

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

January 14, 2022

Dennis Lorenz, PE
Lorenz Design & Consulting LLC
3308 Calle de Daniel NW
Albuquerque, NM 87104

RE: Richie Home
6800 Blanket Flower Pl. NE
Permanent C.O. - Accepted
Engineer's Certification Date: 1/4/22
Engineer's Stamp Date: 1/20/2020
Hydrology File: E23D036

Dear Mr. Lorenz:

PO Box 1293

Based on the Certification received 1/7/22 and site visit on 1/14/22, this certification is approved in support of release of Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

Sincerely,

NM 87103

www.cabq.gov

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Richie Home **Building Permit #:** _____ **Hydrology File #:** E23-D036
DRB#: NA **EPC#:** NA **Work Order#:** NA
Legal Description: Lot 9A, West Highlands at High Desert
City Address: 680 Blanket Flower Place NE

Applicant: Lorenz Design & Consulting LLC **Contact:** Dennis A Lorenz
Address: 3308 Calle De Daniel NW, Albuquerque, NM
Phone#: 505-220-0869 **Fax#:** _____ **E-mail:** dennisl@lorenznm.com

Other Contact: Waszak Enterprises **Contact:** David Waszak
Address: 2000 Los Poblanos NW, Los Ranchos, NM 87107
Phone#: 505-250-7888 **Fax#:** _____ **E-mail:** Waszakbuilds@msn.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:

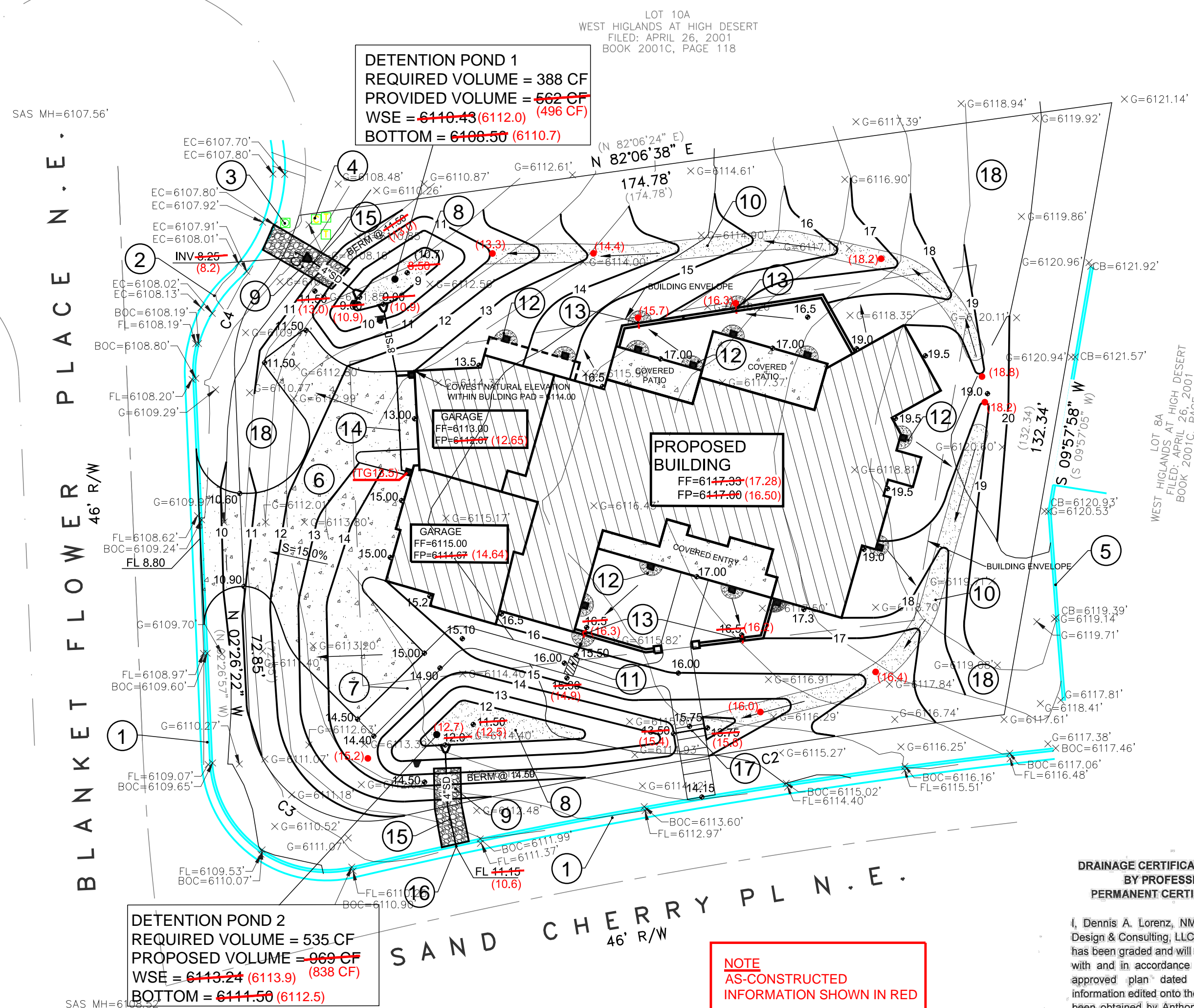
- _____ BUILDING PERMIT APPROVAL
☒ CERTIFICATE OF OCCUPANCY
 _____ PRELIMINARY PLAT APPROVAL
 _____ SITE PLAN FOR SUB'D APPROVAL
 _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
 _____ FINAL PLAT APPROVAL
 _____ SIA/ RELEASE OF FINANCIAL GUARANTEE
 _____ FOUNDATION PERMIT APPROVAL
 _____ GRADING PERMIT APPROVAL
 _____ SO-19 APPROVAL
 _____ PAVING PERMIT APPROVAL
 _____ GRADING/ PAD CERTIFICATION
 _____ WORK ORDER APPROVAL
 _____ CLOMR/LOMR
 _____ FLOODPLAIN DEVELOPMENT PERMIT
 _____ OTHER (SPECIFY) _____

DATE SUBMITTED: January 07, 2022 **By:** Dennis A. Lorenz PE

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



DRAINAGE PLAN NOTES

- LDC recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- This Plan is prepared to establish on-site drainage and grading criteria only. LDC assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes LDC to prepare the Certification, we must be notified PRIOR to placement of the fill.
- LDC recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- All spot elevations are top of pavement unless noted otherwise.

KEYED NOTES

- EXISTING STANDARD CURB & GUTTER.
- EXISTING RUNDOWN CURB.
- EXISTING WATER METER.
- EXISTING DRY UTILITIES.
- EXISTING DRIVEWAY WITH CONCRETE CURB.
- CONSTRUCT CONCRETE DRIVE.
- CONSTRUCT CONCRETE SIDEWALK.
- CONSTRUCT LANDSCAPED DETENTION POND.
- CONSTRUCT OVERFLOW SPILLWAY AT EACH POND. SEE DETAIL B/C.2.
- CONSTRUCT 4" WIDE GRAVEL LINED SWALE. SEE SECTION A/C.2.
- CONSTRUCT 12" SIDEWALK CULVERT.
- CONSTRUCT EROSION CONTROL PAD AT CANALES AND DOWNSPOUTS. SEE DETAIL C/C.2.
- 4" PVC PIPE FOR DRAINAGE THRU WALL WITH EROSION CONTROL PAD. SEE DETAIL C/C.2.
- CONSTRUCT 8" STORM DRAIN WITH END SECTION AT POND. CONNECT TO ROOF DRAINS AT GARAGE.
- CONSTRUCT 4" STORM DRAIN WITH END SECTIONS.
- CONSTRUCT 4" CURB PENETRATION PER COA STD DWG 2235.
- CONSTRUCT 8" CULVERT UNDER SIDEWALK.
- NATIVE LANDSCAPING. SEE LANDSCAPE PLAN.

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE

Pursuant to the Drainage Ordinance for the City of Albuquerque, the Development Process Manual and the High Desert Guidelines for Sustainability, Estate and Premier Homes, and the Drainage Report for High Desert - The West Highlands and the Extension of Blue Grama Road, this Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. A single-family residence is proposed on the 0.50-acre property, together with access, landscaping, drainage and utility improvements.

EXISTING CONDITIONS

Presently the 0.50-acre site is undeveloped. The site is located at 6800 Blanket Flower Place NE. The site is bounded on the north and east by existing single-family residences, on the south by Sand Cherry Place, and on the west by Blanket Flower Place. The site is vegetated with native shrubs and grasses.

The lot slopes from east to west. Flows from the site drain in two directions: Flows from Basin 1 drain to Blanket Flower Place, existing at the back of the cul-de-sac, draining through Lot 13-A, then on to the existing roadside ditch located along the south side of Simms Park Road NE. Flows from Basin 2 drain into Sand Cherry Place. In each case, existing drainage improvements safely convey historic runoff to regional downstream improvements.

As shown by the attached FIRM Panel, the site is not impacted by a mapped 100-year Floodzone. However, the site is located within a Zone "X" 500-year Floodzone.

DRAINAGE MASTER PLAN

The Drainage Master Plan for the property entitled "Drainage Report for High Desert - The West Highlands and the Extension of Blue Grama Road" prepared by Bohannon Huston, Inc., October 3, 2000 outlines drainage management methodology to be used for lots in the subdivision. Storm drainage infrastructure was constructed to accept developed flows from all lots in the subdivision. Every lot in the subdivision was planned with a cross lot drainage easement outside of the building envelope that requires landowners to accept existing offsite flows. The Masterplan established a 1.61 cfs developed peak flowrate threshold for the subject property.

The High Desert Guidelines for Sustainability require each lot to limit developed discharge to historic values. For this property, developed peak discharge will be limited to 1.36 cfs.

PROPOSED CONDITIONS

As shown by the Plan, the site is divided into 4 on-site drainage basins. Basins A and D will discharge developed flows to Blanket Flower Place, where the flows will drain through Lot 13-A, then on to Simms Park Road as described above. Basins "B and C" will drain to Sand Cherry Place. Downstream drainage infrastructure collects and drains this runoff to regional drainage facilities. Two Detention Ponds will be constructed to limit peak developed discharge to 1.36cfs, in accordance with the High Desert Guidelines for Sustainability.

All roof drainage will exit the building by canals, gutters and downspouts at location indicated on the Plan. All roof drainage will will discharge onto erosion control pads. Improved yard swales will convey all runoff to discharge locations.

The peak developed flowrate discharged by the site during the 100 year/6 hour storm is estimated at 1.27 cfs, slightly less than the 1.36 cfs allowed by the Guidelines.

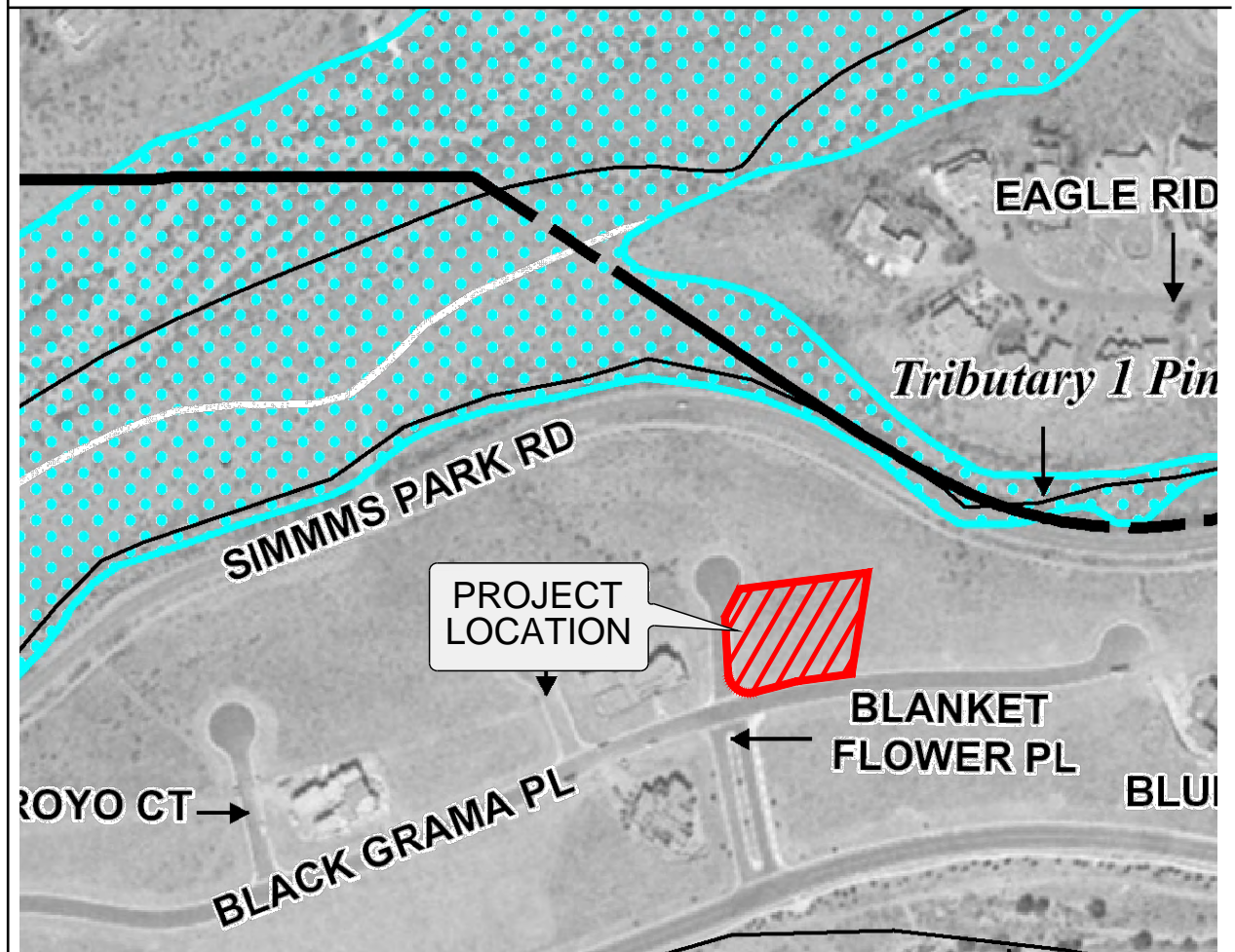
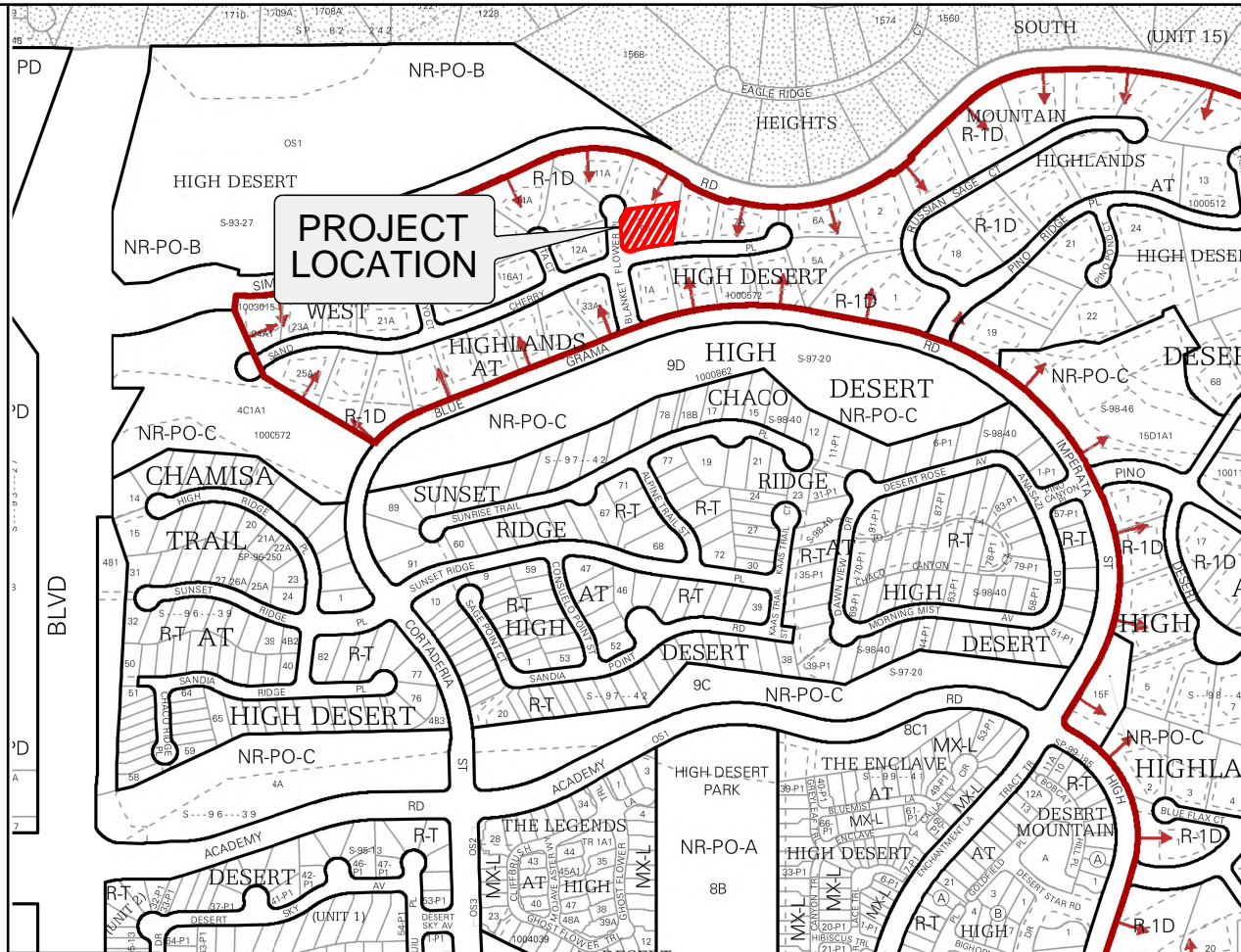
TEMPORARY EROSION CONTROL

Temporary erosion control measures shall be implemented during construction to limit the discharge of sediment from the site to adjacent properties. Silt fencing is recommended along the construction boundaries. It is the contractor's responsibility to obtain a SWPPP, if necessary, and maintain all temporary erosion control measures until completion of all site paving, grading, drainage and landscape improvements.

The contractor must comply with all grading specifications outlined in the High Desert Guidelines for Sustainability.

CALCULATIONS

The calculations shown on Sheet C.2 define the 100 year/6 hour design storm impacting the site and contributing off-site drainage basins under existing and developed conditions. The AHYMO method of estimating peak runoff is presented as outlined in the Development Process Manual, Volume 2, Section 22.2, Part 'A', updated June 1997. Calculations demonstrating compliance with First Flush criteria are provided on Sheet C.2



FIRM PANEL

35001C0133H

NOT TO SCALE

PROJECT DATA

PROPERTY ADDRESS:

6800 BLANKET FLOWER PLACE NE
ALBUQUERQUE, NEW MEXICO 87111

LEGAL DESCRIPTION:

LOT 9A, WEST HIGHLANDS
AT HIGH DESERT

PROJECT BENCHMARK:

CITY OF ALBUQUERQUE SURVEY
MONUMENT "10-E23"
ELEV. = 6207.41 (NAVD88)

SURVEY:

ALL PROJECT SURVEYING BY
ANTHONY HARRIS NMPLS 11463
DATE OF SURVEY: APRIL 4, 2019

TOPO CERTIFICATION:

I, DENNIS A. LORENZ, HEREBY CERTIFY THAT I PERSONALLY
INSPECTED THE SITE SHOWN ON THIS PLAN ON MARCH 25, 2020,
AND AS OF THAT DATE IT APPEARED THAT NO FILLING, GRADING, OR
EXCAVATION HAD OCCURRED THEREON SINCE COMPLETION OF THE
TOPOGRAPHIC SURVEY USED TO PREPARE THIS PLAN.

LOT 9A WEST HIGHLANDS AT HIGH DESERT GRADING AND DRAINAGE PLAN



LORENZ
DESIGN & CONSULTING, LLC
Civil Engineering & Construction Management

2501 Rio Grande Blvd. NW, Suite A
Albuquerque, New Mexico 87104
Ph: 505-568-6088

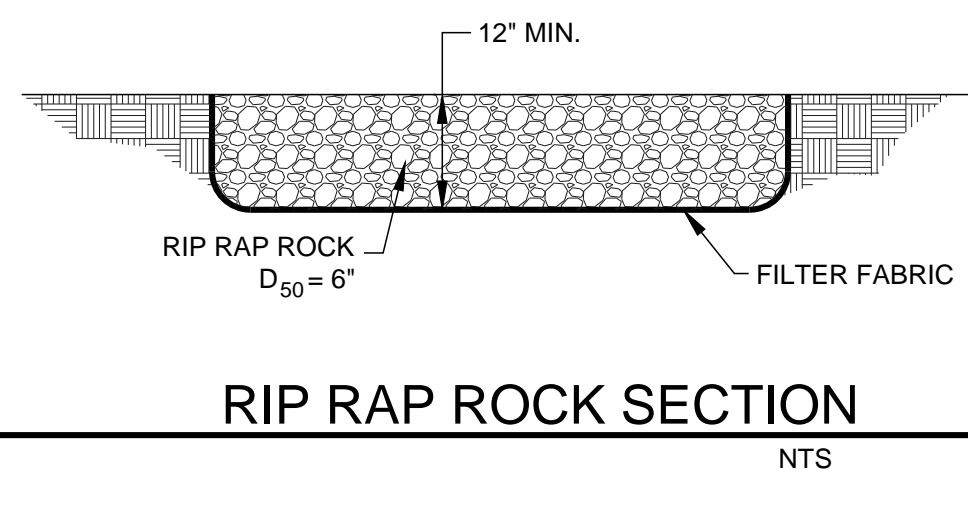
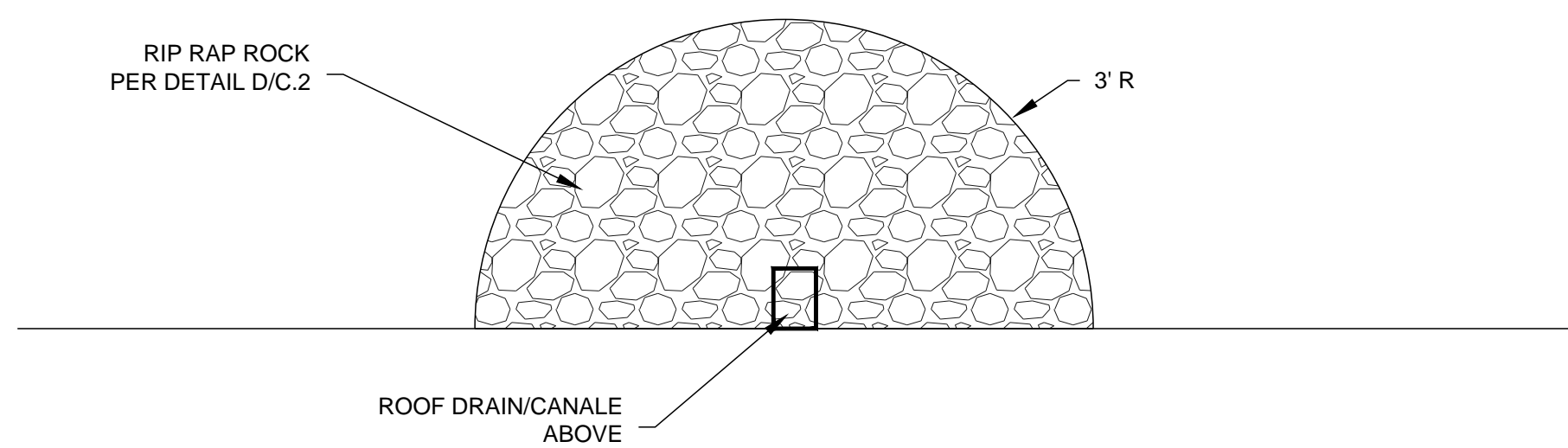
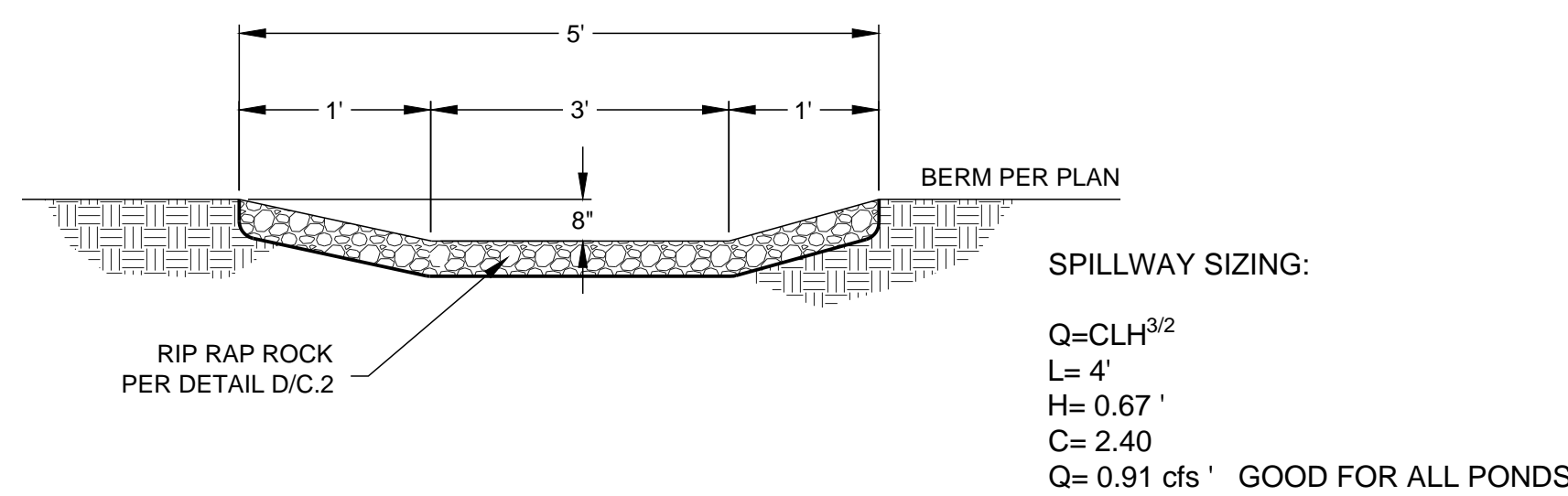
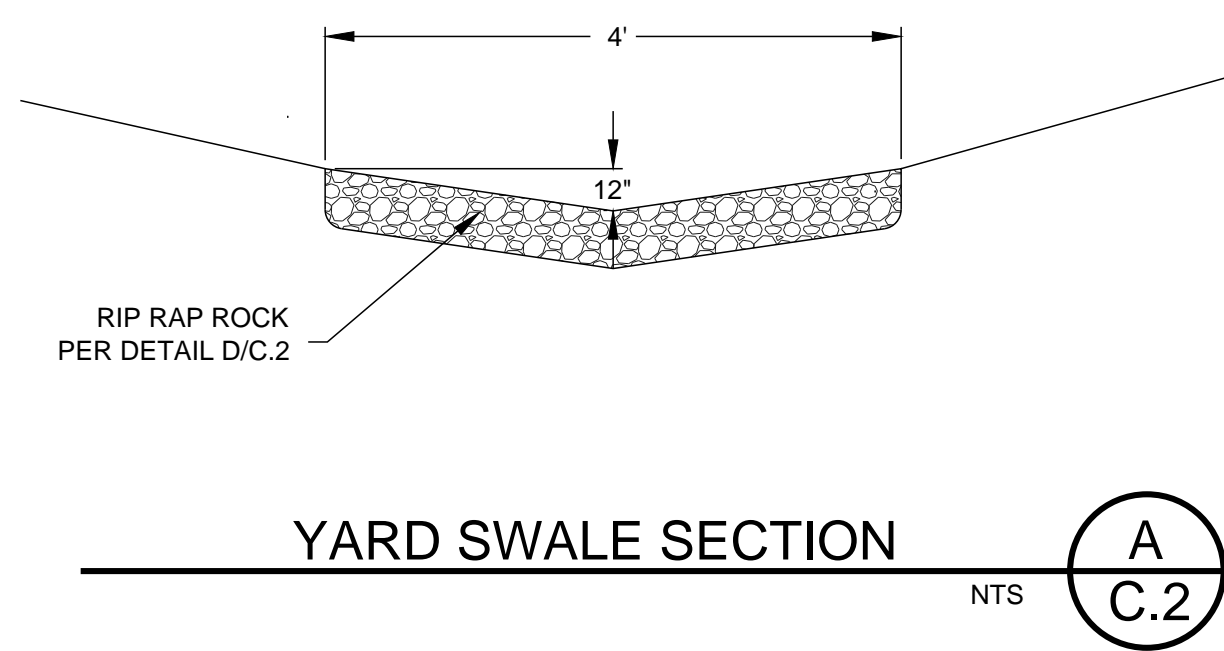
DRAWN BY: DAL

DATE: April 2020

CHECKED BY: DAL

C.1

FILE: 20-006 G&D Plan



FIRST FLUSH CRITERIA

By ordinance the site is required to retain the 90th percentile rainfall depth. In order to comply with this criterion, where practical, all surface areas will be routed through landscaped areas before release to downstream public drainage facilities. In addition to the volume within the landscaped areas, excess runoff will be routed through 2 Onsite Detention Ponds that drain to the adjoining public streets. Storage in excess of the 90th percentile rainfall will be provided as illustrated below.

90 th percentile depth	0.44"
Less initial abstraction	0.10"
<hr/>	
Total retained depth	0.34"

Site Area Type D = 0.12 ac.
Storage requirement = $Ad(0.34'') = 0.12 \text{ ac}(43,560 \text{ sf/ac})(0.34'')/12''/\text{ft} = 148 \text{ cf}$

First flush storage to be provided within the landscaped Detention Ponds.

Detention Pond 1 Volume = 51 cf
Detention Pond 2 Volume = 97.5 cf

Total storage provided = 148.5 cf

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.

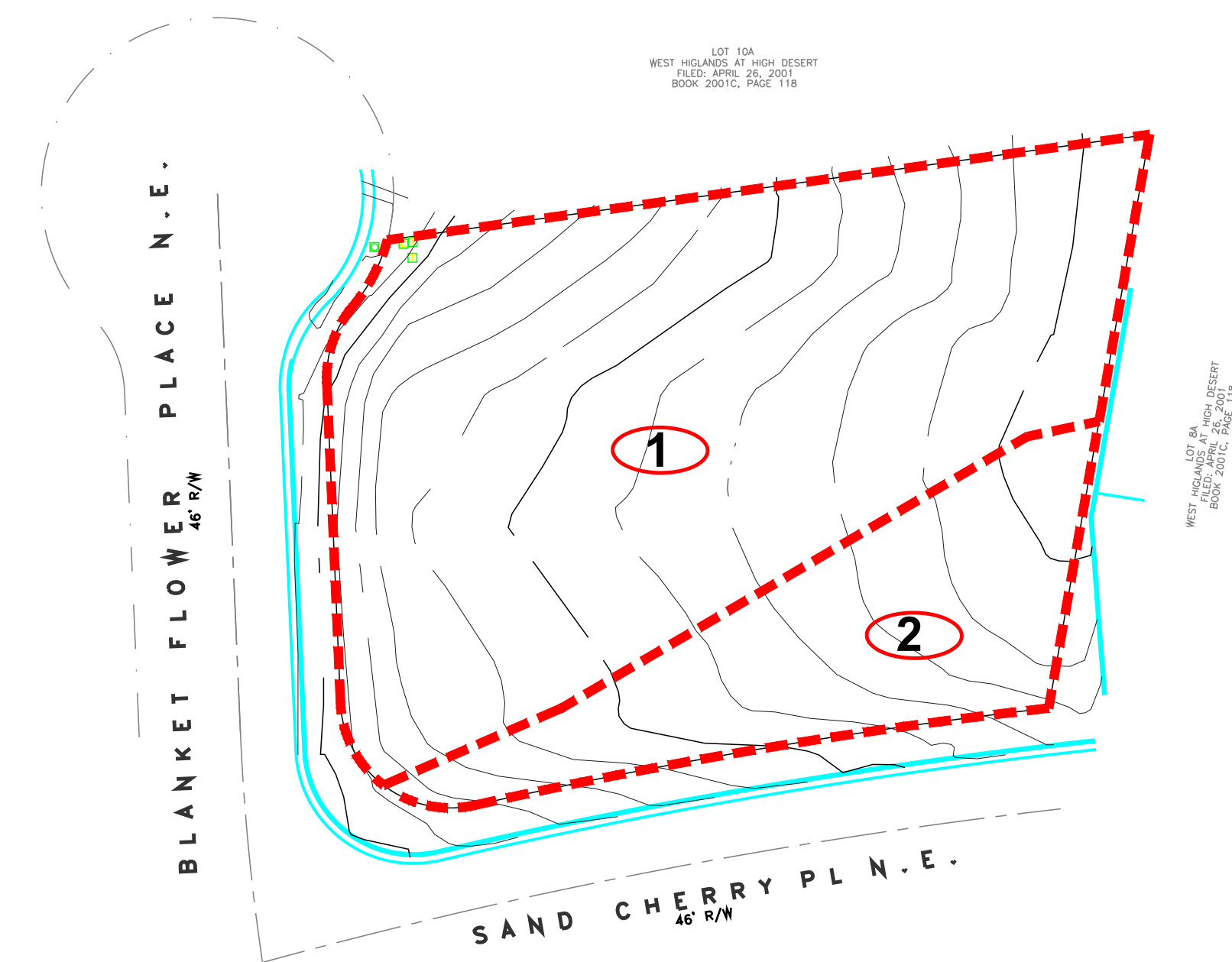
DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR PERMANENT CERTIFICATE OF OCCUPANCY

I, Dennis A. Lorenz, NMPE 9647, of the firm Lorenz Design & Consulting, 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 07-20-2020. The record information edited onto the original design document has been obtained by Anthony Harris, NMPS 11463 of the firm Harris Surveying, Inc. I further certify that I have personally visited the project site on 01-04-2022 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 permanent certificate of occupancy.

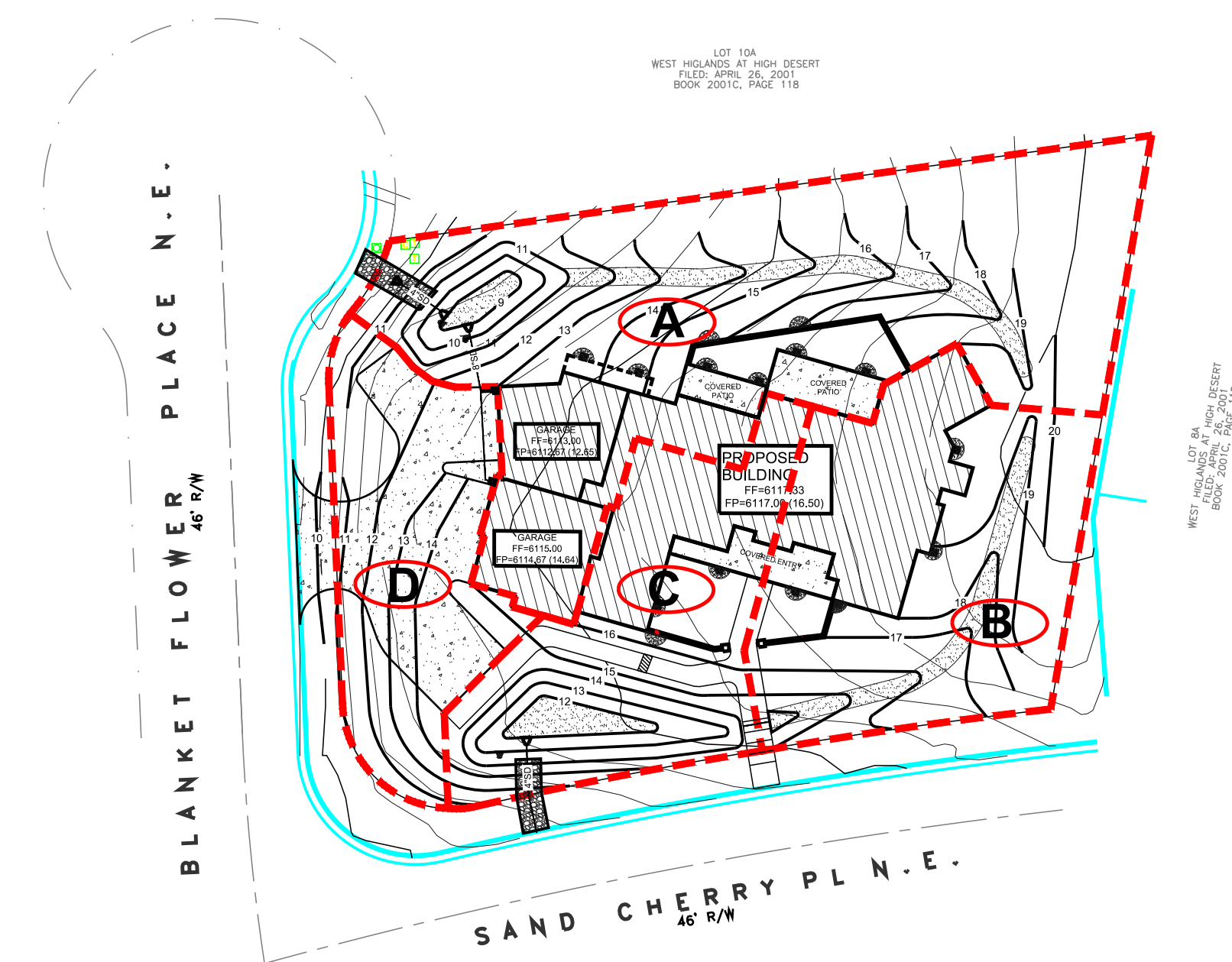
The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.



DENNIS A. LORENZ, NMPE 9647



EXISTING DRAINAGE BASIN MAP
NOT TO SCALE



DEVELOPED DRAINAGE BASIN MAP
NOT TO SCALE

LOT 9A
WEST HIGHLANDS AT HIGH DESERT
GRADING AND DRAINAGE PLAN



LORENZ
DESIGN & CONSULTING, LLC
Civil Engineering | Construction Management

2501 Rio Grande Blvd NW, Suite A
Albuquerque, New Mexico 87104
Ph: 505-888-6088

DRAWN BY: DAL	DATE: April 2020
CHECKED BY: DAL	C.2
FILE: 20-006 G&D Plan	