Drain: ELLIOT CREEK DRAIN 311
Improvement: THE ESTATES AT CLAY WEST
Operator: JIM SNOUFFETZ, JARED LITHAGEN
Date: 9-11-3
Classification URBAN
Year Coustr. 2001

GIS Drain Input Checklist

	4
Digitize & Attribute Tile Drains	N/A
Digitize & Attribute Storm Drains	9-15-3
Digitize & Attribute SSD	9-15.3
Digitize & Attribute Open Ditch	9.23-03 JHL
• Sum drain lengths & Validate	9-15-3
Enter Improvements into Posse	9-15-3
• Enter Drain Age into Posse	9-15-3
Sum drain length for Watershed in Posse	N/A
Stamp Plans	9-15-3
Pull Source Documents for Scanning	9-23-03 JUL



Kenton C. Ward, Surveyor Phone (317) 776-8495 Tax (317) 776-9628

Suite 188 One Hamilton County Square Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

January 24, 2001

Re: Elliot Creek Drain, The Estates of Clay West Arm

Attached is a petition, non-enforcement request, plans, calculations, quantity summary and assessment roll for the Estates of Clay West Arm, Elliot Creek Drain. I have reviewed the submittals and petition and have found each to be in proper form.

I have made a personal inspection of the land described in the petition. Upon doing so, I believe that the drain is practicable; will improve the public health; benefit a public highway and be of public utility; and that the costs, damages, and expenses of the proposed drain will probably be less than the benefits accruing to the owners of land likely to be benefited. The drain will consist of the following:

6"	SSD	5,370	ft	18" RCP 554	1 ft
12"	RCP	1,365	£t	30" RCP 15	3 ft
15"	RCP	1,577	ft	Open Ditch 350	ft

The total length of the drain will be 9,369 feet.

The retention pond (lake) located in Blocks "E" and "G" are not to be considered part of the regulated drain. Only the inlet and outlet will be maintained as part of the regulated drain. The maintenance of the pond (lake) will be the responsibility of the Homeowners Association. The Board will however, retain jurisdiction for ensuring the storage volume for which the lake was designed will be retained. Thereby, allowing no fill or easement encroachments.

The subsurface drains (SSD) to be part of the regulated drain are those located under the curbs and those main lines between lots or in rear yards. Only the main SSD lines which are located within the easement/right of way are to be maintained as regulated drain. Laterals for individual lots will not be considered part of the regulated drain.

The portion of open drain is that from the North right of way line of 131st Street (end of 60" pipe) to the west line of the Miller property (parcel no. 17-09-28-00-00-025.000). The 60" pipe under 131st Street will not become part of the regulated drain system.

I have reviewed the plans and believe the drain will benefit each lot equally. Therefore, I recommend each lot be assessed equally. I also believe that no damages will result to landowners by the construction of this drain. I recommend a maintenance assessment of \$15.00 per lot, \$3.00 per acre for roadways, with a \$15.00 minimum. With this assessment the total annual assessment for this drain/this section will be \$564.98.

Parcels assessed for this drain may be assessed for the Osborn-Collins or Williams Creek Drain at sometime in the future.

I believe this proposed drain meets the requirements for Urban Drain Classification as set out in IC 36-9-27-67 to 69. Therefore, this drain shall be designated as an Urban Drain.

I recommend that upon approval of the above proposed drain that the Board also approve the attached non-enforcement request. This request is for the reduction of the regulated drain easement to those widths as shown on the secondary plat for The Estates of Clay West as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for February 26, 2001.

Kenton C. Ward

Hamilton County Surveyor

KCW/kkw

CERTIFICATE OF COMPLETION AND COMPLIANCE

To: Hamilton County Surveyor

Ro: The Estates at West Clay

I hereby certify that:

- 1. I am a Registered Land Surveyor or Engineer in the State of Indiana.
- 2. I am familiar with the plans and specifications for the above referenced project.
- 3. I have personally observed and supervised the completion of the drainage facilities for the above referenced project.
- 4. The drainage facilities within the above referenced project to the best of my knowledge, information and belief have been installed and completed in conformity with all plans and specifications, except the pipe between Structures.

Signature: Lay E. Murray P. R. Type or Print Name: Gary Murray P. R.	Date: /0/03/02
Type or Print Name: Gary Murray, P.E.	
Business Name: Paul I. Cripe, Inc.	
Business Address: 7172 Graham Rd.	
Indianapolis IN 46250	
Telephone Number: <u>317-842-6777</u>	
	INDIANA REGISTRATION NUMBER
	93000348





Kenton C. Ward, Surveyor Phone (317) 776-8495 Fax (317) 776-9628

Suite 188 One Hamilton County Square Noblesville, Indiana 46060-2230

October 9, 2002

Pittman Partners P. O. Box 554 Carmel, IN 46032

Re: The Estates of Clay West

This letter is returning the enclosed sureties that were released by the Hamilton County Board of Commissioners during their meeting on September 23, 2002.

HCDB-B00-042 – Developers Surety and Indemnity Company, Performance Bond No. 886067S for The Estates of Clay West – Storm Sewers and Subsurface Drain - \$122,000.00.

HCDB-B01-003A – Developers Surety and Indemnity Company, Performance Bond No. 886068S for The Estates of Clay West – Erosion Control - \$20,000.00

Accompanying this letter you will find the released sureties.

Sincerely,

Jerry L Liston

Hamilton County Surveyor's Office.

JLL/llm

SUBDIVISION IMPROVEMENTS PERFORMANCE BOND

BOND NO: 886068S

KNOW ALL MEN BY THESE PRESENTS:
THAT we, PITTMAN PARTNERS, INC as Principal, and DEVELOPERS SURETY AND INDEMNITY COMPANY, a corporation organized and doing business and under and by virtue of the laws of the State of Laws and dally lineared to an electronic description.
business and under and by virtue of the laws of the State of Iowa and duly licensed to conduct surety business in the State of Indiana, as Surety, are held and firmly bound unto
BOARD OF COMMISSIONERS, HAMILTON COUNTY, ONE HAMILTON SQUARE, NOBLESVILLE, IN 46060
as Obligee, in the sum of
THE CONDITION OF THE OBLIGATION IS SUCH THAT:
WHEREAS, the above named Principal, has agreed to construct in The Estates of Clay West Subdivision, City of Carmel, Indiana the following improvements: Erosion Control
truly perform said agreement or agreements during the original term thereof or of any extension of said term that may be granted by the Obligee with or without notice to the Surety, this obligation shall be void, otherwise it shall remain in full force and effect. IN WITNESS WHEREOF, the seal and signature of said Principal is hereto affixed and the corporate seand the name of the said Surety is hereto affixed and attested by its duly authorized Attorney-in-Fact, this 29th Day of November 2000.
BOARD OF COIVIL SIONERS Pittman Partners, Inc. OF THE COUNTY OF HAMILTON Principal 2
BY: Stury Puth
DATE 12/26/60 DEVELOPERS SURETY AND INDEMNITY COMPANY
RELEASE OF LETTER OF CIRCLET
HAMILTON COUNTY BOARD OF COMMISSIONERS Howard E. McConnell Attorney-in-Fact BY: Howard E. McConnell Attorney-in-Fact
BY: Copy milegrater Archive of the Hamilton County-Surveyor's Office; One Hamilton Co. Softare, Ste. 188, Noblesville, In 46060
HAMILTON COLINTY AUDITOR

SUBDIVISION IMPROVEMENTS PERFORMANCE BOND

BOND NO: 886067S
KNOW ALL MEN BY THESE PRESENTS:
THAT we, PITTMAN PARTNERS, INC as Principal, and DEVELOPERS SURETY AND INDEMNITY COMPANY, a corporation organized and doin business and under and by virtue of the laws of the State of Iowa and duly licensed to conduct suret business in the State of Indiana, as Surety, are held and firmly bound unto
BOARD OF COMMISSIONERS, HAMILTON COUNTY, ONE HAMILTON SQUARE, NOBLESVILLE, IN 46060
as Obligee, in the sum of One hundred twenty two thousand and no/100 Dollars, (\$122,000.00) for which payment, well and truly to be made, we bind ourselves, our heirs, executors and successors, jointly and severally firmly by these presents.
THE CONDITION OF THE OBLIGATION IS SUCH THAT:
WHEREAS, the above named Principal, has agreed to construct in The Estates of Clay West Subdivision, City of Carmel, Indiana
the state of the s
NOW, THEREFORE, the condition of this obligation is such, that if the above Principal shall well and learn that may be granted by the Obligee with or without notice to the Surety, this obligation shall be void, because it shall remain in full force and effect. WITNESS WHEREOF, the seal and signature of said Principal is hereto affixed and the corporate seal and the name of the said Surety is hereto affixed and attested by its duly authorized Attorney-in-Fact, this
BC/ / OF COM GIONERS Pittman Partners, Inc.
BY: Stand Petters
Steve Pittman, President
RELEASE OF MAINTENANCE/PERFORMANC COMPANY RELEASE OF LETTER OF CREDIT DEVELOPERS SURETY AND INDEMNITY COMPANY
HAMILTON COUNTY BOARD OF COMMISSIONERS BY: Haward E. McConnell Attorney-in-Fact
This copy procedure the Digital Archive of the Hanging Court, Surveyor Office; On Mamilton Colquare, Ste. 188, Noblesville, In 46060



Kenton C. Ward, Surveyor Phone (317) 776-8495 Fax (317) 776-9628

Suite 188 One Hamilton County Square Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

July 2, 2003

Re: Elliot Creek Drain: The Estates at Clay West Arm

Attached are as-builts, certificate of completion & compliance, and other information for The Estates at Clay West. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated January 24, 2001. The report was approved by the Board at the hearing held February 26, 2001. (See Drainage Board Minutes Book 5, Pages 575-577) The changes are as follows:

The changes are a						Original	
Structure:		T.C.:	I.E.:	Pipe:	Length:	Plans:	Difference:
7	02		880.77				
7	03	883.83	880.95	15	5	22	17
7	03	883.83	880.77				
7	04	885.66	882.02	15	303	300	3
7	04	885.66	880.97				
7	05	885.66	882.18	15	22	26	4
7	05	885.66	882.07				
7	06	886.21	883.07	12	76	80	4
7	06	886.21	882.18				
7	07		885.1	12	30	39	9
7	00		881.12				
7	01		882.58	30	150.33	153	2.67
7	80		882.45				
7	09	887.87	883.35	18	278	289	11
7	09	887.87	882.45]
7	10	887.78	883.65	15	23	26	3
7	10	887.78	883.41				
7	11		885.76	12	239	247	8
7	12		882.95				
7	13	889.52	883.88	18	256	265	9
7	13	889.52	882.95				

714	889.73	884.16	12	70	74	4
714	889.73	883.93				
715		885.17	12	274	281	7
726	891.8	888.07				
725	891.8	887.89	12	24	26	2
725	891.8	887.84				<u> </u>
724		884.9	15	290	299	9
713	889.52	885.3		200	200	3
716	889.07	885.3	12	27	29	2
716	889.07	884.73				
717	889.25	885.41	12	22	26	4
730	891.87	500	,		20	<u> </u>
729	891.9	888.04	12	23	26	3
729	891.9	887.85			20	
728	892.3	887.87	15	51	55	4
728	892.3	887.53	10	<u> </u>		4
727	552.0	887.53	15	264	273	9
738	892.15	007.00	13	204	213	9
737	892.14	888.75	12	22	26	4
737	892.14	888.4	12	22	20	<u> </u>
736	892.87	888.34	15	70	75	5
736	892.87	888.08	13	70	73	3
735	092.01	888.02	15	218	228	10
734	894.39	000.02	13	210	220	10
733	892.15	891.27	12	300	305	5
733	892.15	889.59	12	300	305	<u> </u>
732	890.42	889.12	15	405	410	5
732	890.42	887.42	10	400	410	5
731	090.42	887.41	15	72	70	6
718		882.98	13	73	79	6
719	889.29		15	174	160	6
719		886.11	10	174	168	<u> </u>
719	889.29 892.25	882.98	45	206	400	
		888.28 886.14	15	396	400	4
720	892.25		40	242	240	
721	893.51	890.61	12	343	346	3
739 740	900.42	886.7	4.5	200	200	40
	890.42	887.67	15	220	230	10
740	890.42	886.7	40	40		
741	892.22	888.47	12	49	54	5
741	892.22	887.68				
742	892.12	888.67	12	22	26	4
743	007 70	884.79	40			
744	887.73	884.96	18	50	63	13
744	887.73	884.79		1=5	, ===	
745	890.14	885.64	18	179	178	1
745	890.14	884.97				
746	892.23	886.35	18	175	177	2
746	892.23	885.69				

747		886.77	18	54	75	21
723	889.4	886.07				
722		885.39	12	182	191	-9

6" SSD Streets:

West Sherbern	2405
CA 3 Street	491
CA 2 Street	424
x2	

Tota	al:	6640
. ~	#11	()()**()

RCP	Pi	pe	To	tals	
-----	----	----	----	------	--

Troi i ipo i otalo.	
12	1703
15	2514
18	992
30	150
Open Ditch	350

The length of the drain due to the changes described above is now 12,349 feet.

The non-enforcement was approved by the Board at its meeting on February 26, 2001 and recorded under instrument #200200027371 and #200200027372. The bonds or letters of credit from Developers Surety and Indemnity Co, number 886067S and 886068S; dated November 29, 2001; in the amounts of \$122,000 and \$20,000; were released September 23, 2002.

I recommend the Board approve the drain's construction as complete and acceptable.

Sincerely,

Kenton C. Ward,

Hamilton County Surveyor

KCW/slm



Kenton C. Ward, Surveyor Phone (317) 776-8495 Fax (317) 776-9628

Suite 188 One Hamilton County Square Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

July 9, 2004

Revised Final: Elliot Creek Drain: The Estates at Clay West Arm

Attached are as-builts, certificate of completion & compliance, and other information for The Estates at Clay West. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated January 24, 2001. The report was approved by the Board at the hearing held February 26, 2001. (See Drainage Board Minutes Book 5, Pages 572-574) The changes are as follows:

						Original	
Structure:		T.C.:	I.E.:	Pipe:	Length:	Plans:	Difference:
	702		880.77				
	703	883.83	880.95	15	5	22	17
	703	883.83	880.77				
	704	885.66	882.02	15	303	300	3
	704	885.66	880.97				
·	705	885.66	882.18	15	22	26	4
	705	885.66	882.07				
	706	886.21	883.07	12	76	80	4
	706	886.21	882.18				
	707		885.1	12	30	39	9
	700		881.12				
	701		882.58	30	150.33	153	2.67
	708		882.45				
	709	887.87	883.35	18	278	289	11
	709	887.87	882.45				
	710	887.78	883.65	15	23	26	3
	710	887.78	883.41				
	711		885.76	12	239	247	8
	712		882.95				
	713	889.52	883.88	18	256	265	9

714	889.73	884.16	12	70	74	4
714	889.73	883.93				
715		885.17	12	274	281	7
726	891.8	888.07				
725	891.8	887.89	12	24	26	2
725	891.8	887.84				
724		884.9	15	290	299	9
713	889.52	885.3				
716	889.07	885.3	12	27	29	2
716	889.07	884.73				
717	889.25	885.41	12	22	26	4
730	891.87					
729	891.9	888.04	12	23	26	3
729	891.9	887.85				
728	892.3	887.87	15	51	55	4
728	892.3	887.53				<u> </u>
727		887.53	15	264	273	9
718		882.98				
719	889.29	886.11	15	174	168	6
719	889.29	882.98				
720	892.25	888.28	15	396	400	4
720	892.25	886.14				<u> </u>
721	893.51	890.61	12	343	346	3
723	889.4	886.07				
722		885.39	12	182	191	-9

6" SSD Streets:

West Sherbern	1810
CA 3 Street	491
CA 2 Street	424
x2	2725

Total: 5450

RCP	Pipe	Totals:
-----	-------------	---------

Tor ripe rotais.	
12	1310
15	1528
18	534
30	150
Open Ditch	350

The length of the drain due to the changes described above is now 9,322 feet.

The non-enforcement was approved by the Board at its meeting on February 26, 2001 and recorded under instrument #200200027371 and #200200027372. The bonds or letters of credit from Developers Surety and Indemnity Co, number 886067S and 886068S; dated November 29, 2001; in the amounts of \$122,000 and \$20,000; were released September 23, 2002.

I recommend the Board approve the drain's construction as complete and acceptable.

Sincerely

Kenton C. Ward,

Hamilton County Surveyor

OWNER/DEVELOPER

THE RESERVE AT SPRING MILL. L.P.

STEVE PITTMAN P.O. BOX 554 CARMEL, IN 46032

Ph. (317) - 580-9693 FAX (317) - 580-9786

AS-BUILT PLANS FOR THE ESTATES OF CLAY WEST



PROJECT DATA

PRESENT ZONING S-1 (1.0) STREET LENGTH = 0.63 MILES STREET DESIGN SPEED = 25 MPH TOTAL ACREAGE = 45.32 Ac.

AXIMUM NUMBER OF LOTS ALLOWED PER ZONING = 1.0(45.32) = 45.32 = > 48TOTAL LOTS PER PLAT = 25 LOTS

TOTAL LOT ACREAGE = 31.27 Ac. MINIMUM OPEN SPACE REQUIREMENT (20% OF TOAL ACREAGE) = $= 0.20 \times 45.32 \text{ Ac.} = 9.06 \text{ Ac.}$

TOTAL POND AREA = 3.66 Ac. TOTAL OPEN SPACE ACREAGE PROVIDED = 8.56 Ac. (18.9%) (INCLUDING 3.66 Ac. OF PONDS)

TOTAL COMMON AREA ACREAGE = 8.56 Ac.

INDEX

SHT	DESCRIPTION					
CS	COVER SHEET					
	SITE PLAN W/ AS-BUILT STORAGE VOLUMES					
C501 C502 C503 C504	SANITARY PLAN & PROFILES SANITARY PLAN & PROFILES SANITARY PLAN & PROFILES SANITARY PLAN & PROFILES					

OCT 0.4 2002

OFFICE OF HAMILTON COUNTY SURVEYOR

BENCHMARKS

PROJECT: DNR BM HAM 62 Located at the West 131st Street bridge over Williams Creek. Set in the top of the northeast concrete wingwall of the bridge, 13.5 feet north of the centerline of West 131st St., 1.1 feet southwest from the northeast end of wingwall, level with the roadway, a Department of Natural Resources control station tablet stamped "HAM 62 1989". ELEVATION = 861.783 (NGVD 1929)

TEMPORARY BENCHMARK A railroad spike in a power pole at the northwest corner of 131st Street and Ditch Road.

CONTACT CO. / PERSON FOR

	NAME	PHONE NO.	FAX NO.
OWNER THE RESERVE	AT SPRING MILL, L.P.	317-580-9693	317-580-9786
PSI	LARRY CASTETTER	317-581-3048	317-581-3031
INDIANA GAS	MARK RIGGS	317-776-5597	317-776-5553
AMERITECH	ERIC MASON	317-252-4274	317-252-5000
HAMILTON WESTERN	JOHN O'MAHONY	317-818-6403	
COUNTY SURVEYOR	KENT WARD	317-776-8495	317-776-9628
CARMEL DOCS	TERRY JONES	317-571-2417	317-571-2462
CARMEL ENGINEER	KAYE BOYLE-WEESE	317-571-2441	317-517-2439
HAMILTON COUNTY SCS	JOHN SOUTH	317-773-1432	317-776-1101
CLAY TOWNSHIP REG WASTE	JAY ALLEY	317-844-9200	317-844-9203



PROJECT LAND PLANNER QUALITY ASSURANCE

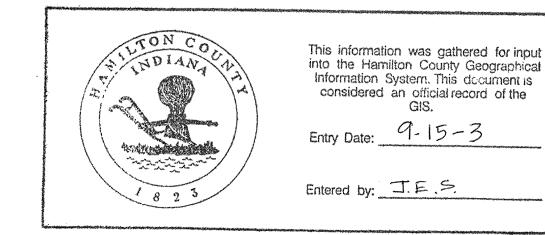
ELEVATION = 890.44

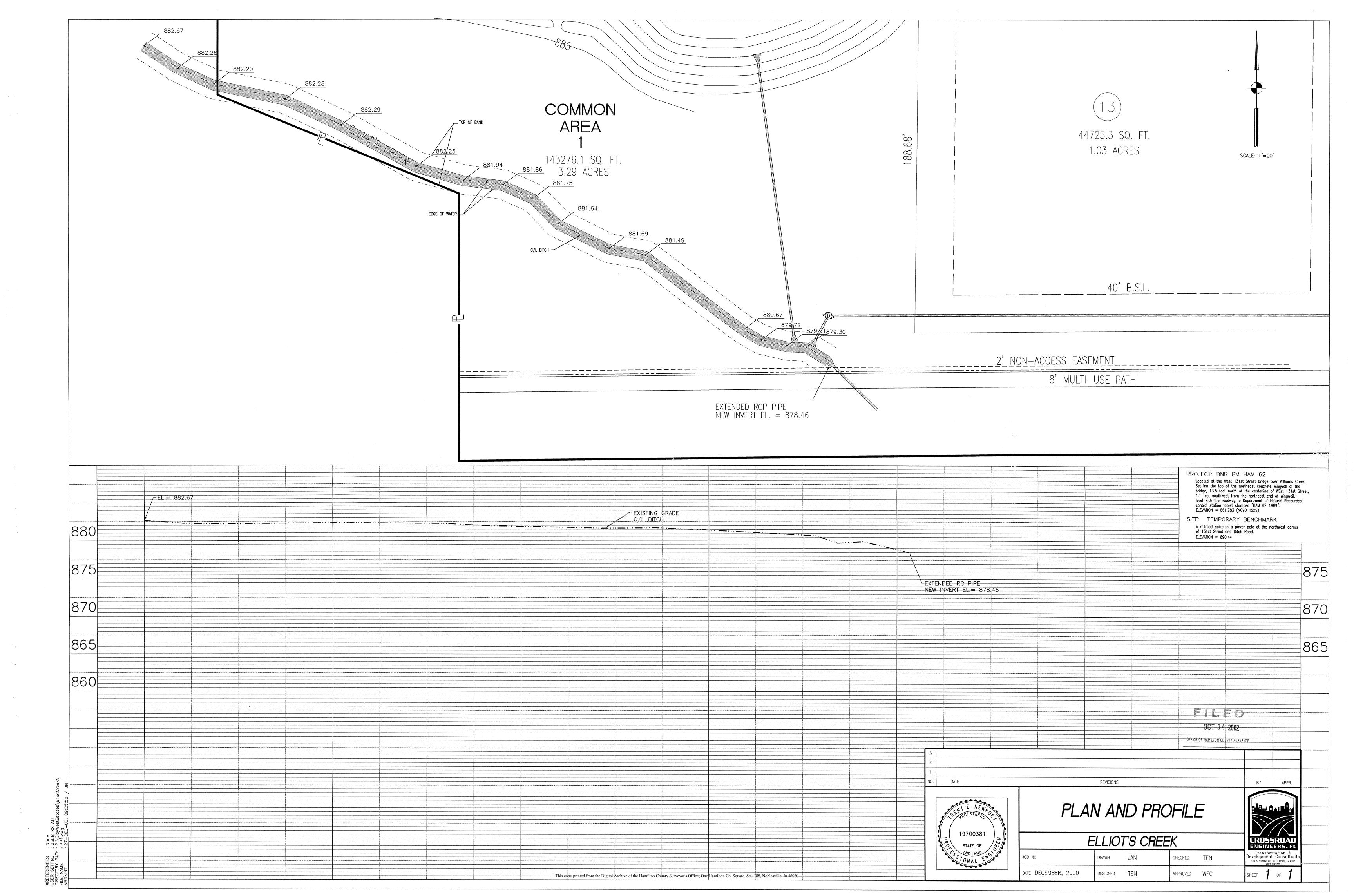
PAUL I. CRIPE TEAM	317-842-6777	FAX-841-4798 EXT. NO.
PROJECT MGR	RICH KELLY	662
PROJECT ENGR	RICK RADABAUGH	651
PROJECT ENGR	MARK LOTT	676

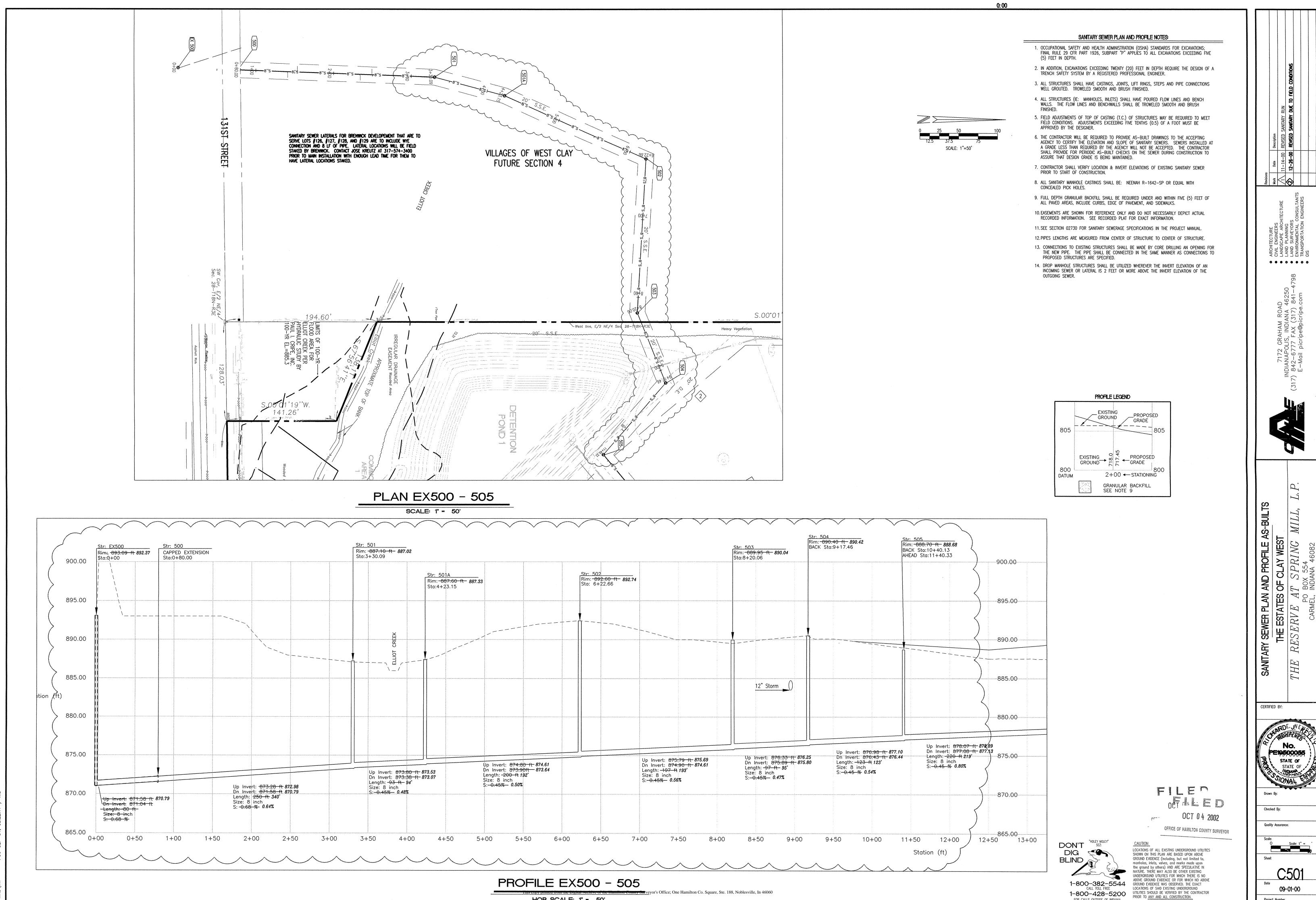
622 TOM SCHELLENBERGER FILE NUMBER Project Number

"HOLEY MOLEY" SAYS CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU DIG IT'S THE LAW 1-800-382-5544 1-800-428-5200

000389-20000







HOR. SCALE: 1" = 50"

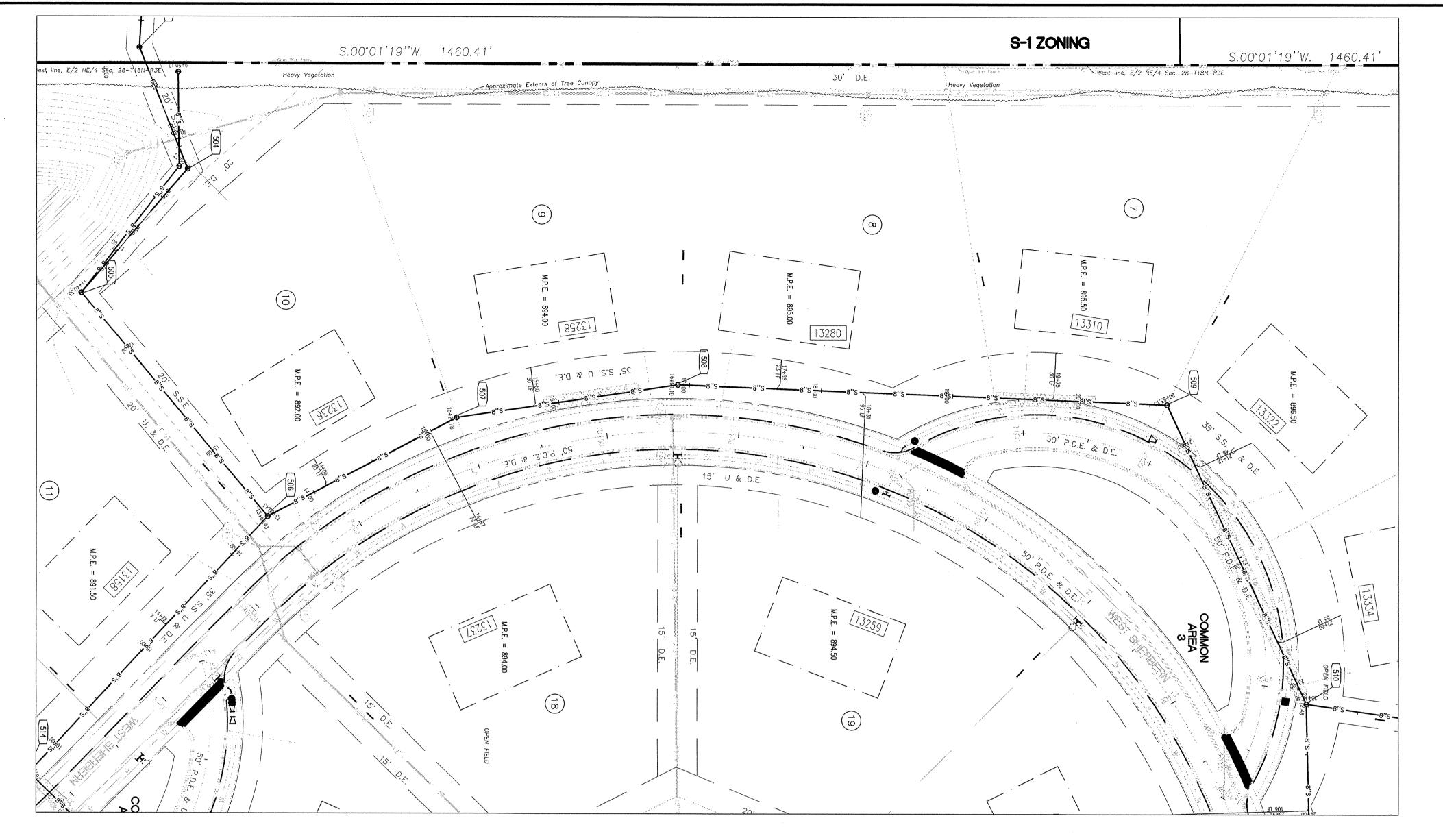
VER. SCALE: 1" = 5"

09-01-00 Project Number

000389-20000

THE

SCALE: 1"=50'



PLAN 505-510

SCALE: 1" = 50'

Str: 506 Rim: 889.80 ft 889.44 Str: 507 Rim: 891.90 ft **891.72** Str: 509 Rim: 894.50 ft **894.39** Sta:20+63.15 Str: 510 Rim: 893.10 ft **893.00** Sta:15+21.78 sta:23+12.48 900.00 895.00 Water 0 890.00 885.00 IE: 883.26 880.00 Up Invert: 881,94 ft 882.63
Dn Invert: 880,27 ft 881.01
Length: 372 ft 370'
Size: 8 inch
S: 0.45 % 0.43% Up Invert: 883.16 ft 883.91 Dn Invert: 882.04 ft 882.74 Up Invert: 880.17 ft *880.87* Dn Invert: 879.40 ft *879.86* Up Invert: 879.30 ft **879.71** Dn Invert: 878.58 ft **878.91** Length: 249 ft 245' Size: 8 inch S: 0.45 % 0.47% Length: 469 ft 166' Size: 8 inch S: 0.45 % 0.60% IE: 878.58 Length: 161 ft 156' Size: 8 inch S: 0.45 % 0.51% 878.97 875.00 870.00

PROFILE 505-510

HOR. SCALE: 1" = 50' VER. SCALE: 1" = 5'

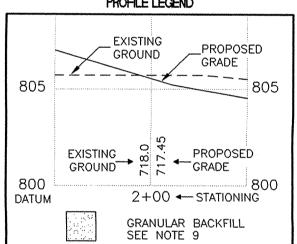
Digital Archive of the Hamilton County Surveyor's Office; One Hamilton Co. Square, Ste. 188, Noblesville, In 46060

SANITARY SEWER PLAN AND PROFILE NOTES:

WELL GROUTED. TROWELED SMOOTH AND BRUSH FINISHED.

- 1. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE
- 2. IN ADDITION, EXCAVATIONS EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A
- TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER. 3. ALL STRUCTURES SHALL HAVE CASTINGS, JOINTS, LIFT RINGS, STEPS AND PIPE CONNECTIONS
- 4. ALL STRUCTURES (IE: MANHOLES, INLETS) SHALL HAVE POURED FLOW LINES AND BENCH WALLS. THE FLOW LINES AND BENCHWALLS SHALL BE TROWELED SMOOTH AND BRUSH
- 5. FIELD ADJUSTMENTS OF TOP OF CASTING (T.C.) OF STRUCTURES MAY BE REQUIRED TO MEET FIELD CONDITIONS. ADJUSTMENTS EXCEEDING FIVE TENTHS (0.5) OF A FOOT MUST BE APPROVED BY THE DESIGNER.
- 6. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE AS-BUILT DRAWINGS TO THE ACCEPTING AGENCY TO CERTIFY THE ELEVATION AND SLOPE OF SANITARY SEWERS. SEWERS INSTALLED AT A GRADE LESS THAN REQUIRED BY THE AGENCY WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL PROVIDE FOR PERIODIC AS-BUILT CHECKS ON THE SEWER DURING CONSTRUCTION TO ASSURE THAT DESIGN GRADE IS BEING MAINTAINED.
- 7. CONTRACTOR SHALL VERIFY LOCATION & INVERT ELEVATIONS OF EXISTING SANITARY SEWER PRIOR TO START OF CONSTRUCTION.
- 8. ALL SANITARY MANHOLE CASTINGS SHALL BE: NEENAH R-1642-SP OR EQUAL WITH CONCEALED PICK HOLES.
- 9. FULL DEPTH GRANULAR BACKFILL SHALL BE REQUIRED UNDER AND WITHIN FIVE (5) FEET OF ALL PAVED AREAS, INCLUDE CURBS, EDGE OF PAVEMENT, AND SIDEWALKS.
- 10. EASEMENTS ARE SHOWN FOR REFERENCE ONLY AND DO NOT NECESSARILY DEPICT ACTUAL
- RECORDED INFORMATION. SEE RECORDED PLAT FOR EXACT INFORMATION. 11. SEE SECTION 02730 FOR SANITARY SEWERAGE SPECIFICATIONS IN THE PROJECT MANUAL.
- 12. PIPES LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 13. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE BY CORE DRILLING AN OPENING FOR THE NEW PIPE. THE PIPE SHALL BE CONNECTED IN THE SAME MANNER AS CONNECTIONS TO PROPOSED STRUCTURES ARE SPECIFIED.
- 14. DROP MANHOLE STRUCTURES SHALL BE UTILIZED WHEREVER THE INVERT ELEVATION OF AN INCOMING SEWER OR LATERAL IS 2 FEET OR MORE ABOVE THE INVERT ELEVATION OF THE OUTGOING SEWER.

PROFILE LEGEND



OFFICE OF HAMILTON COUNTY SURVEYOR



LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE 1-800-382-5544
CALL TOLL FREE
1-800-428-5200
FOR CALLS OUTSIDE OF INDIANA

ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

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SANITARY SEWER PLAN AND PROFILE AS-BUILTS

THE ESTATES OF CLAY WEST

THE RESERVE AT SPRING MILL, L.

PO BOX 554

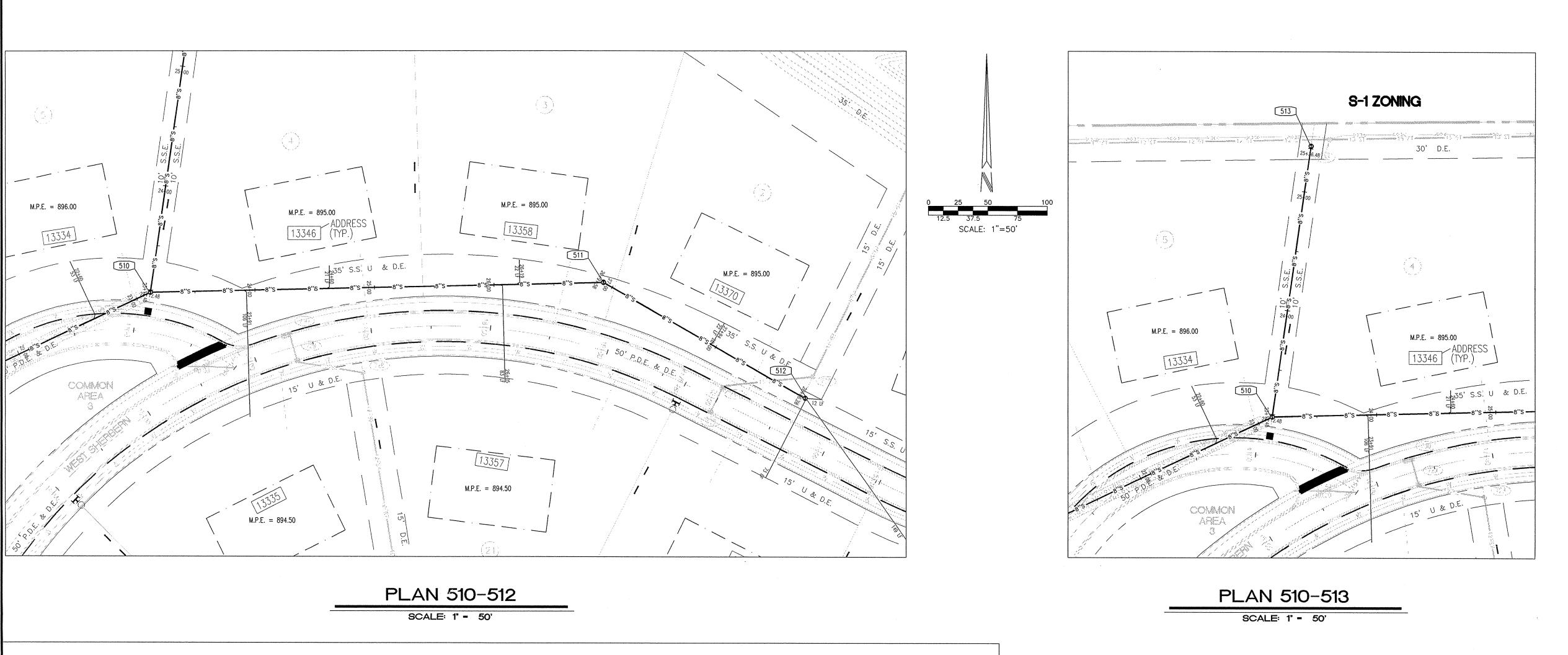
CARMEL, INDIANA 46082

CERTIFIED BY: 19700381

Checked By:

Quality Assurance:

09-01-00



Str: 512 Rim: 892.60 ft *892.76* Sta:28+86.28

900.00

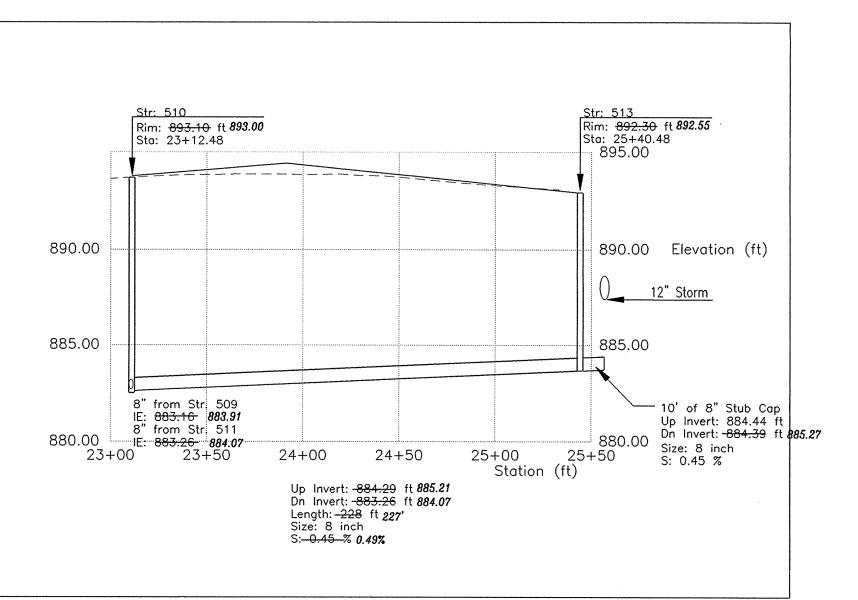
895.00

890.00

880.00

875.00

Elevation (ft)



PROFILE 510-513

HOR. SCALE: 1" = 50' VER. SCALE: 1" = 5'

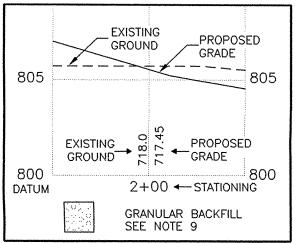
SANITARY SEWER PLAN AND PROFILE NOTES:

- 1. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE
- 2. IN ADDITION, EXCAVATIONS EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A
- TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER. 3. ALL STRUCTURES SHALL HAVE CASTINGS, JOINTS, LIFT RINGS, STEPS AND PIPE CONNECTIONS WELL GROUTED. TROWELED SMOOTH AND BRUSH FINISHED.
- 4. ALL STRUCTURES (IE: MANHOLES, INLETS) SHALL HAVE POURED FLOW LINES AND BENCH WALLS. THE FLOW LINES AND BENCHWALLS SHALL BE TROWELED SMOOTH AND BRUSH
- 5. FIELD ADJUSTMENTS OF TOP OF CASTING (T.C.) OF STRUCTURES MAY BE REQUIRED TO MEET FIELD CONDITIONS. ADJUSTMENTS EXCEEDING FIVE TENTHS (0.5) OF A FOOT MUST BE APPROVED BY THE DESIGNER.
- 6. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE AS-BUILT DRAWINGS TO THE ACCEPTING AGENCY TO CERTIFY THE ELEVATION AND SLOPE OF SANITARY SEWERS. SEWERS INSTALLED AT A GRADE LESS THAN REQUIRED BY THE AGENCY WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL PROVIDE FOR PERIODIC AS-BUILT CHECKS ON THE SEWER DURING CONSTRUCTION TO ASSURE THAT DESIGN GRADE IS BEING MAINTAINED.
- 7. CONTRACTOR SHALL VERIFY LOCATION & INVERT ELEVATIONS OF EXISTING SANITARY SEWER PRIOR TO START OF CONSTRUCTION.
- 8. ALL SANITARY MANHOLE CASTINGS SHALL BE: NEENAH R-1642-SP OR EQUAL WITH CONCEALED PICK HOLES.
- 9. FULL DEPTH GRANULAR BACKFILL SHALL BE REQUIRED UNDER AND WITHIN FIVE (5) FEET OF ALL PAVED AREAS, INCLUDE CURBS, EDGE OF PAVEMENT, AND SIDEWALKS.
- 10. EASEMENTS ARE SHOWN FOR REFERENCE ONLY AND DO NOT NECESSARILY DEPICT ACTUAL RECORDED INFORMATION. SEE RECORDED PLAT FOR EXACT INFORMATION.
- 11. SEE SECTION 02730 FOR SANITARY SEWERAGE SPECIFICATIONS IN THE PROJECT MANUAL.
- 12. PIPES LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. 13. CONNECTIONS TO EXISTING STRUCTURES SHALL BE MADE BY CORE DRILLING AN OPENING FOR THE NEW PIPE. THE PIPE SHALL BE CONNECTED IN THE SAME MANNER AS CONNECTIONS TO

PROPOSED STRUCTURES ARE SPECIFIED.

14. DROP MANHOLE STRUCTURES SHALL BE UTILIZED WHEREVER THE INVERT ELEVATION OF AN INCOMING SEWER OR LATERAL IS 2 FEET OR MORE ABOVE THE INVERT ELEVATION OF THE OUTGOING SEWER.

PROFILE LEGEND



OCT 04 2002

OFFICE OF HAMILTON COUNTY SURVEYOR



LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE 1-800-382-5544
CALL TOLL FREE
1-800-428-5200
FOR CALLS OUTSIDE OF INDIANA

ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

PROFILE 510-512

HOR. SCALE: 1" = 50" VER. SCALE: 1" = 5"

Str: 511 Rim: 893.30 ft **893.14** Sta:26+91.58

Up Invert: 885.95 ft 886.58

Dn Invert: -885.07 ft 885.83

Length: 195 ft 190' Size: 8 inch S: 0.45 % 0.55%

15" Storm

Up Invert: <u>884.97</u> ft *885.71* Dn Invert: <u>883.26</u> ft *884.07*

Length: 379 ft 374' Size: 8 inch S: 0.45 0.43%

Str: 510 Rim: 893.10 ft **893.00** sta:23+12.48

Water

8" from Str. 513

IE: 883.26 884.08

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SANITARY SEWER PLAN AND PROFILE AS-BUILTS

THE ESTATES OF CLAY WEST

THE RESERVE AT SPRING MILL, L.
PO BOX 554
CARMEL, INDIANA 46082

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CERTIFIED BY: 19700381 SSIONAL

Drawn By: Checked By:

09-01-00 Project Number 000389-20000

Revisio Mark

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THE ESTATES OF CLAY WEST

THE ESTATES OF CLAY WEST

RESERVE AT SPRING MILL,

PO BOX 554

CARMEL, INDIANA 46082

FAX: (31)

CERTIFIED BY:

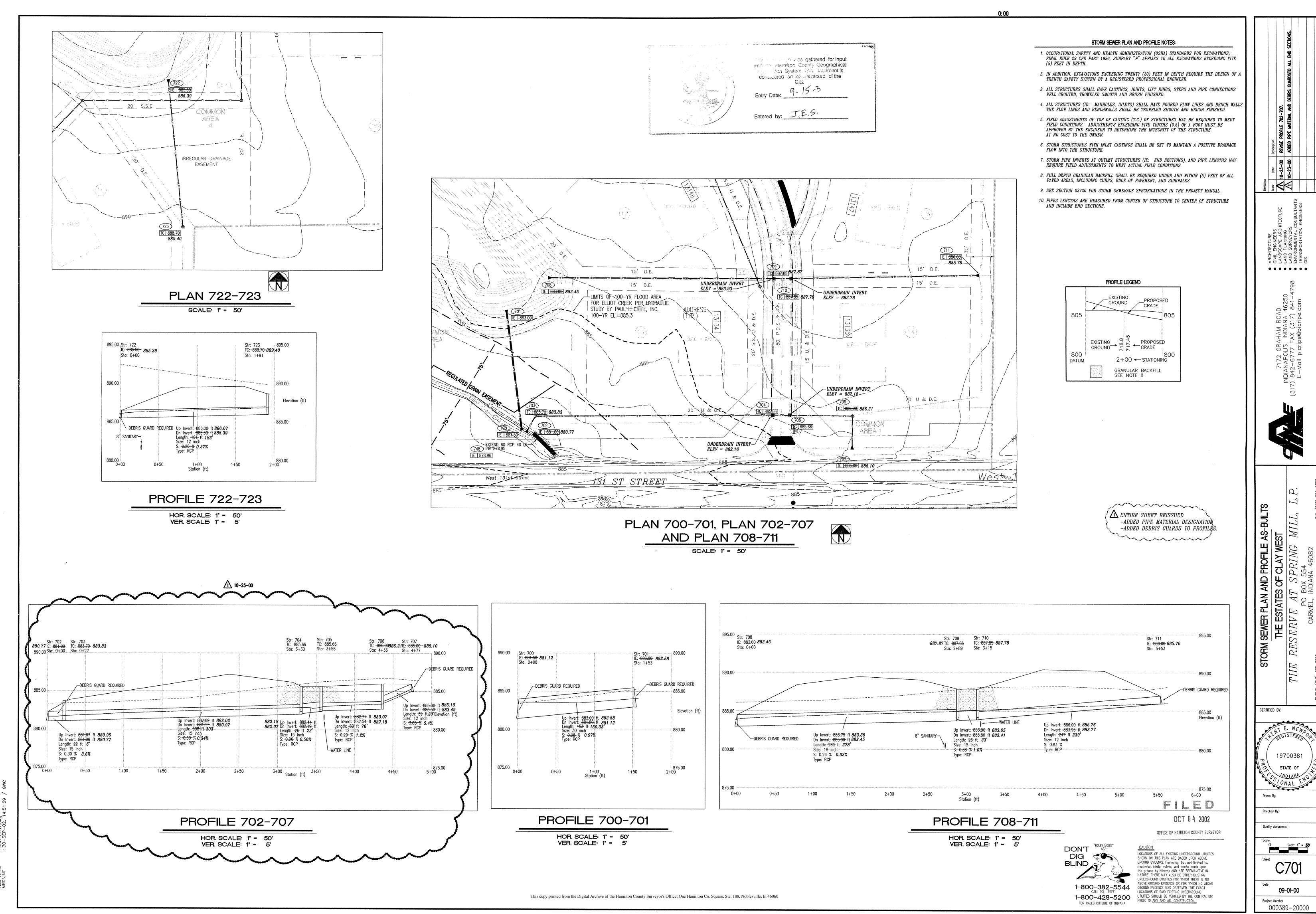
REGISTERED OF 19700381 STATE OF CS ONAL EN

Checked By:

Quality Assurance:

09-01-00

Project Number 000389-20000



: SHEET; SB-00389; : USER XX ALL :TH : P:\ClayWestEstates\ :ASB-c701.dwg :30-SEP-02, 14:51:

XREFERENCES : SHEET; SB+00389; W783TOPO; STM USER SETTING : USER XX ALL DIRECTORY PATH : P:\ClawMestFstates\ASRUII T\Plans\

PROFILE 718-721

VER. SCALE: 1" = 5'
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HOR. SCALE: 1" = 50"

OCT 04 2002 OFFICE OF HAMILTON COUNTY SURVEYOR

DON'T DIG BLIND 1-800-382-5544

LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EMDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE 1-800-428-5200
FOR CALLS OUTSIDE OF INDIANA

UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

Project Number 000389-20000

09-01-00

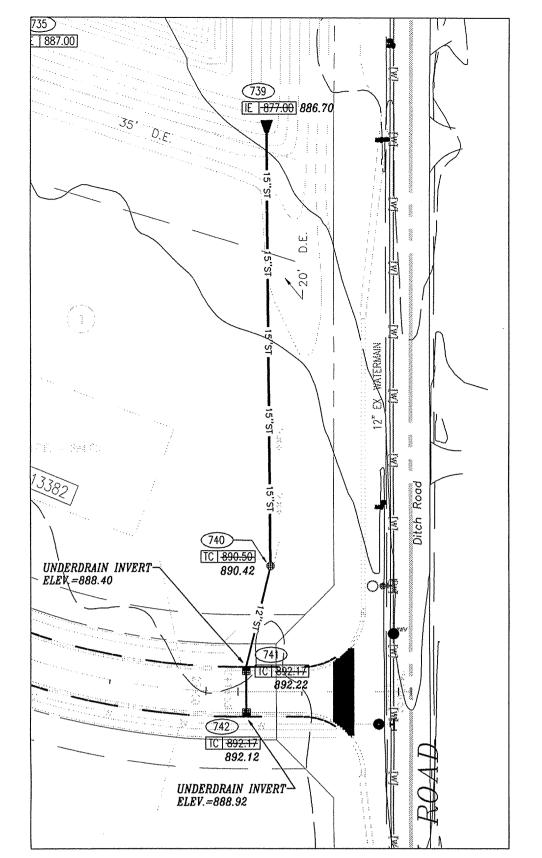
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172 GRAHAM ROAL JAPOLIS, INDIANA 4 -6777 FAX (317)

71. VDIANA 842—(E-Mai

Z C



SCALE: 1" - 50'

N 59'44'03" E 23.98'

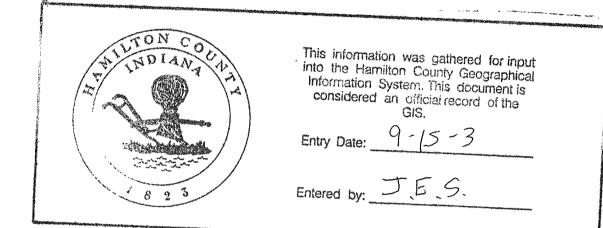
N 54'07'34" E 12.09'

Str: 740 Str: 741 Str: 742
TC: 890.50 890.42 TC: 892.17 892.22 TC: 892.17 892.12 Str: 739 IE: 887.00.**886**.70 Sta: 2+30 Sta: 2+84 Sta: 3+10 895.00 895.00 Sta: 0+00 890.00 890.00 Elevation (ft) 388.47 Up Invert: 888.40 ft Up Invert: 888.60 ft 888.67 887.68 Dn Invert: 887.70-ft Dn Invert: 888.50 ft 888.47 Length: 54 ft 49' Length: 26 ft 22' Dn Invert: 887.00 ft 886.70 -DEBRIS GUARD REQUIRED Length: 230 ft 220' Size: 12 inch S: -1.30 % 1.6% Size: 12 inch S: -0.38 % 0.90% 885.00 2+50 Type: RCP 3+00 Type: RCP 3+50 885.00 0+00 Size: 15 inch 1+00 S: 0.26 % **0.44**%+50 Station (ft) 2+00

PROFILE 739-742

HOR. SCALE: 1" = 50'

VER. SCALE: 1" = 5"



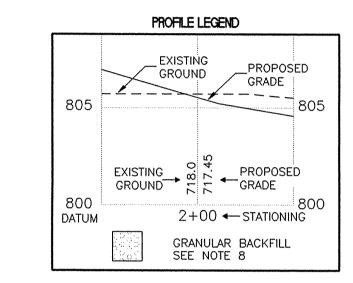
STORM SEWER PLAN AND PROFILE NOTES:

- 1. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
- 2. IN ADDITION, EXCAVATIONS EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
- 3. ALL STRUCTURES SHALL HAVE CASTINGS, JOINTS, LIFT RINGS, STEPS AND PIPE CONNECTIONS
- WELL GROUTED, TROWELED SMOOTH AND BRUSH FINISHED. 4. ALL STRUCTURES (IE: MANHOLES, INLETS) SHALL HAVE POURED FLOW LINES AND BENCH WALLS.
- THE FLOW LINES AND BENCHWALLS SHALL BE TROWELED SMOOTH AND BRUSH FINISHED. 5. FIELD ADJUSTMENTS OF TOP OF CASTING (T.C.) OF STRUCTURES MAY BE REQUIRED TO MEET FIELD CONDITIONS. ADJUSTMENTS EXCEEDING FIVE TENTHS (0.5) OF A FOOT MUST BE APPROVED BY THE ENGINEER TO DETERMINE THE INTEGRITY OF THE STRUCTURE.
- 6. STORM STRUCTURES WITH INLET CASTINGS SHALL BE SET TO MAINTAIN A POSITIVE DRAINAGE FLOW INTO THE STRUCTURE.

AT NO COST TO THE OWNER.

- 7. STORM PIPE INVERTS AT OUTLET STRUCTURES (IE: END SECTIONS), AND PIPE LENGTHS MAY REQUIRE FIELD ADJUSTMENTS TO MEET ACTUAL FIELD CONDITIONS.
- 8. FULL DEPTH GRANULAR BACKFILL SHALL BE REQUIRED UNDER AND WITHIN (5) FEET OF ALL
- PAVED AREAS, INCLUDING CURBS, EDGE OF PAVEMENT, AND SIDEWALKS. 9. SEE SECTION 02720 FOR STORM SEWERAGE SPECIFICATIONS IN THE PROJECT MANUAL.

10. PIPES LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND INCLUDE END SECTIONS.



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172 GRAHAM ROAL JAPOLIS, INDIANA 4 -6777 FAX (317)

PROFILE A CLAY WES PRING 554

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SEWER PLAN /
THE ESTATES

CERTIFIED BY:

QE REGISTERED OF

19700381

COS ONAL ENG

Drawn By:

Checked By:

Quality Assurance:

09-01-00

000389-20000

RES.

HE

PLAN 739-743

746 TC | 892.25 EMMON -AREA

Str: 746 Str: 747 TC: 892:25 **892.23** IE: 887:00 **886.77** Label: 744 TC: 887.50**887.73** Str: 745 TC: 890.50 890.14 IE: -834.00884.79 895.00 Sta: 0+00 Sta: 4+93 m annual proposition where some some some 890.00 --DEBRIS GUARD Elevation (ft) Up Invert: 887.00 ft **886.77** Dn Invert: 886.55 ft **886.36** 885.00 Up Invert: 886.51 ft 886.35 Up Invert: 885.45 ft **885.64** Dn Invert: 884.38 ft **884.97** Length: 178 ft **179** Dn Invert: 885.45 ft 885.69 Length: 75 ft 54' Size: 18 inch Length: 477 ft 175' Up Invert: 884.38 ft 884.96 Size: 18 inch S: 0.60 % **0.38%** S: 0.60-% **0.76%** Type: RCP Dn Invert: 884.00 ft 884.79 Size: 18 inch S:-0.60-% 0.37% Leigth: -63- ft 50' Type: RCP Size: 18 inch Type: RCP S: 0.60- % **0.34%** 880.00 Type: RCP 0+00 0+50 4+50 Station (ft)

> PROFILE 743-747 HOR. SCALE: 1" - 50'

VER. SCALE: 1" = 5'

STORM SEWER STRUCTURE DATA TABLE

STORM SEWER PIPE DATA TABLE

1. THE DEPTH OF THE STRUCTURE IS CALCULATED FROM THE TC OR RIM ELEVATION TO THE INVERT OUT.

- 2. THE PIPE LENGTHS ARE FROM THE CENTER OF THE STRUCTURE TO THE CENTER OF THE STRUCTURE
- AND INCLUDE END SECTIONS. 3. SEE STORM SEWER PLAN & PROFILES SHEETS TO CONFIRM PIPE LENGTHS AND STRUCTURE INFORMATION
- PRIOR TO FABRICATION. 4. HAMILTON COUNTY REGULATED DRAIN DESIGN DETAILS AND STANDARDS APPLY.
- 5. STRUCTURES DEEPER THAN 48" FROM TC OR RIM TO INVERT WILL BE A MANHOLE OR A BOX WITH STEPS UNLESS APPROVED.
- 6. COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET, TO IMPROVE ACCESS.

STORM STRUCTURE DATA

* A ENTIRE SHEET REISSUED -ADDED PIPE MATERIAL DESIGNATION -ADDED DEBRIS GUARDS TO PROFILES.

OCT 0 4 2002



OFFICE OF HAMILTON COUNTY SURVEYOR LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, volves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND 1-800-428-5200

FOR CALLS QUISINE OF INDIANA

OF THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

PLAN 743-747

PONES

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