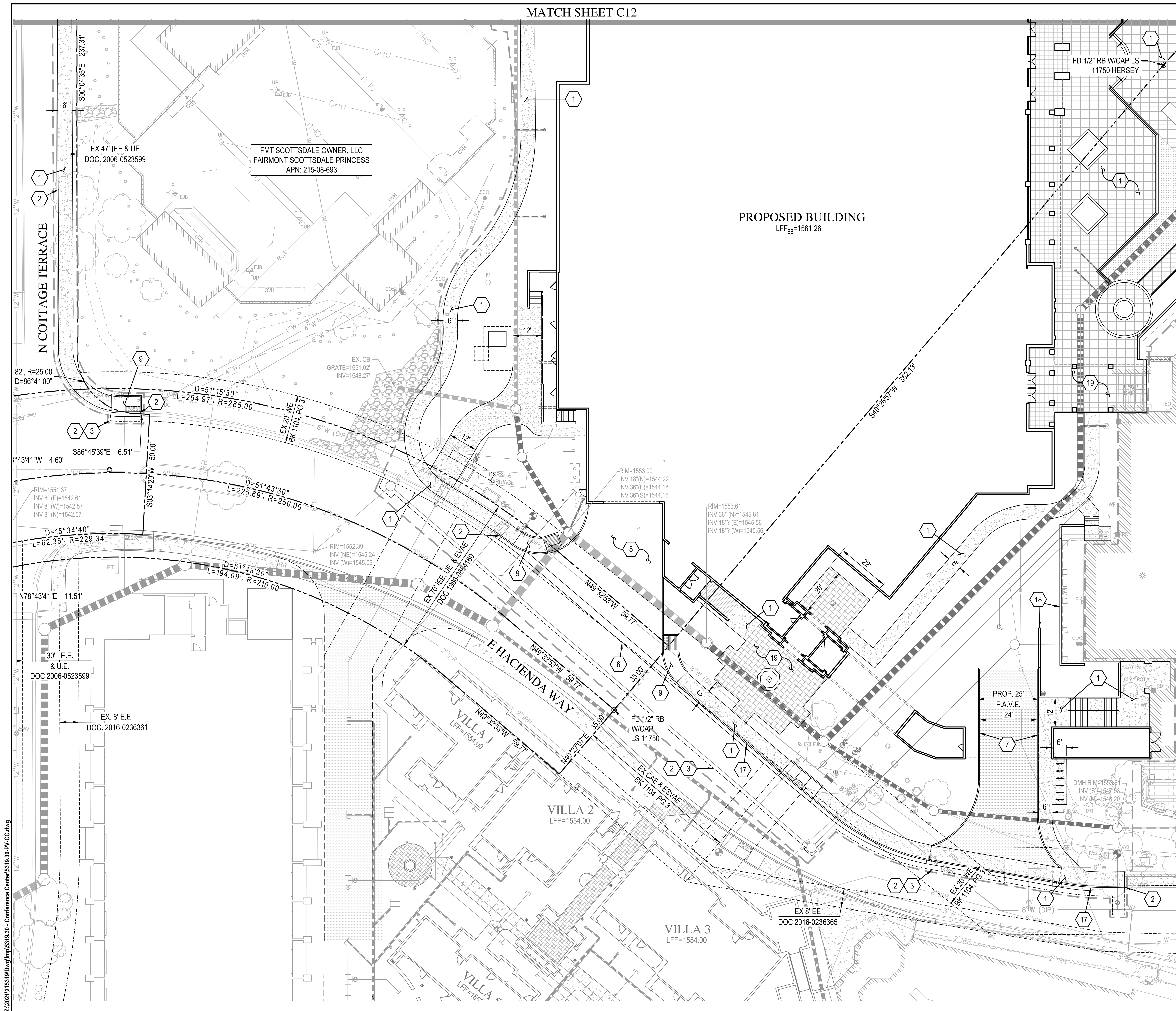


FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS
SCOTTSDALE, ARIZONA
PAVING PLAN

REV	DESCRIPTION	DATE

SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.30
SHEET	C14 OF 28

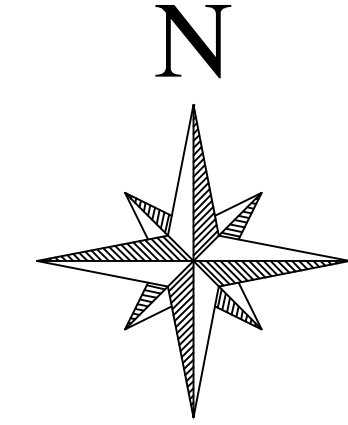
CHECKED BY: DM DESIGNED BY: RS DRAFTED BY: JRS



MATCH SHEET C12

PROPOSED BUILDING
LFF₈₈=1561.26

MATCH SHEET C14



Horz. 1 in. = 20 ft.

PAVING NOTES

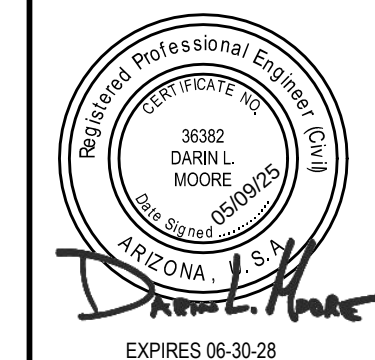
1. CONSTRUCT SIDEWALK PER M.A.G. STD. DET. 230. SEE LANDSCAPE PLANS SHEET XXX FOR COLOR & FINISH.
2. MATCH EXISTING ELEVATIONS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. MATCH NEW PAVEMENT TO EXISTING PAVEMENT AT SAWCUT LINE.
5. INSTALL HEAVY DUTY PAVEMENT, 3" A.C. PAVEMENT OVER 11" A.B.C. PER GEOTECHNICAL REPORT.
6. CONSTRUCT VALLEY GUTTER PER M.A.G. STD. DET. 240 MODIFIED TO A WIDTH OF 3'.
7. CONSTRUCT 6" SINGLE CURB PER MAG STD. DET. 222, TYPE A.
9. CONSTRUCT SIDEWALK RAMP PER C.O.S. STD. DET. 2234.
17. CONSTRUCT 6" CURB & GUTTER PER M.A.G. STD. DET. 220, TYPE A.
18. CONSTRUCT RETAINING WALL. SEE DETAIL XX ON SHEET XXX OF THE ARCHITECTURAL PLANS.
19. INSTALL PAVERS. SEE DETAIL 2 ON SHEET XXXX OF THE LANDSCAPE PLAN.

**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
PAVING PLAN

DATE	DESCRIPTION	REV
 EXPIRES 05-30-28		
SCALE (HORIZ.)		1" = 20'
SCALE (VERT.)		N/A
DATE		05/09/2025
JOB NUMBER		215319.30
SHEET		
C15 OF		28

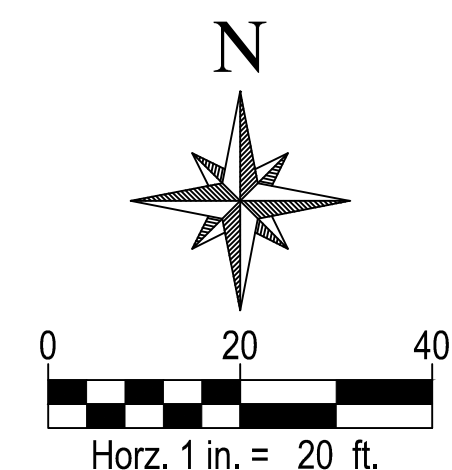
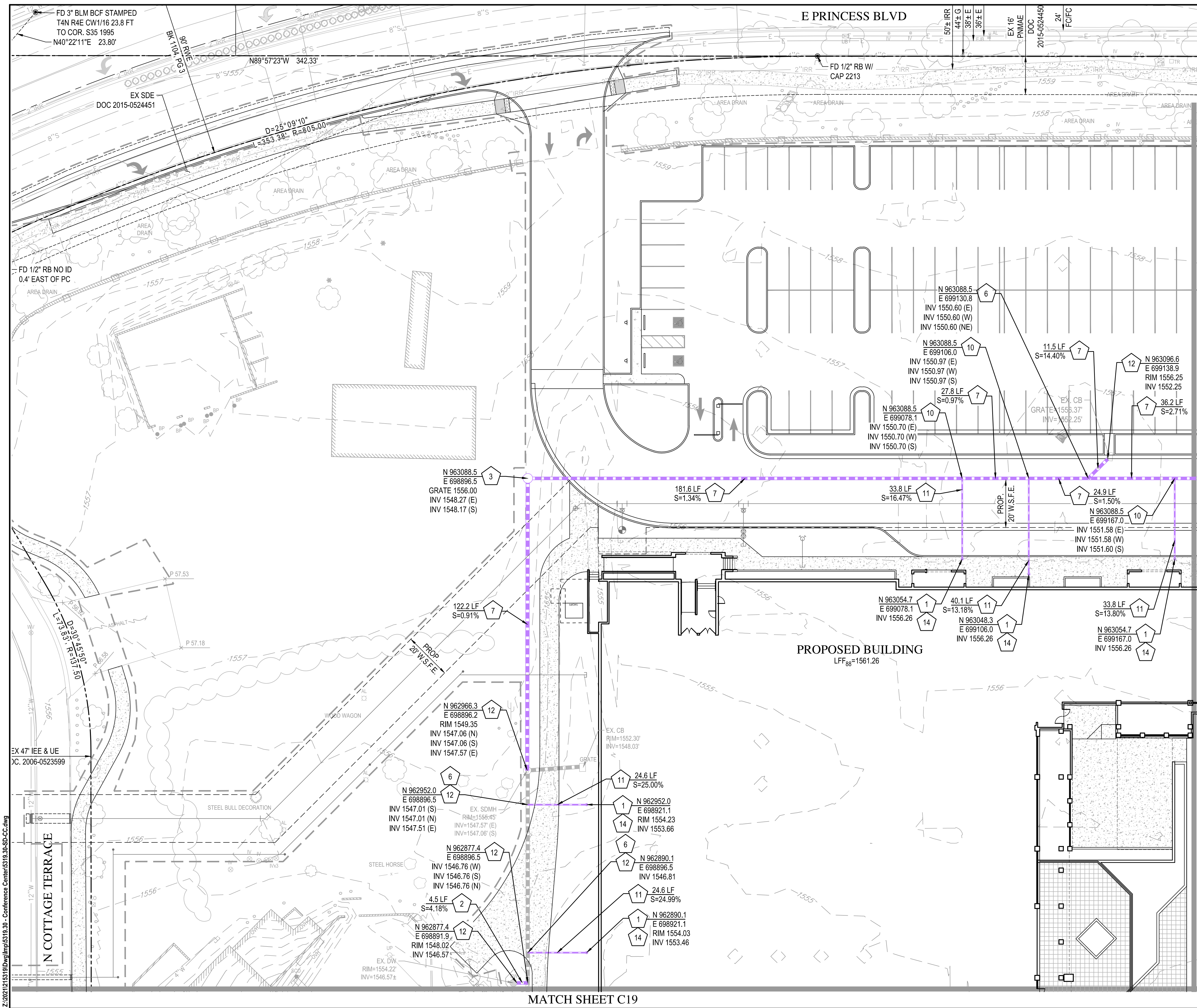
DESCRIPTION

REV



SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.30
SHEET	
C15	OF 28

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



STORM DRAIN NOTES

- 1 SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 2 INSTALL 18" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 3 CONSTRUCT STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 521 & 522 WHERE NECESSARY. CONTRACTOR TO ROTATE COVER TO PREVENT CONFLICT WITH ADJACENT SIDEWALK.
- 6 INSTALL WYE, SIZE PER ADJOINING PIPE DIAMETER.
- 7 INSTALL 15" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 10 INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER.
- 11 INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 12 CONNECT TO EXISTING STORM DRAIN. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 14 INSTALL AIRBREAK PER DETAIL ON SHEET C27.

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PATEL**

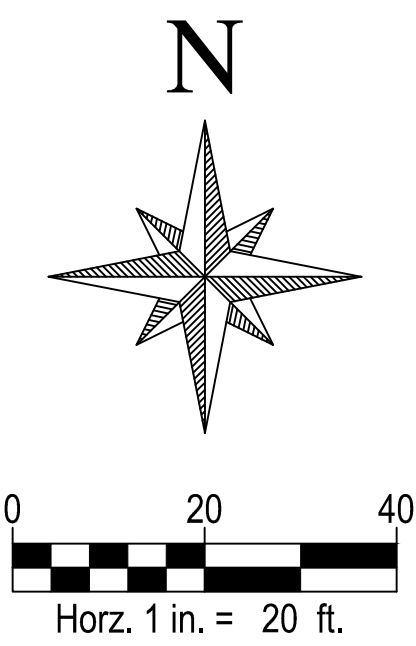
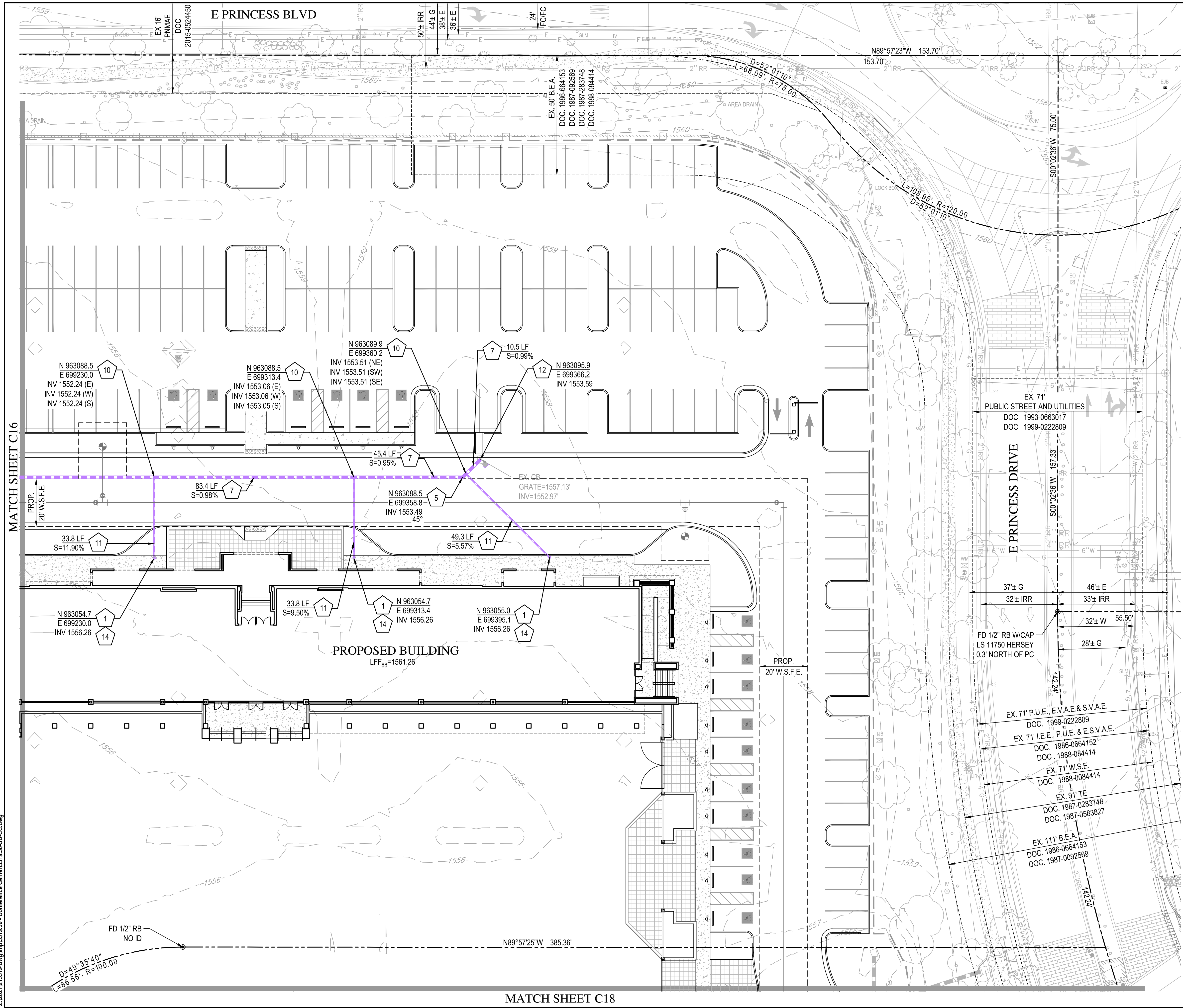
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**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
STORM DRAIN PLAN

[illegible]

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



STORM DRAIN NOTES

- 1 SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 5 INSTALL BEND, SIZE PER ADJOINING PIPE DIAMETER. ANGLE PER PLAN.
- 7 INSTALL 15" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 10 INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER.
- 11 INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 12 CONNECT TO EXISTING STORM DRAIN. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 14 INSTALL AIRBREAK PER DETAIL ON SHEET C27.

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ARIZONA 801
Professional Engineer
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In Maricopa County (R02) 263-1100

**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
STORM DRAIN PLAN

REV	DESCRIPTION	DATE

SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C17 OF 28

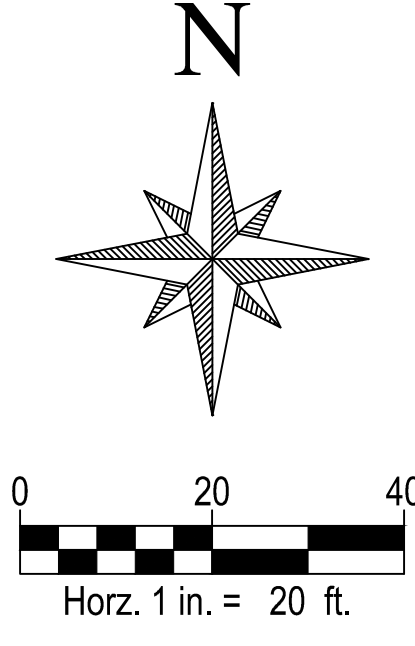
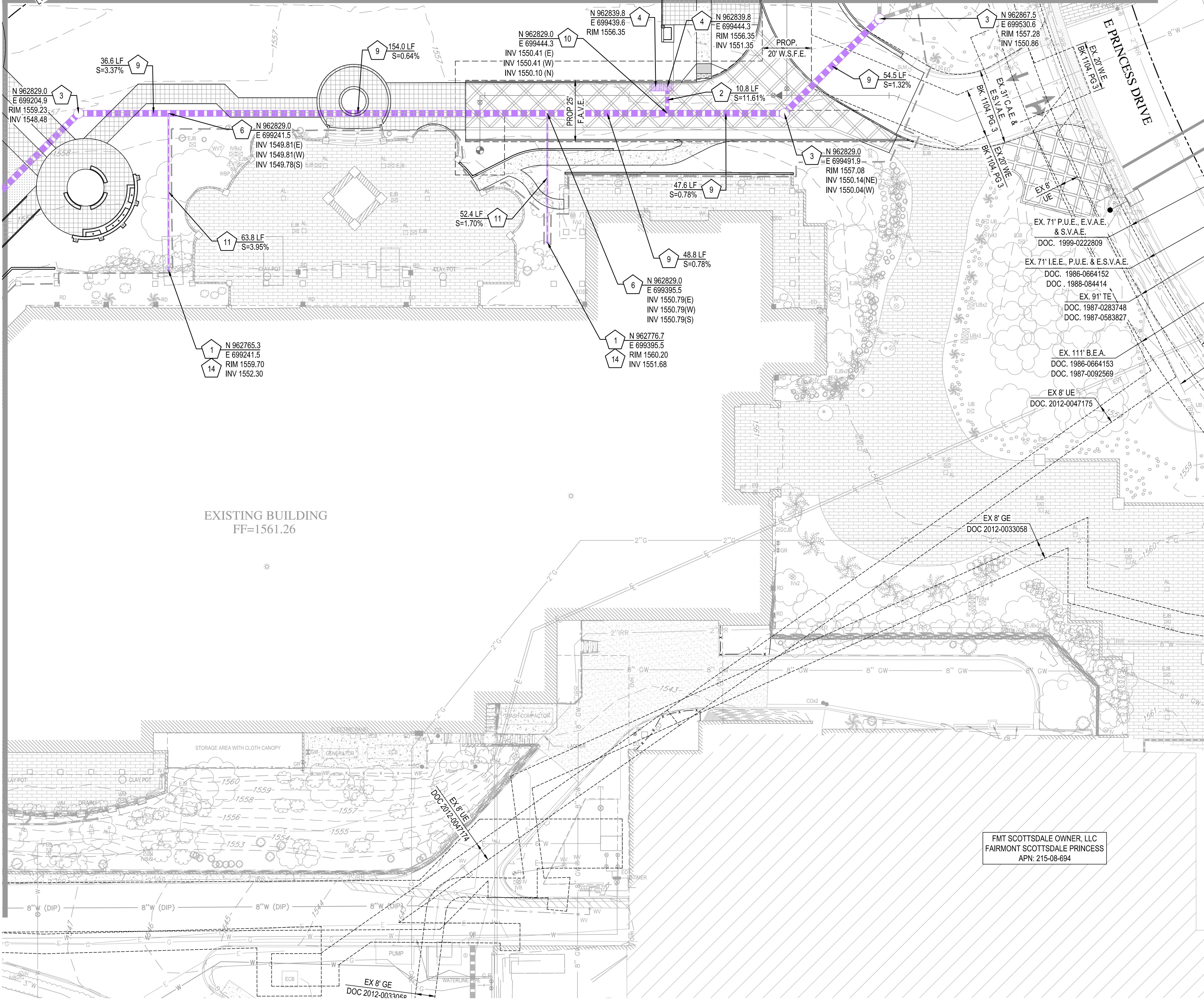
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MATCH SHEET C19

MATCH SHEET C17



STORM DRAIN NOTES

- 1 SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 2 INSTALL 18" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 3 CONSTRUCT STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522 WHERE NECESSARY, CONTRACTOR TO ROTATE COVER TO PREVENT CONFLICT WITH ADJACENT SIDEWALK.
- 4 INSTALL CATCH BASIN PER M.A.G. STD. DETAIL 535.
- 6 INSTALL WYE, SIZE PER ADJOINING PIPE DIAMETER.
- 9 INSTALL 30" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 10 INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER.
- 11 INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
- 14 INSTALL AIRBREAK PER DETAIL ON SHEET C27.

FMT SCOTSDALE OWNER, LLC
FAIRMONT SCOTSDALE PRINCESS
APN: 215-08-694

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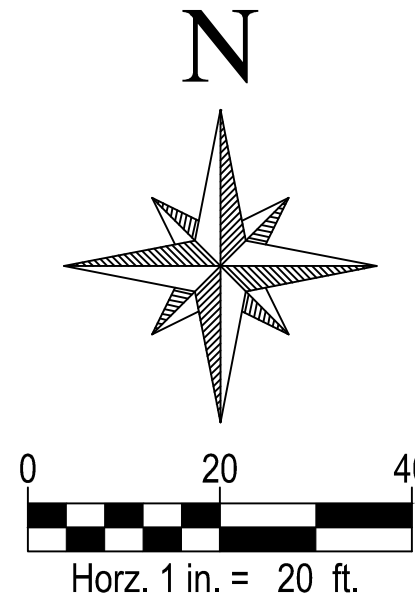
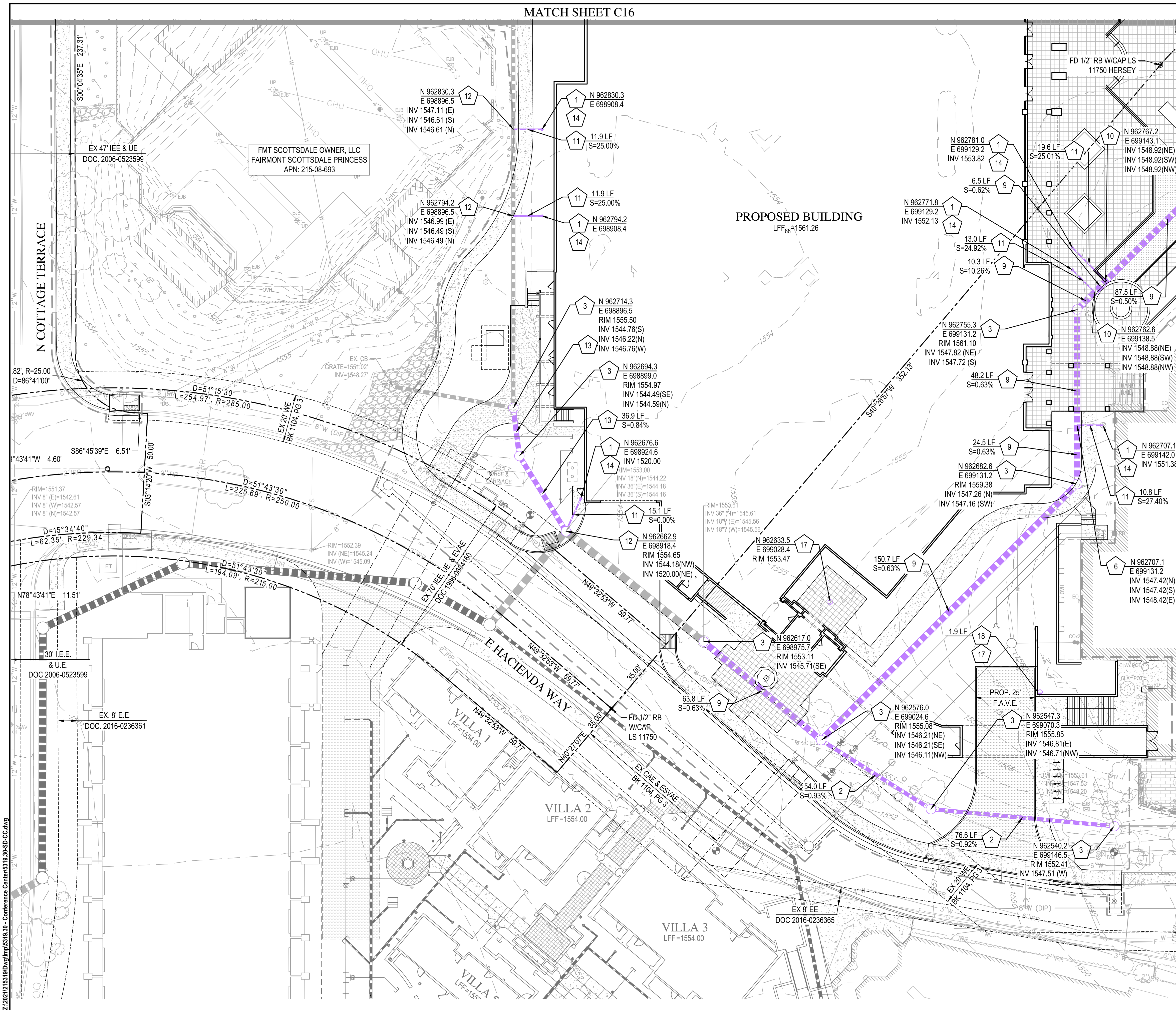
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**FAIRMONT SCOTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTSDALE, ARIZONA
STORM DRAIN PLAN

REV	DESCRIPTION	DATE

Professional Engineer
36382
DARIN L. MOORE
EXPIRES 06-30-28

SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C18 OF 28

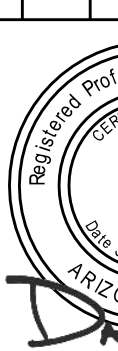


STORM DRAIN NOTES

- MATCH SHEET C18**
- 1. SEE PLUMBING PLANS FOR CONTINUATION, CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
 - 2. INSTALL 18" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
 - 3. CONSTRUCT STORM DRAIN MANHOLE PER M.A.G. STD. DETAIL 520 & 522 WHERE NECESSARY, CONTRACTOR TO ROTATE COVER TO PREVENT CONFLICT WITH ADJACENT SIDEWALK.
 - 6. INSTALL WYE, SIZE PER ADJOINING PIPE DIAMETER.
 - 9. INSTALL 30" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
 - 10. INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER.
 - 11. INSTALL 6" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
 - 12. CONNECT TO EXISTING STORM DRAIN, CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
 - 13. INSTALL 24" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.
 - 14. INSTALL AIRBREAK PER DETAIL ON SHEET C27.
 - 17. INSTALL INLINE DRAIN PER THE DETAIL ON SHEET C27. PIPE WILL DAYLIGHT THOUGH THE PROPOSED WALL WITH A "COW'S TONGUE" ROOF DRAIN OUTLET.
 - 18. INSTALL 4" ADS N-12 H.D.P.E. PIPE WITH WATER TIGHT JOINTS PER C.O.S. SPEC. 738 OR APPROVED EQUAL.

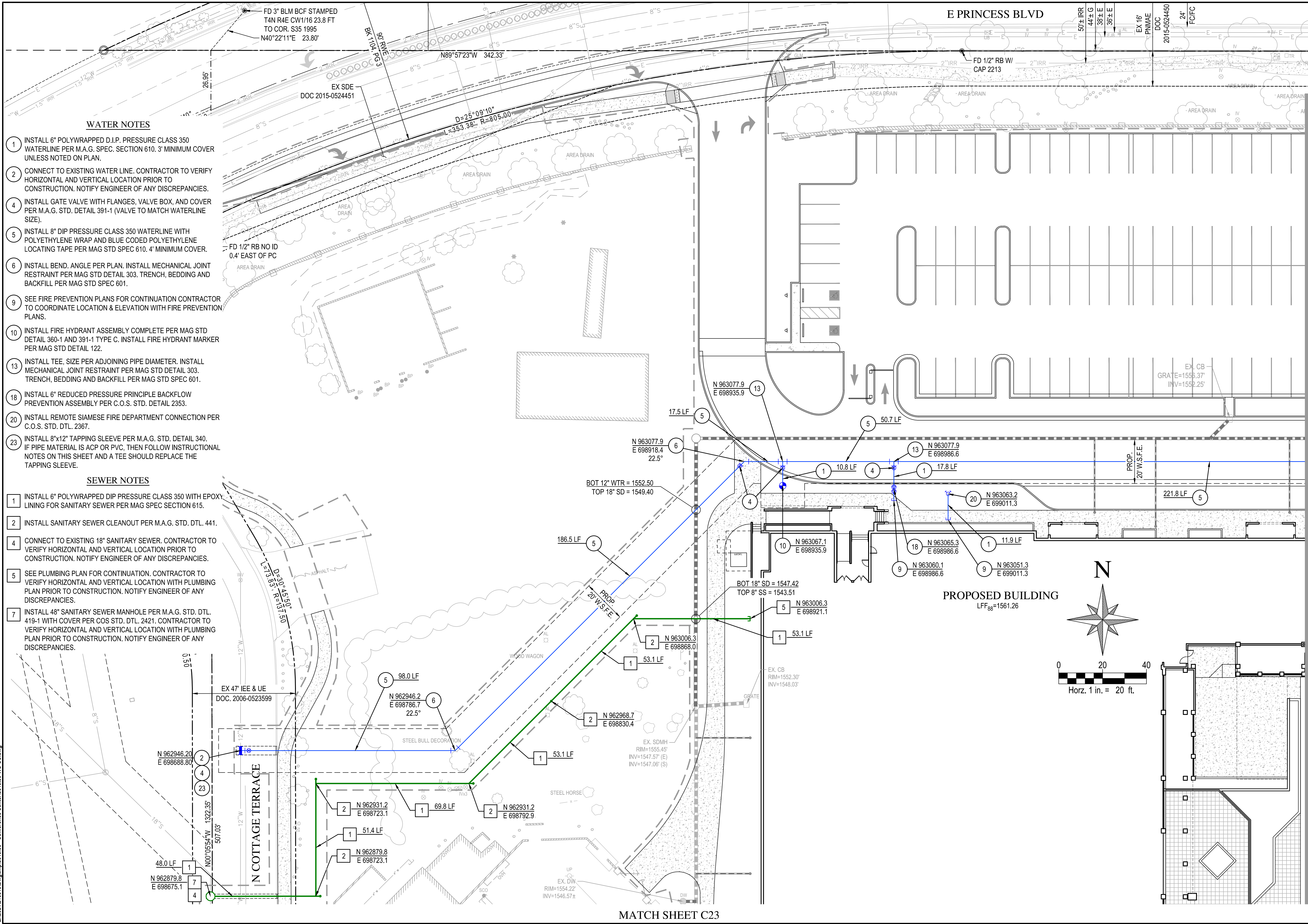
MATCH SHEET C18

**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
STORM DRAIN PLAN

DATE	DESCRIPTION	REV
 EXPIRES 06-30-28		
SCALE (HORIZ.) 1" = 20' SCALE (VERT.) N/A DATE 05/09/2025 JOB NUMBER 215319.30 SHEET C19 OF 28		



SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.30
SHEET	
C19	OF 28



WATER NOTES

- 1 INSTALL 6" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.
- 2 CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 4 INSTALL GATE VALVE WITH FLANGES, VALVE BOX, AND COVER PER M.A.G. STD. DETAIL 391-1 (VALVE TO MATCH WATERLINE SIZE).
- 5 INSTALL 8" DIP PRESSURE CLASS 350 WATERLINE WITH POLYETHYLENE WRAP AND BLUE CODED POLYETHYLENE LOCATING TAPE PER MAG STD SPEC 610. 4' MINIMUM COVER.
- 6 INSTALL BEND, ANGLE PER PLAN. INSTALL MECHANICAL JOINT RESTRAINT PER MAG STD DETAIL 303. TRENCH, BEDDING AND BACKFILL PER MAG STD SPEC 601.
- 9 SEE FIRE PREVENTION PLANS FOR CONTINUATION CONTRACTOR TO COORDINATE LOCATION & ELEVATION WITH FIRE PREVENTION PLANS.
- 10 INSTALL FIRE HYDRANT ASSEMBLY COMPLETE PER MAG STD DETAIL 360-1 AND 391-1 TYPE C. INSTALL FIRE HYDRANT MARKER PER MAG STD DETAIL 122.
- 13 INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER. INSTALL MECHANICAL JOINT RESTRAINT PER MAG STD DETAIL 303. TRENCH, BEDDING AND BACKFILL PER MAG STD SPEC 601.
- 18 INSTALL 6" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DETAIL 2353.
- 20 INSTALL REMOTE SIAMESE FIRE DEPARTMENT CONNECTION PER C.O.S. STD. DTL. 2367.
- 23 INSTALL 8"x12" TAPPING SLEEVE PER M.A.G. STD. DETAIL 340. IF PIPE MATERIAL IS ACP OR PVC, THEN FOLLOW INSTRUCTIONAL NOTES ON THIS SHEET AND A TEE SHOULD REPLACE THE TAPPING SLEEVE.

SEWER NOTES

- 1 INSTALL 6" POLYWRAPPED DIP PRESSURE CLASS 350 WITH EPOXY LINING FOR SANITARY SEWER PER MAG SPEC SECTION 615.
- 2 INSTALL SANITARY SEWER CLEANOUT PER M.A.G. STD. DTL. 441.
- 4 CONNECT TO EXISTING 18" SANITARY SEWER. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 5 SEE PLUMBING PLAN FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 7 INSTALL 48" SANITARY SEWER MANHOLE PER M.A.G. STD. DTL. 419-1 WITH COVER PER COS STD. DTL. 2421. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.

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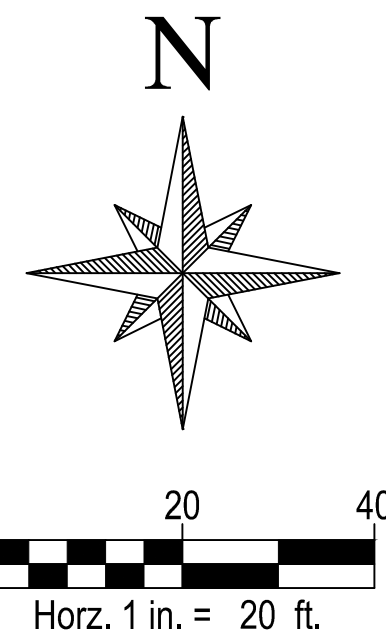
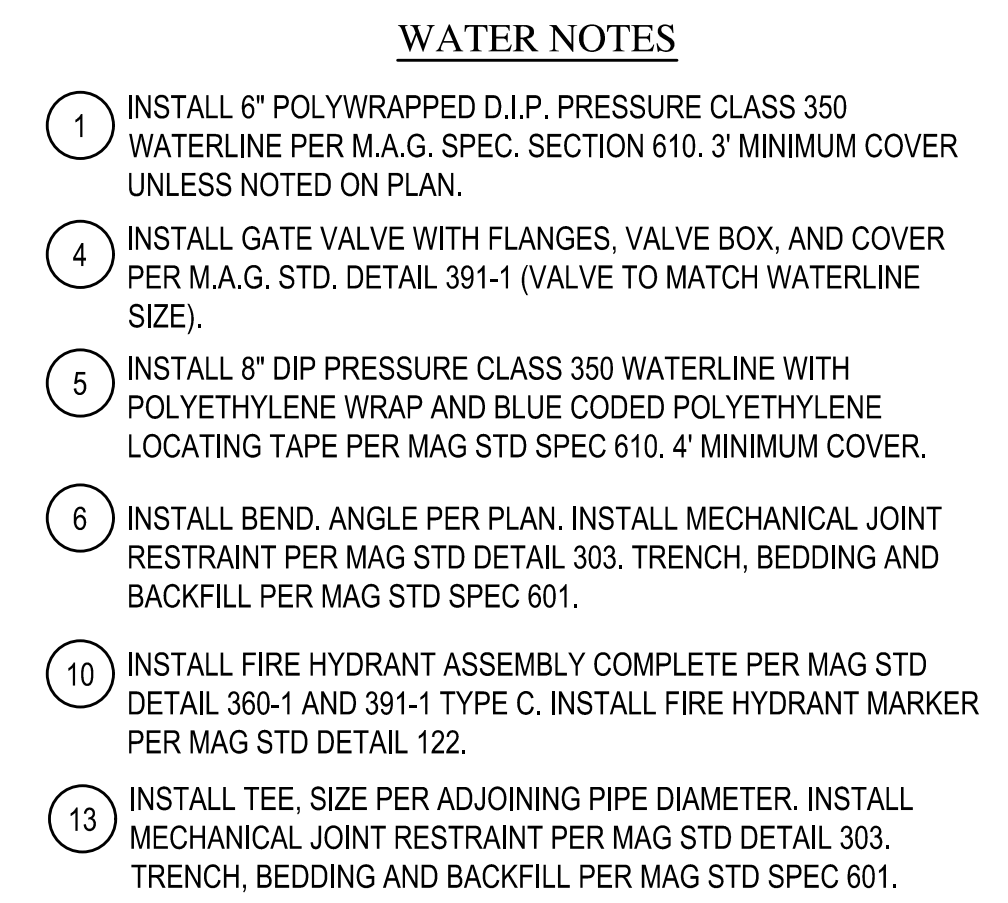
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In Maricopa County (R02) (R03-110)

FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS
SCOTTSDALE, ARIZONA
WATER AND SEWER PLAN

DATE					
DESCRIPTION					
REV					
Professional Engineer 36382 DARIN L. MOORE 05/09/2025 ARIZONA Expires 06-30-28 SCALE (HORIZ.) 1" = 20' SCALE (VERT.) N/A DATE 05/09/2025 JOB NUMBER 215319.30 SHEET C20 OF 28					

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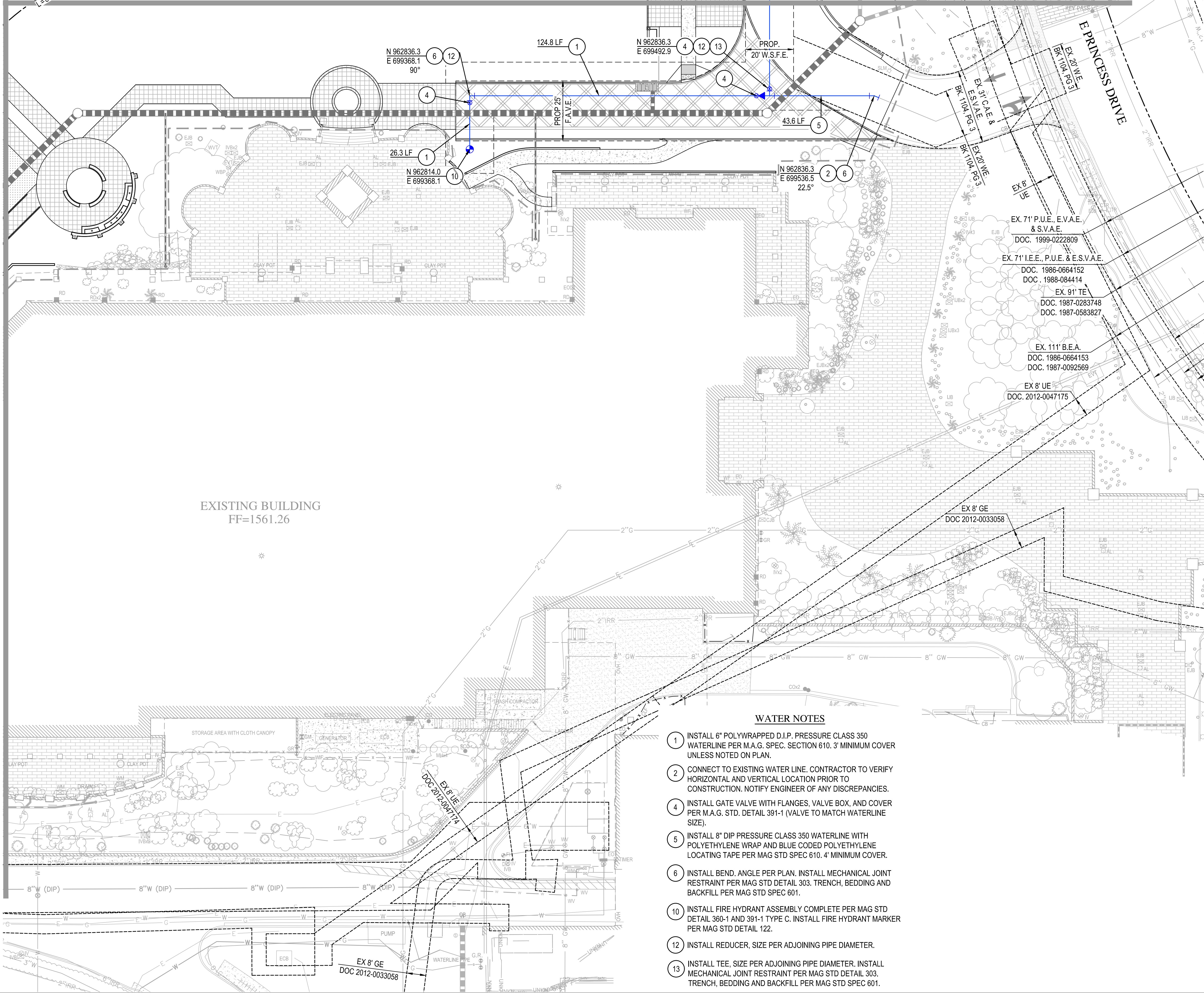
**FAIRMONT SCOTTSDALE PRINCESS
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PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
WATER AND SEWER PLAN

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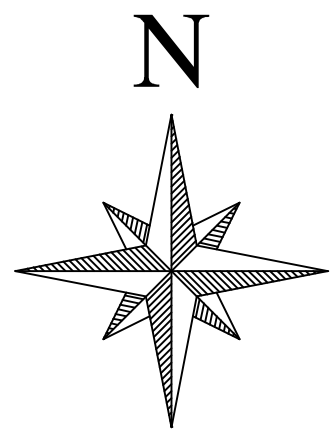
MATCH SHEET C23

MATCH SHEET C21



WATER NOTES

1. INSTALL 6" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.
2. CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. INSTALL GATE VALVE WITH FLANGES, VALVE BOX, AND COVER PER M.A.G. STD. DETAIL 391-1 (VALVE TO MATCH WATERLINE SIZE).
5. INSTALL 8" DIP PRESSURE CLASS 350 WATERLINE WITH POLYETHYLENE WRAP AND BLUE CODED POLYETHYLENE LOCATING TAPE PER MAG STD SPEC 610. 4' MINIMUM COVER.
6. INSTALL BEND, ANGLE PER PLAN. INSTALL MECHANICAL JOINT RESTRAINT PER MAG STD DETAIL 303. TRENCH, BEDDING AND BACKFILL PER MAG STD SPEC 601.
10. INSTALL FIRE HYDRANT ASSEMBLY COMPLETE PER MAG STD DETAIL 360-1 AND 391-1 TYPE C. INSTALL FIRE HYDRANT MARKER PER MAG STD DETAIL 122.
12. INSTALL REDUCER, SIZE PER ADJOINING PIPE DIAMETER.
13. INSTALL TEE, SIZE PER ADJOINING PIPE DIAMETER. INSTALL MECHANICAL JOINT RESTRAINT PER MAG STD DETAIL 303. TRENCH, BEDDING AND BACKFILL PER MAG STD SPEC 601.



0 20 40
Horz. 1 in. = 20 ft.

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Arizona State Board of Professional Engineers and Surveyors
Doc. No. 1-1 or 1-100-STATE 1 (10/23/2018)
In Maricopa County, (R2) 263-1100

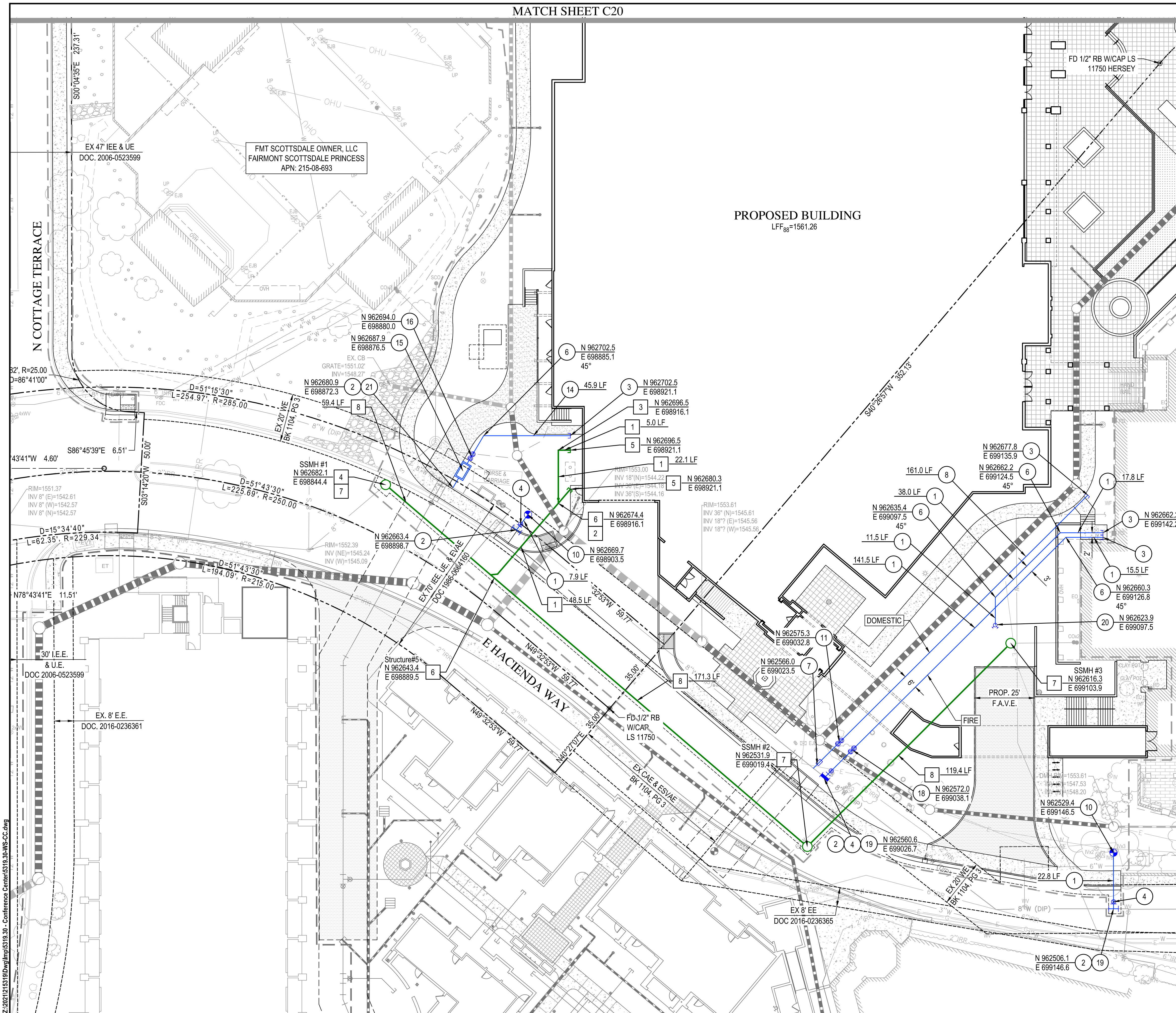
FAIRMONT SCOTTSDALE PRINCESS CONFERENCE CENTER/ EVENT LAWN PRELIMINARY IMPROVEMENT PLANS SCOTTSDALE, ARIZONA WATER AND SEWER PLAN

REV	DESCRIPTION	DATE

Professional Engineer
36382
DARIN L. MOORE
05/09/2025
ARIZONA
EXPIRES 05-30-28

SCALE (HORIZ.) 1" = 20'
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C22 OF 28

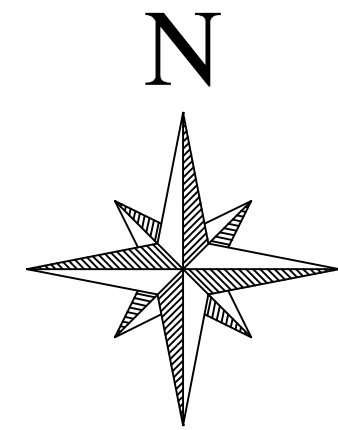
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MATCH SHEET C20

PROPOSED BUILDING
LFF₈₈=1561.26

MATCH SHEET C22



SEWER NOTES

1. INSTALL 6" POLYWRAPPED DIP PRESSURE CLASS 350 WITH EPOXY LINING FOR SANITARY SEWER PER MAG SPEC SECTION 615.
2. INSTALL SANITARY SEWER CLEANOUT PER M.A.G. STD. DTL. 441.
3. INSTALL BEND ANGLE PER PLAN, SIZE PER ADJOINING PIPE DIAMETER.
4. CONNECT TO EXISTING 18" SANITARY SEWER. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
5. SEE PLUMBING PLAN FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
6. INSTALL WYE AND 45° BEND WHEN APPLICABLE, SIZE PER ADJOINING PIPE DIAMETER.
7. INSTALL 48" SANITARY SEWER MANHOLE PER M.A.G. STD. DTL. 419-1 WITH COVER PER COS STD. DTL. 2421. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION WITH PLUMBING PLAN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
8. INSTALL 8" POLYWRAPPED DIP PRESSURE CLASS 350 WITH EPOXY LINING FOR SANITARY SEWER PER MAG SPEC SECTION 615.

WATER NOTES

1. INSTALL 6" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.
2. CONNECT TO EXISTING WATER LINE. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. INSTALL GATE VALVE WITH FLANGES, VALVE BOX, AND COVER PER M.A.G. STD. DETAIL 391-1 (VALVE TO MATCH WATERLINE SIZE).
6. INSTALL BEND, ANGLE PER PLAN. INSTALL MECHANICAL JOINT RESTRAINT PER MAG STD DETAIL 303. TRENCH, BEDDING AND BACKFILL PER MAG STD SPEC 601.
7. INSTALL 2" WATER SERVICE AND METER BOX PER C.O.S. STD. DETAIL 2330.
8. INSTALL 2" TYPE 'K' HARD COPPER PER MAG SPEC. 754.
10. INSTALL FIRE HYDRANT ASSEMBLY COMPLETE PER MAG STD DETAIL 360-1 AND 391-1 TYPE C. INSTALL FIRE HYDRANT MARKER PER MAG STD DETAIL 122.
11. INSTALL 2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DETAIL 2354.
14. INSTALL 4" POLYWRAPPED D.I.P. PRESSURE CLASS 350 WATERLINE PER M.A.G. SPEC. SECTION 610. 3' MINIMUM COVER UNLESS NOTED ON PLAN.
15. INSTALL 4" WATER METER PER C.O.S. STD. DTL. 2345.
16. INSTALL 4" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DETAIL 2353.
18. INSTALL 6" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER C.O.S. STD. DETAIL 2353.
19. INSTALL 6"x8" TAPPING SLEEVE PER M.A.G. STD. DETAIL 340. IF PIPE MATERIAL IS ACP OR PVC, THEN FOLLOW INSTRUCTIONAL NOTES ON THIS SHEET AND A TEE SHOULD REPLACE THE TAPPING SLEEVE.
20. INSTALL REMOTE SIAMESE FIRE DEPARTMENT CONNECTION PER C.O.S. STD. DTL. 2367.
21. INSTALL 4"x8" TAPPING SLEEVE PER M.A.G. STD. DETAIL 340. IF PIPE MATERIAL IS ACP OR PVC, THEN FOLLOW INSTRUCTIONAL NOTES ON THIS SHEET AND A TEE SHOULD REPLACE THE TAPPING SLEEVE.

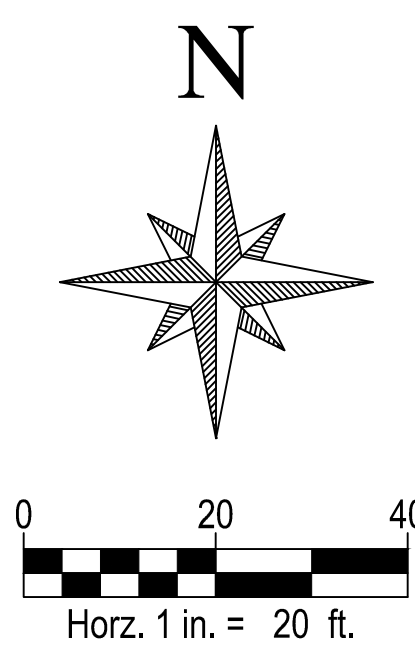
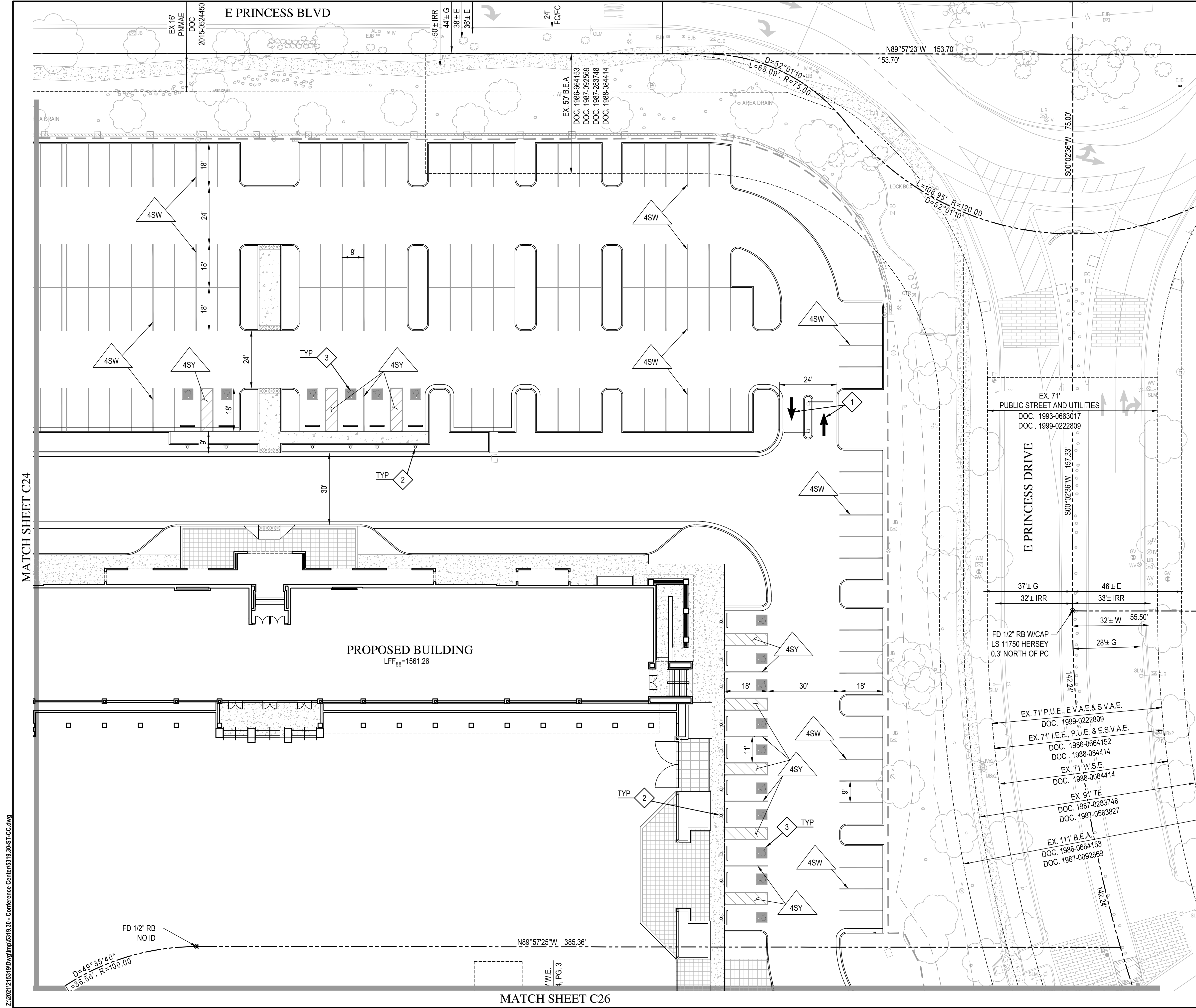
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**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
WATER AND SEWER PLAN

[illegible]



SIGNAGE NOTES

1. INSTALL PAVEMENT SYMBOL PER ADOT STD. DETAIL M-10.
2. INSTALL ACCESSIBLE PARKING SIGN AND POST PER C.O.S. DETAILS 2124 AND 2131. SIGN HEIGHT MEASURED FROM FINISH GRADE TO THE BOTTOM OF THE SIGN IS 80".
3. PROVIDE HANDICAP SYMBOLS PER DETAILS ON SHEET C27.

STRIPING LEGEND

- 4DY ——— 4" DOUBLE YELLOW LINE
- 4SY ——— 4" SOLID YELLOW LINE
- 4SW ——— 4" SOLID WHITE LINE
- 12SW ——— 12" SOLID WHITE LINE
- 18SW ——— 18" SOLID WHITE LINE
- 4SBYM ——— 4" DOUBLE YELLOW LINE, ONE SOLID, ONE BROKEN W/ A 10' LINE SEGMENT AND 30' GAP
- 4BW ——— 4" BROKEN WHITE LINE W/ A 10' LINE SEGMENT AND A 30' GAP



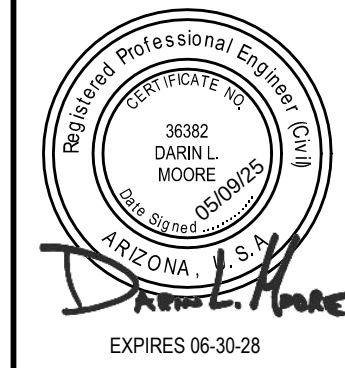
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**FAIRMONT SCOTTSDALE PRINCESS
 CONFERENCE CENTER/ EVENT LAWN
 PRELIMINARY IMPROVEMENT PLANS**
 SCOTTSDALE, ARIZONA
 SIGNING AND STRIPING PLAN

REV	DESCRIPTION	DATE

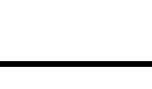
SCALE (HORIZ.)	1" = 20'
SCALE (VERT.)	N/A
DATE	05/09/2025
JOB NUMBER	215319.30
SHEET	C25 OF 28



SIGNAGE NOTES

1 INSTALL PAVEMENT SYMBOL PER ADOT STD. DETAIL M-10.

STRIPING LEGEND

		4" DOUBLE YELLOW LINE
		4" SOLID YELLOW LINE
		4" SOLID WHITE LINE
		12" SOLID WHITE LINE
		18" SOLID WHITE LINE
		4" DOUBLE YELLOW LINE, ONE SOLID, ONE BROKEN W/ A 10' LINE SEGMENT AND 30' GAP
		4" BROKEN WHITE LINE W/ A 10' LINE SEGMENT AND A 30' GAP

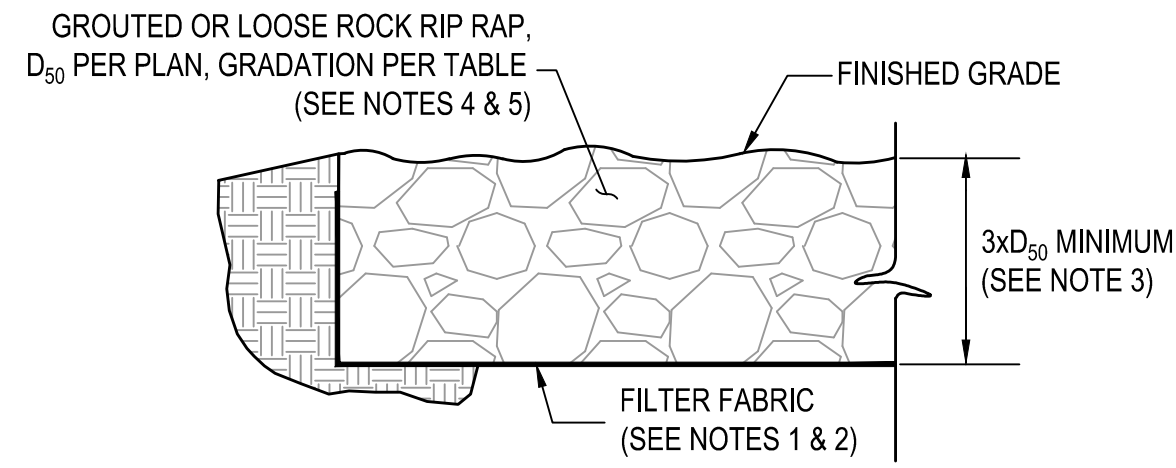


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CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
SIGNING AND STRIPING PLAN

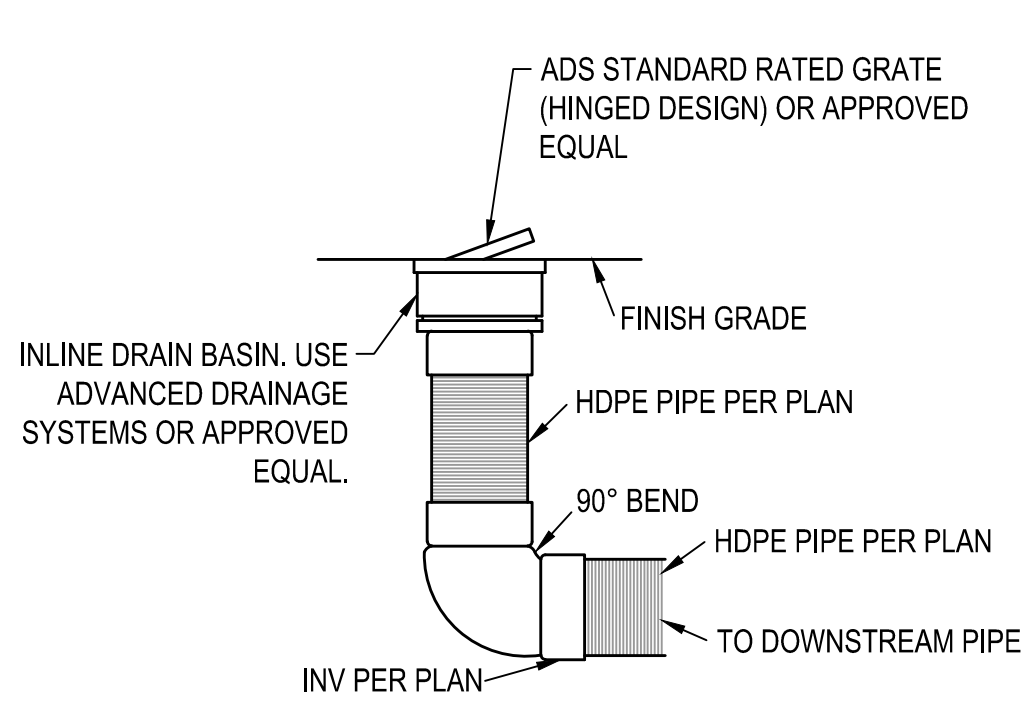
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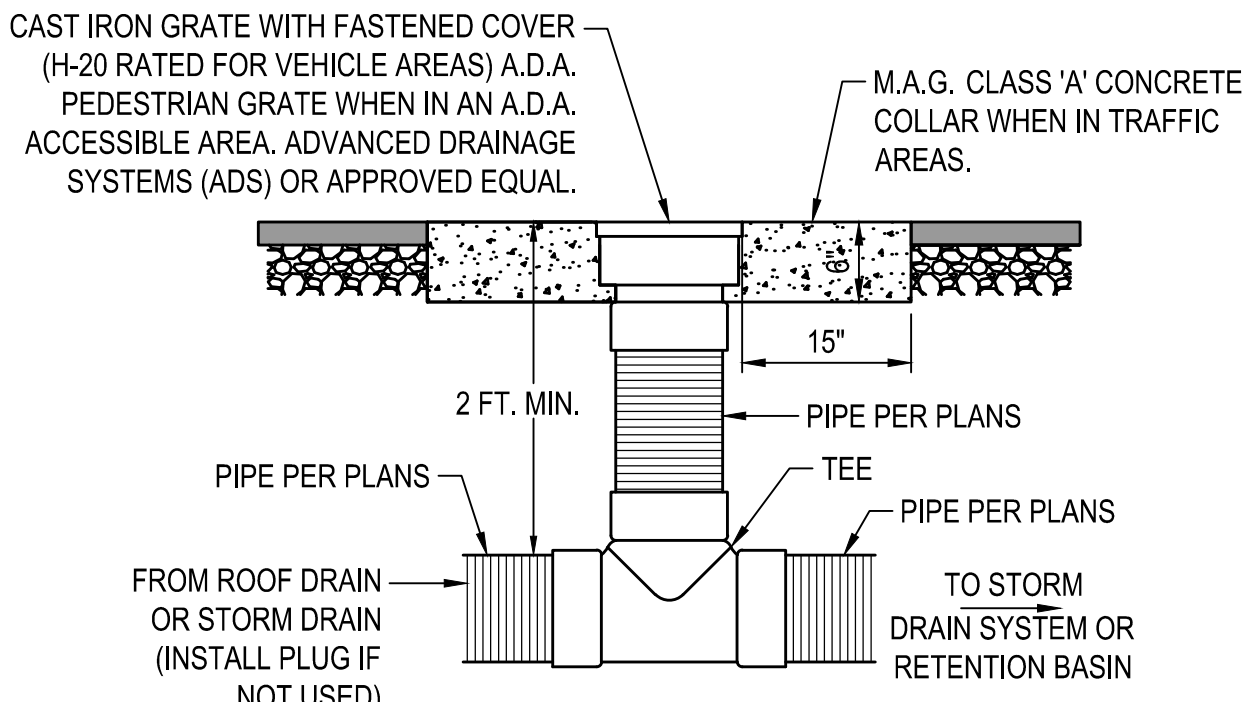
ROCK RIPRAP SECTION

PERCENT PASSING	ROCK SIZE (IN.)			
	D ₅₀ =4"	D ₅₀ =6"	D ₅₀ =8"	D ₅₀ =12"
100 TO 90	8	12	16	24
85 TO 70	6	9	12	18
50 TO 30	4	6	8	12
15 TO 5	3	4	5	8
5 TO 0	1	2	3	4

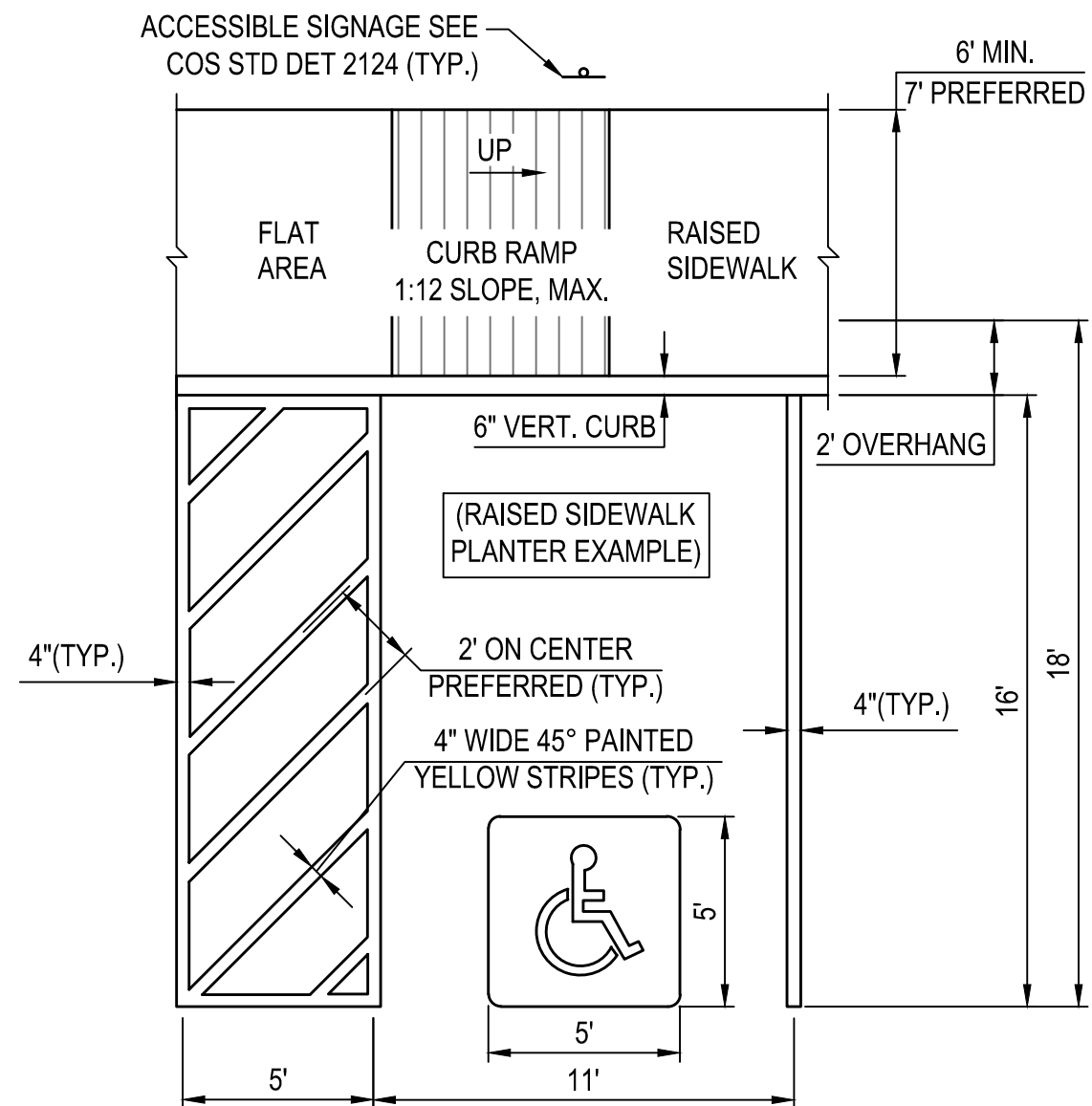
- NOTES:
1. FOR LOOSE RIPRAP APPLICATIONS INSTALL "MIRAFI 140NL" FILTER FABRIC, OR APPROVED EQUAL, UNDER ALL LOOSE RIPRAP.
 2. FOR GROUTED RIPRAP APPLICATIONS OMIT FILTER FABRIC.
 3. DEPTH OF LOOSE RIPRAP SHALL BE 3xD₅₀ MINIMUM UNLESS OTHERWISE SPECIFIED. DEPTH OF GROUTED RIPRAP SHALL BE 2xD₅₀ MINIMUM UNLESS OTHERWISE SPECIFIED.
 4. RIPRAP SHALL BE ANGULAR ROCK.
 5. REFER TO LANDSCAPE PLAN FOR RIPRAP COLOR.



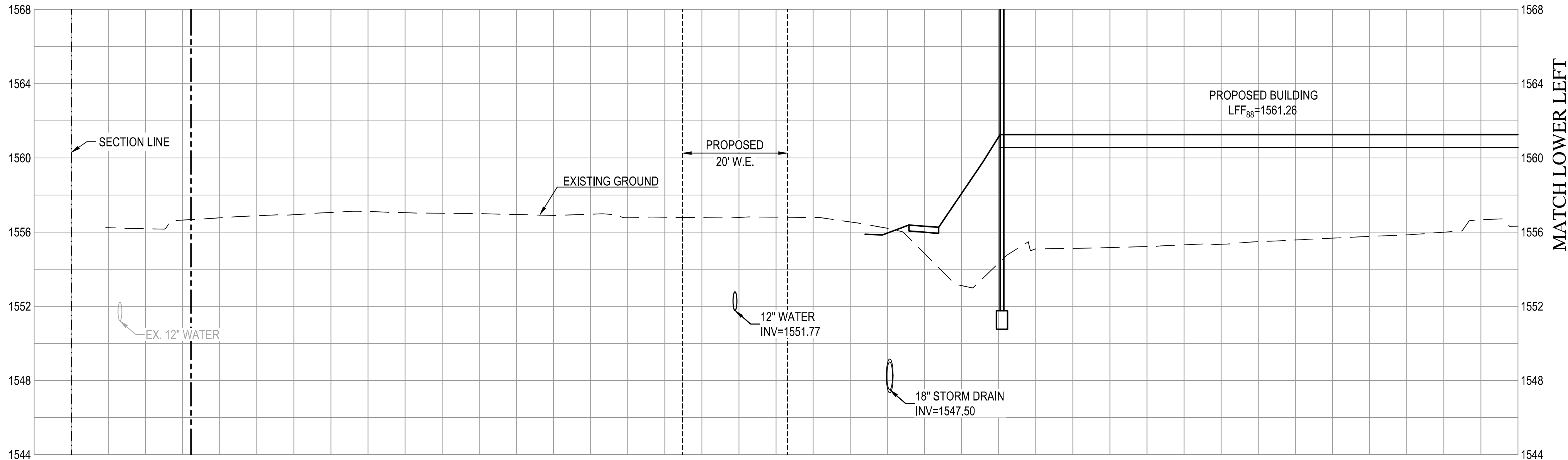
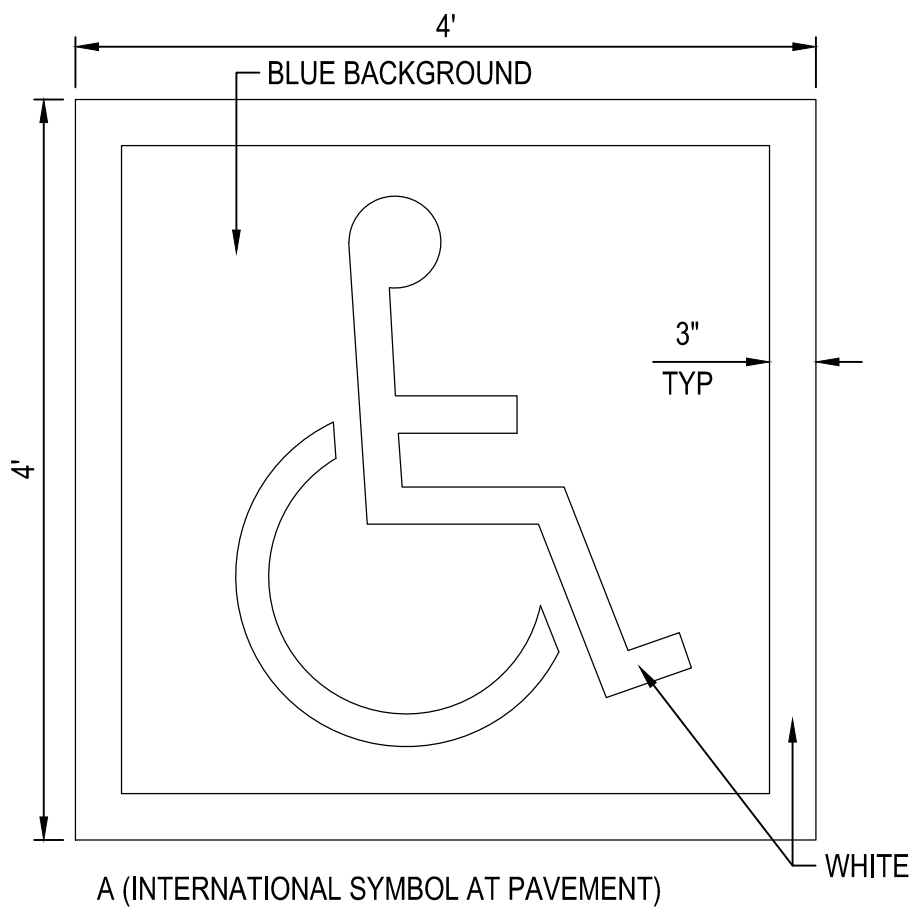
INLINE DRAIN DETAIL
N.T.S.



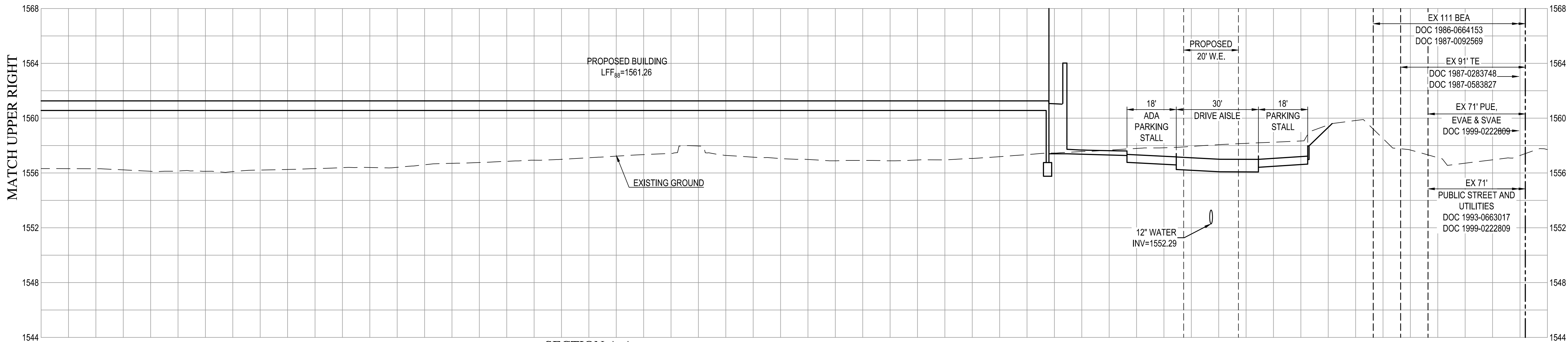
STORM DRAIN AIR BREAK
(N.T.S.)



PREFERRED ACCESSIBLE PARKING SPACES
N.T.S.



SECTION A-A



SECTION A-A

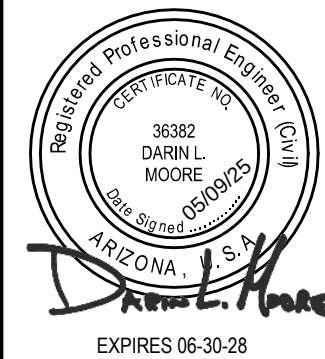


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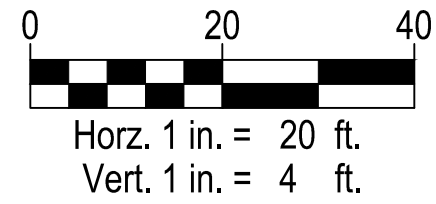
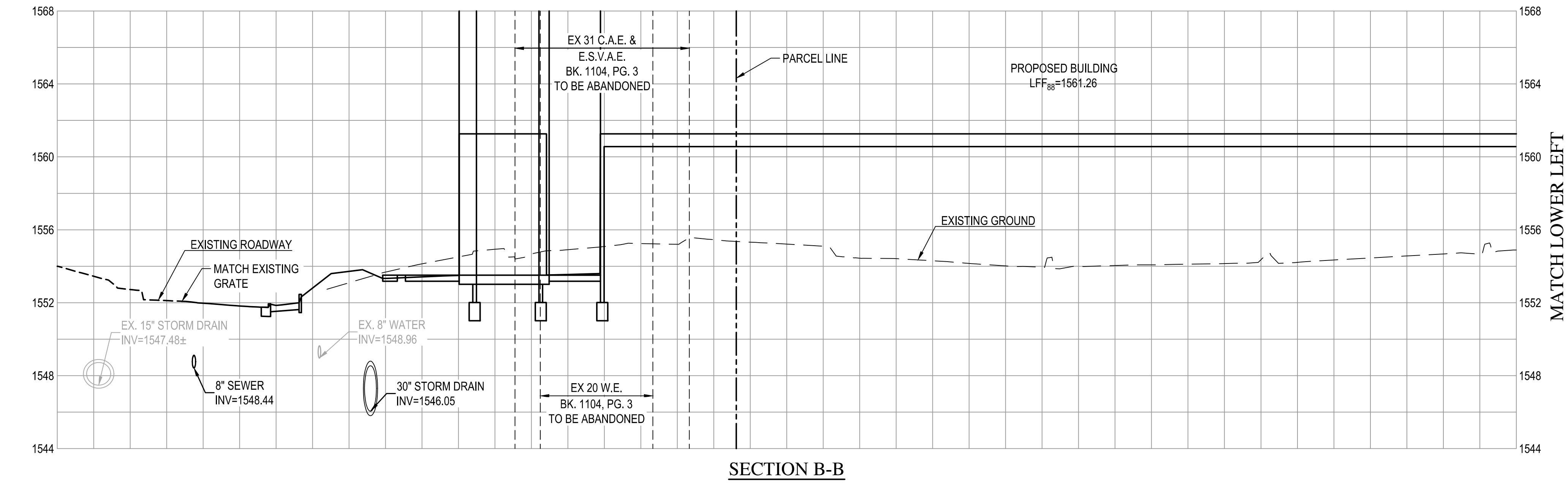
FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS
SCOTTSDALE, ARIZONA
DETAILS AND SECTIONS

REV	DESCRIPTION	DATE



SCALE (HORIZ.) N/A
SCALE (VERT.) N/A
DATE 05/09/2025
JOB NUMBER 215319.30
SHEET C27 OF 28

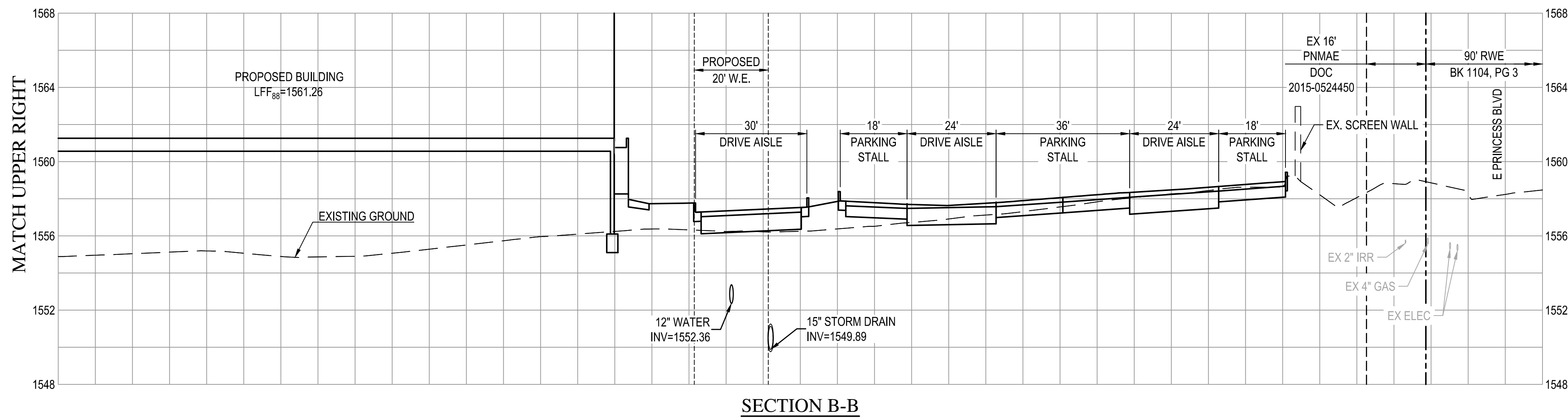
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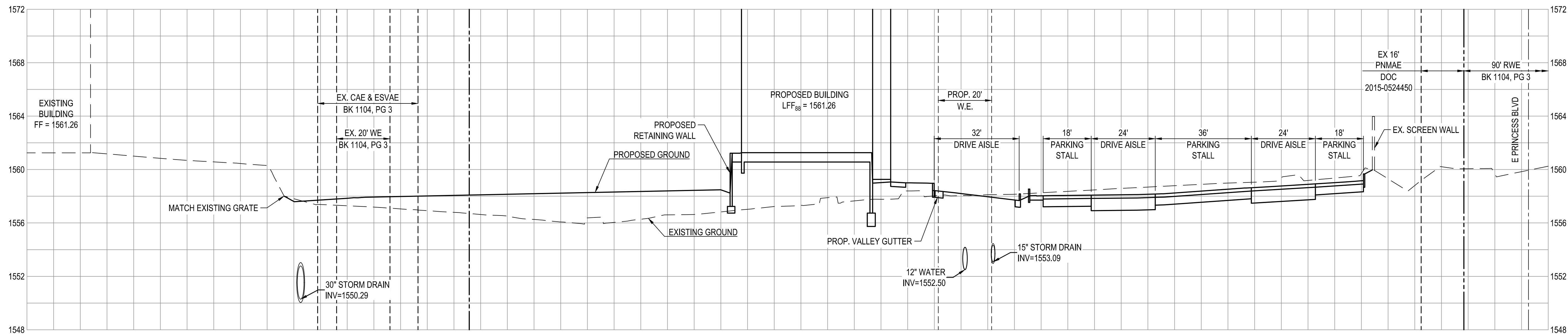
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**FAIRMONT SCOTTSDALE PRINCESS
CONFERENCE CENTER/ EVENT LAWN
PRELIMINARY IMPROVEMENT PLANS**
SCOTTSDALE, ARIZONA
SECTIONS



SECTION B-B



SECTION C-C

DATE					
DESCRIPTION					
REV					
Professional Engineer Seal for Darn L. Moore, No. 36382, expires 06/30/26. SCALE (HORIZ.) 1" = 20' SCALE (VERT.) 1" = 4' DATE 05/09/2025 JOB NUMBER 215319.30 SHEET C28 OF 28					

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

APPENDIX E – WATERCAD MODELING RESULTS

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Reservoir Table

Active Scenario: Calibration Static Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (ft)
284	R-1	1,543.25	1,543.25

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Calibration Static Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
283	PMP-1	1,543.20	1,543.25	1,709.45	0	166.20

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Static Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	68	1,709.45
Domestic (Guest Room Addition)	1,550.00	0	69	1,709.45
Domestic (Italian)	1,556.30	0	66	1,709.45
Domestic (Roasterie)	1,560.25	0	65	1,709.45
EX FH-1	1,547.30	0	70	1,709.45
EX FH-2 (TEST 1)	1,543.00	0	72	1,709.45
EX FH-3 (FLOW 1)	1,549.00	0	69	1,709.45
EX FH-4	1,557.29	0	66	1,709.45
EX FH-5	1,558.03	0	66	1,709.45
EX FH-6 (TEST 2)	1,559.33	0	65	1,709.45
EX FH-7 (FLOW 2)	1,556.86	0	66	1,709.45
EX FH-8	1,556.95	0	66	1,709.45
EX FH-9	1,554.65	0	67	1,709.45
EX FH-11	1,557.90	0	66	1,709.45
EX FH-12	1,552.10	0	68	1,709.45
EX J-10	1,552.00	0	68	1,709.45
EX J-20	1,553.00	0	68	1,709.45
EX J-30	1,553.00	0	68	1,709.45
EX J-34	1,553.36	0	68	1,709.45
EX J-40	1,552.55	0	68	1,709.45
EX J-50	1,552.03	0	68	1,709.45
EX J-54	1,555.20	0	67	1,709.45
EX J-70	1,542.85	0	72	1,709.45
EX J-80	1,542.85	0	72	1,709.45
EX J-90	1,547.00	0	70	1,709.45
EX J-100	1,550.00	0	69	1,709.45
EX J-110	1,556.50	0	66	1,709.45
EX J-120	1,556.34	0	66	1,709.45
EX J-130	1,558.03	0	66	1,709.45
EX J-140	1,560.63	0	64	1,709.45
EX J-141	1,563.47	0	63	1,709.45
EX J-150	1,557.41	0	66	1,709.45
EX J-160	1,554.89	0	67	1,709.45
EX J-170	1,558.93	0	65	1,709.45
EX J-190	1,556.35	0	66	1,709.45
EX J-194	1,556.60	0	66	1,709.45
EX J-200	1,555.17	0	67	1,709.45
FH-1	1,552.65	0	68	1,709.45
FH-2	1,553.15	0	68	1,709.45
FH-7	1,557.87	0	66	1,709.45
FH-8	1,552.10	0	68	1,709.45
Fire (Garage)	1,554.70	0	67	1,709.45
Fire (Guest Room Addition)	1,550.00	0	69	1,709.45
Fire (Italian)	1,556.30	0	66	1,709.45
Fire (Roasterie)	1,559.64	0	65	1,709.45
J-20	1,552.46	0	68	1,709.45

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Static Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-70	1,553.30	0	68	1,709.45

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Calibration Residual Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
283	PMP-1	1,543.20	1,543.25	1,658.75	2,785	115.50

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Residual Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	32	1,628.23
Domestic (Guest Room Addition)	1,550.00	0	35	1,631.04
Domestic (Italian)	1,556.30	0	31	1,627.73
Domestic (Roasterie)	1,560.25	0	33	1,636.96
EX FH-1	1,547.30	0	37	1,631.95
EX FH-2 (TEST 1)	1,543.00	0	50	1,658.75
EX FH-3 (FLOW 1)	1,549.00	2,785	34	1,627.57
EX FH-4	1,557.29	0	30	1,627.77
EX FH-5	1,558.03	0	30	1,627.79
EX FH-6 (TEST 2)	1,559.33	0	30	1,627.89
EX FH-7 (FLOW 2)	1,556.86	0	31	1,628.00
EX FH-8	1,556.95	0	31	1,628.18
EX FH-9	1,554.65	0	32	1,628.40
EX FH-11	1,557.90	0	30	1,627.92
EX FH-12	1,552.10	0	33	1,629.08
EX J-10	1,552.00	0	33	1,627.68
EX J-20	1,553.00	0	32	1,627.91
EX J-30	1,553.00	0	32	1,628.04
EX J-34	1,553.36	0	32	1,628.22
EX J-40	1,552.55	0	33	1,628.62
EX J-50	1,552.03	0	33	1,629.08
EX J-54	1,555.20	0	34	1,634.49
EX J-70	1,542.85	0	47	1,651.56
EX J-80	1,542.85	0	41	1,636.54
EX J-90	1,547.00	0	37	1,632.93
EX J-100	1,550.00	0	34	1,627.69
EX J-110	1,556.50	0	31	1,627.71
EX J-120	1,556.34	0	31	1,627.75
EX J-130	1,558.03	0	30	1,627.80
EX J-140	1,560.63	0	29	1,627.87
EX J-141	1,563.47	0	28	1,627.87
EX J-150	1,557.41	0	31	1,627.92
EX J-160	1,554.89	0	32	1,627.92
EX J-170	1,558.93	0	30	1,627.90
EX J-190	1,556.35	0	31	1,628.08
EX J-194	1,556.60	0	31	1,628.04
EX J-200	1,555.17	0	32	1,628.50
FH-1	1,552.65	0	33	1,628.91
FH-2	1,553.15	0	33	1,628.33
FH-7	1,557.87	0	37	1,643.74
FH-8	1,552.10	0	33	1,629.08
Fire (Garage)	1,554.70	0	32	1,627.92
Fire (Guest Room Addition)	1,550.00	0	35	1,630.98
Fire (Italian)	1,556.30	0	31	1,627.73
Fire (Roasterie)	1,559.64	0	33	1,636.66
J-20	1,552.46	0	33	1,628.96

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Residual Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-70	1,553.30	0	32	1,628.25

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Calibration Flow@20 Model 1

ID	Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
283	PMP-1	1,543.20	1,543.25	1,589.50	4,431	46.25

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Flow@20 Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	-16	1,517.38
Domestic (Guest Room Addition)	1,550.00	0	-11	1,524.03
Domestic (Italian)	1,556.30	0	-17	1,516.19
Domestic (Roasterie)	1,560.25	0	-10	1,538.00
EX FH-1	1,547.30	0	-9	1,526.16
EX FH-2 (TEST 1)	1,543.00	0	20	1,589.50
EX FH-3 (FLOW 1)	1,549.00	4,431	-14	1,515.82
EX FH-4	1,557.29	0	-18	1,516.29
EX FH-5	1,558.03	0	-18	1,516.34
EX FH-6 (TEST 2)	1,559.33	0	-18	1,516.58
EX FH-7 (FLOW 2)	1,556.86	0	-17	1,516.82
EX FH-8	1,556.95	0	-17	1,517.25
EX FH-9	1,554.65	0	-16	1,517.77
EX FH-11	1,557.90	0	-18	1,516.65
EX FH-12	1,552.10	0	-14	1,519.38
EX J-10	1,552.00	0	-16	1,516.09
EX J-20	1,553.00	0	-16	1,516.63
EX J-30	1,553.00	0	-16	1,516.92
EX J-34	1,553.36	0	-16	1,517.35
EX J-40	1,552.55	0	-15	1,518.30
EX J-50	1,552.03	0	-14	1,519.38
EX J-54	1,555.20	0	-10	1,532.16
EX J-70	1,542.85	0	13	1,572.52
EX J-80	1,542.85	0	-3	1,537.01
EX J-90	1,547.00	0	-8	1,528.47
EX J-100	1,550.00	0	-15	1,516.09
EX J-110	1,556.50	0	-17	1,516.15
EX J-120	1,556.34	0	-17	1,516.23
EX J-130	1,558.03	0	-18	1,516.35
EX J-140	1,560.63	0	-19	1,516.52
EX J-141	1,563.47	0	-20	1,516.52
EX J-150	1,557.41	0	-18	1,516.65
EX J-160	1,554.89	0	-17	1,516.65
EX J-170	1,558.93	0	-18	1,516.60
EX J-190	1,556.35	0	-17	1,517.01
EX J-194	1,556.60	0	-17	1,516.92
EX J-200	1,555.17	0	-16	1,518.02
FH-1	1,552.65	0	-15	1,518.98
FH-2	1,553.15	0	-15	1,517.60
FH-7	1,557.87	0	-2	1,554.02
FH-8	1,552.10	0	-14	1,519.38
Fire (Garage)	1,554.70	0	-16	1,516.65
Fire (Guest Room Addition)	1,550.00	0	-11	1,523.87
Fire (Italian)	1,556.30	0	-17	1,516.20
Fire (Roasterie)	1,559.64	0	-10	1,537.29
J-20	1,552.46	0	-14	1,519.10

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Calibration Flow@20 Model 1

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-70	1,553.30	0	-16	1,517.42

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Average Daily Demand - Conference Center

Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	1,543.20	1,543.25	1,708.72	282	165.47

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Average Daily Demand - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	111	67	1,708.28
Domestic (Guest Room Addition)	1,550.00	96	69	1,708.35
Domestic (Italian)	1,556.30	30	66	1,708.32
Domestic (Roasterie)	1,560.25	19	64	1,708.33
EX FH-1	1,547.30	0	70	1,708.36
EX FH-2 (TEST 1)	1,543.00	0	72	1,708.72
EX FH-3 (FLOW 1)	1,549.00	0	69	1,708.33
EX FH-4	1,557.29	0	65	1,708.32
EX FH-5	1,558.03	0	65	1,708.32
EX FH-6 (TEST 2)	1,559.33	0	64	1,708.32
EX FH-7 (FLOW 2)	1,556.86	0	66	1,708.32
EX FH-10	1,563.50	0	63	1,708.32
EX FH-11	1,557.90	0	65	1,708.32
EX FH-12	1,552.10	0	68	1,708.28
EX J-10	1,552.00	0	68	1,708.32
EX J-20	1,553.00	0	67	1,708.30
EX J-30	1,553.00	0	67	1,708.29
EX J-34	1,553.36	0	67	1,708.28
EX J-40	1,552.55	0	67	1,708.28
EX J-50	1,552.03	0	68	1,708.28
EX J-54	1,555.20	0	66	1,708.31
EX J-70	1,542.85	0	72	1,708.62
EX J-80	1,542.85	0	72	1,708.42
EX J-90	1,547.00	0	70	1,708.37
EX J-100	1,550.00	0	69	1,708.33
EX J-110	1,556.50	0	66	1,708.32
EX J-120	1,556.34	0	66	1,708.32
EX J-130	1,558.03	0	65	1,708.32
EX J-140	1,560.63	0	64	1,708.32
EX J-141	1,563.47	0	63	1,708.32
EX J-150	1,557.41	0	65	1,708.32
EX J-160	1,554.89	0	66	1,708.32
EX J-170	1,558.93	0	65	1,708.32
EX J-190	1,556.35	0	66	1,708.32
EX J-194	1,556.60	0	66	1,708.32
FH-1	1,552.65	0	67	1,708.28
FH-2	1,553.15	0	67	1,708.28
FH-3	1,556.46	0	66	1,708.32
FH-4	1,556.42	0	66	1,708.32
FH-5	1,556.39	0	66	1,708.32
FH-6	1,556.95	0	65	1,708.32
FH-7	1,557.87	0	65	1,708.45
FH-8	1,552.10	0	68	1,708.28
Fire (Conf. Center)	1,556.46	0	66	1,708.32
Fire (Garage)	1,554.70	0	66	1,708.32
Fire (Guest Room Addition)	1,550.00	0	69	1,708.35

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Average Daily Demand - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	66	1,708.32
Fire (Roasterie)	1,559.64	0	64	1,708.33
Fire (Villas and Bungalows)	1,553.13	0	67	1,708.31
J-10	1,550.14	0	68	1,708.30
J-20	1,552.46	0	67	1,708.28
J-66	1,556.22	0	66	1,708.32
J-70	1,553.30	0	67	1,708.28
J-78	1,561.26	0	68	1,717.52
J-82	1,561.26	0	64	1,708.32
J-BUNGALOW 1	1,552.30	1	62	1,695.78
J-BUNGALOW 2&3	1,554.15	2	61	1,695.78
J-VILLA 1&2	1,553.50	5	62	1,695.84
J-VILLA 3&4	1,553.15	12	62	1,695.78
J-VILLA 5	1,553.20	2	62	1,695.82
J-VILLA 6	1,553.50	4	62	1,695.79

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Average Daily Demand - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-15	EX J-20	EX J-10	80	8.0	130.0	-93	0.59
EX P-25	EX J-30	EX J-20	43	8.0	130.0	-93	0.59
EX P-33	EX J-34	EX J-30	63	8.0	130.0	-93	0.59
EX P-35(1)	J-70	Domestic (Conference Center)	5	8.0	130.0	-27	0.17
EX P-35(2)	Domestic (Conference Center)	EX J-34	5	8.0	130.0	-137	0.88
EX P-37	FH-2	J-70	27	8.0	130.0	0	0.00
EX P-39	EX J-40	FH-2	103	8.0	130.0	0	0.00
EX P-45	FH-1	EX J-40	46	8.0	130.0	0	0.00
EX P-47(1)	EX J-50	J-20	19	8.0	130.0	0	0.00
EX P-47(2)	J-20	FH-1	9	8.0	130.0	0	0.00
EX P-53	Fire (Roasterie)	EX J-54	85	6.0	130.0	44	0.50
EX P-55	Domestic (Roasterie)	Fire (Roasterie)	12	6.0	130.0	44	0.50
EX P-57(1)	EX FH-2 (TEST 1)	FH-7	603	6.0	130.0	63	0.72
EX P-57(2)	FH-7	Domestic (Roasterie)	272	6.0	130.0	63	0.72
EX P-58	EX J-50	EX FH-12	89	8.0	130.0	0	0.00
EX P-59	EX FH-12	FH-8	37	8.0	130.0	0	0.00
EX P-65	EX J-70	EX FH-2 (TEST 1)	22	6.0	130.0	-219	2.49
EX P-75	EX J-80	EX J-70	46	6.0	130.0	-219	2.49
EX P-85	EX J-90	EX J-80	323	12.0	130.0	-219	0.62
EX P-93	EX FH-1	EX J-90	87	12.0	130.0	-219	0.62
EX P-95	Domestic (Guest Room Addition)	EX FH-1	81	12.0	130.0	-219	0.62
EX P-97	Fire (Guest Room Addition)	Domestic (Guest Room Addition)	6	12.0	130.0	-123	0.35
EX P-99	EX J-100	Fire (Guest Room Addition)	294	12.0	130.0	-123	0.35
EX P-105	EX FH-3 (FLOW 1)	EX J-100	10	12.0	130.0	-123	0.35
EX P-107	EX J-10	EX FH-3 (FLOW 1)	133	12.0	130.0	-123	0.35
EX P-109	EX J-110	EX J-10	231	12.0	130.0	-30	0.08
EX P-113	Domestic (Italian)	EX J-110	171	12.0	130.0	-27	0.08
EX P-115	Fire (Italian)	Domestic (Italian)	13	12.0	130.0	3	0.01
EX P-117	EX J-120	Fire (Italian)	130	12.0	130.0	3	0.01
EX P-125	EX FH-4	EX J-120	245	12.0	130.0	3	0.01

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Average Daily Demand - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-127	EX FH-5	EX FH-4	190	12.0	130.0	3	0.01
EX P-129	EX J-130	EX FH-5	9	12.0	130.0	3	0.01
EX P-135	EX J-140	EX J-130	649	12.0	130.0	3	0.01
EX P-145	EX J-141	EX J-140	403	12.0	130.0	0	0.00
EX P-147	EX FH-10	EX J-141	91	6.0	130.0	0	0.00
EX P-147(1)	EX J-150	EX FH-10	802	6.0	130.0	0	0.00
EX P-155	Fire (Garage)	EX J-150	268	12.0	130.0	0	0.00
EX P-157	EX J-160	Fire (Garage)	189	12.0	130.0	0	0.00
EX P-165	EX J-160	EX J-170	191	12.0	130.0	3	0.01
EX P-175	EX J-170	EX FH-6 (TEST 2)	67	12.0	130.0	3	0.01
EX P-177	EX FH-6 (TEST 2)	EX J-140	221	12.0	130.0	3	0.01
EX P-191	EX J-160	EX FH-7 (FLOW 2)	93	8.0	130.0	-3	0.02
EX P-193	EX FH-7 (FLOW 2)	EX J-194	50	8.0	130.0	-3	0.02
P-5	J-10	EX J-34	336	8.0	130.0	44	0.28
P-15	Fire (Villas and Bungalows)	J-10	107	8.0	130.0	44	0.28
P-17	EX J-54	Fire (Villas and Bungalows)	71	8.0	130.0	44	0.28
P-21	EX J-194	J-66	44	8.0	130.0	-3	0.02
P-23	J-66	EX J-190	16	8.0	130.0	-3	0.02
P-25	FH-5	EX J-190	267	8.0	130.0	3	0.02
P-27	FH-4	FH-5	243	8.0	130.0	3	0.02
P-29	Fire (Conf. Center)	FH-4	222	8.0	130.0	3	0.02
P-31	FH-3	Fire (Conf. Center)	51	8.0	130.0	3	0.02
P-50	FH-3	EX J-110	302	8.0	130.0	-3	0.02
P-55	FH-6	J-66	125	8.0	130.0	0	0.00
P-58	R-1	PMP-1	1	48.0	130.0	282	0.05
P-59	PMP-1	EX FH-2 (TEST 1)	1	48.0	130.0	282	0.05
P-60	J-70	GPV-1	14	4.0	130.0	27	0.68
P-61	GPV-1	J-VILLA 1&2	182	4.0	130.0	27	0.68
P-62	J-VILLA 1&2	J-VILLA 5	53	4.0	130.0	22	0.55
P-63	J-VILLA 5	J-VILLA 6	69	4.0	130.0	20	0.50

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Average Daily Demand - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-64	J-VILLA 6	J-VILLA 3&4	27	4.0	130.0	16	0.41
P-65	J-VILLA 3&4	J-BUNGALOW 2&3	78	4.0	130.0	4	0.09
P-66	J-BUNGALOW 2&3	J-BUNGALOW 1	71	2.5	130.0	1	0.08
P-68	Domestic (Conference Center)	GPV-2	8	4.0	130.0	0	0.00
P-69	GPV-2	J-78	244	4.0	130.0	0	0.00
P-76	Fire (Conf. Center)	J-82	212	6.0	130.0	0	0.00
P-EX FH-11	EX J-150	EX FH-11	23	12.0	130.0	0	0.00

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Max Day - Conference Center

Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	1,543.20	1,543.25	1,706.82	565	163.57

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Max Day - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	221	66	1,705.22
Domestic (Guest Room Addition)	1,550.00	192	67	1,705.46
Domestic (Italian)	1,556.30	60	64	1,705.37
Domestic (Roasterie)	1,560.25	38	63	1,705.41
EX FH-1	1,547.30	0	68	1,705.51
EX FH-2 (TEST 1)	1,543.00	0	71	1,706.82
EX FH-3 (FLOW 1)	1,549.00	0	68	1,705.40
EX FH-4	1,557.29	0	64	1,705.37
EX FH-5	1,558.03	0	64	1,705.37
EX FH-6 (TEST 2)	1,559.33	0	63	1,705.37
EX FH-7 (FLOW 2)	1,556.86	0	64	1,705.37
EX FH-10	1,563.50	0	61	1,705.37
EX FH-11	1,557.90	0	64	1,705.37
EX FH-12	1,552.10	0	66	1,705.22
EX J-10	1,552.00	0	66	1,705.38
EX J-20	1,553.00	0	66	1,705.31
EX J-30	1,553.00	0	66	1,705.28
EX J-34	1,553.36	0	66	1,705.23
EX J-40	1,552.55	0	66	1,705.22
EX J-50	1,552.03	0	66	1,705.22
EX J-54	1,555.20	0	65	1,705.33
EX J-70	1,542.85	0	71	1,706.47
EX J-80	1,542.85	0	70	1,705.73
EX J-90	1,547.00	0	69	1,705.55
EX J-100	1,550.00	0	67	1,705.41
EX J-110	1,556.50	0	64	1,705.38
EX J-120	1,556.34	0	64	1,705.37
EX J-130	1,558.03	0	64	1,705.37
EX J-140	1,560.63	0	63	1,705.37
EX J-141	1,563.47	0	61	1,705.37
EX J-150	1,557.41	0	64	1,705.37
EX J-160	1,554.89	0	65	1,705.37
EX J-170	1,558.93	0	63	1,705.37
EX J-190	1,556.35	0	64	1,705.37
EX J-194	1,556.60	0	64	1,705.37
FH-1	1,552.65	0	66	1,705.22
FH-2	1,553.15	0	66	1,705.22
FH-3	1,556.46	0	64	1,705.38
FH-4	1,556.42	0	64	1,705.37
FH-5	1,556.39	0	64	1,705.37
FH-6	1,556.95	0	64	1,705.37
FH-7	1,557.87	0	64	1,705.85
FH-8	1,552.10	0	66	1,705.22
Fire (Conf. Center)	1,556.46	0	64	1,705.38
Fire (Garage)	1,554.70	0	65	1,705.37
Fire (Guest Room Addition)	1,550.00	0	67	1,705.46

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Max Day - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	64	1,705.37
Fire (Roasterie)	1,559.64	0	63	1,705.40
Fire (Villas and Bungalows)	1,553.13	0	66	1,705.32
J-10	1,550.14	0	67	1,705.30
J-20	1,552.46	0	66	1,705.22
J-66	1,556.22	0	65	1,705.37
J-70	1,553.30	0	66	1,705.22
J-78	1,561.26	0	58	1,695.98
J-82	1,561.26	0	62	1,705.38
J-BUNGALOW 1	1,552.30	2	59	1,689.24
J-BUNGALOW 2&3	1,554.15	5	58	1,689.25
J-VILLA 1&2	1,553.50	10	59	1,689.45
J-VILLA 3&4	1,553.15	25	59	1,689.25
J-VILLA 5	1,553.20	4	59	1,689.37
J-VILLA 6	1,553.50	7	59	1,689.27

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Max Day - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-15	EX J-20	EX J-10	80	8.0	130.0	-186	1.19
EX P-25	EX J-30	EX J-20	43	8.0	130.0	-186	1.19
EX P-33	EX J-34	EX J-30	63	8.0	130.0	-186	1.19
EX P-35(1)	J-70	Domestic (Conference Center)	5	8.0	130.0	-53	0.34
EX P-35(2)	Domestic (Conference Center)	EX J-34	5	8.0	130.0	-275	1.75
EX P-37	FH-2	J-70	27	8.0	130.0	0	0.00
EX P-39	EX J-40	FH-2	103	8.0	130.0	0	0.00
EX P-45	FH-1	EX J-40	46	8.0	130.0	0	0.00
EX P-47(1)	EX J-50	J-20	19	8.0	130.0	0	0.00
EX P-47(2)	J-20	FH-1	9	8.0	130.0	0	0.00
EX P-53	Fire (Roasterie)	EX J-54	85	6.0	130.0	88	1.00
EX P-55	Domestic (Roasterie)	Fire (Roasterie)	12	6.0	130.0	88	1.00
EX P-57(1)	EX FH-2 (TEST 1)	FH-7	603	6.0	130.0	126	1.43
EX P-57(2)	FH-7	Domestic (Roasterie)	272	6.0	130.0	126	1.43
EX P-58	EX J-50	EX FH-12	89	8.0	130.0	0	0.00
EX P-59	EX FH-12	FH-8	37	8.0	130.0	0	0.00
EX P-65	EX J-70	EX FH-2 (TEST 1)	22	6.0	130.0	-438	4.97
EX P-75	EX J-80	EX J-70	46	6.0	130.0	-438	4.97
EX P-85	EX J-90	EX J-80	323	12.0	130.0	-438	1.24
EX P-93	EX FH-1	EX J-90	87	12.0	130.0	-438	1.24
EX P-95	Domestic (Guest Room Addition)	EX FH-1	81	12.0	130.0	-438	1.24
EX P-97	Fire (Guest Room Addition)	Domestic (Guest Room Addition)	6	12.0	130.0	-246	0.70
EX P-99	EX J-100	Fire (Guest Room Addition)	294	12.0	130.0	-246	0.70
EX P-105	EX FH-3 (FLOW 1)	EX J-100	10	12.0	130.0	-246	0.70
EX P-107	EX J-10	EX FH-3 (FLOW 1)	133	12.0	130.0	-246	0.70
EX P-109	EX J-110	EX J-10	231	12.0	130.0	-60	0.17
EX P-113	Domestic (Italian)	EX J-110	171	12.0	130.0	-54	0.15
EX P-115	Fire (Italian)	Domestic (Italian)	13	12.0	130.0	6	0.02
EX P-117	EX J-120	Fire (Italian)	130	12.0	130.0	6	0.02
EX P-125	EX FH-4	EX J-120	245	12.0	130.0	6	0.02

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Max Day - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-127	EX FH-5	EX FH-4	190	12.0	130.0	6	0.02
EX P-129	EX J-130	EX FH-5	9	12.0	130.0	6	0.02
EX P-135	EX J-140	EX J-130	649	12.0	130.0	6	0.02
EX P-145	EX J-141	EX J-140	403	12.0	130.0	1	0.00
EX P-147	EX FH-10	EX J-141	91	6.0	130.0	1	0.01
EX P-147(1)	EX J-150	EX FH-10	802	6.0	130.0	1	0.01
EX P-155	Fire (Garage)	EX J-150	268	12.0	130.0	1	0.00
EX P-157	EX J-160	Fire (Garage)	189	12.0	130.0	1	0.00
EX P-165	EX J-160	EX J-170	191	12.0	130.0	5	0.01
EX P-175	EX J-170	EX FH-6 (TEST 2)	67	12.0	130.0	5	0.01
EX P-177	EX FH-6 (TEST 2)	EX J-140	221	12.0	130.0	5	0.01
EX P-191	EX J-160	EX FH-7 (FLOW 2)	93	8.0	130.0	-6	0.04
EX P-193	EX FH-7 (FLOW 2)	EX J-194	50	8.0	130.0	-6	0.04
P-5	J-10	EX J-34	336	8.0	130.0	88	0.56
P-15	Fire (Villas and Bungalows)	J-10	107	8.0	130.0	88	0.56
P-17	EX J-54	Fire (Villas and Bungalows)	71	8.0	130.0	88	0.56
P-21	EX J-194	J-66	44	8.0	130.0	-6	0.04
P-23	J-66	EX J-190	16	8.0	130.0	-6	0.04
P-25	FH-5	EX J-190	267	8.0	130.0	6	0.04
P-27	FH-4	FH-5	243	8.0	130.0	6	0.04
P-29	Fire (Conf. Center)	FH-4	222	8.0	130.0	6	0.04
P-31	FH-3	Fire (Conf. Center)	51	8.0	130.0	6	0.04
P-50	FH-3	EX J-110	302	8.0	130.0	-6	0.04
P-55	FH-6	J-66	125	8.0	130.0	0	0.00
P-58	R-1	PMP-1	1	48.0	130.0	565	0.10
P-59	PMP-1	EX FH-2 (TEST 1)	1	48.0	130.0	565	0.10
P-60	J-70	GPV-1	14	4.0	130.0	53	1.36
P-61	GPV-1	J-VILLA 1&2	182	4.0	130.0	53	1.36
P-62	J-VILLA 1&2	J-VILLA 5	53	4.0	130.0	43	1.10
P-63	J-VILLA 5	J-VILLA 6	69	4.0	130.0	39	1.01

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Max Day - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-64	J-VILLA 6	J-VILLA 3&4	27	4.0	130.0	32	0.82
P-65	J-VILLA 3&4	J-BUNGALOW 2&3	78	4.0	130.0	7	0.18
P-66	J-BUNGALOW 2&3	J-BUNGALOW 1	71	2.5	130.0	2	0.16
P-68	Domestic (Conference Center)	GPV-2	8	4.0	130.0	0	0.00
P-69	GPV-2	J-78	244	4.0	130.0	0	0.00
P-76	Fire (Conf. Center)	J-82	212	6.0	130.0	0	0.00
P-EX FH-11	EX J-150	EX FH-11	23	12.0	130.0	0	0.00

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pump Table

Active Scenario: Peak Hour Demand - Conference Center

Label	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	1,543.20	1,543.25	1,700.02	1,124	156.77

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Peak Hour Demand - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	402	61	1,694.33
Domestic (Guest Room Addition)	1,550.00	336	63	1,695.19
Domestic (Italian)	1,556.30	179	60	1,694.81
Domestic (Roasterie)	1,560.25	114	58	1,694.80
EX FH-1	1,547.30	0	64	1,695.35
EX FH-2 (TEST 1)	1,543.00	0	68	1,700.02
EX FH-3 (FLOW 1)	1,549.00	0	63	1,694.95
EX FH-4	1,557.29	0	59	1,694.81
EX FH-5	1,558.03	0	59	1,694.81
EX FH-6 (TEST 2)	1,559.33	0	59	1,694.81
EX FH-7 (FLOW 2)	1,556.86	0	60	1,694.81
EX FH-10	1,563.50	0	57	1,694.81
EX FH-11	1,557.90	0	59	1,694.81
EX FH-12	1,552.10	0	62	1,694.33
EX J-10	1,552.00	0	62	1,694.84
EX J-20	1,553.00	0	61	1,694.63
EX J-30	1,553.00	0	61	1,694.52
EX J-34	1,553.36	0	61	1,694.35
EX J-40	1,552.55	0	61	1,694.33
EX J-50	1,552.03	0	62	1,694.33
EX J-54	1,555.20	0	60	1,694.61
EX J-70	1,542.85	0	67	1,698.77
EX J-80	1,542.85	0	66	1,696.15
EX J-90	1,547.00	0	64	1,695.52
EX J-100	1,550.00	0	63	1,694.96
EX J-110	1,556.50	0	60	1,694.82
EX J-120	1,556.34	0	60	1,694.81
EX J-130	1,558.03	0	59	1,694.81
EX J-140	1,560.63	0	58	1,694.81
EX J-141	1,563.47	0	57	1,694.81
EX J-150	1,557.41	0	59	1,694.81
EX J-160	1,554.89	0	61	1,694.81
EX J-170	1,558.93	0	59	1,694.81
EX J-190	1,556.35	0	60	1,694.81
EX J-194	1,556.60	0	60	1,694.81
FH-1	1,552.65	0	61	1,694.33
FH-2	1,553.15	0	61	1,694.33
FH-3	1,556.46	0	60	1,694.82
FH-4	1,556.42	0	60	1,694.82
FH-5	1,556.39	0	60	1,694.81
FH-6	1,556.95	0	60	1,694.81
FH-7	1,557.87	0	60	1,696.42
FH-8	1,552.10	0	62	1,694.33
Fire (Conf. Center)	1,556.46	0	60	1,694.82
Fire (Garage)	1,554.70	0	61	1,694.81
Fire (Guest Room Addition)	1,550.00	0	63	1,695.19

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Peak Hour Demand - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	60	1,694.81
Fire (Roasterie)	1,559.64	0	58	1,694.78
Fire (Villas and Bungalows)	1,553.13	0	61	1,694.57
J-10	1,550.14	0	62	1,694.52
J-20	1,552.46	0	61	1,694.33
J-66	1,556.22	0	60	1,694.81
J-70	1,553.30	0	61	1,694.33
J-78	1,561.26	0	62	1,703.57
J-82	1,561.26	0	58	1,694.82
J-BUNGALOW 1	1,552.30	4	54	1,675.96
J-BUNGALOW 2&3	1,554.15	8	53	1,675.97
J-VILLA 1&2	1,553.50	18	53	1,676.55
J-VILLA 3&4	1,553.15	43	53	1,675.99
J-VILLA 5	1,553.20	7	53	1,676.31
J-VILLA 6	1,553.50	13	53	1,676.05

This table is missing for
scenario 3, max day + fire
flow

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Peak Hour Demand - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-15	EX J-20	EX J-10	80	8.0	130.0	-353	2.25
EX P-25	EX J-30	EX J-20	43	8.0	130.0	-353	2.25
EX P-33	EX J-34	EX J-30	63	8.0	130.0	-353	2.25
EX P-35(1)	J-70	Domestic (Conference Center)	5	8.0	130.0	-93	0.60
EX P-35(2)	Domestic (Conference Center)	EX J-34	5	8.0	130.0	-495	3.16
EX P-37	FH-2	J-70	27	8.0	130.0	0	0.00
EX P-39	EX J-40	FH-2	103	8.0	130.0	0	0.00
EX P-45	FH-1	EX J-40	46	8.0	130.0	0	0.00
EX P-47(1)	EX J-50	J-20	19	8.0	130.0	0	0.00
EX P-47(2)	J-20	FH-1	9	8.0	130.0	0	0.00
EX P-53	Fire (Roasterie)	EX J-54	85	6.0	130.0	142	1.62
EX P-55	Domestic (Roasterie)	Fire (Roasterie)	12	6.0	130.0	142	1.62
EX P-57(1)	EX FH-2 (TEST 1)	FH-7	603	6.0	130.0	256	2.91
EX P-57(2)	FH-7	Domestic (Roasterie)	272	6.0	130.0	256	2.91
EX P-58	EX J-50	EX FH-12	89	8.0	130.0	0	0.00
EX P-59	EX FH-12	FH-8	37	8.0	130.0	0	0.00
EX P-65	EX J-70	EX FH-2 (TEST 1)	22	6.0	130.0	-868	9.85
EX P-75	EX J-80	EX J-70	46	6.0	130.0	-868	9.85
EX P-85	EX J-90	EX J-80	323	12.0	130.0	-868	2.46
EX P-93	EX FH-1	EX J-90	87	12.0	130.0	-868	2.46
EX P-95	Domestic (Guest Room Addition)	EX FH-1	81	12.0	130.0	-868	2.46
EX P-97	Fire (Guest Room Addition)	Domestic (Guest Room Addition)	6	12.0	130.0	-532	1.51
EX P-99	EX J-100	Fire (Guest Room Addition)	294	12.0	130.0	-532	1.51
EX P-105	EX FH-3 (FLOW 1)	EX J-100	10	12.0	130.0	-532	1.51
EX P-107	EX J-10	EX FH-3 (FLOW 1)	133	12.0	130.0	-532	1.51
EX P-109	EX J-110	EX J-10	231	12.0	130.0	-179	0.51
EX P-113	Domestic (Italian)	EX J-110	171	12.0	130.0	-162	0.46
EX P-115	Fire (Italian)	Domestic (Italian)	13	12.0	130.0	17	0.05
EX P-117	EX J-120	Fire (Italian)	130	12.0	130.0	17	0.05
EX P-125	EX FH-4	EX J-120	245	12.0	130.0	17	0.05

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Peak Hour Demand - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
EX P-127	EX FH-5	EX FH-4	190	12.0	130.0	17	0.05
EX P-129	EX J-130	EX FH-5	9	12.0	130.0	17	0.05
EX P-135	EX J-140	EX J-130	649	12.0	130.0	17	0.05
EX P-145	EX J-141	EX J-140	403	12.0	130.0	2	0.01
EX P-147	EX FH-10	EX J-141	91	6.0	130.0	2	0.02
EX P-147(1)	EX J-150	EX FH-10	802	6.0	130.0	2	0.02
EX P-155	Fire (Garage)	EX J-150	268	12.0	130.0	2	0.01
EX P-157	EX J-160	Fire (Garage)	189	12.0	130.0	2	0.01
EX P-165	EX J-160	EX J-170	191	12.0	130.0	15	0.04
EX P-175	EX J-170	EX FH-6 (TEST 2)	67	12.0	130.0	15	0.04
EX P-177	EX FH-6 (TEST 2)	EX J-140	221	12.0	130.0	15	0.04
EX P-191	EX J-160	EX FH-7 (FLOW 2)	93	8.0	130.0	-17	0.11
EX P-193	EX FH-7 (FLOW 2)	EX J-194	50	8.0	130.0	-17	0.11
P-5	J-10	EX J-34	336	8.0	130.0	142	0.91
P-15	Fire (Villas and Bungalows)	J-10	107	8.0	130.0	142	0.91
P-17	EX J-54	Fire (Villas and Bungalows)	71	8.0	130.0	142	0.91
P-21	EX J-194	J-66	44	8.0	130.0	-17	0.11
P-23	J-66	EX J-190	16	8.0	130.0	-17	0.11
P-25	FH-5	EX J-190	267	8.0	130.0	17	0.11
P-27	FH-4	FH-5	243	8.0	130.0	17	0.11
P-29	Fire (Conf. Center)	FH-4	222	8.0	130.0	17	0.11
P-31	FH-3	Fire (Conf. Center)	51	8.0	130.0	17	0.11
P-50	FH-3	EX J-110	302	8.0	130.0	-17	0.11
P-55	FH-6	J-66	125	8.0	130.0	0	0.00
P-58	R-1	PMP-1	1	48.0	130.0	1,124	0.20
P-59	PMP-1	EX FH-2 (TEST 1)	1	48.0	130.0	1,124	0.20
P-60	J-70	GPV-1	14	4.0	130.0	93	2.38
P-61	GPV-1	J-VILLA 1&2	182	4.0	130.0	93	2.38
P-62	J-VILLA 1&2	J-VILLA 5	53	4.0	130.0	76	1.93
P-63	J-VILLA 5	J-VILLA 6	69	4.0	130.0	69	1.76

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Pipe Table

Active Scenario: Peak Hour Demand - Conference Center

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P-64	J-VILLA 6	J-VILLA 3&4	27	4.0	130.0	56	1.43
P-65	J-VILLA 3&4	J-BUNGALOW 2&3	78	4.0	130.0	13	0.32
P-66	J-BUNGALOW 2&3	J-BUNGALOW 1	71	2.5	130.0	4	0.27
P-68	Domestic (Conference Center)	GPV-2	8	4.0	130.0	0	0.00
P-69	GPV-2	J-78	244	4.0	130.0	0	0.00
P-76	Fire (Conf. Center)	J-82	212	6.0	130.0	0	0.00
P-EX FH-11	EX J-150	EX FH-11	23	12.0	130.0	0	0.00

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

Fire Flow Node FlexTable: Fire Flow Results Table

Active Scenario: MD+FF Conference Center (Model 1)

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	True	1,846	1,968	40	1,705.22
Domestic (Guest Room Addition)	1,550.00	True	1,817	2,104	42	1,705.46
Domestic (Italian)	1,556.30	True	1,685	1,923	38	1,705.37
Domestic (Roasterie)	1,560.25	True	1,663	1,689	35	1,705.41
EX FH-1	1,547.30	True	1,625	1,924	43	1,705.51
EX FH-2 (TEST 1)	1,543.00	True	1,625	2,466	46	1,706.82
EX FH-3 (FLOW 1)	1,549.00	True	1,625	1,877	42	1,705.40
EX FH-4	1,557.29	True	1,625	1,863	36	1,705.37
EX FH-5	1,558.03	True	1,625	1,863	36	1,705.37
EX FH-6 (TEST 2)	1,559.33	True	1,625	1,863	34	1,705.37
EX FH-7 (FLOW 2)	1,556.86	True	1,625	1,863	34	1,705.37
EX FH-10	1,563.50	True	1,625	1,727	30	1,705.37
EX FH-11	1,557.90	True	1,625	1,863	33	1,705.37
EX FH-12	1,552.10	True	1,625	1,747	34	1,705.22
EX J-10	1,552.00	True	1,625	1,863	41	1,705.38
EX J-20	1,553.00	True	1,625	1,809	40	1,705.31
EX J-30	1,553.00	True	1,625	1,783	40	1,705.28
EX J-34	1,553.36	True	1,625	1,747	40	1,705.23
EX J-40	1,552.55	True	1,625	1,747	37	1,705.22
EX J-50	1,552.03	True	1,625	1,747	36	1,705.22
EX J-54	1,555.20	False	1,625	1,596	40	1,705.33
EX J-70	1,542.85	True	1,625	2,266	46	1,706.47
EX J-80	1,542.85	True	1,625	1,986	45	1,705.73
EX J-90	1,547.00	True	1,625	1,936	43	1,705.55
EX J-100	1,550.00	True	1,625	1,878	42	1,705.41
EX J-110	1,556.50	True	1,625	1,863	38	1,705.38
EX J-120	1,556.34	True	1,625	1,863	37	1,705.37
EX J-130	1,558.03	True	1,625	1,863	36	1,705.37
EX J-140	1,560.63	True	1,625	1,863	33	1,705.37
EX J-141	1,563.47	True	1,625	1,863	31	1,705.37

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

Fire Flow Node FlexTable: Fire Flow Results Table

Active Scenario: MD+FF Conference Center (Model 1)

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Hydraulic Grade (ft)
EX J-150	1,557.41	True	1,625	1,863	33	1,705.37
EX J-160	1,554.89	True	1,625	1,863	35	1,705.37
EX J-170	1,558.93	True	1,625	1,863	34	1,705.37
EX J-190	1,556.35	True	1,625	1,863	33	1,705.37
EX J-194	1,556.60	True	1,625	1,863	34	1,705.37
FH-1	1,552.65	True	1,625	1,747	36	1,705.22
FH-2	1,553.15	True	1,625	1,747	39	1,705.22
FH-3	1,556.46	True	1,625	1,863	34	1,705.38
FH-4	1,556.42	True	1,625	1,863	33	1,705.37
FH-5	1,556.39	True	1,625	1,863	33	1,705.37
FH-6	1,556.95	True	1,625	1,863	30	1,705.37
FH-7	1,557.87	True	1,625	1,803	31	1,705.85
FH-8	1,552.10	True	1,625	1,747	33	1,705.22
Fire (Conf. Center)	1,556.46	True	1,625	1,863	34	1,705.38
Fire (Garage)	1,554.70	True	1,625	1,863	35	1,705.37
Fire (Guest Room Addition)	1,550.00	True	1,625	1,911	42	1,705.46
Fire (Italian)	1,556.30	True	1,625	1,863	38	1,705.37
Fire (Roasterie)	1,559.64	True	1,625	1,644	35	1,705.40
Fire (Villas and Bungalows)	1,553.13	False	1,625	1,586	41	1,705.32
J-10	1,550.14	False	1,625	1,620	42	1,705.30
J-20	1,552.46	True	1,625	1,747	36	1,705.22
J-66	1,556.22	True	1,625	1,863	34	1,705.37
J-70	1,553.30	True	1,625	1,747	40	1,705.22
J-81	1,579.30	False	1,625	1,286	30	1,705.32
J-BUNGALOW 1	1,552.30	False	1,627	288	30	1,689.24
J-BUNGALOW 2&3	1,554.15	False	1,630	431	30	1,689.25
J-VILLA 1&2	1,553.50	False	1,635	563	30	1,689.45
J-VILLA 3&4	1,553.15	False	1,650	485	30	1,689.25
J-VILLA 5	1,553.20	False	1,629	518	30	1,689.37
J-VILLA 6	1,553.50	False	1,632	481	30	1,689.27

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 3 - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	45	1,657.51
Domestic (Guest Room Addition)	1,550.00	192	48	1,659.87
Domestic (Italian)	1,556.30	60	43	1,655.69
Domestic (Roasterie)	1,560.25	38	44	1,661.01
EX FH-1	1,547.30	0	49	1,660.43
EX FH-2 (TEST 1)	1,543.00	0	58	1,677.00
EX FH-3 (FLOW 1)	1,549.00	0	47	1,658.15
EX FH-4	1,557.29	0	42	1,655.36
EX FH-5	1,558.03	0	42	1,655.20
EX FH-6 (TEST 2)	1,559.33	0	41	1,654.49
EX FH-7 (FLOW 2)	1,556.86	0	42	1,653.74
EX FH-10	1,563.50	0	39	1,654.60
EX FH-11	1,557.90	0	42	1,654.31
EX FH-12	1,552.10	0	46	1,657.51
EX J-10	1,552.00	0	46	1,657.41
EX J-20	1,553.00	0	45	1,657.45
EX J-30	1,553.00	0	45	1,657.48
EX J-34	1,553.36	0	45	1,657.52
EX J-40	1,552.55	0	45	1,657.51
EX J-50	1,552.03	0	46	1,657.51
EX J-54	1,555.20	0	45	1,659.50
EX J-70	1,542.85	0	56	1,672.55
EX J-80	1,542.85	0	52	1,663.27
EX J-90	1,547.00	0	49	1,661.03
EX J-100	1,550.00	0	47	1,658.20
EX J-110	1,556.50	0	43	1,655.87
EX J-120	1,556.34	0	43	1,655.57
EX J-130	1,558.03	0	42	1,655.20
EX J-140	1,560.63	0	41	1,654.64
EX J-141	1,563.47	0	39	1,654.64
EX J-150	1,557.41	0	42	1,654.31
EX J-160	1,554.89	0	43	1,654.31
EX J-170	1,558.93	0	41	1,654.44
EX J-190	1,556.35	0	42	1,653.06
EX J-194	1,556.60	0	42	1,653.43
FH-1	1,552.65	0	45	1,657.51
FH-2	1,553.15	0	45	1,657.51
FH-3	1,556.46	0	40	1,649.62
FH-4	1,556.42	0	40	1,649.93
FH-5	1,556.39	0	41	1,651.43
FH-6	1,556.95	0	42	1,653.16
FH-7	1,557.87	0	47	1,665.98
FH-8	1,552.10	0	46	1,657.51
Fire (Conf. Center)	1,556.46	0	40	1,648.57
Fire (Garage)	1,554.70	0	43	1,654.31
Fire (Guest Room Addition)	1,550.00	0	48	1,659.84

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 3 - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	43	1,655.68
Fire (Roasterie)	1,559.64	0	44	1,660.82
Fire (Villas and Bungalows)	1,553.13	0	46	1,659.22
J-10	1,550.14	0	47	1,658.81
J-20	1,552.46	0	45	1,657.51
J-66	1,556.22	0	42	1,653.16
J-70	1,553.30	0	45	1,657.51
J-78	1,561.26	221	34	1,640.25
J-82	1,561.26	1,625	21	1,609.88
J-BUNGALOW 1	1,552.30	2	39	1,641.53
J-BUNGALOW 2&3	1,554.15	5	38	1,641.53
J-VILLA 1&2	1,553.50	10	38	1,641.74
J-VILLA 3&4	1,553.15	25	38	1,641.54
J-VILLA 5	1,553.20	4	38	1,641.66
J-VILLA 6	1,553.50	7	38	1,641.56

Node J-82 is for scenario 4 only, the fire flow should be applied to worst case hydraulic node excluding service node

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 4 - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Domestic (Conference Center)	1,553.33	0	63	1,698.76
Domestic (Guest Room Addition)	1,550.00	336	65	1,699.16
Domestic (Italian)	1,556.30	179	62	1,698.92
Domestic (Roasterie)	1,560.25	114	60	1,698.99
EX FH-1	1,547.30	0	66	1,699.28
EX FH-2 (TEST 1)	1,543.00	0	69	1,702.66
EX FH-3 (FLOW 1)	1,549.00	0	65	1,699.02
EX FH-4	1,557.29	0	61	1,698.93
EX FH-5	1,558.03	0	61	1,698.93
EX FH-6 (TEST 2)	1,559.33	0	60	1,698.93
EX FH-7 (FLOW 2)	1,556.86	0	61	1,698.93
EX FH-10	1,563.50	0	59	1,698.93
EX FH-11	1,557.90	0	61	1,698.93
EX FH-12	1,552.10	0	63	1,698.76
EX J-10	1,552.00	0	64	1,698.96
EX J-20	1,553.00	0	63	1,698.88
EX J-30	1,553.00	0	63	1,698.83
EX J-34	1,553.36	0	63	1,698.77
EX J-40	1,552.55	0	63	1,698.76
EX J-50	1,552.03	0	63	1,698.76
EX J-54	1,555.20	0	62	1,698.89
EX J-70	1,542.85	0	69	1,701.75
EX J-80	1,542.85	0	68	1,699.86
EX J-90	1,547.00	0	66	1,699.40
EX J-100	1,550.00	0	64	1,699.03
EX J-110	1,556.50	0	62	1,698.94
EX J-120	1,556.34	0	62	1,698.92
EX J-130	1,558.03	0	61	1,698.93
EX J-140	1,560.63	0	60	1,698.93
EX J-141	1,563.47	0	59	1,698.93
EX J-150	1,557.41	0	61	1,698.93
EX J-160	1,554.89	0	62	1,698.93
EX J-170	1,558.93	0	61	1,698.93
EX J-190	1,556.35	0	62	1,698.93
EX J-194	1,556.60	0	62	1,698.93
FH-1	1,552.65	0	63	1,698.76
FH-2	1,553.15	0	63	1,698.76
FH-3	1,556.46	0	62	1,698.94
FH-4	1,556.42	0	62	1,698.93
FH-5	1,556.39	0	62	1,698.93
FH-6	1,556.95	0	61	1,698.93
FH-7	1,557.87	0	62	1,700.13
FH-8	1,552.10	0	63	1,698.76
Fire (Conf. Center)	1,556.46	0	62	1,698.94
Fire (Garage)	1,554.70	0	62	1,698.93
Fire (Guest Room Addition)	1,550.00	0	65	1,699.16

Fairmont Scottsdale Princess Water Master Plan - WaterCAD

FlexTable: Junction Table

Active Scenario: Scenario 4 - Conference Center

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
Fire (Italian)	1,556.30	0	62	1,698.92
Fire (Roasterie)	1,559.64	0	60	1,698.98
Fire (Villas and Bungalows)	1,553.13	0	63	1,698.88
J-10	1,550.14	0	64	1,698.85
J-20	1,552.46	0	63	1,698.76
J-66	1,556.22	0	62	1,698.93
J-70	1,553.30	0	63	1,698.76
J-78	1,561.26	219	52	1,681.66
J-BUNGALOW 1	1,552.30	4	55	1,680.39
J-BUNGALOW 2&3	1,554.15	8	55	1,680.40
J-VILLA 1&2	1,553.50	18	55	1,680.98
J-VILLA 3&4	1,553.15	43	55	1,680.42
J-VILLA 5	1,553.20	7	55	1,680.74
J-VILLA 6	1,553.50	13	55	1,680.48

APPENDIX F – CITY OF SCOTTSDALE DEVELOPMENT WATER DEMAND EXHIBIT

INSTRUCTIONS

INPUT DEVELOPMENT NAME, CASE NUMBER, AND QUANTITY VALUES TO DETERMINE TOTAL AVERAGE DAILY WATER USE PER THE 2018 DESIGN STANDARDS AND POLICY MANUAL (DS7PM) CHAPTER 6 USING GALLONS PER DAY (GPD) VALUES FROM FIGURE 6-1.2

TABLE 1: QUANTITY INPUT TABLE FOR THE DEVELOPMENT**FAIRMONT SCOTTSDALE PRINCESS**

WATER USE DEVELOPMENT TYPE/CATEGORY	AVERAGE UNIT WATER USE PER DS&PM CH. 6 (GPD/UNIT)	INPUT APPLICABLE QUANTITY FOR DEVELOPMENT IN THIS COLUMN	NUMERICAL UNIT	TOTAL AVERAGE WATER USE (GPD)	NOTES
Category: Residential/ Commerical Residential/ Hotel					
< 2 DU/ac	485.6	-	DU	-	Community pool demands not included here. Refer to separate category.
2 – 2.9 DU/ac	470.4	-	DU	-	
3 – 7.9 DU/ac	248.2	-	DU	-	
8 – 11.9 DU/ac	227.6	-	DU	-	
12 – 22 DU/ac	227.6	-	DU	-	
High Density Condominium (condo)	185.3	-	DU	-	
Resort Hotel	446.3	198	ROOM	88,367	Includes site amenities such as 1 "standard" restaurant w/ associated dedicated kitchen, laundry service, landscaping, fountains, and 1 medium capacity pool. Large event venues/kitchens or multiple/large pools and multiple restaurants are not included.
Category: Commerical/ Other					
Restaurant	1.3	29,719	FT2	38,635	
Commercial/Retail	0.80	94,357	FT2	75,486	
Commerical High Rise	0.60	-	FT2	-	per IBC highrise is at or over 75 feet to highest finished floor
Office	0.60	-	FT2	-	
Institutional	1,340	-	ACRE	-	
Industrial	1,027	-	ACRE	-	
Research and Development	1,284	-	ACRE	-	
Category: Special Use Areas					
Natural Area Open Space	-	-	ACRE	-	Zero water demand
Developed Open Space - Parks	1,786	-	ACRE	-	
Developed Open Space- Golf Course	4,285	-	ACRE	-	
Category: Evaporation from Swimming Pools/Spas, Cooling, Turf Area Irrigation, Other Outdoor Consumptive Uses					
Extra large pool (60k to 100k gallons)	274	-	EA	-	Annual mean ETo = 74.75 in as collected by AZ Met. Kc = 1.1. Average pool size of 400 sq. ft. loses 20,490 gallons per year, or 51.23 gallons per sq ft, not including backwashing or leaks, per AMWUA calculator.
Large pool (above 30k to 60k gallons)	154	-	EA	-	
Medium pool (15k to 30k gallons)	75	-	EA	-	
Small pool or spa (under 15k gallons)	51	3	EA	154	
Total Bermuda Turf Area	0.10	4,885	FT2	468	1 sq ft of non-overseeded turf at 60% efficiency with increased Kc is 35 gallons per sq ft per year, per AMWUA calculator.
Total Overseeded Turf Area	0.02	-	FT2	-	1 sq ft of overseeded turf at 60% efficiency with increased Kc is 9 gallons per sq ft per year, per AMWUA calculator.
Evaporative Cooling/ Cooling Towers	-	-	TOTAL COOLING TONNAGE	-	Baed on 1.50 cycles of concentration and average annual daily utilization of 68%. Water use is linear with respect to total cooling capacity tonnage. Based on US Dept of Energy Efficiency and Renewable Energy data.
Category: Filter Backwash Flows & Make-up Water from Pools & Spas (rapid sand filters)					
Extra large pool (60k to 100k gallons)	229	-	EA	-	Based on once per 7 day backwash @ 50,100, and 150gpm, respectively for each size pool category for 8 minute duration. Quantity values used from pool input values above.
Large pool (above 30k to 60k gallons)	171	-	EA	-	
Medium pool (15k to 30k gallons)	114	-	EA	-	
Small pool or spa (under 15k gallons)	57	3	EA	171	

A. TOTAL AVERAGE DAILY WATER USE FOR THIS DEVELOPMENT**203,282 GPD**

NOTES:
 GPD=GALLONS PER DAY, DU=DWELLING UNITS, FT2=SQUARE FEET, AC=ACRE, EA=EACH UNIT, ETo=EVAPOTRANSPIRATION, Kc=CROP COEFFICIENT, AZMET=ARIZONA METEOROLOGICAL NETWORK, AMWUA=ARIZONA MUNICIPAL WATER USERS ASSOCIATION
 NONE OF THE VALUES OR CALCULATIONS HEREIN ARE INTENDED TO BE USED FOR INFRASTRUCTURE DESIGN, PEAK FLOW DETERMINATION, OR SYSTEM CAPACITY ANALYSIS. FOR THESE PURPOSES REFER TO CH.6 & 7 OF THE CITY'S DESIGN STANDARDS AND POLICY MANUAL FOR THE RESPECTIVE DESIGN VALUES AND PEAKING FACTORS.

INSTRUCTIONS

IDENTIFY WATER CONSERVATION MEASURES ABOVE THOSE REQUIRED BY CITY CODE THAT THE DEVELOPMENT(S) PROPOSE TO IMPLEMENT. ENTER AN "X" FOR EACH PROPOSED MEASURE.

TABLE 2: APPROVED SUPPLEMENTAL WATER CONSERVATION MEASURES		
FAIRMONT SCOTTSDALE PRINCESS		
PROPOSED FOR THIS DEVELOPMENT (ENTER "X")	MEASURE	DESCRIPTION
	1. Submetering	Multi-family and mixed-use developments SUBMETER UNITS for leak detection and for occupants ability to manage their own water use
	2. No outdoor water features	Decorative water features outdoors can be a source of water use that is not functional
	3. Indoor water features submetered	Water features have proven to be a source of leaks. Submetering that is capable of alerts to the building monitoring system greatly reduce water waste
x	4. Limitation on functional turf grass	Functional grass turf are areas used for congregation of large number of people and should be limited to up to 10% of the landscapable area
	5. Limitations on artificial turf	Artificial turf is a large source of heat especially during summer months.
	6. Landscaped Rainwater harvesting	Earthworks, such as berms and basins, are encouraged to promote passive rainwater harvesting for planned plants and trees
	7. Cooling tower controllers with monitoring technology	Arizona high evapotranspiration rates, cooling towers use significantly more water here than in other states. Monitory systems can optimize this water use.
	8. Pools and splashpads submeters with monitoring technology	Pools and splashpad can be a source of leaks. Submetering that is capable of alerts to the building monitoring system greatly reduce water waste. Timers on Splash pads
NOTES: Greywater systems and large areas of artificial turf are not recommended by water conservation. This list represents water conservation measures that the conservation office has approved and has shown to provide proven water savings.		
TABLE INPUT VALUES LAST UPDATED:		11/29/2023

Water Demand Exhibit Summary

FAIRMONT SCOTTSDALE PRINCESS

1. Total Estimated Water Use per Day on a Sustainable Basis (gallons per day, gpd)

203,282

gpd

2. Net Water (NW) / Consumptive Use (gallons per day, gpd)

41,698

gpd

3. Proposed Water Conservation Measures Above Those Required By City Code

	1. Submetering	NOT PROPOSED
	2. No outdoor water features	NOT PROPOSED
	3. Indoor water features submetered	NOT PROPOSED
X	4. Limitation on functional turf grass	Functional grass turf are areas used for congregation of large number of people and should be limited to up to 10% of the landscapable area
	5. Limitations on artificial turf	NOT PROPOSED
	6. Landscaped Rainwater harvesting	NOT PROPOSED
	7. Cooling tower controllers with monitoring technology	NOT PROPOSED
	8. Pools and splashpads submeters with monitoring technology	NOT PROPOSED

4. Annual Economic Value of the Development on a per Gallon of Use Basis (Applies to Commercial or Mixed Use, To be Completed by City)

1. Major City Revenues

\$/1,000 gallons

2. Total Annual Output Impact

\$/1,000 gallons

TABLE INPUT VALUES LAST UPDATED:

11/29/2023

TABLE 4: WATER USE SUMMARY

FAIRMONT SCOTTSDALE PRINCESS

WATER USE SUMMARY FOR THE DEVELOPMENT

USE CATEGORY	AMOUNT	UNITS	% OF TOTAL USE	CALCULATION NOTES
A. TOTAL DAILY AVERAGE WATER USE	203,282	GPD	100.0%	A=B+C, C=D+E, F=B+D
B. OUTDOOR CONSUMPTIVE USE	21,861	GPD	10.8%	
C. TOTAL INDOOR USE	181,421	GPD	89.2%	
D. INDOOR CONSUMPTIVE USE	19,837	GPD	9.8%	
E. WASTEWATER TO SEWER	161,584	GPD	79.5%	
F. TOTAL CONSUMPTIVE USE (NET USE)	41,698	GPD	20.5%	

NOTES:

GPD=GALLONS PER DAY

ALL VALUES ARE FOR AVERAGE WATER USE ANALYSIS ONLY. THIS CALCULATION IS NOT INTENDED TO BE USED FOR INFRASTRUCTURE DESIGN, PEAK FLOW DETERMINATION, OR SYSTEM CAPACITY ANALYSIS. FOR THESE PURPOSES REFER TO CH.6 & 7 OF THE CITY'S DESIGN STANDARDS AND POLICY MANUAL FOR THE RESPECTIVE DESIGN VALUES, PEAKING FACTORS, AND DESIGN REQUIREMENTS.

TOTAL AVERAGE WATER USE (GALLONS PER DAY, GPD)

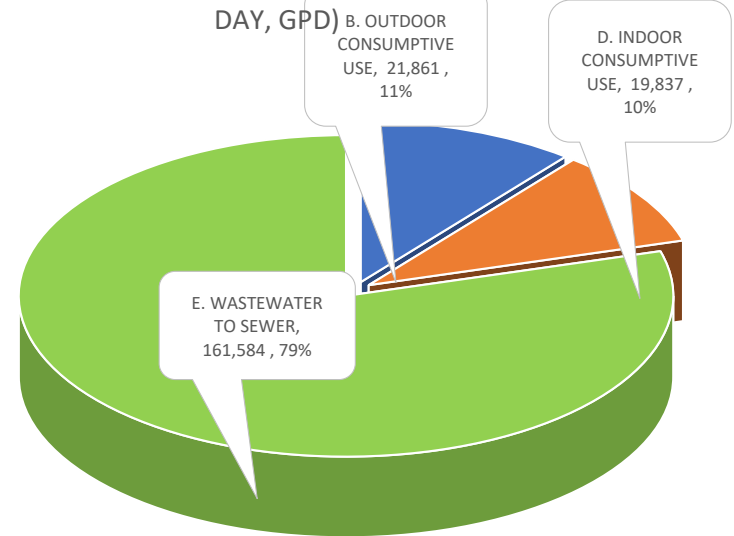


TABLE INPUT VALUES LAST UPDATED:

11/29/2023

TABLE 5: DETAILED WATER USE BREAKDOWN FOR THE DEVELOPMENT

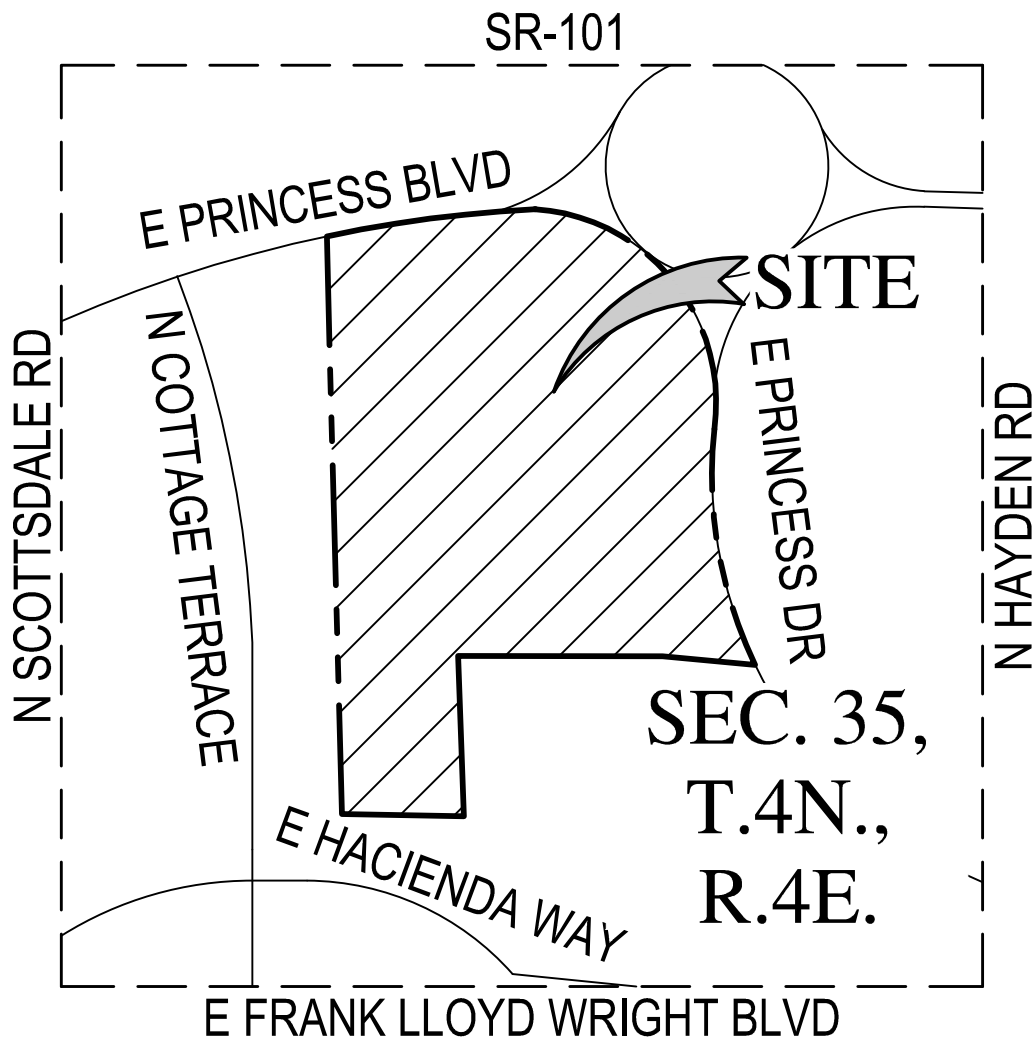
FAIRMONT SCOTTSDALE PRINCESS

TO RIGHT:WATER USE ALLOCATION- ---->	A. TOTAL AVERAGE WATER USE (GPD)	B. AVERAGE OUTDOOR <u>CONSUMPTIVE</u> WATER USE ⁽¹⁾			C. AVERAGE INDOOR <u>TOTAL</u> WATER USE ⁽¹⁾			D. AVERAGE INDOOR <u>CONSUMPTIVE</u> WATER USE ⁽²⁾			E. AVERAGE WASTEWATER FLOWS TO SEWER ⁽³⁾		
BELOW: WATER USE DEVELOPMENT TYPE/CATEGORY		UNIT OUTDOOR CONSUMPTIVE WATER USE (GPD/UNIT)	OUTDOOR CONSUMPTIVE USE (GPD)	OUTDOOR CONSUMPTIVE USE (% OF TOTAL USE)	UNIT TOTAL INDOOR WATER USE (GPD/UNIT)	INDOOR TOTAL USE (GPD)	INDOOR TOTAL USE (% OF TOTAL USE)	UNIT CONSUMPTIVE INDOOR WATER USE (GPD/UNIT)	INDOOR CONSUMPTIVE USE (GPD)	INDOOR CONSUMPTIVE USE (% OF TOTAL USE)	WASTEWATER FLOW (GPD/UNIT)	WASTEWATER FLOW (GPD)	WASTEWATER (% OF TOTAL USE)
Category: Residential/ Commerical Residential/ Hotel													
< 2 DU/ac)	-	276.7	-	0.0%	208.9	-	0.0%	20.9	-	0.0%	188	-	0.0%
2 – 2.9 DU/ac	-	276.7	-	0.0%	193.7	-	0.0%	19.4	-	0.0%	174	-	0.0%
3 – 7.9 DU/ac	-	72.3	-	0.0%	175.9	-	0.0%	17.6	-	0.0%	158	-	0.0%
8 – 11.9 DU/ac	-	72.3	-	0.0%	155.3	-	0.0%	15.5	-	0.0%	140	-	0.0%
12 – 22 DU/ac	-	72.3	-	0.0%	155.3	-	0.0%	15.5	-	0.0%	140	-	0.0%
High Density Condominium (condo)	-	30.0	-	0.0%	155.3	-	0.0%	15.5	-	0.0%	140	-	0.0%
Resort Hotel	88,367	44.6	8,831	4.3%	401.7	79,536.6	39.1%	32.1	6,362.9	3.1%	370	73,174	36.0%
Category: Commerical/ Other													
Restaurant	38,635	0.10	2,972	1.5%	1.20	35,662.8	17.5%	0.12	3,566.3	1.8%	1.08	32,097	15.8%
Commercial/Retail	75,486	0.10	9,436	4.6%	0.70	66,049.9	32.5%	0.11	9,907.5	4.9%	0.60	56,142	27.6%
Commerical High Rise	-	0.10	-	0.0%	0.50	-	0.0%	0.05	-	0.0%	0.45	-	0.0%
Office	-	0.10	-	0.0%	0.50	-	0.0%	0.05	-	0.0%	0.45	-	0.0%
Institutional	-	670	-	0.0%	670.0	-	0.0%	100.50	-	0.0%	569.50	-	0.0%
Industrial	-	154	-	0.0%	873.0	-	0.0%	130.95	-	0.0%	742.05	-	0.0%
Research and Development	-	192	-	0.0%	1,092.0	-	0.0%	163.80	-	0.0%	928.20	-	0.0%
Category: Special Use Areas													
Natural Area Open Space	-	-	-	0.0%							-	-	0.0%
Developed Open Space - Parks	-	1,786	-	0.0%							-	-	0.0%
Developed Open Space- Golf Course	-	4,285	-	0.0%							-	-	0.0%
Category: Evaporation from Swimming Pools/Spas, Cooling, Turf Area Irrigation, Other Outdoor Consumptive Uses													
Extra large pool (60k to 100k gallons)	-	274	-	0.0%							-	-	0.0%
Large pool (above 30k to 60k gallons)	-	154	-	0.0%							-	-	0.0%
Medium pool (15k to 30k gallons)	-	75	-	0.0%							-	-	0.0%
Small pool or spa (under 15k gallons)	154	51	154	0.1%							-	-	0.0%
Total Bermuda Turf Area	468	0.10	468	0.2%							-	-	0.0%
Total Overseeded Turf Area	-	0.02	-	0.0%							-	-	0.0%
Evaporative Cooling/ Cooling Towers	-	-	-	0.0%							-	-	0.0%
Category: Filter Backwash Flows & Make-up Water from Pools & Spas (rapid sand filters)													
Extra large pool (60k to 100k gallons)	-				228.6	-	0.0%				229	-	0.0%
Large pool (above 30k to 60k gallons)	-				171.4	-	0.0%				171	-	0.0%
Medium pool (15k to 30k gallons)	-				114.3	-	0.0%				114	-	0.0%
Small pool or spa (under 15k gallons)	171				57.1	171.4	0.1%				57	171	0.1%
TOTALS	203,282		21,861	10.8%		181,421	89.2%		19,837	9.8%		161,584	79.5%

F. TOTAL CONSUMPTIVE/NET WATER USE FOR THIS DEVELOPMENT (B. + D.)		41,698 GPD	20.5% OF TOTAL USE
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NOTES:
(1) PER 2018 DS&PM CHAPTER 6, FIGURE 6-1.2
(2) VARIES FROM 8% TO 15%, TYPICALLY 10%
(3) WASTEWATER FLOWS TO SEWER ARE CALCULATED AS C. MINUS D.
GPD=GALLONS PER DAY, DU=DWELLING UNIT, FT2=SQUARE FEET, AC=ACRE, EA=EACH UNIT
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EXHIBIT 1 – VICINITY MAP



VICINITY MAP

N.T.S.

NOT
FOR
CONSTRUCTION
OR RECORDING

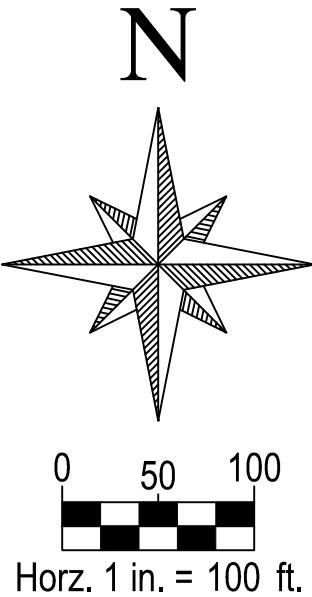
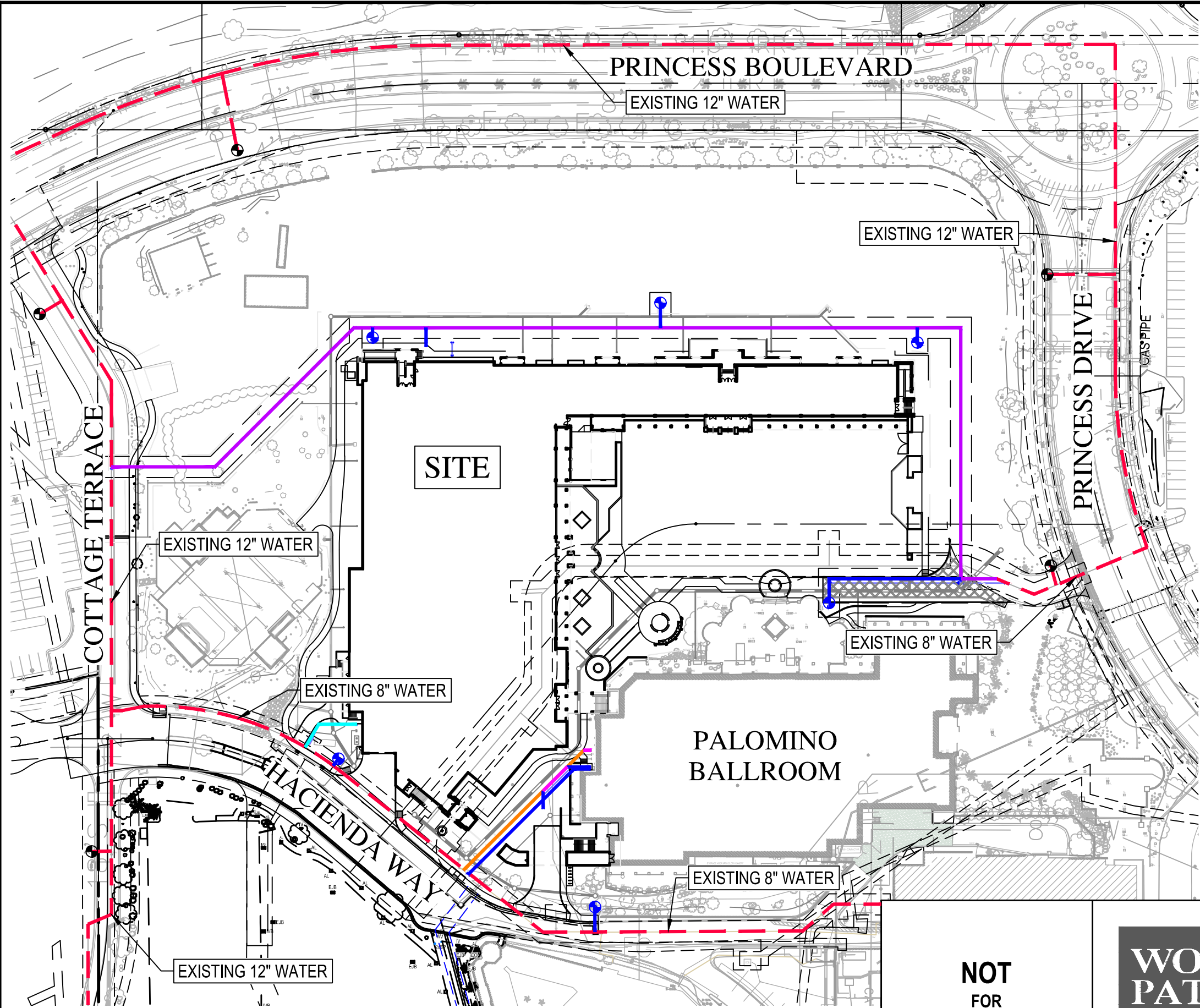
**WOOD
PATEL**

FAIRMONT SCOTTSDALE PRINCESS

CONFERENCE CENTER & EVENT LAWN VICINITY MAP

DATE	07/18/2025	SCALE	N.T.S.	SHEET	1 OF 1
JOB NO.	215319.30	DESIGN	AJS	CHECK	AJS
		DRAWN	DLH	RFI #	

EXHIBIT 2 – WATER EXHIBIT



LEGEND

-  EXISTING FIRE HYDRANT
-  EXISTING WATER
-  PROPOSED FIRE HYDRANT
-  PROPOSED 2" DOMESTIC SERVICE
TRENCHED WITH 6" FIRE LINE TO FDC
-  PROPOSED 2" DOMESTIC SERVICE
-  PROPOSED 4" DOMESTIC SERVICE
-  PROPOSED 6" FIRE LINE/SERVICE
-  PROPOSED 8" WATER MAIN
-  PROPERTY BOUNDARY

**NOT
FOR
CONSTRUCTION
OR RECORDING**

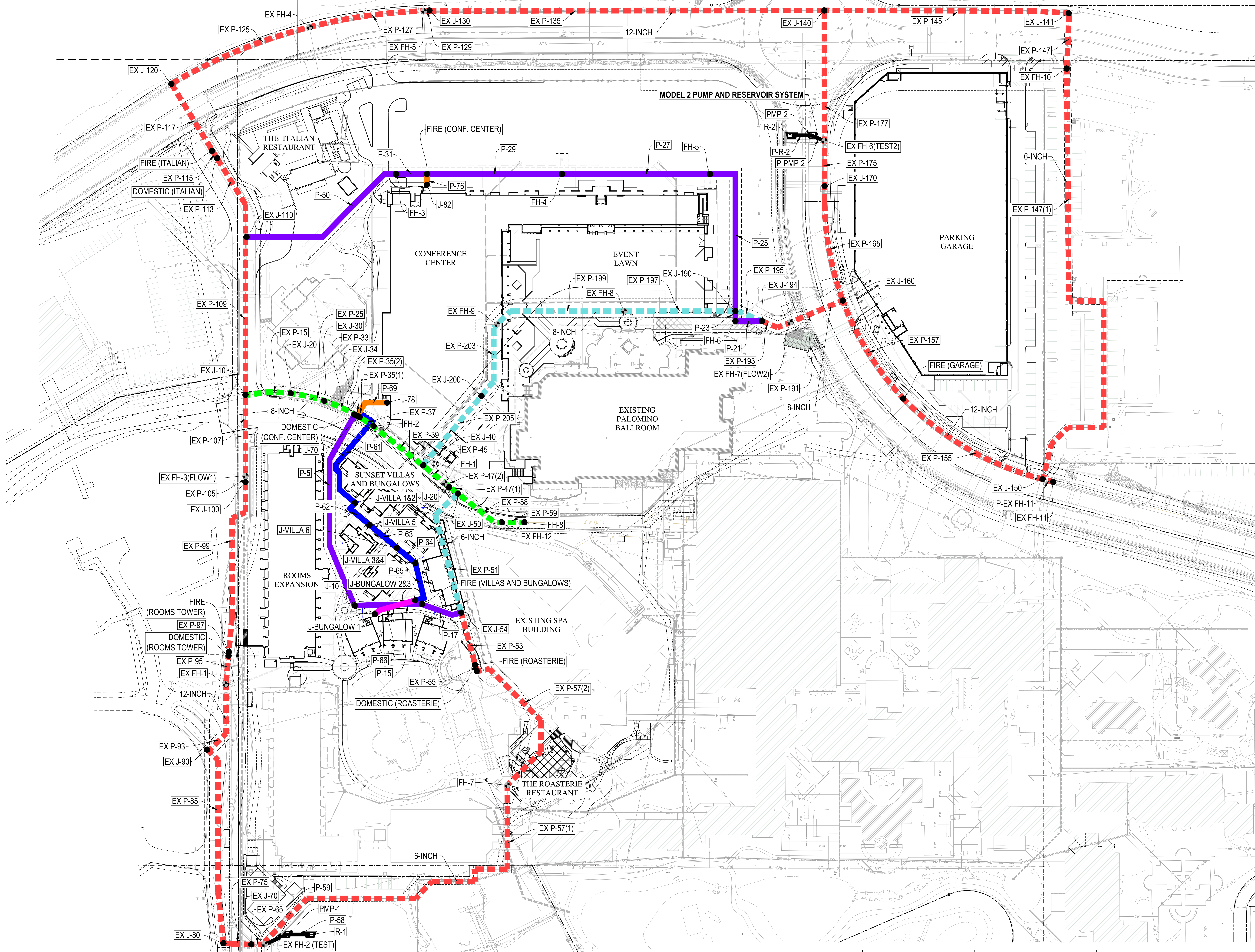


FAIRMONT SCOTTSDALE PRINCESS

**CONFERENCE CENTER & EVENT LAWN
WATER EXHIBIT**

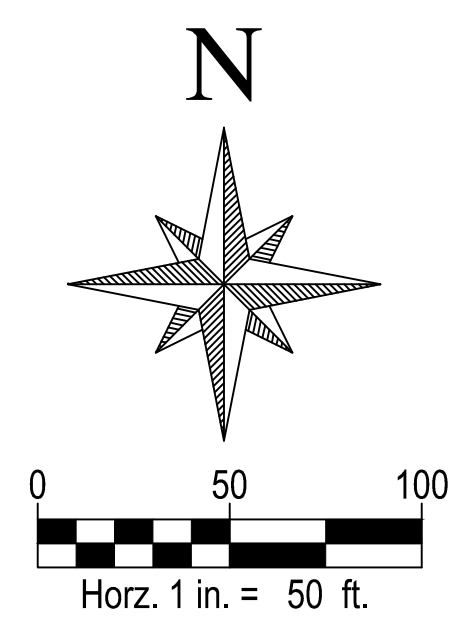
DATE	07/18/2025	SCALE	1" = 100'	SHEET	1 OF 1
JOB NO.	215319.30	DESIGN	AJS	DRAWN	AJS

EXHIBIT 3 – WATERCAD LAYOUT



MODEL 1 PUMP AND RESERVOIR SYSTEM

MODEL 2 PUMP AND RESERVOIR SYSTEM



LEGEND

- PROPOSED 2.5" WATER SERVICE
- PROPOSED 4" WATER SERVICE
- PROPOSED 8" WATER MAIN
- PROPOSED WATER SERVICE
- EXISTING WATER MAIN
- EXISTING WATER MAIN TO BE REMOVED

- RESERVOIR NODE AND LABEL
- PUMP NODE AND LABEL
- JUNCTION NODE AND LABEL
- PIPE LABEL
- FIRE HYDRANT LABEL

NOT
FOR
CONSTRUCTION
OR RECORDING

WOOD
PATEL

FAIRMONT SCOTTSDALE PRINCESS

WATERCAD MODELING MAP

DATE	07/18/2025	SCALE	1" = 50'	SHEET	1 OF 1
JOB NO	215319	DESIGN	AJS	CHECK	RS
		DRAWN	DLH / JRS		