**Description of Fields in:**

**to\_kisters\_bridge\_20221028.geojson**

**hull\_len:** (float) length of bridge along major axis line

avg\_width: (float) average width of the bridge hull [hull polygon area divided by the hull length]

nhd\_name: (string) name of the river the structure crosses – (None and ‘99-No NHD Streams’ means nothing is found)

reachcode: (string) NHD reach code from USGS web service - (Can be null)

name: (sting) road name of major axis line from OpenStreetMaps (Can be Null)

ref: (string) reference name of the major axis line from OpenStreetMaps (Can be Null)

huc\_12: (string) the HUC-12 of the major axis line querried at the centroid of the major axis line

file\_path: (string) internal file path to the major axis line computed

mjr\_ax\_ix: (integer) index of the major axis line from ‘file\_path’

hull\_ix: (integer) index of the bridge hull, used for the bridge deck DEM and hull shape

**sta:** string of python list of stations along major axis line in feet – example: “[0, 1, 2, ….]”

**ground\_elv:** string of python list of ground elevations in feet along the major axis line… should be in feet and be the same length as the “sta” list.

**deck\_elev:** string of python list of higher of the ground or the deck elevations along the major axis line… should be in feet and be the same length as the “sta” list.

uuid: (string) unique ID for each major axis line

feature\_id: (string) National Water Model COMID for the major axis line

order\_: (integer) highest stream order of the NWM stream that crosses major axis line. If no stream crosses, order of nearest stream to major axis line

dist\_river: (float) distance of the major axis line to the nearest National Water Model stream.

nbi\_asset: (string) identifier of the NBI point that is nearest to the bridge

nbi\_thickness: (float) thickness of bridge (in feet)

nbi\_dist: (float) distance from bridge to nearest national bridge inventory (nbi) point

score: (float) value of the confidence that the major axis has the correct nbi data (0 to 1) 1== highest confidence

score\_dist: (float) value from 0 to 1 of how close the nbi is to the bridge (0 == father that the max allowed value, 1 == on the major axis line)

score\_span: (float) value from 0 to 1 comparing the hull\_len to the nbi provided bridge length (1 == match, 0 == percent difference greater than 100%)

score\_road: (float) value from 0 to 1 of comparing text value of OpenStreetMap road name to NBI road name

score\_strm (float) value from 0 to 1 comparing text value of ndh\_name to the nbi crossing facility name

low\_ch\_elv: string of python list of the higher of the low Chord o the bridge or the ground elevation along the major axis line… should be in feet and be the same length as the “sta” list.

convey\_ar: (float) conveyance area between the ground and the low chord

min\_low\_ch: (float) elevation of the lowest minimum chord elevation – in feet

min\_ground: (float) minimum ground elevation

wsel: (float) INTERIM – place holder of water surface elevation… this will ultimately come from the National Water Model input netCDF

hull\_wkt: (string) well known text of the corresponding bridge hull polygon – in same CRS as the major axis line

latitude: (float) Latitude of the centroid of the major axis line to four decimal points: EPSG: 4326

longitude: (float) Longitude of the centroid of the major axis line to four decimal points: EPSG: 4326

geometry (string) well-known-text of the major axis line major axis line

**STILL NEED TO ADD:**

segment\_id: (string) the hydraulic segment ID used to create the HAND rating curve

**hand\_r:** synthetic rating curve for height above nearest drainage (HAND) of the ‘hydro\_id” **-** string of python list of tuplesrepresenting pairs of (discharge in cfs) and (depth in feet) – example “[(0,0), (8.8, 1.0), (33.7, 2.0)…..]” - from Yan’s hydroTable.csv

**ras2fim\_r:** synthetic rating curve for ras2fim of the “nwm\_comid” **-** string of python list of tuplesrepresenting pairs of (discharge in cfs) and (depth in feet) – example “[(0,0), (27, 0.5), (85, 1.0)…..]” - from Andy’s ras2fim run of BLE data

**ble\_xs\_r:** rating curve from BLE model of cross section nearest to the bridge **-** string of python list of tuplesrepresenting pairs of (discharge in cfs) and (depth in feet) – example “[(0,0), (27, 0.5), (85, 1.0)…..]”