N

80 0 80 160
Scale Feet

MODIFY EX. LIFT STATION 38
SEE DETAIL SHEETS 35 & 36
RIM 905.57
N INV. 893.17 (FIELD VERIFY)
W INV. 892.97 (FIELD VERIFY)
W INV. 876.69 (FIELD VERIFY)
E INV. 875.99 (FIELD VERIFY)
S INV. 876.69

STANDARD CURB

CONSTRUCT CONCRETE
ACCESS ROAD
5% MAX SLOPE

MOUNTABLE CURB

STORM MANHOLE (STS 9)
SEE DETAIL SHEET 23
RIM 883.72
N INV. 875.17
E–W INV. 874.67 (FIELD VERIFY)

STORM INLET (STS 8)
STANDARD
RIM 881.80
S INV. 875.27

20LF 24" RCP @ 0.50%

PROPOSED LEVEE
ELEV. 904.06

PROPOSED LEVEE
ELEV. 891.33

234LF 36" RCP @ 0.39%

STORM MANHOLE (STS 2)
TYPE C
RIM 885.03
N INV. 875.77
W INV. 875.60
SE INV. 875.60

GATEWELL (STS 10)
SEE DETAIL SHEET 23
RIM 890.93
E–W INV. 874.00 (FIELD VERIFY)

PROPOSED LEVEE
ELEV. 891.33

POND SKIMMER (STS 1)
SEE DETAIL SHEET 23
RIM 879.45
E INV. 875.65

31LF 36" RCP @ 0.16%

CONSTRUCT LEVEE
TOP ELEVATION RS 39.5+4.5
10' TOP W/ 4:1 SIDE SLOPES

201LF 36" RCP @ 0.11%

SHEET 7 &
SHEET 10

STORM INLET (STS 3)
TYPE A
RIM 884.75
NW INV. 875.37
S INV. 875.37

INSTALL AIR RELEASE VALVE AT HIGHEST
POINT OF THE IRRIGATION LINE.

150LF 4" FUSIBLE POLYETHYLENE IRRIGATION LINE TO
BE INSTALLED IN THE 3' FREEBOARD WITH GATE VALVES
AT BOTH ENDS. FUSE BOLT ON FLANGE TO
POLYETHYLENE TO MAKE CONNECTION TO GATE VALVE.
FIELD VERIFY LOCATION AND ELEVATIONS WITH ENGINEER.

CONSTRUCT 4" CONCRETE
WALKING PATH
5% MAX SLOPE

INSTALL 15" RCP FES W/TRASH RACK
INV. 892.23

212LF 36" RCP @ 0.11%

CONSTRUCT CONCRETE FLUME

70LF 15" RCP @ 1.0%

STORM MANHOLE (STS 4)
TYPE A
RIM 891.52
N INV. 875.14
S INV. 875.14

INSTALL 15" RCP FES W/TRASH RACK
INV. 891.53

INSTALL NDDOT
SPECIFIED RIPRAP

STORM MANHOLE (STS 11)
WITH 18" PIPE MOUNTED FLAP GATE
SEE DETAIL SHEET 22
RIM 891.42
E INV. 874.56 (FIELD VERIFY)
W INV. 886.40
N INV. 874.56

REGRADE DITCH
TO DRAIN NORTH

STORM INLET (STS 12)
SEE DETAIL SHEET 23
RIM 880.75
S INV. 874.61

INSTALL GATE

CONSTRUCT 6" CONCRETE
WALKING PATH
5% MAX SLOPE

133LF 18" RCP @ 0.87%

56LF 48" RCP @ 0.09%

INSTALL PERMANENT TYPE
III BARRICADE AND ROAD
CLOSED SIGN (R11–2)

350LF 36" RCP @ 0.11%

INSTALL ASPHALT
MATCH EXISTING SECTION

INSTALL NDDOT
SPECIFIED RIPRAP

450' RIVER ℄ OFFSET

EXISTING SANITARY MANHOLE
RIM 895.46
N INV. 877.46 (FIELD VERIFY)
S INV. 876.46 (FIELD VERIFY)
W INV. 875.46 (FIELD VERIFY)
SE INV. 875.36

INSTALL ASPHALT
SEE DETAIL SHEET 24

CONSTRUCT CONCRETE
ACCESS ROAD
6% MAX SLOPE

2" MILL AND OVERLAY TO
BE COMPLETED UPON
COMPLETION OF PROJECT

STORM INLET (STS 5)
TYPE D
RIM 889.57
W INV. 875.01 (FIELD VERIFY)
N INV. 874.77
S INV. 874.77

61LF 27" PVC @ 2.00%

167LF 48" RCP @ 0.10%

113LF 66" RCP @ 0.10%

EXISTING STORM MANHOLE
RIM 892.90
N–S–W INV. 887.55 (FIELD VERIFY)
E INV. 887.55

STORM MANHOLE (STS 6)
SEE DETAIL SHEET 22
RIM 885.23
SW INV. 874.55 (FIELD VERIFY)
N INV. 874.55
S INV. 874.70
NE INV. 874.55

211LF 66" RCP @ 0.10%

PIPE OUTFALL
SW INV. 872.47

CONSTRUCT OUTFALL
10' BOTTOM W/ 5:1 SIDE SLOPES

43LF 12" PVC @ 1.00%

EXISTING SANITARY MANHOLE
RIM 891.33
SE INV. 873.14 (FIELD VERIFY)
NW INV. 874.13

AREA TO BE
PRECONSOLIDATED
PER SPECIFICATION

SANITARY MANHOLE (SS 1)
RIM 895.22
N–S INV. 870.95 (FIELD VERIFY)
E INV. 870.95

LIFT STATION
SEE DETAILS SHEET 26–34
RIM 906.62
SW INV. 874.44
NE INV. 872.68

130LF 36" RCP @ 0.50%

123LF 12" PVC @ 1.00%

RECYCLE CENTER
80'X125'

CONSTRUCT LEVEE
TOP ELEVATION RS 39.5+4.5
10' TOP W/ 4:1 SIDE SLOPES

SANITARY MANHOLE (SS 3)
RIM 893.56
E INV. 872.61
NW INV. 872.61

PROPOSED LEVEE
ELEV. 904.36

SHEET 8 &
SHEET 11

SANITARY MANHOLE (SS 2)
RIM 887.26
SE INV. 871.38
W INV. 871.38

213LF 12" PVC @ 1.00%

STORM INLET (STS 7)
TYPE A
RIM 884.50
N INV. 875.35

SANITARY MANHOLE (SS 6)
RIM 885.48
E INV. 878.06
W INV. 878.06

158LF 12" PVC @ 1.00%

INSTALL ASPHALT
SEE DETAIL SHEET 24

INSTALL PERMANENT TYPE
III BARRICADE AND ROAD
CLOSED SIGN (R11–2)

174LF 12" PVC @ 1.00%

228LF 12" PVC @ 1.00%

PROJECT BENCHMARK
S.E.F.H. OF HYDRANT
ELEV. 901.83 (NAVD 1988)

MODIFY EXISTING
LIFT STATION 29
SEE DETAIL SHEET 37

MODIFY EXISTING
GATE WELL
SEE DETAIL SHEET 37

SANITARY MANHOLE (SS 4)
RIM 893.43
E INV. 874.74
W INV. 874.74

SANITARY MANHOLE (SS 5)
RIM 891.91
E INV. 876.32
W INV. 876.32

SANITARY MANHOLE (SS 7)
RIM 898.76
S INV. 882.27 (FIELD VERIFY)
W INV. 880.34

SHEET 9 &
SHEET 12

RELOCATE SALVAGED STREET
SIGN TO NORTHWEST CORNER
OF INTERSECTION

INSTALL ASPHALT
MATCH EXISTING SECTION

11TH AVENUE N

7TH AVENUE N

OAK STREET N

ELM STREET N

RED RIVER OF THE NORTH

Houston Engineering Inc.	Fargo P: 701.237.5065 F: 701.237.5101	Drawn by KNS,SMH Checked by JDB	Date 10-23-12 Scale AS SHOWN

MICKELSON FIELD AREA FLOOD RISK MANAGEMENT PROJECT
FARGO, NORTH DAKOTA

OVERALL SITE PLAN

PROJECT NO. 5902-02

SHEET 2 of 74

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