APPENDIX N SEWER LINE VIDEO SURVEY REPORT

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FILE: WILL TOP6



Science Applications International Corporation

An Employee-Owned Company

September 5, 2002

Mr. Glen Beckham U.S. Army Corps of Engineers, Louisville District ATTN: CELRL-PM-M 600 Martin Luther King, Jr. Place P.O. Box 59 Louisville, Kentucky 40202-0059

Reference: Contract No. DACA 62-00-D-0001, Delivery Order No. CY06

Contract No. DACA 27-97-D-0025, Delivery Order No. 0003

Contract No. F44650-99-0007, ECAS 186

Subject: Storm and Sanitary Sewer Video Survey Data for Phase II Remedial

Investigations (RIs) at Load Lines 1, 2, 3, 4 and 12

Dear Mr. Beckham:

Enclosed for your records are video tape logs and paper copies of the project logs for the storm and sanitary sewer camera surveys conducted at Load Lines 1, 2, 3, 4, and 12. In addition, data provided for Load Lines 2, 3, and 4 includes a compact disk containing digital photographic records of the camera surveys. These surveys were performed as part of the Phase II RI field investigations at each of the facilities. Transmittal of these data completes a key action item derived from the July 17, 2002, comment response meeting for the draft Phase II RI report for Load Line 1. Science Applications International Corporation appreciates the opportunity to provide these services to the U.S. Corps of Engineers, Louisville District and RVAAP.

If you have questions or comments, please feel free to contact me at (865) 481-4614.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Kevin Jago

Project Manager

cc: John Jent - USACE

cc w/o Enclosure: Ike Diggs - SAIC

Mark Patterson – OSC Martha Turpin – SAIC Bob Whelove – OSC

Project File SAIC CRF

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION	PIPE SIZE	TAPE #
1	08/09/2001	Ravenna Army	Load Line 4	GA 17	East	51.39	12"	003
2	08/09/2001	Ravenna Army	Load Line 4	GA 17	West	51.69	12"	003
3	08/09/2001	Ravenna Army	Load Line 4	GA 17	North	28.93	18"	003
4	08/09/2001	Ravenna Army	Load Line 4	GA 17	South	50.4	18"	003
5	08/09/2001	Ravenna Army	Load Line 4	Mh 10	South	174.76	18"	003
6	08/09/2001	Ravenna Army	Load Line 4	MH 9	South	104.28	18"	003
7	08/09/2001	Ravenna Army	Load Line 4	MH 15	West	175.56	24"	003
8	08/09/2001	Ravenna Army	Load Line 4	MH 11	5	66.5	24"	003
9	08/09/2001	Ravenna Army	Load Line 4	5	7	14.91	24"	003
10	08/09/2001	Ravenna Army	Load Line 4	11	12	100.4	24"	003
11	08/09/2001	Ravenna Army	Load Line 2	D.A. 12	B-3	173.77	15"	004
12	08/09/2001	Ravenna Army	Load Line 2	D.B. 12	B-3	254.49	24"	004
13	08/09/2001	Ravenna Army	Load Line 3	E.H. 5	E.H. 4	117.7	12"	005
14	08/09/2001	Ravenna Army	Load Line 3	E.H. 4	E.H. 3	102.59	12"	005
15	08/09/2001	Ravenna Army	Load Line 3	E.H. 5	E.H. 6	102.79	12"	005
16	08/09/2001	Ravenna Army	Load Line 3	E.H. 6	E.H.7	2.88	12"	005
17	08/09/2001	Ravenna Army	Load Line 3	409	West	46.03	10"	005
18	08/09/2001	Ravenna Army	Load Line 3	409	East	13.72	10"	005
19	08/09/2001	Ravenna Army	Load Line 4	W6	W5	213.33	8"	003
20	08/09/2001	Ravenna Army	Load Line 4	W5	W4	30.52	8"	003
21	08/09/2001	Ravenna Army	Load Line 4	W3-1	North	4	8"	003
22	08/09/2001	Ravenna Army	Load Line 4	E4	Southwest	144.54	8"	003
23	08/09/2001	Ravenna Army	Load Line 4	E4	North	113.03	8"	003

2138.21 FT



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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 69	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

005

Ravenna

MAP #1:

CITY:

TV'D LGTH:

117.7 FT

STREET: Load Line 3

MAP #2:

MH:

E.H. 5

LOCALE: EASEMENT

TAPE #:

MH:

E.H. 4

INSPECT REASON:

OTHER

PIPE SIZE:

12"

SECTION TYPE:

MATERIAL:

VCP

JT LGTH:

AREA:

STORMWATER

Ravenna Army Ammunition Plant

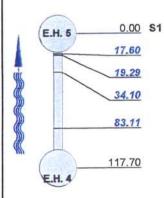
LINING:

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



inspection begins at downstream manhole, START

Longitudinal Crack, at 02 o'clock

Longitudinal Crack, at 08 o'clock

Longitudinal Crack, at 09 o'clock

Multiple Cracks, from 02 to 05 o'clock

inspection ends at upstream manhole, END



17.6 FT //



19.29 FT //



34.1 FT //



83.11 FT //



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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 70	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

005

CITY:

Ravenna

STREET: Load Line 3

LOCALE: EASEMENT

INSPECT REASON: OTHER

SECTION TYPE:

STORMWATER

Ravenna Army Ammunition Plant

TV'D LGTH:

102.59 FT

MH: MH: E.H. 4

E.H. 3

12"

PIPE SIZE: MATERIAL:

VCP JT LGTH:

LINING: RSRVD:

AREA: REMARK:

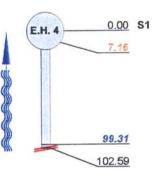
1:1000POSITION

OBSERVATION

MAP #1:

MAP #2:

TAPE #:



inspection begins at downstream manhole, START

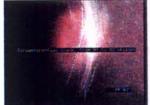
debris Heavy!!!!



camera blocked, inspection abandoned, END Heavy Rocks!!!!!!!









102.59 FT //



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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 71	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 0

005

CITY: F

Ravenna

STREET: Load Line 3

LOCALE: EASEMENT

INSPECT REASON:

MAP #1:

MAP #2:

TAPE #:

TV'D LGTH:

102.79 FT

MH:

E.H. 5 E.H. 6

OTHER

SECTION TYPE:

STORMWATER

PIPE SIZE: MATERIAL: 12"

V

VCP JT LGTH:

AREA:

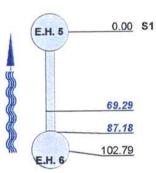
Ravenna Army Ammunition Plant

LINING: RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



inspection begins at downstream manhole, START

Longitudinal Crack, at 10 o'clock Longitudinal Crack, at 02 o'clock

inspection ends at upstream manhole, END



69.29 FT //



87.18 FT /



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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 72	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

CITY:

Ravenna

STREET: Load Line 3

LOCALE: EASEMENT

MAP #1:

MAP #2: TAPE #:

005

TV'D LGTH:

MH:

MH:

E.H. 6 E.H.7

2.88 FT

INSPECT REASON:

OTHER

SECTION TYPE:

STORMWATER

Ravenna Army Ammunition Plant

PIPE SIZE:

MATERIAL: LINING:

VCP JT LGTH:

RSRVD:

AREA: REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 E.H. 6 2.19 2.88

inspection begins at downstream manhole, START

camera blocked, inspection abandoned, END Debris too heavy!!!





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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 73	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 230

CITY:

Ravenna

MAP #1: MAP #2: TAPE #: TV'D LGTH:

46.03 FT

005

MH: MH:

409

INSPECT REASON:

STREET: Load Line 3

LOCALE: EASEMENT

OTHER

PIPE SIZE:

West

MATERIAL:

10" VCP

JT LGTH:

SECTION TYPE:

STORMWATER

Ravenna Army Ammunition Plant

LINING:

RSRVD:

AREA: REMARK:

1:1000POSITION

OBSERVATION

0.00 S1 409 34.79 46.03

inspection begins at upstream manhole, START

roots medium

camera blocked, inspection abandoned, END Roots too heavy!!!!!!!







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INSPECTION REPORT

DATE: 08/09/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 74	SECTION NAME
PRESENT:	VEHICLE:	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 740

005

CITY: Ravenna

MAP #1:

TV'D LGTH:

13.72 FT

STREET: Load Line 3

MAP #2: TAPE #: MH: MH: 409

INSPECT REASON: (

OTHER

PIPE SIZE:

East

SECTION TYPE:

STORMWATER

MATERIAL:

10" VCP

JT LGTH:

AREA:

Ravenna Army Ammunition Plant

LINING: RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 S1

inspection begins at downstream manhole, START



15.71 FT //



15.71 FT //

AGE: 2

	DATE	AREA	STREET	FROM MANHOLE	TO MANHOLE	SECTION	PIPE SIZE	TAPE #
1	08/08/2001	Ravenna Army	Load Line 3	E.B. 20	North	53.08	12"	002
2	08/08/2001	Ravenna Army	Load Line 3	E.B. 20	East	27.34	12"	002
3	08/08/2001	Ravenna Army	Load Line 3	E.B 21	North	50.3	12"	002
4	08/08/2001	Ravenna Army	Load Line 3	E.B. 21	South	8.45	12"	002
5	08/08/2001	Ravenna Army	Load Line 3	E.B. 21	East	53.48	12"	002
6	08/08/2001	Ravenna Army	Load Line 3	E.H. 13	North	52.99	12"	002
7	08/08/2001	Ravenna Army	Load Line 3	E.H 13	South	52.19	12"	002
8	08/08/2001	Ravenna Army	Load Line 3	E.H. 13	East	51.49	12"	002
9	08/08/2001	Ravenna Army	Load Line 3	E.H. 13	East	9.64	24"	002
10	08/08/2001	Ravenna Army	Load Line 3	E.H 13	West	12.43	24"	002
11	08/08/2001	Ravenna Army	Load Line 3	E.B. 4	North	8.65	12"	002
12	08/08/2001	Ravenna Army	Load Line 3	E.B. 4	South	52.69	12"	002
13	08/08/2001	Ravenna Army	Load Line 3	419	South	54.87	8"	002
14	08/08/2001	Ravenna Army	Load Line 3	419	East	51.39	8"	002
15	08/08/2001	Ravenna Army	Load Line 3	424	West	39.47	8"	002
16	08/08/2001	Ravenna Army	Load Line 3	424	South	51.39	8"	002
17	08/08/2001	Ravenna Army	Load Line 3	404	West	51.79	10"	002
18	08/08/2001	Ravenna Army	Load Line 3	404	East	51.2	10"	002
19	08/08/2001	Ravenna Army	Load Line 3	427	West	177.05	8"	002
20	08/08/2001	Ravenna Army	Load Line 3	427	North	26.44	8"	002
21	08/08/2001	Ravenna Army	Load Line 4	E2	Northeast	1	8"	003
22		Ravenna Army	Load Line 4	E6	South	51	8"	003
23		Ravenna Army	Load Line 4	E6	East	10.44	8"	003
24	08/08/2001	Ravenna Army	Load Line 4	C/B 13	West	25.85	8"	003
25		Ravenna Army	Load Line 4	C/B 13	East	52.19	8"	003



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 32	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

002

CITY:

Ravenna

MAP #1:

TV'D LGTH:

STREET: Load Line 3

MAP #2:

MH:

53.08 FT

LOCALE: EASEMENT

TAPE #:

MH:

E.B. 20 North

INSPECT REASON:

OTHER

PIPE SIZE:

12"

SECTION TYPE:

STORMWATER

MATERIAL:

VCP

JT LGTH:

AREA:

Ravenna Army Ammunition Plant

LINING:

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 E.B. 20 22.86 22.96 25.15 53.08

inspection begins at downstream manhole, START

Longitudinal Crack, at 09 o'clock

Longitudinal Crack, at 03 o'clock

Longitudinal Crack, at 10 o'clock

inspection abandoned, END Seen Enough!!!!!



22.86 FT //



22.96 FT //



25.15 FT //



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 33	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

002

CITY: Ravenna

STREET: Load Line 3

MAP #2:

LOCALE: EASEMENT

TV'D LGTH:

27.34 FT

MH: MH:

STEEL

E.B. 20 East

INSPECT REASON:

OTHER

STORMWATER

PIPE SIZE: MATERIAL: 12"

SECTION TYPE:

LINING:

JT LGTH:

AREA:

Ravenna Army Ammunition Plant

RSRVD:

MAP #1:

TAPE #:

REMARK:

1:1000POSITION

OBSERVATION

0.00 S1 E.B. 20 8.05 27.34

inspection begins at downstream manhole, START

debris Heavy!!!!!!!

camera blocked, inspection abandoned, END too dirty to pass



N-13

3E: 2



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50.3 FT

E.B 21

North

TV'D LGTH:

INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

CITY: Ravenna MAP #1: STREET: Load Line 3

MAP #2: MH:

LOCALE: EASEMENT TAPE #: 002 MH:

INSPECT REASON: OTHER PIPE SIZE: 12" JT LGTH: MATERIAL: STEEL STORMWATER SECTION TYPE:

LINING: Ravenna Army Ammunition Plant AREA: RSRVD:

REMARK:

1:1000POSITION

50.30

OBSERVATION

0.00 S1 inspection begins at upstream manhole, START E.B 21

debris Heavy!!!!

inspection abandoned, END Seen Eough!!!!!!



N-14



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 35	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

002

CITY:

Ravenna

MAP #1:

TV'D LGTH:

8.45 FT

STREET: Load Line 3

MAP #2:

MH:

E.B. 21

LOCALE: EASEMENT

TAPE #:

MH:

South

INSPECT REASON:

OTHER

PIPE SIZE: MATERIAL: 12" STEEL

JT LGTH:

SECTION TYPE:

STORMWATER

LINING:

AREA:

Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 E.B. 21 5.00 8.45

inspection begins at upstream manhole, START

debris Heavy!!!!!!

camera blocked, inspection abandoned, END Rock to large!!!!!







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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 36	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

 CITY:
 Ravenna
 MAP #1:
 TVD LGTH:
 53.48 FT

 STREET:
 Load Line 3
 MAP #2:
 MH:
 E.B. 21

LOCALE: EASEMENT TAPE #: 002 MH: East

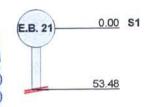
INSPECT REASON: OTHER PIPE SIZE: 12"
SECTION TYPE: STORMWATER MATERIAL: STEEL JT LGTH:

AREA: Ravenna Army Ammunition Plant RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



inspection begins at downstream manhole, START

inspection abandoned, END Seen Enough



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INSPECTION REPORT

DATE:	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
08/08/2001		1-	PRESET:	CLEANED:	RATE:
PRESENT:	VEHICLE:	CAMERA: PAN/TILT	PRESET.	NO	0

CITY:

Ravenna

MAP #1:

TV'D LGTH:

STREET: Load Line 3

MAP #2:

MH:

52.99 FT E.H. 13

LOCALE: EASEMENT

TAPE #: 002 MH:

North

INSPECT REASON:

OTHER

PIPE SIZE:

12"

SECTION TYPE:

STORMWATER

MATERIAL:

VCP

AREA:

Ravenna Army Ammunition Plant

LINING: RSRVD: JT LGTH:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 31.02 36.78 52.99

inspection begins at downstream manhole, START

Longitudinal Crack, at 10 o'clock

Longitudinal Crack, at 04 o'clock inspection abandoned, END Seen Enough!!!!



31.02 FT //





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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
PRESENT:	VEHICLE:	CAMERA:	PRESET:	CLEANED: NO	RATE: 310

002

CITY:

MAP #1:

Ravenna

TV'D LGTH:

52.19 FT

LOCALE: EASEMENT

STREET: Load Line 3

MAP #2: TAPE #:

MH:

E.H 13

INSPECT REASON:

OTHER

PIPE SIZE:

12"

MH:

South

SECTION TYPE:

STORMWATER

MATERIAL:

VCP

JT LGTH:

LINING:

AREA:

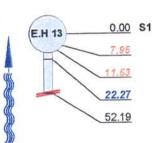
Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



inspection begins at downstream manhole, START

Longitudinal Fracture at 09 o'clock

debris Big Bolt

Longitudinal Crack, at 02 o'clock

inspection abandoned, END Seen Enough!





11.53 FT //





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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 39	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

CITY:

Ravenna

MAP #1:

TV'D LGTH:

STREET: Load Line 3

MAP #2: TAPE #:

MH:

51.49 FT

LOCALE: EASEMENT

002

MH:

E.H. 13 East

INSPECT REASON:

OTHER

PIPE SIZE:

12"

SECTION TYPE:

STORMWATER

MATERIAL: LINING:

VCP JT LGTH:

AREA:

Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 E.H. 13 26.64 51.49

inspection begins at downstream manhole, START

Longitudinal Crack, at 02 o'clock

inspection abandoned, END Seen Enough!!!



26.64 FT //



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

002

CITY:

Ravenna

MAP #1:

TV'D LGTH:

9.64 FT

STREET: Load Line 3

LOCALE: EASEMENT

MAP #2: TAPE #:

MH: MH: E.H. 13 East

INSPECT REASON:

OTHER

PIPE SIZE:

24"

SECTION TYPE:

STORMWATER

MATERIAL: LINING:

STEEL

JT LGTH:

AREA:

Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 E.H. 13

inspection begins at downstream manhole, START

debris Heavy!!!!!

camera blocked, inspection abandoned Debris too heavy to pass!!!







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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

002

CITY:

Ravenna

MAP #1:

TV'D LGTH:

STREET: Load Line 3

MAP #2:

MH:

12.43 FT

LOCALE: EASEMENT

TAPE #:

MH:

E.H 13

INSPECT REASON:

OTHER

PIPE SIZE:

24"

West

SECTION TYPE:

MATERIAL:

AREA:

STORMWATER Ravenna Army Ammunition Plant

LINING: RSRVD: STEEL

JT LGTH:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 E.H 13 12.43

inspection begins at upstream manhole, START

debris Heavy!!!!!!!

camera blocked, inspection abandoned, END Debris too heavy to pass!!!







7611 EASY ST

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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 310

CITY:

Ravenna

MAP #1:

TV'D LGTH:

STREET: Load Line 3

MAP #2:

MH:

8.65 FT

LOCALE: EASEMENT

TAPE #: 002 MH:

E.B. 4

INSPECT REASON:

OTHER

PIPE SIZE:

12"

North

SECTION TYPE:

STORMWATER

MATERIAL:

VCP

JT LGTH:

AREA:

Ravenna Army Ammunition Plant

LINING:

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 E.B. 4 8.65

inspection begins at downstream manhole, START

debris Heavy!!!!!!!!

camera blocked, inspection abandoned, END Debris too heavy!!!!!!



5 FT //





7611 EASY ST MASON OH, 45040 Tel: (513) 398-4521, Fax: (513) 398-5628

INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

CITY: Ravenna MAP #1: TV'D LGTH: 52.69 FT

 STREET:
 Load Line 3
 MAP #2:
 MH:
 E.B. 4

 LOCALE:
 EASEMENT
 TAPE #:
 002
 MH:
 South

INSPECT REASON: OTHER PIPE SIZE: 12"

SECTION TYPE: STORMWATER

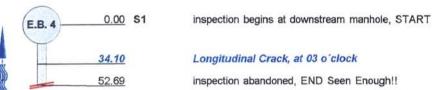
AREA: Ravenna Army Ammunition Plant

MATERIAL: VCP JT LGTH:
LINING:
RSRVD:

REMARK:

1:1000POSITION

OBSERVATION





3/1 FT /

AGE: 12



7611 EASY ST

MASON OH, 45040 Tel: (513) 398-4521, Fax: (513) 398-5628

INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR:	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

002

CITY:

Ravenna

MAP #1:

MAP #2:

TV'D LGTH: 54.87 FT

STREET: Load Line 3 LOCALE: EASEMENT

TAPE #:

MH: MH: 419 South

INSPECT REASON:

OTHER

PIPE SIZE:

8"

SECTION TYPE:

WASTEWATER

MATERIAL: LINING:

VCP

JT LGTH:

AREA:

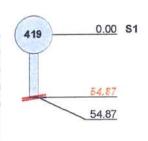
Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



inspection begins at upstream manhole, START



Hole in pipe at 02 o'clock Pipe collapsed

inspection abandoned, END Seen Enough!!!!



7611 EASY ST

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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 45	SECTION NAME
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

CITY: MAP #1: TV'D LGTH: 51.39 FT Ravenna

419 STREET: Load Line 3 MAP #2: MH: LOCALE: EASEMENT TAPE #: 002 MH: East

OTHER PIPE SIZE: 8" INSPECT REASON:

VCP JT LGTH: MATERIAL: WASTEWATER SECTION TYPE: LINING:

Ravenna Army Ammunition Plant AREA: RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 \$1 419 51.39

inspection begins at downstream manhole, START

inspection abandoned, END seen enough



MASON OH, 45040 Tel: (513) 398-4521, Fax: (513) 398-5628

INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 46	SECTION NAME
PRESENT:	VEHICLE:	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE:

CITY:

MAP #1:

Ravenna

TV'D LGTH:

39.47 FT

STREET: Load Line 3

LOCALE: EASEMENT

MAP #2: TAPE #: 002 MH:

424

INSPECT REASON:

OTHER

PIPE SIZE:

MH:

West

SECTION TYPE:

MATERIAL:

8" VCP

JT LGTH:

WASTEWATER

LINING:

AREA:

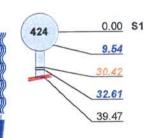
Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



inspection begins at upstream manhole, START

Circumferential Crack, from 01 to 02 o'clock

Longitudinal Fracture at 10 o'clock

Circumferential Crack, from 11 to 12 o'clock

camera blocked, inspection abandoned, END too much debris!!!!!!





30.42 FT //





39.47 FT //



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 47	SECTION NAME
PRESENT:	VEHICLE:	CAMERA: PAN/TILT	PRESET:	CLEANED:	RATE:

CITY:

Ravenna

MAP #1:

STREET: Load Line 3

MAP #2:

MH:

51.39 FT

LOCALE: EASEMENT

TAPE #:

002

MH:

424 South

INSPECT REASON:

OTHER

PIPE SIZE: MATERIAL:

8"

VCP JT LGTH:

TV'D LGTH:

SECTION TYPE: AREA:

WASTEWATER Ravenna Army Ammunition Plant

LINING:

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION

0.00 S1 424 51.39

inspection begins at downstream manhole, START

inspection abandoned, END Seen Enough!!!!!



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 48	SECTION NAME
PRESENT:	VEHICLE:	CAMERA: PAN/TILT	PRESET:	CLEANED:	RATE:

CITY: Ravenna MAP #1: TV'D LGTH: 51.79 FT

 STREET:
 Load Line 3
 MAP #2:
 MH:
 404

 LOCALE:
 EASEMENT
 TAPE #:
 002
 MH:
 West

INSPECT REASON: OTHER PIPE SIZE: 10"

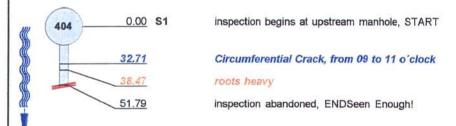
SECTION TYPE: WASTEWATER MATERIAL: VCP JT LGTH: LINING:

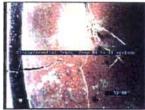
AREA: Ravenna Army Ammunition Plant RSRVD:

REMARK:

1:1000POSITION

OBSERVATION





32.71 FT /



38.47 FT /

N-28



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 49	SECTION NAME
PRESENT:	VEHICLE:	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 770

CITY:

Ravenna

STREET: Load Line 3

MAP #1: MAP #2:

MH: MH:

TV'D LGTH:

404 East

51.2 FT

LOCALE: EASEMENT

TAPE #:

002

10"

JT LGTH:

INSPECT REASON: SECTION TYPE:

OTHER WASTEWATER

MATERIAL: LINING:

PIPE SIZE:

STEEL

AREA:

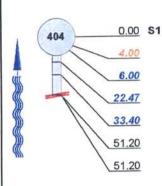
Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



inspection begins at upstream manhole, START

debris

Longitudinal Crack, at 10 o'clock

corrosion medium

corrosion medium

pipe material changes at this point to VCP from Cast Iron

inspection abandoned, END Seen Enough





6 FT //









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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 50	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 330

CITY: Ravenna MAP #1: TV'D LGTH: 177.05 FT

 STREET:
 Load Line 3
 MAP #2:
 MH:
 427

 LOCALE:
 FASEMENT
 TAPE #:
 002
 MH:
 West

LOCALE: EASEMENT TAPE #: 002 MH: Wes

INSPECT REASON: OTHER

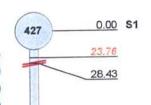
PIPE SIZE: 8"
MATERIAL: STEEL JT LGTH:

SECTION TYPE: WASTEWATER
LINING:
ARFA: Ravenna Army Ammunition Plant RSRVD:

AREA: REMARK:

1:1000POSITION

OBSERVATION



inspection begins at upstream manhole, START

roots heavy

camera blocked, inspection abandoned, END Blocked by piece of pipe



23.76 FT //



28.43 FT /

N-30

GE: 3



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INSPECTION REPORT

DATE: 08/08/2001	work order:	WEATHER: SUNNY, DRY	OPERATOR: P.KELLUM	SECTION NR: 51	SECTION NAME:
PRESENT:	VEHICLE: 811	CAMERA: PAN/TILT	PRESET:	CLEANED: NO	RATE: 660

CITY:

Ravenna

MAP #1:

TV'D LGTH:

MAP #2:

MH:

26.44 FT 427

STREET: Load Line 3 LOCALE: EASEMENT

TAPE #:

002

MH:

North

INSPECT REASON:

OTHER

PIPE SIZE: MATERIAL:

SECTION TYPE:

WASTEWATER

LINING:

STEEL

JT LGTH:

AREA:

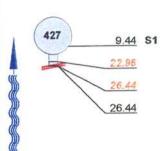
Ravenna Army Ammunition Plant

RSRVD:

REMARK:

1:1000POSITION

OBSERVATION



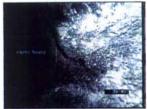
inspection begins at downstream manhole, START

roots heavy

roots heavy

camera blocked, inspection abandoned, END Roots too heavy!!!!!!!







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