



PRELIMINARY BASIS OF DESIGN WASTEWATER REPORT

FOR

"94 HUNDRED SHEA - THE VILLAGE"

**9400 E. SHEA BLVD.
SCOTTSDALE, MARICOPA COUNTY, ARIZONA**

PREPARED FOR:

**94 HUNDRED SHEA LLC
7150 EAST CAMELBACK ROAD, SUITE 444
SCOTTSDALE, MARICOPA COUNTY, ARIZONA 85251**

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 apritchard

DATE 10/18/2022

PREPARED BY:

**WGI, INC.
2727 ALLEN PARKWAY, SUITE 1350
HOUSTON, TEXAS 77019
ARIZONA ENGINEERING FIRM NO. 20717
30194471.00**

**SUBMITTAL 3
OCTOBER 2022**

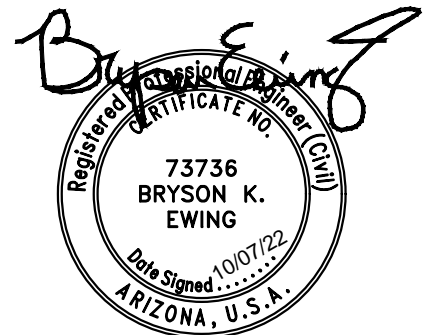




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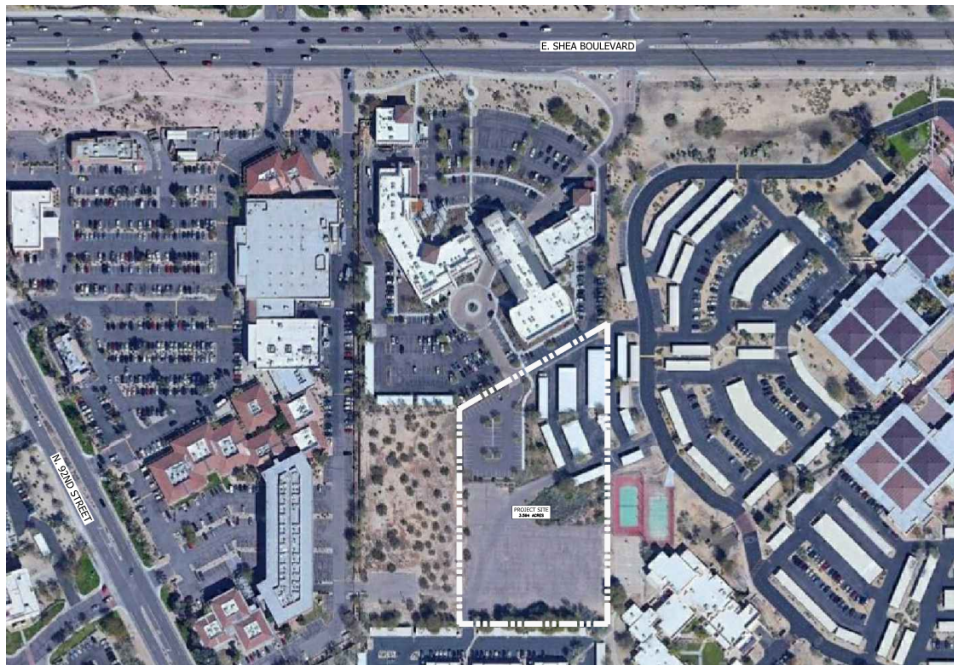
94 Hundred Shea Private Plans | **7**

1. Site Location / Description

The subject site associated with this Preliminary Basis of Design Wastewater Report for a proposed development, 94 Hundred Shea - The Village, is located adjacent to the southeast corner of E. Shea Blvd. and N. 92nd St., in the Full Purpose Limits of the City of Scottsdale (COS), Arizona. The ± 3.594 -acre site is previously developed with ± 1.867 acres of a paved parking lot, ± 0.770 acres of a covered parking lot, and ± 0.958 acres of undeveloped land with associated utilities, desert landscaping, and access drives. See **Exhibit 1 Aerial Map** below and in Appendix.

The proposed development will include the demolition of all existing structures followed by the construction of a 219-unit multi-level apartment complex. The proposed multi-family complex will be comprised of a single four-story building wrapped around a six-story parking garage and one open-space courtyard. The development will feature an extensive multi-purpose clubhouse containing a full fitness center among other various amenities complete with all associated grading, drainage, utility, landscape, and hardscape improvements. There is a swimming pool located on-site which will be considered in the wastewater generation calculations. Flow monitoring for the backwash flow rate is scheduled to determine adequate capacity.x

The subject site is currently zoned in the Commercial Office District (C-O) and is in the process of being rezoned to a Planned Unit Development (PUD). The associated General Plan Amendment and Rezoning Applications have been submitted, and proper documentation will be provided upon receipt.

**2. Purpose / Objective**

The purpose of this Preliminary Basis of Design Wastewater Report is to identify and analyze the existing and proposed sewer demand and system conditions and characteristics as they relate to the proposed development.



B. DESIGN DOCUMENTATION

1. Design Criteria

94 Hundred Shea - The Village is to be designed to meet the requirements of the following:

- *City of Scottsdale Design Standards and Policies Manual - 2018 (COS DSPM)*
- *Maricopa Associate of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction - 2019 Revision*
- *COS Supplement to MAG Uniform Standard Specifications and Details for Public Works Construction - 2015*
- *Scottsdale Revised Code - 2019 (SRC)*
- *International Fire Code - 2015 (IFC)*

2. Methodologies

Design standards were obtained from Chapter 7 of the COS DSPM. Section 7-1.403 details design flow parameters based on land usage, and Figure 7-1.2 displays the average sewer demand and peaking factor for each corresponding land use.

C. EXISTING CONDITIONS

1. Zoning / Land Use

The subject site is currently zoned in the Commercial Office District (C-O) and is in the process of being rezoned to a Planned Unit Development (PUD). The Overall Planned Unit Development is 10.36 acres. The associated General Plan Amendment and Rezoning Applications have been submitted, and proper documentation will be provided upon receipt.

2. Existing Topography / Vegetation

The site is comprised mostly of a vacant asphalt-paved parking lot. In the northeast corner, there is a canopy-covered parking lot. In the northwest corner, there is an uncovered parking lot, both lots currently serve the adjacent development to the north. Native desert landscape and vegetation occupy the undeveloped area between the parking lots. The location generally drains from the northeast, the site's highest elevation point, towards the southwest to the lowest elevation point. There is an existing retention pond in between the covered and uncovered parking lots with a second pond located just south of the two parking lots. The rest of the site drains into two more retention ponds positioned along the southern border of the property.

3. Existing Utilities

The site does not contain any existing wastewater lines or structures within the property. For the adjacent site to the north, there is an existing sanitary manhole located within the existing driveway that connects the two parcels, that will be used as the connection point. Located Reference **Exhibit 2 Existing Conditions** in the Appendix.

D. PROPOSED CONDITIONS

1. Utility Layout

The preliminary wastewater design includes two private sanitary sewer connections located along the north property line just west of the main entrance to the clubhouse. The proposed 8" sanitary



connections discharge to a nearby existing sanitary sewer manhole which eventually outfalls to public sanitary sewer system along E. Shea Blvd. The 8" SDR 35 PVC wastewater pipe segments extend from the building to the manhole and span 107 and 85 linear feet (LF) respectively. They will have a minimum slope of 0.52% slope (0.0052 ft/ft). Reference **Exhibit 4 Preliminary Sanitary Sewer Layout** in the subsequent Appendix of this report.

Authorization to construct the proposed private sewer line to the existing connection point and to discharge project development sewer flows through the adjacent parcel is part of the overall development agreement between the north parcel landowner and the developer of 94 Hundred Shea - The Village. Originally, an existing 8" sanitary stub out was provided by the 9400 Hundred Shea development north of 94 Hundred Shea - The Village for anticipated future contributing flows. See Section E.2 for analysis of public sewer capacity based on flow monitoring and proposed developed peak flow from 94 Hundred Shea - The Village.

2. Maintenance

Sanitary infrastructure associated with the development will be service connections to existing lines. Sanitary sewer connections will be private and maintained by the development.

E. COMPUTATIONS

1. Average Day Sewer Demand and Peak Flow for Existing Site

The calculations for the average daily sewer demand and peak flow for present conditions are specified in Section 7-1.403 of the COS DSPM. Due to the lack of any existing structures or land usage, there is no sewer demand for the site in its current state.

Average Day Demand

$$\begin{aligned} &= \left(\frac{\text{gpd}}{\text{sf}} \right) \times \text{Existing Site Area (sf)} \\ &= (0) \times (243,675) \\ &= \mathbf{0.0 \text{ gpd}} \end{aligned}$$

Peak Flow

$$\begin{aligned} &= \text{Peak Factor} \times \text{Average Day Demand (gpd)} \\ &= (4) \times (0) \\ &= \mathbf{0.0 \text{ gpd}} \end{aligned}$$

2. Average Day Sewer Demand and Peak Flow for Proposed Development

The proposed development consists of a total of 219 apartment units along with a ±13,784 sf clubhouse and associated amenities. The residential space has a unit density of ±60.93 dwelling units per acre and qualifies as "Residential 12-22 DU/ac." The clubhouse is considered an "Office space" and the pool was also taken into consideration separately. These demand values contingent on land use are listed in Figure 7-1.2 COS DSPM.

A flow monitoring report is in the appendix with the as-built drawings showing the private sewer system of the north tract. The flow monitoring report identifies a maximum flow depth of 10.14-in in the existing 21" pipe. The existing d/D under maximum flow conditions is 0.48. The additional flow



depth from the proposed development at peak flow is 2.8 in. The post-development peak flow is 12.94 in (10.14 in. + 2.8 in.), the post development peak d/D is 0.616 which is below City of Scottsdale's d/D = 0.65 under peak flow requirement.

Apartment

$$\begin{aligned}\text{Average Day Demand} &= \left(\frac{\text{gpd}}{\text{unit}}\right) \times (\text{unit}) \\ &= (140) \times (219) \\ &= \mathbf{30,660 \text{ gpd}}\end{aligned}$$

$$\begin{aligned}\text{Peak Flow} &= \text{Peak Factor} \times \text{Average Day Demand (gpd)} \\ &= (4.5) \times (30,660) \\ &= \mathbf{137,970 \text{ gpd}}\end{aligned}$$

Clubhouse

$$\begin{aligned}\text{Average Day Demand} &= \left(\frac{\text{gpd}}{\text{sf}}\right) \times (\text{sf}) \\ &= (0.4) \times (13,784) \\ &= \mathbf{5,514 \text{ gpd}}\end{aligned}$$

$$\begin{aligned}\text{Peak Flow} &= \text{Peak Factor} \times \text{Average Day Demand (gpd)} \\ &= (3) \times (5,514) \\ &= \mathbf{16,542 \text{ gpd}}\end{aligned}$$

Pool

$$\text{Average Day Demand} = \mathbf{100 \text{ gpd}}$$

$$\text{Peak Flow} = \mathbf{100 \text{ gpd}}$$

Combined

$$\begin{aligned}\text{Average Day Demand} &= \text{Apartment} + \text{Clubhouse} + \text{Pool} \\ &= (30,660) + (5,514) + (100) \\ &= \mathbf{36,274 \text{ gpd}}\end{aligned}$$

$$\begin{aligned}\text{Peak Flow} &= \text{Apartment} + \text{Clubhouse} + \text{Pool} \\ &= (137,970) + (16,542) + (100) \\ &= \mathbf{154,612 \text{ gpd}}\end{aligned}$$



F. DESIGN DOCUMENTATION

The proposed wastewater layout is designed in strict compliance with Chapter 7 of the COS DSPM as well as the MAG Uniform Standard Specifications and Details for Public Works Construction. The design satisfies all requirements pertaining to pipe size, material, location, placement, design flows, and hydraulic specifications.

G. SUMMARY

In conclusion, the proposed wastewater system for the 94 Hundred Shea - The Village adheres to all the City of Scottsdale's design standards and policies. This Preliminary Basis of Design Wastewater Report outlines the existing and proposed conditions for the development. Due to the addition of wastewater infrastructure for this site, the proposed wastewater demand for the 94 Hundred Shea - The Village is substantially higher than the existing conditions. However, the wastewater system is designed to adequately facilitate the proposed flow requirements. The comparison of current and proposed demand scenarios is displayed in **Table 1.0** below.

Table 1.0 - Demand Scenario Comparison: Existing Conditions vs. Proposed Conditions

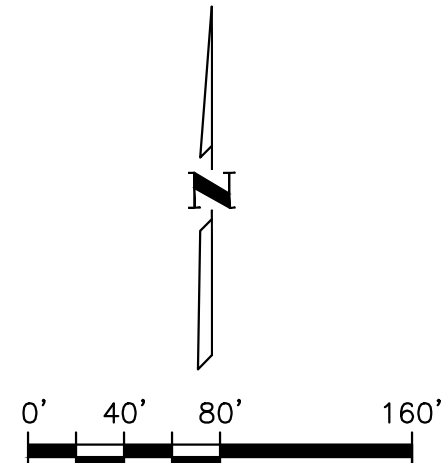
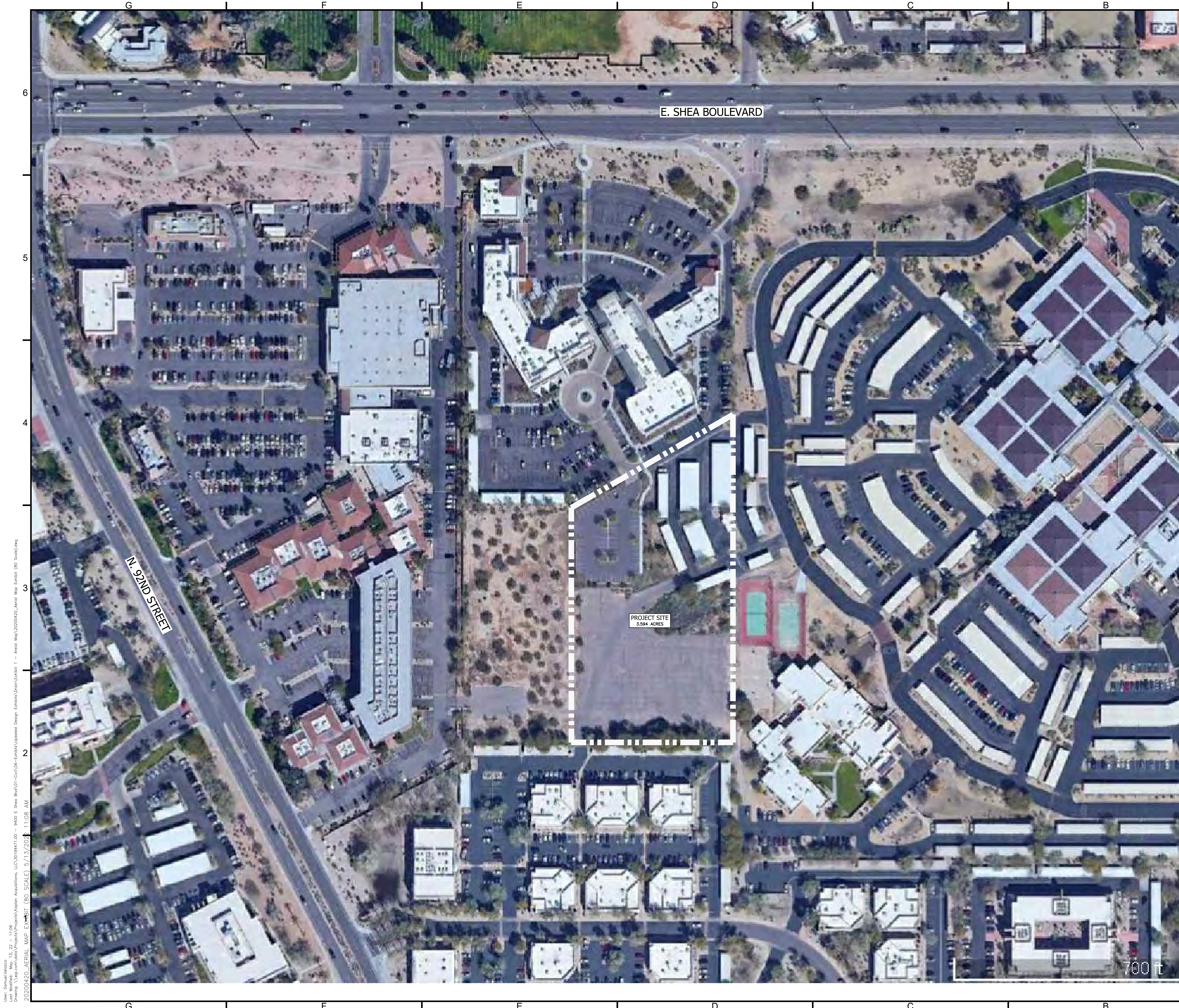
	<u>Existing Conditions</u>	<u>Proposed Conditions</u>
Average Day Demand	0.0 gpd	36,274 gpd
Peak Flow	0.0 gpd	154,612 gpd

H. REFERENCES

- City of Scottsdale Design Standards and Policies Manual - 2018
- MAG Uniform Standard Specifications and Details for Public Works Construction - 2019
- COS Supplement to MAG Uniform Standard Specifications and Details for Public Works Construction - 2015
- Scottsdale Revised Code - 2019
- International Fire Code - 2015
- Scottsdale Geographic Information Systems - Sewer Quarter Section Map 28-50



Aerial Map | **1**



LEGEND	
	BOUNDARY / RIGHT OF WAY

LEGAL DESCRIPTION:

APN 217-36-001P:
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

APN 217-36-989B:
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



PROJECT: 94 HUNDRED SHEA - THE VILLAGE
9400 EAST SHEA BOULEVARD
SCOTTSDALE, MARICOPA COUNTY, ARIZONA 85260

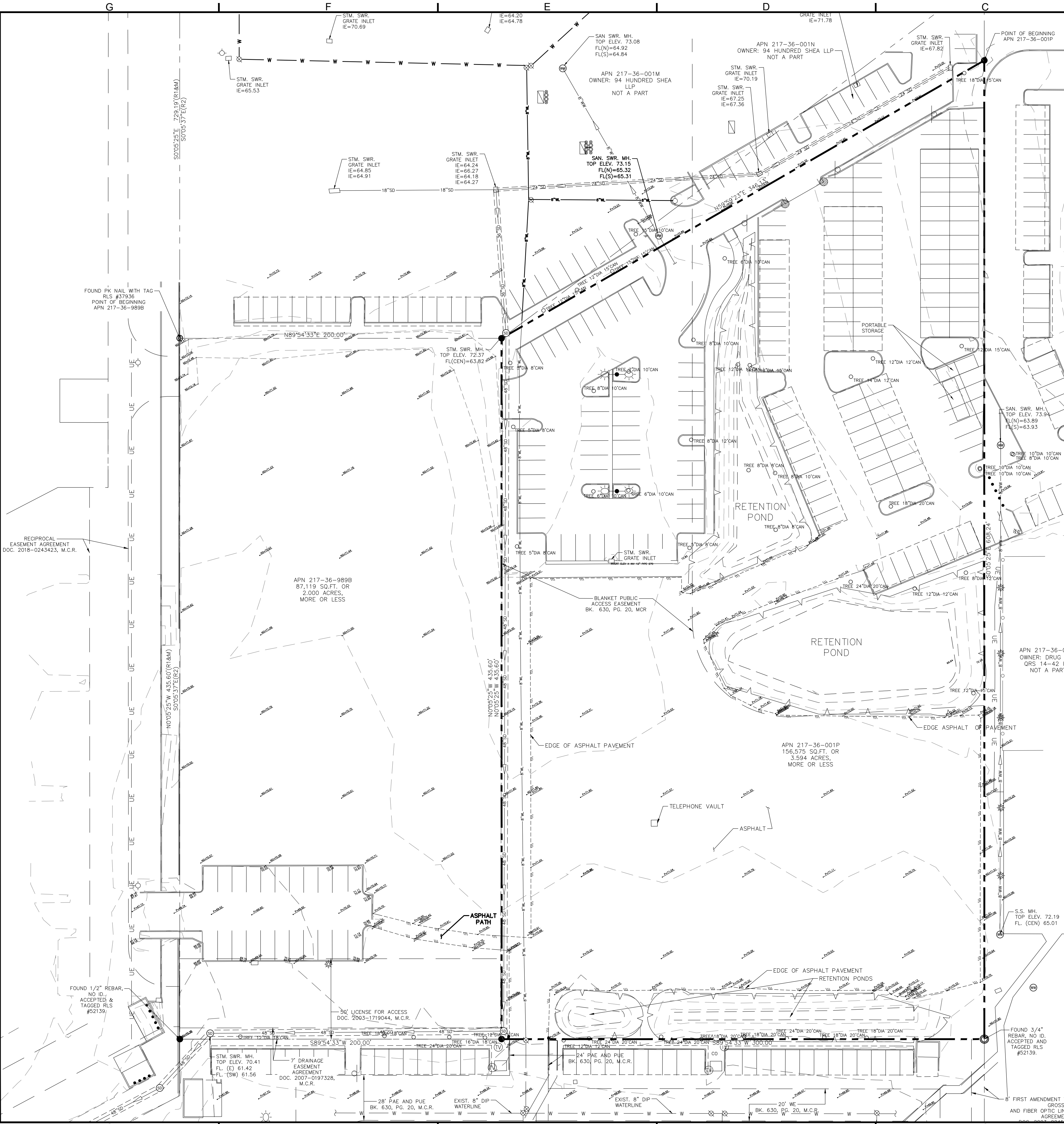
SHEET TITLE: AERIAL MAP

EX-1	
1	1



Existing Conditions | 2

User: Saman Velazco
Last Modified: May, 16, 22 - 14:16
Drawing: \\wgl.com\data\Projects\Projects\9400 East Shea\9400 East Shea.dwg
EXISTING CONDITIONS 5/17/2022 2:17 PM



ELEVATIONS:
ALL EXISTING AND PROPOSED ELEVATIONS WILL REQUIRE AN ADJUSTMENT OF +1,300 FEET.

WARNING!
THE ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING ALL EXISTING UTILITIES BY CALLING TEXAS ONE CALL SYSTEM AT 811 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.

CAUTION:
CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES BOTH VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

PROJECT CONTACTS

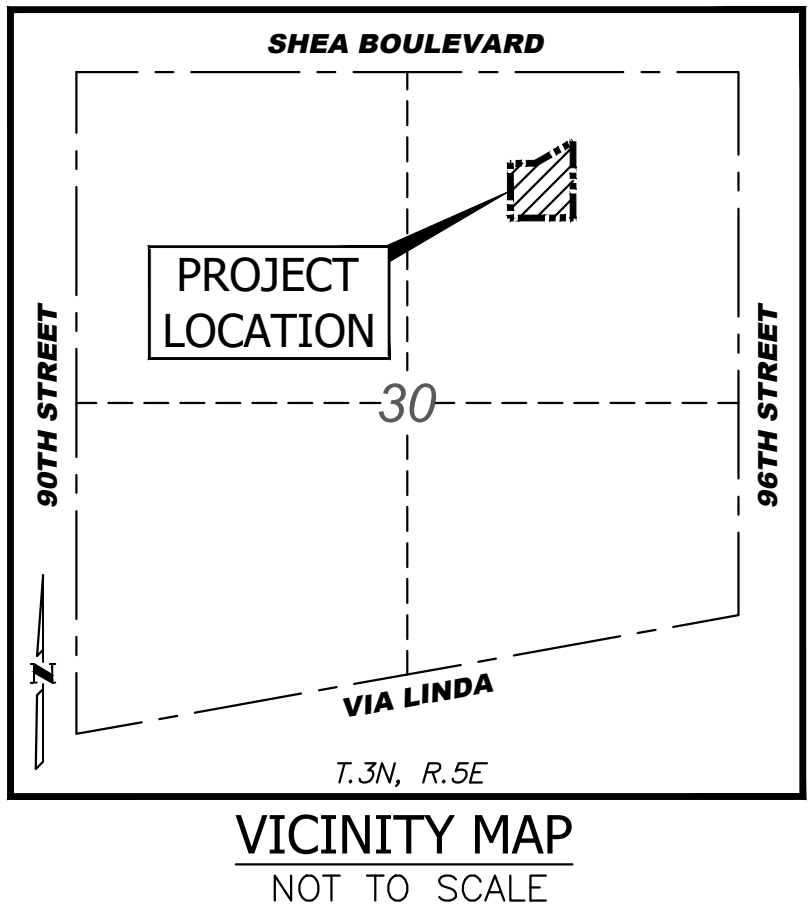
OWNER/DEVELOPER:
94 HUNDRED SHEA, LLC
7150 E. CAMELBACK RD., STE. 444
SCOTTSDALE, AZ 85251
PHONE: (480) 477-8119
CONTACT: JERRY DAVIS

ENGINEER:
WGI
2727 ALLEN PARKWAY, SUITE 1350
HOUSTON, TX 77019
(832) 730-1901
CONTACT: BRYSON K. EWING, P.E.

SURVEYOR:
SURVEY INNOVATION GROUP, INC.
22425 N. 16TH ST., SUITE 1
PHOENIX, ARIZONA 85024
PHONE: (480) 922-0780



LEGEND	
	BOUNDARY / RIGHT OF WAY
	EASEMENT / SETBACK
	LIMITS OF CONSTRUCTION / DISTURBANCE
	CURB & GUTTER
	CONTOUR (GRADE) ELEV.
	STORM SEWER PIPE
	WATER LINE
	WASTE WATER LINE
	FIRE LANE
	UNDERGROUND GAS LINE
	OVERHEAD UTILITY
	OVERHEAD ELECTRIC
	CHAIN LINK FENCE
	WOOD FENCE
	WROUGHT IRON FENCE
	TOP OF BANK
	BENCHMARK
	UTILITY POLE(S)
	GUY ANCHOR
	TRANSFORMER
	LIGHT POLE
	SIGN
	WASTE WATER MANHOLE
	CLEAN-OUT
	WATER VAULT
	WATER METER
	FIRE HYDRANT
	WATER VALVE
	GAS METER
	STORM DRAIN MANHOLE
	STORM DRAINAGE INLET
	BACKFLOW PREVENTER
	TRANSFORMER



SITE INFORMATION:
ADDRESS: 9400 EAST SHEA BOULEVARD
SCOTTSDALE, ARIZONA 85260
SERVED BY: SCOTTSDALE, AZ.
LEGAL DESCRIPTION:
APN 217-36-001P:
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
LAND USE SUMMARY:
GROSS ACREAGE: 3.594 ACRES
LIMITS OF CONSTRUCTION: 3.836 ACRES
ZONING:
EXISTING: C-O
PROPOSED: PUD
APN:
APN 217-36-001P
9400 EAST SHEA BOULEVARD
SCOTTSDALE, AZ 85260

FLOODPLAIN:
ACCORDING TO THE FLOOD INSURANCE RATE MAP #04013C1760 L, DATED OCTOBER 16, 2013, THIS PROPERTY IS LOCATED IN FLOOD ZONE "X". AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD. THIS DETERMINATION IS MADE STRICTLY ACCORDING TO THE FEMA MAPS AND DOES NOT REFLECT ACTUAL ON GROUND FLOOD CONDITIONS. FURTHERMORE THIS COMPANY TAKES NO RESPONSIBILITY FOR SUCH
BENCHMARK ELEV. 1,377.064'
NORTHEAST CORNER SECTION 30, TOWNSHIP 3 NORTH, RANGE 5 EAST FOUND 3" CITY OF SCOTTSDALE BRASS CAP IN HANDHOLE, DOWN 0.5', AT THE INTERSECTION OF 96TH STREET AND SHEA BOULEVARD.
ELEVATION = 1377.064 (NAVD88)
BASIS OF BEARING:
THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 30 AS SHOWN IN BOOK 630, PAGE 20 MARICOPA COUNTY RECORDS. SAID LINE BEARS SOUTH 89 DEGREES 59 MINUTES 24 SECONDS WEST

PROJECT: 94 HUNDRED SHEA - THE VILLAGE
9400 EAST SHEA BOULEVARD
SCOTTSDALE, MARICOPA COUNTY, ARIZONA 85260

SHEET TITLE: EXISTING CONDITIONS

EX 2

WGI.
WGInc.com

2727 ALLEN PARKWAY, SUITE 1350, HOUSTON, TEXAS 77019

6827301591

737356
BRYSON K.
EWING
Professional Engineer
Arizona, U.S.A.

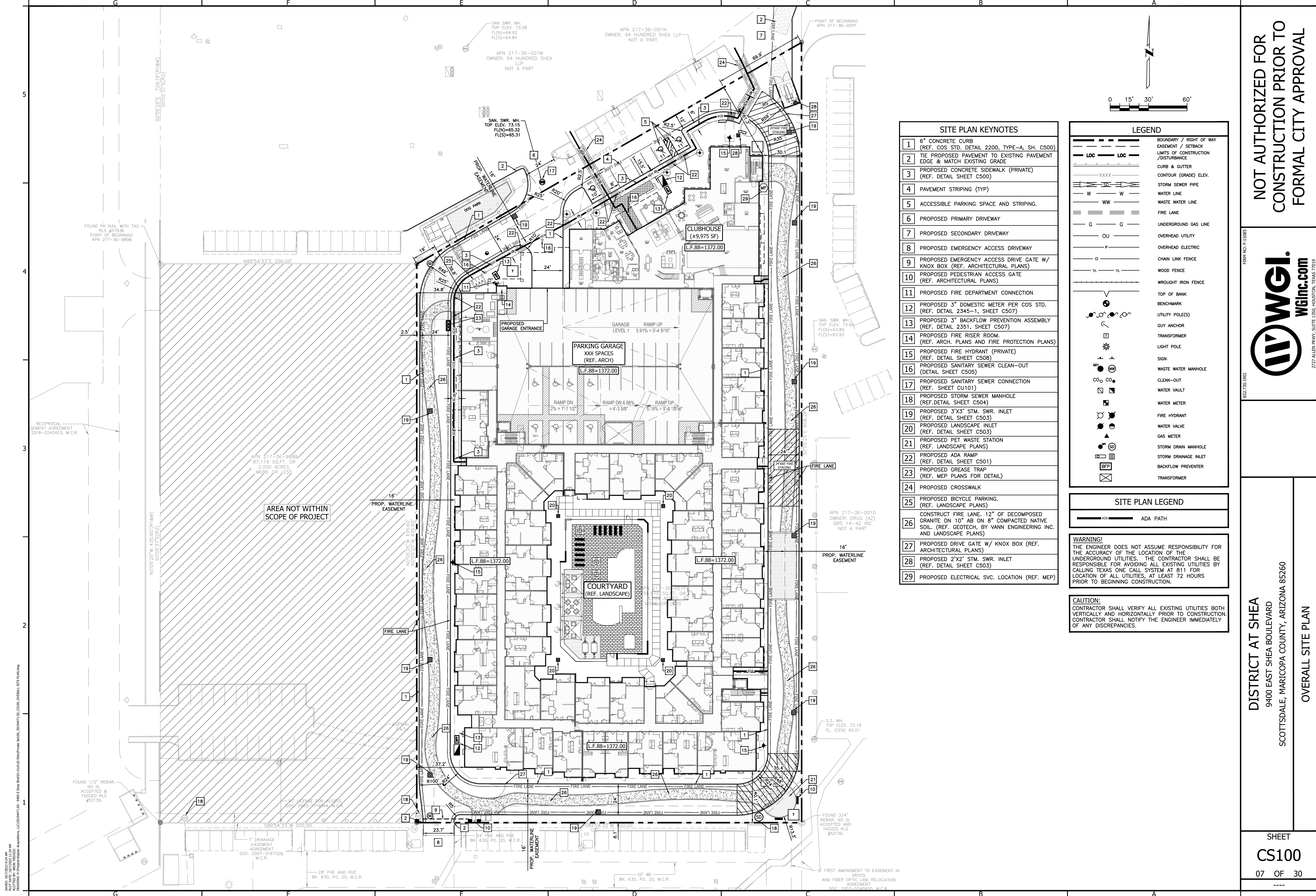
6827301591

737356
BRYSON K.
EWING
Professional Engineer
Arizona, U.S.A.

737356
BRYSON K.
EWING
Professional Engineer
Arizona, U.S.A.



Overall Site Plan | 3



SITE PLAN KEYNOTES	
1	6" CONCRETE CURB (REF. COS STD. DETAIL 2200, TYPE-A, SH. C500)
2	TIE PROPOSED PAVEMENT TO EXISTING PAVEMENT EDGE & MATCH EXISTING GRADE
3	PROPOSED CONCRETE SIDEWALK (PRIVATE) (REF. DETAIL SHEET C500)
4	PAVEMENT STRIPING (TYP)
5	ACCESSIBLE PARKING SPACE AND STRIPING.
6	PROPOSED PRIMARY DRIVEWAY
7	PROPOSED SECONDARY DRIVEWAY
8	PROPOSED EMERGENCY ACCESS DRIVEWAY
9	PROPOSED EMERGENCY ACCESS DRIVE GATE W/ KNOX BOX (REF. ARCHITECTURAL PLANS)
10	PROPOSED PEDESTRIAN ACCESS GATE (REF. ARCHITECTURAL PLANS)
11	PROPOSED FIRE DEPARTMENT CONNECTION
12	PROPOSED 3" DOMESTIC METER PER COS STD. (REF. DETAIL 2345--1, SHEET C507)
13	PROPOSED 3" BACKFLOW PREVENTION ASSEMBLY (REF. DETAIL 2351, SHEET C507)
14	PROPOSED FIRE RISER ROOM. (REF. ARCH. PLANS AND FIRE PROTECTION PLANS)
15	PROPOSED FIRE HYDRANT (PRIVATE) (REF. DETAIL SHEET C508)
16	PROPOSED SANITARY SEWER CLEAN-OUT (DETAIL SHEET C505)
17	PROPOSED SANITARY SEWER CONNECTION (REF. SHEET CU101)
18	PROPOSED STORM SEWER MANHOLE (REF. DETAIL SHEET C504)
19	PROPOSED 3'X3' STM. SWR. INLET (REF. DETAIL SHEET C503)
20	PROPOSED LANDSCAPE INLET (REF. DETAIL SHEET C503)
21	PROPOSED PET WASTE STATION (REF. LANDSCAPE PLANS)
22	PROPOSED ADA RAMP (REF. DETAIL SHEET C501)
23	PROPOSED GREASE TRAP (REF. MEP PLANS FOR DETAIL)
24	PROPOSED CROSSWALK
25	PROPOSED BICYCLE PARKING. (REF. LANDSCAPE PLANS)
26	CONSTRUCT FIRE LANE, 12" OF DECOMPOSED GRANITE ON 10" AB ON 8" COMPACTED NATIVE SOIL. (REF. GEOTECH. BY VANN ENGINEERING INC. AND LANDSCAPE PLANS)
27	PROPOSED DRIVE GATE W/ KNOX BOX (REF. ARCHITECTURAL PLANS)
28	PROPOSED 2'X2' STM. SWR. INLET (REF. DETAIL SHEET C503)
29	PROPOSED ELECTRICAL SVC. LOCATION (REF. MEP)

LEGEND	
	BOUNDARY / RIGHT OF WAY EASEMENT / SETBACK
	LIMITS OF CONSTRUCTION / DISTURBANCE
	CURB & GUTTER
	CONTOUR (GRADE) ELEV.
	STORM SEWER PIPE
	WATER LINE
	WASTE WATER LINE
	FIRE LANE
	UNDERGROUND GAS LINE
	OVERHEAD UTILITY
	OVERHEAD ELECTRIC
	CHAIN LINK FENCE
	WOOD FENCE
	WROUGHT IRON FENCE
	TOP OF BANK
	BENCHMARK
	UTILITY POLE(S)
	GUY ANCHOR
	TRANSFORMER
	LIGHT POLE
	SIGN
	WASTE WATER MANHOLE
	CLEAN-OUT
	WATER VAULT
	WATER METER
	FIRE HYDRANT
	WATER VALVE
	GAS METER
	STORM DRAIN MANHOLE
	STORM DRAINAGE INLET
	BACKFLOW PREVENTER
	TRANSFORMER

SITE PLAN LEGEND	
	ADA PATH
WARNING! THE ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING ALL EXISTING UTILITIES BY CALLING TEXAS ONE CALL SYSTEM AT 811 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.	
CAUTION: CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES BOTH VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.	

NOT AUTHORIZED FOR
CONSTRUCTION PRIOR TO
FORMAL CITY APPROVAL

882.730.1901

wgi.com

2727 ALLEN PKWY, SUITE 1350, HOUSTON, TEXAS 77019

DISTRICT AT SHEA
9400 EAST SHEA BOULEVARD
SCOTTSDALE, MARICOPA COUNTY, ARIZONA 85260

OVERALL SITE PLAN

SHEET
CS100
07 OF 30



Preliminary Sanitary Sewer Plan | 4



Flow Monitoring Report | 5



Flow Study for WGI Kaplan Acquisitions

Shayna Johnson

WGI

777 Post Oak Blvd., Suite 850, Houston TX 77056

SL740 RDH Flow Study, 1 site in Scottsdale, AZ Thursday, 3-12-20 to Wednesday 3-25-20.

Equipment for Site: Hach 901 Logger with Flo-Dar sensor.

Duration of monitoring: 9 days over 2 weekends.

Monitor: Flow (gpm), Level (in), and Velocity (fps)

Data logging: 5 minutes intervals (No averaged intervals)

Site: Manhole located on E. Shea Blvd., west of N. 92nd Street

Quarter Section: 28-50

Manhole: #unknown

21" VCP

Flo-Dar sensor with band installed upstream on the 21" line

The equipment was installed on 3-12-20 with confined space entry, pipe size confirmed, sensor calibrated with a depth target and velocity check, and level depth confirmed to the flow level at that time. The scum line was approximately 7 to 9 inches up from the bottom of the pipe with minor scum build up and no evidence of any surcharging of the pipe or manhole walls. Water flowing east to west. No laterals. Flow data is valid with no missing or erroneous data.

Attached is a summary showing all Flow, Level and Velocity using the Manning equation within the loggers. Emailed with this report is the raw data in Excel for the flow study period.

RDH Environmental Services

Theresa Hayes

General Manager

gm@rdh-env.com



Flow Study for WGI Kaplan Acquisitions

WGI Shea & 92nd 21in. Flow				
Date	Max. (gpm)	Min. (gpm)	Avg. (gpm)	Total (gal)
Thursday, March 12, 2020	582.78	450.59	513.32	30,799.20
Friday, March 13, 2020	948.29	259.56	597.63	860,592.40
Saturday, March 14, 2020	997.92	215.88	561.10	807,987.40
Sunday, March 15, 2020	956.49	212.38	572.81	824,843.10
Monday, March 16, 2020	812.56	195.40	513.73	739,776.00
Tuesday, March 17, 2020	809.62	183.22	471.70	679,254.40
Wednesday, March 18, 2020	721.85	187.77	462.82	666,464.50
Thursday, March 19, 2020	651.39	155.40	394.52	568,111.70
Friday, March 20, 2020	613.63	132.10	382.27	550,472.10
Saturday, March 21, 2020	1043.37	127.16	554.05	797,837.00
Sunday, March 22, 2020	1127.36	192.40	631.36	909,156.30
Monday, March 23, 2020	904.69	217.67	587.60	846,142.90
Tuesday, March 24, 2020	899.32	236.39	592.57	853,296.70
Wednesday, March 25, 2020	850.20	213.99	371.73	245,338.70

Period Summary: Flow				
Measures	Value	Unit	Date	Time
Max.	1,127.36	gpm	Sunday, March 22, 2020	12:50 PM
Min.	127.16	gpm	Saturday, March 21, 2020	6:50 AM
Avg.	521.12	gpm		
Total	9,380,072.30	gal		

*Note: Thursday, March 12th and Wednesday, March 25th do not represent a 24hr period.



Flow Study for WGI Kaplan Acquisitions

WGI Shea & 92nd 21in. Level (in.)			
Date	Maximum	Minimum	Average
Thursday, March 12, 2020	7.72	7.02	7.38
Friday, March 13, 2020	9.59	5.08	7.61
Saturday, March 14, 2020	9.71	4.61	7.24
Sunday, March 15, 2020	9.56	4.53	7.24
Monday, March 16, 2020	8.70	4.38	6.92
Tuesday, March 17, 2020	8.31	4.24	6.65
Wednesday, March 18, 2020	8.30	4.28	6.55
Thursday, March 19, 2020	7.96	3.96	6.06
Friday, March 20, 2020	7.63	3.76	6.00
Saturday, March 21, 2020	9.92	3.65	7.01
Sunday, March 22, 2020	10.14	4.32	7.61
Monday, March 23, 2020	9.31	4.55	7.43
Tuesday, March 24, 2020	9.26	4.83	7.53
Wednesday, March 25, 2020	9.21	4.58	5.91

Period Summary: Level				
Measures	Value	Unit	Date	Time
Max.	10.14	in.	Sunday, March 22, 2020	12:50 PM
Min.	3.65	in.	Saturday, March 21, 2020	6:35 AM
Avg.	6.95	in.		

*Note: Thursday, March 12th and Wednesday, March 25th do not represent a 24hr period.



Flow Study for WGI Kaplan Acquisitions

WGI Shea & 92nd 21in. Velocity (fps)			
Date	Maximum	Minimum	Average
Thursday, March 12, 2020	1.62	1.42	1.51
Friday, March 13, 2020	2.00	1.29	1.66
Saturday, March 14, 2020	2.04	1.20	1.62
Sunday, March 15, 2020	2.03	1.22	1.65
Monday, March 16, 2020	1.92	1.20	1.59
Tuesday, March 17, 2020	2.04	1.08	1.54
Wednesday, March 18, 2020	1.93	1.19	1.54
Thursday, March 19, 2020	1.79	1.10	1.47
Friday, March 20, 2020	1.83	1.01	1.43
Saturday, March 21, 2020	2.14	1.01	1.58
Sunday, March 22, 2020	2.18	1.20	1.68
Monday, March 23, 2020	2.04	1.18	1.64
Tuesday, March 24, 2020	1.97	1.15	1.63
Wednesday, March 25, 2020	1.87	1.23	1.40

Period Summary: Velocity				
Measures	Value	Unit	Date	Time
Max.	2.18	fps.	Sunday, March 22, 2020	12:45 PM
Min.	1.01	fps.	Friday, March 20, 2020	4:40 AM
Avg.	1.58	fps.		

*Note: Thursday, March 12th and Wednesday, March 25th do not represent a 24hr period.



Wastewater Demand Calculations | 6

Wastewater Design Calculation Summary																			
Manhole ID		Additional Units	Total Units	Average Daily Flow (GPD)	Average Daily Flow (GPM)	Peak Daily Flow (GPD)	Peak Daily Flow (GPM)	Additional Acres	Total Acres	Slope (%)	Dia. (in)	n	Maximum Capacity (CFS)	Maximum Capacity (GPM)	Velocity Full (FPS)	Percent Full Dry	Percent Full Wet	Proposed Velocity (FPS)	Proposed Depth (in)
From	TO																		
NEW CO	MH#1	219	219	36,274	25.19	154,912	107.58	3.59	3.59	0.50	8	0.013	0.86	384	2.45	28.0%	28.0%	2.06	2.80



94 Hundred Shea Private Plans | **7**

GRADING AND DRAINAGE NOTES

1. AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
2. GRADING AND DRAINAGE PLAN APPROVAL INCLUDES THE CONSTRUCTION OF ALL SURFACE IMPROVEMENTS SHOWN ON THE APPROVED GRADING AND DRAINAGE PLAN, INCLUDING, BUT NOT LIMITED TO, RETENTION AREAS AND/OR OTHER DRAINAGE FACILITIES, DRAINAGE PATTERNS, WALLS, CURBS, ASPHALT PAVEMENT, AND BUILDING FLOOR ELEVATIONS.
3. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL THE EXISTING ON-SITE UTILITY LINES PRIOR TO EXCAVATION EFFORTS.
4. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWELLS, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, CONCRETE CHANNELS FOR OTHER MEASURES DESIGNED TO PROTECT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE MAINTAINED DURING CONSTRUCTION.
5. "APPROVAL OF THESE PLANS SHALL NOT PREVENT THE CITY FOR REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF BY LAW OR ORDINANCE."
6. PRIOR TO THE START OF GRADING, A DUST CONTROL PERMIT (EARTH MOVING EQUIPMENT PERMIT) MUST BE OBTAINED FROM MARICOPA COUNTY DIVISION OF AIR POLLUTION CONTROL (507-6727).

GENERAL CONSTRUCTION NOTES FOR PUBLIC WORKS CONSTRUCTION

1. ALL CONSTRUCTION IN THE PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARD DETAILS FOR PUBLIC CONSTRUCTION AS AMENDED BY THE LATEST VERSION OF THE CITY OF SCOTTSDALE (COS) SUPPLEMENTAL STANDARD SPECIFICATIONS AND SUPPLEMENTAL STANDARD DETAILS. IF THERE IS A CONFLICT, THE LATTER SHALL GOVERN.
2. THE ENGINEERING DESIGNS ON THESE PLANS ARE ONLY 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. 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 SHALL BE RESUBMITTED TO THE CITY FOR RE-APPROVAL.
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 STARTING OF CONSTRUCTION (TELEPHONE 480-312-5750).
5. WHENEVER EXCAVATION IS TO BE DONE, CALL THE "BLUE STAKE CENTER," 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. 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 UPON RECEIPT OF PAYMENT OF A BASE FEE PLUS A FEE FOR INSPECTION SERVICES TO BE PROVIDED FOR INSPECTION AT ALL ITEMS. FAILURE TO PRODUCE THE REQUIRED PERMITS WILL RESULT IN IMMEDIATE WORK STOPPAGE UNTIL THE PROPER PERMIT DOCUMENTATION IS OBTAINED.
7. ALL EXCAVATION AND GRADING WHICH 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 OF THIS GRADING MUST BE SECURED FROM THE CITY FOR A FEE ESTABLISHED BY THE UNIFORM BUILDING CODE.
8. SIGNAGE PLANS ARE UNDER A SEPARATE APPROVAL AND PERMIT.

GENERAL NOTES

1. ON-SITE STORM WATER STORAGE AND SEWER FACILITIES ARE PRIVATE AND MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER OR ASSOCIATION OF OWNERS.
2. ON-SITE SEWER IS PRIVATE. MAINTENANCE IS RESPONSIBILITY OF THE OWNER OR ASSOCIATION.

LEGAL DESCRIPTION

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, DESCRIBED AS FOLLOWS:
COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 30 FROM WHICH THE EAST QUARTER CORNER OF SAID SECTION 30 BEARS SOUTH 00 DEGREES 02 MINUTES 50 SECONDS EAST 2641.83 FEET;
THENCE SOUTH 89 DEGREES 59 MINUTES 24 SECONDS WEST ALONG THE NORTH LINE OF SAID NORTHEAST QUARTER 1321.14 FEET TO THE EAST LINE OF THE WEST HALF OF SAID NORTHEAST QUARTER;
THENCE SOUTH 00 DEGREES 05 MINUTES 25 SECONDS EAST ALONG SAID EAST LINE 65.00 FEET TO THE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 00 DEGREES 05 MINUTES 25 SECONDS EAST ALONG SAID WEST LINE 490.84 FEET;
THENCE SOUTH 59 DEGREES 59 MINUTES 24 SECONDS WEST, 346.13 FEET TO THE WEST LINE OF THE EAST 300.00 FEET OF THE WEST HALF OF SAID NORTHEAST QUARTER;
THENCE SOUTH 89 DEGREES 54 MINUTES 33 SECONDS WEST, 200.00 FEET TO THE EAST 500 FEET OF THE WEST HALF OF SAID NORTHEAST QUARTER;
THENCE NORTH 00 DEGREES 05 MINUTES 25 SECONDS WEST ALONG SAID WEST LINE, 664.19 FEET TO THE SOUTH LINE OF THE NORTH 65.00 FEET OF SAID NORTHEAST QUARTER;
THENCE NORTH 89 DEGREES 59 MINUTES 24 SECONDS EAST ALONG SAID SOUTH LINE 500.00 FEET TO THE POINT OF BEGINNING.

OFFSITE QUANTITIES

DRIVEWAY STD DTL 2257	1 EA
VERTICAL CURB & GUTTER	717 LF
SIDEWALK	2,223 SF
6" VALLEY GUTTER	71 LF
5.5" AC PMVT ON 20" ABC	1,049 SY
SAWCUT & REMOVE CURB & GUTTER	1,115 LF
ACCESSIBLE RAMPS	2 EA
60" SEWER MANHOLE	2 EA
8" PVC (SDR-35) SEWER	73 LF
8" VCP SEWER	65 LF
8" DIP (CL-350) WATER	116 LF
24"x8" T.S. & VBC	1 EA
SAWCUT & REMOVE EX. AC PMVT	329 SY
SAWCUT & REMOVE EX. SIDEWALK	2,462 SF

ONSITE QUANTITIES

AC PMVT (3" AC ON 8" ABC)	5,019 SY	FIRE HYDRANTS	4 EA
AC PMVT (2-1/2" AC ON 8" ABC)	7,095 SY	PAVEMENT MARKERS	8 EA
6" SINGLE CURB	4,402 LF	FDC	3 EA
MONOLITHIC CURB	1,541 LF	8" DIP WATER	2,151 LF
SIDEWALK	31,220 SF	8" V.B. & C	8 EA
ACCESS RAMP	20 EA	8" V.B. & C	5 EA
3" VALLEY GUTTER	220 LF	4" DIP WATER	122 LF
REFUSE ENCLOSURE	3 EA	3/4" WATER SERVICE	257 LF
CONCRETE SCUPPER	2 EA	1-1/2" WATER SERVICE	25 LF
DECORATIVE PMVT SECTION	2,524 SY	2" WATER SERVICE	222 LF
SCREEN WALL	30 LF	3" WATER SERVICE	40 LF
FIRE LANE SIGNS	29 EA	1 1/2" RPPBP	1 EA
STANDARD MANHOLE	11 EA	2" RPPBP	3 EA
15" HDPE-SD	20 LF	CATCH BASINS	11 EA
18" HDPE-SD	442 LF	MONITORING MANHOLE	2 EA
24" HDPE-SD	509 LF	6" PVC-SEWER	345 LF
36" HDPE-SD	86 LF	8" PVC-SEWER	745 LF
48" HDPE-SD	633 LF	8" STUB-OUT & PLUG	1 EA
8" DIP FIRELINE	279 LF		

EARTHWORK QUANTITIES

CUT = 1,786 C.Y.

FILL = 385 C.Y.

NET = 1,401 C.Y. CUT

*EARTHWORK PROVIDED FOR PERMITTING PURPOSES ONLY. CONTRACTOR TO PROVIDE OWN CALCULATIONS FOR CONSTRUCTION PURPOSES.

*EARTHWORK ESTIMATE TAKES NO SHRINKAGE OR SWELL INTO ACCOUNT.

FLOOD PLAIN DESIGNATION

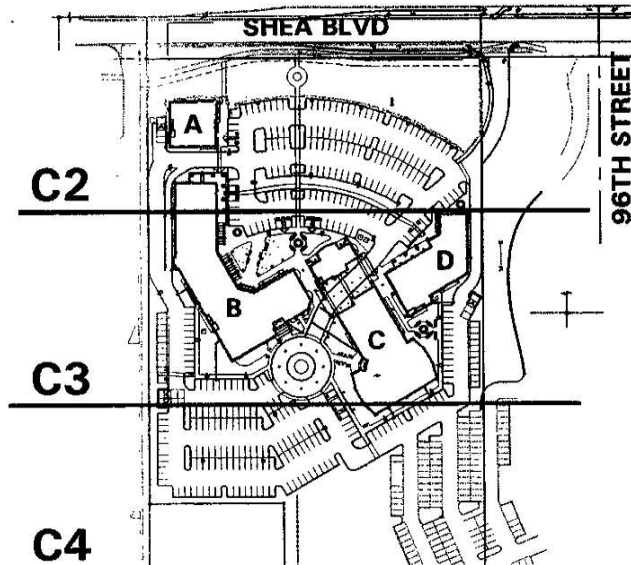
COMMUNITY NUMBER	PANEL #	SUFFIX	DATE OF FIRM (INDEX DATE)	FIRM ZONE	BASE FLOOD ELEVATION (IN AO ZONE, USE DEPTH)
04013C	1685	E	7-19-01	ZONE X	DEPTH <1 (VEL. 4FPS)

ENGINEER'S CERTIFICATION: THE LOWEST FLOOR ELEVATION(S) AND/OR FLOODPROOFING ELEVATION(S) ON THIS PLAN ARE SUFFICIENTLY HIGH TO PROVIDE PROTECTION FROM FLOODING CAUSED BY A ONE-HUNDRED YEAR STORM, AND ARE IN ACCORDANCE WITH CITY OF SCOTTSDALE REVISED CODE, CHAPTER 37 - FLOODWAYS & FLOODPLAINS ORDINANCE.

GRADING AND DRAINAGE PLAN COVER SHEET 94 HUNDRED SHEA

9325, 9343, 9375, 9397 N. SHEA BOULEVARD
SCOTTSDALE, ARIZONA

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



KEYMAP/SHEET INDEX

ENGINEERS STATEMENT

THE ENGINEER OF RECORD ON THESE PLANS HAS RECEIVED A COPY OF THE APPROVED STIPULATIONS FOR THIS PROJECT AND HAS DESIGNED THESE PLANS IN CONFORMANCE WITH THE APPROVED STIPULATIONS

EXISTING LEGEND

PROPERTY LINE	---
EASEMENT LINE	---
TRAFFIC LIGHT	⊙
BOLLARD (POST)	⊕
WATER VALVE	⊗
FIRE HYDRANT	⊗
WATER METER	⊗
GAS VALVE	⊗
POWER POLE	⊗
PUBLIC UTILITY EASEMENT	P.U.E.
OVER HEAD ELECTRIC	OHE
SANITARY SEWER MANHOLE	SSMH
MANHOLE	MH
EASEMENT	---
WATER	---
SEWER	---
ELECTRICAL LINE	---
TELEPHONE LINE	---
GAS LINE	---
CONCRETE	---

PROPOSED LEGEND

DIRECTION OF SLOPE	→
CATCH BASIN	⊗
SPOT ELEVATION	53.50 P
CLEANOUT	⊗
REDUCER	⊗
BACKFLOW DEVICE	⊗
WATER VALVE	⊗
FIRE HYDRANT	⊗
VERTICAL CURB	---
EXTRUDED CURB	---
GRADE BREAK	⊗
PROPERTY LINE	---
STORM LINE	---
SEWER LINE	---
WATER LINE	---
CONTOUR	---
SECTION CALLOUT	⊗

NO CONFLICT SIGNATURE BLOCK

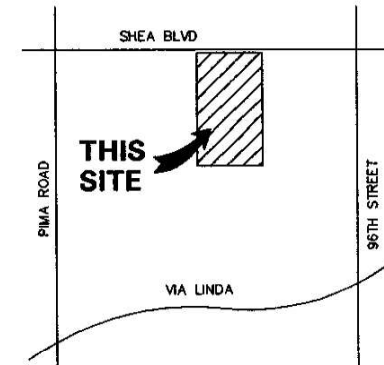
UTILITY	UTILITY COMPANY	NAME OF COMPANY REPRESENTATIVE	TELEPHONE NUMBER	DATE SIGNED
ELECTRIC	APS - ELEC	BRENDA BRUCIGROSSI	(602) 493-4265	01/25/05
TELEPHONE	QWEST	LIAISON	(602) 630-0492	02/21/05
NATURAL GAS	SOUTHWEST GAS	ISABEL FIGUEROA	(602) 484-5306	02/15/05
CABLE TV	COX CABLE	ROB RUSSELL	(623) 322-7044	03/07/05
WATER	CITY OF SCOTTSDALE			
SEWER	CITY OF SCOTTSDALE			

JEFF HUNTER, BEING THE PERSON RESPONSIBLE FOR DESIGNING THE FACILITIES NECESSARY TO SERVE THIS DEVELOPMENT, HEREBY CERTIFY THAT ALL OF THE UTILITY COMPANIES LISTED ABOVE, HAVE REVIEWED THIS PROJECT PROPOSAL AND ALL CONFLICTS HAVE BEEN RESOLVED AT THIS POINT. "NO CONFLICT" FORMS HAVE BEEN OBTAINED FROM EACH UTILITY COMPANY AND ARE INCLUDED IN THIS SUBMITTAL. I ALSO CERTIFY THAT ALL ONSITE TRANSFORMERS, CABLE BOXES AND ANY OTHER PUBLIC/PRIVATE APPURTENANCES ARE PLACED SUCH THAT THEY DO NOT NEGATIVELY IMPACT THE USE OR INTENDED USE OF ANY DEDICATED EASEMENTS OR FACILITIES DEVELOPED WITH THIS PROJECT INCLUDING BUT NOT LIMITED TO STORMWATER STORAGE BASINS, SIGHT DISTANCE EASEMENTS AND NAOS OR OTHER OPEN SPACE EASEMENTS.

SIGNATURE

DATE

6-22-05



VICINITY MAP

NET ACREAGE: 7.025 AC
GROSS ACREAGE: 7.295 AC
(INCLUDING 1/2 STREET R/W)

PARCEL NUMBER
217-36-001K

ZONING

C-3 PCD
Q.S. 28-50

BASIS OF BEARING

THE BASIS OF BEARING IS THE MONUMENT LINE OF 96TH STREET, ALSO BEING THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 30, USING A BEARING OF SOUTH 00 DEGREES 02 MINUTES 50 SECONDS EAST.

SHEET INDEX

GRADING & DRAINAGE COVER SHEET	C1
GRADING & DRAINAGE PLAN	C2
GRADING & DRAINAGE PLAN	C3
GRADING & DRAINAGE PLAN	C4
TYPICAL DETAILS	C5
TYPICAL SECTIONS	C6
UTILITY PLAN	C7
UTILITY PLAN	C8
UTILITY PLAN	C9
OFFSITE IMPROVEMENTS SHEA BLVD	C10
OFFSITE IMPROVEMENTS SHEA BLVD	C11
OFFSITE SEWER LINE SHEA BLVD	ER01
STORMWATER MANAGEMENT PLAN COVER SHEET	ER02
STORMWATER MANAGEMENT PLAN	ER03
STORMWATER MANAGEMENT PLAN BMP DETAILS	ER03

BENCH MARK

THE BRASS CAP IN HANDHOLE AT THE INTERSECTION OF SHEA BOULEVARD AND 96TH STREET HAVING AN ELEVATION OF 1377.07, CITY OF SCOTTSDALE DATUM.

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

UNDERGROUND UTILITY NOTE

THE UTILITIES DEPICTED HEREON ARE BASED UPON OF THE FIELD SURVEY. CONTRACTOR TO CONTACT BLUE STAKE 48 HOURS PRIOR TO ANY ONSITE CONSTRUCTION AND FIELD VERIFY EXACT LOCATIONS OF ALL UTILITIES. IF DISCREPANCIES EXIST CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.

CITY OF SCOTTSDALE APPROVAL

REVIEWED AND RECOMMENDED APPROVAL BY:			
PAVING	L. Lawt 6-23-05	TRAFFIC	Opp 8/Helol 6-23-05
G&D	L. Lawt 6-23-05	PLANNING	Paul Can 6/23/05
W&S	L. Lawt 6-23-05	FIRE	Opp 6-27-05
RET. WALLS	N/A		
Joseph D. Morris		6/24/05	
ENGINEERING COORDINATION MANAGER (OR DESIGNEE)		DATE	

APPROVALS

BY: T.S. Chiff 053650
DATE: 6/22/05
ENGINEER
MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

*IN ACCORDANCE WITH AAC R18-4-119, ALL MATERIALS ADDED AFTER JANUARY 1, 1993 WHICH MAY COME IN CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.

602-263-1100
1-800-STAKE-IT
(EXCEPT MARICOPA COUNTY)

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.:
WST001

SCALE
N.T.S.

SHEET
C1 OF 14

GRADING & DRAINAGE PLAN
COVER SHEET
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

BY: _____
REVISION: _____
NO. DATE: _____
DESIGN BY: RR
DRAWN BY: JAR
CHECKED BY: JMH
PURPOSE:
SIGNATURE SUBMITTAL 6-22-05

DESIGN BY: RR
DRAWN BY: JAR
CHECKED BY: JMH

HUNTER
ENGINEERING
8283 N. HAYDEN RD. SUITE 275
SCOTTSDALE, ARIZONA 85258
PHONE: (480) 991-3985
FAX: (480) 991-3986
CONTACT: BRIAN SILVESTER

HUNTER ENGINEERING P.C.
8283 N. HAYDEN ROAD SUITE 275
SCOTTSDALE, ARIZONA 85258
PHONE: (480) 991-3985
FAX: (480) 991-3986
CONTACT: JEFF HUNTER

GRADING & DRAINAGE PLAN
COVER SHEET
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.:
WST001

SCALE
N.T.S.

SHEET
C1 OF 14

PLAN CHECK NO. 305-05 CASE NO. 8-DR-2004 NATIVE PLANT#6-NP-2004

CONSTRUCTION NOTES

1. SAWCUT, REMOVE AND REPLACE EXISTING AC PAVEMENT, CURB, GUTTER, AND SIDEWALK. DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC PAVEMENT PER MAG SPEC. 321 AND 336, 340 AND C.O.S. STD DTL 2200 OR REPLACE IN KIND, WHICHEVER IS GREATER. SAWCUT LIMITS ARE APPROXIMATE.
2. CONTRACTOR TO VERIFY ELEVATION OF EXISTING AC PVT, CURB OR SIDEWALK AT TIE-IN LOCATION AND MATCH EXISTING. NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. CONSTRUCT DRIVEWAY WITH VALLEY GUTTER AND APRONS PER C.O.S. STD DTL 2240 AND 2257 TYPE CH-1, MODIFIED PER PLAN.
4. CONSTRUCT 6" SINGLE CURB PER MAG STD DTL 222 TYPE A.
5. CONSTRUCT CONCRETE SIDEWALK WITH THICKNESS & SPECIF. PER MAG STD. DTL. 230, & C.O.S. SPEC. 340. WIDTH PER PLAN. SEE ARCHITECTURAL PLANS FOR DETAILS. PLAN CHECK #303-05.
6. CONSTRUCT MONOLITHIC CURB AND SIDEWALK. COORDINATE WITH ARCHITECTURAL PLANS. SEE DETAIL 3 SHEET C5.
7. CONSTRUCT SIDEWALK ACCESS RAMP. COORDINATE RAMP WITH PLAN AND DETAIL 2 OR 5 ON SHEET C5. DO NOT EXCEED 1:50 CROSS SLOPE AND 1:12 LONGITUDINAL SLOPE.
8. CONSTRUCT HEAVY PAVEMENT SECTION 3" AC MIN. ON 8" ABC PER RECOMMENDATION BY GEOTECH REPORT. SEE DETAIL 1 ON SHEET C5.
9. CONSTRUCT LIGHT PAVEMENT SECTION MIN. 2 1/2" AC MIN. ON 6" ABC PER RECOMMENDATION BY GEOTECH REPORT. SEE DETAIL 1 ON SHEET C5.
10. SEE ARCHITECTURAL PLANS FOR ALL PARKING LOT STRIPING AND SIGNAGE LAYOUT AND DETAILS. ALL DISABLED ACCESS STRIPING AND SIGNAGE TO COMPLY WITH CURRENT ADA STANDARDS. PLAN CHECK #303-05.
11. LANDSCAPE/PLANTER AREA. SEE LANDSCAPE PLANS FOR DETAILS. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING, WHERE APPLICABLE. PLAN CHECK #303-05.

12. CONSTRUCT HDPE N-12 OR EQUIVALENT STORM PIPE, LENGTH, SIZE, AND SLOPE PER PLAN. BACKFILL PER PIPE MANUFACTURERS SPECIFICATIONS.
13. CONSTRUCT 3" VALLEY GUTTER PER MAG STD DTL 240.
14. CONSTRUCT CONCRETE SCUPPER AND CONCRETE CHANNEL PER PLAN AND PER MAG STD DTL 203. WIDTH PER PLAN.
15. CONSTRUCT REFUSE ENCLOSURE PER C.O.S. STD DTL 2146-1 OR 2147-1.
16. SEE ARCHITECTURAL PLANS FOR MONUMENT SIGN ELEVATIONS AND DETAILS. PLAN CHECK #305-05. SIGN TO BE APPROVED UNDER SEPARATE PERMIT.
17. CONSTRUCT CONCRETE UTILITY PAD. COORDINATE WITH ELECTRICAL PLANS FOR DETAILS. PLAN CHECK #303-05.
18. SEE ELECTRICAL PLANS FOR SITE LIGHTING DETAILS, BLDG. DEPT. PLAN CHECK #305-05.
19. SIGHT VISIBILITY TRIANGLES PER C.O.S. FIGURE 3.1-13.
20. CONSTRUCT CATCH BASIN PER MAG STD DTL 535 TYPE F. RIM AND INVERT PER PLAN.
21. CONSTRUCT 48" MANHOLE BASE AND SHAFT PER MAG STD DTL 520 AND 522.
22. SEE ARCHITECTURAL PLANS FOR WATER FEATURE DETAILS. APPROVED UNDER SEPARATE PERMIT. PLAN CHECK #303-05.
23. CONSTRUCT DECORATIVE PAVEMENT SECTION PER ARCHITECTURAL PLANS. PLAN CHECK #303-05.
24. CONSTRUCT SCREENWALL PER PLAN. SEE STRUCTURAL AND ARCHITECTURAL PLANS FOR DETAILS. WALL ELEVATIONS PER PLAN. PLAN CHECK #303-05.

25. SEE LANDSCAPE PLANS FOR PUBLIC TRAIL (N.I.C.) DETAILS.
26. EXISTING 8' WIDE SIDEWALK TO REMAIN IN PLACE PER PLAN.
27. REGRADE LANDSCAPE AREA PER PLAN. COORDINATE WITH DEMOLITION PLAN FOR REMOVALS.
28. ROOF DRAIN DOWNSPOUT LOCATION. COORDINATE WITH ARCHITECTURAL PLANS FOR LOCATION AND SIZE.
29. CONSTRUCT ROOF DRAIN BUBBLER BOX. RIM AND INVERT PER PLAN. SEE DETAIL 7 ON SHEET C5.
30. PROTECT EXISTING CMU WALL IN PLACE.
31. CONSTRUCT CONCRETE PIPE COLLAR PER MAG STD DTL 505-48".
32. INSTALL FIRE LANE SIGNS, PER C.O.S. STD. DTL. 2365. SEE DTL. 10, SHEET C5.

GENERAL NOTES

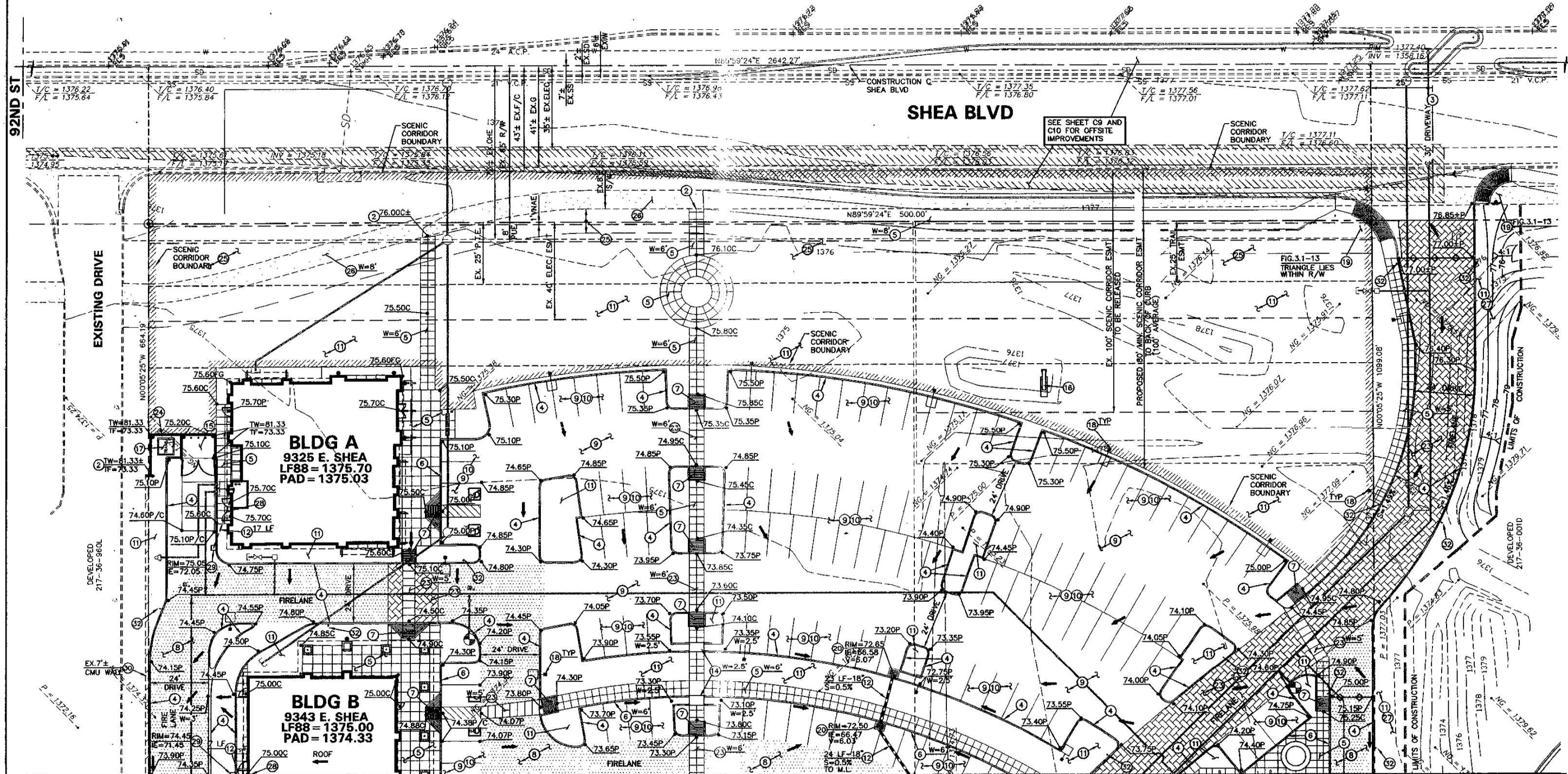
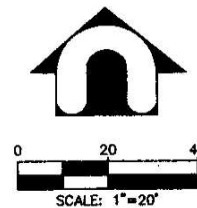
SEE SHEET C1

LEGEND

SEE SHEET C1

NOTE

1. ALL SITE WALLS SHALL REQUIRE A SEPARATE PERMIT AND APPROVAL THROUGH THE C.O.S. BUILDING DEPARTMENT.
2. COORDINATE MINIMUM FOOTING COVER WITH STRUCTURAL/ARCHITECTURAL WALL DETAILS.
3. NOT ALL NOTES ARE USED ON THIS SHEET.
4. CONTRACTOR SHALL MAINTAIN 1 FOOT MIN. COVER OVER FOOTING.
5. CONTRACTOR TO DETERMINE IN FIELD STEP IN FOOTER LOCATION



MATCHLINE SEE SHEET C3

HUNTER
ENGINEERING
8283 N. HAYDEN RD. SUITE 275
SCOTTSDALE, AZ 86258
T 480 991 3985
F 480 991 3986



GRADING & DRAINAGE PLAN
FOR
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE
NOT APPROVED FOR
CONSTRUCTION
WITHOUT AN
APPROVED SIGNATURE
FROM THE GOVERNING
MUNICIPALITY.

HE JOB NO.:
WSTR001

SCALE
1"=20'

SHEET
C2 OF 14

PLAN CHECK NO. 305-05 CASE NO. 8-DR-2004 NATIVE PLANT #6-NP-2004

CONSTRUCTION NOTES

- SAWCUT, REMOVE AND REPLACE EXISTING AC PAVEMENT, CURB, GUTTER, AND SIDEWALK. DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC PAVEMENT PER MAG SPEC. 321 AND 336, 340 AND C.O.S. STD DTL 2200 OR REPLACE IN KIND, WHICHEVER IS GREATER. SAWCUT LIMITS ARE APPROXIMATE.
- CONTRACTOR TO VERIFY ELEVATION OF EXISTING AC PAVT, CURB OR SIDEWALK AT TIE-IN LOCATION AND MATCH EXISTING. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- CONSTRUCT DRIVEWAY WITH VALLEY GUTTER AND APRONS PER C.O.S. STD DTL 2240 AND 2257 TYPE CH-1, MODIFIED PER PLAN.
- CONSTRUCT 6" SINGLE CURB PER MAG STD DTL 222 TYPE A.
- CONSTRUCT CONCRETE SIDEWALK WITH THICKNESS & SPECIF. PER MAG STD. DTL. 230, & C.O.S. SPEC. 340. WIDTH PER PLAN. SEE ARCHITECTURAL PLANS FOR DETAILS. PLAN CHECK #303-05.
- CONSTRUCT MONOLITHIC CURB AND SIDEWALK. COORDINATE WITH ARCHITECTURAL PLANS. SEE DETAIL 3 SHEET C5.
- CONSTRUCT SIDEWALK ACCESS RAMP. COORDINATE RAMP WITH PLAN AND DETAIL 2 OR 5 ON SHEET C5. DO NOT EXCEED 1:50 CROSS SLOPE AND 1:12 LONGITUDINAL SLOPE.
- CONSTRUCT HEAVY PAVEMENT SECTION 3" AC MIN. ON 8" ABC PER RECOMMENDATION BY GEOTECH REPORT. SEE DETAIL 1 ON SHEET C5.
- CONSTRUCT LIGHT PAVEMENT SECTION MIN. 2 1/2" AC MIN. ON 6" ABC PER RECOMMENDATION BY GEOTECH REPORT. SEE DETAIL 1 ON SHEET C5.
- SEE ARCHITECTURAL PLANS FOR ALL PARKING LOT STRIPING AND SIGNAGE LAYOUT AND DETAILS. ALL DISABLED ACCESS STRIPING AND SIGNAGE TO COMPLY WITH CURRENT ADA STANDARDS. PLAN CHECK #303-05.
- LANDSCAPE/PLANTER AREA. SEE LANDSCAPE PLANS FOR DETAILS. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING, WHERE APPLICABLE. PLAN CHECK #303-05.

- CONSTRUCT HDPE N-12 OR EQUIVALENT STORM PIPE. LENGTH, SIZE, AND SLOPE PER PLAN. BACKFILL PER PIPE MANUFACTURERS SPECIFICATIONS.
- CONSTRUCT 3' VALLEY GUTTER PER MAG STD DTL 240.
- CONSTRUCT CONCRETE SCUPPER AND CONCRETE CHANNEL PER PLAN AND PER MAG STD DTL 203. WIDTH PER PLAN.
- CONSTRUCT REFUSE ENCLOSURE PER C.O.S. STD. DTL. 2146-1 OR 2147-1.
- SEE ARCHITECTURAL PLANS FOR MONUMENT SIGN ELEVATIONS AND DETAILS. PLAN CHECK #303-05. SIGN TO BE APPROVED UNDER SEPARATE PERMIT.
- CONSTRUCT CONCRETE UTILITY PAD. COORDINATE WITH ELECTRICAL PLANS FOR DETAILS. PLAN CHECK #303-05.
- SEE ELECTRICAL PLANS FOR SITE LIGHTING DETAILS, BLDG. DEPT. PLAN CHECK #305-05.
- SIGHT VISIBILITY TRIANGLES PER C.O.S. FIGURE 3.1-13.
- CONSTRUCT CATCH BASIN PER MAG STD DTL 535 TYPE F. RIM AND INVERT PER PLAN.
- CONSTRUCT 48" MANHOLE BASE AND SHAFT PER MAG STD DTL 520 AND 522.
- SEE ARCHITECTURAL PLANS FOR WATER FEATURE DETAILS. APPROVED UNDER SEPARATE PERMIT. PLAN CHECK #303-05.
- CONSTRUCT DECORATIVE PAVEMENT SECTION PER ARCHITECTURAL PLANS. PLAN CHECK #303-05.
- CONSTRUCT SCREENWALL PER PLAN. SEE STRUCTURAL AND ARCHITECTURAL PLANS FOR DETAILS. WALL ELEVATIONS PER PLAN. PLAN CHECK #303-05.

- SEE LANDSCAPE PLANS FOR PUBLIC TRAIL (N.I.C.) DETAILS.
- EXISTING 8' WIDE SIDEWALK TO REMAIN IN PLACE PER PLAN.
- REGRADE LANDSCAPE AREA PER PLAN. COORDINATE WITH DEMOLITION PLAN FOR REMOVALS.
- ROOF DRAIN DOWNSPOUT LOCATION. COORDINATE WITH ARCHITECTURAL PLANS FOR LOCATION AND SIZE.
- CONSTRUCT ROOF DRAIN BUBBLER BOX. RIM AND INVERT PER PLAN. SEE DETAIL 7 ON SHEET C5.
- PROTECT EXISTING CMU WALL IN PLACE.
- CONSTRUCT CONCRETE PIPE COLLAR PER MAG STD DTL 505-48".
- INSTALL FIRE LANE SIGNS, PER C.O.S. STD. DTL. 2365. SEE DTL. 10, SHT. C5.

GENERAL NOTES

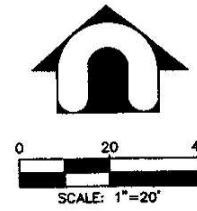
SEE SHEET C1

LEGEND

SEE SHEET C1

NOTE

- ALL SITE WALLS SHALL REQUIRE A SEPARATE PERMIT AND APPROVAL THROUGH THE C.O.S. BUILDING DEPARTMENT.
- COORDINATE MINIMUM FOOTING COVER WITH STRUCTURAL/ARCHITECTURAL WALL DETAILS.
- NOT ALL NOTES ARE USED ON THIS SHEET.
- CONTRACTOR SHALL MAINTAIN 1 FOOT MIN. COVER OVER FOOTING.
- CONTRACTOR TO DETERMINE IN FIELD STEP IN FOOTER LOCATION



NO.	DATE	REVISION	BY

DESIGN BY: RR
DRAWN BY: SA
CHECKED BY: ME

HUNTER ENGINEERING
8283 N. HAYDEN RD. SUITE 275
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986



GRADING & DRAINAGE PLAN
FOR
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.: WSTR001

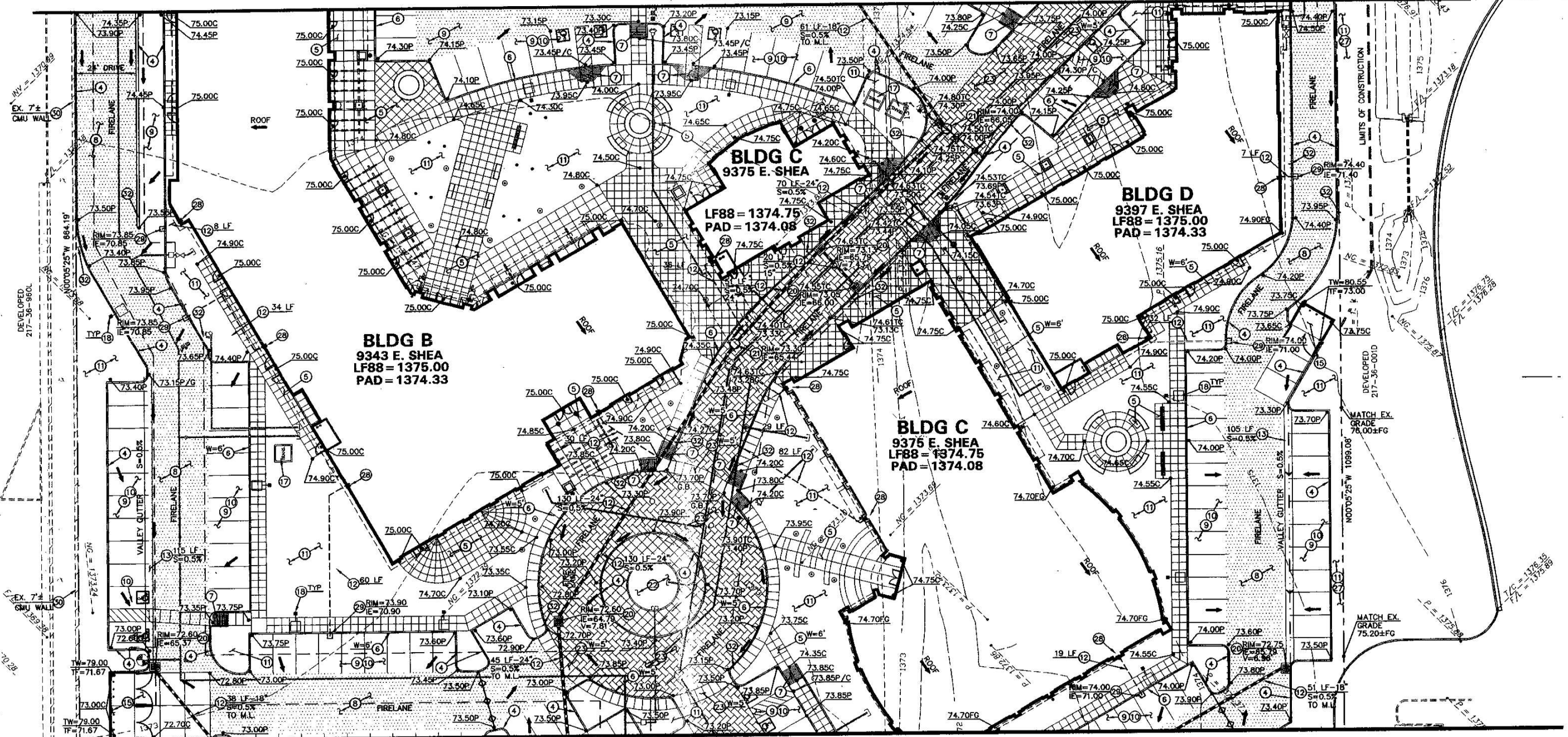
SCALE 1"=20'

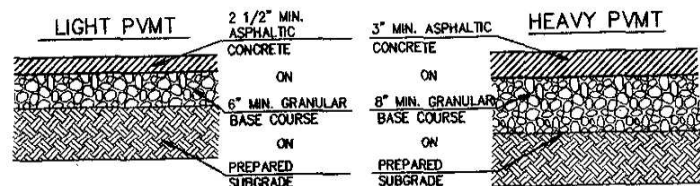
SHEET C3 OF 14

PLAN CHECK NO.305-05 CASE NO. 8-DR-2004 NATIVE PLANT#6-NP-2004

MATCHLINE SEE SHEET C2

MATCHLINE SEE SHEET C4



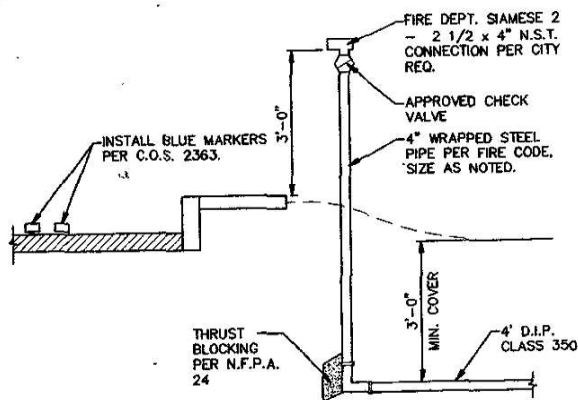


NOTE:

ALL PAVEMENT, A.B.C. AND SUBGRADE CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH RECOMMENDATIONS OF GEOTECH REPORT BY SPEEDIE AND ASSOCIATES DATED 4-16-04 PROJ #040344SA

1 PAVEMENT SECTION

N.T.S.



SEE FIRE SPRINKLER PLANS

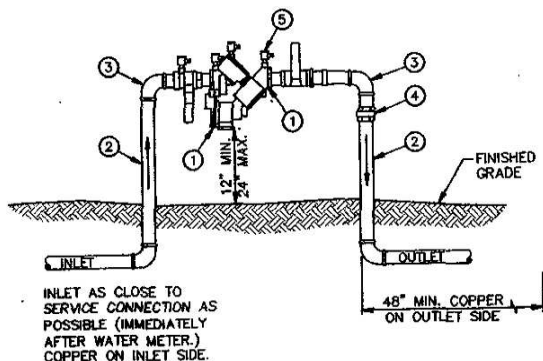
NOTE: PROVIDE BUILDING I.D. ON THE REMOTE F.D.C.

FIRELINE NOTES:

1. REMOTE F.D.C. - 2 1/2\"/>

6 FIRE DEPT. SIAMESE CONNECTION

N.T.S.



INLET AS CLOSE TO SERVICE CONNECTION AS POSSIBLE (IMMEDIATELY AFTER WATER METER.) COPPER ON INLET SIDE.

48\"/>

MATERIAL LIST

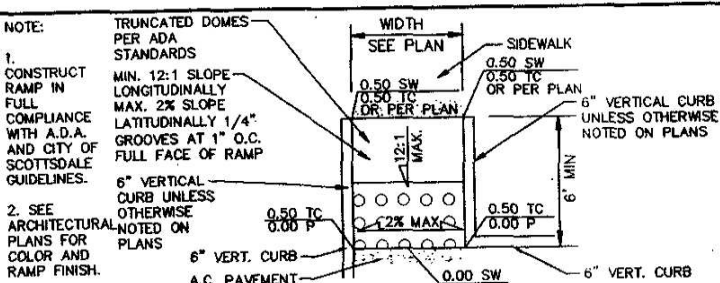
1. APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY, BALL VALVES INCLUDED.
2. PIPE SPOOL, TYPE \"L\" HARD COPPER, 3/4\"/>

GENERAL NOTES

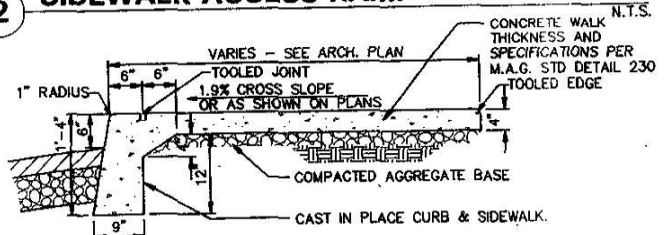
1. CONTACT THE CITY OF SCOTTSDALE WATER AND WASTEWATER OPERATIONS, BACKFLOW PREVENTION 312-5668, FOR LATEST LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES OR CERTIFIED TESTERS.
2. BACKFLOW PREVENTERS MUST BE TESTED BY A CERTIFIED TESTER BEFORE FINAL APPROVAL IS ISSUED.
3. COPPER FITTINGS SHALL BE CONNECTED WITH LEAD FREE SOLDER JOINTS.
4. FINISHED GRADE UNDERNEATH THE BACKFLOW PREVENTER SHALL BE AT 95% COMPACTION.
5. ALL NIPPLES TO BE COPPER OR BRASS.
6. PIPING UNDER THE CITY RIGHT OF WAY MUST BE TYPE \"K\" COPPER.
7. CALL FOR UNDERGROUND INSPECTION BEFORE BACKFILLING TRENCH.

N.T.S.

9 REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY FOR ASSEMBLIES 3/4\"/>



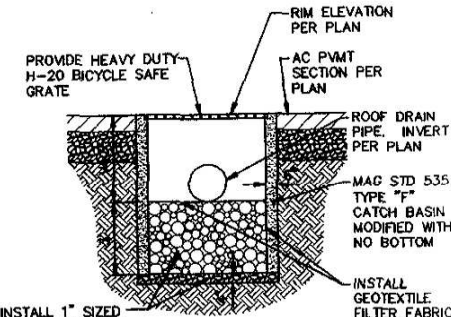
2 SIDEWALK ACCESS RAMP



- NOTE:
- * CONCRETE TO HAVE STRENGTH OF 3,000 PSI IN 28 DAYS, 2\"/>

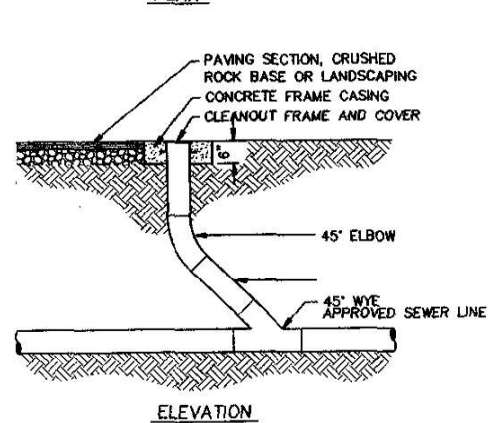
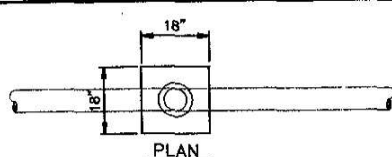
3 COMBINATION CURB/SIDEWALK DETAIL

N.T.S.



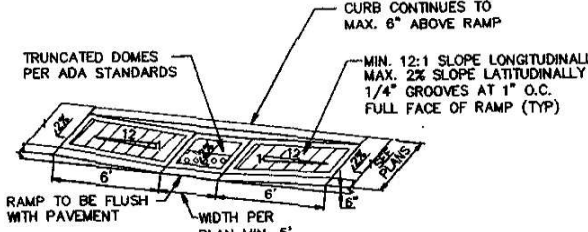
7 BUBBLER BOX DETAIL

N.T.S.



4 CLEANOUT DETAIL

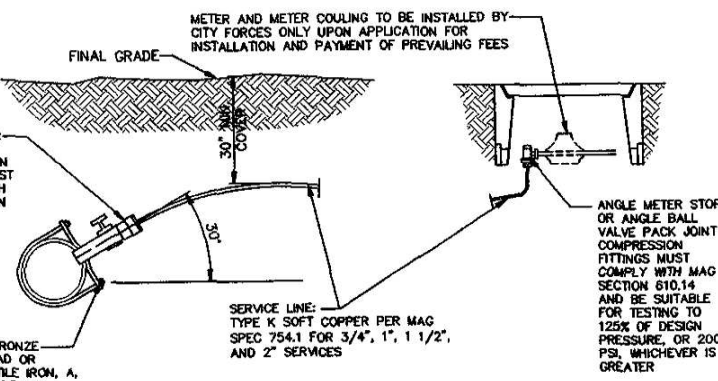
N.T.S.



- NOTE:
1. RAMP TEXTURING IS TO BE DONE IN ACCORDANCE WITH THE CITY OF SCOTTSDALE AND ADA REQUIREMENTS.
 2. SEE ARCHITECTURAL PLANS FOR COLOR AND RAMP FINISH.

5 SIDEWALK ACCESS RAMP

N.T.S.



- NOTES:
1. ALL TAPS MUST BE MADE USING A SERVICE SADDLE.
 2. ALL SERVICE LINE SIZES SHALL HAVE THE PACK JOINT COMPRESSION FITTINGS FOR CORP. STOPS AND METER STOPS.
 3. WHERE A CONTRACTOR IS INSTALLING NEW WATER LINES, HE SHALL ALSO INSTALL THE WATER SERVICE CONNECTION. THE INSTALLATION SHALL INCLUDE THE SERVICE SADDLE, CORP. STOP, SERVICE PIPE, APPURTENANT FITTINGS, METER STOP, CONCRETE METER BOX AND BOX COVER, PER MAG SPECIFICATIONS.
 4. COPPER SERVICE LINES IN THE 3/4\", 1\", 1 1/2\", AND 2\"/>

5. WHEN ALL OR PART OF A DEVELOPMENT IS TO BE SERVICED BY EXISTING CITY OF SCOTTSDALE WATER MAINS, ONLY AUTHORIZED CITY OF SCOTTSDALE WATER & WASTEWATER OPERATIONS PERSONNEL SHALL INSTALL THE WATER SERVICE CONNECTION.

8 WATER SERVICE LINE CONNECTION-C.O.S. STD DTL 2330

N.T.S.



10 FIRE LANE SIGN-C.O.S. DETAIL #2365

N.T.S.

NOTES:

1. At the beginning and end of the fire lane, the sign shall have a single headed arrow pointing in the direction the regulation is in effect. The intermediate signs shall have double headed arrows pointing in both directions.
2. The maximum spacing of the signs shall be 100', contingent upon Traffic Engineering's review and approval.
3. The signs shall be set at an angle of not less than 30' nor more than 45' with the curb or line of traffic flow
4. The clearance to the bottom of the sign shall be 7 feet. There shall be no other signs attached to the sign or the sign pole.
5. The sign plate shall be a minimum of 12\"/>

DETAILS AND TYPICAL SECTIONS FOR

94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.: WSTR001

SCALE N.T.S.

SHEET C5 OF 14

BY: REMSON
NO. DATE
DESIGN BY: J.M.H.
DRAWN BY: J.M.H.
CHECKED BY: J.M.H.

HUNTER ENGINEERING
8283 N. HAYDEN RD., SUITE 275
SCOTTSDALE, AZ 85268
T 480 991 3985
F 480 991 3986



PLAN CHECK NO.305-05 CASE NO. 8-DR-2004 NATIVE PLANT#6-NP-2004

PURPOSE: SIGNATURE SUBMITTAL 6-2-05

FIRELINE CONSTRUCTION NOTES

1. INSTALL 6" D.I.P. (CLASS 350) POLYWRAPPED FIRELINE, LENGTH PER PLAN. MIN 3' COVER TO TOP OF PIPE.
2. INSTALL 6" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
3. INSTALL 6" D.I. 11.25° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
4. SEE FIRE PROTECTION PLAN FOR CONTINUATION OF FIRELINE INTO BUILDING. COORDINATE SIZE AND LOCATION W/FIRE SPRINKLER CONTRACTOR. NOTIFY ENGINEER OF DISCREPANCIES.
5. INSTALL 6" VALVE, BOX & COVER PER MAG STD DTL 391-1-C.
6. INSTALL 4" D.I.P. (CLASS 350) POLYWRAPPED FDC LINE, LENGTH PER PLAN. MIN. 3' COVER TO TOP OF PIPE.
7. INSTALL 4" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
8. INSTALL 4" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
9. INSTALL REMOTE FIRE DEPT. CONNECTION PER C.O.S. AND NFPA REQUIREMENTS. (FDC) SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL FIRE CODE. COORDINATE SIZE AND LOCATION WITH FIRE PROTECTION PLAN. SEE DETAIL 1 SHEET C6.
10. INSTALL PAYMENT MARKER FOR FIRE HYDRANTS AND FIRE DEPT. CONNECTION PER C.O.S. DTL 2363.
11. MAINTAIN 2' MIN. VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES.
12. INSTALL 6" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
13. INSTALL 4" D.I. 22.5° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.

WATER MAIN CONSTRUCTION NOTES

1. CONTRACTOR TO POTHOLE AND VERIFY LOCATION AND SIZE OF EXISTING WATERMAIN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. SAWCUT, REMOVE AND REPLACE EX. AC P.V.M.T. CURB AND/OR SIDEWALK (2' MIN). DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC P.V.M.T. PER MAG SPEC. 321, 336, 340 AND C.O.S. STD DTL 2200 OR REPLACE IN KIND, WHICHEVER IS GREATER. REPLACE SIDEWALK PER MAG STD DTL 230 AND C.O.S. SPEC 340.
3. INSTALL 8"x8" T.S. & V.B.&C PER MAG STD DTL 340 AND 391-1-C.
4. INSTALL 8" D.I.P. (CLASS 350 MIN.) POLY WRAPPED WATERMAIN. LENGTH PER PLAN.
5. INSTALL 8" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
6. INSTALL 8"x6" D.I. TEE WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
7. CONSTRUCT WATER SERVICE LINE CONNECTION PER C.O.S. STD DTL 2330. LENGTH AND SIZE OF PIPE PER PLAN. CONNECTION SHALL MATCH METER AND BACKFLOW SIZES. SEE DETAIL 5 ON SHEET C4.
8. CITY FORCES TO INSTALL WATER METER AND SERVICE CONNECTION FOR DOMESTIC USE. METER SIZE PER ARCHITECTURAL PLANS.
9. INSTALL 1 1/2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR PER C.O.S. DTL 2354 WITH ADAPTORS TO A 2" LINE.
10. CITY FORCES TO INSTALL WATER METER AND SERVICE CONNECTION FOR IRRIGATION USE. SIZE PER LANDSCAPE PLANS.
11. INSTALL TYPE K WATER SERVICE LINE. DEFLECT PIPE AS NECESSARY TO MAINTAIN MINIMUM VERTICAL SEPARATION REQUIRED. LENGTH AND SIZE PER PLAN.
12. TERMINATE WATER LINE 5' FROM BUILDING CAP AND MARK FOR BUILDING CONNECTION.
13. SEE IRRIGATION PLANS FOR CONTINUATION OF IRRIGATION SYSTEM.

LEGEND

SEE SHEET C1

14. INSTALL FIRE HYDRANT AND VALVE ASSEMBLY PER MAG STD DTL 360 & 362. LENGTH OF 6" D.I.P. AS SHOWN.
15. MAINTAIN 2' MIN. VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES PER C.O.S. STD DTL 2370. WHEN REQUIRED, INSTALL VERTICAL ALIGNMENT PER C.O.S. STD DTL 2370.
16. INSTALL 8" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
17. INSTALL 8" D.I.P. (CLASS 350 MIN.) POLY WRAPPED FIRELINE. LENGTH PER PLAN.
18. INSTALL 1 1/2" TYPE K WATER SERVICE LINE. DEFLECT PIPE AS NECESSARY TO MAINTAIN MINIMUM VERTICAL SEPARATION REQUIRED.
19. INSTALL 8" D.I. 11.25° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
20. INSTALL 24"x8" T.S. & V.B.&C PER MAG STD DTL 340 AND 391-1-C.
21. MAINTAIN 1' VERTICAL CLEARANCE BETWEEN CROSSING UTILITY LINES. DEFLECT PIPE PER MANUFACTURERS RECOMMENDATIONS AS NECESSARY. GAS METER, TO BE INSTALLED BY OTHERS.
22. INSTALL 8" VALVE, BOX, AND COVER PER MAG STD DTL 391-1-C.
23. INSTALL 8"x8" D.I. TEE WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
24. INSTALL 2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR PER C.O.S. STD DTL 2354, WITH ADAPTORS TO A 3" LINE.
25. INSTALL 8" D.I. 22.5° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
27. INSTALL 3/4"x3" I.E.

PRIVATE SEWER CONSTRUCTION NOTES

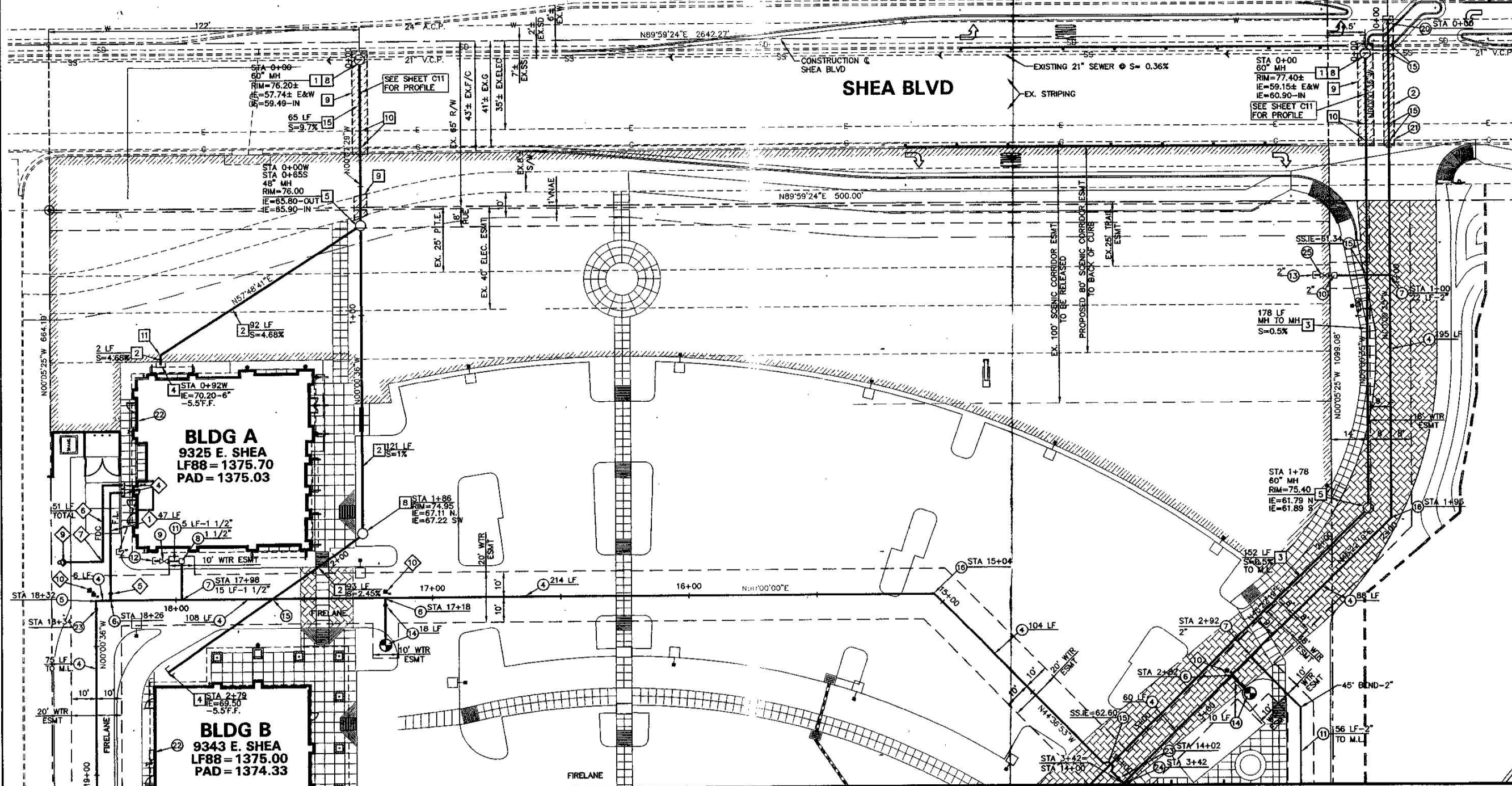
1. CONTRACTOR TO POTHOLE AND VERIFY LOCATION, SIZE AND INVERT ELEVATION OF EXISTING SEWER MAIN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. INSTALL 6" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
3. INSTALL 8" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
4. TERMINATE SEWER LINE 5' FROM BUILDING WITH A 6"x4" ADAPTOR COUPLING. SEE MECHANICAL/PLUMBING PLANS FOR CONTINUATION OF SEWER LINE INSIDE BUILDING. INVERT PER PLAN.
5. INSTALL MONITORING/SAMPLING MANHOLE PER C.O.S. SPEC 625.3.4. MANHOLE PER MAG STD DTL 420 MODIFIED WITH STRAIGHT CHANNEL. RIM AND INVERT PER PLAN.
6. INSTALL SEWER CLEAN OUT PER DETAIL 1 SHEET C7. RIM AND INVERT PER PLAN.
7. INSTALL 8"x6" BUILDING CONNECTION PER MAG STD DTL 440.
8. INSTALL STANDARD MANHOLE PER MAG STD DTL 420 & 424. RIM AND INVERT PER PLAN.
9. SAWCUT, REMOVE AND REPLACE EX. AC P.V.M.T. CURB, GUTTER & SIDEWALK. DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC P.V.M.T. PER MAG SPEC. 321, 336, 340 AND C.O.S. STD DTL 2201 TYPE A, "T-TOP".
10. MAINTAIN 2' MINIMUM VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES.
11. INSTALL 45° SWEEPING BEND, PER UPC.
12. INSTALL 8"x4" BUILDING CONNECTION PER MAG STD DTL 440.
13. INSTALL 4" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
14. 8" STUB OUT AND PLUG PER MAG STD DTL 427.
15. INSTALL 8" VCP SEWER LINE. LENGTH AND SLOPE PER PLAN.

GENERAL NOTES

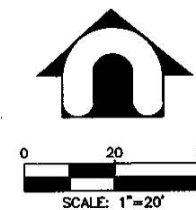
1. ALL ON-SITE PRIVATE PLUMBING WHICH INCLUDES WATER, SEWER, AND FIRE PROTECTION, SHALL BE PRIVATE PLUMBING LINES AND ARE SUBJECT TO THE U.P.C. MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER.
2. ALL WATER LINE LENGTHS ARE MEASURED FITTING TO FITTING.
3. ALL PIPE SEPARATION TO BE PER CURRENT APPLICABLE CODES.
4. ALL WATER LINES SHALL HAVE MIN. 3' COVER TO TOP OF PIPE.
5. PUBLIC WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SCOTTSDALE AND MAG STANDARDS.
6. C.O.S. WATERLINE EASEMENT TO BE FREE OF ALL OBSTRUCTIONS AND ACCESSIBLE TO CITY FORCES AT ALL TIMES.
7. NOT ALL NOTES ARE USED ON THIS SHEET.
8. ALL FERROUS METAL PIPE USED FOR UNDERGROUND FIRELINES SHALL BE WRAPPED PER MAG STD SPEC 610 AND AWWA "C"-150.
9. PROVIDE EXTERIOR 2 1/2" WET HOSE VALVES WHEN THE HOSE LAY IS GREATER THAN 150'-0" FROM THE FIRE TRUCK ACCESS ROAD.

FIRELINE NOTES

- *1. REMOTE F.D.C. - 2 1/2" X 2 1/2" X 4" N.S.T. WITH C.O.S. STD DTL 2363. FIRELINE WITH 3 FOOT MINIMUM OF COVER TO TOP OF PIPE.
 2. PROVIDE AN APPROVED VERTICAL BACKFLOW ASSEMBLY IN THE FIRE SPRINKLER RISER.
 3. THE FIRE SPRINKLER RISER SHALL BE NO GREATER THAN 3'-0" INTO THE BUILDING.
 4. NO TREES, BUSHES, OR WALL WITHIN 5.0' RADIUS OF F.D.C.
 5. PROVIDE BUILDING I.D. ON EACH REMOTE F.D.C.
- *NOTE: IF FIRE SPRINKLER DESIGN INDICATES DEMAND OF 1000 GPM OR MORE, REMOTE FDC LINE MAY BE INCREASED TO BE 6" DIAMETER WITH A THREE WAY 2 1/2" FDC HOSE CONNECTION.



MATCHLINE SEE SHEET C7



UTILITY PLAN
FOR

94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE
NOT APPROVED FOR
CONSTRUCTION
WITHOUT AN
APPROVED SIGNATURE
FROM THE GOVERNING
MUNICIPALITY.

HE JOB NO.:
WSTR001

SCALE
1"=20'

SHEET
C6 OF 14

DESIGN BY: RR
DRAWN BY: SAR
CHECKED BY: JMH

HUNTER
ENGINEERING
8283 N. HAYDEN RD. SUITE 275
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986



PLAN CHECK NO. 305-05 CASE NO. 8-DR-2004 NATIVE PLANT#6-NR-2004

PURPOSE:
SIGNATURE SUBMITTAL 6-2-05

FIRELINE CONSTRUCTION NOTES

1. INSTALL 6" D.I.P. (CLASS 350) POLYWRAPPED FIRELINE, LENGTH PER PLAN. MIN. 3' COVER TO TOP OF PIPE.
2. INSTALL 6" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
3. INSTALL 6" D.I. 11.25° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
4. SEE FIRE PROTECTION PLAN FOR CONTINUATION OF FIRELINE INTO BUILDING. COORDINATE SIZE AND LOCATION W/FIRE SPRINKLER CONTRACTOR. NOTIFY ENGINEER OF DISCREPANCIES.
5. INSTALL 6" VALVE, BOX & COVER PER MAG STD DTL 391-1-C.
6. INSTALL 4" D.I.P. (CLASS 350) POLYWRAPPED FDC LINE, LENGTH PER PLAN. MIN. 3' COVER TO TOP OF PIPE.
7. INSTALL 4" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
8. INSTALL 4" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
9. INSTALL REMOTE FIRE DEPT. CONNECTION PER C.O.S. AND NFPA REQUIREMENTS. (FDC) SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL FIRE CODE. COORDINATE SIZE AND LOCATION WITH FIRE PROTECTION PLAN. SEE DETAIL 1 SHEET C6.
10. INSTALL PAVEMENT MARKER FOR FIRE HYDRANTS AND FIRE DEPT. CONNECTIONS PER C.O.S. DTL 2363.
11. MAINTAIN 2' MIN. VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES.
12. INSTALL 6" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
13. INSTALL 4" D.I. 22.5° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.

WATER MAIN CONSTRUCTION NOTES

1. CONTRACTOR TO POTHOLE AND VERIFY LOCATION AND SIZE OF EXISTING WATERMAIN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. SAWCUT, REMOVE AND REPLACE EX. AC PVMT, CURB AND/OR SIDEWALK (2' MIN). DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC PVMT PER MAG SPEC. 321, 336, 340 AND C.O.S. STD DTL 2200 OR REPLACE IN KIND, WHICHEVER IS GREATER. REPLACE SIDEWALK PER MAG STD DTL 230 AND C.O.S. SPEC 340.
3. INSTALL 8"x8" T.S. & V.B.&C PER MAG STD DTL 340 AND 391-1-C.
4. INSTALL 8" D.I.P. (CLASS 350 MIN.) POLY WRAPPED WATERMAIN, LENGTH PER PLAN.
5. INSTALL 8" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
6. INSTALL 8"x6" D.I. TEE WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
7. CONSTRUCT WATER SERVICE LINE CONNECTION PER C.O.S. STD DTL 2330. LENGTH AND SIZE OF PIPE PER PLAN. CONNECTION SHALL MATCH METER AND BACKFLOW SIZES. SEE DETAIL 5 ON SHEET C4.
8. CITY FORCES TO INSTALL WATER METER AND SERVICE CONNECTION FOR DOMESTIC USE. METER SIZE PER ARCHITECTURAL PLANS.
9. INSTALL 1 1/2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR PER C.O.S. DTL 2354 WITH ADAPTORS TO A 2" LINE.
10. CITY FORCES TO INSTALL WATER METER AND SERVICE CONNECTION FOR IRRIGATION USE. SIZE PER LANDSCAPE PLANS.
11. INSTALL TYPE K WATER SERVICE LINE. DEFLECT PIPE AS NECESSARY TO MAINTAIN MINIMUM VERTICAL SEPARATION REQUIRED. LENGTH AND SIZE PER PLAN.
12. TERMINATE WATER LINE 5' FROM BUILDING CAP AND MARK FOR BUILDING CONNECTION.
13. SEE IRRIGATION PLANS FOR CONTINUATION OF IRRIGATION SYSTEM.
14. INSTALL FIRE HYDRANT AND VALVE ASSEMBLY PER MAG STD DTL 360 & 362. LENGTH OF 6" D.I.P. AS SHOWN.
15. MAINTAIN 2' MIN. VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES PER C.O.S. STD DTL 2370. WHEN REQUIRED, INSTALL VERTICAL REALIGNMENT PER C.O.S. STD DTL 2370.
16. INSTALL 8" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
17. INSTALL 6" D.I.P. (CLASS 350 MIN.) POLY WRAPPED FIRELINE, LENGTH PER PLAN.
18. INSTALL 1 1/2" TYPE K WATER SERVICE LINE. DEFLECT PIPE AS NECESSARY TO MAINTAIN MINIMUM VERTICAL SEPARATION REQUIRED.
19. INSTALL 8" D.I. 11.25° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
20. INSTALL 24"x8" T.S. & V.B.&C PER MAG STD DTL 340 AND 391-1-C.
21. MAINTAIN 1" VERTICAL CLEARANCE BETWEEN CROSSING UTILITY LINES. DEFLECT PIPE PER MANUFACTURERS RECOMMENDATIONS AS NECESSARY. GAS METER, TO BE INSTALLED BY OTHERS.
22. INSTALL 8" VALVE, BOX, AND COVER PER MAG STD DTL 391-1-C.
23. INSTALL 8"x8" D.I. TEE WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
24. INSTALL 2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR PER C.O.S. STD DTL 2354, WITH ADAPTORS TO A 3" LINE.
25. INSTALL 8" D.I. 22.5° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
26. NOT USED.
27. INSTALL 3/4" WATER SERVICE.
28. INSTALL 3/4" REDUCED PRESSURE PRINCIPLE BACKFLOW REVENTOR PER C.O.S. DTL 2354.

PRIVATE SEWER CONSTRUCTION NOTES

1. CONTRACTOR TO POTHOLE AND VERIFY LOCATION, SIZE AND INVERT ELEVATION OF EXISTING SEWER MAIN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. INSTALL 6" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
3. INSTALL 8" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
4. TERMINATE SEWER LINE 5' FROM BUILDING WITH A 6"x4" ADAPTOR COUPLING. SEE MECHANICAL/PLUMBING PLANS FOR CONTINUATION OF SEWER LINE INSIDE BUILDING. INVERT PER PLAN.
5. INSTALL MONITORING/SAMPLING MANHOLE PER C.O.S. SPEC 625.3.4. MANHOLE PER MAG STD DTL 420 MODIFIED WITH STRAIGHT CHANNEL. RIM AND INVERT PER PLAN.
6. INSTALL SEWER CLEAN OUT PER DETAIL 1 SHEET C7. RIM AND INVERT PER PLAN.
7. INSTALL 8"x6" BUILDING CONNECTION PER MAG STD DTL 440.
8. INSTALL STANDARD MANHOLE PER MAG STD DTL 420 & 424. RIM AND INVERT PER PLAN.
9. SAWCUT, REMOVE AND REPLACE EX. AC PVMT, CURB, GUTTER & SIDEWALK. DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC PVMT PER MAG SPEC. 321, 336, 340 AND C.O.S. STD DTL 2201 TYPE "A" 11-TOP.
10. MAINTAIN 2' MINIMUM VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES.
11. INSTALL 45° SWEEPING BEND, PER UPC.
12. INSTALL 8"x4" BUILDING CONNECTION PER MAG STD DTL 440.
13. INSTALL 4" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
14. 8" STUB OUT AND PLUG PER MAG STD DTL 427.
15. INSTALL 8" VCP SEWER LINE. LENGTH AND SLOPE PER PLAN.

LEGEND

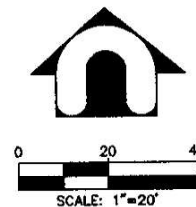
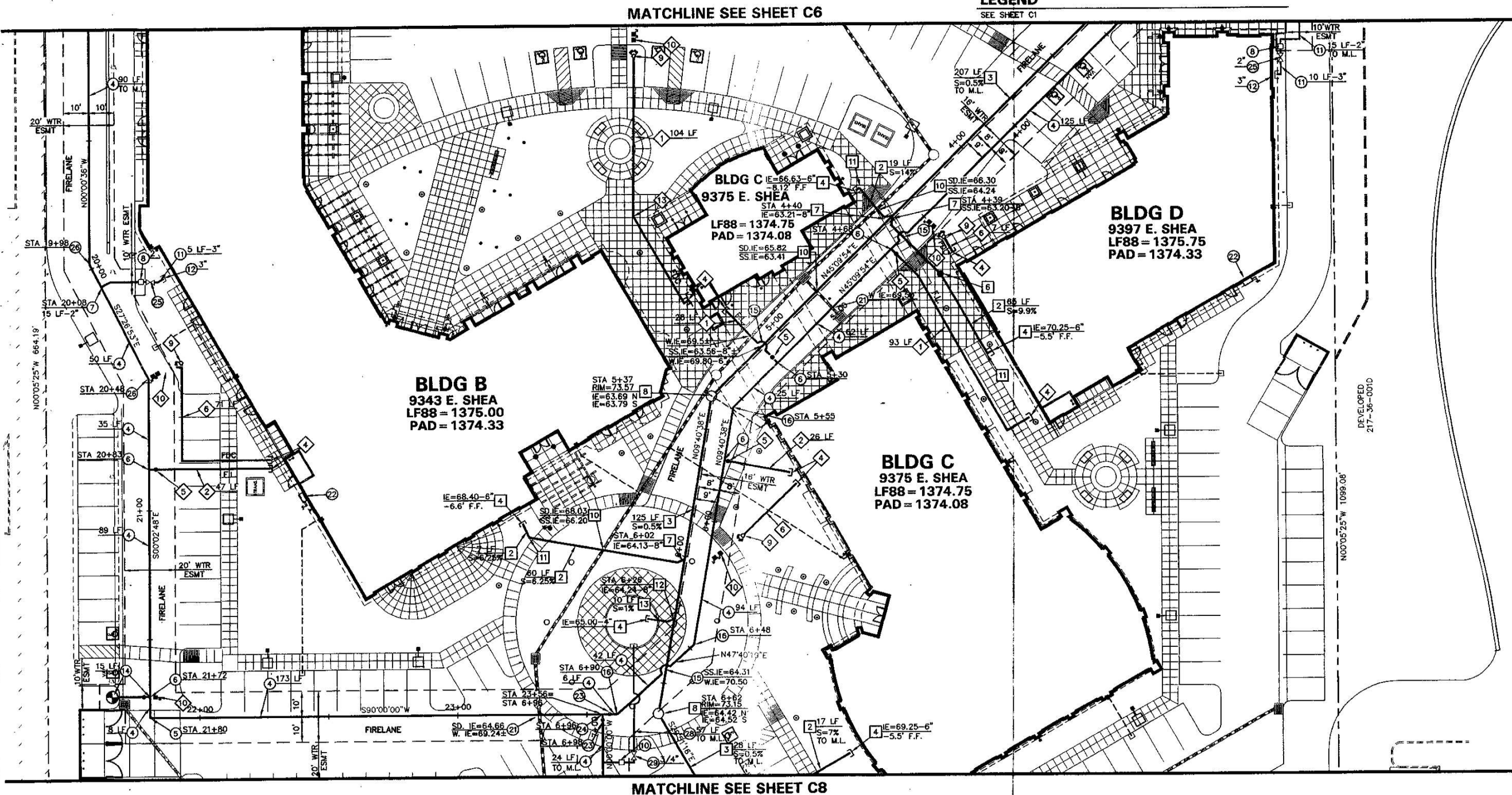
SEE SHEET C1

GENERAL NOTES

1. ALL ON-SITE PRIVATE PLUMBING WHICH INCLUDES WATER, SEWER, AND FIRE PROTECTION, SHALL BE PRIVATE PLUMBING LINES AND ARE SUBJECT TO THE U.P.C. MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER.
2. ALL WATER LINE LENGTHS ARE MEASURED FITTING TO FITTING.
3. ALL PIPE SEPARATION TO BE PER CURRENT APPLICABLE CODES.
4. ALL WATER LINES SHALL HAVE MIN. 3' COVER TO TOP OF PIPE.
5. PUBLIC WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SCOTTSDALE AND MAG STANDARDS.
6. C.O.S. WATERLINE EASEMENT TO BE FREE OF ALL OBSTRUCTIONS AND ACCESSIBLE TO CITY FORCES AT ALL TIMES.
7. NOT ALL NOTES ARE USED ON THIS SHEET.
8. ALL FERROUS METAL PIPE USED FOR UNDERGROUND FIRELINES SHALL BE WRAPPED PER MAG STD SPEC 610 AND AWWA "C"-150.
9. PROVIDE EXTERIOR 1 1/2" WET HOSE VALVES WHEN THE HOSE LAY IS GREATER THAN 150'-0" FROM THE FIRE TRUCK ACCESS ROAD.

FIRELINE NOTES

1. REMOTE F.D.C. = 2 1/2" X 2 1/2" X 4" N.S.T. WITH C.O.S. STD DTL 2363. FIRELINE WITH 3 FOOT MINIMUM OF COVER TO TOP OF PIPE.
2. PROVIDE AN APPROVED VERTICAL BACKFLOW ASSEMBLY IN THE FIRE SPRINKLER RISER.
3. THE FIRE SPRINKLER RISER SHALL BE NO GREATER THAN 3'-0" INTO THE BUILDING.
4. NO TREES, BUSHES, OR WALL WITHIN 5.0' RADIUS OF F.D.C.
5. PROVIDE BUILDING I.D. ON EACH REMOTE F.D.C.
- *NOTE: IF FIRE SPRINKLER DESIGN INDICATES DEMAND OF 1000 GPM OR MORE, REMOTE FDC LINE MAY BE INCREASED TO BE 6" DIAMETER WITH A THREE WAY 1/2" FDC HOSE CONNECTION.



UTILITY PLAN
FOR
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE
NOT APPROVED FOR
CONSTRUCTION
WITHOUT AN
APPROVED SIGNATURE
FROM THE COVERING
MUNICIPALITY.

HE JOB NO.:
WSTR001

SCALE
1"=20'

SHEET
C7 OF 14

HUNTER
ENGINEERING
8283 N. HAYDEN RD., SUITE 275
SCOTTSDALE, AZ 85258
T 480 991 3985
F 480 991 3986

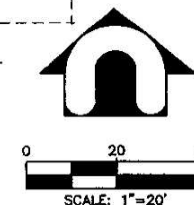
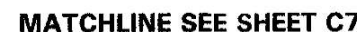


DESIGN BY: RR
CHECKED BY: JMH

NO.	DATE	REVISION	BY

PURPOSE:
SIGNATURE SUBMITTAL 6-22-05

PLAN CHECK NO. 305-05 CASE NO. 8-DR-2004 NATIVE PLAN #6-NP-2004



PRIVATE SEWER CONSTRUCTION NOTES

- 1 CONTRACTOR TO POTHOLE AND VERIFY LOCATION, SIZE AND INVERT ELEVATION OF EXISTING SEWER MAIN PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 2 INSTALL 6" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
- 3 INSTALL 8" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
- 4 TERMINATE SEWER LINE 5' FROM BUILDING WITH A 6"x4" ADAPTOR COUPLING. SEE MECHANICAL/PLUMBING PLANS FOR CONTINUATION OF SEWER LINE INSIDE BUILDING. INVERT PER PLAN.
- 5 INSTALL MONITORING/SAMPLING MANHOLE PER C.O.S. SPEC 625.3.4. MANHOLE PER MAG STD DTL 420 MODIFIED WITH STRAIGHT CHANNEL. RIM AND INVERT PER PLAN.
- 6 INSTALL SEWER CLEAN OUT PER DETAIL 1 SHEET C7. RIM AND INVERT PER PLAN.
- 7 INSTALL 8"x6" BUILDING CONNECTION PER MAG STD DTL 440.
- 8 INSTALL STANDARD MANHOLE PER MAG STD DTL 420 & 424. RIM AND INVERT PER PLAN.
- 9 SAWCUT, REMOVE AND REPLACE EX. AC PVMT, CURB, GUTTER & SIDEWALK. DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC PVMT PER MAG SPEC. 321, 336, 340 AND C.O.S. STD DTL 2201 TYPE 'A', "T-TOP".
- 10 MAINTAIN 2' MINIMUM VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES.
- 11 INSTALL 45' SWEEPING BEND, PER UPC.
- 12 INSTALL 8"x4" BUILDING CONNECTION PER MAG STD DTL 440.
- 13 INSTALL 4" PVC (SDR-35) SEWER LINE. LENGTH AND SLOPE PER PLAN.
- 14 8" STUB OUT AND PLUG PER MAG STD DTL 427.

LEGEND

SEE SHEET C1

GENERAL NOTES

1. ALL ON-SITE PRIVATE PLUMBING WHICH INCLUDES WATER, SEWER, AND FIRE PROTECTION, SHALL BE PRIVATE PLUMBING LINES AND ARE SUBJECT TO THE U.P.C. MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER.
2. ALL WATER LINE LENGTHS ARE MEASURED FITTING TO FITTING.
3. ALL PIPE SEPARATION TO BE PER CURRENT APPLICABLE CODES.
4. ALL WATER LINES SHALL HAVE MIN. 3' COVER TO TOP OF PIPE.
5. PUBLIC WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SCOTTSDALE AND MAG STANDARDS.
6. C.O.S. WATERLINE EASEMENT TO BE FREE OF ALL OBSTRUCTIONS AND ACCESSIBLE TO CITY FORCES AT ALL TIMES.
7. NOT ALL NOTES ARE USED ON THIS SHEET.
8. ALL FERROUS METAL PIPE USED FOR UNDERGROUND FIRELINES SHALL BE WRAPPED PER MAG STD SPEC 610 AND AWWA "C"-150.
9. PROVIDE EXTERIOR 2 1/2" WET HOSE VALVES WHEN THE HOSE LAY IS GREATER THAN 150'-0" FROM THE FIRE TRUCK ACCESS ROAD.

FIRELINE NOTES

- *1. REMOTE F.D.C. - 2 1/2" x 2 1/2" x 4" N.S.T. WITH C.O.S. STD DTL 2363. FIRELINE WITH 3 FOOT MINIMUM OF COVER TO TOP OF PIPE.
2. PROVIDE AN APPROVED VERTICAL BACKFLOW ASSEMBLY IN THE FIRE SPRINKLER RISER.
3. THE FIRE SPRINKLER RISER SHALL BE NO GREATER THAN 3'-0" INTO THE BUILDING.
4. NO TREES, BUSHES, OR WALL WITHIN 5.0' RADIUS OF F.D.C.
5. PROVIDE BUILDING I.D. ON EACH REMOTE F.D.C.
- *NOTE: IF FIRE SPRINKLER DESIGN INDICATES DEMAND OF 1000 GPM OR MORE, REMOTE FDC LINE MAY BE INCREASED TO BE 6" DIAMETER WITH A THREE WAY 2 1/2" FDC HOSE CONNECTION.

FIRELINE CONSTRUCTION NOTES

1. INSTALL 6" D.I.P. (CLASS 350) POLYWRAPPED FIRELINE, LENGTH PER PLAN. MIN. 3' COVER TO TOP OF PIPE.
2. INSTALL 6" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
3. INSTALL 6" D.I. 11.25° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
4. SEE FIRE PROTECTION PLAN FOR CONTINUATION OF FIRELINE INTO BUILDING. COORDINATE SIZE AND LOCATION W/FIRE SPRINKLER CONTRACTOR. NOTIFY ENGINEER OF DISCREPANCIES.
5. INSTALL 6" VALVE, BOX & COVER PER MAG STD DTL 391-1-C.
6. INSTALL 4" D.I.P. (CLASS 350) POLYWRAPPED FDC LINE, LENGTH PER PLAN. MIN. 3' COVER TO TOP OF PIPE.
7. INSTALL 4" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
8. INSTALL 4" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
9. INSTALL REMOTE FIRE DEPT. CONNECTION PER C.O.S. AND NFPA REQUIREMENTS. (FDC) SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL FIRE CODE. COORDINATE SIZE AND LOCATION WITH FIRE PROTECTION PLAN. SEE DETAIL 1 SHEET C6.
10. INSTALL PAVEMENT MARKER FOR FIRE HYDRANTS AND FIRE DEPT. CONNECTIONS PER C.O.S. DTL 2363.
11. MAINTAIN 2' MIN. VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES.
12. INSTALL 6" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
13. INSTALL 4" D.I. 22.5° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.

WATER MAIN CONSTRUCTION NOTES

- ① CONTRACTOR SHALL POTHOLE AND VERIFY LOCATION AND SIZE OF EXISTING DISCREPANCIES.
- ② SAWCUT, REMOVE AND REPLACE EX. AC PMVT, CURB AND/OR SIDEWALK (2" MIN.). DISPOSE OF DEBRIS PER LOCAL CODES. REPLACE AC PMVT PER MAG SPEC. 321, 336, 340 AND C.O.S. STD DTL 2200 OR REPLACE IN KIND, WHICHEVER IS GREATER. REPLACE SIDEWALK PER MAG STD DTL 230 AND C.O.S. SPEC. 340.
- ③ INSTALL 8"x8" T.S. & V.B.&C PER MAG STD DTL 340 AND 391-1-C.
- ④ INSTALL 8" D.I.P. (CLASS 350 MIN.) POLY WRAPPED WATERMAIN. LENGTH PER PLAN.
- ⑤ INSTALL 8" D.I. 90° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
- ⑥ INSTALL 8"x6" D.I. TEE WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
- ⑦ CONSTRUCT WATER SERVICE LINE CONNECTION PER C.O.S. STD DTL 2330. LENGTH AND SIZE OF PIPE PER PLAN. CONNECTION SHALL MATCH METER AND BACKFLOW SIZES. SEE DETAIL 5 ON SHEET C4.
- ⑧ CITY FORCES TO INSTALL WATER METER AND SERVICE CONNECTION FOR DOMESTIC USE. METER SIZE PER ARCHITECTURAL PLANS.
- ⑨ INSTALL 1 1/2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR PER C.O.S. DTL 2354 WITH ADAPTORS TO A 2" LINE.
- ⑩ CITY FORCES TO INSTALL WATER METER AND SERVICE CONNECTION FOR IRRIGATION USE. SIZE PER LANDSCAPE PLANS.
- ⑪ INSTALL TYPE K WATER SERVICE LINE. DEFLECT PIPE AS NECESSARY TO MAINTAIN MINIMUM VERTICAL SEPARATION REQUIRED. LENGTH AND SIZE PER PLAN.
- ⑫ TERMINATE WATER LINE 5' FROM BUILDING CAP AND MARK FOR BUILDING CONNECTION.
- ⑬ SEE IRRIGATION PLANS FOR CONTINUATION OF IRRIGATION SYSTEM.
- ⑭ INSTALL FIRE HYDRANT AND VALVE ASSEMBLY PER MAG STD DTL. 360 & 391-1-C. LENGTH OF 6" D.I.P. AS SHOWN.
- ⑮ MAINTAIN 2' MIN. VERTICAL SEPARATION BETWEEN CROSSING UTILITY LINES PER C.O.S. STD DTL 2370. WHEN REQUIRED, INSTALL VERTICAL REALIGNMENT PER C.O.S. STD DTL 2370.
- ⑯ INSTALL 8" D.I. 45° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
- ⑰ INSTALL 6" D.I.P. (CLASS 350 MIN.) POLY WRAPPED FIRELINE. LENGTH PER PLAN.
- ⑱ INSTALL 1 1/2" TYPE K WATER SERVICE LINE. DEFLECT PIPE AS NECESSARY TO MAINTAIN MINIMUM VERTICAL SEPARATION REQUIRED.
- ⑲ INSTALL 8" D.I. 11.25° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
- ⑳ INSTALL 24"x8" T.S. & V.B.&C PER MAG STD DTL 340 AND 391-1-C.
- ㉑ MAINTAIN 1' VERTICAL CLEARANCE BETWEEN CROSSING UTILITY LINES. DEFLECT PIPE PER MANUFACTURERS RECOMMENDATIONS AS NECESSARY.
- ㉒ GAS METER, TO BE INSTALLED BY OTHERS.
- ㉓ INSTALL 8" VALVE, BOX, AND COVER PER MAG STD DTL 391-1-C.
- ㉔ INSTALL 8"x8" D.I. TEE WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.
- ㉕ STD 2" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTOR PER C.O.S. STD DTL 2354, WITH ADAPTORS TO A 3" LINE.
- ㉖ INSTALL 8" D.I. 22.5° BEND WITH JOINT RESTRAINT AND TIE RODS PER MAG STD DTL 303-1 AND 303-2.

UTILITY PLAN FOR

FOR
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE
NOT APPROVED FOR
CONSTRUCTION
WITHOUT AN
APPROVED SIGNATURE
FROM THE GOVERNING
MUNICIPALITY.

HE JOB NO.
WSTROO1

SCALE
1"=20'

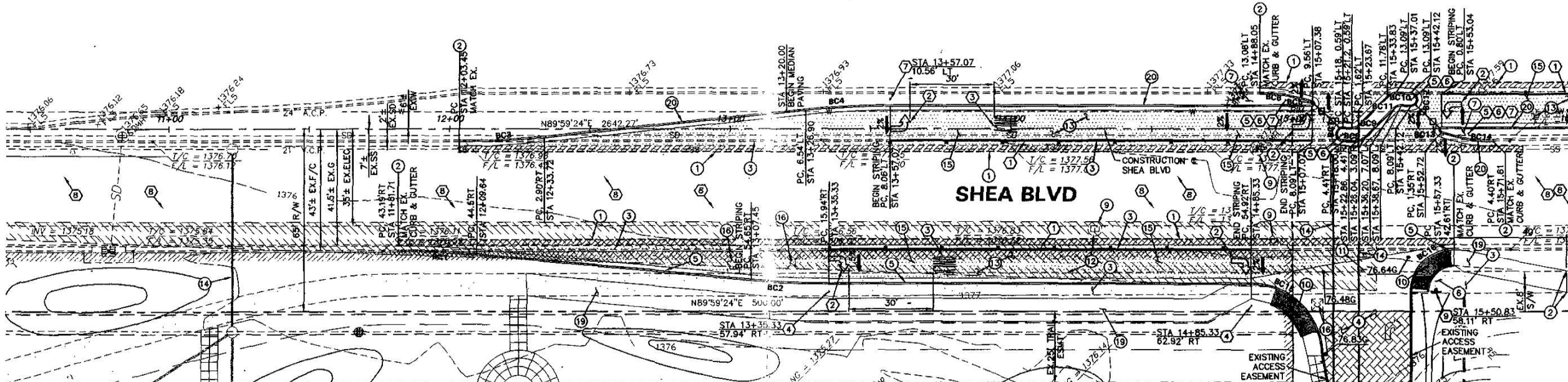
SHEET
C8 OF 14

DESIGN BY: RR
DRAWN BY: SAR
CHECKED BY: JMH

CIVIL AND SURVEY

HUNTER

PLAN CHECK NO.305-05 CASE NO. 8-DR-2004 NATIVE PLANT #6-NP-2004,



PLAN
HORIZONTAL SCALE: 1"=20'
GENERAL NOTES
SEE SHEET C1
LEGEND
SEE SHEET C1
SIGN CODE:

R3-5-L ONLY,
30" X 36"

R3-5-R ONLY,
30" X 36"

R4-7, MEDIAN
24" X 30"

OH-3L, WARNING
12" X 36"

CONSTRUCTION NOTES

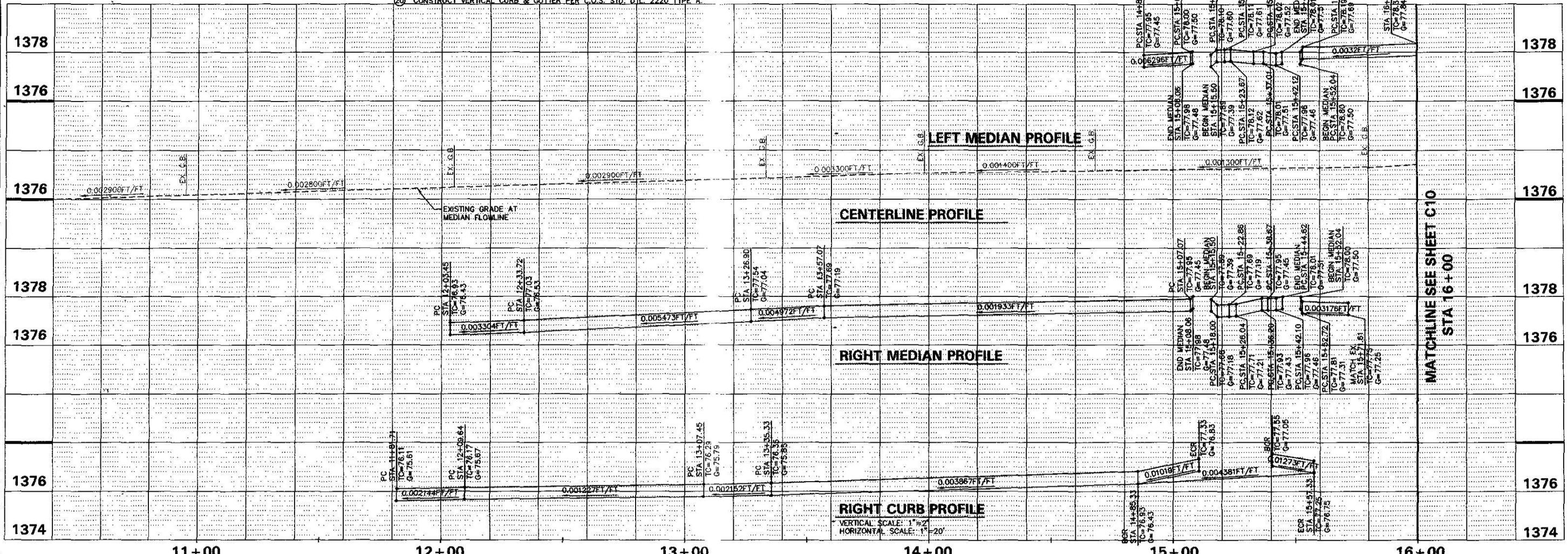
- SAWCUT, REMOVE AND REPLACE EXISTING AC PAVEMENT PER PLAN. DISPOSE OF PER LOCAL CODES. REPLACE AC PAVEMENT PER MAG SPEC. 321 AND 336, 340 AND C.O.S. STD DTL 2200 OR REPLACE IN KIND, WHICHEVER IS GREATER. SAWCUT LIMITS ARE SHOWN APPROXIMATE ON PLANS.
- CONTRACTOR TO VERIFY ELEVATION OF EXISTING CURB, SIDEWALK AND AC PAVEMENT TIE-IN LOCATIONS AND MATCH EXISTING. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- SAWCUT AND REMOVE CONCRETE SIDEWALK, AC PAVEMENT, OR CURBING PER PLAN. DISPOSE OF PER LOCAL CODES. SAWCUT LIMITS SHOWN ON PLANS ARE APPROXIMATE.
- CONSTRUCT DRIVEWAY PER C.O.S. STD DTL 2257-CH1 OR CH2, PER PLAN.
- CONSTRUCT VERTICAL CURB AND GUTTER PER MAG STD DTL 220 TYPE "A".
- SITE VISIBILITY TRIANGLES PER DS&PM FIG. 3.1-13 AND 3.1-14 REQUIREMENTS.
- CONSTRUCT MEDIAN PER THIS PLAN AND C.O.S. STD DTL 2225 AND 2226 TYPE A.
- NOT USED.
- ADJUST EXISTING RIM ELEVATION TO FINISHED GRADE PER C.O.S. STD DTL 2270.
- CONSTRUCT SIDEWALK ACCESS RAMP PER MAG STD DTL 232, TYPE "B". RADIUS PER PLAN.
- CONSTRUCT 6" VALLEY GUTTER AND APRONS PER C.O.S. STD DTL 2240.
- USE CAUTION IN THIS AREA WHERE BURIED UTILITY LINES EXIST. MAINTAIN MIN. VERTICAL CLEARANCE, PER C.O.S. DTL 2372.
- CONSTRUCT TURN LANE (AUX. LANE) PER PLAN AND C.O.S. DS&PM FIG. 3.1-15.
- SEE UTILITY PLANS FOR CONSTRUCTION DETAILS.
- CONSTRUCT ROADWAY PAVEMENT SECTION 5.5" AC MIN. ON 20" ABC PER MAG SPEC 301-1, RECOMMENDATION BY GEOTECH REPORT.
- RELOCATE EXISTING UTILITY. COORDINATE WITH UTILITY PROVIDER.
- NOT USED.
- MEDIAN PAVING PER C.O.S. STD DTL 2225.
- CONSTRUCT CONCRETE SIDEWALK WITH THICKNESS & SPECIFICATION PER MAG STD. DTL 230, & C.O.S. SPEC. 340, WIDTH PER PLAN.
- CONSTRUCT VERTICAL CURB & GUTTER PER C.O.S. STD. DTL 2220 TYPE A.

STRIPING NOTES

- 8" SOLID WHITE LINE WITH TYPE "G" RPW'S @ 20' SPACING. SEE STRIPING DETAIL ON SHEET C10.
- PREFORMED WHITE THERMOPLASTIC TRAFFIC ARROW PER M.U.T.C.D. STANDARD SPEC'S.
- PREFORMED WHITE THERMOPLASTIC LETTERING PER M.U.T.C.D. STANDARD SPEC'S.
- INSTALL R3-5(R) TURN ONLY SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- INSTALL R4-7 SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- INSTALL OH-3L SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- INSTALL R3-5(L) TURN ONLY SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- EXISTING STRIPING TO REMAIN.
- INSTALL R1-1 STOP SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.

CURVE DATA

CURVE	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA	CURVE	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA
BC1	300'B/C	27.97'	14.00'	5'20'32"	BC10	4.00'B/C	3.14'	1.66'	44'59'24"
BC2	300'B/C	27.97'	14.00'	5'20'32"	BC11	4.00'B/C	3.14'	1.66'	44'59'24"
BC3	300'B/C	30.27'	15.15'	5'46'51"	BC12	2.00'B/C	6.28'	-	180'00'00"
BC4	300'B/C	30.27'	15.15'	5'46'51"	BC13	0.50'B/C	1.41'	3.10'	161'39'01"
BC5	0.50'B/C	1.41'	3.10'	161'39'01"	BC14	59.50'B/C	19.06'	9.61'	18'20'59"
BC6	59.50'B/C	19.06'	9.61'	18'20'59"	BC15	25.00'B/C	39.27'	25.00'	90'00'00"
BC7	2.00'B/C	6.28'	-	180'00'00"	BC16	15.00'B/C	23.56'	15.00'	90'00'00"
BC8	4.00'B/C	3.14'	1.66'	44'59'24"					
BC9	4.00'B/C	3.14'	1.66'	44'59'24"					



HUNTER ENGINEERING
9233 N. HAYDEN RD. SUITE 275
SCOTTSDALE, AZ 85268
T 480 991 3985
F 480 991 3986

OFFSITE IMPROVEMENTS SHEA BLVD
STA 11+81 TO STA 16+00
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

THESE PLANS ARE NOT APPROVED FOR CONSTRUCTION WITHOUT AN APPROVED SIGNATURE FROM THE GOVERNING MUNICIPALITY.

HE JOB NO.: WSTR001

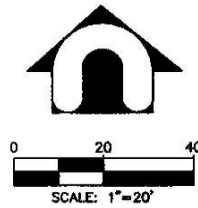
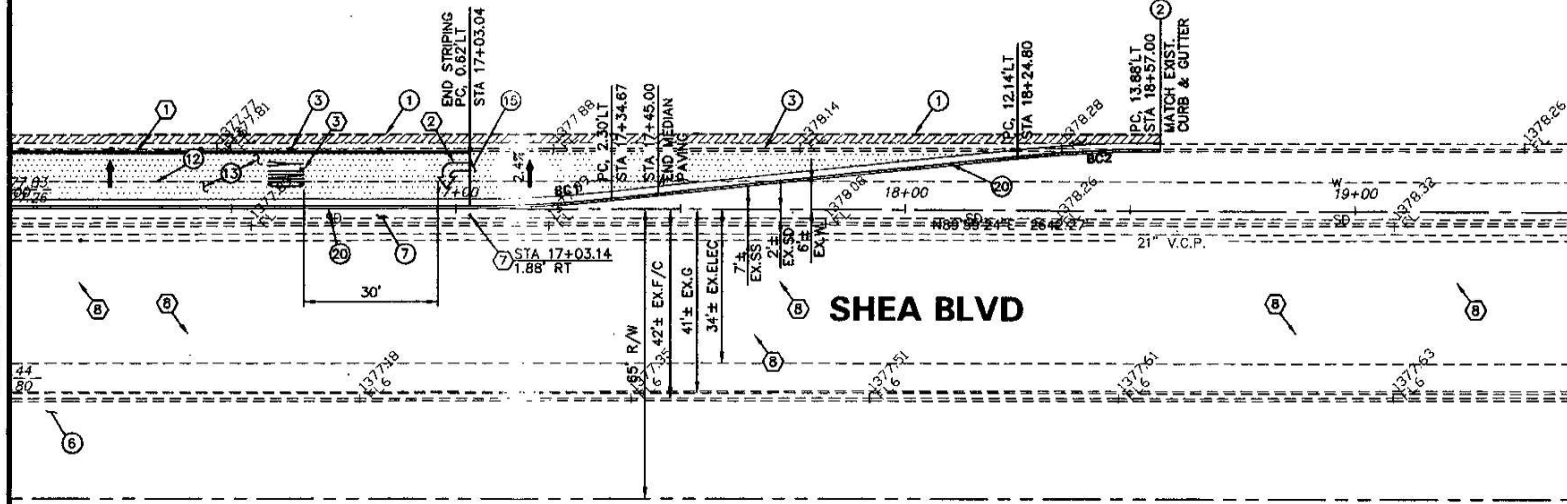
SCALE: 1"=20'

SHEET: C9 OF 14

PLAN CHECK NO. 305-05 CASE NO. 8-DR-2004 NATIVE PLANT #6-NP-2004

PURPOSE: SIGNATURE SUBMITTAL 6/2/05

MATCHLINE SEE SHEET C9
STA 16+00



CURVE DATA

CURVE	RADIUS (FT)	LENGTH (FT)	TANGENT (FT)	DELTA
BC1	300'B/C	31.74'	15.88'	6'03'42"
BC2	300'B/C	31.74'	15.88'	6'03'42"

PLAN

HORIZONTAL SCALE: 1"=20'

GENERAL NOTES

SEE SHEET C1

LEGEND

SEE SHEET C1

SIGN CODE:

R3-5-L ONLY,
30" X 36"



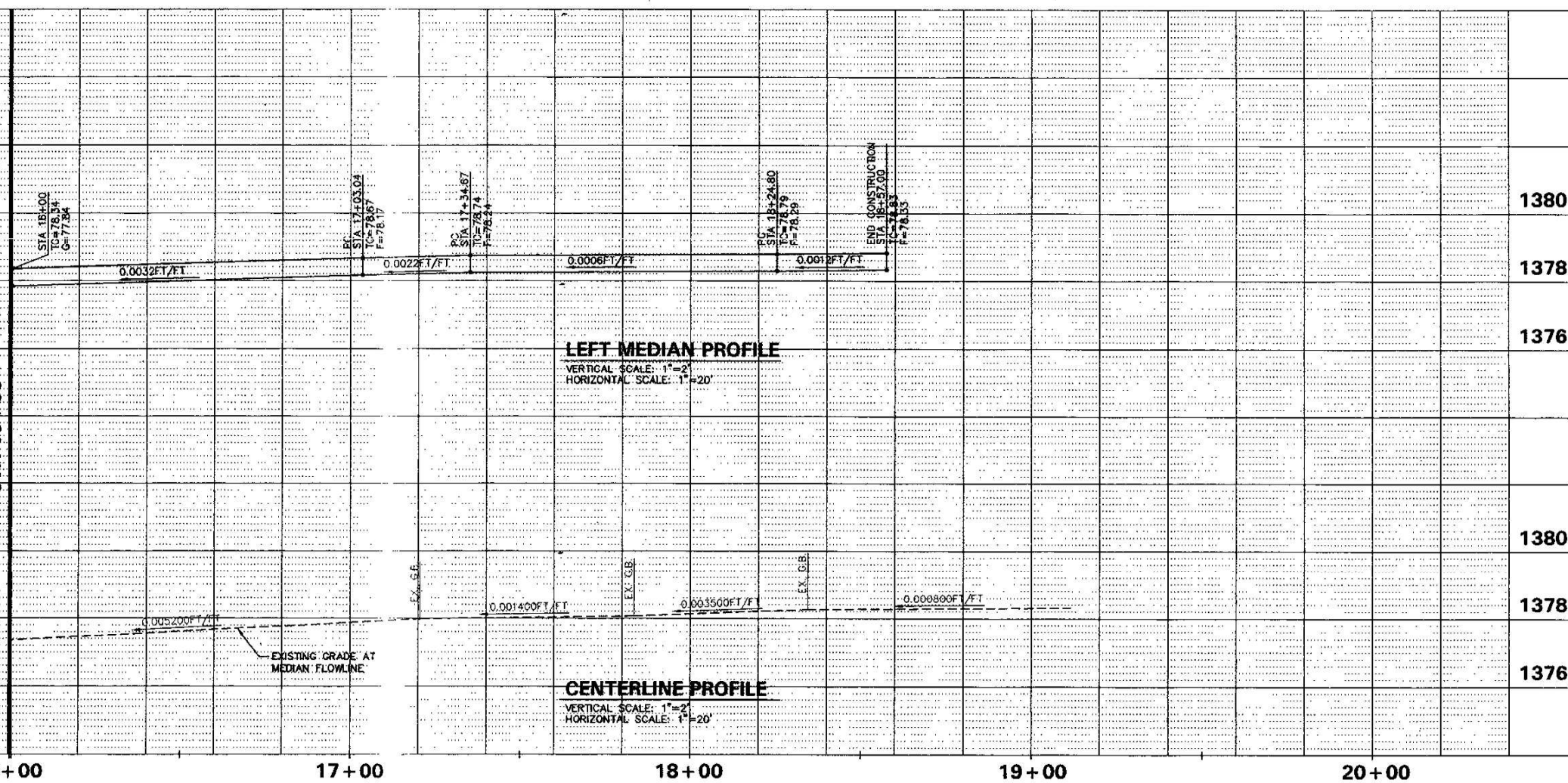
CONSTRUCTION NOTES

- 1 SAWCUT, REMOVE AND REPLACE EXISTING AC PAVEMENT PER PLAN. DISPOSE OF PER LOCAL CODES. REPLACE AC PAVEMENT PER MAC SPEC. 321 AND 336, 340 AND C.O.S. STD DTL 2200 OR REPLACE IN KIND, WHICHEVER IS GREATER. SAWCUT LIMITS ARE SHOWN APPROXIMATE ON PLANS.
- 2 CONTRACTOR TO VERIFY ELEVATION OF EXISTING CURB, SIDEWALK AND AC PAVT TIE-IN LOCATIONS AND MATCH EXISTING. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- 3 SAWCUT AND REMOVE CONCRETE SIDEWALK, AC PAVT, OR CURBING PER PLAN. DISPOSE OF PER LOCAL CODES. SAWCUT LIMITS SHOWN ON PLANS ARE APPROXIMATE.
- 4 CONSTRUCT DRIVEWAY PER C.O.S. STD DTL 2257-CH1 OR CH2, PER PLAN.
- 5 CONSTRUCT VERTICAL CURB AND GUTTER PER MAG STD DTL 220 TYPE "A".
- 6 SITE VISIBILITY TRIANGLES PER DS&PM FIG. 3.1-13 AND 3.1-14 REQUIREMENTS.
- 7 CONSTRUCT MEDIAN PER THIS PLAN AND C.O.S. STD DTL 2225 AND 2226 TYPE A.
- 8 NOT USED.
- 9 ADJUST EXISTING RIM ELEVATION TO FINISHED GRADE PER C.O.S. STD DTL 2270.
- 10 CONSTRUCT SIDEWALK ACCESS RAMP PER MAG STD DTL 232, TYPE "B". RADIUS PER PLAN.
- 11 CONSTRUCT 6" VALLEY GUTTER AND APRONS PER C.O.S. STD DTL 2240.
- 12 USE CAUTION IN THIS AREA WHERE BURIED UTILITY LINES EXIST. MAINTAIN MIN. VERTICAL CLEARANCE, PER C.O.S. DTL 2372.
- 13 CONSTRUCT TURN LANE (AUX. LANE) PER PLAN AND C.O.S. DS&PM FIG. 3.1-15.
- 14 SEE UTILITY PLANS FOR CONSTRUCTION DETAILS.
- 15 CONSTRUCT ROADWAY PAVEMENT SECTION 5.5" AC MIN. ON 20" ABC PER MAG SPEC 301-1, RECOMMENDATION BY GEOTECH REPORT.
- 16 RELOCATE EXISTING UTILITY. COORDINATE WITH UTILITY PROVIDER.
- 17 NOT USED.
- 18 MEDIAN PAVING PER C.O.S. STD DTL 2225.
- 19 CONSTRUCT CONCRETE SIDEWALK WITH THICKNESS & SPECIFICATION PER MAG STD. DTL 230, & C.O.S. SPEC. 340. WIDTH PER PLAN.
- 20 CONSTRUCT VERTICAL CURB & GUTTER PER C.O.S. STD. DTL 2220 TYPE A.

STRIPING NOTES

- 1 8" SOLID WHITE LINE WITH TYPE "G" RPM'S @ 20' SPACING. SEE STRIPING DETAIL ON SHEET C10.
- 2 PREFORMED WHITE THERMOPLASTIC TRAFFIC ARROW PER M.U.T.C.D. STANDARD SPEC'S.
- 3 PREFORMED WHITE THERMOPLASTIC LETTERING PER H.U.T.C.D. STANDARD SPEC'S.
- 4 INSTALL R3-5(R) TURN ONLY SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- 5 INSTALL R4-7 SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- 6 INSTALL OH-3L SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- 7 INSTALL R3-5(L) TURN ONLY SIGN PER M.U.T.C.D. STANDARD SPEC'S. POST INSTALLATION PER C.O.S. STD DTL 2131.
- 8 EXISTING STRIPING TO REMAIN.

MATCHLINE SEE SHEET C9
STA 16+00



OFFSITE IMPROVEMENTS SHEA BLVD
STA 16+00 TO STA 19+00
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

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FROM THE GOVERNING
MUNICIPALITY.

HE JOB NO.:
WSTR001

SCALE
1"=20'

SHEET
C10 OF 14

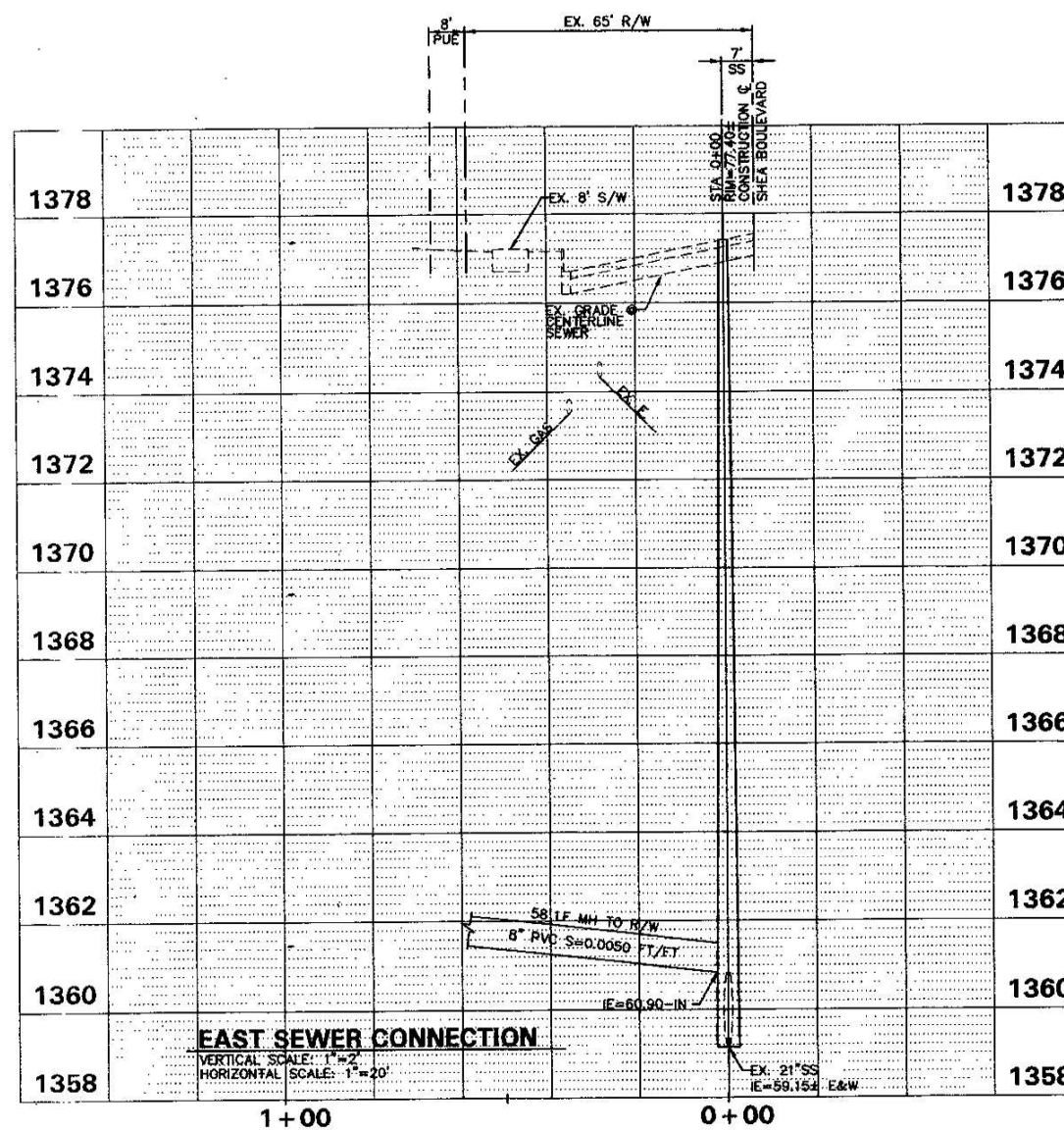
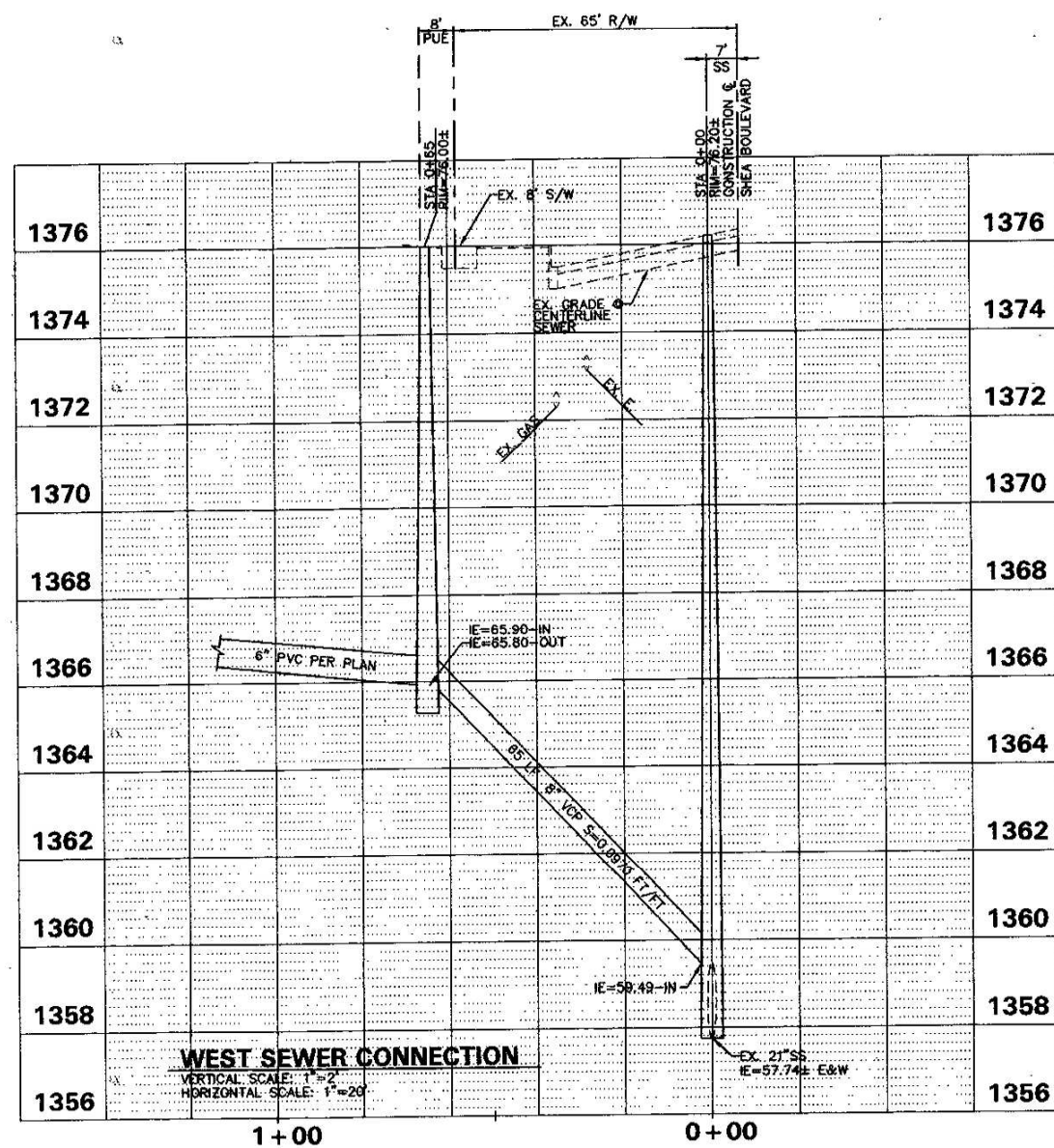
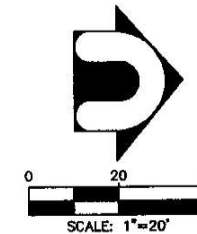
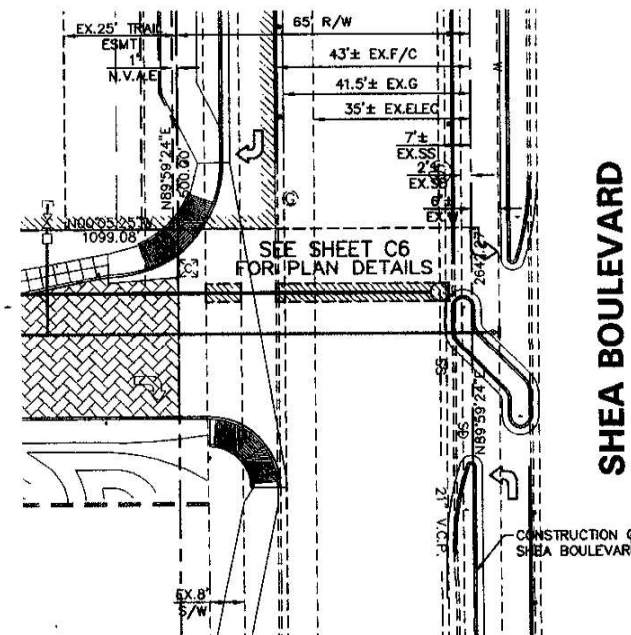
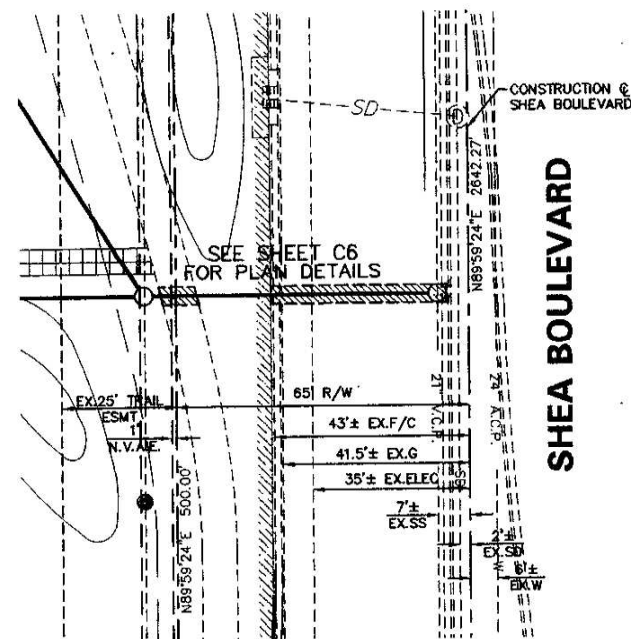
NO.	DATE	REVISION	BY

DESIGN BY: RR
DRAWN BY: SAR
CHECKED BY: JMH

HUNTER
ENGINEERING
6283 N. HAYDEN RD., SUITE 275
SCOTTSDALE, AZ 85258
T 480 991 3986
F 480 991 3986



PLAN CHECK NO. 305-05 CASE NO. 8-DR-2004 NATIVE PLANT#6-NP-2004



GENERAL NOTES

SEE SHEET C1.0

LEGEND

SEE SHEET C1.0

PLAN

HORIZONTAL SCALE: 1"=20'

AS-BUILT CERTIFICATION

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

REGISTERED ENGINEER

DATE

REGISTRATION NUMBER

PUBLIC SEWER LINE PLAN
SHEA BOULEVARD
94 HUNDRED SHEA
9325, 9343, 9375, 9397 E. SHEA BLVD
SCOTTSDALE, ARIZONA

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HE JOB NO.:
WSTR001

SCALE
1"=20'

SHEET
C11 of 14

HUNTER
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8223 N. HAYDEN RD. SUITE 275
SCOTTSDALE, AZ 85258
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F 480 991 3086



NO.	DATE	REVISION	BY

PURPOSE:
SIGNATURE SUBMITTAL 6-2-05

DESIGN BY: RR
DRAWN BY: SAR
CHECKED BY: JMH

PLAN CHECK NO. 305-05 CASE NO. 8-DR-2004 NATIVE PLANT #6-NP-2004