CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

March 15, 2022

Kofi Addo, P.E.
Bowman Consulting Group
5601 Democracy Drive
Suite 205
Plano, TX 75024

RE: Whataburger - 98th and Volcano
Conceptual Grading & Drainage Plans
Engineer's Stamp Date: 02/28/22
Hydrology File: K09D048A

Dear Mr. Addo:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 03/10/2022, the Conceptual Grading & Drainage Plan **is** approved for action by the DRB on Site Plan for Building Permit.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2018)

Project Title: Whataburger - 98th and Volcano Building Permit #: _____ Hydrology File #: K09D048A

DRB#: 2021-005864 EPC#: _____ Work Order#: _____

Legal Description: TR 12 PLAT OF TRS 1 THRU 12 AVALON SUBD UNIT 5 CONT 11.0941AC

City Address: Northeast corner of 98th Street NW and Volcano Road NW

Applicant: Bowman Consulting Group Contact: Kofi Addo

Address: 5601 Democracy Dr., St 205

Phone#: 972-497-2990 Fax#: _____ E-mail: kaddo@bowman.com

Other Contact: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF DEVELOPMENT:_____ PLAT (# of lots) _____ RESIDENCE X DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? X Yes _____ No

DEPARTMENT: _____TRAFFIC/TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
X CONCEPTUAL G & D PLAN
____ 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?

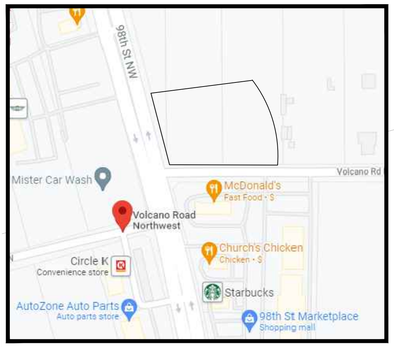
TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

____ 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
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
X OTHER (SPECIFY) DRB Site Plan

DATE SUBMITTED: 02/07/2022 By: Kofi Addo

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____



VICINITY MAP
NTS

DRAINAGE CALCULATIONS ARE BASED ON CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) ARTICLE 6-2(A) - PROCEDURE FOR 40-ACRE AND SMALLER BASINS ZONE 1 LOCATION.

Pre-Development Conditions

Drainage Area	Acres	Time of Concentration (Min)	2 Year Runoff Coefficient	2 Year Intensity (In/Hr)	2 Year Runoff (cfs)	10 Year Runoff Coefficient	10 Year Intensity (In/Hr)	10 Year Runoff (cfs)	100 Year Runoff Coefficient	100 Year Intensity (In/Hr)	100 Year Runoff (cfs)
A-1	1.457	12.00	0.28	0.15	0.06	0.51	0.23	0.17	0.63	0.36	0.33

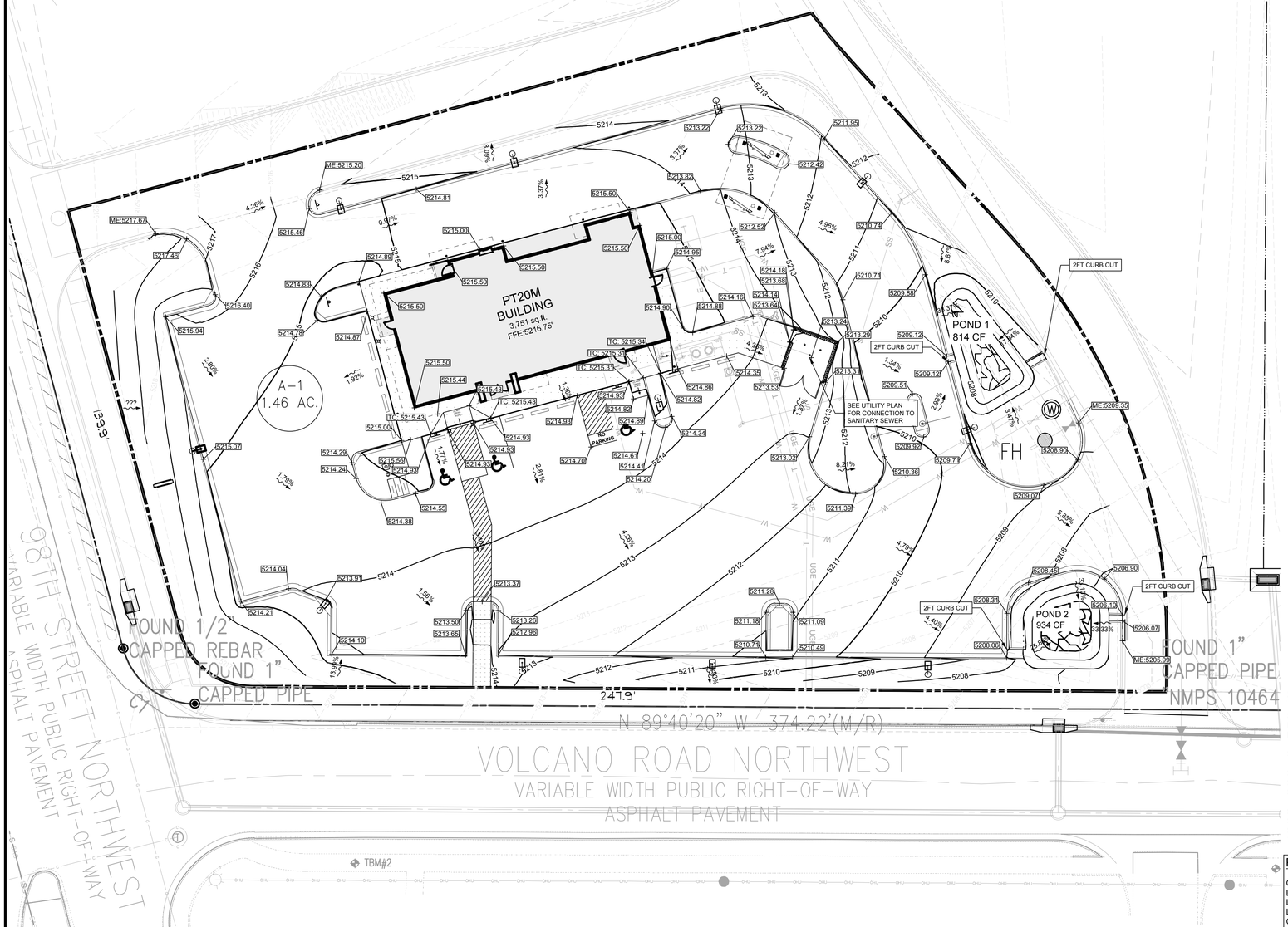
Post-Development Conditions

Drainage Area	Acres	Time of Concentration (Min)	2 Year Runoff Coefficient	2 Year Intensity (In/Hr)	2 Year Runoff (cfs)	10 Year Runoff Coefficient	10 Year Intensity (In/Hr)	10 Year Runoff (cfs)	100 Year Runoff Coefficient	100 Year Intensity (In/Hr)	100 Year Runoff (cfs)
A-1	1.457	12.00	0.89	0.15	0.19	0.90	0.23	0.30	0.90	0.36	0.47

DIFFERENCE IN RUNOFF (EXISTING VS PROPOSED)

2 Year Runoff (cfs)	10 Year Runoff (cfs)	100 Year Runoff (cfs)	Net Change
0.13	0.13	0.14	Increase

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 03/15/22
BY: René C. Brissette
HydroTrans # K09D048A
THESE PLANS AND/OR REPORT ARE CONCEPTUAL ONLY. MORE INFORMATION MAY BE NEEDED IN THEM AND SUBMITTED TO HYDROLOGY FOR BUILDING PERMIT APPROVAL.



BENCHMARKS

TBM #1	TBM - SET CHISELED X (1483393.40, 1493191.03)	ELEV: 5205.67'
TBM #2	TBM - SET CHISELED X (1483395.13, 1492881.32)	ELEV: 5215.90'

TBM#1
SET CHISELED X
NORTHING: 1483393.40
EASTING: 1493191.03
ELEVATION: 5205.67'

GRADING LEGEND

PROPOSED BUILDING
PROPERTY LINE
STD. 6" CONCRETE CURB
PROPOSED CONTOUR — 430 —
EXISTING CONTOUR — — — 430 — — —
DIRECTION OF FLOW 2.30%
SPOT ELEVATION 843.56
EXISTING GRADE TIE IN ME: 843.56
TOP OF CURB TC: 843.56
BOTTOM OF CURB BC: 843.56
STORM CATCH BASIN
STORM PIPE

20 0 20 40
SCALE: 1 INCH = 20 FT

EXISTING LEGEND

FOUND MONUMENT (AS NOTED)
TEMPORARY BENCHMARK
TELEPHONE MANHOLE
SEWER MANHOLE
DRAINAGE MANHOLE
FIRE HYDRANT
WATER VALVE
DRAINAGE INLET
SIGN
(M) MEASURED/CALCULATED DIMENSION
(R) RECORD DIMENSION
N/F NOW OR FORMERLY
R/W RIGHT-OF-WAY
TBM TEMPORARY BENCHMARK
RCP REINFORCED CONCRETE PIPE
PVC POLYVINYL CHLORIDE PIPE
BOC BACK OF CURB
FL FLOW LINE
EA EDGE OF ASPHALT
TC TOP OF CONCRETE
TA TOP OF ASPHALT
TB TOP OF BANK
BB BOTTOM OF BANK
NG NATURAL GROUND
BUILDING OVERHANG
CENTERLINE
S UNDERGROUND SEWER LINE
UNDERGROUND STORM DRAIN LINE
SUBJECT PROPERTY LINE

STORMWATER QUALITY VOLUME AND DETENTION

SITE AREA TOTAL:	63,496 SF (1.457 AC)
IMPERVIOUS AREA:	47,927 SF (1.100 AC)
PERVIOUS AREA OPEN SPACE:	15,569 SF (0.357 AC)

STORMWATER QUALITY VOLUME (SWQV) REQUIRED:

SWQV = 0.42 INCHES PER SQUARE FOOT IMPERVIOUS AREA
SWQV = (0.42 x 47,927) / 12
SWQV = 1,677 CF

STORMWATER QUALITY VOLUME (SWQV) PROVIDED
SWQV PROVIDED POND 1 = 814 CF
SWQV PROVIDED POND 2 = 934 CF
TOTAL SWQV PROVIDED = 1,748 CF

POND 1 CURB CUT WEIR CALCULATIONS

$Q = CLH^{3/2}$
$L = Q / CH^{3/2}$
$L = 0.47 / (2.7 \times 0.5^{3/2})$
L = 0.5 FT
CURB CUT PROVIDED 2FT

POND 2 CURB CUT WEIR CALCULATIONS

$Q = CLH^{3/2}$
$L = Q / CH^{3/2}$
$L = 0.47 / (2.7 \times 0.5^{3/2})$
L = 0.5 FT
CURB CUT PROVIDED 2FT

GRADING NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF ALL EXISTING UTILITIES (ABOVE AND BELOW GROUND) AS SHOWN ON THESE PLANS ARE APPROXIMATE AND WERE LOCATED BASED ON EITHER VISUAL OBSERVATIONS AT THE SITE, EXISTING SURVEYS, AND/OR FROM UTILITY OWNERS. THE OWNER DOES NOT GUARANTEE THAT EXISTING UTILITY LOCATIONS ARE EXACT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATIONS OF EXISTING UTILITIES(ABOVE AND BELOW GROUND) BEFORE BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL CALL APPROPRIATE UTILITY COMPANIES AND THE UTILITIES PROTECTION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY OWNER AND/OR ENGINEER OF ANY UTILITY CONFLICTS WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING AND COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
3. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND FOR ALL NATURAL AND PAVED AREAS.
4. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
5. CONTRACTOR TO REVIEW GEOTECHNICAL REPORT PROVIDED BY THE OWNER.
6. ALL PROPOSED SPOT ELEVATIONS ARE PAVEMENT GRADES, UNLESS OTHERWISE NOTED, TOP OF CURB ELEVATIONS ARE 6 INCH ABOVE ELEVATIONS SHOWN ON THIS PLAN.
7. ALL ELEVATIONS PRESENTED IN THESE PLANS ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF NAVD 88.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING CONSTRUCTION ACTIVITIES TO ENSURE THAT PUBLIC STREETS AND RIGHT-OF-WAYS ARE KEPT CLEAN OF MUD, DUST OR DEBRIS. DUST ABATEMENT SHALL BE MAINTAINED BY ADEQUATE WATERING OF THE SITE BY THE CONTRACTOR.
9. CLEAR AND GRUB WITHIN WORK LIMITS FOR ALL SURFACE VEGETATION, TREES, STUMPS, BRUSH, ROOTS, ETC. DO NOT DAMAGE OR REMOVE TRESS EXCEPT AS APPROVED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS. PROTECT ALL ROOTS TWO INCHES IN DIAMETER OR LARGER.
10. STRIP WORK LIMITS, REMOVING ALL ORGANIC MATTER WHICH CANNOT BE COMPACTED INTO A STABLE MASS. ALL TRESS, BRUSH, AND DEBRIS ASSOCIATED WITH CLEARING, STRIPPING OR GRADING SHALL BE REMOVED AND DISPOSED OFF SITE BY THE CONTRACTOR.
11. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, STRAIGHT GRADES SHALL BE RUN BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN. FINISH PAVEMENT GRADES AT TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES OR SHALL BE FEATHERED PAST JOINTS WITH EXISTING PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINAGE SURFACE.
12. ALL EXISTING AND CONSTRUCTED MANHOLES, CLEANOUTS, MONUMENTS, GAS VALVES, WATER VALVES, AND SIMILAR STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH GRADE OF THE PAVEMENT, SIDEWALK, LANDSCAPED AREA, OR MEDIAN STRIP WHEREIN THEY LIE.

ADA NOTES

1. THE DESIGN PROFESSIONAL SIGNING THIS DOCUMENT REPRESENTS THAT TO THE BEST OF HIS/HER PROFESSIONAL JUDGEMENT, KNOWLEDGE, AND BELIEF THE DESIGN SPECIFICATIONS HEREIN COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
2. ALL GRADES/SLOPES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY THE AMERICANS WITH DISABILITIES ACT (ADA). IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES, AND THE ADA DESIGN MANUAL. IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT FROM THOSE SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE ENGINEER SHOULD BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
3. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL THE PHASES OF WORK RELATING TO ADA ACCESSIBILITY FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS REQUIRED BY ADA ARE SUBJECT TO REJECTION AND MAY BE REQUIRED TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
4. SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUBCONTRACTORS DURING GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF AMERICANS WITH DISABILITIES ACT ACCESSIBILITY RELATED ITEMS BY THE CITY, ANY OTHER AUTHORITY, OR AFFECTED PARTIES.

FEMA FLOOD NOTE

THIS PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 35001C0328J, WHICH BEARS AN EFFECTIVE DATE OF 11/04/2016 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

Know what's below. Call before you dig.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

Bowman CONSULTING
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Ste 215
Plano, Texas 75024
Phone: (972) 497-2590
Fax: (512) 327-4662
www.bowman.com

REVISIONS

REVISION	DESCRIPTION	DATE
1		

GRADING & DRAINAGE PLAN

WHATABURGER
NEC 98TH ST. & VOLCANO RD.
ALBUQUERQUE, NM 87124

Kofi Addo-Nyarko
NEW MEXICO
25552
PROFESSIONAL ENGINEER
3/23/2022

DESIGN	DRAWN	CHKD
BB	BB	KAN

JOB No. 070426-01-001

SHEET
C4.0

PRELIMINARY NOT FOR CONSTRUCTION