

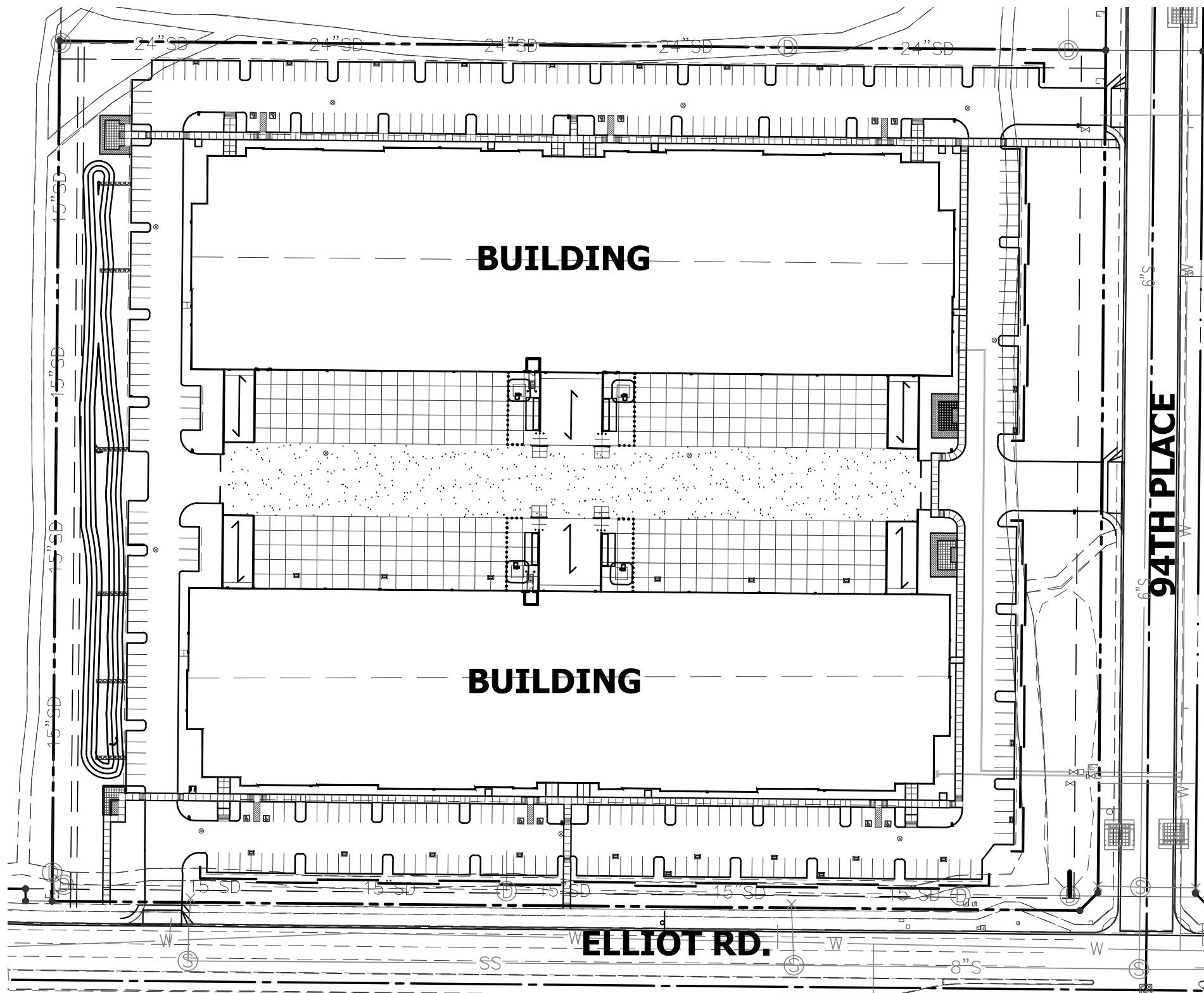
LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MARICOPA, STATE OF ARIZONA, AND IS DESCRIBED AS FOLLOWS:

LOT 3, FIRST MESA COMMERCE PARK, PHASE 1 AMENDED, ACCORDING TO BOOK 1167 OF MAPS, PAGE 45, RECORDS OF MARICOPA COUNTY, ARIZONA.

CONCEPTUAL GRADING,
DRAINAGE AND UTILITY PLAN
FOR
ELLIOT 94
NWC 94TH PLACE & ELLIOT ROAD
MESA, ARIZONA

A PORTION OF THE SOUTHEAST QUARTER OF SECTION 10,
TOWNSHIP 1 SOUTH, RANGE 7 EAST, GILA AND SALT RIVER MERIDIAN,
MARICOPA COUNTY, ARIZONA



SHEET INDEX

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EXISTING LEGEND

RIGHT OF WAY	---
PROPERTY LINE	---
CENTERLINE	---
EASEMENT LINE	---
WATER LINE	-- 8" ACP W --
WATER LINE	-- 16" ACP W --
SANITARY SEWER LINE	-- 6" VCP SS --
SPOT ELEVATION	+ 1349.16
FIRE HYDRANT	⊙
WATER VALVE	⊗
IRRIGATION CONTROL VALVE	⊗
SANITARY SEWER MANHOLE	⊙
SANITARY SEWER CLEANOUT SIGN	⊙
LIGHT POLE	⊙
ELECTRICAL RISER	⊙
ELECTRICAL CABINET	⊙

PROPOSED LEGEND

DIRECTION OF SLOPE	←
SEWER LINE	---
WATER LINE	---
FIRE LINE	---
EASEMENT	---
SAWCUT	---
GRADE BREAK	---
CATCH BASIN	---
DRYWELL	---
SPOT ELEVATION	90.50P
SECTION CALLOUT	---
FLOW LINE	---
BACKFLOW PREVENTOR	---
TAPPING SLEEVE & VALVE	---
SANITARY SEWER CLEANOUT	---

FEMA CLASSIFICATION

THE CURRENT FEMA FLOOD INSURANCE RATE MAP (FIRM) FOR THIS AREA, MAP NUMBER 04013C 2760L (EFFECTIVE REVISED DATE OCTOBER 16, 2013) DESIGNATES THIS SITE AS LOCATED WITHIN FLOOD HAZARD ZONE X. FLOOD ZONE X IS DEFINED BY F.E.M.A. 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 AREA LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD".

RETENTION CALCULATIONS

ON-SITE AREA: 13.92 AC
OFF-SITE AREA: 0.62 AC
RETENTION REQUIRED:
ONSITE:
 $VR = (C) * (P / 12) * (A)$, $P = 2.19$ (100YR-2HR EVENT)
 $VR = (0.90) * (2.19 / 12) * (13.92) * (43,560) = 99,118$ CF
OFFSITE:
 $VR = (C) * (P / 12) * (A)$, $P = 2.19$ (100YR-2HR EVENT)
 $VR = (0.95) * (2.19 / 12) * (0.62) * (43,560) = 4,672$ CF
TOTAL REQUIRED = 103,790 CF

RETENTION BASIN TABLE

BASIN NO.	VOLUME REQUIRED (CU. FT.)	VOLUME PROVIDED (CU. FT.)	EXCESS VOLUME (CU. FT.)
BASIN 1	21,325	25,225	3,900
UGRT#1	20,627	20,813	186
UGRT#2	41,772	42,019	247
UGRT#3	20,066	20,420	354
TOTAL	103,790	108,477	4,687

OWNER

KITCHELL DEVELOPMENT
1707 E. HIGHLAND AVE. STE. 100
PHOENIX, ARIZONA 85016
CONTACT: KEVIN MILLER
PHONE: (602) 631-6177
EMAIL: KMILLER@KITCHELL.COM

ARCHITECT

BUTLER DESIGN GROUP
5017 E. WASHINGTON STREET, SUITE 107
PHOENIX, ARIZONA 85034
CONTACT: RICK BUTLER
PHONE: (602) 957-1800
EMAIL: RBUTLER@BUTLERDESIGNGROUP.COM

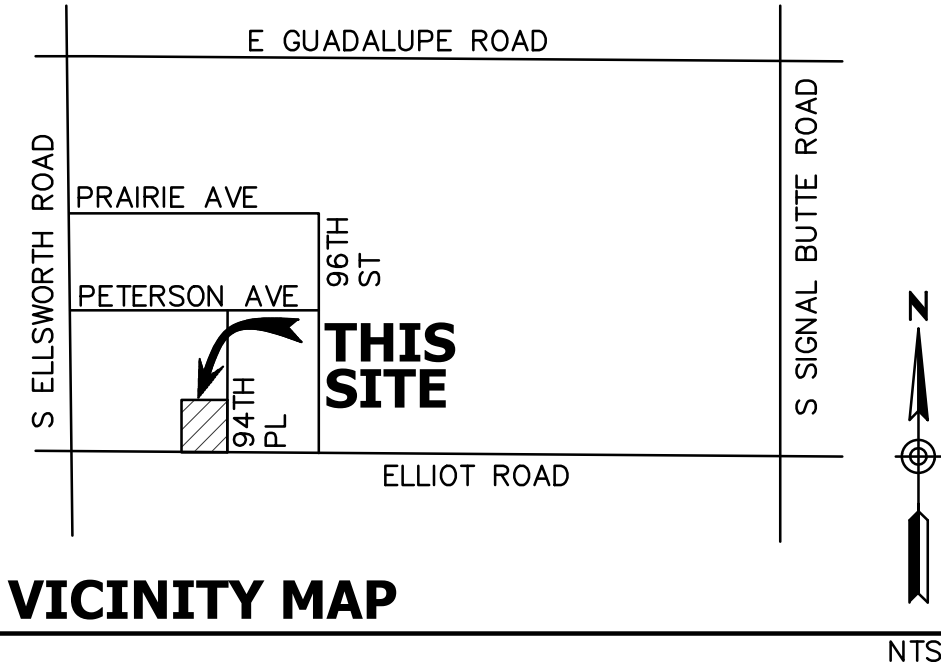
CIVIL ENGINEER

HUNTER ENGINEERING, INC.
10450 N. 74TH STREET, SUITE #200
SCOTTSDALE, ARIZONA 85258
CONTACT: JEFF HUNTER, PE
PHONE: (480) 991-3985
EMAIL: JHUNTER@HUNTERENGINEERINGPC.COM

BASIS OF BEARING

BASIS OF BEARING FOR THIS SURVEY IS A BEARING OF SOUTH 89°28'45" EAST, ALONG THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, ACCORDING TO THE FINAL PLAT OF FIRST MESA COMMERCE PARK PHASE 1 AMENDED, RECORDED IN BOOK 1167, PAGE 45, MARICOPA COUNTY RECORDS, ARIZONA.

VICINITY MAP



APN #

304-03-041B
304-03-847A
304-03-846J

SITE ACREAGE

GROSS SITE AREA = ±15.96 AC
NET SITE AREA = ±13.96 AC

BENCHMARK

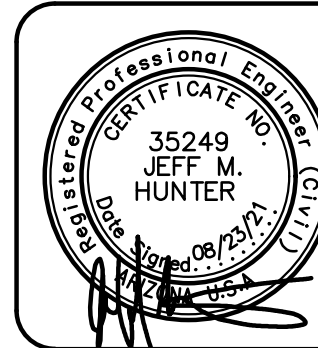
BENCH MARK DATA
CITY OF MESA BRASS CAP IN HAND HOLE .7 DOWN
INTERSECTION OF ELLSWORTH AND PETERSON
EL=1408.43'

NO.	DATE	REVISION	BY

PURPOSE:
2ND CONCEPTUAL SUBMITTAL

DESIGN BY: JH
DRAWN BY: DC
CHECKED BY: JH

HUNTER
ENGINEERING
CIVIL AND SURVEY
10450 NORTH 74TH STREET,
SUITE 200
SCOTTSDALE, ARIZONA 85258
T 480 991 3985
F 480 991 3986



COVER SHEET
FOR
ELLIOT 94
NWC 94TH PLACE & ELLIOT ROAD
MESA, ARIZONA

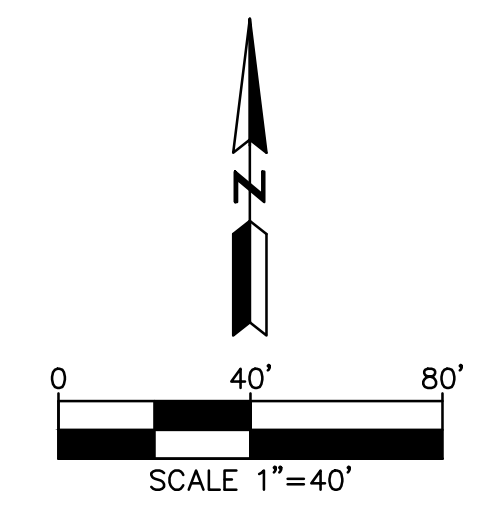
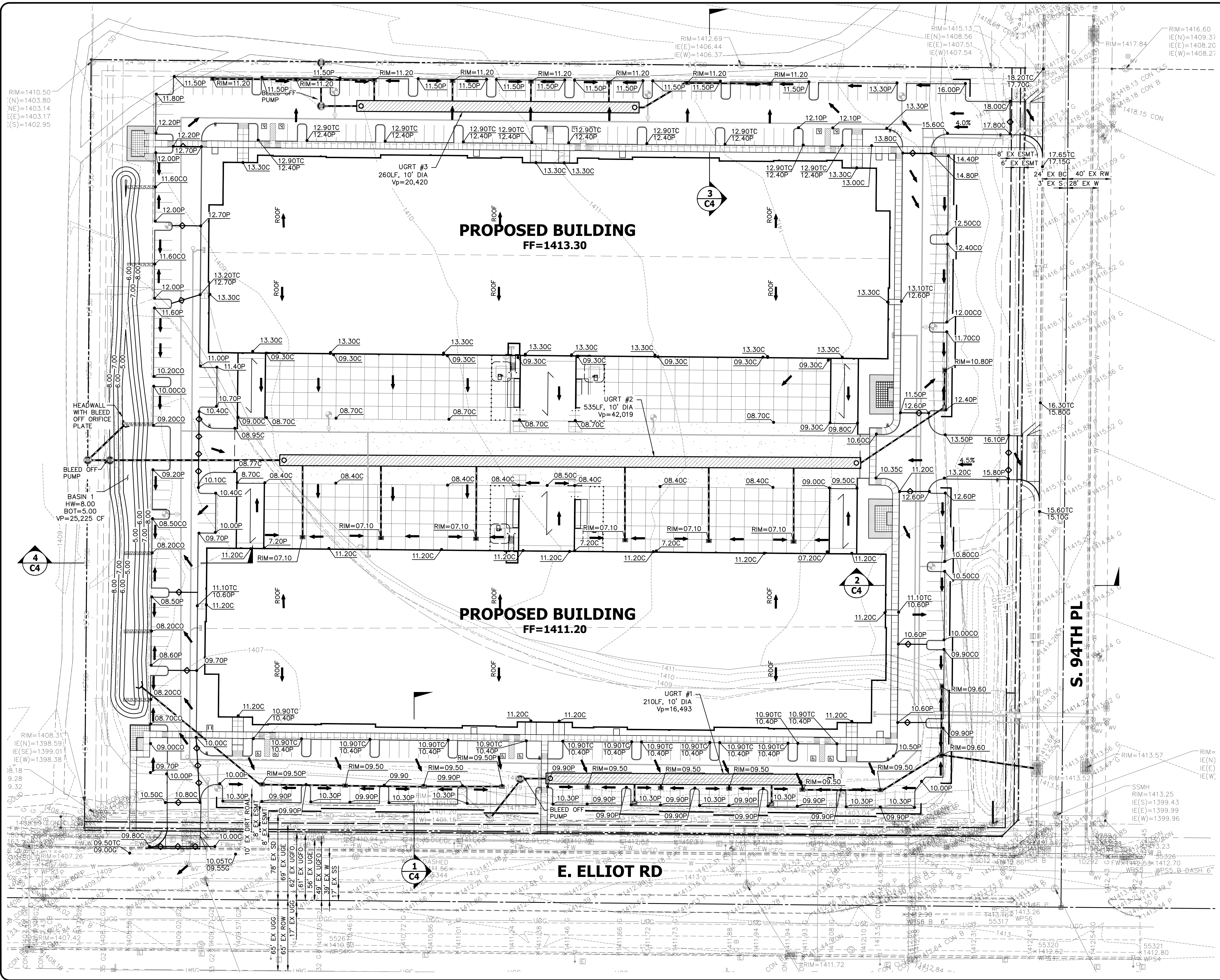
CONTACT ARIZONA.BIT AT LEAST 2 FULL
WORKING DAYS BEFORE YOU BEGIN EXCAVATION
AR ZONA811
CALL 811 OR CLICK ARIZONA811.COM

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

PROJECT NAME:
KITCHELL

HE NO.: KITC011
SCALE: NTS

SHEET:
C1



NO.	DATE	REVISION	BY

PURPOSE:
2ND CONCEPTUAL SUBMITTAL

DESIGN BY: JH
DRAWN BY: DC
CHECKED BY: JH

HUNTER
ENGINEERING
10450 NORTH 74TH STREET,
SUITE 200
SCOTTSDALE, AZ 85258
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CIVIL AND SURVEY



**CONCEPTUAL GRADING & DRAINAGE
FOR
ELLIOT 94
NWC 94TH PLACE & ELLIOT ROAD
MESA, ARIZONA**

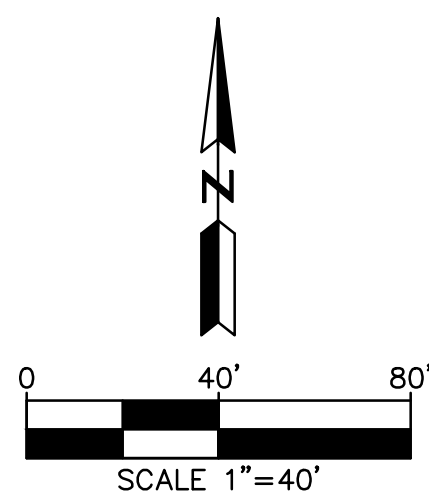
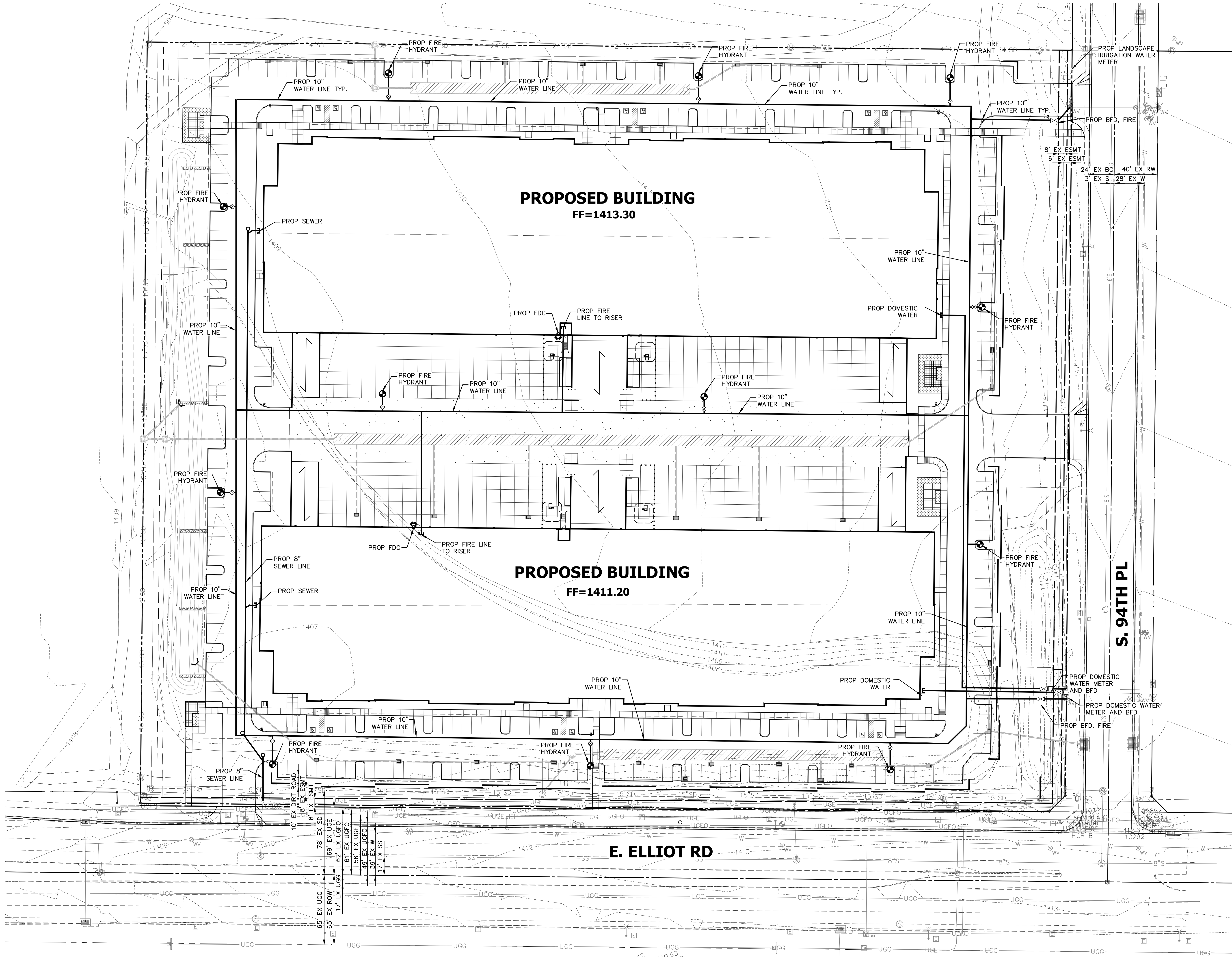
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PROJECT NAME:
KITCHELL

HE NO.: KITC011
SCALE: 1"=40'

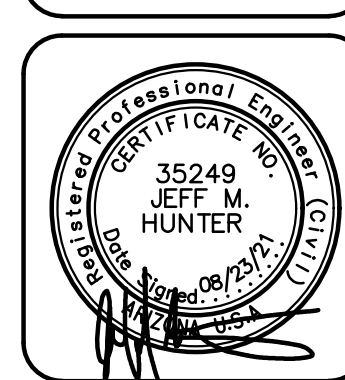
SHEET:
C2



NO.	DATE	REVISION	BY

DESIGN BY: JH
DRAWN BY: DC
CHECKED BY: JH

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CIVIL AND SURVEY
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SCOTTSDALE, AZ 85258
T 480 991 3986
F 480 991 3986



**CONCEPTUAL UTILITY PLAN
FOR
ELLIOT 94
NWC 94TH PLACE & ELLIOT ROAD
MESA, ARIZONA**

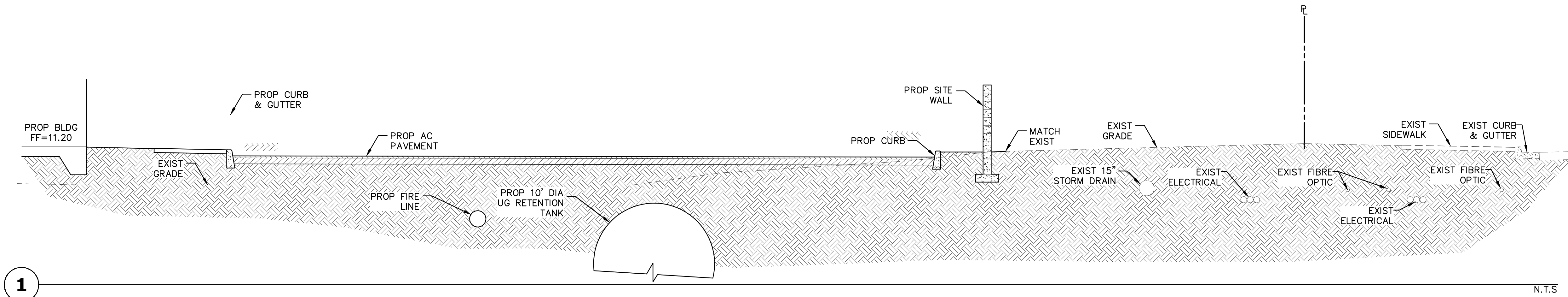
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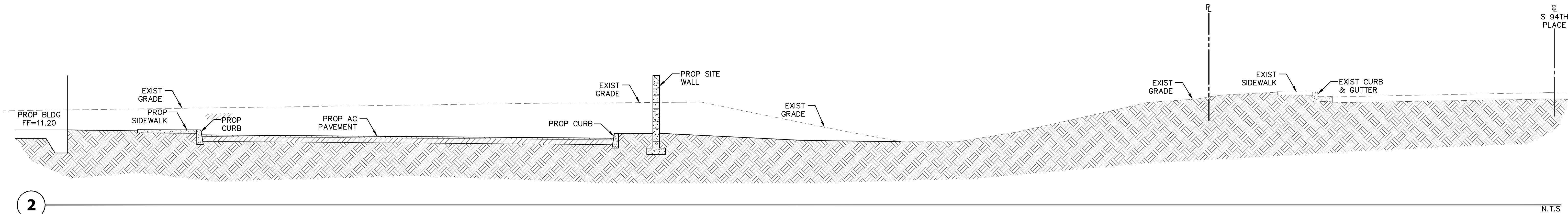
HE NO.: KITC011
SCALE: 1"=40'

**SHEET:
C3**



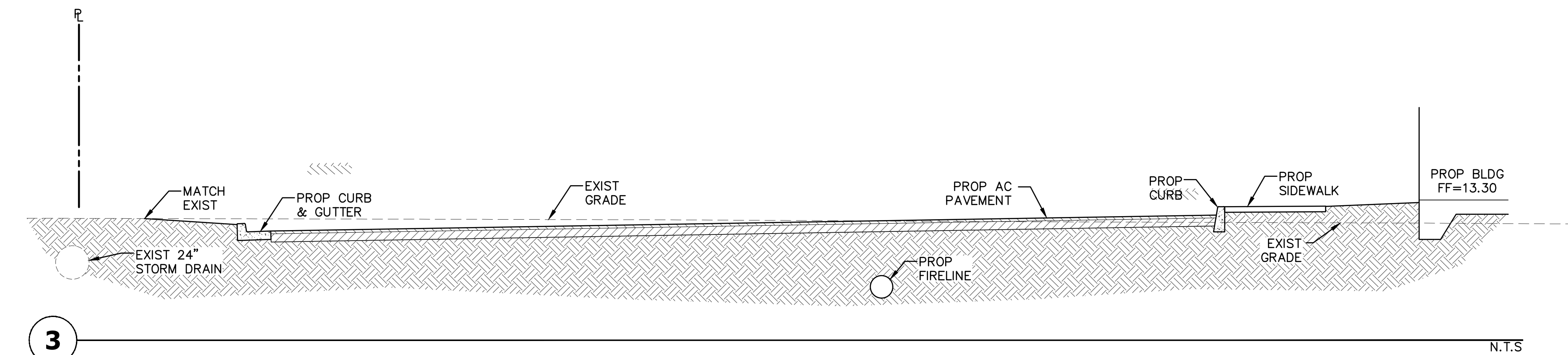
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N.T.S



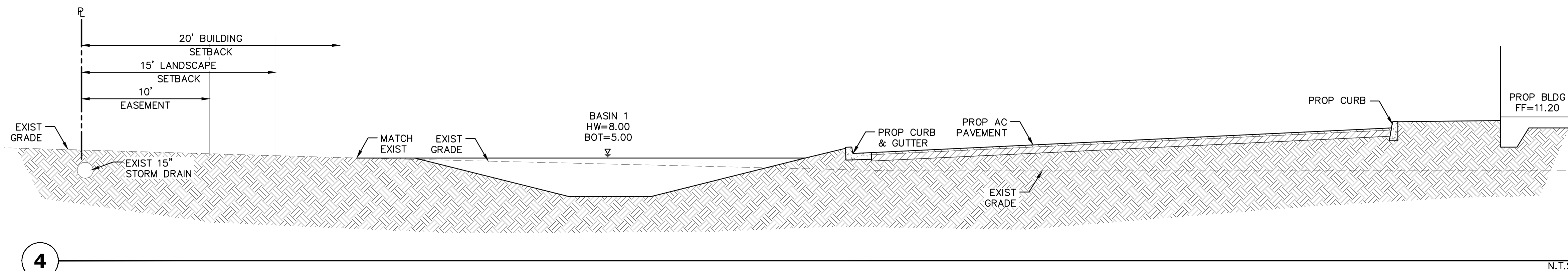
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N.T.S



3

N.T.S



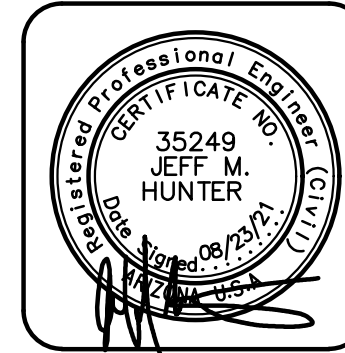
4

N.T.S

NO.	DATE	REVISION	BY:

DESIGN BY: JH
DRAWN BY: DC
CHECKED BY: JH

HUNTER
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**CONCEPT TYPICAL SECTIONS
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MESA, ARIZONA**

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KITCHELL**

HE NO.: KITC011
SCALE: NTS

SHEET:
C4