CASE STUDY · DIVERSYS · 2025

Driver Mobile App

Redesigning the advanced driver workflow, so drivers can run every pickup and drop-off from a rugged Zebra handheld in the field.

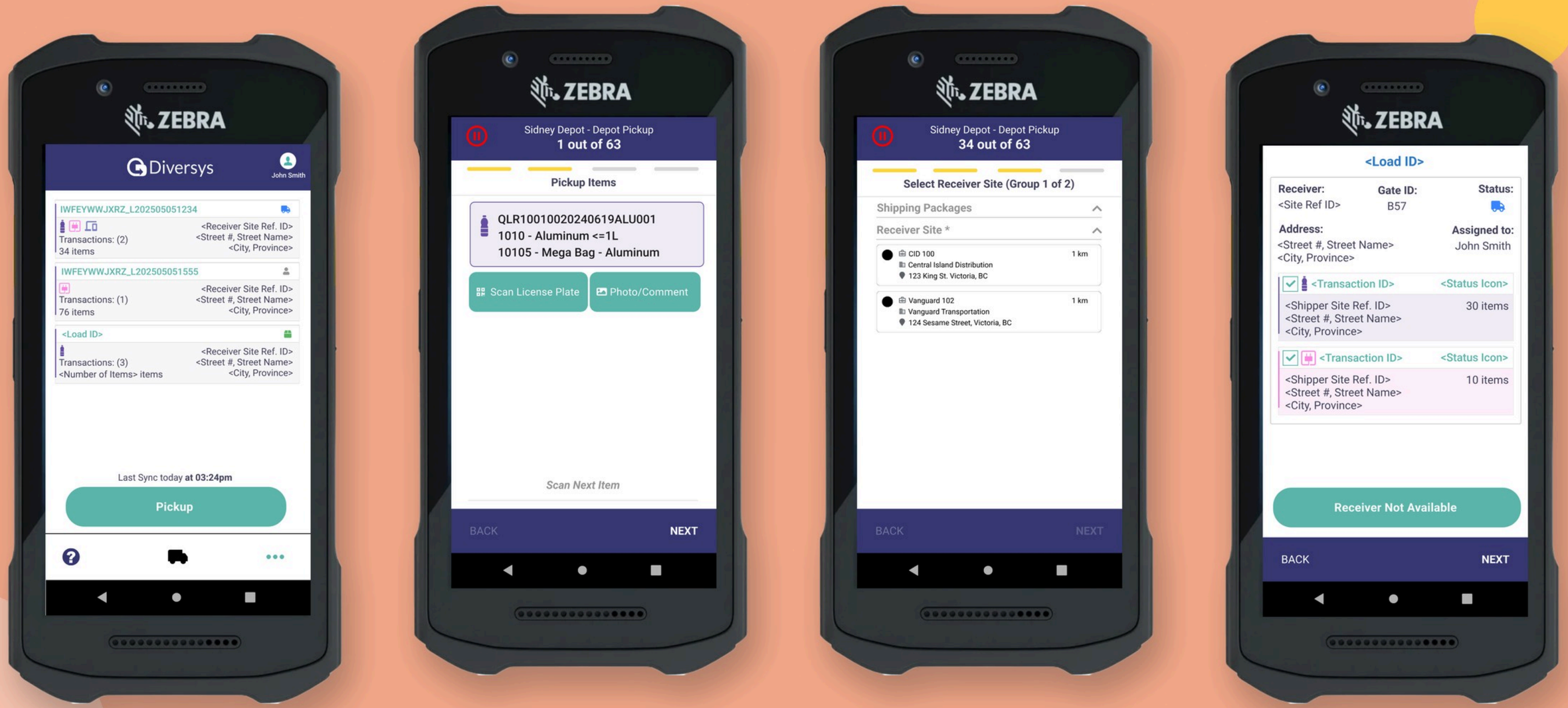
Product Designer: Solida Sar

COVERED SECTIONS

1. Context, users and user flow
2. Where it started
3. Pickup scenarios
4. The pickup flow
5. Multiple destinations
6. Live inventory validation
7. Optimizing for Zebra
8. The drop-off flow
9. Releases and process

DRIVER MOBILE APP · DIVERSYS

Every pickup and drop-off, from one handheld



Who the app is for

BUSINESS VALUE

“As a Driver, I want to perform all supported pickup and drop-off transactions on my mobile app when the Advanced workflow is configured.”

Hauler · Driver

Scans and loads the truck: creates transactions, loads materials, submits transactions and gets a signature at the destination. For a spotted container, scans just the container ID to pull its inventory list.

Hauler · Compactor driver

Drives a compactor truck and empties bags at the depot.

Devices: Zebra rugged handhelds, plus a separate flow for regular phones.

01 · USER PERSONA

Meet Marco, a hauler driver

M

Marco

Driver · Hauler

Device: Zebra handheld, often used on the go

Works from: the truck, between sites

Proto-persona, built from the roles and scenarios in my design files

Goals

- Finish each pickup quickly
- Drop the right items at each stop
- Get the signature and move on

Frustrations

- Inventory list unavailable on site
- Small, crowded controls
- Prompts that repeat the summary

A typical shift

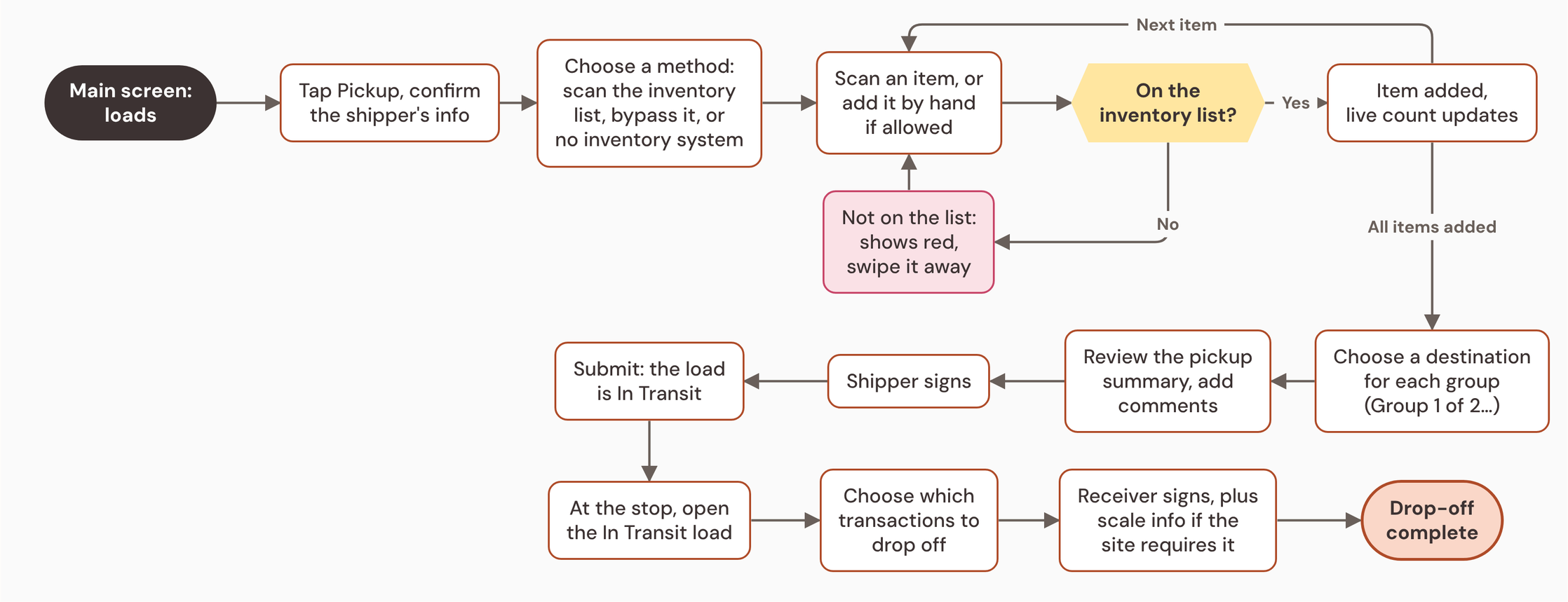
- Scans and loads at depots
- Runs one trailer to several stops
- Gets a signature at each one

How the design responds

- Live checks on every scan
- A destination for each group
- Less chrome on the Zebra screen

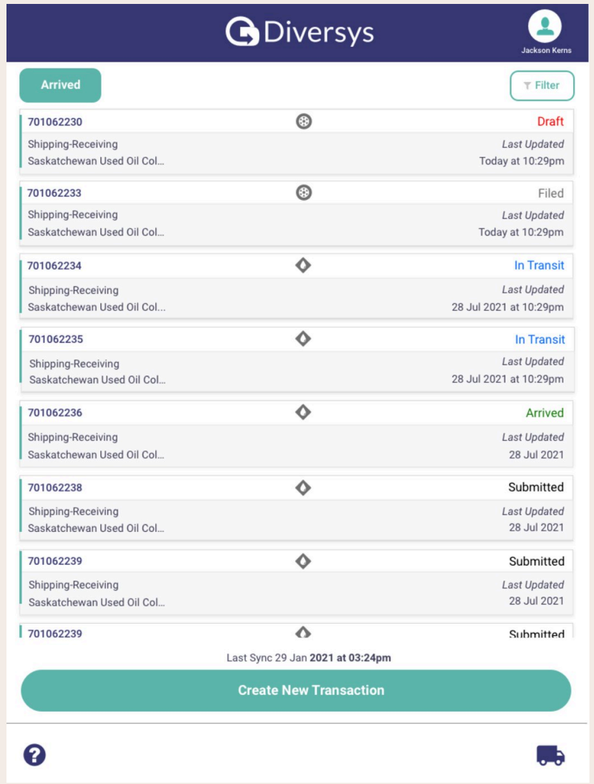
01 · USER FLOW

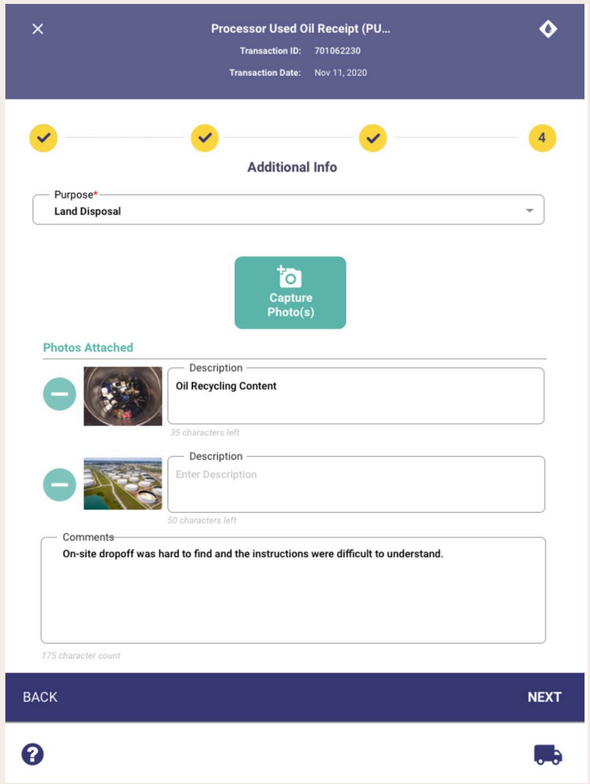
A pickup and its drop-off, end to end



02 · WHERE IT STARTED

One transaction at a time





The published app worked transaction by transaction: a list of transactions, then a four-step form with photos and comments.

The Advanced workflow needed more: loads that hold many transactions, several destinations per trip, live checks against inventory, and screens built for a Zebra handheld.

App Store screenshots, release 2.18

03 · PICKUP SCENARIOS

Four ways a pickup can go, one flow to cover them

1 · Inventory list enforced

The driver must scan the inventory list, then can only scan items. No manual entry.

2 · Enforced, but the system is down

The list is required but unavailable. Still no manual entry, flagged to discuss with the customer.

3 · Not enforced, scan only

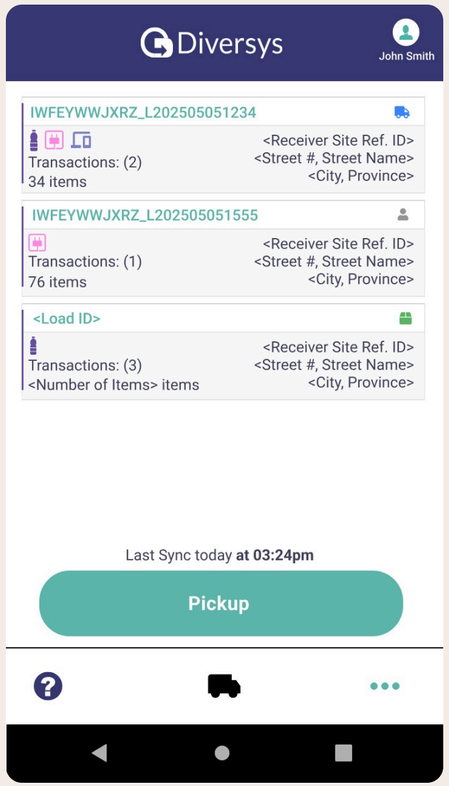
The driver skips the list and goes straight to scanning items.

4 · Not enforced, manual allowed

The driver can scan items or add them by hand.

A later release added a choice up front: scan the site’s inventory list QR code, bypass it, or pick up where there is no inventory system at all.

From the main screen to a signed pickup



01 Tap Pickup on the main screen

02 Confirm the shipper's info

03 Choose a pickup method

04 Scan items, or choose manual entry

05 Add items one at a time

06 Confirm all items are added

07 Choose a destination for each category

08 Review the pickup summary, adding comments

09 Get the shipper's signature

10 Submit

05 · MULTIPLE DESTINATIONS

One trailer, more than one stop

REAL-WORLD CASES

Leave the trailer behind

The driver drops the whole trailer at the first, blind drop-off. Once that site receives its part, the transactions for the second destination switch to Staging.

Unload part, keep driving

The driver unloads some content at the first stop and continues to the next location.

HOW THE APP GROUPS ITEMS

By root category

Ask for a destination per group, and create a separate transaction for each destination.

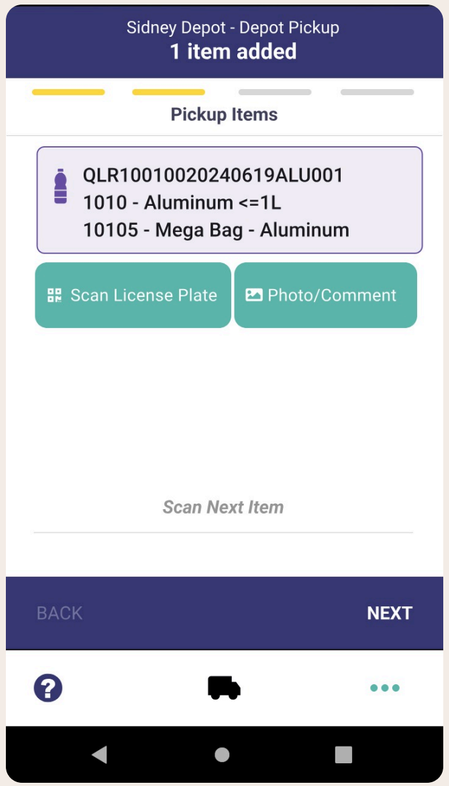
By sub-category

Ask per group, but don’t split groups that share a sub-category and destination.

“Select Receiver Site” became a sub-stepper: Group 1 of 2, Group 2 of 2.

06 · LIVE INVENTORY VALIDATION

Every scan checked as it happens



Know what's available

The app downloads the site's available labels, or the driver scans a QR code the shipper generates.

Check each scan

Each item is validated against the list, so the driver sees in real time what has been scanned.

Short or extra items

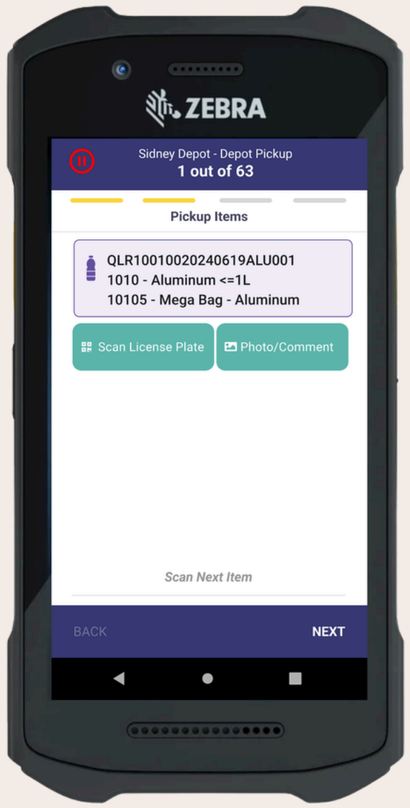
The app lists unscanned or additional items, and the driver can still submit.

Errors stand out

Items no longer on the list turn red and swipe away. A list from the wrong site shows an error.

07 · OPTIMIZING FOR ZEBRA

Less chrome on a small, rugged screen



WHAT CHANGED, MAY 2025

- Removed the top Back/Next bar, the progress bar and the “X” from pickup and drop-off
- Removed final confirmation prompts that repeated the summary
- The main screen lists loads, not transactions; tapping an In Transit load starts the drop-off
- Removed the Filter and DropOff buttons from the main screen
- A new “…” menu holds staging and parking actions
- Renamed step 2 to “Pickup Items”, and annotated Back/Next on every screen

Earlier, in February: a bigger item count in the header (“1 out of 63”) and a trash icon in place of “_”.

Where should “Scan Next Item” live?

On the Zebra screen the button overlapped other controls. It’s the action drivers repeat most, so I explored four fixed positions.



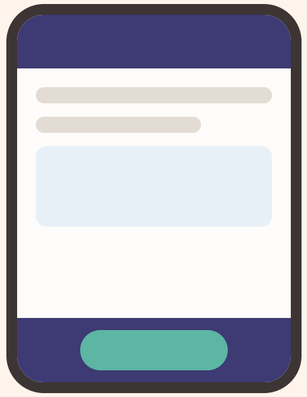
1 · Pinned, no background



2 · Pinned, with a divider



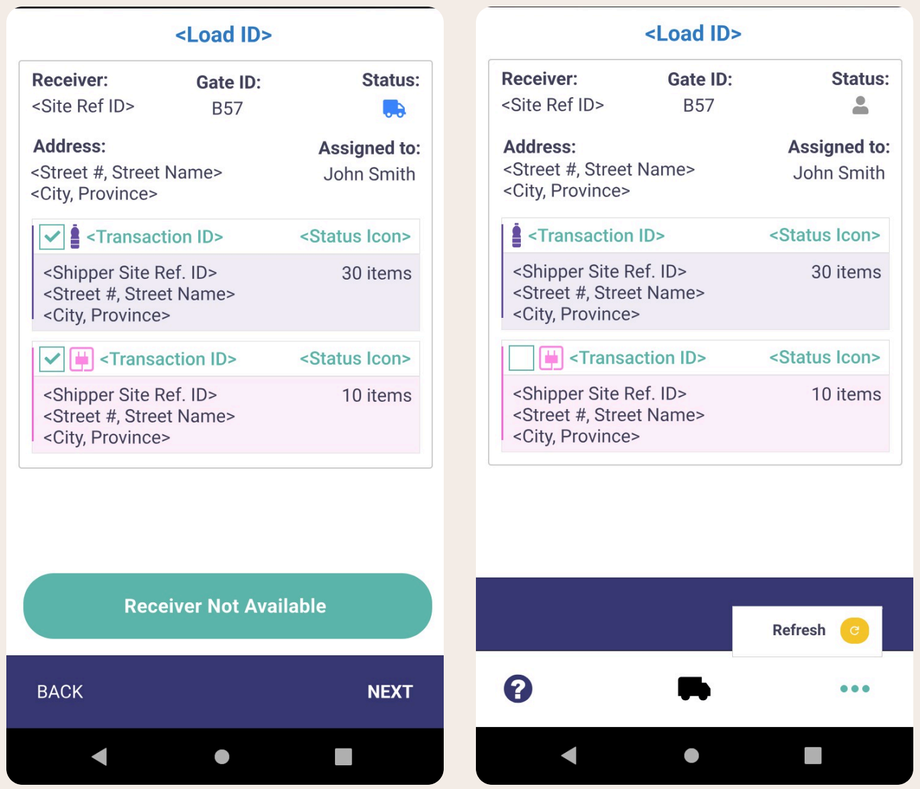
3 · Pinned, grey band



4 · In the nav bar

My proposal, if it works across the native app

Stage it, sign it, or drop part of it



Choose what to drop

Transactions in the load start checked. Uncheck any to leave them off the drop-off summary QR code.

Filter by destination

Current destination by default, or every in-transit transaction in the load.

Pause and come back

Pausing returns to the load list and marks the load Paused, so nothing is lost.

Sign, then scale info

Receiver name and signature, then scale information when the site requires it.

09 · RELEASES

Shipped in steps, release after release

R2.18

Driver at a consolidation site on Zebra: optimized pickup and drop-off screens

R2.19

Seal numbers for spotted-trailer pickups

R2.20

Pickups at commingle sites, a choice of how to add products, and pull to refresh

R2.21

Capturing a license plate for a scanned item

R2.22

Receiving a partial load, for drivers and receivers

R2.24

Secondary shipping containers, plus selective stage and selective pickup of loads

09 · HOW I WORKED

One living design doc per feature

Ready for design → In design → Ready for review → Design complete

Before the screens

Rationale, a deliverable checklist, user diagrams and UI element proposals.

Explorations kept

Rejected variations stay in the file, labelled, so the team can see why a direction was chosen.

Annotated for build

Back/Next behaviour, default views and validation rules written on every screen, with dated UX updates.

UX discussions with the team, such as making action buttons bigger and pairing them with icons, so drivers can tap them easily on the go.



Thank you

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