CITY OF ALBUQUERQUE Planning Department



Mayor Timothy M. Keller

January (MA) December 8, 2018

J. Graeme Means, P.E. High Mesa Consulting Group 6010 B Midway Park Blvd NE Albuquerque, NM, 87109

RE: Good 2 Go: Broadway 1401 Broadway Blvd. SE Grading and Drainage Plan Request for Temp C.O. - Accepted Engineer's Certification Dated 1/5/18 Hydrology File: L14D022

Dear Mr. Means:

PO Box 1293

Based on the Certification received 1/5/18 and site visit on 1/8/18, the site is acceptable for a Temp Certificate of Occupancy by Hydrology.

The following items require correction or additional verification prior to engineer's final certification for Permanent Certification of Occupancy:

Albuquerque

NM 87103

- The fueling area (roughly the south half of the site) must be completed prior to certification for permanent certification of occupancy.
- The north-south flowline west of the southernmost Broadway entrance lacks definition and may not adequately serve to direct runoff to the water quality basin. This area shall be flow tested in the presence of the engineer. If tested does not indicate compliance with the intent, then pavement correction will be required.

www.cabq.gov

If you have any questions, please contact me at 924-3986 or at

Sincerely,

und D Heather

James D. Hughes, P.E. Principal Engineer, Hydrology Planning Department

MA/JH C: File

Albuquerque - Making History 1706-2006

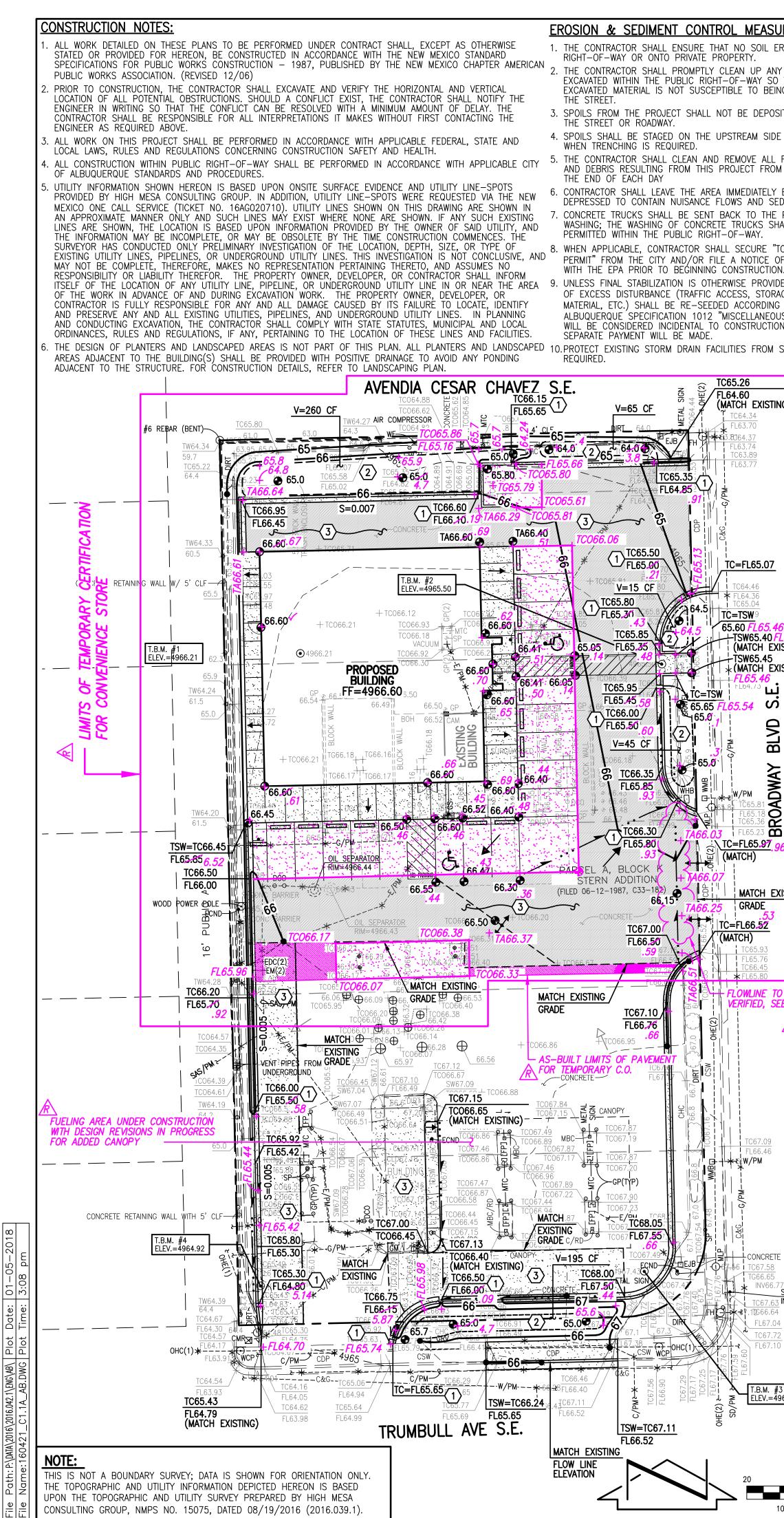


City of Albuquerque

Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title:	Building Pe	rmit #: Hydrology File #:	
DRB#:	EPC#:	Work Order#:	
Legal Description:			
City Address:			
Applicant:		Contact:	
Address:			
		E-mail:	
Other Contact:		Contact:	
Address:			
		E-mail:	
Check all that Apply:			
DEPARTMENT: HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTROL		TYPE OF APPROVAL/ACCEPTANCE SOUGHT:	
TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION CONCEPTUAL G & D PLAN		PRELIMINARY PLAT APPROVAL SITE PLAN FOR SUB'D APPROVAL SITE PLAN FOR BLDG. PERMIT APPROVAL FINAL PLAT APPROVAL	
GRADING PLAN DRAINAGE MASTER PLAN DRAINAGE REPORT CLOMR/LOMR		SIA/ RELEASE OF FINANCIAL GUARANTEE FOUNDATION PERMIT APPROVAL GRADING PERMIT APPROVAL	
TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTROL PLAN (ESC)		SO-19 APPROVAL PAVING PERMIT APPROVAL GRADING/ PAD CERTIFICATION WORK ORDER APPROVAL CLOMR/LOMR	
OTHER (SPECIFY)		PRE-DESIGN MEETING?	
IS THIS A RESUBMITTAL?:	Yes No	OTHER (SPECIFY)	
DATE SUBMITTED:	By:		

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:



IEASURES:		GRADING KEYED NOTES	CALCULATIONS
SOIL ERODES I	INTO PUBLIC	(1) CONSTRUCT CURB CUT PER TYPICAL DETAIL, SHEET C3.1	I. SITE CHARACTERISTICS
UP ANY MATER IAY SO THAT TI		2 DEPRESSED LANDSCAPING FOR WATER QUALITY RETENTION	A. PRECIPITATION ZONE = <u>2</u> B. P _{100 6 HR} = P ₃₆₀ = 2.4 IN
O BEING WASH			C. TOTAL PROJECT AREA $(A_T) = 37,855$ SF
DEPOSITED OR	STORED IN	ENGINEER'S CERTIFICATION FOR TEMPORARY C.O. I, J. GRAEME MEANS, NMPE 13676, OF THE FIRM HIGH MESA CONSULTING GROUP HEREBY CERTIFY THAT THIS PROJECT HAS	D. LAND TREATMENTS
M SIDE OF TRI	ENCHES	BEEN CONSTRUCTED, GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 12-05-2016 WITH TWO NOTED EXCEPTIONS THAT NEED TO BE CORRECTED PRIOR TO ISSUANCE OF PERMANENT CERTIFICATE OF OCCUPANCY. THESE EXCEPTIONS DO NOT IMPACT THE SITE TO THE EXTENT THAT A TEMPORARY	1. EXISTING LAND TREATMENT
E ALL FUGITIVE	E DUST. SOIL	CERTIFICATE OF OCCUPANCY SHOULD BE WITHELD.	TREATMENT AREA (SF/AC) A
T FROM THE S		THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT WAS OBTAINED 01-04-2018 BY HIGH MESA CONSULTING GROUP UNDER THE DIRECTION OF JOSEPH M. SOLOMON, JR., NMPS 15075, AND IS TRUE AND CORRECT TO THE	B
ND SEDIMENT.	THE CURB	BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED TO SUPPORT A TEMPORARY CERTIFICATE OF OCCUPANCY FOR THE CONVENIENCE STORE PORTION OF THE SITE AND DOES NOT REPRESENT A CERTIFICATION FOR PERMANENT CERTIFICATE OF OCCUPANCY.	C 2,074 SF
O THE PLANT I KS SHALL NOT		THE FOLLOWING ITEMS REQUIRE CORRECTION OR ADDITIONAL VERIFICATION PRIOR TO ENGINEER'S FINAL CERTIFICATION FOR	0.05 AC
AY.		PERMANENT CERTIFICATE OF OCCUPANCY:	D 35,781 SF 0.82 AC
URE "TOPSOIL TICE OF INTEN		1) THE FUELING AREA (ROUGHLY THE SOUTH HALF OF THE SITE) IS NOT COMPLETE. A DESIGN REVISION AND SUBMITTAL IS IN PROGRES TO ADD A CANOPY. THE OWNER INTENDS TO OPEN THE CONVENIENCE STORE IN ADVANCE OF THE FUELING AREA.	2. DEVELOPED LAND TREATMENT
RUCTION. PROVIDED FOR,		BECAUSE THE SITE HAS A ROUGH BASIN DIVIDE THAT ROUGHLY MATCHES THE PHASE LINE, THE SOUTHERN PORTION IS NOT NECESSARY FOR DRAINAGE OF THE CONVENIENCE STORE AREAS BEING CERTIFIED. THE FUELING AREA MUST BE COMPLETED PRIOR TO CERITIFICATION FOR PERMANENT CERTIFICATE OF OCCUPANCY.	TREATMENT AREA (SF/AC)
STORAGE YARI ORDING TO CIT	YOF	2) THE NORTH-SOUTH FLOWLINE WEST OF THE SOUTHERNMOST BROADWAY ENTRANCE LACKS DEFNINTION AND MAY NOT	
LANEOUS SEED RUCTION, THER		ÁDEQUATELY SERVE TO DIRECT RUNOFF TO THE WATER QUALITY BASIN. THIS AREA SHALL BE FLOW TESTED IN THE PRESENCE OF THE ENGINEER. IF TESTING DOES NOT INDICATE COMPIANCE WITH THE INTENT, THEN PAVEMENT CORRECTIONS WILL BE	B
FROM SEDIMEN	IT AS	REQUIRED. UPON CORRECTION OF THE PRECEDING, A VERIFICATION SURVEY AND CERTIFICATION WILL BE PROVIDED FOR PERMANENT	C 4,534 SF 0.10 AC
		CERTIFICATE OF OCCUPANCY.	D 33,321 SF 0.76 AC
		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. THIS CERTIFICATION DOES NOT ADDRESS ADA	
EXISTING)		COMPLIANCE WHICH IS BEYOND THE SCOPE OF GRADING AND DRAINAGE. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.	II. <u>HYDROLOGY</u>
24 70		GRAEME MEAN	A. EXISTING CONDITION 100 YEAR 1. 100-YR STORM
<u>7</u> 4 89		4. Fraeme Mean (₹ (13676))) 01-05-2018	<u>a. VOLUME 100-YR, 6- HR</u> E _W = (E _A A _A +E _B A _B +E _C A _C +E _D A _D)/A _T
77		J. GRAEME MEANS, NMPE NO. 13676	$E_{W} = (0.53^{*}0.00) + (0.78^{*}0.00) + (1.13^{*}0.05) + (2.12^{*}0.00)$
			$V_{100,6 \text{ HR}} = (E_W/12)A_T = (2.07/12)0.87 =$
		POFESSION	$\frac{b. PEAK DISCHARGE}{Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B} + Q_{PC}A_{C} + Q_{PD}A_{D}}$
	DRAINAGE	PLAN	$Q_{P} = (1.56 * 0.00) + (2.28 * 0.00) + (3.14 * 0.05) + (4.14)$
		DUCTION AND EXECUTIVE SUMMARY	B. DEVELOPED CONDITION
<u>65.07</u>	EXISTING SITE	T, LOCATED IN THE SOUTH BROADWAY AREA OF ALBUQUERQUE, REPRESENTS A MODIFICATION TO AN E WITHIN AN INFILL AREA. ON A DEVELOPED SITE THAT CONTAINS AN EXISTING BUILDING, PAVEMENT, A	1. <u>100-YR STORM</u> a. VOLUME
<u>46</u> 36		CANOPY, CARWASH, AND LANDSCAPED AREAS. THE PROPOSED REDEVELOPMENT IS COMPRISED OF NEW NSTRUCTION, PAVING IMPROVEMENTS, LANDSCAPING, AND UTILITY IMPROVEMENTS. THE DRAINAGE PLAN FOF	$E_{W} = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$ $E_{W} = (0.53^* 0.00) + (0.78^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.10) + (2.12^* 0.00) + (1.13^* 0.00)$
9		T WILL CONTINUE TO FOLLOW EXISTING DRAINAGE PATTERNS INTO BROADWAY BLVD AND TRUMBULL AVE DUCE THE PEAK DISCHARGE RATE. THERE ARE NO OFF-SITE FLOWS THAT DRAIN INTO THE SITE.	$V_{100,6 \text{ HR}} = (E_W/12)A_T = (2.00/12)0.87 =$
<i>L65.46</i> 55.40 <i>FL65.35</i>	II. PROJE	CT DESCRIPTION ′ THE VICINITY MAP ON SHEET C1.1, THE SITE LOCATED AT THE NORTHWEST CORNER OF THE	b. PEAK DISCHARGE
CH EXISTING) 55.45	INTERSECTION	I OF BROADWAY BLVD. SE AND TRUMBULL AVE. SE. THE CURRENT LEGAL DESCRIPTION IS PARCEL A LOTS TWO(2) THRU SIX(6), INCLUSIVE AND THE SOUTHERLY 18 OF LOT ONE(1), BLOCK "K" EASTERN	$\overline{Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B}} + Q_{PC}A_{C} + Q_{PD}A_{D}$
CH EXISTING)	ADDITION. AS	S SHOWN BY PANEL 334 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE	$Q_{P} = (1.56 * 0.00) + (2.28 * 0.00) + (3.14 * 0.10) + (4.1$
ло С С	WITHIN A DES	SHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO SEPTEMBER 26, 2008, THIS SITE DOES NOT LIE SIGNATED FLOOD HAZARD ZONE.	C. <u>COMPARISON 100 YEAR</u> 1. 100-YR STORM
	THE FOLLOWI	ROUND DOCUMENTS ING IS A LIST OF DOCUMENTS RELATED TO THE SITE AND SURROUNDING AREA. THE LIST MAY NOT BE	a. VOLUME 100-YR, 6-HR
BLVD		/E, HOWEVER REPRESENTS A SUMMARY OF THE RELEVANT PLANS AND DOCUMENTS WHICH ARE KNOWN TO ER AT THE TIME OF THE PLAN PREPARATION.) $\Delta V_{100, \; 6 \; HR} = 6310 - 6530 =$ b. PEAK DISCHARGE
		RAPHIC AND UTILITY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP (HMCG), DATED (NMPS 15075). THE SURVEY DOCUMENTS THE EXISTING CONDITIONS FOR THE SITE.	$\Delta Q_{100} = 3.9 - 4.0 =$
SOADWAY	B. GRADIN	IG AND DRAINAGE PLAN FOR DIAMOND SHAMROCK GAS STATION, PREPARED BY LEE ENGINEERING, R.G. DATED 6/26/1987. THIS ESTABLISHED FREE DISCHARGE FROM THE DEVELOPED SITE TO BROADWAY BLVD	* DOES NOT INCLUDE PONDING WHICH IS A GRE
5.81 O	SE AND TRUI	MBULL AVE. SE AND A DISCHARGE RATE OF 3.69 CFS. THE PRECIPITATION DEPTH, RATIONAL METHOD AND PEAK INTENSITY USED TO CALCULATE THIS PEAK DISCHARGE RATE ARE LOWER THAN THE STANDARE	D. <u>FIRST FLUSH CALCULATIONS</u> 1. RETENTION REQUIREMENT
5.18 O 5.23 D	VALUES USE	D IN THE CURRENT DPM WHICH ACCOUNTS FOR THE DIFFERENCE IN DISCHARGE RATES BETWEEN OUR	a. VOLUME
5.97.96	I. EXISTIN	EXISTING RATE AND APPROVED DEVELOPED RATE SHOWN ON THIS PLAN. IG CONDITIONS	V _{RQ} = ((P _{FF} -IA _D)/12)A _D V _{RQ} = ((0.44-0.10)/12)(33320.70) =
)	ALSO CONTAI	G SITE CONSISTS OF A GAS STATION BUILDING, CANOPY, CAR LOCATED WITHIN AN INFILL AREA. THE SITE INS EXISTING CONCRETE PAVING, CURB AND GUTTER, LANDSCAPING, AND AN EXISTING RETAINING WALL	2. WATER QUALITY PONDING PROVIDED ONSITE (
TCH EXISTING	THROUGH TH	WEST EDGE OF THE SITE. THE SITE IS DIVIDED BY A HIGH POINT THAT RUNS NORTHWEST TO SOUTHEAST IE SITE. THE AREA SOUTH OF THE HIGH POINT DRAINS FROM NORTHEAST TO SOUTHWEST AND FREELY	V _{CAP} = 260 + 15+ 45+195+65 =
ADE .53	THE SITE. TH	INTO TRUMBULL AVE THROUGH THE EXISTING DRIVEPAD ENTRANCES LOCATED ON THIS SOUTH SIDE OF IE AREA NORTH OF THE HIGH POINT FROM SOUTHWEST TO NORTHEAST AND FREELY DISCHARGES INTO	
6 <u>.57</u>		LVD. THROUGH THE EXISTING DRIVEPAD ENTRANCES LOCATED ON THIS THE EAST SIDE OF THE SITE. THE TAL DISCHARGE THAT LEAVES THE SITE IS 4.0 CFS. THERE ARE NO OFFSITE FLOWS INTO THE SITE.	
65.93 65.76		DPED CONDITIONS THE NEW DEVELOPMENT THE EXISTING GAS STATION BUILDING AND CARWASH WILL BE DEMOLISHED AND	
55.76 56.45 55.80	ONE OF THE	EXISTING DRIVE PAD ENTRANCES ALONG TRUMBULL AVE. WILL BE REMOVED AND REPLACED WITH ID CURB AND GUTTER. THE EXISTING CANOPY AND GAS STALLS WILL REMAIN. THE EXISTING RETAINING	•
INE TO BE	WALL AND C	URB ALONG THE WEST EDGE OF THE SITE WILL ALSO REMAIN UNDISTURBED. THE NEW SITE WILL CONTAIN DING, PAVEMENT, SIDEWALKS, AND DEPRESSED LANDSCAPED AREAS FOR WATER QUALITY RETENTION. THE	RECORD DRAW
IED, SEE CERT. ^	: EVELOPED	SITE WILL STILL FOLLOW THE EXISTING DRAINAGE PATTERN OF SPLITTING THE SITE RUNOFF AND FREELY INTO TRUMBULL AVE AND BROADWAY BLVD BUT UNLIKE IN THE EXISTING CONDITION, A PORTION OF THE	CONSTRUCT RECORD INFORMATION (V
R	RUNOFF WILL	BE DIRECTED TOWARDS DEPRESSED LANDSCAPED AREAS PRIOR TO LEAVING THE SITE. THE PROPOSED	$\checkmark \qquad AS-CONSTRUCTED = AS-$
	DISCHARGE.	ARGE THAT LEAVES THE SITE WILL BE 3.9 CFS WHICH IS A 0.1 CFS REDUCTION TO THE EXISTING THIS RATE IS SLIGHTLY HIGHER THAN THE APPROVED DEVELOPED DISCHARGE OF 3.69 CFS BUT THIS	(VERIFIED BY AS-BUILT S
		IS ATTRIBUTABLE TO FACTORS DESCRIBED ABOVE IN THE BACKGROUND DOCUMENT SECTION. AS IN THE NDITION, THERE WILL CONTINUE TO BE NO OFFSITE FLOWS IMPACTING THE PROJECT SITE.	.36 [·] 42" RECORD INFORMATION FR +25.2 RECORD INFORMATION FR
		ED LANDSCAPED WATER HARVESTING AREAS WITHIN AND AT THE PERIMETER OF THE DEVELOPED SITE WILL	
		D TREAT THE FIRST FLUSH RUNOFF GENERATED BY THE PROPOSED IMPROVEMENTS TO THE MAXIMUM CTICABLE. FIRST FLUSH CALCULATIONS FOR THE DEVELOPED SITE SHOW THAT 940 CF OF WATER	LEGEND
67.09	HARVESTING	IS REQUIRED; AVERAGE END AREA METHOD CALCULATIONS FOR THE DEVELOPED SITE DEMONSTRATE THAT ED ONSITE WATER HARVESTING AREA CAPACITY IS 580 CF. DUE TO SITE TOPOGRAPHY LIMITATIONS AND	C&G CURB AND GUTTER
_66.46 ′PM	THIS BEING	A PARTIAL MODIFICATION TO AN EXISTING SITE, NO ADDITIONAL WATER QUALITY AREAS ARE AVAILABLE.	C/PM COMMUNICATION BY PAINT MARK CAM CAMERA
	THE GRADING	PLAN ON SHEET C1.1 SHOWS 1) THE EXISTING GRADES INDICATED BY THE CONTOURS AT 1 FOOT	CHC CONCRETE HEADER CURB CLD CENTERLINE OF DOOR
	LIMIT AND CH	ND SPOT ELEVATIONS FROM THE TOPOGRAPHIC SURVEY REFERENCED ABOVE BY THIS OFFICE; 2) THE HARACTER OF EXISTING IMPROVEMENTS AS SHOWN BY THE AFOREMENTIONED SURVEY; 3) THE LIMIT AND	CLF CHAINLINK FENCE
		OF THE PROPOSED IMPROVEMENTS; 4) PROPOSED GRADES INDICATED BY CONTOURS AT 1 FOOT ND SPOT ELEVATIONS; AND 5) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES.	CO SEWER CLEANOUT CONC CONCRETE

III. CALCULATIONS THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100 YEAR. 6-HOUR RAINFALL EVENT, THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISIONS OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993 AND REVISED 1997, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS SHOWN BY THE CALCULATIONS, THERE WILL BE A DECREASE IN THE 100-YEAR PEAK DISCHARGE AND VOLUME RUNOFF ATTRIBUTABLE TO THIS PROJECT DUE TO. THE ADDITION OF LANDSCAPED AREAS. THE DISCHARGE WILL BE FURTHER REDUCED DUE TO THE CONSTRUCTION OF WATER QUALITY PONDS. IV. CONCLUSIONS

THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED FROM THE EVALUATIONS CONTAINED HEREIN:

1. THE PROPOSED IMPROVEMENTS REPRESENT MODIFICATIONS TO AN EXISTING DEVELOPED SITE.

. THE PROPOSED IMPROVEMENTS WILL NOT SIGNIFICANTLY ALTER THE EXISTING DRAINAGE PATTERNS ON SITE. 3. THE PROPOSED IMPROVEMENTS WILL RESULT IN A DECREASE IN THE DEVELOPED RUNOFF GENERATED BY THE SITE. 4. THE PROPOSED IMPROVEMENTS WILL RESULT IN A DECREASE IN THE DEVELOPED DISCHARGE RATE 5. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS.

SCALE:

ELEV.=4967.43

COMMUNICATIONS RISER CMR CSW CONCRETE SIDEWALK DCO DOUBLE SEWER CLEANOUT ELECTRIC BY PAINT MARK E/PM ECND ELECTRIC CONDUIT ELECTRIC DISCONNECT SWITCH EDC EJB ELECTRIC JUNCTION BOX ELECTRIC METER ΕM FH FIRE HYDRANT FLOWLINE FUEL PUMP FP G/PM GAS BY PAINT MARK GM GAS METER GP STEEL GUARD POST GRV GRAVEL GAS SERVICE GS IRRIGATION VALVE BOX IVF 10"X10" METAL BUILDING COLUMN MBC METAL COLUMN MC METAL LIGHT POLE MLP MTC METAL TRASH CAN OHC(1)OVERHEAD COMMUNICATION (# OF LINES) OHE(2)OVERHEAD ELECTRIC (# OF LINES)

