CITY OF ALBUQUERQUE

Hydrology Section Planning Department David S. Campbell, Director



Timothy M. Keller, Mayor

January 31, 2018

Philip Clark Clark Consulting Engineers 19 Ryan Road Edgewood, NM 87015

RE: Cosme Retail – 6205 Central Ave. NW
Request for Certificate of Completion

Hydrology Final Inspection – Disapproved Engineer's Stamp Date: 3/15/2017 (K11D077)

Certification Date 1/24/2018

Dear Mr. Clark:

Based on the certification received on 1/25/2018 this submittal cannot be approved for release of Certificate of Completion by Hydrology until the following are addressed:

PO Box 1293

1. A FEMA Elevation Certificate must be submitted to Rudy Rael.

2. A standard form Drainage Covenant for the floodplain mitigation ponds, the first flush ponds, and the culvert between the ponds must be recorded. The original notarized document must be submitted to Madeline Caruthers along with an application form and a \$25 check made payable to Bernalillo County for the

recording fee. Madeline will route the covenant for review and approval and then e-

mail the recorded document to you.

3. The as-built elevations show that the driveway water-block was constructed between 0.13' and 0.26' lower than planned, and may be lower than the COA STD DWG 2425 for Drivepads. Dimension L on the standard detail is measured from the top of curb, so both top of curb and property line elevations should be shown on the certification and any deviation noted and justified in the certification statement with supporting calculations on the plan or under separate engineer's stamp.

4. The sidewalk culver must be built before CO, because we do not allow drainage over the sidewalk on Arterial and Collector streets. An SO-19 permit is required for the sidewalk culvert construction in the public R/W and Jason Rodriquez will need to inspect it after it is complete and send us his approval (see SO-19 notes on the

approved G&D Plan.

Albuquerque

NM 87103

www.cabq.gov

- 5. The first flush pond south of the parking lot is missing and needs to be graded per plan. The pond south of the building also lacks volume. The volume below the sidewalk culvert invert must not be less than is shown on the approved plan and must be specifically included in the certification. Extra volume in the other ponds does not compensate for the missing volume in these two ponds. The diameter and inverts of the 4" pipes connecting the two ponds needs verified. Drainage from the parking lot must be prevented from flowing onto the sidewalk connection to Central by adding a header curb between the parking lot and the sidewalk, and a curb cut need to direst drainage from the parking lot into the pond.
- 6. After these items have been addressed a new application must be turned in with a new DTIS form and the building permit number must be filled in on the form.

If you have any questions, I can be contacted at 924-3986 or jhughes@cabq.gov.

Sincerely,

James D. Hughes P.E.

Principal Engineer, Planning Dept. Development Review Services



COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ____

City of Albuquerque

Planning Department Development & Building Services Division

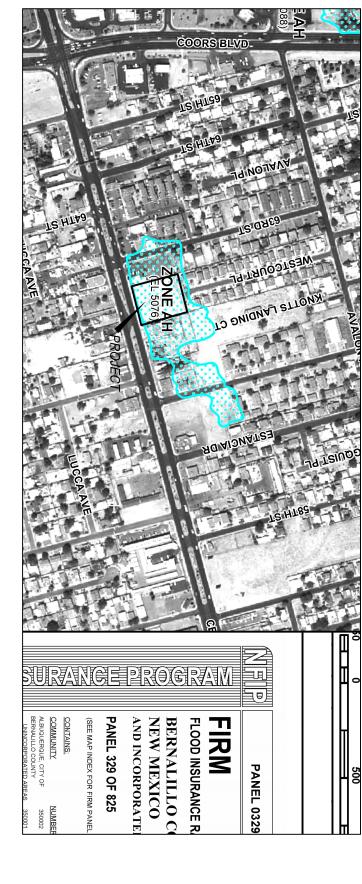
DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 1/2016)

Project Title:		Building Perm	it #: Hydrolo	Hydrology File #:	
DRB#:		EPC#:	Work O		
Legal Des	scription:				
,					
Applicant: CLARK CONSULTING ENGINEERS		ING ENGINEERS	Contact: Philip Clark		
Address:	19 Ryan Road	Edgewood, NM 87015			
Phone#:			E-mail:	CCEalbq@aol.com	
Other Con	ıtact:		Contact:		
			E-mail:		
Check all th	at Apply:				
DEPARTMENT:			TYPE OF APPROVAL/ACCEPTANCE SOUGHT:		
HYDROLOGY/ DRAINAGE			BUILDING PERMIT APPROVAL		
TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTROL			CERTIFICATE OF OCCUPANCY		
MS4/ EROSION & SEDIMENT CONTROL			GRADING/ESC PERMIT APPROVAL		
	SUBMITTAL:				
AS-BUILT CERTIFICATION			PRELIMINARY PLAT APPROVAL		
			SITE PLAN FOR SUB'D APPROVAL		
CONCEPTUAL G & D PLAN			SITE PLAN FOR BLDG. PERMIT APPROVAL		
GRADING PLAN DRAINAGE MASTER PLAN			FINAL PLAT APPROVAL		
			GLA / DEL EAGE OF EDIANI	CIAL CHADANTEE	
DRAINAGE REPORT CLOMR/LOMR			SIA/ RELEASE OF FINANCIAL GUARANTEE		
CLOWIN/LOWN			FOUNDATION PERMIT APPROVAL		
TRAFFIC CIRCULATION LAYOUT (TCL)		YOUT (TCL)	SO-19 APPROVAL PAVING PERMIT APPROVAL		
TRAFFIC IMPACT STUDY (TIS)		, ,	GRADING/ PAD CERTIFICATION		
NEIGHBORHOOD IMPACT ASSESMENT (NIA)			WORK ORDER APPROVAL		
		,	CLOMR/LOMR		
EROS	ION & SEDIMENT CO	NTROL PLAN (ESC)	<u></u> 92011112011111		
OTHER (SPECIFY)			PRE-DESIGN MEETING?		
			OTHER (SPECIFY)		
IS THIS A I	RESUBMITTAL?:	YesNo			

FEE RECEIVED: ___



ORTHO-PHOTO, DA TED 11 <u>__</u> 2015



· FI JAMARATIE

SITE DOES LIE \geq SPHA PANEL **"**## 329

ADING DRAINAGE ע $\stackrel{\mathcal{A}}{\geq}$

29.0

12,412

St

·NWQ2 '01

FIN. FLR.-ELEV. 77.6 77.55

THE COMMERCIAL RETAIL PROJECT IS LOCATED IN THE WEST CENTRAL AREA OF ALBUQUERQUE APPROXIMATELY 3 MILES WEST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERN-ALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: INCLUDING PREVIOUSLY DEVELOPED LOT

2. PROPOSED IMPROVEMENTS: 12,400 SF OFFICE-RETAIL BLDG, ON-SITE PARKING, NEW GRADE ELEVATIONS, FLATWORK AND LANDSCAPING.

3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.

4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE EAST AND WEST BY COMMERCIAL USE. CENTRAL AVE ON THE SOUTH IS 4—LANES PAVED, DEVELOPED WITH 6' WIDE SIDEWALKS AND CURB & GUTTER. THE SITE CURRENTLY DOES NOT DRAIN OR DISCHARGE RUNOFF. HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE CENTRAL AVE. IS IMPROVED NO GRADING IS PROPOSED WITHIN THE CITY R.O.W. THE "FIRST FLUSH" 1/2—INCH RAINSTORM IS RETAINED ON—SITE. ADDITIONALLY, RUNOFF IS ROUTED TO LANDSCAPING AND WATER HARVESTING IS RECOMMENDED. THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF—SITE DRAINAGE FLOWS.

CALCULATIONS

DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND
FOR STUDY AREA **VOLUMETRIC** DISCHARGE

OUTLET:

Q Q | |

 $CA \sqrt{2gH}$ 2.8 CFS

Where: C = 1' W. SDWK. A = 0.625 S

2' WIDE

UNDEVEL./
LANDSCAPING / Harvest
GRAVEL & COMPACTED SOIL
ROOF — PAVEMENT 1.75 In.[1.07]

0.XXX Ac.(XX%) 0.20 Ac.(17%) 0.0 Ac.(0%) 1.0 Ac.(83%) 1.2 Ac. Q Peak 1.29[0.24] 2.03[0.76] 2.87[1.49] 4.40[2.90]

VOLUME 100 = 4<u>E</u>
0.49[0.08]
0.67[0.22]
0.99[0.44]
1.97[1.24]

YDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM)
ENSED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
ISCHARGE RATE: Q=QPEAK × AREA..."Peak Discharge Rates For Small Watersheds"
OLUMETRIC DISCHARGE: VOLUME = EWeighted × AREA
100 = 2.20 Inches, Zone 1
Time of Concentration, TC = 10 Minutes
ESIGN STORM: 100—YEAR/6—HOUR, 10—YEAR/6—HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS (PREVIOUSLY DEVELOPED)

PRECIP. 'C' = 0.99 In. [0.44] PEAK DISCHARGE 'A' = 2.9 CFS/AC. [1.5]

TOTAL AREA = 1.2 ACRES, WHERE EXCESS F PEAK DISCHARGE, Q100 = 3.5 CFS [1.8], WHERE UNIT F THEREFORE: VOLUME 100 = 4312 CF [1916]

LAND TREATM'T

ROUTE DEVELOPED RUNOFF THROUGH EXISTING/UPGRADED SOFT LANDSCAPING INCLUDING DEPRESSED LANDSCAPING STRIP ALONG PARKING AS SHOWN BASIN TO CFS...SIZE ABOVE)

1.2 AC \times 43560 SF \times 0.37"/12 = : TOTAL RETAINED ON-SITE, 1675 CF, CHECK EPA FIRST-FLUSH RE TAINED 1612 CF)F, 4 AREAS

- "SO-19 PERMIT"
City R.O.W. REQUIRED BEFORE

950 CF

FIN. FLR. -ELEV. 77.0 76.90

EQUILIZATION Install 2-4 p PVC, INV. 75.8

7552 CF

F 76 CONTOUR = $2150 \text{ SF } \supseteq 2$ F 74 CONTOUR = $634 \text{ SF } \supseteq 2$ F 76 CONTOUR = $4103 \text{ SF } \supseteq 1$ F 74.4 CONTOUR = $2243 \text{ SF } \supseteq 1$ RE TOTAL OF 2-PONDS: VOL.

] 2' DEPTH, N. POND

] 1.6' DEPTH, E. POND

= 0.7, g = 32 f/s $\langle CULV. = 1'x7-1/2''$ SF, H=0.625'DISPLACEMENT VOL. = PROVIDED EXISTING Displaced Volu = (25082 SF + 0) / 2me = (area of 5076 Contour x 0.6' = 7525 CF 9 20 OS CENTRAL

Philip W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO SIGNIFICANT EARTHWORK KIND, NOR MAJOR DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

ANY WORK MIHIN CITY RIGHT-OF-WAY.

2. ALL WORK DETAILED ON THESE PLANS.

APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS

CONCERNING CONSTRUCTION SAFETY AND HEALTH.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NM
ONE CALL 260-1990 (OR DIAL 811), FOR LOCATION OF EXISTING UTILITIES.

4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE
HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A
CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE
CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.

6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER
OF THE PROPERTY BEING SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HR. BASIS.

8. CONTRACTOR MUST CONTACT JASON RODRIGUEZ (CURRENTLY) @ 235-8016 AND
CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE AN INSPECTION. AN EXCAVATION/CONSTRUCTION PERMIT WILL ANY WORK WITHIN CITY RIGHT-OF-WAY.
ALL WORK DETAILED ON THESE PLANS TO BE APPLICABLE FEDERAL, STATE, AND LOCAL LA CONCERNING CONSTRUCTION SAFETY AND HE. To CONTRACTORS –

Drainage Facilities within 76.49 PER COA 30 PAD
TC 175 BE CLOSED
TO BE CLOSED

0.9%

Build Riprapu Swale Per Se

V

DRAINAGE CERTIFICATION

AS-BUILT

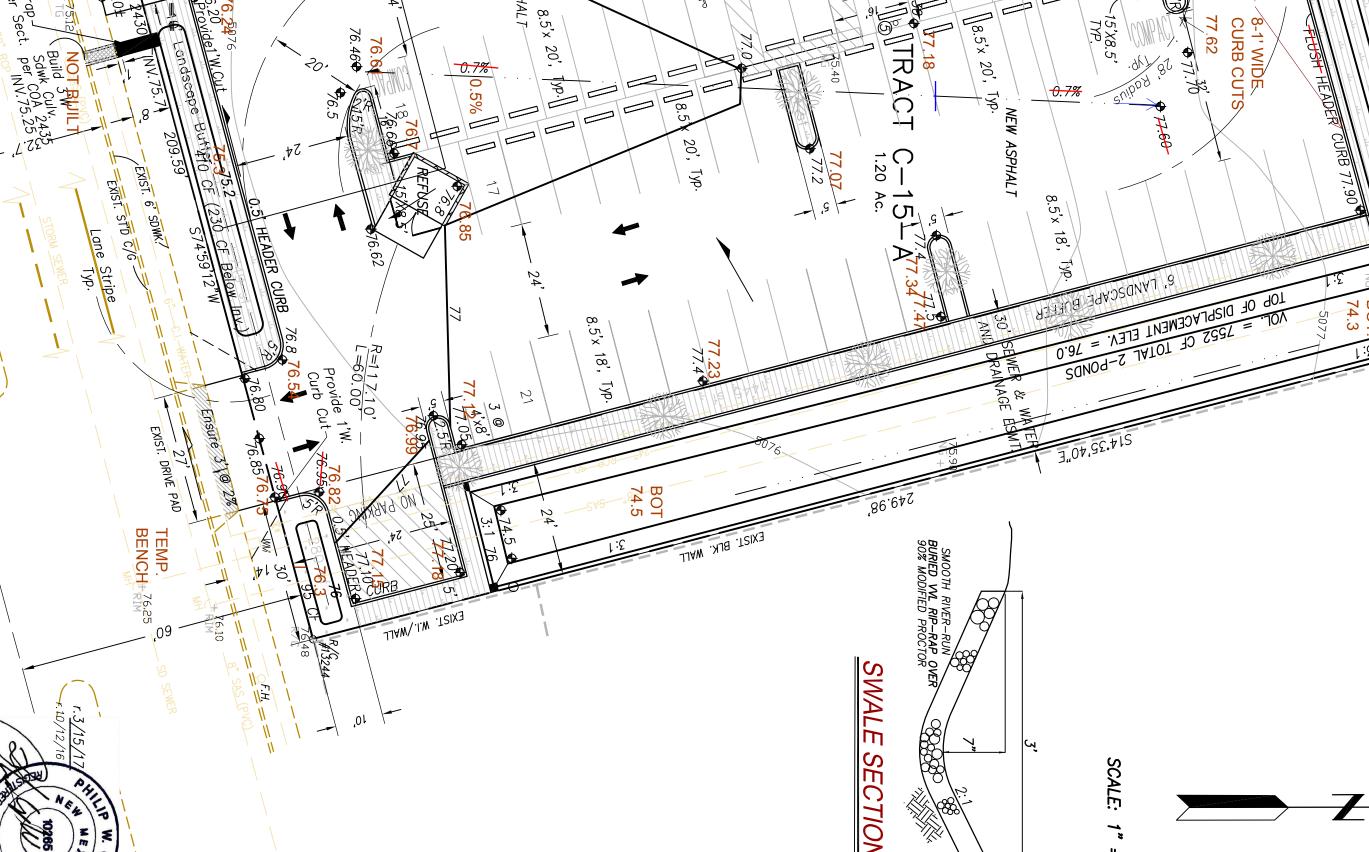
M

7

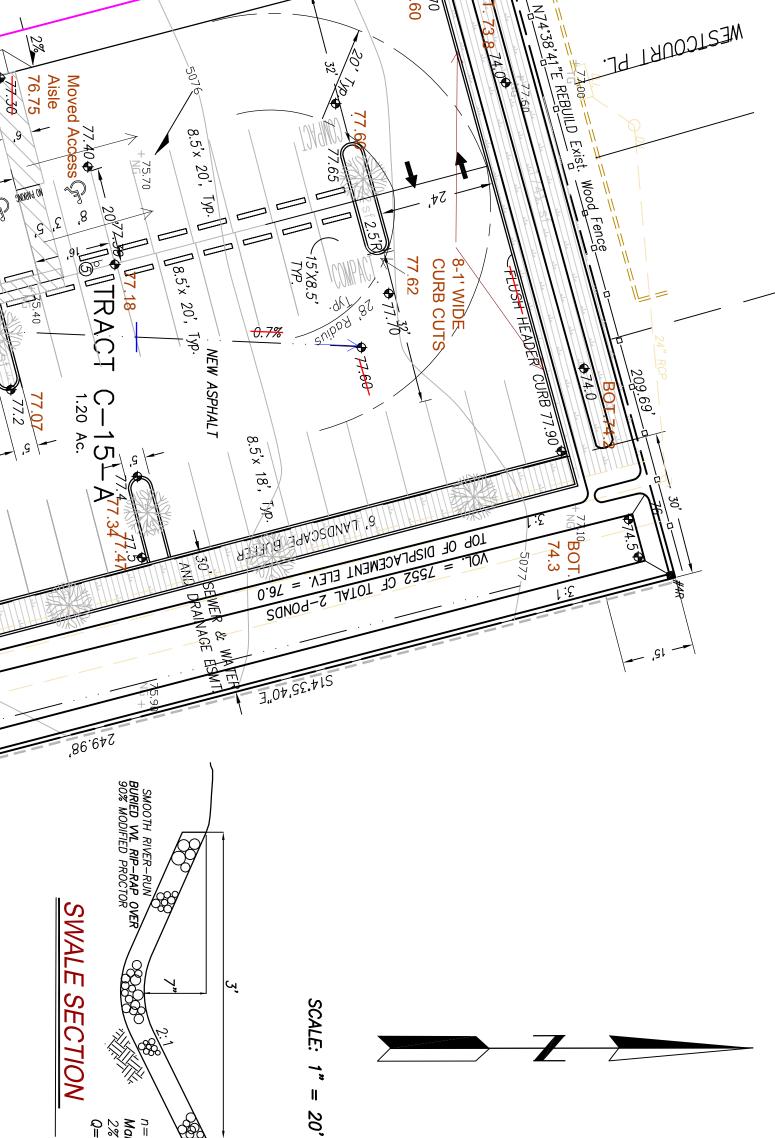
76.1<u>1</u>

ACEMENT VOL. = AREA OF 76
PROVIDED AREA OF 74
AREA OF 76
AS-BUILTAREA OF 74
THEREFORE 0) $/2 \times depth$

I, PHILIP W CLARK, NMPE 10265, OF THE FIRM CLARK CONSULTING ENGINEERS, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 3-15-17. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY GARY E. GRITSKO, NMPS 8686, OF ALPHA PRO SURVEYING IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR _CERTIFICATE OF OCCUPANCY. THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.



,67 = ,G+



YCINITY

ZONE

K-11

NOTES

₱74 BOIL

1. ALL WORK WITHIN THE RIGHT—OF—WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION W/ 9 UPDATES. ALL DRAINAGE IMPROVEMENTS WITHIN THE CITY ROW SHALL BE BUILT, INSPECTED, AND ACCEPTED PER THE S.O. (SPECIAL ORDER) 19 PROCESS

n=0.04 Mannings 2% Slope, Q= 3 CFS

ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL.

AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.

REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1012, NATIVE SEED MIX.
REFER TO & SEE EROSION & SEDIMENT CONTROL PLAN CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.

MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

EGEND

NEW SPOT ELEVATION NEW CONTOUR EXIST. SPOT ELEVATION CONTOUR +24.0 As-Built 74.5 — 10 , • , ◆ 24.0 -12

NEW SWALE -DRAINAGE DIRECTION, EXISTING

TC

TOP OF CURB, EXISTING FLOWLINE EXISTING POWER POLE
FACE OF CURB/FACE OF CURB NEW P.C.C., CONCRETE HIGH POINT 0

PROJEC DATA

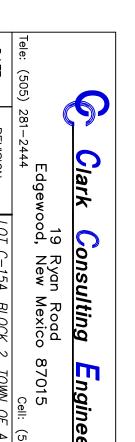
LEGAL DESCRIPTION

LOT C-15A, BLOCK 2, TOWN OF ATRISCO GRANT ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

TOP OF REBAR/CAP #13244 AT THE SOUTHEAST CORNER MSL ELEVATION = 5076.48, AS TIED FROM COA 3-1/4" DIAMETER ALUM DISK, ACS 18_K11, NAVD 88, MSL ELEV. 5076.47, LOCATED AT THE ENE CURB RETURN OF 63TH ST. AND CENTRAL AVE. PROJECT BENCHMARK

TOPOGRAPHIC DESIGN SURVEY

PROVIDED BY ALPHA PRO SURVEYING SUPPLEMENTED BY CLARK CONSULTING ENGINEERS UNDER DIRECTION OF GARY E. GRITSKO, N.M.P.S., DATED APRIL 2016.



Engineers

ADDR COAHYDROL
ADDED SO19 NOTES
&REF: TO ESC PLAN

Grading & Drainage

Plan

QF

3/15/17