Ridge Road Extension

Phase II

from East of Suncoast Parkway to US 41

Supplemental Submittal to U.S. Army Corps of Engineers

Additional Wetland Impact Minimization Efforts

Prepared For:

Prepared By:

Pitman Hartenstein & Associates, Inc. Engineers

6989 East Fowler Avenue

Tampa, Florida 33617

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Updated 5-20-11

RIDGE ROAD EXTENSION Phase II
Pasco County Florida
County Project No C 6686.20

WETLAND MINIMIZATION EFFORTS

Initial Efforts

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Numerous wetland minimization techniques have been incorporated into all segments of the Ridge Road Extension project. One minimization technique used throughout Phase II was the use of minimum median width for the design speed of the facility. For Phase II the median width is to be 40' when the widening from a 2 lane to a four-lane facility occurs. Another minimization approach given the rural typical section and paved shoulder was providing no sidewalk or shared use path thereby reducing the roadway footprint.

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As part of the original wetland impact minimization efforts for this segment, a comparative study was completed that quantified the wetland impacts, costs, and safety considerations of five rural typical section alternatives. The study was submitted to SWFWMD in support of the application for an Environmental Resource Permit. Per the results of the study, the typical sections utilized were determined to minimize impacts to wetlands to the maximum extent practicable considering costs, applicable design criteria and public safety. Rather than utilizing a typical open swale drainage approach the County elected to utilize shoulder gutter with inlets and storm sewer system to capture and convey runoff from the rural typical section when the roadway passes through wetlands. This costly shoulder gutter approach reduces the width of the embankment and limits of construction thereby reducing wetland impacts. Additionally, the front slopes within the clear recovery area had been steepened to the maximum allowed 1:4 from the recommended 1:6. The impact reduction of these minimization techniques varies with fill height. For embankment sections in the 6' to 8' high range the reduction in wetland impacts is approximately 18%. The wetland impact reductions resulting from the use of shoulder gutter through wetlands in lieu of ditches are reflected by limit of construction lines that are inside the right of way limits. The use of ditches typically resulted in disturbance of the wetlands to the right of way lines. Original wetland impacts were determined based on impacts to the right of way lines. The limit of construction lines inside the right of way shows the extent of the construction. Impact reductions and the impact acreages are based on the use of these lines.

OTHER ITEMS:

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Reduction in Computed Impacts at Bridge over Bexley Access Easement

Originally the crossing of the north-south access easement within the Bexley property was at grade. This would have allowed for a standard at grade intersection for any future north-south roadway and Ridge Road Extension Phase II. Pasco County has elected to construct a bridge over this easement to eliminate any future at grade intersection access with Ridge Road at this location. The utilization of a bridge has the added benefit of

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reducing the wetland impacts on the east and west side of the easement as a result of utilizing vertical mechanically stabilized earth (MSE) walls for the bride approaches. The use of MSE walls reduces the footprint of the roadway (limits of construction) in fill sections and thereby reduces impacts when passing through wetlands. The use of a bridge/MSE walls at the Bexley easement crossing results in impact reductions within wetlands No 33 and 35.

Summary of Wetland Impact Reductions

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At the time of the issuance of the Public Notice in 2000, the anticipated wetland impacts totaled 29.81 acres. As a result of minimization efforts the impacts associated with the final design have been reduced to 28.00 acres, a 1.81 acre reduction. Additionally, the change in project limits at the end of the project, work on US 41 has been eliminated, has further reduced wetland impacts associated with the project by 2.56 acres. The total wetland impacts for Phase II of the project based on final design is 25.45 acres. This is a reduction of 4.36 acres since the issuance of the original Public Notice. The locations of the wetland impacts based on the final design are shown on the attached Ridge Road Phase II ACOE Plan Sheets and summarized on the Summary of Wetland Impacts table on the next page. The table provides a summary of the impacts as proposed in 2000, the impacts associated with the final design and the differences between the two. All wetland resources that are impacted by the project are included regardless of jurisdictional determination.

OTHER ITEMS:

Stormwater Management and Flood Plain Compensation Facilities:

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As part of the wetland avoidance efforts for the project all stormwater management facilities (ponds) for Phase II are located in upland areas. Additionally all ponds have a 25' wide, average, 15' wide minimum, buffer between the pond limits of construction and the jurisdictional wetland lines. Flood plain compensation areas (FPC's) are also located in uplands with two exceptions. The hydraulic connection to the flood plain, a necessity for the compensation sites to function, normally extends into the adjacent wetlands. To minimize the permanent impacts associated with this connection it is typically designed as a very narrow ditch. The second exception is FPC B-5 in Phase II that encompasses the non-viable remainder of a wetland impacted by the roadway alignment. This flood compensation area will be hydraulically connected to the remaining non-impacted portion of the wetland via pipe under the roadway embankment. Because the FPC's will be planted and are included as part of the mitigation plan for this project an upland buffer similar to that used for the ponds was not utilized. For ease of legal description the boundaries of the pond and flood compensation sites have been made geometrically simple. Due to this approach some portions of the boundaries cross through wetland jurisdictional lines. This does not affect the limits of construction restrictions for the facilities as described above.

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Summary of Wetland Impact Reductions¶
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At the time of the issuance of the Public Notice in 2000, the anticipated wetland impacts totaled 29.814 acres. As a result of minimization efforts and the elimination of some impacts from this project that have been impacted and mitigated for by other projects the impacts associated with the final design have been reduced to 23.77 acres, a 6.04 acre reduction. The Summary of Wetland Impacts Table on the next page provides a summary of the impacts as proposed in 2000, the impacts associated with the final design and the differences between the two. ¶
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Summary of Wetland Impact Areas
U.S. Army Corps of Engineers Wetland Lines
Ridge Road Phase II
From East of the Suncoast Parkway to U.S. 41

Wetland Number	Impact Area (Acres) 2000 Public Notice	**Impact Area (Acres) Final Design**	Impact Reductions (Acres) Since Public Notice	
			LOC	Other
W28	2.52	2.30	0.22	
W30	0.76	0.57	0.19	
W31	0.57	0.53	0.04	
W32	0.04	0.04	0.00	
W32A	0.13	0.13	0.00	
W33	2.53	2.26	0.27	
W35	3.83	3.39	0.44	
W37	0.52	0.46	0.06	
W38	2.71	2.78	-0.07	
W39	2.85	2.58	0.27	
W40	2.32	2.06	0.26	
W42	1.61	1.42	0.19	
W44	3.72	3.76	-0.04	
W45A	0.52	0.52	0.00	
W45B	0.39	0.39	0.00	
W46A	0.60	0.60	0.00	
W47	0.05	0.05	0.00	
W48	0.92	0.92	0.00	
W50	0.69	0.69	0.00	
W52	0.40	0.0 (No longer in project limits)		0.40
W53	0.32	0.0 (No longer in project limits)		0.32
W54	1.48	0.0 (No longer in project limits)		1.48
W55	0.37	0.0 (No longer in project limits)		0.37
Total	29.81	**25.45**	1.81	2.56
			Total Reduction:	4.36

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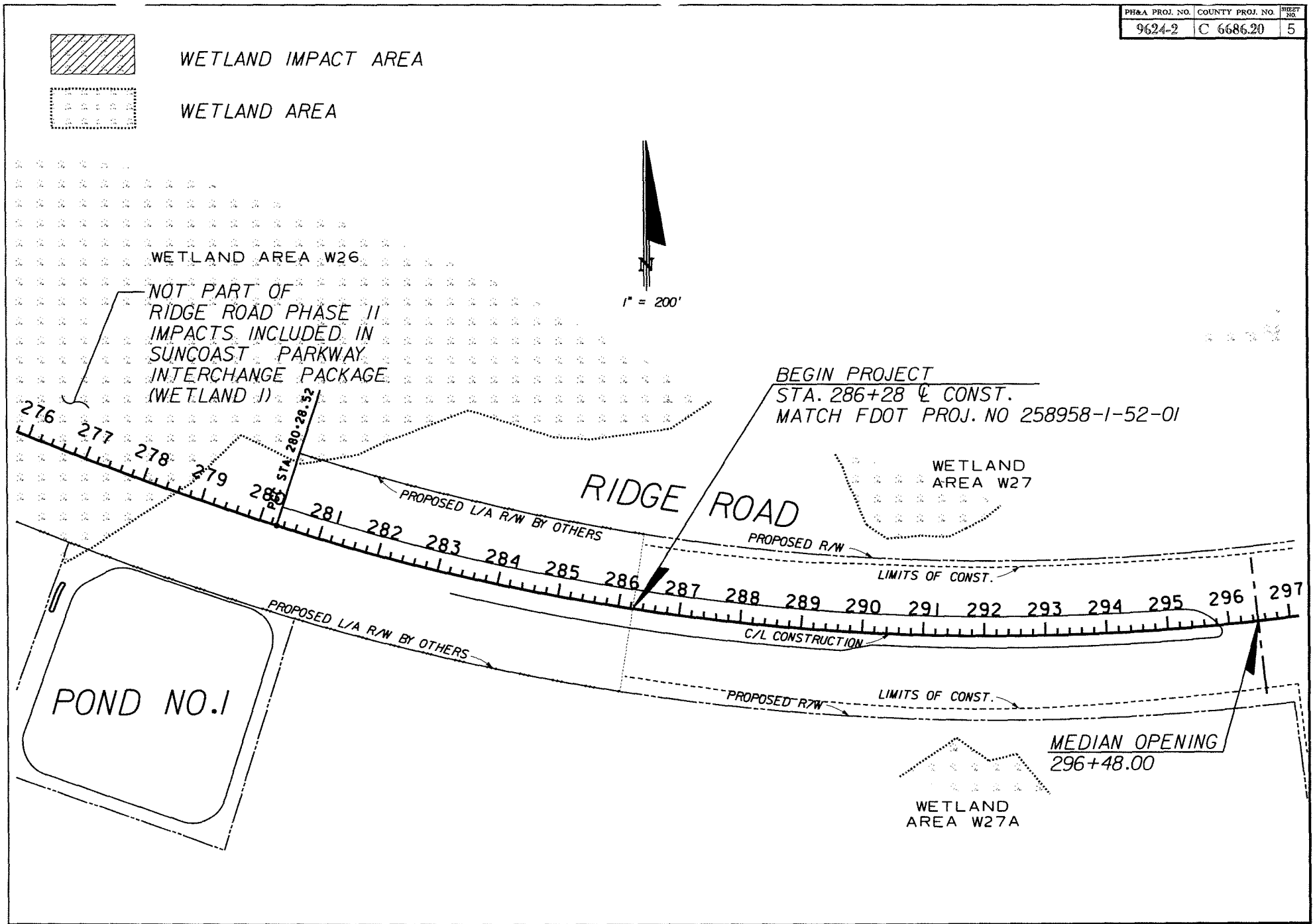

PITMAN HARTENSTEIN & ASSOCIATES, ENGINEERS, INC.	6989 EAST FOWLER AVENUE, TAMPA, FLORIDA 33617 EB# 4464 THOMAS J. MONTGOMERY, P.E. NO. 35008	(813) 988-1882	PASCO COUNTY	RIDGE ROAD EXTENSION PHASE II	ACOE PLAN SHEETS

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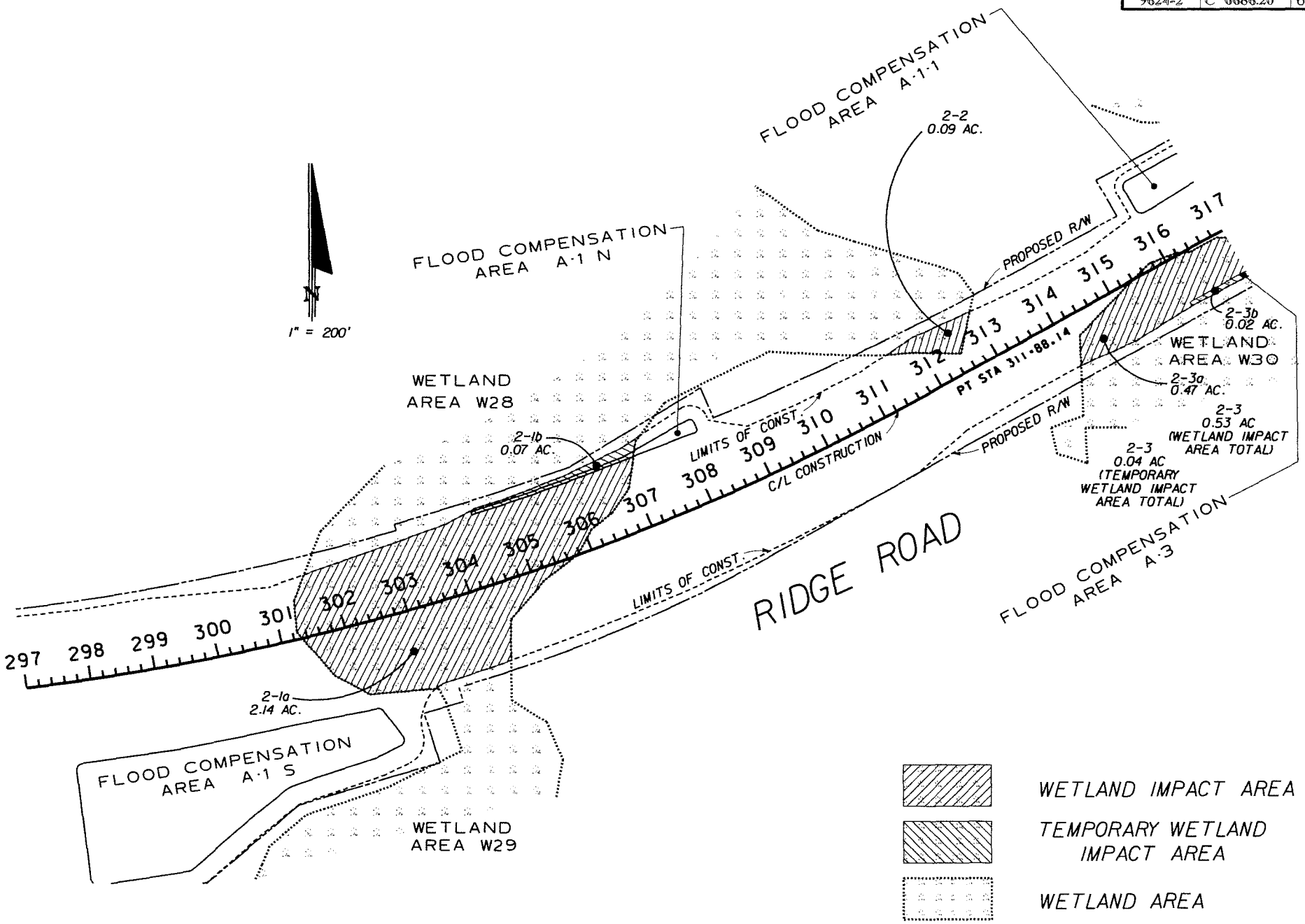

PITMAN HARTENSTEIN & ASSOCIATES, ENGINEERS, INC. 6989 EAST FOWLER AVENUE, TAMPA, FLORIDA 33617 EB# 4464 THOMAS J. MONTGOMERY, P.E. NO. 35008	PITMAN HARTENSTEIN & ASSOCIATES ENGINEERS (813) 988-1882	PASCO COUNTY	RIDGE ROAD EXTENSION PHASE II	ACOE PLAN SHEETS

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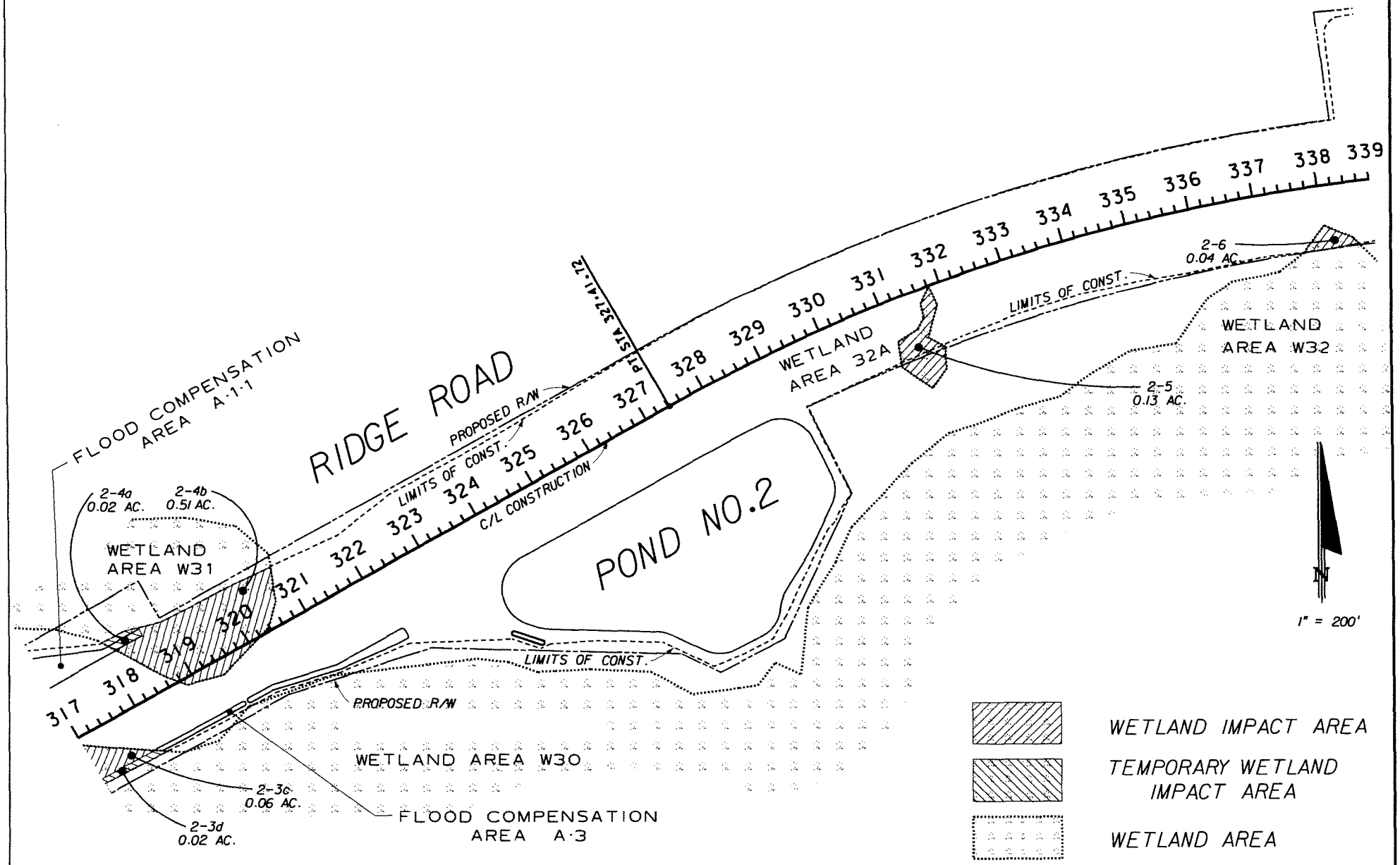

PITMAN HARTENSTEIN & ASSOCIATES, ENGINEERS, INC. 6989 EAST FOWLER AVENUE, TAMPA, FLORIDA 33617 EB# 4464 THOMAS J. MONTGOMERY, P.E. NO. 35008	(813) 988-1882	PASCO COUNTY	RIDGE ROAD EXTENSION PHASE II	ACOE PLAN SHEETS

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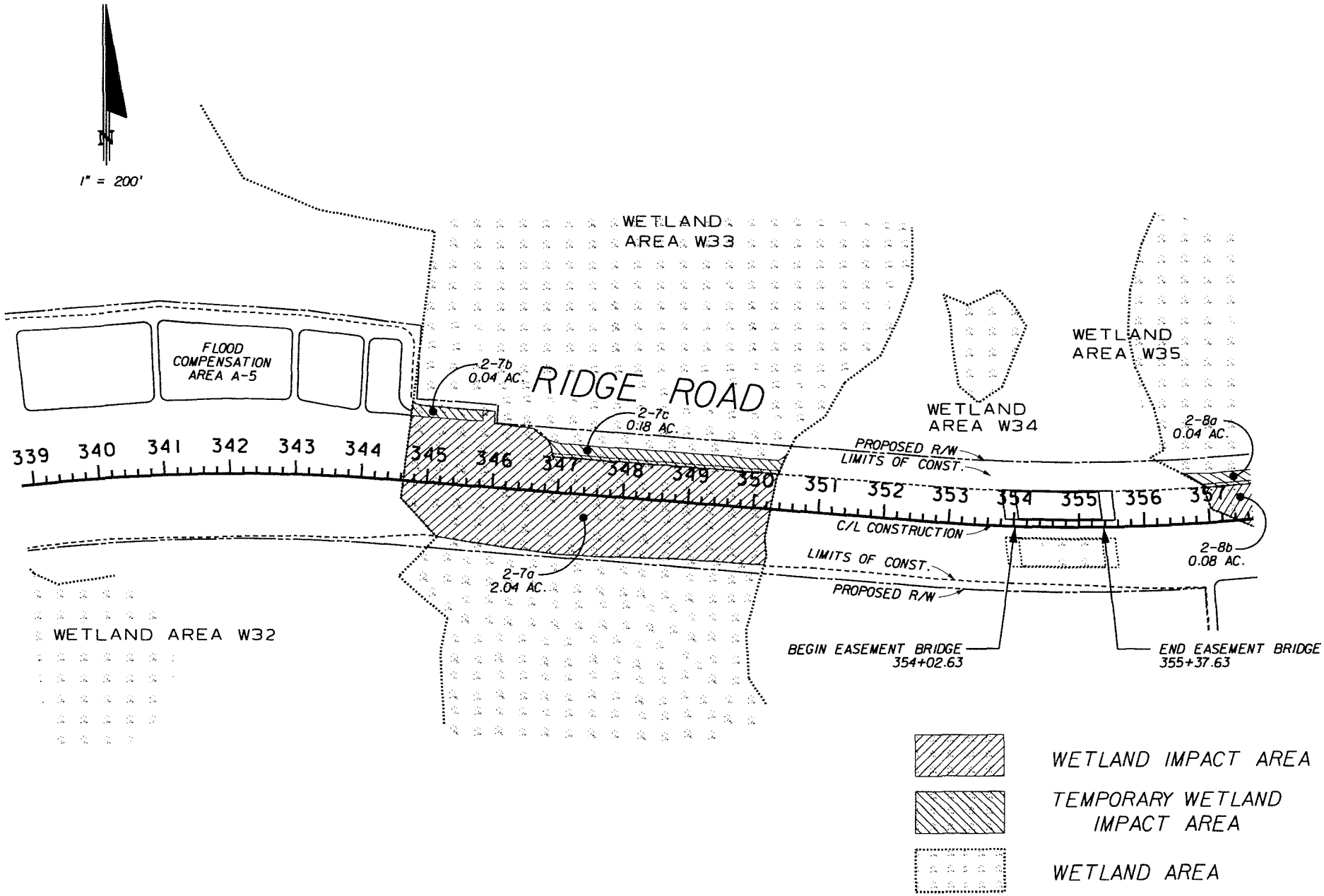

PITMAN HARTENSTEIN & ASSOCIATES, ENGINEERS, INC.	6989 EAST FOWLER AVENUE, TAMPA, FLORIDA 33617 EB# 4464 THOMAS J. MONTGOMERY, P.E. NO. 35008	(813) 988-1882	PASCO COUNTY	RIDGE ROAD EXTENSION PHASE II	ACOE PLAN SHEETS

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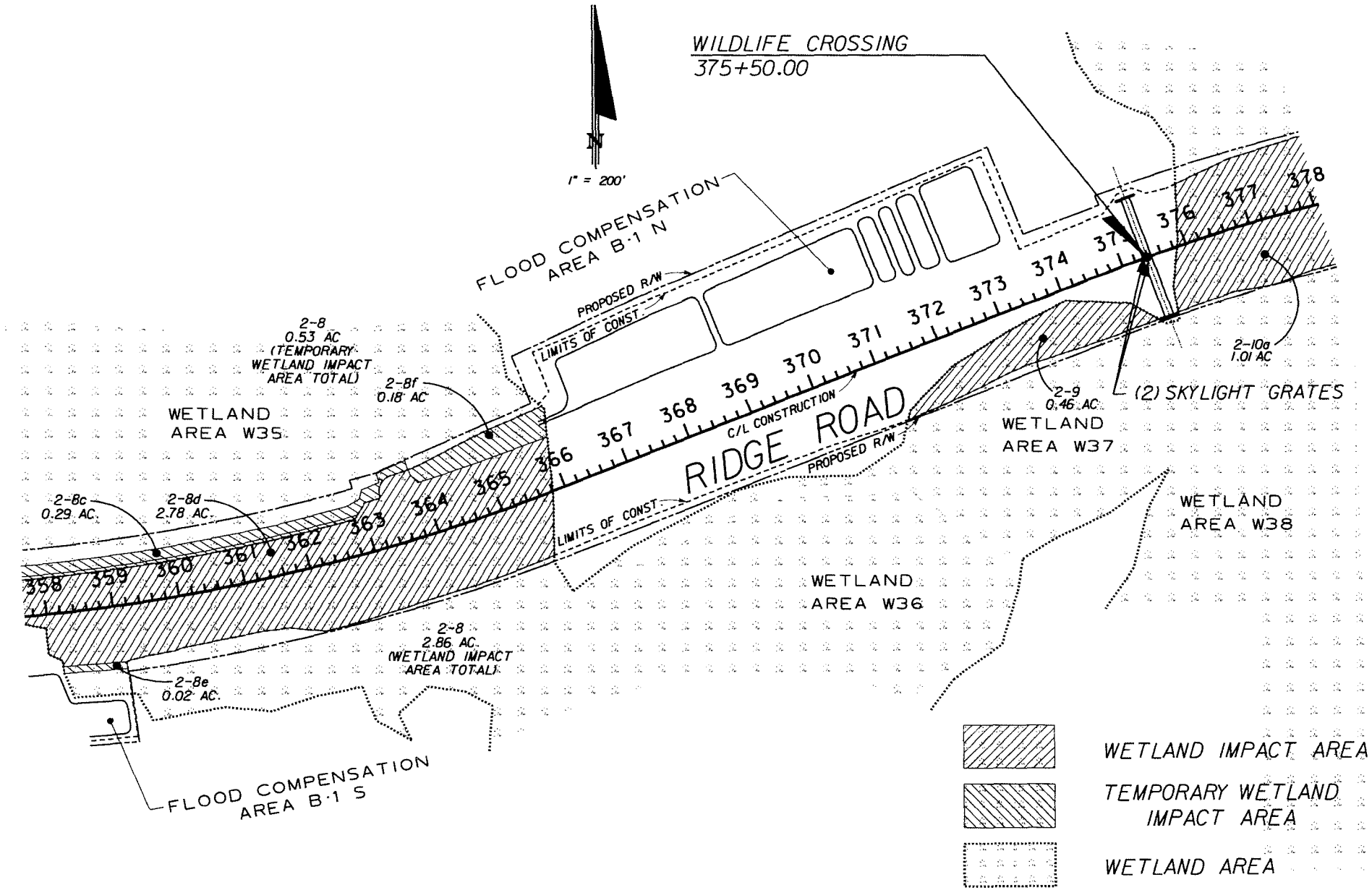

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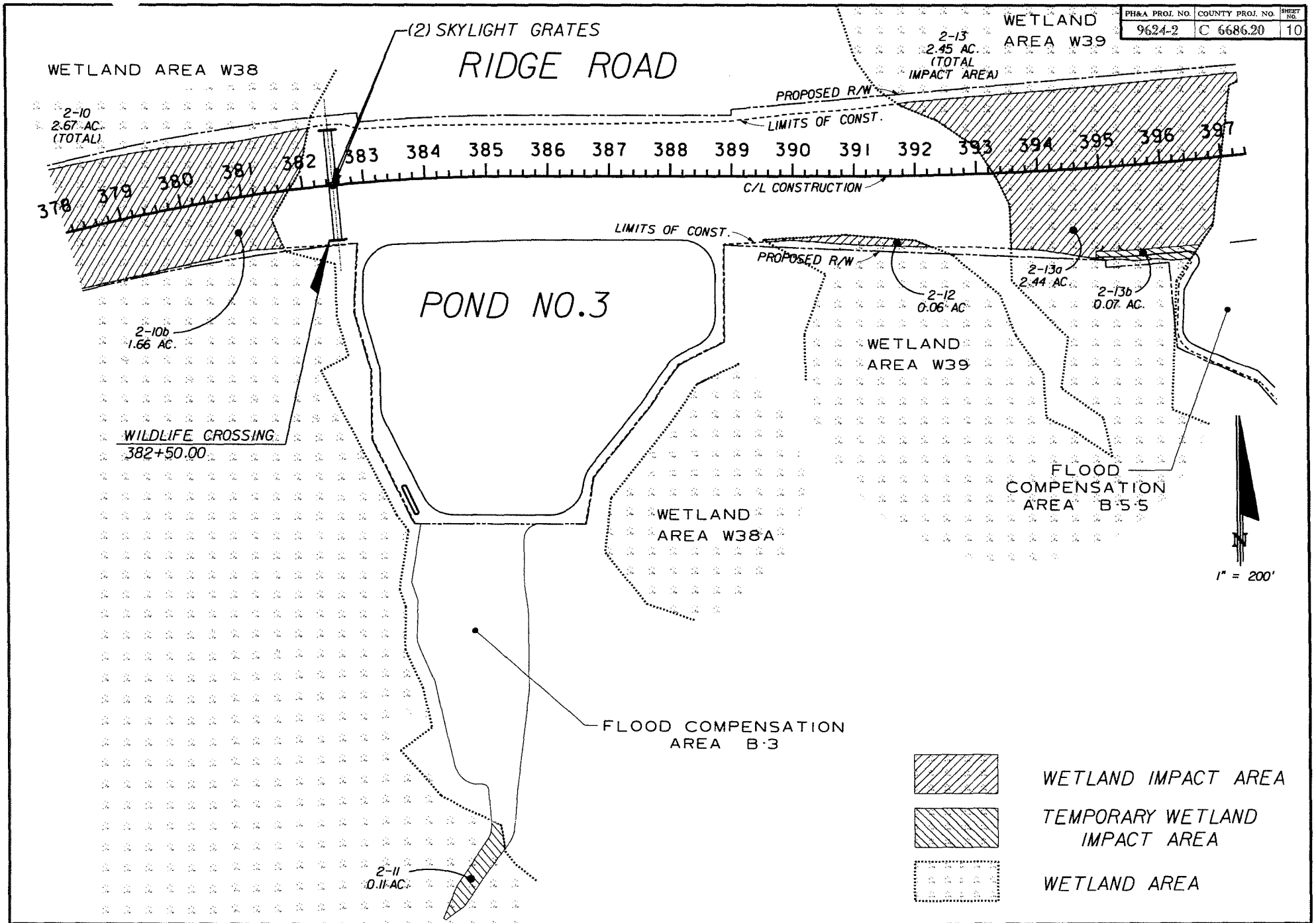

PITMAN HARTENSTEIN & ASSOCIATES, ENGINEERS, INC.	6989 EAST FOWLER AVENUE, TAMPA, FLORIDA 33617 EB# 4464 THOMAS J. MONTGOMERY, P.E. NO. 35008	ENGINEERS (813) 988-1882	PASCO COUNTY	RIDGE ROAD EXTENSION PHASE II	ACOE PLAN SHEETS

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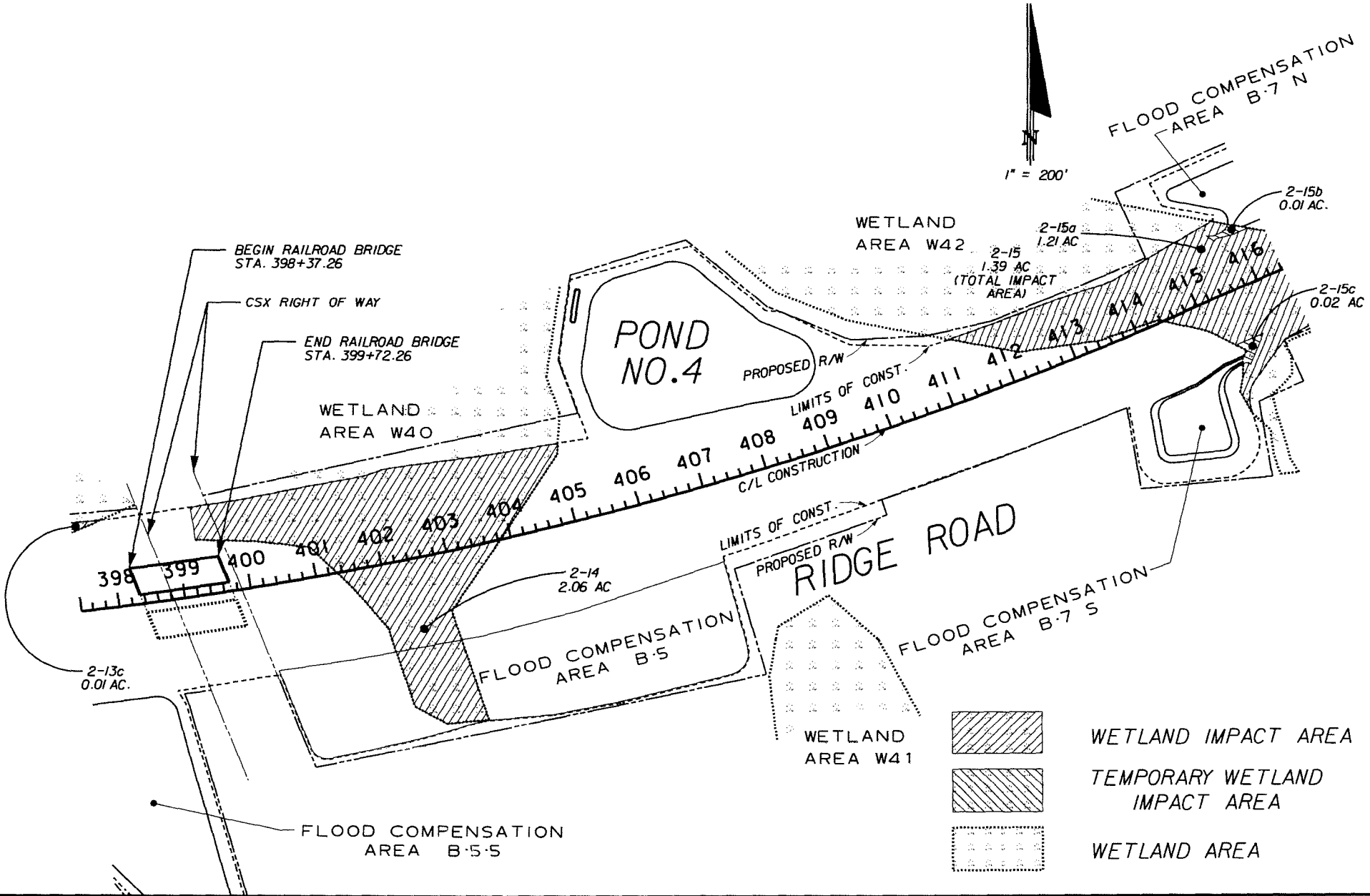

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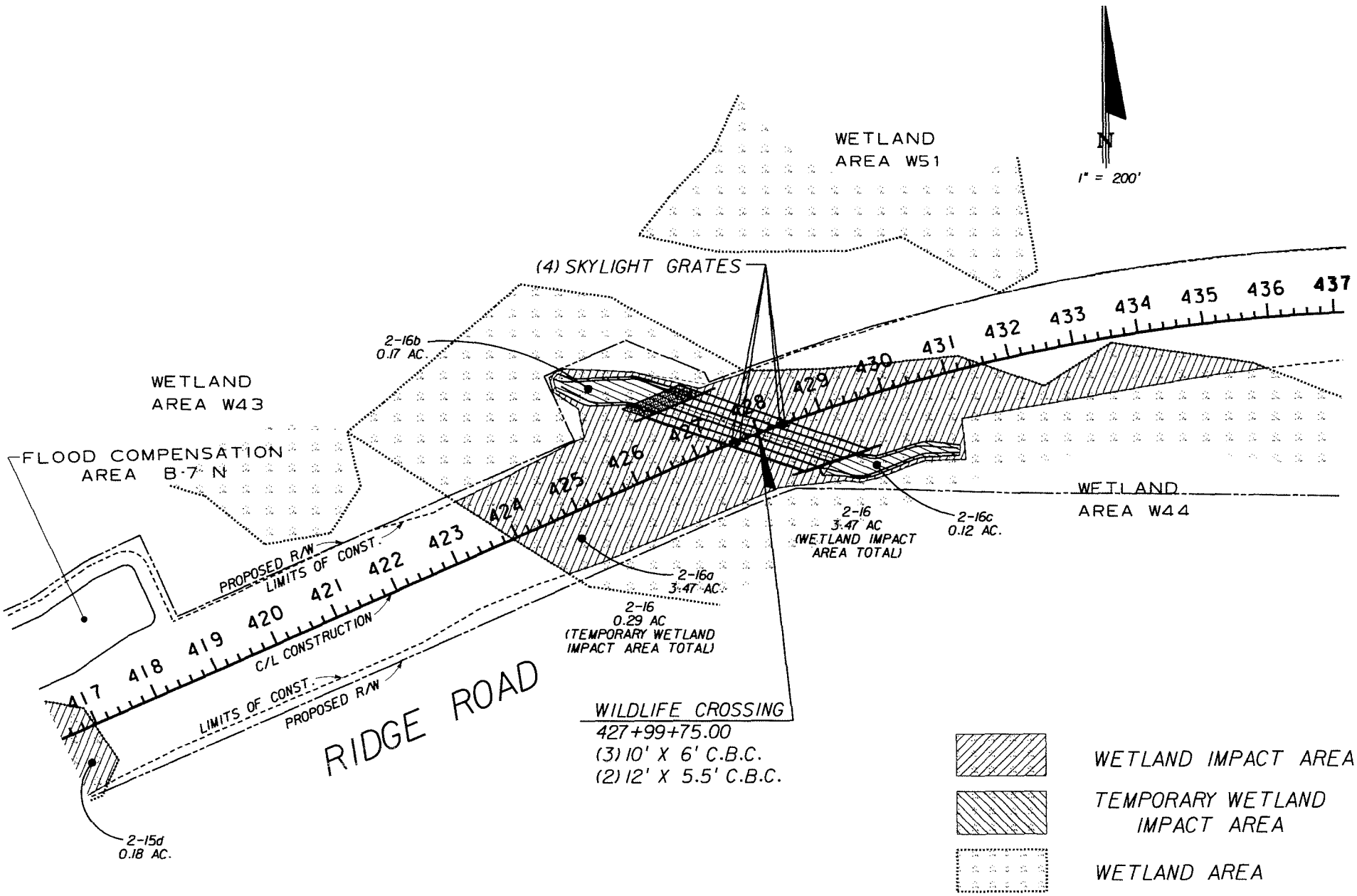

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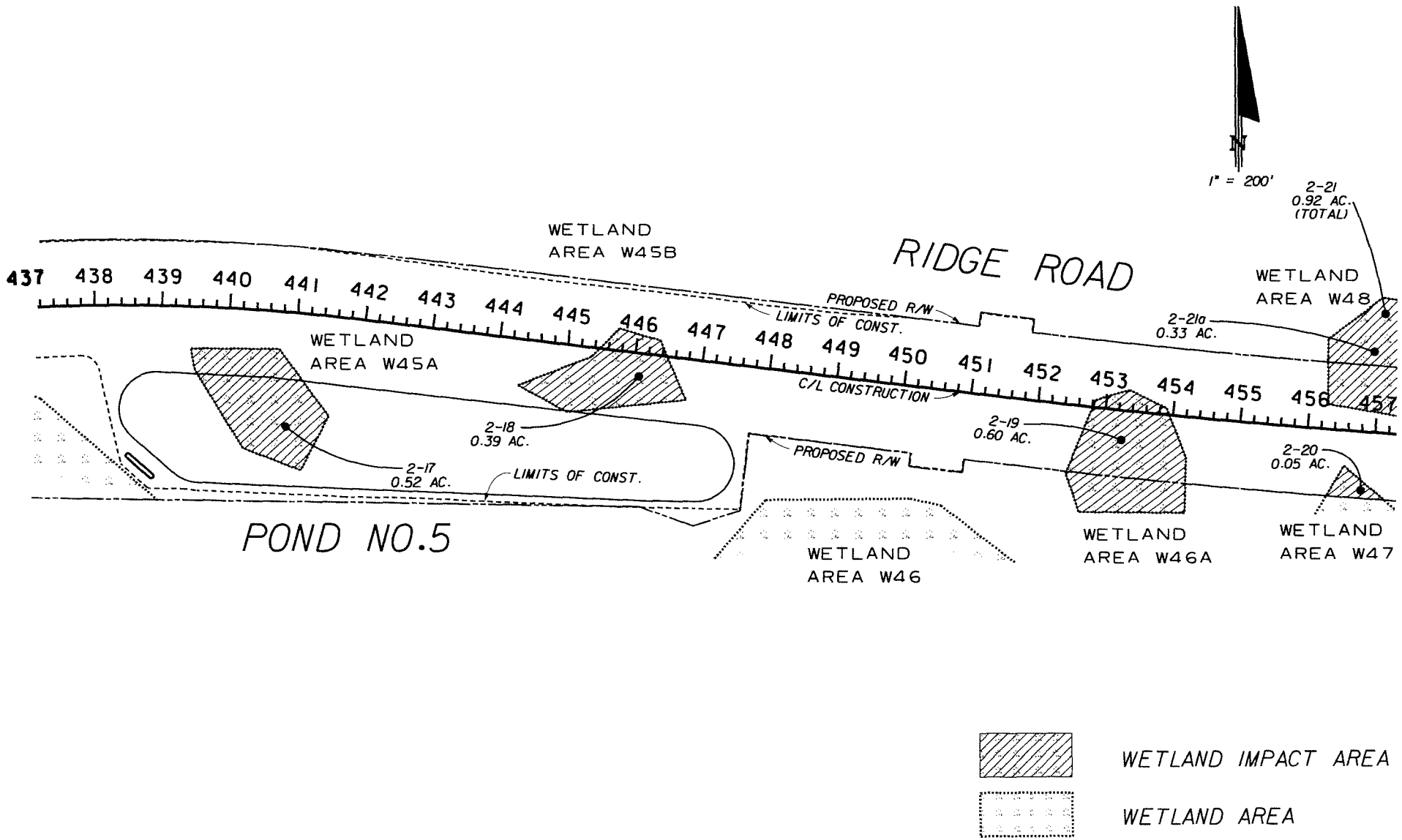

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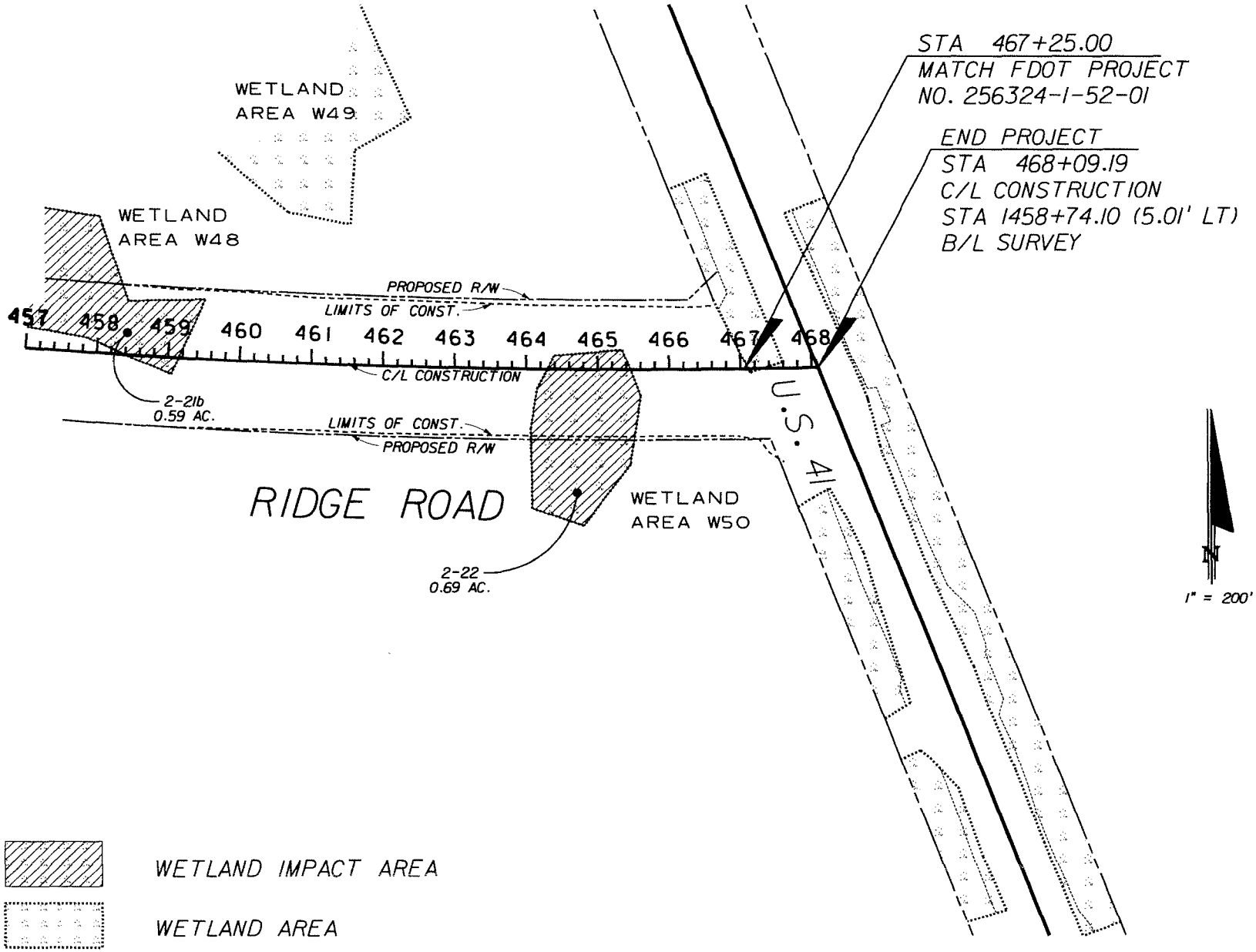

WETLAND IMPACT AREA

WETLAND AREA

PITMAN HARTENSTEIN & ASSOCIATES, ENGINEERS, INC. 6989 EAST FOWLER AVENUE, TAMPA, FLORIDA 33617 EB# 4464 THOMAS J. MONTGOMERY, P.E. NO. 35008 (813) 988-1882	PASCO COUNTY	RIDGE ROAD EXTENSION PHASE II	ACOE PLAN SHEETS

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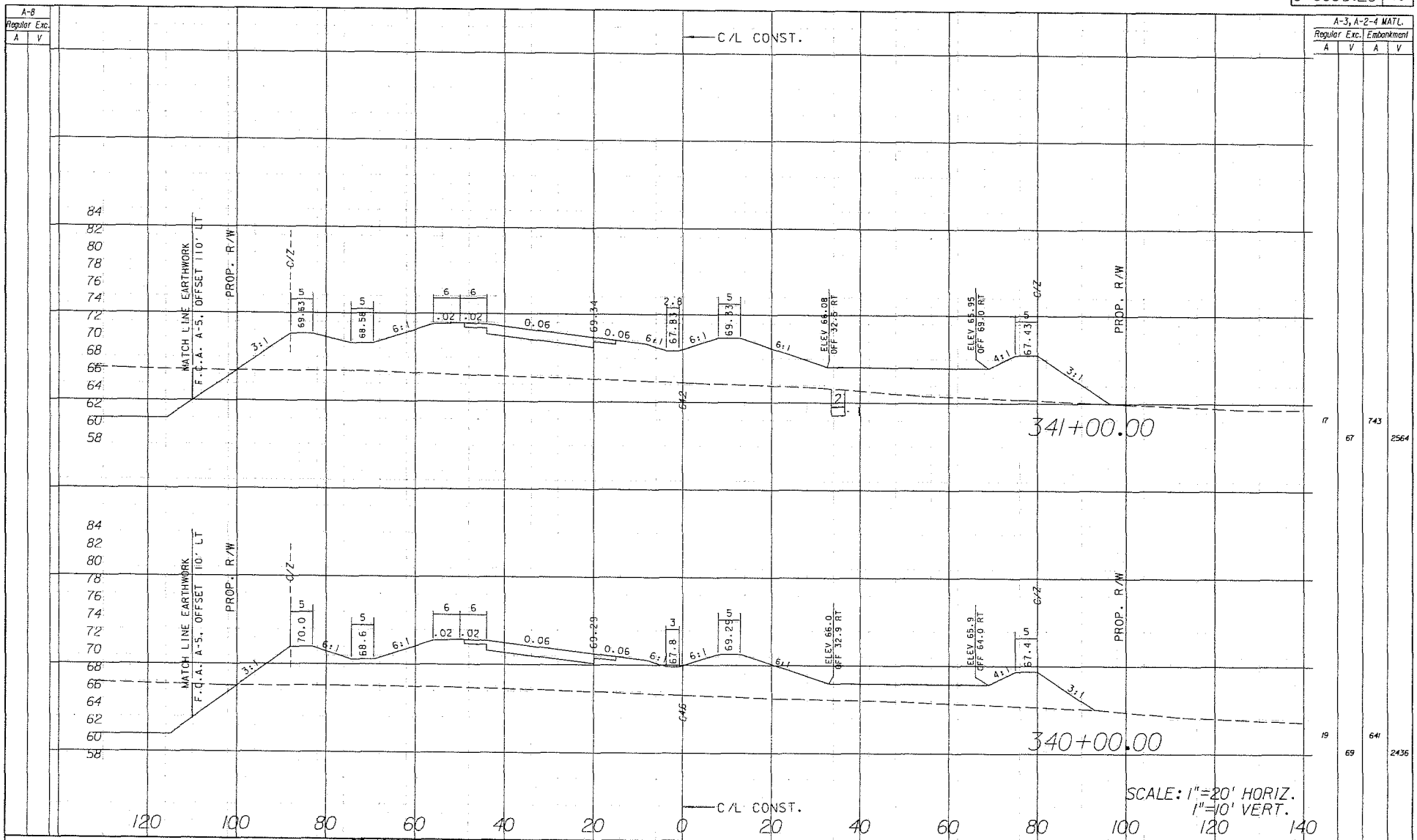

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		17	67	743	2564
		19	69	641	2436

REVISIONS											
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PITMAN HARTENSTEIN & ASSOC. INC. ENGINEERS
8888 E. FOWLER AVENUE TAMPA FLORIDA 33617 (813) 4461
THOMAS J. MONTGOMERY P.E. NO. 33004

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

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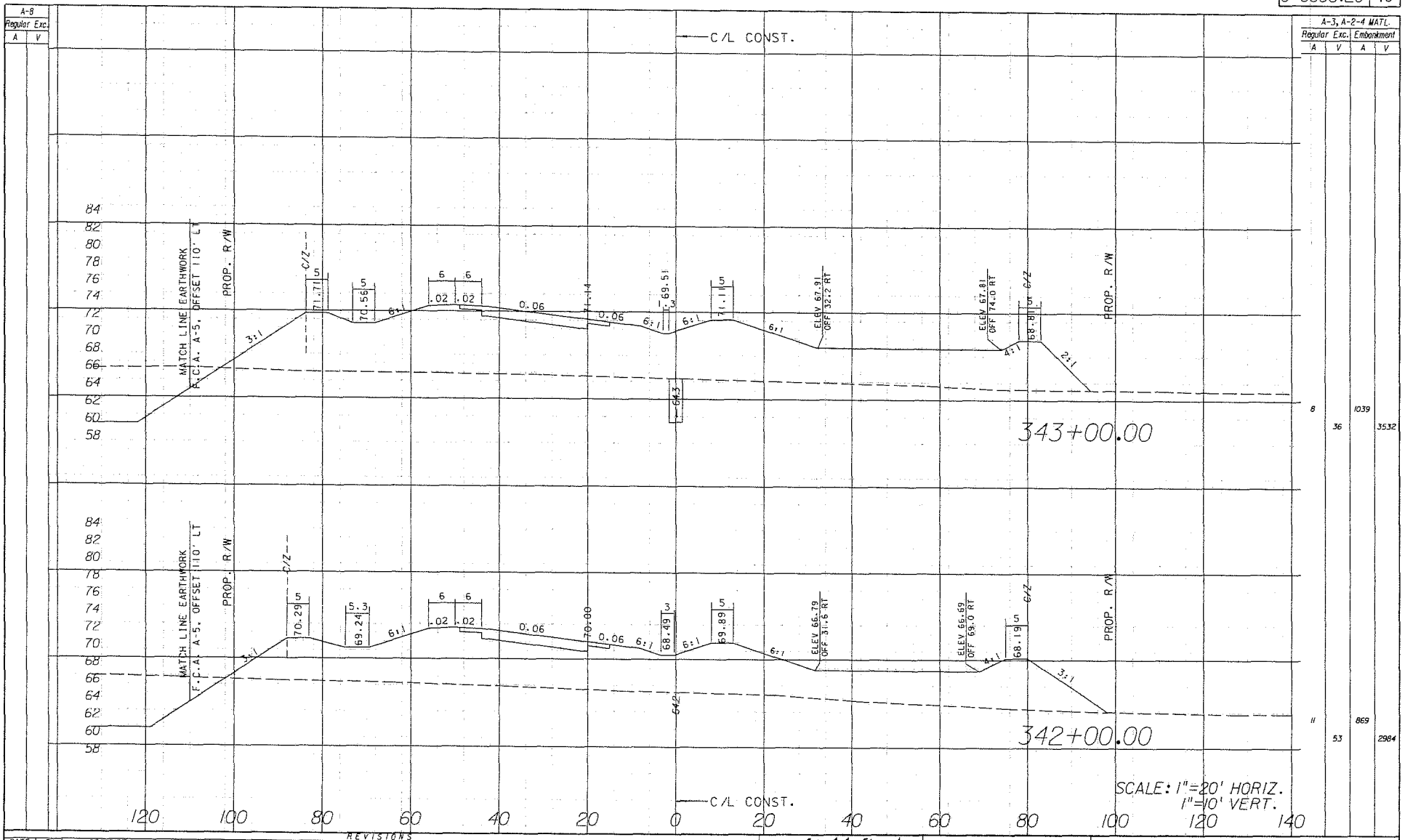

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		8	36	1039	3532
		11	53	869	2984

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
6965 E. FOWLER AVENUE, TAMPA, FLORIDA, 33617 EB# 4461
THOMAS J. MONTGOMERY P.E. NO. 35006
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PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

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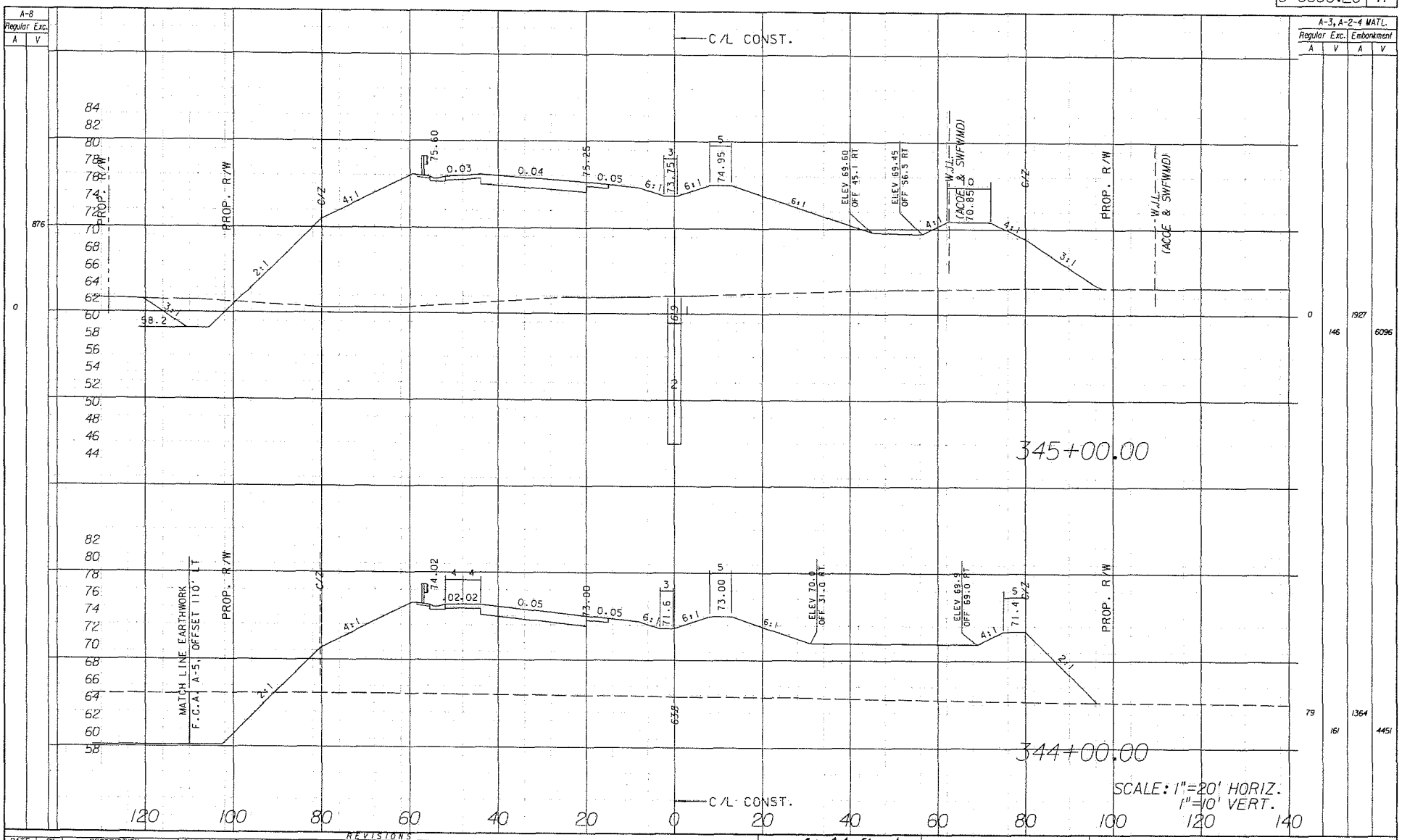

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PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
8888 E. FOWLER AVENUE TAMPA FLORIDA 33617 813-4461
THOMAS J. MONTGOMERY P.E. NO. 23008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	18

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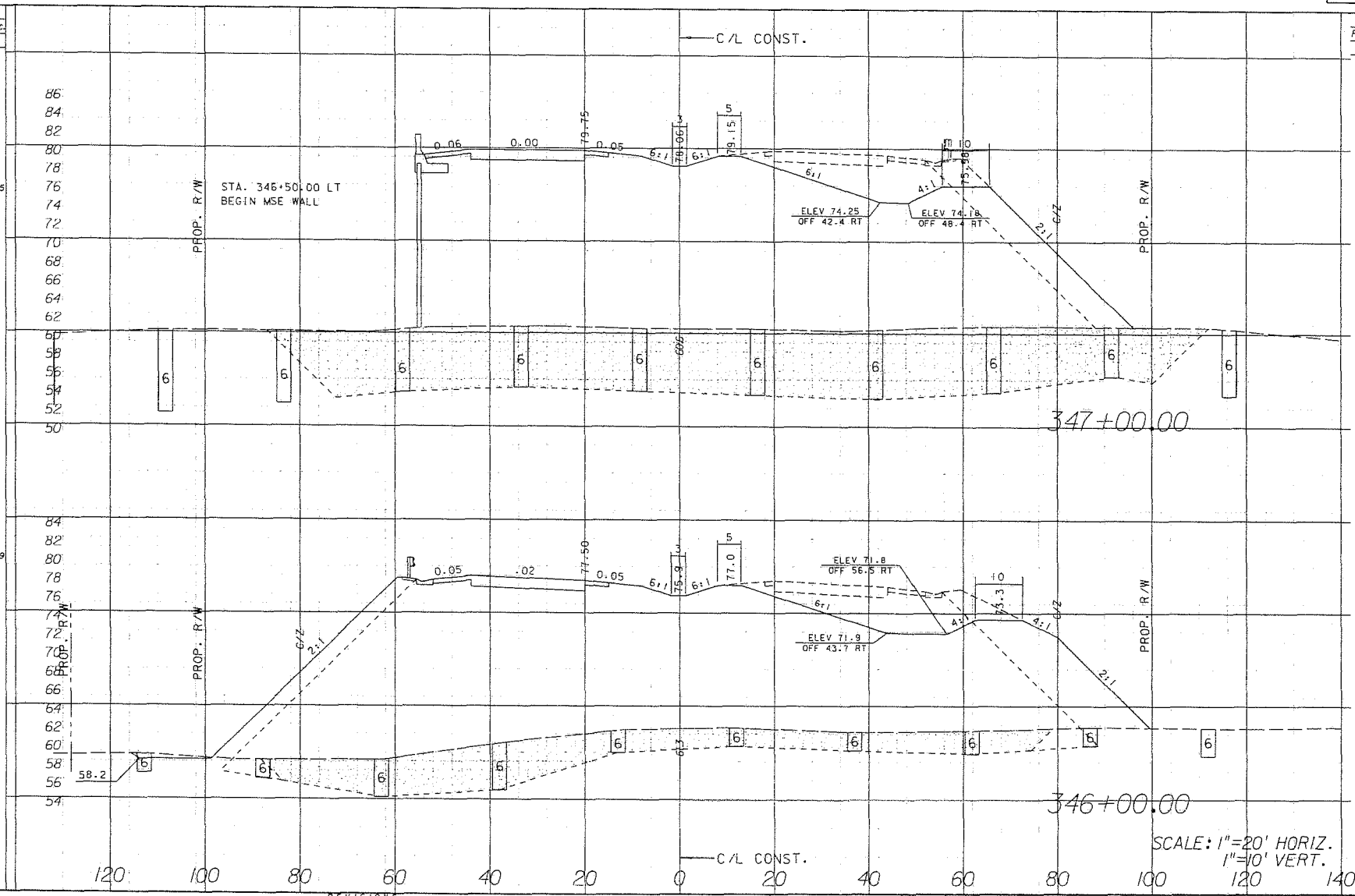
1195	3665	0	0	2288	8795
473	3089	0	0	2461	8127



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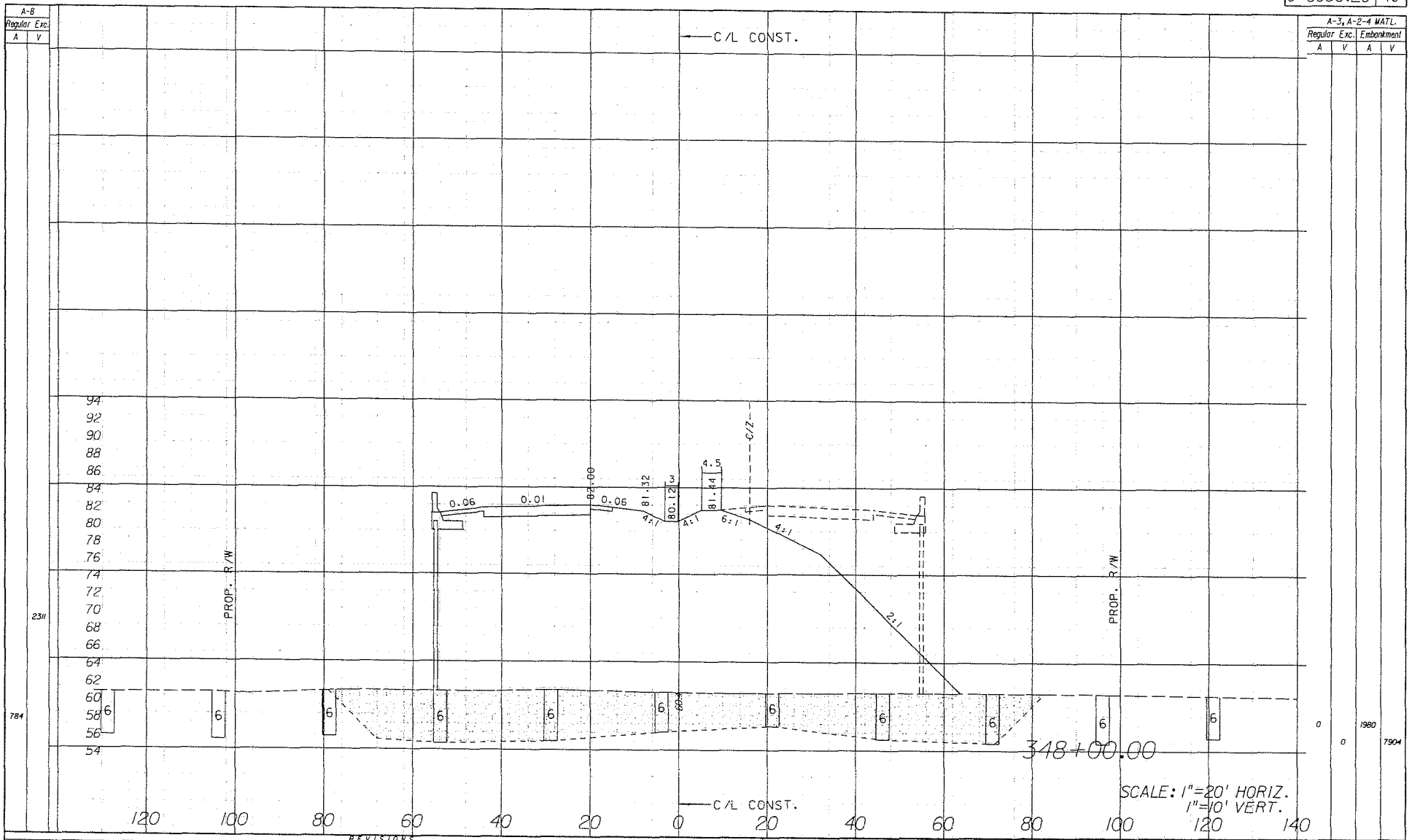
PITMAN HARTSTEIN & ASSOCIATES ENGINEERS
6885 E. FOWLER AVENUE TAMPA FLORIDA 33617 (813) 464
THOMAS J. MONTGOMERY P.E. NO. 33008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	19

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
784	2311	0	0	1980	7904



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PITMAN HARTENSTEIN & ASSOCIATES
ENGINEERS
6000 E. FOWLER AVENUE TAMPA FLORIDA 33617 PH. 464
THOMAS J. HARTENSTEIN P.E. NO. 22008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	20

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
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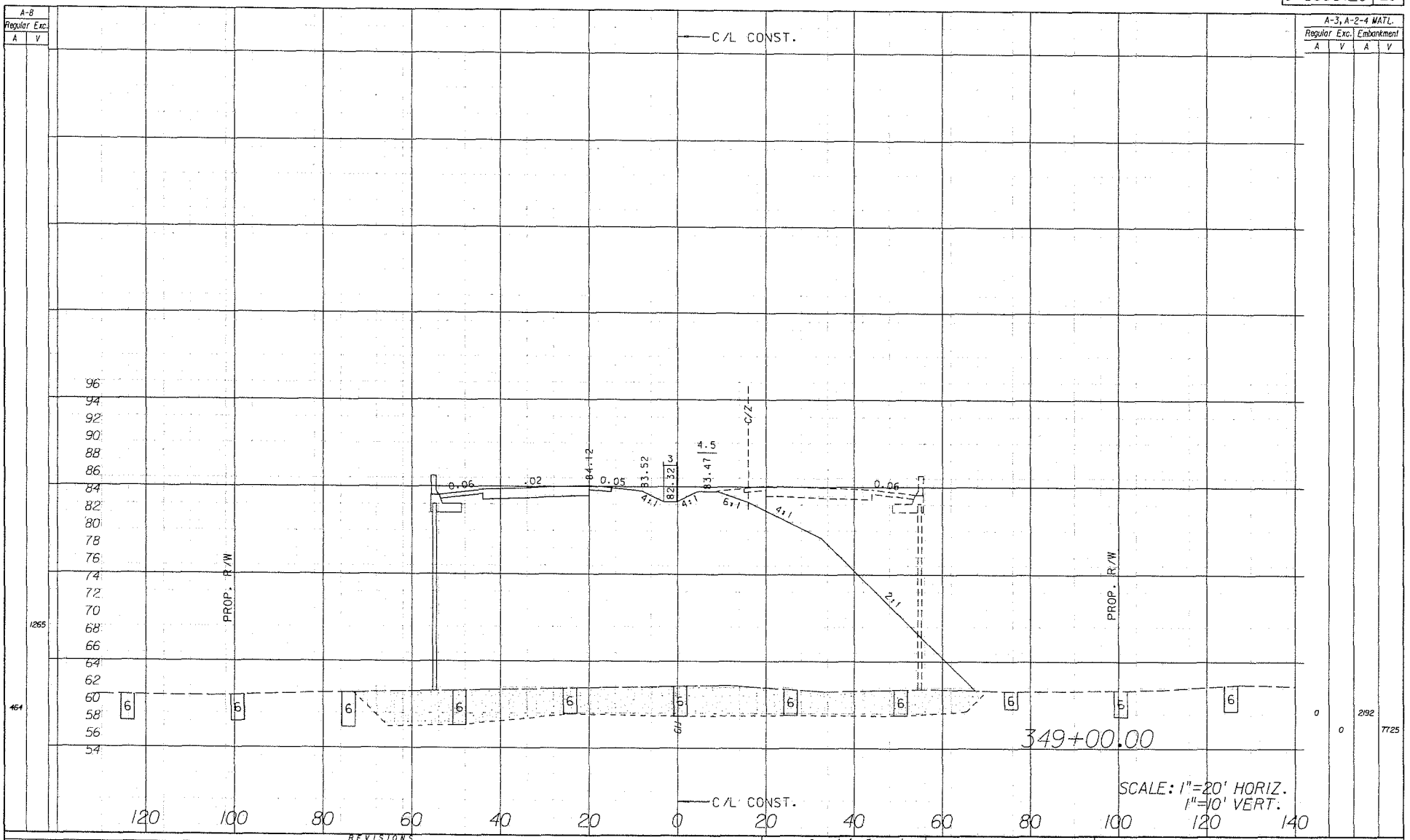

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PITMAN HARTENSTEIN & ASSOC., INC.
CONSULTING ENGINEERS
6809 E. FOWLER AVENUE TAMPA, FLORIDA 33617 EB# 4464
THOMAS J. MONTGOMERY P.E. NO. 33008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

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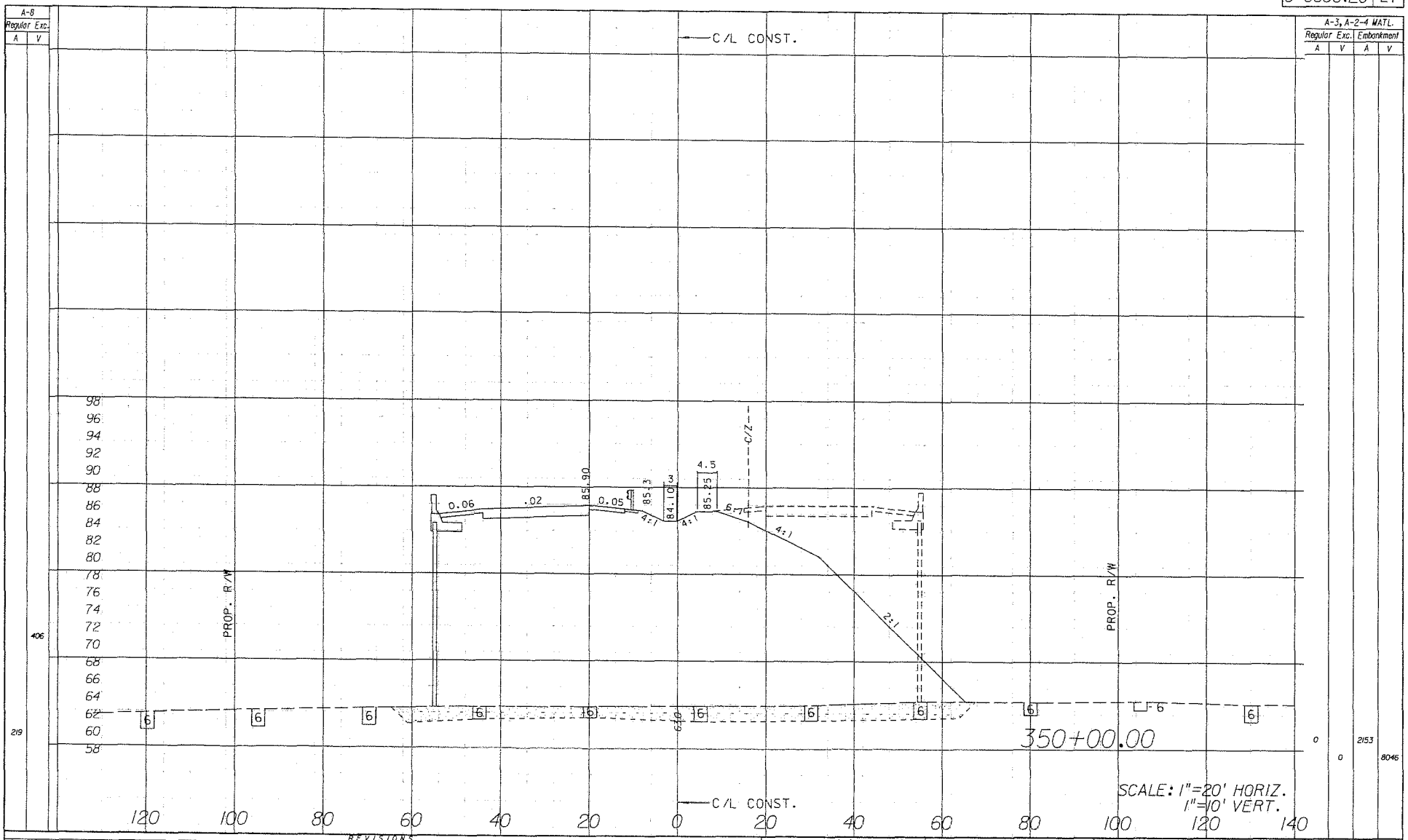

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
219	406	0	0	2153	8046

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PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
4000 E. FOWLER AVENUE TAMPA FLORIDA 33617 813-971-4464
THOMAS J. MONTGOMERY P.E. NO. 23608

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

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COUNTY PROJ. NO.	SHEET NO.
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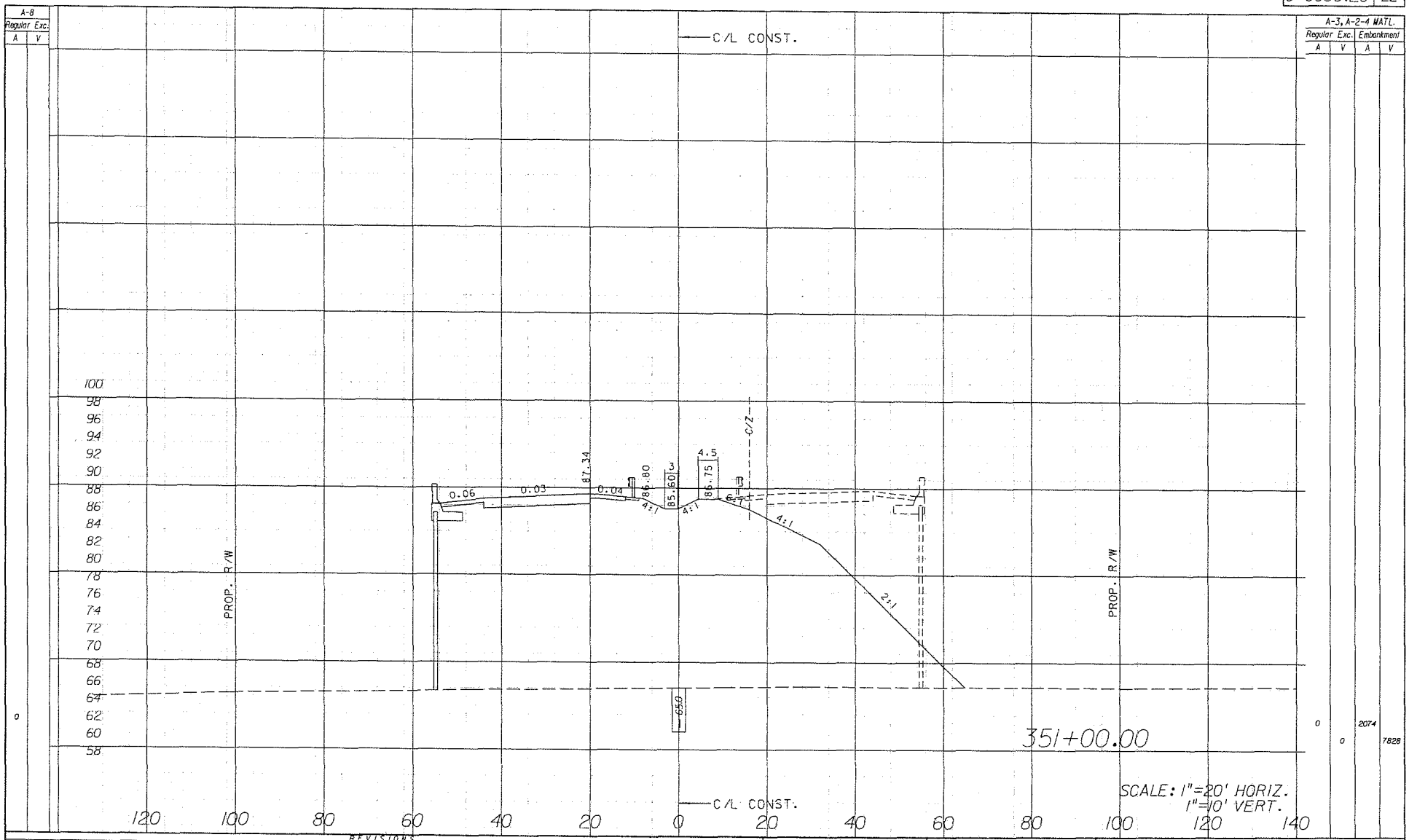
A-8 Regular Exc. A	A-8 Regular Exc. V
0	

A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
0	0	2074	7828



SCALE: 1"=20' HORIZ.
1"=10' VERT.

REVISIONS													
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

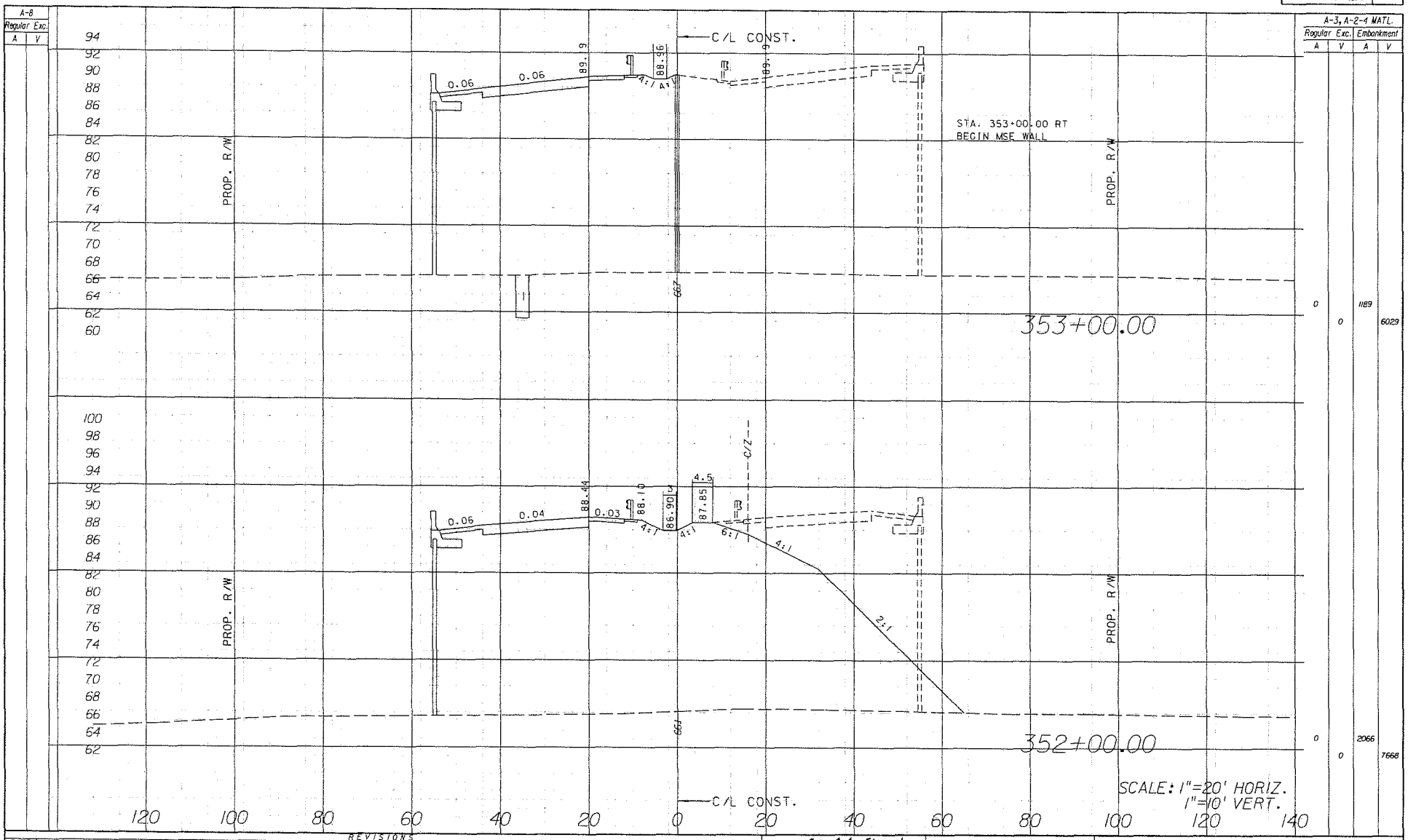
PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
5885 E. FOWLER AVENUE TAMPA FLORIDA 33617 (813) 884-4461
THOMAS J. MONTGOMERY P.E. NO. 13008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:12:25 AM Q:\9624\Plots-2\Roadway\Geopak\Xsd\rdd.jng

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	23



REVISIONS															
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
8888 E. FOWLER AVENUE TAMPA, FLORIDA 33617 (813) 1484
THOMAS J. MONTGOMERY P.E. NO. 19608
cbmith

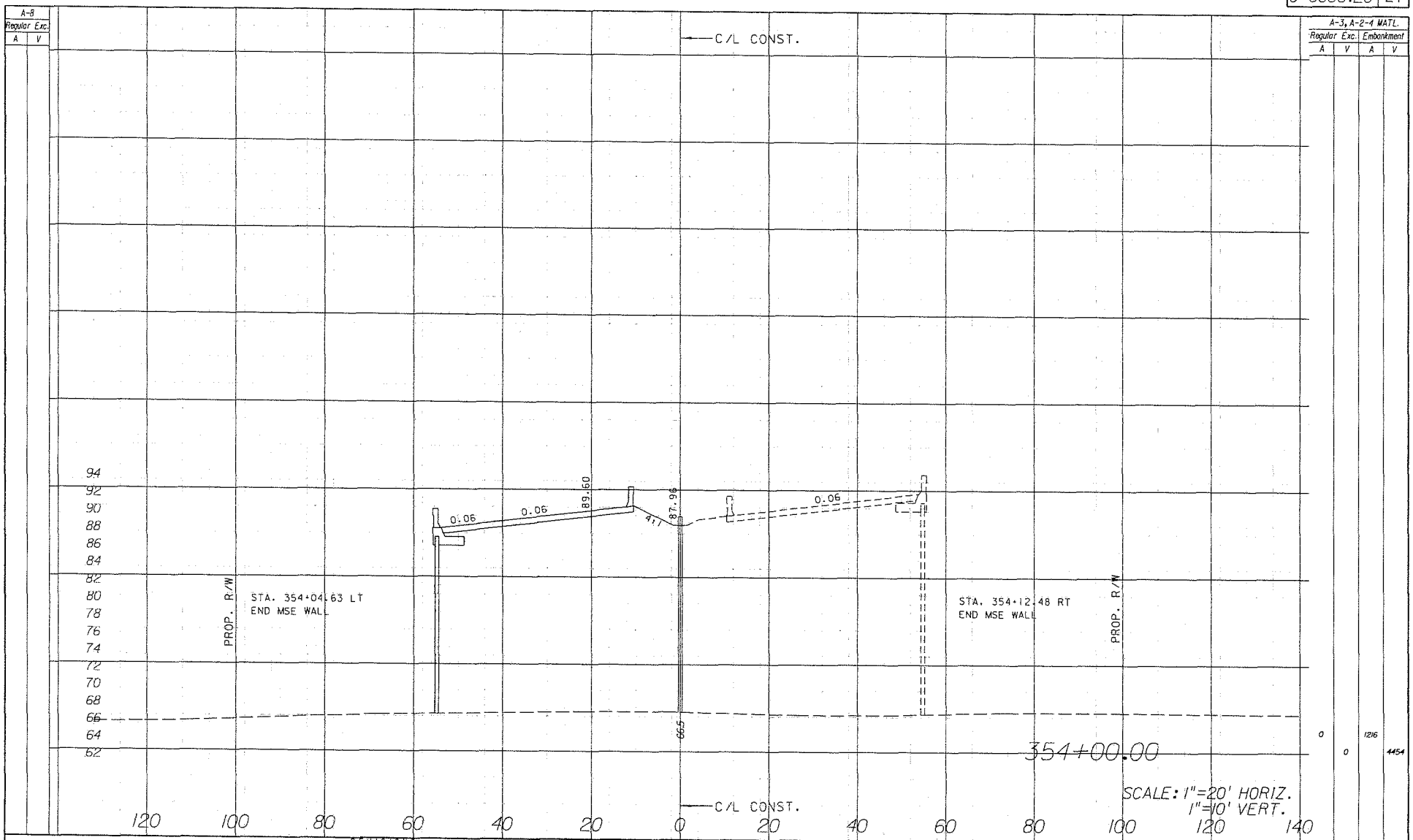
PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:27:35 AM Q:\9624\Phase-2\roadway\ridge\d\xsrdd01.shg

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	24

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
		0	0	1216	4454



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

REVISIONS

PITMAN HANTZSTEIN & ASSOC., INC.
ENGINEERS
6888 E. FOWLER AVENUE TAMPA FLORIDA 33617 (813) 4464
THOMAS J. MONTGOMERY P.E. NO. 23008

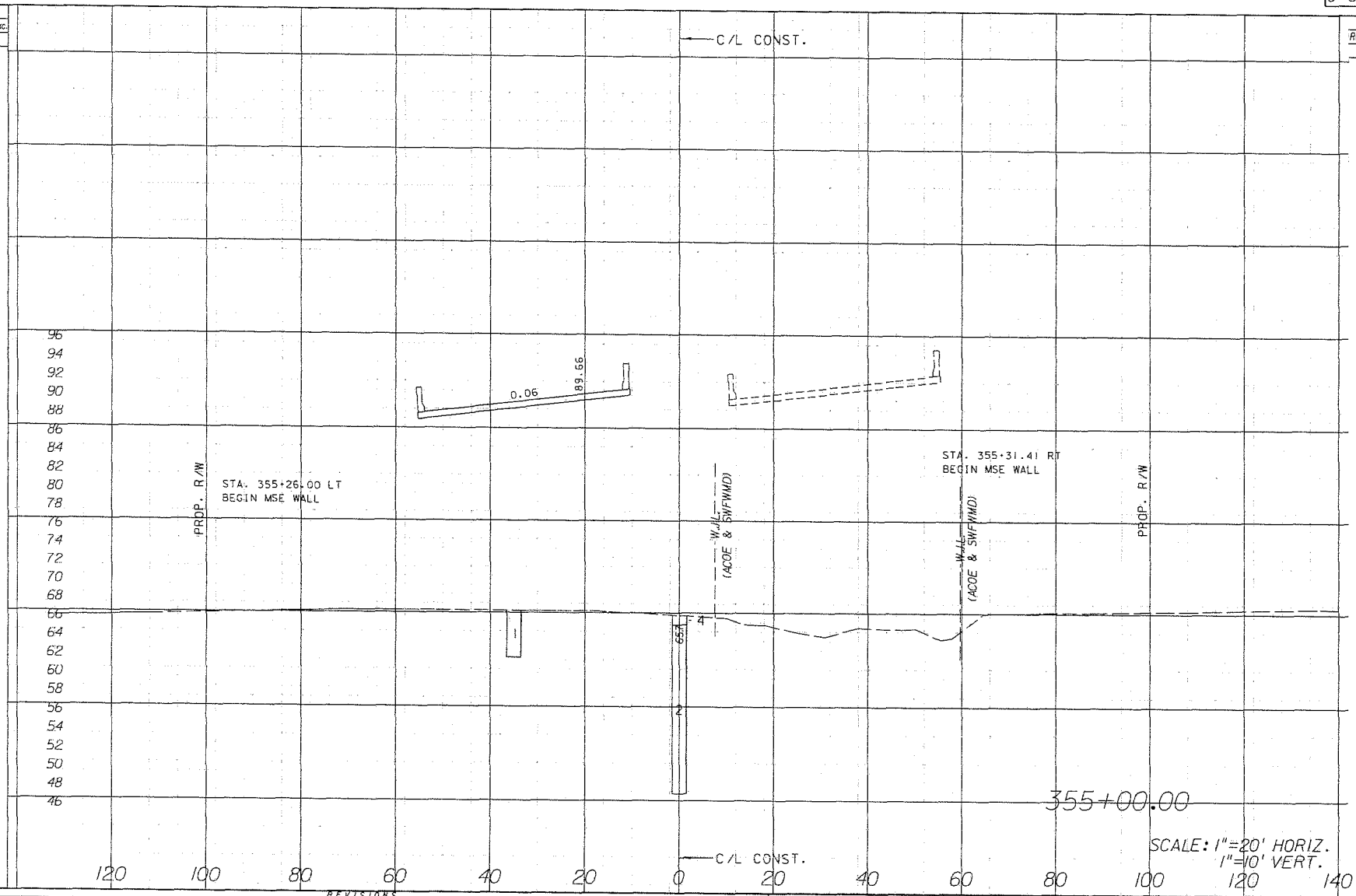
PASCO COUNTY

CROSS SECTION
(RIDGE ROAD)

5/19/2011 9:21:42 AM U:\9624\Phase-2\Roadway\Roadway\crosstour.stn

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	25

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V



REVISIONS															
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY		

URBAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
5809 E. FOWLER AVENUE, TAMPA, FLORIDA, 33617 Ebv 4461
THOMAS J. MONTGOMERY P.E. NO. 29008

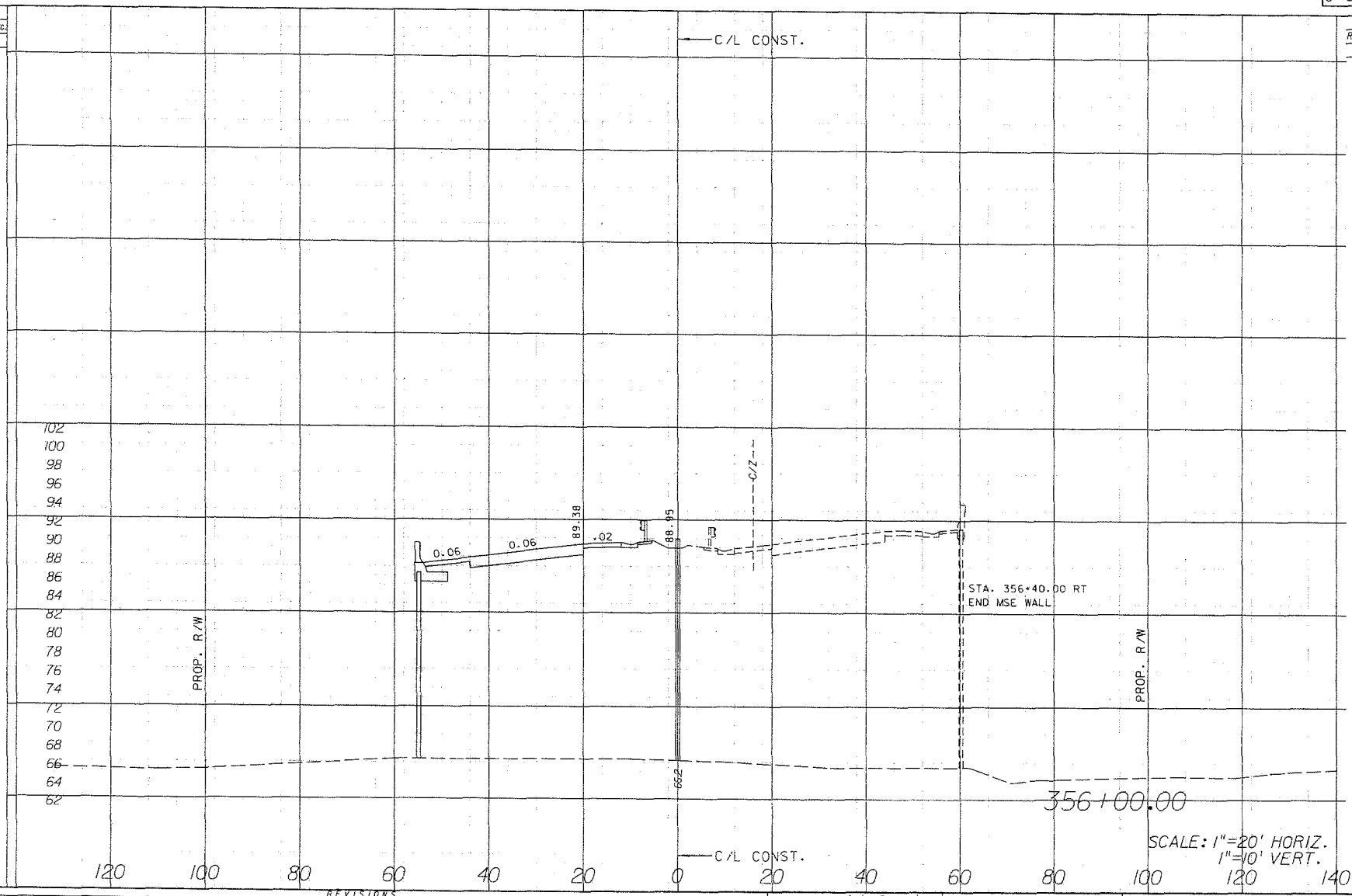
PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:28:37 AM U:\9624\Plans-2\Roadway\9624SR-Xsts(01.dgn)

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	26

A-8 Regular Exc.	
A	V



A-3, A-2-4 MATL.			
Regular Exc.		Embankment	
A	V	A	V
0		1205	
	0		8966

REVISIONS															
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

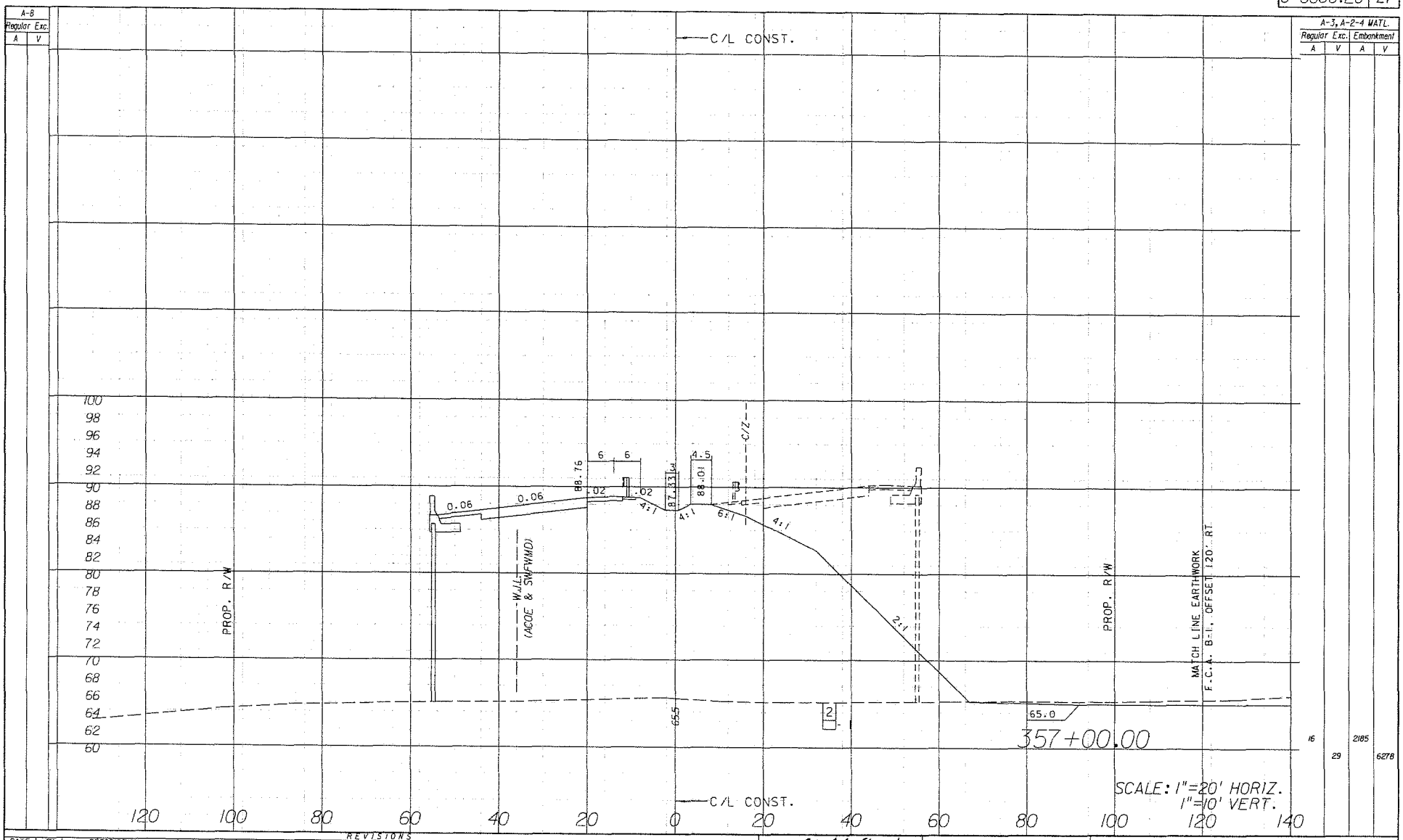
PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
6969 E. FOWLER AVENUE TAMPA FLORIDA 33617 EB# 4461
THOMAS J. MONTGOMERY P.E. NO. 19008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:28:51 AM Q:\9624\Plans-2\Roadway\Geotex\01STD01.dgn

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	27



A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 WATL. Regular Exc. A	A-3, A-2-4 WATL. Regular Exc. V	A-3, A-2-4 WATL. Embankment A	A-3, A-2-4 WATL. Embankment V
		16	29	2185	6278

REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

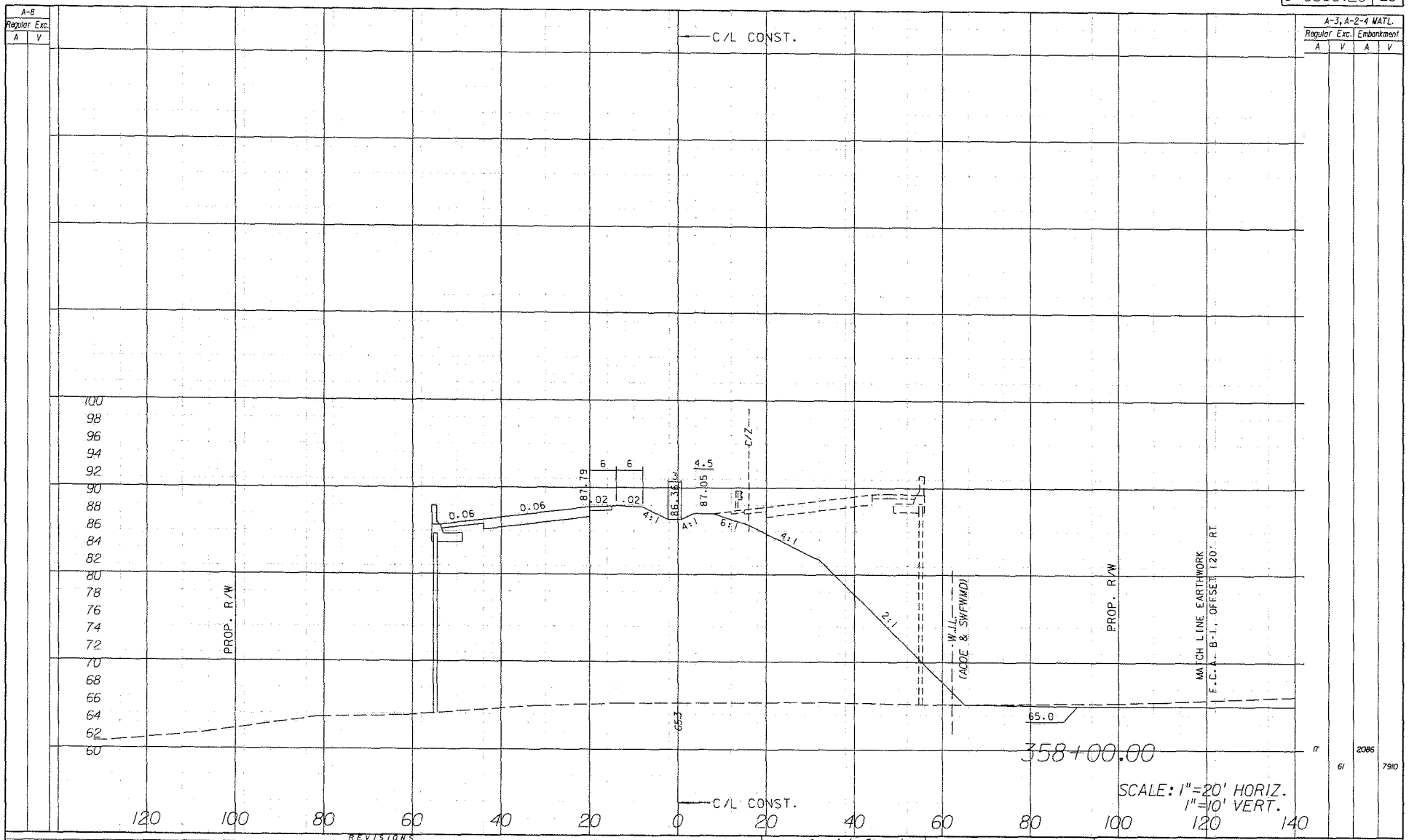
PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
5809 E. FOWLER AVENUE, TAMPA, FLORIDA 33617 PH. 44-
THOMAS J. HARTENSTEIN P.E. NO. 17608
csmith

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:28:24 AM U:\3624\Pasco-2\Roadway\Geopak\Crosroad.stg

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	28



REVISIONS															
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

KITTNER HARTENSTEIN & ASSOC., INC.
ENGINEERS
8888 E. FOWLER AVENUE TAMPA FLORIDA 33617 EB# 4461
THOMAS J. MONTGOMERY P.E. NO. 20008

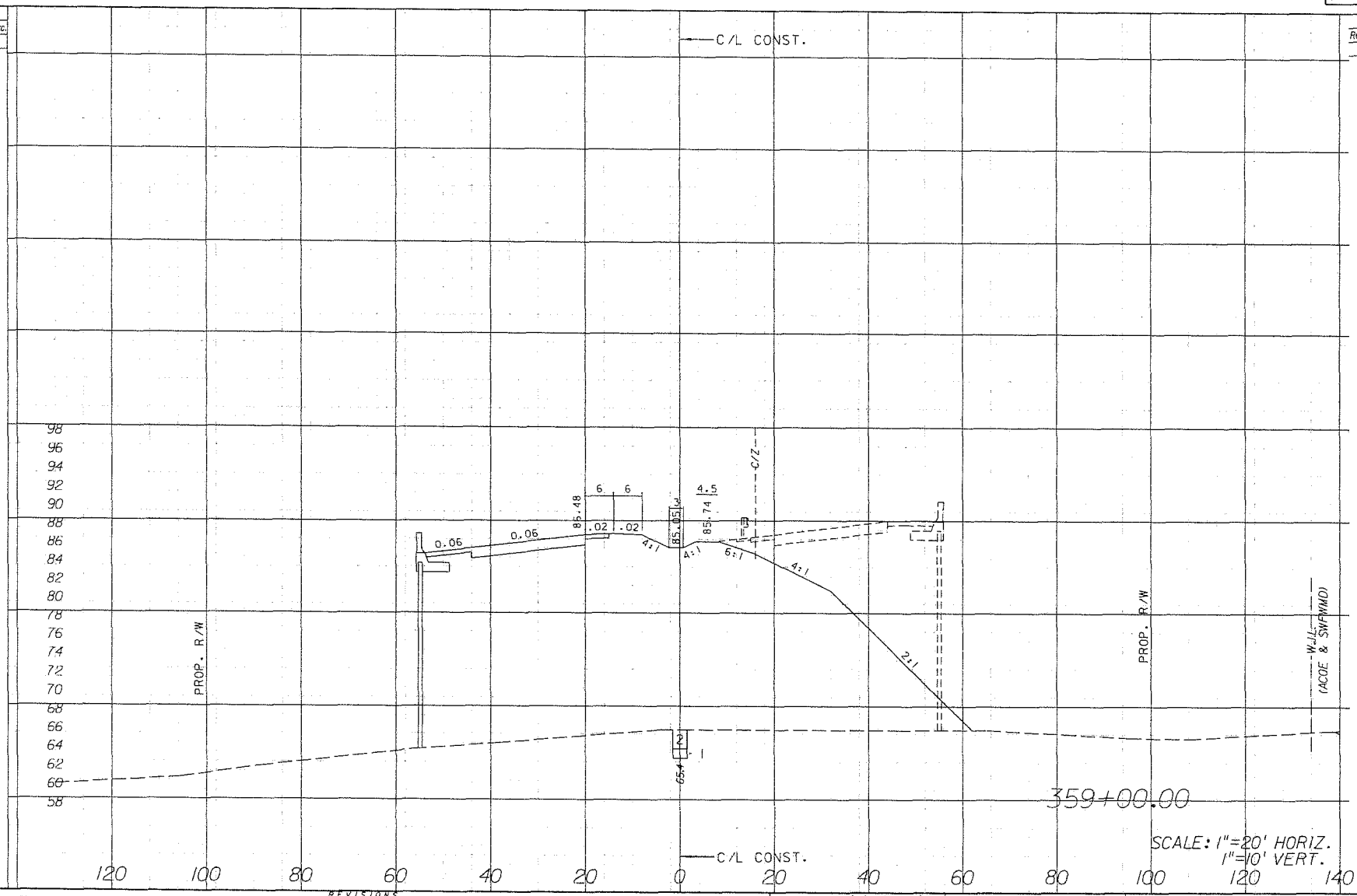
PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	29

A-8 Regular Exc.	
A	V

A-3, A-2-4 MATL.			
Regular Exc.		Embankment	
A	V	A	V
0		1949	
	32		7473



REVISIONS													
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

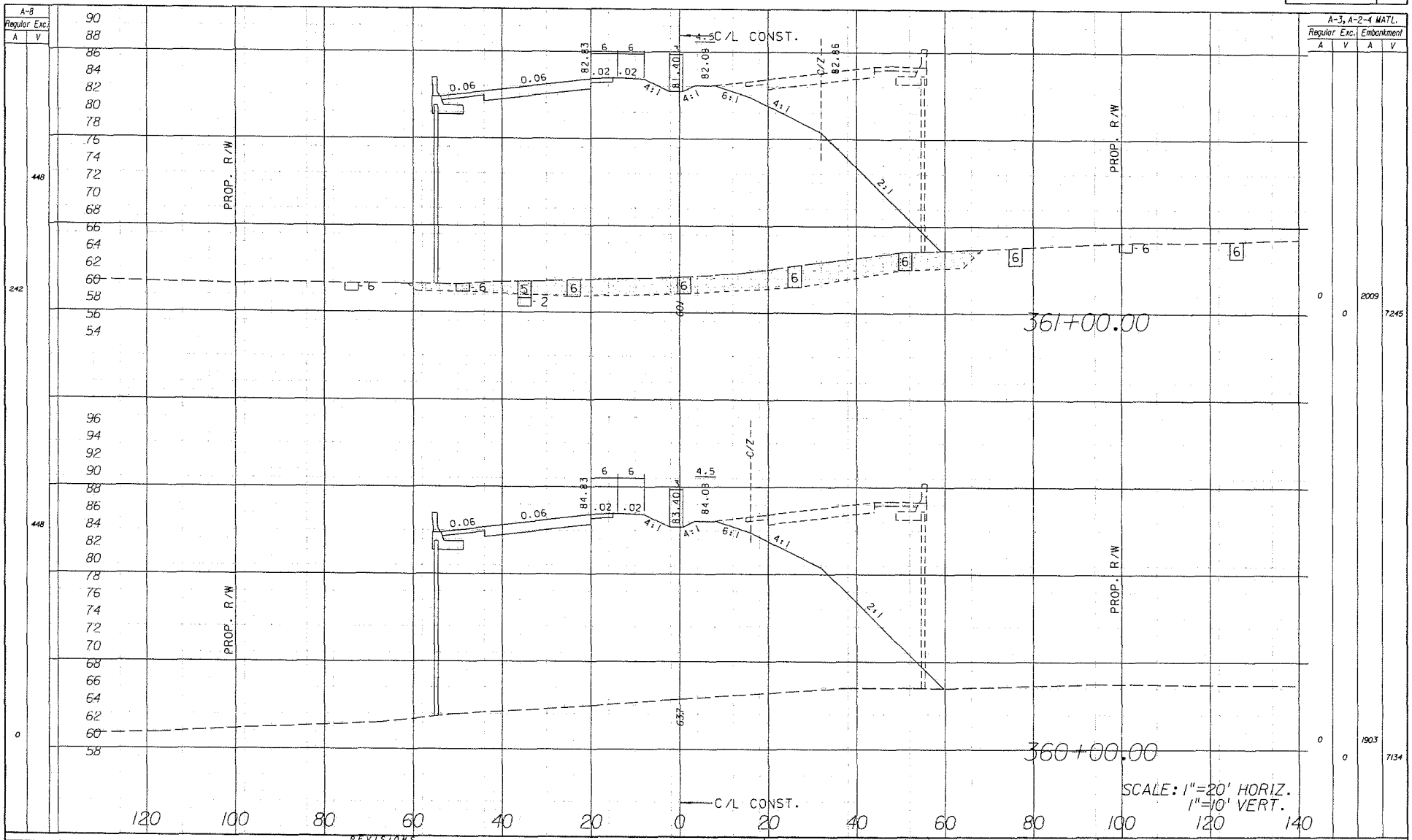
PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
5000 E. FOWLER AVENUE TAMPA FLORIDA 33617 (813) 44-1
THOMAS J. MONTGOMERY P.E. NO. 29038
csmith

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:28:40 AM Q:\9624-Phase-2\Roadway\Cross\dur.dwg

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	30



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

REVISIONS

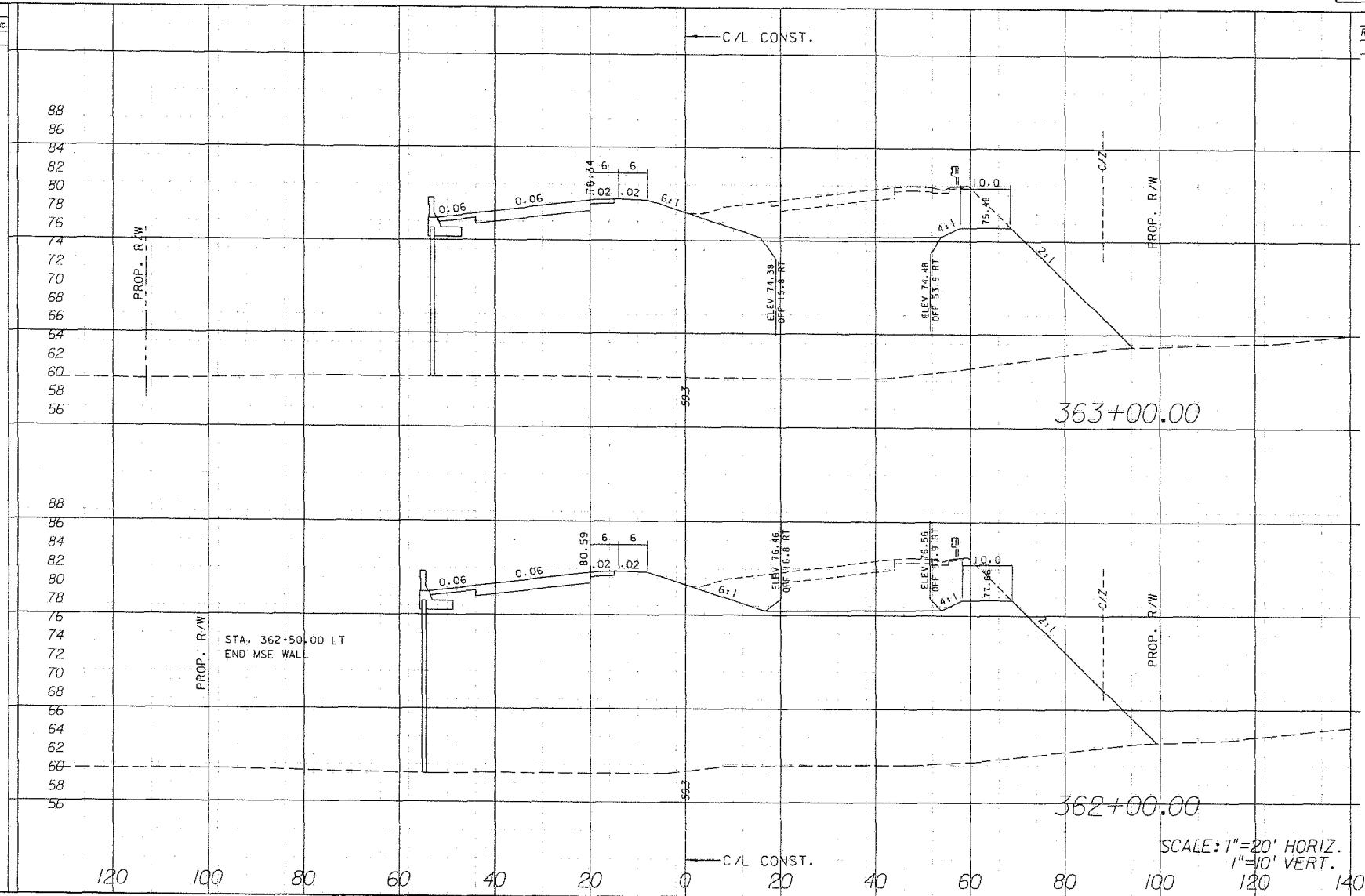
PITMAN HARTSTEIN & ASSOC., INC.
ENGINEERS
1009 E. FOWLER AVENUE TAMPA FLORIDA 33612 EB# 4464
THOMAS J. MONTGOMERY P.E. NO. 25008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	31

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
		0	0	2737	9760
0	0	0	0	2533	8411



REVISIONS															
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY		

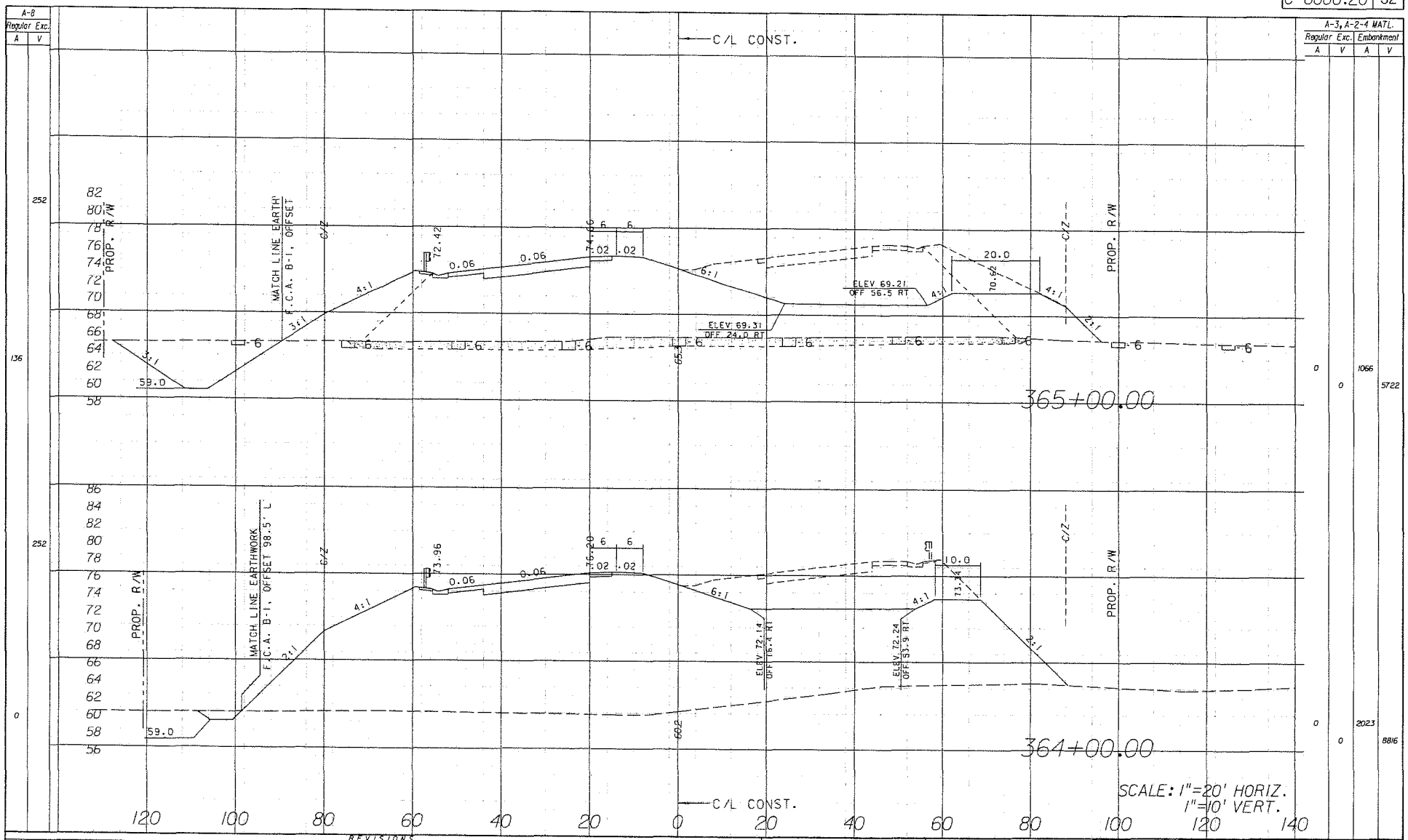
PITMAN HANTZSCHE & ASSOC., INC.
ENGINEERS
6005 E. FOWLER AVENUE TAMPA FLORIDA 33617 CA# 4464
THOMAS J. MORTRONCH P.E. NO. 13028

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:25:03 AM

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	32



A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
136	252	0	0	1066	5722
0	252	0	0	2023	8816

REVISIONS

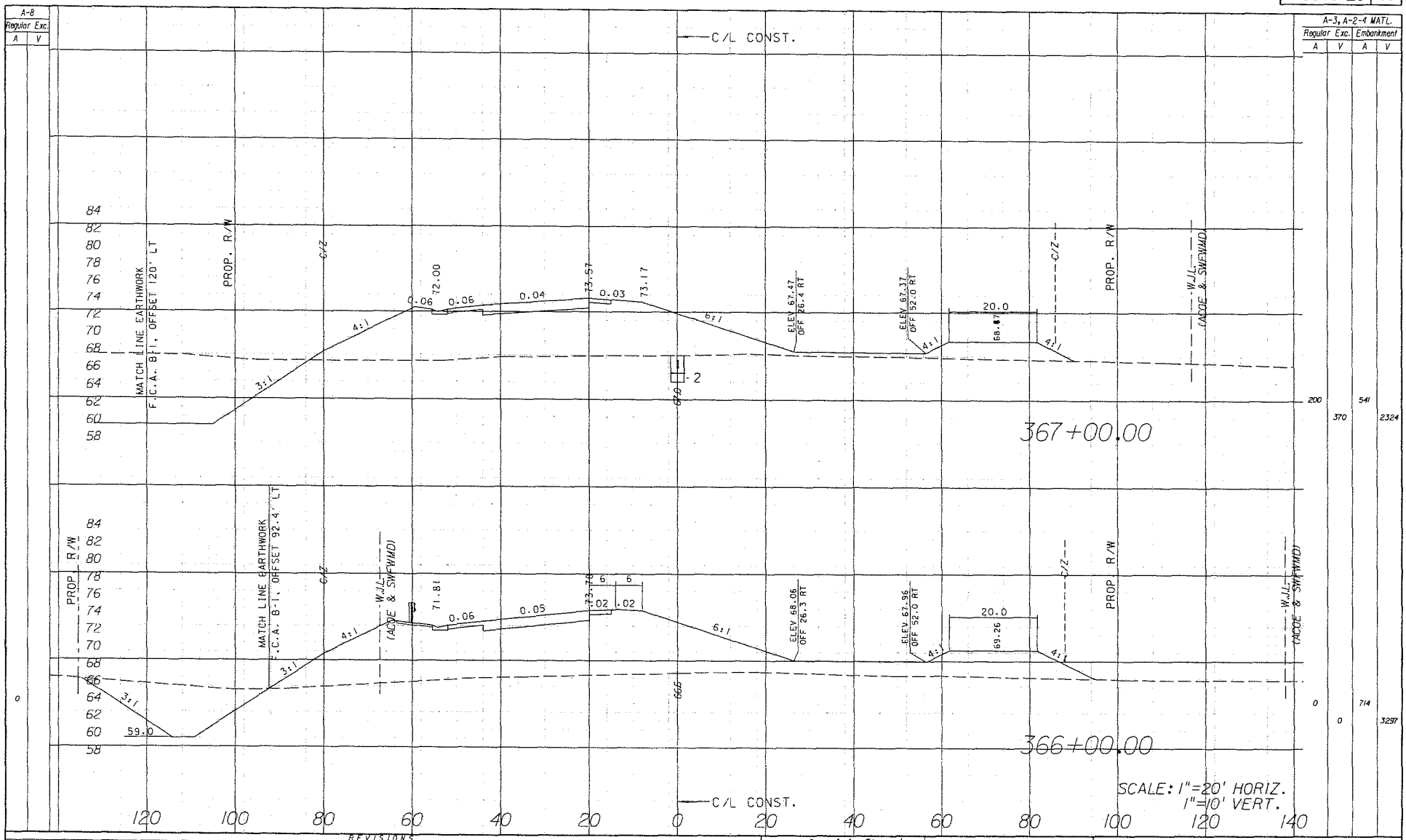
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

PITMAN HARTCHSTEIN & ASSOC. INC.
ENGINEERS
5809 E. FOWLER AVENUE TAMPA FLORIDA 33617 (813) 4861
THOMAS J. MONTGOMERY P.E. NO. 19506

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	33



A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
		200	370	541	2324
0		0	0	714	3297

REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

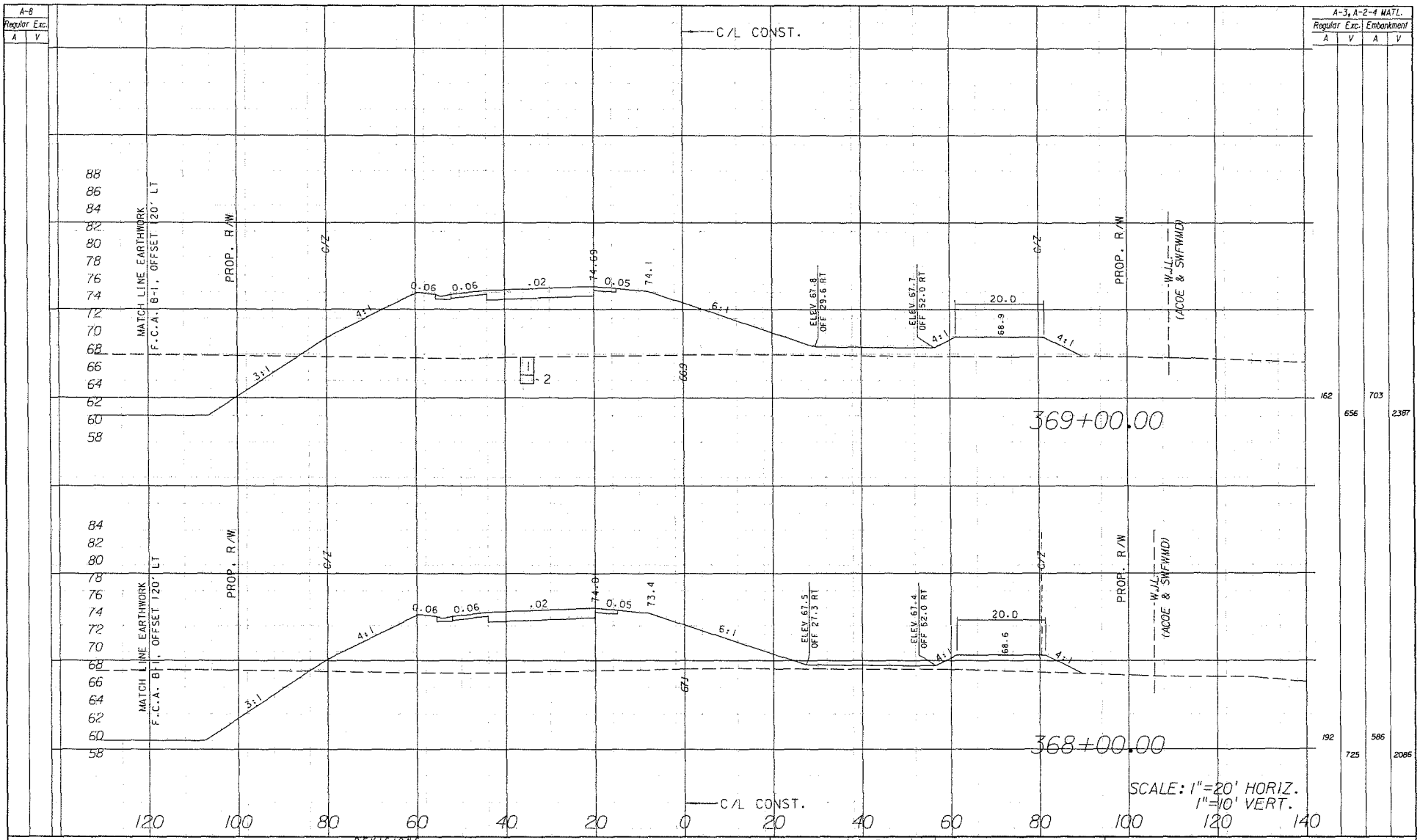
PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
1885 E. FOWLER AVENUE, TAMPA FLORIDA, 33612 (813) 971-4461
THOMAS J. MONTGOMERY P.E. NO. 33008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 5:29:24 AM U:\0624\Phase-2\Hoddwd\Gadpat\rdxsrdur.shp

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	34



REVISIONS															
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

PITMAN MARKEVSTEIN & ASSOC., INC.
ENGINEERS
8888 E. FOWLER AVENUE TAMPA FLORIDA 33617 813-884-4464
THOMAS J. MONTGOMERY P.E. NO. 13008

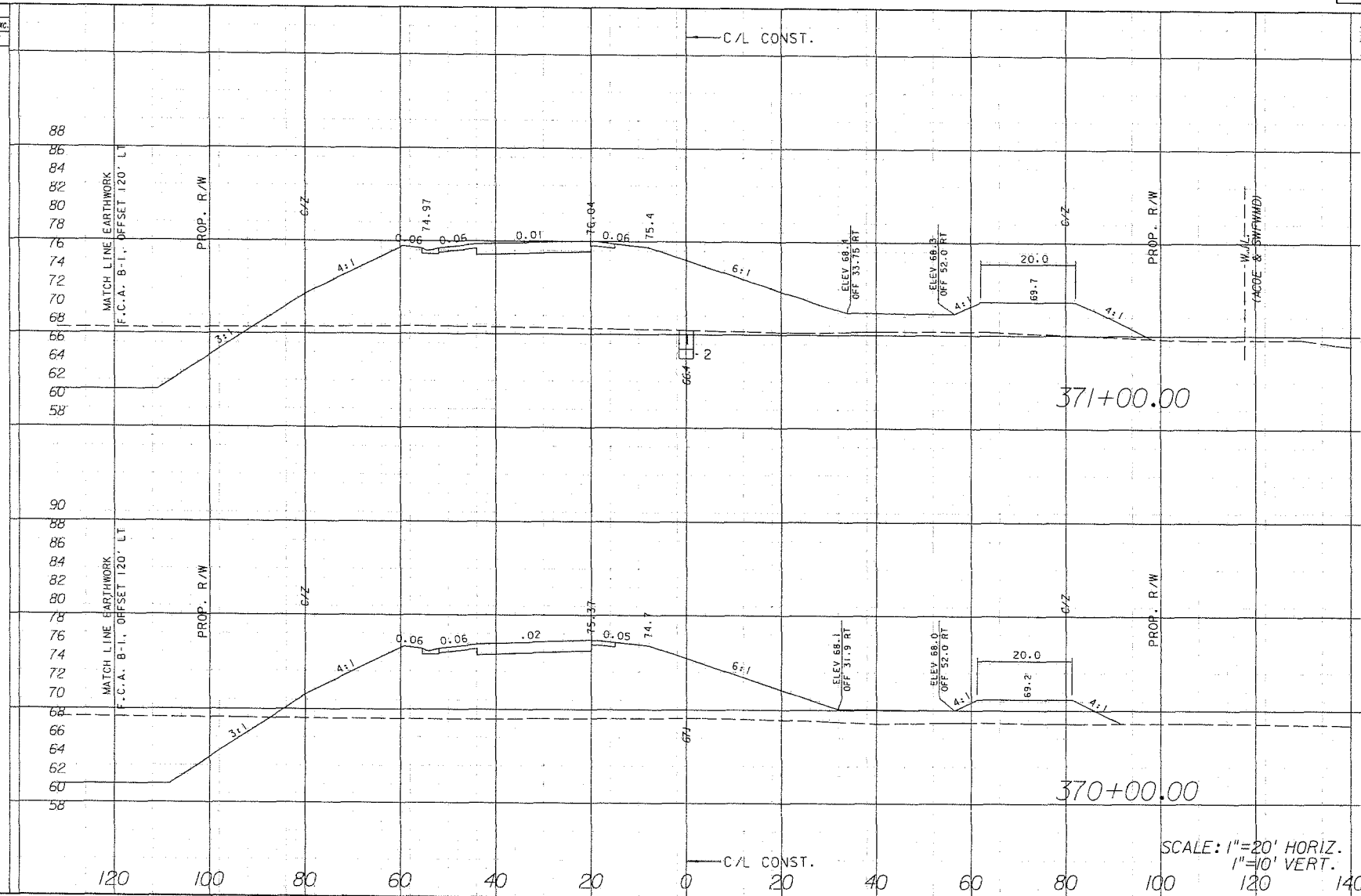
PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/18/2011 9:29:38 AM Q:\0624*Atlas-2\Roadway\Groupd\rdxs7801.dgn

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	35

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
126		525		964	3216
158		592		773	2734



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

REVISIONS

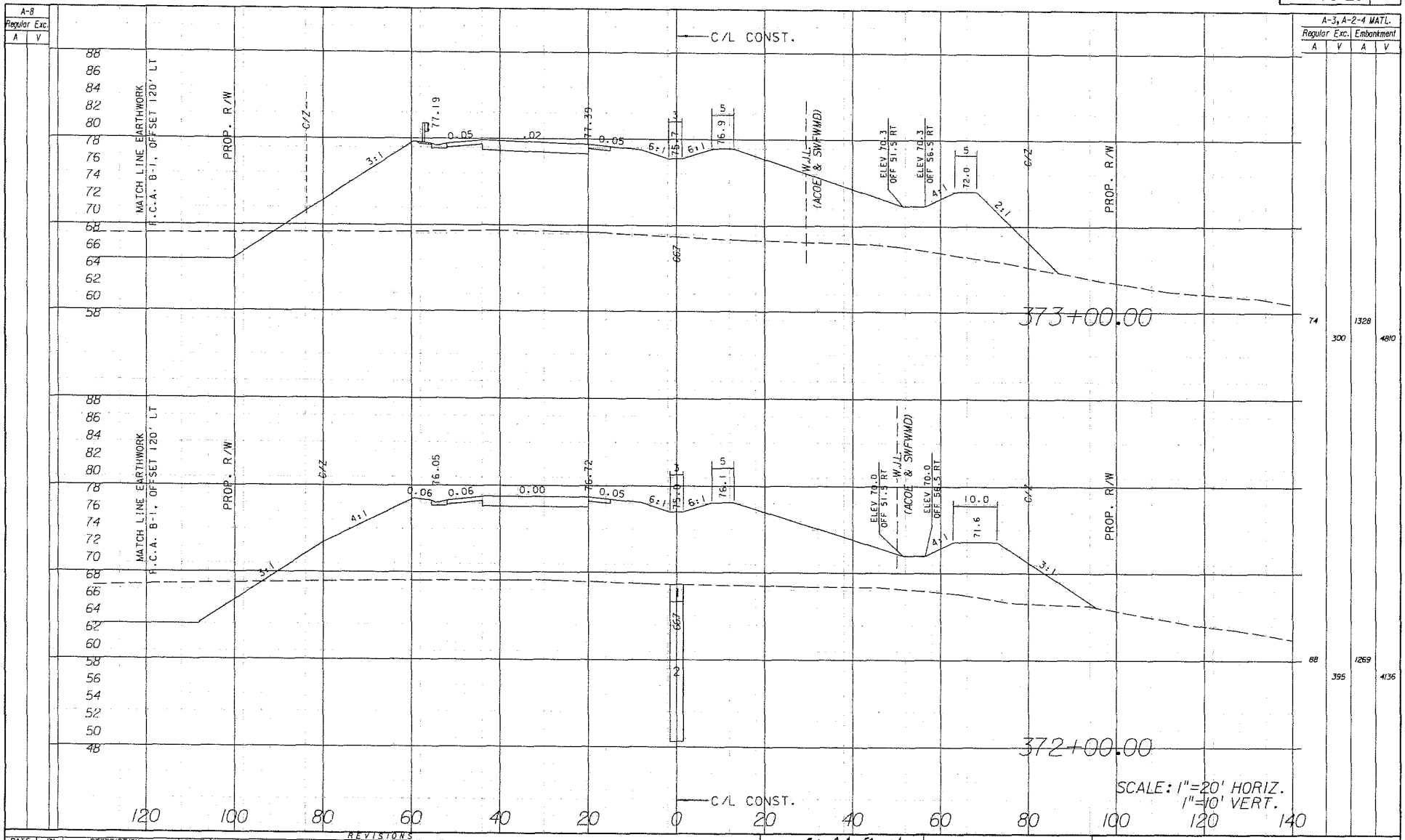
PITMAN HARTCHSTEIN & ASSOC., INC.
ENGINEERS
1889 E. FOWLER AVENUE TAMPA FLORIDA 33612 EB# 4464
THOMAS J. MONTGOMERY P.E. NO. 19026

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/15/2011 9:29:49 AM U:\0624-Phase-2\Roadway\Geopak\xsrdgr.shp

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	36



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

REVISIONS

PITMAN HANTZSCHEW & ASSOC., INC.
ENGINEERS
8889 E. FOWLER AVENUE, TAMPA FLORIDA 33617 EB# 4481
THOMAS J. MONTGOMERY P.E. NO. 23028

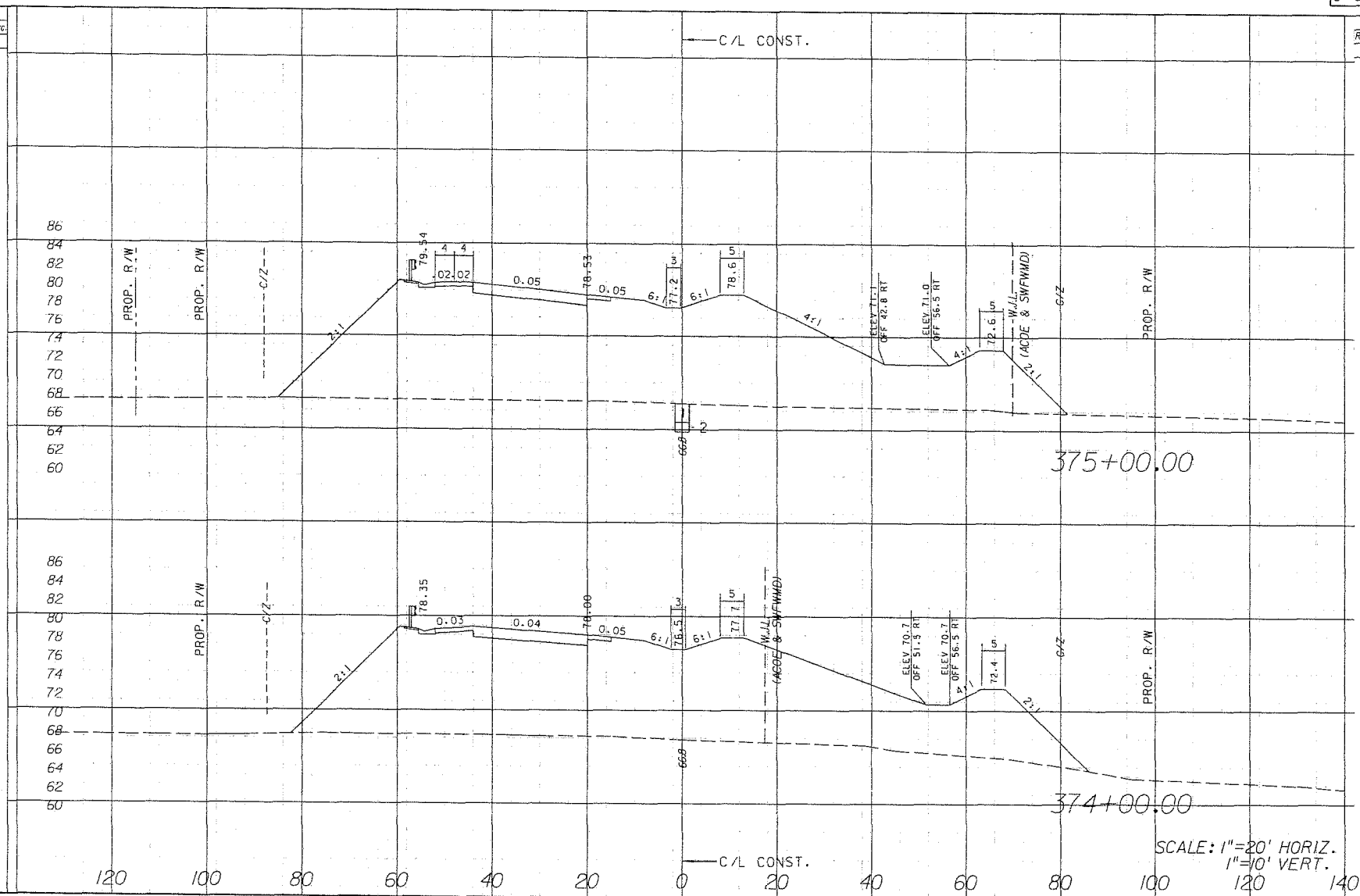
PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

5/19/2011 9:29:57 AM U:\0624\Phase-2\Roadway\Geopak\rd01rtlt.stg

COUNTY PROJ. NO.	SHEET NO.
C 6686.20	37

A-8 Regular Exc. A	A-8 Regular Exc. V	A-3, A-2-4 MATL. Regular Exc. A	A-3, A-2-4 MATL. Regular Exc. V	A-3, A-2-4 MATL. Embankment A	A-3, A-2-4 MATL. Embankment V
		0	0	1414	5145
		0	137	1365	4986



SCALE: 1"=20' HORIZ.
1"=10' VERT.

REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

PITMAN HARTENSTEIN & ASSOC., INC.
ENGINEERS
5809 E. FOWLER AVENUE, TAMPA FLORIDA 33617 Ph. 4-4
THOMAS J. HARTENSTEIN P.E. NO. 13008

PASCO COUNTY

CROSS SECTION (RIDGE ROAD)

csmith 5/19/2011 9:30:01 AM
U:\9624\Phase-2\Roadway\Geopak\Cross\ridge.cfg