# CITY OF ALBUQUERQUE

Timothy M. Keller, Mayor

January 11, 2018

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

**RE: Navin Properties LLC**
**1400 Britt SE**
**Request for Permanent C.O. – Accepted**
**Engineer's Certification Date: 01/05/18**
**Engineer's Stamp Date: 3/12/17**
**Hydrology File: M21D005D**

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Dear Mr. Biazar:

Based on the Certification received 01/09/18 and site visit on 01/10/18, the site is acceptable for a Permanent Certificate of Occupancy by Hydrology for 1400 Britt SE.

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

Orig: Drainage File

**Location**
LOT 4, BLOCK 3, SANDIA RESEARCH PARK is located at 1400 Britt St., SE containing 1.0169 acre. See attached portion of Vicinity Map M-21-Z for exact location.

**Purpose**
The purpose of this drainage report is to present a grading and drainage solution for new building and improvements with this tract of land.

**Existing Drainage Conditions**
This site falls within Master Drainage Plan for the Sandi Research Park, Area D-1 (M-21/D5) prepared by Andrews, Asbury, & Roberts,Inc. Area D-1, discharging directly into streets at various locations which eventually drains directly into existing pond this development. No offsite flows enters this site. the runoff to the east drains east. Small portion of the site to the east drains east. The runoff to the north and to the south drain west to Birtt Stree.

**Proposed Conditions and On-Site Drainage Management Plan**
Since the Master Plan (File M-21/D5) is designed for complete discahrge, we are proposing to pond the 90th Percentile/First Flush requirement which is is 0.34 inches times the impervious area. Total retention volume provided within pond A and B (2,922.52 cf) exceeds the ponding volume requirement for First Flush (814.31 cf). Pond A overflows into parking lot and then to Pond B. From there the runoff drainsto Britt Street via Sidewalk culvert.

**Calculations**
City of Albuquerque, Development Process Manuel, Section 22.2, Hydrology Section, was used for runoff calculations. See this plan for AHYMO input and Summary output files.

```
* ZONE 3
**********************************************************************
*          100-YEAR,  6-HR STORM (UNDER EXISTING CONDITIONS)         *
**********************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                     RAIN DAY=3.10 IN DT=0.03333 HR
*
COMPUTE NM HYD       ID=1 HYD NO=100.0 AREA=0.001589 SQ MI
                     PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
**********************************************************************
*          10-YEAR,  6-HR STORM (UNDER EXISTING CONDITIONS)          *
**********************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                     RAIN DAY=2.07 IN DT=0.03333 HR
*
COMPUTE NM HYD       ID=1 HYD NO=110.0 AREA=0.001589 SQ MI
                     PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                     TP=0.1333 HR MASS RAINFALL=-1
**********************************************************************
*          100-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)         *
**********************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=2.14 IN RAIN SIX=2.60 IN
                     RAIN DAY=3.10 IN DT=0.03333 HR
*
COMPUTE NM HYD       ID=1 HYD NO=100.1 AREA=0.001589 SQ MI
                     PER A=0.00 PER B=25.00 PER C=10.00 PER D=65.00
                     TP=0.1333 HR MASS RAINFALL=-1
**********************************************************************
*          10-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)          *
**********************************************************************
START                TIME=0.0
RAINFALL             TYPE=1 RAIN QUARTER=0.0 IN
                     RAIN ONE=1.43 IN RAIN SIX=1.73 IN
                     RAIN DAY=2.07 IN DT=0.03333 HR
*
COMPUTE NM HYD       ID=1 HYD NO=110.1 AREA=0.001589 SQ MI
                     PER A=0.00 PER B=25.00 PER C=10.00 PER D=65.00
                     TP=0.1333 HR MASS RAINFALL=-1
**********************************************************************
FINISH
```

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) – – VERSION: 1997.02d RUN DATE (MON/DAY/YR) =03/12/2017
INPUT FILE = BRITT.TXT USER NO.= AHYMO-I-9702c01000R31-AH

| COMMAND | HYDROGRAPH IDENTIFICATION | FROM ID NO. | TO ID NO. | AREA (SQ MI) | PEAK DISCHARGE (CFS) | RUNOFF VOLUME (AC-FT) | RUNOFF (INCHES) | TIME TO PEAK (HOURS) | CFS PER ACRE | PAGE = 1 NOTATION |
|---|---|---|---|---|---|---|---|---|---|---|
| START | | | | | | | | | | TIME= .00 |
| RAINFALL TYPE= 1 | | | | | | | | | | RAIN6= 2.600 |
| COMPUTE NM HYD | 100.00 | – | 1 | .00159 | 1.91 | .056 | .65514 | 1.533 | 1.880 | PER IMP= .00 |
| START | | | | | | | | | | TIME= .00 |
| RAINFALL TYPE= 1 | | | | | | | | | | RAIN6= 1.730 |
| COMPUTE NM HYD | 110.00 | – | 1 | .00159 | .57 | .016 | .18834 | 1.533 | .563 | PER IMP= .00 |
| START | | | | | | | | | | TIME= .00 |
| RAINFALL TYPE= 1 | | | | | | | | | | RAIN6= 2.600 |
| COMPUTE NM HYD | 100.10 | – | 1 | .00159 | 4.34 | .160 | 1.88584 | 1.500 | 4.270 | PER IMP= 65.00 |
| START | | | | | | | | | | TIME= .00 |
| RAINFALL TYPE= 1 | | | | | | | | | | RAIN6= 1.730 |
| COMPUTE NM HYD | 110.10 | – | 1 | .00159 | 2.70 | .095 | 1.11772 | 1.500 | 2.653 | PER IMP= 65.00 |
| FINISH | | | | | | | | | | |

## POND VOLUME REQUIRED

TOTAL PONDING VOLUME REQUIRED (90TH PERCENTILE/FIRST FLUSH) = 0.34 INCHES x IMPERVIOUS AREA = (0.34/12 x 28,708.75) = 813.41 CF

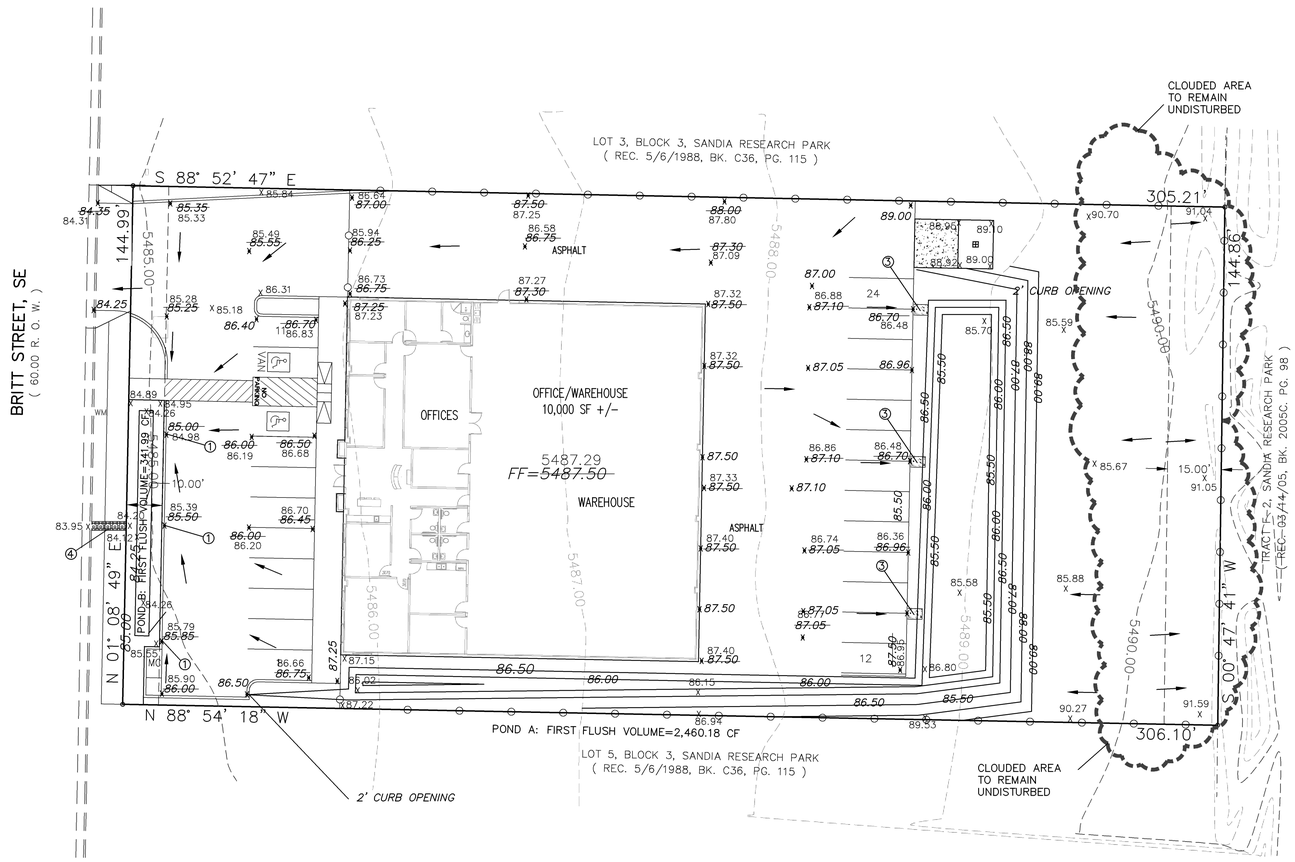
## POND CALCULATION

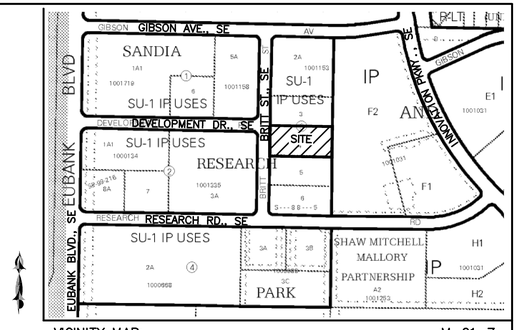
TOTAL POND AREA PROVIDED =
PONDING CALCULATIONS:

POND A: AREA @ TOP = 3,578.92, AREA @ BOTTOM = 1,496.69
POND VOLUME = (3,578.92+1,496.69)/2*1.00 = 2,537.81 CF

POND B: AREA @ TOP = 778.27, AREA @ BOTTOM = 247.62
POND VOLUME = (778.27+247.62)/2*0.75 = 384.71 CF

TOTAL POND VOLUME PROVIDED = 2,537.81 + 384.71 = 2,922.52 CF




VICINITY MAP: M-21-Z

**LEGAL DESCRIPTION:**
LOT 4, BLOCK 3, SANDIA RESEARCH PARK
CONTAINING 1.0169 ACRE
ZONING: SU-1 FOR IP USES
ADDRESS: 1400 BRITT ST., SE

GENERAL NOTES:
1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION LSS_302, HAVING AN ELEVATION OF 5444.139 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 CONSIDERATIONS.
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.

## LEGEND

| | |
|---|---|
| ----5030---- | EXISTING CONTOUR (MAJOR) |
| ----5029---- | EXISTING CONTOUR (MINOR) |
| ——— | BOUNDARY LINE |
| x 28.50 | PROPOSED SPOT ELEVATION |
| x 5029.16 | EXISTING GRADE |
| x 5075.65 FL | EXISTING FLOWLINE ELEVATION |
| ▬ ▬ ▬ ▬ ▬ | PROPOSED RETAINING WALL |
| BC=89.08 | BOTTOM OF CHANEL |
| TC=28.50 | TOP OF CURB |
| TA=28.00 | TOP OF ASPHALT |
| HP | HIGH POINT |
| 87.40 / ~~87.50~~ | AS-BUILT GRADES |
| x 90.27 | AS-BUILT 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 03-12-2017 , THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS 9801 (LEONARD MARTINEZ), OF SBS CONSTRUCTION AND ENGINEERING, LLC . 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 — 01-05-2018 DATE

REZA AFAGHPOUR NEW MEXICO 11814 REGISTERED PROFESSIONAL ENGINEER 01-05-2018

## NOTES:

1. PROVIDE 12" CURB OPENING
2. PROPOSED 2-4" STORM DRAIN PIPE
3. 3' WIDE CONCRETE RUNDOWN
4. 2. 24" SIDEWALK CULRVET PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT).

GRAPHIC SCALE
20 10 0 20
SCALE: 1"=20'

REZA AFAGHPOUR NEW MEXICO 11814 LICENSED PROFESSIONAL ENGINEER 3/12/2017

REZA AFAGHPOUR
P.E. #11814


SBS CONSTRUCTION AND ENGINEERING, LLC
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5570


NAVIN PROPERTIES, LLC
1400 BRITT ST., SE
CONCEPTUAL GRADING PLAN

| DRAWING: | DRAWN BY: | DATE: | SHEET # |
|---|---|---|---|
| 201632-GD.DWG | SH-B | 3/12/2017 | 3 OF 4 |

LAST REVISION: 3-12-2017