

# HiCAMS User Guide

## Chapter 1: Getting Started

## Section 4: Design Build Contract Administration Guide

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# Revision History

Comments or concerns with this document should be directed to the NCDOT Construction Unit at (919)707-2400 or the Materials and Test Unit at (919)329-4200.

<b>Date</b>	<b>Version</b>	<b>Description</b>	<b>Author</b>
July 2011	1.0	Initial Version	Marie Novello
December 2011	1.1	Updated phone numbers	Marie Novello
November 2013	1.2	Modified SAF information and made minor text modifications.	Marie Novello
October 2014	1.3	Added content about Pay Adjustments	Marie Novello

# About This User Guide

This User Guide provides users with an overview of how a Design Build contract is administered using the NCDOT's **H**ighway **C**onstruction and **M**aterials **S**ystem (HiCAMS). It is divided into two sections, one covering the tasks required during the construction phase and the other covering the tasks required when work is complete.

During the Construction phase, HiCAMS is used for Contract Administration, Materials Tracking, and Payment to the contractor.

- Contract Administration tasks include entering Subcontracts and Contract Adjustments (Supplemental Agreements and Claims).
- Materials Tracking tasks include entering Material Receipts, Ticket Books, Samples, and Densities.
- Payment tasks include entering Pay Records, Material Prepayments, Incentives and Penalties, and creating Estimates.

When the contract work is complete, the Final Estimate is entered, and Final Documentation is gathered.

To administer a Design Build Contract in HiCAMS, all the items needed to administer a regular contract are needed. In addition, the contractor is required to submit the following documents as defined in the Division One Addendum inserted into the Standard Special Provisions for the contract

- Schedule of Values
- Table of Quantities

Two functions not generally used for regular contracts are used for Design Build contracts. They are Contract Maintenance > Review Work Items, and Contract Tracking > Review Work Accomplished.

The purpose of these two modules is to generate accurate Materials quantities throughout the life of the contract. This allows for ongoing Project Certification activities.

On a regular contract, the quantities paid on the Line Item multiplied by the Material conversion factor generates the Paid Quantity of Material. If Materials were added directly to the Lump Sum line item, every payment for that line item would create a Paid Quantity for every Material assigned to the line item. By using the Work Items and Work Accomplished modules, Materials quantities are only calculated for those work items that had actual work on them.

Most other aspects of HiCAMS data entry are the same. This User Guide details areas where Design Build contract administration differs from a standard contract. The guide is arranged in the order that the data would need to be entered.

It would be beneficial to all parties involved in a Design Build contract to have regular Project Certification review meetings with representatives from the Construction Unit, the Division, and the Materials and Tests Unit present. It would be helpful if this topic is

addressed at the Pre-Construction meeting, with additional meetings held when the project is 25 to 50% complete, and a final one at Project Closeout (before Final payment is made). These meetings will ensure that all parties are aware of their responsibilities with regards to Materials handling and Project Certification. Please contact Randy Pace at the Materials and Tests unit for additional information about these meetings.

# HiCAMS Data Entry for Design Build Contracts

## ***Activating the Contract***

Design Build contracts appear in the same list as other contracts in HiCAMS. The difference is the Contract Type.

To activate a Design Build Contract in HiCAMS:

1. Complete the cover sheet.
  - Do NOT enter a Fuel and/or an AC Base Price. An adjustment provision may exist in the Contract, but this is calculated by hand outside of HiCAMS and paid on a Line Item entered using Contract Adjustments > Review Other Line Items.
  - If the Contract has an AC Penalty Base Price that is used for calculating a Penalty when there is a Density failure, enter that in the field AC Penalty Base Price. This allows the Contract Tracking > Review Pay Adjustments to automatically calculate the penalty.
  - If the contract has the Twelve Month Guarantee special provision, or a warranty provided by the Design Build firm, check the box next to Project Guarantee, and enter the number of months if longer than 12. If a yearly review of a multi-year guarantee is required, notifications will be managed in the Review Contract Details window after contract acceptance by incrementing the months after each review (12, 24, 36, etc.)
2. Perform Verifications.

### *Verify the Contract Bill Of Materials (CBOM)*

- Because there is generally only one line item for a Design Build contract, or multiple Lump Sum line items, Materials are not added to the Line Item(s). Work Items will be added to the line item with their associated Materials after the Schedule of Values and Table of Quantities are received from the Design Build firm.

***Note:*** Adding materials to the CBOM for a line item does not generally make the Check for Materials indicator uncheck.

### *Verify the Line Item Indicators*

- Design Build Contracts do not have Major and Specialty Line Items.
- Even if the Design Build Contract has an AC Price Adjustment provision, the AC Adjustment indicator is not checked. The AC Price Adjustment is calculated manually and entered on the line items created in Contract Adjustments > Review Other Line Items.
- Even if the Design Build Contract has a Fuel Adjustment provision, the Fuel Adjustment indicator is not checked. The Fuel Adjustment is calculated manually and entered on the line items created in Contract Adjustments > Review Other Line Items.

### Verify the Contract Times

- The Overall Contract Time is 00. No changes can be made to it by users. If an error is discovered, contact the Construction Unit at (919)707-2400.
- Intermediate Contract Times (ICTs) are numbered sequentially starting with 01.
- If the contract has an ICT and it is not listed in the Review Contract Times window, use Insert to enter it. Contract Times may be imbedded in the Traffic Control, or other provisions in the contract, not only in the Contract Times provision.

3. Activate the contract.

### **Adding Work Items**

Per the Specifications, the Contractor is to provide the Resident Engineer with a Table of Quantities. The Table of Quantities is a listing of work items (corresponding to the items in the Trns\*port pay item list) that contributes to a project completion. The table includes the estimated quantities for each work item.

Use the Contract Maintenance > Review Work Items function to construct the Contract's Work Items list.

### **Entering Subcontracts**

All Subcontracts on a single Lump Sum line item contract have the Partial indicator checked. It is imperative that the items of work being performed by the Subcontractor are identified on the Subcontract Approval Form (SAF) and in the comments section of the HiCAMS subcontract.

***Note:** The Design Build Prime Contractor should list the Work Items on the SAF. The Work Item description and number, if known, should be entered in the comments section.*

### **Entering Supplemental Agreements**

Supplemental Agreements for Design Build Contracts should generally be entered as Lump Sums with a single line item. Useful examples can be found on Contract C202383 and C202980.

If the NCDOT is entitled to a Credit against the Lump Sum item, the Supplemental Agreement should indicate CREDIT in the description, and be entered with a Positive Quantity, and a Negative Unit Price.

If no additional time will be granted for the Supplemental Agreement work, a statement similar to "Time Extensions allowed under Article 108-10(B)(1) will not apply for performance of this work." should be entered in the Supplemental Agreement

description and nothing entered on the Contract Times tab of the Supplemental Agreement.

For assistance with Supplemental Agreements, contact the Roadway or Bridge Construction Engineer assigned to your Division.

### ***Entering Samples***

Samples for Design Build contracts are entered the same as for any other contract, but the Materials reside on the Contract BOM assigned to a Work Item instead of to the Line Item directly.

**Note:** *If the Material being sampled does not appear on the Materials list for the Contract, it needs to be added to the appropriate work item on the Contract Bill of Materials.*

### ***Entering Material Prepayments***

In order to eliminate an overcounting of Materials required for the Design Build contract, Materials Prepayments should not be entered through the Contract tracking > Review Material Prepayments window. The overcounting occurred because the Review Material Prepayments window does not recognize the Materials associated with Work Items, only those associated with the Line Item. This meant that the Material needed to be present in two places, directly on the Lump Sum Line Item and also on the Work Item. This resulted in Materials Discrepancy issues.

Instead, the Materials prepayment should now simply be paid for as part of the Lump Sum Line Item payment using the Source Document type of "Material Prepayment." It is important to create a Materials Received entry at the same time so that certification requirements are met.

**Note:** *The rationale for this change is that the cost of the materials is included in the value that the Contractor has assigned to the work item.*

In addition, this eliminates the problem with making sure that the Material Prepayment is deducted during the estimate process.

**Note:** *It is important to remember that even though the Material Prepayment function is not being used, the Contractor must still comply with the requirements of Section 109-5 of the Standard Specifications.*

### ***Receiving Materials***

Materials that are to be incorporated into the project must either be received on an M&T Materials Received Report (MRR) or compiled into Ticket Books. Invoices, alternate ID lists, bills of lading, certifications, etc., should be attached to the MRR.

Data entry for Material Receipts and Tickets is done at the Line item and Work item level.

Tickets entered using a Work Item are automatically checked as Do Not Pay - Other Payment Method. This eliminates the possibility of double paying the contractor.

**Note:** *If the Material being received does not appear on the Materials list for the Contract, it needs to be added to the appropriate work item on the Contract Bill of Materials.*

## ***Entering Densities***

Densities should be entered using the regular Density windows.

If the contractor encounters a penalty situation, navigate to the Pay Adjustment Window and enter the penalty as for any other contract. The AC Penalty Base Price will be used to calculate the penalty amount.

## ***Processing Monthly Estimates***

Estimate Payments for Design Build contracts are derived from the Contractor's Schedule of Values and Table of Quantities.

Payments are entered using the Contract Tracking > Review Pay Records window. These payments can be entered with three decimal position precision.

If the contract has a Fuel or AC adjustment and work was done on work items that are subject to them, calculate the amount due the contractor and enter Pay Records on the line items created in the Review Other Line Items module.

The Materials quantities are derived from the Table of Values. The contractor's quantities of work for the estimate period are entered into the Contract Tracking > Review Work Accomplished module. At this time, the amount entered on tickets must be reentered in the Work Accomplished module. A change to this part of the window has been requested for future implementation.

### Enter Penalties or Incentives

Density Penalties are derived from Pay Factors entered using the regular Pay Adjustment Recommendation module.

Other Penalties such as Sample Failures, or Incentives such as those received for not having an NOV, are paid on Line Items added by the Construction Unit. It is still possible to do the Pay Adjustment from the failing Sample or Field Inspection Report so that the disposition can be tracked. Use a quantity of 0.001 for the appropriate line item. Document the amount of the penalty and the approval of the Pay Adjustment Recommendation in HiCAMS, then contact the Construction Unit to have an Other Line Item added. The Person who approves the PAR should also Close it.

### Estimate Periods

An Estimate payment should be made monthly, on the same day of the month every month. The Estimate end date is entered on the Dates tab of Review Contract Details.

*Note: Calculations for Asphalt Cement and Fuel Adjustments are computed using the Average Terminal Price (ATP) in accordance with Subsections 620-4 and 109-8 respectively. These specifications state that the average terminal price in effect on the first day of the month in which the partial payment period ends will be used to make payment adjustments. This is why it is imperative that the estimate end date is consistent throughout the life of the project.*

If the Contractor is performing enough work to justify twice monthly estimates, try to have the estimate periods end on the same days each month.

#### Ongoing Project Certification Review

By using the Work Items and Work Accomplished modules, realistic quantities of materials will be generated for the ongoing Project Certification process. The Project Certification reports should be reviewed monthly and discrepancies resolved.

## **When the Contract Work is Complete**

The process for completing a Design Build Contract is no different than the one used for a non-Design Build Contract, as long as all the information has been entered into HiCAMS and the third party lab (if there is one) has used HiCAMS for test results.

### ***Final Estimate Assembly***

The final estimate assembly sent to the Construction Unit for Design Build Projects is the same as what is sent for a regular project. There are usually fewer Pay Record Books and Ticket Books. The rest of the assembly is exactly the same with the exception of the As-Constructed Plans which are signed by both the Contractor and Resident Engineer.

Details of the Final Estimate Assembly can be found in Appendix B.

### ***As-Constructed Plans***

The Design Build Contractor must submit As-Constructed Plans for the project. The plans must be submitted as an electronic file in the Portable Document Format (PDF).

The As-Constructed Plans must be signed by both the Contractor and Resident Engineer.

An example of the cover sheet used for a Design Build project is shown in Appendix C. An electronic copy can be obtained from the Printing and Plotting Services group of the Contract Standards and Development Unit.

Guidelines for the As-Constructed Plans are also included in Appendix C.

### ***Project Certification Letter***

The responsibility for the Project Certification letter required by CFR 23-637.209 Appendix A to Subpart B depends on who performed the testing.

- If a CEI firm is used for the QA on the project, then the head QA person should sign this letter and forward to M&T with the Buy America information and technician information.
- If there is no CEI working for the Department (consultants only for contractor QC), then the Resident or Division Construction Engineer must send a letter approving the QC technicians and M&T will write a letter approving the outside lab.
- If there are no QC technicians involved, only NCDOT inspectors, then the only difference from a normal contract is the work items, and work accomplished. Everything should be in HiCAMS.

### ***Disposition of Project Records***

- If all contract administration, inspection, and testing is done by NCDOT personnel, the project records are handled the same as any other contract.
- If CEI firms and/or a private testing lab are used, all records must be forwarded to the Department for disposition. Contract Administration records would be submitted to the Resident Engineer or Division Office, and the Testing Information to Materials and Tests in Raleigh.

# **Appendix A: Relevant Contract Division One Standard Special Provisions**

***Note: These specifications are provided as examples of what may be included in your contract. Please be aware that your contract should be used for all contract administration decisions made.***

## **SECTION 101 - DEFINITION OF TERMS**

***from C202646 Letting Date 04/19/2011***

Page 1-2, Article 101-3, replace and add certain definitions as follows:

### **PLANS**

(E) As-Constructed Drawings:

Final drawings prepared by the Design-Build Team, documenting the details and dimensions of the completed work.

### **SCHEDULE OF VALUES**

A schedule of work items necessary to complete work, along with the progress of each work item, primarily for the purpose of partial payments.

### **TABLE OF QUANTITIES**

A listing of work items (corresponding to the items in the Trns\*port pay item list) that contributes to a project completion. The table shall include estimated quantities for each work item.

## **SECTION 106 - CONTROL OF MATERIAL**

***from C202646 Letting Date 04/19/2011***

Page 1-56, Article 106-2, add the following after the second paragraph:

Prior to beginning construction, the Design-Build Team shall provide a Table of Quantities as described in Article 101-3 of these specifications.

The **Table of Quantities** Work Items shall correspond to Pay Items as defined in the Standard Specifications. These Work Items have associated Materials and Conversion Factors. For nonstandard Work Items, a Generic Work Item with the correct Unit of Measure and in an appropriate category will be used. For example, "GENERIC TRAFFIC CONTROL ITEM – EA" or "GENERIC RETAINING WALL ITEM – LF". For these Generic Work Items, Materials must be defined and appropriate conversion factors submitted.

An initial **Table of Quantities** shall be submitted no later than 30 calendar days after the date of award. The **Table of Quantities** shall be updated and resubmitted within 14 days of when a set of Plans is sealed as Release for Construction (RFC) Plans, and whenever there are substantial changes to the Quantities on previously incorporated RFC Plans.

## **SECTION 109 - MEASUREMENT AND PAYMENT**

*from C202646 Letting Date 04/19/2011*

**Pages 1-90, delete Article 109-4(A) and replace with the following:**

### **109-4 PARTIAL PAYMENTS**

#### **(A) General:**

Partial payments will be based upon progress estimates prepared by the Engineer at least once each month on the date established by the Engineer. Partial payments may be made twice each month if in the judgment of the Engineer the amount of work performed is sufficient to warrant such payment. No partial payment will be made when the total value of work performed since the last partial payment amounts to less than \$10,000.00. Partial payments will be approximate only and will be subject to correction in the final estimate and payment.

When the contract includes one lump sum price for the entire work required by the contract, partial payments for the lump sum design-build price shall be based on a certified **Schedule of Values** submitted by the successful Design-Build Team and approved by the Engineer. The certification shall indicate the Design-Build Team has reviewed the information submitted and the information accurately represents the work performed for which payment is requested. The certified **Schedule of Values** shall be submitted no later than 30 calendar days after the date of award. Each item on the certified **Schedule of Values** shall be assigned a cost and quantity and shall be identified as an activity on the progress schedule. Each bridge to be replaced shall be included as a separate line item in the **Schedule of Values**. Specifically, each bridge to be replaced shall be included as a separate line item in the **Schedule of Values**. A revised certified **Schedule of Values** shall be submitted with each update of the Progress schedule as described in Article 108-2 or when requested by the Engineer. A certified copy of the **Table of Quantities** shall also be submitted with each payment request. The certification of the **Table of Quantities** shall indicate the Design-Build Team has reviewed the information submitted and the information accurately represents the materials for the work performed for which payment is requested.

When the contract includes lump sum items for portions of the work required by the contract, and the applicable section of the Specifications or Request for Proposals specify the means by which the total amount bid be included in the partial pay estimates, the Engineer will determine amounts due on the partial pay estimate in accordance with the applicable portion of the Specifications or Request for Proposals. The Engineer will withhold an amount sufficient to cover anticipated liquidated damages as determined by the Engineer.

## Appendix B: Final Estimate Assembly Guidelines

The final estimate assembly sent to the Construction Unit for Design Build Projects is the same as what is sent for a regular project. There are usually fewer Pay Record Books and Ticket Books. The rest of the assembly is exactly the same with the exception of the As-Constructed Plans which are signed by both the Contractor and Resident Engineer.

Specific guidance concerning individual items follows:

**PAY RECORD BOOKS:** Needs to have Line Item #1 which is a lump sum item shown. If any SA's are added that are not paid in tons the line items need to be entered into a pay record book. (Work Books are to be kept at the Residents Office - Division Office should check to make sure that all pertinent information has been transferred into the Pay Record Books.)

**TICKET BOOKS:** If any line item is paid by tons, the ticket books need to be sent with the final.

**COMP SHEETS:** Information on quantities that have been paid but not covered in the Pay Record Books or Ticket Books.

**PENALTY CALCULATIONS:** Copy of letters sent to the Contractor for each of the penalties should be sent with the final estimate.

**DIARIES:** All diaries.

**SUPPLEMENTAL AGREEMENTS/CLAIMS:** All original Supplemental Agreement and Claim forms need to be sent to Construction Unit

**DBE FORM:** The current DBE Form is to be filled out by the Resident and sent with final estimate.

**AS-CONSTRUCTED PLANS:** Since these are usually done by the Contractor the plans need to be signed by both the Contractor and the Resident Engineer. See Appendix C for detailed guidance.

**SUMMARIES:** Ticket Books and Pay Record Book Summaries.

**LETTERS:** The following letters should be included in the Final Estimate Assembly:

- Notification of Final Quantities (Letter to Contractor)
- Transmittal Letter or Form (Letter to CCU)
- Certifications (Either the "I certify" statement signed by Resident and Division or use the Final Estimate Transmittal Form that has the information on the bottom)
- State Project: Need acceptance letter from the Division Engineer.
- Federal Project: Copy of letter sent to Area Engineer accepting project.
- Pro Rata Computation Sheet

- Begin Construction Letter

For additional guidance on the Final Estimate Assembly, please contact the Construction Unit Final Estimate Technician, Norita Deans.

## Appendix C: As-Constructed Plans Guidelines

The Design-Build Team shall be responsible for maintaining As Constructed Plans during the life of the project. The final set of As Constructed plans shall be submitted to the Resident Engineer upon the completion of the project.

The following certification shall appear on the cover sheet and shall be signed by the Design Build Project Manager: "I HEREBY CERTIFY THAT THIS PROJECT WAS CONSTRUCTED ACCORDING TO THE PLANS EXCEPT NOTED HEREIN." Likewise, the following certification shall appear on the cover sheet and shall be signed by the Design Build Project Manager: "FINAL RIGHT-OF-WAY HAS BEEN CHECKED." Signature lines shall be provided for the Resident Engineer and Division Right-of-Way Agent for the construction certification and Right-of-Way certification respectively.

The following are requirements for various sheets of the As-Constructed Plans. The sheets are listed in the order they should appear in the As-Constructed Plans:

1. **Cover Sheet:** This should be Sheet Number 1. Page numbers should be shown in the upper right hand corner. Page numbers should be numbered consecutively for all sheets thereafter. The number of total sheets should be shown on each page.
2. **Original Plan Title Sheet:** This is the original plan title sheet that was included as part of the project plans. Any changes in the original equalities or project lengths should be shown in their appropriate locations.
3. **Typical Sections:** All typical sections that were used in the construction of the project should be included.
4. **General Note Sheet:** If a revised standard is used in the construction of any item, this revision should be indicated on this sheet.
5. **Summary Sheets:** The **List of Pipe, Endwalls, Etc.** summary sheet should be included in the As-Constructed Plans, **but the quantities should not be revised and it is not necessary to line through the quantities. However, a note should be prominently placed stating "For as-constructed lengths, see plan sheets". If the size, type of pipe, or drainage structure has been changed from that shown on the original summary, then this information should be corrected.** Other summary sheets, such as guardrail, earthwork, etc., should not be included in the As-Constructed Plans.
6. **Plan and Profile Sheets:** The plan and profile sheet should show the following information:
  - A. Location of all right-of-way markers. These markers should be consecutively numbered starting at the beginning of the project. These same numbers should be recorded in the pay record book.

- B. The final location of all control of access lines, if applicable, should be shown. **These may or may not coincide with the right-of-way lines.**
  - C. The location of all pipe lines. **The length laid for all pipe lines except subdrain and shoulder drain should be shown on the plan sheets.**
  - D. The location of all subdrain and shoulder drain lines should be shown. Information should include station, line, and left, or right. This information can be drawn on each roadway plan sheet, drawn on a supplemental plan sheet and placed immediately after the roadway plan sheet, or summarized in a tabular format on each roadway plan sheet.
  - E. Any changes in the right-of-way limits.
  - F. If a revised standard is used for any item during construction, this revised standard should be indicated on the plan sheet in the As-Constructed Plans. This should be accomplished by neatly lining through with one inked line the standard indicated on the original plans and placing the corrected information above or beside the original information.
  - G. The location of all fencing that has been placed.
  - H. Where possible, show sketches of all borrow and waste pits.
  - I. Where applicable, note those existing roads that are to be abandoned, obliterated, or left in place and retained on the State Roads System.
  - J. All channel changes.
  - K. All changes in the horizontal or vertical alignment. These changes should be shown in black ink. If the revision is such that it cannot be shown on the existing plan sheet, then a new plan sheet should be drawn. This sheet should show all appropriate topography, such as driveways, sidewalks, etc., right-of-way and property lines, curve data, and bearings.
7. **Cross-Section Sheets:** Original roadway plan cross-sections should not be included in the As-Constructed Plans. Cross-sections utilized for computation of quantities should be prepared as follows:
- A. A black pencil should be used to denote the original ground and a red pencil to denote final subgrade and side slopes on all cross-sections.
  - B. The names of the individuals who computed and checked the cross-sections should be shown in the lower right hand corner of the last sheet of cross-sections. If several different people did this work, each should identify his own work.
  - C. Cross-sections should normally be plotted to a minimum scale of one inch equals five feet horizontal and vertical. However, if necessary, the scale may be adjusted.
  - D. Original and final cross-sections of fill areas are to be shown and computed only when there is waste to be deducted.
  - E. All cross-sections should be plotted with the stations running up the sheet.
  - F. Any material removed below subgrade should be clearly identified on the cross-sections in blue pencil or blue ink.
  - G. The pay record book(s) in which the cross-sections were recorded along with the page numbers where the information can be found should be shown on the first cross-section sheet.
8. **As-Constructed Plan Sheets for Structures:** These plans should be revised in so far as dimensions and elevations are concerned. **Where corrections are made, strike through - but leave legible - the original elevations and**

**dimensions, and insert the corrected information over or beside the original information.**

- A. All necessary sketches and computations to document the final quantities should be shown in the pay record book except the actual plotting of rod readings and the area computations of the cross-sections. If used, this information is to be shown on supplementary sheets in the As-Constructed Plans. The initials of the individuals plotting and checking the cross-sections and computing the areas as well as the date that the work was done should be shown.
  - B. Where extra depth concrete is involved with excavation cross-sections, they should be handled in the same manner. See **Specific Instructions Pertaining to All Entries Made in Pay Record Books and Estimate Work Books - Structure Items: Excavation and Class A Concrete** in the Department's Construction Manual.
  - C. All corrections made on the As-Constructed Plans should be made with black ink.
9. **Computation Sheets for Items not Computed in Pay Record Books:** While it is noted that all computations concerning pay items should be made in the pay record book in which the measurements were recorded, it is recognized that there will be instances where this is not possible. In these instances the following procedures should be used:
- A. Sheets containing the necessary sketches and computations should be included in the As-Constructed Plans.
  - B. The computations should be clearly labeled and the pay record book number(s) and page number(s) where the original measurements were recorded should be shown.
  - C. The initials of the individual who made the computations and the individual who checked them should be shown on the computation sheets.

An example of the As-Constructed Plan Cover sheet is on the next page.

SHEET NO	DESCRIPTION
_____	TITLE
_____	INDEX, GENERAL NOTES & STDS.
_____	TYPICAL SECTIONS
_____	DRAINAGE QUANTITIES
_____	ROADWAY PLAN
_____	CROSS SECTIONS
_____	ELECTRICAL PLANS
_____	LANDSCAPE PLANS
_____	UTILITY PLANS
_____	SIGNING PLANS
_____	_____
_____	_____
_____	_____
_____	CULVERT PLANS
_____	STRUCTURE PLANS
_____	_____
_____	COMPSHEETS

## AS CONSTRUCTED PLANS

**CONTRACT NO.:** \_\_\_\_\_

**FEDERAL NO.:** \_\_\_\_\_

**TIP NO.:** \_\_\_\_\_

**COUNTY:** \_\_\_\_\_

**DESCRIPTION:** \_\_\_\_\_

**DIVISION NO.:** \_\_\_\_\_

**DESIGN-BUILD FIRM:** \_\_\_\_\_

**DIVISION ENGINEER:** \_\_\_\_\_

**RESIDENT ENGINEER:** \_\_\_\_\_

**DESIGN BUILD MNGR:** \_\_\_\_\_

FINAL RIGHT-OF-WAY HAS BEEN CHECKED

I HEREBY CERTIFY THAT THIS PROJECT  
WAS CONSTRUCTED ACCORDING TO THE  
PLANS EXCEPT AS NOTED HEREIN

\_\_\_\_\_  
DIVISION RIGHT-OF-WAY AGENT

\_\_\_\_\_  
RESIDENT ENGINEER

\_\_\_\_\_  
DESIGN-BUILD QUALITY MANAGER

\_\_\_\_\_  
DESIGN-BUILD QUALITY MANAGER

## Remember

1. The Construction Manual ([http://www.ncdot.org/doh/operations/dp\\_chief\\_eng/constructionunit/formsmanuals/construction/](http://www.ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/construction/)) provides specific guidance on the topics covered in this user guide.
2. HiCAMS User Guides ([http://www.ncdot.org/doh/operations/dp\\_chief\\_eng/constructionunit/formsmanuals/UserGuide/Index\\_User\\_Guide.html](http://www.ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/UserGuide/Index_User_Guide.html)) provide step by step instructions for many areas of HiCAMS.
3. For answers to specific questions about Contract Administration, contact the Construction Unit at (919)707-2400. For answers to specific questions about Materials, contact the Materials and Test Unit (919) 329-4200.