

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

May 15, 2023

Jesus Lopez, P.E.
Smith Engineering
2201 San Pedro Dr. NE, Building 4, Suite 200
Albuquerque, NM 87110

**RE: Loma Linda CC Gym Addition
Tr 2-A-1 Plat of Tracts 1-A & 2-A-1 Cactus/Shalit Parcel
1512 Yale Blvd SE ABQ NM 87106
Grading & Drainage Plan
Engineer's Stamp Date: 2/7/2023
Hydrology File: L16D025**

Dear Mr. Lopez:

PO Box 1293
Albuquerque
NM 87103

Based upon the information provided in your submittal received 5/10/2023, the Grading & Drainage Plan is approved for Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.

www.cabq.gov

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 505-924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

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:

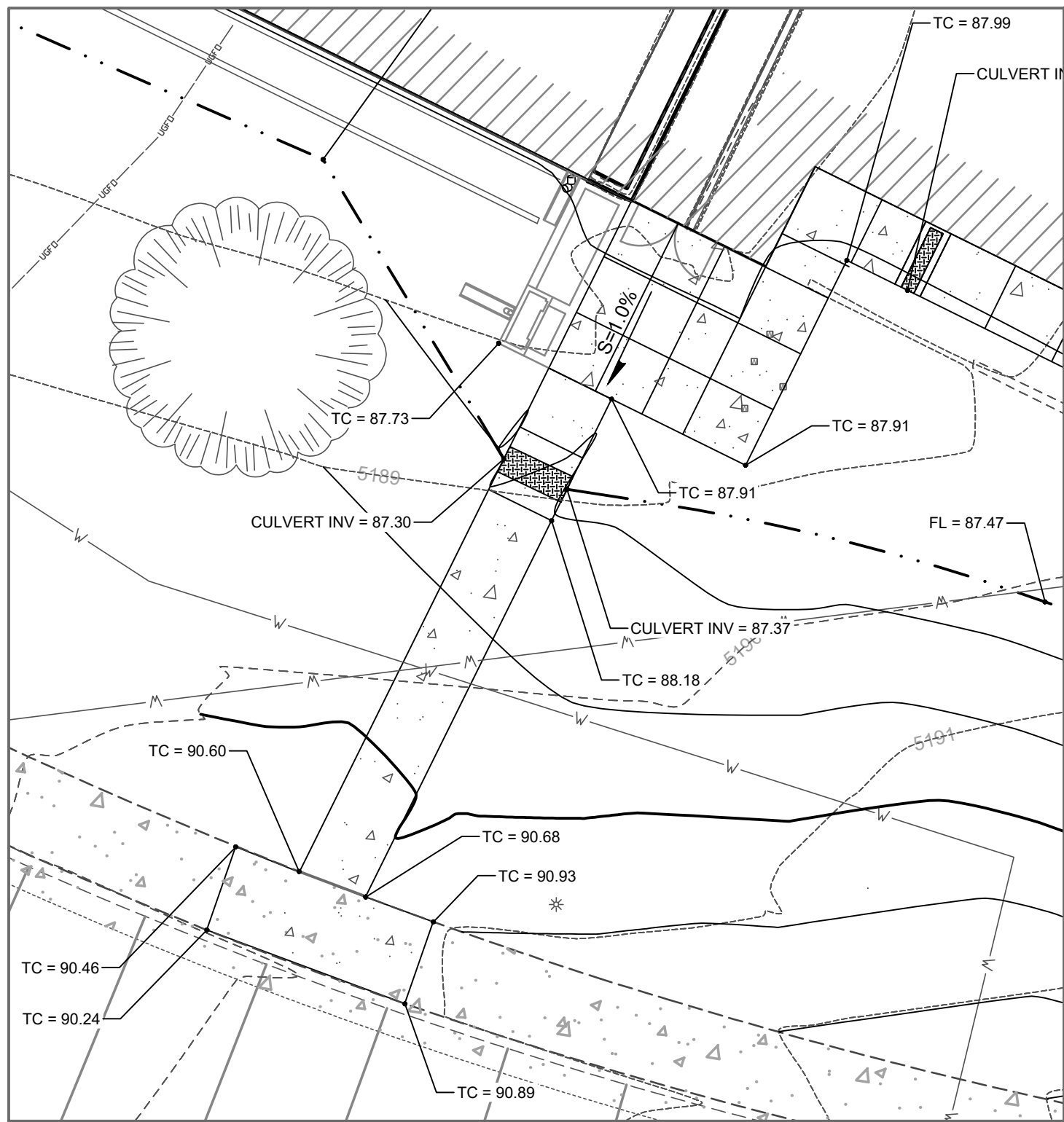
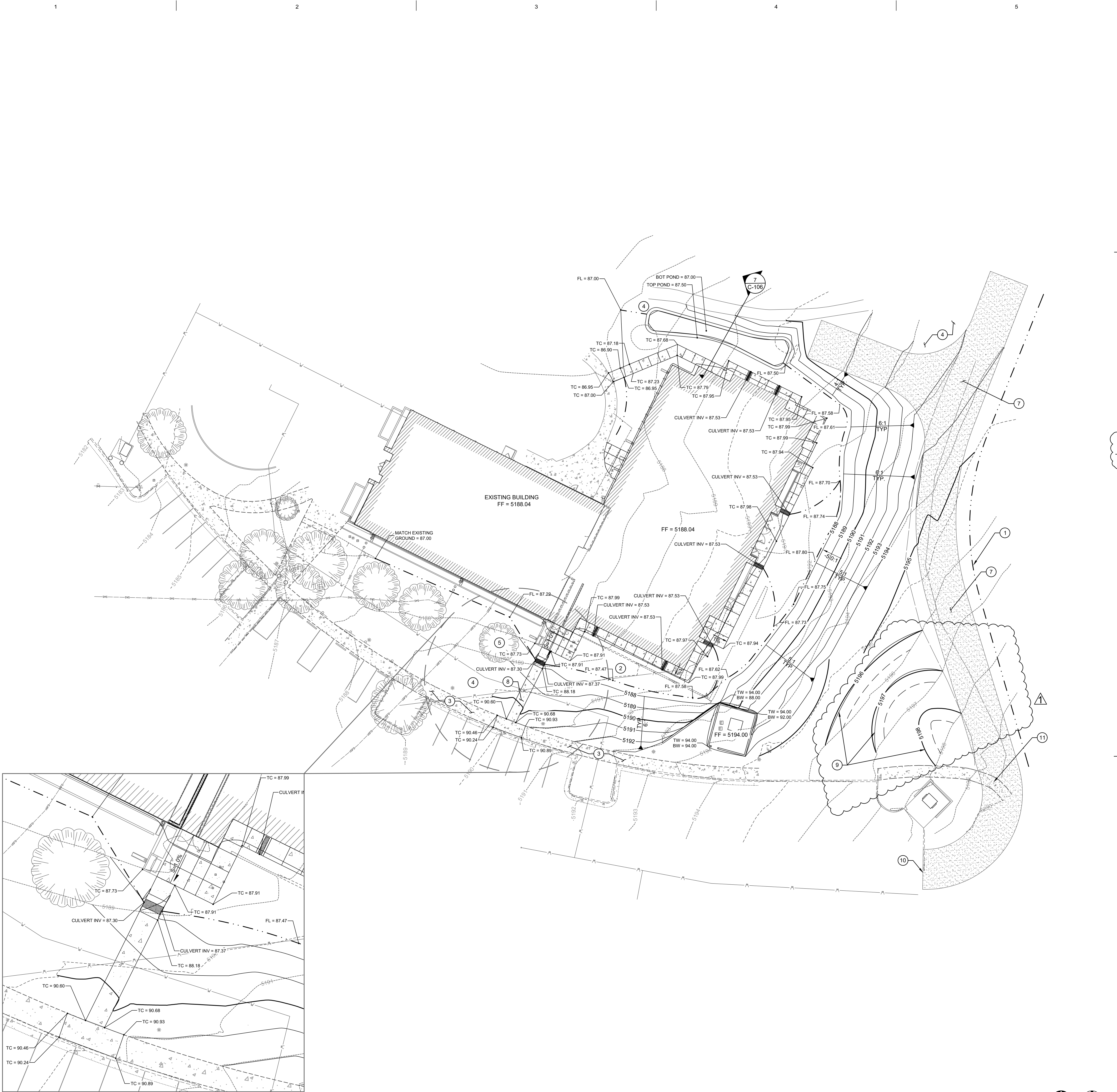
- _____ BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY
- _____ PRELIMINARY PLAT APPROVAL
- _____ SITE PLAN FOR SUB'D APPROVAL
- _____ SITE PLAN FOR BLDG. PERMIT APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ SIA/ RELEASE OF FINANCIAL GUARANTEE
- _____ FOUNDATION PERMIT APPROVAL
- _____ GRADING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

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



*UTILITIES NOT SHOWN FOR CLARITY

ENLARGED SIDEWALK PLAN

SCALE: 1" = 10'



GENERAL NOTES

- CONTRACTOR TO PROVIDE CONCRETE JOINT LAYOUT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF CONCRETE.
- EXPANSION JOINTS SHALL BE PLACED AT ALL CHANGES IN GRADE AND AT LOCATIONS FOR ISOLATION AND NOT TO EXCEED 50-FEET IN SPACING.
- CONTROL (CONTRACTION) JOINTS SHALL BE PLACED TO PROVIDE A STONE WITH DIMENSIONS TO NOT EXCEED 1.5:1 (L:W).
- CONTRACTOR SHALL INDICATE WHERE PROPOSED CONSTRUCTION JOINTS ARE IN THE JOINT LAYOUT PLAN.
- ALL JOINTS ARE TO BE SEALED. EXPANSION JOINTS SHALL HAVE FILLER, BACKER AND SEALANT.
- ITEMS TO BE REMOVED PER REMOVAL SHEETS NOT SHOWN ON PLAN FOR CLARITY PURPOSES.
- PROPOSED UTILITIES NOT SHOWN FOR CLARITY PURPOSES. SEE CIVIL UTILITY SHEETS FOR DETAILS.
- SEE LANDSCAPING DRAWINGS FOR GROUND COVER PLAN AND LAYOUT.

GRADING NOTES

- ROADSIDE SWALE PER DETAIL 9 ON SHEET C-106.
- GRADE AT UNIFORM SLOPE TO MATCH NEW SIDEWALK.
- EXISTING SIDEWALK, PROTECT IN PLACE.
- GRADE UNIFORMLY TO MATCH EXISTING GROUND.
- GRADE AROUND TREE TO MATCH EXISTING PRIOR TO CANOPY. HAND TRENCH IF NECESSARY TO AVOID ROOT DAMAGE.
- NOT USED.
- INSTALL 20" WIDE BASECOURSE EMERGENCY FIRE ACCESS ROAD BASECOURSE AND SUBGRADE INSTALLATION PER COA SPECIFICATION 301 AND 302.
- MATCH EXISTING SIDEWALK ELEVATION AT NEAREST CONCRETE JOINT. PROTECT EXISTING CURB IN PLACE.
- STORMWATER QUALITY RETENTION AREA. SEE DETAIL 7 ON SHEET C-106.
- INSTALL 20" WIDE CURB CUT AND TIE NEW BASECOURSE ACCESS ROAD.
- PROTECT IN-PLACE EXISTING ASPHALT PATH. TIE NEW BASECOURSE ACCESS ROAD TO ASPHALT EDGES.

EARTHWORK			
CUT	2,000	CY	
FILL	100	CY	
NET	1,900	CY (CUT)	

EARTHWORK CALCULATIONS
INCLUDE A 1.25 FILL FACTOR

LEGEND

TOP	TOP OF PLATE
TSW	TOP OF SIDEWALK
TC	TOP OF CONCRETE
TA	TOP OF ASPHALT
FL	FLOW LINE
INV	INVERT
X-EP	EXISTING EDGE OF PAVEMENT



© 2023 Studio Southwest Architects, Inc.
Duplication or reproduction by any means
without the express written consent of
Studio Southwest Architects, Inc. is a
violation of federal and international law.
The information contained in this document
is the intellectual property of Studio
Southwest Architects, Inc. and all rights
thereto are reserved.

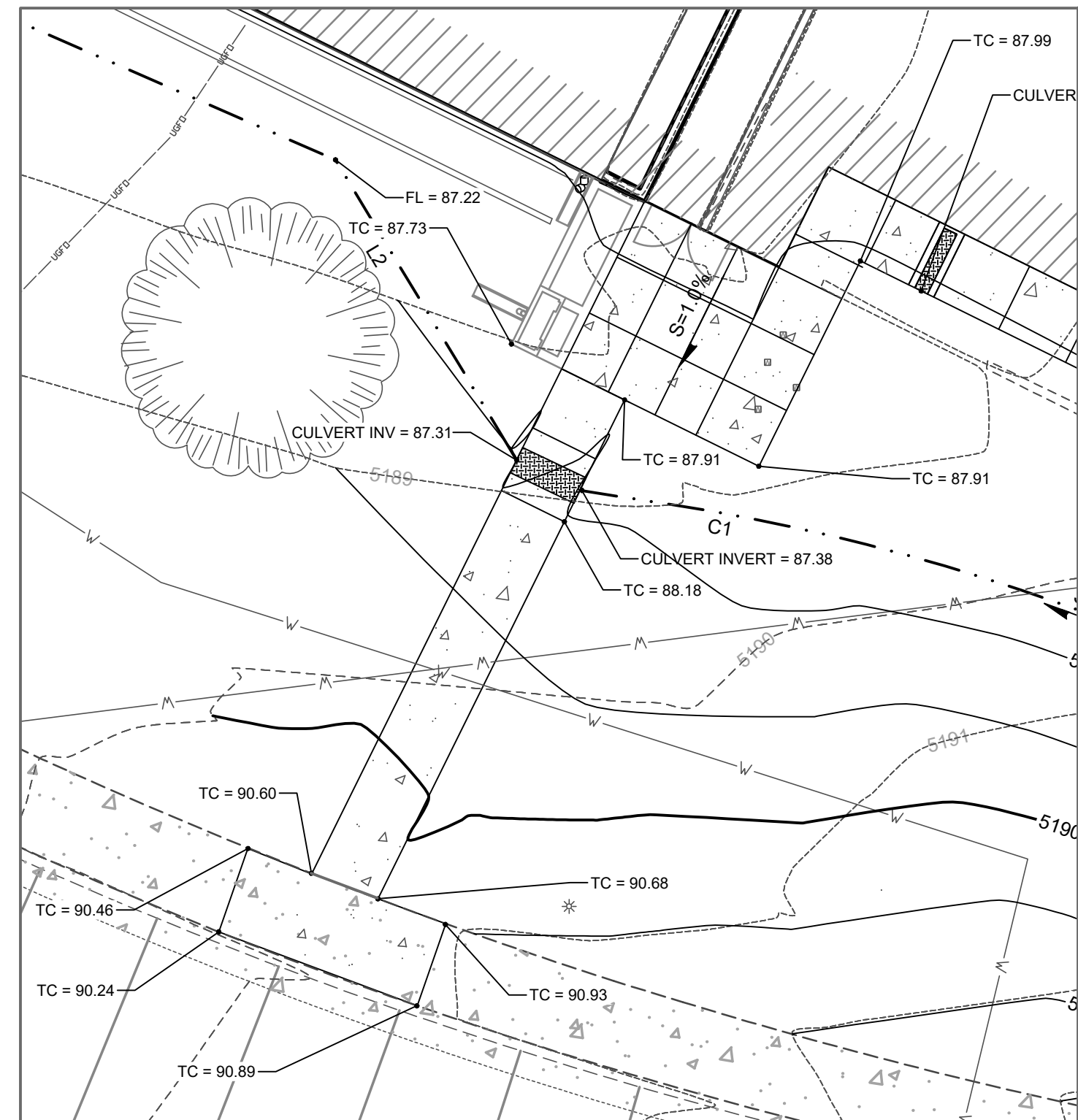


CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

PROJECT TITLE: LOMA LINDA COMMUNITY CENTER GYM ADDITION

DRAWING TITLE: SITE GRADING

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
PERMIT SET	City Project No. 502093	Zone Map No. L-16-Z	DWG. C-103
			Sheet 07 of 108



SCALE: 1" = 10'

Plan North True North

0 20' 40'



1. PLACING OF DRAIN THRU EXISTING SIDEWALK AND CURB & GUTTER REQUIRES THAT THE ENTIRE SIDEWALK AND CURB AND GUTTER STONES BE REMOVED AND REPLACED AS DETAILED HEREIN.
2. THE CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAXIMUM DENSITY AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET, THEN WARPED PARALLEL TO FLOWLINE AT THE OUTLET, UNLESS OTHERWISE SHOWN.

4. LENGTH OF EACH PLATE SHALL BE SUCH THAT THE WEIGHT WILL NOT EXCEED 300 LBS. CLEAN SURFACE OF PLATE AND PAINT WITH ONE SHOP COAT RED OXIDE AND TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69).
5. THE CITY WILL NOT ASSUME RESPONSIBILITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS.
6. CULVERT MUST BE PERPENDICULAR TO THE CURB.

CONSTRUCTION NOTES

- A. INSTALL $\frac{1}{2}$ " EXPANSION JOINT.

- B. DEPTH VARIES. SEE PLANS

- C. 3" RADIUS (TYPICAL).
- D. $\frac{3}{8}$ " CHECKERED STEEL PLATE (PAINT PER NOTE 4, ABOVE).
- E. NO. 3 REBAR \perp , SPACE AT 18" O.C. MAXIMUM, $\frac{1}{2}$ " MINIMUM FROM FACE OF CONCRETE. STAGGER FOR MULTIPLE CULVERTS.

- F. WELD $\frac{3}{4}$ " STEEL ROD TO PLATE, FULL LENGTH OF PLATE; GRIND ENDS FLUSH TO THE FACE OF CURB.

- G. DRAIN WIDTH PER PLAN (12" MINIMUM, 24" MAXIMUM).

- H. EXTEND CULVERT AND STEEL PLATE 1-FOOT BEYOND BACK OF SIDEWALK, UNLESS RESTRICTED BY PROPERTY LINE.

- J. IF SIDEWALK IS NOT AT BACK OF CURB,
EXTEND CULVERT AND STEEL PLATE TO
FACE OF CURB.

- K. SLOPE $\frac{1}{4}^{\circ}$ PER FOOT (MINIMUM).
- L. FOR SECURING PLATE USE POWERS®

- 3/8-16 CARBON STEEL FLANGED DROP-IN
ANCHOR OR APPROVED EQUAL. INSTALL USING
SETTING TOOL AND MANUFACTURER'S
INSTRUCTIONS AT MAX 24" O.C. A MINIMUM OF 2

- M. 3/8-16X1" COUNTERSUNK, STAINLESS

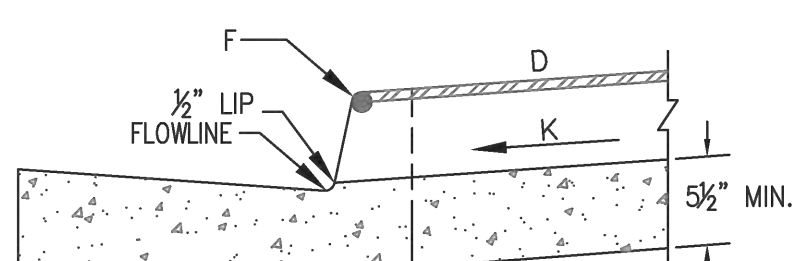
- N. FILL VOID BETWEEN PLATES WITH NP-1

- P. NO. 3 REBAR, CONTINUOUS.

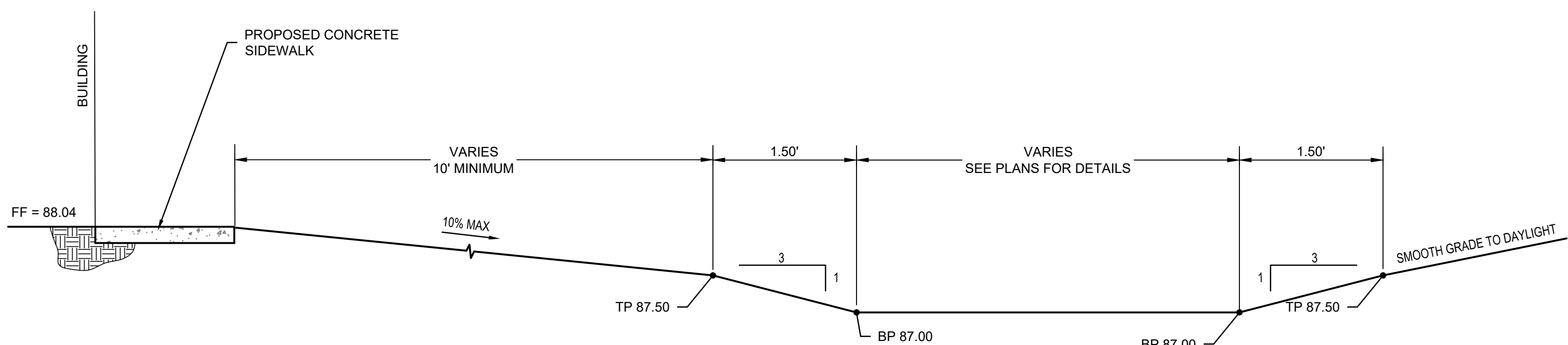
- Q. HOLE DIAMETER AT BOTTOM OF COUNTERSUNK HOLE OF STEEL PLATE TO BE $\frac{1}{2}$ " DIAMETER.

- | | |
|-----------|---------------------|
| REVISIONS | CITY OF ALBUQUERQUE |
|-----------|---------------------|

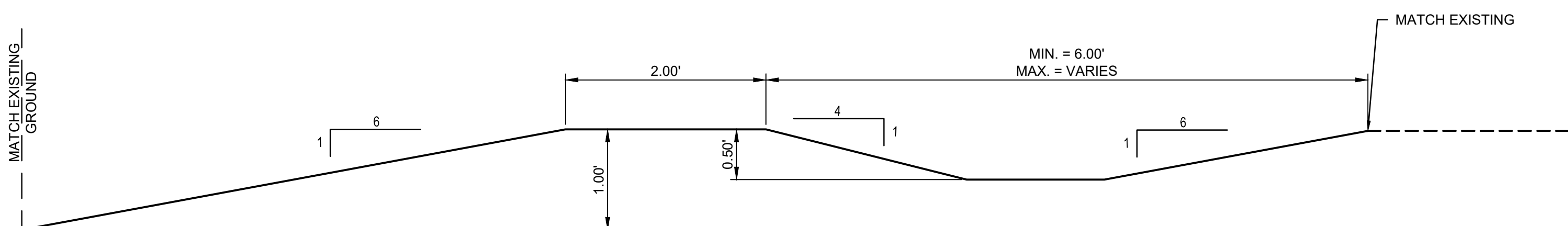
REVISIONS	CITY OF ALBUQUERQUE
	DRAINAGE SIDEWALK CULVERT PLAN, AND SECTIONS A-A AND B-B DWG. 2236 JUNE 2019



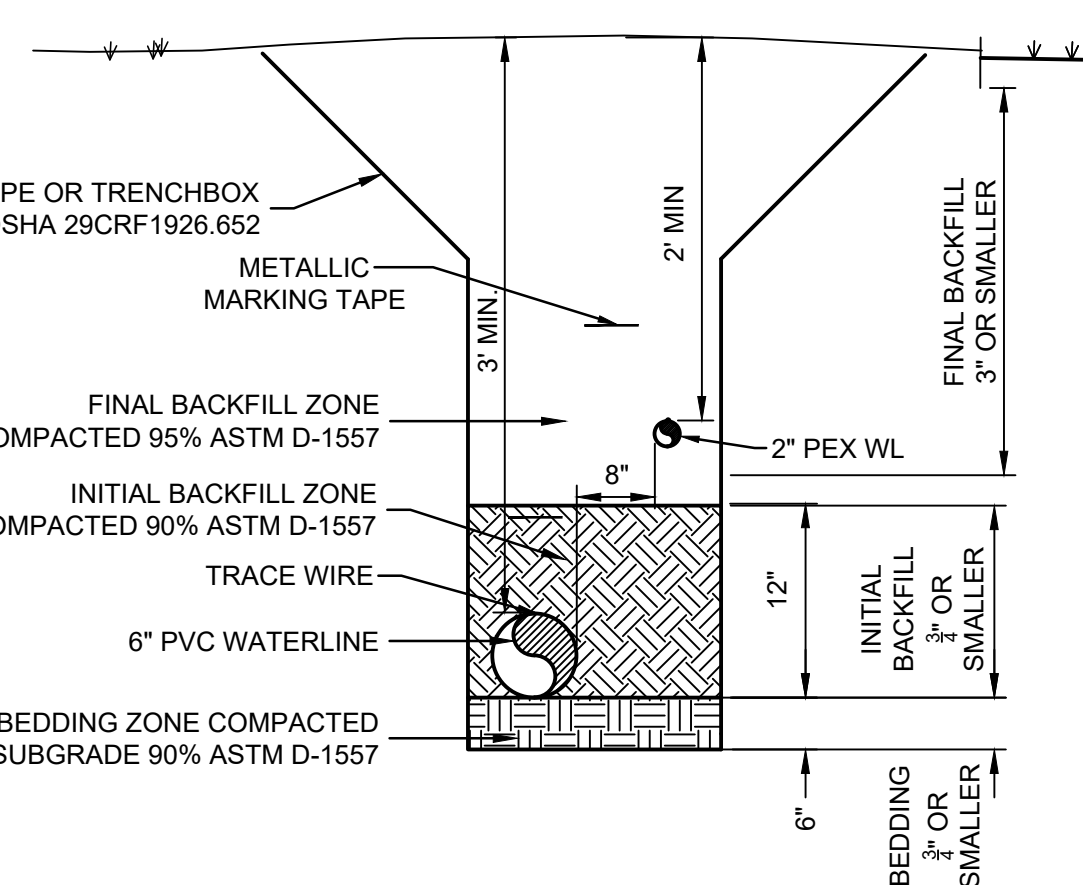
SECTION B-B
SINGLE OR MULTIPLE CULVERT



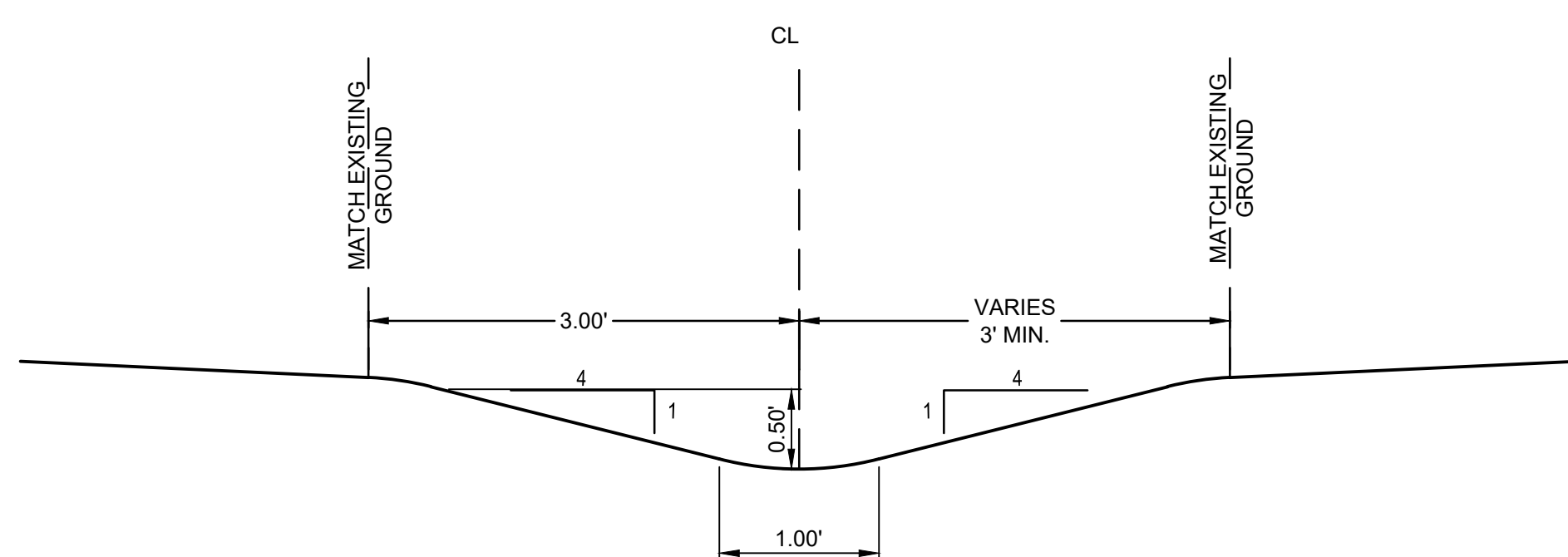
7 TYPICAL SECTION STORMWATER QUALITY IMPROVEMENT POND



8 TYPICAL SECTION: STORMWATER QUALITY SEDIMENT BERM
NTS



5 WATER PIPE TRENCH SECTION
UNSURFACED AREAS
NTS

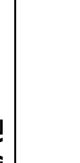


9 TYPICAL SECTION: ROADSIDE SWALE
NTS

AS-BUILT INFORMATION	
CONTRACTOR	DATE
DRAWN BY	
CHECKED BY	DATE
DESIGNED BY	
ADJUSTANCE BY	DATE
FIELD COUNCIL	
RECORDS CLERK	DATE
DRAWINGS	
CONNECTED BY	
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	



[illegible]

SEAL



02/07/2023

No.	Date	REMARKS	By
DESIGN			
REVISIONS			
Designed By: J.L.		DATE	07 FEBRUARY 2023
Drawn By: J.L.		DATE	07 FEBRUARY 2023
Checked By: CS .JL		DATE	07 FEBRUARY 2023

SEC JOB # 119613-03																	
 <div style="text-align: center;"> <p><i>Solutions For Today... Vision for Tomorrow</i></p> <p>2201 San Pedro Dr NE Building 4, Suite 200 Albuquerque, NM 87110 Phone: 505-884-4780 www.smithengineeringpro.com</p> </div>						© 2023 Studio Southwest Architects, Inc. Duplication or reproduction by any means without the express written consent of Studio Southwest Architects, Inc. is a violation of federal and international law. The information contained in this document is the intellectual property of Studio Southwest Architects, Inc. and all rights thereto are reserved.											
 <div style="text-align: center;"> <h2>CITY OF ALBUQUERQUE</h2> <h3>DEPARTMENT OF MUNICIPAL DEVELOPMENT</h3> </div>											No.	Date			Designed By: JL	JL	
																Drawn By:	CS, JL
PROJECT TITLE:																	
LOMA LINDA COMMUNITY CENTER GYM ADDITION																	
DRAWING TITLE:																	
CIVIL DETAILS AND CROSS SECTIONS																	
Design Review Committee				City Engineer Approval				Last Design Update		Mo./Day/Yr.				Mo./Day/Yr.			
PERMIT SET				City Project No. 502093				Zone Map No. L-16-Z				DWG. C-106				Sheet 10 of 108	



VICINITY MAP: L15 & L16

FEMA FIRM: 35001C0353H

CITY OF ALBUQUERQUE BENCHMARK
3 1/4" BRASS CAP STAMPED 7 L 15 1984
N = 1479550.20
E = 1529067.37
EL = 5164.12

GRASS FIELD

GRASS FIELD

DRAINAGE SUMMARY

BACKGROUND

LOMA LINDA COMMUNITY CENTER IS SITUATED AT THE SOUTHEAST CORNER OF YALE BLVD AND KATHRYN AVE AND CONTAINS 14.09 ACRES. THE PROPOSED RENOVATION AND ASSOCIATED EXTERIOR IMPROVEMENTS WILL ENCOMPASS 2.46 ACRES AND INCLUDES A GYMNASIUM ADDITION AND A POTENTIAL EXTERIOR AMPHITHEATER, INCLUDING SUPPORTING GRADING & DRAINAGE IMPROVEMENTS AND A BASECOURSE EMERGENCY VEHICLE ACCESS ROAD.

A SMALL PORTION OF THE PROJECT SITE IS BEING USED FOR THESE IMPROVEMENTS, SO THERE WILL NOT BE A SIGNIFICANT INCREASE IN THE CALCULATED STORMWATER CHARACTERISTICS DURING THE 100-YEAR 24-HOUR STORM EVENT, AS SUCH, SMITH ENGINEERING MET WITH THE COA'S STORM WATER PERSONNEL IN THE PLANNING STAGES OF THIS PROJECT AND IT WAS DETERMINED THAT THE INCREASE IN FLOWS WERE NEGLIGIBLE AND WILL NOT HAVE AN IMPACT ON DOWNSTREAM STORMWATER INFRASTRUCTURE. ADDITIONALLY, THE SITE HAS FREE STORMWATER DISCHARGE PER THE APPROVED "KOREAN WAR VETERANS PARK GRADING AND DRAINAGE PLAN" (CPN 5020.92), PREPARED BY JEFF MORTENSEN AND ASSOCIATES, INC. IN JUNE 1999. THE CALCULATED INCREASE IN STORMWATER FLOW RATE IS 0.61 CFS.

THE SITE IS NOT LOCATED WITHIN A FLOODPLAIN PER FEMA FIRM #35001C0353H AND IS CLASSIFIED AS ZONE X.

METHODOLOGY

THE DEVELOPED ASSUMPTIONS AND CRITERIA, INCLUDING LAND TREATMENT TYPES AND IMPERVIOUS AREAS, AS WELL AS THE HYDROLOGIC AND HYDRAULIC ANALYSES FOR THE IMPROVEMENTS WERE PERFORMED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), CHAPTER 6, PART 6-2(A) PROCEDURE FOR 40-ACRE AND SMALLER BASINS WAS USED TO CALCULATE PEAK FLOW RATES AND VOLUME. THE HYDROLOGY TABLE ON THIS SHEET ILLUSTRATES THE CALCULATIONS PERFORMED IN THIS ANALYSIS.

EXISTING CONDITIONS

THE DRAINAGE BASIN THAT WAS DELINEATED FOR THESE IMPROVEMENTS, BASIN "A", DOES NOT RECEIVE ANY OFFSITE FLOWS AND, IN GENERAL, DRAINS FROM EAST TO WEST TO TWO DISCHARGE POINTS. THE FIRST DISCHARGE POINT IS NORTHWEST OF THE EXISTING BUILDING WHERE AN EXISTING SWALE ACCEPTS THE INCOMING FLOWS AND CONVEYS THEM TO THE NORTH TO A RETENTION / WATER QUALITY POND PRIOR TO EVENTUAL DISCHARGE ONTO YALE BLVD. THE SECOND DISCHARGE POINT IS LOCATED SOUTH OF THE BUILDING WHERE THE FLOWS ARE CONVEYED THROUGH EXISTING SIDEWALK CULVERTS. THE FLOWS THEN DISCHARGE INTO A SERIES OF EXISTING WATER QUALITY DEPRESSIONS BEFORE DISCHARGING ONTO YALE BLVD.

PROPOSED CONDITIONS

THE PROPOSED DEVELOPMENT WILL CONSIST OF APPROXIMATELY 17,500 SF OF NEW IMPERVIOUS AREA, INCLUDING A NEW GYMNASIUM AND SIDEWALK, AND A NEW AMPHITHEATER. THE AMPHITHEATER WAS ASSUMED TO BE COMPLETELY IMPERVIOUS FOR THE PURPOSES OF HYDROLOGIC CALCULATIONS. IN REALITY, IF THE AMPHITHEATER IS INSTALLED, IT WILL CONTAIN APPROXIMATELY 50% IMPERVIOUS AREA AND THE REMAINING SURFACING WILL BE LAWN OR TYPE B LAND TREATMENT. THE PROPOSED EMERGENCY ACCESS ROAD WILL BE CONSTRUCTED OUT OF BASECOURSE MATERIAL AND PROVIDE FOR SOME STORMWATER INFILTRATION.

FLOWS WILL BE ROUTED AS THEY WERE PRIOR TO THE PROPOSED RENOVATION. SOME FLOWS WILL BE CONVEYED SOUTH OF THE BUILDING TO THE EXISTING SIDEWALK CULVERTS WHICH WILL BE UPGRADED. SEDIMENTATION BERMS WILL BE INSTALLED UPSTREAM OF THE PROPOSED RENOVATIONS TO FILTER OUT SEDIMENT PRIOR TO THE STORMWATER CONVEYANCE THROUGH THE IMPROVED SITE FEATURES. THE REMAINDER OF THE FLOWS WILL BE CONVEYED TO THE NORTH SIDE OF THE BUILDING WHERE A WATER QUALITY POND WILL HOLD THE FIRST 406 CF OF STORMWATER (378 CF REQUIRED) PRIOR TO RELEASING THE STORMWATER INTO THE EXISTING SWALE THAT CONVEYS THE FLOWS NORTH.

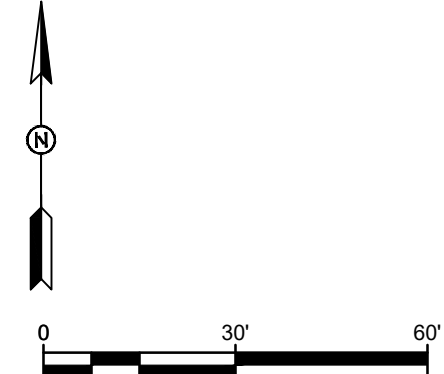
OVERALL, THE FLOW RATE WILL BE INCREASED FOR THIS BASIN FROM 5.29 CFS TO 5.90 CFS (0.61 CFS) DURING THE 100-YEAR 24-HOUR STORM EVENT, WHICH IS CONSIDERED NEGLIGIBLE FOR THE SITE, AND NO DETENTION FONDING WILL BE IMPLEMENTED.



Project:		Loma Linda Community Center		
Total Basin Area (ac):		2.46		
CoA Precipitation Zone:		2		
100yr 24hr Depth (inches):		2.59		
100yr 6hr Depth (inches):		2.29		
Land Treatment Type		E (inches)	Q (cfs/ac)	
A	0.62	1.71		
B	0.80	2.36		
C	1.03	3.05		
D	2.33	4.34		
EXISTING CONDITIONS		AREA	V (AC-FT)	Q (CFS)
A	1.34	0.16	5.29	
B	0.66			
C	0.43			
D	0.03			
TOTAL		2.46		
PROPOSED CONDITIONS		AREA	V (AC-FT)	Q (CFS)
A	1.34	0.32	5.90	
B	0.47			
C	0.25			
D	0.40			
TOTAL		2.46		
SQWV REQ:		378 CF		
SQWV PROVIDED:		406 CF		

1. TABLE VALUES OBTAINED FROM COA DPM CHAPTER 6

2. SMITH ENGINEERING MET WITH COA STORM WATER PERSONNEL ON 8/12/21. AFTER DISCUSSING THE PROJECT, IT WAS DETERMINED THAT THE INCREASE IN FLOWS WILL NOT HAVE A NEGATIVE IMPACT ON THE DOWNSTREAM STORMWATER INFRASTRUCTURE AND DETENTION IS NOT REQUIRED FOR THIS PROJECT.



SEC JOB # 119613-03

SMITH ENGINEERING

Solutions for Today...
Vision for Tomorrow

2201 San Pedro Dr NE
Building 4, Suite 200
Albuquerque, NM 87110
Phone: 505-884-0700
www.smithengineering.pro

© 2023 Studio Southwest Architects, Inc.
Duplication or reproduction by any means without the express written consent of Studio Southwest Architects, Inc. is a violation of federal and international law. The information contained in this document is the intellectual property of Studio Southwest Architects, Inc. and all rights thereto are reserved.

CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT

PROJECT TITLE: LOMA LINDA COMMUNITY CENTER GYM ADDITION

DRAWING TITLE: DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	
PERMIT SET	City Project No. 502093	Zone Map No. L-16-Z	DWG. C-107	Sheet 11 of 108