

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

November 19, 2020

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

RE: B&D Industries
330 Altez St. SE
Permanent C.O. - Accepted
Engineer's Certification Date: 11/11/20
Engineer's Stamp Date: 10/4/19
Hydrology File: L20D071

Dear Mr. Dourte:

PO Box 1293

Based on the Certification received 11/12/20 and previous site visit on 07/17/20, this certification is approved in support of Permanent Release of Occupancy by Hydrology.

Albuquerque

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

Sincerely,

NM 87103

Renée C. Brissette

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: B&D Industries, Inc. **Building Permit #:** _____ **Hydrology File #:** L20D071
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Tract B, Block 21, Skyline Heights
City Address: 330 Altez St. 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: 11-11-20 **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 = 88%

4. THE VOLUME OF WATER GENERATED BY THIS SITE FOR THE 100YR 6HR RAIN FALL EVENT IS 4336CF. SEE DRAINAGE CERTIFICATION NOTE #3.

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.

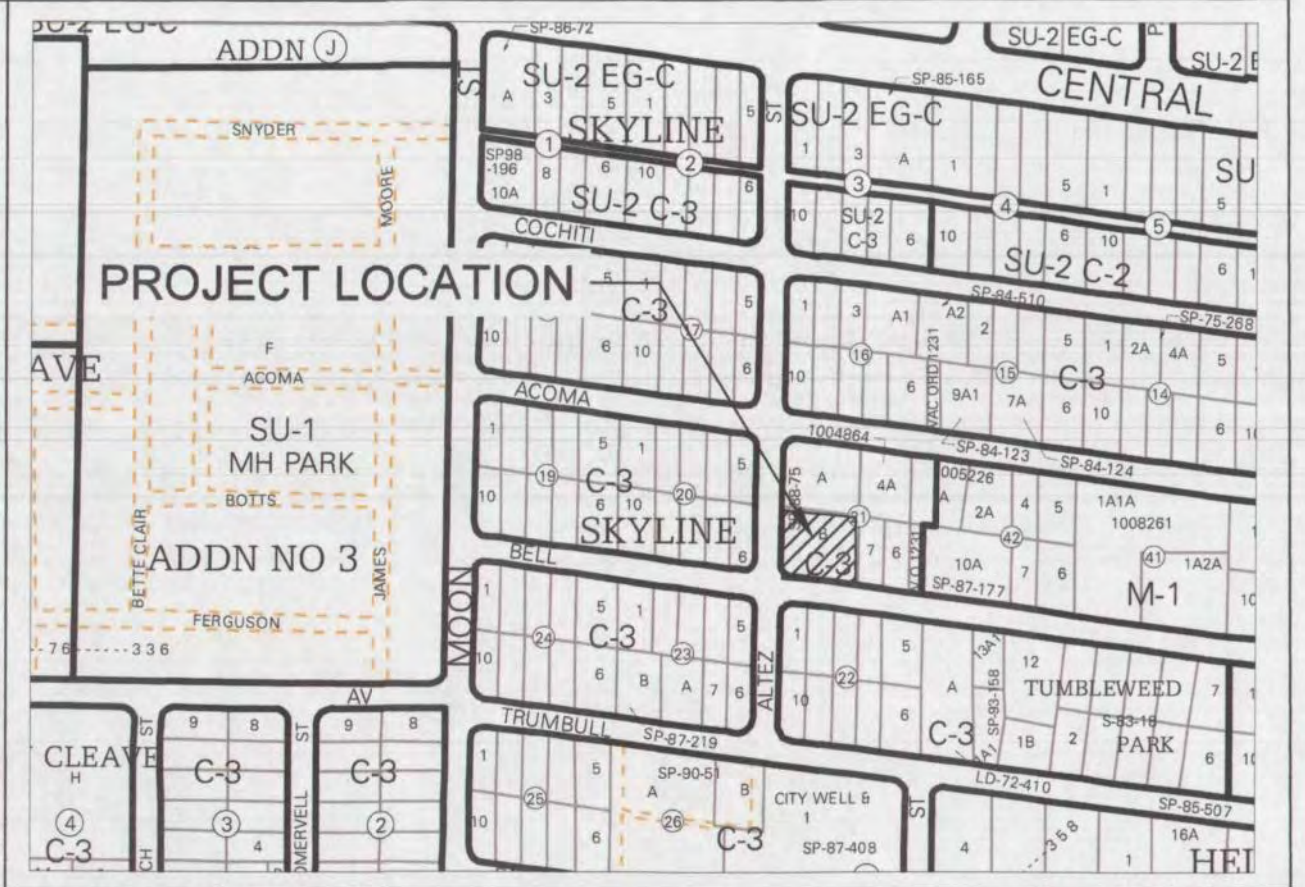
WEIR CALCULATIONS

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. 330 Altez St. SE	DRAWN BY
RICHARD H. DOURTE REGISTERED PROFESSIONAL ENGINEER NEW MEXICO 10854		DATE
10-04-19	GRADING AND DRAINAGE PLAN	SHEET # 1 OF 1
Richard Dourte P.E. #10854	RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	JOB #

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* <i>A</i> a)+(Ea* <i>A</i> a)+(Ec* <i>A</i> c)+(Eo* <i>A</i> o))/(<i>A</i> a+ <i>A</i> b+ <i>A</i> c+ <i>A</i> o)
V360=(Weighted E * <i>A</i> 1)/12 in/ft
V1440= V360* <i>A</i> o*(P4day-P360)/12in/ft
V4days=V360* <i>A</i> o*(P4day-P360)/12in/ft
V10days=V360* <i>A</i> o*(P10days-P360)/12in/ft

Peak Discharge (CFS/ACRE) 100 YR				
Treatment				
Zone	A	B	C	D
1	1.29	2.03	2.87	4.37
2	1.56	2.28	3.14	4.70
3	1.87	2.60	3.45	5.02
4	2.20	2.92	3.73	5.25

*****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		

*****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		

*****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		

*****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		

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.

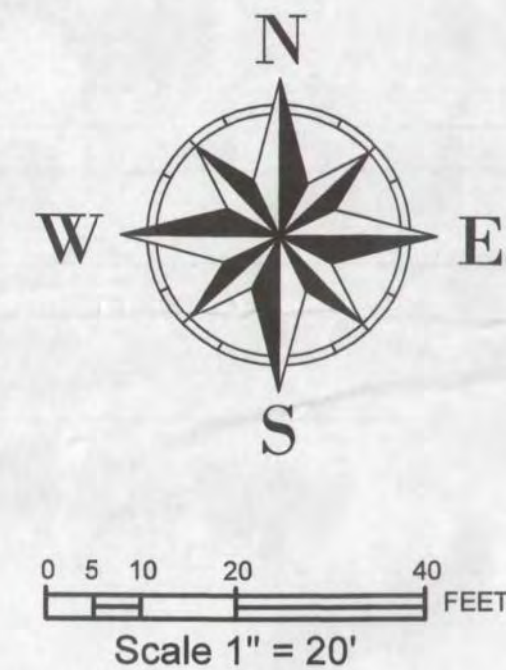
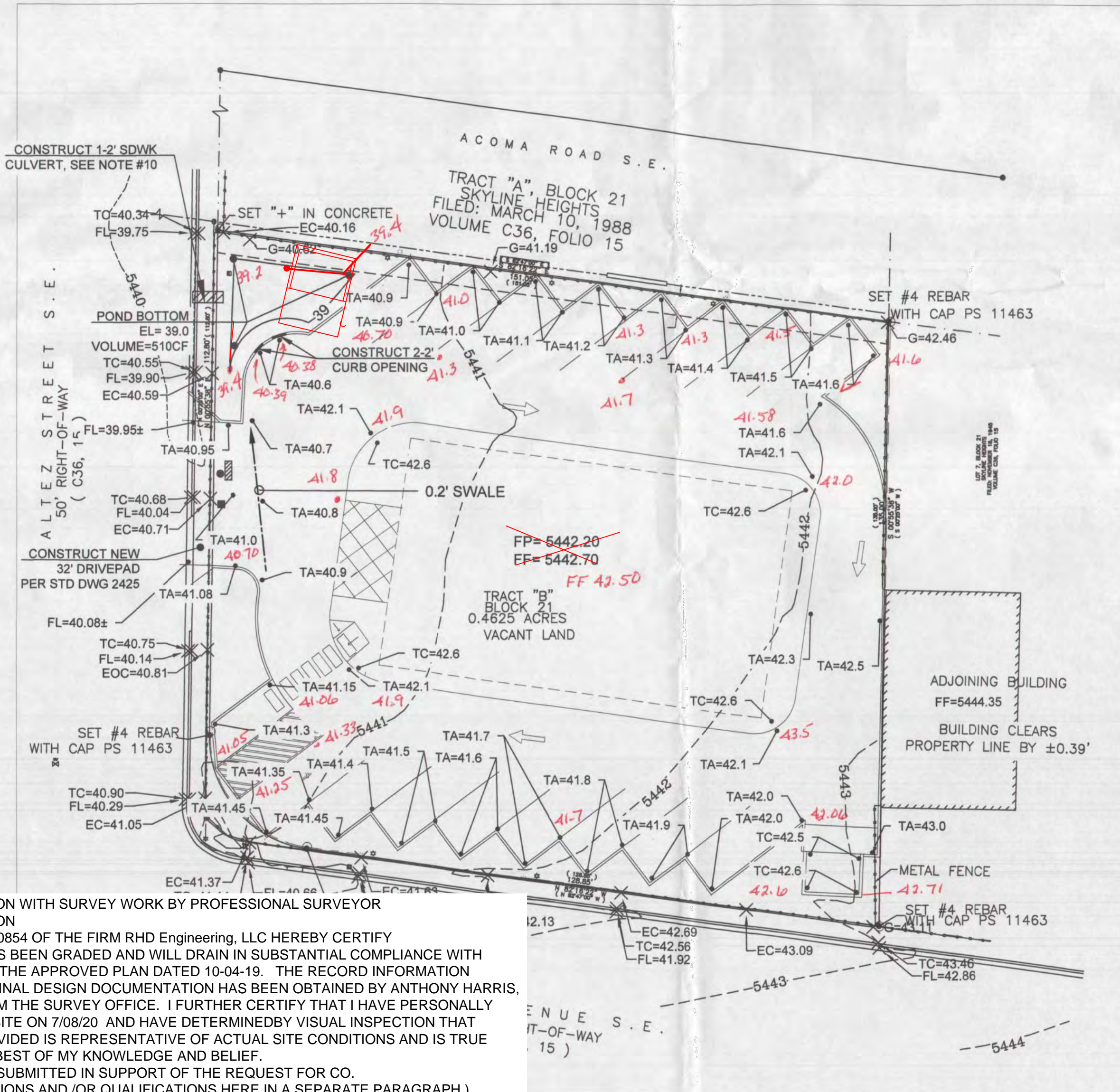
Storm Water Quality Ponding Requirement = *A*o *0.34 in/12in/ft = 492 CF

DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR
DRAINAGE CERTIFICATION
I, Richard Dourte, NMPE 10854 OF THE FIRM RHD Engineering, LLC HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 10-04-19. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENTATION HAS BEEN OBTAINED BY ANTHONY HARRIS, NMPS 11463 OF THE FIRM THE SURVEY OFFICE. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 7/08/20 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 THE REQUEST FOR CO. (DESCRIBE ANY EXCEPTIONS AND /OR QUALIFICATIONS HERE IN A SEPARATE PARAGRAPH.)
1. THE CHANGES ARE IN RED.
2. THE DUMPSTER WAS RELOCATED.
3. DUE TO THE RELOCATION OF THE DUMPSTER, THE POND VOLUME DECREASED TO 365CF, THUS A DEFICIT OF 492-365=127CF EXISTS. COMPENSATION TO THE COA WILL BE REQUIRED.

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 DOCUMENTATION ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Richard Dourte
Richard Dourte, NMPE 10854
(seal)

11/11/20
Date



BENCH MARK INFORMATION:

CITY OF ALBUQUERQUE STATION NO. "15_L20"
ELEVATION: 5418.71, NAVD 1988 LOCATED AT THE NE QUADRANT OF SUSAN AVE. AND GENERAL HODGES ST. SE

TBM BENCH MARK INFORMATION:

SD MANHOLE RIM IN BELL AVE, ELEVATION= 5440.35



Department of Municipal Development

Street Maintenance Storm drain inspection
Office (505)235-8016/Fax (505) 857-8042
Augustine Armijo storm division inspector

Date: 8-24-20

To: Ernest Armijo, Principal Engineer, PL-Planning Department

From: Augustine Armijo, Inspector, Street/ Storm Maintenance
505-235-8016

Return to: N/A

Details/Description of Document: 330 Altez

Hydro # L20D071

I went out to 330 Altez SE on 8-11-20 contractor had to remove existing culvert and replace
with a new one following drawing 2236. The contractor replaced the culvert and it was up
to the COA standard, it passed the inspection. The job was completed on 8-22-20.

Date/Time Stamp and submit to DMD front desk for logging in and out.