PROJECT CONTROL NUMBER: 5101330

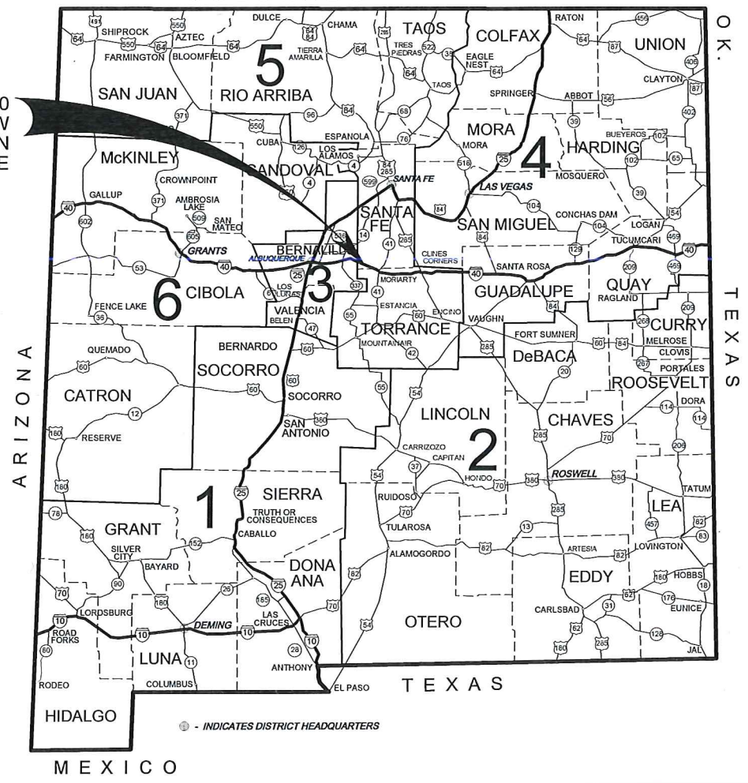
TOWN OF EDGEWOOD

CONSTRUCTION PLANS

BACHELOR DRAW PEDESTRIAN BRIDGE

EDGEWOOD, NM

CN 5101330



TOWN OF EDGEWOOD
1999

ROBERT C. CROFT
NEW MEXICO
16740
LICENSED PROFESSIONAL ENGINEER
4/6/21

NMDOT

Bohannan Huston
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FABIAN CARBAJAL
5-Apr-21

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11:18 AM

DESIGNED BY: R. CROFT

NEW MEXICO PROJECT NO. 5101330

DRAWING SCALE: NTS

SHEET NO. 1 - 1

PROJECT CONTROL NUMBER: 5101330

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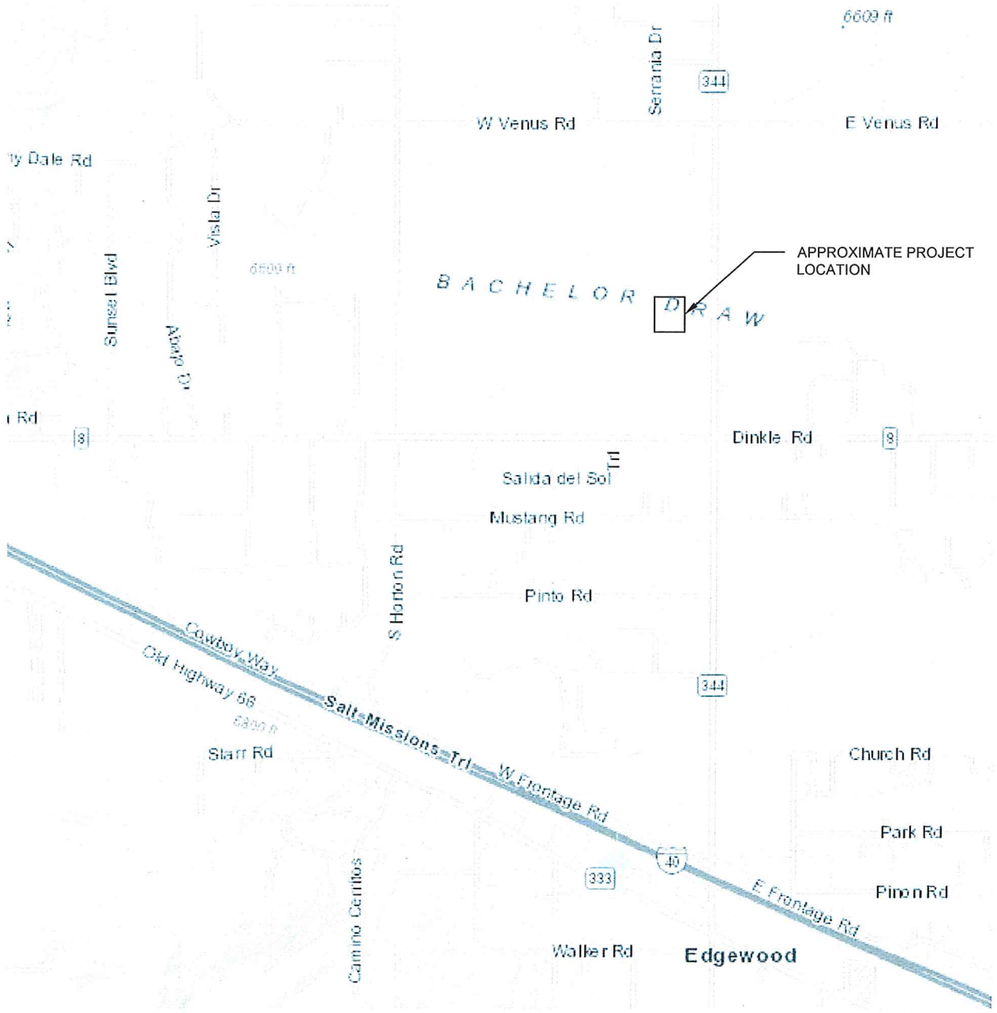
INTENT OF PROJECT

THE PURPOSE OF THIS PROJECT IS TO PROVIDE ACCESS OVER BACHELOR DRAW FOR THE PUBLIC. A PEDESTRIAN BRIDGE WILL CONNECT A SERIES OF TRAILS ON BOTH SIDES OF THE ARROYO THAT WILL FACILITATE ACTIVITIES SUCH AS HIKING, HORSEBACK RIDING AND BICYCLING.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION	REVISION DATE
1-1	COVER SHEET	
1-2	VICINITY MAP	
1-3	SURVEY NOTES	
1-4	SUMMARY OF QUANTITIES	
1-5	GENERAL NOTES	
1-6	ENVIRONMENTAL COMMITMENTS	
SHEET SUBTOTAL = 6		
2-1	MISCELLANEOUS DETAILS AND QUANTITIES	
2-2	BOLLARD DETAIL	
SHEET SUBTOTAL = 2		
3-1	TRAIL PLAN AND PROFILE	
SHEET SUBTOTAL = 1		
5-1	ESTIMATED BRIDGE QUANTITIES	
5-2	STRUCTURE LOCATION PLAN	
5-3	STRUCTURE PROFILE	
5-4	STRUCTURE ELEVATION AND SECTIONS	
5-5	FRAMING PLAN AND SECTION DETAILS	
5-6	RAILING DETAILS	
5-7	ABUTMENT DETAILS	
5-8	FOUNDATION DETAILS	
5-9	WINGWALL DETAILS	
SHEET SUBTOTAL = 9		
TOTAL SHEETS = 18		



VICINITY MAP

N.T.S.

CONTACT INFORMATION

DESIGNER
ROB CROFT, PE
505-823-1000

SURVEYOR
BARRY PHILLIPS, PLS
505-823-1000

TOWN OF EDGEWOOD CONTACT
CARLA SALAZAR
505-286-4518

SHIPPING POINTS

EDGEWOOD, NM

THE 2019 EDITION OF NEW MEXICO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND STANDARD DRAWINGS FOR HIGHWAY AND BRIDGE CONSTRUCTION SHALL GOVERN CONSTRUCTION OF THIS PROJECT.

ROBERT C. CROFT
NEW MEXICO
16740
LICENSED PROFESSIONAL ENGINEER
4/8/21

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

VICINITY MAP

PROJECT CONTROL NUMBER:5101330

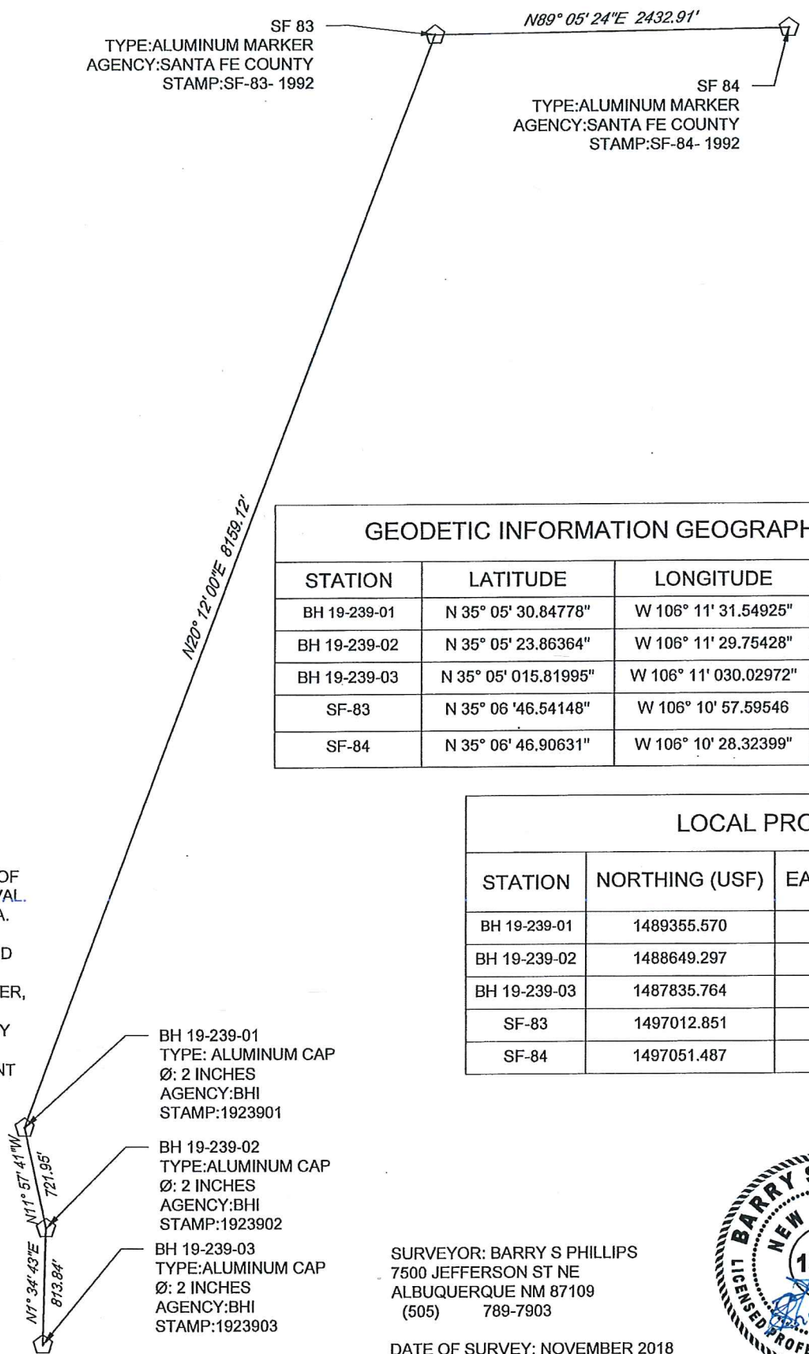
GENERAL NOTES:

1. ALL SURVEY POINTS WERE FOUND OR SET BY THE BOHANNAN HUSTON, INC. IN NOVEMBER 2018.
2. A $1000 COST PENALTY WILL BE ASSESSED TO THE CONTRACTOR DURING CONSTRUCTION FOR ANY BRASS/ALUMINUM CAP MONUMENTS THAT ARE DISTURBED OR DESTROYED. IF ANY MONUMENT MUST BE DISTURBED DURING CONSTRUCTION, NOTIFICATION TO THE NMDOT GEODETIC SURVEY UNIT MUST BE MADE PRIOR TO SUCH ACTION SO THAT PROPER REFERENCE MARKS CAN BE SET FOR RE-ESTABLISHMENT OF SAID MONUMENT.
3. THE STATE PLANE COORDINATES SHOWN HEREON ARE REFERRED TO THE NEW MEXICO COORDINATE SYSTEM - CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983 AND WERE DERIVED USING GPS DIFFERENTIAL POSITIONING TECHNIQUES. THE FINAL STATE PLANE COORDINATES SHOWN HEREON ARE THE RESULT OF NGS OPUS SOLUTION CHECKED AGAINST NGS PUBLISHED CONTROL PERFORMED BY BOHANNAN HUSTON, INC IN NOVEMBER 2018.
4. THE ELEVATIONS SHOWN HEREON ARE REFERRED TO NAVD 88, ELEVATIONS WERE DERIVED USING GPS ELLIPSOID HEIGHT DIFFERENCES COMBINED WITH THE NGS GEOID MODELING PROGRAM 'GEOID12A'.
5. THE LOCAL PROJECT GROUND COORDINATES SHOWN HEREON WERE DERIVED USING THE FOLLOWING FORMULA:
   - 5.1. THE FINAL ADJUSTED STATE PLANE GRID COORDINATES WERE SCALED TO THE SURFACE USING A PROJECT AVERAGE COMBINED GRID TO THE GROUND FACTOR OF 1.0004098979
6. ALL DISTANCES SHOWN HEREON ARE CALCULATED GROUND DISTANCES USING THE INVERSED GRID DISTANCES AND THE PROJECT AVERAGE COMBINED GRID TO GROUND SCALE FACTOR.
7. THE FIELD DATA WAS COLLECTED USING TRIMBLE GPS RECEIVER AND WAS PROCESSED UTILIZING TRIMBLE BUSINESS CENTER SOFTWARE. GEOSPATIAL CONTROL REPORT (POSITIONAL AND NETWORK ACCURACY) MAY BE OBTAINED BY CONTACTING BOHANNAN HUSTON, INC.

NOTE:

THE CONTRACTOR SHALL NOT DISTURB, COVER, OR REMOVE ANY SURVEY MONUMENTS INCLUDING TRIANGULATION STATIONS, BENCH MARKS, MONUMENTS, LAND GRANT MARKERS, SECTION CORNERS, N.M.D.O.T. MONUMENTS OR ANY OTHER PERMANENT REFERENCE MARKERS LOCATED WITHIN THE CONSTRUCTION LIMITS (INCLUDING THE LIMITS OF TEMPORARY CONSTRUCTION PERMITS) OR ON THE RIGHT-OF-WAY LINE OF THIS PROJECT, UNLESS WRITTEN DOCUMENTATION REGARDING REFERENCING OF SAID MARKER HAS BEEN PROVIDED BY THE CONTRACTOR TO THE PROJECT ENGINEER FOR HIS APPROVAL. SUCH REFERENCING SHALL BE DONE IN ACCORDANCE WITH STATUTE 61-23-1 THROUGH 61-23-32 N.M.S.A. (1978). THE CONTRACTOR, AT HIS EXPENSE, SHALL RESET DESTROYED MONUMENTS IN ACCORDANCE WITH STATUTE 61-23-1 THROUGH 61-23-32 N.M.S.A. (1978) AND IN COMPLIANCE WITH THE STANDARDS AND PROCEDURES SET FORTH IN THE GEODETIC MARK PRESERVATION GUIDEBOOK, NATIONAL GEODETIC SURVEY, MARCH 1990, CONTACT: NGS MARK PRESERVATION CENTER-NOAA, RC-325 BROADWAY, BOULDER, CO 80303- TELEPHONE (303) 497-6530, FTS 320-6530. ALL NOTES BY THE CONTRACTOR REGARDING REFERENCING OF SAID MONUMENTS SHALL BE SUBMITTED TO THE PROJECT ENGINEER SO THAT HE MAY FORWARD THEM TO THE SURVEYING AND LANDS ENGINEERING SECTION, MONUMENTATION UNIT. THE CONTRACTOR SHALL BE ASSESSED ONE THOUSAND DOLLARS ($1,000.00) PENALTY FOR EACH MONUMENT WHICH HAS NOT BEEN PROPERLY REFERENCED PRIOR TO ITS DISTURBANCE OR DESTRUCTION.

This project combined factor = 0.99959027. Project coordinates were modified to ground by scaling the State Plane coordinates about NM SPC Central Zone projection origin of (0,0).



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GRAPHIC SCALE
0 1000' 2000'
SCALE: 1" = 1000'
(IN FEET)

GEODETIC INFORMATION GEOGRAPHIC/STATE PLANE (NAD83) COORDINATES

STATION	LATITUDE	LONGITUDE	NORTHING (USF)	EASTING (USF)	ZONE	ELLIPSOID
BH 19-239-01	N 35° 05' 30.84778"	W 106° 11' 31.54925"	1488745.337	1657737.541	NM C	6483.498
BH 19-239-02	N 35° 05' 23.86364"	W 106° 11' 29.75428"	1488039.353	1657887.105	NM C	6476.506
BH 19-239-03	N 35° 05' 015.81995"	W 106° 11' 030.02972"	1487226.153	1657864.693	NM C	6485.299
SF-83	N 35° 06 '46.54148"	W 106° 10' 57.59546	1496399.480	1660553.710	NM C	1980.481 (M)
SF-84	N 35° 06' 46.90631"	W 106° 10' 28.32399"	1496438.100	1662985.320	NM C	1973.614 (M)

LOCAL PROJECT GROUND COORDINATES

STATION	NORTHING (USF)	EASTING (USF)	ZONE	ORTHOMETRIC	DESCRIPTION
BH 19-239-01	1489355.570	1658417.045	NM C	6547.6540	2" ALUMINUM CAP
BH 19-239-02	1488649.297	1658566.670	NM C	6540.6600	2" ALUMINUM CAP
BH 19-239-03	1487835.764	1658544.249	NM C	6549.4410	2" ALUMINUM CAP
SF-83	1497012.851	1661234.367	NM C	6561.7650	ALUMINUM MARKER
SF-84	1497051.487	1663666.974	NM C	6539.1470	ALUMINUM MARKER

SURVEYOR: BARRY S PHILLIPS
7500 JEFFERSON ST NE
ALBUQUERQUE NM 87109
(505) 789-7903

DATE OF SURVEY: NOVEMBER 2018
SURVEY UNITS: U.S. SURVEY FEET.

BARRY S. PHILLIPS NEW MEXICO 15517 LICENSED PROFESSIONAL SURVEYOR

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NO.	DESCRIPTION	DATE	BY
BRIDGE 4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

SURVEY NOTES

DRAWING PATH: P:\201902391SURVEY\02_OFFICE\03_C3D\20190239_CONTROL_SHT.dwg

DESIGNED BY: BP DRAWN BY: BJG CHECKED BY: BP PLOT DATE: 8/27/2019

NEW MEXICO PROJECT NO. 5101330

SHEET NO. 1 - 3

Bohannan Huston
www.bhinc.com 800.877.5332

SUMMARY OF QUANTITIES

			TRAIL		BRIDGE		PROJECT TOTAL	
NUMBER	DESCRIPTION	UNIT	ESTIMATE	FINAL	ESTIMATE	FINAL	ESTIMATE	FINAL
201000	CLEARING AND GRUBBING	L.S.	1				1	
203000	UNCLASSIFIED EXCAVATION	C.Y.	6				6	
203100	BORROW	C.Y.	270				270	
207000	SUBGRADE PREPARATION	S.Y.	290				290	
210002	MAJOR STRUCTURE EXCAVATION	C.Y.			40		40	
210003	MAJOR STRUCTURE BACKFILL	C.Y.			26		26	
303900	CRUSHER FINES	C.Y.	49				49	
502036	DRILLED SHAFT FOUNDATION 36"D	LIN. FT.			52		52	
502600	OBSTRUCTION REMOVAL	LIN. FT.			2		2	
511000	STRUCTURAL CONCRETE CLASS A	C.Y.			13		13	
511300	SUBSTRUCTURE CONCRETE CLASS A	C.Y.			36		36	
540060	REINFORCING BARS GRADE 60	LB			8760		8760	
540160	EPOXY COATED REINFORCING BARS GRADE 60	LB			1180		1180	
541100	STRUCTURAL STEEL FOR STEEL BRIDGES	LB			10150		10150	
541405	PEDESTRIAN BRIDGE (REHABILITATION)	L.S.			1		1	
541406	METAL RAILING, PEDESTRIAN (OFF BRIDGE)	LIN. FT.			56		56	
546000	RECOATING STRUCTURES	L.S.			1		1	
546206	SP 6 COMMERCIAL BLAST CLEANING	L.S.			1		1	
547000	SAFETY AND ENVIRONMENTAL REQUIREMENTS	L.S.			1		1	
548001	COATING OF CONCRETE - STAIN	S.F.			855		855	
560000	ELASTOMERIC BEARING PAD	EACH			4		4	
621000	MOBILIZATION	L.S.	1				1	
632000	CLASS A SEEDING	AC	0.6				0.6	
667500	BOLLARD	EACH	2				2	
701000	PANEL SIGNS	S.F.	5				5	
701100	STEEL/BASE POSTS FOR ALUMINUM PANEL SIGNS	L.F.	25				25	
801000	CONSTRUCTION STAKING BY THE CONTRACTOR	L.S.	1				1	
906000	CONTRACTOR TESTING	L.S.	1				1	

ROBERT C. CROFT
NEW MEXICO
16740
LICENSED PROFESSIONAL ENGINEER
Robert C. Croft
4/8/21

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

SUMMARY OF QUANTITIES

PROJECT CONTROL NUMBER: 5101330

Bohannan Huston
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GENERAL NOTES

1. AS-BUILT BRIDGE PLANS, FOR THE DONATED STEEL TRUSS BRIDGE, ARE AVAILABLE IN THE PROJECT CONTRACT BOOK.
2. THE PEDESTRIAN BRIDGE SUPERSTRUCTURE DESIGN IS IN ACCORDANCE WITH AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2009 EDITION,
3. THE PEDESTRIAN BRIDGE SUBSTRUCTURE DESIGN IS IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 8TH EDITION WITH INTERIMS.
4. A SUBSURFACE SOIL INVESTIGATION HAS BEEN PERFORMED BY GEOTEST, INC. JOB NO. 1-80811 DATED NOVEMBER 16, 2018. THIS INVESTIGATION CAN BE FOUND IN THE PROJECT CONTRACT BOOK.
5. THE GEOTECHNICAL ENGINEER SHALL SUBMIT THE RESULTS OF ALL REQUIRED TESTS TO THE OWNER OR OWNER'S REPRESENTATIVE.
6. ALL WORK RELATED TO THE REHABILITATED STEEL TRUSS, NOT COVERED BY SPECIFIC BID ITEMS, SHALL BE INCLUDED IN THE 541405 - PEDESTRIAN BRIDGE (REHABILITATION) PAY ITEM.

ROBERT C. CROFT
NEW MEXICO
16740
LICENSED PROFESSIONAL ENGINEER
4/6/21

NO.	DESCRIPTION	DATE	BY
4			
3			
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1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

GENERAL NOTES

FABIAN CARBAJAL
5-Apr-21

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DESIGNED BY: R. CROFT

NEW MEXICO PROJECT NO. 5101330

DRAWING SCALE: NTS

PROJECT CONTROL NUMBER: 5101330

Bohannan Huston
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ENVIRONMENTAL COMMITMENT

THE CONTRACTOR SHALL REFER TO SECTION 107 OF THE 2019 STANDARD SPECIFICATIONS, MAKING SPECIAL NOTE OF SUB-SECTION 107.14 CONTRACTORS RESPONSIBILITY FOR ENVIRONMENTAL AND CULTURAL RESOURCE PROTECTION.

☒ NO ADDITIONAL PROJECT-SPECIFIC ENVIRONMENTAL REQUIREMENTS APPLY.

☐ IN ADDITION TO SECTION 107, THE FOLLOWING PROJECT-SPECIFIC ENVIRONMENTAL REQUIREMENTS APPLY.

R Blake Croyle — 8-22-19

ENVIRONMENTAL DEVELOPMENT SECTION MANAGER — DATE

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

ENVIRONMENTAL COMMITMENTS

MICHAEL ROSEBOROUGH 26-Nov-2018 9:34 AM
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DESIGNED BY: R. CROFT

NEW MEXICO PROJECT NO. 5101330

DRAWING SCALE: NTS

SHEET NO. 1 - 6

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701000 PANEL SIGNS

701100 STEEL POSTS AND BASE POSTS FOR ALUMINUM PANEL SIGNS

SIGN	NO. OF SIGNS	TOTAL SIGN SQ FT	CENTER	TOTAL	SQUARE TUBING 12 GAL 1.75 IN SQ	SQUARE TUBING 12 GAL 2 IN SQ	SQUARE TUBING 12 GAL 2.25 IN SQ	SQUARE TUBING 12 GAL 2.5 IN SQ	BASE POSTS NO.	BASE POSTS TOTAL LENGTH FT
DO NOT ENTER WHEN FLOODED	2	4.50	9.0	18.0	X				2.00	7.00
TOTAL		**4.50**		**18.00**						**7.00**
USE		**5**		**18**						**7**

EARTHWORK SUMMARY

STATION	TO	STATION	LOC	203000 UNCLASSIFIED EXCAVATION CU YD	EMBANKMENT CU YD	203100 BORROW CU YD	REMARKS
0+00.00		1+35.30	LT&RT	2.7	210.3	207.6	
1+98.30		2+49.32	LT&RT	1.0	98.4	97.4	
TEE AREA				1.9	1.0		NORTH OF THE BRIDGE
						-40.0	UTILIZE MAJOR STRUCTURE EXCAVATION
			TOTALS	**5.6**	**309.7**	**265.0**	
			USE	**6**		**270**	

CRUSHER FINES

	LENGTH (FT)	WIDTH (FT)	207000 SUBGRADE PREPARATION SQ YD	303900 CRUSHER FINES CU YD	REMARKS
SOUTH TRAIL	143	8	127	21	
NORTH TRAIL	181	8	161	27	
		TOTALS	288	49	
		USE	290	49	

SEEDING

STATION	TO	STATION	LOC	632000 CLASS A SEEDING (FLATTER 3:1) AC
00+00.00		02+65.00	LT	0.27
00+00.00		02+65.00	RT	0.27
			TOTAL	0.55
			USE	**0.6**
SEED ALL DISTURBED AREAS WITHIN ROW				

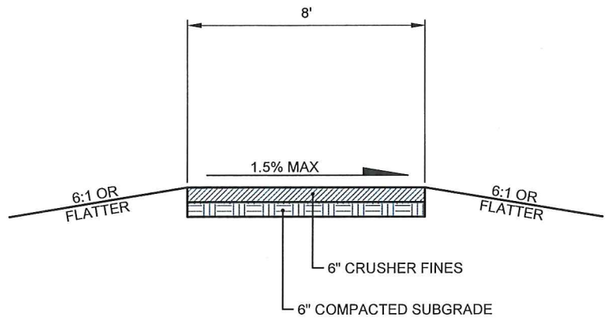
LUMP SUM ITEMS

621000	MOBILIZATION
201000	CLEARING & GRUBBING
801000	CONSTRUCTION STAKING BY THE CONTRACTOR

667500 BOLLARD

STATION	LOC	EA
00+57.29	CL	1
01+45.29	CL	1
	TOTAL	2
	USE	**2**

PER COA STD DWG 2723



TRAIL TYPICAL SECTION

STA 0+00.00 TO STA 1+25.29
STA 2+08.29 TO STA 2+49.32
TEE AREA

JEANETTE A. WALTHER
NEW MEXICO
11243
REGISTERED PROFESSIONAL ENGINEER
4/8/21

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

MISCELLANEOUS DETAILS & QUANTITIES

PROJECT CONTROL NUMBER: 5101330

Bohannan Huston
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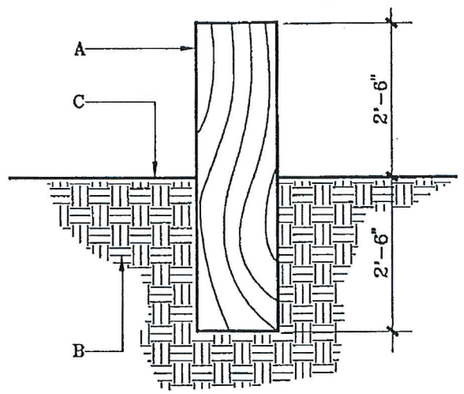

CITY OF ALBUQUERQUE

LANDSCAPE
BOLLARD DETAIL
DWG. 2723
NOV. 1990

REVISIONS

GENERAL NOTES:

1. BOLLARD SHALL BE PONDEROSA PINE TREATED WITH COPPER ARSENATE IN ACCORDANCE WITH THE REQUIREMENTS OF AWPA C-14. WOOD PRESERVATIVES SHALL CONFORM WITH THE REQUIREMENTS OF AASHTO M-133.
2. BOLLARD SHALL BE INSTALLED IN A HOLE EXCAVATED TO A MINIMUM SIZE OF 24"X24"X30". BACKFILL AROUND BOLLARD SHALL BE COMPACTED TO 95%.

CONSTRUCTION NOTES:

A. WOOD BOLLARD; 8"X8"X5'-0".
B. SUBGRADE COMPACTED TO 95%.
C. MATERIAL VARIES (REFERENCE THE DRAWING).

JEANETTE A. WALTHER
NEW MEXICO
11243
REGISTERED PROFESSIONAL ENGINEER
4/8/21

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

BOLLARD DETAIL

JEANETTE WALTHER
8-Apr-21

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DESIGNED BY: J.WALTHER

NEW MEXICO PROJECT NO. 5101330

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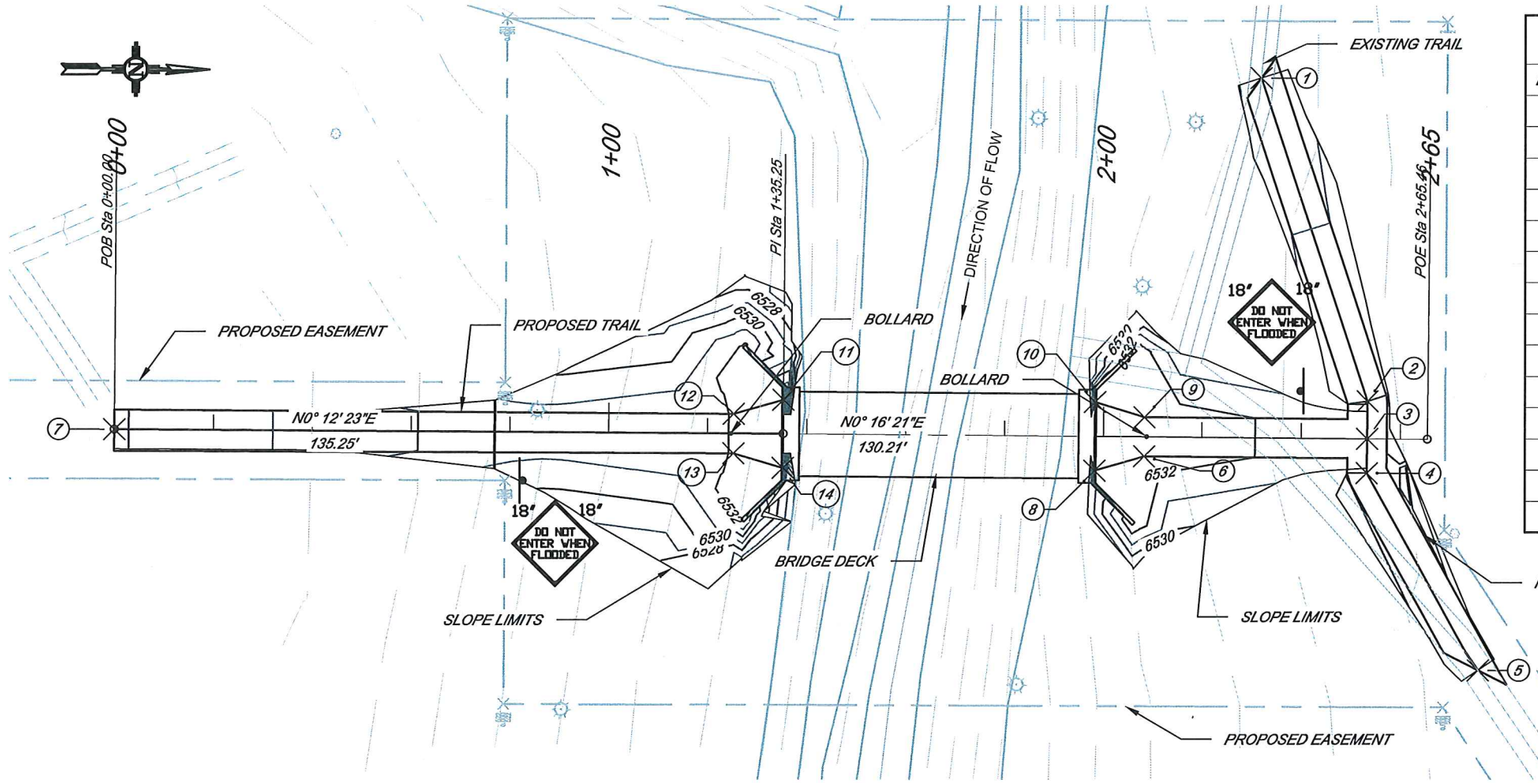
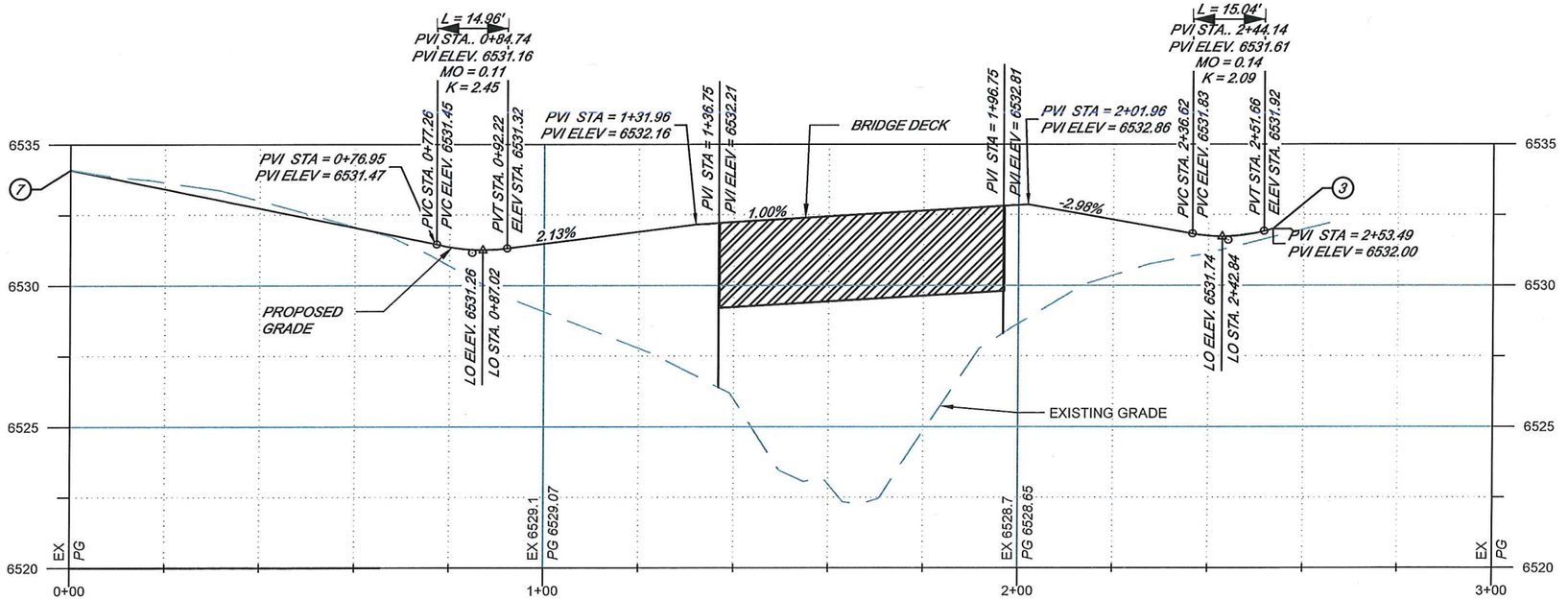
SHEET NO. 2 - 2

PROJECT CONTROL NUMBER: 5101330



POINT TABLE

POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	NW TIE POINT	1488713.93	1657938.55	6530.12
2	NW HINGE POINT	1488735.73	1658004.44	6532.00
3	N INTERSECTION POINT	1488735.70	1658012.10	6532.00
4	NE HINGE POINT	1488735.66	1658019.10	6532.00
5	NE TIE POINT	1488758.50	1658059.30	6532.46
6	EDGE OF TRAIL	1488690.65	1658015.87	6532.67
7	S HINGE POINT	1488482.42	1658011.04	MATCH EXIST.
8	EDGE OF TRAIL	1488680.64	1658018.84	6532.83
9	EDGE OF TRAIL	1488690.69	1658007.88	6532.67
10	EDGE OF TRAIL	1488680.71	1658004.82	6532.83
11	EDGE OF TRAIL	1488617.70	1658004.59	6532.19
12	EDGE OF TRAIL	1488607.69	1658007.49	6532.02
13	EDGE OF TRAIL	1488607.65	1658015.55	6532.02
14	EDGE OF TRAIL	1488617.64	1658018.50	6532.19



30 15 0 30

1"=30'

1"=5' VERTICAL

JEANETTE A. WALTHER
NEW MEXICO
11243
4/8/21
REGISTERED PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

TRAIL PLAN AND PROFILE

JEANETTE WALTHER
8-Apr-21

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DESIGNED BY: J.WALTHER

NEW MEXICO PROJECT NO. 5101330

DRAWING SCALE: 1:20

SHEET NO. 3 - 1

PROJECT CONTROL NUMBER: 5101330

Bohannan Huston
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ESTIMATED BRIDGE QUANTITIES

ITEM		UNIT	SUPERSTRUCTURE	SUBSTRUCTURE		TOTAL
				ABUT. NO. 1	ABUT. NO. 2	
210002	MAJOR STRUCTURE EXCAVATION	C.Y.		17	23	40
210003	MAJOR STRUCTURE BACKFILL	C.Y.		12	14	26
502036	DRILLED SHAFT FOUNDATION 36"D	L.F.		25	27	52
502600	OBSTRUCTION REMOVAL	L.F.		1	1	2
511000	STRUCTURAL CONCRETE CLASS A	C.Y.	13			13
511300	SUBSTRUCTURE CONCRETE CLASS A	C.Y.		18	18	36
540060	REINFORCING BARS GRADE 60	LB		4320	4440	8760
540160	EPOXY COATED REINFORCING BARS GRADE 60	LB	1180			1180
541100	STRUCTURAL STEEL FOR STEEL BRIDGES	LB	10150			10150
541405	PEDESTRIAN BRIDGE (REHABILITATION)	L.S.	1			1
541406	METAL RAILING, PEDESTRIAN (OFF BRIDGE)	L.F.	56			56
546000	RECOATING STRUCTURES	L.S.	1			1
546206	SP 6 COMMERCIAL BLAST CLEANING	L.S.	1			1
547000	SAFETY AND ENVIRONMENTAL REQUIREMENTS	L.S.	1			1
548001	COATING OF CONCRETE - STAIN	S.F.	855			855
560000	ELASTOMERIC BEARING PADS	EACH		2	2	4

NOTES:

1. THE CONTRACTOR SHALL USE THE COLOR FEDERAL STANDARD 595A COLOR No. 10080 OR APPROVED EQUAL FOR THE CONCRETE STAIN.
2. THE CONTRACTOR SHALL USE THE COLOR FEDERAL STANDARD 595A COLOR No. 11136 (INSIGNIA RED) OR APPROVED EQUAL FOR THE STEEL COATING.
3. THE COATING OF ALL STEEL SHALL BE PAID FOR UNDER 546000 RECOATING STRUCTURES. THIS INCLUDES BOTH REHABILITATED AND NEW STEEL.
4. THE STEEL COATING SHALL BE NMDOT COATING SYSTEM No. 3: SHOP OR FIELD APPLIED 2 - COAT WITH ACRYLIC TOPCOAT PER SPECIFICATION SECTION 545.2.3.

BRIDGE DESIGN DATA

SUPERSTRUCTURE:
STRUCTURAL CONCRETE CLASS A
f'c = 4000 psi @ 28 DAYS
fy = 60 ksi, EPOXY COATED BARS

SUBSTRUCTURE:
SUBSTRUCTURE CONCRETE CLASS A
f'c = 3000 psi @ 28 DAYS
fy = 60 ksi, GRADE 60

LIVE LOAD:
PEDESTRIAN LIVE LOAD: 90 PSF
EQUESTRIAN LOAD: 1kip IN A 4" SQUARE AREA

HORIZONTAL EARTH PRESSURE:
ACTIVE EARTH PRESSURE: 40 psf/ft
AT-REST EARTH PRESSURE: 60 psf/ft
NOTE: PASSIVE SOIL RESISTANCE IN FRONT OF THE WINGWALLS HAS BEEN IGNORED DUE TO FUTURE POTENTIAL EROSION OR MAINTENANCE

DRILLED SHAFTS:
NOMINAL RESISTANCE PER SHAFT: 79 kips
FACTORED LOADS PER SHAFT (STRENGTH 1): 76.2 kips (VERTICAL), 1 kip (LATERAL)

ROBERT C. CROFT
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LICENSED PROFESSIONAL ENGINEER
4/6/21

BRIDGE

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

ESTIMATED BRIDGE QUANTITIES

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-1 ESTIMATED BRIDGE QUANTITIES.dwg

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330

PROJECT CONTROL NUMBER: 5101330

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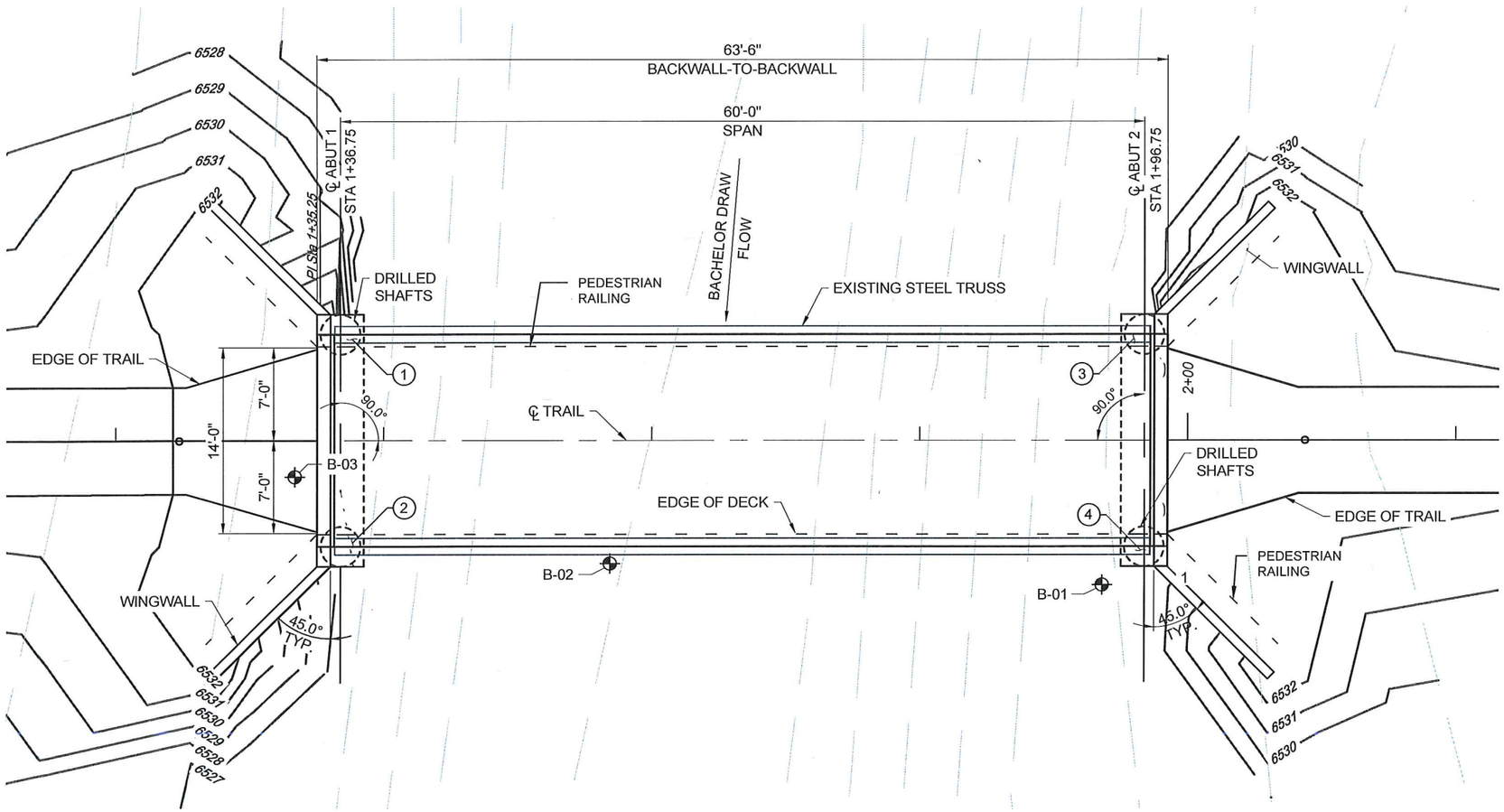
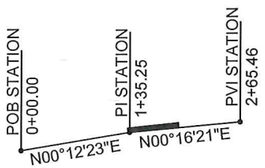


LEGEND

- B-XX APPROXIMATE BORE HOLE LOCATION
- — — PEDESTRIAN RAIL (MIDPOINT)
- (X) DRILLED SHAFT ID

STRUCTURE LOCATION PLAN

SCALE: 1" =10'



HORIZONTAL DATA

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

BRIDGE

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LICENSED PROFESSIONAL ENGINEER
4/8/21

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

STRUCTURE LOCATION PLAN

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330

SHEET NO. 5 - 2

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-2 STRUCTURE LOCATION PLAN.dwg

PROJECT CONTROL NUMBER: 5101330

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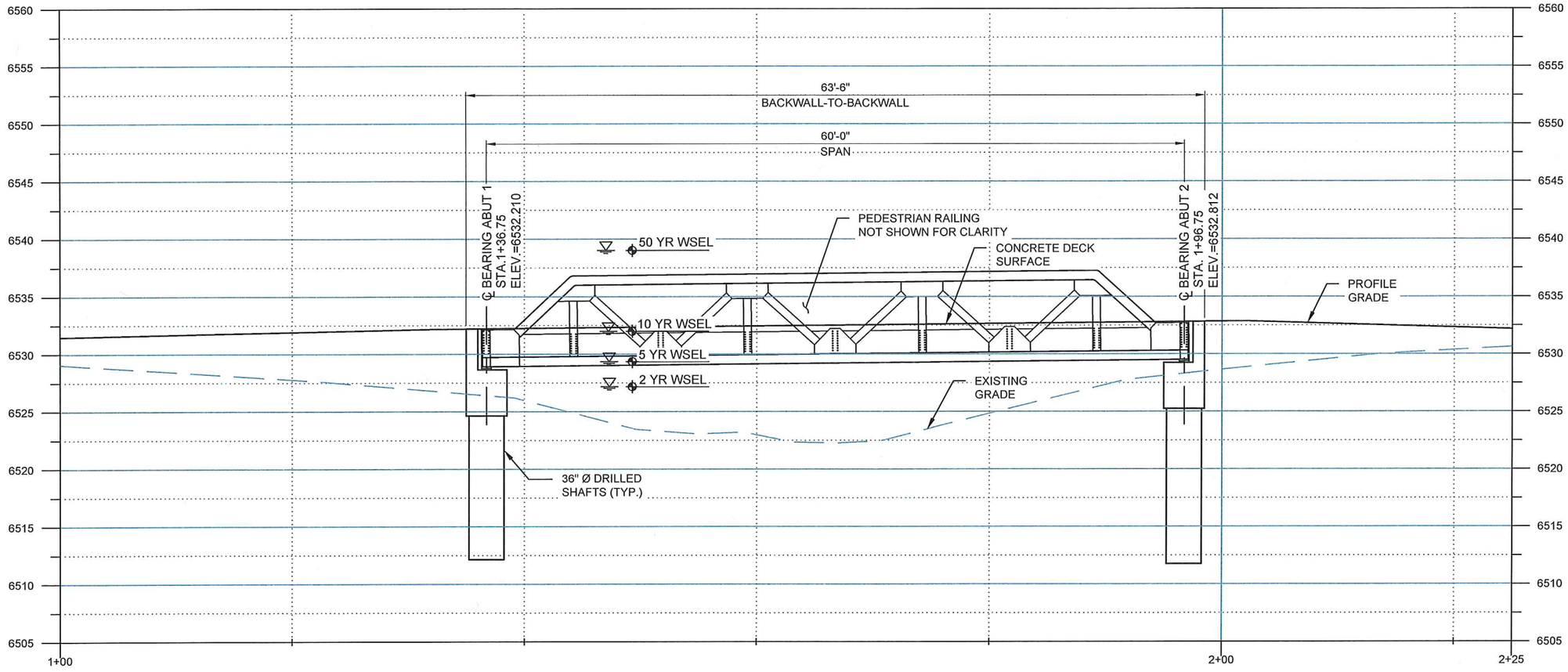
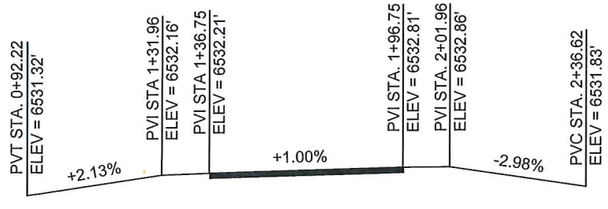


STRUCTURE PROFILE

SCALE: 1"=10'



PROFILE GRADE VERTICAL DATA

BACHELOR DRAW WATERWAY DATA

WS ELEV, 2 YR = 6527.16 FT
WS ELEV, 5 YR = 6529.28 FT
WS ELEV, 10 YR = 6531.79 FT
WS ELEV, 50 YR = 6539.05 FT

Q (2 YR) = 592 CFS
Q (5 YR) = 1285 CFS
Q (10 YR) = 1917 CFS
Q (50 YR) = 3852 CFS

V (2 YR) = 3.72 FT/S
V (5 YR) = 4.65 FT/S
V (10 YR) = 4.90 FT/S
V (50 YR) = 2.43 FT/S

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4/8/21

BRIDGE

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

STRUCTURE PROFILE

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-3 STRUCTURE PROFILE.dwg

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330

PROJECT CONTROL NUMBER: 5101330

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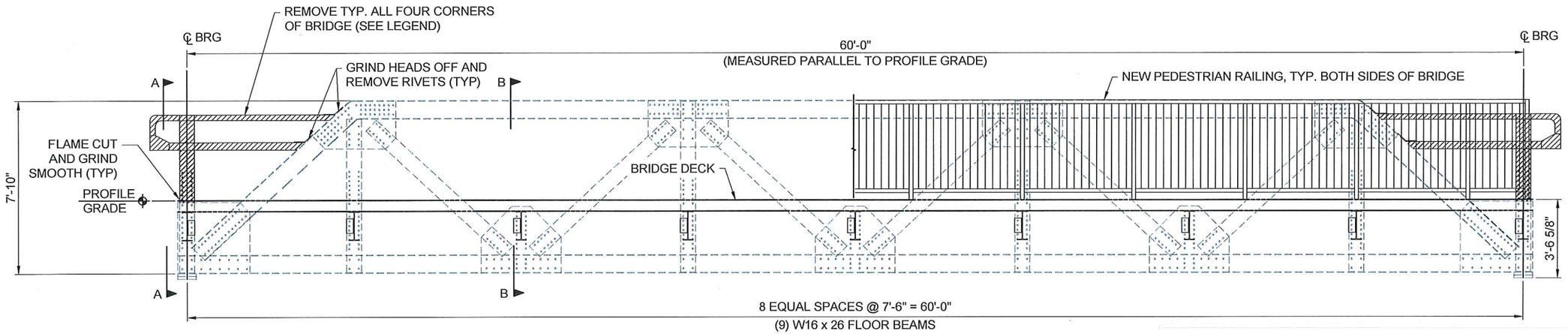
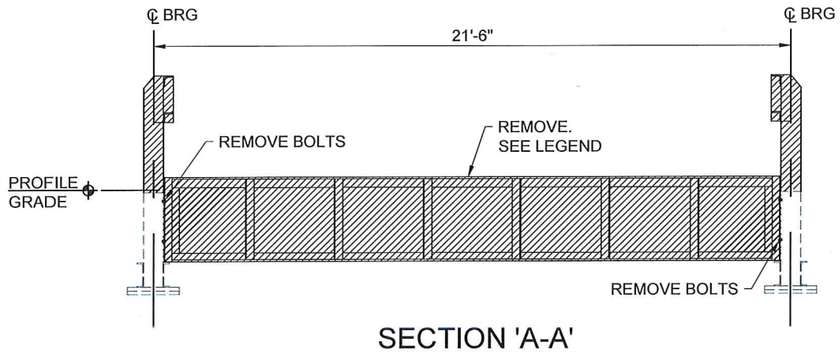
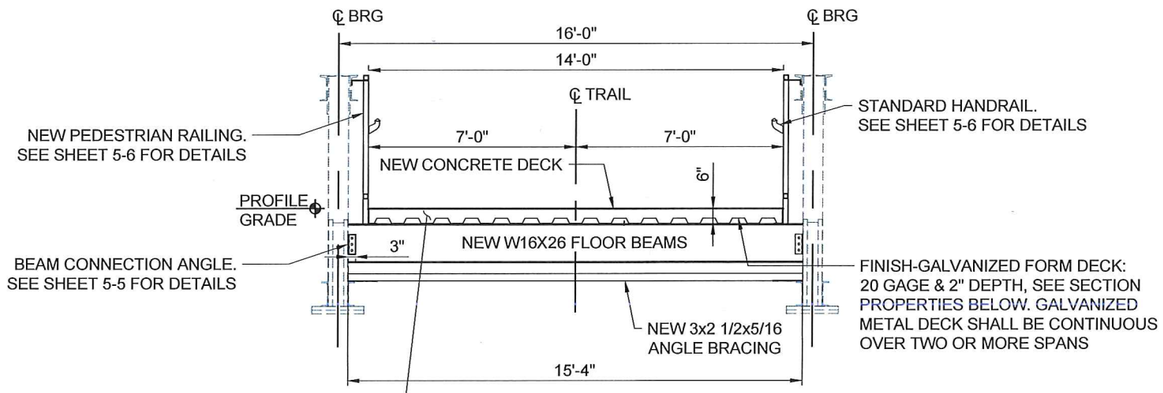


STRUCTURE ELEVATION



SECTION 'A-A'
EXISTING BRIDGE MEMBERS



SECTION 'B-B'
NEW BRIDGE MEMBERS

LEGEND:

1. REMOVE AND DISPOSE OF STEEL.

SCHEDULE OF STEEL REINFORCING FOR DECK					
MARK	SIZE	LENGTH (ft-in)	NUMBER	BEND DIAGRAM	REMARKS
#4D1*	#4	13'-8"	61	1	
#4D2*	#4	40'-0"	15	1	
#4D3*	#4	22'-1"	15	1	

* DENOTES EPOXY COATED BARS

GALVANIZED METAL DECK SECTION PROPERTIES							
GAGE	THICKNESS	I_p (in^4/ft)	I_n (in^4/ft)	S_p (in^3/ft)	S_n (in^3/ft)	V_s (lbs/ft)	F_y (ksi)
20	0.0358	0.403	0.402	0.326	0.337	2419	50

LENGTH
TYPE 1

BAR BENDING DIAGRAM

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

STRUCTURE ELEVATION AND SECTIONS

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330

SHEET NO. 5 - 4

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-4 STRUCTURE ELEVATION AND SECTIONS.dwg

PROJECT CONTROL NUMBER: 5101330

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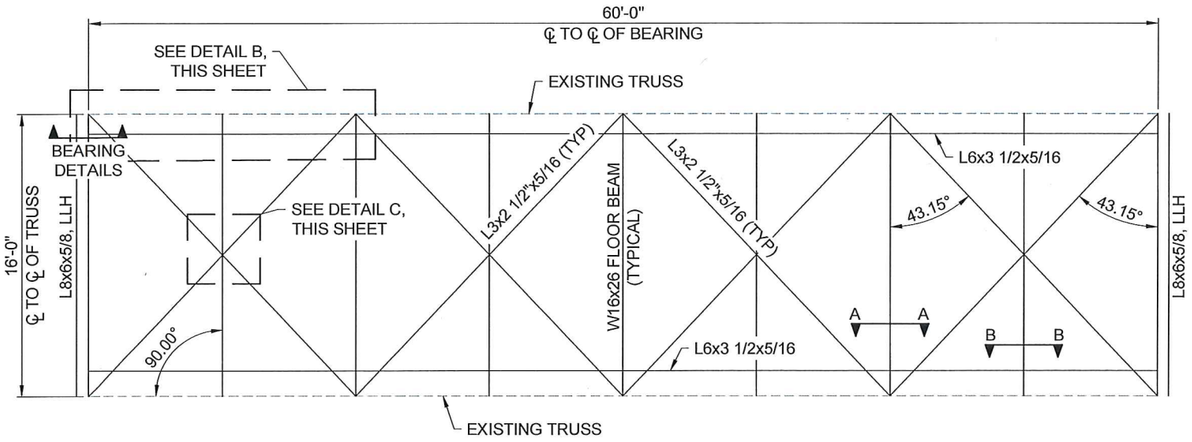
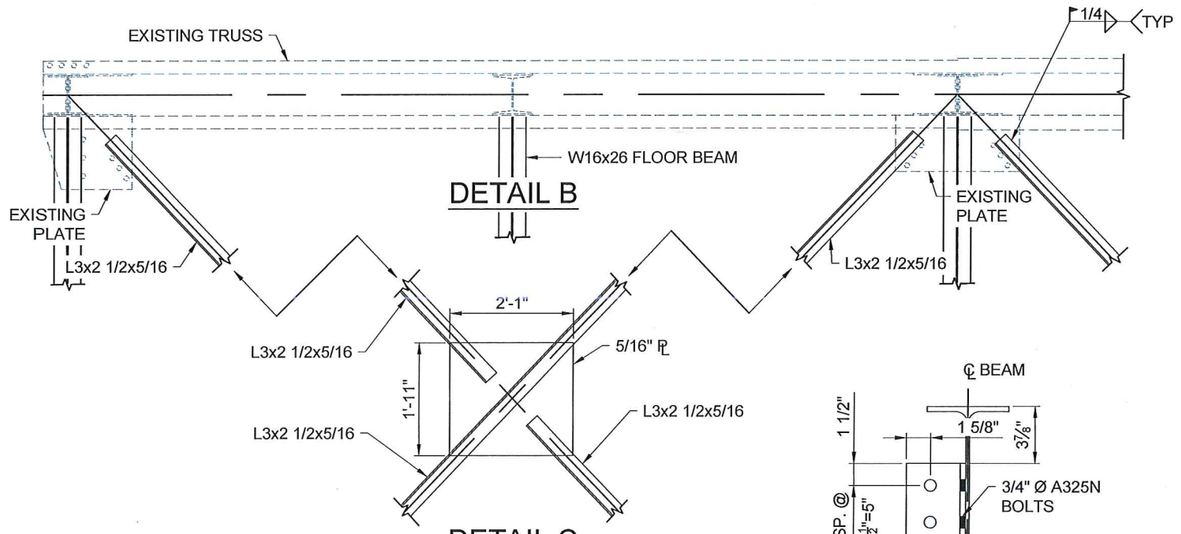


FRAMING PLAN

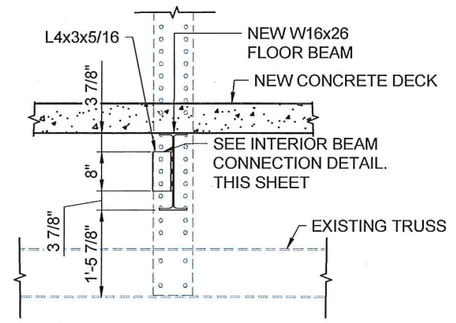
NOTE: LINES SHOWN ARE CENTERLINES OF EXISTING AND NEW MEMBERS

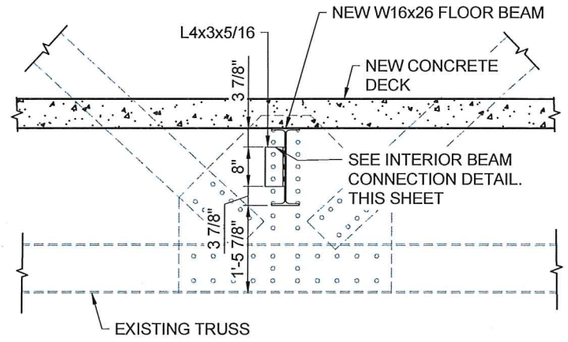


DETAIL B

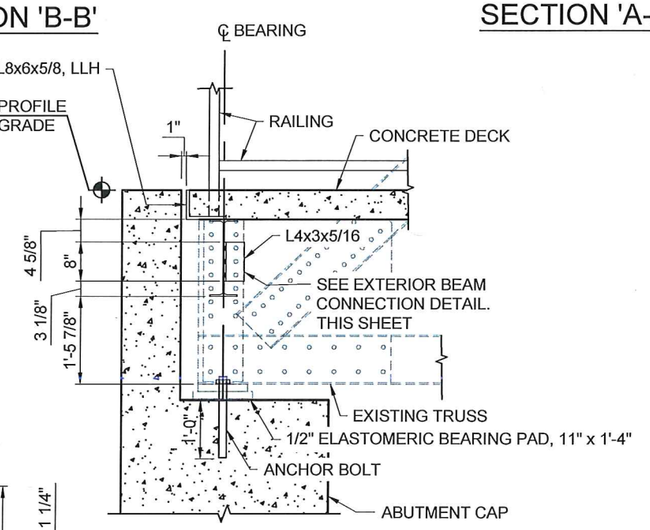
DETAIL C

NOTE: FLOOR BEAM NOT SHOWN FOR CLARITY





SECTION 'B-B'

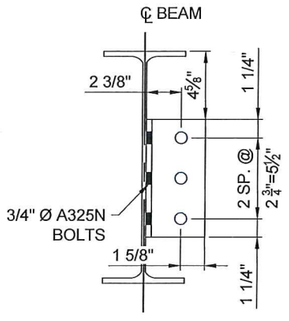


SECTION 'A-A'

BEARING DETAILS

INTERIOR BEAM CONNECTION DETAILS

FIELD VERIFY BOLT HOLE DIMENSIONS



EXTERIOR BEAM CONNECTION DETAILS

FIELD VERIFY BOLT HOLE DIMENSIONS

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NO.	DESCRIPTION	DATE	BY
BRIDGE 4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

FRAMING PLAN AND SECTION DETAILS

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330

SHEET NO. 5 - 5

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-5 FRAMING PLAN AND SECTION DETAILS_recover.dwg

PROJECT CONTROL NUMBER: 5101330

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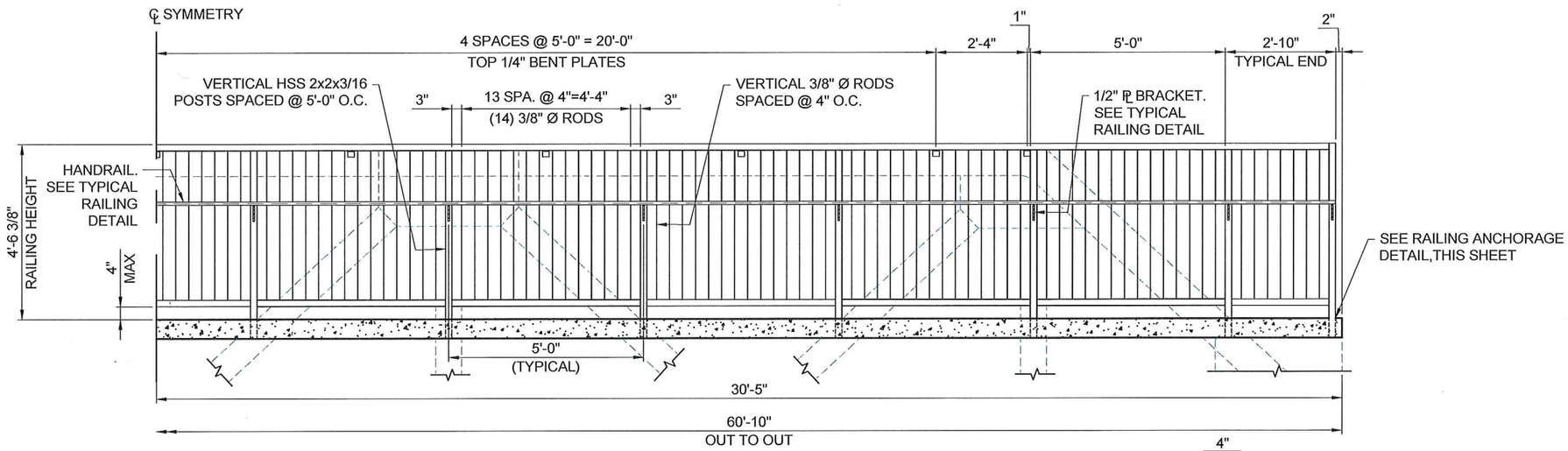
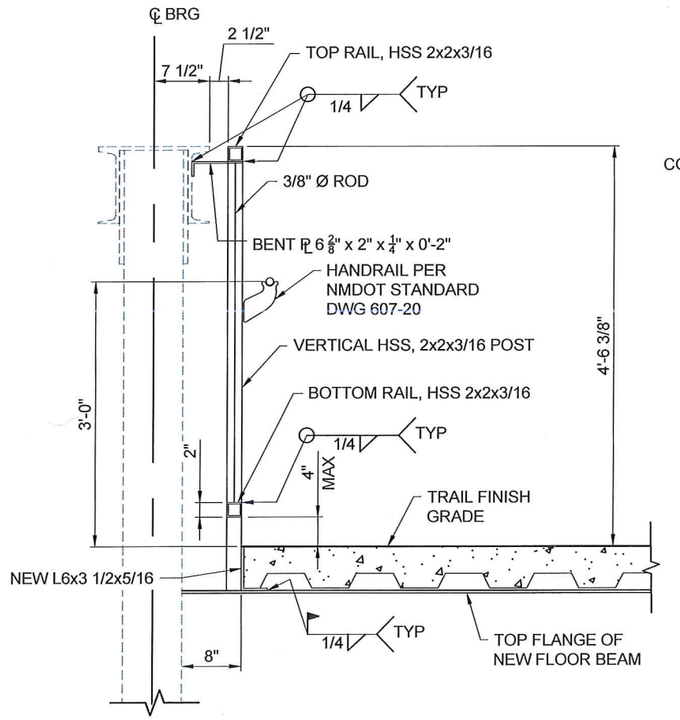
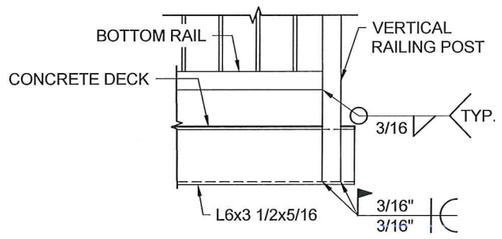


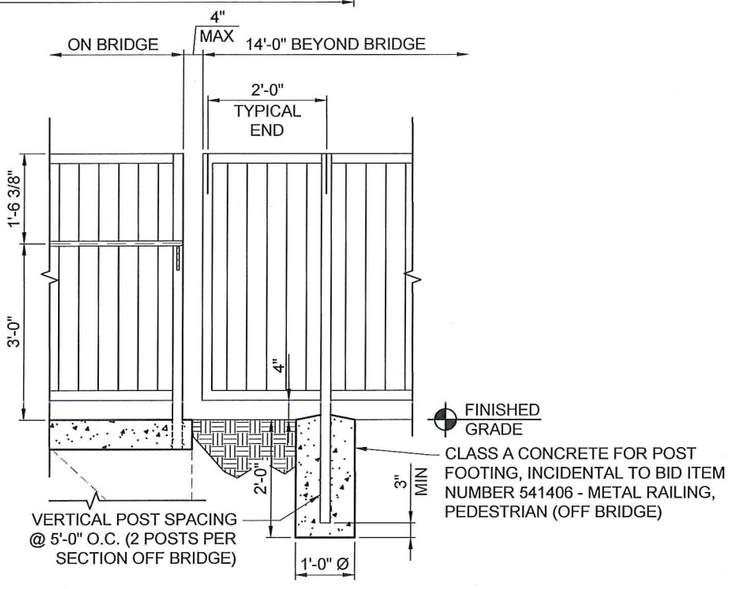
RAILING ELEVATION



TYPICAL RAILING DETAIL



RAILING ANCHORAGE ELEVATION DETAIL



RAILING ELEVATION BEYOND BRIDGE

BRIDGE

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

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4/6/21

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

RAILING DETAILS

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-6 RAILING DETAILS.dwg

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330

SHEET NO. 5 - 6

PROJECT CONTROL NUMBER: 5101330

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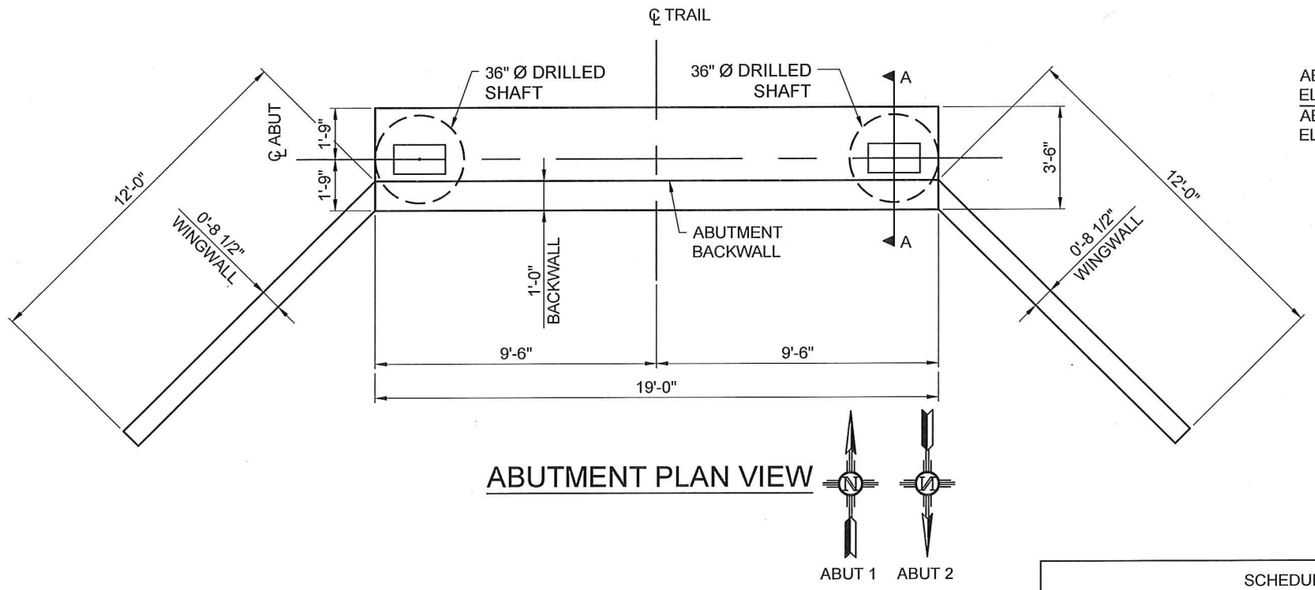
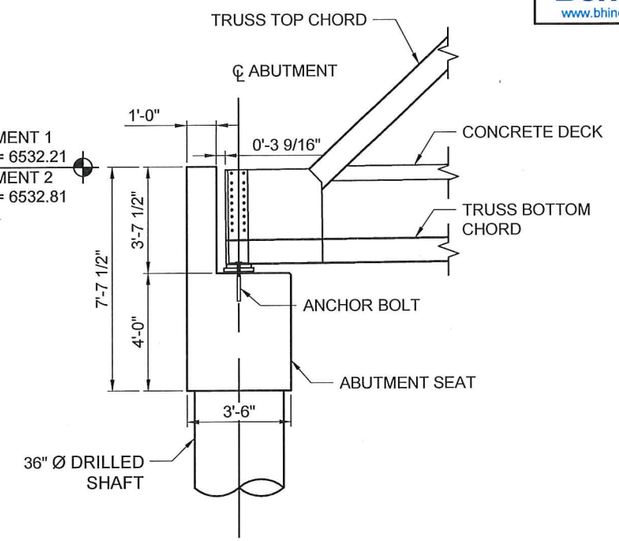
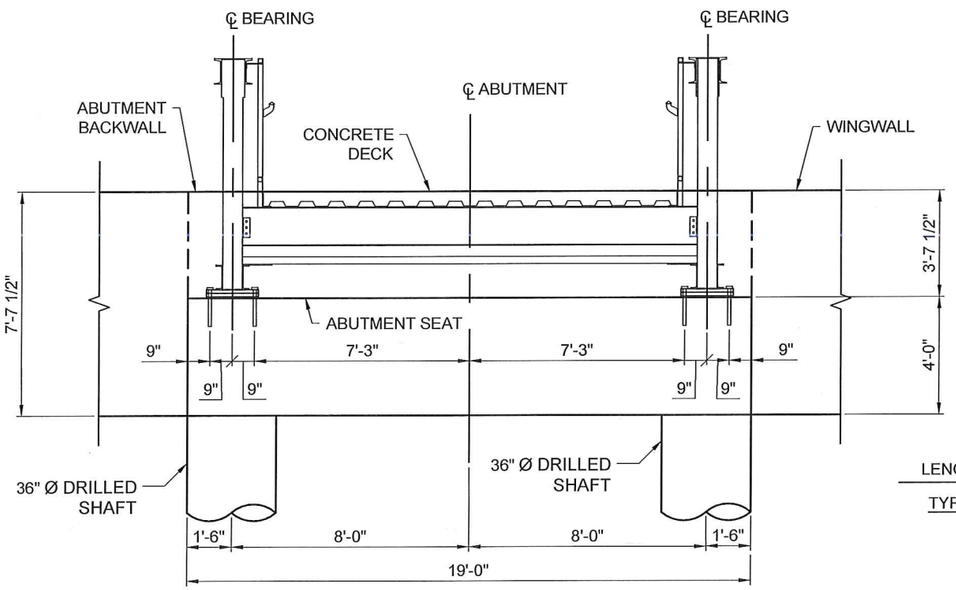


ABUTMENT PLAN VIEW



ABUTMENT DETAIL

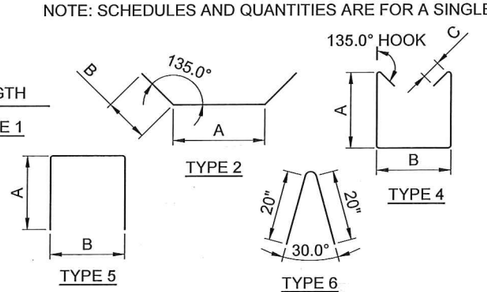


ABUTMENT TRANSVERSE SECTION VIEW

SCHEDULE OF STEEL REINFORCING FOR ABUTMENT

MARK	SIZE	LENGTH (ft-in)	NUMBER	BEND DIAGRAM	REMARKS
#7AB1	#7	18'-6"	6	1	
#7AB2	#7	23'-8"	2	2	A=19'-4", B=2'-2"
#6AB1	#6	23'-8"	13	2	A=19'-4", B=2'-2"
#6AB2	#6	18'-6"	6	1	
#4AB1	#4	11'-0"	29	4	A=3'-7", B=3'-2", C=4"
#4AB2	#4	7'-10"	29	5	A=2'-4", B=3'-2"
#5AB3	#5	7'-1"	19	1	
#5AB4	#5	3'-6"	6	6	A=20"

NOTE: SCHEDULES AND QUANTITIES ARE FOR A SINGLE ABUTMENT



BAR BENDING DIAGRAM

(ALL RADII SHALL BE IN ACCORDANCE WITH LATEST CRSI MANUAL)

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LICENSED PROFESSIONAL ENGINEER

APPROVED FOR CONSTRUCTION: _____ DATE: _____

BRIDGE

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

ABUTMENT DETAILS

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-7 ABUTMENT.dwg

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

NEW MEXICO PROJECT NO. 5101330

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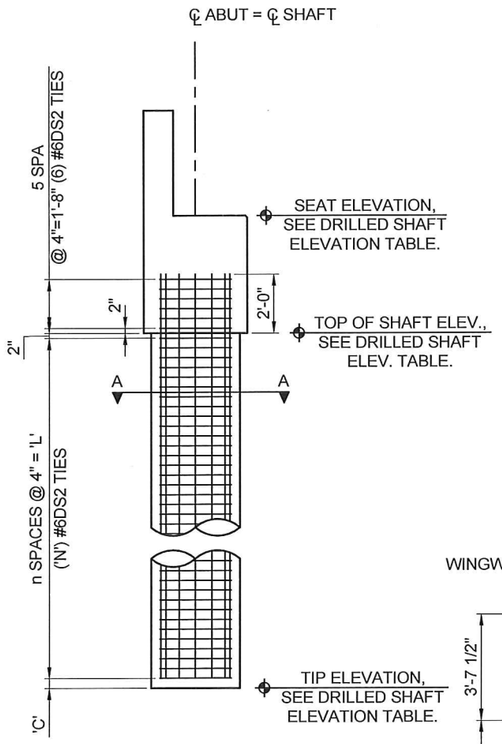
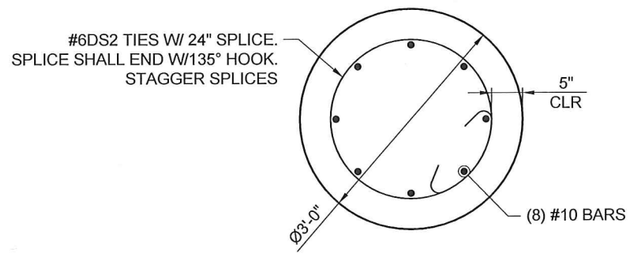
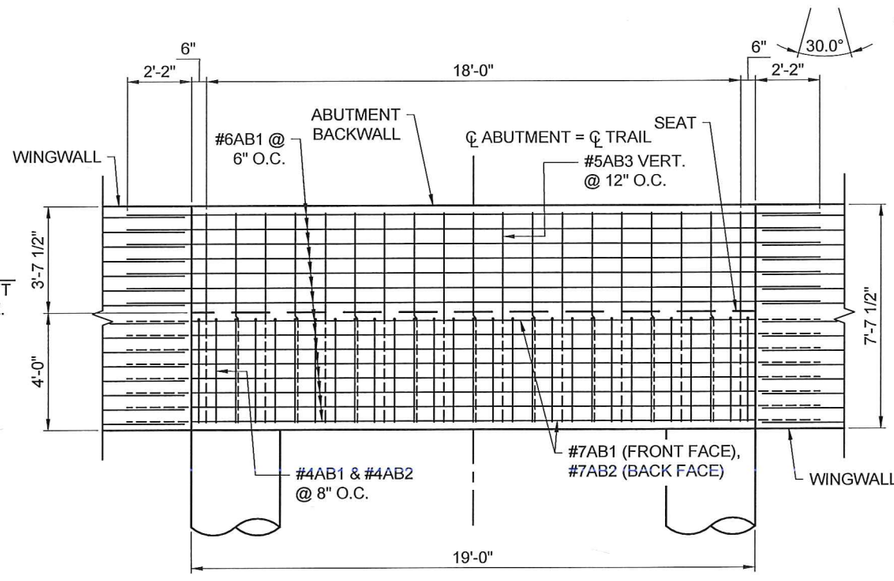


TYPICAL SHAFT ELEVATION

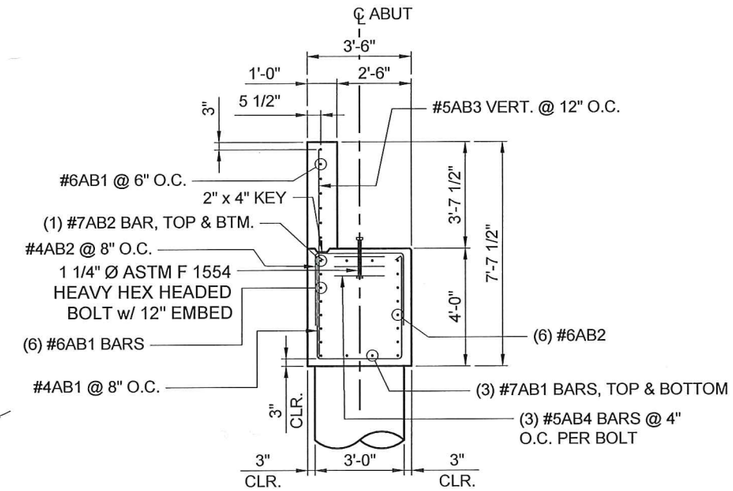
* SEAT ELEVATION SHALL BE VERIFIED BY CONTRACTOR DURING CONSTRUCTION OF THE ABUTMENT



SECTION 'A-A'



TYPICAL ABUTMENT ELEVATION DETAIL



TYPICAL ABUTMENT SECTION

SCHEDULE OF STEEL REINFORCING FOR DRILLED SHAFT ABUTMENT 1					
MARK	SIZE	LENGTH (ft-in)	NUMBER	BEND DIAGRAM	REMARKS
#10DS1	#10	14'-2"	16	1	
#6DS2	#6	9'-6"	86	3	A=2'-2", LAP = 24"

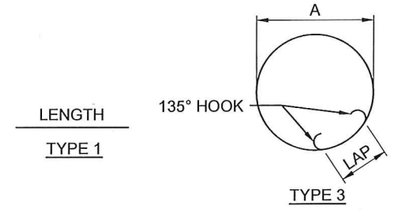
NOTE: SCHEDULE AND QUANTITIES ACCOUNT FOR BOTH DRILLED SHAFTS ON ABUTMENT 1

SCHEDULE OF STEEL REINFORCING FOR DRILLED SHAFT ABUTMENT 2					
MARK	SIZE	LENGTH (ft-in)	NUMBER	BEND DIAGRAM	REMARKS
#10DS3	#10	15'-2"	16	1	
#6DS2	#6	9'-6"	88	3	A=2'-2", LAP = 24"

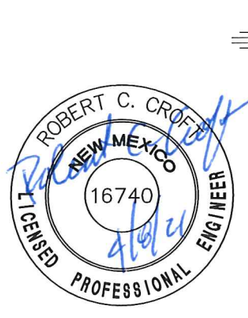
NOTE: SCHEDULE AND QUANTITIES ACCOUNT FOR BOTH DRILLED SHAFTS ON ABUTMENT 2.

DRILLED SHAFT ELEVATION TABLE								
LOCATION	ID	n	N	L	C	SEAT (FT)	TOP OF SHAFT (FT)	TIP (FT)
ABUTMENT 1 (WEST)	1	36	37	12'-0"	4"	6528.585	6524.585	6512.085
ABUTMENT 1 (EAST)	2	36	37	12'-0"	4"	6528.585	6524.585	6512.085
ABUTMENT 2 (WEST)	3	39	40	13'-0"	4"	6529.187	6525.187	6511.687
ABUTMENT 2 (EAST)	4	39	40	13'-0"	4"	6529.187	6525.187	6511.687

NOTE: THE TOP OF SHAFT ELEVATIONS MAY BE ADJUSTED TO FACILITATE THE CONTRACTORS PREFERRED CONSTRUCTION TECHNIQUES. IF THE TOP OF SHAFT ELEVATION IS MODIFIED, APPROVAL SHALL BE PROVIDED BY THE DESIGN ENGINEER. STIRRUP SPACING SHALL REQUIRE MODIFICATION ADJACENT TO THE TOP OF SHAFT. THE DRILLED SHAFT TIP ELEVATION MAY NOT BE MODIFIED, AND EXPOSED DRILLED SHAFT SURFACES SHALL HAVE A FORMED SURFACE. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THESE CHANGES AND MODIFICATIONS.



BAR BENDING DIAGRAM



BRIDGE

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

FOUNDATION DETAILS

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-8 FOUNDATION DETAILS.dwg

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330

PROJECT CONTROL NUMBER: 5101330

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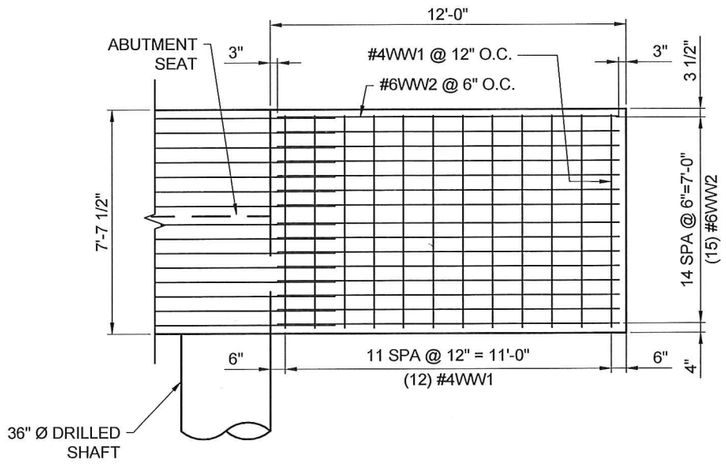
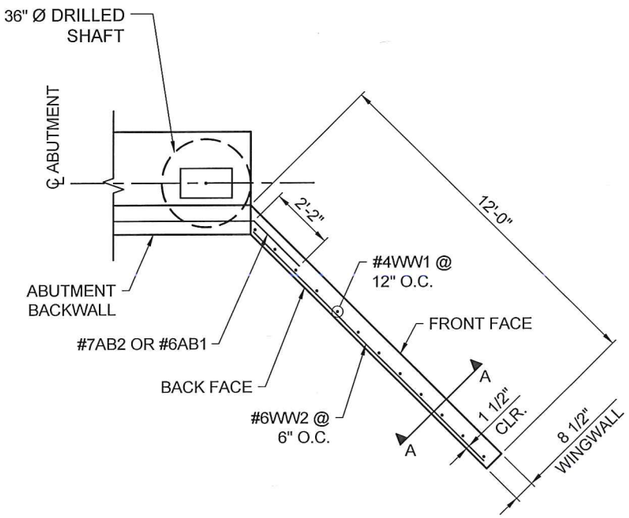
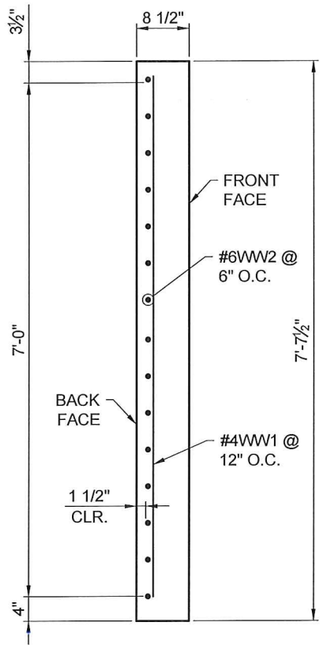


TYPICAL WINGWALL ELEVATION DETAIL

(LOOKING AT BACK FACE)



TYPICAL WINGWALL PLAN DETAIL



SECTION 'A-A'

SCHEDULE OF STEEL REINFORCING FOR WINGWALL					
MARK	SIZE	LENGTH (ft-in)	NUMBER	BEND DIAGRAM	REMARKS
#4WW1	#4	7'-0"	12	1	
#6WW2	#6	11'-6"	15	1	

NOTE: SCHEDULES AND QUANTITIES ARE FOR A SINGLE WINGWALL

ROBERT C. CROFT
NEW MEXICO
16740
LICENSED PROFESSIONAL ENGINEER

BRIDGE

NO.	DESCRIPTION	DATE	BY
4			
3			
2			
1			

REVISIONS (OR CHANGE NOTICES)

NEW MEXICO DEPARTMENT OF TRANSPORTATION
EDGEWOOD BACHELOR DRAW

WINGWALL DETAILS

DRAWING PATH: P:\20190239\STRUCT\Drawings\ACAD\5-Sheets\5-9 WINGWALL DETAILS.dwg

DESIGNED BY: RCC DRAWN BY: FMC CHECKED BY: SMM PLOT DATE: 4/5/2021

APPROVED FOR CONSTRUCTION: _____ DATE: _____

NEW MEXICO PROJECT NO. 5101330