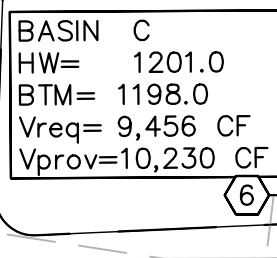


MATCH LINE: SEE SHEET GD4



- ⑦ PROPOSED CATCH BASIN.
- ⑧ PROPOSED HDPE STORM DRAIN PIPE.
- ⑨ PROPOSED HEADWALL WITH ORIFICE PLATE
- ⑩ PROPOSED FLARED END SECTION.
- ⑪ PROPOSED STORM DRAIN MANHOLE.
- ⑫ PROPOSED STORM DRAIN EQUALIZER PIPE.
- ⑬ PROPOSED STORM DRAIN BLEED PIPE.

ACCORDING TO THE FLOOD INSURANCE RATE MAP #04013C2288
M, DATED NOVEMBER 3, 2015, 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.

1. ADD 1200" TO ALL ELEVATIONS BETWEEN 0-20 AND 1100" TO ALL ELEVATIONS BETWEEN 20.01-99.99.
2. ADD 0.5 TO PAVEMENT ELEVATIONS FOR TOP OF CURB ELEVATION, UNLESS OTHERWISE NOTED.
3. ALL SPOT ELEVATIONS ARE FINISHED GRADE PAVEMENT (P), GUTTER/GRADE (G), OR SIDEWALK (SW) ELEVATIONS UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL PROTECT EXISTING STRUCTURES IN PLACE UNLESS NOTED OTHERWISE.
5. CONTRACTOR TO PROTECT ALL EXISTING LANDSCAPE NOT LOCATED WITHIN PROPOSED IMPROVEMENTS.
6. CONTRACTOR TO COORDINATE LANDSCAPE SLEEVE LOCATIONS, TYPE, ETC. WITH LANDSCAPE ARCHITECT PRIOR TO PAVEMENT/CONCRETE CONSTRUCTION.
7. CONTRACTOR TO COORDINATE LIGHTING CONDUIT LOCATIONS, TYPE, ETC. WITH LANDSCAPE ARCHITECT/ELECTRICIAN PRIOR TO SITE GRADING AND PAVEMENT/CONCRETE CONSTRUCTION.

THE EXISTING SITE CONSISTS OF RECENTLY CULTIVATED FARM LAND AND UNUSED DESERT WITH LIGHT VEGETATION. SITE-GENERATED STORM WATER IS CONVEYED TO PROPOSED STORM DRAIN TANKS LOCATED THROUGHOUT THE SITE AND PROPOSED RETENTION BASINS.

THIS SITE WILL PROVIDE STORM WATER STORAGE VOLUME FOR THE 100-YEAR, 2-HOUR EVENT. STORAGE WILL BE PROVIDED IN UNDERGROUND 10' DIAMETER CMP TANKS AND SURFACE BASINS, AND THE STORM WATER WILL BE DISPOSED OF THROUGH THE EXISTING 24" IRRIGATION PIPE THAT BLEEDS OFF THE STORM WATER TO AN EXISTING BASIN SOUTHWEST OF THE SITE. THE PROPOSED UNDERGROUND TANKS WILL BE PUMPED INTO THE EXISTING IRRIGATION PIPE.

RETENTION INFRASTRUCTURE ALREADY EXISTS FOR THE EXISTING STREETS TO SOUTH OF THE SITE. A RETENTION BASIN WILL BE CONSTRUCTED ON SITE TO CAPTURE THE RETENTION REQUIRED FOR THE PROPOSED 48TH STREET IMPROVEMENTS. THE BASIN IS A MAX OF 1 FOOT DEEP AND SHOULD THEREFORE DISPOSE OF BY SURFACE PERCOLATION.

THIS SITE IS LOCATED IN FLOOD ZONE 'X'. NO MAJOR OFF-SITE FLOWS IMPACT THE SITE. RETENTION IS PROVIDED FOR 100-YEAR, 2-HOUR EVENT. THE ULTIMATE SITE OUTFALL IS LOCATED AT THE EXISTING 24" IRRIGATION PIPE THAT BLEEDS OFF THE STORM WATER TO AN EXISTING BASIN SOUTHWEST OF THE SITE. THE EXISTING BASIN TO THE SOUTHWEST OF THE SITE IS PART OF AN EXISTING AGREEMENT TO PROVIDE STORAGE FOR THE SITE AND SHOULD THEREFORE BE AN ACCEPTABLE OUTLET.

KIMLEY-HORN AND ASSOCIATES, INC.
7740 N. 16TH STREET, SUITE 300
PHOENIX, AZ 85020
PH: (602) 944-5500
CONTACT: MIKE DELMARTER, PE.

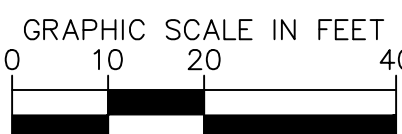
BSB DESIGN, INC.
9105 E. DEL CAMINO DRIVE, SUITE 105
SCOTTSDALE, AZ 85258
PH: (480) 229-8177
CONTACT: DANA BURKHARDT



	PROPERTY LINE
	RIGHT OF WAY LINE
	STREET CENTERLINE
	EASEMENT LINE
	EXISTING SEWER MAIN
	EXISTING PUBLIC WATER MAIN
	PROPOSED WATER MAIN
	PROPOSED SEWER MAIN
	PROPOSED STORM DRAIN
	EXISTING STORM DRAIN
	HIGH POINT
	LOW POINT
	PROPOSED CONTOUR
	EXISTING CONTOURS
	PROPOSED PAVEMENT SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING SANITARY SEWER MANHOLE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	PROPOSED CATCH BASIN
	SURFACE FLOW DIRECTION
	EXISTING STORM DRAIN MANHOLE

SURVEY INNOVATION GROUP INC.
22425 N. 16TH ST., SUITE 1
PHOENIX, ARIZONA 85024
PH: (480) 922-0780
CONTACT: ANTHONY SLATER

LENNAR MULTIFAMILY COMMUNITIES,
15125 N. SCOTTSDALE ROAD SUITE,201
SCOTTSDALE, ARIZONA 85254
PH: (480) 338-6826
CONTACT: DANIEL W. TILTON



ZONING: RS-43
APN: 140-55-0040
Q.S.: 79C



Stormwater Retention Summary									
Drainage Area	Land Use	Area [A]		Runoff Coefficient [C]	Precipitation Depth [P]	Required Storage (V _{REQ} = CPA/12)		Tank Provided	Volume Provided
		sf	ac		in	cf	ac-ft		
UG	Mixed-Use	359,328	8.249	0.80	2.5	59,888	1.375	763	59,926
A	Mixed-Use	27,203	0.624	0.80	2.5	4,534	0.104	N/A	6,702
B	Mixed-Use	184,891	4.245	0.80	2.5	30,815	0.707	N/A	34,400
C	Mixed-Use	56,734	1.302	0.80	2.5	9,456	0.217	N/A	10,230
D	Mixed-Use	14,274	0.328	0.80	2.5	2,379	0.055	N/A	2,386
TOTAL	-	642,430	14.75	-	-	107,072	2.458	763	113,644

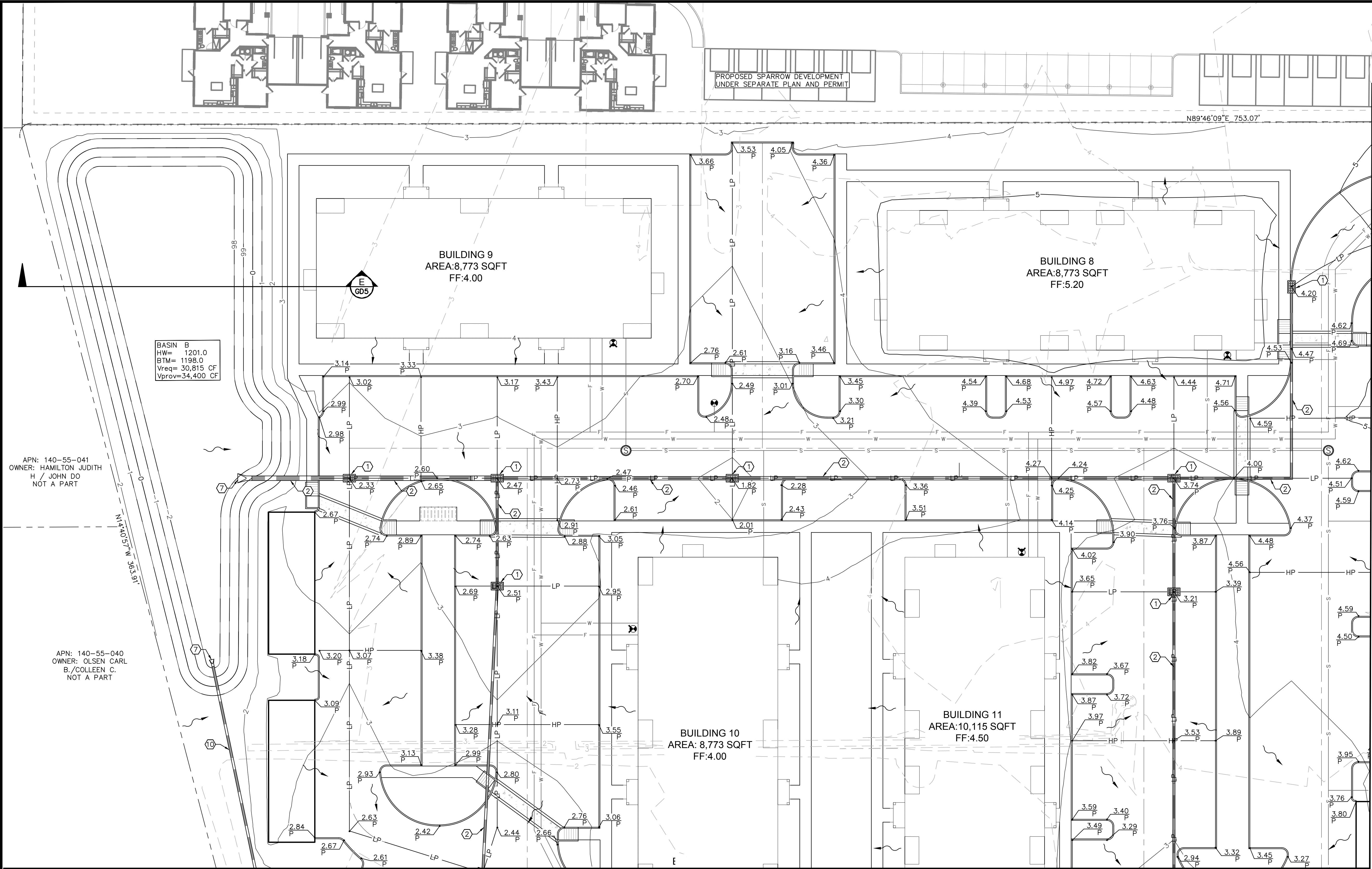
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7740 North 16th Street, Suite 300
Phoenix, Arizona 85020 (602) 944-5500

SCALE (H): 1"=20'
SCALE (V): NONE
DESIGNED BY: MLD
DRAWN BY: DJH
CHECKED BY: MLD
DATE: 11/1/2022

LMC MESA
PRELIMINARY GRADING AND DRAINAGE PLAN
NEC OF S. 48TH ST. AND E. HAMPTON AVE.
MESA, ARIZONA 85206

091908052
DRAWING NAME GD1
1 OF 5

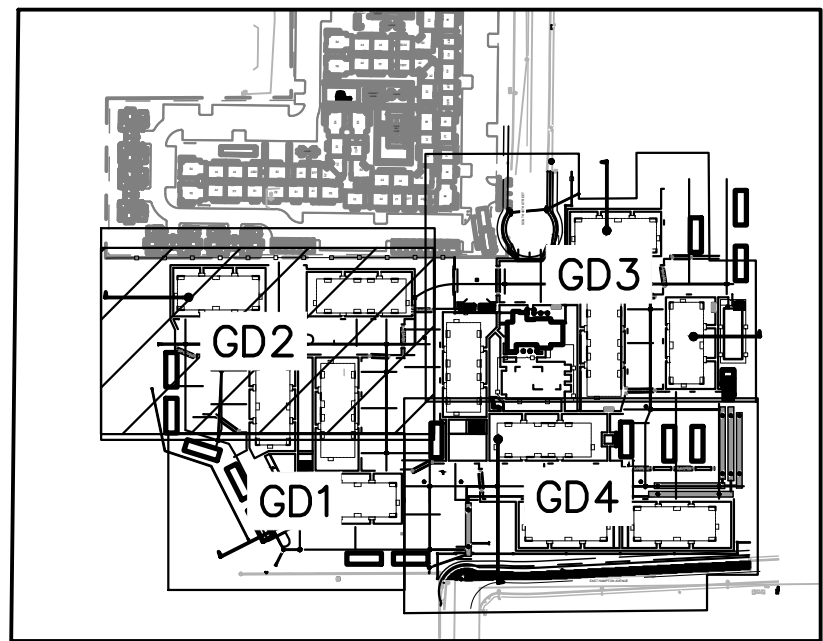
K:_H\H_Civil\091908052 - LMC-Mesa\CAAD\Improvement Plans\Preliminary GD.dwg Jul 22, 2022 alex.diball
XREFS: KEM_AVT_XTB_HBN-SPARROW_AUT_XAS
OF AND UNPUBLISHED RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.



PRELIMINARY GRADING AND DRAINAGE NOTES

- ① PROPOSED CATCH BASIN.
- ② PROPOSED HDPE STORM DRAIN PIPE.
- ⑦ PROPOSED FLARED END SECTION.
- ⑩ PROPOSED STORM DRAIN EQUALIZER PIPE.

PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION PURPOSES
Kimley»Horn
ENGINEER MIKE DELMARTER
PE NO. 30886 DATE 07/25/22



KEY MAP
N.T.S.

MATCH LINE: SEE SHEET GD1

LEGEND

- PROPERTY LINE
- - - RIGHT OF WAY LINE
- - - STREET CENTERLINE
- - - EASEMENT LINE
- - - EXISTING SEWER MAIN
- - - EXISTING PUBLIC WATER MAIN
- - - PROPOSED WATER MAIN
- - - PROPOSED SEWER MAIN
- - - PROPOSED STORM DRAIN
- - - EXISTING STORM DRAIN
- - - HIGH POINT
- - - LOW POINT
- - - PROPOSED CONTOUR

LEGEND

- 50.00
FG
EXISTING CONTOURS
- PROPOSED PAVEMENT
SPOT ELEVATION
- EXISTING SPOT
ELEVATION
- EXISTING SANITARY
SEWER MANHOLE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- PROPOSED CATCH BASIN
- SURFACE FLOW DIRECTION
- EXISTING STORM DRAIN MANHOLE

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

ZONING: RS-43
APN: 140-55-004G
O.S.: 79C
Contact Arizona 911 at least two full
working days before you begin excavation
ARIZONA 911
Call 911 or click Arizona911.com

MATCH LINE: SEE SHEET GD3

Kimley»Horn

LMC MESA
PRELIMINARY GRADING AND DRAINAGE PLAN
NEC OF S. 48TH ST. AND E. HAMPTON AVE.
MESA, ARIZONA 85206

091908052
DRAWING NAME
GD2

2 OF 5

NO.	REVISION	BY	DATE	APPR.

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7740 North 16th Street, Suite 300
Phoenix, Arizona 85020 (602) 944-5500

ZONING: RS-43 APN: 140-55-004G Q.S.: 79C



① PROPOSED CATCH BASIN.

② PROPOSED HDPE STORM DRAIN PIPE.

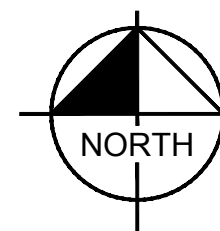
⑦ PROPOSED FLARED END SECTION.

PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION PURPOSES
Kimley»Horn
ENGINEER MIKE DELMARTER
PE NO. 30886 DATE 07/25/22



APN: 140-54-005K
OWNER: CORP OF PRES
BISHOP PF CH OF JS OF LDS.
NOT A PART

APN: 140-54-005E
OWNER: MESA UNIFIED SCHOOL
DISTRICT NO 4
NOT A PART



GRAPHIC SCALE IN FEET

A horizontal line with vertical tick marks at 0, 10, 20, and 40. The segments between 0 and 10, 10 and 20, and 20 and 40 are shaded black. The segment between 0 and 10 is labeled '0' at the left end and '10' at the right end. The segment between 10 and 20 is labeled '10' at the left end and '20' at the right end. The segment between 20 and 40 is labeled '20' at the left end and '40' at the right end.

ZONING: RS-43
APN: 140-55-004
O.S.: 79C

Contact Arizona 811 at least two full working days before you begin excavating.

ARIZONA811

Call 811 or click Arizona811.com

Kimley»Horn

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7740 North 16th Street, Suite 300
Phoenix, Arizona 85020 (602) 944-5500

SCALE (H): 1"=20'
SCALE (V): NONE
DESIGNED BY: MLD
DRAWN BY: DJH
CHECKED BY: MLD
DATE: 11/15/2022

LMC MESA
PRELIMINARY GRADING AND DRAINAGE PLAN
NEC OF S. 48TH ST. AND E. HAMPTON AVE.
MESA, ARIZONA 85206

LMC MESA

PRELIMINARY GRADING AND DRAINAGE PLAN
NEC OF S. 48TH ST. AND E. HAMPTON AVE.

091908052

DRAWING NAME
GD3

3 OF 5

5	E	APN: 140-55-004G	Q S: 79C
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[illegible]

