CONSTRUCTION PLANS

OF

GLYNN VILLAGE PLAT 4

CITY OF WAUKEE
DALLAS COUNTY, IOWA

FOR

HUBBELL REALTY COMPANY

PREPARED BY:

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2413 GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

NOTE:

THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT.

PROJECT BENCHMARK:

SE TAB BOLT ON HYDRANT AT SW CORNER WARRIOR LANE & UNIVERSITY AVENUE
ELEV=1028.39

GENERAL NOTES

1. All work shall comply with applicable city, and county codes, ordinances, regulations and rules. Including Waukee standard specifications for public improvements
2. All debris spilled on the streets or adjacent property shall be removed by the Contractor by the end of the day or prior to a rain event.
3. All construction procedures and materials to meet or exceed minimum requirements of City of Waukee.
4. All work shall be done in accordance with current OSHA codes and standards. Nothing indicated on these plans shall relieve the Contractor from complying with any and all appropriate safety regulations.
5. The Contractor shall furnish and place all necessary signs and barricades during construction in accordance with the Manual of Uniform Traffic Control Devices for Streets and Highways.
6. The Contractor shall be responsible for giving the City of Waukee proper notice for their required inspections.
7. The Contractor shall be responsible for obtaining any and all required permits for performing the work.
8. Work shall include connection to existing public utilities and any and all fittings, cleanouts and appurtenances required by codes.
9. The Contractor is responsible for clearing & grubbing the site, and removal & disposal of any deleterious and excess materials from the site.
10. The Contractor shall place silt fence around all storm sewer inlet locations, steep slopes, or as directed by the City.
11. Any damage done to the existing fences, yards or other structures outside the construction limits shall be repaired at the Contractor's expense.
12. The Contractor is to notify the City of Waukee 48 hours prior to the beginning of construction.
13. The Contractor is to identify and coordinate removal and/or trimming of trees along the west project boundary with the City of Waukee. The Contractor should also identify notification and coordination of the barbwire fence removal with the City of Waukee.
14. The installation of a trail is required through the adjoining open space and City Property as identified on the plans.

WATER MAINS

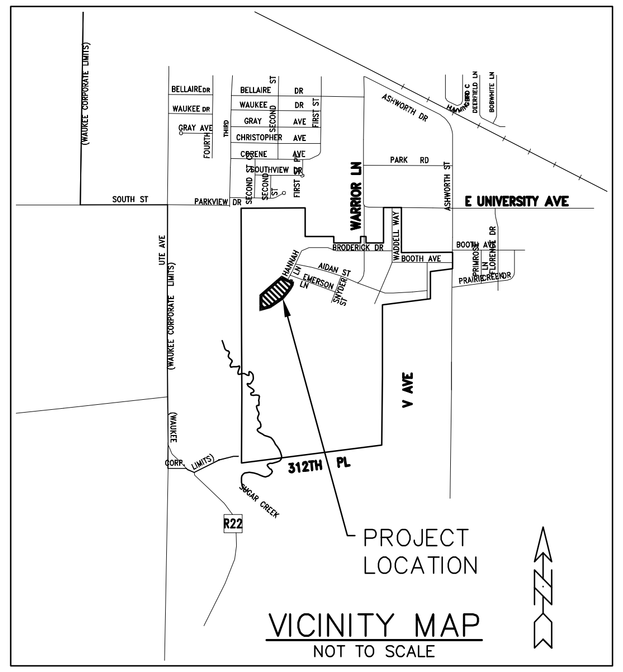
1. The Contractor shall arrange and pay for the required taps to the public water main.
2. Water main shall have a minimum of 5.5 feet cover.
3. All hydrants shall be 18" minimum from sidewalks.
4. The contractor shall verify before placing F.H.'s that no part of the F.H. shall be closer than 18" to a proposed sidewalk. F.H.'s shall also be placed on the extension of lot lines as shown on the plans. Additional stakes for lot corners and sidewalks shall be set.

SANITARY SEWERS

1. The sanitary sewer pipe bedding shall be granular encasement.
2. Vertical separation between sanitary sewer and water main and storm sewer shall be 1.50 feet minimum.

PCC PAVING

1. All subgrade under slab to be compacted to 95% Standard Proctor density for a minimum of 12". Recommended moisture content range 0% to +4% of optimum.
2. Moisten subgrade prior to placing concrete.
3. Concrete shall have minimum 28-day compressive strength of 4000 psi.
4. Aggregate shall be Class 4.
5. Concrete surfaces shall be burlap finish. Check surface with template. No deviation over 1/8" in 10' is permitted. All concrete shall slope to drain.
6. All concrete shall be cured with an ASTM C309 Type 2 water based white pigmented curing compound per IDOT Sec. 4105
7. Saw cut joints as soon as concrete has set enough to prevent tearing of the concrete adjacent to the joint and prior to any cracking.
8. Saw cuts to be 1/8" to 1/4" wide; Depth: longitudinal T/3, transverse T/4.
9. Longitudinal joint spacing shall not be greater than 12'. Joint layout shall be approved by the Engineer.
10. Bars at longitudinal joints to be #5 X 30" deformed at 30" o.c. and shall be epoxy coated.
11. All joints shall be filled with W-R Meadows D-164 Hot Pour Rubber Base Joint Sealer or approved equal.
12. The Contractor to barricade slab for 14 days after placing.
13. Pavement thicknesses shall be 7-inch non-reinforced, 26' B-B with 12" of subgrade preparation.
14. Submit design mix as designed by independent testing laboratory prior to placing any concrete.
15. All work to comply with current ACI standards.

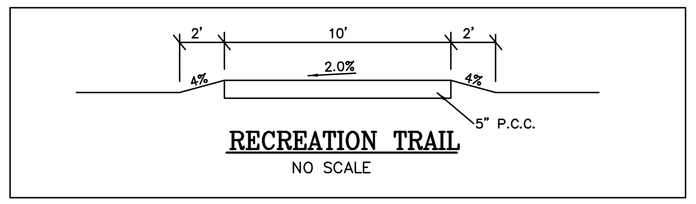


VICINITY MAP
NOT TO SCALE

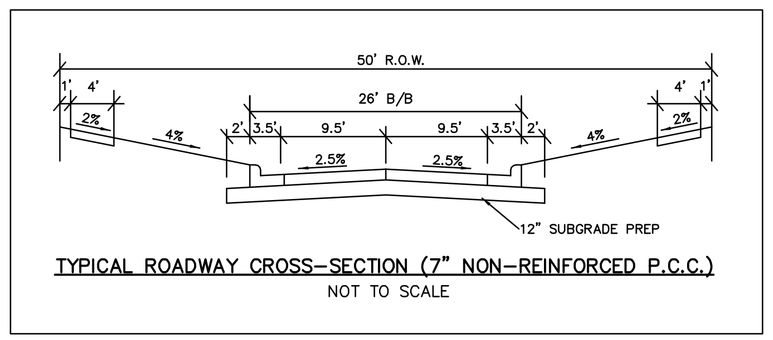
NOTE: SEE STORM WATER POLLUTION PREVENTION PLAN FOR EROSION CONTROL MEASURES

PLANS APPROVED BY CITY OF WAUKEE

DATE: _____



RECREATION TRAIL
NO SCALE



TYPICAL ROADWAY CROSS-SECTION (7" NON-REINFORCED P.C.C.)
NOT TO SCALE

INDEX OF SHEETS

1. COVER SHEET
2. PROJECT MAP
3. GRADING PLAN
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5. HANNAH LANE - SANITARY & WATER
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7. HANNAH LANE - PAVEMENT & STORM SEWER
8. BRODIE STREET - PAVEMENT & STORM SEWER
9. HANNAH LANE - GREENBELT STORM SEWER
10. DETAILS

1. SWPPP EROSION CONTROL
2. SWPPP EROSION CONTROL
3. SITE MAP FOR STORM WATER CONTROL

LICENSED PROFESSIONAL ENGINEER
DOUGLAS J. SALTSGAVER
11993
IOWA

ENGINEERING CERTIFICATION

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT, SPECIFICATION OR REPORT WAS PREPARED BY ME, OR UNDER MY DIRECT PERSONAL SUPERVISION, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

DOUGLAS J. SALTSGAVER, P.E. #11993
MY REGISTRATION RENEWAL DATE IS DECEMBER 31, 2012

PAGES OR SHEETS COVERED BY THIS SEAL
1-10

RECORD DRAWING

DATE: 10/12/11

1

7150.00

GLYNN VILLAGE PLAT 4

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NOTE:

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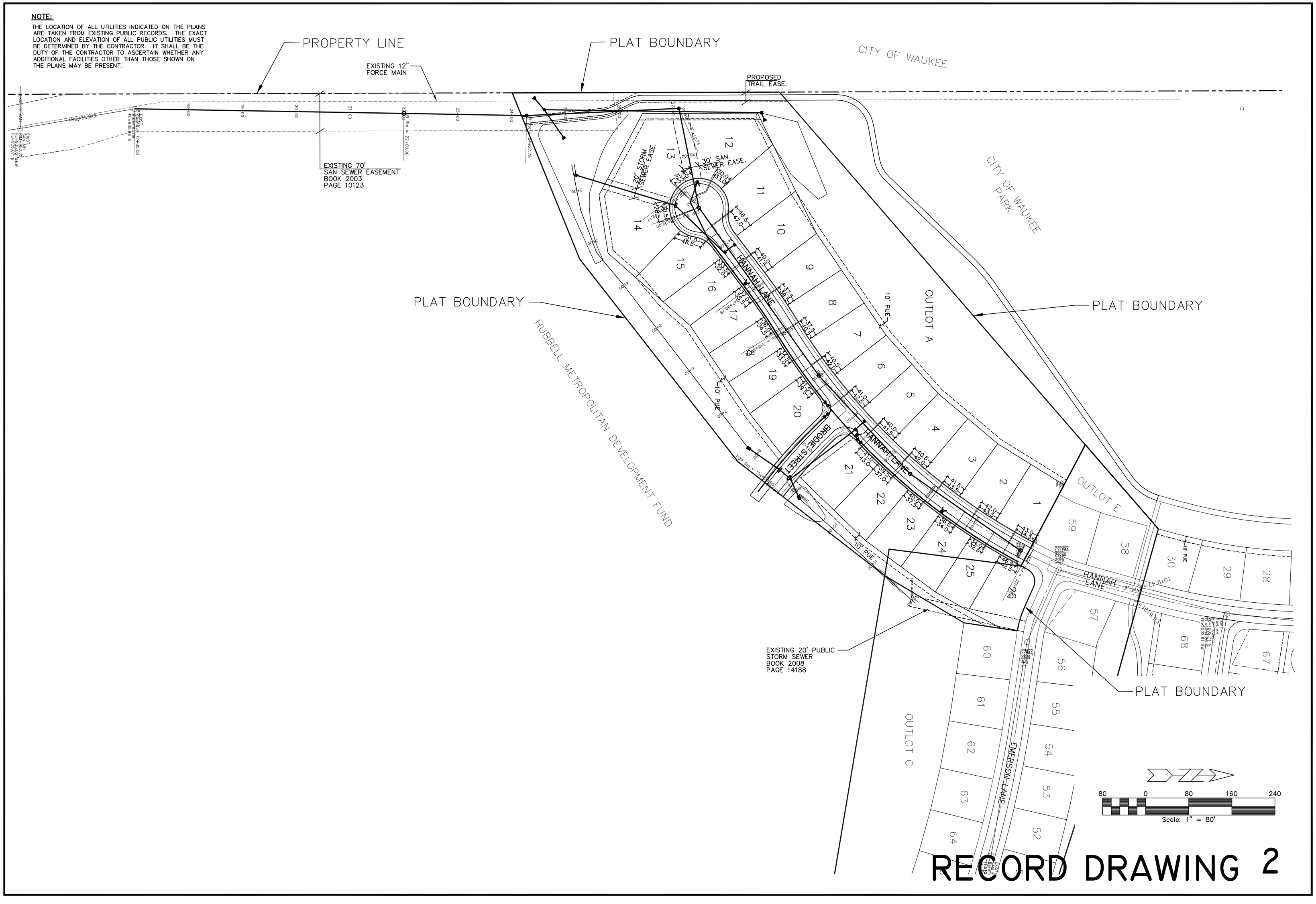

RECORD DRAWING 2

GLYNN VILLAGE PLAT 4 - PROJECT MAP

NO.	REVISION	DATE	BY:	FOR: HUBBELL REALTY COMPANY

LOCATION:

SCALE:	1" = 80'	DESIGNED BY:	DJS	DRAWN BY:	pjv
DWG:	7150PRJ.DWG	CHECKED BY:	RPV	DATE:	10/12/11
FIELD BOOK:		SHEET 1	OF 10	FILE NO.:	7150

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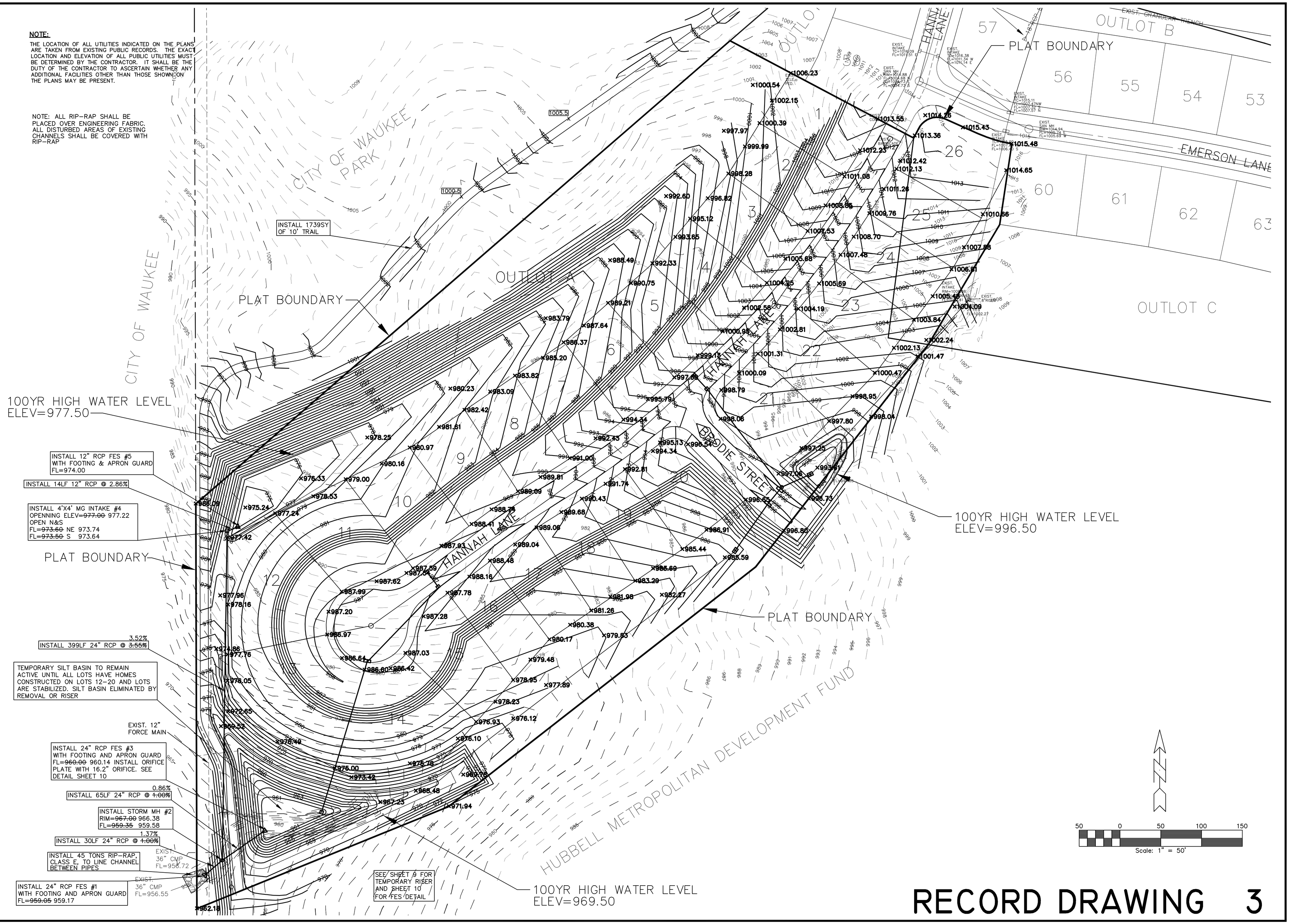
NOTE: ALL RIP-RAP SHALL BE PLACED OVER ENGINEERING FABRIC. ALL DISTURBED AREAS OF EXISTING CHANNELS SHALL BE COVERED WITH RIP-RAP



RECORD DRAWING 3

GLYNN VILLAGE PLAT 4 - GRADING PLAN

NO.	REVISION	DATE	BY

FOR: HUBBELL REALTY COMPANY

LOCATION:

SCALE: 1" = 50'
DWG: 7150GRD.DWG
FIELD BOOK:

DESIGNED BY: DJS
CHECKED BY: RPV
SHEET 3 OF 10

DRAWN BY: PJV
DATE: 10/12/11
FILE NO.: 7150

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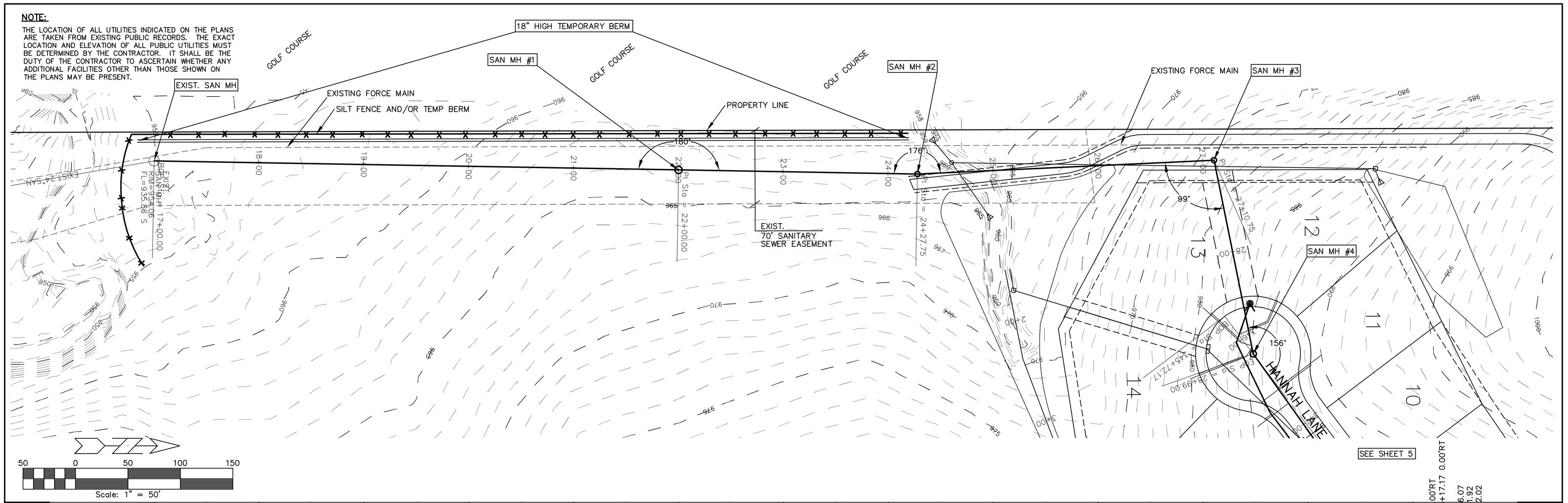

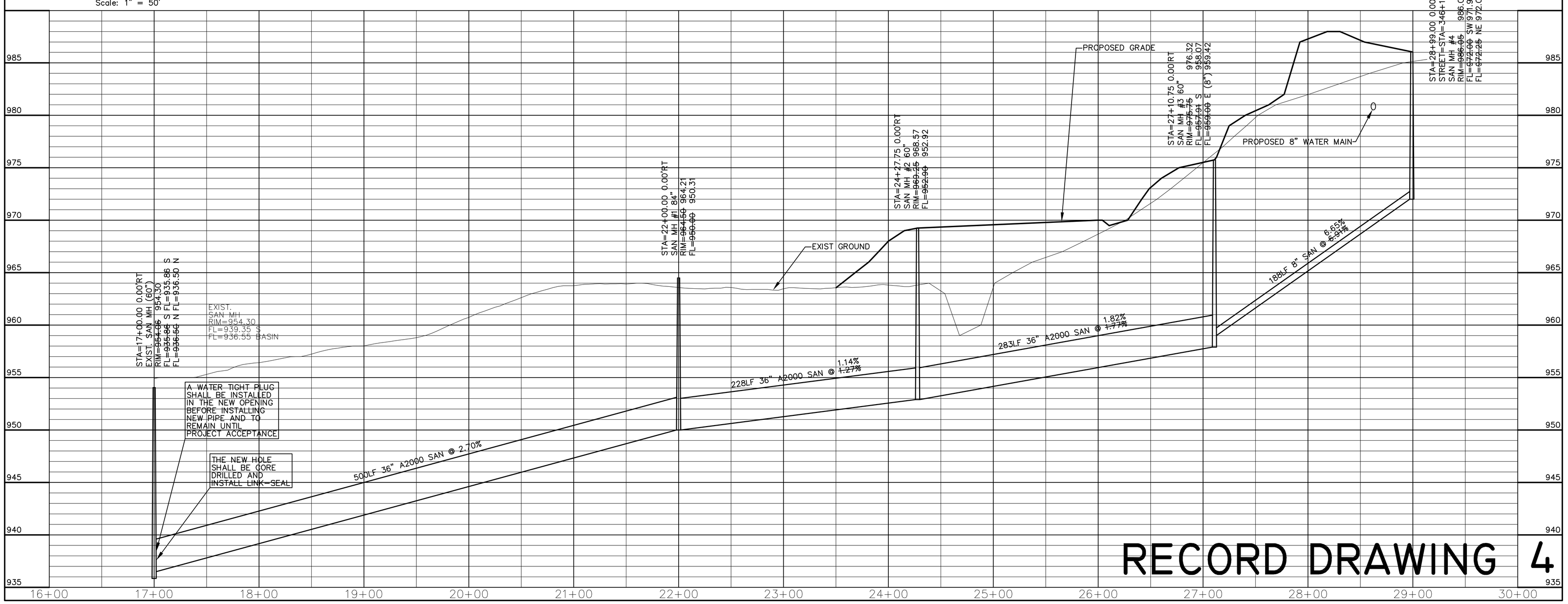

RECORD DRAWING 4

GLYNN VILLAGE PLAT 4 - OFFSITE TRUNK SEWER

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: DJS	DRAWN BY: PJV
	DWG: 7150PP4.DWG	CHECKED BY:	DATE: 10/12/11
	FIELD BOOK:	SHEET 4 OF 10	FILE NO.: 7150

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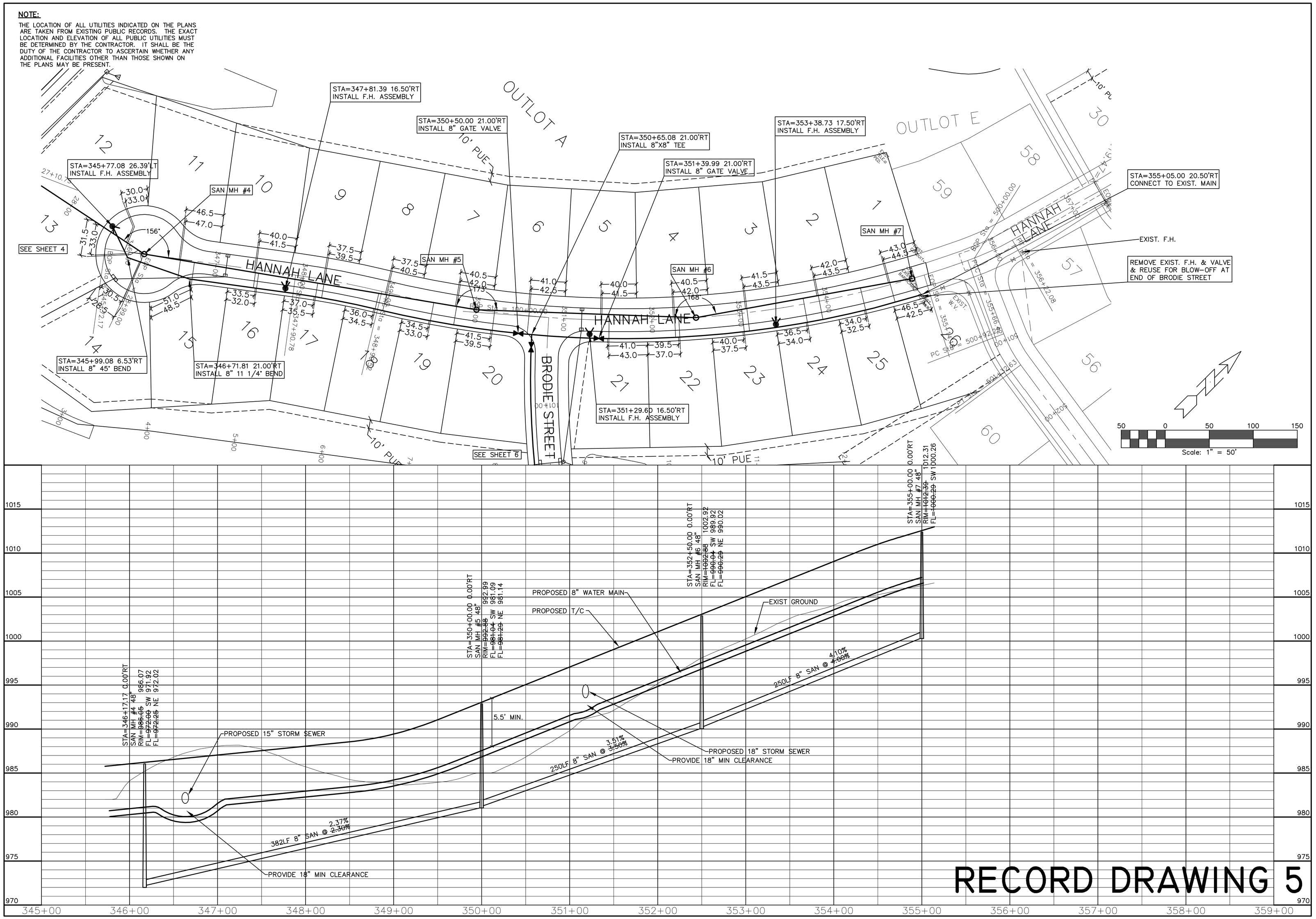

RECORD DRAWING 5

HANNAH LANE - SANITARY AND WATER

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: DJS	DRAWN BY: PJV
	DWG: 7150PP5.DWG	CHECKED BY:	DATE: 10/12/11
	FIELD BOOK:	SHEET 5 OF 10	FILE NO.: 7150

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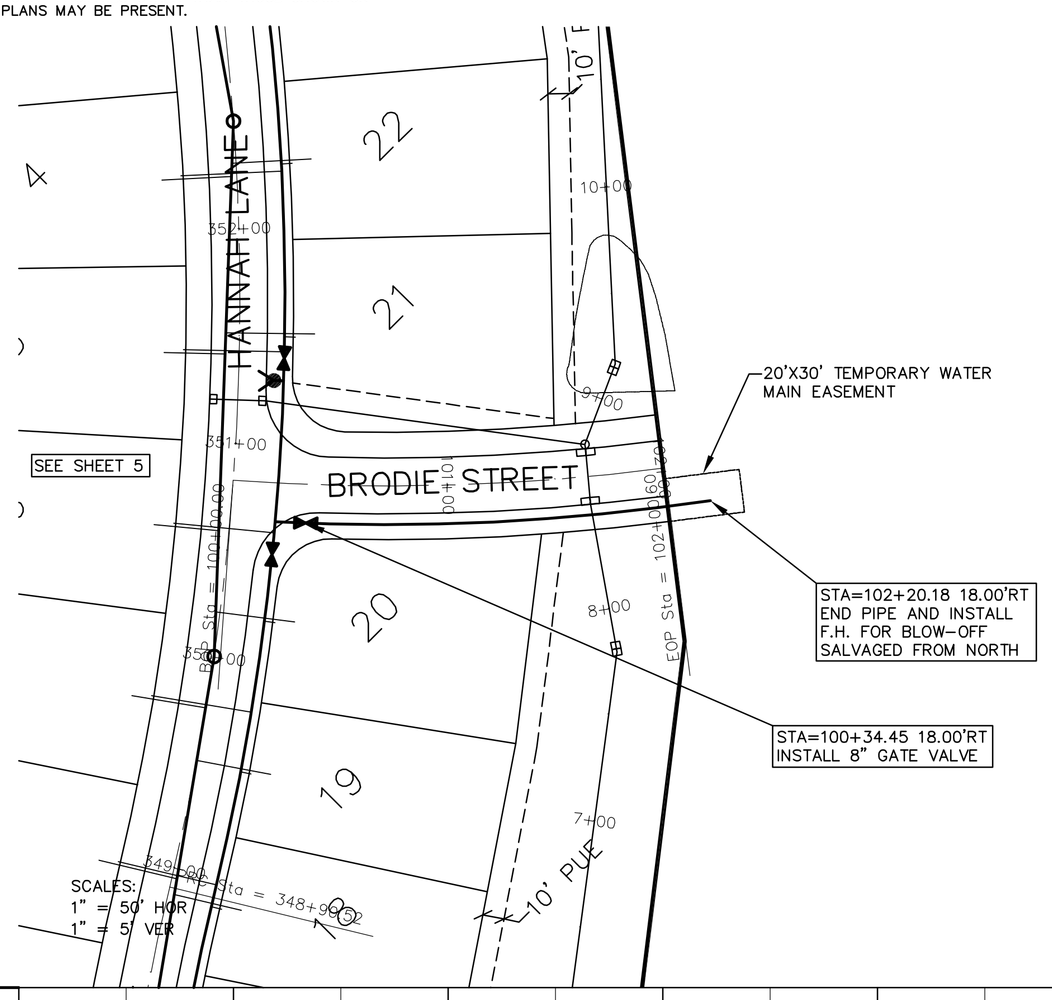

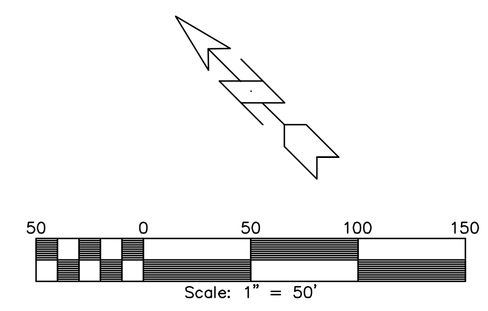

RECORD DRAWING 6

BRODIE STREET - WATER

LOCATION:	SCALE: 1" = 50'	DESIGNED BY: DJS	DRAWN BY: PJV
	DWG: 7150PP6.DWG	CHECKED BY:	DATE: 10/12/11
	FIELD BOOK:	SHEET 6 OF 10	FILE NO.: 7150

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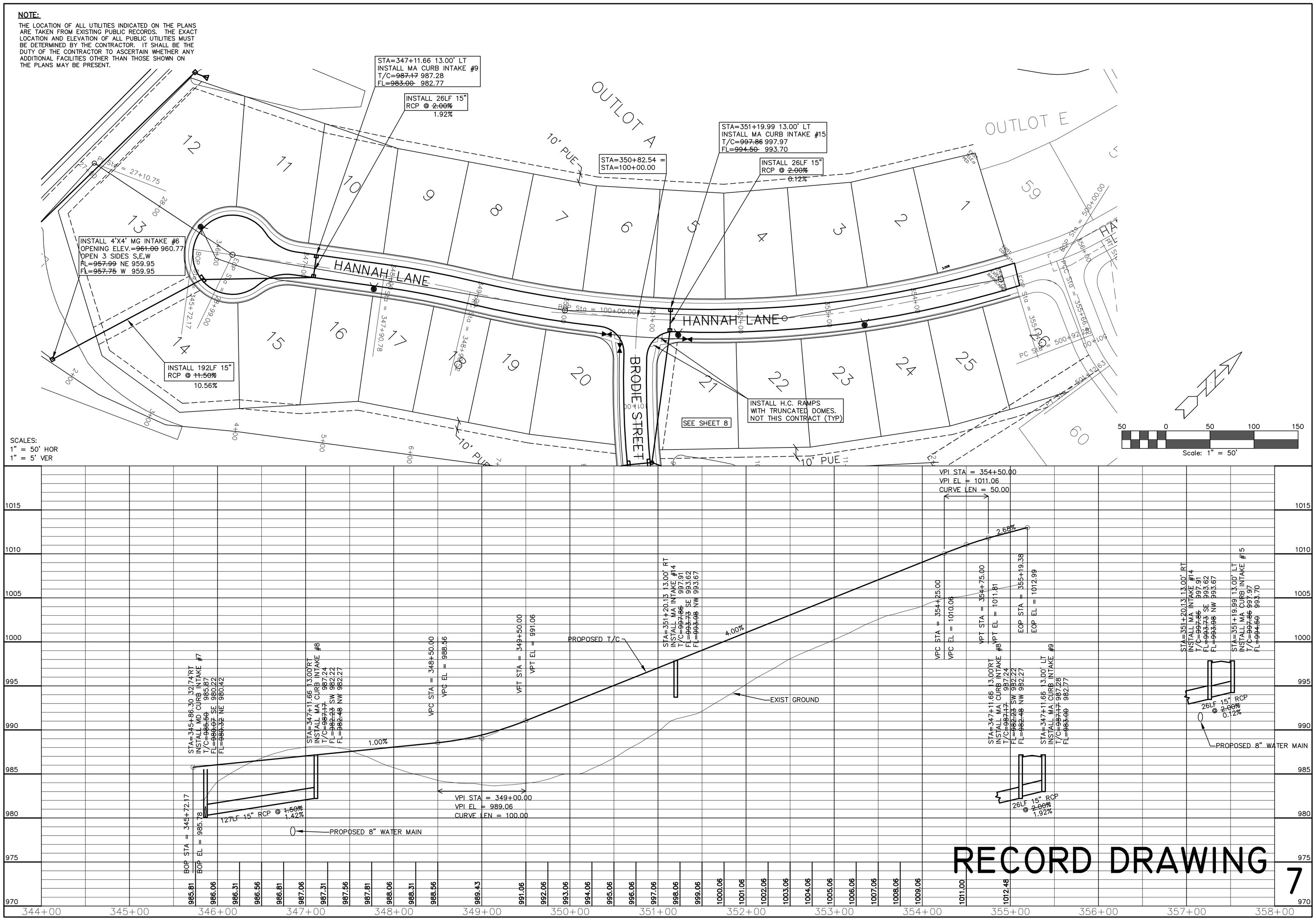

HANNAH LANE - PAVEMENT AND STORM SEWER

SCALE: 1" = 50'	DESIGNED BY: DJS	DRAWN BY: PJV	
DWG: 7150PP7.DWG	CHECKED BY:	DATE: 10/12/11	
FIELD BOOK:	SHEET 7 OF 10	FILE NO.: 7150	

LOCATION:

FOR: HUBBELL REALTY COMPANY

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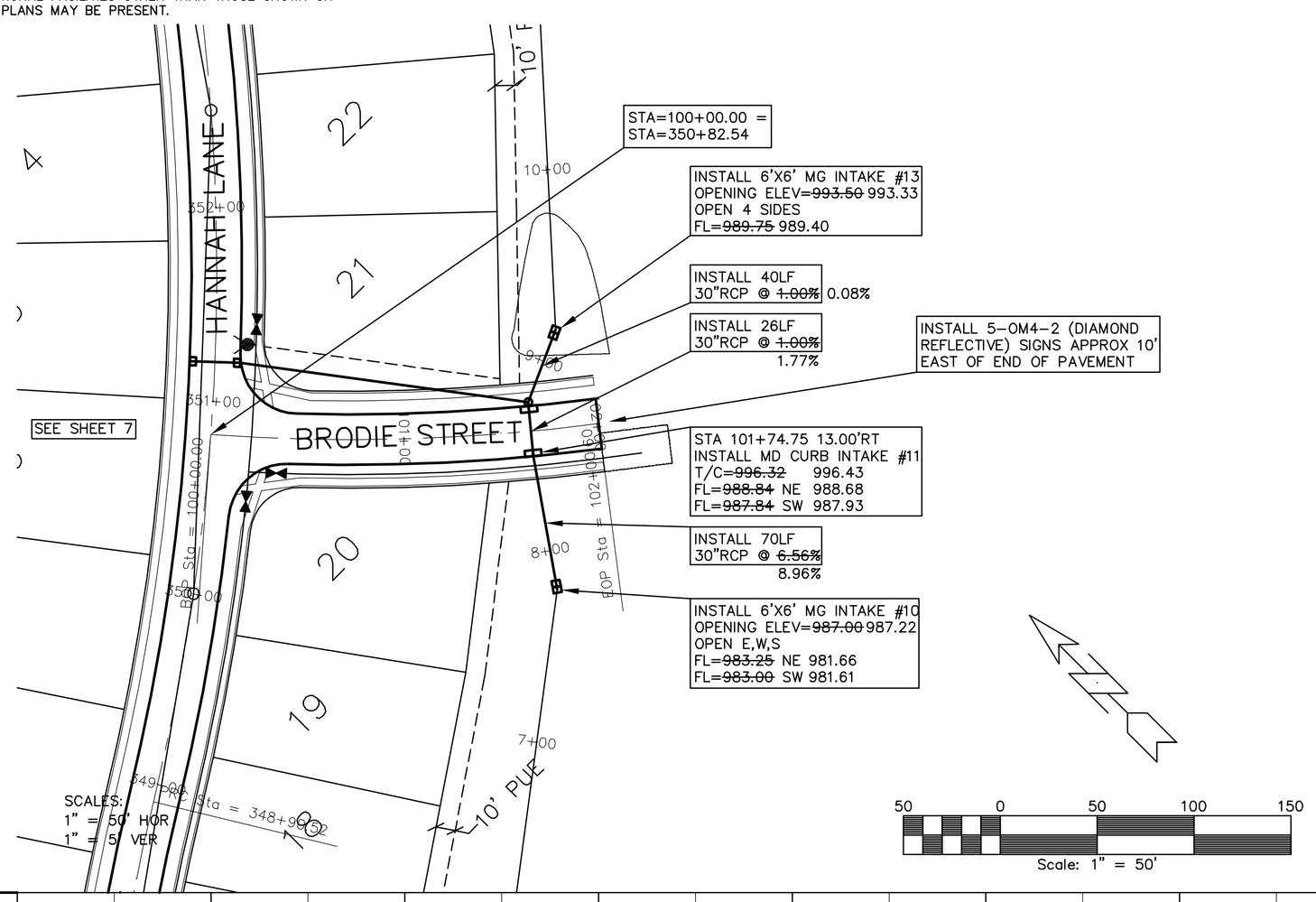
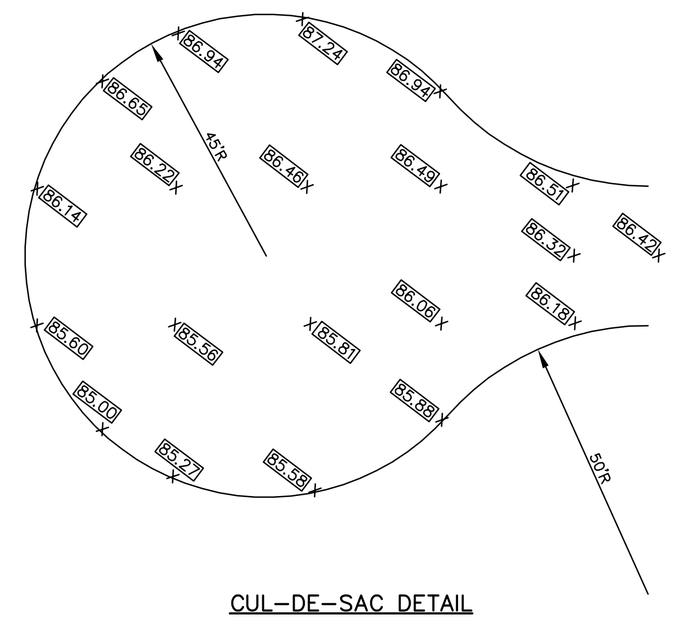
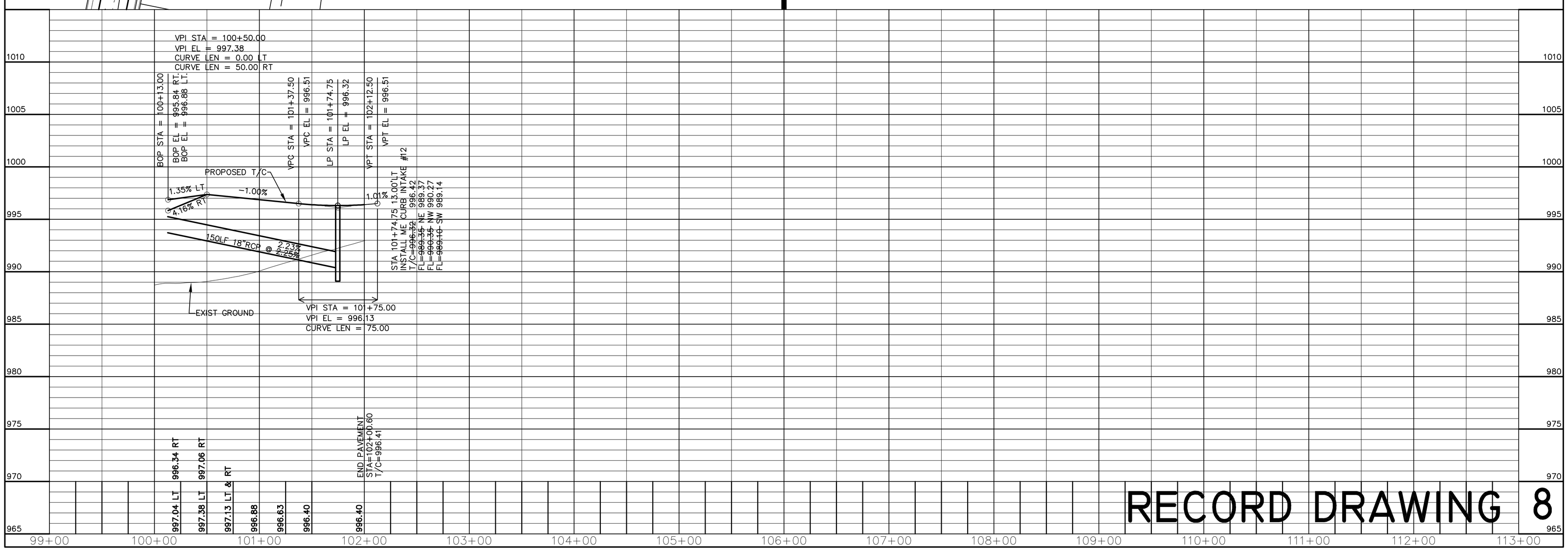




CUL-DE-SAC DETAIL

1" = 20'



RECORD DRAWING

8

BRODIE STREET - PAVEMENT AND STORM SEWER

FOR:	HUBBELL REALTY COMPANY
LOCATION:	
SCALE:	1" = 50'
DWG:	7150PP8.DWG
FIELD BOOK:	
DESIGNED BY:	DJS
CHECKED BY:	
SHEET 8 OF 10	
DRAWN BY:	PJV
DATE:	10/12/11
FILE NO.:	7150

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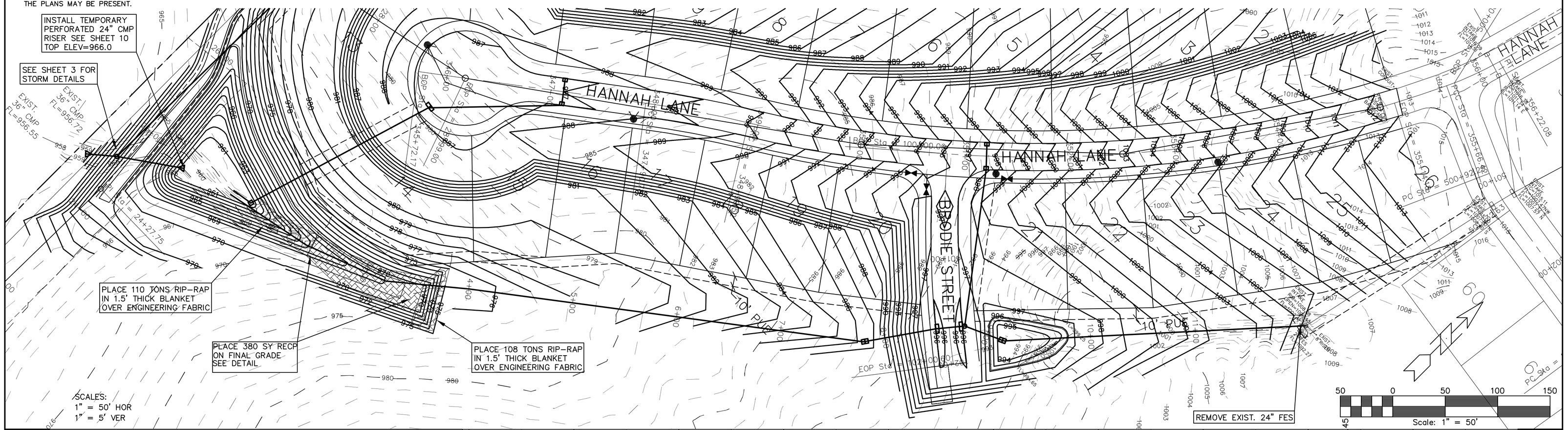
SEE SHEET 7 FOR STORM SEWER

SEE SWPPP FOR TERMS OF REMOVAL OF THE TEMPORARY STANDPIPE



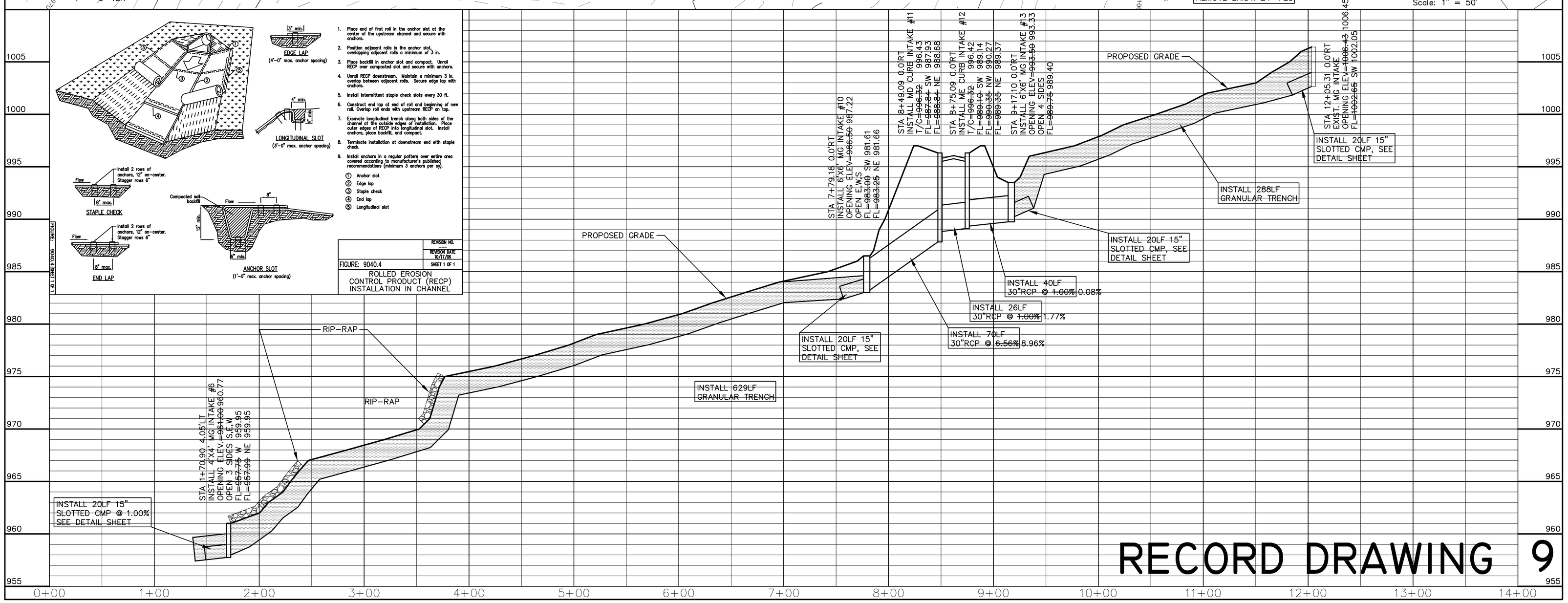
1. Place end of first roll in the anchor slot at the center of the upstream channel and secure with anchors.
2. Position adjacent rolls in the anchor slot, overlapping adjacent rolls a minimum of 3 in.
3. Place backfill in anchor slot and compact. Unroll RECP over compacted slot and secure with anchors.
4. Unroll RECP downstream. Maintain a minimum 3 in. overlap between adjacent rolls. Secure edge lap with anchors.
5. Install intermittent staple check slots every 30 ft.
6. Construct end lap at end of roll and beginning of new roll. Overlap roll ends with upstream RECP on top.
7. Excavate longitudinal trench along both sides of the channel at the outside edges of installation. Place outer edges of RECP into longitudinal slot. Install anchors, place backfill, and compact.
8. Terminate installation at downstream end with staple check.
9. Install anchors in a regular pattern over entire area covered according to manufacturer's published recommendations (minimum 3 anchors per sy).

① Anchor slot
② Edge lap
③ Staple check
④ End lap
⑤ Longitudinal slot

REVISION NO.	
REVISION DATE	10/17/09
SHEET	1 OF 1

FIGURE: 9040.4

ROLLED EROSION CONTROL PRODUCT (RECP) INSTALLATION IN CHANNEL



RECORD DRAWING 9

HANNAH LANE - GREENBELT STORM SEWER

LOCATION:		DRAWN BY:	PJV
SCALE:	1" = 50'	DESIGNED BY:	DJS
DWG:	7150PP9.DWG	DATE:	10/12/11
FIELD BOOK:		CHECKED BY:	
		SHEET 9 OF 10	FILE NO.: 7150

FOR: HUBBELL REALTY COMPANY

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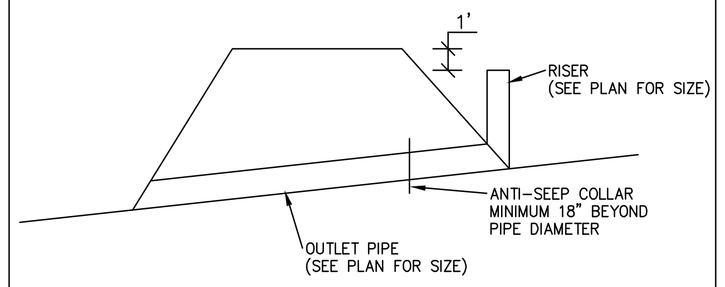
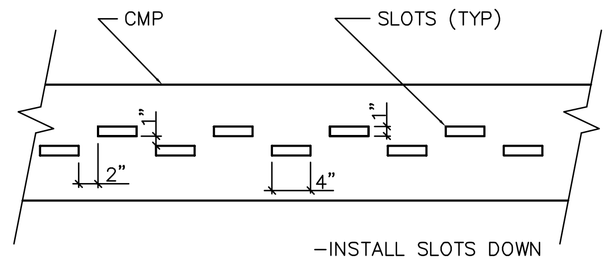
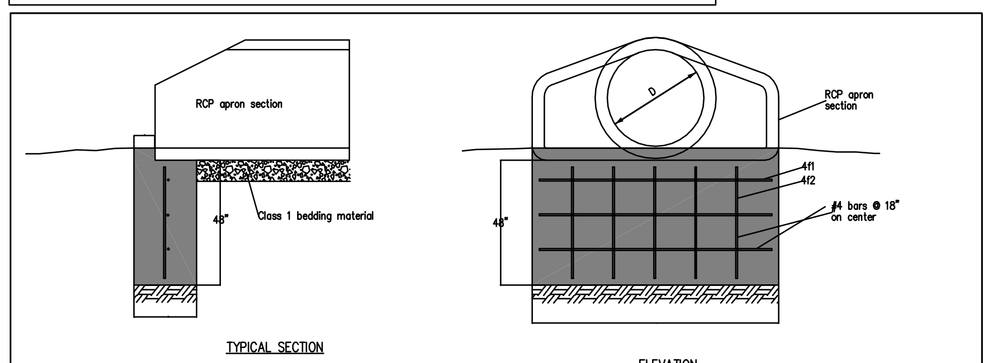


RISER PIPE DETAIL
NTS



SLOTTED PIPE DETAIL
NOT TO SCALE



TYPICAL SECTION

ELEVATION

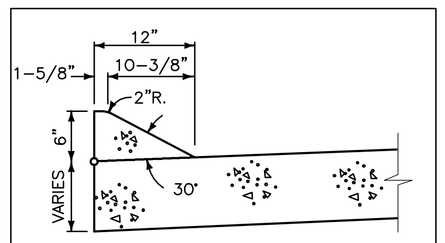
REINFORCING BAR LIST

D	W	Mark	Size	Length	Count
12"	2'-4"	4f1	4	2'-0"	3
		4f2	4	3'-8"	2
15"	2'-10½"	4f1	4	2'-6½"	3
		4f2	4	3'-8"	2
18"	3'-5"	4f1	4	3'-1"	3
		4f2	4	3'-8"	3
24"	4'-6"	4f1	4	4'-2"	3
		4f2	4	3'-8"	3
30"	5'-7"	4f1	4	5'-3"	3
		4f2	4	3'-8"	4
36"	6'-8"	4f1	4	6'-4"	3
		4f2	4	3'-8"	5
42"	7'-3"	4f1	4	6'-11"	3
		4f2	4	3'-8"	5
48"	7'-10"	4f1	4	7'-6"	3
		4f2	4	3'-8"	6
54"	8'-5"	4f1	4	8'-1"	3
		4f2	4	3'-8"	6
60"	8'-11"	4f1	4	8'-7"	3
		4f2	4	3'-8"	6
66"	8'-11"	4f1	4	8'-7"	3
		4f2	4	3'-8"	6
72"	10'-0"	4f1	4	9'-8"	3
		4f2	4	3'-8"	7
78"	10'-7"	4f1	4	10'-3"	3
		4f2	4	3'-8"	7
84"	11'-1"	4f1	4	10'-9"	3
		4f2	4	3'-8"	8

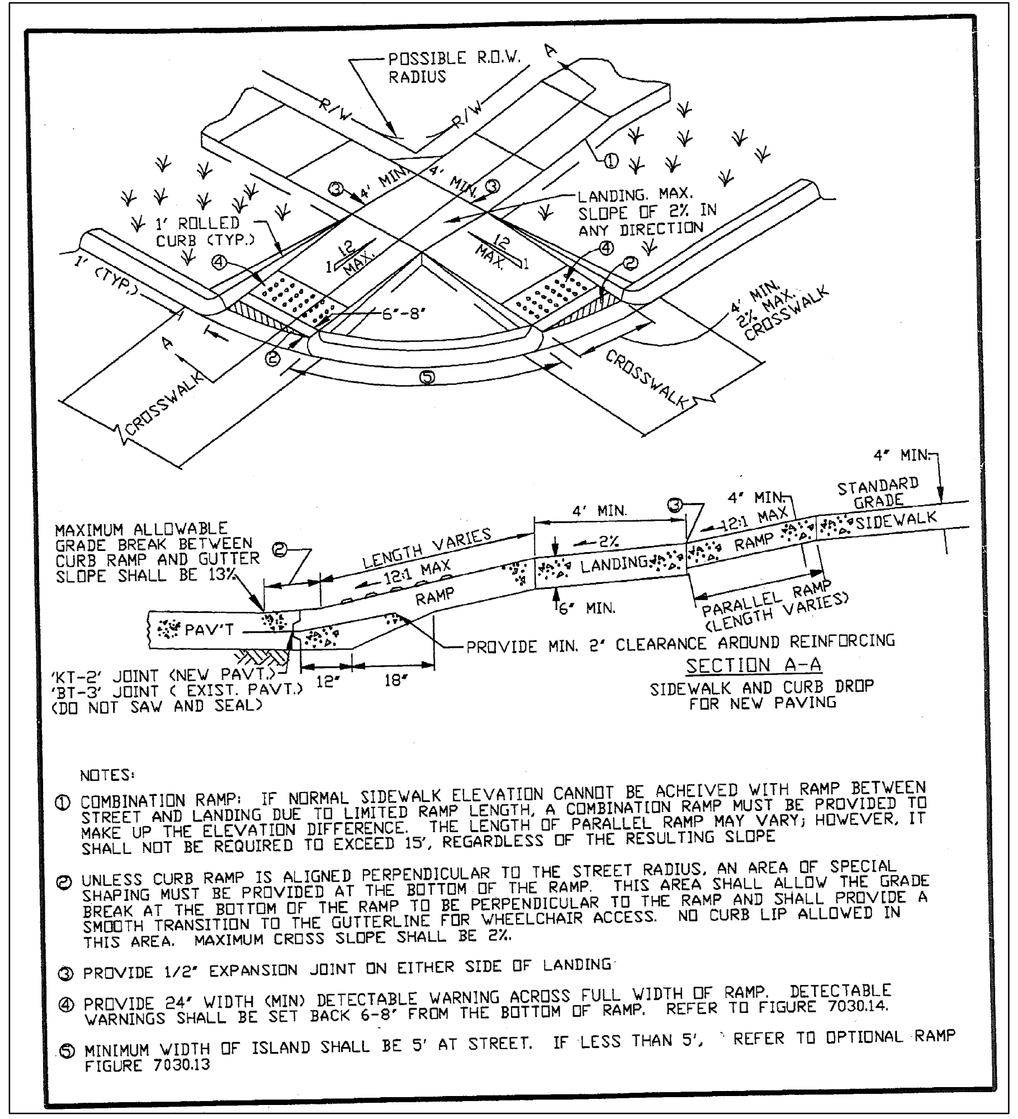
REVISION	
NEW	10/29/08
FIGURE 4030.221	
SHEET 1 OF 1	

RCP APRON SECTION FOOTING

FIGURE 4030.221 SHEET 1 OF 1



INTEGRAL 6" SLOPED CURB
NOT TO SCALE



SECTION A-A
SIDEWALK AND CURB DROP FOR NEW PAVING

NOTES:

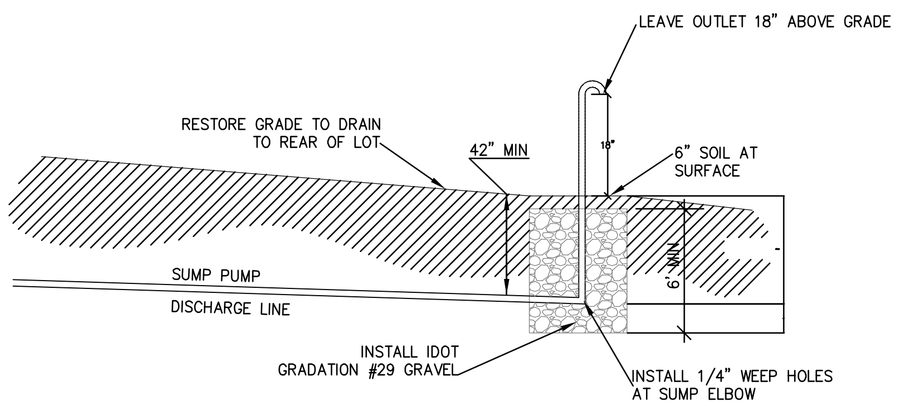
① COMBINATION RAMP: IF NORMAL SIDEWALK ELEVATION CANNOT BE ACHEIVED WITH RAMP BETWEEN STREET AND LANDING DUE TO LIMITED RAMP LENGTH, A COMBINATION RAMP MUST BE PROVIDED TO MAKE UP THE ELEVATION DIFFERENCE. THE LENGTH OF PARALLEL RAMP MAY VARY; HOWEVER, IT SHALL NOT BE REQUIRED TO EXCEED 15', REGARDLESS OF THE RESULTING SLOPE

② UNLESS CURB RAMP IS ALIGNED PERPENDICULAR TO THE STREET RADIUS, AN AREA OF SPECIAL SHAPING MUST BE PROVIDED AT THE BOTTOM OF THE RAMP. THIS AREA SHALL ALLOW THE GRADE BREAK AT THE BOTTOM OF THE RAMP TO BE PERPENDICULAR TO THE RAMP AND SHALL PROVIDE A SMOOTH TRANSITION TO THE GUTTERLINE FOR WHEELCHAIR ACCESS. NO CURB LIP ALLOWED IN THIS AREA. MAXIMUM CROSS SLOPE SHALL BE 2%.

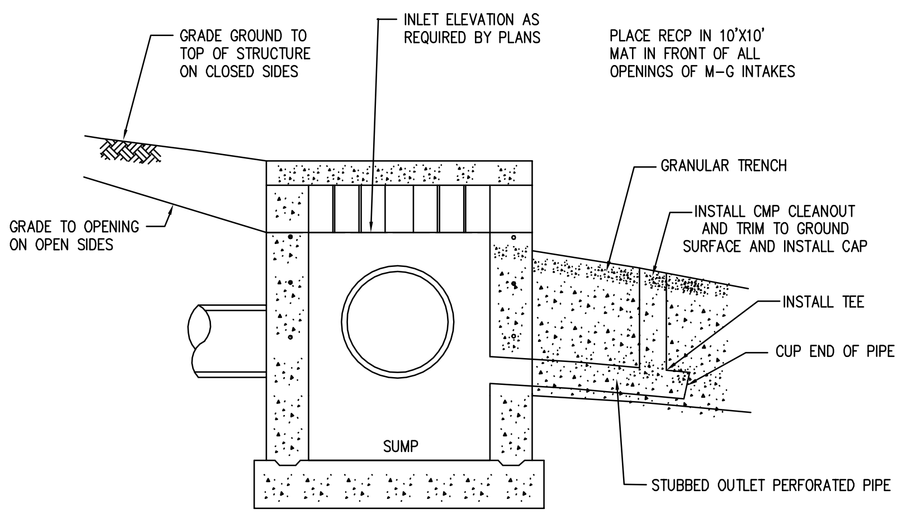
③ PROVIDE 1/2" EXPANSION JOINT ON EITHER SIDE OF LANDING

④ PROVIDE 24" WIDTH (MIN) DETECTABLE WARNING ACROSS FULL WIDTH OF RAMP. DETECTABLE WARNINGS SHALL BE SET BACK 6-8" FROM THE BOTTOM OF RAMP. REFER TO FIGURE 7030.14.

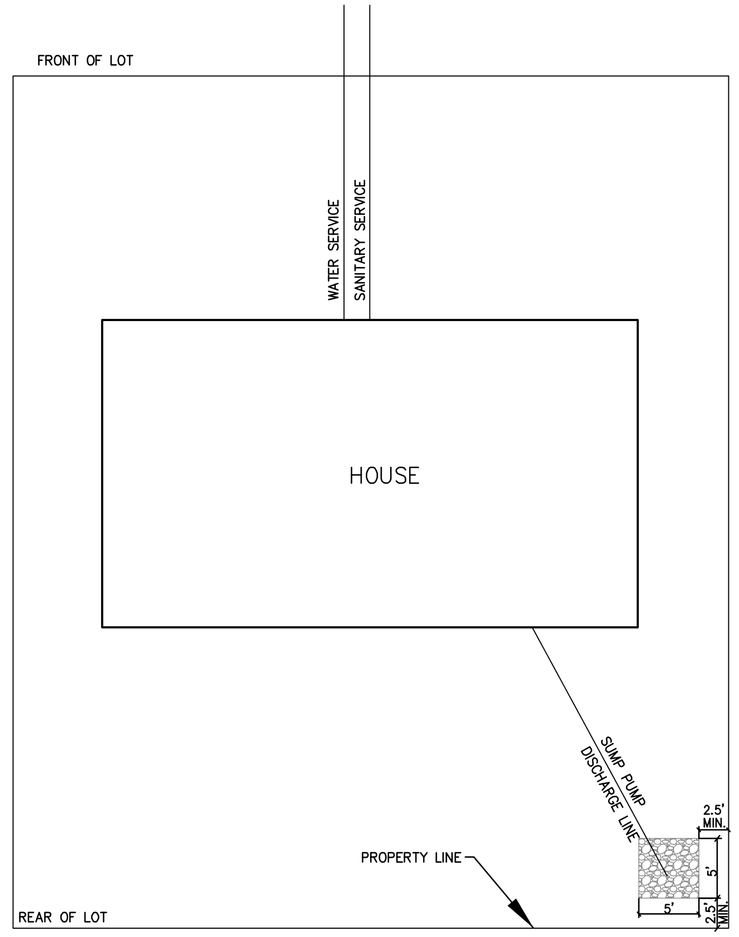
⑤ MINIMUM WIDTH OF ISLAND SHALL BE 5' AT STREET. IF LESS THAN 5', REFER TO OPTIONAL RAMP FIGURE 7030.13



TYPICAL LOT SUMP SERVICE PROFILE DETAIL
NOT TO SCALE

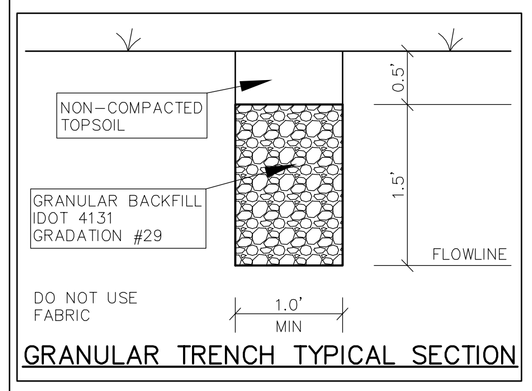


AREA TYPE "M-G" OUTLET
NOT TO SCALE

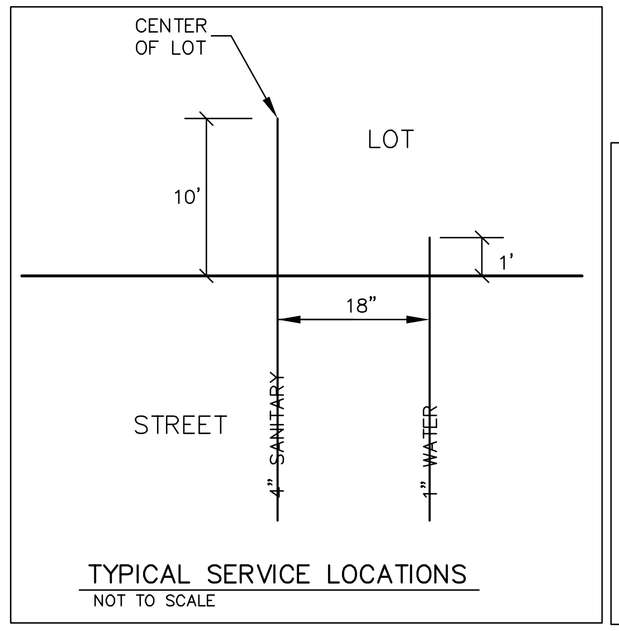


NOTE: SUMP PITS TO BE INSTALLED BY INDIVIDUAL HOMEBUILDER. PIT SHALL BE LOCATED A MINIMUM OF 1' OUTSIDE OF ANY REAR OR SIDE YARD EASEMENTS. SUMP PITS SHALL BE LOCATED ON THE LOW SIDE OF THE LOT.

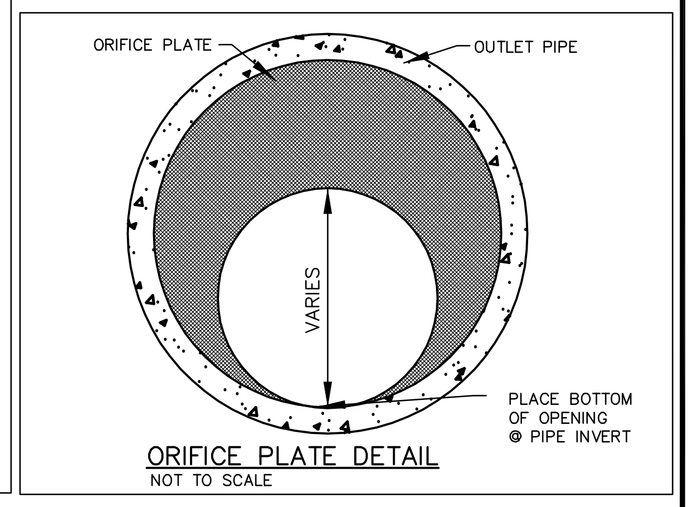
TYPICAL LOT SUMP SERVICE PLAN DETAIL
NOT TO SCALE



GRANULAR TRENCH TYPICAL SECTION



TYPICAL SERVICE LOCATIONS
NOT TO SCALE



ORIFICE PLATE DETAIL
NOT TO SCALE

RECORD DRAWING

10

GLYNN VILLAGE PLAT 4 - DETAILS

SCALE:	1" = 50'	DESIGNED BY:	DJS
DWG:	7150DTL.DWG	CHECKED BY:	RPV
FIELD BOOK:		SHEET 10 OF 10	

DRAWN BY:	PJV
DATE:	10/12/11
FILE NO.:	7150

LOCATION:

FOR: HUBBELL REALTY COMPANY

NO.	REVISION	DATE	BY

ERG
Engineering Resource Group, Inc.
Engineers and Surveyors
2414 SE GRAND AVENUE
DES MOINES, IOWA 50312
(515) 288-4823

7150.00

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