

PRELIMINARY WATER BASIS OF DESIGN REPORT

For
MERCADO VILLAGE
10301 N. 92nd Street
Scottsdale, AZ 85254

PRELIMINARY Basis of Design Report

- ☒ **ACCEPTED**
☐ **ACCEPTED AS NOTED**
☐ **REVISE AND RESUBMIT**



Disclaimer: If accepted; the preliminary approval is granted under the condition that a final basis of design report will also be submitted for city review and approval (typically during the DR or PP case). The final report shall incorporate further water or sewer design and analysis requirements as defined in the city design standards and policy manual and address those items noted in the preliminary review comments (both separate and included herein). The final report shall be submitted and approved prior to the plan review submission.

For questions or clarifications contact the Water Resources Planning and Engineering Department at 480-312-5685.

BY JCampo

DATE 4/11/2024

Prepared For:



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Project Number: 210414

Date Submitted: 01-09-2024 (Zoning)

Date Submitted: 03-25-2024 (Zoning)

Case No: 6-ZN-2021 Plan Check No.: TBD

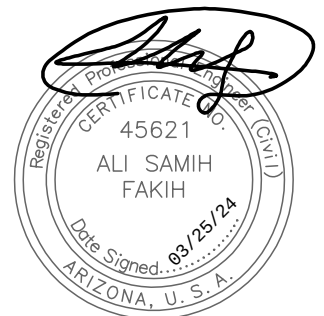


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1. EXECUTIVE SUMMARY

Mercado Village proposes to rezone 6.06 acres of commercial property located south and east of the Shea Boulevard and 92nd Street intersection. More generally the site lies south of the Sprouts shopping center.

Existing structures will be razed making way for a new 3-story high-density residential facility with 255 units. The building will have a central at-grade/below grade parking garage.

The western portion of the property is presently zoned PUD; the eastern lot is zoned C-O PCD. The site is proposed to be rezoned as R-5.

Located within the City of Scottsdale corporate boundary, this site will receive domestic water and fire service from the City of Scottsdale by connecting to a 10" ACP water line in N. 92nd Street. A new 8" DIP line extended into the site from 92nd Street along the south property line tapping the existing 8" DIP on the 94 Hundred Shea site just east of the Mercado Village property line. That existing 8" offsite water line extends north under a proposed fire lane. Another reach of 8" DIP will be installed along the north property line connecting an existing 6" water line at the NWC of the site to the existing offsite 8" water line on the 94 Hundred Shea site. A reach of 6" ACP running though the site will need to be removed. The proposed 6" fire line will be tapped off the 10" ACP water line in N. 92nd Street.

All water improvements will be designed and constructed to the most recent City of Scottsdale and Maricopa County Environmental Services Department design requirements.

2. INTRODUCTION

2.1 PLAN OBJECTIVE:

The purpose of this report is to provide information and calculations supporting the water system design. Preparation of this report has been done in accordance with Chapters 6 of the City's Design Standards & Policies Manual².

2.2 SITE LOCATION

The 6.06 acre subject property consists of five contiguous parcels whose APN's are:

- 217-39-536, -537A, -537B and -537C
- 217-36-989B

The Site is bounded by:

- N. 92nd Street on the west
- The Sprouts shopping center on the north
- A parking area and cleared area to the east (a proposed 9400 Shea residential project)
- Medical office development to the south

Refer to **FIGURE 1** for a vicinity map.

2.3 EXISTING SITE DESCRIPTION

The western portion of the site is developed with two commercial buildings and parking. The eastern lot is open undeveloped land with minor scrub vegetation. The property gently slopes to the southwest at approximately 0.7%. Refer to **FIGURE 2** for an aerial of the site and **FIGURE 3** for an ALTA.

2.4 EXISTING WATER SYSTEM

A 10" ACP water line exists along the west side of N. 92nd Street. A public 6" water line off 92nd Street runs along the south lot line and up through the site to provide a loop with the Sprouts commercial center. Three fire hydrants are presently available to the site; one located at the southwest corner of the property along 92nd Street and two on the north-south 6" loop near the center of the site. An existing 4" water meter will be removed with development fee credit requested to offset fees for the new water service. Refer to **FIGURE 4** for the City's sewer quarter-section map¹.

2.5 PROPOSED DEVELOPMENT

Once cleared, the site will be graded and developed for a high-density residential building consisting of 255 units. The project will need to abandon the onsite 12' wide water line easement and 6" pipe. A new 8" pipe will be tapped off the 10" ACP in 92nd Street at the southwest corner of the property and extended into the site connecting to the existing 8" water line on the 94 Hundred Shea site. A second connection to the existing 8" water line will extend west along the north Mercado Village site and connect to the existing 6" water line relocating an existing fire hydrant and fire line to the adjacent shopping center. A 20' water easement is proposed on 9400 Shea.

Refer to **APPENDIX II** for the Preliminary Utility Plan.

3. DESIGN CRITERIA

3.1 DEVELOPMENT CRITERIA

Demands, system layout, pressures, velocities, head losses and required fire flow will all be in accordance with the City's DS&PM and the International Fire Code. The final design report will model the new water line layout using Bentley OpenFlows WaterCAD® CONNECT Edition Update 3.

4. DEMANDS

4.1 PROPOSED DEMANDS

The tables below show the existing and proposed site water demands using calculations based on design criteria in the City's DS&PM.

Table 1: WATER DEMANDS

	Avg. Day Demand (gpm)	Units	Max Day Peaking Factor	Peak Hour Peaking Factor
Office	8.34E-04	Per sq. ft.	2	3.5
High Density Residential	0.27	Per Unit	2	3.5

Table 2: EXISTING WATER DEMAND CALCULATIONS

	Area (sf)	Avg. Day Demand (gpm/sf or unit)	Max Day Peaking Factor	Peak Hour Peaking Factor	Avg. Day Demand (gpm)	Max. Day Demand (gpm)	Peak Hour Demand (gpm)
Office	58,048	8.34E-04	2	3.5	48.4	96.8	169.4
Office	14,480	8.34E-04	2	3.5	12.1	24.2	42.3
Totals					60.5	121.0	211.7

Table 3: PROPOSED WATER DEMAND CALCULATIONS

	Units	Avg. Day Demand (gpm/unit)	Max Day Peaking Factor	Peak Hour Peaking Factor	Avg. Day Demand (gpm)	Max. Day Demand (gpm)	Peak Hour Demand (gpm)
Residential	255	0.27	2	3.5	68.9	137.7	241.0
Office	5,000	8.34E-04	2	3.5	4.2	8.3	14.6
Totals					73.0	146.0	255.6

Note: the average day demand is less than 100,000 gallons so the Water Demand Exhibit is not required.

4.2 FIRE FLOW DEMAND

A previous submittal included a fire hydrant flow test was performed by Arizona Flow Testing LLC on March 7, 2024 at 7:00 am. That test will be updated with the final submittal of this report. Results of the earlier test are included in **FIGURE 5**. The static pressure was recorded at 88 psi with a residual pressure of 64 psi flowing at 1,764 gpm. The calculated flow at 20 psi is 3,095 gpm. Per the DS+PM the water model in the final design report will utilize this data with a 10% safety factor (typically NFES design).

The residential building will likely be Type V-A construction and accounting for the area of three consecutive floors results in a fire flow demand of 8000 gpm per Appendix B of the International Fire Code³. The City allows for a 75% reduction for fully automated sprinkler systems resulting in a system demand of 2,000 gpm. A 500 gpm hose train allowance will be added along with the maximum day demand for the water model.

NFPA 1 allows for the fire flow to be provided concurrently by the available fire hydrants to the building. The final water model will configure a concurrent 1,250 gpm demand at two adjacent hydrants along with the maximum day demand.

4.3 WATER ZONE

According to the City of Scottsdale DS&PM Sec. 6-1, the site is within Pressure Zone 2.

4.4 PHASING OF PROJECT

Infrastructure for this project is anticipated to be constructed in a single phase.

5. PROPOSED INFRASTRUCTURE

5.1 WATER DISTRIBUTION SYSTEM

As stated earlier, the 6" onsite water line will be removed and replaced with an 8" line along the south property and north property line. A new 8" pipe will be installed along the north and south portions of the site looping the Sprouts Shopping Center around the Mercado Village, connecting to the existing 10" water line in 92nd Street. Fire hydrants will be spaced to comply with DS+PM requirements. Refer to **APPENDIX II** for the Preliminary Utility Plan.

A new water meter will be installed near the southwest driveway area and include a reduced pressure principle backflow preventer and pressure regulator per COS DS+PM Sec. 6-1.417 and 6-1.407; likewise for an irrigation service. A 6" fire line will connect to the existing 10" pipe near mid-site.

Table 4: WATERCAD RESULTS

Scenario	Demand (gpm)	Minimum Pressure (psi)	Maximum Pressure (psi)
MD + FF Split	2,646	24	41

5.2 MAINTENANCE AND OWNERSHIP

All new water lines, meters and fire hydrants will be within 20-foot wide water easements dedicated to the City.

6. WATER COMPUTATIONS

6.1 MODELING

The new water system will be designed to meet the criteria of COS Water, the Arizona Department of Environmental Quality, and Maricopa County Environmental Services Department.

Preliminary water modeling will only include results of the max day plus fire flow for the Zoning Case. Full demand scenarios will be provided with the Final Water Report. The fire analysis described in Section 4.2 was split among two hydrants that will be near the building. Metered demand was placed off the new 8" DIP water line near the southwest corner of the site. The results of water modeling are included in **APPENDIX III** and show compliance with Scottsdale's design criteria.

7. SUMMARY / CONCLUSIONS

Sufficient city water capacity is available in the proposed water system layout to support domestic and fire service to the project. The project's MEP will determine if domestic or fire pumps are required or desired to serve the buildings.

8. REFERENCES

1. COS QS number 28-50
2. City of Scottsdale Design Standards & Policies Manual, 2018 (Chapter 6 – Water)
3. 2018 International Fire Code, Appendix B
4. NFPA 1 – Minimum Number of Fire Hydrants for Fire Flow

9. FIGURES

- FIGURE 1 - Vicinity Map
- FIGURE 2 - Aerial
- FIGURE 3 - ALTA
- FIGURE 4 - Q-S Map 28-50
- FIGURE 5 - Fire Hydrant Flow Test

10. APPENDICIES

- APPENDIX I - Site Plan
- APPENDIX II - Preliminary Utility Plan
- APPENDIX III - Water Model and Fire Scenario Reports

FIGURES

FIGURE I – Vicinity Map

FIGURE II – Aerial

FIGURE III – ALTA

FIGURE IV – Sewer Q-S Maps

FIGURE V – Fire Hydrant Flow Test

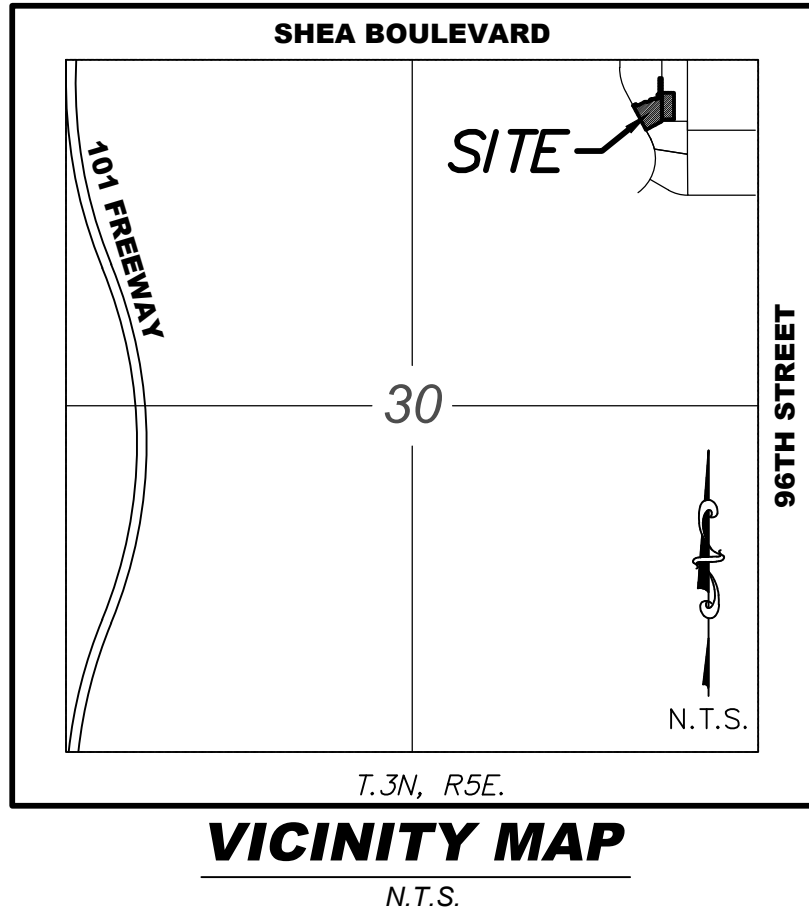




**FIGURE 2 –
Aerial**

ALTA / NSPS LAND TITLE SURVEY
92ND STREET WEST

A PORTION OF THE NORTHEAST QUARTER OF SECTION 30, TOWNSHIP 3 NORTH, RANGE 5 EAST OF THE
GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.



SIG

SURVEY INNOVATION GROUP, INC

Land Surveying Services

22425 N. 16th ST., SUITE 1
PHOENIX, ARIZONA 85024
PHONE (480) 922-0780
FAX (480) 922-0781
WWW.SIGSURVEYAZ.COM

ALTANSPS LAND TITLE SURVEY
92ND STREET WEST
SCOTTSDALE, ARIZONA

NOTES

1. THE SURVEYOR'S SCOPE-OF-SERVICES IS LIMITED TO PROVIDING SERVICES IN A MANNER CONSISTENT WITH THE DEGREE OF CARE AND SKILL ORDINARILY EXERCISED BY MEMBERS OF THE LAND SURVEY PROFESSION CURRENTLY PRACTICING UNDER SIMILAR CONDITIONS. SCHEDULE "B" ITEM DOCUMENTS MAY CONTAIN ENCUMBRANCES WHICH AFFECT THE SUBJECT PROPERTY IN A MANNER THE SURVEYOR IS NOT QUALIFIED TO INTERPRET AND/OR ARE NOT WITHIN THE SURVEYOR'S SCOPE-OF-SERVICES. IT IS RECOMMENDED THAT INTERESTED AND AFFECTED PARTIES OBTAIN LEGAL COUNSEL FOR ADDITIONAL INTERPRETATION OF ALL SCHEDULE "B" DOCUMENTS REFERENCED IN THE TITLE REPORT.
2. THE SURVEYOR HAS RELIED SOLELY ON INFORMATION SUPPLIED TO THE SURVEYOR FROM EITHER THE CLIENT OR THE TITLE COMPANY AND HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR ADDITIONAL EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER MATTERS THAT MAY AFFECT THE SUBJECT PROPERTY.
3. THIS SURVEY WAS COMPLETED USING GLOBAL POSITIONING SYSTEM (GPS) EQUIPMENT. THE MONUMENTS LOCATED ARE WITHIN THE POSITIONAL TOLERANCES RECOMMENDED AND SHOWN IN SECTION 3E OF THE MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS EFFECTIVE FEBRUARY 23, 2021.
NOTE: IF THE RELATIVE POSITIONAL PRECISION EXCEEDS THE MAXIMUM ALLOWED, THEN THE REASON MUST BE STATED IN THIS NOTE.
5. PARCEL 1, PARCEL 2 AND PARCEL 3 HAVE PHYSICAL ACCESS TO AN ABUTTING STREET, HIGHWAY, OR OTHER PUBLIC OR PRIVATE WAY (92ND STREET) AS OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY FIELDWORK.
PARCEL 4 DOES NOT HAVE PHYSICAL ACCESS TO AN ABUTTING STREET, HIGHWAY, OR OTHER PUBLIC OR PRIVATE WAY AS OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY FIELDWORK.
6. PURSUANT TO TABLE "A" ITEM 6, THE SURVEYOR HAS SHOWN THE ZONING CLASSIFICATION AS SET FORTH BY THE LOCAL AGENCY OF JURISDICTION AND OR IDENTIFIED IN A ZONING REPORT OR LETTER AS PROVIDED TO THE SURVEYOR BY THE CLIENT OR CLIENT'S REPRESENTATIVE AS REFERENCED ON THIS SURVEY.
7. PURSUANT TO TABLE "A" ITEM 7, THE BUILDING LINES AND DIMENSIONS SHOWN DEPICT THE EXTERIOR BUILDING FOOTPRINT AT GROUND OR NEAR GROUND LEVEL BASED ON FIELD MEASUREMENTS. THIS INFORMATION IS INTENDED TO DEPICT THE GENERAL CONFIGURATION OF THE BUILDING AT GROUND LEVEL AND MAY OR MAY NOT BE THE BUILDING FOUNDATION. THE BUILDING AREA SHOWN IS BASED ON THE EXTERIOR BUILDING FOOTPRINT AND IS NOT INTENDED TO REFLECT THE INTERIOR OR LEASE AREA.
8. PURSUANT TO TABLE "A" ITEM 16, THE SURVEYOR DID NOT OBSERVE RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK
9. PURSUANT TO TABLE "A" ITEM 17, THE SURVEYOR HAS NOT BEEN INFORMED OF ANY CHANGES IN THE PROPOSED RIGHTS OF WAY. ADDITIONALLY, ANY CHANGES IN RIGHTS OF WAY, WHICH HAVE ALREADY OCCURRED, SHOULD BE VERIFIED BY ADDITIONAL TITLE SEARCH. THE SURVEYOR HAS NOT OBSERVED ANY RECENT STREET OR SIDEWALK CONSTRUCTION IN THE PROCESS OF CONDUCTING THE FIELDWORK.
10. THIS SURVEY IS BASED ON COMMITMENT FOR TITLE INSURANCE ISSUED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY NO. 21000696-040-BN1-A98, DATED MARCH 17, 2021.
11. FIELD WORK WAS COMPLETED JUNE 26, 2014.

LEGAL DESCRIPTION

SCHEDULE 'B' ITEMS

1. PROPERTY TAXES, WHICH ARE A LIEN NOT YET DUE AND PAYABLE, INCLUDING ANY ASSESSMENTS COLLECTED WITH TAXES TO BE LEVIED FOR THE YEAR 2021.
*NOT A SURVEY MATTER
2. RESERVATIONS, EXCEPTIONS AND PROVISIONS CONTAINED IN THE PATENT FROM THE UNITED STATES OF AMERICA, AND IN THE ACTS AUTHORIZING THE ISSUANCE THEREOF. RECORDING DATE: JUNE 9, 1923 RECORDING NO: BOOK 175 OF DEEDS, PAGE 556
*NOT A SURVEY MATTER
3. WATER RIGHTS, CLAIMS OR TITLE TO WATER, WHETHER OR NOT DISCLOSED BY THE PUBLIC RECORDS.
*NOT A SURVEY MATTER
4. COVENANTS, CONDITIONS AND RESTRICTIONS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, SOURCE OF INCOME, GENDER, GENDER IDENTITY, GENDER EXPRESSION, MEDICAL CONDITION, OR GENETIC INFORMATION, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH IN THE DOCUMENT
RECORDED: DECEMBER 1, 1980
RECORDING NO: DOCKET 14863, PAGE 1238
THEREAFTER A DELEGATION RIGHTS RECORDED JUNE 3, 1987, AS RECORDING NO. 87-348552.
*AFFECTS PROPERTY, BLANKET IN NATURE, NOT GRAPHICALLY PLOTTED HEREON.
5. COVENANTS, CONDITIONS, RESTRICTIONS AND RESERVATIONS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, SOURCE OF INCOME, GENDER, GENDER IDENTITY, GENDER EXPRESSION, MEDICAL CONDITION, OR GENETIC INFORMATION, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH IN THE DOCUMENT
RECORDED: DECEMBER 1, 1980
RECORDING NO: DOCKET 14863, PAGE 1258
SAID DOCUMENT PROVIDES, AMONG OTHER THINGS, FOR THE LEVY OF SPECIAL USE FEES BY MCCORMICK RANCH PROPERTY OWNERS' ASSOCIATION, AN ARIZONA CORPORATION
*AFFECTS PROPERTY, BLANKET IN NATURE, NOT GRAPHICALLY PLOTTED HEREON.
6. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF SCOTTSDALE
PURPOSE: WATER LINE, WATER METERS AND FIRE HYDRANTS
RECORDING DATE: JUNE 26, 1984
RECORDING NO: 84-277079
AFFECTS: THE COMMON AREA
*GRAPHICALLY PLOTTED HEREON.
7. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF SCOTTSDALE
PURPOSE: SEWER LINE
RECORDING DATE: AUGUST 14, 1984
RECORDING NO: 84-355083
AFFECTS: THE COMMON AREA
*GRAPHICALLY PLOTTED HEREON.
8. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF SCOTTSDALE
PURPOSE: DRAINAGE AND FLOOD CONTROL
RECORDING DATE: AUGUST 14, 1984
RECORDING NO: 84-355084
AFFECTS: THE COMMON AREA
*GRAPHICALLY PLOTTED HEREON.
9. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: CITY OF SCOTTSDALE
PURPOSE: VEHICULAR NON-ACCESS
RECORDING DATE: AUGUST 14, 1984
RECORDING NO: 84-355088
AFFECTS: THE COMMON AREA ALONG 92ND STREET
*GRAPHICALLY PLOTTED HEREON.
10. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: ARIZONA PUBLIC SERVICE COMPANY
PURPOSE: ELECTRIC LINES AND FACILITIES
RECORDING DATE: NOVEMBER 15, 1984
RECORDING NO: 84-497474
AFFECTS: THE COMMON AREA
*BLANKET IN NATURE, NOT GRAPHICALLY PLOTTED HEREON.

SCHEDULE 'B' ITEMS

11. COVENANTS, CONDITIONS AND RESTRICTIONS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, SOURCE OF INCOME, GENDER, GENDER IDENTITY, GENDER EXPRESSION, MEDICAL CONDITION, OR GENETIC INFORMATION, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS SET FORTH IN THE DOCUMENT
RECORDING DATE: DECEMBER 5, 1985
RECORDING NO: 85-577841
RE-RECORDED: MARCH 12, 1986
RECORDING NO.: 86-118301
THEREAFTER A SUPPLEMENT RECORDED APRIL 20, 1989, AS RECORDING NO. 89-180814. THEREAFTER AMENDED IN A FIRST AMENDMENT RECORDED APRIL 7, 1995, AS RECORDING NO. 95-0193629, AND RE-RECORDED JANUARY 22, 1996, AS RECORDING NO. 96-0042420.
*BLANKET IN NATURE, NOT GRAPHICALLY PLOTTED HEREON.
12. THE MATTERS SET FORTH IN THE DOCUMENT SHOWN BELOW WHICH, AMONG OTHER THINGS, CONTAINS OR PROVIDES FOR:
CERTAIN EASEMENTS; LIENS AND THE SUBORDINATION THEREOF; PROVISIONS RELATING TO PARTITION; RESTRICTIONS ON SEVERABILITY OF COMPONENT PARTS; AND COVENANTS, CONDITIONS AND RESTRICTIONS BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING, BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, SOURCE OF INCOME, GENDER, GENDER IDENTITY, GENDER EXPRESSION, MEDICAL CONDITION, OR GENETIC INFORMATION, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW.
ENTITLED: CONDOMINIUM DECLARATION FOR 92ND STREET WEST, A CONDOMINIUM
RECORDING DATE: APRIL 2, 2015
RECORDING NO: 20150226207
RE-RECORDED: APRIL 13, 2015
RECORDING NO: 20150250915
*BLANKET IN NATURE, NOT GRAPHICALLY PLOTTED HEREON.
13. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT
ENTITLED: TENANT SUBORDINATION, NON-DISTURBANCE AND ATTORNMEN AGREEMENT
LESSOR: PARANTAP LLC
LESSEE: HONOR HEALTH
RECORDING DATE: MAY 20, 2015
RECORDING NO: 2015-354706
*NOT A SURVEY MATTER
14. AN UNRECORDED LEASE WITH CERTAIN TERMS, COVENANTS, CONDITIONS AND PROVISIONS SET FORTH THEREIN AS DISCLOSED BY THE DOCUMENT
ENTITLED: TENANT SUBORDINATION, NON-DISTURBANCE AND ATTORNMEN AGREEMENT
LESSOR: PARANTAP LLC
LESSEE: ARIZONA UROLOGY SPECIALISTS, PLLC
RECORDING DATE: MAY 20, 2015
RECORDING NO: 2015-354707
*NOT A SURVEY MATTER
15. MATTERS CONTAINED IN THAT CERTAIN DOCUMENT
ENTITLED: NOTICE OF FUNDING OF 92ND STREET WEST CONDOMINIUM ASSOCIATION COMMON ELEMENTS EXPENSES
RECORDING DATE: JUNE 30, 2020
RECORDING NO: 20200580941
REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.
*NOT A SURVEY MATTER
16. ANY RIGHTS OF THE PARTIES IN POSSESSION OF A PORTION OF, OR ALL OF, SAID LAND, WHICH RIGHTS ARE NOT DISCLOSED BY THE PUBLIC RECORDS.
*NOT A SURVEY MATTER
17. MATTERS WHICH MAY BE DISCLOSED BY AN INSPECTION AND/OR BY A CORRECT ALTA/NSPS LAND TITLE SURVEY OF SAID LAND THAT IS SATISFACTORY TO THE COMPANY, AND/OR BY INQUIRY OF THE PARTIES IN POSSESSION THEREOF.
*NOT A SURVEY MATTER

FLOOD ZONE

ACCORDING TO THE FLOOD INSURANCE RATE MAP #04013C1760 L, DATED OCTOBER 16, 2013, THIS PROPERTY IS LOCATED IN FLOOD ZONE "X". AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD.

AREA

- PARCEL NO. 1 = 201,373 SQ.FT. OR 4.623 ACRES NET
- PARCEL NO. 2 = 47,038 SQ.FT. OR 1.284 ACRES NET
- PARCEL NO. 3 = 6,621 SQ.FT. OR 0.152 ACRES NET
- PARCEL NO. 4 = 8,913 SQ.FT. OR 1.079 ACRES NET.

ZONING

ZONE CODE PUD (CITY OF SCOTTSDALE ZONING JURISDICTION)
OBTAINED FROM MARICOPA COUNTY ASSESSOR'S WEB SITE.

ADDRESS

10301 NORTH 92ND STREET
SCOTTSDALE, ARIZONA 85258

BASIS OF BEARING

THE NORTH LINE OF NORTHWEST QUARTER OF SECTION 30, TOWNSHIP 3 NORTH, RANGE 5 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, SAID LINE BEARS NORTH 89 DEGREES 56 MINUTES 30 SECONDS EAST.

CERTIFICATION

TO: KUSYCO, INC., AN ARIZONA CORPORATION; WISHING WELL RESIDENTIAL, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO PARCEL 1; PARANTAP, LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO PARCEL 2; AND 92ND ST EAST TOWER LLC, AN ARIZONA LIMITED LIABILITY COMPANY, AS TO PARCEL 3; FIRST ARIZONA TITLE AGENCY; FIRST AMERICAN TITLE INSURANCE COMPANY; KEYSTONE REAL ESTATE LENDING FUND, L.P., A DELAWARE LIMITED PARTNERSHIP, AND ITS SUCCESSOR AND ASSIGNS.

THIS IS TO CERTIFY THAT THIS MAP AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 6(A), 8, 9, 13, 16 AND 17 OF TABLE A THEREOF.

FIELD WORK WAS COMPLETED JUNE, 2014

JASON SEGNERI DATE
7301 EAST EVANS ROAD
SCOTTSDALE, ARIZONA, 85260
PHONE: 480-922-0780
JASONS@SIGSURVEYAZ.COM

FIGURE 3

REVISIONS:
△ 4/9/21
ADDED TOPOGRAPHY
△
△
△
DRAWING NAME: 13-186 ALTA 2/21
JOB NO. 13186
DRAWN: RMH
CHECKED: JAS
DATE: 3/29/21
SCALE: N.T.S.
SHEET: 1 OF 3

PARCEL 4
BUILDING B
UNIT 100

POINT	NORTHING	EASTING
A	8582.33	2321.59
B	8557.94	2275.67
C	8560.45	2195.08
D	8606.38	2170.70

LEGEND

- FOUND BRASS CAP FLUSH
- ⊙ FOUND PK NAIL
- FOUND 1/2" REBAR
- ⊠ FOUND CHISELED X IN CONCRETE
- ⊡ FOUND BRASS CAP IN HANDHOLE
- SET 1/2" REBAR WITH CAP, RLS 35833
- ▲ BUILDING CORNER COORDINATE

BOUNDARY LINE
ADJACENT BOUNDARY LINE
CENTER LINE
EASEMENT LINE

- V.N.A.E. VEHICULAR NON-ACCESS EASEMENT
P.U.E. PUBLIC UTILITY EASEMENT
(R1) RECORD DATA PER TITLE COMMITMENT
(R2) RECORD DATA PER BOOK 705 PAGE 41 M.C.R.
(R3) RECORD DATA PER BOOK 648 PAGE 25 M.C.R.
(R4) RECORD DATA PER BOOK 219 PAGE 10 M.C.R.
(R5) RECORD DATA PER BOOK 185 PAGE 44 M.C.R.
(R6) RECORD DATA PER DOC. 2006-640767 M.C.R.
(R7) RECORD DATA PER BOOK 1221 PAGE 46 M.C.R.
(M) MEASURED DATA PER THIS SURVEY
(C) CALCULATED DATA PER THIS SURVEY

LINE	(R1)	(R2)	(M/C)
L1			N27°59'38"W 40.00'
L2	N62°19'22"E 54.50'	N62°16'17"E 54.55'	N62°19'22"E 54.37'
L3	S27°56'09"E 36.00'	S27°55'33"E 36.04'	S27°56'09"E 36.00'
L4	N62°19'22"E 147.48'	N62°24'22"E 147.52'	N62°19'22"E 147.65'
L5	N89°54'23"E 41.76'	N89°54'23"E 41.76'	N89°54'23"E 41.76'
L6	S00°05'37"E 7.54'	S00°05'37"E 6.77'	
L7	N62°03'51"E 57.50'	N62°03'51"E 57.50'	N62°05'02"E 57.19'
L8	N27°56'09"W 18.08'	N27°56'09"W 18.08'	N27°56'09"W 18.08'
L9	N62°03'51"E 27.00'	N62°03'51"E 27.00'	N62°05'02"E 27.00'
L10	S27°56'09"E 18.08'	S27°56'09"E 18.08'	S27°56'09"E 18.08'
L11	N62°03'51"E 50.35'	N62°03'51"E 50.35'	N62°05'02"E 50.58'
L12	S27°56'09"E 21.68'	S27°56'09"E 21.68'	S27°38'36"E 21.95'
L13	N62°03'51"E 36.12'	N62°03'51"E 36.13'	N61°48'01"E 36.44'
L14		N89°54'23"E 31.12'	N89°54'23"E 30.95'
L15	N00°05'37"W 41.00'	N00°05'37"W 41.00'	N00°05'37"W 41.00'
L16	S89°54'23"W 30.00'	S89°54'23"W 30.00'	S89°54'23"W 29.63'
L17	N00°05'37"W 27.00'	N00°05'37"W 27.00'	N00°05'37"W 27.00'
L18	N89°54'23"E 30.00'	N89°54'23"E 30.00'	N89°54'23"E 29.63'
L19	N89°54'23"E 45.00'	N89°54'23"E 45.00'	N89°54'23"E 45.00'
L20			S89°54'23"W 45.00'

BASIS OF BEARING
N89°56'30"E(R2,R7,M) 2642.28'(R7,M) N89°59'59"E(R5) 2642.42'(R5) N89°59'24"E(R1)
821.38'(R1,R2) 822.25'(C)

FOUND BRASS CAP IN HANDHOLE
NORTH QUARTER CORNER
SECTION 30, T3N, R5E

S00°03'32"E 149.65'(C)
N00°00'01"E 150.00'(R5)

L=487.58(C)
R=1000.00'(C)
D=27°56'11"(C)
L=487.58(R5)
R=1000.00'(R5)
D=27°56'10"(R5)

APN 217-36-960-L
OWNER: SHEA AND 92ND OPCO LLC
NOT A PART

*THE POSITION OF LINES L7, L11 AND L12
ARE BASED UPON THE MEASURED
LOCATION OF THE NORTHWESTERLY FACE
OF THE BUILDING.

PARCEL 1

PARCEL 2

PARCEL 4
BUILDING B
UNIT 100
BK. 1221 PG. 46

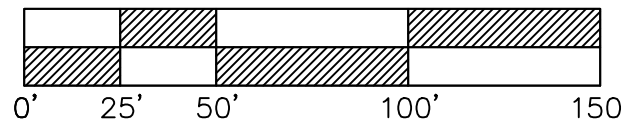
SHEA BOULEVARD

PARCEL 3

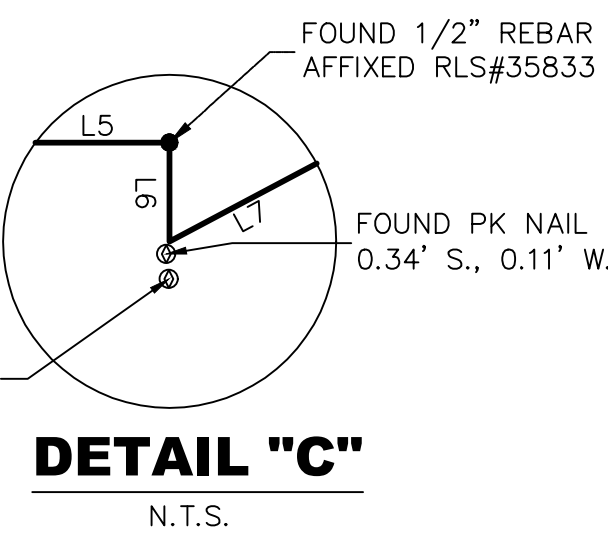
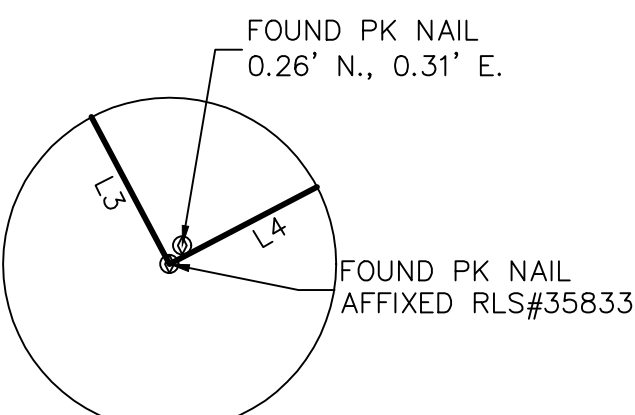
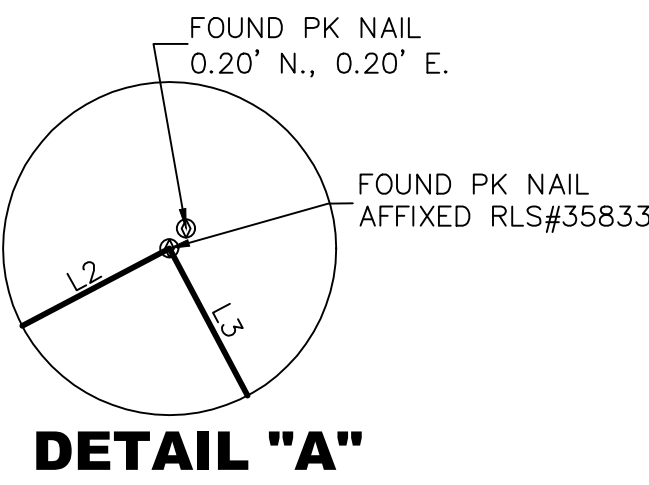
APN 217-36-001-M
OWNER: 94 HUNDRED SHEA LLLP
NOT A PART

FOUND BRASS CAP IN HANDHOLE
NORTHEAST CORNER
SECTION 30, T3N, R5E
POINT OF COMMENCEMENT

SCALE: 1"=50'



APN 217-36-001-P
OWNER: 94 HUNDRED SHEA LLLP
NOT A PART



ALTANSPS LAND TITLE SURVEY
92ND STREET WEST
SCOTTSDALE, ARIZONA

SIG
SURVEY INNOVATION
GROUP, INC
Land Surveying Services
22425 N. 16th ST., SUITE 1
PHOENIX, ARIZONA 85024
PHONE (480) 922-0780
FAX (480) 922-0781
WWW.SIGSURVEYAZ.COM

REVISIONS:

△	4/9/21
△	ADDED TOPOGRAPHY
△	
△	

DRAWING NAME:
13-186 ALTA 2/21
JOB NO. 13186
DRAWN: RMH
CHECKED: JAS
DATE: 3/29/21
SCALE: 1"=50'
SHEET: 2 OF 3

LEGEND

- FOUND BRASS CAP FLUSH
- ⊙

FOUND PK NAIL
- FOUND 1/2" REBAR
- ⊠

FOUND CHISELED X IN CONCRETE
- ⊠

FOUND BRASS CAP IN HANDHOLE
- SET 1/2" REBAR WITH RLS 35833
- ⊝

SANITARY SEWER MANHOLE
- ⊕

WATER VALVE
- ⊙

CLEANOUT
- ⊠

WATER METER
- ⊝

DRYWELL
- ⊕

IRRIGATION VALVE
- ⊕

FIRE DEPARTMENT CONNECTION
- ⊕

FIRE HYDRANT
- ⊝

STORM DRAIN MANHOLE
- ▲

ELECTRICAL TRANSFORMER
- ⊠

ELECTRICAL JUNCTION BOX

⊕

LIGHT POLE WITH MAST

⊕

LIGHT POLE

●

BOLLARD

⊕

CATV RISER

⊠

CATCH BASIN

⊕

ELECTRICAL MANHOLE

⊕

GAS VALVE

▶

AIR RELIEF VALVE

⊕

SIGN

♿

HANDICAPPED PARKING

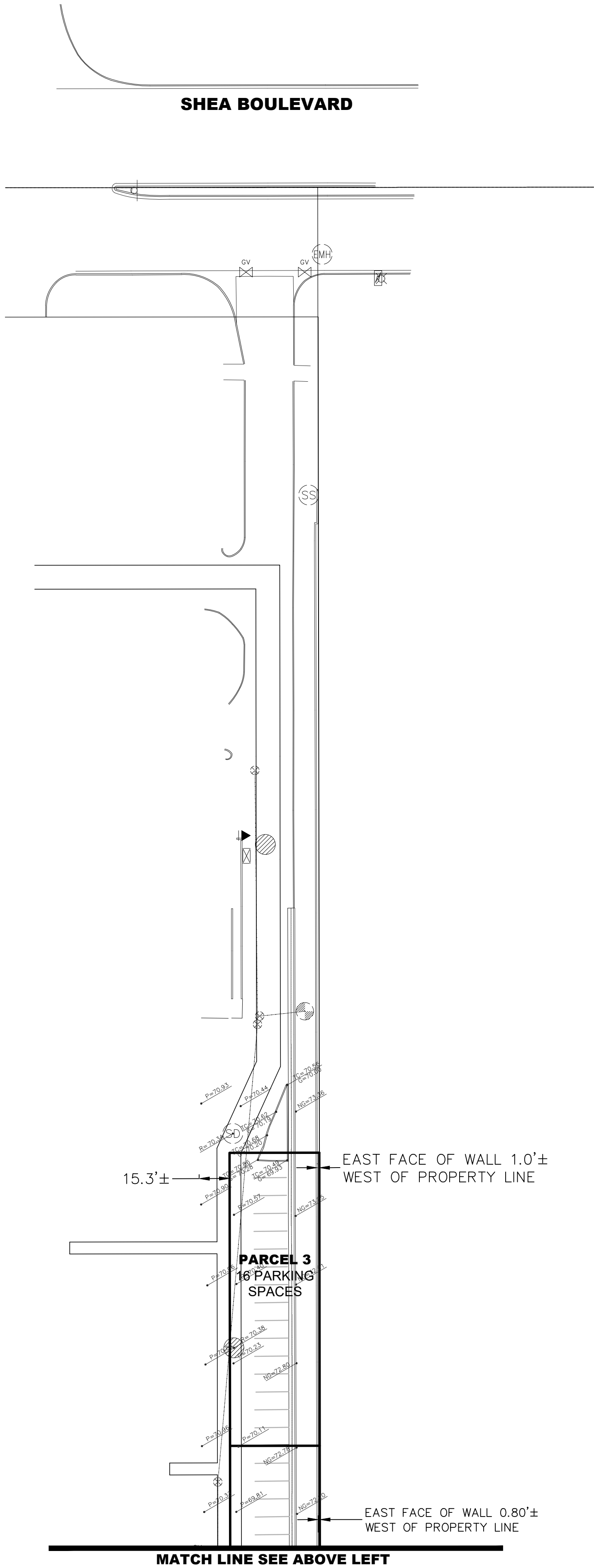
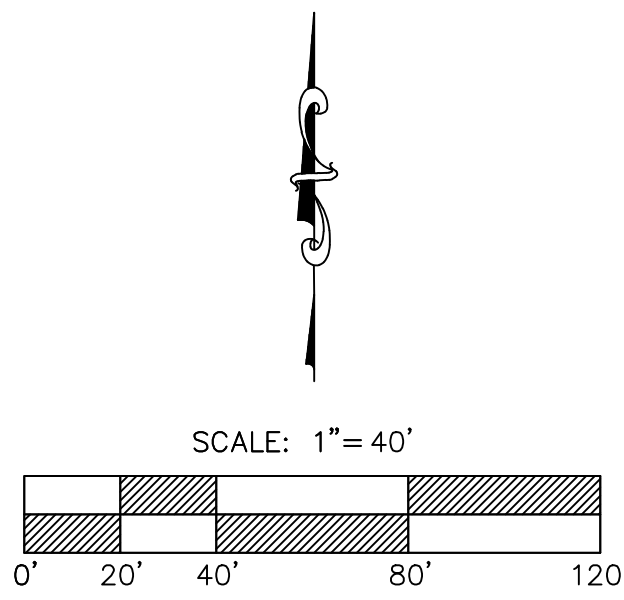
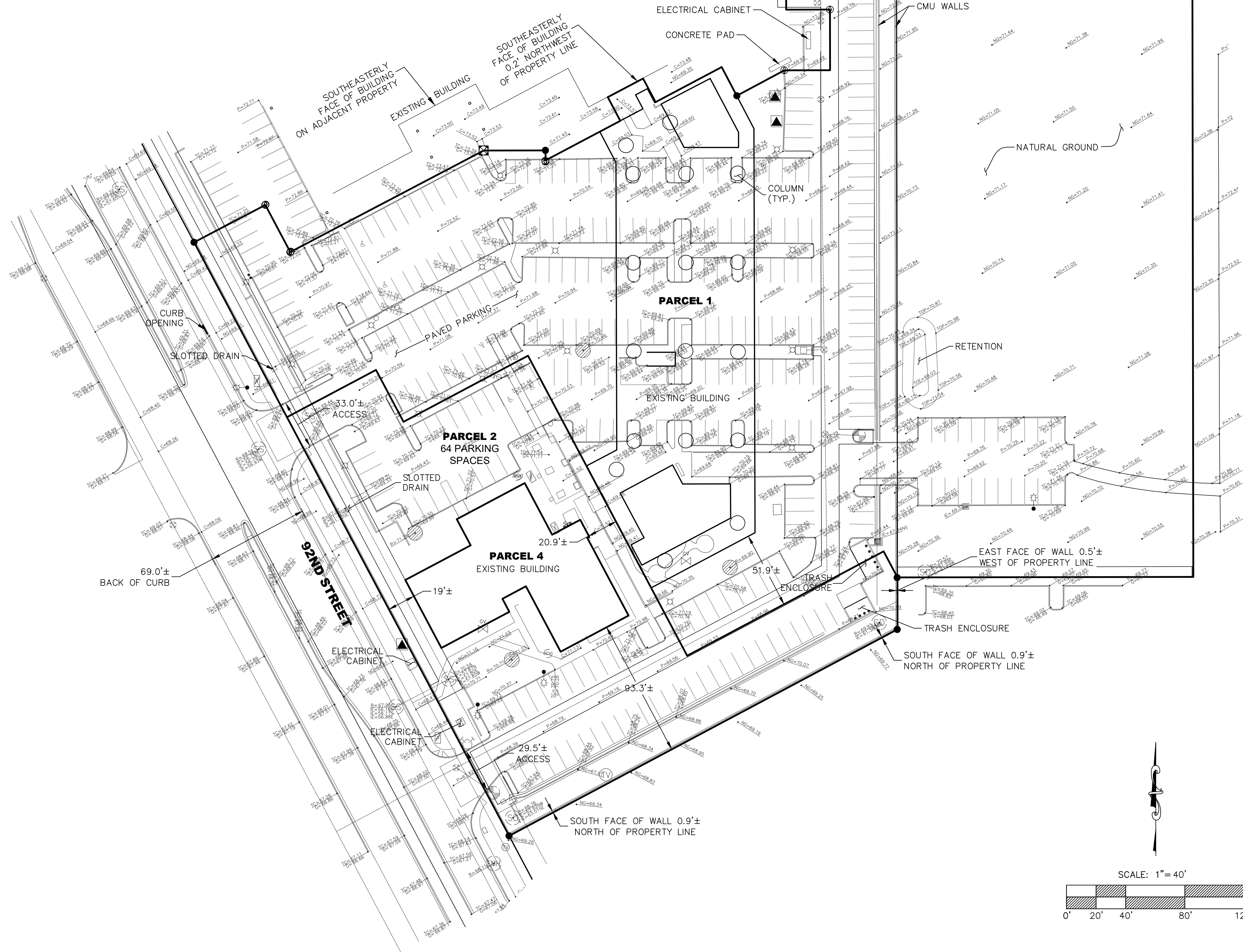
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BOUNDARY LINE

—

CENTER LINE

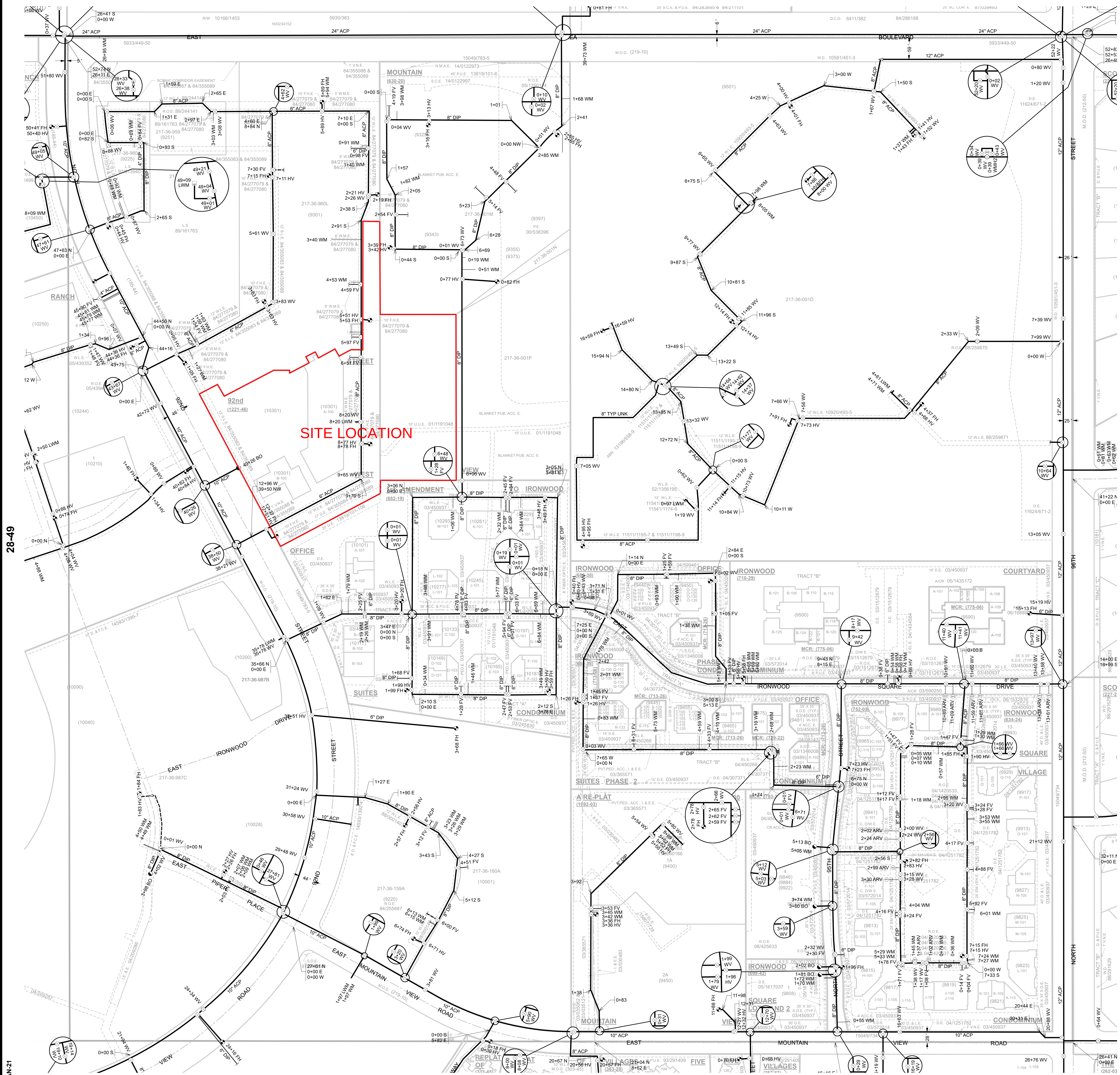
—

EASEMENT LINE

ALTANSPS LAND TITLE SURVEY
92ND STREET WEST
SCOTTSDALE, ARIZONA

SIG
SURVEY INNOVATION
GROUP, INC
Land Surveying Services
22425 N. 16th ST., SUITE 1
PHOENIX, ARIZONA 85024
PHONE (480) 922-0780
FAX (480) 922-0781
WWW.SIGSURVEYAZ.COM

REVISIONS:
△ 4/9/21
ADDED TOPOGRAPHY
△
△
DRAWING NAME: 13-186 ALTA 2/21
JOB NO. 13186
DRAWN: RMH
CHECKED: JAS
DATE: 3/29/21
SCALE: 1"=40'
SHEET: 3 OF 3



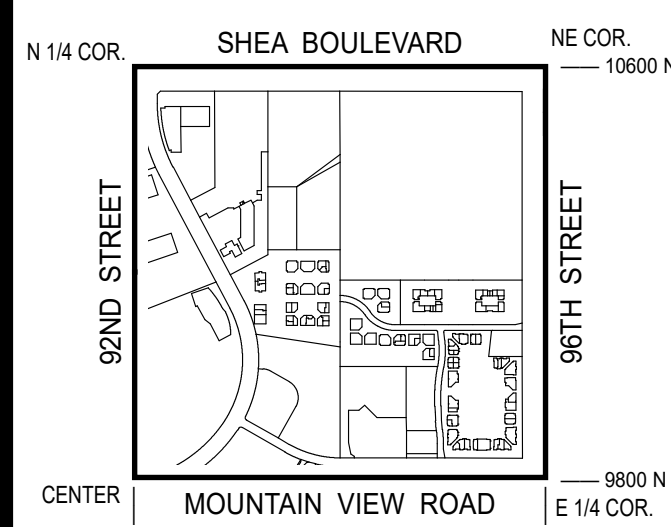
GENERAL NOTES:

- 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:

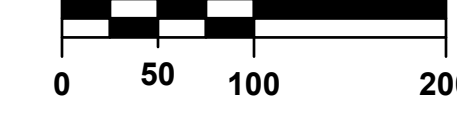
Air Release Valve	
Non-potable Air Release Valve	
Blowoff	
Cap	
Cathodic Protection	
Fill Drain	
Fire Hydrant	
Non-GPS Point	
Pressure Reducing Valve	
Pump	
Reducer	
Sample Station	
Water Manhole	
Non-Potable Manhole	
Well	
Valve	
Non-potable Valve	
Vault	
Water Main	
Non-Potable Main	
Fire / Private Main	
Non-Scottsdale Main	

VICINITY MAP



NORTH

SCALE: 1" = 100'



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

WATER QUARTER SECTION MAP

28-50

NE 1/4 SEC. 30 T3N R5E

FIGURE 4

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

Project Name:	Mercado Village
Project Address:	10299 North 92nd Street, Scottsdale, Arizona 85258
Client Project No.:	Not Provided
Arizona Flow Testing Project No.:	24194
Flow Test Permit No.:	C74656
Date and time flow test conducted:	March 7, 2024 at 8:40 AM
Data is current and reliable until:	September 7, 2024
Conducted by:	Floyd Vaughan – Arizona Flow Testing, LLC (480-250-8154)
Witnessed by:	Cesar Alcantar –City of Scottsdale-Inspector (480-209-3047)

Raw Test Data

Static Pressure: **88.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **64.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **22.0 PSI**
(Measured in pounds per square inch)

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

Coefficient of Diffuser: 0.7875

Flowing GPM: **1,764 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **3,095 GPM**

Data with 16 PSI Safety Factor

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

Residual Pressure: **48.0 PSI**
(Measured in pounds per square inch)

Approx. distance between hydrants: 370 Feet

Main size: Not Provided

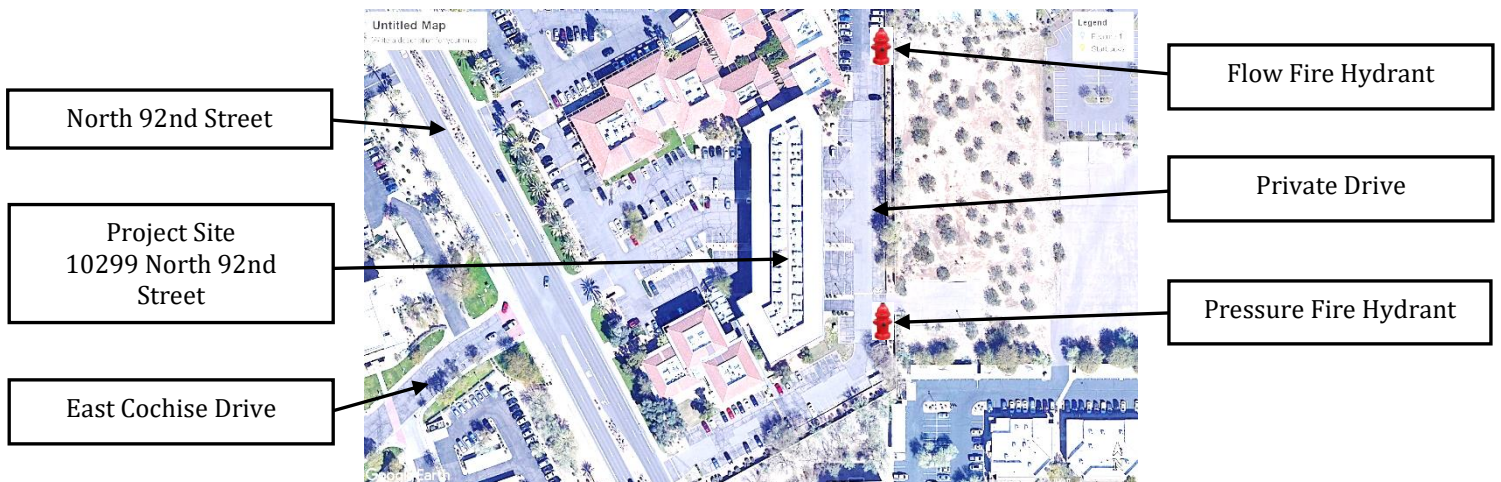
Flowing GPM: **1,764 GPM**

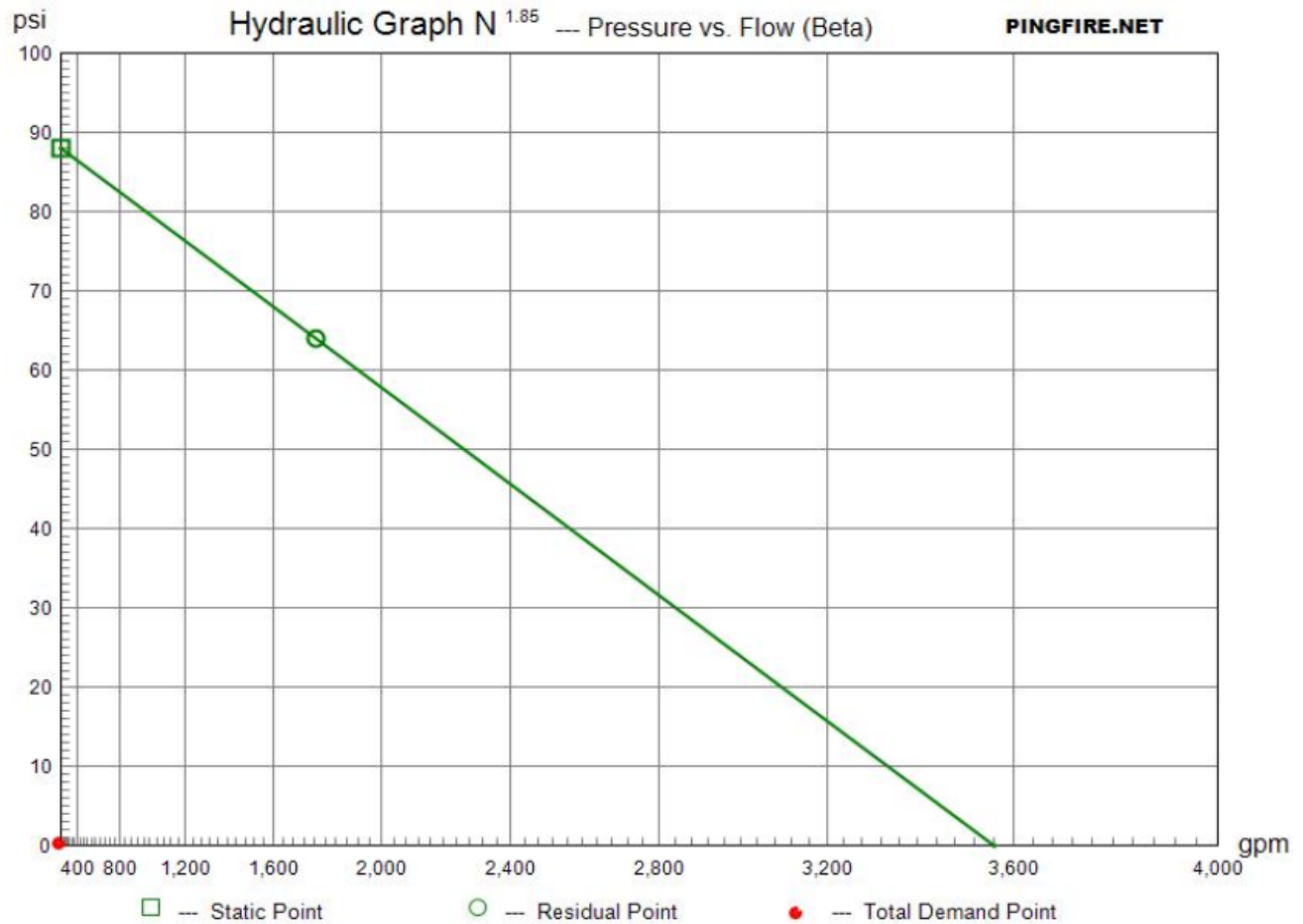
GPM @ 20 PSI: **2,677 GPM**

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

Flow Test Location

North ↑

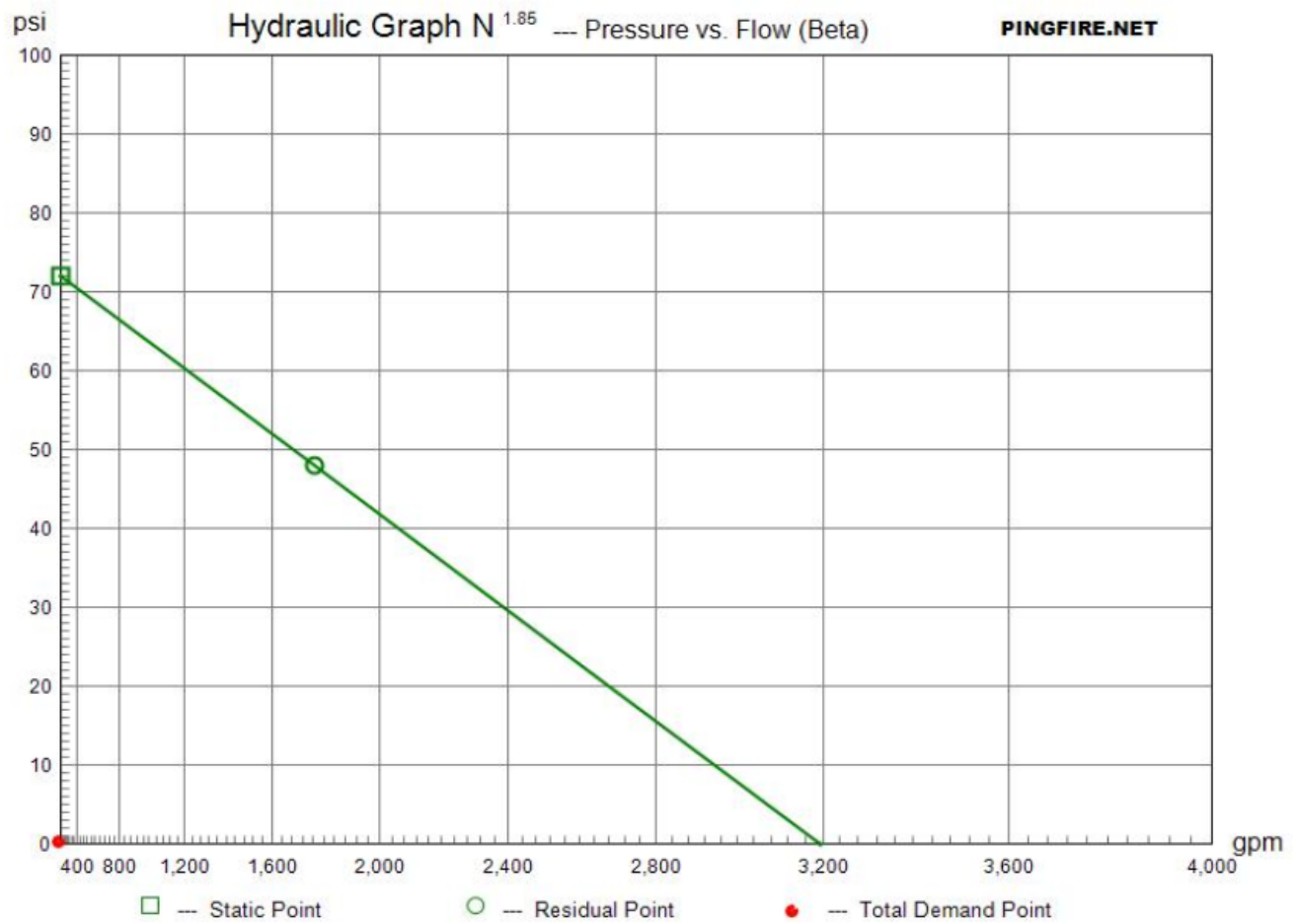




Project Location: 92 Ironwood - Raw Test Data

Flow Test: Hydrant Elev.= 1370.4 ft., Static Pressure= 88 psi, Residual Pressure= 64 psi, Flow= 1764 gpm

FIGURE 5 – Fire Hydrant Flow Test



Project Location: 92 Ironwood - Raw Test Data (AFES)

Flow Test: Hydrant Elev.= 1370.4 ft., Static Pressure= 72 psi, Residual Pressure= 48 psi, Flow= 1764 gpm

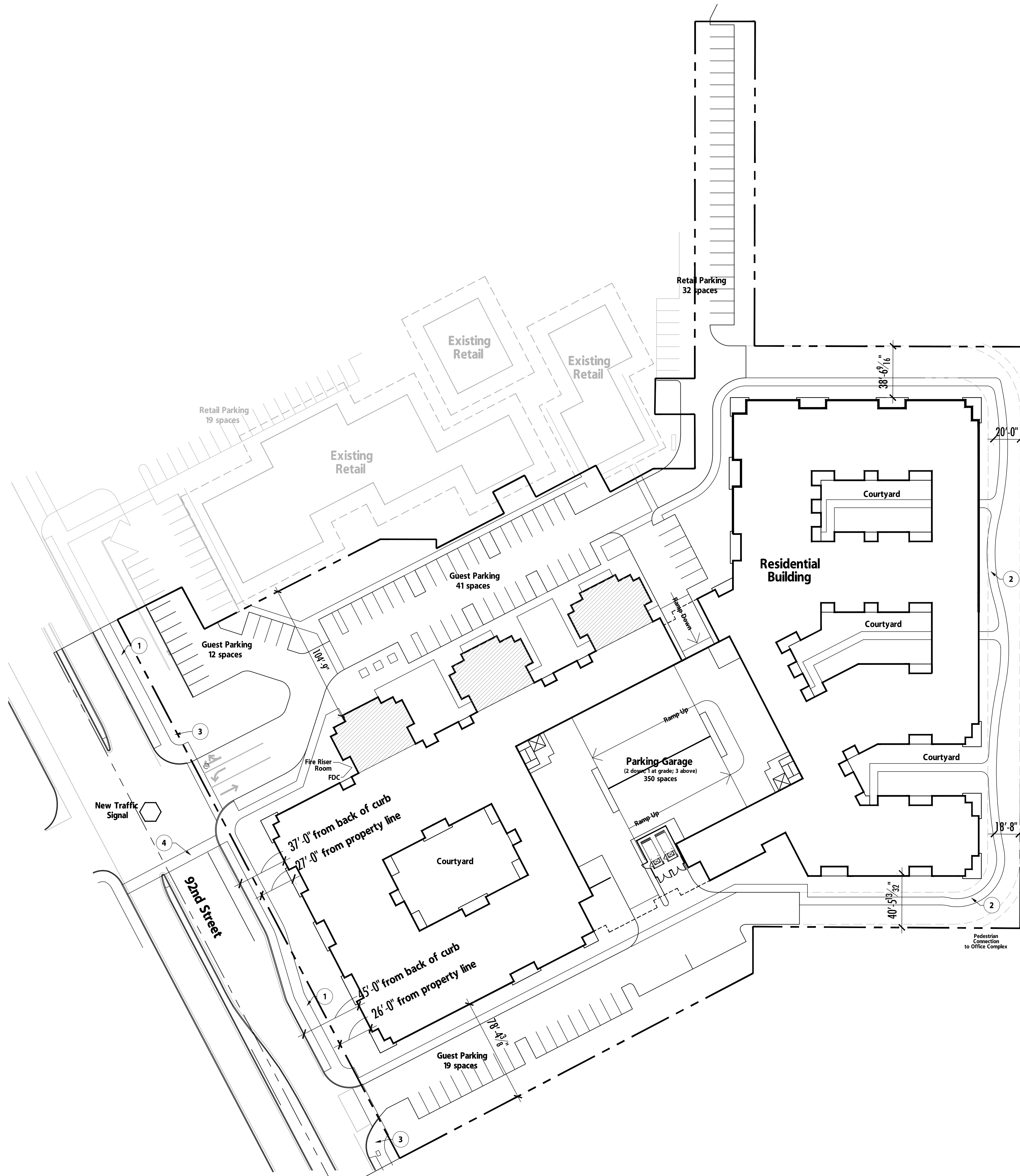
FIGURE 5 – Fire Hydrant Flow Test

APPENDICIES

APPENDIX I – Site Plan

APPENDIX II – Preliminary Utility Plan

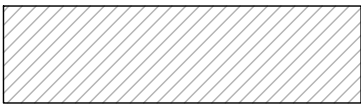
APPENDIX III – Water Model & Reports



Site Plan

Site Area:	6.64 acres gross (289,152sf) 6.08 acres net (264,725sf)
Residential Area:	225,355sf rentable
Building Height:	50'-0" (3 Stories)
Total Units:	255 units (884sf average)
Density:	38.40 units / gross acre
Co-work Space:	5,000sf (8 L/W; 195 1-bdrm; 52 2-bdrm.)
Residential Parking Required:	353 spaces (1.3/1-bdrm; 1.7/2-bdrm.)
Guest Parking Required:	43 spaces (1 space / 6 units)
Co-work Required:	17 spaces (1.0/300sf)
Total Parking Required:	413 spaces
Parking Provided:	350 parking garage spaces 72 surface spaces 422 spaces total (1.65 per unit)

Co-working/Live-work:

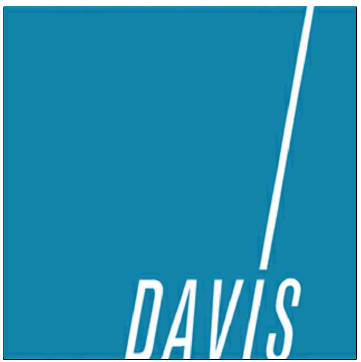


KEYNOTES

1. New 8' Detached Concrete Sidewalk
2. 6' wide Sidewalk Connection
3. Visibility Triangle (30" max. landscape height)
4. New Pedestrian Crosswalk with Traffic Signal

APPENDIX I

0' 40' 80' 120' 160' NORTH



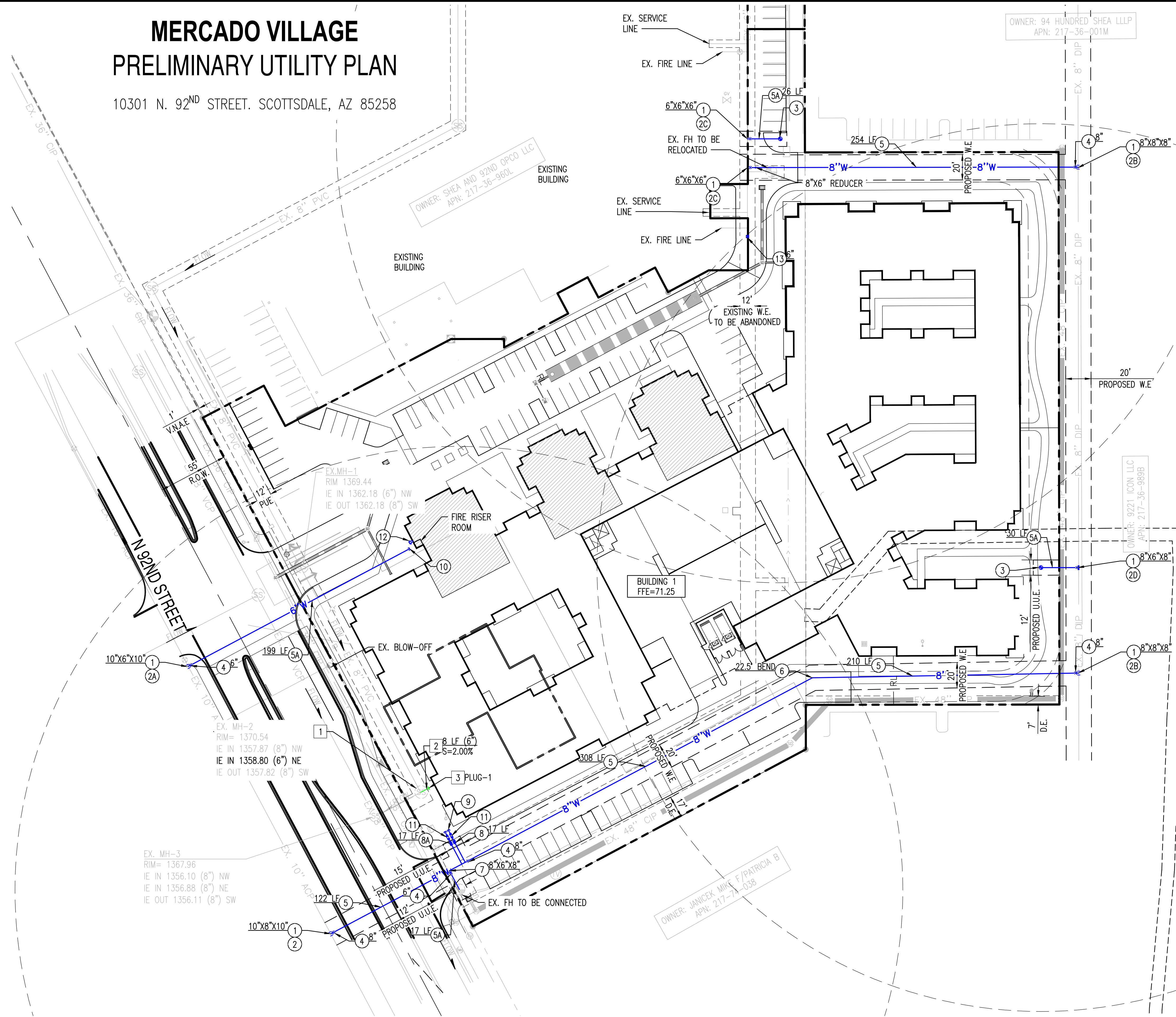
MERCADO VILLAGE- Scottsdale, Arizona

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20157- 12-13-23

MERCADO VILLAGE PRELIMINARY UTILITY PLAN

10301 N. 92ND STREET. SCOTTSDALE, AZ 85258



EXISTING LEGEND:

	CENTERLINE		SEWER LINE		STORM DRAIN LINE		SIGN
	EASEMENT LINE AS NOTED		SEWER MANHOLE		STORM CATCH BASIN		STREET LIGHT
	CHAINLINK FENCE		WATER LINE		STORM MANHOLE		FIBER OPTIC LINE
	TREE		WATER VALVE		GAS LINE		
			FIRE HYDRANT		IRRIGATION LINE		

PROPOSED UTILITY LEGEND:

	PROPERTY LINE		FIRE HYDRANT SPACING		GATE VALVE		CAP
	EASEMENT LINE		FIRE HYDRANT		T.S.V.B&C		BUILDING CONNECTION
	WATER LINE		FDC		BACK FLOW PREVENTER		SEWER MANHOLE
	SEWER LINE		WATER METER		REDUCER		SEWER CLEAN OUT

PRELIMINARY SEWER CONSTRUCTION KEY NOTES

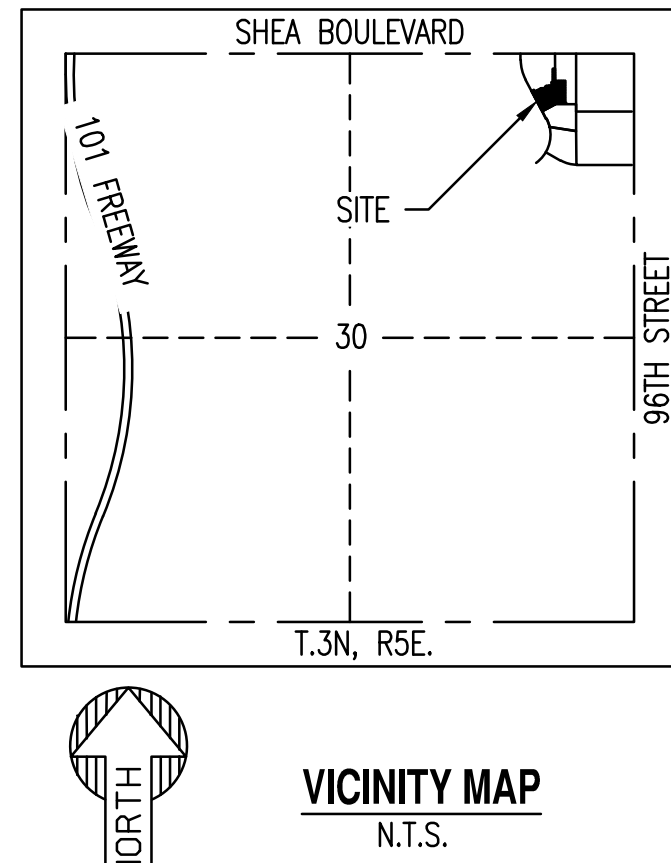
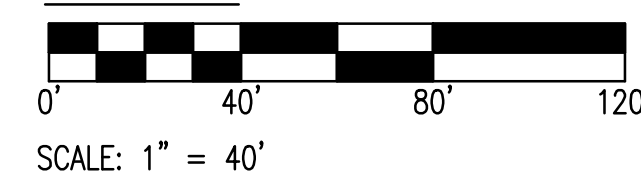
- 1 CONNECTION TO EXISTING SEWER MANHOLE.
- 2 6" PVC SEWER LINE. LENGTH AND SLOPE PER PLAN.
- 3 SEWER CONNECTION TO BUILDING.

PRELIMINARY WATER CONSTRUCTION KEY NOTES

- 1 CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO CONSTRUCTION.
- 2 10" X 8" CUT-IN TEE
- 2A 10" X 6" CUT-IN TEE
- 2B 8" X 8" CUT-IN TEE
- 2C 6" X 6" CUT-IN TEE
- 2D 8" X 6" X 8" TSVB&C
- 3 FIRE HYDRANT ASSEMBLY (COMPLETE WITH GATE VALVE, BOX & COVER) PER MAG STD. DET. 360. PROVIDE PAVEMENT MARKER (PM) PER C.O.S. STD. DET. 2363.
- 4 GATE VALVE WITH VALVE BOX PER MAG STD. DET. 391-1, TYPE "C" WITH LOCKING LID. SIZE PER PLAN.
- 5 8" DUCTILE IRON PIPE, CLASS 350, CEMENT MORTAR LINED, WITH POLYETHYLENE WRAPPING. PROVIDE BLUE POLYETHYLENE LOCATING TAPE ABOVE ALL PUBLIC WATER LINES. MAINTAIN 3' MINIMUM COVER. LENGTH PER PLAN.
- 5A 6" DUCTILE IRON PIPE, CLASS 350, WITH POLYETHYLENE WRAPPING. LENGTH PER PLAN.
- 6 BEND WITH RESTRAINED JOINTS PER MAG 303. OR THRUST BLOCK PER MAG STD. DET. 303 & 380. SIZE AND ANGLE PER PLAN.
- 7 TEE WITH MECHANICAL JOINT RESTRAINT PER MAG STD. DET. 303-1 AND 303-2 SIZE PER PLAN.
- 8 2" TYPE "K" COPPER DOMESTIC SERVICE CONNECTION PER C.O.S. STD. DET. 2330. INSTALL "X" METER BOX PER MAG STD. DET. 320 AND 315. (CONNECTION AND METER TO BE INSTALLED BY CITY FORCES)
- 8A 1" TYPE "K" COPPER IRRIGATION SERVICE CONNECTION PER C.O.S. STD. DET. 2330. INSTALL 1" METER BOX PER MAG STD. DET. 320 AND 315. (CONNECTION AND METER TO BE INSTALLED BY CITY FORCES)
- 9 DOMESTIC CONNECTION TO BUILDING, REFER TO MEP PLAN FOR CONTINUATION.
- 10 FIRE CONNECTION TO BUILDING, REFER TO PLAN FOR CONTINUATION.
- 11 REDUCED PRESSURE PRINCIPLE BACKFLOW ASSEMBLY (RPPBA) PER C.O.S. STD. DET. 2354. SIZE TO MATCH WATER METER SIZE.
- 12 FIRE DEPARTMENT CONNECTION BY BUILDING CONTRACTOR (FOR REFERENCE ONLY).
- 13 CAP END AND PROVIDE FLUSHING PIPE PER MAG STD. DET. 390, TYPE "B".

APPENDIX II

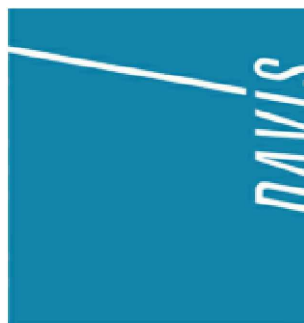
PLAN VIEW



PRELIMINARY
NOT FOR
CONSTRUCTION

SUSTAINABILITY
ENGINEERING
GROUP

SEG



PROJECT

MERCADO VILLAGE

LOCATION

92ND & SHEA,
SCOTTSDALE, AZ 85258

REVISION NO.:

DATE:

JOB NO.:

210414

SHEET TITLE:

PRELIMINARY
UTILITY PLAN

PAGE NO.:

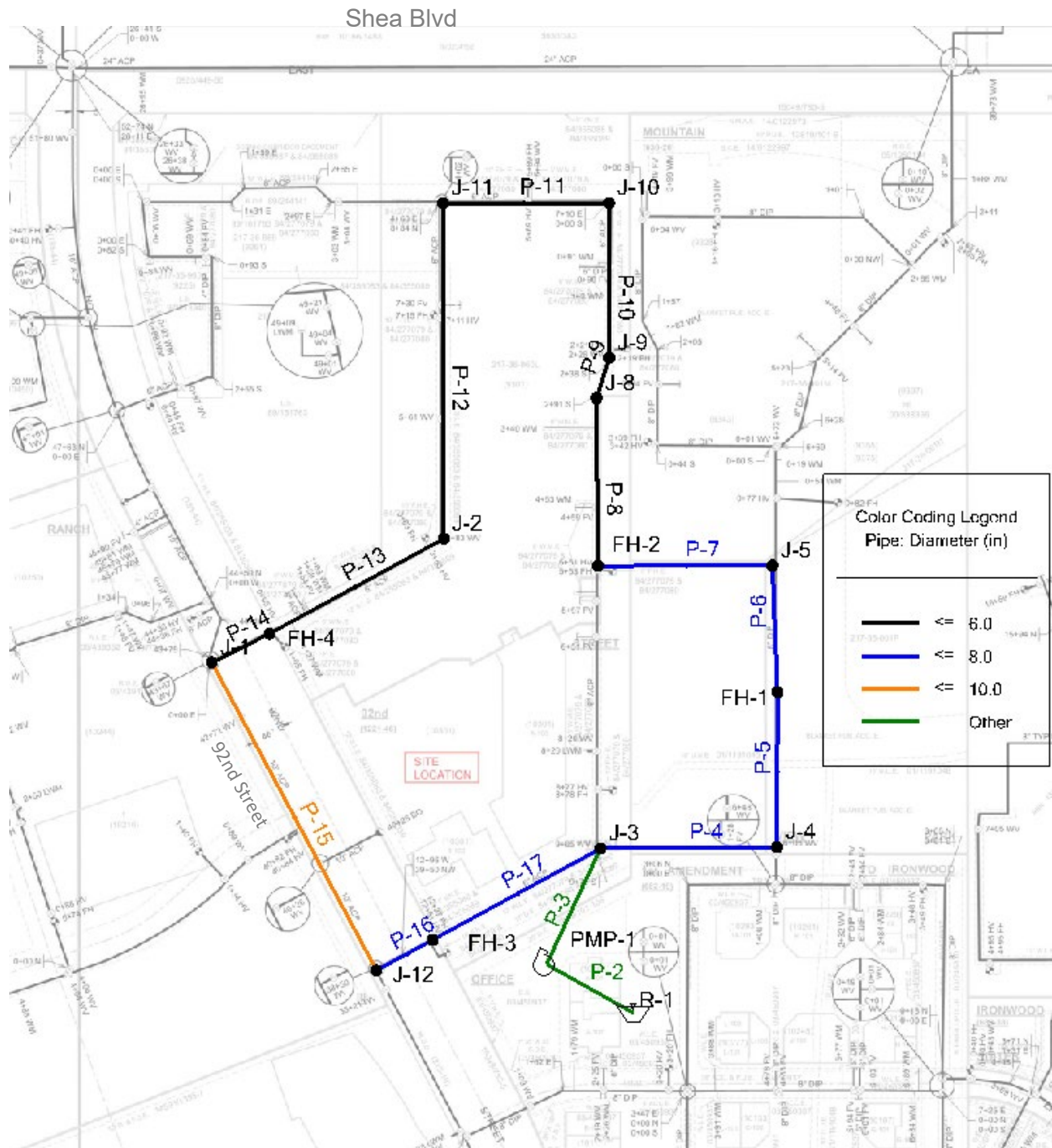
1 OF 1

SHEET NO.:

C4.00

5240 N. 16TH STREET SUITE 105, PHOENIX, ARIZONA 85016
WWW.AZSEG.COM TEL. 480.588.7226 FAX. 480.259.3534

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APPENDIX III – Water Model Layout

2024-04-25 Mercado Courtyard-v1.wtg

Active Scenario: PH

FlexTable: Junction Table

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure Head (ft)
FH-1	1,372.40	0	1,577.71	89	205.31
FH-2	1,373.10	0	1,577.69	89	204.59
FH-3	1,369.20	256	1,577.42	90	208.22
FH-4	1,369.07	0	1,577.44	90	208.37
J-1	1,368.50	0	1,577.43	90	208.93
J-2	1,370.50	0	1,577.49	90	206.99
J-3	1,370.60	0	1,577.73	90	207.13
J-4	1,370.40	0	1,577.72	90	207.32
J-5	1,372.70	0	1,577.70	89	205.00
J-8	1,370.50	0	1,577.65	90	207.15
J-9	1,371.00	0	1,577.64	89	206.64
J-10	1,372.00	0	1,577.60	89	205.60
J-11	1,371.80	0	1,577.57	89	205.77
J-12	1,366.80	0	1,577.42	91	210.62

2024-04-25 Mercado Courtyard-v1.wtg

Active Scenario: MD+ SPLIT FF

FlexTable: Junction Table

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Pressure Head (ft)
FH-1	1,372.40	1,250	1,432.32	26	59.92
FH-2	1,373.10	1,250	1,427.54	24	54.44
FH-3	1,369.20	146	1,462.16	40	92.96
FH-4	1,369.07	0	1,458.95	39	89.87
J-1	1,368.50	0	1,460.85	40	92.35
J-2	1,370.50	0	1,453.09	36	82.59
J-3	1,370.60	0	1,464.40	41	93.80
J-4	1,370.40	0	1,447.32	33	76.92
J-5	1,372.70	0	1,430.31	25	57.61
J-8	1,370.50	0	1,432.50	27	62.00
J-9	1,371.00	0	1,433.74	27	62.74
J-10	1,372.00	0	1,438.31	29	66.31
J-11	1,371.80	0	1,443.20	31	71.40
J-12	1,366.80	0	1,461.70	41	94.90

2024-04-25 Mercado Courtyard-v1.wtg

Active Scenario: MD+ SPLIT FF

FlexTable: Pipe Table

Label	Start Node	Stop Node	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)
P-2	R-1	PMP-1	146	24.0	ACP	130.0	2,646	1.88	0.001
P-3	PMP-1	J-3	187	24.0	ACP	130.0	2,646	1.88	0.001
P-4	J-3	J-4	258	8.0	DIP	130.0	2,005	12.80	0.066
P-5	J-4	FH-1	227	8.0	DIP	130.0	2,005	12.80	0.066
P-6	FH-1	J-5	185	8.0	DIP	130.0	755	4.82	0.011
P-7	J-5	FH-2	255	8.0	DIP	130.0	755	4.82	0.011
P-8	FH-2	J-8	245	6.0	ACP	130.0	-495	5.62	0.020
P-9	J-8	J-9	61	6.0	ACP	130.0	-495	5.62	0.020
P-10	J-9	J-10	226	6.0	ACP	130.0	-495	5.62	0.020
P-11	J-10	J-11	242	6.0	ACP	130.0	-495	5.62	0.020
P-12	J-11	J-2	490	6.0	ACP	130.0	-495	5.62	0.020
P-15	J-1	J-12	510	10.0	ACP	130.0	-495	2.02	0.002
P-16	J-12	FH-3	93	8.0	DIP	130.0	-495	3.16	0.005
P-17	FH-3	J-3	279	8.0	DIP	130.0	-641	4.09	0.008
P-14	J-1	FH-4	94	6.0	ACP	130.0	495	5.62	0.020
P-13	FH-4	J-2	290	6.0	ACP	130.0	495	5.62	0.020

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Active Scenario: MD+ SPLIT FF

FlexTable: Pump Table

Label	Elevation (ft)	Pump Definition	Status (Initial, Transient)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	1,374.40	PMP-3	On	1,376.32	1,464.50	2,646	88.18

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Active Scenario: MD+ SPLIT FF
Pump Definition Detailed Report: PMP-3

Element Details			
ID	83	Notes	
Label	PMP-3		
Pump Definition Type			
Pump Definition Type	Standard (3 Point)	Design Head	147.66 ft
Shutoff Flow	0 gpm	Maximum Operating Flow	3,095 gpm
Shutoff Head	203.04 ft	Maximum Operating Head	50.76 ft
Design Flow	1,764 gpm		
Pump Efficiency Type			
Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0 gpm		
Transient (Physical)			
Inertia (Pump and Motor)	0.000 lb·ft²	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

2024-04-25 Mercado Courtyard-v1.wtg
Active Scenario: MD+ SPLIT FF
Pump Definition Detailed Report: PMP-3

