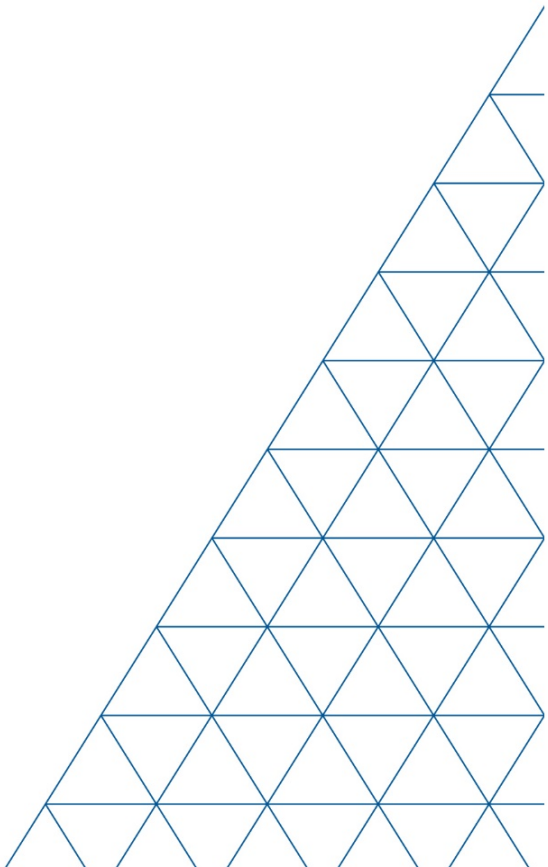
YOUR CONSTRUCTION TECHNOLOGY PROVIDER

Field Reference Guides

EARTHWORKS DOZER VERISON 2.10

SITECH SOUTHEAST TEXAS

SITECH-SETX.COM



Trimble Authorized Dealer

System: Earthworks Dozer

Version: 2.1

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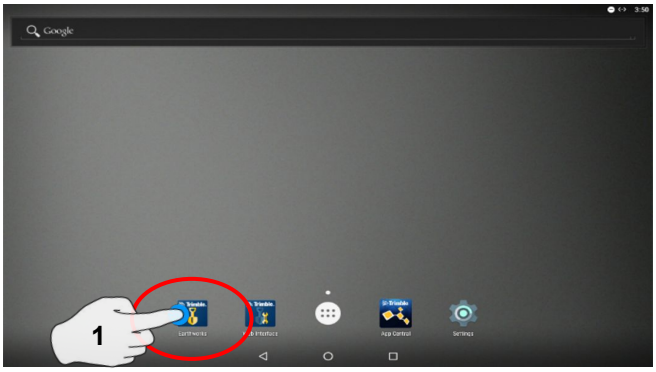
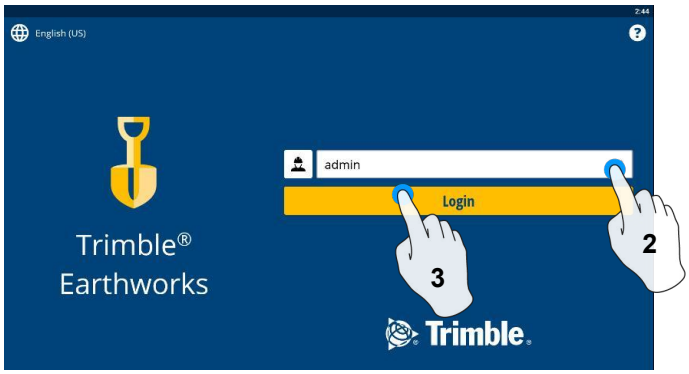
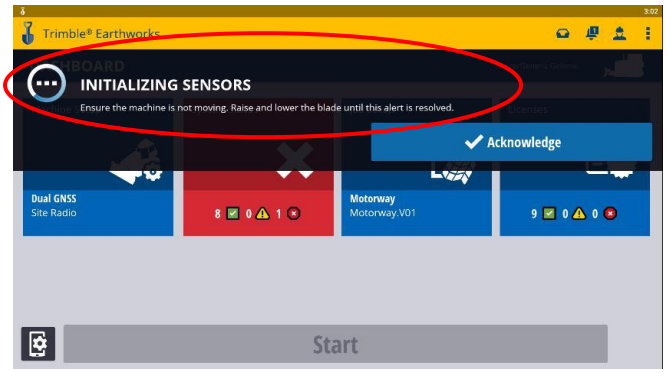
Starting Earthworks



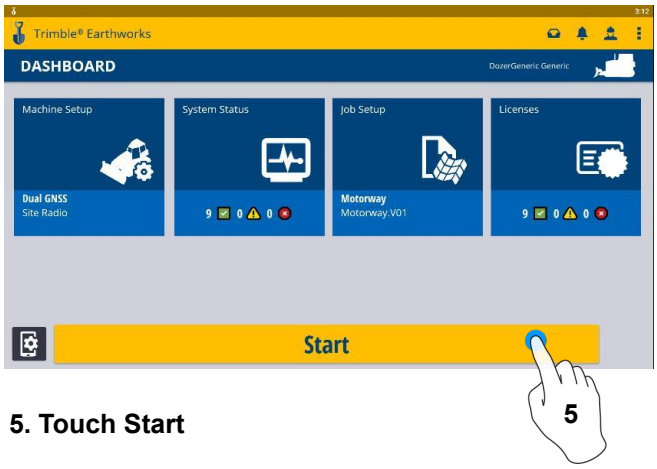
1. Touch Earthworks Icon



2. Select operator
3. Enter password if required and touch login

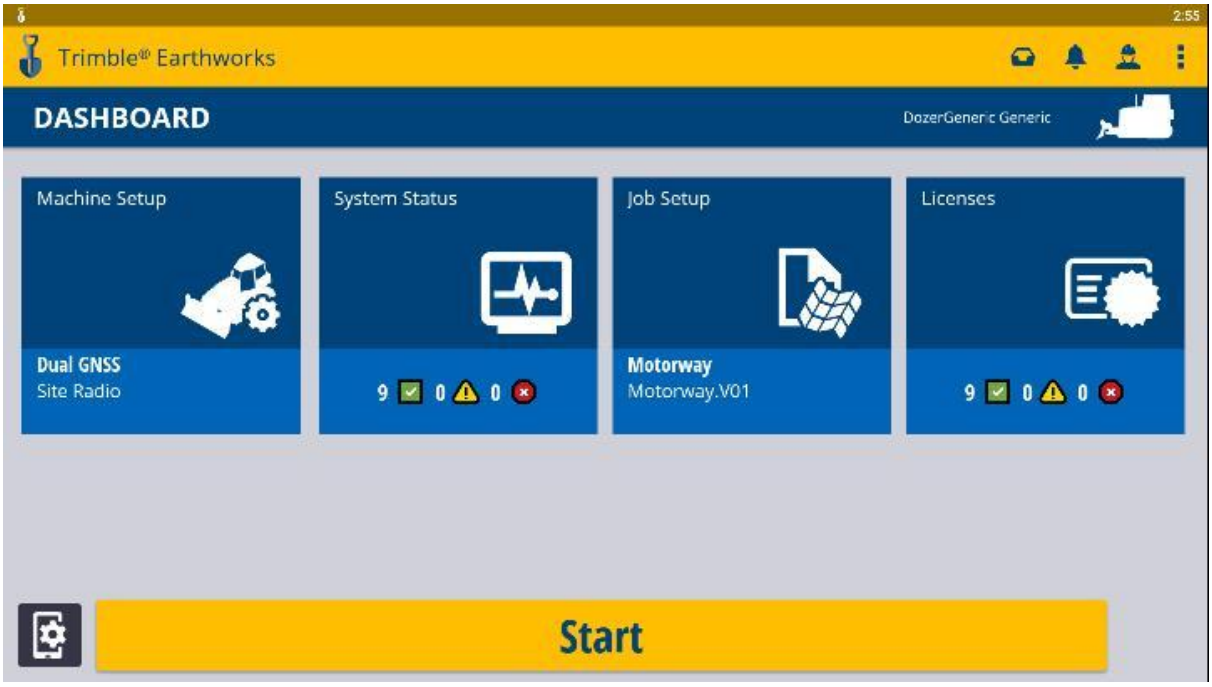


4. Raise and lower the blade to initialize sensors



5. Touch Start

Dashboard



Machine Setup

- Position Source
- Correction Source

System Status

- Status of Devices
- Component Warnings

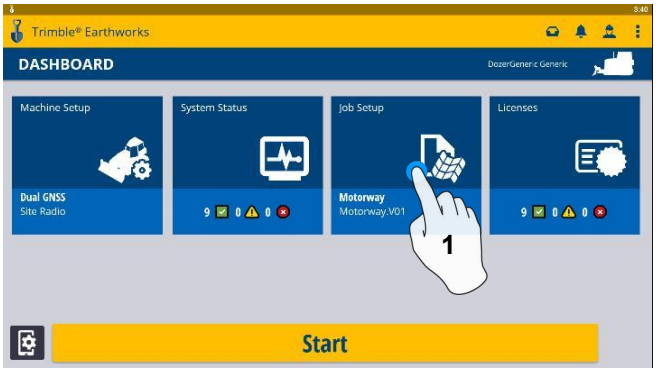
Job Setup

- Select or Create Project
- Select or Create Design
- Create Work Orders

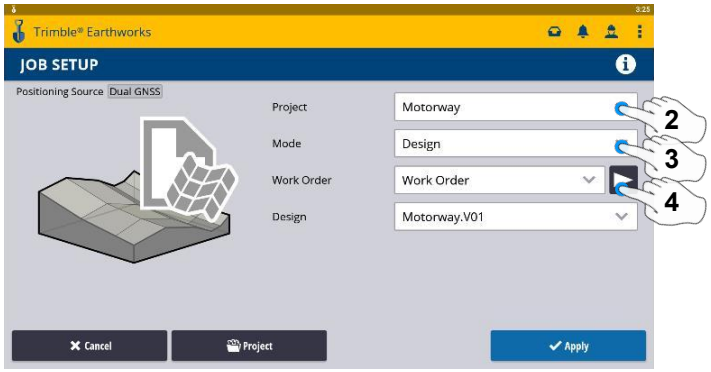
Licenses

- EC520 License
- TD520 License
- GNSS Receiver License

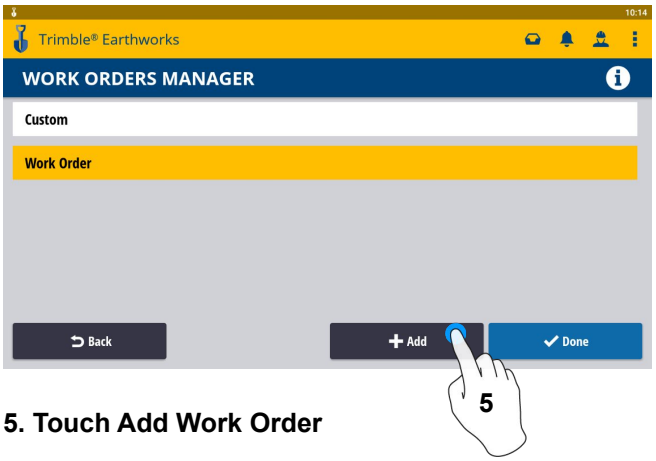
Select Project, Design and Work Order



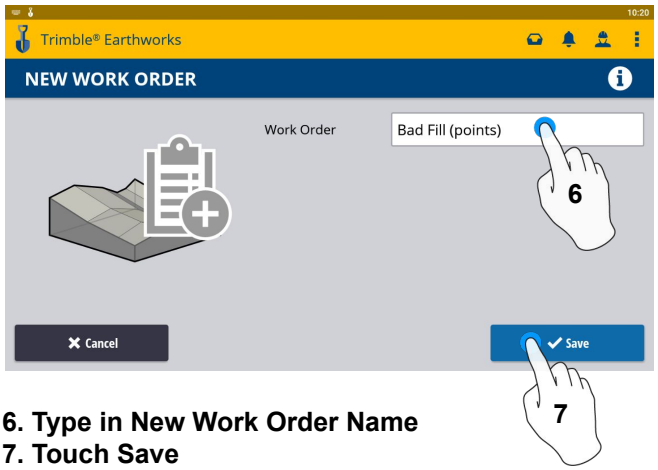
1. Touch Job Setup



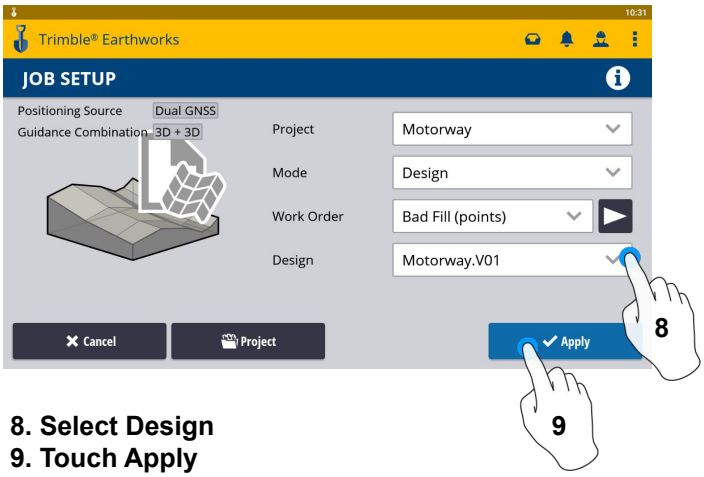
2. Select Project
3. Select Mode
4. Work Order (Create New)



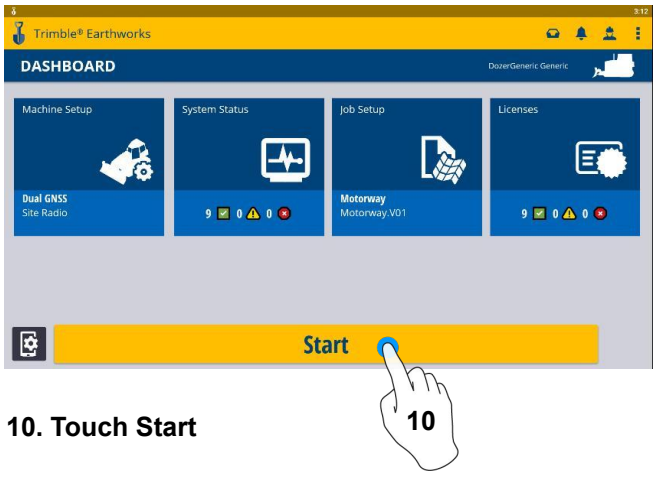
5. Touch Add Work Order



6. Type in New Work Order Name
7. Touch Save

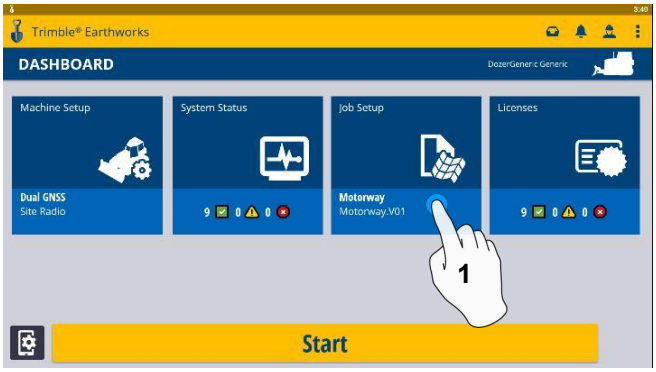


8. Select Design
9. Touch Apply

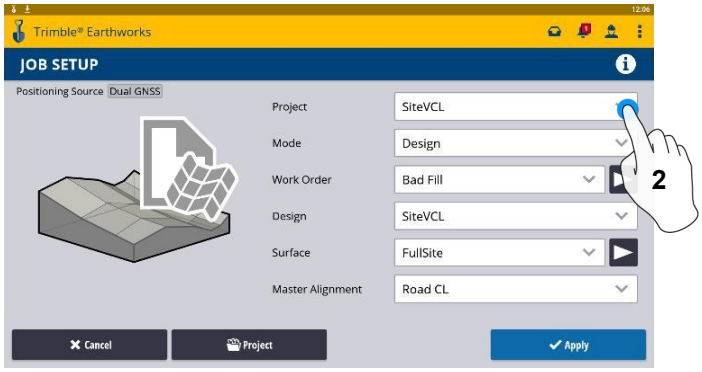


10. Touch Start

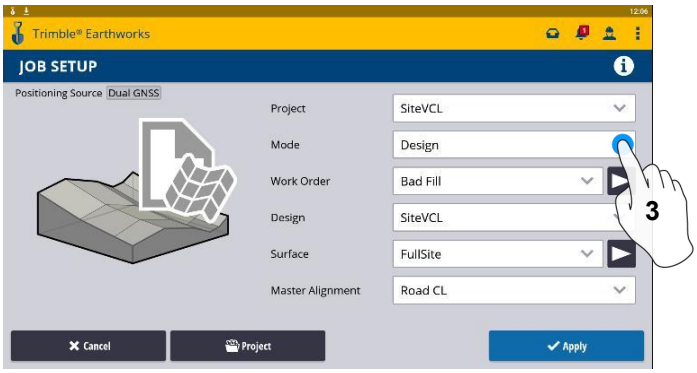
Select Project, Design, and Work Order: VCL



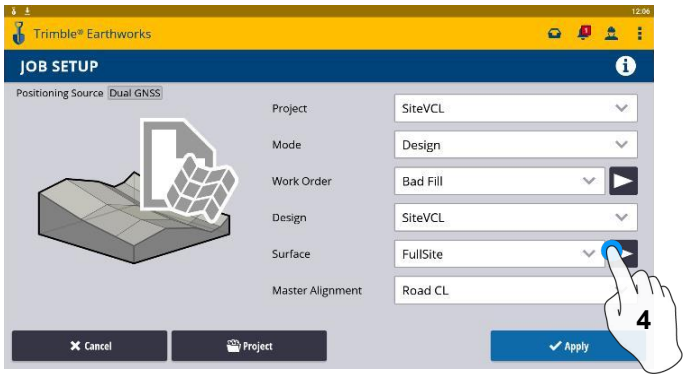
1. Touch Job Setup



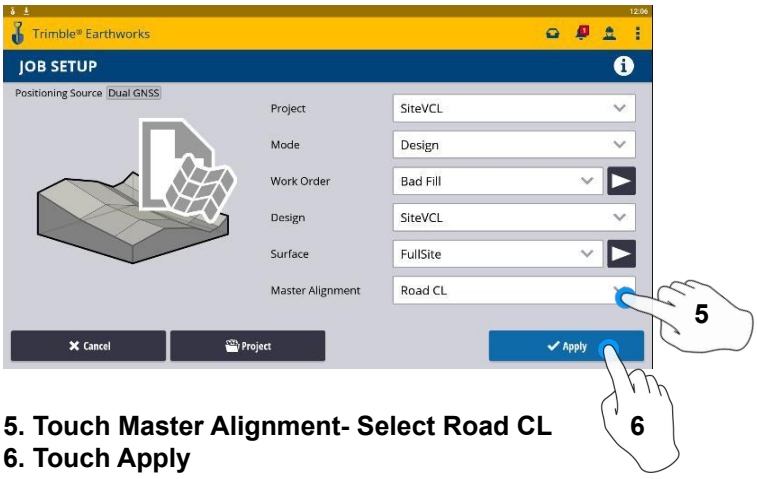
2. Touch Project- Select Site VCL



3. Touch Design- Select SiteVCL

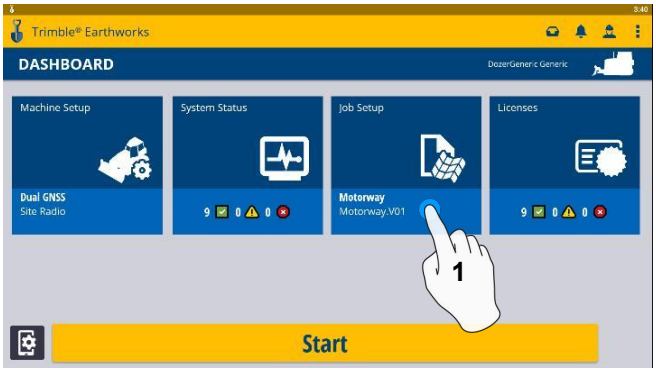


4. Touch Surface- Select Surface

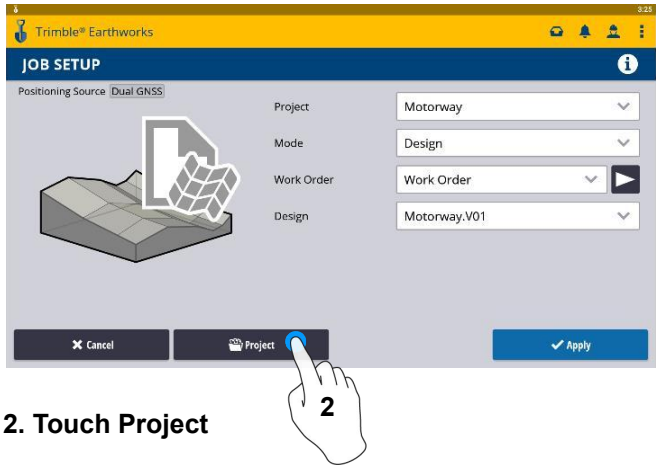


5. Touch Master Alignment- Select Road CL
6. Touch Apply

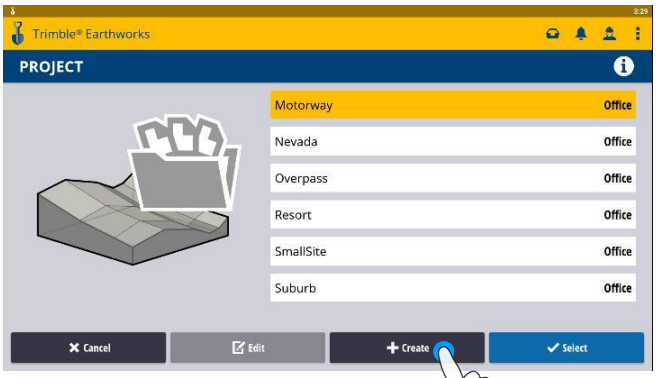
Create Project



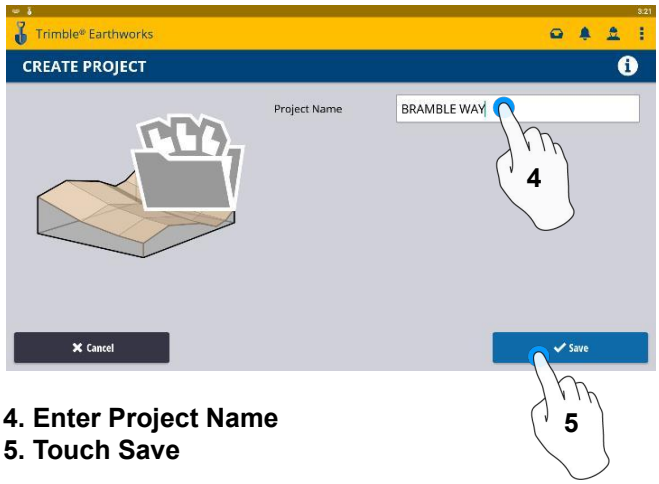
1. Touch Job Setup



2. Touch Project

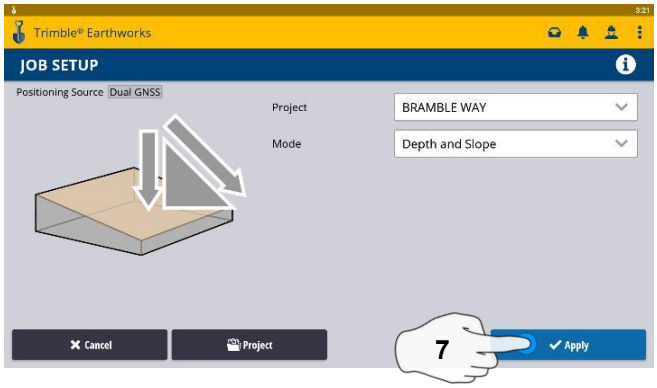


3. Touch Create



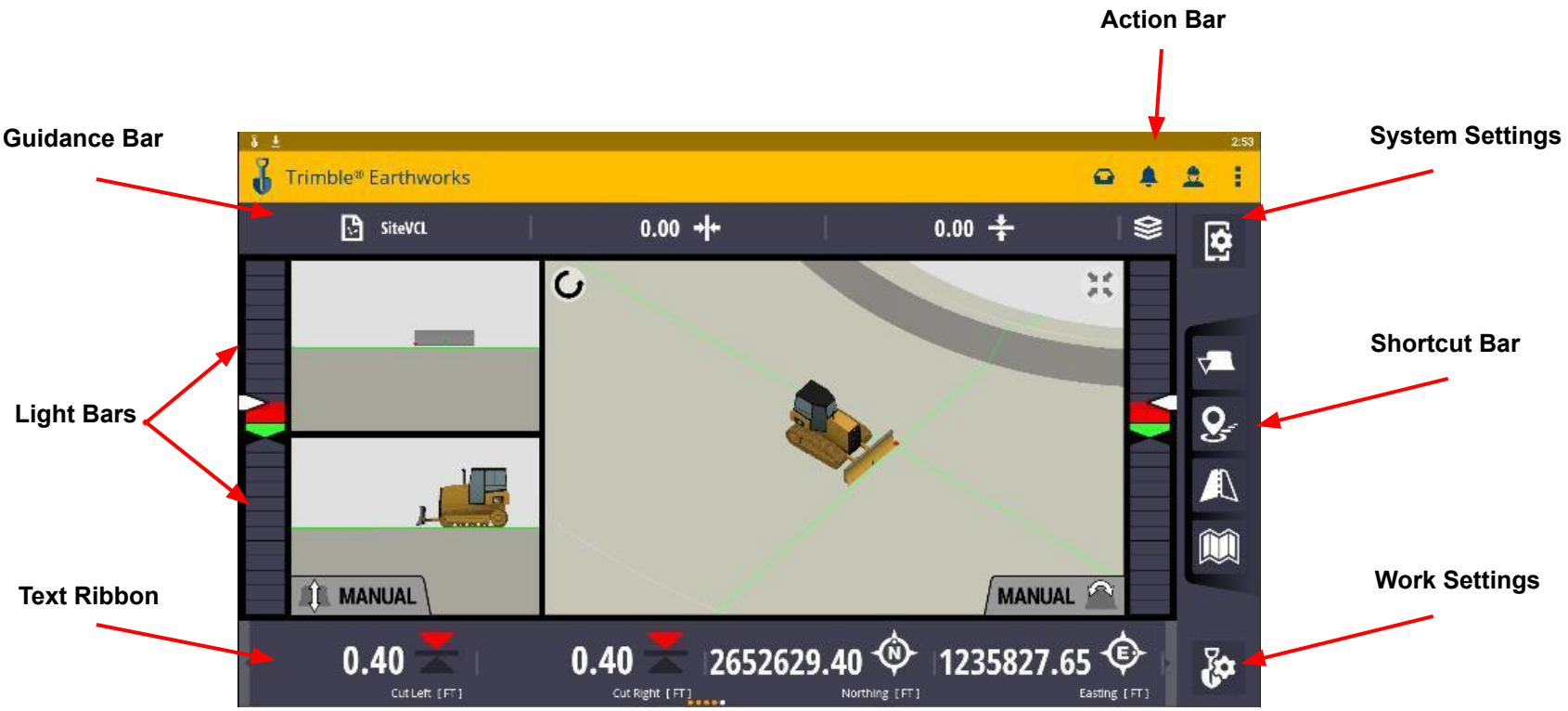
4. Enter Project Name
5. Touch Save

6. Touch Select

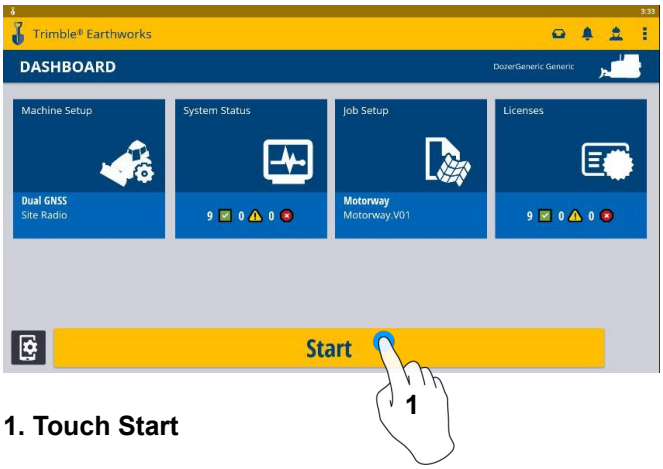


7. Touch Apply
8. Touch Start

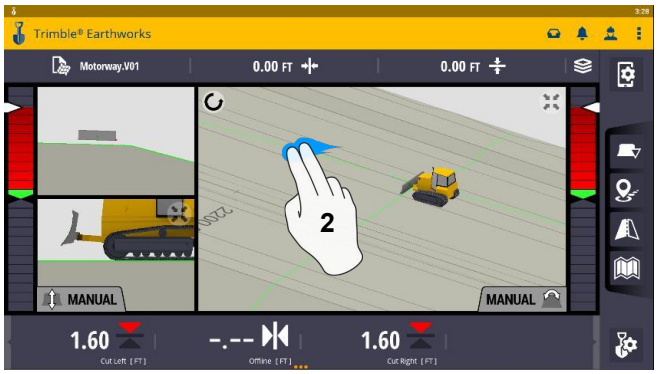
Earthworks Screen



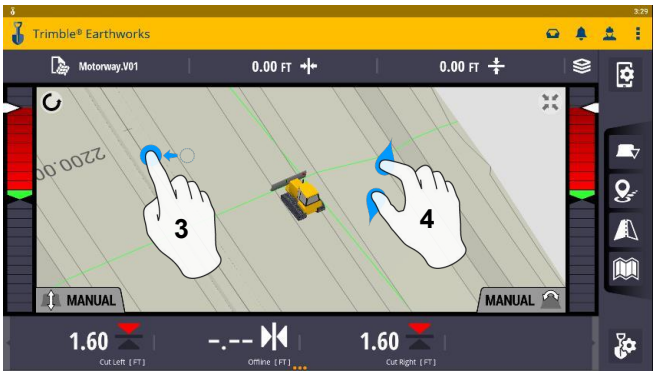
Work Screen Interface



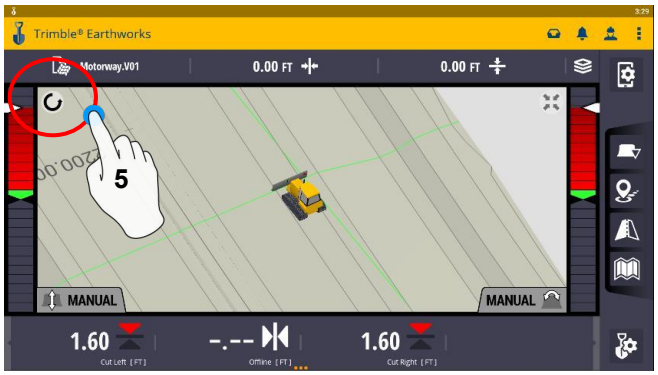
1. Touch Start



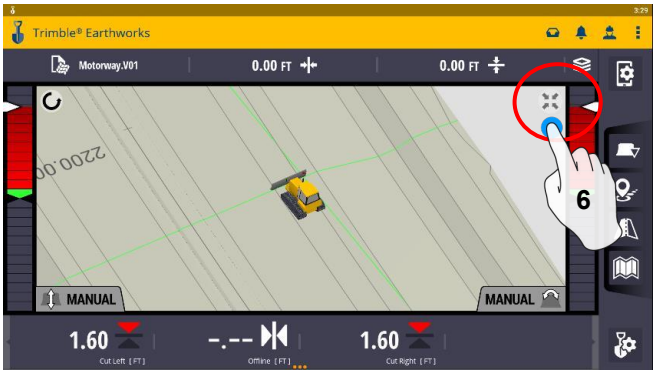
2. 2 Finger swipe to change views



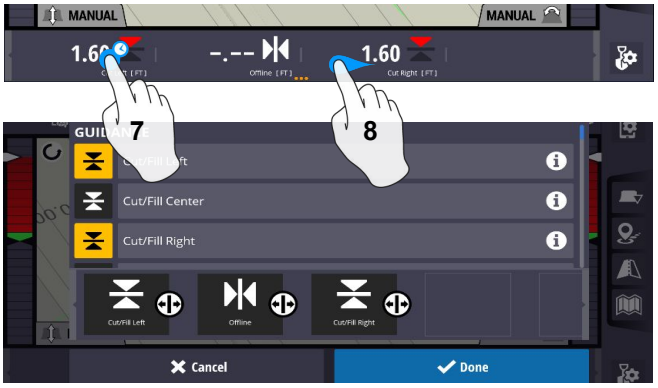
3. Drag to pan
4. Pinch-Spread to zoom



5. Touch to select Pan or Rotate

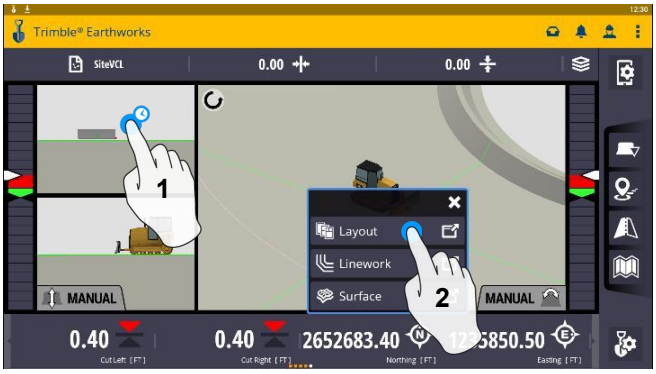


6. Touch to re-center

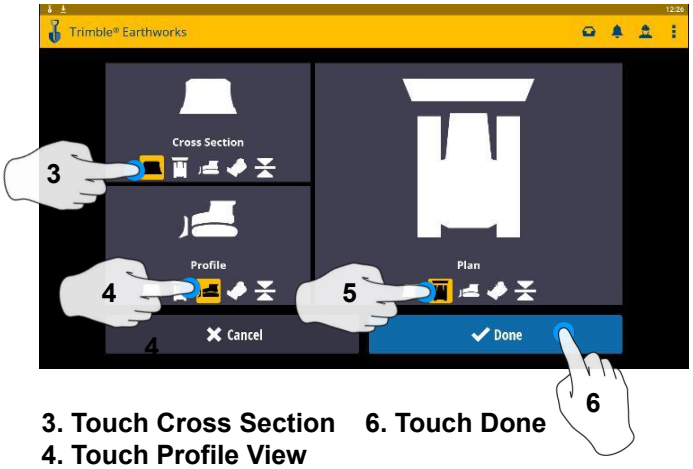


7. Touch and Hold for Setup
8. Swipe to change view

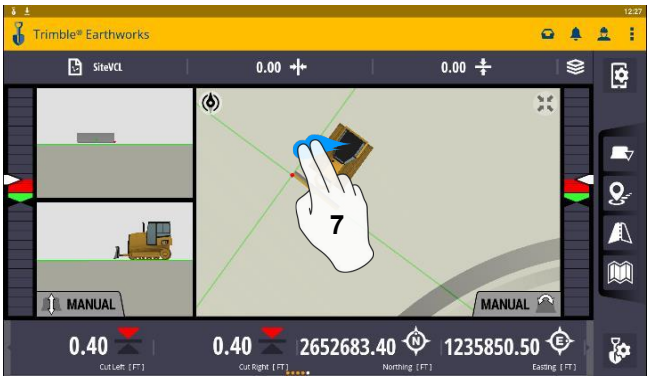
Work Screen Setup



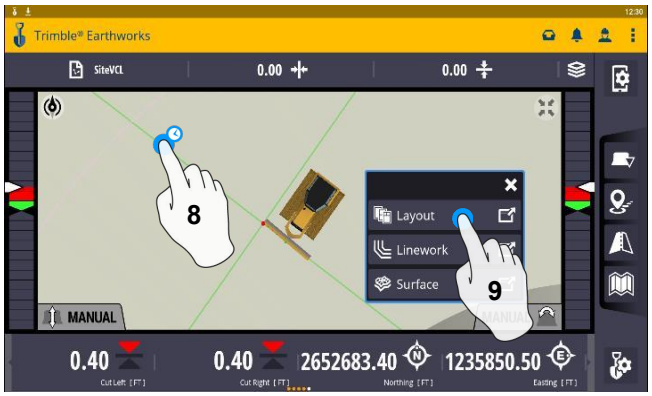
1. Touch and hold
2. Touch Layout



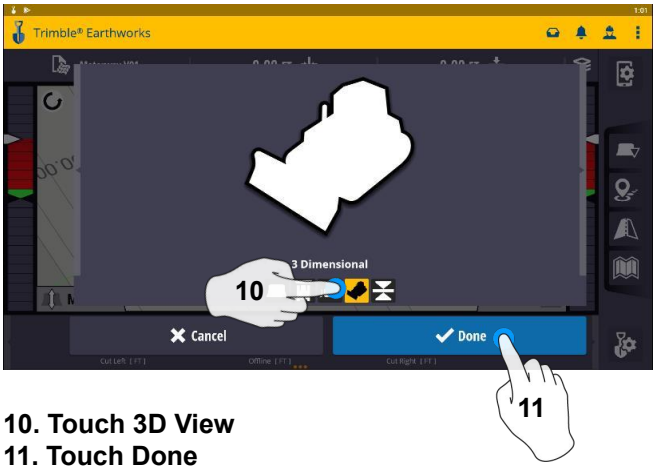
3. Touch Cross Section
4. Touch Profile View
5. Touch Plane View
6. Touch Done



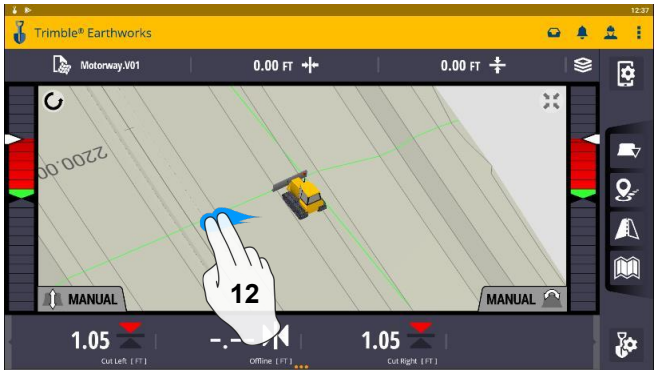
7. 2 Finger Swipe to single view



8. Touch and Hold
9. Touch Layout

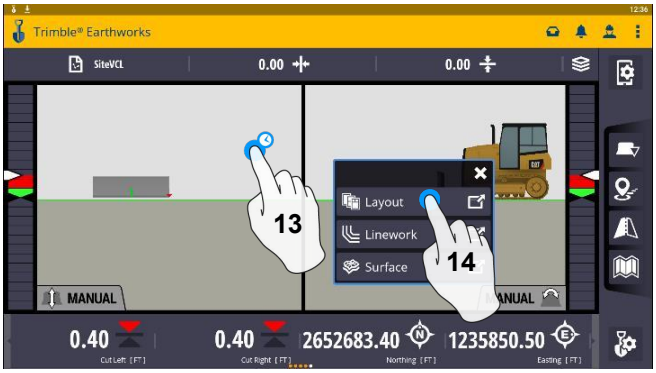


10. Touch 3D View
11. Touch Done

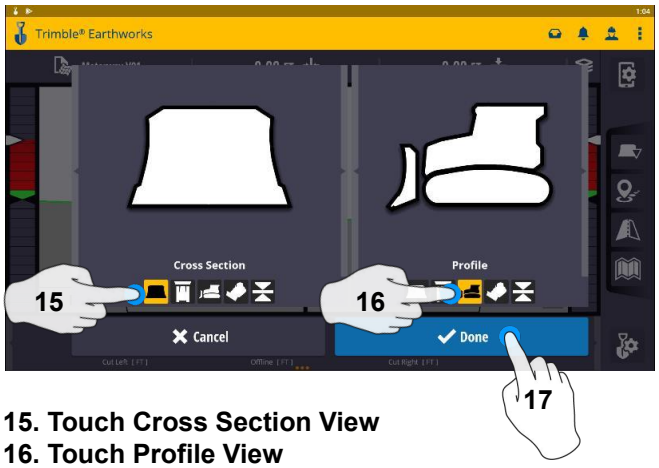


12. 2 Finger swipe to 2 Screen View

Work Screen Setup Cont:

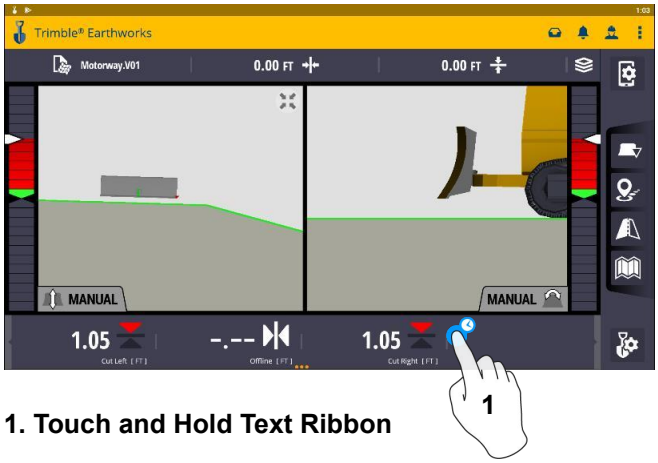


13. Touch and Hold
14. Touch Layout

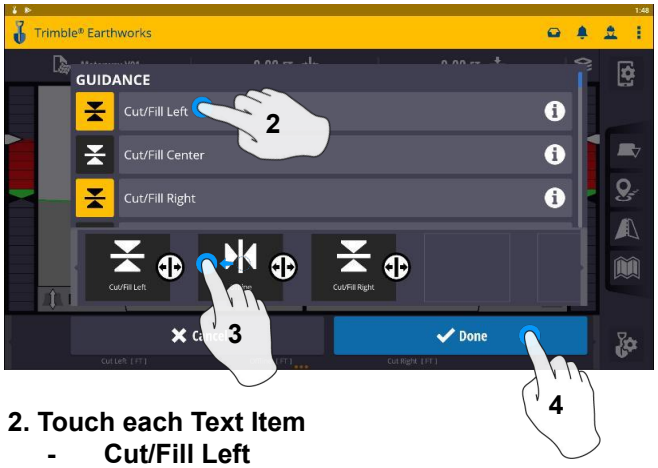


15. Touch Cross Section View
16. Touch Profile View
17. Touch Done

Text Ribbon Setup

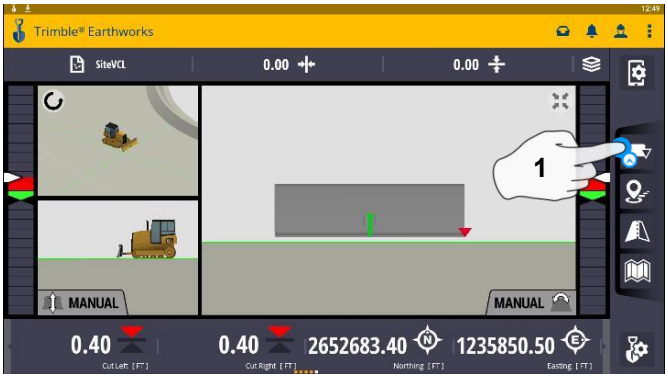


1. Touch and Hold Text Ribbon

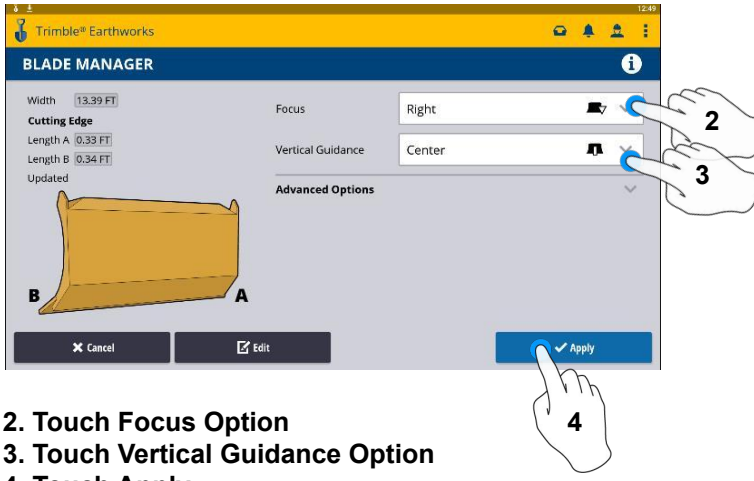


2. Touch each Text Item
   - Cut/Fill Left
   - Offline
   - Station
   - Cut/Fill right
   - Northing
   - Easting
   - Elevation
   - Design Elevation
   - Design Cross Slope
   - Design Mainfall
   - Vertical GNSS Precision
   - Satellite Count
3. Touch-Hold-Drag to change position
4. Touch Done

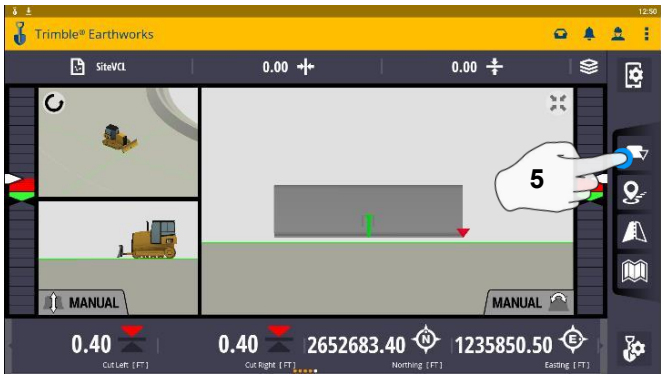
Blade Focus Point / Vertical Guidance



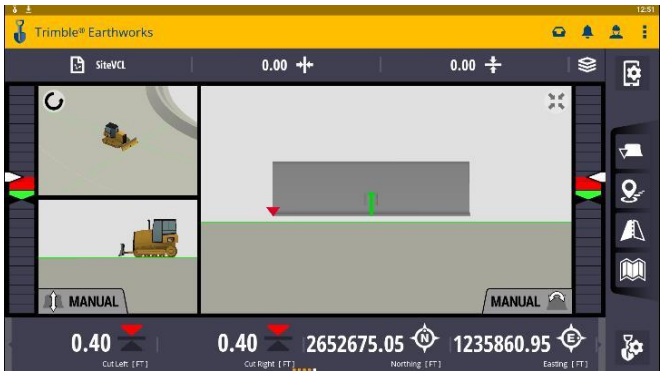
1. Touch and Hold Blade Icon



2. Touch Focus Option
3. Touch Vertical Guidance Option
4. Touch Apply

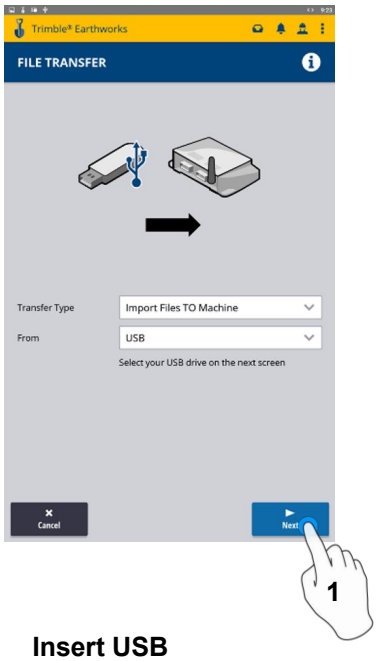


5. Touch Blade Icon to change focus point

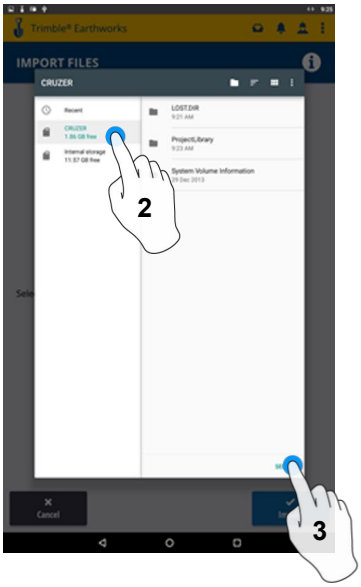


NOTE: "LINK TO FOCUS" vertical guidance will follow focus point.

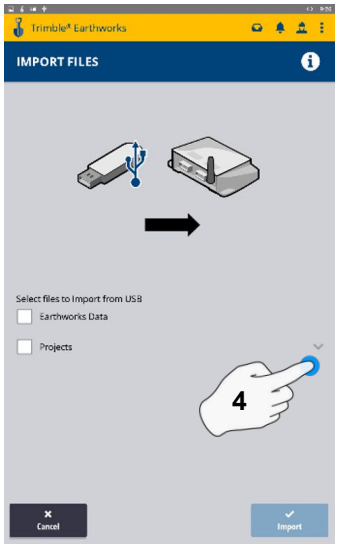
Import Data With USB



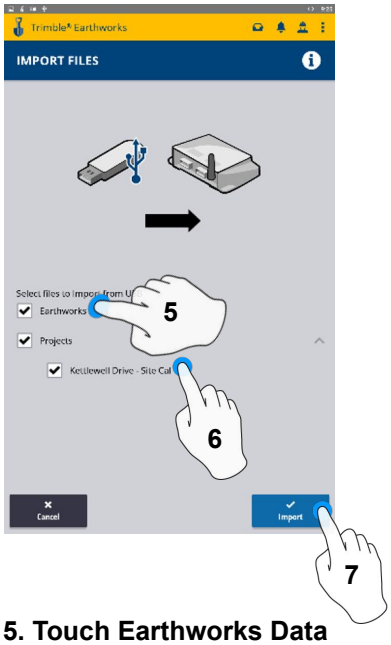
Insert USB
1. Touch Next



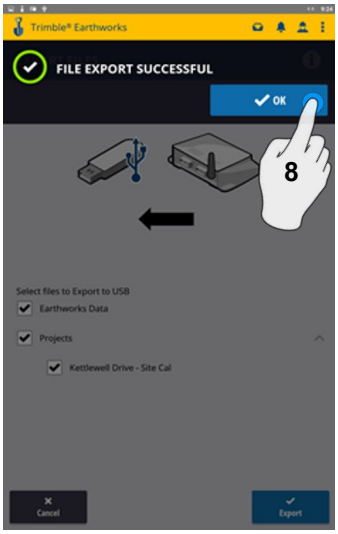
2. Touch USB
3. Touch Select



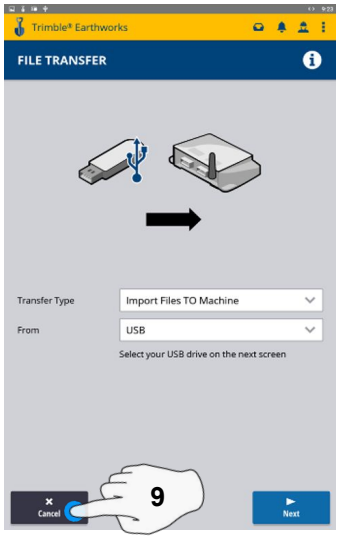
4. Touch "v"



5. Touch Earthworks Data
6. Touch Project
7. Touch Import

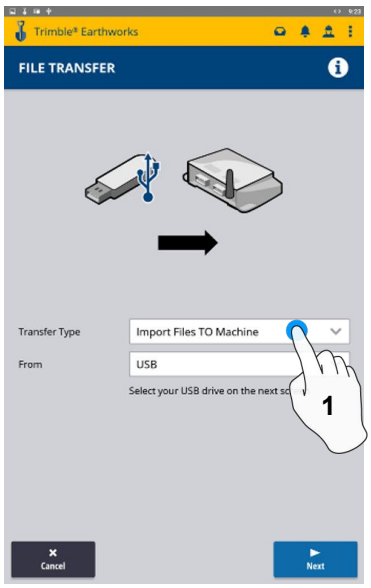


8. Touch OK

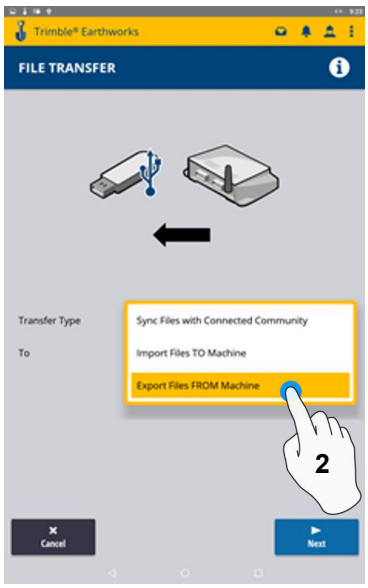


9. Touch Cancel
Remove USB

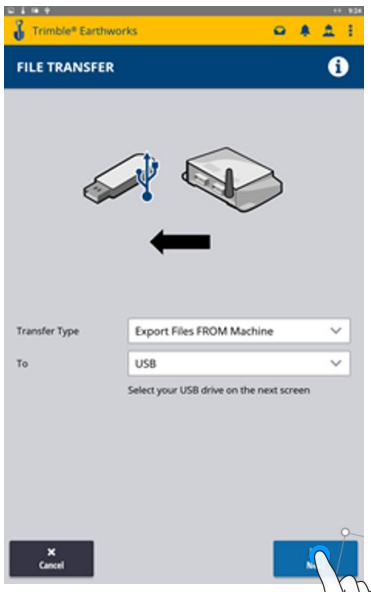
Export Data With USB



Insert USB
1. Touch Transfer Type

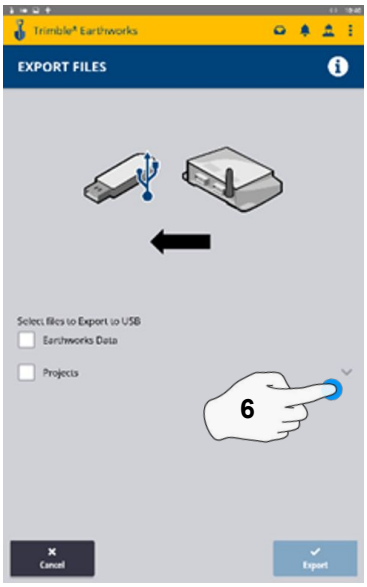


2. Touch Export Files

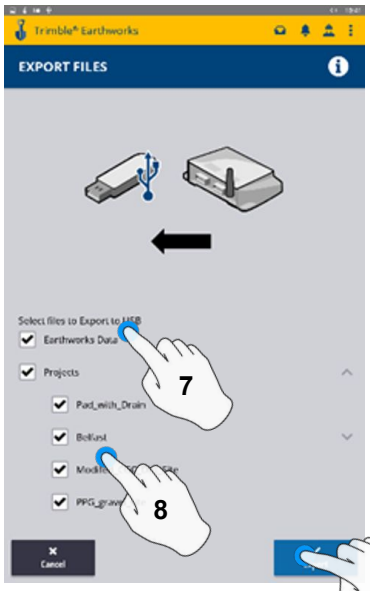


3. Touch Next

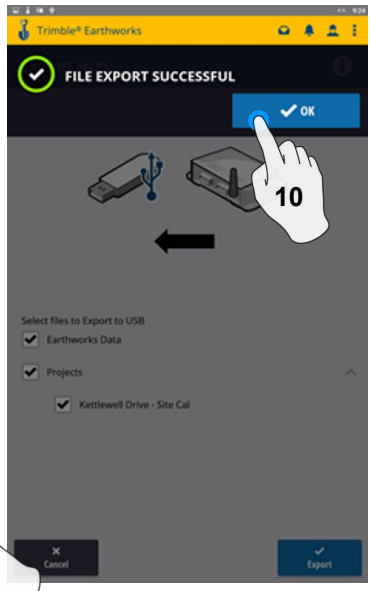
4. Touch USB
5. Touch Select



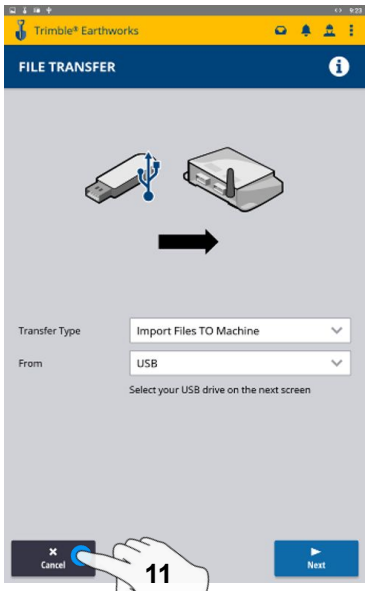
6. Touch "V"



7. Touch Earthworks Data
8. Touch Projects
9. Touch Export

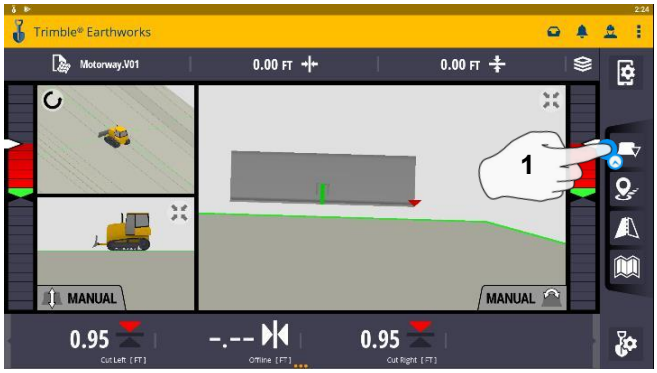


10. Touch OK

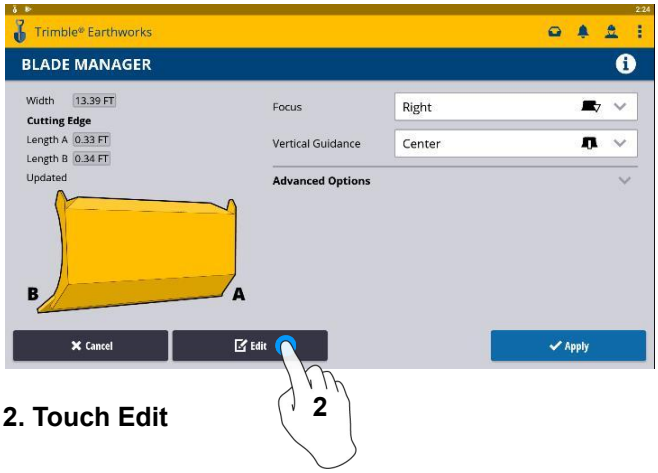


11. Touch Cancel
Remove USB

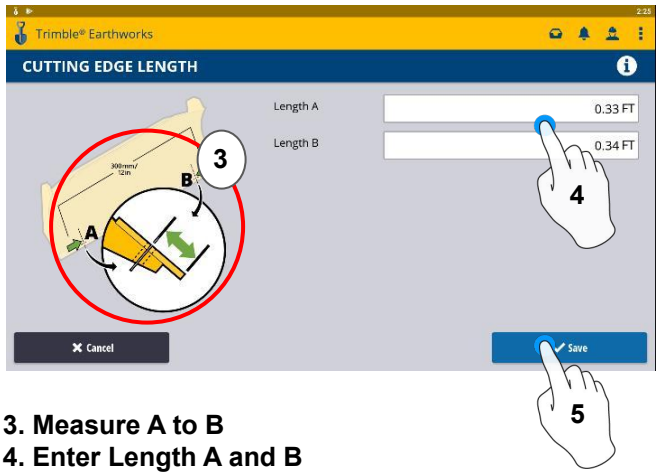
Cutting Edge Wear and Overcut Protection



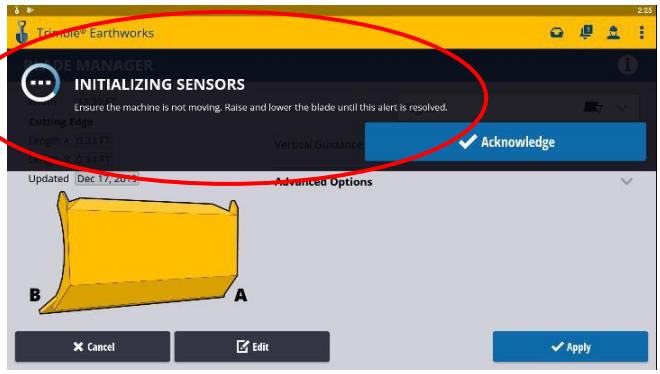
1. Touch and hold Focus Icon



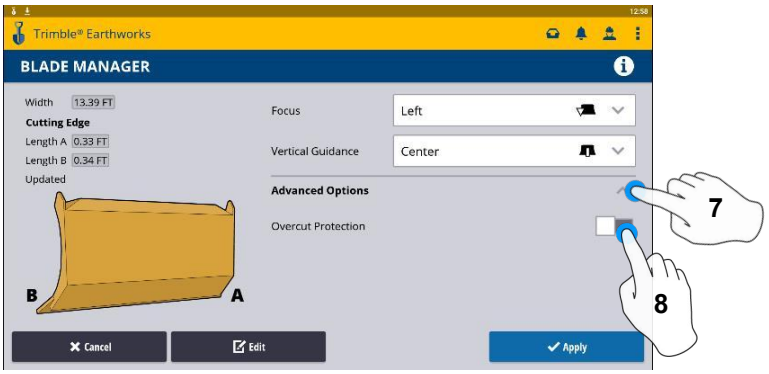
2. Touch Edit



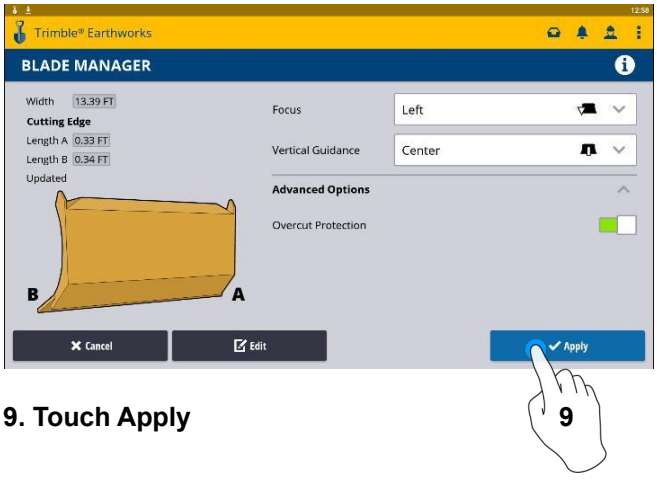
3. Measure A to B
4. Enter Length A and B
5. Touch Save



6. Keep the Blade still, let sensors initialize



7. Touch Advanced Options
8. Touch Overcut Protection

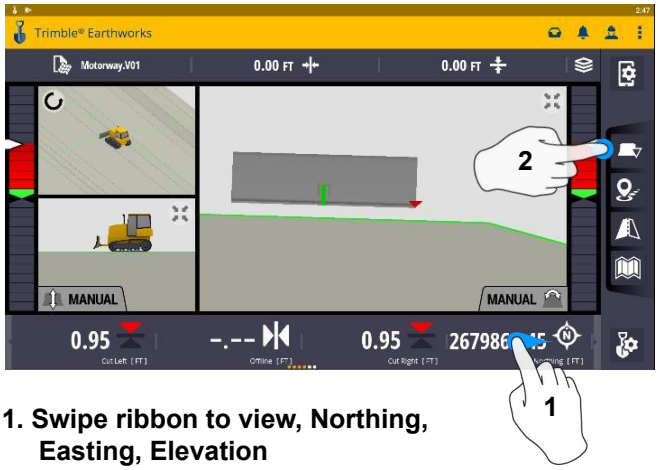


9. Touch Apply

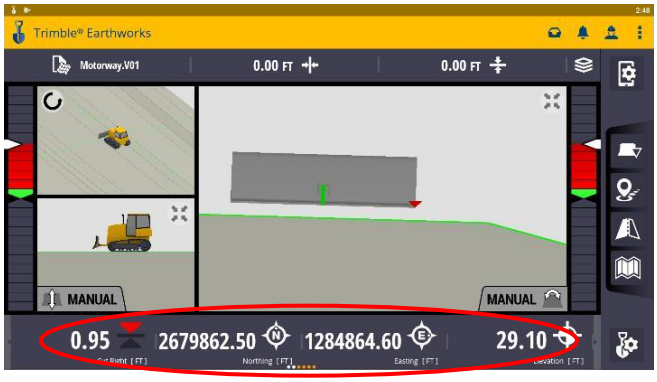
Verify System Accuracy

Verify the system accuracy by checking into a bench

Position the blade tip over the bench point



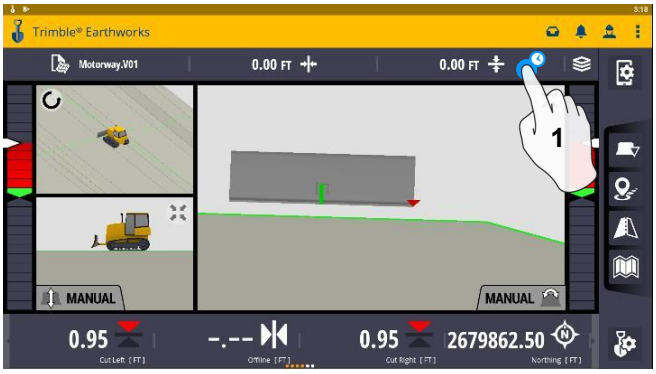
1. Swipe ribbon to view, Northing, Easting, Elevation
2. Touch blade focus to match verification location



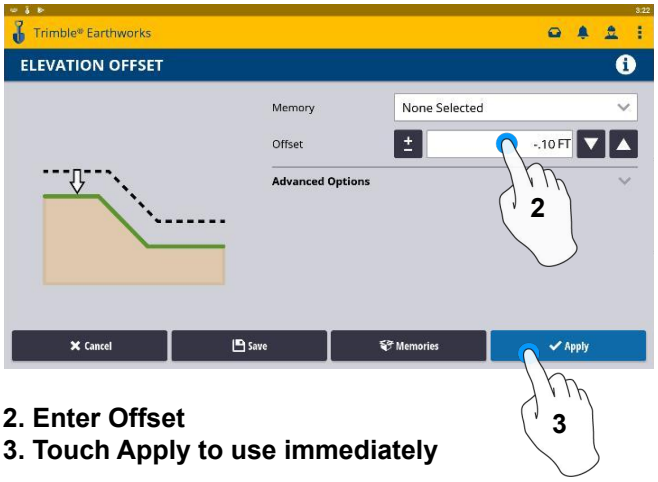
3. Verify Accuracy Northing, Easting, Elevation

See Supervisor if Northing, Easting and Elevation do not match Project tolerances

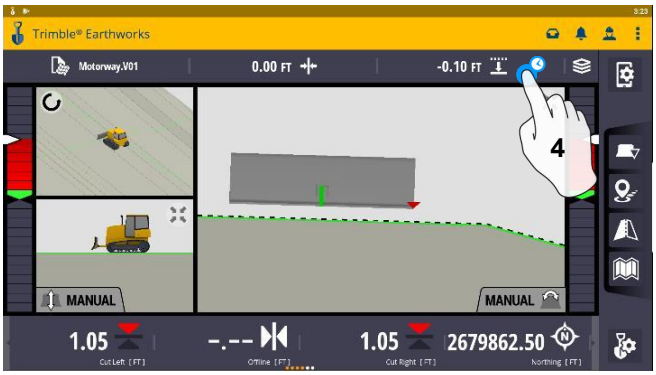
Vertical Offset / Memories



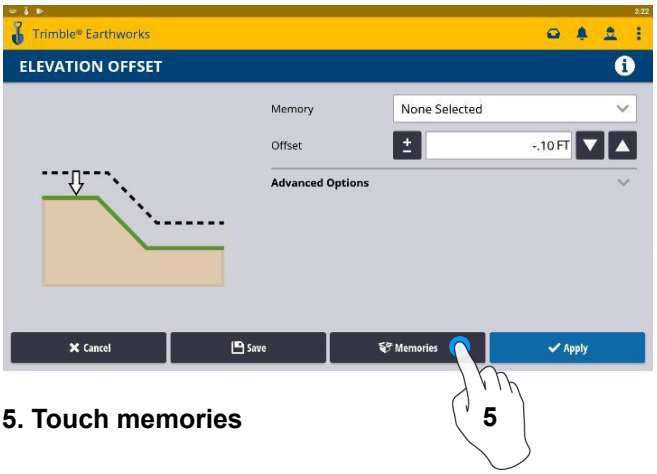
1. Touch and hold Vertical Offsets



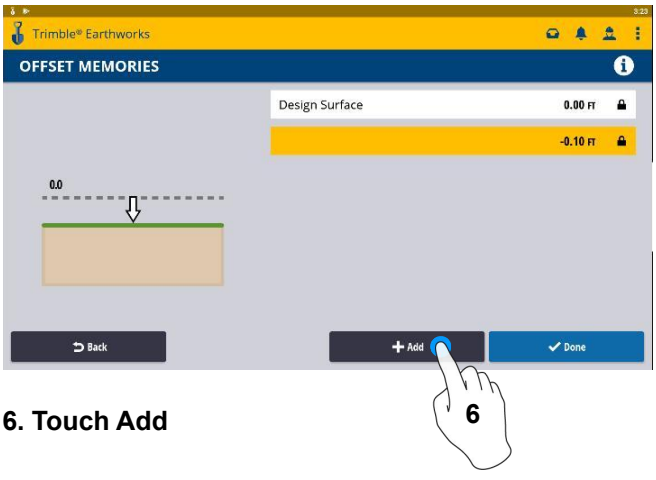
2. Enter Offset
3. Touch Apply to use immediately



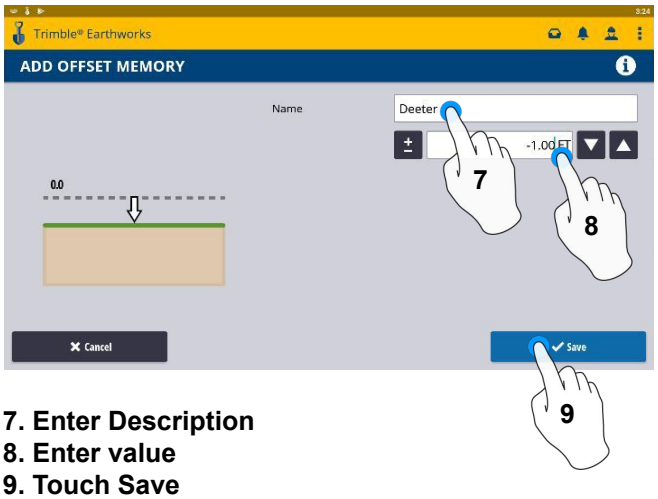
4. Touch and Hold Vertical Offsets



5. Touch memories

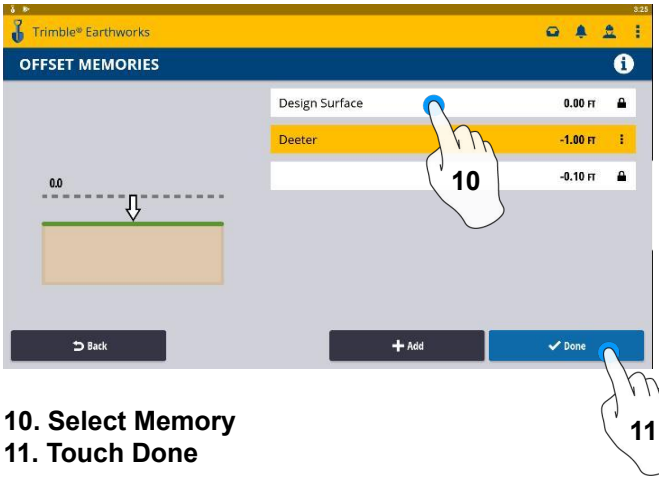


6. Touch Add

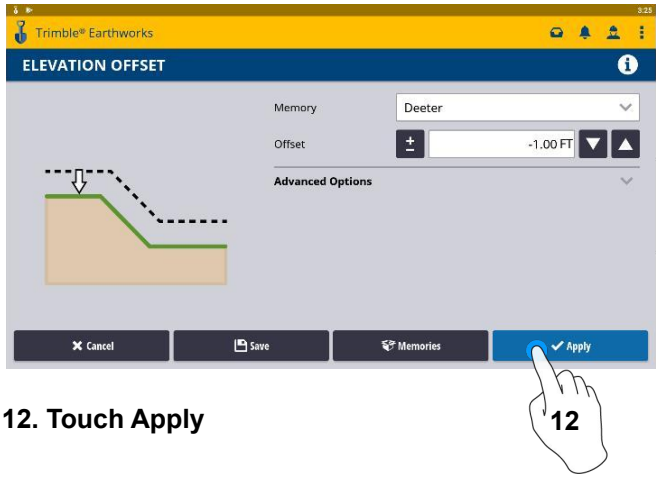


7. Enter Description
8. Enter value
9. Touch Save

Vertical Offset / Memories Cont:

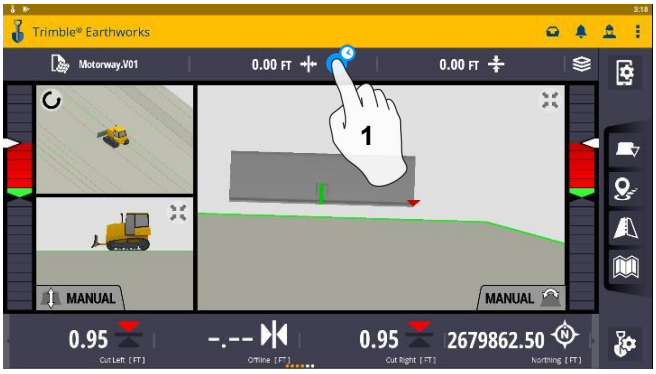


10. Select Memory
11. Touch Done

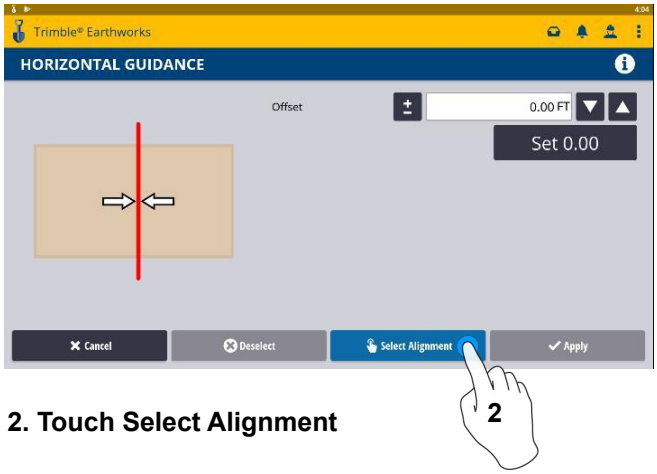


12. Touch Apply

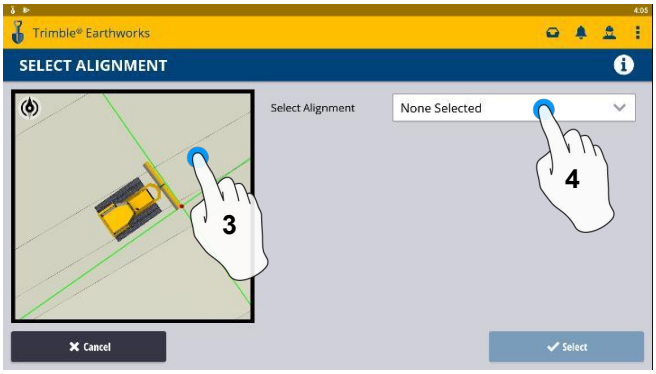
Horizontal Offset



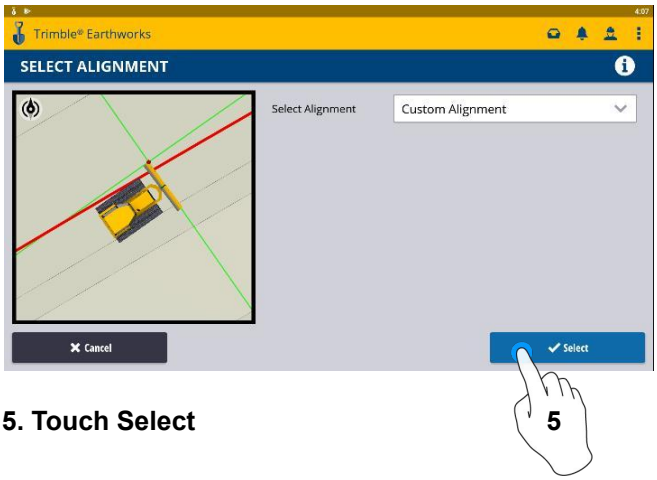
1. Touch and hold Horizontal Offset



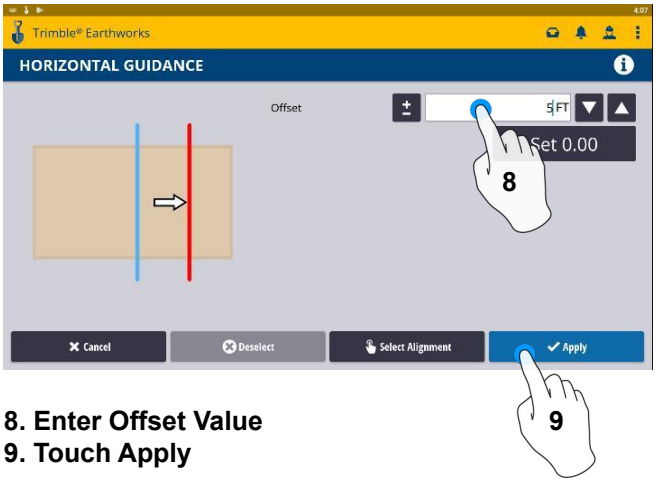
2. Touch Select Alignment



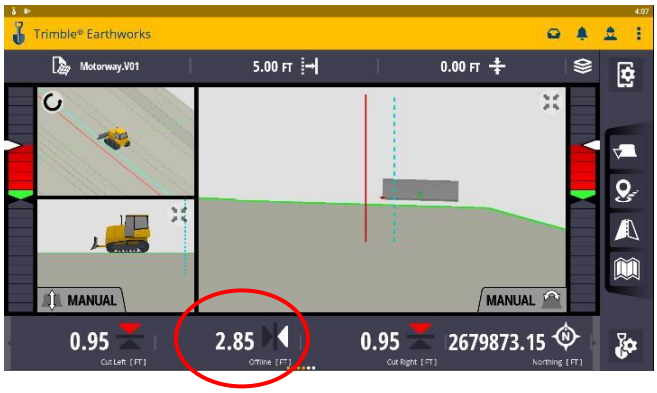
3. Touch Line OR
4. Touch and Select Alignment



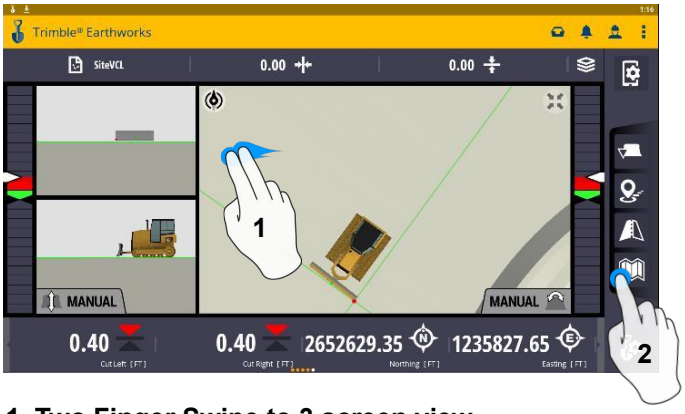
5. Touch Select

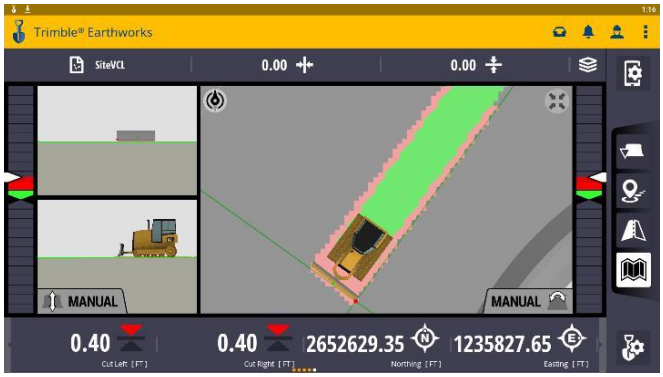


8. Enter Offset Value
9. Touch Apply



Cut Fill Mapping

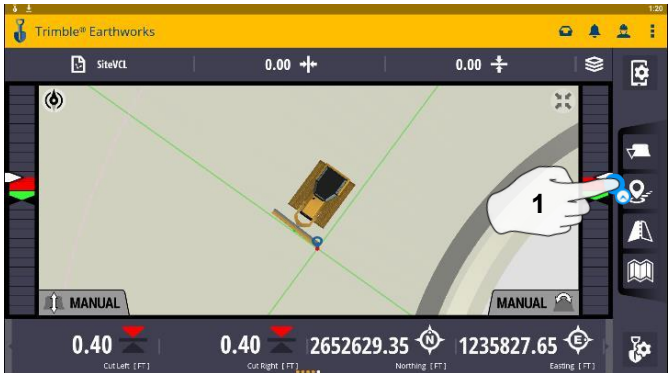




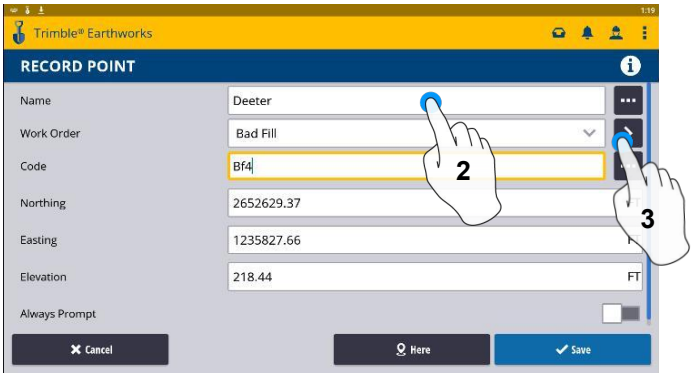
1. Two Finger Swipe to 3 screen view
2. Touch Mapping Icon to View

****Cut Fill Mapping will only be visible in Plan, Cross section, and Profile views****

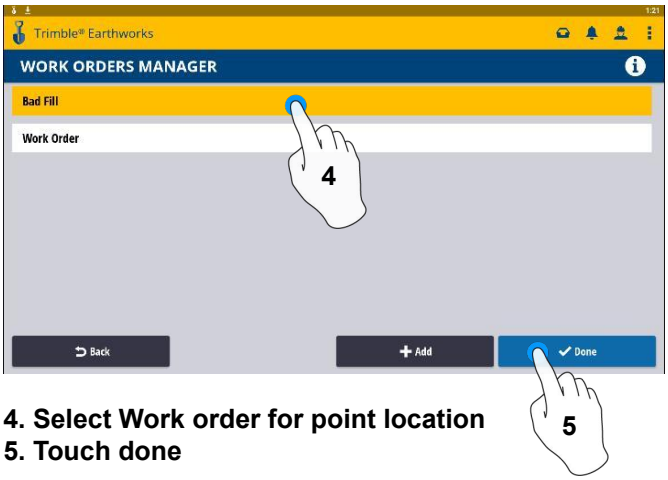
Record Point



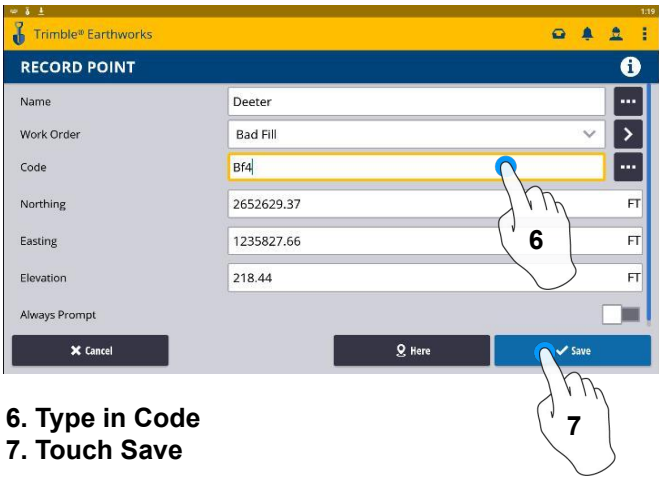
1. Touch and Hold Record Point



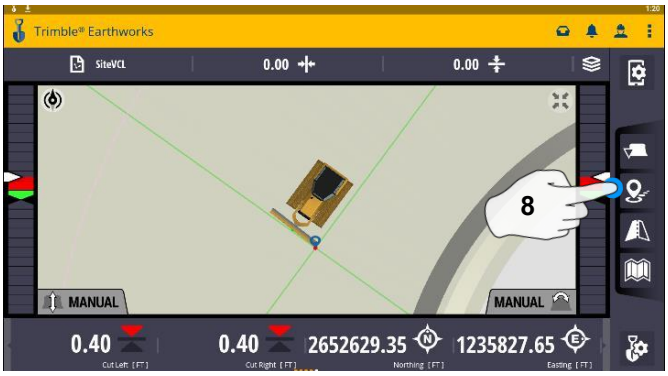
2. Touch to Edit Name
3. Touch and select Work Order



4. Select Work order for point location
5. Touch done



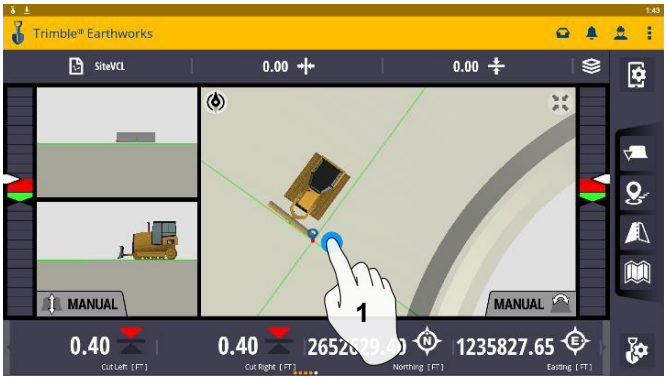
6. Type in Code
7. Touch Save



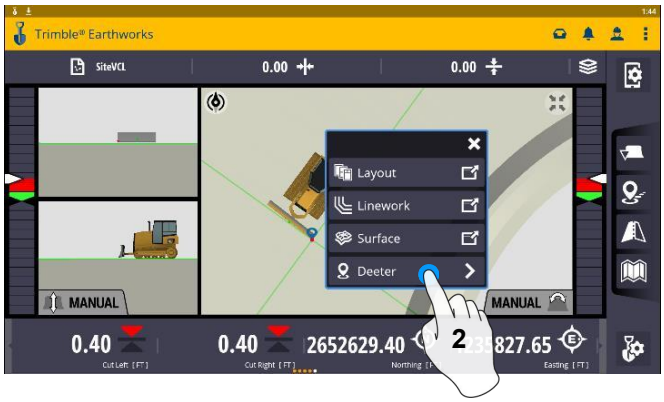
8. Touch Point Icon Records Point

**** Note- After recording a point, it will save automatically in Work Order Created during project setup. ****

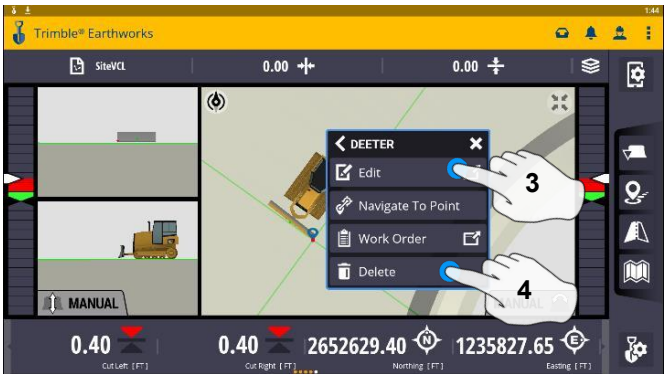
Delete / Edit Point



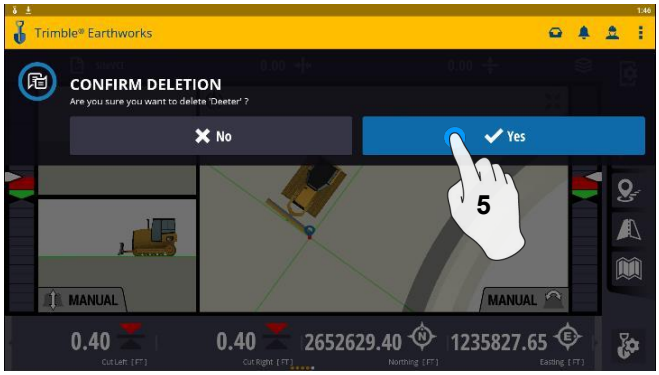
1. Touch and hold over point created



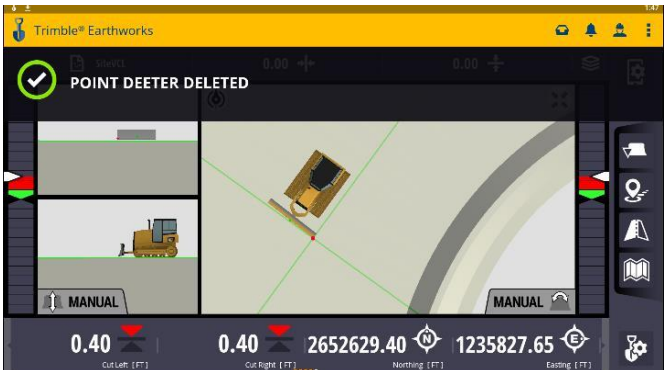
2. Touch point information



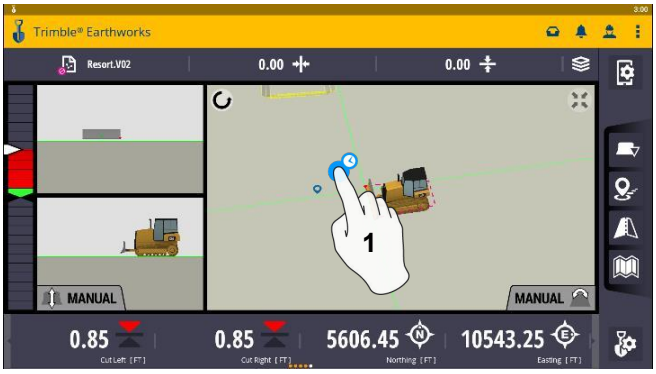
3. Edit point information if needed
4. Touch Delete



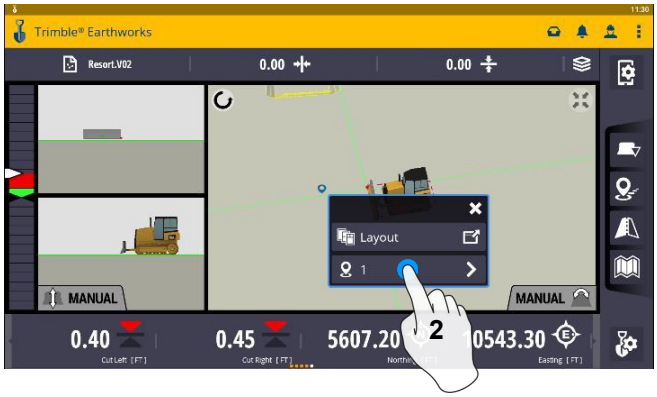
5. Touch Yes to Confirm Delete
(once deleted can no longer retrieve)



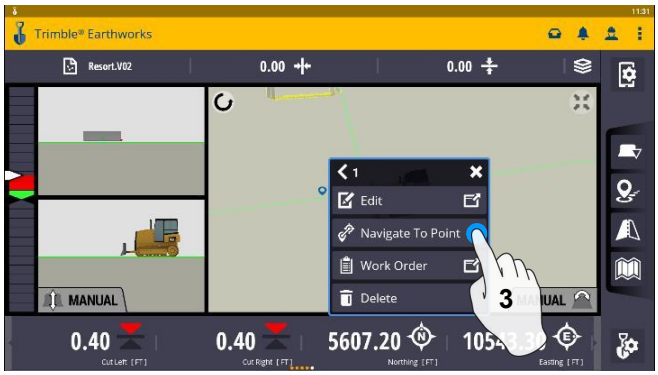
Navigate to Point



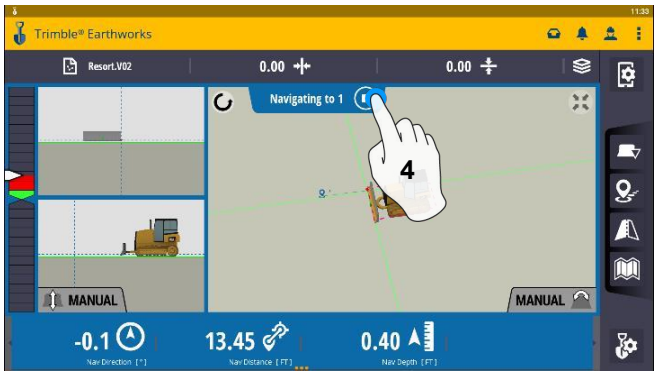
1. Touch and hold next to point



2. Touch Point Name

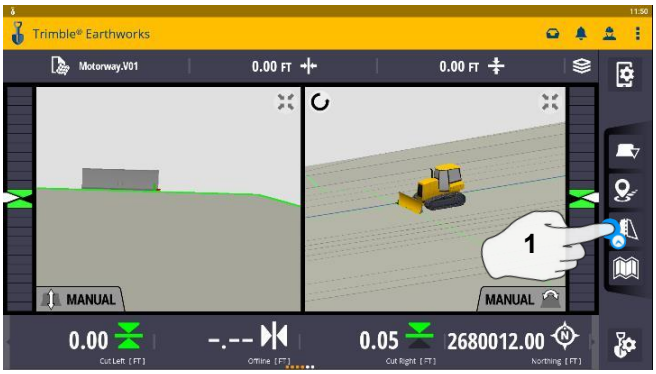


3. Touch Navigate To Point

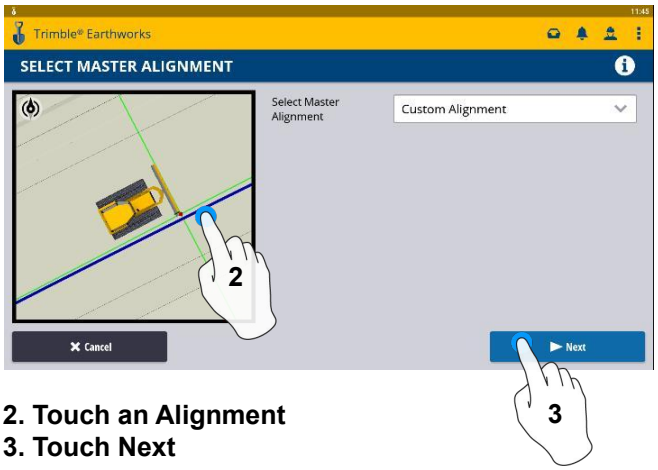


4. Touch to Exit

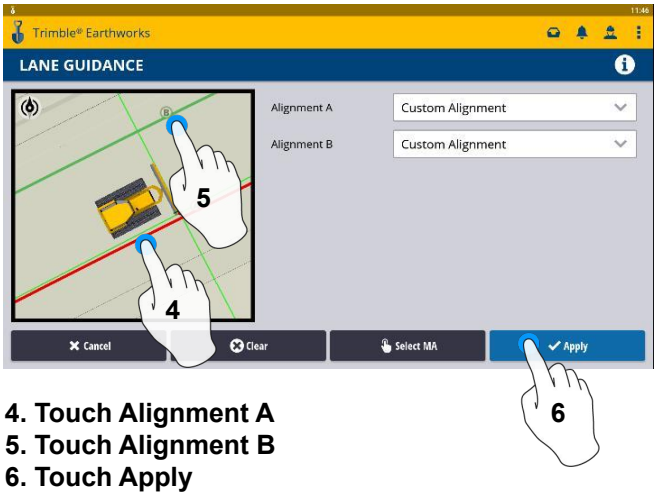
Lane Guidance



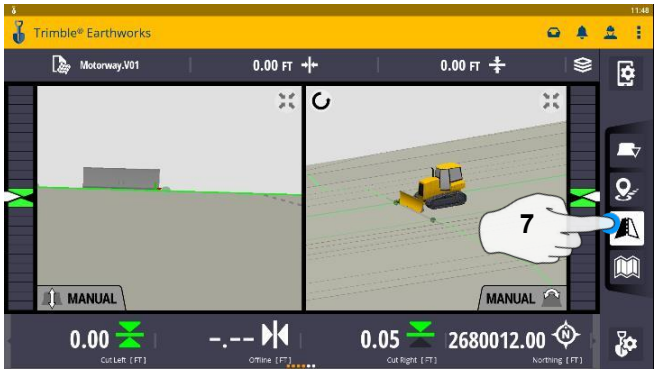
1. Touch and hold Lane Guidance



2. Touch an Alignment
3. Touch Next



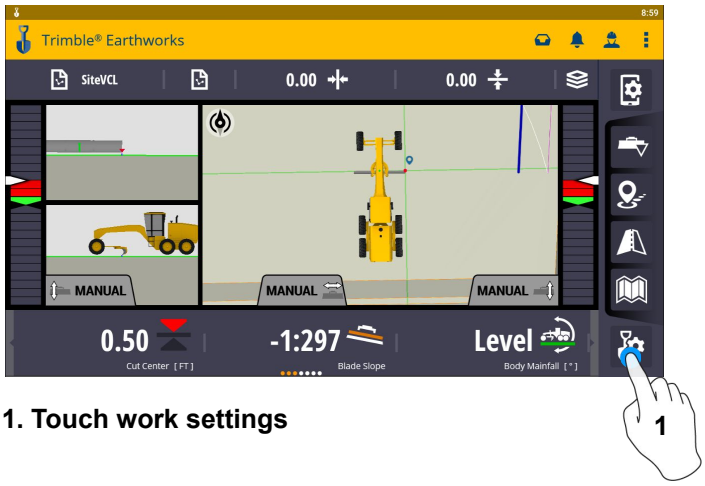
4. Touch Alignment A
5. Touch Alignment B
6. Touch Apply



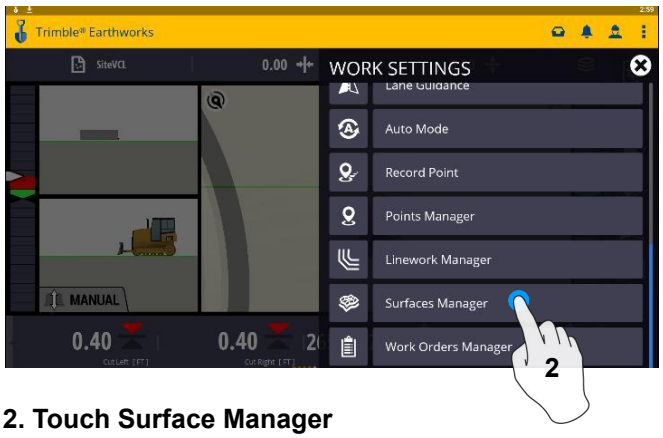
7. Touch Lane Guidance to Cancel

The slope between the two lines will be projected

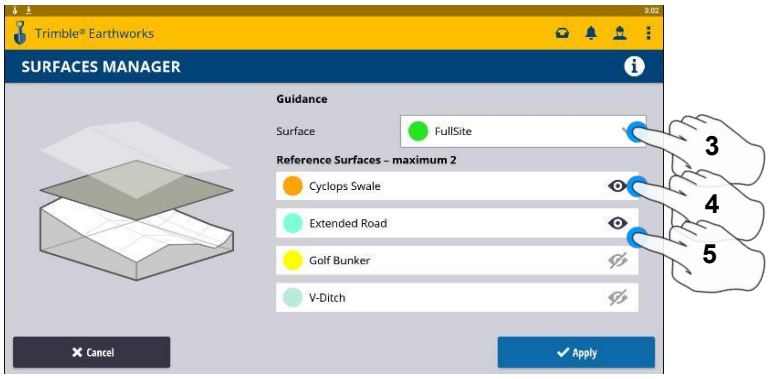
Surface Manager ** Will only work in VCL format Designs**



1. Touch work settings

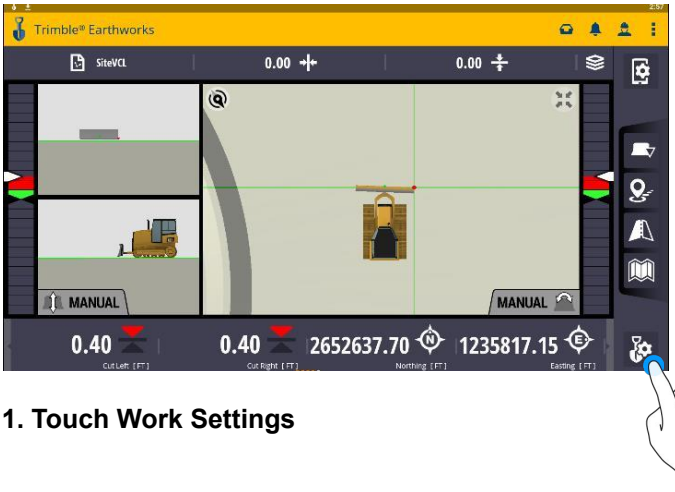


2. Touch Surface Manager

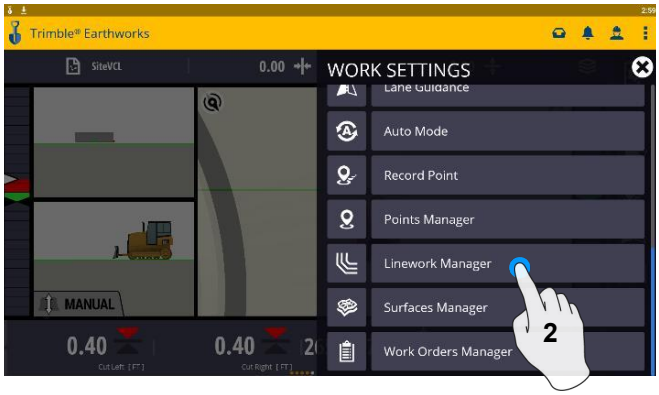


3. Select Surface for guidance
4. Select which Reference Surface(Maximum of 2)
5. Touch Apply

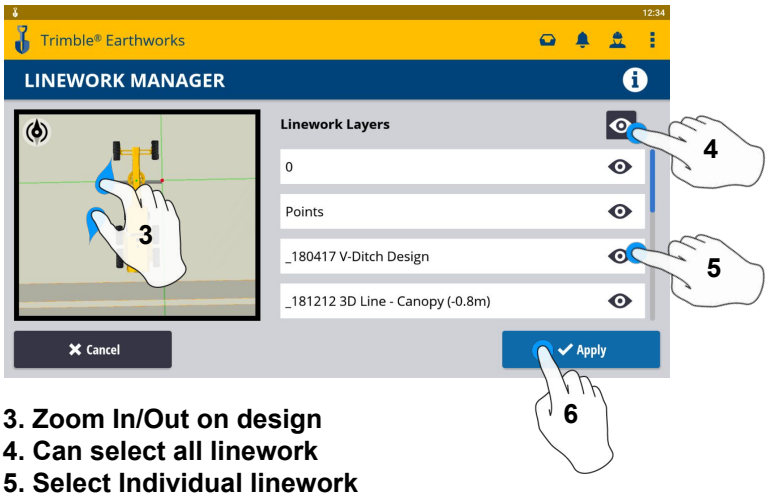
Linework Manager ** Will only work in VCL format Designs**



1. Touch Work Settings

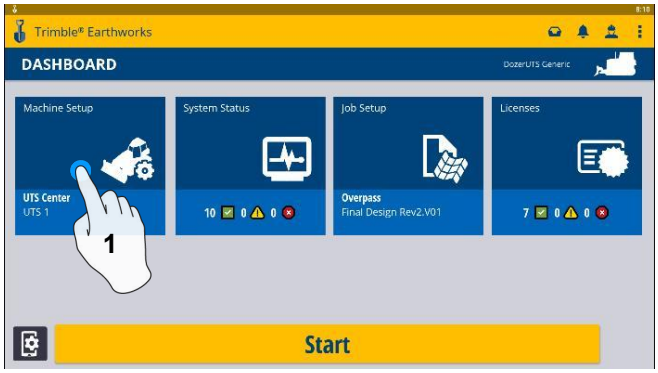


2. Touch Linework manager

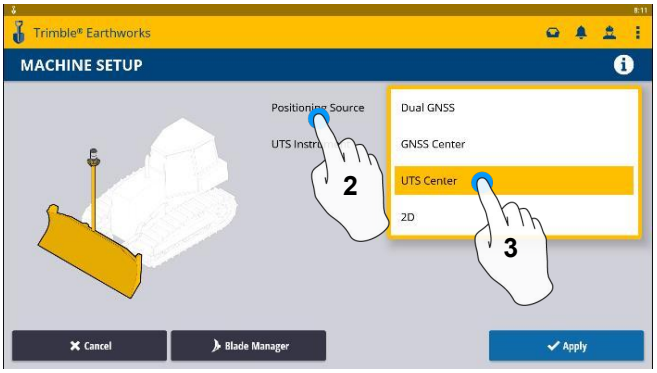


3. Zoom In/Out on design
4. Can select all linework
5. Select Individual linework
6. Touch apply once complete

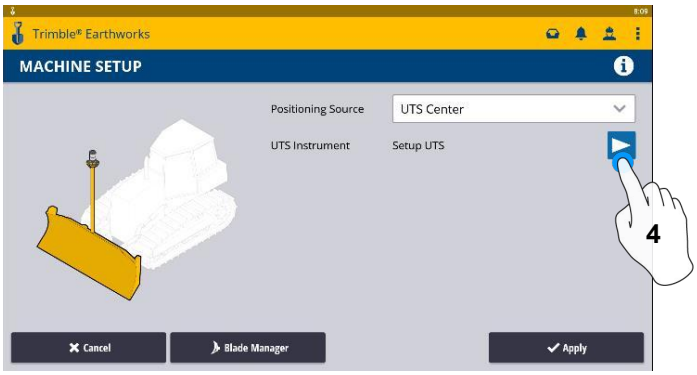
UTS Setup



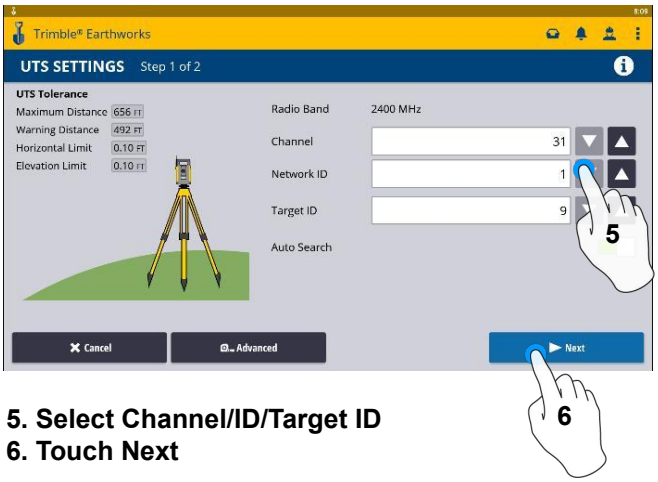
1. Touch Machine Setup



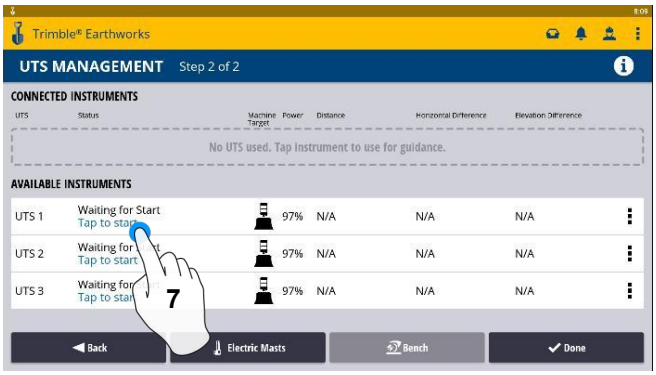
2. Touch Positioning Source
3. Touch UTS



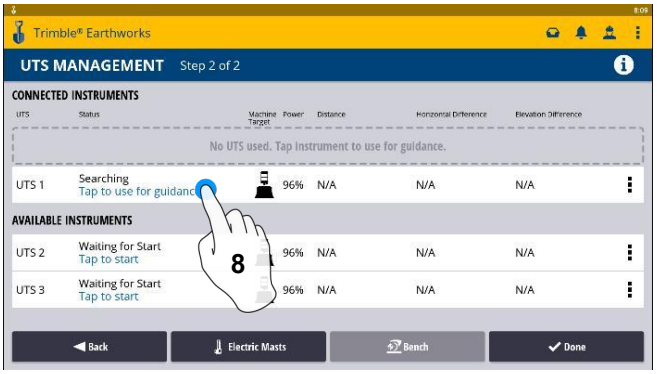
4. Touch to Edit/Add UTS



5. Select Channel/ID/Target ID
6. Touch Next

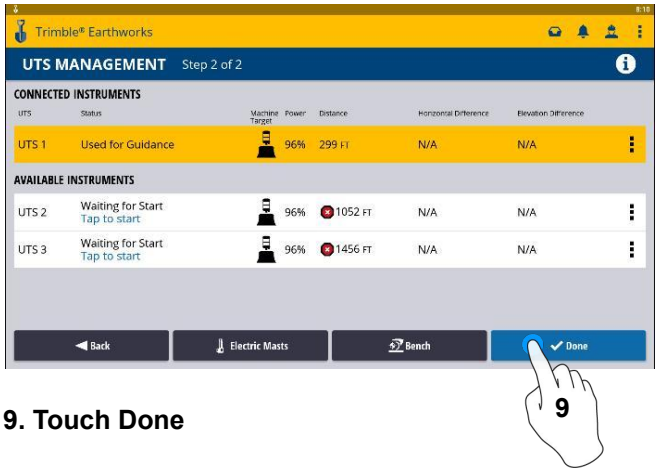


7. Touch to Start

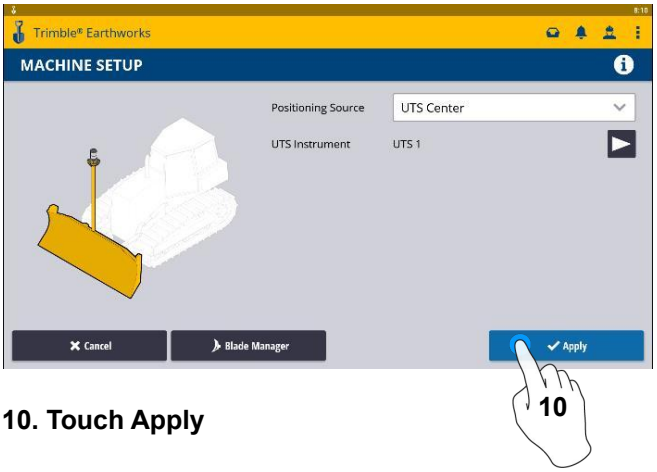


8. Touch to use for guidance

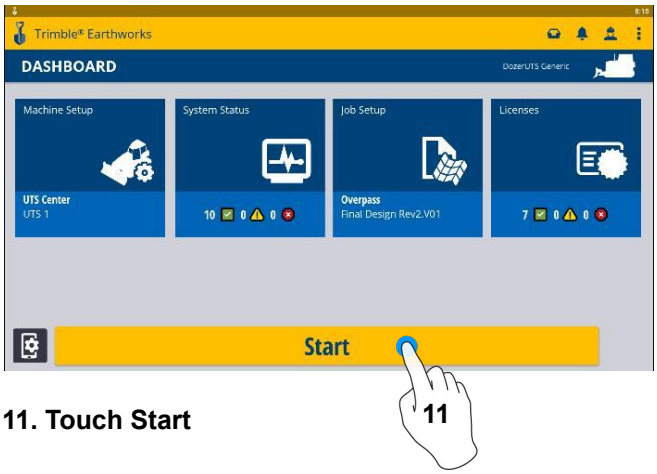
UTS Setup Cont:



9. Touch Done

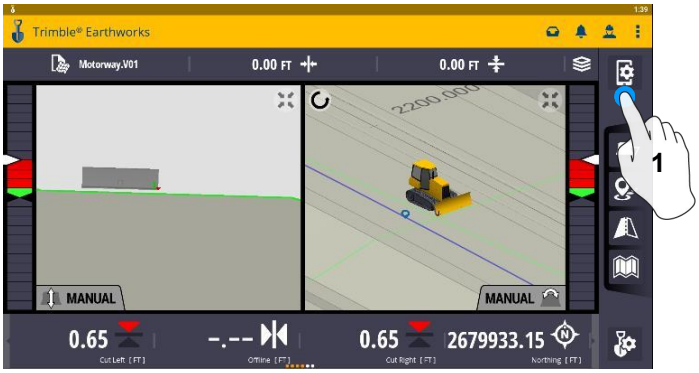


10. Touch Apply

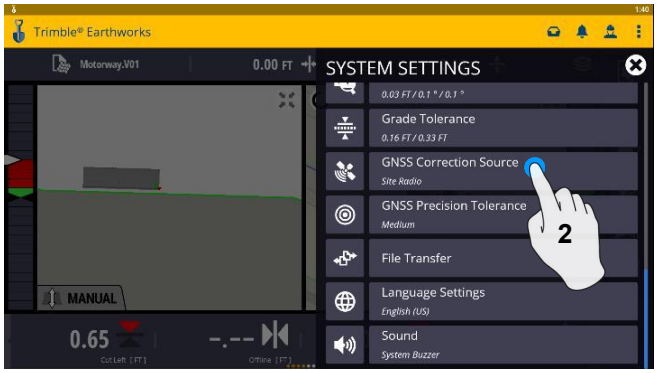


11. Touch Start

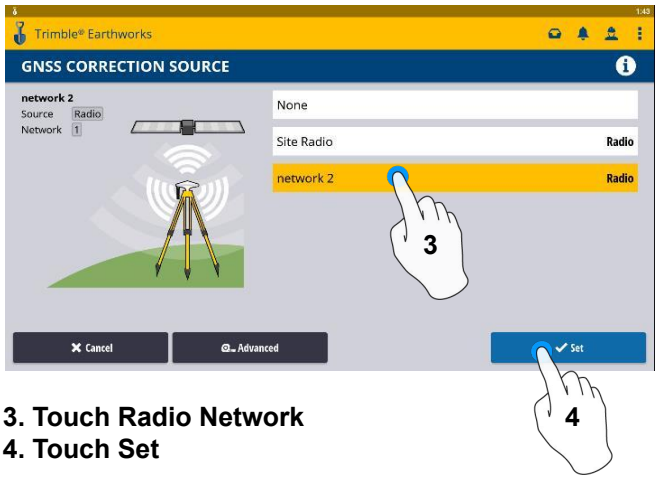
Change Radio Network



1. Touch System Settings

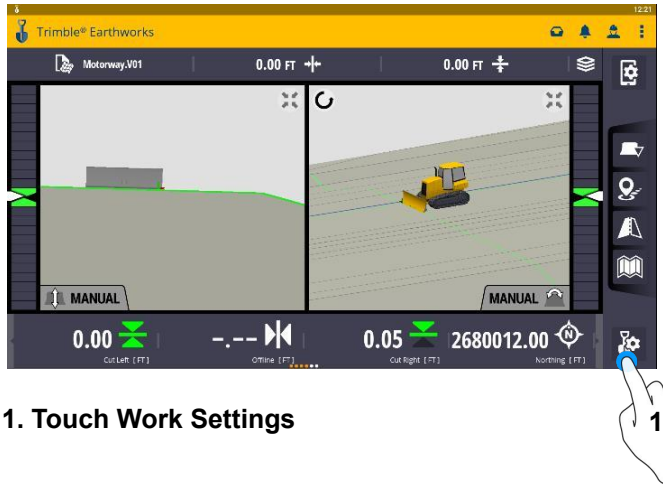


2. Touch GNSS Correction Source

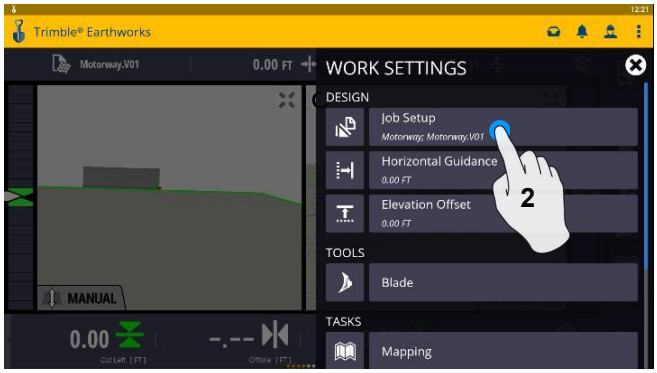


3. Touch Radio Network
4. Touch Set

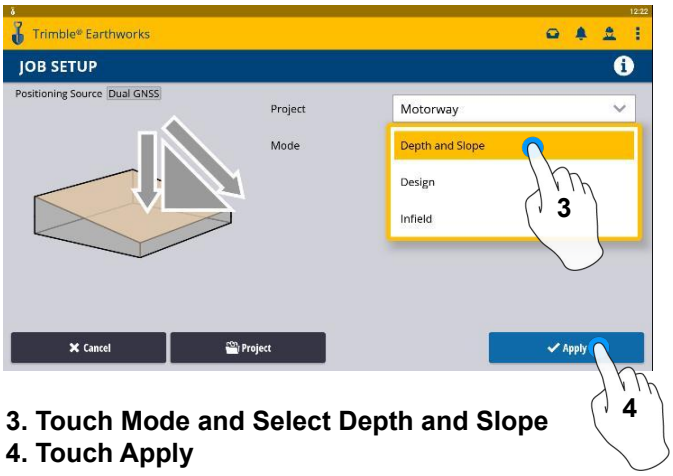
Level Surface



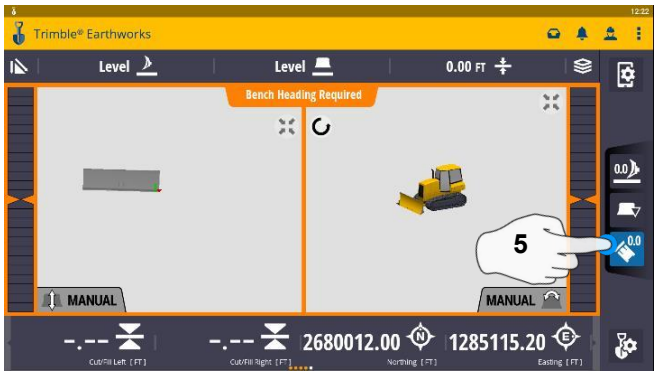
1. Touch Work Settings



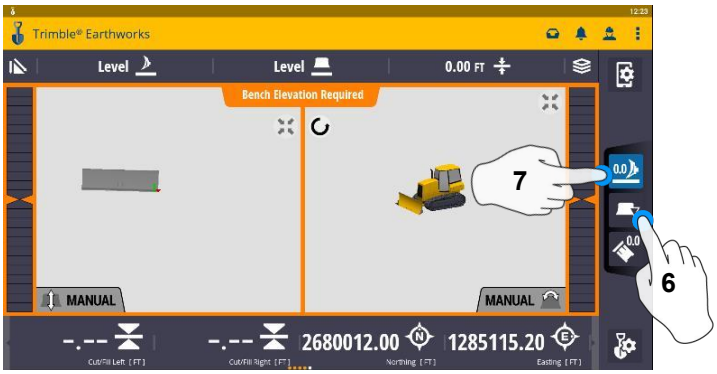
2. Touch Job Setup



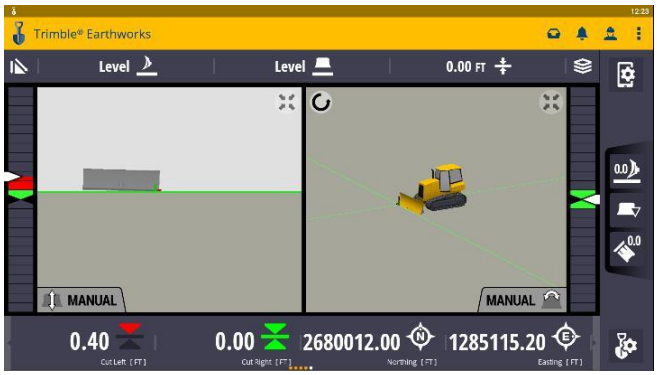
3. Touch Mode and Select Depth and Slope
4. Touch Apply



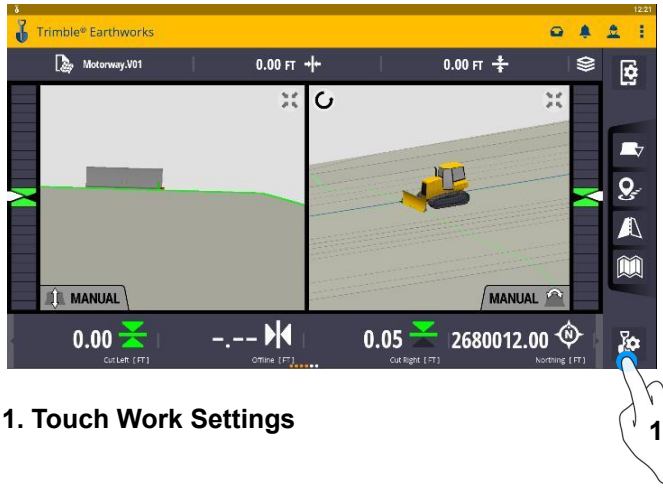
5. Touch Bench Heading



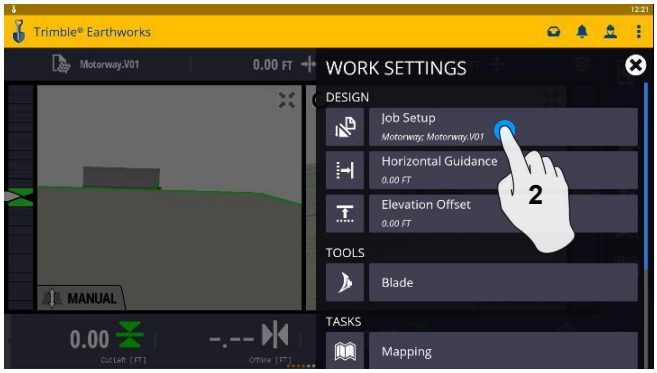
6. Select Blade Tip Focus Point
7. Place Blade Tip at Elevation and Touch Bench



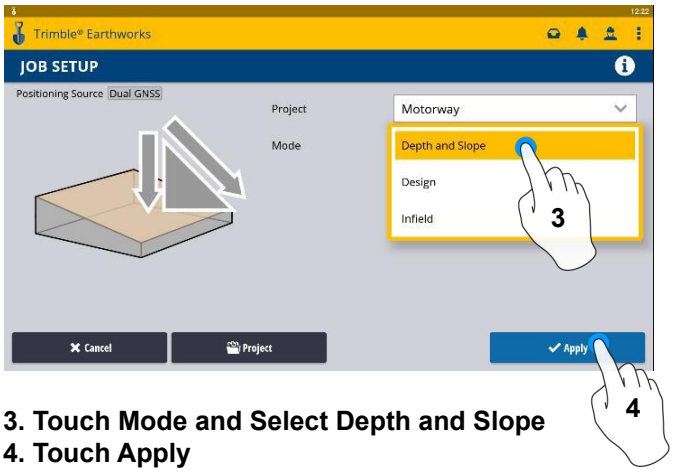
Sloping Surface



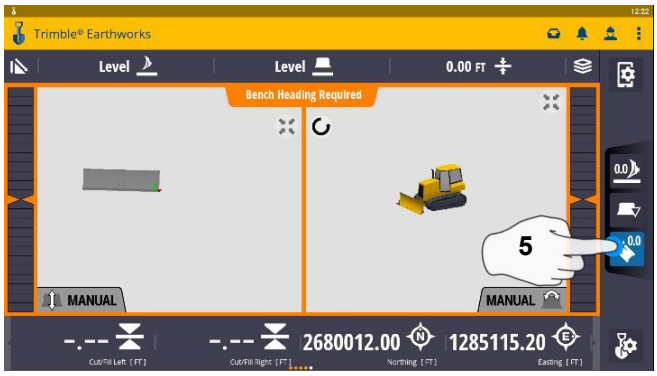
1. Touch Work Settings



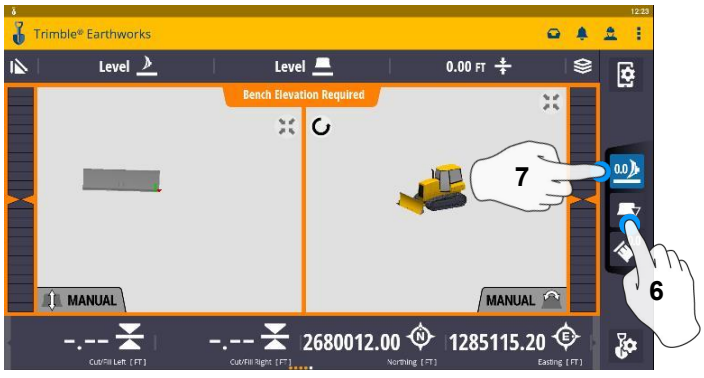
2. Touch Job Setup



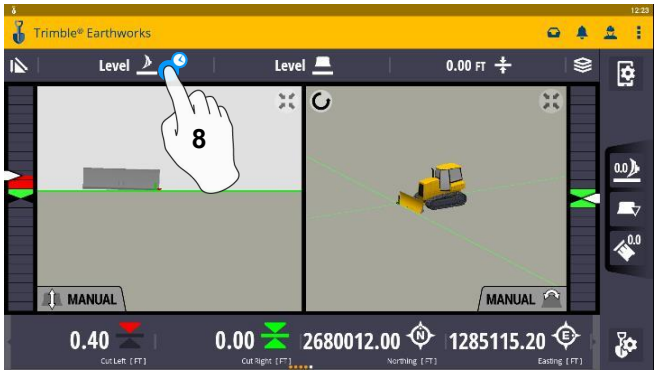
3. Touch Mode and Select Depth and Slope
4. Touch Apply



5. Touch Bench Heading

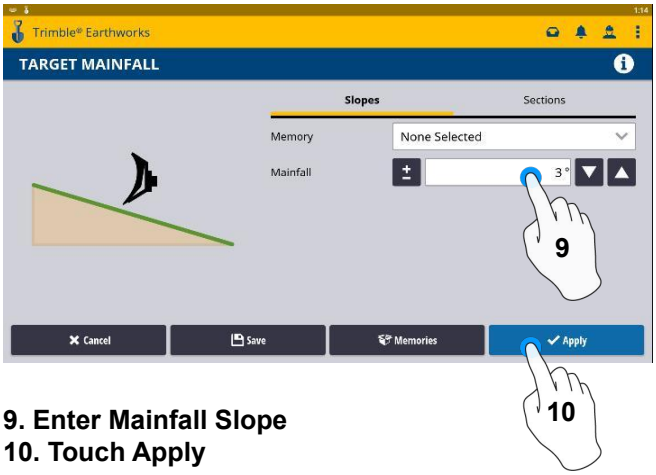


6. Select Blade Tip Focus Point
7. Place Blade Tip at Elevation and Touch Bench

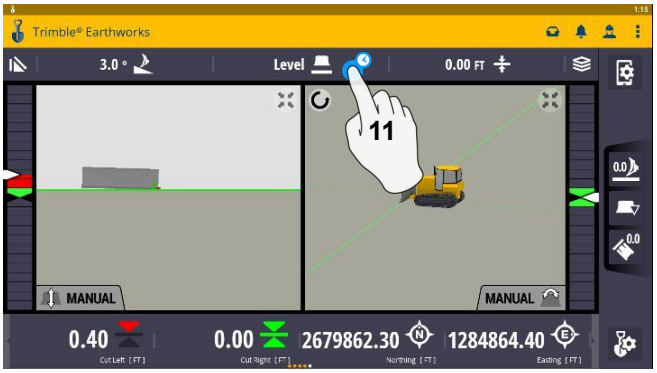


8. Touch and Hold Target Mainfall
Note: This will apply a slope parallel to the direction of heading.

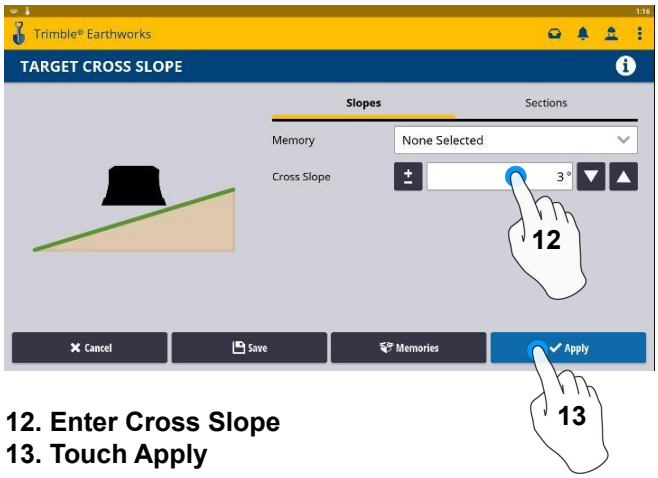
Sloping Surface Cont:



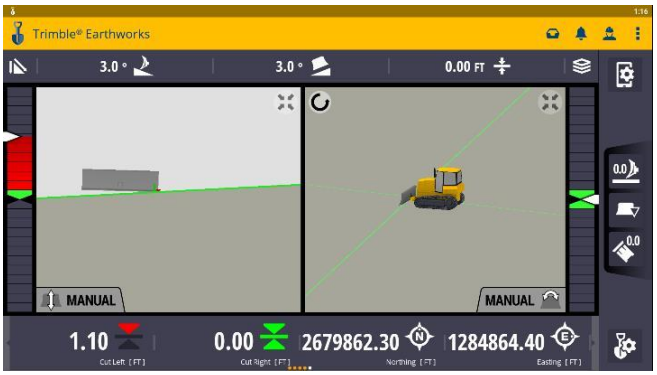
9. Enter Mainfall Slope
10. Touch Apply



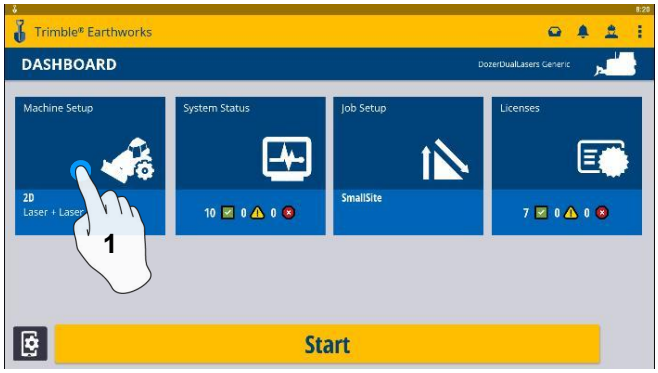
11. Touch and Hold Cross Slope
Note: This will apply a slope perpendicular to the direction of the heading



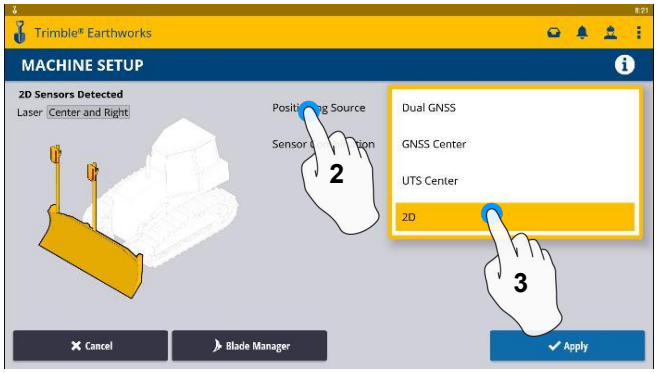
12. Enter Cross Slope
13. Touch Apply



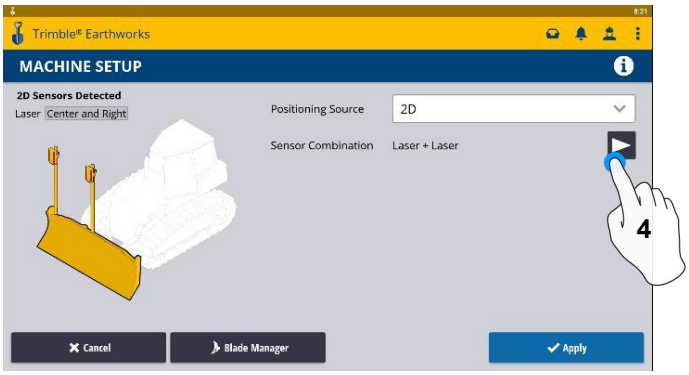
Laser Setup



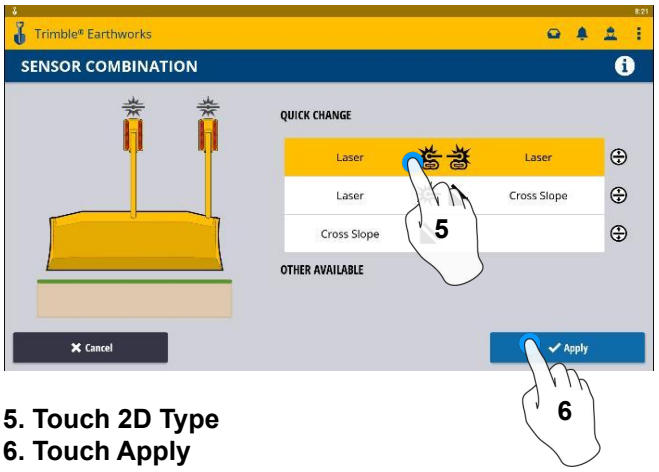
1. Touch Machine Setup



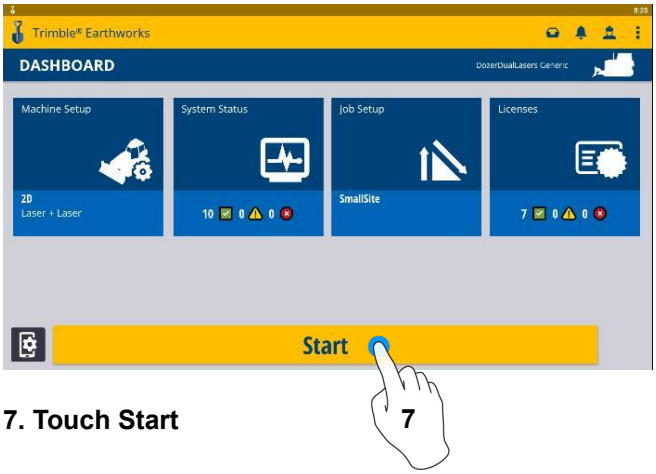
2. Touch Positioning Source
3. Touch 2D



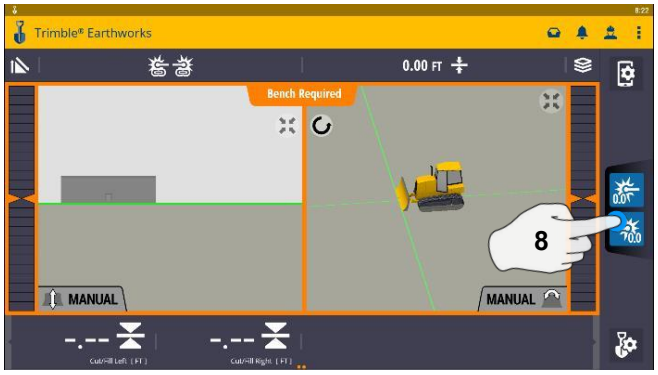
4. Touch to Edit 2D Sensors



5. Touch 2D Type
6. Touch Apply



7. Touch Start



8. Touch to bench Laser Receivers