PROPOSED ABOVE GRADE LIMITS

PROPOSED LOWER LEVEL LIMITS

ADJUST EXISTING CASTING TO GRADE

ADJUST EXISTING CASTING TO GRADE

SAN MH B (2)
RIM=850.73
INV=832.74 (E) 12"
INV=832.63 (W) 12"

SW SAN STUB
INV=832.90 (W) 12"

32LF 12" SAN
@ 0.50%

ADJUST EXISTING CASTING TO GRADE

96LF 12" SAN
@ 0.62%

SAN MH B (1)
RIM=849.16
INV=832.10 (E) 12"
INV=832.00 (SW) 12"

CONNECT TO INTERNAL BUILDING FIRE LOOP PER CITY REQUIREMENTS

CONNECTION (BY OTHERS)

TOWER CRANE

18" CHILLED WATER SUPPLY AND RETURN INSTALLATION RESPONSIBILITY TO BE DETERMINED

34LF-6" WM

37LF-6" WM

10" STEAM
8" CONDENSATE RETURN
INSTALLATION RESPONSIBILITY
TO BE DETERMINED

EXISTING 54" SAN TO REMAIN

COMMUNICATION CONDUIT

94LF 12" SAN
@ 0.52%

HATCH REPRESENTS APPROXIMATE EXTENTS OF REINFORCED SOIL RETAINING WALL SYSTEM

EXISTING SAN MH EX B
CORE DRILL NEW
12" CONNECTION
EX RIM=844.23
PROP RIM=847.91
INV=831.51 (NE) 12"
EX. INV=817.23 (N&S) 54"

198LF-6" WM

SOUTH SAN STUB
INV=831.50 (SW) 12"

69LF 12" SAN
@ 2.00%
BLDG CONNECTION TO MH 1 TO BE
DUCTILE IRON PIPE
CONTRACTOR TO VERIFY
PIPE IS SUPPORTED INSIDE BUILDING
JOINTS TO BE RESTRAINED.

ROOF DRAIN

SANITARY EASEMENT

138LF-6" WM

SAN MH 1 (26)
RIM=838.54
INV=830.13 (NE) 12"
INV=830.03 (SW) 12"

133LF-6" WM

EXISTING SAN MH 1 (25)
REPAIR EXISTING CONNECTION PER
CITY REQUIREMENTS
AND CORE DRILL NEW
12" CONNECTION
EX. RIM=838.57
RAISE STRUCTURE WITH
ADDITIONAL SECTIONS
PER CITY STANDARD
PROP. RIM=842.32
CONSTRUCT OUTSIDE DROP
INV=827.91 (NE) 12"
DROP INV=823.82 (NE) 12"
EX. INV=817.82 (N&S) 54"

44LF 12" SAN
@ 4.85%

5LF-6" WM

FDC STANDPIPE
HYD TO BE PAINTED YELLOW
PER CITY REQUIREMENTS
FACE FDC HYD CAPS
TOWARD HYD ACROSS 6TH

ADJUST EXISTING CASTING TO GRADE

ADJUST EXISTING CASTING TO GRADE

HYD & GV

13LF-6" WM

CONNECT TO EX HYD
LEADER. CONFIRM WITH MPLS WATER

NORTH

0 20 40
SCALE IN FEET

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HKS

OWNER
MINNESOTA SPORTS FACILITIES AUTHORITY
900 SOUTH 5th STREET, MINNEAPOLIS, MN 55415

OWNER
MINNESOTA VIKINGS FOOTBALL, LLC
9500 VIKING DR., EDEN PRAIRIE, MN 55344

ARCHITECT / INTERIORS / BRANDING
HKS, INC.
350 N. ST. PAUL ST., SUITE 100, DALLAS, TX 75201

ASSOCIATE ARCHITECT - SKIN
STUDIO FIVE ARCHITECTS
322 FIRST AVE. N, SUITE 600, MINNEAPOLIS, MN 55401

ASSOCIATE ARCHITECT - INTERIORS
STUDIO HIVE
901 NORTH 3rd ST., SUITE 228, MINNEAPOLIS, MN 55401

MEP / TECHNOLOGY/ LIGHTING
M-E ENGINEERS, INC.
10055 WEST 43rd AVE., WHEAT RIDGE, CO 80033

STRUCTURAL ENGINEER
THORNTON TOMASETTI
12750 MERIT DR., SUITE 750, LB-7, DALLAS, TX 75251

CIVIL ENGINEER
EVS, INC.
10025 VALLEY VIEW, SUITE 140, EDEN PRAIRIE, MN 55344

LANDSCAPE ARCHITECT
OSLUND AND ASSOCIATES
115 WASHINGTON AVE. N., MINNEAPOLIS, MN 55401

AUDIO VISUAL CONSULTANTS
ACOUSTIC DIMENSIONS
15508 WRIGHT BROTHERS DR., ADDISON, TX 75001

WJHW
4801 SPRING VALLEY RD., DALLAS, TX 75244

CODE / FIRE PROTECTION
FSC, INC.
9225 INDIAN CREEK, SUITE 300, OVERLAND PK, KS 66210

FOOD SERVICE
RICCA NEWMARK
5325 SOUTH VALENTIA, GREENWOOD VLG, CO 80111

WAYFINDING
SELBERT PERKINS DESIGN
432 CULVER BLVD., PLAYA DEL REY, CA 90293

VERTICAL TRANSPORTATION
ELEVATOR ADVISORY GROUP
14530 PENNOCK AVE., SAINT PAUL, MN 55124

ADA CONSULTANT
ED ROETHER CONSULTING, LLC.
25950 MISSION BELLEVIEW, LOUISBURG, KS 66053

WIND / SNOW CONSULTANT
ROWAN, WILLIAMS, DAVIES, AND IRWIN, INC
650 WOODLAWN RD. W., GUELPH, ON CANADA N1K 1B8

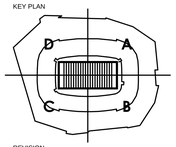
BUILDING ENVELOPE CONSULTANT
THORNTON TOMASETTI - BUILDING SKIN PRACTICE
330 N. WABASH AVE., SUITE 1500, CHICAGO, IL 60611

FACADE ACCESS CONSULTANT
LERCH BATES, INC.
8089 LINCOLN ST., SUITE 105, LITTLETON, CO 80122

Minnesota MULTI PURPOSE STADIUM

CERTIFICATION
I hereby certify that the 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.
Name: Daniel E Bowar
Reg. No.: 45018
Date: 5/02/2014
Signature:

KEY PLAN



REVISION

NO.	DESCRIPTION	DATE
1	CCD-083	6/20/14
2	CCD-121	8/22/14
3	ASI-172	1/30/15
4	ASI-191	3/20/15
5	CCD-252	10/30/15
6	CCD-248	8/7/15
7	ASI-290	9/25/15

HKS PROJECT NUMBER
16246.000

DATE
MAY 2, 2014

ISSUE
CCD-060

SHEET TITLE
UTILITY PLAN
SW

SHEET NO.
C4.03

PLOT DATE: 5/7/2013 2:30:11 PM TEMPLATE VERSION: 2.6.0.20120914