CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director

Mayor Richard J. Berry

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

March 16, 2017

Paul Van Gulick, P.E.
Design X
1031 Monte Largo Dr. NE
Albuquerque, New Mexico 87123

RE: **Lot 5, Block 4 Volcano Cliffs Unit 18**
6611 Papagayo Rd NW (S.A.D. 228)
Grading and Drainage Plan
Engineer's Stamp Date 3-31-16 (D10D003K4)

Dear Mr. Gulick,

Based upon the information provided in your submittal received 3/15/17, this plan is approved for Grading Permit.

Prior to building Permit approval a Pad certification must be received, either by a written statement from the engineer of record or an as-built plan with spot elevations and signed by an engineer. Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Notify the owner/contractor, a separate permit for a retaining/garden wall is required. Openings in the wall/s in the rear yard PUE are required, to allow for flows to pass from the property to the north of this site. The openings are to be calculated according to the amount of water allowed to leave the property to the north. Attach this approved plan to the wall permit set showing the wall openings.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, please contact me at 924-3999 or Rudy Rael at 924-3977.

Sincerely,

Shahab Biazar, P.E.
City Engineer, Planning
Development Review Services

RR/SB
C: File

LOT 4, BLOCK 5, VOLCANO CLIFFS SUBDIVISION, UNIT 18
WITHIN SPECIAL ASSESSMENT DISTRICT 228 *(SAD-228)*

NARRATIVE

LOT 4 FALLS WITHIN ZONE "X" (AREA OF MINIMAL FLOOD HAZARD) AS SHOWN ON FEMA F.I.R.M. 35001C0111G EFFECTIVE 9/26/2008

EXISTING SITE TOPOGRAPHY: LOT 4 SLOPES GENERALLY FROM WEST TO EAST WITH AN AVERAGE SLOPE OF 0.02 FT/FT. THE AVERAGE ELEVATION AT THE BUILDING PAD IS 5328 FT. THE PROPOSED BUILDING PADS WILL BE 5328 FT IN ORDER TO BALANCE CUT AND FILL. THE PROPOSED FINISHED FLOOR ELEVATION WILL BE 5328.5 FT.

PROPOSED GRADING WILL MAINTAIN HISTORIC CROSS-LOT DRAINAGE PER SAD-228 DRAINAGE MASTER PLAN (DMP).

FIRST FLUSH WILL BE INTERCEPTED BY A SERIES OF 12' DIAMETER TREE WELLS.

A SEGMENTAL RETAINING WALL WITH MAX HEIGHT 2' IS PROPOSED TO MANAGE SITE TOPOGRAPHY FOR PROPER RUNOFF AND PROVIDE AREA FOR TREE WELLS.

PER SAD-228 VOL. 1 THE SEWER SERVICE STUB FOR THIS LOT HAS AS INVERT OF 5324 FEET. THIS IS ADEQUATE TO ACHIEVE A MINIMUM 2% GRADE TO THE SERVICE STUB WHEN THE BUILDING IS PLUMBED.

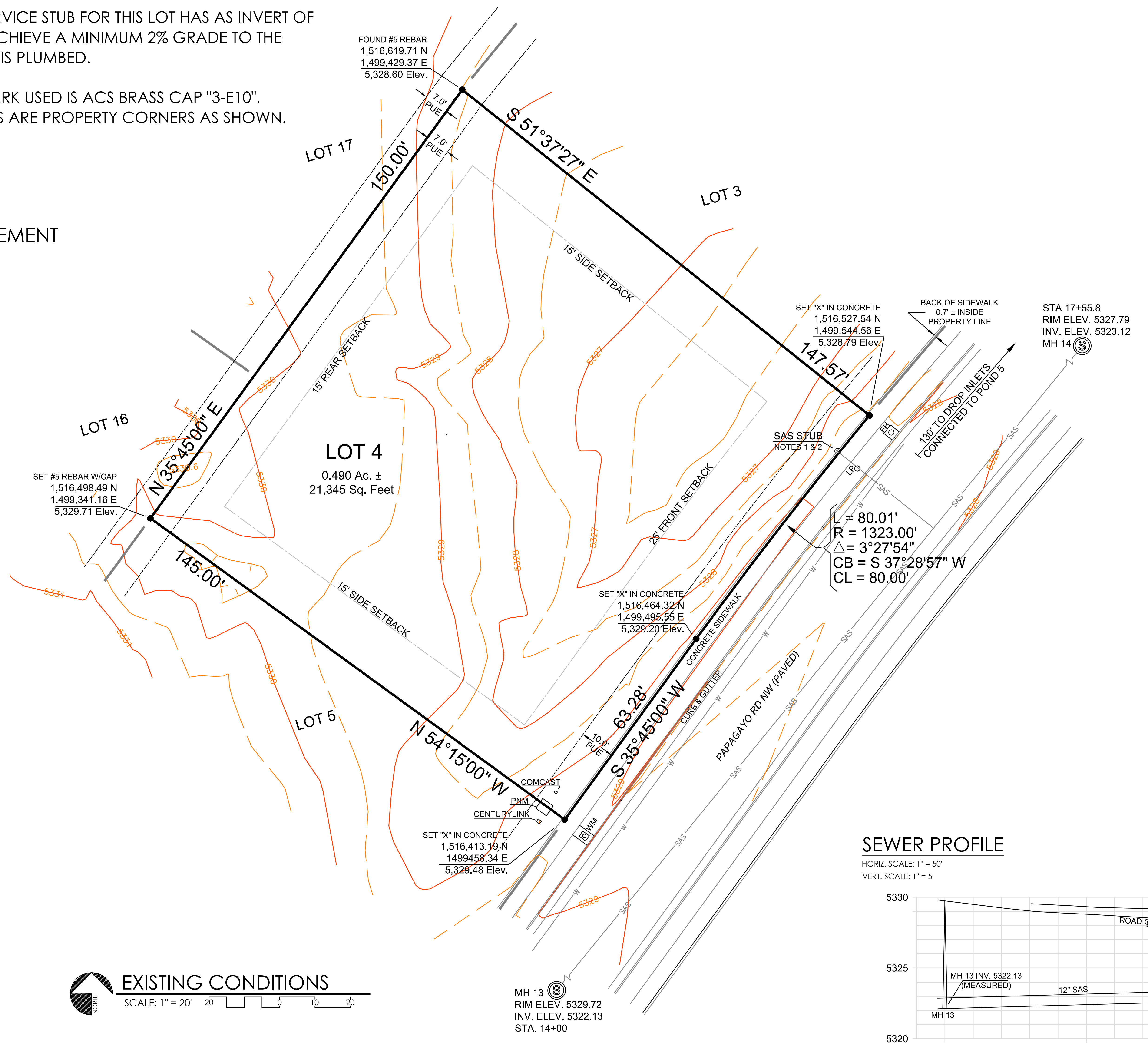
PERMANENT ELEVATION BENCHMARK USED IS ACS BRASS CAP "3-E10". PROJECT ELEVATION BENCHMARKS ARE PROPERTY CORNERS AS SHOWN.

NOTES

1. LOCATION OF SAS STUB INDICATED BY STAMPED "S" IN CURB. INVERT OF STUB IS REPORTED IN SAD 228 TO BE 5324.0' WHICH IS APPROXIMATELY 5 FEET BELOW ADJACENT SIDEWALK. CONTRACTOR SHALL POTHOLE TO CONFIRM LOCATION AND INVERT OF STUB PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH ENGINEER WHEN POTHOLING FOR ENGINEER TO CONFIRM ELEVATION OF STUB INVERT.

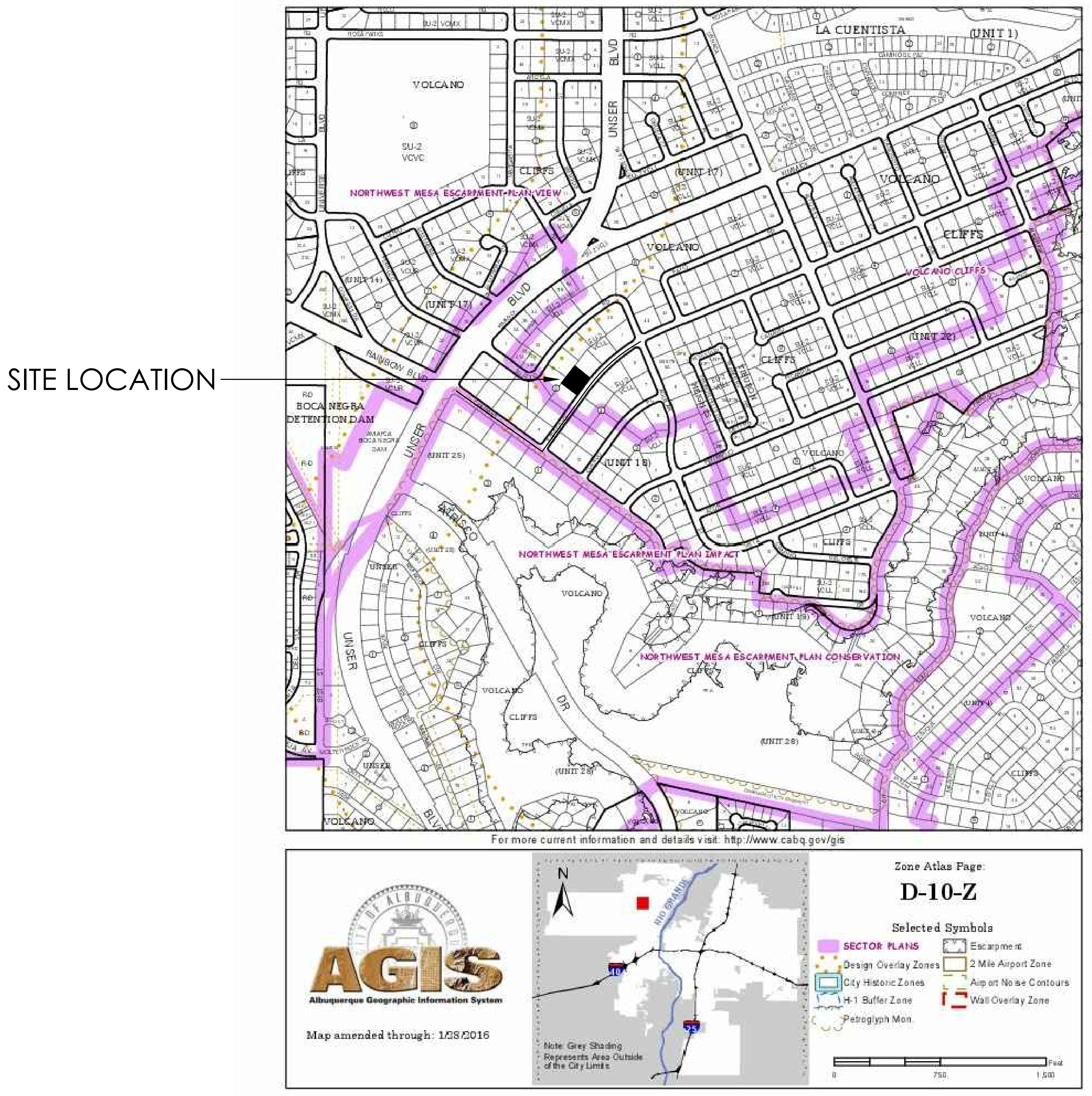
ABBREVIATIONS

PUE	- PUBLIC UTILITY EASEMENT
SAS	- SANITARY SEWER
MH	- MANHOLE
FH	- FIRE HYDRANT
LP	- LIGHT POST



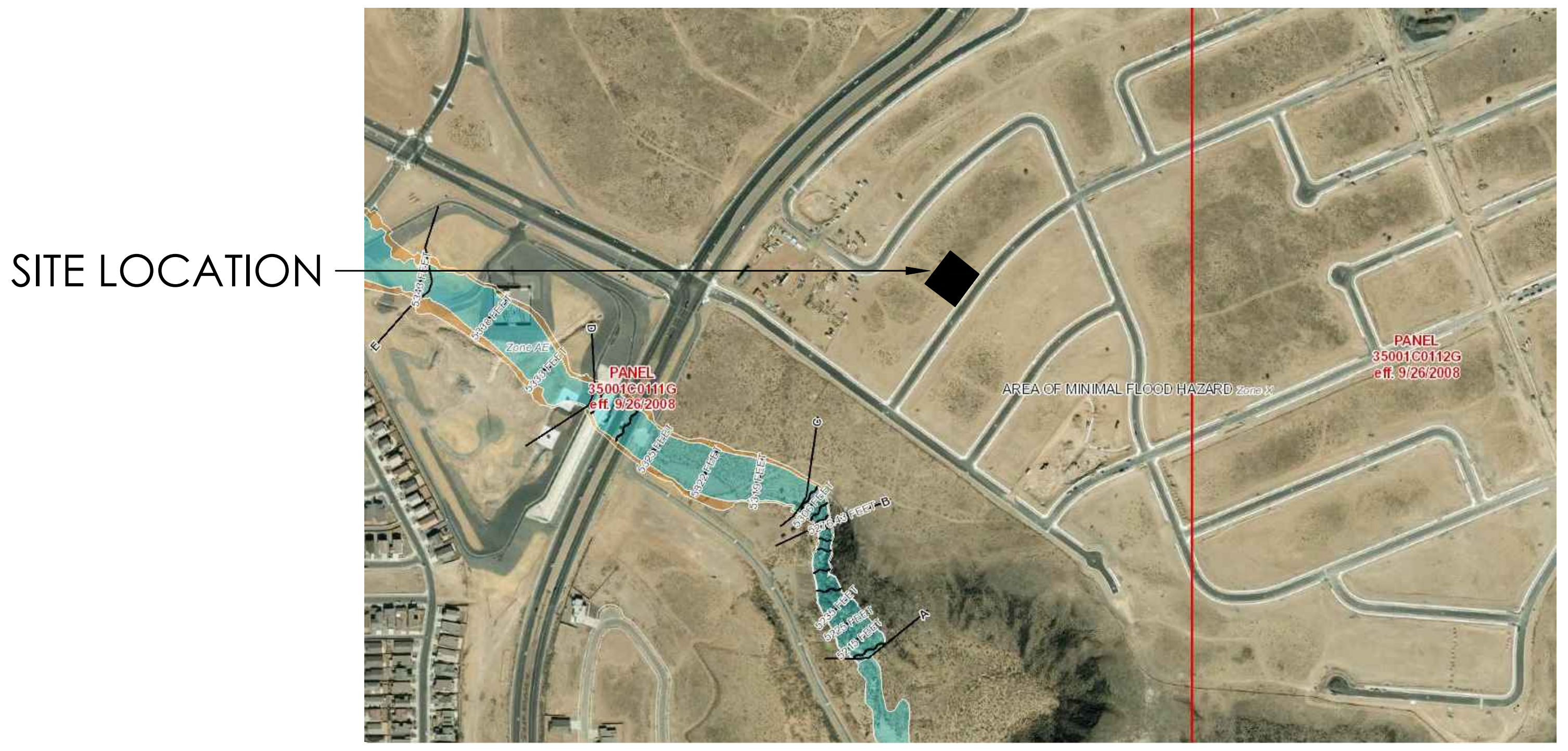
EXISTING CONDITIONS

SCALE: 1" = 20' 0 10 20



VICINITY MAP - D-10-Z

N.T.S.

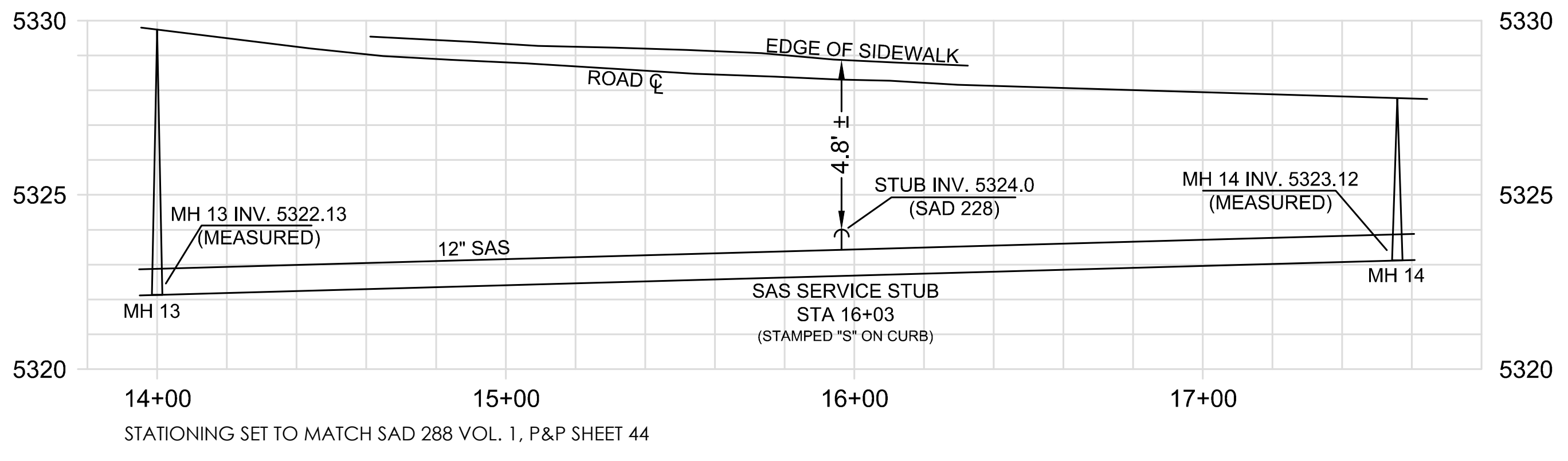


FEMA F.I.R.M. - 35001C0111G - *ZONE X*

N.T.S.

SEWER PROFILE

HORIZ. SCALE: 1" = 50'
VERT. SCALE: 1" = 5'



STATIONING SET TO MATCH SAD 288 VOL. 1, P&P SHEET 44

FROM SAD 228 VOL 1 UTILITY P&P SHEET 44

PAPAGAYO ROAD					
4" SEWER SERVICES AT PL					
STATION	LOT/BLK		INV @ PL	LEN	RMKS
11+72	1	4	5327.6	25'	RT
13+22	2	4	5326.1	25'	RT
13+17	6	5	5326.2	25'	LT
11+65	7	5	5327.6	25'	LT
14+65	5	5	5324.7	26'	LT
16+03	4	5	5324.0	26'	LT
14+72	3	4	5324.6	24'	RT
16+22	4	4	5323.9	24'	RT
18+18	5	4	5323.6	27'	LT
17+34	3	5	5323.5	27'	LT
18+64	2	5	5323.9	27	LT
18+65	6	4	5323.9	26'	LT
21+05	7	9	5325.9	26'	LT

PREPARED FOR
DESIGN ... X
ARCHITECTURE + VISUALIZATION

PREPARED BY
PAUL van GULICK, PE, PS
1031 MONTE LARGO DR. NE
ALBUQUERQUE, NM 87123

PAUL VAN GULICK
12758
Paul van Gulick
3/31/2016

REVISION DATES

NOTES

PROJECT
HINCHMAN RESDENCE
6611 PAPAGAYO RD NW
ALBUQUERQUE, NM 87106

SHEET TITLE
GRADING & DRAINAGE PLAN
EXISTING CONDITIONS

DATE
MARCH 15, 2016

SHEET NUMBER
C-1.1

LOT 4, BLOCK 5, VOLCANO CLIFFS SUBDIVISION, UNIT 18
WITHIN SPECIAL ASSESSMENT DISTRICT 228 *(SAD-228)*

HYDROLOGY

PRECIPITATION ZONE 1

Treatment	Condition	Site Area (sq ft)	Site Area (%)	SAD 228 DMP (%)	First Flush	First Flush Storage (cu- ft)	First Flush Storage (gal)	Q100 (cfs/ac) (Zone 1)	SAD 228 Q100 (cfs)	Proposed Q100 (cfs)
A	Undisturbed	-	0%	0%	-	-	-	1.29	-	-
B	Yard/Lawn	680	3%	10%	-	-	-	2.03	0.10	0.03
C	Compacted	14,260	67%	40%	-	-	-	2.87	0.56	0.94
D	Impervious	6,405	30%	50%	0.34	185	1,390	4.37	1.07	0.64
	Totals	21,345	100%	100%					1.73	1.61

PROPOSED Q100 IS LESS THAN SAD 228

STORM WATER CONTROL MEASURES - FIRST FLUSH

A. STORM WATER CONTROL MEASURES SHALL BE DESIGNED TO MANAGE FIRST FLUSH AND CONTROL RUNOFF GENERATED BY CONTRIBUTING IMPERVIOUS SURFACES.

B. FIRST FLUSH IS DEFINED AS THE STORMWATER RUNOFF DURING THE EARLY STAGES OF A STORM EQUAL TO OF LESS THAN RUNOFF FROM A 90TH PERCENTILE STORM EVENT THAT CAN DELIVER A POTENTIALLY HIGH CONCENTRATION OF POLLUTANTS DUE TO THE WASHING EFFECT OF RUNOFF FROM A IMPERVIOUS AREAS DIRECTLY CONNECTED TO THE STORM DRAINAGE SYSTEM.

C. NEW CONSTRUCTION INCLUDES 6,405 SQ. FT. OF IMPERVIOUS SURFACE (Treatment D). THE REMAINDER OF THE SITE IS ASSUMED TO BE COMPACTED (Treatment C), WITH THE EXCEPTION OF 680 SQ. FT. OF YARD/LAWN (Treatment B) WHICH REPRESENTS TREE WELL PROPOSED TO INTERCEPT THE FIRST FLUSH.

D. FIRST FLUSH PER SIGNIFICANT DRAINAGE ORDINANCE IS 0.44 IN. INITIAL IMPERVIOUS ABSTRACTION IS 0.1 IN. DEPTH TO MANAGE IS 0.44 - 0.10 = 0.34 IN. (0.0283 FT.)

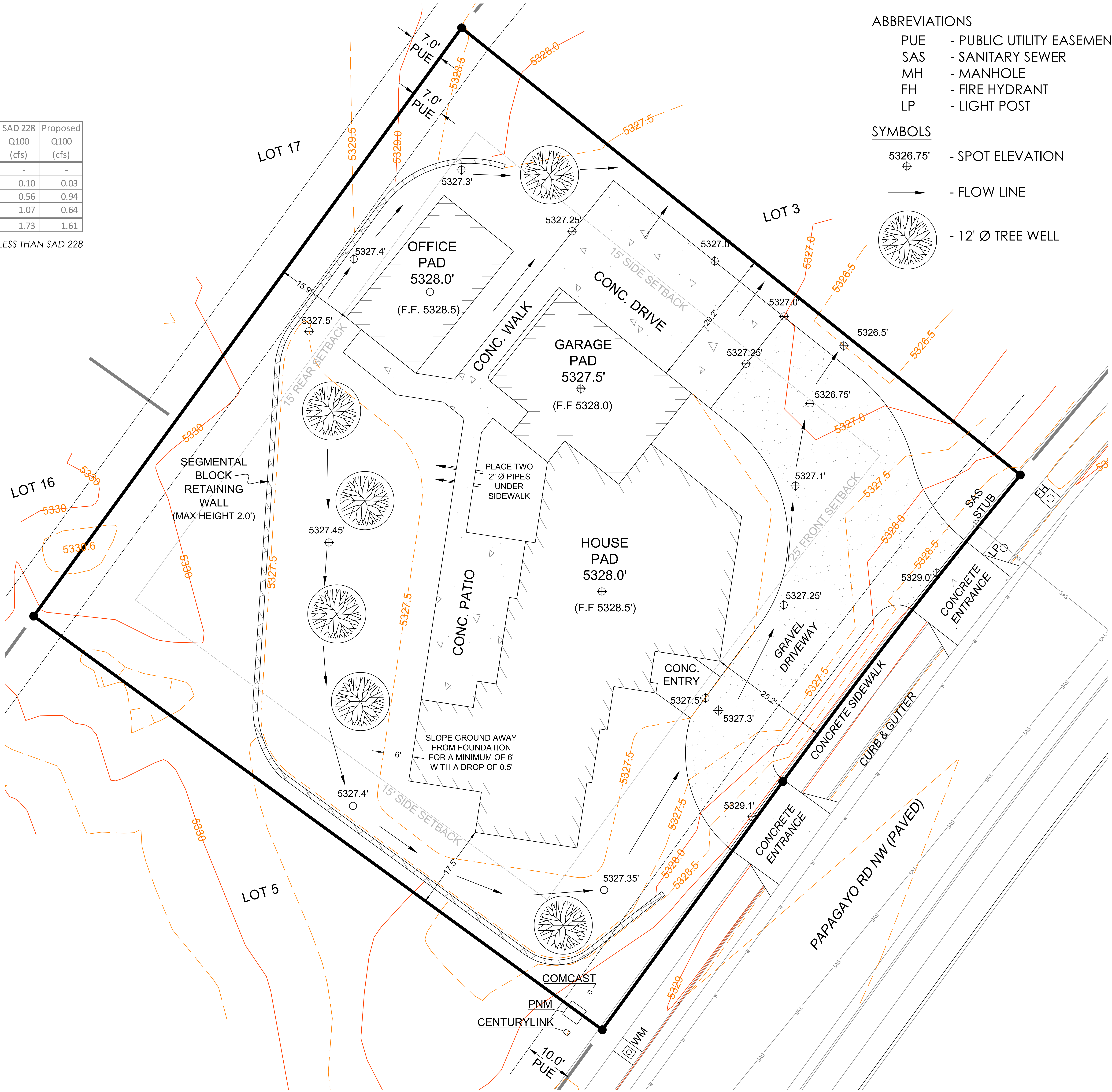
E. FIRST FLUSH VOLUME IS 6,405 SQ FT X 0.0283 FT. = 185 CU-FT (1,390 GAL).

F. PROPOSED RETENTION MEASURES:

RAIN BARRELS: 4 x 55 gallons = 220 gallons (30 cu ft)
PONDING: 6 x 12' dia. x 0.3' deep tree wells at 34 cu ft ea. = 204 cu ft
TOTAL: 234 CU-FT
TOTAL IS GREATER THAN FIRST FLUSH

NOTES

1. GRADE BUILDING PADS TO ELEVATIONS SHOWN. REFER TO GEO-TECHNICAL REPORT FOR REQUIRED OVER-EXCAVATION AND STRUCTURAL FILL.
2. FINISHED FLOOR ELEVATION IS ASSUMED TO BE 1/2 FT HIGHER THAN GRADED BUILDING PAD.
3. GRADE SOIL UNIFORMLY SIX FEET AWAY FROM BUILDING PADS TO GIVE A 1/2 FT DROP IN 6 FT.
4. GRAVELED DRIVEWAY SHOULD BE A WELL GRADED MIX OF 1/4 TO 3/4 INCH GRAVEL.
5. SEGMENTAL RETAINING WALL IS SHOWN BUT SLOPE OF 1:2 VERTICAL TO HORIZONTAL OR GREATER MAY BE GRADED INSTEAD AT OWNER'S OR BUILDERS OPTION.
6. TREE SPECIES, SIZE, AND FINAL PLACEMENT WILL BE ACCORDING TO LANDSCAPER'S PLAN. HOWEVER, NET RETAINAGE OF 204 CU-FT MUST BE ACHIEVED.
7. NOTE THAT FINAL GRADING WILL BE SHOWN ON AS-BUILT FOR CERTIFICATE OF OCCUPANCY AND MUST SUBSTANTIALLY CONFORM TO THESE PLANS FOR MANAGING FIRST FLUSH AND MAINTAINING FLOW AROUND HOUSE GENERALLY FROM SOUTHWEST TO NORTHEAST WHICH IS THE HISTORICAL PATTERN.



PROPOSED CONDITIONS
SCALE: 1" = 10'

ABBREVIATIONS

PUE	- PUBLIC UTILITY EASEMENT
SAS	- SANITARY SEWER
MH	- MANHOLE
FH	- FIRE HYDRANT
LP	- LIGHT POST

SYMBOLS

5326.75' ⊕	- SPOT ELEVATION
→	- FLOW LINE
◎	- 12' Ø TREE WELL

PREPARED FOR
DESIGN ... X
ARCHITECTURE + VISUALIZATION

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