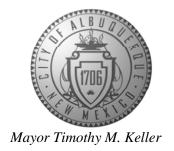
# CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



October 14, 2019

Glenn Broughton, P.E. Bohannan Huston, Inc. 7500 Jefferson St NE Albuquerque, NM 87109

RE: Presbyterian Hospital Expansion 1100 Central SE et al. Conceptual Grading and Drainage Plan Engineer's Stamp Date: 10/3/19 Hydrology File: K15D005

Dear Mr. Broughton:

PO Box 1293

Based on the submittal received on 10/3/19, the Grading and Drainage Plan cannot be approved until the following corrections are made:

#### Prior to Site Plan for Building Permit:

Albuquerque

1. The grading plan needs to cover the full extent of the work. The north edge of the Patient Tower area is clipped. It may be easier just to make the Patient Tower area a separate viewport from the Energy Plant.

NM 87103

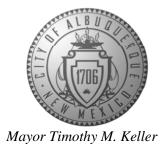
2. Provide hydraulic calculations for the channel and sidewalk culvert discharging to Oak. The sidewalk culvert(s) should be included on the Infrastructure List (or build by SO-19, if no other infrastructure is identified by the DRB). Also, the work here will require a NMDOT permit.

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- 3. Provide hydraulic calculations for the channel and sidewalk culvert discharging to Lead. A second sidewalk culvert is likely required here to pass the  $Q_{100}$  of 6.1cfs and should be included on the Infrastructure List (or build by SO-19, if no other infrastructure is identified by the DRB).
- 4. Provide existing contours, showing how the proposed grading will tie-in at property line. This is provided on the parking garage viewport, but not the other two areas.
- 5. Provide sections through all external boundaries with proposed walls showing the proposed walls and their footers; identify retaining vs. garden vs. stem wall, show property/ROW lines, and existing and proposed grades. In accordance with DPM Ch.22, section 5 part B, grading and wall construction near the property line may not endanger adjacent property or constrain its use.

# CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



- a. Any private encroachment into the public ROW will require a revocable permit.
- b. Any private encroachment into a public easement will require an encroachment agreement.
- c. Any private encroachment into neighboring private property will require written and signed permission from both property owners.
- 6. What is the odd U-shaped hatched area on the Energy Plant viewport? Is it relevant to the grading and drainage or can it be removed?

### Prior to Building Permit (For Information):

- 7. Remove all "Conceptual" markings.
- 8. Identify the addresses (and Building Permit #, if known) of each viewport and label on the plan. This will smooth the process for obtaining Certificate of Occupancy.
- 9. Identify the area where fee-in lieu was already paid during the "make ready" phase and ensure no overlap occurs in calculating the redeveloped impervious area for this project.
- 10. Payment in Lieu (Amount = TBD) of onsite management of the stormwater quality volume (SWQV) must be made. Provide SWQV calculations.
- 11. Provide hydraulic calculations for the proposed storm drain system (Patient Tower area), calculated along the Energy Grade Line; include both the HGL and EGLs in the table.
- 12. Provide the design for the lift station. Include pump curves, a section showing elevations of pump-on, pump-off, max WSE, etc..., contributing area hydrology. Where is the emergency overland path, or the extents of the ponding if the pump fails?
- 13. Flow depth (and EGL) on Silver, in front of the garage entrance, needs to be calculated. Demonstrate that the EGL is less than the proposed waterblock height. Otherwise a standard 0.87' waterblock is required.
- 14. 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.
- 15. Additional comments may be provided at Building Permit, based on the outcome of the above remarks and level of detail shown on plans.

Prior to Certificate of Occupancy (For Information):

PO Box 1293

Albuquerque

NM 87103

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# CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



- 16. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
- 17. City acceptance and close-out of the public Work Order will be required, unless a financial guarantee has been posted.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana M. Peterson
Senior Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

NM 87103

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# City of Albuquerque

## Planning Department

## Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

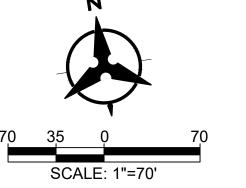
Project Title:Bu	ilding Permit #:	Hydrology File #:
DRB#:EP	PC#:	Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
Phone#:Fa		
Other Contact:		Contact:
Address:		
Phone#:Fa		E-mail:
TYPE OF DEVELOPMENT: PLAT	RESIDENCE	DRB SITE ADMIN SITE
Check all that Apply:		
DEPARTMENT:	BUILDIN CERTIFIC  PRELIMI SITE PLA SITE PLA FINAL PI  SIA/ REL FOUNDA GRADING SO-19 AF PAVING GRADING GRADING CLOMR/I FLOODPI	PERMIT APPROVAL G/PAD CERTIFICATION RDER APPROVAL

FEE PAID:\_\_\_\_

# 24 **CENTRAL AVENUE SE** SD INLETS **EXISTING** SD INLETS GOLD AVENUE SE EXB1 EXB6 EXISTING **EXISTING** SILVER AVENUE SE SD INLETS EXB5 EXISTING SD INLETS LEAD AVENUE SE

EXISTING DRAINAGE MANAGEMENT PLAN

1" = 70'-0"



## **LEGEND**

DRAINAGE BASIN BOUNDARY

## BACKGROUND:

PRESBYTERIAN HOSPITAL IS PLANNING AN EXPANSION TO THEIR DOWNTOWN CAMPUS. THE EXPANSION WILL CONSIST OF SEVERAL PHASES AND DISTINCT WORK AREAS. A NEW PARKING STRUCTURE IS PROPOSED IN THE NORTH EAST PORTION OF THE SITE. THE GARAGE IS BOUNDED BY SPRUCE, SYCAMORE, SILVER AND CENTRAL. AN EXPANSION TO THE MAIN HOSPITAL IS PROPOSED. THIS WILL BE LOCATED AT THE NORTHEAST CORNER OF OAK AND SILVER. THE THIRD MAJOR WORK AREA IS AN EXPANSION OF THE CENTRAL PLANT. THIS IS LOCATED AT THE SOUTHEAST CORNER OF OAK AND SILVER.

## METHODOLOGY:

THE SITE IS LOCATED IN THE CITY OF ALBUQUERQUE AND SECTION 22.2 OF THE DEVELOPMENT PROCESS MANUAL (DPM) WAS USED TO ANALYZE THE EXISTING AND PROPOSED DRAINAGE. THE PROJECT IS LOCATED BETWEEN THE RIO GRANDE AND SAN MATEO AND IS WITHIN PRECIPITATION ZONE 2.

## **EXISTING CONDITIONS:**

ALL THREE AREAS OF THE SITE ARE FULLY DEVELOPED WITH ASPHALT PAVING AND MINIMAL LANDSCAPING. THE PARKING GARAGE SITE IS BROKEN INTO THREE BASINS. THE SOUTHERN BASIN (BASIN EXB1) FREE DISCHARGES INTO SPRUCE AND DRAINS INTO THE GOLD AVE. ALIGNMENT. THE NORTHERN TWO BASINS (BASINS EXB2 & EXB3) DRAIN NORTH TO AN EXISTING PRIVATE INLET IN THE NORTHWEST CORNER OF BASIN EXB3. THIS INLET CONNECTS TO AN EXISTING PUBLIC STORM DRAIN INLET AT THE INTERSECTION OF SPRUCE AND CENTRAL.

THE HOSPITAL EXPANSION AREA DRAINS TO THE NORTHWEST AND FREE DISCHARGES OUT A DRIVEWAY TO OAK (BASIN EXB6).

THE ENERGY CENTER AREA IS DIVIDED INTO TWO BASINS. THE NORTHERN BASIN (BASIN EXB5) FREE DISCHARGES INTO SILVER AND SOUTH ON OAK. THE SOUTHERN BASIN (BASIN EXB4) FREE DISCHARGES INTO LEAD IMMEDIATELY EAST OF OAK. BOTH BASINS ARE INTERCEPTED BY PUBLIC INLETS AND INTO THE LEAD AVE STORM DRAIN SYSTEM.

THE SITE IS NOT LOCATED WITHIN A DESIGNATED FEMA FLOOD ZONE (FEMA FIRM # 35001C0334G).

## PROPOSED CONDITIONS

THE PROPOSED GRADING AND DRAINAGE PLAN SHOW THE FULL PROJECT BUILD OUT AS PRESENTED TO EPC. THE PROJECT WILL BE PHASED OVER A NUMBER OF YEARS. EACH AREA OF THE PROJECT WAS CONSIDERED A SEPARATE ANALYSIS AREA WITH SEPARATE DRAINAGE BASINS. IN THE DEVELOPED CONDITION EACH AREA OF THE PROJECT WILL DRAIN TO THE PUBLIC RIGHT OF WAY AS IT CURRENTLY DOES.

THE SCOPE OF THE PARKING STRUCTURE IS TO CONSTRUCT A 3-LEVEL PARKING STRUCTURE IN PLACE OF THE EXISTING PAVED PARKING LOT. RUNOFF IN THE UPPER DECK WILL BE DIRECTED TO DRAINS AND PIPED TO THE PUBLIC RIGHT OF WAY. THE DRAIN FOR THE SOUTHERN PORTION OF THE GARAGE WILL DISCHARGE AT GRADE INTO SPRUCE. THIS RUNOFF WILL CROSS SPRUCE AND DRAIN INTO THE ALIGNMENT OF GOLD AS IT CURRENTLY DOES, THE DRAIN FOR THE NORTHERN PORTION WILL PIPED AND CONNECT TO THE PRIVATE STORM DRAIN INLET AT THE NORTHWEST CORNER OF THE SITE. RUNOFF FROM THIS AREA CURRENTLY DRAINS ON THE SURFACE AND IS INTERCEPTED BY THE INLET. SURFACE RUNOFF THAT DRAINS TO THIS INLET WILL BE SIGNIFICANTLY REDUCED WITH THE PROPOSED PARKING STRUCTURE, BUT THE TOTAL PEAK FLOW RATE TO THE PUBLIC STORM DRAIN AT THE SOUTHEAST CORNER OF SPRUCE AND CENTRAL IS ESSENTIALLY EQUAL TO THE CURRENT CONDITION.

THE FIRST PHASE HOSPITAL AREA OF THE SITE INCLUDES AN 11 STORY PATIENT TOWER EXPANSION ALONG WITH OTHER HOSPITAL FUNCTIONS. A PORTION OF THE EXISTING BUILDING WILL BE DEMOLISHED AS PART OF THIS PROJECT. THE EXPANSION WILL EXTEND TO THE RIGHT OF WAY OF SILVER. THE DRAINAGE AREA EAST OF THE NEW ADDITION WILL BE BLOCKED WITH THE ADDITION. WE ARE EVALUATING GRAVITY STORM DRAIN AND STORM WATER PUMP OPTIONS. BOTH OPTIONS WILL DISCHARGE TO OAK IN ESSENTIALLY THE SAME LOCATION AS IN THE CURRENT CONDITION. THE SECOND PHASE OF THE HOSPITAL EXPANSION WILL BE WEST OF THE PHASE ONE ADDITION AND WITHIN THE EXISTING PARKING. A PORTION OF THE EXISTING BUILDING WILL BE DEMOLISHED FOR THIS ADDITION. THE INTENT WILL BE TO DRAIN THE PHASE TWO AREA TO OAK AS IT CURRENTLY DOES.

THE ENERGY CENTER PORTION OF THE PROJECT INCLUDES AN ADDITION TO THE SOUTH SIDE OF THE EXISTING BUILDING. THIS ADDITION IS WITHIN THE EXISTING PARKING AREA. THIS PARKING WILL BE RECONFIGURED TO ACCOMMODATE PARKING AND BUILDING SERVICE FUNCTIONS. THE DRAINAGE PATTERNS WILL NOT BE ALTERED WITH THIS SCOPE OF WORK.

REFER TO THE DRAINAGE MANAGEMENT PLAN FOR DELINEATION OF THE DRAINAGE BASINS, LAND TREATMENTS AND RUNOFF PEAK FLOW RATES.

## STORM WATER POLLUTION CONTROL - WATER QUALITY RUNOFF VOLUME:

NO RETENTION VOLUME WILL BE PROVIDED WITH THESE SITE MODIFICATIONS. THE SITE IS EXTREMELY CONGESTED WITH LITTLE AVAILABLE SPACE TO PROVIDE ONSITE STORM WATER RETENTION. THE SITE IMPROVEMENT PROJECT WHICH WAS RECENTLY APPROVED PAID CASH IN LIEU FOR THE IMPERVIOUS AREA DISTURBED WITH THAT PROJECT. WITH THIS PROJECT THERE WILL BE SOME AREAS WITHIN THE SITE IMPROVEMENT PROJECT LIMITS THAT WILL BE RECONFIGURED. IT IS OUR UNDERSTANDING THAT PAYMENT OF CASH IN LIEU FOR SUBSEQUENT PROJECTS WILL NOT INCLUDE ADDITIONAL DISTURBED AREAS PREVIOUSLY ACCOUNTED FOR WITH THE SITE IMPROVEMENT PROJECT. THE WATER QUALITY VOLUME AND FEES WILL BE COMPUTED ON EACH PHASE AS PART OF THE REQUEST FOR BUILDING PERMIT APPROVAL.

THE AREAS THAT ARE PROPOSED FOR REDEVELOPMENT CURRENTLY DISCHARGE TO THE PUBLIC RIGHT OF WAY. WITH THE REDEVELOPMENT OF THE THESE AREAS THE EXISTING DRAINAGE PATTERNS AND PEAK DISCHARGE FLOW RATES WILL NOT CHANGE. PROVIDING ONSITE RETENTION VOLUME TO COMPLY WITH SECTION 22.9 OF THE DPM IS NOT TECHNICALLY FEASIBLE. THE OWNER WILL PAY CASH IN LIEU BASED ON THE CALCULATED RETENTION VOLUMES. THIS WILL BE FINALIZED DURING THE REQUEST FOR BUILDING PERMIT APPROVAL. THIS DRAINAGE MANAGEMENT PLAN IS BEING SUBMITTED IN SUPPORT OF HYDROLOGY APPROVAL FOR SITE PLAN FOR BUILDING PERMIT.

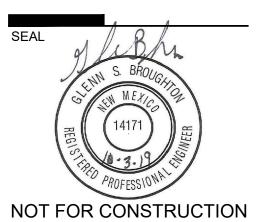
> **Bohannan** A Huston www.bhinc.com

DEKKER PERICH SABATINI

ARCHITECTURE / DESIGN / INSPIRATION

7601 JEFFERSON NE, SUITE 100 ALBUQUERQUE, NM 87109

505.761.9700 / DPSDESIGN.ORG



PROJECT

**(**)

9

B 100

Albuque

REVISIONS

SITE

PRE

DRAWN BY ВО REVIEWED BY GSB DATE 10/03/2019 PROJECT NO.

DRAWING NAME **EXISTING** DRAINAGE

MANAGEMENT PLAN

SHEET NO.

19-0010.001

Thu, 3-Oct-2019 - 1:44:pm, Plotted by: BORTEGA P:\20190464\CDP\Hydro\DRB Submittal\Existing DMP.dwg

This table is based on the DPM Section 22.2, Zone: 2											
Basin	Area	Area	Land	d Treatmer	nt Percent	ages	Q(100yr)	Q(100yr)	V(100yr)	V <sub>(100yr-6hr)</sub>	V <sub>(100yr-24hr)</sub>
ID	(SQ. FT)	(AC.)	Α	В	С	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)
CURRENT ONSI	TE BASINS	3									
B1	68311	1.57	0.0%	0.0%	0.0%	100.0%	4.7	7.4	2.12	12068	14345
B2	66758	1.53	0.0%	0.0%	0.0%	100.0%	4.7	7.2	2.12	11794	14019
B3	6335	0.15	0.0%	0.0%	96.0%	4.0%	3.2	0.5	1.17	617	626
B4	32445	0.74	0.0%	0.0%	37.0%	63.0%	4.1	3.1	1.75	4742	5423
B5	11212	0.26	0.0%	0.0%	88.0%	12.0%	3.3	0.9	1.25	1167	1212
B6	58554	1.34	0.0%	0.0%	17.0%	83.0%	4.4	6.0	1.95	9523	11143
B7	25110	0.58	0.0%	0.0%	9.0%	91.0%	4.6	2.6	2.03	4250	5011
B8	58908	1.35	0.0%	0.0%	12.0%	88.0%	4.5	6.1	2.00	9824	11552

■■■■■ DRAINAGE BASIN BOUNDARY

**LEGEND** 

SABATINI

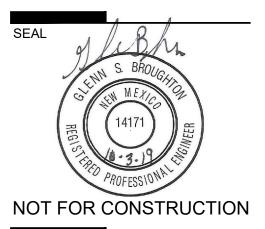
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ARCHITECTURE / DESIGN / INSPIRATION

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PROJECT

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REVISIONS

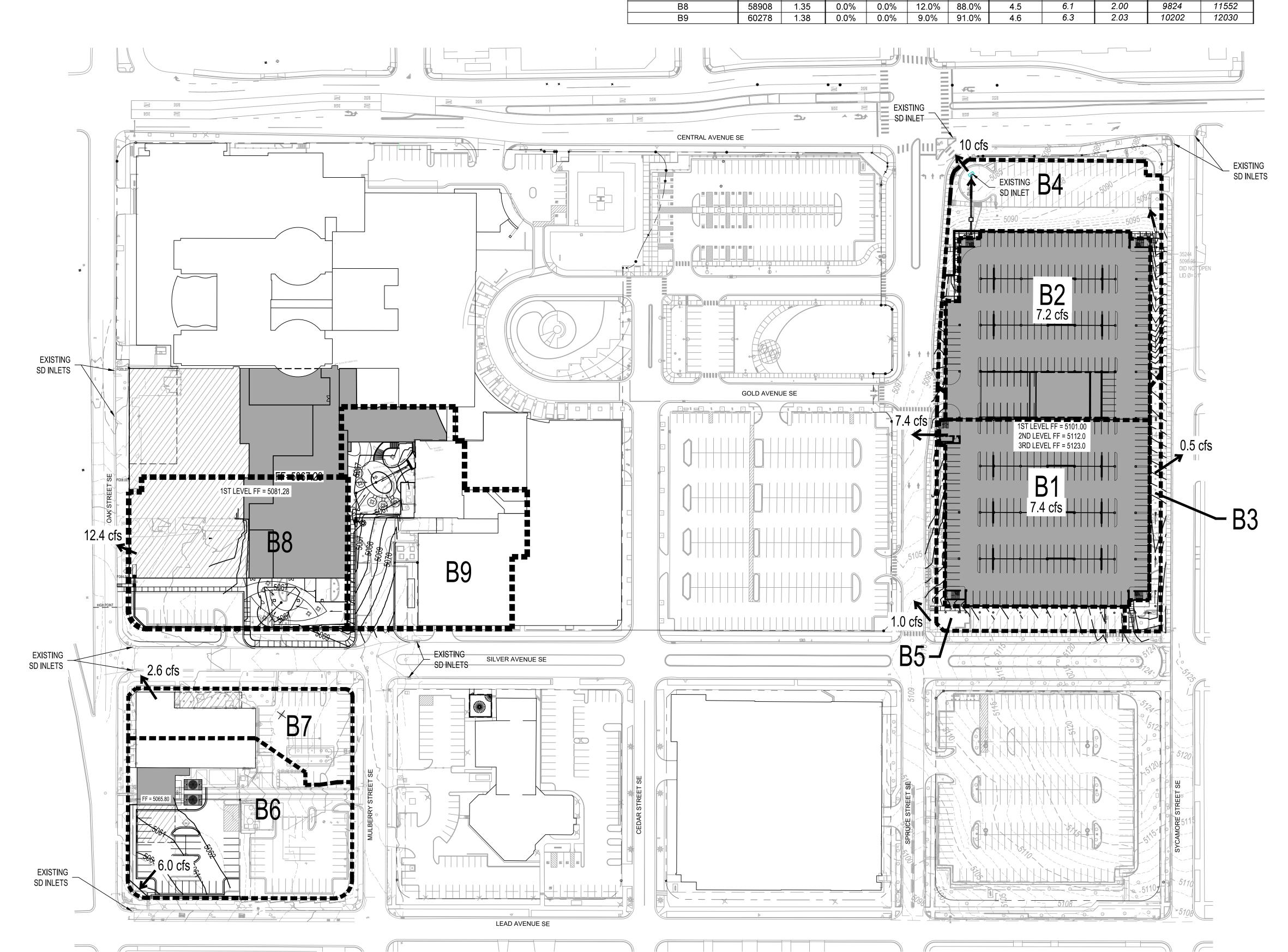
DRAWN BY	ВО
REVIEWED BY	GSB
DATE	10/03/2019
PROJECT NO.	19-0010.001
DRAWING NAME	

PROPOSED DRAINAGE

MANAGEMENT PLAN

SHEET NO.

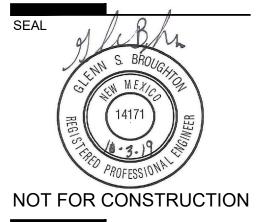
Bohannan A Huston
www.bhinc.com 800.877.5332





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PROJECT

PRESBYTERIAN HOSPITAL
DEVELOPMENT PLAN FOR BUILDING PERMIT

100

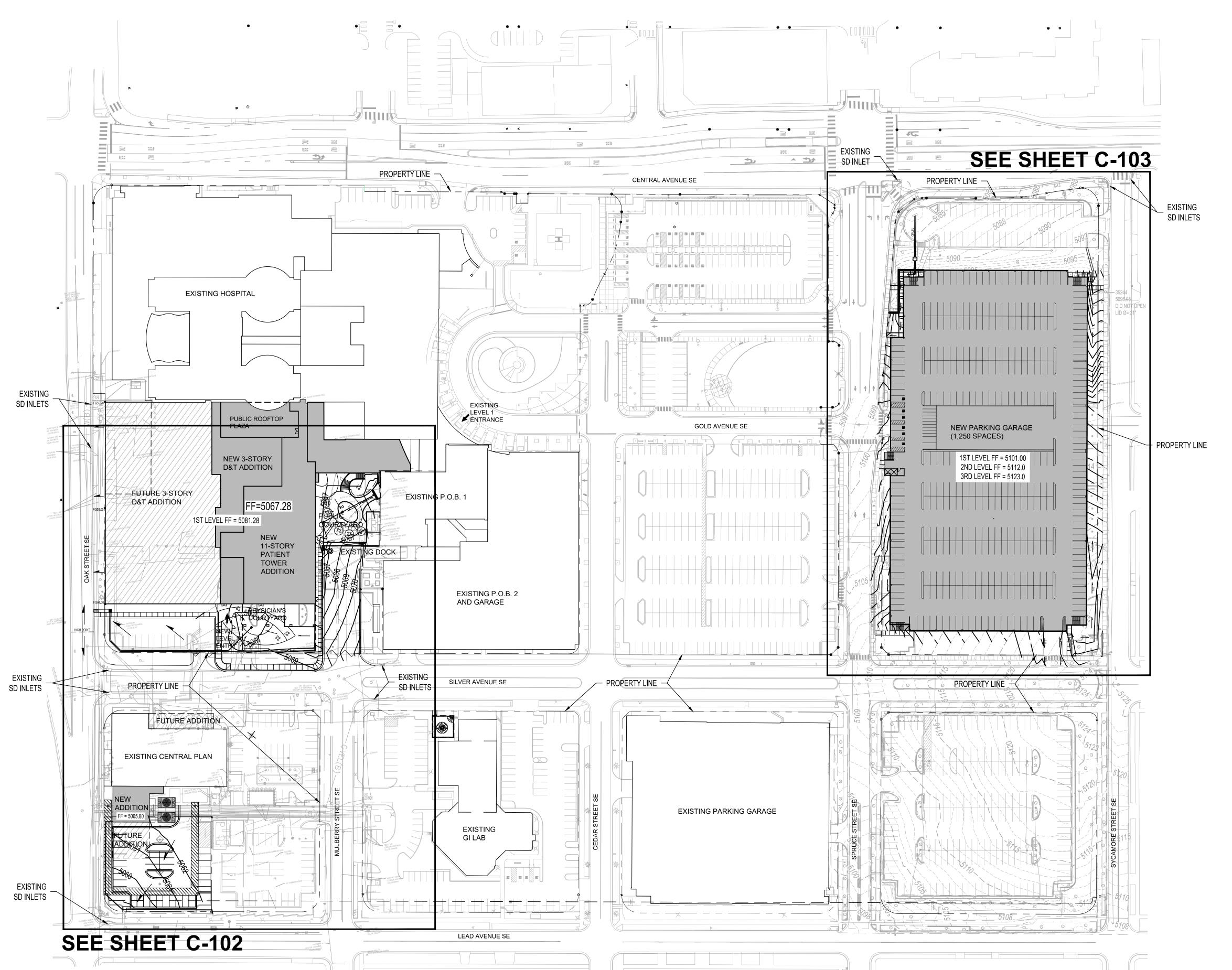
DRAWN BY BO
REVIEWED BY GSB
DATE 10/03/2019
PROJECT NO. 19-0010.001

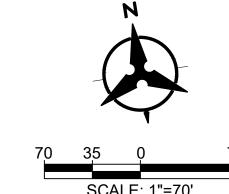
CONCEPTUAL
GRADING AND

GRADING AND DRAINAGE PLAN

SHEET NO.

C-10





PROJECT

DRAWN BY	ВС
REVIEWED BY	GSE
DATE	10/03/2019
PROJECT NO.	19-0010.00

DRAWING NAME

CONCEPTUAL

GRADING AND DRAINAGE PLAN AREA A

SHEET NO.

° C-10



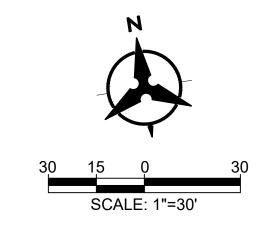
 CURB CUTS SHOWN ON THE PLAN HAVE BEEN LOCATED TO DIRECT SITE RUNOFF TO LANDSCAPE WATER HARVESTING AREAS. THE LOCATIONS WILL BE REFINED AS THE DESIGN DEVELOPS.

# KEYED NOTES

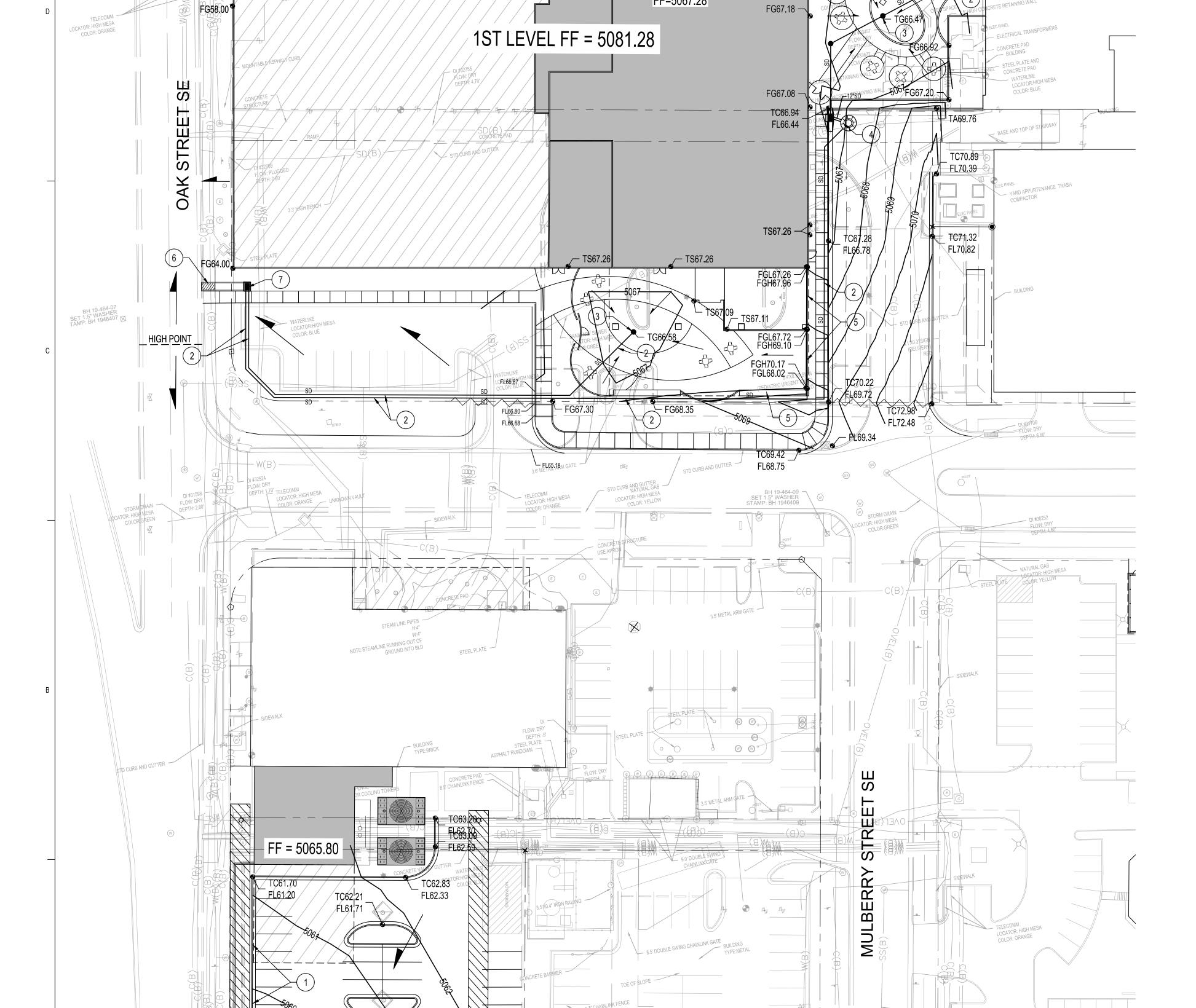
- 1. CURB CUT.
- 2. STORM DRAIN.
- 3. AREA DRAIN.
- 4. STORM DRAIN LIFT STATION.
- 5. RETAINING WALL.
- 6. SIDEWALK CULVERT.
- 7. PUMP DISCHARGE.

## **GRADING LEGEND**

2.0%	DIRECTION OF FLOW
<b>23.00</b>	PROPOSED SPOT ELEVATION
<del></del> 5100 <del></del>	PROPOSED INDEX CONTOUR
<del></del> 5101 <del></del>	PROPOSED INTERMEDIATE CONTOUR







Thu, 3-Oct-2019 - 1:47:pm, Plotted by: BORTEGA
P:\20190464\CDP\Plans\General\DRB\20190464 GP02 - DRB.dwg

FF=5067.28



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PRESBYTERIAN HOSPITAL
E DEVELOPMENT PLAN FOR BUILDING PERM

100

DRAWN BY	ВС
REVIEWED BY	GSE
DATE	10/03/2019
PROJECT NO.	19-0010.00

CONCEPTUAL
GRADING AND
DRAINAGE PLAN
AREA B

SHEET NO.

C-103

