

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

August 16, 2022

Marion F. Hall IV, P.E.
Iris Development Services, LLC
2673 N. Riley Rd
Buckeye, AZ 85396

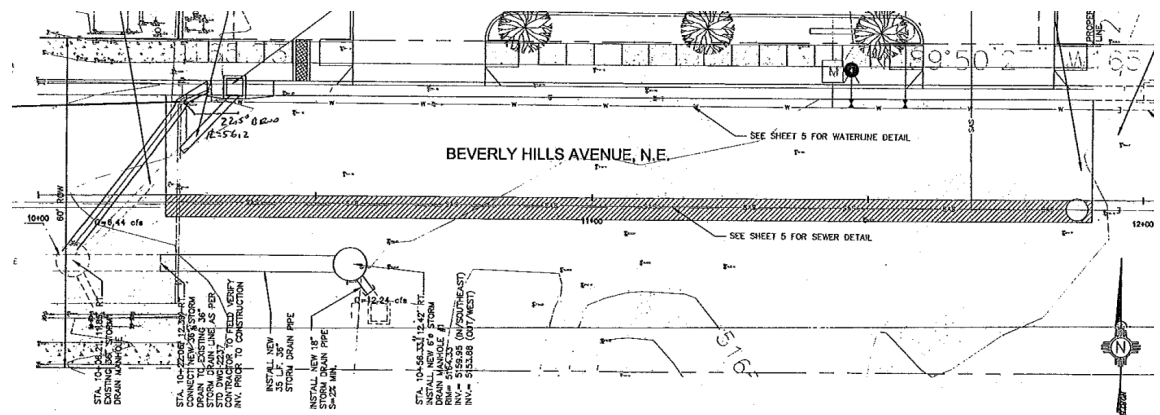
**RE: Luxelocker
Conceptual Grading & Drainage Plan
Engineer's Stamp Date: 07/13/22
Hydrology File: B18D031**

Dear Mr. Hall:

Based upon the information provided in your submittal received 07/17/2022, the Conceptual Grading & Drainage Plan is approved for action by the DRB on Site Plan for Building Permit.

PRIOR TO BUILDING PERMIT:

1. Please submit the Grading & Drainage Plan to Hydrology for review and approval. This digital (.pdf) submittal, emailed to PLNDRS@cabq.gov along with the Drainage Transportation Information Sheet.
2. Below is the as-built for existing utilities within Beverly Hills R.O.W., Please connect the proposed storm sewer to the existing storm manhole instead of the existing inlet.



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As a reminder, 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.

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

Sincerely,



Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

TECHNICAL MEMORANDUM

To: Renee C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

From: Mac Hall, PE

Re: LuxeLocker
Conceptual Grading & Drainage Plan
Engineer's Stamp Date" 06/03/22
Hydrology File: B18D031

Date: July 13, 2022

General Comments

1. Hydrology does not to review the Utility Plan (water & sanitary sewer). This is done through Albuquerque Bernalillo County Water Unity Authority (ABCWUA).

Response: The Utility Plan has been removed from this submittal.

2. Hydrology also does need the Site's Cut & Fill calculation and the overall site sections. Hydrology does need sections through the stormwater quality ponds and through any retaining / garden walls (only if you have them).

Response: The Site's Cut & Fill calculation along with the overall site sections has been removed with this submittal and replaced with the pond sections.

3. Per the DPM, the following must be on the Grading & Drainage Plan. I have attached two different examples of Grading & Drainage Plan for your use.
 - a. Please provide an engineer's stamp with signature and date.

Response: An engineer's stamp with signature and date has been provided with this submittal.

- b. Please use 1"=20' for scale.

Response: A scale of 1" = 30' was used due to 1" = 20' not providing a clear description of the overall grading and drainage plan.

- c. Please provide a Vicinity Map. Typically, this is the Zone Atlas. This can be downloaded in pdf format from the City of Albuquerque's website.

Response: A Vicinity Map has been provided on the Grading and Drainage Plan.

- d. Please provide the Benchmark information (location, description, and elevation) for the survey contour information provided.

Response: Arial Panels were used to generate the survey contour information for the survey. The location and elevation is provided on the Grading and Drainage Plan.

- e. Please provide the FIRM Map and flood plain note with effective date.

Response: The FIRM map and flood plan note with effective date has been provided under “General Notes” on the Grading and Drainage Plan.

- f. Please provide a legal description of the property.

Response: The legal description of the property has been provided under “General Notes” on the Grading and Drainage Plan.

4. Since this will be a Conceptual Grading & Drainage Plan, please add a note, “Not for Construction” on the plans.

Response: The note “Not for Construction” has been provided under “General Notes” on the Grading and Drainage Plan.

5. Please use the procedure for 40 acre and smaller basins as outlined in Development Process Manual (DPM) Article 6-2(a). Please provide both the existing conditions and proposed conditions for the 100 year – 6 hour storm event.

Response: Both the existing conditions and proposed conditions for the 100 year – 6 hour storm event has been provided on the Drainage Area Map & Storm Calcs Sheet.

6. Please follow the DPM Article 6-12 Stormwater Quality and Low-Impact Development for the sizing calculations. To calculate the required SWQV, multiply the impervious area draining to the BMP by 0.42 inches for new development sites. Each stormwater quality pond must have a spillway. This is typically handled by installing a sidewalk culvert with the invert starts at the elevation of the SWQV on the pond side and slopes to the street gutter elevation. Below is an illustration of this.

Response: The required and provided SWQV for both ponds have provided on the Drainage Area Map & Storm Calcs Sheet. The sidewalk culverts for both ponds have been shown on the Grading and Drainage Plan.

7. For the work within Beverly Hills R.O.W., Please match the existing street width when you extend the south side of the roadway.

Response: The proposed improvements within Beverly Hills R.O.W. has been revised to match the existing street width. This is shown on the Grading and Drainage Plan.

8. The whole grading needs to be revised. The entire site just drains directly to Beverly Hills without going into either of the required stormwater quality ponds as outlined in Comment #6.

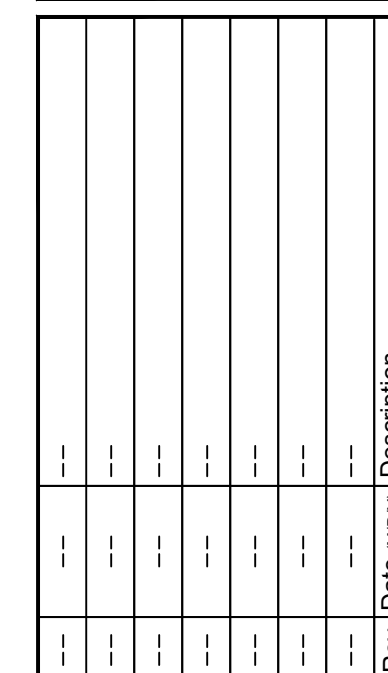
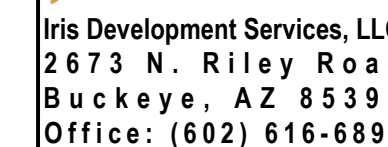
Response: Yard inlets have been provided to capture the site runoff and convey it to the proposed stormwater management facilities. These areas are shown on the Grading and Drainage Plan.

9. There is currently off-site runoff that will be flowing directly into the development from the east. This flow needs to be calculated and shown. Please note that these flows are existing conditions and once this site is developed flows will discharge into Beverly Hills. So how is this development doing to handle the existing condition off-site flows?

Response. There is a proposed swale on the east side of building E to direct the runoff from the adjoining property to either Beverly Hills or San Diego. This swale is shown on the Grading and Drainage Plan.

10. Need to calculate the south half of Beverly Hills street capacity as described in the DPM Article 6-9 Street Hydraulics. If the HGL or EGL is over the proposed top of curb, then an inlet will need to be installed. This inlet will then need to be connected to the existing 36-in storm sewer to the west on Beverly Hills.

Response: Street capacity calculations have been provided on the Drainage Area Map & Storm Calcs Sheet. Storm inlets have been provided to reduce the runoff within Beverly Hills, so the 100-year storm event does not overtop the curb. The proposed inlets are shown on the Grading and Drainage Plan.



LUXELOCKER - ALBUQUERQUE
BEVERLY HILLS AVE NE & SAN DIEGO AVE NE
ALBUQUERQUE, NM

Scale: N.T.S.

Date: MAY 2022

Drawn By: MFH

Project Number:
2022 - 09

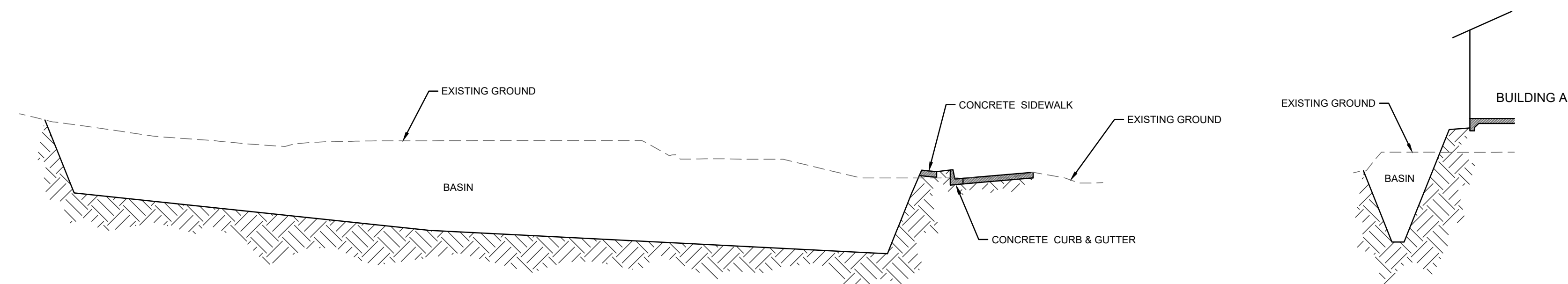
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POND SECTIONS

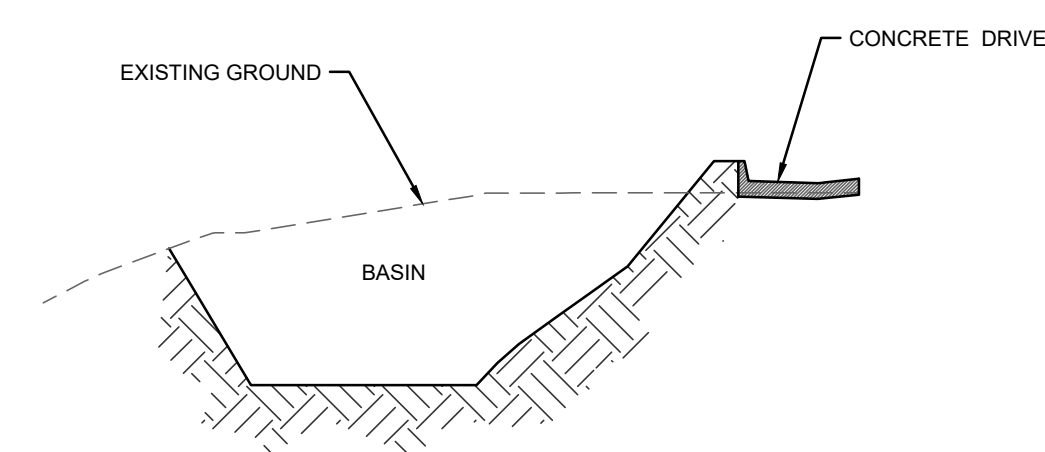
Sheet Number:

C2

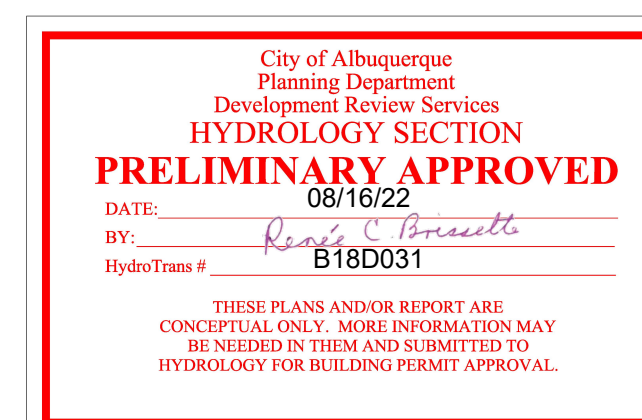
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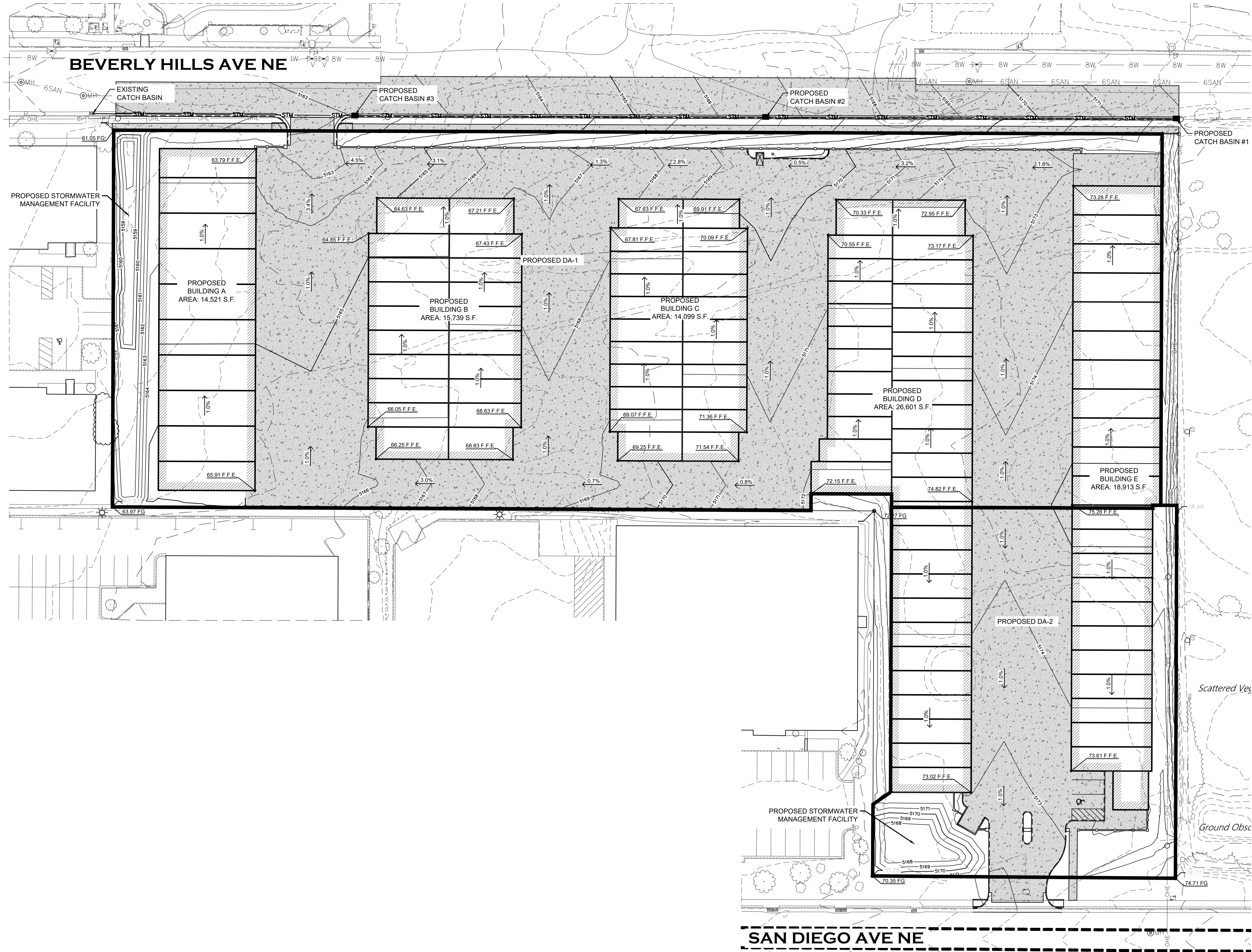


WEST POND



SOUTH POND





GENERAL NOTES

- CONTACT ARIZONA ONE CALL AT (800) STAKE-IT OR 811 PRIOR TO START OF ANY EXCAVATION FOR LOCATIONS OF BURIED UTILITIES. THE LOCATIONS OF ANY AND ALL UNDERGROUND UTILITIES SHOWN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, AS-BUILT MAPS, AND MARKS MADE ON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY BE UNDERGROUND UTILITIES, WHETHER IN SERVICE OR ABANDONED, FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH THE ABOVE GROUND EVIDENCE WAS NOT OBSERVED. FURTHERMORE, THE UTILITIES MAY NOT BE IN THE EXACT LOCATIONS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND ELEVATIONS OF UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF CONSTRUCTION. ANY AND ALL DAMAGES THAT MAY OCCUR FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE ANY AND ALL UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES OR VARIANCES TO THE PLANS ARE FOUND.
- SEE ARCHITECTURAL FOUNDATION CONSTRUCTION PLANS FOR ALL ACTUAL BUILDING DIMENSIONS. DIMENSIONS SHOWN ON CIVIL SITE PLAN ARE APPROXIMATE.

100 YEAR - 6 HOUR STORM

EXISTING CONDITIONS:	PROPOSED CONDITIONS:
TOTAL AREA: 4.53 ACRES	TOTAL AREA: 4.53 ACRES
$V_{120} = 4.53 \times 0.55/12$	$V_{120} = 4.53 \times 2.24/12$
$V_{120} = 0.21 \text{ AC-FT}$	$V_{120} = 0.85 \text{ AC-FT}$
$Q_p = C \times I \times A$	$Q_p = C \times I \times A$
$Q_p = 0.34 \times 4.81 \times 4.53$	$Q_p = 0.90 \times 4.81 \times 4.53$
$Q_p = 7.41 \text{ cfs}$	$Q_p = 19.61 \text{ cfs}$

STORMWATER QUALITY VOLUME

DRAINAGE AREA 1:	DRAINAGE AREA 2:
TOTAL AREA: 3.48 ACRES	TOTAL AREA: 0.94 ACRES
VOLUME REQUIRED:	VOLUME REQUIRED:
$SWQV = A \times (0.42/12)$	$SWQV = A \times (0.42/12)$
$SWQV = 3.48 \times (0.42/12)$	$SWQV = 0.94 \times (0.42/12)$
$SWQV = 0.12 \text{ AC-FT}$	$SWQV = 0.03 \text{ AC-FT}$
VOLUME PROVIDED:	VOLUME REQUIRED:
SWMF #1: 0.12 AC-FT	SWMF #2: 0.07 AC-FT

STREET CAPACITY

OFFSITE DRAINAGE AREA: 4.52 ACRES (INCLUDES UNDEVELOPED AREA TO THE EAST ALONG WITH HALF OF BEVERLY ROW)
ONSITE DRAINAGE AREA: 3.48 ACRES
TOTAL DRAINAGE AREA: 8 ACRES (WESTERN PORTION OF PROPOSED DEVELOPMENT)

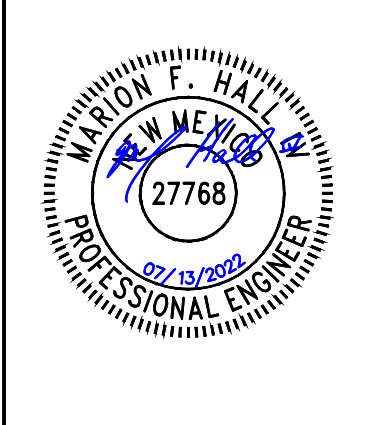
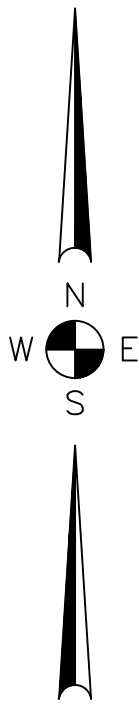
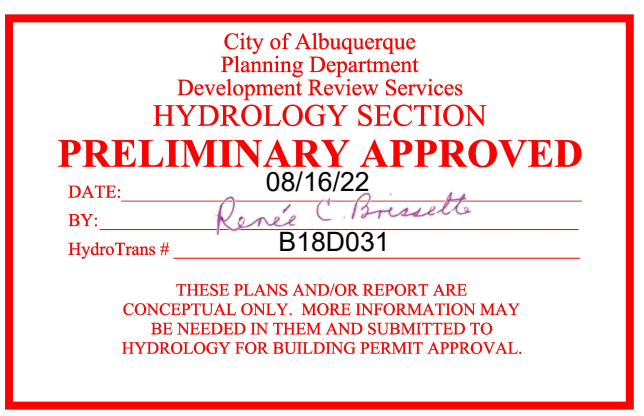
STREET CAPACITY = 15.30 CFS

TOTAL FLOW AT CATCH BASIN 1: 19.56 CFS
INLET CAPACITY PER FIGURE 6.9.9: 5.0 CFS
TOTAL FLOW IN STREET: 14.56 CFS (LESS THAN CAPACITY)

TOTAL FLOW AT CATCH BASIN 2: 15.29 CFS (LESS THAN CAPACITY)
INLET CAPACITY PER FIGURE 6.9.9: 5.0 CFS
TOTAL FLOW IN STREET: 10.29 CFS (LESS THAN CAPACITY)

TOTAL FLOW AT CATCH BASIN 3: 11.02 CFS (LESS THAN CAPACITY)
INLET CAPACITY PER FIGURE 6.9.9: 5.0 CFS
TOTAL FLOW IN STREET: 6.2 CFS (LESS THAN CAPACITY)

TOTAL FLOW AT EXISTING CATCH BASIN: 21.26 CFS
INLET CAPACITY PER FIGURE 6.9.9: 5.0 CFS
TOTAL FLOW IN STREET: 16.26 CFS



Rev	Date	By	Description

LUXELOCKER - ALBUQUERQUE
BEVERLY HILLS AVE NE & SAN DIEGO AVE NE
ALBUQUERQUE, NM

Scale: 1" = 30'
Date: MAY 2022
Drawn By: MFH
Project Number: 2022 - 09

Sheet Title:
DRAINAGE AREA MAP & STORM CALCS.

Sheet Number:
C3
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