



NC DOT Engineering Content Management

Preconstruction Project Sites

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Agenda

- New Preconstruction Project Sites
- What Is Changing and Why
- Preconstruction Project Site Model
- Where We Are Today
- Future Direction
- How you can benefit



Transportation

Announcing: NCDOT Preconstruction Project Sites

To facilitate project delivery through enhanced collaboration between NCDOT and its partners, online Preconstruction Project Sites are being established for every transportation project.

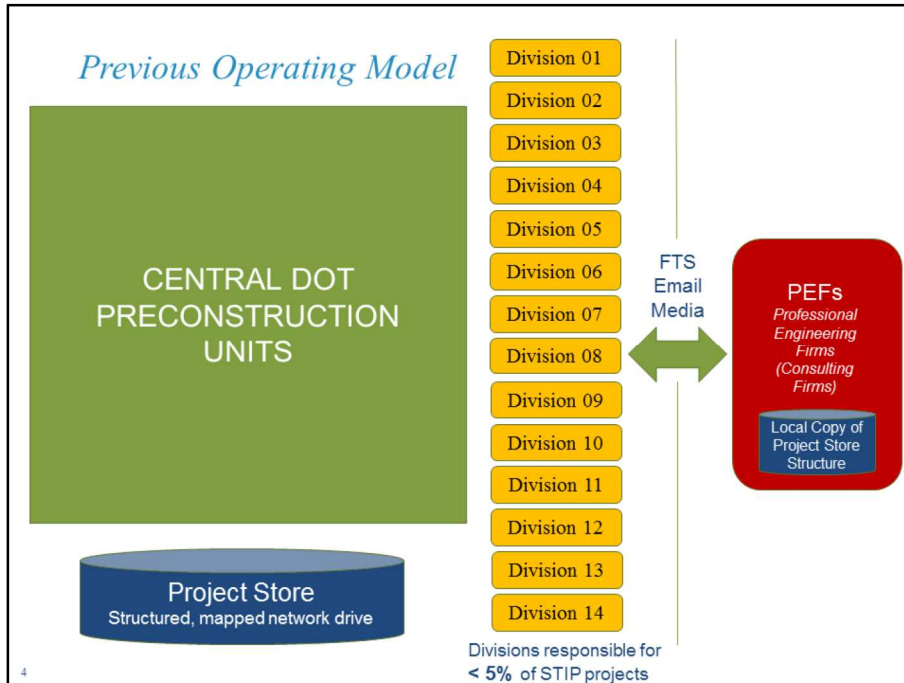
Each Preconstruction Project Site will allow:

- Registered users (internal and external) to submit, review, and modify project files based on their roles;
- A consistent way to organize project files statewide;
- Rapid and comprehensive searching of all project files;
- Transfer of large files;
- Versioning of project documents; and
- Access to project files from mobile devices.

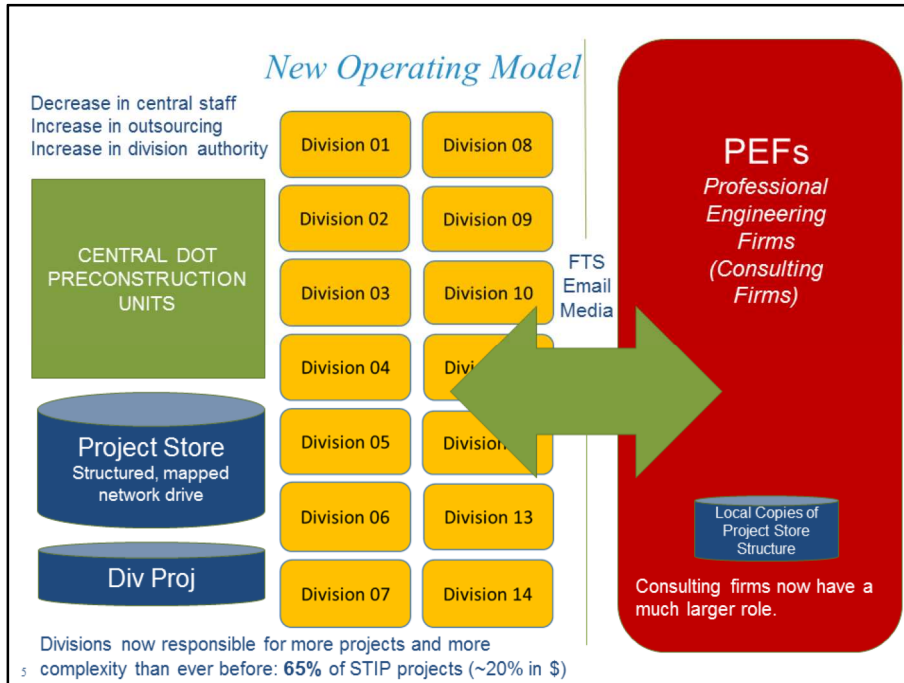
The initial rollout includes support for the planning portions of the project; support for additional disciplines & project phases will follow.

The screenshot shows the 'Connect NCDOT BUSINESS PARTNER RESOURCES' header with navigation tabs for 'Doing Business', 'Bidding & Letting', 'Projects', 'Resources', and 'Local Governments'. The main content area is titled 'Preconstruction - Preconstruction' and features a 'Find a Site' search bar. Below the search bar is a table listing project sites by division and project number. The NCDOT logo and the word 'Transportation' are visible in the bottom right corner.

Division	Project Number
Division 01	14SP-20221.1
Division 02	14SP-20221.2
Division 03	14SP-20431.1
Division 04	17SP-14-R-130
Division 04	17SP-14-R-141
Division 05	17SP-14-R-143 Bridge No 64
Division 05	17SP-14-R-162
Division 06	2016CPT-14-07
Division 07	2017CPT-14-06
Division 08	51213.012 Cherokee Rest Area A-00009



Previously, almost all STIP projects were managed centrally and all the preconstruction content was stored in a complex mapped network drive called Project Store.. Divisions managed small local projects, seldom exceeding 20 plan sheets. They tended to store all their project content for the small projects just in few folders on a share drive, not in a formal structure. PEFs exchanged files with DOT through FTS, email or physical media. Central DOT disciplines would store the files in Project Store.



DivProj was created as a copy of Project Store structure but with access tailored for the divisions. With increase in scope & responsibility, many more files had to be exchanged through the inefficient processes of FTS, email & physical media. Improvement is needed to facilitate project delivery.

Goals to Support Project Delivery

Accessibility goals:

- Appropriate access by all involved user groups: DOT users (central and division), Consultants (PEFs), and External partners
- Access from mobile devices

Functionality goals:

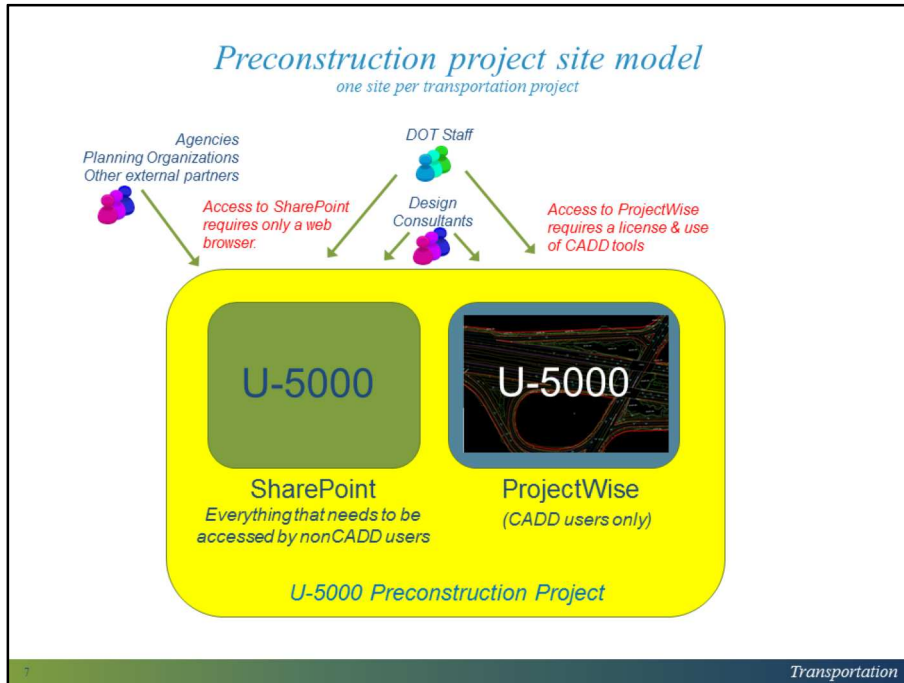
- Easy & intuitive to use, fits business processes & terminology
- Handles large files
- Tools tailored for CADD design
- Automation & standardization
- Everyone works with same reference copy
- Versioning
- Backup & recovery, retention management

General Content Management goals:

- Organized online storage and useful tools
- Ability to navigate to content by discipline
- Ability to search for content & quickly locate deliverables



Biggest impact: Ability for consultants to access and store files directly



Ultimately, each project will have two sides – the SharePoint side and the ProjectWise (CADD) side. The SharePoint side is much farther along and that’s what we are mainly talking about today.

First Step: SharePoint

Connect NCDOT
BUSINESS PARTNER RESOURCES

Doing Business Bidding & Letting Projects Resources

A-0009C · A-0009C

Precon Project Site

Division 14 A-0009C

Project Site

- Preconstruction Home
- Grant Consulting Firm Access
- Discipline Specific Links
- Project Commitments

From DOT

- Human Environment
- Natural Environment
- Project Development
- To DOT

Sept 2016: Initial rollout on SharePoint

- > 1000 sites created so far, one per project
- Each site is built from a common **template**

Initial rollout **Benefits:**

- Consulting firms can *contribute* to some libraries based on assigned role and *read* the rest
- DOT & Consultants can store, share and exchange files in a persistent place:
 - Files are not deleted *unlike with FTS*
 - Multiple groups can access same set of files
 - Initial set of disciplines can be completely moved to SharePoint instead of using Project Store
 - Store ETRACS deliverables here & provide link
- Quick Reference files, FAQ, useful links

Initial rollout **Limitations:**

- Other disciplines must share and exchange files or sets of files in the **From DOT** and **To DOT** libraries
- No CADD support yet

Next Steps on SharePoint

By January 2017:

Added Tuesday 11/8

- **Precon Announcements** on *Preconstruction Home* page, to inform users of new features
- **Project Development Collaboration library**
collaborate with resource agencies & planning organizations (MPOs, RPOs) on environmental documents etc.
- **DOT Restricted library**
Restricted cultural resources, protected species, plans by others (visible to DOT only)
NOTE: Info that should not be shared with a broad audience, such as Man day estimates, engineering ests., consultant feedback – should not be put in these sites
- **Project Contacts list**
Keep track of who is working on the project & their contact info
- **New User Survey**

Incrementally roll out improvements:

- **More document libraries**
- **More useful tools**
- **Updates to Help information**



Prioritize & enhance model based on User Group Feedback:

- To volunteer for the **Preconstruction User Group**, contact Ellen Dickson ehdickson@nedot.gov
- Monthly meeting – in person in Raleigh or join by phone

Connect NCDOT
BUSINESS PARTNER RESOURCES

Home Help Team Sites Site ID

Doing Business Bidding & Letting Projects Resources Local Governments Search...

Preconstruction · Preconstruction

Preconstruction

- Home
- SharePoint Help
- Discipline Specific Links
- Site Requests
- Consulting Firm Access Requests
- Preconstruction Help
- Preconstruction Search
- Reports
- Survey

Find a Site

Division 01	14SP.20221.1
	14SP.20221.2
Division 02	14SP.20451.1
Division 03	17BP.14.R.130
Division 04	17BP.14.R.141
	17BP.14.R.143 Bridge No 64
Division 05	17BP.14.R.62
Division 06	2016CPT.14.07
Division 07	2017CPT.14.06
	51213.012 Cherokee Rest Area
Division 08	A-0009B
Division 09	A-0009C
	A-0011C
Division 10	B-3186
Division 11	B-5408
Division 12	B-5541
	B-5896
Division 13	B-5897
	B-5898
Division 14	B-5898

Future Direction
(subject to change)

Precon Announcements

Title

[More flexibility in naming project sites](#)

When requesting a new preconstruction project site, DOT users may now provide a short (20 character) description that will be added to the end of the TIP or WBS to make the site name. This allows you to set up separate sites for projects that share a WBS and enables a more user-friendly site name than a WBS alone provides. Use the "WBS Extension" field in the Site Requests list to make your site names more usable.

B-5501 ▶ **B-5501**
Precon Project Site

Future Direction (subject to change)

🏠 ▶ Division 01 ▶ B-5501

Project Site

- Preconstruction Home
- Grant Consulting Firm Access
- Discipline Specific Links
- Project Commitments

- Key Documents
- Project Calendar
- Project Contacts
- Project Information
- Project Site Access Summary
- Project Structures

GENERAL

- General Announcements
- DOT Restricted
- Project Input – Data, Recommendations, and Other
- Review Comments

DISCIPLINES

- Geotechnical
- Human Environment
- Hydraulics
- Intelligent Traffic Systems and Signals
- Location, Surveys, and Photogrammetry
- Natural Environment
- Pavement and Resurfacing
- Project Development
- Right of Way
- Roadside Environmental
- Roadway
- Signing and Delineation
- Structures
- Utilities Engineering
- Work Zone Traffic Control

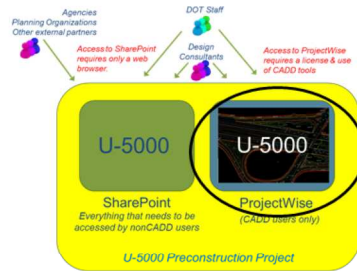
EXTERNAL COLLABORATION

- Project Development Collaboration
- Utilities Coordination

PLANS & PROVISIONS

- Key Milestone Plan Sets
- Final Provisions
- Assembly for Let

Bentley's ProjectWise



SharePoint does not understand CADD internal references.

- Files (or .zip files) can be stored there, but designers need more

NCDOT plans to use ProjectWise for storing and sharing CADD based content.

NCDOT is in the process of procuring

- Use of Bentley's cloud-based managed ProjectWise Design Integration environment
- Use of additional service offerings:
 - ProjectWise Project Sharing Services
 - ProjectWise Deliverables Management
- Services engagement with Bentley to help us get started
- *Exact configuration of applications & tools for CADD still under development*



Transportation

How you can benefit!

- Online access to project repositories
- Easy way to store/transfer large files
- Access from mobile devices*
- Simpler standard project structure – less complex than today's TIP folders
- Consistent structure from project to project
- More libraries and features coming soon!

What you can do to get started

- Start using the project sites!
- Request new sites be set up for projects that don't yet have sites
 - Use the "WBS Extension" field to add a word or phrase to the site name
- Grant access to projects for the consulting firms you're working with
 - Subs can be granted access as well
- Consider participating in the Preconstruction User Group or otherwise provide constructive feedback

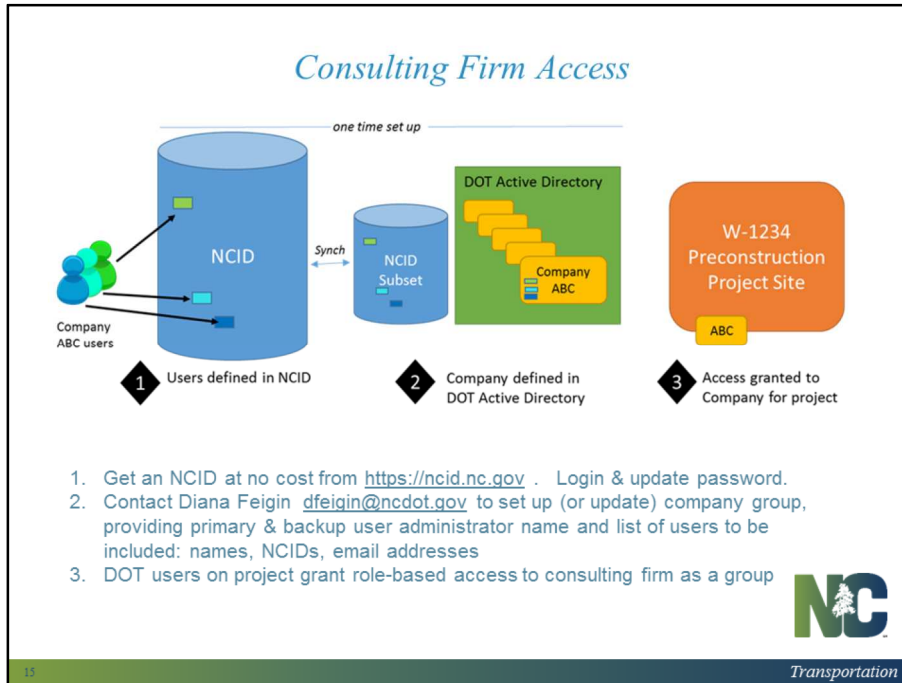
*Windows & IOS devices. Android users must use an app, such as SharePlus.



Transportation

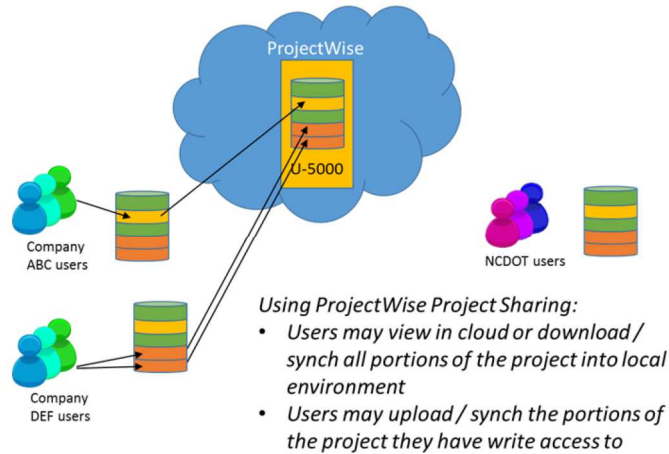
Backup Slides





Here is the process for how design consulting firms get themselves set up such that NCDOT users can grant access to them for specific projects.

ProjectWise Project Sharing Services



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Consulting companies can use Project Sharing with or without ProjectWise in their own premises.