TxDOT 0-6863: Pretensioned Concrete Bent Caps Phase 1 Experimental Dataset

Dataset available at: https://doi.org/10.18738/T8/HXPWMG

This U.S. Department of Transportation-funded dataset is preserved by the Texas Department of Transportation (TxDot) in the Texas A&M University Dataverse Repository (https://dataverse.tdl.org/dataverse/tamu), which is a part of the larger Texas Data Repository (https://dataverse.tdl.org/) and is available at https://doi.org/10.18738/T8/HXPWMG

Metadata from the Texas A&M University Dataverse Repository record:

Description:

This dataset contains metadata and data collected during TxDOT Project 0-6863 on development of standards for precast, pretensioned concrete bent caps.

Phase 1 tests are contained in this dataset. Phase 1 consisted of four specimens:
1. RCS-16-12: A solid reinforced concrete bent cap with 16 longitudinal rebar and 12" spacing of shear reinforcement
2. PSS-16-12: A solid pretensioned concrete bent cap with 16 strands and 12" spacing of shear reinforcement
3. PSS-16-24: A solid pretensioned concrete bent cap with 16 strands and 24" spacing of shear reinforcement
4. PSV-16-12: A pretensioned concrete bent cap with internal void, 16 strands, and 12" spacing of shear reinforcement

Data provided includes specimen as-built drawings, measured material properties, test setup details, load patterns/sequence, applied loads at key points during test, and crack data (location and width).

Subject:

Engineering

Related Publication:

Birely, A.C., Mander, J.B., Lee, J.D., McKee, C.D., Yole, K.J., and Barooah, U.R. (2018). "Precast, Prestressed Concrete Bent Caps: Volume 1 Preliminary Design Considerations and Experimental Test Program." Rep. No. FHWA/TX-18/0-6863-1-Vol1, Texas Department of Transportation and Texas A&M Transportation Institute.

Recommended citation:

Lee, Ju Dong; McKee, Codi D.; Birely, Anna C.; Mander, John B., 2018, "TxDOT 0-6863: Pretensioned Concrete Bent Caps Phase 1 Experimental Data", https://doi.org/10.18738/T8/HXPWMG, Texas Data Repository, V2

Dataset description:

This dataset contains 1 file collection described below.

TxDOT 0-6863_Dataset_P1.zip:

- TestSetup.pdf
- MaterialTestData_MOR_ASTMC79.xlsx
- MaterialTestData_MOE_ASTMC469.xlsx
- MaterialTestData_IDT_ASTMC496.xlsx
- MaterialTestData_fc_ASTMC39.xlsx
- MaterialProperties.xlsx
- LoadSequence_RCS-16-12.csv
- LoadSequence_PSV-16-12.csv
- LoadSequence_PSS-16-24.csv
- LoadSequence_PSS-16-12.csv
- LoadPattern.csv
- CrackWidth_RCS-16-12_South(units_inch).csv
- CrackWidth_PSV-16-12_South(units_inch).csv
- CrackWidth_PSS-16-24_South(units_inch).csv
- CrackWidth_PSS-16-12_South(units_inch).csv
- CrackMaps_RCS-16-12.pdf
- CrackMaps_PSV-16-12.pdf
- CrackMaps_PSS-16-24.pdf
- CrackMaps_PSS-16-12.pdf
- ConstructionTimeline_RCS-16-12.csv
- ConstructionTimeline_PSV-16-12.csv
- ConstructionTimeline_PSS-16-24.csv
- ConstructionTimeline_PSS-16-12.csv
- AsBuilt_RCS-16-12.pdf
- AsBuilt_PSV-16-12.pdf
- AsBuilt_PSS-16-24.pdf
- AsBuilt_PSS-16-12.pdf
- AppliedLoads_RCS-16-12.csv
- AppliedLoads_PSV-16-12.csv
- AppliedLoads_PSS-16-24.csv
- AppliedLoads_PSS-16-12.csv

The .xlsx file type is a Microsoft Excel file, which can be opened with Excel, and other free available software, such as OpenRefine.

The .pdf file format is an Adobe Acrobat Portable Document Format (PDF) file and can be opened with the Adobe Acrobat software.

The .csv, Comma Separated Value, file is a simple format that is designed for a database table and supported by many applications. The .csv file is often used for moving tabular data between two different computer programs, due to its open format. The most common software used to open .csv files are Microsoft Excel and RecordEditor, (for more information on .csv files and software, please visit https://www.file-extensions.org/csv-file-extension).

National Transportation Library (NTL) Curation Note:
As this dataset is preserved in a repository outside U.S. DOT control, as allowed by the U.S. DOT's Public Access Plan (https://ntl.bts.gov/public-access) Section 7.4.2 Data, the NTL staff has performed ***NO*** additional curation actions on this dataset. NTL staff last accessed this dataset at https://doi.org/10.18738/T8/HXPWMG on 2021-10-27. If, in the future, you have trouble accessing this dataset at the host repository, please email NTLDataCurator@dot.gov describing your problem. NTL staff will do its best to assist you at that time.