

NOTE : CASTING ADJUSTMENTS FOR EXISTING MANHOLES AND GATE VALVES AS WELL AS CATCHBASINS ARE INCIDENTAL TO THE PAVING CONTRACT.

NOTE : ALL SPOT ELEVATIONS ARE @ GUTTERLINE UNLESS OTHERWISE NOTED

NOTE : STREET SHALL BE CLEANED PRIOR TO PLACING TACK COAT

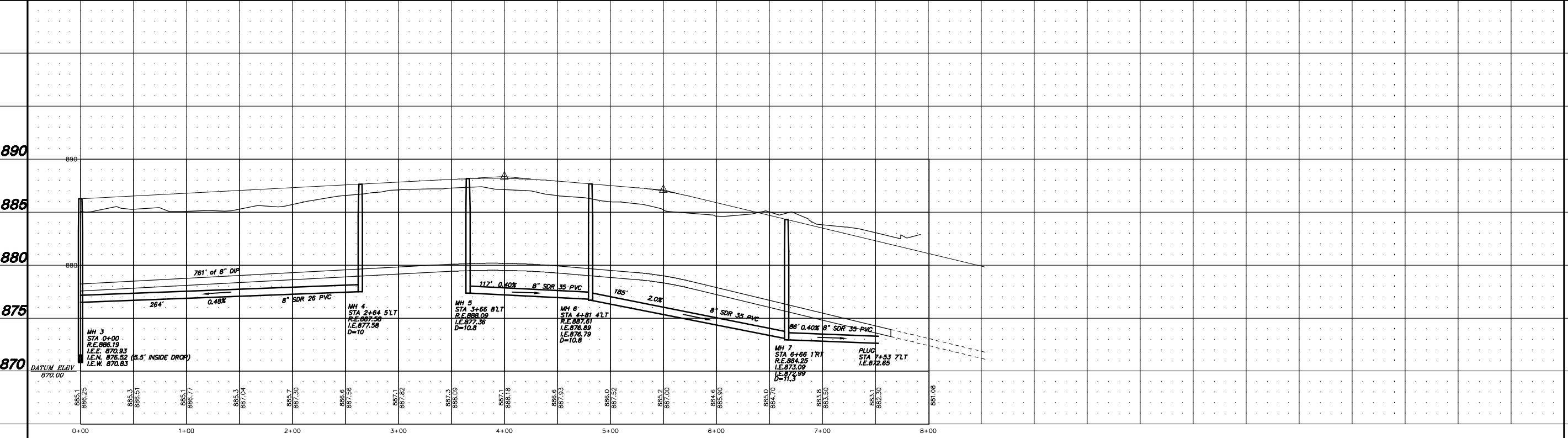
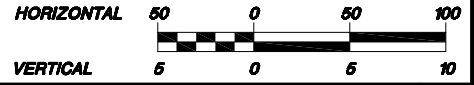
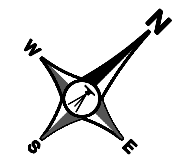
NOTE : TACK COAT SHALL BE PLACED BETWEEN BITUMINOUS LIFTS.

**MATERIALS**

WATER  
 WATER SERVICE - 1" TYPE K COPPER  
 SANITARY  
 SANITARY SERVICE - 4" SDR 35 PVC

-ALL SANITARY SERVICES CONNECTED TO 8" DR 18 PIPE MUST INCLUDE CONCRETE AROUND THE WYE AND ELBOW.  
 -10' TYPICAL HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND WATERMAIN.  
 -3' TYPICAL HORIZONTAL SEPARATION BETWEEN SANITARY AND WATER SERVICES.  
 -HYDRANTS LOCATED 5' FROM BACK OF CURB.  
 -WYE STATIONED FROM DOWNSTREAM MH.  
 -CURB STOPS SHALL BE PLACED @ PROPERTY LINE UNLESS SIDEWALK IS SHOWN THEN STUB INTO LOT 9' PAST R.O.W.

# KAMACITE STREET/ 169TH LANE NW



DATE	REVISIONS	BY

**ANDERSON PASSI & ASSOCIATES**  
 200 3RD AVE NE, SUITE 100  
 CAMBRIDGE, MINNESOTA 55008  
 phone 763-689-4042 fax 763-689-6681

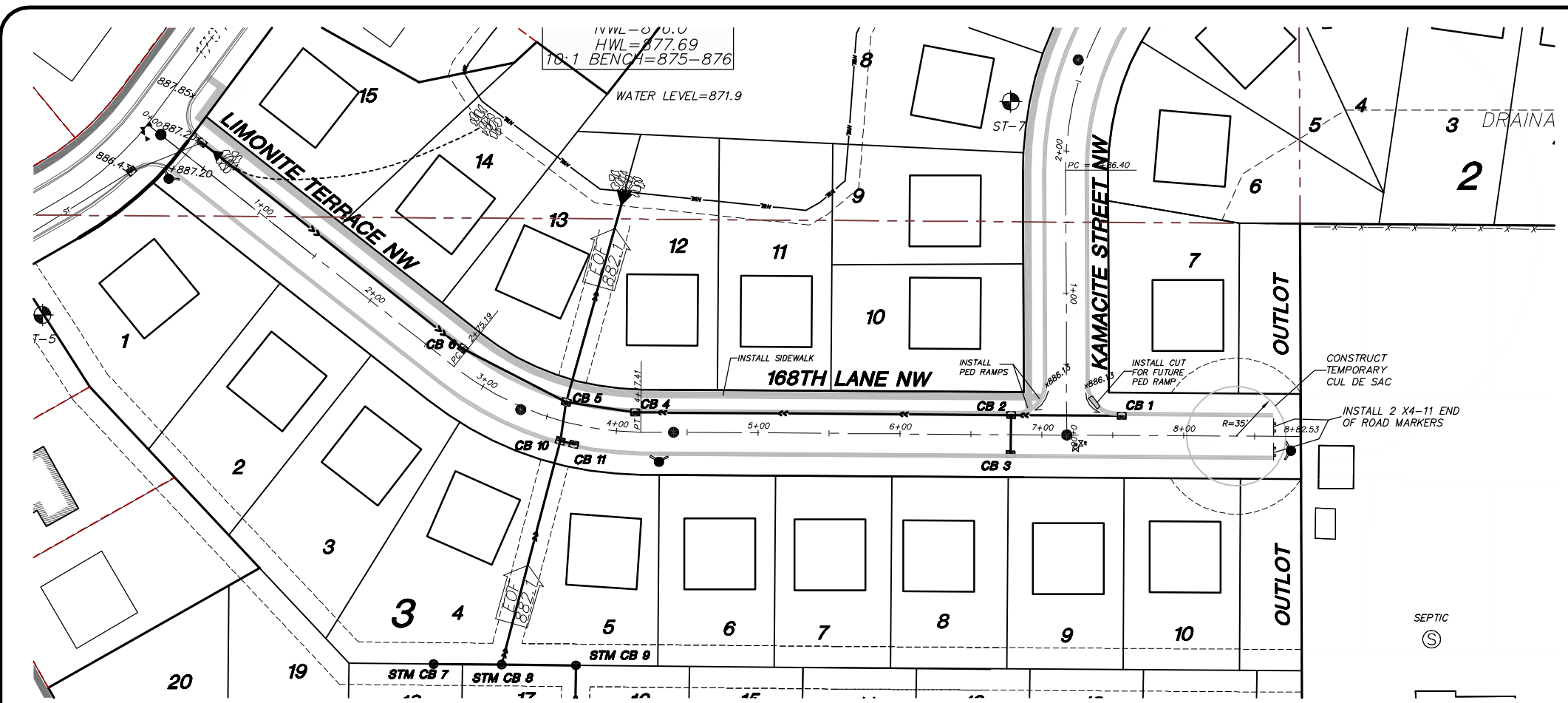
**BROOKFIELD 4TH ADDITION**  
 SANITARY SEWER/WATERMAIN  
 KAMACITE STREET/ 169TH LANE NW  
 RAMSEY, MINNESOTA

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 11-7-2013 REG. NO. 24018  
 Brent Kosell  
 BRENT KOSSELL

SCALE: 1"=50'  
 PROJECT: 127-13  
 DRAWN: KJA  
 DATE: 11-7-2013  
 CHECKED: BTR  
 APPROVED: BTR

**C3**



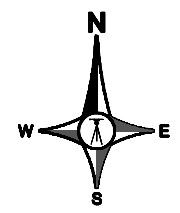
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NOTE : ALL SPOT ELEVATIONS ARE @ GUTTERLINE UNLESS OTHERWISE NOTED

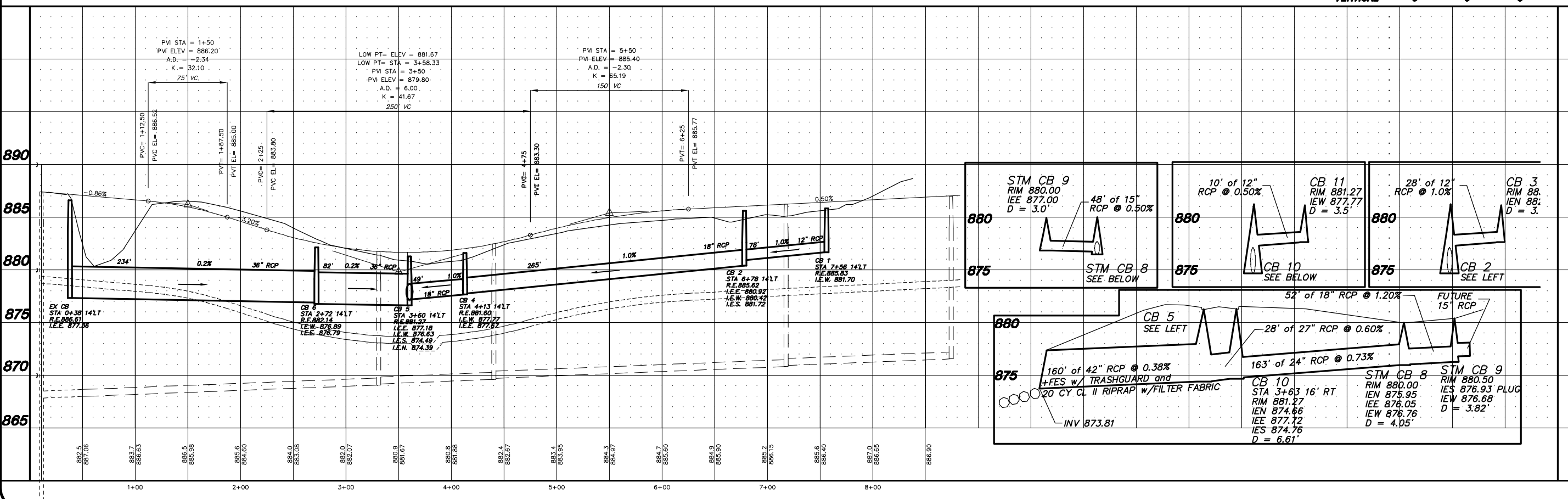
NOTE : STREET SHALL BE CLEANED PRIOR TO PLACING TACK COAT

NOTE : TACK COAT SHALL BE PLACED BETWEEN BITUMINOUS LIFTS.

**MATERIALS**  
 WATER  
 WATER SERVICE - 1" TYPE K COPPER  
 SANITARY  
 SANITARY SERVICE - 4" SDR 35 PVC



# LIMONITE TERRACE NW/168TH LANE NW



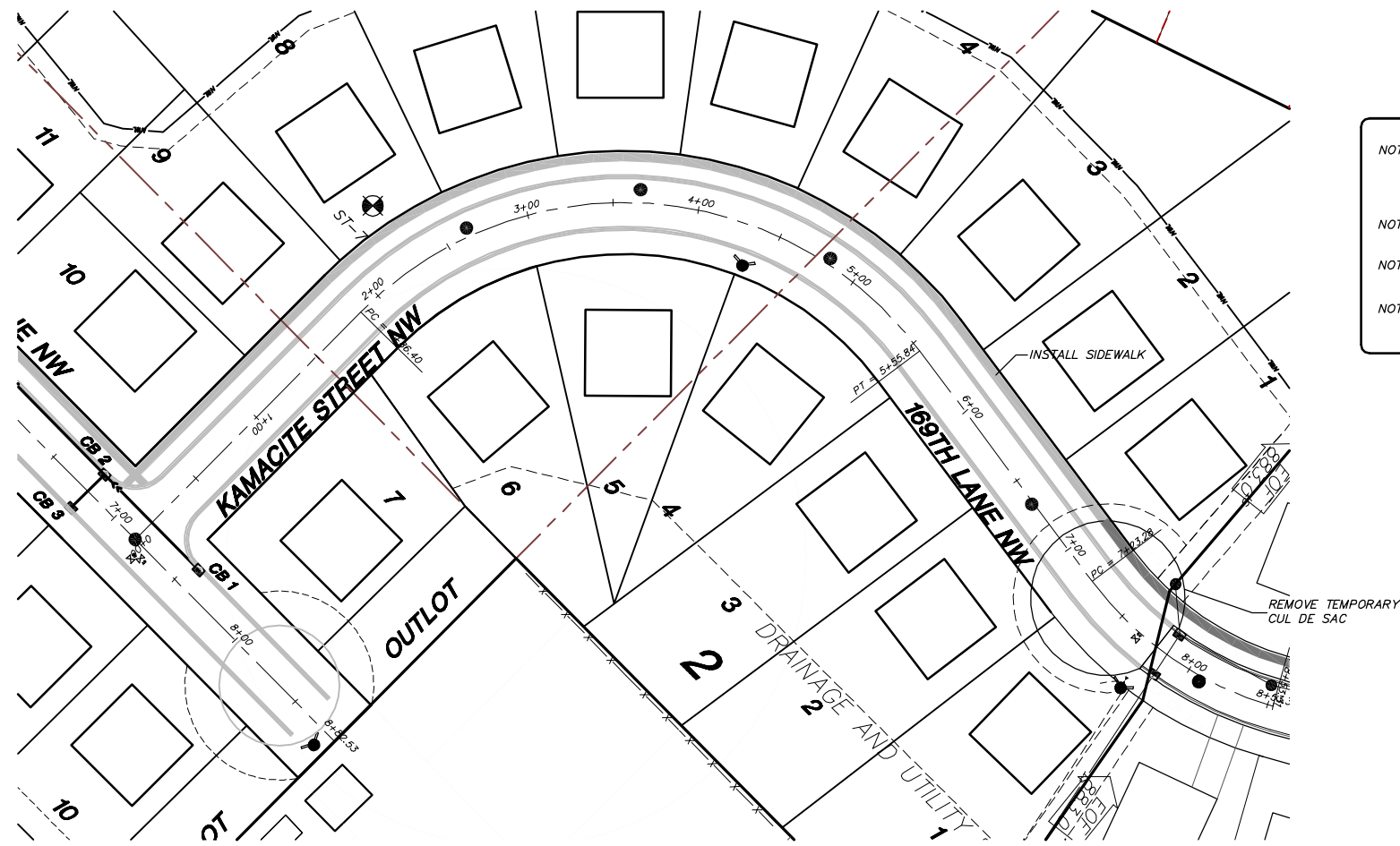
DATE	REVISIONS	BY

**ANDERSON PASSE & ASSOCIATES**  
 200 3RD AVE NE, SUITE 100  
 CAMBRIDGE, MINNESOTA 55008  
 phone 763-689-4042 fax 763-689-6681

**BROOKFIELD 4TH ADDITION STREET/STORM SEWER**  
 LIMONITE TERRACE NW/  
 168TH LANE NW  
 RAMSEY, MINNESOTA

DATE	11-7-2013	REG. NO.	24019
PROJECT	127-13	CHECKED	BTR
SCALE	1"=60'	APPROVED	BTR

**C4**

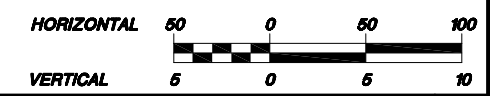
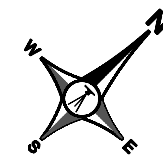


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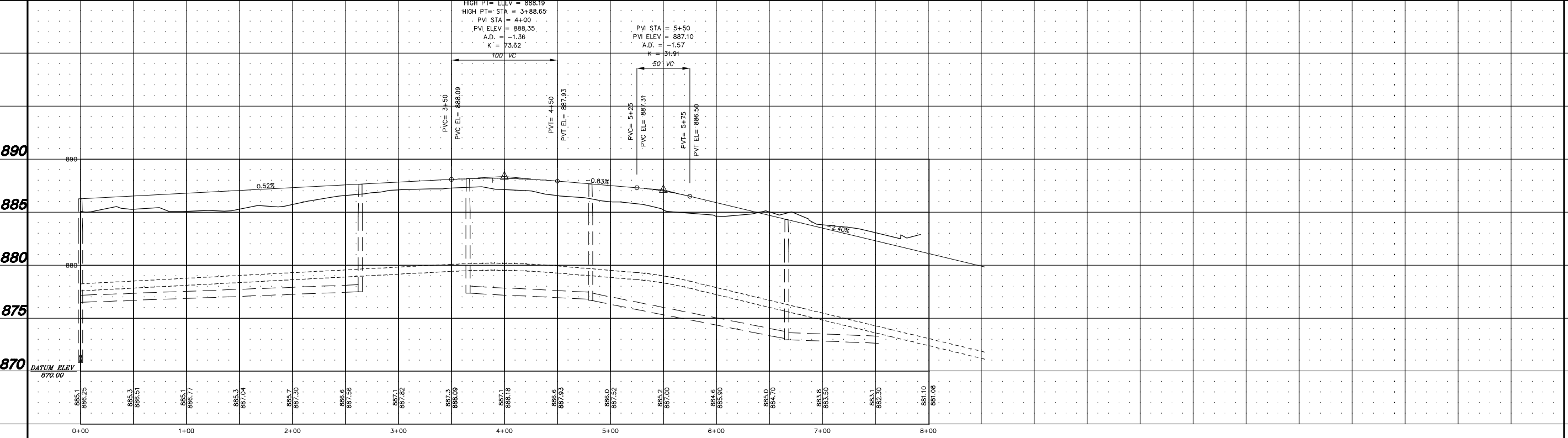
NOTE : ALL SPOT ELEVATIONS ARE @ GUTTERLINE UNLESS OTHERWISE NOTED

NOTE : STREET SHALL BE CLEANED PRIOR TO PLACING TACK COAT

NOTE : TACK COAT SHALL BE PLACED BETWEEN BITUMINOUS LIFTS.



# KAMACITE STREET/ 169TH LANE NW



DATE	REVISIONS	BY

**ANDERSON PASSI & ASSOCIATES**  
 200 3RD AVE NE, SUITE 100  
 CAMBRIDGE, MINNESOTA 55008  
 phone 763-689-4042 fax 763-689-6681

**BROOKFIELD 4TH ADDITION STREET/STORM SEWER**  
 KAMACITE STREET/ 169TH LANE NW  
 RAMSEY, MINNESOTA

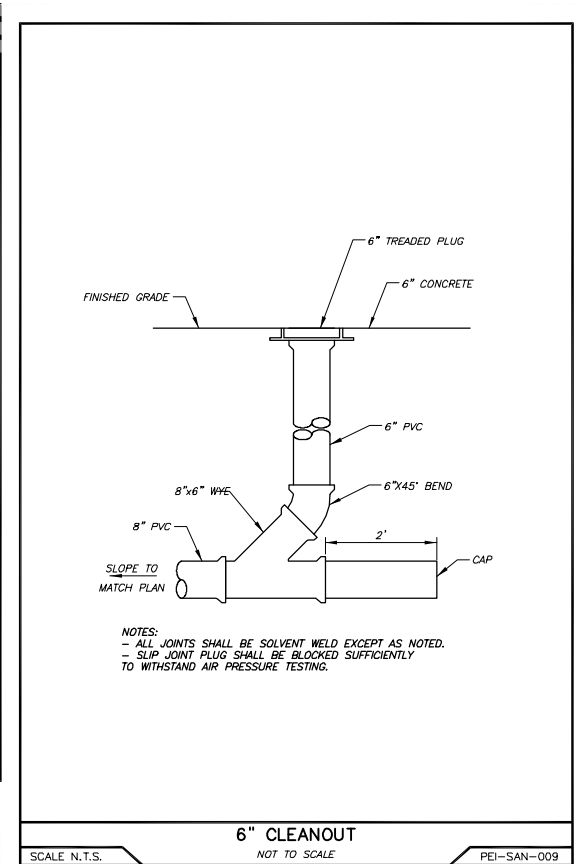
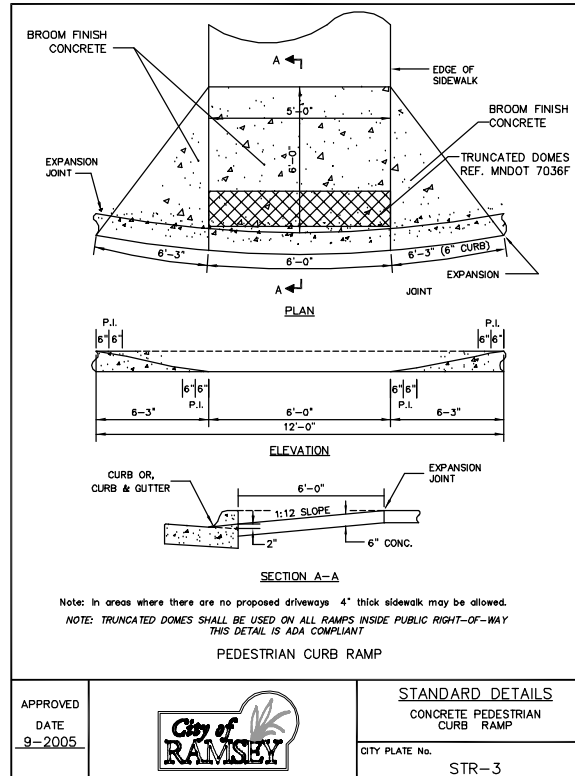
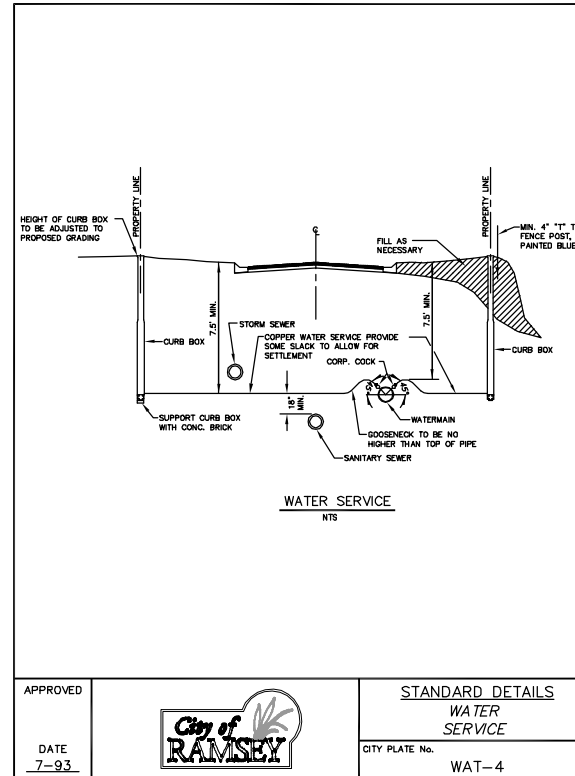
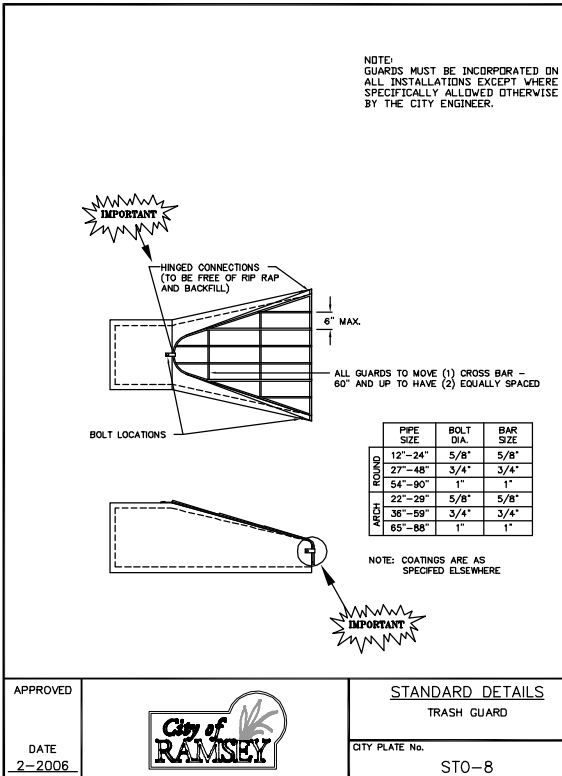
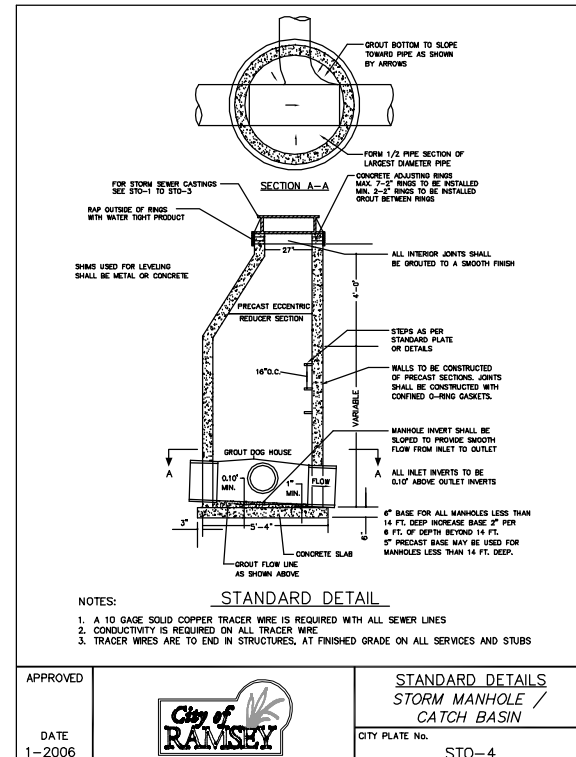
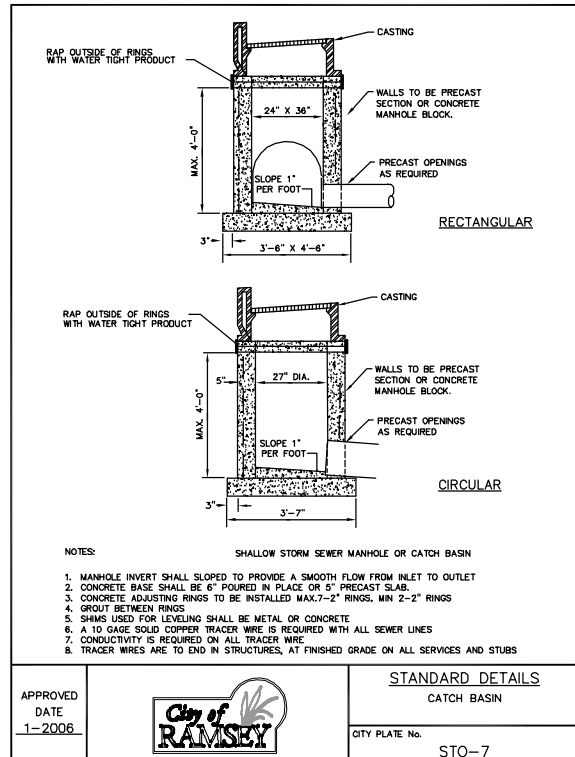
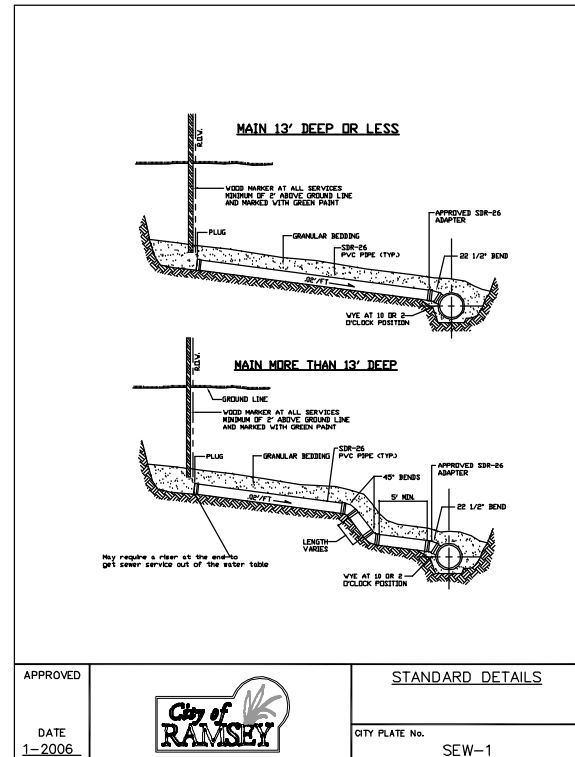
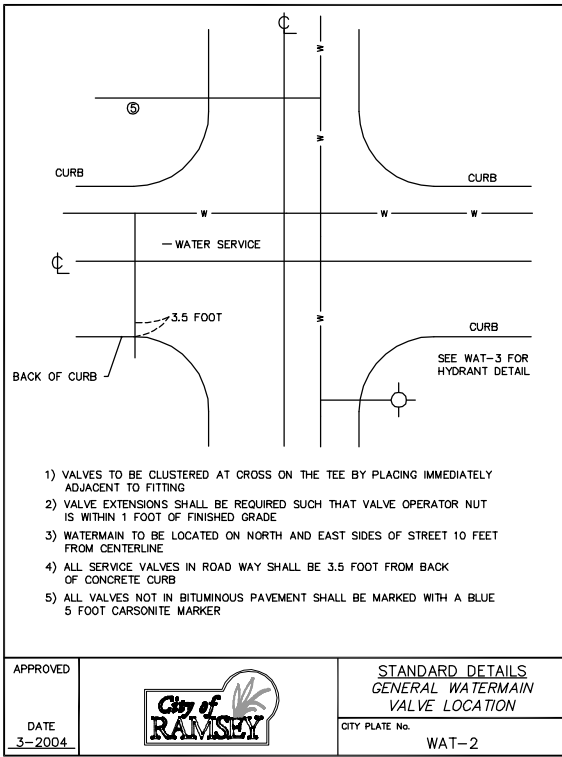
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 11-7-2013 REG. NO. 24018  
*Brent Kosbell*  
 BRENT KOSBELL

DRAWN	KJA
DATE	11-7-2013
SCALE	1"=50'
PROJECT	127-13
CREATED	BTR
APPROVED	BTR

**C5**





**ANDERSON PASSI & ASSOCIATES**  
 200 3RD AVE NE, SUITE 100  
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 phone 763-689-4042 fax 763-689-6681

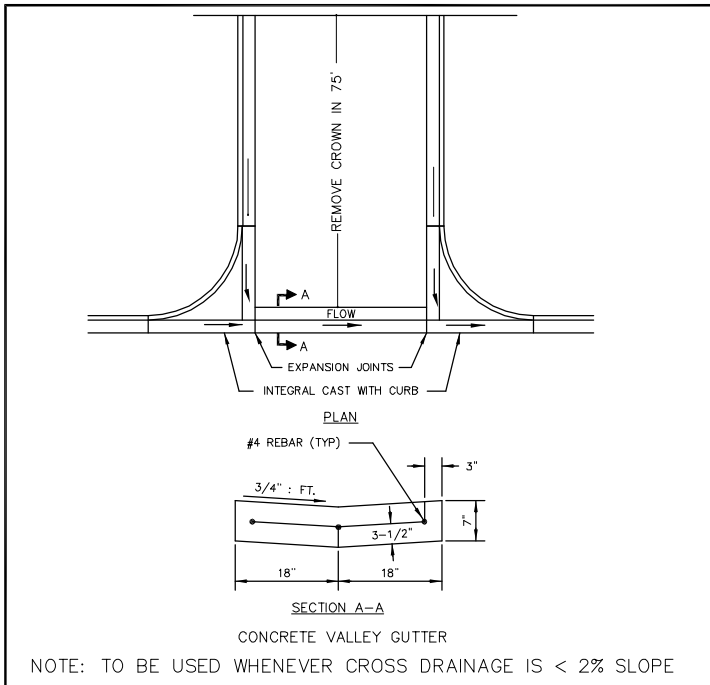
**BROOKFIELD 4TH ADDITION**  
 KAMACITE STREET / 169TH LANE NW  
 RAMSEY, MINNESOTA

DATE: 11-7-2013  
 SCALE: 1"=50'  
 PROJECT: 127-13  
 CHECKED: BTR  
 APPROVED: BTR

DATE: 11-2-2013  
 REG. NO.: 56019  
 BRENT ROSEBELL

DATE: 11-7-2013  
 SCALE: 1"=50'  
 PROJECT: 127-13  
 CHECKED: BTR  
 APPROVED: BTR

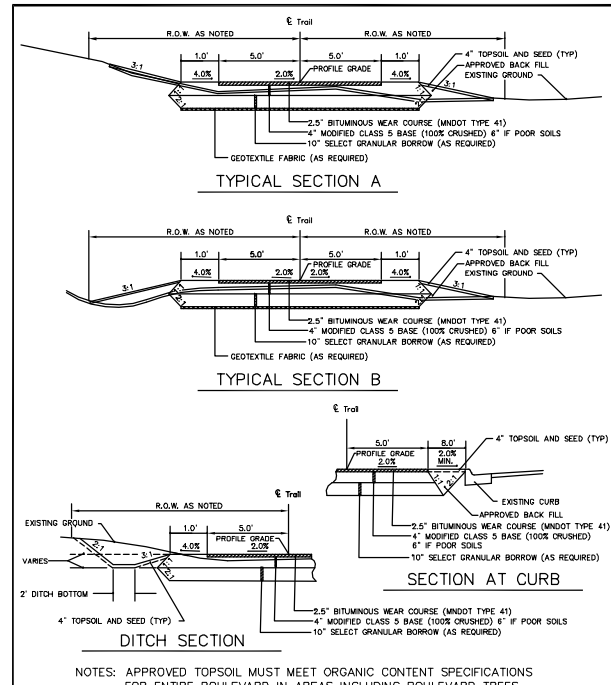
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APPROVED DATE 2-2003

**City of RAMSEY**

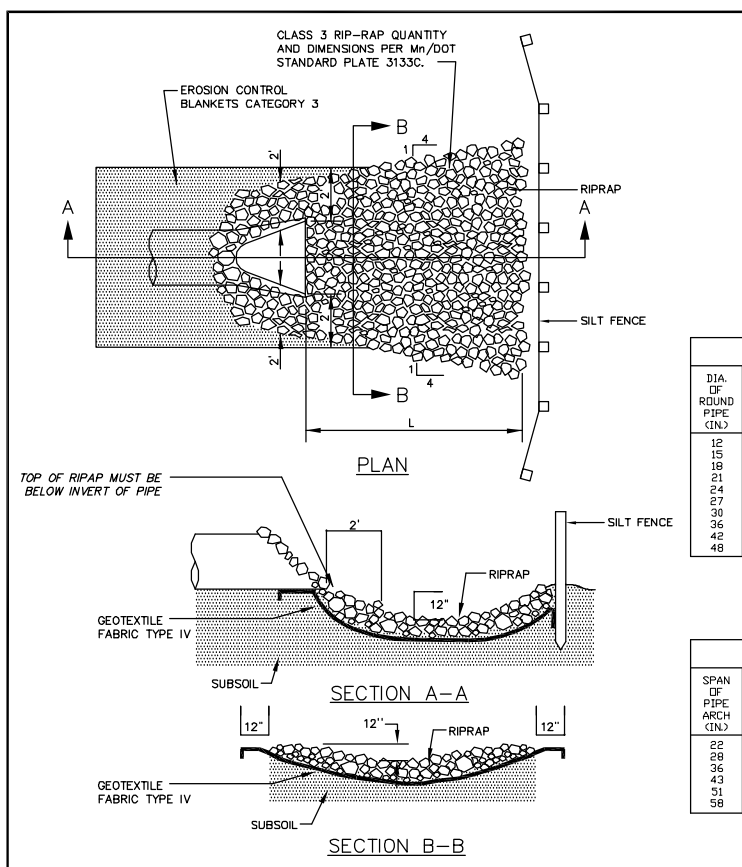
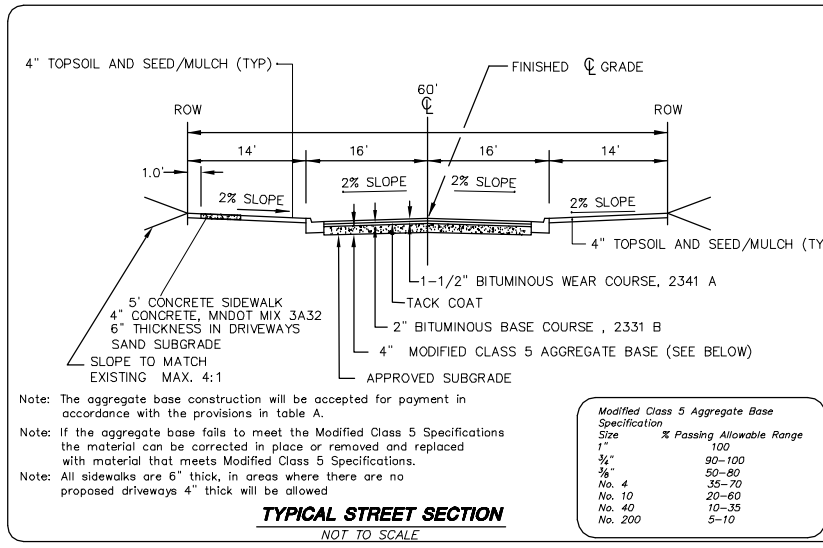
STANDARD DETAILS CROSS GUTTER CITY PLATE No. STR-2



APPROVED DATE 1-2004

**City of RAMSEY**

STANDARD DETAILS TRAIL SPECIFICATIONS CITY PLATE No. PARK 1



APPROVED DATE 2-2006

**City of RAMSEY**

STANDARD DETAILS SEDIMENT CONTROL AT PIPE CITY PLATE No. STO-9

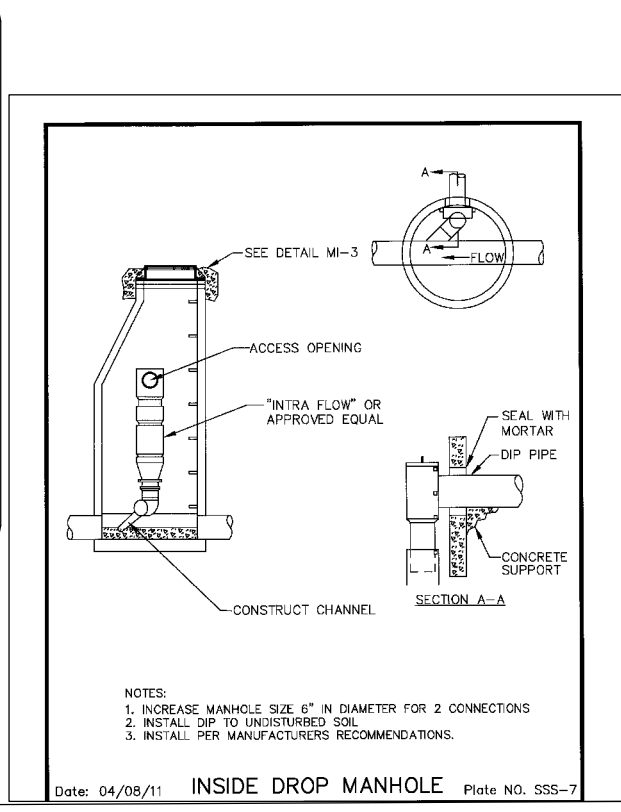
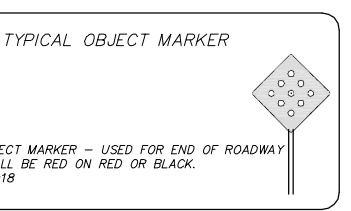
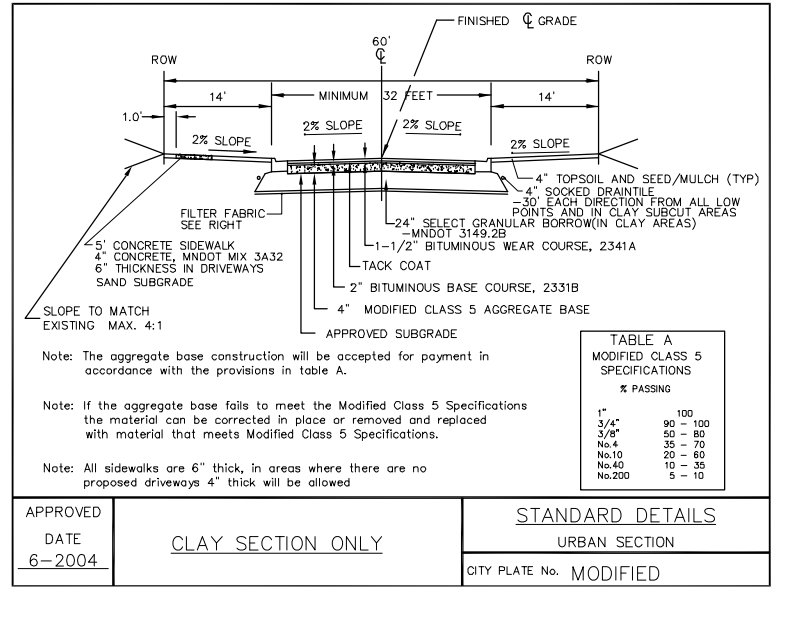
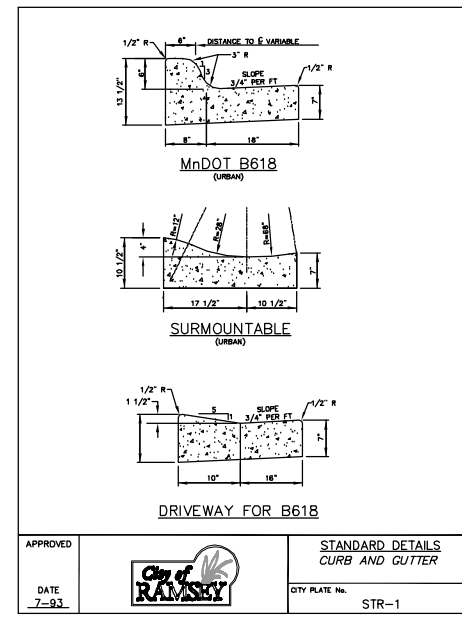
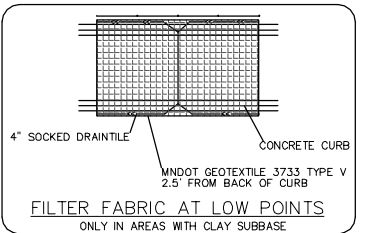
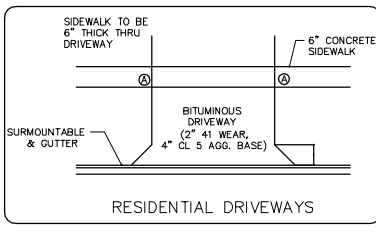
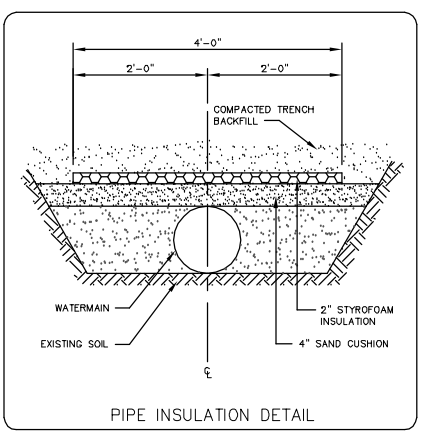
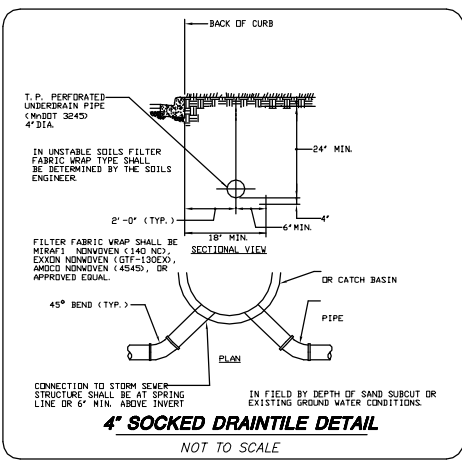
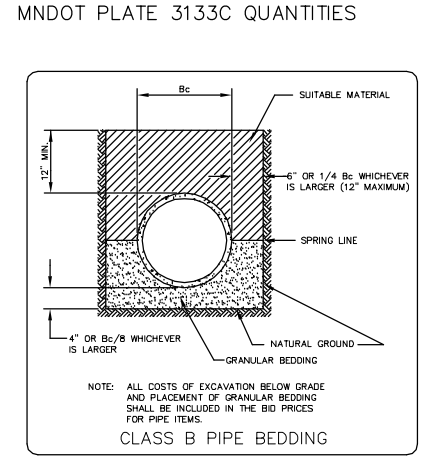


TABLE OF QUANTITIES RIPRAP AT RCP OUTLETS

DIA OF ROUND PIPE (IN.)	L (FT.)	CLASS II (S50=6')		CLASS II (S50=9')		CLASS II (S50=12')	
		12" DEPTH RIPRAP (CU. YDS.)	6" DEPTH GRANULAR FILTER (CU. YDS.)	18" DEPTH RIPRAP (CU. YDS.)	9" DEPTH GRANULAR FILTER (CU. YDS.)	24" DEPTH RIPRAP (CU. YDS.)	12" DEPTH GRANULAR FILTER (CU. YDS.)
12	8	2.8	1.4	4.1	2.1	5.5	2.8
15	8	2.9	1.5	4.4	2.2	5.8	2.9
18	10	3.9	2.0	5.9	3.0	7.8	3.9
21	10	4.2	2.1	6.3	3.2	8.4	4.2
24	12	5.5	2.8	8.3	4.2	11.0	5.5
27	12	6.8	2.9	8.7	4.4	11.6	5.8
30	14	7.3	3.7	10.9	5.5	14.5	7.3
36	16	9.7	4.6	13.8	6.9	18.3	9.7
42	18	10.9	5.5	16.3	8.2	21.7	10.9
48	20	12.9	6.5	19.4	9.7	25.8	12.9

TABLE OF QUANTITIES RIPRAP AT RCP-A OUTLETS OR BOXES OF EQUIVALENT SPAN WIDTH

SPAN OF PIPE ARCH (IN.)	L (FT.)	CLASS II (S50=6')		CLASS II (S50=9')		CLASS II (S50=12')	
		12" DEPTH RIPRAP (CU. YDS.)	6" DEPTH GRANULAR FILTER (CU. YDS.)	18" DEPTH RIPRAP (CU. YDS.)	9" DEPTH GRANULAR FILTER (CU. YDS.)	24" DEPTH RIPRAP (CU. YDS.)	12" DEPTH GRANULAR FILTER (CU. YDS.)
22	10	3.9	2.0	5.9	3.0	7.8	3.9
28	12	5.5	2.8	8.2	4.1	10.9	5.5
36	14	7.2	3.6	10.8	5.4	14.3	7.2
43	16	9.2	4.6	13.7	6.9	18.3	9.2
51	18	10.9	5.5	16.3	8.2	21.7	10.9
58	20	12.7	6.4	19.0	9.5	25.4	12.7



REVISIONS

DATE

**ANDERSON PASSH**  
A S S O C I A T E S  
200 3RD AVE NE, SUITE 100  
CAMBRIDGE, MINNESOTA 55008  
phone 763-689-4042 fax 763-689-6681

**BROOKFIELD 4TH ADDITION**  
DETAIL SHEET  
KAMACITE STREET/ 169TH LANE NW  
RAMSEY, MINNESOTA

DATE 11-7-2012  
SCALE 1"=50'  
PROJECT 127-13  
CHECKED BTR  
APPROVED BTR

DATE 11-2-2013  
REG. NO. 52602  
Brent Rosnell  
BRENT ROSNELL

D2

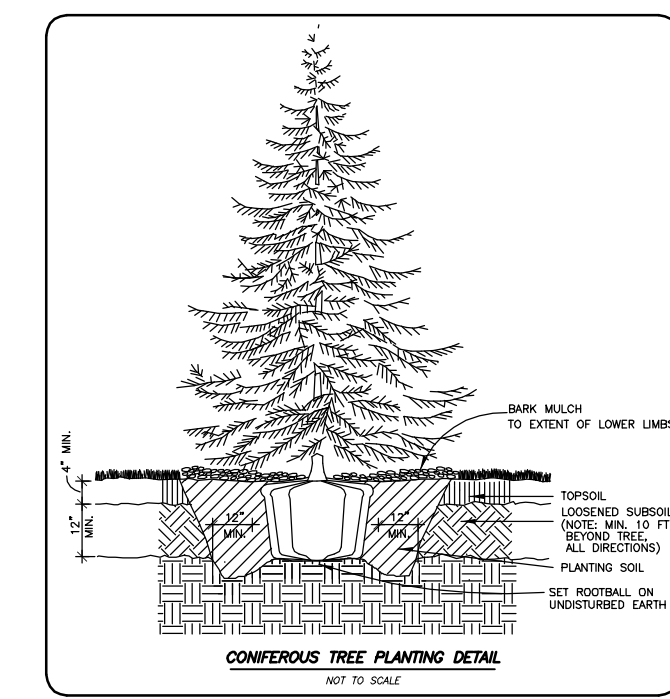
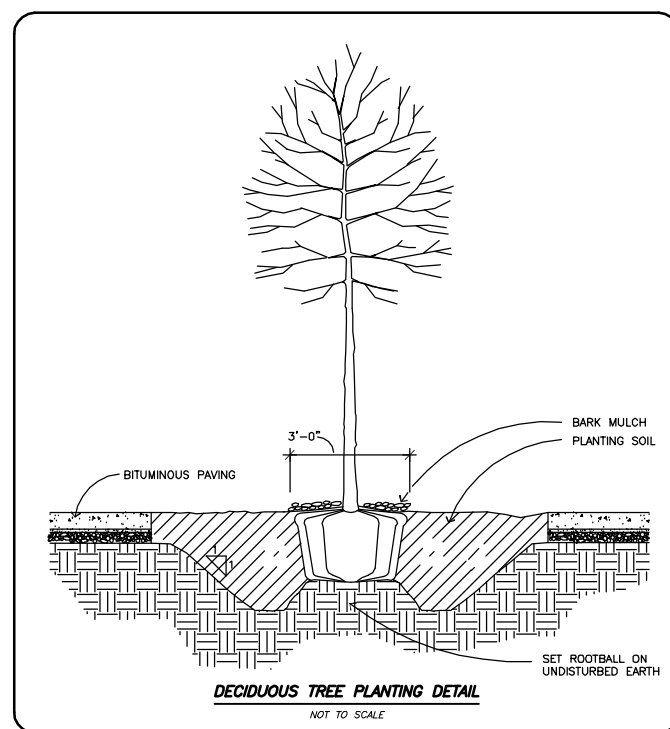


- PROPOSED CONIFEROUS TREES /QTY**
- DENOTES BLACK HILLS SPRUCE (PICEA GLAUCA DENSATA) 12 EACH
  - DENOTES RED (NORWAY) PINE (PINUS RESINOSA) 2 EACH
- PROPOSED DECIDUOUS TREES /QTY**
- DENOTES WHITE OAK (QUERCUS ALBA) 14 EACH
  - DENOTES SILVER MAPLE (ACER SACCHARINUM) 19 EACH
  - DENOTES AMERICAN ELM (ULMUS AMERICANA) 10 EACH
  - DENOTES DOWNY HAWTHORN (CRATAEGUS MOLLIS) 1 EACH
  - DENOTES COMMON HONEYLOCUST (GLEDTISIA TRIACANTHOS) 6 EACH

**PLANTING REQUIREMENTS**

TREES:  
 OVERSTORY DECIDUOUS TREES 1" DIAMETER MEASURED 6' FROM THE BASE AT PLANTING

CONIFEROUS TREES MUST HAVE A MINIMUM HEIGHT OF 5 FEET  
 - MINIMUM 25% DECIDUOUS AND CONIFEROUS



BY	REVISIONS	DATE	DATE	DATE	DATE	DATE	RECORD DRAWING
<p><b>ANDERSON PASSE &amp; ASSOCIATES</b>          200 3RD AVE NE, SUITE 100          CAMBRIDGE, MINNESOTA 55008          phone 763-689-4042 fax 763-689-6681</p>							
<p><b>BROOKFIELD 4TH ADDITION</b>          LANDSCAPE PLAN          RAMSEY, MINNESOTA</p>							
DRAWN	DATE	SCALE	PROJECT	CHECKED	APPROVED	REG. NO.	DATE
K.A.	11-7-2013	1"=100'	127-13	BTR	BTR	25019	11-7-2013
<p>I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.</p> <p style="text-align: right;"><i>Brent Roszell</i>          BRENT ROSZELL</p>							

L1

