



LEGEND

- AE
- FLOODWAY
- AO (1 FT)
- AO (2 FT)
- AO (3 FT)
- NONE
- X
- FEMA Q3 ZONE X500
- FEMA Q3 ZONE A
- BFE CONTOUR
- INDEX CONTOUR
- HEC-RAS CROSS SECTION LOCATIONS
- STREAM FLOWPATH
- INTERMEDIATE CONTOUR
- BANK STATIONS
- STURGIS CORPORATE LIMITS - AUG 2006

DIGITAL ORTHOQUADRANGLE OBTAINED FROM THE SOUTH DAKOTA GEOLOGICAL SURVEY. PHOTO DATE: AUGUST 2004. TOPO DATE: NOVEMBER 2001.

ALL DATA SHOWN IS UTM ZONE 13, NORTH AMERICAN DATUM 1983 (NAD83). ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

CORPORATE LIMITS WERE OBTAINED FROM MEADE COUNTY GIS IN AUGUST 2006. LIMITS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

FINAL SUBMITTAL

EXHIBIT 5
STURGIS, SOUTH DAKOTA (460055)
COOK CANYON CREEK
DOLAN CREEK & DEADMAN GULCH
(NORTH & EAST PORTIONS)
WORK MAP W/ DELINEATIONS
OCTOBER 2006



APPROXIMATELY 200 CFS FLOWS NORTH IN THIRD ST STORM SEWER. 1% CHANCE FLOW ALONG DOLAN CREEK REDUCED TO 1,480 CFS

NO LETTERED CROSS SECTIONS PROVIDE FROM HERE TO BEAR BUTTE CREEK DUE TO FLOW BEING CONTAINED PRIMARILY WITHIN THE STREET NETWORK

SMALL AMOUNT OF 1% CHANCE FLOW REMOVED BY STORM SEWER. FLOW IS REMOVED FROM SYSTEM AND TRANSPORTED IN HOWARD STREET STORM SEWER TO DEADMAN GULCH. THIS ADDITIONAL FLOW TO DEADMAN GULCH IS ASSUMED NEGLECTABLE AND THEREFORE NOT ADDED TO DEADMAN GULCH.

THE 1982 FLOOD INSURANCE STUDY AND ASSOCIATED FIRM STATE THAT THE 0.2% CHANCE FLOOD IS CONTAINED WITHIN THE DEADMAN GULCH FLUME. THIS STATEMENT IS INCORRECT. WITHIN THE DEADMAN GULCH O&M MANUAL IT STATES THAT THE MAXIMUM CAPACITY OF THE FLUME UNDER WELL MAINTAINED CONDITIONS IS 140-YEAR CAPACITY. THEREFORE, THE 0.2% CHANCE FLOOD IS SHOWN AS ZONE X. THE ZONE X DELINEATION WAS COMPLETED USING TOPOGRAPHIC METHODS ONLY. THE DEADMAN GULCH MODEL(S) DO NOT SHOW THE FULL EXTENT OF THE ANTICIPATED INUNDATED AREA.

DOLAN CREEK 1% CHANCE FLOW = 1,880 CFS

CONFLUENCE OF DEADMAN GULCH AND VANOCKER CREEK

BEAR BUTTE CREEK PROPOSED BFCW DEADMAN GULCH = 13,000 CFS