11/9/2018 UNDERWATER INSPECTION SMS TRAINING NOTES

- SMS logon issues - contact Chas Horinek
  - Need to create ePass account, request SMS access, submit certification for team leader status

- Enter designated high water mark information in the 'Comments' box under Inventory → Assets → Location tab
  - This shows up as 'General Bridge Notes' on SMS report, will be included on every report that's generated for bridge
  - Special Note - anything under the defined high water mark is considered a submerged element. MDT will work on how to deal with controlling defects in submerged vs. above water elements for reporting (added complexity scenario - only 3 of 10 piles are submerged)

- Enter anything that's specific to the inspection only (i.e. change in attributes) in 'comments' Box under Inspection → Inspection → Info tab
  - This shows up as 'General Inspection Notes' on SMS report, will only be included for respective inspection

- Scope of Work requires review and update of certain attributes
  - Set Type 2 Underwater Inspection Frequency (92B-2) to 60 months; don't worry about changing Next Inspection Date (auto-populates)
  - Add comments when appropriate
  - Tips on attributes
    - (##) - NBI value, can find guidance in NBI coding guide
    - (MDT##) - MDT value, some guidance in manual (work in progress)
    - Once you hit 'Edit', all chapters are expanded and reset to top of page - need to re-find attribute to edit. To avoid jumping around, start filtering by attribute name, then 'Edit' (stays in place)

- Will likely need to add necessary components (many of these are the first underwater inspections)
  - **To add components to bridge**
    - Inventory → Assets → Components
      - Tip - always look at components before you go to the inspection tab. If you go from inspection to components, program usually crashes
    - Under 'Tree View' tab, click 'New' → submerged elements are listed under FWHA/Agency Defined Elements
      - Underwater Type II components should all be submerged (800 series)
      - Need to include all components applicable to bridge, regardless of CS1
    - All reports need to have **Bed Profile X-Sect**
    - ***Special Note*** *(Not discussed in detail at training – if any questions, please call)* - Document scour using the Scour Element (900), not scour defects within various substructure elements. See MDT Manual Chapter 5 for guidance.
    - Things to note when adding components
      - Component father always defaults - usually needs to be removed and the field left blank. If a protective coating element is used, the component father will need to be populated with the applicable component father.

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- Number of Copy - we don't generally use this, the only application we can foresee is entering a footing
  - Footing - doesn't graph correctly, **consultants do not need to add right now**
    - Profiles that are done separately using CAD will include cross sections with footing elevations
- Can add same element twice and rename to differentiate
  - Guidance - we only want this done if there's a good reason to separate; if components are fairly similar, keep in one group
- After element is added, attributes need to be added/updated back in 'Tree View' tab. Guidance on attributes associated with each component should be in the manual, call with any questions
- If there's not an element for something fairly common, let us know and we may add it to SMS.
- 'Hybrid' components - documentation is the most important. Do what makes sense, leave notes so we can track reasoning behind judgement calls. Add notes in specific inspection comments; add to General Bridge comments if it will be applicable year after year.

- **To see inspections associated with each bridge, which ones are active**
  - Inventory → Assets → Inspection Masters Tab
    - Note - Inspector status doesn't have permission to edit Inspection Masters

- **To determine which elements show up in the inspection report**
  - Highlight Underwater Type II Inspection → 'Edit' → Components Tab
    - Check applicable elements, uncheck applicable elements (Note - underwater type II inspections should have submerged elements)

- **Other Data Entry Notes**
  - Updated Manual has been uploaded to SMS
    - Filter on '00000 Reference Documents' → Inventory → Documents
  - To input inspection information, Inspection → Inspection → Highlight applicable inspection and 'Edit'
  - Repairs – see updated MDT Manual Appendix A, page 3 for repair item guidance
    - Add repairs and photos specific to certain defects in appropriate Condition State cell under Element Level Data tab (not under general inspection)
    - Add repairs and photos specific to scour appraisal items in 'Bed Profile X-Sect'
      - i.e. Remove timber debris
    - All repairs are summarized under 'Repairs' tab
      - Add directly to this tab if the repair isn't associated with elements or scour appraisal items
      - Note – repairs from other inspections will show up under 'Other Inspections'
  - Enter scour appraisal information, located under Inspection tab → Bed Profile X-Sec
    - Guidance in MDT manual (9.3.1)
  - Inspection Profiles Tab
    - Use z = 999 for waterline elevation profile

    - Make sure to clearly note datum for channel profiles, so future inspections can measure from same datum (allows for superimposing profiles)
    - Note - will get an error if there are any blank rows/empty cells at end
  - When routing - dialog box always asks to change team leader. Be careful not to change unless it actually needs to be changed.
  - Upload Underwater Inspection Procedures as standalone document under Inventory → Documents
    - Compliant with FWHA Metric #17
  - Upload videos under Inspection → Inspection → Edit → Inspection Documents tab
  - Upload files in pdf format to Inspection → Inspection → Edit → Inspection Documents tab if you want them to generate in the report

Other SMS Tips/tricks/known issues

- Inventory → Assets - always need to hit 'Yes' to dialog box that pops up; if you don't see it and can't do anything, it might be off-screen or behind another window
- If 'Save' (typically in bottom right corner) disappears, it's likely a scaling issue. Hit control and user roller ball on mouse to zoom out
- If photos don't appear, only an 'X' - disconnect (bottom left of screen) and log back in
- Reports only include defects that are populated with values. If want to print a planned report and take to the field, make fake entries under each defect (i.e. 1%) so that they show up *(more applicable to future inspections)*