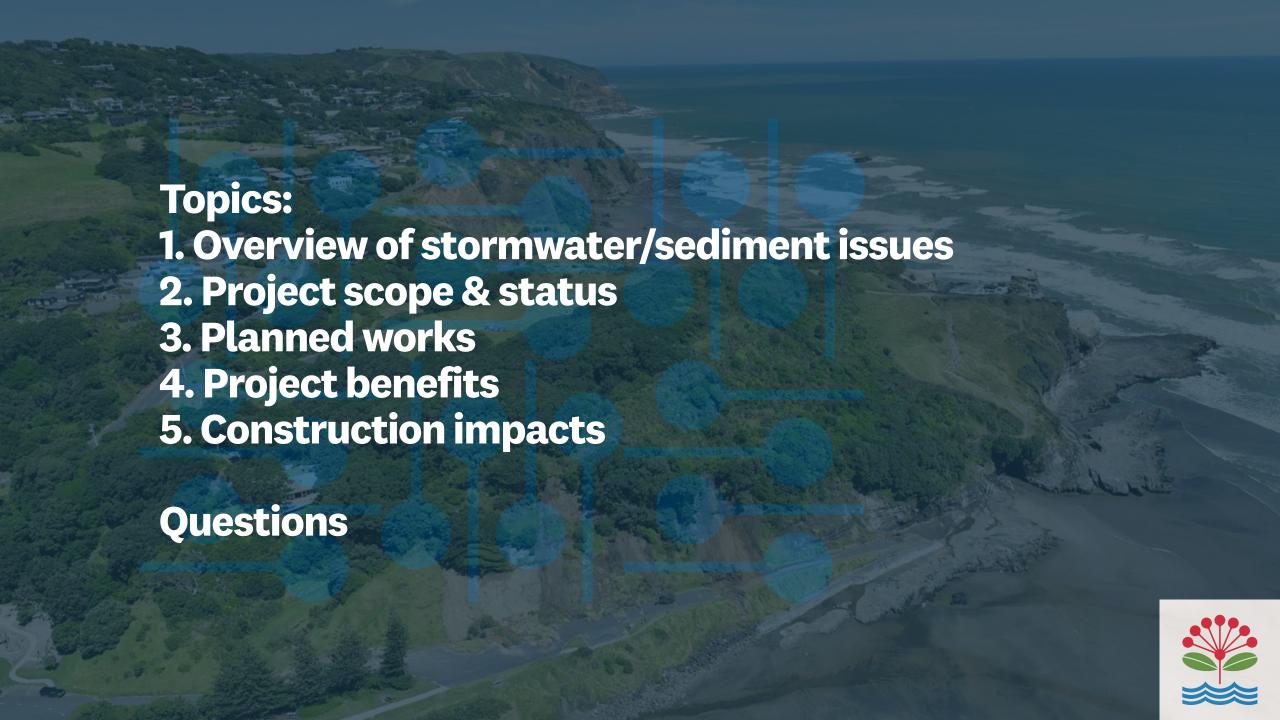
# Muriwai Stormwater improvements - Motutara Road & Domain Crescent

Auckland Council | GHD





#### **Current issues**

- From the landslips we have loose soil
- In rain events these soils are carried downhill (as sediment)
- This sediment ends up on private property, driveways, roads and in the stormwater network
- This sediment blocks drains and pipelines
- With blocked drains more flow goes overland and through properties
- Some Council pipelines and channels are undersized



# **Project scope**

#### The scope of the project is:

- ✓ Complete stormwater upgrade works in Motutara Road and Domain Cresent
- ✓ Capture sediment runoff from landslips
- ✓ Improve stormwater intakes
- ✓ Increase capacity of Council pipelines so that they can handle a 1 in 10 year rain event

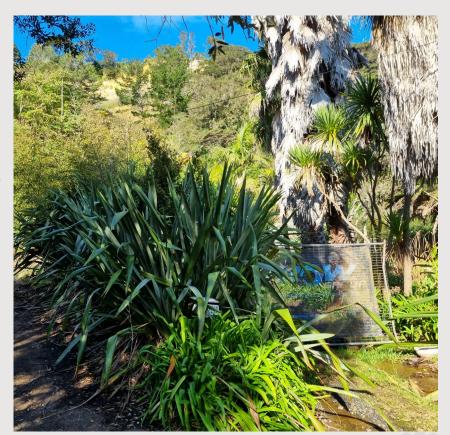
#### The project does not cover:

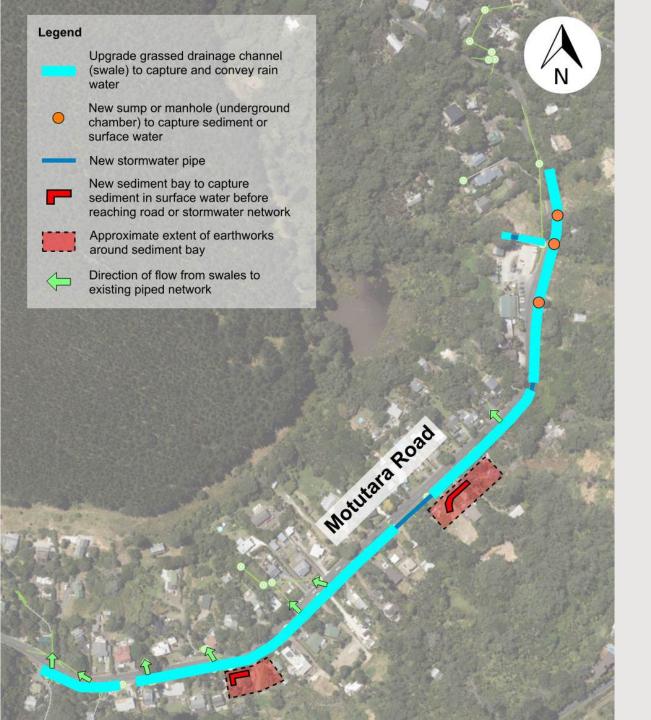
- The wider catchment
- Slope stability
- Works within private property



# **Project Status and Consenting**

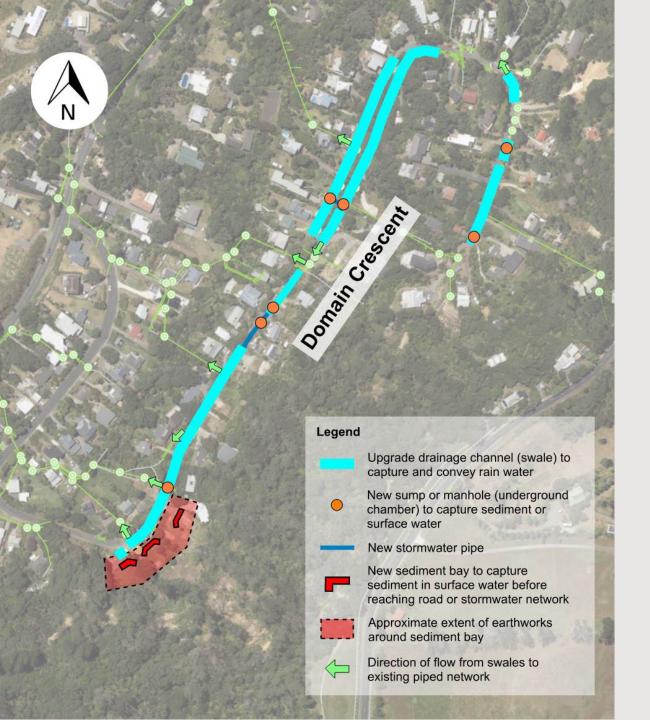
- Detailed design is complete
- Aiming for consent lodgement mid-October
- In determining whether to notify a consent or not, consideration is given to whether the activity will have adverse effects on the environment that are more than minor. The draft AEE concludes that the proposed works are likely to have adverse effects that are less than minor. The decision on notification sits with Auckland Council (Regulatory), any discussion on notification within the draft AEE is intended to guide Auckland Council (Regulatory) in its notification section only. In these instances, Auckland Council (Regulatory) typically use an independent commissioner to decide on the notification status.
- Resource consent will be processed in approximately 3 months





# **Works Overview Motutara Road**





# **Works Overview Domain Crescent**



# **Sediment Bays - Visualisation**



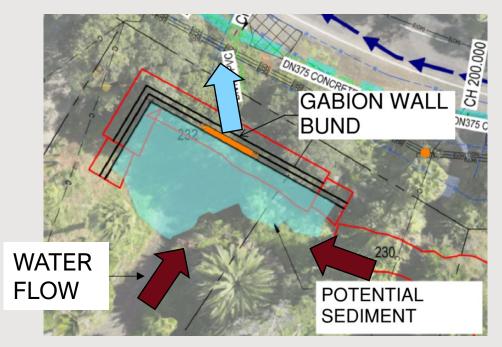
Gabion (rock) wall example



3D model visualisation



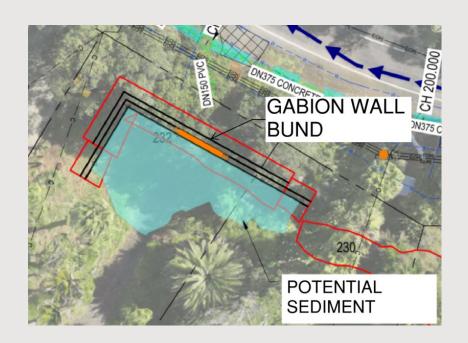
# **Sediment Bays - Function**



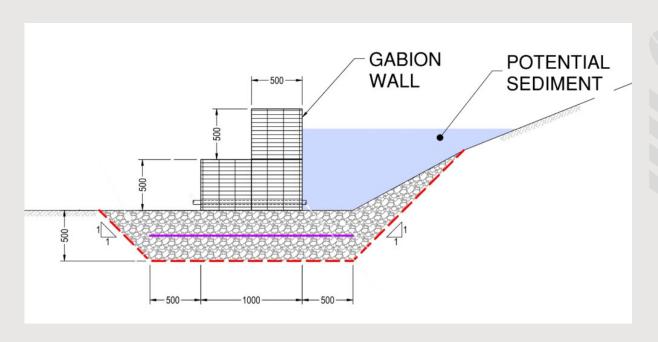
- Water from slope flows down the slopes and is directed to the bay
- Water flows through gabion (rock) wall to swales/scruffy domes downstream
- Sediment is blocked by the gabion wall and accumulates in bay over time



# **Sediment Bays - Design**



Sediment bay view from above



Bund (gabion wall) cross section



# **Sediment Bays - Maintenance**



Sediment bay view from above

- Design includes accessways and space for maintenance personnel/machinery
- Maintenance will be undertaken by Auckland Council Healthy Waters Operations Team
- Regular inspections (every 3 months) to check sediment bays
- Maintenance and cleaning to be undertaken at least once every year



# Swale - example 1



Existing road (~95-105 Domain Crescent)



Example road-side grassed swale



# Swale - example 2



Existing road (~200-250 Motutara Road)



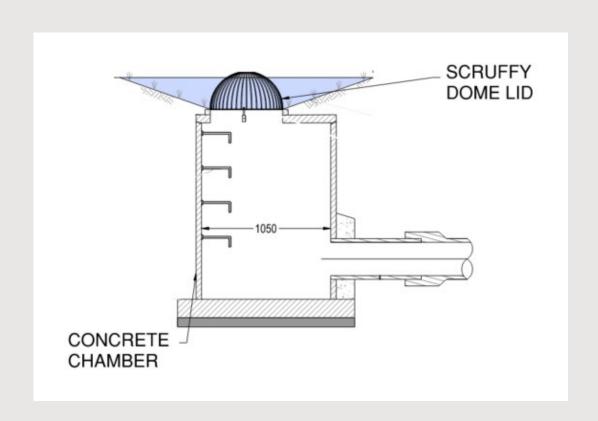
Example road-side grassed swale



# **Sediment Sumps & Manholes**



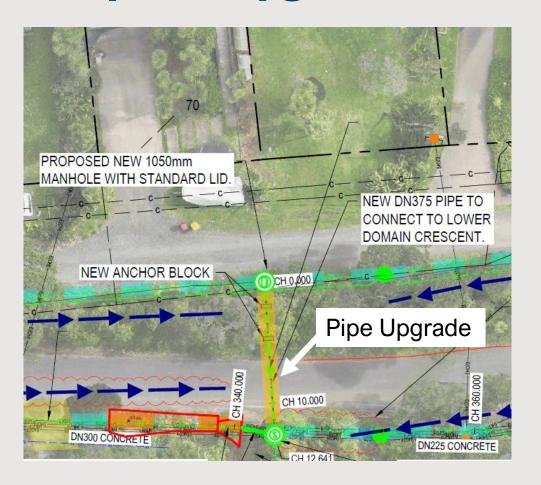
Example scruffy dome lid

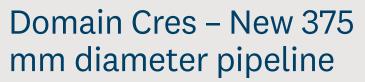


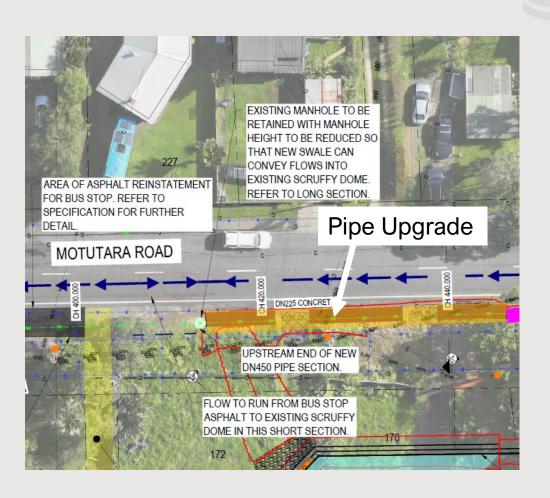
Typical sump/manhole



### **Pipeline Upgrades**



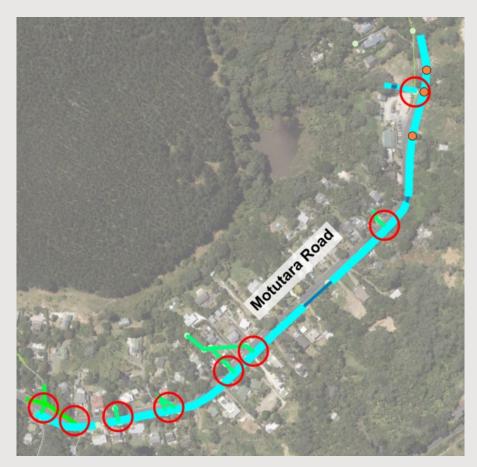




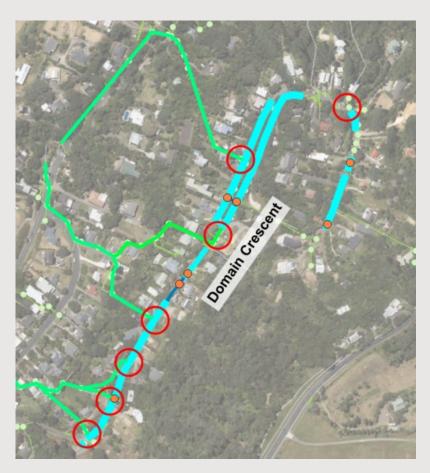
Motutara Road – New 450 mm diameter pipeline



# Swale outlet locations - where the flow goes



Motutara Road indication of swale outlet locations into existing stormwater network



Domain Crescent indication of swale outlet locations into existing stormwater network



#### Swale outlet locations - example

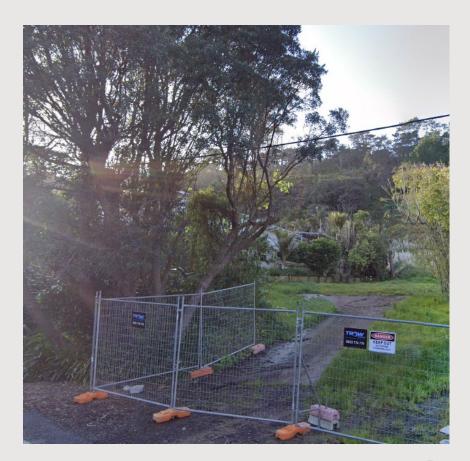


Example of swale outlet to existing stormwater network (approx. 208-214 and 257-265 Motutara Road)



# **Driveway Management**

- No changes will be made to your driveways.
   Only exceptions are:
  - 180 & 184 Moturara Road will have the first part of their driveways removed and replaced as part of the new 450 mm pipe install
  - 79 & 81 Domain Cresent will have the first part of their driveways removed and replaced as part of the new 375 mm pipe install
  - 132 Domain Cresent Driveway will have the first part of their driveway removed and replaced as part of the new slot drain install
- Driveway access points to council acquired properties will be removed, these include concrete, gravel and dirt driveways. Swales will be built in these locations. Only exception is:
  - If these driveways support Auckland Councils for future maintenance works (e.g. access to sediment bays etc) then these driveways are retained
- The extent of driveway removal is limited to a width that matches the width of the swale area. Additional driveway removal is not part of this stormwater scope





# **Community feedback**

### Community meeting was held in October 2024

Community concerns/comments	Response
Concrete channels not aesthetically pleasing, not friendly to vehicles	Design changed from concrete channels to grassed swales
Want to continue using road-side space for parking and walking	Shallow swale profiles used if possible where space is currently used for parking/walking
Has design considered downstream network capacity?	<ul> <li>Pipes immediately downstream have been checked for capacity.</li> <li>Reducing sediment in stormwater network is expected to reduce blockages in downstream pipes</li> </ul>
Will the assets be properly maintained	<ul> <li>Sediment bays designed so that machinery available in the area (e.g. small digger) can be used to remove the sediment.</li> <li>Sediment sumps designed so sucker trucks can be used to remove sediment (like standard catchpits/manholes).</li> <li>Reducing sediment that reaches the road/pipes is anticipated to reduce maintenance requirements</li> <li>Sediment bays/sumps have storage capacity for sediment</li> </ul>



#### **Benefits**

Improved sediment capture using sediment bays, swales and sediment sumps

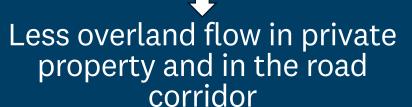


Less sediment in private property and roads and driveways



Less blockages in the stormwater intakes and pipelines

Greater stormwater capacity in the swales and pipelines





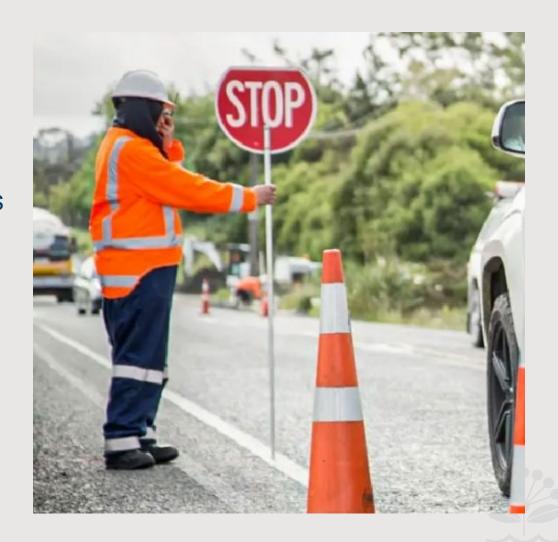
Reduced flooding



# **Construction impacts**

- Construction likely to commence mid to late February 2026.
- Works anticipated to take around seven months to complete (tbc)
- Effort will be made to avoid road closures and detours where possible
- General approach will be to complete 50 metre long sections and then move further along the street
- Stop Go operation with one road lane blocked for construction works will be a common arrangement on site



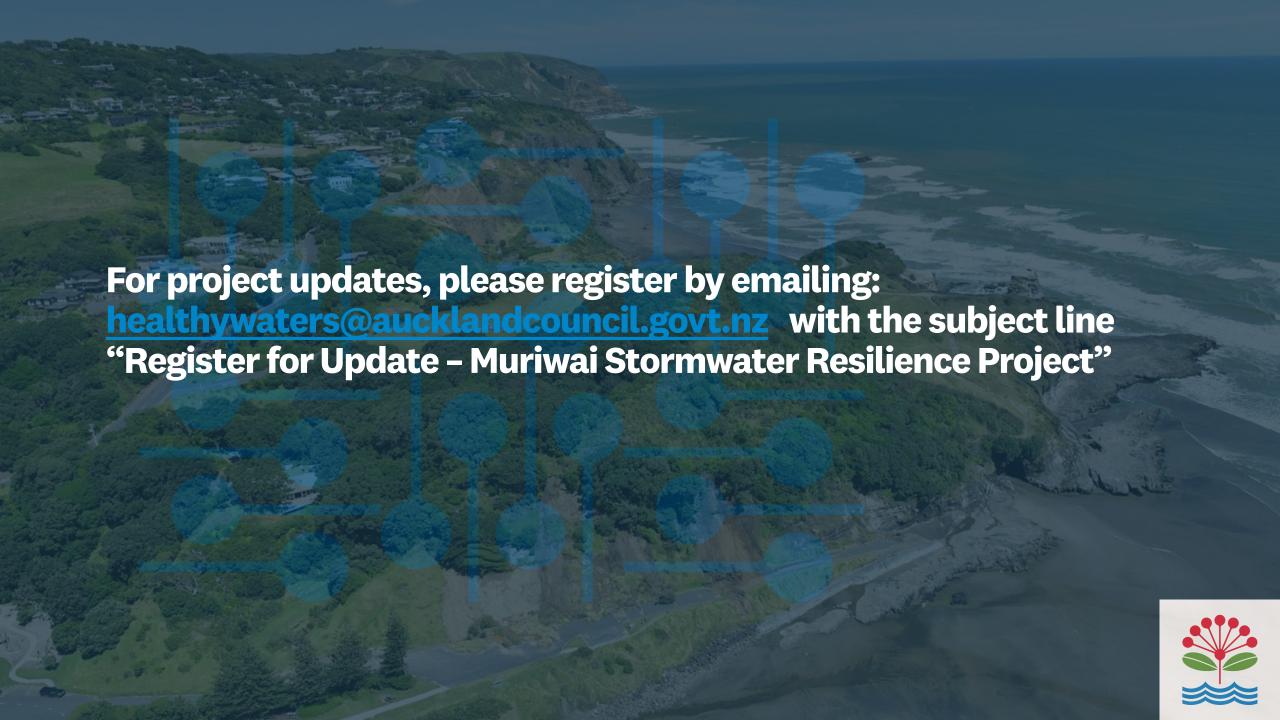


### **Construction impacts (Continued)**

- Works are Mon Fri 7:30am to 6:00pm
- Saturday work may be required on a case- by-case basis
- Between 7:00am and 7:30am work will be restricted to low noise generating activities only, such as site set up and pre-start meetings
- No construction works on Sunday or Public Holidays
- Contractor will keep residents updated on progress







# **General Q&A**

1	How can I register for project updates?	For project updates, please register by emailing: <a href="mailto:healthywaters@aucklandcouncil.govt.nz">healthywaters@aucklandcouncil.govt.nz</a> with the subject line "Register for Update – Muriwai Stormwater Resilience Project".
2	Issues related to Road & Footpath	These have been referred to Auckland Transport. We have requested AT to share their plans, so that it can be shared with the community.
3	Operations & Maintenance	Ongoing management will be undertaken by the Healthy Waters Operations Team.  An Operations & Maintenance manual will be developed, incorporating community feedback, and shared for review.  Inspections will occur every three months, with annual routine maintenance programmed in.  Any callouts or maintenance issues raised outside the scheduled programme will be responded to by the Operations Team.  Operations / Maintenance related queries or complaints: Please call Auckland Council Contact Centre on 09 301 0101.
4	Site specific queries / issues raised by the community.	We are planning to complete another round of site investigation and meet people on site so that we can identify the issues onsite, investigate and amend the design where required to achieve the project outcome.  We will be getting in touch with residents to set up a time for site meetings, being planned for 2 <sup>nd</sup> week of November.