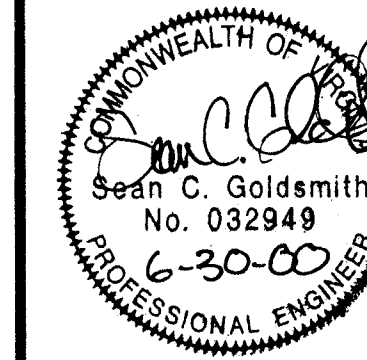
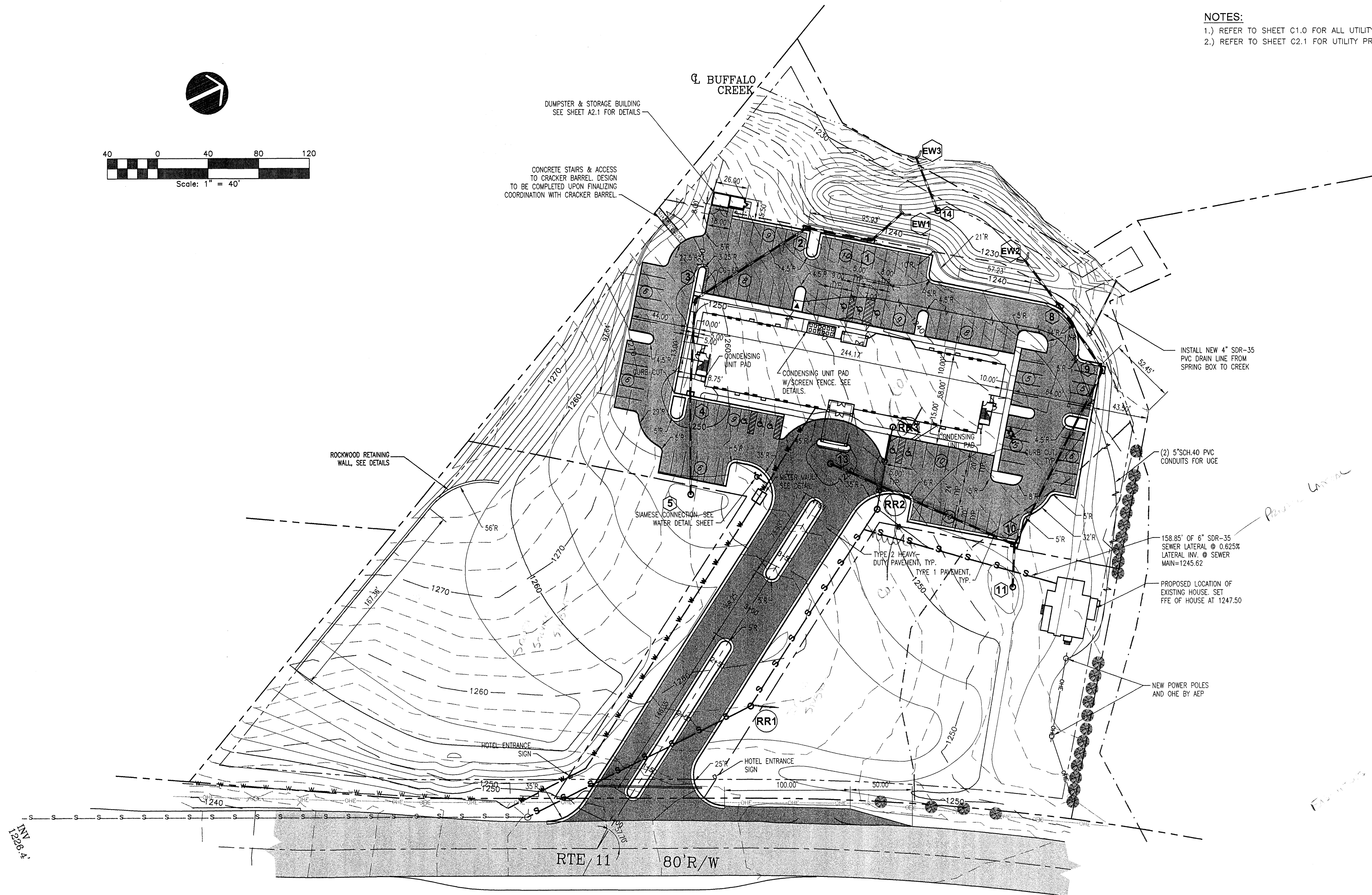


- NOTES:
- 1.) REFER TO SHEET C1.0 FOR ALL UTILITY NOTES
 - 2.) REFER TO SHEET C2.1 FOR UTILITY PROFILES.

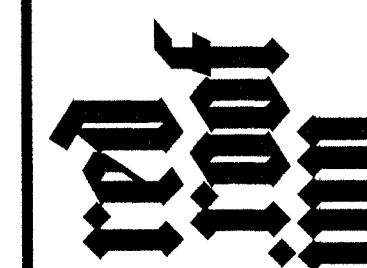


2103-A Electric Road, S.W.
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87 UNIT HOTEL

Troutville, Virginia



DRAWN BY: SCG

DESIGNED BY: SCG

CHECKED BY: SCG

DATE: JUNE 2000

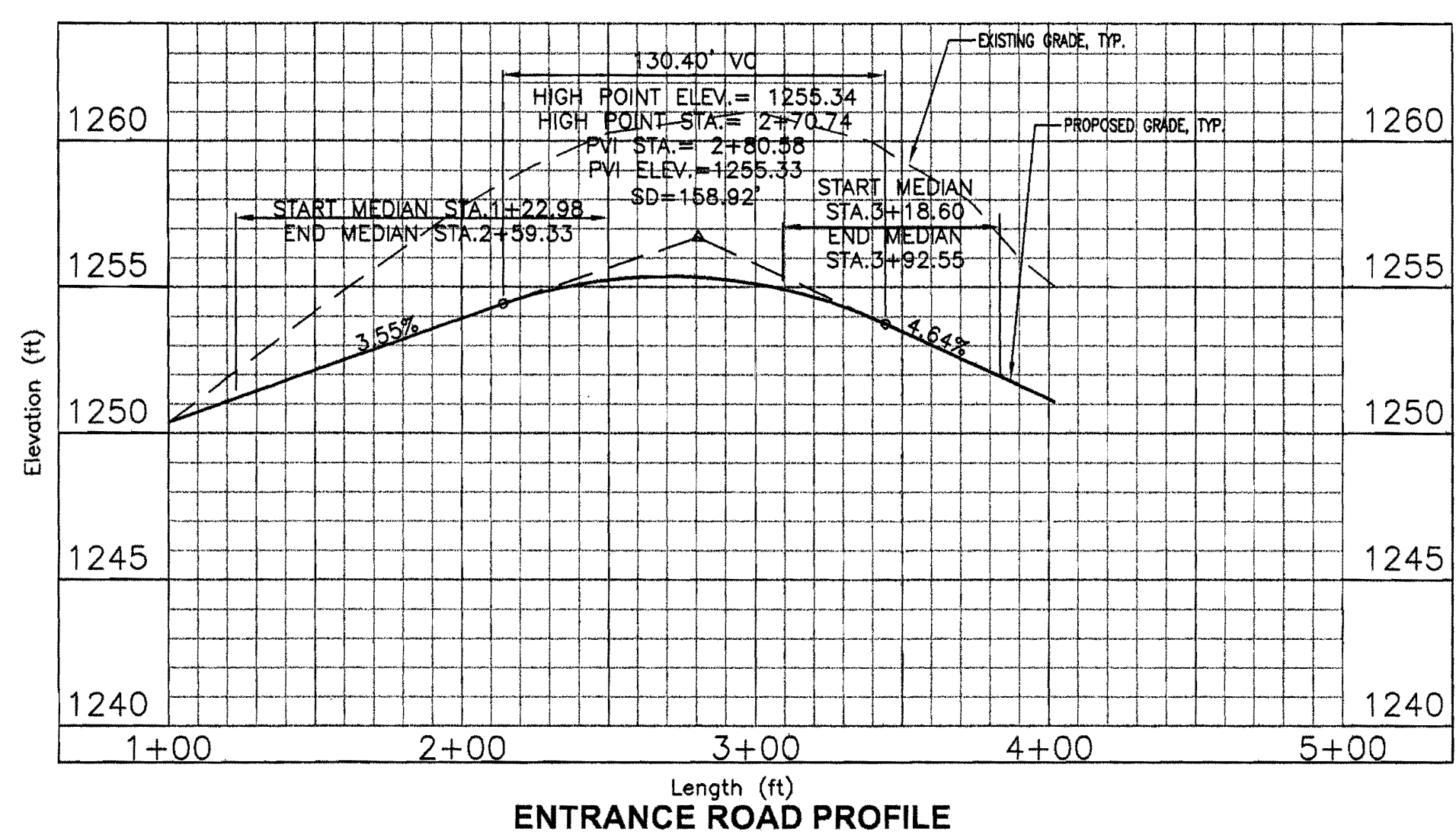
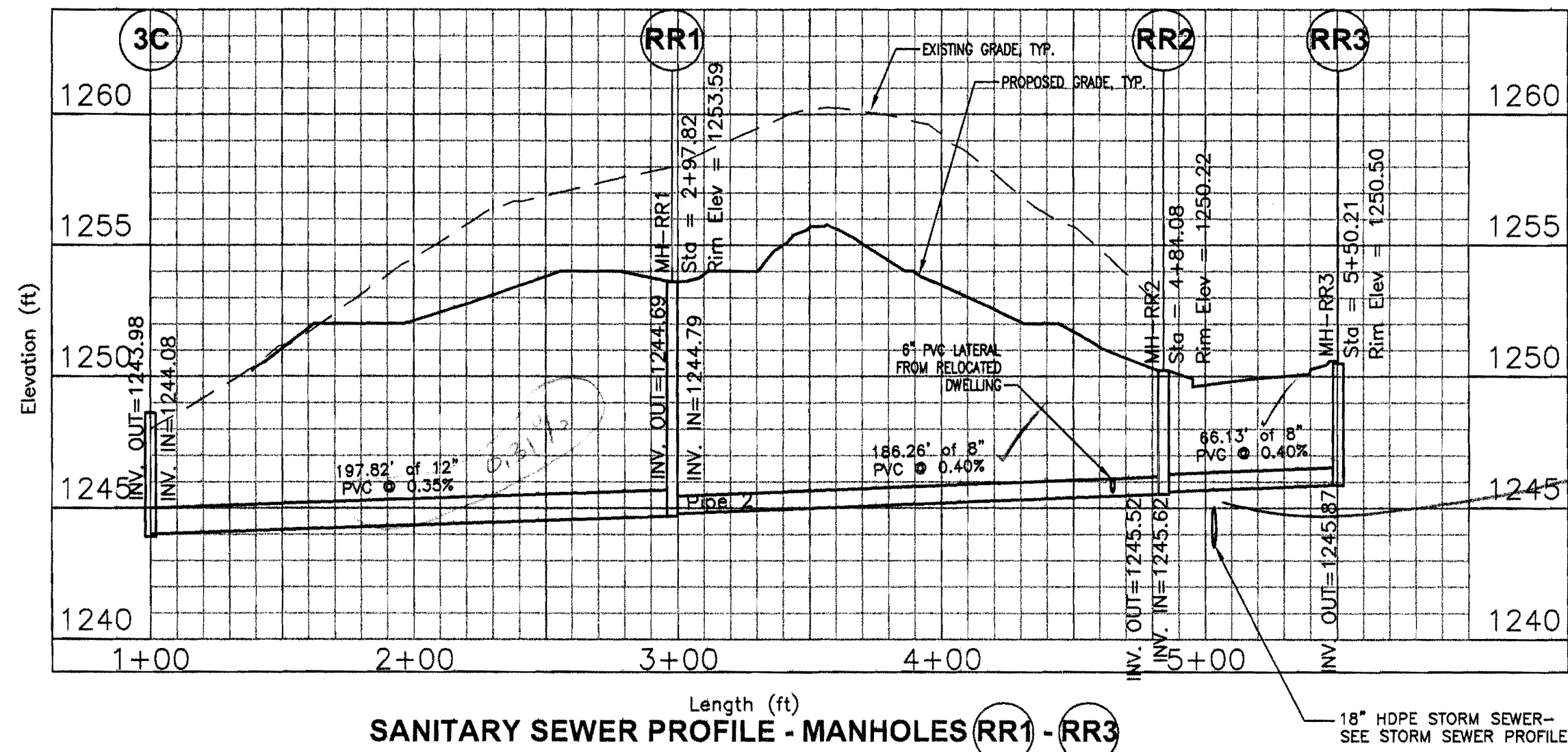
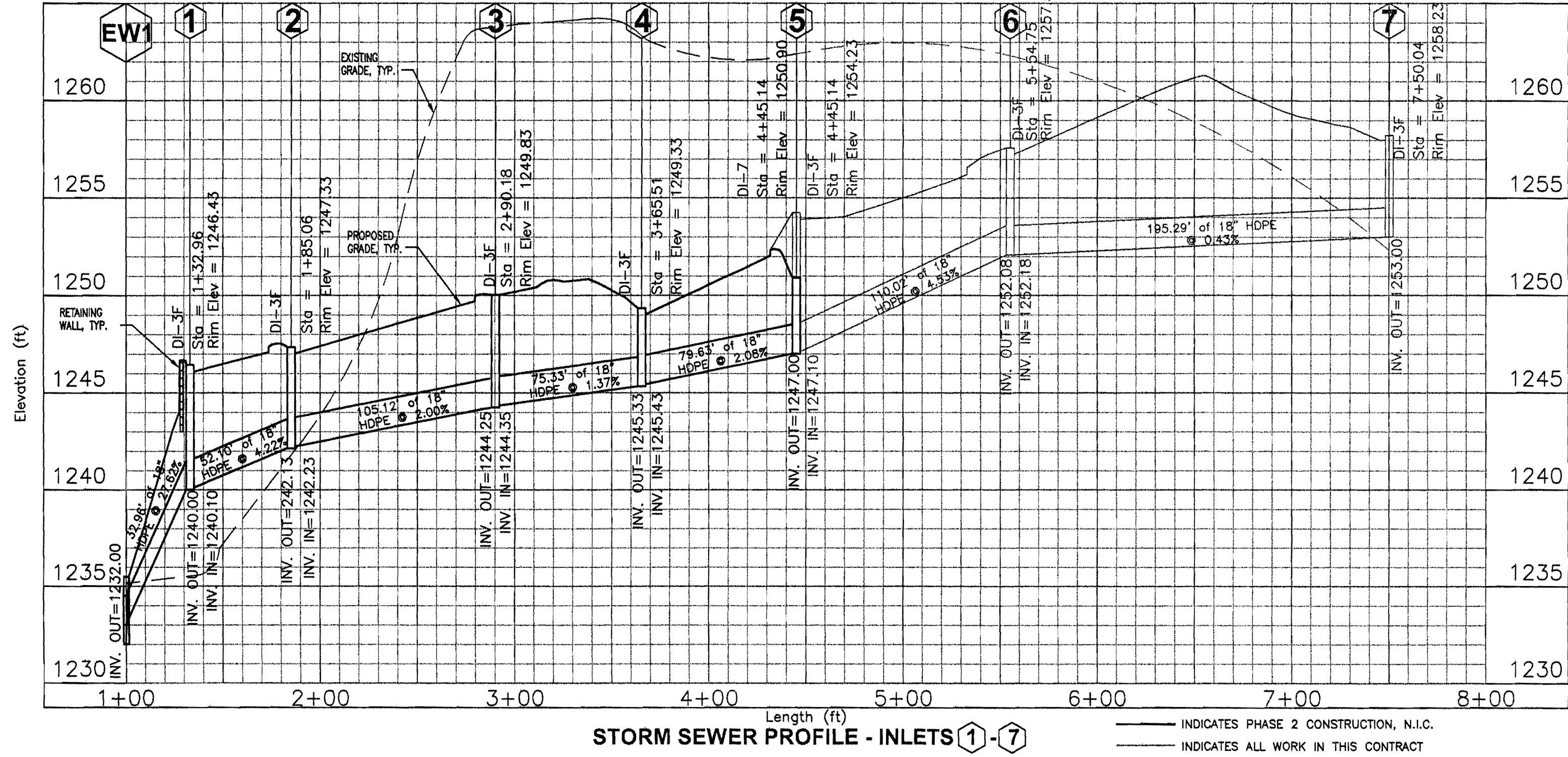
REVISIONS

SCALE: 1"=40'

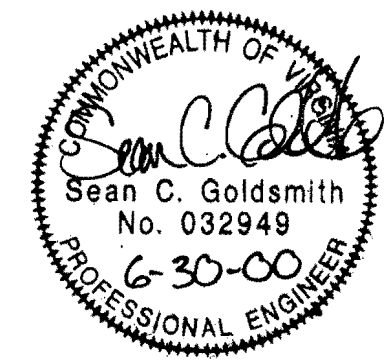
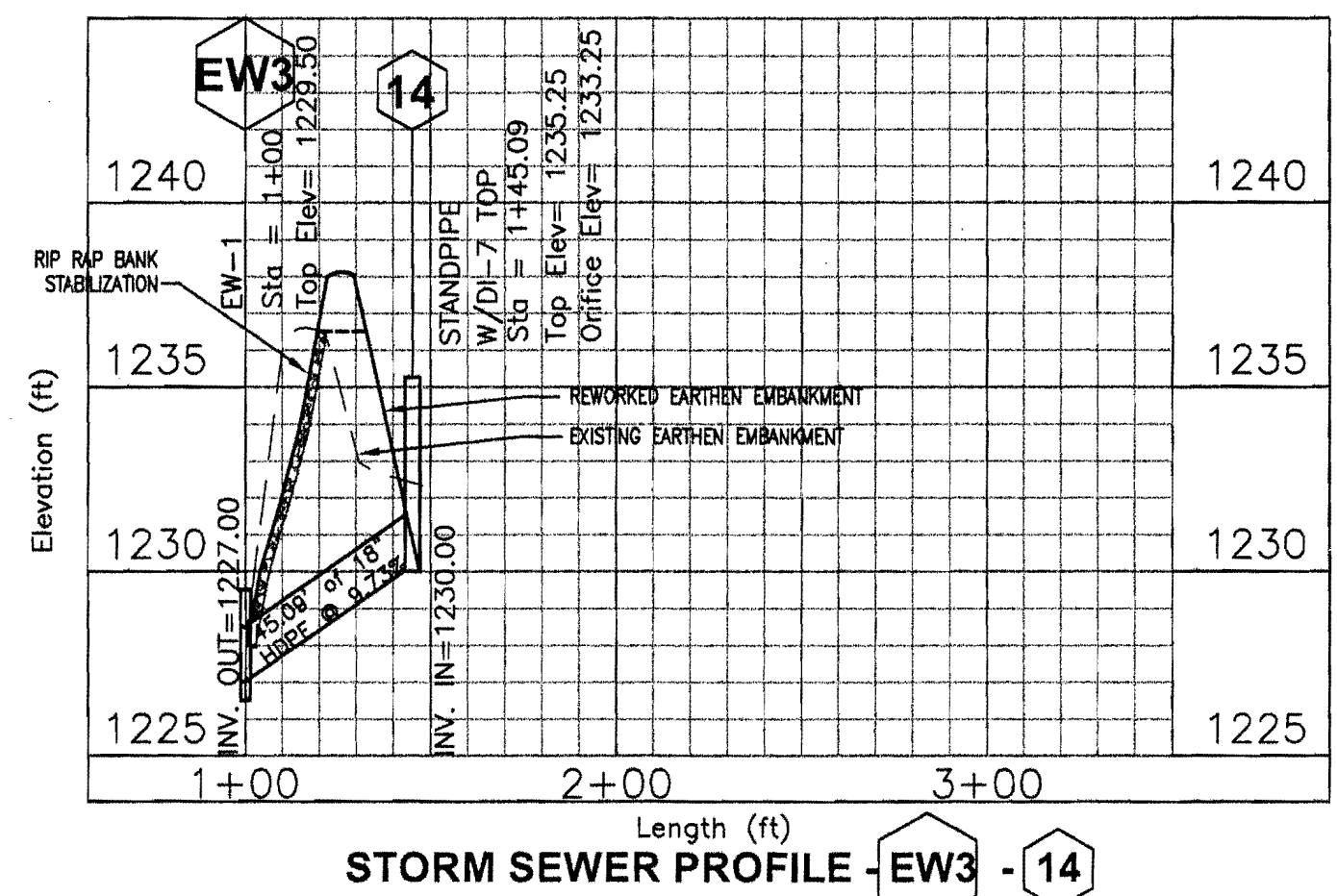
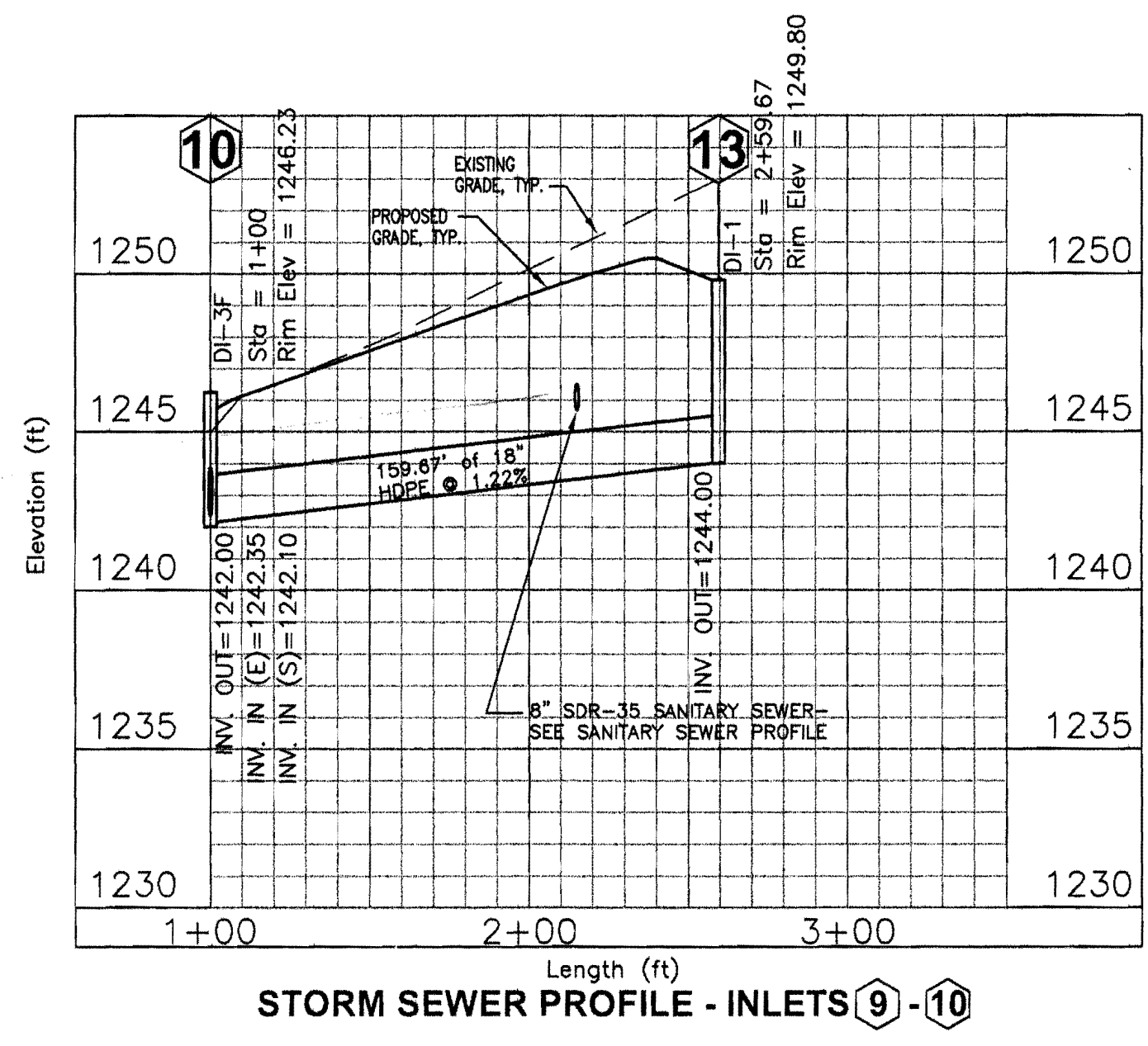
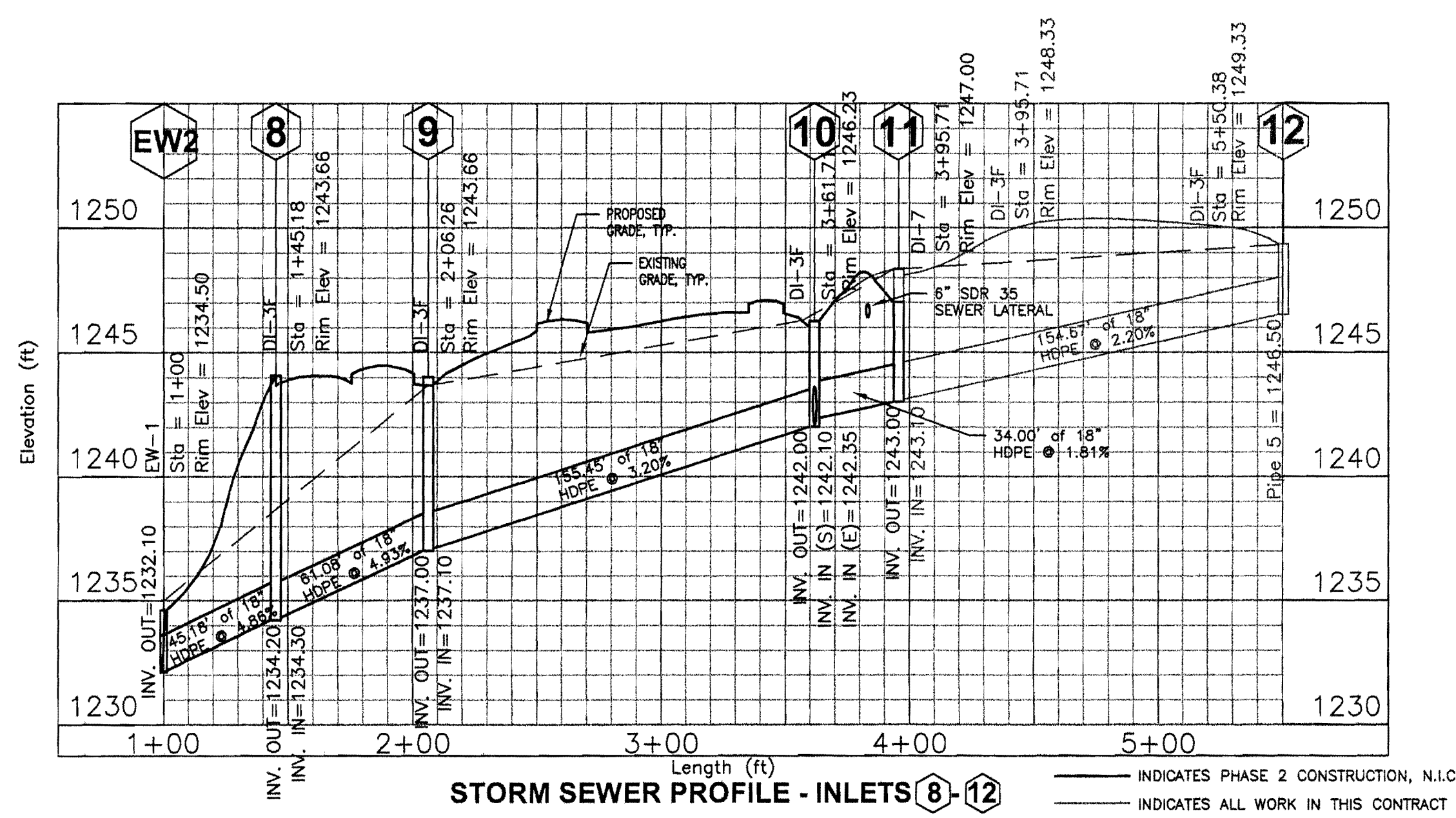
SHEET No.

C1.3

UTILITY AND
DIMENSIONAL PLAN

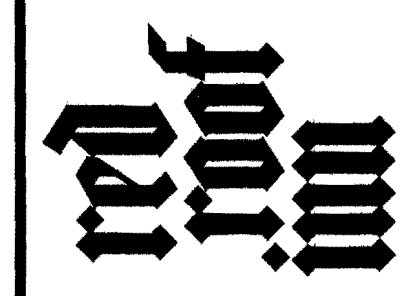


- NOTES:**
- 1) ALL PIPE LENGTHS ARE CALCULATED FROM CENTER OF MANHOLE/INLET.
 - 2) ALL SLOPES ARE CALCULATED FROM FACE OF MANHOLE/INLET TO FACE OF MANHOLE/INLET.
 - 3) ALL STORM SEWER PIPE TO BE ADS N-12 WITH SILT TIGHT COUPLERS OR APPROVED EQUAL.



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87 UNIT HOTEL
Troutville, Virginia

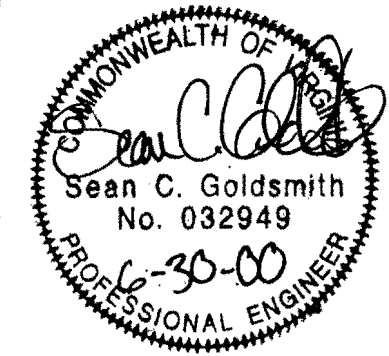
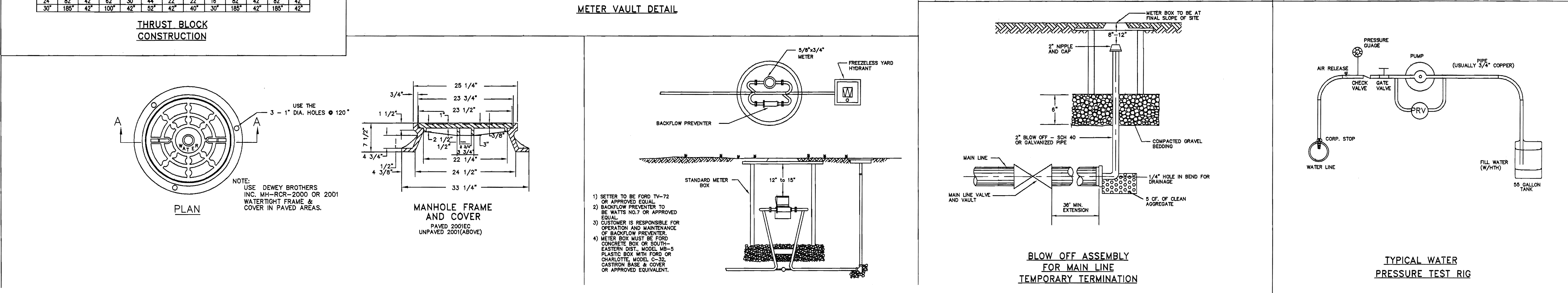
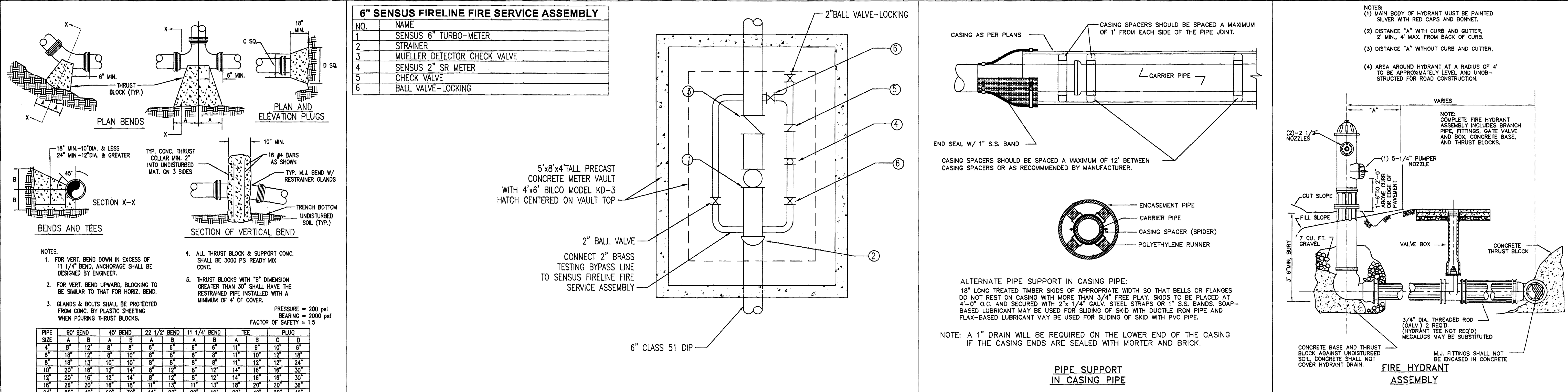
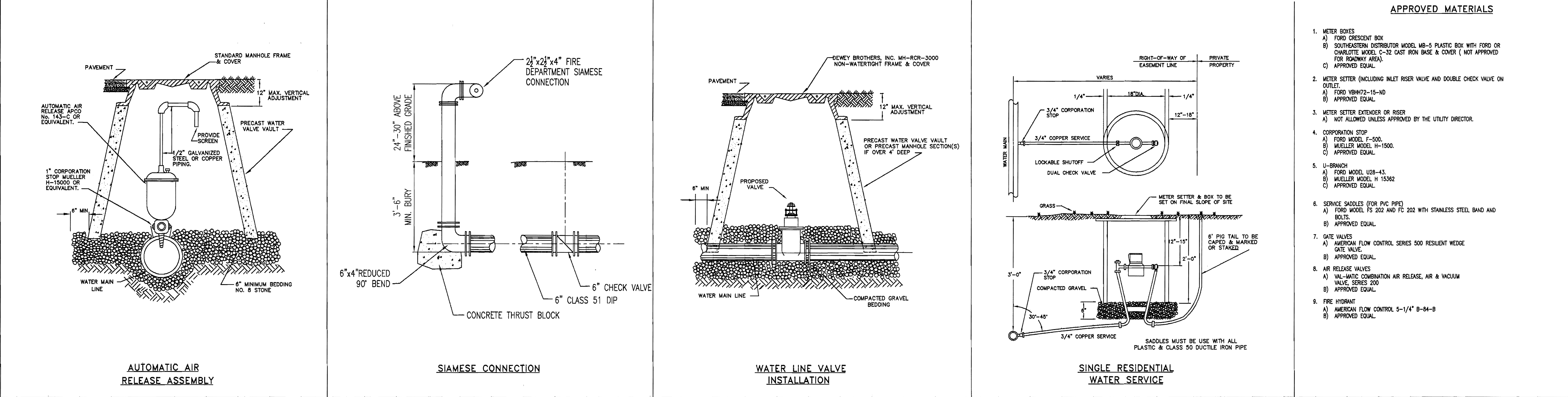


DRAWN BY: SCG
DESIGNED BY: SCG
CHECKED BY: SCG
DATE: JUNE 2000

REVISIONS

SCALE: VERT.: 1"=5'
HORIZ.: 1"=50'

SHEET No.
C2.1
UTILITY PROFILES



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87 UNIT HOTEL
Troutville, Virginia



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DESIGNED BY: SCG
CHECKED BY: SCG
DATE: JUNE 2000

REVISIONS

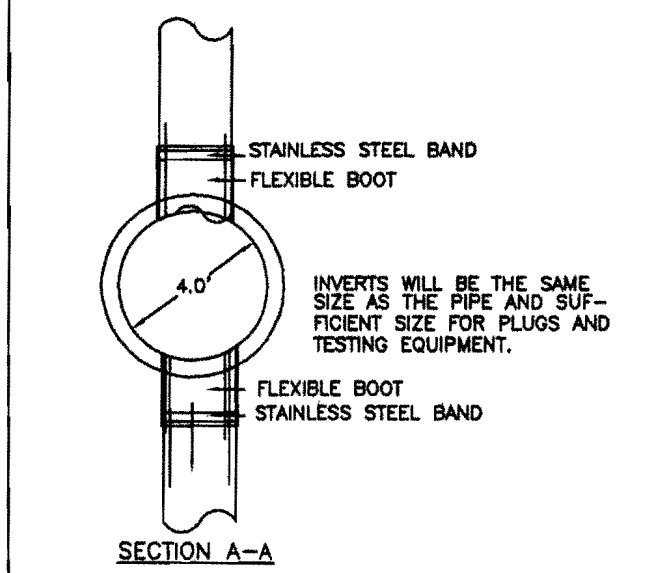
SCALE: NO SCALE

SHEET No.

C3.1

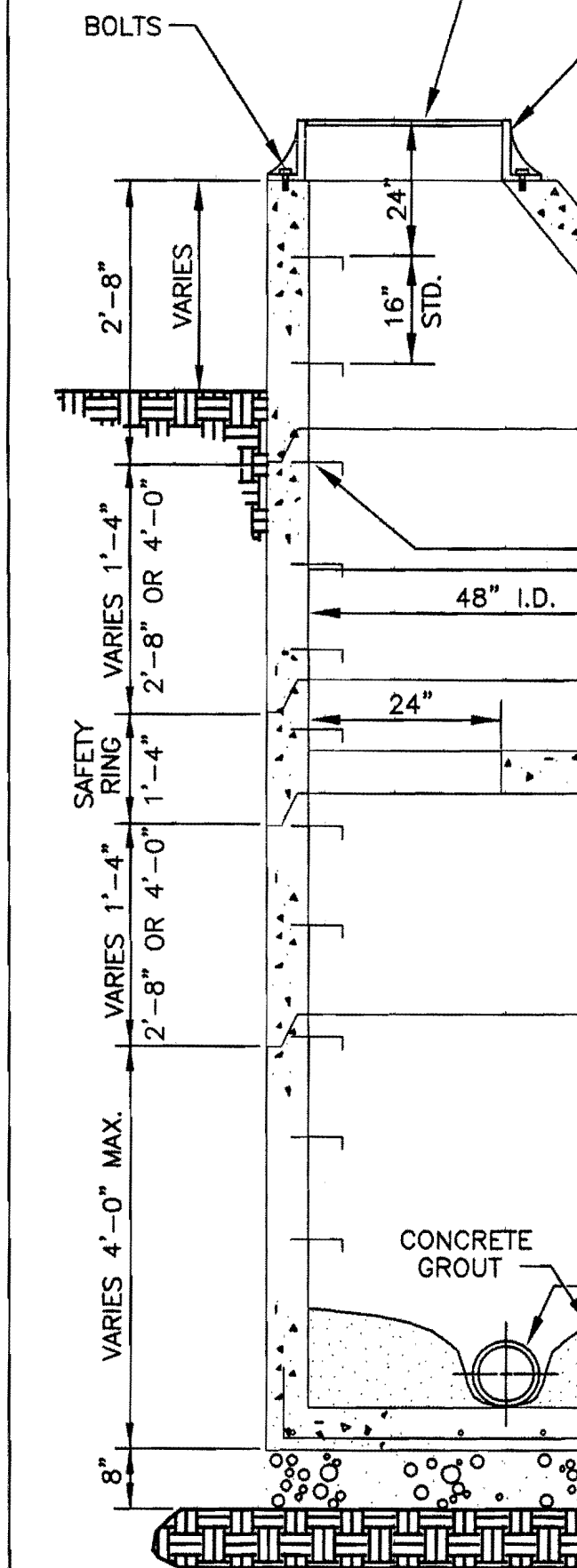
WATER DETAILS

JOB No. 00015



Pipe Diameter (in.)	Min. Time (min:sec)	Length for Min. Time (ft)	Time for Longer Length (sec)	Specified Time for Length (L) Shown (min:sec)							
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
4	3:46	597	.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	7:36	8:52	10:24
10	9:26	239	2.374 L	9:26	9:26	9:26	9:26	9:53	11:52	13:51	15:46
12	11:20	199	3.418 L	11:20	11:20	11:24	11:45	17:05	19:59	22:47	25:36
15	14:10	159	5.342 L	14:10	14:10	17:48	22:18	26:42	31:09	35:36	40:04
18	17:00	133	7.692 L	17:00	18:15	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.940 L	19:50	26:10	34:45	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13.674 L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306 L	28:51	41:56	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852 L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768 L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46

Pipe Diameter (in.)	Min. Time (min:sec)	Length for Min. Time (ft)	Time for Longer Length (sec)	Specified Time for Length (L) Shown (min:sec)							
				100 ft	150 ft	200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
4	3:46	597	.380 L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854 L	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	298	1.520 L	7:34	7:34	7:34	7:34	7:36	7:36	8:52	10:24
10	9:26	239	2.374 L	9:26	9:26	9:26	9:26	9:53	11:52	13:51	15:46
12	11:20	199	3.418 L	11:20	11:20	11:24	11:45	17:05	19:59	22:47	25:36
15	14:10	159	5.342 L	14:10	14:10	17:48	22:18	26:42	31:09	35:36	40:04
18	17:00	133	7.692 L	17:00	18:15	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.940 L	19:50	26:10	34:45	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13.674 L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306 L	28:51	41:56	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366 L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852 L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768 L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46

[illegible]

200 ft	250 ft	300 ft	350 ft	400 ft	450 ft
3:46	3:46	3:46	3:46	3:46	3:46
5:40	5:40	5:40	5:40	5:42	6:24
7:34	7:34	7:34	8:52	10:08	11:24
9:26	9:53	11:52	13:51	15:49	17:48
11:24	14:15	17:05	19:56	22:47	25:38
17:48	22:15	26:42	31:09	35:36	40:04
23:58	32:03	38:27	44:52	51:16	57:41
34:54	43:37	52:21	61:00	69:48	78:31
45:34	55:58	68:22	79:46	91:10	102:33
57:41	72:07	86:32	100:57	115:22	129:46
71:13	89:02	106:50	124:38	142:26	160:15
86:10	107:43	128:16	150:43	172:21	193:53
128:12	153:50				230:46

3/4" THREADED ROD
STAINLESS STEEL OR
STEEL WITH APPROVED
COATING. (3 TYP.)

FORM AND FILL WITH
3000 PSI CONCRETE

PRECAST CONCRETE
ADJUSTMENT RING

12" MAX
TOP OF
CONE SECTION

FORM AND FILL WITH
3000 PSI CONCRETE

ADJUSTMENT
NUT (TYP.)

MIN. 4"

ROD TO BE
FIRMLY SECURED
BY EPOXY

8" TYP.

INSTALLATION DETAIL

FOR ALL FRAMES AND COVERS

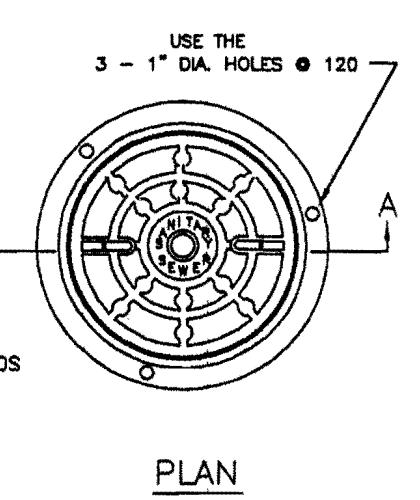
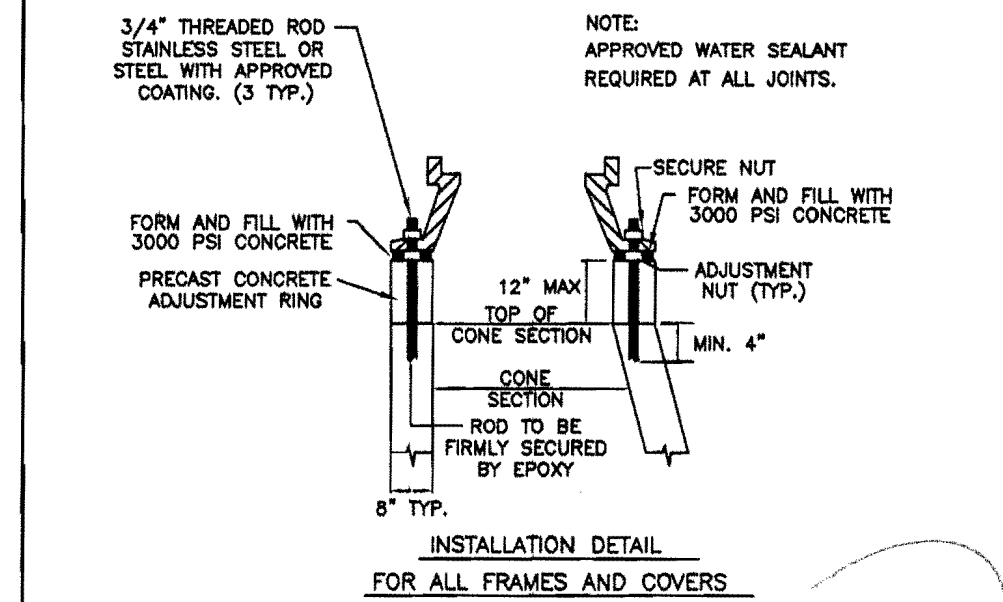
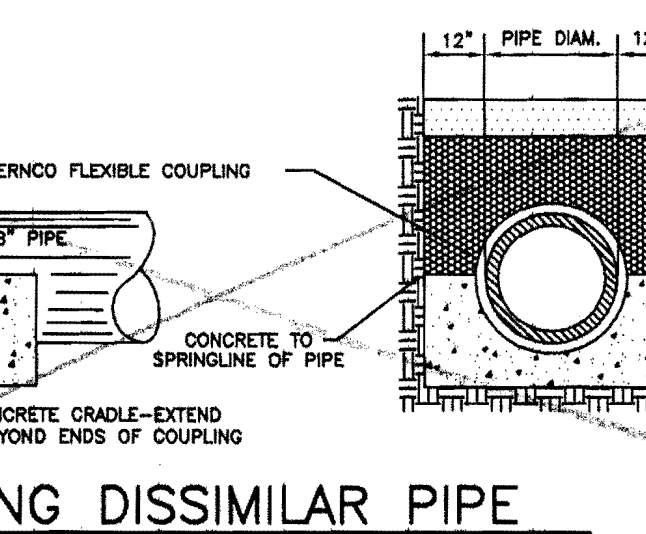


Diagram illustrating a concrete gradeable extension for a pipe coupling. The diagram shows a cross-section of a pipe with a diameter of 12 inches. The pipe is shown in two sections: a top section labeled "12\" PIPE DIAM." and a bottom section labeled "CONCRETE TO SPRINGLINE OF PIPE". The bottom section shows the pipe embedded in a concrete structure, with a label "CONCRETE GRADEABLE-EXTEND TOWARD ENDS OF COUPLING" pointing to the concrete area. The diagram also shows a "FIBERGLASS FLEXIBLE COUPLING" connecting the two pipe sections.



FINISHED GRADE

9" 1'-0"

1'-0" MIN. 1'-5"

NO. 4 REBAR

NO. 4 REBAR

VARIABLE SIZE SAN. SEWER PIPE

UNDISTURBED SOIL

1'-0"

2'-6"

6"

1'-0"

READY MIX CONCRETE
3000 PSI IN 28 DAYS

GRADES 20% TO 35% -- 36 FT ON CENTER
* GRADES 35% TO 50% -- 24 FT ON CENTER
* GRADES 50% TO 80% -- 16 FT ON CENTER
* WITH WRITTEN APPROVAL OF UTILITY DIRECTOR

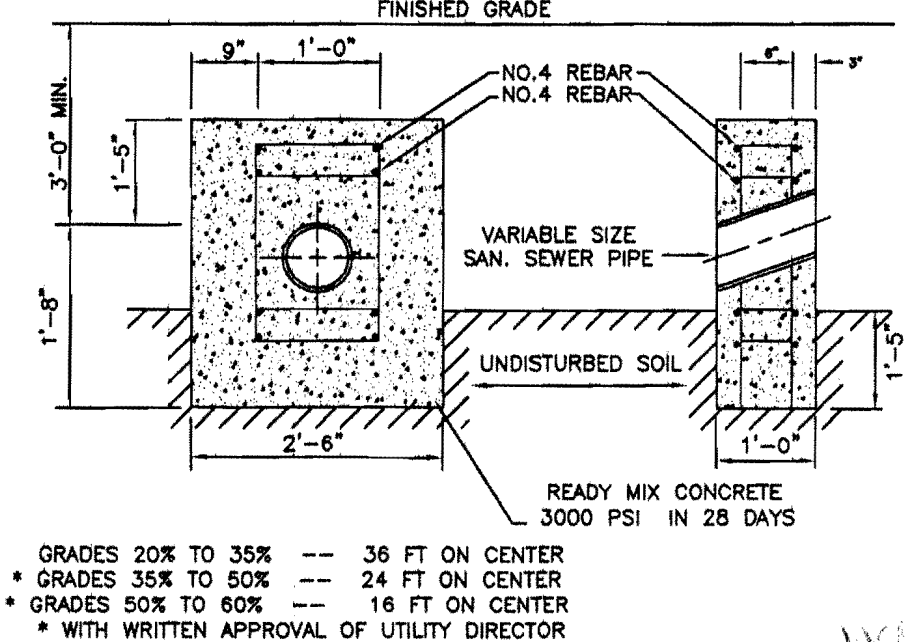
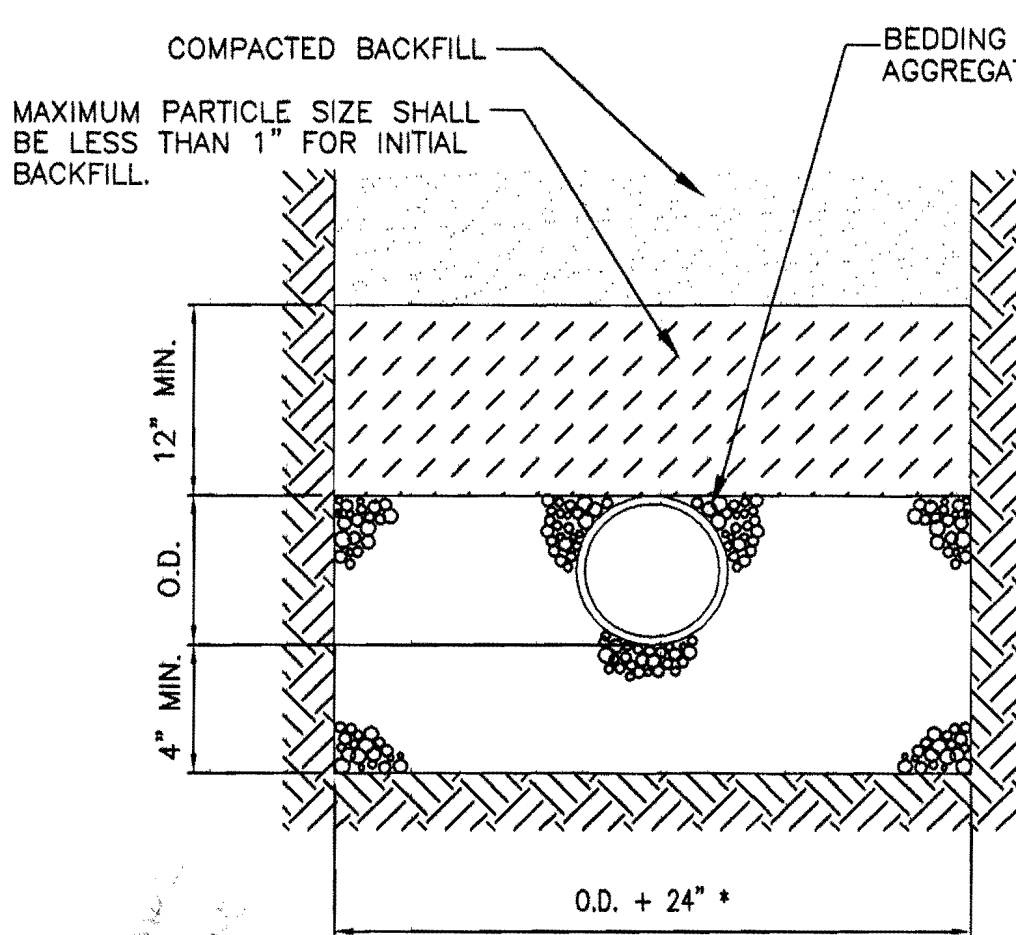


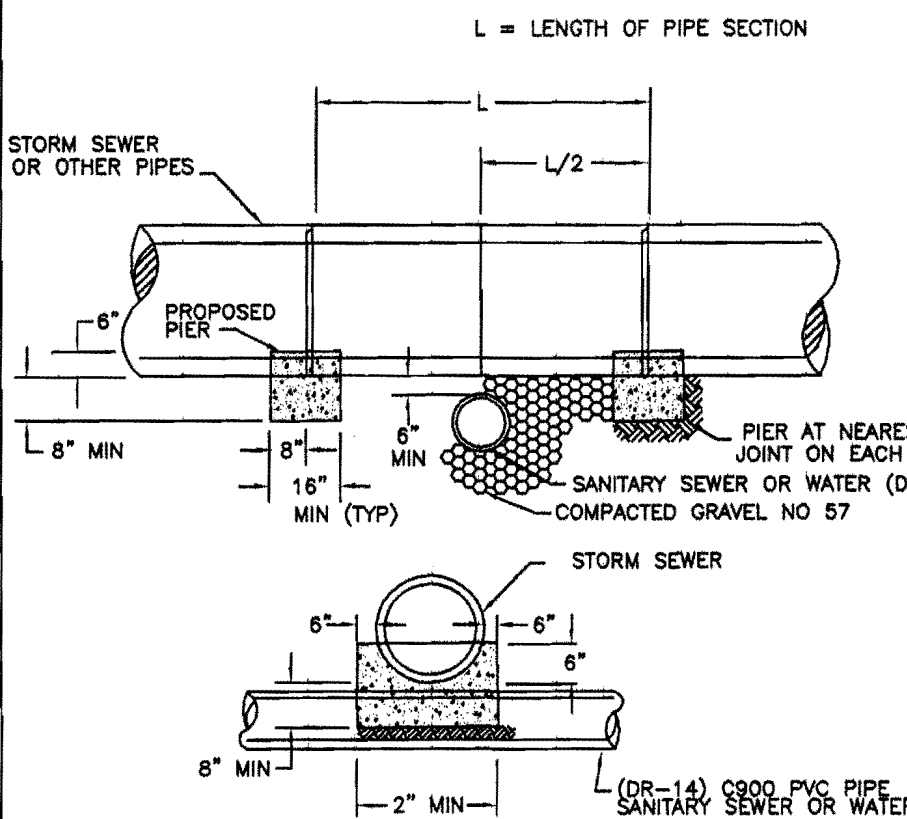
Diagram illustrating the construction of a manhole structure, showing the bedding and backfill layers.

Labels and Dimensions:

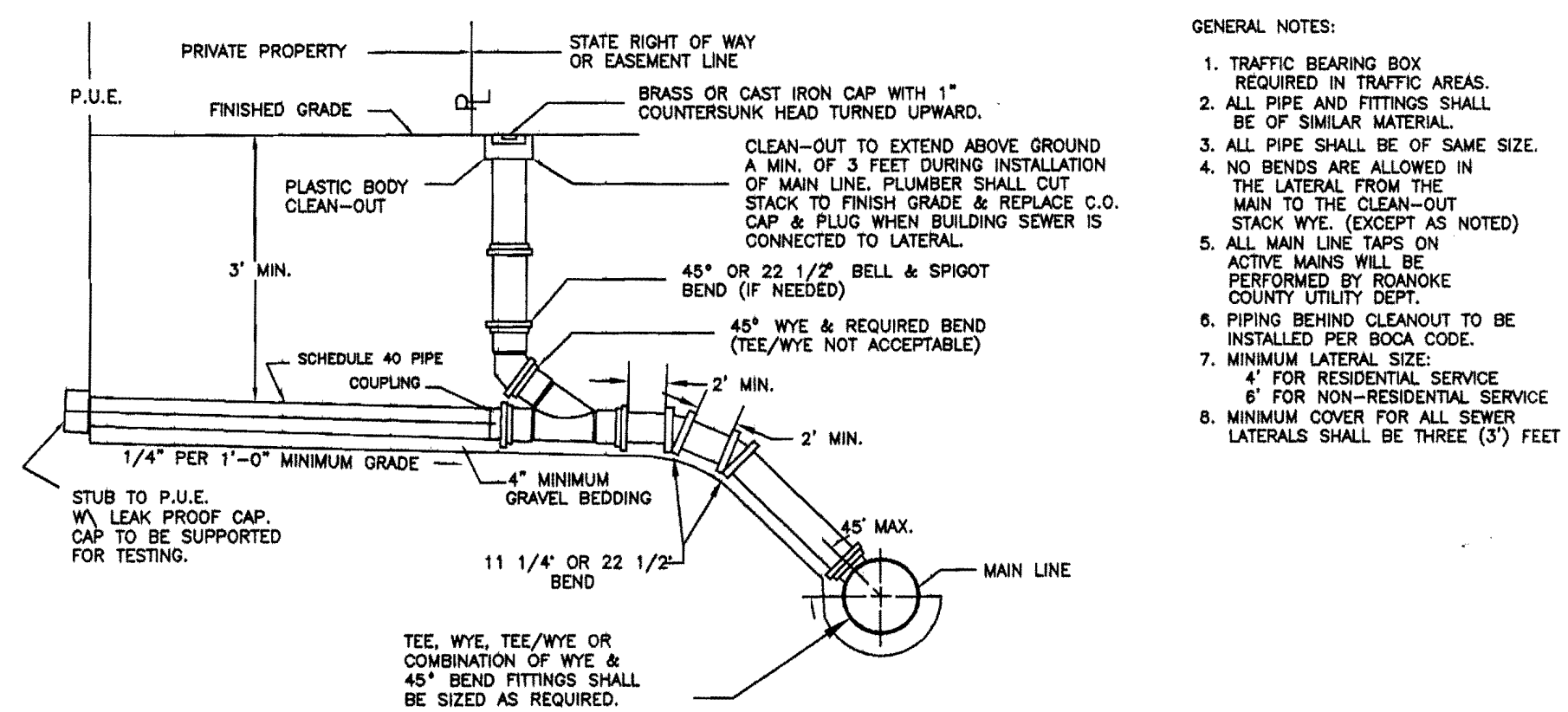
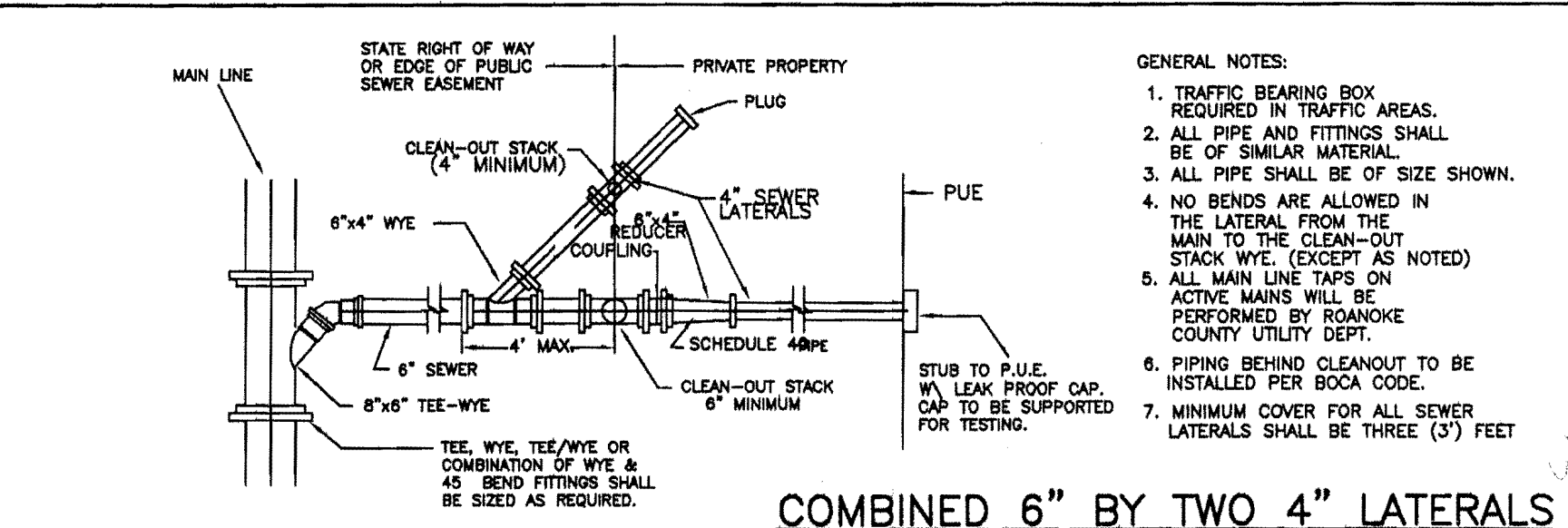
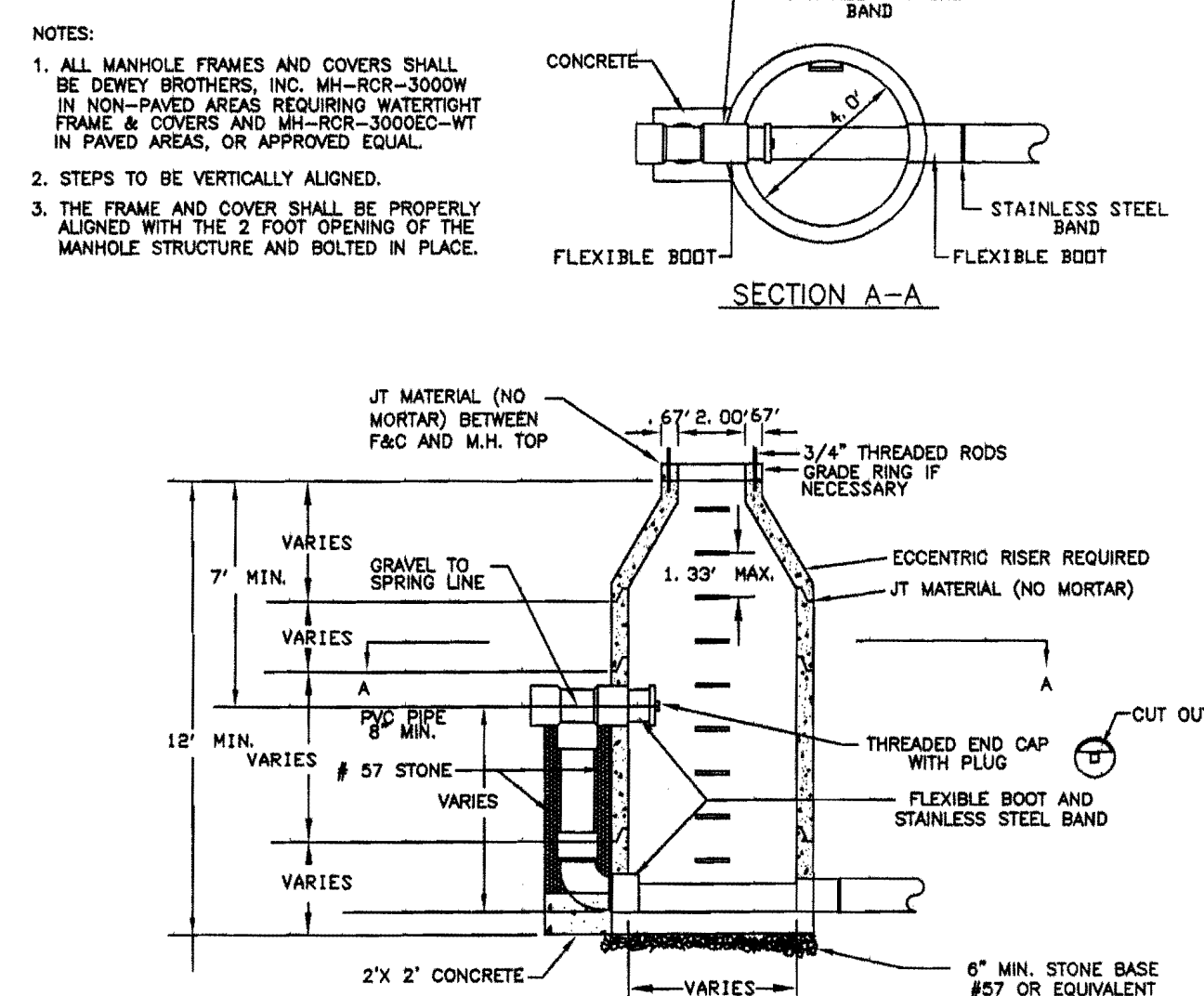
- COMPACTED BACKFILL**: The material surrounding the bedding and manhole.
- BEDDING AGGREGATE**: The layer of aggregate material directly beneath the manhole.
- MAXIMUM PARTICLE SIZE SHALL BE LESS THAN 1" FOR INITIAL BACKFILL.**: Specification for the initial backfill material.
- 12" MIN.**: Minimum thickness of the bedding aggregate layer.
- O.D.**: Outside Diameter of the manhole.
- 4" MIN.**: Minimum thickness of the bedding aggregate layer directly beneath the manhole.
- O.D. + 24" ±**: Dimension indicating the width of the bedding aggregate layer at the base of the manhole.



FLEXIBLE CONNECTION DETAIL



CONCRETE PIER

[illegible]

FOR ADDITIONAL REFERENCE, SEE DETAIL
DRAWINGS IN SEWER STANDARDS.

GENERAL NOTES:

1. TRAFFIC BEARING BO REQUIRED IN TRAFFIC AREAS.
2. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL.
3. ALL PIPE SHALL BE OF SAME SIZE.
4. NO VENTS ARE TO BE IN THE LATERAL FROM THE MAIN TO THE CLEAN-OUT STOP VALVE. (EXCEPT AS NOTED)
5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY ROCKAWAY COUNTY UTILITY DEPT.
6. PIPING BEHIND CLEANOUT TO BE INSTALLED PER BOOK CODE.
7. MINIMUM LATERAL SIZE:
 - 4" FOR RESIDENTIAL SERVICE
 - 6" FOR NON-RESIDENTIAL SERVICE
8. MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE (3') FEET

A&E
INTERNATIONAL·LLC
The Future of Construction

VA Class A License #2705049748A

87 UNIT HOTEL
Troutville, Virginia

Foot

DRAWN BY: SCG

DESIGNED BY: SCG

CHECKED BY: SCG

DATE: JUNE 2000

REVISIONS

SCALE: NO SCALE

SHEET No.

C3.2

SEWER DETAILS

JOB No. 00015