



#### Mobile Data Entry for RFID

**RFID MRR** NCDOT Materials and Tests Unit



The Early Functions Indunity References Flammin Foots miniation freip	File	Edit	Functions	Inquiries	References	Admin	Tools	Window	Help	
---	------	------	-----------	-----------	------------	-------	-------	--------	------	--

🤜 🗅 🔛 🎒 🔔 🖉 🖼 🛒

🚓 Review Precast Concrete ( Report ID: 62233)

Report Name: Precast Concrete

Report ID: 62233

Report Status: Authorized	
---------------------------	--

ized 🗾 🚽

D

General Results Alt IDs Report History

#### Alternate IDs for Material:

Concrete, Precast, Barrier, Single Face- Each

Alternate Type	Alternate ID	Status	Quantity	Available
Piece	1C012700000000000027779	In Use	1.000	.000
Piece	1C012700000000000028209	In Use	1.000	.000
Piece	1C012700000000000027960	In Use	1.000	.000
Piece	1C012700000000000028055	In Use	1.000	.000
Piece	1C012700000000000028140	In Use	1.000	.000
Piece	1C012700000000000027943	In Use	1.000	.000
Piece	1C012700000000000027886	In Use	1.000	.000
Piece	1C012700000000000027840	In Use	1.000	.000
Piece	1C012700000000000028509	In Use	1.000	.000
Piece	1C012700000000000027948	In Use	1.000	.000
Piece	1C012700000000000027898	In Use	1.000	.000
1 of 11 Items			11.000	0.000

efine Range								
Count: 2 🔺								
<u>C</u> reate Range								
Clear <u>R</u> ange								
Show Summary								

\_ | & | × |

Training Environment

\_ | 🗆 | × |

l [] 📄 🧰 🤤 🦪 🍼 📴 🐡

O Ask me anything

Ready

## WELCOME



## Introduction

- The final link in the RFID program is the receiving of the project onto the project site.
- The producer has entered the quality control and initial production information into the RFID, mostly through the Idencia program.
- Idencia is the conduit through which date is transmitted from the producer, and transmitted to HiCAMS.
- The NCDOT, through the Materials and Tests technicians, inspect the product pieces to ensure quality control. Materials and Tests also utilizes the Idencia software to transmit test results to HiCAMS.
- HiCAMS uses the information transmitted from Idencia to create the Field Inspection Report (FIR). Information transmitted is a combination of the producer's initial QC process, and the M&T technicians QA inspection.
- The project inspector receives the product based on the RFID. If the RFID is in the HiCAMS, the producer's info and the M&T technicians info has been confirmed and meets specification.
- The product is then accepted on the project.



## NCDOT Electronic Asset Tracking



## The Acceptance Process



# HiCams Entry Mobile App

Contract Tracking	×	MRR Mobile Data Entry
Contract Estimates	۲	Reconcile MRR
WBS Maintenance	•	Review Material Receipts
Density	•	Review Pay Records
Field Inspection Reports	×	Pay Records Mobile Data Entry
Independent Assurance	•	Review Tickets
QA/QC	×	Review Work Accomplished
Sampling	۲	Review Material Prepayments
Project Certification	۲	Review Pay Adjustments
Project Closeout	۲	

DOH Vendor System...

## Access the HiCAMS Mobile App

- Log into Citrix using the Apple Ipad tablet
- Log into HiCAMS
- Go to Contract Tracking in HiCAMS
- Next go to MRR Data Entry
- Information entered on the RFID tags is accessed by scanning the RFID with a reader app.

## MRR Data Screen

We WICK WODIE Data Entry		<u> </u>
Contract:		
Date: 12/11/2015	MRR:EMR201512110601 Report Type:	
Alternate ID:	Validate	
Row Alterr	mate ID Item Status Qty Line Item FIR ID	
1 <u>N</u>	tew MRR Comment Delete Save Close	
		Tran

#### Tablet View



- A RFID or a barcode scanner will need to be downloaded and installed on the lpad.
- The app will be used to read the number on the RFID tag.
- Once read by the scanner, the number is copied into the HiCAMS MRR application.



## Scanning Process

- After opening HiCAMS and selecting MRR, open the selected Scan app
- Scan the RFID using the lpad
- Once the tag is recognized by the Ipad, select Copy



Scan	~	10:12 AM		17 8 77% <b>■</b> .
				Copy
10	01270000	00000000	027886	
	Q Scan	(-) History	o o o More	



🤄 🗟 🔛 🗛 🚴 🥖 🗯 🕱		
Review Sample Details - Sample (Untitled)     Sampled Date: 00/00/0000     Sample Status: New     Material:     Material Type:	Sample ID:	
General Cont/Loc Prod/Supp Tracking Alt IDs Parts Line Item History		(
		Done
	_	Done
Q W E R T Y U I	O F	
Q W E R T Y U I A S D F G H J	O F	return
QWERTYUI ASDFGHJ AZXCVBNM	O F K L ! ?	return
$\begin{bmatrix} \mathbf{P} \\ \mathbf{Q} \end{bmatrix} = \begin{bmatrix} \mathbf{R} \\ \mathbf{T} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{R} \end{bmatrix} \begin{bmatrix} \mathbf{R} \\ \mathbf{T} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{F} \end{bmatrix} \begin{bmatrix} \mathbf{Q} \\ \mathbf{H} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{F} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{R} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{F} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{R} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{F} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{F} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{R} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{F} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} \mathbf{V} \\ \mathbf{V} $	O F K L ! ? ; .	return

To copy number into the MRR app, first click on the T to open the dialog box.

Hold finger on dialogue box until the Paste menu opens.		CAMS - [hicamsprod]	-1-
Hold finger on dialogue box until the Paste menu opens.		/e Edit Functions Inquiries References Admin Tools Window Help	
Hold finger on dialogue box until the Paste menu opens.		N L 🖬 199 🙈 / 2 🌆 13	
Hold finger on dialogue box until the Paste menu opens.		Sample Date: 00/00/0000     Sample Status: New Sample ID:	
Hold finger on dialogue box until the Paste menu opens.		*Material:	
Hold finger on dialogue box until the Paste menu opens.		Material Type:	
Hold finger on dialogue box until the Paste menu opens.			
Hold finger on dialogue box until the Paste menu opens.		General Could as Dudding Tracking Ability Date Ling has Uline	
Hold finger on dialogue box until the Paste menu opens.		Contraction Contraction Productupp Tracking Air Dis Parts Line term Pristory	
Hold finger on dialogue box until the Paste menu opens. Select Select All Paste T OWERTYUIOP ASDFGHJKLreturn CXCVBNM!??			
Hold finger on dialogue box until the Paste menu opens.			
Hold finger on dialogue box until the Paste menu opens.			
Hold finger on dialogue box until the Paste menu opens.			
Hold finger on dialogue box until the Paste menu opens. Select Select All Paste OVERTYUIOP ASDFGHJKLreturn CXCVBNM!??			
Hold finger on dialogue box until the Paste menu opens.			
Hold finger on dialogue box until the Paste menu opens. Select Select All Paste QWERTYUIOP ASDFGHJKLreturn CASDFGHJKLreturn CASDFGHJKLreturn			
until the Paste menu opens. Select Select Al Paste ■ T Q W E R T Y U I O P ≪ A S D F G H J K L return ● Z X C V B N M ! ? . 1123 ₩ 0	Hold finder on dialogue box		
until the Paste menu opens. Select Al Paste QWERTYUIOP ASDFGHJKL return ZXCVBNM ; ? • 2123 © Q : 2123			
Opens. Select All Paste T Q W E R T Y U I O P C A S D F G H J K L return C Z X C V B N M ! ? 2123 © Q 2123	until the Paste menu		
Select Select All Paste QWERTYUIOP ASDFGHJKL return CZXCVBNM!? 2123	onens		
Select Select All   Paste     Done     Q   W E   R T   Y U   I O   P X   A S   D F   G H   J K   L return   I Z   X C   V B   N I   ? I     ?123	opens.		
Select All Paste T Done Q W E R T Y U I O P X A S D F G H J K L return T Z X C V B N M ! ? .123 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Select All Paste ■ T Q W E R T Y U I O P ≪ A S D F G H J K L return ◆ Z X C V B N M ! ? . * ?123 © ↓			
QWERTYUIOP ( ASDFGHJKL return ZXCVBNM!? 2123 Q 2123 Q 2123 Q 2123 Q 2123 Q		Select All Paste	
Q       W       E       R       T       Y       U       I       O       P $\bigotimes$ A       S       D       F       G       H       J       K       L       return $\bigstar$ Z       X       C       V       B       N       I,       ? $\bigstar$ ?1123 $\bigcirc$ $\bigcirc$ .       . <td< td=""><td></td><td></td><td>Done</td></td<>			Done
Q       W       E       R       T       Y       U       I       O       P $\bigotimes$ A       S       D       F       G       H       J       K       L       return         Image: Comparison of the system of the syste			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
A       S       D       F       G       H       J       K       L       return         ▲       Z       X       C       V       B       N       I       ??       ▲         .?123       ④       Q		Q W E R T Y U I O P	$\langle \times \rangle$
$A S D F G H J K L return$ $\bullet Z X C V B N M ?? \bullet$ $.?123 \textcircled{3}$			
Z X C V B N M ! ? + $  2123$		A S D F G H J K L	return
.?123 ☺ ♀ .?123 .?123			
.?123 😂 🖉 .?123 🛒			
		.2123 😄 🕕	3
			JUř

	CAM5 - [hicamsprod]	
	de Functions Inquiries References Admin Tools Window Help	
	V 🙈 /2 Mit .3.	
	Contract C203646	
	Date: 12/10/2015 MRR: EMR201512101357 Report Type: Precast Conc	rete 🔄
	Alternate ID: Validate	
	Row Alternate ID Item Status Qty L	ine Item FIR ID
Click paste to get the scanned number in the dialogue box. Click Send to copy the number into the Alternate ID field.	Image: New MRR         Comment         Delete         Save         Close	, ]
	■ T 1C012700000000000028160	Send
	qwertyu i	o p 🗵
	asd fghjk	l return
	☆ z x c v b n m	! ? ひ
	.?123 😄 🎍	.?123
	.?123 😀 🦉	.?123

runcuons	Induiries References Admin Tools Window Help						
🗟 🖉							
MRR Mobile	e Data Entry (C203646)						
Contractio							
Date: 12/10/2015 MRR: EMR201512101357 Report Type: Precast Concrete							
Alternate ID: 1C012700000000028160							
Row	Alternate ID Item Status Qty Line Item FIR ID						
<b>↓</b>		▶					
	New MRR Comment Delete Save Close						
		Done					
Ţ		Done					
Q	WERTYUI OP	Done					
Q	WERTYUIOP	Done					
Q	W E R T Y U I O P S D F G H J K L re	Done (X) turn					
Q A	W E R T Y U I O P S D F G H J K L re Z X C V B N M ; ?	Done (X) turn					
Q A • .?123	$W E R T Y U I O P$ $S D F G H J K L re$ $Z X C V B N M \frac{1}{2}$ $2123$	Done       Image: Constraint of the second seco					

.2123 😳 🕡

# Field Inspection Report (FIR) example

#### Alternate IDs for Material:

Precast Concrete Noise Wall- Square Feet

Alternate Type	Alternate ID	Status	Quantity	Available
Piece	1C012700000000000027906	Available	1.000	1.000
Piece	1C012700000000000027923	Available	1.000	1.000
Piece	1C012700000000000028060	Available	1.000	1.000
Piece	1C012700000000000028077	Available	1.000	1.000
Piece	1C012700000000000028091	Available	1.000	1.000
Piece	1C012700000000000028092	Available	1.000	1.000
Piece	1C012700000000000028099	Available	1.000	1.000
Piece	1C012700000000000028174	Available	1.000	1.000
Piece	1C012700000000000028193	Available	1.000	1.000
Piece	1C012700000000000028217	Available	1.000	1.000

Define Range						
Count:	2	•				
<u>C</u> reate R	ang	e				
Clear <u>R</u> ange						
Show Summary						

After the RFID number is entered, the MRR first checks to ensure the precast piece is on the CBOM.

# Validation for MRR



If the precast piece is on the CBOM, and listed on a FIR, it will be added to the MRR

## MRR

Alternat	te ID:		Validate 🔒
Row 1	Alternate ID 0127000000000000027906	Item Status	Qty   Line Item   FIR ID     1   ✓   362   62254 Preca
•			•
	New MRR Com	ment Delete Save	Close

## MRR



## MRR Reconcilation

- If a piece is marked as invalid on the MRR, it is sent to the Reconcile screen for further action.
- The reconcile screen is located just below the MRR screen on the Contract Tracking tab.
- The screen allows further investigation to ensure the piece does not actually belong on the project.
- In conjunction with the Reconcile screen, NCDOT Precast Lookup site is also used to verify the status of the precast item.
- The address for the Precast Lookup site is
   <u>https://apps.ncdot.gov/vendor/approvedproducts/PrecastLookup.aspx</u>
- After attempting to reconcile, and looking on the Precast Lookup site, the MRR is saved.
- The items on the Reconcile window remain their until resolved.





## Reconcile MRR Screen

1         1C012700000000028120         FIR Not Found         1 <th< th=""></th<>	
Validate	

## Reconcile Screen

low	Alternate ID	Item Status	Qty		Line Item	FIR ID	Material Type	
1	1C0127000000000000028120	FIR Not Found	1	×				
					_			
		MRR Mobile		23				
		FIR not fou	und for this Alternate I	D.				
			0	к				
	m							
المحا	ta							

## NCDOT Precast Lookup

🗲 😔 🧟 https://apps.ncdot.gov	/vendor/approv	edproducts/Precast	Lookup.aspx	- م	🔒 🖒 🎑 NCDOT V	endor Approved	×	ගි ඒ
File Edit View Favorites Tool	s Help							
Connecting people, protection of the economic	<b>TH CAROLINA I</b> oducts, and place ny and vitality of	DEPARTMENT OF TR as safely and efficient North Carolina.	ANSPORTATION ly with customer	focus, accountability .	and environmental sen	sitivity		Home   About   Careers   Contact   Search
		Business	DMV	Newsroom	Programs	Projects	Travel & Maps	
Approved Resources	Business » Precast	t Lookup						
Product Listing	Brocact Con	croto ID/Parcodou			]			
Seeds	Freedst Con	crete ib/barcoue.		Search	Reset			
Producer/Supplier								
Technician Certification								
Minimum Sampling Guide								
Precast Lookup								

# NCDOT Precast Lookup Page

+ 🕀 🌔 🏉 https://apps.ncdot.gov	w/vendor/approvedproducts/PrecastLookup.aspx	🗅 🗕 🖒 <i> (©</i> NCDOT Vendor Approved 🔅	☆ ☆ 袋
File Edit View Favorites Tool	ols Help		
	INTH CAROLINA DEPARTMENT OF TRANSPORTATION		Home   About   Careers   Contact   Search
Connecting people, pro to enhance the econor	roducts, and places safely and efficiently with customer focus, accountai omy and vitality of North Carolina,	vility and environmental sensitivity	
	Business DMV Newsroor	n Programs Projects	Travel & Maps
Approved Resources	Business »		
Product Listing	Precast Lookup		
	Precast Concrete ID/Barcode: 1C01270000000000002812	)	
Seeds	Searc	h	
Producer/Supplier	No records matched your search criteria.		
Technician Certification			
Minimum Sampling Guide			
Precast Lookup			
	© Copyright NCDOT NCDO	THome   NC.gov   Accessibility   Privacy Stateme	nt

#### Transportation

# NCDOT Precast Lookup Page-Tag Found

	Business	DMV	/ News	sroom	Program	ns Projects	Travel & Maps		
roved Resources	Business »	t Lool	kup						
oduct Listing	Description			040700000	000000005	440			
eds	Precast Con	icrete ID/	Barcode: 01 10	:0127000000	Searc	h Reset			
oducer/Supplier									
chnician Certification	Report Type	FIR Report ID	FIR ID Status Typ	Alt ID Status	Qty Available	Producer/Facility/Plant ID	Material Inspector	Inspection Date	Contra Nor
nimum Sampling Guide	Precast					Concrete Pipe and Precast	Bobby W.	9/26/2013	
ecast Lookup	Concrete	48320 A	Authorized Piec	e Available	1.000	LLC - Concrete Pipe and Products - Dunn - PC12	Watkins	12:00:00 AM	



# FIR Showing Pieces Received

General Results Arris Report Ristory

#### Alternate IDs for Material:

Precast Concrete Noise Wall- Square Feet

Alternate Type	Alternate ID	Status	Quantity	Available
Piece	1C012700000000000027906	In Use	1.000	.000
Piece	1C012700000000000027923	In Use	1.000	.000
Piece	1C012700000000000028060	In Use	1.000	.000
Piece	1C012700000000000028077	In Use	1.000	.000
Piece	1C012700000000000028091	In Use	1.000	.000
Piece	1C012700000000000028092	Available	1.000	1.000
Piece	1C012700000000000028099	Available	1.000	1.000
Piece	1C012700000000000028174	Available	1.000	1.000
Piece	1C012700000000000028193	Available	1.000	1.000
Piece	1C01270000000000028217	Available	1.000	1.000

Define Range							
Count: 2							
<u>C</u> reate Range							
Clear <u>R</u> ange							
Show Summary							

# **QUESTIONS**

