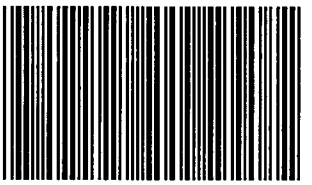
ERP PERMITS
ERP Types

Separator Sheet



3

Maps & Drawings

Created by Smeadlink express for [SUWANNEE RIVER WATER MGMT]

Columbia County

JOB NUMBER: 02-2003

Construction Plan
Stonehenge Subdivision
Sec. 23 - T4S - R16E
Columbia County, Florida

Index of Plans

Sheet No.	Sheet Description
1	Key Sheet
2	Typical Sections
3	Drainage Plan
4-6	Drainage Details
7-12	Plan & Profile

The Contractor shall verify all existing conditions and dimensions at the job site to ensure that all work will fit in the manner intended on the plans. Should any conditions exist that are contrary to those shown on the plans, the Contractor shall notify the Engineer of such differences immediately and prior to proceeding with the work.

All disturbed areas shall be seeded with a mixture of long-term vegeation and short-term vegetation. The long term vegetation shall be applied at a minimum rate of 70 ponds per acre. The short-term vegetation shall be applied at a minimum rate of 20 pounds per acre and shall consist of winter rye from September through March and millet from April through August.

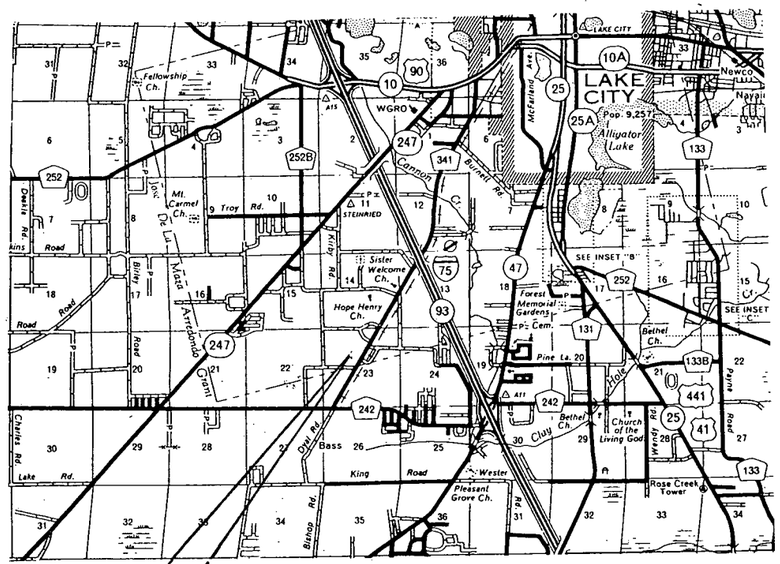
The permittee shall institute necessary measures during construction to minimize erosion, turbidity, nutrient loading, and sedimentation to adjacent lands and in the receiving waters.

All grades may be adjusted in the field six inches as long as the stopping sight distance and the flow of water are not changed.

Existing topographical information and elevations provided by surveyor.

Where ditch has to be deeper than normal to accomodate a pipe the transition from normal ditch grade to pipe flow line shall be a minimum length of one hundred feet.

The Contractor shall adhere to the Erosion and Sedimentation Control Plan from before earthwork begins until as-builts are completed.



Location of Project

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC DESIGN STANDARDS DATED JANUARY 2000, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2000, AS AMENDED BY CONTRACT DOCUMENTS.

REVISIONS

RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE ERP03-0016.1
COPIES TO _____

ERP03-0016
DONALD WILLIAMS PROJECT

OWNER
DONALD E. WILLIAMS
ROUTE 18 BOX 576
LAKE CITY, FL 32025
386-755-0764

ENGINEER
ARTHUR N. BEDENBAUGH
ROUTE 6 BOX 507
LAKE CITY, FL 32025
386-752-5846

BRITT SURVEYING
LAND SURVEYORS AND MAPPERS
1426 WEST DUVAL STREET
LAKE CITY, FL 32055
386-752-7163

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED BY REPRODUCTION

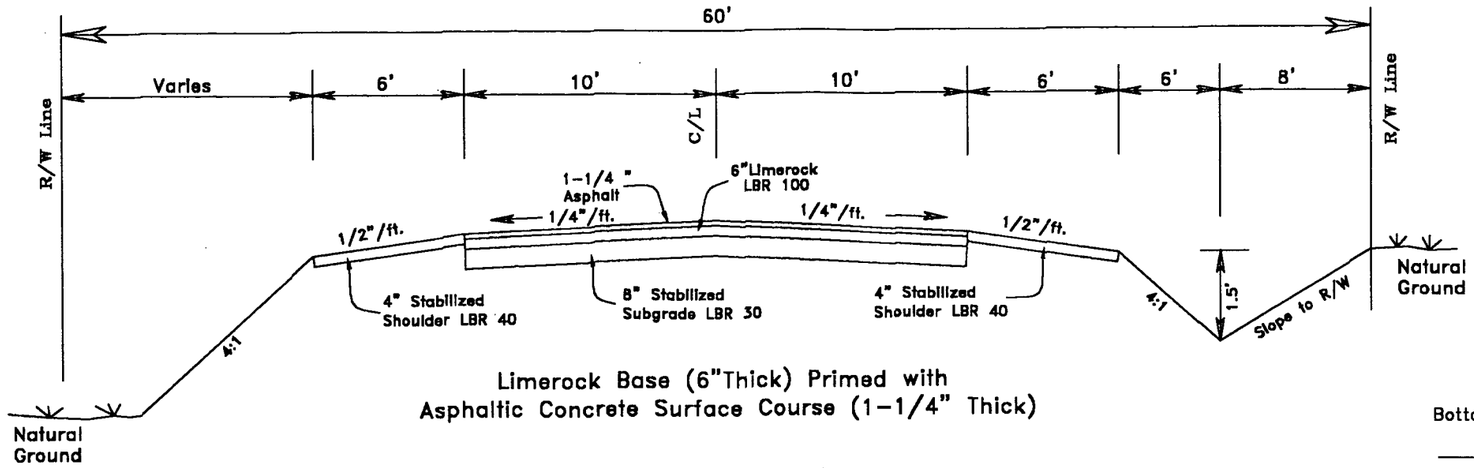
Arthur N. Bedenbaugh

Engineer of Record: Arthur N. Bedenbaugh

P.E. No.: 9162

7-23-03

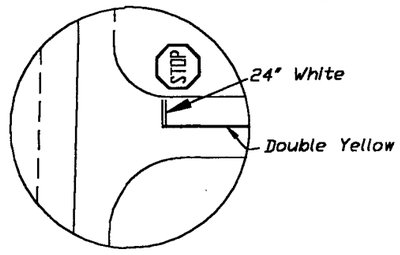
SHEET 1



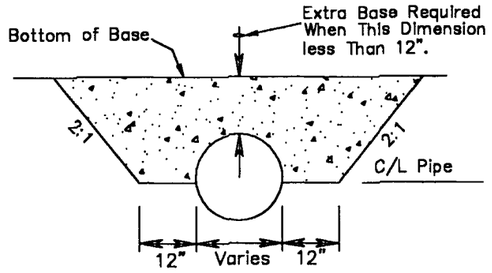
Limerock Base (6"Thick) Primed with
Asphaltic Concrete Surface Course (1-1/4" Thick)

TYPICAL SECTION

Design Speed 25 M.P.H.



Intersection Signing & Marking Detail



Pipe Detail less than 12" Cover

COLUMBIA COUNTY ROADWAY CONSTRUCTION REQUIREMENTS

General Requirements

The roadway construction plans must be reviewed and approved prior to commencing construction.

All materials and construction shall conform to the requirements of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction.

The materials and construction shall be certified by a testing laboratory retained by the developer or contractor. Copies of all test results shall be provided prior to acceptance.

All traffic control and safety items (striping, stop bars, regulatory signs, etc.) shall be in place.

The temporary grass shall be sufficient to control erosion.

Final inspection for acceptance to be performed by County Engineer, Public Works Director, and County Commissioner (should he desire to attend).

Inspections by County Representatives

Completion of clearing and grubbing. Visual only – no test requirements.

Rough graded and drainage structures in place. Test results – LBR – Pipe backfill density.

Subgrade complete. Test results – Density.

Limerock placed and finished. Test results – Thickness, Cross Section and Density.

Asphaltic Concrete in place. Test results – Thickness and density.

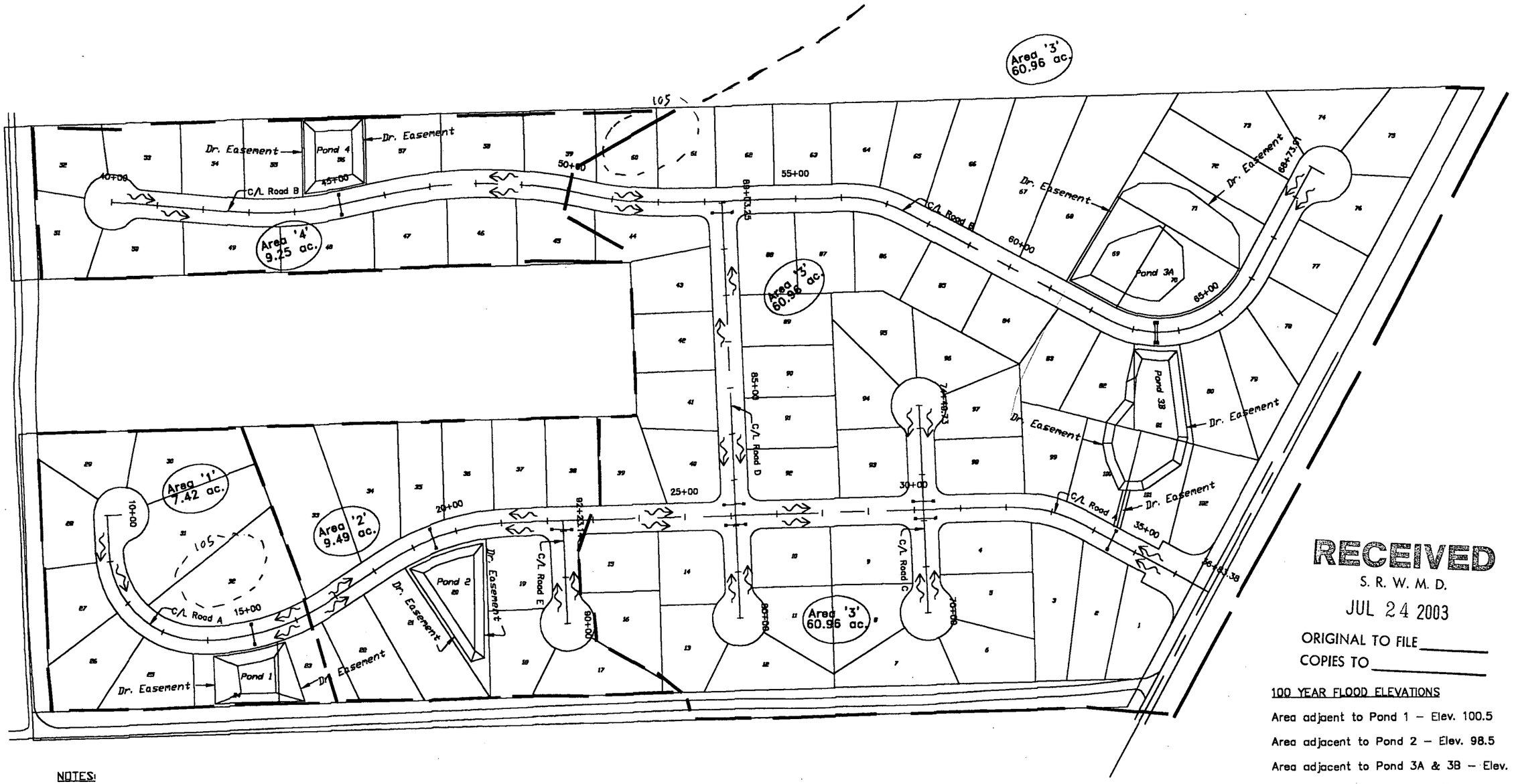
Final Inspection.

RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

ERP03-0016

Arthur N. Bedenbaugh
7-23-03

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS	Columbia County	TYPICAL SECTIONS	SHEET
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846	STONEHENGE SUBDIVISION	JOB NUMBER: 02-2003		2



NOTES:

THE HYDRAULIC DATA IS SHOWN TO INDICATE WATER ELEVATIONS WHICH MAY BE ANTICIPATED IN ANY GIVEN YEAR. THIS DATA WAS GENERATED USING HIGHLY VARIABLE FACTORS DETERMINED BY A STUDY OF THE WATERSHED. MANY JUDGEMENTS AND ASSUMPTIONS ARE REQUIRED TO ESTABLISH THESE FACTORS. THE RESULTANT DATA IS SENSITIVE TO CHANGES, PARTICULARLY OF ANTECEDENT CONDITIONS, URBANIZATION, CHANNELIZATION, AND LAND USE. USERS OF THIS DATA ARE CAUTIONED AGAINST THE ASSUMPTION OF PRECISION WHICH CANNOT BE ATTAINED. DISCHARGES ARE IN CUBIC FEET PER SECOND AND STAGES ARE IN REFERENCE TO NGVD.

THE 100 YEAR FLOOD IS THE FLOOD HAVING A 1% CHANCE OF BEING EXCEEDED IN ANY YEAR.

DATA USED IS FROM USGS QUAD MAPS, SURVEYS BY BRITT SURVEYING, AND FLOOD INSURANCE RATE MAPS.

(DRAINAGE DETAILS AND NOTES ON SHEETS 4, 5, & 6)

RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE _____
COPIES TO _____

100 YEAR FLOOD ELEVATIONS

Area adjaent to Pond 1 – Elev. 100.5

Area adjacent to Pond 2 – Elev. 98.5

Area adjacent to Pond 3A & 3B – Elev. 88.5

Area adjacent to Pond 4 – Elev. 97.5

ERP03-0016

Legend

—146— Exist. Quad Contours

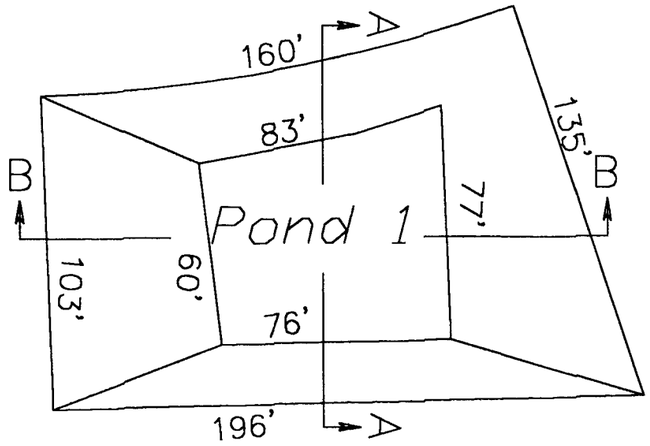
Flow of Water

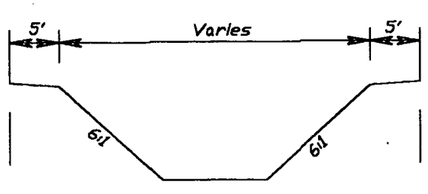
Arthur N. Bedenbaugh

7-23-03

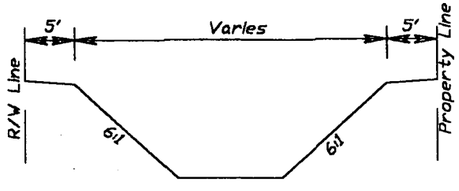
Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS STONEHENGE SUBDIVISION	Columbia County	DRAINAGE PLAN	SHEET 3
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846		JOB NUMBER: 02-2003		

Pond 1 Data
Top Elev. 100.0
Bottom Elev. 95.0
Slopes 6:1





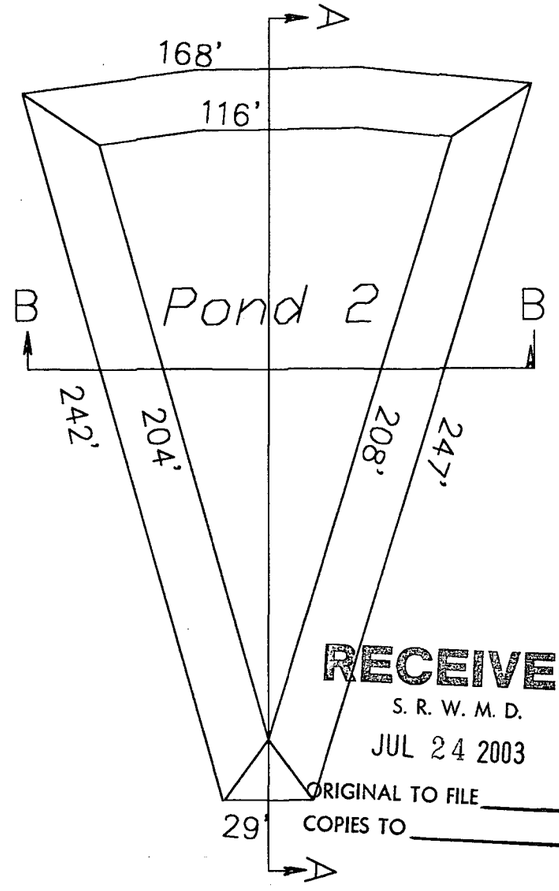
B–B



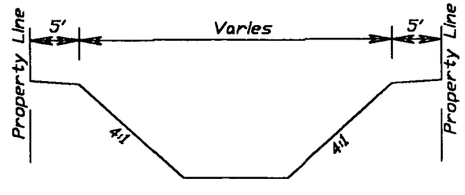
A–A

POND 1 DETAILS

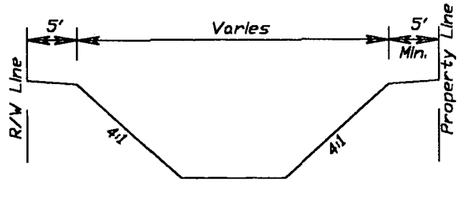
Pond 2 Data
Top Elev. 98.0
Bottom Elev. 93.0
Slopes 4:1



RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO



B–B

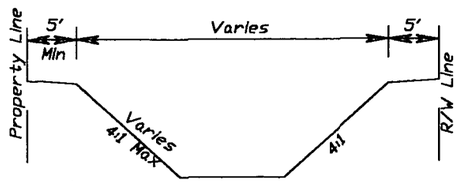


A–A

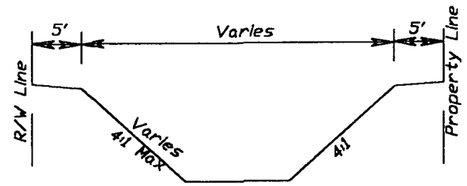
ERP03-0016
Arthur N. Bedenbaugh
7-23-03

POND 2 DETAILS

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS	Columbia County	POND 1 & POND 2 DETAILS	SHEET 4
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846	STONEHENGE SUBDIVISION	JOB NUMBER: 02-2003		

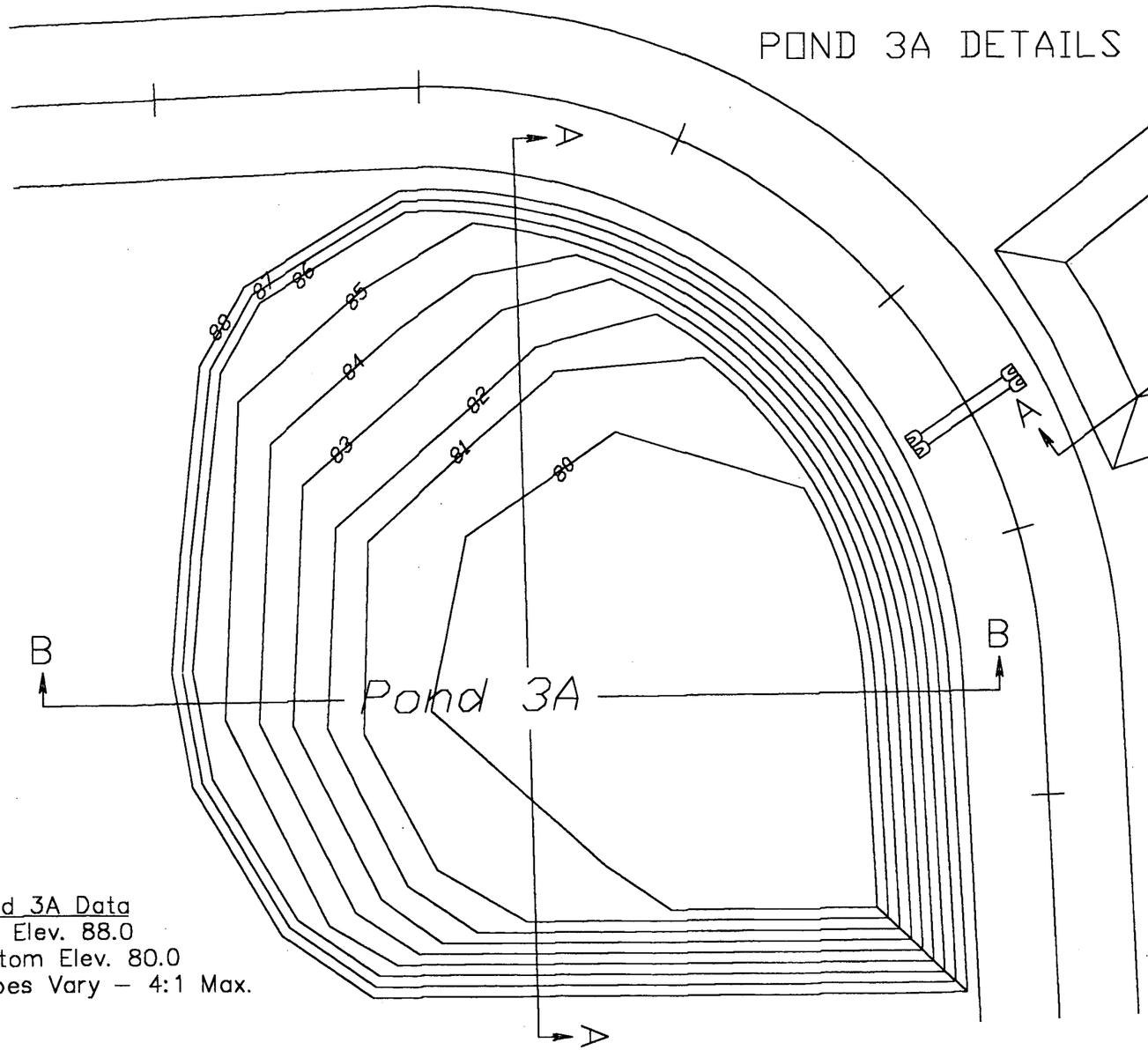


B–B

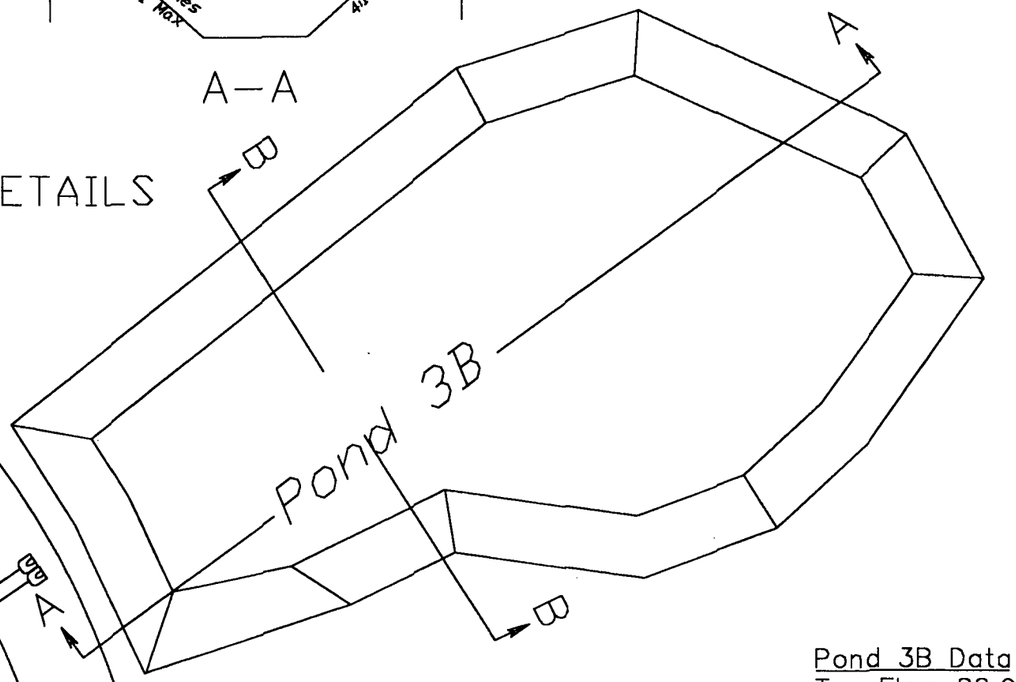


A–A

POND 3A DETAILS

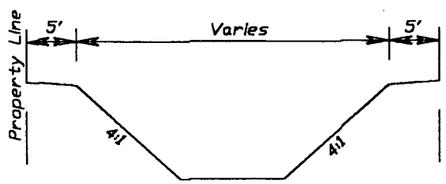


Pond 3A Data
Top Elev. 88.0
Bottom Elev. 80.0
Slopes Vary – 4:1 Max.

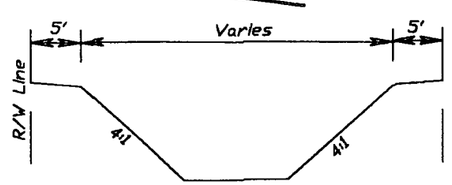


Pond 3B Data
Top Elev. 88.0
Bottom Elev. 84.0
Slopes 4:1

RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO



B–B



A–A

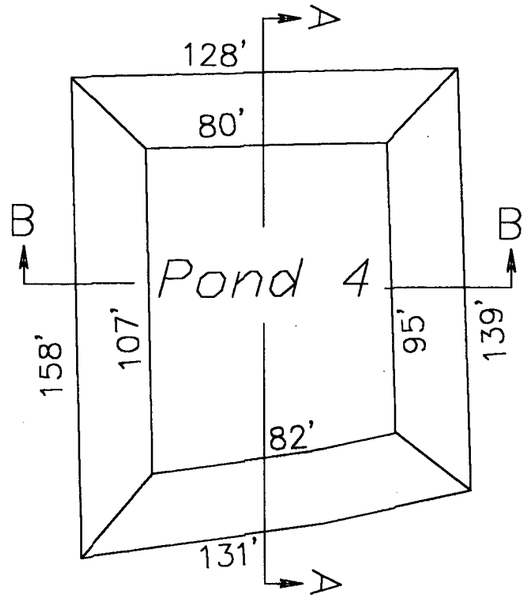
ERP03-0016

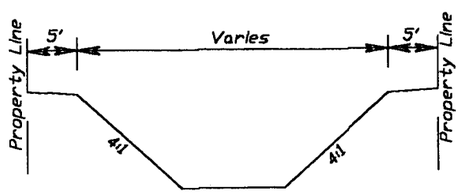
POND 3B DETAILS

Arthur N. Bedenbaugh

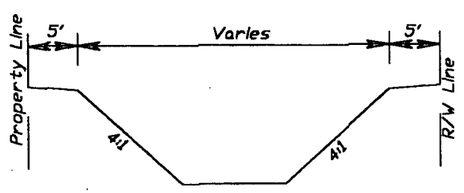
Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS	Columbia County	POND 3A & POND 3B DETAILS 7-23-03	SHEET 5
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846	STONEHENGE SUBDIVISION	JOB NUMBER: 02–2003		

Pond 4 Data
Top Elev. 97.0
Bottom Elev. 91.0
Slopes 4:1





B–B



A–A

POND 4 DETAILS

Drainage Notes

Erosion control devices will be used during construction.

There shall be no construction within the 100–year flood zone without meeting all local, state, and federal requirements including permits when required.

There is to be no fill placed below the 100–year flood elevation.

All habitable structures must be built at least 1 foot above the 100–year flood elevation.

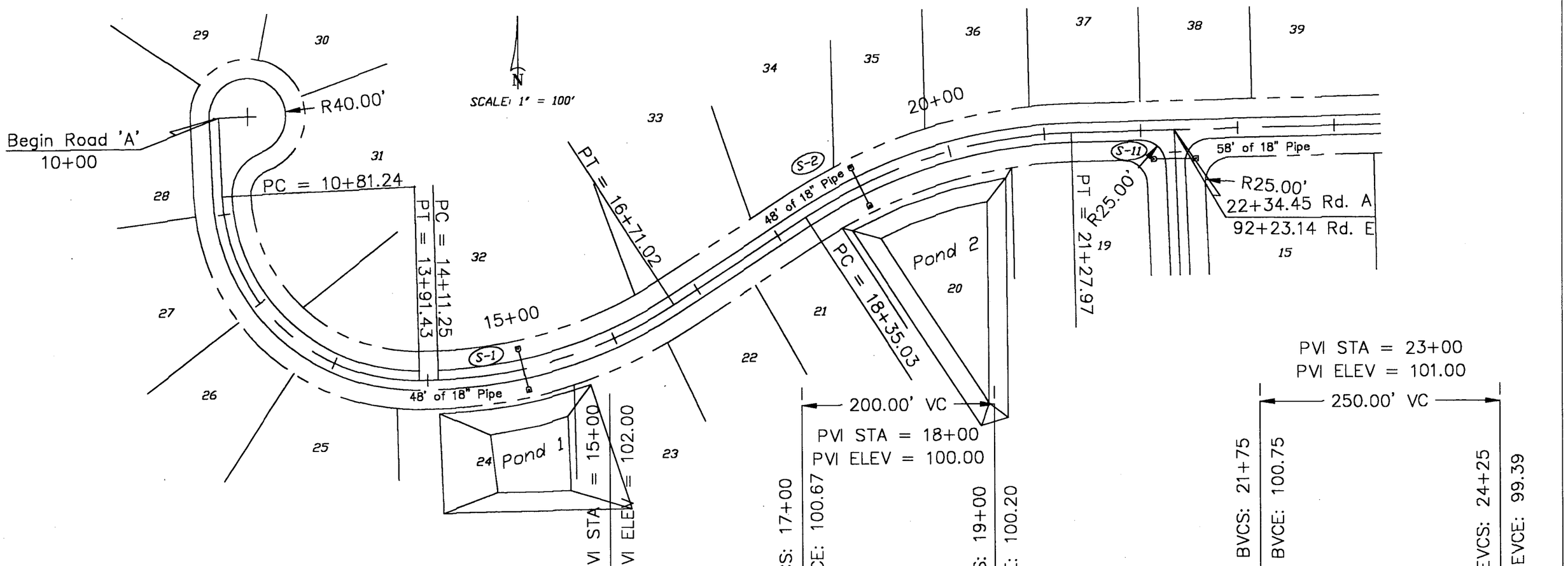
There may be depresssional areas on the property not shown that may hold water during hard rains and should not be used for building sites.

Drainage Easements exist along all retention areas and ditches to retention areas.

RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

ERP03-0018
Arthur N. Bedenbaugh
7-23-03

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS	Columbia County	POND 4 & MISC. DETAILS	SHEET 6
Date	By	Description	Date	By	Description	LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846	STONEHENGE SUBDIVISION	JOB NUMBER: 02–2003		



RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

EW03-0816

Arthur N. Bedenbaugh 7-23-03

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

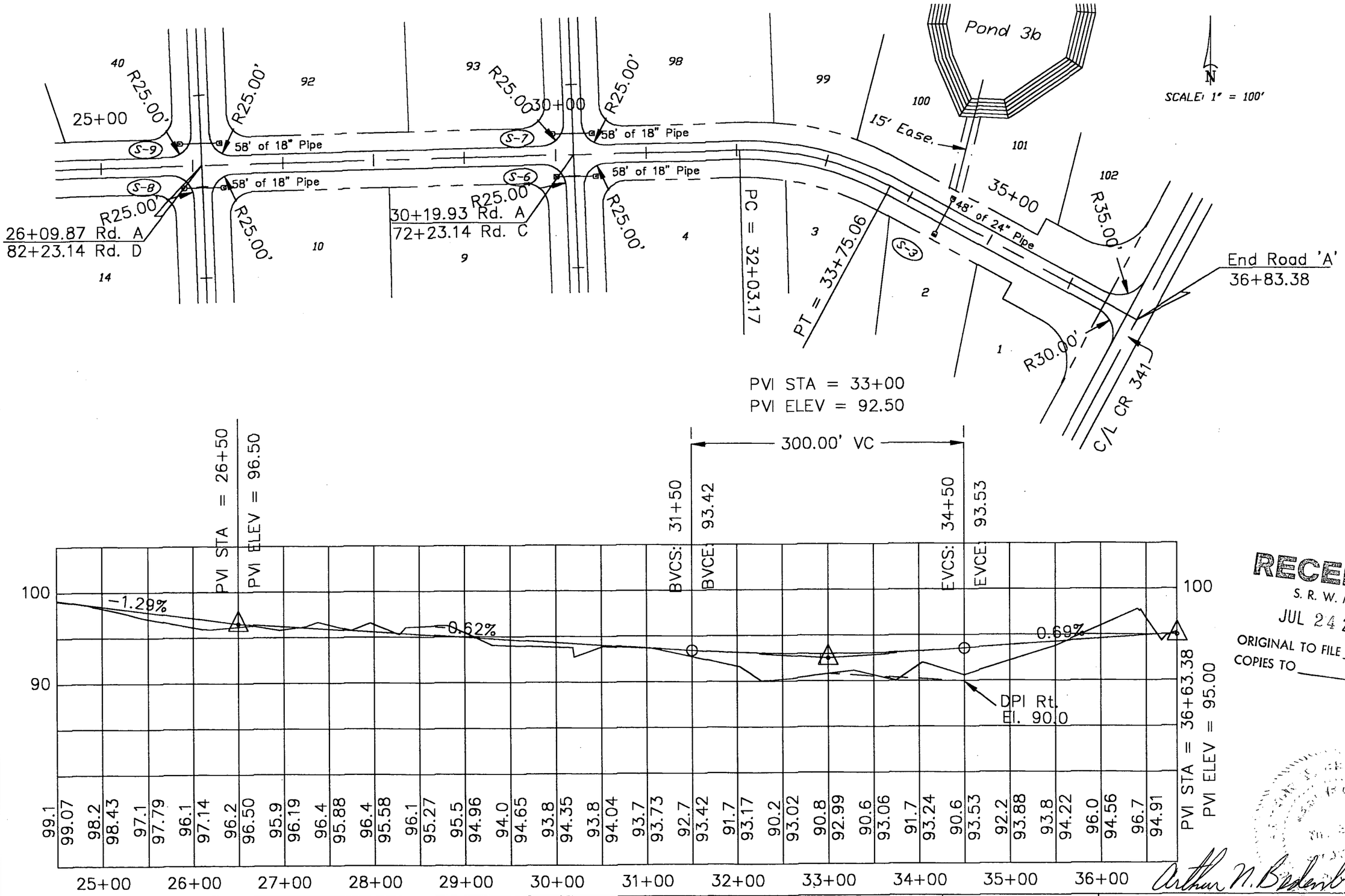
DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County

JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'A'

SHEET
7



RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

Arthur N. Bedenbaugh

Revisions					
Date	By	Description	Date	By	Description

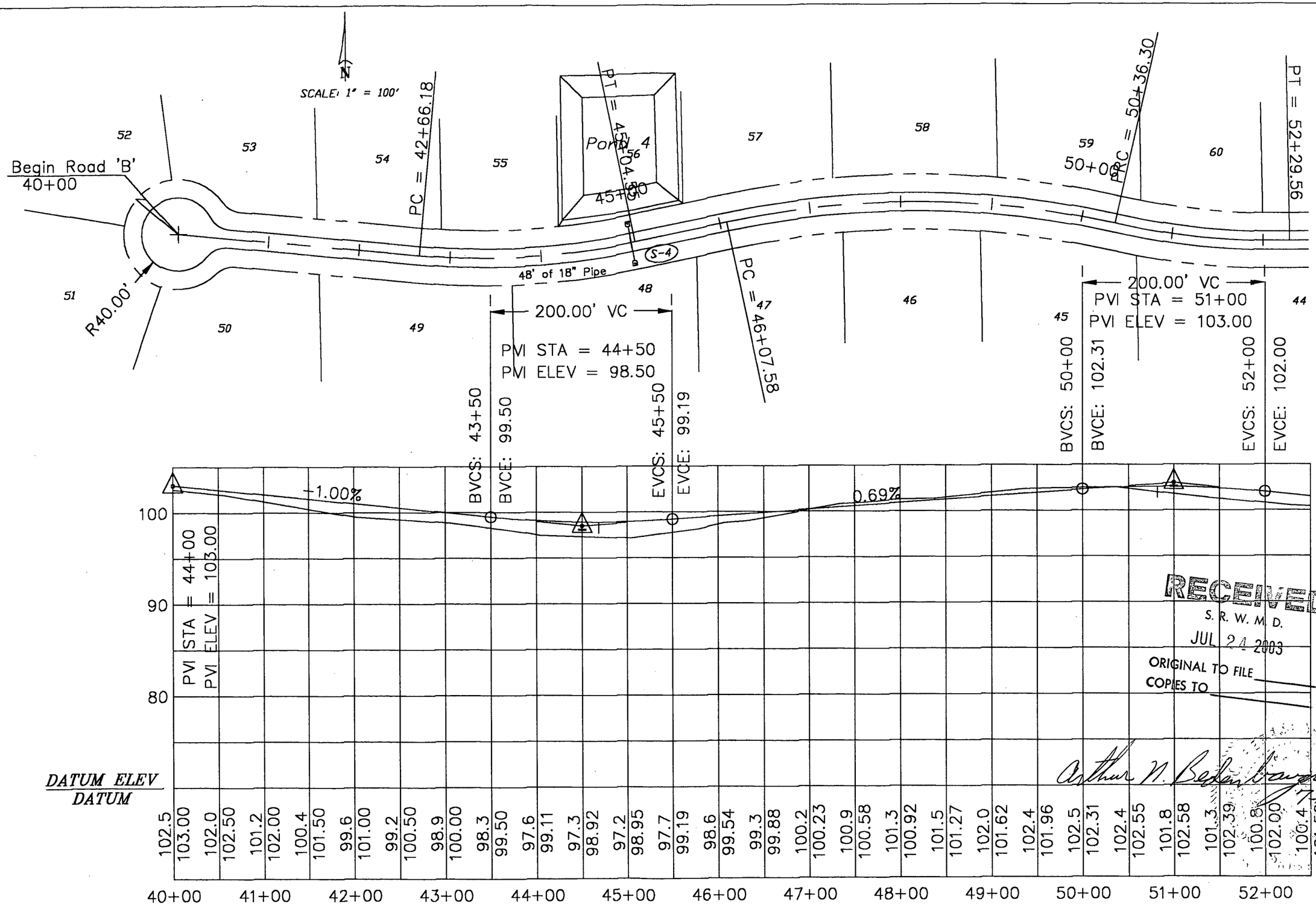
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'A' 7-23-03

SHEET 8



RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

Arthur N. Bedenbaugh

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'B'

SHEET
9

SCALE: 1" = 100'

55+00

60+00

58' of 18" Pipe

S-10

R25.00'

R25.00'

53+37.96 Rd. B

89+03.25 Rd. D

PC = 56+06.92

PT = 57+45.46

PC = 62+45.95

PT = 66+05.97

Pond 3a

65+00

R40.00'

End Road 'B'

68+73.91

48" of Dbl. 24" Pipe

S-5

200.00' VC

PVI STA = 57+50

PVI ELEV = 96.50

300.00' VC

PVI STA = 61+00

PVI ELEV = 88.50

300.00' VC

PVI STA = 64+50

PVI ELEV = 88.50

200.00' VC

PVI STA = 67+00

PVI ELEV = 96.00

Pond 3b

-1.00%

-2.29%

0.00%

0.58%

PVI STA = 68+73.91

PVI ELEV = 97.00

RECEIVED

S. R. W. M.

JUL 24 2003

ORIGINAL TO FILE

COPIES TO

Arthur N. Bedenbaugh

Revisions					
Date	By	Description	Date	By	Description

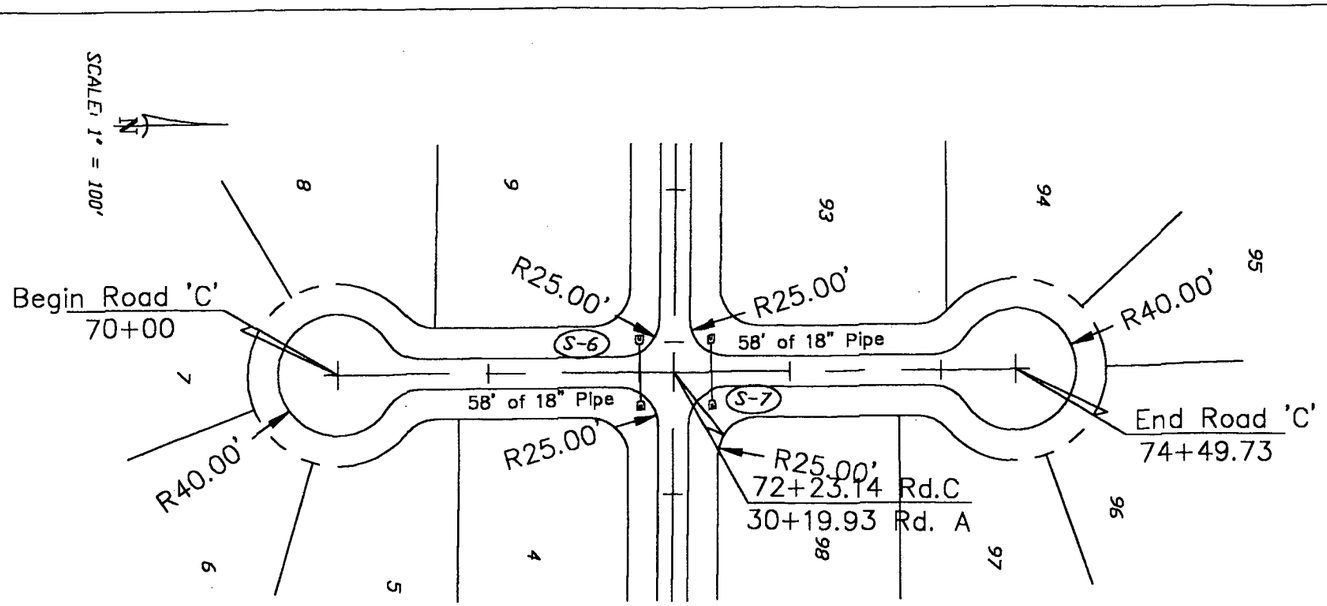
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

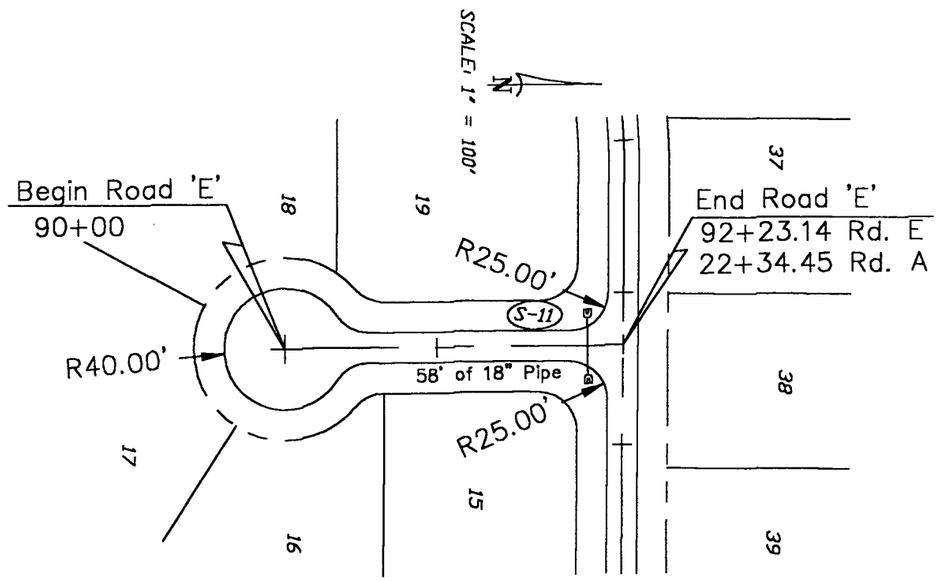
DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

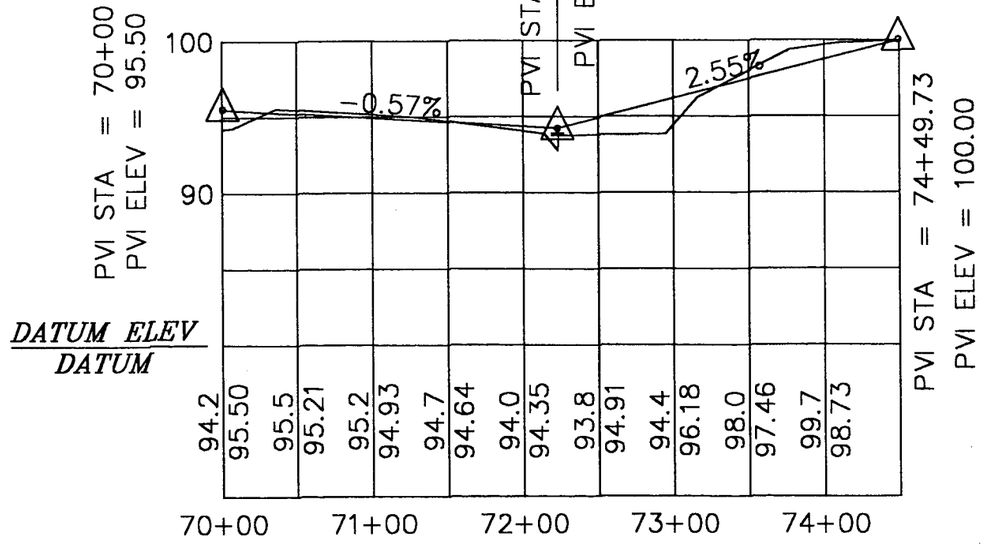
Columbia County
JOB NUMBER: 02-2003

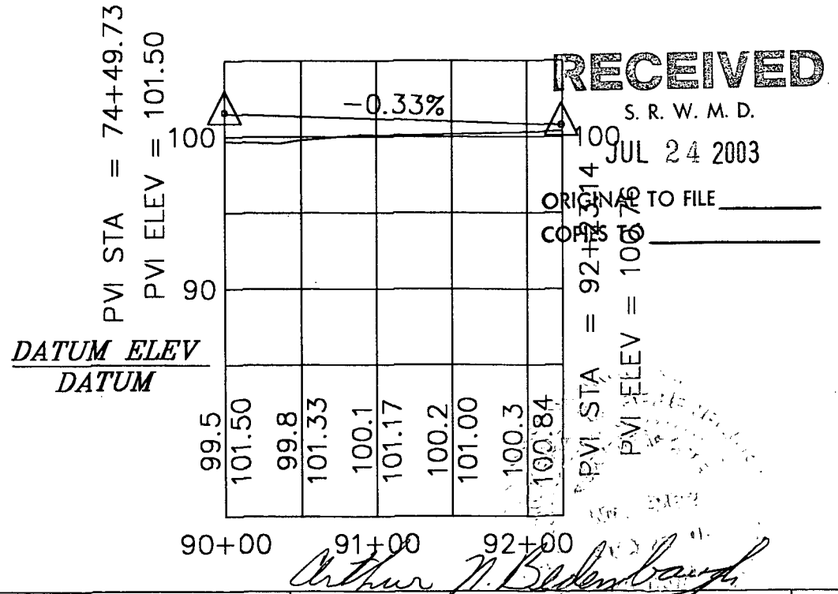
PLAN & PROFILE
ROAD 'B'

SHEET
10









RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

Arthur N. Bedenbaugh 7-23-03

Revisions					
Date	By	Description	Date	By	Description

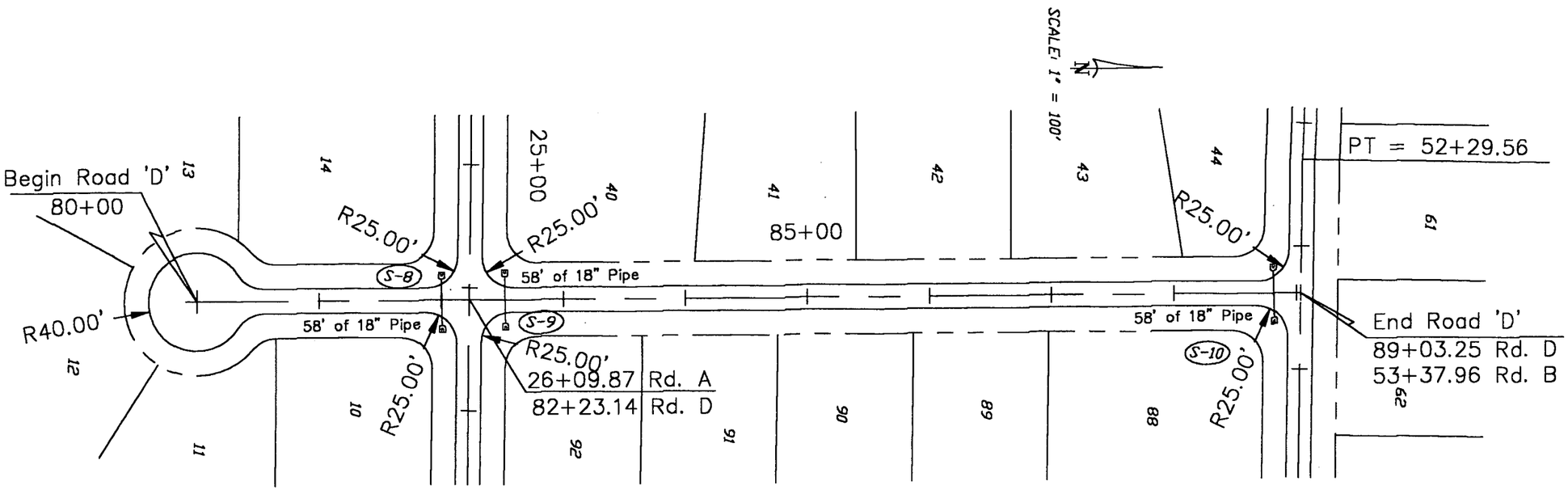
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

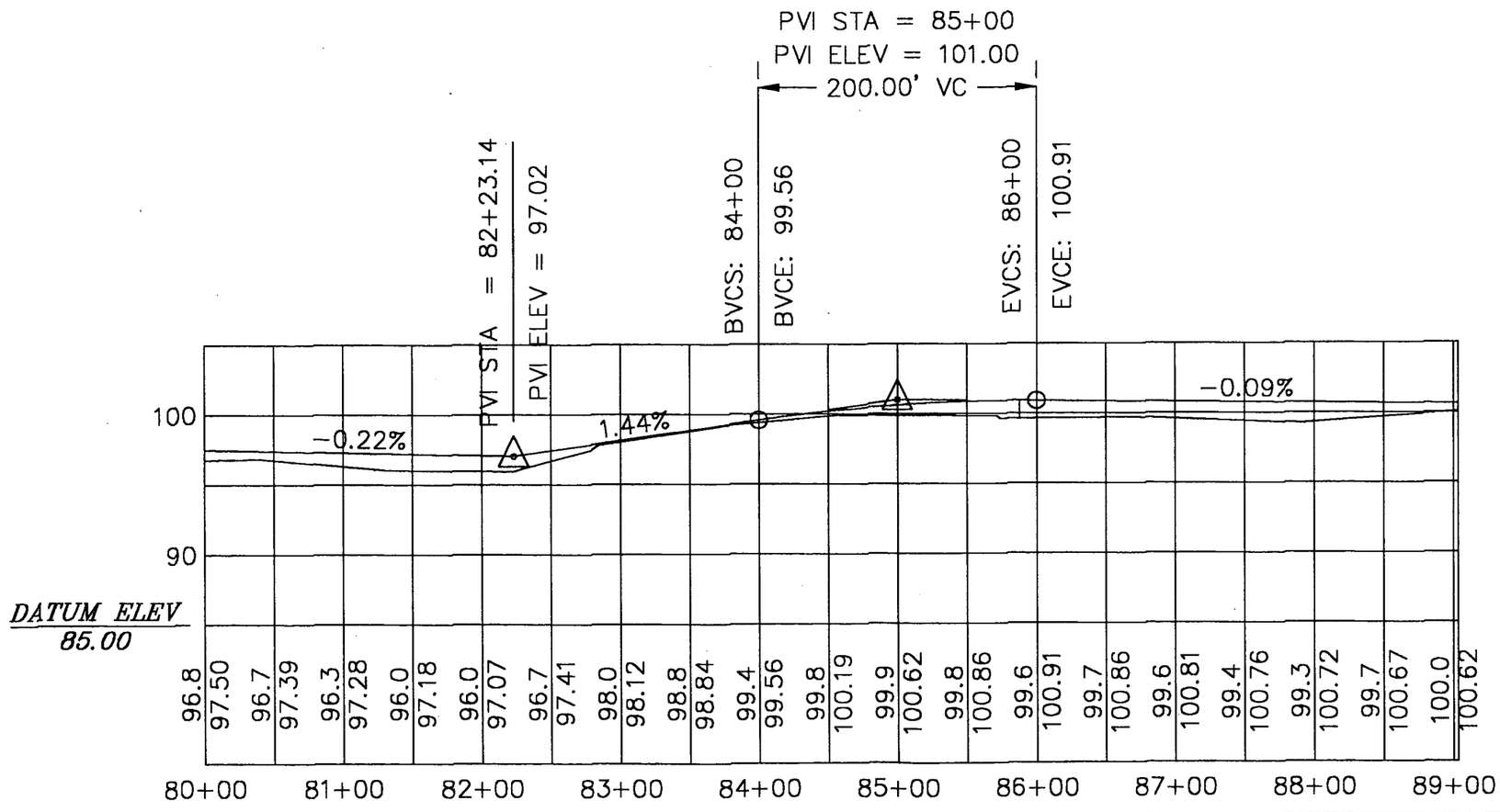
DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'C' & 'E'

SHEET
11





RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

Arthur N. Bedenbaugh

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'D' 7-23-03

SHEET
12

SITE DESCRIPTION:

CONSTRUCTION ACTIVITY: Roadway and Retention Pond Construction

PROJECT LIMITS: Stonehenge Subdivision

PROJECT DESCRIPTION: New paved road construction, drainage structures, and retention ponds.

MAJOR SOIL DISTURBING ACTIVITIES: The major soil disturbing activities include clearing & grubbing, new roadway construction, and excavation for retention ponds.

TOTAL PROJECT AREA: 69.86 ac.

TOTAL AREA TO BE DISTURBED: 14.99 ac.

RUNOFF COEFICIENTS:
Pre-Construction = .15
Post-Construction = .37

ESTIMATES OF SIZE OF DRAINAGE AREA FOR EACH OUTFALL:
See Drainage Plan Sheet 3

LOCATIONS OF DRAINAGE AREAS AND OUTFALLS:
See Drainage Plan Sheet 3

NAME OF RECEIVING WATER(S):
None.

WETLAND AREA:
Total Permanent Impacts: 0
Total Temporary Impacts: 0

CONTROLS:

NARRATIVE – SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS: Primary activities that will disturb soil are clearing & grubbing, excavation, and fill. Contractor shall be responsible for minimizing disturbance in each active work area complying with FDOT Index 102.

EROSION AND SEDIMENT CONTROLS:

STABILIZATION PRACTICES:
Permanent sodding, seeding or seed & mulch.

STRUCTURAL PRACTICES:
Silt Fences
Hay Bales

DESCRIPTION OF STORM WATER MANAGEMENT: The storm water management consists of four retention ponds and treatment in roadside ditches. Runoff is conveyed to ponds via roadside ditches, culverts, and drainage ditches.

WASTE DISPOSAL: To be provided by the Contractor

SANITARY WASTE: To be provided by the Contractor

FERTILIZERS AND PESTICIDES:
Fertilizer: 400 lb/ac at 1 application (Per FDOT Standards)

NON-STORM WATER DISCHARGE: No non-storm water discharge is anticipated.

APPROVED STATE, LOCAL PLANS, OR STORM WATER PERMIT:
SRWMD EPR PERMIT – Pending

MAINTENANCE: All the controls shall be maintained at all times during construction.

INSPECTION: All controls shall be inspected daily and after the end of each rainfall of 0.5 inches or greater.

RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE
COPIES TO

Arthur N. Bedenbaugh 7-23-03

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS	Columbia County	EROSION CONTROL PLAN	SHEET
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846	STONEHENGE SUBDIVISION	JOB NUMBER: 02-2003		13

NOTES:

IF THE PROPOSED EROSION AND SEDIMENT CONTROL PLAN DOES NOT WORK OR IS NOT EFFECTIVE, THE CONTRACTOR SHALL USE THE BEST MANAGEMENT PRATICES IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR MANUAL TO IMPLEMENT A PLAN THAT WILL WORK.

NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.

CROSS DRAINS SHALL BE PROTECTED FROM SEDIMENT LADEN STORMWATER RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS.

RETENTION BASINS SHOULD BE VISUALLY MONITORED FOLLOWING SIGNIFICANT STORM EVENTS FOR SINK HOLE ACTIVITY. WHERE SHALLOW DEPRESSIONS ARE NOTED, THESE MAY BE FILLED TO PRE-EXISTING GRADE WITH CLAYEY SAND MATERIAL, GRADED, AND VEGETATED. OTHER SINK HOLE ACTIVITY SHOULD EMPLOY METHODOLOGIES ACCEPTABLE TO THE APPLICABLE REGULATORY AGENCY.

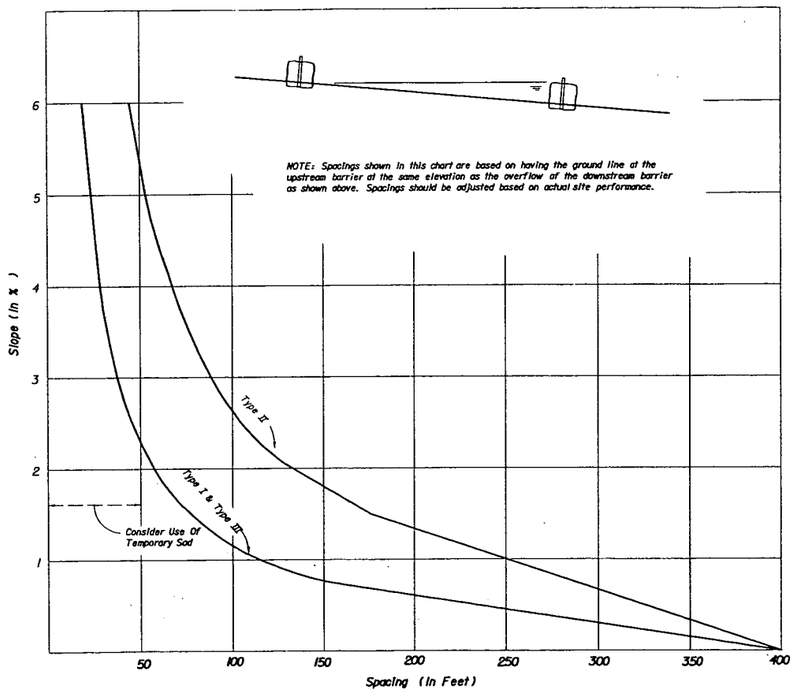
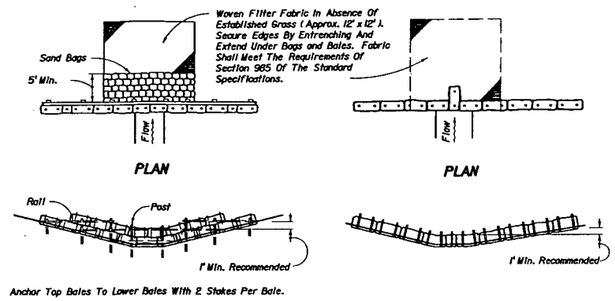
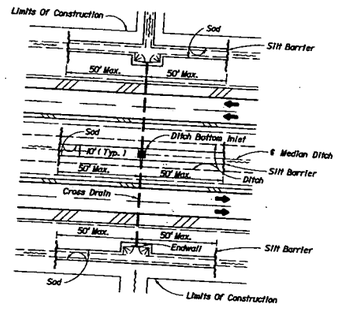


CHART I

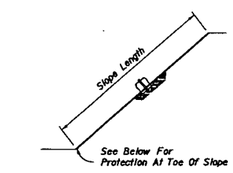
RECOMMENDED SPACING FOR BALED HAY BARRIERS AND TYPE III SILT FENCE



BARRIERS FOR UNPAVED DITCHES

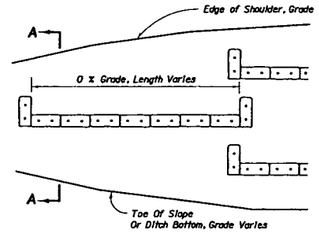


DITCH INSTALLATIONS AT DRAINAGE STRUCTURES



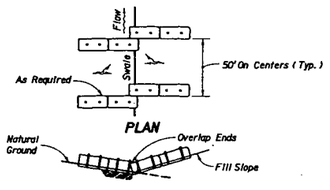
SECTION AA

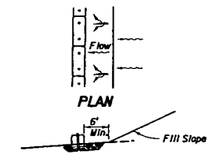
Note:
Where the slope length exceeds 25 feet, construct one row of bale barriers at 0% longitudinal grade midway up the slope. Contruct two rows of bale barriers where the slope length exceeds 50 feet.



ELEVATION

ALONG FILL SLOPE





AT TOE OF SLOPE

BARRIERS FOR FILL SLOPES

RECEIVED
S. R. W. M. D.
JUL 24 2003
ORIGINAL TO FILE _____
COPIES TO _____

Arthur N. Bedenbaugh 7-23-03

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County

JOB NUMBER: 02-2003

EROSION CONTROL PLAN

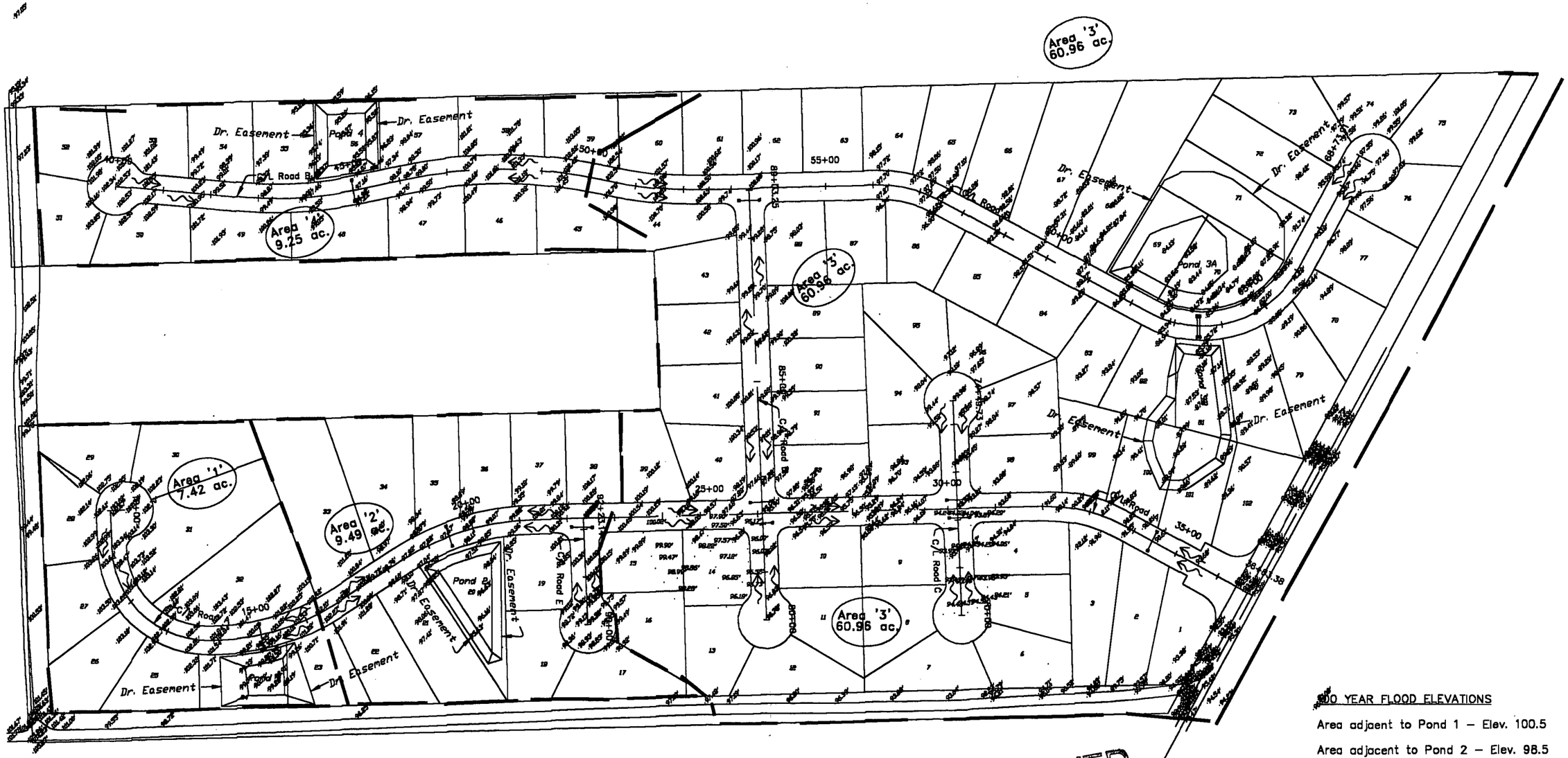
SHEET 14

STONEHENGE										
MINIMUM FINISHED FLOOR ELEVATIONS										
1	94.90		27	104.60		53	104.00		79	92.70
2	94.30		28	105.00		54	102.50		80	90.60
3	94.00		29	105.00		55	101.00			
4	96.00		30	105.00					82	89.50
5	96.50		31	105.00		57	101.50		83	89.90
6	96.50		32	104.20		58	102.60		84	92.90
7	96.50		33	102.20		59	103.50		85	96.30
8	96.50		34	101.30		60	103.60		86	99.00
9	96.60		35	101.20		61	103.00		87	100.00
10	98.40		36	101.30		62	102.00		88	101.50
11	98.50		37	101.60		63	100.50		89	102.00
12	98.50		38	101.80		64	99.50		90	101.30
13	98.50		39	101.60		65	98.50		91	101.30
14	100.10		40	100.60		66	97.20		92	98.80
15	101.80		41	102.00		67	94.10		93	99.70
16	102.50		42	102.00		68	91.90		94	101.00
17	102.50		43	101.90					95	101.00
18	102.50		44	103.60					96	101.00
19	101.80		45	103.60					97	101.00
			46	102.50		72	97.90		98	98.50
21	101.40		47	101.50		73	98.00		99	94.00
22	102.00		48	100.50		74	98.00		100	94.00
23	102.80		49	102.50		75	98.00		101	95.30
			50	104.00		76	98.00		102	95.90
25	104.00		51	104.00		77	97.20			
26	104.20		52	104.00		78	95.40			

Minimum floor elevations have been set by road elevation on the high side of lot. In the event that the road elevations are adjusted during construction, the developer will be required to have the elevation changed on the effected lot before building. In some locations due to natural fall of the lots from one side to the other side, elevation may also be changed by Engineer depending on the building site placement. In any event, the minimum floor elevation will be no lower than Columbia County rules and regulations.

Arthur N. Bedenbaugh

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS	Columbia County	FLOOR ELEVATIONS 7-23-03	SHEET
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846	STONEHENGE SUBDIVISION	JOB NUMBER: 02-2003		15



NOTES:

THE HYDRAULIC DATA IS SHOWN TO INDICATE WATER ELEVATIONS WHICH MAY BE ANTICIPATED IN ANY GIVEN YEAR. THIS DATA WAS GENERATED USING HIGHLY VARIABLE FACTORS DETERMINED BY A STUDY OF THE WATERSHED. MANY JUDGEMENTS AND ASSUMPTIONS ARE REQUIRED TO ESTABLISH THESE FACTORS. THE RESULTANT DATA IS SENSITIVE TO CHANGES, PARTICULARLY OF ANTECEDENT CONDITIONS, URBANIZATION, CHANNELIZATION, AND LAND USE. USERS OF THIS DATA ARE CAUTIONED AGAINST THE ASSUMPTION OF PRECISION WHICH CANNOT BE ATTAINED. DISCHARGES ARE IN CUBIC FEET PER SECOND AND STAGES ARE IN REFERENCE TO NGVD.

THE 100 YEAR FLOOD IS THE FLOOD HAVING A 1% CHANCE OF BEING EXCEEDED IN ANY YEAR.

DATA USED IS FROM USGS QUAD MAPS, SURVEYS BY BRITT SURVEYING, AND FLOOD INSURANCE RATE MAPS.

RECEIVED
S.R.W.M.D.
JUN 20 2003
ORIGINAL TO FILE ERP03-0016
COPIES TO

(DRAINAGE DETAILS AND NOTES ON SHEETS 4, 5, & 6)

100 YEAR FLOOD ELEVATIONS

Area adjacent to Pond 1 – Elev. 100.5

Area adjacent to Pond 2 – Elev. 98.5

Area adjacent to Pond 3A & 3B – Elev. 88.5

Area adjacent to Pond 4 – Elev. 97.5

Legend

—146— Exist. Quad Contours

↝ Flow of Water

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS STONEHENGE SUBDIVISION	Columbia County	DRAINAGE PLAN	SHEET 3
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846		JOB NUMBER: 02–2003		

Columbia County

JOB NUMBER: 02-2003

Construction Plan
Stonehenge Subdivision
Sec. 23 – T4S – R16E
Columbia County, Florida

Index of Plans

Sheet No.	Sheet Description
1	Key Sheet
2	Typical Sections
3	Drainage Plan
4–6	Drainage Details
7–12	Plan & Profile

The Contractor shall verify all existing conditions and dimensions at the job site to ensure that all work will fit in the manner intended on the plans. Should any conditions exist that are contrary to those shown on the plans, the Contractor shall notify the Engineer of such differences immediately and prior to proceeding with the work.

All disturbed areas shall be seeded with a mixture of long–term vegeation and short–term vegetation. The long term vegetation shall be applied at a minimum rate of 70 ponds per acre. The short–term vegetation shall be applied at a minimum rate of 20 pounds per acre and shall consist of winter rye from September through March and millet from April through August.

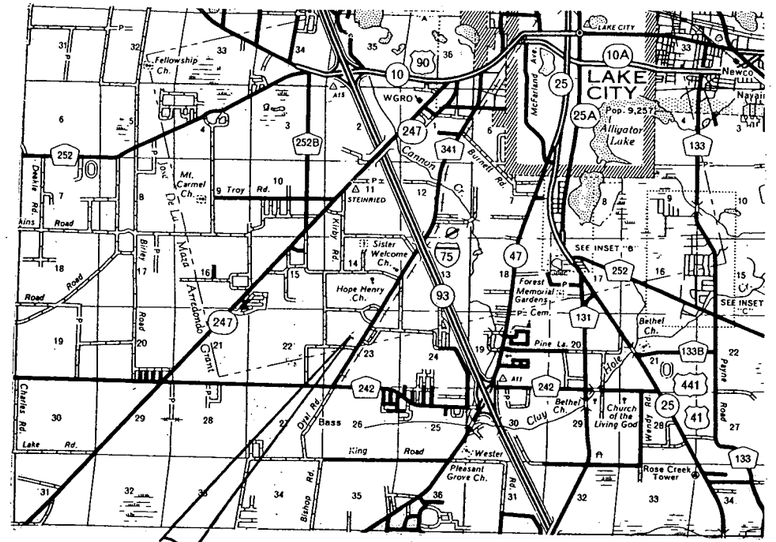
The permittee shall institute necessary measures during construction to minimize erosion, turbidity, nutrient loading, and sedimentation to adjacent lands and in the receiving waters.

All grades may be adjusted in the field six inches as long as the stopping sight distance and the flow of water are not changed.

Existing topographical information and elevations provided by surveyor.

Where ditch has to be deeper than normal to accomodate a pipe the transition from normal ditch grade to pipe flow line shall be a minimum length of one hundred feet.

The Contractor shall adhere to the Erosion and Sedimentation Control Plan from before earthwork begins until as–builts are completed.



GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC DESIGN STANDARDS DATED JANUARY 2000, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2000, AS AMENDED BY CONTRACT DOCUMENTS.

REVISIONS

RECEIVED
S.R.W.M.D.
JUN 20 2003
ORIGINAL TO FILE ERP03-0016
COPIES TO

RECEIVED
S.R.W.M.D.
JUN 20 2003
ORIGINAL TO FILE ERP03-0016
COPIES TO

OWNER
DONALD E. WILLIAMS
ROUTE 18 BOX 576
LAKE CITY, FL 32025
386-755-0764

ENGINEER
ARTHUR N. BEDENBAUGH
ROUTE 6 BOX 507
LAKE CITY, FL 32025
386-752-5846

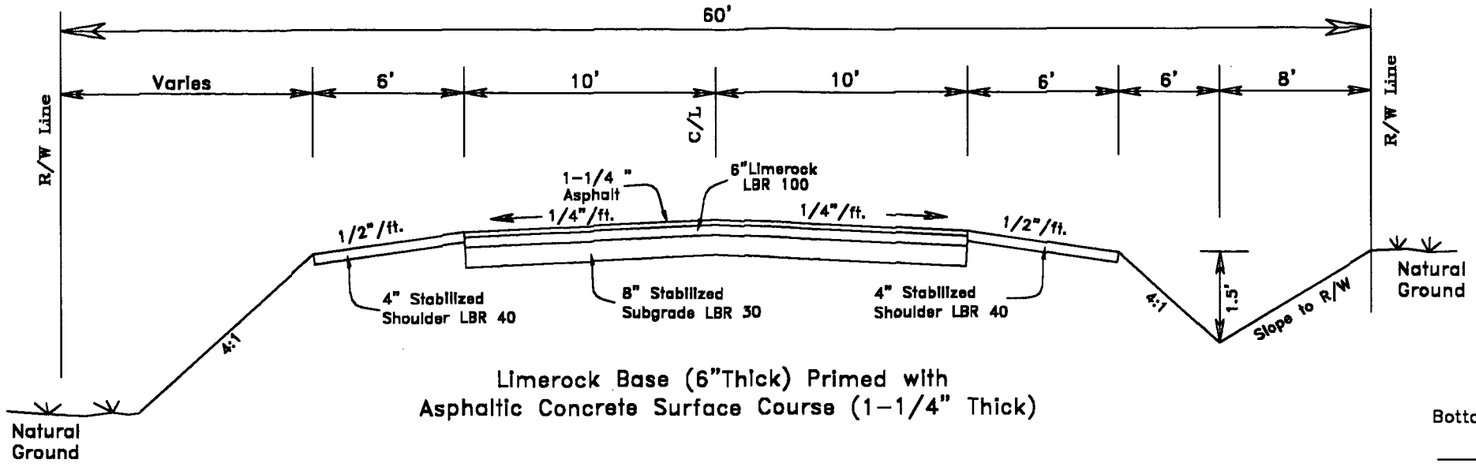
BRITT SURVEYING
LAND SURVEYORS AND MAPPERS
1426 WEST DUVAL STREET
LAKE CITY, FL 32055
386-752-7163

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED BY REPRODUCTION

Engineer of Record: Arthur N. Bedenbaugh 6-18-03

P.E. No.: 9162

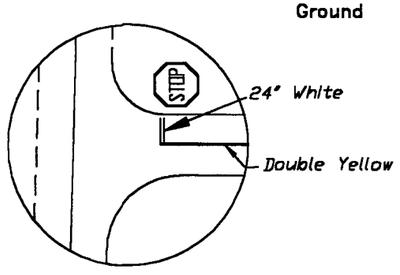
SHEET 1



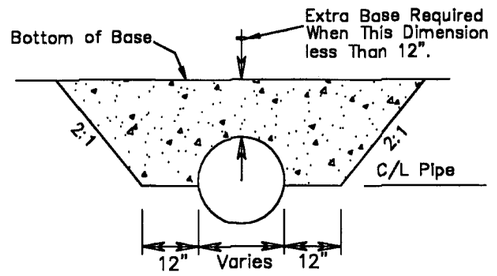
Limerock Base (6"Thick) Primed with
Asphaltic Concrete Surface Course (1-1/4" Thick)

TYPICAL SECTION

Design Speed 25 M.P.H.



Intersection Signing & Marking Detail



Pipe Detail less than 12" Cover

COLUMBIA COUNTY ROADWAY CONSTRUCTION REQUIREMENTS

General Requirements

The roadway construction plans must be reviewed and approved prior to commencing construction.

All materials and construction shall conform to the requirements of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction.

The materials and construction shall be certified by a testing laboratory retained by the developer or contractor. Copies of all test results shall be provided prior to acceptance.

All traffic control and safety items (striping, stop bars, regulatory signs, etc.) shall be in place.

The temporary grass shall be sufficient to control erosion.

Final inspection for acceptance to be performed by County Engineer, Public Works Director, and County Commissioner (should he desire to attend).

Inspections by County Representatives

Completion of clearing and grubbing. Visual only - no test requirements.

Rough graded and drainage structures in place. Test results - LBR - Pipe backfill density.

Subgrade complete. Test results - Density.

Limerock placed and finished. Test results - Thickness, Cross Section and Density.

Asphaltic Concrete in place. Test results - Thickness and density.

Final Inspection.

RECEIVED
S.R.W.M.D.
JUN 20 2003

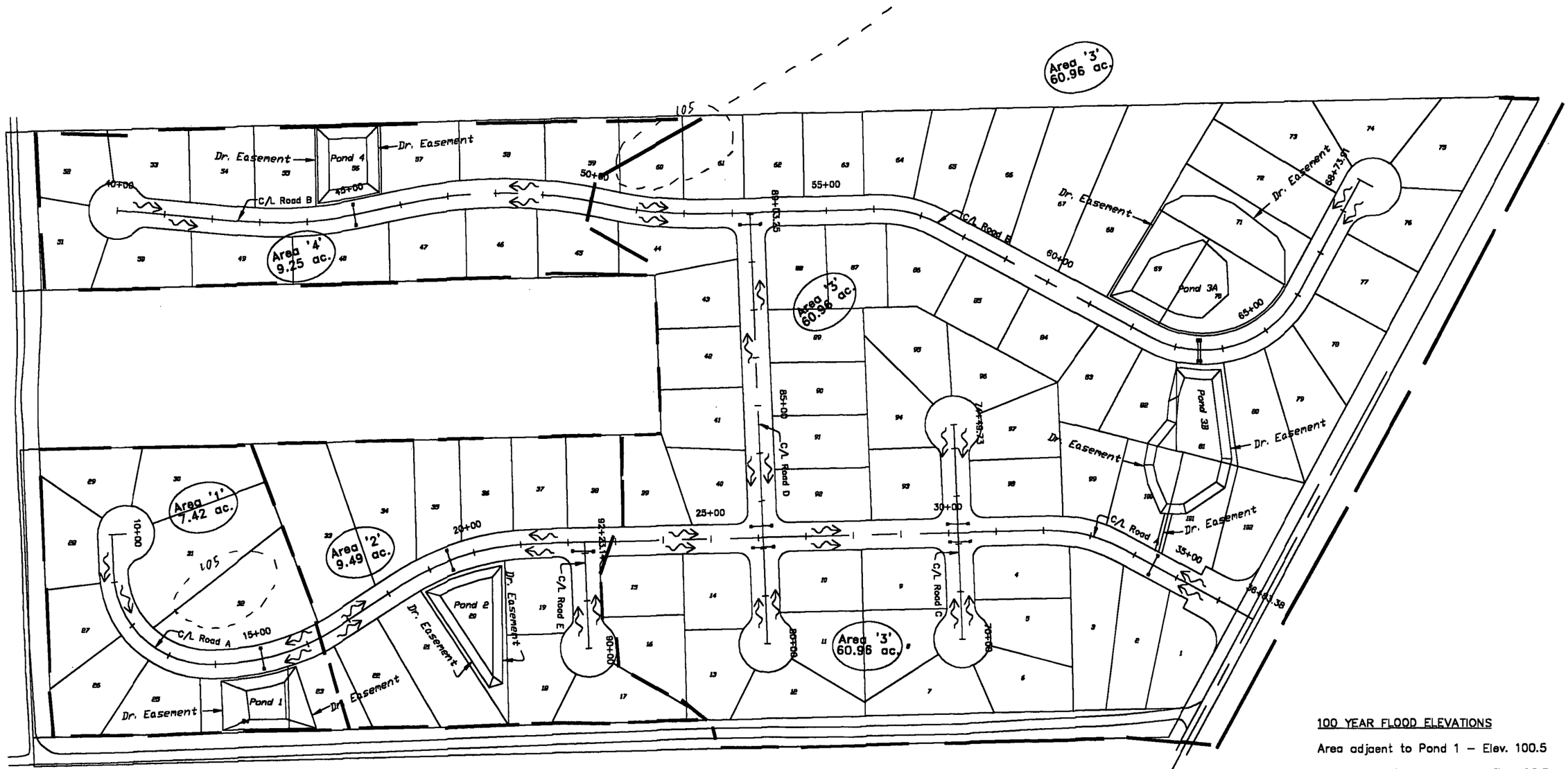
ORIGINAL TO FILE _____

COPIES TO _____

PRELIMINARY

Arthur N. Bedenbaugh
6-18-03

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS STONEHENGE SUBDIVISION	Columbia County JOB NUMBER: 02-2003	TYPICAL SECTIONS	SHEET 2
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846				



100 YEAR FLOOD ELEVATIONS

Area adjacent to Pond 1 – Elev. 100.5

Area adjacent to Pond 2 – Elev. 98.5

Area adjacent to Pond 3A & 3B – Elev. 88.5

Area adjacent to Pond 4 – Elev. 97.5

NOTES:

THE HYDRAULIC DATA IS SHOWN TO INDICATE WATER ELEVATIONS WHICH MAY BE ANTICIPATED IN ANY GIVEN YEAR. THIS DATA WAS GENERATED USING HIGHLY VARIABLE FACTORS DETERMINED BY A STUDY OF THE WATERSHED. MANY JUDGEMENTS AND ASSUMPTIONS ARE REQUIRED TO ESTABLISH THESE FACTORS. THE RESULTANT DATA IS SENSITIVE TO CHANGES, PARTICULARLY OF ANTECEDENT CONDITIONS, URBANIZATION, CHANNELIZATION, AND LAND USE. USERS OF THIS DATA ARE CAUTIONED AGAINST THE ASSUMPTION OF PRECISION WHICH CANNOT BE ATTAINED. DISCHARGES ARE IN CUBIC FEET PER SECOND AND STAGES ARE IN REFERENCE TO NGVD.

THE 100 YEAR FLOOD IS THE FLOOD HAVING A 1% CHANCE OF BEING EXCEEDED IN ANY YEAR.

DATA USED IS FROM USGS QUAD MAPS, SURVEYS BY BRITT SURVEYING, AND FLOOD INSURANCE RATE MAPS.

PRELIMINARY

RECEIVED
S.R.W.M.D.
JUN 20 2003

(DRAINAGE DETAILS AND NOTES ON SHEETS 4, 5, & 6)

ORIGINAL TO FILE_____

COPIES TO_____

Legend

—146— Exist. Quad Contours

⇝ Flow of Water

Arthur N. Bedenbaugh

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

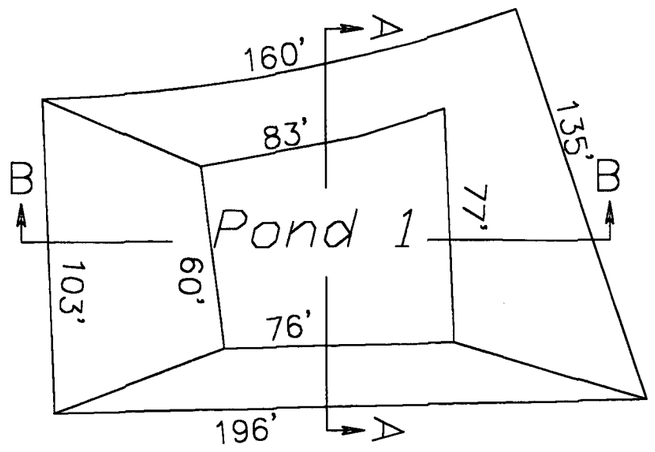
Columbia County

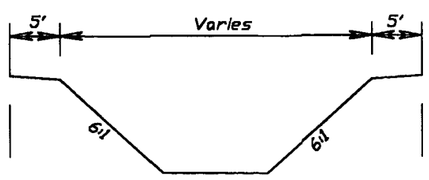
JOB NUMBER: 02-2003

DRAINAGE PLAN 6-18-03

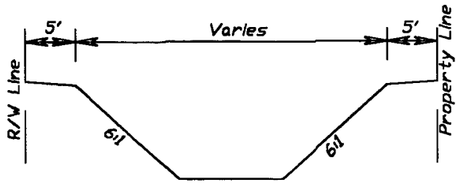
SHEET 3

Pond 1 Data
Top Elev. 100.0
Bottom Elev. 95.0
Slopes 6:1





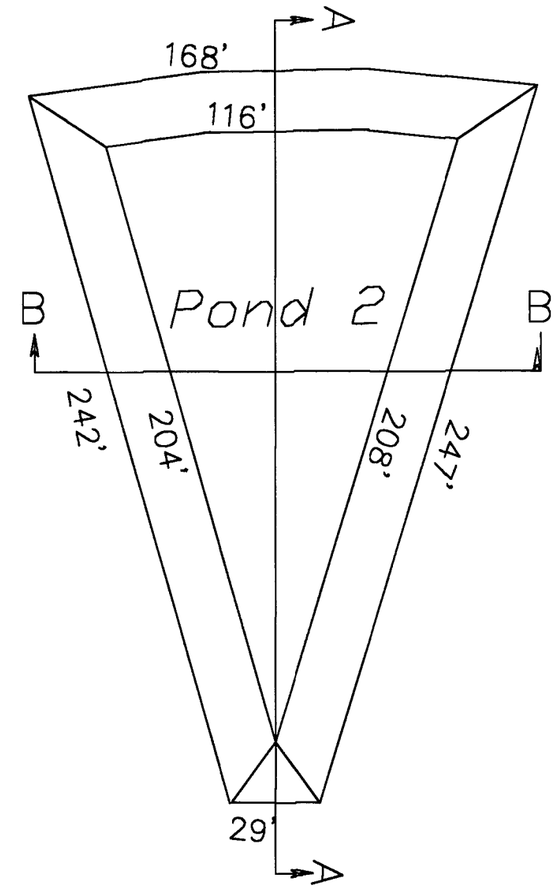
B–B

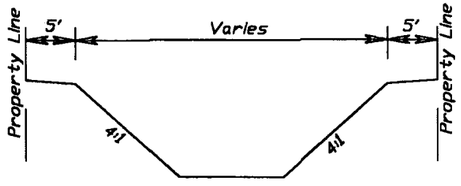


A–A

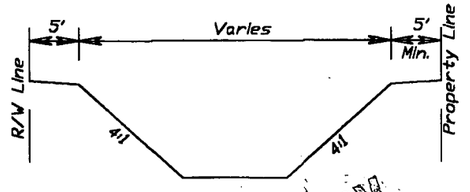
POND 1 DETAILS

Pond 2 Data
Top Elev. 98.0
Bottom Elev. 93.0
Slopes 4:1





B–B



A–A

POND 2 DETAILS

PRELIMINARY

Arthur N. Bedenbaugh

Revisions					
Date	By	Description	Date	By	Description

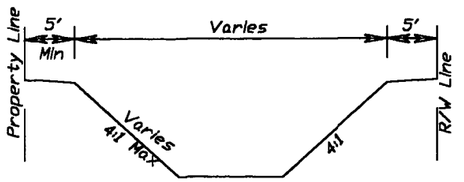
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

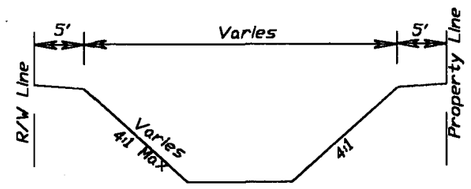
Columbia County
JOB NUMBER: 02-2003

POND 1 & POND 2 DETAILS 6-18-03

SHEET 4

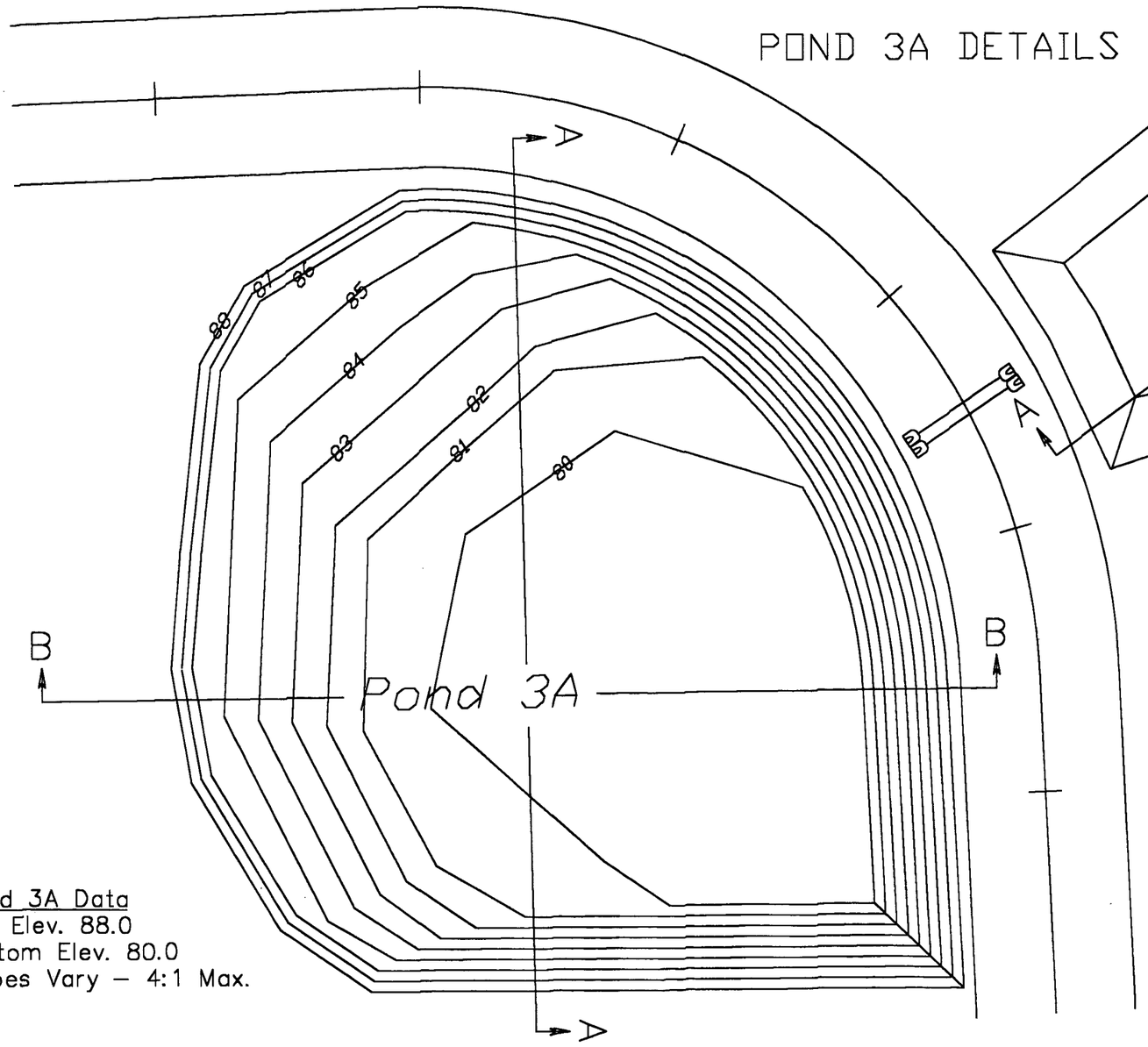


B–B

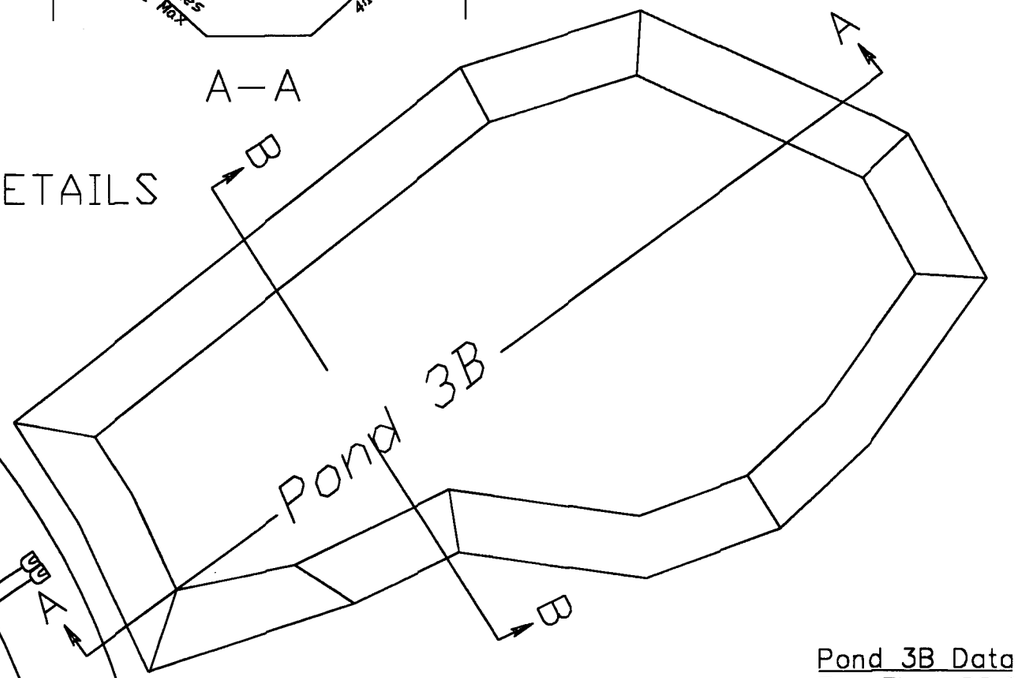


A–A

POND 3A DETAILS

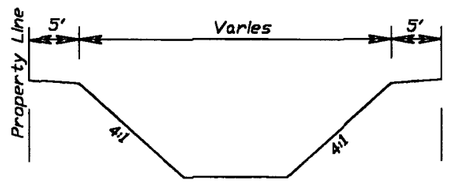


Pond 3A Data
Top Elev. 88.0
Bottom Elev. 80.0
Slopes Vary – 4:1 Max.

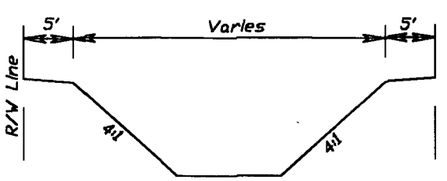


Pond 3B Data
Top Elev. 88.0
Bottom Elev. 84.0
Slopes 4:1

PRELIMINARY



B–B



A–A

POND 3B DETAILS

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5845

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

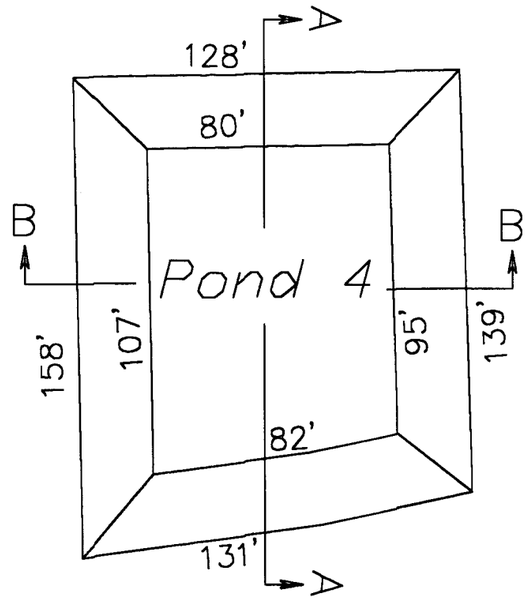
Columbia County
JOB NUMBER: 02–2003

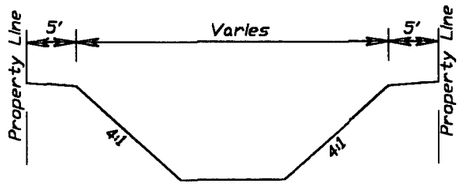
POND 3A & POND 3B DETAILS 6-18-03

SHEET 5

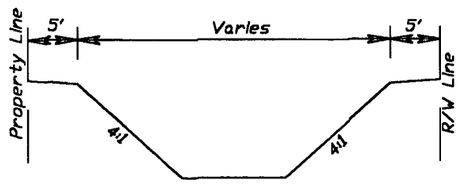
Arthur N. Bedenbaugh

Pond 4 Data
Top Elev. 97.0
Bottom Elev. 91.0
Slopes 4:1





B–B



A–A

POND 4 DETAILS

Drainage Notes

Erosion control devices will be used during construction.

There shall be no construction within the 100–year flood zone without meeting all local, state, and federal requirements including permits when required.

There is to be no fill placed below the 100–year flood elevation.

All habitable structures must be built at least 1 foot above the 100–year flood elevation.

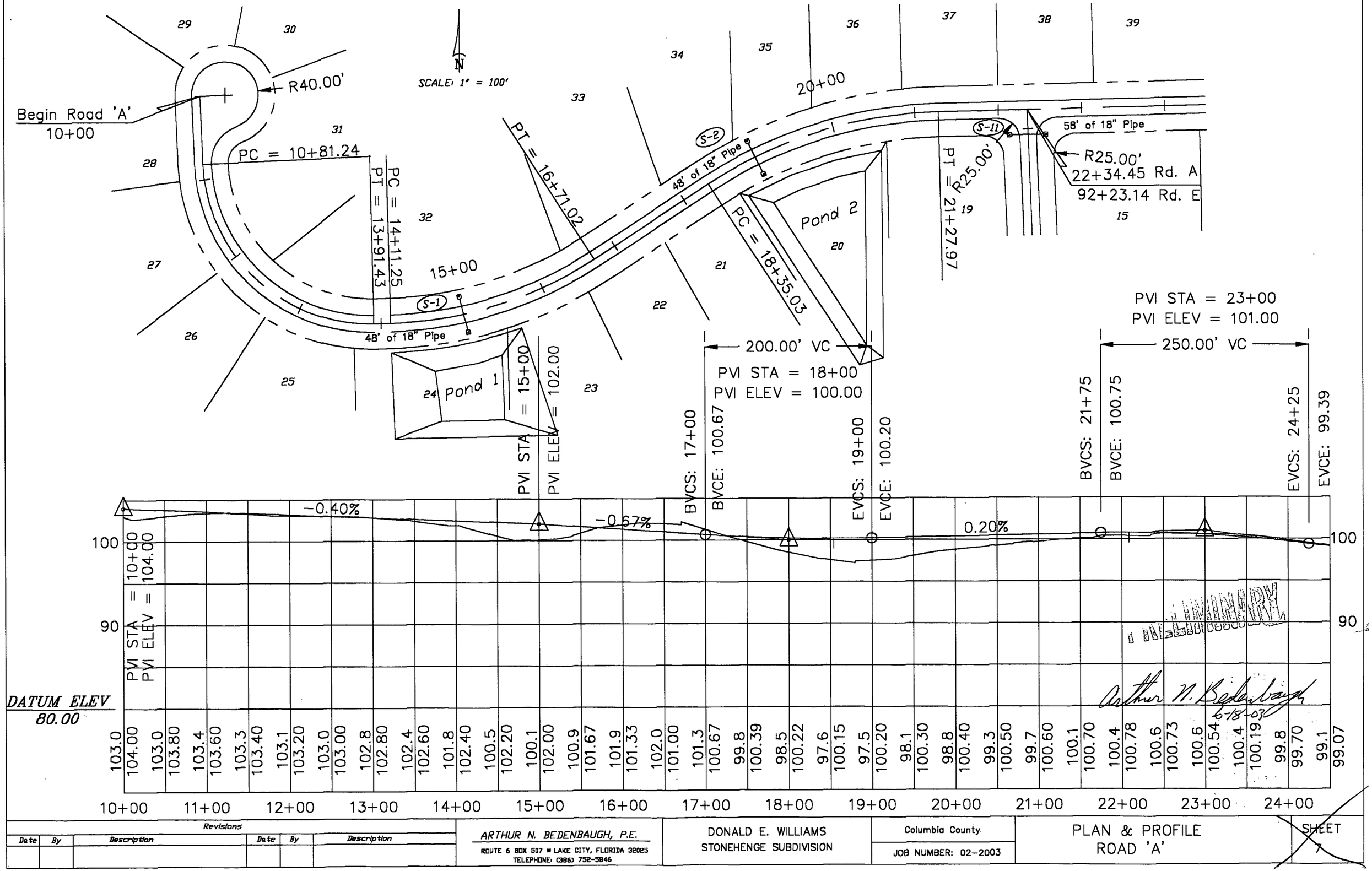
There may be depresssional areas on the property not shown that may hold water during hard rains and should not be used for building sites.

Drainage Easements exist along all retention areas and ditches to retention areas.

PRELIMINARY

Arthur N. Bedenbaugh

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS	Columbia County	POND 4 & MISC.	SHEET
Date	By	Description	Date	By	Description	LAKE CITY, FLORIDA 32025	STONEHENGE SUBDIVISION	JOB NUMBER: 02–2003	DETAILS 6-18-03	6
						TELEPHONE (386) 752-5846				



Revisions					
Date	By	Description	Date	By	Description

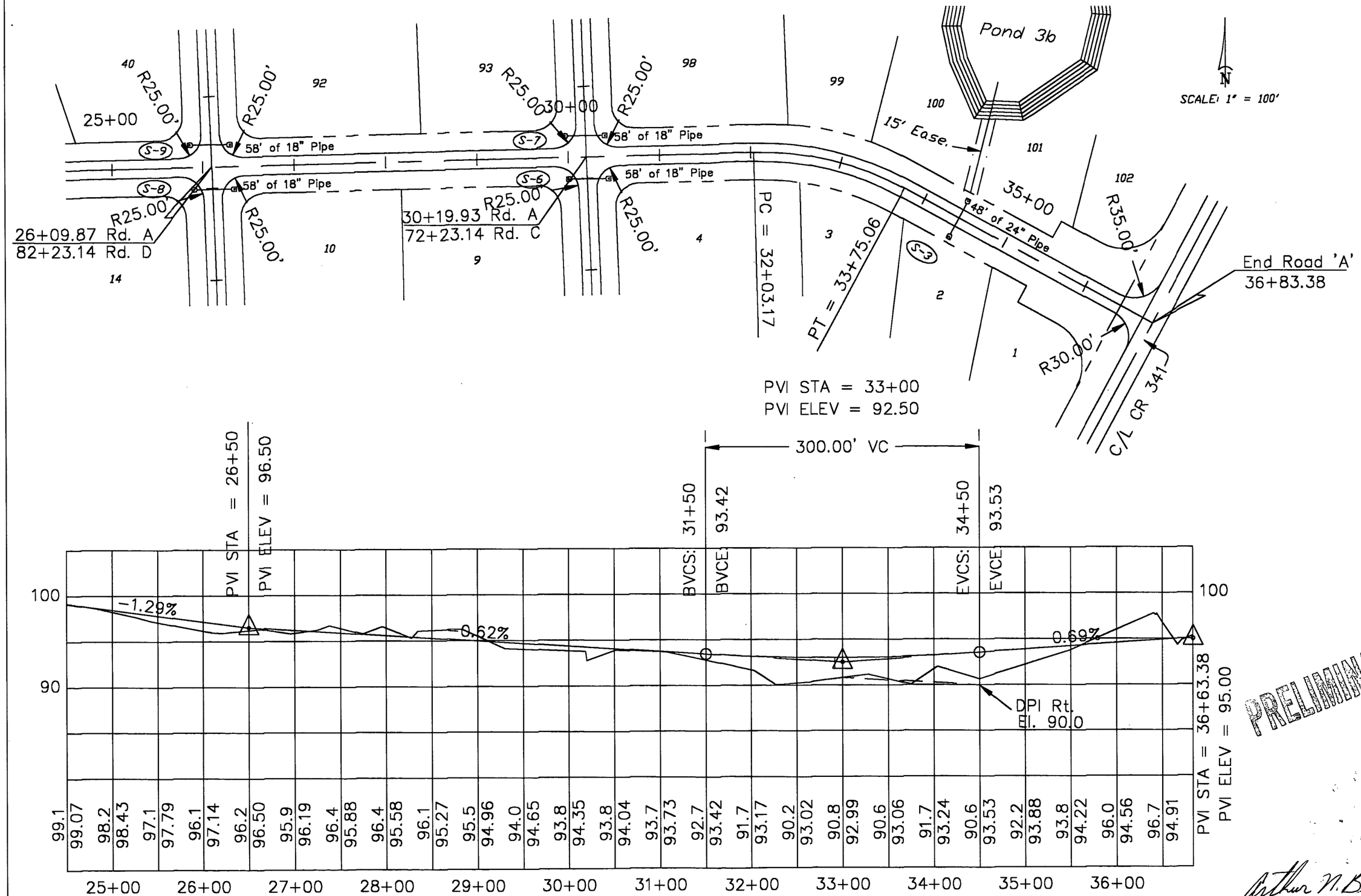
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'A'

SHEET
7



PRELIMINARY

Arthur N. Bedenbaugh 6-18-03

Revisions					
Date	By	Description	Date	By	Description

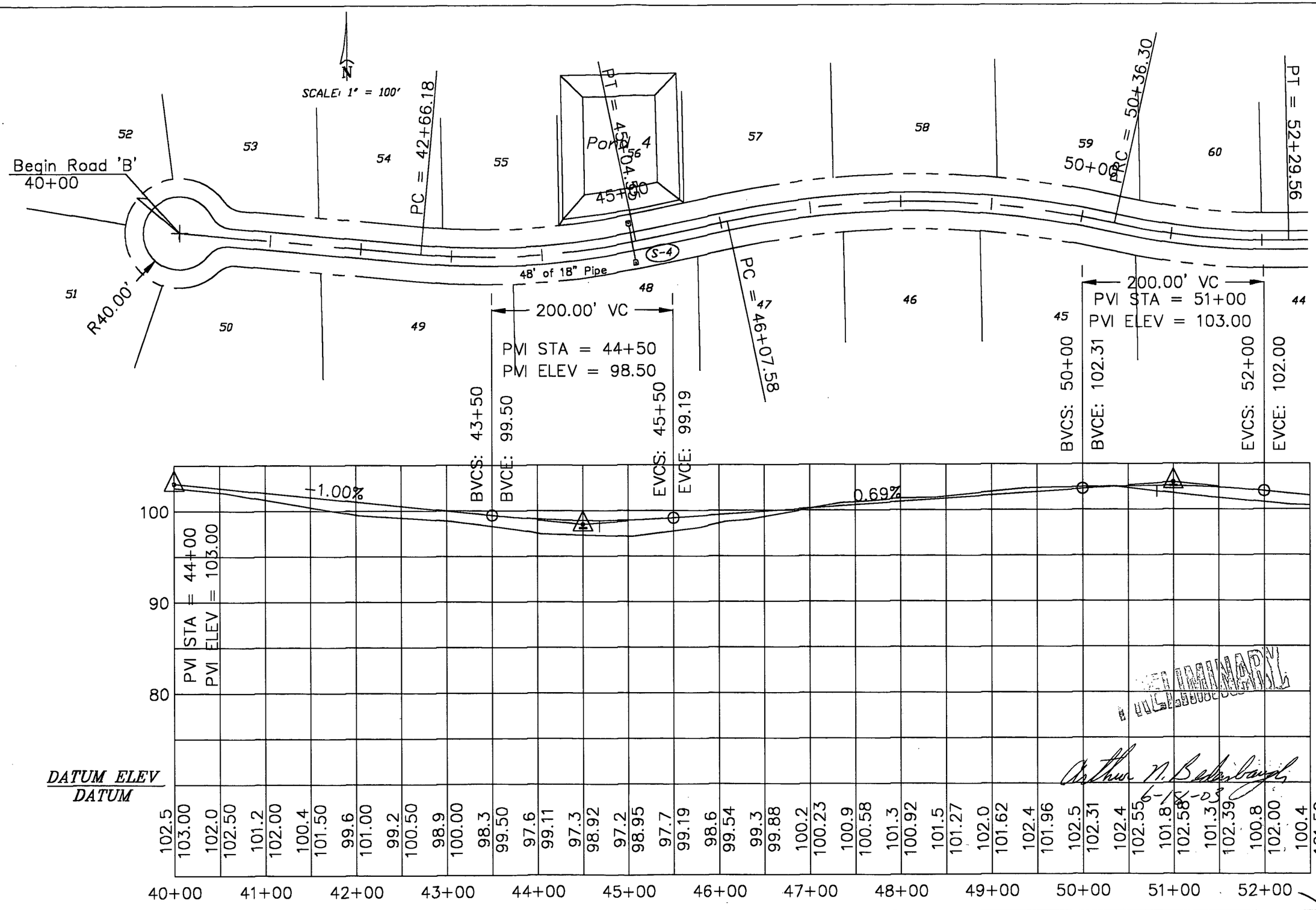
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'A'

SHEET
8



PRELIMINARY

Arthur N. Bedenbaugh 6-17-03

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ▪ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'B'

SHEET
9

SCALE: 1" = 100'

55+00

58' of 18" Pipe

R25.00'

53+37.96 Rd. B
89+03.25 Rd. D

R25.00'

PC = 56+06.92

PT = 57+45.46

60+00

PC = 62+45.95

PT = 66+05.97

Pond 3a

65+00

48' of Dbl. 24" Pipe

S-10

S-5

R40.00'

End Road 'B'
68+73.91

61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 83 84 85 86 87 88

200.00' VC
PVI STA = 57+50
PVI ELEV = 96.50

300.00' VC
PVI STA = 61+00
PVI ELEV = 88.50

300.00' VC
PVI STA = 64+50
PVI ELEV = 88.50

200.00' VC
PVI STA = 67+00
PVI ELEV = 96.00

	56+50	58+50	59+50	62+50	63+00	66+00	68+00
BVCS:	97.50	94.21	91.93	88.50	88.50	93.00	96.58
BVCE:	97.50	94.21	91.93	88.50	88.50	93.00	96.58
EVCS:	97.50	94.21	91.93	88.50	88.50	93.00	96.58
EVCE:	97.50	94.21	91.93	88.50	88.50	93.00	96.58

-1.00% -2.29% 0.00% 0.58%

PVI STA = 68+73.91
PVI ELEV = 97.00

53+00	54+00	55+00	56+00	57+00	58+00	59+00	60+00	61+00	62+00	63+00	64+00	65+00	66+00	67+00	68+00
100.4	101.50	100.2	101.00	99.9	100.50	99.4	100.00	98.9	99.50	98.5	99.00	98.0	98.50	97.7	98.00
97.7	97.50	97.4	96.92	96.2	96.18	94.7	95.28	93.3	94.21	91.9	93.07	90.7	91.93	89.5	90.88
88.3	90.02	87.3	89.36	86.3	88.88	85.6	88.60	85.1	88.50	85.1	88.50	85.3	88.63	85.8	89.00
86.5	89.63	88.1	90.50	90.2	91.63	92.2	93.00	94.2	94.35	95.6	95.39	96.4	96.14	96.7	96.58
96.9	96.86														

PRELIMINARY
Arthur N. Bedenbaugh
6-18-03

Revisions					
Date	By	Description	Date	By	Description

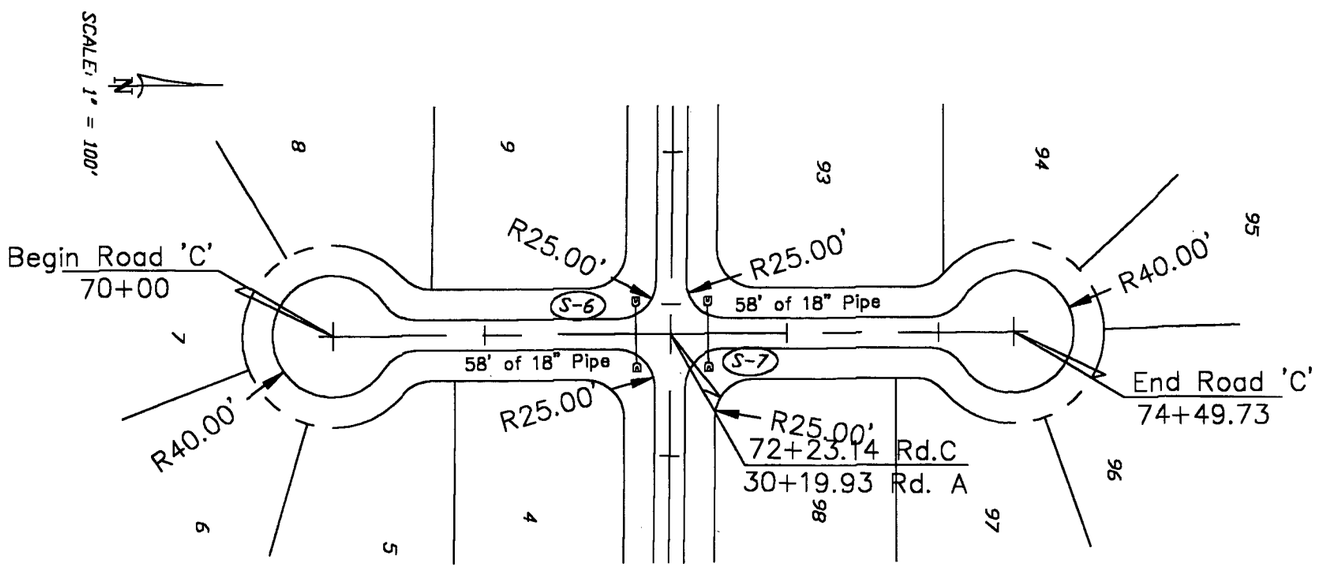
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

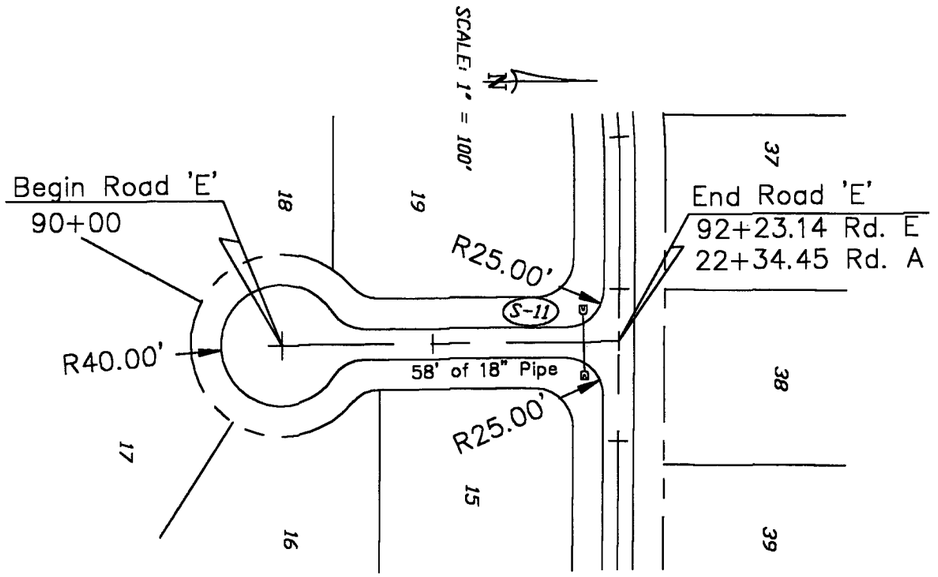
DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

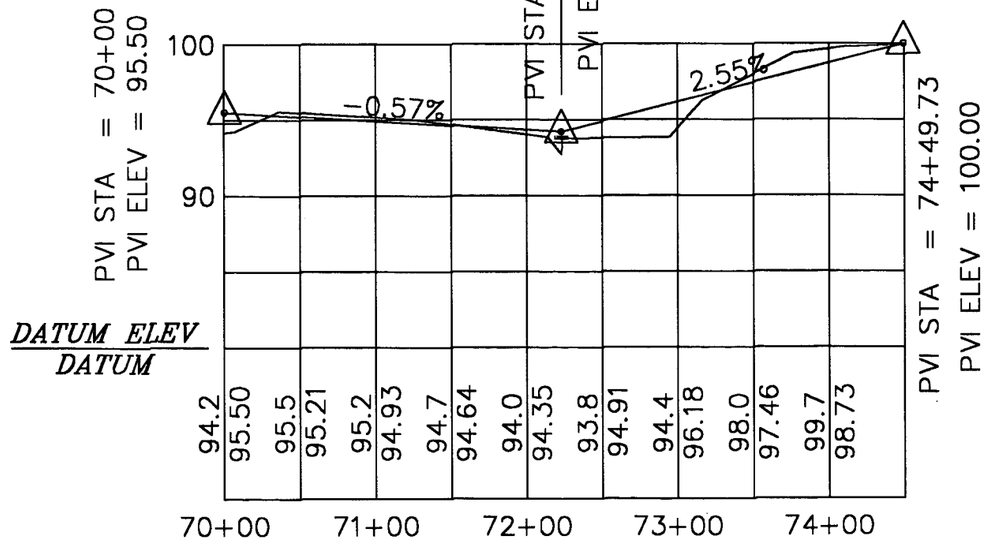
Columbia County
JOB NUMBER: 02-2003

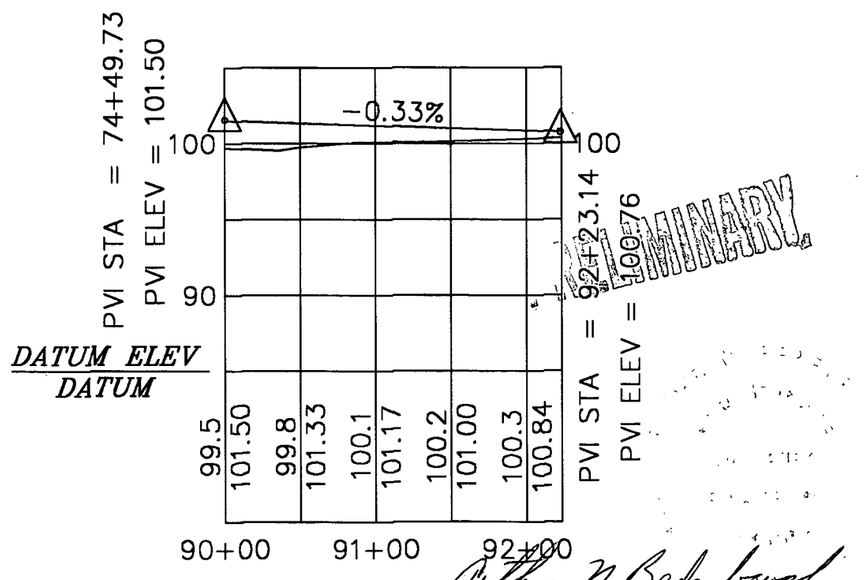
PLAN & PROFILE
ROAD 'B'

SHEET
10









PRELIMINARY

Arthur N. Bedenbaugh 6-18-03

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

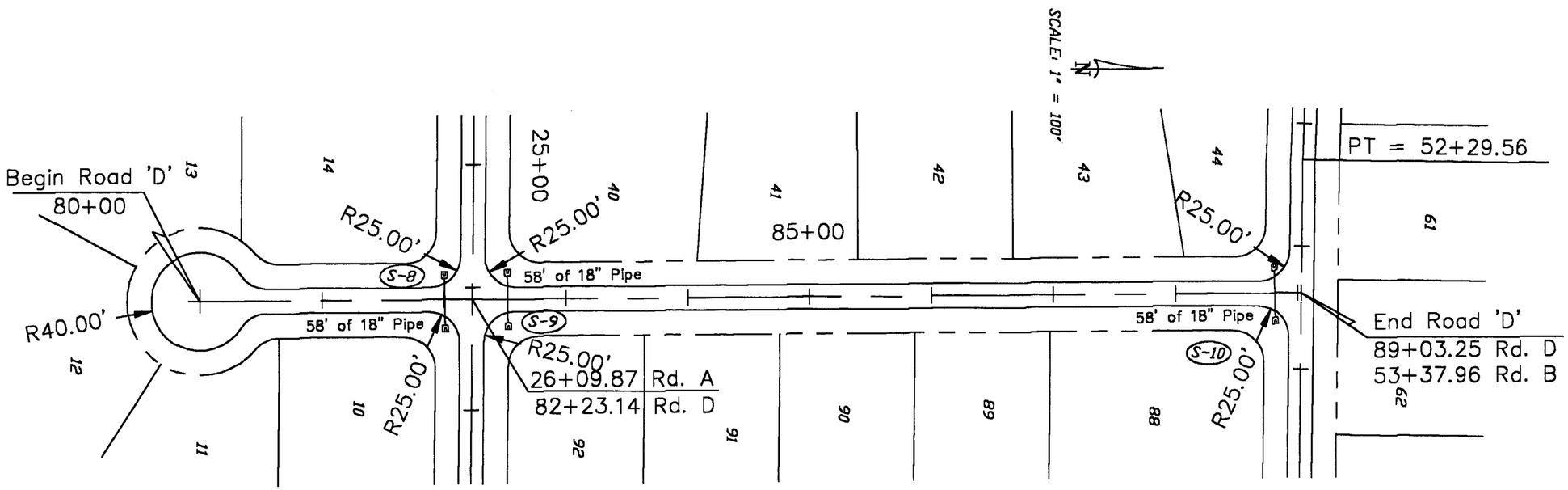
DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

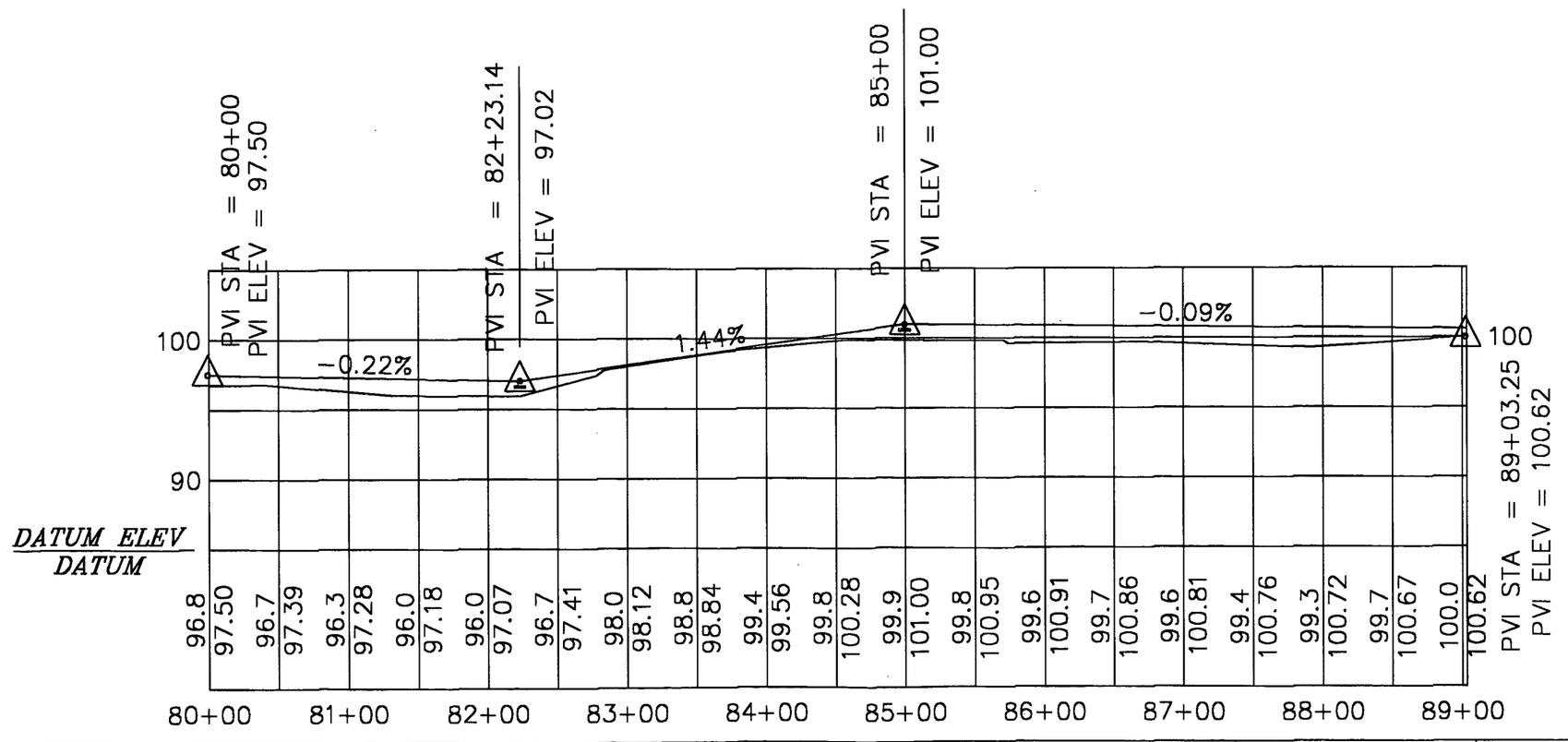
Columbia County

JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'C' & 'E'

SHEET
11





PRELIMINARY

Arthur N. Bedenbaugh

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE 6-18-03
ROAD 'D'

SHEET
12

SITE DESCRIPTION

CONSTRUCTION ACTIVITY: Roadway and Retention Pond Construction

PROJECT LIMITS: Stonehenge Subdivision

PROJECT DESCRIPTION: New paved road construction, drainage structures, and retention ponds.

MAJOR SOIL DISTURBING ACTIVITIES: The major soil disturbing activities include clearing and grubbing, new roadway construction, and excavation for retention ponds.

TOTAL PROJECT AREA: 69.86 ac.

TOTAL AREA TO BE DISTURBED: 14.99 ac.

RUNOFF COEFICIENTS:
Pre-Construction = .15
Post-Construction = .37

DESCRIPTION OF SOIL: Soils within the project area are generally within the following soil groups.
Blanton Fine Sand
Bonneau-Blanton Complex

ESTIMATES OF SIZE OF DRAINAGE AREA FOR EACH OUTFALL:
See Drainage Plan Sheet 3

LOCATIONS OF DRAINAGE AREAS AND OUTFALLS:
See Drainage Plan Sheet 3

NAME OF RECEIVING WATER(S):
All water retained on project site.

WETLAND AREA:
Total Permanent Impacts: 0
Total Temporary Impacts: 0

CONTROLS

NARRATIVE – SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS: Primary activities that will disturb soil are clearing and grubbing, excavation, and fill. Contractor shall be responsible for minimizing disturbance in each active work area complying with FDOT Index 102. Sediment controls include silt fences and hay bales which are to remain in place until temporary or permanent seeding or sodding has taken hold.

EROSION AND SEDIMENT CONTROLS:

STABILIZATION PRACTICES:
Permanent sodding, seeding or seed & mulch.

STRUCTURAL PRACTICES:
Silt Fences
Hay Bales

DESCRIPTION OF STORM WATER MANAGEMENT: The storm water management consists of four retention ponds and swale treatment in roadside ditches. Runoff is conveyed to ponds via roadside ditches, culverts, and drainage ditches. All runoff is retained on project site.

WASTE DISPOSAL: To be provided by the Contractor

SANITARY WASTE: To be provided by the Contractor

FERTILIZERS AND PESTICIDES:
Fertilizer: 400 lb/ac at 1 application (Per FDOT Standards)

NON-STORM WATER DISCHARGE: No non-storm water discharge is anticipated.

APPROVED STATE, LOCAL PLANS, OR STORM WATER PERMIT:
SRWMD EPR PERMIT – Pending

MAINTENANCE: All the controls shall be maintained at all times during construction.

INSPECTION: All controls shall be inspected daily and after the end of each rainfall of 0.5 inches or greater.

RECEIVED
S.R.W.M.D.
JUL 0 3 2003
ORIGINAL TO FILE EPP03-0016, Lm II
COPIES TO

Arthur N. Bedenbaugh 6-27-03

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS STONEHENGE SUBDIVISION	Columbia County	EROSION CONTROL PLAN	SHEET 13
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846		JOB NUMBER: 02-2003		

NOTES:

IF THE PROPOSED EROSION AND SEDIMENT CONTROL PLAN DOES NOT WORK OR IS NOT EFFECTIVE, THE CONTRACTOR SHALL USE THE BEST MANAGEMENT PRATICES IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR MANUAL TO IMPLEMENT A PLAN THAT WILL WORK.

NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.

CROSS DRAINS SHALL BE PROTECTED FROM SEDIMENT LADEN STORMWATER RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS.

RETENTION BASINS SHOULD BE VISUALLY MONITORED FOLLOWING SIGNIFICANT STORM EVENTS FOR SINK HOLE ACTIVITY. WHERE SHALLOW DEPRESSIONS ARE NOTED, THESE MAY BE FILLED TO PRE-EXISTING GRADE WITH CLAYEY SAND MATERIAL, GRADED, AND VEGETATED. OTHER SINK HOLE ACTIVITY SHOULD EMPLOY METHODOLOGIES ACCEPTABLE TO THE APPLICABLE REGULATORY AGENCY.

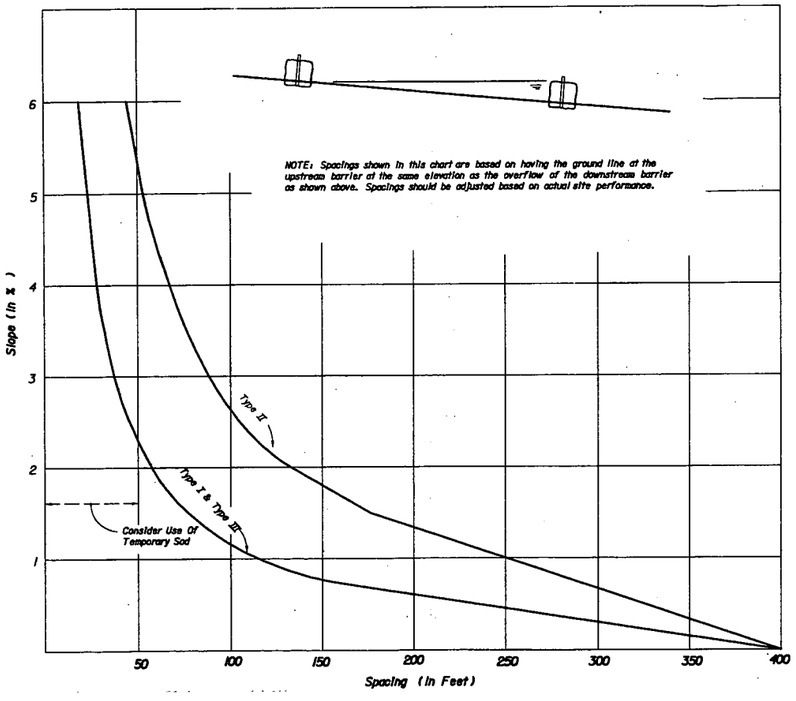
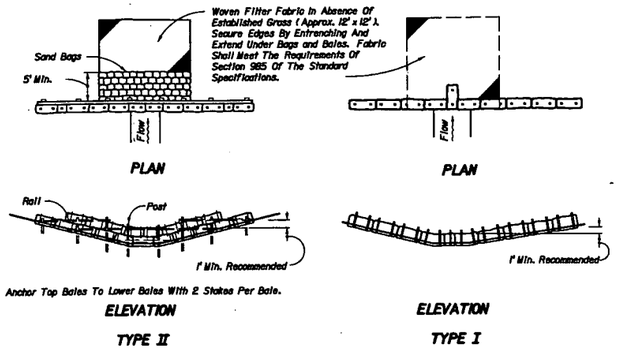
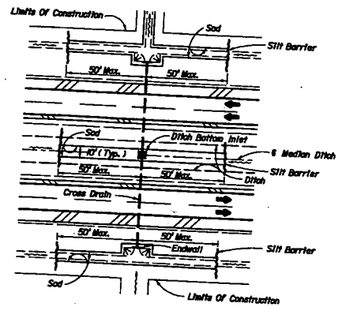


CHART I

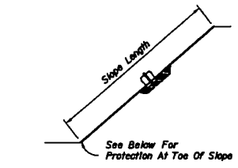
RECOMMENDED SPACING FOR BALED HAY BARRIERS AND TYPE III SILT FENCE



BARRIERS FOR UNPAVED DITCHES

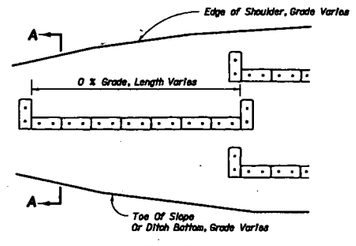


DITCH INSTALLATIONS AT DRAINAGE STRUCTURES



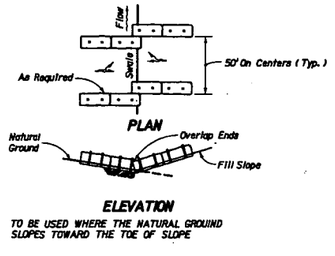
SECTION AA

Note:
Where the slope length exceeds 25 feet, construct one row of bale barriers at 0% longitudinal grade midway up the slope. Contruct two rows of bale barriers where the slope length exceeds 50 feet.



ALONG FILL SLOPE

ELEVATION



AT TOE OF SLOPE

BARRIERS FOR FILL SLOPES

RECEIVED
S.R.W.M.D.
JUL 0 3 2003
ORIGINAL TO FILE
COPIES TO

Arthur N. Bedenbaugh
6-27-03

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County

JOB NUMBER: 02-2003

EROSION CONTROL PLAN

SHEET 14

STONEHENGE
MINIMUM FINISHED FLOOR ELEVATIONS

1	94.90		27	104.60		53	104.00		79	92.70
2	94.30		28	105.00		54	102.50		80	91.50
3	94.00		29	105.00		55	102.50		81	89.00
4	96.00		30	105.00		56	100.20		82	89.50
5	96.50		31	105.00		57	100.20		83	90.40
6	96.50		32	104.20		58	101.30		84	93.00
7	96.50		33	102.40		59	102.70		85	96.30
8	96.50		34	101.70		60	103.60		86	99.00
9	96.60		35	101.20		61	103.00		87	100.00
10	98.40		36	101.30		62	102.00		88	101.80
11	98.00		37	101.60		63	100.50		89	102.00
12	98.00		38	101.80		64	99.50		90	101.30
13	98.00		39	101.60		65	98.50		91	99.90
14	100.10		40	100.60		66	97.20		92	98.50
15	102.50		41	102.00		67	94.10		93	96.90
16	102.50		42	102.00		68	91.90		94	101.00
17	102.50		43	101.90		69	89.00		95	101.00
18	102.50		44	103.60		70	89.00		96	101.00
19	102.40		45	102.30		71	89.00		97	101.00
20	101.20		46	101.30		72	97.90		98	99.80
21	101.40		47	99.50		73	98.00		99	94.00
22	102.00		48	100.50		74	98.00		100	94.00
23	102.80		49	102.50		75	98.00		101	94.60
24	103.60		50	103.50		76	98.00		102	95.30
25	104.60		51	104.00		77	97.90			
26	104.20		52	104.00		78	95.40			

RECEIVED
S.R.W.M.D.
JUL 0 3 2003
ORIGINAL TO FILE_____
COPIES TO_____

Arthur N. Bedenbaugh
6-27-03

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS STONEHENGE SUBDIVISION	Columbia County JOB NUMBER: 02-2003	FLOOR ELEVATIONS	SHEET 5
Date	By	Description	Date	By	Description					
						ROUTE 6 BOX 507 • LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846				

Columbia County

JOB NUMBER: 02-2003

Construction Plan
Stonehenge Subdivision
Sec. 23 - T4S - R16E
Columbia County, Florida

Index of Plans

Sheet No.	Sheet Description
1	Key Sheet
2	Typical Sections
3	Drainage Plan
4-9	Plan & Profile

RECEIVED
S. R. W. M. D.
MAY 16 2003
ORIGINAL TO FILE _____
COPIES TO _____

The Contractor shall verify all existing conditions and dimensions at the job site to ensure that all work will fit in the manner intended on the plans. Should any conditions exist that are contrary to those shown on the plans, the Contractor shall notify the Engineer of such differences immediately and prior to proceeding with the work.

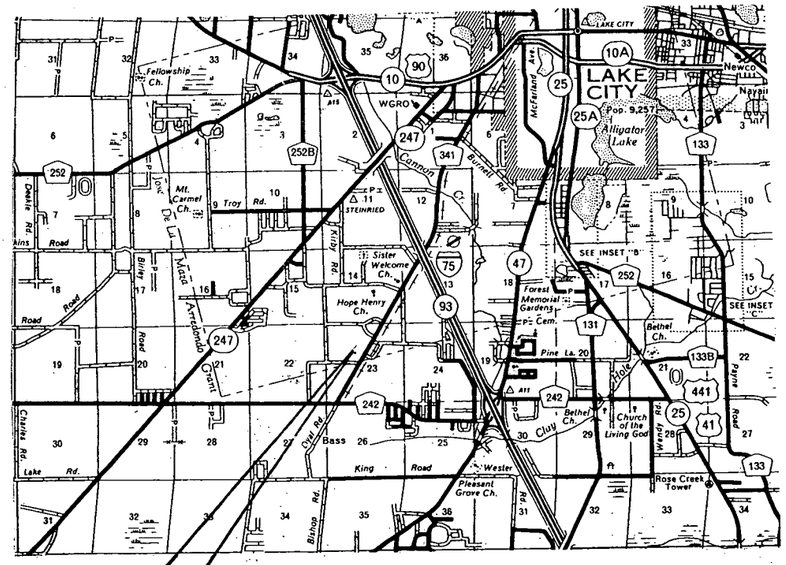
All disturbed areas shall be seeded with a mixture of long-term vegeation and short-term vegetation. The long term vegetation shall be applied at a minimum rate of 70 ponds per acre. The short-term vegetation shall be applied at a minimum rate of 20 pounds per acre and shall consist of winter rye from September through March and millet from April through August.

The permittee shall institute necessary measures during construction to minimize erosion, turbidity, nutrient loading, and sedimentation to adjacent lands and in the receiving waters.

All grades may be adjusted in the field six inches as long as the stopping sight distance and the flow of water are not changed.

Existing topographical information and elevations provided by surveyor.

Where ditch has to be deeper than normal to accomodate a pipe the transition from normal ditch grade to pipe flow line shall be a minimum length of one hundred feet.



Location of Project

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC DESIGN STANDARDS DATED JANUARY 2000, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2000, AS AMENDED BY CONTRACT DOCUMENTS.

REVISIONS

PRELIMINARY

ERP03-0016

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED BY REPRODUCTION

DONALD WILLIAMS PROJECT
ERP03-0016

OWNER
DONALD E. WILLIAMS
ROUTE 18 BOX 576
LAKE CITY, FL 32025
386-755-0764

ENGINEER
ARTHUR N. BEDENBAUGH
ROUTE 6 BOX 507
LAKE CITY, FL 32025
386-752-5846

BRITT SURVEYING
LAND SURVEYORS AND MAPPERS
1426 WEST DUVAL STREET
LAKE CITY, FL 32055
386-752-7163

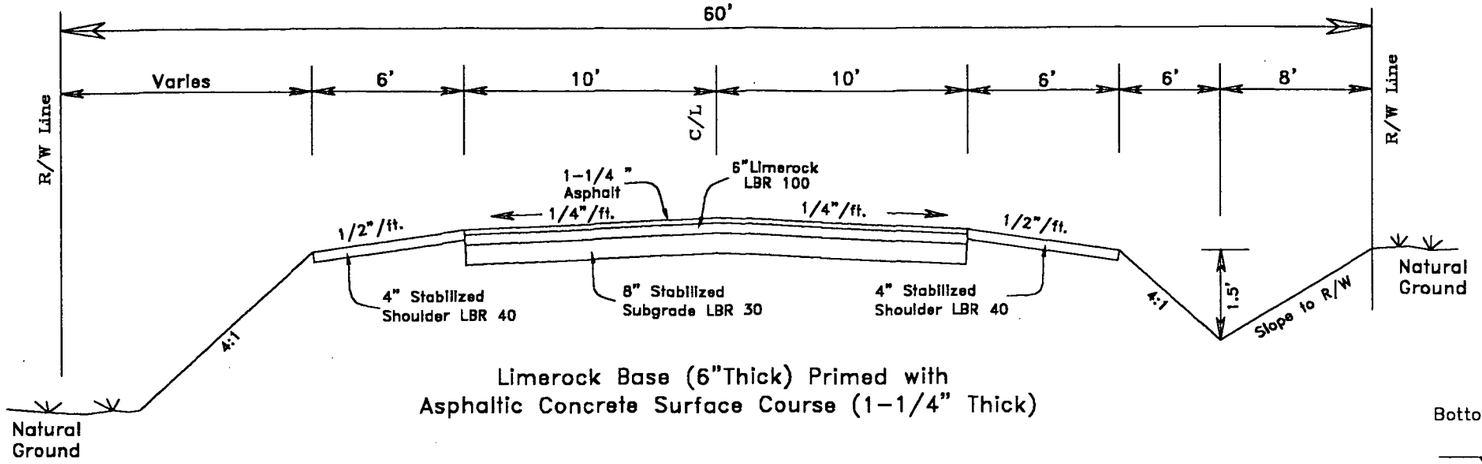
ERP03-0016

Arthur N. Bedenbaugh

Engineer of Record: Arthur N. Bedenbaugh 5-16-03

P.E. No.: 9162

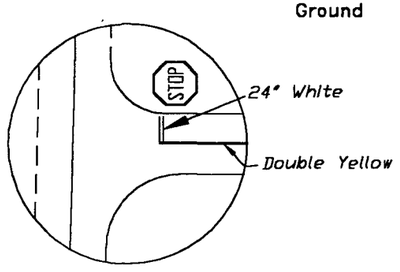
SHEET 1



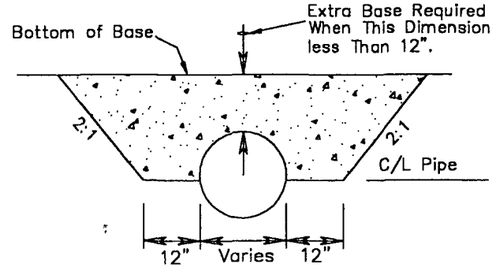
Limerock Base (6"Thick) Primed with
Asphaltic Concrete Surface Course (1-1/4" Thick)

TYPICAL SECTION

Design Speed 25 M.P.H.



Intersection Signing & Marking Detail



Pipe Detail less than 12" Cover

RECEIVED
S.R.W.M.D.
MAY 16 2003
ORIGINAL TO FILE
COPIES TO

COLUMBIA COUNTY ROADWAY CONSTRUCTION REQUIREMENTS

General Requirements

The roadway construction plans must be reviewed and approved prior to commencing construction.

All materials and construction shall conform to the requirements of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction.

The materials and construction shall be certified by a testing laboratory retained by the developer or contractor. Copies of all test results shall be provided prior to acceptance.

All traffic control and safety items (striping, stop bars, regulatory signs, etc.) shall be in place.

The temporary grass shall be sufficient to control erosion.

Final inspection for acceptance to be performed by County Engineer, Public Works Director, and County Commissioner (should he desire to attend).

Inspections by County Representatives

Completion of clearing and grubbing. Visual only – no test requirements.

Rough graded and drainage structures in place. Test results – LBR – Pipe backfill density.

Subgrade complete. Test results – Density.

Limerock placed and finished. Test results – Thickness, Cross Section and Density.

Asphaltic Concrete in place. Test results – Thickness and density.

Final Inspection.

PRELIMINARY
ERP03-0016

Arthur N. Bedenbaugh
5-16-03

Revisions					
Date	By	Description	Date	By	Description

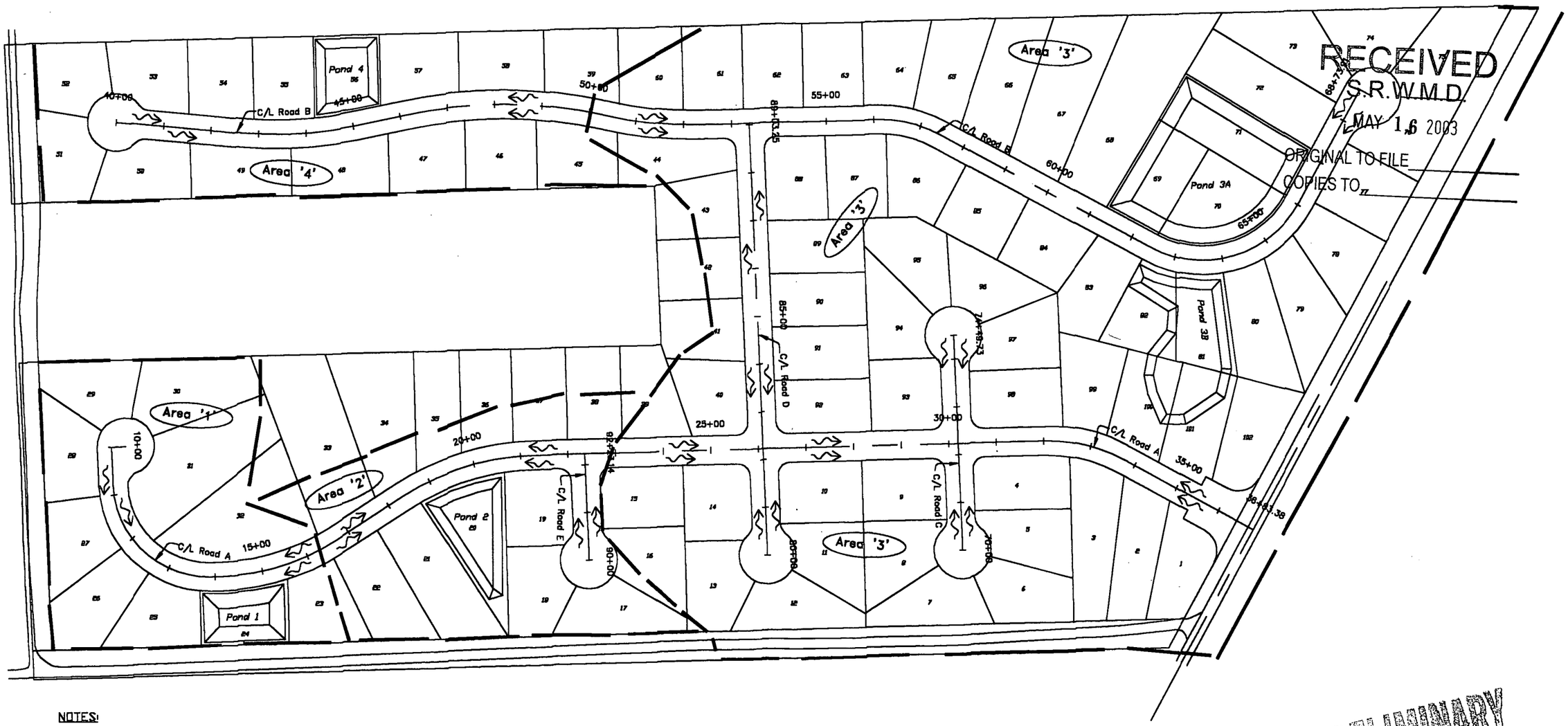
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

TYPICAL SECTIONS

SHEET 2



RECEIVED
S.R.W.M.D.
MAY 16 2003
ORIGINAL TO FILE
COPIES TO

NOTES:

THE HYDRAULIC DATA IS SHOWN FOR INFORMATIONAL PURPOSES TO INDICATE WATER ELEVATIONS WHICH MAY BE ANTICIPATED IN ANY GIVEN YEAR. THIS DATA WAS GENERATED USING HIGHLY VARIABLE FACTORS DETERMINED BY A STUDY OF THE WATERSHED. MANY JUDGEMENTS AND ASSUMPTIONS ARE REQUIRED TO ESTABLISH THESE FACTORS. THE RESULTANT DATA IS SENSITIVE TO CHANGES, PARTICULARLY OF ANTECEDENT CONDITIONS, URBANIZATION, CHANNELIZATION, AND LAND USE. USERS OF THIS DATA ARE CAUTIONED AGAINST THE ASSUMPTION OF PRECISION WHICH CANNOT BE ATTAINED. DISCHARGES ARE IN CUBIC FEET PER SECOND AND STAGES ARE IN REFERENCE TO NGVD.

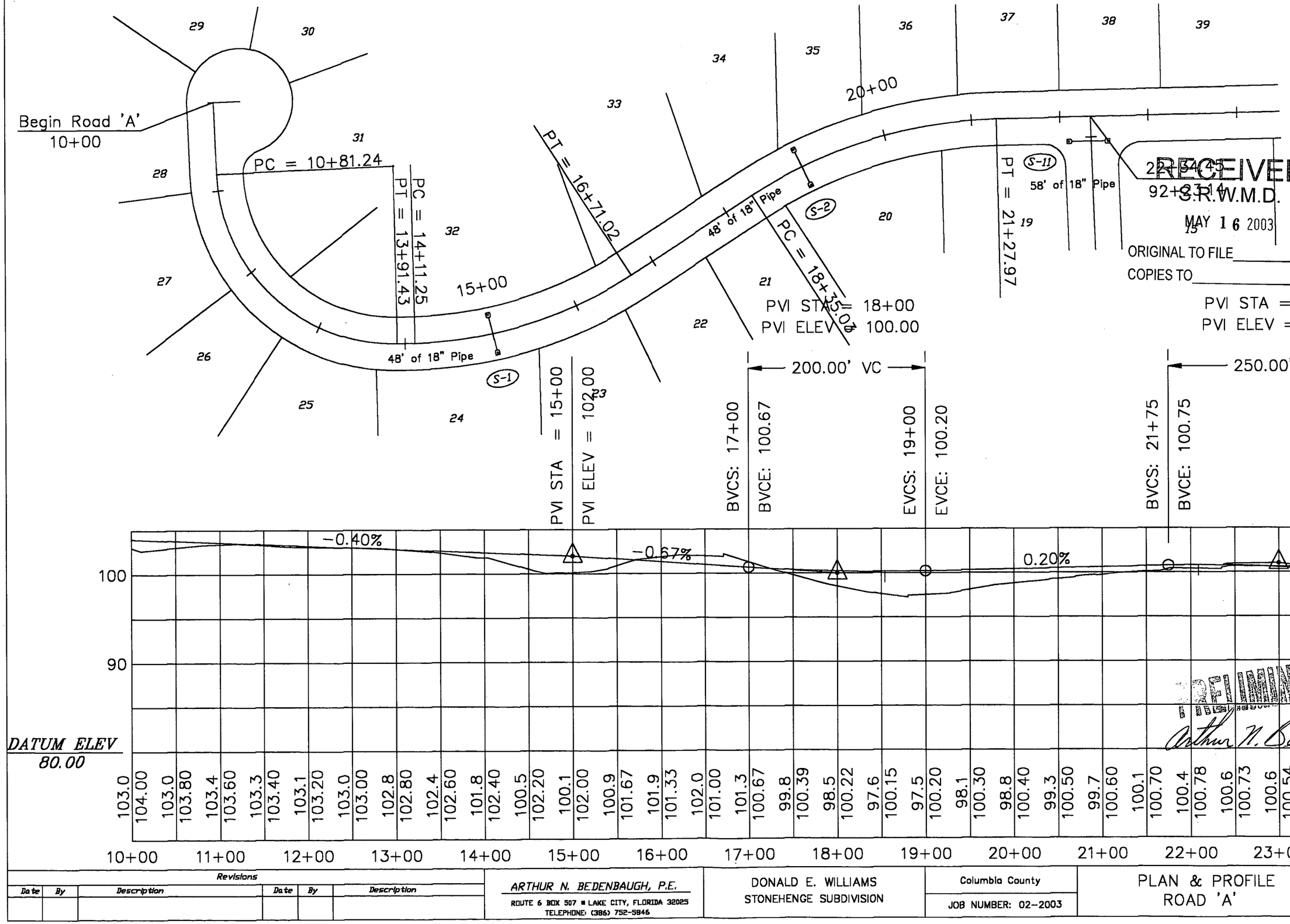
THE 100 YEAR FLOOD IS THE FLOOD HAVING A 1% CHANCE OF BEING EXCEEDED IN ANY YEAR.

DATA USED IS FROM USGS QUAD MAPS, SURVEYS BY BRITT SURVEYING, AND FLOOD INSURANCE RATE MAPS.

PRELIMINARY

Arthur N. Bedenbaugh
5-16-03

Revisions						ARTHUR N. BEDENBAUGH, P.E.	DONALD E. WILLIAMS STONEHENGE SUBDIVISION	Columbia County	DRAINAGE PLAN	SHEET 3
Date	By	Description	Date	By	Description	ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025 TELEPHONE: (386) 752-5846		JOB NUMBER: 02-2003		



RECEIVED
S.R.W.M.D.
MAY 16 2003

ORIGINAL TO FILE _____
COPIES TO _____

PRELIMINARY
Arthur N. Bedenbaugh 5-16-03

Revisions					
Date	By	Description	Date	By	Description

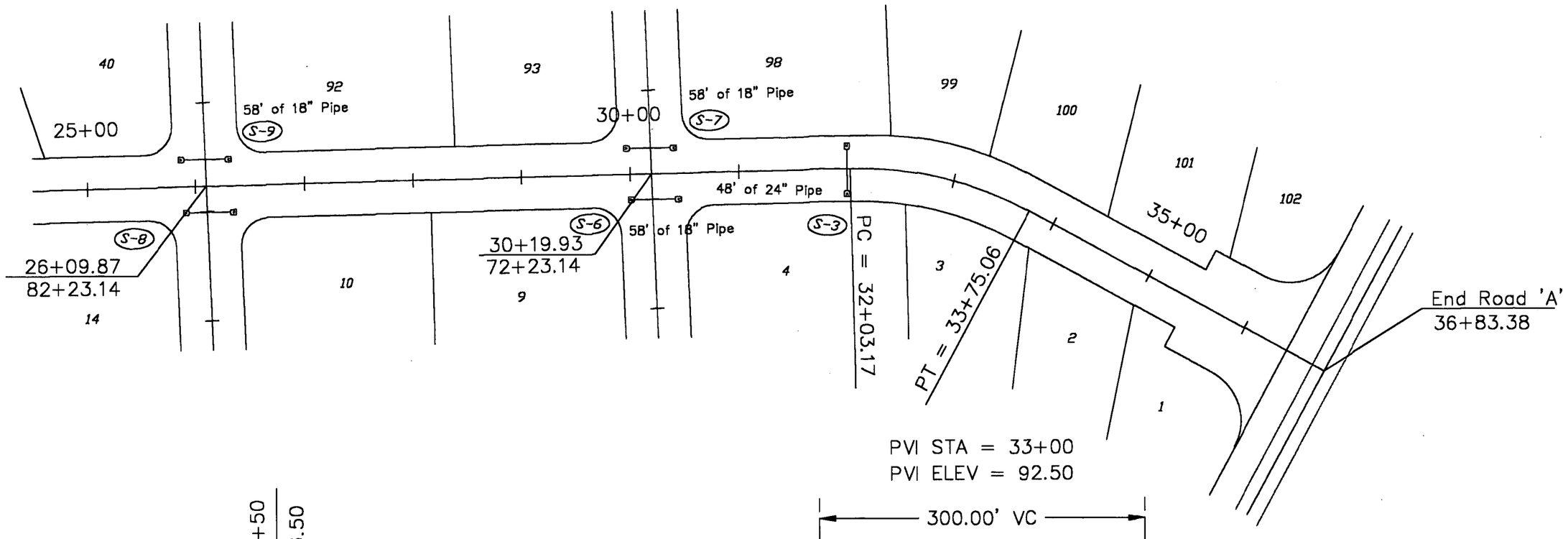
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5845

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

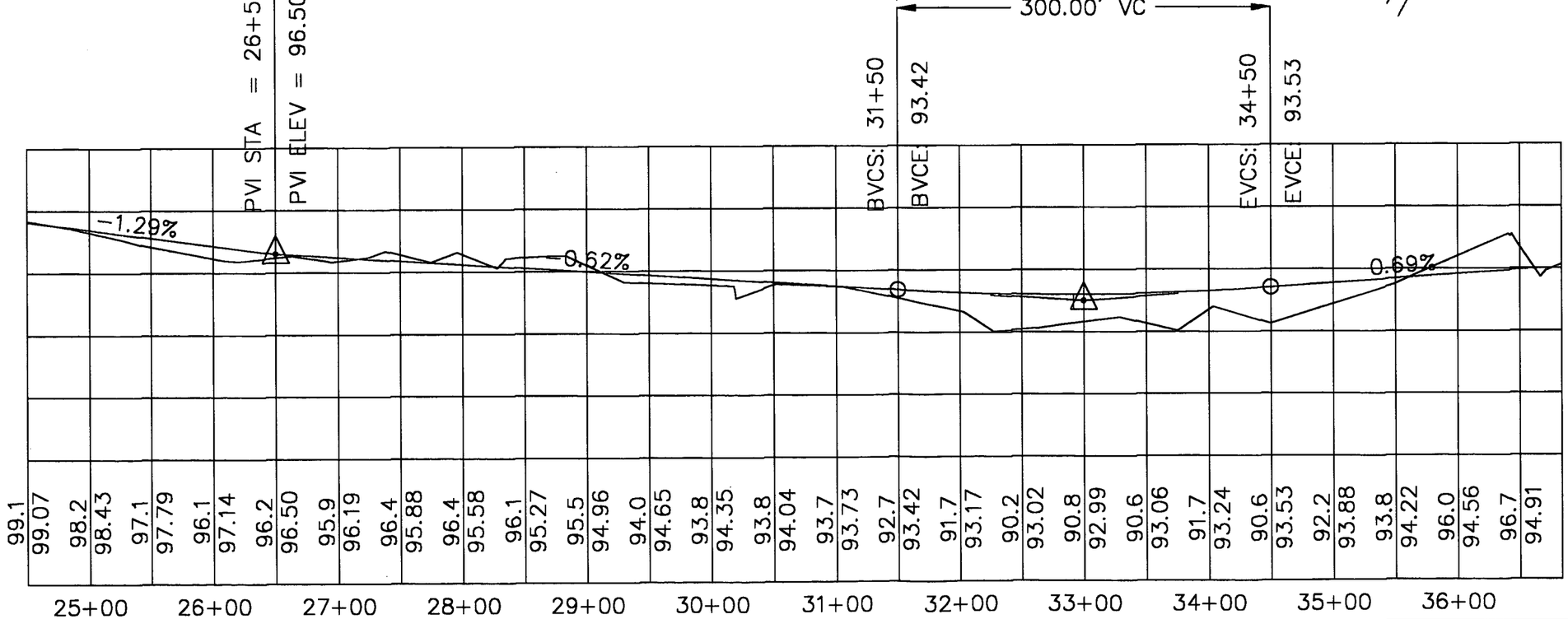
Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'A'

SHEET
4



PVI STA = 33+00
PVI ELEV = 92.50



PRELIMINARY

Arthur N. Bedenbaugh
5-16-03

Revisions					
Date	By	Description	Date	By	Description

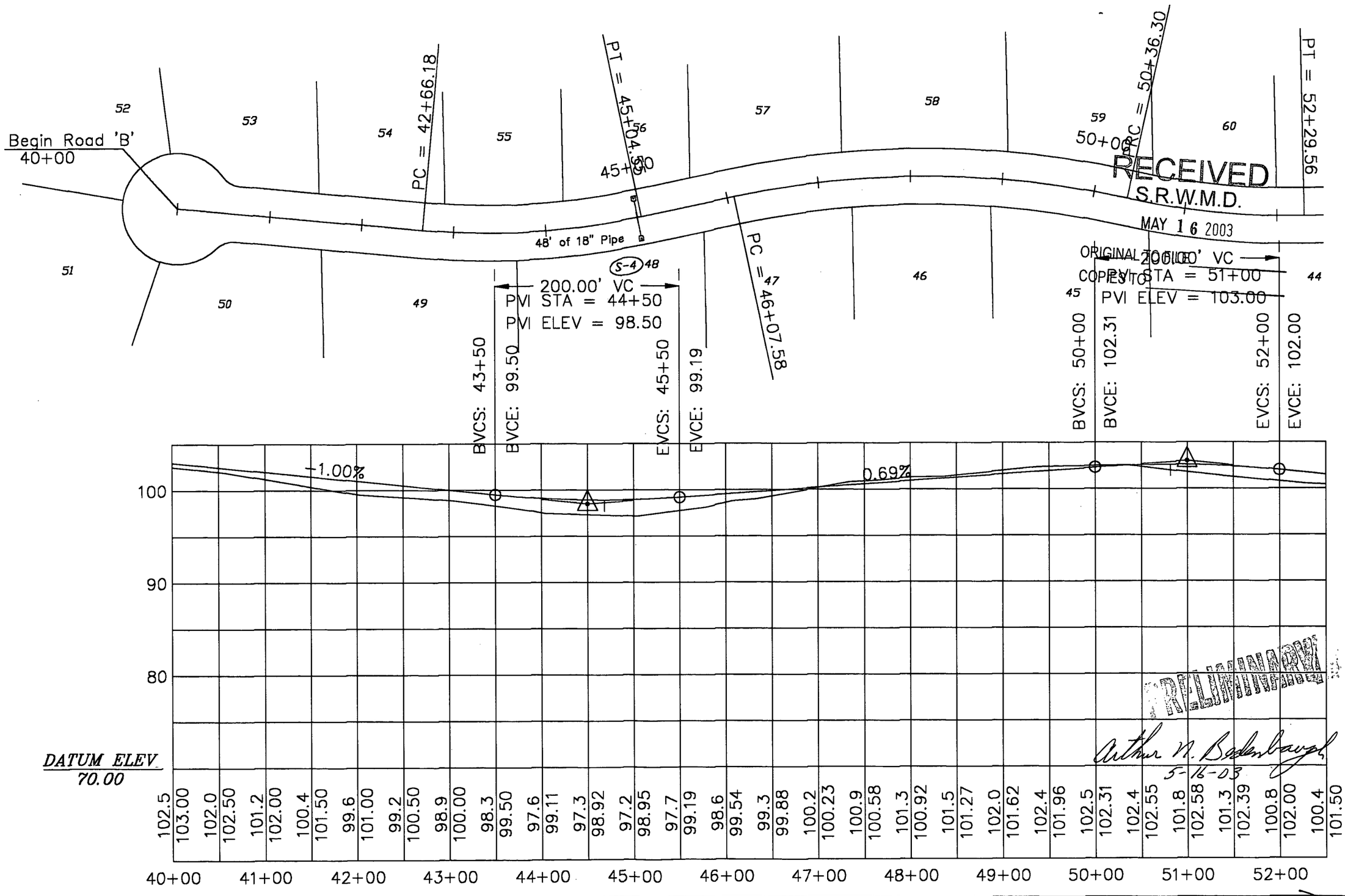
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'A'

SHEET
5



RECEIVED
S.R.W.M.D.
MAY 16 2003

ORIGINAL TO FILE
COPIES TO

PRELIMINARY

Arthur N. Bedenbaugh
5-16-03

Revisions					
Date	By	Description	Date	By	Description

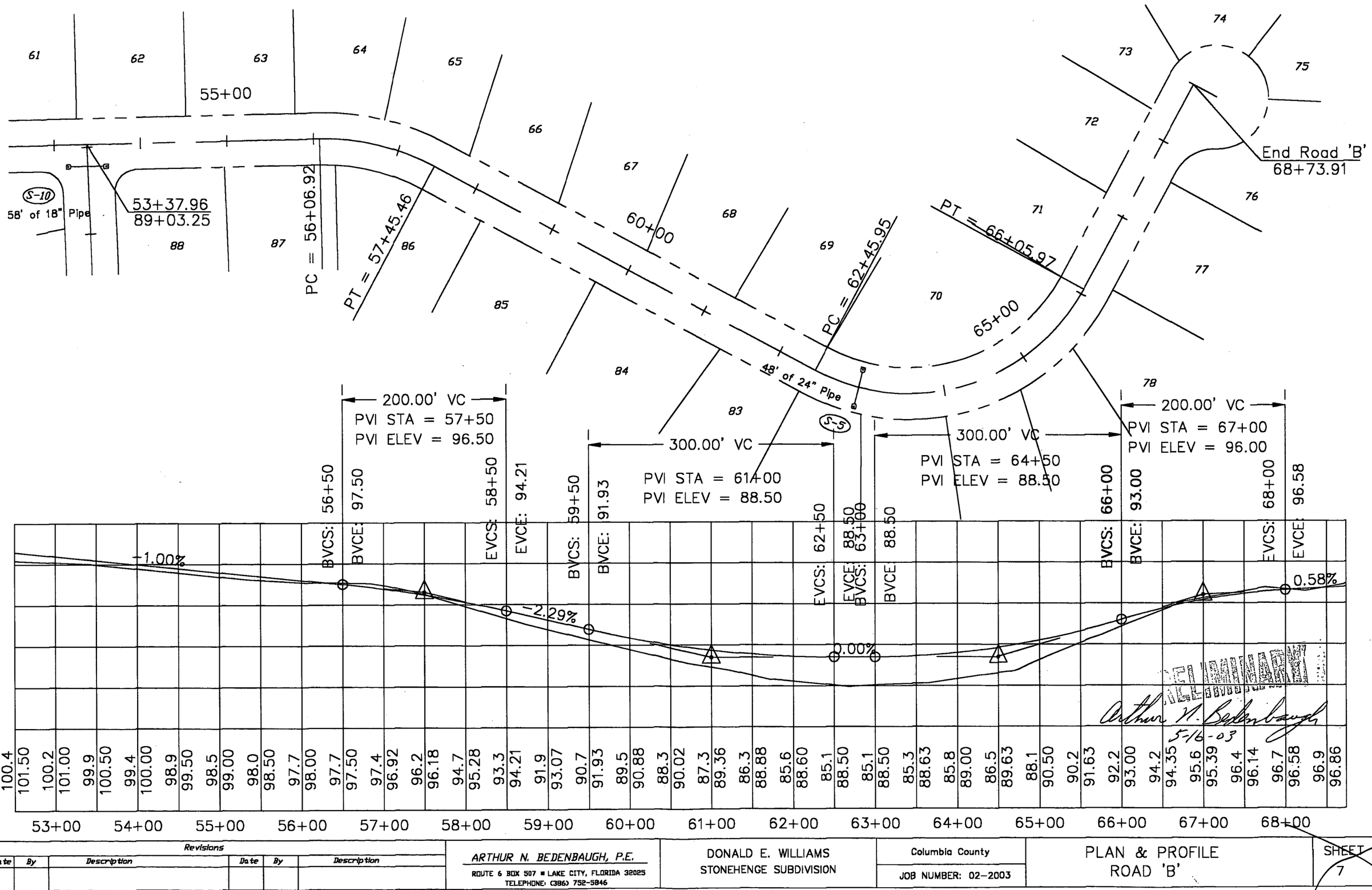
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'B'

SHEET
6



Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

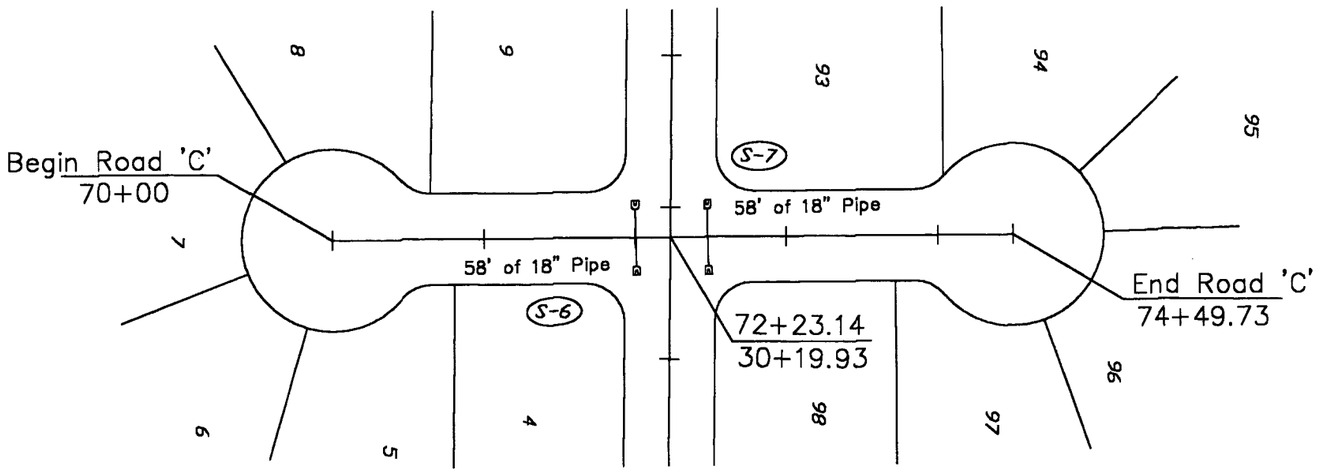
DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

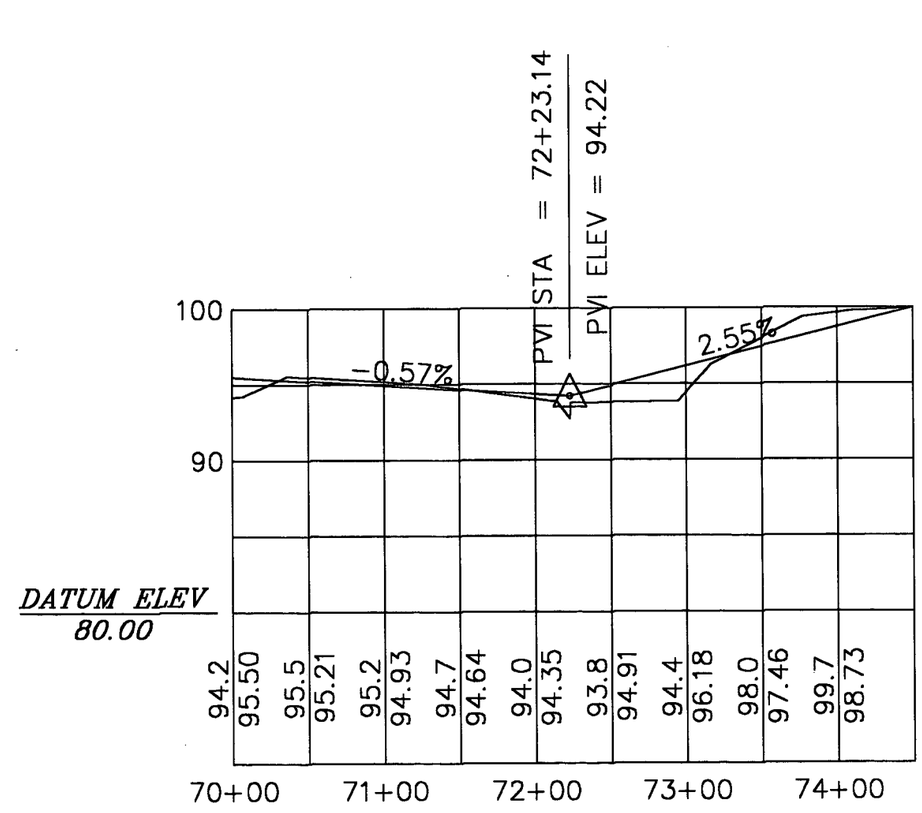
Columbia County
JOB NUMBER: 02-2003

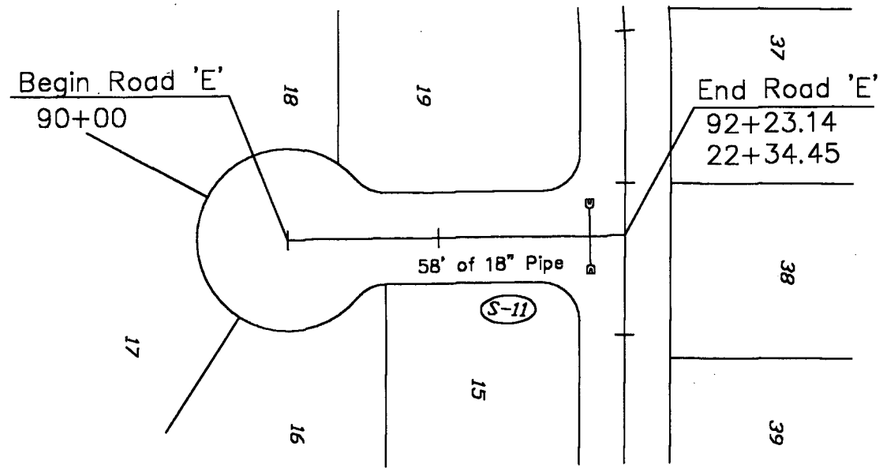
PLAN & PROFILE
ROAD 'B'

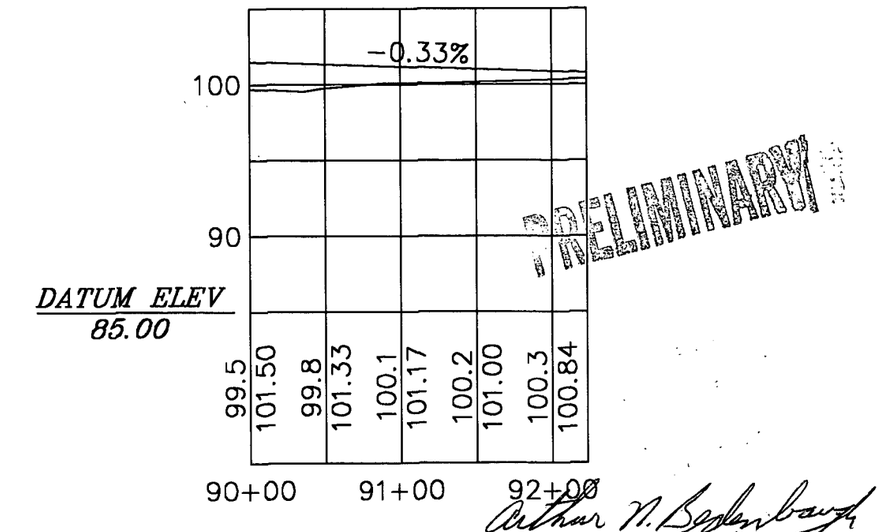
SHEET 7

Arthur N. Bedenbaugh 5-16-03









PRELIMINARY

Arthur N. Bedenbaugh 5-16-03

Revisions					
Date	By	Description	Date	By	Description

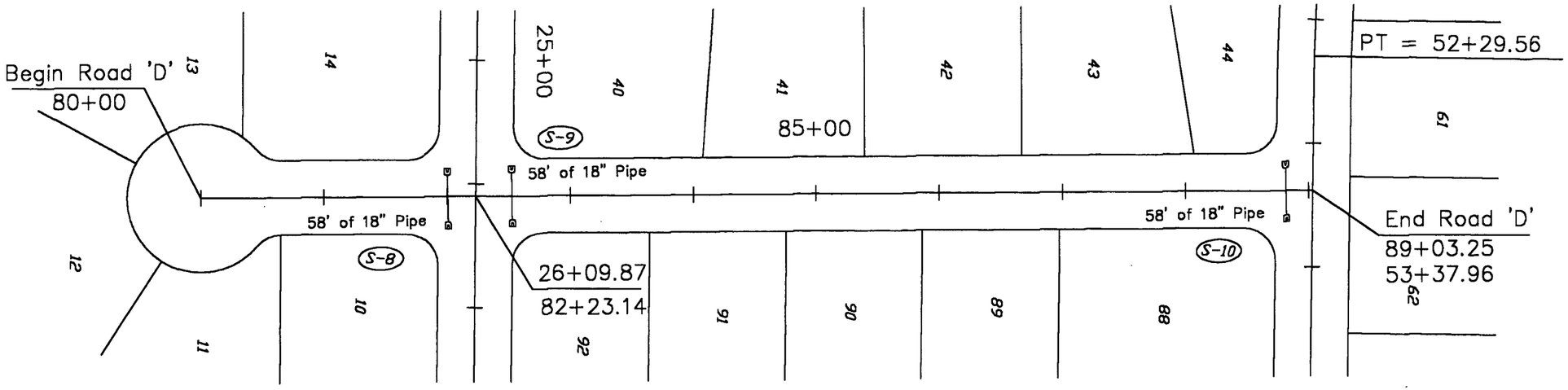
ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

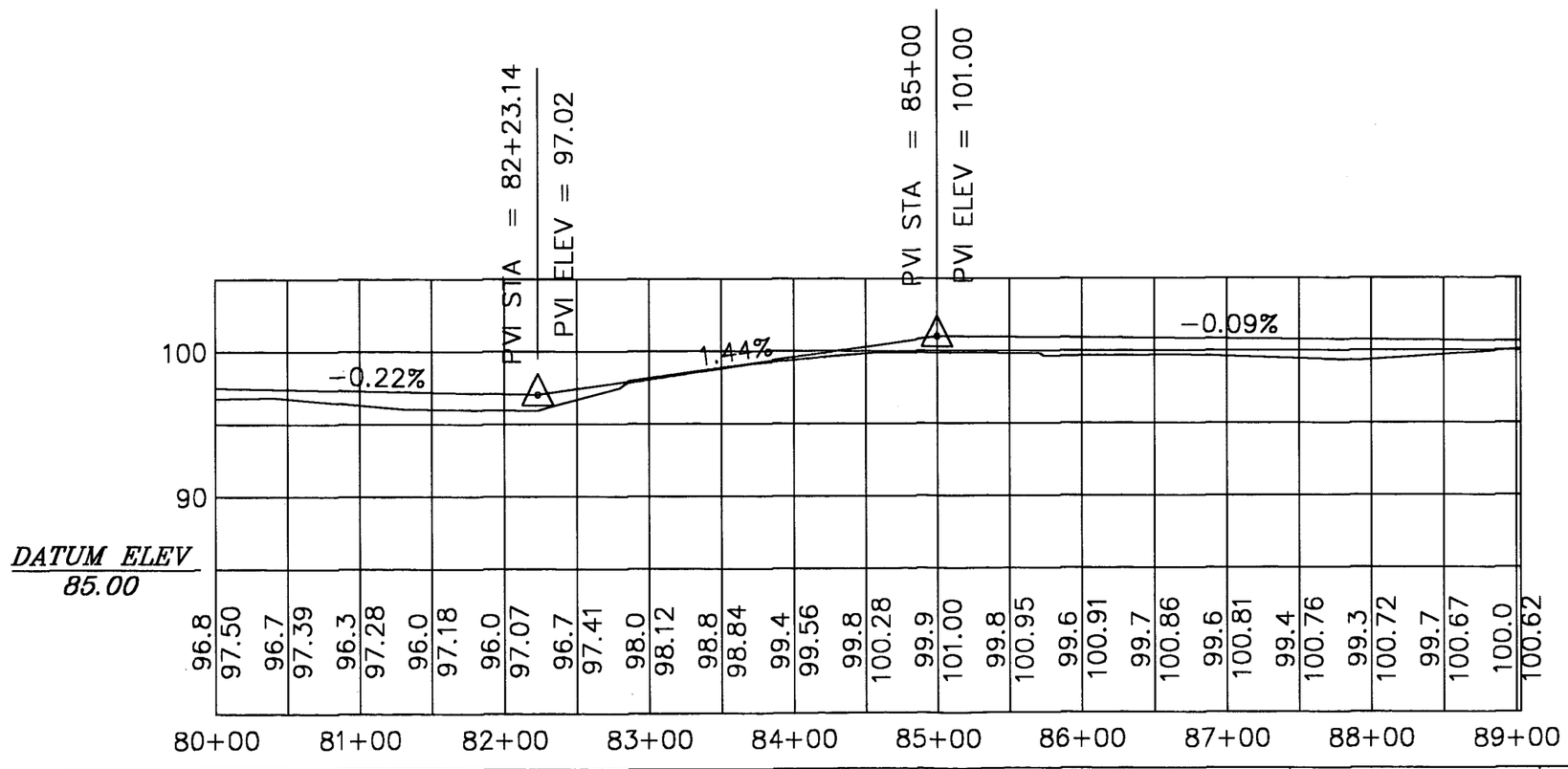
DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'C' & 'E'

SHEET
8





PRELIMINARY

Arthur N. Bedenbaugh
5-16-03

Revisions					
Date	By	Description	Date	By	Description

ARTHUR N. BEDENBAUGH, P.E.
ROUTE 6 BOX 507 ■ LAKE CITY, FLORIDA 32025
TELEPHONE: (386) 752-5846

DONALD E. WILLIAMS
STONEHENGE SUBDIVISION

Columbia County
JOB NUMBER: 02-2003

PLAN & PROFILE
ROAD 'D'

SHEET
9

(COLUMBIA)
4444 II SW

SCALE 1:24000

1/2 0

00 0 1000 2000 3000 4000 5000 6000

1

1 .5 0

CONTOUR INTERVAL 5 FEET

SEE OVERSIZED MAPS & PLANS

SEE OVERSIZED DRAWINGS

MICROGRAPHICS

The Information and Image Managers[SM]
1925-A N.W. Second Street
Gainesville, Florida 32609
Phone: (352) 372-6039 – Fax: (352) 378-6039
www.micrographicsinc.com