

Structural Design Certificate

Description of Works: High Clearance Arch to Suit range of Aluminium Shoring Panels.

We ShoreWorX being equipped with a Registered Professional Engineer, hereby certify that we are responsible for the structural design check for the above-mentioned work as detailed in this Structural design assessment and attached drawings:

- **SW- 001032- High Clearance Arch Design Check**

This design check has been carried out in accordance with the Australian engineering principles and, in particular with the Australian Standards listed below:

AS/NZA 1664 – 1997	Aluminium Structures
AS 4744.1 – 2025	Shoring and trench lining – Design
AS/NZS 1170.0:2002	Structural design actions: General principles
AS/NZS 1170.1:2002	Structural design actions: Permanent, imposed and other actions
AS 4100-2020	Steel structures

HIGH CLEARANCE ARCH DESIGN CHECK

- The ShoreWorX High Clearance Arch (HCA) has been checked, and it has been decided to Increase the overall HCA Factor of Safety by reinforcing the Bottom Strut (Compression Strut). This will ensure the HCA is adequate for the Nominated Rated Lateral Earth Pressure (SWL) of **70 kPa**.
- Where the total HCA Width is less than or equal to 2.0m the calculated SWL Capacity ranges from 50 kPa to 55 kPa, where the Bottom Strut is not reinforced.
- The Bottom Strut is to be Reinforced as shown in the attached Sketch Drawings.
- After Reinforcement the HCA will have sufficient capacity for a Nominated Rated Lateral Earth Pressure (SWL) of **70 kPa** where total HCA widths do not exceed 4.0m (where Panel Length = 5.0m).

Certified by,

Gagandeep Singh

Gagandeep Singh

BEng, MEng, MIEAust, CPEng, NER (4681624), RPEQ 32858, RPEV PE0018102

PROFESSIONAL REGISTERED ENGINEER – PRE0002818

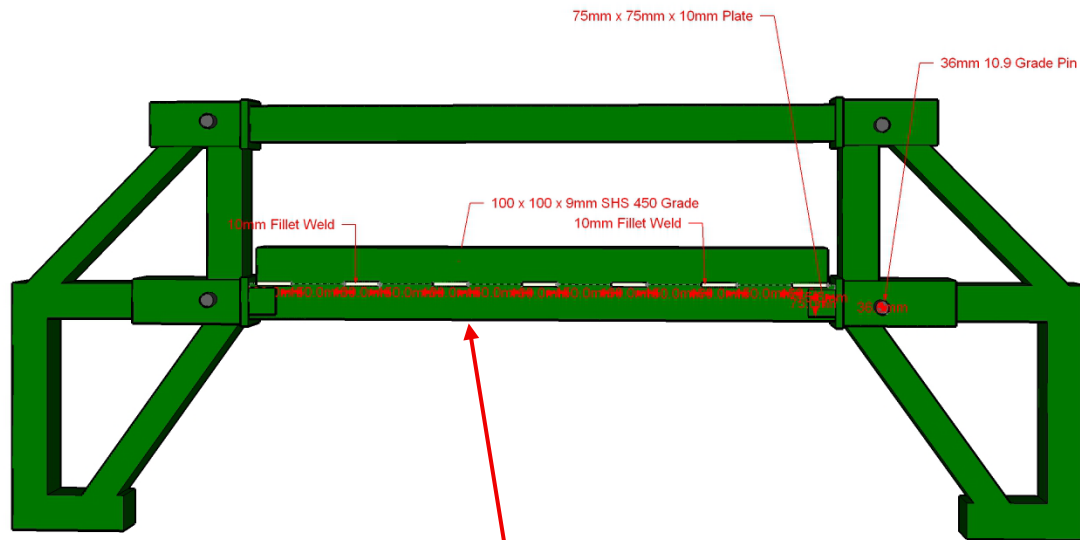
Engineer Design Specialist



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100X100X9 SHS (GRADE 450) TO FACE OF EXISTING STRUT. 10mm CFW, HIT 100mm, MISS 150mm. WELDS ARE TO START AND FINISH AT ENDS OF ADDITIONAL SHS STRUT.

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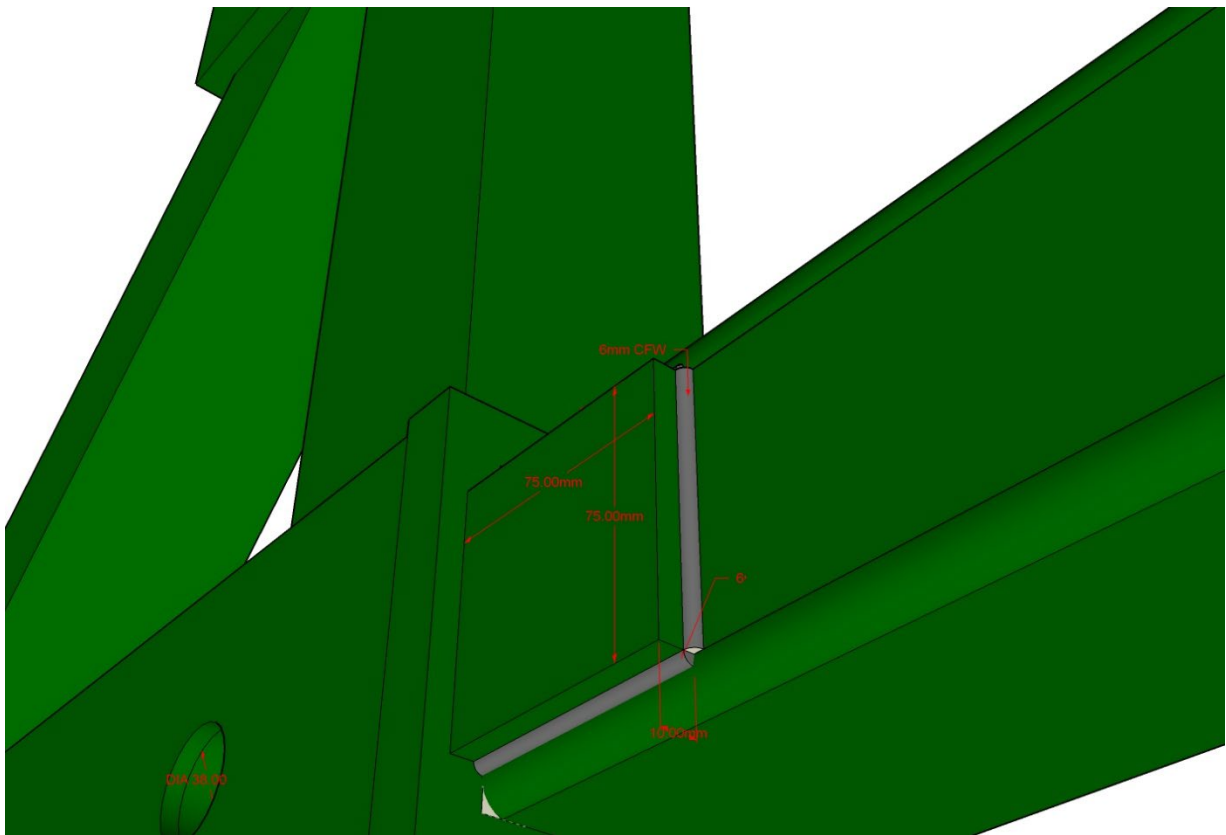
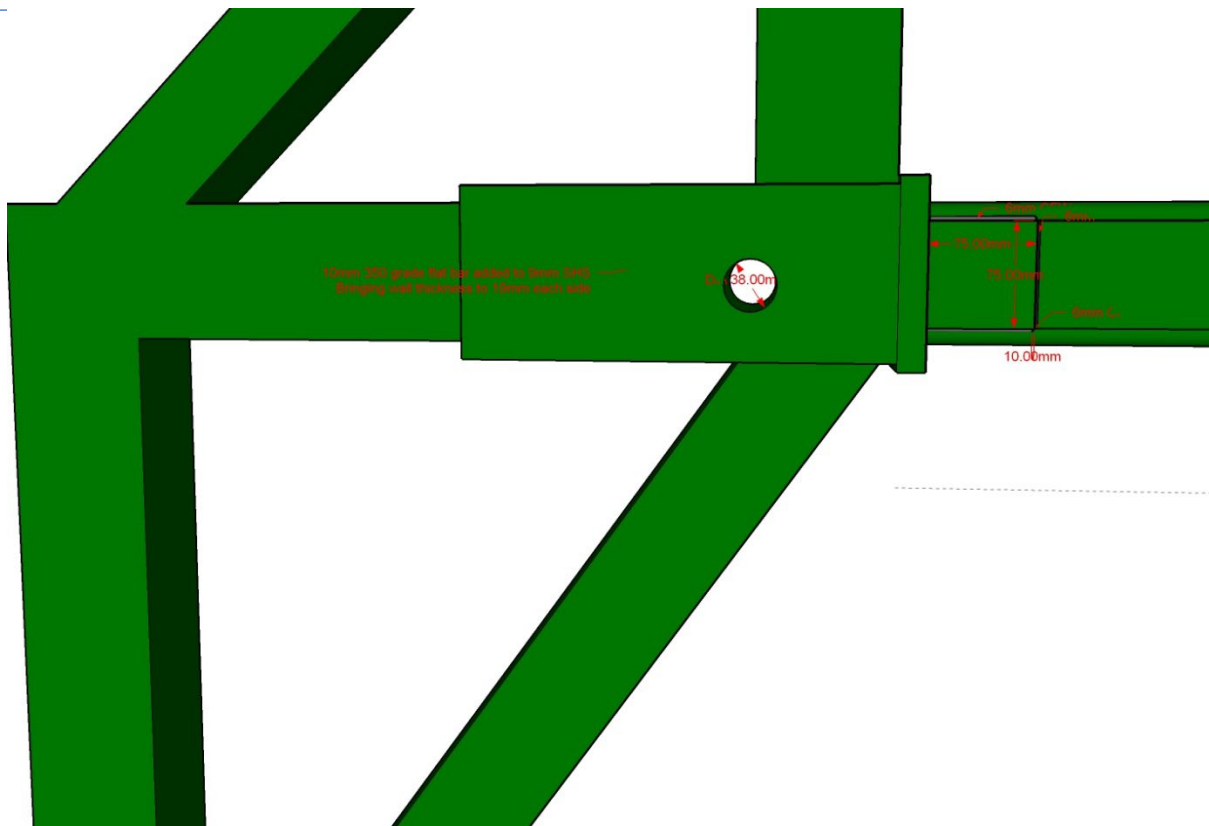
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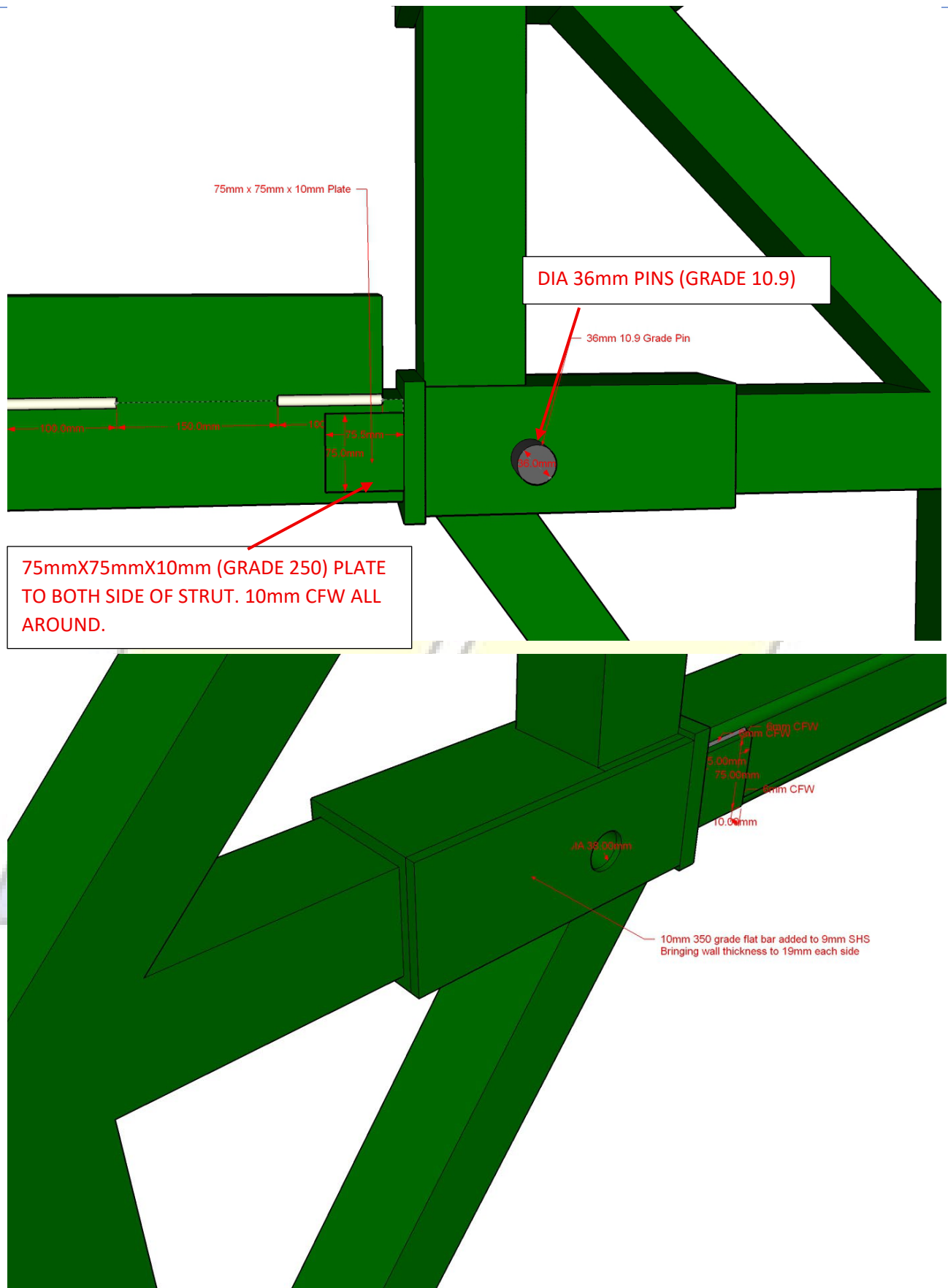


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*LITE GUARD TRENCH SHORING *LITE GUARD GRAVE SHORING *SHORING ACCESSORIES



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