193RD STREET NW

966.5
SEWER ELEV
@ 45° BEND
SERVICE IS OFF ZANE AVE

MILL EXISTING BITUMINOUS SURFACE
1.5" DEEP x 4' WIDE, STRAIGHT LINE CUT,
TACK, AND MATCH EXISTING BITUMINOUS

MATCH EXISTING CURB

CONNECT TO EXISTING
SANITARY SEWER MANHOLE

~~6"~~ ~~41LF~~ 8"DIP WATERMAIN
(7.5FT. MIN COVER)

T/C=993.13

8" PLUG

8" VALVE

12"x8" TEE

12"-22½° BEND

11¼° BEND

T/C=993.72

12"x8" TEE

T/C=993.15

MH 1

MH 3

MH 4

T/C=994.95

T/C=994.95

T/C=994.42

T/C=994.20

T/C=994.14

SEE SHEET P2

SAN 9+78
36'-4"PVC W
HYD - 88'
MH 4 - 16'

INSTALL SALVAGED
HYD W/VALVE
94'-8" LEAD

6"-45° BEND
~~11¼° BEND~~

T/C=993.89

0.5%
0.5%
0.83%
0.83%

APPROX LOCATION OF CLEAN OUT

APPROX LOCATION OF CLEAN OUT

NORTH
0 20
0 VERT. 5

T/C=993.46

T/C=992.48

T/C=992.70

12"-22½° BEND
6+59

INSTALL
12" VALVE
6+40 — 55'-4"PVC W/ 5' RISER

SALVAGE EXISTING
HYDRANT & VALVE
CONNECT TO EXISTING
WATERMAIN

EXISTING SERVICE TIES
SAN MH 3 - 84' CB - 47'
WM MH 3 - 86' CB - 45'

MATCH EXISTING
CURB & GUTTER

SANITARY SERVICE
6+25
13 RISER, 52'-4"PVC, 5' RISER
TIES
MH 3 - 53'
VALVE @ 6+40 - 39'

TIES
MH 3 - 52'
VALVE @ 6+40 - 39'

WATER SERVICE
6+30
50'-1" COPPER

SAN
6+78
MH 3 - 51
VALVE @ 6+40 - 56'

WATER
6+83
MH 3 - 93
VALVE - 59'

SAN
7+59
54'-4"PVC W/ 5' RISER
MH 4 - 103
VALVE - 165'

WATER
7+54
41'-1" COPPER
MH 4 - 100.5'
VALVE - 161'

SAN
8+30
111'-4"PVC THEN CLEAN OUT
W/12" RISER 1' THEN 5' RISER
MH 4 - 114'
VALVE - 97'

WATER
8+35
100'-1" COPPER
MH 3 - 109'
VALVE - 98'

SAN
8+92
91'-4"PVC
W/ CLEAN OUT
AND 5' RISER
MH 4 - 111'
VALVE - 28'

WATER
8+97
20'-1" COPPER
MH 4 - 107'
VALVE - 22'

SEWER ELEV
@ 45° BEND

968.2
SEWER ELEV
@ 45° BEND

975.4
SEWER ELEV
@ 45° BEND

978.3
SEWER ELEV
@ 45° BEND

981.8
SEWER ELEV
@ 45° BEND

985.1
SEWER ELEV
@ 45° BEND

982.0
986.0
990.0
992.0
996.0
1000.0
CUSTOM

972.0	972.0	972.8	973.4	982.8	985.2	985.4	986.2	986.8	986.0	986.0	985.0
976.74	977.69	979.25	981.65	984.37	987.05	989.63	991.71	993.25	994.25	994.71	994.63

400.00' VC
HIGH POINT ELEV = 994.74
HIGH POINT STA = 9+17.51
PVI STA = 8+69.13
PVI ELEV = 998.81
A.D. = -8.64
K = 46.30

PVI STA = 6+69.13
BVCS: 6+-69.13
BVCE: 988.08
PVI ELEV = 988.08

FINISHED ℄ PROFILE
EXISTING ℄ GRADED PROFILE
TOP 994.20
7.5' MIN. COVER
TOP 987.00
5.37%
4.36%
PVI STA = 4+75
PVI ELEV = 978.16
PVI STA = 5+25
PVI ELEV = 980.34
STARTED WM @ 6+39
425'-12"DIP CL 52 WATERMAIN
+50 MH 3
BUILD 19.36
+50 MH 4 BUILD 25.48
150'-8"PVC SDR 35 @ 0.40%
200'-8"PVC SDR 26 @ 0.40%
95'-8"PVC SDR 26 @ 0.40%
83'-8"PVC SDR 35 @ 0.40%
966.69 E
966.69 N
966.59 W
MH 2
17.05
967.72 E
967.62 W
968.62 E
968.52 W
969.00

1000 995 990 985 980 975 970 965 960

4+00 4+50 5+00 5+50 6+00 6+50 7+00 7+50 8+00 8+50 9+00 9+50

RECORD PLAN
DECEMBER 2002

Xrefs: 811385R7-1.DWG

DESIGNED BY: EY DRAWN BY: TAE
APPROVED BY: TJM JOB NUMBER 811385J
CAD DATE: April 04, 2003 7:54:06 a.m.
CAD FILE: 811385j\dwg\811385P-1.DWG (JLALLEN)

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

SIGNATURE _____ DATE _____
PRINTED NAME TERRY J. MAUER LIC.NO. 15316

NO.	DATE	BY	REVISION DESCRIPTION
1	10/04/02	EY	ADDED WATERMAIN STUB

1326 ENERGY PARK DRIVE
ST. PAUL, MINNESOTA 55108
(651) 644-4389
Howard R. Green Company
CONSULTING ENGINEERS

CITY OF ELK RIVER
THE WOODS OF HILLSIDE II
STREET AND UTILITY IMPROVEMENTS

193RD STREET N.W.
STREET AND UTILITY IMPROVEMENTS
6+50 TO 9+00

SHEET NO.
P1

DRAWING NUMBER
WOODS3.02
3

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6502