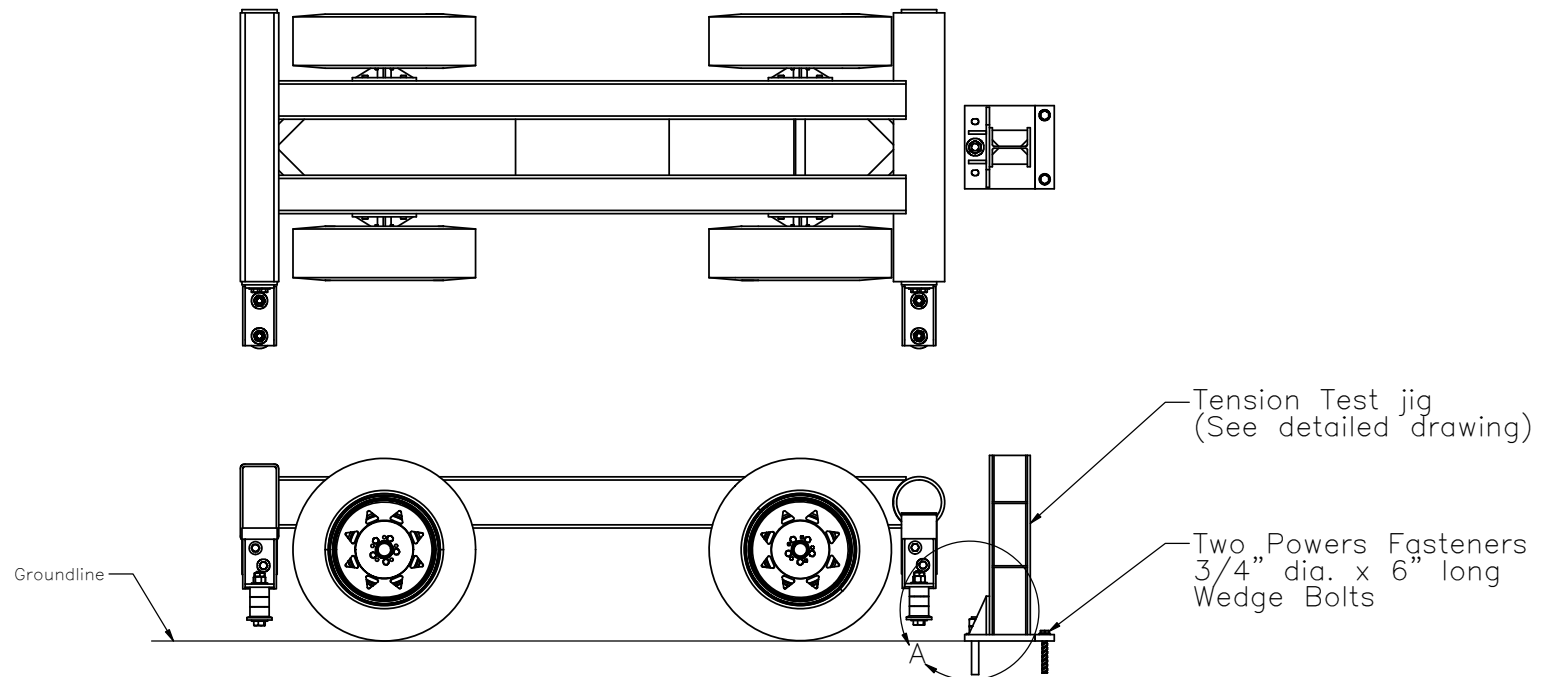


Epoxy Anchor Rebar Bogie Testing-Tensile Test Setup

1. Bogie No. 3 – Small Bogie with standard round impact head
2. Speed = 15 mph
3. One high-speed digital camera perpendicular
4. One high-speed digital camera perpendicular zoomed in on the tensile test jig and anchor.
5. JVC digital video
6. DTS and EDR-3
7. Note any installation issues or problems in fieldbook.
8. Note failure mode in fieldbook.
9. Each test must be at least 2' from any previous test anchor holes to prevent anchor spacing and edge spacing issues from affecting results.
10. Kick plate anchors must be replaced each test.
11. Anchors must be installed while the concrete temperature remains above 45° during curing time for the epoxy. If required, heat the concrete to the desired temperature.
12. Anchors are to be installed in same concrete slabs as used in test nos. WEAB 1-13.
13. Epoxy used for third round of testing will be Hilti HIT-RE 500-SD.
14. 1 1/8" A307 rods with 5 1/4" embedment.
15. Tension jig must be modified to have larger slot. See sheet 3 of "EpoxyAnchor Tensile_R3".



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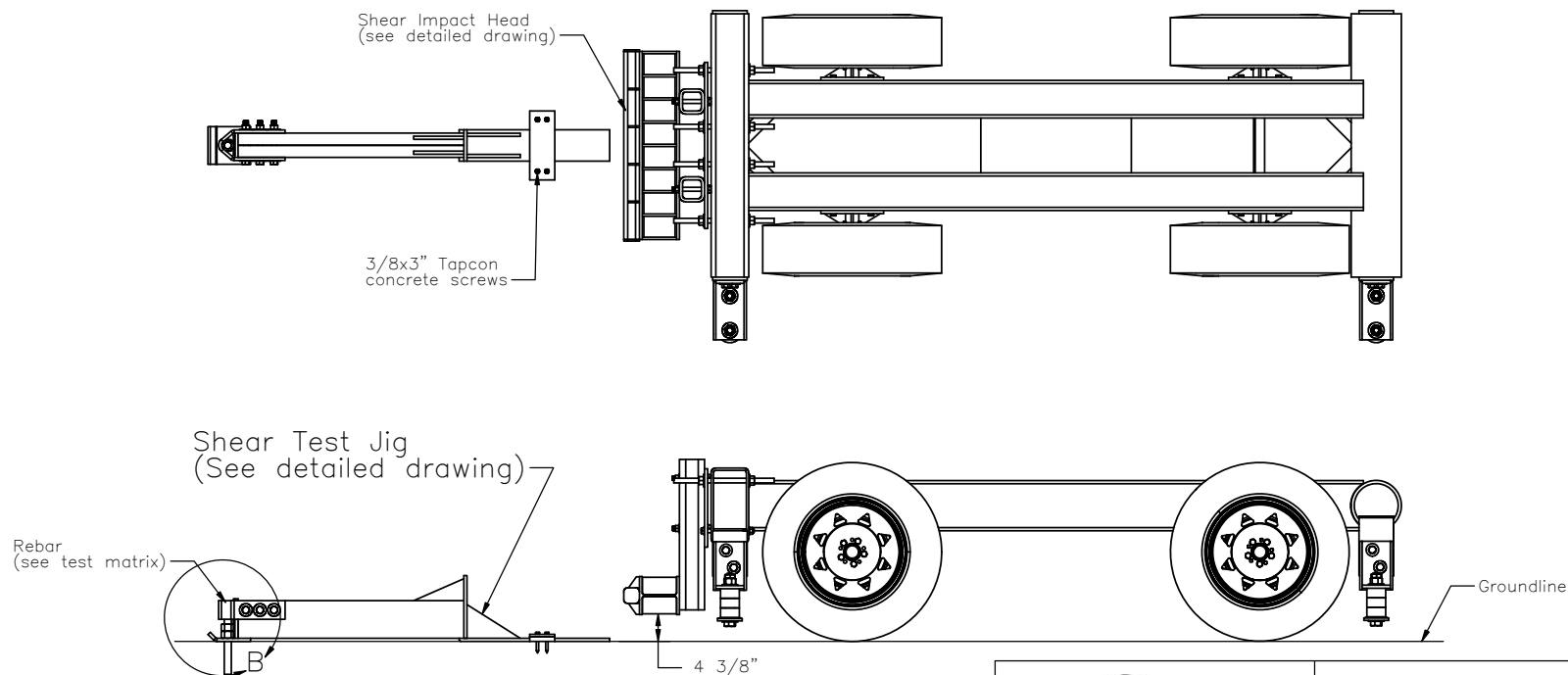
Epoxy Anchor Testing
Tension Test Setup

SHEET:
1 of 4
DATE:
06/02/2011
DRAWN BY:
JGP/MDM

DWG. NAME: EpoxyAnchor testsetupmatrix_14-15_R3	SCALE: None UNITS: Inches	REV. BY: RWB/BJD
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Epoxy Anchor Rebar Bogie Testing—Shear Test Setup

1. Bogie No. 3 – Small Bogie with Shear Impact Head
2. Speed = 10 mph
3. One high-speed digital camera perpendicular
4. One high-speed digital camera perpendicular zoomed in on the shear test jig and anchor.
5. JVC digital video
6. DTS and EDR-3
7. Note any installation issues or problems in fieldbook.
8. Note failure mode in fieldbook.
9. Each test must be at least 2' from any previous test anchor holes to prevent anchor spacing and edge spacing issues from affecting results.
10. Tapcon concrete screws need to be replaced after each test.
11. Anchors must be installed while the concrete temperature remains above 45° during curing time for the epoxy. If required, heat the concrete to the desired temperature.
12. Anchors are to be installed in same concrete slabs as used in test nos. WEAB 1–13.
13. Epoxy used for third round of testing will be Hilti HIT-RE 500-SD.
14. 1 1/8" A307 rods with 5 1/4" embedment.
15. Shear jig must be modified with fabricated plug. See sheet 2 and 5 of "EpoxyAnchor_shear_R3".



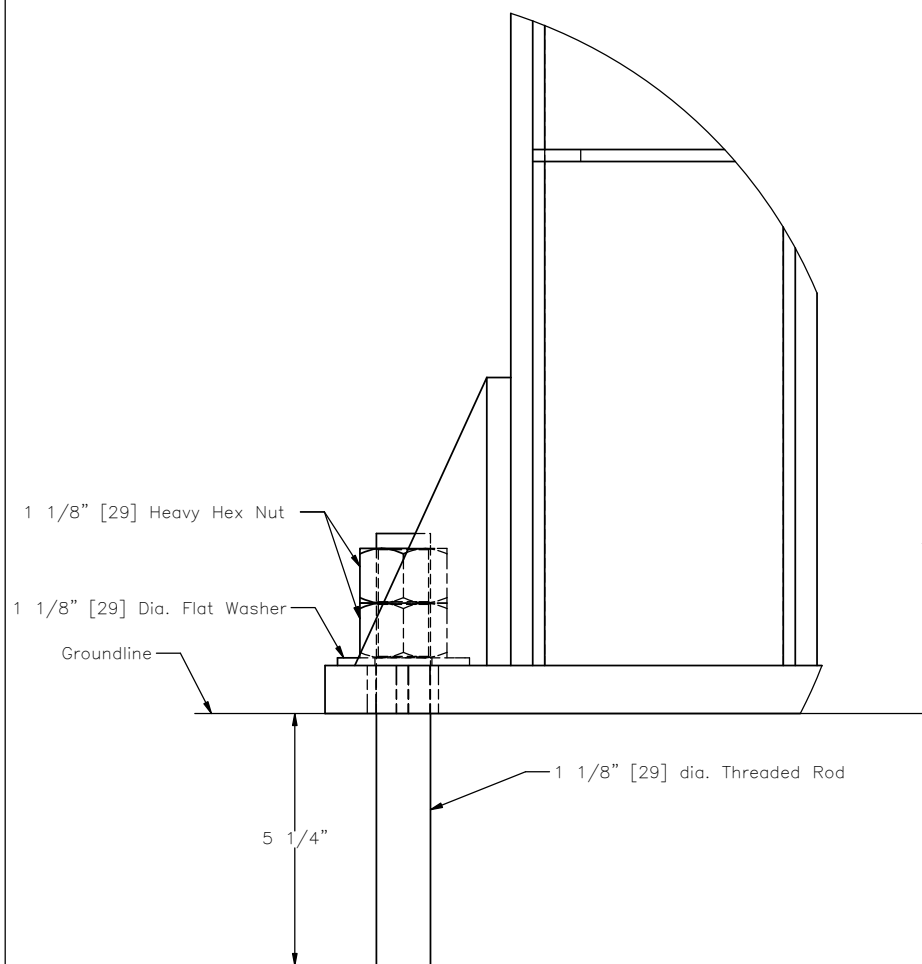
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Epoxy Anchor Testing
Shear Test Setup

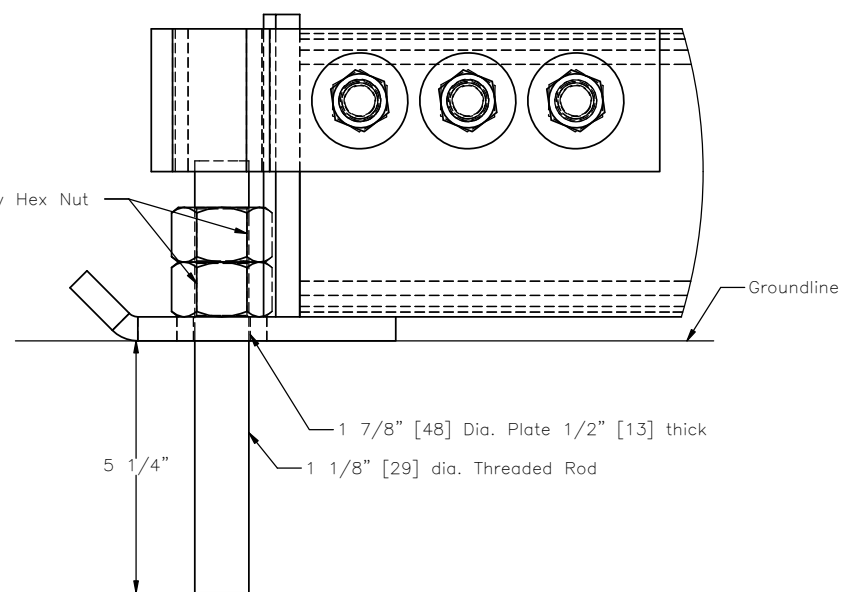
DWG. NAME.
EpoxyAnchor testsetupmatrix_14-15_R3

SCALE: None
UNITS: Inches

SHEET:
2 of 4
DATE:
06/02/2011
DRAWN BY:
JGP/MDM
REV. BY:
RWB/BJD



DETAIL A
Tension Testing



DETAIL B
Shear Testing

Note: (1) Insert any necessary shims between the threaded rod and the shear jig to obtain tight fit.
(2) Drill a $\phi 1 \frac{1}{4}$ inch hole to fill with epoxy and set rebar into.



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Epoxy Anchor Testing

Testing Setup Detail Views

DWG. NAME:
EpoxyAnchor testsetupmatrix_14-15_R3

SCALE: 1:4
UNITS: Inches

SHEET:
3 of 4
DATE:
06/02/2011
DRAWN BY:
JGP/MDM
REV. BY:
RWB/BJD

Test No.	Test Type	Threaded Rod	Bar Coating	Embedment Depth	Spacing	Speed
WEAB-14	Tensile	1 1/8"	None	5 1/4"	Single	15 mph
WEAB-15	Shear	1 1/8"	None	5 1/4"	Single	10 mph



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Epoxy Anchor Testing
Bogie Testing Matrix

SHEET:
4 of 4
DATE:
06/02/2011
DRAWN BY:
JGP/MDM

DWG. NAME: EpoxyAnchor testsetupmatrix_14-15_R3
SCALE: None
UNITS: Inches
REV. BY: RWB/BJD