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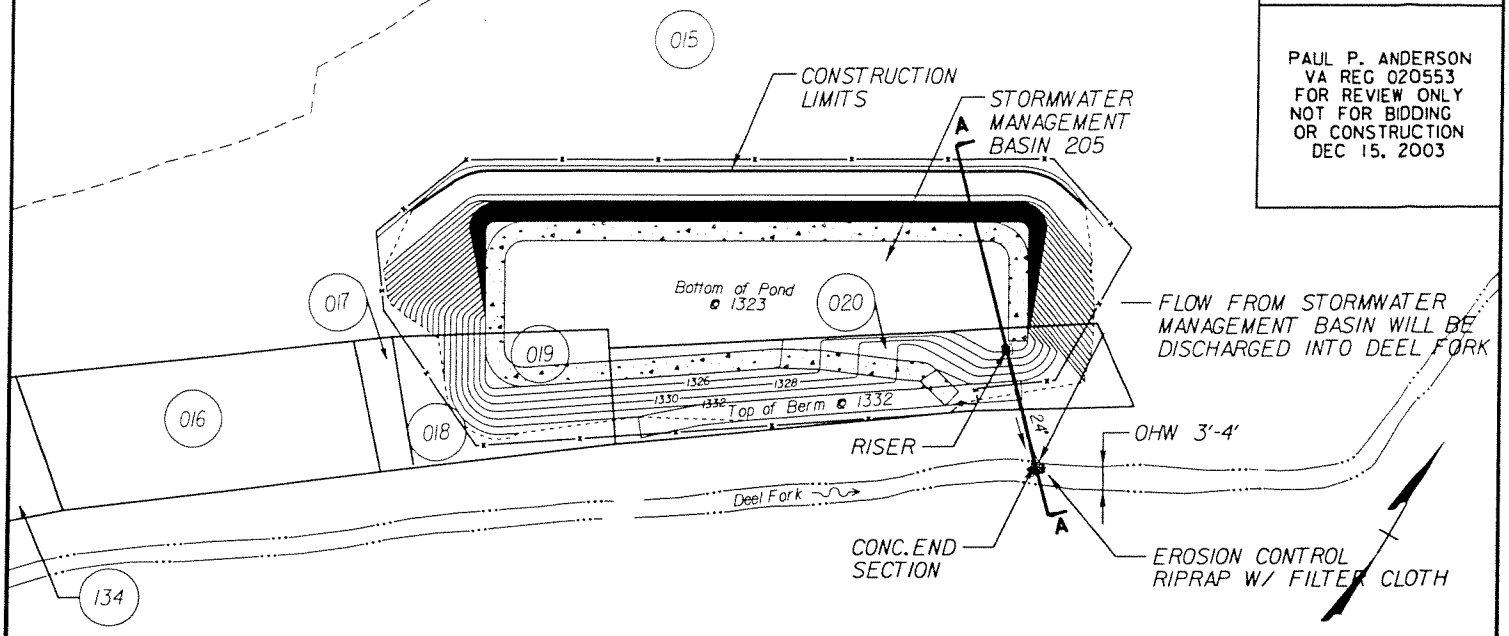
Ref. File - 30021A\CADD\DGN\Permits\permit-property.dgn
Ref. File - 30021A\CADD\DGN\Permits\permitborder.dgn
Ref. File - 30021A\CADD\DGN\d64125\d64126200.dgn

SWM BASIN 205
DEEL FORK

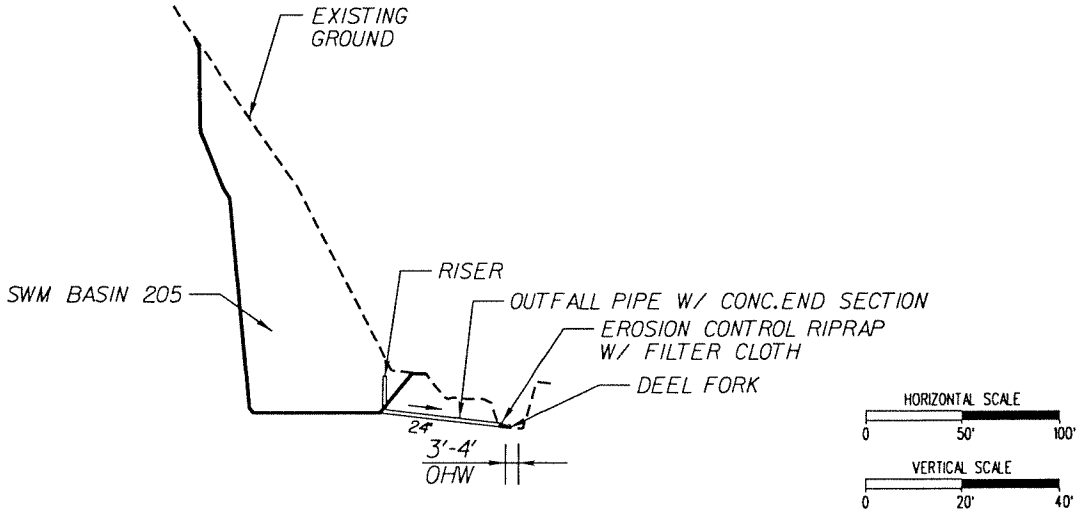
HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
FOR REVIEW ONLY
NOT FOR BIDDING
OR CONSTRUCTION
DEC 15, 2003



SWM BASIN 205 TO DEEL FORK
PLAN

SCALE
0 50' 100'



HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

CROSS SECTION "A" - "A"

ADJACENT PROPERTY OWNERS:
- (05) ELMER ELSWICK ESTATE
- (06) (07) JAMES M. SHORTT
- (08) (09) PAUL Z. SHORTT
- (010) CHRISTINE CHILDRESS
- (014) MICHAEL OWENS

PLAN & CROSS SECTION VIEW
ROUTE 121
ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
SWM BASIN 205
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

6-01-2004 17:05:18
cdavis
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Design File - 30021A\CADD\DGN\Permits\sk9.dgn Ref. File - 30021A\CADD\DGN\Permits\permit-property.dgn Ref. File - 30021A\CADD\DGN\Permits\permitborder.dgn Ref. File - 30021A\CADD\DGN\d64726\d64726200.dgn

SWM BASIN 208
BULL CREEK

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
FOR REVIEW ONLY
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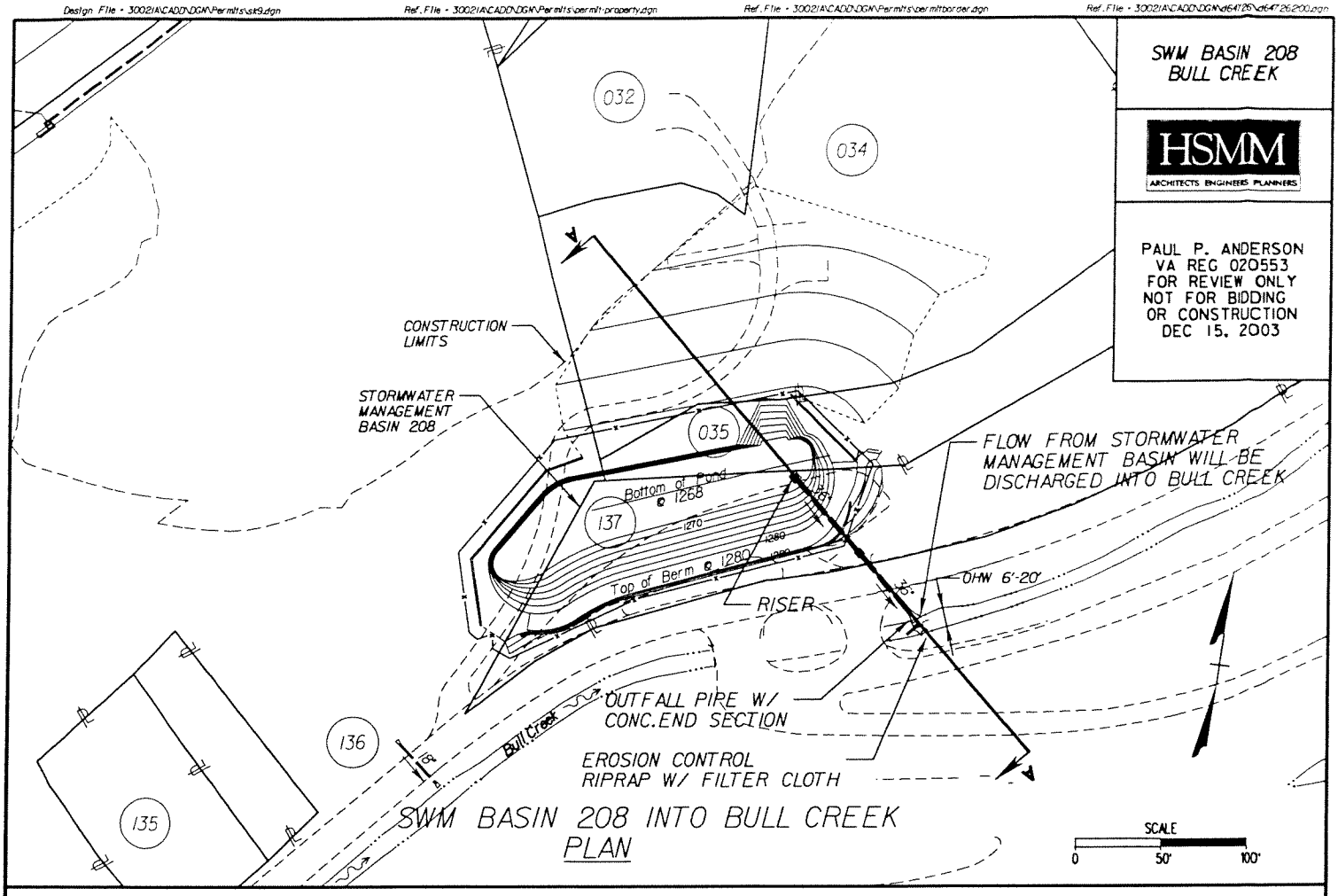
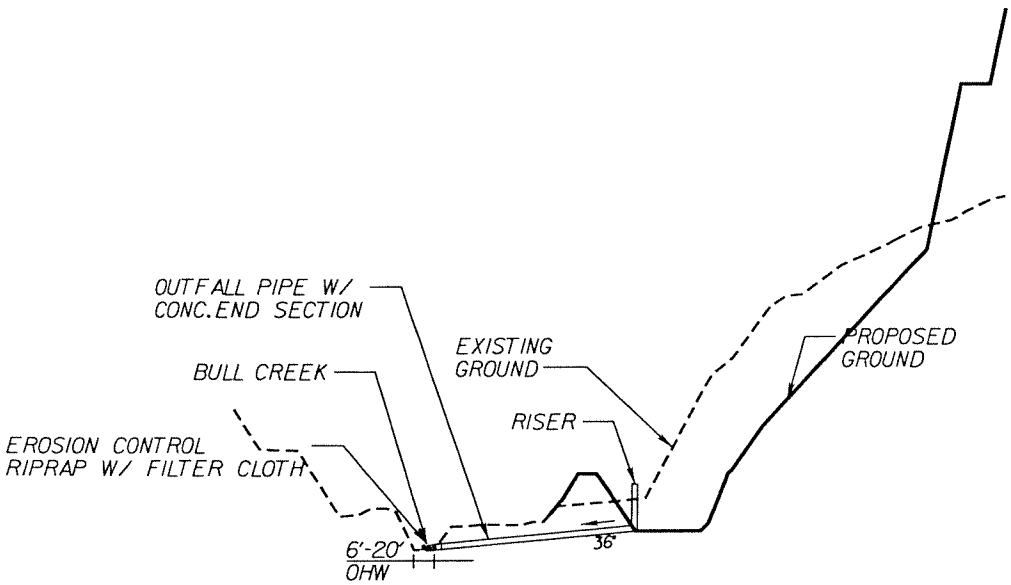
OR CONSTRUCTION
DEC 15, 2003



SWM BASIN 208 INTO BULL CREEK
PLAN



CROSS SECTION "A" - "A"

HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:
032 DELFORD AND MADELINE WARD
034 DELFORD AND MADELINE WARD
035 PENN VIRGINIA RESOURCE PARTNERS, LLC.
035 DANNY MICHAEL ELSWICK
036 GEORGE FLETCHER
037 SEE SHEET 207E

PLAN & CROSS SECTION VIEW
ROUTE 121
ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
SWM BASIN 208
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

6-03-2004 18:15:08

dcassaras

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Design File - 3002\A\CADD\DGN\Permits\stb.dgn
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Ref. File - 3002\A\CADD\DGN\Permits\permitborder.dgn
Ref. File - 3002\A\CADD\DGN\d647-26\d647-26200.dgn

SWM BASIN 209 BULL CREEK

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
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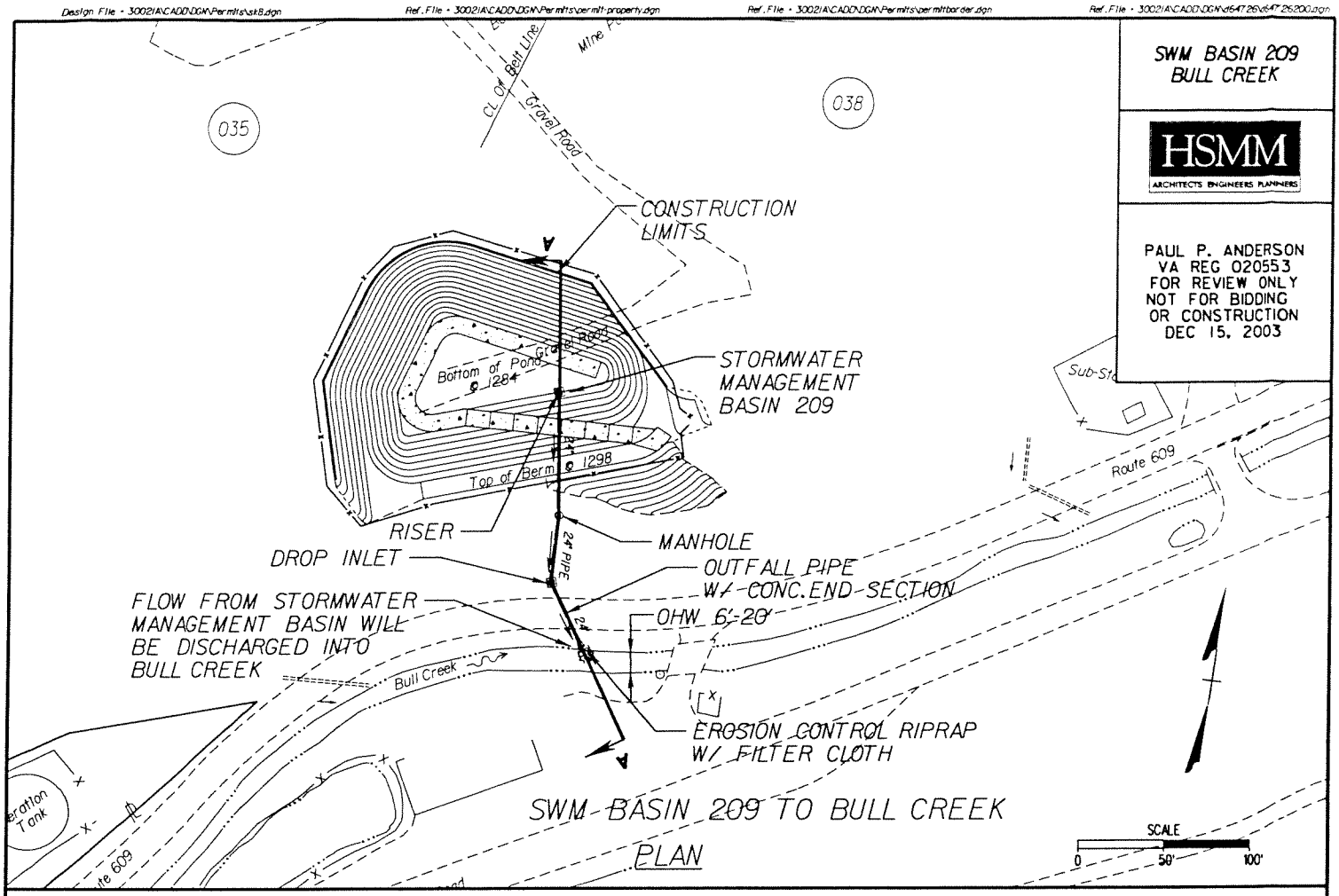
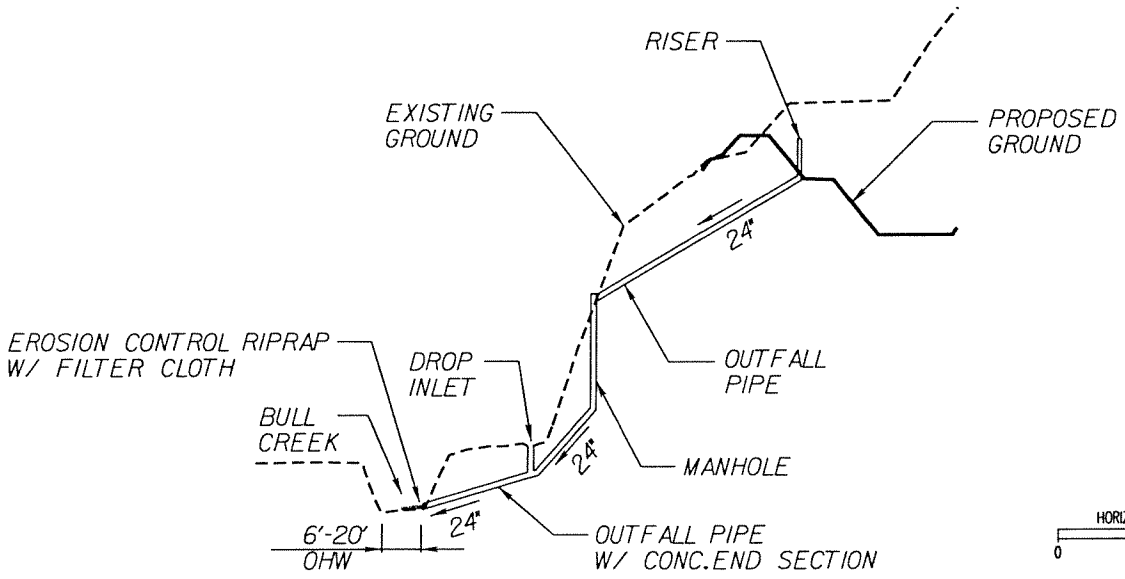
OR CONSTRUCTION
DEC 15, 2003



SWM-BASIN 209 TO BULL CREEK
PLAN



CROSS SECTION "A" - "A"

ADJACENT PROPERTY OWNERS:
(039) PENN VIRGINIA COAL COMPANY
(038) PENN VIRGINIA COAL COMPANY

PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
SWM BASIN 209
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

Design File - 30021A\CADD\DGN\Permits\sk7.dgn
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Ref. File - 30021A\CADD\DGN\Permits\permitborder.dgn
Ref. File - 30021A\CADD\DGN\d647126\d647126200.dgn

TSB 210
STARR BRANCH

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
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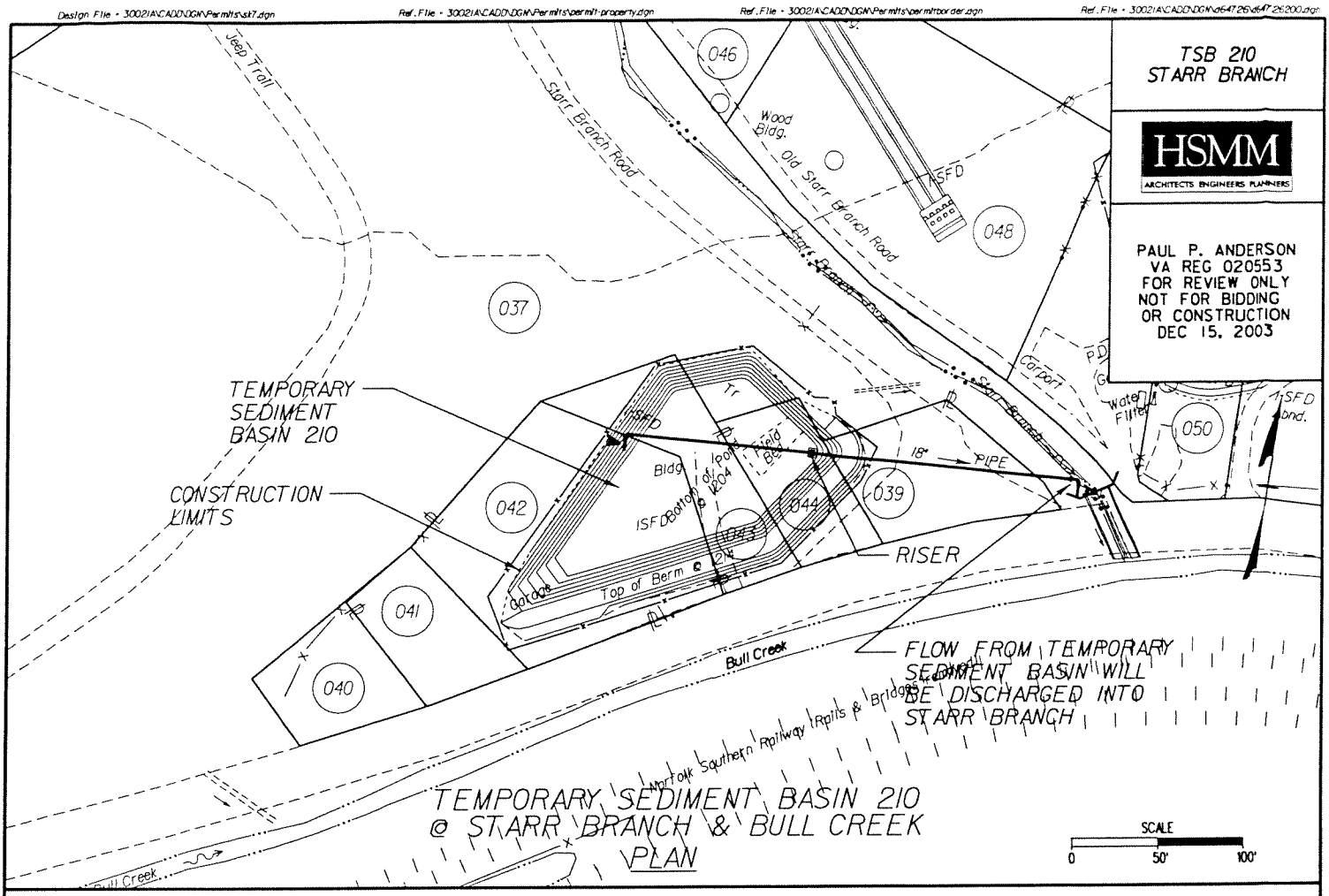
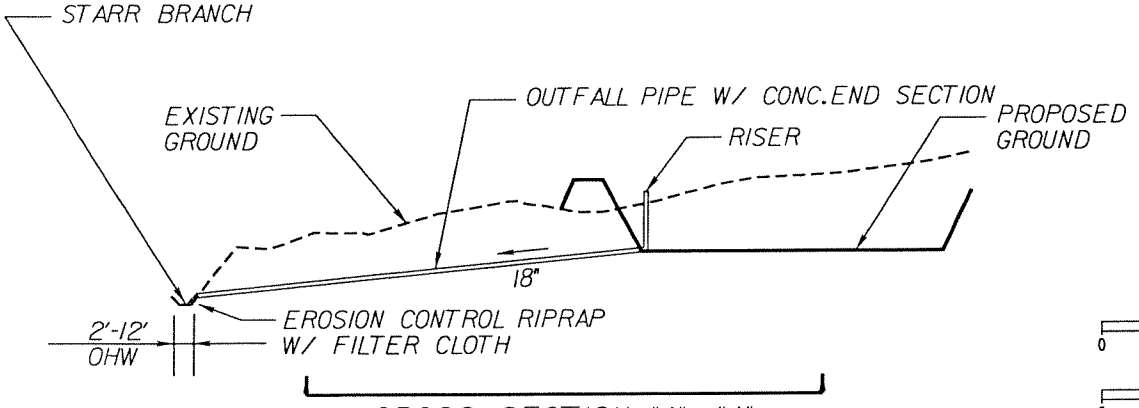
OR CONSTRUCTION
DEC 15, 2003



TEMPORARY SEDIMENT BASIN 210
@ STARR BRANCH & BULL CREEK
PLAN



CROSS SECTION "A" - "A"

HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:
- (039) PENN VIRGINIA RESOURCE PARTNERS, LLC.
- (039) PENN VIRGINIA RESOURCE PARTNERS, LLC.
- (042) JAMES RUSSELL AND LEXIE WEBB
- (044) JIMMY AND LEXIE WEBB
- (043) JAMES RUSSELL AND LEXIE WEBB
- (043) KIMBERLY LEE DEEL
- (044) KIMBERLY LEE DEEL
- (048) BURL LEE AND GLENDA JEAN RATLIFF
- (048) BURL LEE AND GLENDA JEAN RATLIFF
- (050) REX ALLEN AND JAMES EDWARD GREEN

PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
TSB 210
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

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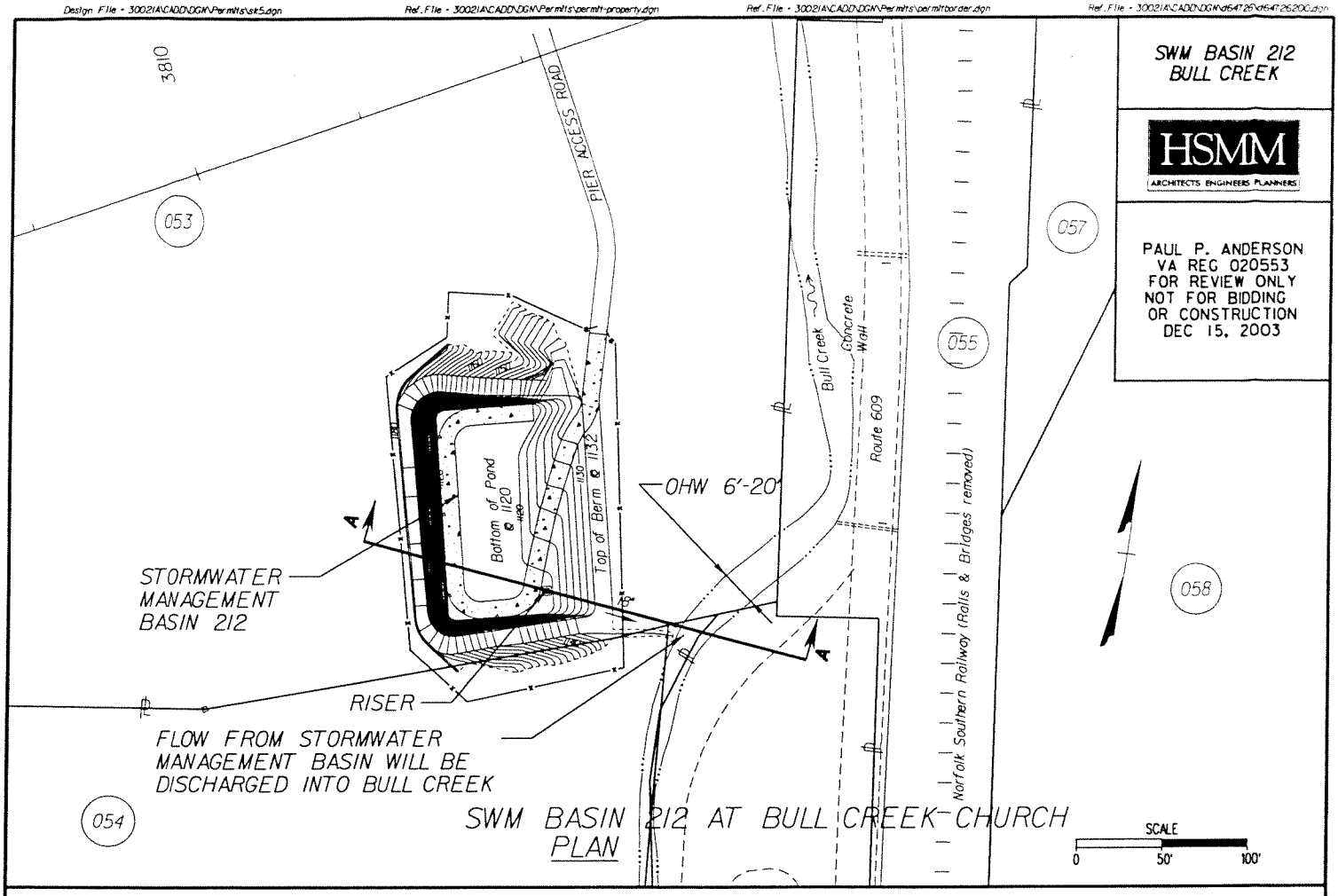
Ref. File - 30021A\CADD\DGN\Permits\permitborder.dgn
Ref. File - 30021A\CADD\DGN\d64726\d64726200.dgn

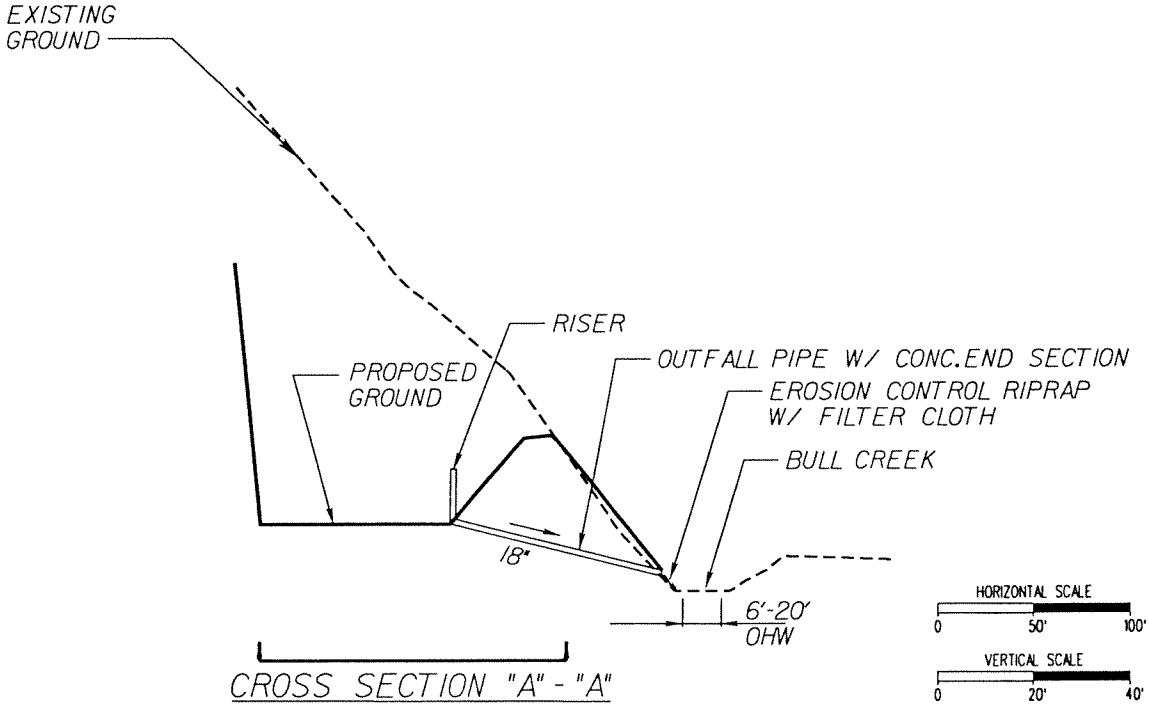
SWM BASIN 212 BULL CREEK

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
FOR REVIEW ONLY
NOT FOR BIDDING
OR CONSTRUCTION
DEC 15, 2003



SWM BASIN 212 AT BULL CREEK CHURCH PLAN



CROSS SECTION "A" - "A"

ADJACENT PROPERTY OWNERS:
- (053) JOHN T. LOONEY ESTATE
- (054) JANIS M. CARRIGAN
- (055) NORFOLK SOUTHERN
- (057) JOHN T. LOONEY ESTATE
- (058) EDITH C. LOONEY ESTATE

PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
SWM 212 TO BULL CREEK
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

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Ref. File - 30021A\CADD\DGN\Permits\permitborder.dgn
Ref. File - 30021A\CADD\DGN\d64726\d64726200.dgn

SWM BASIN 216
BULL CREEK

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
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OR CONSTRUCTION
DEC 15, 2003

FLOW FROM STORMWATER MANAGEMENT BASIN WILL BE DISCHARGED INTO BULL CREEK

064

Route 609

Bull Creek

Block Bldg.

Wood Bldg.

Metal Bldg.

OHW 6'-20'

DITCH W/ EROSION CONTROL RIPRAP W/ FILTER CLOTH

055

24" PIPE

Norfolk Southern Railway (Rails & Bridges removed)

Top of Berm 1072

1070

Bottom of Pond @ 1062

RISER

STORMWATER MANAGEMENT BASIN 216

CONSTRUCTION LIMITS

060

PROP SOLDIER PILE WALL

SWM BASIN 216 TO BULL CREEK
PLAN

SCALE
0 50' 100'

EXISTING GROUND

RISER

24"

OUTFALL PIPE W/ CONCRETE END SECTION

EROSION CONTROL RIPRAP W/ FILTER CLOTH

BULL CREEK

6'-20' OHW

CROSS SECTION "A" - "A"

HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:
055 NORFOLK SOUTHERN
060 JAMES R. STILTNER
064 BUCHANAN COUNTY BOARD OF SUPERVISORS

PLAN & CROSS SECTION VIEW
ROUTE 121
ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
SWM BASIN 216
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

6-03-2004 (Built)
dossaras
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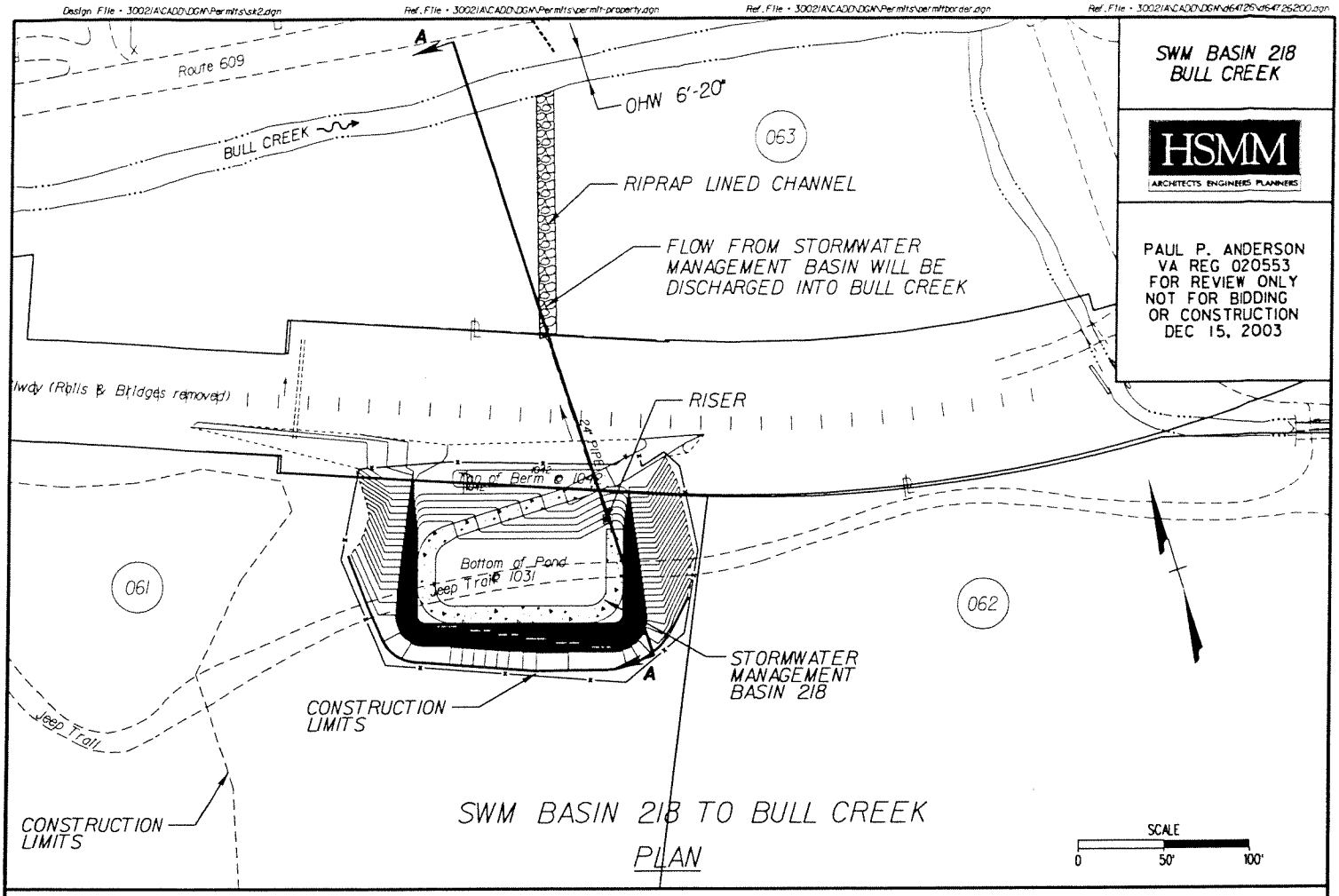
Design File - 3002IA\CADD\DGN\Permits\sk2.dgn
Ref. File - 3002IA\CADD\DGN\Permits\permit-property.dgn
Ref. File - 3002IA\CADD\DGN\Permits\permitborder.dgn
Ref. File - 3002IA\CADD\DGN\d64126\d64126200.dgn

SWM BASIN 218
BULL CREEK

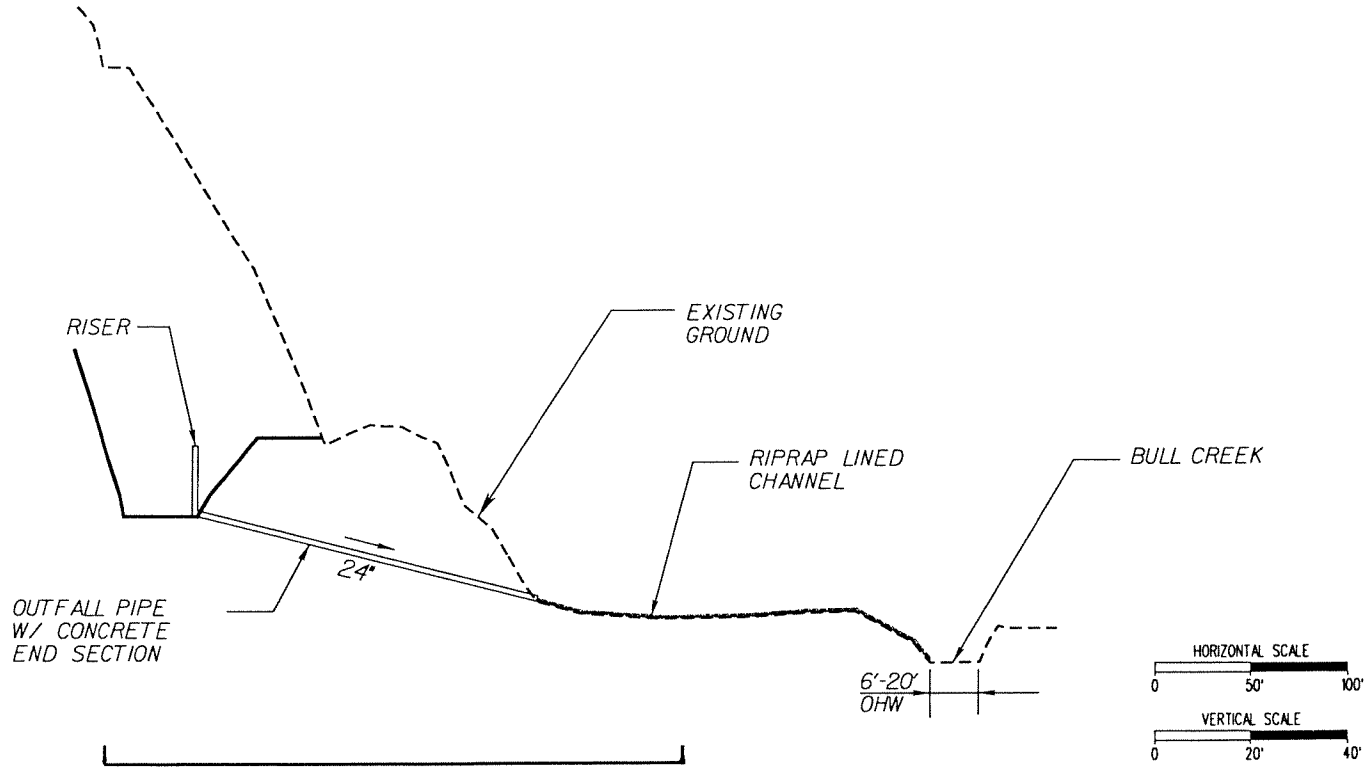
HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
FOR REVIEW ONLY
NOT FOR BIDDING
OR CONSTRUCTION
DEC 15, 2003



SWM BASIN 218 TO BULL CREEK
PLAN

SCALE
0 50' 100'



CROSS SECTION "A" - "A"

ADJACENT PROPERTY OWNERS:
(061) JAMES R. STILTNER
(062) JAMES R. STILTNER
(063) SHIRLEY C. BELCHER

PLAN & CROSS SECTION VIEW
ROUTE 121
ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
SWM BASIN 218
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

6-03-2004 18:22:46
dcassaras
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SWM BASIN 220
BULL CREEK

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
FOR REVIEW ONLY
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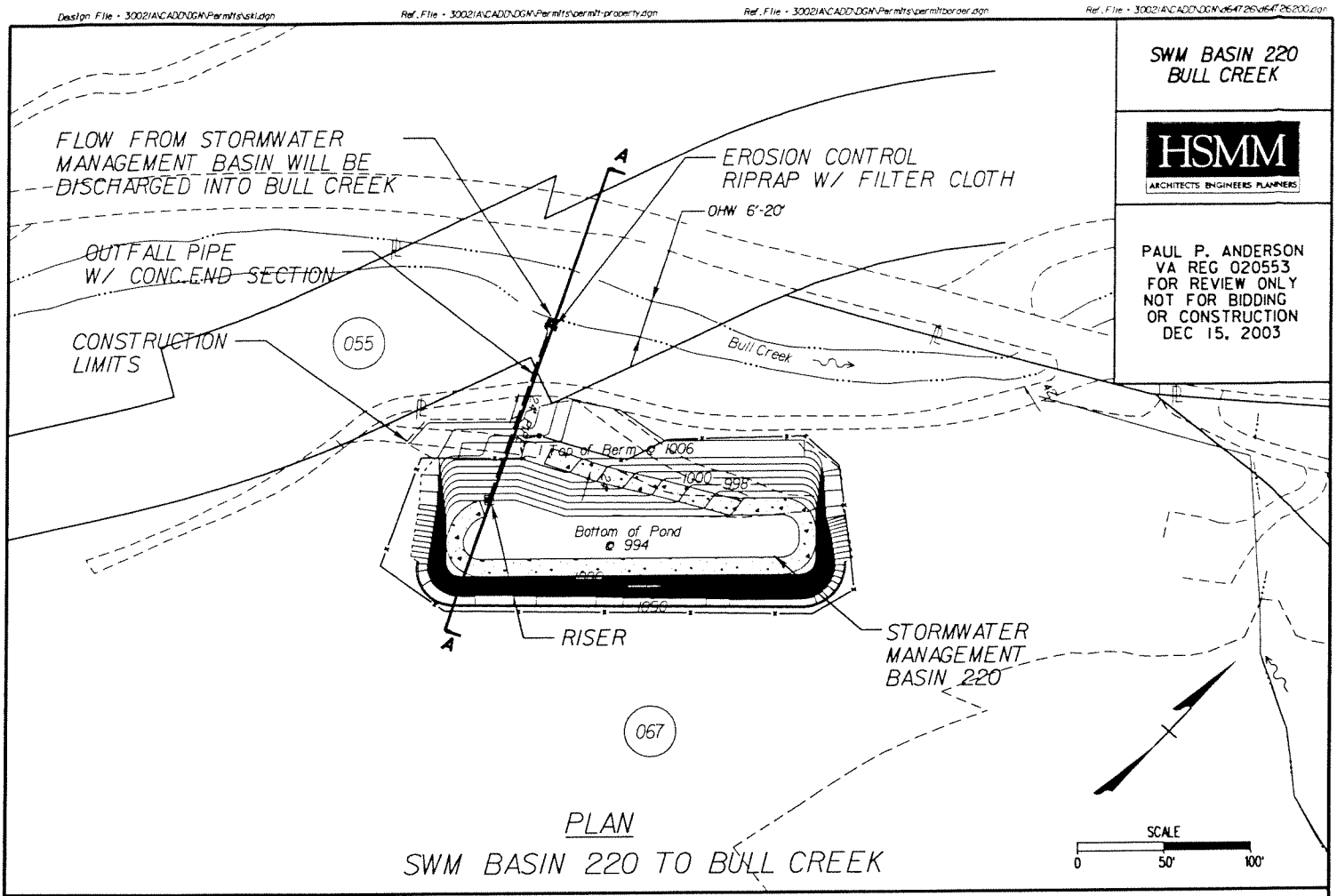
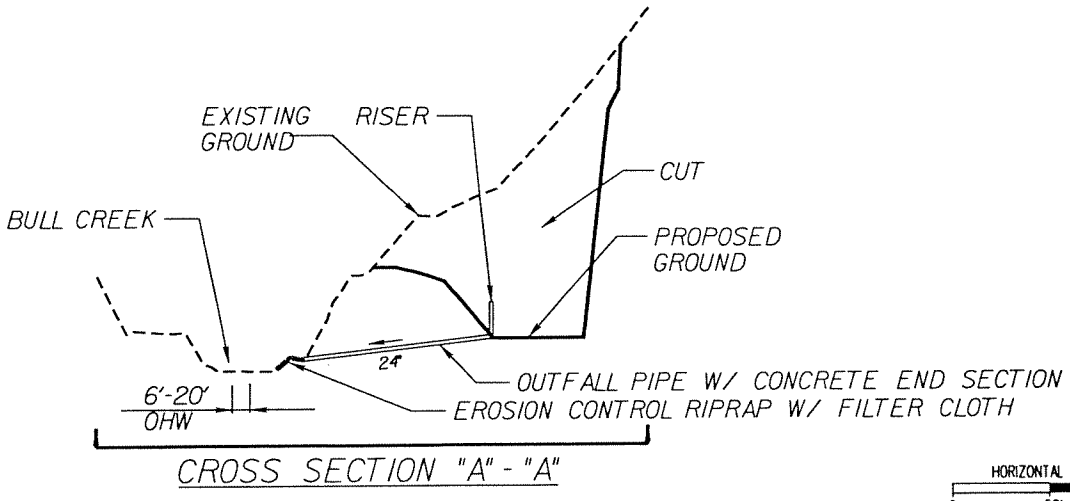
OR CONSTRUCTION
DEC 15, 2003



PLAN
SWM BASIN 220 TO BULL CREEK



CROSS SECTION "A" - "A"

HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

STREAM CHANNEL REDIRECTION.
EXCAVATED INTO UPLAND AREA.

ADJACENT PROPERTY OWNERS:
(067) BULL CREEK COAL COMPANY
(055) NORFOLK SOUTHERN

PLAN & CROSS SECTION VIEW
ROUTE 121
ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
SWM BASIN 220
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

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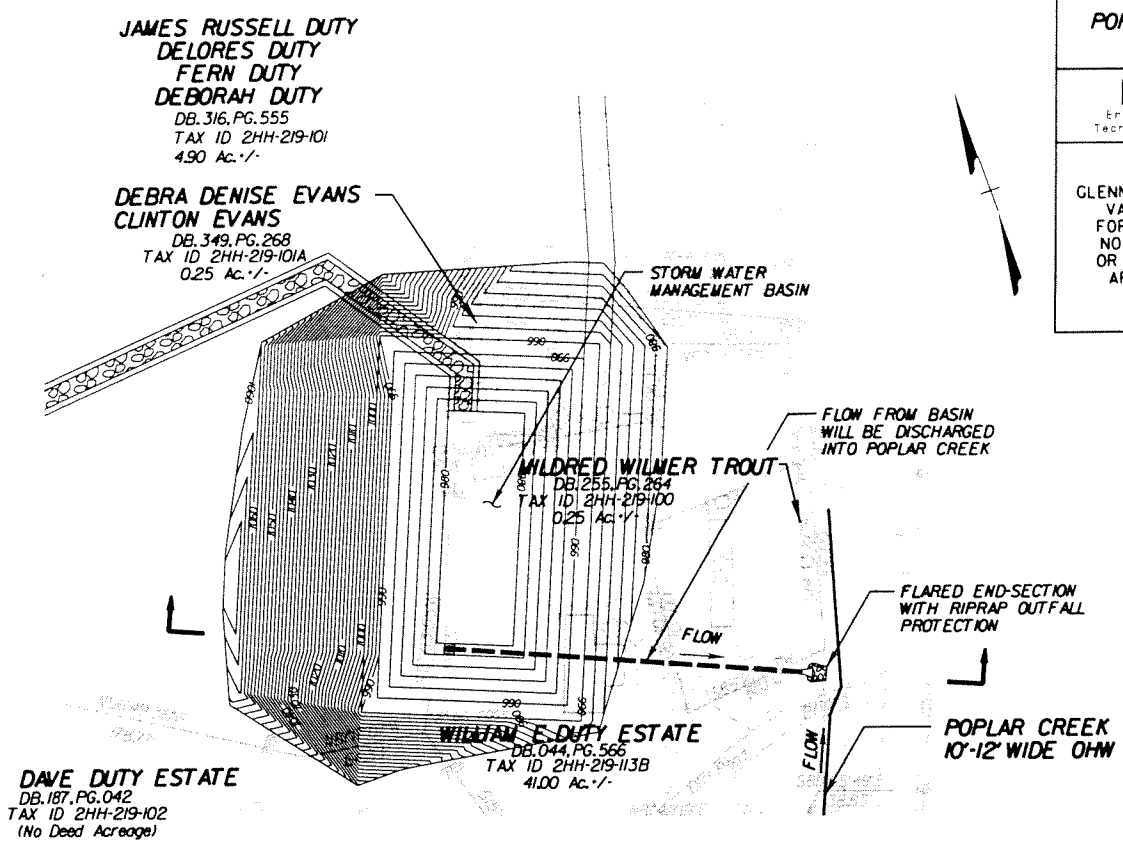
Levels on: 1, 37, 39, 41, 43, 45, 50, 52, 63

SWM BASIN

POPLAR CREEK

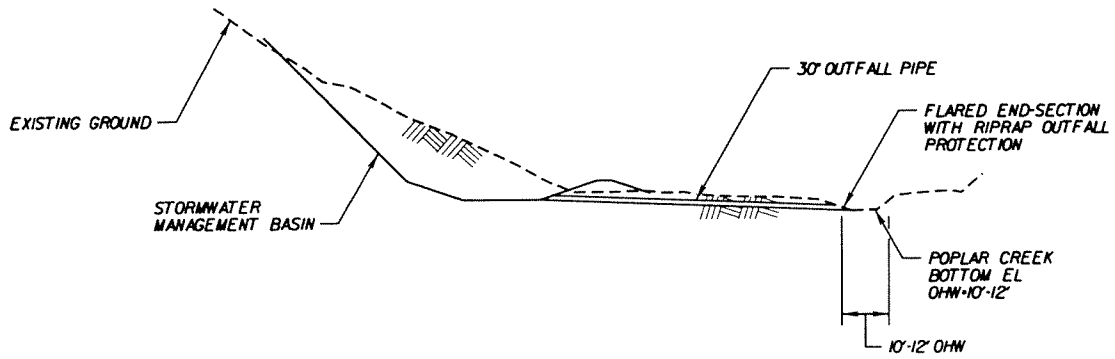
KBR
Engineered by KBR
Technical Services Inc

GLENN DAVID RAUCHLE
VA REG 037388
FOR REVIEW ONLY
NOT FOR BIDDING
OR CONSTRUCTION
APRIL 13, 2004



PLAN

SCALE
0 50' 100'



HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

CROSS SECTION

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT STORMWATER MANAGEMENT BASIN AT POPLAR CREEK COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 10/31/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
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bbrf141

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NOTE

CREEK DA 320 AND LEVISA FORK WILL BE BRIDGED

SWM BASIN

STREAM DA 320

KBR
Engineered by KBR Technical Services Inc

GLENN DAVID RAUCHLE
VA REG 037388
FOR REVIEW ONLY
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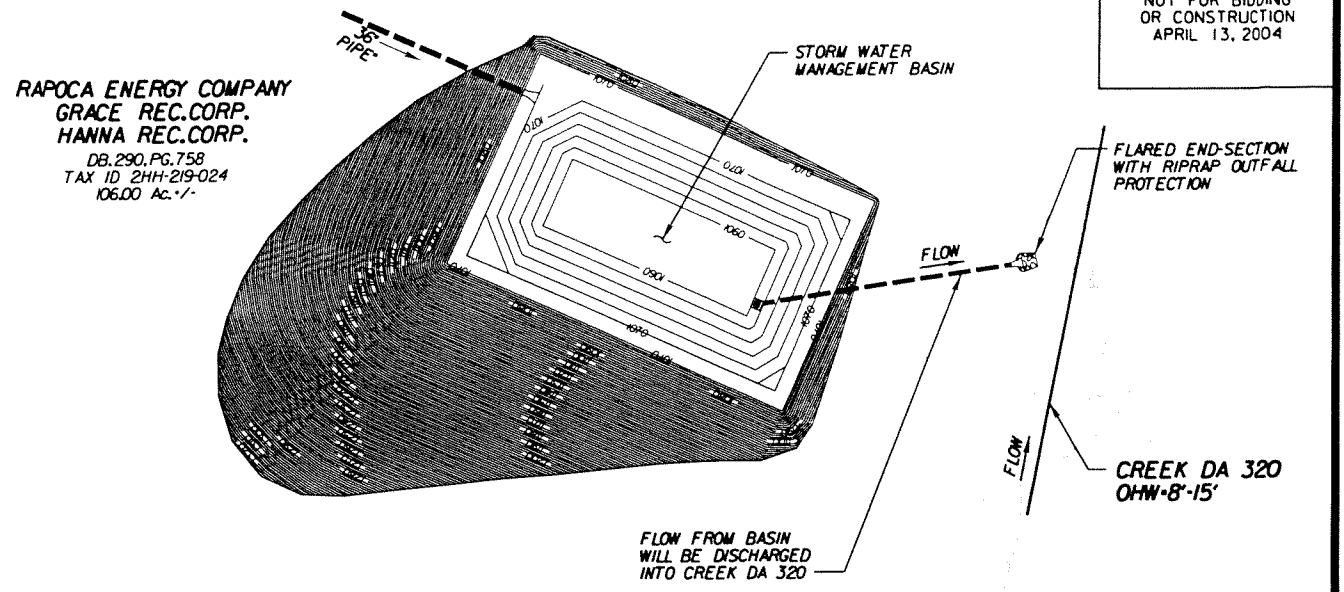
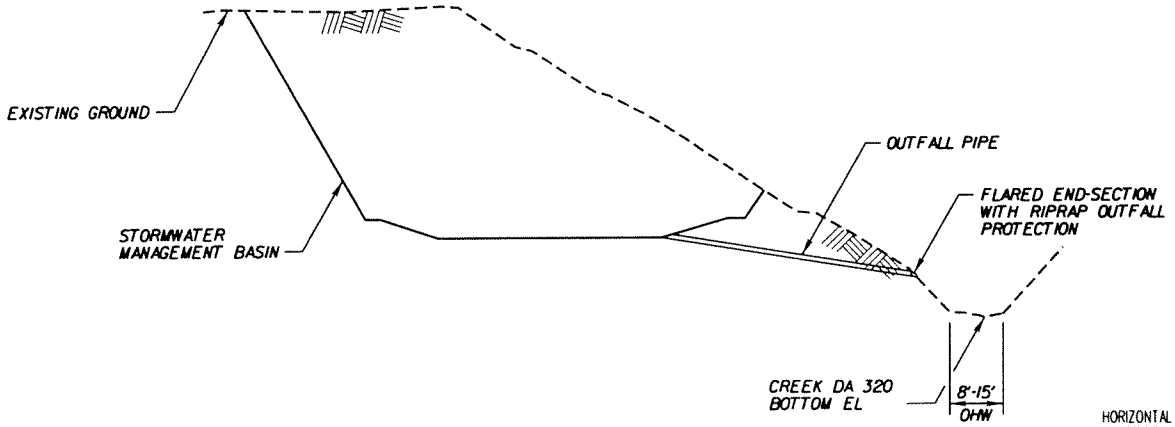
OR CONSTRUCTION
APRIL 13, 2004



PLAN

SCALE
0 50' 100'



HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

CROSS SECTION

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT CREEK DA 320 COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 11/3/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK041204D	

6-08-2004 3:44:35

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SWM BASIN

LEVISA FORK

KBR
Engineered by KBR
Technical Services Inc

GLENN DAVID RAUCHLE
VA REG 037388
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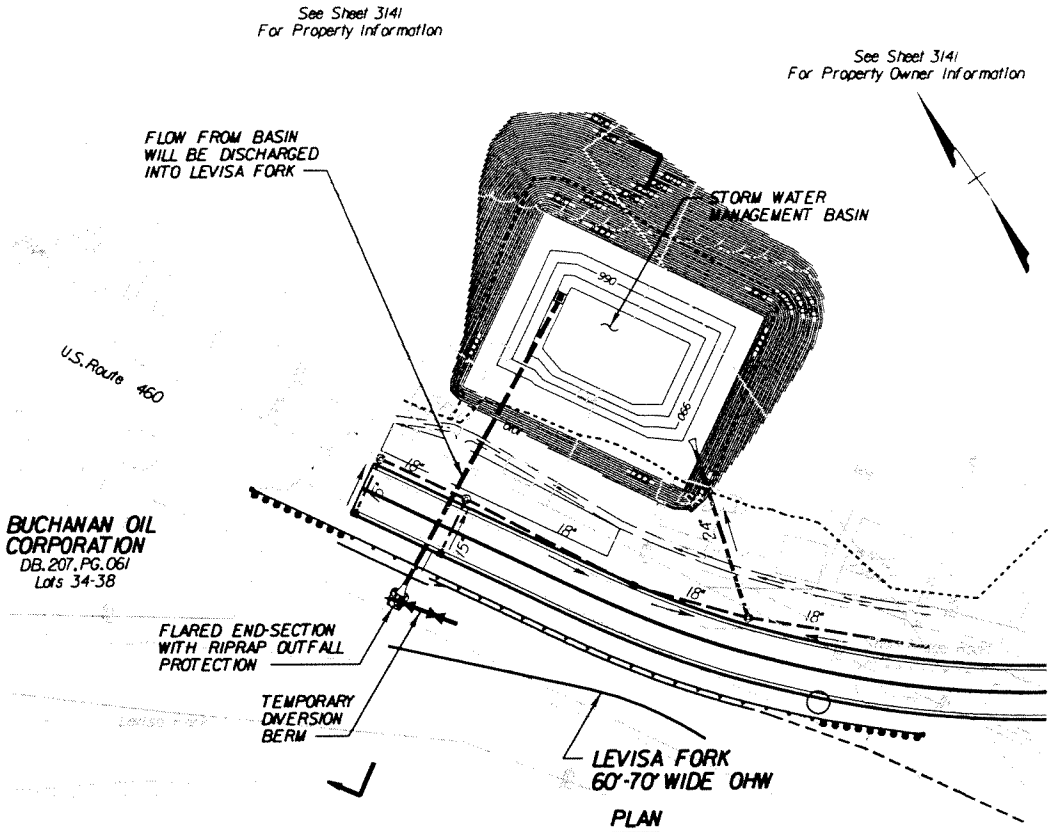
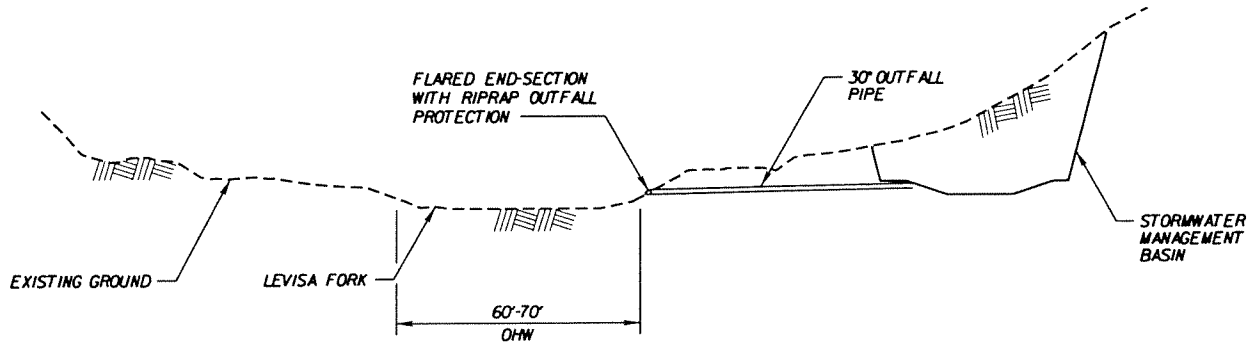
OR CONSTRUCTION
APRIL 13, 2004



PLAN

SCALE
0 50' 100'



HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

CROSS SECTION

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT STORMWATER MANAGEMENT BASIN AT LEVISA FORK COUNTY: APPLICANT: SHEET1 OF1 DATE: 11/3/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK041204E	

6-08-2004 3:46:37

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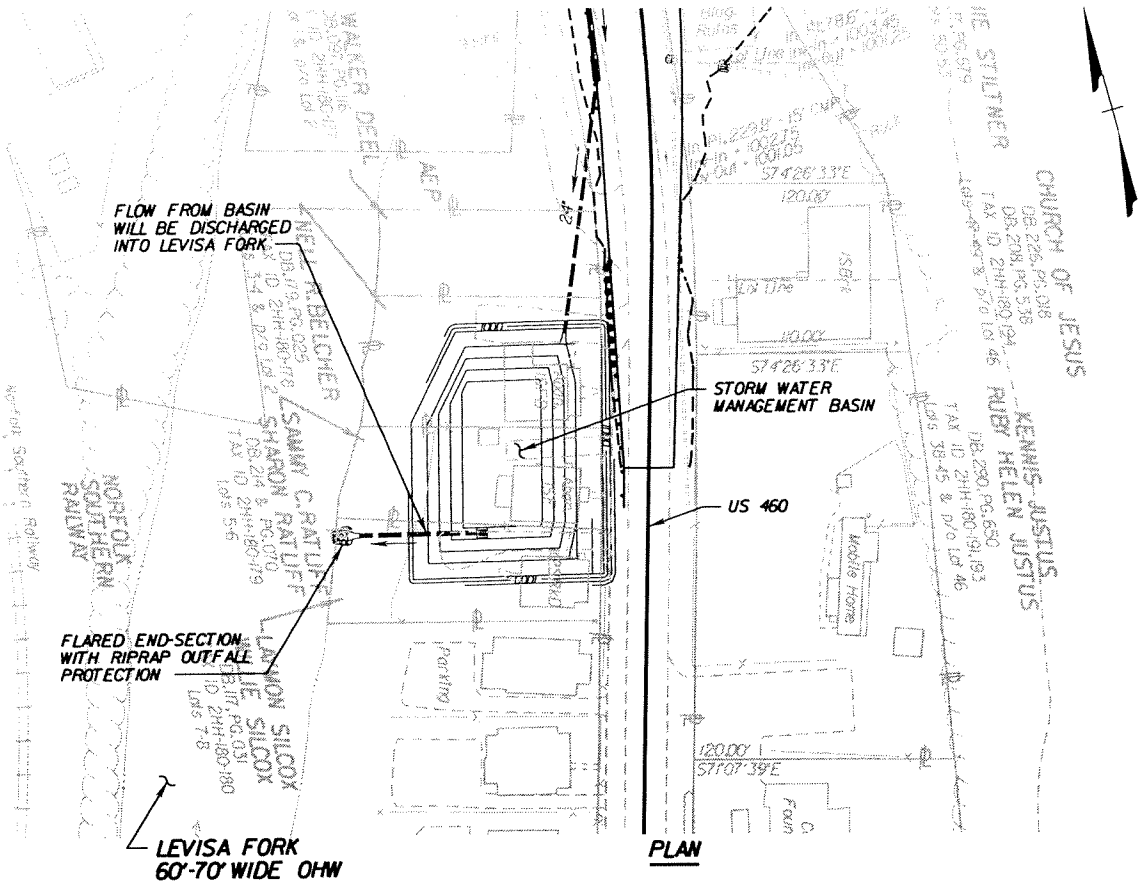
Levels on • 1-62

SWM BASIN

LEVISA FORK

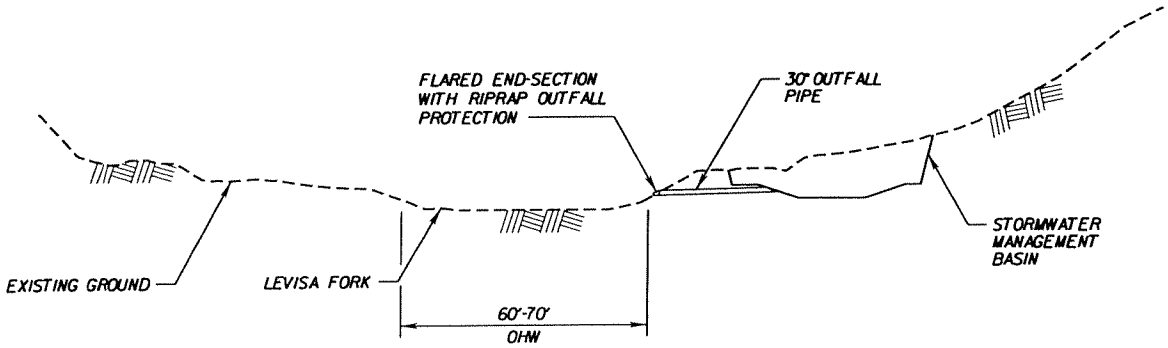
KBR
Engineered by KBR
Technical Services, Inc

GLENN DAVID RAUCHLE
VA REG 037388
FOR REVIEW ONLY
NOT FOR BIDDING
OR CONSTRUCTION
APRIL 13, 2004



PLAN

SCALE
0 50' 100'



CROSS SECTION

HORIZONTAL SCALE
0 50' 100'
VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT STORMWATER MANAGEMENT BASIN AT LEVISA FORK COUNTY: APPLICANT: SHEET: 1 OF 1 DATE: 11/3/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK041204E	

6-10-2004 4:57:22

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