



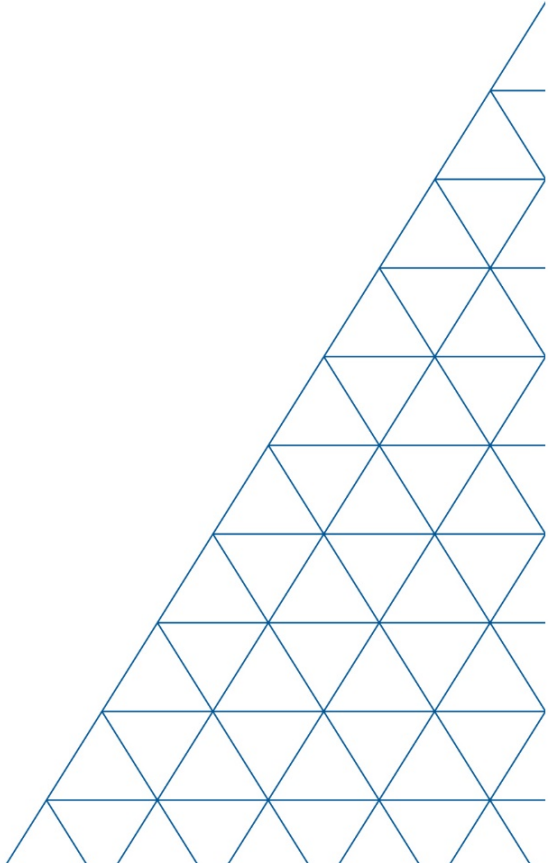
YOUR CONSTRUCTION TECHNOLOGY PROVIDER

# Field Reference Guides

EARTHWORKS GRADER VERISON 2.10

SITECH SOUTHEAST TEXAS

[SITECH-SETX.COM](http://SITECH-SETX.COM)



## System: Earthworks Grader

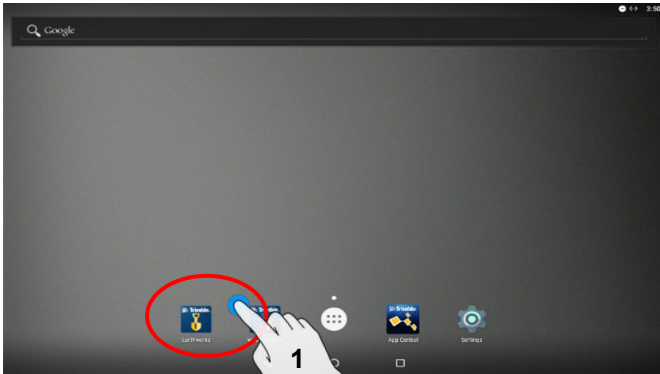
Version 2.1

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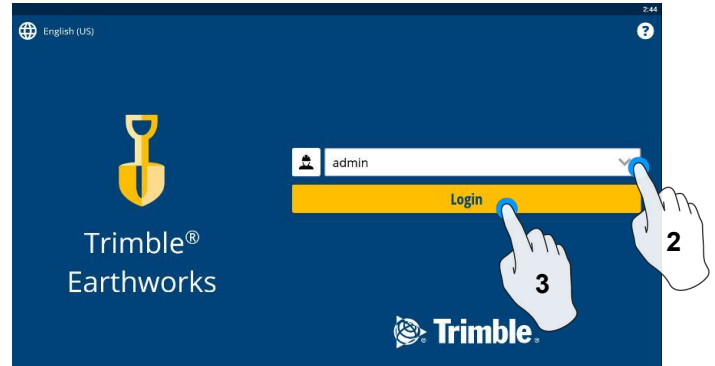
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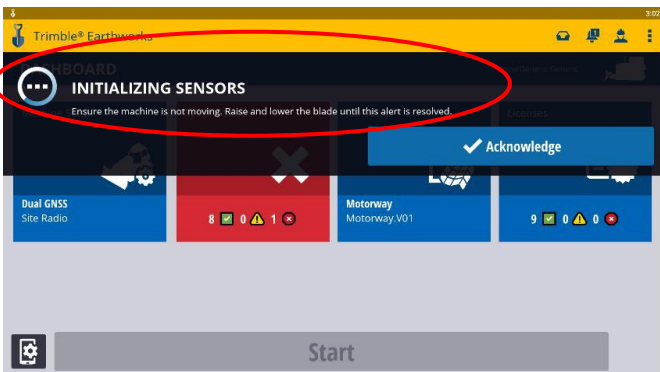
## Starting Earthworks



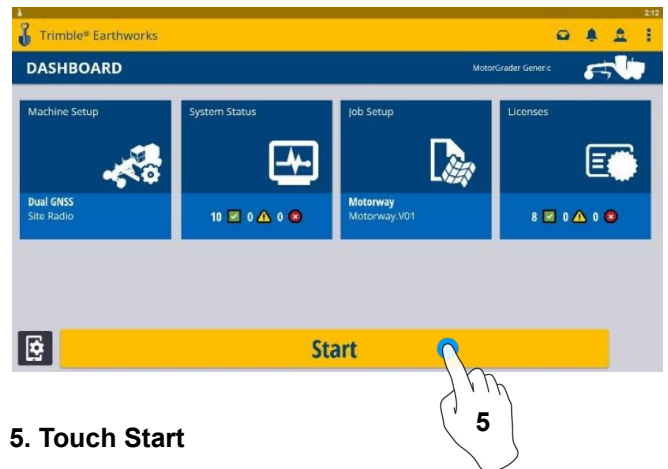
1. Touch  Earthworks Icon



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

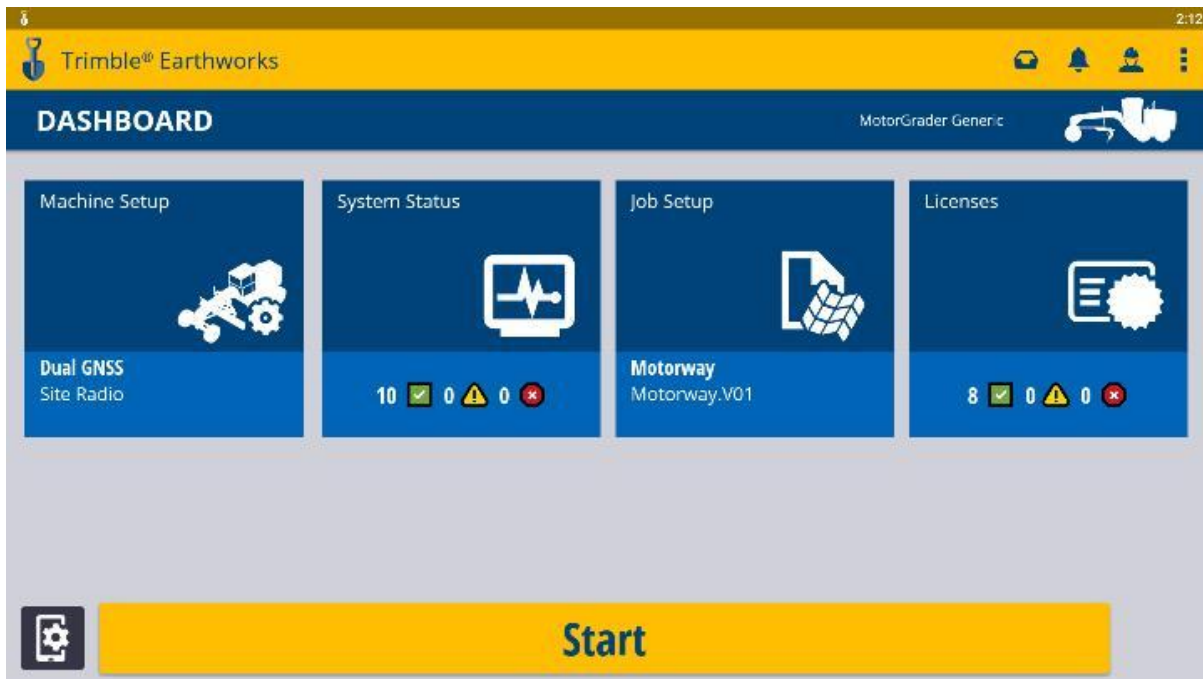


4. Raise and lower the blade  
to initialize sensors



5. Touch Start

## Dashboard

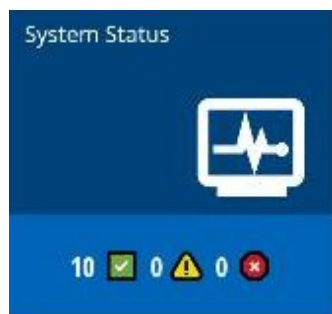


### Machine Setup



- Position Source
- Correction Source

### System Status



- Status of Devices
- Component Warnings

### Job Setup



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

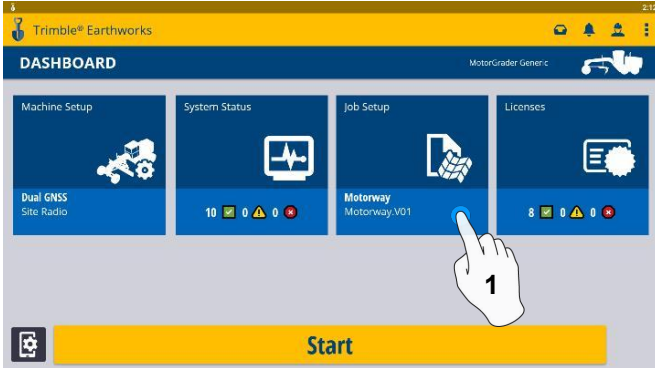
### Licenses



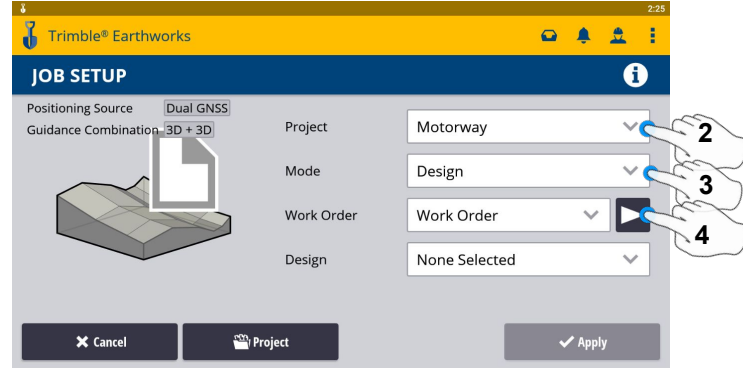
- EC520 License
- TD520 License
- GNSS Receiver License

# SITECH TECHNOLOGY DEALER Field Reference Guides

## Select Project, Design and Work Order

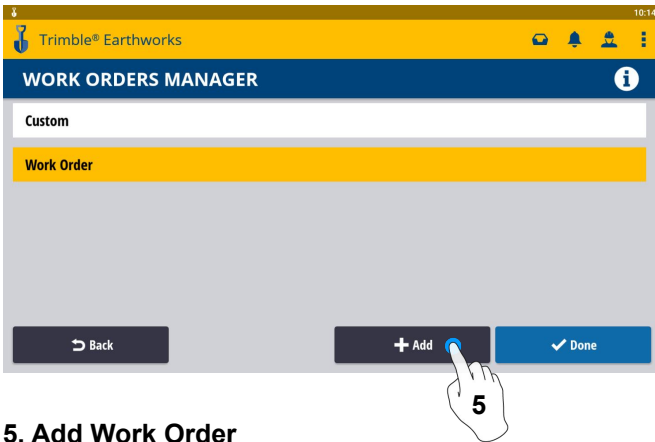


1. Touch Job Setup

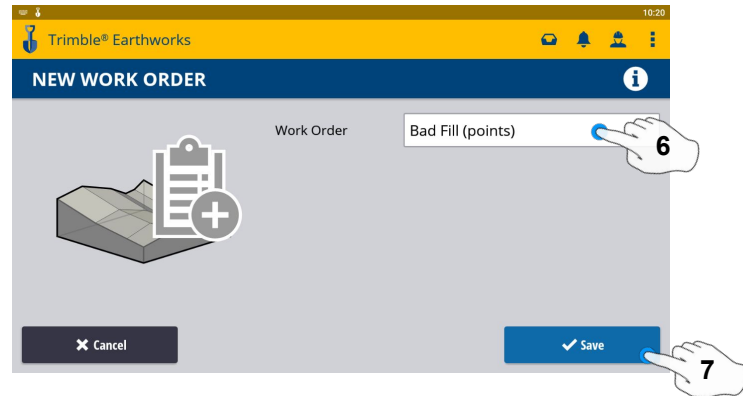


2. Select Project  
3. Select Mode

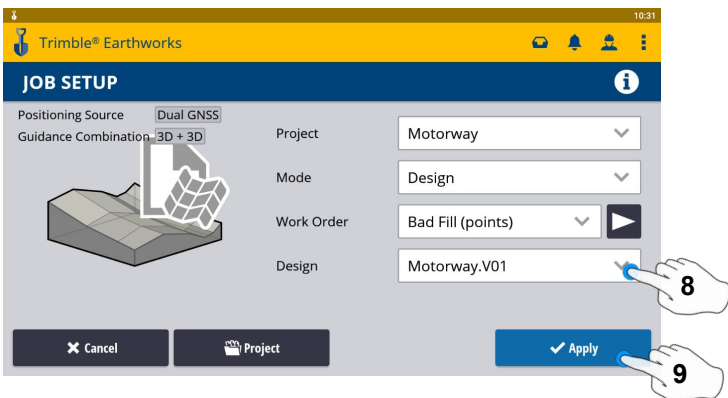
4. Work Order (Create New)



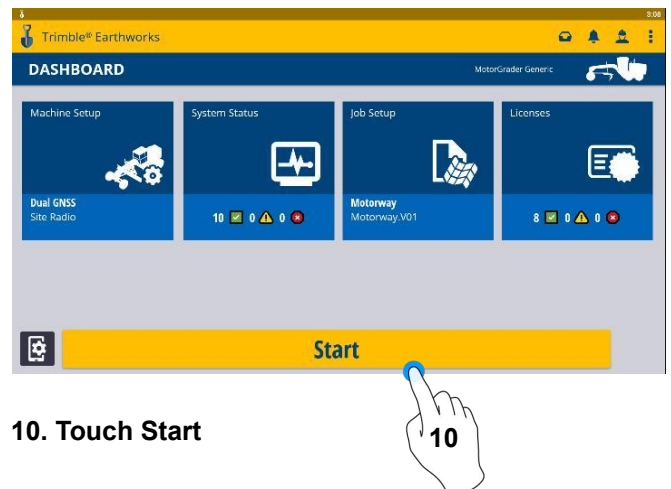
5. Add Work Order



6. Type New work Order Name  
7. Touch Save

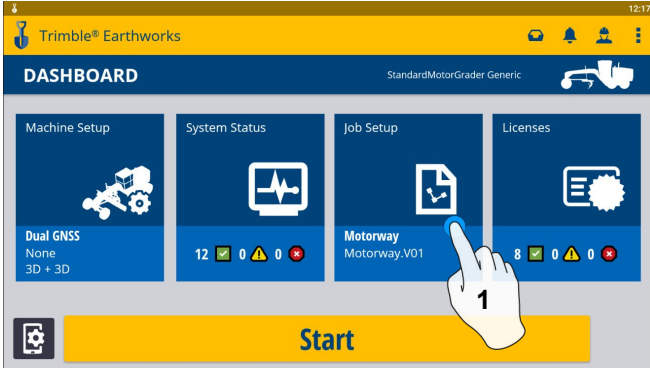


8. Select Design  
9. Touch Apply

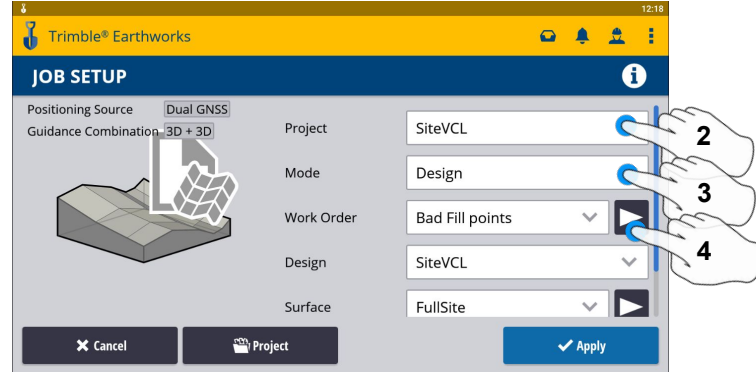


10. Touch Start

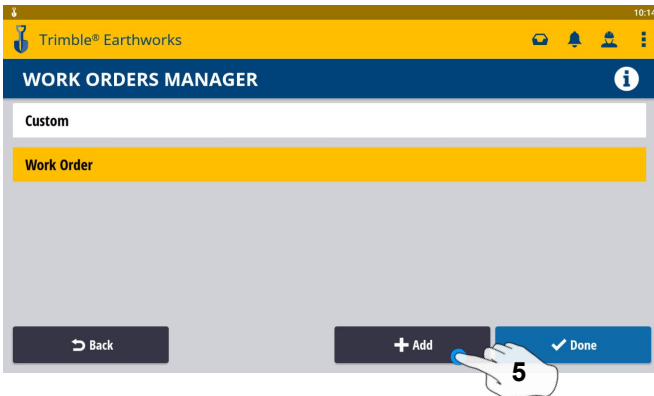
## Select Project, Design and Work Order: VCL



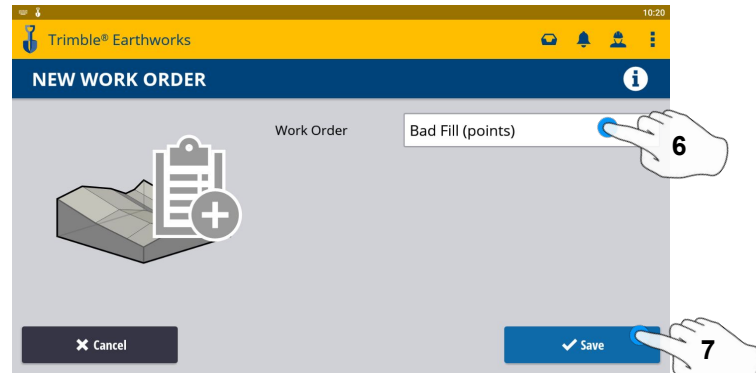
1. Touch Job Setup



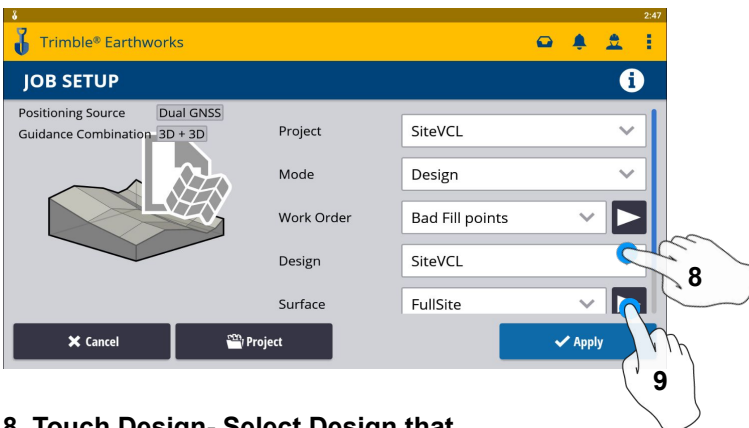
2. Touch Project- Select Project  
3. Touch Mode- Select Design  
4. Touch Work Order



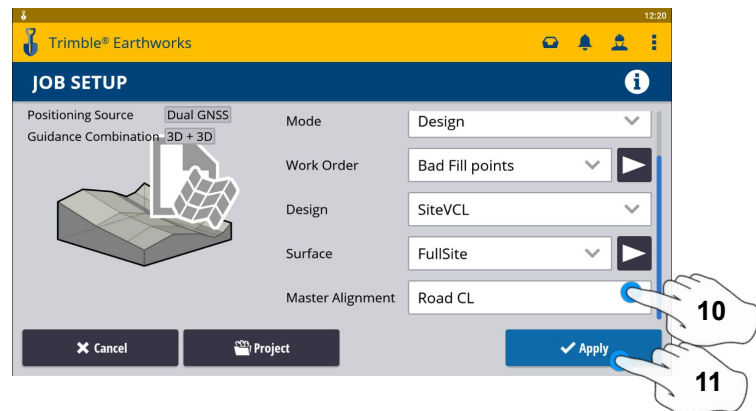
5. Add Work Order



6. Type New work Order Name  
7. Touch Save



8. Touch Design- Select Design that contains a VCL  
9. Touch Surface- Select Surface

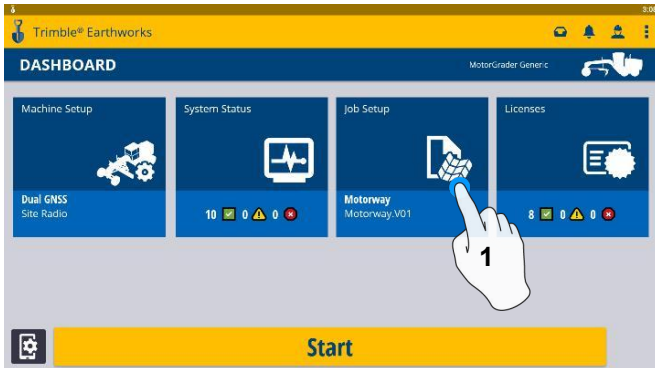


10. Touch Master Alignment - Select Alignment  
11. Touch Apply

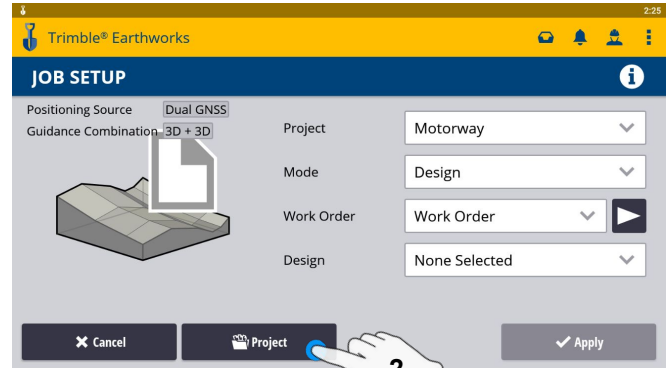


12. Touch Start

## Create New Project



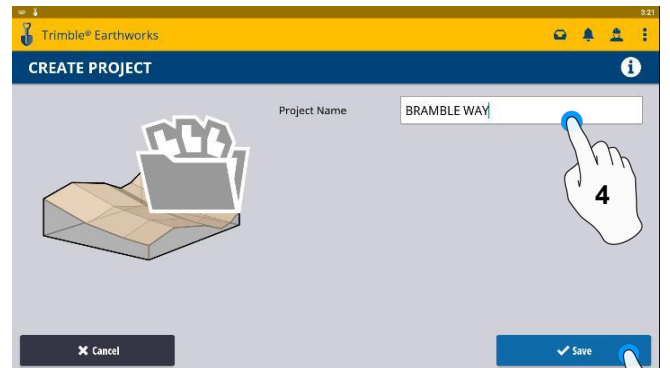
1. Touch Job Setup



2. Touch Project



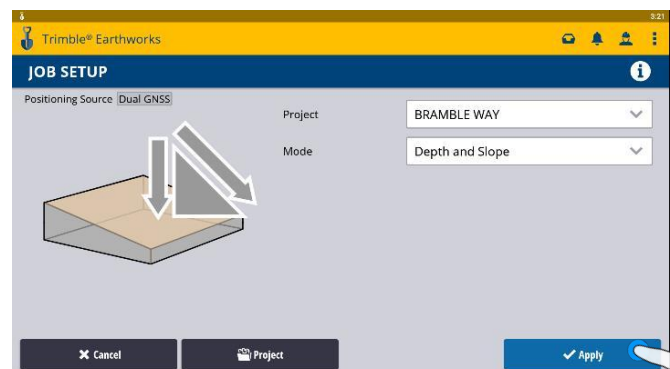
3. Touch Create



4. Enter Project Name  
5. Touch Save



6. Touch Select



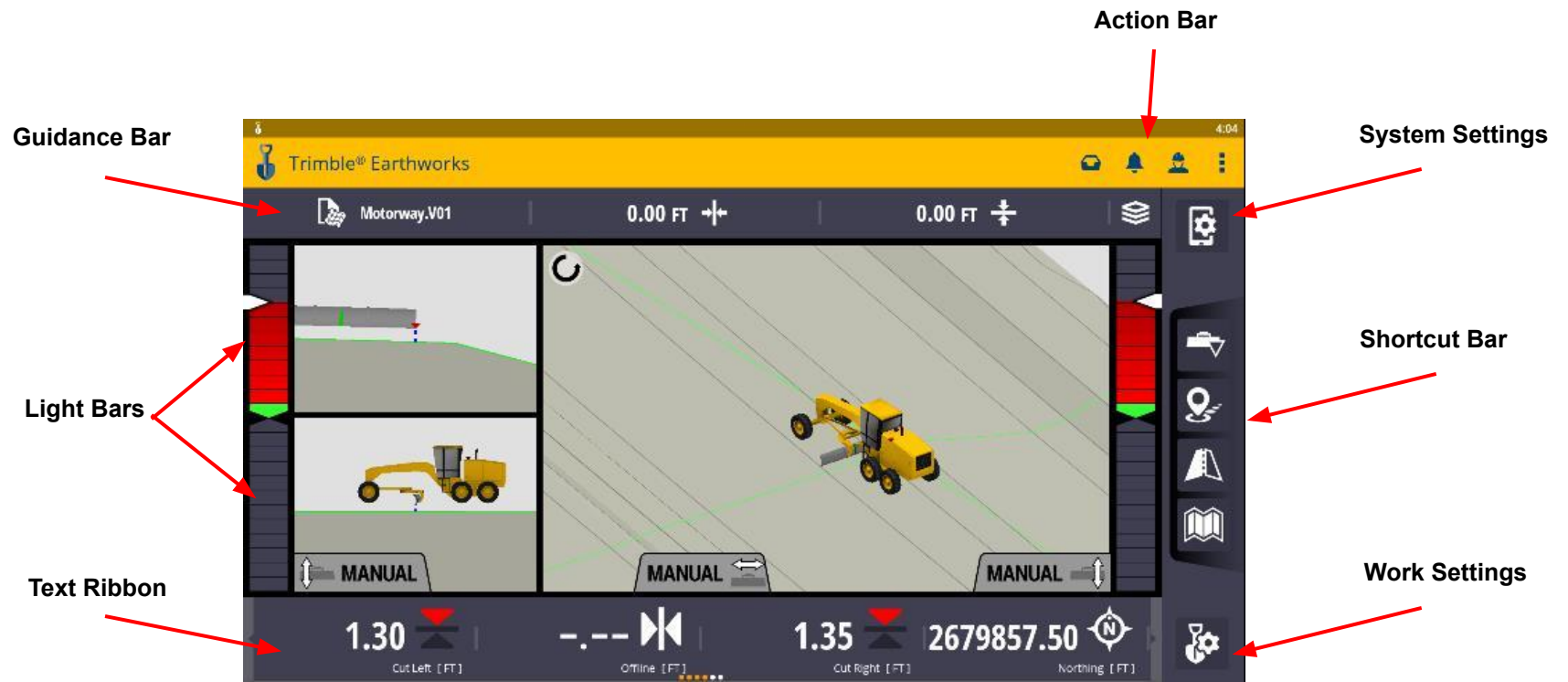
7. Touch Apply  
8. Touch Start







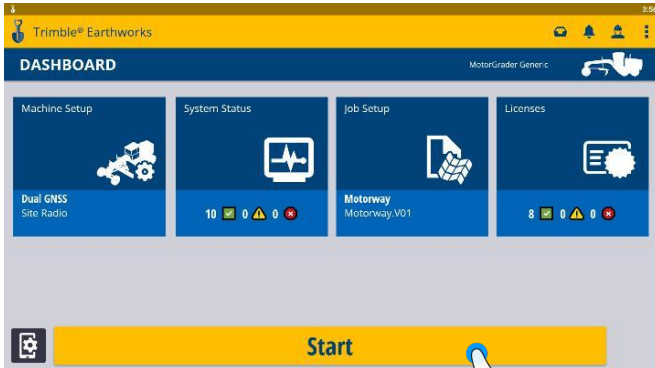
## Earthworks Screen



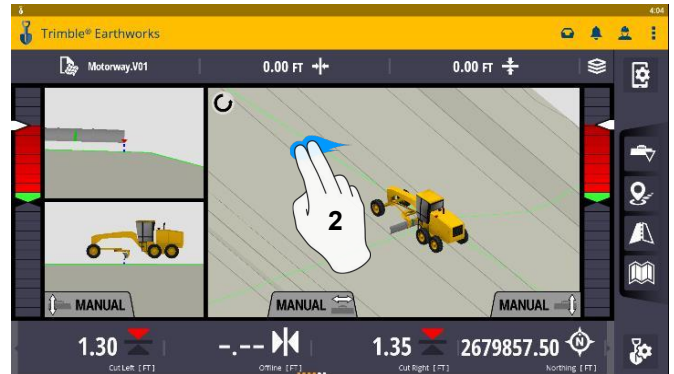
∞



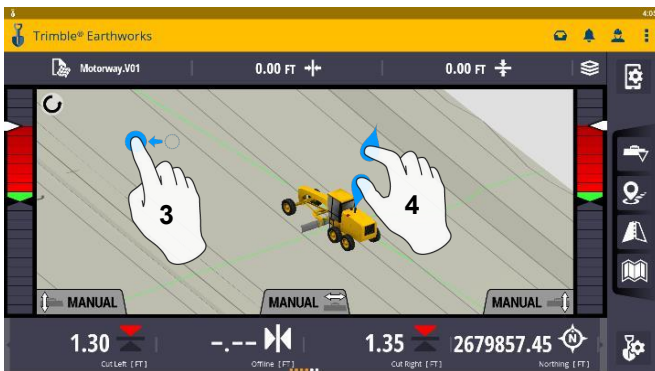
## Work Screen Interface



1. Touch to Start

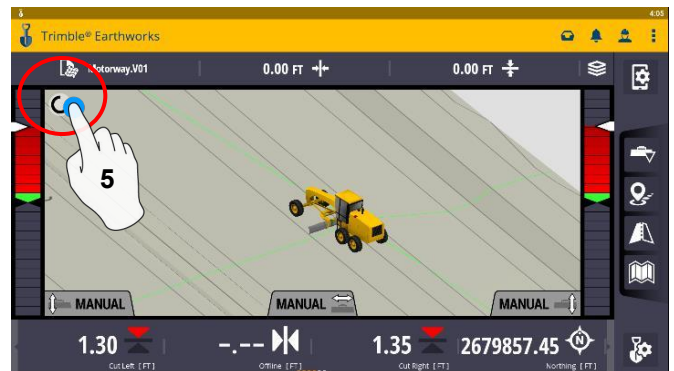


2. 2 Finger swipe to change views

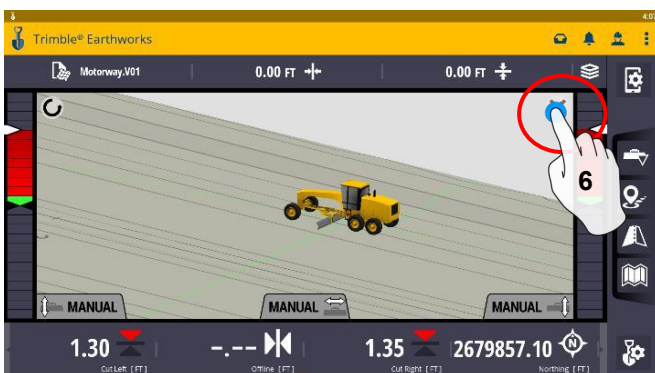


3. Drag to pan

4. Pinch-Spread to zoom/Zoom out



5. Touch to select Pan or Rotate



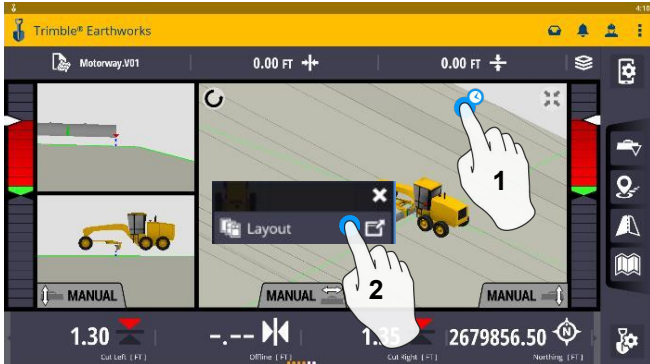
6. Touch to re-center



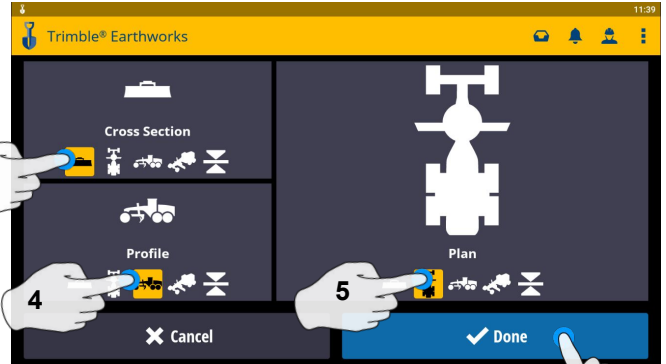
7. Touch and Hold for Setup

8. Swipe to change view

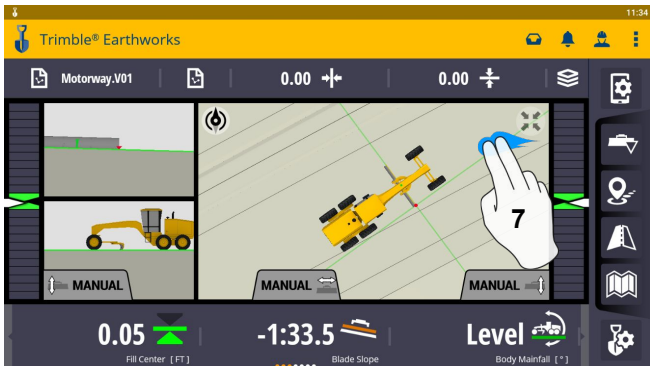
## Work Screen Setup



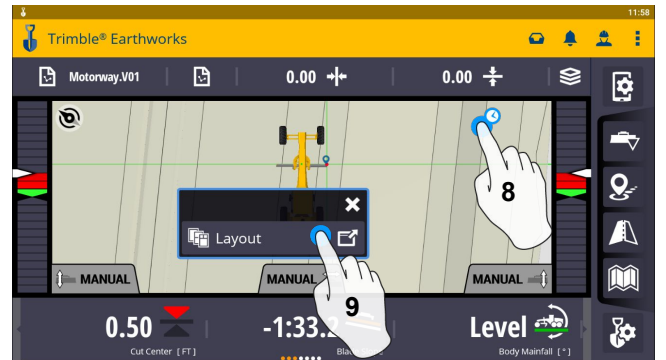
1. Touch and Hold
2. Touch Layout



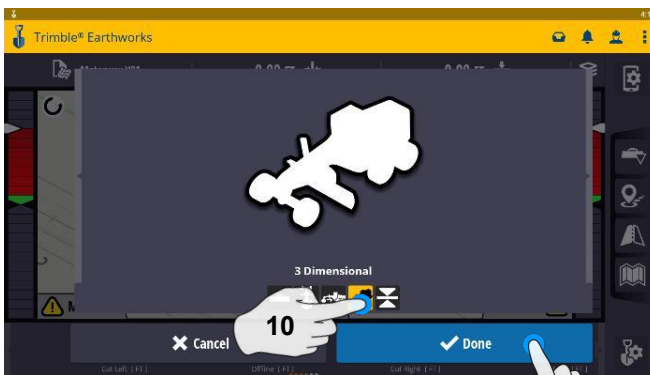
3. Touch Cross Section
4. Touch Profile View
5. Touch Plan View
6. Touch Done



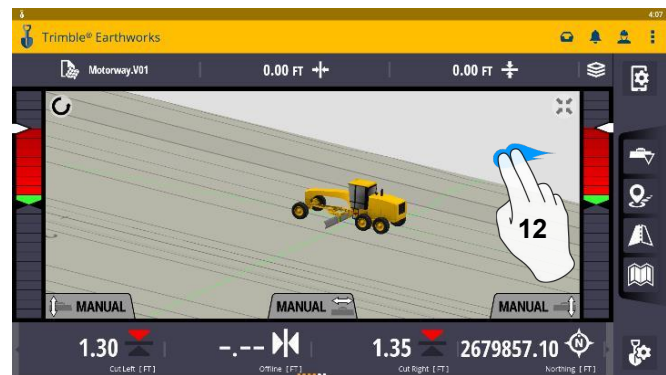
7. 2 Finger Swipe to single view



8. Touch and Hold
9. Select Layout

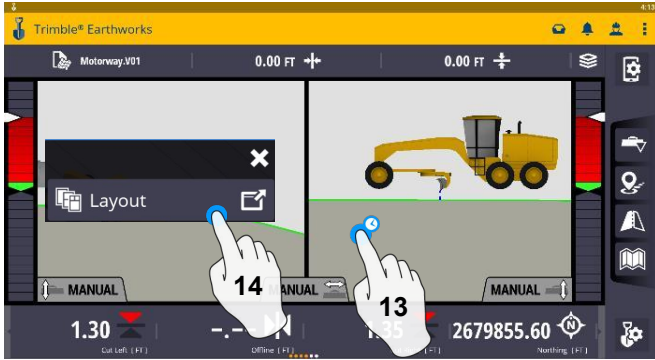


10. Touch 3D View
11. Touch Done

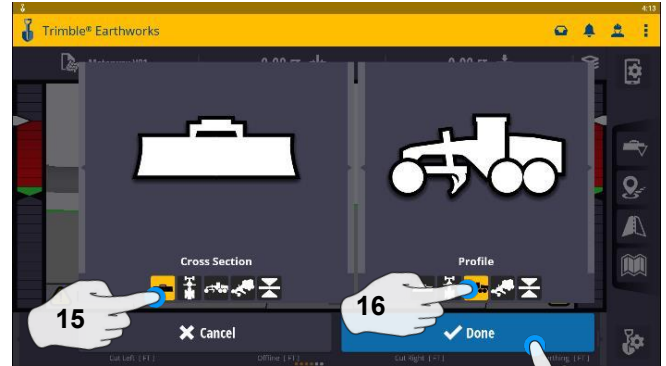


12. 2 Finger swipe to 2 Screen View

## Work Screen Setup Cont:

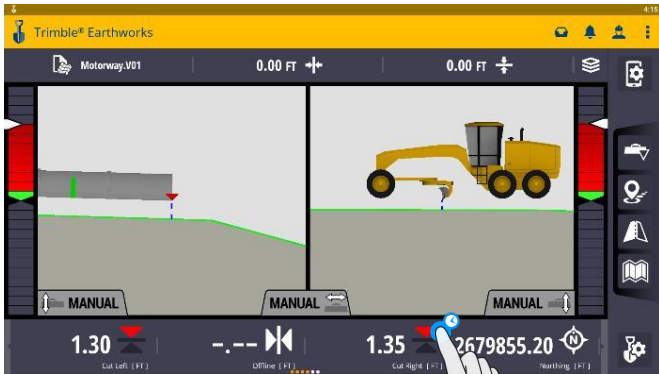


- 13. Touch and Hold
- 14. Touch Layout

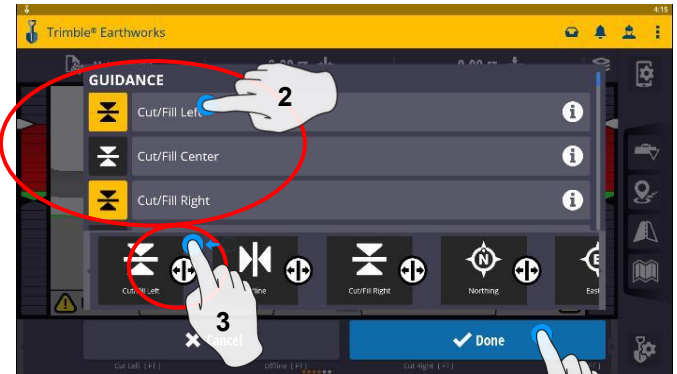


- 15. Touch Cross Section View
- 16. Touch Profile View
- 17. Touch Done

## Text Ribbon Setup



1. Touch and Hold Text Ribbon



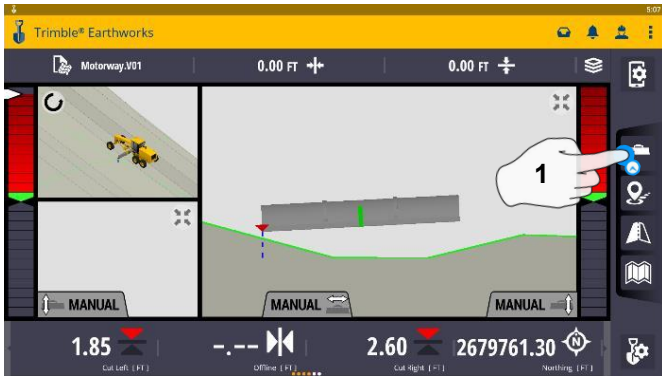
2. Touch each Text Item

- Cut/Fill Left
- Offline
- Station
- Cut/Fill right
- Northing
- Easting
- Elevation
- Design Elevation
- Design Cross Slope
- Design Mainfall
- Vertical GNSS Precision
- Satellite Count

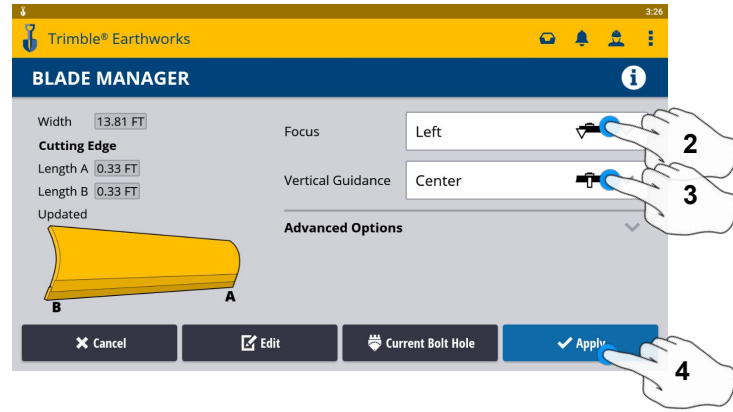
3. Touch-Hold-Drag to change position

4. Touch Done

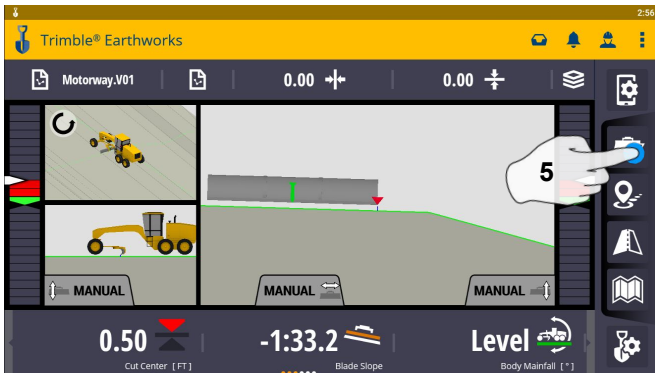
## Blade Focus Point / Vertical Guidance



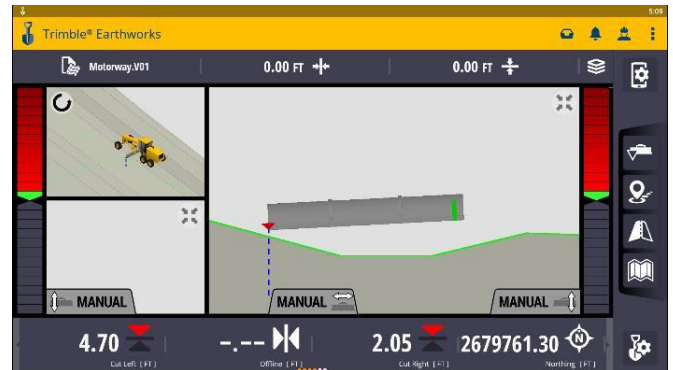
1. Touch and Hold Blade Icon



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

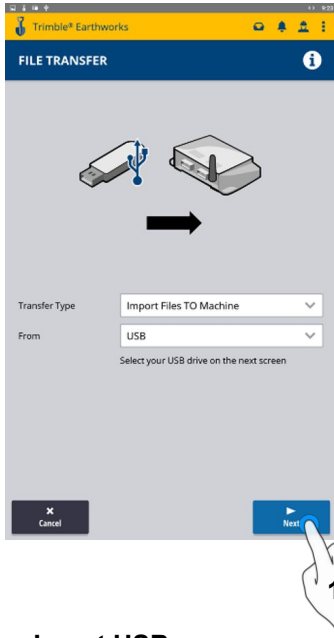


5. Touch Blade Icon to change focus point

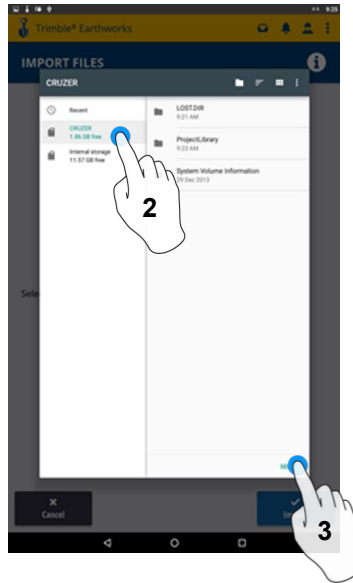


**NOTE:** "LINK TO FOCUS" vertical guidance will follow focus point.

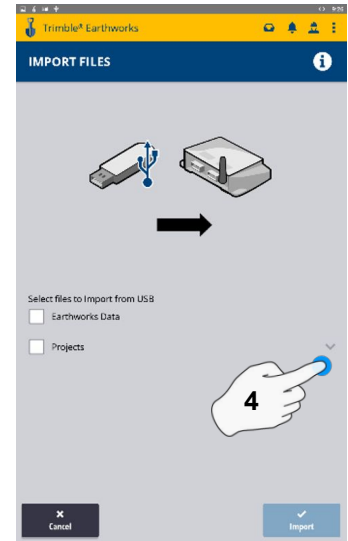
## Import Data With USB



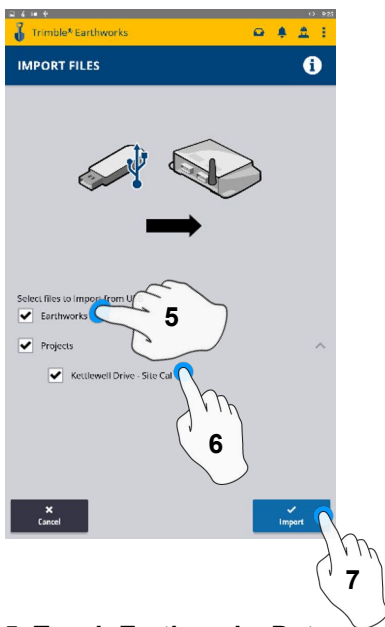
Insert USB  
1. Touch Next



2. Touch USB  
3. Touch Select



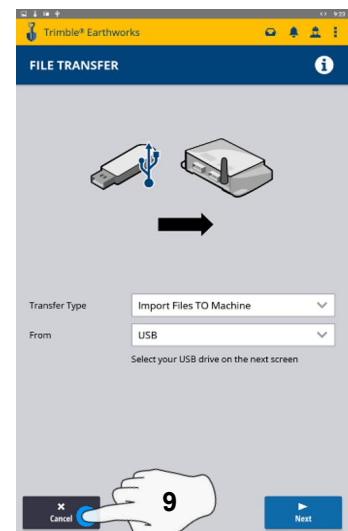
4. Touch "v"



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



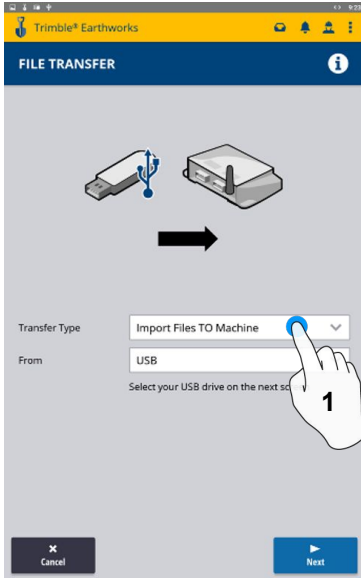
8. Touch OK



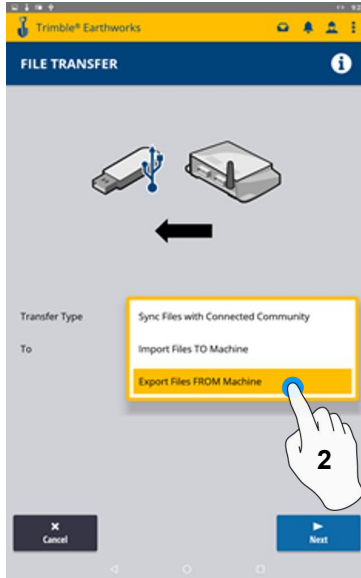
9. Touch Cancel  
Remove USB



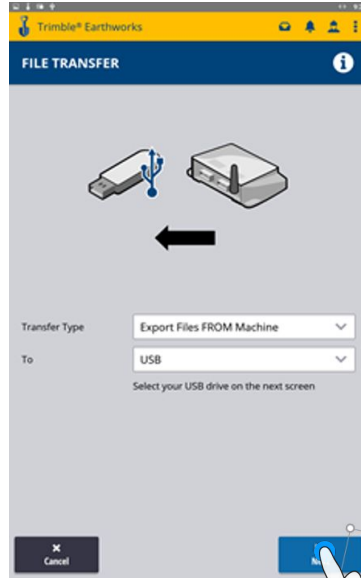
## Export Data With USB



**Insert USB**  
1. Touch Transfer Type



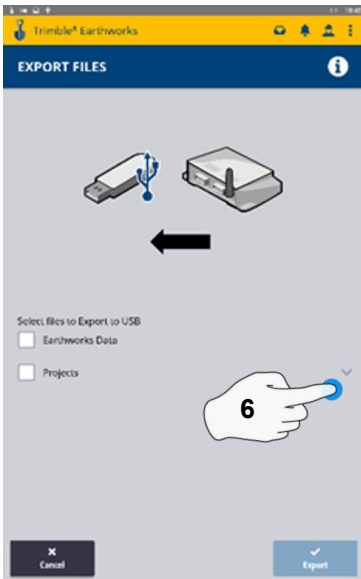
2. Touch Export Files



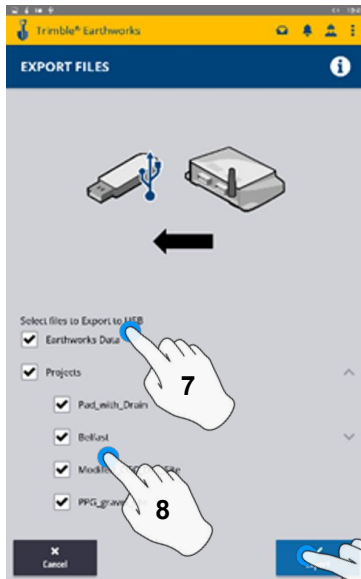
3. Touch Next



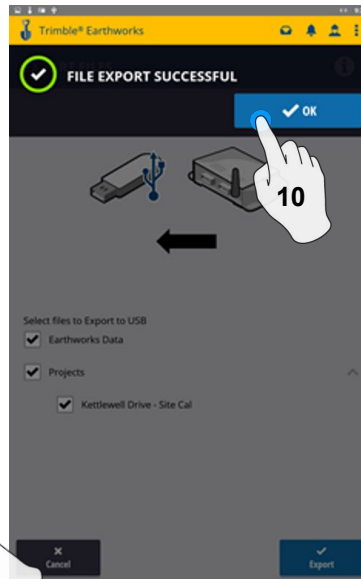
4. Touch USB  
5. Touch Select



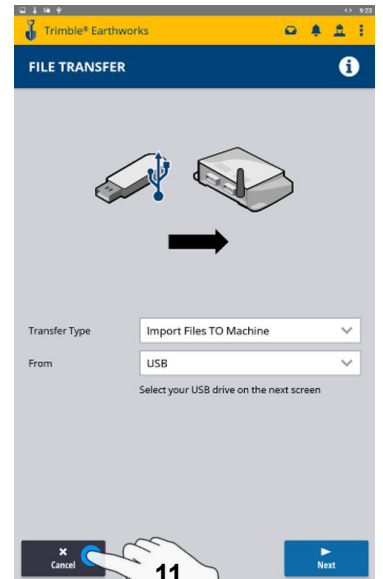
6. Touch "V"



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



10. Touch OK

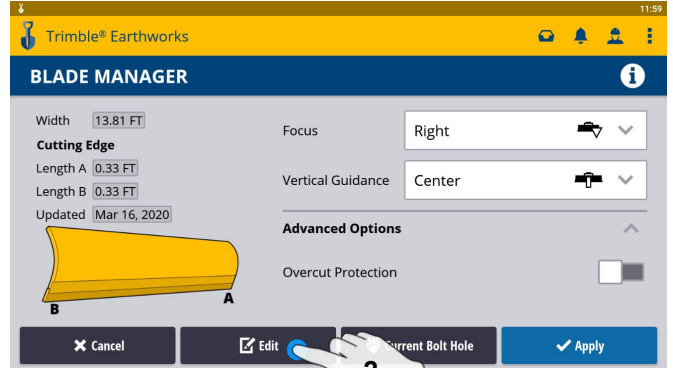


11. Touch Cancel  
Remove USB

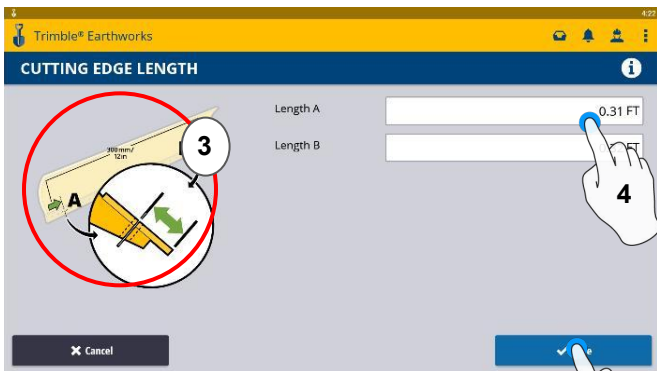
## Cutting Edge Wear / Overcut Protection



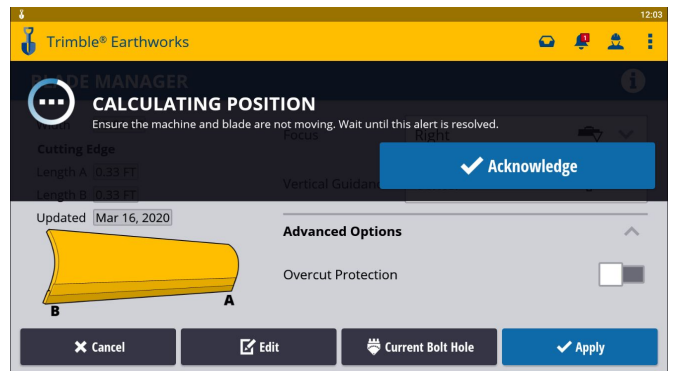
1. Touch and hold Focus Icon



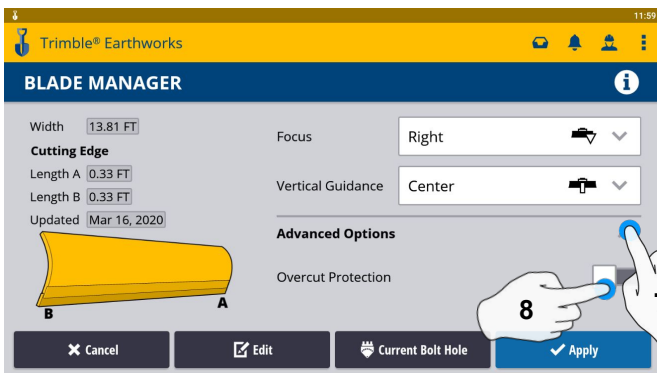
2. Touch Edit



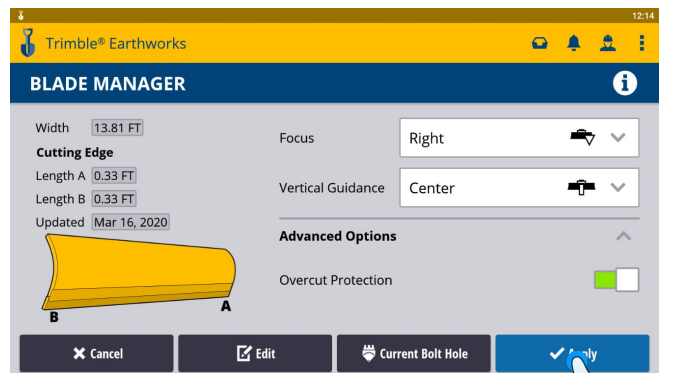
- 3. Measure A & B
- 4. Enter measured length A and B
- 5. Touch Save



6. Sensors will Initialize

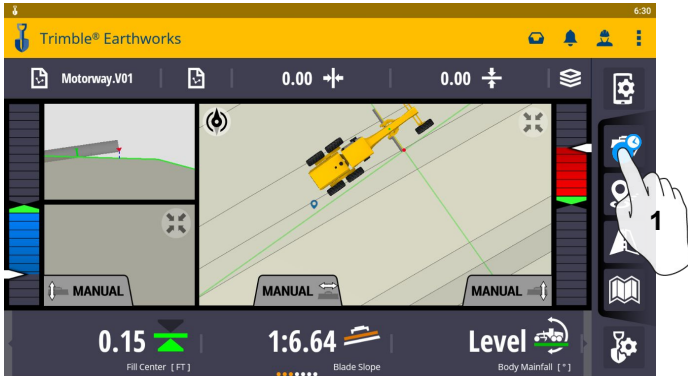


- 7. Touch Advanced Options
- 8. Touch Overcut Protection

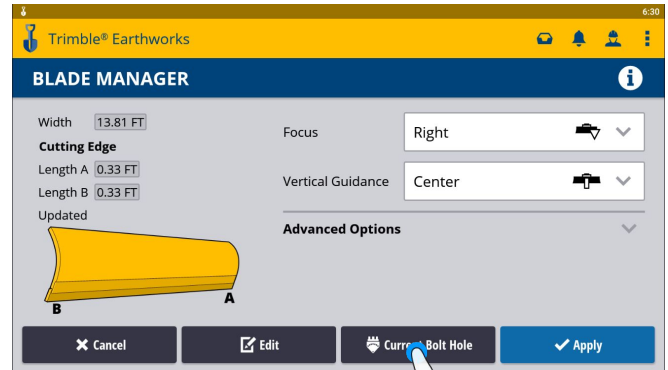


9. Touch Apply

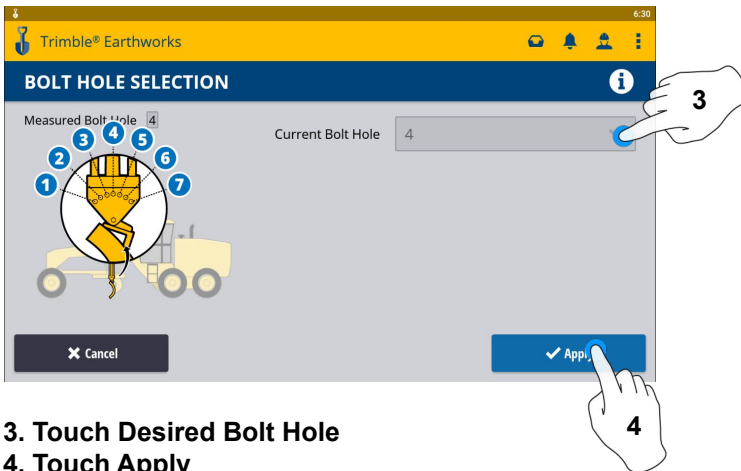
## Select Bolt Hole



1. Touch and hold on Blade Manager Icon



2. Touch Current Bolt Hole



3. Touch Desired Bolt Hole

4. Touch Apply

**\*\*Note machine must be measured up for additional bolt holes.\*\***

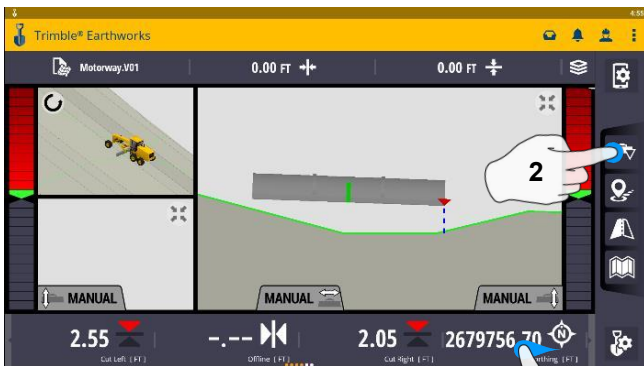


## Verify System Accuracy

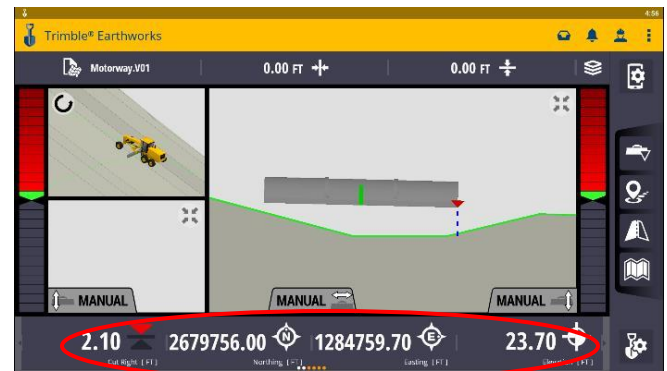
Verify the system accuracy by checking into a bench



Position the blade tip over the bench point



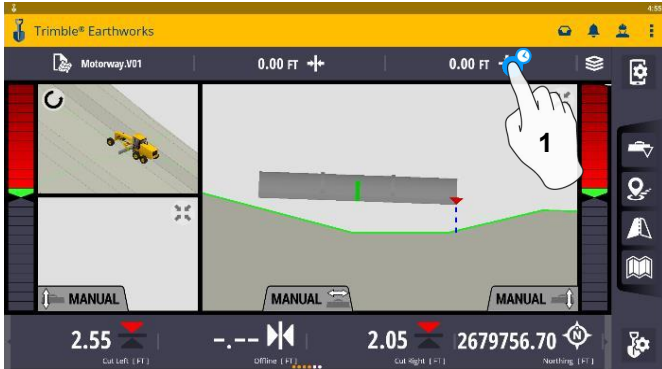
1. Swipe ribbon to view, Northing, Easting, Elevation
2. Touch blade focus to match verification location



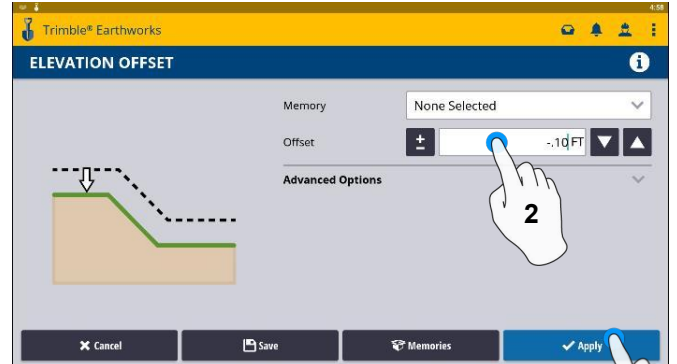
3. Verify Accuracy Northing, Easting, Elevation

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

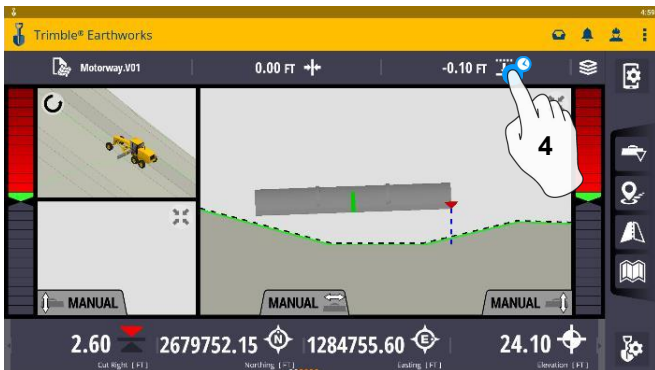
## Vertical Offset / Memories



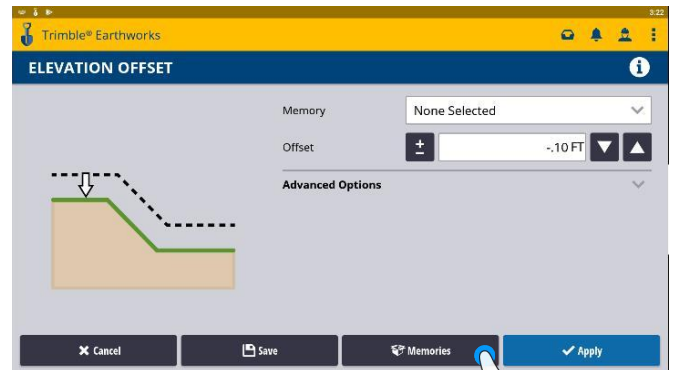
1. Touch and hold Vertical Offsets



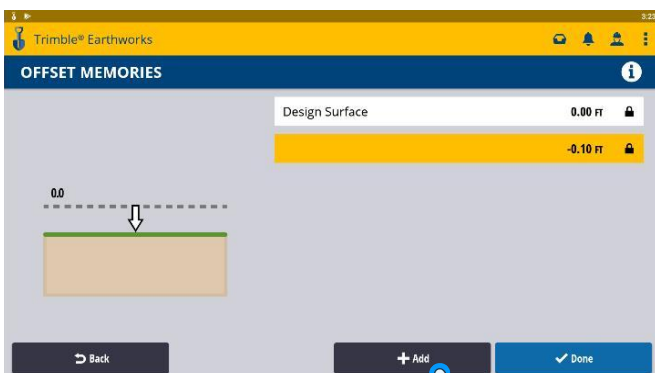
2. Enter Offset  
3. Touch Apply to use immediately



4. Touch and Hold Vertical Offsets



5. Touch memories

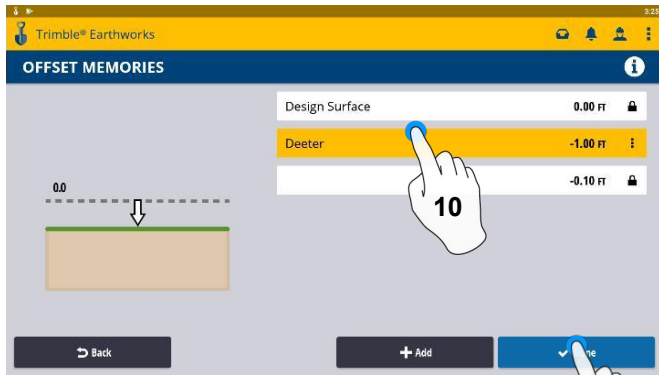


6. Touch Add

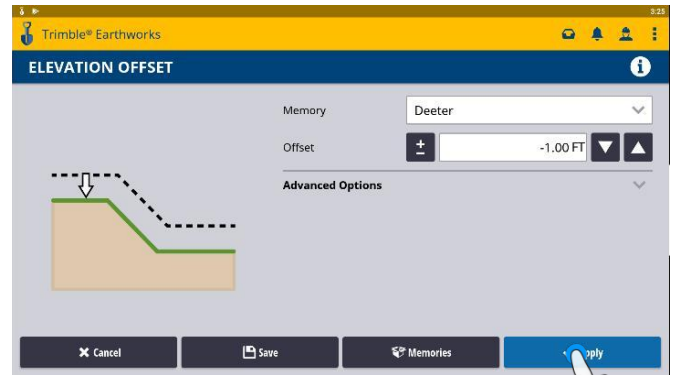


7. Enter Description  
8. Enter value  
9. Touch Save

## Vertical Offset / Memories Cont:

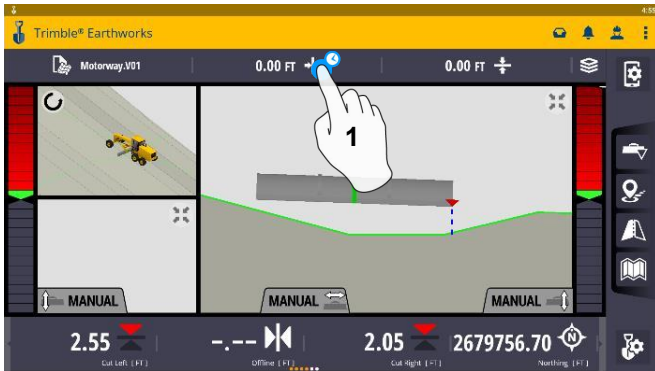


10. Touch Memory  
11. Touch Done

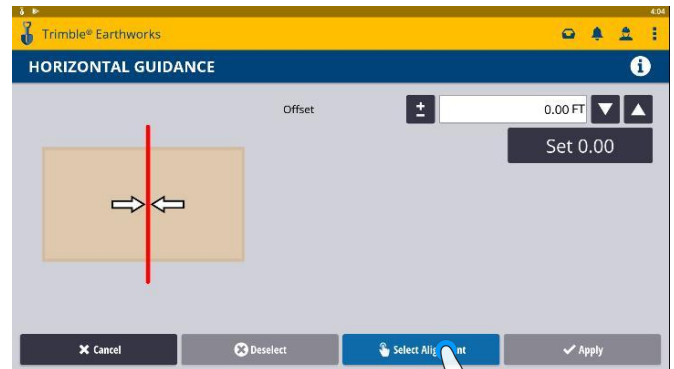


12. Touch Apply

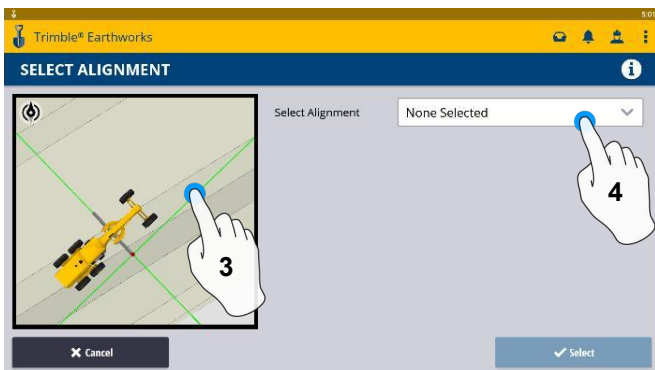
## Horizontal Offset



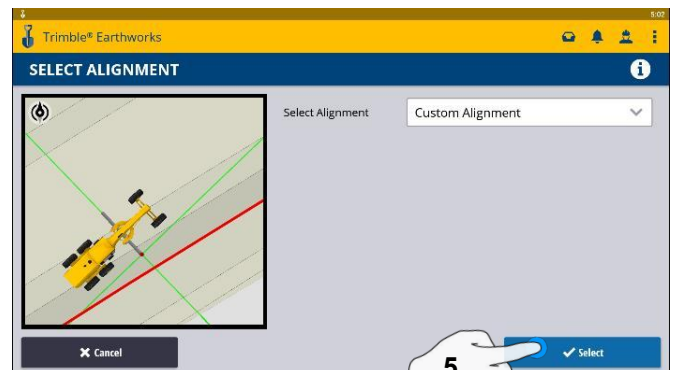
1. Touch and hold Horizontal Offset



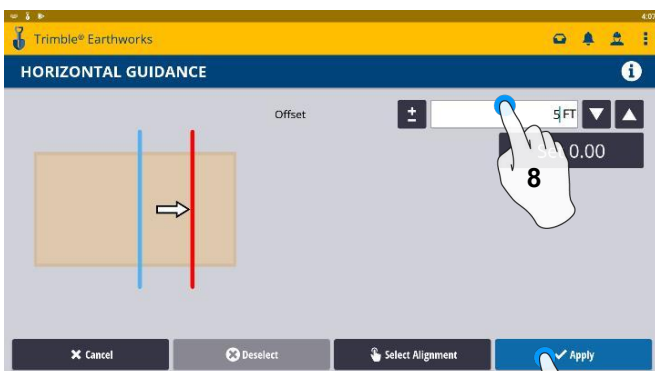
2. Touch Select Alignment



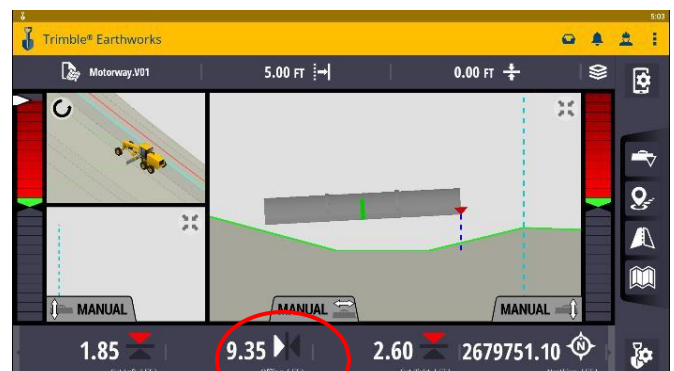
3. Touch Line OR  
4. Touch and Select Alignment



5. Touch Select

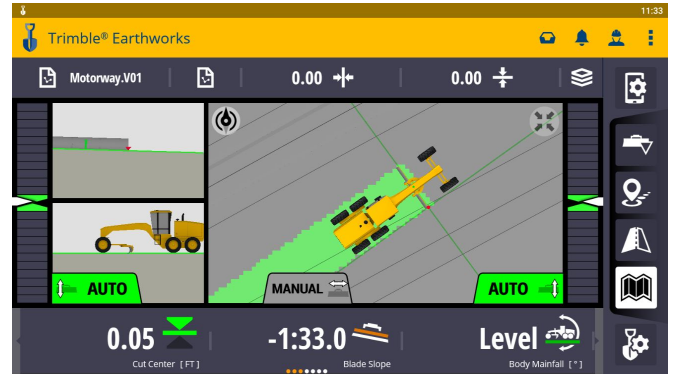
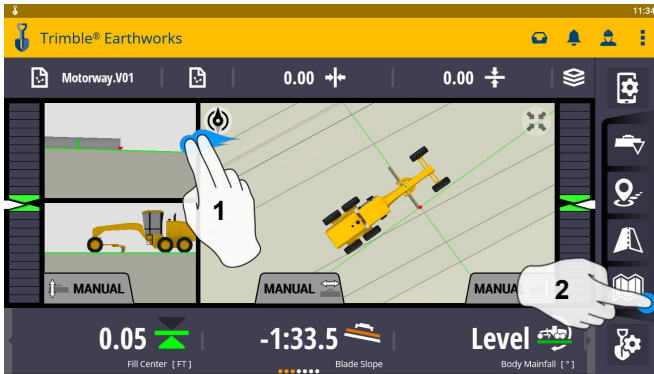


8. Enter Offset Value  
9. Touch Apply





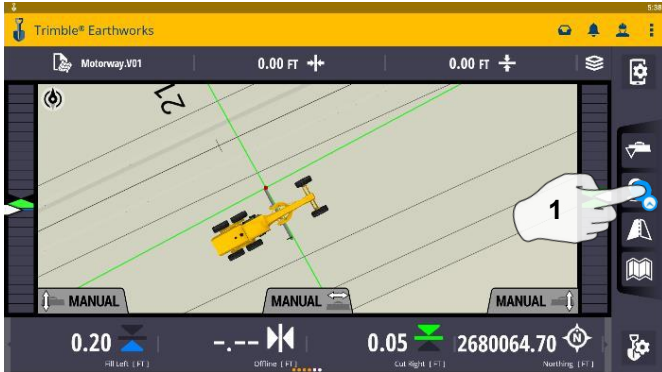
## Cut Fill Mapping



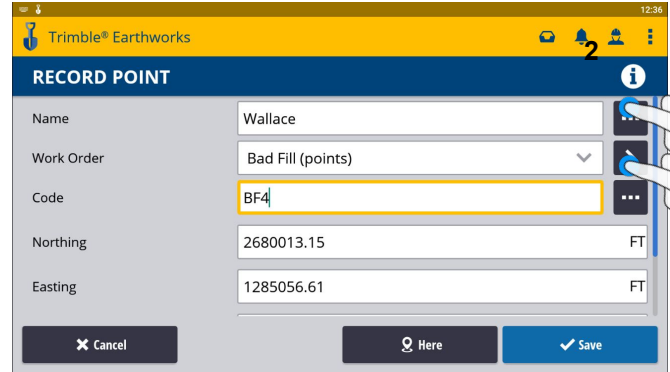
1. Two Finger Swipe to 3 screen view
2. Touch Mapping Icon to View

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

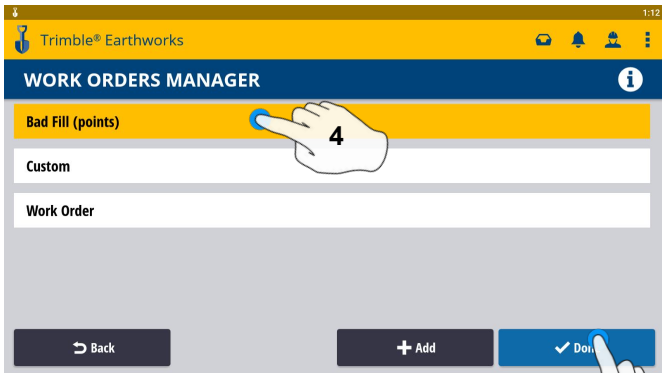
## Record Point



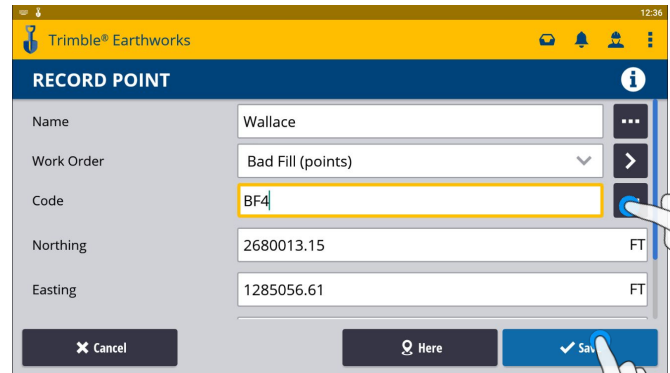
1. Touch and Hold Record Point



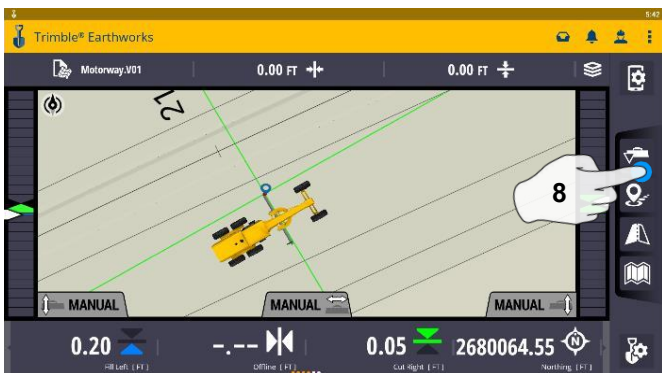
2. Touch to Edit Name  
3. Touch and select Work Order



4. Touch Work order for point location  
6. Touch done



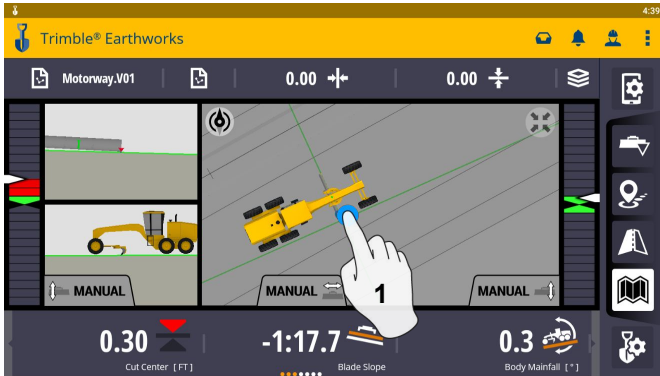
7. Type Code  
8. Touch Save



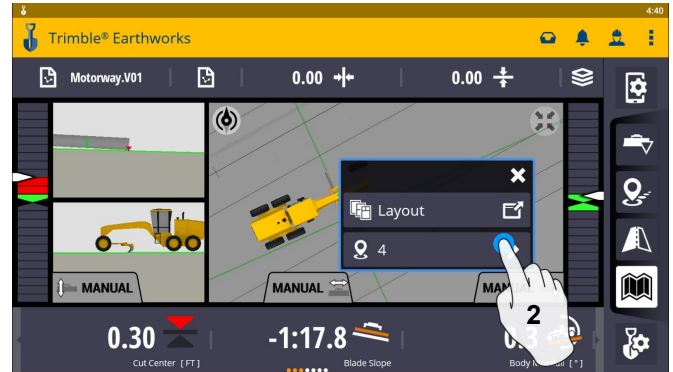
8. Touch Point Icon Records Point

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

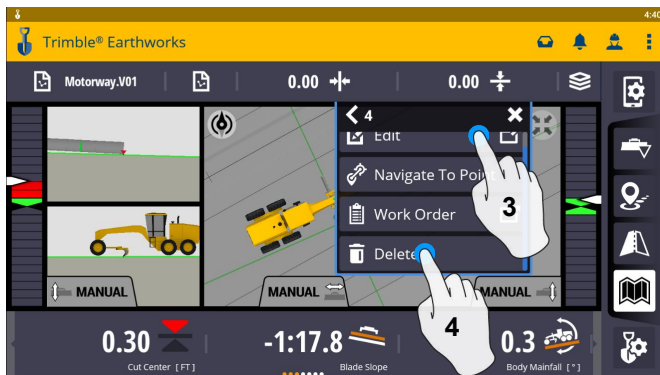
## Delete / Edit Point:



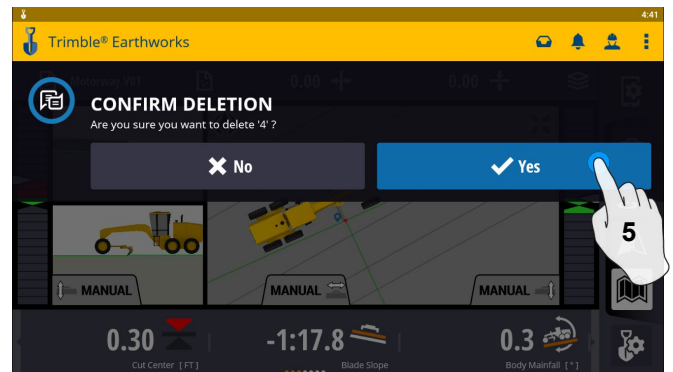
1. Touch and hold over point created



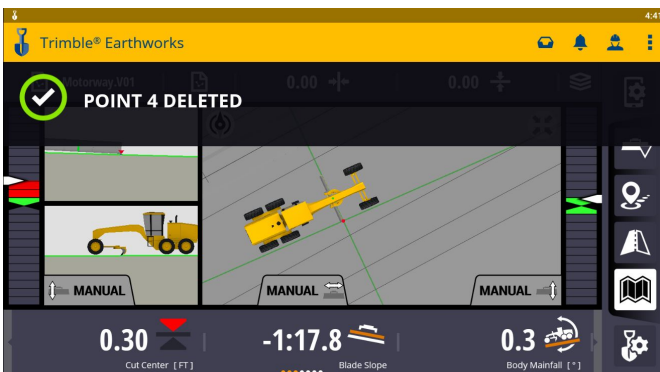
2. Touch point information



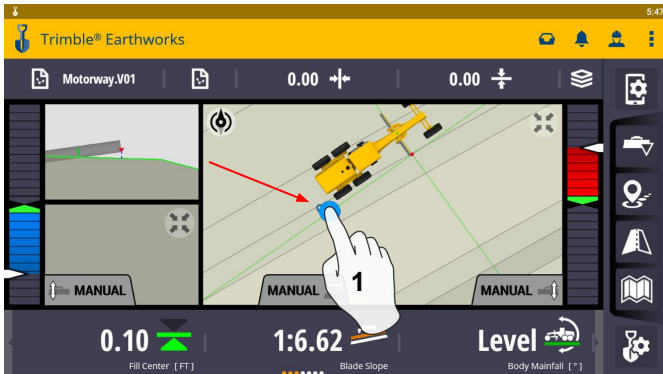
3. Can Edit point information if needed  
4. Touch Delete



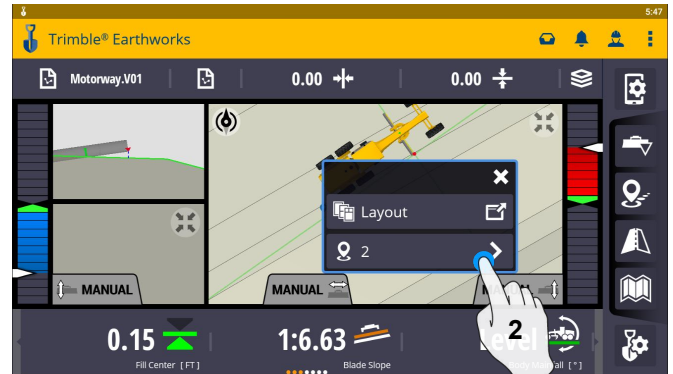
5. Touch Yes to Confirm Delete  
(once deleted can no longer retrieve)



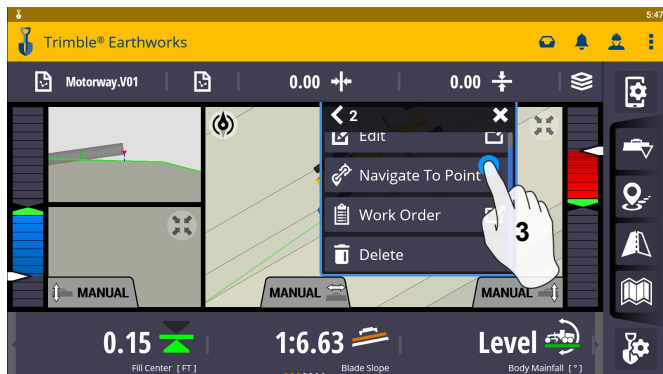
## Navigate to Point



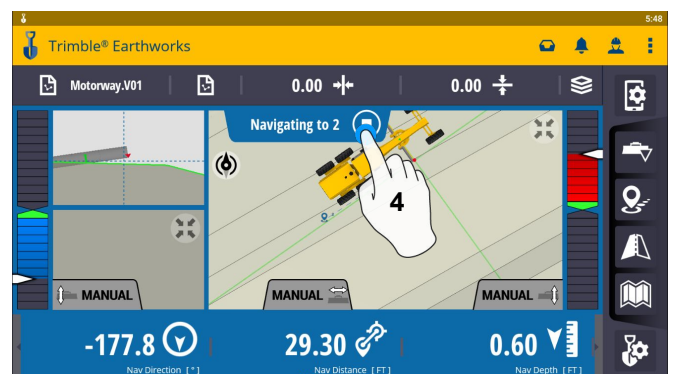
1. Touch and hold on Point



2. Touch Point Info

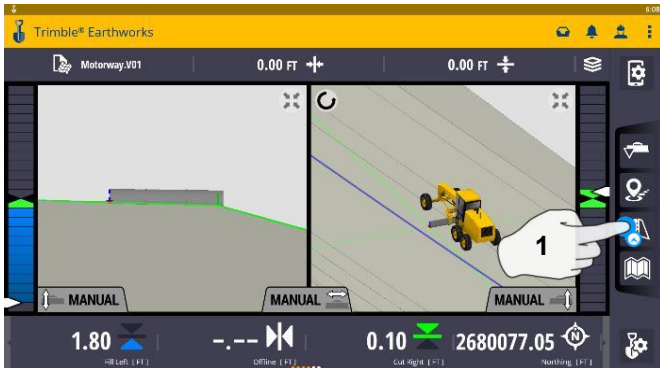


3. Touch Navigate to Point

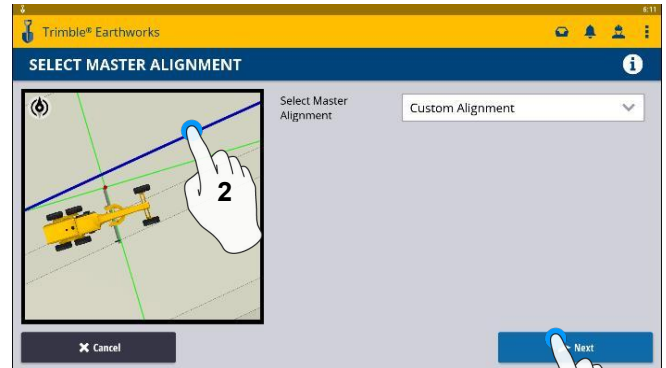


4. Touch Stop icon once complete

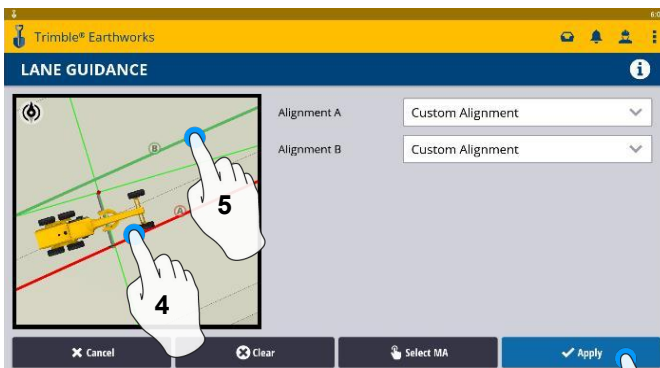
## Lane Guidance



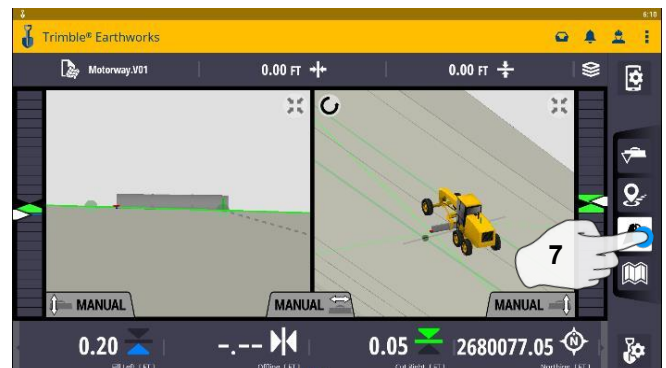
1. Touch and hold Lane Guidance



2. Touch an Alignment  
3. Touch Next



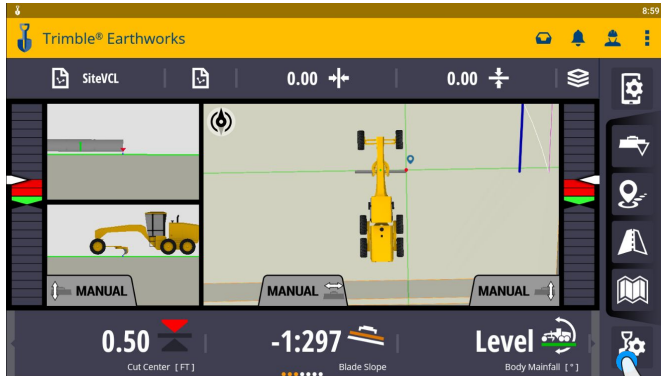
4. Touch Alignment A  
5. Touch Alignment B  
6. Touch Apply



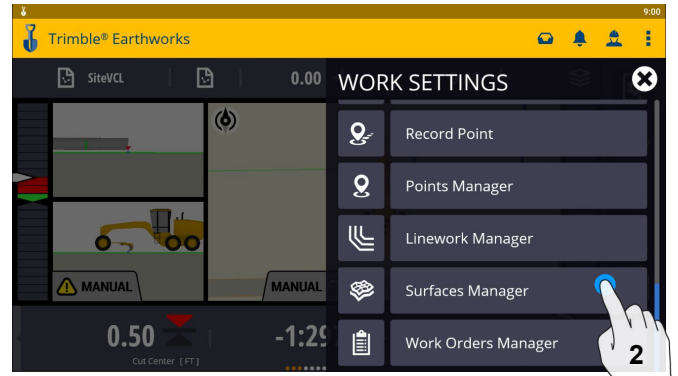
7. Touch Lane Guidance to Cancel

The slope between the two lines will be projected

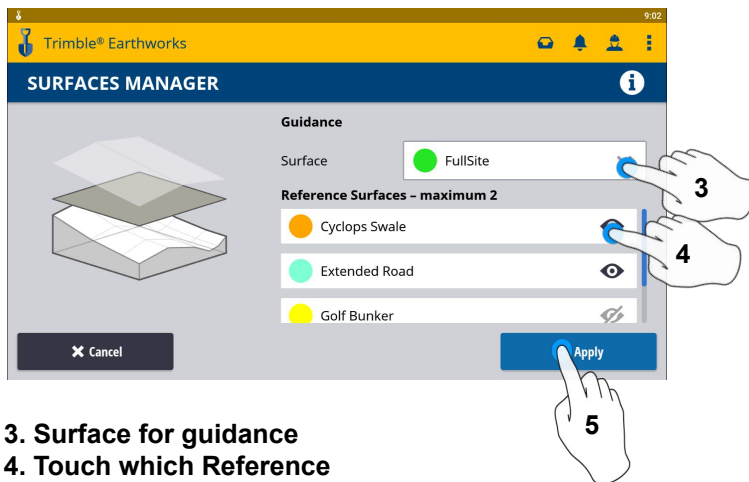
## Surface Manager \*\* Will only work in VCL format Designs\*\*



1. Touch work settings

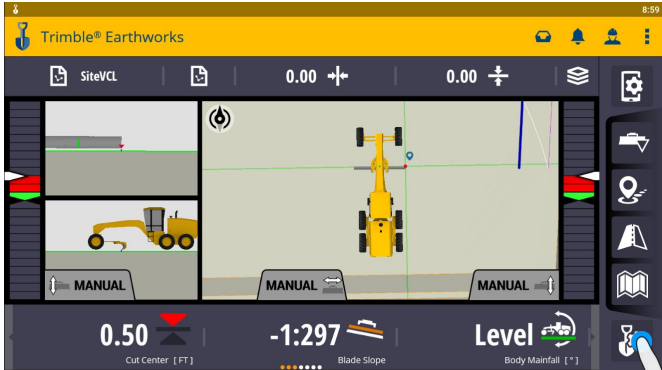


2. Touch Surfaces Manager

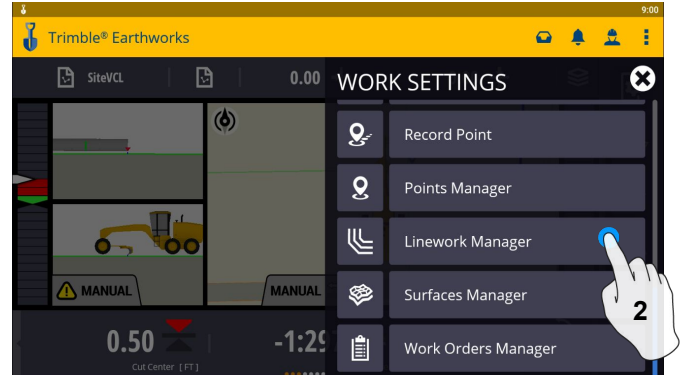


- 3. Surface for guidance
- 4. Touch which Reference Surface(Maximum of 2)
- 5. Touch Apply

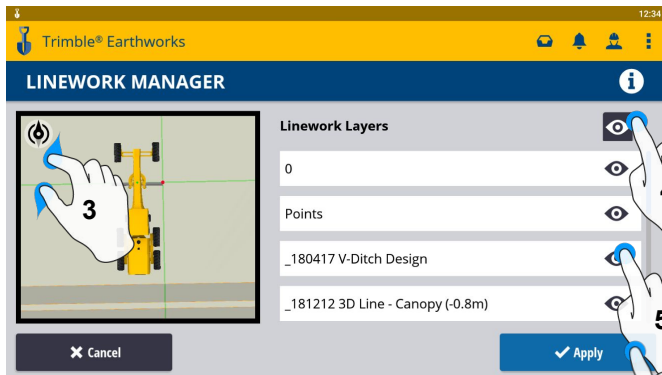
## Linework Manager \*\* Will only work in VCL format Designs\*\*



1. Touch Work Settings

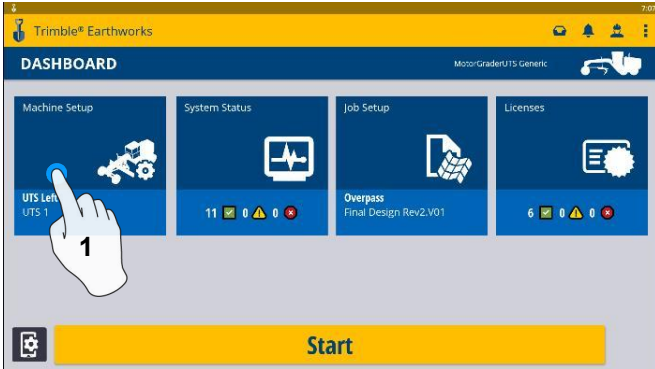


2. Touch Linework manager

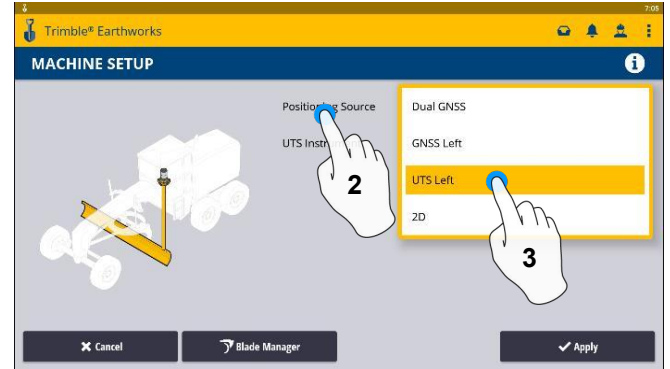


- 3. Zoom In/Out on design
- 4. Can select all linework
- 5. Select Individual linework
- 6. Touch apply once complete

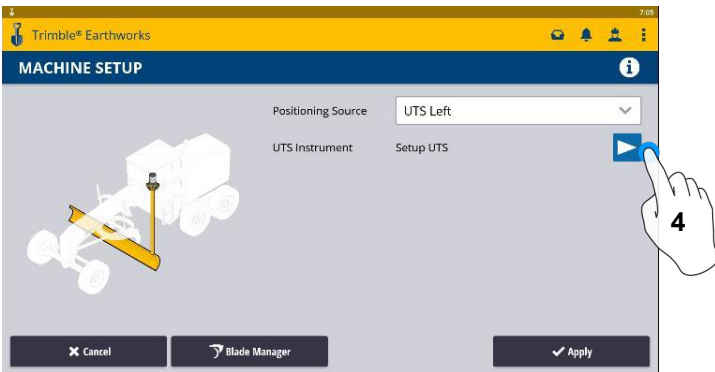
## UTS Setup



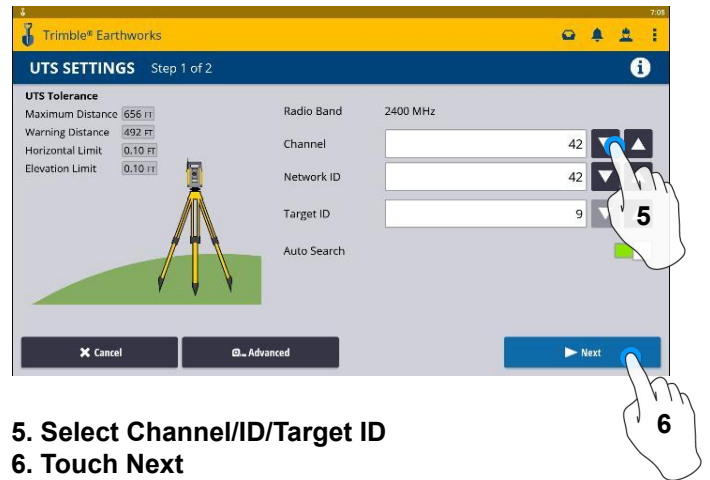
1. Touch Machine Setup



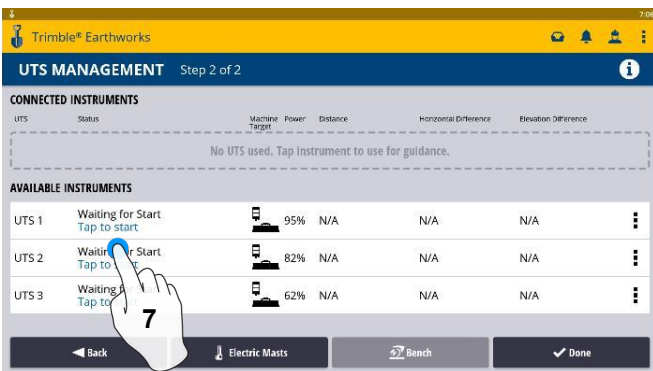
2. Touch Positioning Source  
3. Touch UTS (Right or Left)



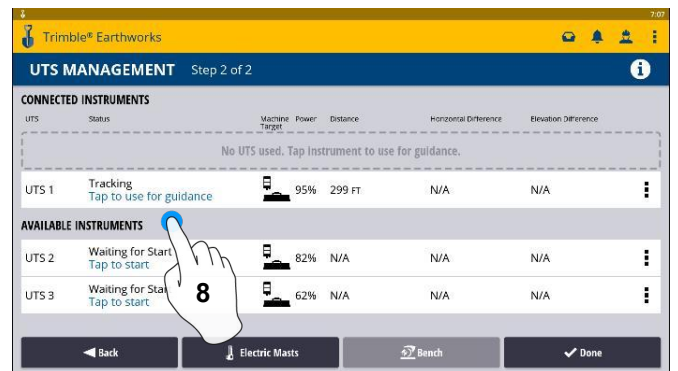
4. Touch to Edit/Add UTS



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



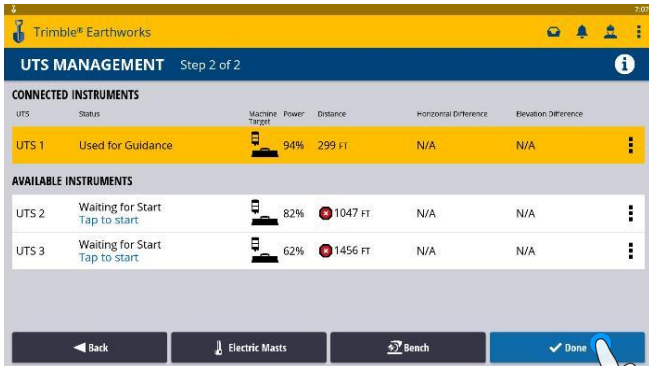
7. Touch to Start



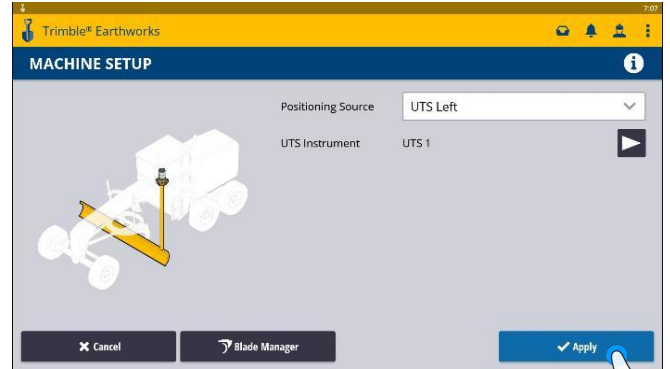
8. Touch to use for guidance



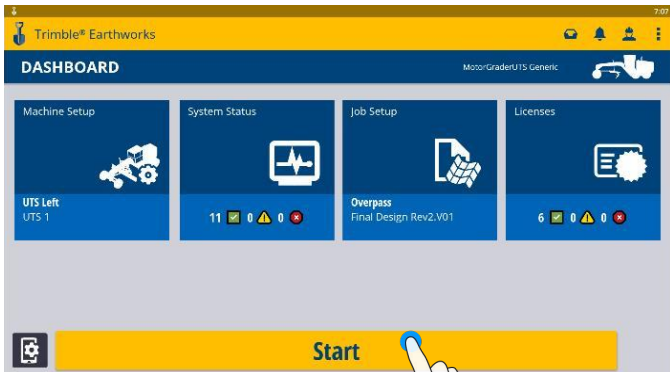
## UTS Setup Cont:



9. Touch Done



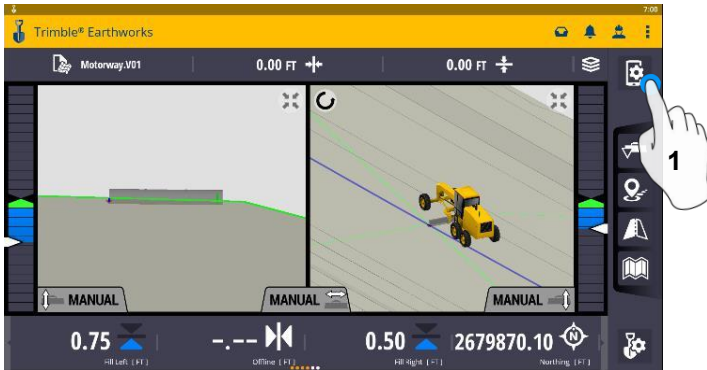
10. Touch Apply



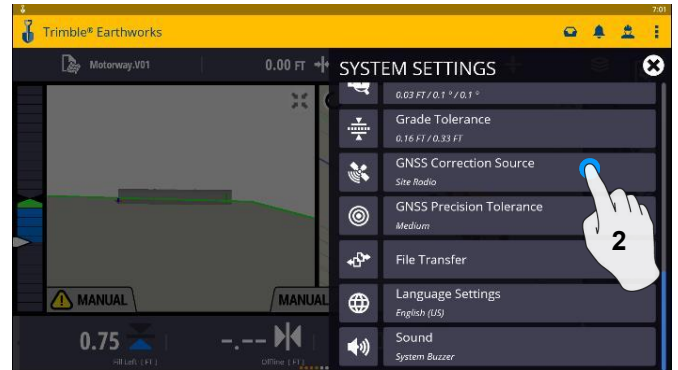
11. Touch Start



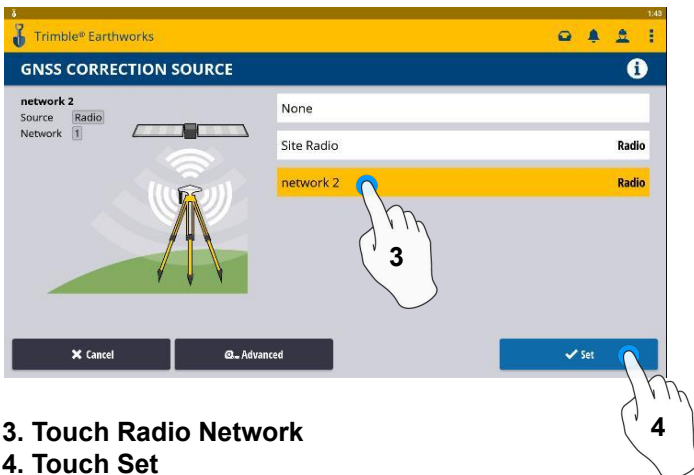
## Change Radio Network



1. Touch System Settings



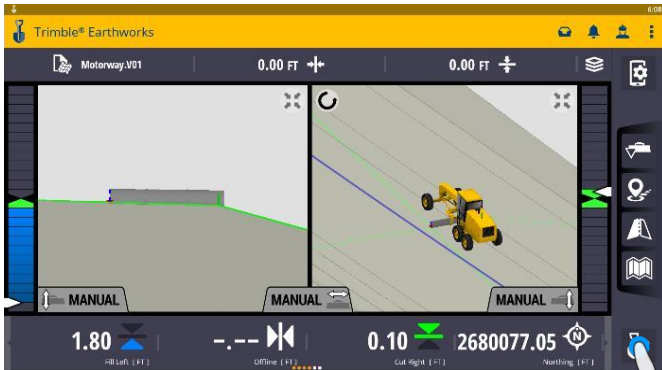
2. Touch GNSS Correction Source



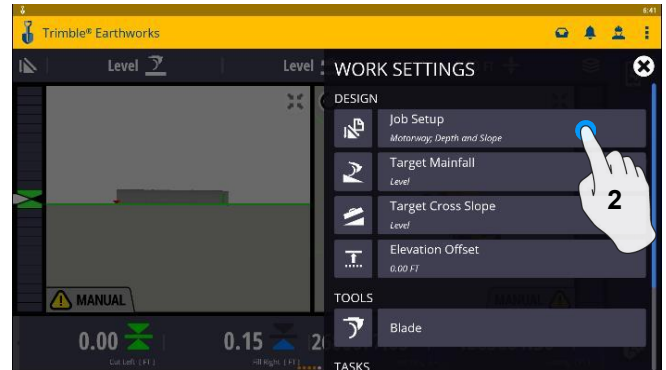
3. Touch Radio Network

4. Touch Set

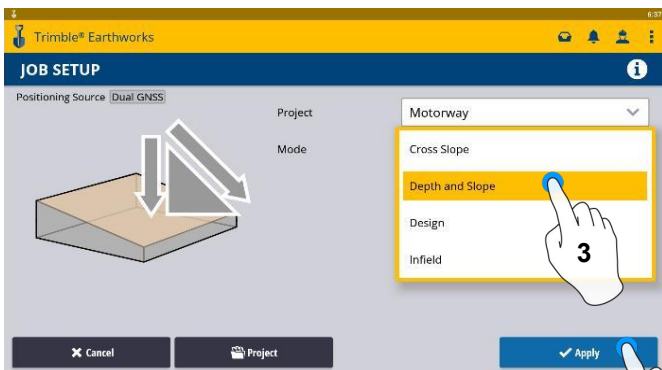
## Level Surface



1. Touch Work Settings

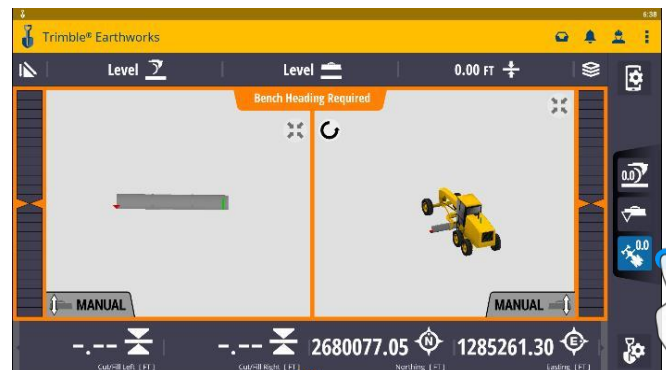


2. Touch Job Setup

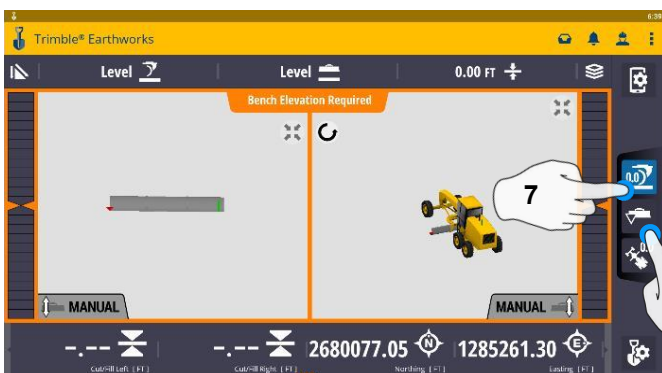


3. Touch Mode and Select Depth and Slope

4. Touch Apply

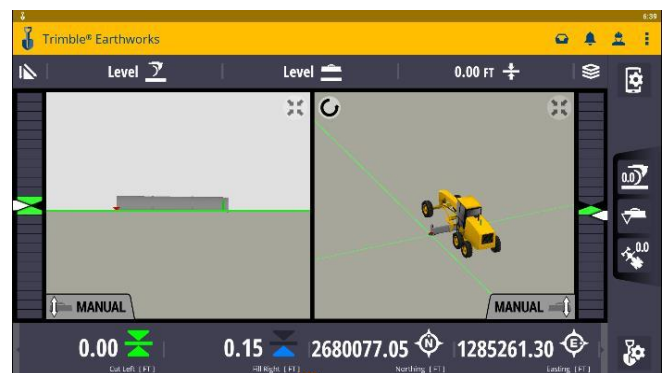


5. Touch Bench Heading

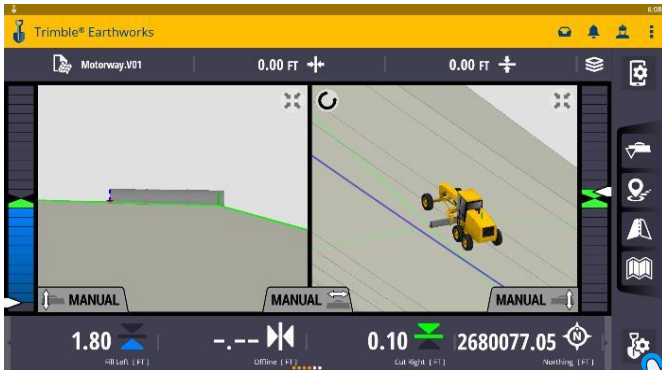


6. Touch Blade Tip Focus Point

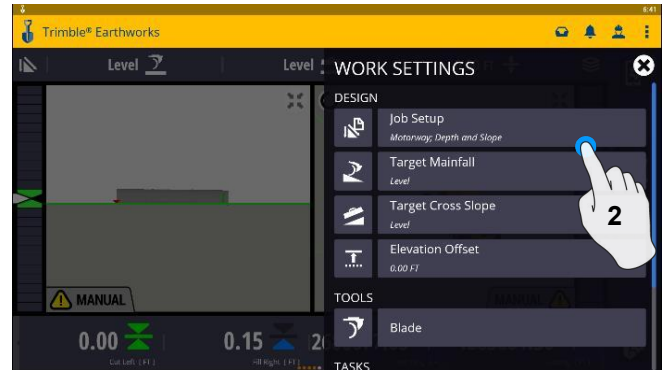
7. Place Blade Tip at Elevation and Touch Bench



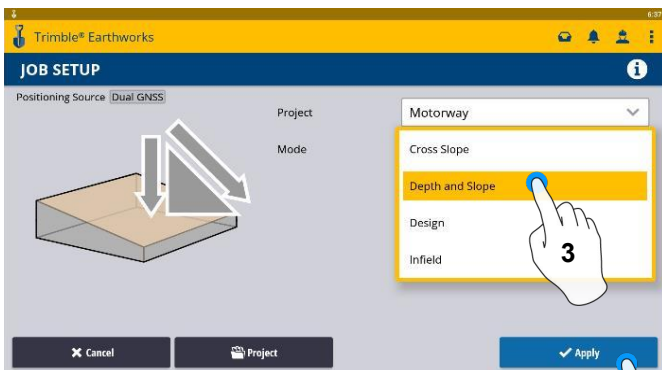
## Sloping Surface



1. Touch Work Settings

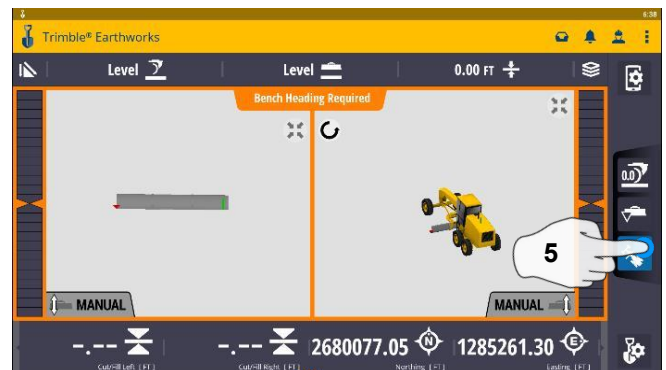


2. Touch Job Setup

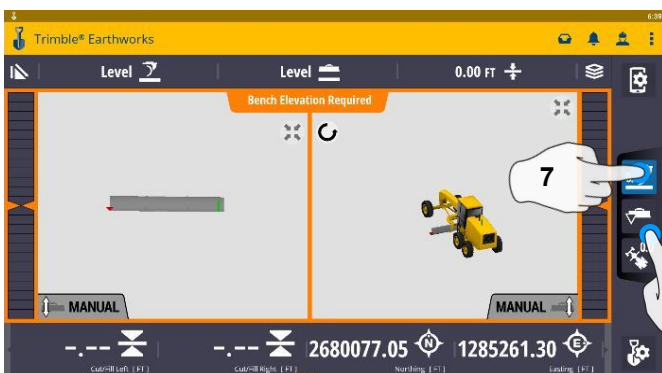


3. Touch Mode and Select Depth and Slope

4. Touch Apply

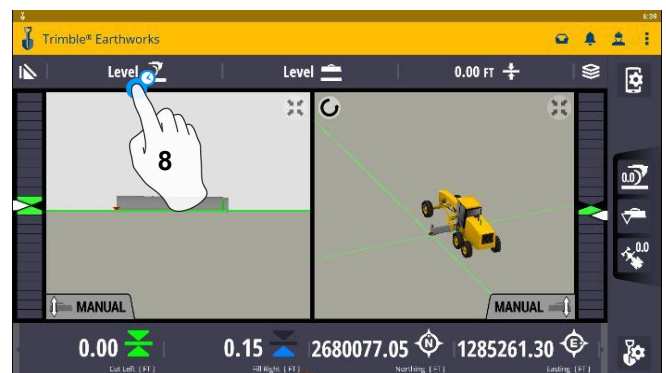


5. Touch Bench Heading



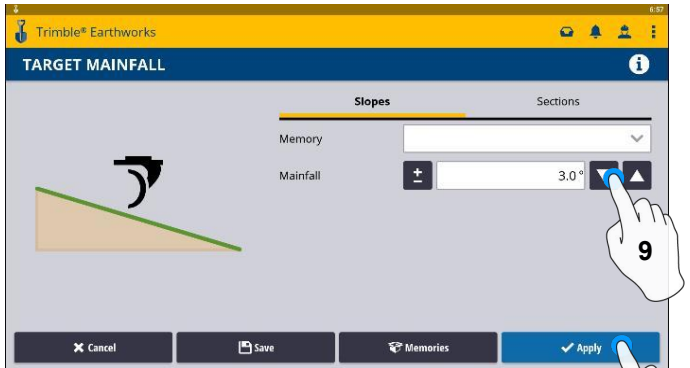
6. Select Blade Tip Focus Point

7. Place Blade Tip at Elevation and Touch Bench

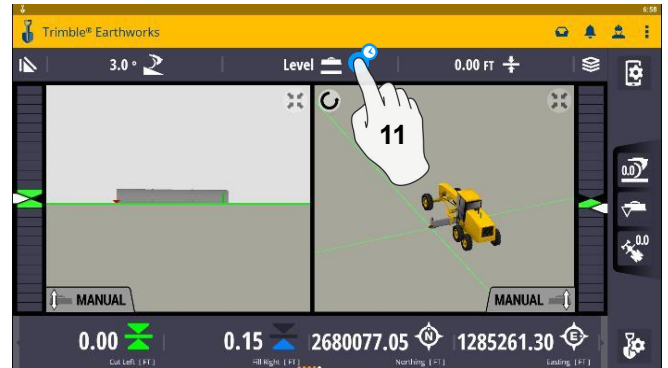


8. Touch and Hold Target Mainfall

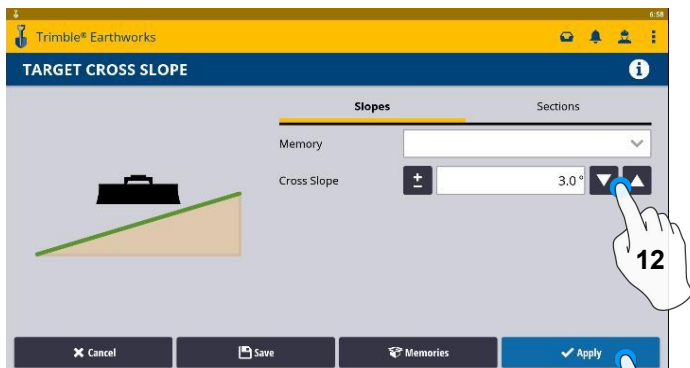
## Sloping Surface Cont:



- 9. Enter Mainfall Slope
- 10. Touch Apply



- 11. Touch and Hold Cross Slope



- 12. Enter Cross Slope
- 13. Touch Apply

