

2024 v2

NSGC Course Maintenance Facility



Simon Burrowes

NSGC Course Superintendent

12/7/2024

NSGC – Proposed Golf course maintenance facility

The following plans form the basis of the minimum requirements for the proposed new maintenance facility at NSGC. They are based on the area provisionally assigned by the course architect and are subject to change. However, they do differ from the provisional plan and or do not include the following:

1. Shed provisional size at 40m x 20m, proposed 50m x 20m.
2. Site location #2 Compound has been created as proposed shed site would require sand deliveries to pass close to new housing development. Also, the proposed shed site is too small for both shed and sand storage.
3. Gaps in berms identify proposed entrance/egress for site but are merely suggested within proposal. Course path routing has yet to be identified by course architect.
4. Originally the proposed plan did not include a recommended 10% Future growth of the facility. With the addition of the new compound site including a 12.5m x 6m implement shed, adjacent to Sand bays, this will narrow the gap.

Key features of proposed plans

1. Grid formation to ensure all equipment can be accessed without manoeuvring other vehicles. Easy, safe access for operators and sufficient turning space for all equipment.
2. ESD Waste to Water combined washdown and chemical handling system.
 1. Recycled washdown pad
 2. Sprayer filling/cleaning station, connected to ESD to process spray spills and rinse-ate.
 3. Certified Chemical storage shed
 4. Fertiliser store container, for storage of dry and liquid fertilisers. Will also house liquid fertiliser mix tank, which will be plumbed to Sprayer station.
3. 360° Truck access for single truck access (No Truck and Trailers for shed compound)
4. Parking for 16 staff
5. 4 Covered and 2 Large uncovered sand bay's that can contain Greens and Tees renovation quantities of sand at Compound.
6. Fuel shed will also house 2 Stroke fuels.
7. Workshop, Staff facilities and offices at one end of facility. 2 floors with open mezzanine common area for staff.

Further discussion points

All the following plans are not to take away any input from the course designer and are all open to discussion. A visual representation has ensured an accurate picture of inventory vs storage capacity. I am unaware of exact building requirements for sheds of this size and I'm aware that some/all/if any of these requests may not be applicable.

Regardless of the eventual outcomes achieved, the details of equipment, services, and site requirements within should be viewed as a minimum requirement. Every effort has been made to maximise the space provisionally identified. There may also be other requirements not considered or identified, these will need further discussion.

Kind regards

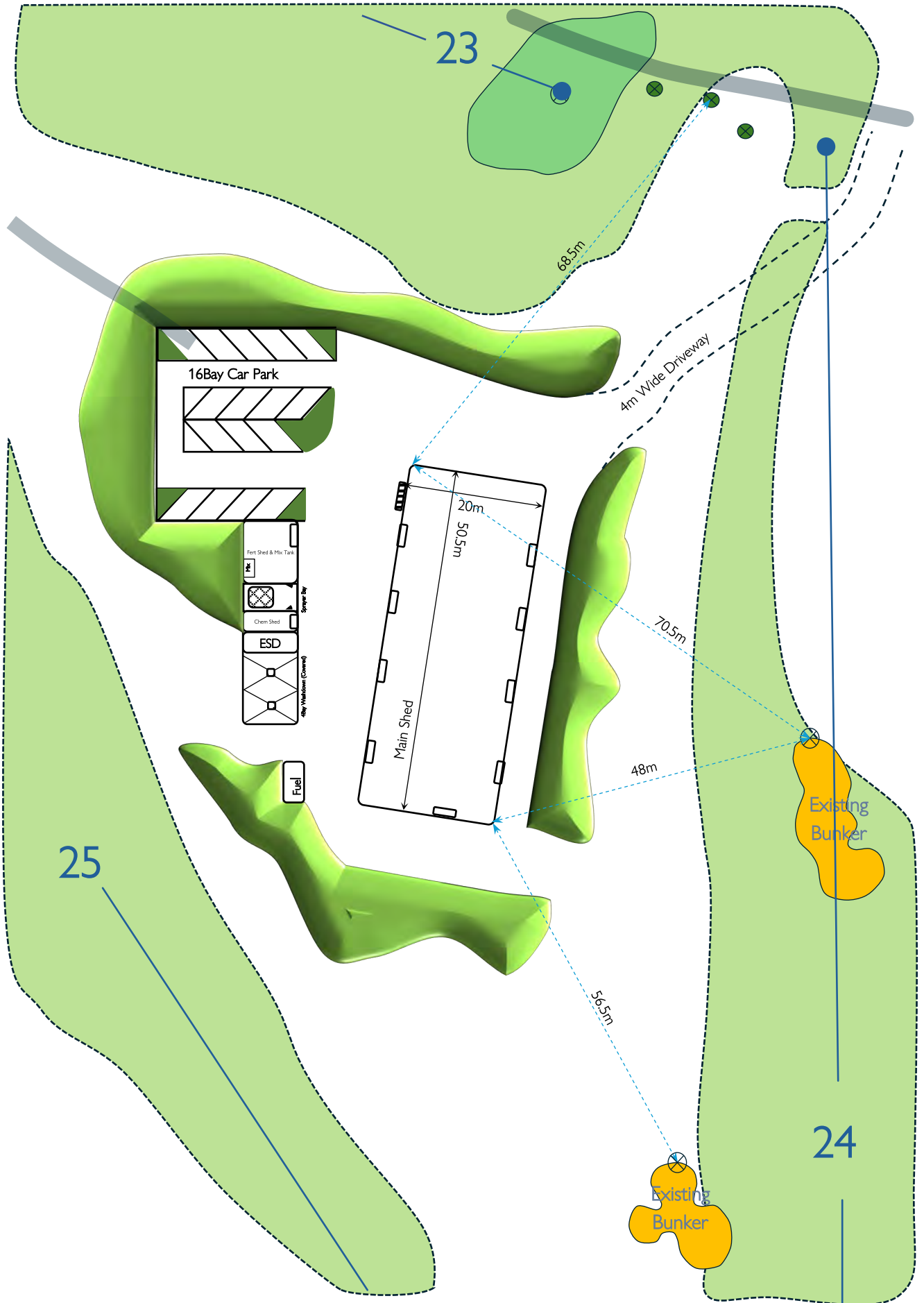
Simon Burrowes

NSGC Course Superintendent – 12/07/2024

Related reference material at end of report.

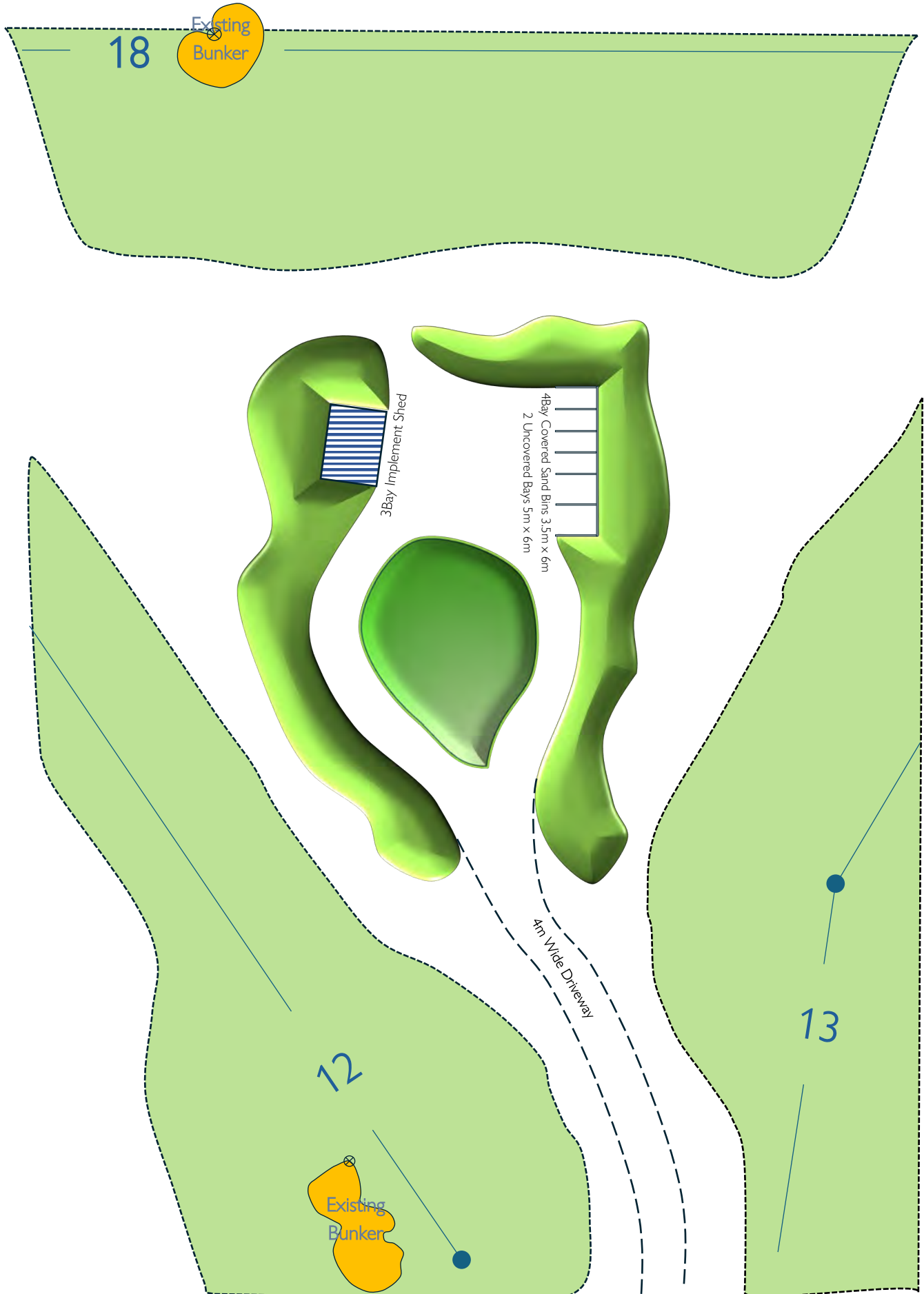
Shed Complex

Scale 1m = 0.13cm - Holes 23, 24 and 25 Proposed RBT Design (Avenza)



Sand and Auxiliary storage Compound

Scale 1m = 0.12cm - Holes 11, 12 and 18 Proposed RBT Design (Avenza)



Compound Driveway

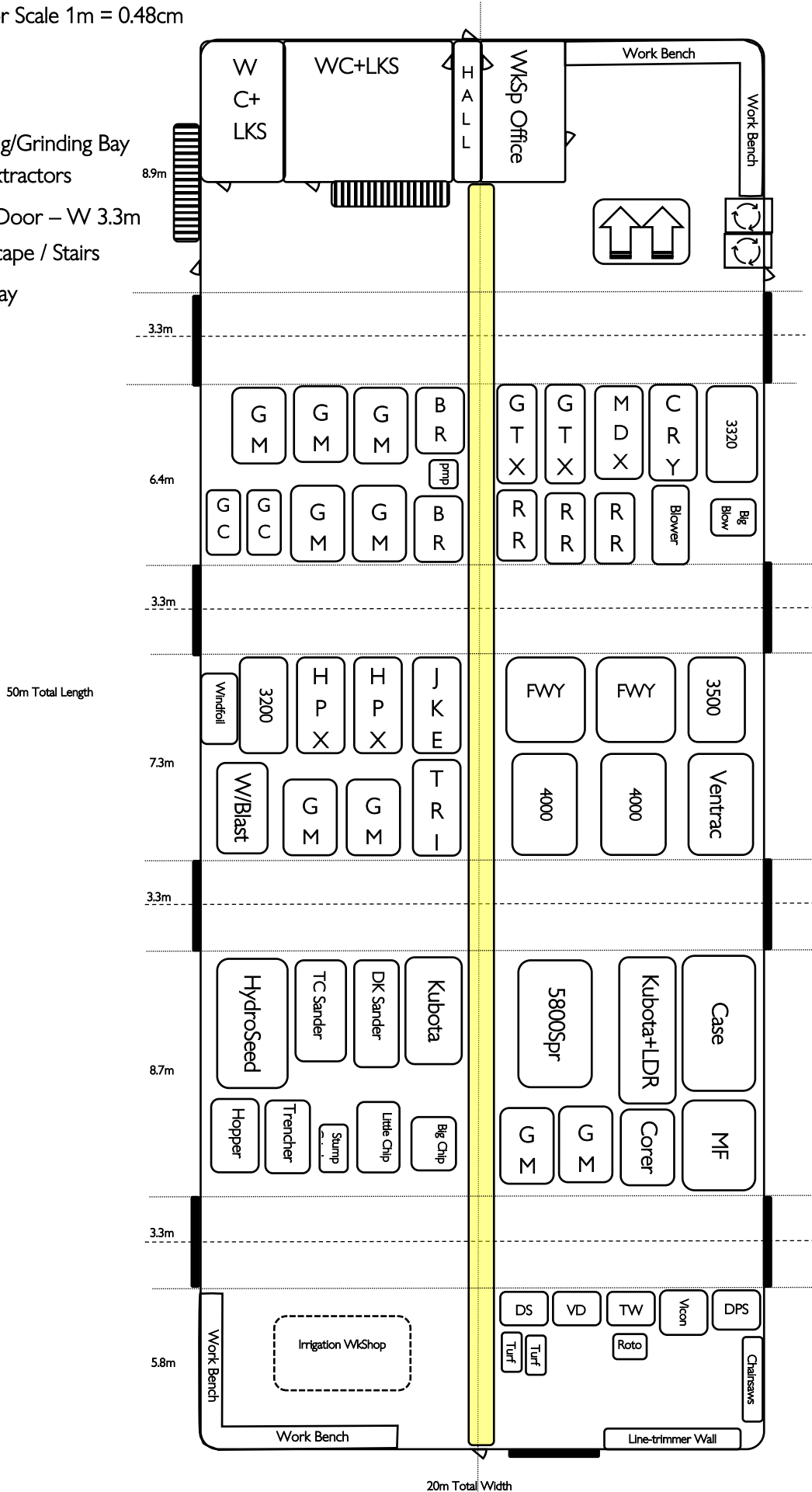
Scale 1m = 0.05cm - Holes 11, 12 and 18 Proposed RBT Design (Avenza)



Shed Layout




Ground Floor Scale 1m = 0.48cm

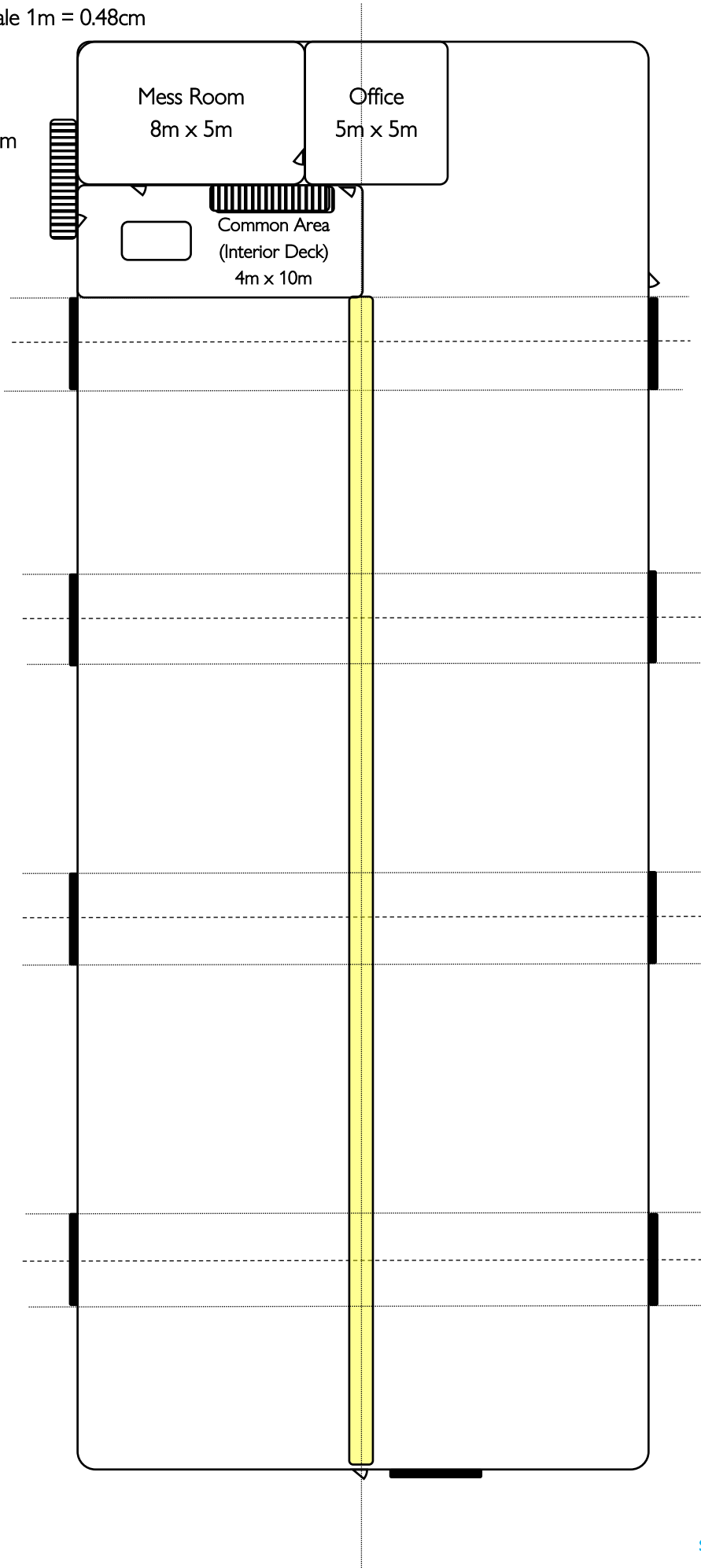
- Hoist
- Welding/Grinding Bay with extractors
- Roller Door – W 3.3m
- Fire Escape / Stairs
- Walkway



Shed Layout

First Floor (Mezzanine) Scale 1m = 0.48cm

-  Roller Door – W 3.3m
-  Fire Escape / Stairs
-  Walkway



Shed site (Existing Course Position)



Compound site (Existing Course Position)



ESD Waste²Water, Inc.

GSMS Series



The GSMS Series is the latest in wash water recycling technology. The GSMS Series is designed for treating Turf Care maintenance facility equipment with up to 4-hose stations. The addition of the Grass Clipping Separator, the integrated Inclined Plate Clarifier combined with the Biological Treatment System creates a water quality with a low Turbidity. The GSMS provides the versatility to separate grass clippings, suspended solids and hydrocarbons all in one compact system to produce a high quality recycled wash water. Contact ESD Waste2Water, Inc. to discuss a Turf Care Facility design today and learn more about the GSMS Advantage.

GOLF SOLIDS MANAGEMENT SYSTEM SPECIFICATIONS	INCLINED PLATE SEPARATOR SURFACE	WASHING STATIONS	MEDIA	DIMENSIONS	OPERATING CAPACITY	ELECTRICAL	FRESH WATER	NET WEIGHT
700 Series	277 Square Feet	1 to 2	822.5 Square Feet Surface Area	132 1/2" x 48 1/2" x 64 (L x W x H)	622 Gallon	240 Volt, Single Phase, 40 Amp with Neutral Wire	3/4"	Approx 1,300 lbs. Dry
800 Series	480 Square Feet	1 to 4	2,115 Square Feet Surface Area	186" x 60 1/2" x 64 (L x W x H)	1,834 Gallon	240 Volt, Single Phase, 40 Amp with Neutral Wire	3/4"	Approx 2,000 lbs. Dry



Certified to UL-508A Standards



1-800-277-3279
495 Oak Road
Ocala, Florida 34472
www.waste2water.com

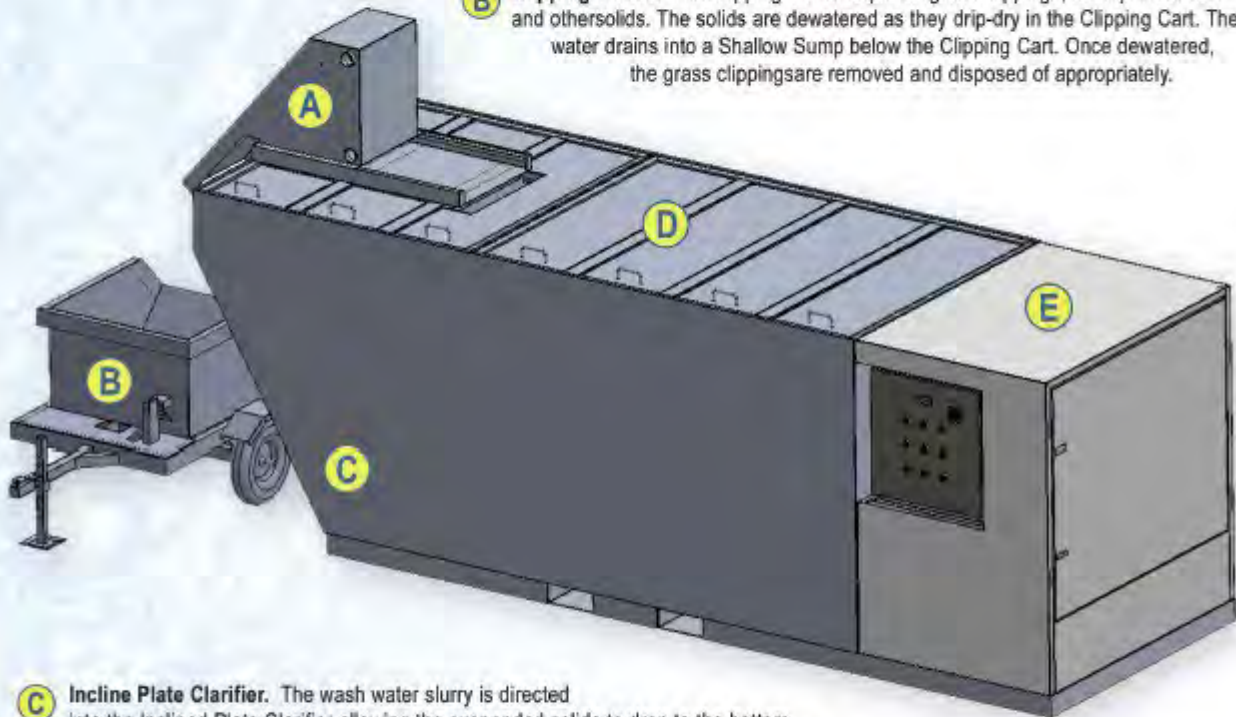


ESD Waste²Water, Inc.

GSMS Series

A Clipping Separator. The wash water slurry flows over the fine mesh clipping screen where grass and other solids slide down the clipping screen and into the Clipping Cart. At the same time, water drops through the clipping screen and into the Solids Separator.

B Clipping Trailer. The Clipping Trailer captures grass clippings, sand particulates and other solids. The solids are dewatered as they drip-dry in the Clipping Cart. The water drains into a Shallow Sump below the Clipping Cart. Once dewatered, the grass clippings are removed and disposed of appropriately.



C Incline Plate Clarifier. The wash water slurry is directed into the Inclined Plate Clarifier allowing the suspended solids to drop to the bottom while skimming the water and hydrocarbons off to travel into the Biological Treatment Chamber.

D Biological Treatment Chamber. Once in the Biological Treatment System, the water travels over and under a series of baffles and through a mass of honeycomb bio media covered with specially-formulated microbes. Organic contaminants are consumed by the microbes, and the contaminants are converted into carbon dioxide and water. Creating a low turbidity recycled wash water.

E Covered Controls. The marine grade aluminum covering is designed to protect the intrinsically safe controls from the environment. The GSMS also provides a Water Flow Meter to report the amount of Recycled Water for Sustainability.



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Chemical Containment and Recovery Pads For Turf Care Facilities



The Chemical Containment & Recovery Pads by ESD provide an extremely versatile way to create an instant chemical mix and load area in almost any location. The pads can be set up on virtually any flat and level surface. In the event of a chemical spill during the mixing and loading process, the chemical solution will be contained in the pad's large reservoir. Once contained, the spill can be filtered and recovered with the help of a powerful air-actuated pump and a 100 micron reusable filter. Recovered solution can be directed to a spray rig, or to an appropriate chemical container for reuse or proper disposal. The Chemical Containment and Recovery Pads are constructed of marine-grade aluminum for maximum durability and chemical resistance.

Specifications:

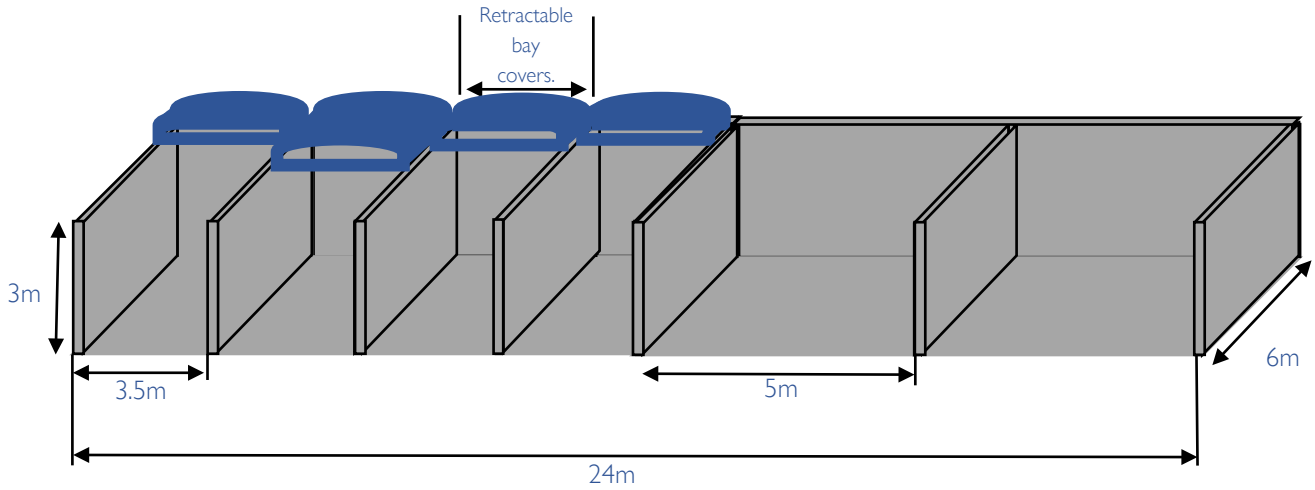
Approximate Dimensions / Holding Capacity	
Above Ground	10'W x 12'L x 8"H / 380 gallons
Above Ground	12'W x 16'L x 1'H / 1,048 gallons
Cement Imbed	10'W x 12'L x 8"H / 380 gallons
Cement Imbed	12'W x 16'L x 1'H / 1,048 gallons
Filtration:	100 Microns
Utility Requirement	20-100 psi compressed air for air powered diaphragm pump
Approach Ramps	(2) Included with Above Ground Pads

For maximum versatility, Chemical Containment and Recovery Pads can be used:

- Inside
- Outside
- Above Ground
- Imbedded in Cement

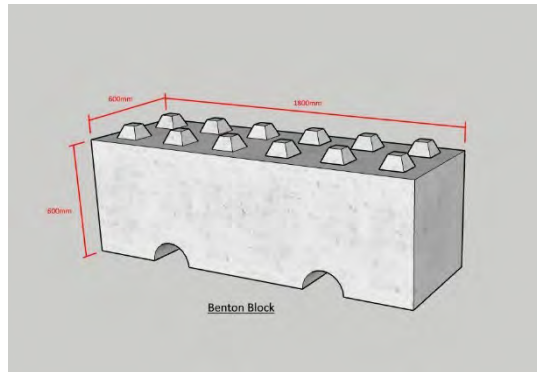


Covered Sand Bays and Auxiliary Shed



Sand Bin wall construction

Dimple Lock Concrete Block



Sand Bay Covers

Kiwi Tarp Retractable Bay covers



Implement Shed



Reference material – Royal Melbourne Sheds

