

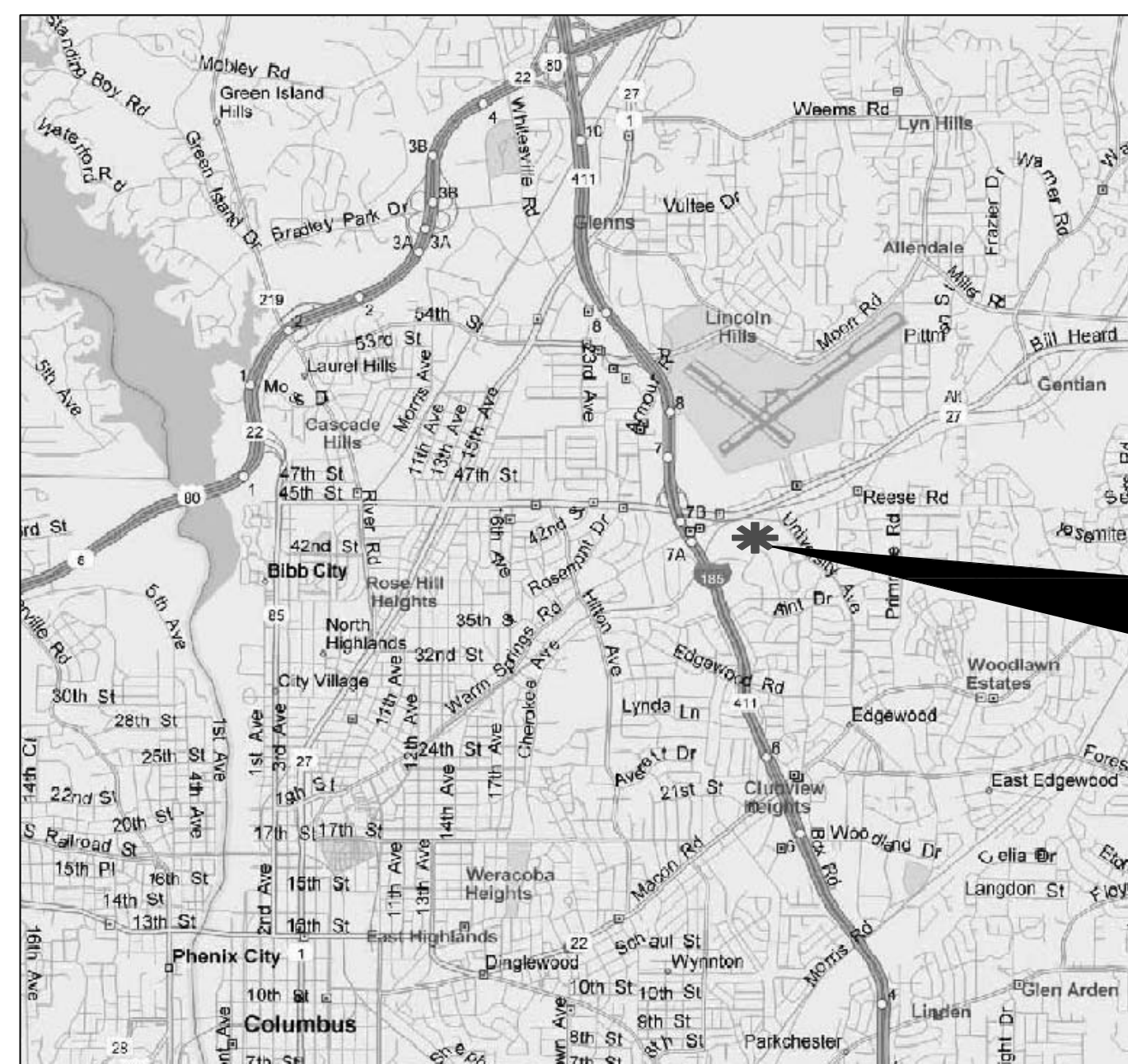
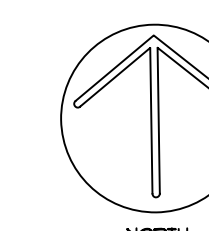
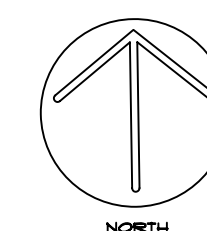
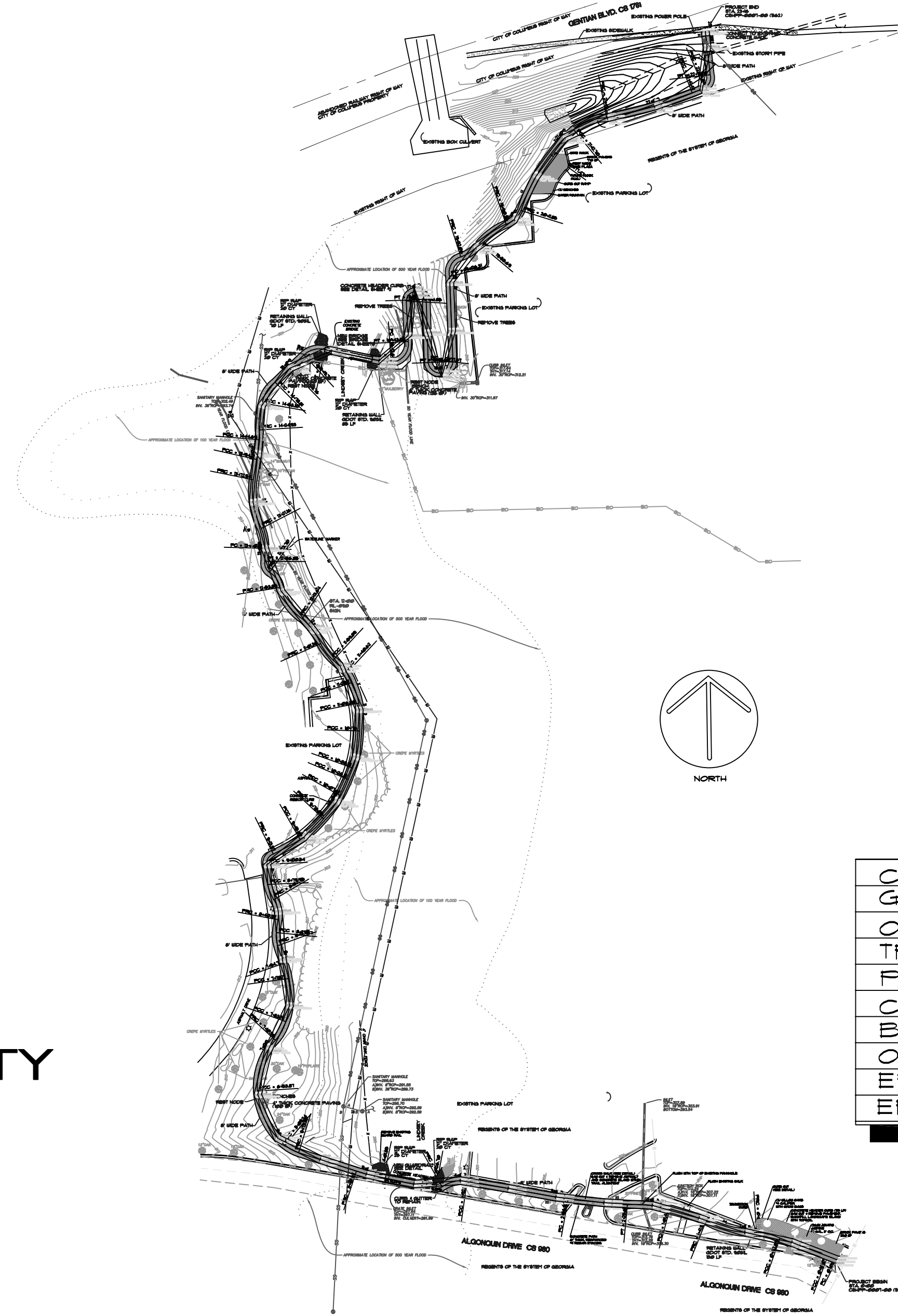
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0007-00(562)	0	19
	REVISION		DATE
	12-09	GDOT	

CONSTRUCTION PLANS MULTI-USE TRAILS CSHPP-0007-00(562) COLUMBUS STATE UNIVERSITY COLUMBUS, MUSCOGEE COUNTY, GEORGIA

HORIZONTAL DATUM - ASSUMED COORDINATES
VERTICAL DATUM - NAVD1988
ENVIRONMENTAL CLASSIFICATION : CE
PROJECT REVIEW DESIGNATION : EXEMPT

THIS PROJECT IS LOCATED IN THE
3rd CONGRESSIONAL DISTRICT OF GEORGIA

PROJECT LENGTH 2,316 LINEAR FEET



PROJECT VICINITY

VICINITY MAP
NTS

INDEX OF SHEETS

SHEET TITLE	SHEET NUMBER
COVER SHEET	0
GENERAL NOTES & DETAIL ESTIMATE	1
OVERALL PLAN	2
TRAFFIC & SAFETY CONTROL PLAN	3
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CROSS SECTIONS	11
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EROSION & SEDIMENT CONTROL PLANS	16-18
EROSION & SEDIMENT CONTROL PLANS NOTES AND DETAILS	19

NOTE:
THIS PROJECT TO BE CONSTRUCTED AS PER
GEORGIA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS, 2001 EDITION,
AS APPROVED BY THE FEDERAL HIGHWAY
ADMINISTRATION AND MODIFIED BY
CONTRACT DOCUMENTS.

SUBMITTED FOR: COLUMBUS STATE UNIVERSITY

APPROVED BY: _____



10-7-09



PLANS PREPARED BY:
Rakestraw & Associates, Inc.
Planning * Design * Environmental
83 Ty Ty Omega Road Tifton, Georgia 31793 229-382-0000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	REVISIONS	
GA	CSHPP-0001-00(562)	1	19	DATE	DESCRIPTION
				12-09	GDOT

GENERAL NOTES:

- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT MAY NOT BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE BEEN INSTALLED AND CONSTRUCTED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) AFFECTING HIS WORK. IN ADDITION TO CONTACTING THE LOCAL UTILITY AGENCIES, THE CONTRACTOR SHALL GIVE THREE WORKING DAYS NOTICE TO THE UTILITIES PROTECTION CENTER AT 1-800-282-7411 PRIOR TO ANY EXCAVATION.
- THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PROTECT EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES DAMAGED DURING CONSTRUCTION WITH LIKE MATERIALS AND CONSTRUCTION METHODS AS APPROVED BY THE DESIGNER AND THE CITY OF PELHAM WITHOUT INCREASE IN CONTRACT PRICE OR TIME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF UTILITY RELOCATION.
- THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION AND SHALL USE WHATEVER MEANS NECESSARY TO MANAGE STORM WATER SUCH THAT IMPACT TO CONSTRUCTION IS MINIMIZED.
- DEWATERING SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH PROJECT SPECIFICATIONS AS NECESSARY TO INSTALL/CONSTRUCT THE WORK PROPERLY. DEWATERING DISCHARGE SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATIONS AND REQUIREMENTS OF AGENCIES HAVING JURISDICTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE 1992 GEORGIA HIGH VOLTAGE SAFETY ACT AND TO NOTIFY THE UTILITIES PROTECTION CENTER AT 1-800-282-7411 BEFORE WORKING WITHIN 10 FEET OF OVERHEAD POWER LINES OF 750 VOLTS OR MORE.
- ANY CHANGES IN THE APPROVED PLANS MUST BE COORDINATED WITH THE PROJECT ENGINEER AND MUST BE APPROVED PRIOR TO PROCEEDING.
- THE CONTRACTOR SHALL MAKE TEMPORARY CONNECTIONS TO ASSURE UTILITY SERVICE IS RESTORED AT THE END OF THE WORK DAY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL SHRUBBERY, TREES, OR STRUCTURES WITHIN THE WORKING AREA THROUGHOUT THE COURSE OF CONSTRUCTION. ANY TREES, SHRUBS, OR STRUCTURES DAMAGED OR DISTURBED SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING MANHOLE COVERS AND VALVE BOXES TO PROPOSED FINAL GRADE. PAYMENT FOR THIS ITEM SHALL BE UNDER GRADING COMPLETE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A TRAFFIC CONTROL PLAN SHOWING PROPOSED MEASURES TO MANAGE TRAFFIC DURING CONSTRUCTION ACTIVITIES. THE PLAN SHALL CONFORM TO THE 2003 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, MILLENNIUM EDITION, AND GDOT SPECIFICATION 150. ANY LANE CLOSURES MUST BE APPROVED BY AND COORDINATED WITH THE GDOT AREA ENGINEER. LANE CLOSURES WILL REQUIRE PROPER LANE TAPERS AND ADVANCE WARNINGS PER GDOT STANDARDS.
- ALL SIGNING AND MARKING SHALL BE IN ACCORDANCE WITH THE 2003 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, MILLENNIUM EDITION.
- CSU WILL BE RESPONSIBLE FOR ALL MAINTENACE ITEMS WITHIN THE PROJECT AREA.

LEGEND

EXISTING CURB INLET		PROPOSED GAS VALVE	
PROPOSED CURB INLET		EXISTING CATCH BASIN	
NAIL SET		PROPOSED CATCH BASIN	
BENCHMARK		EXISTING RAILROAD SIGNAL	
CONCRETE MONUMENT FOUND		EXISTING PROPERTY LINE	
IRON PIN FOUND		EXISTING RIGHT-OF-WAY	
IRON PIN SET		EXISTING WATER LINE	
PROPOSED FIRE HYDRANT		PROPOSED WATER LINE	
EXISTING FIRE HYDRANT		EXISTING GAS LINE	
EXISTING LIGHT POLE		PROPOSED GAS LINE	
PROPOSED LIGHT POLE		EXISTING WOOD LINE	
EXISTING SEWER MANHOLE		PROPOSED CONTOUR	
PROPOSED SEWER MANHOLE		EXISTING CONTOUR	
EXISTING SPOT ELEVATION		SOIL LINE	
PROPOSED SPOT ELEVATION		OVERHEAD POWER LINE	
EXISTING WATER METER		UNDERGROUND POWER LINE	
PROPOSED WATER METER		TELEPHONE LINE	
EXISTING TELEPHONE PEDESTAL		UNDERGROUND TELEPHONE LINE	
EXISTING CABLE TV BOX		CABLE T.V.	
EXISTING POWER POLE W/ GUY		UNDERGROUND CABLE T.V.	
EXISTING BACKFLOW PREVENTER		FLOW LINE	
PROPOSED BACKFLOW PREVENTER		EXISTING DITCH	
EXISTING WATER VALVE		PROPOSED FENCE	
PROPOSED WATER VALVE		EXISTING SANITARY SEWER	
EXISTING GAS VALVE		PROPOSED SANITARY SEWER	
		EXISTING STORM SEWER	
		PROPOSED STORM SEWER	
		EXISTING FORCE MAIN	
		PROPOSED FORCE MAIN	
		EXISTING EDGE OF PAVEMENT	
		PROPOSED EDGE OF PAVEMENT	
		EXISTING EDGE OF ROAD	

NTS

AC	ASBESTOS CEMENT PIPE	MIN	MINIMUM
BCCMP	BITUMINOUS COATED CORRUGATED METAL PIPE	MISC	MISCELLANEOUS
BLDG	BUILDING	MJ	MECHANICAL JOINT
BOC	BACK OF CURB	N.G.S.	NATIONAL GEODETIC SURVEY
BTM	BOTTOM	NIC	NOT IN CONTRACT
CI	CURB INLET	NTS	NOT TO SCALE
CIP	CAST IRON PIPE	OCEW	ON CENTER EACH WAY
CL	CENTERLINE	OD	OUTSIDE DIAMETER
CM	CONCRETE MONUMENT	PC	POINT OF CURVE
CMP	CORRUGATED METAL PIPE	PT	POINT OF TANGENT
co	CLEAN OUT	PVC	POLYVINYL CHLORIDE PIPE
CONC	CONCRETE	PVMT	PAVEMENT
CONT	CONTINUOUS	R	RADIUS
CY	CUBIC YARD	RCP	REINFORCED CONCRETE PIPE
DIA (Ø)	DIAMETER	REQD	REQUIRED
DIP	DUCTILE IRON PIPE	RR	RAILROAD
DEPT	DEPARTMENT	R/W	RIGHT OF WAY
DOT	GEORGIA DEPARTMENT OF TRANSPORTATION	S	SLOPE
EA	EACH	SCH	SCHEDULE
EG	EXISTING GROUND	SHT	SHEET
EL	ELEVATION	SJ	SLIP JOINT
EOP	EDGE OF PAVEMENT	SP	SERVICE POLE
EOR	EDGE OF DIRT ROAD	SS	STAINLESS STEEL
EPD	ENVIRONMENTAL PROTECTION DIVISION	SSES	SAFETY SLOPE END SECTION
EQ	EQUAL	STA	STATION
EW	EACH WAY	STD	STANDARD
EXIST	EXISTING	SY	SQUARE YARDS
FES	FLARED END SECTION	TOC	TOP OF CURB
FF	FINISHED FLOOR ELEVATION	TOE	TOE OF SLOPE
GAB	GRADED AGGREGATE BASE	TOF	TOP OF FOOTING
GALV	GALVANIZED	TOP	TOP OF PAVEMENT
HB	HOSE BIBB	TOH	TOP OF HEADWALL
HDPE	HIGH DENSITY POLYETHYLENE PIPE	TYP	TYPICAL
HORIZ	HORIZONTAL	VERT	VERTICAL
ID	INSIDE DIAMETER	VC	VERTICAL CURVE
INV	INVERT ELEVATION	VCP	VITRIFIED CLAY PIPE
IP	IRON PIPE/PIN	W/	WITH
MAX	MAXIMUM	B.O.R.	BOARD OF REGENTS-GA.

ABBREVIATIONS

DETAILED ESTIMATE

ITEM NO.	DESCRIPTION	UNITS	QUANTITY
005-0023	ADA CURB CUT RAMPS	EA	4
005-6090	EXTEND POWER SOURCE	LS	LUMP SUM
009-2000	LANDSCAPING WITH IRRIGATION	LS	LUMP SUM
009-2002	BACKFILL PLANTER	LS	LUMP SUM
150-1000	SAFETY & TRAFFIC CONTROL	LS	LUMP SUM
163-0001	EROSION CONTROL	LS	LUMP SUM
210-0100	GRADING COMPLETE	LS	LUMP SUM
211-1000	BRIDGE EXCAVATION	CY	20
212-1000	GRANULAR EMBANKMENT	CY	125
310-5060	GR AGGR BASE CRS, 6 INCH INCL MATL	SY	2300
400-3600	ASPH CON 9.5 MM	TN	488,840
441-0106	CONC SIDEWALK, 6 INCH	SY	50
441-0104	CONC SIDEWALK, 4 IN	SY	50
441-5003	CONC HEADER CURB, 6 INCH, TP 2	LF	825
500-3107	CLASS A CONCRETE, RETAINING WALL	CY	35
543-9000	CONSTRUCTION OF BRIDGE COMPLETE	LS	LUMP SUM
682-9030	LIGHTING SYSTEM	LS	LUMP SUM
700-0010	WILDFLOWER SEEDING	AC	1.5

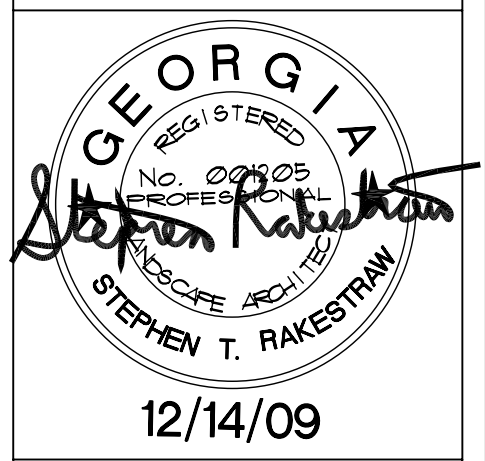
UTILITY PROVIDERS

WATER: CITY OF COLUMBUS-STEVE FIX (706) 649-3478
 SEWER: CITY OF COLUMBUS-STEVE FIX (706) 649-3478
 PHONE: BELL SOUTH-DAVID HUCKBY (706) 321-3988
 ELECTRIC: GEORGIA POWER-KEVIN HENDERSON (706) 321- 3547
 CABLE: NOT APPLICABLE

NORTH



Rakestraw & Associates
 Planning • Design • Environmental
 23 TY TY OMEGA RD.
 TIFTON, GA. 31794
 Phone: 229.382.0009

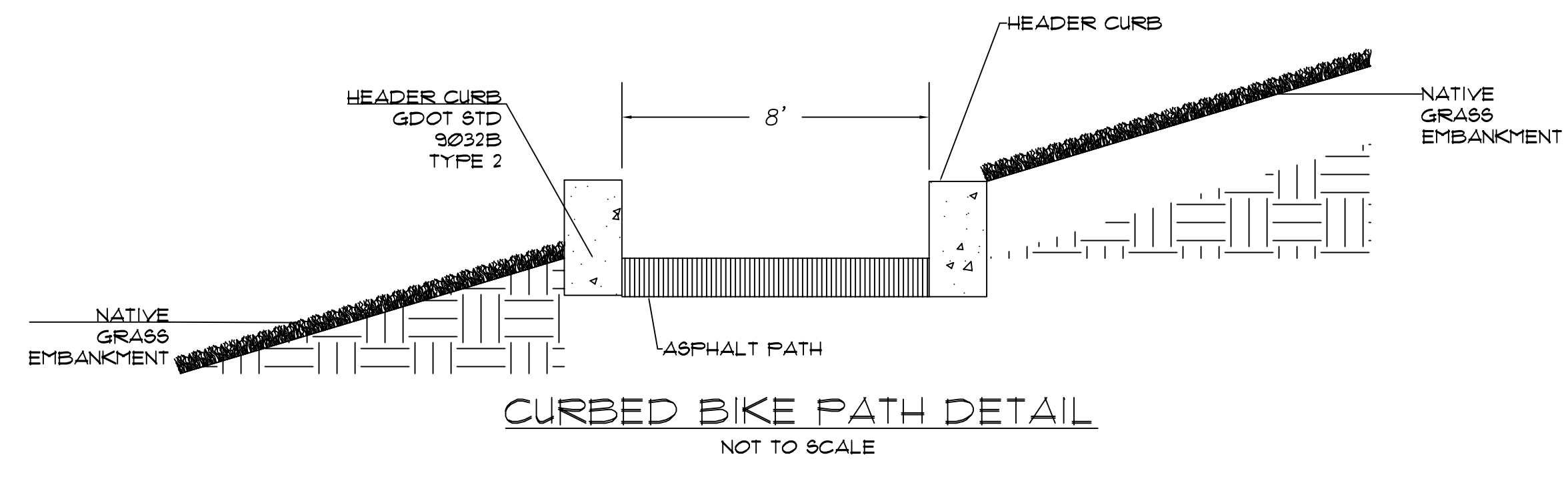
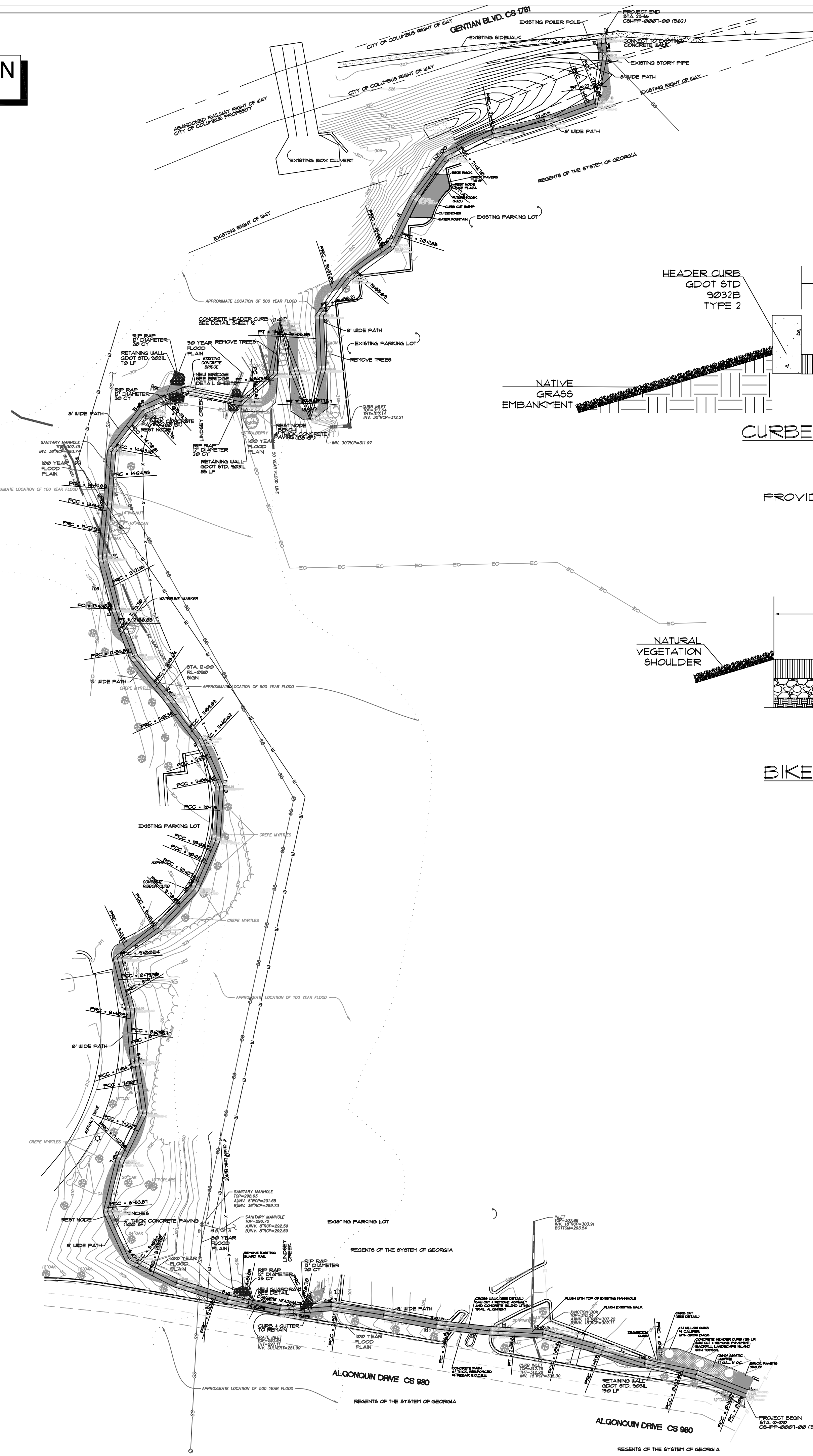
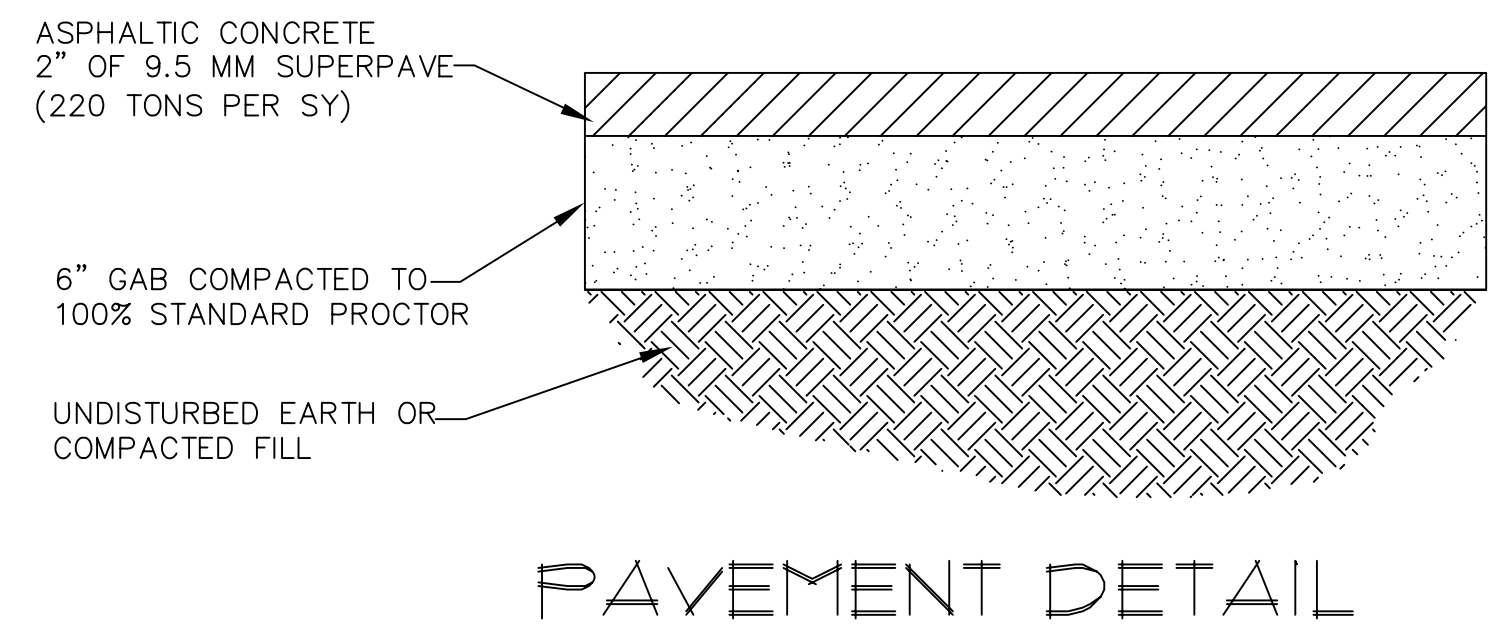
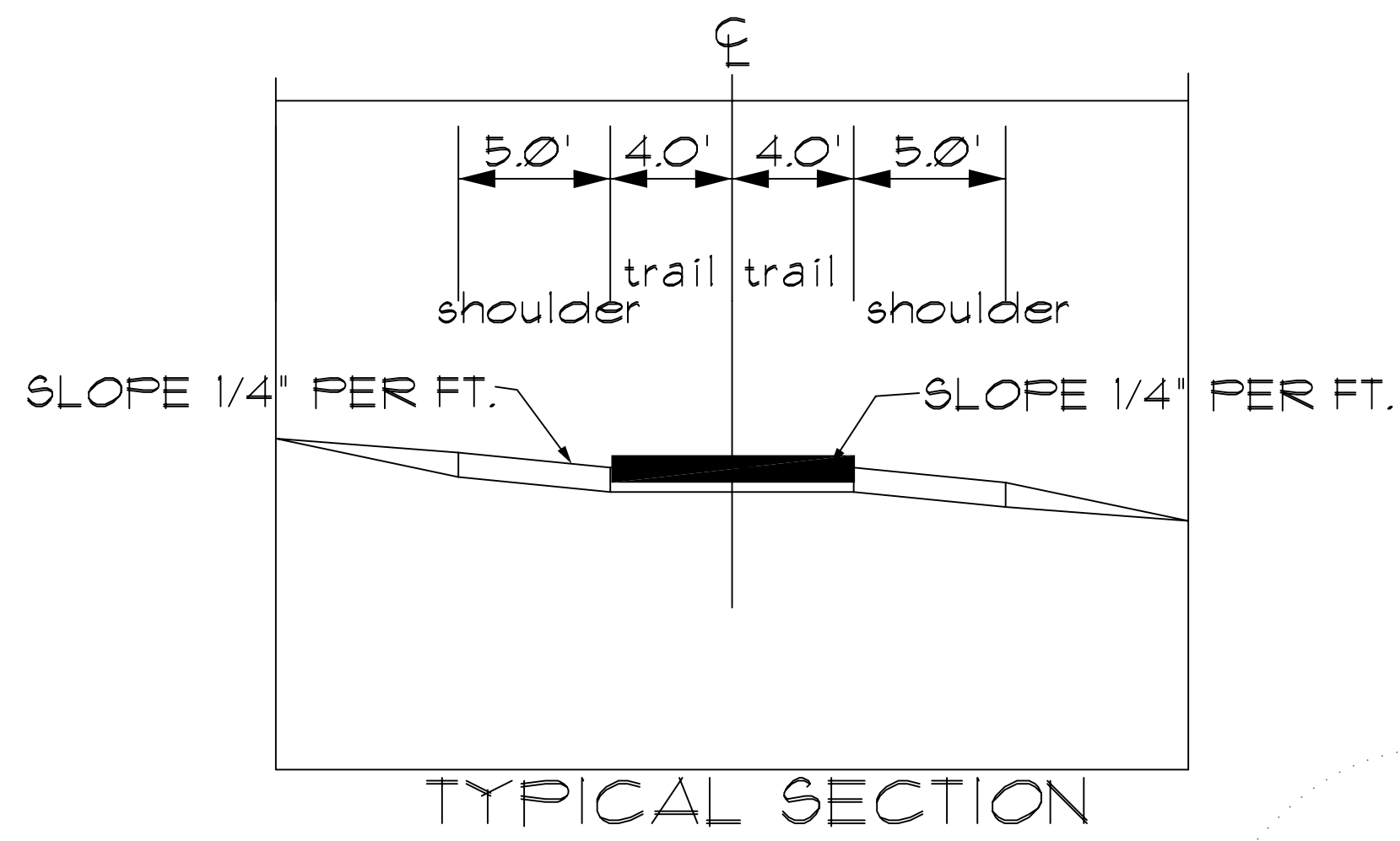


PROJECT:
 MULT-USE TRAIL
 COLUMBUS, GA
 CLIENT:
 COLUMBUS STATE
 UNIVERSITY

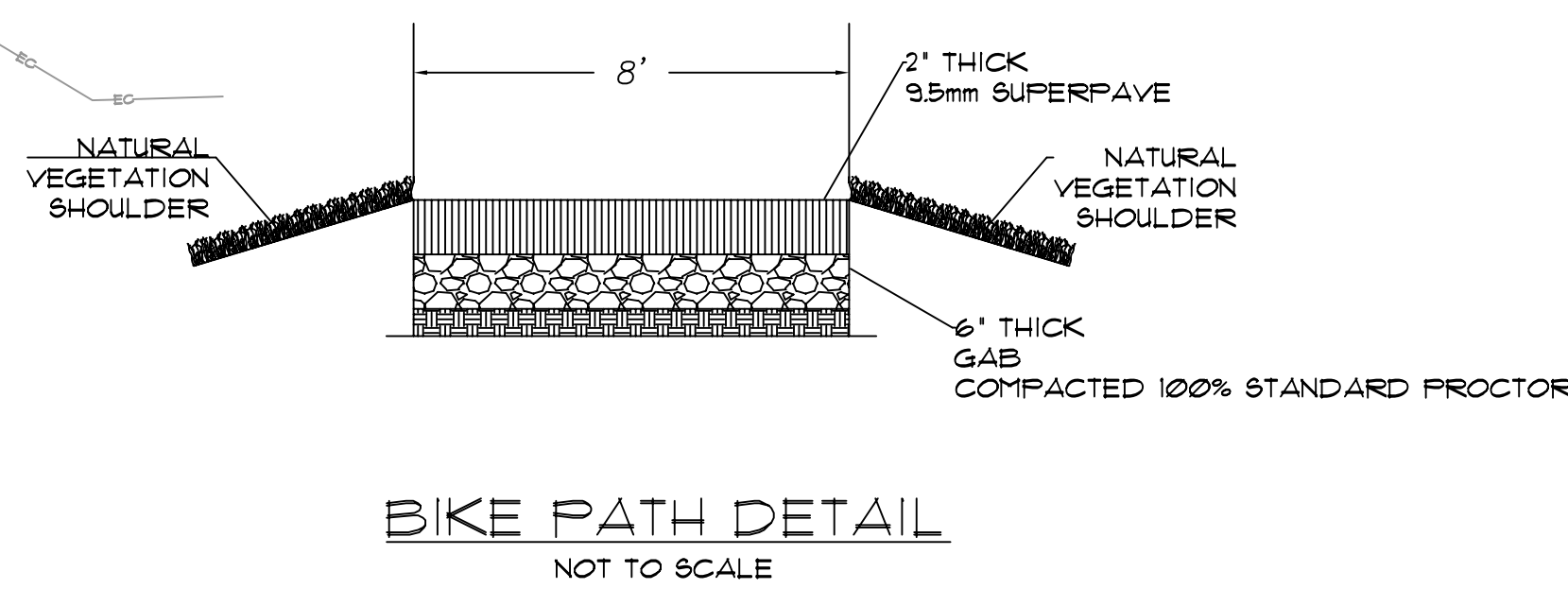
SHEET TITLE:
 GENERAL NOTES &
 DETAILED ESTIMATE

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 DATE: 12/09
 SCALE: 1" = 20'
 SHEET NO.:
1
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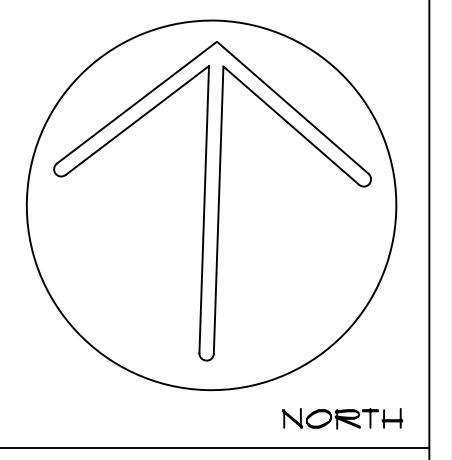
MULTI-USE TRAIL PLAN
NOT TO SCALE



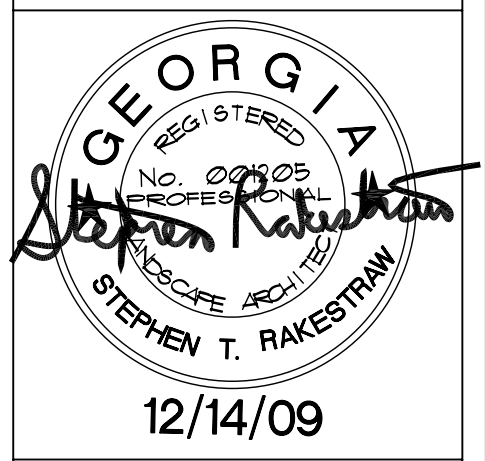
STA 15+90 - 19+30
PROVIDE 1' W X 2' D X 6' H CONCRETE FLUMES
AT STA. 18+00, 17+00, & 16+25



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	REVISIONS
GA	CSHPP-0001-00(562)	2	19	DATE DESCRIPTION
				12-09 GDOT



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TIFTON, GA. 31794
Phone: 229.382.0003



PROJECT:
MULT-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

SHEET TITLE:
OVERALL SHEET

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DATE: 12/09
SCALE: NOT TO SCALE

SHEET NO.:
2
of 19

GENERAL NOTES:

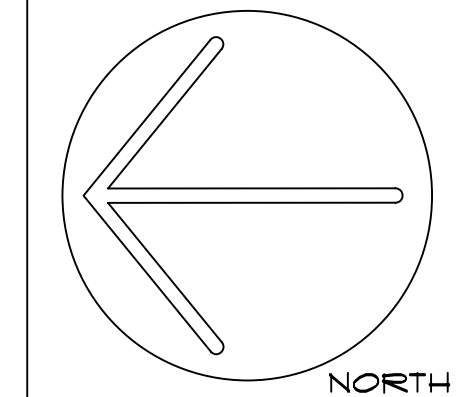
- 1) ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERRECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS; THE MUTCD; THE GEORGIA STANDARD SPECIFICATIONS; AND/OR SPECIAL PROVISIONS. SEE SECTION 150.
- 2) ALL TRAFFIC CONTROL DEVICES SHALL BE AS SHOWN, OR AS DIRECTED BY THE ENGINEER, ADDITIONAL DEVICES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
- 3) ALL PORTABLE MOUNTED SIGNS SHALL BE MOUNTED SO THAT THE BOTTOM OF THE SIGN WILL BE BETWEEN 1' AND 5' ABOVE THE PAVEMENT EDGE. ALL TEMPORARY POST MOUNTED SIGNS SHALL BE MOUNTED SO THAT THE BOTTOM OF THE SIGN SHALL BE 5" MINIMUM ABOVE PAVEMENT EDGE OR 7" MINIMUM, IF ROADWAY CONDITIONS DICTATE.
- 4) WHEN THE CONSTRUCTION AREA HAS ENTRANCE/EXIT RAMP OR INTERSECTIONS, WORK WILL BE PERFORMED IN SUCH A MANNER TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE AS POSSIBLE. ADDITIONAL CANNELIZATION AND SIGNING SHALL BE INSTALLED, AS REQUIRED, TO ALLOW TRAFFIC TO REMAIN AS OPERATIONAL AS POSSIBLE. WHEN ENTRANCE RAMP/INTERSECTIONS ARE INOPERABLE, FLAGGERS WILL BE UTILIZED TO CONTROL AND PROHIBIT MOVEMENT INTO THE PROJECT AT THAT POINT UNTIL CONSTRUCTION HAS CLEARED THE RESTRICTION SUFFICIENT TO RETURN TO OPERATIONAL STATUS.
- 5) FOR NIGHT TIME OPERATIONS ALL CHANNELIZING DEVICES IN ADVANCE OF AND THROUGHOUT THE WORK AREA SHALL BE TYPE I BARRICADES OR STRIPED DRUMS AND SHALL HAVE TYPE "C" YELLOW STEADY BURNING LIGHTS. SPACING OF DEVICES SHALL BE AS SHOWN. DURING DAYLIGHT HOURS, CONES (28" MIN.) MAY BE USED IN ADVANCE OF AND THROUGHOUT WORK AREA.
- 6) SIGNS SHOWN HERE ARE IN ADDITION TO ALL ADVANCE WARNING SIGNS REQUIRED IN SECTION 150. WARNING FLAGS OR AND FLASHING LIGHTS ON SIGNS SHALL BE AS REQUIRED BY SECTION 150.
- 7) FLAGGERS SHALL BE PROVIDED AS NECESSARY TO PROHIBIT WRONG DIRECTION OF TRAFFIC THROUGH WORK AREAS AT ALL FEDERAL OR STATE ROUTE INTERSECTIONS AND AT COUNTY ROADS OR MAJOR DRIVEWAY INTERSECTIONS WITH SIGNIFICANT ENTERING TRAFFIC.
- 8) WHEN NOT IN USE, PORTABLE SIGNS SHALL BE REMOVED OR LOCATED A MINIMUM OF 30' FROM THE PAVEMENT EDGE AND PLACED SO THE MESSAGE IS NOT VISIBLE TO THE MOTORIST.
- 9) PAYMENT FOR TRAFFIC CONTROL SHALL BE PER SECTION 150.
- 10) SAFETY FENCING SHALL BE IN PLACE IN ALL WORK AREAS AT THE END OF EACH DAY.
- 11) SAFETY FENCING SHALL HAVE SIGNS POSTED ON FENCING THAT READS "CONSTRUCTION WORK SITE KEEP OUT",

LEGEND

- TYPE "A" SINGLE DIRECTION FLASHING LIGHT
- 18"x18" FLUORESCENT RED/ORANGE OR ORANGE/RED WARNING FLAG
- PORTABLE MOUNTED SIGN
- TEMPORARY POST MOUNTED SIGN
- FLAGGER WITH STOP/SLOW PADDLE
- TRAFFIC CONE - 28" MIN.
- WORK AREA
- SAFETY FENCE

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0001-00(562)	3	19

REVISIONS	
DATE	DESCRIPTION
12-09	GDOT



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 23 TY TY OMEGA RD.
 TIFTON, GA. 31794
 Phone: 229.382.0003



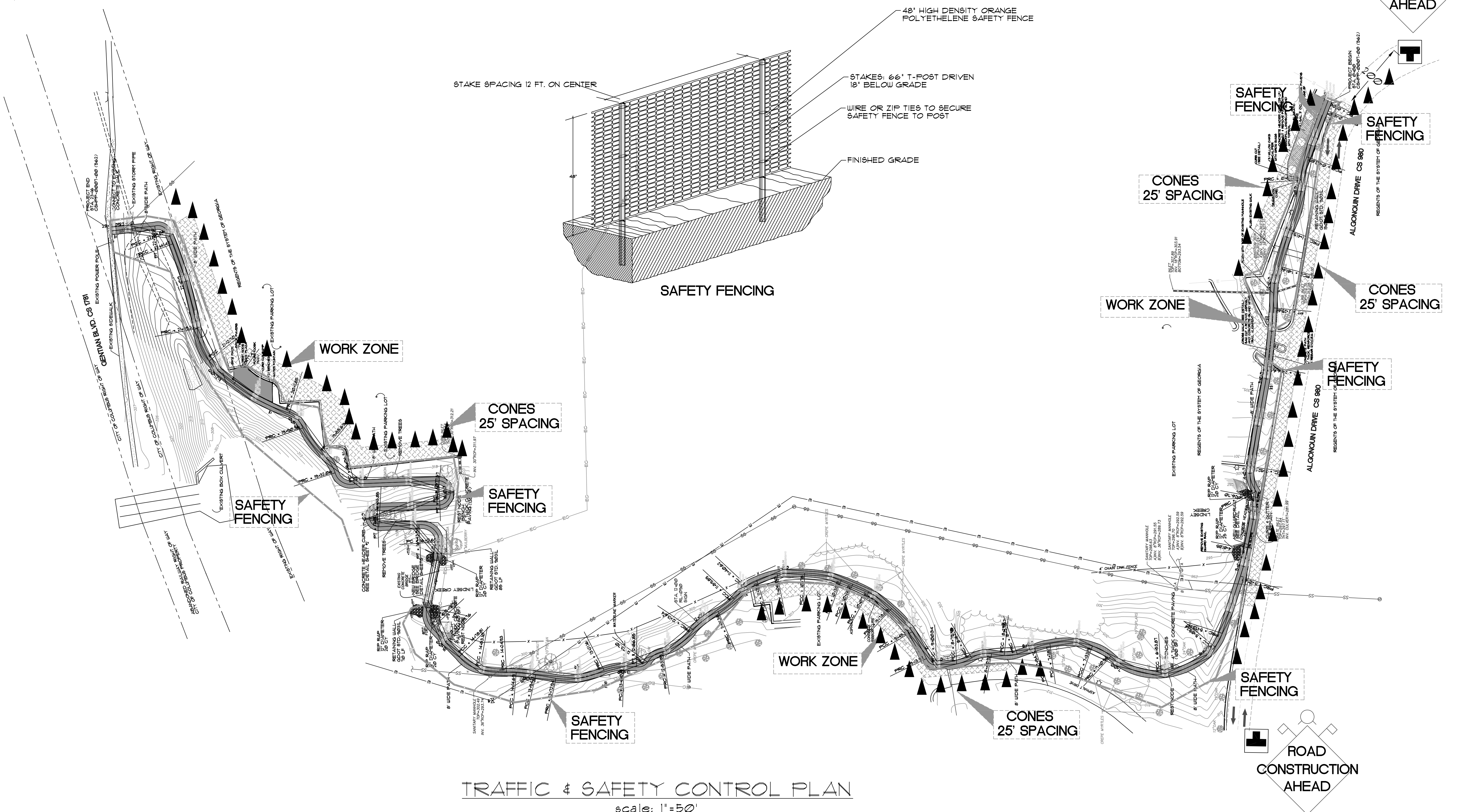
PROJECT:
 MULT-USE TRAIL
 COLUMBUS, GA
 CLIENT:
 COLUMBUS STATE
 UNIVERSITY

SHEET TITLE:
 SAFETY & TRAFFIC
 CONTROL PLAN

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DATE: 12/09
 SCALE: 1" = 50'

SHEET NO.:
3
 of 19



TRAFFIC & SAFETY CONTROL PLAN
 scale: 1" = 50'

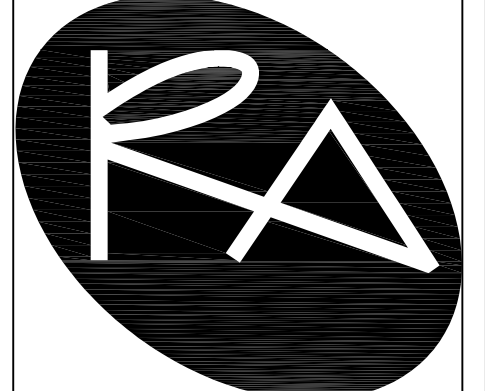
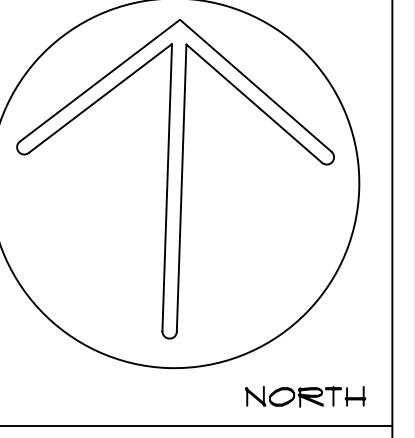
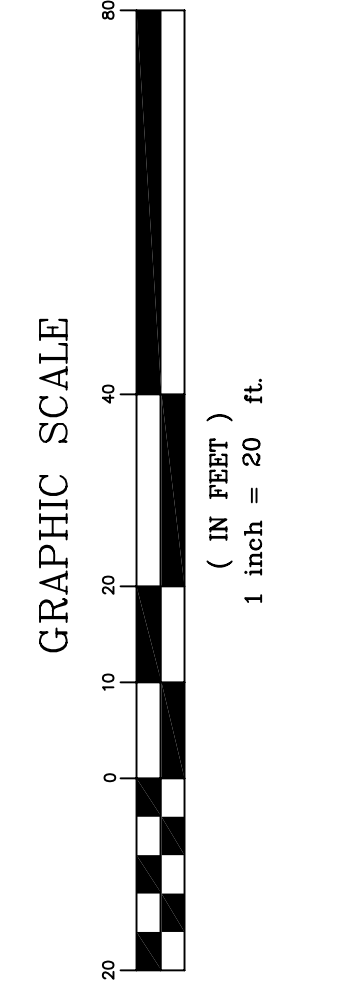
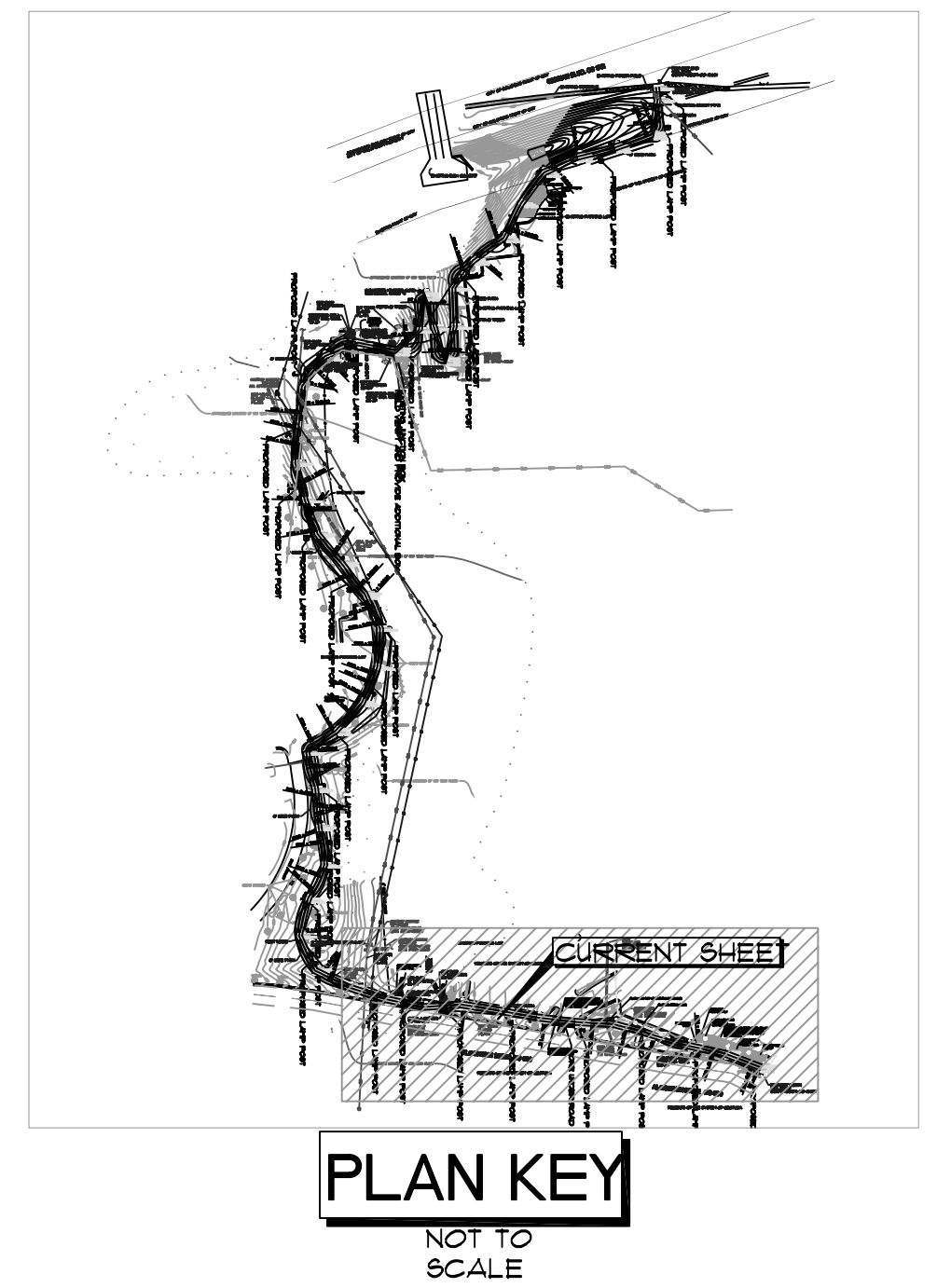
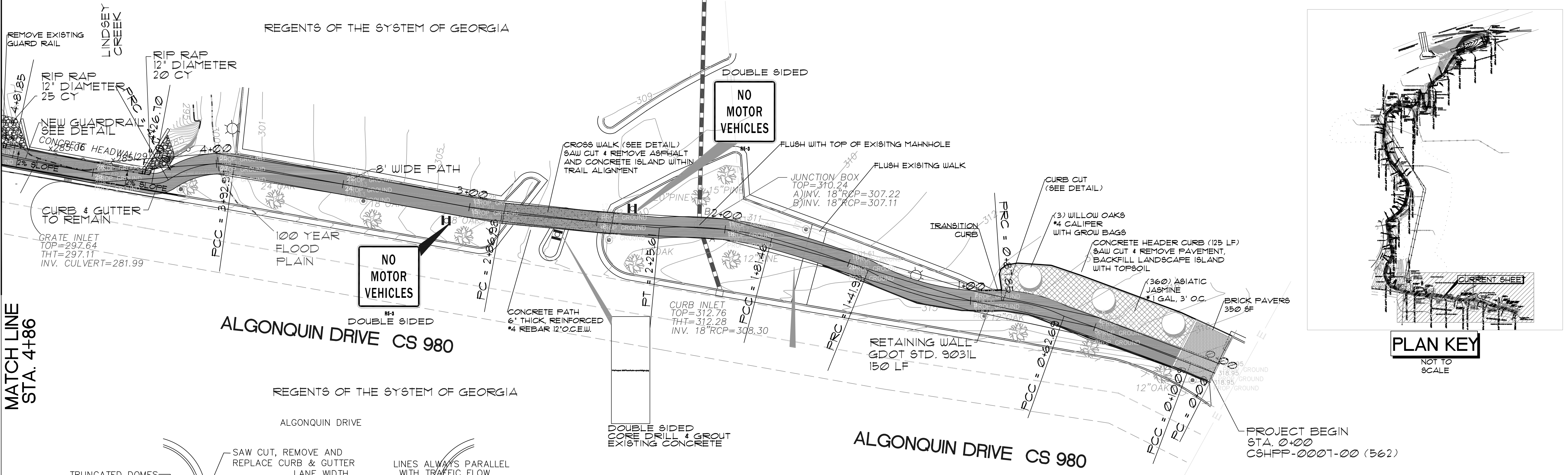
SANITARY MANHOLE
TOP=296.70
A) INV. 8" RCP=292.59
B) INV. 8" RCP=292.59

EXISTING PARKING LOT

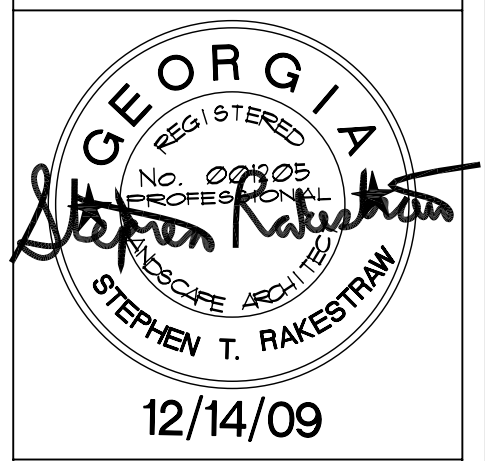
MULTI-USE TRAIL PLAN
SCALE 1" = 20'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0001-00(562)	4	19

REVISIONS	
DATE	DESCRIPTION
12-09	GDOT



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PROJECT:
MULTI-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

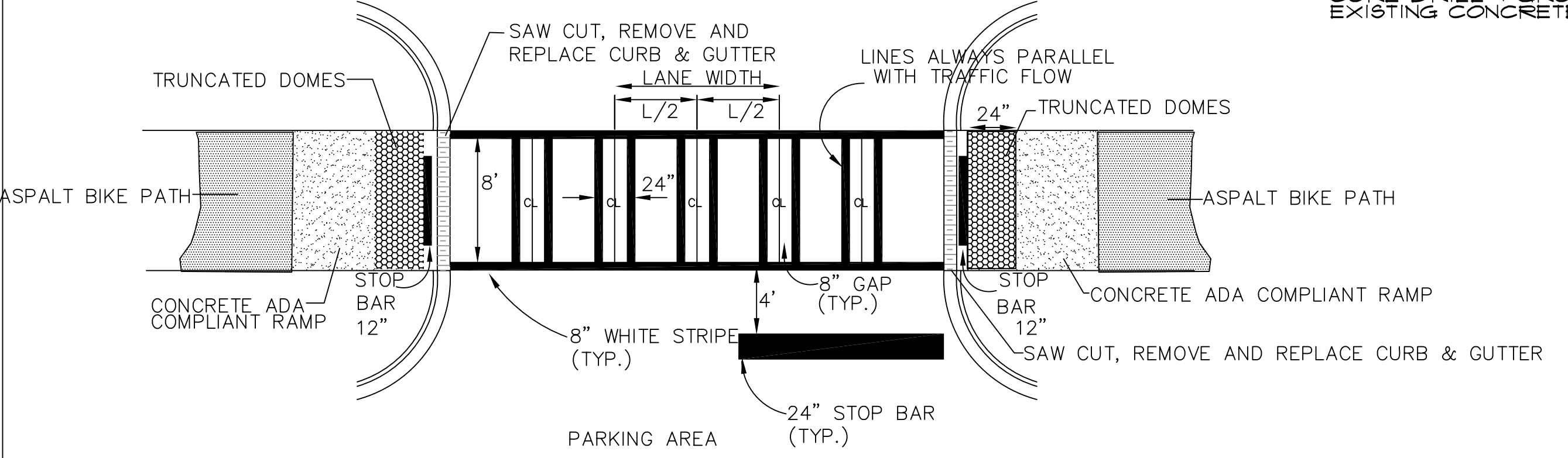
SHEET TITLE:
TRAIL
PLAN & PROFILE

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DATE: 12/09
SCALE: 1" = 20'

SHEET NO.:
4
OF 19

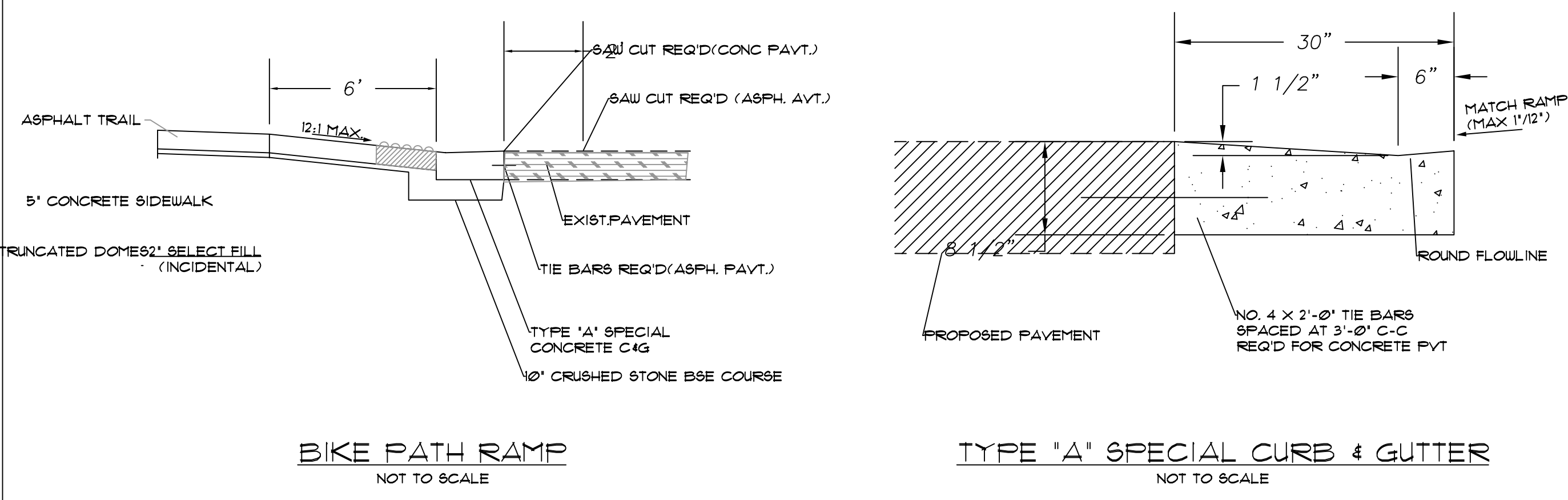
MATCH LINE
STA. 4+86



CROSSWALK STRIPING DETAIL

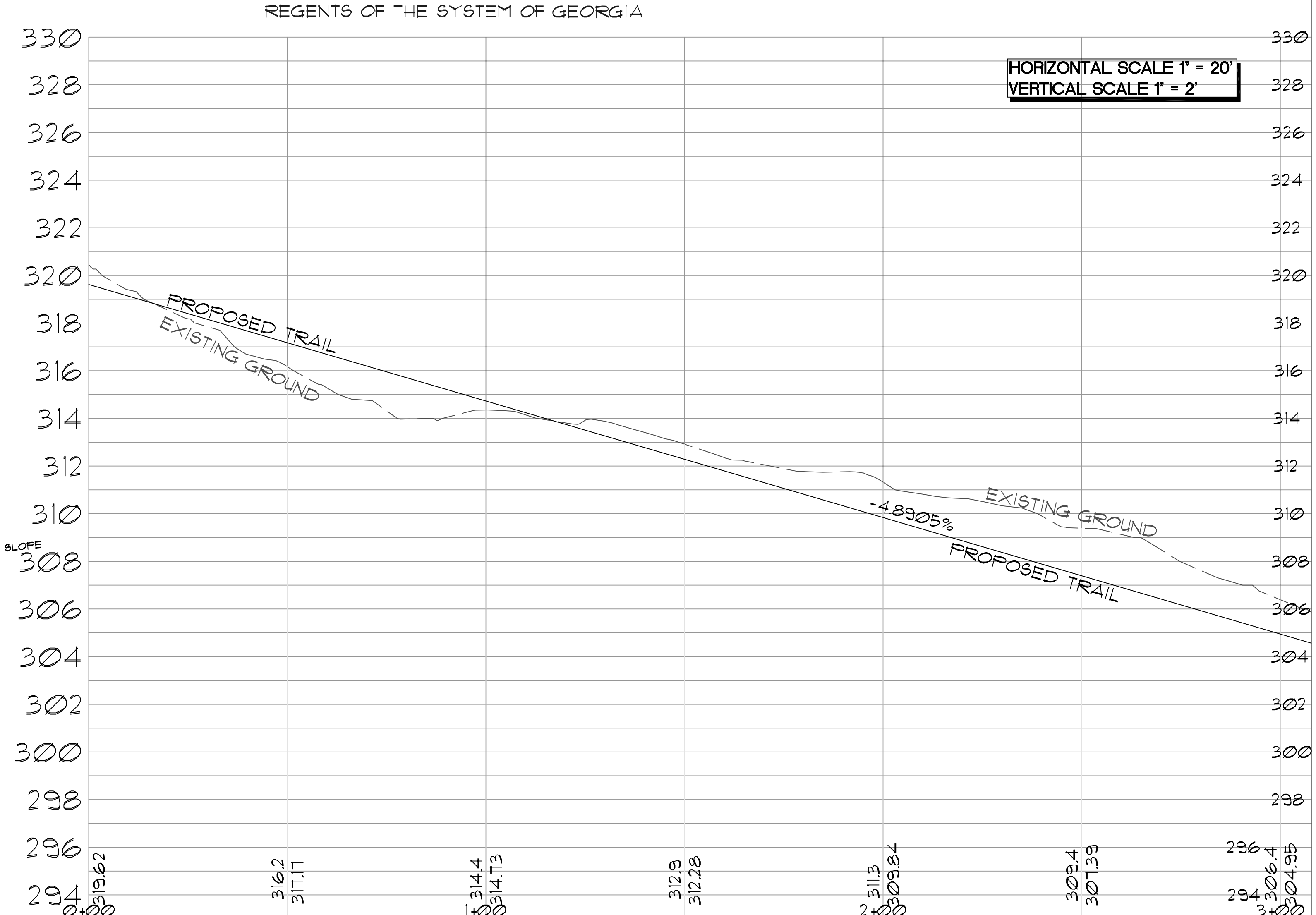
SEE GEORGIA DEPARTMENT OF TRANSPORTATION SPECIAL DETAIL FOR T-11A LATEST REVISION
SEE GEORGIA DEPARTMENT OF TRANSPORTATION SPECIAL DETAIL FOR A-3 LATEST REVISION
TRUNCATED DOME PAVERS ARE TO MATCH EXISTING

SEE WEBSITE:
<http://tomcat2.dot.state.ga.us/stds-dtls/edtls.jsp>



BIKE RAMP CURB CUT DETAIL

BIKE RAMP CURB CUT DETAIL

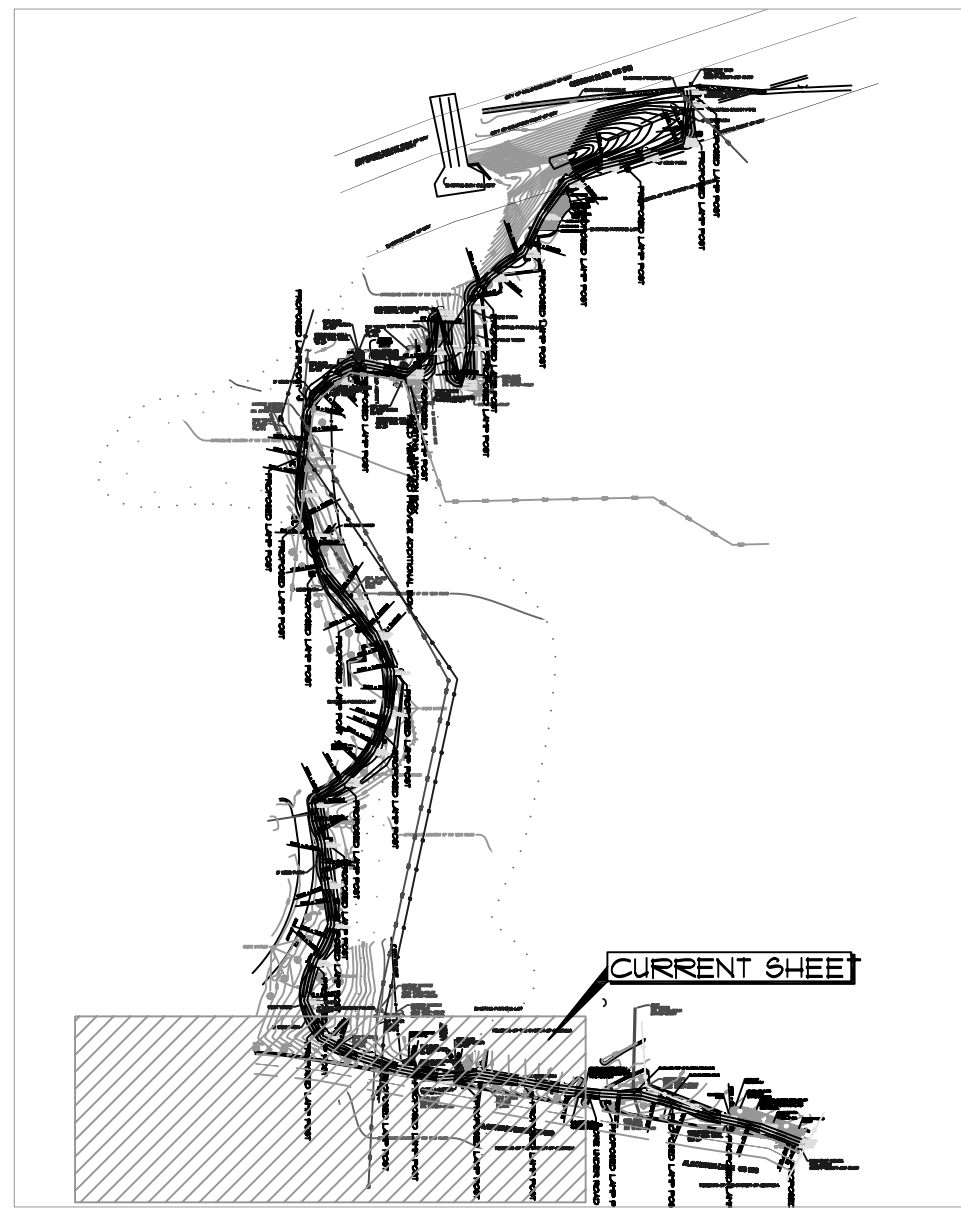


HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 2'

MATCH LINE
STA. 6+30

MULTI-USE TRAIL PLAN

SCALE 1" = 20'

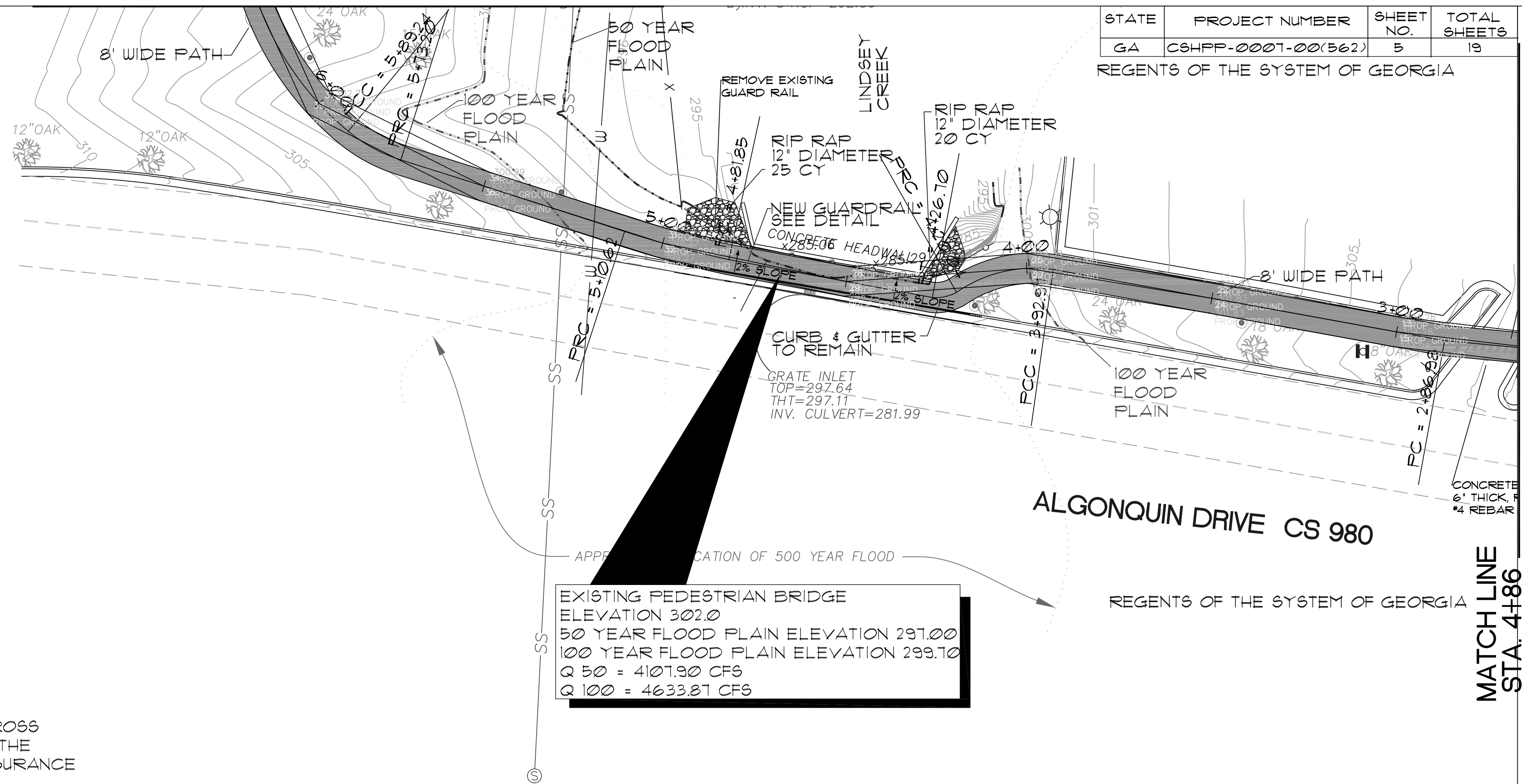


PLAN KEY

NOT TO SCALE

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 2'

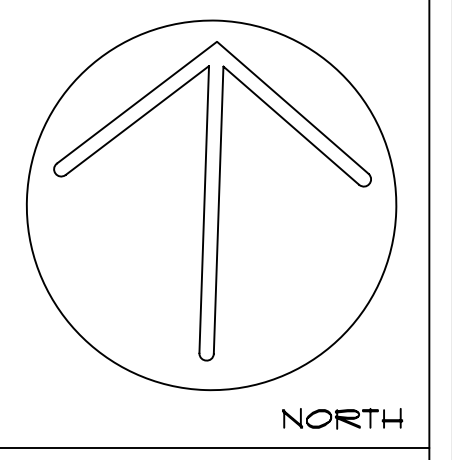
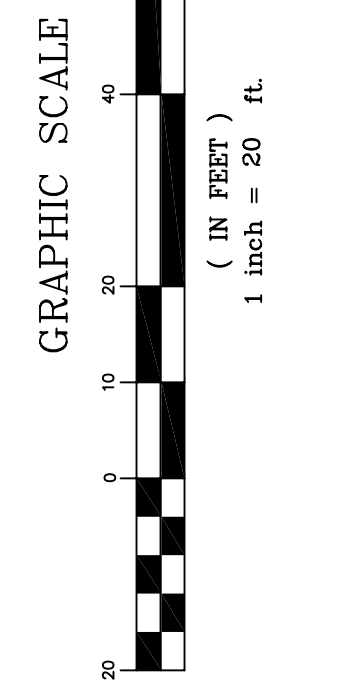
FLOODPLAIN ELEVATION WERE BASED OF CROSS SECTION ELEVATIONS OF LINDSEY CREEK IN THE SEPTEMBER 5, 2001 ISSUE OF THE FLOOD INSURANCE STUDY, VOLUME 1 OF 2, CITY OF COLUMBUS, MUSCOGEE COUNTY, GEORGIA. COMMUNITY #135158, FLOOD INSURANCE STUDY #135158V001A



EXISTING PEDESTRIAN BRIDGE
ELEVATION 302.0
50 YEAR FLOOD PLAIN ELEVATION 297.00
100 YEAR FLOOD PLAIN ELEVATION 299.70
Q 50 = 4107.90 CFS
Q 100 = 4633.87 CFS

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0001-00(562)	5	19

REVISIONS	
DATE	DESCRIPTION
12-09	GDOT



Rakestraw & Associates
Planning • Design • Environmental
23 TY TY OMEGA RD.
TIFTON, GA. 31794
Phone: 229.382.0009

REGISTERED PROFESSIONAL ENGINEER
STEPHEN T. RAKESTRAW
12/14/09

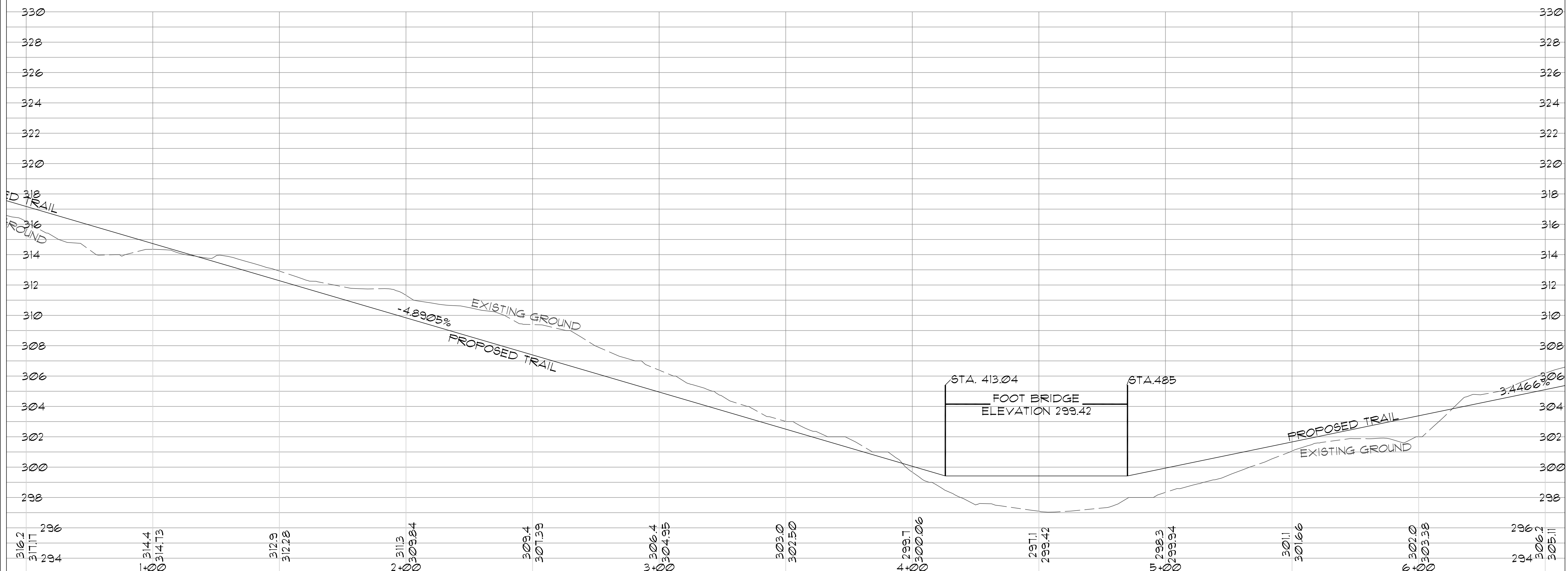
PROJECT:
MULT-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE UNIVERSITY

SHEET TITLE:
TRAIL
PLAN & PROFILE

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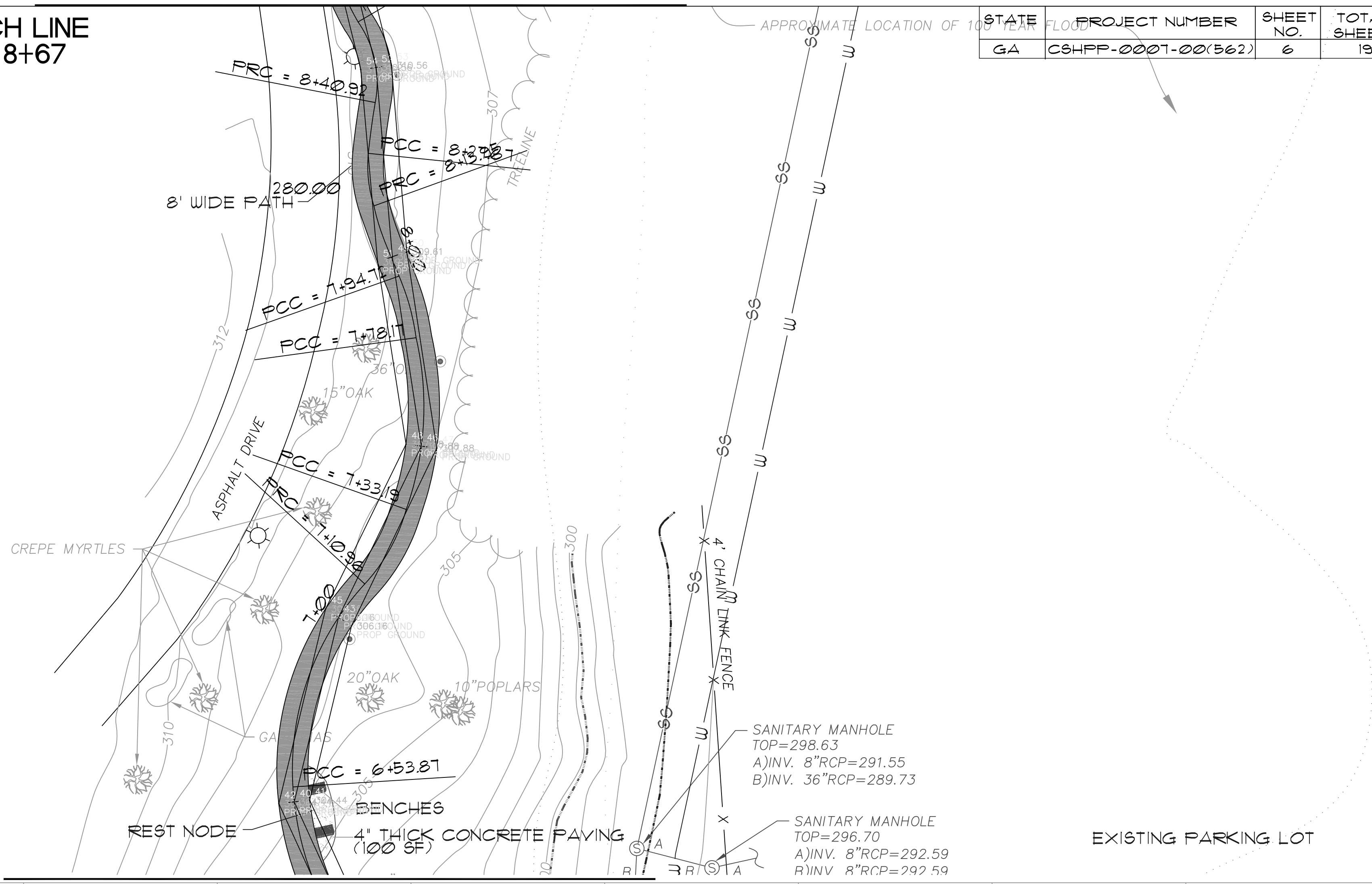
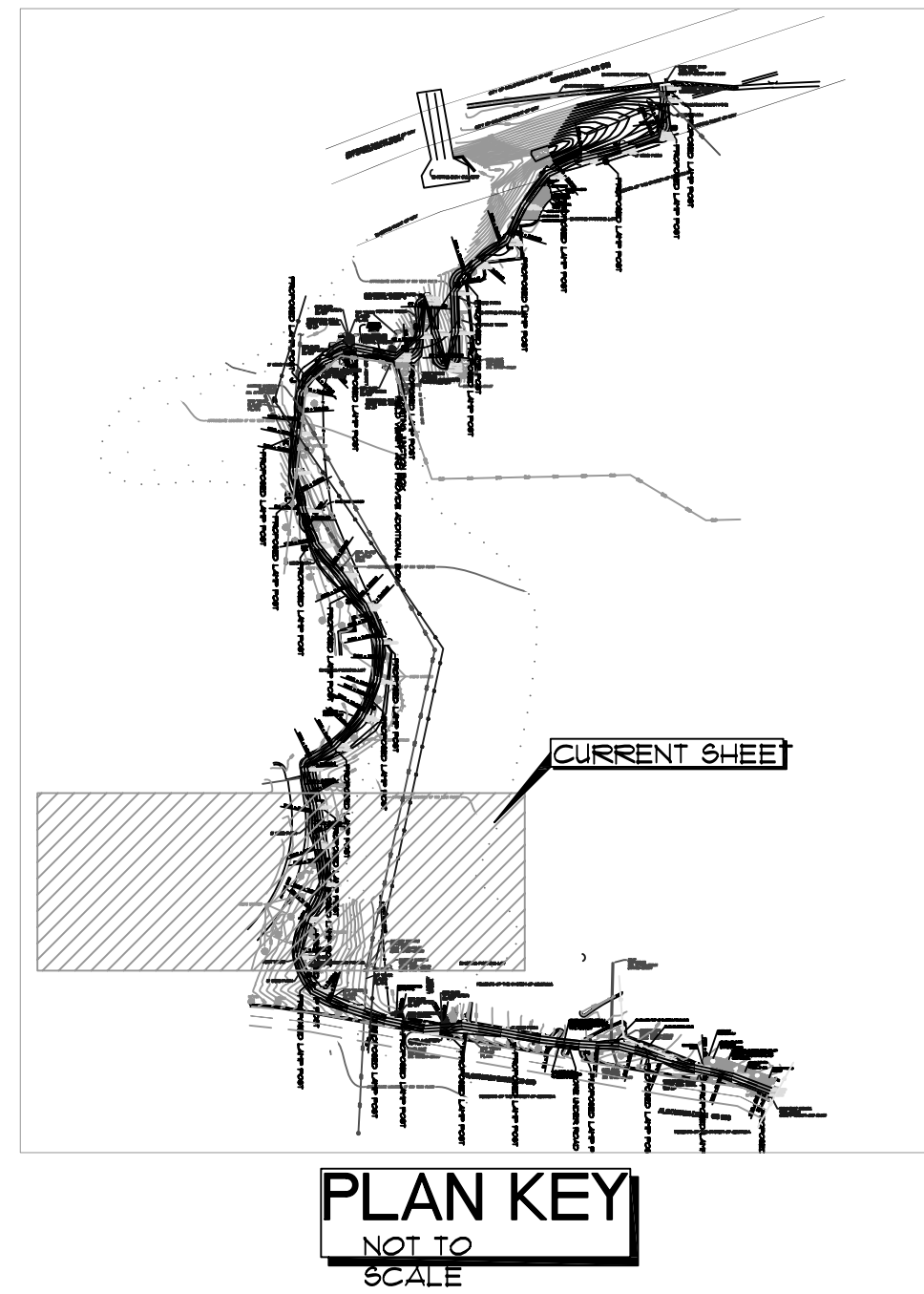
DATE: 12/09
SCALE: 1" = 20'

SHEET NO.:
5
OF 19

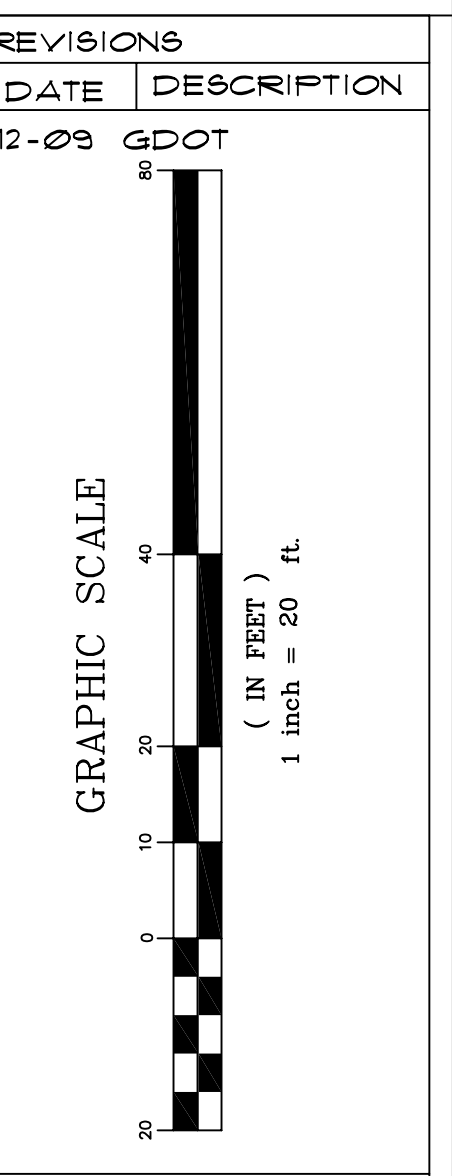


MATCH LINE
STA. 8+67

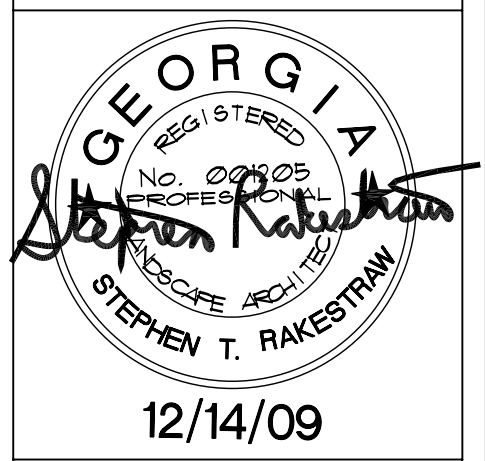
MULTI-USE TRAIL PLAN
SCALE 1" = 20'



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0001-00(562)	6	19



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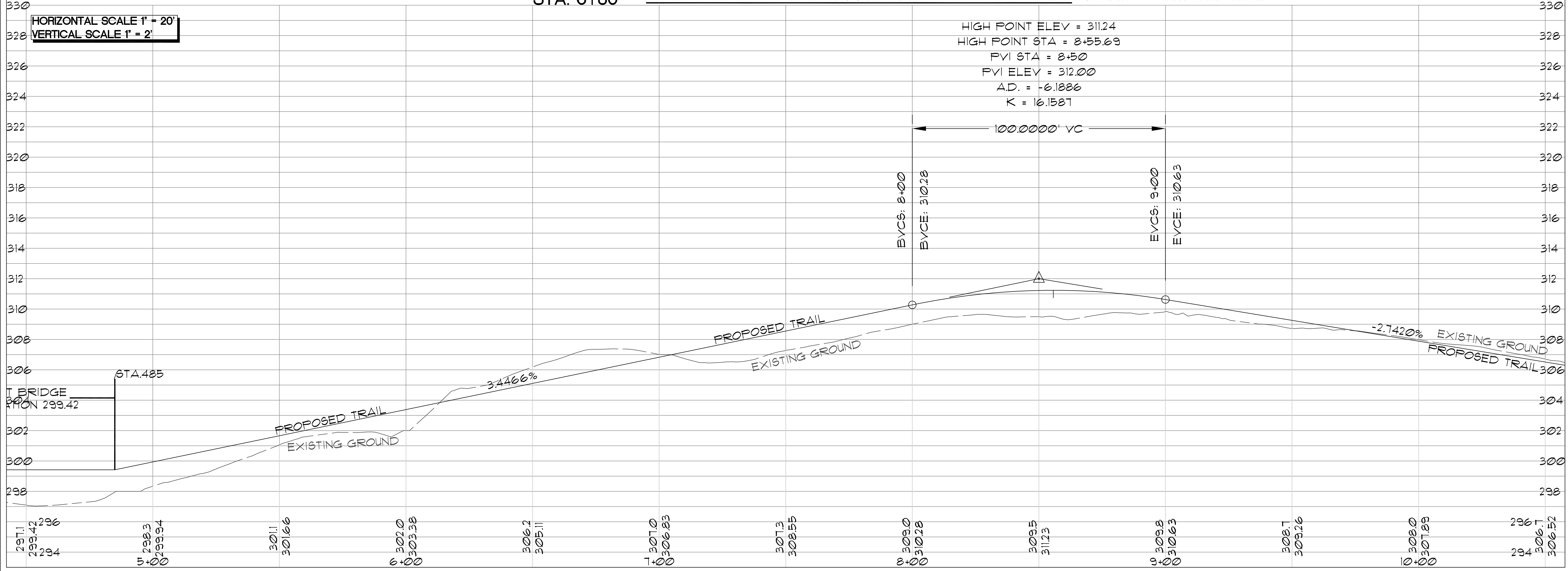
PROJECT:
MULT-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

SHEET TITLE:
TRAIL
PLAN & PROFILE

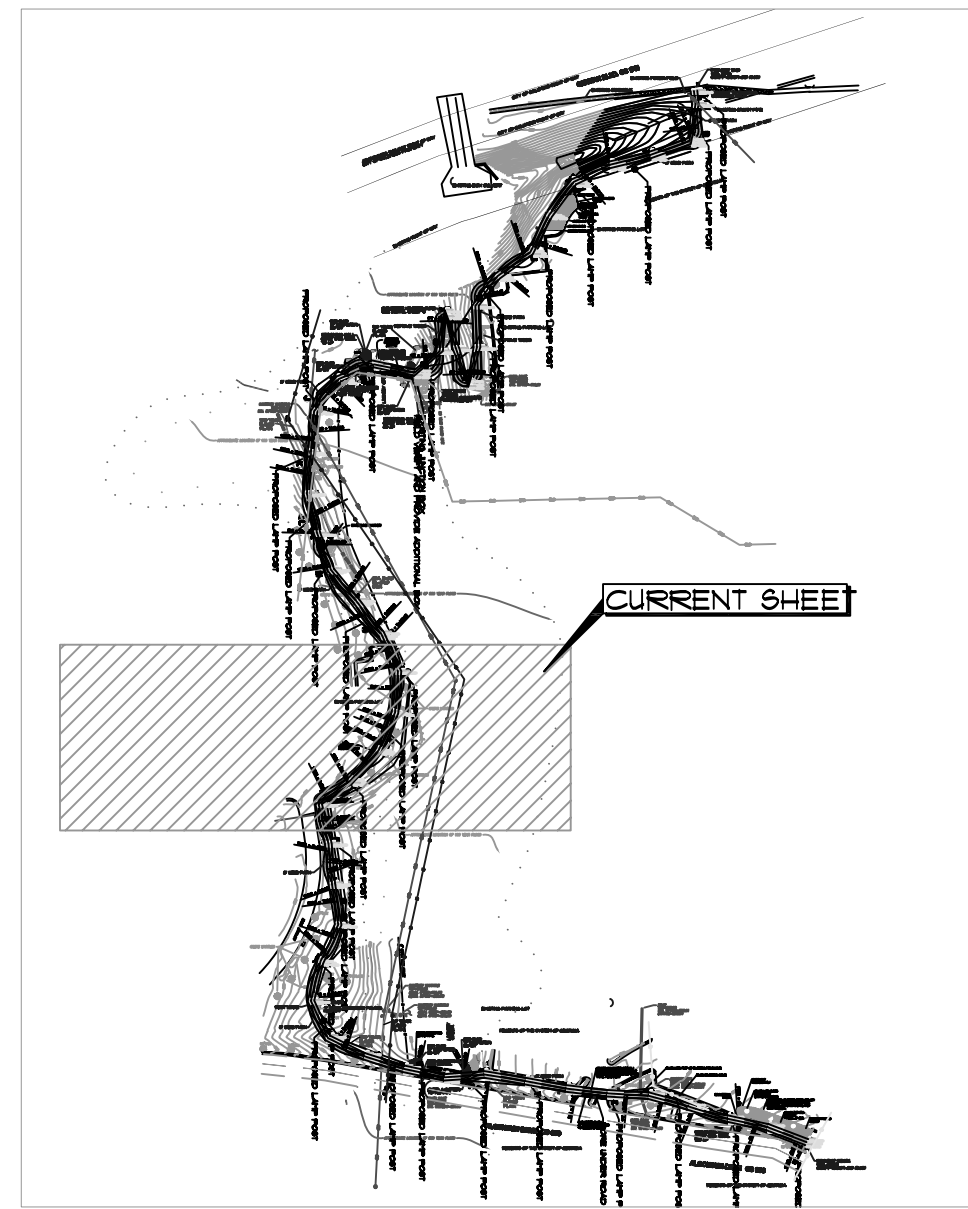
DATE: 12/09
SCALE: 1" = 20'

SHEET NO.:
6
of 19

MATCH LINE
STA. 6+30



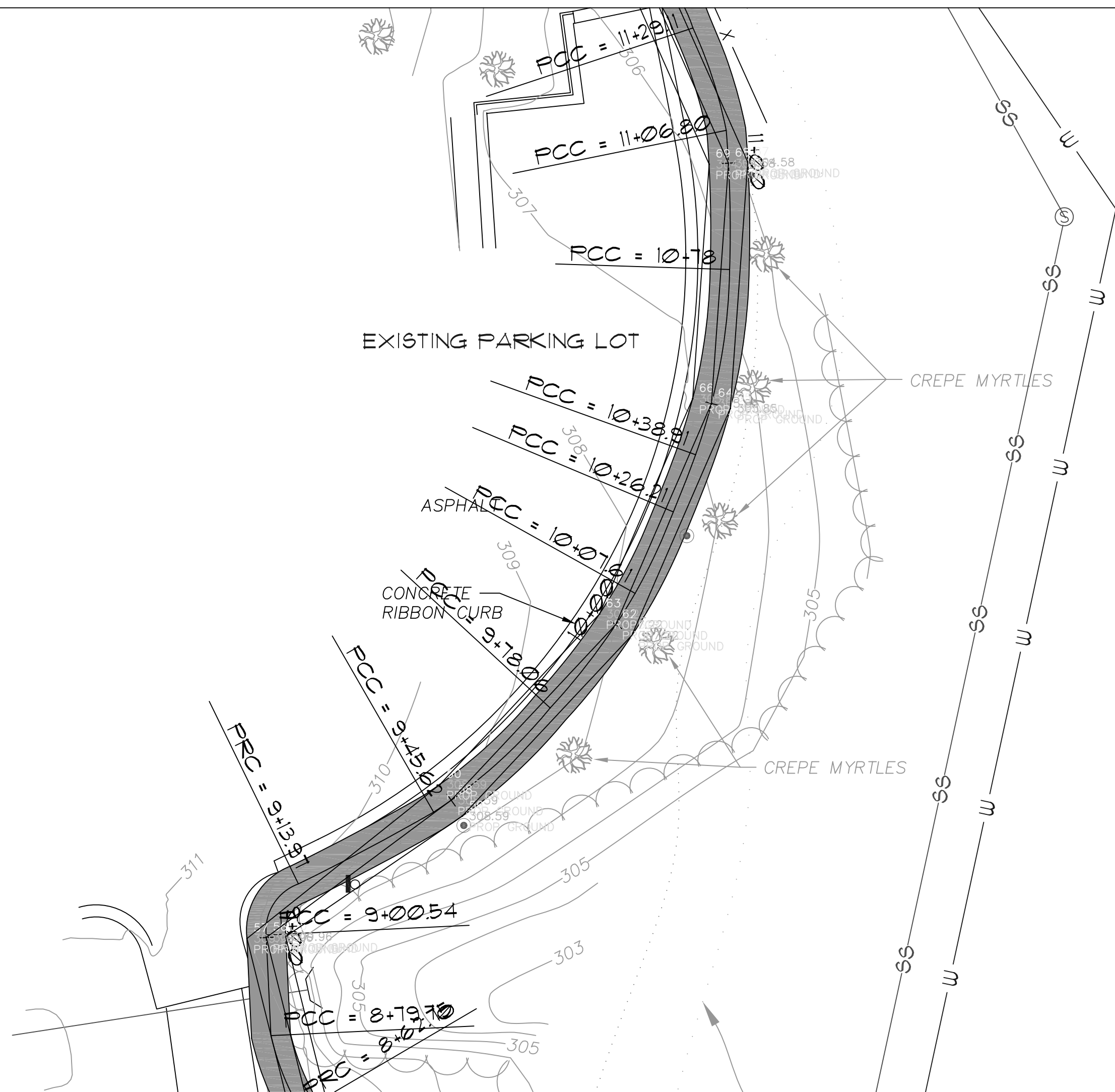
HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 2'



PLAN KEY

NOT TO SCALE

MULTI-USE TRAIL PLAN
SCALE 1" = 20'

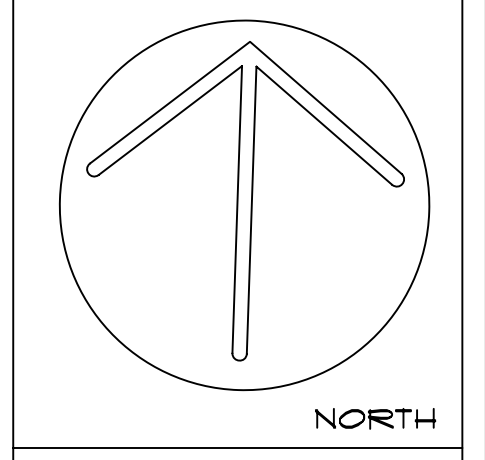


STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0001-00(562)	7	19

REVISIONS

DATE	DESCRIPTION
12-09	GDOT

GRAPHIC SCALE
(IN FEET)
1 inch = 80 ft.



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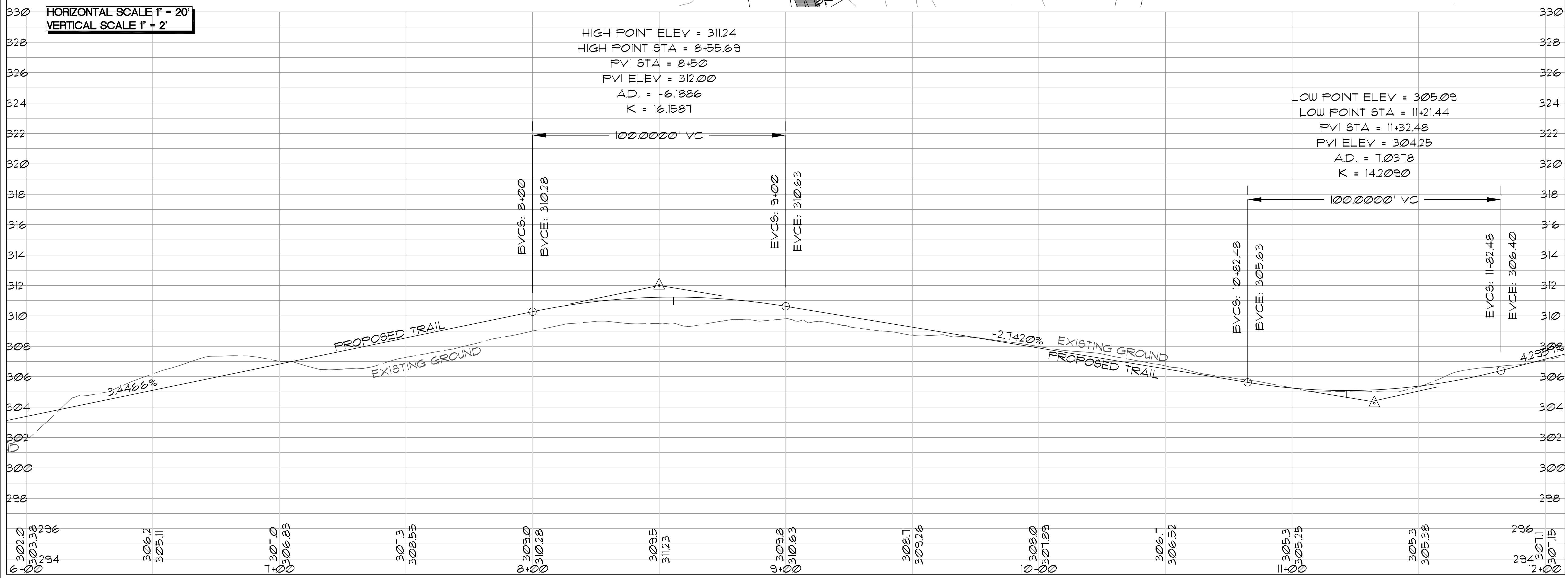
12/14/09

PROJECT:
MULTI-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

SHEET TITLE:
TRAIL
PLAN & PROFILE

DATE: 12/09
SCALE: 1" = 20'

SHEET NO.:
7
OF 19

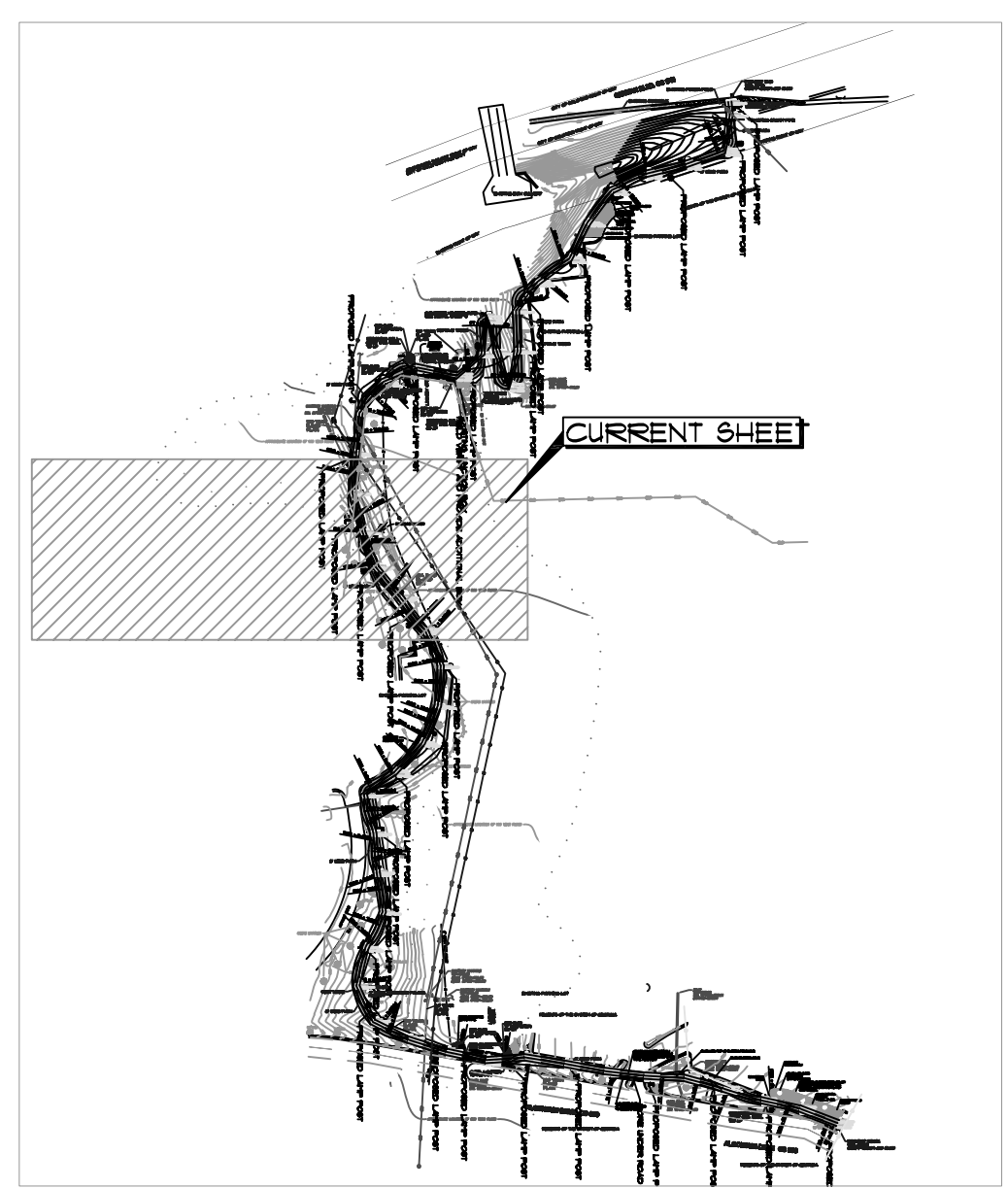


MULTI-USE TRAIL PLAN
SCALE 1" = 20'

MATCH LINE
STA. 13+97

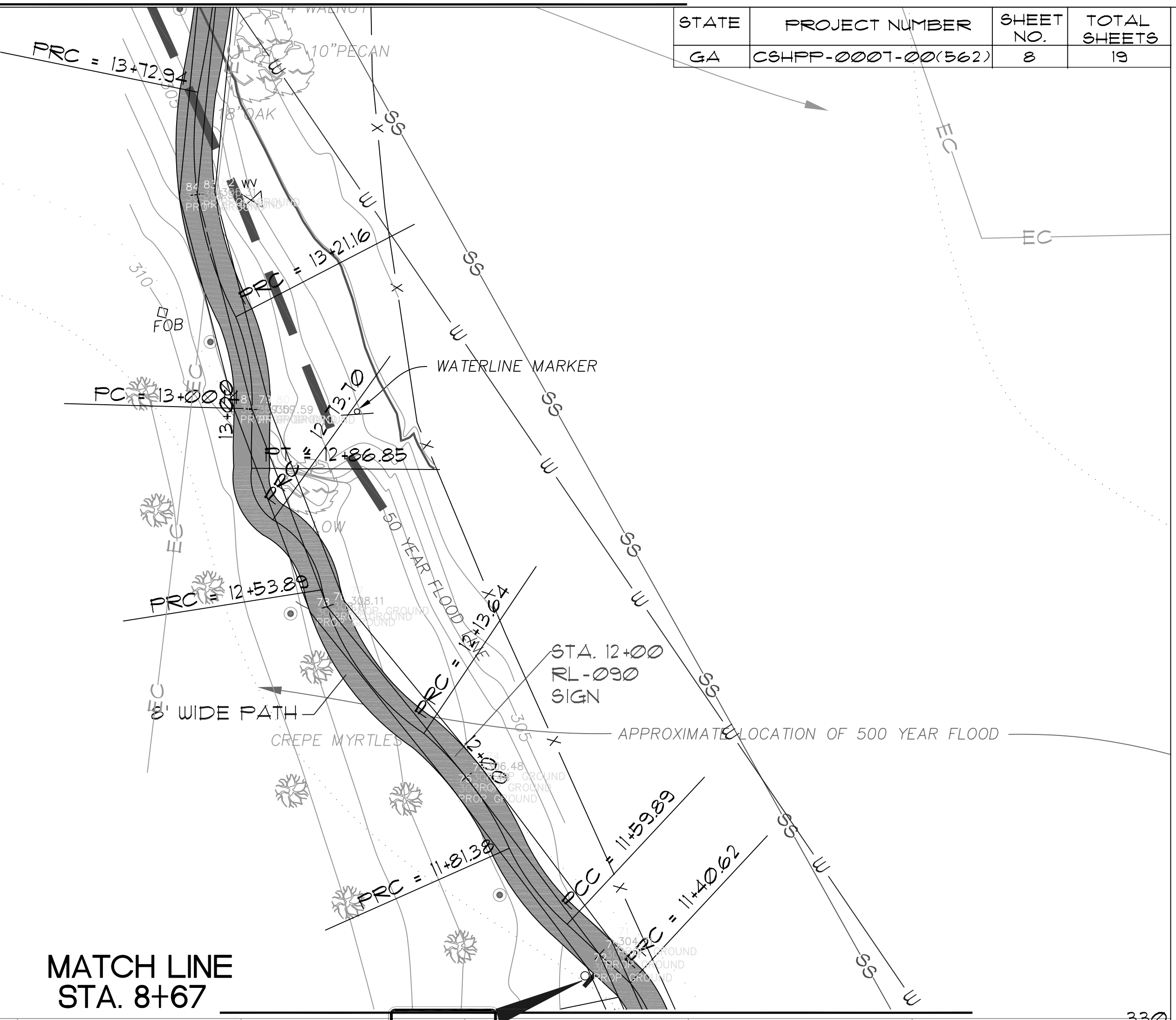
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-000T-00(562)	8	19

REVISIONS	
DATE	DESCRIPTION
12-09	GDOT



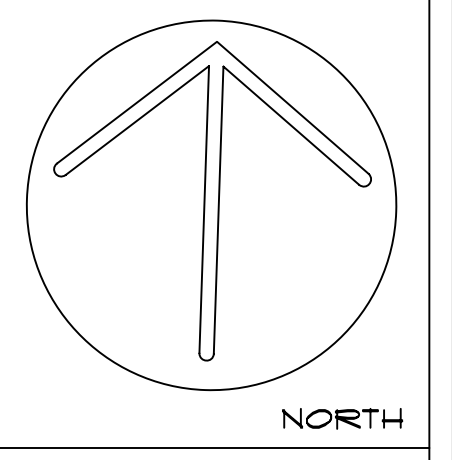
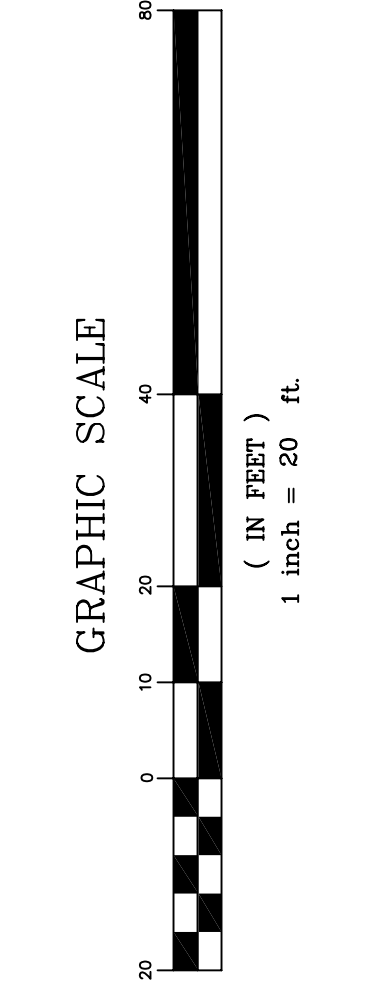
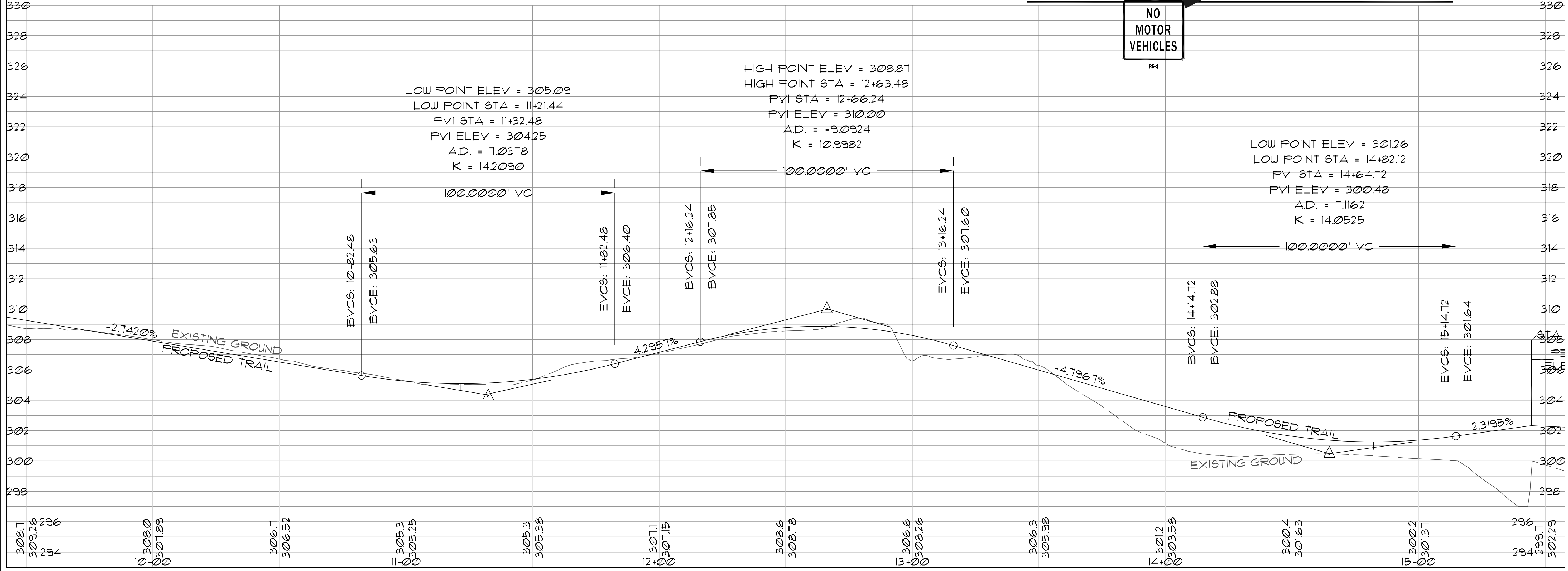
PLAN KEY
NOT TO SCALE

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 2'

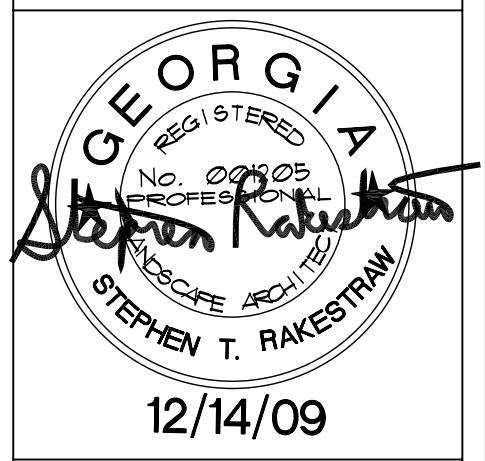


MATCH LINE
STA. 8+67

NO MOTOR VEHICLES



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 TIFTON, GA. 31794
 Phone: 229.382.0009



PROJECT:
MULTI-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE UNIVERSITY

SHEET TITLE:
TRAIL PLAN & PROFILE

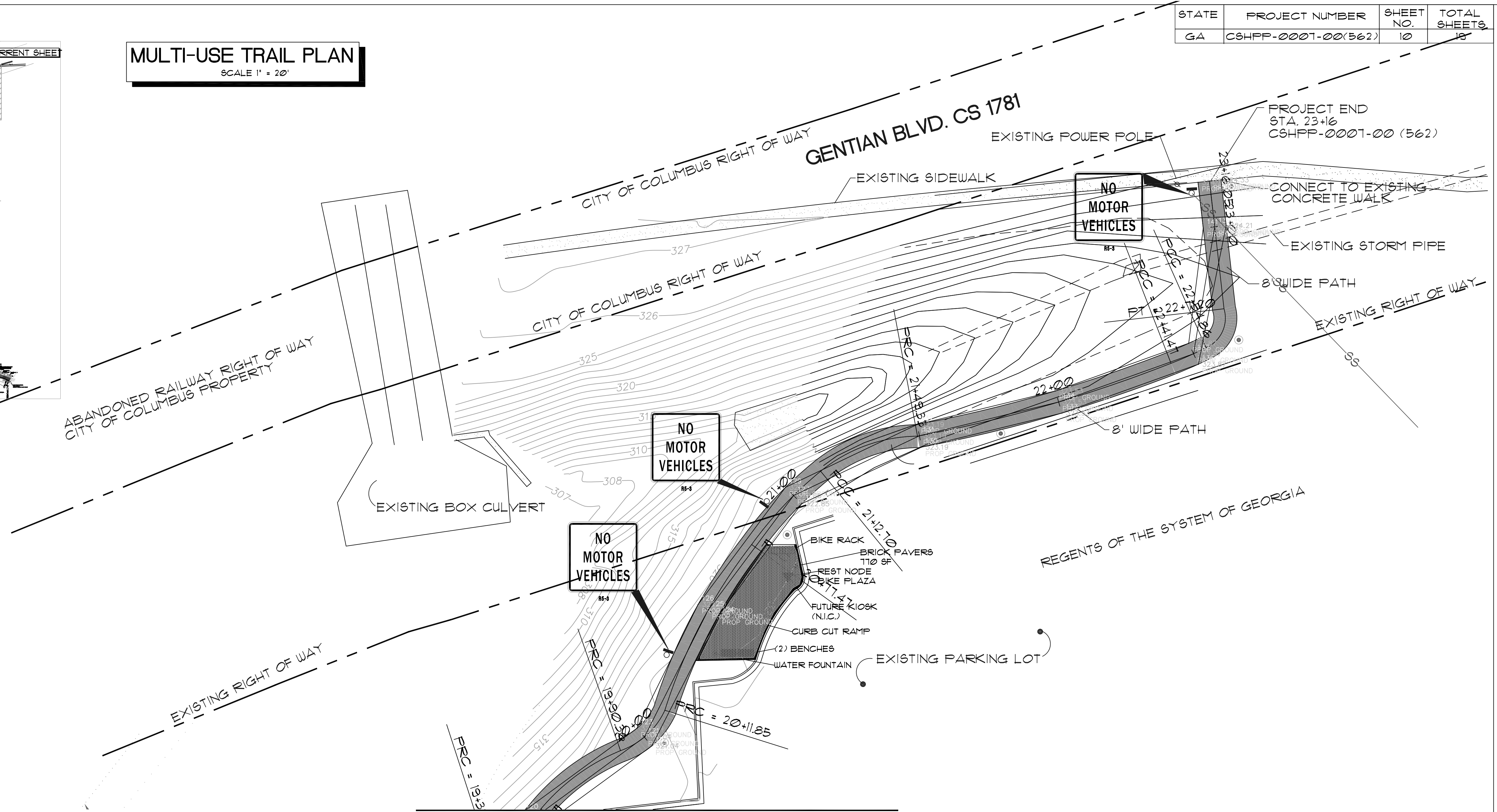
DATE: 12/09
SCALE: 1" = 20'

SHEET NO.:
8
OF 19

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0001-00(562)	10	18

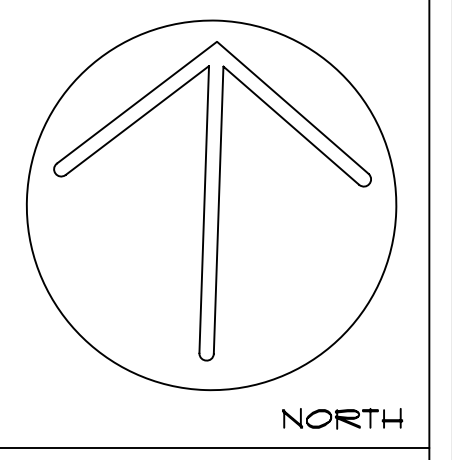
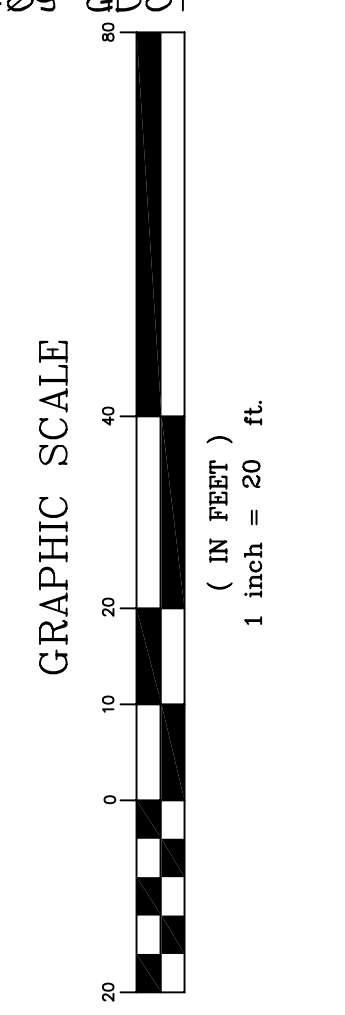
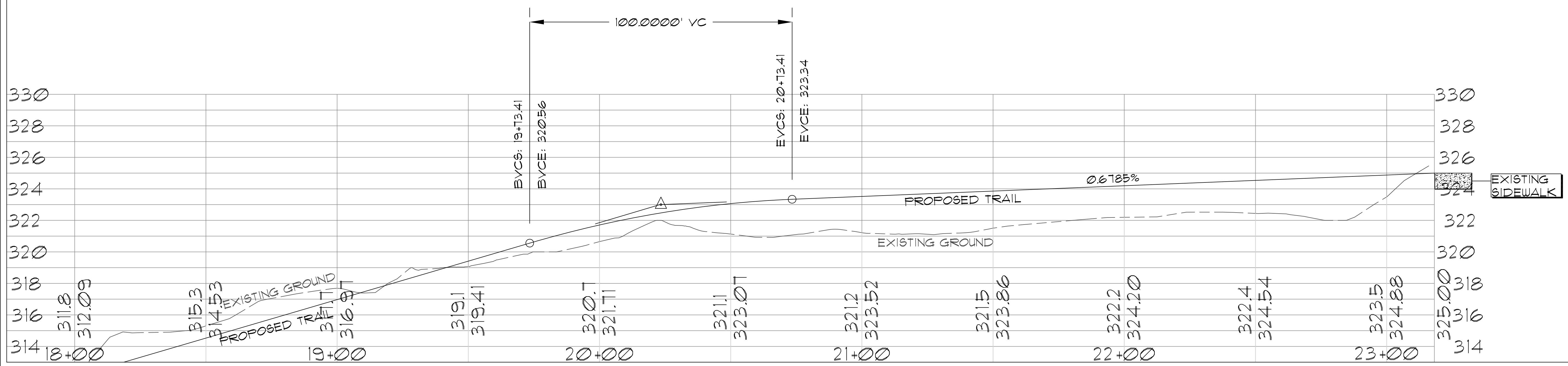
REVISIONS	
DATE	DESCRIPTION
12-09	GDOT

MULTI-USE TRAIL PLAN
SCALE 1" = 20'

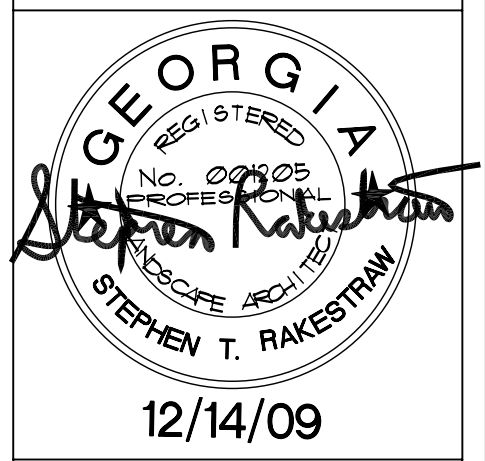


PVI STA = 20+23.41
PVI ELEV = 323.00
A.D. = -4.2065
K = 23.7128

MATCH LINE
STA. 19+55



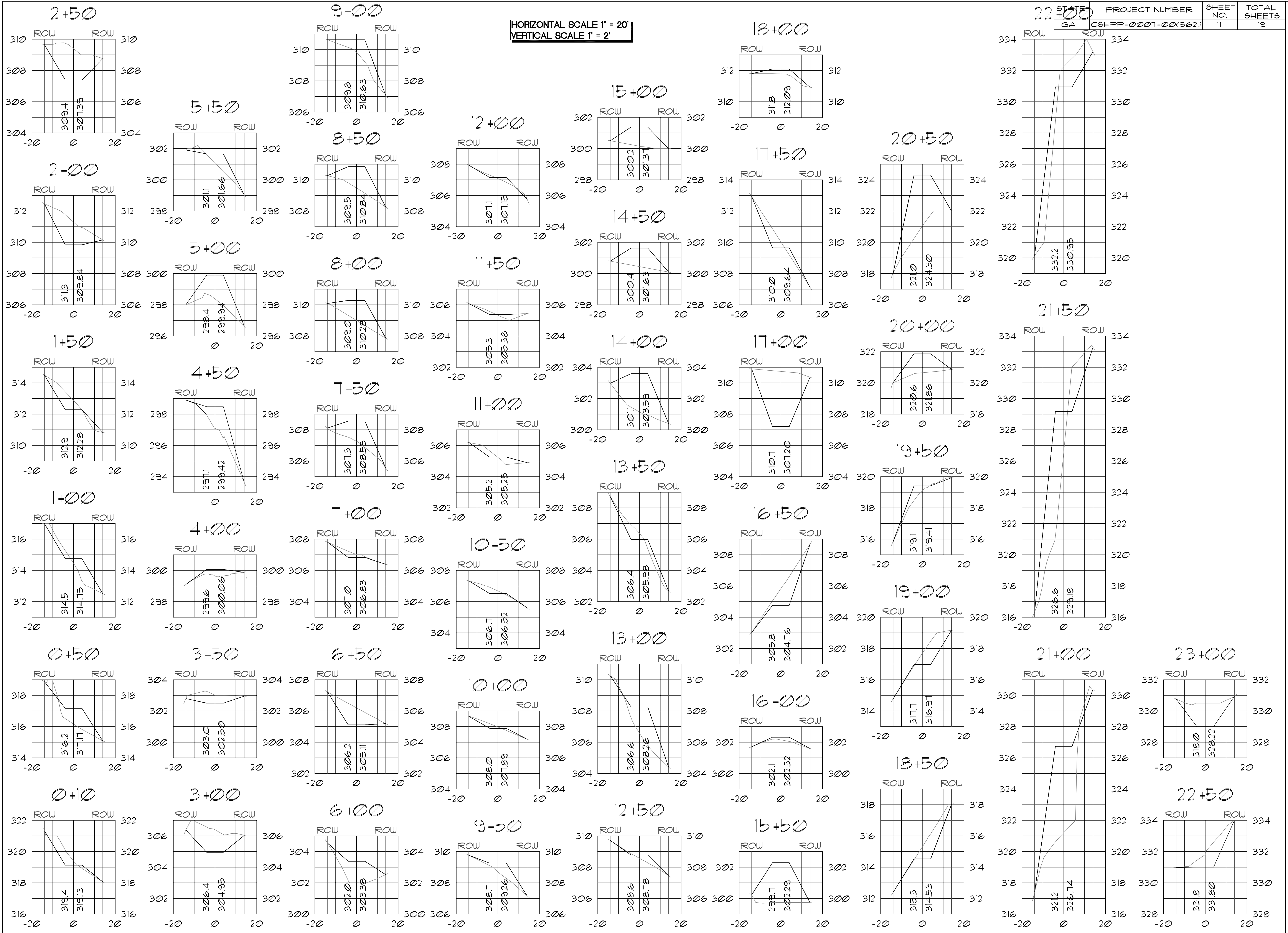
Rakestraw & Associates
Planning • Design • Environmental
23 TY TY OMEGA RD.
TIFTON, GA. 31794
Phone: 229.382.0003



12/14/09
PROJECT:
MULTI-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

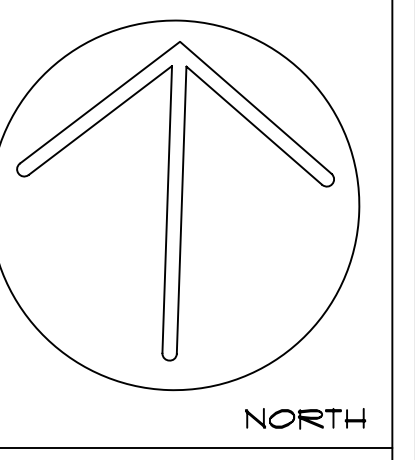
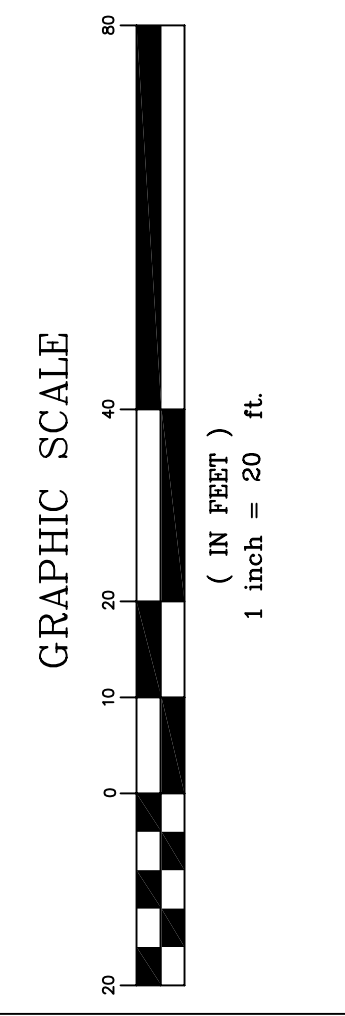
SHEET TITLE:
TRAIL
PLAN & PROFILE

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DATE: 12/09
SCALE: 1" = 20'
SHEET NO.:
10
of 18



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0001-00(562)	11	19

REVISIONS	
DATE	DESCRIPTION
12-09	GDOT



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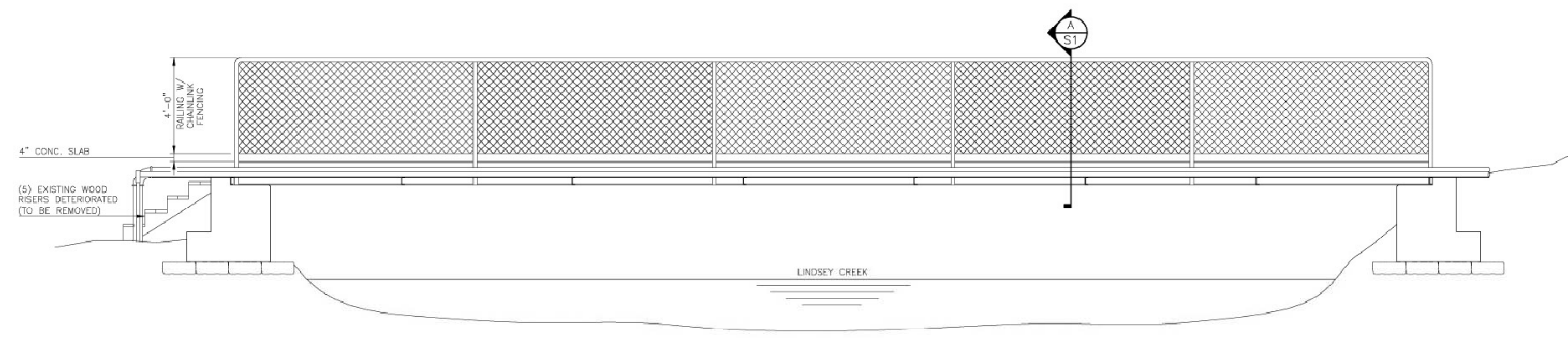
12/14/09

PROJECT:
 MULT-USE TRAIL
 COLUMBUS, GA
 CLIENT:
 COLUMBUS STATE
 UNIVERSITY

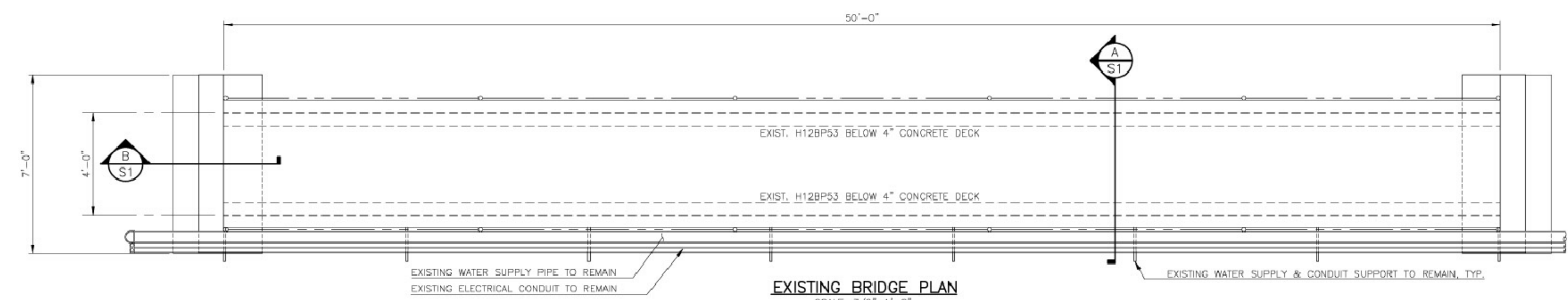
SHEET TITLE:
 CROSS SECTIONS

© 2009 RAKESTRAW & ASSOCIATES, INC.
 DATE: 12/09
 SCALE: 1" = 20'
 SHEET NO.:
11
 OF 19

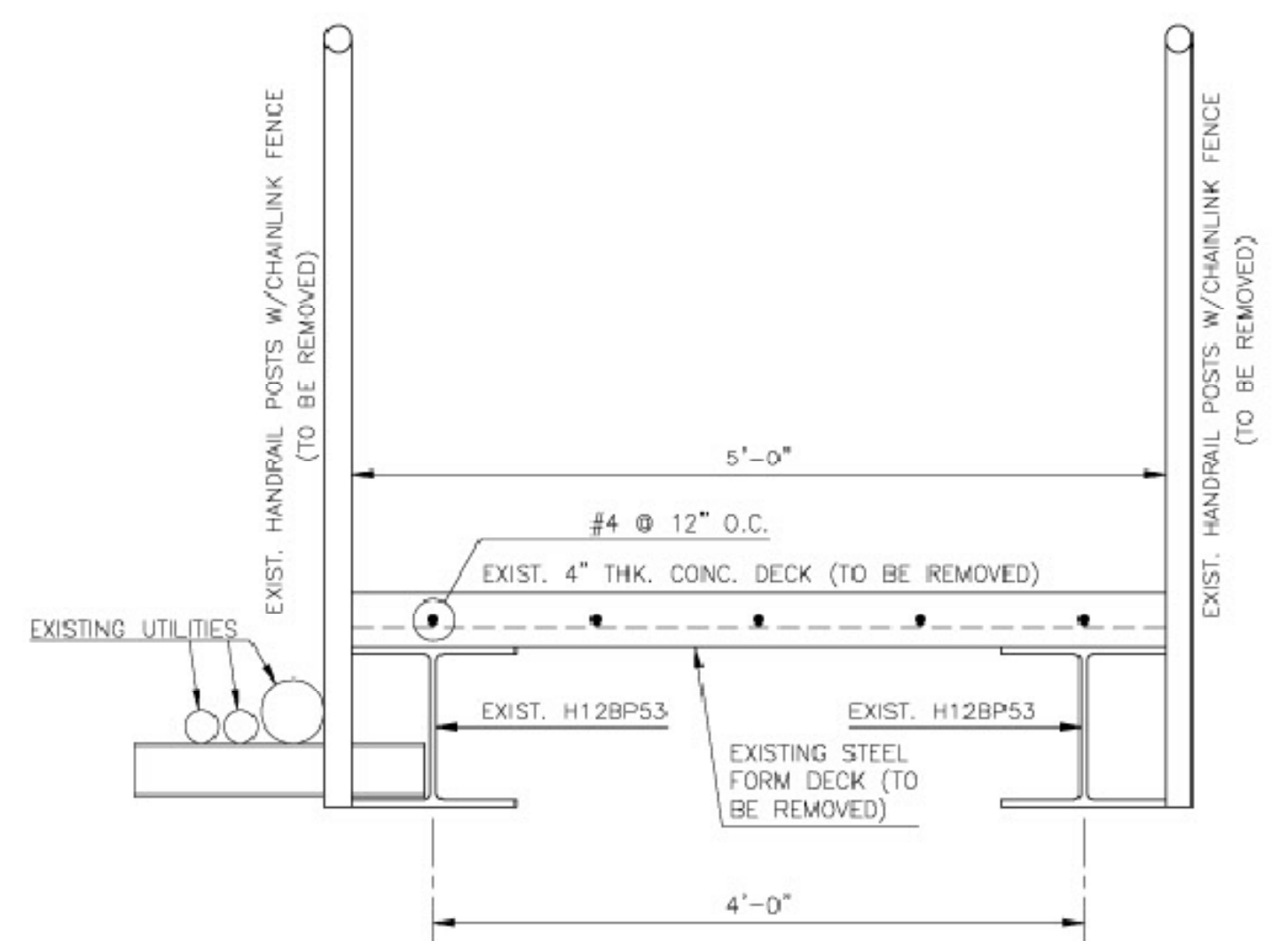
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	REVISIONS
GA	CSHPP-0001-00(562)	12	19	DATE DESCRIPTION
				12-3-09 GDOT BRIDGE OFFICE



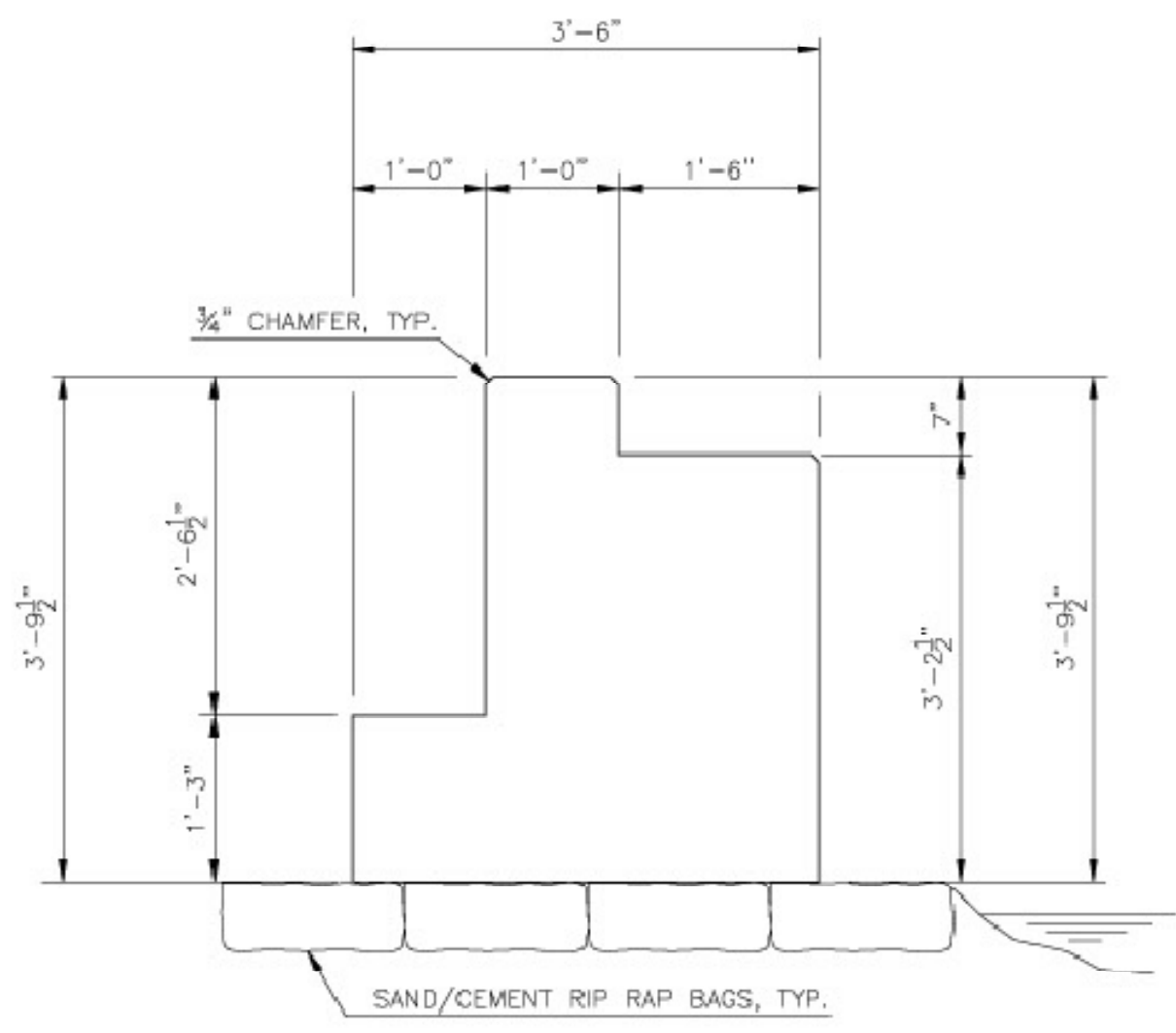
EXISTING BRIDGE ELEVATION
SCALE: 3/8"=1'-0"



EXISTING BRIDGE PLAN
SCALE: 3/8"=1'-0"



A SECTION
SCALE: 1"=1'-0"

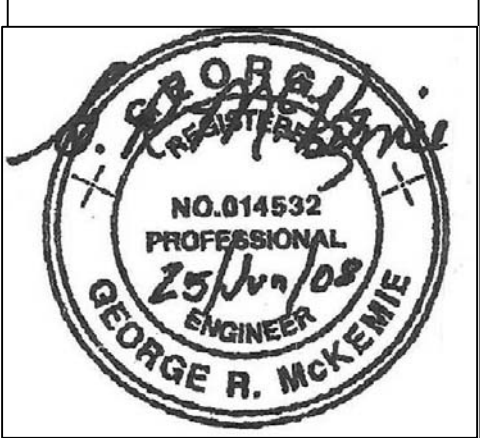


B SECTION
SCALE: 3/4"=1'-0"

NORTH



Rakestraw & Associates
Planning • Design • Environmental
83 TY TY OMEGA RD.
TIFTON, GA. 31794
Phone: 229.382.0009



PROJECT:
MULT-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

SHEET TITLE:
BRIDGE PLAN

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DATE: 12/09
SCALE: AS SHOWN

SHEET NO.:
12
of 19

T. W. Tucker and Associates, Inc.
Consulting Structural Engineers
1710 Gillonville Road • P.O. Box 70218 • Albany, Georgia 31708-0218
Phone (229) 432-5531 • Fax (229) 432-5532 • tw.tucker@belbouth.net
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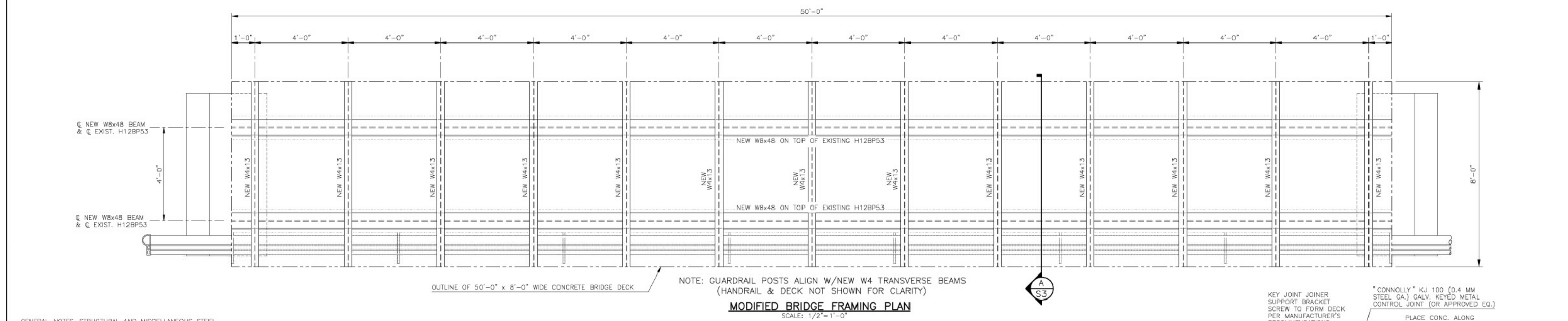
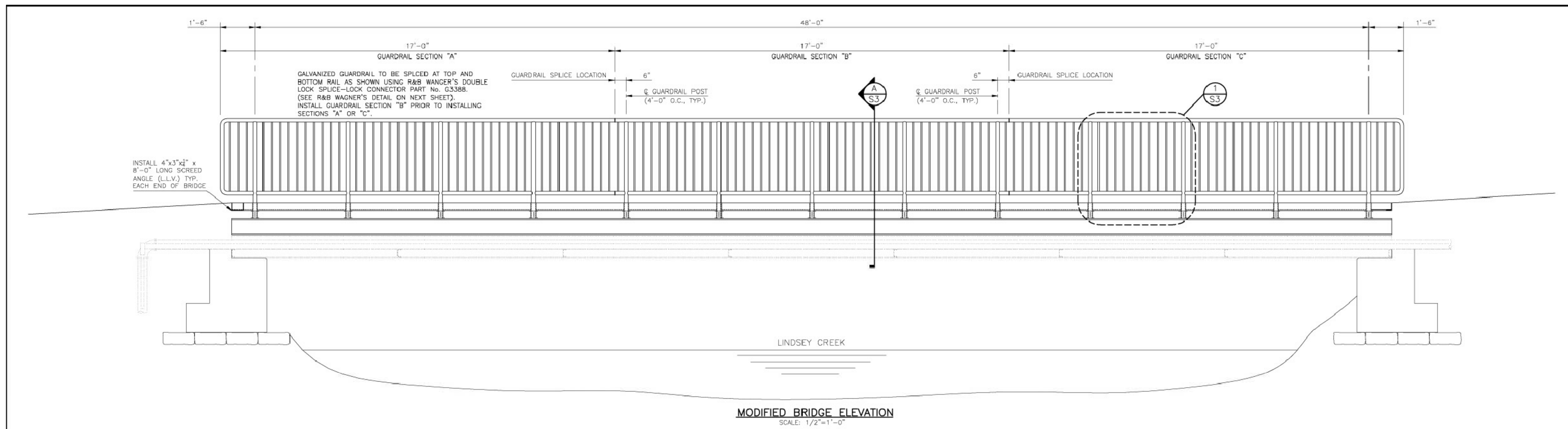
Rev. No.	Date	Description	By

RAKESTRAW & ASSOCIATES, INC.
TIFTON, GEORGIA

SCALE: AS SHOWN DRAWN BY: JW
DATE: 6-26-08 JOB NO.: 08081

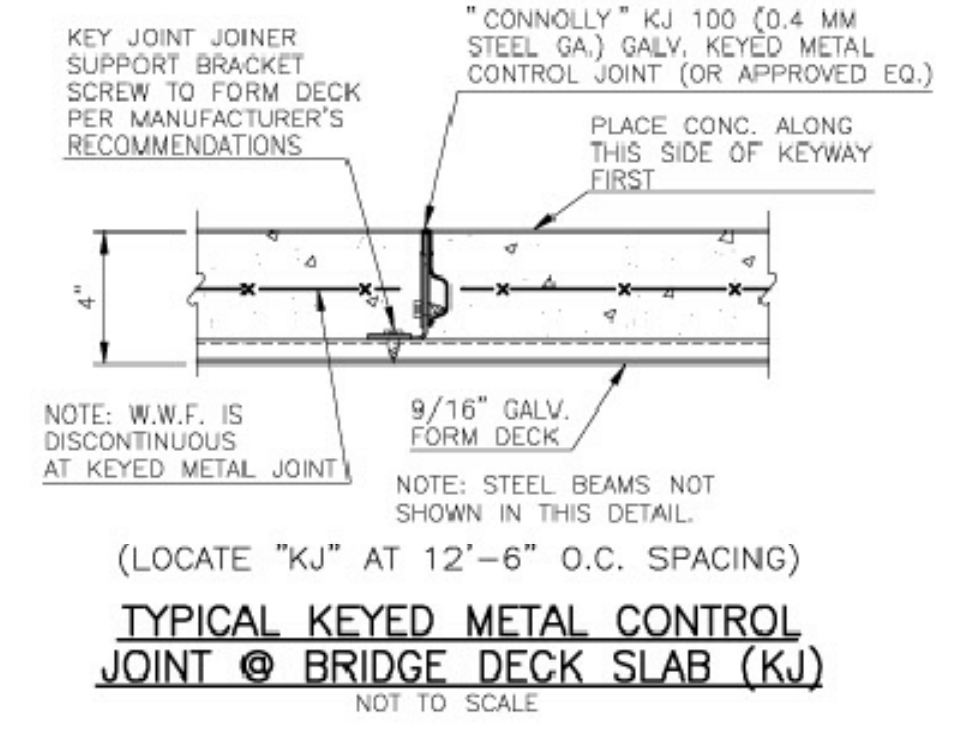
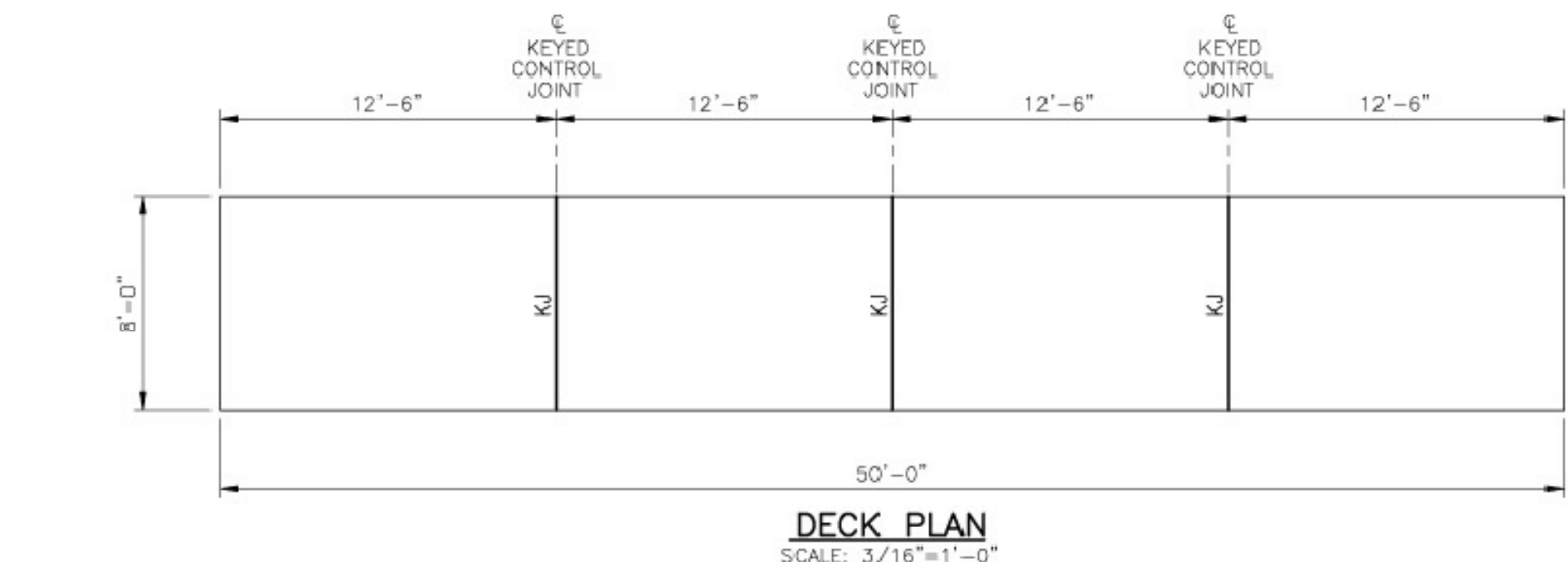
PEDESTRIAN BRIDGE WIDENING AT COLUMBUS STATE UNIVERSITY - COLUMBUS, GEORGIA
EXISTING BRIDGE DETAILS DRAWING NO.: S1 OF 3

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	REVISIONS
GA	C5HPP-0001-00(562)	13	19	DATE DESCRIPTION
				12-3-09 GDOT BRIDGE OFFICE



- GENERAL NOTES—STRUCTURAL AND MISCELLANEOUS STEEL**
- ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "MANUAL OF STEEL CONSTRUCTION," LATEST EDITION, THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," AND AASHTO "GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES", AUGUST 1997.
 - DESIGN LOADS PER AASHTO "GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES", AUGUST 1997 AND IBC, 2006.
 - A. UNIFORM PEDESTRIAN LIVE LOAD.....85 PSF
 - B. VEHICLE LOAD: OCCASIONAL PASSAGE OF ONE MAINTENANCE VEHICLE SPECIFIED BY OWNER AS:
 - CUB CADET BIG COUNTRY 4x2 UTILITY VEHICLE FULLY LOADED, (1) ONE 200 LB OPERATOR, (1) ONE 200 LB PASSENGER, AND MAXIMUM BED CAPACITY.
 - C. WIND LOAD: GIRDERS & BEAMS.....50 PSF
 - D. HANDRAIL LOADS PER IBC, 2006, SECTION 1607.7.1
 - STEEL DESIGN IS BASED ON THE FOLLOWING MATERIAL STRENGTHS:
 - A. STEEL SHAPES AND PLATES (ASTM A36).....Fy=36,000 PSI
 - B. BOLTS (ASTM A307 OR A36).....Fy=36,000 PSI Fu=58,000 PSI
 - C. PIPE (ASTM A53, GRADE B).....Fy=48,000 PSI
 - ALL STRUCTURAL MEMBER CONNECTIONS, BOLTED OR WELDED, SHALL BE AS SHOWN IN THE TABLES OF THE AISC MANUAL. BEAM CONNECTIONS SHALL BE AS SHOWN IN TABLE II-A OF THE AISC MANUAL EXCEPT CONNECTIONS MAY BE SHOP WELDED TO THE BEAM WEB.
 - WELDING SHALL BE PERFORMED ONLY BY APPROVED CERTIFIED WELDERS, USING E70 ELECTRODES, WELDING SHALL CONFORM TO THE PROVISIONS OF THE "STRUCTURAL WELDING CODE—STEEL" OF THE AMERICAN WELDING SOCIETY, LATEST EDITION. MINIMUM WELD SIZE SHALL BE 3/16" UNLESS OTHERWISE NOTED.

- BOLTS FOR STRUCTURAL AND MISCELLANEOUS STEEL CONNECTIONS SHALL BE DOMESTIC OR CANADIAN MANUFACTURED 3/4" DIAMETER, A325 HIGH STRENGTH BOLTS, UNLESS OTHERWISE NOTED.
 - WHERE A SECTION OR DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY TO ALL LIKE OF SIMILAR CONDITIONS, EVEN THOUGH NOT SPECIFICALLY MARKED ON THE PLANS.
 - NO OPENINGS SHALL BE CUT IN STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS.
 - ALL STEEL TO BE PAINTED SHALL HAVE SURFACE PREPARATION IN ACCORDANCE WITH SSPC NO.6 (COMMERCIAL BLAST CLEANING). AFTER CLEANING, ALL SURFACES SHALL RECEIVE ONE SHOP COAT OF PRIMER. COLOR OF FINAL PAINT FINISH FOR STEEL BEAMS SHALL BE SELECTED BY OWNER.
 - ALL EXPOSED HANDRAILS & METAL DECKING SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM STANDARD A90.
- GENERAL NOTES — CONCRETE**
- CONCRETE DESIGN IS BASED ON THE BUILDING CODE REQUIREMENTS FOR CONCRETE (ACI 318-05) AND ITS SUPPLEMENTS.
 - CONCRETE DESIGN IS BASED ON THE FOLLOWING MATERIAL STRENGTHS UNLESS NOTED OTHERWISE ON THE FOLLOWING:
 - A. CONCRETE—28 DAYS (DECK SLAB—PUMP MIX).....3,000 PSI.
 - WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.



- GDOT SPECIFICATIONS NOTES**
- ALL CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH GDOT SECTION 500.
 - ALL STEEL STRUCTURES SHALL BE IN ACCORDANCE WITH GDOT SECTION 501.
 - ALL PAINTING OF BRIDGE STRUCTURES SHALL BE IN ACCORDANCE WITH GDOT SECTION 535.
 - ALL PAINTING SHALL BE IN ACCORDANCE WITH GDOT SECTION 870.

T. W. Tucker and Associates, Inc.
Consulting Structural Engineers

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Phone (229) 432-5531 • Fax (229) 432-5532 • twtucker@bellsouth.net
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Rev. No.	Date	Description	By

RAKESTRAW & ASSOCIATES, INC.
TIFTON, GEORGIA

SCALE: AS SHOWN DRAWN BY: JW
DATE: 6-25-08 JOB NO.: 08001

PEDESTRIAN BRIDGE WIDENING AT COLUMBUS STATE UNIVERSITY — COLUMBUS, GEORGIA

PROJECT NO.:
MODIFIED BRIDGE PLAN & ELEVATION SHEET 2 OF 3

NORTH

Rakestraw & Associates
Planning • Design • Environmental
83 TY TY OMEGA RD.
TIFTON, GA. 31794
Phone: 229.382.0009

PROFESSIONAL ENGINEER
GEORGE R. MCKEMIE

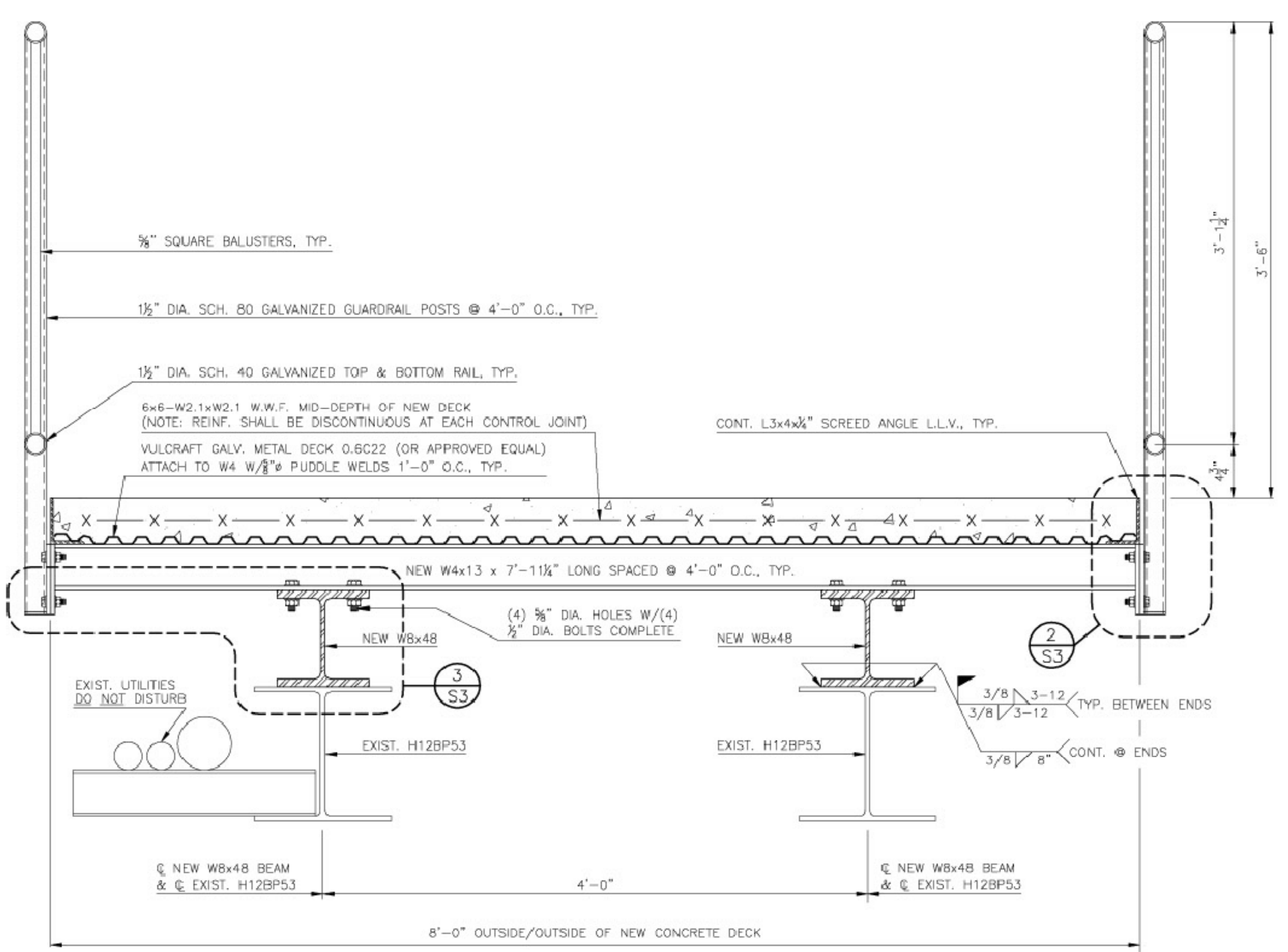
PROJECT:
MULTI-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

SHEET TITLE:
BRIDGE PLAN

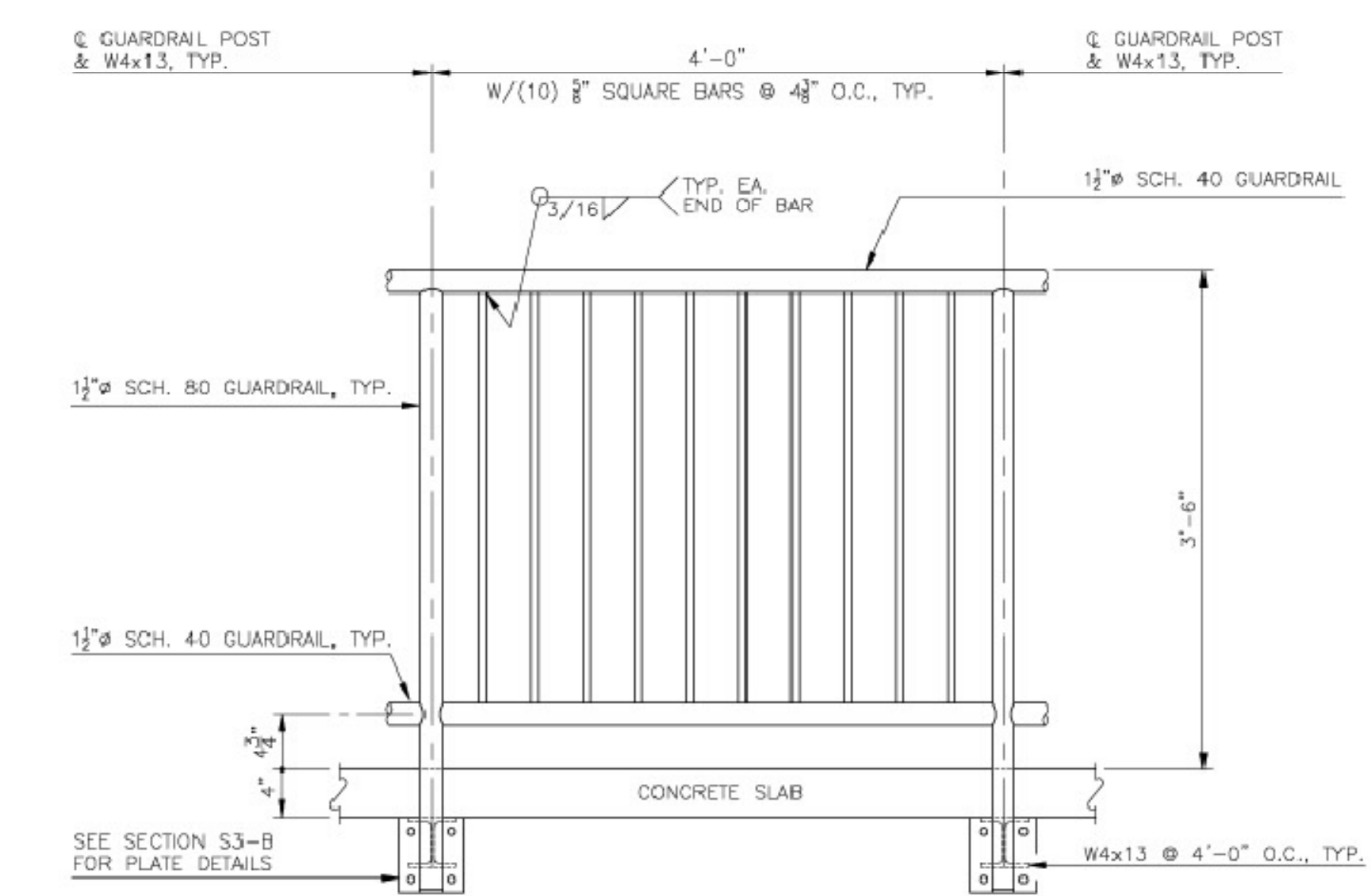
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DATE: 12/09
SCALE: AS SHOWN

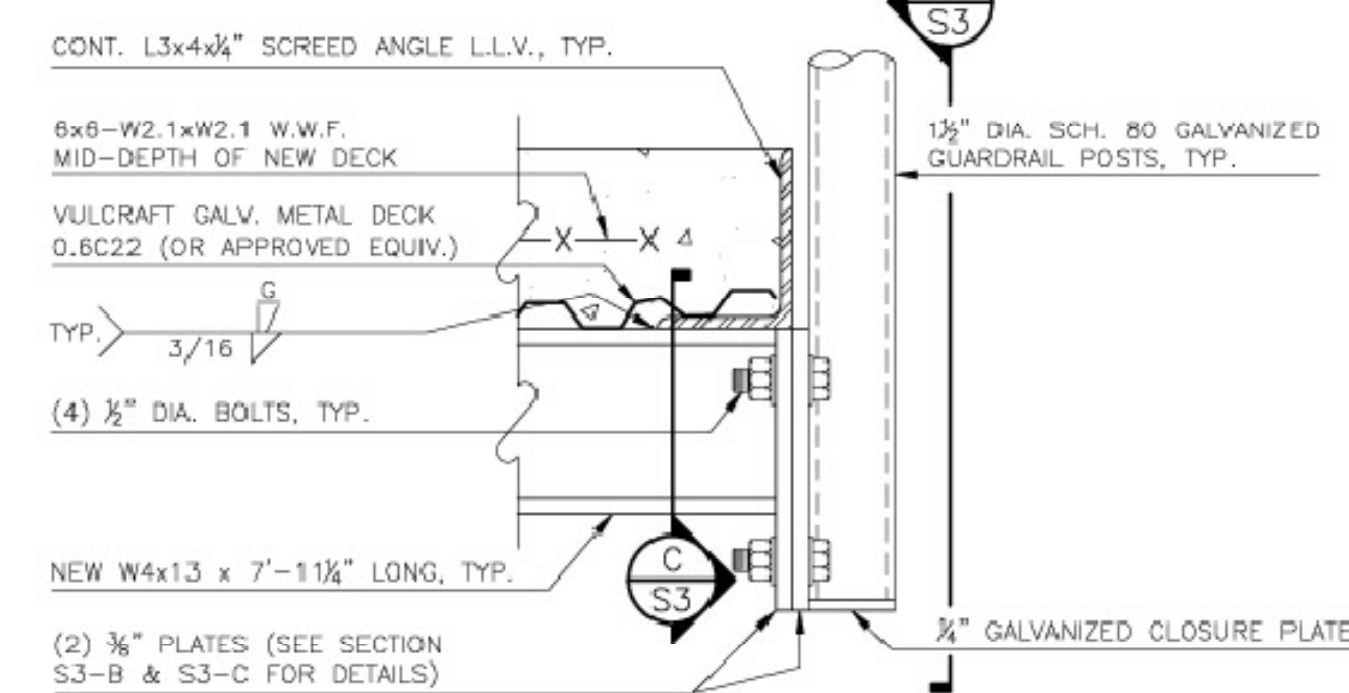
SHEET NO.:
13
of 19



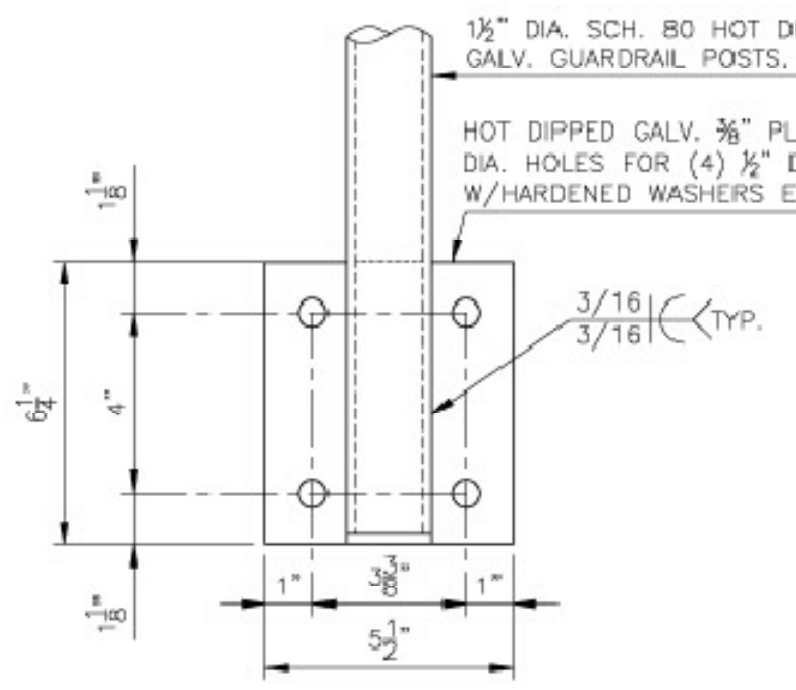
SECTION A S3
SCALE: 1 1/2"=1'-0"



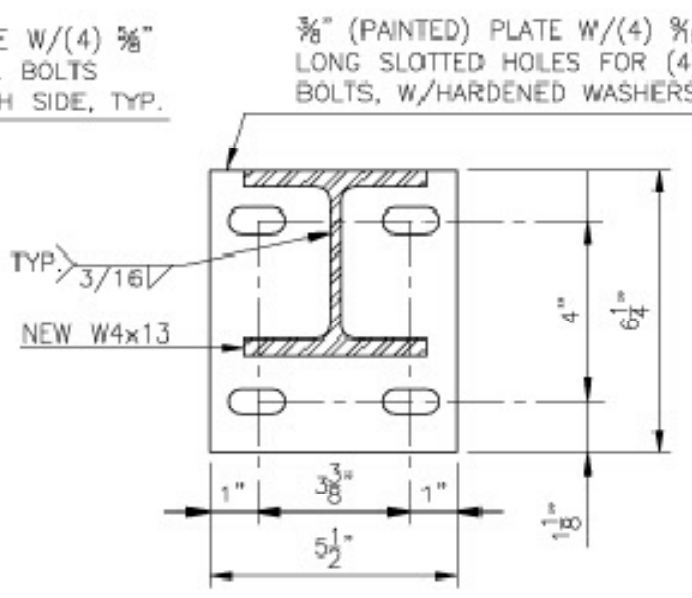
DETAIL 1 S3
(TYPICAL GUARDRAIL ELEVATION)
SCALE: 1"=1'-0"



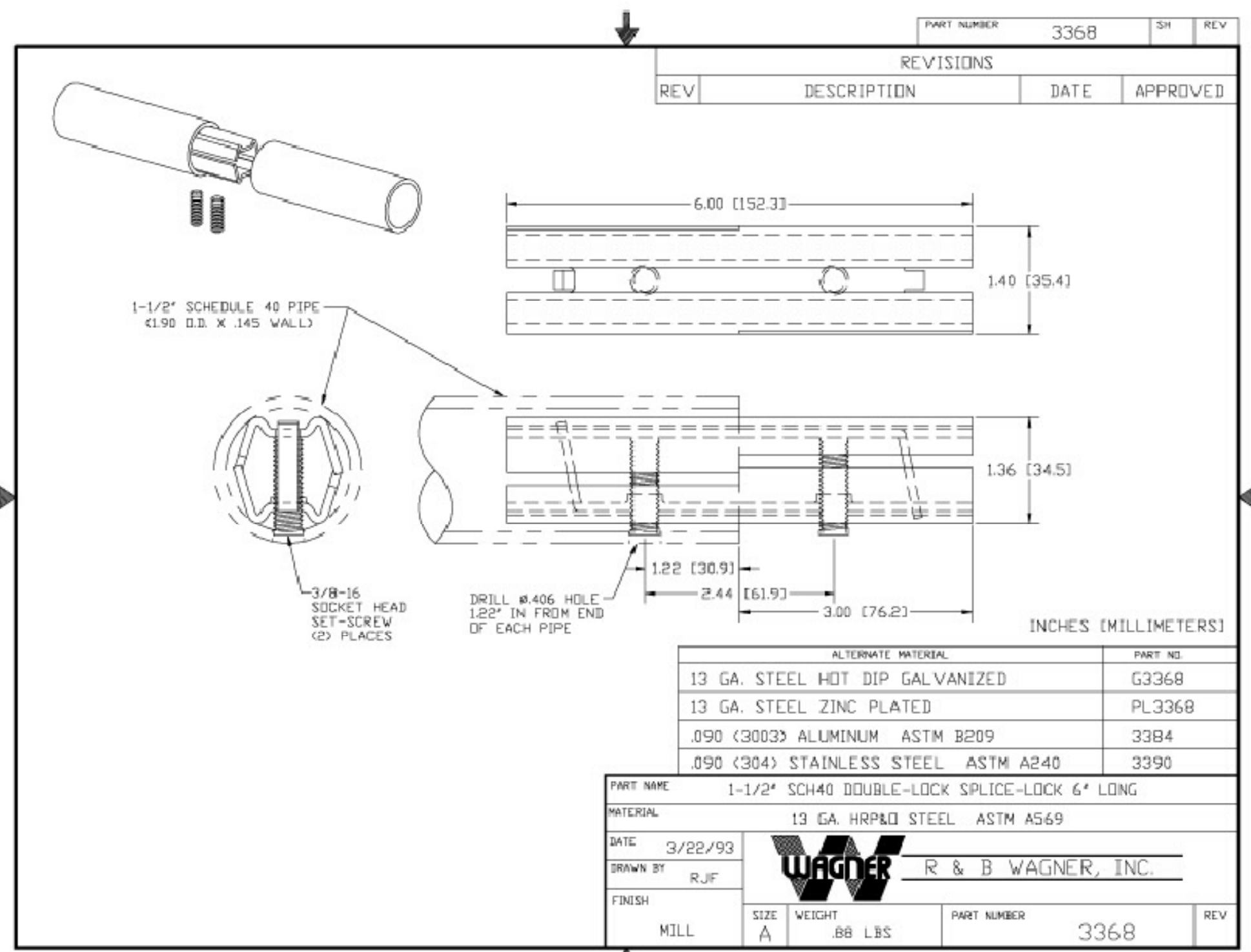
DETAIL 2 S3
SCALE: 3"=1'-0"



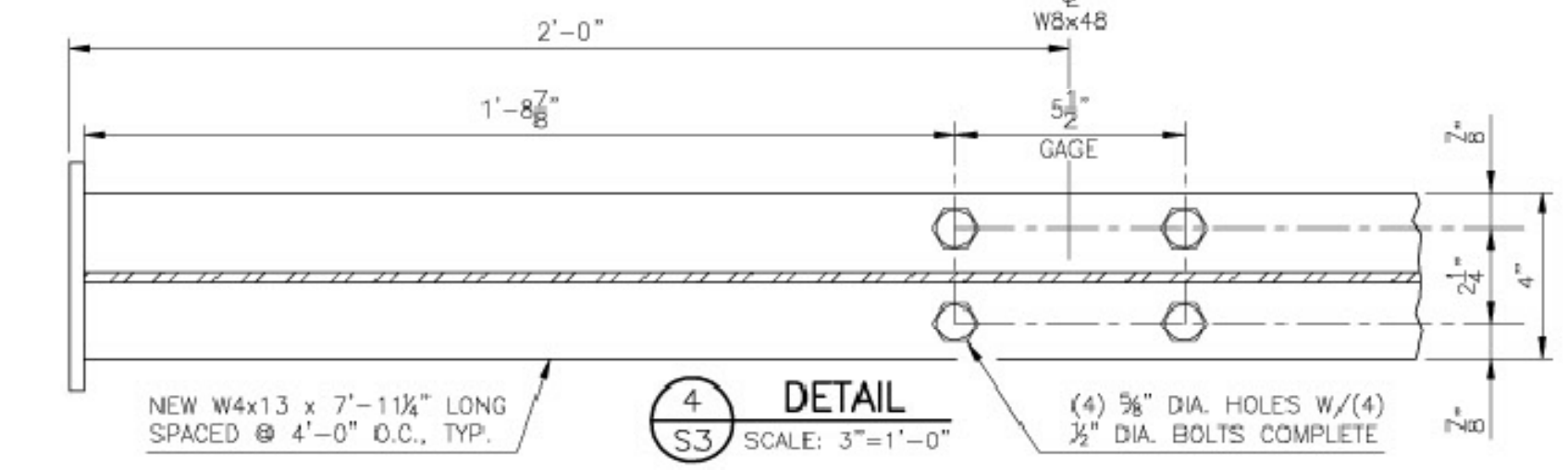
SECTION B S3
SCALE: 3"=1'-0"



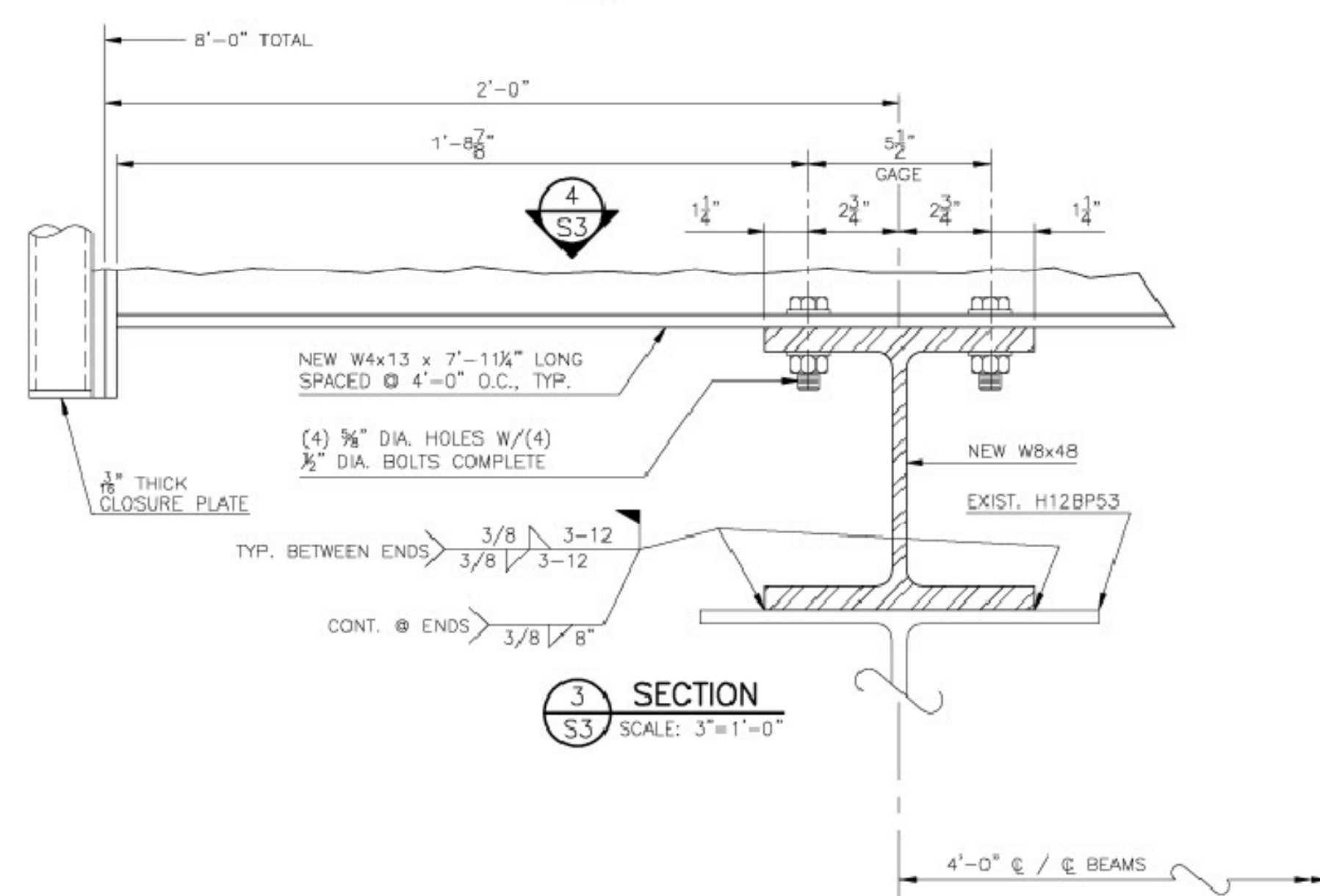
SECTION C S3
SCALE: 3"=1'-0"



DOUBLE-LOCK SPLICE-LOCK CONNECTOR
PART No. G3388 BY R&B WAGNER
(8 REQUIRED TOTAL)
NOT TO SCALE



DETAIL 4 S3
SCALE: 3"=1'-0"



SECTION 3 S3
SCALE: 3"=1'-0"

T. W. Tucker and Associates, Inc.
Consulting Structural Engineers
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TIFTON, GEORGIA
SCALE: AS SHOWN
DATE: 8-25-08
DRAWN BY: JW
JOB NO.: 000011
PEDESTRIAN BRIDGE WIDENING AT COLUMBUS STATE UNIVERSITY - COLUMBUS, GEORGIA
MODIFIED BRIDGE SECTIONS & DETAILS S3 OF 3

NORTH

Rakestraw & Associates
Planning • Design • Environmental
83 TY TY OMEGA RD.
TIFTON, GA. 31794
Phone: 229.382.0009

GEORGE R. MCKEMIE
PROFESSIONAL ENGINEER
NO. 014532
25 Jun 08

PROJECT:
MULT-USE TRAIL
COLUMBUS, GA
CLIENT:
COLUMBUS STATE
UNIVERSITY

SHEET TITLE:
BRIDGE PLAN

DATE: 10/09
SCALE: AS SHOWN
SHEET NO.:
14
of 19

LIGHTING SCHEDULE

LAMP ID	STA.	CIRCUIT	DESCRIPTION
A	23+16	CC-1	CSU STANDARD LAMP
B	22+60	CC-1	CSU STANDARD LAMP
C	21+78	CC-1	CSU STANDARD LAMP
D	21+10	CC-1	CSU STANDARD LAMP
E	20+00	CC-1	CSU STANDARD LAMP
F	19+20	CC-1	CSU STANDARD LAMP
G	18+55	CC-2	CSU STANDARD LAMP
H	16+00	CC-2	CSU STANDARD LAMP
I	15+40	CC-2	CSU STANDARD LAMP
J	14+65	CC-2	CSU STANDARD LAMP
K	13+93	CC-2	CSU STANDARD LAMP
L	13+21	CC-2	CSU STANDARD LAMP
M	12+50	CC-3	CSU STANDARD LAMP
N	11+24	CC-3	CSU STANDARD LAMP
O	11+00	CC-3	CSU STANDARD LAMP
P	10+25	CC-3	CSU STANDARD LAMP
Q	9+50	CC-3	CSU STANDARD LAMP
R	8+50	CC-3	CSU STANDARD LAMP
S	7+75	CC-4	CSU STANDARD LAMP
T	7+00	CC-4	CSU STANDARD LAMP
U	6+10	CC-4	CSU STANDARD LAMP
V	5+30	CC-4	CSU STANDARD LAMP
W	4+83	CC-4	CSU STANDARD LAMP
X	4+20	CC-4	CSU STANDARD LAMP
Y	3+41	CC-5	CSU STANDARD LAMP
Z	2+45	CC-5	CSU STANDARD LAMP
aa	1+68	CC-5	CSU STANDARD LAMP
bb	0+95	CC-5	CSU STANDARD LAMP
cc	0+6	CC-5	CSU STANDARD LAMP
dd	16+67	CC-2	CSU STANDARD LAMP

CIRCUIT SCHEDULE

CIRCUIT	DESCR.	QUANTITY	CONDUIT QUANTITY	PROVIDED CONDUIT
CC-1	LAMP	6	1"	600 LF
CC-2	LAMP	7	1"	550 LF
CC-3	LAMP	6	1"	900 LF
CC-4	LAMP	6	1"	1300 LF
CC-5	LAMP	6	1"	1750 LF

PROVIDED CONDUIT IS THE CONDUIT FROM THE JUNCTION BOX AT THE PEDESTRIAN BRIDGE TO THE PANEL BOX AT THE CUNNINGHAM CENTER

ELECTRICAL NOTES

- 1.) ALL UNDERGROUND CONDUITS SHALL BE PVC SCH. 40 AND BURIED AT A MIN. 24" BELOW GRADE AND 48" BELOW PAVEMENT.
- 2.) ALL LIGHTS SHALL BE CONTROLLED WITH A MASTER PHOTO CELL AT EACH CONTROL BOX.
- 3.) THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL NECESSARY BREAKERS REQUIRED FOR INSTALLATION. NEW BREAKERS SHALL MATCH A.I.C. RATING AND BREAKER TYPE AS EXISTING BREAKERS.
- 4.) FOR ANY POWER METERS, THE SOCKET IS TO BE FURNISHED BY GA. POWER AND INSTALLED BY THR CONTRACTOR. THE SERVICE DROP AND METER IS TO BE FURNISHED AND INSTALLED BY GA. POWER.
- 5.) ALL EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL (RGS)
- 6.) 208 VOLT WIRING :10-2 WITH GROUND (1) - 2 POLE BREAKER/RELAY (30 AMP)
- 7.) ALL OUTDOOR EQUIPMENT SHALL BE WEATHERPROOF.
- 8.) AT ALL OUTDOOR JUNCTION BOX LOCATIONS, THE CONTRACTOR SHALL STUB UP INCOMING CONDUIT TO 3" A.F.G. THEN PIPE MOUNT THE JUNCTION BOX ON THE END OF THE CONDUIT. THE CONDUITS EXITING THE JUNCTION BOX SHALL CONTINUE UNDERGROUND. *ALL JUNCTION BOXES SHALL HAVE LIDS LABELED "ELECTRIC"
- 9.) ALL WORK TO BE DONE PER 1999 NEC.
- 10.) THE CONTRACTOR SHALL COORDINATE ALL WORK WITH GA. POWER, AND COLUMBUS STATE UNIVERSITY.
- 11.) AN EXISTING CONTROL PLAN IS WITHIN THE CUNNINGHAM CENTER MECHANICAL ROOM. EXISTING CONDUITS ARE IN PLACE FROM THE CUNNINGHAM CENTER TO THE EXISTING PEDESTRIAN BRIDGE AREA JUNCTION BOX. ELECTRICAL CONTRACTORS SHALL INSPECT THE EXISTING CONDITIONS, CONDUITS, JUNCTION BOXES, AND PANEL BOX PRIOR TO BIDDING AND MAKE ANY NECESSARY CHANGES ABOVE THE PLANS TO PROVIDE THE LATEST ELECTRICAL CODE COMPLIANCY. ALL CONNECTIONS, FITTINGS, BREAKERS, ETC. SHALL BE AT THE CONTRACTORS EXPENSE.
- 12.) ALL CONDUIT ON PEDESTRIAN BRIDGE SHALL BE RIGID GALVANIZED STEEL, WATERPROOF AND SECURED TO BRIDGE IBEAMS,

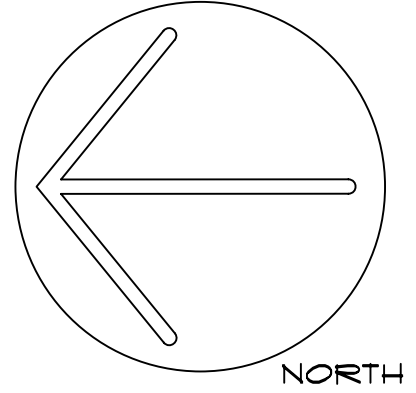
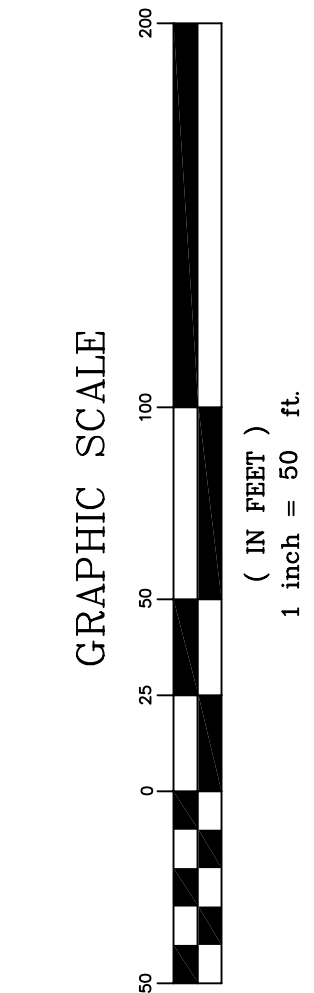
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0007-00(562)	15	19

REVISIONS	
DATE	DESCRIPTION
12-09	GDOT

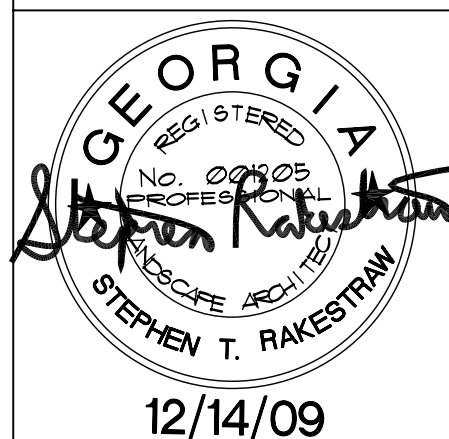
LAMP POST VENDORS

LAMP POST AND FIXTURE SHALL BE:

- 1) 14' CAST ALUMINUM POLE
- 2) 250 WATT METAL HALIDE FIXTURE
- 3) ACORN STYLE GLASS HOUSING
- 4) ACCESSIBLE HANDHOLD WITH RECEPTACLE
- 5) TRACK SYSTEM FOR BANNERS OR CAMERAS
- 6) COLOR = BLACK



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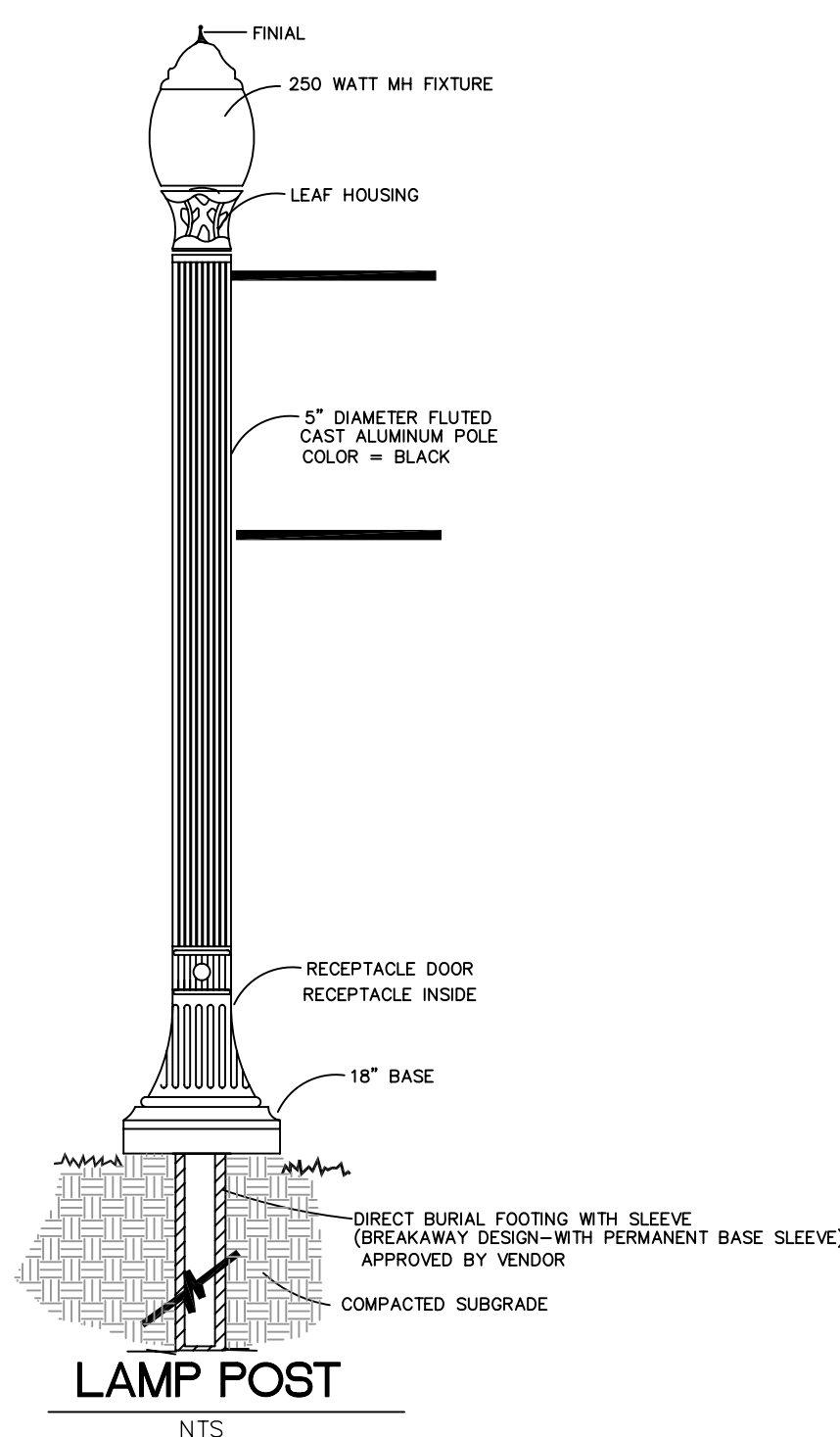
PROJECT:
 MULT-USE TRAIL
 COLUMBUS, GA
 CLIENT:
 COLUMBUS STATE
 UNIVERSITY

SHEET TITLE:
 OUTDOOR LIGHTING PLAN

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DATE: 12/09
 SCALE: 1" = 50'

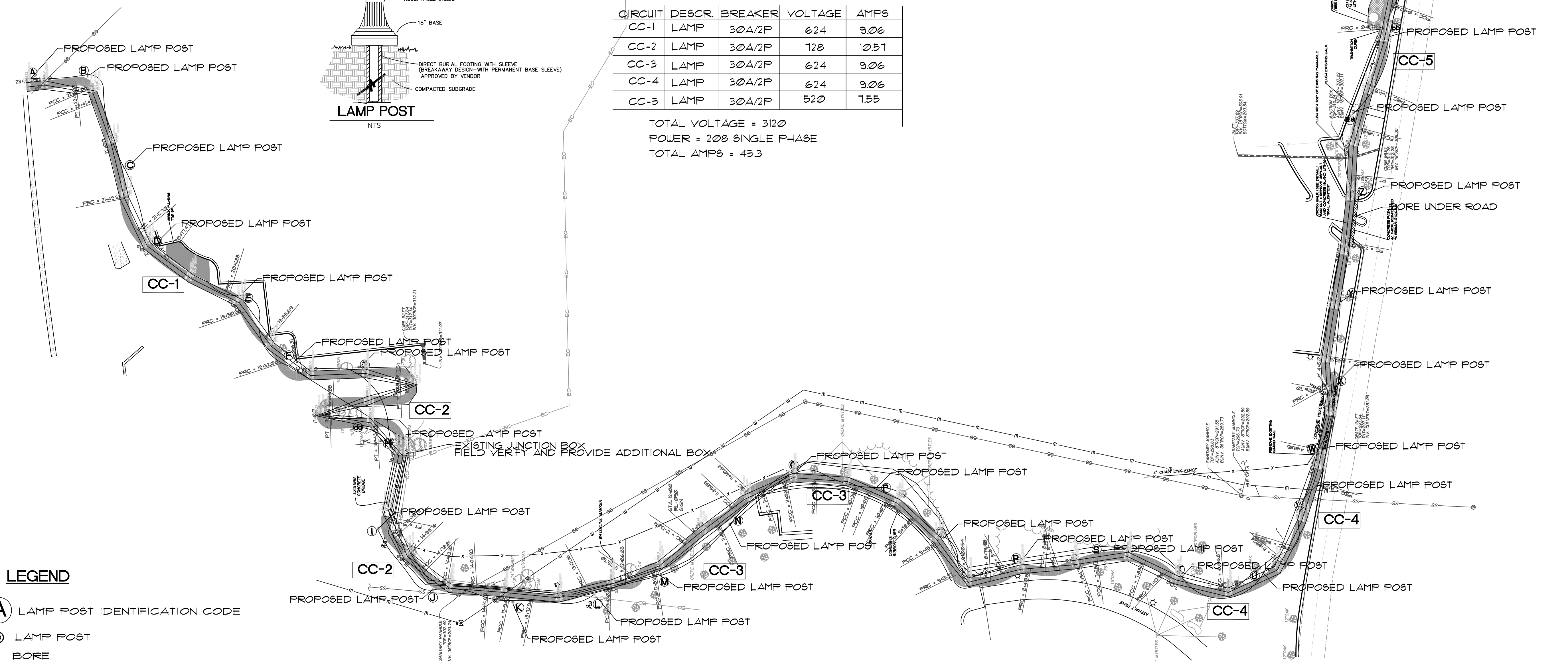
SHEET NO.:
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PANEL SCHEDULE

CIRCUIT	DESCR.	BREAKER	VOLTAGE	AMPS
CC-1	LAMP	30A/2P	624	9.06
CC-2	LAMP	30A/2P	728	10.51
CC-3	LAMP	30A/2P	624	9.06
CC-4	LAMP	30A/2P	624	9.06
CC-5	LAMP	30A/2P	520	7.55

TOTAL VOLTAGE = 3120
 POWER = 208 SINGLE PHASE
 TOTAL AMPS = 45.3



OUTDOOR LIGHTING PLAN

scale: 1" = 50'

PRACTICE	CONSTRUCTION EXIT	DUST CONTROL	SEDIMENT BARRIER	DISTURBED AREA STABILIZATION (WITH MULCH)	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)	SEDIMENT BARRIER type C	SEDIMENT INLET TRAP	SEDIMENT BARRIER SILT FENCE HAY BALE	TOPSOILING
MAP SYMBOL										

INITIAL PHASE NOTES

THE INITIAL PHASE OF THE DEVELOPMENT MUST INCLUDE THE INSTALLATION OF THE FOLLOWING EROSION & SEDIMENT CONTROL DEVICES PRIOR TO GROUND BREAKING:

- 1) SILT FENCE (Sd1) BOUNDARY ALONG ALL AREA WITHIN THE LIMITS OF DISTURBANCE
- 2) CONSTRUCTION EXIT (Co) TO PREVENT THE MIGRATION OF DIRT FROM THE PROJECT SITE
- 3) SEDIMENT STORAGE FOND SHALL BE CONSTRUCTED PRIOR TO GRADING.
- 4) PLAN DESIGNER SHALL BE NOTIFIED AND INSPECT BMP'S NO LATER THAN 1 DAYS AFTER GROUND BREAKING.
- 5) OPERATOR SHALL NOTIFY PLAN DESIGNER WITHIN 48 HOURS OF GROUND BREAKING.

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

ALL DISTURBED AREAS NOT DESIGNATED FOR PAVING OR STRUCTURES SHALL BE STABILIZED WITH TEMPORARY AND PERMANENT VEGETATION Ds1 and Ds2.

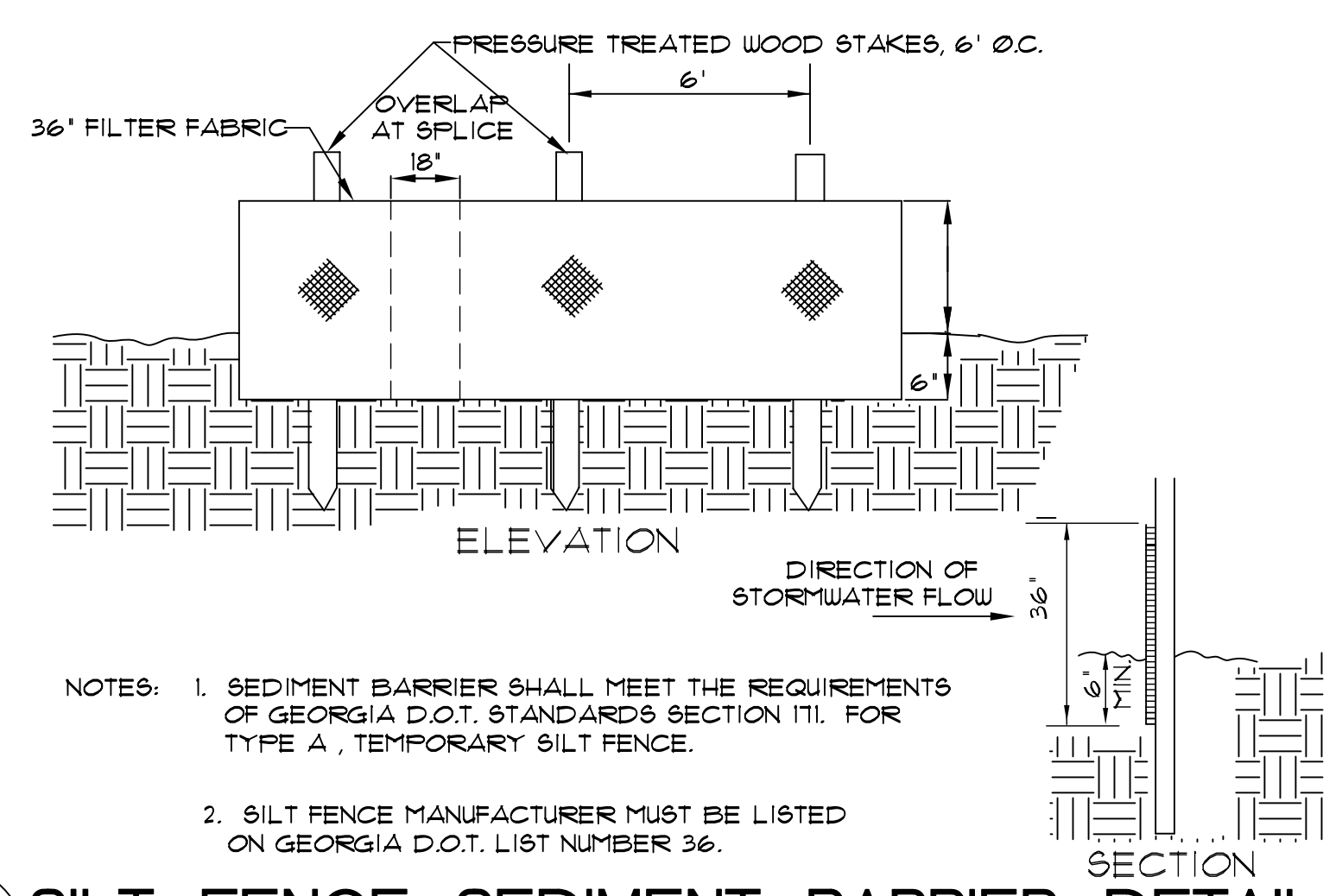
ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

TP TOPSOILING

1. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4 TO 6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
2. IF PH VALUE IS LESS THAN 6.0. LIME SHALL BE APPLIED AND INCORPORATED WITH THE TOPSOIL TO ADJUST THE PH TO 6.5 OR HIGHER. TOPSOILS CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
3. THE LOCATION OF TOPSOIL STOCKPILES SHOULD NOT OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
4. STOCKPILES SHALL BE CONTAINED BY SEDIMENT BARRIERS TO PREVENT SEDIMENTATION ON ADJACENT AREAS. STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH SPECIFICATIONS FOR DS1, DS2, AND TP.

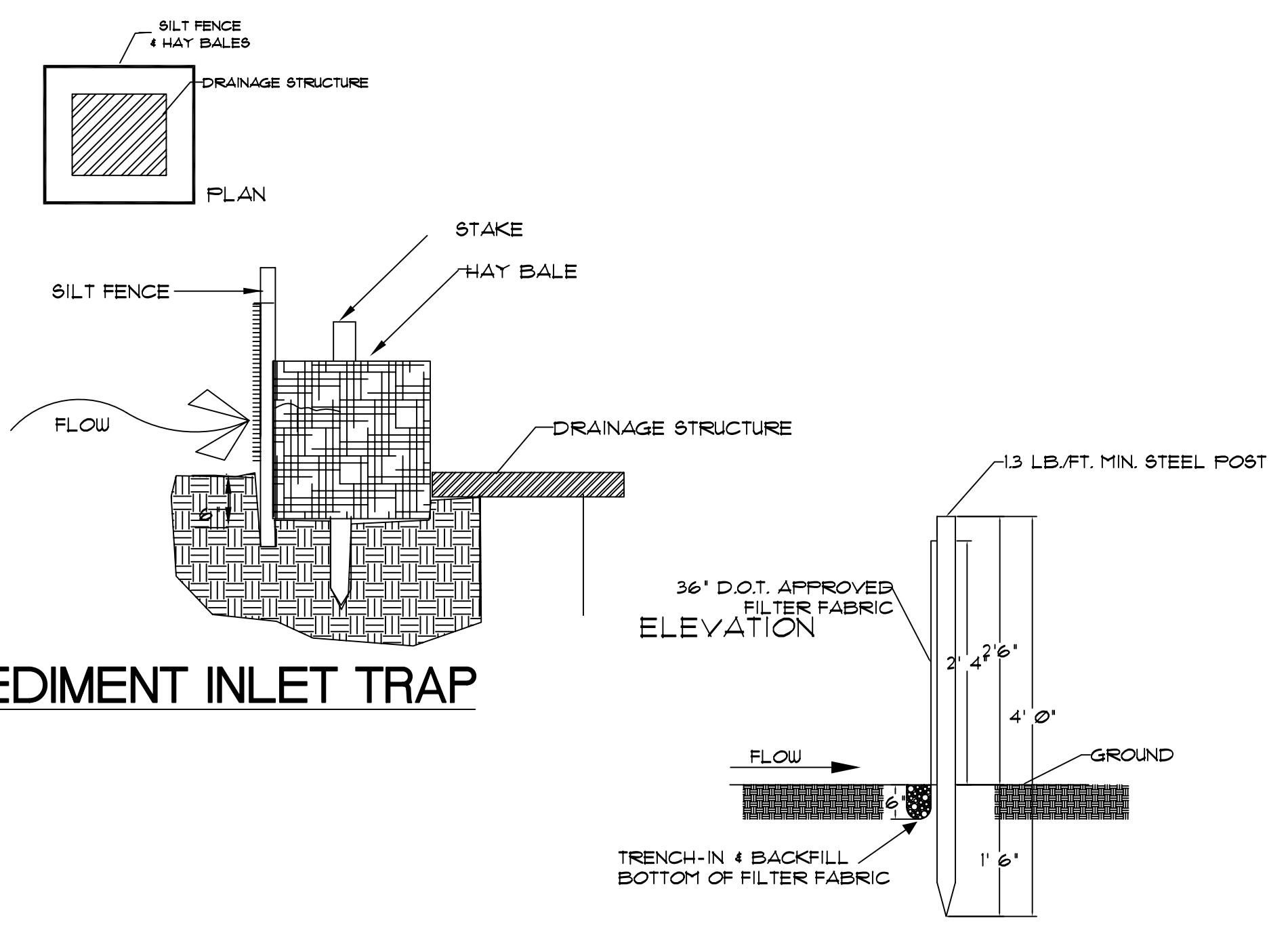
SITE PREPARATION:

1. TOPSOILING: WHEN TOPSOILING, MAINTAIN NEEDED EROSION CONTROL PRACTICE SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, LEVEL SPREADERS, WATERWAYS, SEDIMENT BASINS, ETC.
2. GRADING: GRADES ON THE AREAS TO BE TOP SOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED.
3. LIMING: SOIL TESTS SHOULD BE USED TO DETERMINE THE PH OF THE SOIL. WHERE THE PH OF THE SUBSOIL IS 5.0 OR LESS OR COMPOSED OF HEAVY CLAYS, AGRICULTURAL LIMESTONE SHALL BE SPREAD AT THE RATE OF 100 POUNDS PER 1,000 SQUARE FEET. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES:
4. BONDING: USE ONE OF THE FOLLOWING METHODS TO INSURE BONDING OF TOPSOIL:
 - A. TILLING: AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUB GRADE SHALL BE LOOSENEED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL.
 - B. TRACKING: PASSING A BULLDOZER OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO LEAVE HORIZONTAL DEPRESSIONS.
5. APPLYING TOPSOIL:
 - A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITH WITHOUT DAMAGING SOIL STRUCTURE.
 - B. A UNIFORM APPLICATION OF 6 INCHES (UNSETTLED) IS RECOMMENDED, BUT MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER OR LANDSCAPE ARCHITECT.

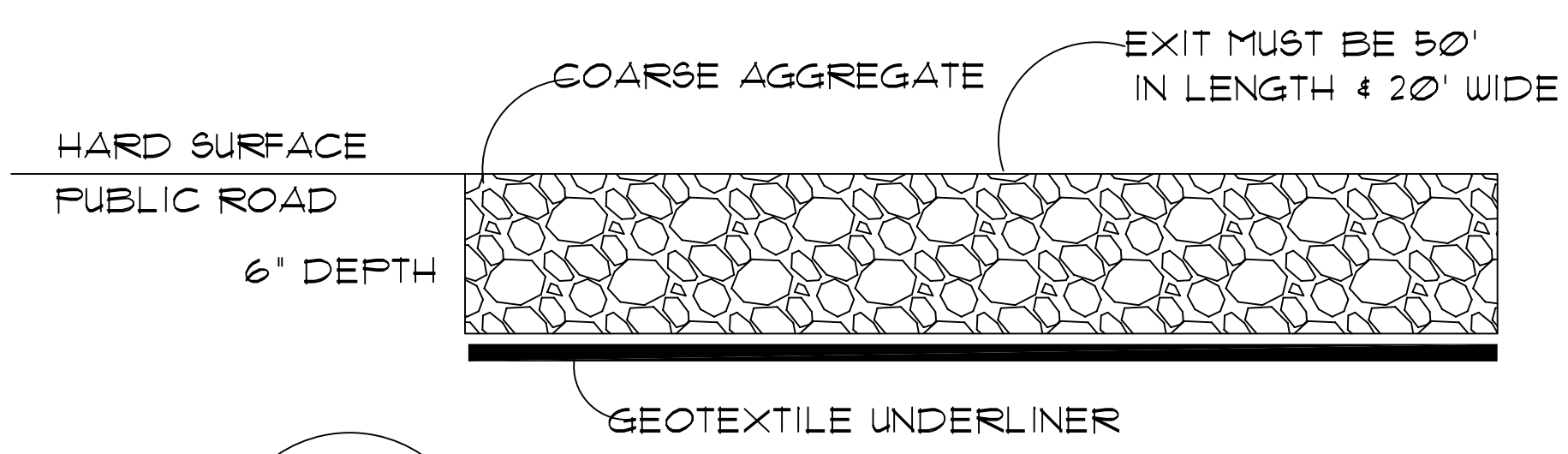


NOTES: 1. SEDIMENT BARRIER SHALL MEET THE REQUIREMENTS OF GEORGIA D.O.T. STANDARDS SECTION III. FOR TYPE A, TEMPORARY SILT FENCE.
2. SILT FENCE MANUFACTURER MUST BE LISTED ON GEORGIA D.O.T. LIST NUMBER 36.

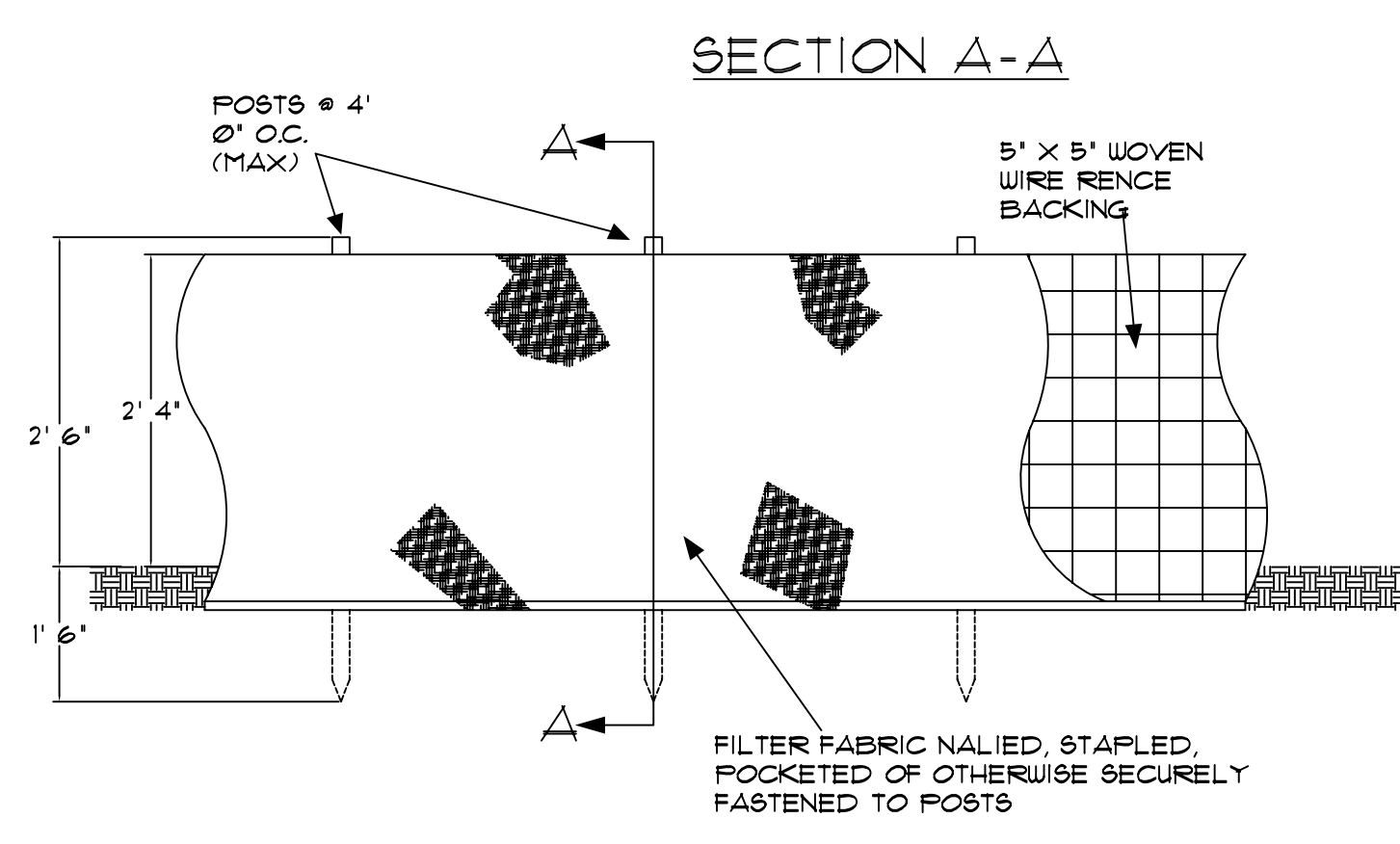
Sd1 SILT FENCE SEDIMENT BARRIER DETAIL NTS



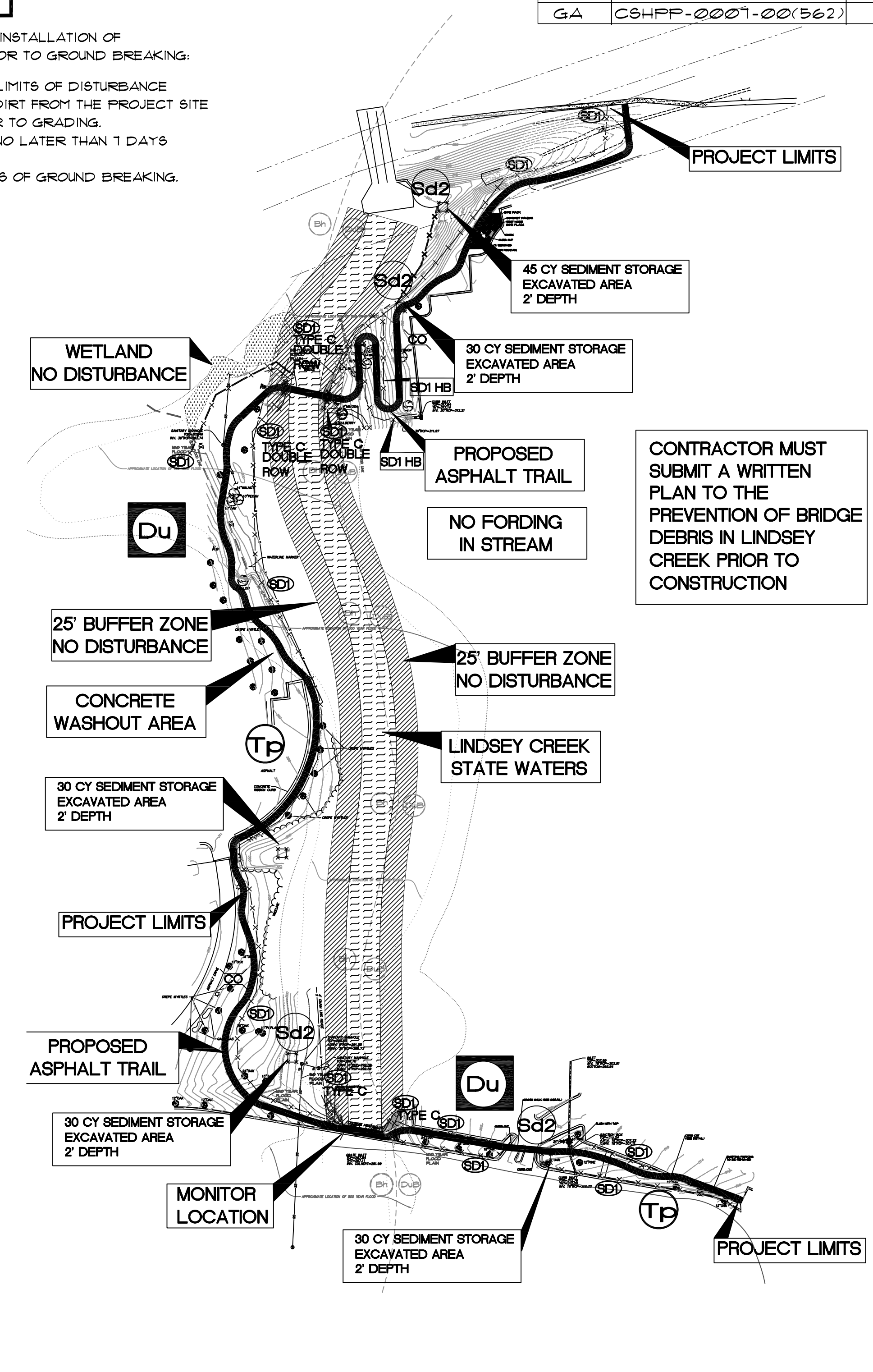
Sd2 SEDIMENT INLET TRAP



Co CONSTRUCTION EXIT



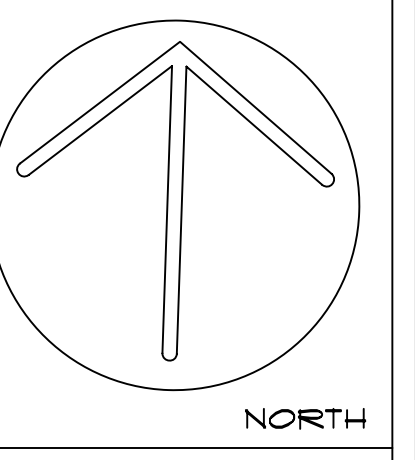
Sd1-C SEDIMENT BARRIER-SILT FENCE N.T.S.



INITIAL PHASE
1" = 100'

CONTRACTOR MUST SUBMIT A WRITTEN PLAN TO THE PREVENTION OF BRIDGE DEBRIS IN LINDSEY CREEK PRIOR TO CONSTRUCTION

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHPP-0007-00(562)	16	19



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Phone: 229.382.0003

GEORGIA REGISTERED PROFESSIONAL ENGINEER
No. 000029
Stephen T. Rakestraw
STEPHEN T. RAKESTRAW
12/14/09
Certified Design
Professional # 000002144

PROJECT:
MULT-USE TRAIL
COLUMBUS, GA

CLIENT:
COLUMBUS STATE UNIVERSITY

SHEET TITLE:
INITIAL PHASE

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DATE: 12/14/09
SCALE: 1" = 100'

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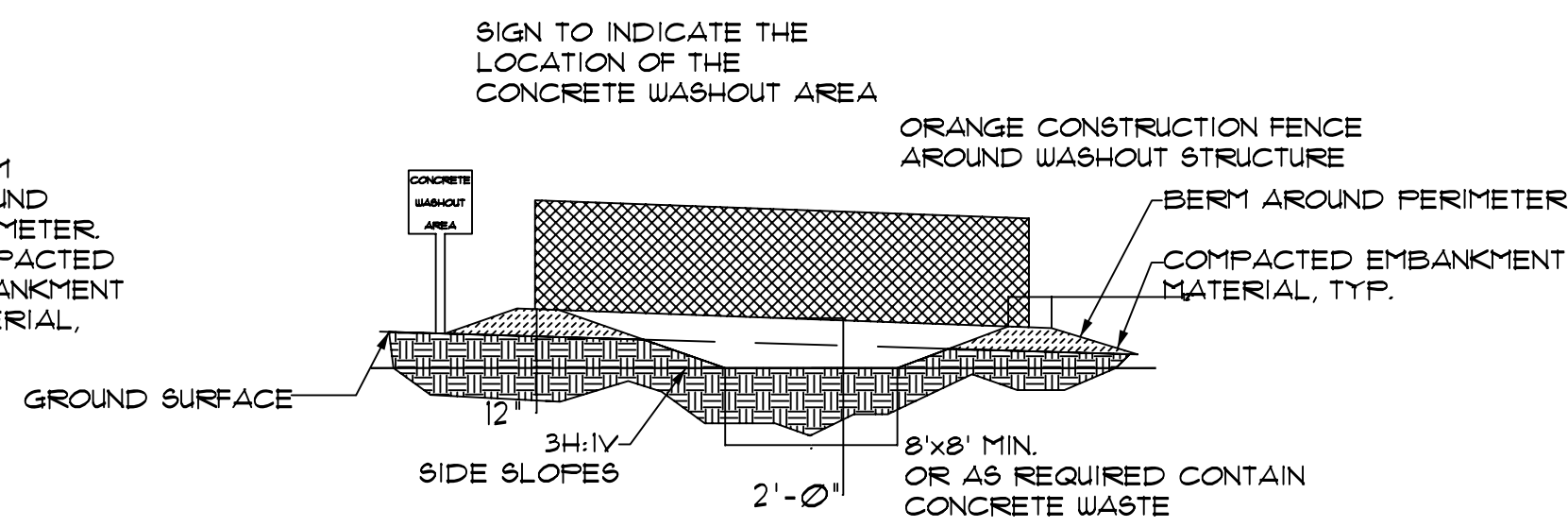
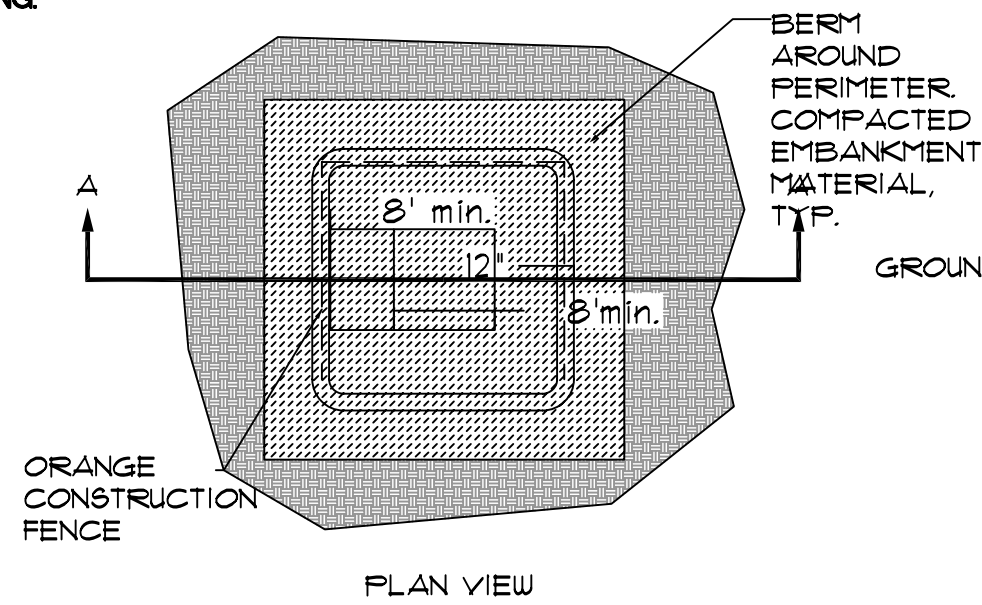
PRACTICE	CONSTRUCTION EXIT	DUST CONTROL	SEDIMENT BARRIER	DISTURBED AREA STABILIZATION (WITH MULCH)	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)	SEDIMENT BARRIER type C	SEDIMENT INLET TRAP	SEDIMENT BARRIER SILT FENCE HAY BALE	TOPSOILING
MAP SYMBOL										

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

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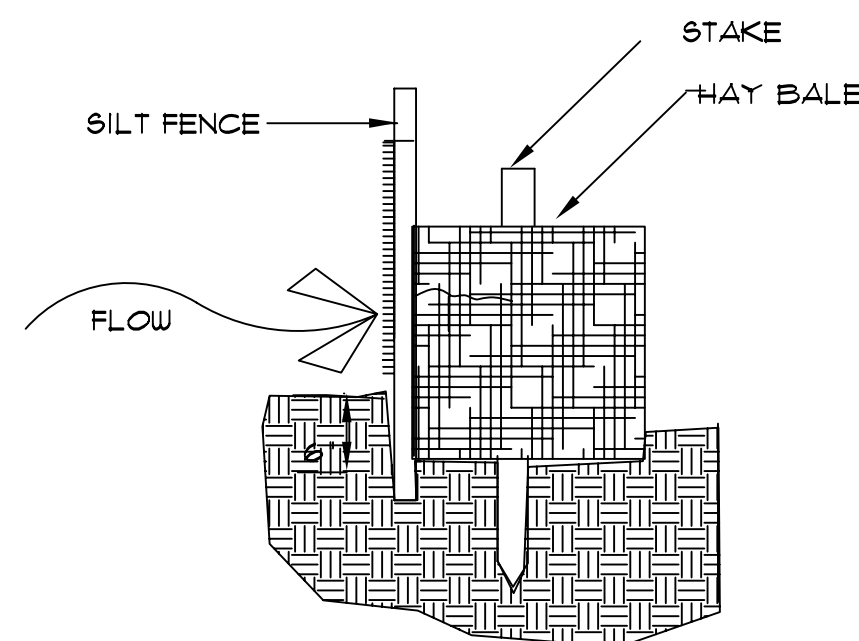
ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.



CONCRETE WASHOUT AREA
N.T.S.

NOTES:

1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. VEHICLE TRACKING CONTROL IS REQUIRED AT CONCRETE WASHOUT ENTRANCE IF ACCESS TO CONCRETE WASHOUT AREA IS OFF PAVEMENT.
3. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND/OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTE CONCRETE.
4. WASTE MATERIAL FROM CONCRETE WASHOUT OPERATIONS MUST BE REMOVED AND LEGALLY DISPOSED OR WHEN IT HAS ACCUMULATED TWO THIRDS OF THE NET STORAGE CAPACITY OF THE STRUCTURE.
5. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT AN APPROVED WASTE SITE.
6. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDING AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY LOCAL AUTHORITIES.
7. WASHOUT AREA SHALL BE CLEAN AND FREE OF CONCRETE RESIDUE PRIOR TO REMOVAL OF DEVICE. ALL PROPER BMP'S AND EPD REGULATIONS FOR DISPOSAL SHALL BE FOLLOWED.

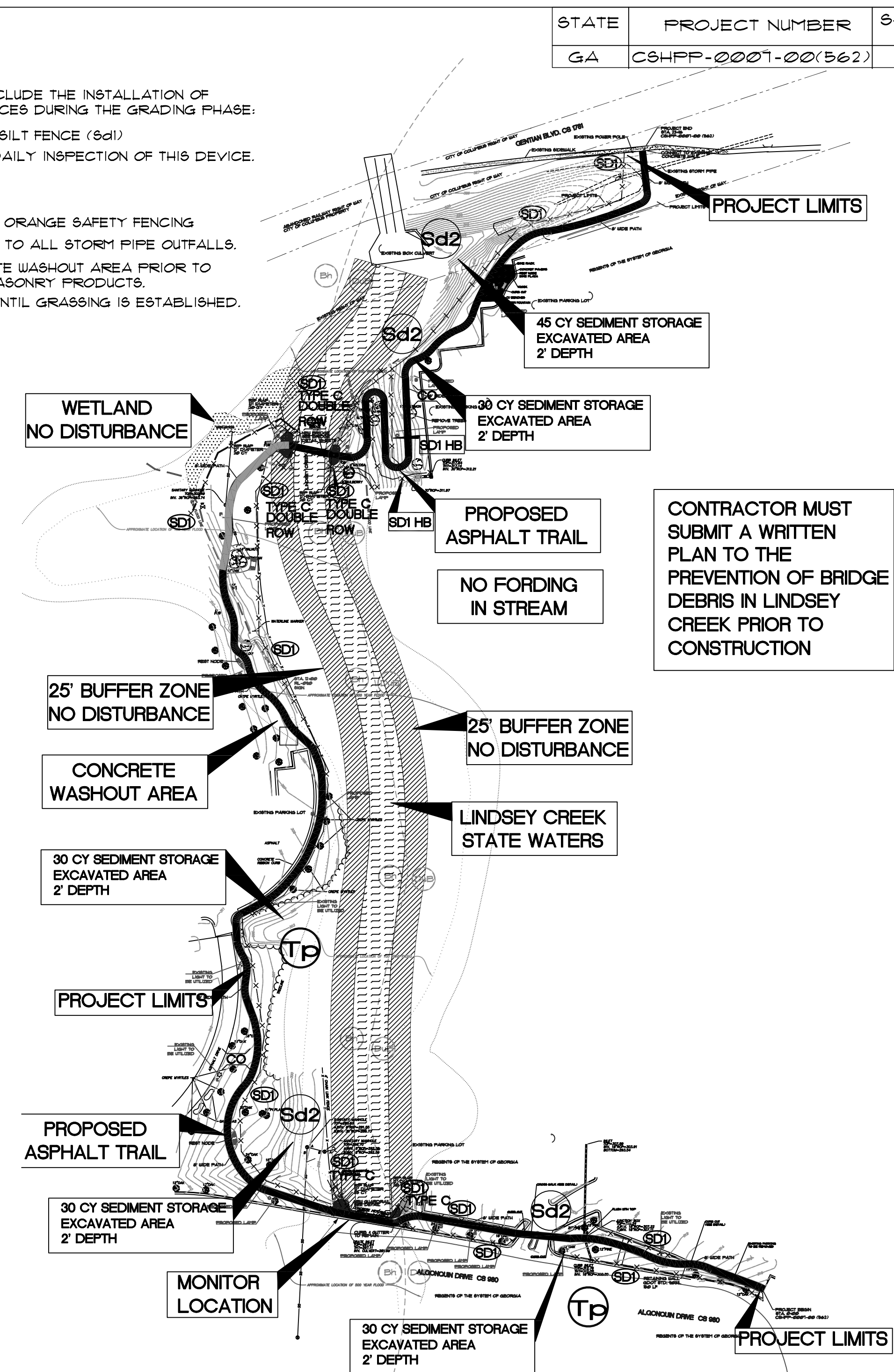


Sd1-HB Silt Fence with Hay Bale

GRADING PHASE NOTES

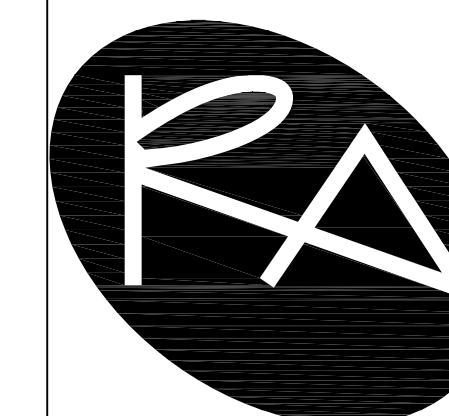
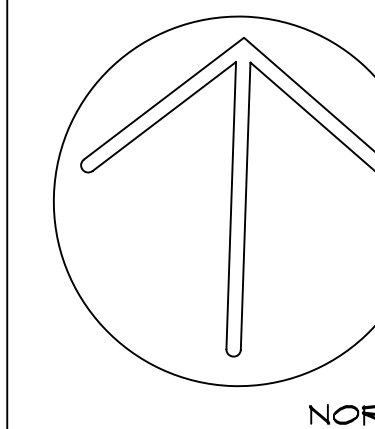
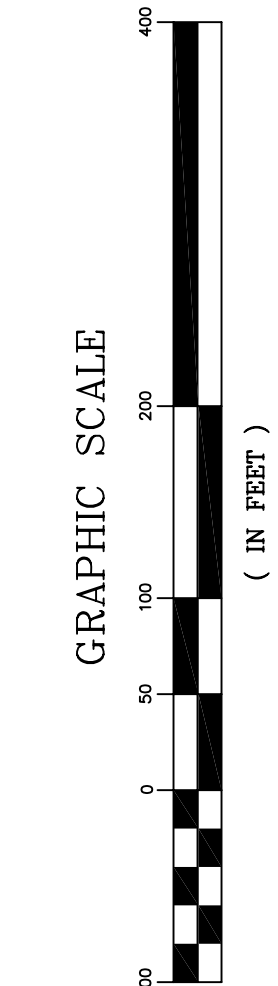
THE GRADING PHASE OF THE DEVELOPMENT MUST INCLUDE THE INSTALLATION OF THE FOLLOWING EROSION & SEDIMENT CONTROL DEVICES DURING THE GRADING PHASE:

- 1) MAINTENANCE AND INSTALLATION OF ADDITIONAL SILT FENCE (Sd1)
- 2) MAINTENANCE OF CONSTRUCTION EXIT (Co) AND DAILY INSPECTION OF THIS DEVICE.
- 3) MAINTENANCE OF SEDIMENT INLET TRAPS (Sd2)
- 4) MAINTENANCE OF SEDIMENT STORAGE AREAS
- 5) MAINTENANCE AND INSTALLATION OF ADDITIONAL ORANGE SAFETY FENCING
- 6) INSTALLATION OF STORM OUTLET PROTECTION (St) TO ALL STORM PIPE OUTFALLS.
- 7) INSTALLATION AND MAINTENANCE OF THE CONCRETE WASHOUT AREA PRIOR TO THE POURING OF ANY CONCRETE OR MIXING OF MASONRY PRODUCTS.
- 8) DUST CONTROL (Du) SHALL BE IMPLEMENTED UNTIL GRASSING IS ESTABLISHED.



GRADING PHASE
1" = 100'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	REVISIONS
GA	CSHPP-0007-00(562)	17	19	DATE DESCRIPTION



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GEORGIA
Professional Seal
STEPHEN T. RAKESTRAW
12/14/09
Certified Design
Professional # 000002144

PROJECT:
MULT-USE TRAIL
COLUMBUS, GA

CLIENT:
COLUMBUS STATE
UNIVERSITY

SHEET TITLE:
GRADING PHASE

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DATE: 12/14/09
SCALE: 1" = 100'

SHEET NO.:
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PRACTICE	CONSTRUCTION EXIT	DUST CONTROL	SEDIMENT BARRIER	DISTURBED AREA STABILIZATION (WITH MULCH)	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)	SEDIMENT BARRIER type C	SEDIMENT INLET TRAP	SEDIMENT BARRIER SILT FENCE HAY BALE	TOPSOILING
MAP SYMBOL										

THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

ALL DISTURBED AREAS NOT DESIGNATED FOR PAVING OR STRUCTURES SHALL BE STABILIZED WITH TEMPORARY AND PERMANENT VEGETATION Ds1 and Ds2.

ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

FINAL PHASE NOTES

THE FINAL PHASE OF THE DEVELOPMENT MUST INCLUDE THE INSTALLATION OF THE FOLLOWING EROSION & SEDIMENT CONTROL DEVICES DURING THE FINAL PHASE:

- 1) INSTALL HAY BLANKETS TO STABILIZE THE FILL SLOPES OVER 3/1 SLOPES.
- 2) THE USE OF Ds1, AND Ds2 SHALL BE USED DURING ALL PHASES TO PREVENT THE MIGRATION OF SOIL AND DUST CONTROL.
- 3) REMOVAL OF SILT FENCE (Sd1) SHALL BE DONE AFTER SITE IS STABILIZED.
- 4) REMOVAL OF CONSTRUCTION EXITS SHALL BE DONE AFTER PAVING IS INSTALLED.
- 5) REMOVAL OF CONCRETE WASHOUT AREA SHALL BE DONE AFTER ALL MASONRY AND CONCRETE IS POURED. PROPER CLEAN UP AREA SHALL BE DONE SEE DETAIL SHEET C400.
- 6) REMOVAL OF THE TEMPORARY SEDIMENT PONE SHALL BE DONE AFTER THE SITE WORK IS COMPLETE AND THE GROUND COVER IS STABILIZED.

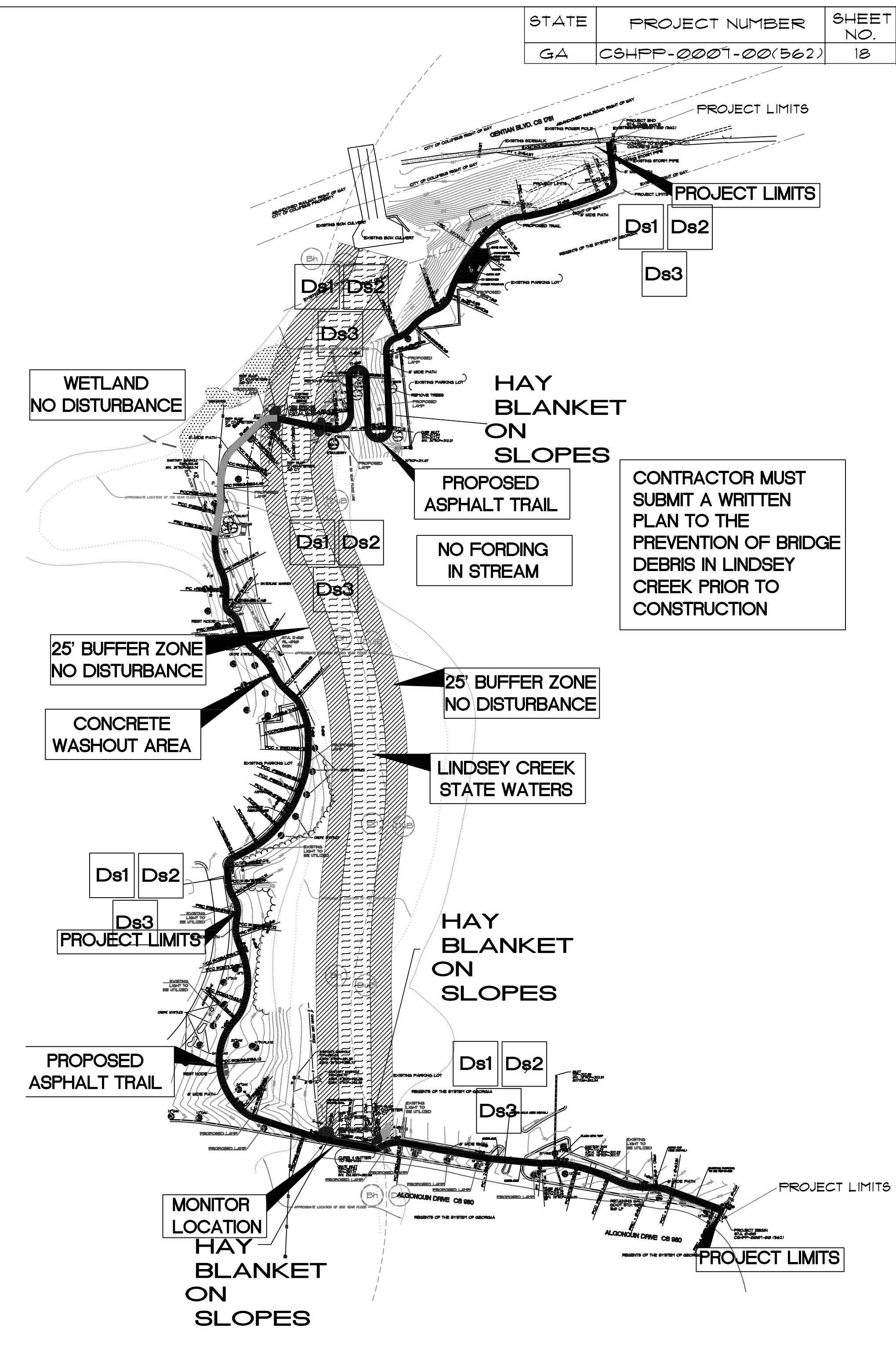
Ds1 HAY MULCH AT 2' THICK

Grassing Schedule

Species	Rate/Acre	Dates	Fertilizer (6-12-12)	N-Top Dressing Rates
Temporary Ds2				
Weeping Love	4lb	2/1-6/21	0.75 Tons/Acre	50-100 lbs/ac.
Grass	3lb	9/1-12/1	0.75 Tons/Acre	50-100 lbs/ac.
Rye	40lb	4/1-7/15	0.75 Tons/Acre	50-100 lbs/ac.
Browntop Millet				Apply in spring following seeding Apply in spill applications when high rates are used
Permanent Ds3				
Common Bermuda (Hulled)PLS	10lb	3/1-6/31	0.75 Tons/Acre	50-100 lbs/ac.
Common Bermuda (Unhulled)PLS	Block seed Only	4/1-6/1	0.4 Tons/Acre	50-100 lbs/ac
Centipede				Apply in spring following seeding Apply in spill applications when high rates are used
Lime	2 Tons			
Straw Mulch	2 Tons			

Notes:

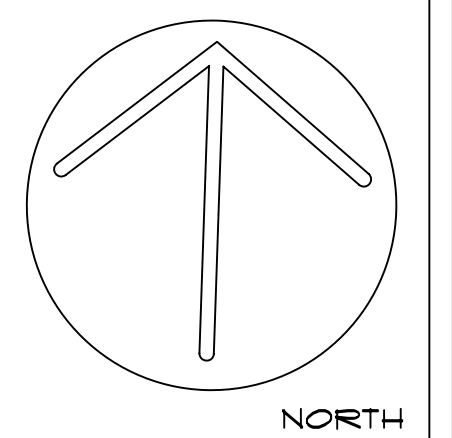
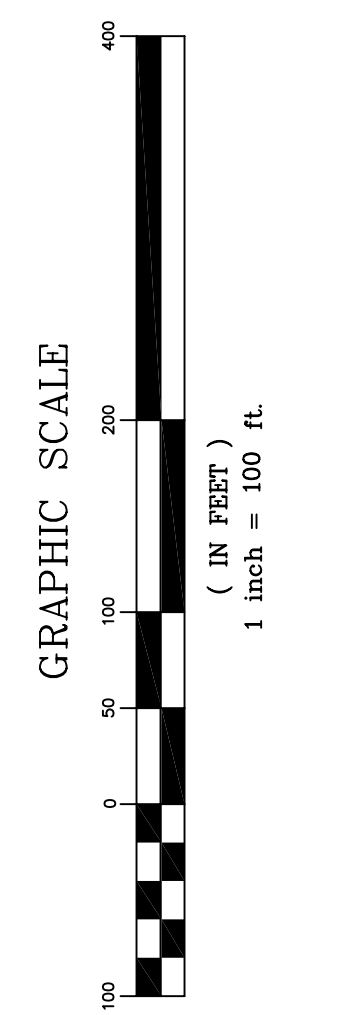
1. Lime and Fertilizer shall be applied Prior to permanent seeding.
2. Straw Mulch shall be applied immediately after seeding, regardless of planting method.
3. Any delay of 10 days in construction will require mulching of cleared areas.
4. The term "pure live seed" is used to express the quality of seed, even if it is not shown on the label, pure live seed (pls) is expressed as a percentage of seeds are pure and will germinate.



FINAL PHASE

1" = 100'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	REVISIONS
GA	CSHPP-0007-00(562)	18	19	DATE DESCRIPTION



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 Phone: 229.382.0003

GEORGIA
 REGISTERED PROFESSIONAL ENGINEER
 No. 20025
 EXPIRES 12/31/09
 STEPHEN T. RAKESTRAW
 12/14/09
 Certified Design
 Professional # 000002144

PROJECT:
 MULT-USE TRAIL
 COLUMBUS, GA
 CLIENT:
 COLUMBUS STATE
 UNIVERSITY

SHEET TITLE:
 FINAL PHASE

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DATE: 12/09
 SCALE: 1" = 100'

SHEET NO.:
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 of 19

EROSION AND SEDIMENT CONTROL NOTES

1. **DESCRIPTION:** The project is located within the limits of Columbus, Muscogee County. The project consists of the development of a 8' wide asphalt path and pedestrian bridge. The project site is located within Land Lot 33, 8th District Muscogee County, Georgia. Current land use is a college campus.

2. **DEVELOPER/OWNER:** MICHAEL E. MEDLOCK
PRIMARY PERMITTEE: 4225 UNIVERSITY AVENUE
 COLUMBUS, GA.
 (706) 565-3465

3. **24-HOUR LOCAL CONTACT:** MICHAEL E. MEDLOCK
 (706) 565-3465

4. **SIZE OF PROJECT:** The affected area of the project site is 2.4 acres.

5. **ACTIVITY SCHEDULE:** THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL BE INSTALLED PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES. The detailed schedule is on this sheet of these plans.

6. **STORMWATER AND SEDIMENT MANAGEMENT SYSTEMS:**
Erosion Control Program: Clearing will be kept to an absolute minimum. Vegetation and mulch will be applied to applicable areas immediately after grading is complete. Land disturbing will be scheduled to limit exposure of bare soils to erosive elements.
Sediment Control Program: Type A silt fence will be installed as shown on these plans.
 All designs will conform to and work will be performed in accordance with the standards and specifications set forth in the "Manual for Erosion and Sediment Control in Georgia".

7. **CRITICAL AREAS:** No areas of this project are expected to have erosion problems. Areas of potential sedimentation problems due to excavation work will be protected by silt fences as shown on the plans.

8. **SOILS:** Information about soils on these plans comes from the "Soil Survey of Richmond County, Georgia". Soils in the affected area are listed in the soils table on this sheet of the plans.

9. **VEGETATIVE PLAN:** The vegetative plan is shown on this sheet of the plans. After satisfactory stand of grass has been obtained, remove silt fence and grass disturbed areas.

10. **100 YEAR FLOOD PLAIN:** The proposed project is within the 100 Year Floodplain.

11. **SAFETY PROTECTION:** Construction activities will be performed in compliance with all applicable laws, rules, and regulations.

12. **MAINTENANCE PROGRAM:** Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional measures shall be implemented to control or treat the sediment source.

13. **STATE WATERS:** The Project crosses state waters.

14. **DUST CONTROL:** Ingress and Egress of the site shall be controlled by BMP's for dust control and sediment tracking. Maintenance of Construction Exits shall be down to prevent dirt and sediment on construction routes.

15. **ENGINEER SITE VISITS:** The design engineer shall be informed (7) seven days before clearing to visit the site to inspect the clearing phase of the project. Site Visits will be performed by the design engineer will inspect all phases of the erosion and sediment control plans on site. These visits are in addition to the requirements of the NPDES General Permit. The engineer shall inspect the site within (7) days after initial construction starts.

16. **STREAM BUFFERS:** No Construction Activities also including non-exempt activities shall not be conducted with the undisturbed stream buffer as measured from the wreted vegetation without first acquiring necessary variances and permits.

17. **STORM WATER POLLUTANTS:** All stormwater discharge areas shall be monitored along with preventive measures and BMP's will be installed to prevent stormwater pollutants during construction and once completed.

18. **PLAN AMENDMENTS:** Any deviation from plans including hydraulic components shall be approved and certified by the design engineer.

19. **WASTE MATERIALS:** Any waste materials shall NOT be discharged to state waters, except as authorized by a Section 404 permit.

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURE METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER.

20. HAZARDOUS WASTE MATERIALS:

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS. THE JOB SITE SUPERINTENDENT, WHO WILL ALSO BE RESPONSIBLE FOR SEEING THAT THOSE PRACTICES ARE FOLLOWED, WILL INSTRUCT SITE PERSONNEL IN THESE PRACTICES. MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS WILL BE MAINTAINED IN THE ESPCD FILE AT THE JOB SITE CONSTRUCTION TRAILER AFFECTS. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.

THE CONTRACTOR WILL IMPLEMENT THE SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN FOUND WITHIN THE ESPCD AND WILL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTE WILL BE ALLOWED TO COME IN CONTACT WITH STORM WATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORM WATER DISCHARGE WILL BE CONTAINED ON SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND GENERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORM WATER. IT SHALL BE THE RESPONSIBILITY THE JOB SITE SUPERINTENDENT TO PROPERLY TRAIN ALL PERSONNEL IN THE USE OF THE SPCC PLAN.

APPENDIX B

NEPHELOMETRIC TURBIDITY UNIT (NTU) TABLE

SURFACE WATER DRAINAGE AREA SQUARE MILES		50-100	100-200	200-500	500-1000	1000-5000	5000-10000
0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500-1000
100-150	150-200	200-300	300-400	400-500	500-750	750-1000	1000-1500
150-200	200-250	250-300	300-400	400-500	500-750	750-1000	1000-1500
250-500	500-750	750-1000	1000-1500	1500-2000	2000-3000	3000-4000	4000-5000
500-1000	1000-1500	1500-2000	2000-3000	3000-4000	4000-5000	5000-7500	7500-10000
1000+	50	50	50	50	50	100	100

ACTIVITY	CONSTRUCTION SCHEDULE															
	2009	NOV	DEC	JAN	FEB	MAR	APR									
CONSTRUCTION BEGIN-Start of Clearing Phase																
INITIAL PHASE CLEARING AND GRUBBING																
GRADING PHASE & TRAIL CONSTRUCTION																
GRASSING																
FINAL PHASE REMOVAL OF TEMPORARY EROSION MEASURES																
COMPLETION																

21. **PETROLEUM TANKS:** Comply with Section 12-7-6 of the Georgia Erosion and Sediment Control Handbook.

SOIL CLEANUP AND CONTROL PRACTICES

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
 - MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
 - SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.

- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS.

- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.

- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.

- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ON SITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

22. **SECONDARY PERMITTEE:** No secondary permittees are involved with this project.

23. **CONCRETE:** The washdown of concrete tools, and concrete mixer chutes, shall be done only within the specific washout area(s) on the plans. No washouts of concrete drums is allowed within the project site.

24. **COMPLIANCE:** The ESPC plan is in compliance with all local and state regulations that govern sanitary sewer, waste disposal, and septic systems.

Inspections:

(1) Each day when any type of construction activity has taken place at a primary permittee's site, qualified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipments; (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking; and (c) measure rainfall once each twenty-four hour period at the site. These inspections must be conducted until a Notice of Termination is submitted.

(2) Certified personnel (provided by the primary permittee) shall inspect at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater (unless such storm ends after 5: PM, on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first).

(a) disturbed areas of the primary permittee's construction site that have not undergone final stabilization; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation that have not undergone final stabilization; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For areas of a site that have undergone final stabilization, the permittee must comply with Part IV.D.3.a.(3). These inspections must be conducted until a Notice of Termination is submitted.

(3) Qualified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is received by EPD) the areas of the site that have undergone final stabilization. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s).

(4) Based on the results of each inspection, the site description and the pollution prevention and control measures identified in the Erosion, Sedimentation and Pollution Control Plan, the Plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as practical but in no case later than seven (7) calendar days following each inspection.

Sampling:

All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by 40 CFR Part 136 (unless other test procedures have been approved); the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.

(1) Sample containers should be labeled prior to collecting the samples.

(2) Samples should be well mixed before transferring to a secondary container.

(3) Large mouth well cleaned and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.

(4) Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. Dilution of samples is not required. Samples may be analyzed directly with a properly calibrated turbidimeter. Samples are not required to be cooled.

(5) Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.E.

Sampling Points:

Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:

(a) The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value.

(b) The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c) Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).

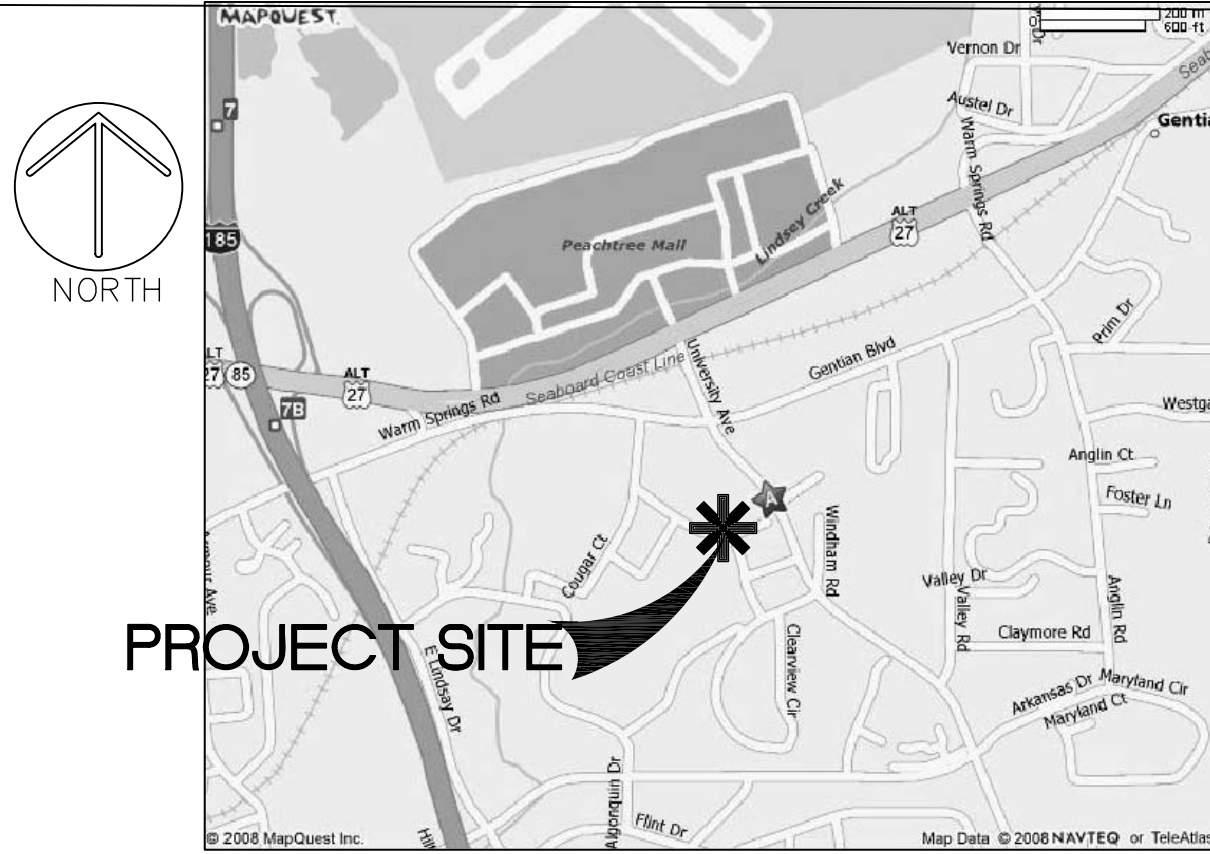
(d) Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.

(e) The sampling container should be held so that the opening faces upstream.

(f) The samples should be kept free from floating debris.

(g) Permittees do not have to sample sheetflow that flows onto undisturbed natural areas or areas stabilized by permanent structures. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures, 100% of 10% or greater, or equivalent permanent stabilization measures (such as the use of rip rap, gabions, permanent mulches or geotextiles) have been used. Permanent vegetation shall consist of planted trees, shrubs, perennial vines or a crop of permanent vegetation that has been established and is in a state of annual vegetation and a seeding of target crop perennials appropriate for the region. For infrastructure construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use. Final stabilization applies to each phase of construction.

(h) All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the facility/site is in compliance with the standard set forth in Parts III.C.3. or III.C.4., whichever is applicable.



PROJECT SITE

PROJECT LOCATION MAP NTS

SOIL DESCRIPTIONS

DuB: Dothan-Urban land complex, 2 to 5 percent slopes well drained soils

Bh: Bibb sandy loam, 0 to 2 percent slope poorly drained

Sampling Frequency:

1) The primary permittee must sample in accordance with the Plan at least once for each rainfall event described below. For a qualifying event, samples must be taken within forty-five (45) minutes of: (a) the accumulation of the minimum amount of rainfall for the qualifying event, if the storm water discharge to a monitored receiving water or from a monitored outfall has begun at or prior to the accumulation; or (b) the beginning of any storm water discharge to a monitored receiving water or from a monitored outfall, if the discharge begins after the accumulation of the minimum amount of rainfall for the qualifying event. (2) However, where manual and automatic sampling are impossible (as defined in this permit), or are beyond the permittee's control, the permittee shall take samples as soon as possible, but in no case more than twelve (12) hours after the beginning of the storm water discharge. (3) Sampling by the permittee shall occur for the following events:

(a) For each area of the site that discharges to a receiving stream, the first rain event that reaches or exceeds 0.5 inch and allows for monitoring during normal business hours (Monday thru Friday, 9:00 AM to 5:00 PM and Saturday 9:00 AM to 5:00 PM when construction activity is being conducted by the Primary permittee) that occurs after all clearing and grubbing operations have been completed in the drainage area of the location selected as the representative sampling location.

(b) In addition to (a) above, for each area of the site that discharges to a receiving stream, the first rain event that reaches or exceeds 0.5 inch and allows for monitoring during normal business hours that occurs either 30 days after the first sampling event or after all mass grading operations have been completed in the drainage area of the location selected as the representative sampling location, whichever comes first.

(c) At the time of sampling performed pursuant to (a) and (b) above, if BMPs are found to be properly designed, installed and maintained, no further action is required. If BMPs in any area of the site that discharges to a receiving stream are not properly designed, installed and maintained, corrective action shall be defined and implemented within 2 business days, and turbidity samples shall be taken from discharges from that area of the site for each subsequent rain event that reaches or exceeds 0.5 inch during normal business hours until the selected turbidity standard is attained, or until post-storm event inspections determine that BMPs are properly designed, installed and maintained and (d) Existing construction activities, i.e., those that are occurring on or before the effective date of this permit, that have met the sampling required by (a) above shall sample in accordance with (b). Those existing construction activities that have met the sampling required by (b) above shall not be required to conduct additional sampling other than as required by (c) above.

Note that the Permittee may choose to meet the requirements of (a) and (b) above by collecting turbidity samples from any rain event that reaches or exceeds 0.5 inch and allows for monitoring at any time of the day or week.

Reporting:

1. The applicable permittees are required to submit a summary of the monitoring results to the EPD at the address shown in Part I.C. by the fifteenth day of the month following the reporting period. Reporting periods are months during which samples are taken in accordance with this permit. Sampling results shall be in a clearly legible format. Upon written notification, EPD may require the applicable permittees to submit the sampling results on a more frequent basis. Sampling and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to the EPD. The sampling reports must be signed in accordance with Part V.G. Sampling reports must be submitted to EPD until such time as a NOT is submitted in accordance with Part VI.

2. Each permittee must retain copies of all monitoring results reported by that permittee in accordance with this Part. In addition to other record keeping requirements, the monitoring information shall include: a. The date, exact place, and time of sampling or measurements; b. The name(s) of the individual(s) who performed the sampling and measurements; c. The date(s) analyses were performed; d. The time(s) analyses were initiated; e. The name(s) of the individual(s) who performed the analyses; f. References and written procedures, when available, for the analytical techniques or methods used; g. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results; and h. Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU."

Retention of Records:

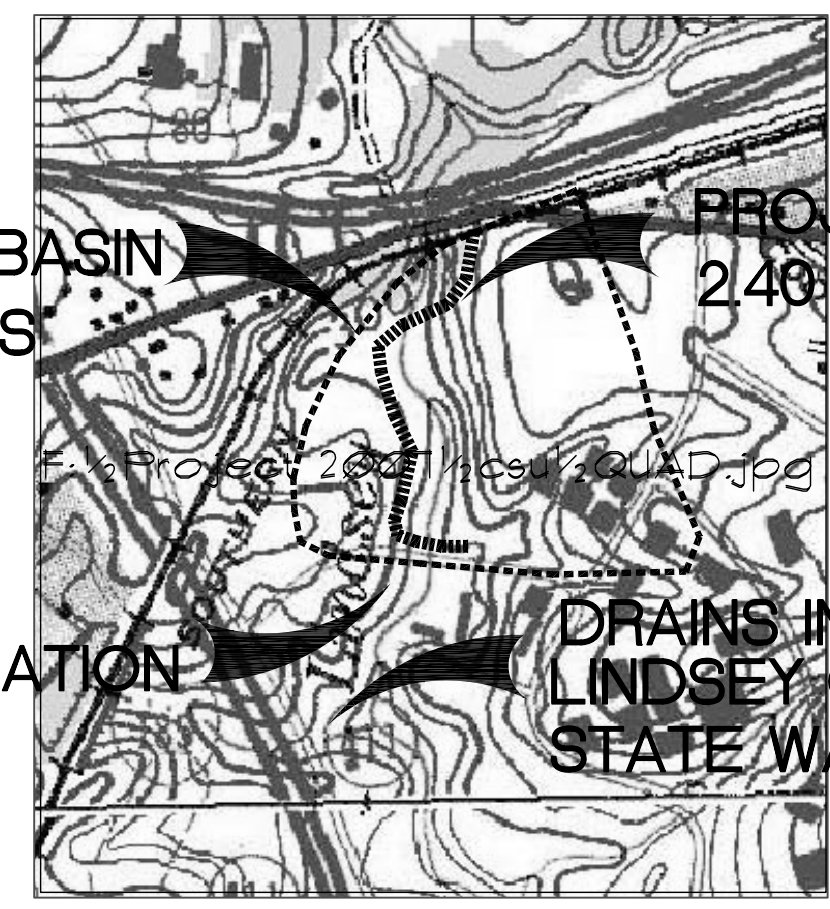
1. a. A copy of all Notices of Intent submitted to EPD; b. a copy of the Erosion, Sedimentation and Pollution Control Plan required by this permit; c. The design professional's report of the results of the inspection conducted in accordance with part IV.A.5. of this permit; d. a copy of all monitoring information, results, and reports required by this permit; e. a copy of all inspection reports generated in accordance with Part IV.A.4.a. of this permit; f. a copy of all violation summaries and violation summary reports generated in accordance with part III.D.2. of this permit; and g. Daily rainfall information collected in accordance with Part IV.D.4.a.(1)(c) of this permit.

2. Copies of all Notices of Intent, Notices to Termination, reports, plans, monitoring reports, monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, Erosion, Sedimentation and Pollution Control Plans, records of all data used to complete the Notice of Intent to be covered by this permit and all other records required by this permit shall be retained by the permittee who either produced or used it for a period of at least three years from the date NOT is submitted in accordance with Part VI of this permit. These records must be maintained at the permittee's primary place of business once the construction activity has ceased at the permitted site. This period may be extended by request of the EPD at any time upon written notification to the permittee.

"I CERTIFY UNDER THE PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS!"

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STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	CSHFP-0007-00(562)	19	19



DRAINAGE BASIN 27.7 ACRES

PROJECT SITE 2.40 ACRES

MONITOR LOCATION

DRAINS INTO LINDSEY CREEK STATE WATERS

DRAINAGE BASIN MAP NTS

NPDES INFORMATION

OUTFALL: NONE
 LAND USE: COLLEGE CAMPUS
 ACREAGE: ON SITE 2.4 ACRES
 DRAINAGE BASIN 27.7 ACRES
 NAME OR RECEIVING DRAINAGE BASIN: LINDSEY CREEK

SEDIMENT STORAGE

67 CY OF SEDIMENT STORAGE PER ACRE
 2.4 ACRES x = 160.8 CY REQUIRED STORAGE
 EXCAVATED AREAS = 200 CY OF STORAGE

WATER QUALITY

- 1) SEDIMENT FOR AREAS DISTURBED SHALL BE RETAINED BY THE BEST MANAGEMENT PRACTICES.
- 2) STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
- 3) CONSTRUCTION RELATED MATERIALS, WASTES, SPILLS, OR RESIDUES SHALL BE RETAINED ON SITE TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF.
- 4) ALL CONSTRUCTION PERSONNEL ARE TO BE AWARE OF THE REQUIRED BMP'S AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE.
- 5) DURING CONSTRUCTION, DISPOSAL OF MATERIALS AND POTENTIAL POLLUTANTS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY ON SITE PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

SOIL DESCRIPTIONS

DuA - Doige Urban Land Complex
 0-3% slopes moderately well drained
 Fnc - Fuquay Urban Land Complex
 2-8% slopes well drained
 Ra - Rains Loamy Sand
 0-2% slopes poorly drained

STORMWATER CALCULATIONS

ON SITE ACRES = 2.4
 TOTAL DRAINAGE BASIN 27.7 ACRES
 EXISTING CN = 68
 PREDEVELOPMENT RUNOFF = 150.68 cfs
 (25 YEAR STORM)

POST DEVELOPMENT CN = 69
 POST DEVELOPMENT RUNOFF = 152.9 cfs
 (25 YEAR STORM)

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION.
 I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENT AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALL AND THAT THE DESIGNED SYSTEM OF THE BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GA000001.
 Stephen T. Rakestraw, 9-21-09
 Stephen T. Rakestraw, Certified Design Professional # 0000020144

REVISIONS	
DATE	DESCRIPTION

Rakestraw & Associates
 Planning • Design • Environmental
 83 TY TY OMEGA ROAD
 TIFTON, GA. 31793
 Phone: 229.382-0009

12/14/09
 Certified Design Professional # 000002144

PROJECT: MULTI-USE TRAILS COLUMBUS STATE UNIVERSITY

SHEET TITLE: EROSION, SEDIMENT, & POLLUTION CONTROL NOTES

PROJECT NUMBER: CSHFP-0007-00(562)

DATE: 12/09

SCALE: NTS

SHEET NO.: 19 of 19