CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director

Mayor Timothy M. Keller

February 1, 2022

Ronald Bohannan, P.E.
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM 87109

RE: Dutch Brothers - 528
3615 Hwy 528 NW
Grading & Drainage Plans
Engineer's Stamp Date: 01/31/22
Hydrology File: A14D019

Dear Mr. Bohannan:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 10/14/2021, the Grading & Drainage Plan is approved for Building Permit, Grading Permit, and for action by the DRB on Site Plan for Building 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 CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the Drainage Covenant with Exhibit A for the stormwater quality pond per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit the original copies along with the $ 25.00 recording fee check made payable to Bernalillo County to Marion G. Velasquez (mgvelasquez@cabq.gov) on the 4th floor of Plaza de Sol.
3. Please provide a private Drainage Easement for the stormwater quality pond. Please submit the original copies along with the $ 25.00 recording fee check made payable to Bernalillo County to Marion G. Velasquez (mgvelasquez@cabq.gov) on the 4th floor of Plaza de Sol.

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 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
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 6/2018)

Project Title: Dutch Brothers -528 Building Permit #: _____ Hydrology File #: A14D019

DRB#: PR-2021-005222 EPC#: PR-2021-005301 Work Order#: _____

Legal Description: Lots(s) Tract C-4-A Plat of Tracts C3A, C2B, C3C, & C4A Seven Bar Ranch

City Address: 3615 Hwy 528 NW Albuquerque, NM 87114

Applicant: Tierra West, LLC Contact: Luis Noriega

Address: 5571 Midway Park Place NE Albuquerque NM 87109

Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: lnoriega@tierrawestllc.com

Other Contact: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

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

IS THIS A RESUBMITTAL? _____ Yes X No

DEPARTMENT _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY

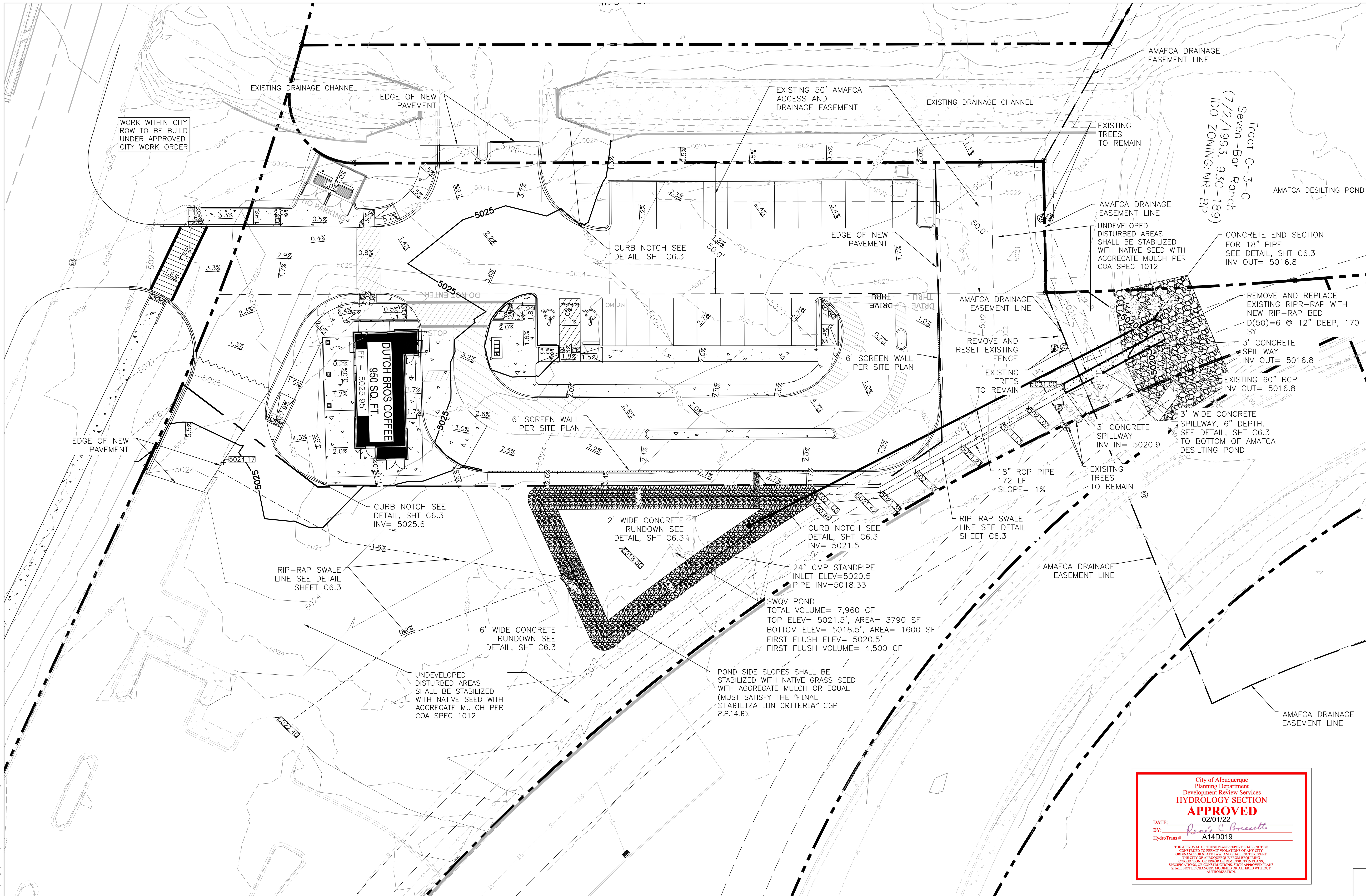
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
X SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL

____ 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: 10/14/2021 By: Luis Noriega

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- SIDEWALK
- BUILDING
- SCREEN WALL
- 5010 CONTOUR MAJOR
- 5011 CONTOUR MINOR
- x 5048.25 SPOT ELEVATION
- FLOW ARROW
- GRADE BREAK
- EXISTING CURB & GUTTER
- EXISTING EASEMENT
- EXISTING BOUNDARY LINE
- EXISTING RETAINING WALL
- EXISTING CONCRETE
- 5010 EXISTING CONTOUR MAJOR
- 5011 EXISTING CONTOUR MINOR
- ST EXISTING STORM DRAIN LINE
- x 5048.25 SPOT ELEVATION
- EXISTING STORM DRAIN MH
- EXISTING STORM DRAIN INLET
- SURVEY MONUMENT
- EXISTING TREE TO REMAIN
- RIP-RAP
- GRAVEL MULCH

SPOT ELEVATION NOTE:

ALL SPOT ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.

AMAFCA GENERAL NOTES:

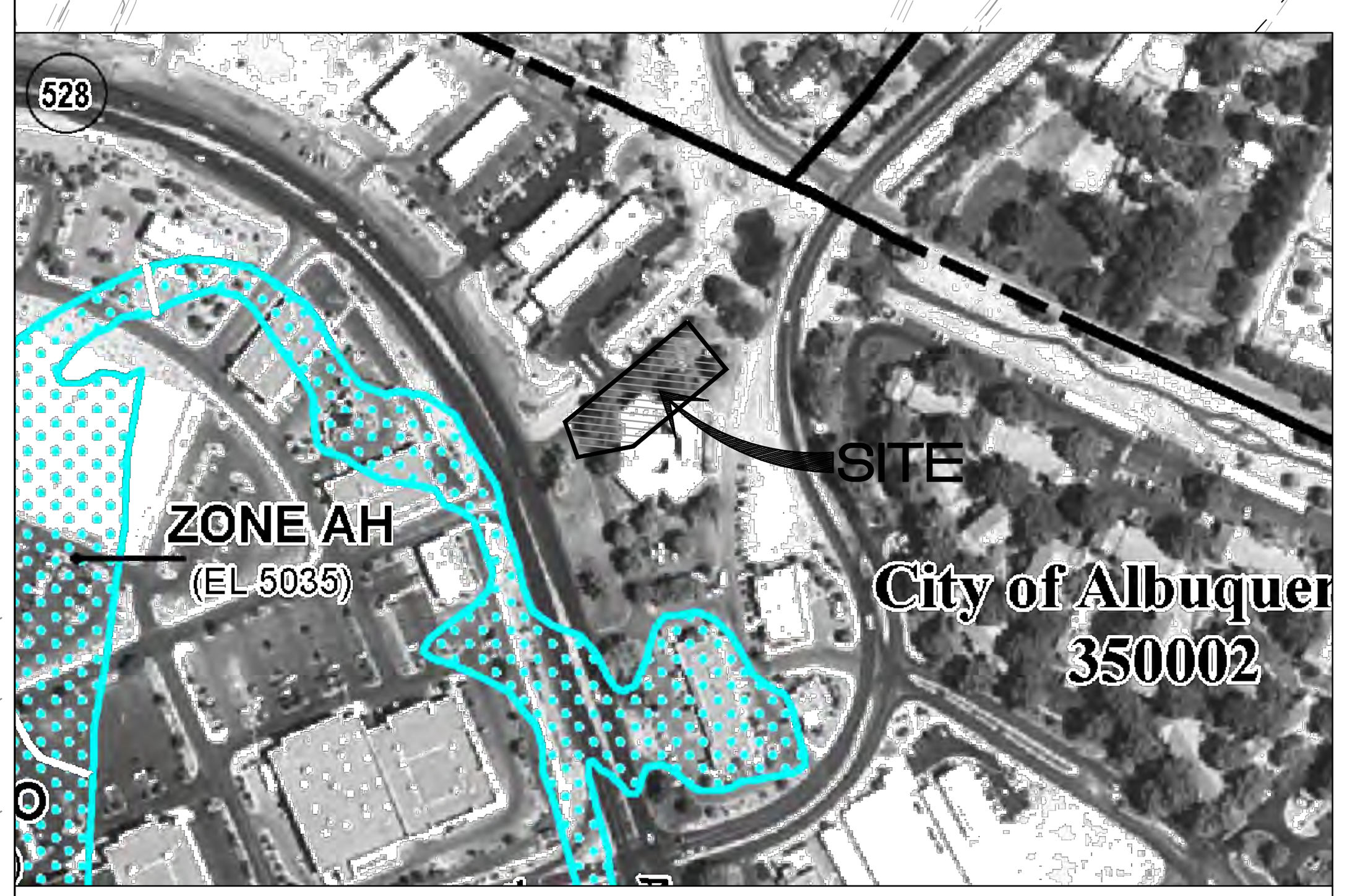
1. AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY WORK WITHIN THE AMAFCA R/W. TELEPHONE (505)884-2215.
2. NO WORK SHALL BE PERFORMED IN THE AMAFCA R/W BETWEEN MAY 15 AND OCTOBER 15 WITHOUT WRITTEN PERMISSION FROM AMAFCA.
3. ALL SUB-GRADE, BACKFILL, AND EMBANKMENT SHALL BE COMPACTED TO 95% (± 2% OF OPTIMUM MOISTURE PER ASTM D-1557) WITHIN THE AMAFCA R/W. TESTING REPORTS SHALL BE PROVIDED TO AMAFCA FIELD ENGINEER.
4. AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO FINAL INSPECTION OF ANY FACILITIES WITHIN THE AMAFCA R/W.
5. ALL DISTURBED GROUND AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 1012 NATIVE GRASS SEEDING, AS CURRENTLY UPDATED.
6. ANY MONUMENTS DISTURBED OR DESTROYED SHALL BE REPLACED BY A NM LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE. AMAFCA SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY MONUMENT PLACEMENT.
7. THE MAXIMUM WHEEL LOAD ALLOWED IN AMAFCA CHANNELS IS 12,000 POUNDS.
8. NO TRACKED VEHICLES ARE ALLOWED IN AMAFCA CHANNELS REGARDLESS OF LOCATION WITHOUT WRITTEN PERMISSION FROM AMAFCA.
9. CRANES OPERATING IN AMAFCA CHANNELS WITH OUTRIGGERS SHALL LIMIT THE OUTRIGGER FOOTPRINT LOAD AREA TO LESS THAN 12,000 POUNDS.
10. ALL CULVERT PIPE PLACED UNDER THE CHANNEL LINING OR WITHIN AMAFCA RIGHT-OF-WAY SHALL BE RCP CLASS III MIN.

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/01/22
BY: Renée C Brissette
HydroTrans # A14D019

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OR ERASURE OF ERRORS IN PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

DATE	APPROVED BY

AMAFCA REVIEW



FIRM MAP: 35043C1908D

NOTICE TO CONTRACTORS

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE.
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, FOR LOCATION OF EXISTING UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
5. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
6. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING ROADWAY.
3. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
4. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

CAUTION:

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=20'

NOTE:

1. REFERENCE GEOTECHNICAL REPORT CONSTRUCTION REQUIREMENTS/MINIMUMS
2. REFERENCE LANDSCAPE PLAN FOR FINAL STABILIZATION REQUIREMENTS.

Accelerated DEVELOPMENT SERVICES

DUTCH BROS Coffee

ENGINEER'S SEAL

RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER

01/31/2022

RONALD R. BOHANNAN
P.E. #7868

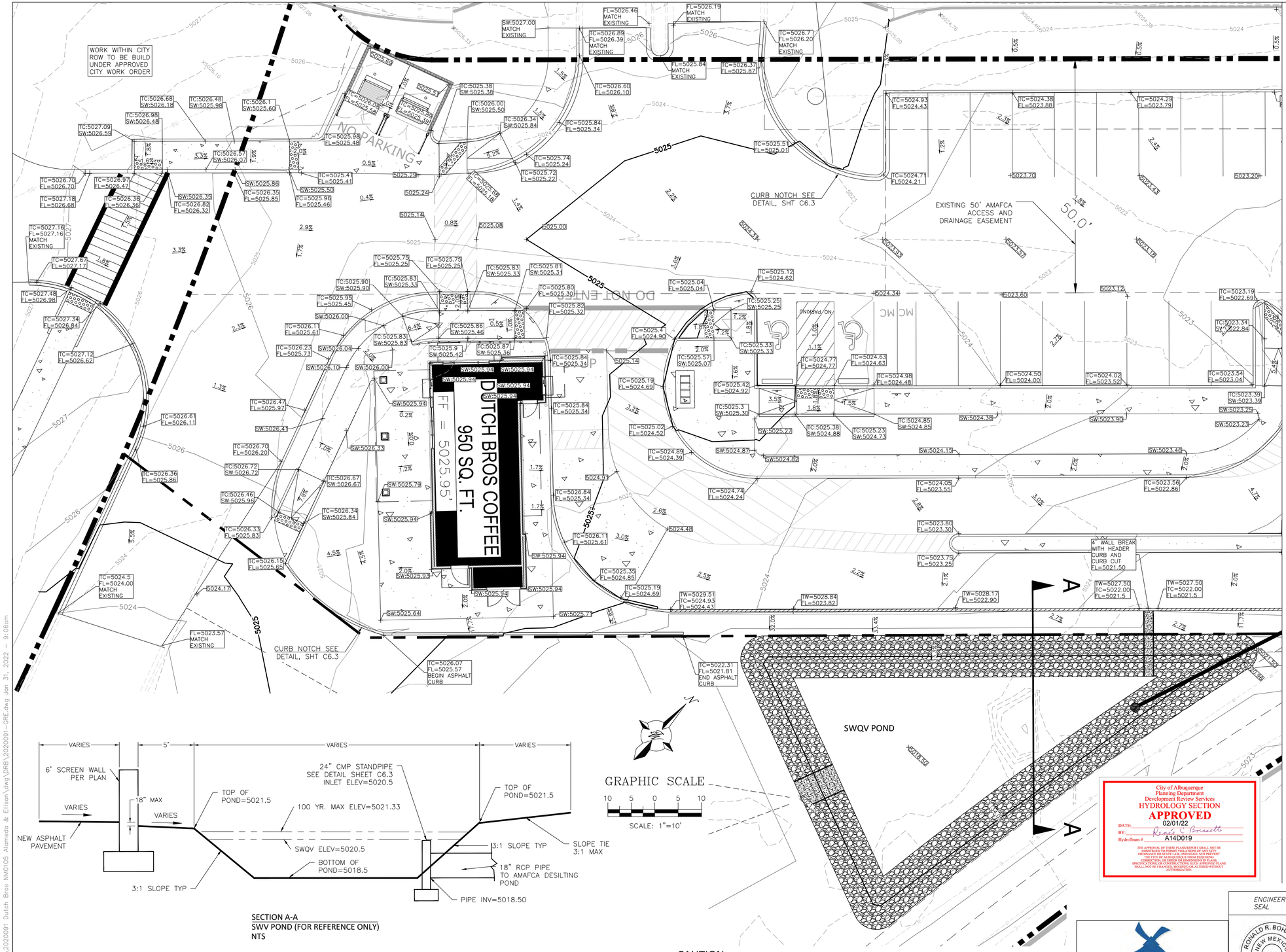
DUTCH BRO'S
3615 NM 528

GRADING PLAN OVERALL

TIERRA WEST, LLC
5571 MIDWAY PARK PL NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY	LN
DATE	10/04/2021
DRAWING	2020091-GRE
SHEET #	C3.1
JOB #	2020091

\\TWNAS\Z_Drive\2020\2020091 Dutch Bros NM0105 Alameda & Ellison\dwg\DRB\2020091-GRE.dwg Jan 31, 2022 - 9:17am



LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- SIDEWALK
- BUILDING
- SCREEN WALL
- 5010 CONTOUR MAJOR
- 5011 CONTOUR MINOR
- x 5048.25 PROPOSED SPOT ELEVATION
- FLOW ARROW
- GRADE BREAK
- EXISTING CURB & GUTTER
- EXISTING EASEMENT
- EXISTING BOUNDARY LINE
- EXISTING RETAINING WALL
- EXISTING CONCRETE
- 5010 EXISTING CONTOUR MAJOR
- 5011 EXISTING CONTOUR MINOR
- ST EXISTING STORM DRAIN LINE
- x 5048.25 EXISTING SPOT ELEVATION
- EXISTING STORM DRAIN MH
- EXISTING STORM DRAIN INLET
- SURVEY MONUMENT
- EXISTING TREE TO REMAIN
- GRAVEL MULCH

NOTICE TO CONTRACTORS

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE.
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, FOR LOCATION OF EXISTING UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
5. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
6. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING ROADWAY.
3. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
4. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

SPOT ELEVATION LEGEND

SW=TOP OF SIDEWALK
FL=FLOW LINE
TC=TOP OF CURB
TW=TOP OF WALL

SPOT ELEVATION NOTE:

ALL OTHER SPOT ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.

NOTE:

1. REFERENCE GEOTECHNICAL REPORT CONSTRUCTION REQUIREMENTS/MINIMUMS
2. REFERENCE LANDSCAPE PLAN FOR FINAL STABILIZATION REQUIREMENTS.

SECTION A-A
SWV POND (FOR REFERENCE ONLY)
NTS

GRAPHIC SCALE
10 5 0 5 10
SCALE: 1"=10'

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/01/22
BY: Ronald C. Bohannan
HydroTrans # A14D019
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY FROM REQUIRING THE CORRECTION OF ERRORS IN THE CONSTRUCTION PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

CAUTION:

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

Accelerated DEVELOPMENT SERVICES

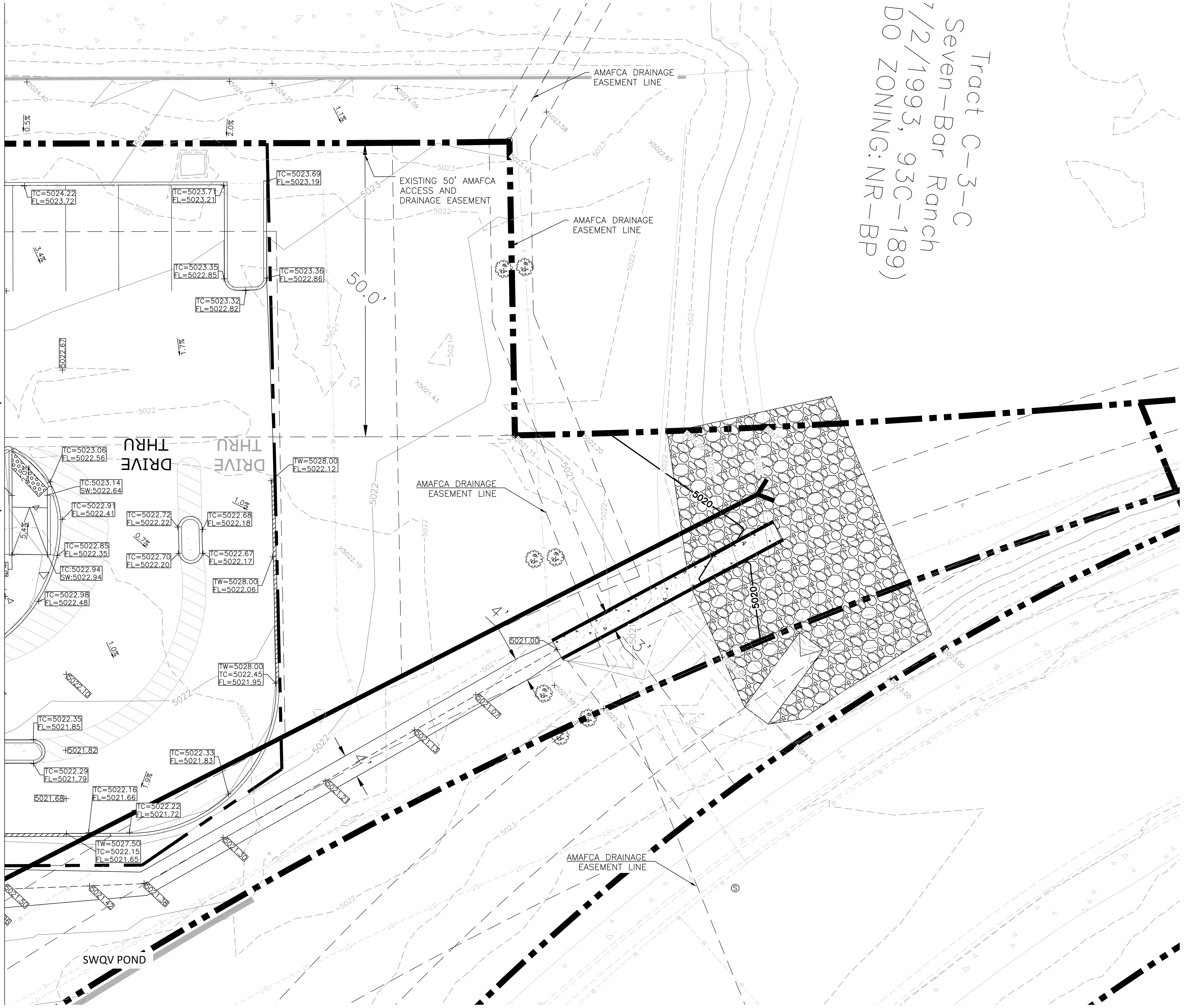
DUTCH BROS Coffee

ENGINEER'S SEAL
RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER
01/31/2022
RONALD R. BOHANNAN P.E. #7868

DUTCH BRO'S
3615 NM 528
GRADING PLAN SOUTHWEST

TIERRA WEST, LLC
5571 MIDWAY PARK PL NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY: LN
DATE: 10/04/2021
DRAWING: 2020091-GRE
SHEET #: C3.2
JOB #: 2020091



GRAPHIC SCALE

SCALE: 1"=10'

LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- SIDEWALK
- BUILDING
- SCREEN WALL
- CONTOUR MAJOR
- CONTOUR MINOR
- PROPOSED SPOT ELEVATION
- FLOW ARROW
- GRADE BREAK
- EXISTING CURB & GUTTER
- EXISTING EASEMENT
- EXISTING BOUNDARY LINE
- EXISTING RETAINING WALL
- EXISTING CONCRETE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXISTING STORM DRAIN LINE
- EXISTING SPOT ELEVATION
- EXISTING STORM DRAIN MH
- EXISTING STORM DRAIN INLET
- SURVEY MONUMENT
- EXISTING TREE TO REMAIN
- RIP-RAP

AMAFCA GENERAL NOTES:

1. AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY WORK WITHIN THE AMAFCA R/W. TELEPHONE (505)884-2215.
2. NO WORK SHALL BE PERFORMED IN THE AMAFCA R/W BETWEEN MAY 15 AND OCTOBER 15 WITHOUT WRITTEN PERMISSION FROM AMAFCA.
3. ALL SUB-GRADE, BACKFILL, AND EMBANKMENT SHALL BE COMPACTED TO 95% (± 2% OF OPTIMUM MOISTURE PER ASTM D-1557) WITHIN THE AMAFCA R/W. TESTING REPORTS SHALL BE PROVIDED TO AMAFCA FIELD ENGINEER.
4. AMAFCA FIELD ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO FINAL INSPECTION OF ANY FACILITIES WITHIN THE AMAFCA R/W.
5. ALL DISTURBED GROUND AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 1012 NATIVE GRASS SEEDING, AS CURRENTLY UPDATED.
6. ANY MONUMENTS DISTURBED OR DESTROYED SHALL BE REPLACED BY A NM LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE. AMAFCA SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY MONUMENT PLACEMENT.
7. THE MAXIMUM WHEEL LOAD ALLOWED IN AMAFCA CHANNELS IS 12,000 POUNDS.
8. NO TRACKED VEHICLES ARE ALLOWED IN AMAFCA CHANNELS REGARDLESS OF LOCATION WITHOUT WRITTEN PERMISSION FROM AMAFCA.
9. CRANES OPERATING IN AMAFCA CHANNELS WITH OUTRIGGERS SHALL LIMIT THE OUTRIGGER FOOTPRINT LOAD AREA TO LESS THAN 12,000 POUNDS.
10. ALL CULVERT PIPE PLACED UNDER THE CHANNEL LINING OR WITHIN AMAFCA RIGHT-OF-WAY SHALL BE RCP CLASS III MIN.

NOTICE TO CONTRACTORS

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE.
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, FOR LOCATION OF EXISTING UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
5. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
6. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING ROADWAY.
3. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
4. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

SPOT ELEVATION LEGEND

SW=TOP OF SIDEWALK
FL=FLOW LINE
TC=TOP OF CURB
TW=TOP OF WALL

SPOT ELEVATION NOTE:

ALL OTHER SPOT ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.

NOTE:

1. REFERENCE GEOTECHNICAL REPORT CONSTRUCTION REQUIREMENTS/MINIMUMS
2. REFERENCE LANDSCAPE PLAN FOR FINAL STABILIZATION REQUIREMENTS.

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/01/22
BY:
HydroTrans #: A14D019

CAUTION:

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

Accelerated DEVELOPMENT SERVICES

DUTCH BROS Coffee

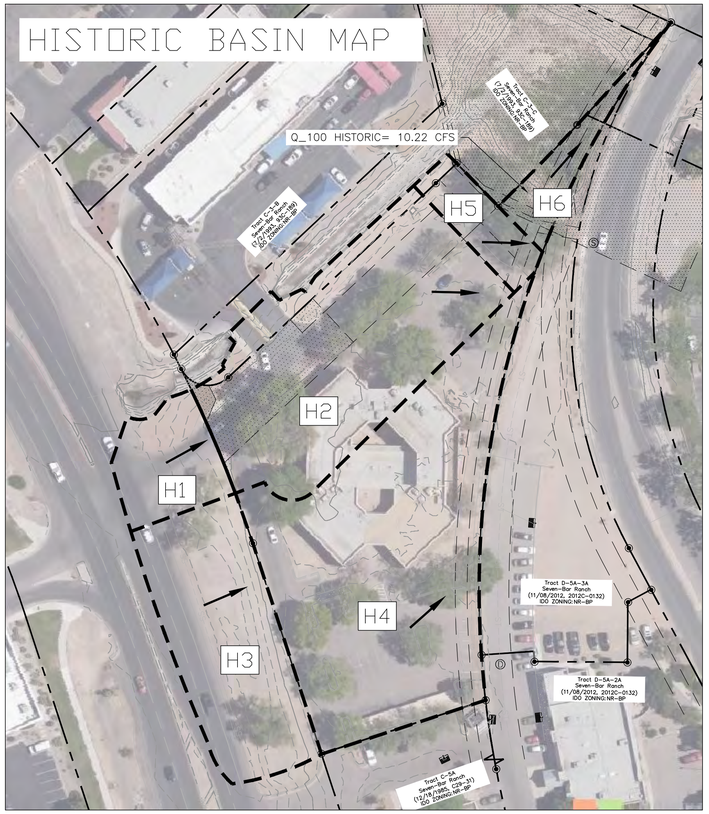
ENGINEER'S SEAL
RONALD R. BOHANNAN
NEW MEXICO
7868
PROFESSIONAL ENGINEER
01/31/2022
RONALD R. BOHANNAN
P.E. #7868

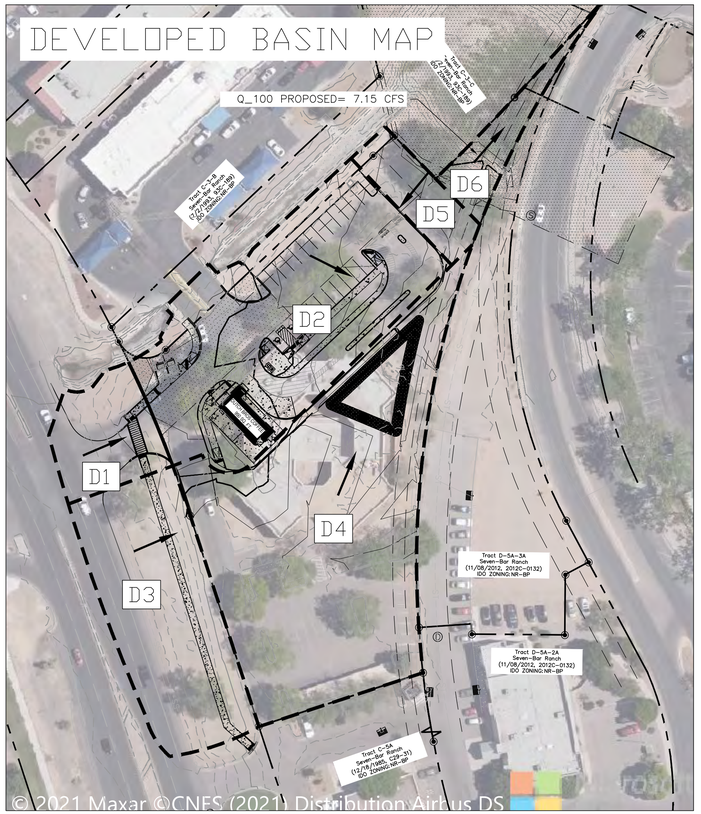
DUTCH BRO'S
3615 NM 528

GRADING PLAN
NORTHEAST

TIERRA WEST, LLC
5571 MIDWAY PARK PL NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY	LN
DATE	10/04/2021
DRAWING	2020091-GRE
SHEET #	C3.3
JOB #	2020091





LEGEND

- BASIN BOUNDARY
- FLOW ARROW
- D5 — BASIN NAME

GRAPHIC SCALE

60 30 0 30 60

SCALE: 1"=60'

SITE INFORMATION

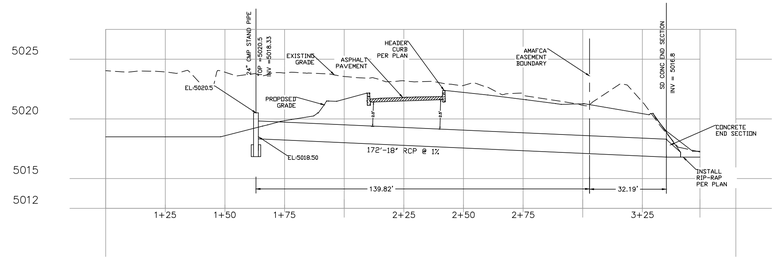
THE PROPOSED DEVELOPMENT IS A 1.99 ACRE MULTI-PAD COMMERCIAL DEVELOPMENT PROJECT, LOCATED AT 3615 HWY 528 ALBUQUERQUE, NM 87114. THE PROPOSED DEVELOPMENT IS LOCATED IN PRECIPITATION ZONE 1, WEST OF THE RIO GRANDE RIVER AS SPECIFIED IN THE DEVELOPMENT PROCESS MANUEL CH. 6. THE PROJECT SITE IS LOCATED WITHIN SAD 223, WHERE DRAINAGE IS COLLECTED FROM A LARGE AREA AROUND THE COTTONWOOD MALL. THE PROJECT SITE PREVIOUSLY CONTAINED A TWO STORY OFFICE BUILDING WHICH HAS SINCE BEEN DEMOLISHED AND REMOVED. THE PROJECT SITE HAS BEEN PREVIOUSLY GRADED AND IS PARTLY PAVED. THE SITE IS BORDERED BY A VARIETY OF COMMERCIAL AND RESIDENTIAL ZONE DISTRICTS. TO THE SOUTH LAYS THE INTERSECTION OF NM-528 AND ELLISON DR. TO THE NORTH THE SITE IS BORDERED BY AN AMAFCA DRAINAGE CHANNEL AND A DE-SILTING POND. THE PROPOSED SITE LIES WITHIN HYDROLOGY NUMBER A14D019 AND DOES NOT CONTAIN A FLOOD PLAIN.

EXISTING CONDITIONS

THE SITE IS CURRENTLY PARTLY PAVED WHICH INCLUDES ACCESS AISLES AND PARKING ON THE SOUTH SIDE OF THE PROPERTY. THE REMAINDER OF THE LOT REMAINS VACANT WITH GROWING VEGETATION. BASED ON THE TOPOGRAPHY, RUNOFF SURFACE FLOWS NORTH-EAST AND DISCHARGES INTO THE AMAFCA DE-SILTING POND VIA AN EXISTING ROCK SWALE, LOCATED ON THE SOUTH-EAST SIDE OF THE DE-SILTING POND. CROSS LOT DRAINAGE FROM THE NEIGHBORING LOTS IS REDUCED DUE TO EXISTING WALLS AND CURBING ALONG THE SOUTH, EASTERN AND NORTHERN PROPERTY LINE. OFFSITE DRAINAGE FROM A PORTION OF HWY NM-528'S RIGHT OF WAY FLOWS EAST INTO THE SUBJECT PROPERTY AND IS TAKEN INTO CONSIDERATION.

PROPOSED CONDITIONS

THE CONCEPTUAL GRADING AND DRAINAGE REPORT AND PLAN FOR THIS SITE HAS BEEN PREVIOUSLY APPROVED BY HYDROLOGY UNDER HYDRO NUMBER A14D019. THE DEVELOPED FLOWS WILL SURFACE FLOW INTO A STORM WATER QUALITY (SWQ) POND LOCATED ON THE EASTERN SIDE OF THE PROJECT SITE. THE SWQ POND IS DESIGNED TO RETAIN THE FIRST 0.62 INCHES OF RUNOFF. ANY FLOWS BEYOND THAT WILL BE CONVEYED INTO AN UNDERGROUND STORM DRAIN PIPE, WHICH OUTFALLS INTO THE AMAFCA DE-SILTING POND NORTH OF THE SITE. IN AN EMERGENCY SITUATION, AS THE SWQ POND REACHES MAXIMUM CAPACITY THE STORM WATER RUNOFF WILL BE ROUTED INTO AN EMERGENCY SPILLWAY WHICH DRAINS INTO THE AMAFCA DE-SILTING POND. THE EMERGENCY SPILLWAY IS A CONCRETE RUNDOWN LOCATED SOUTH-EAST OF THE DE-SILTING POND.



18" STORM DRAIN PROFILE
HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=6'

Historic Conditions

Basin	Tract	Area	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-Hr		
ID		(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs
H1	OFFSITE	7,634	0.18	0.00027	0%	0.000	0%	0.000	50%	0.088	50%	0.088	1.595	0.023	0.61
H2	1	34,754	0.80	0.00125	0%	0.000	0%	0.000	15%	0.120	85%	0.678	2.047	0.136	3.14
H3	OFFSITE	21,115	0.48	0.00076	0%	0.000	0%	0.000	70%	0.339	30%	0.145	1.337	0.054	1.57
H4	2	46,848	1.08	0.00168	0%	0.000	0%	0.000	15%	0.161	85%	0.914	2.047	0.183	4.23
H5	2	4,812	0.11	0.00017	0%	0.000	0%	0.000	50%	0.055	50%	0.055	1.595	0.015	0.39
H6	2	4,280	0.10	0.00015	0%	0.000	0%	0.000	100%	0.098	0%	0.000	0.950	0.008	0.28
Total		**119,443**	**2.74**	**0.00428**		**0.000**		**0.000**		**0.861**		**1.881**	1.835	**0.419**	**10.22**

Developed Conditions

Basin	Tract	Area	Area	Area	Treatment A	Treatment B		Treatment C			Treatment D		100-Year, 6-Hr		
ID		(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs
D1	OFFSITE	7,634	0.18	0.00027	0%	0.000	0%	0.000	45%	0.079	55%	0.096	1.660	0.024	0.62
D2	1	34,754	0.80	0.00125	0%	0.000	5%	0.040	10%	0.080	85%	0.678	2.036	0.135	3.11
D3	OFFSITE	21,115	0.48	0.00076	0%	0.000	0%	0.000	55%	0.267	45%	0.218	1.531	0.062	1.66
D4	2	46,848	1.08	0.00168	0%	0.000	5%	0.054	10%	0.108	85%	0.914	2.036	0.182	4.19
D5	2	4,812	0.11	0.00017	0%	0.000	0%	0.000	15%	0.017	85%	0.094	2.047	0.019	0.43
D6	2	4,280	0.10	0.00015	0%	0.000	0%	0.000	100%	0.098	0%	0.000	0.950	0.008	0.28
Total		**119,443**	**2.74**	**0.00428**		**0.000**		**0.094**		**0.648**		**2.001**	1.884	**0.430**	**10.304**

SWQV Pond Volume Calculation		
Area at Mid Depth	2,695	Sq. Ft.
Depth of Pond	3	Ft.
Total Volume	8,085	Cubic Ft.

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted E * Total Area

Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

Stormwater Quality Volume

Total Impervious Area =	ΣArea in "Treatment D"	
Retainage depth = 0.62" Per DPM Pg. 272	0.0517	foot
Retention Volume =	**=0.0517 x area**	CF

SWQV	
Vol Required (cf)	Provided (cf)
216	0
1,526	0
490	0
2,057	4,500
210	0
0	0
4,500	**4,500**

Excess Precipitation, E (in.)		
Zone 1	100-Year	10-Year
Ea	0.44	0.08
Eb	0.67	0.22
Ec	0.99	0.44
Ed	1.97	1.24

Peak Discharge (cfs/acre)		
Zone 1	100-Year	10-Year
Qa	1.29	0.24
Qb	2.03	0.76
Qc	2.87	1.49
Qd	4.37	2.89

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/01/22
BY: Rosa C. Brissette
HydroTrans # A14D019
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT. SPECIFICATIONS OR OMISSIONS CONTAINED IN THESE PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

Accelerated DEVELOPMENT SERVICES

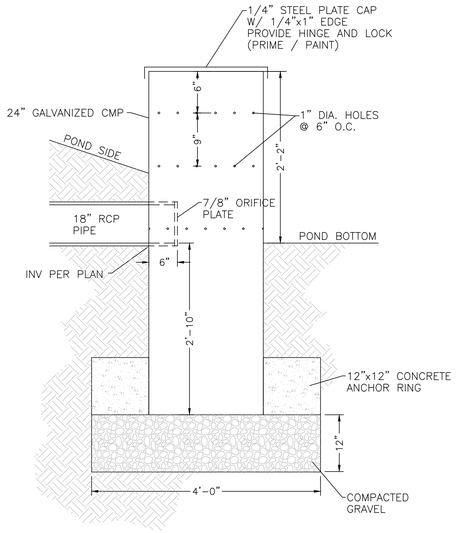
DUTCH BROS Coffee

ENGINEER'S SEAL
RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER
01/31/2022
RONALD R. BOHANNAN P.E. #7868

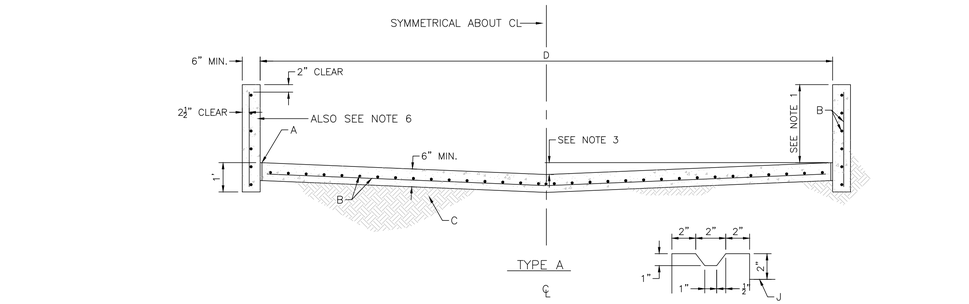
DUTCH BRO'S
3615 NM 528
DRAINAGE PLAN

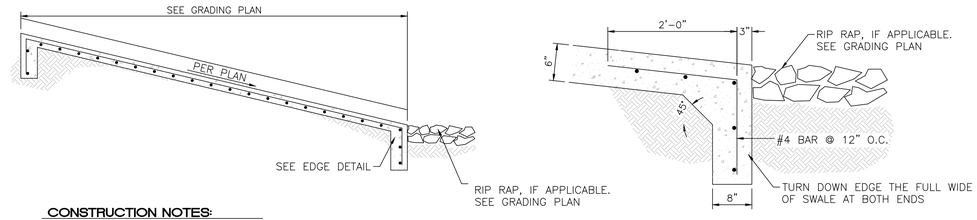
TIERRA WEST, LLC
5571 MIDWAY PARK PL NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY: LN
DATE: 10/04/2021
DRAWING: 2020091-BASIN
SHEET #: C4
JOB #: 2020091



STAND PIPE DETAIL
NTS





EDGE DETAIL

CONSTRUCTION NOTES:

A. EXPANSION JOINT

B. #4 REBARS @ 6" O.C. LONG AND 12" O.C. TRANSVERSE

C. 6" COMPACTED SOIL 95% ASTM D 1557

D. WIDTH OF CHANNEL = 3'

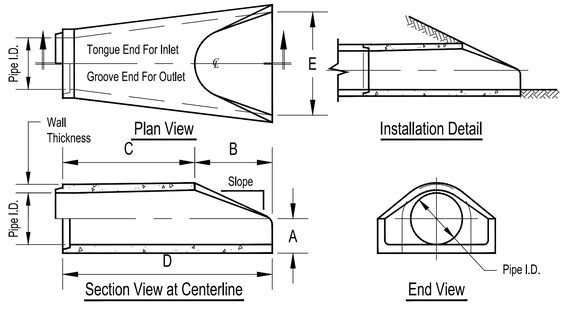
E. KEYED CONSTRUCTION JOINT

CONCRETE SPILLWAY
NTS

GENERAL NOTES:

1. CHANNEL DEPTHS EXCEEDING 2' WILL REQUIRE SEPARATE DESIGN FOR FLOOR AND WALLS.
2. TYPE B LINING WILL BE USED ONLY WHERE NO UTILITIES ARE LOCATED OR PROPOSED.
3. UP TO 16' WIDTH USE 4" INVERTED CROWN. 16' WIDTH AND OVER USE 6" INVERTED CROWN.
4. WARNING: THESE WALLS ARE NOT DESIGNED TO SUPPORT THE ADDITION OF GARDEN OR RETAINING TYPE WALLS.
5. THE OUTSIDE OF DRAINAGE WALLS SHALL NOT EXTEND BEYOND EASEMENT LINES OR ROW LINES.
6. 6" CONC. BLOCK WITH CORES FILLED WITH CONC. AND #4 BARS INSERTED INTO CORES AT 1'-6" O.C. MAY BE SUBSTITUTED FOR FORMED CONC. WALLS.

Flared End Section
12" - 72" Diameter Pipe

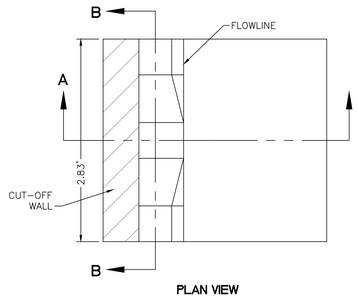


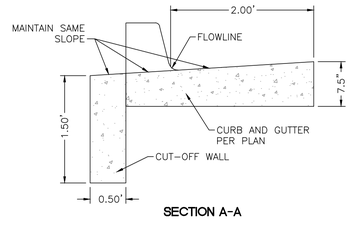
Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	B (inches)	C (inches)	D (inches)	E (inches)	Slope
12	2	4	24	48 7/8	72 7/8	30	3:1
15	2 1/4	6	27	46	73	30	3:1
18	2 1/2	9	27	46	73	36	3:1
24	3	9 1/2	43 1/2	30	73 1/2	48	3:1
30	3 1/2	12	54	19 3/4	73 3/4	60	3:1
36	4	15	63	34 3/4	97 3/4	72	3:1
42	4 1/2	21	63	35	98	78	3:1
48	5	24	72	26	98	84	3:1
54	5 1/2	27	65	35	100	90	2.4:1
60	6	30	60	39	99	96	2:1
66	6 1/2	32	78	21	99	102	2:1
72	7	34	78	21	99	108	2:1

Dimensions may vary depending upon equipment availability.

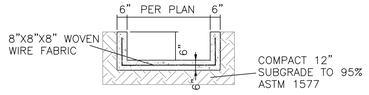
Notes:
1. Produced to meet ASTM specifications.
2. Contact a Concrete Pipe Division representative for details not listed on this sheet. Rinker 024

CONCRETE FLARED END SECTION DETAIL
NTS

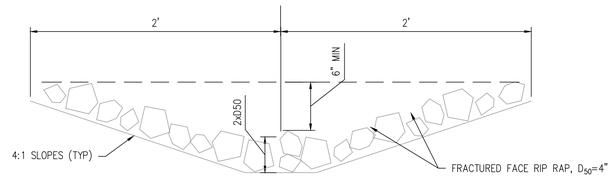




CURB NOTCH DETAIL
NTS



CONCRETE RUNDOWN (4000 psi)
NTS



RIP-RAP SWALE
NTS

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 02/01/22
BY: Ronald R. Bohannan
HydroTrans #: A14D019
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATION OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT. ANY SPECIFICATIONS, OR CONSTRUCTIONS, SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

Accelerated DEVELOPMENT SERVICES

DUTCH BROS Coffee

ENGINEER'S SEAL
RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER
01/31/2022
RONALD R. BOHANNAN
P.E. #7868

DUTCH BRO'S
3615 NM 528, ABQ

DETAILS C

TIERRA WEST, LLC
5571 MIDWAY PARK PL NE
ALBUQUERQUE, NEW MEXICO 87109
(505) 858-3100
www.tierrawestllc.com

DRAWN BY	LN
DATE	10/04/2021
DRAWING	2014059-SPE
SHEET #	C6.3
JOB #	2020091

\\TWNAS\Z_Drive\2020\2020091 Dutch Bros NM0105 Alameda & Ellison\dwg\DRB\2020091-SP.dwg Jan 31, 2022 - 9:08am