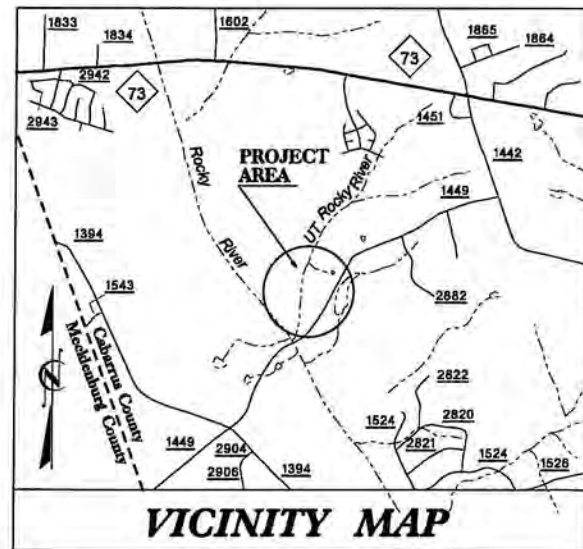


29/08/95

CONTRACT: UT TO ROCKY RIVER SCO# 070708001



AS-BUILT PLANS UT TO ROCKY RIVER

LOCATION: CABARRUS COUNTY, NORTH CAROLINA

LAT: 35°25'34.52" N

LONG: 80°44'25.53" W

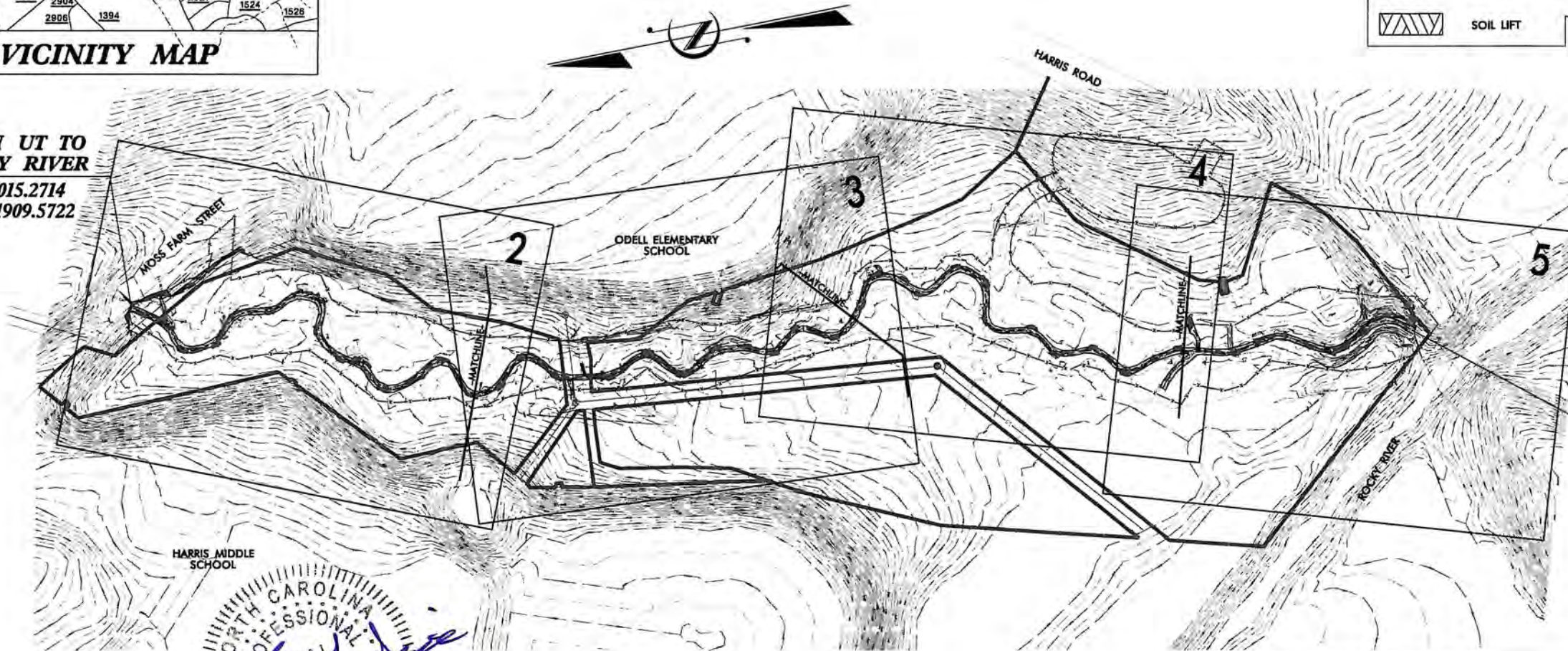
TYPE OF WORK: AS-BUILT PLANS

STATE	UT TO ROCKY RIVER	SHEET NO.	TOTAL SHEETS
N.C.		1	5

LEGEND

	CONSTRUCTION REVISIONS		ROCK CROSS VANE
	EASEMENT BOUNDARY		LOG VANE W/SILL
	BANKFULL		LOG CROSS VANE
	THALWEG		DOUBLE STEP LOG CROSS VANE
	TOE OF SLOPE		TRANSPLANTS
	FPI - FLOODPLAIN INTERCEPTOR		
	ROCK L-VANE		
	LOG SILL		
	SOIL LIFT		

BEGIN UT TO ROCKY RIVER
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E = 1481909.5722

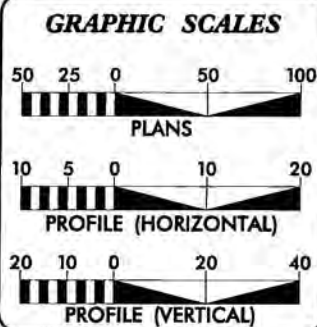


END UT TO ROCKY RIVER
N = 613897.5867
E = 1481456.8104



INDEX OF SHEETS

TITLE SHEET	1
PLAN SHEETS	2 - 5



DESIGN DATA

DESIGN STREAM TYPE	=	C5/E5
BANKFULL AREA (FT ²)	=	9.0
CROSS-SECTIONED		
BANKFULL WIDTH (FT)	=	9.5
MAX DEPTH (FT)	=	1.4
WIDTH / DEPTH RATIO	=	10
DRAINAGE AREA (AC)	=	0.8
BANKFULL SLOPE (FT/FT)	=	0.002

TOTAL LIMITS OF DISTURBANCE

PROJECT LENGTH

EXISTING STREAM LENGTH	=	2,350 FT
PROPOSED DESIGN STREAM LENGTH	=	2,715 FT
WETLAND ENHANCEMENT AREA	=	8.40 AC.



OWNER CONTACT:

ROBIN DOLIN
EEP PROJECT MANAGER

LIN XU
REVIEW COORDINATOR

Constructed By:

Vaughn Contracting, INC.
P.O. Box 796
Wadesboro N.C. 278170
(704) 694-6450

Prepared In the Office of:

FH Florence & Hutcheson
CONSULTING ENGINEERS
5121 KINGDOM WAY, SUITE 100
RALEIGH, N.C. 27607
(919) 851-6066
License No: F-9258

R. KEVIN WILLIAMS
PROJECT ENGINEER

RYAN V. SMITH
PROJECT DESIGNER

4/4/2011
R:\Construction\As-Built\RockyRiver_Asbuilt_p.h.dgn
Florence & Hutcheson, Inc.

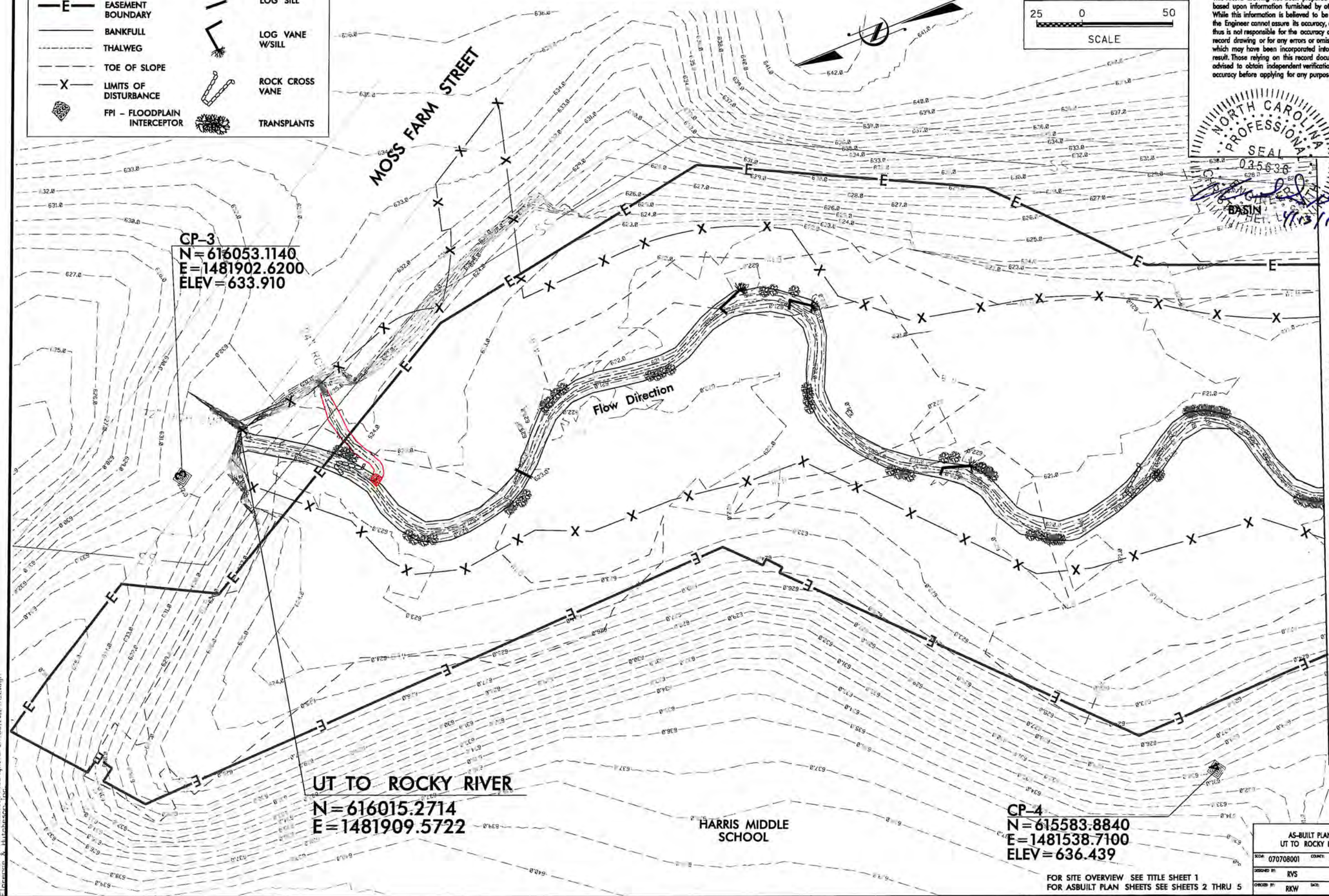
LEGEND	
	CONSTRUCTION REVISIONS
	EASEMENT BOUNDARY
	BANKFULL THALWEG
	TOE OF SLOPE LIMITS OF DISTURBANCE
	FPI - FLOODPLAIN INTERCEPTOR
	ROCK L-VANE
	LOG SILL
	LOG VANE W/SILL
	ROCK CROSS VANE
	TRANSPLANTS

AS-BUILT PLANS

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 CONSULTING ENGINEERS
 5121 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 (919) 851-4966
 License No. 7-4122

25 0 50
 SCALE

PROJECT REFERENCE NO.	SHEET NO.
UT TO ROCKY RIVER	2
PROJECT ENGINEER	
AS BUILT	
This record drawing has been prepared in part, based upon information furnished by others. While this information is believed to be reliable, the Engineer cannot assure its accuracy, and thus is not responsible for the accuracy of this record drawing or for any errors or omissions which may have been incorporated into it as a result. Those relying on this record document are advised to obtain independent verification of its accuracy before applying for any purpose.	



-MATCHLINE- SEE SHEET 3

AS-BUILT PLANS UT TO ROCKY RIVER	
SCALE 070708001	CORNER CABARRUS
DESIGNED BY: RVS	
CHECKED BY: RKW	DATE: 01/11

FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

6/14/2011 10:00 AM C:\Users\jrh\Documents\Projects\RockyRiver\As-Built\11-11-11-2.dgn

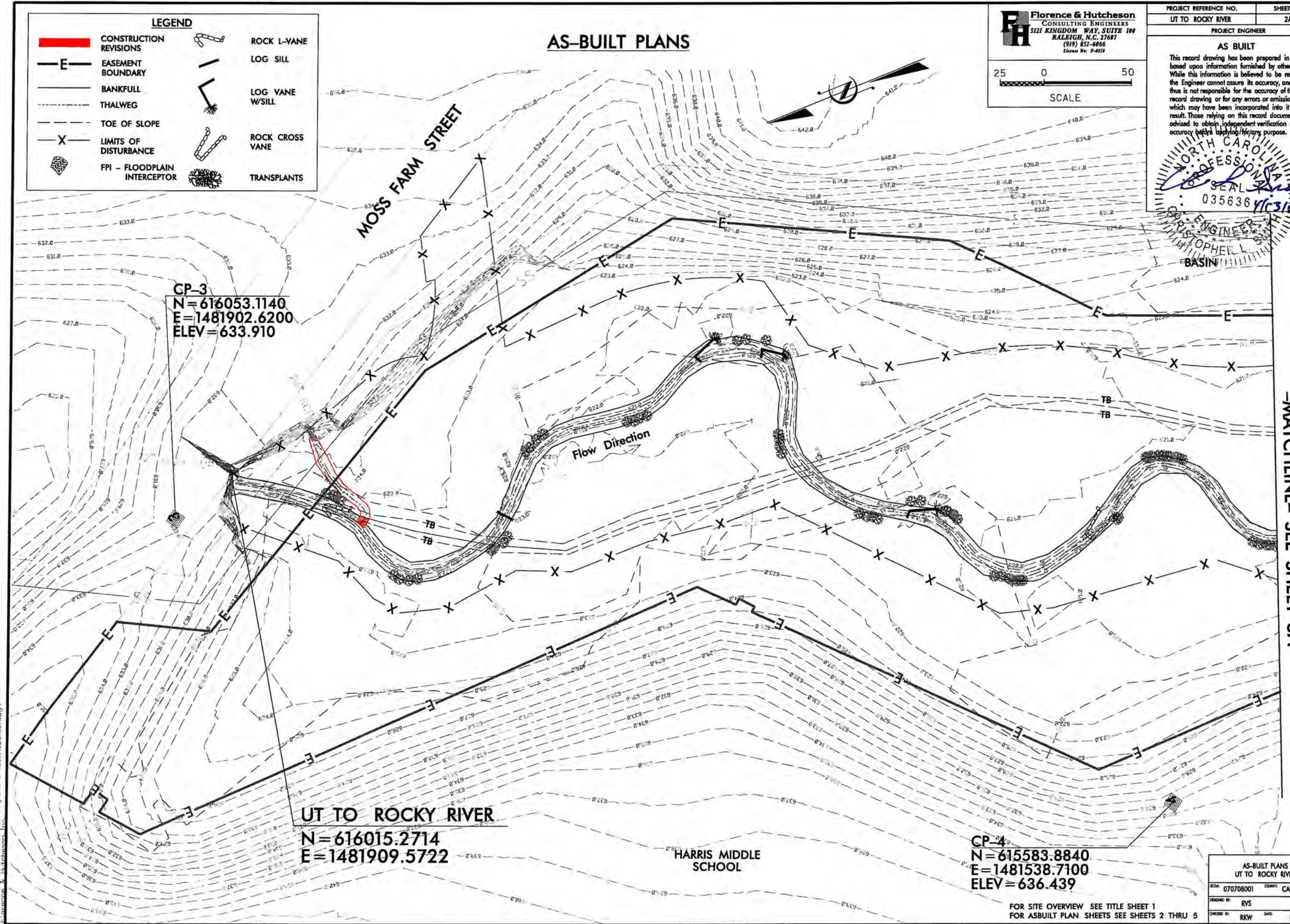
LEGEND	
	CONSTRUCTION REVISIONS
	EASEMENT BOUNDARY
	BANKFULL
	THALWEG
	TOE OF SLOPE
	LIMITS OF DISTURBANCE
	FPI - FLOODPLAIN INTERCEPTOR
	ROCK L-VANE
	LOG SILL
	LOG VANE W/SILL
	ROCK CROSS VANE
	TRANSPLANTS

AS-BUILT PLANS

Florence & Hutcheson
 CONSULTING ENGINEERS
 5121 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 (919) 551-4966
 License No. 3-4828

25 0 50
 SCALE

PROJECT REFERENCE NO.	SHEET NO.
UT TO ROCKY RIVER	2A
PROJECT ENGINEER	
AS BUILT	
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-MATCHLINE- SEE SHEET 3A

AS-BUILT PLANS UT TO ROCKY RIVER	
CONTRACT NO. 070708001	COUNTY CABARRUS
DESIGNED BY RVS	CHECKED BY RKW
DATE 01/11	

FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

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AS-BUILT PLANS

LEGEND

	CONSTRUCTION REVISIONS		FPI - FLOODPLAIN INTERCEPTOR
	EASEMENT BOUNDARY		LOG SILL
	BANKFULL		LOG VANE W/SILL
	THALWEG		DOUBLE STEP LOG CROSS VANE
	TOE OF SLOPE		TRANSPLANTS
	LIMITS OF DISTURBANCE		
	SOIL LIFT		

Florence & Hutcheson
 CONSULTING ENGINEERS
 5121 KINGDOM WAY, SUITE 100
 RALPHIGH, N.C. 27607
 (919) 851-6066
 License No. E-4258

25 0 50
 SCALE

PROJECT REFERENCE NO.	SHEET NO.
UT TO ROCKY RIVER	3

PROJECT ENGINEER

AS BUILT

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NORTH CAROLINA
 PROFESSIONAL SEAL
 035636
 4/13/11
 ENGINEER
 CHRISTOPHER L. SMITH














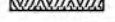
4/13/11
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 Florence & Hutcheson

FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

AS-BUILT PLANS UT TO ROCKY RIVER	
NO: 070708001	COUNTY: CABARRUS
DRAWN BY: RVS	
CHECKED BY: RKW	DATE: 01/11

AS-BUILT PLANS

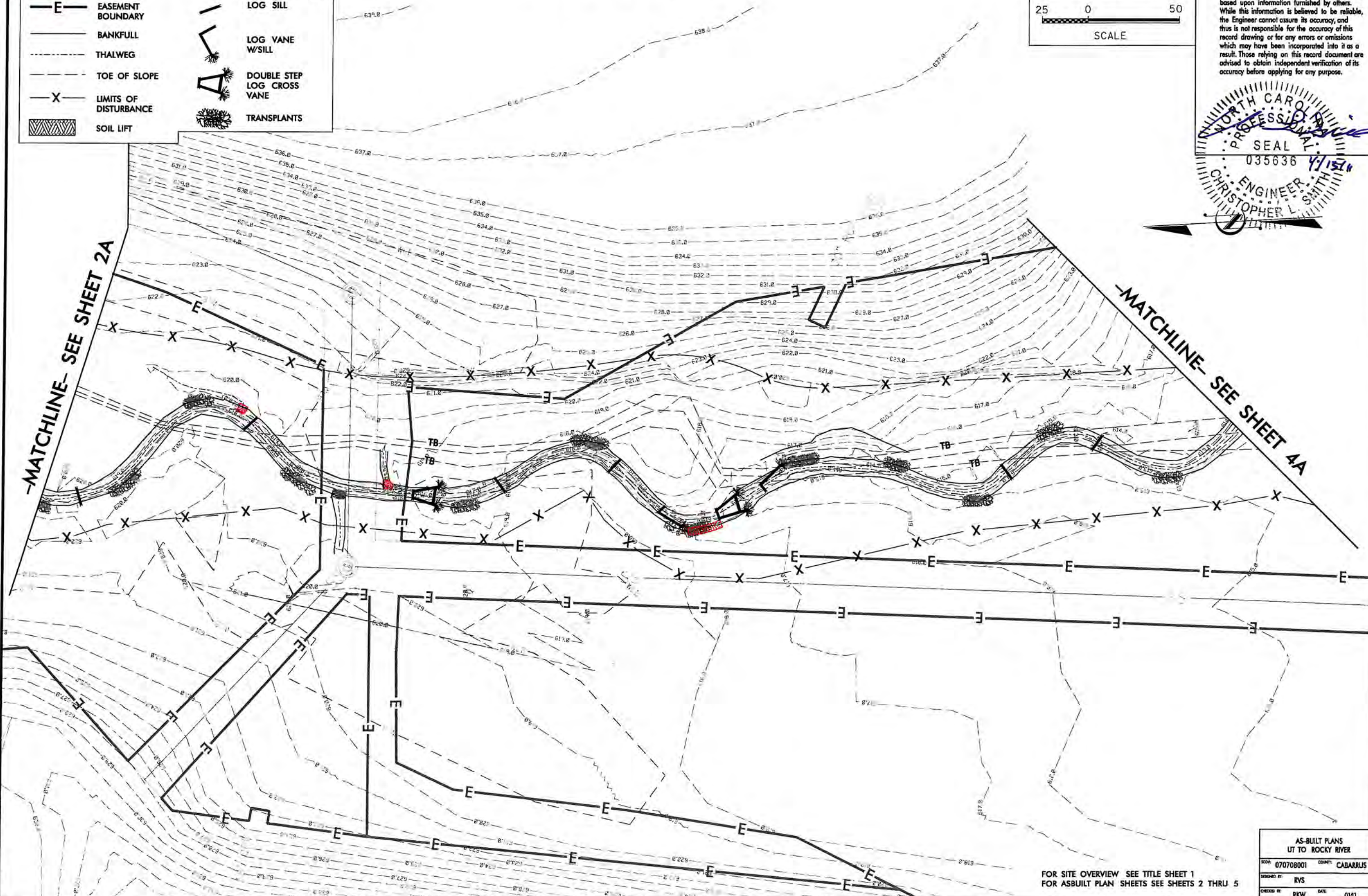
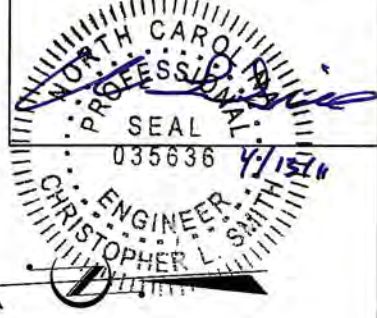
LEGEND

	CONSTRUCTION REVISIONS		FPI - FLOODPLAIN INTERCEPTOR
	EASEMENT BOUNDARY		LOG SILL
	BANKFULL		LOG VANE WSILL
	THALWEG		DOUBLE STEP LOG CROSS VANE
	TOE OF SLOPE		TRANSPLANTS
	LIMITS OF DISTURBANCE		
	SOIL LIFT		

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 5121 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 (919) 851-6966
 License No. 7-4119

25 0 50
 SCALE

PROJECT REFERENCE NO.	SHEET NO.
UT TO ROCKY RIVER	3A
PROJECT ENGINEER	
AS BUILT	
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FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

AS-BUILT PLANS	
UT TO ROCKY RIVER	
NO: 070708001	COUNTY: CABARRUS
DRAWN BY: RVS	
CHECKED BY: RKW	DATE: 01/11

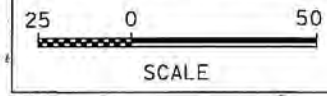
AS-BUILT PLANS

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 5121 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 (919) 851-6666
 License No. P-4314

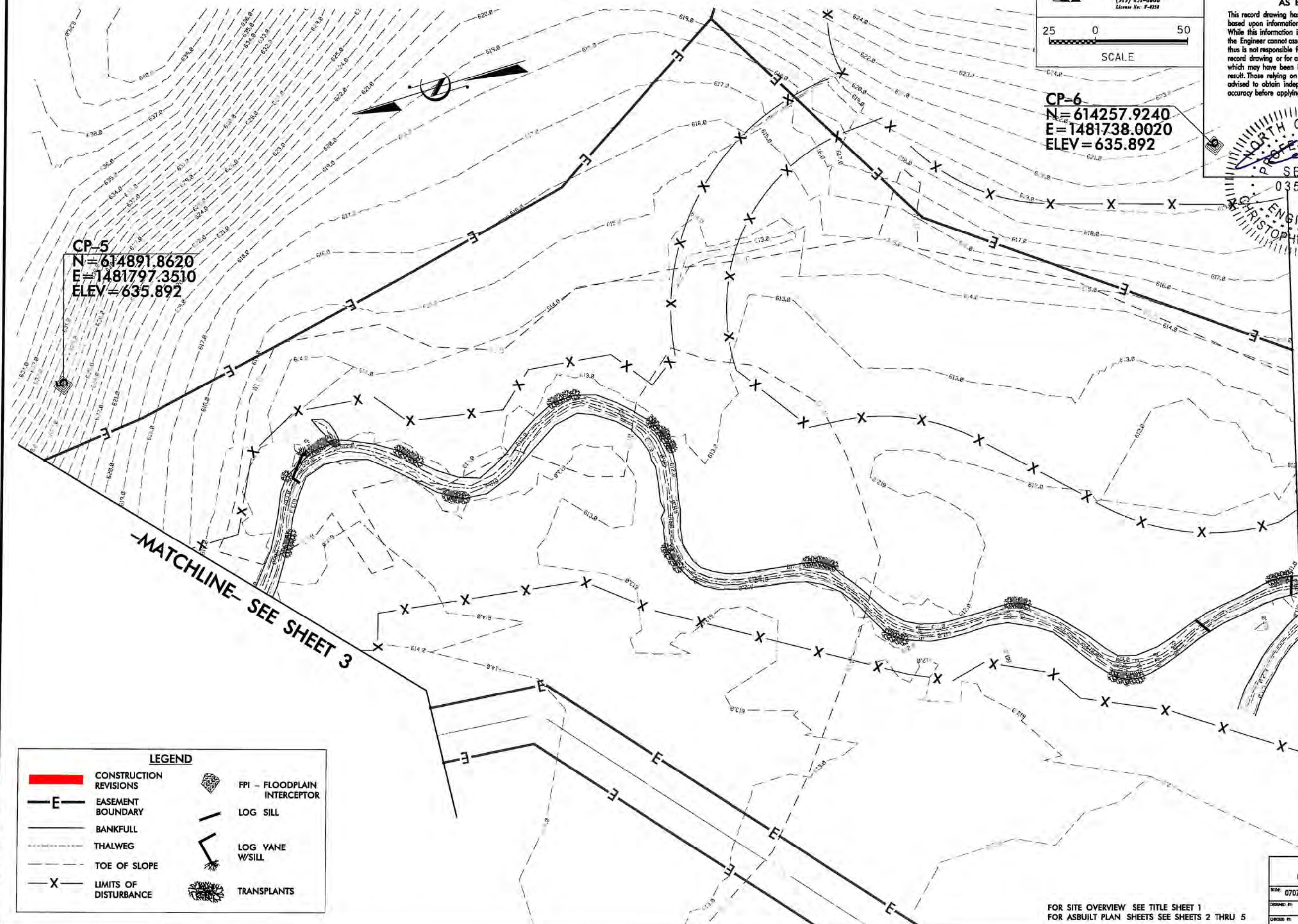
PROJECT REFERENCE NO.	SHEET NO.
UT TO ROCKY RIVER	4

PROJECT ENGINEER

AS BUILT
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CP-6
 N = 614257.9240
 E = 1481738.0020
 ELEV = 635.892



CP-5
 N = 614891.8620
 E = 1481797.3510
 ELEV = 635.892

MATCHLINE- SEE SHEET 3

MATCHLINE- SEE SHEET 5

LEGEND	
	CONSTRUCTION REVISIONS
	EASEMENT BOUNDARY
	BANKFULL
	THALWEG
	TOE OF SLOPE
	LIMITS OF DISTURBANCE
	FPI - FLOODPLAIN INTERCEPTOR
	LOG SILL
	LOG VANE W/SILL
	TRANSPLANTS

AS-BUILT PLANS	
UT TO ROCKY RIVER	
NO: 070708001	COUNTY: CABARRUS
DESIGNED BY: RVS	
DRAWN BY: RKW	DATE: 01/11

FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

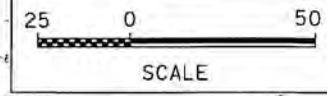
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AS-BUILT PLANS

FH Florence & Hutcheson
 CONSULTING ENGINEERS
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 RALEIGH, N.C. 27607
 (919) 851-6866
 License No. P-4224

PROJECT REFERENCE NO.	SHEET NO.
UT TO ROCKY RIVER	4A

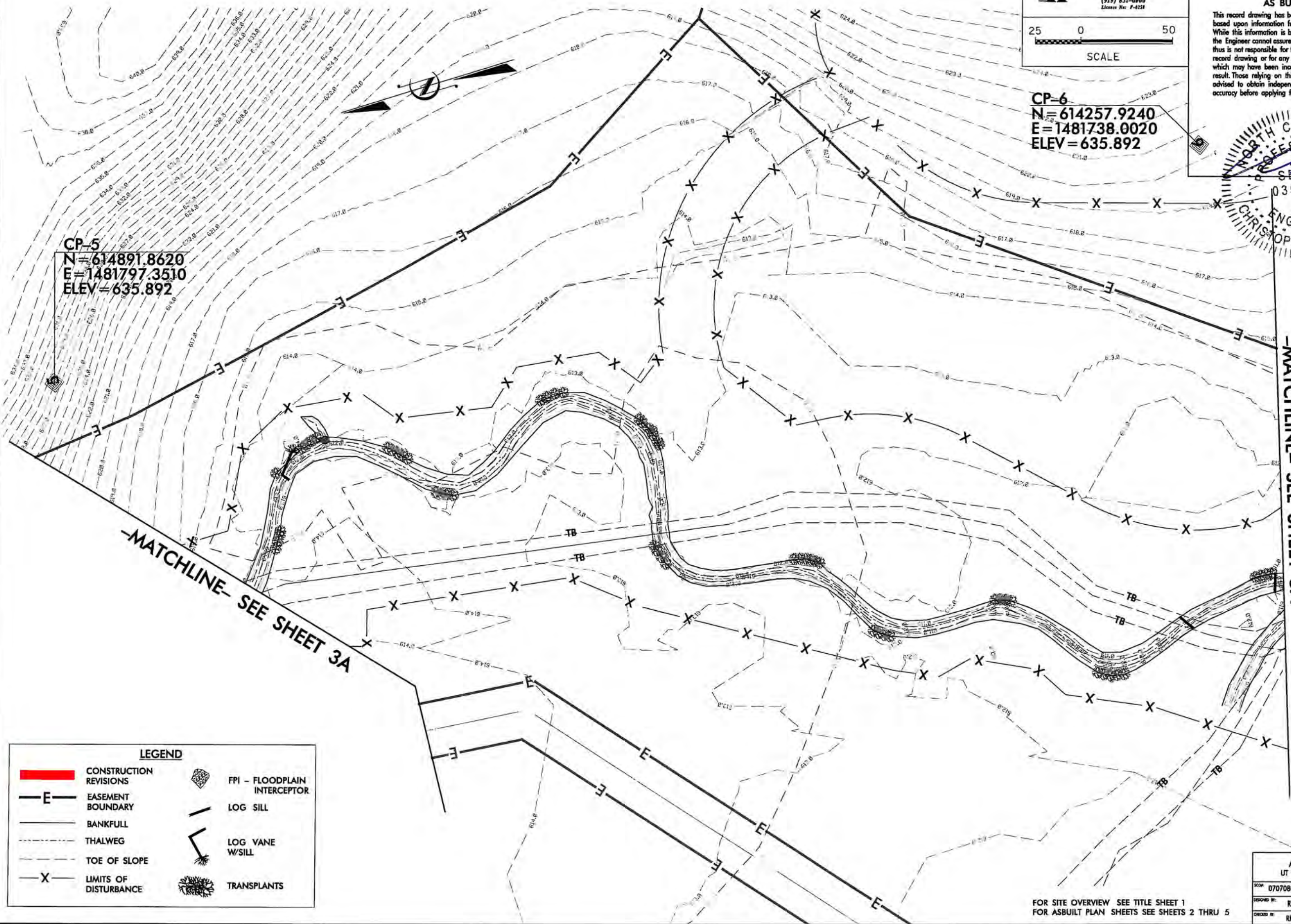
PROJECT ENGINEER
AS BUILT
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CP-6
 N = 614257.9240
 E = 1481738.0020
 ELEV = 635.892



CP-5
 N = 614891.8620
 E = 1481797.3510
 ELEV = 635.892



MATCHLINE- SEE SHEET 3A

MATCHLINE- SEE SHEET 5A

LEGEND

	CONSTRUCTION REVISIONS		FPI - FLOODPLAIN INTERCEPTOR
	EASEMENT BOUNDARY		LOG SILL
	BANKFULL		LOG VANE W/SILL
	THALWEG		TRANSPLANTS
	TOE OF SLOPE		
	LIMITS OF DISTURBANCE		

FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

AS-BUILT PLANS	
UT TO ROCKY RIVER	
SCOP: 070708001	COUNTY: CABARRUS
DESIGNED BY: RVS	
DRAWN BY: BKW	DATE: 01/11

4/4/2011
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AS-BUILT PLANS

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 CONSULTING ENGINEERS
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25 0 50
 SCALE

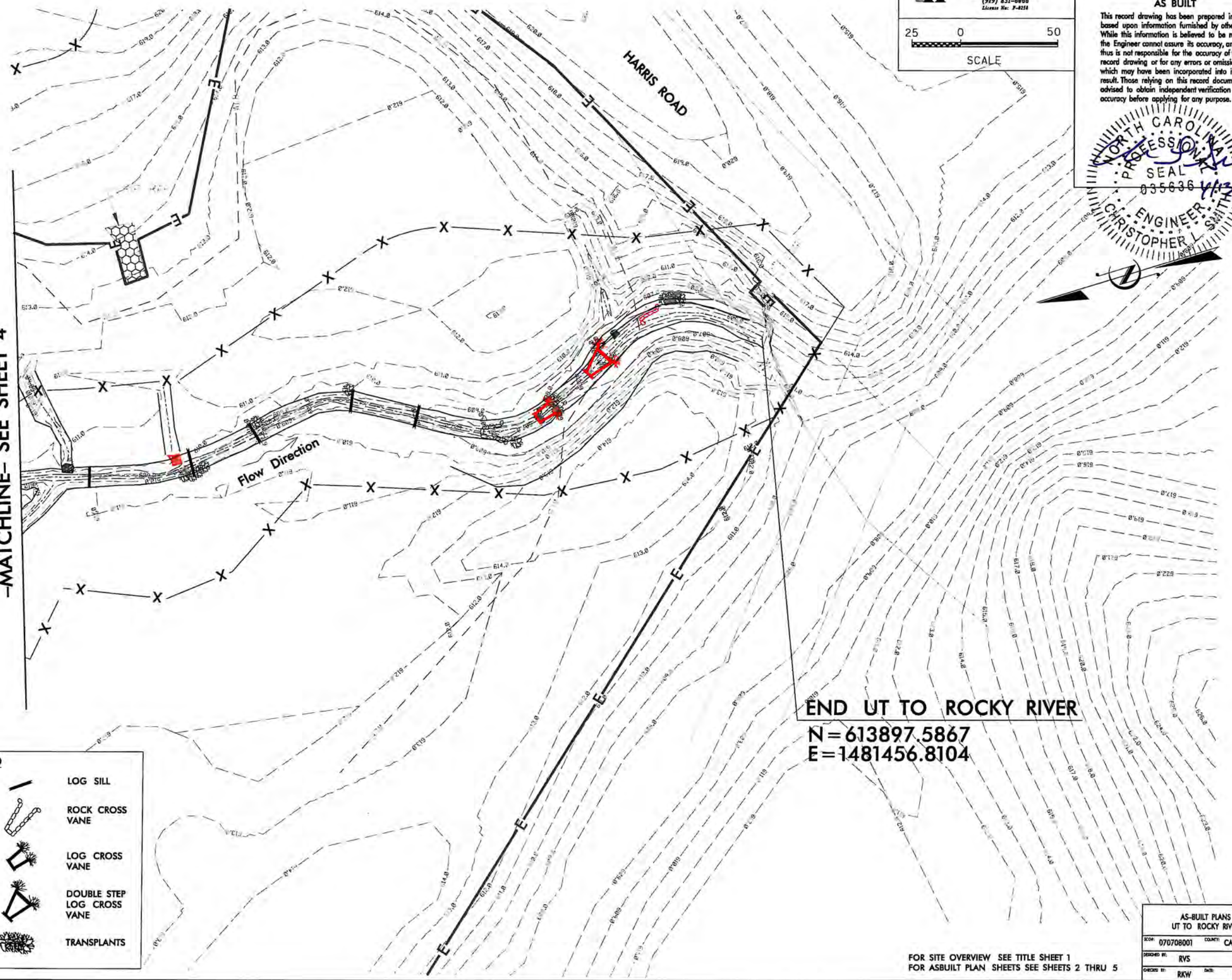
PROJECT REFERENCE NO.	SHEET NO.
UT TO ROCKY RIVER	5

AS BUILT

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-MATCHLINE- SEE SHEET 4



END UT TO ROCKY RIVER
 N=613897.5867
 E=1481456.8104

LEGEND	
	CONSTRUCTION REVISIONS
	EASEMENT BOUNDARY
	BANKFULL
	THALWEG
	TOE OF SLOPE
	LIMITS OF DISTURBANCE
	FPI - FLOODPLAIN INTERCEPTOR
	ROCK L-VANE
	LOG SILL
	ROCK CROSS VANE
	LOG CROSS VANE
	DOUBLE STEP LOG CROSS VANE
	TRANSPLANTS

AS-BUILT PLANS UT TO ROCKY RIVER	
NO: 070708001	COUNTY: CABARRUS
DESIGNED BY: RVS	
CHECKED BY: RKW	DATE: 01/11

FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

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AS-BUILT PLANS

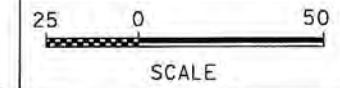
Florence & Hutcheson
 CONSULTING ENGINEERS
 5121 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 (919) 851-8866
 License No. E-4238

PROJECT REFERENCE NO. SHEET NO.
 UT TO ROCKY RIVER 5A

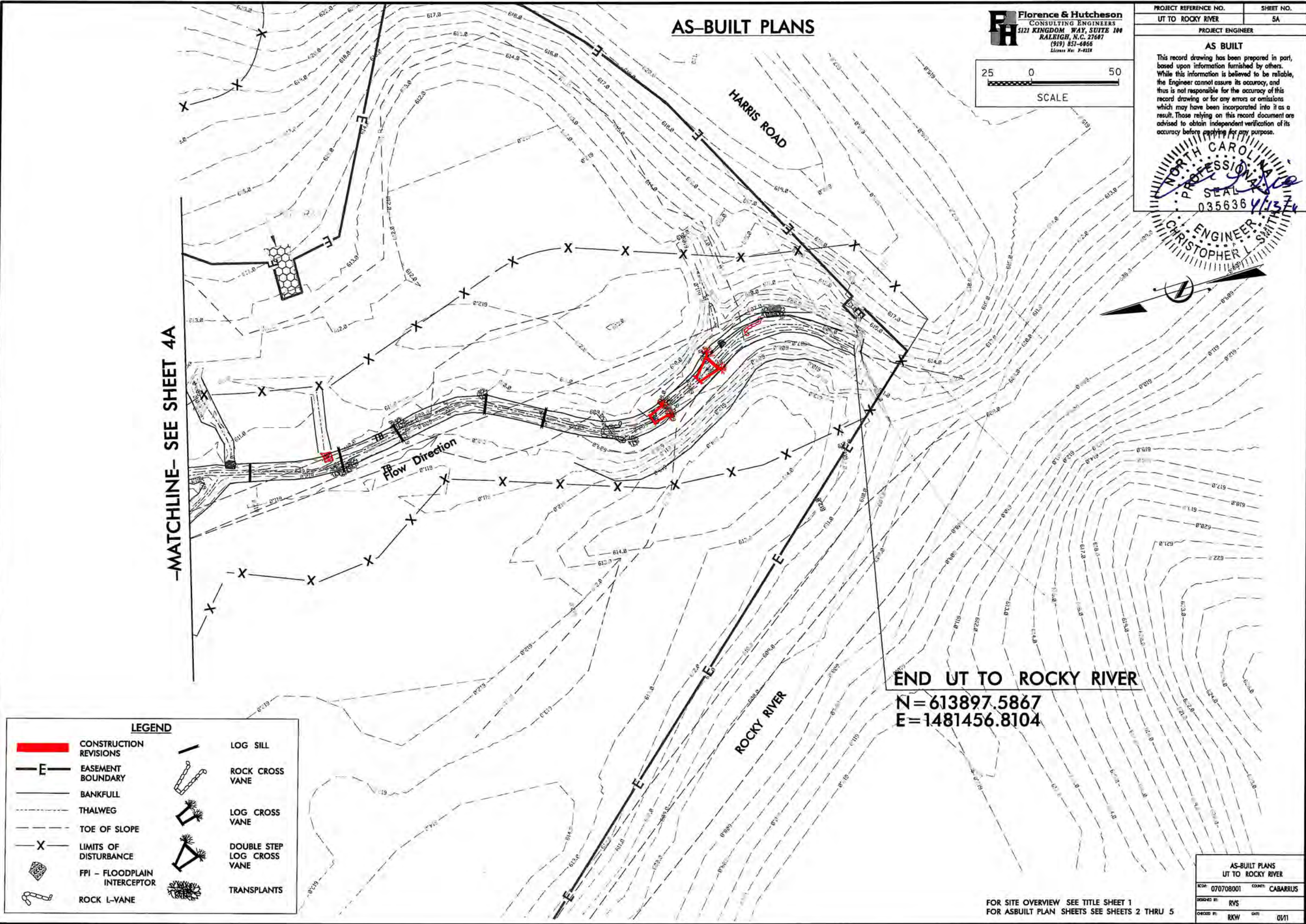
PROJECT ENGINEER

AS BUILT

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-MATCHLINE- SEE SHEET 4A



END UT TO ROCKY RIVER
 N=613897.5867
 E=1481456.8104

LEGEND	
	CONSTRUCTION REVISIONS
	EASEMENT BOUNDARY
	BANKFULL
	THALWEG
	TOE OF SLOPE
	LIMITS OF DISTURBANCE
	FPI - FLOODPLAIN INTERCEPTOR
	ROCK L-VANE
	LOG SILL
	ROCK CROSS VANE
	LOG CROSS VANE
	DOUBLE STEP LOG CROSS VANE
	TRANSPLANTS

AS-BUILT PLANS UT TO ROCKY RIVER	
DCP: 070708001	COMET: CABARRUS
DESIGN BY: RVS	
CHECK BY: RKW	DATE: 01/11

FOR SITE OVERVIEW SEE TITLE SHEET 1
 FOR ASBUILT PLAN SHEETS SEE SHEETS 2 THRU 5

9/1/2011
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