CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



August 9, 2023

Hal Grubb Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032

RE: Dutch Bros. Coffee NM0203

Tract 12 of Plat of Tracts 1 through 12 of the Avalon Subdivision Unit 5

Grading and Drainage Plan (K09D048B)

Engineers Stamp Date: 6/20/2023

Dear Mr. Grubb:

Based upon the information provided in your submittal received 8/7/2023, the Grading & Drainage Plan is approved for Grading Permit and Building Permit approval. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. The civil and landscaping plans approval are not part of this approval. Those plans must be approved by other departments.

PO Box 1293

PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

NM 87103

2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25 made out to "Bernalillo County" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review. Once the review is done, Hydrology will send back an email stating our approval / comments.

www.cabq.gov

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, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.

Principal Engineer, Hydrology

Planning Department, Development Review Services

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COA STAFF:

City of Albuquerque

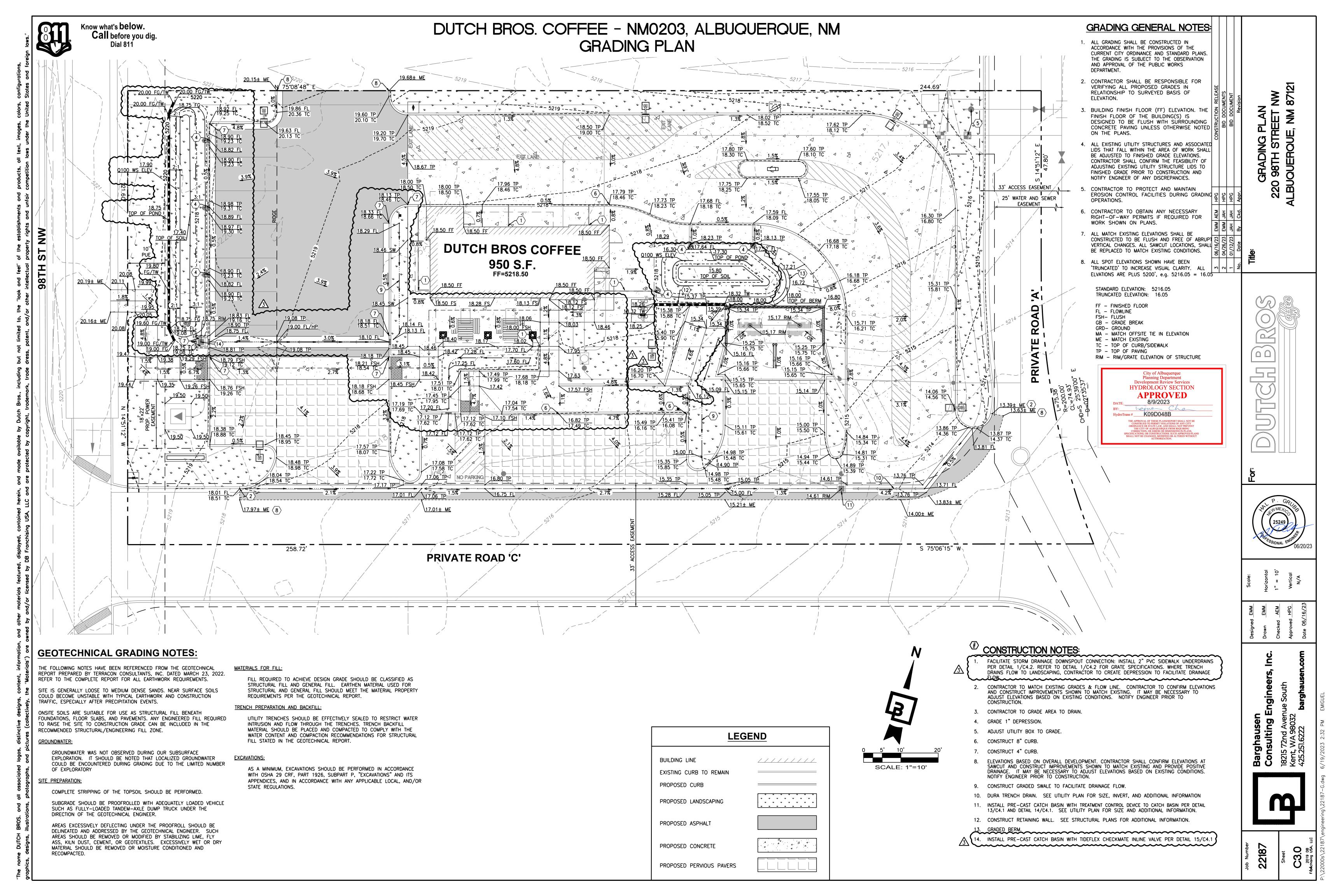
Planning Department Development & Building Services Division

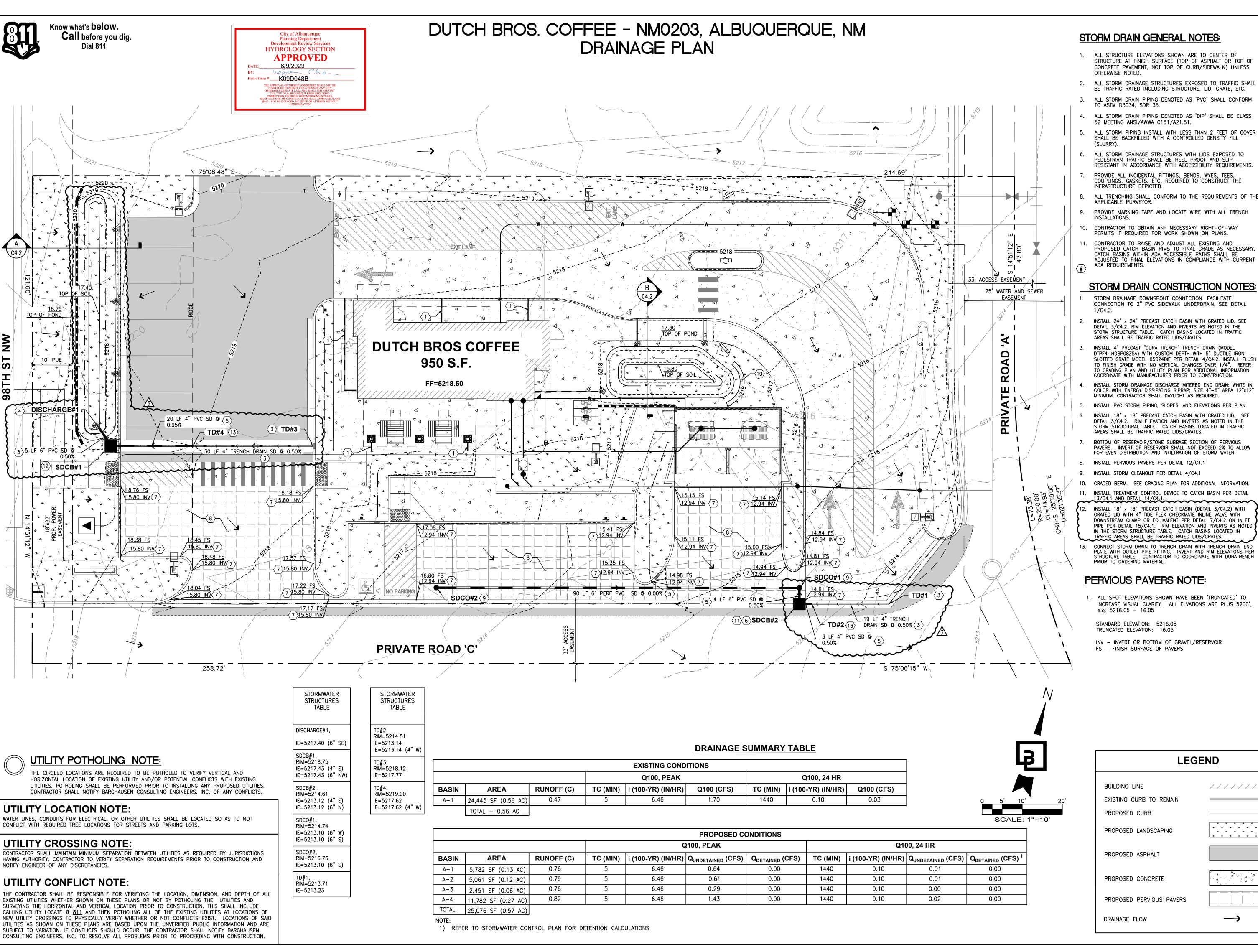
DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title:	Building	Permit #: Hydrology File #:
DRB#:	EPC#:	Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
		E-mail:
Owner:		Contact:
Address:		
		E-mail:
		_ RESIDENCE DRB SITE ADMIN SITE
IS THIS A RESUBMITTAL?:	Yes	No Building Permit has been issued
		HYDROLOGY/ DRAINAGE
Check all that Apply:		TWO OF A DDD ON A L /A COURT A NOTE COLICIET.
TYPE OF SUBMITTAL:		TYPE OF APPROVAL/ACCEPTANCE SOUGHT: BUILDING PERMIT APPROVAL
ENGINEER/ARCHITECT CERTIFICATION		CERTIFICATE OF OCCUPANCY
PAD CERTIFICATION		PRELIMINARY PLAT APPROVAL
CONCEPTUAL G & D PLAN		SITE PLAN FOR SUB'D APPROVAL
GRADING PLAN		SITE PLAN FOR BLDG. PERMIT APPROVAL
DRAINAGE MASTER PLAN		FINAL PLAT APPROVAL
DRAINAGE REPORT		SIA/ RELEASE OF FINANCIAL GUARANTEE
FLOODPLAIN DEVELOPMENT PERMIT APPLIC		FOUNDATION PERMIT APPROVAL
ELEVATION CERTIFICATE		GRADING PERMIT APPROVAL
CLOMR/LOMR		SO-19 APPROVAL
TRAFFIC CIRCULATION LAYOUT (TCL)		PAVING PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)		GRADING/ PAD CERTIFICATION
OTHER (SPECIFY)		WORK ORDER APPROVAL
PRE-DESIGN MEETING?		CLOMR/LOMR
		FLOODPLAIN DEVELOPMENT PERMIT
		OTHER (SPECIFY)
DATE SUBMITTED.	D _{vv}	

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:___





STORM DRAIN GENERAL NOTES:

- ALL STRUCTURE ELEVATIONS SHOWN ARE TO CENTER OF STRUCTURE AT FINISH SURFACE (TOP OF ASPHALT OR TOP OF CONCRETE PAVEMENT, NOT TOP OF CURB/SIDEWALK) UNLESS
- ALL STORM DRAINAGE STRUCTURES EXPOSED TO TRAFFIC SHALL BE TRAFFIC RATED INCLUDING STRUCTURE, LID, GRATE, ETC.
- ALL STORM DRAIN PIPING DENOTED AS 'PVC' SHALL CONFORM
- 52 MEETING ANSI/AWWA C151/A21.51.
- ALL STORM PIPING INSTALL WITH LESS THAN 2 FEET OF COVER SHALL BE BACKFILLED WITH A CONTROLLED DENSITY FILL
- PROVIDE ALL INCIDENTAL FITTINGS, BENDS, WYES, TEES, COUPLINGS, GASKETS, ETC. REQUIRED TO CONSTRUCT THE INFRASTRUCTURE DEPICTED.

- 10. CONTRACTOR TO OBTAIN ANY NECESSARY RIGHT-OF-WAY PERMITS IF REQUIRED FOR WORK SHOWN ON PLANS.
- CONTRACTOR TO RAISE AND ADJUST ALL EXISTING AND PROPOSED CATCH BASIN RIMS TO FINAL GRADE AS NECESSARY CATCH BASINS WITHIN ADA ACCESSIBLE PATHS SHALL BE ADJUSTED TO FINAL ELEVATIONS IN COMPLIANCE WITH CURRENT

- STORM DRAINAGE DOWNSPOUT CONNECTION. FACILITATE CONNECTION TO 2" PVC SIDEWALK UNDERDRAIN, SEE DETAIL
- INSTALL 24" x 24" PRECAST CATCH BASIN WITH GRATED LID, SEE DETAIL 3/C4.2. RIM ELEVATION AND INVERTS AS NOTED IN THE STORM STRUCTURE TABLE. CATCH BASINS LOCATED IN TRAFFIC AREAS SHALL BE TRAFFIC RATED LIDS/GRATES.
- INSTALL 4" PRECAST "DURA TRENCH" TRENCH DRAIN (MODEL DTPF4-HDBP08ZSA) WITH CUSTOM DEPTH WITH 5" DUCTILE IRON SLOTTED GRATE MODEL 05B24DIF PER DETAIL 4/C4.2. INSTALL FLUSH TO FINISH GRADE WITH NO VERTICAL CHANGES OVER 1/4". REFER TO GRADING PLAN AND UTILITY PLAN FOR ADDITIONAL INFORMATION. COORDINATE WITH MANUFACTURER PRIOR TO CONSTRUCTION.
- COLOR WITH ENERGY DISSIPATING RIPRAP; SIZE 4"-6" AREA 12"x12" MINIMUM. CONTRACTOR SHALL DAYLIGHT AS REQUIRED.
- INSTALL 18" x 18" PRECAST CATCH BASIN WITH GRATED LID. SEE DETAIL 3/C4.2. RIM ELEVATION AND INVERTS AS NOTED IN THE STORM STRUCTURAL TABLE. CATCH BASINS LOCATED IN TRAFFIC
- BOTTOM OF RESERVOIR/STONE SUBBASE SECTION OF PERVIOUS PAVERS. INVERT OF RESERVOIR SHALL NOT EXCEED 2% TO ALLOW FOR EVEN DISTRIBUTION AND INFILTRATION OF STORM WATER.
- INSTALL PERVIOUS PAVERS PER DETAIL 12/C4.1
- 10. GRADED BERM. SEE GRADING PLAN FOR ADDITIONAL INFORMATION. 11. INSTALL TREATMENT CONTROL DEVICE TO CATCH BASIN PER DETAIL
- INSTALL 18" x 18" PRECAST CATCH BASIN (DETAIL 3/C4.2) WITH GRATED LID WITH 4" TIDE FLEX CHECKMATE INLINE VALVE WITH DOWNSTREAM CLAMP OR EQUIVALENT PER DETAIL 7/C4.2 ON INLET PIPE PER DETAIL 15/C4.1. RIM ELEVATION AND INVERTS AS NOTED IN THE STORM STRUCTURE TABLE. CATCH BASINS LOCATED IN
- CONNECT STORM DRAIN TO TRENCH DRAIN WITH TRENCH DRAIN END PLATE WITH OUTLET PIPE FITTING. INVERT AND RIM ELEVATIONS PER STRUCTURE TABLE. CONTRACTOR TO COORDINATE WITH DURATRENCH

PERVIOUS PAVERS NOTE:

- ALL SPOT ELEVATIONS SHOWN HAVE BEEN 'TRUNCATED' TO INCREASE VISUAL CLARITY. ALL ELVATIONS ARE PLUS 5200',
 - INV INVERT OR BOTTOM OF GRAVEL/RESERVOIR

LEGEND

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DRAINAGE PL 220 98TH STREE ALBUQUERQUE, N

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DUTCH BROS. COFFEE - NM0203, ALBUQUERQUE, NM CIVIL DETAILS ALBUQUERQUE VAULT COMPANY PRE-CAST CONCRETE PRODUCTS 300 Airport Dr., NW * Albuquerque, NM 87121 * Phone: 505-836-4404 / Fax: 505-836-5663 Not To Scale Feb. 2009 5" \$LOTTED DUCTILE IRON GRATE 4" PRECAST TRENCH DRAIN TYPE C, SINGLE STORM INLET Design specifications conform to latest ASTM C913 specifications for "Precast Concrete TOP OF CURB/SIDEWALK -Water and Wastewater Structures". Concrete compressive strength 4,000 psi minimum. 2" FEMALE RECEIVING FLANGE ALLOWS FOR WATER TIGHT SEALING OF JOINTS Steel reinforcing design to conform to the requirements of ASTM C890 specifications for "Structural Design Loading for Water and Wastewater Structures" and shall utilize grade 60 re-bars conforming to the requirements of ASTM A615 or WWF conforming to the CONNECT DRAIN PIPE TO BUILDING ROOF PLYWOOD TOP KEEPS TRENCH CLEAN DURING CONSTRUCTION GUTTER LINE/FINISH GROUND requirements of ASTM A185 or both. As per C.O.A. Additional reinforcing at all openings. Designed for H-20-44 loading. SECTION A Steps shall be steel reinforced copolymer of ASTM C478. Center on span of wall. HEAVY DUTY LOAD BEARING Z - FRAME WITH BLACK POWDER 3. USE WHERE SHOWN ON PLANS, AND ALLOWED BY JURISDICTION. PLACE CONTRACTION JOINT OVER TOP OF PIPE. Contractor to field adjusted using C.O.A. approved methods Pipe penetration to be as per job requirements. Pipe to be installed by contractor as per DOT requirements for mortar joint connections. Top 12" to be poured in field and to incorporate the casting. Frame and grate per C.O.A. standards or as otherwise specified. Supplied by either Albuquerque Vault or customer. RIGID METAL INSTALLATION BRACKETS ACCEPT #4 REBAR 4. ALL CONCRETE SHALL BE COMMERCIAL GRADE CONCRETE. CONTRACTION JOINT D. Joints to be sealed with butyl rubber joint sealant conforming to the requirements of ASTM - 4X4 - W4XW4 WELDED WIRE REINFORCEMENT C990, or mortar as per C.O.A. requirements, or both. 1. Extended base dimension = 57" long x 57 3/8" wide. 2" TO 1 1/2" DIA III TOP OF SIDEWALK -SEE NOTE 6 - SEE NOTE 10 3" LONG X 3/8" Ø CONCRETE PLUG CENTERED ON RISE AND SPAN ISOMETRIC VIEW RISER NOTE: ALL TRENCHES ARE FACTORY ASSEMBLED AND READY FOR SITE INSTALLATION ULTRA SMOOTH PRECAST REINFORCED POLYMER TRENCH BODY 2" PVC DRAIN PIPE **PROFILE** ISOMETRIC VIEW PROVIDE ROCK RIPRAP AS SHOWN -ON PLAN. 1"-3" COBBLE, 6" THICK, WITH WOVEN GEOTEXTILE, → 11 7/8" (MAX. 2.0% FINISHED SURFACE SLOPE) 47" (OUTSIDE) 47 3/8" (OUTSIDE) 35" (INSIDE) 35 3/8" (INSIDE) (NORMAL SIDEWALK CROSS SLOPE) TOP VIEW MIRAFI FW700 WOVEN MONOFILAMENT POLYPROPYLENE CONCRETE SIDEWALK -GEOTEXTILE OR EQUIVALENT, Planning Department Development Review Services CURB/EDGE OF -**HYDROLOGY SECTION APPROVED** SEE NOTE 4 8/9/2023 TRENCH MATERIAL FIBER REINFORCED POLYMER HydroTrans# K09D048B SIDEWALK UNDERDRAIN DUCTILE IRON 65-45-12 ANCHOR STUDS 3" X 3/8" Ø BLACK E-COATING - ANCHORS: RIGID STAMPED METAL FOR #4 BARS 7" THICK BASE -LOAD RATING Dura Trench LOAD RATING SEE NOTE 3-Dura Trench ADA / HEEL GUARD NO 0.5% TYP (CUSTOM SLOPE AVAILABLE) **DURA TRENCH DRAIN** PRECAST CATCH BASIN C4.2 NOT TO SCALE **M**ADRAX GRABER MANUFACTURING, INC 1080 UNIEK DRIVE BLOCK WALL PER DETAIL 6/C4.2 Ø 2 3/8" STEEL TUBING-CURB CUT OR DETAIL 10/C4.1 5218.75 FREEBOARD 3" MULCH CheckMates® can be made for any pipe I.D. Flange shape and bolt pattern can be customized. Flangeless thimble inserts are available. ŚWOVEN GEOTEXTILE FABRIC, MIRAFI FW700 WOVEN MONOFILAMENT MIRAFI FW700 WOVEN MONOFILAMENT POLYPROPYLENE OR BIORETENTION SOIL MEDIA; PLACE IN 6" LIFTS. COMPACT EACH 6" LIFT WITH LANDSCAPE ROLLER OR BY LIGHTLY WETTING. IF WETTING, LET DRY OVERNIGHT BEFORE PLANTING. THE PLANTING MEDIUM MUST SUSTAIN A MINIMUM INFILTRATION RATE OF 5 INCHES PER HOUR THROUGHOUT THE LIFE OF THE PROJECT AND MUST MAXIMIZE RUNOFF RETENTION AND POLLUTANT REMOVAL. A MIXTURE OF SAND (60%-70%) MEETING THE SPECIFICATIONS OF ASTM C33 AND COMPOST (30%-40%) CHECK DESIRED MOUNT CLASS 2 PERMEABLE MATERIAL (AGGREGATE). **SECTION A** CONCRETE ☐ IN GROUND MOUNT (IG) ☐ SURFACE FLANGE MOUNT (SF) CURB & GUTTER PER - SIDEWALK DRAIN PER PRODUCT: U238-IG(SF) , DESCRIPTION: 'U' BIKE RACK 2 BIKE, SURFACE OR IN GROUND MOUNT 3H MAX. FREEBOARD 5216.30 ©2018 GRABER MANUFACTURING, INC. ALL PROPRIETARY RIGHTS RESERVED. **Back pressure measured from pipe invert. 5215.80 MADRAX BIKE RACK TOP OF MULCH_ Higher back pressure ratings available. Consult factory. TIDEFLEX CHECKMATE INLINE VALVE WOVEN GEOTEXTILE FABRIC MIRAFI FW700 WOVEN MONOFILAMENT MIRAFI FW700 WOVEN) POLYPROPYLENE OR BASE LEVELING PAD NOTES: 1. THE LEVELING PAD IS TO BE CONSTRUCTED OF CRUSHED STONE BIORETENTION SOIL MEDIA; PLACE IN 6" LIFTS. COMPACT EACH 6" LIFT WITH LANDSCAPE ROLLER OR BY LIGHTLY WETTING. IF -LANDSCAPING PER LANDSCAPE PLANS OR 2,000 PSI± UNREINFORCED WETTING, LET DRY OVERNIGHT BEFORE PLANTING. THE PLANTING \cite{j} CONCRETE 2. THE BASE FOUNDATION IS TO BE APPROVED BY THE SITE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF THE LEVELING PAD. MEDIUM MUST SUSTAIN A MINIMUM INFILTRATION RATE OF 5 INCHES PER HOUR THROUGHOUT THE LIFE OF THE PROJECT AND MUST MAXIMIZE RUNOFF RETENTION AND POLLUTANT REMOVAL. A MIXTURE OF SAND (60%-70%) MEETING THE SPECIFICATIONS OF ASTM C33 AND COMPOST (30%-40%) - SEGMENTAL WALL "ANCHOR ASPEN CLASS 2 PERMEABLE MATERIAL STONE" BLOCK WALL (AGGREGATE). NOTES: 1. NO PORTION OF THE WALL IS TO BE CONSTRUCTED THE WALL IS TO BE CONSTRUCTED WITHIN THE EASEMENT (INCLUDING FOOTING). NO PORTION OF THE EASEMENT IS TO BE EXCAVATED **SECTION B** FOR THE CONSTRUCTION OF THE WALL COMPACTED FILL **BIORETENTION BASIN** COLOR AND FINISH WITH 6" CRUSHED ROCK OR -UNREINFORCED CONCRETE LEVELING PAD - BURY BLOCKS AT 12" (MIN.)

SEGMENTAL BLOCK WALL