

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

January 15, 2020

Shawn Biazar
SBS Construction and Engineering, LLC
10209 Snowflake Ct. NW
Albuquerque, NM 87114

**RE: Townhomes for Ahmet Tiryaki
1200 Cagua Dr. NE
Permanent C.O. - Accepted
Engineer's Certification Date: 01/03/2020
Engineer's Stamp Date: 06/11/19
Hydrology File: J18D048**

PO Box 1293

Dear Mr. Biazar:

Albuquerque

Based on the Certification received 01/09/2020 and site visit on 01/14/2020, this certification is approved in support of Permanent Release of Occupancy by Hydrology.

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

NM 87103

Sincerely,

www.cabq.gov

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 6/2018)

Project Title: TOWNHOMES FOR AHMET TIRYAKI Building Permit #: _____ Hydrology File #: J18D048
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: TRACT 3, MARBLE TOWNHOMES
City Address: 1200 CAGUA DR., NE

Applicant: SBS CONSTRUCTION AND ENGINEERING, LLC Contact: SHAWN BIAZAR
Address: 10209 SNOWFLAKE CT., NW, ALBUQUERQUE, NM 87114
Phone#: (505) 804-5013 Fax#: (505) 897-4996 E-mail: AECLLC@AOL.COM

Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

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

IS THIS A RESUBMITTAL? Yes _____ No

DEPARTMENT _____ TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

DATE SUBMITTED: 1-03-2020 By: SHAWN BIAZAR

COA STAFF: _____

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Location/Introduction
 Tract 3, Marble Townhomes, is located at 1200 Cagua Dr., NE containing 0.5259 acre. See attached portion of Vicinity Map J-18-Z for exact location. As shown on FIRM map 350130354H, is located within flood Zone X. The site is surrounded by fully developed parcels. This site has been developed for several years, but the building and existing parking were recently removed.

Purpose
 The purpose of this drainage report is to provide drainage management solution for new building and improvement for tract 3, Marble Townhomes.

Existing Drainage Conditions
 This site is currently developed. This site has historically included a large building with remainder of the site paved (concrete +/-21,500 SF) and small landscaping area (+/-1,400 SF). The site historically drains into adjacent roadways where it is conveyed north to the City Storm Drain. The site is not impacted by any offsite flows. This existing condition has a 2.47 CFS rate of discharge.

Proposed Conditions and On-Site Drainage Management Plan
 The proposed improvements consist of two apartment buildings and associated parking. The site will be graded to follow the existing drainage pattern and will sheet flow out of driveway. However the site contains multiple harvesting ponds and depressed landscaping area that will capture the first flush, before discharging the water. The proposed development will consist of only 15,770.00 SF of new building and parking area. The remaining will be landscaping (+/-5727 SF). As you can see the new developed flow will be less than existing flow. However, we are ponding the first flush on site. The requires ponding for first flush is 446.82 CF and we have provided 1,483.67 CF which is much greater than required ponding. This proposed condition will have a 2.38 cfs rate of discharge which will be less than existon 2.47 cfs. See below calculation.

WEIGHTED E METHOD

| | | 100 YEAR, 6-HR. | | | | | | | | | | | |
|----------|-----------|-----------------|-------------|-------------|-------------|-------------|------------|---------|--------|--------|--------|--------|------|
| BASIN | AREA (SF) | AREA (AC) | Treatment A | Treatment B | Treatment C | Treatment D | Weighted I | Volume | Flow | | | | |
| | | | (acre) | (acre) | (acre) | (acre) | (ac-ft) | (ac-ft) | cfs | | | | |
| EXISTING | 22,851.20 | 0.5200 | 5% | 0.0260 | 5% | 0.0260 | 0.00 | 90% | 0.4680 | 2,2030 | 0.0955 | 2.47 | |
| PROPOSED | 22,851.20 | 0.5200 | 5% | 0.0260 | 5% | 0.0260 | 10% | 0.0520 | 80% | 0.4160 | 2,0960 | 0.0908 | 2.38 |

EQUATIONS:

WEIGHTED E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (TOTAL AREA)

VOLUME = WEIGHTED D * TOTAL AREA

FLOW = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

WHERE FOR 100-YEAR, 6 HOUR STORM (ZONE 3)

$E_a = 0.66$ $Q_a = 1.87$
 $E_b = 0.92$ $Q_b = 2.60$
 $E_c = 1.29$ $Q_c = 3.45$
 $E_d = 2.35$ $Q_d = 5.02$

DISCHARGED PROPOSED 2.38 CFS
 EXISTING DISCHARGE 2.47 CFS
 FIRST FLUSH REQUIREMENT 448.82 CF
 FIRST FLUSH RETAINED 1483.67 CF

PONDING VOLUME REQUIREMENTS (90TH PERCENTILE/FIRST FLUSH)

VOLUME REQUIRED = 0.34 INCHES x IMPERVIOUS AREA =
 $(0.34/12 \times 15,770.00) = 448.82$ CF

TOTAL VOLUME REQUIRED = 448.82 CF

PONDING VOLUME PROVIDED

TOTAL PONDING VOLUME PROVIDED =
 PONDS (A+B+C+D+E+F+G+H+I+J+K+L) =
 $(600.84+170.50+170.50+452.09+44.87+44.87) = 1,483.67$ CF

TOTLA VOLUME PROVIDED = 1,483.67 CF

WEIR CALCULATION FOR CURB OPENNING

$Q = CLH^{1.5}$

$H = 0.50'$, $C = 2.95$, $L = 24"$ (2.00')

$2.95^2 \cdot (50)^{1.5} = 2.95^2 \cdot 0.35355339$

$Q = 2.08$ cfs

GENERAL NOTES:

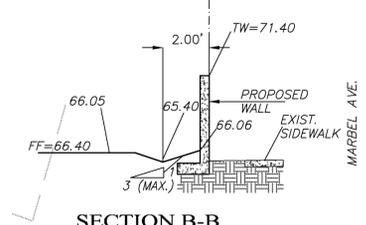
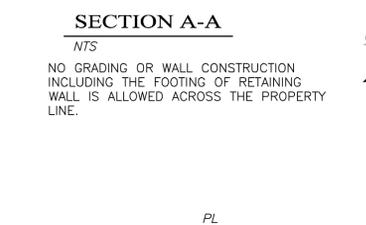
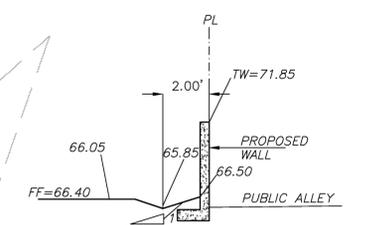
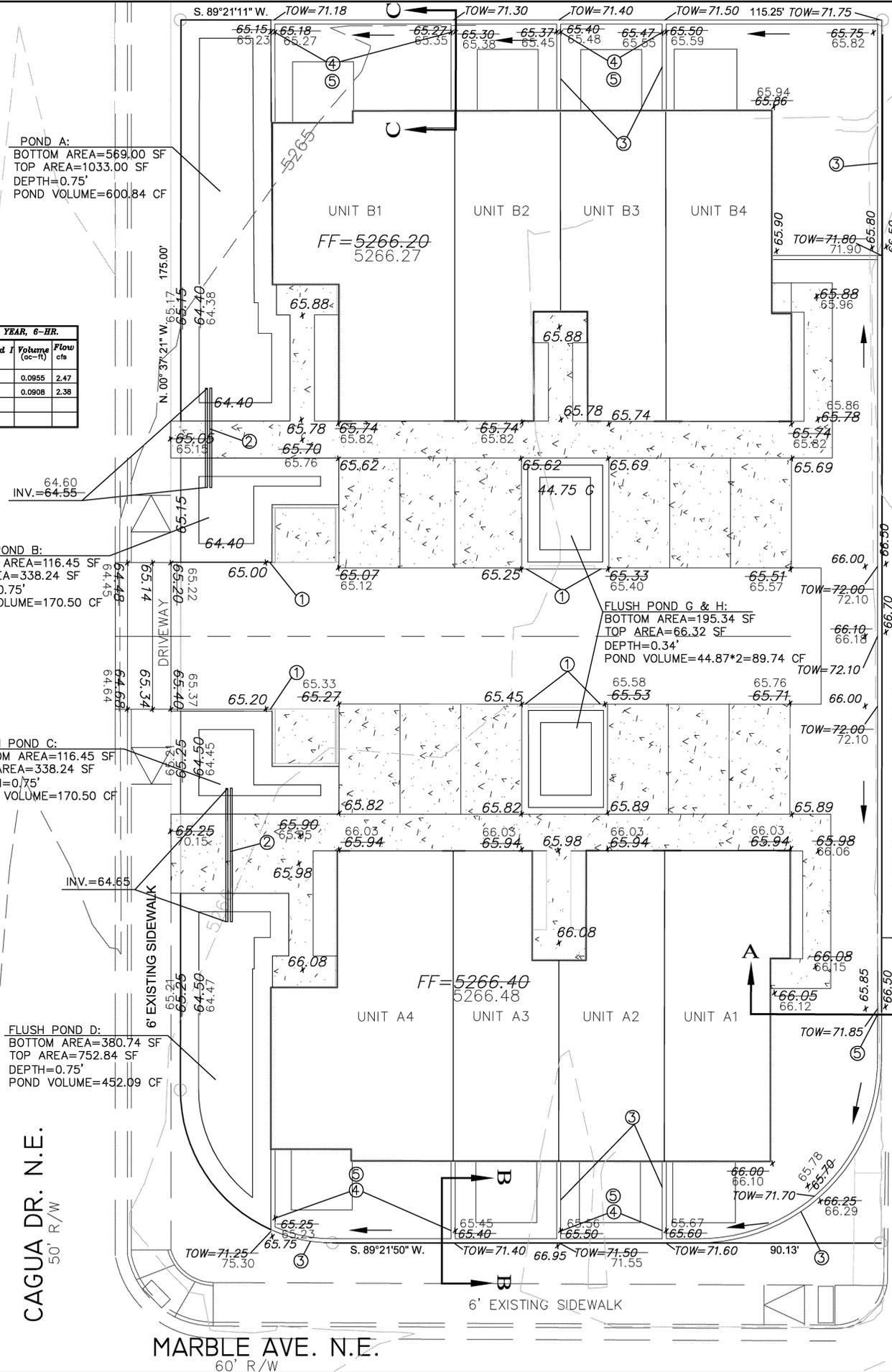
- 1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
- 2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 16_J18, HAVING AN ELEVATION OF 5261.947 FEET ABOVE SEA LEVEL.
- 3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
- 4: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
- 5: SLOPES ARE AT 3:1 MAXIMUM.
- 6: ADD 5200 TO ALL PROPOSED SPOT ELEVATIONS.

DRAINAGE CERTIFICATION

I, REZA AFAGHPOUR, NMPE 11814, OF SBS CONSTRUCTION AND ENGINEERING, LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 06-11-2019. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS 9801 LEONARD MARTINEZ, OF SBS CONSTRUCTION AND ENGINEERING. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR FINAL CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

REZA AFAGHPOUR, NMPE 11814
 1/3/2020
 DATE



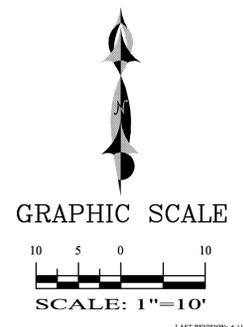
LEGAL DESCRIPTION:
 TRACT 3, MARBLE TOWNHOMES, CONTAINING 0.5259 ACRE
 ADDRESS: 1200 CAGUA DR., NE

LEGEND

| | | |
|------------|---------|-----------------------------|
| --- | 50.30 | EXISTING CONTOUR (MAJOR) |
| --- | 50.29 | EXISTING CONTOUR (MINOR) |
| --- | | BOUNDARY LINE |
| x | 42.70 | PROPOSED SPOT ELEVATION |
| x | 5029.16 | EXISTING GRADE |
| x | 5075.65 | EXISTING FLOWLINE ELEVATION |
| FL | | PROPOSED RETAINING WALL |
| BC | 41.30 | BOTTOM OF CHANEL |
| TF | 42.00 | TOP OF FOOTING |
| TOW | 65.40 | TOP OF WALL ELEV. |
| HP | | HIGH POINT |
| 42.40 | | AS-BUILT GRADES |
| 69.77 | | AS-BUILT SPOT ELEVATIONS |
| FF=5142.30 | | |
| FF=5142.25 | | |

KEYED NOTES:

1. PROVIDE 2' CURB OPENNING, TYP.
2. PROPOSED 2'-4" STORM DRAIN PIPE, TYP.
3. PROPOSED 6' GARDEN WALL, TYP.
4. 6" WALL OPENING (OR TURN ONE BLOCK) AT EACH WALL, 4" ABOVE GROND, TYP.
5. PROVIDE A SWALE 2' FROM THE PROPERTY LINE. SEE CROSS SECTION A, B AND C FOR DETAIL, TYP.



SBS CONSTRUCTION AND ENGINEERING, LLC

10209 SNOWFLAKE CT., NW
 ALBUQUERQUE, NEW MEXICO 87114
 (505)804-5013

TOWNHOMES FOR AHMET TIRYAKI GRADING PLAN

| | | | |
|---------------|-----------|-----------|---------|
| DRAWING: | DRAWN BY: | DATE: | SHEET # |
| 201917-GD.DWG | SH-B | 5-17-2019 | 1 |