

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

April 24, 2020

Phillip W. Clark, PE
Clark Consulting Engineers
19 Ryan Rd
Edgewood, NM 87015

**RE: Stanford Townhomes
424 Stanford Dr. SE
Revised Grading and Drainage Plan
Engineer's Stamp Date: 04/21/20
Hydrology File: K16D084**

Dear Mr. Clark:

PO Box 1293

Based upon the information provided in your submittal received 04/21/2020, the Revised Grading & Drainage Plan **is not** approved for Building Permit and SO-19 Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

NM 87103

www.cabq.gov

1. Please use the drafting standards outlined in the DPM. Plans need to be black & white with appropriate line weights for existing and proposed items. Color plans are very hard to read.
2. Please remove all interior architecture items for the townhomes. One it's not needed and secondly it is hard to read the finish floor elevation.
3. Please provide the FIRM Map and floodplain note with effective date.
4. The two stormwater quality ponds along Stanford Dr. need an emergency spillway. This can be done with a sidewalk culvert. Just make the invert elevation on the pond side the same elevations as the water surface elevation of the required SWQ volume. Also you can only use one sidewalk culvert if you connect the two ponds with a pvc pipe under the private sidewalk.
5. For the sidewalk culverts, instead of the orifice equation which was used, the broad crest weir equation (equation 6.60 in the DPM) must be used, not the orifice equation. A coefficient of 2.7 is typically used for the equation $Q = CLH^{2/3}$.
6. Please update the SO-19 Permit Notes. See Attachment.

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7. 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.
8. Also as a reminder, please provide a Drainage Covenant for the proposed Stormwater Quality Ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee will be required.
9. Standard review fee of \$150 will be required at the time of resubmittal.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

PO Box 1293

Albuquerque

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

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Stanford TownHomes **Building Permit #:** _____ **Hydrology File #:** K16/D084
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 12-A, UNIVERS. HEIGHTS, BLOCK 13
City Address: 424 STANFORD DR, SE

Applicant: CLARK CONSULTING ENGINEERS **Contact:** PHIL
Address: _____
Phone#: 281-2444 **Fax#:** xxx cell / txt 264.6042 **E-mail:** CCEalbq@aol.com

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: _____ PLAT _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE _____

Check all that Apply:

DEPARTMENT:

____ HYDROLOGY/ DRAINAGE
____ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

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

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

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: 4/21/20 **By:** Phil Clark

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

GRADING & DRAINAGE PLAN

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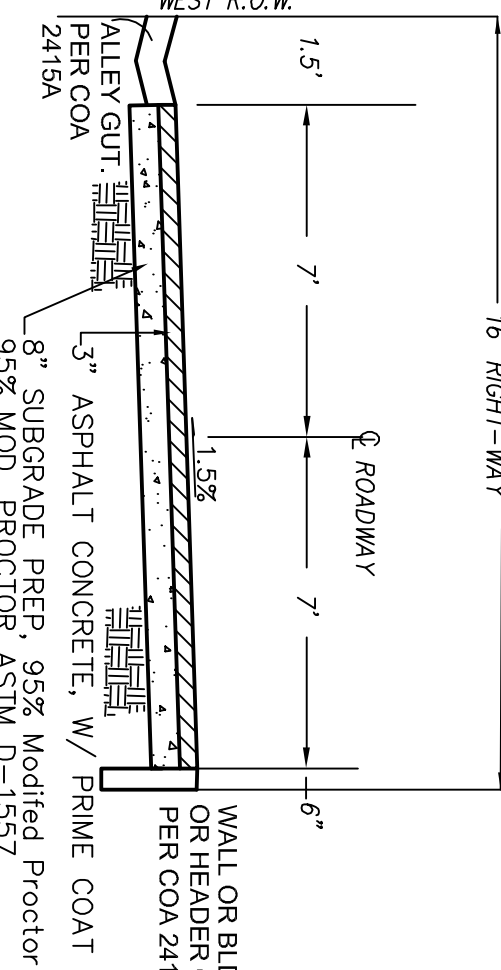
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- PROPOSED IMPROVEMENTS: 10500 SF BUILDING STRUCTURE, NEW CONCRETE DRIVEPAD AND OUTDOOR PATIO AREAS, NEW GRADE ELEVATIONS, FLATWORK AND LANDSCAPING;
- CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS;
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ALLEY REHAB SECTION

NO SCALE

REF: COA STD DWG 2411



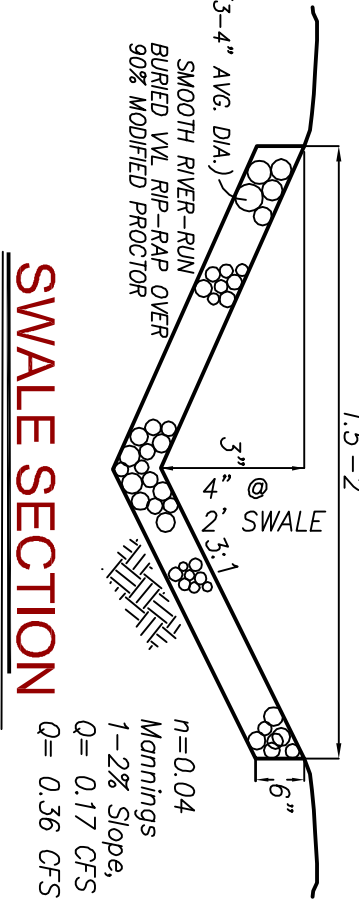
FIRM MAP

PANEL # 353 H

SUBJECT PROPERTY IS NOT ADJACENT TO A FLOOD HAZARD ZONE

TOPD SURVEY LEGEND

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SWALE SECTION

n=0.04
Mornings
1-2% Slope
0 = 0.17 CFS
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NOTICE TO CONTRACTORS - "SO-19 PERMIT"

Private Drainage Facilities within City R.O.W.

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NM DRAINAGE DISTRICT, 810 UNIVERSITY BLVD., ALBUQUERQUE, NM 87102, TO OBTAIN A CONSTRUCTION PERMIT. CONTRACTORS SHALL EXAMINE 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.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HR BASIS.
- CONTRACTOR MUST CONTACT AUGUSTINE AEMLO @ 847-4953 AND/OR CONSTRUCTION COORDINATION AT 824-3416 TO SCHEDULE AN INSPECTION.

APPROVAL NAME (STREET MAINTENANCE)	DATE

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA, "Peak Discharge Rates for Small Watersheds"
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P100 = 2.35 inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 0.32 ACRES, WHERE EXCESS PRECIP. W' = 1.13 in. [0.52]
PEAK DISCHARGE, Q100 = 1.0 CFS [0.55], WHERE UNIT PEAK DISCHARGE W' = 3.025/AC. [1.7]
THEREFORE: VOLUME 100 = 1312 CF [804]

DEVELOPED CONDITIONS

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

AREA	LAND TREATMENT	Q Peak	E
UNDEVELOPED	A	1.56 [0.38]	0.53 [0.13]
LANDSCAPING	0.02 Ac.(6%)	2.26 [0.95]	0.79 [0.28]
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ROOF - PAVEMENT	0.02 Ac.(6%)	4.70 [3.14]	2.12 [1.34]

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Q100 = 1.42 CFS

RECOMMEND: ROUTE DEVELOPED RUNOFF THROUGH SOFT LANDSCAPING FIRST FLUSH: (EPA WATER QUALITY, USE DPM TABLE 2 WATER QUAL. STORM EVENT "J", THEREFORE: PROPORTION FOR 88%, USE 0.40 X 0.28 AC./12 X 43580 SF VOL. RETENTION = 446 C.F.



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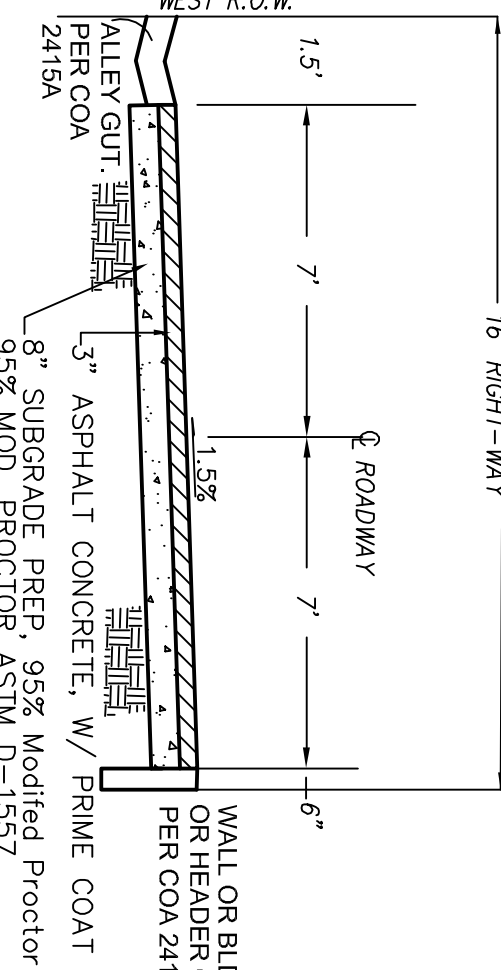
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ALLEY REHAB SECTION

NO SCALE

REF: COA STD DWG 2411



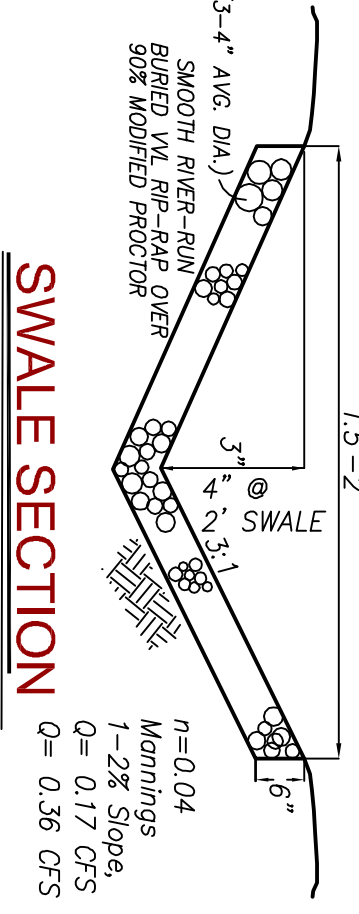
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PANEL # 353 H

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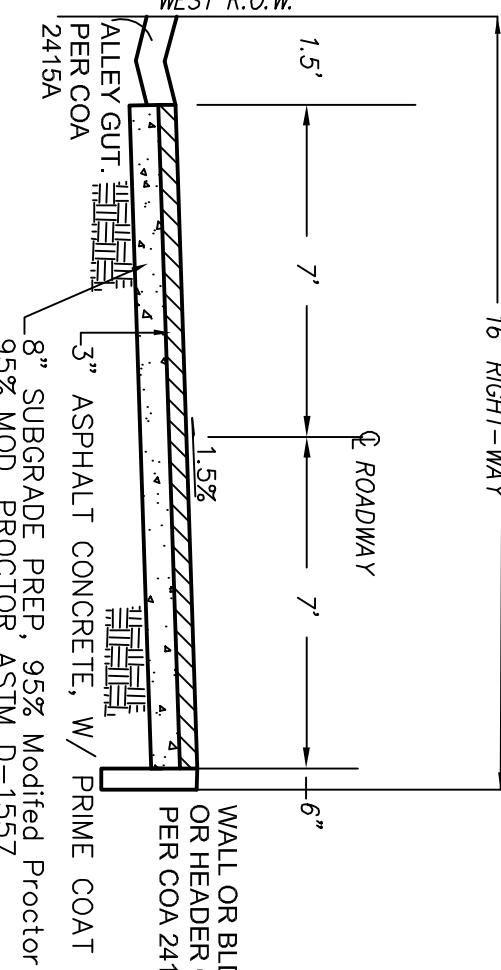
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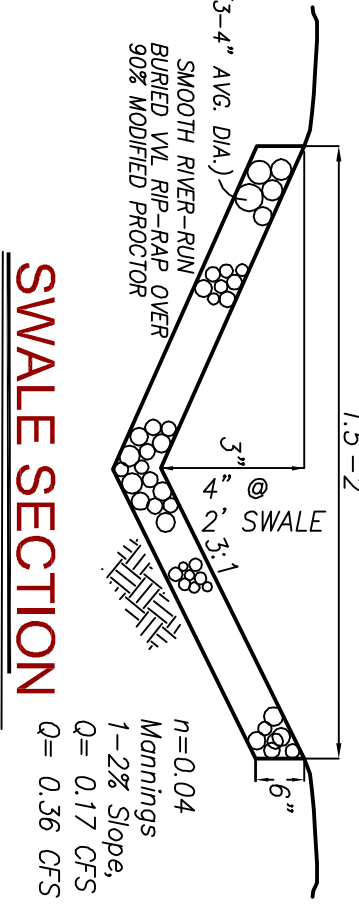
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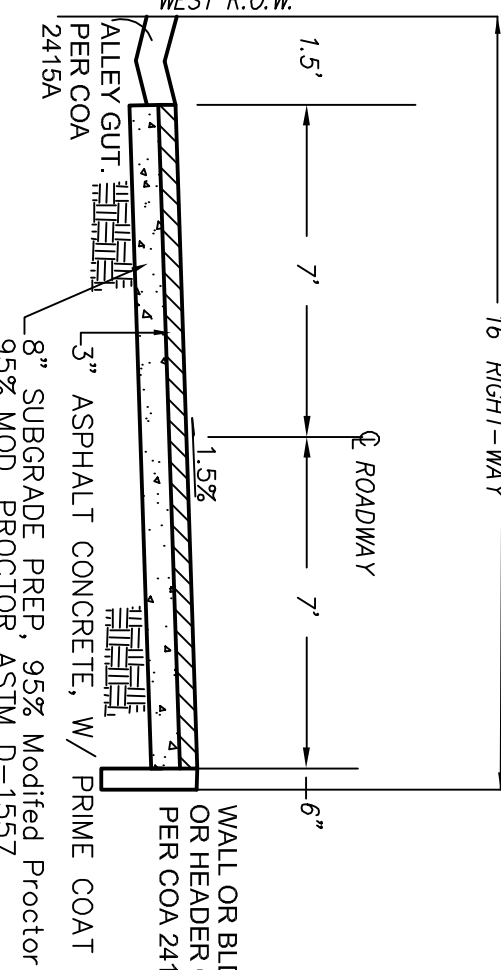
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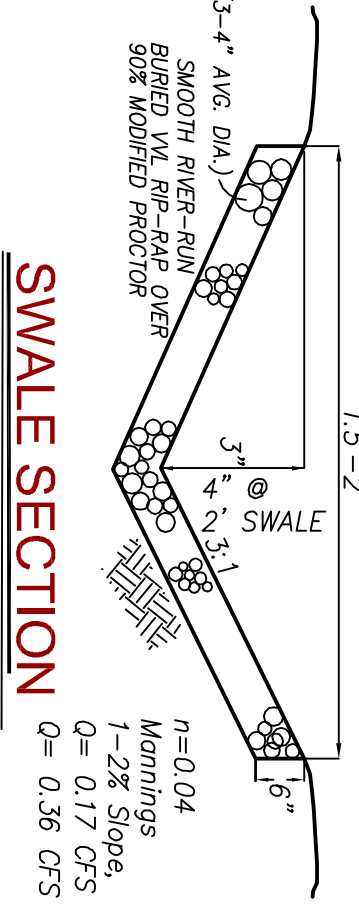
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- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NM DRAINAGE DISTRICT, 810 UNIVERSITY BLVD., ALBUQUERQUE, NM 87102, TO OBTAIN A CONSTRUCTION PERMIT. CONTRACTORS SHALL EXAMINE 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.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HR BASIS.
- CONTRACTOR MUST CONTACT AUGUSTINE AEMLO @ 847-4953 AND/OR CONSTRUCTION COORDINATION AT 824-3416 TO SCHEDULE AN INSPECTION.

APPROVAL NAME (STREET MAINTENANCE)	DATE

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA, "Peak Discharge Rates for Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 0.32 ACRES, WHERE EXCESS PRECIP. W' = 1.13 in. [0.52]
PEAK DISCHARGE, Q100 = 1.0 CFS [0.55], WHERE UNIT PEAK DISCHARGE W' = 3.025/AC. [1.7]
THEREFORE: VOLUME 100 = 1312 CF [804]

DEVELOPED CONDITIONS

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

AREA	LAND TREATMENT	Q Peak	E
UNDEVELOPED	A	1.56 [0.38]	0.53 [0.13]
LANDSCAPING	0.02 Ac.(6%)	2.26 [0.95]	0.79 [0.28]
GRAVEL & COMPACTED SOIL	0.02 Ac.(6%)	3.14 [1.7]	1.13 [0.52]
ROOF - PAVEMENT	0.02 Ac.(6%)	4.70 [3.14]	2.12 [1.34]

THEREFORE: EWeighted = 1.98 in [1.2] & VOLUME 100 = 2300 CF
Q100 = 1.42 CFS

RECOMMEND: ROUTE DEVELOPED RUNOFF THROUGH SOFT LANDSCAPING FIRST FLUSH: (EPA WATER QUALITY, USE DPM TABLE 2 WATER QUAL. STORM EVENT "J", THEREFORE: PROPORTION FOR 88%, USE 0.40 X 0.28 AC./12 X 43580 SF VOL. RETENTION = 446 C.F.

GRADING & DRAINAGE PLAN

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE NORTH BY RESIDENTIAL USE TO THE EAST BY RESIDENTIAL ALLEY, GARFIELD S.W. & STANFORD DRIVE, AND TO THE WEST BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DRAINS AT 1% FROM EAST TO WEST.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED, SINCE BOTH STREETS ARE IMPROVED ONLY MINIMAL GRADING (DRIPEAD RECONSTR-N) IS PROPOSED WITHIN THE CITY R.O.W. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE SINCE THE TOTAL INCREASE OF DEVELOPED FLOW IS MINIMAL, AND CAPACITY EXISTS DOWNSTREAM. A MAJORITY OF DEVELOPED RUNOFF IS ROUTED TO/THRU PERMEABLE (SOFT) LANDSCAPE AREAS.

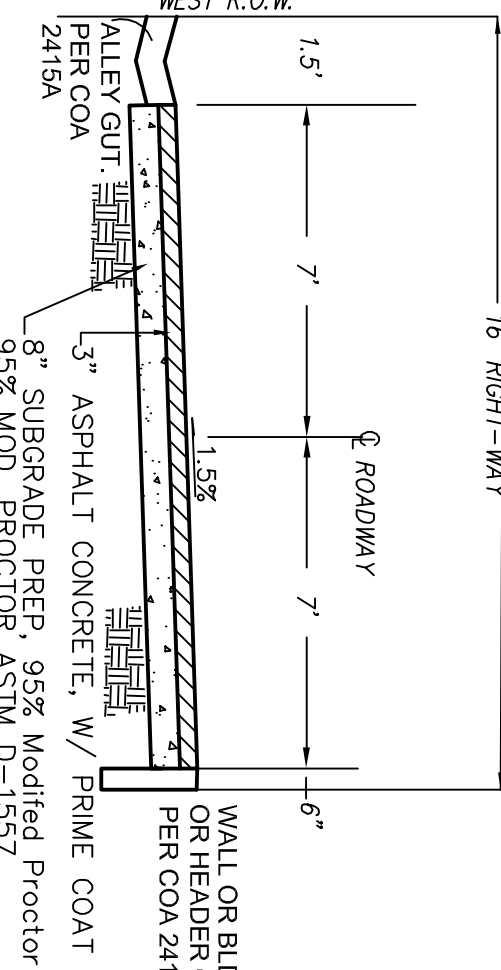
THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

- EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS;
- PROPOSED IMPROVEMENTS: 10500 SF BUILDING STRUCTURE, NEW CONCRETE DRIVEPAD AND OUTDOOR PATIO AREAS, NEW GRADE ELEVATIONS, FLATWORK AND LANDSCAPING;
- CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS;
- QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

ALLEY REHAB SECTION

NO SCALE

REF: COA STD DWG 2411



FIRM MAP

PANEL # 353 H

SUBJECT PROPERTY IS NOT ADJACENT TO A FLOOD HAZARD ZONE

TOPD SURVEY LEGEND

- BOC = BACK OF CURB
- TA = TOP OF ASPHALT
- CLR = CENTERLINE OF ROAD
- CLA = CENTERLINE OF ASPHALT</