

Drainage Reports
Abbreviated Water & Sewer Need Reports
Water Study
Wastewater Study
Stormwater Waiver Application



**City of Scottsdale
Stormwater Management**

Drainage Review Memorandum

From: Nerijus Baronas, P.E., CFM
Senior Stormwater Engineer
City of Scottsdale
480-312-7072
nbaronas@scottsdaleaz.gov

Re: Ben Funke Mixed Use Project
Case number: 27-DR-2017

Review comments for drainage letter prepared by Cypress. It should be noted that first submittal did not contain Drainage Report or Grading and Drainage plan. Our review was limited to Drainage Statement submitted on July 10th, 2017. Our review comments are as follows:

1. In general, preliminary drainage reports/memorandums and related information submitted in support of preliminary plat and development review applications should include a 90% level of design and analysis to allow an accurate analysis of the viability of the proposed project and an in-depth evaluation of the function and design of the stormwater management system by City staff. A number of our comments contained below relate to meeting this requirement and our ability to understand and evaluate the proposed stormwater management system.
2. ~~Missing Grading and Drainage plan.~~ N/A DFL NB 8-11-17
3. Please submit drainage report with hydrologic analysis of pre and post development flows.
4. Submit first flush analysis and depict associated retention volume on the grading and drainage plan. Drainage statement submitted for the first review did not contain first flush analysis or discussion.
5. Review and evaluate LIBW ADMS/P FLO-2D results and any potential impacts to subject site.



Resubmittal Checklist

Please briefly respond to the above comments (or check it with marker) and include the response in the re-submittal. Please also see comments in preliminary drainage report.

- 1 Copies of Drainage Report
- 1 CD with pdf files of drainage report and all supporting hydrologic and hydraulic digital files.

DRAINAGE STATEMENT FOR BEN FUNKE MIXED USE

Scottsdale, Arizona

10 June 2017

• ~~SUBMIT G&D PLAN~~

• PROVIDE FIRST FLUSH

• IDENTIFY PRE AND POST DEVELOPMENT FLOWS
AND SUBMIT ALL SUPPORTING DOCUMENTATION.

• REVIEW AND DISCUSS LIBW ADMS/P F10-20 RESULTS.

PREPARED FOR

Rob Paulus Architects Ltd

990 East 17th Street, Suite 100

Tucson, Arizona 85719

OWNER

Funke Town LLC

7414 East Camelback Road, Suite 103

Phoenix, Arizona 85251

SITE ADDRESS

7033 East Indian School Road

Scottsdale, Arizona 85251

Stormwater Review By:

Nerijus Baronas, P.E., CFM

Phone: 480-312-7072

Fax: 480-312-9187

e-mail: nbaronas@ScottsdaleAZ.gov

Review Cycle 1 Date 7-31-17

SUBMIT GRADING AND DRAINAGE
PLAN. SEE REVIEW MEMORANDUM.

PREPARED BY

CYPRESS
CIVIL DEVELOPMENT
strength + sustainability

4450 north 12th street, #228

phoenix, arizona 85014

CYPRESS # 16.080



27-DR-2017
7/10/2017

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I. INTRODUCTION

1. PROJECT NAME AND LOCATION

The Project is known as 'Ben Funke Mixed Use' and is located at 7033 East Indian School Road in Scottsdale, Arizona.

The Project site occupies approximately 1.86 acres and is currently vacant. The Project is polygonal in shape with four distinct sides and access to Marshall Way along its eastern boundary and 1st Avenue along its southern boundary. To the north is Indian School Road with no access; to the west and a portion of the south of the site is existing commercial development (see Appendix A for Location Map and Aerial Photo). The project lies within an area that historically has been natural desert but has been commercially developed since the 1950's. The area slopes consistently and gently to the east and southeast with average slopes of approximately of 0.5%-1.0%.

Proposed construction associated with this Project consists of a new mixed use commercial and residential development that will preserve the historic drainage patterns or existing hydraulics.

2. PURPOSE

The intent of this Drainage Statement is to provide insight to the existing drainage scheme for the Project in support of the Development Review Board submittal. The statement is written in conformance with the City of Scottsdale drainage statement guidelines, Maricopa Association of Governments (MAG) Standards, and Flood Control District of Maricopa County (FCDMC) Drainage Design Manuals.

3. FEMA FLOOD ZONE

According to the Federal Emergency Management Agency Flood Insurance Rate Map Panel Number 04013C2235L, dated October 16, 2013 the western portion of the Project is located in the Zone X (Shaded) area, which is defined as 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. The remaining area of the Project is located in Zone X (Unshaded) area, which is defined as areas of 0.1% annual chance flood (see Appendix B for FEMA FIRM Map).

II. HYDROLOGY

1. OFFSITE HYDROLOGY

According to the existing topography and field observations, the Project is not impacted by offsite flows. Runoff generated by the commercial development west of the Project is conveyed to Indian School Road, north of the Project. Similarly, runoff

generated by the commercial development to the south is conveyed to 1st Avenue, south of the Project. Runoff generated by Marshall Way right-of-way is conveyed south within the roadway toward 1st Avenue at the southeast corner of the site. The runoff continues south within the Marshall Way right-of-way and away from the site toward 2nd Street where there is evidence of existing public storm drain.

2. ONSITE HYDROLOGY

The runoff generated by the onsite portions of the Project is conveyed to two primary locations. Runoff generated by the parking area north of the existing alley is conveyed south to the existing alley and ultimately to the east, and discharged to Marshall Way. The development has accounted for the flow and allows discharge at the existing driveway.

The second Project outfall location is located at the south side of the southern parking lot. Runoff generated by the southern parking area is conveyed as shallow sheet flow to an existing curb cut driveway along the 1st Avenue right-of-way. From here, runoff flows east in the 1st Avenue right-of-way and ultimately outfalls to Marshall Way at the southeast corner of the Project.

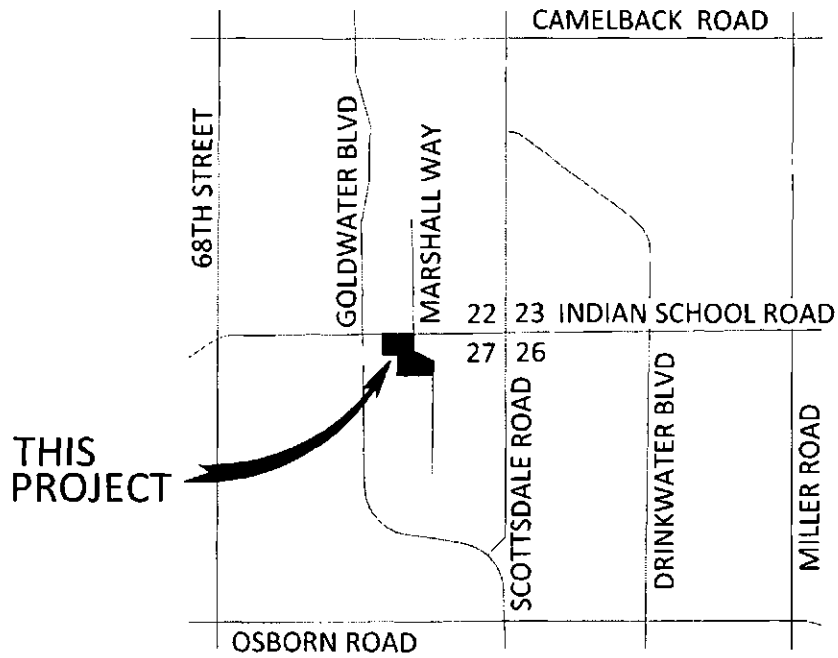
3. RETENTION *PROVIDE FIRST FLUSH*

Per City of Scottsdale Code, the Project is required to provide pre vs post retention for the 100-yr, 2-hr storm event. Based on historic aerial photos, the project has been commercially developed with retail buildings and paved parking lots from the 1950's until recently. The aerial photos indicate that the parcels were historically fully impervious and the project meets or reduces the historic impervious area. Based on these facts, the project is not required to retain any runoff.

III. SUMMARY AND CONCLUSION

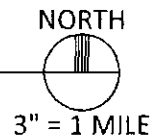
This Drainage Statement is to accompany the Development Review Board submittal for 'Ben Funke Mixed Use'. This Statement was written utilizing generally accepted engineering practices and all information herein has been researched through archived documents and all calculations were accomplished through applying the City of Scottsdale Engineering Standards and the Hydrology/Hydraulic Manual published by the Maricopa County Flood Control District.

APPENDIX A
(Location Map + Aerial Photo)



IN THE NE 1/4 OF THE NE 1/4 OF SECTION 27,
T. 2 N., R. 4 E., G.&S.R.M., CITY OF SCOTTSDALE,
MARICOPA COUNTY, ARIZONA

LOCATION MAP

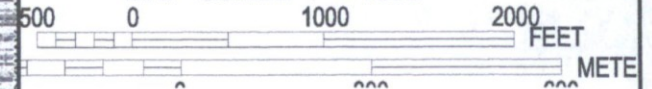




APPENDIX B
(FEMA FIRM Map)



MAP SCALE 1" = 1000'



NFIP

PANEL 2235L

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP
MARICOPA COUNTY,
ARIZONA
AND INCORPORATED AREAS

PANEL 2235 OF 4425

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MARICOPA COUNTY	040037	2235	L
MESA, CITY OF	040046	2235	L
SCOTTSDALE, CITY OF	045012	2235	L
TEMPE, CITY OF	040054	2235	L

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
04013C2235L

MAP REVISED
OCTOBER 16, 2013

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



PRELIMINARY IMPROVEMENT PLANS
for BEN FUNKE MIXED USE
SCOTTSDALE, ARIZONA
PORTION OF NORTHEAST QUARTER OF SECTION 27, TOWNSHIP 2 NORTH, RANGE 4 EAST
OF THE GILA AND SALT RIVER MERIDIAN MARICOPA COUNTY, ARIZONA

CITY OF SCOTTSDALE - GENERAL NOTES

- 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 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.
- 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.
- 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.
- A PUBLIC WORKS INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF SCOTTSDALE RIGHTS-OF-WAY AND IN EASEMENTS. NOTIFY INSPECTION SERVICES WITHIN 24 HOURS PRIOR TO BEGINNING CONSTRUCTION BY CALLING (480) 312-5750.
- 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.
- 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.
- ALL EXCAVATION AND GRADING THAT IS NOT IN THE PUBLIC RIGHT-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 THE UNIFORM BUILDING CODE.

PROJECT INFORMATION

SCOPE
THE PROJECT SHALL BE A MIXED USE DEVELOPMENT CONSISTING OF 3 NEW BUILDINGS WITH PRIMARILY GROUND FLOOR COMMERCIAL SPACES AND UPPER STORY RESIDENTIAL USES. THE PROJECT WILL INCLUDE THE ACCESS, UTILITY AND LANDSCAPE INFRASTRUCTURE REQUIRED TO SUPPORT NEW CONSTRUCTION.

ADDRESS
7033 INDIAN SCHOOL ROAD
SCOTTSDALE, ARIZONA 85251

APN
130-12-031B
130-12-032B
130-12-033B
130-12-045
130-12-046B
130-12-047A

GROSS LOT AREA
NORTH PARCEL: 48,787 SF (1.12 AC)
SOUTH PARCEL: 36,590 SF (0.84 AC)
TOTAL PROJECT: 85,377 SF (1.96 AC)

LEGAL DESCRIPTION

THAT PORTION OF THE NE 1/4 QUARTER OF THE NE 1/4 OF SECTION 27, TOWNSHIP 2 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THAT PART OF LOTS 4, 5, 6, 7, 8, 9, 10, 20, 21, AND 22 BLOCK 2, SCOTTSDALE, A SUBDIVISION OF RECORD IN THE OFFICE OF THE MARICOPA COUNTY RECORDER, IN BOOK 6 OF MAPS, PAGE 26.

SURVEY NOTES

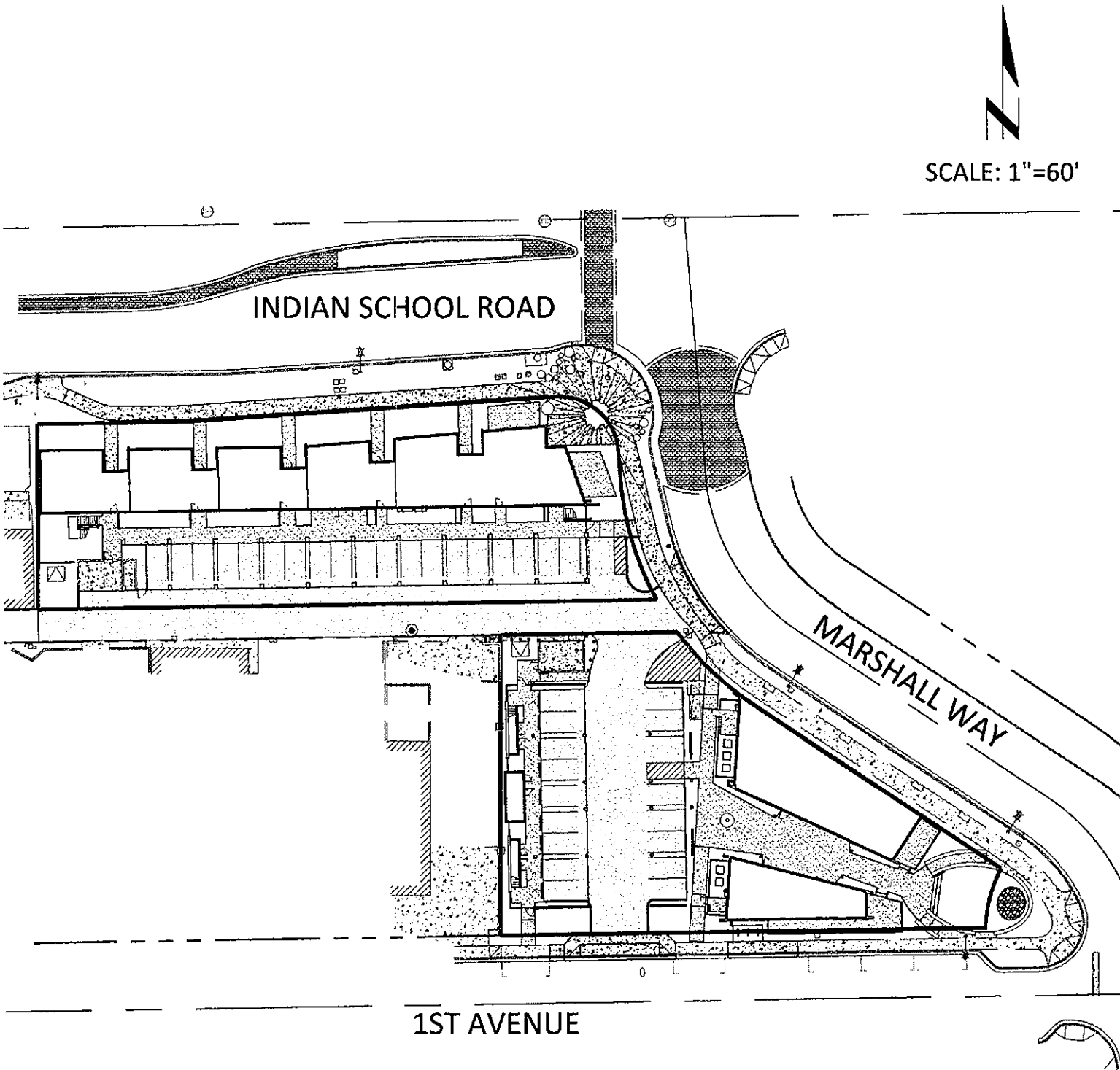
- THE SURVEY FOR THIS PROJECT WAS PERFORMED BY:
LAND SURVEY SERVICES PLC
3160 N. 302ND LANE
BUCKEYE, ARIZONA 85396-3196
PH: 602-703-7010
CONTACT: THOMAS L. ROPE, R.L.S.
- THE BASIS OF BEARINGS FOR THIS PROJECT IS THE CENTERLINE OF 1ST AVENUE BASED ON SURVEY PREPARED BY LAND SERVICES PLC, JOB NO. 10012, DATED MAR 2015 AND REVISED 08/22/16. SAID BEARING S89°07'40"W.
- THE BASIS OF ELEVATION FOR THIS PROJECT IS THE BRASS CAP IN HANDHOLE AT THE INTERSECTION OF INDIAN SCHOOL ROAD AND SCOTTSDALE ROAD, HAVING AN ELEVATION OF 1260.336 (CITY OF SCOTTSDALE, GPS PT. #4272 - NAVD 88 DATUM).

FLOODPLAIN INFORMATION

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP PANEL NUMBER 04013C235L, DATED OCTOBER 16, 2013 THE PARCEL IS LOCATED IN THE ZONE X AREA, WHICH IS DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

DRAINAGE STATEMENT

ACCORDING TO CITY OF SCOTTSDALE CODE, THE PROJECT IS REQUIRED TO PROVIDE PRE VS POST RETENTION FOR THE 100-YR, 2-HR STORM EVENT. BASED ON HISTORIC AERIAL PHOTOS, THE PROJECT HAS BEEN COMMERCIALY DEVELOPED WITH RETAIL BUILDINGS AND PAVED PARKING LOTS FROM THE 1950'S UNTIL RECENTLY. THE PHOTOS SHOW THAT THE PARCELS WERE HISTORICALLY FULLY IMPERVIOUS AND THE PROPOSED PROJECT MEETS OR REDUCES THE HISTORIC IMPERVIOUS AREA. BASED ON THESE FACTS, THE PROJECT IS NOT REQUIRED TO RETAIN ANY RUNOFF.



SCALE: 1"=60'

LEGEND

---	RIGHT-OF-WAY	☑	EXISTING TRANSFORMER
---	PROJECT BOUNDARY LINE	△	EXISTING SIGN
---	OTHER PARCEL LINE	⚡	EXISTING STREET LIGHT
---	ROADWAY CENTERLINE	⊙	EXISTING ELECTRIC MANHOLE
---	SECTION LINE	⊞	EXISTING ELECTRICAL EQUIPMENT
---	FLOW-LINE	⊞	EXISTING TELEPHONE PEDESTAL
---	EXISTING EASEMENT	⊞	EXISTING TRAFFIC LIGHT PULL BOX
---	EXISTING CONTOUR	⊞	EXISTING TRAFFIC CONTROL BOX
2.321	SPOT ELEV. (EXIST. GRADE)	⊞	EXISTING UTILITY POLE
S-S	EXISTING SEWER MAIN	⊞	NEW SEWER CLEANOUT
W-W	EXISTING WATER MAIN	⊞	NEW WATER VALVE
G-G	EXISTING GAS LINE	⊞	NEW WATER METER
---	EXISTING CURB	⊞	NEW BACKFLOW PREVENTER
---	EXISTING PAINT STRIPE	⊞	NEW FIRE HYDRANT
---	EXISTING PAVEMENT EDGE	⊞	NEW FIRE CONNECTION
---	EXISTING CONCRETE	☑	NEW TRANSFORMER
---	EXISTING FENCE	○	SURVEY MONUMENT AS NOTED
---	EXISTING CHAINLINK FENCE	R	RADIUS
---	EXISTING RAILING	P	PAVEMENT (ASPHALT)
---	EXISTING WALL	C	CONCRETE
---	EXISTING UNDERGROUND ELECTRIC	TC	TOP OF CURB
---	EXISTING COMMUNICATION LINE	FG	FINISHED GRADE
---	EXISTING OVERHEAD COMMUNICATION	LP	LOW POINT
---	EXISTING OVERHEAD ELECTRIC	HP	HIGH POINT
---	EXISTING CABLE TELEVISION LINE	GB	GRADE BREAK
T-T	EXISTING TELEPHONE LINE	FFE	FINISHED FLOOR ELEVATION
99.999	SPOT ELEV. (NEW GRADE)	R:	RIM
S-S	NEW SEWER MAIN	I:	INVERT
W-W	NEW WATER MAIN		
F-F	NEW FIRE SERVICE		
---	NEW CURB		
---	NEW PAINT STRIPE		
---	NEW ASPHALT		
---	NEW CONCRETE		
⊙	EXISTING SEWER MANHOLE		
⊞	EXISTING WATER MANHOLE		
⊞	EXISTING WATER VALVE		
⊞	EXISTING WATER METER		
⊞	EXISTING FIRE HYDRANT		
⊞	EXISTING FIRE CONNECTION		
⊞	EXISTING AIR RELEASE VALVE		
⊞	EXISTING IRRIGATION VALVE		
⊞	EXISTING STORM DRAIN MANHOLE		

OWNER/DEVELOPER

FUNKE TOWN LLC
7414 EAST CAMELBACK ROAD, SUITE 103
PHOENIX, ARIZONA 85251
PH: (415) 200-9991
ATTN: BEN FUNKE

CIVIL ENGINEER

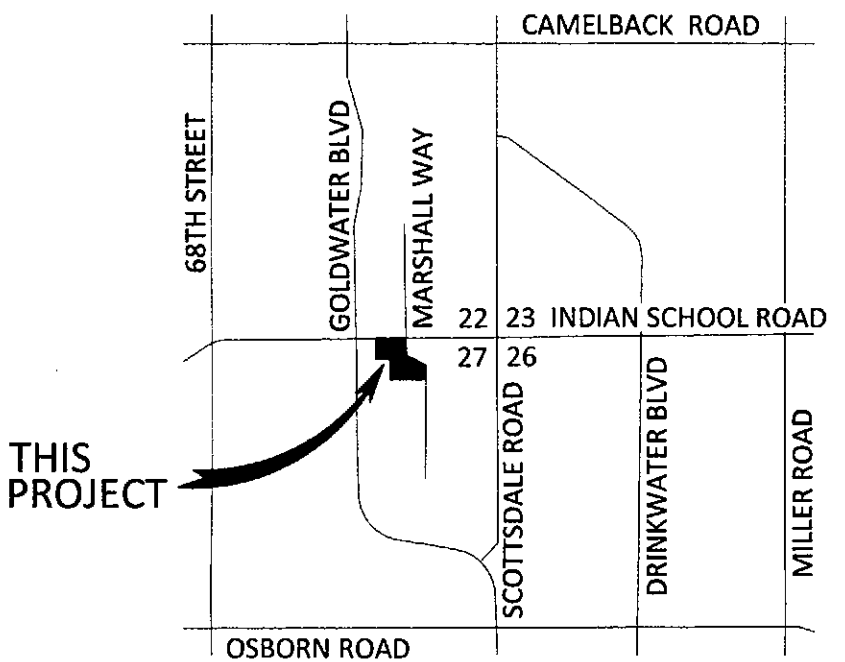
CYPRESS CIVIL DEVELOPMENT
4450 NORTH 12TH STREET, #228
PHOENIX, ARIZONA 85014
PH: 623-282-2498
ATTN: DERICK SCHUMACHER

ARCHITECT

ROB PAULUS ARCHITECTS LTD
990 E. 17TH STREET, SUITE 100
TUCSON, ARIZONA 85719
PH: 520-624-9805
ATTN: ROB PAULUS

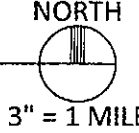
SHEET INDEX

- COVER SHEET
- GRADING AND DRAINAGE
- UTILITY PLAN



IN THE NE 1/4 OF THE NE 1/4 OF SECTION 27,
T. 2 N., R. 4 E., G.&S.R.M., CITY OF SCOTTSDALE,
MARICOPA COUNTY, ARIZONA

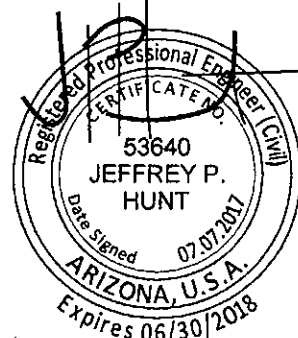
LOCATION MAP



CYPRESS
CIVIL DEVELOPMENT
Strength + Sustainability

4450 north 12th street, #228
phoenix, arizona 85014
p: 623.282.2498
e: jphunt@cypresscivil.com

CYPRESS PROJECT NO: 16.080



NO.	DATE	REVISION

PRELIMINARY IMPROVEMENT PLANS
FOR BEN FUNKE MIXED USE
SCOTTSDALE, ARIZONA

cover

DEVELOPER

FUNKE TOWN LLC
7414 E. CAMELBACK ROAD, SUITE 103
PHOENIX, ARIZONA 85251
ATTN: BEN FUNKE
PH: (415) 200-9991

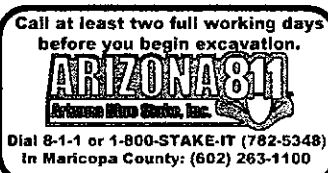
SITE ADDRESS

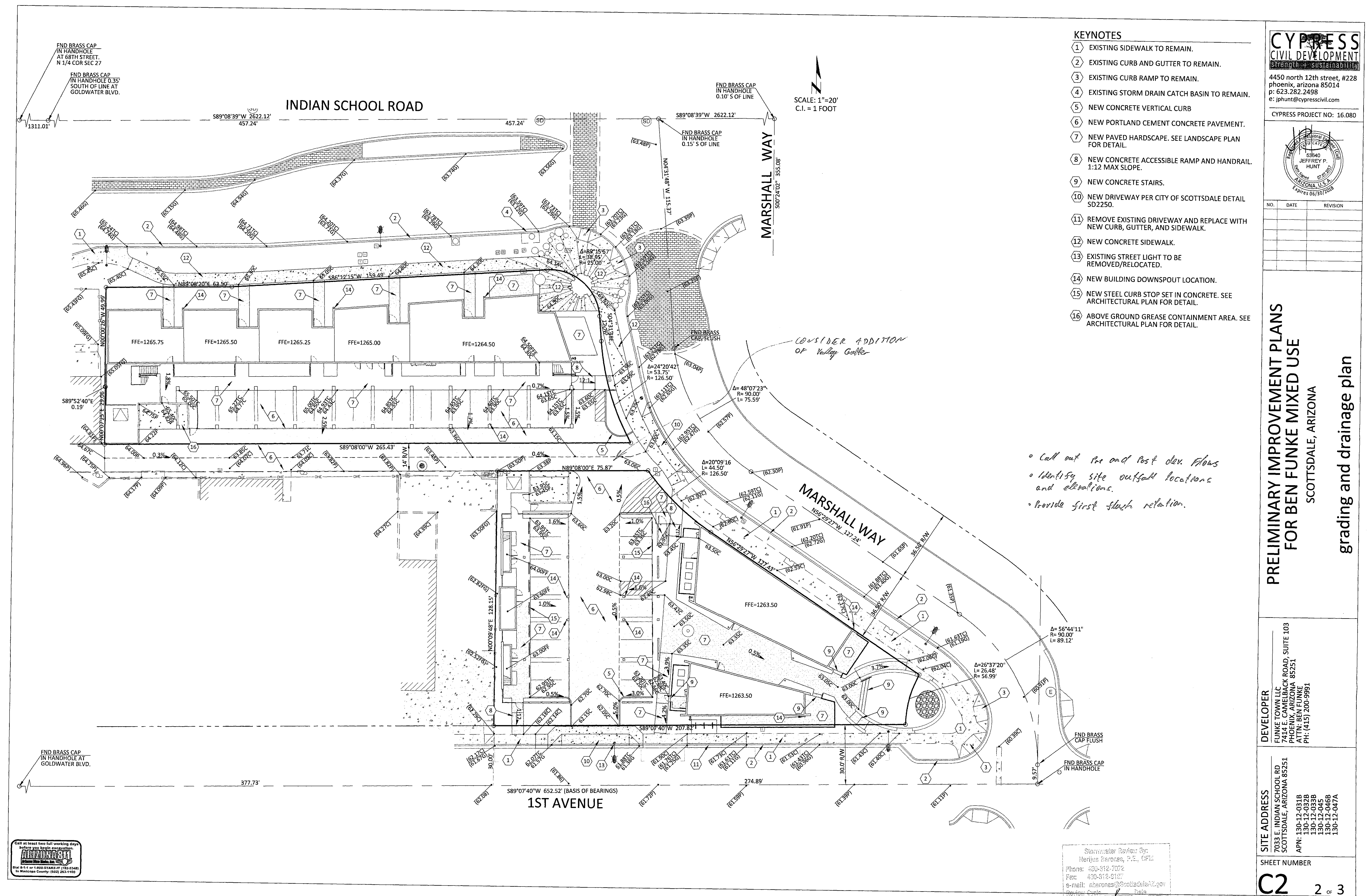
7033 E. INDIAN SCHOOL RD
SCOTTSDALE, ARIZONA 85251

APN: 130-12-031B
130-12-032B
130-12-033B
130-12-045
130-12-046B
130-12-047A

SHEET NUMBER

C1 1 OF 3





- KEYNOTES**
- EXISTING SIDEWALK TO REMAIN.
 - EXISTING CURB AND GUTTER TO REMAIN.
 - EXISTING CURB RAMP TO REMAIN.
 - EXISTING STORM DRAIN CATCH BASIN TO REMAIN.
 - NEW CONCRETE VERTICAL CURB
 - NEW PORTLAND CEMENT CONCRETE PAVEMENT.
 - NEW PAVED HARDSCAPE. SEE LANDSCAPE PLAN FOR DETAIL.
 - NEW CONCRETE ACCESSIBLE RAMP AND HANDRAIL. 1:12 MAX SLOPE.
 - NEW CONCRETE STAIRS.
 - NEW DRIVEWAY PER CITY OF SCOTTSDALE DETAIL SD2250.
 - REMOVE EXISTING DRIVEWAY AND REPLACE WITH NEW CURB, GUTTER, AND SIDEWALK.
 - NEW CONCRETE SIDEWALK.
 - EXISTING STREET LIGHT TO BE REMOVED/RELOCATED.
 - NEW BUILDING DOWNSPOUT LOCATION.
 - NEW STEEL CURB STOP SET IN CONCRETE. SEE ARCHITECTURAL PLAN FOR DETAIL.
 - ABOVE GROUND GREASE CONTAINMENT AREA. SEE ARCHITECTURAL PLAN FOR DETAIL.

• Call out Pre and Post elev. Flows
• Identify site outfall locations and elevations.
• Provide first flush retention.

CYPRESS CIVIL DEVELOPMENT
strength + sustainability

4450 north 12th street, #228
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e: jphunt@cypresscivil.com

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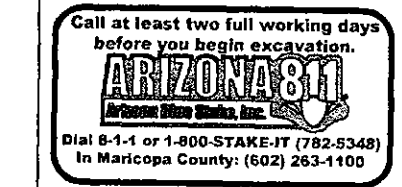
**PRELIMINARY IMPROVEMENT PLANS
FOR BEN FUNKE MIXED USE**
SCOTTSDALE, ARIZONA

grading and drainage plan

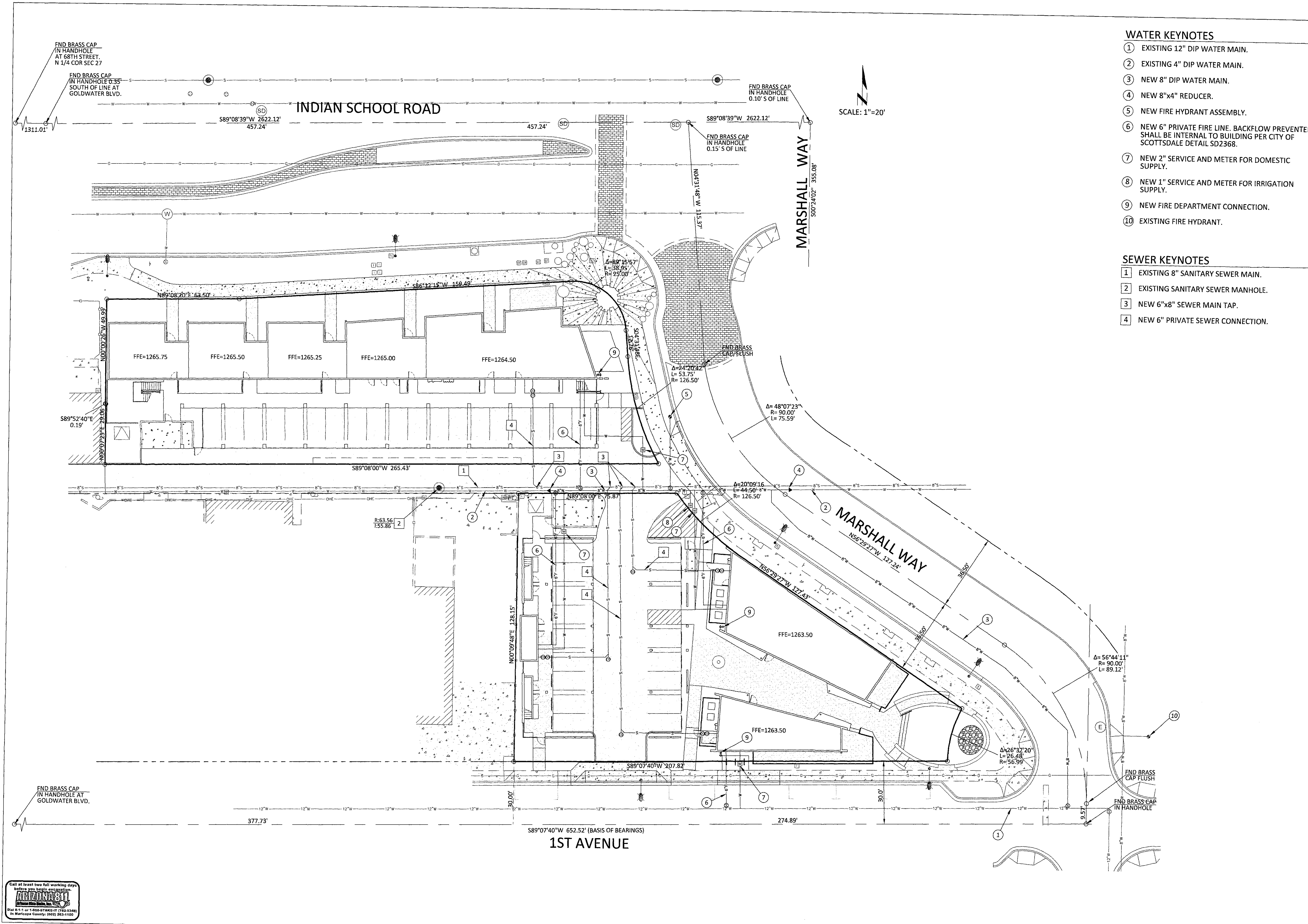
DEVELOPER
FUNKE TOWN LLC
7414 E. CAMELBACK ROAD, SUITE 103
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ATTN: BEN FUNKE
PH: (415) 200-9991

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APN: 130-12-031B
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130-12-045
130-12-046B
130-12-047A

SHEET NUMBER
C2 2 of 3



Stormwater Review By:
Nerijus Baronas, P.E., CEM
Phone: 480-312-7072
Fax: 480-312-9127
e-mail: nbaronas@scottsdaleaz.gov
Review Cycle: 1 Date:



WATER KEYNOTES

- 1 EXISTING 12" DIP WATER MAIN.
- 2 EXISTING 4" DIP WATER MAIN.
- 3 NEW 8" DIP WATER MAIN.
- 4 NEW 8"x4" REDUCER.
- 5 NEW FIRE HYDRANT ASSEMBLY.
- 6 NEW 6" PRIVATE FIRE LINE. BACKFLOW PREVENTER SHALL BE INTERNAL TO BUILDING PER CITY OF SCOTTSDALE DETAIL SD2368.
- 7 NEW 2" SERVICE AND METER FOR DOMESTIC SUPPLY.
- 8 NEW 1" SERVICE AND METER FOR IRRIGATION SUPPLY.
- 9 NEW FIRE DEPARTMENT CONNECTION.
- 10 EXISTING FIRE HYDRANT.

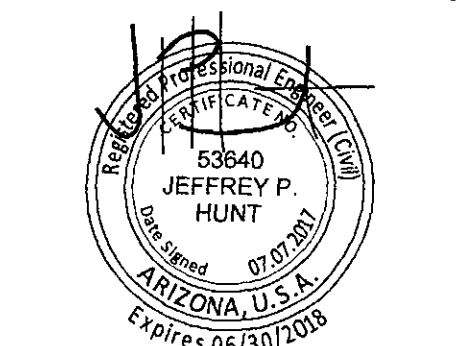
SEWER KEYNOTES

- 1 EXISTING 8" SANITARY SEWER MAIN.
- 2 EXISTING SANITARY SEWER MANHOLE.
- 3 NEW 6"x8" SEWER MAIN TAP.
- 4 NEW 6" PRIVATE SEWER CONNECTION.



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phoenix, arizona 85014
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CYPRESS PROJECT NO: 16.080



NO.	DATE	REVISION

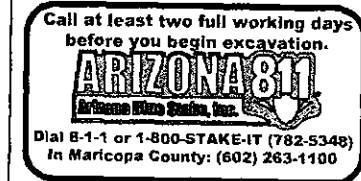
PRELIMINARY IMPROVEMENT PLANS
FOR BEN FUNKE MIXED USE
SCOTTSDALE, ARIZONA
utility plan

DEVELOPER
FUNKE TOWN LLC
7011 E. CAMELBACK ROAD, SUITE 103
PHOENIX, ARIZONA 85251
ATTN: BEN FUNKE
PH: (415) 200-9991

SITE ADDRESS
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130-12-045
130-12-046B
130-12-047A

SHEET NUMBER

C3 3 of 3



COS file
copy

PRELIMINARY WATER & SEWER DESIGN REPORT FOR BEN FUNKE MIXED USE

*provided
separately*
Address COMMENTS & resubmit
City of Scottsdale *as final for*
Water Resources Administration *review*
9379 E. San Salvador
Scottsdale, AZ 85258
LDillon 7-25-17

Scottsdale, Arizona

10 June 2017

PREPARED FOR
Rob Paulus Architects Ltd
990 East 17th Street, Suite 100
Tucson, Arizona 85719

DEVELOPER
Funke Town LLC
7414 East Camelback Road, Suite 103
Phoenix, Arizona 85251

SITE ADDRESS
7033 East Indian School Road
Scottsdale, Arizona 85251

PREPARED BY

CYPRESS
CIVIL DEVELOPMENT
strength + sustainability

4450 north 12th street, #228
phoenix, arizona 85014
CYPRESS # 16.080



27-DR-2017
7/10/2017

PROJECT DESCRIPTION AND LOCATION

The Project is known as 'Ben Funke Mixed Use' and is located at 7033 East Indian School Road in Scottsdale, Arizona. The project is also known as part of Lots 4, 5, 6, 7, 8, 9, 10, 20, 21, and 22 of Block 2, Scottsdale (herein referred to as the "Development").

The proposed project consists of the construction of a multi-story mixed used development with the required paved parking, utility and drainage improvements, and amenity landscaping.

The utility provider for both water and sewer facilities is the City of Scottsdale.

The project is located west of Marshall Way, between Indian School Road and 1st Avenue. The project will straddle the existing alley located between Indian School and 1st Avenue. Per available utility maps and as-built records, existing water mains are located in Indian School Road to the north of the project, within the existing alley, and within 1st Avenue. Per discussions with City of Scottsdale Staff, the mains located within Indian School Road are not available to tap for building services. In addition, the main in the existing alley is 4" diameter, inadequate to provide fire service. As a result, the design team intends to bring a new 8" water main north, connected in 1st Avenue, and increase the size of a portion of the main in the existing alley to 8". This will provide adequate sizing and pressure to supply the intended domestic and fire services to each building.

Handwritten notes: 4", 12", SOUTH LANE is 24" TRANS. MAIN

Per available utility maps and as-built records, existing sewer mains are located in Indian School Road to the north of the project and within the existing alley. The 8" main in the existing alley provides adequate sizing to support the intended building sewer connections.

Handwritten notes: UPGRADE FRAME TO SE

WATER SYSTEM DESIGN

There are 3 individual buildings intended to be constructed onsite. Each building will be supplied with 2" domestic service and 6" fire service. A new hydrant will also be required and will be added in the Marshall Way right-of-way, north of the existing alley.

Handwritten notes: METER OR SERVICE LINE

WASTEWATER SYSTEM DESIGN

There are 3 individual buildings intended to be constructed onsite. Each building will be supplied with 6" private sewer service. For the new building to the north, the residential units and ground floor commercial units will share a building sewer connection to the existing main. The 2 commercial buildings to the south will have their own individual building sewer connections to the existing main. The residential units above the commercial uses and parking to the south will have their own individual building sewer connection.

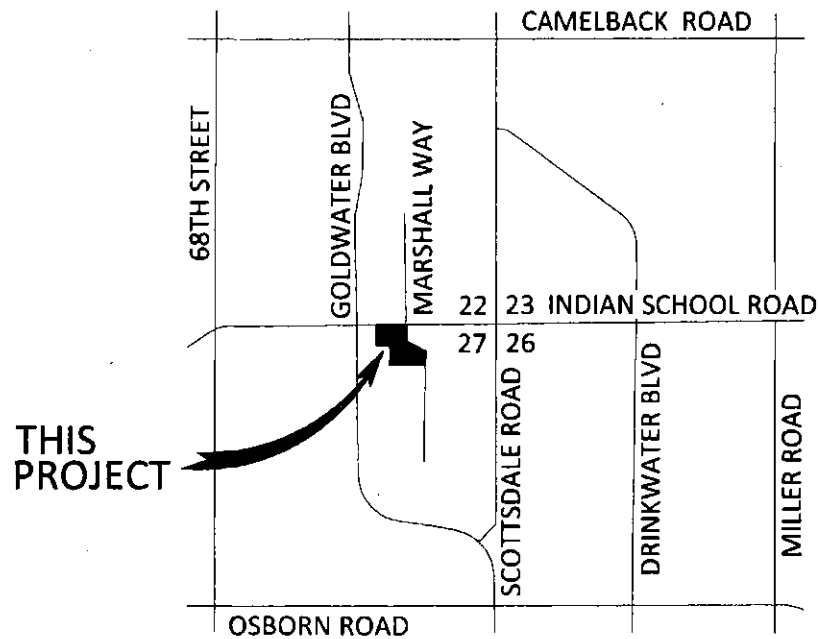
Handwritten note: WILL NEED TO PROVE

CONCLUSION

CYPRESS respectfully submits this preliminary report as the Water & Wastewater Design Report for the proposed Ben Funke Mixed Use Development. The proposed water and wastewater systems shall be designed in accordance with ADEQ and the City of Scottsdale standards and specifications and the Master Water and Sewer reports.

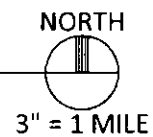
Appendix A

Location Map



IN THE NE 1/4 OF THE NE 1/4 OF SECTION 27,
T. 2 N., R. 4 E., G.&S.R.M., CITY OF SCOTTSDALE,
MARICOPA COUNTY, ARIZONA

LOCATION MAP



Appendix B
Preliminary Utility Plan



indian school elevation



marshall way elevation



first avenue elevation

streetscape elevations
scale: 1/8"=1'



DEVELOPMENT REVIEW 07.07.2017
BOARD SUBMISSION
ISSUE DATE



**FUNK E
MIXED USE**

ROB PAULUS ARCHITECTS LTD.

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TUCSON ARIZONA 85719 520.624.9805
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project no. 2015-002B

A23
streetscape elevations



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 Ben Funke
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FUNKE MIXED USE

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 project no. 2015-002B

view looking southwest from indian school road

A22
 north site rendering



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FUNKE MIXED USE

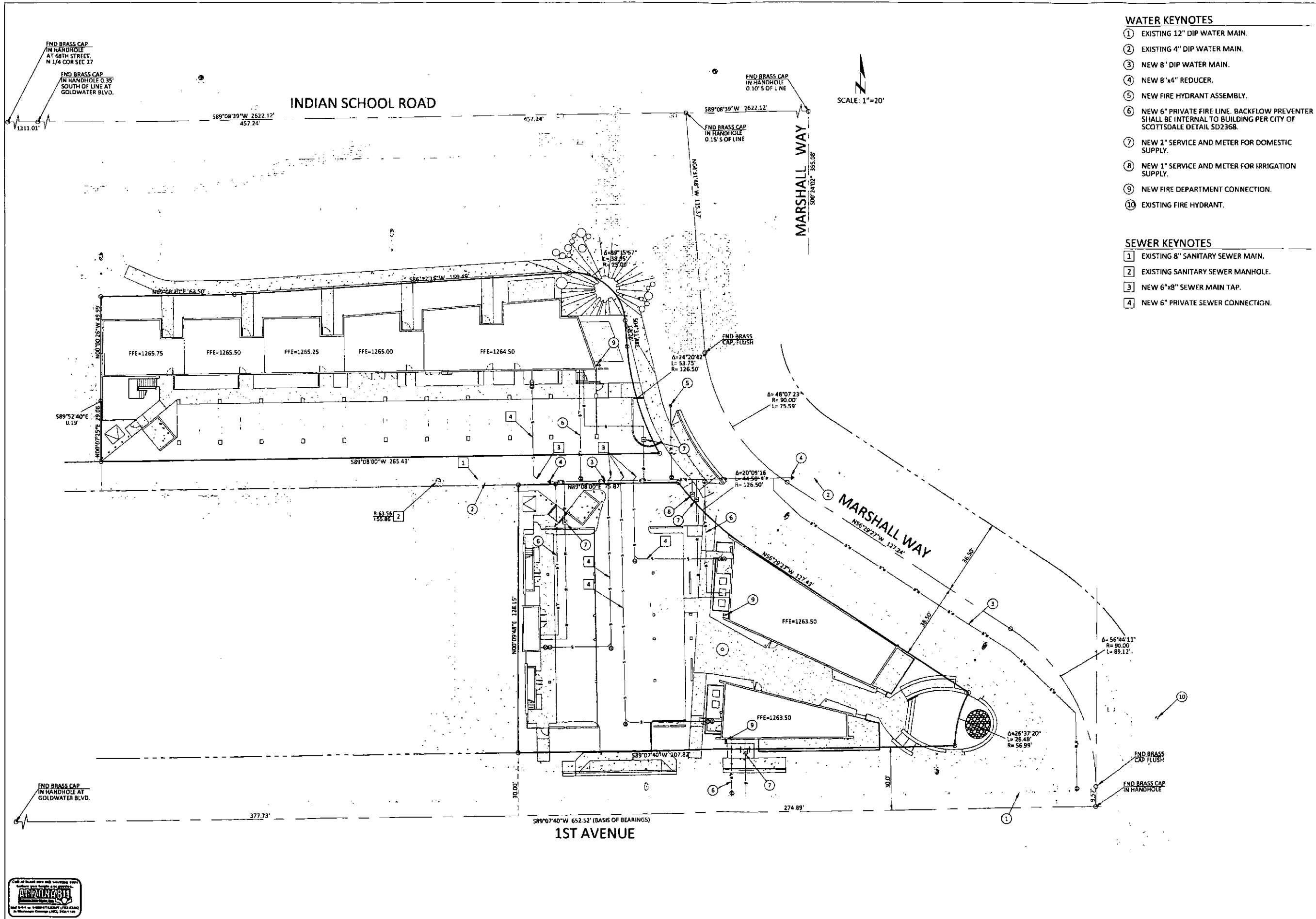
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project no. 2015-002B

view looking west on 1st avenue

A21
south site rendering



WATER KEYNOTES

- 1 EXISTING 12" DIP WATER MAIN.
- 2 EXISTING 4" DIP WATER MAIN.
- 3 NEW 8" DIP WATER MAIN.
- 4 NEW 8"x4" REDUCER.
- 5 NEW FIRE HYDRANT ASSEMBLY.
- 6 NEW 6" PRIVATE FIRE LINE. BACKFLOW PREVENTER SHALL BE INTERNAL TO BUILDING PER CITY OF SCOTTSDALE DETAIL SD2368.
- 7 NEW 2" SERVICE AND METER FOR DOMESTIC SUPPLY.
- 8 NEW 1" SERVICE AND METER FOR IRRIGATION SUPPLY.
- 9 NEW FIRE DEPARTMENT CONNECTION.
- 10 EXISTING FIRE HYDRANT.

SEWER KEYNOTES

- 1 EXISTING 8" SANITARY SEWER MAIN.
- 2 EXISTING SANITARY SEWER MANHOLE.
- 3 NEW 6"x8" SEWER MAIN TAP.
- 4 NEW 6" PRIVATE SEWER CONNECTION.



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CYPRESS PROJECT NO: 16.080



NO.	DATE	REVISION

PRELIMINARY IMPROVEMENT PLANS
FOR BEN FUNKE MIXED USE
SCOTTSDALE, ARIZONA
utility plan

DEVELOPER
FUNKE TOWN LLC
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ATTN: BEN FUNKE
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APN: 130-12-031B
130-12-032B
130-12-033B
130-12-045
130-12-046B
130-12-047A

SHEET NUMBER