



FLETCHER

CONSTRUCTIONUPDATES

NX2 farewells Alan Orange and welcomes Robert Jones as the new Project Director

In April 2018, after almost 45 years working in construction, Alan Orange will be retiring and stepping down from the Project Director role on the Pūhoi to Warkworth motorway project.

Alan joined the project mid-2016 during the tender/concept design phase. Since then he has provided fantastic leadership to a culturally diverse team, ensuring the project gets successfully underway.

A few words from Alan:

I am immensely proud of what the team has achieved to date – from starting strong with our health & safety, to how we have engaged with the local community and supporting the local economy with the use of local contractors/ suppliers.

I am very pleased to advise Robert Jones as my replacement. Robert is an experienced Construction Professional with more than 40 years in our industry, including successfully

delivering the motorway to the south of Pūhoi from Orewa to the Johnstone's Hill Tunnels.

On Tuesday 3 April, the project team came together to celebrate and thank Alan for the significant contribution he has made to the project. Hōkai Nuku presented Alan with a special koha (gift) – a greenstone (pounamu) in the shape of an adze (toki) to symbolise strength and mana (prestige).

From all the team at NX2, we wish Alan all the best for the future but expect to see him out and about in the local community.



Alan Orange presenting Devan Flewellyn of the Warkworth Volunteer Fire Brigade money raised from the December Project Open Day.



Alan shares some highlights with the project team.



The project team coming together to say "haere rā, adios, farewell" to Alan Orange.

Meet Robert Jones, Project Director Fletcher/Acciona Construction Joint Venture

Robert and his wife Marion have lived in the Warkworth area since 2004 when he took on the Project Director role for the delivery of the Northern Gateway, the motorway extension from Orewa to Johnstone's Hill Tunnels. Robert has a vested interest in seeing the next section of motorway complete, as quickly and safely as possible. Robert says about joining the project: The project is an enormous engineering feat and an exciting project to be a part of. My focus during the first few weeks has been getting to know the many teams and individuals working on the project, and to understand the challenges that lie ahead.

It's been great to see many local companies involved in the project. Having local knowledge and experience is hugely important and I'm committed to working with them to see this project through. I'm also keen to attend some of our project events and to meet our local community who I know have a keen interest in the project.

I'd like to acknowledge the great work that Alan Orange has done in setting up the project for success. I have known Alan for many years as an industry colleague and I wish him and his wife Jane all the best for their future endeavours.

NX2 warmly welcomes Robert to the Team and looks forward to learning from his experience and local knowledge.



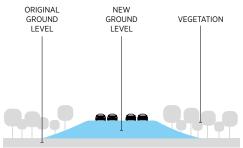
This map is indicative only. For more project photos, maps, videos please visit our website or Facebook page www.nx2group.com and Ara Tūhono – Pūhoi to Warkworth

The nitty gritty of earthworks

You may have seen from the photos and drone footage that the topography of the existing ground is extremely diverse. To construct the new motorway, we need the quantity of material being cut from the hills to balance out the material filling the gullies.

Across the whole project there is over 7 million cubic metres of existing ground to excavate or 'cut'. Around 5 million cubic metres of the excavated material will be used as fill to buildup the motorway and create a smooth road gradient. There will be around 2 million cubic metres of unsuitable materials, which will be moved to soil disposal sites within the project area. Some of these materials (which include topsoils) will be used for reshaping and landscaping the surrounding areas of the new motorway.

The 18.5km project alignment has been divided into four zones; north, central north, central south and south (refer to the map on page 2).



Typical cross-section of a fill

Traffic update

TEMPORARY TRAFFIC LIGHTS INSTALLED ON WOODCOCKS ROAD AND WYLLIE ROAD, WARKWORTH

NX2 has recently installed temporary traffic lights along Woodcocks Road and will soon install lights on Wyllie Road. The lights are required to facilitate the safe movement of vehicles for all road users, as heavy construction traffic will be crossing the local roads.

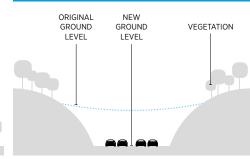
The lights are controlled by a trained Gate Keeper, who will ensure the public are given priority by keeping the lights on green. The lights will be activated orange-red when trucks have a clear path to cross. The lights will be turned off when there are no trucks crossing.

There have been several reported incidents of vehicles running red lights on Woodcocks Road. Although the lights are temporary, the normal road rules apply, and it is an offence to run a red light. The lights are to protect the public and our project team, please reduce your speed and be prepared to stop. Thank you for your cooperation. Each zone has different amounts of earthworks. The central north zone has the most earthworks to complete, due to the steep hills and deep gullies in the forestry area. These zones are designed to balance out the mass haul of 'cut' materials that need to be moved to 'fill' areas, reducing the distance materials need to travel, as much as possible.

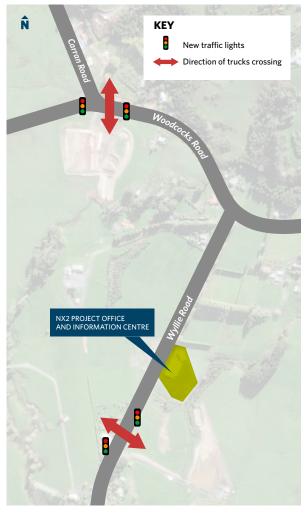
Most of the project's earthworks will be completed between October – April, when weather is typically drier and will be completed over the next three years (2017/18, 2018/19, 2019/20).

DID YOU KNOW?

The amount of earth that needs to be excavated or 'cut' is the equivalent of stacking a rugby field, 1.4km high with material.



Typical cross-section of a cut



NX2 lends a hand to the Motu Kaikoura Project

Motu Kaikoura is the seventh largest island in the Hauraki Gulf Island and nestles just off Great Barrier Island in the Fitzroy Harbour. For many years the island had been privately owned, but in 2005 the island was purchased by the Government and became a public reserve. The island is managed by the Motu Kaikoura Trust, who among other things, are working hard to eradicate pest species.

A few years ago, the main lodge on the island was unfortunately destroyed by fire and since then the Trust has focussed all their energy on replacing it as fast as possible. While the lodge has taken priority, the smaller bush huts have deteriorated. To ensure volunteers and students have habitable accommodation, the huts have needed some serious TLC. The accommodation also serves as a vital cash flow which goes back into the Trust for ongoing maintenance.

The huts have needed new doors, windows and some a new roof, and with all money spent on the new lodge, the Trust has sought the assistance from anyone who could help. The Warkworth Rotary Club offered to take over the hut upgrade and have raised some money for the replacement items. When NX2 learnt of what was needed by the Club, it was decided that suitable materials from the demolished houses on the project alignment would go towards the restoration project. NX2's demolition Contractor Yakka worked closely with the Warkworth Rotary Club to make this fantastic initiative happen!



Yakka owner Bruce Levie with Warkworth Rotarian Peter Johns.



Looking out past the new lodge over Fitzroy Harbour

Significant archaeological finds in the South

Since earthworks started on Site Access Point 10, six archaeological sites have been uncovered. These sites have largely been nohonga (seasonal campsites) with fire pits. However, last month a more permanent settlement was uncovered on a ridgeline overlooking the Pūhoi River. The team were stripping back for the S1 cut, monitored by Kaitiaki from Hōkai Nuku and the Project Archaeologists, and uncovered what looks like the edge of a kainga (village).

This kainga (village) has shell midden, a range of storage pits, fire pits and included an area of flaked obsidian and chert which are not from this area but is probably a stone tool working area. The team also found a toki (adze) on the kāinga site. This large toki is made from greywacke and appears to be newly made when the blade was damaged. It would have been inserted and lashed to a handle and used for carving waka (boats) and posts for buildings.

Story credited to: Na Gena Moses-Te Kani, Pou Tātaki, Hōkai Nuku



Project Archaeologists inspecting the remains of a large shell midden. Fire pits to the bottom right.

Out and about in the community

The NX2 Stakeholder and Communications Team have been out and about in the community, spreading the word about the project and answering those curly questions. The team have presented at the Warkworth Men's Rebus Club, the Hibiscus Hospice Friendship Group, the Mahurangi Friendship Group and at Warkworth Primary School and Mahurangi College.

FROM ROAD BUILDING TO GOLFING!

kāinga site

Toki (adze) found on the

NX2 had four teams entered in the 2018 Warkworth Golf Club Spring Business House competition, and we're proud to announce 'NX2 Team 3' won the shield! Big thanks and congratulations to Warkworth Golf Club for putting on such a fantastic competition, and to all the local sponsors who support the Club.



Kyle Rolland and Deb Hill (NX2) with Robert Dye (Rebus Men's Club)



What's coming up?

NORTH

- Works begin on the Mahurangi stream diversion
- Ground improvement works continue
- Excavating 'cuts' and moving materials across Woodcocks Road

CENTRAL NORTH

- Perry Road stream diversion and culvert works
- Continue removing unsuitable materials to soil disposal sites
- Continue excavating, rock blasting and crushing

CENTRAL SOUTH

- Milling machine to begin extracting rock
- Stream diversion works to begin south of Moir Hill
- Continue removing unsuitable
 materials to soil disposal sites

SOUTH

- Begin ground improvement works
- Installation of a temporary causeway at Te Arawhiti ki Ōkahu

If you do not wish to receive any further newsletters, please <u>unsubscribe here</u>

A copy of our privacy policy and how we look after the information you provide us is available on our website: <u>www.nx2group.com</u>

E. info@nx2group.com P. 0508 P2WK INFO 🖪 Ara-Tūhono-Pūhoi-to-Warkworth