

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

December 16, 2021

Ryan Morrissey, P.E.
Burkhardt Engineering
28 North Cherry St.
Germantown, OH, 45327

**RE: Champion Xpress Car Wash
1520 Juan Tabo Blvd. NE
Grading and Drainage Plan
Engineer's Stamp Date: 11/03/21
Hydrology File: J22D031**

Dear Mr. Morrissey:

Based upon the information provided in your submittal received 11/03/2021, the Grading & Drainage Plan is **not** approved for Building Permit, SO-19 Permit, and for action by the DRB on Site Plan for Building Permit. The following comments need to be addressed for approval of the above referenced project:

SHEET C3.0

1. Update contact information for Water Authority. I am no longer with Water Authority.

UTILITY CONTACT INFORMATION:

SANITARY SEWER / WATER

Albuquerque Bernalillo County Water Utility Authority

Contact: David Gutierrez

Telephone: 505.289.3307

Email: dggutierrez@abcwua.org

No longer @ Water
Authority.

2. Verify grate elevations as they should work with the drainage structure and not flow out of the grate in the event it exceeds the weir elevation.
3. Call out proposed pipe sections and materials and please change line type to make them bold and pop out. Please note/label "private" ownership and maintenance on private infrastructure.

PO Box 1293

Albuquerque

NM 87103

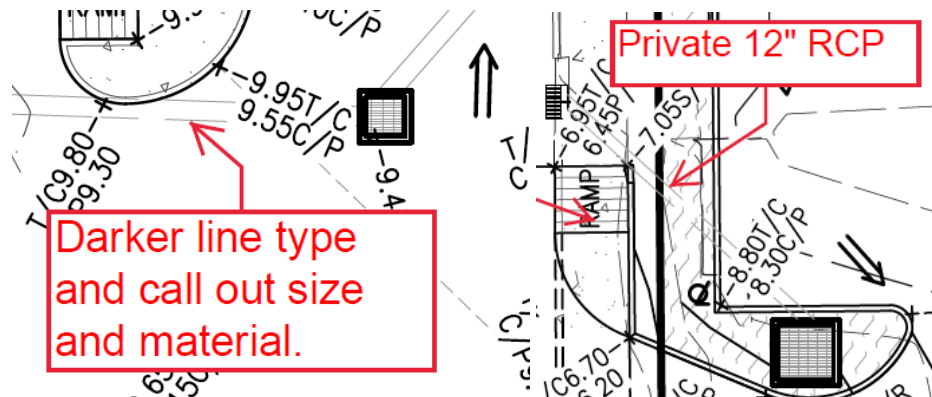
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4. Provide existing top of pipe elevation at Juan Tabo and provide proposed top of pipe elevations.
5. Please include existing flow line elevations at Juan Tabo.
- 6.

SHEET C3.1

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1. Please provide the weir calculations, per DPM Article 6-16(A), for the curb cuts and sidewalk culverts. A coefficient of 2.7 is typically used for the weir equation $Q = CLH^{2/3}$.
2. The proposed entrances need to follow standard details. Please see CoA Standard Detail 2426. Check with Transportation.
3. Please update the SO-19 Notes. See Attachment.
4. Update reference to updated DPM and go over calculations as details have changed in the new DPM. Ensure numbers are updated in the associated tables and information based on new DPM values.

Methodology:

Albuquerque Development Process Manual

Chapter 22, Section 2, Part A;

"A simplified procedure for projects with sub-basins smaller than 40 acres has been developed based on initial abstraction / uniform infiltration precipitation losses and Rational Method procedures."

Need to utilize new
DPM 6-2-A

- b. Please use the procedure for 40 acre and smaller basins as outlined in Development Process Manual (DPM) (signed 06/08/20) Article 6-2(a). Please provide both the existing conditions and proposed conditions for the 100 year-6 hour storm event.
5. Include details of the outfall structure at the pond.
6. Include details of all the inlets at grates. What Type? Standards?
7. Please utilize RCP for the section of pipe connecting to Juan Tabo Blvd. HDPE for the remaining sections is fine.
8. Refer to previous/existing G&D for the site and call out 20% Free Discharge and follow that information.
9. A water block, 0.87' high, per COA Paving Detail No. 2426, is required at the driveway entrances. Please utilize this detail for the entrances.

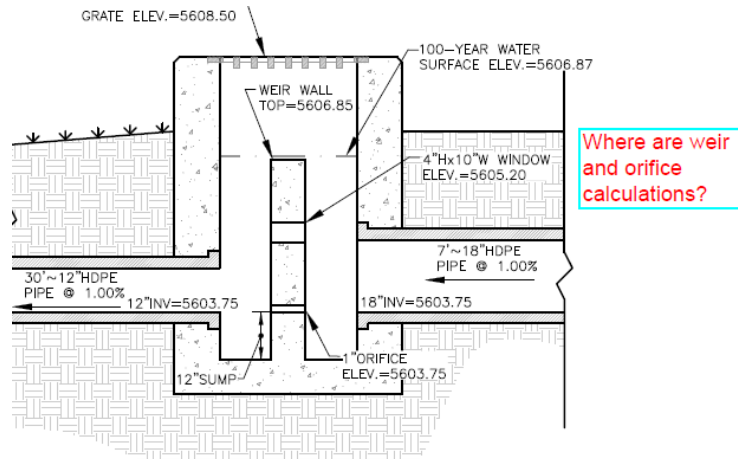
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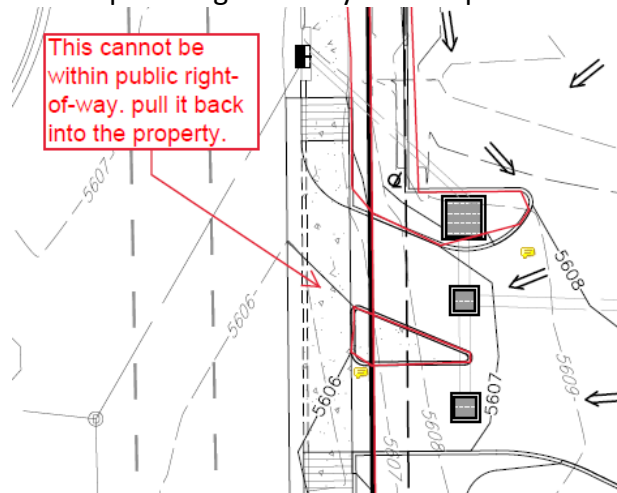


Mayor Timothy M. Keller

10. Please add a note under Grading Notes. "Side slopes need to be stabilized with Native Grass Seed (per City Spec 1012) with Aggregate Mulch or equal (Must satisfy the "Final Stabilization criteria" CGP 2.2.14.b.)".
11. Provide a detail of the pond including property line, inlet and to include volume and max water elevation.
12. Include weir and orifice calcs.



13. Consider removing the median at the entrance. If it is to remain, please remove the portion within public right-of-way and keep this within the property.



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Sincerely,

A handwritten signature in dark ink, appearing to read 'David G. Gutierrez', with a stylized flourish at the end.

David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Departmen

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

TAKE CAUTION DURING EXCAVATION:
THERE ARE UNDERGROUND UTILITY MAINS IN THE CONSTRUCTION AREA WHICH
MAY NOT HAVE BEEN LOCATED ACCURATELY BY THE SURVEYOR / UTILITY OWNERS.
NOTIFY "811" IN ADVANCE OF DIGGING TO HAVE LINES MARKED

Tract B-2-A, Block 11
Dale J. Bellamah's Eastridge, Unit 4
(8/2/1985, C7-200)
Owner: P&M Properties LLC.

Lot 4, Block 11, Unit 4
Dale J. Bellamah's Estridge,
(1/11/1968, D3-183)
Owner: Gray and Luella Cunningham

Lot 3, Block 11, Unit 4
Dale J. Bellamah's Estridge,
(1/11/1968, D3-183)
Owner: Matthew J. and Jacqueline R. Pena

Lot 2, Block 11, Unit 4
Dale J. Bellamah's Easdrige,
(1/11/1968, D3-183)
Owner: Tosca A. Schwingendorf

ot 1, Block 11, Unit 4
J. Bellamah's Eastridge,
(1/11/1968, D3-183)
Owner: Alice A. Gomez

PERMITTING CONTACT INFORMATION:
PLANNING / ZONING / BUILDING
 City of Albuquerque - Planning Department
 Contact: Brennon Williams
 Telephone: 505.924.3860
 Email: bnwilliams@cabq.gov

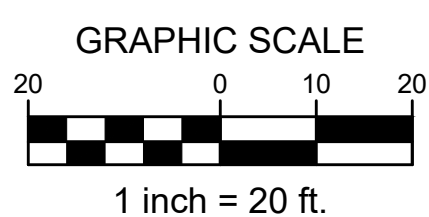
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SANITARY SEWER / WATER
 Albuquerque Bernalillo County Water Utility Authority
 Contact: David Gutierrez
 Telephone: 505.289.3307
 Email: dggutierrez@abcwua.org

STORM SEWER
City of Albuquerque - Planning Hydrology Department
Contact: Renee Brissette
Telephone: 505.924.3995
Email: rbrissett@cabq.gov

GAS
New Mexico Gas Company
Contact: Jacob Gallegos
Telephone: 505.697.3120
Email: Jacob.Gallegos@nmgco.com

ELECTRIC
PNM (Public Service Company of New Mexico)
Contact: Andrew Gurule
Telephone: 505.241.0589
Email: Andrew.Gurule@pnm.com

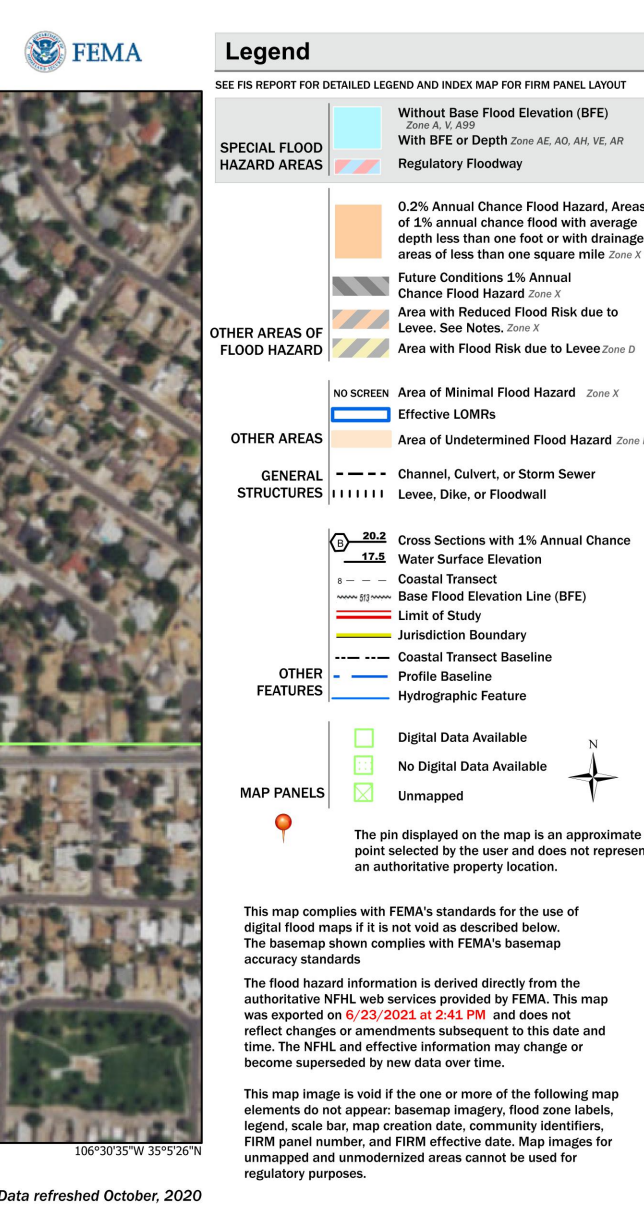
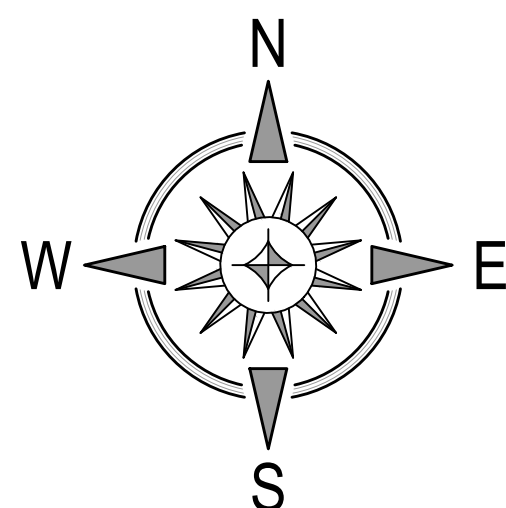
TELECOM
CenturyLink
Contact: Customer Service
Telephone: 865.465.2313



VERTICAL & HORIZONTAL CONTROL:

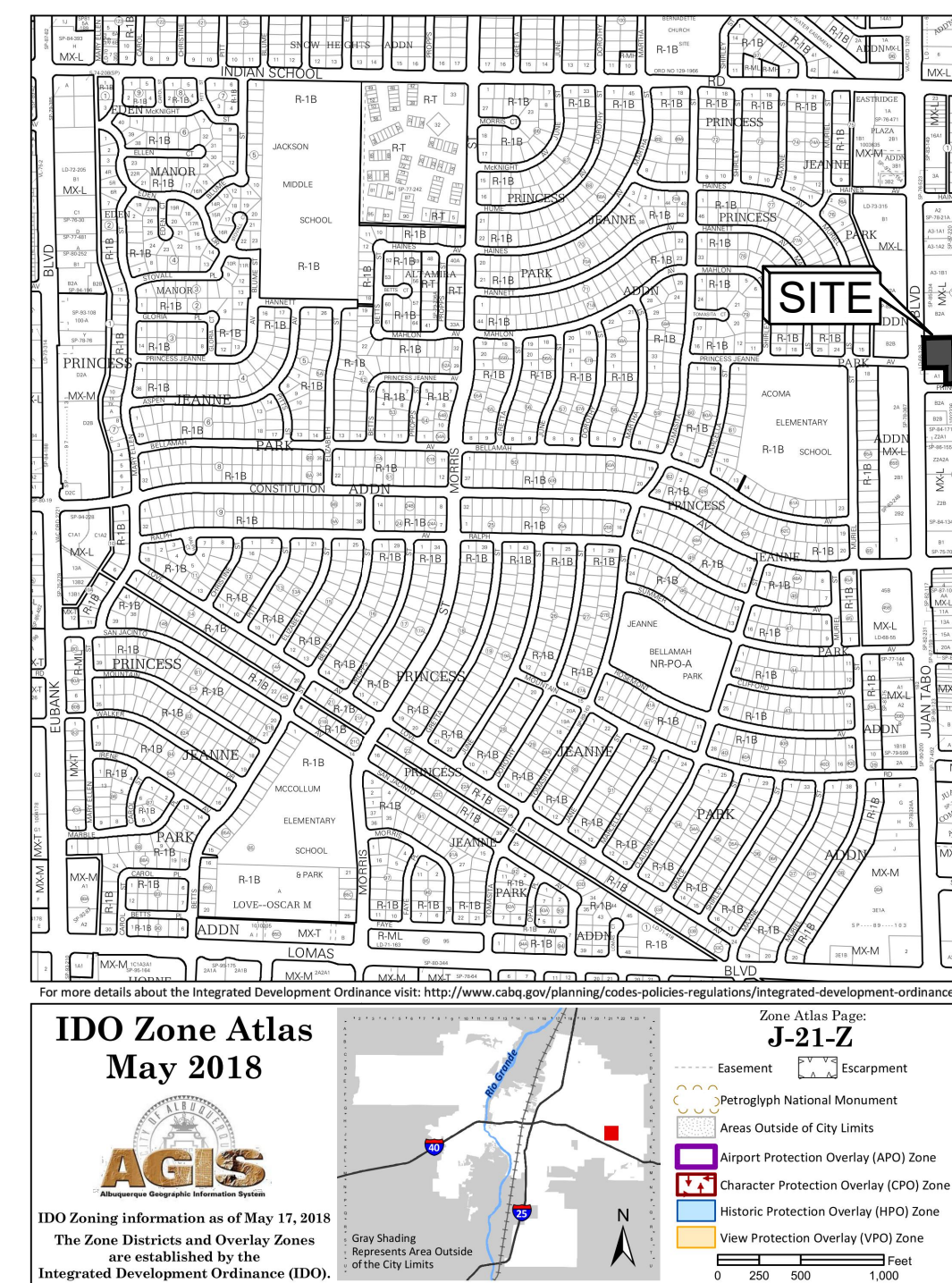
BM#1: Description: Chiseled 'X' in Sidewalk
Elevation: 5605.91'

BM#2: Description: Chiseled 'X' in Sidewalk
Elevation: 5610.51'



SEE GRADING & DRAINAGE NOTES
AND DETAILS, SHEET C-3.1 FOR
ADDITIONAL INFORMATION, FLOW
CALCULATIONS, GENERAL NOTES,
DETAILS AND CROSS SECTIONS.

WORK WITHIN PUBLIC RIGHT-OF-WAY
REQUIRES DRC-APPROVED PLANS.






PROJECT SUMMARY

Project will include the demolition and removal of existing structures, utilities, vegetation, pavement, etc. as necessary to construct a new Champions Xpress Car Wash and its associated pavement, parking facilities, utilities, landscaping, signage and any other proposed improvements which are needed to service the facility.

PROPERTY INFORMATION

Address: 1520 Juan Tabo Blvd. NE, Albuquerque, NM 87112
Legal Description: Tract lettered B-1, Block 11 Dale J. Bellamah's Eastridge Unit 4,
City of Albuquerque, Bernalillo County, New Mexico.

Area: 0.8730 Acres
Zoning: MX-L, Mixed-Use-Low Intensity Zone District
Flood Zone Designation: FIRM # 35001C0357H, effective date: August 16, 2012
Zone "X": Areas determined to be outside the 0.2% annual chance floodplain

GRADING LEGEND	
M/E	MATCH EXISTING PAVEMENT GRADE
S/W	SIDEWALK PAVEMENT
T/C	TOP-OF-CURB
C/P	CONCRETE PAVEMENT GRADE
F/F	FINISHED FLOOR GRADE
G/R	GRATE ELEVATION
	SHEET FLOW
	CHANNEL / GUTTER FLOW
+00.00	PROP. SPOT ELEVATION
————— 0000 —————	PROP. CONTOUR
	LANDSCAPE AREA

[illegible]

SITE DEVELOPMENT PLANS FOR
CHAMPION XPRESS
CAR WASH
1520 JUAN TABO BLVD NE
CITY OF ALBUQUERQUE,
BERNALILLO COUNTY, NEW MEXICO



BURKHARDT
ENGINEERS & SURVEYORS

28 North Cherry Street | Germantown, Ohio 45327 | Phone: 937-388-0690 | BURKHARDTINC.COM
CIVIL ENGINEERING | LAND SURVEYING | NATIONAL RETAIL SITE DEVELOPMENT

Design: AFD	Proj: 21.215
Draw: AFD	Dwg: 21.215.dwg
Check: RJM	Tab: C3.0-GP
Scale: 1" = 20'	
Date: 11.03.2021	
Sheet:	
GRADING & DRAINAGE PLAN	
Sheet No.:	

C-3.0

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

- Build sidewalk culvert per COA STD DWG 2236.
- Contact Storm Drain Maintenance at (505) 857-8033 to schedule a meeting prior to forming.
- An excavation permit will be required before beginning any work within City Right-Of-Way.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- Contractor must contact Storm Drain Maintenance at (505) 857-8033 to schedule a construction inspection. For excavating and barricading inspections, contact Construction Coordination at (505) 924-3416.

STORM WATER MANAGEMENT NOTES:

Existing Lot Coverage - 100% impervious

Proposed Lot Coverage - 75% impervious / 25% landscaping

Net Decrease in Storm Water Runoff due to Development

Methodology:

Albuquerque Development Process Manual

Chapter 22, Section 2, Part A;

"A simplified procedure for projects with sub-basins smaller than 40 acres has been developed based on initial abstraction / uniform infiltration precipitation losses and Rational Method procedures."

For determining run-off rates, the SCS method was used to determine the existing run-off to Juan Tabo Blvd. This area is approximately 0.38 acres of land that is 95% impervious. The detention basin summary table below shows the run-off rates for the various storm events analyzed.

The proposed detention basin outlets to Juan Tabo Blvd at lower release rates than the existing conditions as shown in the table below.

Storm Water Quality Volume (WQv) = Impervious Area x 0.26 inches

Precipitation Zone:

Precipitation Zone 3: "Between the San Mateo and Eubank"

Drainage Summary:

Area = 0.87 acres

Treatment B (Desert Landscaping Area) - 25% = 0.22 acres

Treatment D (Impervious Area) - 75% = 0.65 acres

100-year peak Discharge Rate = 3.73 cfs/acre (Table A-9)

Q₁₀₀ = 3.42 cfs

WQv = 618 cu-ft (required)

Q₁₀₀ = 1.95 cfs (proposed)

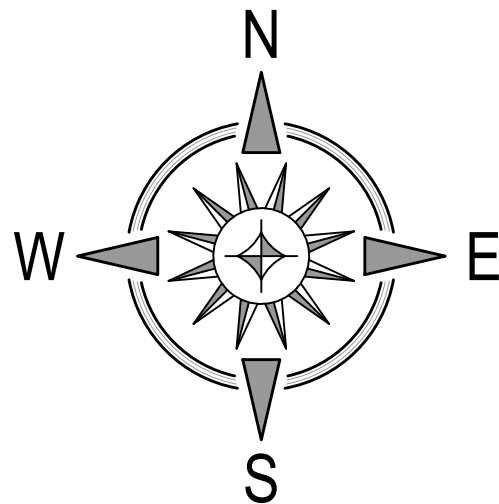
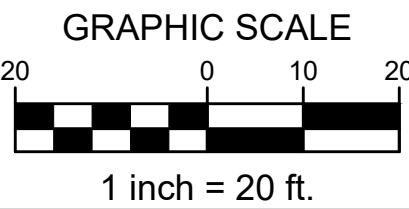
Provided Water Quality Storage Volume:

Elevation (ft)	Contour Area (sq-ft)	Incremental Vol. (cu-ft)	Σ Volume (cu-ft)
5604	10	0	0
5605	518	264	264
5606	1,100	809	1,073
5607	1,765	1,433	2,506
5608	2,474	2,120	4,625
5609	2,857	2,857	7,482

*Average End Area Method used to calculate storage volumes.

Stage Storage Discharge Summary:

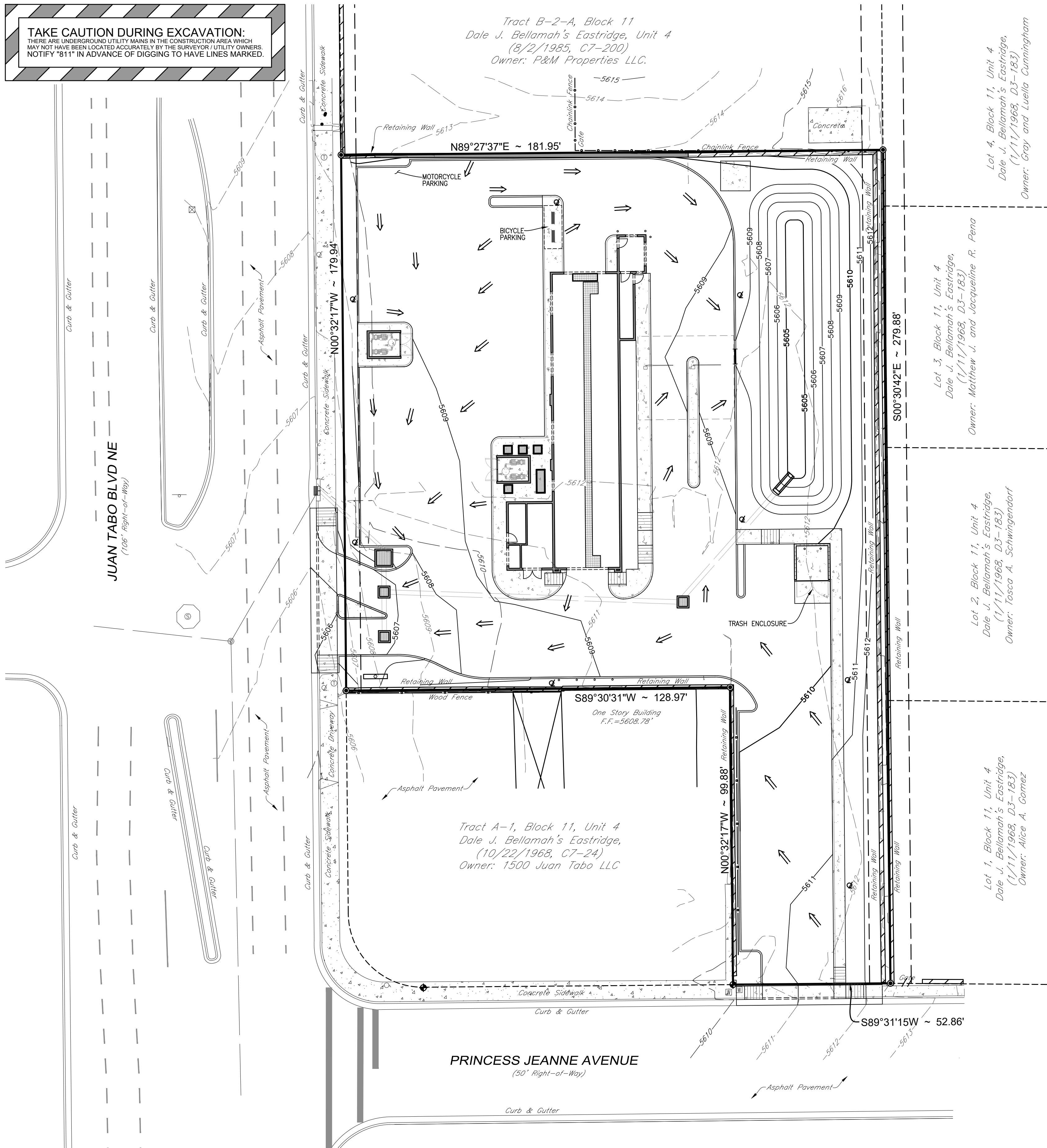
Elevation (ft)	Storage Volume (sq-ft)	Discharge (cu-ft)
5604	10	0
5605	264	0.04
5605.55	709	0.29
5606	1,073	0.77
5606.85	2,291	1.55
5607	2,506	2.18
5608	4,625	7.18
5609	7,482	8.21



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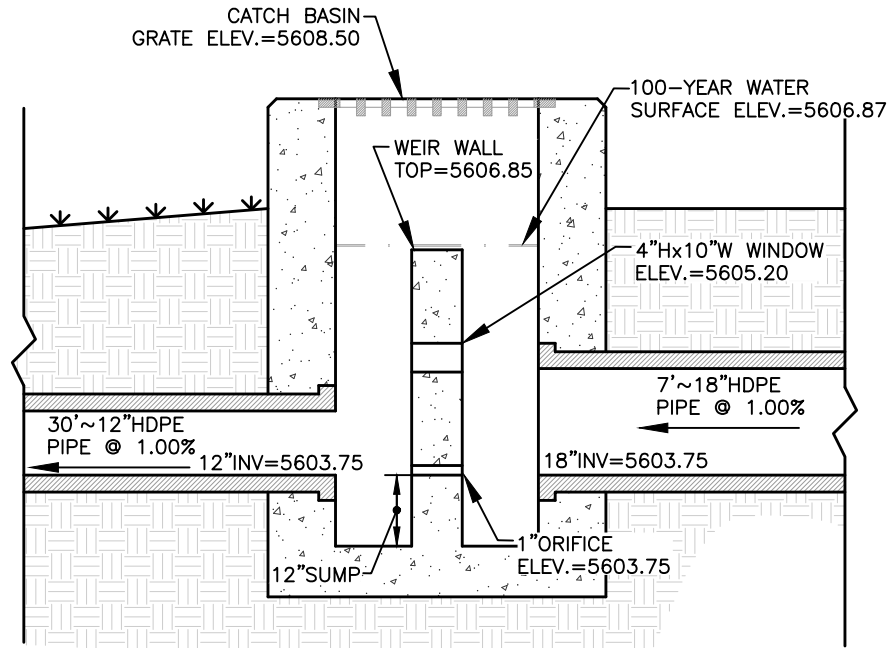


Detention Basin Performance Summary:

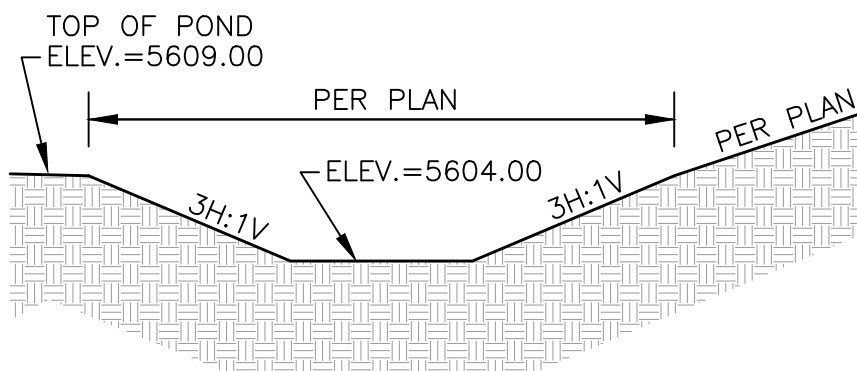
Storm (yr)	Allowable (cfs)	Inflow (cfs)	Outflow (cfs)	Max Elevation (ft)	Storage Volume (cu-ft)
1	0.54	0.86	0.09	5605.60	750
2	0.70	1.22	0.49	5605.84	941
5	0.91	1.70	0.87	5606.09	1,197
10	1.08	2.08	1.04	5606.25	1,433
25	1.30	2.60	1.23	5606.49	1,770
50	1.47	3.00	1.37	5606.67	2,034
100	1.65	3.42	1.58	5606.87	2,315

GENERAL GRADING, EARTHWORK & DRAINAGE NOTES

- All spot elevations indicated in pavement areas are at bottom face of curb and/or finished pavement grade unless noted otherwise. All spot elevations indicated in grass or landscape areas are finished grade unless noted otherwise.
- The Contractor shall be responsible for the removal and disposal of all vegetation and organic materials from the site that results from clearing & grubbing activities.
- The Contractor shall be responsible for stripping and removal of all excess topsoil from the site. All topsoil that cannot be used on site shall be removed from the site at the Contractor's expense. The Contractor may dispose of excess topsoil by burying topsoil in landscape areas only at the direction of the Owner or the Owner's Representative.
- The Contractor will be responsible for all safety requirements and for the protection of all existing and proposed utilities or structures during earthwork procedures.
- The Contractor shall be responsible for the import of structural fill materials if suitable material is not available on site. The location and testing of suitable material shall be the Contractor's responsibility. The Contractor shall be responsible for the export and disposal of all excess or unsuitable materials.
- The Contractor shall provide construction dewatering as necessary to complete construction as outlined in plans.
- The Contractor shall exercise extreme care in establishing all grades and slopes in pavement areas, ramps and sidewalks in the vicinity of handicap parking and access areas and shall comply with Federal, State, and Local Codes.
- In areas where sheet drainage flows from grass or landscape areas onto paved areas, the finished grade in grass or landscape areas shall be 1/2 inch above the top of curb or above the pavement in areas without curb. In areas where sheet drainage flows from pavement to grass or landscaped areas, the finished grade in grass or landscape areas shall be 1/2 inch below the pavement.
- The Contractor shall provide positive drainage in all areas and away from all buildings.
- All pavement shall be laid on a straight, even, and uniform grade with a minimum of 1:100 (1.0%) slope toward the collection points unless otherwise specified on plans. Cut or fill slopes in unpaved areas shall not exceed 3:1 (33.3%) maximum grade unless otherwise noted on plans.
- ADA accessible areas shall not exceed the following slopes:
 - Ramps - 1:12 (8.3%) max.
 - Routes - 1:20 (5.0%) max.
 - Parking - 1:50 (2.0%) max.
 - Cross Slopes - 1:50 (2.0%) max.
- The Contractor shall adjust tops/lids/grates of all cleanouts, manholes, inlets, valves, etc. to match final grade.
- Following grading of subsoil to subgrade elevations, the Contractor shall provide 4" of topsoil (minimum) in all disturbed areas which are not to be paved. Final grades should be smoothly finished to surrounding areas and ensure positive drainage. Stockpiled topsoil shall be screened prior to respreading and should be free of subsoil, debris, and stones.
- The Contractor shall be responsible for determining exact quantities of cut and/or fill for estimating and construction and should alert the Engineer of any excessive cut and/or fill, especially if additional cut and/or fill will be required due to poor existing soil conditions discovered during earthwork operations.
- Refer to the Architectural and Structural Plans for information regarding any perimeter foundation drains.
- The Contractor shall obtain a copy of the Geotechnical / Soils Report and become thoroughly familiar with site and subgrade information and fully implement recommendations given therein.



OUTLET STRUCTURE DETAIL
NOT TO SCALE



NOTES:
1. GRADE OR EXCAVATE CROSS SECTION TO LINES AND GRADES SHOWN ON THE PLANS ACCORDING TO REQUIREMENTS IN THE GEOTECHNICAL REPORT.

WQv AREA SECTION
NOT TO SCALE



SITE DEVELOPMENT PLANS FOR
CHAMPION XPRESS
1520 JUAN TABO BLVD NE
CITY OF ALBUQUERQUE,
BERNALILLO COUNTY, NEW MEXICO



Design: AFD Proj: 21.215
Draw: AFD Dwg: 21.215.dwg
Check: RJM Tab: C3.0-GP

Date: 11.03.2021

Sheet:
**GRADING &
DRAINAGE NOTES
AND DETAILS**

Sheet No.:

C-3.1