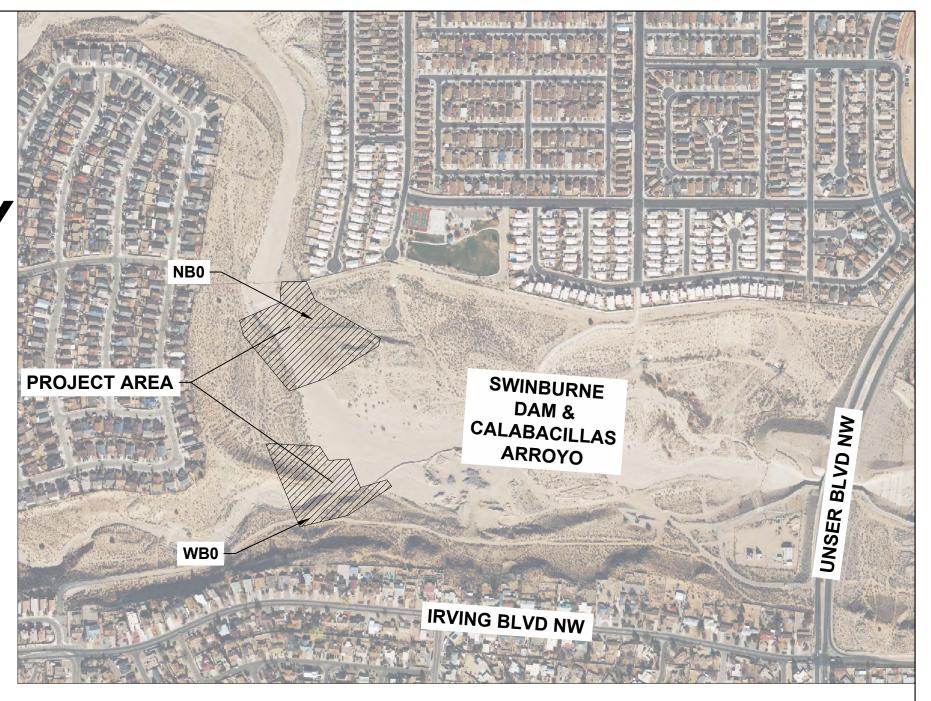
# **CONSTRUCTION PLANS FOR** ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY SWINBURNE DAM GRADE CONTROL STRUCTURES ALBUQUERQUE, NEW MEXICO

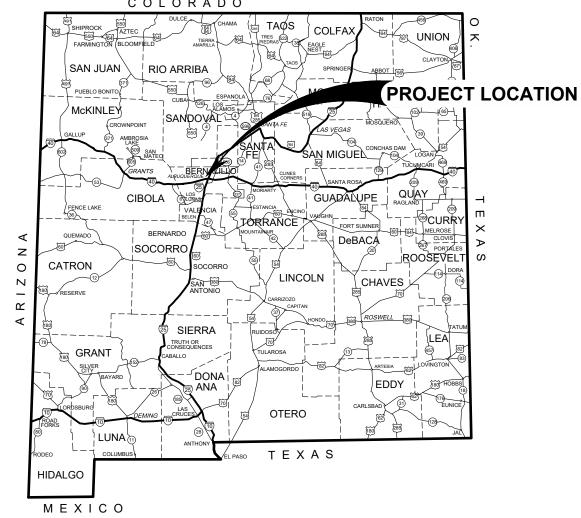
## **INDEX**

SHEET NUMBER	DWG NUMBER	DESCRIPTION
01	G-01	COVER SHEET, SHEET INDEX, VICINITY MAP, AND PROJECT LOCATION
02	G-02	GENERAL NOTES
03	G-03	SURVEY CONTROL
04	G-04	SITE PLAN
05	C-01	REMOVAL PLAN
06	C-02	GRADE CONTROL STRUCTRUE NB0 - TOP OF STRUCTURE
07	C-03	GRADE CONTROL STRUCTURE NB0 - LAYOUT AND FINAL GRADING
08	C-04	PLAN AND PROFILE - STA 101+00.00 TO STA 105+00.00
09	C-05	GRADE CONTROL STRUCTURE NB0 - STRUCTURE SECTIONS
10	C-06	GRADE CONTROL STRUCTURE NB0 - STRUCTURE SECTIONS
11	C-07	GRADE CONTROL STRUCTURE WB0 - TOP OF STRUCTURE
12	C-08	GRADE CONTROL STRUCTURE WB0 - LAYOUT AND FINAL GRADING
13	C-09	PLAN AND PROFILE - STA. 201+00 TO STA. 205+00
14	C-10	GRADE CONTROL STRUCTURE WB0 - STRUCTURE SECTIONS
15	C-11	GRADE CONTROL STRUCTURE WB0 - STRUCTURE SECTIONS
16	C-12	MAINTENANCE ACCESS ROAD 1
17	C-13	MAINTENANCE ACCESS ROAD 2
18	D-01	SECTIONS AND DETAILS 1
19	D-02	SECTIONS AND DETAILS 2
20	D-03	SECTIONS AND DETAILS 3
21	D-04	SECTIONS AND DETAILS 4
22	D-05	CROSS SECTIONS 1 NB0
23	D-06	CROSS SECTIONS 2 NB0
24	D-07	CROSS SECTIONS 3 WB0









ENGINEERS STAMP & SIGNATURE 90% FOR **REVIEW** 

**Bohannan** A Huston www.bhinc.com 800.877.5332

APPROVED FOR BIDDING AND CONSTRUCTION

**REFERENCES:** 

**KEVIN TROUTMAN EXECUTIVE DIRECTOR** 

Tetra Tech, Calabacillas Arroyo Facility Plan Above Swinburne Dam - Final, July 2021.

**AMAFCA** 

SWINBURNE DAM GRADE CONTROL STRUCTURES **COVER SHEET, SHEET INDEX, VICINITY MAP, AND PROJECT LOCATION** 

**DATE** BHI PROJECT NO.

20240392

Mon, 7-Jul-2025 - 4:48:pm, Plotted by: EADAMS P:\20240392\SW\Design\plans\20240392\_01\_G-01\_Cover Sheet.dwg

Geo-Test, Inc. Geotechnical Engineering Services Report Job No. 1-41206 - Swinburne Dam Grade Control Structures. January 2024. Mussetter, R.A., Lagassee, P.F., and Harvey, M.F., Sediment and Erosion Design Guide, prepared for Albuquerque Metropolitan Arroyo Flood Control Authority, March 1994.

Tetra Tech, Swinburne Dam Grading Plan Memorandum, January 2022.

#### **AMAFCA GENERAL NOTES:**

- AMAFCA SHALL BE NOTIFIED BY EMAIL OR BY PHONE AT (505) 884-2215 AT LEAST TEN (10) DAYS PRIOR TO START OF ANY WORK IN AMAFCA ROW/EASEMENT.
- 2. AMAFCA SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY CONCRETE INSTALLATION TO ALLOW FOR INSPECTION OF THE REBAR AND SUBSURFACE PREPARATION.
- AMAFCA SHALL BE NOTIFIED BY EMAIL OR BY PHONE AT (505) 884-2215 AT LEAST TEN (10) DAYS PRIOR TO REQUEST FOR FINAL INSPECTION OF THE WORK WITHIN THE AMAFCA RIGHT-OF-WAY OR EASEMENT.
- NO WORK WILL BE PERFORMED IN THE AMAFCA ROW/EASEMENT BETWEEN MAY 15 AND OCTOBER 15 WITHOUT PRIOR WRITTEN AUTHORIZATION FROM AMAFCA.
- 5. ALL SUBGRADE, BACKFILL AND EMBANKMENT SHALL BE COMPACTED TO 95% (±2% OF OPTIMUM MOISTURE PER ASTM D-1557) WITHIN THE AMAFCA ROW/EASEMENT. ALL TESTING REPORTS SHALL BE PROVIDED TO AMAFCA.
- CERTIFIED AS-BUILT PLANS SHALL BE SUBMITTED TO AMAFCA FOR ANY CONSTRUCTION WITHIN THE AMAFCA ROW/EASEMENT.
- ALL DISTURBED GROUND AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH AMAFCA SUPPLEMENTAL TECHNICAL SPECIFICATION 632, AS CURRENTLY UPDATED.
- 8. ANY EXISTING SURVEY CONTROL MONUMENTS THAT ARE DISTURBED OR DAMAGED AS A RESULT OF THE CONSTRUCTION OR MAINTENANCE ACTIVITIES. SHALL BE REPLACED BY A LICENSED SURVEYOR IN NEW MEXICO AT THE CONTRACTOR'S EXPENSE. AMAFCA SHALL BE NOTIFIED AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY MONUMENT PLACEMENT.
- 9. THE CONTRACTOR SHALL MAINTAIN OR REPAIR ALL AMAFCA INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO FENCING, GATES, SIGNAGE, AND ALL OTHER FACILITIES. ALL REPAIRS WILL BE PERFORMED TO RETURN FACILITIES TO ORIGINAL OR AMAFCA-APPROVED CONDITION.
- 10. DUST SUPPRESSION SHALL BE MAINTAINED SEVEN (7) DAYS A WEEK DURING CONSTRUCTION ACTIVITY. DURING PERIODS OF CONSTRUCTION INACTIVITY, THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN DUST CONTROL MEASURES.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TRACK-OUT REDUCTION MEASURES AND CLEAN UP ANY TRACK-OUT OF MATERIAL. THE CONTRACTOR SHALL CLEAN UP ANY SOIL DEPOSITS OR SPILLS ON ALL PAVED ROADS ALONG HAUL ROUTES.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC AND PEDESTRIAN CONTROL.
- 13. AT THE END OF EACH WORKDAY AND DURING TIMES OF CONSTRUCTION INACTIVITY, THE CONTRACTOR SHALL ENSURE ALL ACCESS GATES TO THE FACILITY ARE CLOSED AND LOCKED.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRASH AND DEBRIS REMOVAL IN THE AREA OF THE CONSTRUCTION ACTIVITY. ALL GRAFFITI WILL BE REMOVED OR APPROPRIATELY COVERED UP WITHIN ONE DAY (24 HOURS).
- 15. ANY FINES IMPOSED AGAINST AMAFCA DUE TO THE CONTRACTOR'S ACTIVITIES THAT VIOLATE THE CONDITIONS OF ANY REQUIRED DUST OR STORMWATER QUALITY PERMIT SHALL BE REIMBURSED BY THE CONTRACTOR.
- 16. ANY FINES LEVIED AGAINST THE CONTRACTOR DUE TO ITS ACTIVITIES THAT VIOLATE ANY LOCAL STATUTES OR REQUIREMENTS SHALL BE PAID BY THE CONTRACTOR.
- 17. IF AMAFCA IS FINED AS BEING THE LANDOWNER OF THE PROPERTY, DUE TO THE CONTRACTOR'S ACTIVITIES, THE CONTRACTOR SHALL REIMBURSE AMAFCA FOR ALL COSTS ASSOCIATED WITH PAYMENT OF THE FINE BY
- 18. THE CONTRACTOR SHALL REMOVE ANY CONCRETE, ASPHALT OR OTHER DEBRIS FOUND WITHIN THE CONSTRUCTION AREA AND APPROPRIATELY DISPOSE OF SAID DEBRIS AT NO COST TO AMAFCA.
- 19. THE MAXIMUM WHEEL LOAD ALLOWED IN THE AMAFCA CHANNEL SHALL BE TWELVE THOUSAND (12.000)
- 20. NO TRACKED VEHICLES WILL BE ALLOWED IN AMAFCA HARD-LINED OR CONCRETE CHANNEL WITHOUT WRITTEN PERMISSION FROM AMAFCA.
- 21. CRANES OPERATING WITH OUTRIGGERS IN THE CHANNEL SHALL LIMIT THE OUTRIGGER FOOTPRINT LOAD AREA TO LESS THAN TWELVE THOUSAND (12,000) POUNDS.

#### **CONSTRUCTION NOTES:**

- 22. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS.
- MORE THAN ONE HANDLING PRIOR TO FINAL PLACEMENT, INCLUDING STOCKPILING AND BLENDING TO MEET GRADATION REQUIREMENT OR STOCKPILING FOR LATER DISPOSAL, OF FILL MATERIALS FROM EXCAVATION OR BORROW WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE FOR EXCAVATION, BACKFILL AND COMPACTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MULTIPLE HANDLING, AND FINAL PAYMENT SHALL BE MADE ON THE BASIS OF QUANTITIES REMOVED FROM THE ORIGINAL LOCATION.
- 24. THE CONTRACTOR SHALL EXCAVATE AND FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS, WATER, SEWER AND OTHER UTILITY LINES, CABLES AND, APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE COORDINATED WITH THAT UTILITY, BE IT PRIVATE OR PUBLIC OWNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE THEIR ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
- 25. DISPOSAL OF UNSUITABLE MATERIAL AND ITEMS DESIGNATED FOR REMOVAL WITHOUT SALVAGE SHALL BE IN ACCORDANCE WITH LANDFILL (DISPOSAL) SITE REQUIREMENTS. COSTS ARE INCIDENTAL.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING UTILITY LINES AND OTHER IMPROVEMENTS WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
- 27. SLOPE/GRADING LIMITS AND LIMITS OF EXCAVATION SHOWN ON THE PLANS DEFINE "LIMITS OF WORK" FOR THIS PROJECT, CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS, ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR, ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
- EXCEPT AS NOTED, CONTRACTOR SHALL KEEP ALL STAGING AREAS WITHIN THE PUBLIC RIGHT-OF-WAY. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL BE ONLY WITHIN PUBLIC RIGHT-OF-WAY.
- 29. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (E.G. BARRICADING, FUGITIVE-DUST PERMIT, NPDES, FLOODPLAIN PERMIT, ETC.). COSTS ARE INCIDENTAL.
- 30. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), U.S. DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
- THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE BEGINNING AND END OF EACH DAY.
- 32. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENTS, PAVEMENT MARKINGS, CURB & GUTTER, DRIVE PADS, WHEELCHAIR RAMPS, AND SIDEWALK DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE, PER COA STANDARDS, AT THEIR OWN EXPENSE.
- CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING FENCES OR GATES DURING CONSTRUCTION. CONTRACTOR MAY INSTALL AN ACCESS GATE. ANY INSTALLED GATE MUST BE LOCKED UP AFTER HOURS AND AT ALL TIMES WHEN CONTRACTOR IS NOT ON SITE. AT PROJECT END, CONTRACTOR SHALL REPLACE FENCES EXACTLY AS THEY WERE. INSTALLATION, REMOVAL AND REPLACEMENT OF GATE AND/OR FENCING IS AT CONTRACTOR'S EXPENSE.
- 34. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
- 35. ARROYO ACCESS SHALL BE MADE ONLY AT LOCATIONS APPROVED BY AMAFCA. THE CONTRACTOR SHALL OBTAIN APPROVAL 15 WORKING DAYS PRIOR TO STARTING CONSTRUCTION WITHIN THE ARROYO.
- 36. SITE CLEARING AND GRUBBING MAY BE STOCKPILED AND PLACED IN TOP ONE FOOT OF FINAL EMBANKMENT PRIOR TO RE-SEEDING. NO TRASH OR DEBRIS WILL BE ALLOWED IN EMBANKMENT AND MUST BE REMOVED FROM THE PROJECT SITE.
- PREPARATION OF GCS BASES (NOT SLOPES) SHALL EXTEND TWO (2) FEET HORIZONTALLY BEYOND THE PERIMETER OF THE BASES.
- 38. PREPARATION OF GCS SLOPES AND SLOPES FOR BANK PROTECTION SHALL CONSIST OF SCARIFYING SLOPE FACE TO A DEPTH OF 12 INCHES. MOISTURE CONDITIONING. AND COMPACTION, DEEP MOISTURE CONDITIONING IS NOT REQUIRED.
- 39. ALL COMPACTION SHALL BE A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D-1557 TEST METHOD. TESTS FOR DEGREE OF COMPACTION SHALL BE DETERMINED BY THE ASTM D-1556 METHOD OR ASTM D-6938. OBSERVATION AND FIELD TESTS SHALL BE CONDUCTED DURING FILL AND BACKFILL PLACEMENT BY THE AMAFCA'S PROJECT MANAGER TO ASSIST THE CONTRACTOR IN OBTAINING THE REQUIRED DEGREE OF COMPACTION. IF LESS THAN 95 PERCENT RELATIVE COMPACTION IS INDICATED. ADDITIONAL COMPACTION EFFORT SHALL BE MADE WITH ADJUSTMENT OF THE MOISTURE CONTENT AS NECESSARY UNTIL 95 PERCENT COMPACTION IS OBTAINED. UNLESS OTHERWISE NOTED. MOISTURE CONTENT SHALL BE +/- 2% OF OPTIMUM.
- 40. CONTRACTOR SHALL VERIFY ELEVATIONS OF SHOWN UTILITIES.

#### **NOTICE TO CONTRACTORS:**

- 41. AMAFCA'S PM SHALL BE NOTIFIED OF ANY MATERIAL SALVAGED TO AMAFCA. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING AND UNLOADING SALVAGED MATERIAL.
- 42. CLEANING OF EXISTING SOIL CEMENT OR RIPRAP IS INCIDENTAL TO THE ITEMS FOR DUMPED RIPRAP, GROUTED BOULDER AND CONCRETE/SHOTCRETE.
- 43. SALVAGE AND REUSE ONLY ROCK IN ARROYO BED AND ROCK ON SLOPES WHERE IN WAY OF NEW CONSTRUCTION.
- 46. CONTRACTOR SHALL TINT SHOTCRETE SAN DIEGO BUFF.
- 47. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION 2019 EDITION.
- 48. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- 49. THE CONTRACTOR MUST LOCATE AND PROTECT DURING CONSTRUCTION ALL AMAFCA BRASS CAPS AND OTHER SURVEY MARKERS SHOWN ON PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE, AT THEIR EXPENSE, ANY AND ALL PROPERTY CAPS DESTROYED DURING CONSTRUCTION, RELOCATION OF DISTURBED MONUMENTS SHALL BE INCIDENTAL TO THE WORK. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED CONTRACTOR SHALL, AT THEIR OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. ALL MONUMENTS AND PROPERTY CORNERS MUST BE RESET BY A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR. AMAFCA SHALL BE NOTIFIED AT LEAST TWO DAYS (48 HOURS) PRIOR TO ANY MONUMENT PLACEMENT.
- 50. CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND APPURTENANCES AS REQUIRED BY THE SPECIFICATIONS FOR PREPARATION OF "AS-CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND APPURTENANCES UNTIL ALL DATA HAS BEEN RECORDED.

#### **LEGEND**

PROPERTY LINE EASEMENT LINE NEW MAJOR CONTOUR NEW MINOR CONTOUR EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR ---- GRADING LIMITS —— EXCAVATION PAY LIMITS -ss(oc)——ss(oc)——SANITARY SEWER LINE SANITARY SEWER MANHOLE

WATER LINE SUE ONE A A A SHOTCRETE

**GROUTED BOULDER BURIED SHOTCRETE** 

DUMPED RIPRAP

STORM DRAIN LINE

BURIED GROUTED BOULDER BASE COURSE

**EXISTING STRUCTURE REMOVAL** EXISTING RIPRAP TO BE REMOVED

AND SALVAGED EXISTING STRUCTURE TO REMAIN July 7, 2025

**ENGINEER'S SEAL** 

90% FOR

**REVIEW** 

ONLY

Bohannan A Huston 800.877.5332 www.bhinc.com

> **AMAFCA** SWINBURNE DAM GRADE CONTROL STRUCTURES **GENERAL NOTES**

> > 24

BHI PROJECT NO. DWG NO. 20240392 G-02

Mon. 7-Jul-2025 - 4:56:pm. Plotted by: EADAMS P:\20240392\SW\Design\plans\20240392 02 G-02 General Notes.dwg



## Bohannan A Huston

#### Introduction

This control was established for the purpose of providing construction control for the Swinburn Dam Topo Project. Monuments were established with an OPUS observation initialized through the NGS Control Network. Additional control monuments were established with Dual RTK observations and cross checked. Datasheets provide the specific metadata for each monument established.

#### **Project Control Process Flowchart:**

See attachment

#### **Project Control Specifications:**

Units:	US Survey Foot
Horizontal Datum:	NAD_83(2011)(EPOCH:2010.0000)
Vertical Datum:	NAVD88
Geoid Model:	GEOID18
Projection:	Transverse Mercator
State Plane and/or UTM Zone:	New Mexico Central Zone (3002)
Basis of Bearing:	Grid Bearings
Project Combined Factor:	0.9996720977 based on project BH 20150144
Modification Method Used:	Scaled State Plane coordinates about origin (0,0) no truncation
Field Methodology:	OPUS & RTK Solution
Equipment Used:	Trimble GPS Equipment
Control Set Date:	August 20, 2014 & February 13, 2024
Observation Date:	August 20, 2014 & February 13, 2024
Adjustment/ Publication Date:	February 7, 2025

I, Barry S. Phillips, New Mexico Professional Surveyor No. 15517, do hereby certify that this Control Survey Report was prepared by me or under my direct supervision based on an actual survey on the ground as described herein; that I am responsible for this survey; and that the survey and report meets the minimum standards for surveying in New Mexico as defined by NMAC 12.8.2.7.B(9) – Control Surveying.

Barry S.-Phillips, PS
For and on Behalf of
Bohannan Huston, Inc.
Courtyard I / 7500 Jefferson St. NE
Albuquerque, NM 87109-4335
(505).823.1000



## Bohannan A Huston

## Adjusted Coordinate Listing: See Attached Control Datasheets

POINT	LATITUDE	LONGITUDE	ELLIPSOID (US FT)	ORTHOMETRIC HEIGHT	MODIFIED NORTHING	MODIFIED EASTING	DESCRIPTION
BH 15-144-03	N 35° 13' 03.90524"	W 106° 42' 45.34834"	5386.716	5456.786	1535368.324	1502742.450	2" ALUMINUM CAP
BH 24-392-01	N 35° 12' 32.21550"	W 106° 42' 38.33627"	5253.662	5323.706	1532160.755	1503309.549	2" ALUMINUM CAP
BH 24-392-420	N 35° 12' 18.78685"	W 106° 42' 46.46869"	5241.783	5311.958	1530805.819	1502628.210	AERIAL CONCRETE MONUMENT

### **Geospatial Positional Accuracy Report:**

POINT	HORIZONTAL POSITIONAL ACCURACY	VERTICAL POSITIONAL ACCURACY	
BH 15-144-03	0.0854	0.1177	
BH 24-392-01	0.0186	0.1837	
BH 24-392-420	0.0140	0.0210	

**Control Datasheets** 



90% FOR REVIEW

**ENGINEER'S SEAL** 

ONLY

July 2, 2025

Bohannan A Huston

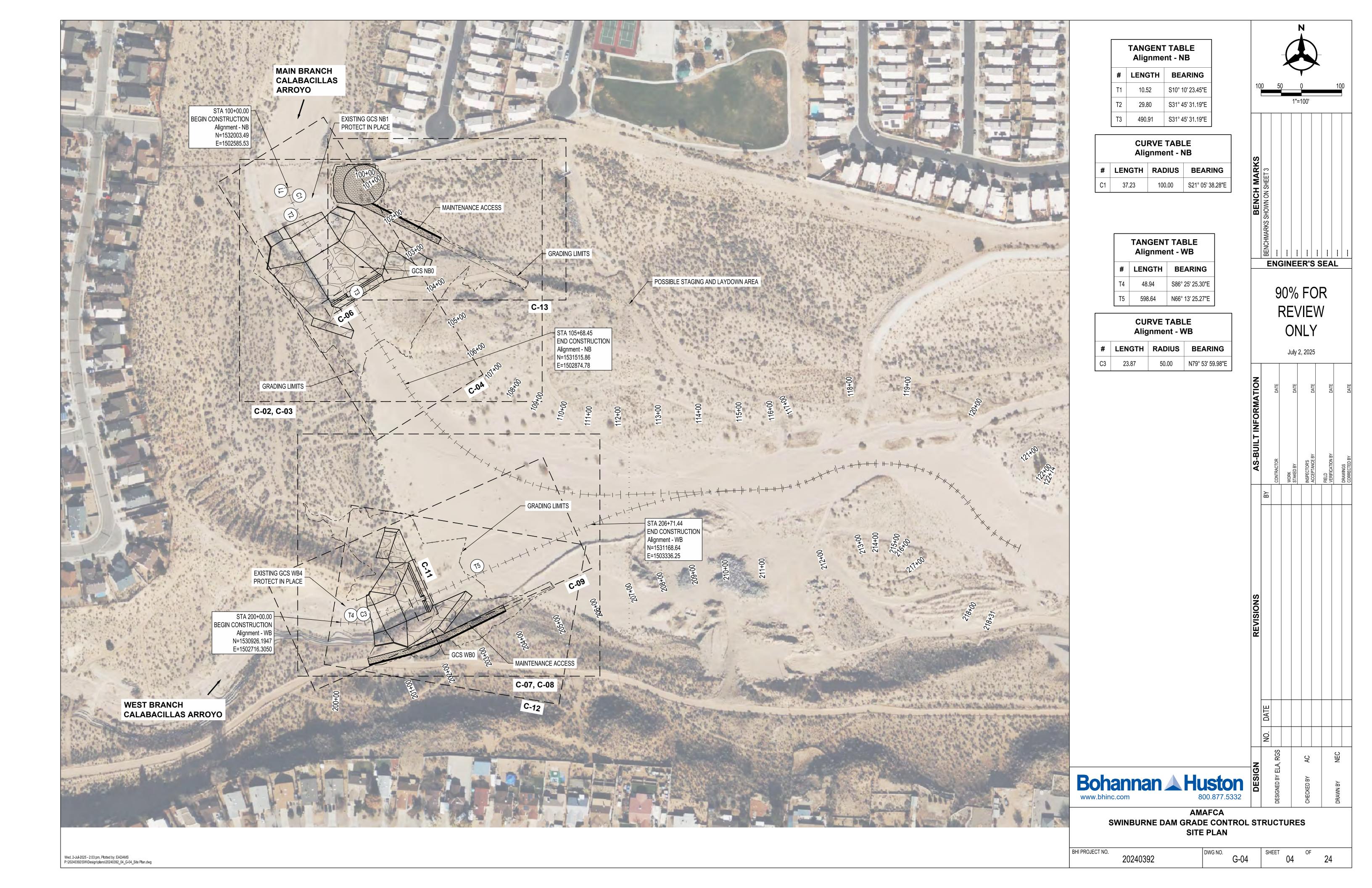
Www.bhinc.com

Bohannan A Huston

800.877.5332

AMAFCA
SWINBURNE DAM GRADE CONTROL STRUCTURES
SURVEY CONTROL

BHI PROJECT NO. 20240392 DWG NO. G-03 SHEET OF 03 24



	NB1 REMOVALS					
ID	NORTHING	EASTING				
1	1531888.75	1502535.63				
2	1531899.90	1502556.89				
3	1531896.58	1502560.64				
4	1531841.78	1502594.18				
5	1531849.87	1502607.03				
6	1531845.34	1502626.47				
7	1531840.43	1502629.94				
8	1531818.69	1502594.86				
9	1531905.65	1502575.27				
10	1531942.45	1502668.93				
11	1531929.70	1502676.83				
12	1531939.20	1502687.11				
13	1531951.76	1502702.61				
14	1531941.22	1502685.79				
15	1531910.78	1502706.10				
16	1531902.60	1502692.29				
17	1531884.12	1502689.19				
18	1531879.21	1502692.66				
19	1531901.43	1502727.71				



## NB1 REMOVALS SCALE: NOT TO SCALE

WB4 REMOVALS					
ID NORTHING		EASTING			
20	1530900.48	1502794.45			
21	1530897.07	1502797.63			
22	1530873.49	1502800.31			
23	1530906.84	1502852.75			
24	1530908.87	1502855.30			
25	1530919.12	1502872.91			
26	1530933.78	1502919.48			
27	1530959.98	1502919.43			
28	1530945.05	1502866.31			
29	1530937.51	1502852.61			
30	1530931.96	1502843.09			
31	1530915.69	1502811.40			
32	1530961.71	1502780.24			
33	1530956.64	1502801.32			
34	1530958.11	1502807.21			
35	1530988.21	1502799.80			
36	1530983.59	1502780.34			
37	1530965.83	1502781.83			



## **GENERAL NOTES**

- 1. ALL AREAS ARE TO BE RESTORED TO EXISTING UNLESS OTHERWISE NOTED BY THE RE-GRADING
- ALL DISTURBED SOILS ARE TO BE RE-SEEDED TO GRADING AND/OR EXCAVATION LIMITS WITH HYDROMULCH UNLESS IN BOTTOM OF CHANNEL.
- 3. EXCESS MATERIAL SHALL BE PLACED ON-SITE AS DIRECTED BY THE PM OR OWNER.

#### **LEGEND**

 EASEMENT LINE
 NEW MAJOR CONTOUR
 NEW MINOR CONTOUR

EXISTING MINOR CONTOUR

PROPERTY LINE

EXISTING MAJOR CONTOUR

—— EXCAVATION PAY LIMITS

— - - - — GRADING LIMITS

——ss(oc)—— SANITARY SEWER LINE SANITARY SEWER MANHOLE

STORM DRAIN LINE WATER LINE SUE ONE

SHOTCRETE **GROUTED BOULDER** 

**BURIED SHOTCRETE** BURIED GROUTED BOULDER

BASE COURSE DUMPED RIPRAP

EXISTING STRUCTURE REMOVAL EXISTING RIPRAP TO BE REMOVED AND SALVAGED

EXISTING STRUCTURE TO REMAIN

90% FOR **REVIEW** ONLY

**ENGINEER'S SEAL** 

July 2, 2025

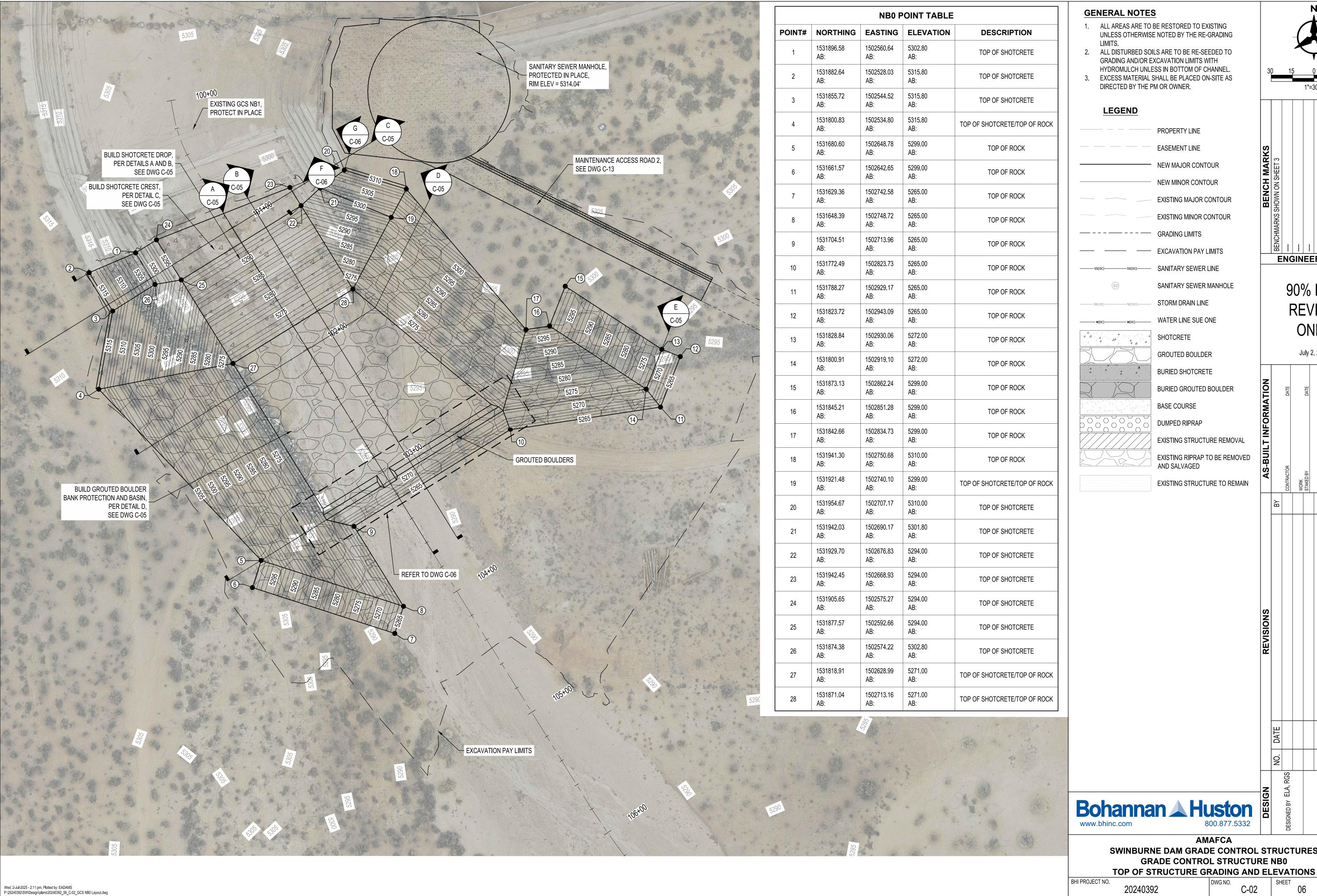
Bohannan A Huston 800.877.5332 www.bhinc.com

> AMAFCA SWINBURNE DAM GRADE CONTROL STRUCTURES REMOVAL PLAN

BHI PROJECT NO. DWG NO.

20240392

Wed, 2-Jul-2025 - 2:05:pm, Plotted by: EADAMS
P:\20240392\SW\Design\plans\20240392\_05\_C-01\_Removal Plan.dwg



- 1. ALL AREAS ARE TO BE RESTORED TO EXISTING UNLESS OTHERWISE NOTED BY THE RE-GRADING
- ALL DISTURBED SOILS ARE TO BE RE-SEEDED TO GRADING AND/OR EXCAVATION LIMITS WITH
- 3. EXCESS MATERIAL SHALL BE PLACED ON-SITE AS DIRECTED BY THE PM OR OWNER.

PROPERTY LINE EASEMENT LINE NEW MAJOR CONTOUR NEW MINOR CONTOUR EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR — - - - — GRADING LIMITS

ss(oc)—ss(oc)—SANITARY SEWER LINE SANITARY SEWER MANHOLE

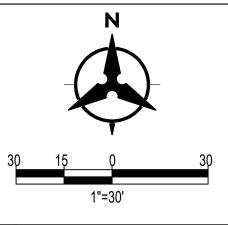
> BURIED SHOTCRETE BURIED GROUTED BOULDER

DUMPED RIPRAP

EXISTING STRUCTURE REMOVAL EXISTING RIPRAP TO BE REMOVED

AND SALVAGED

EXISTING STRUCTURE TO REMAIN



**ENGINEER'S SEAL** 

90% FOR **REVIEW** ONLY

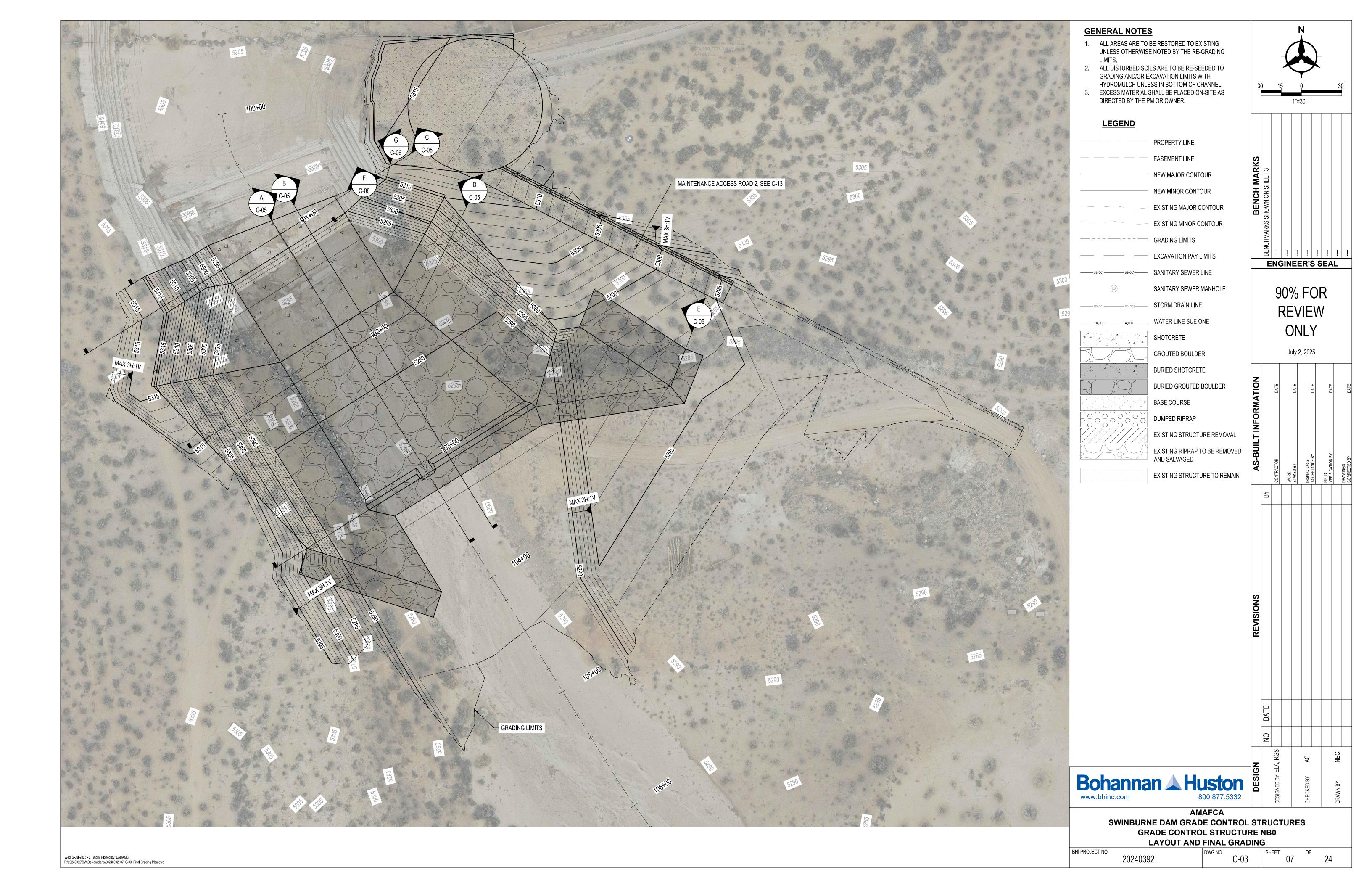
July 2, 2025

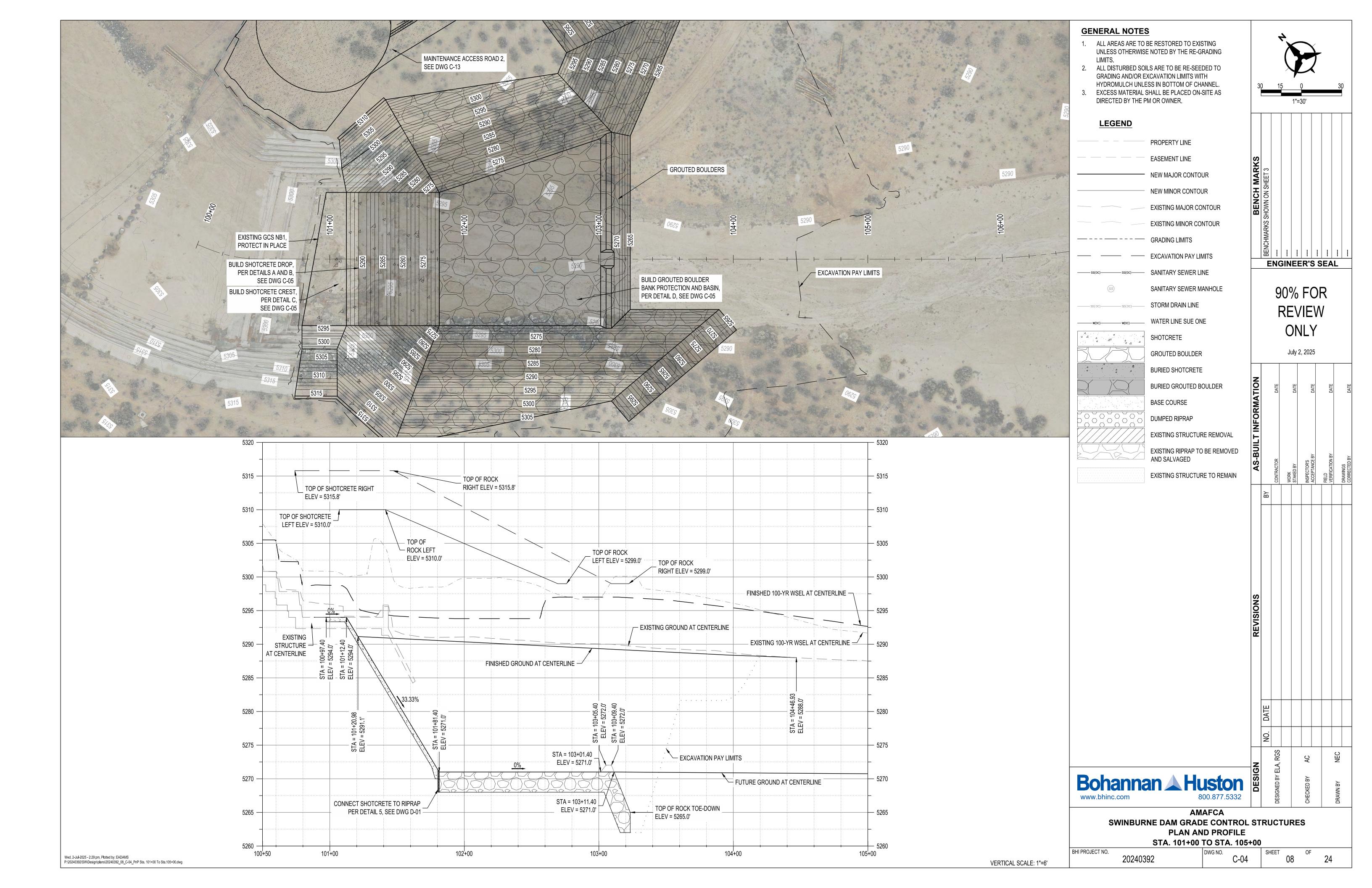
**Bohannan** A Huston 800.877.5332

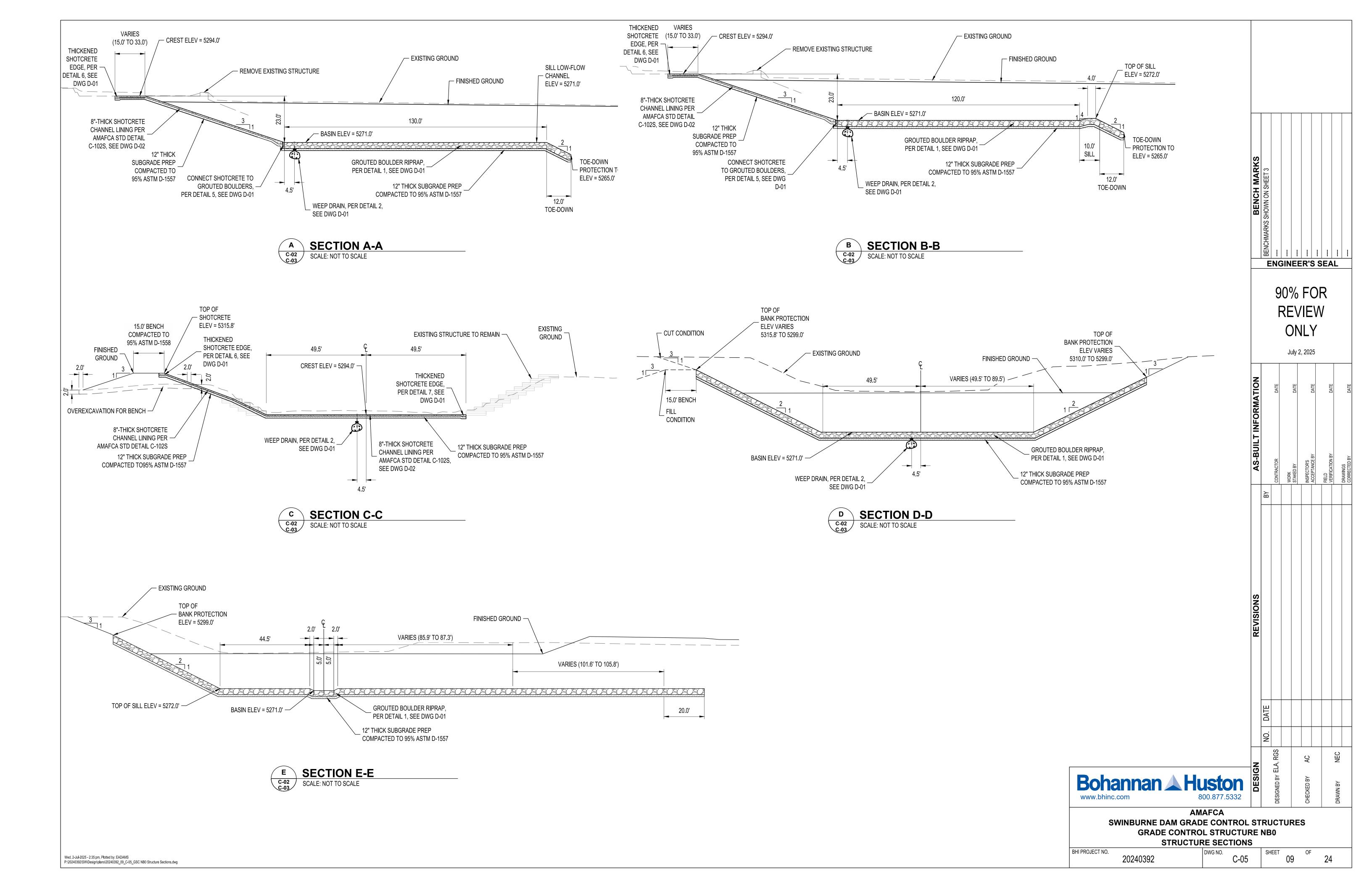
**AMAFCA** 

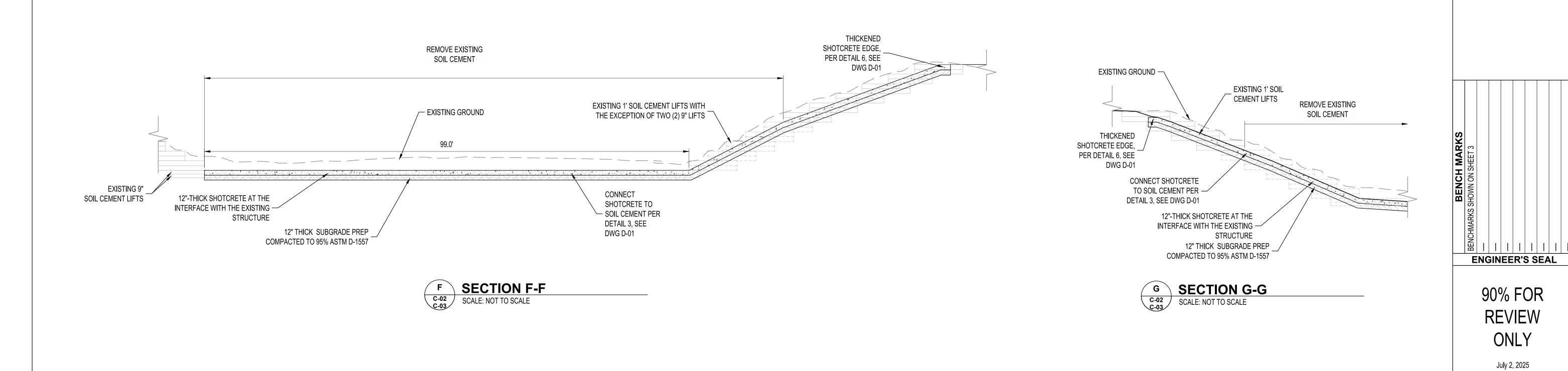
SWINBURNE DAM GRADE CONTROL STRUCTURES **GRADE CONTROL STRUCTURE NB0** 

20240392

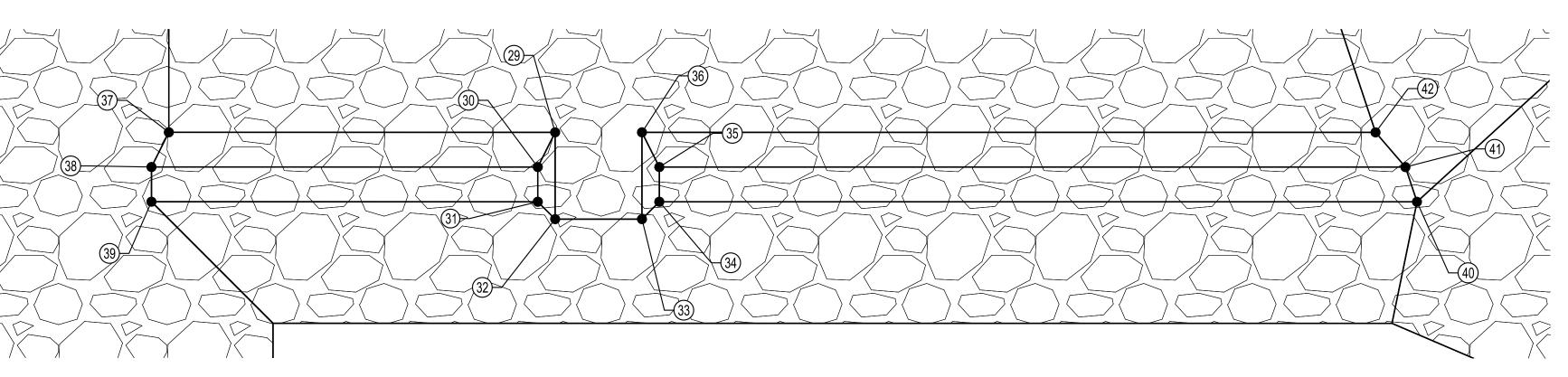








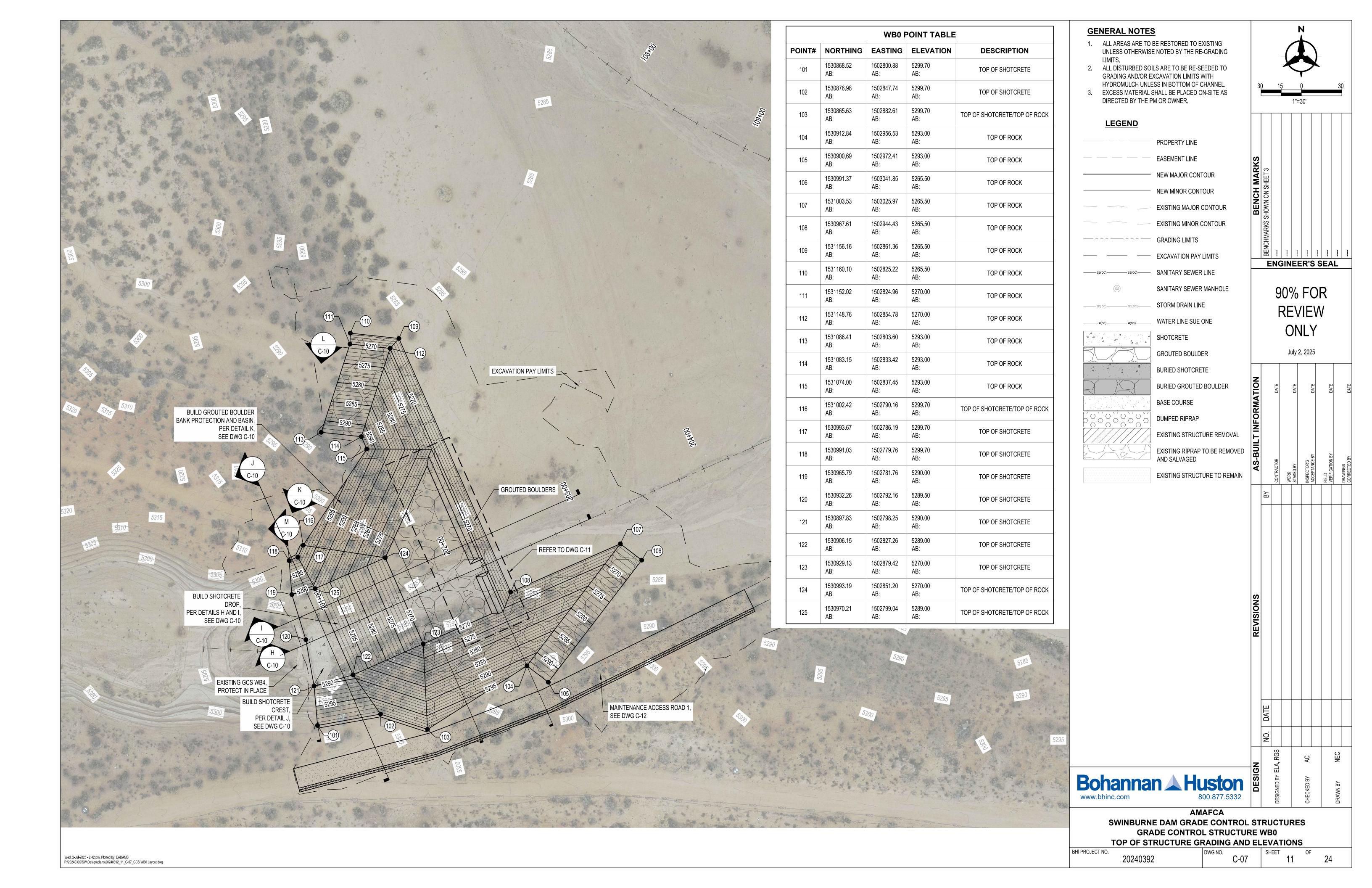
NB0 SILL POINT TABLE						
POINT#	NORTHING	EASTING	ELEVATION	DESCRIPTION		
29	1531740.32 AB:	1502730.01 AB:	5271.00 AB:	TOP OF ROCK		
30	1531735.87 AB:	1502730.42 AB:	5272.00 AB:	TOP OF ROCK		
31	1531732.47 AB:	1502732.52 AB:	5272.00 AB:	TOP OF ROCK		
32	1531731.82 AB:	1502735.28 AB:	5271.00 AB:	TOP OF ROCK		
33	1531737.09 AB:	1502743.78 AB:	5271.00 AB:	TOP OF ROCK		
34	1531739.84 AB:	1502744.42 AB:	5272.00 AB:	TOP OF ROCK		
35	1531743.24 AB:	1502742.32 AB:	5272.00 AB:	TOP OF ROCK		
36	1531745.59 AB:	1502738.51 AB:	5271.00 AB:	TOP OF ROCK		
37	1531716.89 AB:	1502692.18 AB:	5271.00 AB:	TOP OF ROCK		
38	1531712.44 AB:	1502692.58 AB:	5272.00 AB:	TOP OF ROCK		
39	1531709.04 AB:	1502694.69 AB:	5272.00 AB:	TOP OF ROCK		
40	1531785.79 AB:	1502818.62 AB:	5272.00 AB:	TOP OF ROCK		
41	1531788.49 AB:	1502815.38 AB:	5272.00 AB:	TOP OF ROCK		
42	1531790.08 AB:	1502810.35 AB:	5271.00 AB:	TOP OF ROCK		

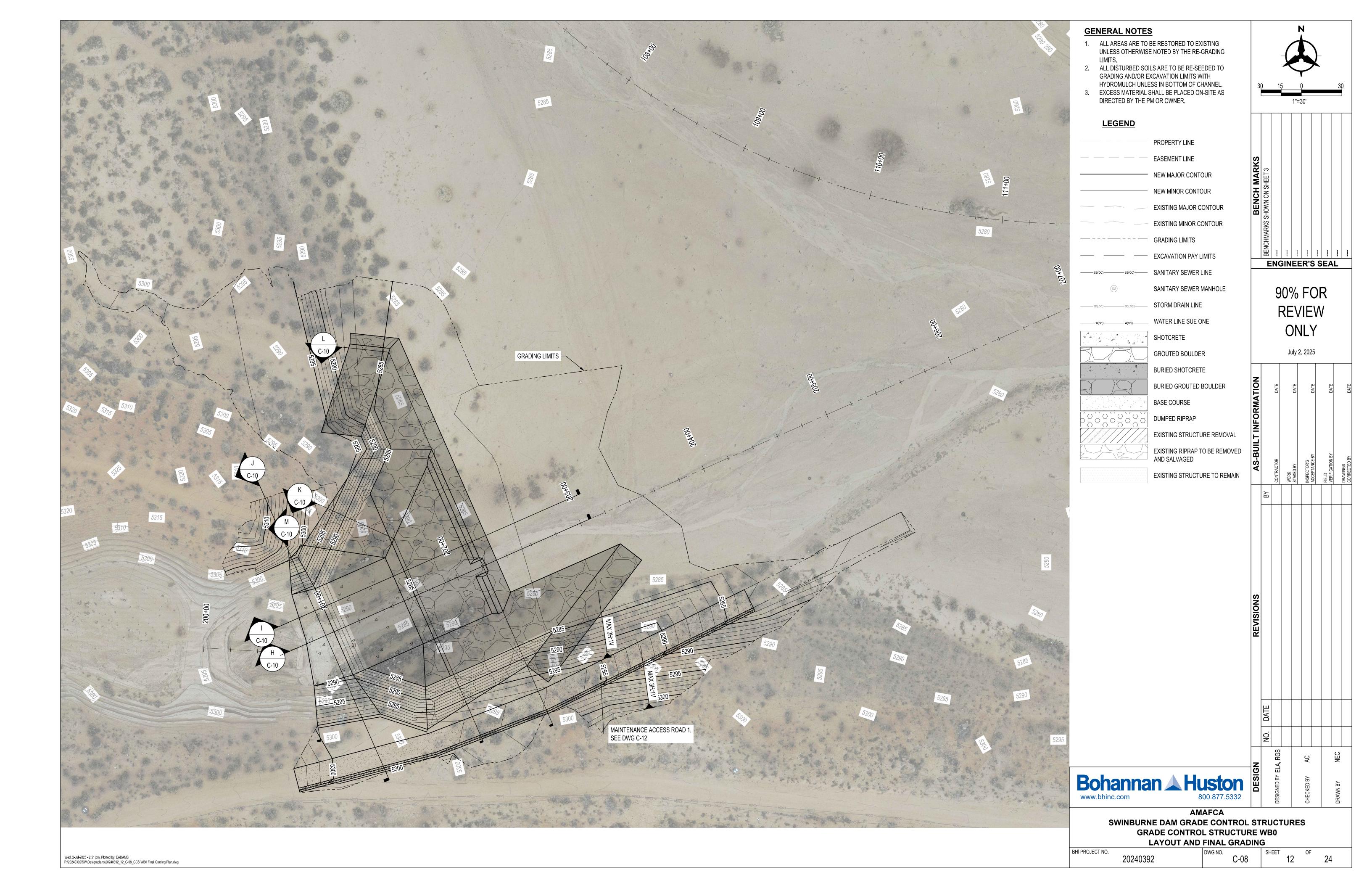


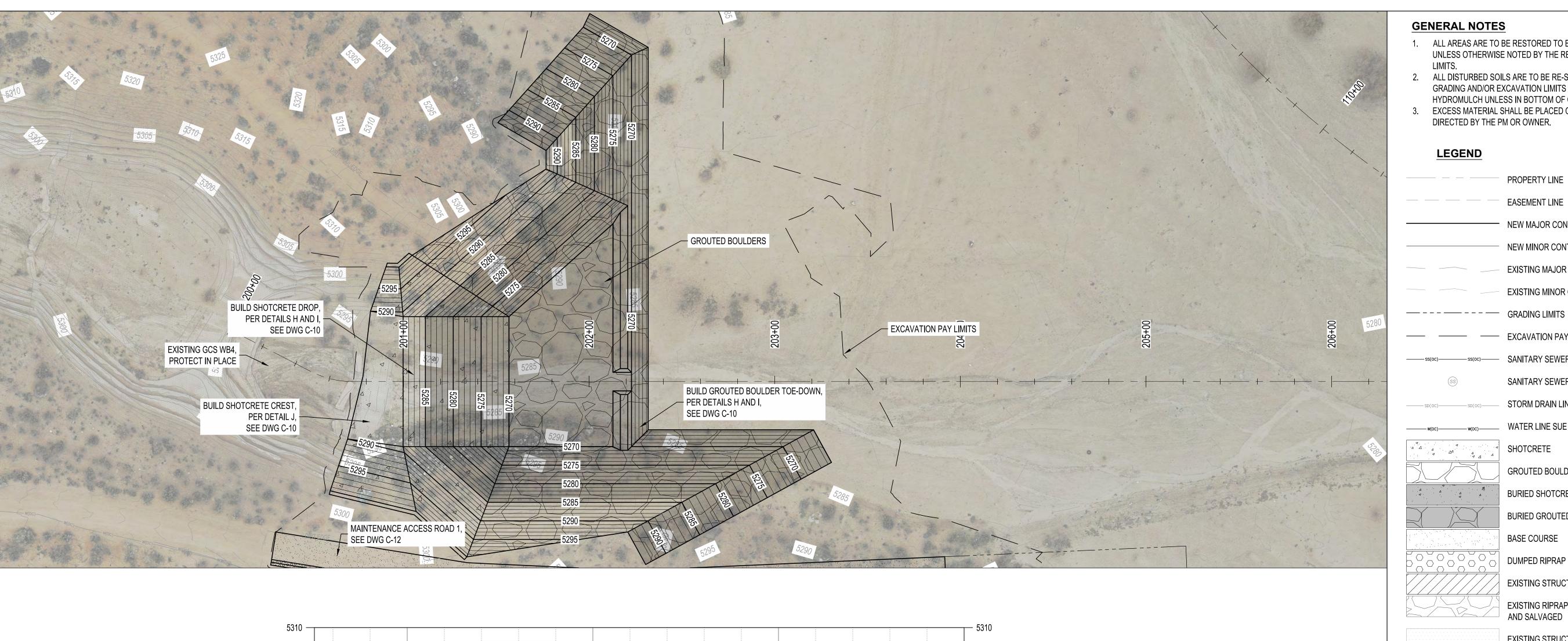
**NB0 SILL POINTS** 

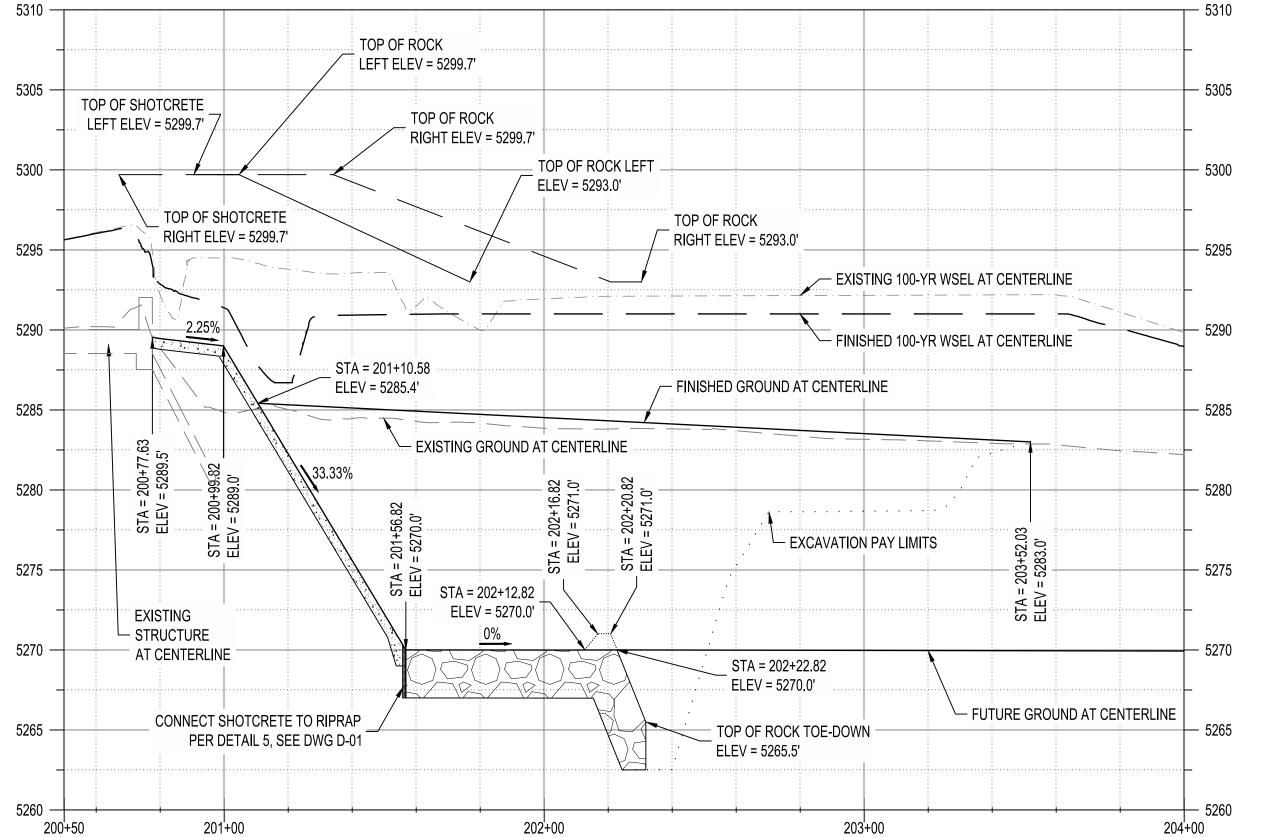


Wed, 2-Jul-2025 - 2:38:pm, Plotted by: EADAMS
P:\20240392\SW\Design\plans\20240392\_10\_C-06\_GSC NB0 Structure Sections (2).dwg









### **GENERAL NOTES**

- 1. ALL AREAS ARE TO BE RESTORED TO EXISTING UNLESS OTHERWISE NOTED BY THE RE-GRADING
- 2. ALL DISTURBED SOILS ARE TO BE RE-SEEDED TO GRADING AND/OR EXCAVATION LIMITS WITH
- HYDROMULCH UNLESS IN BOTTOM OF CHANNEL. 3. EXCESS MATERIAL SHALL BE PLACED ON-SITE AS DIRECTED BY THE PM OR OWNER.

#### **LEGEND**

PROPERTY LINE EASEMENT LINE - NEW MAJOR CONTOUR NEW MINOR CONTOUR

EXISTING MINOR CONTOUR

EXISTING MAJOR CONTOUR

— EXCAVATION PAY LIMITS —ss(oc)—— SANITARY SEWER LINE

SANITARY SEWER MANHOLE STORM DRAIN LINE

SHOTCRETE

WATER LINE SUE ONE

GROUTED BOULDER **BURIED SHOTCRETE** BURIED GROUTED BOULDER

> BASE COURSE DUMPED RIPRAP

> > EXISTING STRUCTURE REMOVAL EXISTING RIPRAP TO BE REMOVED

> > > AND SALVAGED

EXISTING STRUCTURE TO REMAIN

**ENGINEER'S SEAL** 

90% FOR **REVIEW** ONLY

July 2, 2025

Bohannan ▲ Huston www.bhinc.com

> **AMAFCA** SWINBURNE DAM GRADE CONTROL STRUCTURES **PLAN AND PROFILE**

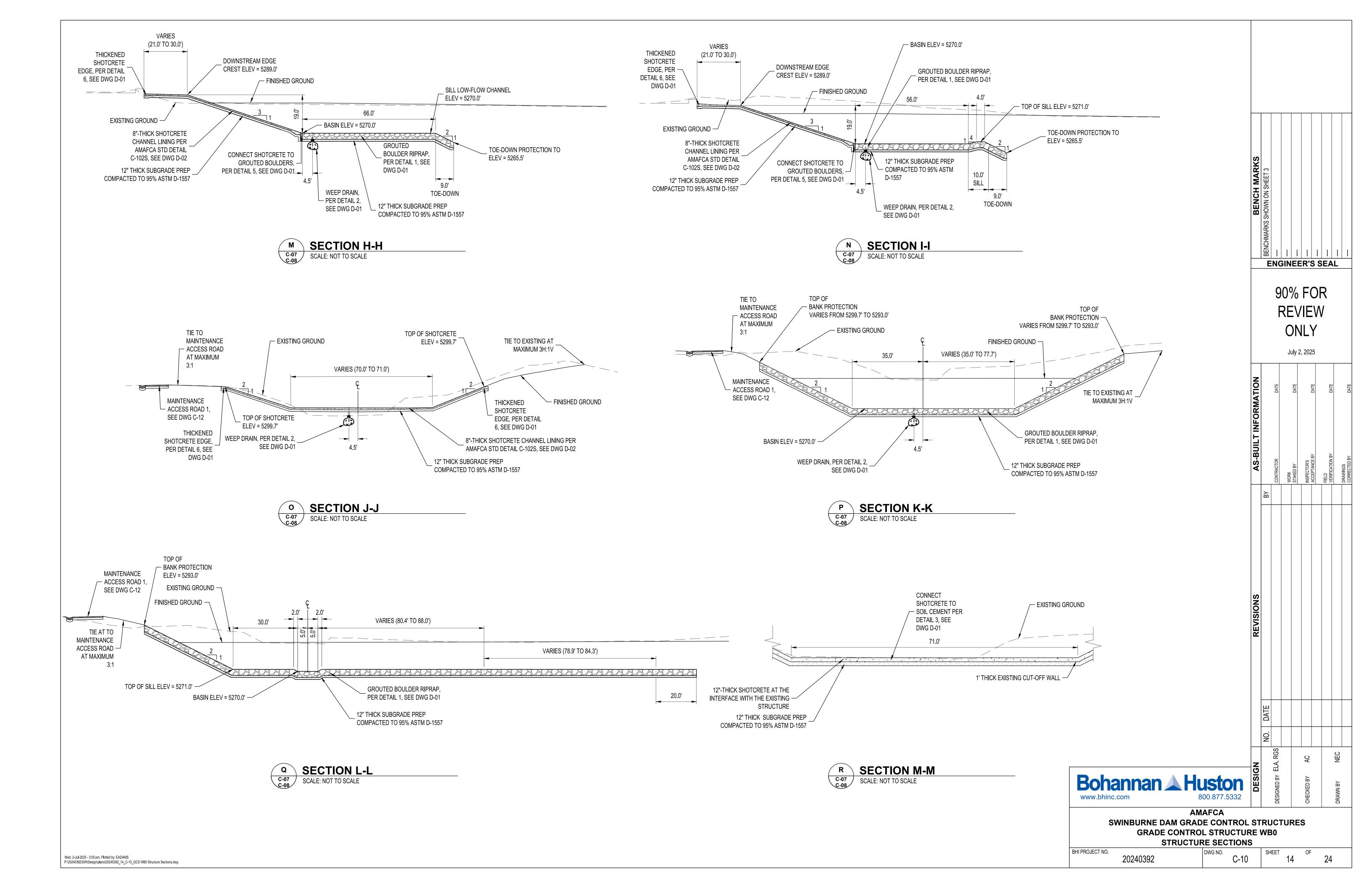
STA. 201+00 TO STA. 205+00 BHI PROJECT NO. DWG NO. 20240392

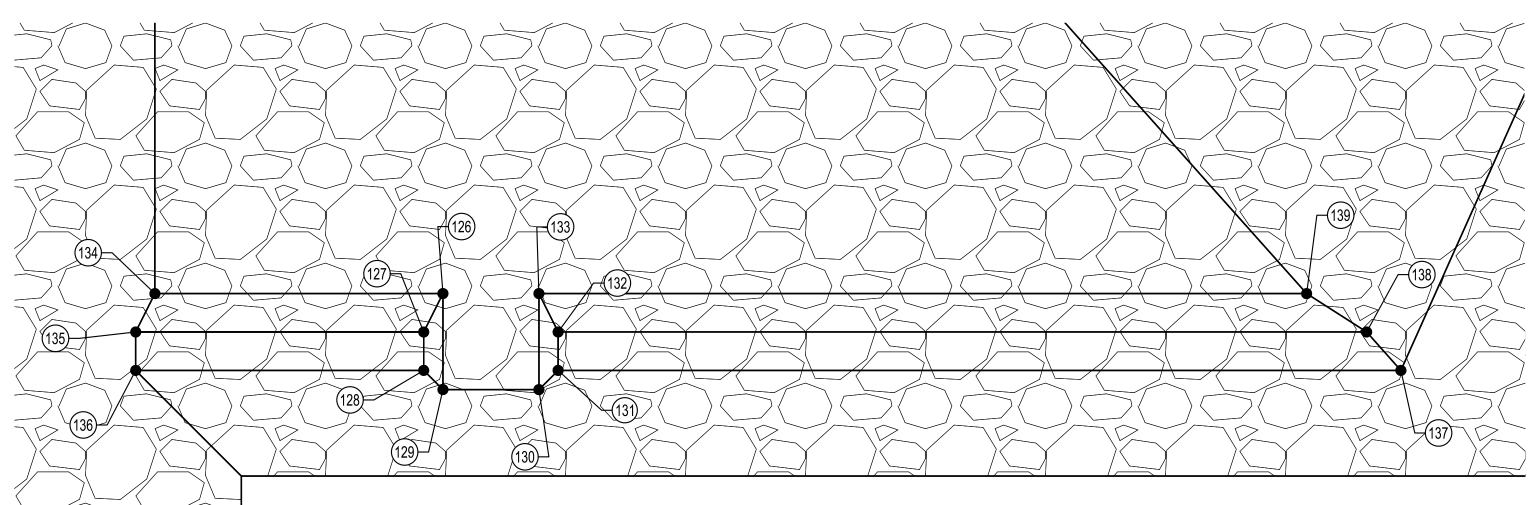
Wed, 2-Jul-2025 - 3:00:pm, Plotted by: EADAMS
P:\20240392\SW\Design\plans\20240392\_13\_C-09\_PnP Sta. 201+00 To Sta. 205+00.dwg

VERTICAL SCALE: 1"=6'

13

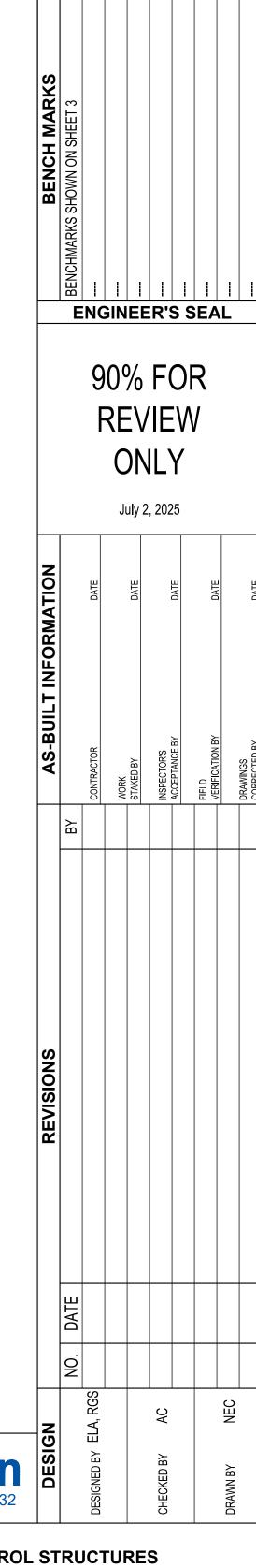
24





WRN	SILL	POI	NTS

WB0 SILL POINT TABLE					
POINT#	NORTHING	EASTING	ELEVATION	DESCRIPTION	
126	1530979.16 AB:	1502918.57 AB:	5270.00 AB:	TOP OF ROCK	
127	1530978.95 AB:	1502923.04 AB:	5271.00 AB:	TOP OF ROCK	
128	1530980.56 AB:	1502926.70 AB:	5271.00 AB:	TOP OF ROCK	
129	1530983.19 AB:	1502927.72 AB:	5270.00 AB:	TOP OF ROCK	
130	1530992.35 AB:	1502923.69 AB:	5270.00 AB:	TOP OF ROCK	
131	1530993.37 AB:	1502921.06 AB:	5271.00 AB:	TOP OF ROCK	
132	1530991.76 AB:	1502917.40 AB:	5271.00 AB:	TOP OF SILL	
133	1530988.31 AB:	1502914.54 AB:	5270.00 AB:	TOP OF ROCK	
134	1530951.71 AB:	1502930.67 AB:	5270.00 AB:	TOP OF ROCK	
135	1530951.49 AB:	1502935.13 AB:	5271.00 AB:	TOP OF ROCK	
136	1530953.10 AB:	1502938.79 AB:	5271.00 AB:	TOP OF ROCK	
137	1531073.71 AB:	1502885.66 AB:	5271.00 AB:	TOP OF ROCK	
138	1531068.83 AB:	1502883.44 AB:	5271.00 AB:	TOP OF ROCK	
139	1531061.49 AB:	1502882.30 AB:	5270.00 AB:	TOP OF ROCK	

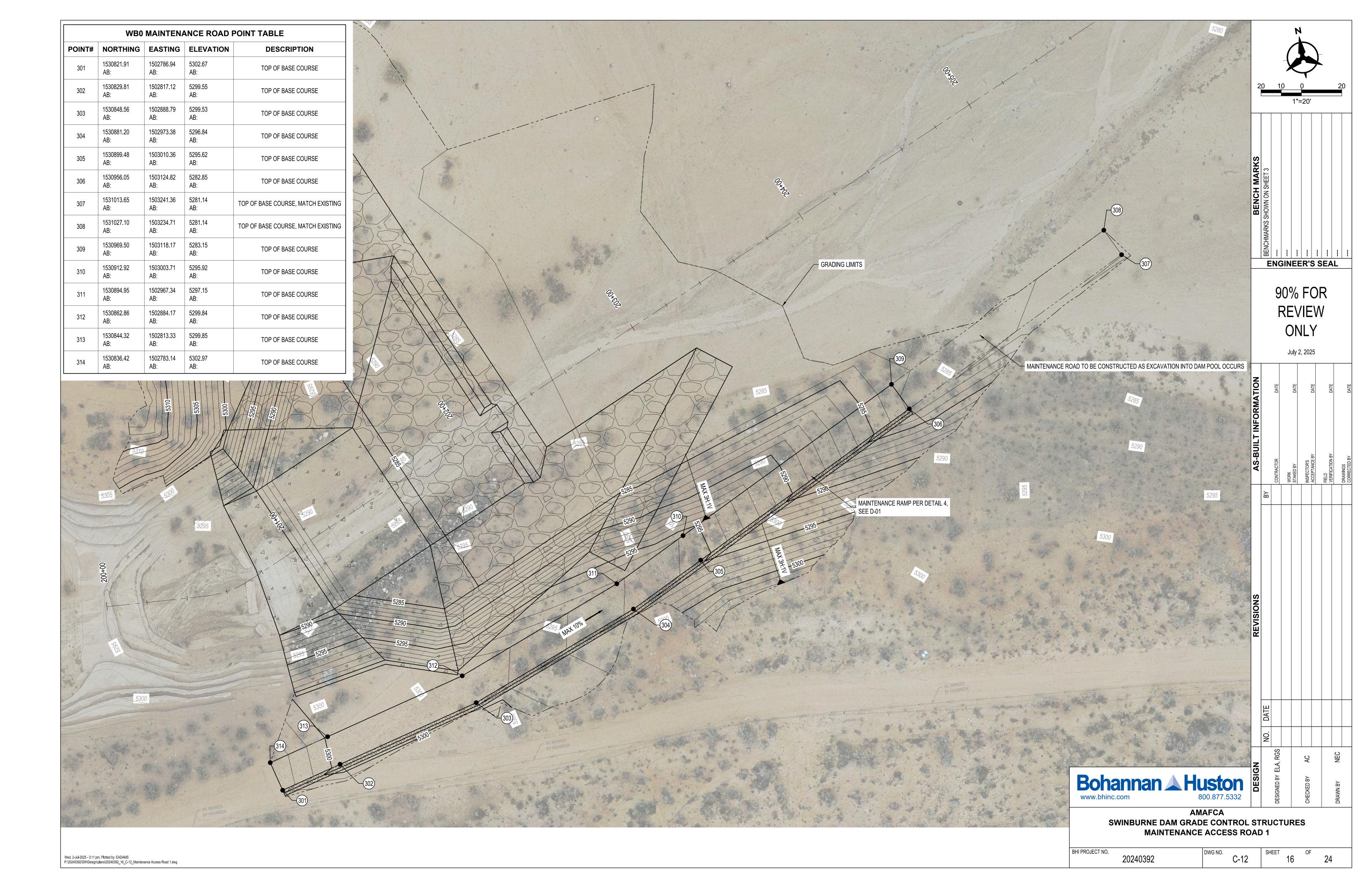


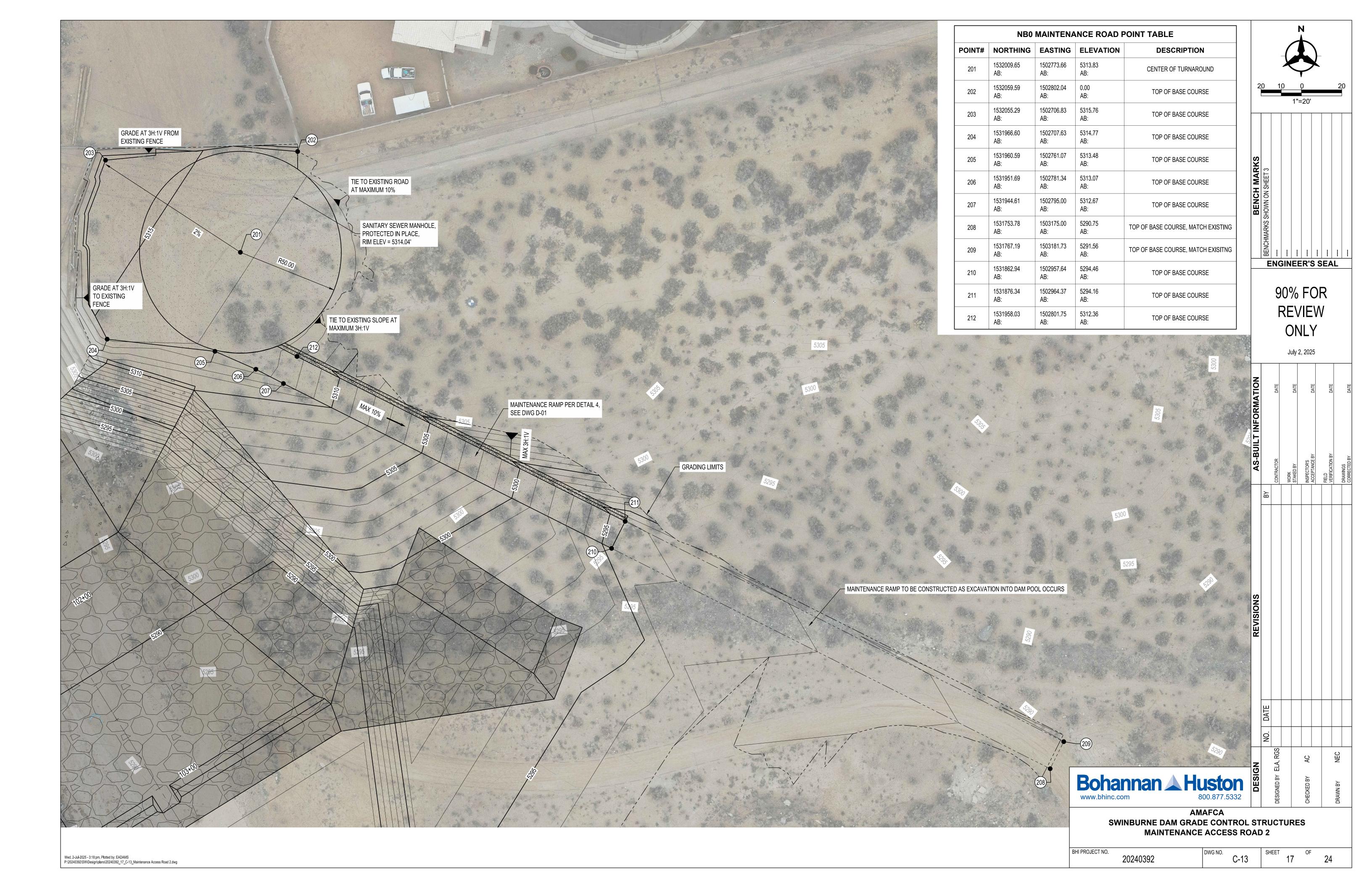
Bohannan A Huston
www.bhinc.com
800.877.5332

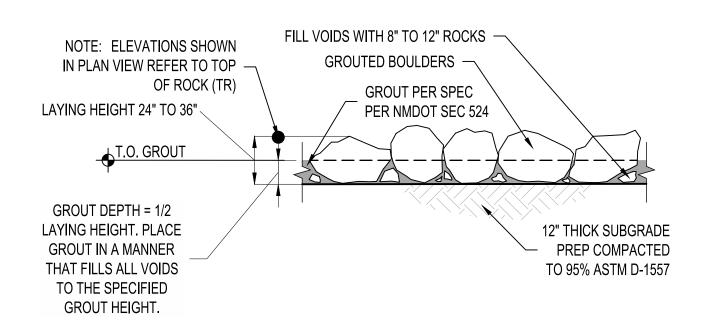
AMAFCA

SWINBURNE DAM GRADE CONTROL STRUCTURES
GRADE CONTROL STRUCTURE WB0
STRUCTURE SECTIONS

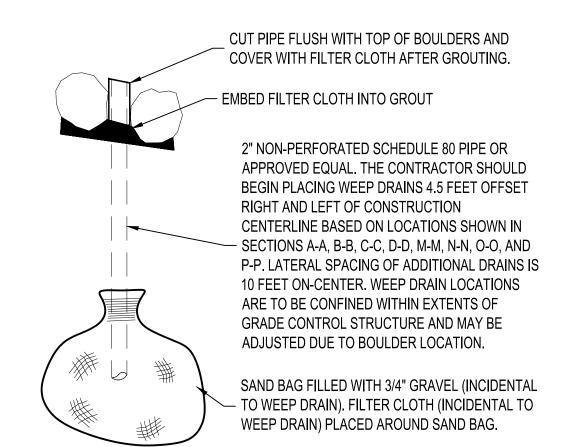
Wed, 2-Jul-2025 - 3:08:pm, Plotted by: EADAMS
P:\20240392\SW\Design\plans\20240392\_15\_C-11\_GCS WB0 Structure Sections (2).dwg





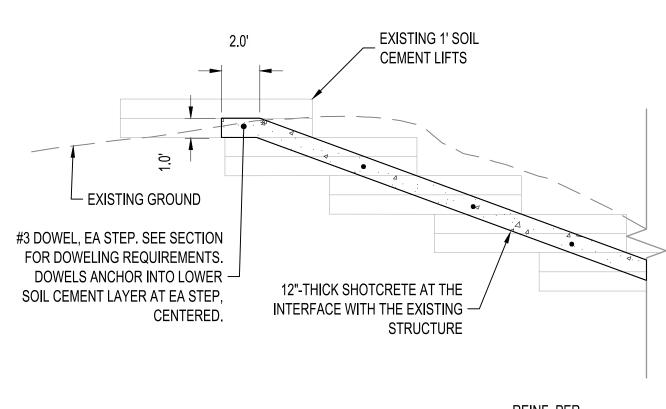


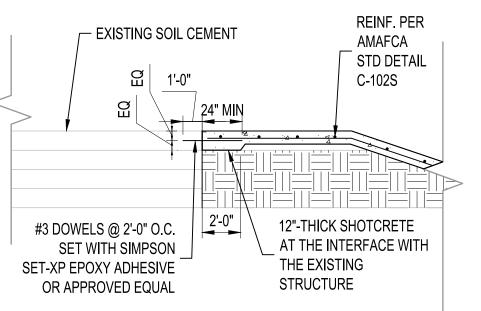




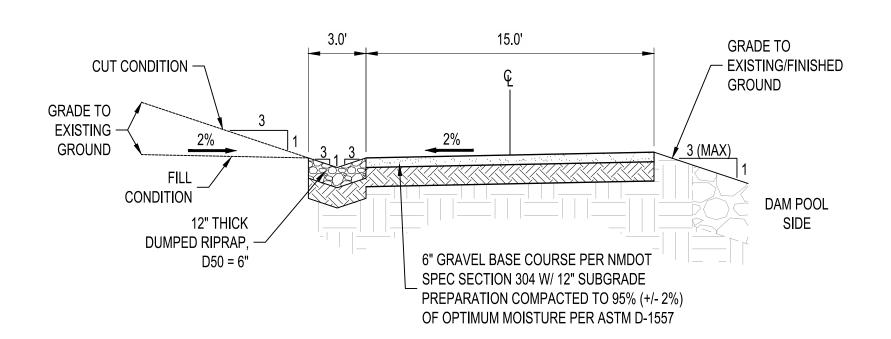
NOTE:
CONTRACTOR SHALL PLACE BOULDERS ON EACH SIDE OF THE PVC
WEEP DRAIN MAKING SURE NOT TO DAMAGE THE PVC PIPE.



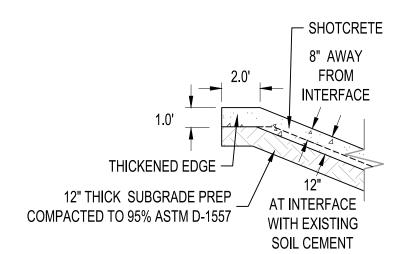




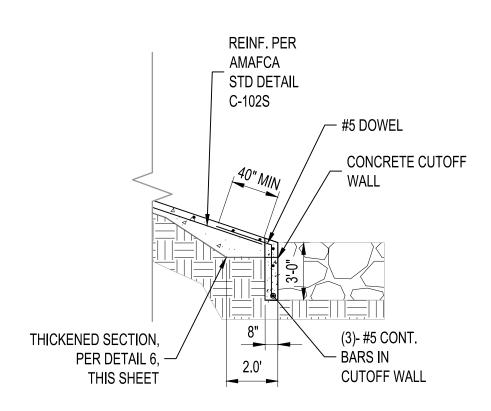
3 SHOTCRETE TO EXISITNG SOIL CEMENT CONNECTION
SCALE: NOT TO SCALE



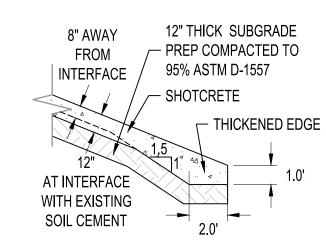




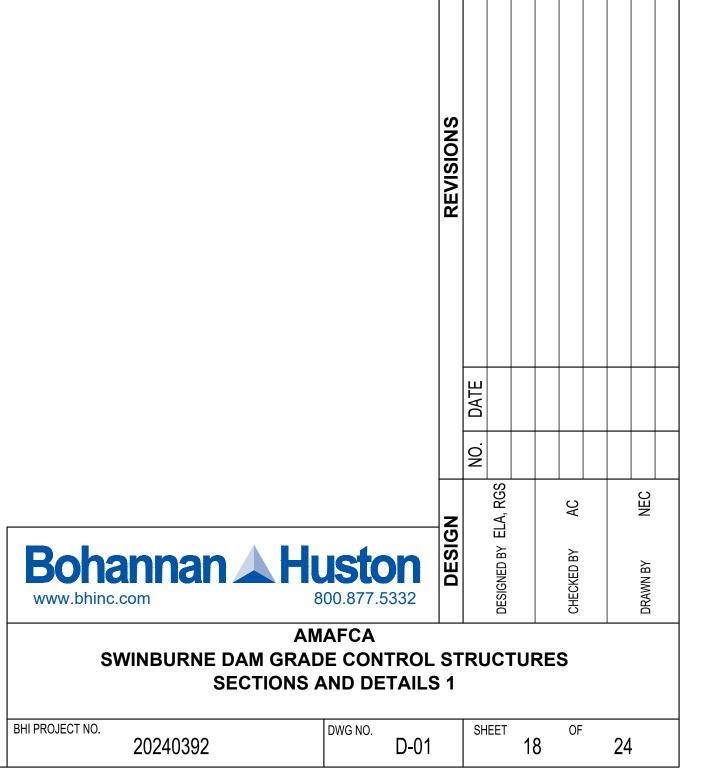
6 THICKENED EDGE AT TOP OF SLOPE
SCALE: NOT TO SCALE



5 SHOTCRETE TO RIPRAP CONNECTION CUTOFF WALL
SCALE: NOT TO SCALE



7 THICKENED EDGE AT BOTTOM OF SLOPE
SCALE: NOT TO SCALE



|闇| || || || || || || || ||

**ENGINEER'S SEAL** 

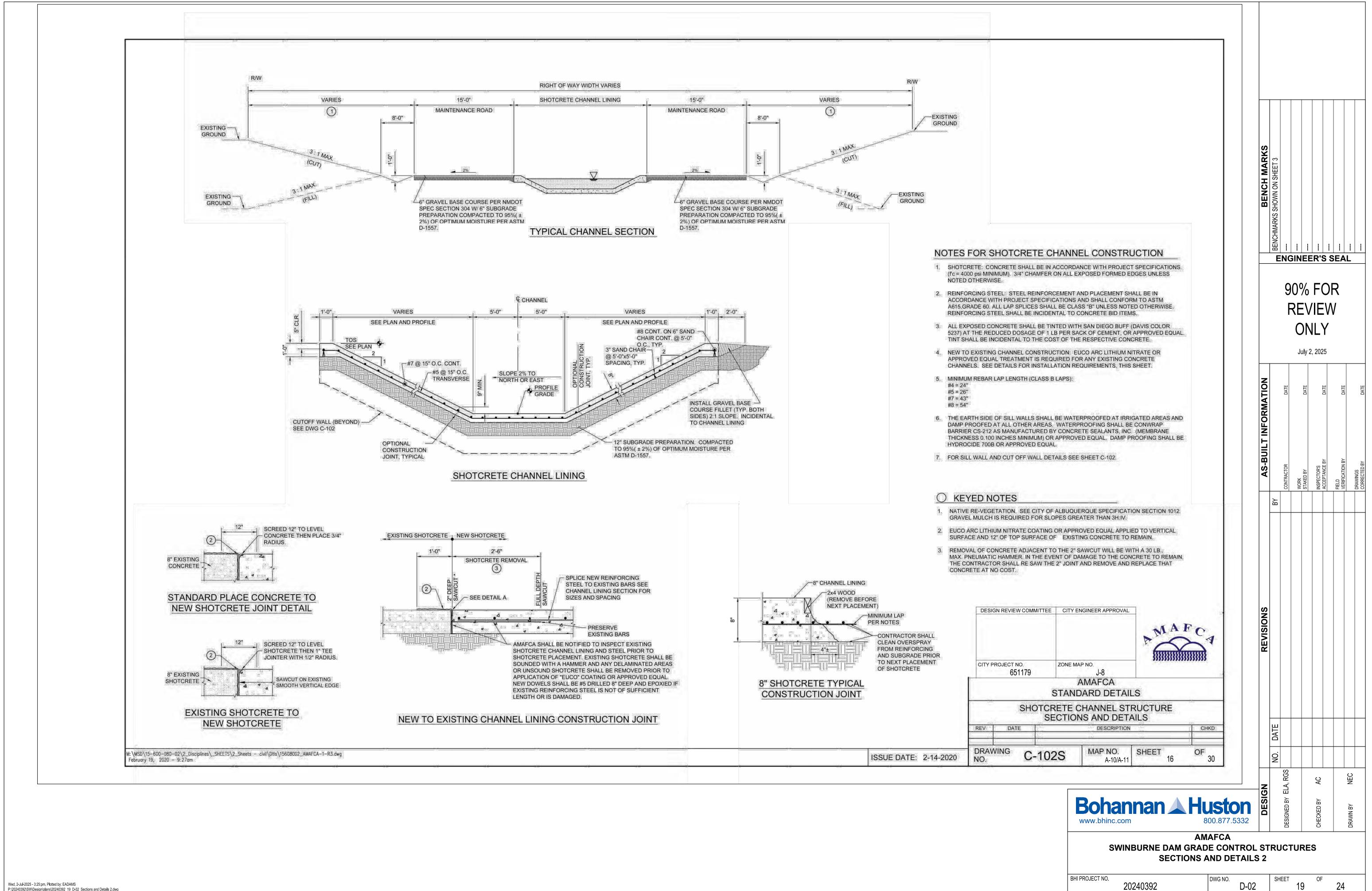
90% FOR

**REVIEW** 

ONLY

July 2, 2025

Wed, 2-Jul-2025 - 4:15:pm, Plotted by: EADAMS P:\20240392\SW\Design\plans\20240392\_18\_D-01\_Sections and Details 1.dwg



Wed, 2-Jul-2025 - 3:25:pm, Plotted by: EADAMS P:\20240392\SW\Design\plans\20240392\_19\_D-02\_Sections and Details 2.dwg

ENGINEER'S SEAL 90% FOR **REVIEW** ONLY July 2, 2025 THIS SHEET INTENTIONALLY LEFT BLANK.
IT WILL EITHER BE USED OR REMOVED FOR FINAL DESIGN. Bohannan ▲ Huston www.bhinc.com AMAFCA SWINBURNE DAM GRADE CONTROL STRUCTURES **SECTIONS AND DETAILS 3** BHI PROJECT NO. 20240392

Wed, 2-Jul-2025 - 3:27:pm, Plotted by: EADAMS
P:\20240392\SW\Design\plans\20240392\_20\_D-03\_Sections and Details 3.dwg

ENGINEER'S SEAL 90% FOR **REVIEW** ONLY July 2, 2025 THIS SHEET INTENTIONALLY LEFT BLANK.
IT WILL EITHER BE USED OR REMOVED FOR FINAL DESIGN. Bohannan ▲ Huston www.bhinc.com AMAFCA SWINBURNE DAM GRADE CONTROL STRUCTURES **SECTIONS AND DETAILS 4** BHI PROJECT NO. 20240392 Wed, 2-Jul-2025 - 3:29:pm, Plotted by: EADAMS
P:\20240392\SW\Design\plans\20240392\_21\_D-04\_Sections and Details 4.dwg

