CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director

Mayor Timothy M. Keller

December 21, 2020

David Thompson
Thompson Engineering Consultants, Inc.
P.O. Box 65760
Albuquerque, NM 87190

RE: **Hawking Drive SE ROW**
Grading and Drainage Plan Stamp Date: 4/28/21
Drainage File: Q16DA006A

Dear Mr. Thompson:

Based on the submittal received on 5/4/21, the Grading and Drainage Plan is approved for Grading Permit and Work Order.

Please note, at DRC a note must be added to the pond grading sheet stating that pond slopes are to be stabilized with "Native Grass Seed with Aggregate Mulch or equal (Must satisfy the "Final Stabilization criteria" CGP 2.2.14.b.).

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: HAWKING DRIVE SE ROW Building Permit #: _____ Hydrology File #: Q16

DRB#: PR-2019-001971 EPC#: _____ Work Order#: 393583

Legal Description: HAWKING DRIVE SE ROW

City Address: _____

Applicant: ThompsonEngineering Consultants, Inc. Contact: David Thompson

Address: P.O. Box 65760, Albuquerque, NM 87193

Phone#: (505) 271-2199 Fax#: _____ E-mail: tecnm@yahoo.com

Owner: Gold Mesa Investments, LLC (Developer) Contact: Rudy Guzman

Address: 5700 University Blvd. SE, Albuquerque, NM 87106

Phone#: (505) 452-0663 Fax#: _____ E-mail: rudy@guzmancs.com

TYPE OF SUBMITTAL: _____ PLAT (___# OF LOTS) ____ RESIDENCE ____ DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X GRADING PLAN
____ DRAINAGE MASTER PLAN
____ DRAINAGE REPORT
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

____ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
X WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

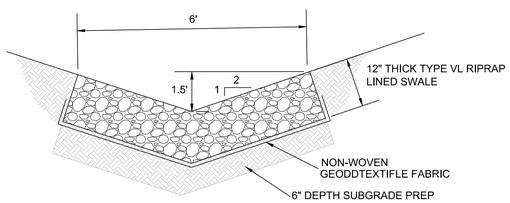
DATE SUBMITTED: 5-3-2021 By: David Thompson

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

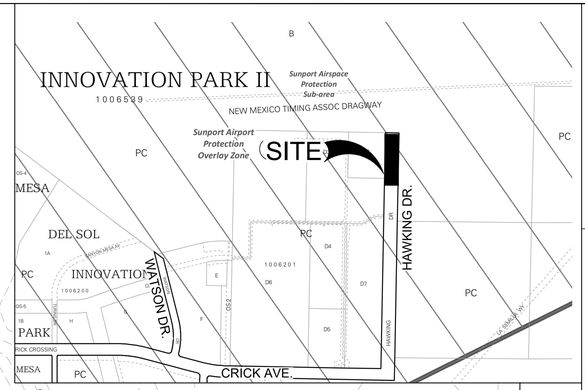
FEE PAID: _____

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 12/21/21
BY: Ernest Armijo
Hydro Item # Q16DA006A

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO BE A VIOLATION OF ANY FEDERAL ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT, SPECIFICATIONS, OR CONSTRUCTION. SUCH APPROVAL OF PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

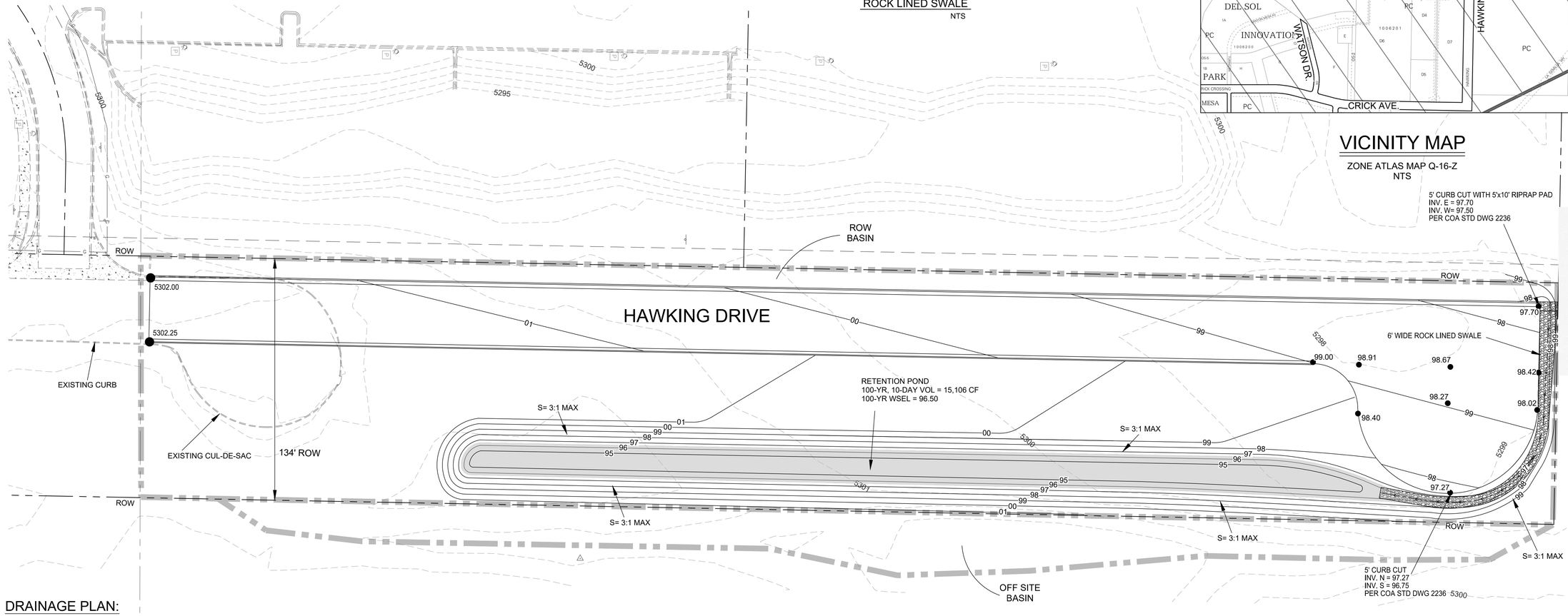


ROCK LINED SWALE
NTS



VICINITY MAP

ZONE ATLAS MAP Q-16-Z
NTS



DRAINAGE PLAN:

HAWKING DRIVE RIGHT-OF-WAY

SITE AREA: 2.3256 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED SEPTEMBER 26, 2008 (PANEL NO. 35001C0363G) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

EXISTING DRAINAGE CONDITIONS:

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH CHAPTER 6 OF THE CITY OF ALBUQUERQUE DPM; EFFECTIVE JUNE 8, 2020, ENTITLED "DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL". HAWKING DRIVE IS LOCATED IN ZONE 2. THE DESIGN STORM TO DETERMINE THE PEAK FLOWS FOR THE SITE IS THE 100-YEAR, 6-HOUR STORM, WHICH IS 2.29 INCHES IN ZONE 2. WHEREAS, THE DESIGN STORM TO DETERMINE THE RUNOFF VOLUME FOR THE SITE IS THE 100-YEAR, 10-DAY STORM, WHICH IS 3.62 INCHES IN ZONE 2.
EXISTING CONDITIONS INCLUDE A TEMPORARY CUL-DE-SAC BULB AND AN UNDEVELOPED AREA. THERE IS A SMALL OFFSITE BASIN THAT DRAINS TO THE HAWKING DRIVE RIGHT-OF-WAY FROM THE SOUTH.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROJECT INVOLVES THE CONSTRUCTION OF THE NORTHERN HALF STREET SECTION OF HAWKING DRIVE. THE STREET SECTION DRAINS TO THE NORTH FROM THE EXISTING STREET SECTION. THE RUNOFF FROM THE STRETT SECTION AND THE UNDEVELOPED PORTION OF THE RIGHT-OF-WAY WILL DRAIN TO A RETENTION POND WITHIN THE HAWKING DRIVE RIGHT-OF-WAY ALONG THE SOUTH RIGHT-OF-WAY LINE. THE STREET WILL DRAIN TO THE NORTHWEST TO A FIVE-FOOT WIDE CURB OPENING TO A ROCK-LINED SWALE. AT THE NORTH END OF THE STREET IS A TEMPORARY CUL-DE-SAC THAT DRAINS FROM WEST TO EAST TO ANORTHER CURB OPENING THAT WILL DRAIN THE ROCK-LINED SWALE. THE ROCK-LINED SWALE WILL CONVEY THE RUNOFF FROM THE STREET AND CUL-DE-SAC TO A RETENTION POND LOCATED ALONG THE SOUTH RIGHT-OF-WAY LINE JUST SOUTH OF THE CUL-DE-SAC. THE RETENTION POND HAS A 100-YEAR, 10-DAY VOLUME OF 15,106 CUBIC-FEET. THE DEPTH OF THE POND WILL BE A MAXAMUM OF 1.5 FEET. THE TOP OF THE POND WATER SURFACE WILL BE TEN FEET FROM THE PROPOSED PUBLIC SANITARY SEWER LINE. THE FIRST FLUSH FROM THE INPERVIOUS AREA OF THE STREET WILL BE RETAINED IN THE RETENTION POND.

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10-day) (acre-ft)	V(10-day) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
ROW	2.3256	94.50	0.00	0.00	5.50	0.71	0.14	6,028	0.15	6,645	4.31
Offsite	0.3535	100.00	0.00	0.00	0.00	0.62	0.02	796	0.02	796	0.60
TOTAL RUNOFF	2.68						0.16	6,824	0.17	7,441	4.92
FULL DEVELOPMENT CONDITIONS											
ROW	2.3256	0.00	68.70	0.00	31.30	1.28	0.25	10,796	0.33	14,311	6.93
Offsite	0.3535	100.00	0.00	0.00	0.00	0.62	0.02	796	0.02	796	0.60
TOTAL RUNOFF	0.35						0.27	11,592	0.35	15,106	7.53
EXCESS PRECIP.		0.62	0.8	1.03	2.33	E_i (in)					
PEAK DISCHARGE		1.71	2.36	3.05	4.34	Q_{Pi} (cfs)					

WEIGHTED E (in) = $(E_A)(\%A) + (E_B)(\%B) + (E_C)(\%C) + (E_D)(\%D)$
$V_{6\text{-HR}}$ (acre-ft) = (WEIGHTED E)(AREA)/12
V_{10DAY} (acre-ft) = $V_{6\text{-HR}} + (A_C)(P_{10DAY} - P_{6\text{-HR}})/12$
Q (cfs) = $(Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$

ZONE = 2
$P_{6\text{-HR}}$ (in.) = 2.29
$P_{24\text{-HR}}$ (in.) = 2.59
P_{10DAY} (in.) = 3.62

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- PROPOSED CURB AND GUTTER
- BASIN BOUNDARY
- PROPOSED PONDING

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO USE COA STD DWGS AND ABCWUA STD DWGS UNLESS OTHERWISE NOTED.

30 15 0 15 30
SCALE: 1"=30'

811
CALL NM ONE-CALL SYSTEM SEVEN (7) DAYS PRIOR TO ANY EXCAVATION

CONSULTANTS
Thompson Engineering Consultants, Inc.
P.O. BOX 65740
ALBUQUERQUE, NM 87193
PHONE: (505) 271-2199
FAX: (505) 830-9246
tecnm@yahoo.com

BENCH MARKS
ACES MONUMENT "2_R16"
NAD 1983 CENTERAL ZONE
X= 1533448.869
Y=1454941.295
Z=5298.787' (NAVD 1988)
G-G= 0.999663568
MAP ANGLE= -0°12'17.51"

SEAL
NEW MEXICO 9677 REGISTERED PROFESSIONAL ENGINEER
4-28-21

NO.	DATE	DESCRIPTION	BY
		AS-BUILT INFORMATION	
		CONTRACTOR: DATE:	
		WORK STAKED BY: DATE:	
		INSPECTOR'S ACCEPTANCE BY: DATE:	
		FIELD VERIFICATION BY: DATE:	
		DRAWINGS CORRECTED BY: DATE:	

DESIGNED BY: DBT
DRAWN BY: DEM
CHECKED BY: DBT
DATE 1/2021

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

MESA DEL SOL, INNOVATION PARK II
HAWKING DRIVE
POND GRADING AND DRAINAGE

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL

ZONE MAP NO. Q-16-Z
CITY PROJECT NO. 393583
SHEET NO. 1 OF 1