

SEWER IMPACT DESIGN REPORT

**SENIOR LIVING
NEC PINNACLE PEAK & SCOTTSDALE ROAD
SCOTTSDALE, ARIZONA
COS # 159 – PA - 2016**

October, 2016

Project No.: 2098

Prepared for:

**INVESTMENTS PROPERTY ASSOCIATES, LLC
1600 SOUTH BEACON BOULEVARD, SUITE 260
GRAND HAVEN, MI 49417**

CONTACT: JEAN CONSTANTINE

TEL: 616-850-1058

Prepared by:

Site Consultants, Inc.

Engineers • Surveyors • Consultants

113 South Rockford Drive • Tempe, AZ 85281
Tel (480) 894-2820 • Fax (480) 894-2847

**30-DR-2016
11/16/16**

TABLE OF CONTENTS

1.0	INTRODUCTION AND SCOPE OF WORK.....	3
1.1	SCOPE OF WORK AND LIMITATIONS.....	3
1.2	SITE LOCATION	3
1.3	SITE DESCRIPTION.....	4
1.4	REGULATORY JURISDICTION AND PROJECT CRITERIA	4
2.0	PROJECT DISCHARGE / DEMAND: SEWER	5
2.1	DESIGN SEWER LOADING.....	5
2.2	SEWER MAIN LINE CAPACITY CALCULATIONS (MINIMUM SLOPE).....	5
2.3	SEWER MAIN LINE CAPACITY CALCULATIONS (DESIGN SLOPE).....	5
2.4	OFF-SITE SEWER	6
3.0	CONCLUSION.....	6

APPENDICES (follow text)

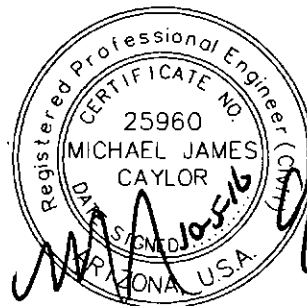
Appendix 1 Vicinity Map

Appendix 2 Site Specific Offsite / On-site Sewer Exhibit

Appendix 3: Improvement Plans

Appendix 4: City of Scottsdale - Pinnacle Peak Sewer Flow Data

Appendix 5: City of Scottsdale Sewer ¼ section Map



Expires 3-31-2019

1.0 INTRODUCTION AND SCOPE OF WORK

This report presents the results of a limited sewer analysis conducted by Site Consultants, Inc. (SCI) as stipulated by City of Scottsdale for the proposed Senior Living facility. The purpose of this report is to document the proposed projects anticipated wastewater loading into City of Scottsdale current wastewater infrastructure.

1.1 Scope of Work and Limitations

This report is focused on providing practical design information, evaluation, and calculations for the sewer system studied. The procedures used herein are derived from, and performed with, currently accepted engineering methodologies and practices. Additionally, the criteria for this evaluation are designed to conform to currently applicable ordinances, regulations and policies affected by the appropriate jurisdictional regulatory authorities for the site.

The analysis presented herein focuses on developing design estimates of sewer system expected demand conditions. Demand conditions exceeding those presented herein may cause or create the risk of reduced system performance other than is addressed and presented herein. However, the scope of this assessment does not include, neither did the client request, evaluation of system performance resulting from demand conditions exceeding those presented herein. Site Consultants, Inc. assumes no responsibility for reduced system performance or increased construction or development cost resulting from or related to any such events, nor shall Site Consultants, Inc. be responsible for any changes in or additions to, regulatory requirements which may result from, or be related to, any such events or changes in distribution system conditions.

In performing the services contained herein, Site Consultants, Inc. has received or will receive information prepared or compiled by others. Site Consultants, Inc. as engineering professionals, are not required to verify the information, but may rely on the information unless actual knowledge concerning the validity of the information is known or is obvious to the professional. Therefore, Site Consultants, Inc. is entitled to rely upon the accuracy and completeness of this information without independent evaluation or verification

1.2 Site Location

The approximately 4.5 net acres project is approximately located at the northeast corner of Scottsdale and Pinnacle Peak Road, north of the existing Crown West (Safeway) shopping center.

The subject property lies within the SW $\frac{1}{4}$ of Section 11, Township 4 North, Range 4 East, of the Gila and Salt River Base and Meridian, Maricopa County (MCR), Scottsdale, Arizona. The site is Parcel 'B' and a portion of Parcel 'A' of the Crown West Land Division Land Map, as recorded in the Bk. 857, Pg. 19, and MCR.

Residential subdivisions borders the site to the north and east; commercial developments borders the site to the south and west.

See Appendix No. 1 for Site Vicinity Map.

SL NEC Scottsdale & Pinnacle Peak Rd

1.3 Site Description

The proposed project development will consist of the construction of a Senior Living facility that consist of both independent living and memory care units. The building is subdivided into three sections; 1) a memory care unit at the northwest corner of the building, 2) a main two-story independent living facility that includes reception, meal kitchen / lounge areas, miscellaneous indoor activity amenities and two outdoor courtyard amenity areas and 3) a lower level independent living area that connects to an outdoor dog park amenity area.

The site is zoned C-2 ESL, the existing zoning is acceptable for the proposed project use and will not be changed.

Currently the City of Scottsdale has existing sewer main line infrastructure located in Scottsdale Road and Pinnacle Peak Road; however the site development does not have any street frontage. Therefore, based on site grading and the associated finish floor elevations it has been determined that a new 8-inch public sewer main line will be constructed, in a water easement from the sites southern property line to the existing 8-inch sewer main line in Pinnacle Peak Road. Most of the said water easement is an existing easement and is dedicated across the adjacent commercial property to the south. Additional easement width and length will be dedicated to facilitate the new public sewer main line installation.

See Appendix No. 2 for proposed On-site / Off-site Sewer Installation Exhibit

See Appendix No. 3 for Sewer main line improvement plans.

See Appendix No. 5 for City of Scottsdale ¼ Section Map.

1.4 Regulatory Jurisdiction and Project Criteria

The criteria used in the water system design and analyses of the site were established using the guidelines as described in the following:

- *Meeting and coordination with City of Scottsdale's Wastewater Engineering Staff.*
- *City of Scottsdale Wastewater Design Standards and Reference Manual.*
- *Site / Building Plans prepared by Todd & Associates.*

The criteria used in the water system design and analyses of the site were established using the guidelines as described in the following:

- 80 ADD / resident (gallons)
- Peaking Factor 4.5
- 132 Residence

2.0 PROJECT DISCHARGE / DEMAND: SEWER

2.1 Design Sewer Loading

8-INCH SEWER LINE LOADING CALCULATIONS

Loading Calculations

Number of Beds	Unit Design Loading (GPD)	Average Daily Flow (GPD)	Peak Daily Flow (GPD-(PF) 4.5)
132	80	10,560	47,520
	TOTAL	10,560	47,520

2.2 Sewer Main Line Capacity Calculations (Minimum Slope)

Average Daily Flow (ADF): 10,560 GPD

Peak Flow (PF): 47,560 GPD

Capacity of 8" sewer line at slope (0.0052'/', n=0.013, d/D ratio 0.7): .74cfs

Manning Formula:

$$Q = 1.486/n \times (S^{1/2}) \times (A/P^{2/3}) \times A$$

Conversion: cfs to gal/ day: Multiply cfs by 646,317

$$0.74 \text{ cfs} \times 646,317 = 478,275 \text{ gal/ day}$$

Capacity 478,275 GPD exceeds 47,560 GPD (PF)

2.3 Sewer Main Line Capacity Calculations (Design Slope)

Average Daily Flow (ADF): 10,560 GPD

Peak Flow (PF): 47,560 GPD

Capacity of 8" sewer line at slope (0.007'/', n=0.013, d/D ratio 0.7): 0.86cfs

Manning Formula:

$$Q = 1.486/n \times (S^{1/2}) \times (A/P^{2/3}) \times A$$

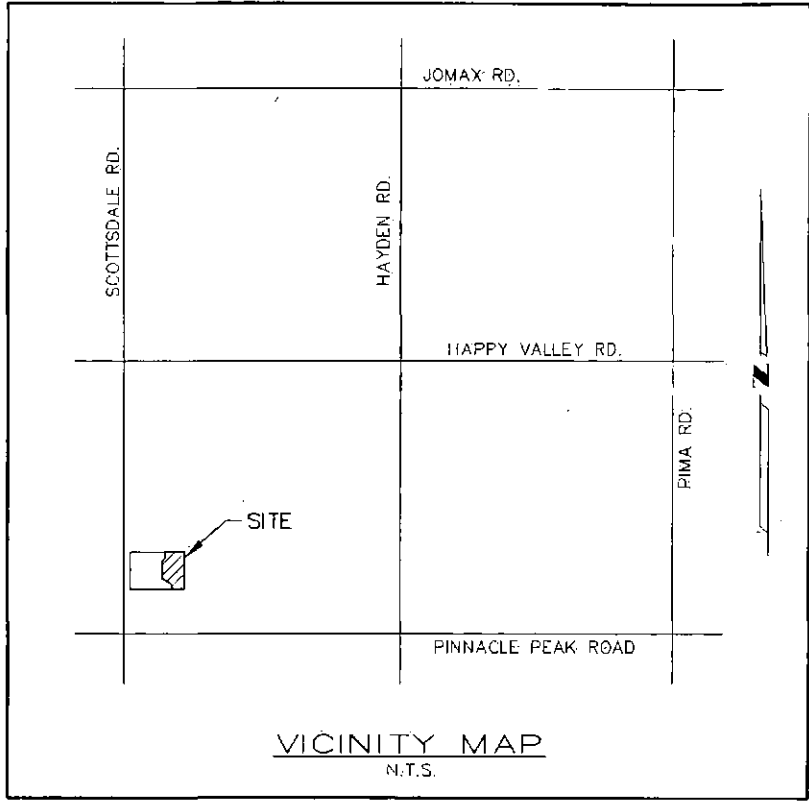
Conversion: cfs to gal/ day: Multiply cfs by 646,317

$$0.86 \text{ cfs} \times 646,317 = 555,833 \text{ gal/ day}$$

Capacity 555,833 GPD exceeds 47,560 GPD (PF)

APPENDIX 1

Vicinity Map

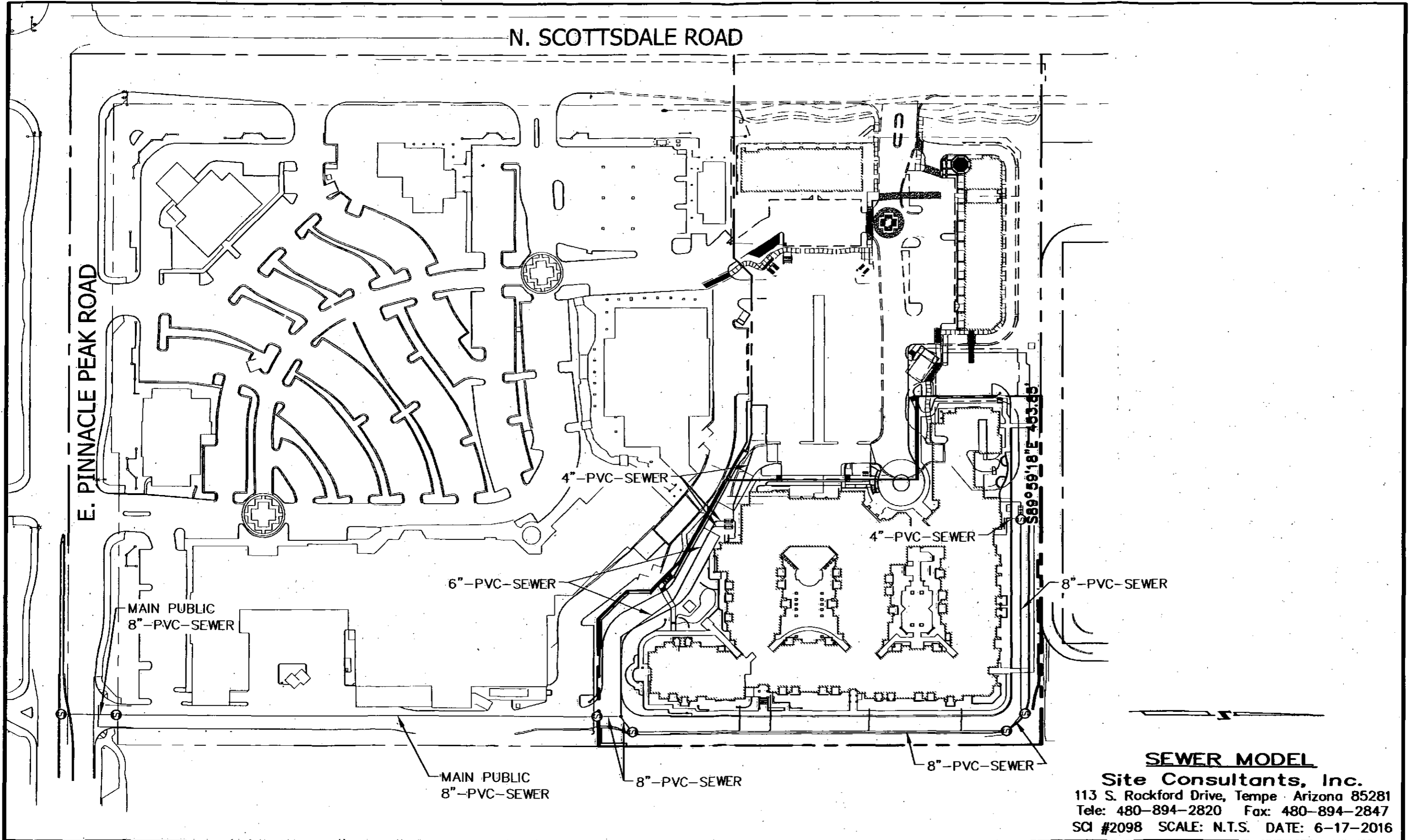


APPENDIX 2

Site Specific Offsite / On-site Sewer Exhibit

N. SCOTTSDALE ROAD

E. PINNACLE PEAK ROAD



MAIN PUBLIC
8" PVC SEWER

6" PVC SEWER

4" PVC SEWER

4" PVC SEWER

8" PVC SEWER

MAIN PUBLIC
8" PVC SEWER

8" PVC SEWER

8" PVC SEWER

S89°59'18"E 163.65'

SEWER MODEL

Site Consultants, Inc.
113 S. Rockford Drive, Tempe Arizona 85281
Tele: 480-894-2820 Fax: 480-894-2847
SCI #2098 SCALE: N.T.S. DATE: 6-17-2016

3

APPENDIX 3

Public Sewer Main Line Improvement Plans

LEGAL DESCRIPTION

PARCEL NO. 1
LOT 2, MINOR LAND DIVISION OF CROWN WEST PLAT, A DIVISION LAND MAP RECORDED IN BOOK 1259 OF MAPS, 28, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 2
EASEMENTS FOR ACCESS AND PARKING AS SET FORTH IN DECLARATION OF ESTABLISHMENT OF RESTRICTIONS AND GRANTS OF EASEMENTS RECORDED AS 89-265868 OF OFFICIAL RECORDS; SECOND AMENDMENT TO DECLARATION OF ESTABLISHMENT OF RESTRICTIONS AND GRANTS OF EASEMENTS RECORDED AS 2016-0100026 OF OFFICIAL RECORDS; AND AMENDED AND RESTATED DECLARATION OF CROSS EASEMENTS AND PARKING RECORDED AS 2007-251301 OF OFFICIAL RECORDS; AND FIRST AMENDMENT TO AMENDED AND RESTATED DECLARATION OF CROSS EASEMENTS AND PARKING RECORDED AS 2016-0100025 OF OFFICIAL RECORDS.

BENCHMARK

CITY OF SCOTTSDALE BRASS CAP IN HANDHOLE LOCATED AT THE INTERSECTION OF SCOTTSDALE ROAD & ALAMEDA DRIVE; ELEVATION = 1887.415 NAVD88 DATUM.

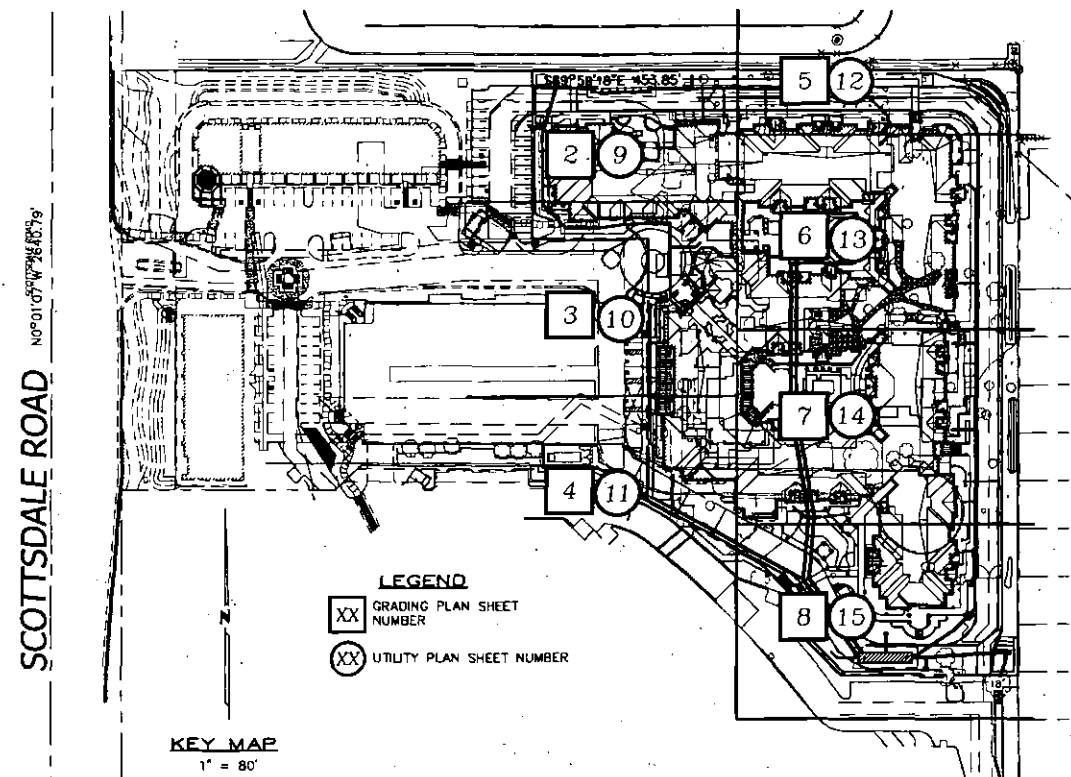
BENCHMARK CERTIFICATION STATEMENT

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

LEGEND

---	PROPERTY LINE	C.O.S.	CITY OF SCOTTSDALE
---	RIGHT OF WAY LINE	R.O.W.	RIGHT OF WAY
---	CENTER LINE	M.C.R.	MARICOPA COUNTY RECORDER OFFICE
---	EASEMENT LINE	D.E.	DRAINAGE EASEMENT
---	CONTOUR LINE	W.L.E.	WATERLINE EASEMENT
---	UNDERGROUND UTILITY	C.A.E.	CROSS ACCESS EASEMENT
---	EDGE OF PAVEMENT	TC	TOP CURB ELEVATION
---	UNDERGROUND ELECTRIC	G	GUTTER ELEVATION
E.CAB	ELECTRIC CABINET	P	PAVEMENT ELEVATION
E.J.B	ELECTRIC J-BOX	C	CONCRETE ELEVATION
E.T.	ELECTRIC TRANSFORMER	NG	NATURAL GROUND
E.V.T.	ELECTRIC VALVT	INV	INVERT
OHE	OVERHEAD ELECTRIC	TB	TOP BANK
S	UNDERGROUND SEWER	BB	BOTTOM BANK
SM	SEWER MANHOLE	TW	TOP WALL
D	UNDERGROUND STORM DRAIN	GB	GRADE BREAK
R.D.	ROOF DRAIN		
T	UNDERGROUND TELEPHONE		
W	UNDERGROUND WATER		
W.V.	WATER VALVE		
F.H.	FIRE HYDRANT		

PRELIMINARY CIVIL IMPROVEMENT PLANS
SENIOR LIVING
BEING A PORTION OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 4 NORTH, RANGE 4 EAST, OF THE GILA & SALT RIVER BASE & MERIDIAN, MARICOPA COUNTY, ARIZONA



SHEET INDEX

COVER SHEET	C-1
PRELIMINARY GRADING PLANS	C-2 TO C-8
PRELIMINARY UTILITY PLAN	C-9 TO C-21
SECTIONS	C-22 TO C-23
DETAILS	C-24 TO C-27

SITE INFORMATION

ADDRESS: 23733 N. SCOTTSDALE ROAD
SCOTTSDALE AZ. 85255
SITE AREA: NET 195,956 S.F. (4.4985 ACRES)
DISTURBANCE AREA: 195,956 S.F. (4.4985 ACRES)
ZONING: C-2 ESL
ASSESSORS PARCEL NUMBER: 212-05-574
QUARTER SECTION: 45-45

GENERAL NOTES FOR PUBLIC WORKS CONSTRUCTION

1. ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENT GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARDS DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF SCOTTSDALE SUPPLEMENTAL STANDARD SPECIFICATIONS AND SUPPLEMENTAL STANDARD DETAILS. IF THERE IS A CONFLICT, THE CITY'S SUPPLEMENTAL STANDARD DETAILS WILL GOVERN.
2. THE CITY ONLY APPROVES THE SCOPE, NOT THE DETAIL, OF ENGINEERING DESIGNS; THEREFORE, IF CONSTRUCTION QUANTITIES ARE SHOWN ON THESE PLANS, THEY ARE NOT VERIFIED BY THE CITY.
3. THE APPROVAL OF PLANS IS VALID FOR SIX (6) MONTHS. IF AN ENCROACHMENT PERMIT FOR THE CONSTRUCTION HAS NOT BEEN ISSUED WITHIN SIX MONTHS, THE PLANS MUST BE RESUBMITTED TO THE CITY FOR REAPPROVAL.
4. A PUBLIC WORKS INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF SCOTTSDALE RIGHTS-OF-WAY AND IN EASEMENTS. NOTIFY INSPECTION SERVICES 24 HOURS PRIOR TO BEGINNING CONSTRUCTION BY CALLING 480-312-5750.
5. WHENEVER EXCAVATION IS NECESSARY, CALL THE BLUE STAKE CENTER, 602-263-1100, TWO WORKING DAYS BEFORE EXCAVATION BEGINS. THE CENTER WILL SEE THAT THE LOCATION OF THE UNDERGROUND UTILITY LINES IS IDENTIFIED FOR THE PROJECT. CALL "COLLECT" IF NECESSARY.
6. ENCROACHMENT PERMITS ARE REQUIRED FOR ALL WORK IN PUBLIC RIGHTS-OF-WAY AND EASEMENTS GRANTED FOR PUBLIC PURPOSES. AN ENCROACHMENT PERMIT WILL BE ISSUED BY THE CITY ONLY AFTER THE REGISTRANT HAS PAID A BASE FEE PLUS A FEE FOR INSPECTION SERVICES. COPIES OF ALL PERMITS MUST BE RETAINED ON-SITE AND BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS WILL RESULT IN IMMEDIATE SUSPENSION OF ALL WORK UNTIL THE PROPER PERMIT DOCUMENTATION IS OBTAINED.
7. ALL EXCAVATION AND GRADING THAT IS NOT IN THE PUBLIC RIGHTS-OF-WAY OR NOT IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO CHAPTER 70, EXCAVATION AND GRADING, OF THE LATEST EDITION OF THE UNIFORM BUILDING CODE PREPARED BY THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS. A PERMIT FOR THIS GRADING MUST BE SECURED FROM THE CITY FOR A FEE ESTABLISHED BY UNIFORM BUILDING CODE.

FEMA

COMMUNITY NUMBER	PANEL #	SUFFIX	DATE OF FIRM (INDEX DATE)	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONE, USE DEPTH)
045012	1310	L	10-16-2013	AO	1

ENGINEERS 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 100-YEAR STORM, AND ARE IN ACCORDANCE WITH SCOTTSDALE REVISED CODE, CHAPTER 37 - FLOODPLAIN AND STORMWATER REGULATION.

DRAINAGE NOTE

THE PAD ELEVATIONS OF ALL NEW A/C AND/OR ELECTRO-MECHANICAL UNITS WILL BE SET AT OR ABOVE RFE TO PROVIDE FLOOD PROTECTION UNDER THE 100 YEAR STORM EVENT.

HIGHEST ADJACENT GRADE/ FINISH FLOOR ELEVATION

MINIMUM FINISH FLOOR ELEVATION FOR NORTHERN BUILDING IS BASED ON HIGHEST ADJACENT GRADE (HAG) LOCATED AT NORTHEAST CORNER OF BUILDING. HAG ELEVATION IS 1871.83 FEET, THEREFORE FINISH FLOOR ELEVATION IS 1873.83 (1871.83 + 2 = 1873.83 FEET).
MINIMUM FINISH FLOOR ELEVATION FOR SOUTHERN BUILDING IS BASED ON HAG LOCATED AT NORTHEAST CORNER OF THE BUILDING. HAG ELEVATION IS 1869.40 FEET, THEREFORE MINIMUM FINISH FLOOR ELEVATION IS 1869.40 (1867.40 + 2=1869.40 FEET), HOWEVER, DUE TO CONSTRUCTION CONSTRAINTS USE 1869.85 ELEVATION.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE AS-BUILT IMPROVEMENTS AS SHOWN HEREON ARE LOCATED AS NOTED, AND THE LOCATIONS ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR _____ DATE _____

CITY OF SCOTTSDALE

REVIEW AND RECOMMENDED APPROVAL BY:

PAVING	TRAFFIC
G & D	PLANNING
W & S	FIRE
RET. WALLS	

APPROVED BY: _____ DATE _____

ENGINEERING COORDINATION MANAGER (OR DESIGNEE) _____ DATE _____

NO CONFLICT SIGNATURE BLOCK

UTILITY	UTILITY COMPANY	NAME OF COMPANY REPRESENTATIVE	TELEPHONE NUMBER	DATE SIGNED
ELECTRIC	ARIZONA PUBLIC SERVICE	CONFLICT REVIEWER	602-493-4460	
TELEPHONE	CENTURY LINK	CONFLICT REVIEWER	480-766-4567	
NATURAL GAS	SOUTHWEST GAS	CONFLICT REVIEWER	480-730-3843	
CABLE TV	COX COMMUNICATIONS	CONFLICT REVIEWER	602-328-3535	
OTHER				
OTHER				

ENGINEER'S CERTIFICATION

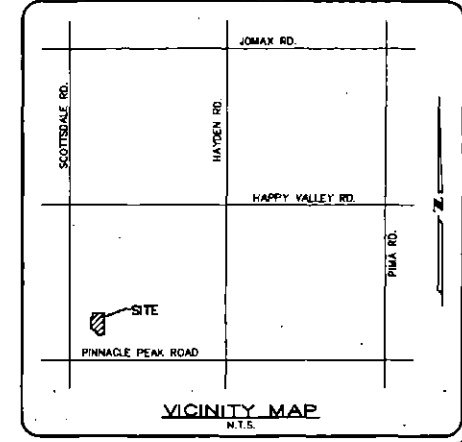
I, MICHAEL J. CAYLOR, AS THE ENGINEER OF RECORD FOR THIS DEVELOPMENT, HEREBY CERTIFY THAT ALL UTILITY COMPANIES LISTED ABOVE HAVE BEEN PROVIDED FINAL IMPROVEMENT PLANS FOR REVIEW, AND THAT ALL CONFLICTS IDENTIFIED BY THE UTILITIES HAVE BEEN RESOLVED. IN ADDITION, "NO CONFLICT" FORMS HAVE BEEN OBTAINED FROM EACH UTILITY COMPANY AND ARE INCLUDED IN THIS SUBMITTAL.

SIGNATURE _____ DATE _____

GENERAL CONSTRUCTION NOTES FOR CAPITAL PROJECTS

1. ALL IMPROVEMENT CONSTRUCTION SHALL COMPLY WITH THE LATEST 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 2006 IBC, 2006 IPC, 2006 IMC, 2006 IFC AND THE 2005 NEC.
2. 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.
3. BASED ON THE INFORMATION SUBMITTED ON THE PLANS AND ASSOCIATED DOCUMENTS, THE CITY HAS REVIEWED AND FOUND THEM TO BE IN ACCORDANCE WITH THE CITY'S MUNICIPAL 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 MUNICIPAL CODE.
4. 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.
5. ANY DEVIATION FROM THE APPROVED PLANS SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO THAT CHANGE BEING INCORPORATED INTO THE PROJECT.
6. A CITY CAPITAL PROJECTS INSPECTOR WILL INSPECT ALL WORK WITHIN THE CITY RIGHTS-OF-WAY, EASEMENTS AND FACILITIES.
7. ANY SPECIAL INSPECTION REQUIRED SHALL BE IN ADDITION TO ANY ROUTINE INSPECTION BY THE CITY.
8. 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.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR SALVAGING PROTECTED NATIVE PLANTS PRIOR TO THE START OF CONSTRUCTION.
10. WHEREVER EXCAVATION IS DONE CONTACT THE BLUE STAKE CENTER AT (602) 263-1100 TWO WORKING DAYS BEFORE EXCAVATION IS TO BEGIN. THE CENTER WILL SEE THAT THE LOCATION OF THE UNDERGROUND UTILITY LINES IS IDENTIFIED FOR THE PROJECT.
11. 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 2006 EDITION OF THE INTERNATIONAL BUILDING CODE PREPARED BY THE INTERNATIONAL CODE COUNCIL. A PERMIT FOR THIS GRADING MUST BE SECURED FROM THE CITY.
12. THRUST RESTRAINT, WHERE REQUIRED, ON ALL CITY WATER LINES SHALL BE PROVIDED USING MEGALUG MECHANICAL JOINT RESTRAINTS OR CITY-APPROVED EQUAL.
13. ANY ASPHALT MIX DESIGN USED ON CITY PROJECTS SHALL HAVE BEEN APPROVED FOR THAT USE PER SECTION 5-10 THE CITY'S DS&PM AND APPEAR ON THE "APPROVED LIST OF ASPHALT MIXES" AS DISTRIBUTED BY THE EAST VALLEY ASPHALT COMMITTEE (EVAC).
14. 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.
15. 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.

PRELIMINARY NOT FOR CONSTRUCTION



REV.
REV.
REV.
REV.
REV.

Site Consultants, Inc.
ENGINEERS & SURVEYORS & CONSULTANTS
a division of Westwood
6009 East Greenway Parkway, Suite 250, Scottsdale, AZ 85254
(888) 937-5150
westwoodps.com

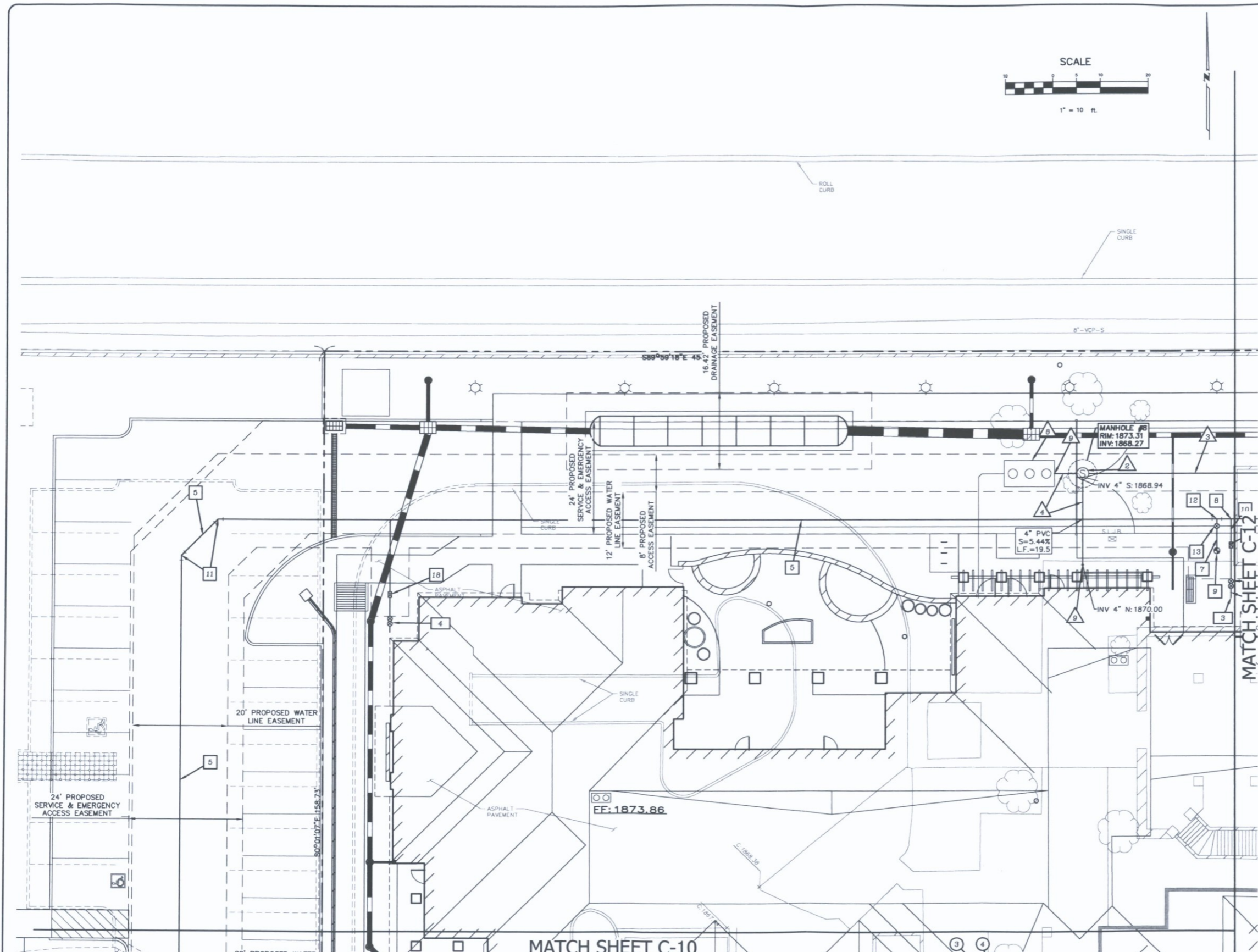
COVER SHEET

SENIOR LIVING FACILITY
23733 N. SCOTTSDALE ROAD
SCOTTSDALE, AZ.



PROJECT NO.: 2098
SCALE: PER PLAN
DRAWN BY: WLG
CHECKED BY: MJC
DATE: 10-5-2015
DWG: 2098-C-05-Pre

C-1
of
27



- PUBLIC WATER MAIN CONSTRUCTION NOTES**
- SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - CONNECT TO EXISTING 8" WATER LINE.
 - INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
 - INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
 - INSTALL 6" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AN 341-1 TYPE 'C'; INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
 - INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
 - INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x6" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
 - INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'; INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
 - INSTALL 8"-90° BEND.

- PRIVATE FIRE LINE CONSTRUCTION NOTES**
- INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
 - FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB; FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.

- PRIVATE WATER CONSTRUCTION NOTES**
- INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
 - INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DT. 2355.

- PRIVATE SEWER CONSTRUCTION NOTES**
- CONNECT TO PUBLIC SEWER MANHOLE.
 - INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
 - INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
 - SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
 - INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
 - CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
 - CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
 - SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

- NOTES**
- ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
 - DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
 - FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
 - ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES).
 - MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
 - SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
 - FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.

MATCH SHEET C-10

MATCH SHEET C-12

PRELIMINARY NOT FOR CONSTRUCTION



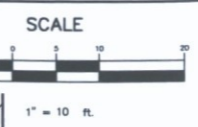
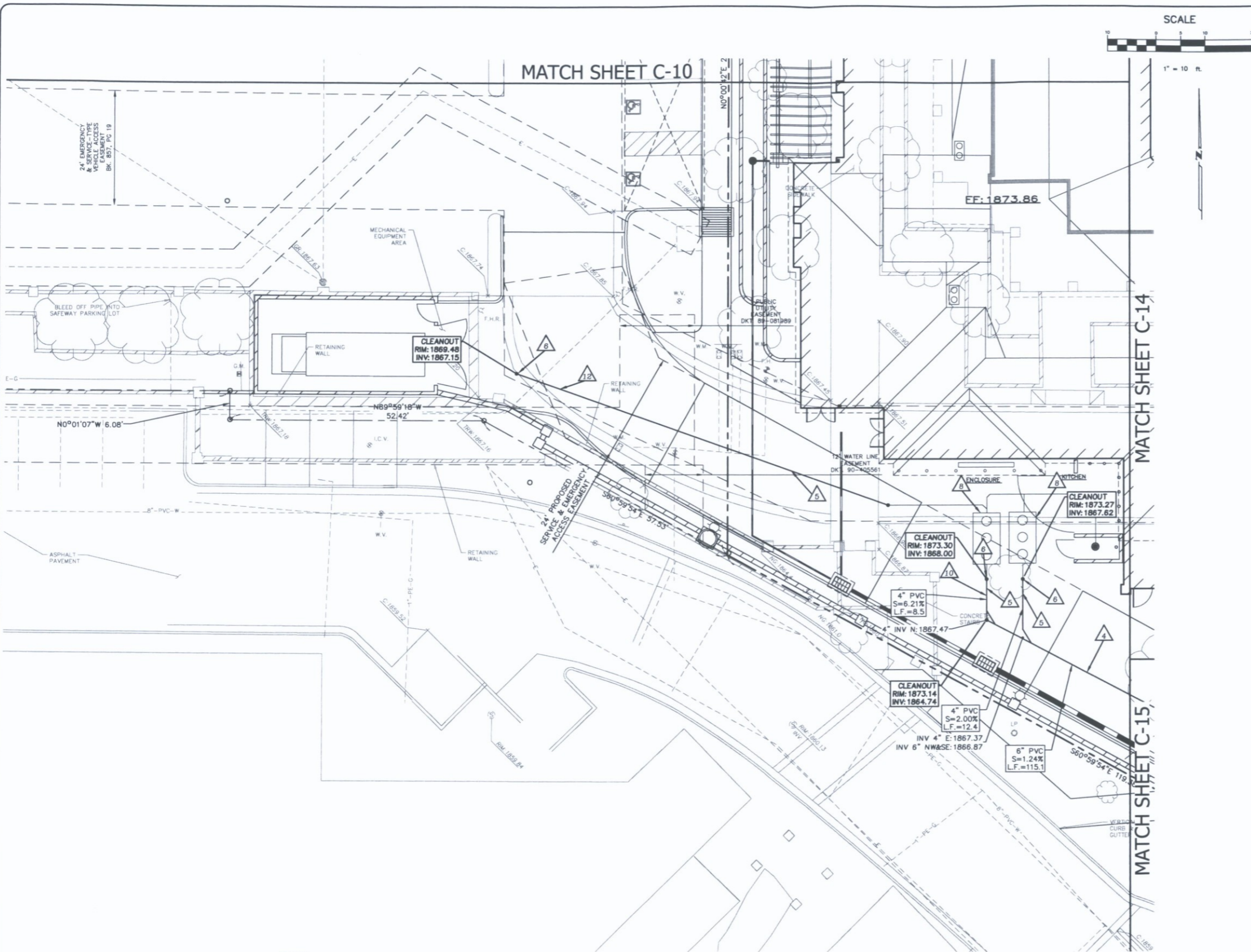
REV.	
REV.	
REV.	
REV.	
REV.	

Site Consultants, Inc.
 ENGINEERS • SURVEYORS • CONSULTANTS
 a division of Westwood
 6909 East Greenway Parkway, Suite 250, Scottsdale, AZ. 85254
 westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
 SENIOR LIVING FACILITY
 23733 N. SCOTTSDALE ROAD
 SCOTTSDALE, ARIZONA

PROJECT NO.:	2098
SCALE:	1" = 10'
DRAWN BY:	WLG
CHECKED BY:	MJC
DATE:	10-05-2016
DWG:	2098-C-0P-Prel

C-9
OF
27



- PUBLIC WATER MAIN CONSTRUCTION NOTES**
- SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - CONNECT TO EXISTING 8" WATER LINE.
 - INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
 - INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
 - INSTALL 6" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AN 341-1 TYPE 'C'; INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
 - INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
 - INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x6" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE "C". VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE "C". VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
 - INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'; INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
 - INSTALL 8"-90° BEND.
- PRIVATE FIRE LINE CONSTRUCTION NOTES**
- INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
 - FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB; FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.
- PRIVATE WATER CONSTRUCTION NOTES**
- INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
 - INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DT. 2355.
- PRIVATE SEWER CONSTRUCTION NOTES**
- CONNECT TO PUBLIC SEWER MANHOLE.
 - INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
 - INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
 - SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
 - INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
 - CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
 - CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
 - SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

- NOTES:**
- ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
 - DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
 - FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
 - ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES).
 - MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
 - SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
 - FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.

PRELIMINARY NOT FOR CONSTRUCTION



REV.
REV.
REV.
REV.
REV.

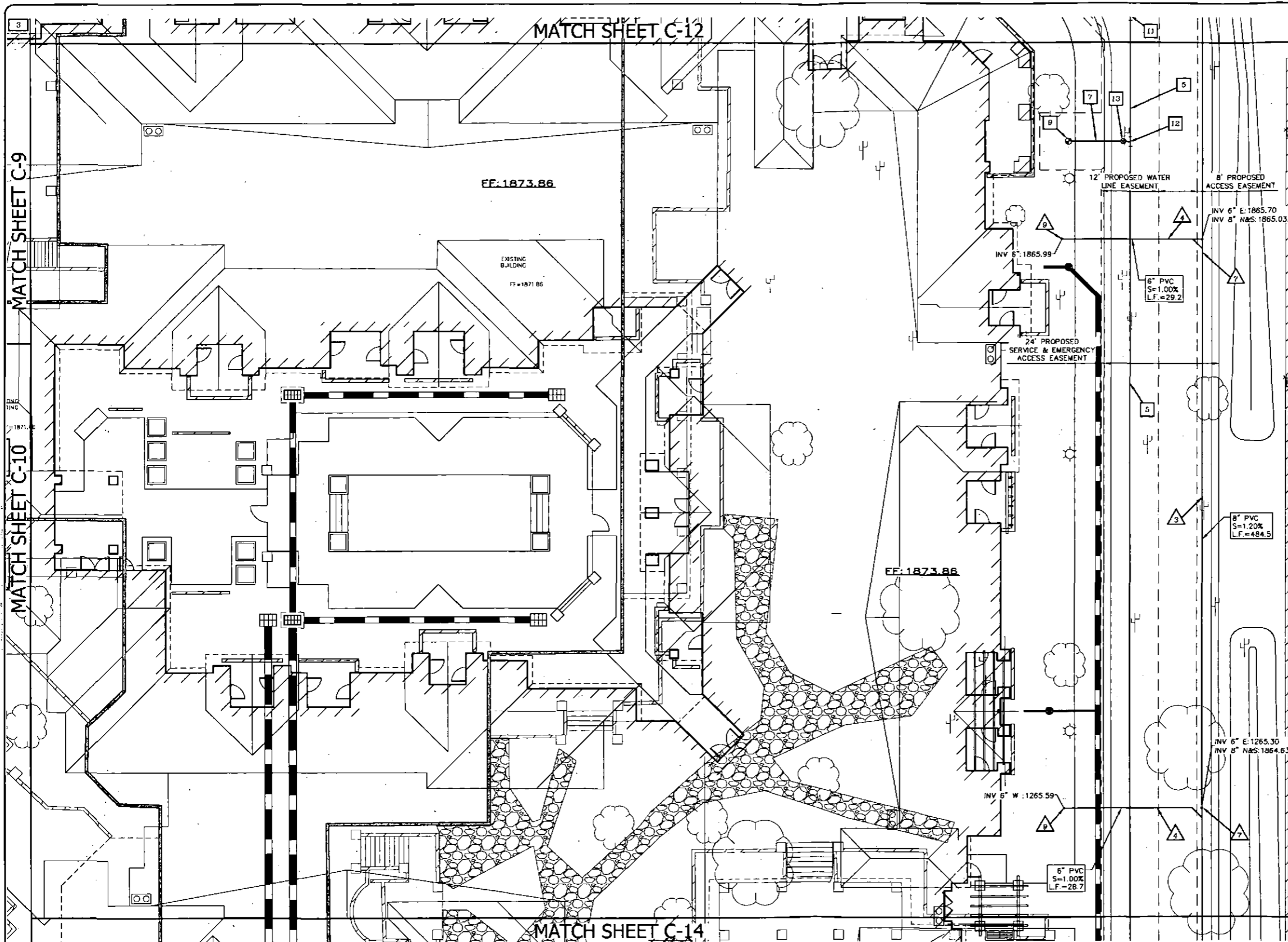


Site Consultants, Inc.
ENGINEERS • SURVEYORS • CONSULTANTS
a division of **Westwood**
6909 East Greenway Parkway, Suite 250, Scottsdale, AZ. 85254
westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
SENIOR LIVING FACILITY
23733 N. SCOTTSDALE ROAD
SCOTTSDALE, ARIZONA

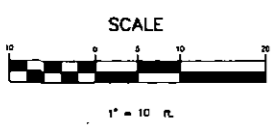
PROJECT NO.: 2098
SCALE: 1" = 10'
DRAWN BY: WLG
CHECKED BY: MJC
DATE: 10-05-2016
DWG: 2098-C-CP-Pre

C-11
OF
27



- PUBLIC WATER MAIN CONSTRUCTION NOTES**
- SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - CONNECT TO EXISTING 8" WATER LINE.
 - INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
 - INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
 - INSTALL 6" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
 - INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
 - INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x6" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
 - INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
 - INSTALL 8"-90° BEND.
- PRIVATE FIRE LINE CONSTRUCTION NOTES**
- INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
 - FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB; FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.
- PRIVATE WATER CONSTRUCTION NOTES**
- INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
 - INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DTL. 2355.
- PRIVATE SEWER CONSTRUCTION NOTES**
- CONNECT TO PUBLIC SEWER MANHOLE.
 - INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
 - INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
 - SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
 - INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
 - CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
 - CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
 - SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

- NOTES:**
- ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
 - DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
 - FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
 - ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES).
 - MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
 - SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
 - FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.



PRELIMINARY NOT FOR CONSTRUCTION

REV.
REV.
REV.
REV.
REV.

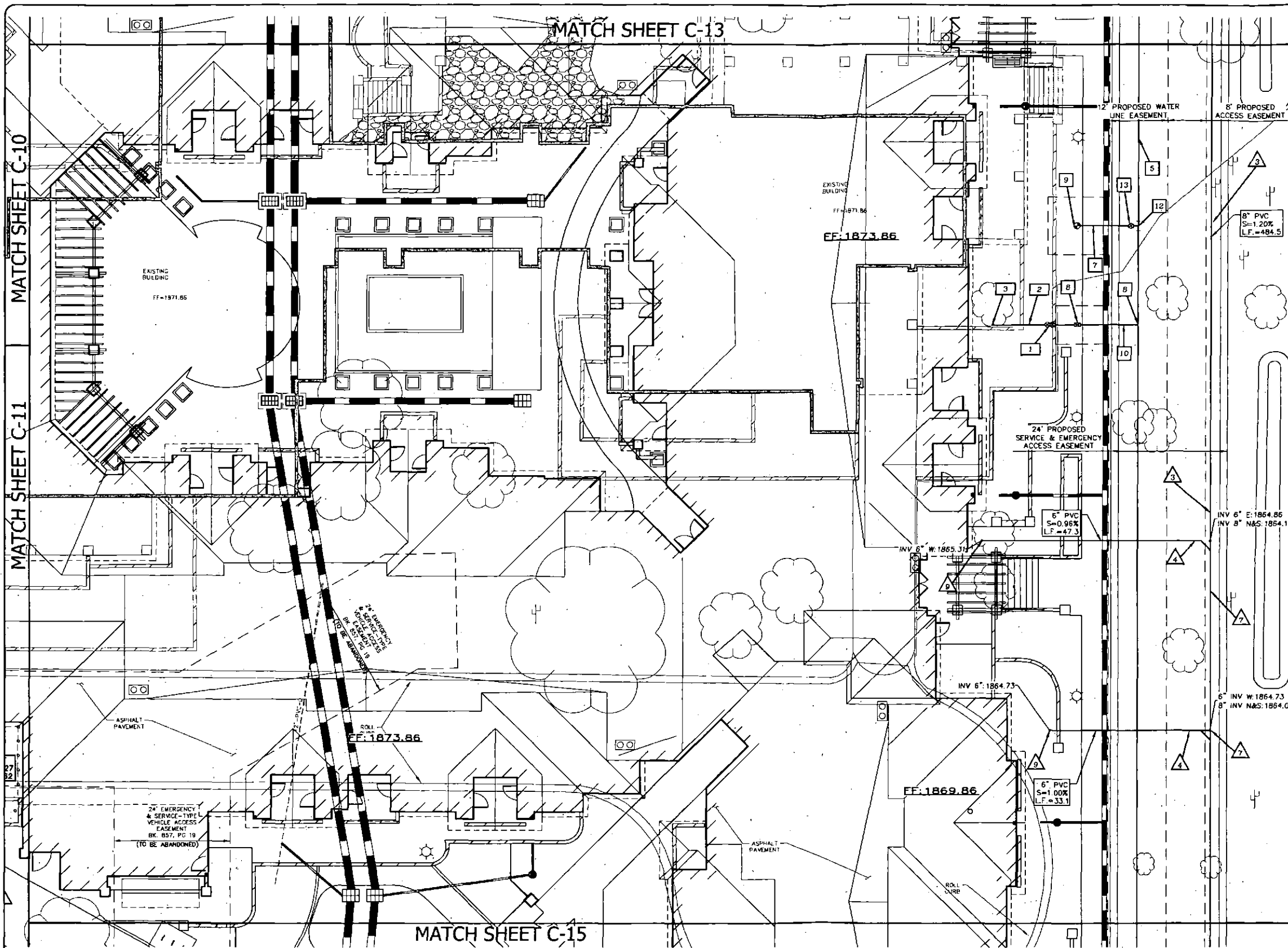


Site Consultants, Inc.
 ENGINEERS • SURVEYORS • CONSULTANTS
 a division of Westwood
 6909 East Greenway Parkway, Suite 250, Scottsdale, AZ, 85254
 westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
 SENIOR LIVING FACILITY
 23733 N. SCOTTSDALE ROAD
 SCOTTSDALE, ARIZONA

PROJECT NO.: 2088
 SCALE: 1" = 10'
 DRAWN BY: WLG
 CHECKED BY: MJC
 DATE: 10-03-2016
 DWG: 2088-C-GP-PRV

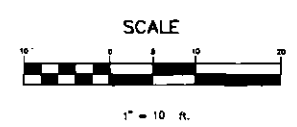
C-13
 OF
 27



- PUBLIC WATER MAIN CONSTRUCTION NOTES**
- SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
 - CONNECT TO EXISTING 8" WATER LINE.
 - INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
 - INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
 - INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
 - INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
 - INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x6" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
 - INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
 - INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
 - INSTALL 8"-90° BEND.
- PRIVATE FIRE LINE CONSTRUCTION NOTES**
- INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
 - INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
 - FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB; FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.
- PRIVATE WATER CONSTRUCTION NOTES**
- INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
 - INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DTL. 2355.
- PRIVATE SEWER CONSTRUCTION NOTES**
- CONNECT TO PUBLIC SEWER MANHOLE.
 - INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
 - INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
 - INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
 - SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
 - INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
 - CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
 - SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
 - CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
 - SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

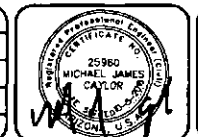
NOTES:

- ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
- DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
- FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
- ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES). MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
- SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
- FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.



PRELIMINARY NOT FOR CONSTRUCTION

REV.
REV.
REV.
REV.

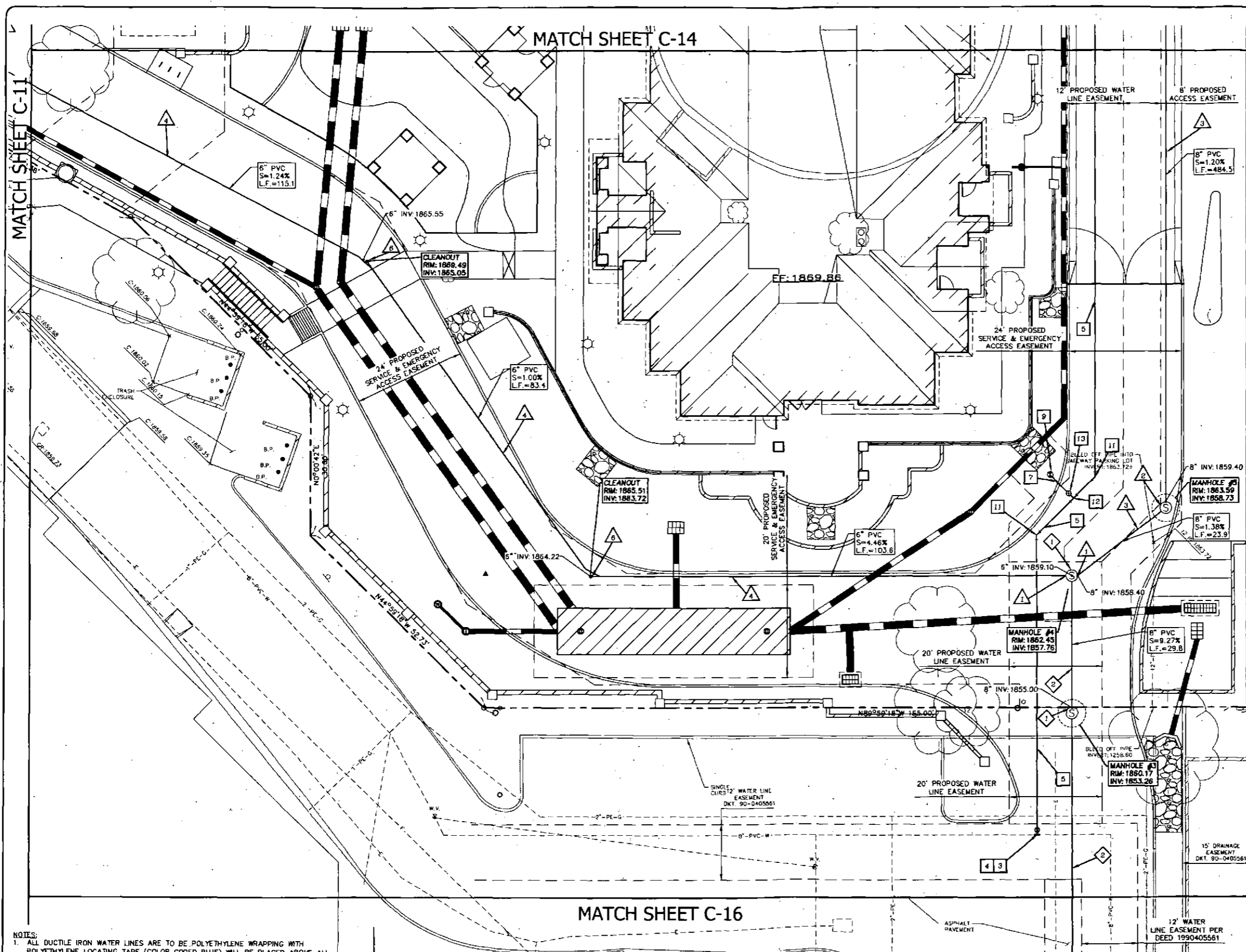


Site Consultants, Inc.
ENGINEERS • SURVEYORS • CONSULTANTS
a division of Westwood
6909 East Greenway Parkway, Suite 250, Scottsdale, AZ 85254
westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
SENIOR LIVING FACILITY
23733 N. SCOTTSDALE ROAD
SCOTTSDALE, ARIZONA

PROJECT NO. 2098
SCALE: 1" = 10'
DRAWN BY: WLG
CHECKED BY: MJC
DATE: 10-05-2016
DWG: 2098-C-01-PI-0

C-14
OF
27



PUBLIC WATER MAIN CONSTRUCTION NOTES

- SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- CONNECT TO EXISTING 8" WATER LINE.
- INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
- INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
- INSTALL 6" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
- INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
- INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- INSTALL 8"x6" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
- INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
- INSTALL 8"-90° BEND.

PRIVATE FIRE LINE CONSTRUCTION NOTES

- INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
- FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB. FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.

PRIVATE WATER CONSTRUCTION NOTES

- INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
- INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DTL. 2355.

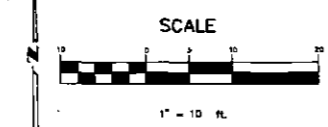
PRIVATE SEWER CONSTRUCTION NOTES

- CONNECT TO PUBLIC SEWER MANHOLE.
- INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
- INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
- SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
- INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
- CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
- CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
- SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

PUBLIC SEWER CONSTRUCTION NOTES

- INSTALL NEW 5' DIAMETER MANHOLE PER M.A.G. STD. DTL. 420 WITH 30 FRAME AND COVER PER C.O.S. STD. DTL. 2270 AND 2421.
- INSTALL 8" F-679, T-1, 46-PSI PVC SEWER PIPE BACKFILL, BEDDING AND FOUNDATION PER DETAIL ON SHEET 2.
- SAWCUT REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT IN LIKE KIND.

- NOTES:**
- ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
 - DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
 - FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
 - ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES).
 - MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
 - SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
 - FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.



PRELIMINARY NOT FOR CONSTRUCTION



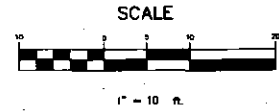
Site Consultants, Inc.
ENGINEERS • SURVEYORS • CONSULTANTS
a division of Westwood
6909 East Greenway Parkway, Suite 250, Scottsdale, AZ. 85254
westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
SENIOR LIVING FACILITY
23733 N. SCOTTSDALE ROAD
SCOTTSDALE, ARIZONA

PROJECT NO.: 2099
SCALE: 1" = 10'
DRAWN BY: WLG
CHECKED BY: WJC
DATE: 10-05-2016
DWG: 2098-C-06-Prd

C-15
OF
27

MATCH SHEET C-15



MATCH SHEET C-17

NOTES:

1. ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
2. DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
3. FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
4. ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES).
5. MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
6. SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
7. FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.

PRELIMINARY NOT FOR CONSTRUCTION



REV.	
REV.	
REV.	
REV.	



Site Consultants, Inc.
 ENGINEERS • SURVEYORS • CONSULTANTS
 a division of Westwood
 6909 East Greenway Parkway, Suite 250, Scottsdale, AZ. 85254
 westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
 SENIOR LIVING FACILITY
 23733 N. SCOTTSDALE ROAD
 SCOTTSDALE, ARIZONA

PROJECT NO. 2088
 SCALE: 1" = 10'
 DRAWN BY: WLG
 CHECKED BY: MJC
 DATE: 10-05-2016
 DWG: 2088-C-0P-Prel

C-16
 OF
27

PUBLIC WATER MAIN CONSTRUCTION NOTES

- 1 SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- 2 SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- 3 CONNECT TO EXISTING 8" WATER LINE.
- 4 INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
- 5 INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 6 INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
- 7 INSTALL 6" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 8 INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
- 9 INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
- 10 INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 11 INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 12 INSTALL 8"x6" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 13 INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- 14 INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 15 INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 16 INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- 17 INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
- 18 INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
- 19 INSTALL 8"-90° BEND.

PRIVATE FIRE LINE CONSTRUCTION NOTES

- 1 INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 2 INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 3 INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
- 4 FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB; FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.

PRIVATE WATER CONSTRUCTION NOTES

- 1 INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
- 2 INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 3 CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- 4 INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DT. 2355.

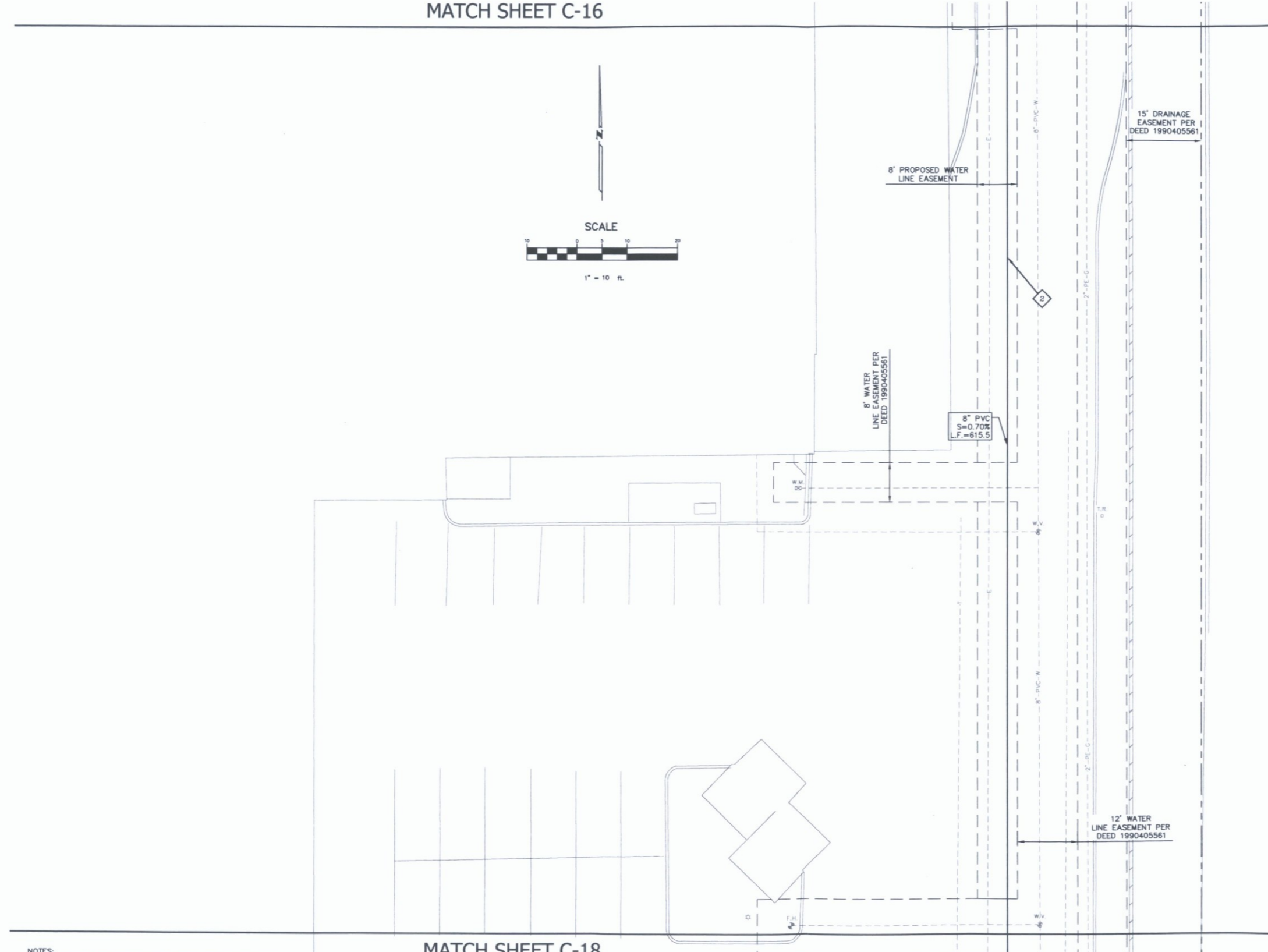
PRIVATE SEWER CONSTRUCTION NOTES

- 1 CONNECT TO PUBLIC SEWER MANHOLE.
- 2 INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
- 3 INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 4 INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 5 INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 6 INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
- 7 SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
- 8 INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
- 9 CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- 10 SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
- 11 CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
- 12 SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

PUBLIC SEWER CONSTRUCTION NOTES

- 1 INSTALL NEW 5' DIAMETER MANHOLE PER M.A.G. STD. DTL. 420 WITH 30 FRAME AND COVER PER C.O.S. STD. DTL. 2270 AND 2421.
- 2 INSTALL 8" F-678, T-1, 46-PSI PVC SEWER PIPE. BACKFILL BEDDING AND FOUNDATION PER DETAIL ON SHEET 2.
- 3 SAWCUT REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT IN LIKE KIND.

MATCH SHEET C-16



MATCH SHEET C-18

PRELIMINARY NOT FOR CONSTRUCTION

PUBLIC WATER MAIN CONSTRUCTION NOTES

- 1 SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- 2 SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- 3 CONNECT TO EXISTING 8" WATER LINE.
- 4 INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
- 5 INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 6 INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
- 7 INSTALL 6" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 8 INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AN 341-1 TYPE 'C'; INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
- 9 INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
- 10 INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 11 INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 12 INSTALL 8"x6" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 13 INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- 14 INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 15 INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 16 INSTALL 8" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- 17 INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
- 18 INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'; INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
- 19 INSTALL 8"-90° BEND.

PRIVATE FIRE LINE CONSTRUCTION NOTES

- 1 INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 2 INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 3 INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
- 4 FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB; FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.

PRIVATE WATER CONSTRUCTION NOTES

- 1 INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
- 2 INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 3 CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- 4 INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DT. 2355.

PRIVATE SEWER CONSTRUCTION NOTES

- 1 CONNECT TO PUBLIC SEWER MANHOLE.
- 2 INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
- 3 INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 4 INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 5 INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 6 INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
- 7 SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
- 8 INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
- 9 CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- 10 SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
- 11 CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
- 12 SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

PUBLIC SEWER CONSTRUCTION NOTES

- 1 INSTALL NEW 5' DIAMETER MANHOLE PER M.A.G. STD. DTL. 420 WITH 30 FRAME AND COVER PER C.O.S. STD. DTL. 2270 AND 2421.
- 2 INSTALL 8" F-679, T-1, 46-PSI PVC SEWER PIPE. BACKFILL, BEDDING AND FOUNDATION PER DETAIL ON SHEET 2.
- 3 SAWCUT REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT IN LIKE KIND.

NOTES:

1. ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
2. DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
3. FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
4. ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES).
5. MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
6. SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
7. FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.



REV.	
REV.	
REV.	
REV.	

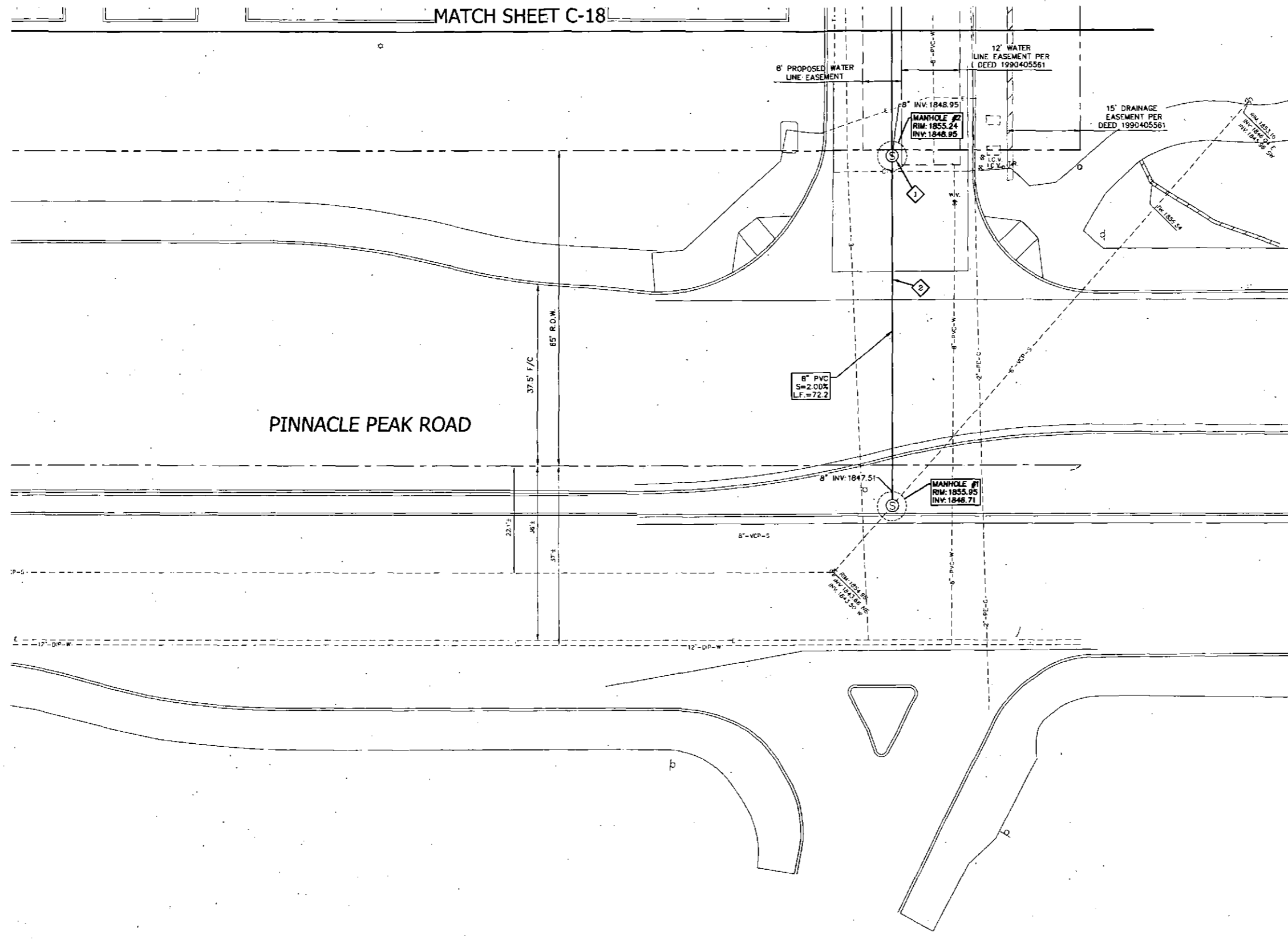


Site Consultants, Inc.
 ENGINEERS • SURVEYORS • CONSULTANTS
 a division of Westwood
 6909 East Greenway Parkway, Suite 250, Scottsdale, AZ. 85254
 westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
 SENIOR LIVING FACILITY
 23733 N. SCOTTSDALE ROAD
 SCOTTSDALE, ARIZONA

PROJECT NO.: 2098
SCALE: 1" = 10'
DRAWN BY: WLG
CHECKED BY: MJC
DATE: 10-05-2016
DWG: 2098-C-0P-Prfl

C-17
 OF
27



PUBLIC WATER MAIN CONSTRUCTION NOTES

- 1 SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- 2 SAWCUT & REMOVE EXISTING CONCRETE PAVEMENT. REPLACE IN LIKE KIND PER C.O.S. DTL. 2200.
- 3 CONNECT TO EXISTING 8" WATER LINE.
- 4 INSTALL 8"x8" T.S.&V. WITH BOX & COVER PER M.A.G. DETAIL 340. CONTRACTOR TO VERIFY SIZE AND LOCATION OF EXISTING WATER LINE PRIOR TO PROCEEDING WITH BALANCE OF CONSTRUCTION.
- 5 INSTALL 8" D.I.P. WATER PIPE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 6 INSTALL 8" D.I.P. FIRE LINE CONNECTION PER C.O.S. DTL. 2362-2. INSTALL TEMPORARY TAP FOR CHLORINE INJECTION PER C.O.S. DTL. 2399.
- 7 INSTALL 6" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 8 INSTALL 3" SERVICE WITH 3" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AN 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2345-2.
- 9 INSTALL FIRE HYDRANT ASSEMBLY PER M.A.G. STD. DTL. 360-1.
- 10 INSTALL 3" TYPE 'K' COPPER LINE (FROM MAIN TO WATER METER). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 11 INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 12 INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 13 INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- 14 INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 15 INSTALL 8"x8" TEE WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 16 INSTALL 6" VALVE BOX AND COVER PER M.A.G. STD. DTL. 391-1 TYPE 'C'. VALVE BOX FRAME AND COVER ADJUSTMENT PER C.O.S. DTL. 2270.
- 17 INSTALL CAP IF OFFSITE CONSTRUCTION IS NOT CONCURRENT WITH ONSITE CONSTRUCTION.
- 18 INSTALL 2" SERVICE WITH 2" TEE AND SHUT OFF VALVE PER M.A.G. STD. DTL. 340 AND 341-1 TYPE 'C'. INSTALL WATER METER AND VAULT PER C.O.S. STD. DTL. 2330 (FOR LANDSCAPE USE).
- 19 INSTALL 8"-90° BEND.

PRIVATE FIRE LINE CONSTRUCTION NOTES

- 1 INSTALL 8" D.I.P. FIRE LINE (MIN. CLASS 350). TRENCH PER C.O.S. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601. RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 2 INSTALL 8"-45° BEND WITH RESTRAIN JOINTS PER M.A.G. STD. DTL. 303.
- 3 INSTALL FIRE DEPARTMENT CONNECTION PER CITY OF SCOTTSDALE REQUIREMENTS.
- 4 FIRE SPRINKLER CONTRACTOR TO CONNECT TO FIRE LINE STUB; FIRE SPRINKLER RISER PER C.O.S. DTL. 2369. SEE FIRE SPRINKLER PLANS FOR CONTINUATION.

PRIVATE WATER CONSTRUCTION NOTES

- 1 INSTALL 3" BACKFLOW PREVENTOR PER C.O.S. DTL. 2353.
- 2 INSTALL 3" K-COPPER LINE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 3 CONNECT TO BUILDING DOMESTIC WATER SYSTEM. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- 4 INSTALL 2" PRESSURE VACUUM BREAKER ASSEMBLY PER C.O.S. STD. DT. 2355.

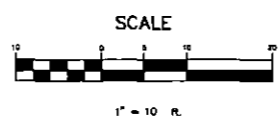
PRIVATE SEWER CONSTRUCTION NOTES

- 1 CONNECT TO PUBLIC SEWER MANHOLE.
- 2 INSTALL SEWER MANHOLE PER M.A.G. STD. DTL. 420-1.
- 3 INSTALL 8" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 4 INSTALL 6" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 5 INSTALL 4" PVC SDR 35 OR EQUAL SEWER PIPE. TRENCH PER C.O.S. STD. DTL. 2201 TYPE 'A' AND M.A.G. SPEC. 336 AND 601.
- 6 INSTALL CLEANOUT PER M.A.G. STD. DTL. 441.
- 7 SEWER TAP FOR BUILDING SERVICE PER M.A.G. STD. DTL. 440-1.
- 8 INSTALL GREASE INTERCEPTOR. SEE PLUMBING PLANS FOR DETAILS.
- 9 CONNECT TO BUILDING SEWER. COORDINATE WITH PLUMBING PLANS FOR CONTINUATION.
- 10 SEWER TAP FOR ENCLOSURE SERVICE PER M.A.G. STD. DTL. 440-1.
- 11 CUT AND CAP EXISTING 6" PVC SEWER SERVICE.
- 12 SEWER TAP FOR TRASH COMPACTOR PER M.A.G. STD. DTL. 440-1.

PUBLIC SEWER CONSTRUCTION NOTES

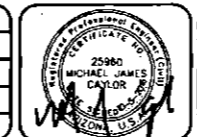
- 1 INSTALL NEW 5' DIAMETER MANHOLE PER M.A.G. STD. DTL. 420 WITH 30 FRAME AND COVER PER C.O.S. STD. DTL. 2270 AND 2421.
- 2 INSTALL 8" F-679, T-1, 46-PSI PVC SEWER PIPE. BACKFILL, BEDDING AND FOUNDATION PER DETAIL ON SHEET 2.
- 3 SAWCUT REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT IN LIKE KIND.

- NOTES:**
- 1 ALL DUCTILE IRON WATER LINES ARE TO BE POLYETHYLENE WRAPPING WITH POLYETHYLENE LOCATING TAPE (COLOR CODED BLUE) WILL BE PLACED ABOVE ALL PUBLIC WATER LINES PER M.A.G. DETAILS.
 - 2 DESIGN JOINT DEFLECTION SHALL NOT EXCEED 4 DEGREES FOR WATER LINES 12 INCHES AND SMALLER.
 - 3 FOR PURPOSES OF HORIZONTAL SEPARATION, STORM DRAINS AND NON-POTABLE WATER LINES SHALL BE TREATED AS SEWER LINES.
 - 4 ELECTRONIC MARKERS ARE TO BE LOCATED AT ALL FITTINGS (EXCLUDING VALVES).
 - 5 MINIMUM COVER OF 36 INCHES TO THE TOP OF PIPES.
 - 6 SEPARATION OF WATER FROM ELECTRICAL OR GAS LINES WILL CONFORM TO C.O.S. STD. DTL. 2372 AND SHALL INCLUDE A PRESSURE REGULATING VALVE.
 - 7 FOR MINIMUM CLEARANCE UNDER CULVERTS, STORM DRAINS, AND OTHER UTILITIES SEE C.O.S. STD. DTL. 2370 AND 2372.



PRELIMINARY NOT FOR CONSTRUCTION

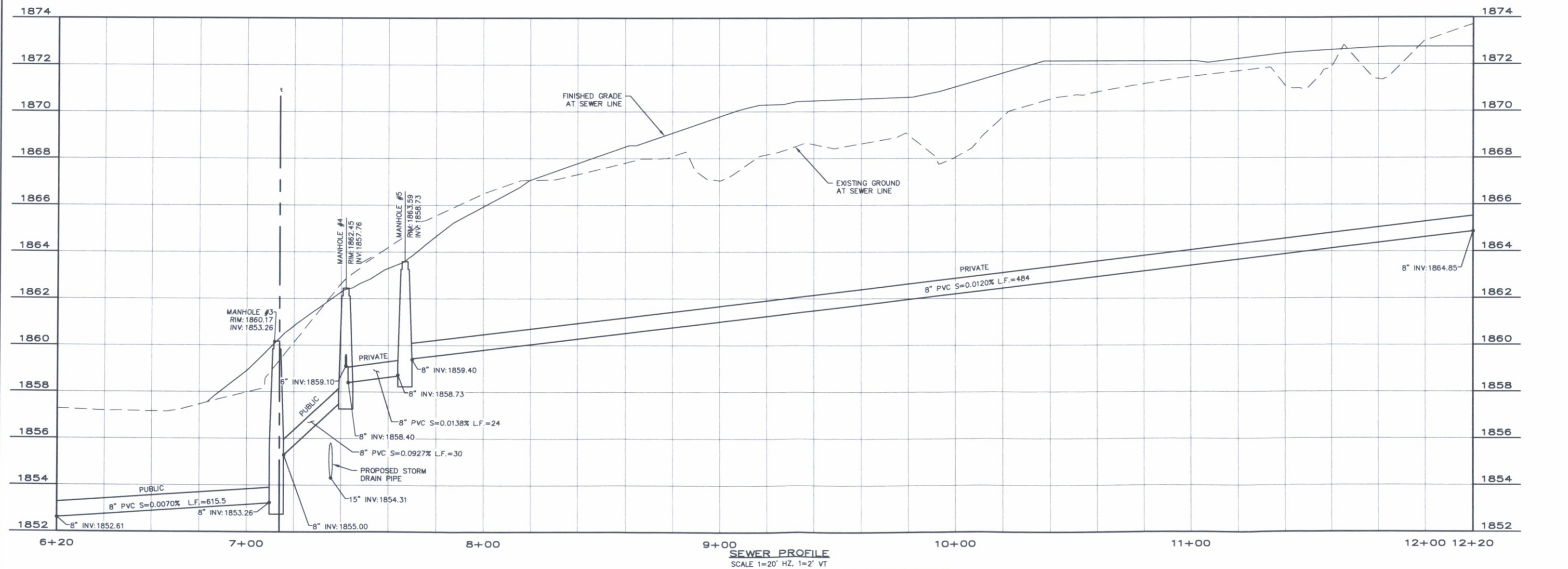
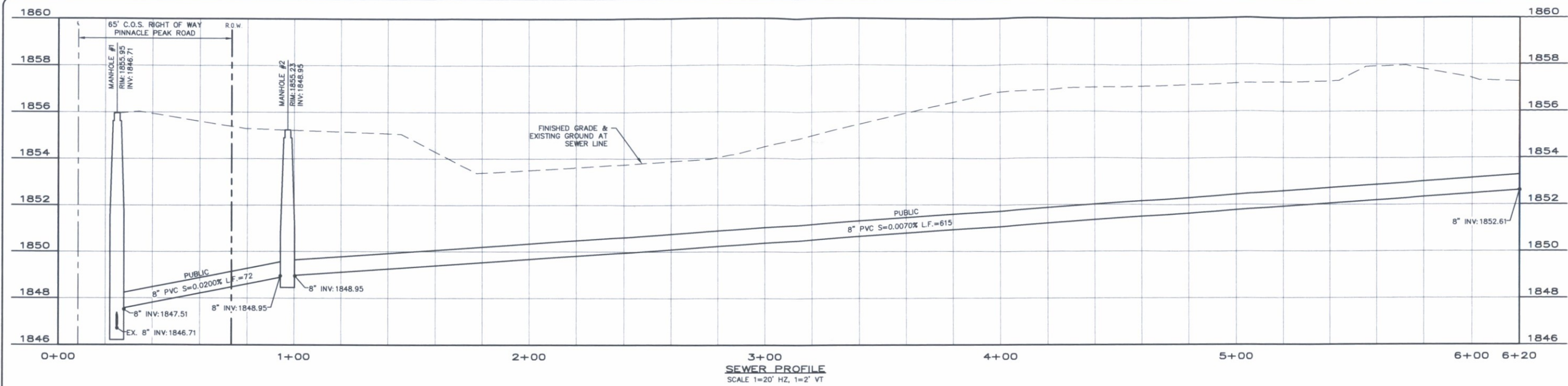
REV.	
REV.	
REV.	
REV.	



Site Consultants, Inc.
ENGINEERS • SURVEYORS • CONSULTANTS
a division of Westwood
6909 East Greenway Parkway, Suite 250, Scottsdale, AZ. 85254
westwoodps.com (888) 937-5150

PRELIMINARY UTILITY PLAN
SENIOR LIVING FACILITY
23733 N. SCOTTSDALE ROAD
SCOTTSDALE, ARIZONA

PROJECT NO.:	2098
SCALE:	1" = 10'
DRAWN BY:	MJC
CHECKED BY:	MJC
DATE:	10-05-2016
DWG.:	2098-C-CP-Pre



PRELIMINARY NOT FOR CONSTRUCTION



REV.	
REV.	
REV.	
REV.	
REV.	



Site Consultants, Inc.
ENGINEERS • SURVEYORS • CONSULTANTS
a division of Westwood
6909 East Greenway Parkway, Suite 250, Scottsdale, AZ. 85254
westwoodps.com (888) 937-5150

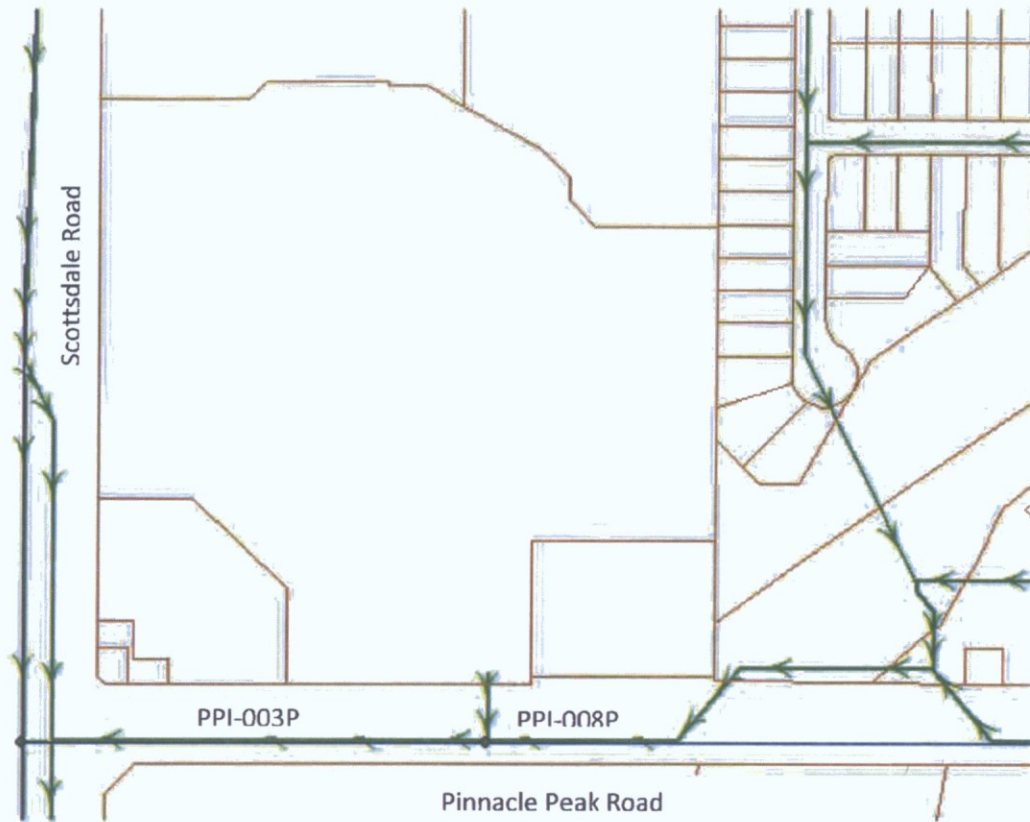
PRELIMINARY SEWER PROFILES
SENIOR LIVING FACILITY
23733 N. SCOTTSDALE ROAD
SCOTTSDALE, ARIZONA

PROJECT NO.:	2098
SCALE:	1" = 10'
DRAWN BY:	WLG
CHECKED BY:	MJC
DATE:	10-05-2016
DWG:	2098-C-GP-Prel

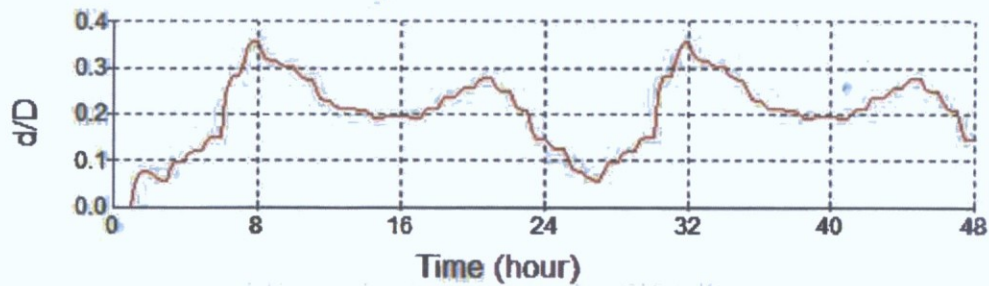
C-20
OF
27

APPENDIX 4

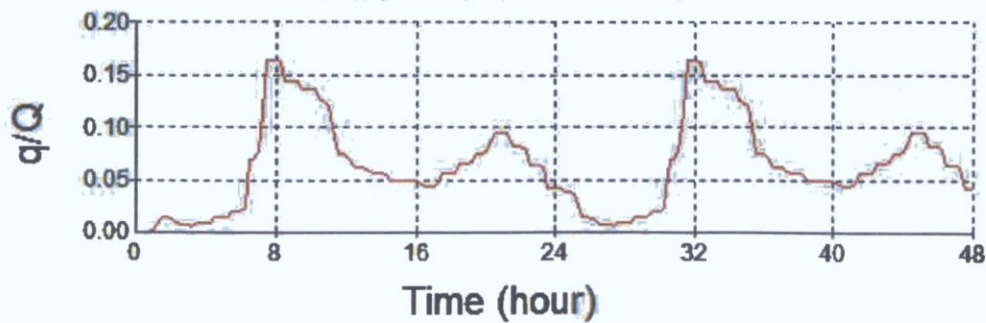
City of Scottsdale Flow Capacity – Pinnacle Peak Sewer



Gravity Main PPI-003P



Gravity Main PPI-008P

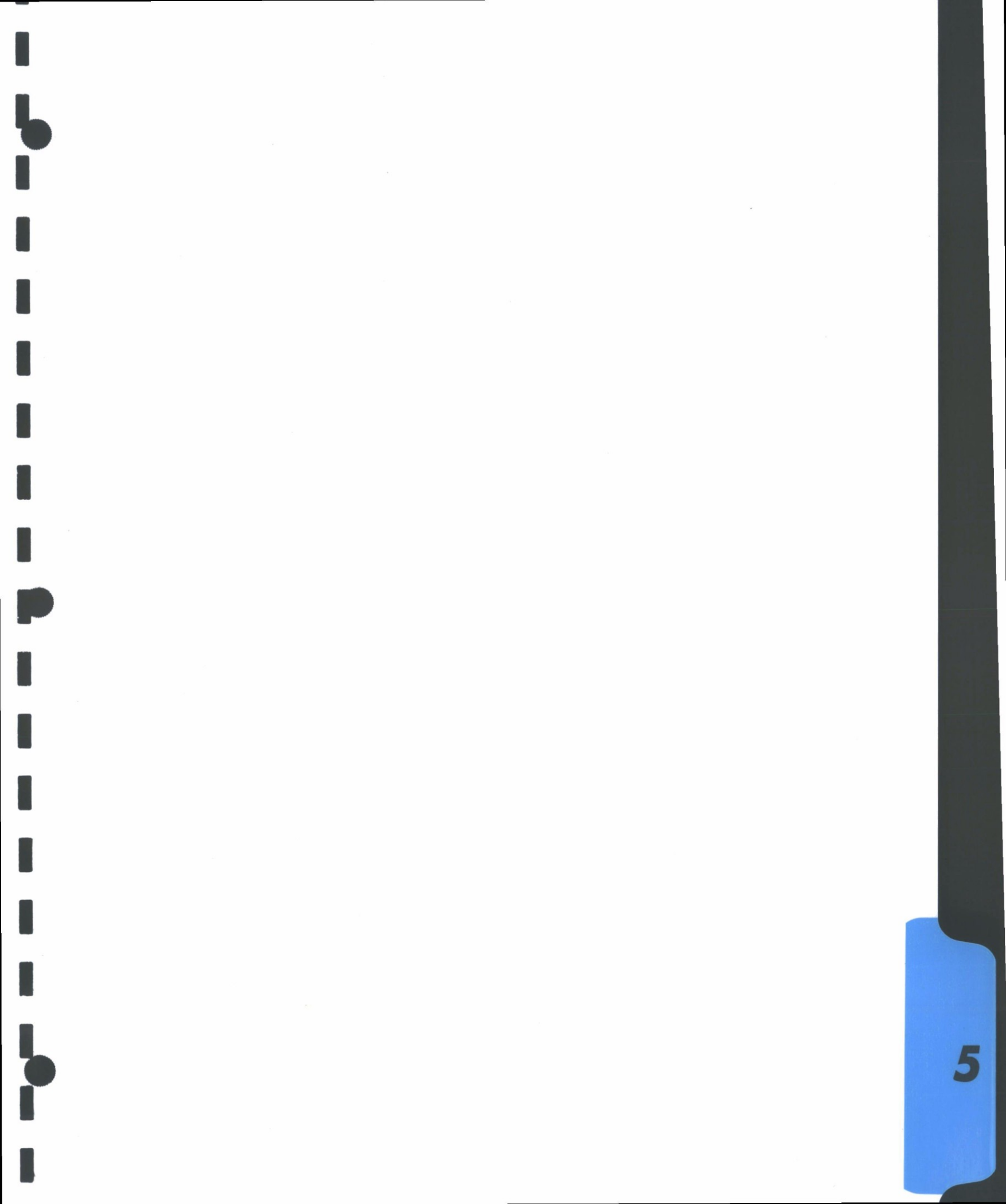


PIPE: PPI-003P

(ID)	PPI-003P
Description	
<input checked="" type="checkbox"/> Geometry	Reverse
Start Node	PPI-003N
End Node	SRT-076N
<input checked="" type="checkbox"/> Modeling	
From Invert	1839.690
To Invert	1831.360
Length	627.150
Diameter	8.000
Coefficient	0.013
Parallel	0
<input type="checkbox"/> Information	
<input checked="" type="checkbox"/> Output	
Flow	0.000 mgd
Flow Type	Free Surface
Velocity	0.000 ft/s
Water Depth	0.000 ft
Froude Number	0.000
Overflow	0.000 mgd
Backwater	No
Adjusted Depth	0.000 ft
Adjusted Velocity	0.000 ft/s
Reserve Capacity	0.659 mgd
d/D	0.000
q/Q	0.000
Maximum Flow	0.244 mgd
Type	Gravity Main
Channel Type	Circular
From Node	PPI-003N
To Node	SRT-076N
Upstream Invert	1839.690 ft
Downstream Inve	1831.360 ft
Length	627.150 ft
Diameter	8.000 in
Friction Factor	0.013
Pipe Slope	0.013

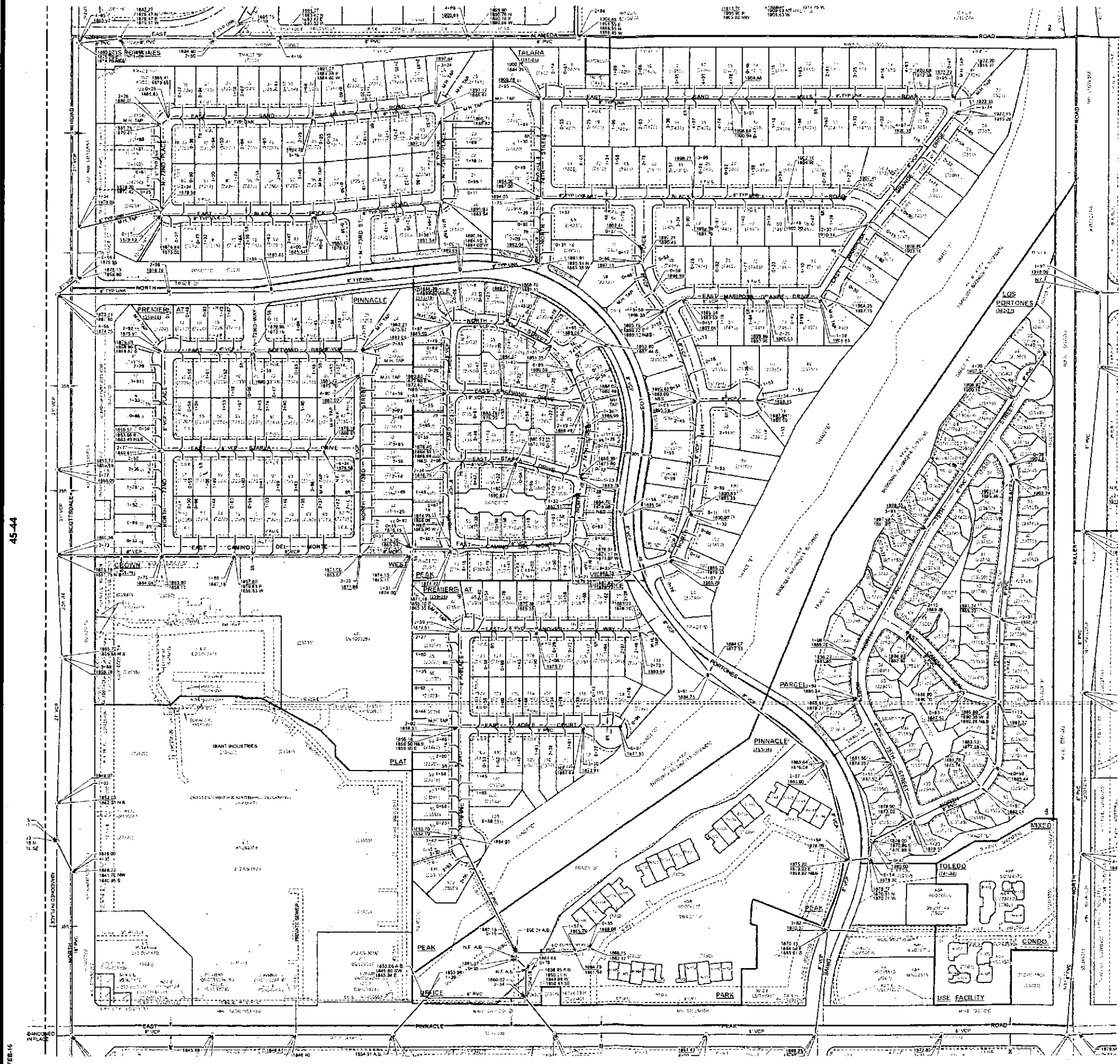
PIPE: PPI-008P

(ID)	PPI-008P
Description	
<input checked="" type="checkbox"/> Geometry	Reverse
Start Node	PPI-008N
End Node	PPI-003N
<input checked="" type="checkbox"/> Modeling	
From Invert	1868.730
To Invert	1839.690
Length	2687.658
Diameter	8.000
Coefficient	0.013
Parallel	0
<input type="checkbox"/> Information	
<input checked="" type="checkbox"/> Output	
Flow	0.000 mgd
Flow Type	Free Surface
Velocity	0.000 ft/s
Water Depth	0.000 ft
Froude Number	0.000
Overflow	0.000 mgd
Backwater	No
Adjusted Depth	0.000 ft
Adjusted Velocity	0.000 ft/s
Reserve Capacity	0.681 mgd
d/D	0.000
q/Q	0.000
Maximum Flow	0.133 mgd
Type	Gravity Main
Channel Type	Circular
From Node	PPI-008N
To Node	PPI-003N
Upstream Invert	1868.730 ft
Downstream Inve	1839.690 ft
Length	2687.658 ft
Diameter	8.000 in
Friction Factor	0.013
Pipe Slope	0.011



APPENDIX 5

City of Scottsdale ¼ Section Map



GENERAL NOTES:
 THIS IS A COMPUTER GENERATED DRAWING. FOR ANY REVISIONS PLEASE CONTACT THE CITY OF SCOTTSDALE GIS DEPARTMENT AT (480) 312-7767.
 THE ELECTRONIC BEARING AND DISTANCES ARE BASED ON THE CITY OF SCOTTSDALE GPS SURVEY OF SEPTEMBER 1997. BEARINGS ARE GIVEN IN DEGREES AND DISTANCES ARE PLATTED TO ONE DECIMAL WHERE NECESSARY. THE DIMENSIONS ARE GIVEN TO ALL CORNER POINTS AND ARE NOTED AS CALCULATED ON THE MAP.

LEGEND:

- Cleanout
- Lot Station
- Manhole
- Non-GPS Point
- Plug
- Sewer Service Point
- Sewer Tap Point
- Sewer Valve
- Treatment Plant
- Sewer Main - Gravity
- Sewer Main - Force
- Sewer Main - Private

VICINITY MAP

NORTH

SCALE: 1" = 100'

0 50 100 200

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

SEWER QUARTER SECTION MAP

45-45

SW 1/4 SEC. 11 T4N R4E

SCOTTSDALE GEOGRAPHIC INFORMATION SYSTEMS
 3520 North Drinkwater Boulevard
 Scottsdale, Arizona 85251

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 USED FOR ANY OTHER PURPOSE.

THE CITY OF SCOTTSDALE

24-FEB-16