

WATER STATEMENT

FOR A DOMESTIC WATER and FIRE LINE
SERVING

7474 E.PINNACLE PEAK ROAD

SCOTTSDALE, AZ 85260

APN #212-05-531

PINNACLE PEAK

“PET RESORT”

Plan Check #

QS #45-45

Provide Basis of Design information, including but not limited to, domestic and fire flow demands per DSPM 6-1.200, 6-1.20, Figure 6-1.2, 6-1.402, 6-1.404, 6-1.405, 6-1.406, 6-1.413, 6-1.414, 6-1.415, 6-1.416, 6-1.419, 6-1.501, 6-1.502, 6-1.507.



Prepared By


KEOGH ENGINEERING. INC.

650 N. 137TH Avenue Suite 110

Goodyear, Arizona 85338

Job No. 22270

February 2023

PRELIMINARY Basis of Design Report	
<input type="checkbox"/> ACCEPTED	
<input type="checkbox"/> ACCEPTED AS NOTED	
<input checked="" type="checkbox"/> REVISE AND RESUBMIT	
<small>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.</small>	
BY: apitchard	DATE: 3/31/2023

Basis of Design Report

The purpose of this report is to provide justification for the connection of domestic water and fire line service serving the Pinnacle Peak Pet Resort. The City of Scottsdale Building Department requires that "Pinnacle Peak Pet Resort" domestic and fire line tie into the existing 2" Dom. And 4" Fire line located at the north property line of this site (see the Water Exhibit).

The subject site is located at the northwest corner of the intersection of Los Portones Drive and Pinnacle Peak Road and a part of the "Pinnacle Peak Office Park" in the City of Scottsdale.

Water QS #45-45 was analyzed for existing sewer facilities in the area (see Water Exhibit).

All new construction will connect to existing water and fire lines owned by Scottsdale and Maricopa.

Design Statement:

The site is included and a part of the overall existing water system serving "Pinnacle Peak Office Park". It is assumed that "Pinnacle Peak Office Park" has provided adequate pressure to include the "Pinnacle Peak Pet Resort" site.

Demonstrate there is adequate flow and pressures for all four model scenarios described in DSPM 6-1.202 for this project. Use square footages of combined first and second floor in calculating fire demand per DSPM 6-1.501.

This project will connect to an existing 2" domestic and 4" fire line located at the north property line of this site. The site will also provide 2" domestic and 4" fire line back flow preventers (see the Water Exhibit).

Per the Fire Flow Test there is a static pressure of 72 p.s.i. See Fire Flow Test dated 2-16-23

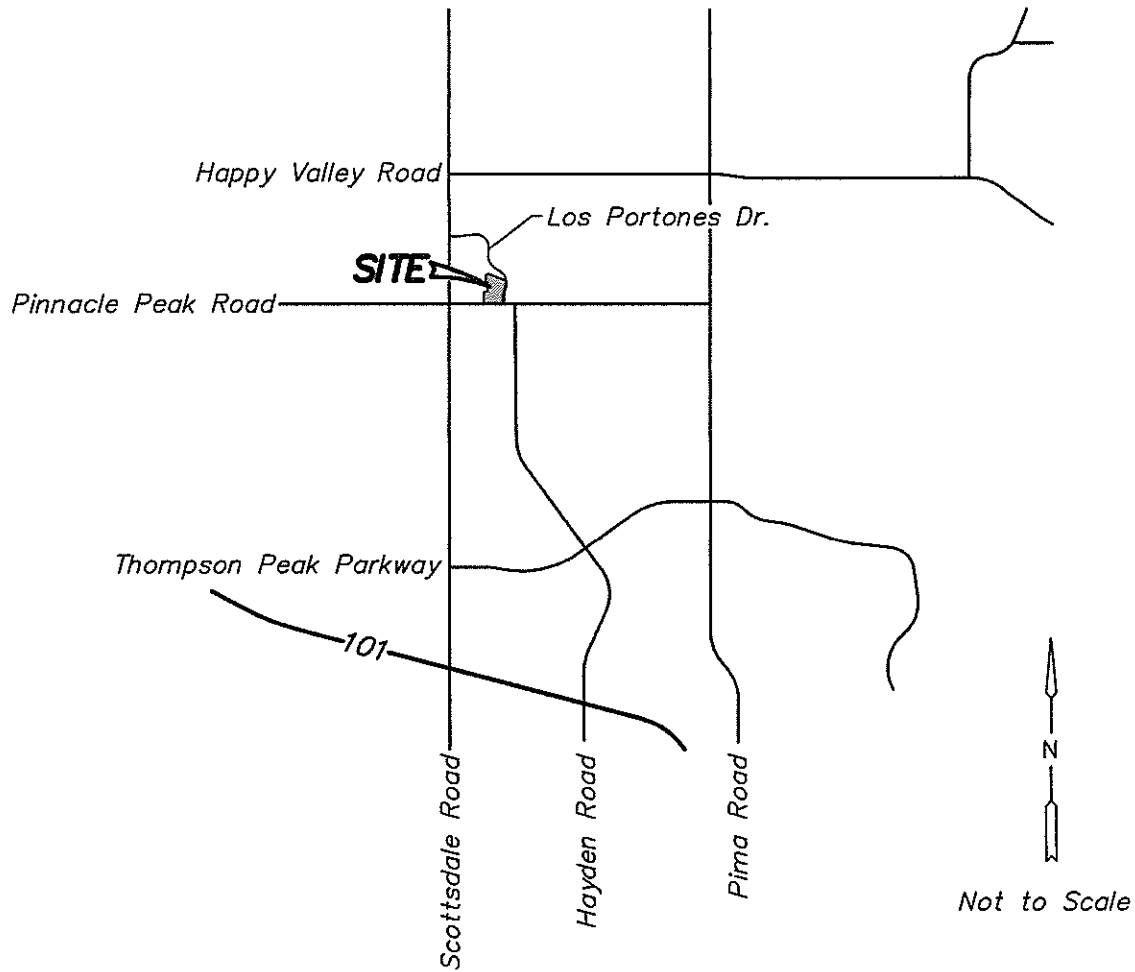
ESTIMATED QUANTITIES:

100 L.F. - 2" Domestic Water Service

1 Ea. - 2" Back Flow Preventer

100 L.F. - 4" Fire line

1 Ea. - 4" Back Flow Preventer



Keogh Engineering, Inc.

650 N. 137TH AVENUE #110 • GOODYEAR, ARIZONA 85338
 PHONE: (623) 535-7260 FAX: (623) 535-7262
 EMAIL: keogh@keoghengineering.com

DESIGNED
DFK/RMV

DATE
2-17-23

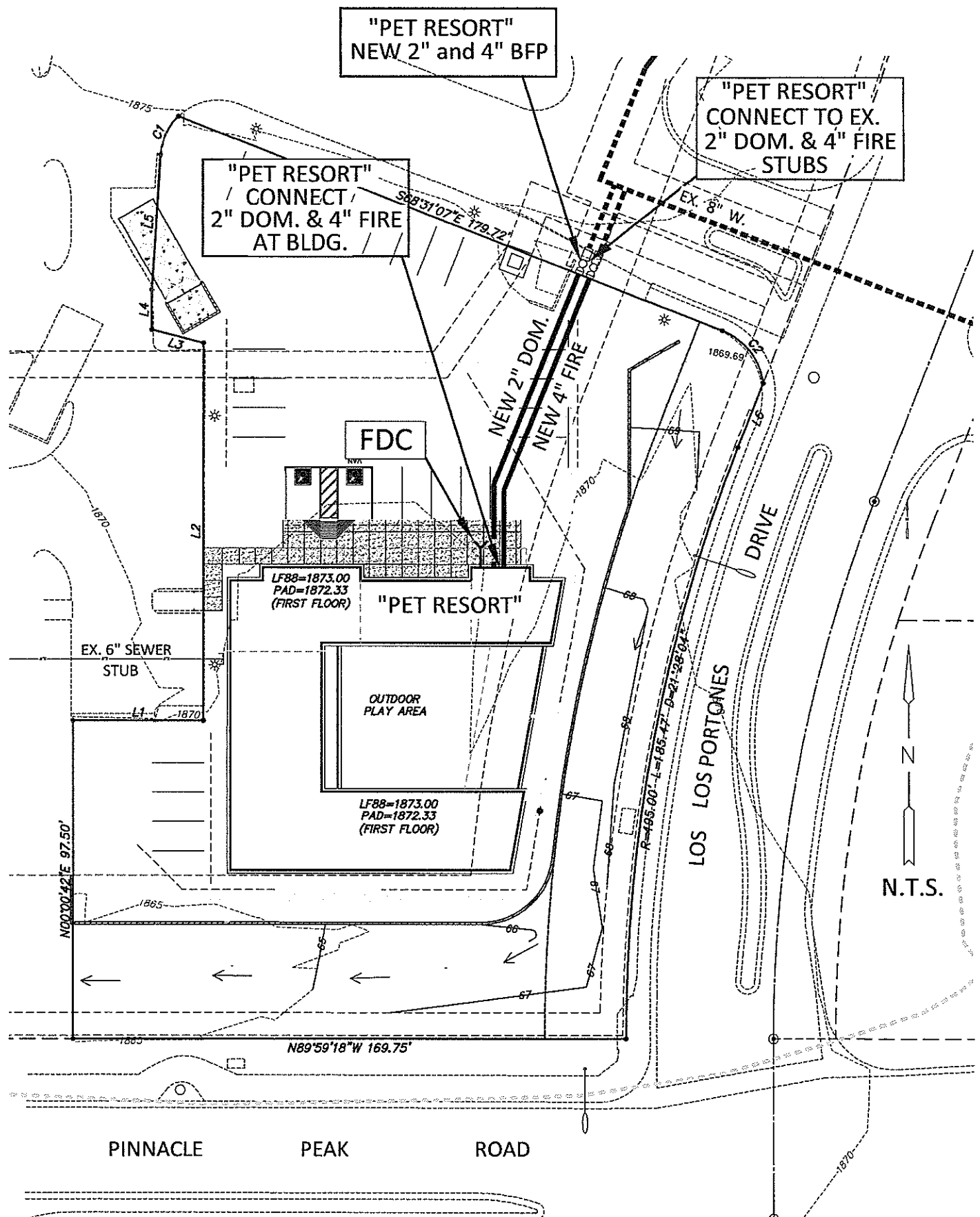
JOB NO.
22270

BASIS OF DESIGN

PINNACLE PEAK PET RESORT "VICINITY MAP"

7474 E. PINNACLE PEAK ROAD
SCOTTSDALE, ARIZONA 85255

C:\VEOCH\JOBS\22270-ATLANTIC DEVELOPMENT\WATER MEMO\22270-PET RESORT WATER MEMO 2-16-23.DWG WATER MEMO EXHIBIT (02-17-23 9:35:47A



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PHONE: (623) 535-7260 FAX: (623) 535-7262
EMAIL: keogh@keoghenengineering.com

DESIGNED
DFK/RMV

DATE
2-16-23

JOB NO.
22270

WATER MEMO

"PINNACLE PEAK PET RESORT" WATER EXHIBIT

7474 E. PINNACLE PEAK ROAD
SCOTTSDALE, ARIZONA 85255

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

Project Name:	Not Provided
Project Address:	7474 East Pinnacle Peak Road, Scottsdale, Arizona, 85255
Client Project No.:	Not Provided
Arizona Flow Testing Project No.:	23092
Flow Test Permit No.:	C71323
Date and time flow test conducted:	February 6, 2023 at 7:00 AM
Data is current and reliable until:	August 6, 2023
Conducted by:	Floyd Vaughan-Az Flow Testing, LLC (480-250-8154)
Witnessed by:	Sonny Schreiner – City of Scottsdale-Inspector (602-819-7718)

Raw Test Data

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

Residual Pressure: **40.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **17.0 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: **1,772 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **2,112 GPM**

Data with 20 PSI Safety Factor

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

Residual Pressure: **20.0 PSI**
(Measured in pounds per square inch)

Approx. distance between hydrants: 340 Feet

Main size: Not Provided

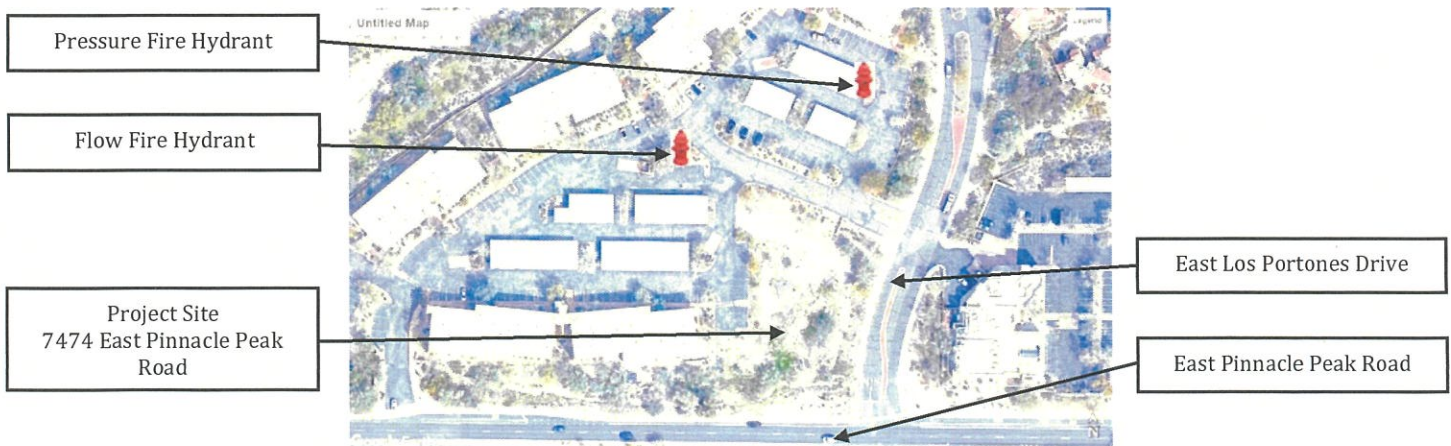
Flowing GPM: **1,772 GPM**

GPM @ 20 PSI: **1,772 GPM**

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

Flow Test Location

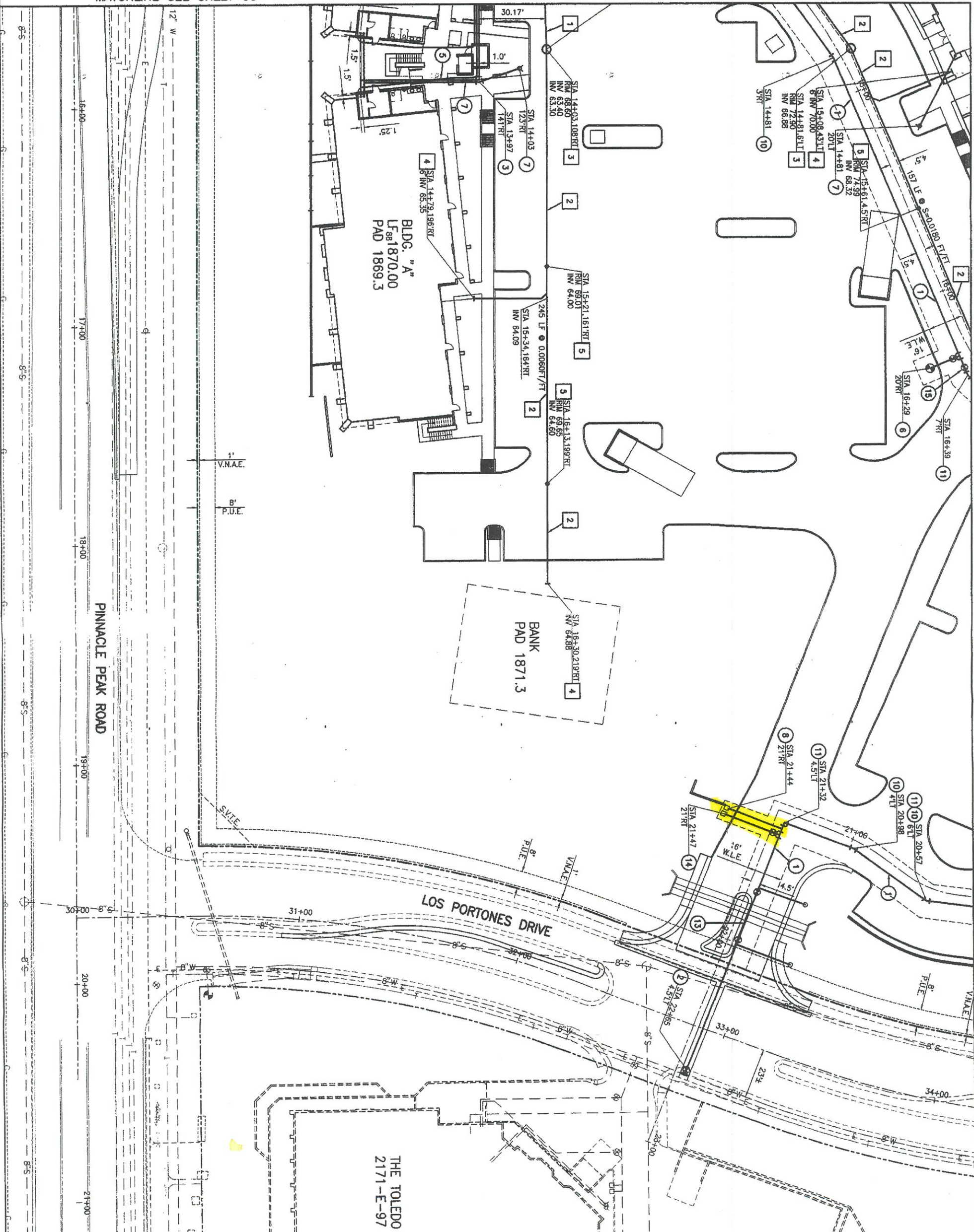
North ↑



MATCHLINE SEE SHEET C8

MATCHLINE SEE SHEET C8

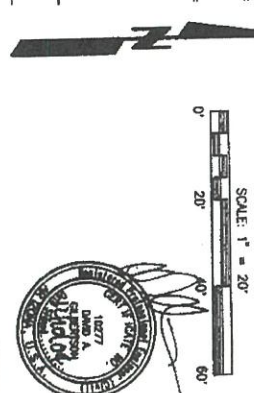
MATCHLINE SEE SHEET C8



THE TOLEDO
2171-E-97

- 1. INSTALL 8" P.V.C. SEWER LINE.
- 2. INSTALL 6" P.V.C. SEWER LINE.
- 3. CONSTRUCT MANHOLE PER M.A.G. STD.
- 4. DETAIL 420 & 424.
- 5. INSTALL 6" P.V.C. SEWER LINE TO 5' FROM BUILDING. SEE PLUMBING PLANS.
- 6. INSTALL CLEANOUT PER U.P.C.

- 1. INSTALL 8" D.I.P. CLASS 350 WATERLINE WITH POLYMER (3" MIN. COVER).
- 2. INSTALL 8"x8" T.S.V.B.A.C. TYPE 'C' PER M.A.G. STD. DETAIL 340 & 391-1-C WITH RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 3. INSTALL 11" BEND WITH ELECTRONIC MARKER PER C.O.S. SPEC. 610.4 AND RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 4. INSTALL 2" WATER SERVICE PER C.O.S. STD. DETAIL 2330 FOR LANDSCAPE. SEE PLUMBING PLANS FOR METER SIZE.
- 5. INSTALL 6" D.I.P. CLASS 350 FIRELINE TO FLANGE ABOVE FINISH FLOOR. SEE FIRE SPRINKLER PLANS. (3" MIN. COVER).
- 6. INSTALL 8"x6" T.S.V.B.A.C. TYPE 'C' PER M.A.G. STD. DETAIL 391-1-TYPE 'C' WITH RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 7. INSTALL FIRE DEPARTMENT CONNECTION PER DETAIL ON SHEET C17 WITH 4" D.I.P. CLASS 350 FIRELINE FOR F.O.C. TO FLANGE 6" ABOVE FINISH FLOOR. SEE FIRE SPRINKLER PLANS.
- 8. INSTALL 2" WATER SERVICE PER C.O.S. STD. DETAIL 2330. SEE PLUMBING PLANS FOR METER SIZE.
- 9. INSTALL 8"x6" TEE WITH 6" V.B.A.C. PER M.A.G. STD. DETAIL 391-1-TYPE 'C' WITH RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 10. INSTALL 11" BEND WITH ELECTRONIC MARKER PER C.O.S. SPEC. 610.4 AND RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 11. INSTALL 22" BEND WITH ELECTRONIC MARKER PER C.O.S. SPEC. 610.4 AND RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 12. INSTALL 90° BEND WITH ELECTRONIC MARKER PER C.O.S. SPEC. 610.4 AND RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 13. INSTALL VERTICAL ALIGNMENT OF WATER LINE PER C.O.S. STD. DETAIL 2370 & MODIFIED WITH ONE VALVE AND AIR RELEASE VALVES SHOWN. PER M.A.G. STD. DETAIL 2348 & MEGALUG JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.
- 14. INSTALL 8" TEE WITH 4" D.I.P. FIRELINE CLASS 350 WITH 2" CIRC8 STOP AND FLUSHING PIPE PER M.A.G. STD. DETAIL 390-8 FOR FUTURE BANK PAD FIRE SPRINKLER. (3" MIN. COVER).
- 15. INSTALL 8" C.V.B. & C. PER M.A.G. STD. DETAIL 391-1 AND RESTRAINED JOINTS PER M.A.G. STD. DETAIL 303-1 & 303-2.



GILBERTSON ASSOCIATES
INC.
1800 East Princeton Drive, Suite 100, Phoenix, Arizona 85024-1004
Pinnacle Peak Office Park

UTILITY PLAN

Designed by: JNE
Drawn by: MJD / CML
Date: DECEMBER 10, 2004
Sheet 07 of 17