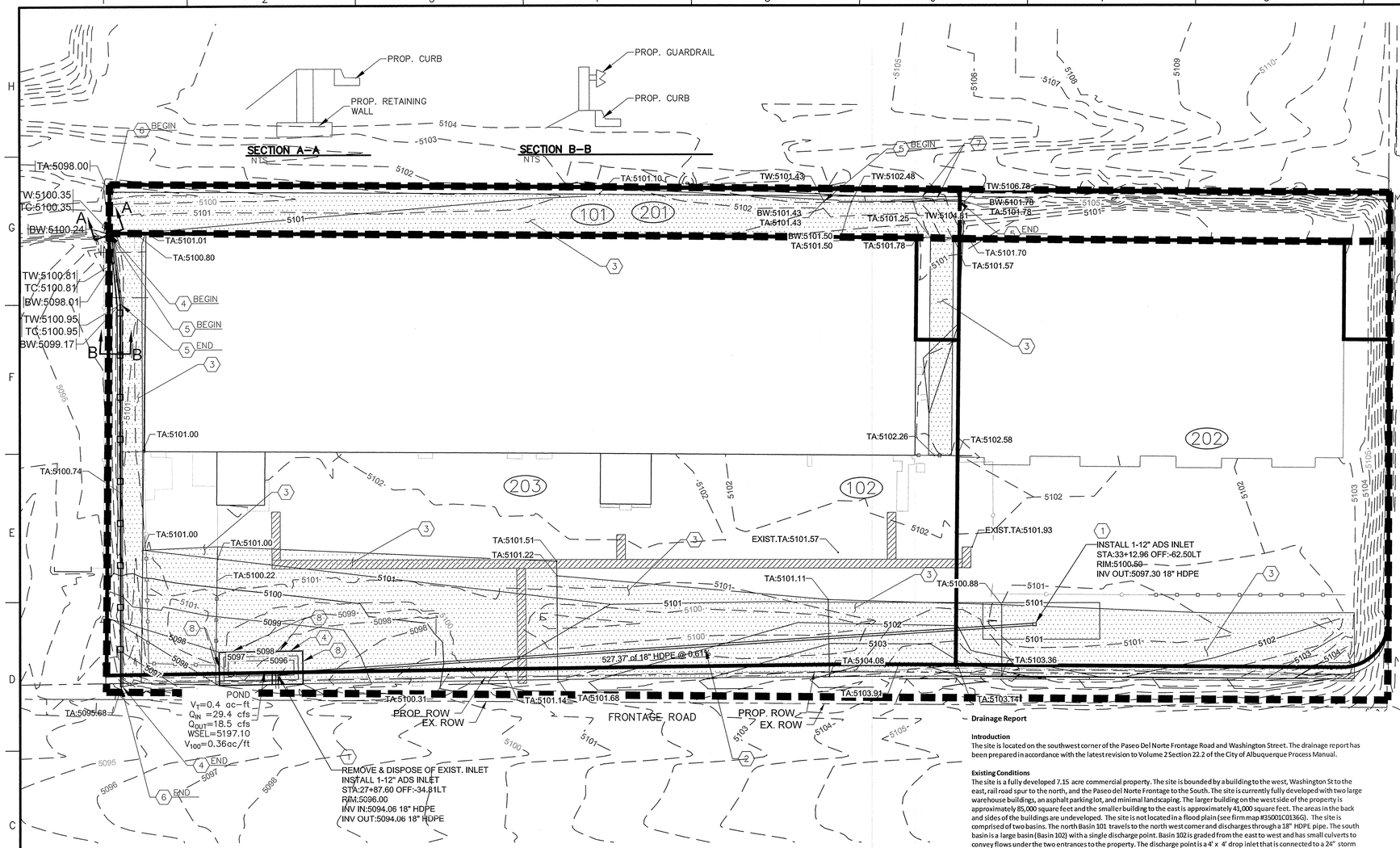


LEGEND

- EX. BOLLARD
- ELEC. PED. — EX. ELECTRICAL PED.
- EX. FENCE
- GAS — EX. GAS
- UG COMM. LN. — EX. UNDERGROUND COMM
- 5100 — EX. MAJOR CONTOUR
- EX. INTERMEDIATE CONTOUR
- EX ROW LINE
- PROPOSED ASPHALT
- PROPOSED FENCE
- PROPOSED BOLLARDS
- PROP. ROW LINE
- PROP. RETAINING WALL
- EX. BASIN BOUNDARY
- PROP. BASIN BOUNDARY
- 101 — EX. BASIN BOUNDARY I.D.
- 201 — PROP. BASIN BOUNDARY I.D.

KEYNOTES

1. INSTALL 1–12" ADS INLET PER DETAIL SHEET C–501
2. INSTALL 18" HDPE STORM DRAIN PIPE.
3. INSTALL 4" ASPHALT SECTION PER DETAIL SHEET C–501
4. INSTALL MEDIAN CURB AND GUTTER PER STD DWG 2415A
5. INSTALL RETAINING WALL PER DETAIL SHEET C–501
6. INSTALL GUARDRAIL PER DETAIL SHEET C–501
7. PROTECT EXISTING POWER POLE DURING CONSTRUCTION.
8. INSTALL CURB CUTS PER DETAIL SHEET C–502

Drainage Report

Introduction
The site is located on the southwest corner of the Paseo Del Norte Frontage Road and Washington Street. The drainage report has been prepared in accordance with the latest revision to Volume 2 Section 22.2 of the City of Albuquerque Process Manual.

Existing Conditions
The site is a fully developed 7.15 acre commercial property. The site is bounded by a building to the west, Washington St to the east, rail road spur to the north, and the Paseo del Norte Frontage to the South. The site is currently fully developed with two large warehouse buildings, an asphalt parking lot, and minimal landscaping. The larger building on the west side of the property is approximately 85,000 square feet and the smaller building to the east is approximately 41,000 square feet. The areas in the back and sides of the buildings are undeveloped. The site is not located in a flood plain (see firm map #35001C0136G). The site is comprised of two basins. The north Basin 101 travels to the north west corner and discharges through a 18" HDPE pipe. The south basin is a large basin (Basin 102) with a single discharge point. Basin 102 is graded from the east to west and has small culverts to convey flows under the two entrances to the property. The discharge point is a 4' x 4' drop inlet that is connected to a 24" storm drain on the south side of Paseo del Norte running parallel to the roadway. This storm drain has a capacity of 20 cfs.

Proposed Conditions
The proposed Paseo Del Norte and Jefferson grade seperation is requiring right-of-way takes from properites immediately surrounding the intersection. Parcel 1-3 will will be affected by the new frontage road being placed to the south of the property and will encounter a right-of-way loss from 12' to 24'. Improvements to the site include a new parking lot design and additional parking behind the larger building to the west and will have asphalt paving on both sides of the buildings. The basin to the north (Basin 201) will slightly increase in size and continue to drain to the North west corner. Basin 102 will be split into two basins, The east will be Basin 202 and the east side will be basin 203. Basin 202 will drain to a new inlet that will connect to the existing storm drain system on the west side of the lot. Basin 203 will continue to drain to the same outlet point as the existing conditions. The existing inlet will remain and will be adjusted to the proposed grade. The pipe that is connected to the storm drain inlet has a capacity of 20 cfs. A small 0.4 ac-ft pond will be installed at the outlet to get the peak flow under 20 cfs, the peak discharge will enter the storm drain at a rate of 18.5 cfs.

Conclusion
The site improvements will increase the amount of impervious areas; however, due to the right-of-way takes the area draining to the outlet is decreased by 0.4 acres. Due to the loss of area, the peak flow being discharged from the property does not increase. The existing storm drain system with the adjusted inlet will be sufficient to carry the sites flows.

Calculations
The Calculations shown below represent the flows for a 100-year 6-hour design event. The hydrology is per the "Section 22.2 of the Development Process Manual for the City of Albuquerque, New Mexico, latest revision."

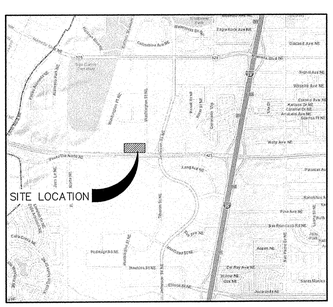
Basin Data: COA Zone: 2
Precip, in: 2.35

Existing Conditions

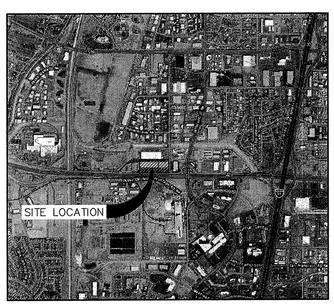
Basin	Total Area (Ac)	A %	A Ac	B %	B Ac	C %	C Ac	D %	D Ac	Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6_{hr}, acre-ft)	Volume (24_{hr}, acre-ft)	Volume (10_{day}, acre-ft)
101	0.700	0	0	0	0	18	0.13	82	0.57	3.1	1.94	0.1133	0.1353	0.1836
102	6.450	0	0	0	0	18	1.16	82	5.29	28.5	1.94	1.0437	1.2465	1.6916

Proposed Conditions

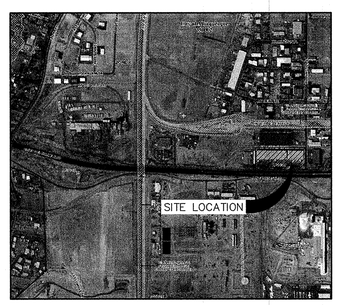
Basin	Total Area	A %	A Ac	B %	B Ac	C %	C Ac	D %	D Ac	Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6_{hr}, acre-ft)	Volume (24_{hr}, acre-ft)	Volume (10_{day}, acre-ft)
201	0.800	0	0.00	0	0.00	5	0.04	95	0.76	3.7	2.07	0.1380	0.1672	0.2311
202	2.150	0	0.00	0	0.00	5	0.11	95	2.04	9.9	2.07	0.3710	0.4493	0.6212
203	4.050	0	0.00	0	0.00	5	0.20	95	3.85	18.7	2.07	0.6988	0.8463	1.1701



LOCATION MAP
ZONE ATLAS MAP NO. C–17



SOILS MAP
REFERENCE: NRCS BERNALILLO COUNTY SOIL SURVEY



FLOOD INSURANCE MAP
REFERENCE: FLOOD INSURANCE STUDY
PANEL 35001C0136G

1"=40'

WILSON & COMPANY
2600 THE AMERICAN RD. SE SUITE 100
RIO RANCHO, NM 87124
PHONE: 505–898–8021
FAX: 505–898–8501
www.wilsonco.com

CONSULTANTS

SEAL
JEFFREY J. JENTON
NEW MEXICO
16205
LICENSED PROFESSIONAL ENGINEER
2-20-15

PROJECT NAME
PARCEL 1-3
PARKING LOT
RECONSTRUCTION

REV.	DATE	DESCRIPTION	BY

PROJECT NO:	
DESIGNED BY:	JLL
DRAWN BY:	JLL
CHECKED BY:	TJA
DATE:	JAN 2015

SHEET TITLE
GRADING PLAN

SHEET NO:
C-102

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