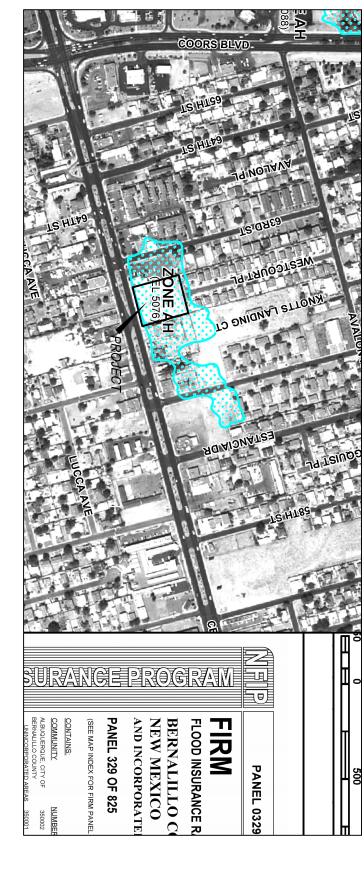


ORTHO-PHOTO, DA TED 11 <u>__</u> 2015

₱74 BOIL



· FI JAMARATIE

Moved Aisle 76.75

6.75

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

ADING DRAINAGE ע $\stackrel{A}{\geq}$

29.0

12,412

FIN. FLR. -ELEV. 77.0 76.90

20.

R=117.10' L=60.00'

EXIST. W.I./WALL

950 CF

EXIST. 6 SDWK!

Ensure 3'X@1%

<u>PF.H.</u> ====

27' EXIST. DRIVE PAD

TEMP.

BENCHERIM

= -EXIST. STD C/G

St

·NWQZ '01

8.5'x 20',

8

8.5° 8.5°

18,

BOT 74.5

EXIST. BLK. WALL

0.7% 0.5%

FIN. FLR.-ELEV. 77.6 77.55

,67 = ,G+

20',

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

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

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] EXISTING CONDITIONS (PREVIOUSLY DEVELOPED) PRECIP. 'C' = 0.99 In. [0.44] PEAK DISCHARGE 'A' = 2.9 CFS/AC. [1.5]

DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND
FOR STUDY AREA LAND TREATM'T **VOLUMETRIC** DISCHARGE

UNDEVEL./ LANDSCAPING / Harvest GRAVEL & COMPACTED SOIL ROOF — PAVEMENT 0.XXX Ac.(XX%) 0.20 Ac.(17%) 0.0 Ac.(0%) 1.0 Ac.(83%) 1.2 Ac.

1.75 In.[1.07] VOLUME 100 = 4Q Peak
1.29[0.24]
2.03[0.76]
2.87[1.49]
4.40[2.90]

ROUTE DEVELOPED RUNOFF THROUGH EXISTING/UPGRADED SOFT LANDSCAPING INCLUDING DEPRESSED LANDSCAPING STRIP ALONG PARKING AS SHOWN

BASIN TO CFS...SIZE

ABOVE)

<u>E</u> 0.49[0.08] 0.67[0.22] 0.99[0.44] 1.97[1.24]

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

Where: C = 1' W. SDWK. A = 0.625 S = 0.7, g = 32 f/s $\langle CULV. = 1'x7-1/2''$ SF, H=0.625'

OUTLET:

Q Q | |

 $CA \sqrt{2gH}$ 2.8 CFS

2' WIDE

ACEMENT VOL. = AREA OF 76
PROVIDED AREA OF 74
AREA OF 76
AS-BUILTAREA OF 74
THEREFORE

] 2' DEPTH, N. POND] 1.6' DEPTH, E. POND 7552 CF

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.

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.

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 - "SO-19 PERMIT"
City R.O.W. REQUIRED BEFORE 76.49 PER COA 30 PAD
TC 175 BE CLOSED
TO BE CLOSED EQUILIZATION Install 2-4 p PVC, INV. 75.8

0.9%

Build Riprapu Swale Per Se

76.1<u>1</u>

NOT BUILT Build Culv. 435 Sdwk COA 2435 Per INV. 75. 25 No.

DISPLACEMENT VOL. = PROVIDED EXISTING Displaced Volu = (25082 SF + 0) / 2me = (area of 5076 Contour x 0.6' = 7525 CF 0) $/2 \times depth$

9

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.

20

OS CENTRAL

V

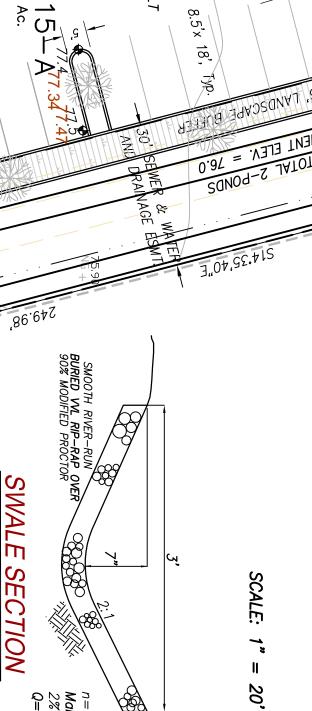
DRAINAGE CERTIFICATION

AS-BUILT

M

7

73874.00 MESICONKI. ~15'X8.5' TYP. 77.62 8-1' WIDE.
CURB CUTS FLUSH-HEADER CURB 77.90 **◆**77.76



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

YCINITY

ZONE

K-11

NOTES

20°, Typ.

8.5'x

20',

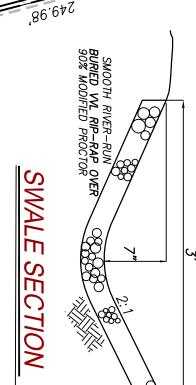
Typ.

ASPHAL

\0.7%

MITRACT

C-1.20



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

TOP OF CURB, EXISTING FLOWLINE NEW P.C.C., CONCRETE TC

EXISTING POWER POLE
FACE OF CURB/FACE OF CURB HIGH POINT 0

PROJEC DATA

LEGAL DESCRIPTION

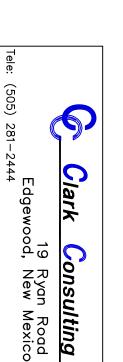
LOT C-15A, BLOCK 2, TOWN OF ATRISCO GRANT ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

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.

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.



19 Ryan Road Edgewood, New Mexico 87015 (505) 281-2444 Engineers

ADDR COAHYDROL
ADDED SO19 NOTES
&REF: TO ESC PLAN Grading & Drainage

3/15/17

Plan QF