CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

March 30, 2023

Mike Walla, P.E.
Walla Engineering
6501 Americas Pwky NE, Suite 301
Albuquerque, NM 87110

RE: 9906 Indian School
Grading & Drainage Plan
Engineer's Stamp Date: 03/24/23
Hydrology File: J20D041

Dear Mr. Walla:

Based upon the information provided in your submittal received 03/24/2023, the Grading & Drainage Plan **is** approved for Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **$25.00** made out to "**Bernalillo County**" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

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

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

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

Project Title: 9906 INDIAN SCHOOL **Building Permit #**_____ **Hydrology File #**_____
DRB#_____ **EPC#**_____
Legal Description: LOT 1-C, BLOCK 5. OXSHEER HEIGHTS ADDITION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO City Address OR Parcel 9906 INDIAN SCHOOL RD NE ALBUQUERQUE, NM 87112

Applicant/Agent: WALLA ENGINEERING **Contact:** MIKE WALLA
Address: 6501 AMERICAS PARKWAY NE, SUITE 301, ALBUQUERQUE, NM 87110 **Phone:** 505-881-3008
Email: mikew@wallaenginering.com

Applicant/Owner: STEPHEN LEOS ARCHITECT **Contact:** STEPHEN LEOS
Address: 413 2nd ST. SE, 2nd FLOOR, ALBUQUERQUE, NM 87102 **Phone:** 505-681-2329
Email: stephen@sleosarch.com

TYPE OF DEVELOPMENT: ___PLAT (#of lots) __RESIDENCE __DRB SITE ___ ADMIN SITE: X
RE-SUBMITTAL: _____YES __X__ NO

DEPARTMENT: _____TRANSPORTATION _X____ HYDROLOGY/DRAINAGE
Check all that apply:

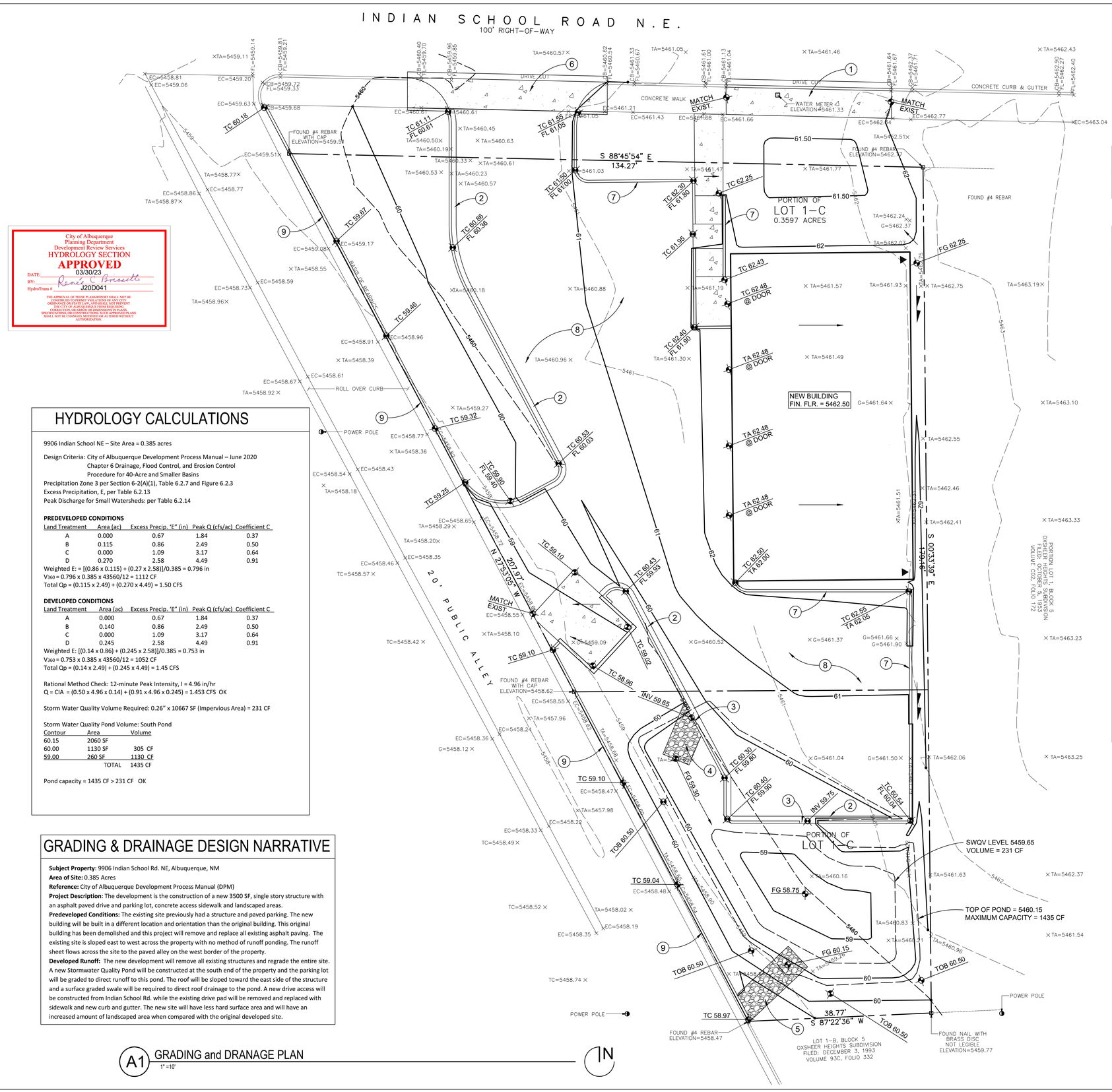
TYPE OF SUBMITTAL:

___ENGINEER/ARCHITECT CERTIFICATION
___PAD CERTIFICATION
___CONCEPTUAL G&D PLAN
_X_GRADING PLAN
___DRAINAGE REPORT
___DRAINAGE MASTER PLAN
___FLOOD PLAN DEVELOPMENT PERMIT APP.
___ELEVATION CERTIFICATE
___CLOMR/LOMR
___TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
___TRAFFIC CIRCULATION LAYOUT FOR DRB APPROVAL
___TRAFFIC IMPACT STUDY (TIS)
___STREET LIGHT LAYOUT
___OTHER (SPECIFY)
___PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

_X_BUILDING PERMIT APPROVAL
___CERTIFICATE OF OCCUPANCY
___CONCEPTUAL TCL DRB APPROVAL
___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
___FLOOD PLAN DEVELOPMENT PERMIT
___OTHER (SPECIFY)_____

DATE SUBMITTED: 3-24-23



City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 03/30/23
BY: René C. Brissette
HydroTrans # J20D041

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT ANY VIOLATION OF ORDINANCES OR REGULATIONS OF THIS AGENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION, OR ERROR OR DIMENSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION

HYDROLOGY CALCULATIONS

9906 Indian School NE – Site Area = 0.385 acres

Design Criteria: City of Albuquerque Development Process Manual – June 2020
Chapter 6 Drainage, Flood Control, and Erosion Control
Procedure for 40-Acre and Smaller Basins
Precipitation Zone 3 per Section 6-2(A)(1), Table 6.2.7 and Figure 6.2.3
Excess Precipitation, E, per Table 6.2.13
Peak Discharge for Small Watersheds: per Table 6.2.14

PREDEVELOPED CONDITIONS

Land Treatment	Area (ac)	Excess Precip. 'E" (in)	Peak Q (cfs/ac)	Coefficient C
A	0.000	0.67	1.84	0.37
B	0.115	0.86	2.49	0.50
C	0.000	1.09	3.17	0.64
D	0.270	2.58	4.49	0.91

Weighted E: = [(0.86 x 0.115) + (0.27 x 2.58)]/0.385 = 0.796 in
V_{360} = 0.796 x 0.385 x 43560/12 = 1112 CF
Total Qp = (0.115 x 2.49) + (0.270 x 4.49) = 1.50 CFS

DEVELOPED CONDITIONS

Land Treatment	Area (ac)	Excess Precip. 'E" (in)	Peak Q (cfs/ac)	Coefficient C
A	0.000	0.67	1.84	0.37
B	0.140	0.86	2.49	0.50
C	0.000	1.09	3.17	0.64
D	0.245	2.58	4.49	0.91

Weighted E: [(0.14 x 0.86) + (0.245 x 2.58)]/0.385 = 0.753 in
V_{360} = 0.753 x 0.385 x 43560/12 = 1052 CF
Total Qp = (0.14 x 2.49) + (0.245 x 4.49) = 1.45 CFS

Rational Method Check: 12-minute Peak Intensity, I = 4.96 in/hr
Q = CIA = (0.50 x 4.96 x 0.14) + (0.91 x 4.96 x 0.245) = 1.453 CFS OK

Storm Water Quality Volume Required: 0.26" x 10667 SF (Impervious Area) = 231 CF

Storm Water Quality Pond Volume: South Pond

Contour	Area	Volume
60.15	2060 SF	
60.00	1130 SF	305 CF
59.00	260 SF	1130 CF
	TOTAL	1435 CF

Pond capacity = 1435 CF > 231 CF OK

GRADING & DRAINAGE DESIGN NARRATIVE

Subject Property: 9906 Indian School Rd. NE, Albuquerque, NM
Area of Site: 0.385 Acres
Reference: City of Albuquerque Development Process Manual (DPM)
Project Description: The development is the construction of a new 3500 SF, single story structure with an asphalt paved drive and parking lot, concrete access sidewalk and landscaped areas.
Predeveloped Conditions: The existing site previously had a structure and paved parking. The new building will be built in a different location and orientation than the original building. This original building has been demolished and this project will remove and replace all existing asphalt paving. The existing site is sloped east to west across the property with no method of runoff ponding. The runoff sheet flows across the site to the paved alley on the west border of the property.
Developed Runoff: The new development will remove all existing structures and regrade the entire site. A new Stormwater Quality Pond will be constructed at the south end of the property and the parking lot will be graded to direct runoff to this pond. The roof will be sloped toward the east side of the structure and a surface graded swale will be required to direct roof drainage to the pond. A new drive access will be constructed from Indian School Rd. while the existing drive pad will be removed and replaced with sidewalk and new curb and gutter. The new site will have less hard surface area and will have an increased amount of landscaped area when compared with the original developed site.

A1 GRADING and DRANAGE PLAN
1" =10'

N

Walla ENGINEERING LTD
Structural Engineering
Civil Engineering
6501 Americas Parkway NE • Suite 301
Albuquerque • New Mexico • 87110
881-3008 • Facsimile 881-4025

BENCHMARK

ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION NO. "17-H20", HAVING AN ELEVATION OF 5469.212, NAVD 1998

LEGAL DESCRIPTION

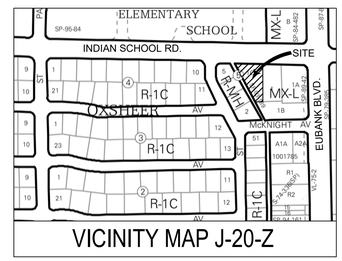
LOT 1-C, BLOCK 5, OXSHEER HEIGHTS ADDITION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

LEGEND

———	PROPERTY LINE
——5460——	EXISTING CONTOUR
× TA=5461.49	EXISTING SPOT ELEVATION
60.00	NEW SPOT ELEVATION
——60——	NEW CONTOUR
TC	TOP OF CONCRETE
FG	FINISHED GRADE
FF	FINISHED FLOOR
FL	FLOW LINE
TOB	TOP OF BERM
INV	INVERT ELEVATION
▶	ROOF DRAIN
→	FLOW DIRECTION
	DRAINAGE SWALE
	NEW CONCRETE PAVING
	NEW ASPHALT PAVING

SHEET KEYNOTES

1 REMOVE AND REPLACE EXISTING DRIVEPAD WITH C.O.A. STANDARD CURB AND GUTTER PER STANDARD DRAWING #2415A AND STANDARD SIDEWALK PER C.O.A. STANDARD DRAWING # 2430
2 CONCRETE CURB AND GUTTER PER DETAIL A1/C201
3 4'-0" WIDE CURB BREAK FOR DRAINAGE
4 6'-0" WIDE RIPRAP LINED RUNDOWN PER DETAIL A2/C201
5 6'-0" WIDE RIPRAP LINED OVERFLOW WEIR AND RUNDOWN PER DETAIL A3/C201
6 REMOVE EXISTING CURB AND GUTTER AND REPLACE WITH NEW DRIVE PAD PER C.O.A. STANDARD DRAWINGS #2420 AND #2426
7 6" WIDE CONCRETE CURB PER DETAIL A4/C201
8 ASPHALT PAVED PARKING AND DRIVE SURFACE PER DETAIL A5/C201
9 6" WIDE CONCRETE CURB AT EXISTING ALLEY PER DETAIL B1/C201



VICINITY MAP J-20-Z

Stephen Leos Architect LLC
413 2nd st. sw | 2nd floor
albuquerque, new mexico 87102
505.681.2329 | www.SLeosArch.com

MIKE I. WALLA NEW MEXICO 11030 REGISTERED PROFESSIONAL ENGINEER 3/24/23

9906 Indian School

9906 Indian School Rd NE
Albuquerque, NM 87112

Permit

REVISIONS

NO.	DATE	DESCRIPTION

GRADING and DRAINAGE PLAN

SHEET NO

C101

PROJECT NO: 22-26

DATE MARCH 24, 2023

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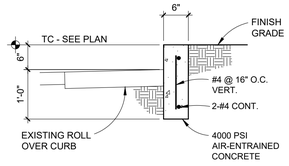
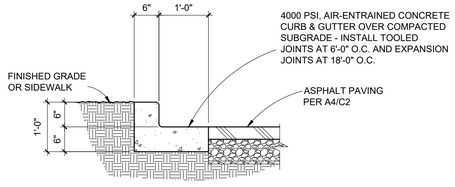
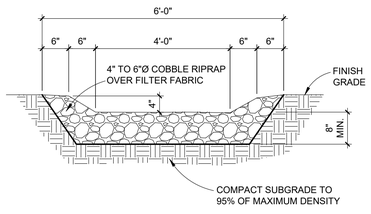


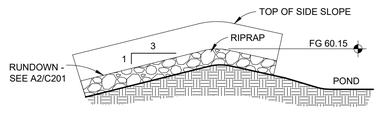
B1 TYPICAL CONCRETE CURB SECTION AT ALLEY
3/4"=1'-0"



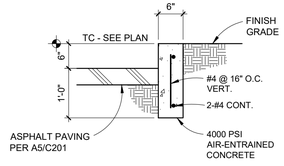
A1 TYPICAL ONSITE CURB AND GUTTER SECTION
3/4"=1'-0"



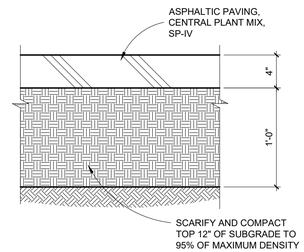
A2 RIPRAP RUNDOWN SECTION
N.T.S.



A3 RUNDOWN WEIR SECTION
N.T.S.



A4 TYPICAL CONCRETE CURB SECTION
3/4"=1'-0"



A5 TYPICAL PAVING SECTION
N.T.S.

9906 Indian School

9906 Indian School Rd NE
Albuquerque, NM 87112

Permit

REVISIONS

NO.	DATE	DESCRIPTION

CIVIL DETAILS

SHEET NO

C201

PROJECT NO: 22-26

DATE MARCH 24, 2023