

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

March 22, 2023

Åsa Nilsson-Weber, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM 87108

**RE: Spanish Walk Subdivision
Conceptual Grading & Drainage Plan
Engineer's Stamp Date: 03/14/23
Hydrology File: E14D002A**

Dear Ms. Nilsson-Weber:

Based upon the information provided in your submittal received 03/14/2023, the Conceptual Grading & Drainage Plan is preliminary approved for action by the Development Facilitation Team (DFT) on Site Plan for Subdivision and action by Development Hearing Officer (DHO) on Preliminary Plat/Final Plat.

PRIOR TO GRADING PERMIT & WORK ORDER:

1. Please submit the Grading & Drainage Plan to Hydrology for review and approval. This digital (.pdf) is emailed to PLNDRS@cabq.gov along with the Drainage Transportation Information Sheet.

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: Spanish Walk Subdivision **Building Permit #** _____ **Hydrology File #** F14

DRB# _____ **EPC#** PR-2023-008085

Legal Description: Tract A-1, Spanish Walk **City Address OR Parcel** 410 Camino Espanol, NW

Applicant/Agent: Isaacson & Arfman, Inc. **Contact:** Åsa Nilsson-Weber

Address: 128 Monroe St. NE **Phone:** 505-206-3774

Email: asaw@iacivil.com

Applicant/Owner: _____ **Contact:** _____

Address: _____ **Phone:** _____

Email: _____

TYPE OF DEVELOPMENT: ☐ PLAT (#of lots) ☐ RESIDENCE ☒ **DRB SITE** ☐ ADMIN SITE: _____

RE-SUBMITTAL: ☐ YES ☒ NO

DEPARTMENT: ☐ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☒ CONCEPTUAL G&D PLAN
- ☐ 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:

- ☐ 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: 03/14/2023

March 14, 2023

SUPPLEMENTAL CALCULATIONS FOR CONCEPTUAL GRADING & DRAINAGE PLAN SUBMITTAL

for

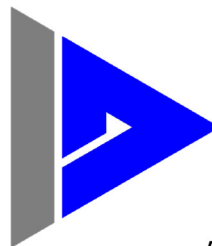
SPANISH WALK SUBDIVISION TRACT A-1, SPANISH WALK,

ALBUQUERQUE, NM

BY



Isaacson & Arfman, Inc.
Civil Engineering Consultants



128 Monroe Street NE
Albuquerque, NM 87108
505-268-8828 | www.iacivil.com

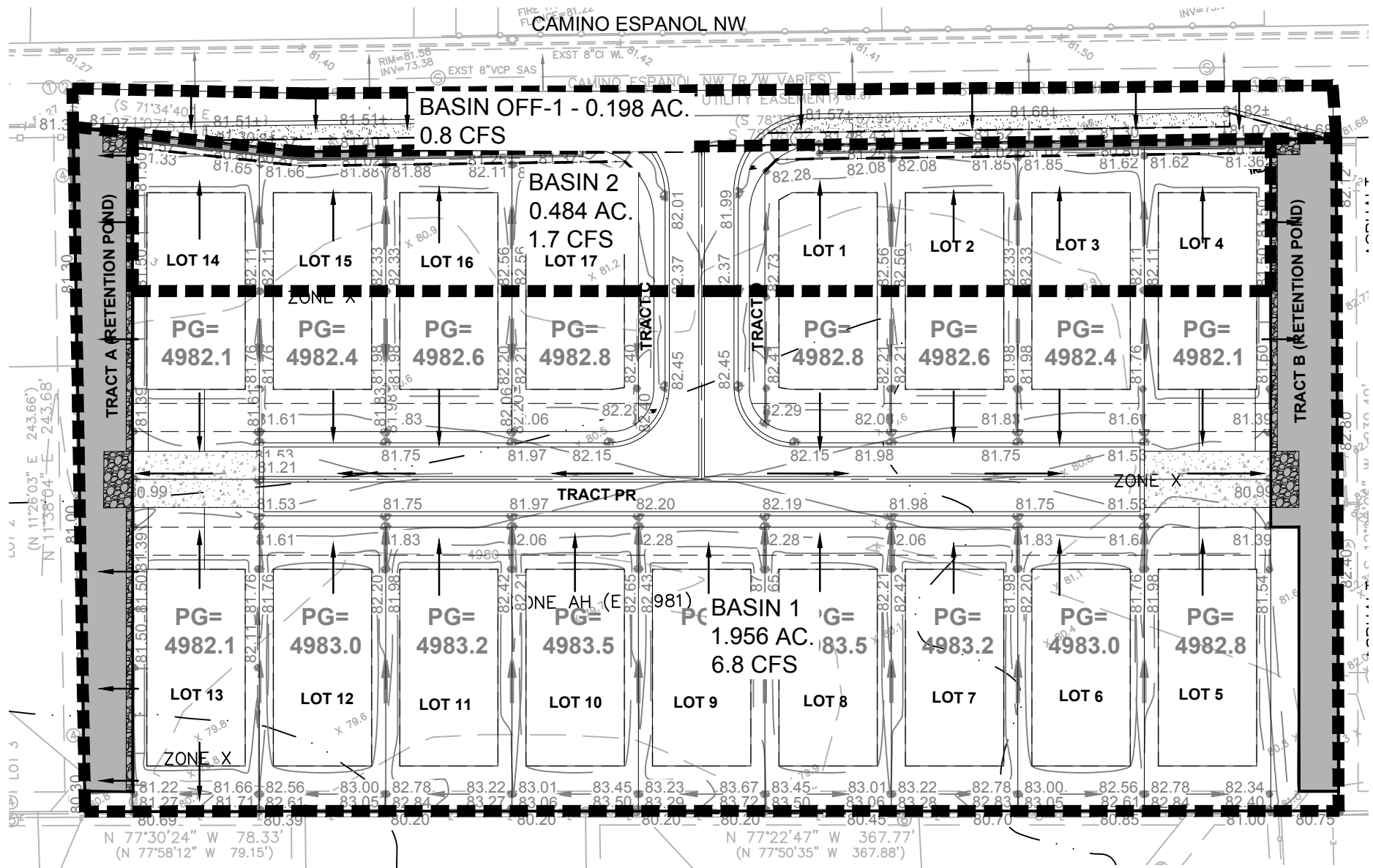
I&A Project No. 2539

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 03/22/23
BY: *Renée C. Brissette*
HydroTrans # E14D002A

THESE PLANS AND/OR REPORT ARE
CONCEPTUAL ONLY. MORE INFORMATION MAY
BE NEEDED IN THEM AND SUBMITTED TO
HYDROLOGY FOR BUILDING PERMIT APPROVAL.

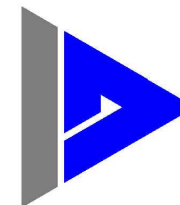
SUPPLEMENTAL INFORMATION:

- **BASIN EXHIBIT**
- **LAND TREATMENT CALCULATIONS**
- **100-YR, 6-HR STORM CALCULATIONS**
- **100-YR, 10-DAY VOLUME AND POND VOLUME CALCULATIONS**
- **RUNDOWN CAPACITY CALCULATIONS**



1"=50'

Isaacson & Arfman, Inc.
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LAND TREATMENT CALCULATIONS

PROJECT NAME: SPANISH WALK SUBDIVISION

JOB NUMBER: 2539

Onsite Total Area 2.4401 ac.

	Area (sf)	
Road	13084	
Pads	41650	70x35
Driveways	5100	15x20 (5' of driveway included in pad)
	<u>59834</u>	

Onsite D area 1.3736 ac.
%D 56%

ONSITE LAND TREATMENTS	
Type A=	0 %
Type B=	39 %
Type C=	5 %
Type D=	56 %
Σ=	100 %

Camino Espanol Half Street

Offsite Road 8490 sf
Pervious 1530 SF

Offsite area 0.1949 ac.
Use B 18 %
Use D 82 %

OFFSITE LAND TREATMENTS	
Type A=	0 %
Type B=	18 %
Type C=	0 %
Type D=	82 %
Σ=	100 %

Job Name:	SPANISH WALK SUBDIVISION
Client:	Las Ventanas NM
Date Prepared:	3/2/2023
Date Modified:	
Precipitation Zone:	2

CALCULATIONS: SPANISH WALK SUBDIVISION :

Based on City of Albuquerque DMP, Article 6-2 Hydrology dated June 26, 2020

100-YEAR, 6-HOUR CALCULATIONS

AREA OF SITE:		106291	SF	=	2.4401	ACRE		
		100-year, 6-hour						
HISTORIC FLOWS:		DEVELOPED FLOWS:				EXCESS PRECIP:		
	Treatment SF	%		Treatment SF	%	Precip. Zone 2		
Area A	=	0	0%	Area A	=	0	0%	$E_A = 0.62$
Area B	=	100976	95%	Area B	=	41453	39%	$E_B = 0.80$
Area C	=	5315	5%	Area C	=	5315	5%	$E_C = 1.03$
Area D	=	0	0%	Area D	=	59834	56%	$E_D = 2.33$
Total Area	=	106291	100%	Total Area	=	106291	100%	
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)								
Weighted E =		$\frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$						
Historic E	=	0.81 in.	Developed E	=	1.67 in.			
On-Site Volume of Runoff: $V_{360} = E * A / 12$								
Historic V_{360}	=	7188 CF	Developed V_{360}	=	14777 CF			
On-Site Peak Discharge Rate: $Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D / 43,560$								
For Precipitation Zone 2								
Q_{pA}	=	1.71	Q_{pC}	=	3.05			
Q_{pB}	=	2.36	Q_{pD}	=	4.34			
Historic Q_p	=	5.8 CFS	Developed Q_p	=	8.5 CFS			

BASIN NO.	1	DESCRIPTION	ONSITE TO RUNDOWN/PONDS
Area of basin flows =	85255	SF	= 1.96 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			LAND TREATMENT
Sub-basin Weighted Excess Precipitation:			A = 0%
Weighted E =			B = 39%
Sub-basin Volume of Runoff:			C = 5%
V ₃₆₀ =			D = 56%
Sub-basin Peak Discharge Rate:			Stormwater Quality Volume
Q _P =			1666 CF
BASIN NO.	2	DESCRIPTION	ONSITE TO PONDS
Area of basin flows =	21067	SF	= 0.48 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			LAND TREATMENT
Sub-basin Weighted Excess Precipitation:			A = 0%
Weighted E =			B = 39%
Sub-basin Volume of Runoff:			C = 5%
V ₃₆₀ =			D = 56%
Sub-basin Peak Discharge Rate:			Stormwater Quality Volume
Q _P =			416 CF
BASIN NO.	OFF-1	DESCRIPTION	OFFSITE CAMINO ESPANOL TO RUNDOWN/PONDS
Area of basin flows =	8646	SF	= 0.20 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			LAND TREATMENT
Sub-basin Weighted Excess Precipitation:			A = 0%
Weighted E =			B = 18%
Sub-basin Volume of Runoff:			C = 0%
V ₃₆₀ =			D = 82%
Sub-basin Peak Discharge Rate:			Stormwater Quality Volume
Q _P =			248 CF

SPANISH WALK SUBDIVISION 2539
REQUIRED 100-YR 10-DAY STORM VOLUME
Onsite 100-year 10-day Storm Volume (cf)

V ₃₆₀ (from previous calculation)	14,777
Area Treatment D (SF)	59,834
Zone	2

For 100-year 10 Day Storms:

$$V_{10\text{day}} = V_{360} + (A_D * (P_{10\text{day}} - P_{360})/12" \text{ per foot})$$

V ₃₆₀	=	14,777
A _D (SF)	=	59,834
Zone	=	2
P _{10day}	=	3.62
P ₃₆₀	=	2.29

V ₃₆₀	=	14,777
+ imp. area	=	6,632

Total Onsite Volume (V_{10 day})	=	21,409
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Offsite (Camino Espanol) 100-year 10-day Storm Volume (cf)

V ₃₆₀ (from previous calculation)	1,480
Area Treatment D (SF)	7,090
Zone	2

For 100-year 10 Day Storms:

$$V_{10\text{day}} = V_{360} + (A_D * (P_{10\text{day}} - P_{360})/12" \text{ per foot})$$

V ₃₆₀	=	1,480
A _D (SF)	=	7,090
Zone	=	2
P _{10day}	=	3.62
P ₃₆₀	=	2.29

V ₃₆₀	=	1,480
+ imp. area	=	786

Total Offsite Volume (V_{10 day})	=	2,266
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Total Onsite & Offsite V_{10-day}	=	23,675 cf
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SPANISH WALK SUBDIVISION
PROVIDED 100-YR 10-DAY STORM VOLUME

TRACT A WEST POND		
Contour	Area	Volume
78.2	4338	
81.0	4338	12,146 CF
POND VOLUME =		12,146 CF

TRACT B EAST POND		
Contour	Area	Volume
78.2	4389	
81.0	4389	12,289 CF
POND VOLUME =		12,289 CF

Total Provided V_{10-day}	=	24,436 cf
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P ₃₆₀	
Zone	D
1	2.17
2	2.29
3	2.43
4	2.64

P _{10day}	
Zone	D
1	3.90
2	3.62
3	4.10
4	6.27

from Table 6.2.8 (updated June 26 2020)
 Depth (inches) at 100-yr Storm

Channel Report

RUNDOWN

Rectangular

Bottom Width (ft) = 2.00
Total Depth (ft) = 0.50

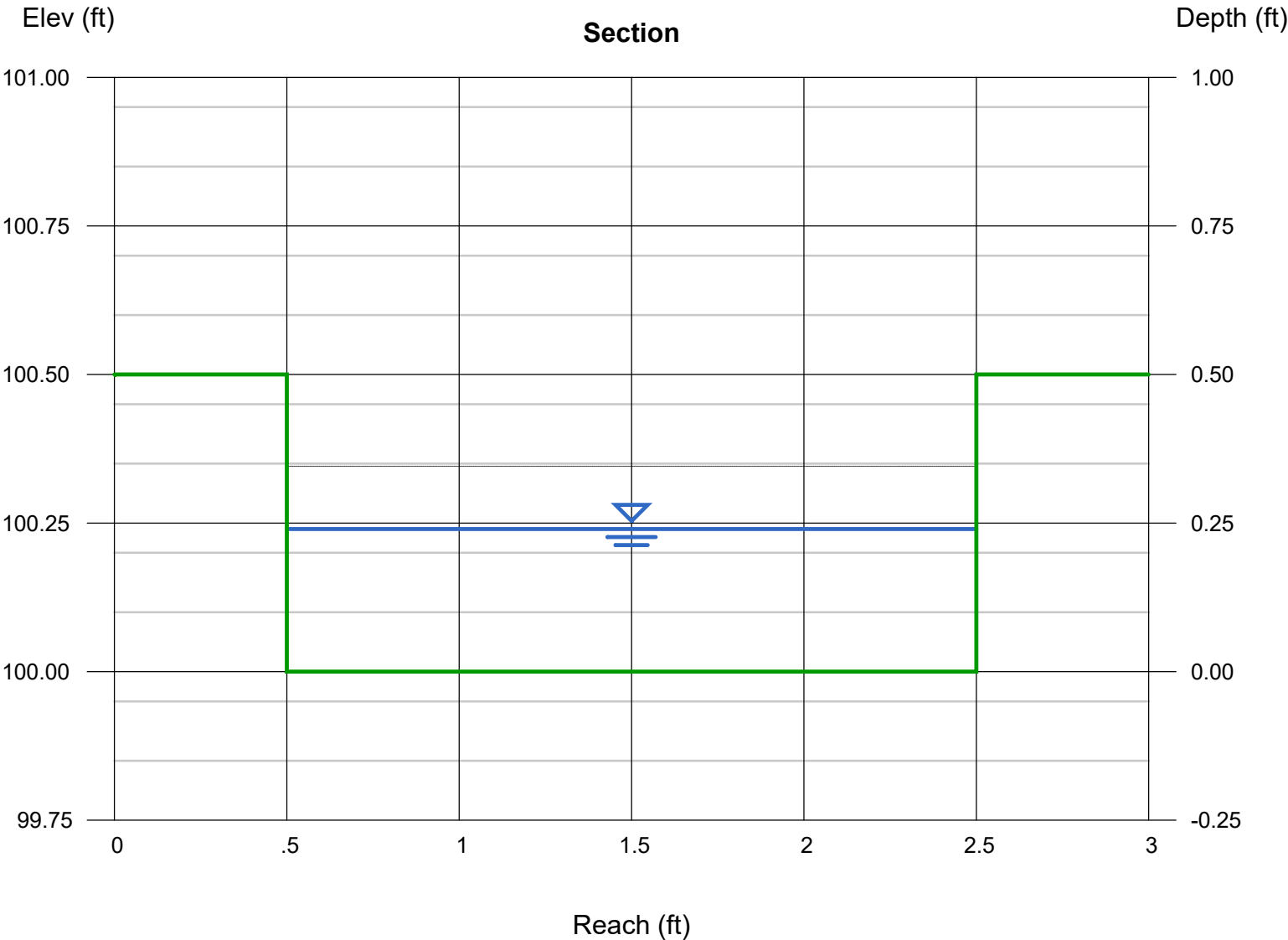
Invert Elev (ft) = 100.00
Slope (%) = 0.50
N-Value = 0.013

Calculations

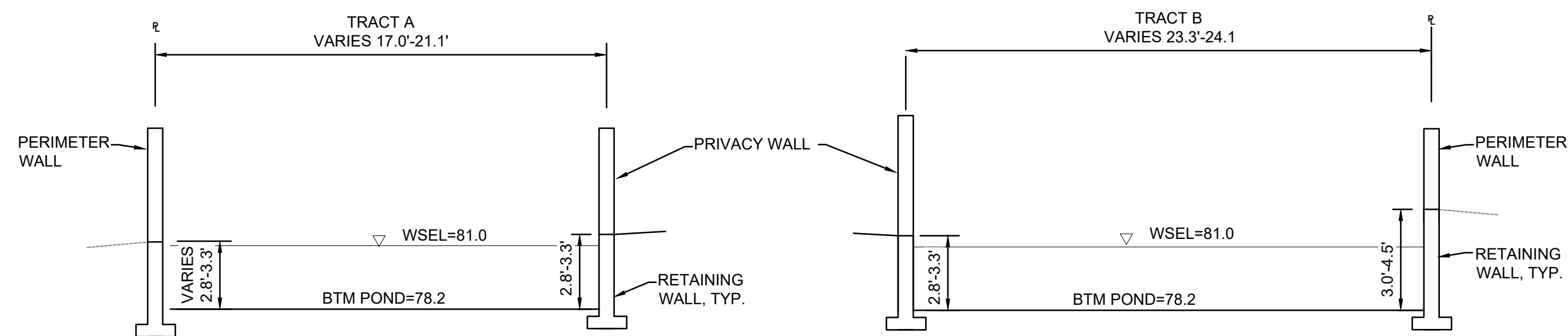
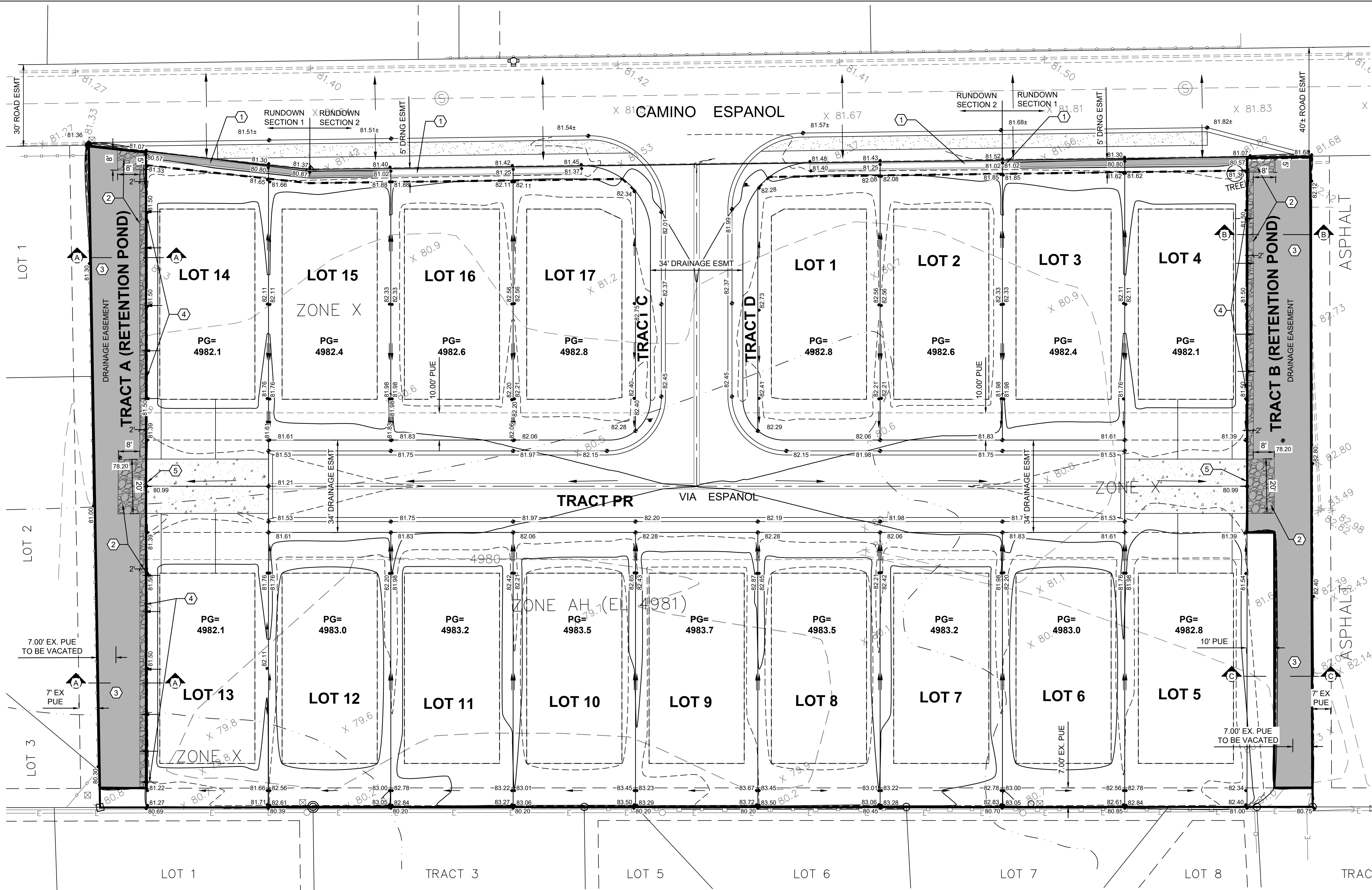
Compute by: Known Q
Known Q (cfs) = 1.25

Highlighted

Depth (ft) = 0.24
Q (cfs) = 1.250
Area (sqft) = 0.48
Velocity (ft/s) = 2.60
Wetted Perim (ft) = 2.48
Crit Depth, Yc (ft) = 0.23
Top Width (ft) = 2.00
EGL (ft) = 0.35

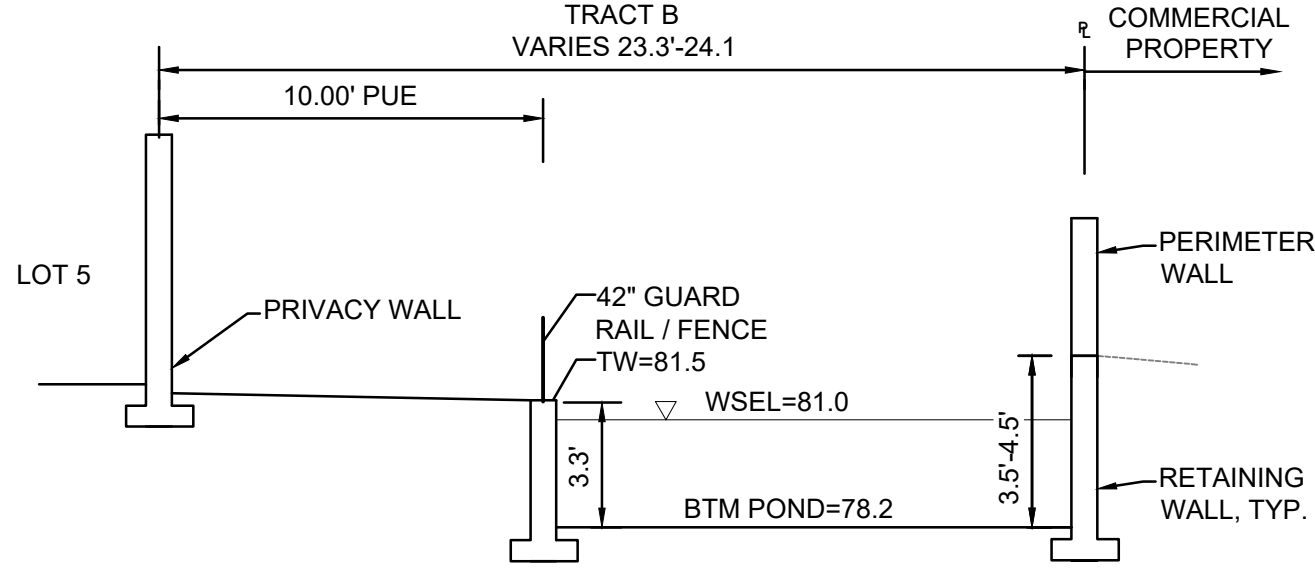


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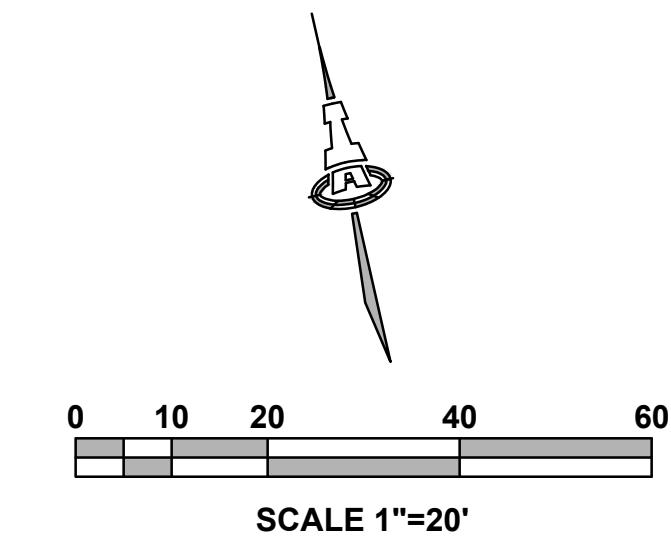


SECTION A-A
1"=5'

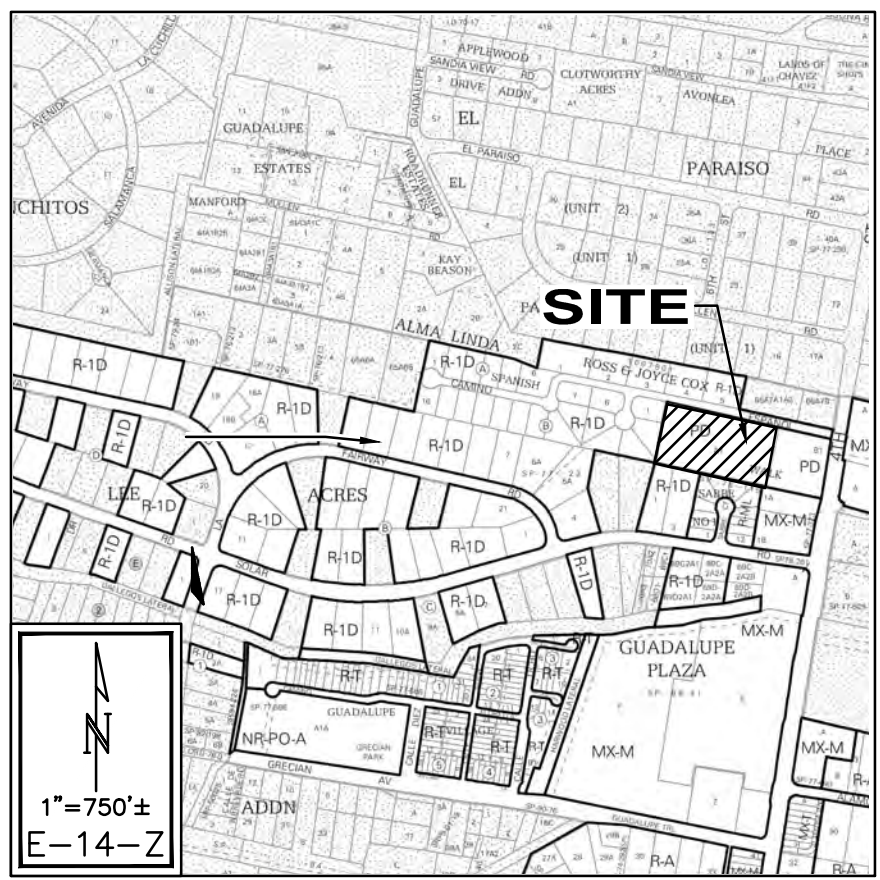
SECTION B-B
1"=5'



SECTION C-C
1"=5'



City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
PRELIMINARY APPROVED
DATE: 03/22/23
BY: *Renee C. Bruneau*
HydroTeam # E14D002A
THESE PLANS AND/OR REPORT ARE
CONCEPTUAL ONLY. MORE INFORMATION MAY
BE NEEDED BY THEM AND SUBMITTED TO
HYDROLOGY FOR BUILDING PERMIT APPROVAL.



PROJECT INFORMATION

PROPERTY: THE SITE IS A VACANT PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP K-10. THE SITE IS BOUND TO THE EAST BY A COMMERCIAL PROPERTY, TO THE NORTH BY CAMINO ESPANOL, TO THE WEST BY DEVELOPED RESIDENTIAL PROPERTIES AND TO THE SOUTH BY DEVELOPED RESIDENTIAL PROPERTIES AND UNDEVELOPED PROPERTIES. THIS PROPERTY AND THE SURROUNDING PROPERTIES ARE FLAT AND CONTAIN STORM DRAINAGE.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE 17 DETACHED RESIDENTIAL LOTS, A PRIVATE ROADWAY AND TWO RETENTION PONDING AREAS.

LEGAL: TRACT A-1, SPANISH WALK, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCHMARK: VERTICAL DATUM IS BASED UPON AGRS ALUMINUM CAP STAMPED "12-E14 1985", ELEVATION = 4978.632 FEET (NAVD 1988).

OFF-SITE FLOW: OFF-SITE FLOW FROM HALF OF CAMINO ESPANOL ENTERS THE PROPERTY. THERE ARE NO OFF-SITE FLOWS FROM THE ADJACENT PROPERTIES TO THE WEST, EAST OR SOUTH THAT ENTER THE PROPERTY.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP 35001C0119G, EFFECTIVE SEPTEMBER 26, 2008, THE SITE IS LOCATED WITHIN ZONE 'AH' (ELEVATION 4981) AND ZONE X (AREAS PROTECTED BY LEVEES). A LOMR-F SHALL BE SUBMITTED TO REMOVE THE FLOODPLAIN ON THE LOTS.

DRAINAGE PLAN CONCEPT: THE SITE WILL BE DEVELOPED TO POND THE 100-YEAR, 10-DAY STORM IN TWO RETENTION PONDS LOCATED ALONG THE WEST AND EAST PROPERTY LINE. THE OFFSITE FLOW FROM CAMINO ESPANOL ALONG WITH FLOWS FROM HALF OF THE LOTS WILL DRAIN TO THE PONDS VIA BACKYARD RUNDOWNS LOCATED ON THE LOTS ADJACENT TO THE STREET. THE REMAINING ONSITE BASIN WILL DRAIN TOWARD THE PRIVATE STREET THAT HAS AN INVERTED CROWN WITH AN ALLEY GUTTER IN THE CENTER. LAND TREATMENT PERCENTAGES WERE CALCULATED AT 34% 'B', 10% 'C' AND 56% 'D'; THE OFFSITE HALF-STREET WAS CALCULATED AT 18% 'B' AND 82% 'D'.

IN THE FULLY DEVELOPED CONDITION, THE PROPERTY AND THE OFF-SITE HALF-STREET WILL DISCHARGE 9.3 CFS TO THE PONDS. THE REQUIRED 100-YEAR, 10-DAY VOLUME TO BE STORED IN THE RETENTION PONDS IS 23,675 CF; THE PROVIDED VOLUME IN THE TWO PONDS IS 24,436 CF.

THE PONDS SHALL BE CONSTRUCTED AS VERTICAL DETENTION BASINS WITH A BOTTOM ELEV= 4978.2; WSEL=4981.0. THE WALLS SHALL BE WATER PROOFED TO ELEV= 4981.5. THE DEVELOPER SHALL OBTAIN APPROVAL (NOTARIZED LETTERS) FROM ALL ADJACENT PROPERTY OWNERS STATING THAT IT IS ACCEPTABLE TO CONSTRUCT SHARED PERIMETER WALLS ON THE PROPERTY LINES.

STORMWATER QUALITY

BECAUSE THE 100-YR, 10-DAY STORM IS PONDED ON THE PROPERTY, THE STORM WATER QUALITY VOLUME IS PROVIDED IN THE PONDS.

KEYED NOTES

- BY PUBLIC WORK ORDER: RUNDOWN PER DETAIL ON SHEET CG-501.
- BY PUBLIC WORK ORDER: INSTALL 6" AVG. DIA., 1' THICK FRACTURED FACE ROCK OVER NON-WOVEN GEOTEXTILE FABRIC.
- BY PUBLIC WORK ORDER: RETENTION BASINS PER SECTIONS THIS SHEET. RETAINING WALLS SHALL BE DESIGNED BY A STRUCTURAL ENGINEER. WALLS SHALL BE WATER PROOFED TO ELEVATION 81.5.
- TURN EVERY OTHER BLOCK IN SIDEYARD WALL TO PROVIDE DRAINAGE OPENINGS.
- GATE FOR MAINTENANCE ACCESS.

LEGEND

- | | |
|------------------|-------------------------|
| — 80 — | PROPOSED 1.0' CONTOUR |
| - - - 81.5 - - - | PROPOSED 0.5' CONTOUR |
| ◆ 82.56 | PROPOSED SPOT ELEVATION |
| → | SURFACE FLOW DIRECTION |
| PG = 4982.2 | PAD ELEVATION |

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Albuquerque, NM 87108
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March 14, 2023
Conceptual
Not for Construction
Engineer

SPANISH WALK SUBDIVISION
410 CAMINO ESPANOL

ISSUE: CONCEPTUAL
PROJECT NUMBER: IA 2539
FILE: JTS/ANW
DRAWN BY: ANW
CHECKED BY: ANW
DATE: 12-12-2022

No	Date	Description

SHEET TITLE

GRADING & DRAINAGE PLAN

SHEET NUMBER

CG-101

GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.

B. ALL SITE PREPARATION, GRADING OPERATIONS, FOUNDATION CONSTRUCTION, AND PAVEMENT INSTALLATION WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, WHICH WILL BE PROVIDED BY THE OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE NOTED IN THE PLANS, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.

C. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.

D. IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

E. THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE CITY OF ALBUQUERQUE REQUIRE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AN NPDES PERMIT FOR PROJECTS WHERE CONSTRUCTION ACTIVITIES MEET THE EPA THRESHOLD. (SWPPP, NPDES PERMIT BY OTHERS.) CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE WHO WILL PREPARE SWPPP AND INSPECT REQUIRED ELEMENTS.

F. ALL NEW PAVEMENT SURFACES SHALL BE CONSTRUCTED WITH POSITIVE SLOPE AWAY FROM BUILDINGS AND POSITIVE SLOPE TOWARD EXISTING AND/OR PROPOSED DRAINAGE PATHS. PAVING AND ROADWAY GRADES SHALL BE $\pm 0.1'$ FROM PLAN ELEVATIONS.

G. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.

H. PAD ELEVATIONS SHALL BE WITHIN 0.1'±.

I. POND DESIGN PARAMETERS AND STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN (TOP OF POND, BOTTOM OF POND, SIZE OF ORIFICE, AREA OF POND, ETC.) TO BE STRICTLY ADHERED TO FOR CERTIFICATION PURPOSES. SEE DETAIL SHEET FOR ADDITIONAL INFORMATION.

J. POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.

K. EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS FIVE WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.

L. FOR ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE (FOR CERTIFICATE OF SUBSTANTIAL COMPLIANCE) PROVIDE AN AUTOCAD FORMAT AS-BUILT SURVEY PREPARED BY A LICENSED SURVEYOR WHICH INCLUDES:

L.A. AS-BUILT SPOT ELEVATIONS AT EACH DESIGN SPOT ELEVATION SHOWN ON THE APPROVED PLAN;

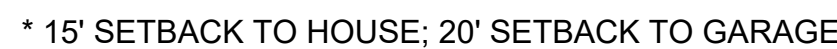
L.B. AS-BUILT ELEVATIONS AT EACH CORNER OF THE PAD AND AT THE CENTER OF THE PAD;

L.C. TOP AND BOTTOM ELEVATIONS AS REQUIRED TO DEFINE THE PERIMETER OF PONDS (TO BE USED BY ENGINEER TO CALCULATE AS-BUILT VOLUME PROVIDED);

L.D. ALL CONSTRUCTION, INCLUDING DRAIN LINES, PIPES AND PONDS SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLAN IN ORDER TO RECEIVE ENGINEER'S CERTIFICATION.

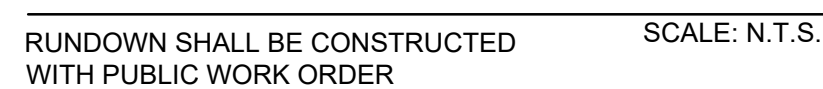
M. UPON WRITTEN REQUEST, THE ELECTRONIC FILE OF THE GRADING AND DRAINAGE WILL BE PROVIDED TO THE CONTRACTOR FOR VERTICAL CONTROL.

N. SITE CONSTRUCTION LAYOUT / STAKING SHALL BE COORDINATED WITH THE OWNER.



TYPICAL LOT DETAIL

LOTS 5-13 NTS



March 14, 2023
Conceptual
Not for Construction
Engineer

410 CAMINO ESPAÑOL

ISSUE: CONCEPTUAL
PROJECT NUMBER: IA 2539
FILE: -
DRAWN BY: JTS/ANW
CHECKED BY: ANW
DATE: 12-12-2022

[illegible]

CONCEPTUAL
GRADING &
DRAINAGE
PLAN

CG-501