

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

April 24, 2025

Robert Fierro, P.E.
Fierro & Company
3201 4th Street NW, Suite C
Albuquerque, NM 87107

**RE: Event Center
1611 Airtech Ct. SE
Grading & Drainage Plans
Engineer's Stamp Date: 4/24/2025
Hydrology File: N15D017**

Dear Mr. Fierro:

PO Box 1293

Based upon the information provided in your submittal received 4/24/2025, the Grading & Drainage Plans **are** approved for Grading Permit and 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.

Albuquerque

PRIOR TO CERTIFICATE OF OCCUPANCY:

NM 87103

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

www.cabq.gov

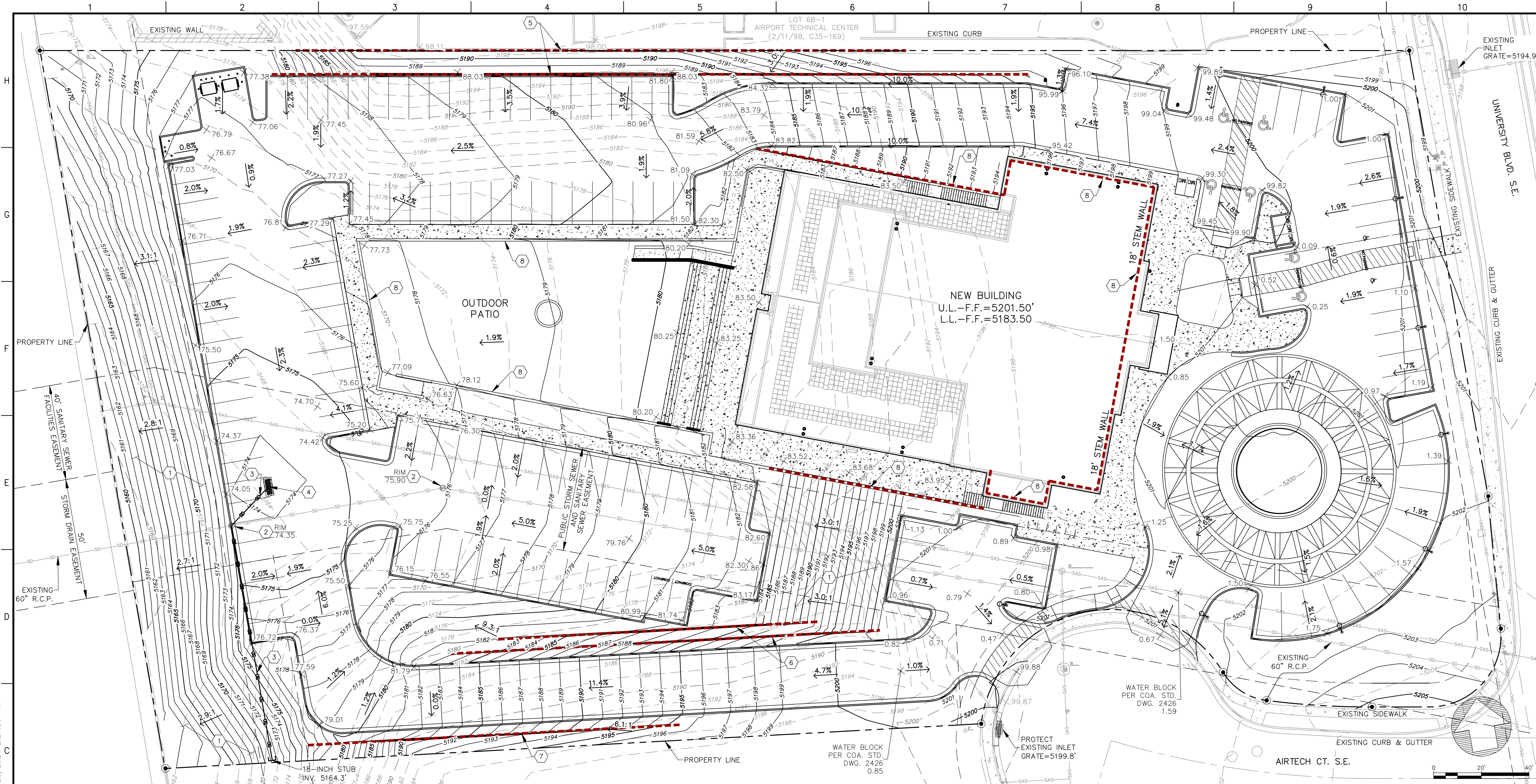
As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E., CFM
Senior Engineer, Hydrology
Planning Department, Development Review Services

P:\PROJECTS\2024\24001\CADD\HYDROLOGY\24001-GRADING.dwg 10/28/2024 2:24:39 PM



LEGEND

- APPARENT PROPERTY BOUNDARY
- APPARENT ADJOINER PROPERTY LINE
- PROPERTY CORNER
- ROOF FLOW DIRECTION
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING OVERHEAD ELECTRIC
- EXISTING STORM DRAIN
- EXISTING SEWER LINE
- EXISTING WATER LINE
- POND CONTOUR
- NEW STORM LINE
- NEW RETAINING WALL
- RTW RETAINING WALL
- M.H. MANHOLE
- E.G. EXISTING GRADE
- F.G. FINISH GRADE

NOTE:
THE OWNER HAS ELECTED TO PAY THE PAYMENT IN LIEU
FOR THE REQUIRED STORMWATER QUALITY VOLUME.

PROJECT INFORMATION

BENCHMARK
ALBUQUERQUE SURVEY MONUMENT: ACS BM, 3-N14
NORTHING: 1469185.928 (NMSPC, CENTRAL, NAD 1983)
EASTING: 1522103.492 (NMSPC, CENTRAL, NAD 1983)
ELEVATION: 4958.90' (NAVD 1988, U.S. SURVEY FOOT)

DESCRIPTION
TRACT B PLAT OF TRACTS A, B, C, D & E AIRPORT
TECHNICAL CENTER

FLOOD NOTE:
THIS PROPERTY LIES WITHIN FLOOD ZONE X WHICH IS
DEFINED AS AN AREA OF MINIMAL FLOOD HAZARD. AS
DETERMINED BY F.E.M.A. AND SHOWN ON THE FLOOD
INSURANCE RATE MAP DATED SEPTEMBER 26, 2008, MAP
NO. 35001C0342G.

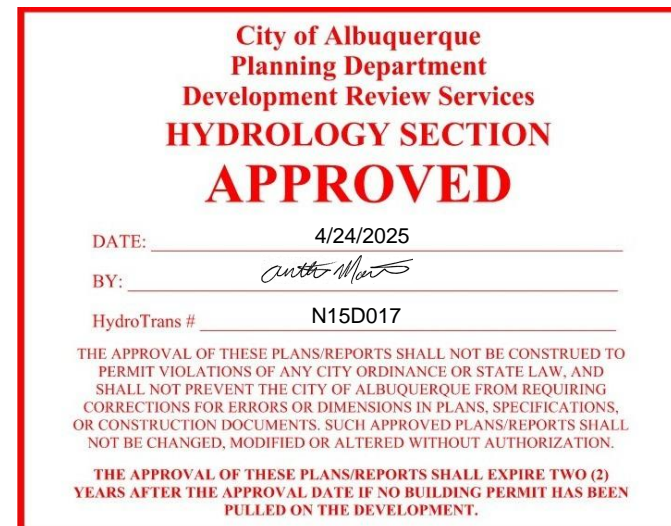
SURVEYOR INFORMATION
TOPOGRAPHIC SURVEY PERFORMED OCTOBER AND
NOVEMBER 2023 BY OTHERS.

GENERAL GRADING NOTES:

- THE CONTRACTOR TO VERIFY LOCATION OF ALL UTILITIES SHOWN AND COORDINATE WITH ALL UTILITY OWNERS PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR SHALL LIMIT DISTURBANCE OF NATIVE VEGETATION TO A MINIMUM.
- THIS PLAN RECOMMENDS POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES TO PREVENT PONDING OF RUNOFF WHICH MAY CAUSE STRUCTURAL SETTLEMENT. FUTURE ALTERATION OF GRADES ADJACENT TO THE PROPOSED STRUCTURES IS NOT RECOMMENDED.
- PERFORM GRADING AND EXCAVATION WORK IN COMPLIANCE WITH APPLICABLE SPECIFICATIONS, REQUIREMENTS, CODES AND ORDINANCES OF CITY OF ALBUQUERQUE, NEW MEXICO.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF OR OBTAINING EXCESS CUT OR FILL MATERIAL REQUIRED FOR FINAL GRADE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH NEW MEXICO ONE CALL PRIOR EXCAVATION.
- CLEAR AND GRUBBING PER NM APWA SECTION 201 SPECIFICATION.
- SPOT ELEVATIONS ARE TO FINISH GRADE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL CONFINE THEIR WORK TO WITHIN THE CONSTRUCTION LIMITS AND/OR PUBLIC RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION, LANDSCAPING, AND PRIVATE PROPERTY. APPROVAL OF THESE PLANS DOES NOT GIVE OR IMPLY ANY PERMISSION TO TRESPASS OR WORK ON PRIVATE PROPERTY. PERMISSION MUST BE GRANTED IN WRITING BY THE OWNER OF THAT PROPERTY.
- CONTRACTOR TO CLEAN UP SEDIMENT AND DEBRIS ON THE STREET, WHICH IS CAUSED BY CONSTRUCTION, AT THE END OF EACH WORK DAY. TEMPORARY DIRT RAMPS ARE NOT TO BE LEFT IN STREETS OR NEAR CURB.

CONSTRUCTION NOTES:

- STABILIZE SIDE SLOPES WITH NATIVE GRASS SEED (PER City Spec 1012) WITH AGGREGATE MULCH OR EQUAL (MUST SATISFY THE "FINAL STABILIZATION CRITERIA" CGP 2.2.1.4.b.)
- ADJUST STORM MANHOLE'S RIM UNDER SO-19 PERMIT.
- CONSTRUCT PRIVATE 18" STORM PIPE. CONNECT TO EXISTING PUBLIC STORM MANHOLE UNDER AN SO-19 PERMIT.
- CONSTRUCT STORM INLET TYPE "D" (DOUBLE GRATE) PER COA STD. DWG. NO. 2206.
- CONSTRUCT RETAINING WALL WITH PRIVACY WALL/GUARDRAIL BY SEPARATE PERMIT. DESIGN BY OTHERS. REFER TO TYPICAL RETAINING WALL NOMENCLATURE ON SHEET C-2.
- CONSTRUCT RETAINING WALL WITH PRIVACY WALL/GUARDRAIL BY SEPARATE PERMIT. DESIGN BY OTHERS. REFER TO TYPICAL RETAINING WALL NOMENCLATURE ON SHEET C-3.
- CONSTRUCT RETAINING WALL BY SEPARATE PERMIT. DESIGN BY OTHERS. REFER TO TYPICAL RETAINING WALL NOMENCLATURE ON SHEET C-4.
- RETAINING WALLS. SEE ARCHITECTURE AND STRUCTURAL SHEETS



SO-19 NOTES:

- BUILD SIDEWALK CULVERT PER C.O.A. STANDARD DWG 2236. WORK IS PERMITTED AND INSPECTED BY DMD CONSTRUCTION SERVICES DIVISION.
- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 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.
- PRIOR TO ANY EXCAVATION, TO THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811". OR (505-260-1990) FOR THE LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE 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 95%.
- MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
- WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24-HOUR BASIS.
- FOR EXCAVATION AND BARRICADING INSPECTIONS, CONTACT DMD CONSTRUCTION SERVICES DIVISION.

Fierro & Company
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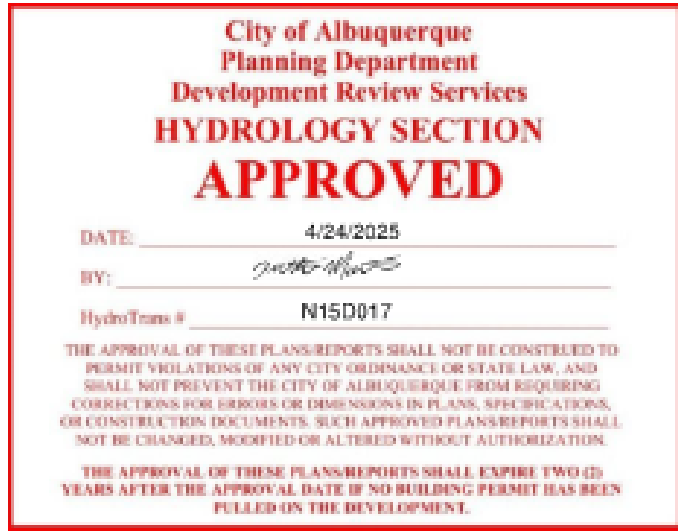
ROBERT J. FIERRO
NEW MEXICO
20585
4-24-2025
PROFESSIONAL ENGINEER

EVENT CENTER
UNIVERSITY BLVD. S.E.
ALBUQUERQUE, NM

PROJECT NAME	PROJECT NO.	DESIGNED BY	DRAWN BY	CHECKED BY	DATE	REV.	DESCRIPTION	BY
	24001	RJF	JB	RJF	OCTOBER 2024			

GRADING PLAN

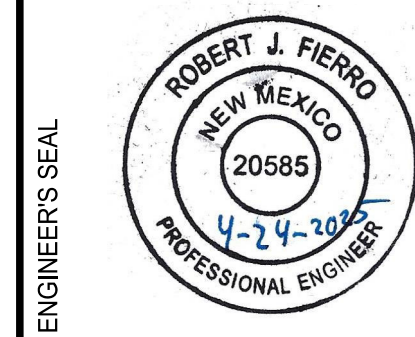
C-1



F&C

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ALBUQUERQUE, NM

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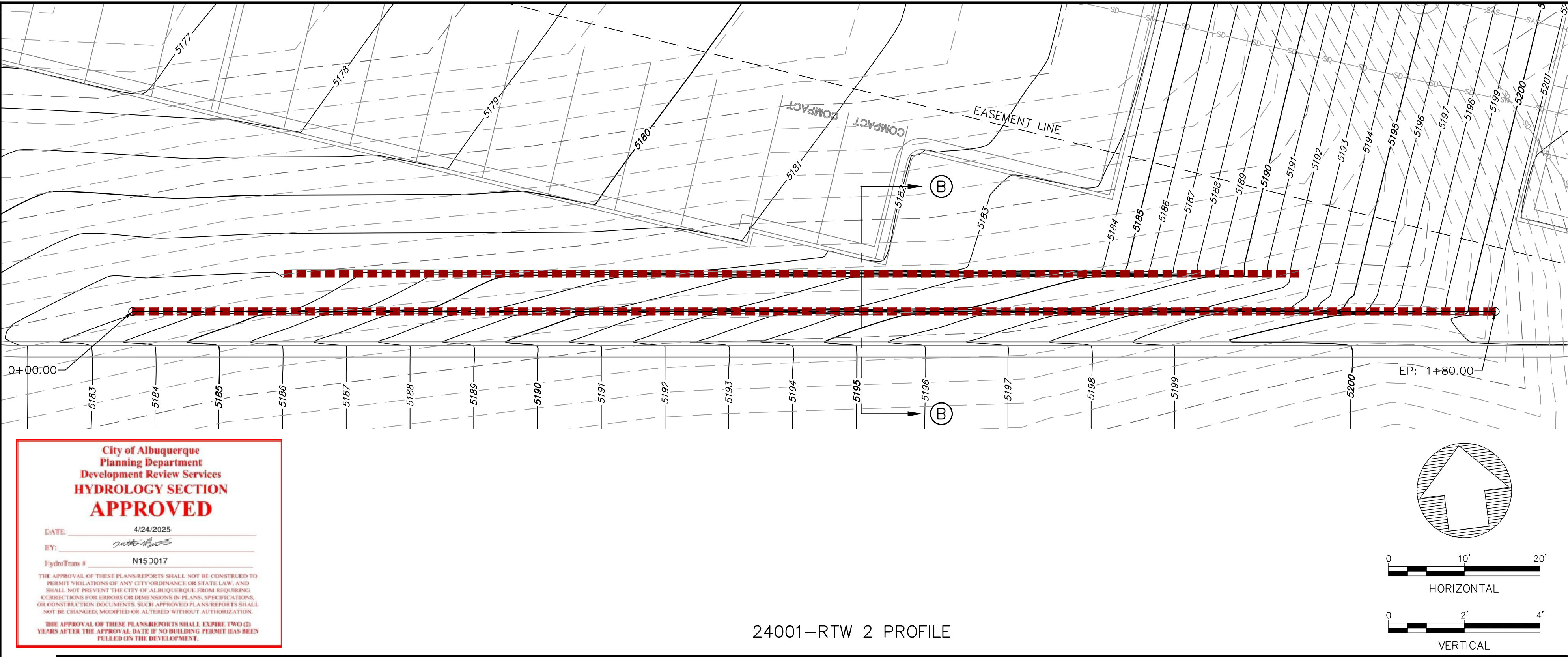
PROJECT NO:	24001
DESIGNED BY:	RJF
DRAWN BY:	JB
CHECKED BY:	RJF
DATE:	OCTOBER 2024

SHEET TITLE

RETAINING WALL
No. 1
PLAN & PROFILE

SHEET NO: C-2

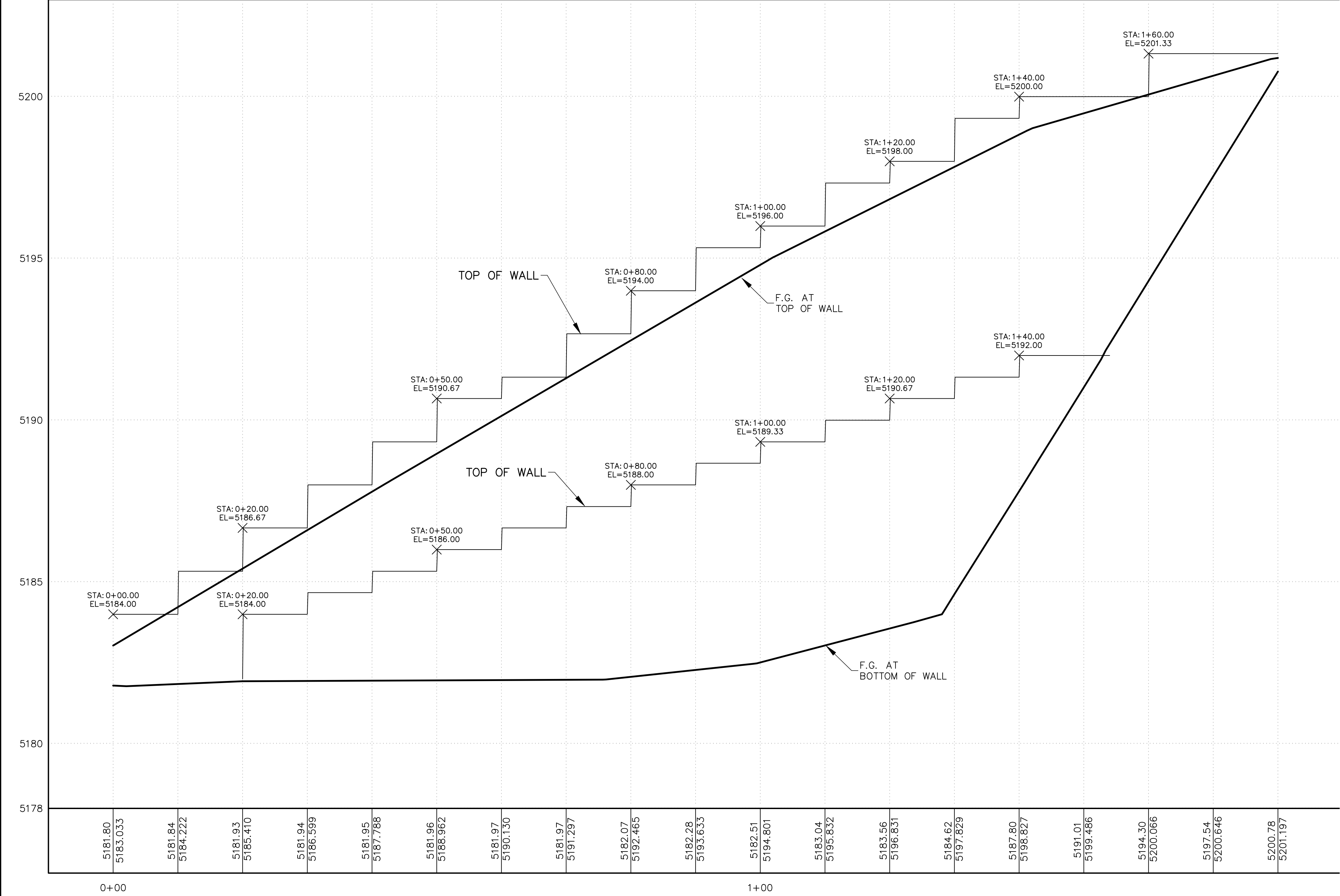
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City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 4/24/2025
BY: [Signature]
HydroTeam # N150017

THE APPROVAL OF THESE PLANS/REPORTS SHALL NOT BE CONSTRUED TO
IMPLY VIOLATIONS OF ANY CITY ORDINANCE, FEDERAL LAW, AND
SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING
CORRECT DESIGN FOR ERRORS OR OMISSIONS IN PLANS, SPECIFICATIONS,
OR CONSTRUCTION DOCUMENTS. SUCH APPROVED PLANS/REPORTS SHALL
NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.
THE APPROVAL OF THESE PLANS/REPORTS SHALL EXPIRE TWO (2)
YEARS AFTER THE APPROVAL DATE IF NO BUILDING PERMIT HAS BEEN
FILED ON THE DEVELOPMENT.



SECTION B-B (TYPICAL RETAINING WALL NOMENCLATURE)
SCALE: NTS

NOTE:
RETAINING WALL BY SEPARATE PERMIT
STRUCTURAL DESIGN BY OTHERS

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ENGINEER'S SEAL

PROJECT NAME
**EVENT CENTER
UNIVERSITY BLVD. S.E.
ALBUQUERQUE, NM**

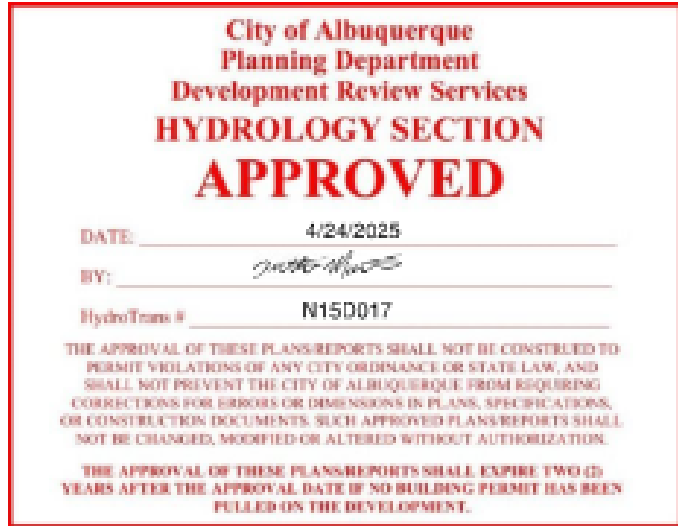
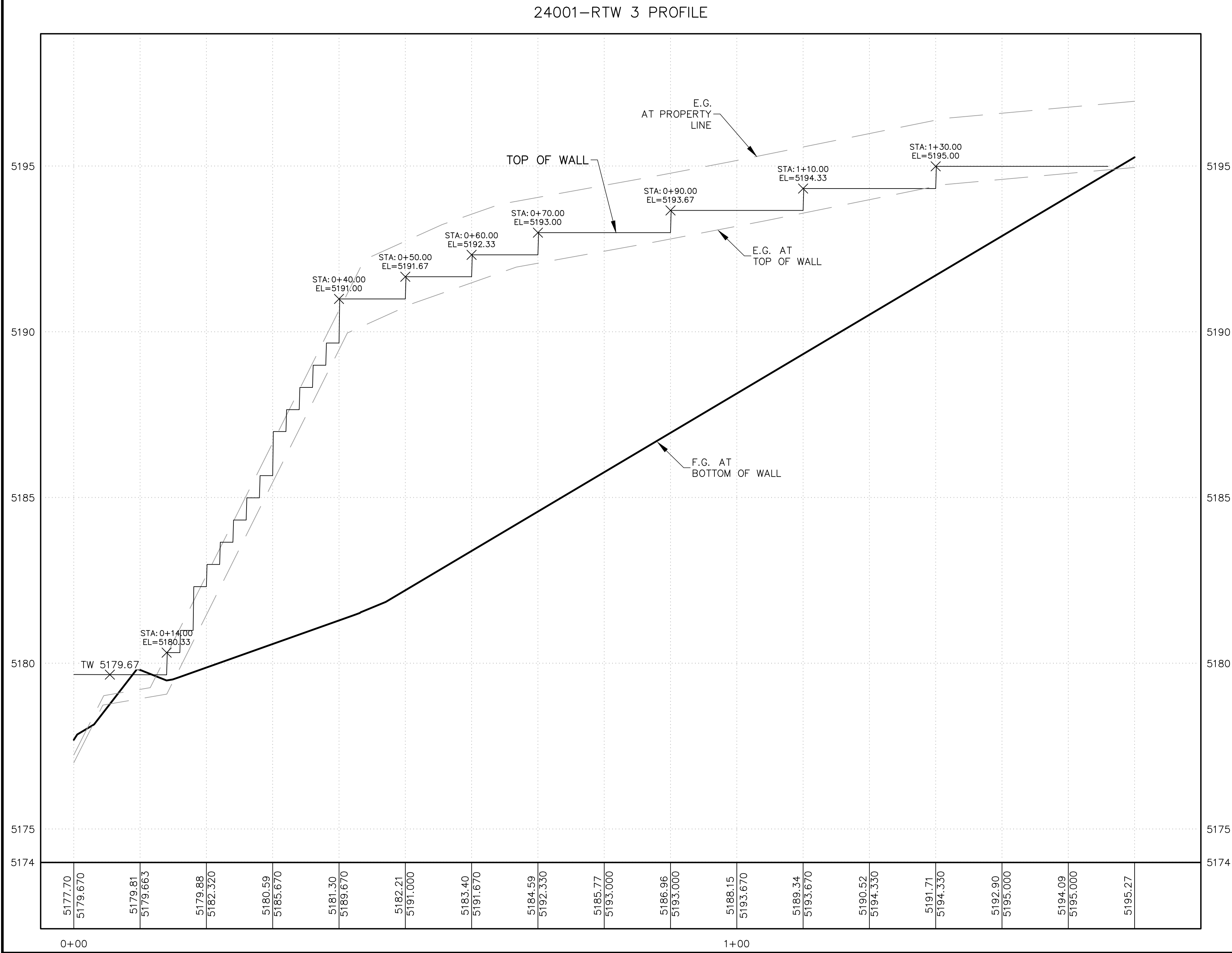
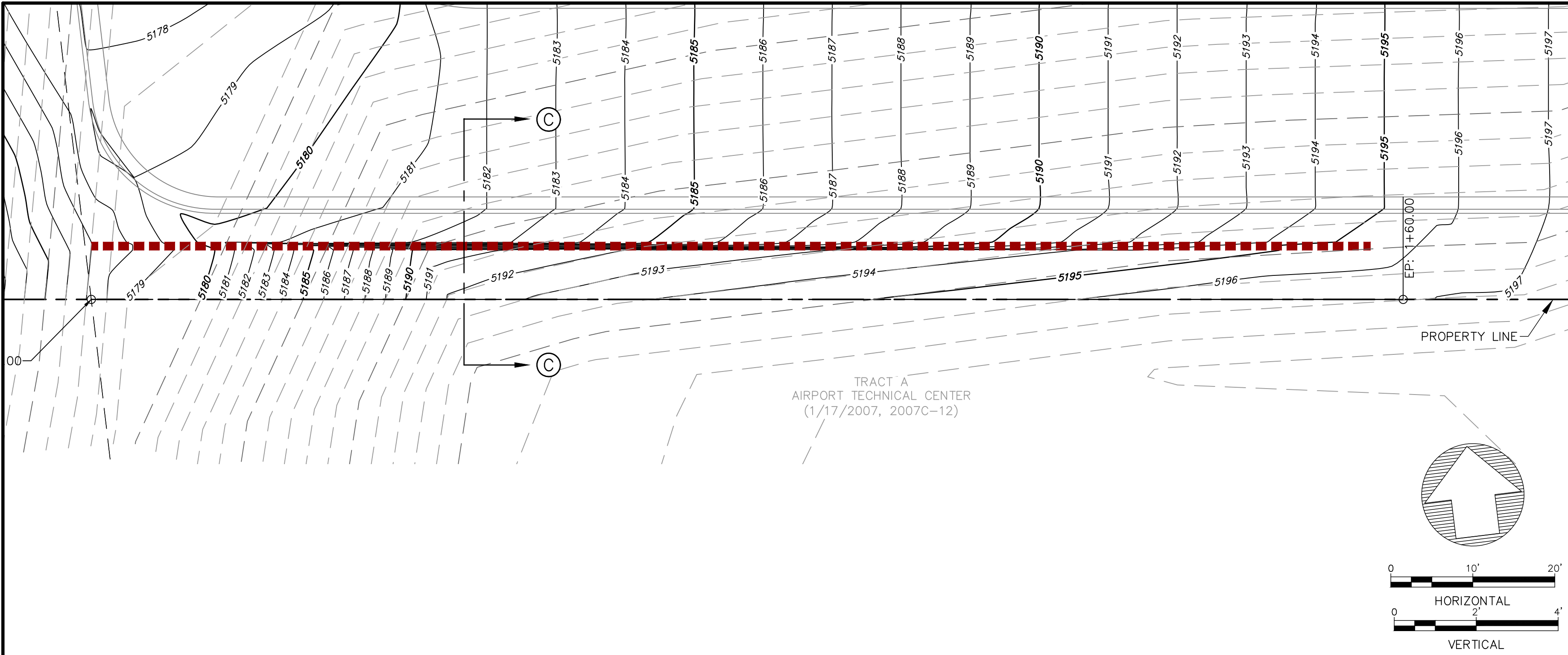
PROJECT NO.	24001
DESIGNED BY:	RJF
DRAWN BY:	JB
CHECKED BY:	RJF
DATE:	OCTOBER 2024

REV.	DATE	DESCRIPTION	BY

SHEET TITLE
**RETAINING WALL
No. 2
PLAN & PROFILE**

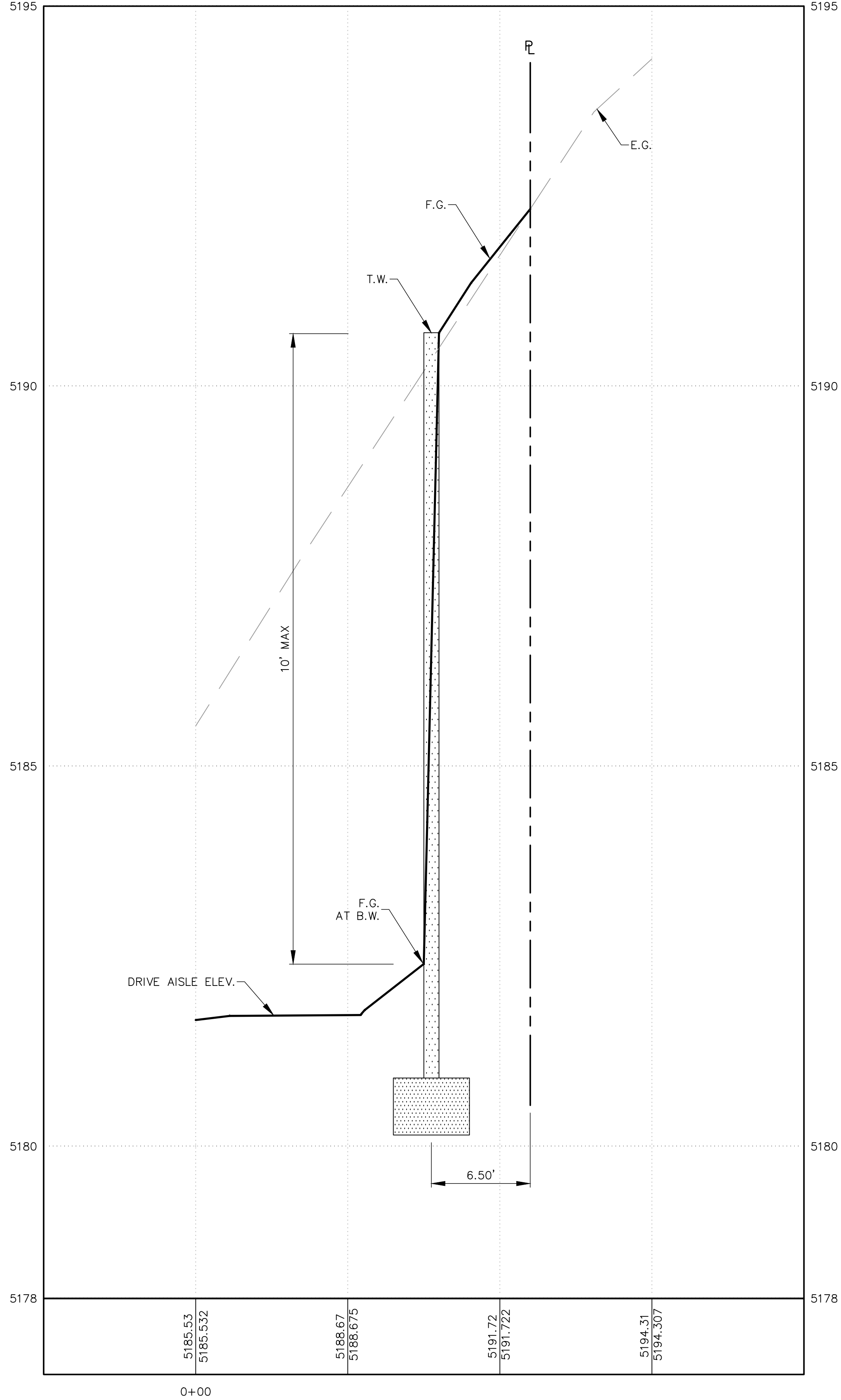
SHEET NO:
C-3

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NOTE:
RETAINING WALL BY SEPARATE PERMIT
STRUCTURAL DESIGN BY OTHERS

24001-XSEC C-C PROFILE



SECTION C-C (TYPICAL RETAINING WALL NOMENCLATURE)
SCALE: NTS

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EVENT CENTER
UNIVERSITY BLVD. S.E.
ALBUQUERQUE, NM

PROJECT NAME

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 24001
DESIGNED BY: RJF
DRAWN BY: JB
CHECKED BY: RJF
DATE: OCTOBER 2024

SHEET TITLE
**RETAINING WALL
No. 3
PLAN & PROFILE**

SHEET NO:
C-4



Introduction

The site is located at the northwest intersection of University Blvd./Airtech Court, and is 3.7 acres. This property is part of a Master Drainage Plan for Airport Technical Center, being Tract B of said Center. Allowable discharge rates have been established. The purpose of this Grading & Drainage Plan is to 1) provide hydrologic and hydraulic analysis of the allowable and proposed condition, 2) satisfy allowable stormwater quality requirements, and 3) seek approval for building permit.

Methodology

Hydrologic procedures presented in the Hydrology Section of the DMP, Article 6-2(a), approved June 8, 2020 were followed. Precipitation Zone 2 data was used in the hydrologic computations.

Existing Condition

The site is undeveloped. There is a 40-foot elevation difference from the East to West property line. Prior to becoming Tract 8, this land used to convey runoff via an arroyo which crossed the property with its runoff being intercepted by a 60-inch RCP at the west property line common to the East property line of UNM Golf Course. This 60-inch R.C.P. pipe has been extended through said Tract 8 to University Blvd. The terrain still represents features of an arroyo; however, all offsite flow is now conveyed via the 60-inch R.C.P. On-site flow discharges to UNM Golf Course with concentrated flow near the 60-inch RCP. The subject site is within the Master Drainage Plan for Lots 6B-2 and 8B, Airport Technical Center with an allowable discharge rate of 16.4 cfs.

Proposed Condition

An event center is proposed at this site. To help make this tract developable the following design elements were incorporated: 1) several retaining walls, steep drive aisle from East to West, steep slopes along the western boundary, and a two tier building. The site will discharge to a double grate inlet which will connect to an existing storm manhole. The western 40-feet of the site has steep slopes of 2.5H:1V which discharge directly to UNM Golf course. UNM Golf course benefits from this development, since the entire site will not surface discharge to UNM Golf Course as under the existing condition. Also, the proposed surface discharge to UNM Golf Course is not concentrated as in the existing condition.

The proposed site cannot accommodate storing the storm water quality requirement due to the following reasons:


- 1) site is encumbered by public easements
- 2) Steep grades
- 3) Platting of Tract B and Master Drainage Plan allowed free discharge of the site; therefore, anticipated the Tract not being able to detain/retain runoff due to the two items above.

A waiver application from stormwater quality volume management on-site is being submitted to seek payment-in-lieu.

DRAINAGE NARRATIVE

**City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED**

DATE: 4/24/2025

BY: 

Hydro/Tran: **N150017**

THE APPROVAL OF THESE PLANS/PROJECTS SHALL NOT BE CONSIDERED TO PRESENT VIOLATIONS OF ANY FEDERAL, STATE OR CITY LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUESTING CORRECTIVE ACTIONS FOR EXISTING OR FUTURE VIOLATIONS OF ANY APPLICABLE REGULATORY DOCUMENTS. SUD APPROVED PLANS/PROJECTS SHALL NOT BE CHALLENGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

THE APPROVAL OF THESE PLANS/PROJECTS SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE. THE EXPIRING PERIOD HAS BEEN PULLED ON THE DEVELOPMENT.

NOTE:
THE OWNER HAS ELECTED TO PAY THE PAYMENT IN LIEU
FOR THE REQUIRED STORMWATER QUALITY VOLUME.

STORMWATER QUALITY VOLUME (WAIVER):

GIVEN:
Area₀=114,478 sq.ft.

SOLUTION:
 $SWQV = \frac{1}{12}(R_D * \text{Area}_0) = \frac{1}{12}[0.420 * 114,478 \text{ sq.ft}] = \underline{4,007 \text{ cu.ft.}}$

CONCLUSION: A waiver application is being submitted to allow runoff generated from 114,478 sq.ft of impervious area to discharge directly to the 60" storm drain within Tract B.


HYDROLOGY SUMMARY									
Allowable runoff based on Master Drainage Plan Lots 6B-2 and 8B, Airport Technical Center									
BASIN	Total Area	Total Area	Land Treatment (%)				$Q_{100yr-6hr}$	$V_{100yr-24hr}$	$V_{100yr-24hr}$
	(sq.ft.)	(acres)	A	B	C	D	(cfs)	(ac-ft)	(cu.ft.)
100 _{ALLOWABLE}	163540	3.754	0.0	0.0	20.0	80.0	15.3	0.723	31481
100 _{PROPOSED}	163540	3.754	0.0	15.0	15.0	70.0	14.5	0.662	28831

S.W.Q.V. CALCULATIONS

HYDROLOGY SUMMARY

LEGEND

-
- - - - - PROPERTY BOUNDARY
 • • • FLOW PATH
 → ROOF FLOW
 ← SURFACE DRAINAGE
 - - - - - EASEMENT LINE
 - - - - - SAS
 -SD-SD-SD- EXISTING SEWER LINE
 -SD-SD-SD- EXISTING STORM DRAIN
 -SD-SD-SD- NEW STORM DRAIN
 3910 PROPOSED MAJOR CONTOUR
 3900 PROPOSED MINOR CONTOUR
 ■ ■ ■ ■ ■ BASIN

		Fierro & Company ENGINEERING SURVEYING 3201 4TH STREET NW, SUITE C ALBUQUERQUE, NEW MEXICO 87107 PH (505) 352-8930 www.fierrocompany.com	
			
ENGINEER'S SEAL			
PROJECT NAME			
EVENT CENTER UNIVERSITY BLVD. S.E. ALBUQUERQUE, NM			
PROJECT NO:		24001	
DESIGNED BY:		RJF	
DRAWN BY:		JB	
CHECKED BY:		RJF	
DATE:		OCTOBER 2024	
SHEET TITLE			
DRAINAGE PLAN			
SHEET NO:		D-1	

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H
G
F
E
D
C
B
A

Inlet Report

Hydrow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Tuesday, May 14 2024

STORM INLET TYPE D (DOUBLE GRATE)

Drop Grate Inlet

Location = Sag
Curb Length (ft) = -0-
Throat Height (in) = -0-
Grate Area (sqft) = 7.44
Grate Width (ft) = 6.40
Grate Length (ft) = 2.10

Gutter

Slope, Sw (ft/ft) = 0.020
Slope, Sx (ft/ft) = 0.020
Local Depr (in) = -0-
Gutter Width (ft) = 6.40
Gutter Slope (%) = -0-
Gutter n-value = -0-

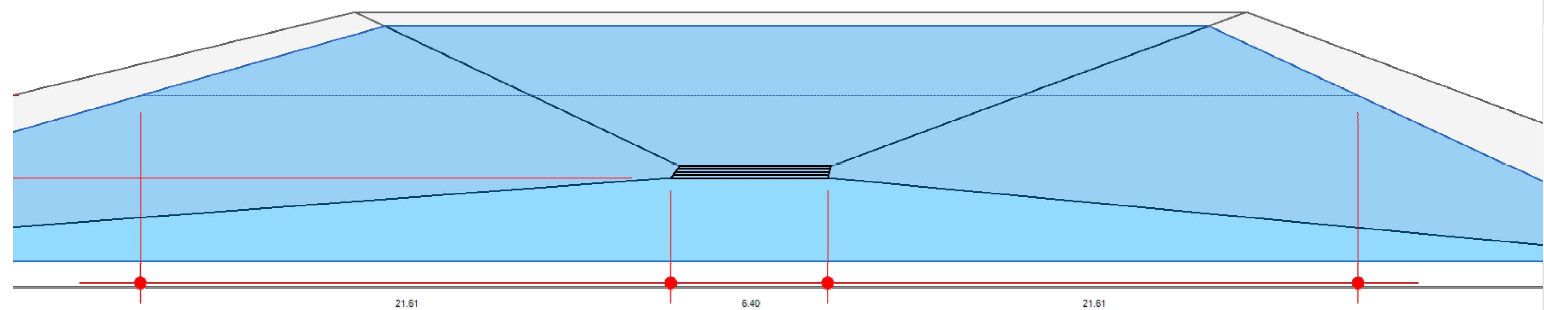
Calculations

Compute by: Known Q
Q (cfs) = 14.50

Highlighted

Q Total (cfs) = 14.50
Q Capt (cfs) = 14.50
Q Bypass (cfs) = -0-
Depth at Inlet (in) = 5.19
Efficiency (%) = 100
Gutter Spread (ft) = 49.62
Gutter Vel (ft/s) = -0-
Bypass Spread (ft) = -0-
Bypass Depth (in) = -0-

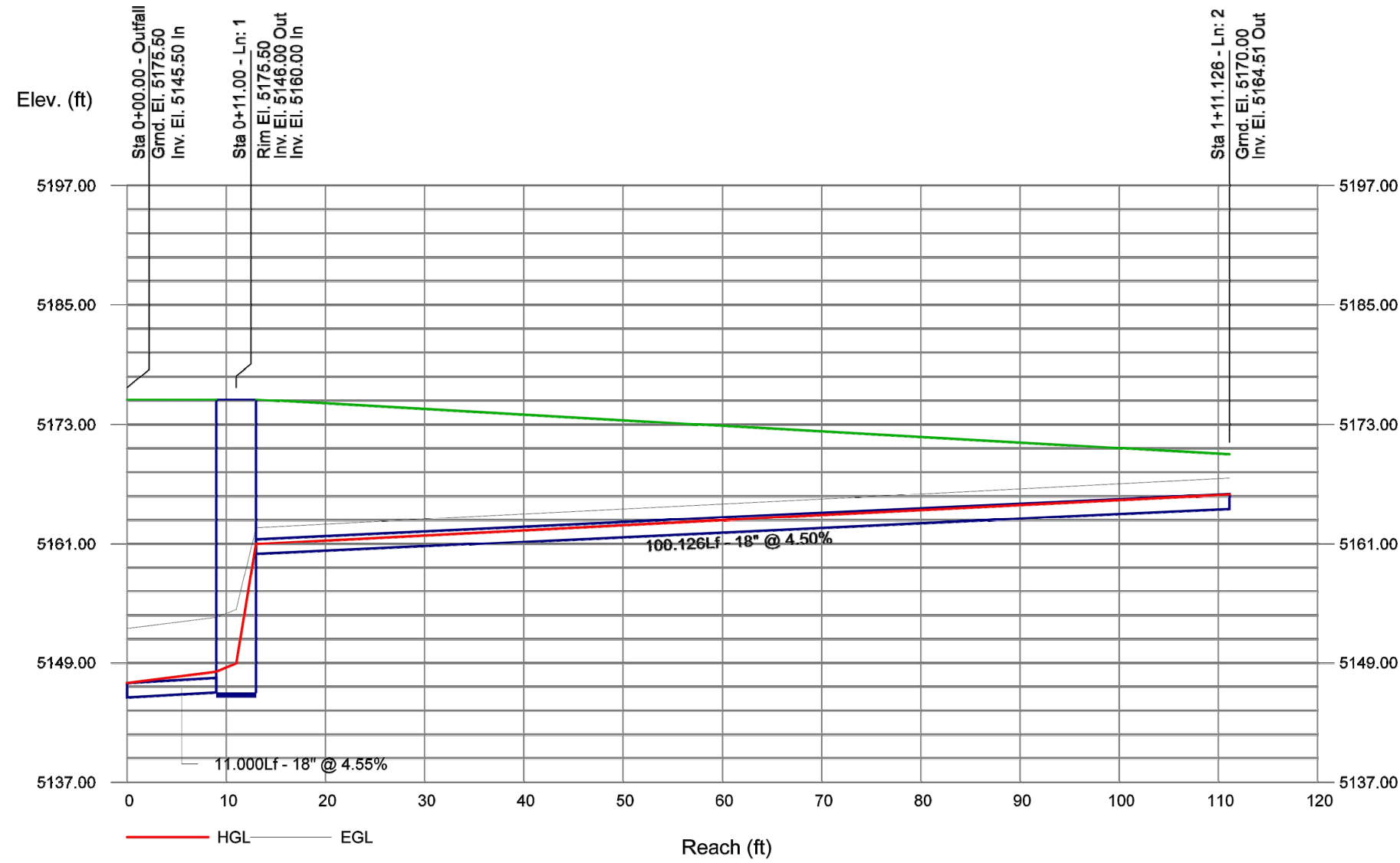
All dimensions in feet



INLET ANALYSIS

Storm Sewer Profile

Proj. file: 24001-STRM PIPE DESIGN.stm



Storm Sewer Summary Report

Page 1

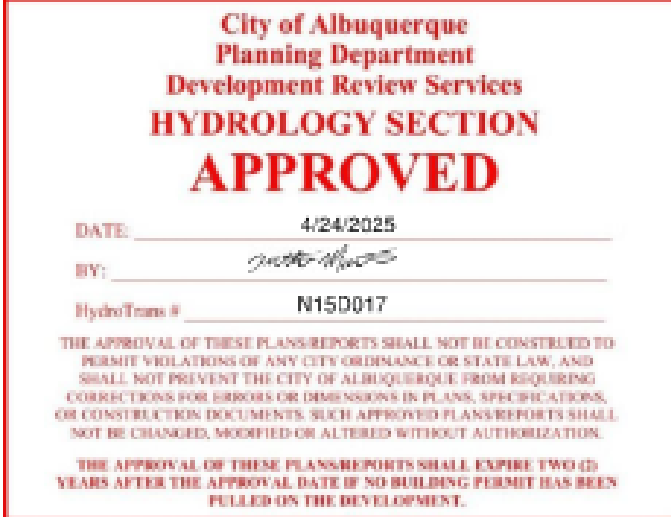
Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1		33.20	18	Cir	11,000	5145.50	5146.00	4.545	5147.00*	5148.10*	0.82	5148.03	End	Manhole
2		17.90	18	Cir	100,128	5150.00	5164.51	4.504	5161.02	5165.96	n/a	5165.96	1	None

24001-STRM PIPE

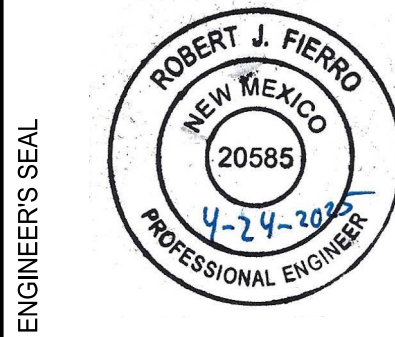
Number of lines: 2

Run Date: 5/14/2024

NOTES: Known Qs only ; *Surcharged (HGL above crown).



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EVENT CENTER
UNIVERSITY BLVD. S.E.
ALBUQUERQUE, NM

PROJECT NAME

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 24001
DESIGNED BY: RJF
DRAWN BY: JB
CHECKED BY: RJF
DATE: OCTOBER 2024

SHEET TITLE

DRAINAGE
PLAN

SHEET NO:

D-2