



**KLAND CIVIL ENGINEERS**

# **Preliminary Water & Sewer Basis of Design Report**

## **Megerdichian Assisted Seniors Center (MASC)**

**8849 E CHOLLA ST, SCOTTSDALE, AZ 85260**

Kland# K15153

**Prepared for:**

AAk Architecture & Interiors, Inc.  
7585 E. Redfield Rd., Suite 106  
Scottsdale, AZ 85260-6937  
Contact: Artin Knadjian

**Prepared by:**

Kland Civil Engineers, L.L.C.  
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Phoenix, Arizona 85020  
Contact: Leslie Kland, P.E.

### **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.

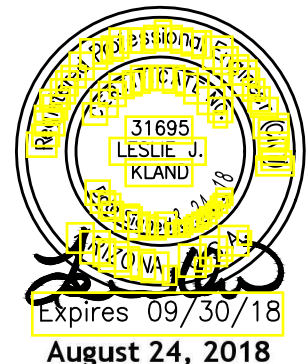
BY rsacks

DATE 1/22/2019

**Submitted to:**

City of Scottsdale  
E. Indian School Road  
Scottsdale, Arizona 85251

**Follow preliminary BOD content per DS & PM.6-1.201 and 7-1.201.**



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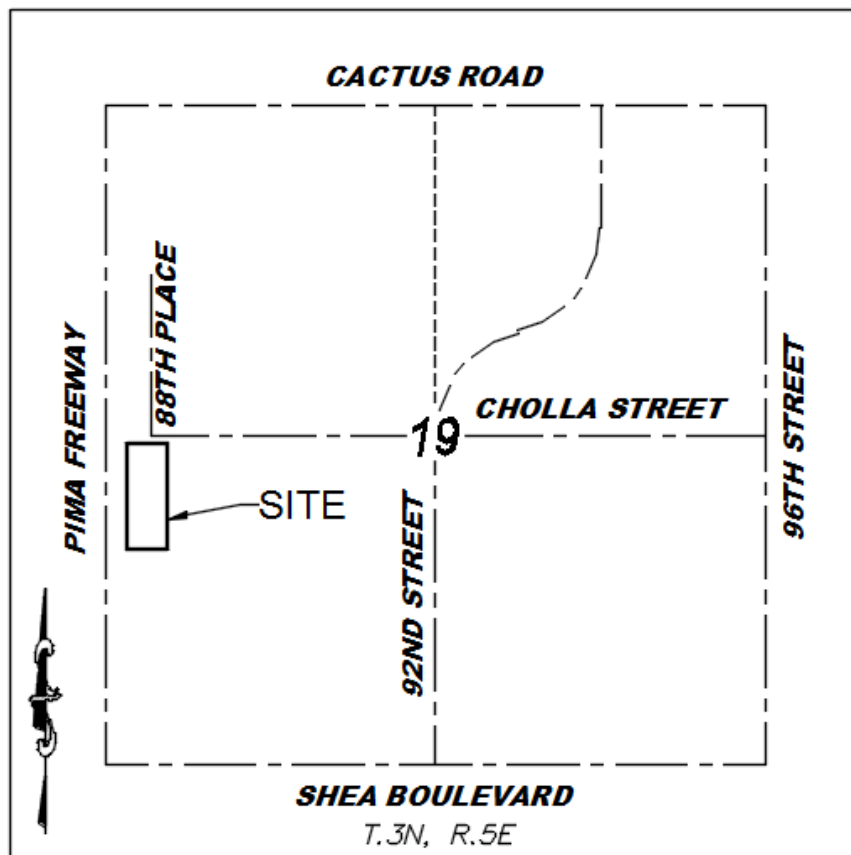


## 1. Introduction

Number of units? Need to provide water and sewer demands.

The Megerdichian Assisted Seniors Center (MASC) is located within a portion of Lot 3 in the Southwest Quarter of Section 19, Township 3 North, Range 5 East of Gila and Salt River base and Meridian, Maricopa County, Arizona. The site is bordered on the west by Pima Freeway, on north by Cholla Street, and on the east and south by previously developed properties. The current zoning of the site is R1-35 according to Maricopa County Assessor's Office. Currently, the site includes several parking lots and paved driveways, three single story buildings which are connected by a dirt road, and a retention area. The remaining portion on the north of the site is open space area which the proposed development will occur on. The proposed development includes a senior center building (21,800 sf), and the required parking spaces.

Please see Vicinity Map below.



### **VICINITY MAP**

**N.T.S.**

An existing 30" DIP public water and 24" PVC public sewer are located along the west property boundary. Please refer to "Appendix A - Sewer and Water Quarter Section Map" for detailed information.

## 2. Sewer Distribution System

Need calculations to verify  
this diameter meets demand.  
Minimum slope?

The site will be serviced by a sewer main connected to the existing 24-inch public sewer line along the west boundary of the property. It is anticipated that a 6-inch sewer line will provide enough capacity for the proposed site plan. The building also will be serviced with 4-inch sewer pipes. The details of the building service lines will be provided by the plumbing engineer at the time of final design.

As can be seen in the preliminary plan attached to the report, there is an existing 8" PVC pipe in the site which might conflict with the new senior center building. Therefore, this pipe is proposed to be removed and replaced with the 6" sewer pipes expanded from the aforementioned existing 24" sewer line.

Please see "Appendix B - Preliminary Water and Sewer Plan" for more information.

Is sewer public or private?

## 3. Water System

No connection  
into 30"

With respect to the water line design, it is planned to service the new building by connecting the new water line to an existing 6" water pipe in the north of the site. This existing 6" water line is connected to the existing 8" ACP water line along Cholla Street. The waterline will be looped through the site and connect back to the 30" water line on the west side of the site. The domestic water supply and fire sprinkler feed will be tapped off of the new loop. In addition this new water line will feed the fire hydrants in two locations on the west and east side of the new senior center building. The existing senior living building will continue to be fed by the existing services.

It is worth mentioning that the existing water line which crosses the proposed senior center building will be completely removed and the new building will be serviced via the mentioned water line.

Please see "Appendix B - Preliminary Water and Sewer Plan" for more information.

Need fire flow test to verify that fire flow demands can be met.

# **APPENDIX A**

## **Water and Sewer Quarter Section Map**

NOTICE

THIS DOCUMENT IS PROVIDED FOR GENERAL INFORMATION PURPOSES ONLY. THE CITY OF SCOTTSDALE DOES NOT WARRANT ITS ACCURACY, COMPLETENESS OR SUITABILITY FOR ANY PARTICULAR PURPOSE. IT SHOULD NOT BE RELIED UPON WITHOUT FIELD VERIFICATION.

THE CITY OF SCOTTSDALE

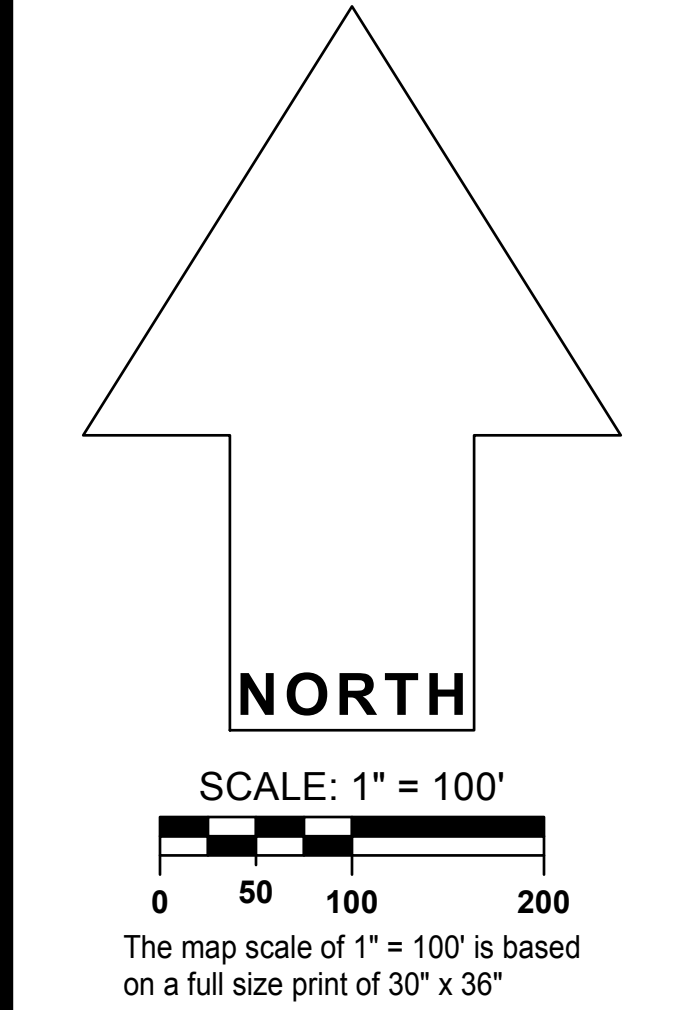
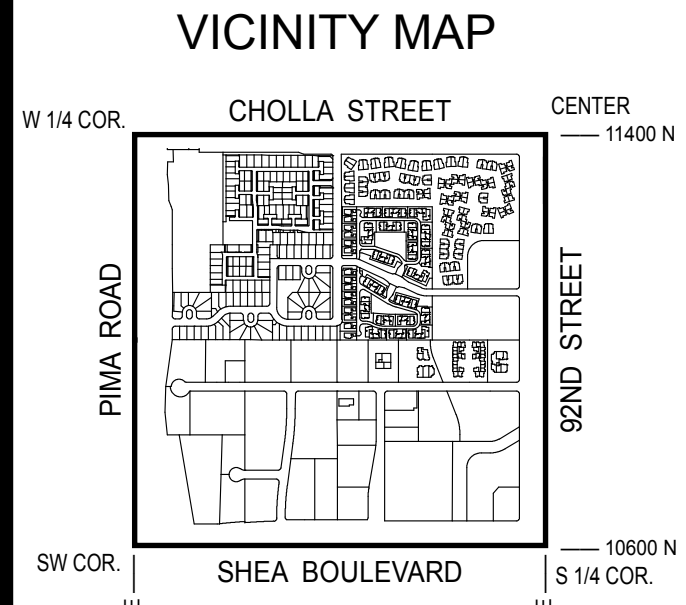
06-AUG-17

29-48

30-49

28-49

- 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



# WATER & SEWER

QUARTER SECTION MAP

## 29-49

SW 1/4 SEC. 19 T3N R5E

CITY OF SCOTTSDALE

SCOTTSDALE GEOGRAPHIC INFORMATION SYSTEMS

3629 North Drinkwater Boulevard  
Scottsdale, Arizona 85251

# **APPENDIX B**

## **Water and Sewer Master Plan**

FOUND BRASS CAP IN HANDHOLE AT  
THE INTERSECTION OF 92ND STREET  
AND CHOLLA STREET. CITY OF  
SCOTTSDALE GPS POINT 8194.  
ELEV = 1388.480 (NAVD '88, CITY OF  
SCOTTSDALE DATUM)

FOUND BRASS CAP IN HANDHOLE AT  
THE INTERSECTION OF 92ND STREET  
AND SHEA BOULEVARD. CITY OF  
SCOTTSDALE GPS POINT 8301.  
ELEV = 1372.195 (NAVD '88, CITY OF  
SCOTTSDALE DATUM)

FOUND BRASS CAP IN HANDHOLE AT  
THE INTERSECTION OF 84TH STREET  
AND SHEA BOULEVARD. CITY OF  
SCOTTSDALE GPS POINT 3251.  
ELEV = 1364.811 (NAVD '88, CITY OF  
SCOTTSDALE DATUM)

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MARICOPA, STATE OF ARIZONA AND IS DESCRIBED AS FOLLOWS:  
LOT 1, A PROPERTY ASSEMBLAGE IN THE CITY OF SCOTTSDALE, ARIZONA ARMENIAN APOSTOLIC CHURCH OF ARIZONA, ACCORDING TO BOOK 971 OF MAPS, PAGE 46, AND THEREAFTER AFFIDAVIT OF CORRECTION IN RECORDING NO. 2008-0228799, RECORDS OF MARICOPA COUNTY, ARIZONA.

THE MONUMENT LINE OF 92ND STREET.  
SAID LINE BEARS SOUTH 00 DEGREES  
01 MINUTES 20 SECONDS EAST.

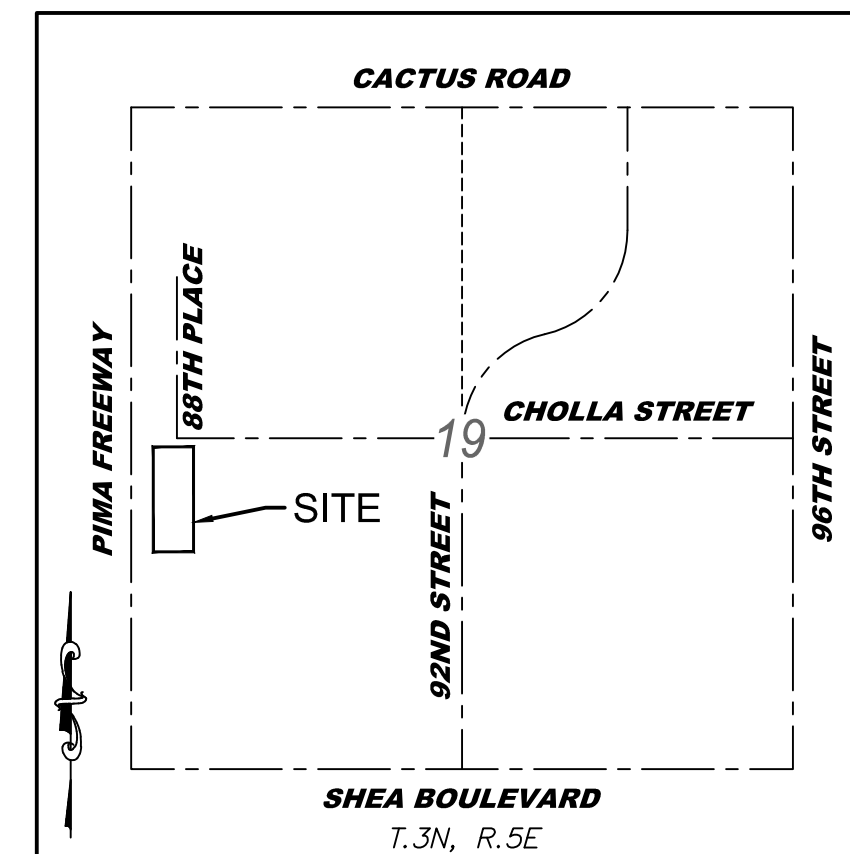
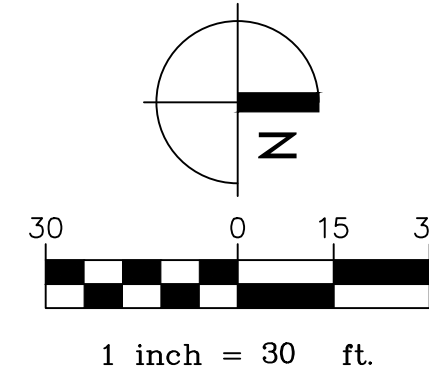
ACCORDING TO THE FLOOD INSURANCE  
RATE MAP #04013C1760L, DATED  
OCTOBER 16, 2013, THIS PROPERTY IS  
LOCATED IN FLOOD ZONE "X".

AAKAI ARCHITECTURE AND INTERIORS  
7585 E. REDFIELD RD., STE 106  
SCOTTSDALE, AZ 85260  
PH: (480) 588-5852  
CONTACT:

KLAND CIVIL ENGINEERS  
7227 N. 16TH ST., STE 217  
PHOENIX, AZ 85020  
PH: (480) 344-0480  
CONTACT: LESLIE KLAND, PE

# MEGERDICHIAN SENIOR CENTER

**8849 EAST CHOLLA STREET, SCOTTSDALE, ARIZONA 85260**  
A PORTION OF LOT 3 IN THE SOUTHWEST QUARTER OF SECTION  
19, TOWNSHIP 3 NORTH, RANGE 5 EAST, OF THE GILA AND SALT  
RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.



**VICINITY MAP**  
N.T.S.

### DESCRIPTION

| <b><u>DESCRIPTION</u></b> | <b><u>PROPOSED</u></b>                                                                |
|---------------------------|---------------------------------------------------------------------------------------|
| SURVEY MARKER             |                                                                                       |
| CURB AND GUTTER           |                                                                                       |
| SIDEWALK                  |    |
| SINGLE CURB               |    |
| WATER FITTINGS            |    |
| WATER METER               |    |
| WATER LINE                |    |
| FIRE HYDRANT              |    |
| SEWER LINE                |    |
| SEWER MANHOLE/CLEANOUT    |    |
| STORM DRAIN               |    |
| CATCH BASIN               |    |
| UNDERGROUND STORAGE TANK  |    |
| DRY WELL                  |    |
| FINISHED FLOOR            |    |
| GAS LINE/METER/VALVE      |    |
| ELECTRIC LINE/METER       |  |
| CABLE/JUNCTION BOX        |  |
| COMMUNICATION LINE        |  |
| OVERHEAD ELECTRIC/POLE    |  |
| VEGETATION                |  |
| BOUNDARY LINE             |  |
| CENTER LINE               |  |
| EASEMENT                  |  |

**PROPOSED**

FF=43.81  
PAD=

FF=4  
PAD=

**MEGERDICHIAN  
SENIOR CENTER**  
8849 E. CHOLLA ST.  
SCOTTSDALE, AZ 85260

[illegible]

**KLAND**  
CIVIL ENGINEERS

**CIVIL ENGINEERING  
LAND DEVELOPMENT  
SERVICES  
LAND SURVEYING**  
7227 N. 16th St. Suite 217  
Phoenix, Arizona 85020  
PHONE: (480) 344-0480  
[www.klandeng.com](http://www.klandeng.com)

SHEET TITLE

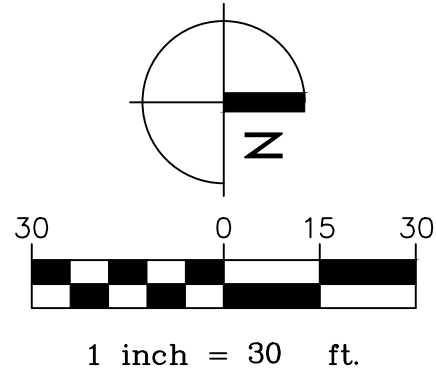
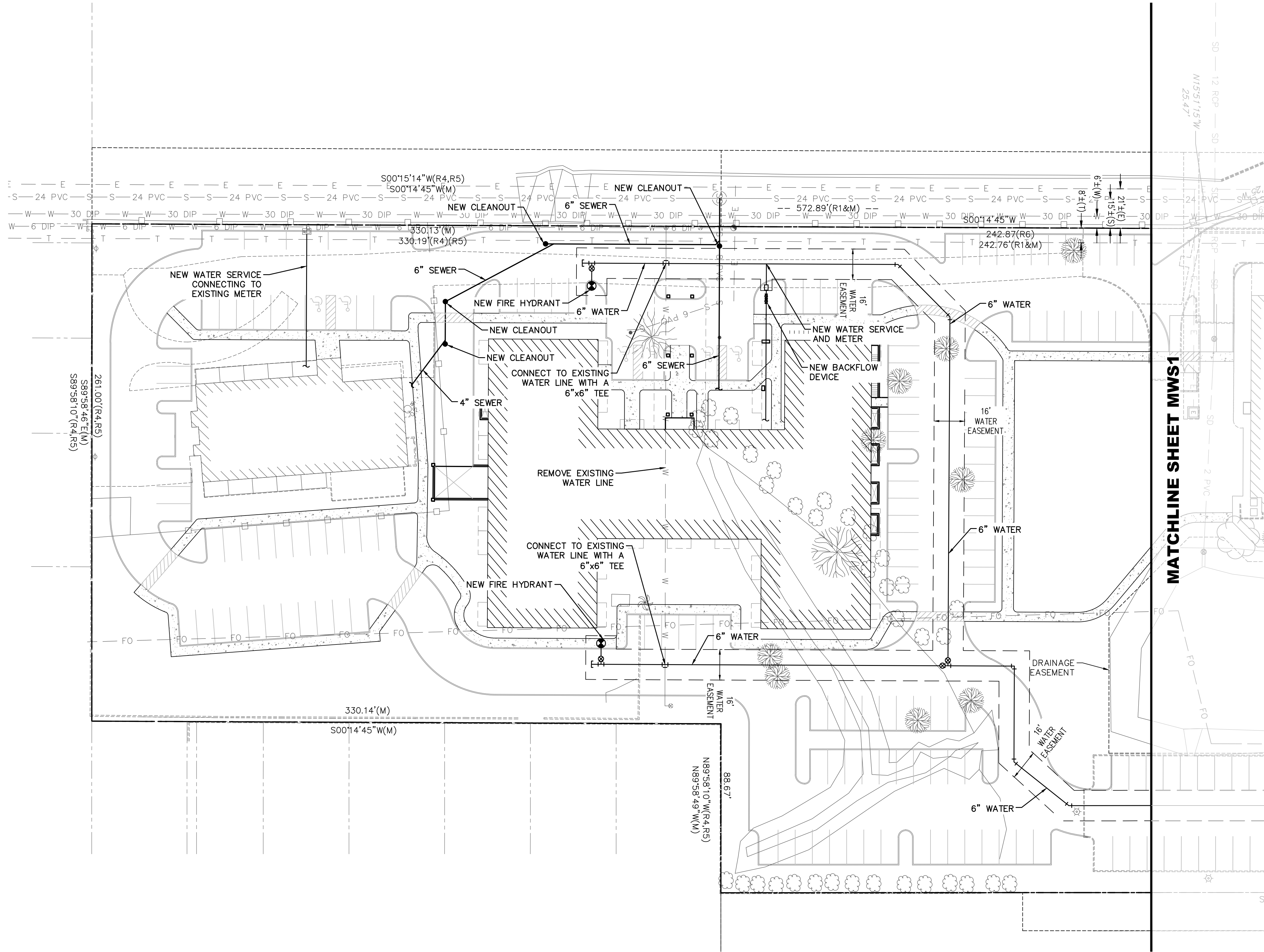
# MASTER WATER AND SEWER PLAN

DATE: 08/24/2018  
JOB NUMBER 1727-00  
KLAND PROJECT NUMBER: K15153

**MWS1**  
**OF 2**



K:\2015\K15153 Megerdichian Senior Center\Draw\CONCEPT\Concept\153-WS.dwg



**aakai** architecture + interiors

480.588.5852  
aakai.com  
7585 e north rd #106 scottsdale, arizona 85261

**MEGERDICHIAN  
SENIOR CENTER**  
8849 E. CHOLLA ST.  
SCOTTSDALE, AZ 85260

| PRE-CONSTRUCTION PHASE |             |      |
|------------------------|-------------|------|
| NO.                    | ISSUED FOR: | DATE |
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| CONSTRUCTION PHASE     |             |      |
| REV.                   | BULLETIN #  | DATE |
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SHEET TITLE  
**MASTER WATER AND  
SEWER PLAN**

DATE: 08/24/2018  
JOB NUMBER: 1727-00  
KLAND PROJECT NUMBER: K15153

**MWS2  
OF 2**

