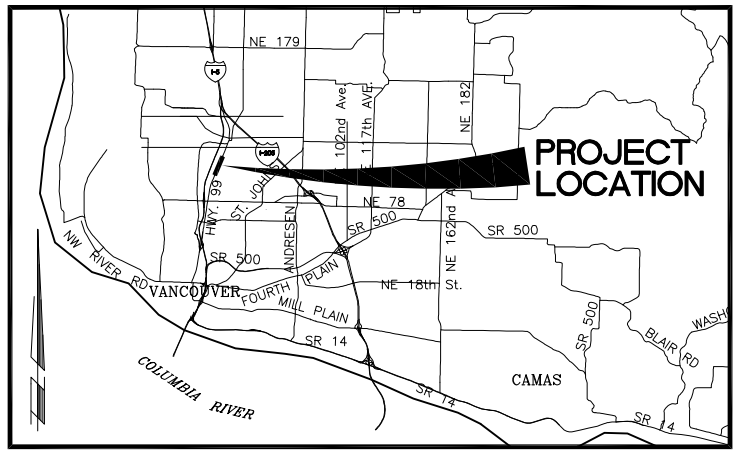
CAPITAL IMPROVEMENTS PROGRAM

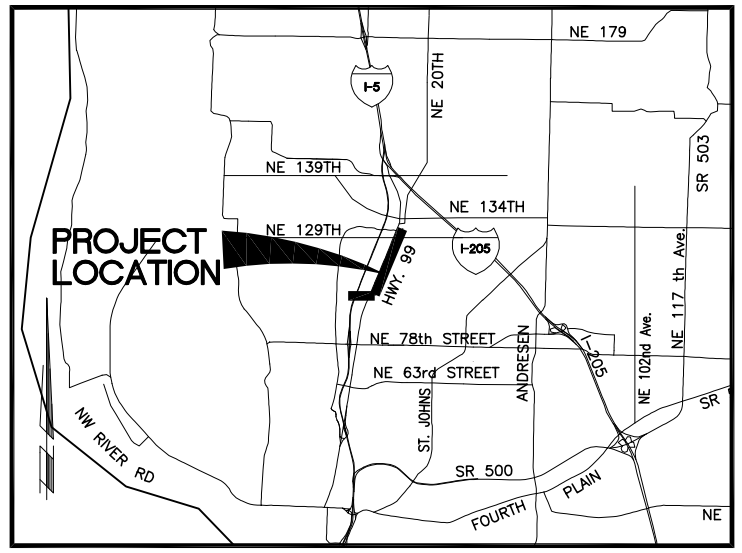
SALMON CREEK NORTH WATER QUALITY PROJECT

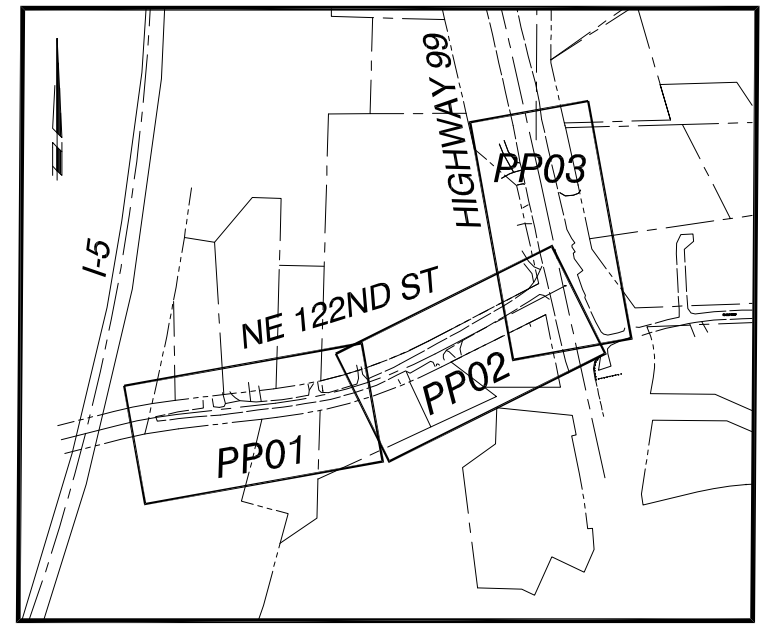
FROM NE 20TH AVENUE TO NE 122ND STREET
WATER QUALITY PROGRAM PROJECT CRP # 400281

PLANS FOR THE CONSTRUCTION OF STORM DRAINAGE SYSTEM



VICINITY MAPS





KEY MAP TO SHEETS

INDEX OF SHEETS

NOT INCLUDED

SHT.	DWG.	DESCRIPTION
1	CV1	COVER SHEET
2	SQ1	GENERAL NOTES, LEGENDS AND BENCHMARKS
3	PP01	PLAN AND PROFILE – NE 122ND STREET (STA 10+00 TO 15+00)
4	PP02	PLAN AND PROFILE – NE 122ND STREET (STA 15+00 TO 20+00)
5	PP03	PLAN AND PROFILE – HIGHWAY 99 (STA 20+00 TO 23+91.26)
6	WQ1	STORM CONVEYANCE DETAILS
7	WQ1	OUTFALL DETAILS

COMMISSIONERS:

BETTY SUE MORRIS, Chair
CRAIG PRIDEMORE, Commissioner
JUDIE STANTON, Commissioner

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DEPARTMENT OF PUBLIC WORKS

DESIGN AND ENGINEERING DIVISION - DESIGN SECTION

otak
Incorporated
700 Washington Street
Suite 401
Vancouver, WA 98660-3139
Phone: (360) 737-9613
FAX: (360) 737-9651

50% SUBMITTAL - JUNE 28, 2004
NOT FOR CONSTRUCTION

Quality Assurance	Project Manager	Director of Public Works
Greg Shafer??? P.E. DATE:	Don Andrews DATE:	Peter Capell, P.E. DATE:

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Recommended for Approval

Grading _____ Erosion _____

Storm Water Plan _____

Development Review Manager _____ Date

V: JOHNMA 06/28/04 10:26am --> R:\DWG\C301S001.DWG

XREF LIST
Ltscale: 1
Resolved
C978X001
PKW

STORMWATER TREATMENT SYSTEM

SUMMARY OF QUANTITIES

ITEM NUMBER	BID ITEM IDENT NO.	QUANTITY	UNIT	DESCRIPTION
1	109.07	1	L.S.	MOBILIZATION
2	110.00	120	HOUR	TRAFFIC CONTROL LABOR
3	110.10	60	HOUR	TRAFFIC CONTROL SUPERVISOR
4	110.30	1	L.S.	TEMPORARY TRAFFIC CONTROL DEVICES
5	201.20	1	L.S.	ROADSIDE CLEANUP
6	202.00	1	L.S.	REMOVAL OF STRUCTURE AND OBSTRUCTION
7	209.02	3,450	C.Y.	STRUCTURE EXCAVATION CLASS B (INCL. HAUL)
8	404.51	80	C.Y.	CRUSHED SURFACING BASE COURSE
9	504.04	270	TON	AC CLASS "G"
10	504.11	830	L.F.	SAWCUT EXISTING ASPHALT PAVEMENT
11	704.10	71	L.F.	STORM SEWER PIPE, 10 IN. DIAM.
12	704.12	85	L.F.	STORM SEWER PIPE, 12 IN. DIAM.
13	704.24	425	L.F.	STORM SEWER PIPE, 24 IN. DIAM.
14	704.30	1,004	L.F.	STORM SEWER PIPE, 30 IN. DIAM.
15	705.01	11	EACH	MANHOLE 48 IN. DIAM. TYPE 1
16	705.03	4	EACH	MANHOLE 60 IN. DIAM. TYPE 1
17	705.03	31.4	LF	MANHOLE ADDITIONAL HEIGHT 60 IN DIAM. TYPE 1
18	705.23	1	EACH	MANHOLE 60 IN. DIAM. FLOW SPLITTER
19	705.35	4	EACH	CATCH BASIN TYPE 1
20	705.77	1	L.S.	ABANDON MANHOLE
21	705.86	1	EACH	CONNECTION TO DRAINAGE STRUCTURE
22	706.00	3	EACH	STANDARD PRECAST STORMFILTER UNIT (SINGLE 18' LONG X 8' WIDE)
23	708.00	1,490	L.F.	TRENCH SAFETY SYSTEM
24	709.05	200	L.F.	CL 52 DI PIPE FOR WATER MAIN 8 IN. DIAM.
25	715.08	4	EACH	CONNECT TO EXISTING 8 IN. MAIN
26	801.51	1,400	L.F.	SILT FENCE
27	802.89	1	AC	SEEDING AND MULCHING
28	815.35	1	EACH	OUTFALL PROTECTION

SYMBOLS LEGEND

- PROPOSED MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED CURB INLET (CI)
- PROPOSED COMBINATION CURB INLET (CCI)
- PROPOSED FLOW-SPLITTER MH
- PROPOSED STORMWATER TREATMENT UNIT
- EXISTING TRANSFORMER
- EXISTING ELEC TOWER
- EXISTING FIRE HYDRANT
- EXISTING CLEAN OUT
- EXISTING GAS VALVE
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING SIGNAL POLE
- EXISTING TELEPHONE VAULT
- EXISTING CABLE TV BOX
- EXISTING GAS LOCATOR PIPE
- EXISTING CURB OPENING INLET (CI)
- EXISTING CATCH BASIN (CB)
- EXISTING STORM MH OR DRYWELL
- EXISTING SANITARY SEWER
- EXISTING SHRUB
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING SIGN
- EXISTING J BOX
- EXISTING TELEPHONE MANHOLE
- EXISTING LIGHT
- EXISTING GUY ANCHOR
- EXISTING UTILITY POLE
- EXISTING MAIL BOX
- EXISTING TELEPHONE JUNCTION BOX
- EXISTING SPRINKLER HEAD
- TRAVERSE POINT
- TEST HOLE

BENCHMARKS-CLARK COUNTY DATUM

DESCRIPTION	STATION	OFFSET	ELEVATION
SURVEY CONTROL POINT #6423 HUB AND TACK	STA. 11+86.63	5.55' RT	93.80
SURVEY CONTROL POINT #1003 5/8" IRON ROD WITH RED "CLARK COUNTY CONTROL" CAP	STA. 19+80.92	59.92' RT	102.02
SURVEY CONTROL POINT #2192 HUB AND TACK	STA. 19+51.24	107.87' RT	99.54'
SURVEY CONTROL POINT #6165 PK NAIL	STA. 17+39.88	24.42' RT	95.29
SURVEY CONTROL POINT #6523 HUB AND TACK	STA. 12+80.36	98.83' RT	59.28'

GENERAL NOTES

1. SURVEY DATUM PER CLARK COUNTY.
2. EXISTING UTILITIES SHOWN ON THE PLANS ARE PER SURFACE LOCATIONS AND RECORD DRAWINGS. THE INSTALLER SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.

LINE LEGEND

- PROPOSED STORM DRAIN PIPE
- PROPOSED FILL LIMITS
- EXISTING ROW/PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB LINE
- EXISTING CENTER LINE
- EXISTING FENCE LINE
- EXISTING TELEPHONE LINE
- EXISTING WATER LINE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING SANITARY SEWER LINE
- EXISTING STORM DRAINAGE
- EXISTING GAS LINE
- EXISTING OVERHEAD POWERLINE
- EXISTING CULVERT
- EXISTING DITCH CENTER LINE
- EXISTING GUARDRAIL
- EXISTING BRUSH LINE
- EXISTING HEDGE

NOT FOR CONSTRUCTION

DESIGNED: PKW
DRAWN: SLW
CRP: 400281
HORIZ. NA
VERT. NA
DATE: 6/28/2004
DWG: SQ1
SHEET 2 OF 8

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GENERAL NOTES, LEGENDS AND BENCHMARKS

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XX/XX

XREF LIST
Ltscale: 20
Resolved
C301S129-BASEMAP
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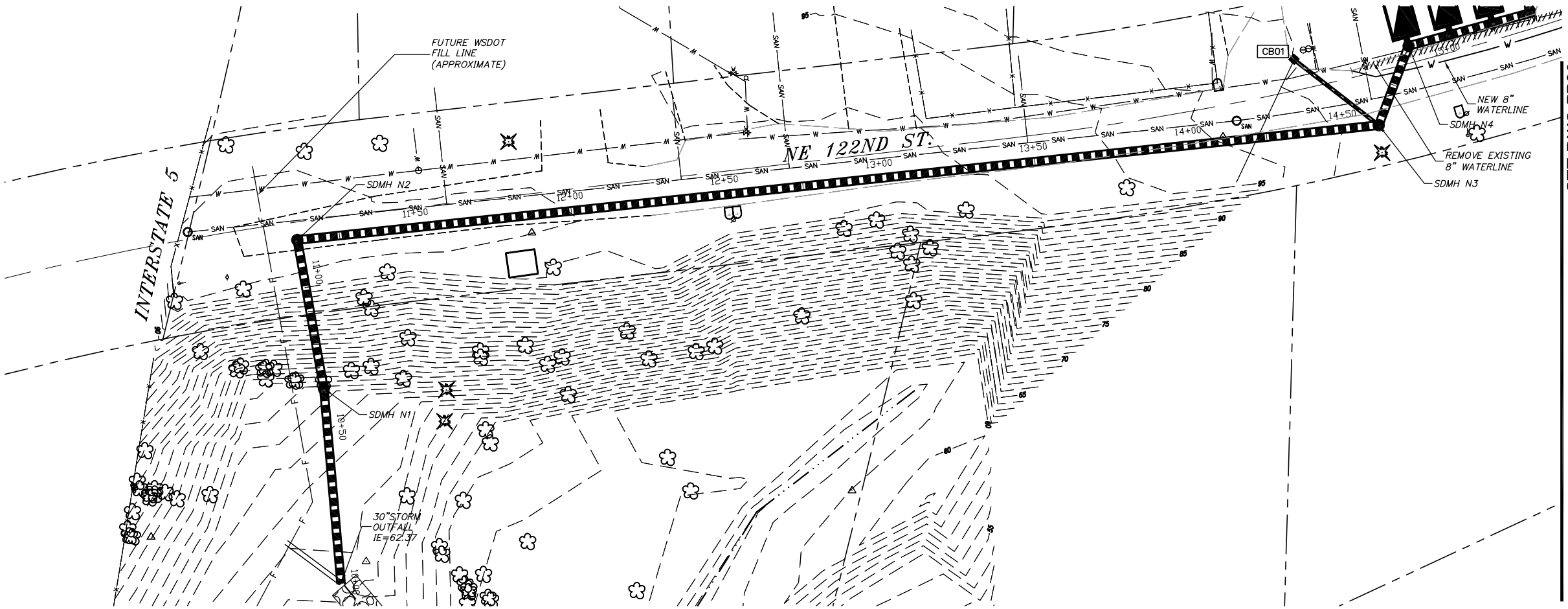
c301x500
HWY99-TO
N-HWY99_BASE



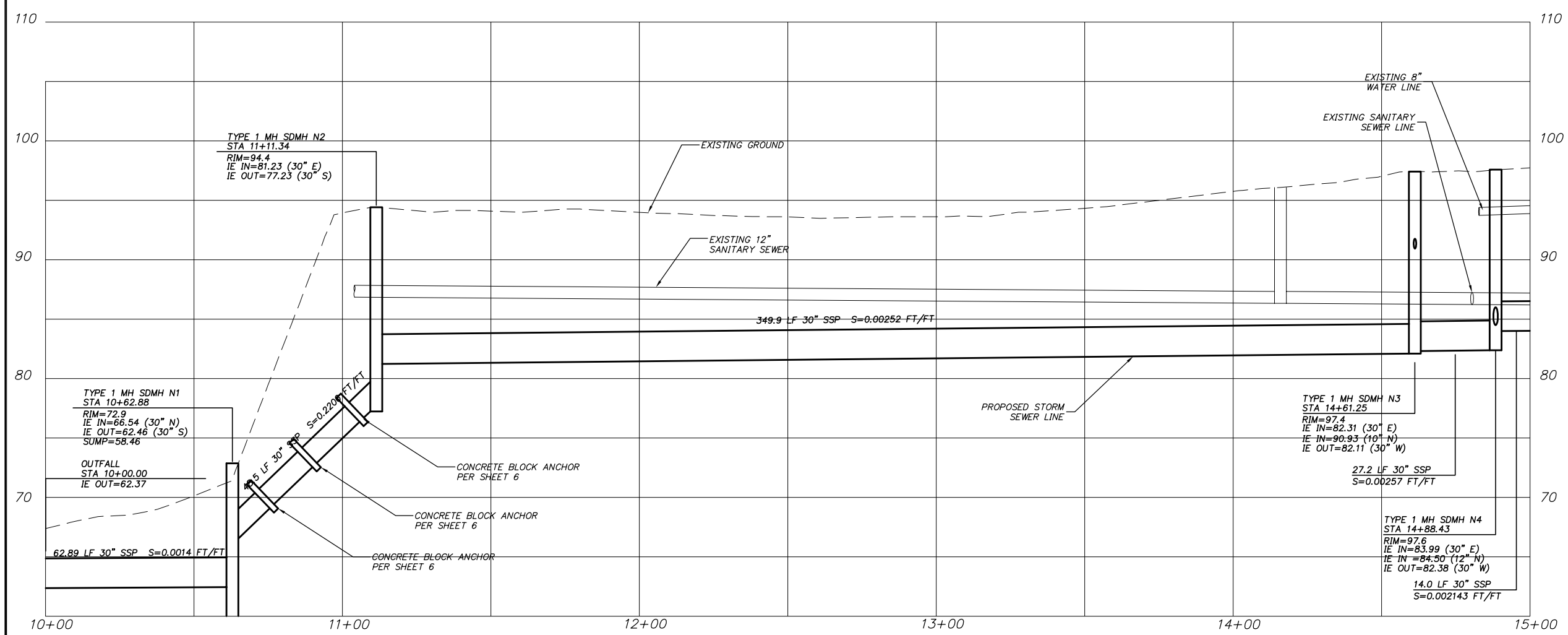
SEE DWG PP02

MATCHLINE STA. 15+00

SCALE IN FEET
20 0 20 40

CATCH BASIN INFORMATION

CB01 TYPE 1 CATCH BASIN
ST. STA. 14+36.36, 23.98' LT
GRATE ELEV. = 96.69
I.E. (OUT) = 91.60
33.41 LF 10" STM. PIPE
S=0.0200 FT/FT



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PLAN AND PROFILE – NE 122ND ST.
STA. 10+00 TO STA. 15+00

DESIGNED:	SKC
DRAWN:	SKC
CRP:	400281
HORIZ.	1" = 20'
VERT.	1" = 5'
DATE:	6/28/2004
DWG:	PP01
SHEET	3 OF 8

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V: JOHNMA 06/28/04 10:28am --> R:\DWG\C301S003.DWG

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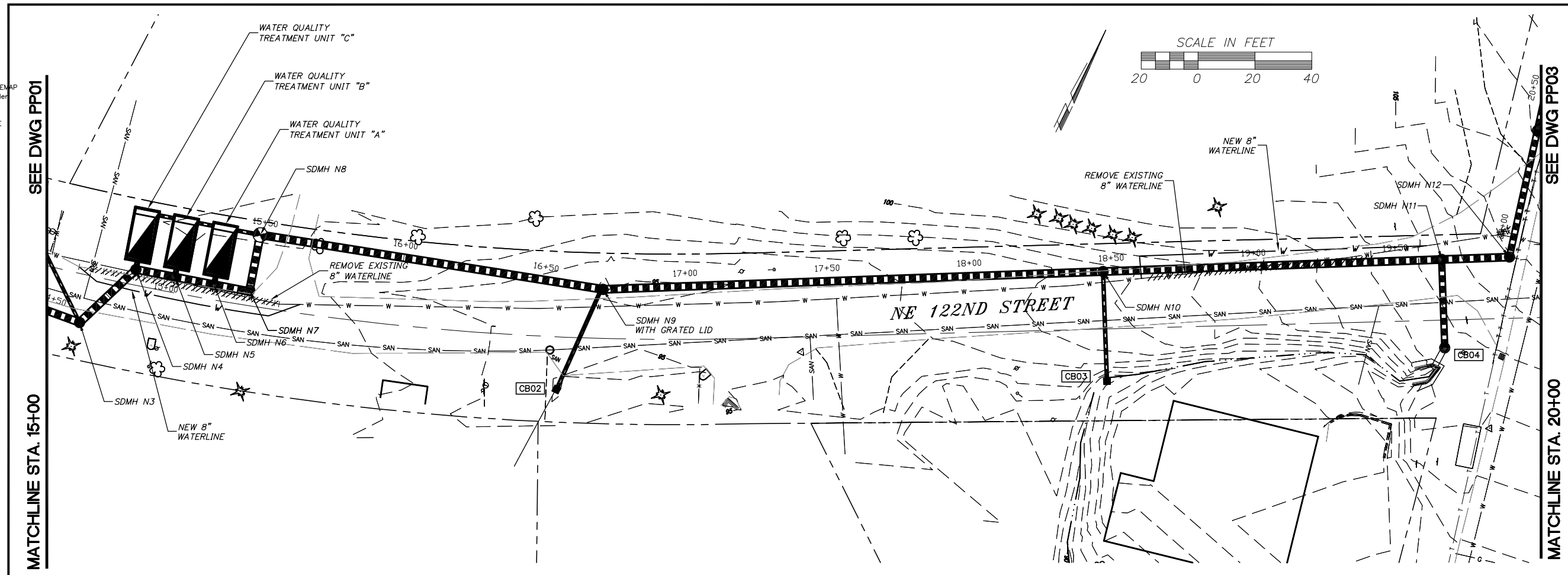
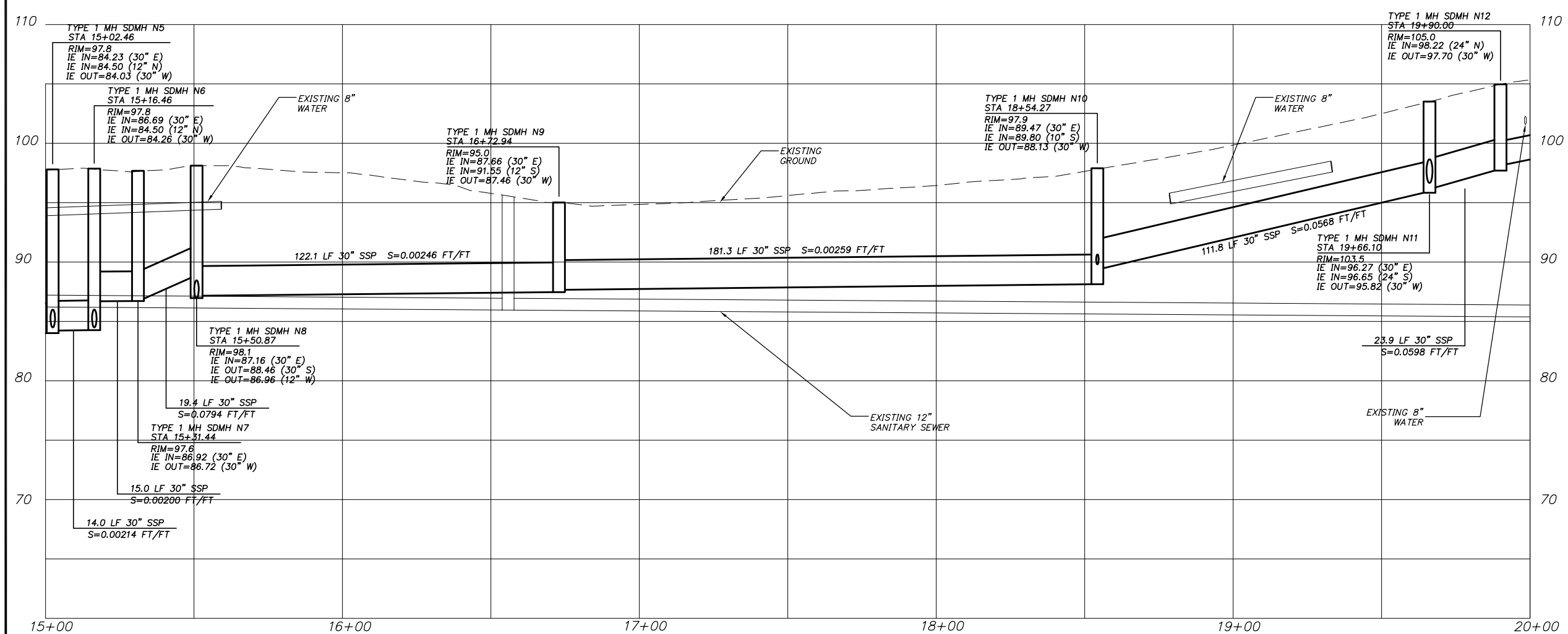
C301x001_border
C301X500
HWY99-TO
N-HWY99_BASE





CONSTRUCTION NOTES

CONSTRUCT WATER QUALITY TREATMENT UNITS PER DETAIL ON SHEET 6.

CURB INLET INFORMATION

CB02 TYPE 1 CATCH BASIN
ST. STA. 16+60.29, 27.36' RT.
GRATE ELEV. = 94.8
I.E. (OUT) = 92.30
37.7 LF 12" STM. PIPE
S=0.0200 FT/FT

CB03 TYPE 1 CATCH BASIN
ST. STA.18+46.97, 38.59' RT.
GRATE ELEV. = 92.30
I.E. (OUT) = 89.80
37.4 LF 10" STM. PIPE
S=0.0050 FT/FT

CB04 TYPE 2 MANHOLE
ST. STA. 19+66.10, 31.08' RT.
GRATE ELEV. = 102.49
I.E. (IN) = 97.53
I.E. (OUT) =97.33
31.1 LF 24" STM. PIPE
S=0.0219 FT/FT

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DESIGNED:	SKC
DRAWN:	SKC
CRP:	400281
HORIZ.	1" = 20'
VERT.	1" = 5'
DATE:	6/28/2004
DWG:	PP02
SHEET	4 OF 8

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PLAN AND PROFILE - NE 122ND STREET
STA. 15+00 TO STA. 20+00

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Resolved
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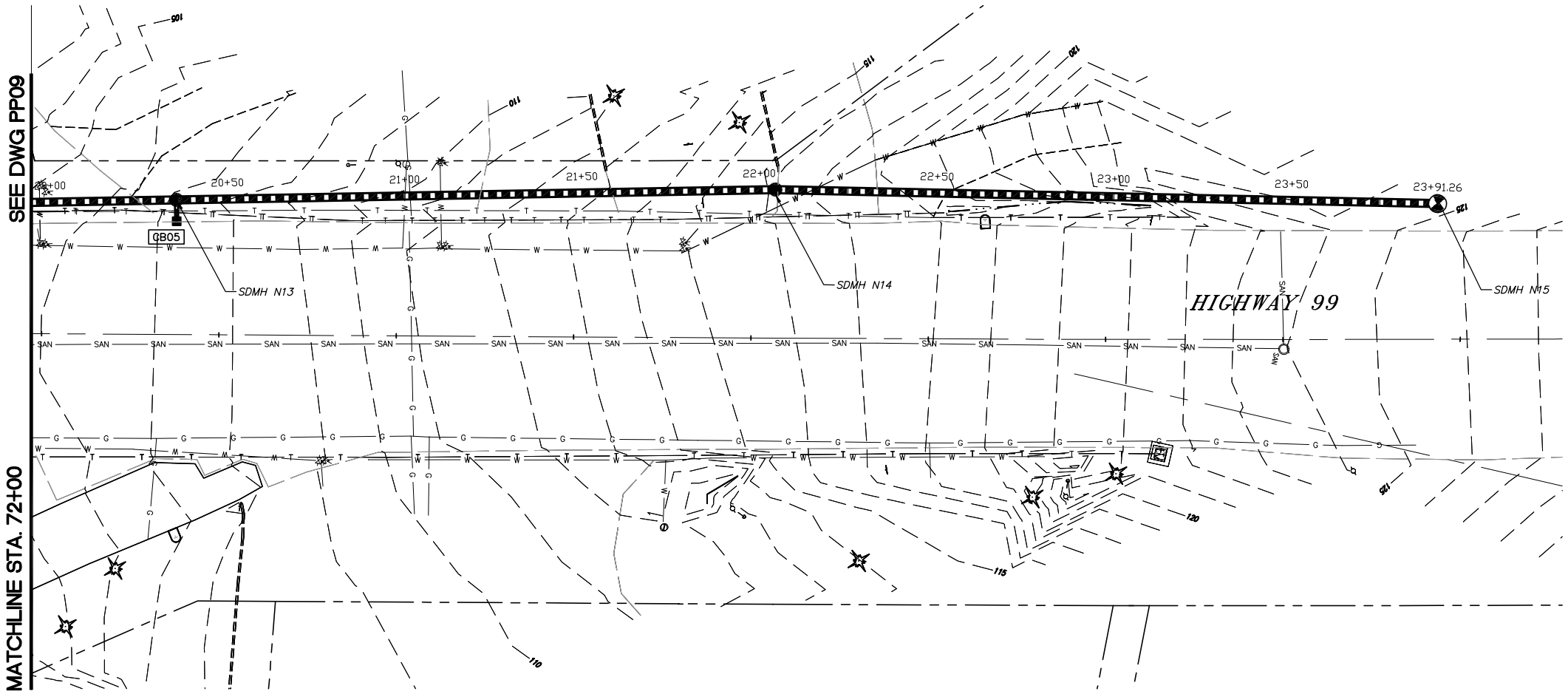
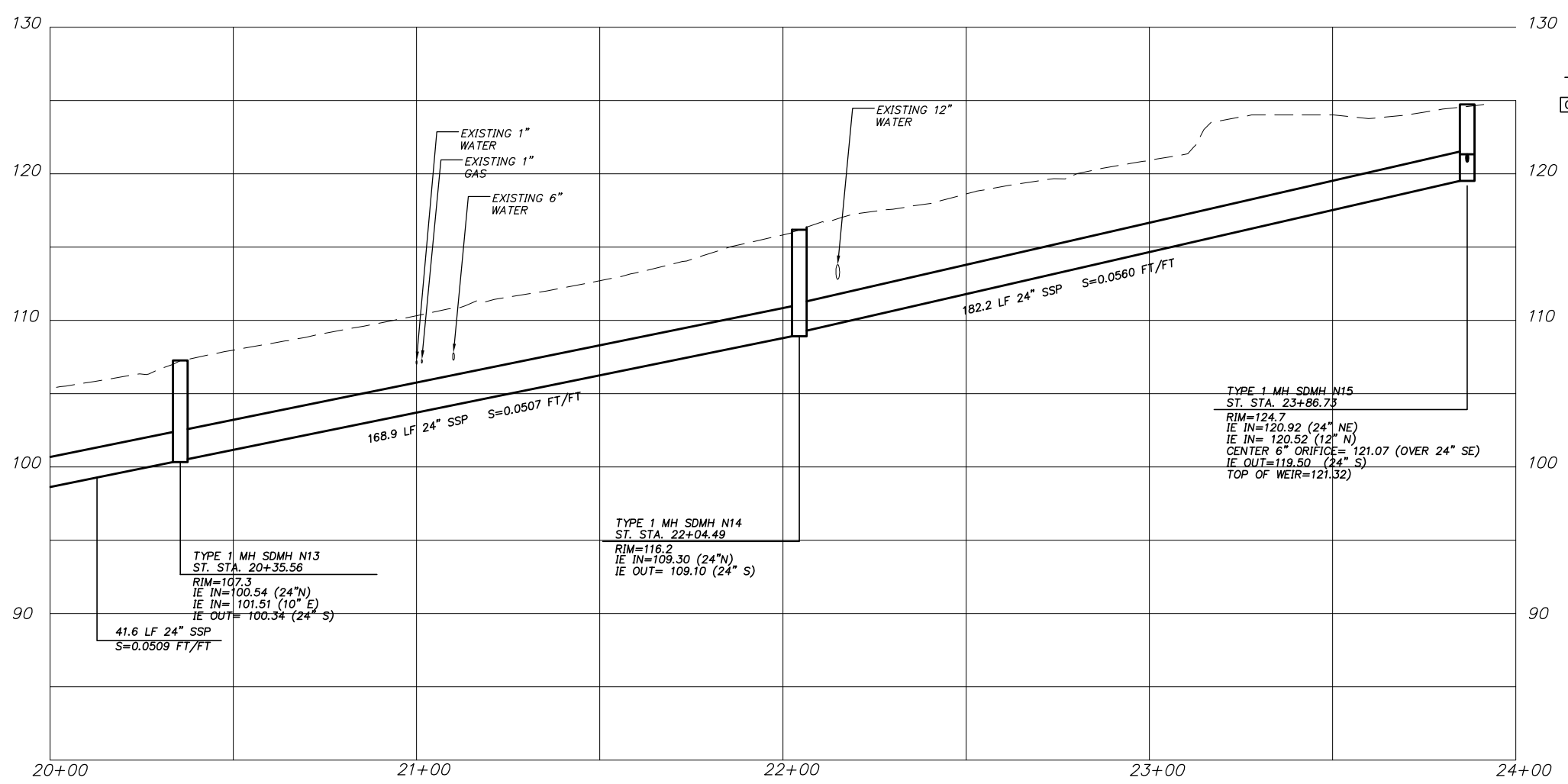
C301X500
HWY99-TO
N-HWY99_BASE





CURB INLET INFORMATION

CB05 TYPE 1 CATCH BASIN
ST. STA. 20+35.56, 6.01' RT.
GRATE ELEV. = 107.2
I.E. (OUT) = 102.37
4.9 LF 10" STM. PIPE
S=0.1720 FT/FT

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PLAN AND PROFILE - NE 122ND STREET
STA. 20+00 TO STA. 23+91.26

DESIGNED:	SKC
DRAWN:	SKC
CRP:	400281
HORIZ.	1" = 20'
VERT.	1" = 5'
DATE:	6/28/2004
DWG:	PP03
SHEET	5 OF 8

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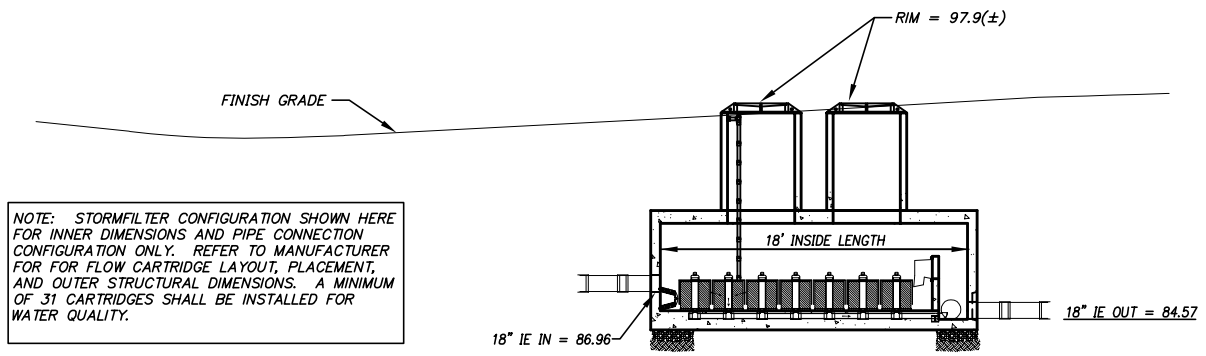
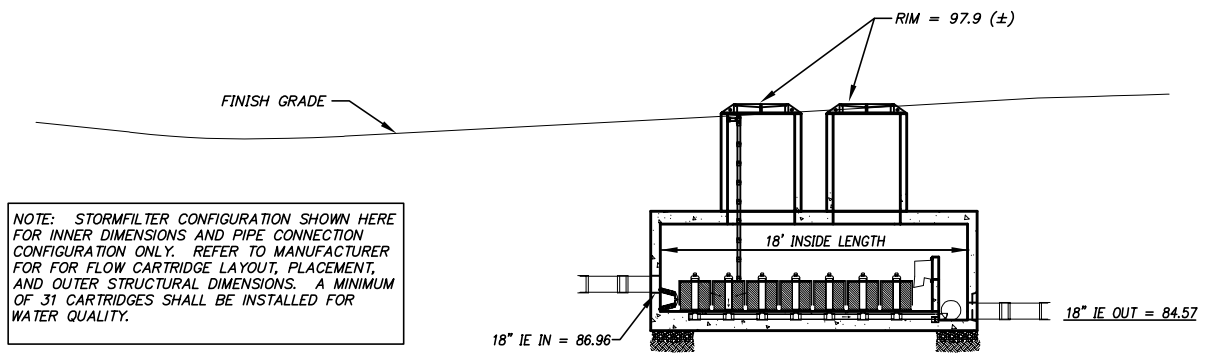


NOTE: STORMFILTER CONFIGURATION SHOWN HERE FOR INNER DIMENSIONS AND PIPE CONNECTION CONFIGURATION ONLY. REFER TO MANUFACTURER FOR FOR FLOW CARTRIDGE LAYOUT, PLACEMENT, AND OUTER STRUCTURAL DIMENSIONS. A MINIMUM OF 31 CARTRIDGES SHALL BE INSTALLED FOR WATER QUALITY.

SECTION B–B

STORM FILTER™ WATER QUALITY UNIT A

NTS



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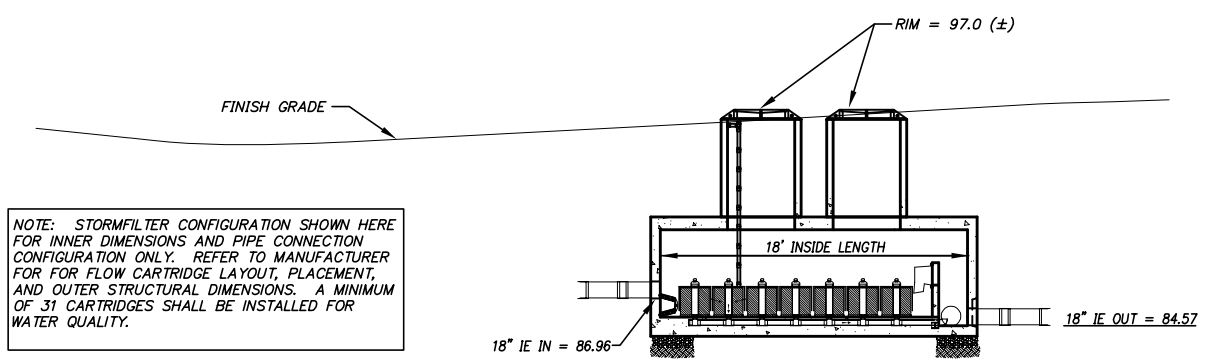
SECTION B–B

STORM FILTER™ WATER QUALITY UNIT B

NTS



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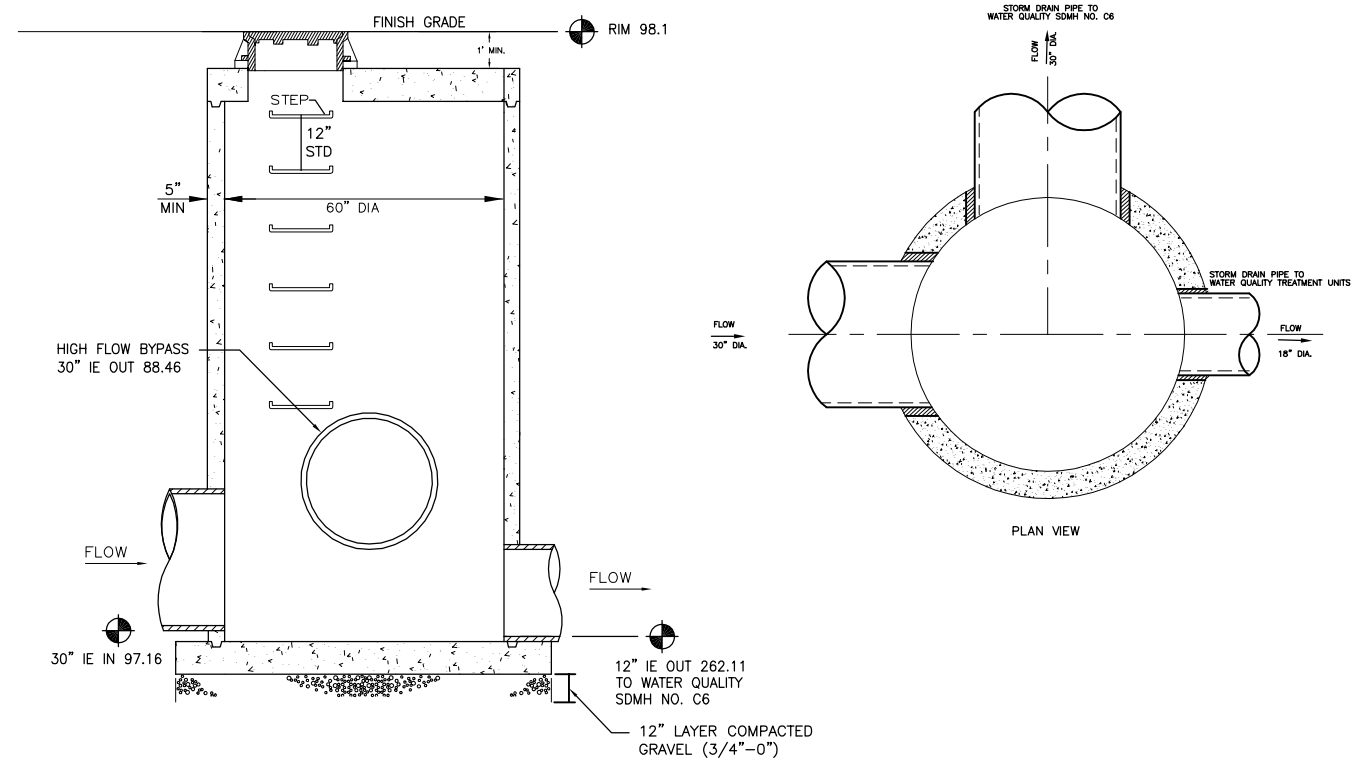
SECTION B–B

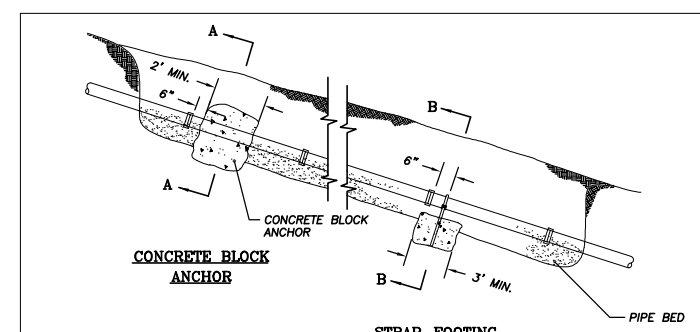
STORM FILTER™ WATER QUALITY UNIT C

NTS



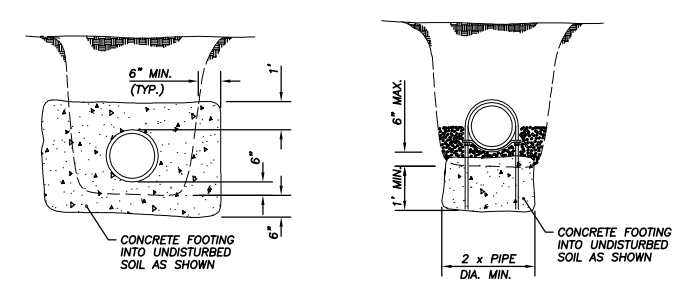
FLOW SPLITTER SDMH N6 TYPE 2 MANHOLE

NOT TO SCALE



CONCRETE BLOCK ANCHOR

STRAP–FOOTING ANCHOR



SECTION A–A

SECTION B–B

NOTES:

1. FOR HDPP, PIPE MUST BE FREE TO SLIDE INSIDE A 4' LONG SECTION OF PIPE ONE SIZE DIAMETER LARGER.
2. ON SLOPES OF 15% OR GREATER, PIPE SHALL HAVE WATERTIGHT JOINTS.

NO.	REVISIONS	DATE	BY

DWG: D22.DWG

Department of Public Works
CLARK COUNTY WASHINGTON
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PIPE ANCHOR DETAIL

APPROVED
Peter Capien
COUNTY ENGINEER
01/01/04
DATE

STANDARD D22
PLAN No.
DESIGNED
DRAWN
DATE 10/03/02

DESIGNED: SKC
DRAWN: SKC
CRP: 400281
HORIZ. 1" = 20'
VERT. 1" = 5'
DATE: 6/28/2004
DWG: PP03
SHEET 5 OF 8

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PLAN AND PROFILE
STA. ???? TO STA. ????

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