BM 641.63 Top Hyd
21st & Catlin Ave.
NW Corner

Δ = 45°
L = 24'
R = 30.5'
T = 12.63'

REPLACE CYPRESS AVE CROSSING WITH TYPE I ST. SECTION.

BM 639.84 Top Hyd.
21st & Grand Ave.
NW Corner

BM 638.72 Top Hyd.
21st & West RR on North side of road.

NOTE: Tie 10 joints near outlet with galvanized U bolts - 2 each joint.

Δ = 30°
L = 16'
R = 30.5'
T = 8.14'

PLACE 2442 CUBIC YARDS RIP RAP ALONG CHANNEL WITH 10' BOTTOM AND 2 TO 1 SLOPES, 4' HIGH. SLOPE AT 4 TO 1 ABOVE RIP RAP.

PLACE 96" CMP INSIDE EX. CULVERT SEE DETAIL BELOW

8" LP GAS MAIN
MH-128
20" Water Main
MH-130
669.18
556'
439'
515.82
MH-129
CB-129B
CBMH-129A
SEE SHEET 18
REPLACE 21ST ST. CROSSING WITH TYPE VI ST. SECTION.
CB-127B
CBMH-127A
4" H.P. Gas Main
3/4" Water Main
EXIST. HEADWALLS
Catlin Ave
Cypress Ave
Grand Ave.
N 21st ST.
R.R. Co.
Wis. Cen.
Scale: 1"=50' Horz.
1"=10' Vert.

96" C.M.P. SHAPED TO FIT EX. CULVERT
FILLED VOIDS WITH CONCRETE GROUT
EXISTING CONCRETE CULVERT

MH-128 644.41
6-48" LONG RADIUS BENDS
152'-96" C.M.P @ 0.37 %
556'-48" R.C.P CL. III @ 0.15%
MH-127 637.67
439'-48" R.C.P CL. III @ 0.59 %
4-48" LONG RADIUS BENDS
48" R.C.P. APRON WITH TRASH GUARD
MH-127 637.67
CBMH-127A CB-127B 637.42 637.53
34'-12" R.C.P @ 1.56 %
6" L.P. GAS MAIN
87'-12" R.C.P. @ 5.75%
Tele.
Stream
℄ Catlin Ave. 13+00
℄ Cypress 6+79
℄ Grand Ave. 5+09
℄ 21st St.
END BENDS
650
640
630
620

BM 643.52 Top Hyd.
Lincoln & Fisher Ave.
NW Corner

BM 642.71 Top Hyd.
21st & Fisher Ave.
NW Corner

BM 644.12 Top Hyd.
22nd & Fisher Ave.
NW Corner

BM 642.08 Top Hyd.
Lincoln & Catlin Ave.
NW Corner

Δ = 45°
L = 24'
R = 30.5'
T = 12.63'

Δ = 82.5°
L = 44'
R = 30.5'
T = 26.75

2" I.P. Gas Main
4" I.P. Gas Main
8" I.P. Gas Main
6" Water Main
6" L.P. Gas Main
4" L.P. Gas Main
4" I.P. Gas Main
20" Water Main
12" Water Main
SEE SHEET 17
SEE SHEET 18
MH-S136
MH-134
CB-134A
MH-S142
CB-143B
CBMH-143A
MH-144
CB-144B
CBMH-144A
MH-133
233.5'
MH-S141
CB-181B
CBMH-181A
CBMH-129A
CB-129B
RIM OF MH-128 & MH-133 SHALL BE 6" BELOW FINISHED GRADE
N. 20th St.
Lincoln St.
N. 21st St.
N. 22nd St.
FISHER AVE
CATLIN AVE
Scale: 1"=50' Horz.
1"=10' Vert.

PVI + 0+50
ELEV = 640.01
L = 100
M = 0.06

PVI + 2+15
ELEV = 639.68
100' V.C.
M = .20

PVI + 14+60
ELEV = 639.64
100' V.C.
M = .21

CB-134A 639.33
MH-134 640.06
+0.30%
-0.20%
CBMH-143A 639.11
+1.36%
MH-144 640.73
-0.92%
CBMH-144A 639.29
CB-144B 639.21
+0.78%
CB-143B 639.09
CBMH-143A 639.11
22'-12" R.C.P @ 1.14%
181'-15" R.C.P CL. IV @ 0.76%
155'-12" R.C.P @ 0.30%
29'-12" R.C.P @ 0.29%
31'-12" RCP @ 1.35%
31'-12" RCP @ 1.45%
4" GAS MAIN L.P.
6" L.P. GAS MAIN
2" I.P. G.M.
6" W.M.
12" SAN. SEWER
4'-4' x 5' SAN. SEWER
MH-133 640.74
233.5'-48" R.C.P. CL. III @ 10.08%
11-48" R.C.P. LONG RADIUS BENDS (30.5 R)
6-48" R.C.P. LONG RADIUS BENDS (30.5R)
MH-128 644.41
STEAM LINE
Tele
℄ Lincoln 3+30
℄ 21st St. 0+00
650
640
630
620

SURVEY	MLS	REVISIONS	
DRAWN	DWS	RECORD PLANS	
DESIGN	DWS	7/7/78 HBR	
APPROV'D	GRC		

I HEREBY CERTIFY THAT THIS PLAN 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 WISCONSIN
DATE OCT. 10, 1974 REG. NO. E06599

BONESTROO, ROSENE, ANDERLIK & ASSOC., INC.
ST. PAUL, MINNESOTA

SUPERIOR, WISCONSIN
DATE: SEPT. 30, 1974 COMM. 5888J

DISTRICT 3B - FAXON
STORM SEWER SEPARATION

16/21

21st St.
Fisher Ave.
Catlin Ave.