CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

April 1, 2022

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
Grading and Drainage Plan
Engineer's Stamp Date: 03/18/2022
Hydrology File: J22D031

Dear Mr. Morrisey:

Based upon the information provided in your submittal received on 3/28/2022, the Revised Grading and Drainage Plan is approved for Building Permit and SO-19 Permit.

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

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.

Please provide Drainage Covenant for the stormwater quality ponds per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit an electronic file of the Covenant and Exhibit for completeness to Marion G. Velasquez at mgvelasquez@cabq.gov. Once the electronic file is approved for completeness, please submit the original copies along with the **$ 25.00** recording fee check made payable to Bernalillo County to Marion on the 4th floor of Plaza de Sol. Please note that Hydrology will need a pdf copy of the recorded Drainage Covenant prior to Hydrology's approval of Permanent Release of Occupancy.

If you have any questions, please contact me at 924-3695 or dggutierrez@cabq.gov .

Sincerely,

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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2018)

Project Title: Champion Xpress Car Wash Building Permit #: _____ Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Tract Lettered B-1, Block 11 Dale J. Bellamah's Eastridge Unit 4

City Address: 150 Juan Tabo Blvd NE

Applicant: Andrew Doerfler Contact: _____

Address: 28 N. Cherry Street, Germantown, Ohio 45327

Phone#: 937-388-0060 Fax#: _____ E-mail: adoerfler@burkhardtinc.com

Other Contact: Modulus Architects Contact: Regina Okoye

Address: 100 Sun Ave. NE, Suite 600 Albuquerque, NM 87109

Phone#: 505-267-7686 Fax#: _____ E-mail: rokoye@modulusarchitects.com

TYPE OF DEVELOPMENT:_____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE x ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes x No

DEPARTMENT: _____TRAFFIC/TRANSPORTATION x HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
x GRADING PLAN
____ DRAINAGE MASTER PLAN
____ DRAINAGE REPORT
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

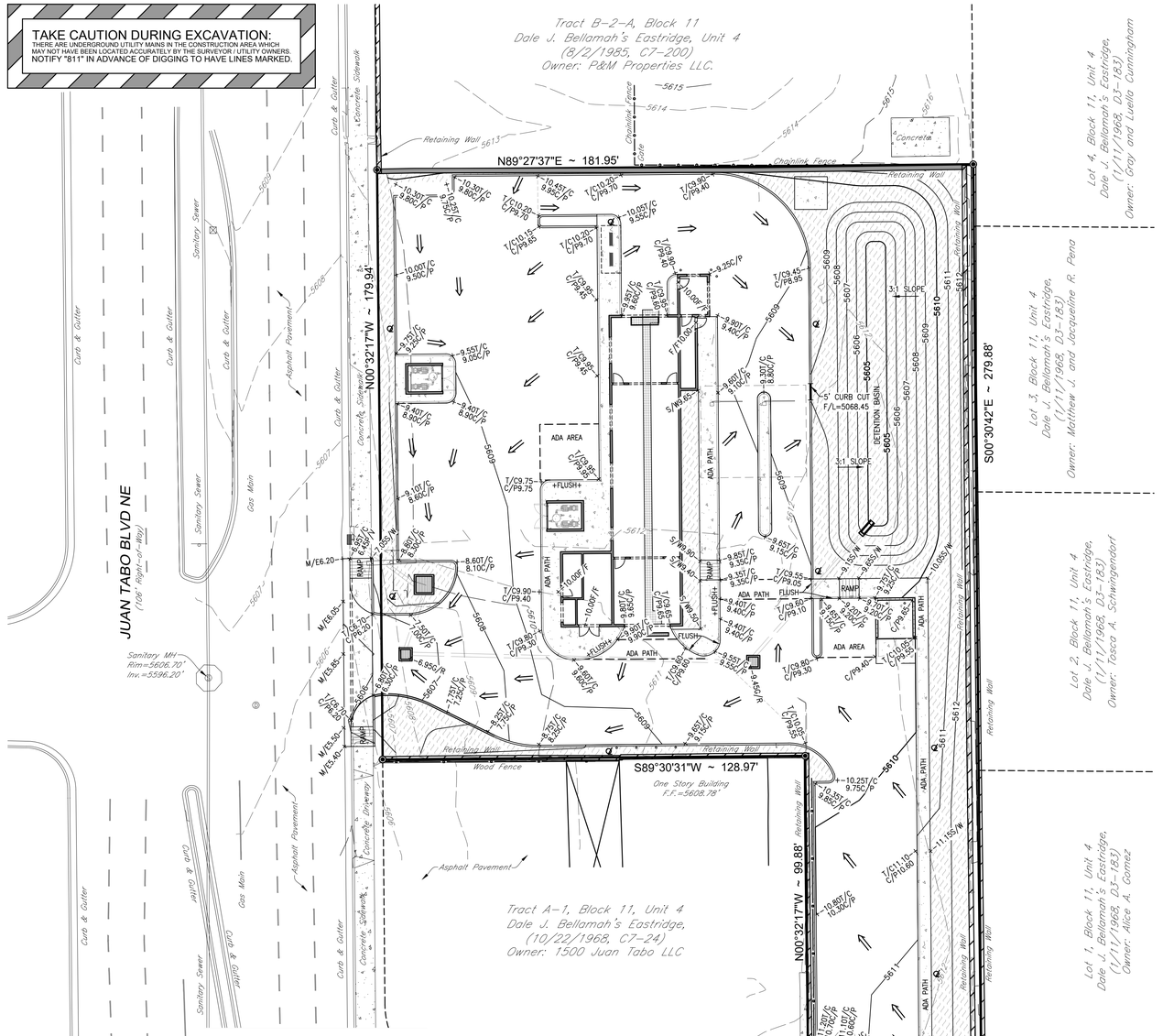
x BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 03/23/2022 By: Andrew Doerfler

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____

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.



City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE 4/1/22
BY:
HydroTrans # J22D031
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO BE A VIOLATION OF ANY PROVISION, ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT. SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

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

PERMITTING CONTACT INFORMATION:

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

UTILITY CONTACT INFORMATION:

SANITARY SEWER / WATER
Albuquerque Bernalillo County Water Utility Authority
Contact: Robert Strong
Telephone: 505.261.4429
Email: rstrong@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

GRAPHIC SCALE
20 0 10 20
1 inch = 20 ft.

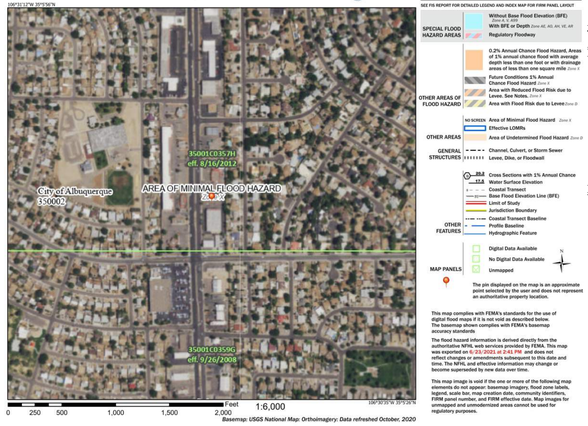
VERTICAL & HORIZONTAL CONTROL:

BM#1: Description: Chiseled 'X' in Sidewalk
Elevation: 5605.91'
BM#2: Description: Chiseled 'X' in Sidewalk
Elevation: 5610.51'

811 Know what's below. Call before you dig.

N W E S

National Flood Hazard Layer FIRMette



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.

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

RYAN JOSEPH MORISSET
NEW MEXICO
25323
PROFESSIONAL ENGINEER
3/18/2022

Item	Description	Date

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: 937-388-9060 | 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: 03.18.2022

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")

1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division.
2. An excavation permit will be required before beginning any work within City Right-of-Way.
3. 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.
4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [of (505) 260-1990] for the location of existing utilities.
5. Prior to construction, the contractor shalle xcavate 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.
6. Backfill compaction shall be 95%.
7. Maintenance of the facility shall be the responsibility of the owner of the property being served.
8. Work on arterial streets may be required on a 24-hour basis.
9. For excavation and barricading inspections, contact DMD Construction Services Division.

STORM WATER MANAGEMENT NOTES:

Existing Lot Coverage - 100% impervious (20% Free Discharge)
Proposed Lot Coverage - 75% impervious / 25% landscaping

Net Decrease in Storm Water Runoff due to Development

Methodology:
Albuquerque Development Process Manual
Chapter 6, 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)
Q_{100} = 3.42 cfs
WQv = 618 cu-ft (required)

Q_{100} = 1.95 cfs (proposed)

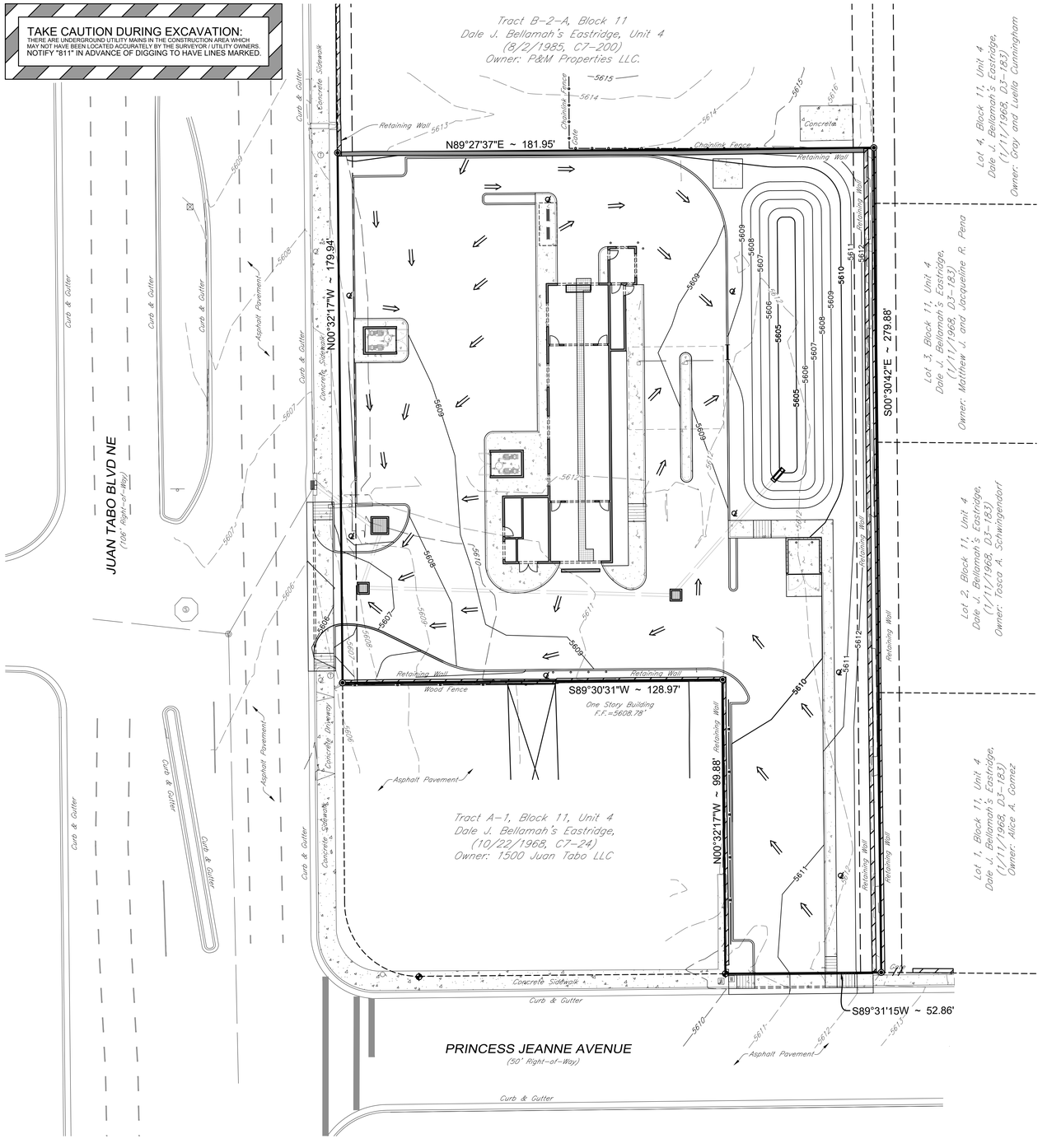
Provided Water Quality Storage Volume:

Elevation (ft)	Contour Area (sq-ft)	Incremental Vol. (cu-ft)	∑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

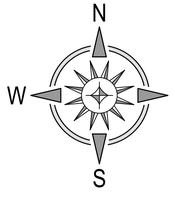
*Average End Area Method used to calculate storage volumes.

Stage Storage Discharge Summary:

Elevation (ft)	Storage Volume (sq-ft)	Discharge (cu-ft)	
5604	10	0	
5605	264	0.03	
5605.55	709	0.14	Water Quality Volume
5606	1,073	0.76	
5607	2,506	1.58	
5608	4,625	6.89	
5609	7,482	7.91	



GRAPHIC SCALE
20 0 10 20
1 inch = 20 ft.



Detention Basin Performance Summary:

Storm (yr)	Allowable (cfs)	Inflow (cfs)	Outflow (cfs)	Max Elevation (ft)	Storage Volume (cu-ft)
1	0.54	0.86	0.13	5605.64	781
2	0.70	1.22	0.61	5605.90	988
5	0.91	1.70	0.91	5606.13	1,254
10	1.08	2.08	1.07	5606.29	1,489
25	1.30	2.60	1.25	5606.52	1,818
50	1.47	3.00	1.39	5606.70	2,076
100	1.65	3.42	1.51	5606.90	2,355

Know what's below. Call before you dig.

VERTICAL & HORIZONTAL CONTROL:

BM#1: Description: Chiseled 'X' in Sidewalk
Elevation: 5605.91'
BM#2: Description: Chiseled 'X' in Sidewalk
Elevation: 5610.51'

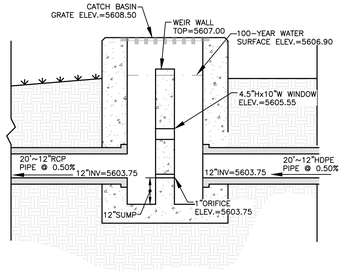
Curb Cut Capacity
Q = C*L*H^(2/3)
Q = Flow Rate (capacity)
C = 2.7
L = 5'
H = 0.5" (top of curb)
Q = 8.50 ft³/sec

Drainage Structure Orifice
Q = C*A*sqrt(2*g*h)
C = 0.611
A = 1"
h = 0.9' = (5605.55-5603.75)/2
Q = 0.39 ft³/sec

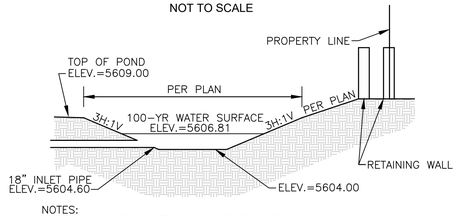
Drainage Structure Weir
Q = C*L*H^(2/3)
C = 2.7
L = 5'
H = 1.5' (top of weir to grate)
Q = 17.69 ft³/sec

GENERAL GRADING, EARTHWORK & DRAINAGE NOTES

1. 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.
2. 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.
3. 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.
4. The Contractor will be responsible for all safety requirements and for the protection of all existing and proposed utilities or structures during earthwork procedures.
5. 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.
6. The Contractor shall provide construction dewatering as necessary to complete construction as outlined in plans.
7. 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.
8. 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.
9. The Contractor shall provide positive drainage in all areas and away from all buildings.
10. 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.
11. 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.
12. The Contractor shall adjust tops/lids/grates of all cleanouts, manholes, inlets, valves, etc. to match final grade.
13. 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.
14. 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.
15. Refer to the Architectural and Structural Plans for information regarding any perimeter foundation drains.
16. 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

RYAN JOSEPH MORISSEY
NEW MEXICO
25323
PROFESSIONAL ENGINEER
3/18/2022

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

BURKHARDT
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Sheet: GRADING & DRAINAGE NOTES AND DETAILS

Sheet No.: C-3.1