

# CITY OF ALBUQUERQUE

Planning Department  
Brennon Williams, Director



Mayor Timothy M. Keller

December 17, 2020

Glenn Broughton  
Bohannon Huston, Inc.  
7500 Jefferson St. NE  
Albuquerque, NM 87109

**RE: Presbyterian Healthplex Pool Addition  
6301 Forest Hills Dr. NE  
Grading and Drainage Plan Stamp Date: 11/20/20  
Hydrology File: E18D036A**

Dear Mr. Broughton:

Based on the submittal received on 11/30/20, the Grading and Drainage Plan is approved for Building Permit by Hydrology.

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](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

Prior to Certificate of Occupancy (For Information):

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

If you have any questions, please contact me at 924-3986 or [earmijo@cabq.gov](mailto:earmijo@cabq.gov).

Sincerely,

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: \_\_\_\_\_ Building Permit #: \_\_\_\_\_ Hydrology File #: \_\_\_\_\_

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: \_\_\_\_\_

City Address: \_\_\_\_\_

Applicant: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Other Contact: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

TYPE OF DEVELOPMENT: \_\_\_\_\_ PLAT \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE \_\_\_\_\_ ADMIN SITE

Check all that Apply:

### DEPARTMENT:

\_\_\_\_\_ HYDROLOGY/ DRAINAGE  
\_\_\_\_\_ TRAFFIC/ TRANSPORTATION

### TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

\_\_\_\_\_ BUILDING PERMIT APPROVAL  
\_\_\_\_\_ CERTIFICATE OF OCCUPANCY

### 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?

\_\_\_\_\_ 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) \_\_\_\_\_

IS THIS A RESUBMITTAL?: \_\_\_\_\_ Yes \_\_\_\_\_ No

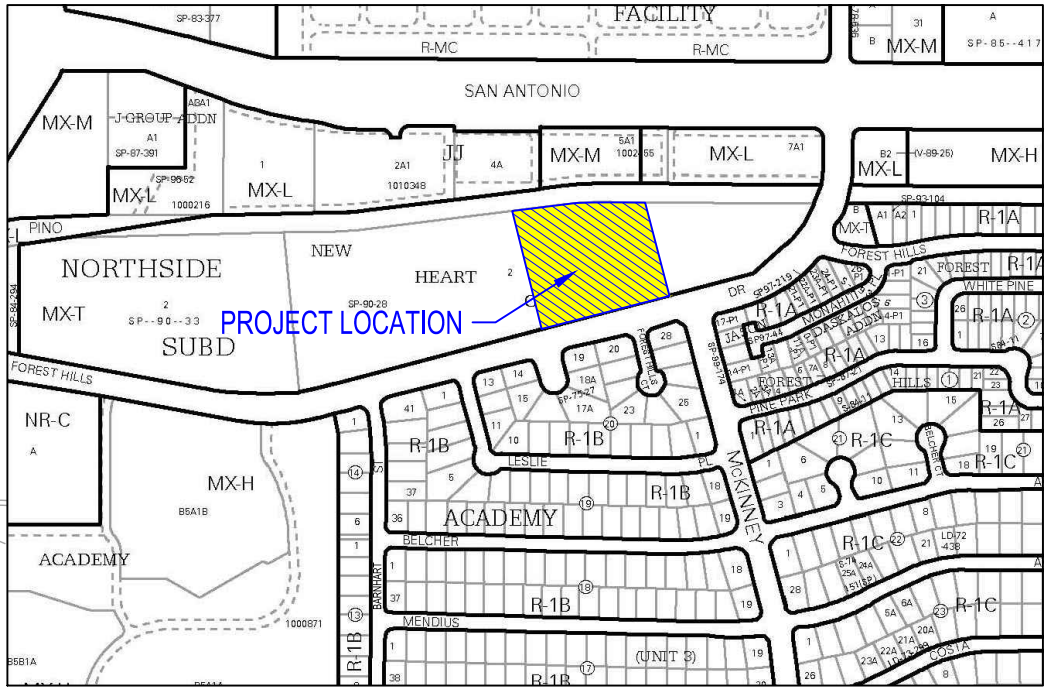
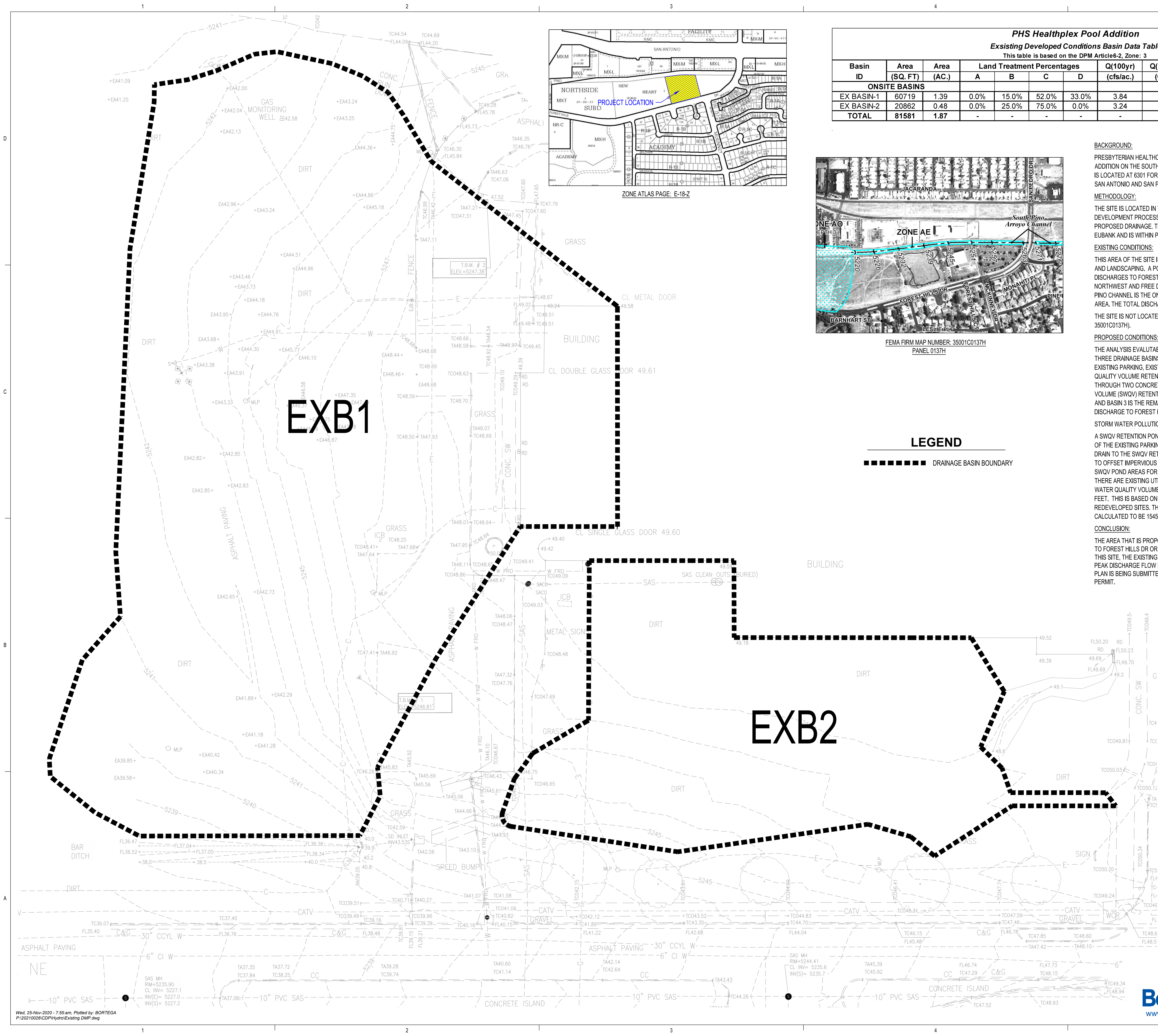
DATE SUBMITTED: \_\_\_\_\_ By: \_\_\_\_\_

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

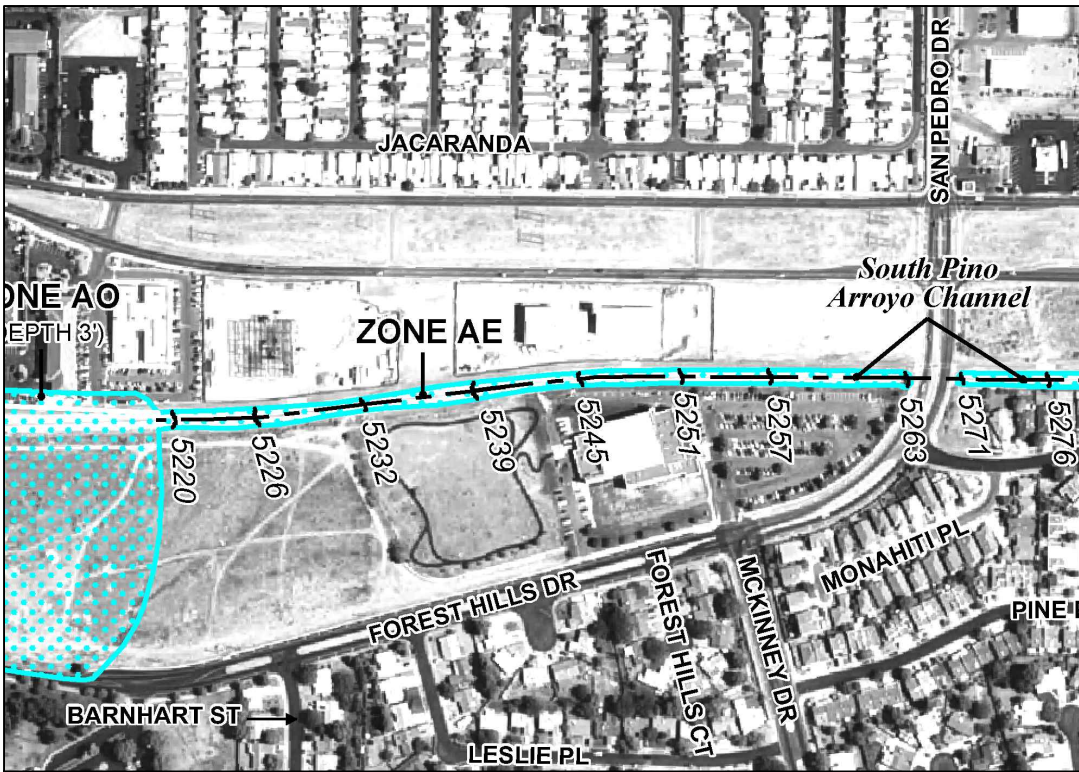
FEE PAID: \_\_\_\_\_





ZONE ATLAS PAGE: E-18-Z

PHS Healthplex Pool Addition											
Existing Developed Conditions Basin Data Table											
This table is based on the DPM Article6-2, Zone: 3											
Basin ID	Area	Area	Land Treatment Percentages				Q(100yr)	Q(100yr)	V(100yr)	V(100yr-6hr)	V(100yr-24hr)
	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac.)	(CFS)	(inches)	(CF)	(CF)
ONSITE BASINS											
EX BASIN-1	60719	1.39	0.0%	15.0%	52.0%	33.0%	3.84	5.4	1.59	8033	8868
EX BASIN-2	20862	0.48	0.0%	25.0%	75.0%	0.0%	3.24	1.6	1.20	2082	2082
TOTAL	81581	1.87	-	-	-	-	-	6.9	-	10115	10950



FEMA FIRM MAP NUMBER: 35001C0137H  
PANEL 0137H

LEGEND

■■■■■■■■ DRAINAGE BASIN BOUNDARY

**BACKGROUND:**  
PRESBYTERIAN HEALTHCARE SERVICES HEALTHPLEX FACILITY IS PROPOSING AN ADDITION ON THE SOUTH SIDE OF THE FACILITY FOR A NEW THERAPY POOL. THE SITE IS LOCATED AT 6301 FOREST HILLS DR, NE SOUTHWEST OF THE INTERSECTION OF SAN ANTONIO AND SAN PEDRO.

**METHODOLOGY:**  
THE SITE IS LOCATED IN THE CITY OF ALBUQUERQUE AND CHAPTER 6 OF THE DEVELOPMENT PROCESS MANUAL (DPM) WAS USED TO ANALYZE THE EXISTING AND PROPOSED DRAINAGE. THE PROJECT IS LOCATED BETWEEN THE SAN MATEO AND EUBANK AND IS WITHIN PRECIPITATION ZONE 3.

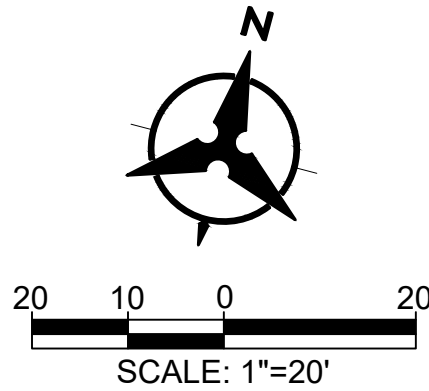
**EXISTING CONDITIONS:**  
THIS AREA OF THE SITE IS FULLY DEVELOPED WITH AN EXISTING BUILDING, PARKING AND LANDSCAPING. A PORTION OF THE SITE DRAINS TO THE SOUTH AND FREE DISCHARGES TO FOREST HILLS DR. THE MAJORITY OF THE SITE DRAINS TO THE NORTHWEST AND FREE DISCHARGES TO SOUTH PINO ARROYO. THE AMAFCA SOUTH PINO CHANNEL IS THE ONLY PUBLIC DRAINAGE INFRASTRUCTURE IN THE IMMEDIATE AREA. THE TOTAL DISCHARGE FROM THE BASINS THAT WERE ANALYZED IS 6.9 CFS.

THE SITE IS NOT LOCATED WITHIN A DESIGNATED FEMA FLOOD ZONE (FEMA FIRM # 35001C0137H).

**PROPOSED CONDITIONS:**  
THE ANALYSIS EVALUATED DRAINAGE AREAS WITHIN THE PROPOSED WORK AREA. THREE DRAINAGE BASINS ARE DELINEATED ON THE DMP. BASIN 1 INCLUDES THE EXISTING PARKING, EXISTING BUILDING, PROPOSED PARKING AND STORM WATER QUALITY VOLUME RETENTION POND. RUNOFF FROM THE PARKING LOT DRAINS THROUGH TWO CONCRETE RUNDOWNS TO A PROPOSED STORM WATER QUALITY VOLUME (SWQV) RETENTION POND. BASIN 2 INCLUDES THE NEW BUILDING ADDITION AND BASIN 3 IS THE REMAINDER OF THE SITE. BOTH OF THESE BASINS FREE DISCHARGE TO FOREST HILLS DR.

**STORM WATER POLLUTION CONTROL - WATER QUALITY RUNOFF VOLUME:**  
A SWQV RETENTION POND WILL BE PROVIDED FOR BASIN 1. A SIGNIFICANT PORTION OF THE EXISTING PARKING LOT AND A SMALL AREA OF THE EXISTING BUILDING WILL DRAIN TO THE SWQV RETENTION POND. EXCESS VOLUME IS PROVIDED IN THIS POND TO OFFSET IMPERVIOUS AREAS THAT DO NOT DRAIN TO A SWQV POND. POTENTIAL SWQV POND AREAS FOR BASINS 2 AND 3 ARE WITHIN A MATURE LANDSCAPE AREA OR THERE ARE EXISTING UTILITIES WITHIN THE AREA. THE TOTAL REQUIRED STORM WATER QUALITY VOLUME FOR THIS PROJECT WAS CALCULATED TO BE 1056 CUBIC FEET. THIS IS BASED ON A PRECIPITATION DEPTH OF 0.26 INCHES FOR REDEVELOPED SITES. THE TOTAL STORM WATER QUALITY VOLUME PROVIDED WAS CALCULATED TO BE 1545 CUBIC FEET.

**CONCLUSION:**  
THE AREA THAT IS PROPOSED FOR REDEVELOPMENT CURRENTLY FREE DISCHARGES TO FOREST HILLS DR OR THE SOUTH PINO ARROYO. WITH THE REDEVELOPMENT OF THIS SITE, THE EXISTING DRAINAGE PATTERNS WILL NOT CHANGE SIGNIFICANTLY. PEAK DISCHARGE FLOW RATE INCREASED BY 1.3 CFS. THIS DRAINAGE MANAGEMENT PLAN IS BEING SUBMITTED IN SUPPORT OF HYDROLOGY APPROVAL FOR BUILDING PERMIT.



DEKKER  
PERICH  
SABATINI

ARCHITECTURE  
DESIGN  
INSPIRATION

ARCHITECT

ENGINEER

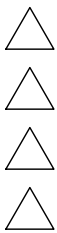


PROJECT

PHS HEALTHPLEX  
POOL ADDITION  
6301 FOREST HILLS DR, NE  
ALBUQUERQUE, NM

ISSUED FOR  
PERMIT & BID

REVISIONS



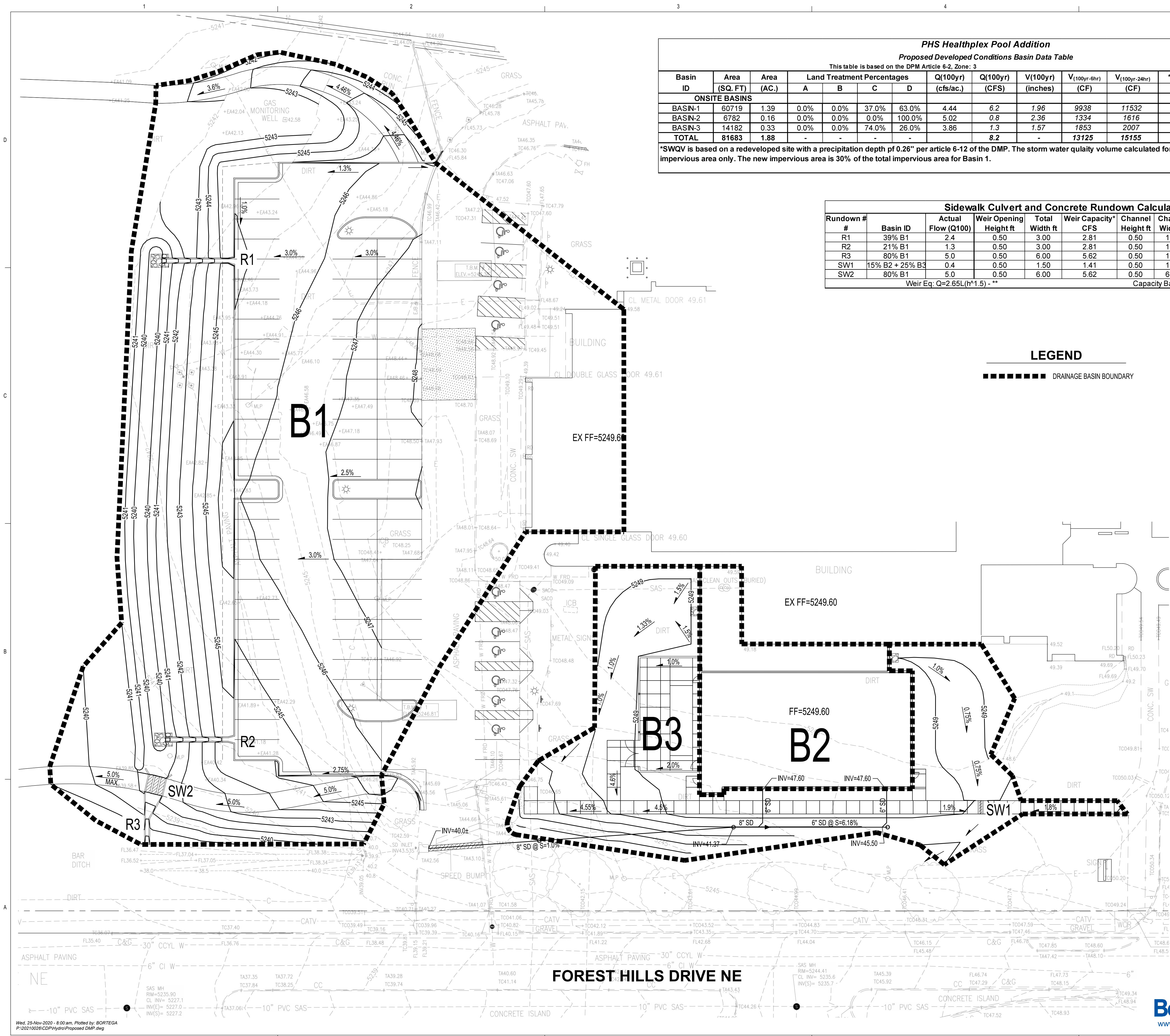
DRAWN BY	BO
REVIEWED BY	GSB
DATE	11.23.2020
PROJECT NO.	20-0006.001
DRAWING NAME	

EXISTING  
DRAINAGE  
MANAGEMENT  
PLAN

SHEET NO.

OF

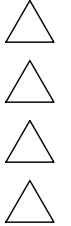
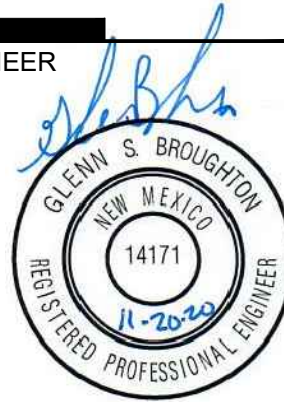




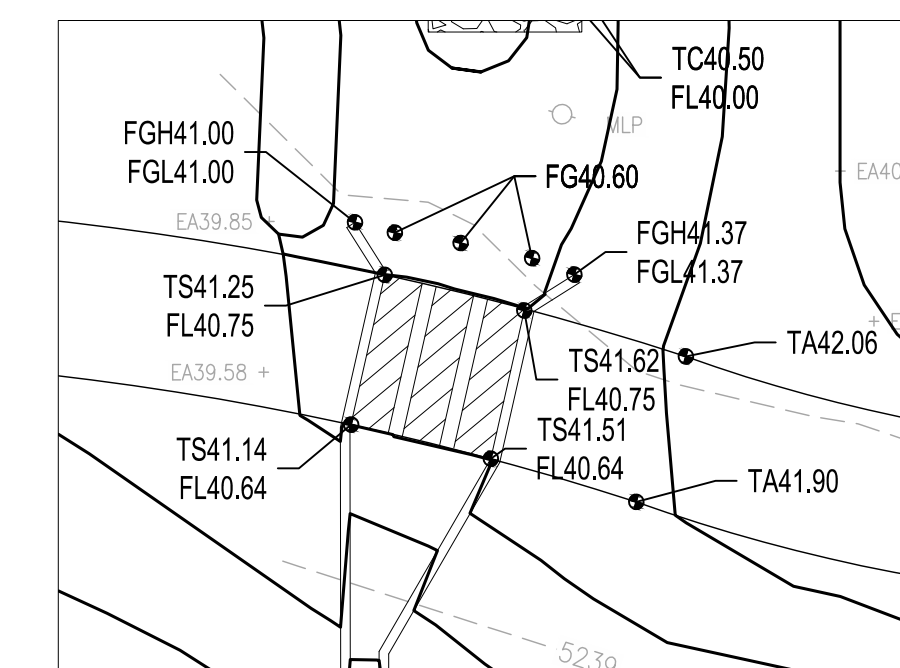
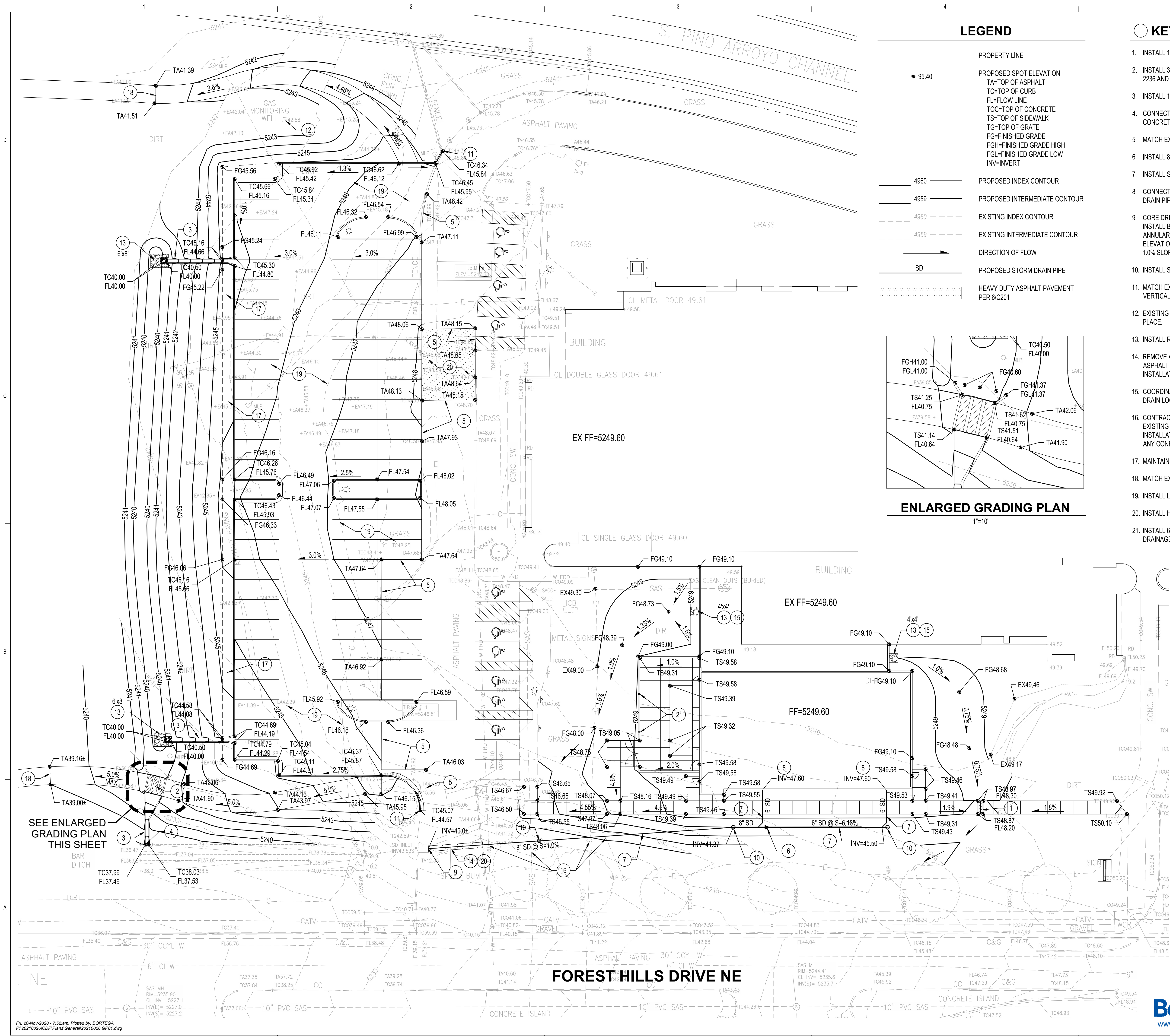
PHS Healthplex Pool Addition													
Proposed Developed Conditions Basin Data Table													
This table is based on the DPM Article 6-2, Zone: 3													
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	V(100yr) (inches)	V <sub>(100yr-6hr)</sub> (CF)	V <sub>(100yr-24hr)</sub> (CF)	*SWQV Required (CF)	SWQV Provided (CF)
ONSITE BASINS													
BASIN-1	60719	1.39	0.0%	0.0%	37.0%	63.0%	4.44	6.2	1.96	9938	11532	829	1545
BASIN-2	6782	0.16	0.0%	0.0%	0.0%	100.0%	5.02	0.8	2.36	1334	1616	147	0
BASIN-3	14182	0.33	0.0%	0.0%	74.0%	26.0%	3.86	1.3	1.57	1853	2007	80	0
TOTAL	81683	1.88	-	-	-	-	-	8.2	-	13125	15155	1056	1545
*SWQV is based on a redeveloped site with a precipitation depth pf 0.26" per article 6-12 of the DMP. The storm water quality volume calculated for Basin 1 includes the proposed impervious area only. The new impervious area is 30% of the total impervious area for Basin 1.													

Sidewalk Culvert and Concrete Rundown Calculations									
Rundown #	Basin ID	Actual Flow (Q100)	Weir Opening Height ft	Total Width ft	Weir Capacity* CFS	Channel Height ft	Channel Width ft	Minimum Slope	Channel Capacity* CFS
R1	39% B1	2.4	0.50	3.00	2.81	0.50	1.50	2.00%	5.43
R2	21% B1	1.3	0.50	3.00	2.81	0.50	1.50	2.00%	5.43
R3	80% B1	5.0	0.50	6.00	5.62	0.50	1.50	12.30%	13.47
SW1	15% B2 + 25% B3	0.4	0.50	1.50	1.41	0.50	1.50	2.00%	5.43
SW2	80% B1	5.0	0.50	6.00	5.62	0.50	6.00	2.00%	27.57
Weir Eq: Q=2.65L(H <sup>1.5</sup> ) - **									
Capacity Based on Manning's Eq w/ N=0.013 - *									

LEGEND  
DRAINAGE BASIN BOUNDARY







ENLARGED GRADING PLAN  
1"=10'

LEGEND

- PROPERTY LINE
- PROPOSED SPOT ELEVATION  
TA=TOP OF ASPHALT  
TC=TOP OF CURB  
FL=FLOW LINE  
TOC=TOP OF CONCRETE  
TS=TOP OF SIDEWALK  
TG=TOP OF GRATE  
FGH=FINISHED GRADE HIGH  
FGL=FINISHED GRADE LOW  
INV=INVERT
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- DIRECTION OF FLOW
- PROPOSED STORM DRAIN PIPE
- HEAVY DUTY ASPHALT PAVEMENT  
PER 6/C201

KEYED NOTES

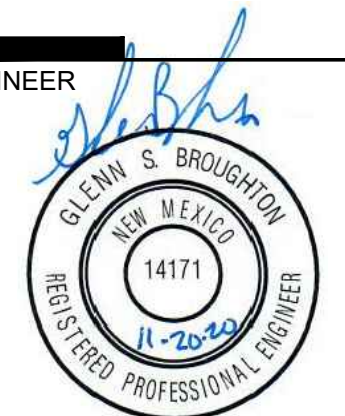
- INSTALL 18" WIDE SIDEWALK CULVERT PER COA STD DWG 2236.
- INSTALL 3 - 24" WIDE SIDEWALK CULVERTS PER COA STD DWG 2236 AND SECTION A/C201.
- INSTALL 18" WIDE CONCRETE RIBBON CHANNEL PER 2/C201.
- CONNECT CONCRETE RIBBON CHANNEL TO EXISTING CONCRETE CHANNEL PER SECTION B/C201.
- MATCH EXISTING ASPHALT PAVEMENT.
- INSTALL 8"x6" ECCENTRIC REDUCER.
- INSTALL STORM DRAIN PIPE. SEE PLAN FOR SIZE AND SLOPE.
- CONNECT ROOF DRAIN DOWNSPOUT TO UNDERGROUND STORM DRAIN PIPE PER DETAIL 1/C201.
- CORE DRILL AND CONNECT TO EXISTING STORM DRAIN INLET. INSTALL BITUMINOUS SEALANT OR APPROVED EQUAL TO SEAL ANNULAR SPACE. CONTRACTOR TO VERIFY EXACT INVERT ELEVATION OF EXISTING INLET AND MAINTAIN A MINIMUM OF 1.0% SLOPE ON THE 8" STORM DRAIN PIPE.
- INSTALL STORM DRAIN CLEANOUT PER 3/C201.
- MATCH EXISTING CURB AND GUTTER HORIZONTALLY AND VERTICALLY.
- EXISTING GAS MONITORING WELL TO REMAIN. PROTECT IN PLACE.
- INSTALL RIP-RAP EROSION CONTROL PAD PER 4/C201.
- REMOVE AND REPLACE EXISTING ASPHALT PAVEMENT. ASPHALT SPEED BUMP AND CONCRETE CURB AS NEEDED FOR INSTALLATION OF STORM DRAIN PIPE. MATCH EXISTING.
- COORDINATE EXACT LOCATION OF RIP-RAP PAD WITH ROOF DRAIN LOCATION. SEE ARCHITECTURAL / PLUMBING PLANS.
- CONTRACTOR TO VERIFY EXACT LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO STORM DRAIN TRENCHING AND INSTALLATION. NOTIFY ENGINEER IMMEDIATELY IF THERE ARE ANY CONFLICTS.
- MAINTAIN A 2.0% SLOPE FROM BACK OF CURB FOR 5'.
- MATCH EXISTING ASPHALT TRAIL.
- INSTALL LIGHT DUTY ASPHALT PAVEMENT PER 5/C201.
- INSTALL HEAVY DUTY ASPHALT PAVEMENT PER 6/C201.
- INSTALL 6" PIPE SLEEVE THROUGH WALL AT GRADE FOR DRAINAGE.

DEKKER  
PERICH  
SABATINI

ARCHITECTURE  
DESIGN  
INSPIRATION

ARCHITECT

ENGINEER

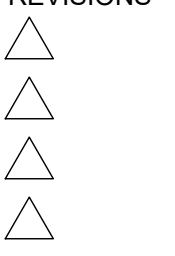


PROJECT

PHS HEALTHPLEX  
POOL ADDITION  
6301 FOREST HILLS DR. NE  
ALBUQUERQUE, NM

ISSUED FOR  
PERMIT & BID

REVISIONS



DRAWN BY	BO
REVIEWED BY	GSB
DATE	11.23.2020
PROJECT NO.	20-0006.001
DRAWING NAME	

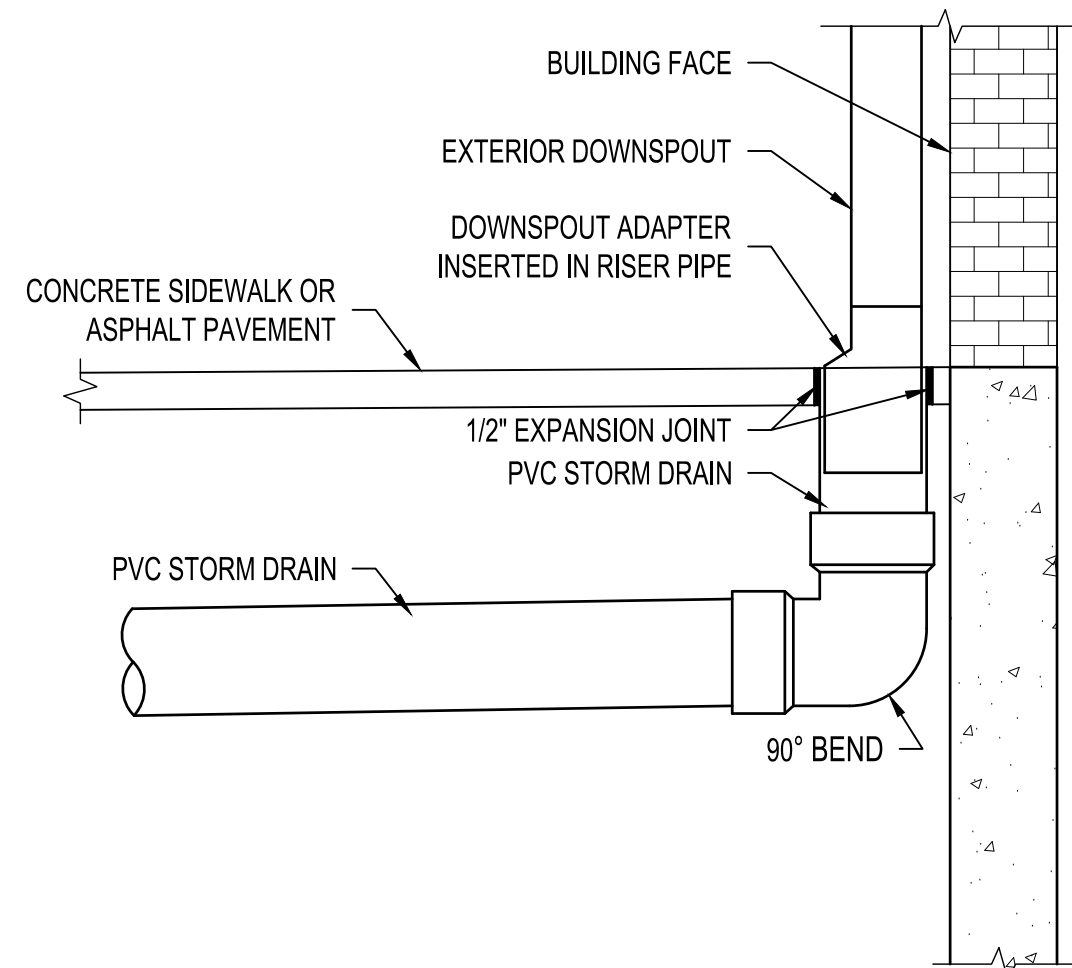
GRADING &  
DRAINAGE PLAN

SHEET NO.

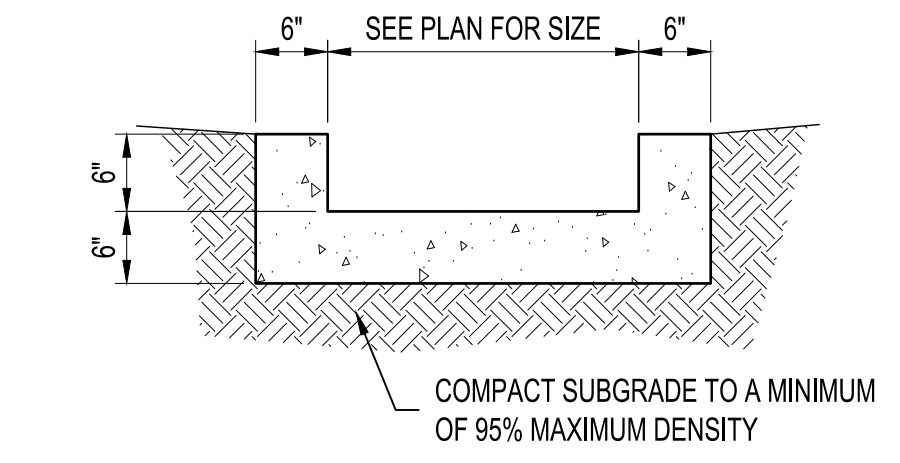
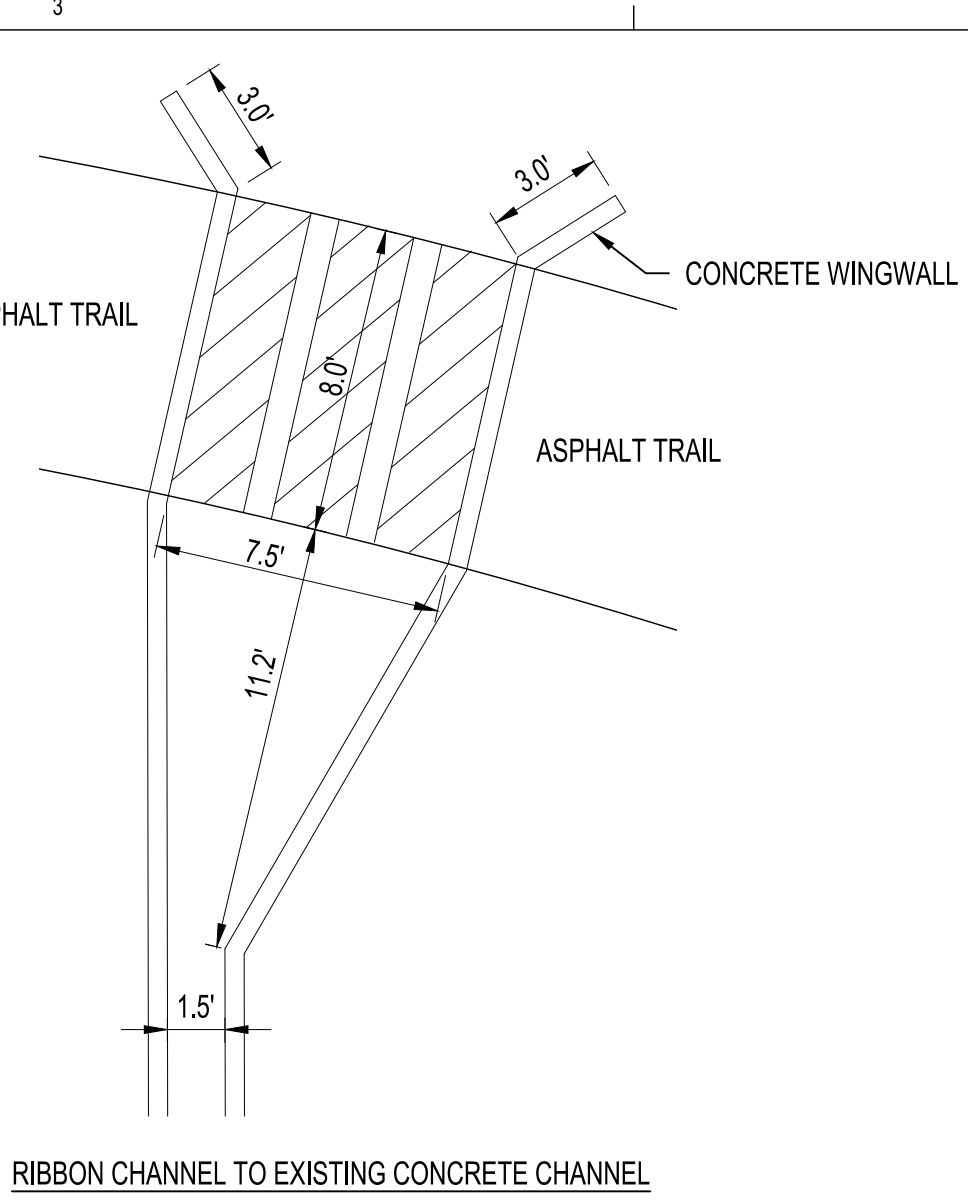
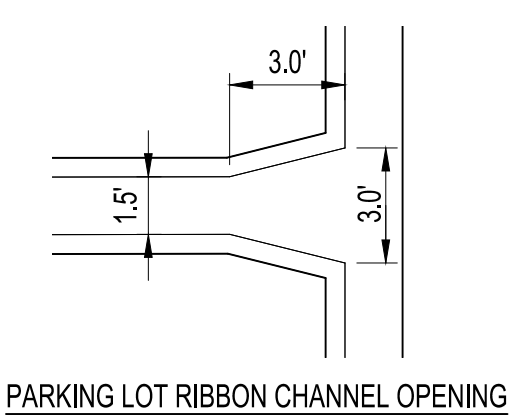
C101  
OF

Bohannon & Huston  
www.bhinc.com 800.877.5332

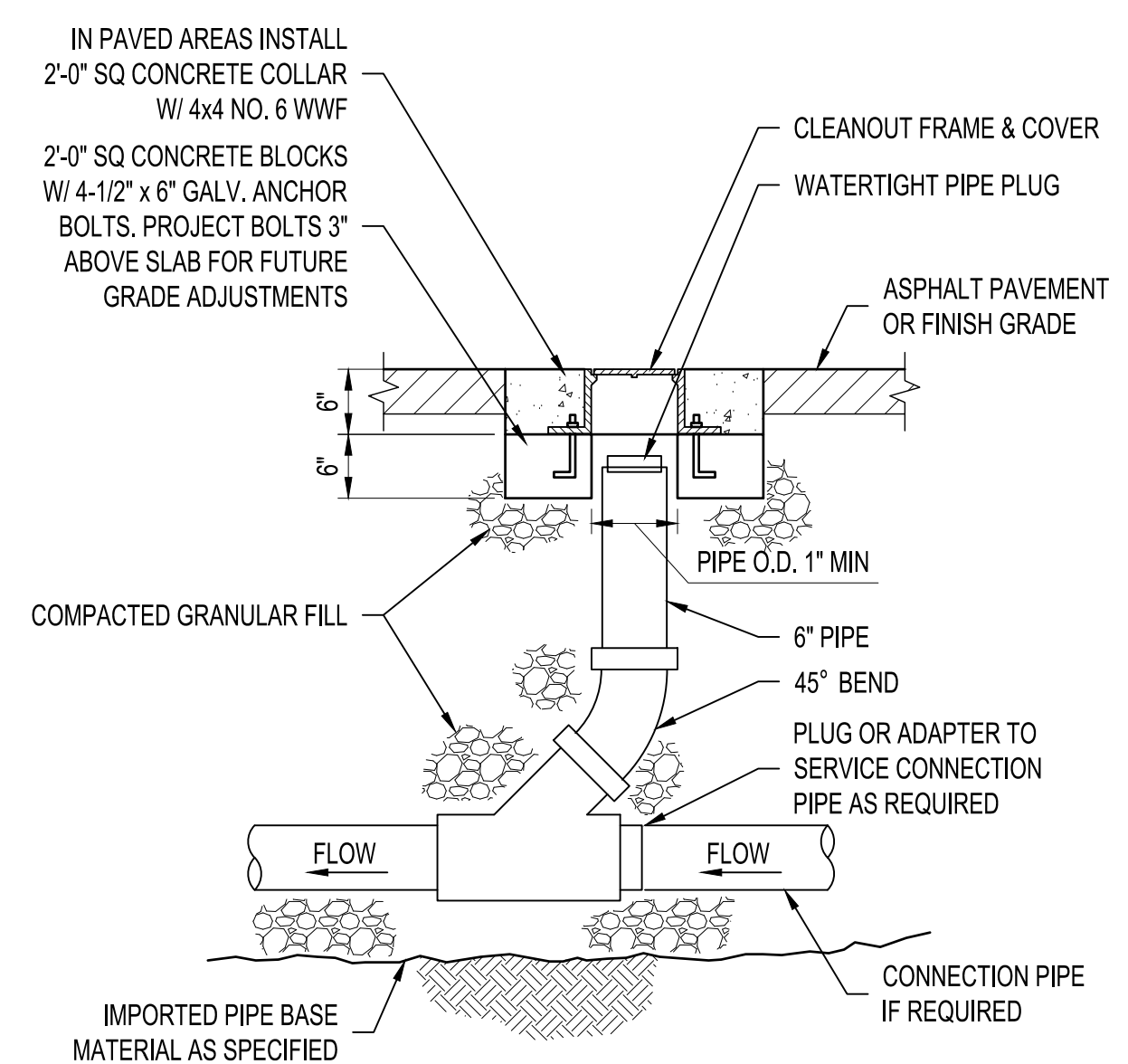
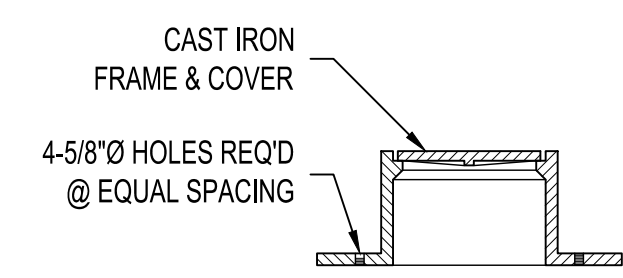




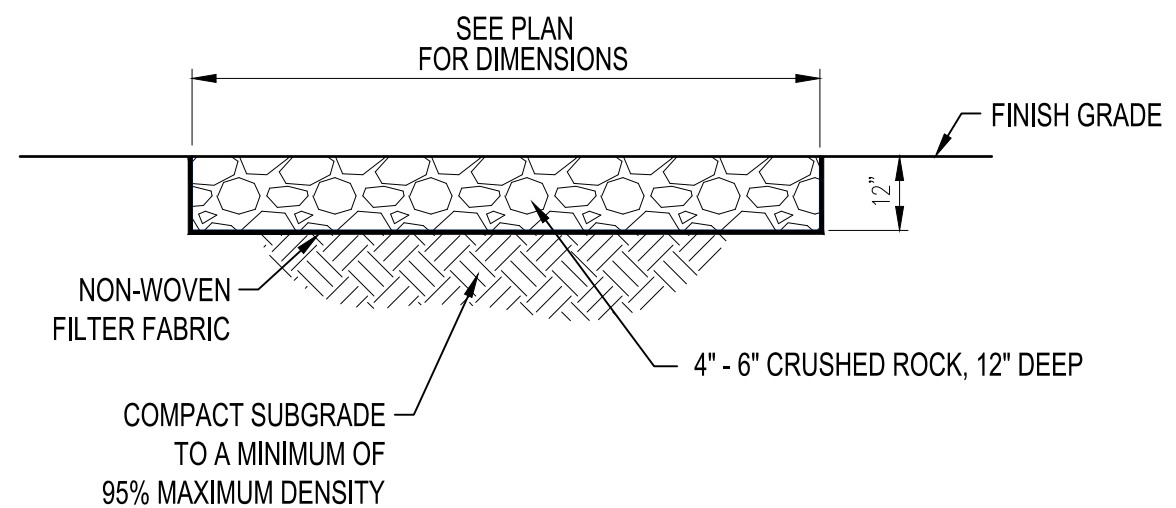
1 ROOF DRAIN CONNECTION NTS



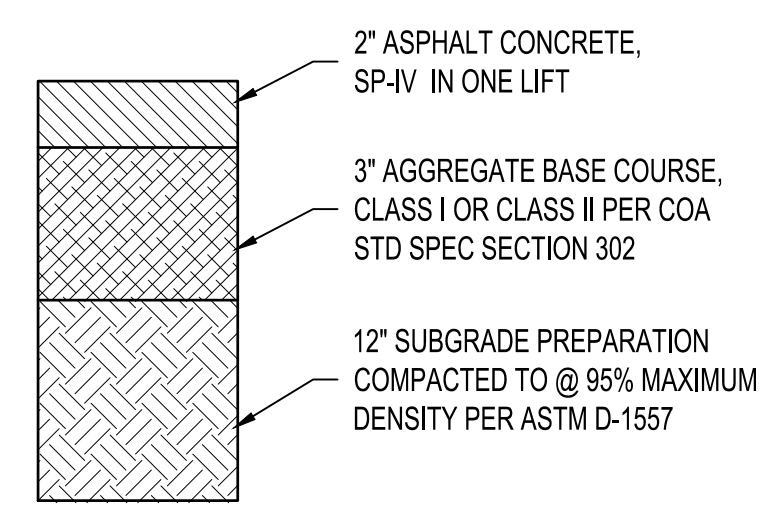
2 CONCRETE RIBBON CHANNEL NTS



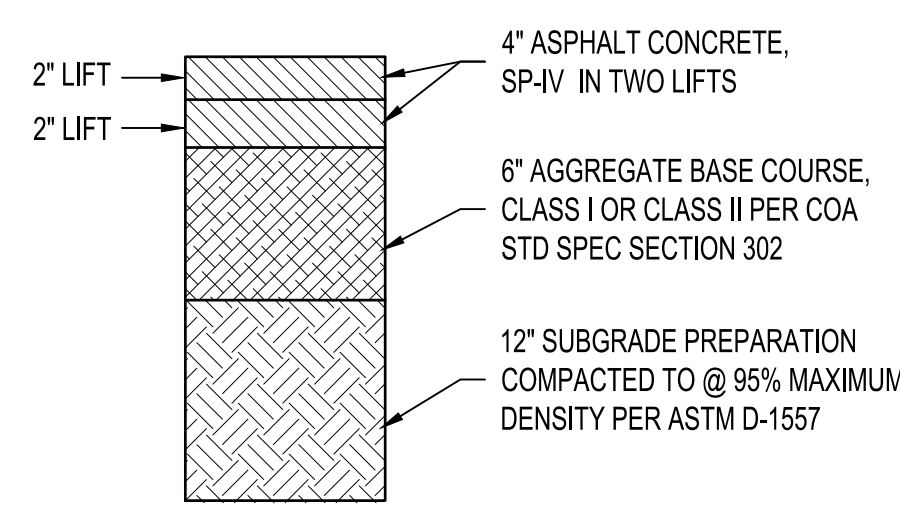
3 CLEANOUT NTS



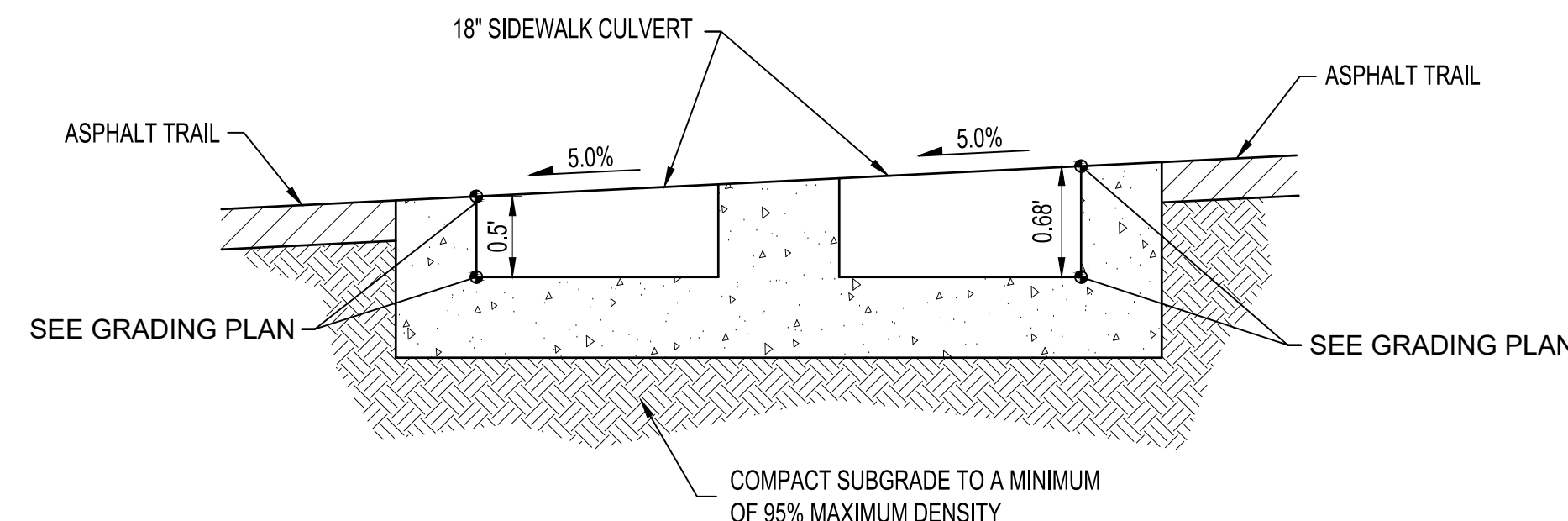
4 RIP-RAP EROSION CONTROL PAD NTS



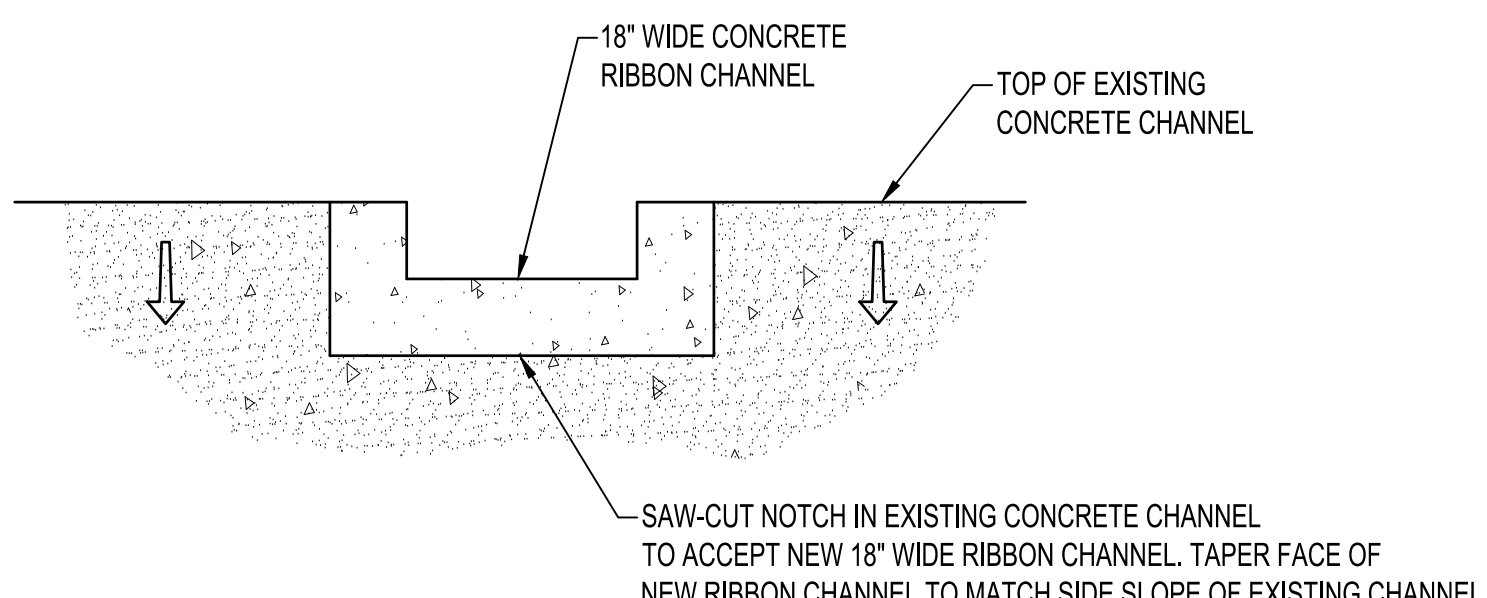
5 LIGHT DUTY PAVEMENT SECTION NTS



6 HEAVY DUTY PAVEMENT SECTION NTS



A SIDEWALK CULVERT SECTION NTS



B CONNECTION TO EXISTING CONCRETE CHANNEL NTS