# CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

August 31, 2022

Reza Afaghpour, PE SBS Construction and Engineering 7632 William Moyers Ave, NE Albuquerque, NM 87122

### RE: Alcalde Townhomes 705 Alcalde Pl SW (various) Grading and Drainage Plan Engineer's Stamp Date: 6/15/2022 Hydrology File: K13D082

Dear Mr. Afaghpour:

Based upon the information provided in your submittal received 07/13/2022, the Grading and Drainage Plan is approved for Grading, Building Permit and SO-19 Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

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.

www.cabq.gov If you have any questions, please contact me at 924-3695 or <u>dggutierrez@cabq.gov</u>

Sincerely,

PO Box 1293

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David G. Gutierrez, P.E. Senior Engineer, Hydrology Planning Department



# City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

| Project Title: ALCALDE TOWNHOMES   | ct Title: ALCALDE TOWNHOMES Building Permit #:   |  |
|--|--|--|
| DRB#:  | EPC#:  | Work Order#:   |
| Legal Description: LOTS 1-A, 2-A, 3-A, 4-A, 5-A,   | 6-A, AND 7-A, BLOCK 23, HUNING CASTLE  |  |
| City Address:705, 709, 715, 723, 727, 731, ALCALI  | DE PLACE, SW AND 1500 SAN PATRICIO AV  | E., SW   |
| Applicant:SBS CONSTRUCTION AND ENGI  | NEEING, LLC  | Contact: SHAWN BIAZAR  |
| Address: 7632 WILLIAM MOYERS AVE., NE, AL  |  |  |
| 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 SITEADMIN SITE   |
| IS THIS A RESUBMITTAL? X Yes   | No   |  |
| DEPARTMENT TRANSPORTATION  | X HYDROLOGY/DRAINAGE   |  |
| Check all that Apply:<br><b>TYPE OF SUBMITTAL:</b><br>PAD CERTIFICATION<br>CONCEPTUAL G & D PLAN<br>X GRADING PLAN<br>DRAINAGE REPORT<br>DRAINAGE MASTER PLAN<br>FLOODPLAIN DEVELOPMENT PERMIT A<br>ELEVATION CERTIFICATE<br>CLOMR/LOMR<br>TRAFFIC CIRCULATION LAYOUT (TCL)<br>TRAFFIC IMPACT STUDY (TIS)<br>STREET LIGHT LAYOUT<br>OTHER (SPECIFY)<br>PRE-DESIGN MEETING? | X BUILDING PER<br>CERTIFICATE<br>PRELIMINARY<br>SITE PLAN FO<br>SITE PLAN FO<br>FINAL PLAT A<br>FOUNDATION<br>X GRADING PER<br>SO-19 APPROV<br>PAVING PERM<br>GRADING/ PAI<br>WORK ORDER<br>CLOMR/LOMR | OF OCCUPANCY<br>Y PLAT APPROVAL<br>R SUB'D APPROVAL<br>R BLDG. PERMIT APPROVAL<br>APPROVAL<br>C OF FINANCIAL GUARANTEE<br>PERMIT APPROVAL<br>RMIT APPROVAL<br>VAL<br>IIT APPROVAL<br>D CERTIFICATION<br>APPROVAL |
|  |  |  |
| COA STAFF:   | ELECTRONIC SUBMITTAL RECEIVED:   |  |

#### Location

LOTS 1-A. 2-A, 3-A, 4-A, 5-A, 6-A, AND 7-A, BLOCK 23, HUNING CASTLE, is located at 705 through 723 Alcalde Place, SW and 1500 San Patricio Avenue, SW, containing 0.4284 acre. See attached portion of Vicinity Map K-13-Z for exact location.

#### Purpose

The purpose of this drainage report is to present a grading and drainage solution for new townhome development for Lots 1-A. 2-A, 3-A, 4-A, 5-A, 6-A, AND 7-A, BLOCK 23, HUNING CASTLE35.

#### **Existing Drainage Conditions**

This lot is very flat and drains east to west into Alcalde Place, SW and no other offiste flows enters this site. There are existing block walls at the east property liner and proposed block wall at both south and north end. The project consist of seven lots. There are existing storm drain pipes and inlets in Alcalde that allows us to free discharge into street except the First Flush Volume.

#### Proposed Conditions and On-Site Drainage Management Plan

There are existing block walls on the east side and we are proposing walls at north and south side of this site. Also proposed building walls to separate town homes yards. Based on the existing storm sewer and the capacity we are proposing to discharge the entire developed flow minus the first flush volume requirement of 68.60 CF. All the lots are the same with proposed same building footprint on each lot. The calculation for first flush is shown below. The first flush volume requirement of 68.60 CF for each lot. As part of this project a 12" sidewalk culvert will be installed at the intersection of Alcalde Road, SW and Escalante Avenue, SW to fix the ponding issue in that area. See the grading plan for the location.

### **VOLUME CALCULATIONS FOR 10 DAY STORM**

BASIN AREA (SF) AREA (AC) AREA (MI<sup>2</sup>) ON-SITE 3,240.00 0.0744 0.000116

### E = EA(AA) + EB(AB) + EC(AC) + ED(AD)

AA + AB + AC + ADV-360 = E (AA + AB + AC + AD)

| EA = 0.62 | P-60 = 1.78     |
|-----------|-----------------|
| EB = 0.80 | P-360 = 2.29    |
| EC = 1.03 | P-1440 = 2.59   |
| ED = 2.33 | P-10 Day = 3.62 |

### **EXISTING CONDITIONS**

# PROPOSED CONDITIONS

| AA = 0.00%  |
|-------------|
| AB = 23.00% |
| AC = 17.00% |
| AD = 60.00% |
|             |

| <b>E</b> = | 0.6200 IN    | $\mathbf{E} =$ | 1.7571 IN    |
|------------|--------------|----------------|--------------|
| V-360 =    | 0.0038 AC-FT | V-360 =        | 0.0109 AC-FT |
| AD =       | 0.0000 AC    | AD =           | 0.0446 AC    |
| V-10 DAY = | 0.0038 AC-FT | V-10 DAY =     | 0.0158 AC-FT |
| V-10 DAY=  | 167.40 CF    | V-10 DAY=      | 689.88 CF    |
|            |              |                |              |

# V (REQUIRED) =689.88 - 167.40 = 522.48 CF

PONDING VOLUME REQUIREMENTS (90TH PERCENTILE/FIRST FLUSH) VOLUME REQUIRED = 0.42 INCHES x IMPERVIOUS AREA =  $(0.44/12 \times 1,960.00) = 68.60 \text{ CF}$ 

### PONDS FLEVATION TABLE AND FIRST FLUSH VOL

| PONDS ELEVATION TABLE AND FIRST FLUSH VOL. |           |           |                |          |        |
|--|-----------|-----------|----------------|----------|--------|
| LOT #                                      | TOP ELEV. | BOP ELEV. | VOL. PROVIDED. | VOL REQ. | POND # |
| LOT 1-A                                    | 4948.30   | 4947.70   | 76.13 CF       | 68.60 CF | A      |
| LOT 2-A                                    | 4948.35   | 4947.60   | 70.72 CF       | 68.60 CF | В      |
| LOT 3-A                                    | 4948.55   | 4947.80   | 70.31 CF       | 68.60 CF | С      |
| LOT 4-A                                    | 4948.70   | 4948.05   | 74.34 CF       | 68.60 CF | D      |
| LOT 5-A                                    | 4948.70   | 4947.95   | 73.95 CF       | 68.60 CF | E      |
| LOT 6-A                                    | 4948.85   | 4948.10   | 73.95 CF       | 68.60 CF | F      |
| LOT 7-A                                    | 4948.50   | 4947.95   | 72.18 CF       | 68.60 CF | G      |

### NOTICE TO CONTRACTOR

- PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SO-19")
- 1. Build sidewalk culvert per COA STD DWG 2236. Work is
- permitted and inspected by DMD Construction Services Division. 2. An excavation permit will be required before beginning any
- work within City Right Of Way.
- 3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations
- concerning construction safety and health. 4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260 1990] for the
- location of existing utilities. 5. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be
- resolved with a minimum amount of delay. 6. Backfill compaction shall be 95%. 7. Maintenance of the facility shall be the responsibility of the
- owner of the property being served.
- 8. Work on arterial streets may be required on a 24 hour basis. 9. For excavation and barricading inspections, contact DMD Construction Services Division.

| 1 | APPROVALS | NAME | DATE |
|---|-----------|------|------|
|   | INSPECTOR |      |      |

### NOTICE TO CONTRACTORS

2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION,

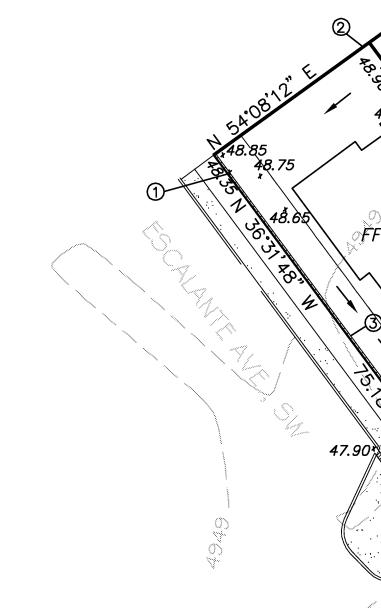
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL FOR LOCATING SERVICE, 260-1990 OR "811", FOR LOCATION OF EXISTING UTILITIES.

## 4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

WORK WITHIN CITY RIGHT-OF-WAY.

5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE. 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

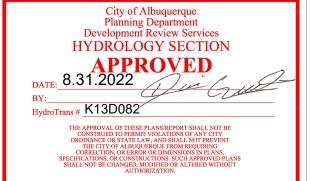


1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY

GENERAL NOTES: 1: CONTOUR INTERVAL IS HALF (1.00) FOOT.

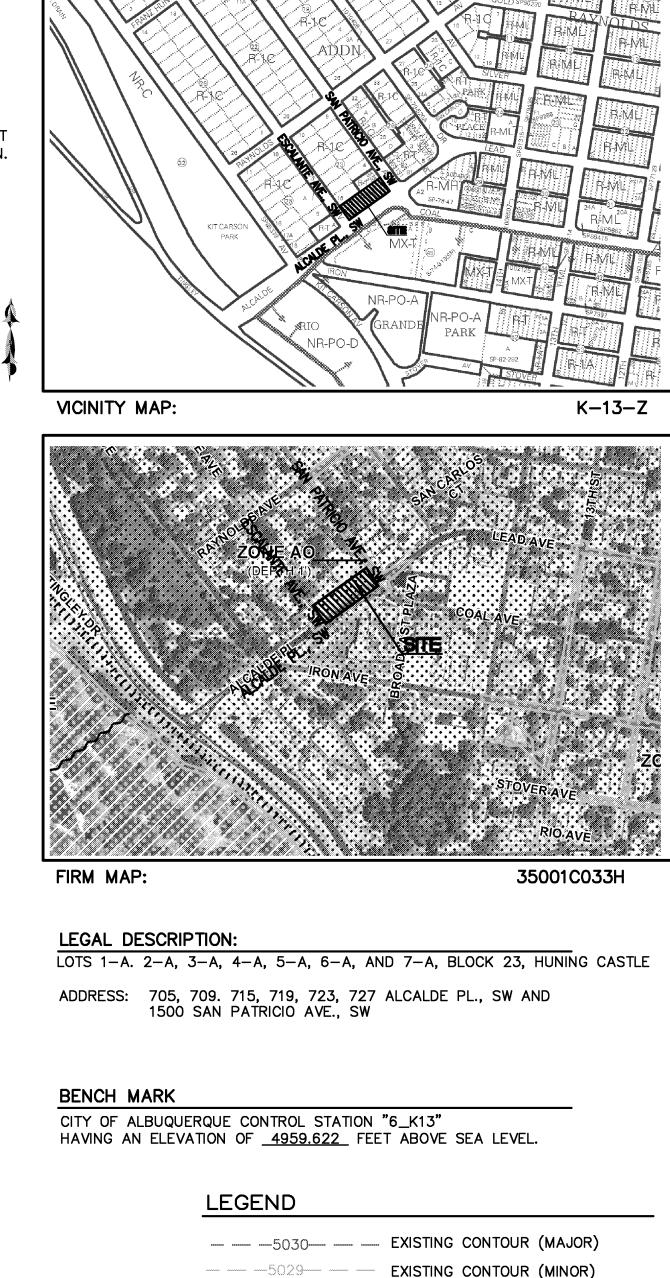
5: SLOPES ARE AT 3:1 MAXIMUM.

49.55 49.60 FF=4949.60 1500 SAN PATRICIO 49.20 \* 49.25 FF=4949.55 49.10 49.35 POND G: BOTTOM AREA=58.73 SF TOP AREA=203.58 SF DEPTH=0.55' POND VOLUME=72.18 CF LOT 6-A 5 **X**49.40 705 ALCALDE *FF***=**4949.40 19.20 49.25 LOT 5-A 709 ALCALDE *FF*=4949.35 19.20 49.05 48 91 48.95 LOT 4-A POND F: BOTTOM AREA=41.00 SE TOP AREA=156.21 SF **18.90** 49.00 FF=4949.25 715 ALCALDE DEPTH=0.75' POND VOLUME=73.95 48.25 9.00 POND E: BOTTOM AREA=41.00 8F 48.21 TOP AREA=156.21 8F LOT 3-A DEPTH=0.75' POND VOLUME=73.95 CF 719 ALCALDE **A**8.85 *FF***=**4949.05 ×48.15 POND D: BOTTOM AREA=52.55 SF TOP AREA=176.19 SF DEPTH=0.65' POND VOLUME=74.34 CF LOT 2-A 723 ALCALDE 48 40 FF=4948.95 727 ALCALDE LOT 1-A 727 ALCALDE POND C: BOTTOM AREA=38.31 SF TOP AREA=149.83 SF SENCH MARK SQUARE CUT IN SW OKEYED NOTES: DEPTH=0.75' POND VOLUME=70.58 CF ELEV.=4949.50 1. INSTALL 12" SW CULVERT PER CITY STD. DWG 2236. POND B: BOTTOM AREA=36.74 SF TOP AREA=151.85 SF DEPTH=0.75' POND VOLUME=70.72 CF 2. EXISTING BLOCK WALL. 3. PROPOSED GARDEN WALL, FACE OF WALL TO BE AT R.O.W LINE. 4. PROPOSED NEW 4' SIDEWALK. X47.80 4<del>8.50</del> POND A: BOTTOM AREA=56.10 SF TOP AREA=197.65 SF 5. PROPOSED GRADEN WALL, THE CENTER OF WALL TO BE ON PROPERTY LINE. DEPTH=0.60' POND VOLUME=76.13 CF <u>EXIST.</u> DROP INLET

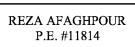


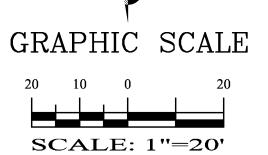
- 2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 6\_K13, HAVING AN ELEVATION OF <u>4959.622</u> FEET ABOVE SEA LEVEL.
- 3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES 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-SIDERATION.
- 4: THIS IS <u>NOT</u> A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.

6: ADD 4900 TO ALL PROPOSED SPOT ELEVATIONS.









| HP                    | HIGH POINT                   |
|-----------------------|------------------------------|
| 42.40<br><b>42.45</b> | AS-BUILT GRADES              |
| 69,77<br>X 4¥.40      | AS-BUILT SPOT ELEVATIONS     |
|                       |                              |
|                       |                              |
|                       |                              |
| SBS                   | S CONSTRUCTION               |
| AND                   | ENGINEERING, LL              |
|                       | 7632 WILLIAM MOYERS AVE., NE |

- BOUNDARY LINE

EXISTING GRADE

X 42.70

**X** 48.05

imes 48.05

BC = 41.30

TF=42.00

TRW=45.12

PROPOSED SPOT ELEVATION

EXISTING FLOWLINE ELEVATION

PROPOSED RETAINING WALL

TOP OF RETAINING WALL

BOTTOM OF CHANEL

TOP OF FOOTING

ALBUQUERQUE, NEW MEXICO 87122 (505)804-5013

# ALCALDE TOWNHOMES **GRADING PLAN**

| 20'                     | DRAWING:      | DRAWN BY: | DATE:     | SHEET # |
|-------------------------|---------------|-----------|-----------|---------|
|                         | 202126-GD.DWG | SH-B      | 5-17-2022 | 1       |
| LAST REVISION: 2-2-2018 |               |           |           |         |
|                         |               |           |           |         |