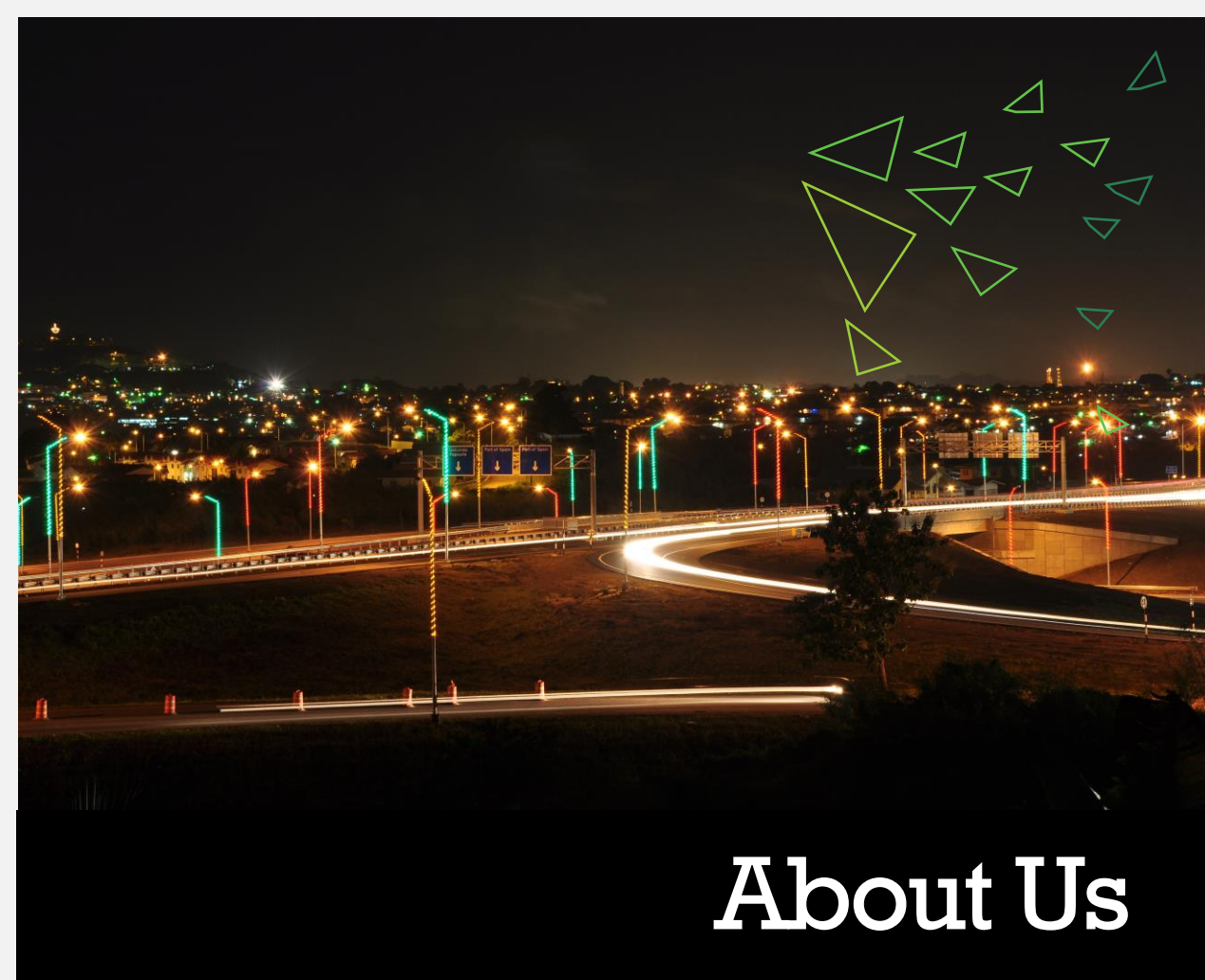




Spotlight on Infrastructure

Key Projects of the Ministry of Works and Transport





About Us

The Ministry of Works and Transport is responsible for providing the physical infrastructure and transport services necessary for the social and economic development of the country.

Role of the Ministry in Implementing Government Policy

The Ministry of Works and Transport (MOWT) is responsible for implementing the following strategic objectives of the National Development Strategy, 2016 to 2030, Vision 2030:

Theme III - Improving Productivity Through Quality Infrastructure and Transportation (Goal 1 and 3)

Theme V - Placing the Environment at the Centre of Social and Economic Development (Goal 1, 2 and 5)

How roads and transportation influence development:

An effective road network can hasten progress in industry and trade, the viability of urban areas, and the expansion of jobs, agricultural and rural development, education and personal opportunity. Further transportation development helps to attain an efficient distribution of population, industry and income.

(source: World Bank Report on Road Infrastructure and Economic Development)

Financial Performance 2019

Fund	Allocation
Consolidated Fund	283,771,941
Infrastructure Development Fund	1,002,009,951
TOTAL	1,285,781,892



Funds allocated in Fiscal 2020

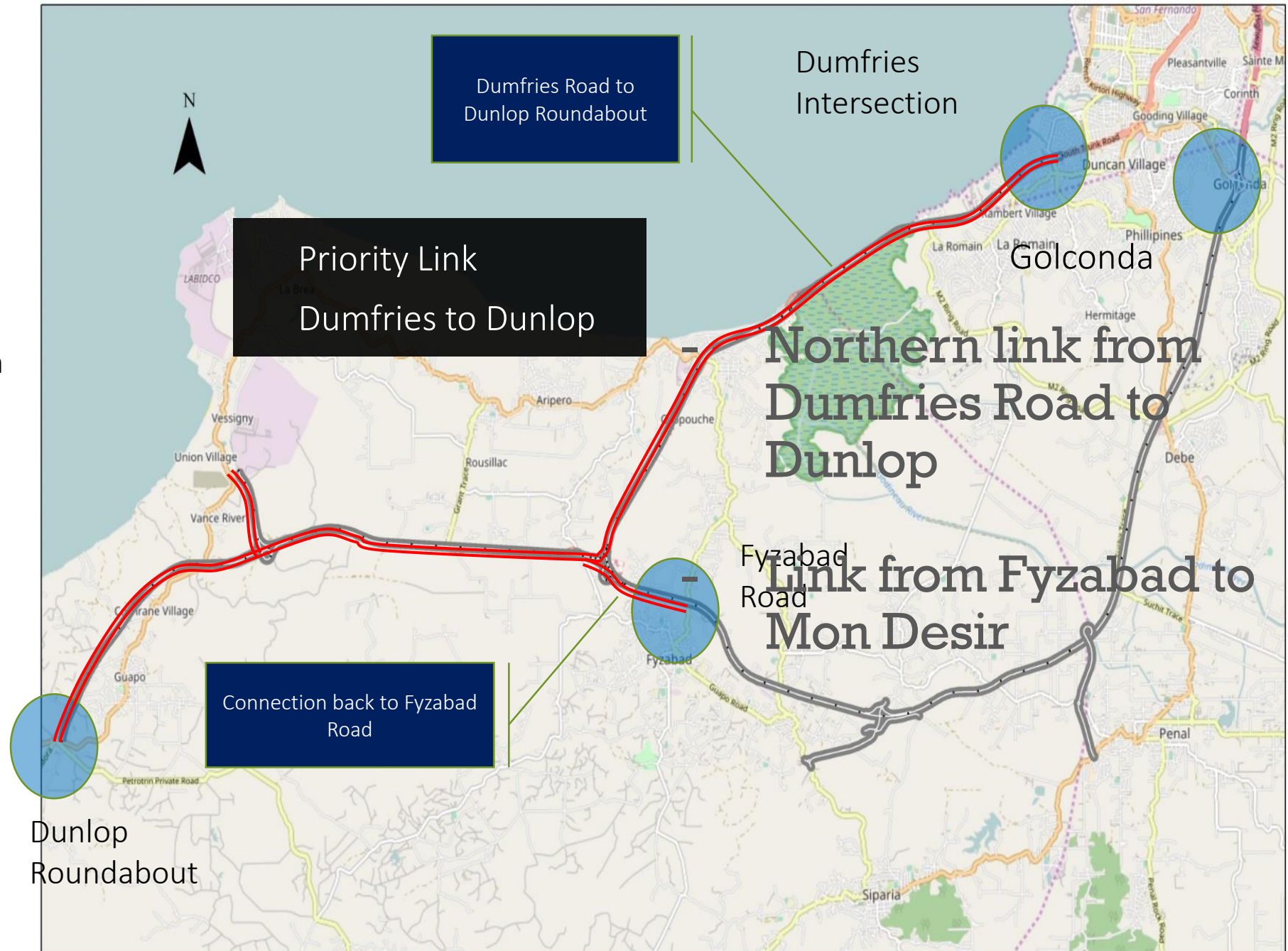
Fund	Allocation
Consolidated Fund	247,675,000
Infrastructure Development Fund	1,002,160,000
TOTAL	1,249,835,000

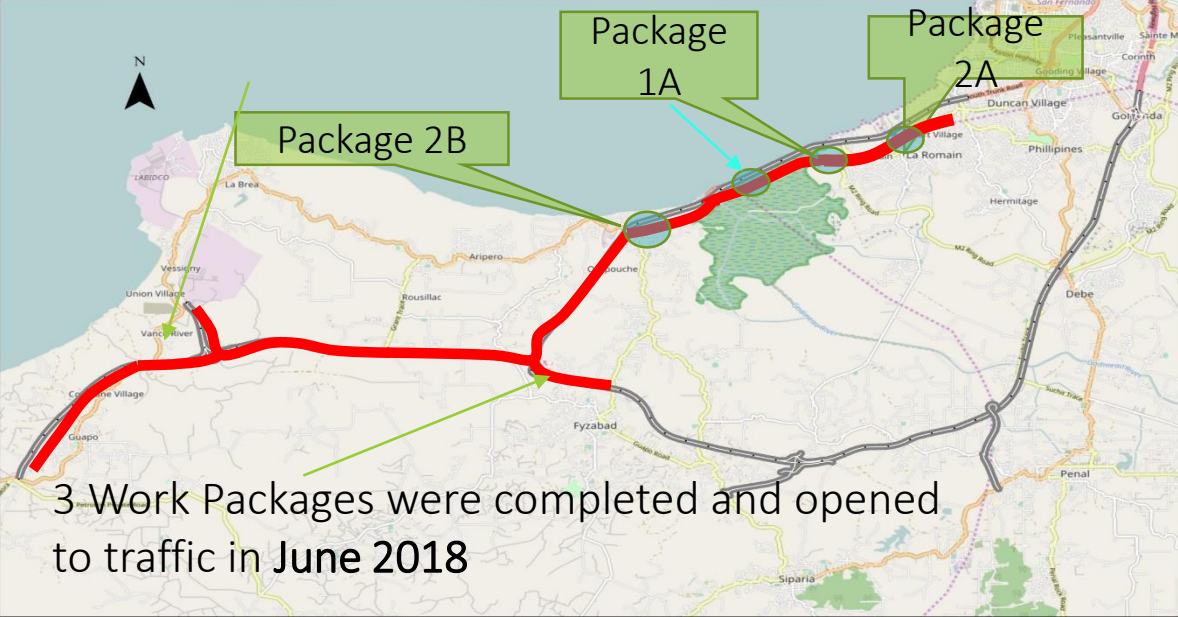
Key Projects and Programmes of the Ministry of Works and Transport



Solomon Hochoy Highway Extension to Point Fortin (SHHEPF)

- Construction of a 29 km 4-lane divided highway from Dumfries Roundabout to Dunlop with with a connection from Mon Desir Interchange back to Fyzabad Road, four (4) interchanges (St Mary's, Mon Desir, Grants Road and La Brea), three (3) overpasses (Delhi Road, Southern Main Road and #8 Road), three (3) river bridges (Godineau, Mosquito, Guapo river bridge)
- The project consists of **12** work packages which have all been awarded to date



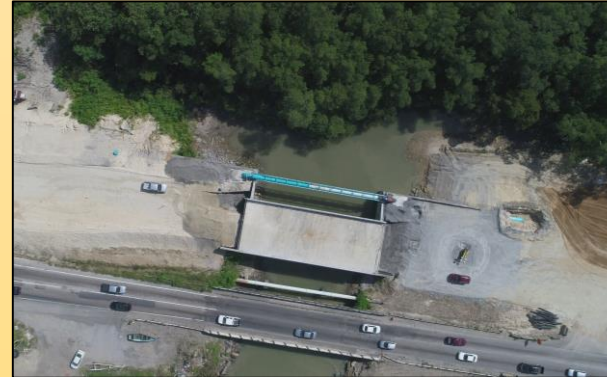


SSHEPF Completed Work Packages

Package 1A – 100% Completed

Mosquito Creek Bridge

Godineau River Bridge



Package 2A – 100% Completed

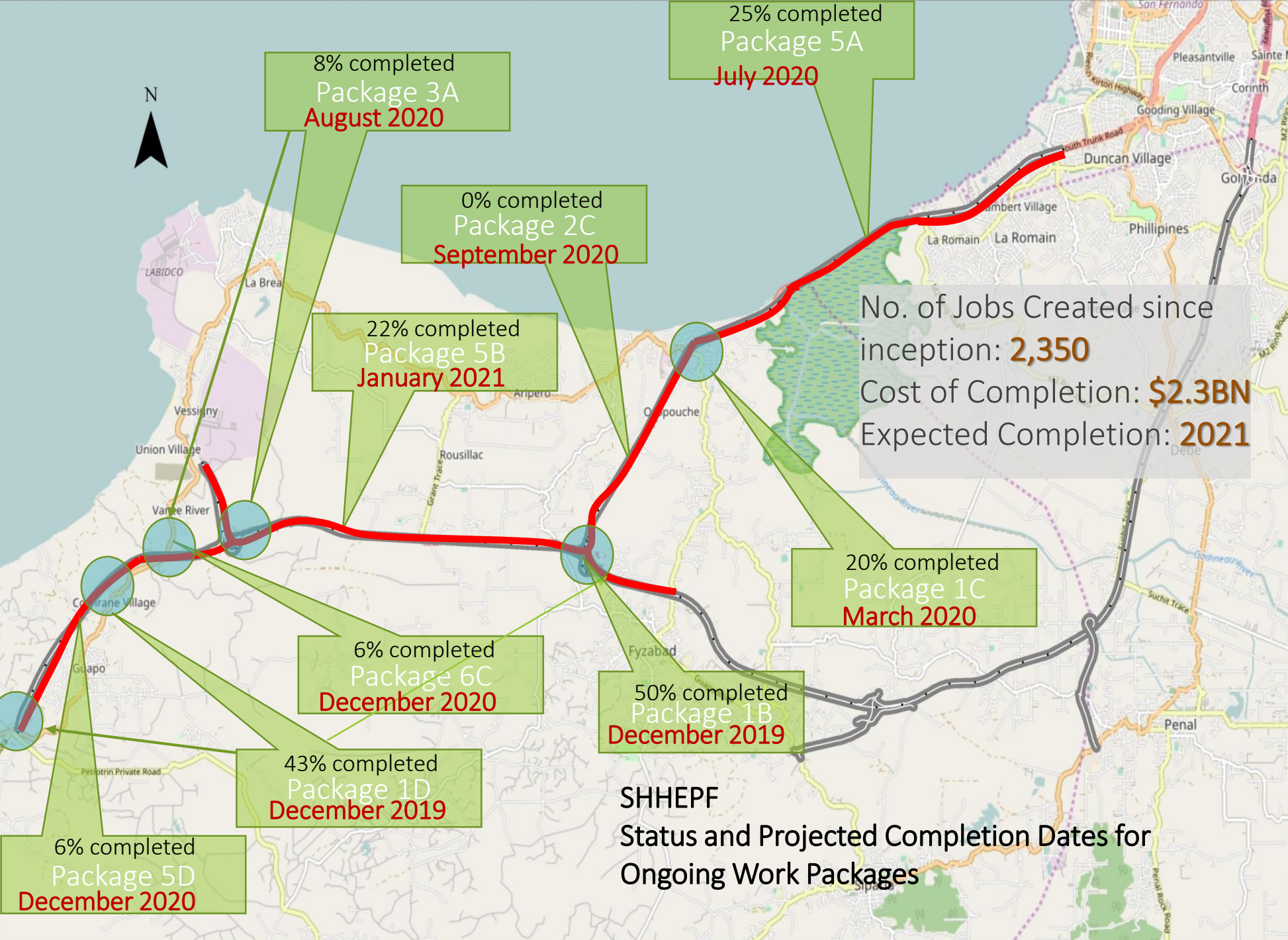
Drainage Works adjacent to Dansteel

Drainage Works towards Sunset Cove



Package 2B – 100% Completed



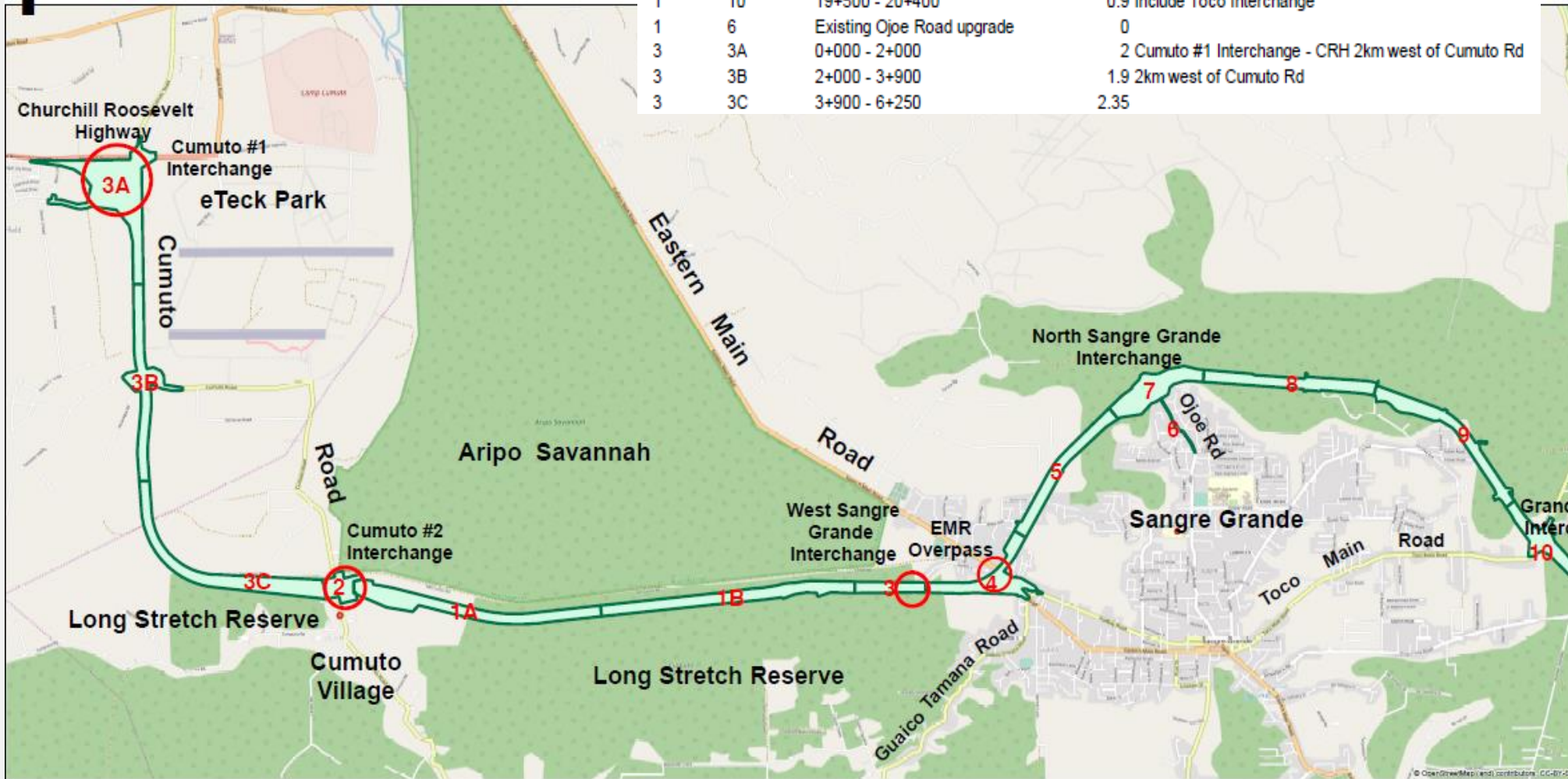


Project benefits and Impact:

- To improve the efficiency of the road network in the south-western areas of Trinidad.
- To improve road access and connectivity to Debe, Penal, Siparia, Fyzabad, La Brea and Point Fortin as well as San Fernando, Gulf City and La Romain.
- To cater to the present and future traffic demands on the road network in these areas. This is considering residential, commercial and industrial growth.
- To facilitate economic development of the south-western region of Trinidad.

Churchill Roosevelt Highway Extension to Sangre Grande (CRHES)

PHASE	PACKAGE	STATION	Lenght_Km	Description
1	2	6+250 - 6+600	0	Cumuto #2 Interchange
1	1A	6+600 - 9+080	2.48	
1	1B	9+080 - 11+600	2.52	
1	3	11+600 - 12+300	0.7	include West Grande Ramps
1	4	12+500 - 13+500	1	1 Include EMR overpass
1	5	13+600 - 15+000	1.4	
1	7	15+000 - 16+000	1	1 include North Grande Interchange
1	8	16+000 - 17+700	1.7	
1	9	17+700 - 19+500	1.8	
1	10	19+500 - 20+400	0.9	Include Toco Interchange
1	6	Existing Ojoe Road upgrade	0	
3	3A	0+000 - 2+000	2	Cumuto #1 Interchange - CRH 2km west of Cumuto Rd
3	3B	2+000 - 3+900	1.9	2km west of Cumuto Rd
3	3C	3+900 - 6+250	2.35	



- Extension of the Churchill Roosevelt Highway Extension to Sangre Grande on a phased basis
- **The first phase** is a 14km segment starting from Cumuto Junction to Toco Main Road. This Phase consists of 11 separate work packages.
- **The second phase** is 6.25km from the existing CRH to Cumuto and consists of three (3) separate work packages.

Churchill Roosevelt Highway Extension to Sangre Grande (CRHES)

Status of Works – Phase 1



Pkg 1A – a new segment of highway from Cumuto Road and continuing eastward for 2.5km

Estimated Cost: \$198-Mn

38% completed

Projected End Date
December 2019

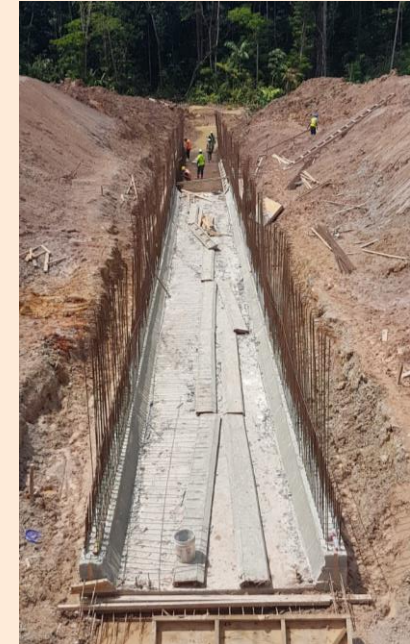


Pkg 1B – new segment of highway from 2km west of the EMR and continuing westward 2.5km

Estimated Cost: \$203.4-Mn

13% completed

Projected End Date
January 2020

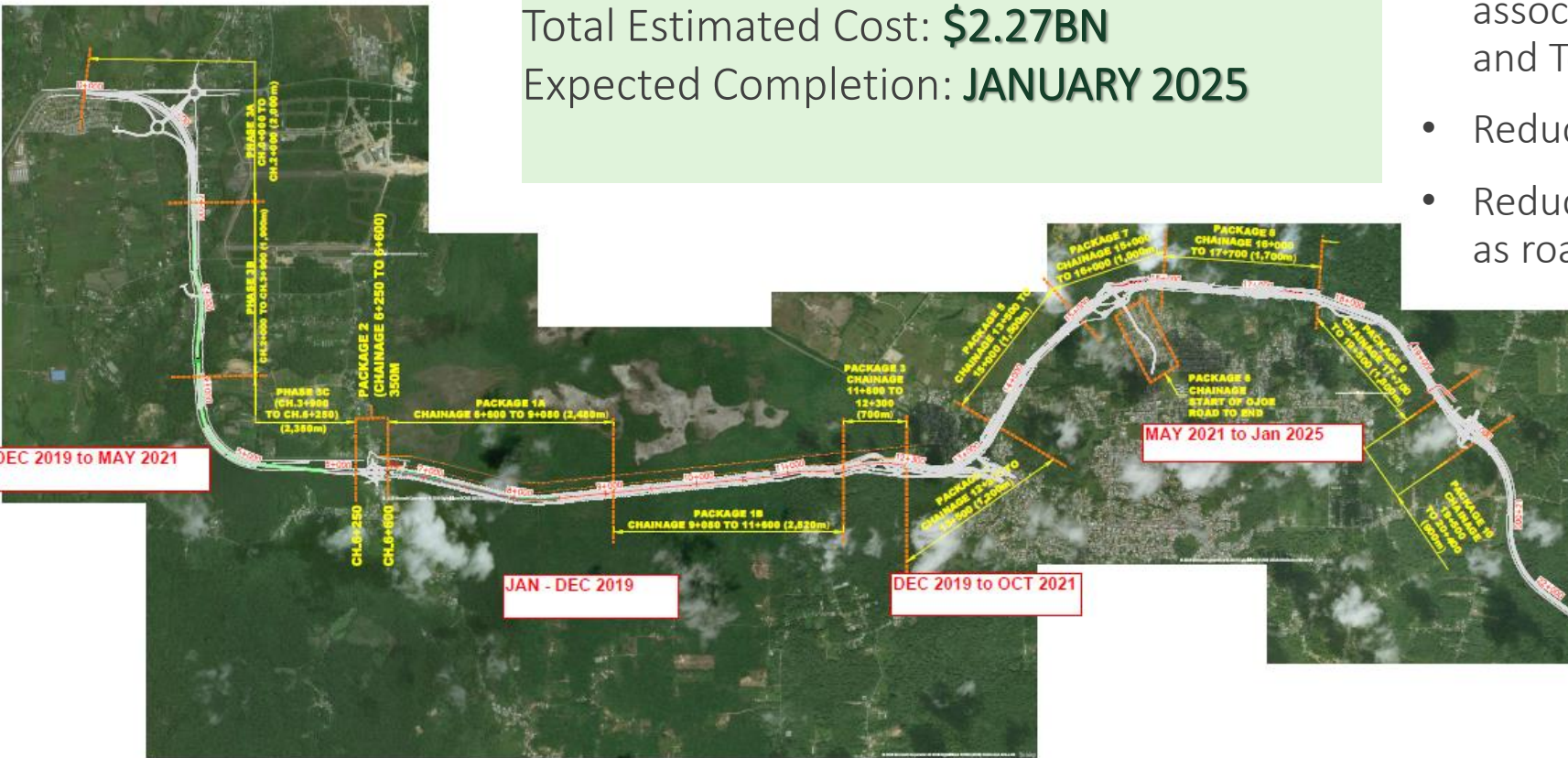


Churchill Roosevelt Highway Extension to Sangre Grande (CRHES)

No. of Jobs Created since inception: **285**
 Total Estimated Cost: **\$2.27BN**
 Expected Completion: **JANUARY 2025**

Project Benefits

- Improved connectivity to east Trinidad.
- Open up Eastern Trinidad to development
- Create better linkages with Tobago (in association with the Valencia to Toco Road and Toco Port projects)
- Reduced Vehicle Operating Costs.
- Reduced Transportation and Distribution costs as road efficiency improves



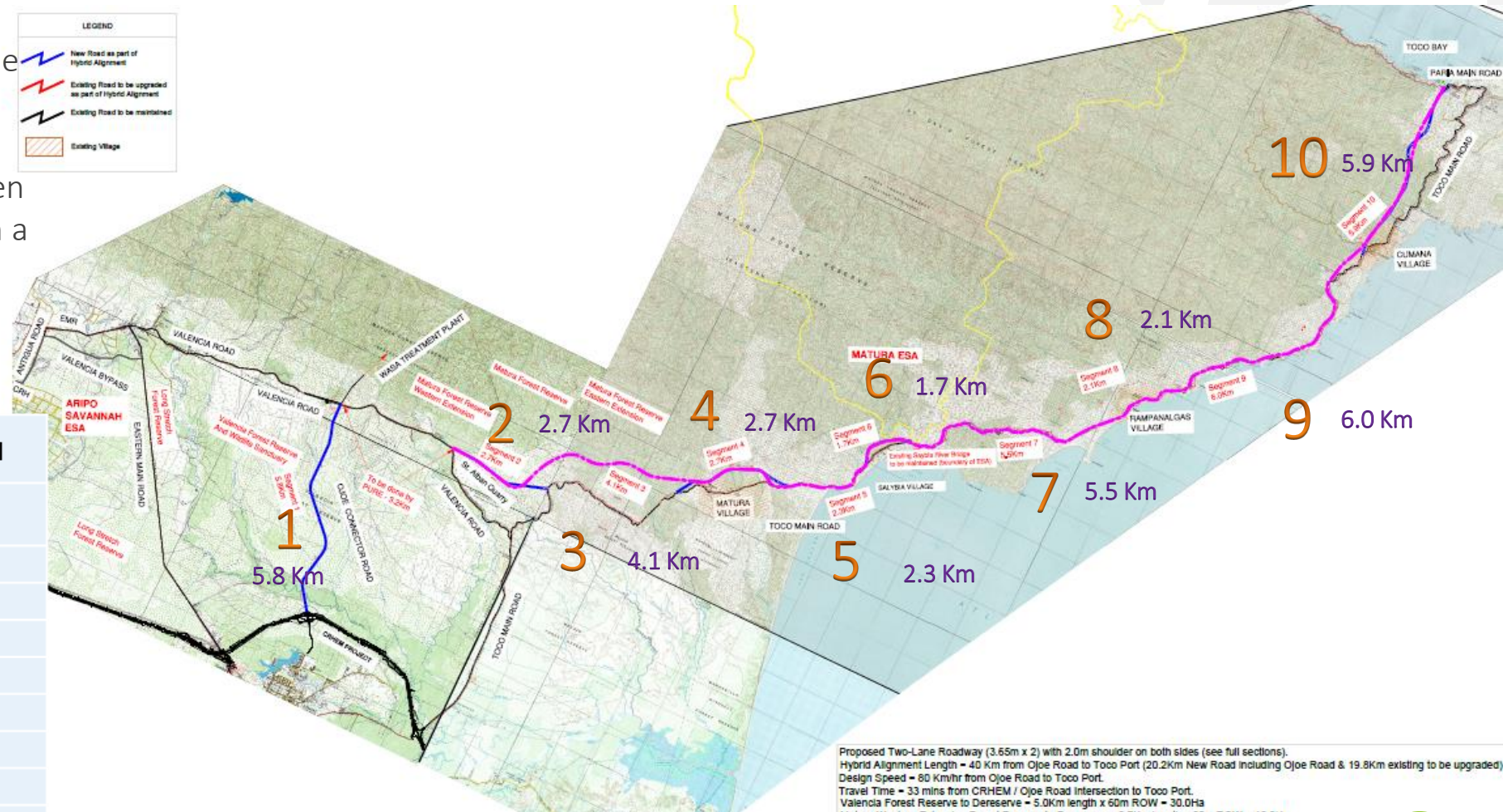
PRELIMINARY CONSTRUCTION SCHEDULE

Phase 1 – Jan 2019 – Jan 2025
 (consists of 11 Work Packages)

Phase 2 – Dec 2019 – May 2021
 (consists of 3 Work Packages)

Construction of a First Class Road from Valencia to Toco

- Project involves a hybrid approach to construction in that some segments of the proposed roadway will constitute widening and rehabilitation works while others will require entirely new construction
- The proposed roadway project has been divided into 10 segments and will span a total length of 40km, from Ojoe Connector Road in Sangre Grande to Toco Bay, and will include both connector and adjacent roads



Proposed Two-Lane Roadway (3.65m x 2) with 2.0m shoulder on both sides (see full sections).
 Hybrid Alignment Length = 40 Km from Ojoe Road to Toco Port (20.2Km New Road including Ojoe Road & 19.8Km existing to be upgraded).
 Design Speed = 60 Km/hr from Ojoe Road to Toco Port.
 Travel Time = 33 mins from CRHEM / Ojoe Road Intersection to Toco Port.
 Valencia Forest Reserve to Dereserve = 5.0Km length x 60m ROW = 30.0Ha

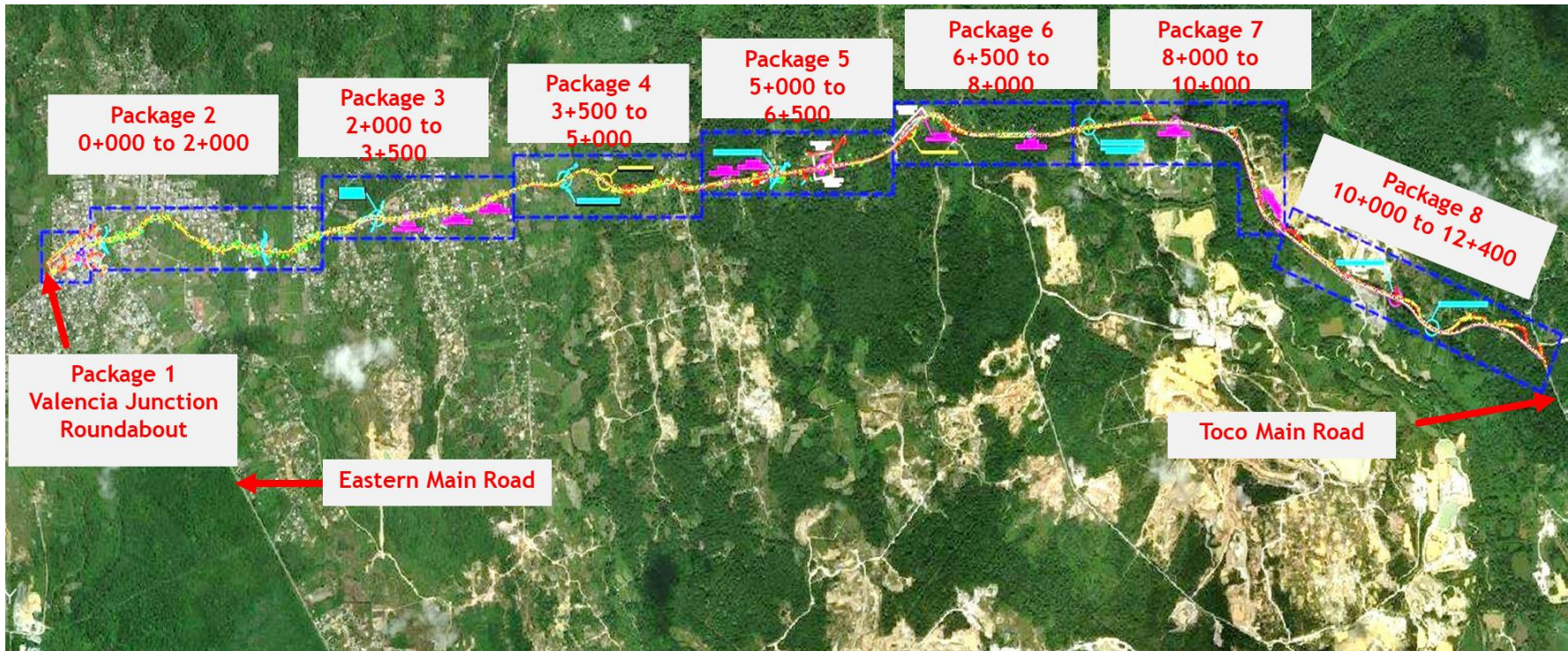
	DESCRIPTION	LENGTH
Segment 1	Ojoe Road Connector	5.8 km
PURE SECTION	Upgrade (PURE)	3.2 km
Segment 2	New Road	2.7 km
Segment 3	New Road	4.1 km
Segment 4	New Road	2.7 km
Segment 5	Upgrade	2.3 km
Segment 6	New Road	1.7 km
Segment 7	Upgrade	5.5 km
Segment 8	Upgrade	2.1 km
Segment 9	Upgrade	6.0 km
Segment 10	New Road	5.9 km

Construction of a First Class Road from Valencia to Toco

No. of Jobs Created since inception: **67**
Estimated Cost: **\$3.12Bn**
Expected Completion: **2021**

Project Benefits

- Improved accessibility - reduced travel time
- Increased potential for economic activity in general and local tourism
- Expansion of cottage industries
- Provision of a smooth riding surface
- Improved drainage system and
- Improved sight distances

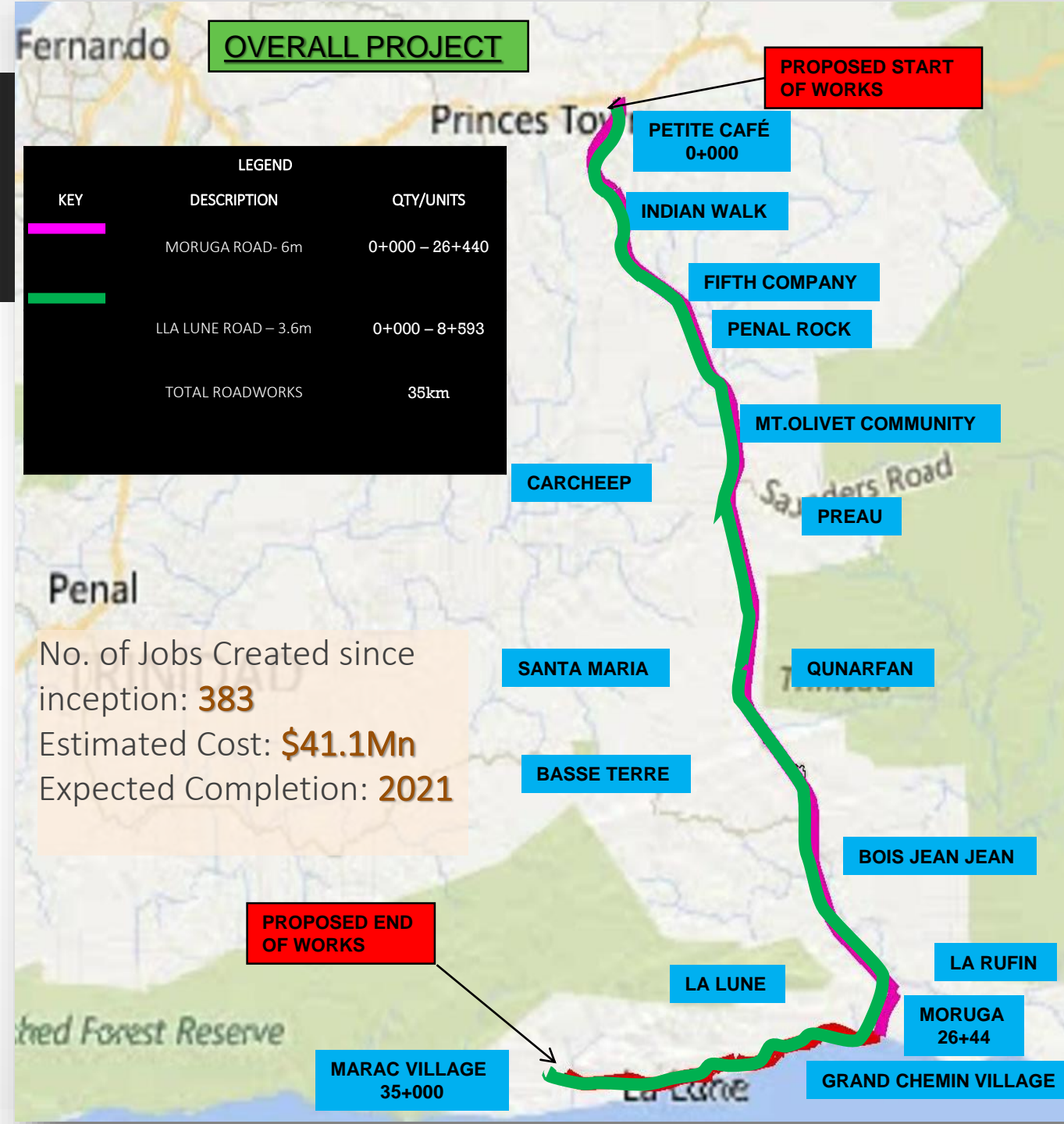




MORUGA ROAD REHABILITATION PROJECT

The Moruga Road Rehabilitation project extends from Petit Café in the North to Marac Village, Moruga in the south. The project comprises the rehabilitation of the Moruga Road, La Lune Road and Moreau Road inclusive of the design, widening and construction of culverts, the design and construction of adequate drainage, the construction of footpaths as required, the design and construction of bridges and the design and implementation of slope stabilization measures.

This project is intended to upgrade the access to the fishing port and processing facility in accordance with the vision of the Government.



Port of Spain East West Corridor Transportation Project **Construction of the CRH/SMR (Curepe) Interchange (Package D)**



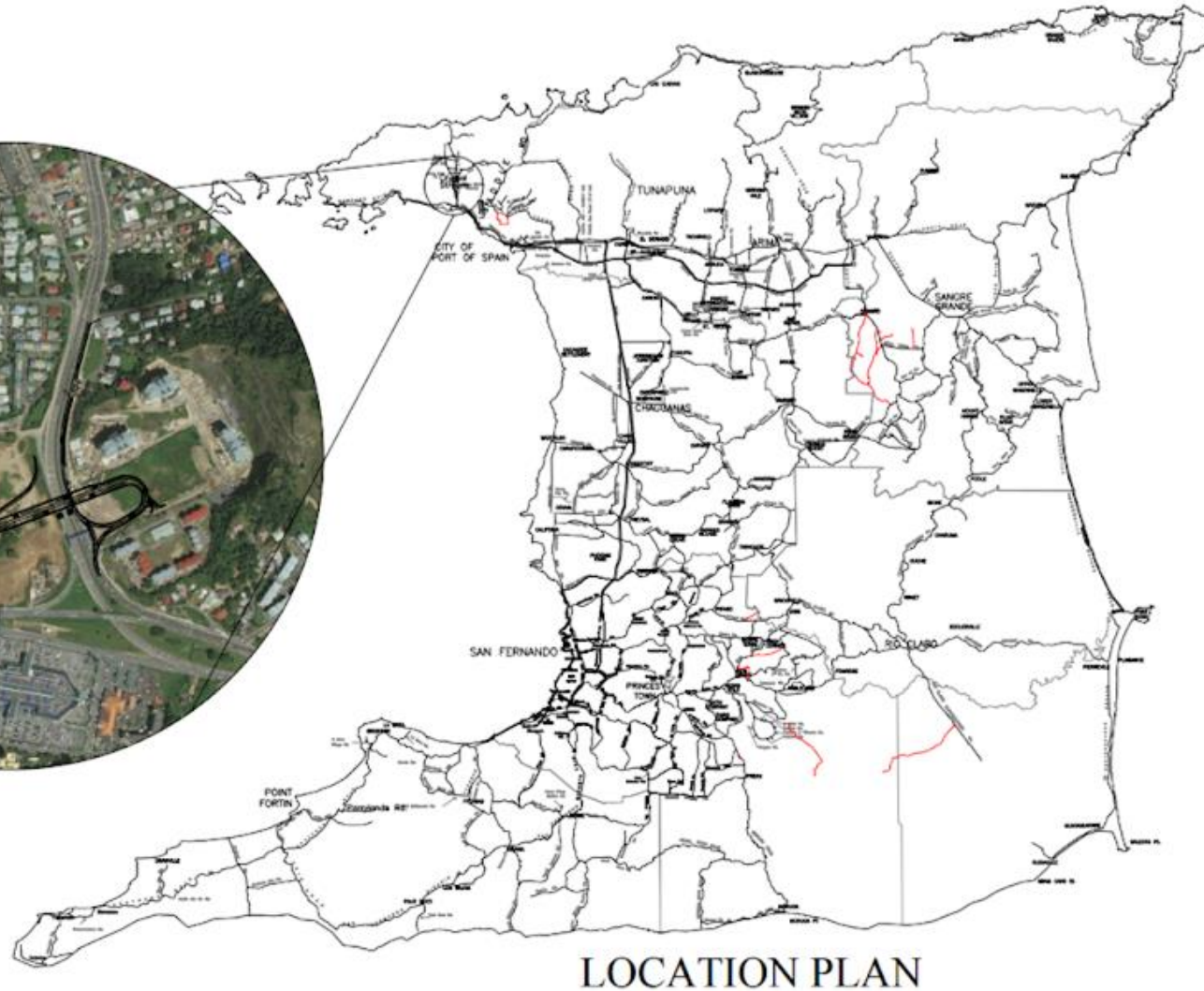
Status of the Design-Build Contract

- Detailed Design – 99%
- Construction – 45%
- Overall Completion – 70%

It is expected that construction of the Curepe Flyover will be substantially completed by **February 2020** at an estimated cost of **\$221-Mn**

Diego Martin Overpass

Project Location



Project Benefits

- 1 Provide upgraded transportation facilities to accommodate current and future growth and development of the Western Peninsula.
- 2 Improve the connectivity to the Western Peninsula from the Diego Martin Valley by removing unnecessary routing which contribute to eastbound congestion and delays
- 3 Provide access to new developments situated adjacent to the proposed site and improve existing accesses to adjacent developments and communities.
- 4 Improve road safety and network efficiency by eliminating unsafe movements (eg. u-turn at Cocorite) and circuitous movements (turn at Cocorite Fishing Facility) .

**PROPOSED DESIGN
2019**

Victoria
Gardens

Frontage Road

Victoria Keys

Proposed
Diego Martin
Regional
Corporation
Complex

Vehicular
Overpass

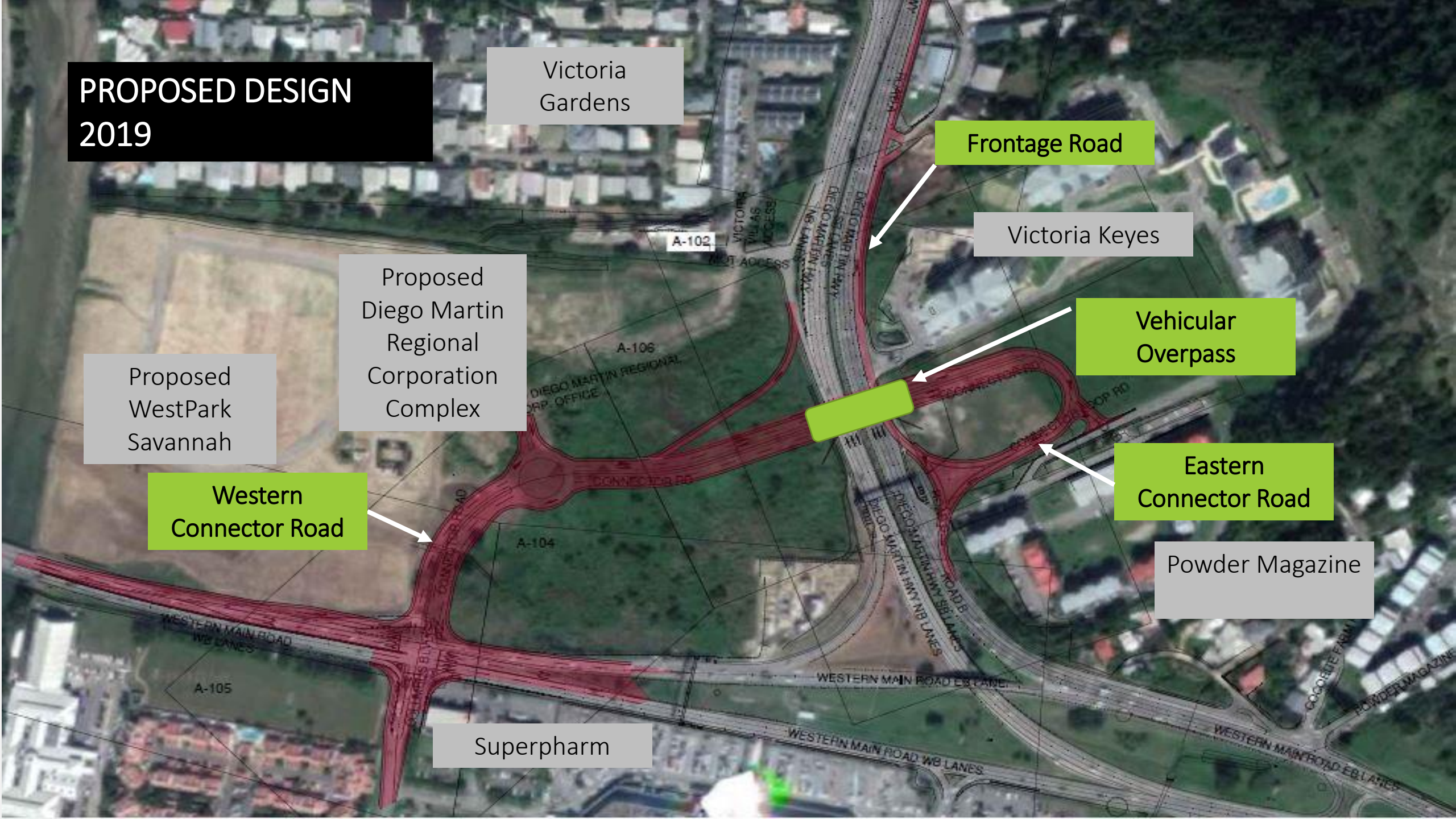
Proposed
WestPark
Savannah

Eastern
Connector Road

Western
Connector Road

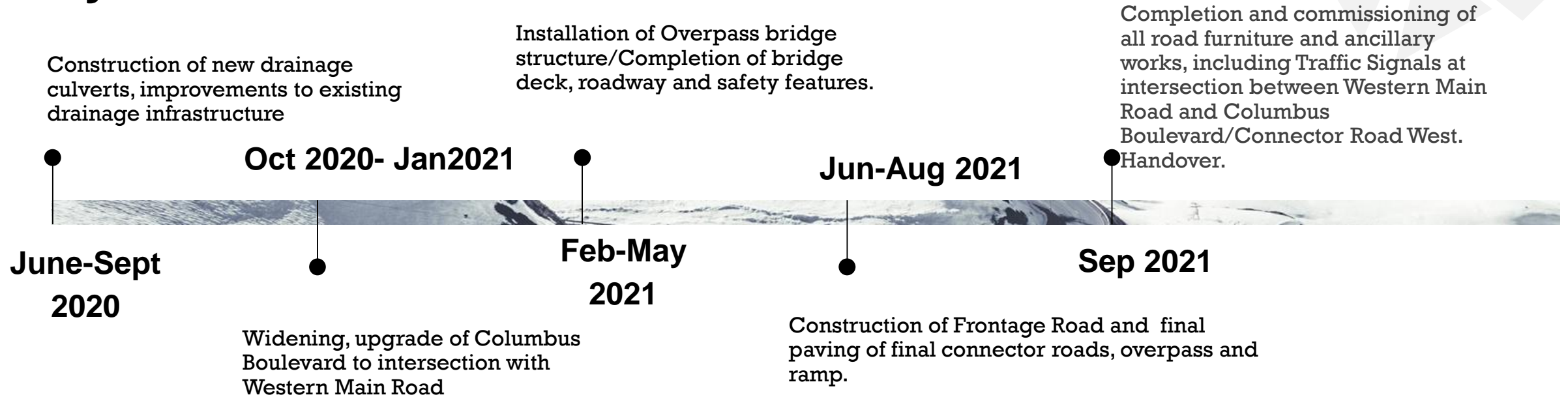
Powder Magazine

Superpharm



Diego Martin Overpass

Project Schedule



Negotiations are ongoing with the preferred bidder for the Design-Build Contract

Chaguanas Traffic Alleviation Project

- Phase 1 was opened on June 21, 2019 at a cost \$9.28-Mn and consisted of a new traffic alternative
- Planned future phases include:
 - Phase 1A – Endeavour Phase I
 - Phase 1B - Soogram Trace Roundabout.
 - Phase 2 - Endeavour Phase II
 - Phase 3 – Upgrade to the Munroe Road Interchange
 - Phase 4 – Construction of two overpasses at Soogram Trace and at Brentwood

The project aims to alleviate traffic congestion, improve connectivity between east and west Chaguanas, provide alternative access routes and improve infrastructure for faster and more efficient travel.



Bridges Reconstruction Programme

The Bridges Reconstruction Programme (BRP) consists of the reconstruction of 62 structurally deficient bridges on the Highways Division's road network. In fiscal 2019, works continued on Phases 1 and 2, which are being implemented concurrently

- Phase 1 which commenced prior to 2015 consists of 25 bridges in total
- To date 22 bridges were completed

B1/1 Camden Road



Before



After

C2/3 Papourie Road



Before

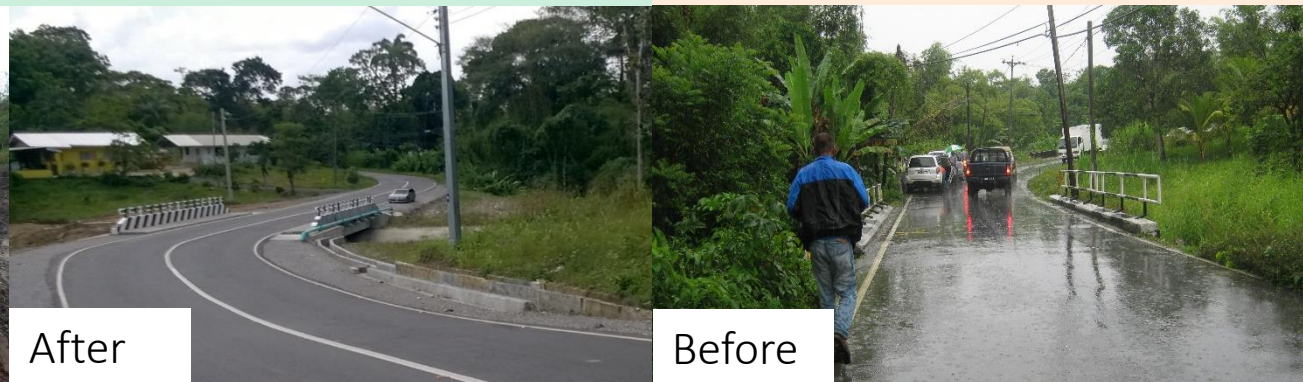


After

B1/3 Torrib Tabaquite Road



Before



After

B1/22 Naparima Mayaro Road



Before



After

Bridges Reconstruction Programme

Phase 2 Projects – Total 12, Completed in 2019 - 5



Bridges Reconstruction Programme

Planned Works

- Phase 3 consists of a total 25 bridges
- The award of design and construction supervision contracts is scheduled by the end of October 2019 for the first 13 bridges
- Construction works scheduled to begin by the 2nd quarter of fiscal 2020

1,284 jobs have been created under this Programme



B1/4 La Fortune Pluck Road



B1/5 Tableland Road, New Grant



B1/8 Piparo Road



B2/9 Chickland Road Caparo



B1/1 Tamana Road



B1/11 Mayaro Guayaguayare Road



B1/1 Fondes Amades Road, St. Anns



B1/43 Paria Main Road, Toco (Shark River)



B1/45 Paria Main Road, Toco



B1/40 Paria Main Road, Toco (Grande Riviere)

Construction of Toco Ferry Port

Port at **TOCO**



Perspective Sketch, Birds Eye View

The Project consists the development of a modern, multipurpose Toco Ferry Port Facility which facilitates the provision of inter-island transportation of persons and passenger vehicles, the provision of a base facility for the operation of the Coast Guard, the provision of a marina to facilitate the berthing of yachts and the arrival of tourists in Toco and the provision of a modern fishing facility for the fisherfolk of North East Trinidad



View Along Fisheries Moorings



View of Coast Guard Building



Masterplan Massing Model Overview



View Over Harbour to Port Admin and Capitainerie



View From Capitainerie too Ferry Terminal Building

Title: **Perspective Sketch and Imagery**

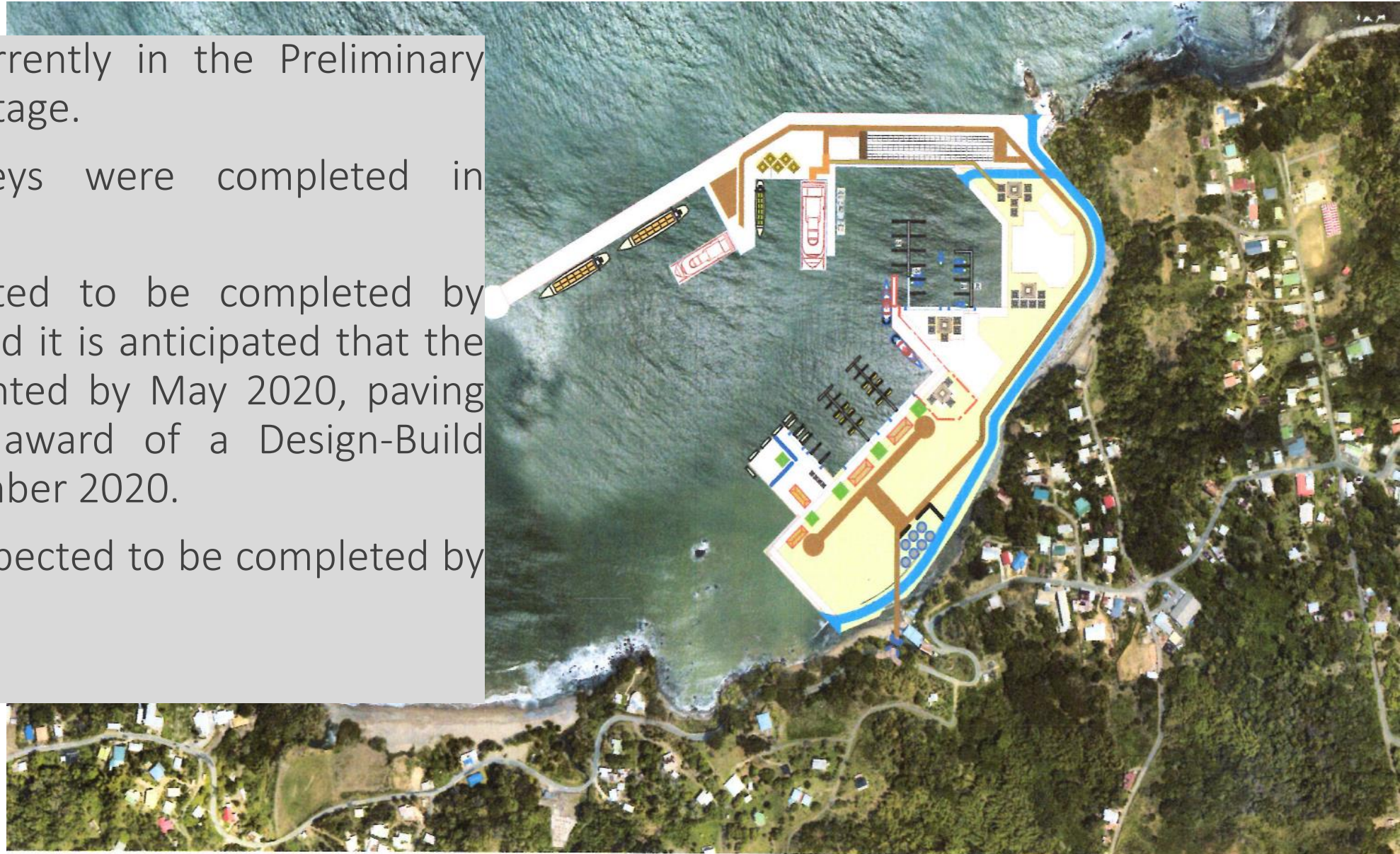
Drawing No: T-200-05 Scale: NTS

Date: 20-10-2017

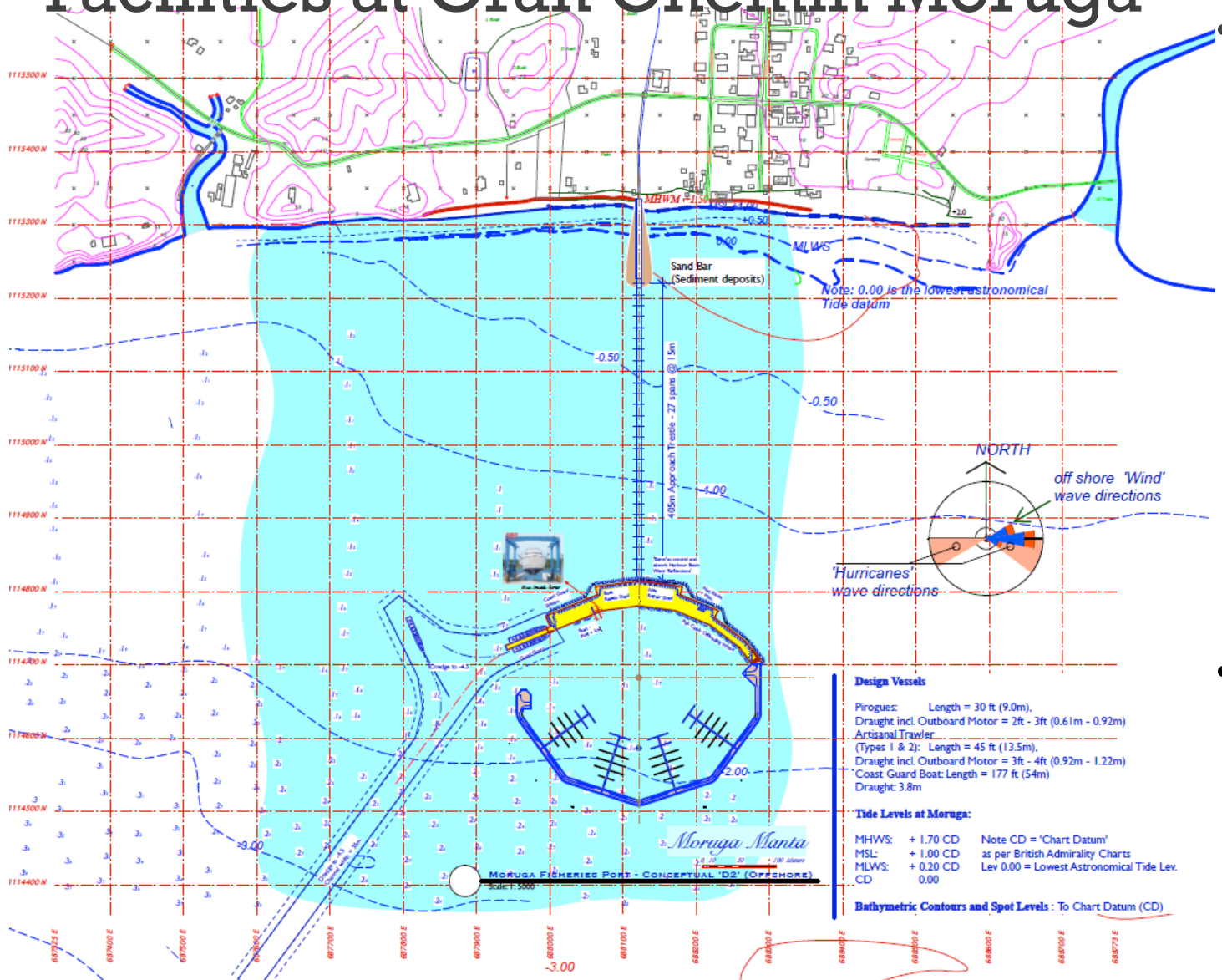


Construction of Toco Ferry Port

- This project is currently in the Preliminary Design and Study Stage.
- Geophysical Surveys were completed in March 2019
- The EIA is expected to be completed by December 2019 and it is anticipated that the CEC would be granted by May 2020, paving the way for the award of a Design-Build Contract by September 2020.
- The Toco Port is expected to be completed by 2022 - 2023



Construction of Fishing Port and Associated Facilities at Gran Chemin Moruga



Design Vessels

Pirogues: Length = 30 ft (9.0m),
 Draught incl. Outboard Motor = 2ft - 3ft (0.61m - 0.92m)
 Artisanal Trawler
 (Types 1 & 2): Length = 45 ft (13.5m),
 Draught incl. Outboard Motor = 3ft - 4ft (0.92m - 1.22m)
 Coast Guard Boat: Length = 177 ft (54m)
 Draught: 3.8m

Tide Levels at Moruga:

MHWS: +1.70 CD	Note CD = 'Chart Datum'
MSL: +1.00 CD	as per British Admiralty Charts
MLWS: +0.20 CD	Lev 0.00 = Lowest Astronomical Tide Lev.
CD: 0.00	

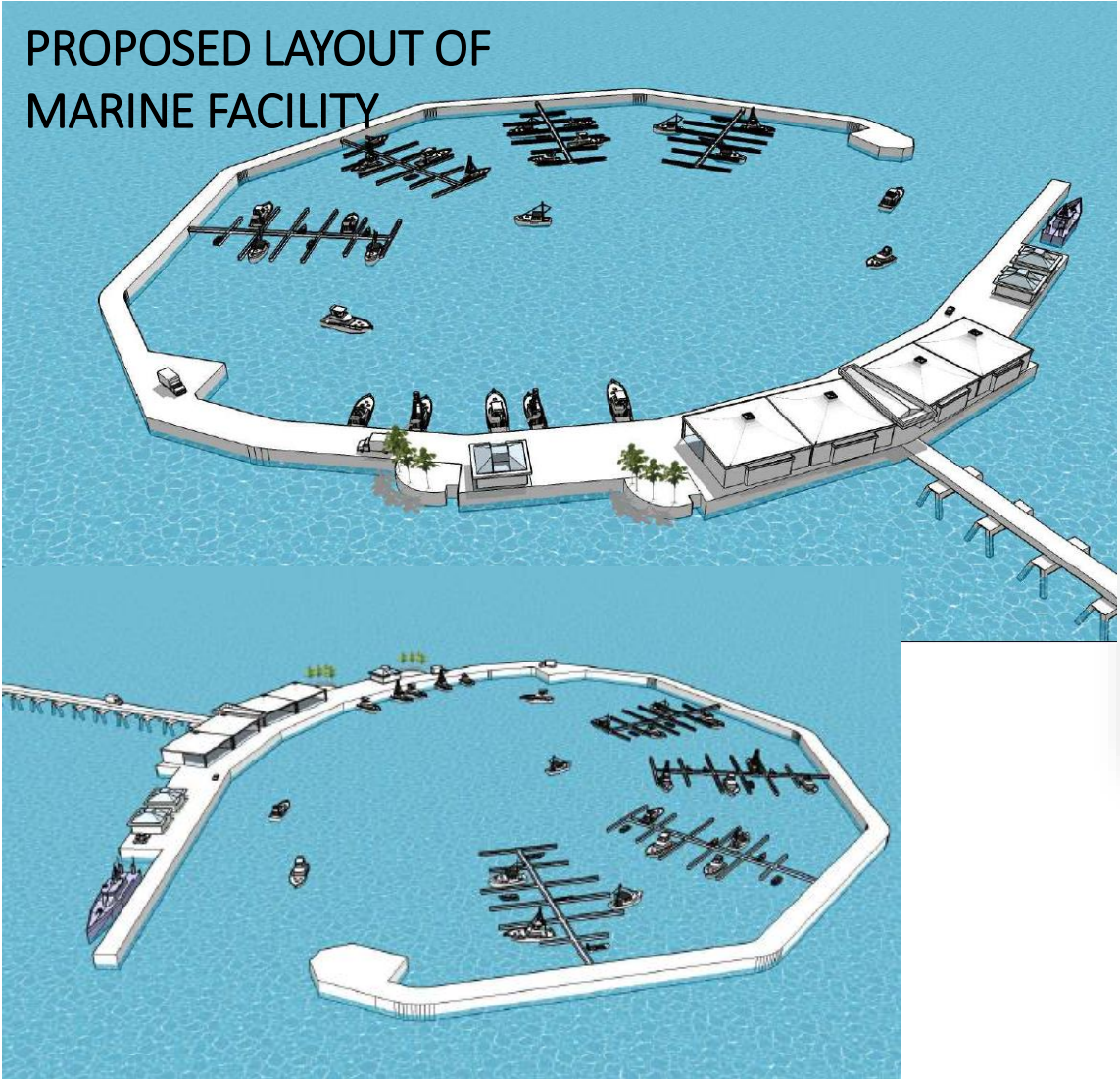
Bathymetric Contours and Spot Levels: To Chart Datum (CD)

- This facility comprises of both an Onshore component as well as an Offshore component. The Onshore component is being designed to accommodate ninety-one (91) fishing vessels and will provide amenities that include Locker rooms, Engine repair room, Net repair area, Vessel repair area, Slipway, Ice making and ice storage area, Wastewater Treatment Plant, Administrative offices and conference room, Washroom facilities and a Parking area.
- Approximately fifty (50) fisherfolk of the Moruga area will benefit from a new facility as the existing facility is inadequate

Construction of Fishing Port and Associated Facilities at Gran Chemin Moruga



PROPOSED LAYOUT OF MARINE FACILITY



PROPOSED LAYOUT OF LANDSIDE FACILITY



Construction of Fishing Port and Associated Facilities at Gran Chemin Moruga

- This Port Facility is envisaged to provide commercial and retail opportunities ashore, while berthing of marine vessels will occur a short distance off-shore in keeping with the stipulations of the EMA
- Detailed designs for the marine facility were completed in July 2019
- Detailed designs and tender documents for the landside facilities were completed in July 2019
- The CEC for the landside facility was granted in August 2019. Tenders for construction of the landside facility was invited on September 11, 2019 and will close October 23, 2019. Expected sod turning end of November 2019
- An EIA study for the marine facility is expected to be completed by March 2020 following which a CEC is expected to be granted by August 2020. It is expected that construction of the marine facility would commence by December 2020.
- The facility is to provide berthing accommodation for 175 vessels and facilitate the processing of 3,000 tonnes of catch per year
- The landside facility is expected to be completed by **July 2021** and the marine facility by **September 2023**



Critical Coastal Protection Programme

- The Ministry is also engaged in the promotion of environmentally and economically sustainable solutions to maintain and rehabilitate the coastlines of Trinidad.
- These projects address the impact of coastal erosion and coastal flooding at prioritized sites comprising over 6,500 linear meters of coastline. Projects have been geared towards filling of data gaps for sound decision making; and development of sustainable solutions for coastal management at prioritized coastal stretches
- Under its Work Programme, the Coastal Protection Unit has oversight of the following key projects: -
 1. South Cocos Bay Shoreline Stabilization Works- 84% completed
 2. Cap-de-Ville Shoreline Stabilization Works – 17%
 3. Matelot Grande Riviere Shoreline Stabilization Works Phase II- 46% completed
 4. San Souci Shoreline Stabilization Works- 68% completed
 5. Cocos Bay Shoreline Stabilization Works- 84% completed
 6. Quinam Coastal Protection Works- Completed in December 2018
 7. Shoreline Management Plan for Manzanilla Beach (Manzanilla Point to Point Radix)- planned completion date November 2019
 8. Mayaro-Guayaguayare Coastal Study
 9. Construction of a Breakwater System at Magdalena Grand Beach and Golf Resort in Tobago





South Cocos Bay Shoreline Stabilization Works – 84% completed



Cap-de-Ville Shoreline Stabilization Works – 17% completed

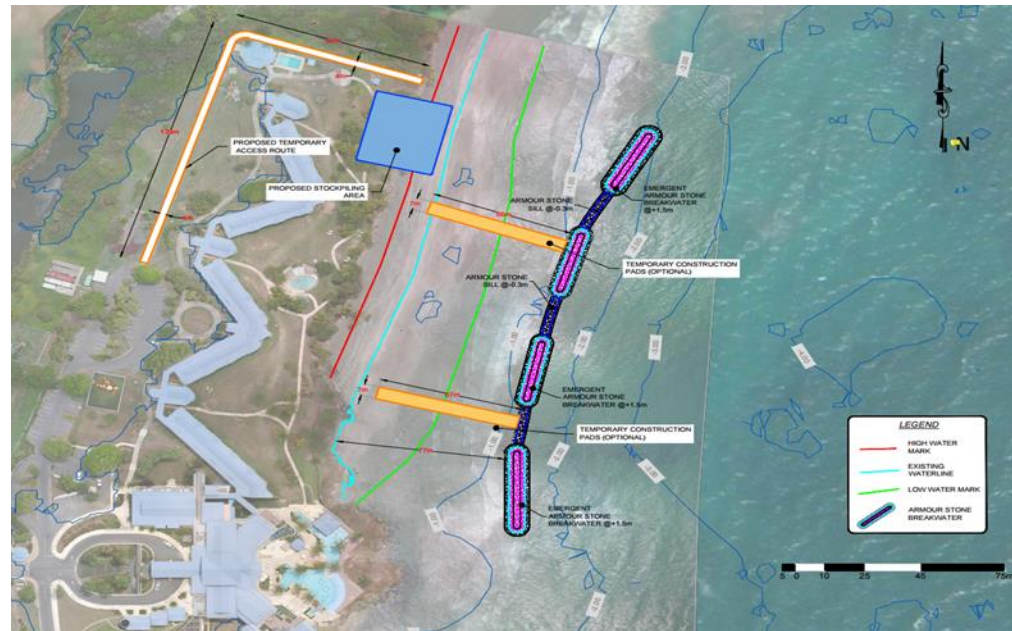


San Souci Shoreline Stabilization Works – 68% completed

Critical Coastal Projects in Progress



Cocos Bay Shoreline Stabilization Works- 84% completed



In addition, in early fiscal 2020 works are scheduled to commence on Construction of a Breakwater System at Magdalena Grand Hotel and Beach Resort in Tobago, under the Little Rockly Bay Stabilization Works



SAN FERNANDO WATERFRONT REDEVELOPMENT PROJECT

The Proposed San Fernando Waterfront Redevelopment Project (SFWRP) is an initiative of the Ministry of Planning and Development (MPD) which is anticipated to be an attraction for both local and international tourists to the southern city, San Fernando.

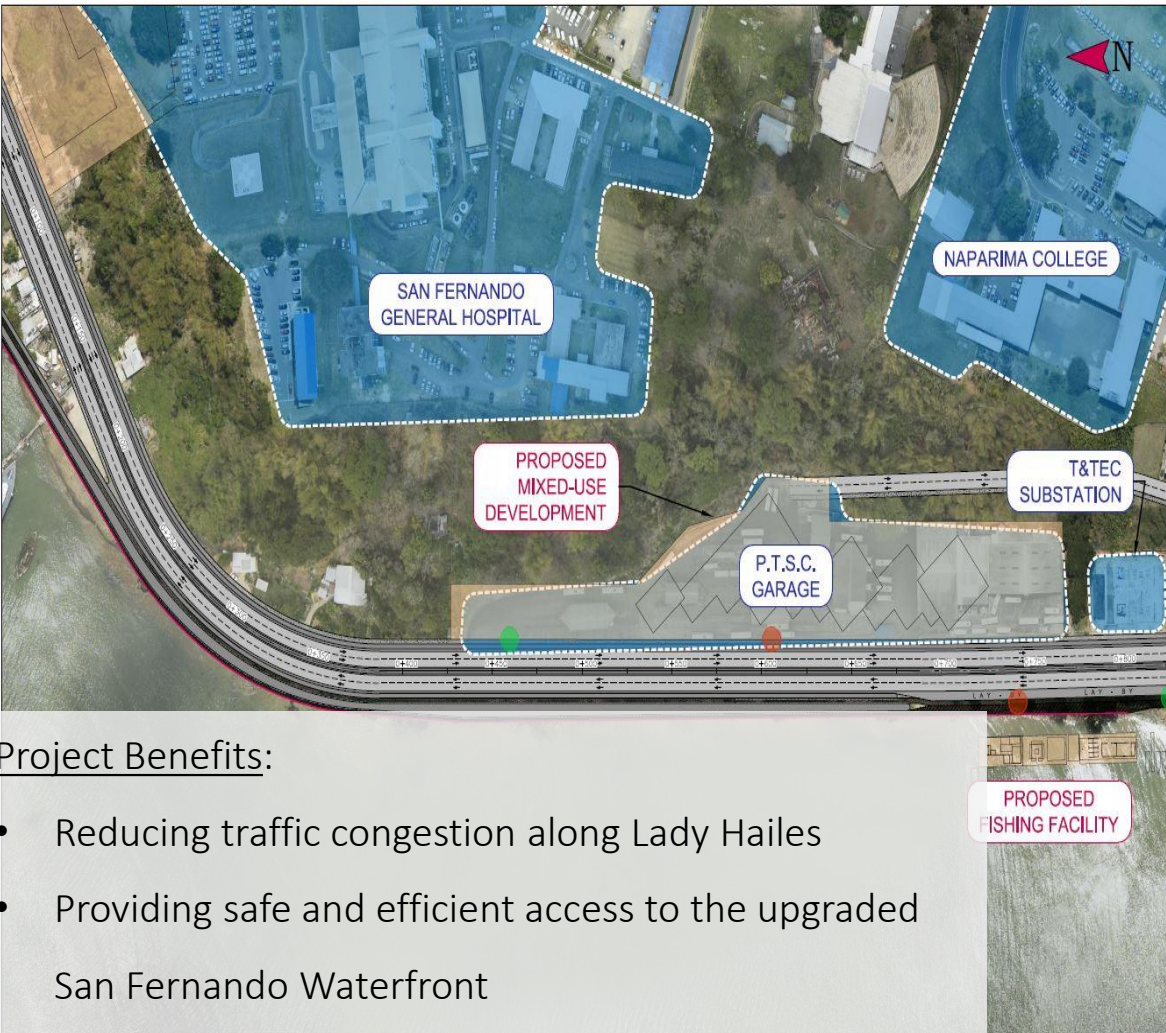
The Scope of Works includes:

- Widening of Lady Hailes Avenue to four-lane dual carriageway – **Designs are completed and it is expected that the tenders will be invited in October 2019, Sod Turning in December 2019 and construction to commence thereafter**
- Repair of the Sea Wall along King's Wharf central node
- Establishment of a Boardwalk along King's Central and South Nodes



SAN FERNANDO WATERFRONT REDEVELOPMENT PROJECT

- PROPOSED ROAD ALIGNMENT



Estimated Cost of Roadworks - **\$143.90 MN**

Project Benefits:

- Reducing traffic congestion along Lady Hailes
- Providing safe and efficient access to the upgraded San Fernando Waterfront



PURE PROGRAMME OF WORKS

- Over the period 2015 – 2019, the PURE Unit has undertaken **529** projects across the country

KEY COMPLETED PROJECTS



Churchill Roosevelt Highway –
Widening of East Bound Lane

Maracas Beach Facilities
Improvement Project

Construction of the Sea lots
Walkover

Port of Spain Flood Alleviation
Project-Phase 1

PURE ONGOING PROJECTS 2019



KEY ONGOING PROJECTS



North Coast Road Slope Stabilization (11km Mark)

Water Taxi Pedestrian Overpass Taxi Pedestrian Overpass

Diego Martin Pedestrian Overpass

Western Main Road

St. Andrews Golf Course

PROPOSED PROJECTS 2019 - 2020

In fiscal 2020, the PURE proposes to commence over 300 road projects



Construction of Movie Towne Walkover

Wrightson Road Widening: From Maraval Parkway to Sackville Street

Farm Road to the Uriah Butler Highway – Construction of Alternative Access Route

PURE also proposes to commence reconstruction works on 5 bridges: B1/1 & B1/2 Chatham Erin Road, B1/24 Toco Road, B1/1 Galera Road, B2/5 Caigal Road, B3/11 Guaico Tamana Road

Drainage Programme of Works

In fiscal 2019, the Ministry completed in the vicinity of 400 drainage projects and in fiscal 2020 will be embarking on 350 new projects

Desilting of the Upper St Ann's River from Cascade to St Ann's Silt Trap



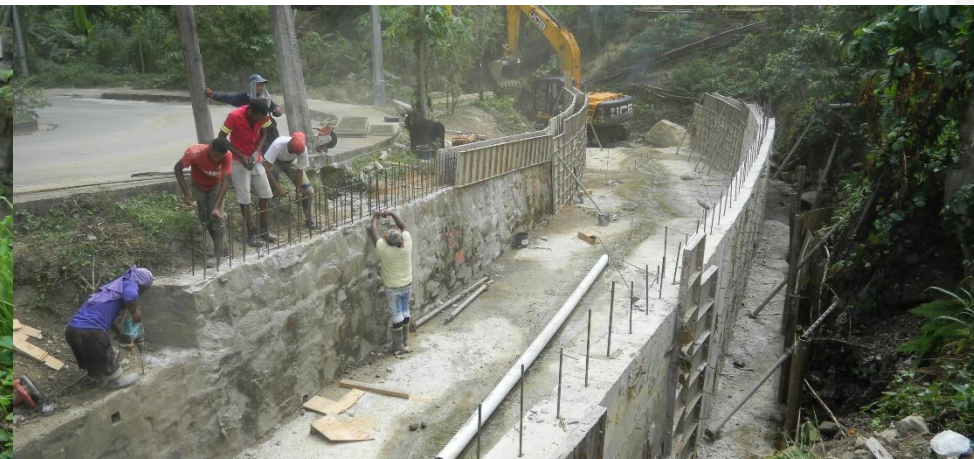
Before



Improvement Works to St Ann's River, #1 Mar Che Road off Ariapita Road St. Ann's



Before



Before



Desilting of the St Joseph River from the Priority Bus Route to the Churchill Roosevelt Highway

Conclusion

- The Programme of Works of the Ministry is part of a long term development plan steeped in the areas of road infrastructure, drainage, coastal protection and transport, among others.
- The major highway expansion projects the Ministry is pursuing are part of a Trunk Roads Expansion Programme which emanated from an IDB Study
- Further to this the Ministry is seeking to update its National Transportation Plan as part of its future development planning approach
- The approach to infrastructure development is as a step-by-step process, which creates interconnectivity across all sectors, thereby opening up areas of the country to increased economic growth and development;
- In conceiving and designing project the Ministry adheres to a comprehensive technical specification guideline based on international standards

An aerial photograph of a coastal area. On the left, there is a parking lot with several cars and a few buildings. A paved road curves through the area. The middle section shows a sandy beach with some people and a small structure. To the right, the beach meets a rocky coastline with large boulders. The water is a clear, light blue-green color. A black rectangular box is overlaid on the center of the image, containing the text 'Thank You' and the logo of the Ministry of Works & Transport.

Thank You

