YOUR CONSTRUCTION TECHNOLOGY PROVIDER

SITECH

Field Reference Guides

EARTHWORKS Dozer Version 2.9

SITECH XXX

SITECH-XXX.COM

Trimble Authorized Dealer

System: Earthworks Dozer

Version: 2.9

SITECH TECHNOLOGY DEALER

TRAINING CHECKLIST

System: Earthworks Dozer Version: 2.9

SITECH Copy

Training Acknowledgement:

Customer Signature **Date** **SITECH Representative** **Date**

SITECH TECHNOLOGY DEALER

TRAINING CHECKLIST

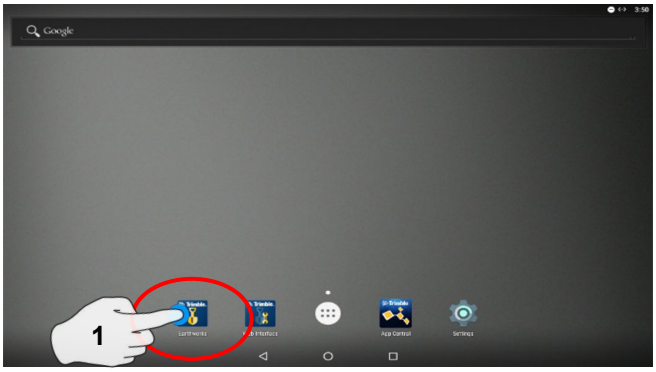
System: Earthworks Dozer Version: 2.9

Customer Copy

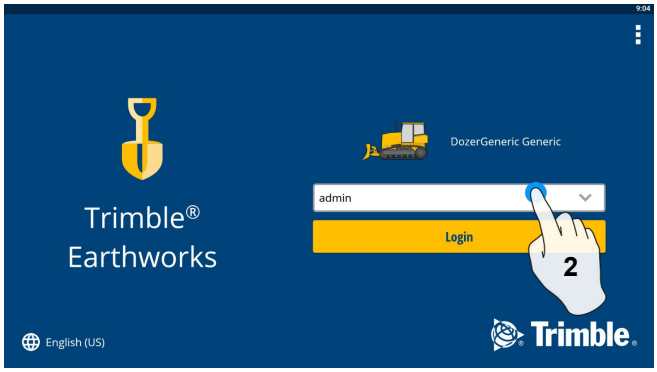
Training Acknowledgement:

Customer Signature **Date** **SITECH Representative** **Date**

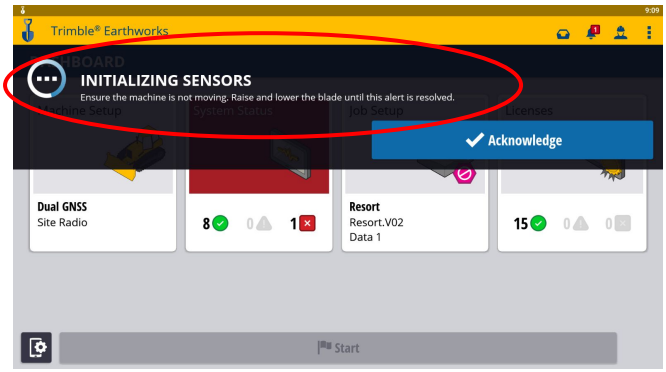
Starting Earthworks



1. Touch  **Earthworks Icon**

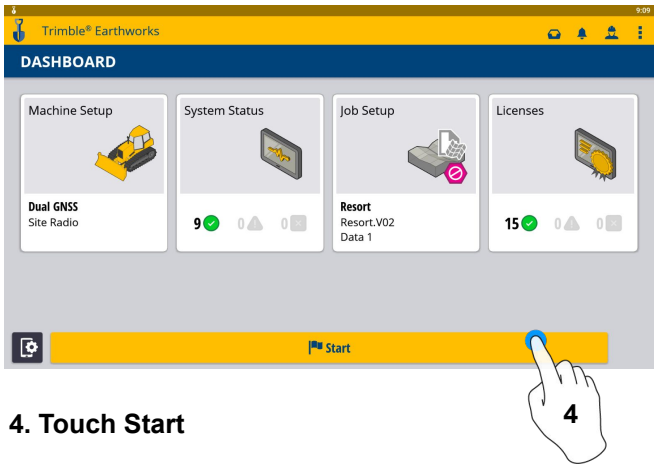


2. Select operator



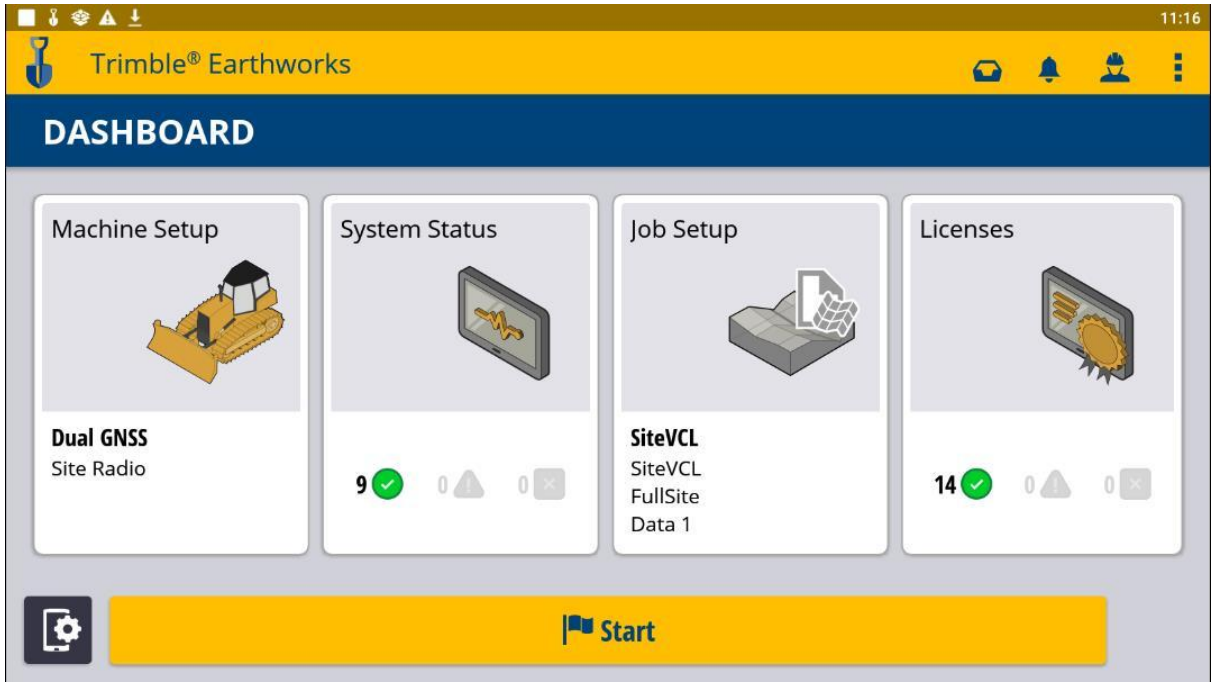
3. Raise and lower the blade to initialize sensors

Note: 6 way blades require sensor initialization
Push blades do not

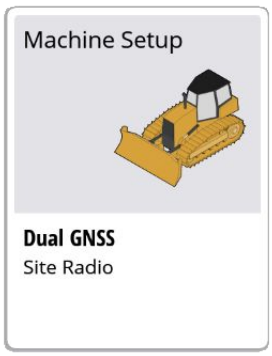


4. Touch Start

Dashboard

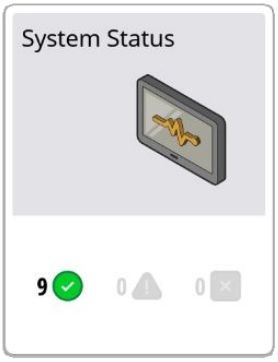


Machine Setup



- Position Source
- Correction Source
- Blade Manager

System Status

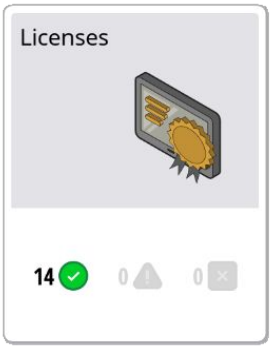


- Status of Devices
- Component Warnings

Job Setup

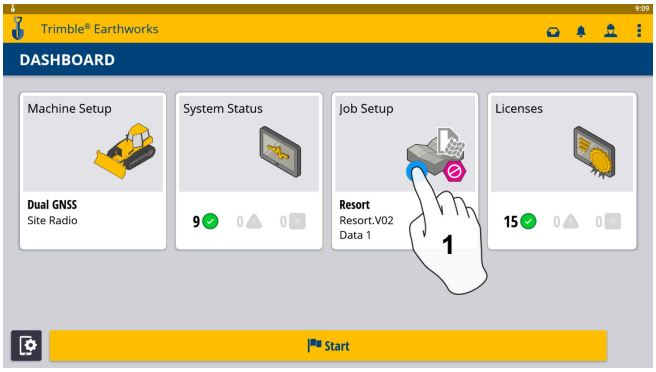
- Select or Create Project
- Select Mode
- Create Measured Data Folder
- Select Design
- File Transfer

Licenses

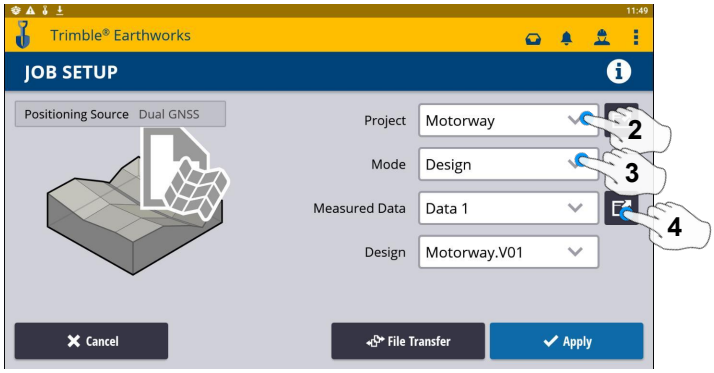


- EC520 License
- TD520 License
- GNSS Receiver License
- Software Maintenance

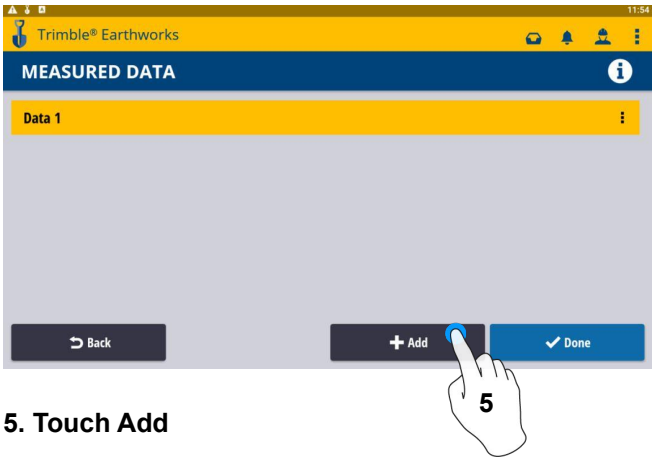
Select Project, Design and Measured Data



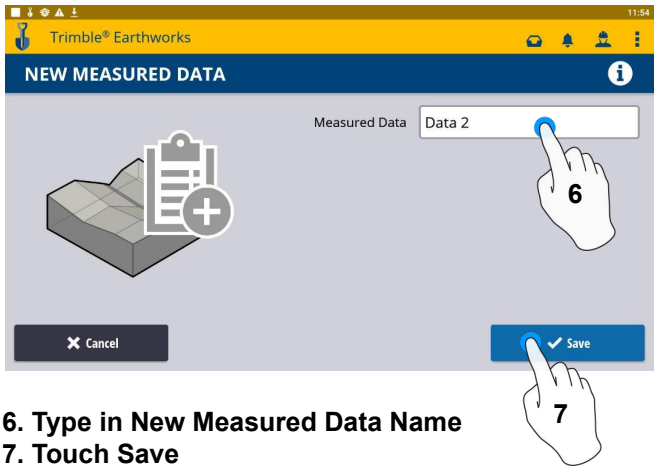
1. Touch Job Setup



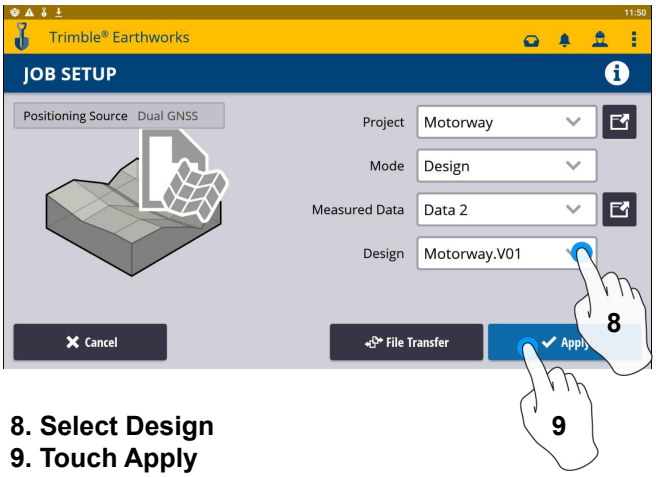
2. Select Project
3. Select Mode
4. Measured Data (Create New)



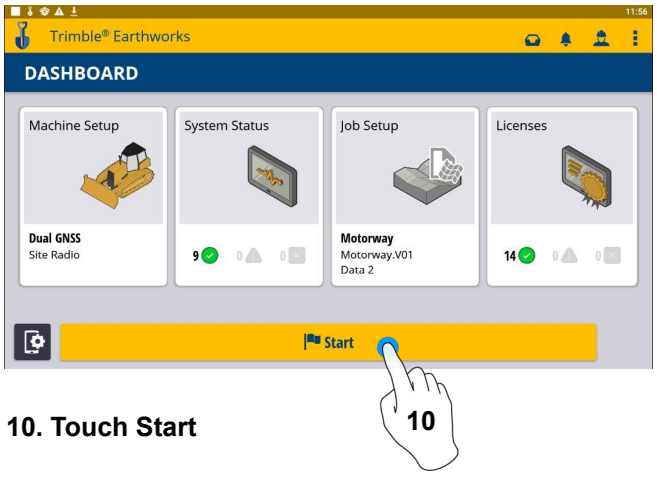
5. Touch Add



6. Type in New Measured Data Name
7. Touch Save

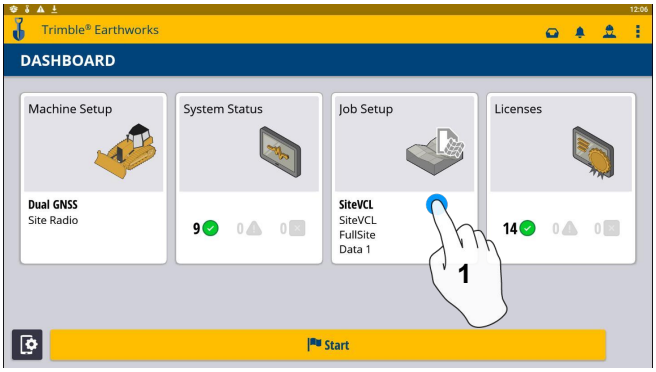


8. Select Design
9. Touch Apply

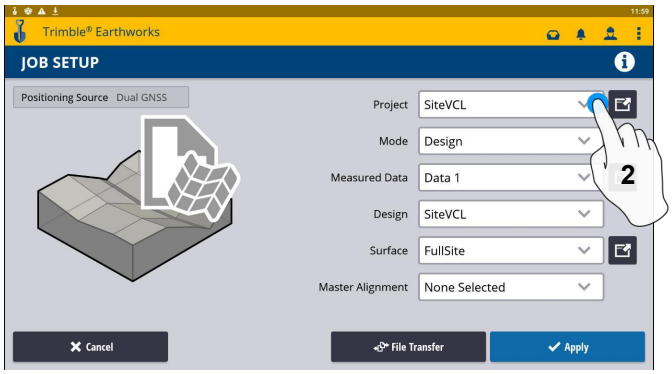


10. Touch Start

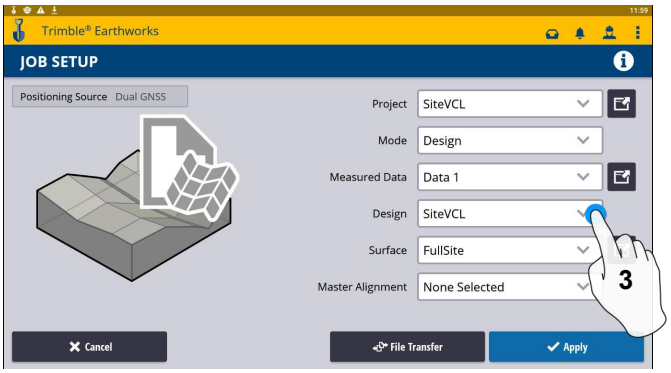
Select Project, Design, and Measured Data: VCL



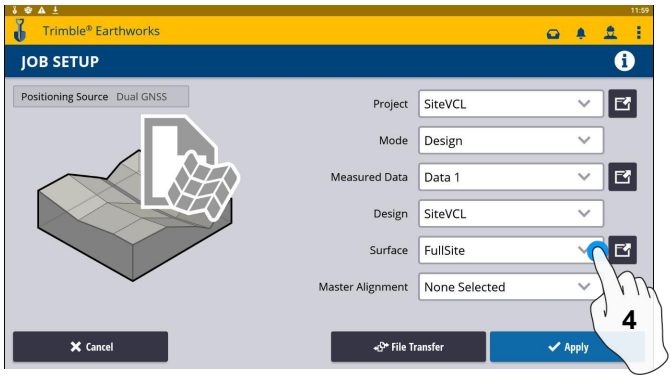
1. Touch Job Setup



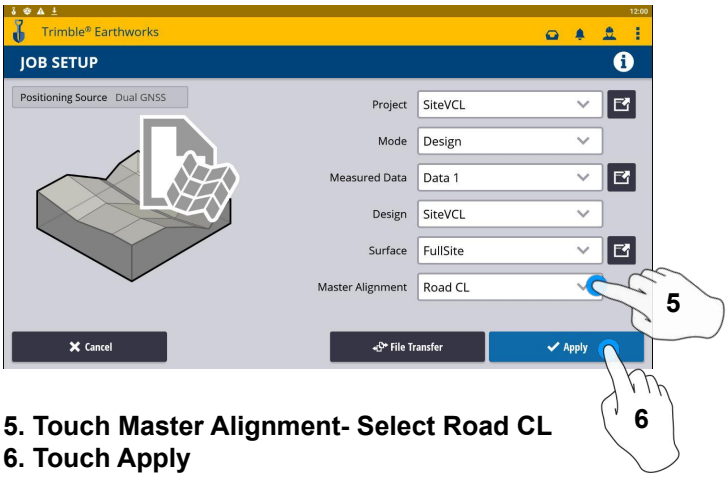
2. Touch Project- Select Site VCL



3. Touch Design- Select SiteVCL

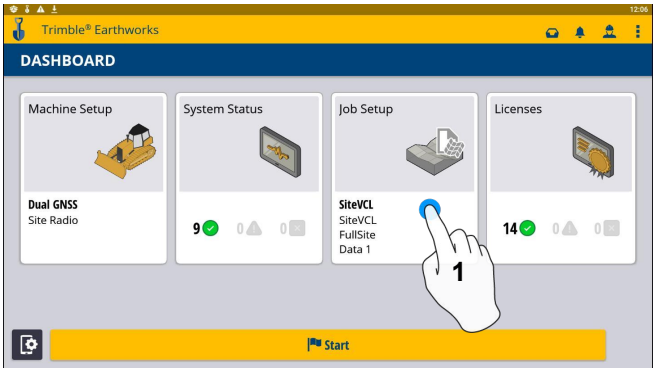


4. Touch Surface- Select Surface

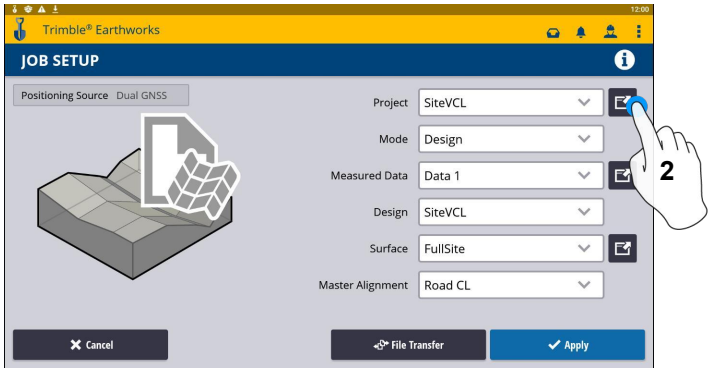


5. Touch Master Alignment- Select Road CL
6. Touch Apply

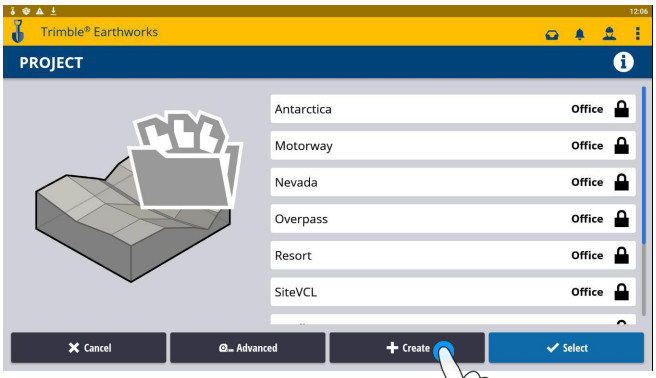
Create Project



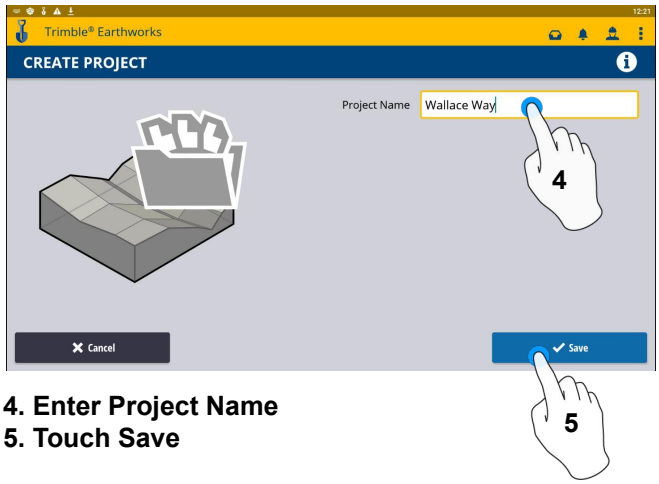
1. Touch Job Setup



2. Touch Project (Create Project)

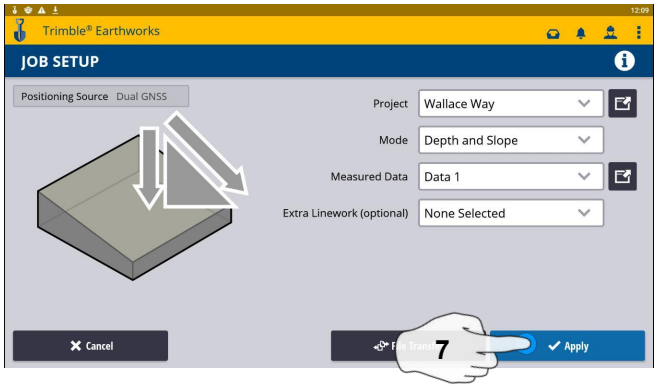


3. Touch Create



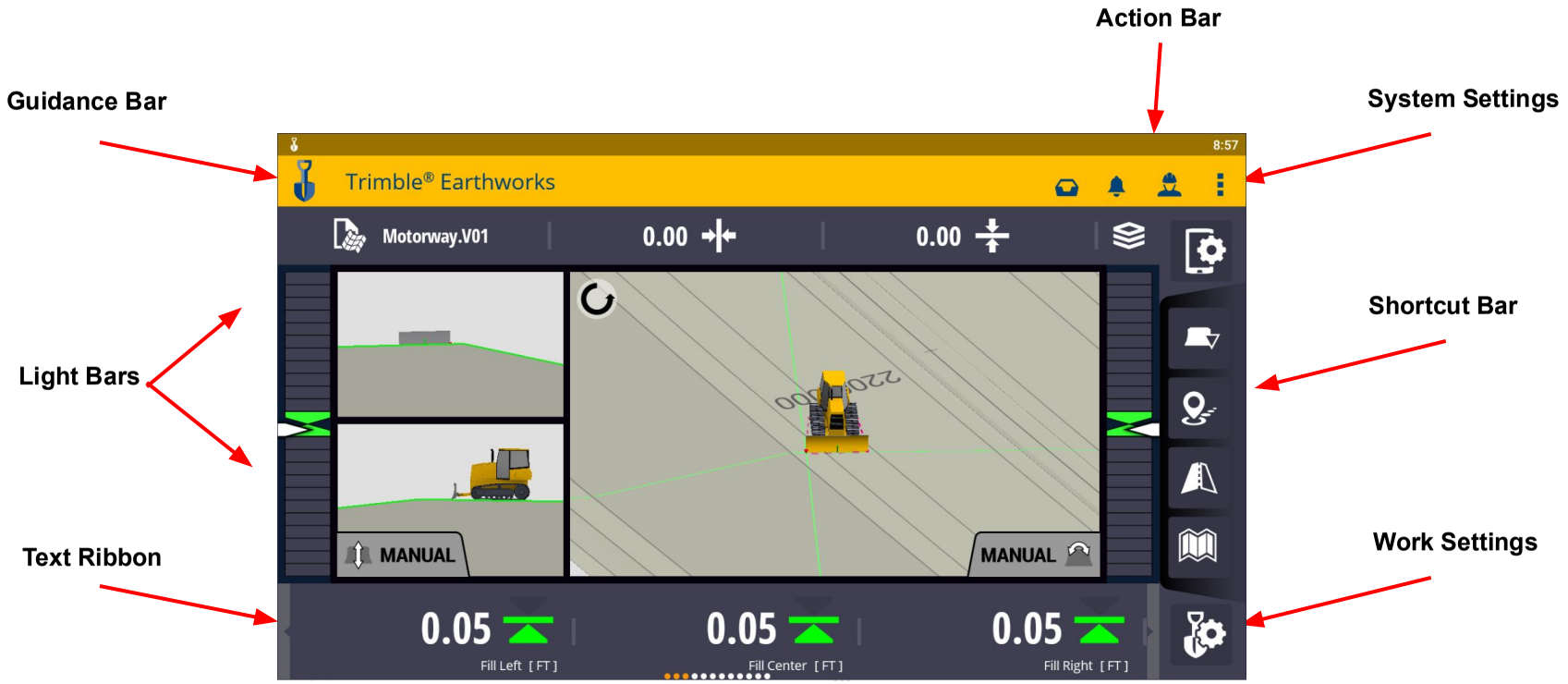
4. Enter Project Name
5. Touch Save

6. Touch Select

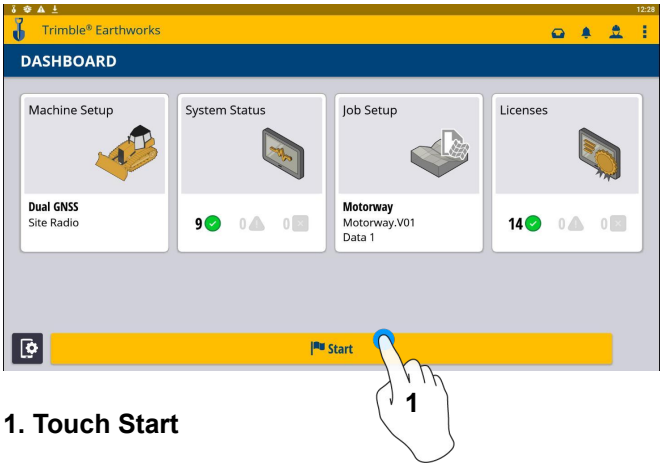


7. Touch Apply
8. Touch Start

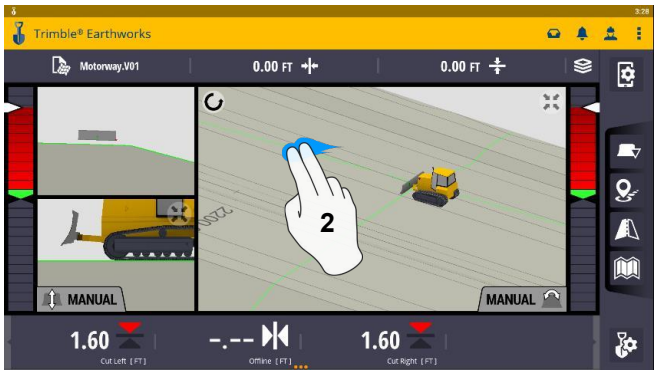
Earthworks Screen



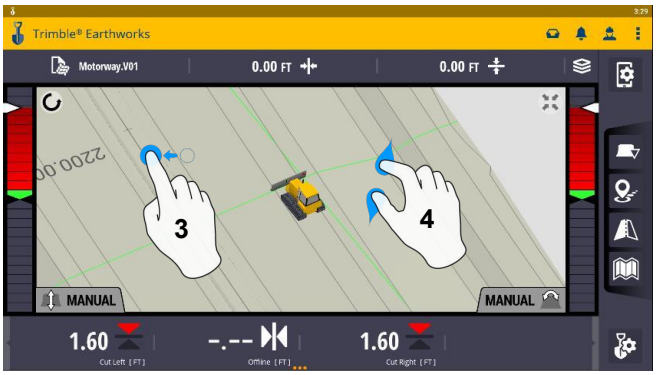
Work Screen Interface



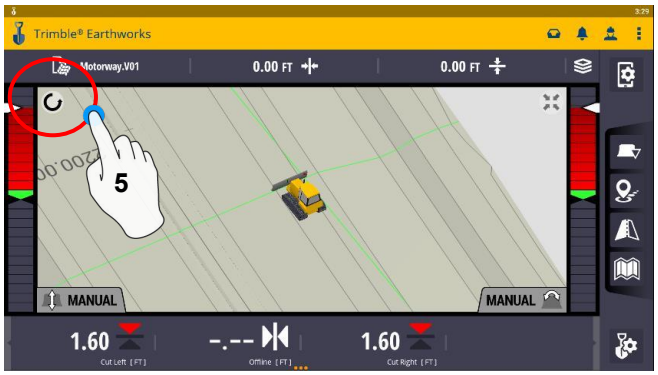
1. Touch Start



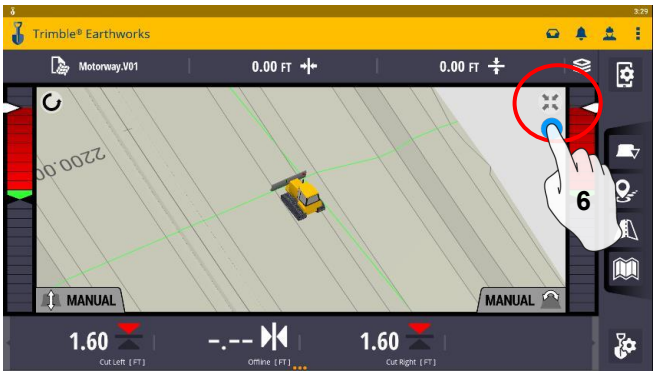
2. 2 Finger swipe to change views



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

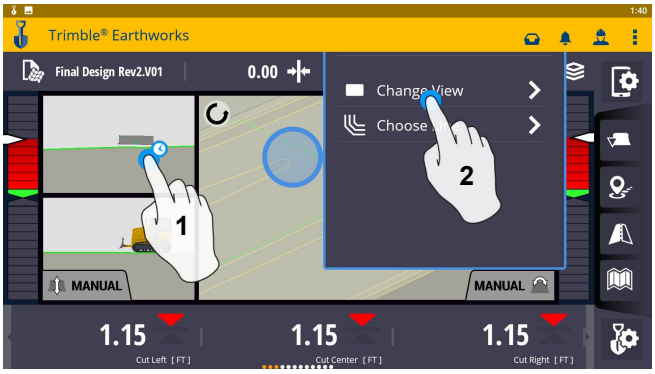


5. Touch to select Pan or Rotate

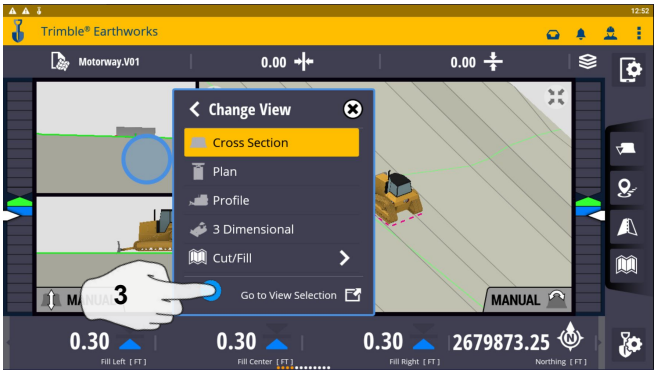


6. Touch to re-center

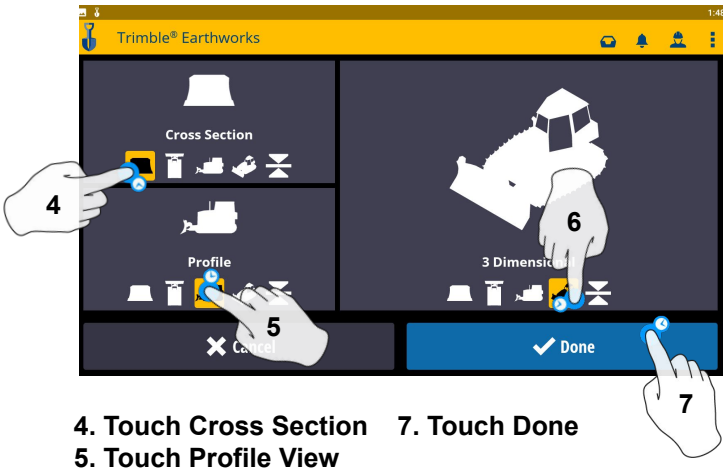
Work Screen Setup



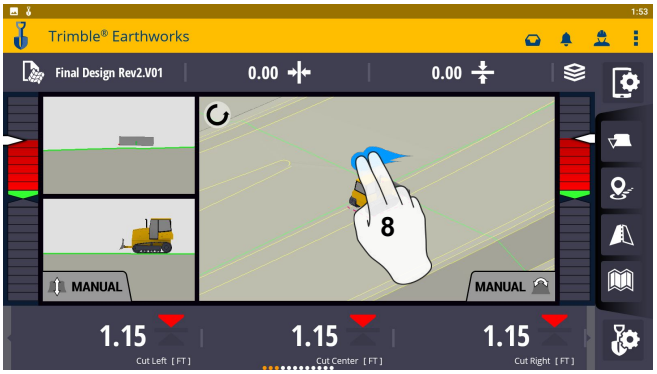
1. Touch and hold
2. Touch Change View



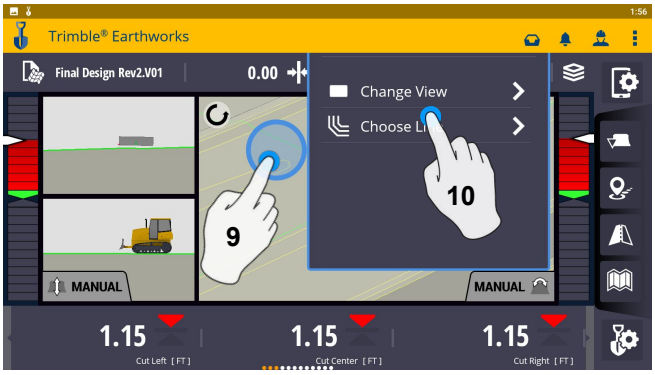
3. Touch Go To View Section



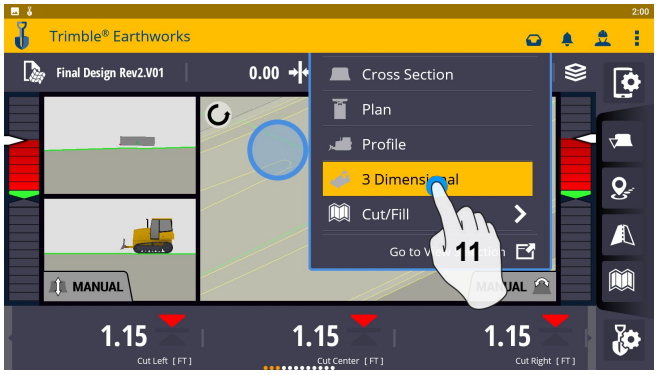
4. Touch Cross Section
5. Touch Profile View
6. Touch 3 Dimensional View
7. Touch Done



8. 2 Finger Swipe to Single View

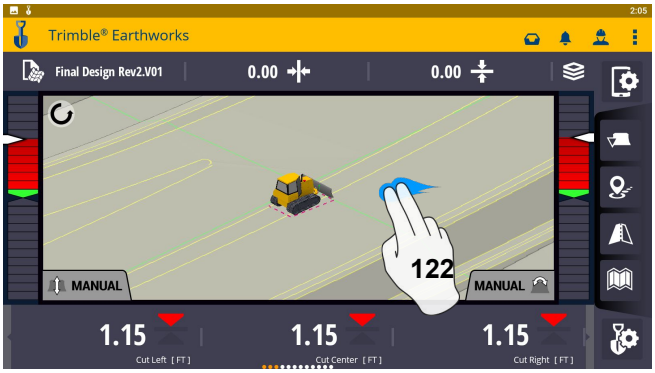


9. Touch and hold
10. Touch Change View

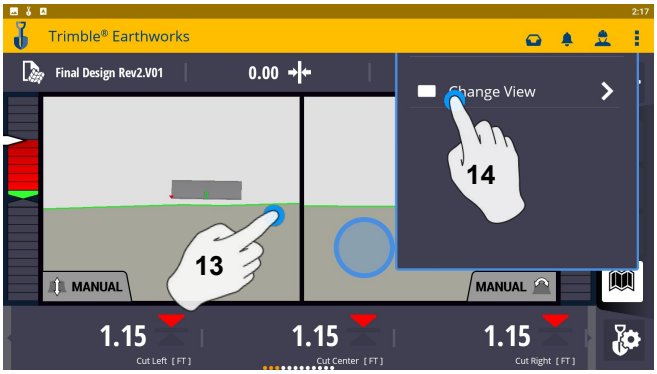


11. Select 3 Dimensional

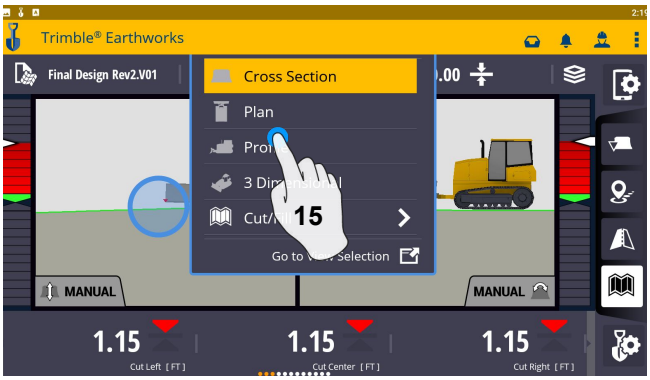
Work Screen Setup



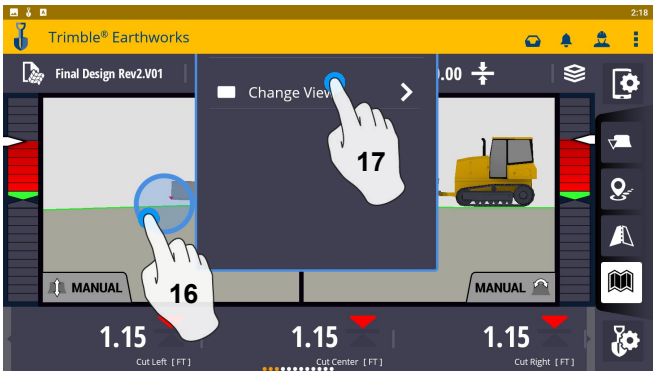
12. 2 Finger swipe to 2 Screen View



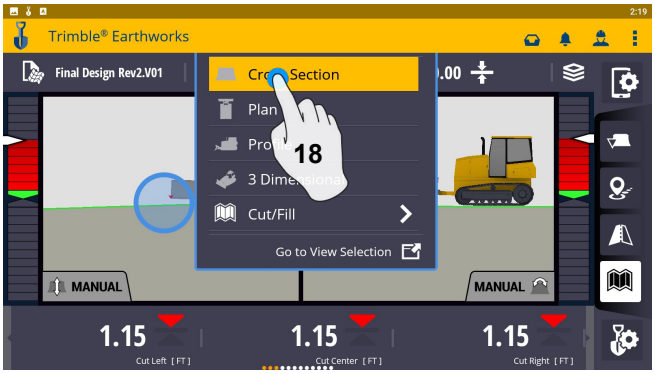
13. Touch and hold
14. Touch Change View



15. Touch Profile

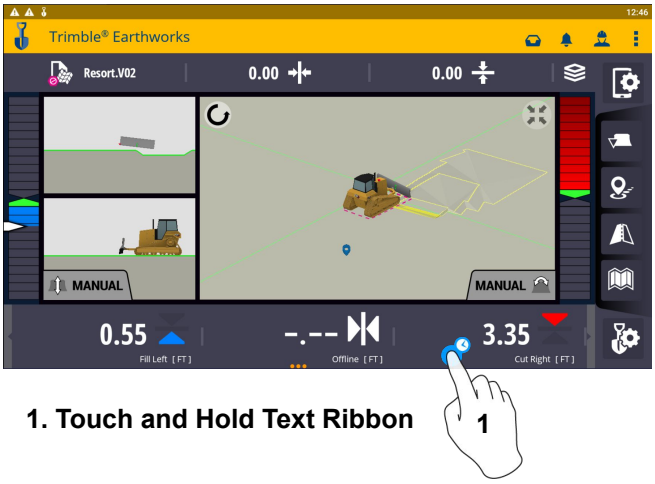


16. Touch and Hold
17. Touch Change View

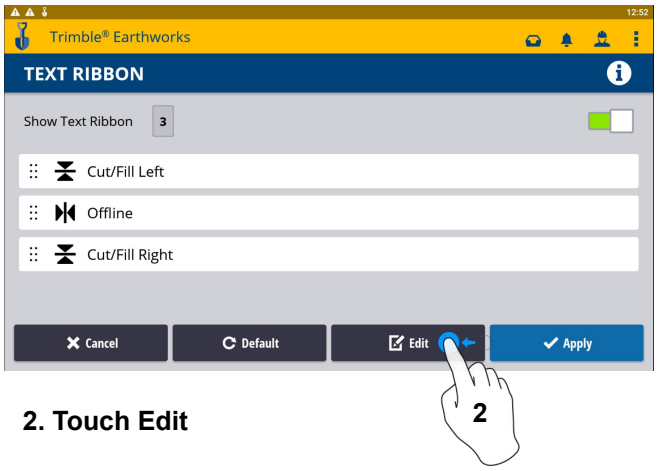


18. Touch Cross Section

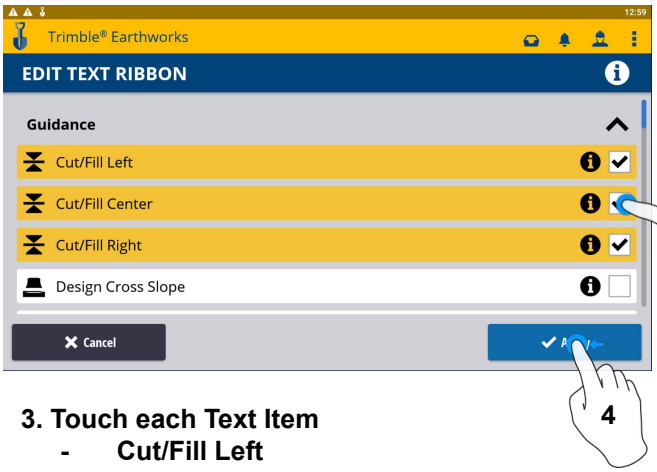
Text Ribbon Setup



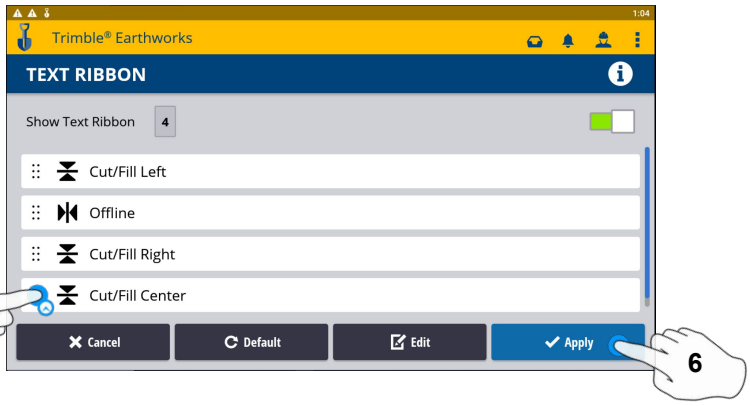
1. Touch and Hold Text Ribbon



2. Touch Edit

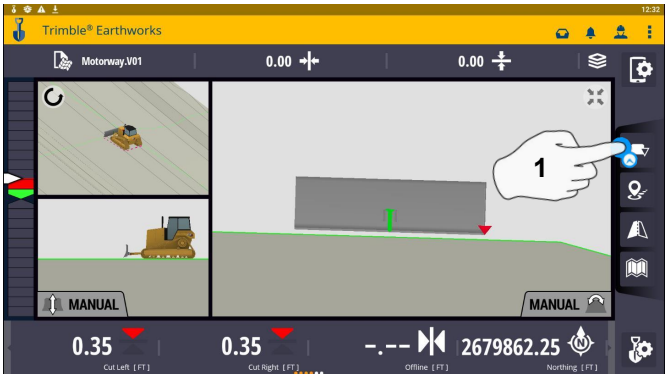


3. Touch each Text Item
   - Cut/Fill Left
   - Cut/Fill Right
   - Cut/Fill Center
   - Offline
   - Station
   - Design Cross Slope
   - Design Elevation
   - Design Mainfall
   - Distance to Avoidance Zone
   - Distance from Bench
   - Elevation from Reference
   - Guidance Line
   - Height from Bench
   - MA offset
   - Offline
   - Offline Angle
   - Station
   - UTS Distance
4. Touch Apply when done

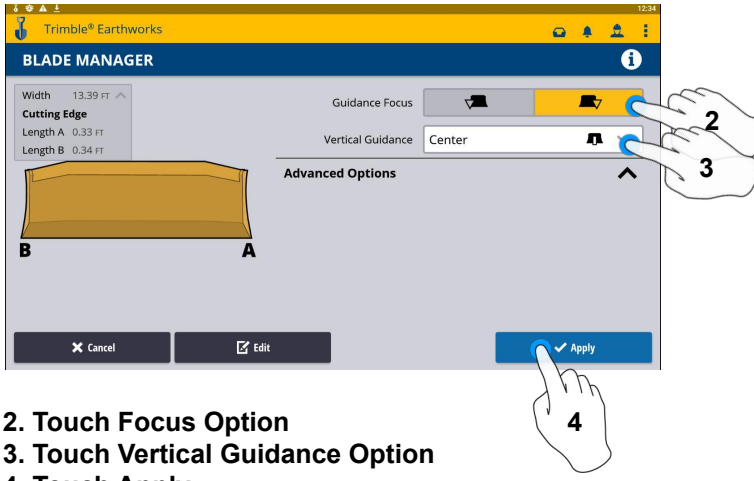


5. Touch-Hold-Drag to change position
6. Touch Apply

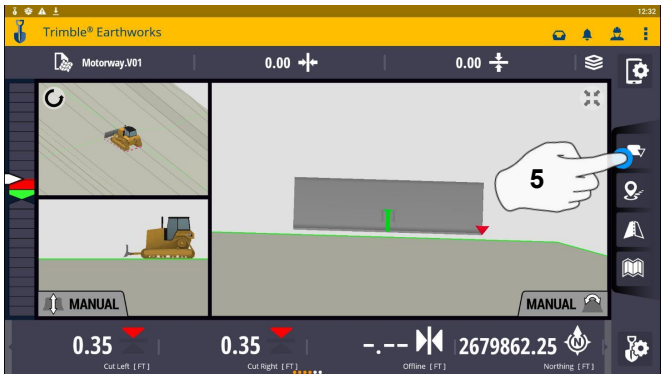
Blade Focus Point / Vertical Guidance



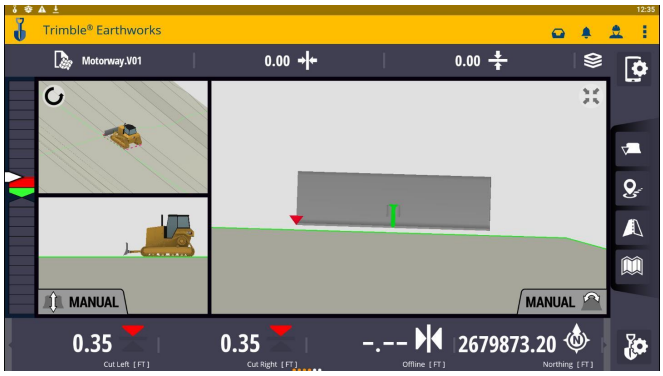
1. Touch and Hold Blade Icon



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

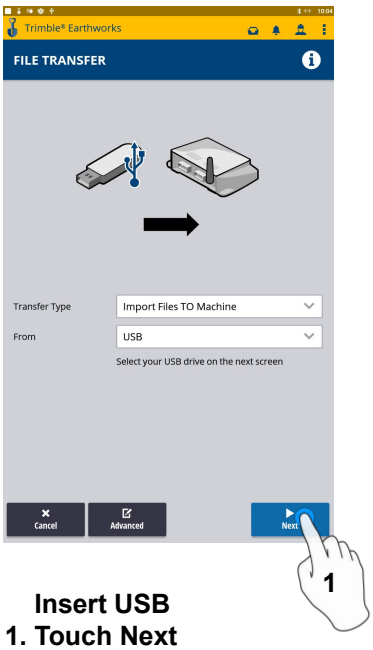


5. Touch Blade Icon to change focus point

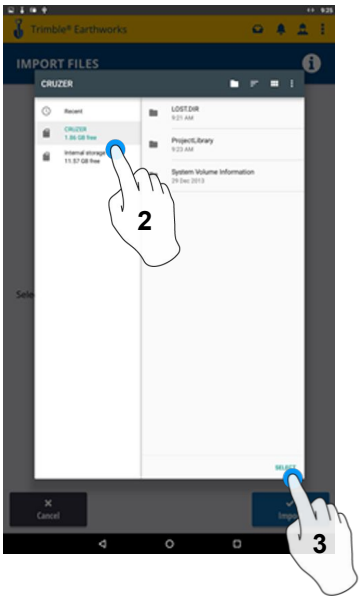


NOTE: "LINK TO FOCUS" vertical guidance will follow focus point.

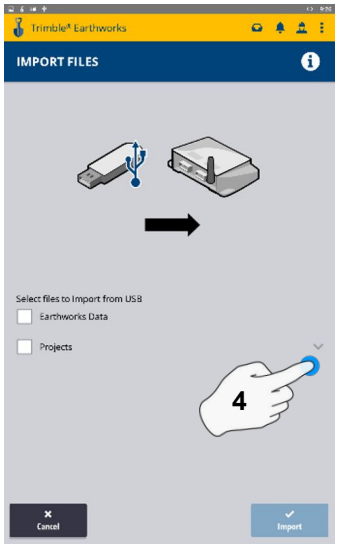
Import Data With USB



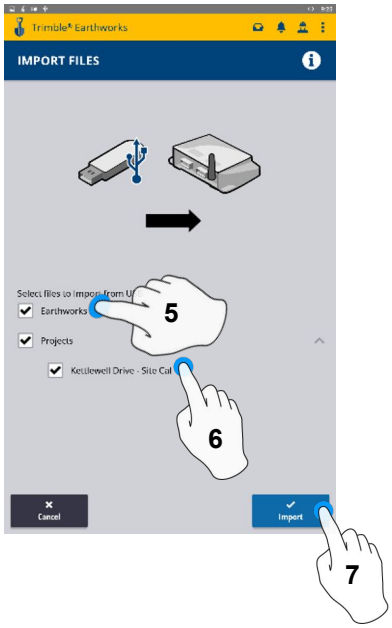
Insert USB
1. Touch Next



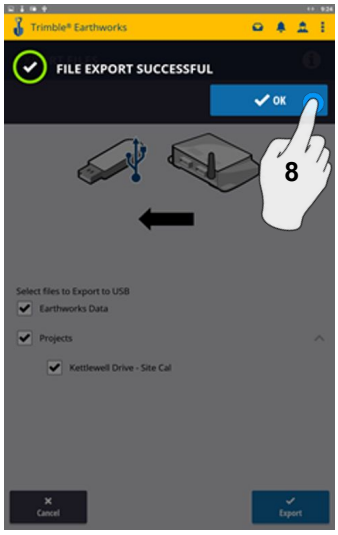
2. Touch USB
3. Touch Select



4. Touch "V"

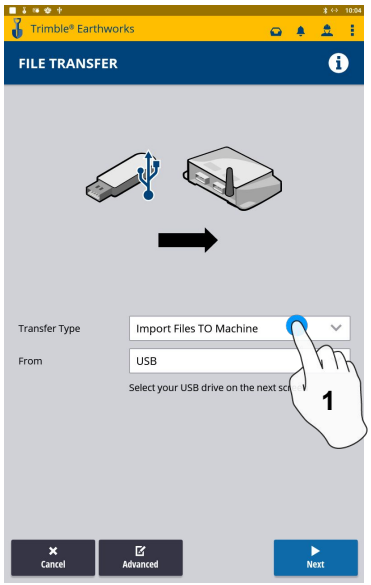


5. Touch Earthworks Data
6. Touch Project
7. Touch Import

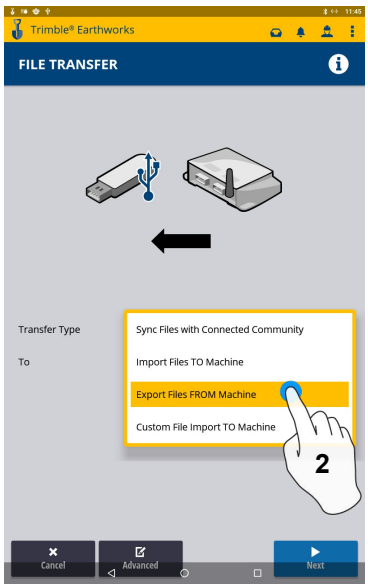


8. Touch OK

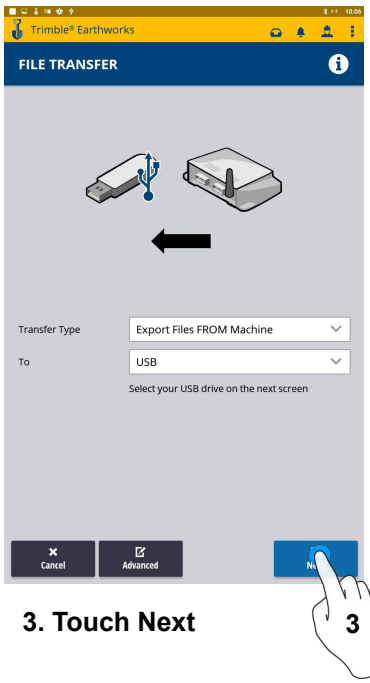
Export Data With USB



Insert USB
1. Touch Transfer Type

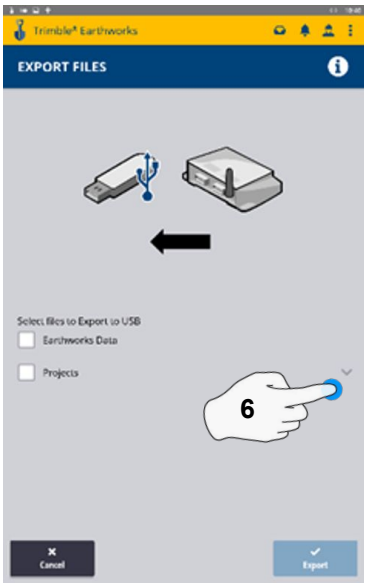


2. Touch Export Files

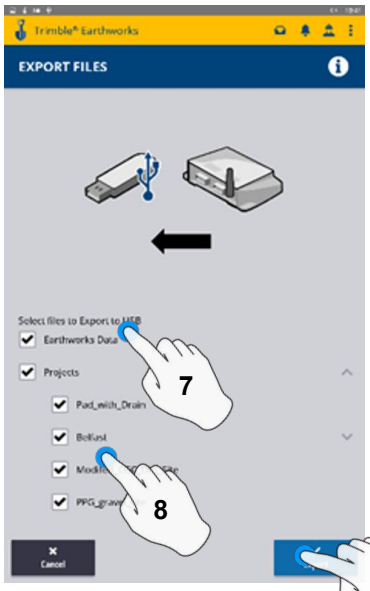


3. Touch Next

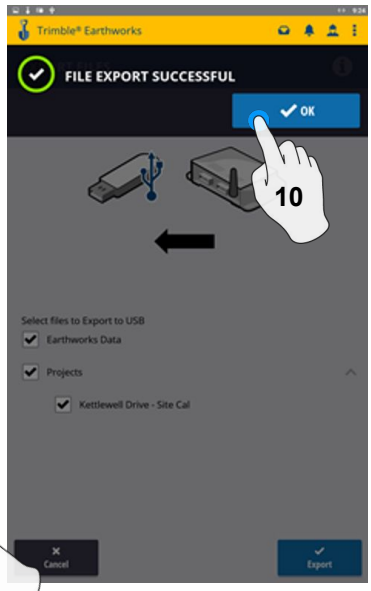
4. Touch USB
5. Touch Select



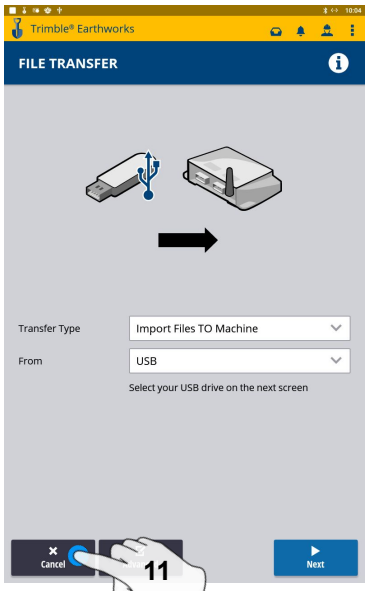
6. Touch "V"



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

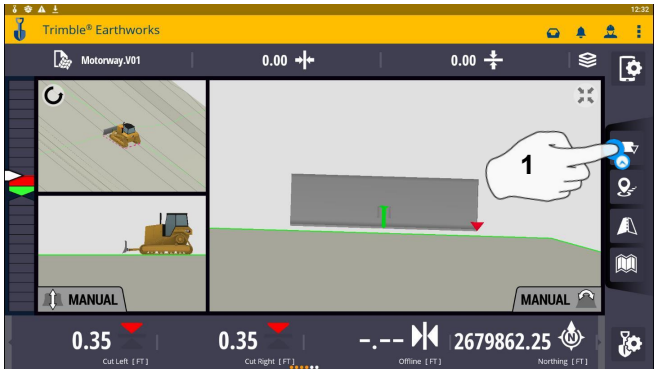


10. Touch OK

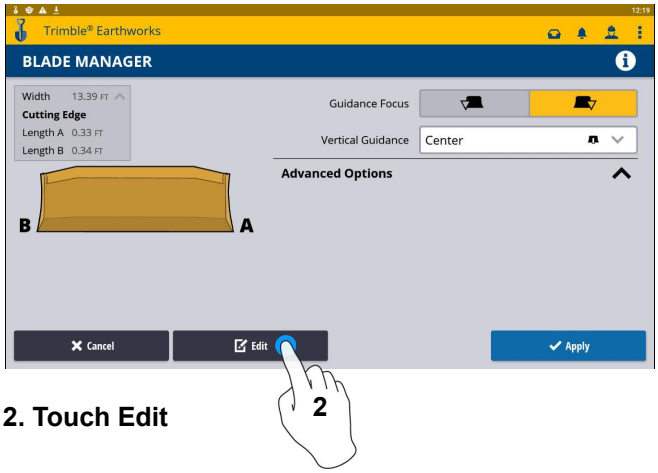


11. Touch Cancel
Remove USB

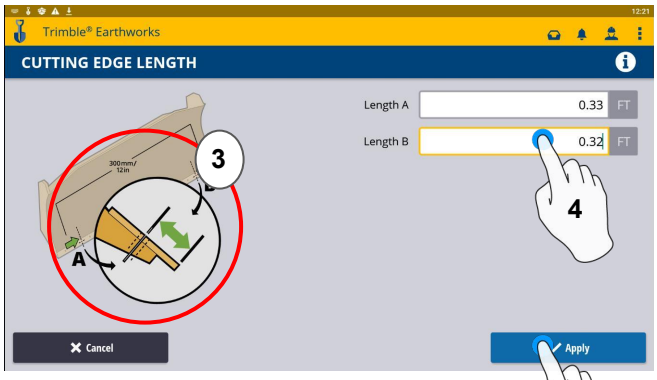
Cutting Edge Wear / Overcut Protection



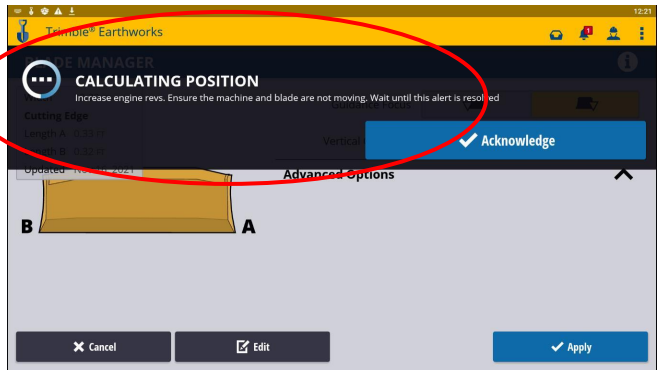
1. Touch and hold Focus Icon



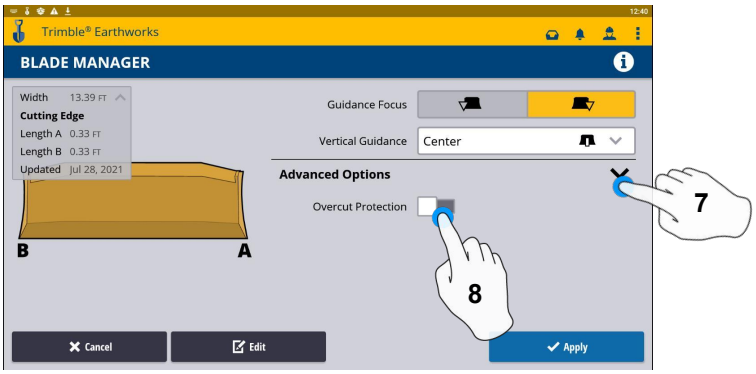
2. Touch Edit



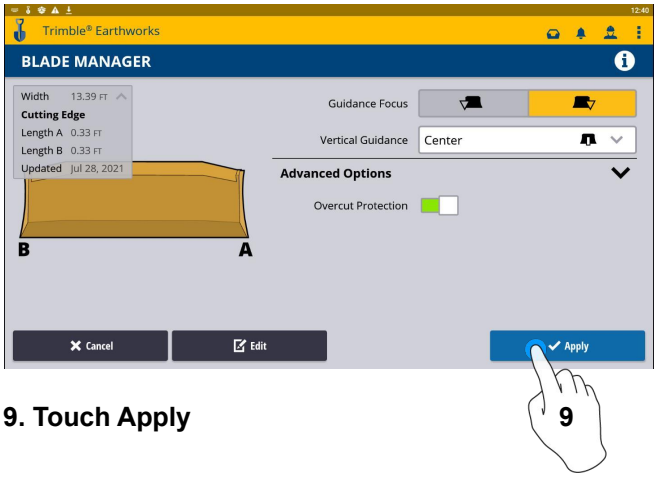
3. Measure A to B
4. Enter Length A and B
5. Touch Save



6. Keep the Blade still, let sensors initialize



7. Touch Advanced Options
8. Touch Overcut Protection

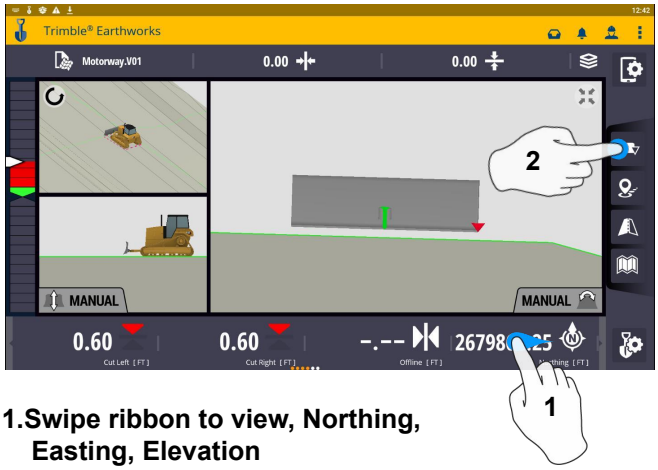


9. Touch Apply

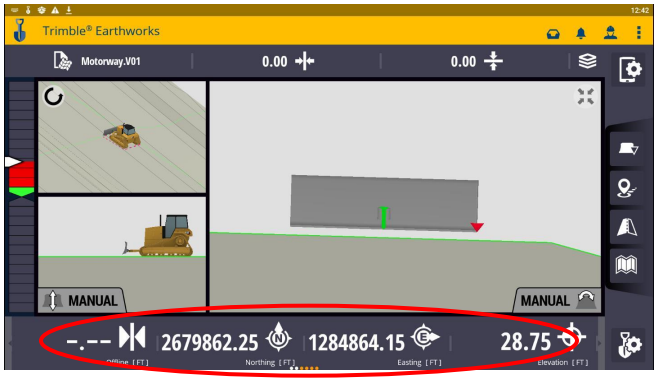
Verify System Accuracy

Verify the system accuracy by checking into a bench

Position the blade tip over the bench point



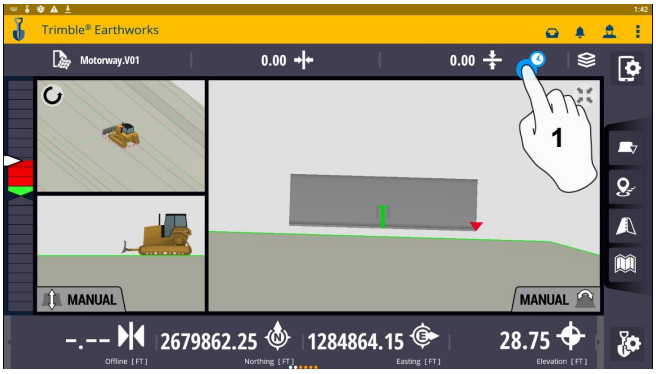
1.Swipe ribbon to view, Northing, Easting, Elevation
2. Touch blade focus to match verification location



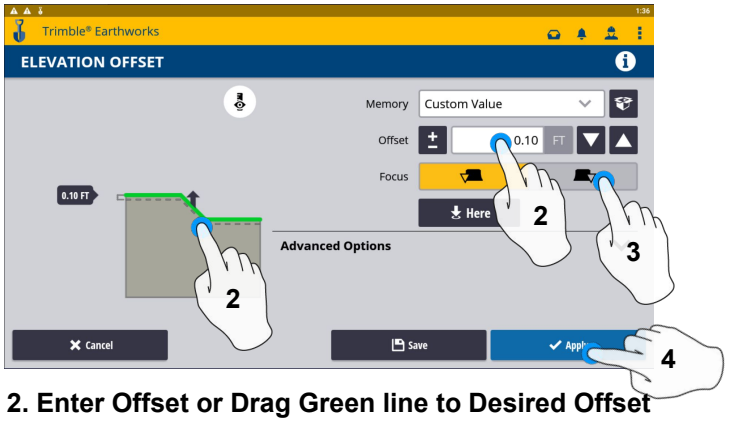
3. Verify Accuracy Northing, Easting, Elevation

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

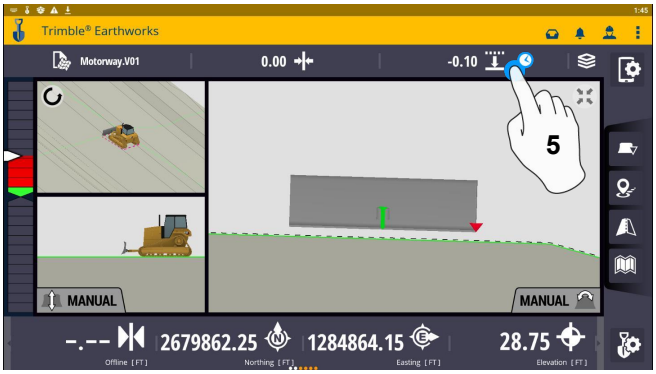
Vertical Offset / Memories



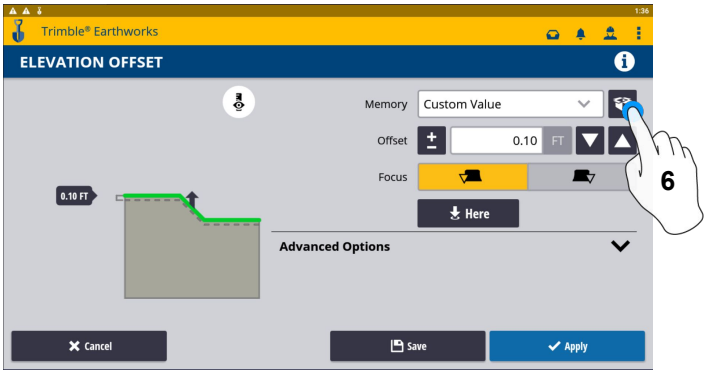
1. Touch and hold Vertical Offsets



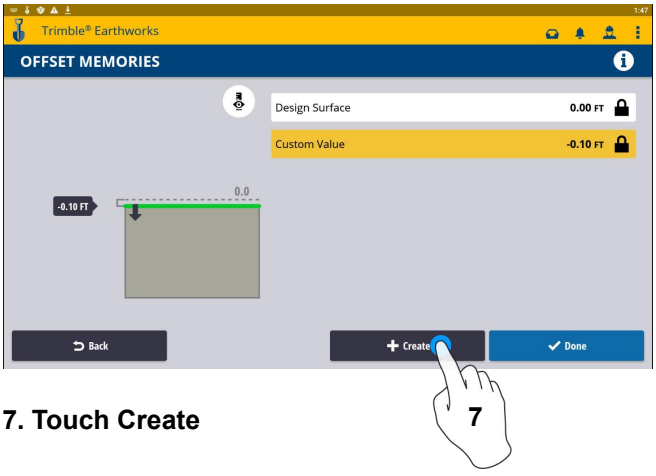
2. Enter Offset or Drag Green line to Desired Offset
3. Select your Focus Point
4. Touch Apply to use immediately



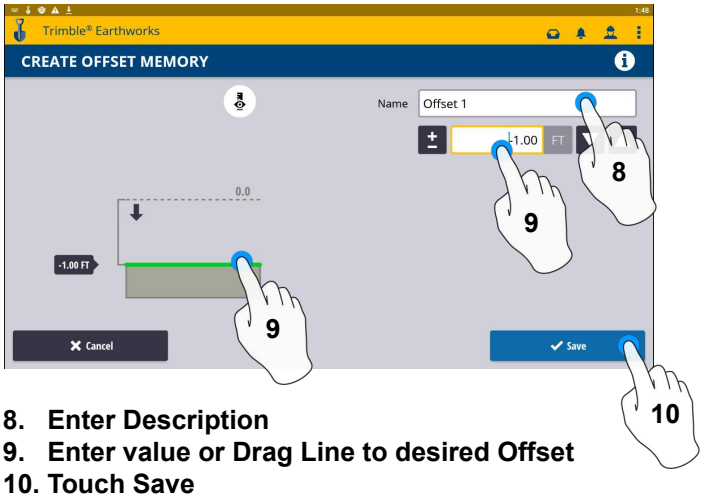
5. Touch and Hold Vertical Offsets



6. Touch memories box

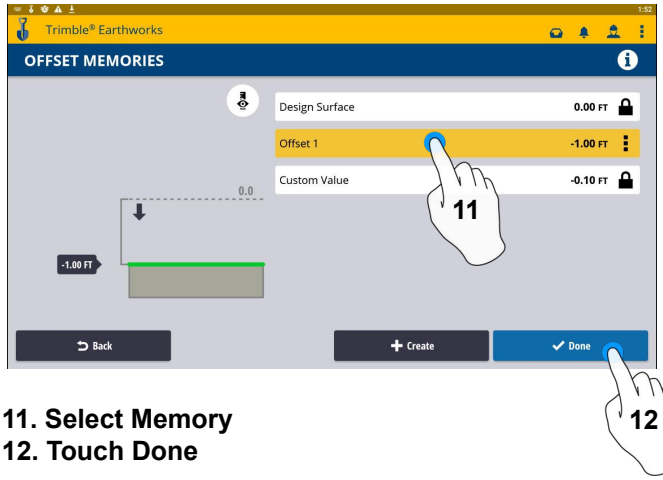


7. Touch Create

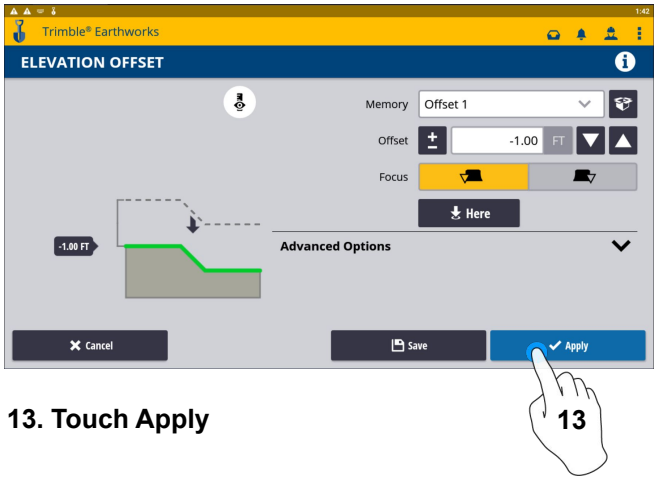


8. Enter Description
9. Enter value or Drag Line to desired Offset
10. Touch Save

Vertical Offset / Memories Cont:

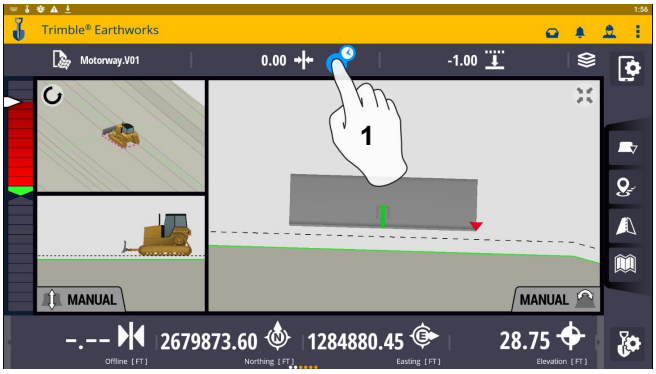


11. Select Memory
12. Touch Done

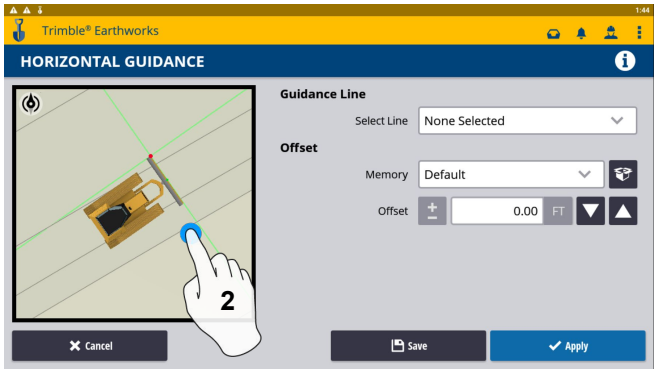


13. Touch Apply

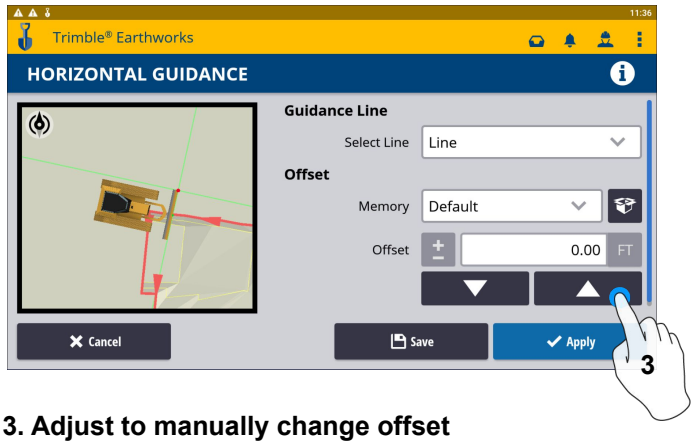
Horizontal Offset



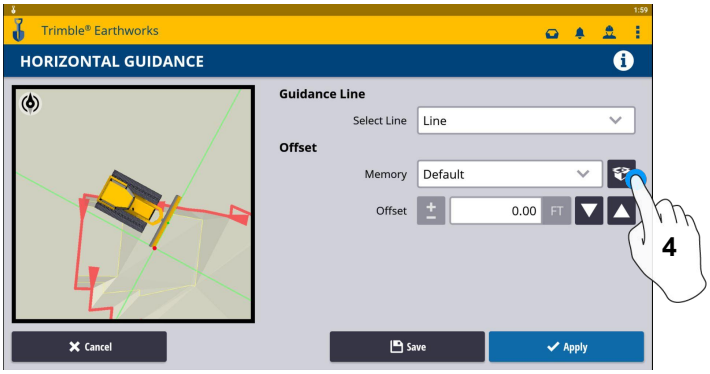
1. Touch and hold Horizontal Offset



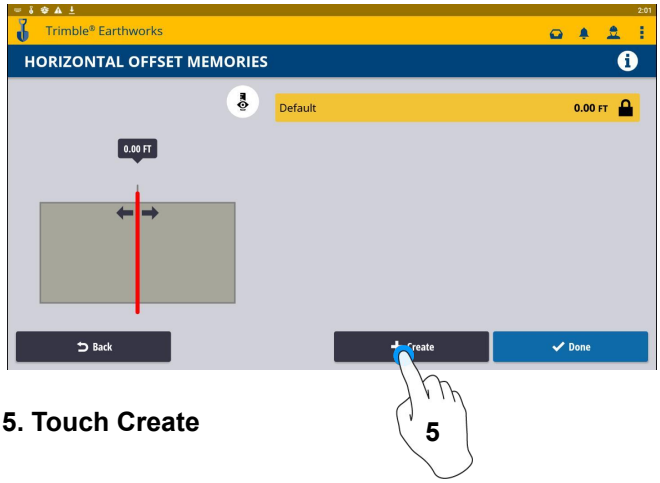
2. Touch and select Alignment



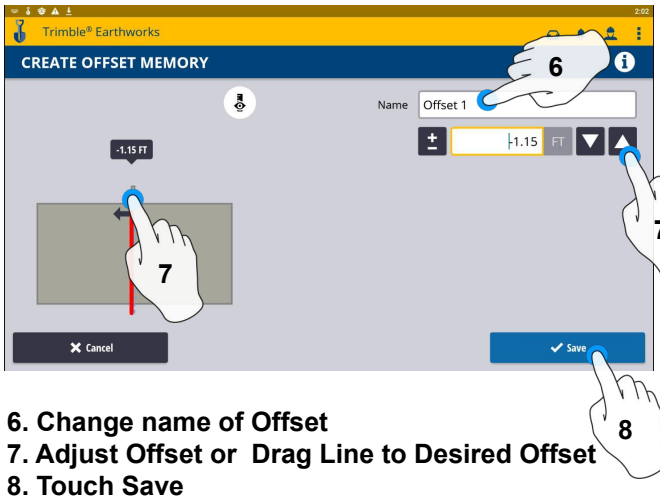
3. Adjust to manually change offset



4. Touch Memories box to create Default Offset

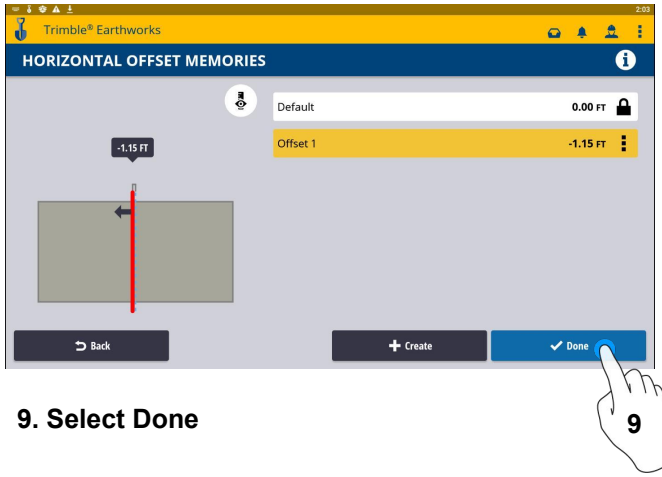


5. Touch Create

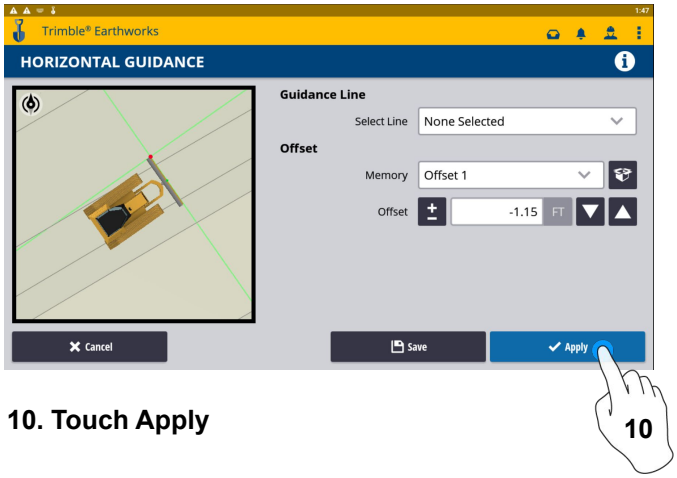


6. Change name of Offset
7. Adjust Offset or Drag Line to Desired Offset
8. Touch Save

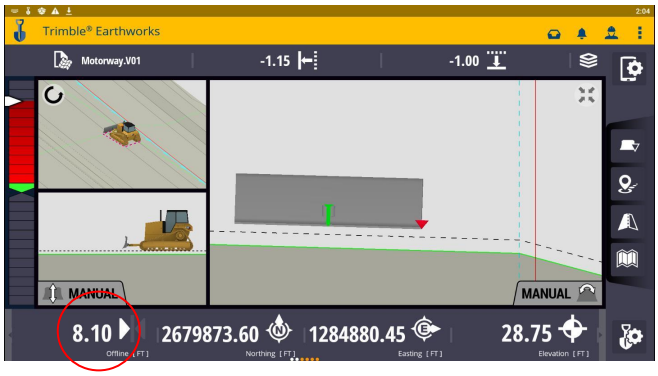
Horizontal Offset / Memories Cont:



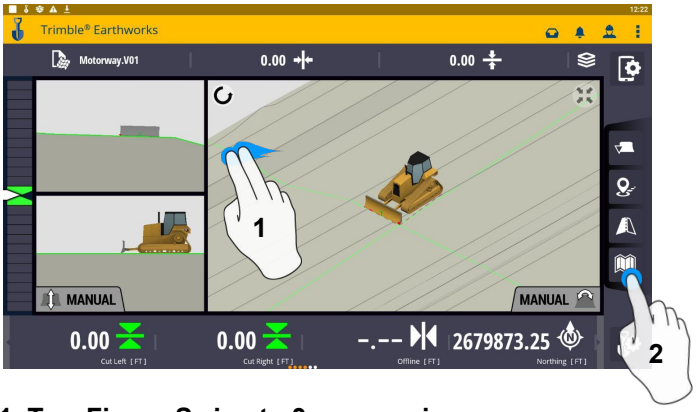
9. Select Done



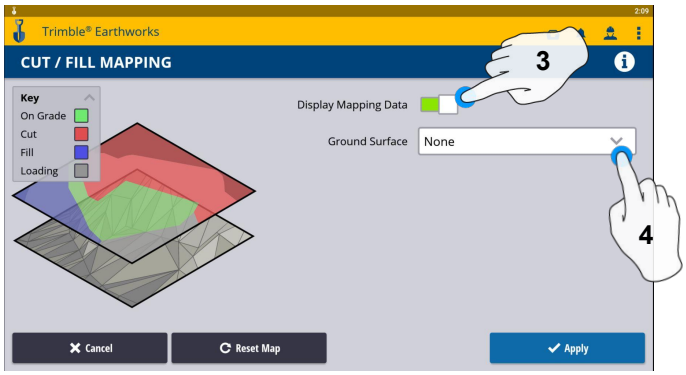
10. Touch Apply



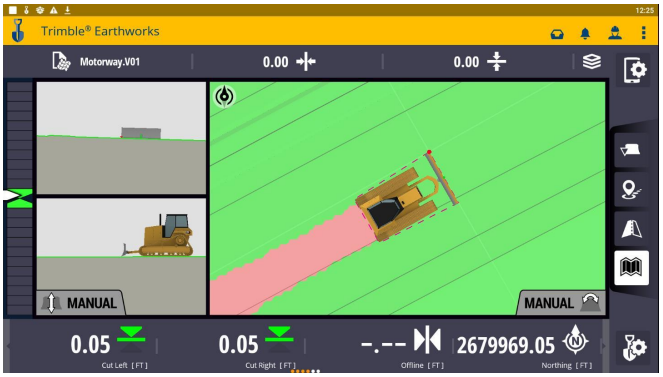
Cut Fill Mapping



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

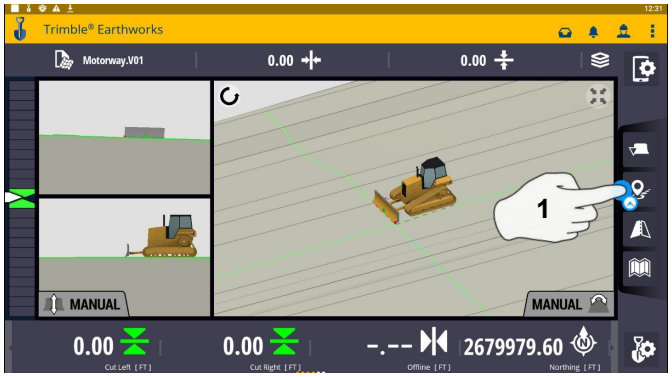


3. Toggle On & Off Display Mapping Data
4. Select a Ground Surface

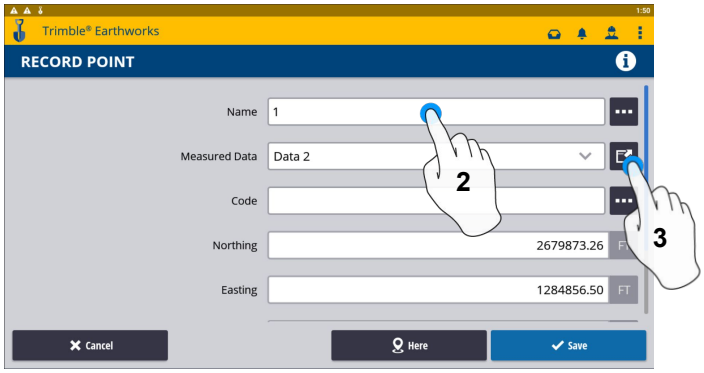


****Cut Fill Mapping will only be visible in Plan, Cross section, and Profile views****

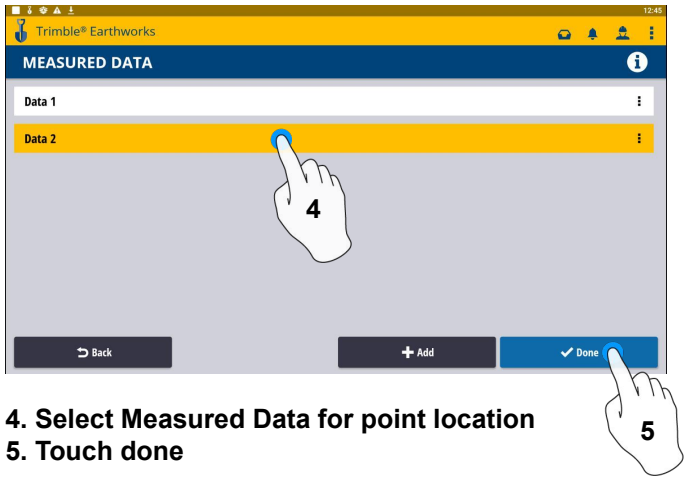
Record Point



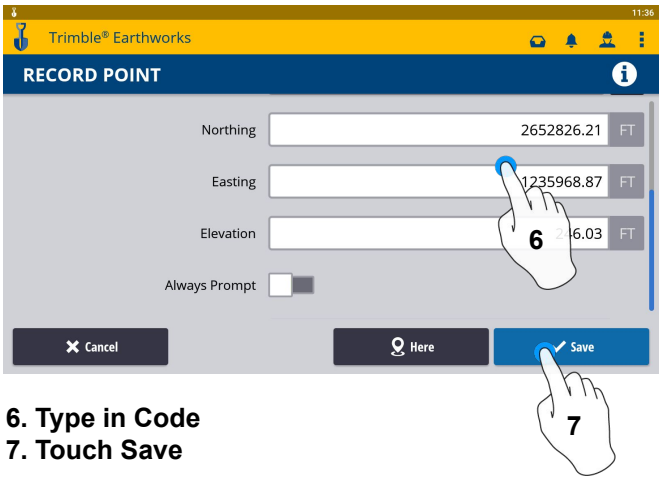
1. Touch and Hold Record Point



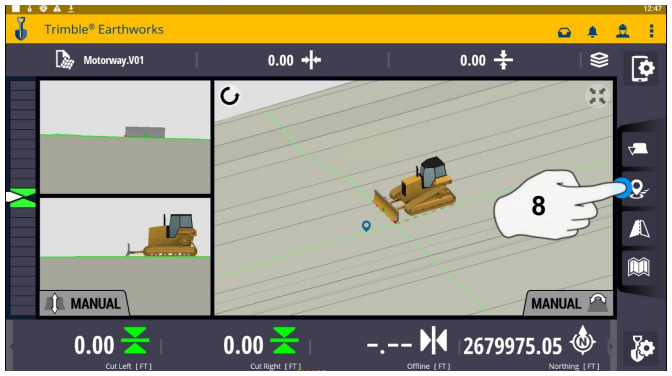
2. Touch to Edit Name
3. Touch and select Measured Data



4. Select Measured Data for point location
5. Touch done



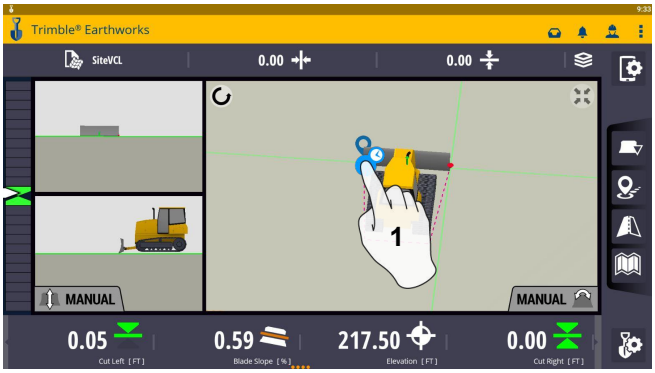
6. Type in Code
7. Touch Save



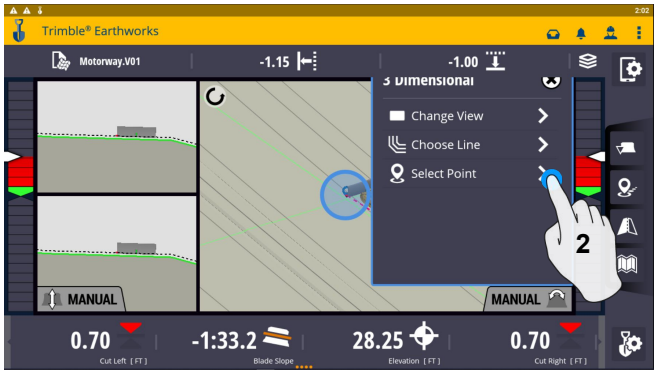
8. Touch Point Icon Records Point

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

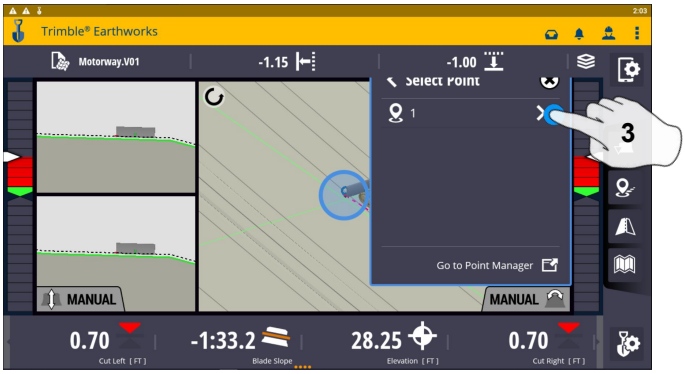
Delete / Edit Point



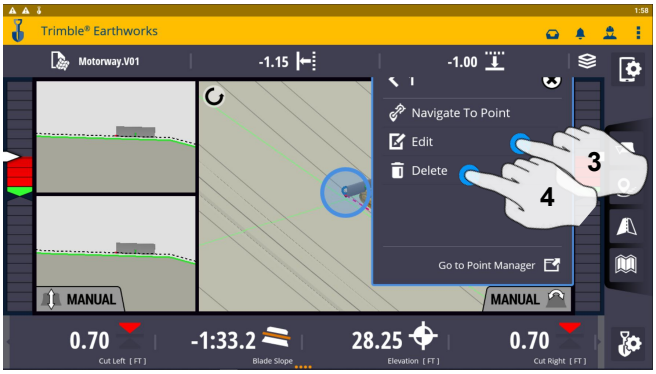
1. Touch and hold over point created



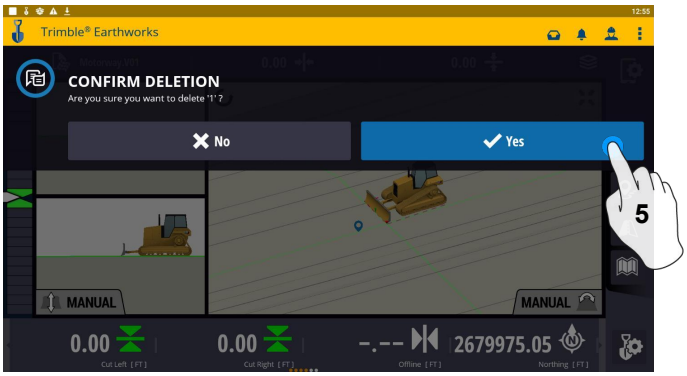
2. Touch Select Point

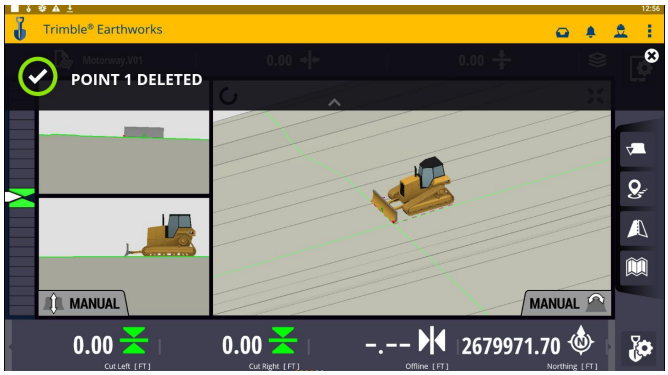


3. Select the point



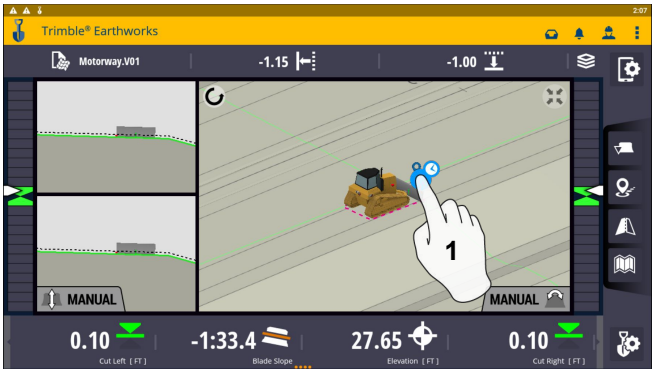
3. Edit point information if needed
4. Touch Delete



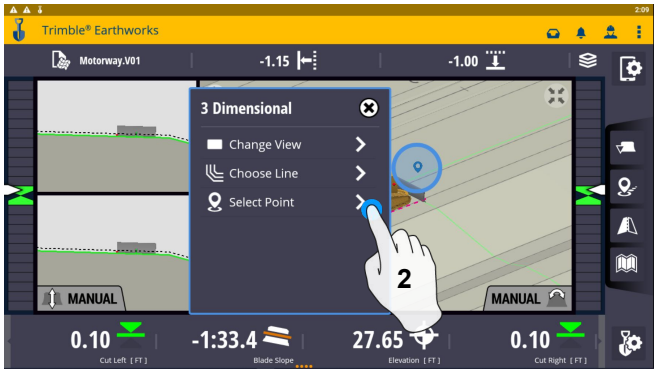


5. Touch Yes to Confirm Delete
(once deleted can no longer retrieve)

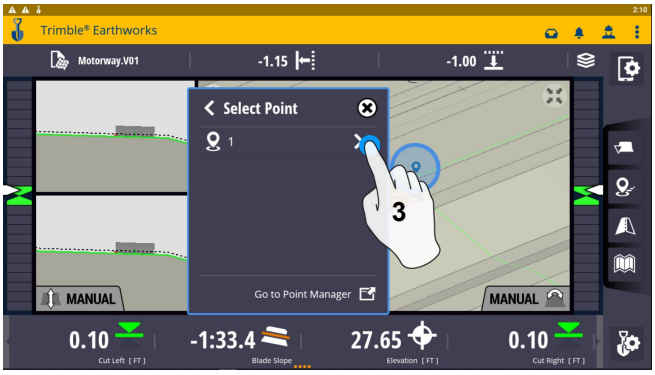
Navigate to Point



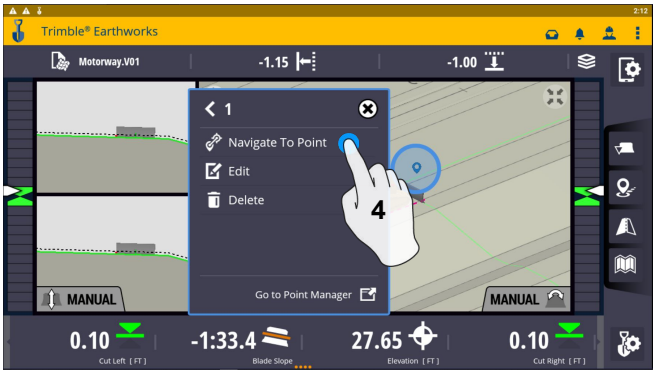
1. Touch and hold next to point



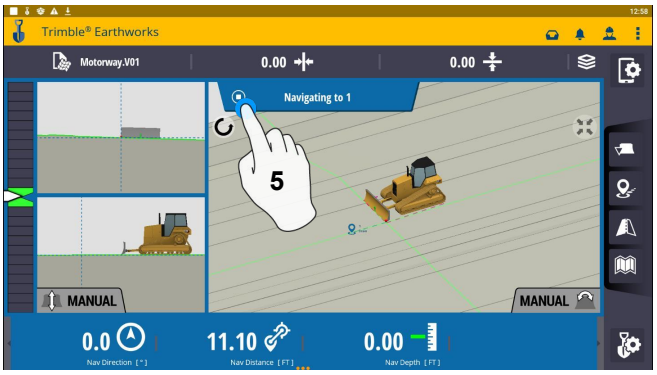
2. Touch Select Point



3. Select the Point

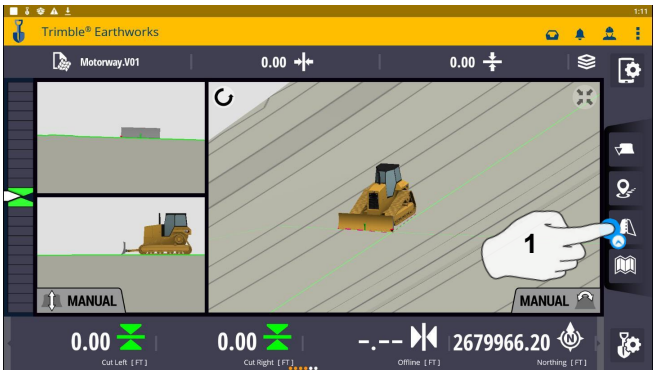


4. Touch Navigate To Point

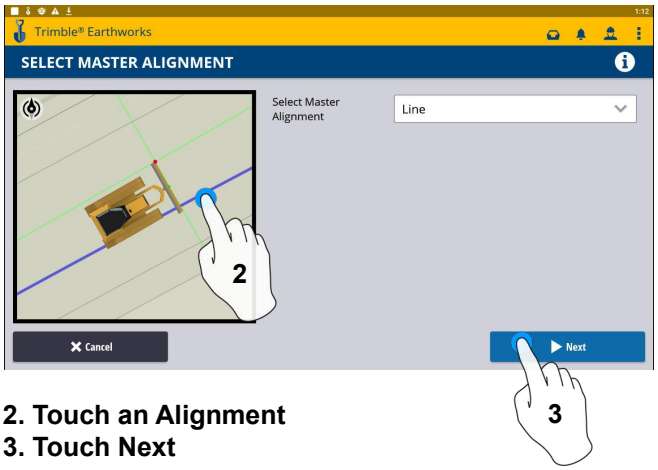


5. Touch to Stop Button to Exit

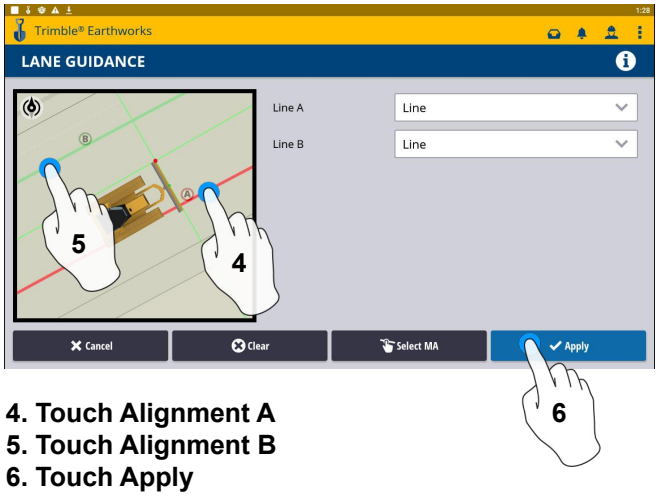
Lane Guidance



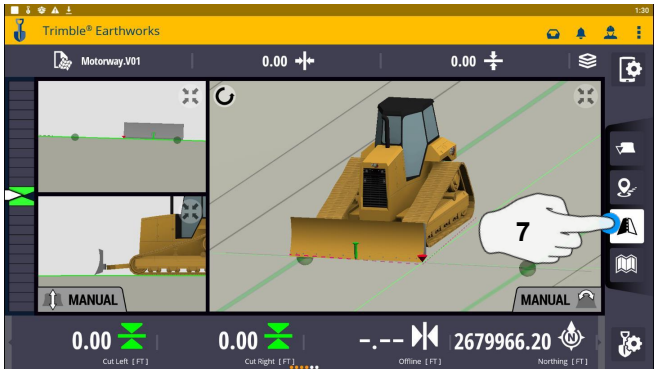
1. Touch and hold Lane Guidance



2. Touch an Alignment
3. Touch Next



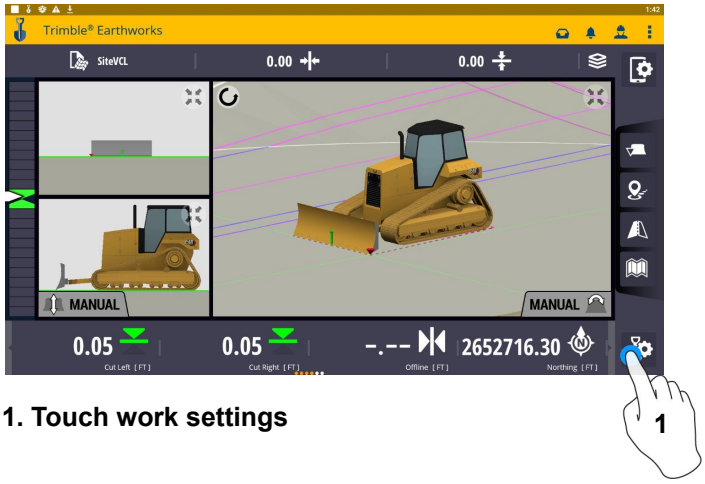
4. Touch Alignment A
5. Touch Alignment B
6. Touch Apply



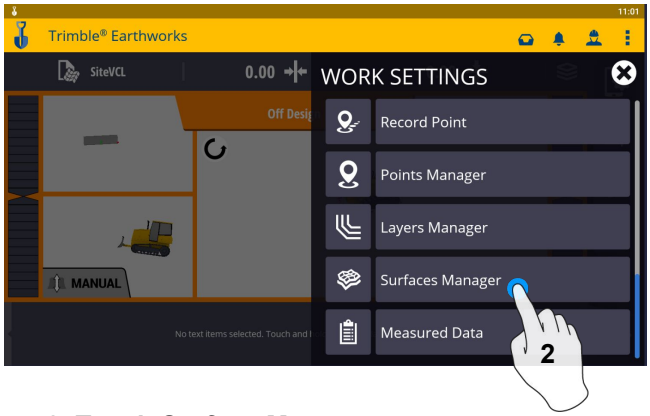
7. Touch Lane Guidance to Cancel

The slope between the two lines will be projected

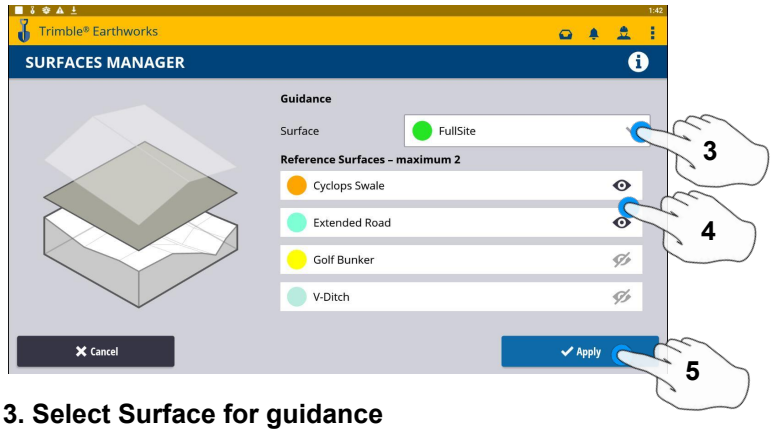
Surface Manager ** Will only work in VCL format Designs**



1. Touch work settings

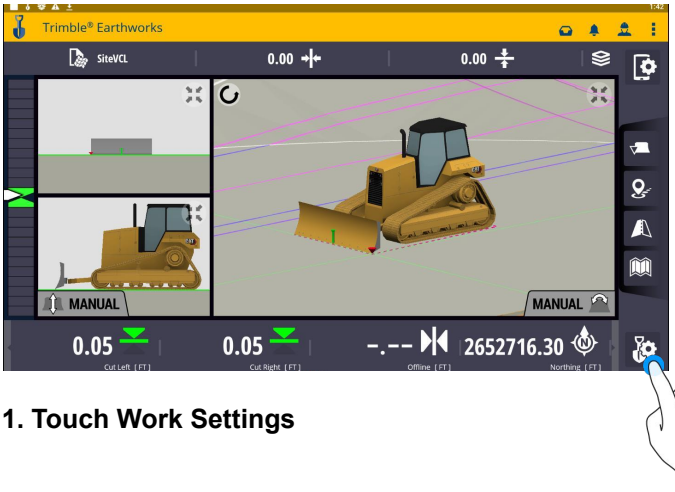


2. Touch Surface Manager

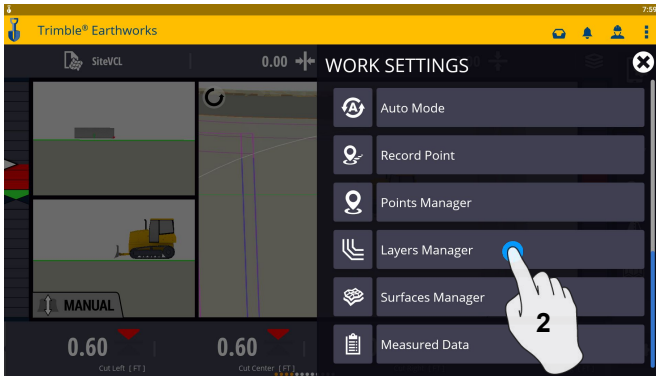


3. Select Surface for guidance
4. Select which Reference Surface (Maximum of 2)
5. Touch Apply

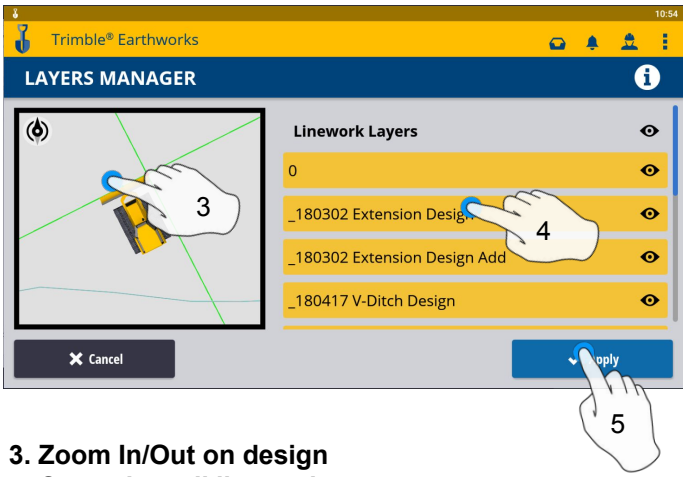
Layers Manager ** Will only work in VCL format Designs**



1. Touch Work Settings

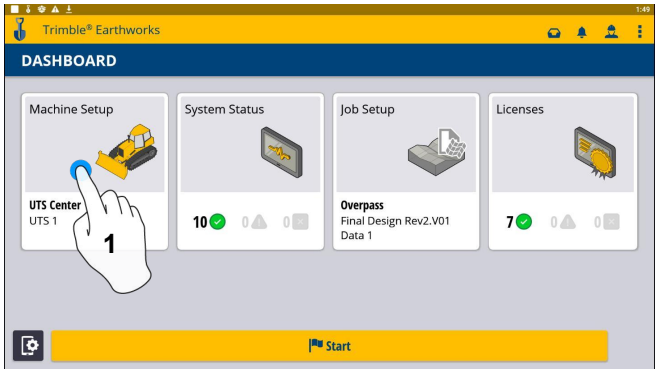


2. Touch Layers manager

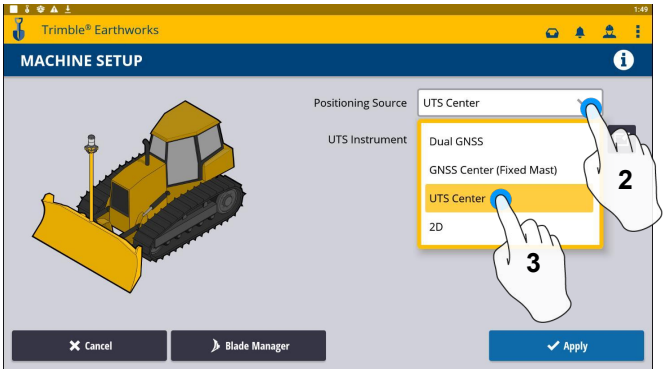


3. Zoom In/Out on design
4. Can select all linework
5. Select Individual linework
6. Touch apply once complete

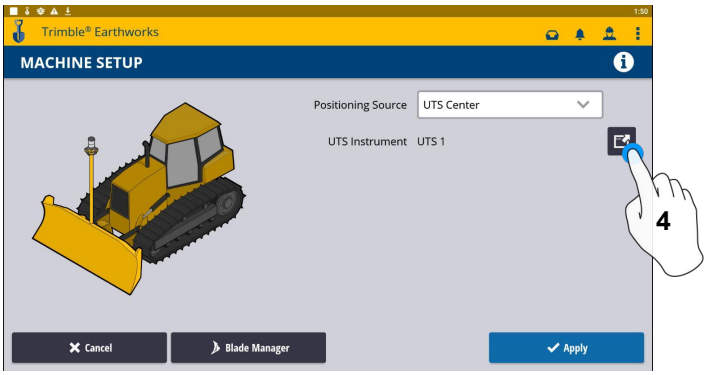
UTS Setup



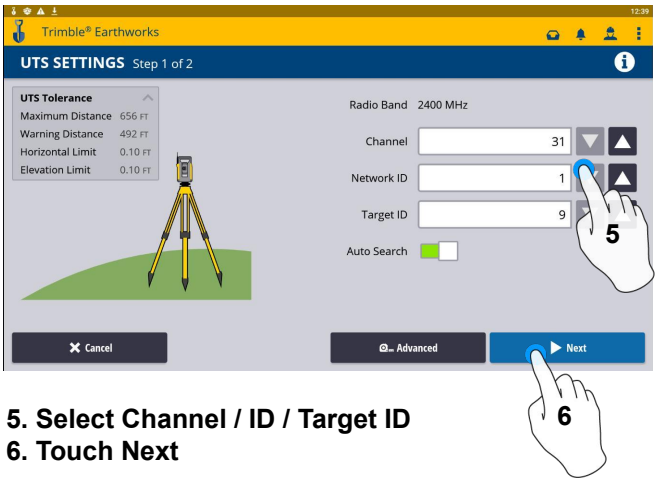
1. Touch Machine Setup



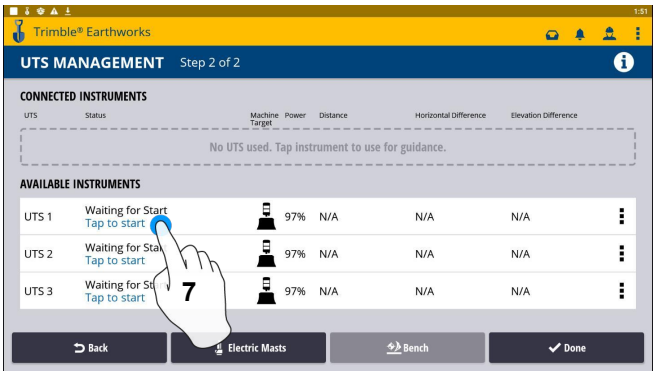
2. Touch Positioning Source
3. Touch UTS



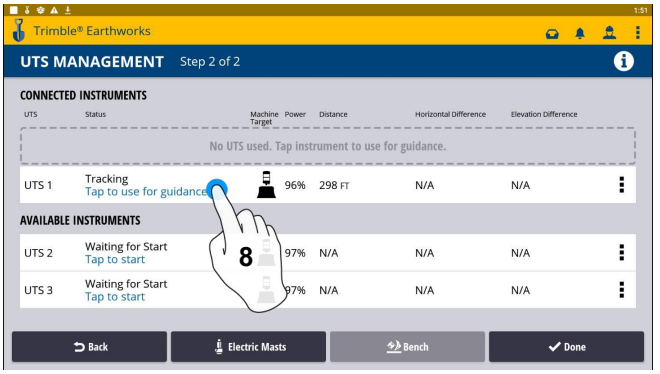
4. Touch to Edit / Add UTS



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

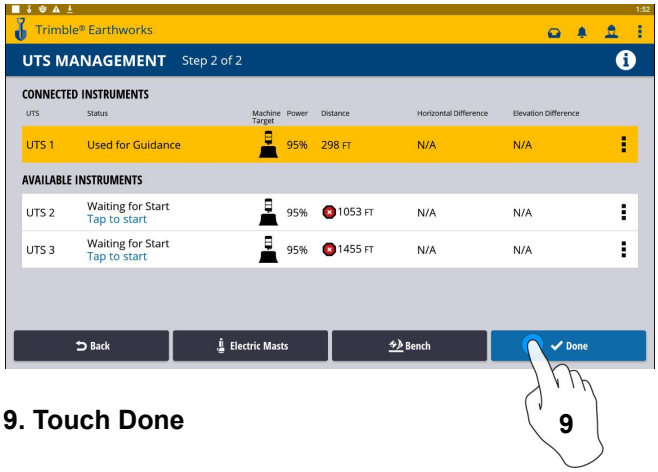


7. Touch to Start

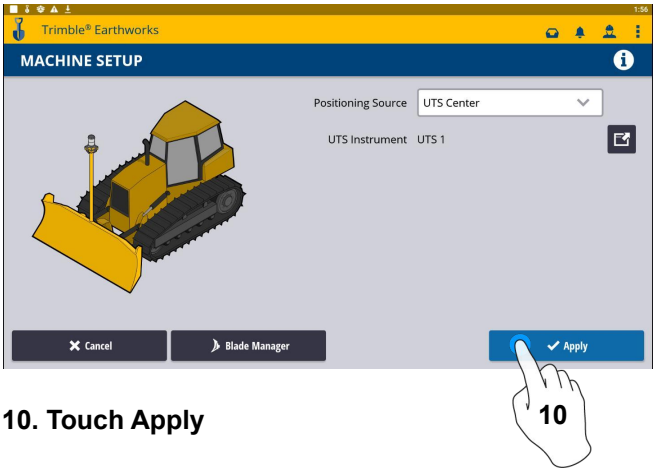


8. Touch to use for guidance

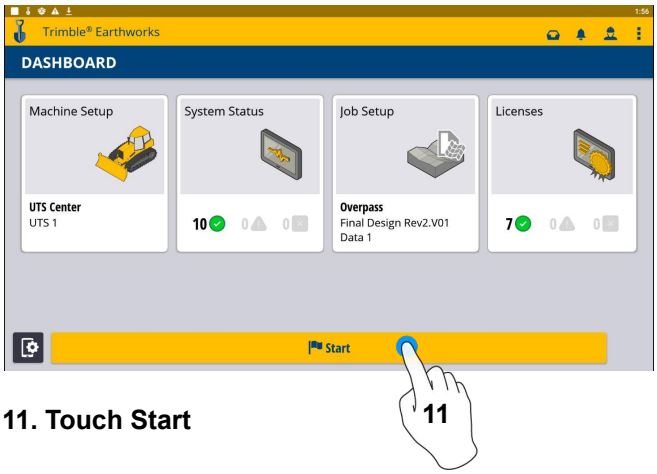
UTS Setup Cont:



9. Touch Done

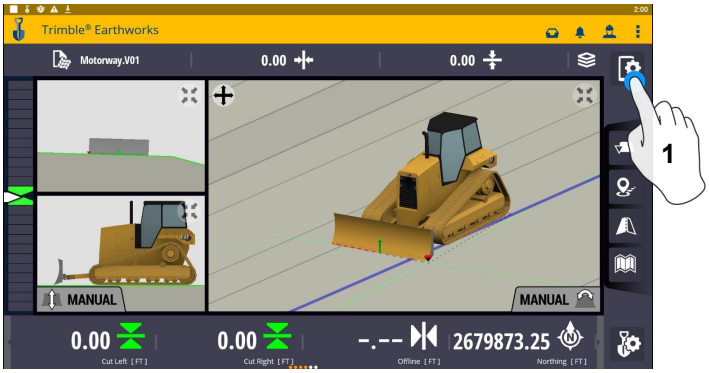


10. Touch Apply



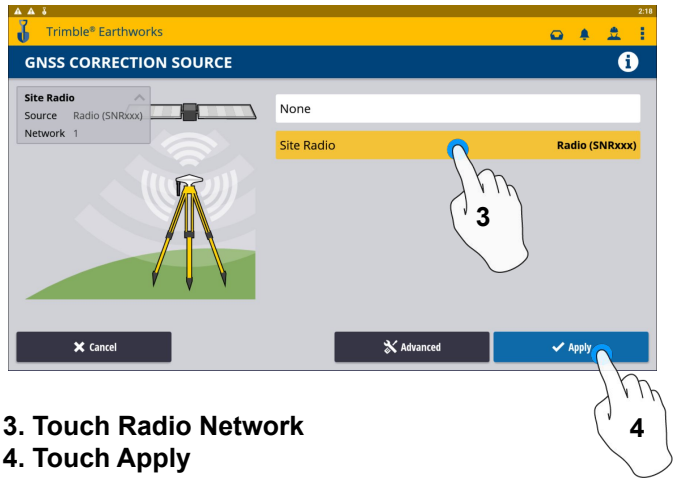
11. Touch Start

Change Radio Network



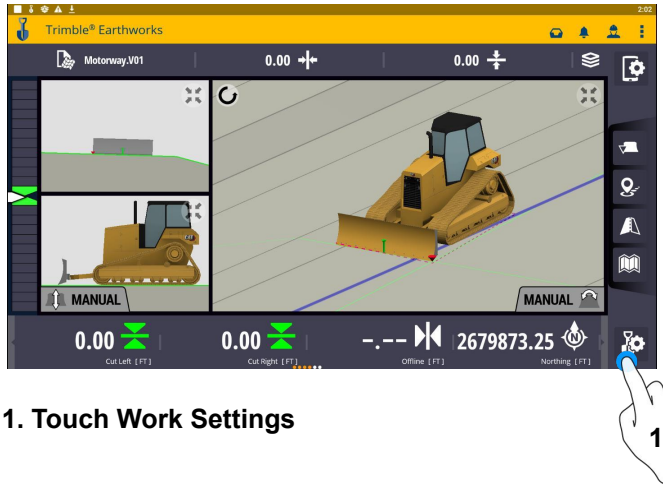
1. Touch System Settings

2. Touch GNSS Correction Source



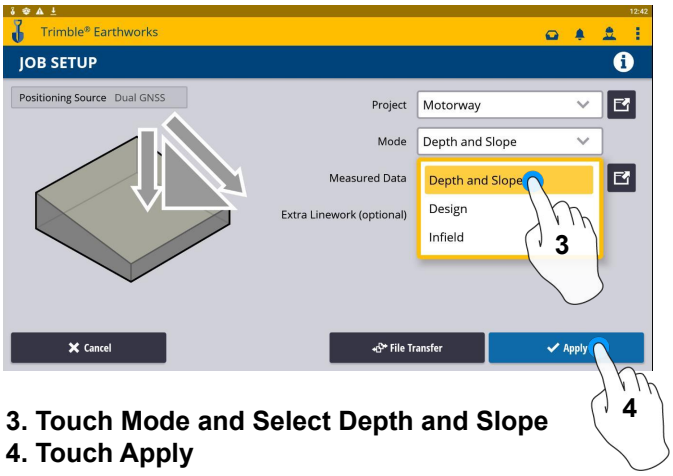
3. Touch Radio Network
4. Touch Apply

Level Surface

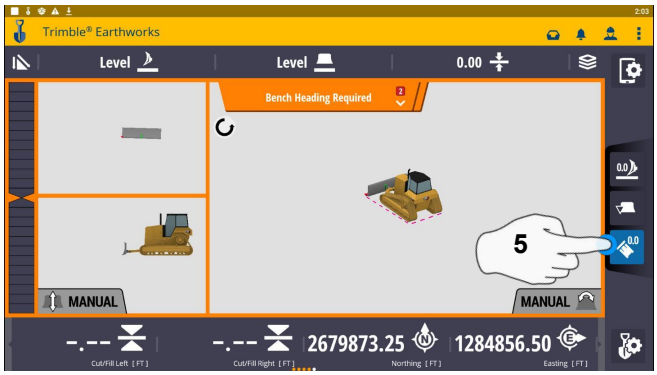


1. Touch Work Settings

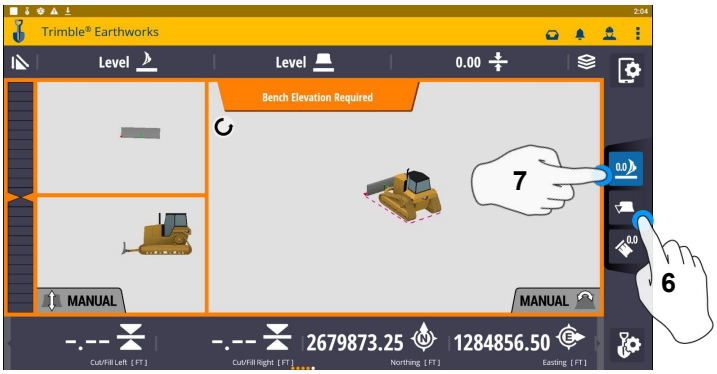
2. Touch Job Setup



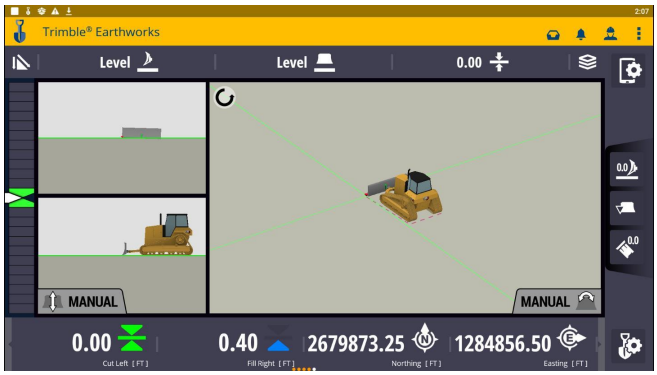
3. Touch Mode and Select Depth and Slope
4. Touch Apply



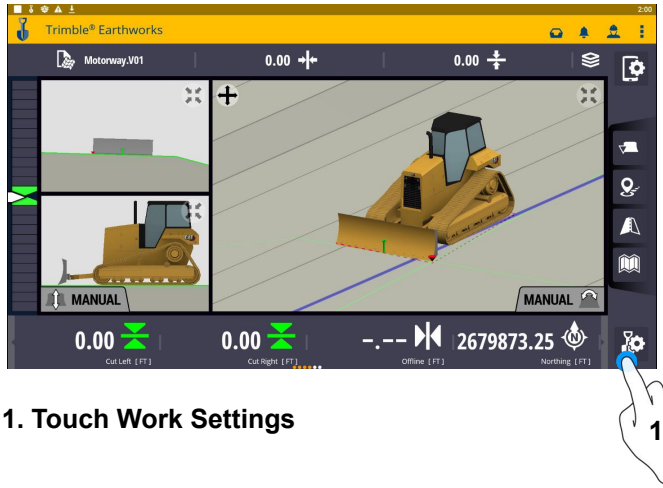
5. Touch Bench Heading



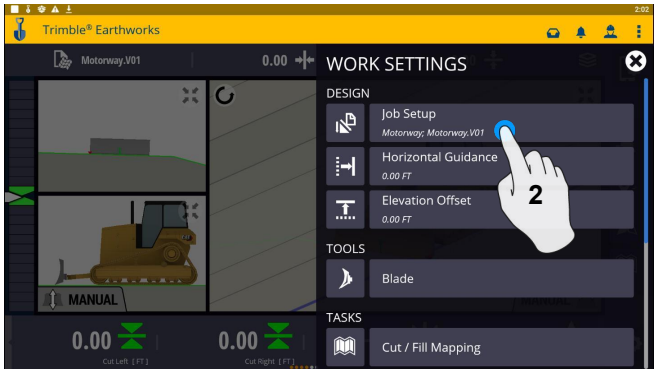
6. Select Blade Tip Focus Point
7. Place Blade Tip at Elevation and Touch Bench



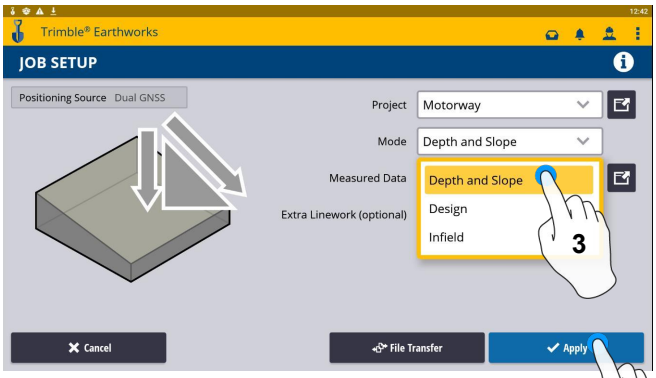
Sloping Surface



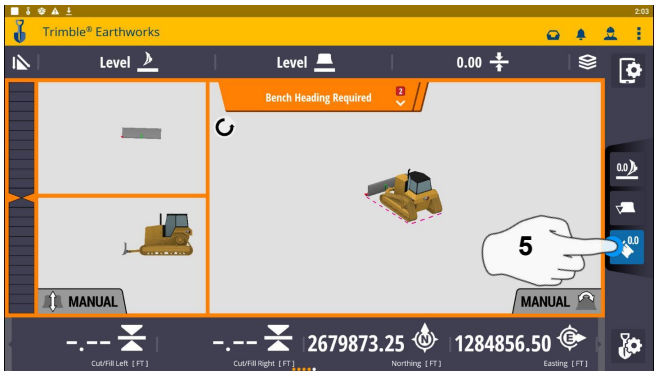
1. Touch Work Settings



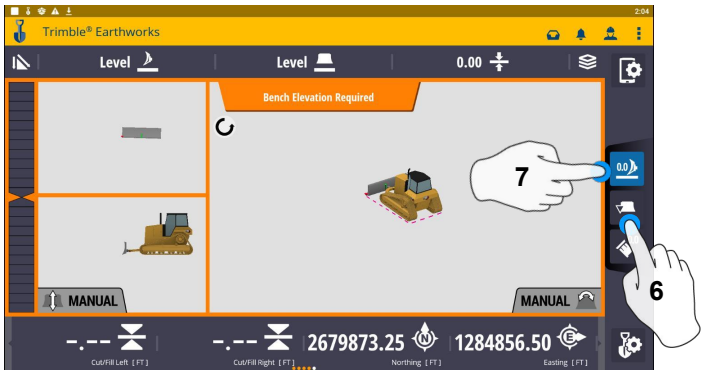
2. Touch Job Setup



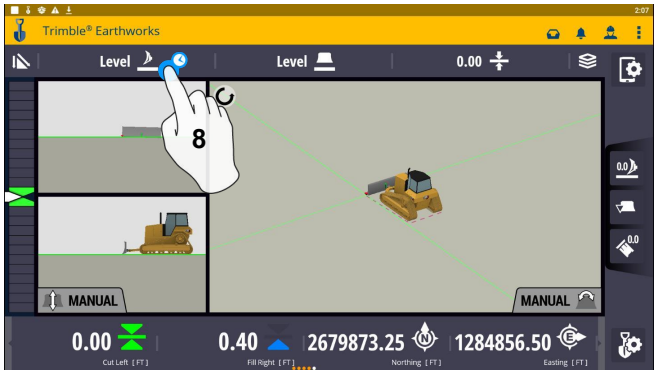
3. Touch Mode and Select Depth and Slope
4. Touch Apply



5. Touch Bench Heading

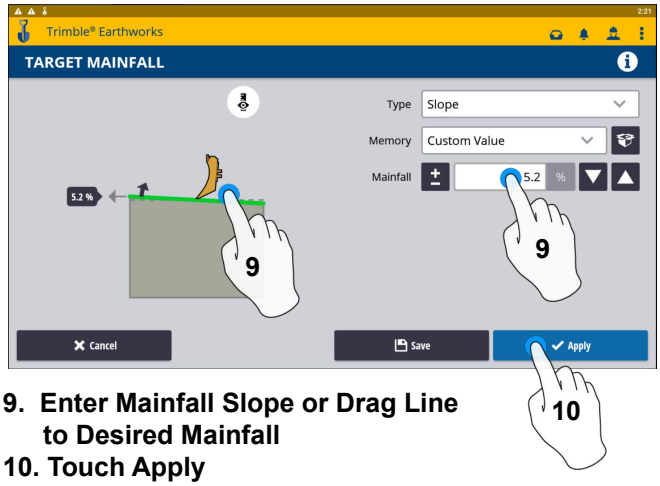


6. Select Blade Tip Focus Point
7. Place Blade Tip at Elevation and Touch Bench

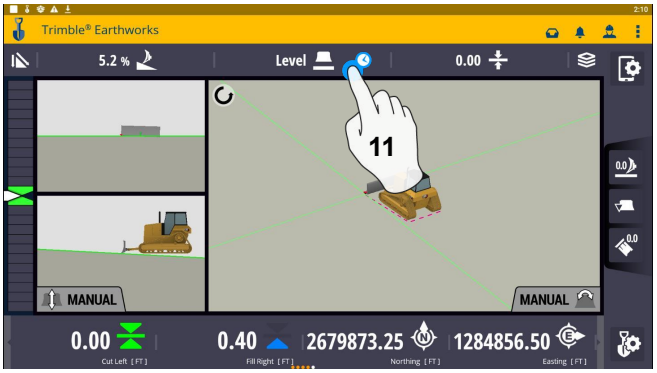


8. Touch and Hold Target Mainfall
   Note: This will apply a slope parallel to the direction of heading.

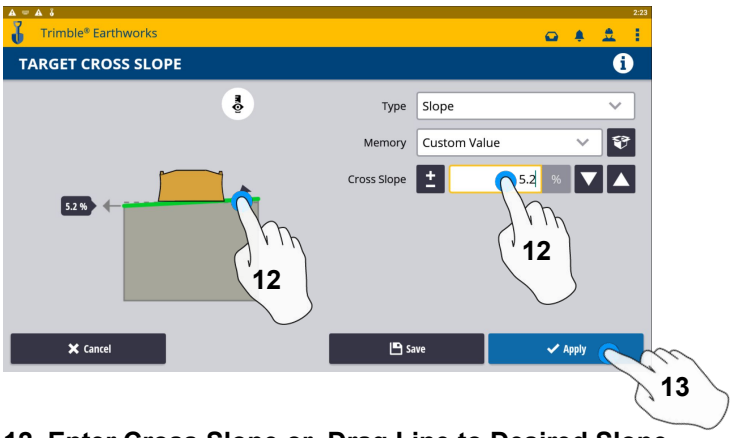
Sloping Surface Cont:



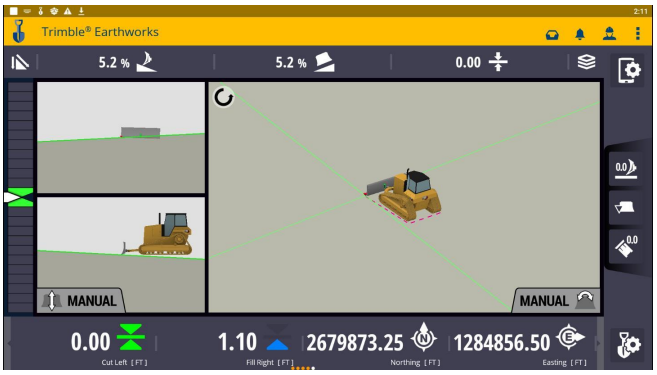
9. Enter Mainfall Slope or Drag Line to Desired Mainfall
10. Touch Apply



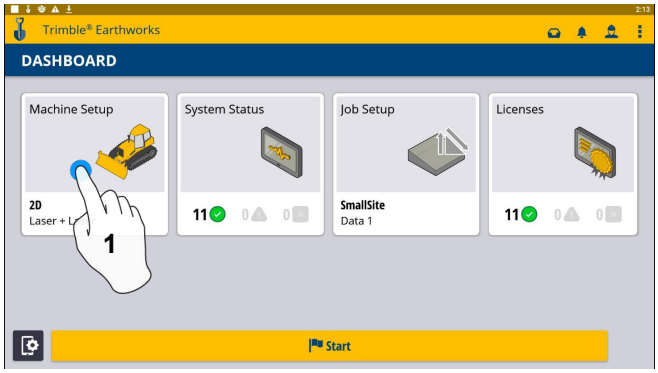
11. Touch and Hold Cross Slope
Note:This will apply a slope perpendicular to the direction of the heading



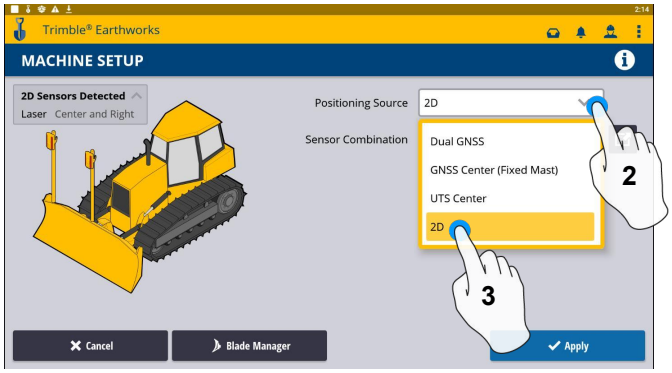
12. Enter Cross Slope or Drag Line to Desired Slope
13. Touch Apply



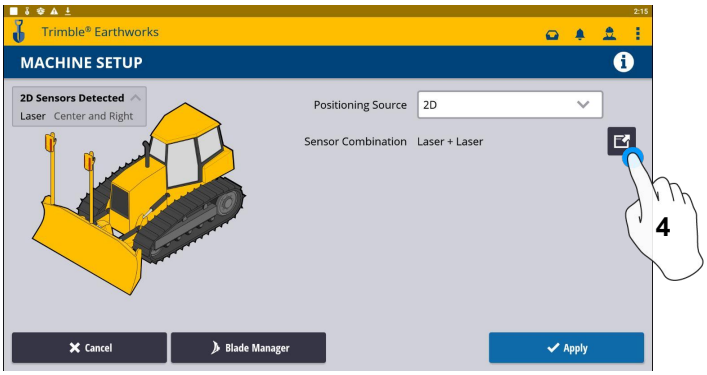
Laser Setup



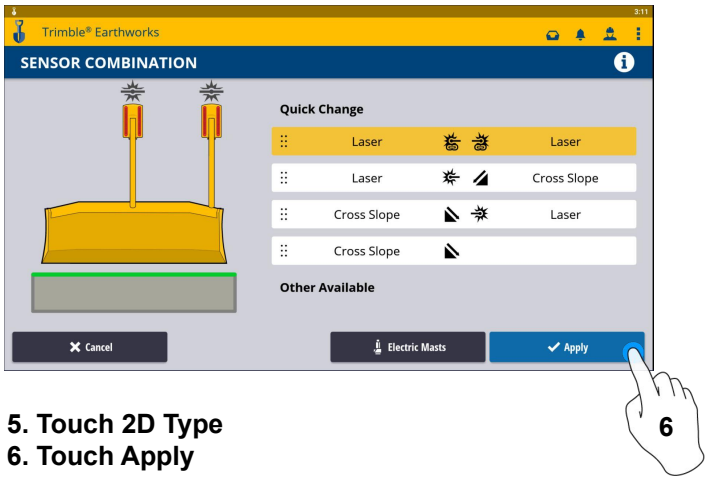
1. Touch Machine Setup



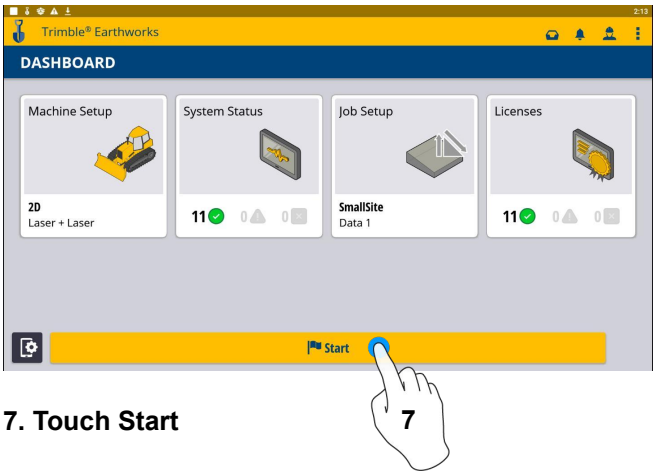
2. Touch Positioning Source
3. Touch 2D



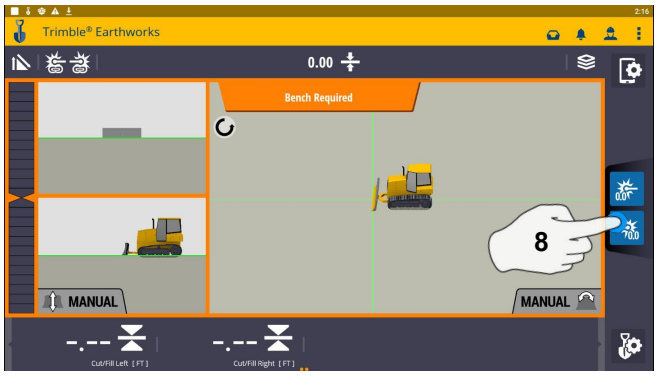
4. Touch to Edit 2D Sensors



5. Touch 2D Type
6. Touch Apply



7. Touch Start



8. Touch to bench Laser Receivers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