WORKSPACE (General Updates)

December 23, 2020

CIVIL CELLS

- New civil cell dgnlib: **Abutment_TDOT.dgnlib** containing **9** new civil cells.
  - TDOT ABUTMENT LEFT UPSTATION
  - TDOT ABUTMENT PERPENDICULAR
  - TDOT ABUTMENT RIGHT DOWNSTATION
  - TDOT ABUTMENT LEFT DOWNSTATION
  - TDOT ABUTMENT RIGHT UPSTATION
  - TDOT APPROACH SLAB DITCH - TOP RIGHT
  - TDOT APPROACH SLAB DITCH - TOP LEFT
  - TDOT APPROACH SLAB DITCH - BOTTOM RIGHT
  - TDOT APPROACH SLAB DITCH - BOTTOM LEFT
- All TDOT T-INT civil cells updated to allow for semi-independent shoulder control and correct shoulder radii modeling. Addition of **4** new civil cells with no shoulder on them.
  - TDOT T-INT C&G + GS + SW CONT. NO SHLDR
  - TDOT T-INT C&G + GS + SW STOP @ RAMP NO SHLDR
  - TDOT T-INT C&G + SW CONT. NO SHLDR
  - TDOT T-INT C&G + SW STOP @ RAMP NO SHLDR
- Release 3 caused many *curb ramp* civil cells to stop working. Progress is underway to correct the issues and one service ticket related to the creation of civil cells have been filed.
- The ON-RAMP and OFF-RAMP GORE civil cells (**Interstate_TDOT.dgnlib**) have been removed from the civil cell library. Ramp design will now be handled with template drops and an exercise is provided in the Road-II manual.
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ITL

- Curb & Gutter Components have been corrected to match the current TDOT Standard drawings.
- New Ditch & Special Ditch Components have been built and there is an exercise in the ROAD II manual that uses these.
  - New alternate lining materials for ditches have been added as components in the library.
- Shoulder Off and End-Condition Off null points have been added with display rules to all TS-3, TS-4, & TS-5 templates. These are included for the purposes of ramp-gore template convergence and their use is covered in the ROAD-II manual.
- Approach slab and bridge templates have been updated to more correctly model what occurs at bridge ends with respect to cross-slope transitions.
- Slab bridge templates have been added as well as edge beam templates for box-culvert and slab bridge modeling.

LINE STYLES

- New line styles added for vehicle and pedestrian safety rail TDOT STD. MM-VPR-1.

FEATURE DEFINITION DGNLIB UPDATES

- Roadway
    - Various improvements and updates for continuity and modeling including but not limited to:
        - Ditch CL linestyle in the templates changed because a line style with an arrow will always show in the direction of the template drop and not the direction of flow.
        - Graded shoulder hinge and subgrade tie point display turned on in 2D through the template drop.
            - This allows significantly improved modeling for designers when trying to tie back to template drop end conditions.

- Drainage
    - Special ditch and Standard ditch prototypes, catalogs, and feature definitions have been added.
    - Ditch Begin/End nodes updated.
    - Headwalls are streamlined in accordance with coordination with TDOT.
        - Type U grated headwalls (all sizes) are now provided.
        - Type U non-grated headwalls (all sizes) are now provided.
        - All SEW headwalls are updated for correct grate numbers.
        - Type SEW 15" 12:1 has been removed.
        - Headwalls over 72" have been removed.
        - Type B headwalls have been removed.
    - FDs, Symbologies and ETs for Catch Basins Type 28 & 29 have been deleted per TDOT IB dated April 2020.
    - Updated wall thicknesses for concrete RCP per Std drawings within Conduit catalog table.
    - FlexTables renamed to differentiate TDOT format from Bentley's standard FlexTables.
    - Curb & Gutter inlets are now enabled to use a "dynamic" road cross slope from terrain.
    - Conduit description is revised per Bentley's direction to be able to view "conduit size" in the Pipe Inventory report.
    - Gutter feature definitions are incorporated per TDOT's Std drawings (6-30, 6-33, etc).
    - Stream profile symbologies updated.

SEED FILES

- 2D seed file updated to have all 3D linestyles stored into the seed which avoids software defect when 3D linestyles are not displayed at random in the 3D view.

CELLS (NON-CIVIL)

- Drainage Cells updated and improved to work with new "elevation is invert" tool during node placement in drainage modeling. Dimensional/grate updates also made.
- New cell and legend cell created for filter sock check damn EPSC measure Pay Item: 209-08.09.