

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

November 23, 2021

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM 87108

**RE: Calle Cuarta Residential & Commercial
420 Fitzgerald Road NW
Conceptual Grading and Drainage Plans
Engineer's Stamp Date: 10/25/21
Hydrology File: G14D097**

Dear Mr. Arfman:

PO Box 1293
Albuquerque
NM 87103

Based upon the information provided in your submittal received 10/25/2021, the Conceptual Grading & Drainage Plans are approved for action by the DRB for Site Plan for Building Permit.

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.

www.cabq.gov

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: Calle Cuarta Residential & Commerical Building Permit #: _____ Hydrology File #: G14
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: Lots 1 thru 3, Block 1, Fitzgerald Addition and Tracts 90-C & 90-B-2
City Address: 420 Fitzgerald Road NW - Albuquerque, NM

Applicant: Isaacson & Arfman, Inc. Contact: Fred C. Arfman or Bryan J. Bobrick
Address: 128 Monroe Street NE - Albuquerque, NM 87108
Phone#: (505) 268-8828 Fax#: _____ E-mail: freda@iacivil.com
bryanb@iacivil.com

Owner: Yes Housing, Inc. Contact: Thaddeus Lucero
Address: 901 Pennsylvania Street NE - Albuquerque, NM 87110
Phone#: (505) 923-9611 Fax#: _____ E-mail: tlucero@yeshousing.org

TYPE OF SUBMITTAL: _____ PLAT (____# OF LOTS) _____ RESIDENCE ☒ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

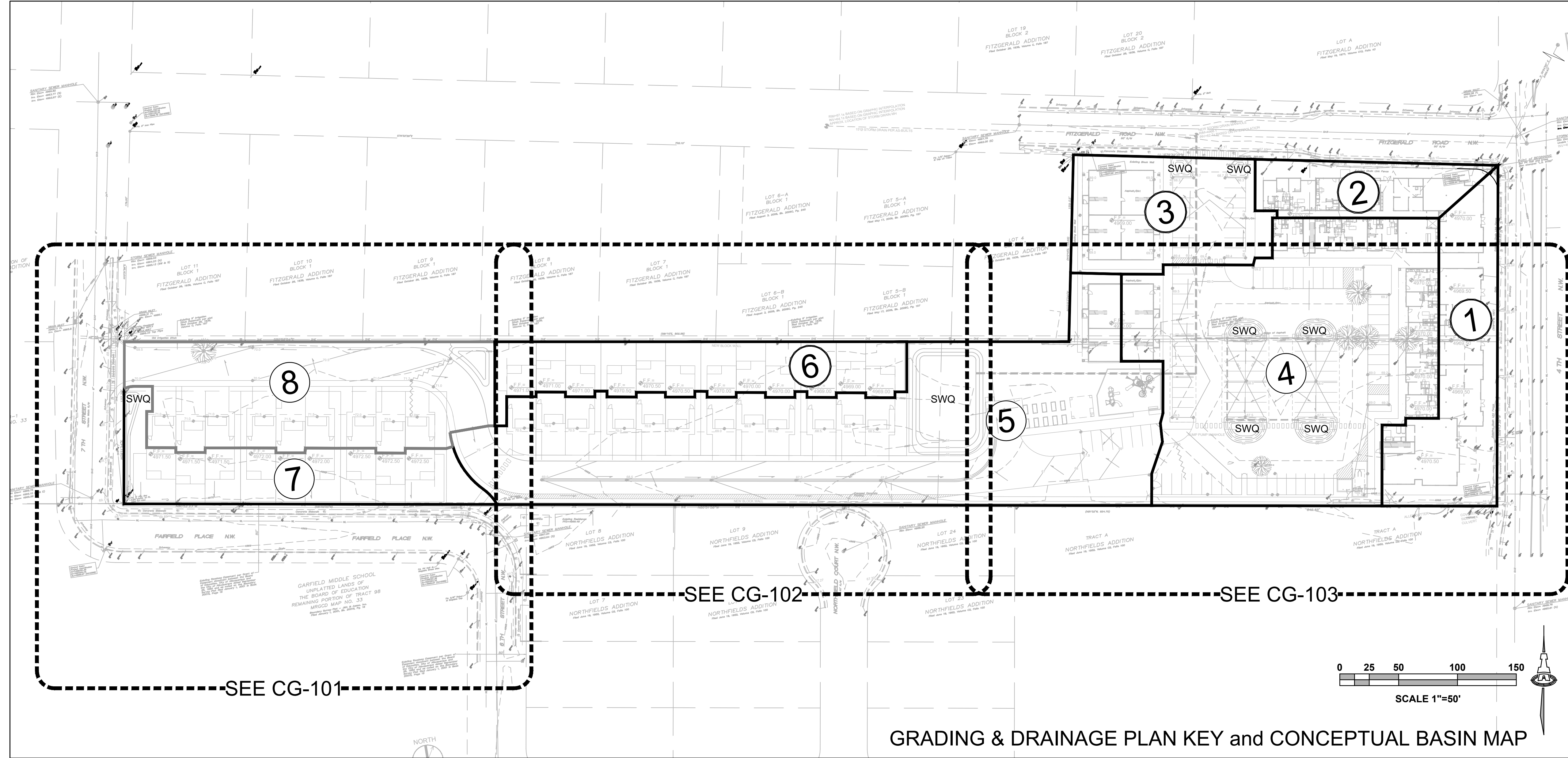
_____ BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY
_____ PRELIMINARY PLAT APPROVAL
_____ SITE PLAN FOR SUB'D APPROVAL
☒ SITE PLAN FOR BLDG. PERMIT APPROVAL
_____ FINAL PLAT APPROVAL
_____ SIA/ RELEASE OF FINANCIAL GUARANTEE
_____ FOUNDATION PERMIT APPROVAL
_____ GRADING PERMIT APPROVAL
_____ SO-19 APPROVAL
_____ PAVING PERMIT APPROVAL
_____ GRADING/ PAD CERTIFICATION
_____ WORK ORDER APPROVAL
_____ CLOMR/LOMR
_____ FLOODPLAIN DEVELOPMENT PERMIT
_____ OTHER (SPECIFY) _____

DATE SUBMITTED: October 25, 2021 By: Fred C. Arfman

COA STAFF:

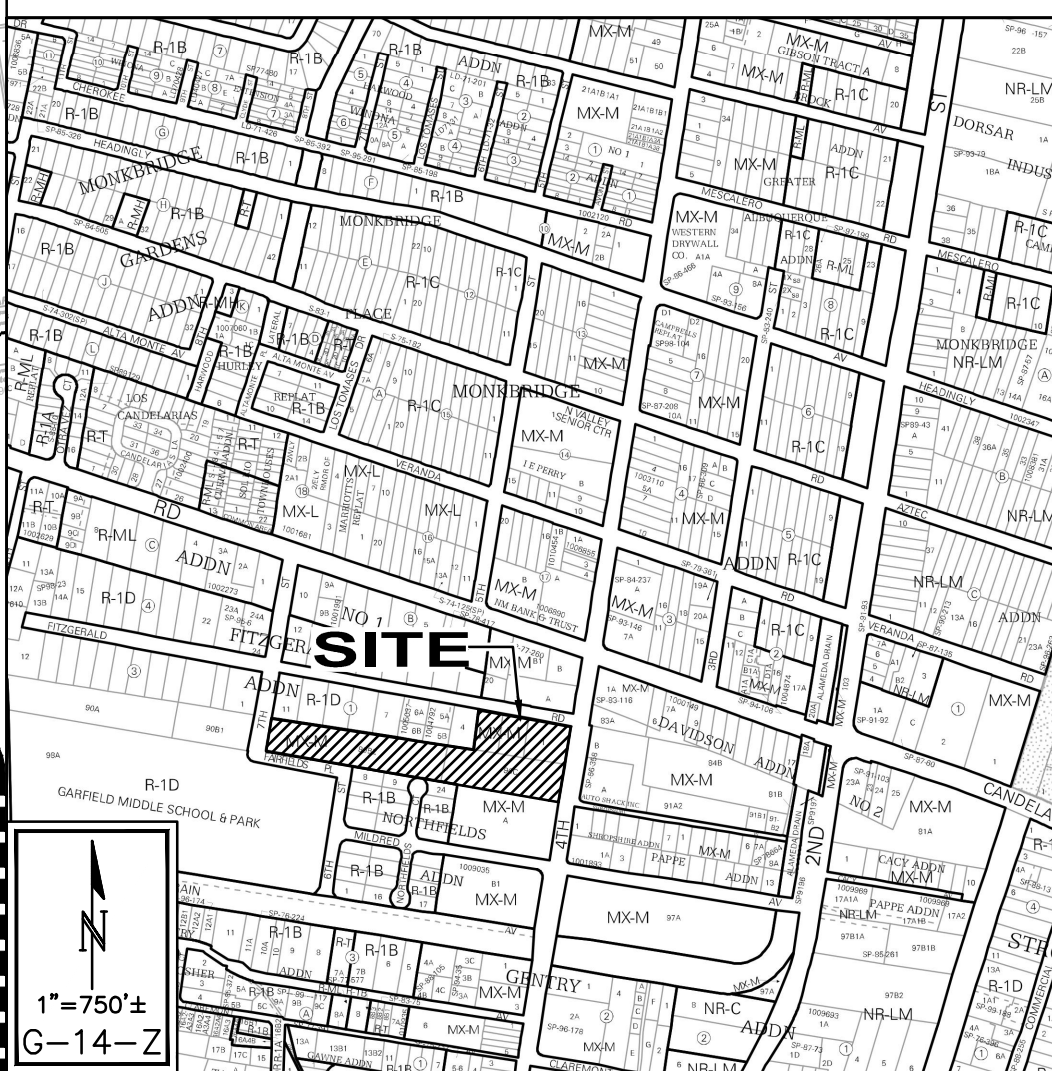
ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



GRADING & DRAINAGE PLAN KEY and CONCEPTUAL BASIN MAP

VICINITY MAP



PROJECT INFORMATION

PROPERTY: THE SITE IS A PREVIOUSLY DEVELOPED PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP G-14. THE SITE IS BOUND TO THE EAST BY 4TH ST. SW, TO THE WEST BY 7TH ST. SW, TO THE NORTH BY DEVELOPED RESIDENTIAL LOTS AND FITZGERALD RD. NW, AND TO THE SOUTH BY DEVELOPED RESIDENTIAL AND COMMERCIAL PROPERTIES.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A 21 UNIT TOWNHOME PROPERTY ADJACENT TO A MIXED MULTI-FAMILY RESIDENTIAL COMMERCIAL AREA WITH ASSOCIATED ASPHALT PAVED ACCESS, PARKING, AND LANDSCAPING.

LEGAL: LOTS 1 THRU 3, BLOCK 1 FITZGERALD ADDITION AND TRACTS 90C AND 90B2 M.R.G.C.D. PROPERTY MAP NO. 33.

BENCHMARK: VERTICAL DATUM IS BASED UPON ALBUQUERQUE CONTROL SURVEY MONUMENT "23-G14", ELEVATION = 4969.296 FEET (NAVD 88).

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: THE SUBJECT PROPERTY APPEARS TO LIE WITHIN "ZONE X" (AREA WITH REDUCED FLOOD RISK DUE TO LEVEE) AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP NUMBER 35001C0332G, EFFECTIVE DATE SEPTEMBER 26, 2008.

DRAINAGE PLAN CONCEPT: BASED ON A PREDESIGN MEETING WITH COA HYDROLOGY, (RENEE BRISETTE - SENIOR ENGINEER) THE PROPERTY IS PERMITTED FREE DISCHARGE TO THE SURROUNDING STREETS. SURFACE DISCHARGE WILL BE PROVIDED WHERE POSSIBLE. A PRIVATE STORM DRAIN SYSTEM(S) WILL BE INSTALLED TO COLLECT ON-SITE RUNOFF AND ROUTE TO THE EXISTING PUBLIC STORM DRAINS IN 7TH STREET AND FITZGERALD ROAD NW.

SURVEYOR: RUSS P. HUGG, NMPS NO. 9750, SURV-TEK, INC.

STORMWATER QUALITY PONDS

BASED ON HISTORICAL GOOGLE IMAGERY, THIS PROPERTY HAS BEEN PREVIOUSLY DEVELOPED AS A COMMERCIAL BUSINESS. FOR REDEVELOPMENT SITES, THE CABQ STORMWATER QUALITY VOLUME (SWQV) IS BASED ON THE 80TH PERCENTILE STORM EVENT OR 0.26".

THE ESTIMATED IMPERVIOUS AREA FOR THIS PROPERTY IS CALCULATED AS 71% OF TOTAL AREA: (0.71 * 5.0 AC) = 154,749 SF. THE TOTAL REQUIRED S.Q. RETENTION VOLUME = 0.26" * TYPE "D" AREA: (0.26/12 * 154,749 SF) = 3,353 CF. THIS MAY CHANGE DEPENDING ON THE FINAL IMPERVIOUS AREA TO BE CONSTRUCTED WITHIN EACH BASIN.

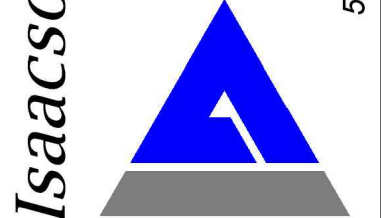
SWQV PONDS WILL BE CONSTRUCTED THROUGHOUT THE PROPERTY. AS THE SITE DEVELOPS, FINAL LOCATIONS AND DESIGN WILL BE PROVIDED AS PART OF THE BUILDING PERMIT CONSTRUCTION DOCUMENTS. PROPOSED SWQV POND AREAS ARE SHOWN TO INDICATE POTENTIAL POND LOCATIONS.

PRIOR TO BUILDING PERMIT APPROVAL, A "PAYMENT IN-LIEU FOR S.Q. VOLUME REQUIREMENT" TREASURY DEPOSIT SLIP WILL BE PROVIDED BY C.O.A. HYDROLOGY BASED ON THE PORTION OF S.Q. VOLUME (@ \$8.00 / CF THAT IS NOT RETAINED ON-SITE. A COPY OF THE PAID RECEIPT WILL BE REQUIRED PRIOR TO RECEIVING HYDROLOGY APPROVAL FOR BUILDING PERMIT.

A DRAINAGE COVENANT MAY BE REQUIRED FOR THE SWQV PONDS AND THEIR OUTFALL STRUCTURES. IF SO, THE ORIGINAL NOTARIZED FORM, EXHIBIT A (LEGIBLE ON 8.5X11) AND RECORDING FEE (PAYABLE TO CITY OF ALBUQUERQUE) WILL BE SUBMITTED AS DIRECTED.

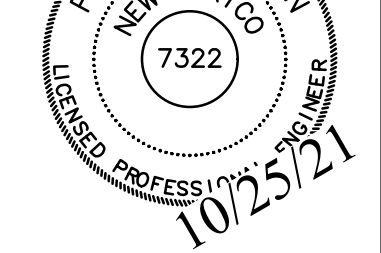


Isaacson & Arfman, Inc.
Civil Engineering Consultants
128 Monroe Street NE
Albuquerque, NM 87108
505-266-8828 | www.iacivil.com



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CONCEPTUAL
NOT FOR
CONSTRUCTION



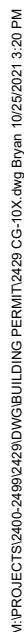
Engineer

Calle Cuarta Residential & Commercial
a development of
YES Housing

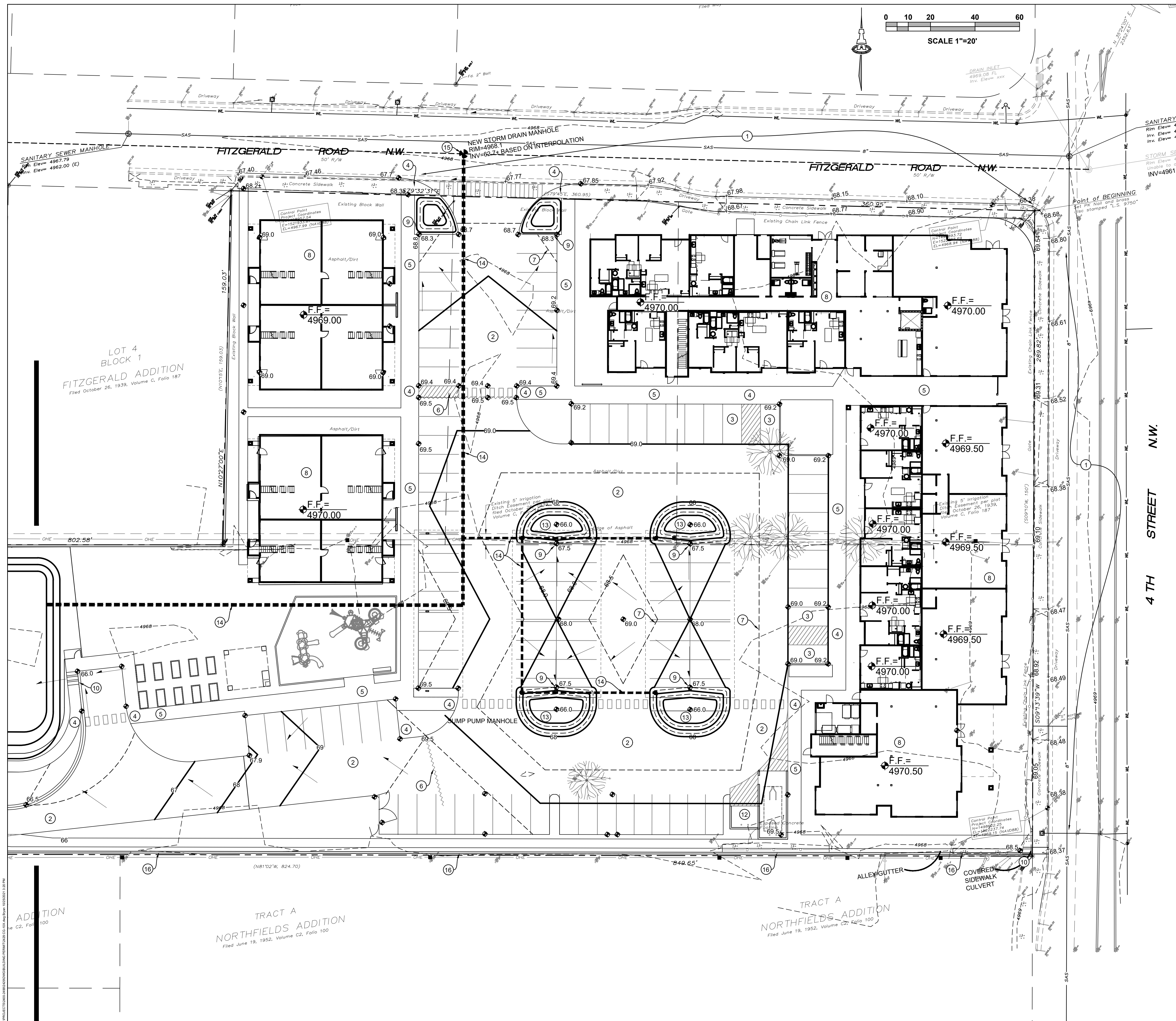
CALCULATIONS: 2429 YES Housing : 10-25-2021									
Based on City of Albuquerque DMP, Article 6-2 Hydrology dated June 26, 2020									
100-YEAR, 6-HOUR CALCULATIONS									
AREA OF SITE:		217956		SF		=		5.00 ACRE	
100-year, 6-hour									
HISTORIC FLOWS:				DEVELOPED FLOWS:				EXCESS PRECIP:	
		Treatment SF		%				Precip. Zone 2	
Area A	=	0	0%	Area A	=	0	0%	E _A = 0.62	
Area B	=	0	0%	Area B	=	30514	14%	E _B = 0.80	
Area C	=	174365	80%	Area C	=	32693	15%	E _C = 1.03	
Area D	=	43591	20%	Area D	=	154749	71%	E _D = 2.33	
Total Area	=	217956	100%	Total Area	=	217956	100%		
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)									
Weighted E =				$\frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$					
Historic E	=	1.29 in.		Developed E	=	1.92 in.			
On-Site Volume of Runoff: V ₃₆₀ = E*A / 12									
Historic V ₃₆₀	=	23430 CF		Developed V ₃₆₀	=	34888 CF			
On-Site Peak Discharge Rate: Q _p = Q _{pA} A _A +Q _{pB} A _B +Q _{pC} A _C +Q _{pD} A _D / 43,560									
For Precipitation Zone 2									
Q _{pA}		= 1.71		Q _{pC}		= 3.05			
Q _{pB}		= 2.36		Q _{pD}		= 4.34			
Historic Q _p	=	16.6 CFS		Developed Q _p	=	19.4 CFS			

BASIN NO.	1	DESCRIPTION	TO 4TH STREET
Area of basin flows =	16807	SF	= 0.39 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 1.92 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 2685 CF			
Sub-basin Peak Discharge Rate: Q _p = 1.5 cfs			
Stormwater Quality Volume = 255 CF			
BASIN NO.	2	DESCRIPTION	TO FITZGERALD STREET
Area of basin flows =	8540	SF	= 0.2 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 1.92 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 1364 CF			
Sub-basin Peak Discharge Rate: Q _p = 0.8 cfs			
FIRST FLUSH VOL. = 130 CF			
BASIN NO.	3	DESCRIPTION	TO FITZGERALD STREET
Area of basin flows =	15467	SF	= 0.4 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 1.92 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 2471 CF			
Sub-basin Peak Discharge Rate: Q _p = 1.4 cfs			
FIRST FLUSH VOL. = 235 CF			
BASIN NO.	4	DESCRIPTION	TO PRIVATE STORM DRAIN
Area of basin flows =	57309	SF	= 1.2 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 2.12 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 9433 CF			
Sub-basin Peak Discharge Rate: Q _p = 5.0 cfs			
FIRST FLUSH VOL. = 982 CF			

BASIN NO.	5	DESCRIPTION	TO MAIN SWQ POND / PRIVATE STORM DRAIN
Area of basin flows =	65746	SF	= 1.5 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 1.83 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 10021 CF			
Sub-basin Peak Discharge Rate: Q _p = 5.7 cfs			
FIRST FLUSH VOL. = 926 CF			
BASIN NO.	6	DESCRIPTION	TO MAIN SWQ POND / PRIVATE STORM DRAIN
Area of basin flows =	16139	SF	= 0.4 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 1.76 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 2372 CF			
Sub-basin Peak Discharge Rate: Q _p = 1.4 cfs			
FIRST FLUSH VOL. = 210 CF			
BASIN NO.	7	DESCRIPTION	TO FAIRFIELD STREET
Area of basin flows =	14895	SF	= 0.3 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 1.76 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 2190 CF			
Sub-basin Peak Discharge Rate: Q _p = 1.3 cfs			
FIRST FLUSH VOL. = 194 CF			
BASIN NO.	8	DESCRIPTION	TO 7TH STREET
Area of basin flows =	27057	SF	= 0.6 Ac.
The following calculations are based on Treatment %s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:			
Weighted E = 1.98 in.			
Sub-basin Volume of Runoff: V ₃₆₀ = 4469 CF			
Sub-basin Peak Discharge Rate: Q _p = 2.5 cfs			
FIRST FLUSH VOL. = 440 CF			



CG101



KEYED NOTES

THESE NOTES ARE REFERENCED ON SHEETS CG101, CG102 AND CG103.
NOT ALL NOTES ARE USED ON EACH SHEET.

1. SIDEWALK(S) AND RAMP(S): TARGET CROSS SLOPE = 1% TO 1.5%. CROSS SLOPE SHALL NOT EXCEED 2% ACCESSIBLE RAMP(S): TARGET LONGITUDINAL SLOPE = 7% LONGITUDINAL SLOPE SHALL NOT EXCEED 12.1 (8.3%). ACCESSIBLE PARKING: TARGET SLOPE = 1% TO 1.5%. SLOPE SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION
2. SEE PUBLIC WORK ORDER DRAWINGS FOR CONSTRUCTION WITHIN R/W INCLUDING NEW ACCESS DRIVES, ADA COMPLIANT RAMPS, PUBLIC SIDEWALKS, COVERED SIDEWALK CULVERTS, ETC. PROPOSED GRADES WITHIN R/W ARE SHOWN FOR INFORMATION ONLY. NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT.
3. NEW PAVING AT ELEVATIONS SHOWN. SEE PAVING PLAN FOR MATERIAL, EXTENTS, JOINTS AND PAVING SECTIONS.
4. SLOPE WITHIN ADA PARKING AREAS TO BE ADA COMPLIANT. MAX. SLOPE = 2% IN ANY DIRECTION.
5. ADA COMPLIANT ACCESS RAMP.
6. ADA COMPLIANT PEDESTRIAN ACCESS WALK.
7. HIGH POINT / GRADE BREAK LOCATION.
8. 0.5' DESIGN CONTOURS ARE SHOWN DASHED TO CLARIFY GRADING CONCEPT.
9. ROOF DISCHARGE TO BE RELEASED AT GRADE. INSTALL PRECAST SPLASHPAD WHERE CONCENTRATED ROOF DISCHARGES TO UNPAVED AREA.
10. 2.0' WIDE OPENING IN CURB TO PASS FLOW.
11. COVERED CONCRETE SIDEWALK CULVERT PER COA STD. DWG. 2236.
12. CONCRETE HEADWALL.
13. CONCRETE DUMPSHED PAD. SLOPE INTERIOR TO DRAIN TO PROPOSED SANITARY SEWER DRAINAGE INLET. SEE UTILITY PLAN.
14. 18" MAX. DEPTH STORMWATER QUALITY RETENTION POND AT ELEVATIONS SHOWN. INSTALL ANULAR CULVERT TO DEFINE PERIMETER. STORMWATER QUALITY PONDING VOLUMES WILL BE VERIFIED AS PART OF AS-BUILT CERTIFICATION. PONDS WHICH DO NOT PROVIDE THE REQUIRED VOLUME WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
15. PRIVATE STORM DRAIN SYSTEM.
16. NEW STORM SEWER MANHOLE.
17. SITE PERIMETER WALL(S) (RETAINING <18") TO ACHIEVE GRADE DIFFERENCE SHOWN. SEE ARCHITECTURAL FOR DETAILS INCLUDING TOTAL HEIGHT, FOOTING, GUARDRAIL, REINFORCING, ETC.

LEGEND

-
- 4965 EXISTING CONTOUR
 71 PROPOSED 1.0' CONTOUR
 72.1 PROPOSED SPOT ELEVATION
 FLOW DIRECTION
 FINISH FLOOR ELEVATION
 PROPOSED STORM DRAIN / INLET



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NEW MEXICO
7322
LICENSED PROFESSIONAL ENGINEER
10/25/21

**Calle Cuarta Residential &
Commercial
a development of
YES Housing**

No	Date	Description
DESIGN DEVELOPMENT		
PROJECT NUMBER: IA 2429		
FILE:		
DRAWN BY:		
CHECKED BY:		
DATE: NOV. 2021		

SHEET TITLE

GRADING &
DRAINAGE
PLAN 3 OF 3

SHEET NUMBER

CG103