

ZERO CIVIL

ZERO WASTE FOUNDATIONS

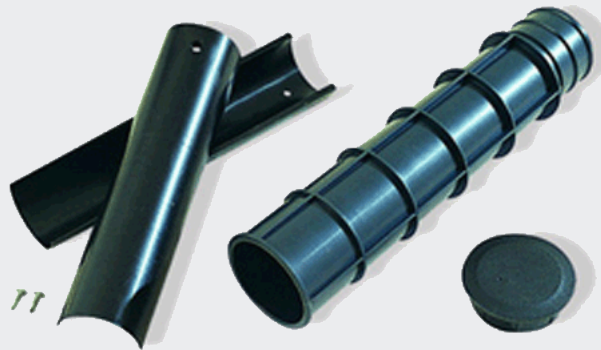
01

OUR NO.1 INNOVATION



IMPROVED RESILIENCE

When items are secured using ZERO WASTE FOUNDATIONS the ground socket, Taper and surrounding foundations become reusable following even severe impact. No on-going costs.



IMPROVED EFFICIENCY

Items of infrastructure remain perfectly aligned safe and secure year after year. Developments remain clean and safe and infrastructure becomes dynamic quickly removed, replaced or relocated for events, disaster response, maintenance and future upgrades.

IMPROVED COST SAVINGS

No more expensive repairs. No major traffic management required. Maintenance operations quickly become financially sustainable



IMPROVED WORKPLACE SAFETY

Reduce the risk of workplace injury from "Body stressing from digging and heavy labour", "time working in dangerous traffic" and "damage to dangerous underground services".



DOH&S WORKSAFE AWARD

AND OUR MOST TRANSFORMATIVE INNOVATION

01
OUR NO.1 INNOVATION

What makes them so transformative?

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WHAT MAKES THEM SO **TRANSFORMATIVE**?

Transforming developments from continual decline to continual improvement.

Securing roadside assets in reusable foundations delivers a level of resilience, safety and efficiency conventional fixing methods cannot match.

Common complaints with conventional metal systems:

- require replacement every 10–20 years
- rust, corrode, dent or distort
- rely on pins, padlocks or bolts
- locking components can shear or seize
- items can loosen, shift or become misaligned
- items can become stuck in the footing
- damaged items can create sharp edges or trip hazards
- replacements require clean-up, labour and reinstatement
- costs continue to increase over time
- Cities remain in a constant state of decline

IMPACT RESISTANT

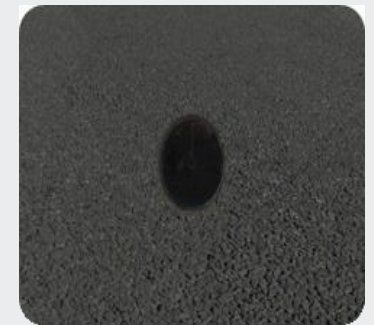
Made from impact absorbing advanced polymer and rubberised compound, the ZERO WASTE Foundations, (Ground socket and Taper) absorb impact force and recover following repeated impacts, including in-service installations on roads with speed limits up to 110 km/h.

NO BREAKABLE COMPONENTS

Items are secured using only friction remaining perfectly aligned and upon impact are actually forced further into the ground socket- so will not become loose and the locking device will continue working year after year. This also ensures items cannot become “stuck” in the ground socket.

UNIVERSAL

The same ground socket is used to install almost any size or weight item (subject to footing design). The same 60 mm ZERO WASTE Foundations can be used to install large statues, posts and large diameter bollards.



IMPROVED DEVELOPMENTS

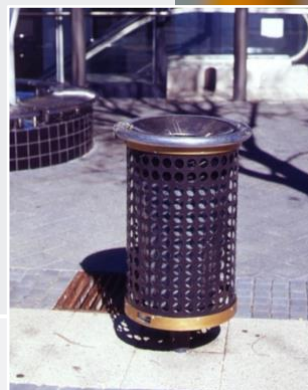
Posts, barriers, grab-rails, bins, bike racks, bollards and street furniture can all be installed using 60 mm ZERO WASTE Foundations. The wider the application, the greater the benefits.

01

Developments remain clean and safe

- No damaged footpaths or paving
- Items remain perfectly aligned
- Items remain safe and secure.
- Damaged items are quickly replaced

When widely applied cities become dynamic able to reconfigure infrastructure for events, disaster recovery, maintenance and upgrades.



MORE EFFICIENT **NEW WORKS**

ZERO WASTE ground sockets can be installed by simply positioning upright when pouring foundations

02

Instead of returning later to core, cut and disturb newly laid foundations, ZERO WASTE ground sockets can be positioned during the original concrete pour (requiring no additional traffic management digging, waste, no additional concrete, no delays and no disturbance to newly laid foundations)

Ground sockets can be installed by simply positioning upright (using installation tool from a standing position – facing traffic) when pouring foundations (creating a clean finish) and you can install the infrastructure for an entire development in a single day.



MORE EFFICIENT MAINTENANCE

By making foundations reusable you greatly improve your ability to efficiently maintain infrastructure

03

Instead of repeatedly digging up and replacing valuable foundations, damaged items are removed using ergonomic tools from a standing position, and replacement items are dropped into position. (automatically locking in place), reducing costs, risks and delays caused by digging and heavy labour.



IMPROVED **WORKPLACE SAFETY**

By making foundations reusable you greatly reduce the risk of workplace injury

DOH&S presented ZERO WASTE Foundations with a WorkSafe Award for addressing the major causes of workplace injury

- Removing the risk of body stressing from digging and heavy labour (The major cause of workplace injury)
- Removing the risk of damage to dangerous underground services
- Substantially reducing time working in dangerous traffic (The major cause of serious injury)
- Reducing exposure to silica dust by avoiding repeated concrete breakout

04

Body stressing drives the highest number of injury claims; traffic exposure and vehicle incidents drive the highest severity risk and Utility strikes cost Australia an estimated \$4.6 billion /year.



MASSIVE COST SAVINGS

By making foundations reusable you greatly improve your ability to maintain infrastructure within the limited budgets.

With around 200, 000 items replaced annually, the cost of repeated repairs is not the \$50 million spent on labour and materials, but the hidden cost of

- Traffic management
- Underground service strikes
- Workplace Injuries
- Workplace fatalities
- Delays and repeated call outs

That are costing billions Annually.

Removing the need for repeated excavation is not just a maintenance improvement — it is a major risk-reduction strategy

With ZERO WASTE developments foundations remain re-usable with ZERO repairs required, saving millions over the life of a development.

Damaged items are replaced quickly and efficiently using ergonomic tools and the only cost is labour.

For existing developments, the transition to financial sustainability is surprisingly fast.

The reason for this is that around 80% of maintenance results from just 20% of items - because they are the first replaced and made sustainable, within a very short time frame around 80% of the workload becomes simple “swap outs” and maintenance operations quickly transition to a state of financial sustainability.

	EST COST
Replacing damaged items	\$500 Million
Australia — work-related road crash injuries	\$500 Million
Australia — underground service strikes	\$4.6 Billion
Australia — serious workers’ compensation claims	\$2 Billion +
Australia — worker fatalities	\$2 Billion +

MEETING COMPLIANCE REQUIREMENTS

Supporting government requirements for safety, sustainability, resilience and whole-of-life value.

06

Government contracts are increasingly assessed against

- whole-of-life cost,
- safety,
- sustainability,
- risk reduction,
- maintenance efficiency and
- long-term asset performance.

ZERO WASTE Foundations help authorities meet these requirements by reducing repeated excavation, reinstatement, waste, traffic disruption and exposure to workplace injury risks — through a small, low-cost change to the way roadside assets are installed and replaced.

Helping meet key requirements for:

- whole-of-life value
- financial sustainability
- workplace safety
- reduced maintenance disruption
- lower excavation and reinstatement risk
- improved asset resilience
- reduced waste and environmental impact

Tested, approved and proven in service for more than two decades, ZERO WASTE Foundations are used by State Government departments, utilities and major local government authorities to improve efficiency and reduce key workplace injury risks.

Recognised with a **DOH&S WorkSafe Award** for reducing key workplace injury risks.



Department of Transport

