

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

February 12, 2019

Larry Read, P.E.
Larry Read & Associates
8100 Wyoming Blvd NE, Suite M-4 Box 107
Albuquerque, NM, 87113

RE: 7410 Washington St. NE
Grading and Drainage Plan
Engineer's Stamp Date: 01/11/19
Hydrology File: D17D003AA

Dear Mr. Read:

PO Box 1293

Based upon the information provided in your submittal received 01/30/2019, the Grading Plan is **not** approved for Building Permit, Grading Permit and SO-19 Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

NM 87103

www.cabq.gov

1. Please provide the benchmark information for the survey contour information provided.
2. Under Water Quality Ponding on Sheet 2, please add a note which states, "The Owner has elected to pay the Payment in Lieu for the required Stormwater Quality Volume of 463 CF. This payment Amount = 463 CF x \$8/CF = \$3,704.00."
3. The Payment in Lieu payment of \$3,704.00.00 must be paid prior to Building Permit approval. Please use the attached City of Albuquerque Treasury Deposit form. The Owner needs to bring three copies of this form to the cashier on the Building Permits side of the ground floor and pay the fee. Once paid, please provide Hydrology with one of the copies showing the receipt.
4. Please provide a cross section of the riprap channel.
5. Please provide the calculations of the proposed riprap channel. This just needs to provide for the off-site flows of 1.88 cfs.
6. Please provide written letter of the adjacent property owner acknowledging the construction within the adjacent drainage easement for the proposed riprap channel.
7. Please provide a section of the proposed swale.

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8. Please provide calculations for the proposed swale. This needs to provide for the off-site flows of 0.75 cfs and on-site flows of 1.09 for a combined flow of 1.84 cfs.
9. Please add the SO-19 Notes on Sheet 1. See attached.
10. Standard review fee of \$150 will be required at the time of resubmittal.

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

Sincerely,

Renée C. Brissette

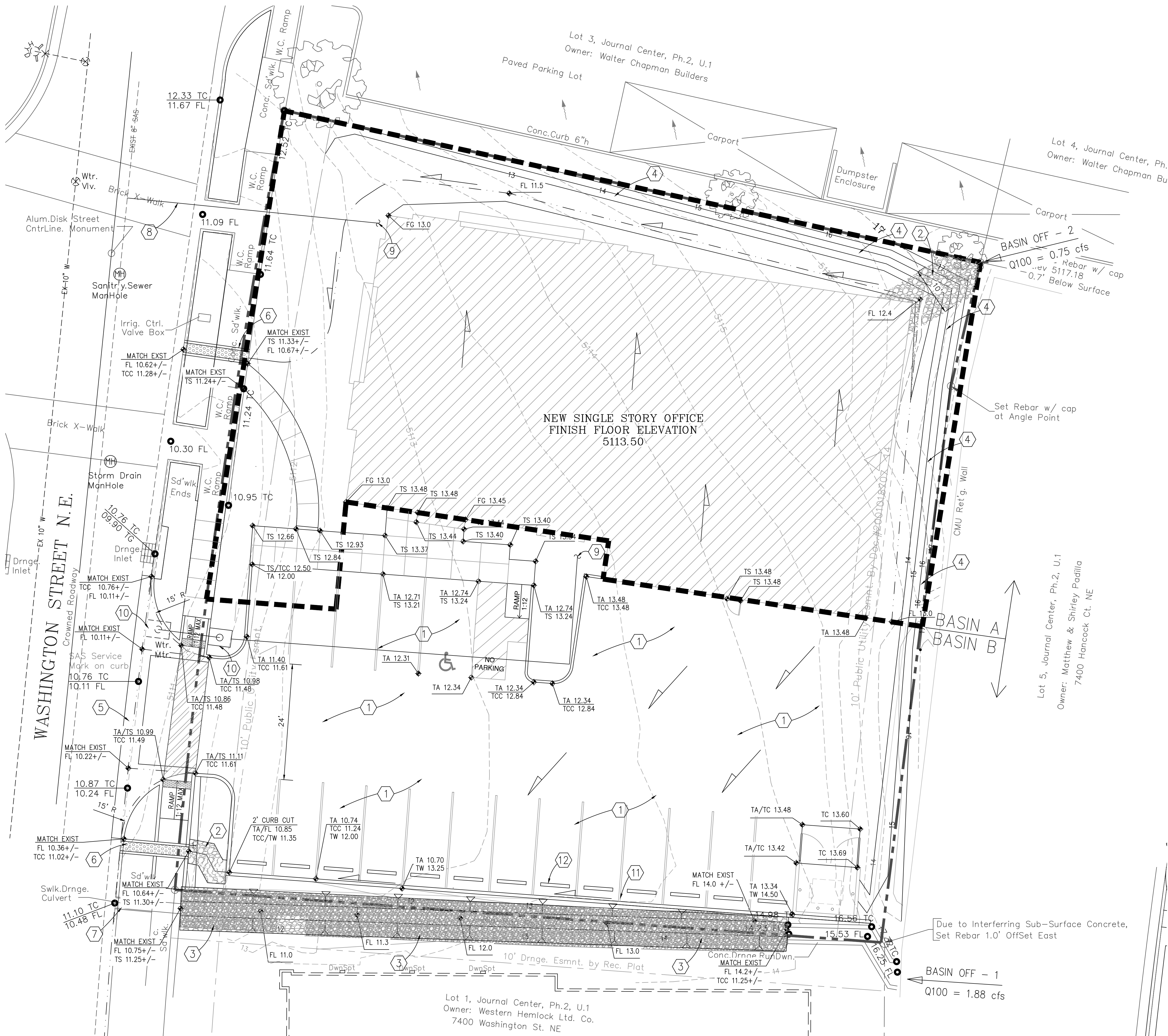
Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

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15 KEYED NOTES:

1. NEW ASPHALT PAVEMENT.
2. V-SHAPED RIPRAP CHANNEL 5-FOOT WIDE. RIPRAP MAY BE RECLAIMED FROM SOUTH CHANNEL AND INSTALLED 8" THICK OVER FILTER FABRIC SUCH AS A MIRIFI N-140 OR EQUAL.
3. DEMOLISH EXISTING RIPRAP CHANNEL. RIPRAP MAY BE STOCKPIED FOR REUSE. CONSTRUCT TRAPEZOIDAL RIPRAP CHANNEL. RIPRAP FROM EXISTING MAY BE SALVAGED AND REUSED. CHANNEL SHALL BE 3-FOOT WIDE BOTTOM WITH 3:1 SIDE SLOPES AT LEAST 1-FOOT DEEP. RIPRAP SHALL BE INSTALLED 8" THICK OVER FILTER FABRIC SUCH AND MIRIFI N-140 OR EQUAL.
4. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH GRAVEL PAVE OR SIMILAR STABILIZATION PRODUCT.
5. BUILD 24" WIDE PRIVATE ENTRANCE WITH UNIDIRECTIONAL WHEELCHAIR RAMPS PER COA STANDARD DETAIL 2426.
6. BUILD 24" SIDEWALK CULVERT PER COA STANDARD DETAIL 2236.
7. EXISTING SIDEWALK CULVERT TO REMAIN.
8. BUILD SANITARY SEWER SERVICE LINE PER COA STANDARD DETAIL 2125.
9. SEE PLUMBING PLANS FOR LOCATION AND CONTINUATION.
10. REMOVE EXISTING WATER METER AND BOX. EXTEND LINE AND INSTALL NEW METER BOX AND 3/4" METER IN EXISTING UTILITY EASEMENT PER COA STANDARD DETAIL 2362.
11. CONSTRUCT RETAINING WALL. DESIGN BY OTHERS.
12. INSTALL PRECAST CONCRETE WHEEL STOPS - TYPICAL.

LARRY READ & ASSOCIATES, Inc.
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NO.	DATE	REVISIONS	DESCRIPTION	BY
1				
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GRADE AND DRAIN PLAN
and WATER SEWER PLAN



7410 WASHINGTON
GRADING PLAN
LOT 2 JOURNAL CENTER PHASE 2 UNIT 1
BERNALILLO COUNTY NEW MEXICO

DRAWING NAME: WALL LOW POND
SHEET
1 OF 3

LOCATION & DESCRIPTION

THE PROPOSED SITE IS AN UNDEVELOPED 0.52 ACRE COMMERCIAL TRACT, LOCATED ON THE EAST SIDE WASHINGTON STREET NE. THE PARCELS TO THE NORTH, EAST, AND SOUTH ARE DEVELOPED OFFICE/WAREHOUSE FACILITIES.

THE CURRENTLY PROPOSED CONSTRUCTION ON THIS SITE IS A 7,010 (Approximately) OFFICE WAREHOUSE FACILITY WITH PAVED PARKING LOT.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0136G, EFFECTIVE SEPTEMBER 26, 2008 IS NOT WITHIN ANY DESIGNATED 100-YEAR FLOODPLAIN.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 2 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE 6-HOUR PRECIPITATION, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

EXISTING DRAINAGE

THE EXISTING UNDEVELOPED SITE SLOPES FROM NORTHEAST TO SOUTHWEST WHERE THE RUNOFF DRAINS OVER THE CURB INTO WASHINGTON STREET. ONCE IN THE STREET IT RUNS NORTH WITHIN THE CURB TO AN EXISTING STORM INLET LOCATED ABOUT CENTER OF THIS SITE. THE SITE IS IMPACTED BY RUNOFF CHanneled INTO THE SOUTHEAST CORNER OF THE SITE FROM LOTS TO THE EAST - BASIN OFF-1. A RIPRAP CHANNEL CONVEYS THE RUNOFF TO WASHINGTON STREET. THIS CHANNEL IS MOSTLY WITHIN AN EXISTING DRAINAGE EASEMENT IN ADDITION, RUNOFF FROM THE PARCELS TO THE EAST DISCHARGE INTO THE VERY NORTHEAST CORNER OF THIS SITE. CURRENTLY THIS RUNOFF SHEET FLOWS ACROSS THE SITE, NORTHEAST TO SOUTHWEST WITH THE RUNOFF GENERATED ONSITE. IT DISCHARGES OVER THE CURB INTO Washington STREET.

DEVELOPED CONDITION

AS STATED ABOVE, THE CURRENT PROPOSED DEVELOPMENT ON THIS SITE IS A COMMERCIAL OFFICE/WAREHOUSE FACILITY WITH ASSOCIATED PAVED PARING. THE PROPOSED GRADING AND DRAINAGE PLAN FOLLOWS THE GENERAL DRAINAGE PATTERNS AND DISCHARGE POINTS. THE RUNOFF FROM OFFSITE BASIN OFF-1 CONTINUES TO FLOW DOWN THE EXISTING CONCRETE FLUME IN THE SOUTHEAST CORNER OF THE SITE THEN WEST TO WASHINGTON STREET. THE EXISTING CHANNEL FROM THE END OF THE FLUME TO WASHINGTON IS POORLY DEFINED SO WE ARE PROPOSING TO REMOVE THE EXISTING RIPRAP, RESHAPE THE CHANNEL WITHIN THE EXISTING 10' DRAINAGE EASEMENT, THEN REPLACE THE RIPRAP. THE RUNOFF DISCHARGES INTO WASHINGTON STREET VIA AN EXISTING SIDEWALK CULVERT. THE RUNOFF FROM THE OFFSITE BASIN OFF-2 IN THE NORTHEAST CORNER OF THE SITE IS A SMALL FLOW RATE SO WE CAPTURED IT IN THE SWALE, AROUND THE NORTH AND WEST SIDE OF THE BUILDING TO DISCHARGE THROUGH A PROPOSED SIDEWALK CULVERT INTO WASHINGTON STREET. RUNOFF FROM ONSITE BASIN 'B' FLOWS WEST IN THE PAVED PARKING AREA AND DISCHARGES INTO WASHINGTON STREET VIA A PROPOSED NEW SIDEWALK CULVERT.

WATER QUALITY PONDING

THE PROPOSED DEVELOPMENT REQUIRES TWO PONDING AREAS PER THE TABLE TO THE RIGHT. THE DEVELOPER DESIRES TO USE THE "CASH-IN-LIEU" OPTION SINCE THE PROPOSED SITE PLAN DOES NOT READILY PROVIDE LOCATIONS FOR THE REQUIRED PONDING.

100-YEAR HYDROLOGIC CALCULATIONS											
BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
		A (%)	B (%)	C (%)	D (%)						
EXISTING CONDITIONS											
BASIN A	0.27	100.00	0.00	0.00	0.00	0.53	0.01	525	0.01	525	0.43
BASIN B	0.25	100.00	0.00	0.00	0.00	0.53	0.01	481	0.01	481	0.39
OFF 1	0.40	100.00	0.00	0.00	0.00	0.53	0.02	770	0.02	770	0.62
OFF 2	0.16	100.00	0.00	0.00	0.00	0.53	0.01	308	0.01	308	0.25
PROPOSED CONDITIONS											
BASIN A	0.27	0.00	0.00	45.00	55.00	1.67	0.04	1,659	0.06	2,531	1.09
BASIN B	0.25	0.00	0.00	14.80	85.20	1.97	0.04	1,791	0.07	3,028	1.12
OFF 1	0.40	0.00	0.00	0.00	100.00	2.12	0.07	3,078	0.12	5,401	1.88
OFF 2	0.16	0.00	0.00	0.00	100.00	2.12	0.03	1,231	0.05	2,161	0.75
EXCESS PRECIP.		0.53	0.78	1.13	2.12	Ei (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	QP1 (cfs)					
								ZONE =		2	
%A) + (EB)(%B) + (EC)(%C) + (ED)(%D)								P6-HR (in.) :		2.35	
= (WEIGHTED E)(AREA)/12								P24-HR (in.) :		2.75	
/6-HR + (AD)(P10DAY - P6-HR)/12								P10DAY (in.) :		3.95	
QPB)(AB) + (QPC)(AC) + (QPD)(AD)											

Weir Flow Equation = CPH*3/2				Weir Flow Equation = CPH*3/2			
C	L(ft)	h (ft)	Q(cfs)	C	L(ft)	h (ft)	Q(cfs)
2.6	3.33	0.10	0.27	2.6	3.33	0.10	0.27
2.6	3.33	0.20	0.77	2.6	3.33	0.20	0.77
2.6	3.33	0.30	1.42	2.6	3.33	0.30	1.42
2.6	3.33	0.36	1.87	2.6	3.33	0.36	1.87
2.6	3.33	0.50	3.06	2.6	3.33	0.50	3.06
2.6	3.33	0.60	4.02	2.6	3.33	0.60	4.02
2.6	3.33	0.70	5.07	2.6	3.33	0.70	5.07
2.6	3.33	0.80	6.20	2.6	3.33	0.80	6.20

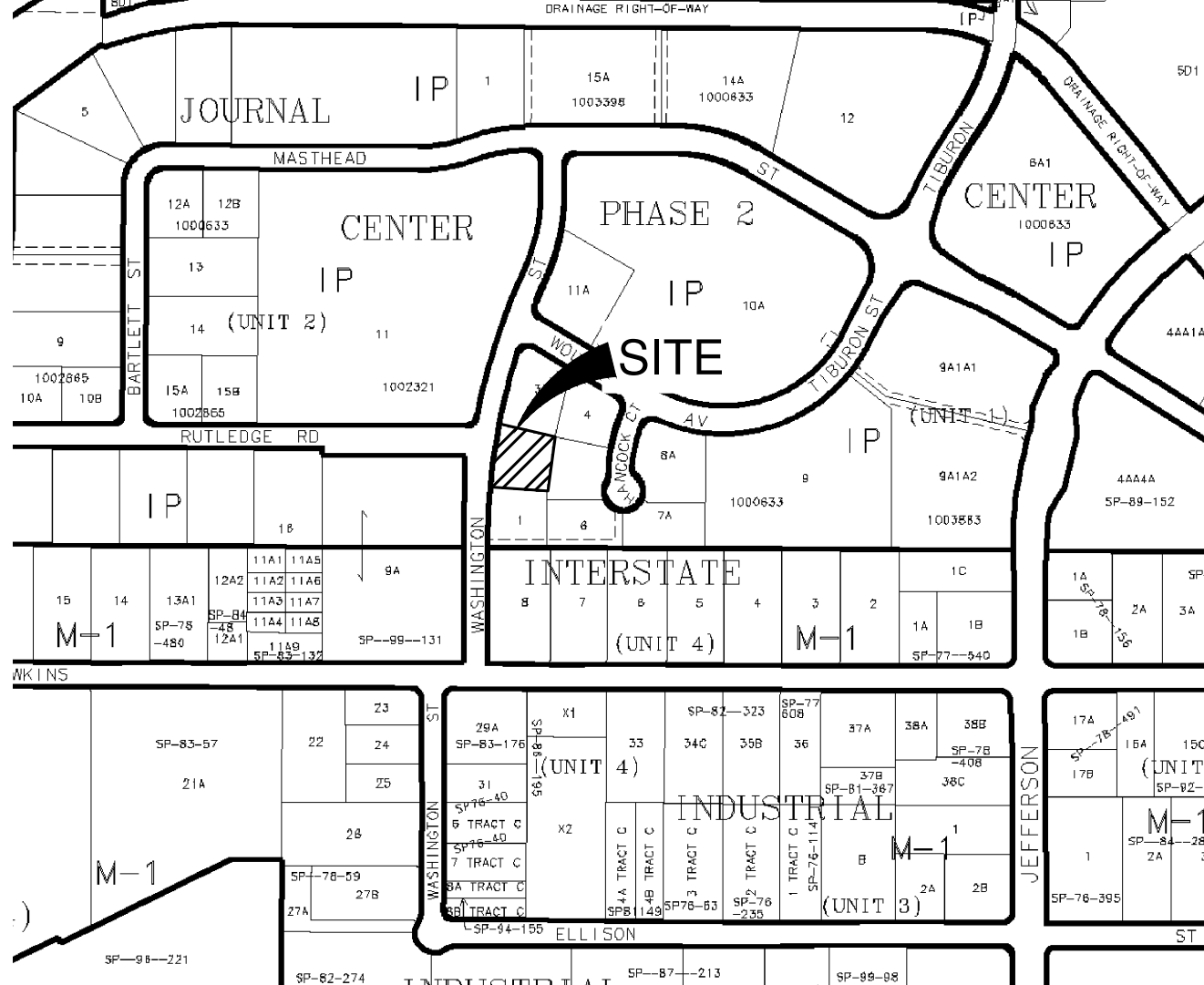
Analysis is for proposed north sidewalk culvert
Q100 = 1.88cfs BASIN A + OFF-2

Analysis is for proposed south sidewalk culvert
Q100 = 1.84cfs BASIN B

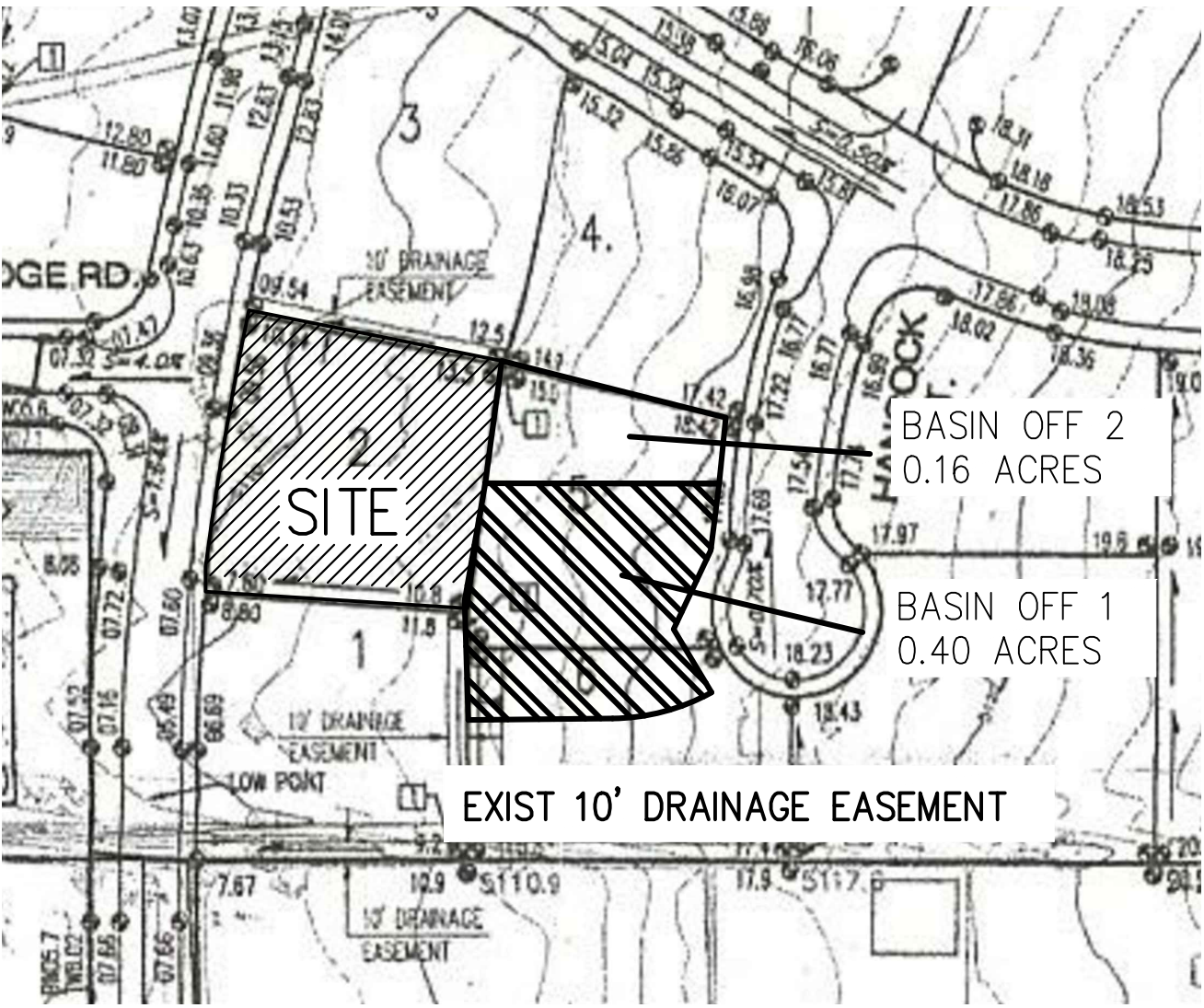
WATER QUALITY PONDING					
POND ID	BASIN ID	CONTRIBUTING IMPERVIOUS AREA (SQ-FT)	REQUIRED PONDING (IN)	PONDING VOLUME (0.34/12*AREA) (CU-FT)	PONDING VOLUME PROVIDED (CU-FT)
SITE	A	7080	0.34	201	-
	B	9278	0.34	263	-
TOTAL		16358		463	-
* THE DEVELOPER DESIRES TO PROVIDE "CASH-IN-LIEU" OF THE WATER QUALITY PONDING					



FIRM PANEL 35001C0136G
Effective 09/26/2008



VICINITY MAP - ZONE ATLAS D-17-Z



OFFSITE DRAINAGE BASIN MAP
SCALE: 1" = 100'

LARRY READ & ASSOCIATES, Inc.
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BY	REVISIONS	DESCRIPTION

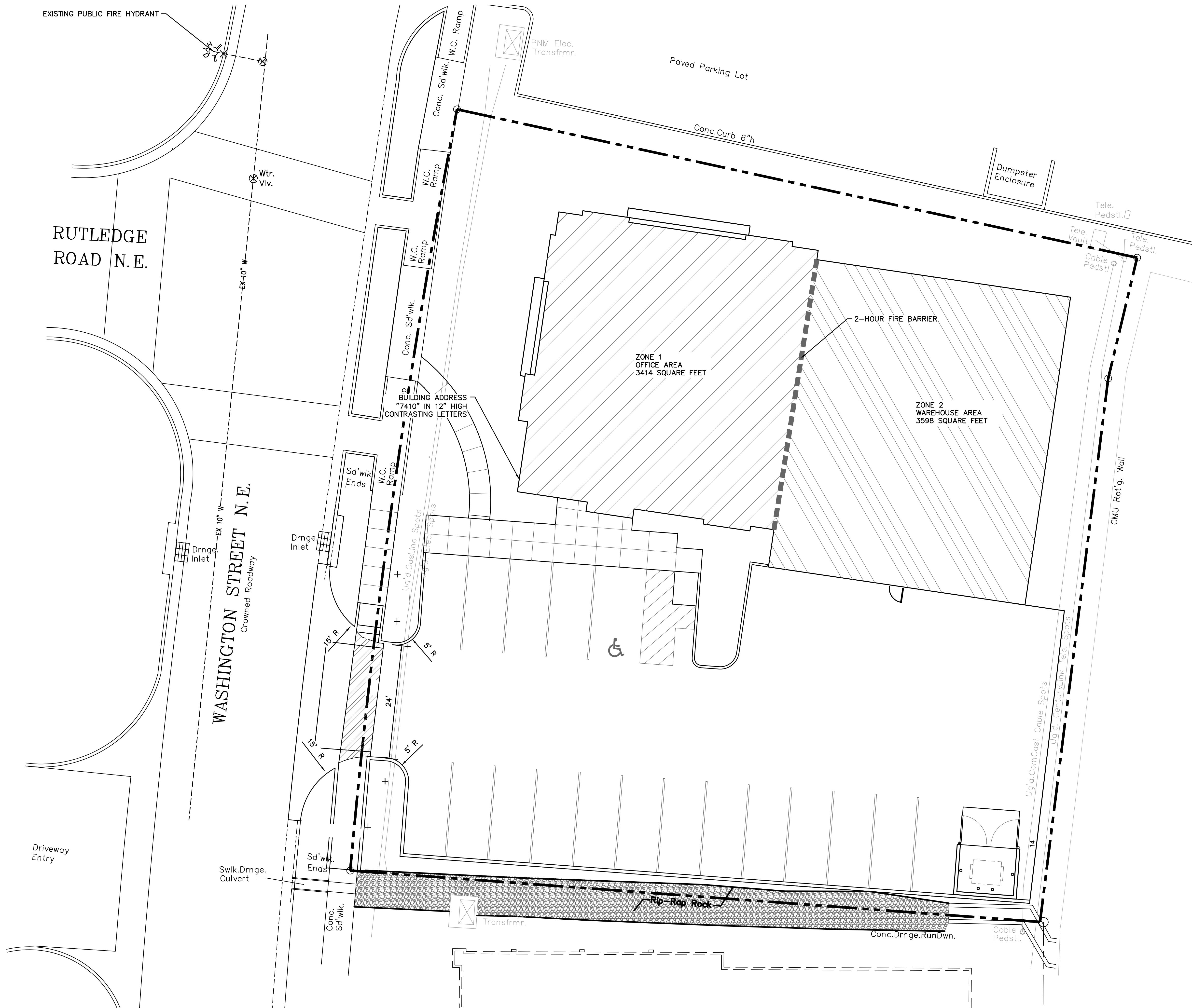
NO.	DATE	DESCRIPTION
1		
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HYDROLOGY

LAWRENCE D. READ
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
10998

7410 WASHINGTON
GRADING PLAN
LOT 2 JOURNAL CENTER PHASE 2 UNIT 1
BERNALLO COUNTY NEW MEXICO

DRAWING NAME:
WALL LOW POND
SHEET
2 OF 3



- BUILDING INFORMATION:**
- 2 ZONES — 3414 SQUARE FOOT OFFICE, AND 3598 SQUARE FOOT WAREHOUSE SEPARATED BY 2-HOUR FIRE BARRIER
 - TRADITIONAL CONSTRUCTION
 - 22' TALL AT PARAPET
 - TYPE V-B CONSTRUCTION
 - NON SPRINKLERED
 - TYPE B/S2 OCCUPANCY
- FIRE ITEMS**
- 1 FIRE HYDRANT REQUIRED/PROVIDED
 - 1,500 GPM FLOW REQUIRED
- SITE INFORMATION**
- ASPHALT PAVEMENT CAPABLE OF SUPPORTING 80,000 POUNDS
 - NO GRADES ABOVE 10%

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NO.	DATE	REVISIONS DESCRIPTION	BY
1			
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7410 WASHINGTON

LOT 2 JOURNAL CENTER PHASE 2 UNIT 1
BERNALILLO COUNTY NEW MEXICO

DRAWING NAME:
WALL LOW POND

SHEET
3
OF
3

LAWRENCE D. READ
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12/17/17