Planning Department
Alan Varela, Interim Director



January 26, 2022

Lauren Nuffer, P.E. Kimley-Horn 13455 Noel Road Two Galleria Office Tower Suite 700 Dallas, TX 75024

RE: Raising Cain's C0705 2004 Wyoming Blvd NE

Grading and Drainage Plan

Engineer's Stamp Date: 12/15/2022 (Invalid – Please correct)

**Hydrology File: H20D003D** 

Dear Mr. Engineer Last Name:

Based upon the information provided in your submittal received 12/15/2021, 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:

PO Box 1293

#### SHEET C 6.0

Albuquerque

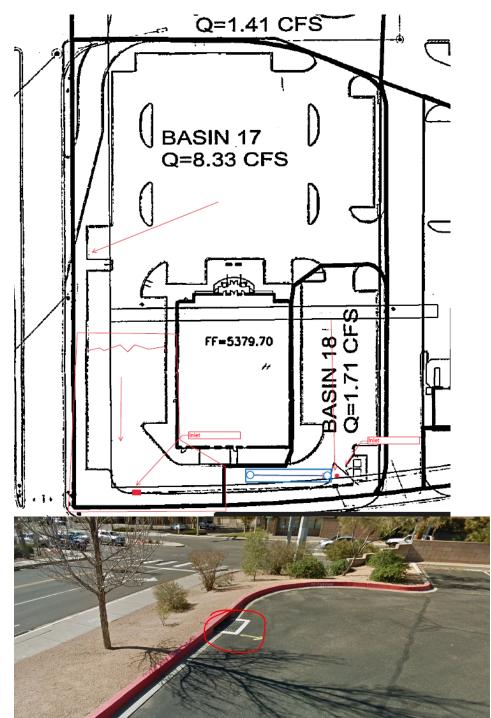
NM 87103

- 1. Please provide containment for trash enclosures per DPM Chapter 6-12(D)(2
  - a. Section 6-12(D)(2) **Restaurants and Commercial Food Processing** These land uses shall provide a drain in the trash enclosure (i.e. dumpster) pad that drains to the sanitary sewer. On-site stormwater shall not drain onto the trash enclosure pad, and the pad shall be graded to the drain. A berm around the pad may be required to ensure that stormwater runoff from the site will not mix with stormwater falling on the trash enclosure pad.
- 2. Please see engineer stamp date and revise with new corrected stamp date. It is currently dated 12/15/2022 and correctly reference the correct year.
- 3. The legal description notes that there is a lease agreement that shows the Raising Cane's site however the south portion of the lot needs to also be included on the G&D and should include interim grading conditions that will include a silt pond prior to drainage into the public storm system.
- 4. Please see existing inlets for south portion of the lot. I assume they will be utilized for future plans. Please note to protect in place.

Planning Department Alan Varela, Interim Director



Mayor Timothy M. Keller



PO Box 1293

Albuquerque

NM 87103

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- 5. Please include the DPM calculations and information on the G&D Sheet to include existing vs. proposed and the narrative summary. Please note existing instead of predevelopment as the site is actually developed but is be redeveloped for different use.
- Provide a Storm Water Quality pond (s) once these calculations have been completed as required per the DPM Chapter 6. Also complete the drainage covenant for the ponds. (attached)
- 7. For the south portion of the lot, include an interim grading plan that includes a silt pond prior to draining into the existing storm system.
- 8. 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.)".
- 9. Please provide the FIRM Map and floodplain note with effective date.
- 10. Please include project benchmark and datum.
- 11. Per the DPM Chapter 6, 24"x36" is currently the City's standard. This applies to all site plans, Grading & Drainage Plans, Traffic Circulation Plans, DRC Plans etc. Please resubmit with this plan size.
- 12. Please provide the SWQV calculations for each basin draining to each pond. The stormwater quality ponds need to be sized for the areas draining to them.
- 13. Payment in Lieu (Amount = 207CF x \$8/CF = \$1656, per sheet C-002) of onsite management of the SWQV must be made. Take three copies of the treasury deposit slip to the Treasury and then include one copy of the paid deposit slip when resubmitting.
  - a. If SWQV cannot be met onsite this potential solution but approval may not be given. Please fill out the application attached if this is desired.
- 14. Include details about historical flows (existing) and proposed and the difference between the two based on DPM calculations.

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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 924-3695 or dggutierrez@cabq.gov

Sincerely,

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

Die Gul

PO Box 1293

Albuquerque

NM 87103



# City of Albuquerque

## Planning Department

## Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2018)

Project Title:	Building	Permit #:	Hydrology File #:		
DRB#:	EPC#:		Work (	Order#:	
Legal Description:					
City Address:					
Applicant:			Contact		
Address:Phone#:					
Other Contact:					
Address:				_	
Phone#:					
TYPE OF DEVELOPMENT:	PLAT (# of lots)	RESIDENCE _	DRB SITE	ADMIN SITE	
IS THIS A RESUBMITTAL? Y					
<b>DEPARTMENT:</b> TRAFFIC/TI		HYDROLOG	Y/DRAINAGE		
Check all that Apply:				PTANCE SOUGHT:	
TYPE OF SUBMITTAL:  ENGINEER/ARCHITECT CER' PAD CERTIFICATION  CONCEPTUAL G & D PLAN  GRADING PLAN  DRAINAGE MASTER PLAN  DRAINAGE REPORT  FLOODPLAIN DEVELOPMEN' ELEVATION CERTIFICATE  CLOMR/LOMR  TRAFFIC CIRCULATION LAY TRAFFIC IMPACT STUDY (TI OTHER (SPECIFY)  PRE-DESIGN MEETING?	T PERMIT APPLIC OUT (TCL)	CERTI PRELI SITE P SITE P SITE P FINAL SIA/ R FOUNI GRAD SO-19 PAVIN GRAD WORK CLOM FILOOI	PLAT APPROVALELEASE OF FINANDATION PERMIT APPLATED PERMIT APPLATED PERMIT APPROVALING/PAD CERTIFORDER APPROVAL	PANCY PROVAL APPROVAL PERMIT APPROVAL NCIAL GUARANTEE APPROVAL ROVAL ICATION L MENT PERMIT	
DATE SUBMITTED:	By:				

FEE PAID:\_\_\_

#### **LEGAL DESCRIPTION**

A lease site lying and situate within Section 8, Township 10 North, Range 4 East, N.N.P.M. City of Albuquerque, Bernalillo Bounty, New Mexico, comprising of a portion of Parcel 5-A, Wyoming Mall, as the same is shown and designated on the plat thereof filed in the office of the County Clerk of Bernalillo County, New Mexico on April 2, 2007, in Map Book 2007C, Page 80, said lease site being more particularly described by New Mexico State Plane Coordinate System grid bearings (NAD 83-Central Zone) and ground distances (US Survey Feet) as follows;

Beginning at the southeast corner of described lease site, marked by a set no. 5 rebar with pink plastic cap "PS 11993", from whence a tie to A.G.R.S. Monument "14\_H20" bears N 30°13'01" E, a distance of 2036.60 feet;

Thence from said point of beginning, N 89°51′54″ W, a distance of 247.22 feet to the southwest corner of described lease site, lying on the east right of way line of Wyoming Boulevard, N.E., marked by a set no. 5 rebar with pink plastic cap "PS 11993".;

Thence along said east Right of Way line, N 13°51'57" E, a distance of 117.58 feet to an angle point, marked by a set chiseled "X";

Thence continuing along said east Right of Way line, N 00°08'06" E, a distance of 84.18 feet to the northwest corner of described lease site, marked by a found PK nail with washer "PS14269";

Thence leaving said east Right of Way line, S 89°51′54" E, a distance of 136.27 feet to an angle point, marked by a set PK nail with washer "PS 11993";

Thence S 68°28'15" E, a distance of 89.19 feet to the northeast corner of described lease site, marked by a set PK nail with washer "PS 11993";

Thence S 00°08'06" W, a distance of 165.86 feet to the point of beginning, containing 1.0045 acres (43,755 square feet), more or less.

# FINAL DRAINAGE REPORT FOR

## Raising Cane's - Restaurant # RC 705

at 2004 Wyoming Blvd NE Albuquerque, NM 87112

December 15, 2021

PREPARED FOR:
RAISING CANE'S
RESTAURANT SUPPORT OFFICE
6800 BISHOP ROAD
PLANO, TX 75024

PREPARED BY:

KIMLEY-HORN

1000 2ND AVENUE, SUITE 3900

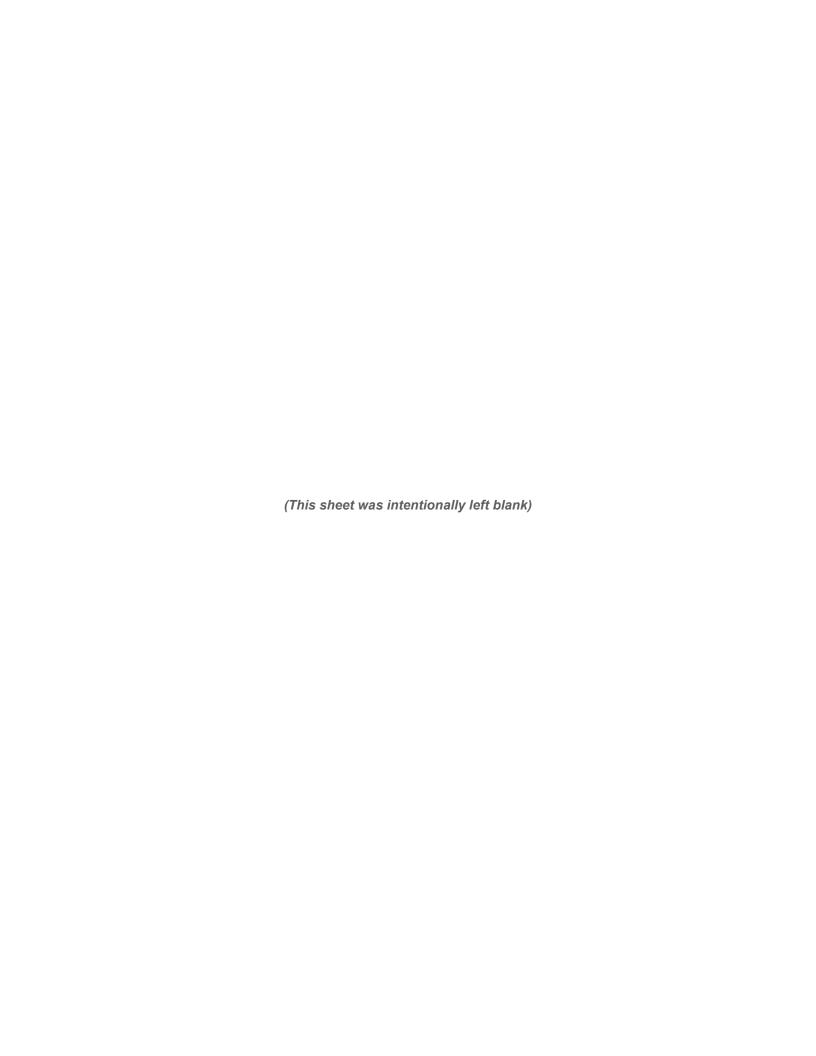
SEATTLE, WA 98104

OFFICE: (206) 667-8610

KHA PROJECT #: 069313444







# **Disclosure Statement:** This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

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#### **EXECUTIVE SUMMARY**

The project is located in the City of Albuquerque on the East side of Wyoming Blvd NE near the intersection with Northeastern Blvd NE. It is currently developed and contains an existing Furr's Buffet Fresh Restaurant. Current zoning is Mixed Use, Medium Density (MX-M), which aligns with what is proposed for the project. Proposed improvements consist of removing the existing 11,637 SF Furrs Building and construction of a new 3,443 SF building with drive-thru, hardscaped patio, and associated improvements. The project will not cause an increase in impervious cover when compared to the existing conditions and will thus generate no additional stormwater runoff. After project completion, existing drainage patterns, point of discharge, and stormwater storage volume will match historical conditions.

#### INTRODUCTION

#### PURPOSE AND SCOPE OF STUDY

The purpose of this Final Drainage Report (FDR) is to provide the hydrologic and hydraulic calculations and to document and finalize the drainage design methodology in support of the proposed Raising Cane's Restaurant ("the Site"). The Site is located within the jurisdictional limits of City of Albuquerque ("the City").

#### PROJECT REQUIREMENTS

The Site was designed in accordance with the City of Albuquerque's Development Process Manual Chapter 6 (*Drainage, Flood Control, and Erosion Control*), Part 6-3(A) (*Procedure for 40 Acre and Smaller Basins*). This section states that the principal design storm is the 100-year event.

All proposed stormwater improvements onsite are private and to tie to an existing public storm system in the Wyoming Boulevard Right-of-Way. The Site is currently developed with a restaurant use and is a part of a retail development which defines drainage patterns and stormwater detention for the whole development.

#### PROJECT DESCRIPTION

#### LOCATION

The Site is located on the east side of Wyoming Blvd NE, approximately 0.03 miles North of the intersection with Northeastern Blvd NE. Currently, the Site is developed as a Furr's Buffet Fresh Restaurant and is located in existing retail development Wyoming Mall.

#### **BACKGROUND DOCUMENTS**

#### PLANNING HISTORY

The Site is currently developed and contains an existing Furr's Buffet Fresh restaurant. It is zoned Mixed Use, Medium Density (MX-M). Current zoning and use align with what is proposed for the Site. The City of Albuquerque has provided copies of records for every approved site plan. Based on this information, the Site has historically always been a restaurant use.

#### DRAINAGE HISTORY AND RELATED DOCUMENTS

The Site and associated retail development historically use a combination of surface and private storm drain conveyance to the south west corner of the site. No documentation was found by the owner and tenant of the retail development or the City detailing a former drainage analysis or a master drainage plan, so assumptions were used to determine existing conditions and mitigation required to provide equivalent storage capacity. Refer to **Existing Conditions** for more details on the assumptions that were made during analysis.

#### **EXISTING CONDITIONS**

#### SITE INVESTIGATION

The Site is currently fully developed, containing a 11,637 SF building with associated parking and landscaping. The site historically surface flows to the south west to two existing inlets on the Site, one on the west side and one on the south side. The existing storm drain inlets discharge into the public storm drain system. The site is located in precipitation zone 3 per the City of Albuquerque's Development Process Manual.

#### Form of Analysis

The proposed development reduces the amount of impervious cover to the project area and decreases the peak discharge leaving the site, refer to **Table 1 - Pre vs Post Development Peak Discharge**.

The Rational Method was used to check existing storm drain capacity. A grate inlet capacity chart was used to check existing inlet capacity and corresponding ponding depth.

#### **Downstream Capacity**

Historically, the point of discharge onsite is an existing catch basin and is conveyed through an existing 36" storm line in Wyoming Blvd NE. The point of discharge will not be changed with the proposed development, and no additional impervious cover is proposed with this project. No adverse effects are anticipated downstream as a result of this development.

#### **DEVELOPED CONDITIONS**

#### ONSITE

Proposed improvements consist of a new 3,443 SF building with drive thru, hardscaped patio, and associated improvements. The proposed site will maintain the historic drainage patterns, utilizing surface conveyances from north to southwest towards Wyoming Blvd NE. Runoff will be captured in the existing catch basin on the west side of the site and conveyed through the existing 36" storm line into Wyoming BLVD NE. See **Appendix A and C** for existing 36" pipe outfall location.

#### **OFFSITE**

The proposed development includes offsite work to modify traffic patterns to accommodate a new drivethru and to connect to existing infrastructure. The proposed curb at the northeast corner of the site will generate minimal additional flow contributing to the existing catch basin at the northern side of the site.

#### **CALCULATIONS**

The peak discharge generated by the site was determined pre and post development using the rational method. The site is located in precipitation zone 3 and a 100-year, 12-minute storm was used to determine the peak discharge from the site see **Table 1 - Pre vs Post Development Peak Discharge** for calculations. The existing western inlet and 36" pipe onsite have been sized to contain the 100-year storm event based on the Peak Discharge Rate found in the City of Albuquerque's Development Process Manual Chapter 6 (*Drainage, Flood Control, and Erosion Control)*, Part 6-3(A) (*Procedure for 40 Acre and Smaller Basins*).

TABLE 1 – PRE VS POST DEVELOPMENT PEAK DISCHARGE

TABLE 1 THE VOT GOT BEVELOT MENT I EAR BIGGINARGE							
Pre-Development Peak Discharge							
Land Condition	Land Treatment	Area	[A]	Intensity [I]	Coefficient [C]	Peak Discharge [Q]	
		SF	Acre	in/hr	CSF/Acre	CFS	
Pavement/Building (D)	98	39,197	0.90	4.96	0.91	4.06	
Landscape (A)	77	4,558	0.10	4.96	0.37	0.19	
		43,755	1.00			4.25	
	F	Post-Developr	nent Peak	Discharge			
Land Condition	Land Treatment	• •		Intensity [I]	Coefficient [C]	Peak Discharge [Q]	
		SF	Acre	in/hr	CSF/Acre	CFS	
Pavement/Building (D)	98	38,543	0.88	4.96	0.91	3.99	
Landscape (A)	77	5,212	0.12	4.96	0.37	0.22	
==:::a:===ip= (/ i)		- ,					

The proposed development will decrease the amount of impervious cover when compared to the existing conditions and will thus decrease the peak discharge generated by the site.

Refer to **Appendix B** for all calculations.

#### CONCLUSION

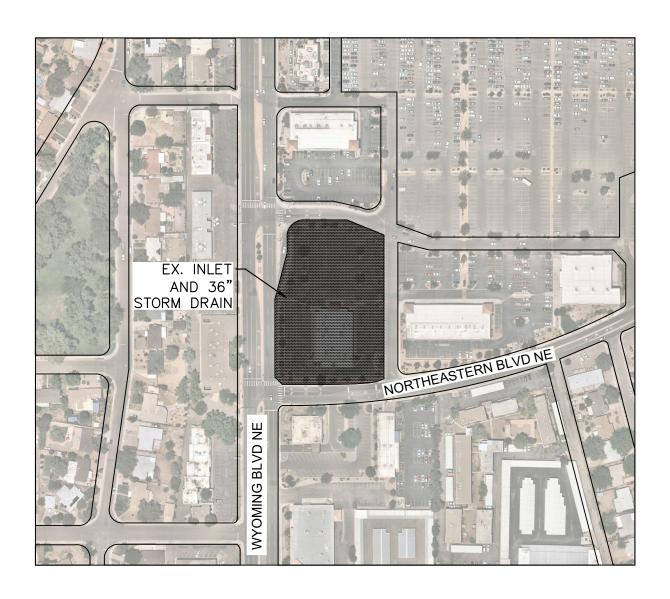
The proposed development will maintain the historic drainage patterns, point of discharge, and stormwater storage volume. The proposed development will decrease the amount of impervious cover when compared to the existing conditions and will thus decrease the peak discharge generated by the site. The site will continue to drain southwest towards Wyoming Blvd NE. Any offsite flows entering the eastern parking lot via curb cuts will continue to do so. No adverse effects are anticipated downstream as a result of this development.

#### **REFERENCES**

1. City of Albuquerque "Development Process Manual" (DPM) dated June 2020.

### **APPENDIX A: MAPS**

**VICINITY MAP** 



Vicinity Map NTS





## **APPENDIX B: CALCULATIONS**

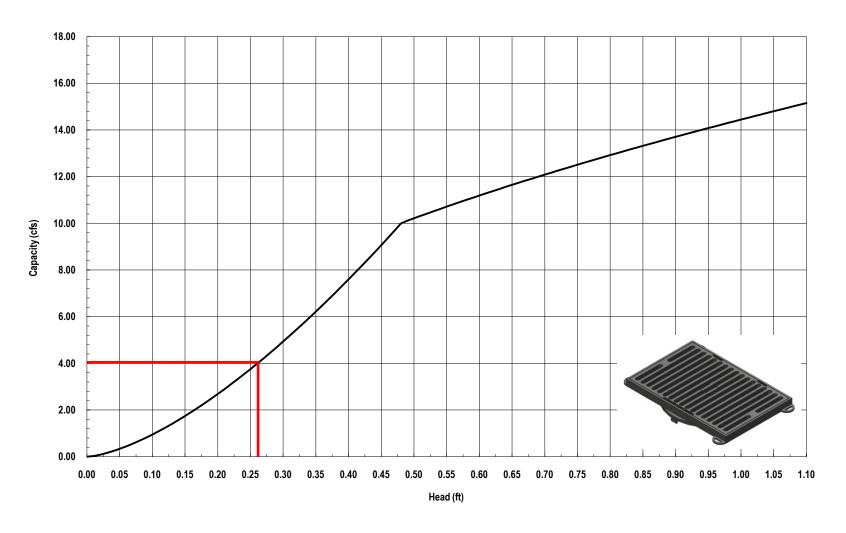
**EXISTING PIPE CAPACITY** 

## Ex. 36" Pipe Capacity

				•	•			
Friction Method	Roughness Coefficient	Channel Slope (ft/ft)	Normal Depth (in)	Diameter (in)	Discharge (cfs)	Hydraulic Radius (in)	Velocity (ft/s)	Velocity Head (ft)
Manning Formula	0.024	0.004	10.3	36.0	4.06	5.9	2.44	0.09
Maximum Discharge (cfs)	Discharge Full (cfs)							
24.58	22.85							

#### **EXISTING INLET CAPACITY**

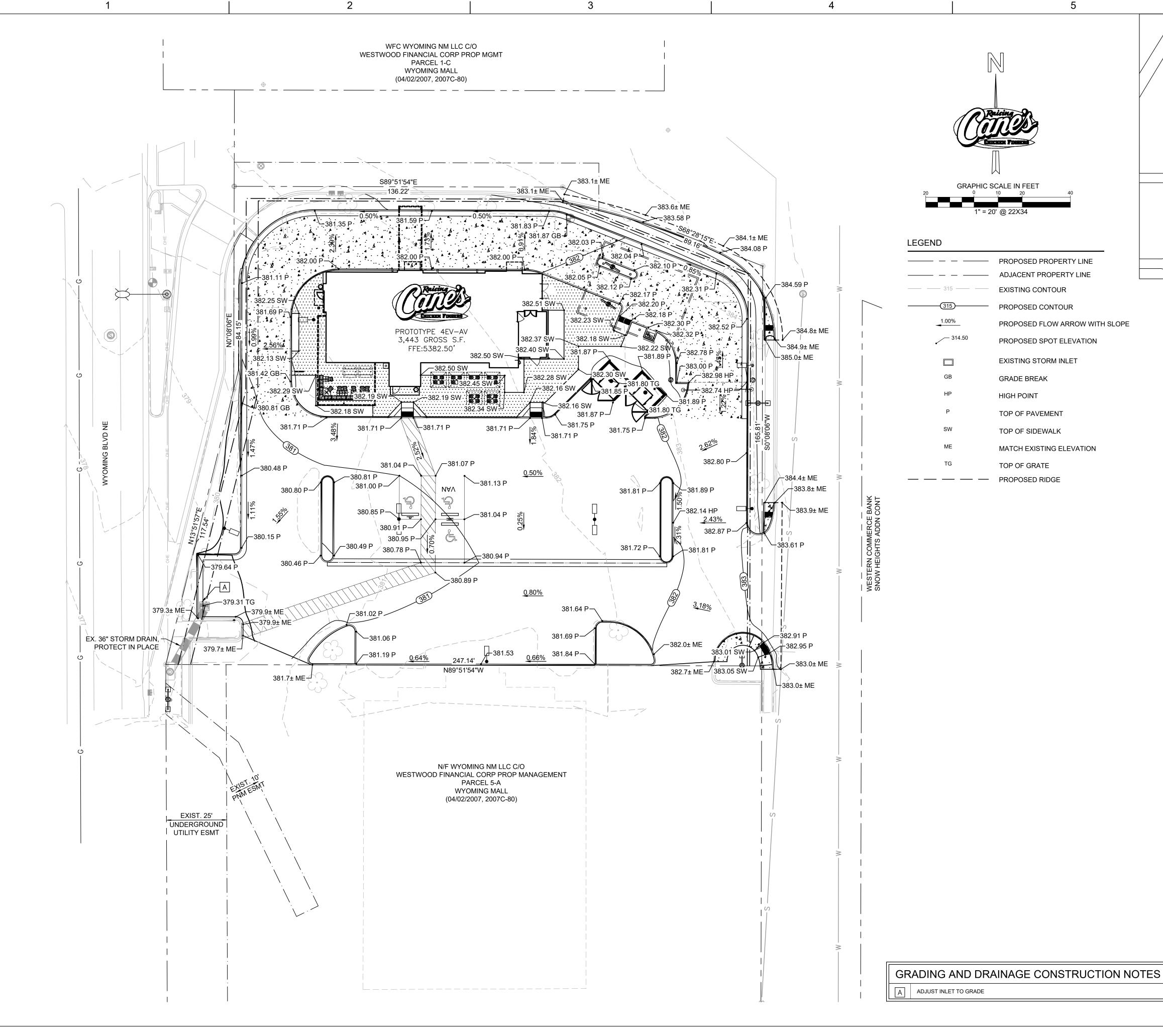
#### Nyloplast 2' x 3' Road & Highway Grate Inlet Capacity Chart



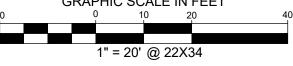


## **APPENDIX C: RELEVANT DOCUMENTS**

**GRADING PLAN** 







PROPOSED PROPERTY LINE ADJACENT PROPERTY LINE **EXISTING CONTOUR** PROPOSED CONTOUR PROPOSED FLOW ARROW WITH SLOPE PROPOSED SPOT ELEVATION **EXISTING STORM INLET GRADE BREAK HIGH POINT** TOP OF PAVEMENT

TOP OF SIDEWALK

TOP OF GRATE

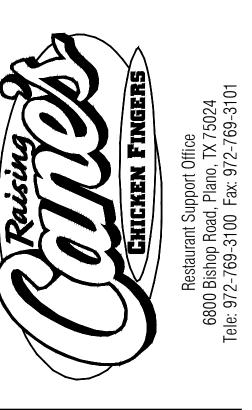
PROPOSED RIDGE

MATCH EXISTING ELEVATION



# **GRADING NOTES**

- 1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THESE PLANS AND THE CITY/AHJ STANDARDS AND SPECIFICATIONS.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL MAKE CERTAIN THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
- 3. THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES. MINOR ADJUSTMENTS TO FINISH GRADE TO ACCOMPLISH SPOT DRAINAGE ARE ACCEPTABLE, IF NECESSARY, UPON PRIOR APPROVAL OF ENGINEER. PAVING INSTALLED SHALL "FLUSH OUT" AT ANY JUNCTURE WITH EXISTING PAVING.
- 4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED
- 5. ALL CUT OR FILL SLOPES SHALL BE 4:1 OR FLATTER UNLESS OTHERWISE NOTED.
- 6. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- 8. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
- 9. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING FOOTPRINT DIMENSIONS.
- 10. CONTRACTOR SHALL REFER TO FINAL GEOTECH REPORT FOR BUILDING SUBGRADE AND SITE PREPARATION REQUIREMENTS.
- 11. CONTRACTOR SHALL ADJUST EXISTING VALVES, MANHOLE RIMS, ETC. AS NECESSARY TO MATCH FINISHED GRADE.
- 12. ALL ELEVATIONS ARE TOP OF PAVEMENT UNLESS NOTED OTHERWISE. TO GET TOP OF CURB ELEVATIONS ADD 6" TO THE ELEVATION SHOWN.
- 13. GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO ADA STANDARDS. SLOPES SHALL NOT EXCEED 5% LONGITUDINAL SLOPE OR 2% CROSS SLOPE. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET AT ANY LOCATION.
- 14. ANY PROPOSED CONTOURS SHOWN ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND DESIGNATED GRADIENT ARE TO BE USED IN THE EVENT OF ANY DISCREPANCIES.
- 15. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO COMMENCING GRADING OPERATIONS.
- 16. ALL FILL TO BE PLACED SHALL BE IN ACCORDANCE WITH THE CURRENT APPLICABLE GEOTECHNICAL REPORT RECOMMENDATIONS.
- 17. ADD 5000' TO ALL ELEVATIONS SHOWN.



# 2004 WYOMING BLVD. NE. **ALBUQUERQUE, NM 87112** Restaurant #RC705 P4E-V-AV SCHEME A

Professional of Record:

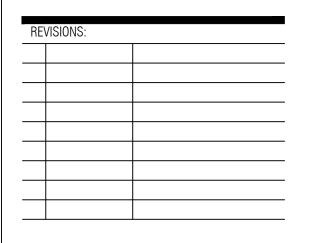
## Architectural Solutions Group 1101 Central Expressway South

Suite 100 Allen, TX 75013 CONTACT: EVERETT FIELDS (469) 619-1164 EFIELDS@PMDGINC.COM



Prototype:	P4E-V- AV 2021 - 1.0 RELEASE	
Prototype Issue	Date: 05.07.2021	
Design Bulletin Updates: -		
Date Issued:	Bulletin Number:	

# **PERMIT SET**



Sheet Title:

## **GRADING PLAN**

Date:	12.15.2021
Project Number:	RAC21010.0
Drawn By:	JH

Sheet Number:

C6.0