

MAP OF THE
CITY OF SKYLINE
BLUE EARTH COUNTY, MN

CITY OF SKYLINE
CONSTRUCTION PLANS FOR
1999 WATERMAIN IMPROVEMENTS

SKYLINE, MN
MARCH 1999

SHEET INDEX

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5	SKYLINE COURT STA 20+00 TO STA 27+25
6	SOUTH SKYLINE DRIVE STA 30+00 TO STA 32+30

RESOURCE LIST

CITY OF SKYLINE	UTILITIES
City Hall P.O. BOX 424 MANKATO, MN 56002-0424 507-345-5390	GAS Minnegasco 2400 N. Riverfront Drive Mankato, MN 56001 507-685-5611, FAX: 507-387-1997
City Treasurer: DOROTHY ANDRING	TELEPHONE MCTC 221 EAST HICKORY STREET MANKATO, MN 56001 507-387-1151
City Clerk: ROBERT IRWIN	CABLE BRESNAN COMMUNICATIONS 1724 MADISON AVENUE MANKATO, MN 56001 507-388-9311
Mayor: WILLARD VETTER	ELECTRIC Northern States Power PO Box 1090 Mankato, MN 56001 507-625-5621, FAX: 507-387-9604
City Council Members: BRYAN COMSTOCK HAL JOHNSON ANN FISCHER ALAN HONERMANN	
City Engineer: (Consultant) Mark D. Kasma, P.E. Bolton & Menk, Inc. 515 North Riverfront Drive Mankato, MN 56001 507-625-4171, FAX: 507-625-4177	

NOTE:
EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS
BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR
SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING
CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY
GOPHER STATE ONE-CALL 1-800-252-1166 OR 612-454-0002.

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

Mark D. Kasma REG. NO. 21282 DATE: 3/31/99

THESE RECORD DRAWINGS HAVE BEEN PREPARED
FROM AVAILABLE INFORMATION. NOT ALL
FEATURES AND CONSTRUCTION NOTES HAVE BEEN
CHANGED OR REDRAWN TO REFLECT THE AS
CONSTRUCTED CONDITIONS. CARE AND FIELD
VERIFICATION ARE RECOMMENDED IF THESE
DRAWINGS ARE TO BE USED FOR FUTURE
EXTENSIONS OR REVISIONS. 2-20-2000
MDE

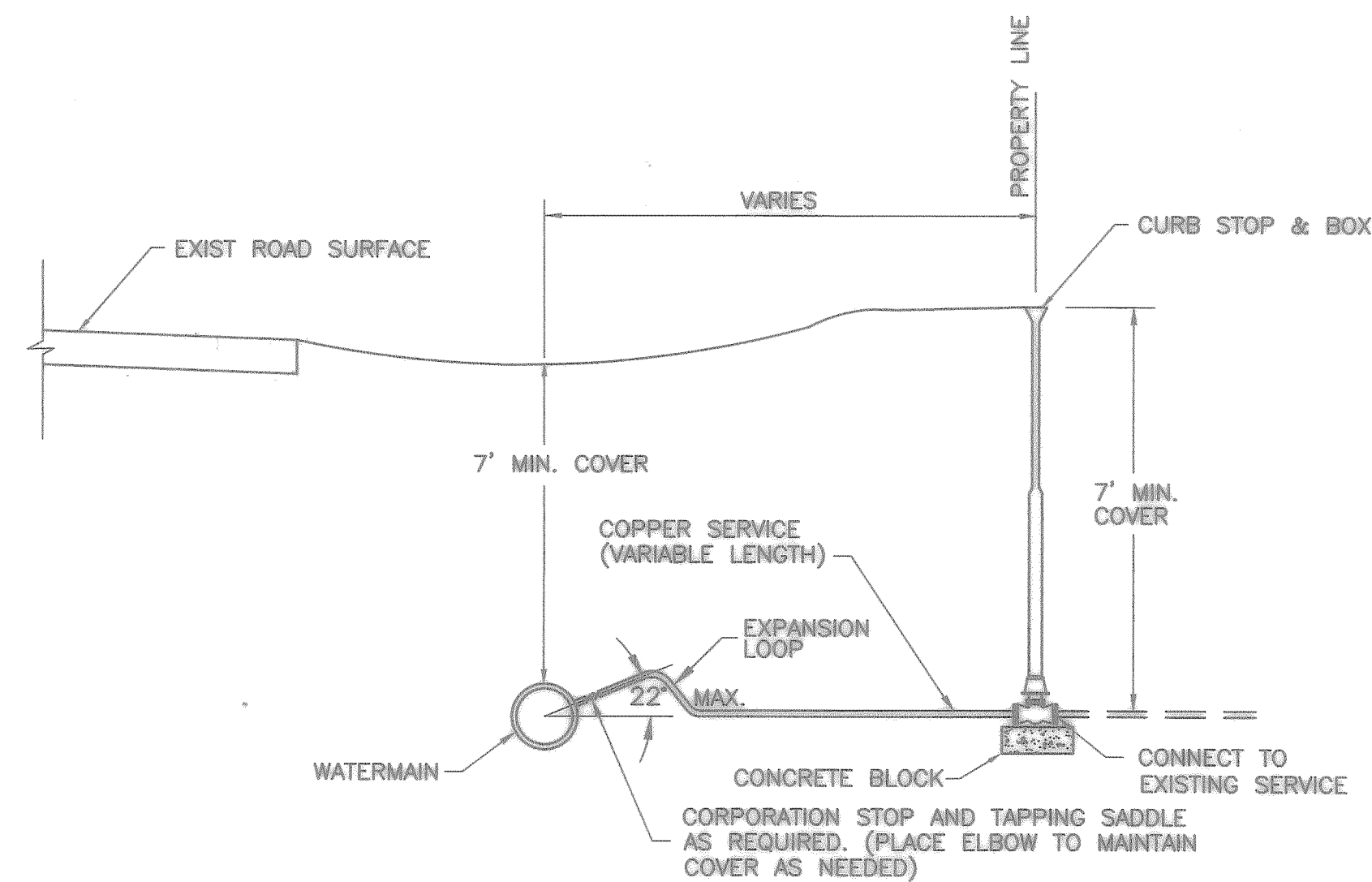
BOLTON & MENK, INC
CONSULTING ENGINEERS & SURVEYORS
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN
BURNSVILLE, MN WILLMAR, MN AMES, IA LIBERTY, MO

EXISTING	
-----	COUNTY LINE
-----	CITY LIMITS
-----	SECTION LINE
-----	PRESENT RIGHT OF WAY LINE
-----	PROPERTY/LOTLINE
-----	PERPETUAL EASEMENT
-----	ZONING SETBACK LINE
-----	ACCESS CONTROL LINE
-----	RAILROAD RIGHT OF WAY LINE
-----	RAILROAD
-----	WATER EDGE
-----	WATER CENTERLINE
-----	HIGHWATER LINE
-----	SWALE CENTERLINE
-----	WETLAND BOUNDARY
-----	WETLAND/MARSH
=====	CURB & GUTTER
=====	CONCRETE EDGE
=====	BITUMINOUS EDGE
=====	GRAVEL EDGE
-----	FENCE
=====	CULVERT
-----	DECIDUOUS TREE
-----	CONIFER TREE
-----	HEDGE
-----	TREE LINE
-----	TRAFFIC SIGN
-----	MANHOLE
-----	CATCH BASIN
-----	8" SAN INP
-----	4" FM INP
-----	15" STM INP
-----	STORM SEWER
-----	TILE LINE
-----	4" WMN INP
-----	WATERMAIN
-----	HYDRANT
-----	VALVE
-----	CURB STOP
-----	GAS
-----	POWER POLE
-----	LIGHT POLE
-----	PAD MOUNTED TRANSFORMER
-----	UE
-----	UNDERGROUND ELECTRIC
-----	OE
-----	OVERHEAD ELECTRIC
-----	UTILITY PEDESTAL/CABINET
-----	UT
-----	UNDERGROUND TELEPHONE
-----	TV
-----	UNDERGROUND TV CABLE
-----	BENCHMARK
-----	B-3
-----	SOIL BORING

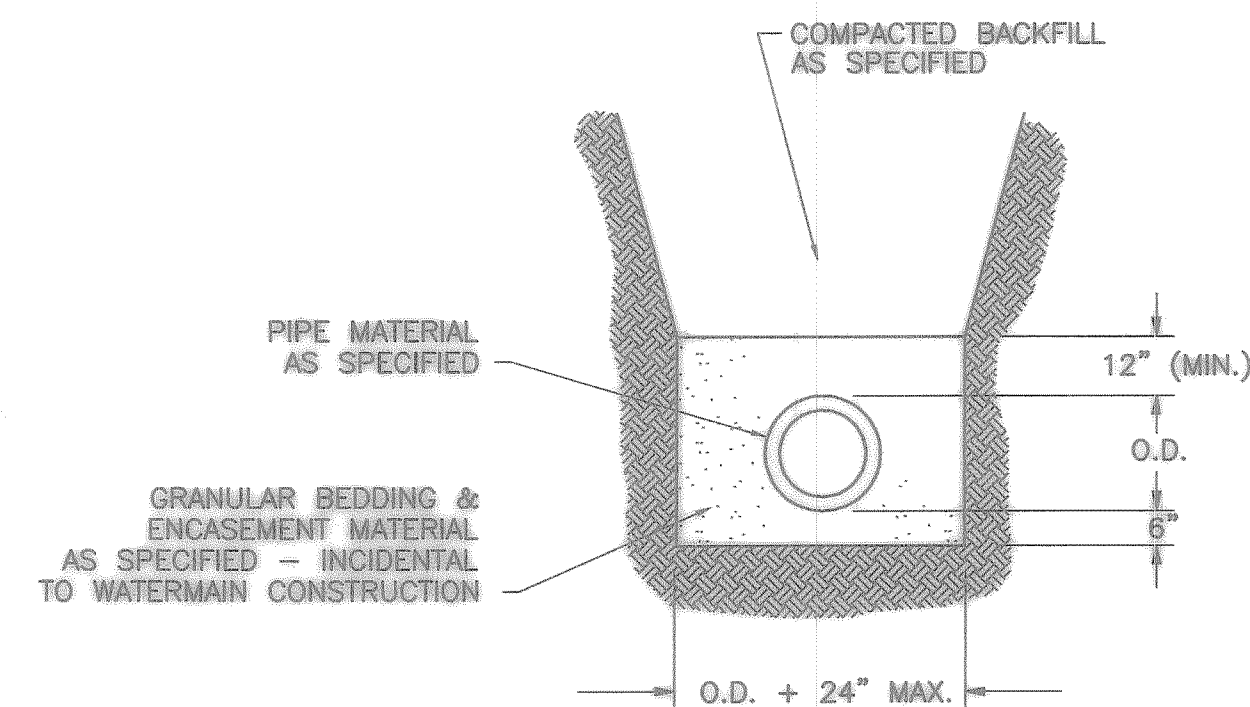
PROPOSED	
-----	22+00
-----	ALIGNMENT/CENTERLINE
-----	RIGHT OF WAY LINE
-----	TEMPORARY EASEMENT
-----	CONSTRUCTION LIMITS
=====	CURB & GUTTER
=====	BITUMINOUS EDGE
=====	CONCRETE EDGE
=====	GRAVEL EDGE
-----	SILT FENCE-PREASSEMBLED
-----	SILT FENCE-HEAVY DUTY
-----	EROSION PROTECTION AT INLET
-----	MANHOLE
-----	CATCH BASIN
-----	8" SAN
-----	6" FM
-----	12" STM
-----	4" PERF PD
-----	STORM SEWER
-----	PERFORATED PIPE DRAIN
-----	CULVERT W/APRON
-----	HYDRANT
-----	VALVE
-----	CURBSTOP
-----	6" WMN
-----	WATERMAIN



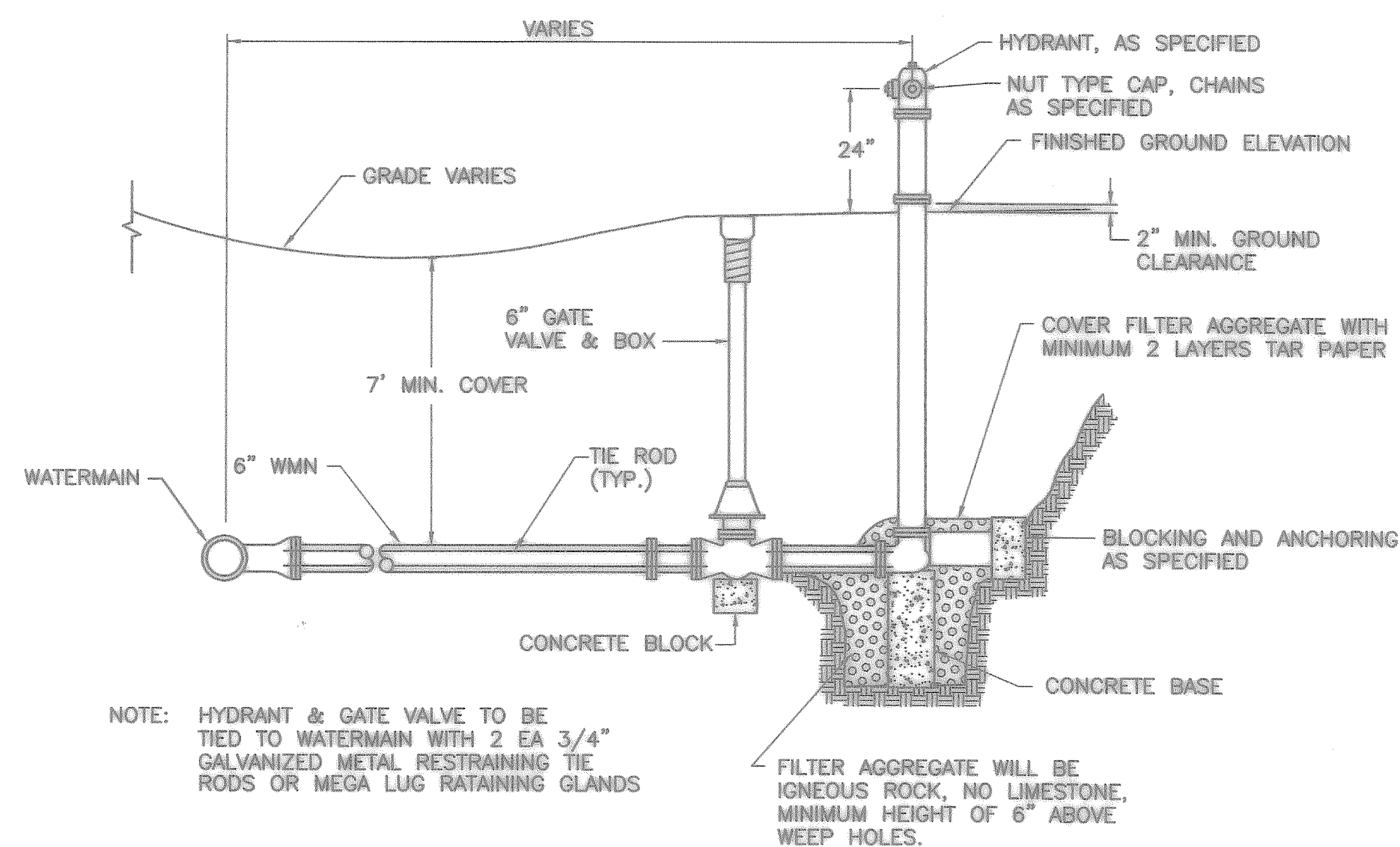
HA:SKYLINE:1999:0004:CAD:MSD:MANKATO: 3-31-1999



WATER SERVICE INSTALLATION DETAIL



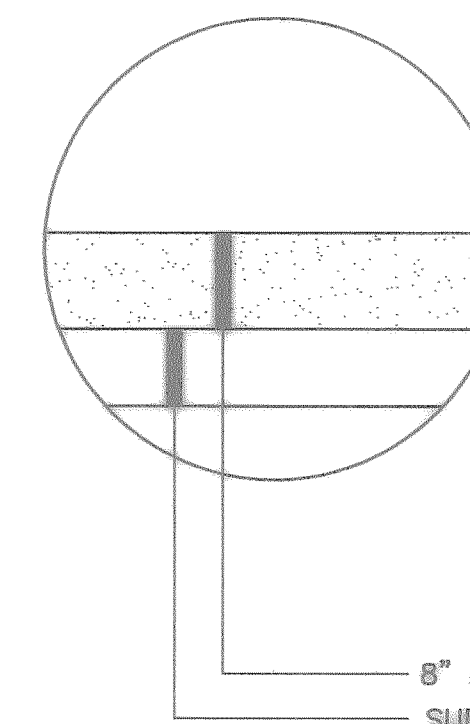
TRENCH DETAIL
PVC WATERMAIN



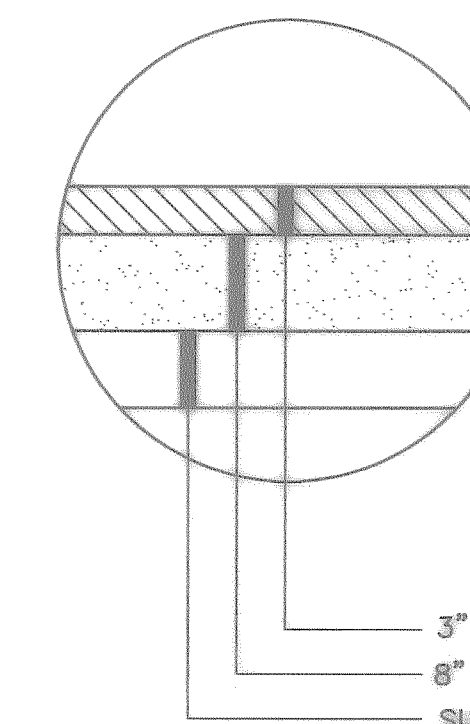
NOTE: HYDRANT & GATE VALVE TO BE TIED TO WATERMAIN WITH 2 EA 3/4\" GALVANIZED METAL RESTRAINING TIE RODS OR MEGA LUG RETAINING GLANDS

FILTER AGGREGATE WILL BE IGNEOUS ROCK, NO LIMESTONE, MINIMUM HEIGHT OF 6\" ABOVE WEEP HOLES.

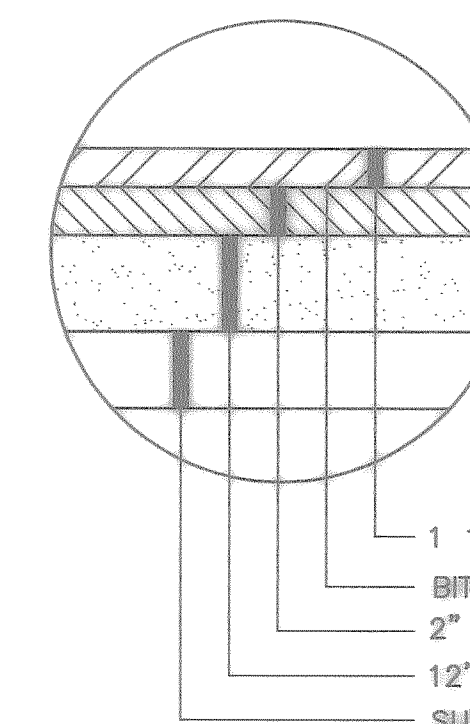
HYDRANT INSTALLATION



GRAVEL DRIVEWAY PATCH



BITUMINOUS DRIVEWAY PATCH



BITUMINOUS PATCH

THESE RECORD DRAWINGS HAVE BEEN PREPARED FROM AVAILABLE INFORMATION. NOT ALL FEATURES AND CONSTRUCTION NOTES HAVE BEEN CHANGED OR REDRAWN TO REFLECT THE AS CONSTRUCTED CONDITIONS. CARE AND FIELD VERIFICATION ARE RECOMMENDED IF THESE DRAWINGS ARE TO BE USED FOR FUTURE EXTENSIONS OR REVISIONS. 2-22-2000 MDK

PROJECT NO: MM99.0004
DRAWING NAME: H:\SKYL\MM990004\CAD\M9004-001.DWG
PLOT DATE: 3-31-1999

NOTE: DETAILS ARE NOT TO SCALE

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Mark A. Karna
REG. NO. 21282 DATE 3/31/99

DESIGNED
DJD
DRAWN
DRC
CHECKED
MDK



BOLTON & MENK, INC
CONSULTING ENGINEERS & SURVEYORS
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN
BURNSVILLE, MN WILLMAR, MN AMES, IA LIBERTY, MO

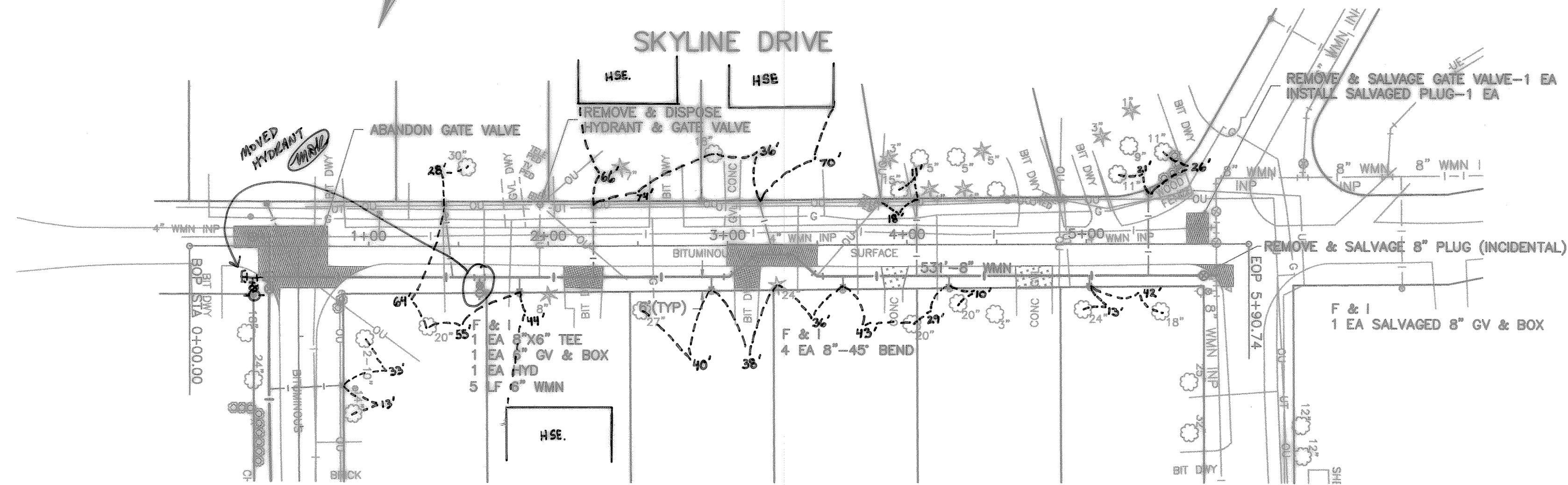
REV.	BY	DATE

CITY OF SKYLINE, MN
1999 WATERMAIN IMPROVEMENTS
DETAILS

SHEET
2
OF
6

19-470

U-17



LEGEND

- [Solid black rectangle] = BITUMINOUS PATCH
- [Cross-hatched rectangle] = BITUMINOUS DRIVEWAY PATCH
- [Dotted rectangle] = GRAVEL DRIVEWAY PATCH

NOTE: CONTRACTOR TO PNEUMA GOPHER ALL SERVICES ACROSS ROADWAY (UNLESS NOTED).

ABANDON EXISTING WATERMAIN STA. 0+36 TO STA. 5+73 (INCIDENTAL)

± BM=991.36
TOP OF HYD AT SW COR
OF SKYLINE DRIVE &
SOUTH SKYLINE DRIVE

1000

995

990

985

980

975

970

965

960

1000

995

990

985

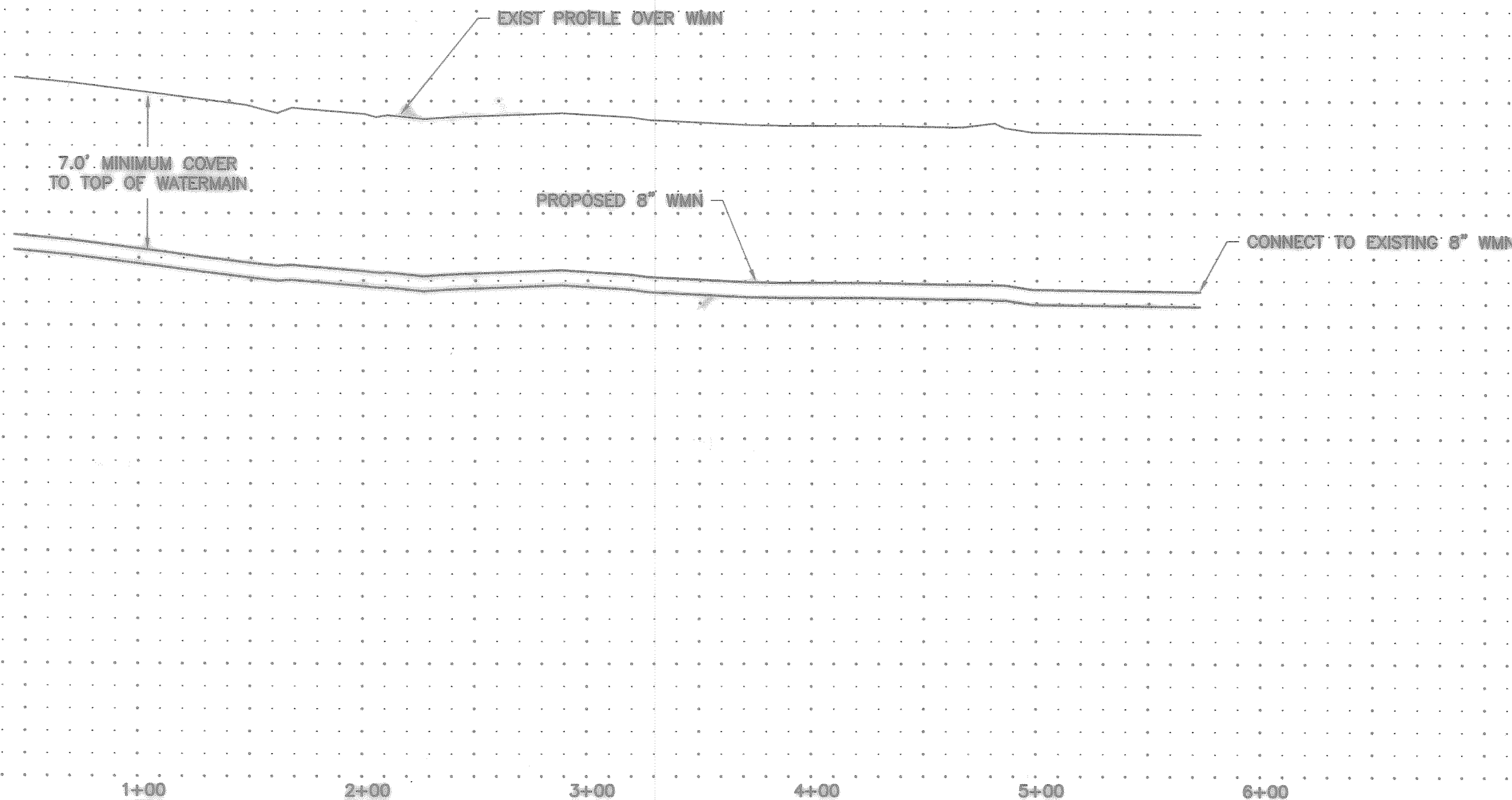
980

975

970

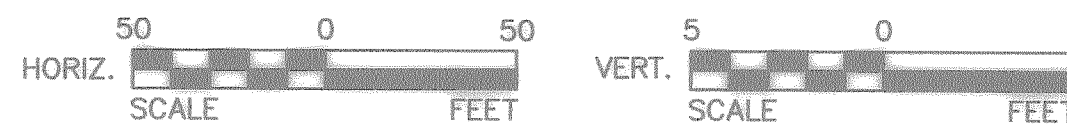
965

960



THESE RECORD DRAWINGS HAVE BEEN PREPARED FROM AVAILABLE INFORMATION. NOT ALL FEATURES AND CONSTRUCTION NOTES HAVE BEEN CHANGED OR REDRAWN TO REFLECT THE AS CONSTRUCTED CONDITIONS. CARE AND FIELD VERIFICATION ARE TO BE USED FOR FUTURE EXTENSIONS OR REVISIONS: 2-22-2007 MDK

PROJECT NO.: MM99.0004
DRAWING NAME: H:\SKYL\MM990004\CAD\RCP01001.DWG
PLOT DATE: 3-31-99
FB:



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Walter S. Kasma
REG. NO. 21282 DATE 3/31/99

DESIGNED MDK
DRAWN DSS
CHECKED MDK

BOLTON & MENK, INC
CONSULTING ENGINEERS & SURVEYORS
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN
BURNSVILLE, MN WILLMAR, MN AMES, IA LIBERTY, MO

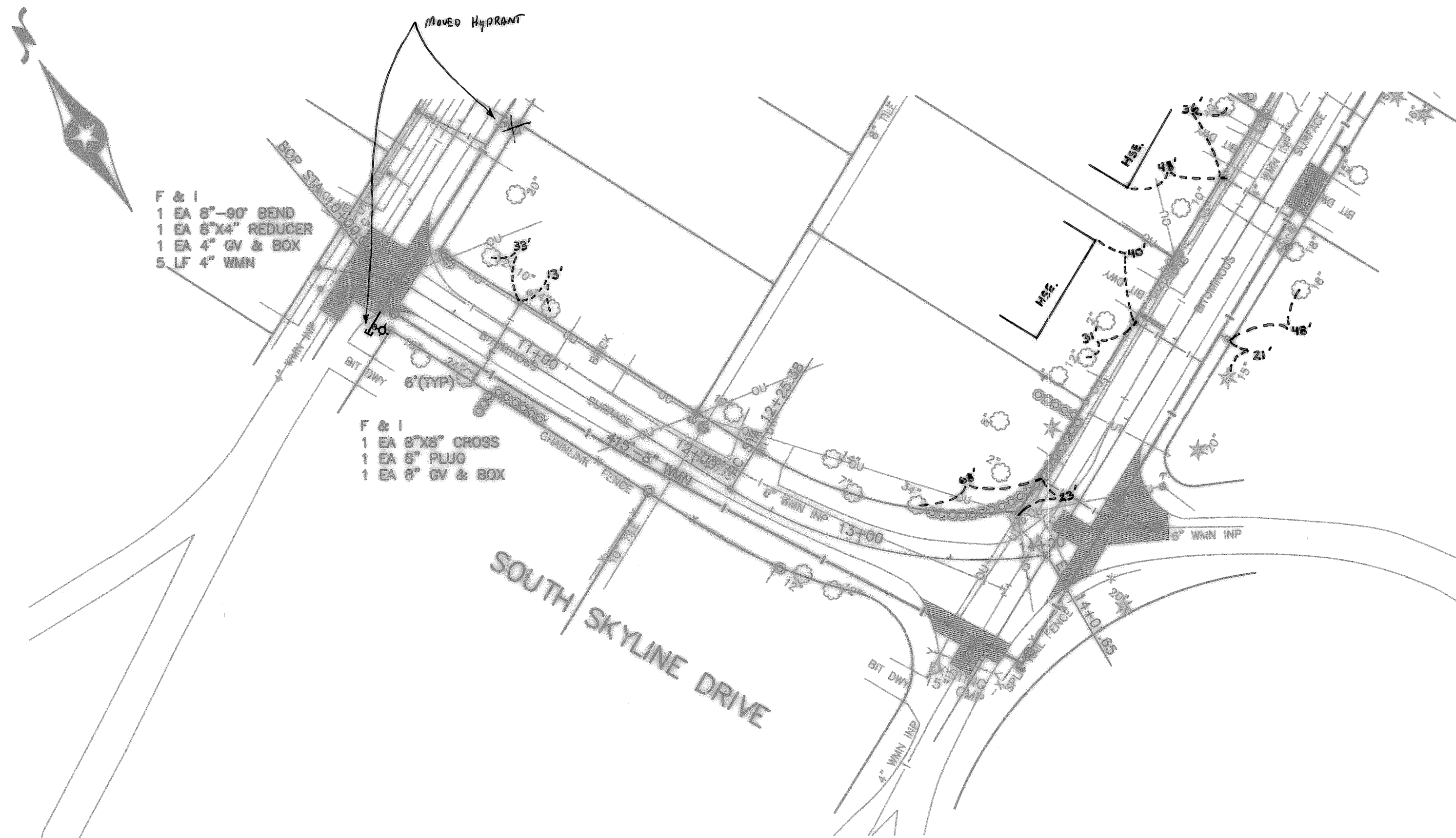
REV.	BY	DATE

CITY OF SKYLINE, MN
1999 WATERMAIN IMPROVEMENTS
SKYLINE DRIVE
STA 0+00 TO STA 5+91

SHEET
3
OF
6

M-492

V-77



F & I
1 EA 6"-90° BEND
1 EA 6"x4" REDUCER
1 EA 4" GV & BOX
5 LF 4" WMN

F & I
1 EA 8"x8" CROSS
1 EA 8" PLUG
1 EA 8" GV & BOX

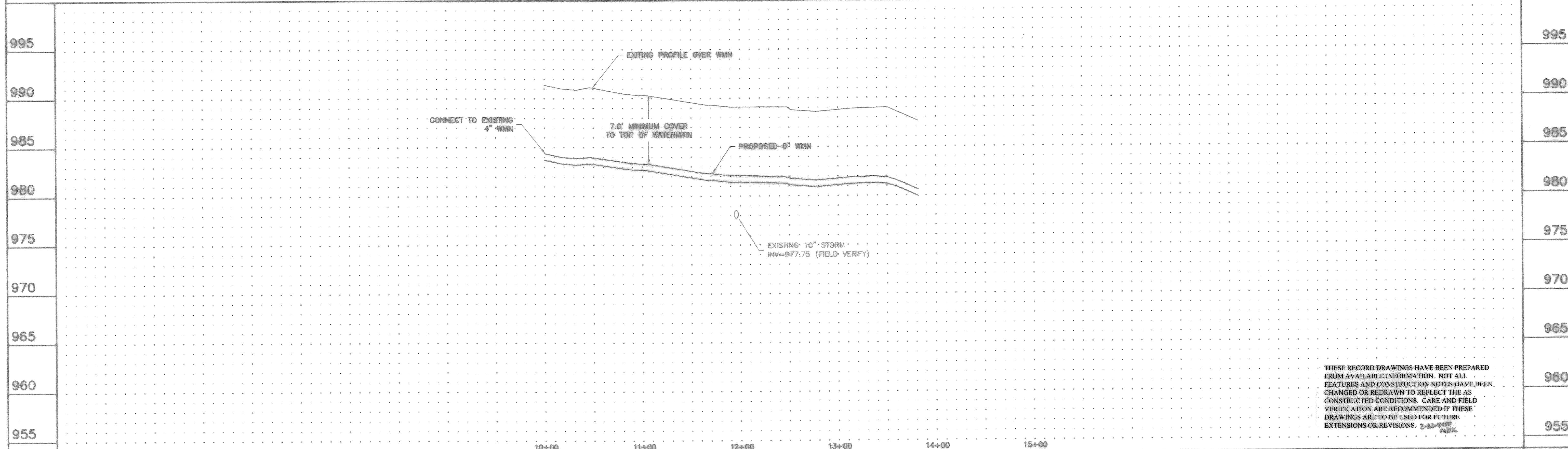
LEGEND

- = BITUMINOUS PATCH
- = BITUMINOUS DRIVEWAY PATCH

NOTE: CONTRACTOR TO PNEUMA GOPHER ALL SERVICES ACROSS ROADWAY (UNLESS NOTED).

ABANDON EXISTING WATERMAIN STA. 9+95 TO STA. 13+90 (INCIDENTAL)

± BM=991.36
TOP OF HYD AT SW COR
OF SKYLINE DRIVE &
SOUTH SKYLINE DRIVE



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PROJECT NO.: MM99.0004
DRAWING NAME: H:\SKYL\MM990004\CAD\RCP01002.DWG
PLOT DATE: 3-31-99
FB:



I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Michael D. Hanna
REG. NO. 21282 DATE 3/31/99

DESIGNED MDK
DRAWN DSS
CHECKED MDK



BOLTON & MENK, INC
CONSULTING ENGINEERS & SURVEYORS
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN
BURNSVILLE, MN WILLMAR, MN AMES, IA LIBERTY, MO

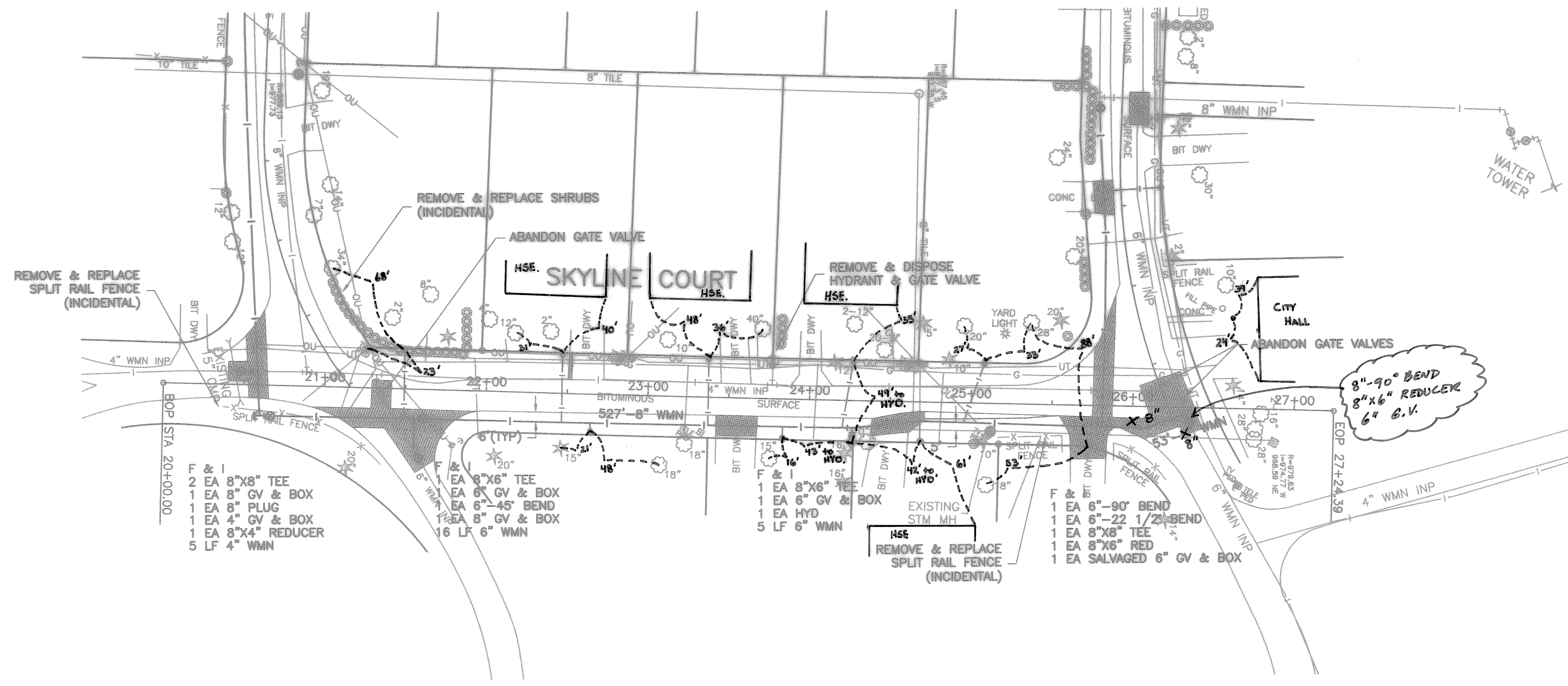
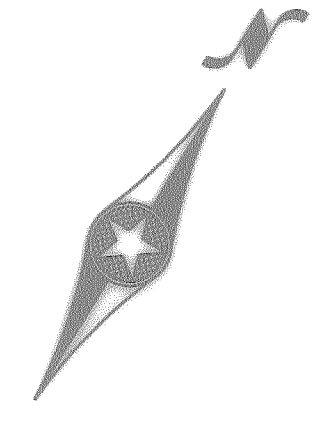
REV.	BY	DATE

CITY OF SKYLINE, MN
1999 WATERMAIN IMPROVEMENTS
SOUTH SKYLINE DRIVE
STA 10+00 TO STA 14+02

SHEET
4
OF
6

M-490

V-77



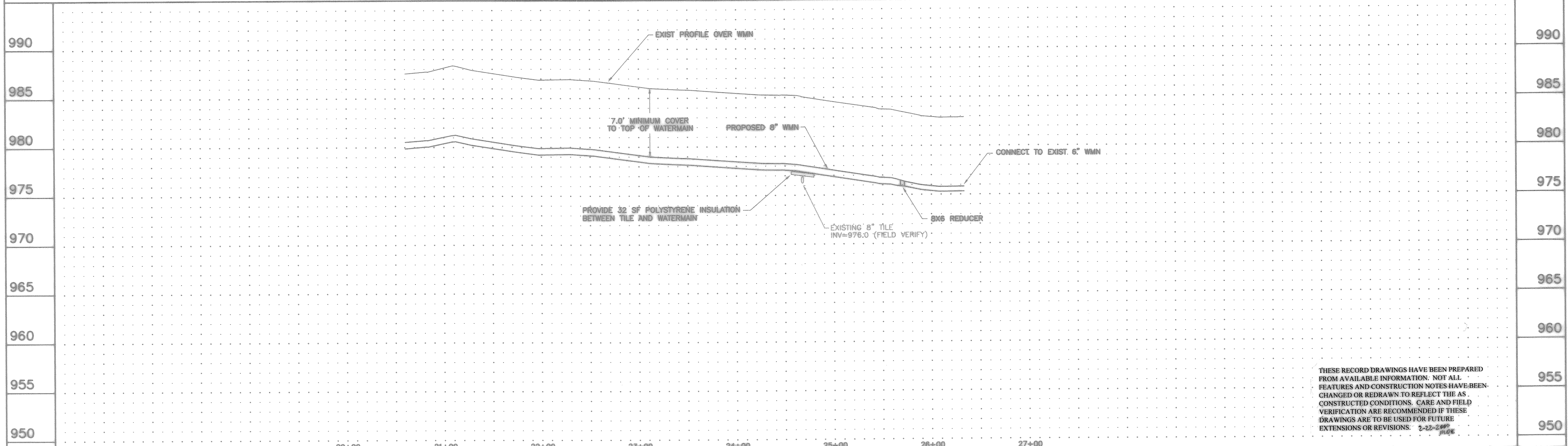
LEGEND

- [Solid black rectangle] = BITUMINOUS PATCH
- [Cross-hatched rectangle] = BITUMINOUS DRIVEWAY PATCH

NOTE: CONTRACTOR TO PNEUMA GOPHER ALL SERVICES ACROSS ROADWAY (UNLESS NOTED).

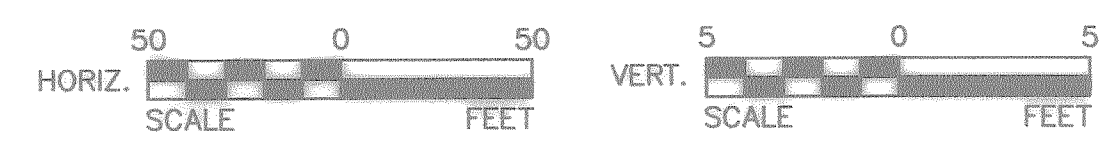
ABANDON EXISTING WATERMAIN STA. 20+60 TO STA. 26+25 (INCIDENTAL)

+ BM=991.36
TOP OF HYD AT SW COR
OF SKYLINE DRIVE &
SOUTH SKYLINE DRIVE



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PROJECT NO.: MM99.0004
DRAWING NAME: H:\SKYL\MM990004\CAD\RCP01003.DWG
PLOT DATE: 3-31-99
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Mark D. Kasma
REG. NO. 21282 DATE 3/21/99

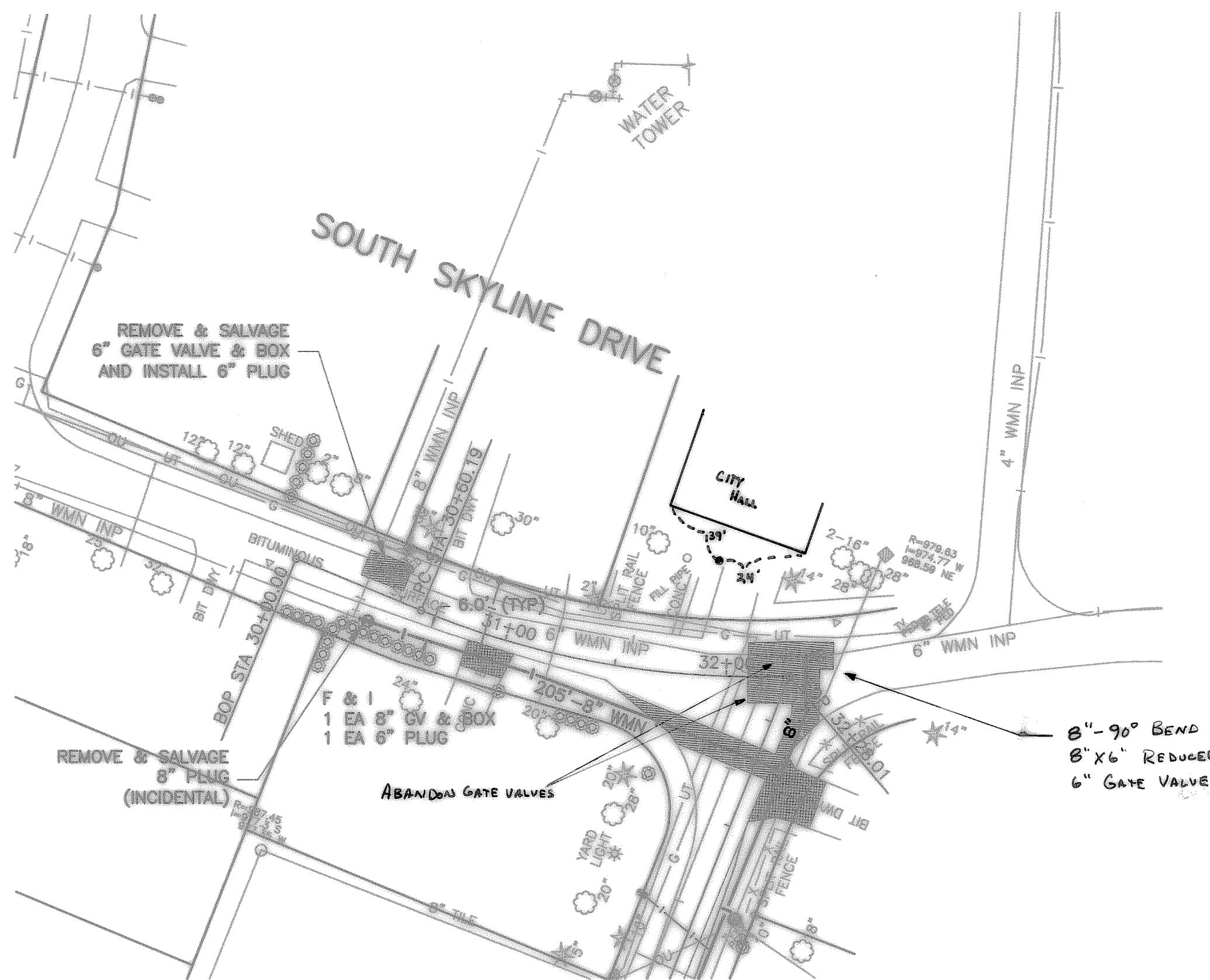
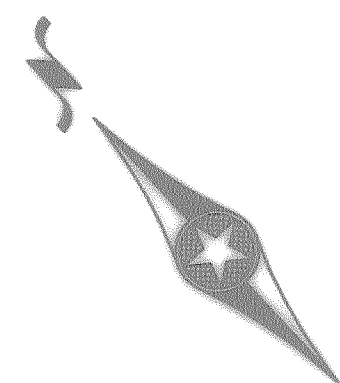
DESIGNED MDK
DRAWN DSS/DRC
CHECKED MDK

BOLTON & MENK, INC
CONSULTING ENGINEERS & SURVEYORS
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN
BURNSVILLE, MN WILLMAR, MN AMES, IA LIBERTY, MO

REV.	BY	DATE

CITY OF SKYLINE, MN
1999 WATERMAIN IMPROVEMENTS
SKYLINE COURT
STA 20+00 TO STA 27+25

SHEET 5 OF 6



LEGEND

- [Solid black rectangle] = BITUMINOUS PATCH
- [Cross-hatched rectangle] = BITUMINOUS DRIVEWAY PATCH

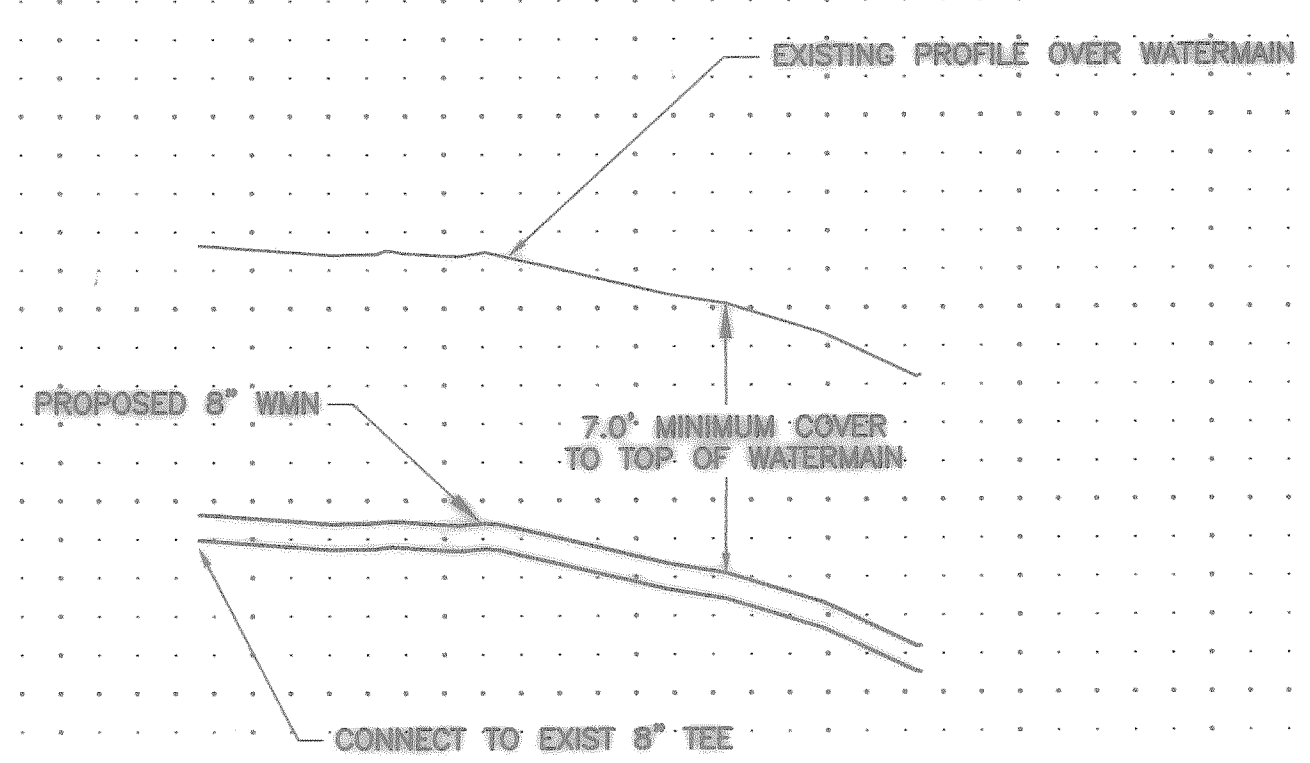
NOTE: CONTRACTOR TO PNEUMA GOPHER ALL SERVICES ACROSS ROADWAY (UNLESS NOTED).

ABANDON EXISTING WATERMAIN STA. 30+25 TO STA. 32+20 (INCIDENTAL)

± BM=991.36
TOP OF HYD AT SW COR
OF SKYLINE DRIVE &
SOUTH SKYLINE DRIVE

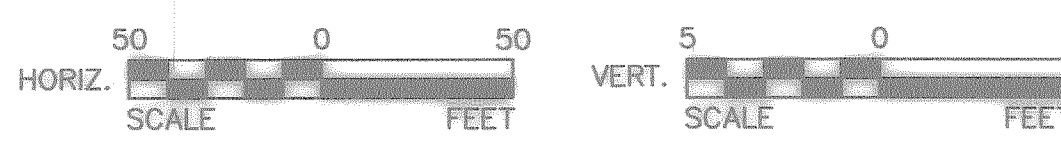
995
990
985
980
975
970
965
960
955

995
990
985
980
975
970
965
960
955



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PROJECT NO.: MM99.0004
DRAWING NAME: H:\SKYL\MM990004\CAD\RCP01004
PLOT DATE: 3-31-99
FB:



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

Mark D. Kama
REG. NO. 21262 DATE 3/31/99

DESIGNED MDK
DRAWN DSS/DRC
CHECKED MDK

BOLTON & MENK, INC
CONSULTING ENGINEERS & SURVEYORS
MANKATO, MN FAIRMONT, MN SLEEPY EYE, MN
BURNSVILLE, MN WILLMAR, MN AMES, IA LIBERTY, MO

REV.	BY	DATE

CITY OF SKYLINE, MN
1999 WATERMAIN IMPROVEMENTS
SOUTH SKYLINE DRIVE
STA 30+00 TO STA 32+30

SHEET
6
OF
6

M-490

V-77

