

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

July 17, 2020

Richard Dourte, P.E.
RHD Engineering, LLC.
4305 Purple Sage Ave. NW
Albuquerque, NM 87120

**RE: B&D Industries
9720 Bell Ave SE
Temporary C.O. - Accepted
Engineer's Certification Date: 07/10/20
Engineer's Stamp Date: 10/4/19
Hydrology File: L20D071**

Dear Mr. Dourte:

PO Box 1293

Based solely on the Certification received 07/13/20, this certification is approved in support of Temporary Release of Occupancy by Hydrology. The following comments need to be addressed prior to acceptance for Permanent C.O.

Albuquerque

NM 87103

www.cabq.gov

1. The sidewalk culvert must be inspected and approved by Storm Drain Maintenance (Augie Armijo at (505) 857-8607). I have already been in contact with him and I'm waiting for his inspection.
2. There appears to have been parking installed over the stormwater quality pond. This will need to be addressed and the as-built volume needs to be calculated. If the volume is less than what is required, then a payment-in-lieu will need to be paid.

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 6/2018)

Project Title: B&D Industries, Inc. **Building Permit #:** _____ **Hydrology File #:** L20D071
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Tract B, Block 21, Skyline Heights
City Address: 9720 Bell Ave. SE

Applicant: RHD Engineering, LLC **Contact:** Richard Dourte
Address: 4305 Purple Sage Ave. NW, Alb. NM, 87120
Phone#: 505.288.1621 **Fax#:** _____ **E-mail:** rhengineering@outlook.com

Other Contact: Joe Simons Architecture **Contact:** Joe Simons
Address: PO Box 67408, Albuquerque NM, 87193-7406
Phone#: _____ **Fax#:** _____ **E-mail:** joe@simonsarchitecture.com

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: 07/15/2020 **By:** Richard Dourte

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE NARRATIVE:

1. THIS SITE IS LOCATED IN A FEMA FLOOD HAZARD ZONE X (REFER TO THE FIRM MAP 35001C0358H, EXCERPT ATTACHED).
2. THIS SITE IS IN A FREE DISCHARGE AREA.
3. LANDSCAPED AREA = 14%
IMPERVIOUS AREA = 86%
4. THE VOLUME OF WATER GENERATED BY THIS SITE FOR THE 100YR 6HR RAIN FALL EVENT IS 4336CF.
5. THE FIRST FLUSH PONDING REQUIREMENT IS 492CF. THE PONDING PROVIDED IS 510CF, THUS THE PONDING PROVIDED IS GREATER THAN THE REQUIRED PONDING.

Private Drainage Facilities within City Right-of-Way Notice to Contractor (Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. 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.
3. Two working days prior to any excavation, the contractor must contact **New Mexico One Call**, dial **"811"** [or (505) 260-1990] for the location of existing utilities.
4. 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.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Augie Armijo at (505) 857-8607 and Construction Coordination at 924-3416 to schedule an inspection.

GENERAL NOTES:

1. THIS SITE IS LOCATED IN A FEMA FLOOD HAZARD ZONE X (REFER TO THE FIRM MAP 35001C0358H, EXCERPT ATTACHED).
2. RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.
3. GEOBRUGG TECO STEEL MESH (OR EQUIV.) SHALL BE USED FOR SOIL STABILIZATION ON SLOPES GREATER THAN A 3:1 SLOPE, PER MANUFACTURER RECOMMENDATIONS.
4. MODIFICATIONS OR ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES/EROSION MITIGATION IMPROVEMENTS SHALL BE DONE IN THE SAME MANNER AS THE ORIGINAL IMPROVEMENT.
5. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.
6. RESEED GRADED AREAS (INCLUDING THE DRAINAGE SWALE) TO MITIGATE EROSION.
7. ALL WORK ON THIS PLAN SHALL BE DONE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARDS. ALL APPLICABLE PERMITS SHALL BE OBTAINED PRIOR TO WORK COMMENCING.
8. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARDS.
9. THE SURVEY INFORMATION WAS PROVIDED BY THE SURVEY OFFICE, INC.
10. CONSTRUCT 1-2' SIDEWALK CULVERT PER STD DWG. 2236 (SO-19 REQUIRED, SEE NOTES ON THIS SHEET INV. IN = 40.1, INV. OUT = 39.82± MATCH EXST. FL EXTEND STEEL COVER PLATE 1' PAST PROPERTY LINE, TACK WELD TIE DOWN BOLTS.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

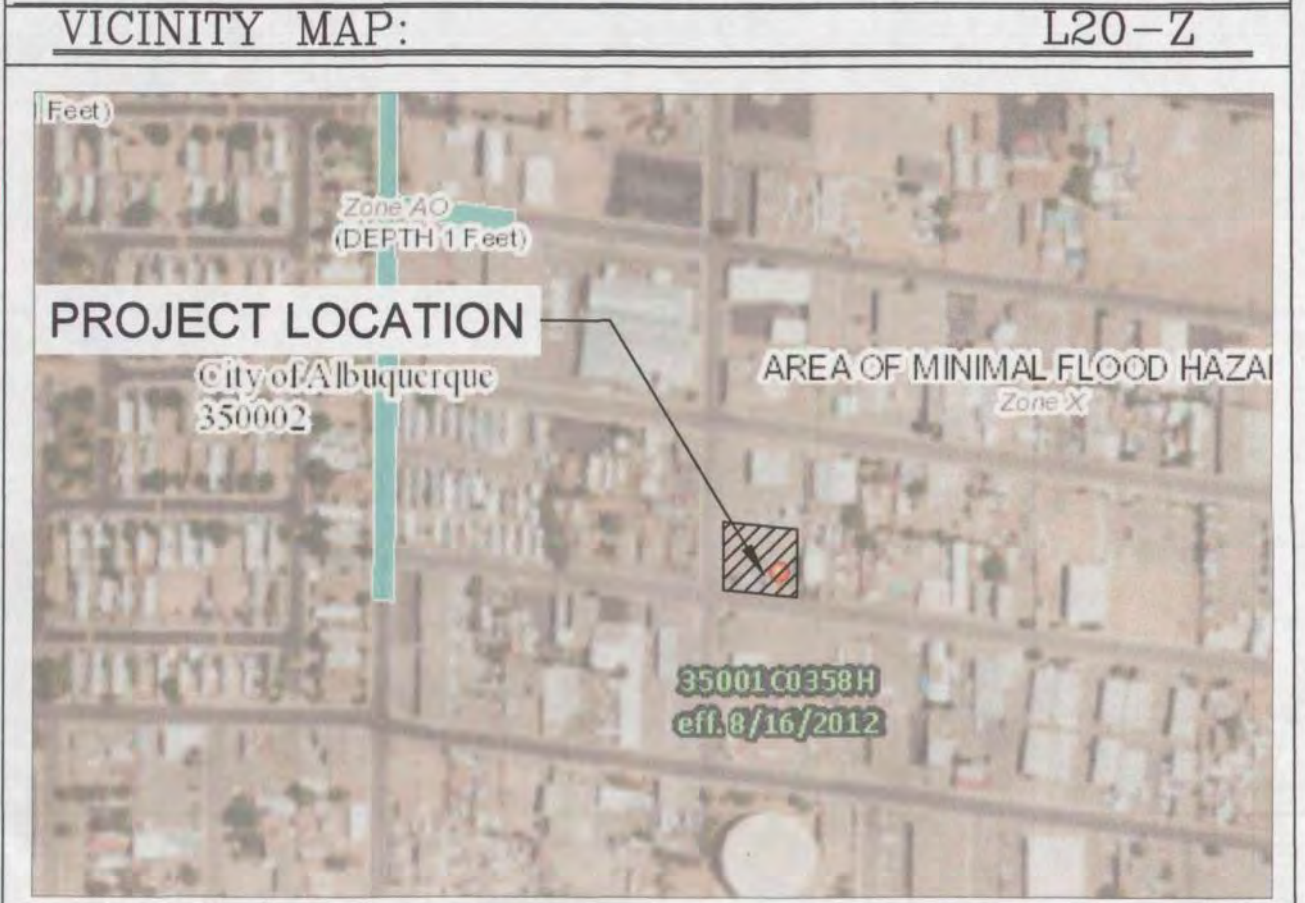
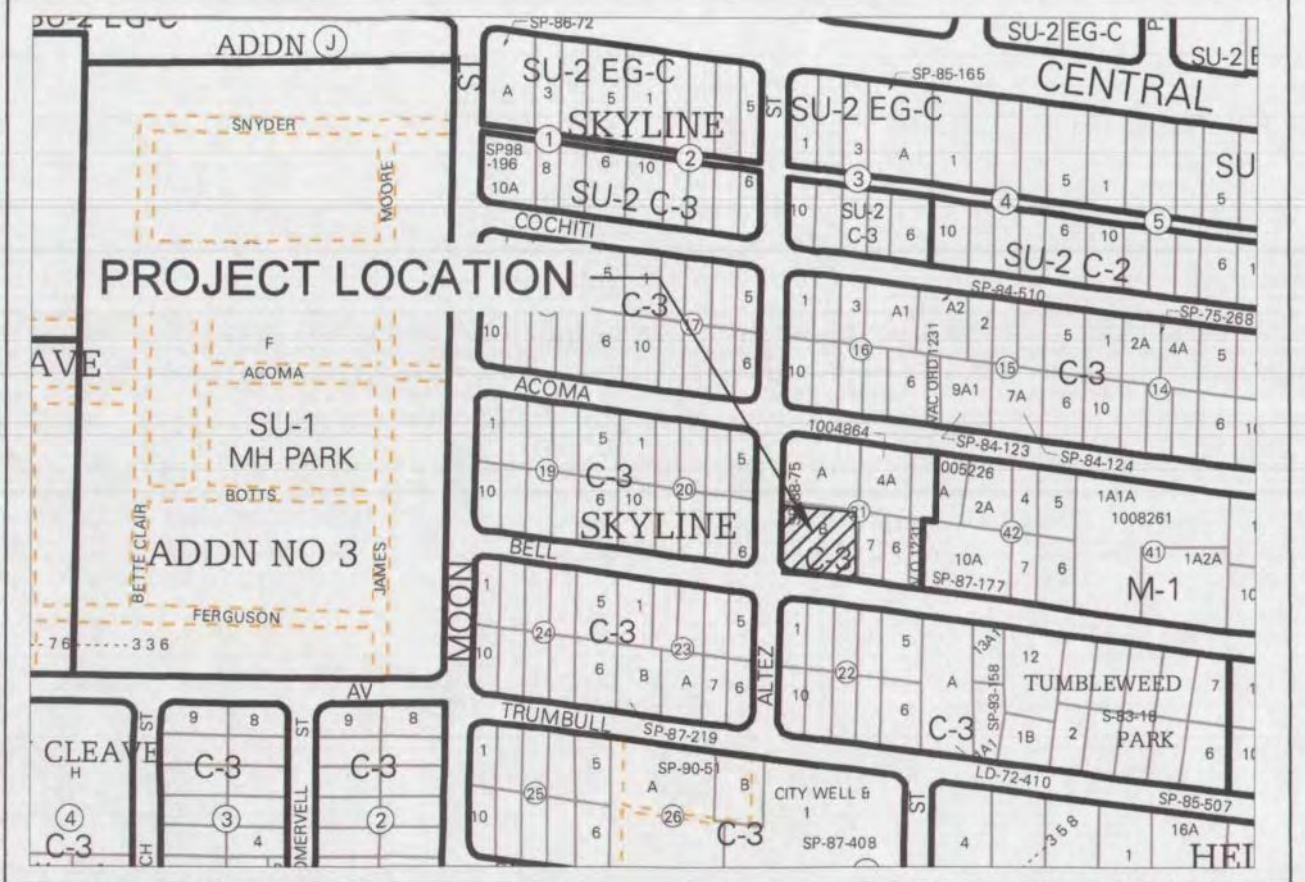
WEIR CALCULATIONS

Q=CLH^{3/2}
C=3.2
L=2.0'
H=0.5'
Q=3.2(2.0)((0.5)^{3/2})= 2.3CFS PER SIDEWALK CULVERT

THIS SITE GENERATES 2.2CFS FOR THE 100YR, 6HR EVENT, THUS 1 SIDEWALK CULVERT IS NEEDED.

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



VICINITY MAP: L20-Z

FIRM MAP: FM35001C0358H

LEGAL DESCRIPTION:

TRACT B, BLOCK 21, SKYLINE HEIGHTS
BERNALILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. RETAIN THE FIRST 34" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQUIREMENTS

LEGEND

46.00	PROPOSED SPOT ELEVATION
TW=44.00	TOP OF WALL ELEVATION
BW=39.00	BOTTOM OF WALL ELEVATION
---	EXISTING CONTOUR
---	EXISTING INDEX CONTOUR
---	PROPOSED CONTOUR
---	PROPOSED INDEX CONTOUR
---	LOT LINE
---	CENTERLINE
---	RIGHT-OF-WAY
---	PROPOSED RETAINING WALL
---	PROPOSED ROCK FACE WALL
---	EXISTING CURB AND GUTTER
---	PROPOSED CURB AND GUTTER
---	PROPOSED EDGE OF CONCRETE
---	PROPOSED FLOWLINE
---	EXISTING WALL
---	PROPOSED BASIN BOUNDARY

I HAVE PERSONALLY INSPECTED THE PROPERTY ON 9-7-19 NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE TOPO SHOWN.

Richard Dourte P.E. #10854 DATE

ENGINEER'S SEAL	Title: B&D INDUSTRIES, INC. 9720 BELL AVE. SE	DRAWN BY DATE
RICHARD H. DOURTE REGISTERED PROFESSIONAL ENGINEER NEW MEXICO 10854	GRADING AND DRAINAGE PLAN	SHEET # 1 OF 1
10-04-19	RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	JOB #
Richard Dourte P.E. #10854		

Project: BD Industries

Drainage Calculations - Zone 3

Depth (inches) at 100yr Storm

Zone	P60	P80	P1440	P4days	P10days
1	1.87	2.20	2.66	3.12	3.67
2	2.01	2.35	2.75	3.30	3.95
3	2.14	2.60	3.10	3.95	4.90
4	2.23	2.90	3.65	4.70	5.95

Weighted E= ((Ea*As)+(Eb*Ab)+(Ec*Ac)+(Ed*Ad))/(Aa+Ab+Ac+Ad)

V360=(Weighted E *A1)/12 in/ft

V1440= V360*Ad*(P1440-P360)/12in/ft

V4days=V360*Ad*(P4days-P360)/12in/ft

V10days=V360*Ad*(P10days-P360)/12in/ft

*****EXISTING CONDITIONS*****

Area

SQ. FT

Acres

% Total

A=

0

0.000

0%

B=

0

0.000

0%

C=

20147

0.463

100%

D=

0

0.000

0%

Total

20147

0.463

100%

Weighted E=

1.290

Design Flows (100YR)

Area	SQ. FT	Acres	Peak Discharge (CFS)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	20147	0.463	1.60
D=	0	0.000	0.00
Total (CFS)			1.60

*****PROPOSED CONDITIONS*****

Area

SQ. FT

Acres

% Total

A=

0

0.000

0%

B=

0

0.000

0%

C=

2795

0.064

14%

D=

17352

0.398

86%

Total

20147

0.463

100%

Weighted E=

2.212

Design Flows (100YR)

Area	SQ. FT	Acres	Peak Discharge (CFS)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	2795	0.064	0.22
D=	17352	0.398	2.00
Total (CFS)			2.22

V360

V1440

V4days

V10days

Cubic feet	2166	2166	2166
Acres-ft	0.05	0.05	0.05

The 100 year peak flows for this developed site is 2.2 CFS and the existing flows are 1.6 CFS for an increase of 0.6 CFS. The 100 year 6 hr volume increase is 3713-2166 = 1547CF.

Storm Water Quality Ponding Requirement = Ao *0.34 in/12in/ft = 492 CF