**GIS Datasets**

GIS/geoHMS

| File | Coordinate System | Description |
|---|---|---|
| CNgridEX | NAD 1983 BLM Zone 14N US Feet | Existing CN Grid. Raster generated through HEC-geoHMS application based on Landuse-Existing.shp and SSURGO.shp datasets. |
| CNgridFU | NAD 1983 BLM Zone 14N US Feet | Future CN Grid. Raster generated through HEC-geoHMS application based on Landuse-Future.shp and SSURGO.shp datasets. |
| DEM_TFG | NAD 1983 BLM Zone 14N US Feet | 2010 LIDAR Topography (modified). Raster generated through HEC-geoHMS DEM Reconditioning application. TFG modified stream channel cross section and culvert crossings based on field measurements. |
| landuse-EX.shp | Lancaster County Grid US Feet | Existing Land Use. Shapefile generated by TFG using the City's Ownership Parcels GIS dataset. Parcels were subdivided as needed and categorized based on aerial photography and site visits. |
| landuse-FU.shp | Lancaster County Grid US Feet | Future Land Use. Shapefile generated by TFG using Landuse-Existing.shp file as a base. Parcels were modified and re-categorized as needed based on the 2014 Conceptual Level Design Plans. |
| Reservoirs.shp | Lancaster County Grid US Feet | HEC-HMS Schematic - Existing Reservoir Nodes Shapefile generated by TFG showing point location of existing HEC-HMS reservoir nodes. |
| Future_Reservoirs.shp | Lancaster County Grid US Feet | HEC-HMS Schematic - Future Reservoir Nodes Shapefile generated by TFG showing point location of future HEC-HMS reservoir nodes. |
| Junctions.shp | Lancaster County Grid US Feet | HEC-HMS Schematic – Junction Nodes. Shapefile generated by TFG showing point location of HEC-HMS junctions nodes. |
| River286.shp | NAD 1983 BLM Zone 14N US Feet | Reaches Shapefile generated through HEC-geoHMS application for Terrain Preprocessing. Reaches |
| SSURGO.shp | USA Contiguous Albers Equal Area Conic USGS Meter | Soils - Hydrologic Soil Groups Shapefile generated by TFG from the NRCS's SSURGO database with Hydrologic Soil Group attributes, and clipped to watershed. |
| Subbasin286.shp | NAD 1983 BLM Zone 14N US Feet | Existing Subbasin Delineation Shapefile generated through HEC-geoHMS application for Terrain Preprocessing. |
| Subbasinsfu.shp | NAD 1983 BLM Zone 14N US Feet | Future Subbasin Delineation Shapefile generated by TFG using Subbasin-Existing.shp as a basis. Subbasins were modified based on the 2014 Conceptual Level Design Plans. |

**GIS Datasets**

GIS/geoRAS

| File | Coordinate System | Description |
|---|---|---|
| EX500yr.shp | NAD 1983 BLM Zone 14N US Feet | Existing 500yr Floodprone Area. Shapefile generated through HEC-geoRAS application for Inundation Mapping of the 500year-24hr Floodplain under existing conditions. |
| EX100yr.shp | NAD 1983 BLM Zone 14N US Feet | Existing 100yr Floodprone Area. Shapefile generated through HEC-geoRAS application for Inundation Mapping of the 100year-24hr Floodplain under existing conditions. |
| EX_XS_Cut_Lines.shp | NAD 1983 BLM Zone 14N US Feet | Existing Cross Section Locations. Shapefile generated through HEC-geoRAS application from the HEC-RAS GIS export file for existing conditions based on 2010 LIDAR data. |
| FU500yr.shp | NAD 1983 BLM Zone 14N US Feet | Future 500yr Floodprone Area. Shapefile generated through HEC-geoRAS application for Inundation Mapping of the 500year-24hr Floodplain under future peak flow conditions. |
| FU100yr.shp | NAD 1983 BLM Zone 14N US Feet | Future 100yr Floodprone Area. Shapefile generated through HEC-geoRAS application for Inundation Mapping of the 100year-24hr Floodplain under future peak flow conditions. |
| FU_XS_Cut_Lines.shp | NAD 1983 BLM Zone 14N US Feet | Future Cross Section Locations. Shapefile generated through HEC-geoRAS application from the HEC-RAS GIS export file for future peak flow conditions based on 2010 LIDAR data. |
| minfldcor_FL.shp | Lancaster County Grid US Feet | Minimum Flood Corridor. Shapefile generated by TFG based River.shp and 2010 LIDAR topography. Minimum Flood Corridor widths calculated per the City of Lincoln Drainage Criteria Manual. |
| River.shp | NAD 1983 BLM Zone 14N US Feet | HEC-RAS River Flowline. Shapefile generated by TFG using the River.shp derived through HEC-geoHMS as a basis. River lengths were modified to include only channels with 150ac of accumulated streamflow. |
| Existing Road Crossing.shp | Lancaster County Grid US Feet | Existing Road Crossing Locations. Shapefile generated by TFG showing the point location of Existing Road Crossings based on 2010 LIDAR data and River.shp. |
| Future Road Crossing.shp | Lancaster County Grid US Feet | Future Road Crossing Locations. Shapefile generated by TFG showing the point location of Future Road Crossings based on conceptual level design plans. |

**Models**

Models/Hydraulics

| File | Description |
|---|---|
| UpWagonTrainWshd.prj | HEC-RAS modeling project file. This file was generated by TFG as described in the Master Plan. |
| UpWagonTrainWshd.p05 | HEC-RAS modeling plan file for the *Existing Flood Prone Area* delineation. |
| UpWagonTrainWshd.p02 | HEC-RAS modeling plan file for the *Future Flood Prone Area* delineation. |
| UpWagonTrainWshd.p03 | HEC-RAS modeling plan file for the *Preliminary Culvert Sizing* analysis. |
| UpWagonTrainWshd.g06 | HEC-RAS modeling geometry data file for existing conditions (*EXISTING*). |
| UpWagonTrainWshd.g01 | HEC-RAS modeling geometry data file for future conditions (*FUTURE*). This file contains future inline weirs and existing culverts. |
| UpWagonTrainWshd.g08 | HEC-RAS modeling geometry data file for preliminary culvert sizing analysis (*FU CULV*). |
| UpWagonTrainWshd.f02 | HEC-RAS modeling steady flow data file for existing conditions (*EX Q*). |
| UpWagonTrainWshd.f01 | HEC-RAS modeling steady flow data file for future peak flows conditions (*FU Q*). |
| UpperWagonTrainWshd2016.hy8 | HY8 modeling project file. This file was generated by TFG as described in the Master Plan. |

Models/Hydrology

| File | Description |
|---|---|
| UpperWagonTrainWshd.prj | HEC-HMS modeling project file. This file was generated by TFG as described in the Master Plan. |
| 002yr24hr.met | HEC-HMS Meteorologic Model file for the 2 year – 24 hour event. |
| 010yr24hr.met | HEC-HMS Meteorologic Model file for the 10 year – 24 hour event. |
| 050yr24hr.met | HEC-HMS Meteorologic Model file for the 50 year – 24 hour event. |
| 100yr24hr.met | HEC-HMS Meteorologic Model file for the 100 year – 24 hour event. |
| 500yr24hr.met | HEC-HMS Meteorologic Model file for the 500 year – 24 hour event. |
| 002yr24hr.met | HEC-HMS Meteorologic Model file for the 2 year – 24 hour event. |
| Existing_Basin.basin | HEC-HMS Basin Model file for existing conditions using the SCS Lag method developing the Runoff Hydrograph. This file is intended for use with the 50, 100, and 500 year – 24 hour Meteorologic Models. |
| Existing_TR55.basin | HEC-HMS Basin Model file for existing conditions using the TR55 method developing the Runoff Hydrograph. This file is intended for use with the 50, 100, and 500 year – 24 hour Meteorologic Models. |
| Future_Basin.basin | HEC-HMS Basin Model file for future conditions using the SCS Lag method developing the Runoff Hydrograph. This file is intended for use with the 50, 100, and 500 year – 24 hour Meteorologic Models. |
| Future_TR55.basin | HEC-HMS Basin Model file for future conditions using the TR55 Lag method developing the Runoff Hydrograph. This file is intended for use with the 50, 100, and 500 year – 24 hour Meteorologic Models. |

*Note: Model support files, which are not described above, are also included with this submittal.*


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