

# CITY OF ALBUQUERQUE

Planning Department  
Brennon Williams, Director



Mayor Timothy M. Keller

June 15, 2021

Jesus Lopez, P.E.  
Respec  
5971 Jefferson St. NE  
Albuquerque, NM 8710

**RE: Cottonwood Crossing Car Wash  
10084 Coors Blvd NW  
Conceptual Grading & Drainage Plan  
Engineer's Stamp Date: 06/15/21  
Hydrology File: B14D010C**

Dear Mr. Lopez:

PO Box 1293

Based upon the information provided in your submittal received 05/21/2021, the Conceptual Grading & Drainage Plan is approved for action by the DRB on Site Plan for Building Permit.

Albuquerque

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](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

NM 87103

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

[www.cabq.gov](http://www.cabq.gov)

Sincerely,

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 (REV 11/2018)

**Project Title:** \_\_\_\_\_ **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_

**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_

**Legal Description:** \_\_\_\_\_

**City Address:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Owner:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**TYPE OF SUBMITTAL:** \_\_\_\_\_ PLAT (\_\_\_\_# OF LOTS) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE \_\_\_\_\_ ADMIN SITE

**IS THIS A RESUBMITTAL?:** \_\_\_\_\_ Yes \_\_\_\_\_ No

**DEPARTMENT:** \_\_\_\_\_ TRAFFIC/ TRANSPORTATION \_\_\_\_\_ HYDROLOGY/ DRAINAGE

Check all that Apply:

### TYPE OF SUBMITTAL:

- \_\_\_\_\_ ENGINEER/ARCHITECT CERTIFICATION
- \_\_\_\_\_ PAD CERTIFICATION
- \_\_\_\_\_ CONCEPTUAL G & D PLAN
- \_\_\_\_\_ 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:

- \_\_\_\_\_ 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:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_





Legend:

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED SLOPE ARROW
- PROPERTY LINE
- RETAINING WALL

ALL SPOT ELEVATIONS ARE AT FLOWLINE UNLESS OTHERWISE NOTED IN THE PLANS.

- |              |                          |
|--------------|--------------------------|
| — 90.25      | FLOWLINE ELEVATION       |
| — TC 90.25   | TOP OF CURB ELEVATION    |
| — BC 90.25   | BOTTOM OF CURB ELEVATION |
| — FF = 90.25 | FINISHED FLOOR ELEVATION |

TRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING DRY AND WET UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY OWNER OF ANY ISSUES. UTILITY RELOCATION MAY BE REQUIRED.

PARKING LOT STRIPING HAS BEEN SCREENED BACK FOR VISUAL CLARITY

GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS.

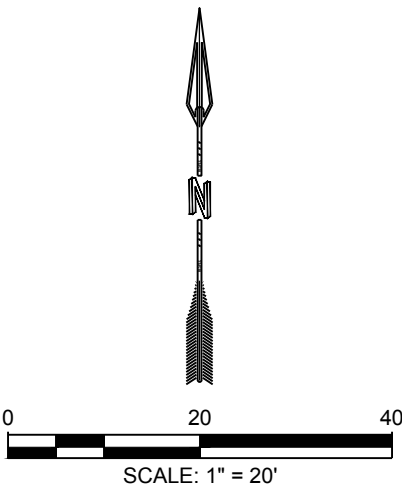
GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.




REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE WITH APPLICABLE REGULATIONS.

PROVIDE TEMPORARY GRADING FEATURES SUCH AS BERMS, SWALES, DUMPS AND BASINS TO MANAGE INTERIM STORM WATER RUNOFF DURING CONSTRUCTION PROCESS. STORM WATER RUNOFF LEAVING THE SITE SHALL MEET ALL FEDERAL, STATE AND LOCAL QUALITY REQUIREMENTS.

ALL DISTURBED AREAS TO BE RE-SEED PER LANDSCAPE PLAN PROVIDED BY OTHERS.

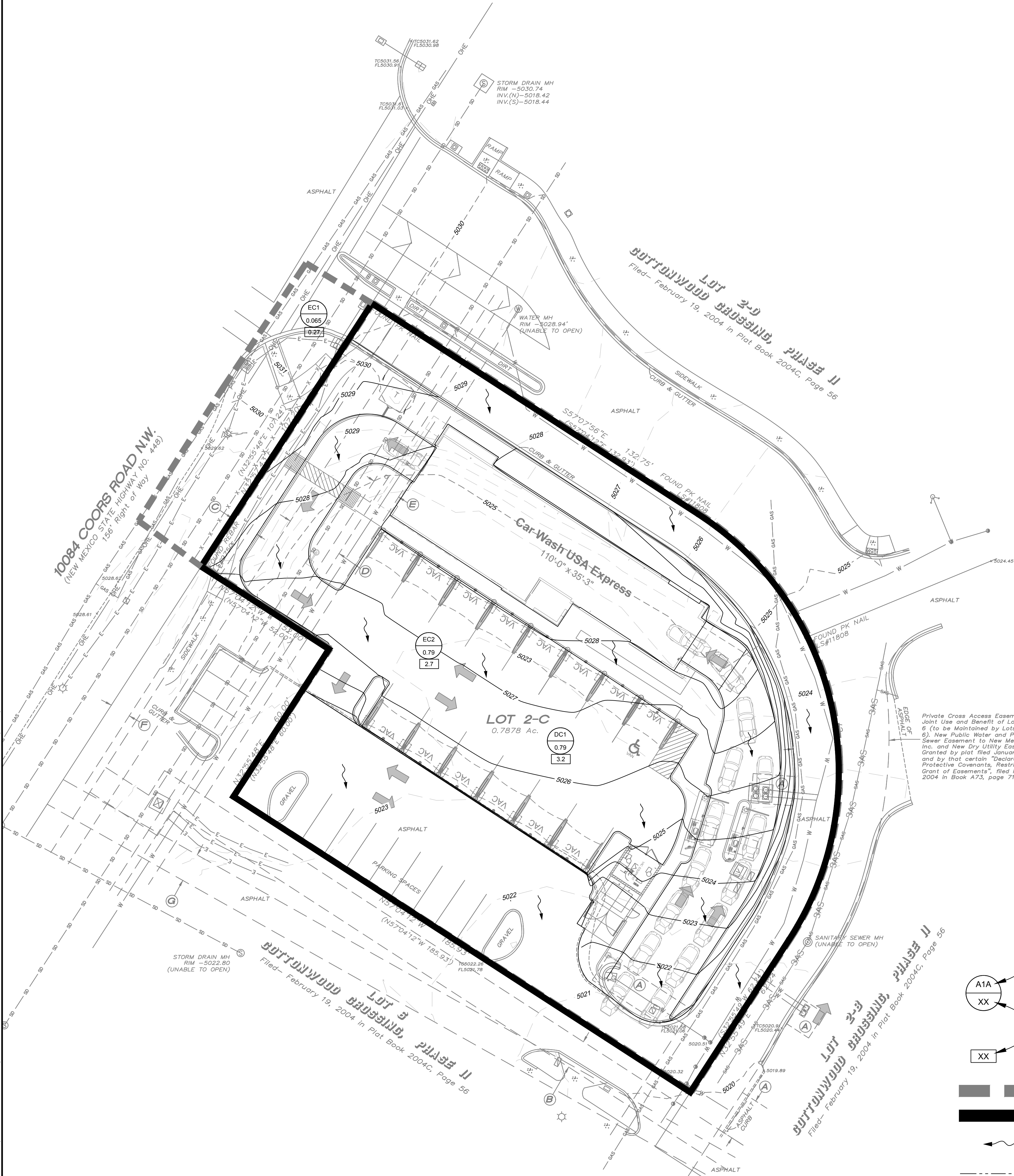
ALL AREAS WITH SLOPES GREATER THAN 3:1 SHALL BE LANDSCAPED WITH 3:4 MINUS ALL FINE FRACTURED GRAVEL AND SEPARATION FABRIC.



DESIGNED HF	DRAWN AR	CHECKED JL	DATE 6.15.2021	REVISION
<b>RESPEC</b> COMMUNITY DESIGN SOLUTIONS 5875 ALPHEGON STREET SUITE 101 SAN JOSE, CA 95128 WWW.RESPEC.COM PHONE: (950) 933-9118				
				
STAMP				
				
THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED				
				
PROJ. #: W0032.31002				
PROJECT NAME:				
COTTONWOOD CROSSING				
CAR WASH				
GRADING PLAN				
REVIEW				
SHEET NUMBER:				
C-101				



NAME: N:\Projects\W0032 M3 Design\W0032-21002 M3 Cottonwood Commons Car Wash.dwg PLOT DATE: Jun 15, 2021 10:21am



- LEGEND**
- A1A BASIN DESIGNATION
  - XX BASIN AREA, ACRES
  - XX 100 YEAR STORM, CFS
  - EXISTING SUB-BASIN BOUNDARY
  - PROPOSED SUB-BASIN BOUNDARY
  - DIRECTION OF DRAINAGE FLOW
  - PROPERTY LINE

#### BACKGROUND

10084 COORS BLVD NORTHWEST IS APPROXIMATELY 0.788 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THIS LOCATION IS AT THE SOUTHEAST CORNER OF COORS BLVD AND SEVEN BAR LOOP ROAD NORTHWEST. THE INTENT FOR THIS PROPERTY IS TO BE USED AS A CAR WASH. THERE IS NO DESIGNATED 100-YR FLOOD ZONE SHOWN ON THE SITE.

#### METHODOLOGY

HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) SECTION 6-2 USING THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS TO CALCULATE PEAK FLOW RATES FOR THE 100-YEAR, 24-HOUR STORM TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. WATER QUALITY IS ACCOUNTED FOR THROUGH THE PAYMENT-IN-LIEU OPTION PER SECTION 6-12(C)(1) IN THE DPM. ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

#### EXISTING CONDITIONS

THE EXISTING SITE IS PARTIALLY UNDEVELOPED WITH LOW VEGETATIVE COVER AND SEVERAL DISTURBED AREAS. THE SOUTH AREA OF THE SITE IS PAVED AND IN USE FOR PARKING. THE SITE, IN GENERAL, SLOPES FROM THE NORTH/NORTHWEST TO THE SOUTHEAST CORNER TOWARD AT APPROXIMATELY 1.5-3%. STORM WATER RUNOFF GENERATED IN THE EXISTING AREA FLOW GENERALLY TO THE SOUTHEAST, WITH EVENTUAL DISCHARGE INTO THE DRAINAGE POND INSTALLED IN THE "COTTONWOOD CROSSING PHASE II". THE SITE HAS BEEN DIVIDED INTO BASIN EC1 FOR ROW FLOWS AND EC2 FOR SITE FLOWS.

SUB-BASIN EC1 IS 0.788 ACRES AND SUB-BASIN EC2 IS 0.065 ACRES. THE EXISTING FLOW FOR EC2 IS 2.7 CFS. THE RUNOFF FREE DISCHARGES AT THE SOUTHEAST CORNER OF THE SITE TO THE POND LOCATED SOUTHEAST OF THE SITE VIA EXISTING SURFACE FLOWS.

#### DEVELOPED CONDITIONS

THE DRAINAGE INTENTION OF THE DEVELOPED CONDITIONS IS TO MATCH THE EXISTING DRAINAGE PATTERN WITH FREE DISCHARGE. USING THE COTTONWOOD CROSSING PHASE II DRAINAGE REPORT AS REFERENCE, THERE IS ALLOWED FREE DISCHARGE TO THE DOWNSTREAM POND. THE NEW CAR WASH WILL BE CONSTRUCTED, PRESERVING THE EXISTING PARKING LOT ON THE SITE. DEVELOPED FLOWS INCREASE FROM 2.7 TO 3.2 CFS.

SUB-BASIN DC1 IS 0.788 ACRES AND GENERATES 3.2 CFS WHICH IS CONVEYED TO THE SOUTHEAST CORNER OF THE SITE VIA SHEET FLOW. CALCULATIONS FOR THE DEVELOPED CONDITIONS ARE SHOWN BELOW.

#### Hydrology Calculations

The following calculations are based on Albuquerque's Development Process Manual, Section 6-2(A), using the 100-year, 24-hour design storm

Runoff Rate:

Treatment Type Areas

Subbasin	Area <sub>a</sub> (ac)	Area <sub>b</sub> (ac)	Area <sub>c</sub> (ac)	Area <sub>d</sub> (ac)	Total (ac)
EC1	0.00	0.00	0.00	0.07	0.07
EC2	0.00	0.00	0.47	0.32	0.79
DC1	0.00	0.00	0.07	0.72	0.79

Peak Discharge values based on Zone 1, Table 6.2.14

Q<sub>a</sub> = 1.54 cfs/ac    Q<sub>b</sub> = 2.16 cfs/ac    Q<sub>c</sub> = 2.87 cfs/ac    Q<sub>d</sub> = 4.12 cfs/ac

Peak Discharge calculation for a 100-yr, 24-hr storm event from equation 6.6

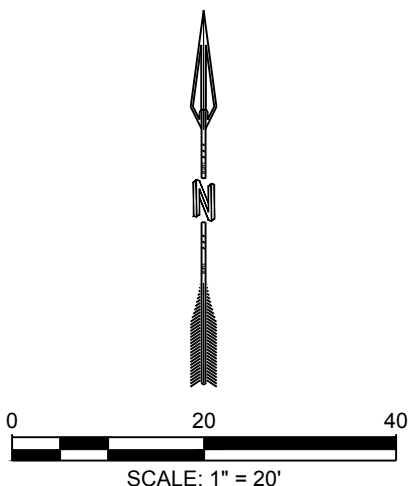
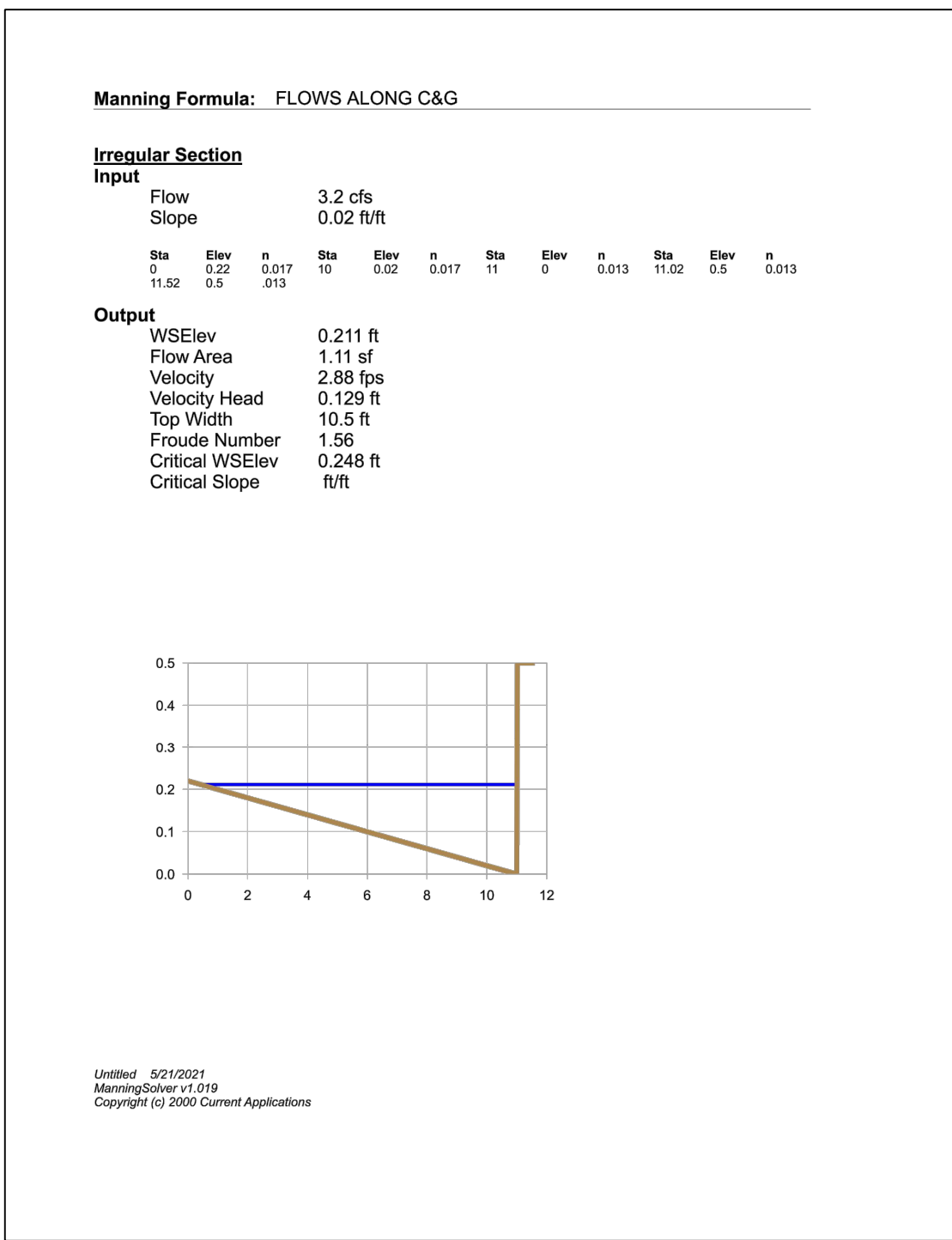
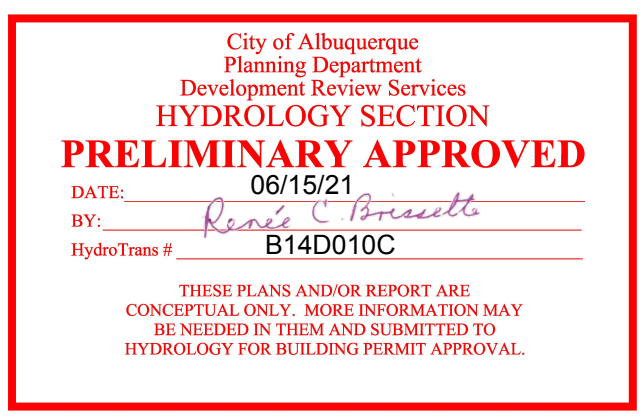
Subbasin	Discharge (cfs)
EC1	0.3
EC2	2.7
DC1	3.2

Subbasin	Volume (cu. ft.)
EC1	N/A
DC1	678

#### STORMWATER QUALITY CALCULATIONS

IMPERVIOUS AREA = 0.72 ACRES X 0.42" DEPTH = 1098 CF

PAYMENT IN LIEU = \$8/CF X 1098 = \$8784



DESIGNED HF	DRAWN AR	CHECKED JL	DATE	REVISION
RESPEC	RESPEC	RESPEC	6.15.2021	
COMMUNITY DESIGN SOLUTIONS	COMMUNITY DESIGN SOLUTIONS	COMMUNITY DESIGN SOLUTIONS	COMMUNITY DESIGN SOLUTIONS	COMMUNITY DESIGN SOLUTIONS
5971 JEFFERSON STREET SUITE 101	5971 JEFFERSON STREET SUITE 101	5971 JEFFERSON STREET SUITE 101	5971 JEFFERSON STREET SUITE 101	5971 JEFFERSON STREET SUITE 101
ALBUQUERQUE, NM 87111	ALBUQUERQUE, NM 87111	ALBUQUERQUE, NM 87111	ALBUQUERQUE, NM 87111	ALBUQUERQUE, NM 87111
WWW.RESPEC.COM	WWW.RESPEC.COM	WWW.RESPEC.COM	WWW.RESPEC.COM	WWW.RESPEC.COM
PHONE: (505) 253-9718	PHONE: (505) 253-9718	PHONE: (505) 253-9718	PHONE: (505) 253-9718	PHONE: (505) 253-9718
STAMP	STAMP	STAMP	STAMP	STAMP
PROJ. #	PROJ. #	PROJ. #	PROJ. #	PROJ. #
W0032.31002	W0032.31002	W0032.31002	W0032.31002	W0032.31002
PROJECT NAME:	PROJECT NAME:	PROJECT NAME:	PROJECT NAME:	PROJECT NAME:
COTTONWOOD CROSSING CAR WASH	COTTONWOOD CROSSING CAR WASH	COTTONWOOD CROSSING CAR WASH	COTTONWOOD CROSSING CAR WASH	COTTONWOOD CROSSING CAR WASH
SHEET TITLE:	SHEET TITLE:	SHEET TITLE:	SHEET TITLE:	SHEET TITLE:
DRAINAGE PLAN	DRAINAGE PLAN	DRAINAGE PLAN	DRAINAGE PLAN	DRAINAGE PLAN
SUBMITTED FOR:	SUBMITTED FOR:	SUBMITTED FOR:	SUBMITTED FOR:	SUBMITTED FOR:
REVIEW	REVIEW	REVIEW	REVIEW	REVIEW
SHEET NUMBER:	SHEET NUMBER:	SHEET NUMBER:	SHEET NUMBER:	SHEET NUMBER:
C-102	C-102	C-102	C-102	C-102