

資料-1 データシート

1. 調査団員氏名

氏名	担当	所属
テディ 正典	業務主任／経済特区インフラ開発計画	日本工営
山寺 彰	技術副主任／送配水施設 1／給水計画	日本工営
杉浦 健一郎	電気機械設備	日本工営
河原 龍弥	土地造成計画・設計	日本工営都市空間
田辺 勲	排水路設計	日本工営
佛圓 公宏	施工計画/積算 1	日本工営
仲田 文寧	施工計画/積算 2	日本工営都市空間
中沢 修	環境社会配慮 1	日本工営 (いであ)
ハリソン・オチエン	環境社会配慮 2	日本工営 (Koei Africa)
金子 和代	事業化支援 (1)	日本工営 (JIN)
肥後 伯子	事業化支援 (2)	日本工営
田畑 聡美	給水施設	日本工営
田辺 勲	道路設計	日本工営
田辺 勲	道路設計/積算 5	日本工営
兼澤 真吾	施工計画/積算 3	日本工営
伊達 幸孝	建築/建築設計	日本工営 (コーエイリサーチ&コンサルティング)
国本 健太	建築/積算	日本工営 (コーエイリサーチ&コンサルティング)
笠原 雄次	建築/構造設計	日本工営 (雄設計室)
近澤 廣美	建築/機械設計	日本工営 (個人コンサルタント)
近澤 廣美	建築/電気設計	日本工営 (個人コンサルタント)
今井 久	建築/数量設計	日本工営 (コーエイリサーチ&コンサルティング)
渡辺 昭文	事業化支援 (3)	日本工営
庄司 (片島) 直子	住民移転計画 1	日本工営
ニャンダロ・ムテキ	住民移転計画 2	日本工営
武田 智恵	住民移転計画 3	日本工営
山本 象平	移転用地計画	日本工営

氏名	担当	所属
山本 象平	技術副主任 2/経済特区インフラ開発計画 2	日本工営
加茂 元	施工計画/積算 4	日本工営
藤井 雅之	施工計画 5	日本工営
住谷 航大	造成計画	日本工営

2. 現地調査工程

(1) 現地調査 (1) : 2019年2月4日～2019年3月29日

月日 (曜日)	活動内容
2/4 (月) ～ 2/5 (火)	団員移動
2/6 (水) ～ 2/12 (火)	JICA 打合せ、団内打合せ、本邦民間企業打合せ、積算作業、現地再委託調達準備
2/13 (水) ～ 2/21 (木)	現地調査、関連機関協議、積算作業、現地再委託調達準備
2/22 (金) ～ 2/27 (水)	現地再委託調達準備、KPA との協議
2/28 (木) ～ 3/1 (金)	現地調査、現地再委託調達ネゴ、KPA との協議
3/2 (土) ～ 3/12 (火)	現地再委託調達ネゴ、団内打合せ、積算作業
3/13 (水) ～ 3/15 (金)	積算作業、現地調査
3/16 (土) ～ 3/27 (水)	積算作業、事業スキーム検討、JICA 打合せ、団内打合せ
3/28 (木) ～ 3/29 (金)	団員移動

氏名	担当	所属	現地調査期間
テディ 正典	業務主任／経済特区 インフラ開発計画	日本工営	2019年2月4日～ 2019年2月17日、 2019年3月25日～ 2019年3月29日
山寺 彰	技術副主任／送配水 施設 1／給水計画	日本工営	2019年2月4日～ 2019年3月5日
河原 龍弥	土地造成計画・設計	日本工営都市空間	2019年2月12日～ 2019年3月2日
佛圓 公宏	施工計画／積算 1	日本工営	2019年2月4日～ 2019年3月5日
仲田 文寧	施工計画／積算 2	日本工営都市空間	2019年2月25日～ 2019年3月26日
金子 和代	事業推進支援 (1)	日本工営 (JIN)	2019年2月11日～ 2019年3月21日、 2019年3月25日～ 2019年3月29日
肥後 伯子	事業推進支援 (2)	日本工営	2019年2月25日～ 2019年3月17日

(2) 現地調査 (2) : 2019年5月7日～2019年6月27日

月日 (曜日)	活動内容
5/7 (火) ～ 5/8 (水)	団員移動
5/9 (木) ～ 5/11 (土)	JICA 打合せ、団内打合せ、本邦民間企業打合せ、現地再委託調達準備
5/12 (日) ～ 5/16 (木)	現地調査、関係機関協議、現地再委託調達準備
5/17 (金) ～ 5/20 (月)	現地再委託調達準備、類似 SEZ (Tatu SEZ) 視察、概算事業費報告書

月日（曜日）	活動内容
	作成、JICA 打合せ
5/21（火）～ 5/23（木）	KPA 協議、現地調査、関係機関協議
5/24（金）～ 6/2（日）	現地再委託調達準備、設計、団内打合せ
6/3（月）	現地調査、現地再委託調達準備
6/4（火）～ 6/16（日）	現地再委託調達準備、関係機関協議、設計、団内打合せ
6/17（月）～ 6/18（火）	現地調査、環境社会配慮現地再委託調達準備
6/19（水）～ 6/25（火）	環境社会配慮現地再委託調達準備・ネゴ、設計
6/26（水）～ 6/27（木）	団員移動

氏名	担当	所属	現地調査期間
テディ 正典	業務主任／経済特区 インフラ開発計画	日本工営	2019年5月7日～ 2019年5月21日、 2019年6月3日～ 2019年6月20日
山寺 彰	技術副主任／送配水 施設1／給水計画	日本工営	2019年5月7日～ 2019年6月20日
杉浦 健一郎	電気機械設備	日本工営	2019年5月14日～ 2019年5月30日
河原 龍弥	土地造成計画・設計	日本工営都市空間	2019年5月20日～ 2019年6月15日
田辺 勲	排水路設計	日本工営	2019年5月20日～ 2019年6月9日
佛圓 公宏	施工計画/積算1	日本工営	2019年5月7日～ 2019年5月27日
中沢 修	環境社会配慮1	日本工営（いであ）	2019年6月15日～ 2019年6月27日
ハリソン・オ チエン	環境社会配慮2	日本工営（Koei Africa）	2019年6月21日
金子 和代	事業推進支援（1）	日本工営（JIN）	2019年5月14日～ 2019年5月27日
肥後 伯子	事業推進支援（2）	日本工営	2019年5月8日～ 2019年5月26日

(3) 現地調査（3）：2019年7月12日～2019年9月3日

月日（曜日）	活動内容
7/12（火）、7/15（水）	環境社会配慮現地再委託先との協議
7/16（火）～ 7/17（水）	団員移動
7/18（木）～ 7/21（日）	積算、設計、JICA 打合せ、JCC 準備・参加、団内打合せ
7/22（月）～ 7/23（火）	現地調査、KPA 協議
7/24（水）～ 8/7（水）	設計、積算、KPA 協議、JICA 打合せ、団内打合せ
8/8（木）～ 8/9（金）	現地調査、KPA 協議、事業スキーム検討
8/10（土）～ 8/19（月）	設計、積算、団内打合せ、事業スキーム検討

月日（曜日）	活動内容
8/20（火）～ 8/21（水）	現地調査、KPA 協議、関連機関協議
8/22（木）～ 9/1（日）	設計、積算、団内打合せ
9/2（月）～ 9/3（火）	団員移動

氏名	担当	所属	現地調査期間
テディ 正典	業務主任／経済特区 インフラ開発計画	日本工営	2019年7月16日～ 2019年7月26日、 2019年8月14日～ 2019年8月26日
山寺 彰	技術副主任／送配水 施設1／給水計画	日本工営	2019年7月16日～ 2019年9月3日
河原 龍弥	土地造成計画・設計	日本工営都市空間	2019年7月16日～ 2019年7月29日
佛圓 公宏	施工計画/積算1	日本工営	2019年7月30日～ 2019年8月4日
ハリソン・オ チエン	環境社会配慮2	日本工営（Koei Africa）	2019年7月12日、 2019年7月15日
金子 和代	事業推進支援（1）	日本工営（JIN）	2019年8月14日～ 2019年8月31日
肥後 伯子	事業推進支援（2）	日本工営	2019年8月7日～ 2019年8月18日
田畑 聡美	給水施設	日本工営	2019年7月16日～ 2019年8月21日
田辺 勲	道路設計	日本工営	2019年7月16日～ 2019年9月3日
兼澤 真吾	施工計画/積算3	日本工営	2019年7月30日～ 2019年9月3日
伊達 幸孝	建築／建築設計	日本工営（コーエイリサ ーチ&コンサルティング グ）	2019年8月19日～ 2019年9月2日
近澤 廣美	建築／機械設計	日本工営（個人コンサル タント）	2019年8月19日～ 2019年9月2日
近澤 廣美	建築／電気設計	日本工営（個人コンサル タント）	2019年8月19日～ 2019年9月2日
今井 久	建築／数量設計	日本工営（コーエイリサ ーチ&コンサルティング グ）	2019年8月19日～ 2019年9月2日

*2019年7月13日、14日は現地調査実施せず。

(4) 現地調査（4）：2019年10月15日～2019年11月8日

月日（曜日）	活動内容
10/15（火）～10/16（水）	団員移動
10/20（日）～10/26（土）	環境社会配慮現地再委託先との協議、団内打合せ、関連機関協議
10/27（日）～10/29（火）	関連機関協議、事業スキーム検討
10/30（水）～10/31（木）	団員移動

月日（曜日）	活動内容
11/3（日）	団員移動
11/4（月）～11/6（水）	KPA 協議、関連機関協議、環境社会配慮現地再委託先との協議
11/7（木）～11/8（金）	団員移動

氏名	担当	所属	現地調査期間
テディ 正典	業務主任／経済特区 インフラ開発計画	日本工営	2019年10月15日～ 2019年10月19日、 2019年11月3日～ 2019年11月8日
中沢 修	環境社会配慮 1	日本工営（いであ）	2019年10月18日～ 2019年10月28日
肥後 伯子	事業推進支援（2）	日本工営	2019年10月15日～ 2019年10月31日

*2019年11月1日、2日は現地調査実施せず。

(5) 現地調査（5）：2019年11月23日～2019年12月2日

月日（曜日）	活動内容
11/23（土）～11/24（日）	団員移動
11/25（月）	現地調査、関連機関協議
11/26（火）～11/28（木）	KPA 協議、団内打合せ
11/29（金）～11/30（土）	環境社会配慮現地再委託先との協議
12/1（日）～12/2（月）	団員移動

氏名	担当	所属	現地調査期間
山寺 彰	技術副主任／送配水 施設 1／給水計画	日本工営	2019年11月23日～ 2019年12月2日
河原 龍弥	土地造成計画・設計	日本工営都市空間	2019年11月23日～ 2019年12月2日
田辺 勲	道路設計	日本工営	2019年11月23日～ 2019年12月2日

(6) 現地調査（6）：2020年1月6日～2020年1月31日

月日（曜日）	活動内容
1/6（月）～1/7（火）	団員移動
1/8（水）～1/14（火）	環境社会配慮現地再委託先との協議、事業化支援に向けた協議
1/15（水）～1/23（木）	KPA との協議、環境社会配慮に係る関係者協議、団内打合せ
1/24（金）～1/29（水）	事業化に向けた協議
1/30（木）～1/31（金）	団員移動

氏名	担当	所属	現地調査期間
テディ 正典	業務主任／経済特区 インフラ開発計画	日本工営	2020年1月6日～ 2020年1月17日
山寺 彰	技術副主任／送配水 施設1／給水計画	日本工営	2020年1月14日～ 2020年1月24日
肥後 伯子	事業推進支援 (2)	日本工営	2020年1月6日～ 2020年1月31日
渡辺 昭文	事業推進支援 (3)	日本工営	2020年1月10日～ 2020年1月15日、 2020年1月20日～ 2020年1月23日、 2020年1月28日～ 2020年1月31日

(7) 現地調査 (7) : 2020年2月6日～2020年3月13日

月日 (曜日)	活動内容
2/6 (木) ～2/7 (金)	団員移動
2/8 (土) ～2/15 (土)	関連機関協議、本邦企業説明、事業化に向けた協議
2/16 (日) ～2/26 (水)	事業化に向けた協議
2/27 (木) ～3/1 (日)	傭人招聘に向けた協議、関連機関協議、KPA 協議
3/2 (月) ～3/5 (木)	エチオピアから傭人招聘・セミナーの実施、KPA 協議、 CWWDA 協議、WSP 協議、環境社会配慮現地再委託先との協議
3/6 (金) ～3/11 (水)	KPA 協議、環境社会配慮現地再委託先との協議、関連機関協議
3/12 (木) ～3/13 (金)	団員移動

氏名	担当	所属	現地調査期間
田辺 勲	道路設計	日本工営	2020年3月1日～ 2020年3月13日
肥後 伯子	事業推進支援 (2)	日本工営	2020年2月6日～ 2020年2月15日、 2020年2月24日～ 2020年2月29日
兼澤 真吾	施工計画/積算 3	日本工営	2020年3月1日～ 2020年3月13日
渡辺 昭文	事業推進支援 (3)	日本工営	2020年2月14日～ 2020年2月26日

(8) 現地調査 (8) : 2021年3月1日～2021年3月10日

月日 (曜日)	活動内容
3/1 (月) ～3/2 (火)	団員移動
3/3 (水) ～3/8 (月)	環境社会配慮現地再委託先との協議、KPA 協議、JICA 打合せ、 CWWDA 協議、現地調査

月日（曜日）	活動内容
3/9（火）～3/10（水）	団員移動

氏名	担当	所属	現地調査期間
田辺 勲	道路設計	日本工営	2021年3月1日～ 2021年3月10日
庄司（片島）直子	住民移転計画1	日本工営	2021年3月1日～ 2021年3月10日
ニヤンダロ・ムテキ	住民移転計画2	日本工営	2021年3月1日～ 2021年3月10日

(9) 現地調査 (9) : 2021年9月4日～2021年12月26日

月日（曜日）	活動内容
9/4（土）～9/5（日）	団員移動
9/6（月）～9/12（日）	NLCの補償算定に関するスタディ、団内打合せ、KPA協議
9/13（月）～9/20（月）	NLCの補償算定に関するスタディ、補償移転用地に関するケ国の制度のスタディ、KPA協議
9/21（火）～9/26（日）	NLCの補償算定に関するスタディ
9/27（月）～10/3（日）	NLCの補償算定に関するスタディ、JICA打合せ、NLC協議、KPA協議、現地調査、関連機関協議
10/4（月）～10/10（日）	補償費の試算作業、現地調査、KPA協議、関連機関協議
10/11（月）～10/15（金）	ARAPの更新作業、補償費の試算作業、現地調査、KPA協議、関連機関協議
10/16（土）～10/22（金）	EMP/EMoPの更新作業、補償費の試算作業、現地調査、KPA協議、関連機関協議
10/23（土）～10/31（日）	KPA協議、関連機関協議、現地調査
11/1（月）～11/7（日）	補償費の試算作業、現地調査、KPA協議、移転用地インフラの要件確認、図化作業
11/8（月）～11/14（日）	ARAPの改訂作業、現地調査、KPA協議、移転用地インフラの要件確認、図化作業、関連機関協議
11/15（月）～11/22（月）	NLC打合せのフォローアップ、ARAPの改訂作業、現地調査、KPA協議、移転用地インフラの要件確認、図化作業、関連機関協議、本体再積算のための情報収集
11/23（火）～11/28（日）	KPA協議、ARAPの改訂作業、JICA打合せ、本体再積算のための情報収集
11/29（月）～12/5（日）	KPA協議、JICA打合せ、生計復旧活動についての資料検討、現地調査、本体再積算のための見積収集作業

月日（曜日）	活動内容
12/6（月）～12/12（日）	NEMA モンバサ協議、現地調査、JICA 打合せ、NLC 協議、本体再積算のための見積収集作業
12/13（月）～12/24（金）	積算資料収集、本体再積算のための見積収集作業
12/25（土）～12/26（日）	団員移動

氏名	担当	所属	現地調査期間
庄司（片島）直子	住民移転計画 1	日本工営	2021 年 11 月 22 日～ 2021 年 12 月 15 日
ニャンダロ・ムテキ	住民移転計画 2	日本工営	2021 年 9 月 4 日～ 2021 年 12 月 8 日
山本 象平	移転用地計画	日本工営	2021 年 10 月 9 日～ 2021 年 10 月 27 日
山本 象平	技術副主任 2／経済特区インフラ開発計画 2	日本工営	2021 年 12 月 2 日～ 2021 年 12 月 26 日
加茂 元	施工計画／積算 4	日本工営	2021 年 10 月 1 日～ 2021 年 12 月 26 日

(10) 現地調査 (10) : 2022 年 1 月 12 日～2022 年 3 月 7 日

月日（曜日）	活動内容
1/12（水）～1/14（金）	団員移動
1/15（土）～1/23（日）	現地調査、KPA 協議、現地再委託業者選定用資料作成、JICA 打合せ
1/24（月）～1/31（月）	KPA 協議、JICA 打合せ、団内打合せ
2/1（火）～2/28（月）	KPA 協議、JICA 打合せ、現地調査、環境社会配慮に係る関係者協議
3/1（火）～3/5（金）	NEMA Kwale 協議、KPA 協議、環境社会配慮に係る関係者協議
3/6（日）～3/7（月）	団員移動

氏名	担当	所属	現地調査期間
田辺 勲	道路設計	日本工営	2022 年 1 月 12 日～ 2022 年 3 月 7 日
ニャンダロ・ムテキ	住民移転計画 2	日本工営	2022 年 2 月 15 日～ 2022 年 3 月 6 日
住谷 航大	造成計画	日本工営	2022 年 1 月 13 日～ 2022 年 2 月 22 日

(11) 現地調査 (11) : 2022 年 3 月 28 日～2022 年 5 月 26 日

月日 (曜日)	活動内容
3/28 (月) ～3/29 (金)	団員移動
3/30 (水) ～4/3 (日)	KPA 協議、現地調査
4/4 (月) ～4/10 (日)	KPA 協議、JICA 打合せ、環境社会配慮に係る関係者協議
4/11 (月) ～4/15 (金)	KPA 協議、環境社会配慮に係る関係者協議
4/16 (月) ～4/10 (日)	KPA 協議、JICA 打合せ、環境社会配慮に係る関係者協議、PAPs との協議会の実施
4/25 (月) ～5/1 (日)	KPA 協議、ARAP の更新と RAP の補足要約の作成、ESIA 承認事項のフォローアップ
5/2 (月) ～5/8 (日)	JICA 打合せ、ARAP データベースを更新、ARAP レポートの更新
5/9 (月) ～5/23 (月)	KPA 協議、JICA 打合せ、団内打合せ、DoD Annex 作成
5/25 (水) ～5/26 (木)	団員移動

氏名	担当	所属	現地調査期間
テディ 正典	業務主任／経済特区 インフラ開発計画	日本工営	2022 年 3 月 28 日～ 2022 年 4 月 27 日
田辺 勲	道路設計	日本工営	2022 年 3 月 28 日～ 2022 年 5 月 26 日
ニャンダロ・ムテキ	住民移転計画 2	日本工営	2022 年 4 月 8 日～ 2022 年 5 月 7 日

3. 関係者（面会者）リスト

(1) Kenya Ports Authority

氏名	所属
Vincent Sidai	General Manager Infrastructure Development
Martin Mutuku	Head of Corporate Department
Mohamed I. Golicha	Principal Statistician
Daniel Githinji	Principal Environment of Officer
Rashid Salim	General Manager Engineering Services
Kennedy Nyaga	Head of Projects Development & Management
William K. Tenay	Principal Civil Engineer (P&D)
Peter Masinde	Head of Nairobi ICD
Nuru Bwana Kombo	Project Civil Engineer
Bett S. Kipyegon	Senior Civil Engineer
Kenneth Mosop	Senior Surveyor
Amani Kidada	Assistant Planning Officer (Economist)
Ali Mohamed	Civil Engineer
Edwin O. Obadha	RAP Expert
Amiri Mbonde	Senior Economist
Swalha Omar	Assistant Planning Officer
Amani Kirwa Kidada	Assistant Planning Officer
Nenant Njule Hamisi	Intern at Corporate Development
Mohamad A. Hassan	Senior Environment Officer
Magdaline Wairagu	RAP Expert
Caroline Wakoigia	Environmentalist REPCON Associates
James N. Rai	Projects Development and Management
Samson Onyara	Projects Development and Management
Maryam Kidere	Senior Port Security Officer

(2) Ministry of Water & Sanitation & Irrigation

氏名	所属
Isaac Kimani	Deputy Director/ Operation & Coordination

(3) County Government of Kwale

氏名	所属
Musyoki M. Muthuka	Chief Officer of Water Services, Roads and Public Works Department
Ali Chalala Joseph	Ag Country Water Director
Gilbert B. Kitiyo	County Commissioner - Mombasa
Robert S. Shunet	County Commissioner - Kwale
Hemed R. Mwabudzo	County Executive Committee – Roads
Martin K. Anyange	County Executive Committee – Water

(4) Kwale Water & Sewerage Co. Ltd (KWAWASCO)

氏名	所属
Malimau	Office Tiwi Coast Water Branch Office
Hussein Mwavadu	Commercial Manager
Swaleh Kidzuga	Technical Manager

(5) Mombasa Water Supply & Sanitation Co. Ltd (MOWASSCO)

氏名	所属
Anthony Njaramba	Managing Director
Raymond Masha	Engineer

(6) Kenya National Highways Authority (KeNHA)

氏名	所属
Howard A. M.	Deputy Regional Director
Eric Wambua	Regional Director - Coast

(7) Kenya Rural Roads Authority (KeRRA)

氏名	所属
T.K. Kendagor	Deputy Director, Kwale Region

(8) Water Resource Authority (WRA)

氏名	所属
Susan Mwangi	GW

(9) Coast Water Works Development Agency (CWWDA)

氏名	所属
Ambrose Magiga	Procurement Officer
Mary Okioma	Corporation Secretary
Hope Makalo	System Admin
Edwin M. Lenga	Engineer
David Kanvi	Engineer
Martin Tsuma	Technical Manager
Fadhili Khamisi	Technical Officer

(10) 在ケニア日本大使館

氏名	所属
石川 啓貴	一等書記官

(11) 国際協力機構 ケニア事務所

氏名	所属
小森 克俊	所長
杉本 聡	次長
加藤 真理	次長
二階 達哉	所員
宮川 聖史	所員
Steve Mogere	所員
Anne Olubendi	所員
中野 健二	企画調査員

(12) 国際協力機構 専門家

氏名	所属
松島 共範	産業通商協同組合省 モンバサ経済特区開発促進アドバイザー

4. 討議議事録 (M/D)

本プロジェクトで実施した主な協議を下表まとめた。この内、重要協議に係る議事録を「5. 重要協議議事録」に示す。なお、設計方針等の重要事項を確認した打合せ議事録は「6. 参考資料」に示す。

No.	日時	相手機関	内容	備考
1	2019/4/16	KPA-JICA	本プロジェクトで設計対象となる施設の確認	重要協議
2	2019/7/23	KPA	各コンポーネントの設計方針	重要打合せ
3	2019/8/8	KPA	各コンポーネントの設計方針	重要打合せ
4	2019/11/26	KPA	準備調査報告書（案）に係る協議	重要打合せ
5	2019/11/28	KPA	準備調査報告書（案）に係る協議	重要打合せ
6	2020/01/21	KPA	本プロジェクトの範囲に係る協議	重要打合せ
7	2022/6/2	KPA-JICA	準備調査報告書案の説明	重要協議

5. 重要協議議事録

先に示した重要協議の議事録を以下に示す。

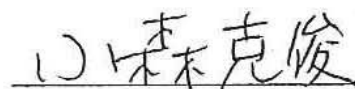
(1) 2019年4月16日協議

協議議事録及び資料を次頁以降に示す。

Minutes of Discussions
on the Preparatory Survey for the Project for
Infrastructure Development in Mombasa Special Economic Zone
at Dongo Kundu in the Republic of Kenya

Based on the several preliminary discussions between the Government of the Republic of Kenya (hereinafter referred to as "Kenya") and the Embassy of Japan in the Republic of Kenya and the Kenya Office of Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA dispatched the Preparatory Survey Team for the Outline Design (hereinafter referred to as "the Team") of the Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu in the Republic of Kenya (hereinafter referred to as "the Project") to Kenya. The Team held a series of discussions with the officials of the Government of Kenya and conducted a field survey. In the course of the discussions, both sides have confirmed the main items described in the attached sheets.

Nairobi, April 16, 2019



Mr. Katsutoshi Komori

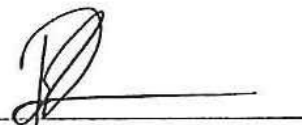
Chief Representative

Kenya Office

Japan International Cooperation Agency

Japan

for



Dr. Arch. Daniel O. Manduku

Managing Director

Kenya Ports Authority

The Republic of Kenya

ATTACHMENT

1. Objective of the Project
The objective of the Project is to improve business environment of Dongo Kundu area in Mombasa through developing a part of infrastructure, thereby contributing to improving socio-economic environment and economic development.
2. Title of the Preparatory Survey
Both sides confirmed the title of the Preparatory Survey as “the Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu in the Republic of Kenya.”
3. Project site
Both sides confirmed that the sites of the Project are in Mombasa and Kwale, which is shown in Annex 1.
4. Responsible authority for the Project
Both sides confirmed that Kenya Ports Authority (hereinafter referred to as “KPA”) will be the executing agency for the Project (hereinafter referred to as “the Executing Agency”). The Executing Agency shall coordinate with all the relevant authorities to ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities as described in Annex 2 properly and on time.
5. Items requested by the Government of Kenya
 - 5-1. As a result of discussions, both sides confirmed that the items requested by the Government of Kenya are as follows:
 - (a) Water Supply
 - Intake wells
 - Transmission and distribution pipeline
 - Booster pumping station
 - Service reservoir
 - Security posts (including fence)
 - (b) Drainage
 - Drainage for the north area of the southern bypass road

K. K.

(c) Freeport D1 Area

- Land leveling for 10ha
- Gate, perimeter fence and drainage
- Operation building

(d) Consulting Service / Soft Component

- 5-2. Kenyan side also requested a secondary distribution pipeline along the main transmission pipeline up to the boundary of SEZ, while the water supply facilities after the secondary distribution pipeline will be taken care by KPA.
- 5-3. JICA will assess the feasibility of the above requested items through the survey and will report the findings to the Government of Japan. The final scope of the Project will be decided by the Government of Japan.
- 5-4. The Government of Kenya shall submit an official request to the Government of Japan through a diplomatic channel before the appraisal of the Project, which is scheduled in May 2019.
6. Procedures and Basic Principles of Japanese Grant
- 6-1. The Kenyan side agreed that the procedures and basic principles of Japanese Grant as described in Annex 3 shall be applied to the Project.
As for the monitoring of the implementation of the Project, JICA requires Kenyan side to submit the Project Monitoring Report, the form of which is attached as Annex 4.
- 6-2. The Kenyan side agreed to take the necessary measures, as described in Annex 5, for smooth implementation of the Project. The contents of the Annex 5 will be elaborated and refined during the Preparatory Survey and be agreed in the mission dispatched for explanation of the Draft Preparatory Survey Report.
The contents of Annex 5 will be updated as the Preparatory Survey progresses, and eventually, will be used as an attachment to the Grant Agreement.
7. Schedule of the Survey
- 7-1. The Team will proceed with further survey in Kenya.
- 7-2. An official request to the Government of Japan will be submitted before the appraisal of the Project, which is scheduled in May 2019.
- 7-3. JICA will dispatch an appraisal mission to Kenya in order to confirm the project outline and undertakings to be taken by the Kenyan side around May 2019.
- 7-4. JICA will prepare a draft Preparatory Survey Report in English and dispatch a mission to Kenya in order to explain its contents around October 2019.

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7-5. If the contents of the draft Preparatory Survey Report is accepted by the Kenya side, JICA will finalize the Preparatory Survey Report and send it to Kenya around December 2019.

7-6. The above schedule is tentative and subject to change.

8. Environmental and Social Considerations

8-1. The Kenyan side confirmed to give due environmental and social considerations before and during implementation, and after completion of the Project, in accordance with the JICA Guidelines for Environmental and Social Considerations (April 2010).

8-2. The Project is categorized as "B" from the following considerations:

The Project is not considered to be a large-scale water supply, river, and land development project, is not located in a sensitive area, and has none of the sensitive characteristics under the JICA Guidelines for Environmental and Social Considerations (April 2010), it is not likely to have a significant adverse impact on the environment.

The Kenyan side confirmed to conduct the necessary procedures concerning the environmental assessment (including stakeholder meetings, Environmental Impact Assessment (EIA) /Initial Environmental Examination (IEE) and information disclosure, etc.) and make EIA/IEE report of the Project. The EIA/IEE approval shall be received from the responsible authorities and submitted to JICA before the signing of Grant Agreement.

8-3. For the Project that will result in involuntary resettlement, the Kenyan side confirmed to prepare a Resettlement Action Plan (RAP)/Abbreviated Resettlement Action Plan (ARAP) and make it available to the public. In addition, the Kenya side confirmed to provide the affected people with sufficient compensation and/or support in accordance with RAP/ARAP, which is consistent with the JICA Guidelines for Environmental and Social Considerations (April 2010), in a timely manner.

9. Other Relevant Issues

9-1. Both sides agreed that the developed land (D1 area) should be exclusively utilized for the purpose of Special Economic Zone including the form of Freeport. In case that the Kenyan side needs to utilize the developed D1 area for other purposes, the Kenyan side shall notify it to the JICA Kenya Office in a written form, and seek for an no objection by the Government of Japan in advance of its execution.

X. K.



2. 井水整備 16.04.20
- 9-2. Both sides confirmed that water supply facilities will be constructed under the responsibility of KPA as the Executing Agency for this project. However, the aspect of operation and maintenance of the water supply facility will be ~~discussed~~ *handled* and agreed upon by both sides prior to appraisal. *and managed by relevant water service provider.*
- 9-3. For smooth implementation of land development (D1) and water pipeline installation, both sides confirmed that it is necessary to proceed the detailed design of the Project in coordination with that of Yen loan project. 16.04.20
- 9-4. Both sides confirmed that the necessary measures to be taken by the Kenyan side are mainly as follows:
- (a) Land acquisition and access (from intake wells to public road, booster pumping station site, etc.), as described in Annex 6 and 7.
 - (b) Relevant permits and licenses (water access right, permission of constructing water transmission pipeline in the RoW, etc.)

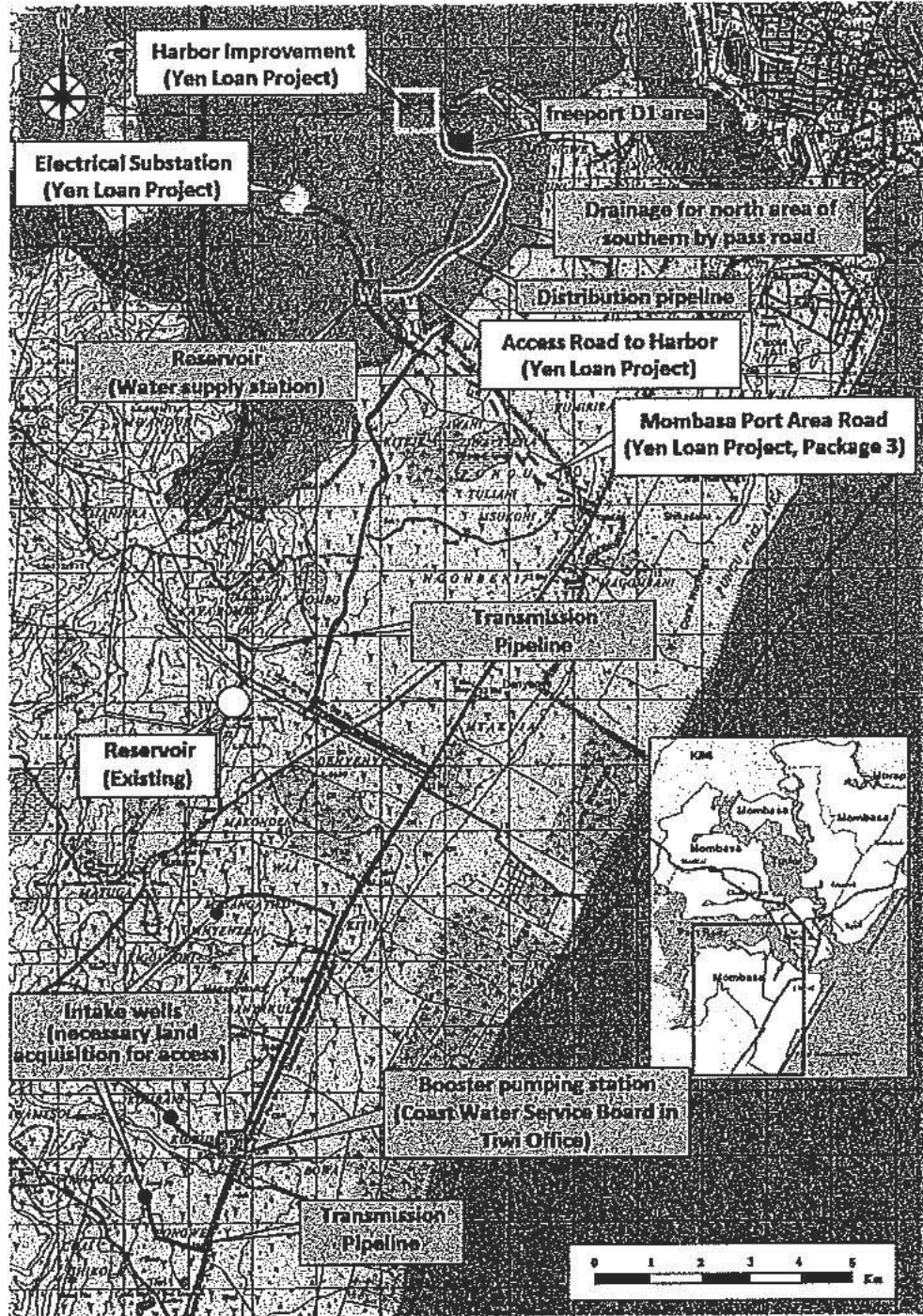
[END]

- Annex 1 Project Site
- Annex 2 Tentative Stakeholder Matrix
- Annex 3 Japanese Grant
- Annex 4 Project Monitoring Report (template)
- Annex 5 Major Undertakings to be taken by the Government of Kenya
- Annex 6 Location Map of Land Requirement for Water Supply System for the Project
- Annex 7 Tentative Land Requirement for Installation of Water Supply Facilities

B.K.



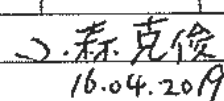
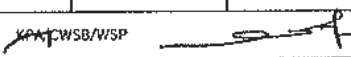
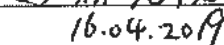
Annex.1 Project Site



N.S.

R

Tentative Stakeholder Matrix for Mombasa Freeport/SEZ Water Supply Project

Task/ Mandate	Grant Aid Project Component for Water Supply					
	Intake Wells	Transmission Pipeline	Booster Pumping Station	Transmission and Distribution Mains	SEZ Reservoir	Distribution Mains
Water Permit	WRA					
Current Land Ownership		Local Residents KeNHA/KURA/KeRRA	CWSB (Tint Oloca)	KeNHA/KURA/KeRRA	KPA	KPA KeNHA
Property Access	KPA	KPA	KPA	KPA	KPA	KPA
Land Acquisition	N/A	KPA/NLC (0.75 acre)	N/A	N/A	N/A	N/A
Responsibility of O/M	KPA	KPA	KPA	KPA	KPA	KPA
Outsourcing Operator under KPA						
Cost Factors under KPA's responsibility	MoWI: Land Access Fee	Private Land: Land Acquisition	CWSB: Land Access Fee	Public Road (KeNHA/KURA): Inspection Fee/Installation Permit		
	WRA: Water Permit Fee and Intake Water Fee	Public Road (KeNHA/KURA): Inspection Fee/Installation Permit		Community/Mombasa +Kwale Water: distribution as CSI components		
	Community: CSI component					
Operation and Maintenance Cost	 					
Initial Cost	 Funded by the Grant Aid					
Benefit Factors	Water Sales by WSP					

16.04.20

WRA: Water Resources Authority
 CWSB: Coast Water Service Board
 MoWI: Ministry of Water and Irrigation
 KeNHA: Kenya National Highways Authority
 KURA: Kenya Urban Roads Authority
 KeRRA: Kenya Rural Roads Authority
 CSI: Corporate Social Investment
 NLC: National Land Commission
 WSP: Water Service Provider

J.H.



JAPANESE GRANT

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

- (1) Preparation
 - The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA
- (2) Appraisal
 - Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet
- (3) Implementation
 - Exchange of Notes
 - The Notes exchanged between the GOJ and the government of the Recipient
 - Grant Agreement (hereinafter referred to as "the G/A")
 - Agreement concluded between JICA and the Recipient
 - Banking Arrangement (hereinafter referred to as "the B/A")
 - Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant
 - Construction works/procurement
 - Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A
- (4) Ex-post Monitoring and Evaluation
 - Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the

Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as follows:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

- 1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.
- 2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

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4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

1st/1st.

PROCEDURES OF JAPANESE GRANT

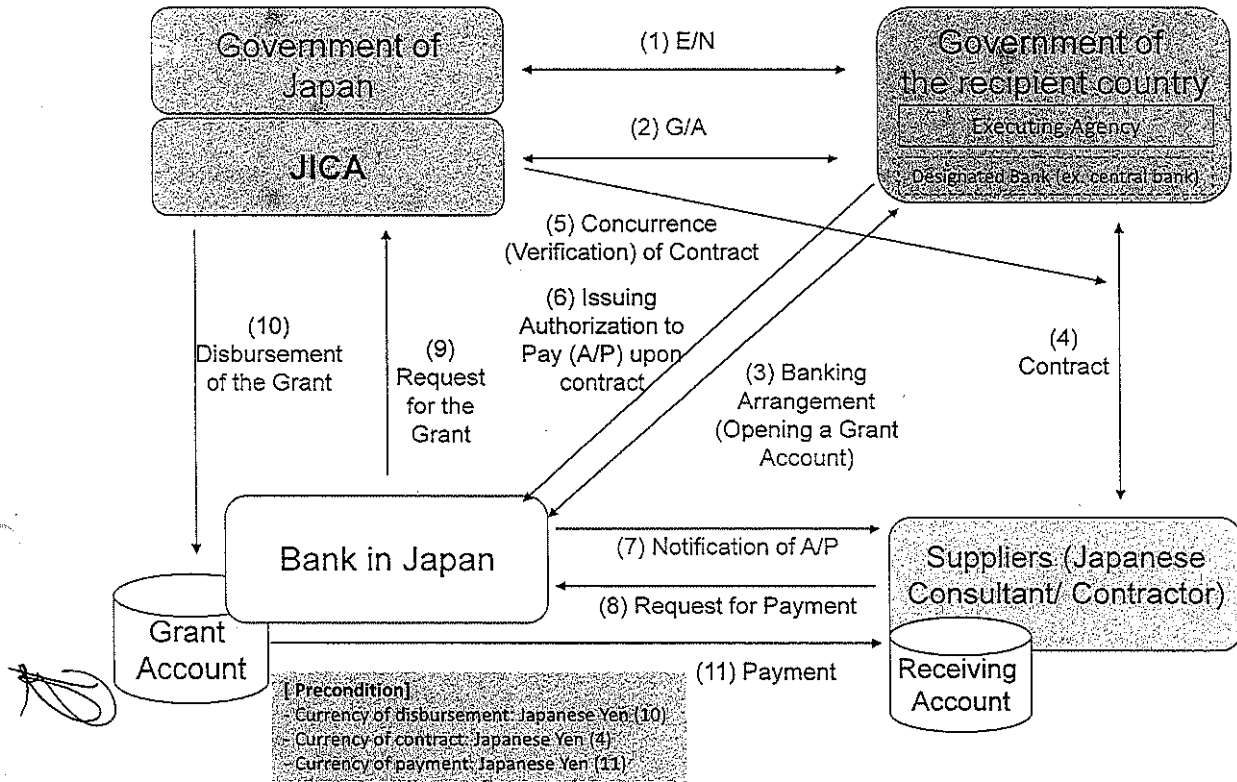
Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank	
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x					
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate.		x		x	x			
	(2) Preparatory Survey Explanation of draft outline design, including soil estimate, undergrounds, etc.		x		x	x			
2. Appraisal	(3) Agreement on conditions for implementation	Conditions will be explained with the draft notes (BN) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (BN)	x (G/A)				
	(4) Approval by the Japanese cabinet			x					
3. Implementation	(5) Exchange of Notes (EN)		x	x					
	(6) Signing of Grant Agreement (G/A)		x		x				
	(7) Banking Arrangement (BA)	Need to be informed to JICA.	x					x	
	(8) Contracting with consultant and issuance of Authorization to Pay (ATP)	Concurrence by JICA is required	x		x	x		x	
	(9) Detail design (DD)		x		x				
	(10) Preparation of bidding documents	Concurrence by JICA is required	x		x				
	(11) Bidding	Concurrence by JICA is required	x		x	x	x		
	(12) Contracting with contractor/supplier and issuance of ATP	Concurrence by JICA is required	x				x	x	
	(13) Construction work/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.		x		x	x		
	(14) Completion certificate			x		x	x		
	4. Ex-post monitoring & evaluation	(15) Ex-post monitoring	To be implemented generally after 1, 2, 10 years of completion, subject to change.	x		x			
		(16) Ex-post evaluation	To be implemented basically after 3 years of completion.	x		x			

notes:

1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

1/12

Financial Flow of Japanese Grant (A/P Type)



Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXX
20XX, Month

Organizational Information

Signer of the G/A (Recipient)	Person in Charge (Designation) _____ Address: _____ Phone/FAX: _____ Email: _____
Contacts	_____
Executing Agency	Person in Charge (Designation) _____ Address: _____ Phone/FAX: _____ Email: _____
Contacts	_____
Line Ministry	Person in Charge (Designation) _____ Address: _____ Phone/FAX: _____ Email: _____
Contacts	_____

General Information:

Project Title	_____
E/N	Signed date: Duration: _____
G/A	Signed date: Duration: _____
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (): _____

12.12

R

1: Project Description

1-1 Project Objective

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
_____	_____	_____
_____	_____	_____
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

2-1 Location		Original	Actual
Components	(proposed in the outline design)		
1.	_____		_____
2-2 Scope of the work		Original*	Actual*
Components	(proposed in the outline design)		
1.	_____		_____

Reasons for modification of scope (if any):
(PMR)

2.14

2-3 Implementation Schedule

Items	Original (proposed in the outline design)		Actual (at the time of signing the Grant Agreement)	

Reasons for any changes of the schedule, and their effects on the project (if any)

--

2-4 Obligations by the Recipient
2-4-1 Progress of Specific Obligations
See Attachment 2.

2-4-2 Activities
See Attachment 3.

2-4-3 Report on RD
See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant (Confidential until the Bidding)

Components	Original (proposed in the outline design)		Actual (in case of any modification)		Cost (Million Yen)	
					Original (proposed in the outline design)	Actual
1.						
Total						

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components	Original (proposed in the outline design)		Actual (in case of any modification)		Cost (1,000,000 Yen)	
					Original (proposed in the outline design)	Actual
1.						
Total						

PMR

PMR

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

--

- 2-6 Executing Agency
- Organization's role, financial position, capacity, cost recovery etc.
 - Organization Chart including the unit in charge of the implementation and number of employees.

Original (at the time of outline design)

name:
role:
financial situation:
institutional and organizational arrangement (organogram):
human resources (number and ability of staff):

Actual (PMR)

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original (at the time of outline design)

Actual (PMR)

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original (at the time of outline design)

PMR

Actual (PMR)

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (at the time of outline design)	
Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low Impact: High/Moderate/Low Analysis of Probability and Impact: Mitigation Measures: Action required during the implementation stage: Contingency Plan (if applicable):
2. (Description of Risk)	Probability: High/Moderate/Low Impact: High/Moderate/Low Analysis of Probability and Impact: Mitigation Measures: Action required during the implementation stage: Contingency Plan (if applicable):
3. (Description of Risk)	Probability: High/Moderate/Low Impact: High/Moderate/Low Analysis of Probability and Impact: Mitigation Measures: Action required during the implementation stage: Contingency Plan (if applicable):

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Contingency Plan (if applicable):

 Actual Situation and Countermeasures (PMR)

5: Evaluation and Monitoring Plan (after the work completion)

- 5-1 Overall evaluation**
Please describe your overall evaluation on the project.
- 5-2 Lessons Learnt and Recommendations**
Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.
- 5-3 Monitoring Plan of the Indicators for Post-Evaluation**
Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
 Appendix - Photocopy of Contractor's Progress Report (if any)
 - Consultant Member List
 - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
8. Pictures (by JPEG style by CD-R) (PMR (final) only)
9. Equipment List (PMR (final) only)
10. Drawing (PMR (final) only)
11. Report on RD (After project)

Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)	Initial Volume	Initial Unit Price (¥)	Initial total Price (C=A×B)	1% of Contract Price (D)	Condition of Payment (E=C×D)
Item 1	●●●	●●●	●●●	●●●	●●●
Item 2	●●●	●●●	●●●	●●●	●●●
Item 3					
Item 4					
Item 5					

2. Monitoring of the Unit Price of Specified Materials
 (1) Method of Monitoring : ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials	1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
Item 1						
Item 2						
Item 3						
Item 4						
Item 5						

(3) Summary of Discussion with Contractor (if necessary)

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Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country) A	Foreign Procurement (Japan) B	Foreign Procurement (Third Countries) C	Total D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

2

Annex 5

Major Undertakings to be taken by the Government of Kenya

1. Specific obligations of the Government of Kenya which will not be funded with the Grant

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open a bank account for the Grant	within 1 month after the signing of the G/A	National Treasury		
2	To issue the authorization to pay (A/P) to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract	National Treasury		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A 1) Advising commission of A/P 2) Payment commission for A/P	within 1 month after the signing of the contract every payment	National Treasury		
4	To obtain an approval of EIA from NEMA (cost for EIA Study supported by JICA)	before the signing of the G/A	KPA		
5	To implement Environment Management Plan (EMP) and Environmental Monitoring Plan (EMoP), and to submit the updated EMP and EMoP to JICA when any updates are made.	before the bidding	KPA		
6	To submit the environmental monitoring results to JICA, by using the monitoring form on a quarterly basis	once the monitoring completes	KPA		
7	To secure the necessary budget and implement land acquisition procedures including compensation with full replacement cost in accordance with Resettlement Action Plan (RAP) (cost for RAP Study supported by JICA)	before the notice of tender	KPA		
8	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form on a quarterly basis	until land acquisition and resettlement complete	KPA		
9	To secure and clear the Project sites	before the notice of tender	KPA		
10	To obtain the construction permits	before the notice of tender	KPA		
11	To submit the Project Monitoring Report (with the result of the detailed design)	before preparation of the bidding documents	KPA		

(B/A: Banking Arrangement, A/P: Authorization to Pay, EIA: Environmental Impact Assessment, NEMA: National Environment Management Authority, G/A: Grant Agreement

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(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier(s)	within 1 month after the signing of the contract(s)	National Treasury		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A 1) Advising commission of A/P 2) Payment commission for A/P	within 1 month after the signing of the contract(s) every payment	National Treasury		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the supplier(s) with internal transportation therein	during the Project	KPA		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	KPA		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the recipient with respect to the purchase of the products and/or the services be exempted.	during the Project	KPA		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	KPA		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	KPA		
8	To submit the Project Monitoring Reports	every month	KPA		
9	To submit the Project Monitoring Report (final)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	KPA		
10	To submit a report concerning completion of the Project	within 6 months after completion of the Project	KPA		
11	To take measure necessary for security and safety of the Project 1) Maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident 2) Traffic control around the site(s) and on transportation routes of construction materials 3) Installation of fences around the site(s)	during the construction	KPA		
12	To implement EMP and EMoP	during the construction	KPA		
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of the Project Monitoring Reports	during the construction	KPA		

X.B.

R

14	To implement RAP (livelihood restoration program)	KPA	for a period based on livelihood restoration program
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of the Project Monitoring Reports (The period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between KPA and JICA.)	KPA	until the end of livelihood restoration program (in case that livelihood restoration program is provided) - for 2 years after land acquisition and resettlement complete (in case that livelihood restoration program is not provided)

2. Other obligations of the Government of Kenya funded with the Grant

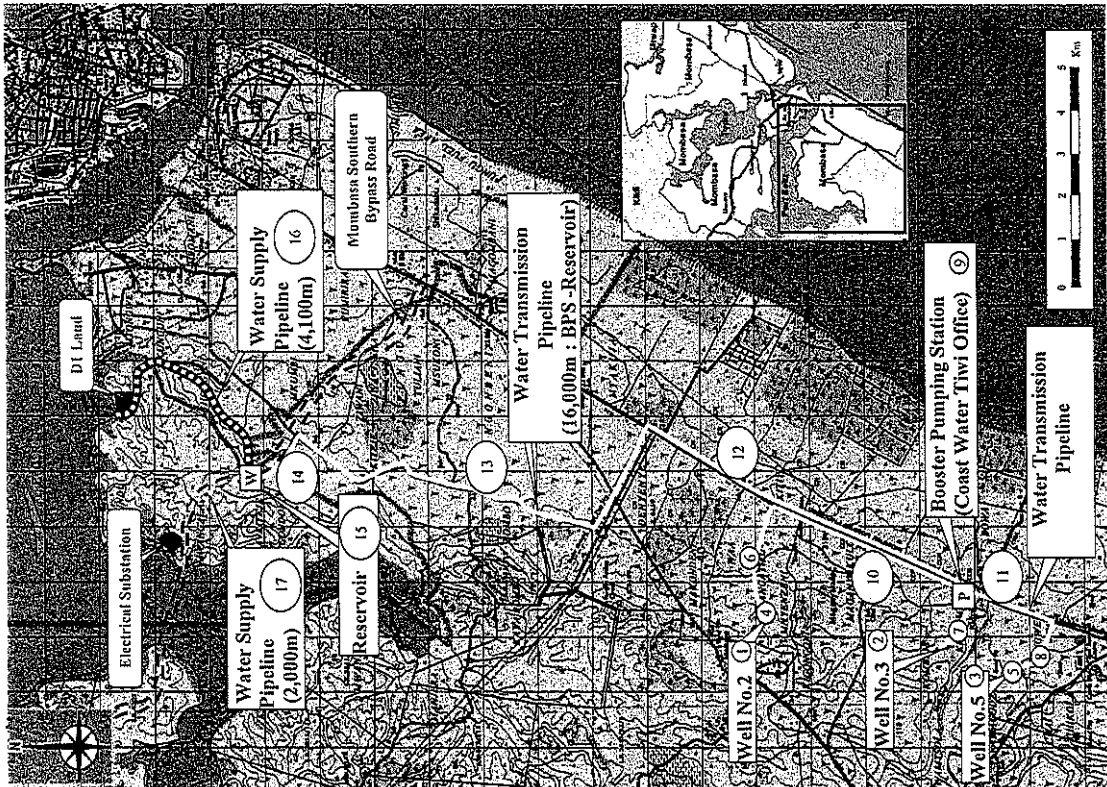
NO	Items	Deadline	Amount (Million Japanese Yen)
1	To construct water supply facilities and drainage	by the Project completion	
2	To develop freeport D1 area 1) Land leveling 2) Construction of gate, perimeter fence and drainage		
3	To implement detailed design, bidding support, construction supervision (Consulting Service)		
4	Contingencies		
	Total		TBC

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	KPA		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually (The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between KPA and JICA.)	for 3 years after the Project			
3	To maintain and use property and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction			

J.H.

J.H.



⊙ : Location Number of Land Requirement
 Location Map of Land Requirement for Water Supply System for the Project

R

A.A.

Tentative Land Requirement for Installation of Water Supply Facilities

Location	Area*	Land Owner	Water Supply Facility
1 Well No.2	20m x 20m	MoWI	Well No.2
2 Well No.3	20m x 20m	MoWI	Well No.3
3 Well No.5	20m x 20m	MoWI	Well No.5
4 Access Road to Unpaved Road from Well No.2	500m x 5m	Local Resident	Water Transmission Pipeline
5 Access Road to Unpaved Road from Well No.5	100m x 5m	Local Resident	Water Transmission Pipeline
6 Unpaved Road to Asphalt Road from Well No.2	4,700m x 5m	Kenha/Kura/Kerra	Water Transmission Pipeline
7 Unpaved Road to Asphalt Road from Well No.3	1,100m x 5m	Kenha/Kura/Kerra	Water Transmission Pipeline
8 Unpaved Road to Asphalt Road from Well No.5	1,800m x 5m	Kenha/Kura/Kerra	Water Transmission Pipeline
9 Coast Water Tiwi Office	15m x 40m	Coast Water	Booster Pumping Station
10 Asphalt Road to CW Tiwi Office for Well No.2	3,200m x 5m	Kenha/Kura/Kerra	Water Transmission Pipeline
11 Asphalt Road to CW Tiwi Office for Well No.5	800m x 5m	Kenha/Kura/Kerra	Water Transmission Pipeline
12 Asphalt Road to Reservoir	6,100m x 5m	Kenha/Kura/Kerra	Water Transmission Pipeline
13 Unpaved Road to Reservoir	8,100m x 5m	Kenha/Kura/Kerra	Water Transmission Pipeline
14 Asphalt Road (Ring Road) to Reservoir	1,800m x 5m	Kenha	Water Transmission Pipeline
15 Reservoir	200m x 240m	KPA	Reservoir
16 Reservoir to DT and DK-1 Lands	4,100m x 5m	KPA	Water Supply Pipeline
17 Reservoir to Electrical Substation	2,000m x 5m	Kenha	Water Supply Pipeline

*: Approximation

Tentative Land Requirement

- Local Resident	3,000 m2 *
- MoWI	1,200 m2 *
- Coast Water	600 m2 *
- Kenha/Kura/Kerra	148,000 m2 *
- KPA	68,500 m2 *
	221,300 m2 *

Other:

- Installation of electrical cable for pump operation of intake wells and booster pumping station shall be required.

(2) 2022年6月2日協議

協議議事録及び資料を次頁以降に示す。

Minutes of Discussions
on the Preparatory Survey for
the Project for Infrastructure Development in Mombasa Special Economic Zone at
Dongo Kundu Area in the Republic of Kenya
(Explanation on Draft Preparatory Survey Report)

With reference to the minutes of discussions signed between the Kenya Ports Authority (hereinafter referred to as "KPA") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") in April 16 and June 13, 2019 and March 4, 2022, and in response to the request from the Government of the Republic of Kenya (hereinafter referred to as "Kenya") dated July 3, 2019, JICA dispatched the Preparatory Survey Team (hereinafter referred to as "the Team") for the explanation of Draft Preparatory Survey Report (hereinafter referred to as "the Draft Report") for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area in the Republic of Kenya (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed on the main items described in the attached sheets.

Mombasa, June 2, 2022

同井直人

Naoto Mukai
Leader
Preparatory Survey Team
Japan International Cooperation Agency



Amb. John Mwangemi
Managing Director
Kenya Ports Authority

ATTACHEMENT

1. Confirmation of contents of the Minutes of Discussions of Preliminary Detailed Outline Design Mission.

Both sides re-confirmed that the contents of the Preliminary Detailed Outline Design Mission Minutes of Discussions signed on March 4, 2022 (Annex 1) with further updates as per this Minutes of Discussion. That any discrepancy between this Minutes of Discussion and Annex 1, this Minutes of Discussion prevails.

2. Contents of the Draft Report

The Team explained the contents of the Draft Report, except for the preliminary project cost estimate, as attached in Annex 2 and the Kenyan side agreed to its contents. JICA will finalize the Preparatory Survey Report, including the preliminary project cost estimate, based on the confirmed items. The report will be sent to the Kenyan side around August 2022.

3. Cost estimate

The Team explained that the preliminary cost estimate has not been completed due to the difficulty of estimating the procurement cost of Cargo Handling Equipment. The Team will explain the preliminary cost estimate by the end of June 2022.

Both sides confirmed that the preliminary cost estimate will be provisional and will be examined further by both sides based on changes in the Detail Design stage.

Both sides confirmed that the cost estimate may include the contingency, which would cover the additional cost against natural disaster, unexpected natural conditions, etc.

4. Timeline for the project implementation

The Team explained to the Kenyan side that the expected timeline for the project implementation is as attached in Annex 3

5. Undertakings of the Project

5-1. Both sides confirmed that the undertakings of the Project confirmed in the Annex 6 of the Preliminary Detailed Outline Design Minutes of Discussions is replaced with Annex 4 of this Minutes of Discussions.

5-2. Both sides confirmed that the Kenyan side will take necessary measures of the undertakings of the Project for smooth implementation of the Project.

5-3. With regards to land acquisition and access out of SEZ area from intake wells to public road, booster pumping station site, both sides confirmed that such relevant permits and licenses shall be obtained before the bidding.

5-4. With regard to exemption of customs duties, internal taxes and other fiscal levies as stipulated in No.5 of (2) of 1 Annex 4, both sides confirmed that such customs duties, internal taxes and other fiscal levies, which shall be clarified in the bid documents by KPA during the implementation stage of the Project.

5-5. The Kenyan side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project. It is further agreed that the costs are indicative, i.e. at Outline Design level. More accurate costs will be calculated at the Detailed Design stage.

6. Tender Process

Both sides confirmed that the tender package will be separated Civil/Building Construction package and Equipment Procurement package. The tender will start from Civil/Building Construction package and the tender of Equipment Procurement package will start after successful tender of Civil/Building Construction package and confirmed the amount can be utilized. Tentative Project Implementation schedule is as attached in Annex 5.

7. Environmental and Social Considerations

7-1 General Issues

7-1-1 Environmental Guidelines and Environmental Category

The Team explained that 'JICA Guidelines for Environmental and Social Considerations (April 2010)' (hereinafter referred to as "the Guidelines") is applicable for the Project. The Project is categorized as B because the Project is not likely to have significant adverse impact on the environment under the Guidelines in terms of its sectors, characteristics and areas.

7-1-2 Environmental Checklist

The environmental and social considerations including major impacts and mitigation

measures for the Project are summarized in the Environmental Checklist attached as Annex 6. Both sides agreed that Kenyan side shall submit the modified version to JICA in a timely manner, if there is any significant change in the project scope and impacts.

7-2 Environmental Issues

7-2-1 Environmental Impact Assessment (EIA)

Both sides confirmed the EIA license has been issued by National Environment Management Authority (NEMA) in May 2022. The update information of the EIA report according to the revised scope of the Project is prepared as a Supplementary Environmental and Social Impact Assessment (S-ESIA) report. The S-ESIA report will be submitted to NEMA by KPA and is expected to be acknowledged by NEMA in June 2022.

The Kenyan side agreed JICA's disclosure of provided EIA report on its website.

The Kenyan side confirmed that progress and status of compliance with conditions of EIA License (ECC) and other key actions agreed between the Kenyan side and the Team will be reported to JICA as a part of Project Monitoring Report (PMR) by filling in the attached list of key actions (Annex 7). In addition, the Kenyan side shall inform JICA of any major changes which may affect environmental and social considerations made for the Project in a timely manner.

7-2-2 Environmental Management Plan and Environmental Monitoring Plan

Both sides confirmed Environmental Management Plan (EMP) and Environmental Monitoring Plan (EMoP) of the Project is as Annex 8, respectively. Both side agreed that environmental mitigation measures and monitoring shall be conducted based on the EMP and EMoP, which may be updated during the detailed design stage.

7-2-3 Other specific environmental issues which need to be confirmed/agreed between the parties.

Both sides confirmed that KPA will take necessary actions to respond to the conditions of EIA license, as stated in the Annex 7.

7-3 Social Issues

7-3-1 Land Acquisition and Resettlement

Both sides confirmed the 2.92 ha of land would be acquired in Kwale County and

54.93 ha of government land inside the SEZ in Mombasa County would be required for the Project and in total, 61 households /142 people would be physically relocated due to the implementation of the Project.

Such land acquisition and resettlement shall be implemented based on the (Abbreviated) Resettlement Action Plan (RAP) which was prepared in April 2020 based on JICA Environmental Guideline (April 2010) and was updated according to the scope of the Project in May 2022 as Annex 9. The updated ARAP was approved by KPA in May 31, 2022 accordingly.

7-3-3 Other specific social issues which need to be confirmed/agreed between the parties
Both sides confirmed that land acquisition and resettlement, including compensation payment and provision of assistance, should be completed before the start of construction, and agreed the tasks and timeline for the implementation of the resettlement as Annex 10.

Both sides agreed that with regard to the implementation of land acquisition and resettlement for the entire Mombasa SEZ, priority should be given to the sites of the Project and Mombasa Special Economic Zone Development Project, including road and power sub-projects. Land acquisition and resettlement for these projects are to be completed by January 2023.

Both sides confirmed that KPA is required to establish Resettlement Implementation Unit (RIU) immediately to procure the EIA consultant and the contractor for preparation of resettlement sites as soon as possible, from early June. Assistance to KPA in implementation of resettlement may be done through contract amend of consulting service of Mombasa Special Economic Zone Development Project.

7-4 Environmental and Social Monitoring

7-4-1 Environmental Monitoring

Both sides agreed that the Kenyan side will submit results of environmental monitoring to JICA with PMR by using the monitoring form attached as Annex 11. The timing of submission of the monitoring form is described in Annex 4 and Annex 8.

7-4-2 Social Monitoring

Both sides confirmed that the Kenyan side will implement social monitoring about land acquisition and resettlement plan proposed in the RAP until land acquisition and resettlement activities including livelihood restoration program are completed. The Kenyan side and the Team agreed that KPA will submit results of social monitoring to JICA with PMR by using the monitoring form attached as Annex 12.

In case there is a remaining issue that needs to be addressed (e.g. insufficient livelihood restration of displaced Project Affected Persons (PAPs)), JICA may request to extend the period of monitoring and reporting until JICA confirms the issues have been properly addressed and solved. The extension of the monitoring will be decided in accordance with the agreement between the Kenyan side and JICA.

7-4-3 Information Disclosure of Monitoring Result

Both sides confirmed that the Kenyan side will disclose results of environmental and social monitoring to local stakeholders through their website / in their field offices. The Kenyan side agreed JICA will disclose results of environmental and social monitoring submitted by the Kenyan side as the monitoring forms attached as Annex 11 and Annex 12 on its website.

8. Other Relevant Issues

8-1. Disclosure of Information

Both sides confirmed that the Preparatory Survey Report from which project cost is excluded will be disclosed to the public after completion of the Preparatory Survey. The comprehensive report including the project cost will be disclosed to the public after all the contracts under the Project are concluded.

8-2. Draft Grant Agreement

Both sides confirmed that the that Final Draft Grant Agreement was shared by JICA to KPA as per JICA Letter TC-22-067 (NT) dated April 21, 2022 (Annex 13) and was confirmed acceptable for signing as per KPA Letter CDD/PD/3/1/06 dated April 22, 2022.(Annex 14)

8-3. Implementation on appropriate schedule

The Team requested KPA to take prompt actions on necessary procedures including the implementation of ARAP in order to avoid further delay of the project and the situation that the period, specified in the G/A, during which the grant is available

expires before the completion of the disbursement. KPA agreed to it. In the event that the said period expires before the completion of the disbursement, necessity of extension of the period of the Project will be thoroughly examined. If there are not concrete prospects for its completion, the termination of the project will also be considered.

Annex 1 Minutes of Discussions signed on March 4, 2022

Annex 2 Project Explanation of Final Design Works

Annex 3 Project Implementation Schedule

Annex 4 Major Undertakings to be taken by the Government of Kenya

Annex 5 Tentative Procurement Schedule

Annex 6 Environmental Check List

Annex 7 List of Key Actions

Annex 8 Environmental Management Plan/Environmental Monitoring Plan

Annex 9 (Abbreviated) Resettlement Action Plan

Annex 10 Tasks for the Social Consideration

Annex 11 Environmental Monitoring Form

Annex 12 Social Monitoring Form

Annex 13 JICA Letter TC-22-067 (NT) dated April 21, 2022

Annex 14 KPA Letter CDD/PD/3/1/06 dated April 22, 2022

Minutes of Discussions
on the Preliminary-Detailed Outline Design Mission for
Infrastructure Development in Mombasa Special Economic Zone
at Dongo Kundu Area in the Republic of Kenya


APPNEDIX I: MAIN POINTS DISCUSSED

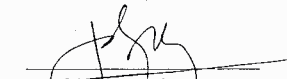
Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched relevant JICA officers for the Preliminary Detailed Outline Design Mission for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area in the Republic of Kenya (hereinafter referred to as "the Project") and held series of discussions with the Kenya Ports Authority (hereinafter referred to as "KPA") from March 2, 2022 to March 10, 2022 as per Appendix I. Both sides confirmed that nothing in this Minutes of Discussion will be interpreted as JICA's commitment to provide grant for the Project and everything confirmed in this Minutes of Discussion is tentative and not legally binding.

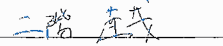
Mombasa, March 11, 2022

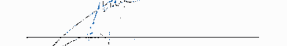
For Japan International Cooperation Agency


For Kenya Ports Authority


 Iwama Hajime
 Chief Representative
 JICA Kenya Office


 Amr. John Mwangemi
 Managing Director
 Kenya Ports Authority


 Tatsuya Nikai
 Representative
 JICA Kenya Office


 Eng. Vincent Sidai
 General Manager
 Kenya Ports Authority


 Dr. Stephen Mogere
 Infrastructure Advisor
 JICA Kenya Office

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6. Confidentiality of the cost estimate and technical specifications
 Both sides confirmed that the cost estimate and technical specifications of the Project will be re-explained at the Detailed Outline Design Mission (hereinafter referred to as "DoD Mission") and should never be disclosed to any third parties until all the contracts under the Project are concluded.

7. Scope of the Project

7-1. As a result of discussions, both sides confirmed that the items requested by the Government of Kenya are as follows:

- (a) Water Supply
 - Intake facilities
 - Transmission pipeline (from well to Booster Pumping Station (BPS))
 - Booster Pumping Station (BPS; with security post and fencing)
 - Main Transmission pipeline (from BPS to Water Supply Center (WSC))
 - Distribution pipeline (from BPS to Water Kiosks)
 - Water Kiosks
 - Water Service Center (WSC; with security post and fencing)
 - Connection pipeline (from WSC to Mombasa Water pipeline)
- (b) Drainage
 - Drainage for the north area of the Southern Bypass road
- (c) Freeport D1 Area
 - Land leveling and surface protection up to 10ha
 - Administration building and related facilities
 - Public transportation rotaries and public toilet
- (d) Road
 - Temporary construction road (from D1 to disposal site/FTZ-B)
- (e) Cargo Handling Equipment, with following conditions
 - The equipment may consist of reach stacker, forklift and tractor with chassis, which the item and unit number will be determined after determination of the budget balance
 - The equipment will be made in Japan, including necessary spare parts and training specifications
 - In case of the bidding price (contractor's price proposal) has exceeded the predetermined price, primarily the quantity of equipment will be adjusted for re-bidding.
 - In case completion of DK-1 under loan project delays, after handing over

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1. Objective of the Project
 The objective of the Project is to improve business environment of Dongo Kundu area in Mombasa through developing a part of infrastructure, thereby contributing to improving socio-economic environment and economic development.
2. Title of the Project
 Both sides confirmed the title of the Project as "The Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area in the Republic of Kenya."
3. Project Site
 Both sides confirmed that the sites of the Project are in Mombasa and Kwale, which is shown in Annex 1.
4. Responsible Authority for the Project
 Both sides confirmed that Kenya Ports Authority (hereinafter referred to as "KPA") will be the executing agency for the Project (hereinafter referred to as "the Executing Agency").
 The Executing Agency shall coordinate with all the relevant authorities, including but not limited to social and environment measures. The Executing Agency shall also ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities, especially on water supply component, as described in Annex 2, properly and on time under coordination with Coast Water Works Development Agency. Moreover, the Executing Agency should provide sufficient compensation and assistance to the PAPs which will be determined in detailed later in updated Abbreviated Resettlement Action Plan (hereinafter referred to as "ARAP"). Compensation policy for PAPs within the SEZ area is described in Annex 3.
5. Cost estimate
 Both sides confirmed that the cost estimate is provisional and will be examined further by both side based on changes such as price adjustment.

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of Grant Project, KPA may utilize the equipment at the existing terminal until completion of DK-1, with condition that; (1) KPA shall move the equipment to DK-1 and utilize them under its own expense and responsibility, and (2) KPA shall properly maintain the equipment even after the defect period (one year after handing over) of the equipment

- (f) Consulting Service
 - Detailed Design
 - Tender Preparation and Assistance
 - Construction Supervision

8. Procedures and Basic Principles of Japanese Grant
 8-1. The Kenyan side confirmed and agreed that the procedures and basic principles of Japanese Grant as described in Annex 4 shall be applied to the Project. In addition, the Kenyan side agreed to take necessary measures according to the procedures.
9. Schedule of the Preparatory Survey for the Project
 Both sides confirmed and agreed that:
 9-1. JICA will prepare a draft Preparatory Survey Report and dispatch the DoD Mission to Kenya around End of March 2022, in order to finalize the detailed project outline (including confirmation on the contents of Preparatory Survey Report, approval of EIA by NEMA and finalization of ARAP by KPA) and undertakings to be taken by the Kenyan side.
 9-2. If the contents of the Preparatory Survey Report are accepted by the Kenyan side, JICA will finalize the Preparatory Survey Report and send it to Kenya around May 2022.
 9-3. The above schedule is tentative and subject to change. As for reference, implementation schedule for the Project is attached in Annex 5.
10. Timeline for the project implementation
 JICA Mission explained to the Kenyan side that the expected timeline for the project implementation is as attached in Annex 5. Both sides shall take the necessary steps to follow the agreed schedule.
11. Expected outcomes and indicators
 Both sides agreed that key indicators for expected outcomes are as follows. The Kenyan side will be responsible for the achievement of agreed key indicators targeted

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in year 2029 and shall monitor the progress for Ex-Post Evaluation based on those indicators.

[Quantitative indicators]

Indicator	Basic Value (actual for year 2022)	Target Value (year 2029) [4 years after completion] *
*Water Supply Capacity (m ³ /day)	0 m ³ /day	2,000 m ³ /day
Occupancy Ratio of D1 Area (%)	0%	50%

*remarks: Main water distribution pipeline which connecting WSC and D-1/DK-1 will be constructed under KenHA loan project and it will be handing over to KPA after completion, also it will be transferred from KPA to CWWDA as stated in the MOU.

[Qualitative indicators]

- Improvement of the drainage within the Project area.
- Improvement of the investment climate of the Project area by provision of the necessary infrastructure for SEZ.
- Economic promotion of Kenya.

12. Ex-Post Evaluation

JICA will conduct ex-post evaluation after four years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Kenyan side is required to provide necessary support for the data collection.

13. Undertakings of the Project

- Both sides confirmed that Kenyan side will take necessary measures as undertakings of the Project as described in Annex 6 for smooth implementation of the Project.
- With regards to Land acquisition and access out of SEZ area from intake wells to public road, booster pumping station site, both sides confirmed that such relevant permits and licenses shall be clarified before the bidding.
- With regard to exemption of customs duties, internal taxes and other fiscal levies as per No. 5 of (2) Annex 6, both sides confirmed that such customs duties, internal taxes and other fiscal levies, shall be clarified in the bid documents by KPA during the implementation stage of the Project.

13-4. The Kenyan side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project.

14. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 7. The PMR will be submitted every quarter of the year.

15. Project completion

Both sides confirmed that the definition of the term of the project completion is when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly, but in any event not later than six months after completion of the Project.

16. Other Relevant Issues

16-1. Both sides confirmed that the consultant and construction procurements will follow JICA Procurement Guidelines for the Japanese Grants. The contract will be one package each for the consultant and the construction (including equipment).

17. Draft Grant Agreement

17-1. JICA Mission explained that, in principle, Draft Grant Agreement can only be generated upon successful completion of the DoD Mission as scope may change while waiting for the finalization of the ARAP. That the DoD Mission can only be dispatched after the ARAP is completed and confirmed compliant of JICA Environmental and Social Guidelines.

17-2. However, JICA Mission further explained that technical component of the Project is, in principle, confirmed by this Minutes of Discussion and the ARAP is expected to complete in near future. That, therefore, for purpose of timely initiation of the Project, JICA Mission provided the Draft Grant Agreement to KPA as per Annex 8 for their review for possible signing after successful completion of the DoD Mission.

17-3. JICA Mission further explained that Annex 8 is tentative version based on the current understanding as per this Minutes of Discussion, which can change during the DoD Mission. That Annex 8 cannot be signed until the DoD Mission

is completed and JICA Mission's provision of Annex 8 will not be interpreted as JICA's commitment to provide grant for implementation of the Project.

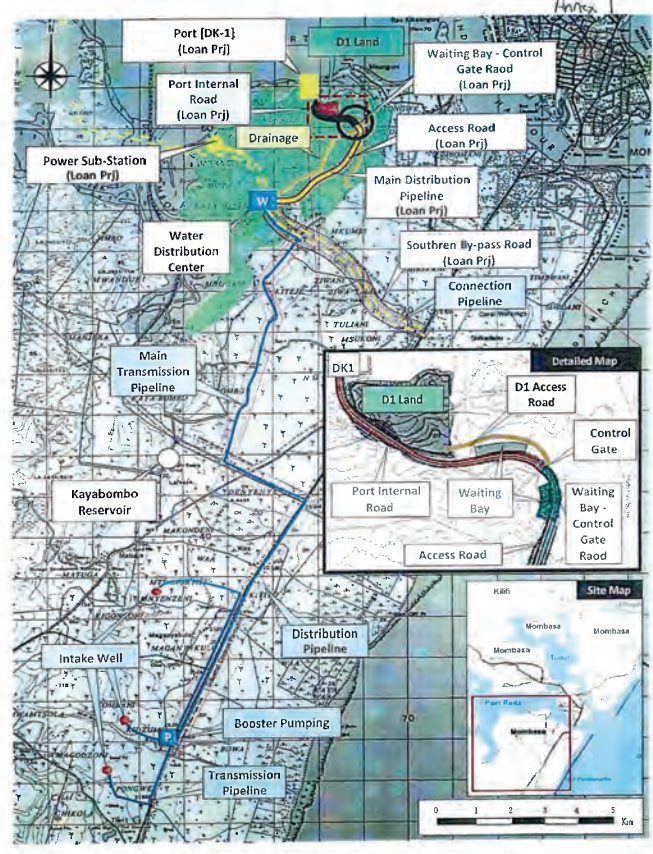
- 17-4. While JICA Mission explained that any change of the Draft Grant Agreement is difficult due to global operation policy of JICA and the policy of the Government of Japan, KPA explained that following section is difficult for KPA to accept.

Clause	Wording per Draft Grant Agreement (Annex 8)	KPA Proposal
Article 8	Procedures for Implementation of the Subprojects(s) (Procurement by the Agent)	Entire Article 8 to be deleted as no Procurement by the Agent is planned.
Signing Page	THE GOVERNMENT OF Name of the Recipient Country	To be replaced to "For Kenya Ports Authority".
Article 7-1, Article 10, Schedule 3	Article 7-1: ...Procurement by the Authority... Article 10: ...be held upon the request of either JICA or the Authority... Schedule 3: name of the Recipient country / name of the authority of the Recipient country, name of the Recipient country	To be replaced with "the Recipient" as "the Authority" is not defined within the draft Grant Agreement.

[END]

List of Attachments:

- Annex 1 Project Site
- Annex 2 Tentative Stakeholder Matrix
- Annex 3 Compensation Policy
- Annex 4 Principles of Japanese Grant
- Annex 5 Project Implementation Schedule
- Annex 6 Major Undertakings to be taken by the Government of Kenya
- Annex 7 Project Monitoring Report (template)
- Annex 8 Draft Grant Agreement (tentative)



Project Location Map

Tentative Stakeholder Matrix for KPA Mombasa Freeport/SEZ Water Supply Project

Task/Mandate	Grant Aid Project Component for Water Supply					
	Intake Well	Transmission Pipeline	Booster Pumping Station	Transmission and Distribution Mains	SEZ Reservoir	Distribution Mains
Water Permit	WRMA					
Current Land Ownership	Local Residents					
Property Access	KPA					
Land Acquisition	N/A	KPA/NLC (0.75 acre)	N/A	N/A	N/A	N/A
Responsibility of O&M	KPA	KPA	KPA	KPA	KPA	KPA
Outsourcing Operator under KPA	Water Use Right: KPA Operation: PWSP		Private Water Service Provider (PWSP)	Transmission Mains: KPA/PWSP Distribution Mains: KPA/PWSP		Private Water Service Provider (PWSP)
Cost Factors under KPA's responsibility	MoWE: Land Access Fee	Private Land: Land Acquisition	CWSB: Land Access Fee	(KENHA/KURA): Public Road Inspection Fee/Installation Permit		
	WRMA: Water Permit Fee and Intake Water Fee	Public Road (KENHA/KURA): Inspection Fee/Installation Permit		+Kwale Water: distribution as CSI components		
Operation and Maintenance Cost	KPA/Private Water Service Provider (PWSP)					
Initial Cost	Funded by the Grant Aid					
Benefit Factors	Water Sales by Private Water Service Provider					

WRMA: Kenya's Water Resources Management Authority
 CWSB: Coast Water Service Board
 MoWE: Ministry of Water and Irrigation
 KENHA: Kenya National Highways Authority
 KURA: Kenya Urban Roads Authority
 KRRA: Kenya Rural Roads Authority
 CSI: Corporate Social Investment
 NLC: National Land Commission

KPA

Draft Compensation Policy Paper for Mombasa Special Economic Zone (Dongo Kundu)

Prepared By:
 KPA in liaison with JICA Study Team (JST)
 November 2021



1 Executive Summary

KPA owns four land parcels in Dongo Kundu namely Mombasa/Mainland South/Block IV/247, 248, 250 and 251 each measuring 325.9, 16.8, 451.4 and 422.6 Hectares. The Mombasa Special Economic Zone, Dongo Kundu was identified as one of the flagship projects of the vision 2030. The Government of Kenya requested the Government of Japan, through JICA, for support towards the development of SEZ in Mombasa. Kenya and Japan signed an MOU on 28th August 2016 to develop the SEZ. The government of Japan committed to finance the basic infrastructure of phase one of the SEZ through a concessional loan of US\$ 210.8 million and a grant assistance of US\$ 58.9 million.

There is a presence of project affected persons (PAPs), who have settled on the land. KPA undertook a Resettlement Action Plan through UNES in 2015 and issued a report in 2016 with a total of 1,522 households requiring a total of KES. 1,303,634,783 for compensation. This RAP was updated by Repcon Associates in 2018 who submitted an updated report in 2019 and presented valuation in two folds; KES. 1,768,066,440 to compensate for improvements only and an estimate of KES. 3,340,945,649 as compensation required for both developments and land. the RAP report was forwarded to the NLC for validation and they issued a report to the Ministry of Transport and requested KES. 1,408,572,440 for compensation on developments only as a government decision on the land matter was awaited.

The JICA Study Team (JST) reviewed the UNES RAP report based on Kenya Laws and the JICA Guidelines/World Bank safeguard policy and pointed out some gaps. The guidelines require that PAPs' standard of living, income opportunities, and production levels need to be improved or at least restored to pre-project levels (JICA Env. GL, p. 30).

To bridge the gap by the Kenyan standard and meet the JICA standards, the following assistance are proposed. Land resettlement within the SEZ by providing minimum size of land for living and provision of public amenities, livelihood support and restoration and a transitional assistance to bridge the unfairness cause by issuance of same land size to PAPs with different sizes of land claim. KPA is recommended to give an assistance to the PAPs through the Corporate Social Responsibility (CSR) activities to secure their current living standard and smooth implementation of the Project.

The policy paper has a total budget estimate of KES 2,502,480,582. This includes the improvements compensation validated by NLC at KES 1,408,572,440, resettlement area development, KES 537,316,600, transitional assistance, KES 202,500,000, related consultancies and other assistances as detailed herein.

The resettlement implementation will be phased based on project priority areas.

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List of abbreviations

BMU	Beach Management Unit
CSR	Corporate Social Responsibility
DK	Dongo Kundu
DoD	Detailed outline Design
EA	Enterprise Area
Ha	Hectares
JICA	Japan International Cooperation Agency
JPY	Japanese Yen
JST	JICA Study Team
KES	Kenya Shillings
KFS	Kenya Forest Service
KPA	Kenya Ports Authority
MD	Managing Director
MOU	Memorandum of Understanding
M-SEZ	Mombasa Special Economic Zone
NLC	National Land Commission
PAP	Project Affected Person
PS	Principal Secretary
RA	Resettlement Area
RAP	Resettlement Action Plan
SEZ	Special Economic Zone
UNES	University of Nairobi Enterprise Services
USD (\$)	United States Dollar

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3 Introduction

KPA owns four land parcels in Dongo Kundu namely **Mombasa/Mainland South/Block IV/247, 248, 250 and 251** each measuring **325.9, 16.8, 451.4 and 422.6 Hectares** in size respectively. They were compulsory acquired in 1979 by the government and vested in KPA for harbors development, warehousing and port oriented industrial area.

The four parcels are on leasehold tenure from the Government of Kenya for a term of 99 years from 1st October 1997.

The Mombasa Special Economic Zone, Dongo Kundu was identified as one of the flagship projects of the vision 2030. The Government of Kenya requested the Government of Japan, through JICA, for support towards the development of SEZ in Mombasa. Kenya and Japan signed an MOU on 28th August 2016 to develop the SEZ through a phased approach based on the Master Plan for Development of Mombasa Special Economic Zone. The government of Japan committed to finance the basic infrastructure of phase one of the SEZ through a concessional loan of **US\$ 210.8 million** and a grant assistance of **US\$ 58.9 million**.

There is a presence of project affected persons (PAPs), who have settled on the land from when it was acquired. In 2014, the Principal Secretary (PS) Ministry of Transport requested for guidance from the National Land Commission (NLC) on how to undertake a Resettlement Action Plan (RAP) to free the Dongo Kundu land from squatters, for development. University of Nairobi Enterprise Services (UNES) took up the RAP consultancy in February 2015 and issued a report in 2016 with a total of 1,522 households requiring a total of **KES. 1,303,634,783** for compensation. Following the expiry of the 2-year RAP implementation period, KPA engaged M/s Repcon Associates in 2018 to update the RAP. Repcon submitted an updated RAP report in 2019 and presented valuation in two folds; **KES. 1,768,066,440** to compensate for improvements only and an estimate of **KES. 3,340,945,649** as compensation required for both developments and land. The RAP data is summarized in the tables below.

Village	Total Parcels	Total Land (HA)
Dongo Kundu	384	393.3
Mwangala	388	246.2
Mrongondoni	170	96.3
Kaya Mtongwe	227	206.0
Mbuta	391	179.7
Siji	88	90.7
Total	1,648	1,212.2

Table 1. Dongo Kundu land parcels per village

Parameter	2019 Survey
Total parcels	1,648
Developed parcels	791
Cultivated parcels	689
Idle parcels	168

Table 2. Land development matrix

Details on the type of Structures development and distribution

Broad Category	Dongo Kundu	Mwangala	Mrongondoni	Kaya Mtongwe	Mbuta	Siji	Total Tally	Sum of Areas	% Share of tally
Residential Buildings	330	269	166	153	245	32	1,195	36,471	46.2
Commercial Buildings	4	3	6	1	5	0	19	541	0.7
Non-Residential Buildings	116	125	99	92	129	30	591	4,441	22.9
Agricultural Buildings	50	69	24	43	38	13	237	4,702	9.2
Religious Buildings	3	6	2	0	2	0	13	1,016	0.5
Institutional Buildings	8	0	0	0	3	0	11	2,282	0.4
Educational Buildings	0	7	0	0	0	0	7	634	0.3
Storage Buildings	19	18	10	13	23	3	86	1,204	3.3
Cultural Structures	74	22	22	15	48	21	202	316	7.8
Security Structures	16	13	5	0	18	1	53	8,466	2.1
Water related Structures	34	25	15	3	52	2	131	631	5.1
Other Structures	8	15	6	5	6	0	40	78	1.5
Total	662	572	355	325	569	102	2,585	60,781	100

Table 3. Type of structure development and distribution

Source: RAP Report

NLC validated the RAP and only valued improvements on land giving a final value of **KES. 1,408,572,440** for 1,574 project affected persons. No valuation for land was done.

4 Policy Gap between Kenyan and JICA Standards


The JICA Study Team (JST) reviewed the UNES RAP report based on Kenya Laws and the JICA Guidelines/World Bank safeguard policy and pointed out the following gaps.

- JICA Guidelines require that when population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken.
- JICA Guidelines require that people who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported so that they can improve or at least restore their standards of living to pre-project levels.
- JICA Guidelines require that appropriate participation of affected people must be promoted in planning, implementation and monitoring of action plans.
- JICA Guidelines require that eligibility of benefits includes the PAPs who have formal legal rights to lands (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal rights to the land they are occupying.
- JICA Guidelines require that affected people are offered support after displacement for a transitional period and provided with development assistance in addition to compensation measures, such as land preparation, credit facilities, training, or job opportunities.
- JICA Guidelines require that particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women, and children, ethnic minorities.

These gaps are further analyzed in the table on the next three pages.


Item	JICA Standard	Kenyan Standard	Gap and means to bridge
Landowners	Land Compensation at full replacement cost: (i) those with formal legal rights to land (ii) those with no legal rights to land but have customary and traditional or recognized rights to land No land compensation but assistance for security of tenure (i) those without formal legal rights or customary/traditional/recognized rights to land	Constitution Article 40 (4) states compensation to be paid to occupants who may not hold title to the land in good faith. On the other hand, Article 40(5) states that the rights under this Article do not extend to any property that has been found to have been unlawfully acquired. The Land Use (Amendment) Act 2010 Section 107A (9) requires the payment of compensation to occupants in good faith and may not hold a title to the land being acquired. This includes all Kenya's community and private land	PAPs at DK have no legal rights and may have claim to the land. Although Article 40 (4) of the Kenya Constitution provides for payment of compensation in good faith, in practice it has not been implemented. On the other hand, Section 107A of the Land Act 2019 is not triggered since land in DK is considered as public land. To ensure security of tenure, KPA will provide 1/8 acre of land to PAPs with stakes in land. Also, provision of public facilities (i.e., water, school, market, dispensary and cemetery) is available.
Compensation for structure and crops	Structures: Promot and effective compensation at full replacement cost for losses. No compensation to be considered. Trees & Crops: market value	The Land Act No. 6 of 2012, Section 113, (2), an award shall be based on (i) the size of the land; (ii) the value (determined by the Commission); (iii) the amount of the compensation payable; Lands (Assessment) of Just	No Gap. NLC calculates structure compensation at replacement cost with no structure value considered. Compensation for trees and crops is based on

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Item	JICA Standard	Kenyan Standard	Gap and means to bridge
Livelihood support and restoration	(i) Offer support after displacement for a transitional period (ii) Provide with development assistance in addition to compensation measures, such as land preparation, credit facilities, training or job opportunities.	The Land Act No. 6 of 2012, Section 111(1) requires prompt payment of just compensation which covers land, structures, trees, crops, and any other loss associated with acquisition. Section 135 says the Land Settlement Fund is used for (d) provision of shelter and a livelihood to persons in need of settlement programmes if the settlement scheme is prepared for the affected persons. But the details are not provided. Land Value (Amendment) Act 2019 Section 107A (8) requires proof of existing profits through evidence of tax returns. In assessing the value of land, NLC considers the diminution of profits provided that the owner of the land provides proof of existing profits including evidence of tax returns.	government market rates (Department of Agriculture and Forestry). Livelihood restoration is not explicitly addressed by Kenyan laws except for the loss of business (income) evidenced by tax returns. To close the gap JST proposed the following: (i) Provide job opportunity during construction and operation stage (ii) Provide money management training (iii) Provide vocational training for 1 person/vulnerable who will be needed to change jobs (iv) Compensation for BMUs

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Item	JICA Standard	Kenyan Standard	Gap and means to bridge
Special assistance for vulnerable	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women, and children, ethnic minorities	According to the Land Act No.6 of 2012, Section 134: (4), women, youth, and the vulnerable people can be co-opted as a member of committee of beneficiary's identification. The National Policy for Older Persons and Ageing of 2014, Article 57 calls for measures to ensure the rights of older persons are recognized by mainstreaming issues of older persons in all development processes. Similarly, Disabilities Act of 2012 advocates for equalization of opportunities for persons with disability.	Both the National Policy and the Land Act do not mention any specific assistance to vulnerable people. One-time cash assistance of KES 10,000 will be given to physically challenged PAPs & orphaned children and over age PAPs. (This requirement was not specified in the ARAP but proposed in the entire SEZ RAP).
Other resettlement assistance	For physical relocation: provide with assistance (such as moving allowance) during relocation	The Land Act 2012 does not out rightly stipulate assistance for relocation, but it can be interpreted that relocation cost will be included in just compensation and 15% for the disturbance allowance and any applicable statutory addition.	No specific provision on relocation assistance. The 15% disturbance allowance is expected to cover (1) the moving cost, and (2) any other less significant disturbances. If not sufficient, top-up is required.

Table 4. Kenyan and JICA standards comparison table

5 Contents of the Compensation Policy

- A. Asset Compensation based on Kenyan Law
- B. Proposed Relocation Assistance based on JICA Standard
 - I. Structure
 - II. Land
 - III. Public Facilities
- C. Other Assistancess
- D. Recommendation and Challenges

5.1 Asset Compensation based on Kenyan Law

Outline of the Asset Compensation

Although KPA and the JST have not received the Validation report from NLC, it is expected that compensation for developments on land have been sufficiently provided in the KES. 1,408,572,440 requested for compensation. However, there is need for the JST to review the validation report to ascertain if the KES 1,408,572,440 provided is adequate. It is expected that the following have been covered based on Kenyan Standard.

1. Structure
 - ✓ Estimated for replacement cost based on Kenyan standard.
2. Trees
 - ✓ Estimated by relevant authority (Kenya Forest Service: KFS) valuation based on Kenyan standard.
3. Permanent Crops
 - ✓ Estimated by relevant authority (Agriculture Department of Mombasa) valuation based on Kenyan standard.
4. Disturbance Allowance
 - ✓ 15% for total compensation amount as stated in the Kenyan standard.

Land compensation was left out of the NLC validation, because the PAPs are non-land title holders and can't be compensated by Kenyan Standard, therefore it awaited a decision as for the assistance which not stated in Kenyan Standard from the government of Kenya.

Proposed Relocation Assistance based on JICA Standards

To bridge the gap by the Kenyan standard and meet the JICA standards, the following assistance are proposed.

1. Land

- ✓ Resettlement within the SEZ by providing minimum size land for living
- ✓ Additional land for farming with condition
- ✓ Provision of public amenities within the resettlement area

2. Livelihood

- ✓ livelihood support and restoration

3. Other Assistance, if above items are not closing the gap

- ✓ e.g. transitional assistance

KPA is recommended to give an assistance to the PAPs through the Corporate Social Responsibility (CSR) activities to secure their current living standard and smooth implementation of the Project.

Alternatives of Relocation Assistancess

Three options for resettlement were explored and analyzed in the table below.

Item	Alternative-1: High-Rise Type Structure	Alternative-2: Bungalow (flat) Type Structure	Alternative-3: Land only Without Structure
Unit number	552 units	552 units	0 unit
Housing type	2-bed room 4 floors building 4 units/floor	2-bed room flat house	-
Area per unit	70 m ²	84 m ²	-
Land for construction	6 acres	82 acres	-
Land for PAPs	None	188 m ² /PAP without land title; 2m buffer from structure Total of 160 acres	Min. 1/8 acre/PAP with land title Total of 206 acres
Construction cost	Alt-1 + KES 3,667,728,400	Alt-2 + KES 2,619,830,640	KES 533,816,600

Item	Alternative-1: High-Rise Type Structure	Alternative-2: Bungalow (flat) Type Structure	Alternative-3: Land only Without Structure
Remarks	Less land required, however very high cost and not matching with local lifestyle. Moreover, difficult to get an agreement due to different PAP's needs on housing design, and huge difference in current land area. Not Recommend	More land required but difficult to get an agreement due to different PAP's needs in housing design. Not Recommend	Easier alternative to reach basic agreement with PAPs and fastest project implementation. RECOMMEND
	It is necessary to consider transitional assistance to reduce unfairness to those with claim on larger parcels of land		

Table 5. Alternative for residential building structure compensation

Alternative-1: High Rise Type Structure

GROUND FLOOR LAYOUT

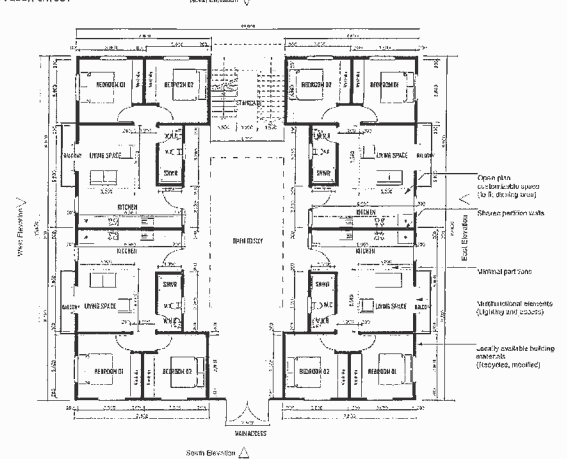


Figure 1. High Rise type structure

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Alternative-1 High-Rise Type Structure
Preliminary Cost Estimate

Item	Description	Unit	Qty	Rate	Amount	
1	Land Purchase	Acre	0.225	0	0	
2	Statutory Requirements	County approvals	NO	1	560,000	560,000
		NEMA Approvals	NO	1	129,600	129,600
		NCA approvals	NO	1	129,600	129,600
3	Construction	Preliminaries	%age	64,800,000	0.10	6,480,000
		Site clearance	SM	900	300	270,000
		Site investigations	Sum	1	1,944,000	1,944,000
		Light roads/pathways	KM	0.05	35,000,000	1,750,000
		Storm water drainage	LM	50	15,000	750,000
		Perimeter wall	SM	420	10,000	4,200,000
		Power connection	Sum	1	560,000	560,000
		Water supply	Sum	1	320,000	320,000
		Wastewater disposal	Sum	1	1,500,000	1,500,000
		Building construction (G+3)	SM	1296	50,000	64,800,000
4	Consultancy	Construction manager	%age	82,304,000	1.5%	1,234,560
		Architectural	%age	82,304,000	6.0%	4,936,240
		Quantity survey	%age	82,304,000	3.0%	2,469,120
		Structural/civil	%age	82,304,000	2.5%	2,057,600
		E.A.J Expert	%age	82,304,000	0.5%	411,520
		Services Engineer	%age	82,304,000	1.5%	1,234,560
5	Development overheads	%age	82,304,000	15.0%	823,040	
6	Contingencies	%age	82,304,000	0.10	8,230,400	
	Total per block				104,792,240	
	Total per unit		104,792.240	16	6,549,515	

Table 6. High-rise type structure cost estimate

Source: KPA

Alternative-2: Bungalow (flat) Type Structure

FLOOR PLAN LAYOUT

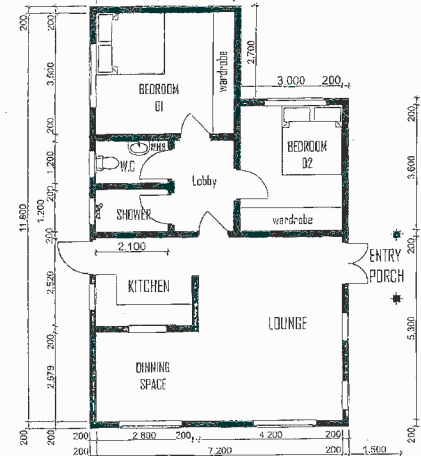


Figure 2. Bungalow type structure

AM

AM

NT

NT

km

km

KS

Alternative 1a - 2: Bungalow type structure
Preliminary Cost Estimate

Item	Description	Unit	Qty	Rate	Amount	
1	Land	Purchase	Acre	0.225	0	
2	Statutory Requirements	County approvals	NO	1	35,000	
		NEMA Approvals	NO	1	3,900	
		NCA approvals	NO	1	3,900	
3	Construction	Preliminaries	%age	1,950,000	0.25	487,500
		Site clearance	SM	450	200	90,000
		Site investigations	Sum	1	19,500	19,500
		Light roads/pathways	KM	0.015	30,000,000	450,000
		Storm water drainage	LM	30	15,000	450,000
		Chain-link fence	LM	90	3,000	270,000
		Power connection	Sum	1	50,000	50,000
		Water supply	Sum	1	30,000	30,000
		Septic/soak	Sum	1	90,000	90,000
		Building construction (2 BR)	SM	65	30,000	1,950,000
		4	Consultancy	Construction manager	%age	3,887,000
Survey	%age			3,887,000	1.0%	38,870
Architectural	%age			3,887,000	3.5%	136,045
Quantity survey	%age			3,887,000	2.0%	77,740
Structural/civil	%age			3,887,000	1.1%	42,757
E.A.I Expert	%age			3,887,000	0.4%	15,548
Services Engineer	%age			3,887,000	1.0%	38,870
5	Development's overheads	%age	3,887,000	0.01	38,870	
6	Contingencies	%age	3,887,000	0.10	388,700	
Total per unit					4,746,070	

Table 7. Bungalow type structure cost estimate

Source: KPA

Land

The proposed resettlement was considered at the area designated as the Resettlement Area (RA) in the Dongo Kundu SEZ Master Plan. This location was chosen because it is in line with the intended land use, its proximity to available social amenities and the suitability of the topography because it is relatively flat and on high ground. The Residential Area (RA) is colored yellow in the Land Use Map below

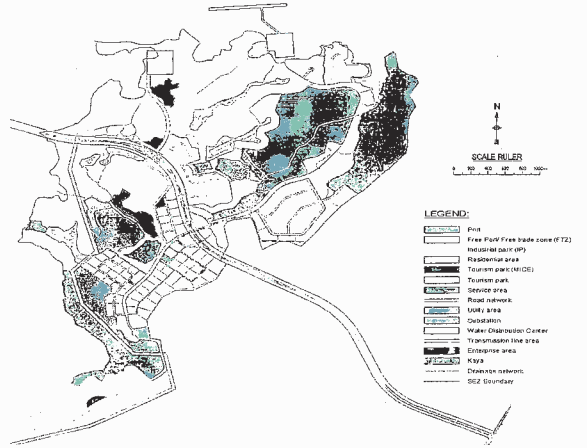


Figure 3. Mobasa SEZ Land Use Map

Contour data was analyzed to determine the slopes in the SEZ area in order to determine the suitability for developing the resettlement area. The contour map and the results are shown below.

M
 NT km

M
 NT km



Figure 4. Contour data

Study Conditions:

- > Minimum required land area for PAPs = 206 acres (1/8 acre x 1,648 PAPs)
- > Land efficiency for residential area = 80% can be used for housing lot

The suitable areas were mapped out as shown in the slope map below.

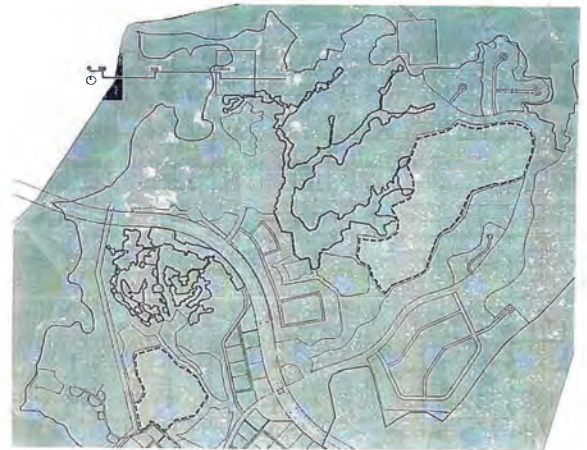


Figure 5. Slope Map

LEGEND

- land slope <10%
- land slope 11<15%
- land slope 16<20%
- land slope >20%

Slope Map

The proposed resettlement areas were categorized as **Zone A** (North of the Mombasa Southern Bypass Road) and **Zone B** (South of the Southern Bypass Road). The Residential Area (RA) in Zone A was 100.5 acres with only 76 acres being suitable for resettlement while Zone B was 59.1 acres with 39. 2 being suitable.

M
 NT km

M
 NT km

Having exhausted available land at the Residential Area (RA), the Enterprise Area (EA) was proposed as additional resettlement area. 197.3 acres were proposed in Zone A while 80.7 acres were proposed in Zone B. The topography of the Enterprise Area (EA) was found to be sloppier, and some earth formation works (cuts and fills) were proposed to make the area usable. To reduce the unfairness that will come because of the sloppiness of the Enterprise Area (EA), 0.312 acre per PAPs, instead of 0.125 acre in RA was proposed in this area.

The map below shows the proposed RA and EA for resettlement.

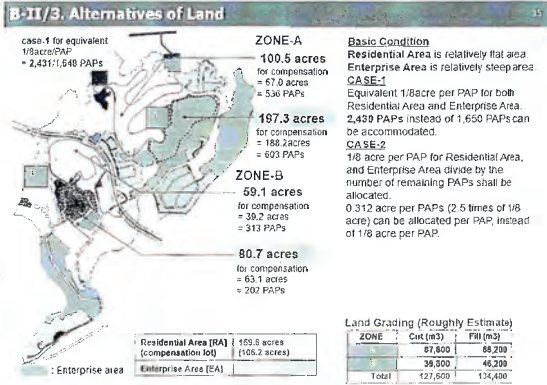


Figure 6. Proposed Resettlement area map

Proposed Provision of Public Amenities

Public amenities proposed for provision in the resettlement area include access roads, water, a market, a dispensary and cemeteries. They are shown in the figures below for both Zone A and B.

Layout for Zone A

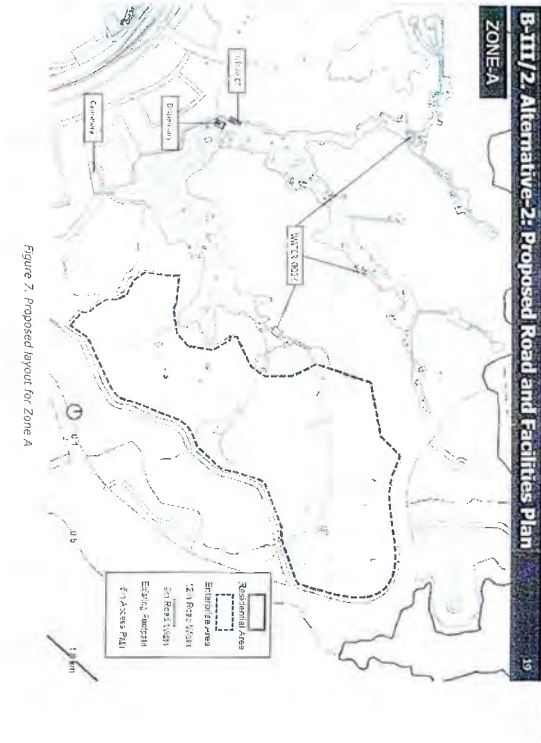


Figure 7. Proposed layout for Zone A

B-II/5. Proposed Road and Access Path Cross Sections

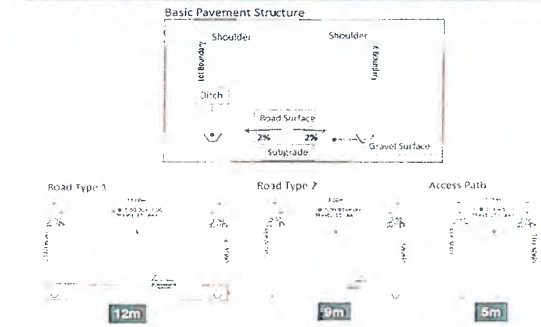


Figure 8. Proposed Road Pavement Structure and Cross Section

Cost Estimates

The table below shows the cost estimate for development of the resettlement area.

Item	Quantities	Unit Price (KES)	Amount	Remarks
1. Land Grading				
a) Cut	127,600 m ³	800/m ³	KES 102,080,000	
b) Fill	134,400 m ³	500/m ³	KES 67,200,000	
c) Filling Material	63,000 m ³	1,000/m ³	KES 63,000,000	
2. Road Gravel Pavement				
a) ROW 9m	16,203 m	12,000/m	KES 194,436,000	
b) ROW 12m	1,962 m	14,700/m	KES 28,841,400	
3. Public Facilities				
a) Water Kiosk	4 units	691,000/unit	KES 2,764,000	3 for ZONE-A 1 for ZONE-B
b) Water transmission line	5.4 km	6,388,000/km	KES 34,495,000	1.3km for MSBR 3.2km for ZONE-A 0.9km for ZONE-B
Booster Pump House		3,500,000	KES 3,500,000	Pump: 2 units (One standby) Pumphouse: 1 unit
c) Dispensary	1 unit	18,000,000/unit	KES 18,000,000	1 for ZONE-A & B
d) Market	1 unit	9,000,000/unit	KES 9,000,000	1 for ZONE-A & B

Layout for Zone B

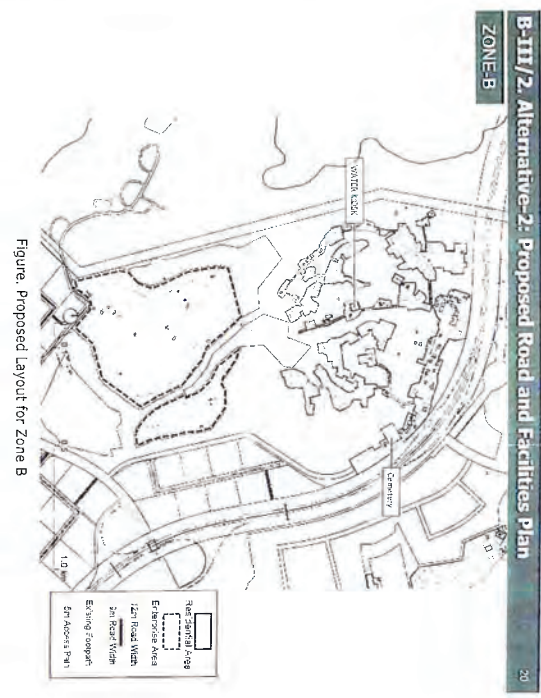


Figure 9. Proposed layout for Zone B

Item	Quantities	Unit Price (KES)	Amount	Remarks
e) Cemetery [2 acres land]	2 sites	7,000,000/site	KES 14,000,000	1 each Muslims and Christians at ZONE-A OR B and shall be located close to Kaya
TOTAL			KES 537,316,600	

Table 8. Resettlement area development cost estimate

5.3 Outline of Other Activities

Livelihood Support

- Construction stage
Give PAPs priority to work as a construction workers by including this condition in the terms of condition for the contractor.
- Implementation/operation stage
Give PAPs priority to work for the port as well as free port under KPA's authority, and industrial park under SEZA's authority.

Livelihood Restoration

- Compensate for loss of business (income) if not covered or underestimated by NLC's validation.
- Compensation for Beach Management Units (BMUs).
- Provide relocation assistance (moving cost included in 15% disturbance allowance).
- Provide money management training to avoid wasting compensation money.
- Provide vocational training for 1 person/vulnerable household who needs to change jobs due to relocation and need a new skill.
- Provide one-time cash assistance of KES 10,000 for 39 physically challenged PAPs, 29 over age PAPs and 28 orphaned children PAPs

Asset Compensation

- There is need to confirm the estimation detailed (unit and price) by NLC.
- NLC validation is **KES 1,408,572,440**.

Relocation Assistance

- Alternative proposed minimizes the land condition gap between Residential Area [RA] and Enterprise Area [EA] by providing larger land plot to EA (maximum 2.5 times of RA). Moreover, it will shorten the compensation activities period and allow for faster implementation of the

project (grant and loan) immediately. Total budget of **KES 537.3 million** will be required.

- Selection of the compensation land plot will be carried out by giving priority to the largest size landowner to minimize the unfairness due to same land size allocation by zone (residential/flat area or enterprises/steep).
- Transitional assistance will be required to fill the remaining gap between Kenyan and JICA compensation standards in term of the size of land given to PAPs. It is proposed at 15% of the land value i.e., KES 450,000/acre as originally valued during RAP preparation for each parcel claim. This will reduce the unfairness created by issuing land of the same size against different size land claim and reach an agreement with the PAPs easily.

Other Assurances

- Necessary coordination with relevant authority which will implement the project within the SEZ for livelihood support.
- Total budget of **KES 960,000 (1 million)** will be required for one-time cash assistance to vulnerable groups.

6 Implementation Phased Approach

- Phased approach by considering the projects implementation sequence is required, which is [(1) Grant Aid Project] as priority and follow by [(2) ODA Loan Project].

Necessary Overall Budget

To realize the resettlement, a total budget of **KES 2,502,480,582** will be required as detailed in the table below.

No.	Item	Unit	Unit Price	Amount (KES)
1.	Improvement Compensation Assistance	NLC's Validation		1,408,572,440
2.	a) Site preparation for relocation assistance	detailed estimation on page in the table above		537,316,600
	b) Transitional assistance	3,000 acres	KES67,500/acre	202,500,000
	c) One-time cash assistance	96 PAPs	KES 10,000/PAP	960,000
3.	Consultant/Survey Cost			
	a) Boundary survey, incl. concrete peg	450 acres	40,474 per acre	18,213,300
	b) Consultant for the site preparation	lump sum		21,000,000
	c) EIA for the resettlement site	lump sum		10,000,000
4.	Training cost (max. 1,648 PAPs)			
	a) Money Management Training			1,000,000
	b) Vocational training			
	Preliminary Training	1,130 per term	KES 65,200/ term	73,676,000
	Basic Level	70 two terms	KES 88,700/two term	6,209,000
5.	Other Cost			
	a) Subdivision Survey	1650 plots	KES 40,000/plot	66,000,000
	b) Land Registration fee	1650 plots	KES 18,750 /plot	30,937,500
	c) Taxes (Stamp Duty at 4% land value)	380 acres	KES 18,000/acre	6,930,000
6.	Contingency	5%	Subtotal	119,165,742
			2,383,314,840	
			TOTAL	2,502,480,582

Table 9. Overall resettlement budget estimate

Note: Item in the **bold text** should be implemented at once and exclude from phased approach.

7 Further Action and Schedule for Grant Project

Below is a schedule of activities that are planned for once the Resettlement Action Plan is progressed and the Grant Aid Agreement signed.

- | | |
|--|---------------------------|
| A) Public Consultation: | Early December 2021 |
| B) MOU for Detailed Outline Design (DoD) (at least 2 weeks after [A]): | Mid December 2021 |
| C) Grant Agreement (at least 1 month after [C]): | Early February 2022 |
| D) Contract with Consultant (asap after [D]): | Late February 2022 |
| E) Detailed Design (4 months): | March-June 2022 |
| F) Bidding/Contractor Procurement (4 months): | July-October 2022 |
| G) Construction (22 months): | November 2022-August 2024 |

Implementation of Public Consultation is the major challenge and bottleneck of the project implementation schedule, which necessitates the following actions in advance:

- Approval from KPA Management and Board on the public consultation implementation based on this report contents.
- Confirmation from the NLC as well as community leader on the methodology of the implementation of public consultation.
- Preparation works (e.g. material, venue...) of the public consultation.

PRINCIPALS OF JAPANESE GRANT¹⁾

The Japanese Grant is non-reimbursable fund provided to a recipient country (hereinafter referred to as "the Recipient") to purchase the products and/or services (engineering services and transportation of the products, etc.) for its economic and social development in accordance with the relevant laws and regulations of Japan. Followings are the basic features of the project grants operated by JICA (hereinafter referred to as "Project Grants").

1. Procedures of Project Grants

Project Grants are conducted through following procedures (See "PROCEDURES OF JAPANESE GRANT" for details):

- (1) Preparation
 - The Preparatory Survey (hereinafter referred to as "the Survey") conducted by JICA
- (2) Appraisal
 - Appraisal by the government of Japan (hereinafter referred to as "GOJ") and JICA, and Approval by the Japanese Cabinet
- (3) Implementation
 - Exchange of Notes
 - The Notes exchanged between the GOJ and the government of the Recipient
 - Grant Agreement (hereinafter referred to as "the G/A")
 - Agreement concluded between JICA and the Recipient
 - Banking Arrangement (hereinafter referred to as "the B/A")
 - Opening of bank account by the Recipient in a bank in Japan (hereinafter referred to as "the Bank") to receive the grant
 - Construction works/procurement
 - Implementation of the project (hereinafter referred to as "the Project") on the basis of the G/A
- (4) Ex-post Monitoring and Evaluation
 - Monitoring and evaluation at post-implementation stage

2. Preparatory Survey

(1) Contents of the Survey

The aim of the Survey is to provide basic documents necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of

relevant agencies of the Recipient necessary for the implementation of the Project.

- Evaluation of the feasibility of the Project to be implemented under the Japanese Grant from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of an outline design of the Project.
- Estimation of costs of the Project.
- Confirmation of Environmental and Social Considerations

The contents of the original request by the Recipient are not necessarily approved in their initial form. The Outline Design of the Project is confirmed based on the guidelines of the Japanese Grant.

JICA requests the Recipient to take measures necessary to achieve its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the executing agency of the Project. Therefore, the contents of the Project are confirmed by all relevant organizations of the Recipient based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA contracts with (a) consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the feasibility of the Project.

3. Basic Principles of Project Grants

(1) Implementation Stage

1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes (hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the Recipient to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Recipient to define the necessary articles, in accordance with the E/N, to implement the Project, such as conditions of disbursement, responsibilities of the Recipient, and procurement conditions. The terms and conditions generally applicable to the Japanese Grant are stipulated in the "General Terms and Conditions for Japanese Grant (January 2016)."

2) Banking Arrangements (B/A) (See "Financial Flow of Japanese Grant (A/P Type)" for details)

- a) The Recipient shall open an account or shall cause its designated authority to open an account under the name of the Recipient in the Bank, in principle. JICA will disburse the Japanese Grant in Japanese yen for the Recipient to cover the obligations incurred by the Recipient under the verified contracts.
- b) The Japanese Grant will be disbursed when payment requests are submitted by the Bank to JICA under an Authorization to Pay (A/P) issued by the Recipient.

3) Procurement Procedure

The products and/or services necessary for the implementation of the Project shall be procured in accordance with JICA's procurement guidelines as stipulated in the G/A.

4) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the Recipient to continue to work on the Project's implementation after the E/N and G/A.

5) Eligible source country

In using the Japanese Grant disbursed by JICA for the purchase of products and/or services, the eligible source countries of such products and/or services shall be Japan and/or the Recipient. The Japanese Grant may be used for the purchase of the products and/or services of a third country as eligible, if necessary, taking into account the quality, competitiveness and economic rationality of products and/or services necessary for achieving the objective of the Project. However, the prime contractors, namely, constructing and procurement firms, and the prime consulting firm, which enter into contracts with the Recipient, are limited to "Japanese nationals", in principle.

6) Contracts and Concurrence by JICA

The Recipient will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be concurred by JICA in order to be verified as eligible for using the Japanese Grant.

7) Monitoring

The Recipient is required to take their initiative to carefully monitor the progress of the Project in order to ensure its smooth implementation as part of their responsibility in the G/A, and to regularly report to JICA about its status by using the Project Monitoring Report (PMR).

8) Safety Measures

The Recipient must ensure that the safety is highly observed during the implementation of the Project.

9) Construction Quality Control Meeting

Construction Quality Control Meeting (hereinafter referred to as the "Meeting") will be held for quality assurance and smooth implementation of the Works at each stage of the Works. The member of the Meeting will be composed by the

Recipient (or executing agency), the Consultant, the Contractor and JICA. The functions of the Meeting are as follows:

- a) Sharing information on the objective, concept and conditions of design from the Contractor, before start of construction.
- b) Discussing the issues affecting the Works such as modification of the design, test, inspection, safety control and the Client's obligation, during of construction.

(2) Ex-post Monitoring and Evaluation Stage

1) After the project completion, JICA will continue to keep in close contact with the Recipient in order to monitor that the outputs of the Project is used and maintained properly to attain its expected outcomes.

2) In principle, JICA will conduct ex-post evaluation of the Project after three years from the completion. It is required for the Recipient to furnish any necessary information as JICA may reasonably request.

(3) Others

1) Environmental and Social Considerations

The Recipient shall carefully consider environmental and social impacts by the Project and must comply with the environmental regulations of the Recipient and JICA Guidelines for Environmental and Social Considerations (April, 2010).

2) Major undertakings to be taken by the Government of the Recipient

For the smooth and proper implementation of the Project, the Recipient is required to undertake necessary measures including land acquisition, and bear an advising commission of the A/P and payment commissions paid to the Bank as agreed with the GOJ and/or JICA. The Government of the Recipient shall ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Recipient with respect to the purchase of the Products and/or the Services be exempted or be borne by its designated authority without using the Grant and its accrued interest, since the grant fund comes from the Japanese taxpayers.

3) Proper Use

The Recipient is required to maintain and use properly and effectively the products and/or services under the Project (including the facilities constructed and the equipment purchased), to assign staff necessary for this operation and maintenance and to bear all the expenses other than those covered by the Japanese Grant.

4) Export and Re-export

The products purchased under the Japanese Grant should not be exported or re-exported from the Recipient.

PROCEDURES OF JAPANESE GRANT

Stage	Procedures	Remarks	Recipient Government	Japanese Government	JICA	Consultants	Contractors	Agent Bank
Official Request	Request for grants through diplomatic channel	Request shall be submitted before appraisal stage.	x	x				
1. Preparation	(1) Preparatory Survey Preparation of outline design and cost estimate		x		x	x		
	(2) Preparatory Survey Explanation of draft outline design, including cost estimate, undertakings, etc.		x		x	x		
2. Appraisal	(3) Agreement on conditions for implementation	Conditions will be explained with the draft notes (E/N) and Grant Agreement (G/A) which will be signed before approval by Japanese government.	x	x (E/N)	x (G/A)			
	(4) Approval by the Japanese cabinet			x				
3. Implementation	(5) Exchange of Notes (E/N)		x	x				
	(6) Signing of Grant Agreement (G/A)		x	x				
	(7) Banking Arrangement (B/A)	Need to be informed to JICA	x					x
	(8) Contracting with consultant and issuance of Authorization to Pay (A/P)	Concurrence by JICA is required	x			x		x
	(9) Detail design (D/D)		x			x		
	(10) Preparation of bidding documents	Concurrence by JICA is required	x			x		
	(11) Bidding	Concurrence by JICA is required	x			x	x	
	(12) Contracting with contractor/supplier and issuance of A/P	Concurrence by JICA is required	x					x
4. Ex-post monitoring & evaluation	(13) Construction work/procurement	Concurrence by JICA is required for major modification of design and amendment of contracts.	x			x	x	
	(14) Completion certificate		x			x	x	
	(15) Ex-post monitoring	To be implemented generally after 1, 3, 10 years of completion, subject to change	x		x			
	(16) Ex-post evaluation	To be implemented basically after 5 years of completion	x		x			

- notes:
1. Project Monitoring Report and Report for Project Completion shall be submitted to JICA as agreed in the G/A.
 2. Concurrence by JICA is required for allocation of grant for remaining amount and/or contingencies as agreed in the G/A.

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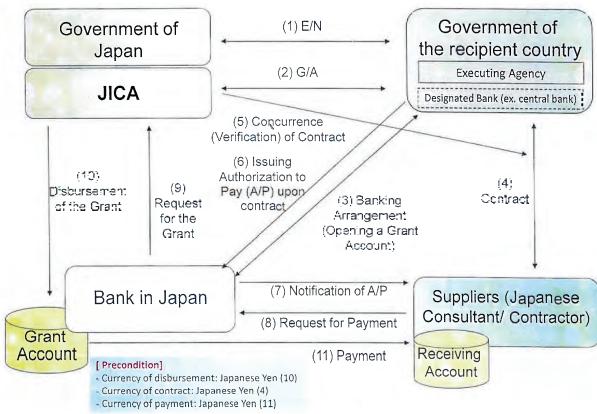
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Financial Flow of Japanese Grant (A/P Type)

Attachment 2



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ANNEX 5: Project Implementation Schedule

Year	2018	2019	2020	2021	2022	2023	2024
Preparatory Survey							
Detailed Design							
Bidding							
Construction							
Completion							

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Major Undertakings to be taken by the Government of Kenya

1. Specific obligations of the Government of Kenya which will not be funded with the Grant

(1) Before the Bidding

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open a bank account for the Grant	within 1 month after the signing of the G/A	KPA		
2	To issue the authorization to pay (A/P) to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract	KPA		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A 1) Advising commission of A/P 2) Payment commission for A/P	within 1 month after the signing of the contract every payment	KPA		
4	To obtain an approval of EIA from NEMA (cost for EIA Study supported by JICA)	before the signing of the G/A	KPA		
5	To implement Environment Management Plan (EMP) and Environmental Monitoring Plan (EMoP), and to submit the updated EMP and EMoP to JICA when any updates are made.	before the bidding	KPA		
6	To submit the environmental monitoring results to JICA, by using the monitoring form on a quarterly basis	once the monitoring completes	KPA		
7	To secure the necessary budget and implement land acquisition procedures including compensation with full replacement cost in accordance with Resettlement Action Plan (RAP) (cost for RAP Study supported by JICA)	before the notice of tender	KPA		
8	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form on a quarterly basis	until land acquisition and resettlement complete	KPA		
9	To secure and clear the Project sites	before the notice of tender	KPA		
10	To obtain the construction permits	before the notice of tender	KPA		
11	To submit the Project Monitoring Report (with the result of the detailed design)	before preparation of the bidding documents	KPA		

(B/A: Banking Arrangement, A/P: Authorization to Pay, EIA: Environmental Impact Assessment, NEMA: National Environment Management Authority, G/A: Grant Agreement)

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(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier(s)	within 1 month after the signing of the contract(s)	KPA		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A 1) Advising commission of A/P 2) Payment commission for A/P	within 1 month after the signing of the contract(s) every payment	KPA		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the supplier(s) with internal transportation therein	during the Project	KPA		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	KPA		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted.	during the Project	KPA		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	KPA		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	KPA		
8	To submit the Project Monitoring Reports	every month	KPA		
9	To submit the Project Monitoring Report (final)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	KPA		
10	To submit a report concerning completion of the Project	within 6 months after completion of the Project	KPA		
11	To take measure necessary for security and safety of the Project 1) Maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident 2) Traffic control around the site(s) and on transportation routes of construction materials 3) Installation of fences around the site(s)	during the construction	KPA		
12	To implement EMP and EMoP	during the construction	KPA		
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of the Project Monitoring Reports	during the construction	KPA		

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14	To implement RAP (livelihood restoration program)	for a period based on livelihood restoration program	KPA		
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of the Project Monitoring Reports (The period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between KPA and JICA.)	until the end of livelihood restoration program (In case that livelihood restoration program is provided) - for 2 years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)	KPA		

2. Other obligations of the Government of Kenya funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)
1	To construct water supply facilities and drainage	by the Project completion	TBC
2	To develop freeport D1 area 1) Land leveling 2) Construction of gate, perimeter fence and drainage		
3	To implement detailed design, bidding support, construction supervision (Consulting Service)		
4	Contingencies		
	Total		TBC

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	KPA		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually (The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between KPA and JICA.)	for 3 years after the Project	KPA		
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	KPA		

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Project Monitoring Report
on
Project Name
Grant Agreement No. XXXXXXX
20XX, Month

Organizational Information

Signer of the G/A (Recipient)	Person in Charge (Designation)	_____
	Contacts	Address: _____ Phone/FAX: _____ Email: _____
Executing Agency	Person in Charge (Designation)	_____
	Contacts	Address: _____ Phone/FAX: _____ Email: _____
Line Ministry	Person in Charge (Designation)	_____
	Contacts	Address: _____ Phone/FAX: _____ Email: _____

General Information:

Project Title	_____
E/N	Signed date: _____ Duration: _____
G/A	Signed date: _____ Duration: _____
Source of Finance	Government of Japan: Not exceeding JPY _____ mil. Government of (_____): _____

1: Project Description

1-1 Project Objective

1-2 Project Rationale

- Higher-level objectives to which the project contributes (national/regional/sectoral policies and strategies)
- Situation of the target groups to which the project addresses

1-3 Indicators for measurement of "Effectiveness"

Quantitative indicators to measure the attainment of project objectives		
Indicators	Original (Yr)	Target (Yr)
Qualitative indicators to measure the attainment of project objectives		

2: Details of the Project

Components	Location	
	Original <i>(proposed in the outline design)</i>	Actual
1.		

Components	Scope of the work	
	Original* <i>(proposed in the outline design)</i>	Actual*
1.		

Reasons for modification of scope (if any):
(PMR)

2-3 Implementation Schedule

Items	Original		Actual
	<i>(proposed in the outline design)</i>	<i>(at the time of signing the Grant Agreement)</i>	

Reasons for any changes of the schedule, and their effects on the project (if any)

2-4 Obligations by the Recipient

2-4-1 Progress of Specific Obligations
See Attachment 2.

2-4-2 Activities
See Attachment 3.

2-4-3 Report on RD
See Attachment 11.

2-5 Project Cost

2-5-1 Cost borne by the Grant (Confidential until the Bidding)

Components	Original		Cost (Million Yen)	
	<i>(proposed in the outline design)</i>	<i>(in case of any modification)</i>	Original ¹⁾²⁾ <i>(proposed in the outline design)</i>	Actual
1.				
Total				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar = Yen

2-5-2 Cost borne by the Recipient

Components	Original		Cost (1,000 Taka)	
	<i>(proposed in the outline design)</i>	<i>(in case of any modification)</i>	Original ¹⁾²⁾ <i>(proposed in the outline design)</i>	Actual
1.				

Note: 1) Date of estimation:
2) Exchange rate: 1 US Dollar =

Reasons for the remarkable gaps between the original and actual cost, and the countermeasures (if any)

(PMR)

2-6 Executing Agency

- Organization's role, financial position, capacity, cost recovery etc.
- Organization Chart including the unit in charge of the implementation and number of employees.

Original (at the time of outline design)

name:
role:
financial situation:
institutional and organizational arrangement (organogram):
human resources (number and ability of staff):

Actual (PMR)

2-7 Environmental and Social Impacts

- The results of environmental monitoring based on Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- The results of social monitoring based on in Attachment 5 (in accordance with Schedule 4 of the Grant Agreement).
- Disclosed information related to results of environmental and social monitoring to local stakeholders (whenever applicable).

3: Operation and Maintenance (O&M)

3-1 Physical Arrangement

- Plan for O&M (number and skills of the staff in the responsible division or section, availability of manuals and guidelines, availability of spareparts, etc.)

Original (at the time of outline design)

Actual (PMR)

3-2 Budgetary Arrangement

- Required O&M cost and actual budget allocation for O&M

Original (at the time of outline design)

Actual (PMR)

4: Potential Risks and Mitigation Measures

- Potential risks which may affect the project implementation, attainment of objectives, sustainability
- Mitigation measures corresponding to the potential risks

Assessment of Potential Risks (at the time of outline design)

Potential Risks	Assessment
1. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
Contingency Plan (if applicable):	
2. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:
Contingency Plan (if applicable):	
3. (Description of Risk)	Probability: High/Moderate/Low
	Impact: High/Moderate/Low
	Analysis of Probability and Impact:
	Mitigation Measures:
	Action required during the implementation stage:

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Contingency Plan (if applicable):
Actual Situation and Countermeasures (PMR)

5: Evaluation and Monitoring Plan (after the work completion)

5-1 Overall evaluation

Please describe your overall evaluation on the project.

5-2 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

5-3 Monitoring Plan of the Indicators for Post-Evaluation

Please describe monitoring methods, section(s)/department(s) in charge of monitoring, frequency, the term to monitor the indicators stipulated in 1-3.

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Attachment

1. Project Location Map
2. Specific obligations of the Recipient which will not be funded with the Grant
3. Monthly Report submitted by the Consultant
- Appendix - Photocopy of Contractor's Progress Report (if any)
 - Consultant Member List
 - Contractor's Main Staff List
4. Check list for the Contract (including Record of Amendment of the Contract/Agreement and Schedule of Payment)
5. Environmental Monitoring Form / Social Monitoring Form
6. Monitoring sheet on price of specified materials (Quarterly)
7. Report on Proportion of Procurement (Recipient Country, Japan and Third Countries) (PMR (final) only)
8. Pictures (by JPEG style by CD-R) (PMR (final) only)
9. Equipment List (PMR (final) only)
10. Drawing (PMR (final) only)
11. Report on RD (After project)

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Monitoring sheet on price of specified materials

1. Initial Conditions (Confirmed)

Items of Specified Materials	Initial Volume A	Initial Unit Price B	Initial total Price C=A×B	1% of Contract Price D	Condition of payment	
					Price (Decrease) E=(D-D)	Price (Increase) F=(D-D)
1 Item 1	●●●	●	●	●	●	●
2 Item 2	●●●	●	●	●	●	●
3 Item 3						
4 Item 4						
5 Item 5						

2. Monitoring of the Unit Price of Specified Materials

(1) Method of Monitoring: ●●

(2) Result of the Monitoring Survey on Unit Price for each specified materials

Items of Specified Materials	1st month, 2015	2nd month, 2015	3rd month, 2015	4th	5th	6th
1 Item 1	●	●	●			
2 Item 2						
3 Item 3						
4 Item 4						
5 Item 5						

(3) Summary of Discussion with Contractor (if necessary):

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Report on Proportion of Procurement (Recipient Country, Japan and Third Countries)
(Actual Expenditure by Construction and Equipment each)

	Domestic Procurement (Recipient Country)	Foreign Procurement (Japan)	Foreign Procurement (Third Countries)	Total
	A	B	C	D
Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Direct Construction Cost	(A/D%)	(B/D%)	(C/D%)	
Others	(A/D%)	(B/D%)	(C/D%)	
Equipment Cost	(A/D%)	(B/D%)	(C/D%)	
Design and Supervision Cost	(A/D%)	(B/D%)	(C/D%)	
Total	(A/D%)	(B/D%)	(C/D%)	

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Grant Agreement No.1960360

ANNEX 8

GRANT AGREEMENT

For

THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN
MOMBASA SPECIAL ECONOMIC ZONE AT DONGO KUNDU AREA

Between

THE JAPAN INTERNATIONAL COOPERATION AGENCY

And

KENYA PORTS AUTHORITY

Dated Month Date, Year

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On the basis of the Exchange of Notes between the Government of Japan and the Government of the Republic of Kenya dated September 20, 2019 (hereinafter referred to as "the E/N") concerning Japanese grant assistance for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area (hereinafter referred to as "the Programme") operated by the Government of the Republic of Kenya, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), and Kenya Ports Authority of the Republic of Kenya on behalf of the Government of the Republic of Kenya (hereinafter referred to as "the Recipient") have agreed to conclude the following grant agreement (hereinafter referred to as "the G/A"):

Article 1 Amount and Purpose of the Grant

For the purpose of contributing to the implementation of the Programme, JICA shall extend a grant of six billion Japanese Yen (JPY6,000,000,000) (hereinafter referred to as "the Grant") to the Government of the Republic of Kenya in accordance with the relevant laws and regulations of Japan and within the scope of the E/N.

Article 2 Availability of the Grant

The Grant shall be available during the period between the date of entry into force of the G/A and December 31, 2025, unless the period is extended by mutual consent between JICA and the Recipient.

Article 3 Use of the Grant

The Grant and its accrued interest shall be used by the Government of the Republic of Kenya properly and exclusively for the purchase of such products and services of eligible source countries which shall be Japan and the country of the Recipient necessary for the implementation of the Programme (hereinafter respectively referred to as the "Products" and the "Services"), as well as for the payment of such fees necessary for the implementation of the Programme. Notwithstanding the above, when JICA and the Recipient deem it necessary, the Grant may be used for the purchase of the Products and/or the Services of countries other than Japan or the country of the Recipient for the implementation of the Programme.

Article 4 Subprojects

(1) The Programme shall be composed of several subprojects and shall be conducted by implementing agencies designated by the Recipient, as specified in Schedule 1

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attached hereto (hereinafter respectively referred to as "the Subprojects" and "the Implementing Agencies").

(2) JICA will conduct surveys to formulate the Subprojects based on the requests from the Recipient.

(3) The Subprojects are to be implemented by either of the two procedures respectively described in Articles 7 and 8.

(4) General information about the Subprojects shall be described in Schedule 1. Schedule 1 may be modified by the mutual consent of JICA and the Recipient.

(5) Each Subproject shall be commenced after JICA and the Recipient confirm the results of the surveys related to the Subprojects.

Article 5 Procurement Guidelines

The Recipient shall ensure that the Products and the Services for the Subprojects are procured in accordance with JICA's Procurement Guidelines as designated in Schedule 1 (hereinafter referred to as "the Procurement Guidelines").

Article 6 Misconduct

(1) The Recipient will take all measures necessary to prevent any offer, gift, or payment of any consideration or benefit, which would be construed as a corrupt practice or fraudulent practice in the Republic of Kenya from being made as an inducement or reward for the award of the contracts related to the G/A. JICA and the Recipient understand that when any corrupt practice or fraudulent practice of any type above occurs, the Recipient will refund to JICA a portion of the Grant equivalent to the amount spent in such corrupt practice or fraudulent practice, as determined by JICA.

(2) JICA may, in addition, exercise other remedies under the G/A. Under JICA's Japanese Grant Aid policy, the Recipient, as well as any tenderers and contractors under contracts funded with Japanese Grant Aid or other forms of Japanese ODA, are to observe the highest standards of ethics during the procurement and execution of such contracts. In pursuance of this policy, JICA;

(a) will reject a proposal for an award if it determines that the tenderer recommended for

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the award has engaged in any corrupt practice or fraudulent practice in competing for the contract in question; and

(b) will recognize a physical or juridical person as ineligible, for a period determined by JICA, to become a party to, to become a subcontractor under, or to be delegated any responsibilities under, any contract funded with Japanese Grant Aid or any other form of Japanese ODA if JICA, at any time, determines that the person has engaged in any corrupt practice or fraudulent practice in competing for, or in executing, another contract funded with Japanese Grant Aid or any other form of Japanese ODA.

(3) If JICA receives information related to suspected any corrupt practice or fraudulent practice in the competition for, or in the execution of contracts to be funded out of the proceeds of the Grant, the Recipient shall provide JICA with such information as JICA may reasonably request, including information related to any official and/or public organizations of the Recipient.

(4) The Recipient shall not unfairly or unfavorably treat physical persons and/or juridical persons that provide information related to suspected corrupt practices or fraudulent practices in the competition for, or in the execution of, contracts to be funded out of the proceeds of the Grant to JICA and/or the Recipient.

Article 7 Procedures for Implementation of the Subproject(s) (Procurement by the Recipient)

Article 7-1 Verification of Contracts

The Recipient shall enter into contracts in Japanese Yen with Japanese nationals for the purchase of Products and Services for the Subproject(s) (Procurement by the Authority) described in Schedule 1. JICA shall verify the eligibility of such contracts for the Grant for the Subproject(s) (Procurement by the Recipient). (The term "Japanese nationals" means Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons.)

Article 7-2 Payments

JICA shall execute the Grant for the Subproject(s) (Procurement by the Recipient) by making payments in Japanese Yen to cover the obligations incurred by the Recipient under the contracts verified in accordance with Article 7-1 (hereinafter referred to as "the

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Verified Contracts") to a bank account (hereinafter referred to as the "the Account") for the Subproject(s) (Procurement by the Recipient) to be opened within thirty (30) days from the date of entry into force of the G/A at a bank in Japan designated by the Recipient (hereinafter referred to as "the Bank for the Subproject(s) (Procurement by the Recipient)").

Article 7-3 Banking Arrangement for the Subproject(s) (Procurement by the Recipient)

The sole purpose of the Account for the Subproject(s) (Procurement by the Recipient) referred to in Article 7-2 is to receive the payments in Japanese Yen from JICA and to pay to the Japanese nationals who are parties to the Verified Contracts. The procedural details concerning the credit to and debit from the Account for the Subproject(s) (Procurement by the Recipient) referred to in Article 7-2 will be agreed upon through consultation between the Bank for the Subproject(s) (Procurement by the Recipient) and the Recipient.

Article 7-4 Authorization to Pay

In order to execute the procedures in the banking arrangement (hereinafter referred to as "the Banking Arrangement"), the Recipient shall issue an authorization to make payments to the Bank in connection with each contract verified by JICA, within thirty (30) days after the conclusion of the contract. The payments referred to in Article 7-2 shall be made when payment requests are presented by the Bank for the Subproject(s) (Procurement by the Recipient) to JICA under an authorization to pay issued by the Recipient.

Article 7-5 Modification of the Subproject(s) (Procurement by the Recipient)

Before making any necessary modification to plan and/or design of a Subproject (Procurement by the Recipient), the Recipient shall consult with JICA to obtain its consent in accordance with the Procurement Guidelines.

Article 8 Procedures for Implementation of the Subproject(s) (Procurement by the Agent)

Article 8-1 Procurement and Management

(1) To ensure that Products and Services for the Subproject(s) (Procurement by the Agent) are purchased effectively, smoothly, and appropriately as described in Schedule 1, and that the Recipient receives other necessary supports, the Recipient shall conclude employment contract(s) with the independent and competent agent to be selected by JICA

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(hereinafter referred to as "the Agent"), in principle within sixty (60) days after JICA's notice, as the entity to act on behalf of the Recipient in accordance with the scope of the Agent's services set forth in Schedule 2 attached herewith. By making this selection of the Agent, JICA shall assume none of the responsibilities that the Agent is to bear to the Recipient.

(2) JICA shall issue a written approval of the employment contract(s) referred to in sub-paragraph (1) above to verify that they are eligible for the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest.

Article 8-2 Banking Arrangement for the Subproject(s) (Procurement by the Agent) and Payments

(1) The Recipient shall open Yen ordinary deposit account(s) for the Subproject(s) (Procurement by the Agent) at a bank in Japan (hereinafter referred to as "the Account for the Subproject(s) (Procurement by the Agent)") within thirty (30) days from the date of entry into force of the G/A and shall notify JICA in the written form prescribed in Schedule 3 attached herewith of the completion of the procedures for the opening of the Account(s) for the Subproject(s) (Procurement by the Agent) within seven (7) days from the date of the opening of the Account(s) for the Subproject(s) (Procurement by the Agent).

(2) JICA shall execute the Grant for the Subproject(s) (Procurement by the Agent) by making payments in Japanese Yen to the Account(s) for the Subproject(s) (Procurement by the Agent) during the period referred to in Article 2 and on or after the date of receipt of the written notification referred to in sub-paragraph (1) above.

(3) The sole purpose of the Account(s) for the Subproject(s) (Procurement by the Agent) is to receive the payments in Japanese Yen from JICA referred to in sub-paragraph (2) above and to make payments necessary for the purchase of Products and Services and the fees referred to in Schedule 1.

Article 8-3 Disbursement Procedures

(1) The Recipient shall ensure that the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest are completely disbursed from the Account for the Subproject(s) (Procurement by the Agent) and available for the payments necessary for the purchase of the Products and/or the Services, as well as for the fees referred to in Schedule 1, within a period of twelve (12) months after the date of the execution of the

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Grant, unless the period is extended by mutual consent between JICA and the Recipient.

(2) The Recipient and the bank referred to in sub-paragraph (1) of Article 8-2 (hereinafter referred to as the "Bank for the Subproject(s) (Procurement by the Agent)") shall conclude a fund transfer arrangement under which the Recipient designates the Agent as the representative acting on behalf of the Recipient concerning all fund transfers to the Agent.

(3) The Agent shall request the Bank for the Subproject(s) (Procurement by the Agent) to transfer funds to cover the expenses necessary for the purchase of all or part of the Products and Services and for the fees referred to in Schedule 1. Each fund transfer request shall be accompanied by a detailed estimate of the expenses to be covered by the funds transferred and a copy of the approval by JICA referred to in sub-paragraph (2) of Article 8-1. Copies of the request and estimation shall be sent to the Recipient at the same time.

(4) Pursuant to the Agent's request referred to in sub-paragraph (3) above, the Bank for the Subproject(s) (Procurement by the Agent) shall notify the Recipient of the request made by the Agent. The Bank for the Subproject(s) (Procurement by the Agent) shall pay the amount specified in the request (hereinafter referred to as "the Advances") to the Agent from the Account for the Subproject(s) (Procurement by the Agent) unless the Recipient expresses opposition in writing to such payment within ten (10) working days after the notification by the Bank for the Subproject(s) (Procurement by the Agent). The Agent shall make payments to the supplier(s) and/or provider(s) of the Products and/or the Services from the funds received in accordance with the terms of the contract(s) with them.

(5) The Recipient shall present to JICA, through the Agent, a report prepared in a written form acceptable to JICA on the transactions on the Account for the Subproject(s) (Procurement by the Agent), without delay when the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest are completely disbursed from the Account for the Subproject(s) (Procurement by the Agent) in accordance with the provisions of sub-paragraph (1) above or upon the request of JICA.

Article 8-4 Modification of the Subproject(s) (Procurement by the Agent)

Before making any necessary modification to a plan and/or design of the Subproject(s)

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(Procurement by the Agent), the Recipient shall consult with JICA to obtain its consent in accordance with the Procurement Guidelines.

Article 8-5 Subcommittee

(1) The Recipient shall establish consultative committee(s) for the Subproject(s) (Procurement by the Agent) (hereinafter referred to as "the Subcommittee") in order to discuss any matter related to the Subproject(s) (Procurement by the Agent) that may arise from or in connection with the G/A.

(2) The Subcommittee shall be chaired by the head of the representatives of the Recipient. The members of the Subcommittee shall be defined in Schedule 4.

(3) Immediately after the employment contract referred to in sub-paragraph (1) of Article 8-1 is concluded, the Agent shall appoint a representative who is to participate on behalf of the Agent in the meetings of the Subcommittee as an adviser. Representative(s) of organizations other than the Agent may be invited, whenever necessary, to participate and provide advices in the meetings of the Subcommittee.

(4) In principle, the first meeting of the Committee shall be held in the Republic of Kenya immediately after JICA approves the employment contract referred to in sub-paragraph (2) of Article 8-1. The meetings thereafter will be held upon the request of either JICA or the Recipient whenever JICA deems it necessary to call such meetings. The Agent may advise JICA and the Recipient on the need to call a meeting of the Subcommittee.

(5) The terms of reference of the Subcommittee shall be as follows:

(a) to confirm an implementation schedule for Subproject(s) (Procurement by the Agent) for the speedy and effective execution of the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest;

(b) to discuss the need for and appropriateness of modifications of the Subproject(s) (Procurement by the Agent), including modifications of a plan and/or design of the Subproject(s);

(c) to exchange views on allocations of the Grant for the Subproject(s) (Procurement by

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the Agent) and its accrued interest for the Subproject(s) (Procurement by the Agent), as well as on potential end-users related to the Subproject(s) (Procurement by the Agent);

(d) to identify problems related to the Subproject(s) (Procurement by the Agent) that may delay the execution of the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest, and to explore solutions to such problems;

(e) to exchange views on publicity related to the execution of the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest for the Subproject(s) (Procurement by the Agent);

(f) to discuss any other matters related to the Subproject(s) (Procurement by the Agent) that may arise from or in connection with the G/A; and

(g) to provide the Committee for the Programme referred to in Article 10 with information on the progress of the Subproject(s) (Procurement by the Agent) and problems related to the Subproject(s) (Procurement by the Agent).

Article 8-6 Refund

When any amount of funds remains in the Account for the Subproject(s) or any amount of the Advances remains (hereinafter referred to collectively as "the Remaining Amount") after the completion of the Subproject(s), JICA shall notify the Recipient of the procedures for refunding the Remaining Amount. The Recipient shall refund the Remaining Amount to JICA without delay through such procedures as notified above.

Article 9 Obligations of the Recipient

(1) The Recipient shall take necessary measures:

(a) to ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Republic of Kenya with respect to the purchase of the Products and/or the Services for the Programme be exempted;

(b) to give due environmental and social consideration in the implementation of the Programme;

(c) to ensure that the Products and/or the Services of the Programme be maintained and

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used properly and effectively for the implementation of the Programme;

(d) to secure a lot of land necessary for the implementation of the Programme and to clear the sites;

(e) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Programme outside the sites referred to in (d) above;

(f) to ensure prompt unloading and customs clearance at ports of disembarkation in the Republic of Kenya and to assist internal transportation therein of the Products for the Programme;

(g) to accord the Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the Products and/or the Services for the Programme such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work; and

(h) to bear all the expenses, other than those covered by the Grant and its accrued interest, necessary for the implementation of the Programme.

(2) If the employment contract with the Agent referred to in (1) of Article 8-1 is concluded, the Recipient shall take following necessary measures, in addition to observing the provisions of sub-paragraph (1) above:

(a) to ensure that customs duties, internal taxes, and other fiscal levies that may be imposed in the Republic of Kenya with respect to the employment of the Agent be exempted;

(b) to accord Japanese physical persons and/or physical persons of third countries employed by the Agent whose services may be required in connection with the supply of the Products and/or the Services for the Programme such facilities as may be necessary for their entry into the Republic of Kenya and stay therein for the performance of their work; and

(c) to present to JICA, through the Agent, a report prepared in a written form acceptable

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to JICA on the transactions on the account referred to (1) of Article 8-2, upon the request of JICA.

(3) The Recipient shall provide JICA with periodic progress reports on the Programme, a completion report upon the completion of the Programme, and any other necessary information related to the Programme, upon the request of JICA.

(4) With regard to the shipping and marine insurance of the Products and/or the Services for the Programme, the Recipient shall refrain from imposing any restrictions that may hinder fair and free competition among the shipping and marine insurance companies.

(5) The Products for the Programme shall not be exported or re-exported from the Republic of Kenya.

(6) The Recipient shall ensure that no official of the Recipient undertakes any part of the Japanese nationals' work and/or the work of nationals of third countries on purchase of the Products and/or the Services for the Programme.

(7) Any other matter confirmed in writing between JICA and the Implementing Agencies to be an obligation of the Recipient for the implementation of Subprojects shall constitute part of the G/A.

Article 10 Committee

(1) The Recipient shall establish a committee for the Programme (hereinafter referred to as "the Committee") in order to discuss any matter, at the Programme level, that may arise from or in connection with the G/A.

(2) The members of the Committee shall be as defined in Schedule 4.

(3) In principle, a regular meeting of the Committee shall be held in the Republic of Kenya semiannually, and other meetings may be held upon the request of either JICA or the Authority whenever JICA deems it necessary to call such meetings.

(4) The terms of reference of the Committee shall be as follows:

(a) to confirm an implementation schedule for the Programme for the speedy and effective

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execution of the Grant and its accrued interest;

(b) to discuss modifications of the Programme, including modifications of the allocation of the Grant for Subprojects;

(c) to identify problems that may delay the implementation of the Programme or the execution of the Grant and its accrued interest, and to explore solutions to such problems;

(d) to exchange views on publicity related to the Programme; and

(e) to discuss any other matters that may arise from or in connection with the G/A.

Article 11 Applicable Laws

The validity, interpretation and performance of the G/A shall be governed by the relevant laws and regulations of Japan.

Article 12 Amendments

The G/A may be amended within the scope of the E/N by written agreement between JICA and the Recipient. An amendment to the G/A shall enter into force on the date of signature of such written agreement by JICA and the Recipient.

Article 13 Consultation

JICA and the Recipient shall consult with each other to resolve any matter that may arise from or in connection with the G/A.

Article 14 Effectiveness and Termination

(1) The G/A shall enter into force on the date of signature by JICA and the Recipient, provided that the E/N is in force.

(2) When JICA recognizes any of the following situations, JICA may, by issuing a notification to the Recipient, suspend in whole or in part the rights of the Recipient and/or require the Recipient to remedy the situation. When the Recipient will not remedy the situation within a period of thirty (30) days from the date of receipt of such notification, JICA may, with the consent of the Government of Japan, terminate the G/A:

(a) default of the Recipient in the fulfillment of any obligations or in compliance with the

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terms and conditions under the E/N or the G/A;

(b) a fundamental change of any circumstance relating to the Recipient with regard to those existing at the time of the entry into force of the G/A; and

(c) any emergency, unforeseen circumstances, or force majeure such as a war, civil war, earthquake, or flood, that seriously impedes the implementation of the Programme.

For

JAPAN INTERNATIONAL
COOPERATION AGENCY

For

THE GOVERNMENT OF

IWAMA Hajime
Chief Representative
JICA Kenya Office

(Name)
(Title)

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Schedule 1
The Subprojects and Indicative Amount of the Grant allocated under the Programme for the Project for Infrastructure Development in Mombasa Special Economic Zone of Dongo Kundu Area

Title(s) of the Subprojects	Indicative Amount of the Grant allocated (million Japanese Yen)	Components (the Products and/or the Services)	Implementation Type (Procurement by the Recipient / Procurement by the Agent)	Implementing Agency	JICA Procurement Guidelines applied
Water Supply		Intake facilities Transmission pipeline Booster Pumping Station Main Transmission pipeline (from BPS to WSC) Distribution pipeline (from BPS to Water Kiosks) Water Kiosks Water Service Center Main Distribution	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016

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Drainage		pipeline Concrete pipeline Drainage for the north side of the Southern Bypass road (improvement of existing stream)	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016
Freight DI Area		Earthwork Administration building Public transportation routes	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016
Road		New temporary road	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016
Cargo Equipment	Handling		Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016

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Schedule 2

Scope of the Agent's Services for the Subproject(s) (Procurement by the Agent)

1. Provision of information and advice to the Subcommittee.
2. Conclusion of an agreement for detailed design works and construction supervision with the consultants.
3. Ensuring that the Recipient fully understand the procedures to employ the Agent and the procedures for the purchase of the Products and/or the Services for the Subproject(s) (Procurement by the Agent).
4. (1) The preparation of the specifications for the Products for the Recipient, including, where necessary, detailed discussions with the end-users.

(2) The preparation of tender documents appropriate for the values and types of the Products and/or the Services for the Subproject(s) (Procurement by the Agent) to be purchased.

(3) Advertisements and announcements of the tenders and where the international competitive bidding is to be held, the wording of which is to be agreed with the Recipient.

(4) Evaluation of the tenders from both technical and financial standpoints.

(5) Submission of recommendations to the Recipient for the approval of orders with the suppliers and providers of the Products and/or the Services for the Subproject(s) (Procurement by the Agent).
5. Receipt and use of the Advances in accordance with the employment contract with the Recipient.
6. Negotiation and conclusion of contracts with the suppliers and providers of the Products and/or the Services for the Subproject(s) (Procurement by the Agent), including arrangements for satisfactory payments and shipment and inspection

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arrangements, where necessary.

7. Monitoring of the progress of the Subproject(s) (Procurement by the Agent) to ensure that the delivery schedules of the Products and/or the Services provided are as contracted.
8. Provision of documents containing detailed information on the progress of orders, notifications of orders placed, amendments to contracts, delivery and service information, shipping documents, etc., to the Recipient and end-users.
9. Payments to the suppliers and providers of the Products and/or the Services for the Subproject(s) (Procurement by the Agent) from the Advances.
10. The preparation of periodic progress reports for JICA and the Recipient with comprehensive information on enquiries, orders, order status, values, deliveries, services provided, etc.
11. Submission of quarterly statements to JICA and the Recipient detailing the balance against the Grant and its accrued interest and all disbursements for the quarter.
12. Submission to JICA of an overall evaluation report with comprehensive details on all of the Products and/or the Services, source countries (if applicable), delivery dates / service provision periods, the values of Products and/or Services (including relevant charges), and the total amounts disbursed and remaining.

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Schedule 3

(Form)

Date:
Ref.:

To: JAPAN INTERNATIONAL COOPERATION AGENCY, JAPAN

Notification of the Opening of the Account for the Subproject(s) (Procurement by the Agent) and

Request for the (the title of the Subproject(s)) Grant payment for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area

In accordance with the provisions of Article 8-2 of Grant Agreement No. 1960360 between the Japan International Cooperation Agency and the Recipient dated 2007.07.27, we would like to notify JICA of the completion of the procedures for the opening of the Yen ordinary deposit account, and to request JICA to make the grant payments specified in Schedule 1 of the above-mentioned Grant Agreement in accordance with the following details:

1. The amount to be paid (Japanese Yen): ()
Japanese Yen (JPY) ()
2. Bank name:
3. Bank address:
4. Account number:
5. Account name:
6. Account type (Non-Resident Account or Resident Account)

(Authorized Signature)

Name
Title

[The Government of Kenya]

Signature: _____
Date: _____

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Schedule 4

The Members of the Committee for the Grant for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area

1. The Recipient side
Managing Director of Kenya Ports Authority
Chief Executive Officer of Coast Water Works Development Agency
2. JICA side
Chief Representative of Kenya Office

The Members of the Sub-Committee for (the title of the Subproject(s))

1. The Recipient side
2. JICA side

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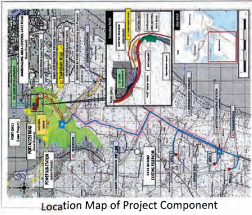
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Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone

**Annex 2 :
Explanation of Final Design Works**

JICA STUDY TEAM



Outline of Project Scope

Project Scope	Project Scope
A. Water Supply Component	B. Drainage Component
1. Intake Facilities (3 wells)	1. River Improvement
2. Transmission Pipes (3 wells to BPS)	C. Land Development Component
3. Booster Pumping Station	1. Earth Work
4. 24 x 7 Transmission Pipes (BPS to WSR)	2. Building Support Work (external work)
5. Distribution Pipe to Kiosk (10K)	3. Administration Building
6. Water Kiosk or Counter (10K)	D. Road Component
7. Connection Pipe to Mombasa WSP	1. Temporary Road

Contents:

1. Overview of Water Supply Component
2. Design Policy
3. Designed Facilities
 - 3-1. Borehole Facility
 - 3-2. Transmission Pipe
 - 3-3. Booster Pumping Station
 - 3-4. Main Transmission Pipe/ Distribution Pipe
 - 3-5. Mombasa Reservoir
 - 3-6. Connection Pipe

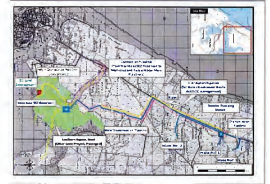
1. Overview of Water Supply Component

Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone

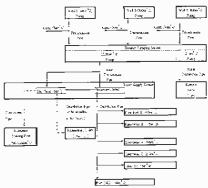
**Design for
Water Supply Component**

Designed Items:

- Pipe
 - Transmission Pipe
 - Main Transmission Pipe
 - Distribution Pipe
 - Connection Pipe
- Borehole Facility
- Booster Pumping Station
- Mombasa Reservoir
- Water KIOSK (10 units)



Water Supply Flow



Location of Water KIOSK

No.	Place
1	Waa Primary School
2	Madikwani Mosque
3	Kirgawa Primary School
4	Kiteje Dispensary/Mosque***
5	Masjid Mosque
6	Mukumbi Mosque
7	Maganda Mosque***
8	We I No.2
9	We I No.3
10	We I No.5

Design Policy

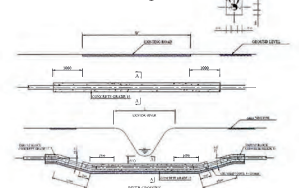
Item	Design Policy
Hydraulic calculation	Hazen-Williams Formula
Pipe Material	HDPE, GI
Min. & Max Design Flow Velocity	0.5 ~ 3.0 m/s
Min. & Max Dynamic Water Pressure	0.13MPa ~ 0.74MPa
Air valve	1/2 call at the depression point
One valve	1/2 call at the depression point
Bore part	Install thrust block
Road and River crossing	Concrete lining For crossing the Likuni road, micro to 7m high (in concrete) or method shall be applied.

References:
 Handbook for Water Supply Services (Ministry of Water and Irrigation)
 Design Criteria for Waterworks Facilities (Japan Water Works Association)

Condition of Pipe Installation



Road and River Crossing



2. Design Policy

3. Designed Facilities

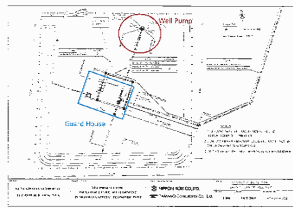
3-1. Borehole Facility

Borehole Facility

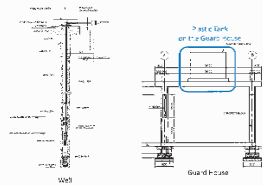
- Submersible pump is installed.
- Total discharge amount is 2,300 m³/day, consists of 2,000 m³/day for SEZ and 300 m³/day for Water KIOSKS (within Kwale County).
- Water KIOSKS (No.8, 9 and 10) are installed at the well site.

Specifications of Borehole Facility

Item	Borehole Depth (m)	Casing Diameter (mm)	Static Water Level (m)	Dynamic Water Level (m)	Discharge (m ³ /day)
Well No. 8	85	150	41.5	59.5	75.0
Well No. 9	85	150	43.2	65.5	38.5
Well No. 10	85	150	45.0	67.5	36.0



Layout Plan of Intake Facilities



Typical Section of Well and Guard House

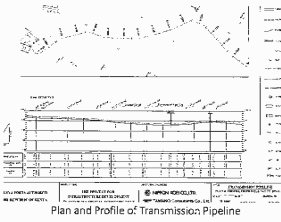
3-2. Transmission Pipe (TP)

Transmission Pipe

- TP connects from each well to the booster pumping station.
- For the bend point, 45, 22.5, 11.25 degree bend is installed.

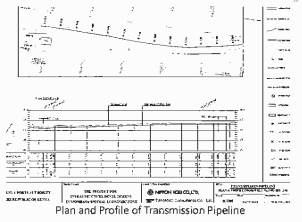
Specification of Transmission Pipe

Item	Material	Diameter (mm)	Length (m)
Well No. 8 - SEZ	HDPE	300	1.3
Well No. 9 - SEZ	HDPE	300	1.4
Well No. 10 - SEZ	HDPE	300	2.5

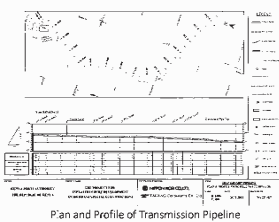


Plan and Profile of Transmission Pipeline

Sample Drawings of Transmission Pipe (TP)



Plan and Profile of Transmission Pipeline



Plan and Profile of Transmission Pipeline

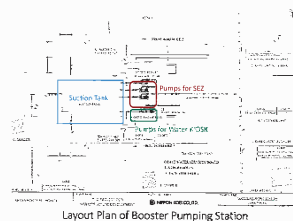
3-3. Booster Pumping Station (BPS)

Booster Pumping Station

- BPS is installed at the CWWDA's TRW office.
- Transmitted water from the each well is stored in the suction tank.
- Suction tank is made from reinforced concrete construction.
- The size of suction tank is length 8m x width 5 m x depth 3m, and effective capacity is 80m³.

Item	PLTD Capacity			Nos.*
	Discharge (m ³ /hr)	Head (m)	Power (KW)	
For SEZ	0.568	85	22	3
For Water KIOSK	0.145	147	7.5	2

* Including one standby per set



Layout Plan of Booster Pumping Station

3-4. Main Transmission Pipe (MTP) and Distribution Pipe (DP)

Main Transmission Pipe (MTP) and Distribution Pipe (DP)

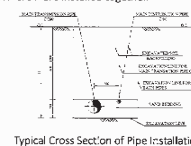
- MTP is for transmission to Mombasa Reservoir
- DP is for distribution of 300m³/day to Kwale County by 7 Water KIOSKS
- MTP and DP are installed parallelly together.
- In case of crossing the road of KeNHA, micro tunneling (non-open cut) method must be applied.

Specification of MTP & DP

Item	Material	Diameter (mm)	Length (m)
Main Transmission Pipe / BPS - SEZ	GPE	300	25.0
Distribution Pipe / BPS - Water KIOSK	HDPE	90	14.0

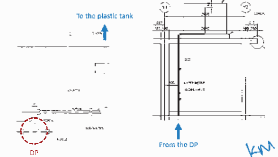
Main Transmission Pipe (MTP) and Distribution Pipe (DP)

- MTP & DP are installed together.

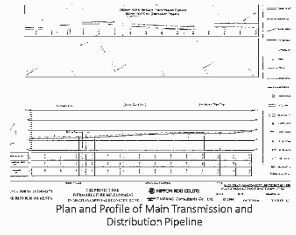


Typical Cross Section of Pipe Installation

Water KIOSK



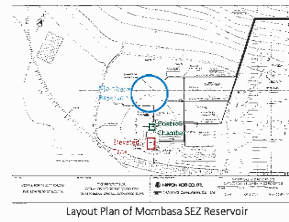
Sample Drawings of MTP and DP



Water Distribution from Mombasa Reservoir

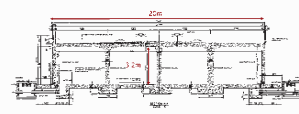
- 1,000 m³ reservoir and 50 m³ elevated tank are installed at MSR.
- 1,000 m³ reservoir is for distributing to following zone:
 - Free Port Area
 - Enterprise A
 - Enterprise B
 - Enterprise C
 - Land
 - S1
- 50 m³ elevated tank is for distributing to following zone:
 - Residential area
 - Industrial
 - Concrete Pipe
- Facilities for a water truck is designed on the control chamber.

3-5. Mombasa Reservoir (MSR)

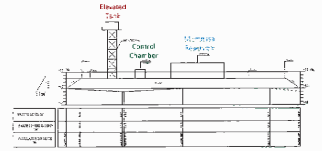


1000 m³ Reservoir

- The capacity of reservoir is 1,000m³ which can store 12 hours equivalent of maximum daily supply (2,000 m³/day)

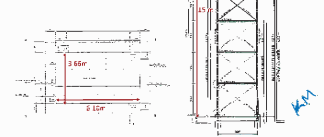


Profile of Mombasa SEZ Reservoir (MSR)



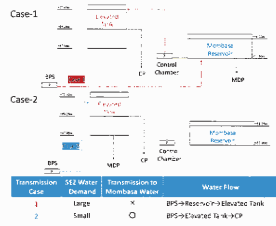
50 m³ Elevated Tank

- The tower height is 15m.
- Empty weight of the tank is 4.8t, full water weight is 59.2t.



Water Flow

- Water flow around Mombasa SEZ Reservoir differs depending on the water demand of SEZ.
- As long as water consumption by SEZ is small, water is transmitted to Mombasa Water through the Connection Pipe.
- From the economic efficiency, 2 transmission cases are set, as shown in the next page.



Connection Pipe (CP)

- CP is installed along the Mombasa Southern Bypass.
- It is connected to the existing water supply pipe (Mombasa Water Service Provider).
- Connection work between the CP and MWS SP pipelines is not included in the Grant Aid Project.

3-6. Connection Pipe (CP)

Hydraulic Calculation

Hydraulic Calculation

$$V = 0.35464 \cdot D^{0.53} \cdot I^{0.54}$$

$$f = 10.666 \cdot C^{-1.85} \cdot D^{-4.87} \cdot Q^{1.85}$$

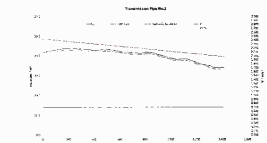
V: Velocity, L: Hydraulic Gradient, D: Pipe Diameter, C: Velocity Coefficient

- Velocity coefficient C is set as 110.
- Hydraulic gradient must be more than 2m higher than the pipe top in order to install air valves.

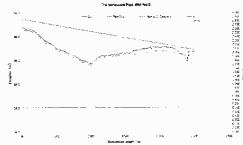
Transmission Pipe for Well No. 2



Transmission Pipe for Well No. 3



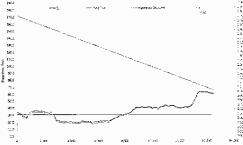
Transmission Pipe for Well No. 5



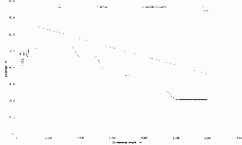
Main Transmission Pipe



Distribution Pipe



Connection Pipe



Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone

Design for Drainage Component

1. Overview of Drainage Component 1) Objective Basins



Source: JICA Study Team

Contents:

1. Overview of Drainage Component:
 - 1) Objective Basins
 - 2) Basin Features
 - 3) Planned Facilities
 - 4) Location of Planned Facilities
2. Design Conditions
3. Basic Design of Facilities

1. Overview of Drainage Component 2) Basin Features

Location	Basin 1 (Designing point in the downstream)	Basin 2 (Designing point in the upstream)	Basin 3 (Designing point in the upstream)	Basin 4 (Designing point in the upstream)
Basin 1 (km)	138	141	75	11.7
Basin 2 (km)	41.7	141	7.8	11.7
Basin 3 (km)	138	141	7.8	11.7
Basin 4 (km)	138	141	7.8	11.7

Basin 1: The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved.

Basin 2: The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved.

Basin 3: The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved.

Basin 4: The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved. The basin is located in the upstream of the main channel. It is a natural basin and is not planned to be improved.

* Designing points located at the upstream reach of the Basin 1
Source: JICA Study Team

1. Overview of Drainage Component 3) Planned Structures

River Improvement of Natural Drain Channel

At three locations in Channel-1, where a remarkable erosion/damage of the existing bank is observed.

2. Design Conditions

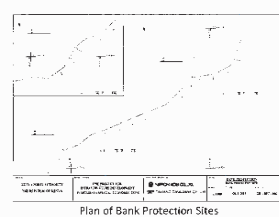
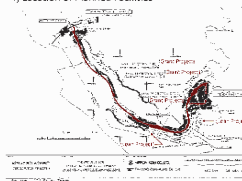
Facility	Item	Design Condition
River Improvement	Protection Method	Gabion mat
	Max Side Slope	1:1.0
	Position of top of Gabion	Skateboard sheet underneath gabion

3. Basic Design of Structure

- > Riverbed width: 5m
- > Side slope: 1:1.0 in the max.
- > Protection height: 2 to 3 m
- > Objective stretch length of protection at each location
 - along main channel: 30m
 - along branch channel: 15m

Source: JICA Study Team

1. Overview of Drainage Component 4) Location of Planned Facilities



Source: JICA Study Team



Typical Cross Section of Bank Improvement (Gabion)

Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone

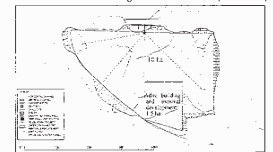
Design for Land Development Component

Contents:

1. Overview of Land Development Component
 - 1) Layout Plan of D1 Land Development
 - 2) Location of Planned Facilities
2. Design Conditions
3. Basic Design of Facilities
4. Building Support Work (external work)
5. Administration Building

1. Overview of Land Development Component 1) Layout Plan of D1 Land Development

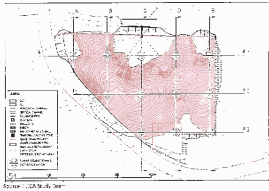
- D1 Land Earthwork: 10 ha
- Building Support Work: 1ha
- Administration Building: 1 unit for 2nd floor (2 x 400 m²)



Source: JICA Study Team

1. Overview of Road Component

2) Location of Planned Facilities



2. Design Conditions (2/2)

Facility	Item	Design Condition
Netts Filled Area	Grassy retaining wall	For the north-filled area along the sea, gravity retaining walls (10.5m) with gabions are installed in slope exposures.
	Underground drain	Underground drains (Ø150) are installed along the natural ground to discharge groundwater seepage.
Drainage	Temporary drainage and pond	The collected surface water in the area will be discharged to the temporary drainage and temporary pond.
	Staged drainage	Staged drainage is installed on the right side to discharge surface water from the sea.

2. Design Conditions (1/2)

Facility	Item	Design Condition
Old Land Reclamation	Elevation	EL+28.0m
	Area	Between elevation between D1 and the connecting access road at built-in match line. Installed a KPM office and parking lot at D1.
Slope	Cut Slope	Slope 1:1.5, berm every 7m height
	F. Slope	Slope 1:2.0, berm every 6m height
	Cut Slope Protection	Shrub cover
Slope Protection	F. Slope Protection	In situ concrete frame and vegetation mat
	Slope of drainage	Horizontal and Vertical channel
High filled Area	3m x 1.5m	A sand pile is installed on slope above 5m.
	Soft ground	Black cotton soil which is around 3m from the surface will be removed and replaced with normal soil.

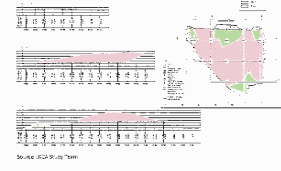
3. Basic Design of Facilities

1) Land Development Facilities

No.	Item	Design Condition
1	Filling & Grubbing	110,000m ³
2	Cutting	316,000m ³
3	Filling	128,800m ³
4	Removal of Surplus Work	674,300m ³
5	Slope Protection	Concrete Structure: 1410mm, 3,500m ² Concrete frame (incl. planting works): 6,110m ² Retaining Wall: 110m
6	Drainage	Slope drain: 470m
		Slope vertical drain: 850m Concrete culvert: 32m, Ø900mm Collapsible culvert (Ø900mm, wave type): 6m Step drain: 16m Culvert: 200m, Ø900mm, wave type: 250m Ø600mm, 1,000m

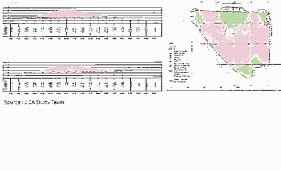
3. Basic Design of Facilities

2) Typical Section N-S



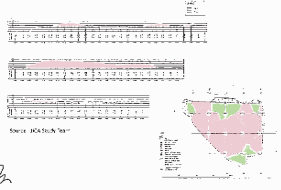
3. Basic Design of Facilities

3) Typical Section N-S



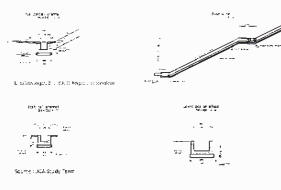
3. Basic Design of Facilities

4) Typical Section W-E



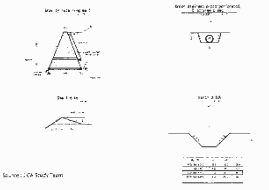
3. Basic Design of Facilities

5) Structural Drawing (1)



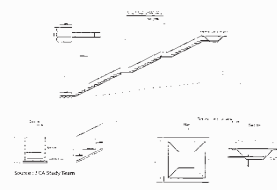
3. Basic Design of Facilities

6) Structural Drawing (2)



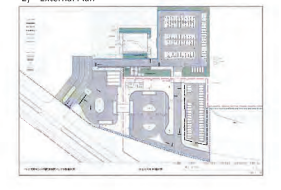
3. Basic Design of Facilities

7) Structural Drawing (3)



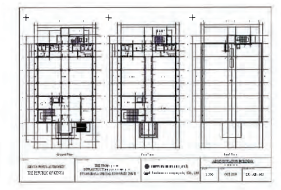
4. Building Support Work (external work)

2) External Plan



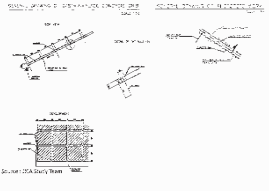
5. Administration Building

1) Plan



3. Basic Design of Facilities

8) Structural Drawing (4)



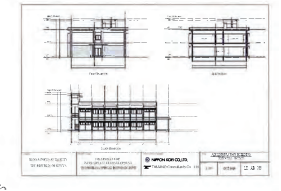
4. Building Support Work (external work)

1) Features of External Plan

Item	Quantity	Unit	Remarks
2) Building support work			
Ø1.5m pipe & drainage road	As per drawing	Ø1.5m	
Ø1.5m pipe (incl. fittings)	1,750m	m	Work steps to determine as result of site investigation
Ø1.5m pipe	1,750m	m	between Road Project and Lake Project
Ø1.5m pipe to sea	1.2 km (incl. 80m)	m	regarding development of the premises drainage
Ø1.5m pipe	Ø1.5m	m	Ø1.5m horizontal building to 1.5m
Ø1.5m pipe	Ø1.5m	m	Ø1.5m horizontal building to 1.5m

5. Administration Building

2) Elevation and Section



Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone

Design for Road Component

Contents:

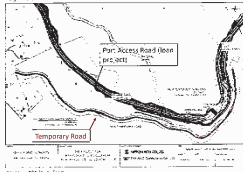
1. Overview of Road Component
 - 1) Objective Road Facilities
 - 2) Planned Facilities
 - 3) Location of Planned Facilities
2. Design Features
3. Typical Cross Section

1. Overview of Road Component

- 1) Objective Road Facilities
 - Temporary Road : 2.4km
- 2) Planned Facilities
 - 2.4km from FTZ-B area (soil disposal area to DL land development site)

Source: JICA Study Team

1. Overview of Road Component
3) Location of Planned Facilities



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2. Design Features

Item	Required Scope	Remarks
1) Temporary Road		
1) Length and coverage area	width: 2.4km, 7m	In order to secure the access to DL land
2) Costing	12,000 m ²	development site
3) Costing	28,400 m ²	in short depending on the project access road to be constructed on the site
4) Material	Crushed stone (100mm)	Project area to be temporary access road from soil disposal area (FTZ-B) to DL areas to be constructed
3) Road crossing structure	PC plate (2.0 x 1.2) x 100	100mm

Temporary Road



Typical Cross Section

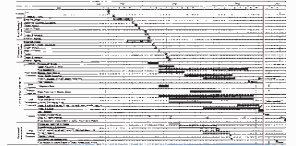
Preparatory Survey for the Project for Infrastructure Development in Mombasa Special Economic Zone

Preliminary Cost Estimation

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Project Implementation Schedule



Contents:

1. Grant Component (cost burden for Japan)
2. Counter Fund for Implementation (cost burden for Kenya)
 - a. Necessary permit
 - b. Necessary land purchase
 - c. Necessary compensation and support to the PAs
 - d. Necessary other actions
3. Counter Fund for Operation and Maintenance (cost burden for Kenya)

1. Grant Component (cost burden for Japan)

The preliminary cost estimate has not been completed due to the difficulty of estimating the procurement cost of Cargo Handling Equipment; the preliminary cost estimate by the end of June 2022.

2. Counter Fund for Implementation (cost burden for Kenya)

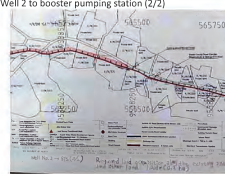
a. Necessary permits

Item	Estimated Cost (USD)
Construction permit for pipeline (PAPs)	3.0 ^{*)}
Water, Mechanical, Electrical and Plumbing (WMEP) Construction permit for Administration Building (Administrative and Office)	0.0 ^{*)}
Water permit for water supply (for 1 year)	3.0 ^{*)}
Application for installation of electricity for water supply system (water treatment and Administration Building)	0.0 ^{*)}
Application for installation of telecommunication	0.0 ^{*)}
Total	6.0

*1: 100mm depth for 40m
*2: 100mm
*3: will depend on the requirement of DL operator who will install telecommunication building

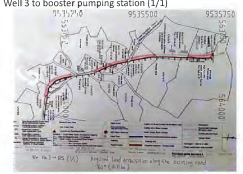
2. Counter Fund for Implementation (cost burden for Kenya)

b. Necessary land purchase and other purchase cost Well 2 to booster pumping station (2/2)



2. Counter Fund for Implementation (cost burden for Kenya)

b. Necessary land purchase and other purchase cost Well 3 to booster pumping station (1/1)



2. Counter Fund for Implementation (cost burden for Kenya)

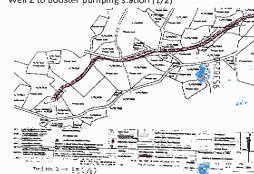
b. Necessary land purchase and other purchase cost

Item	Land Purchase Cost (USD)	Other Cost (USD)	Total Cost (USD)
1. Well 2 to booster pumping station (1/1)	1,375,000	0	1,375,000
2. Well 3 to booster pumping station (1/1)	885,000	62,000	947,000
3. Well 4 to booster pumping station (1/1)	915,000	8,000	923,000
4. Booster pump station to SLD (1/1)	0	199,000	199,000
Total	2,975,000	207,000	3,182,000

*1: Excluding costs for structures and construction

2. Counter Fund for Implementation (cost burden for Kenya)

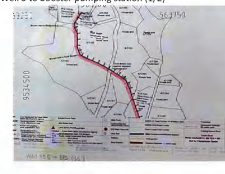
b. Necessary land purchase and other purchase cost Well 2 to booster pumping station (1/2)



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2. Counter Fund for Implementation (cost burden for Kenya)

b. Necessary land purchase and other purchase cost Well 5 to booster pumping station (1/2)



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2. Counter Fund for Implementation (cost burden for Kenya)

b. Necessary land purchase and other purchase cost Well 5 to booster pumping station (2/2)



END

2. Counter Fund for Implementation (cost burden for Kenya)

c. Based on the number of PAPs, which is the Grant Aid Project is 1/30 of entire SEZ area, required compensation and assistances budget is KES 250 million, since required budget for entire area is estimated to be KES 2,500 million.

However, the implementation of the compensation and assistance shall be conducted at once as for entire SEZ area. Therefore, it is required to grasp and secure overall budget and/or to stage-wise the implementation by given the priority to Grant Aid Project, since the project will be implemented earlier.

2. Counter Fund for Implementation (cost burden for Kenya)

d. Necessary other actions

Item	Cost Burden of Kenya (KES million)
Compensation cost between the compensation area and the existing water supply area for the entire SEZ area	250
Additional fee (contribution) by the agent bank for the compensation	max. 71
Contribution for the compensation	0.0
Compensation (resettlement and other items) (contribution) cost for the SEZ, including land lease, infrastructure and communication works (except for compensation cost)	870.7
G/A	88.0

*1: maximum
*2: to be secured through the G/A money (contribution)
*3: to be secured through the G/A money (contribution) for the entire SEZ area (including the EIA study and 22 months of implementation)
*4: to be secured through the G/A money (contribution) for the entire SEZ area (including the EIA study and 22 months of implementation)
*5: to be secured through the G/A money (contribution)

2. Counter Fund for Implementation (cost burden for Kenya)

Total cost and the breakdown

- a) Cost for permits: KES 6 million
- b) Cost for land purchase and other purchase: KES 3 million
- c) Compensation and support to PAPs: KES 250 million
- d) Cost for other actions: KES 88 million

Total cost burden for Kenya : KES 347 million

3. Counter Fund for Operation and Maintenance (cost burden for Kenya)

Annual operation and maintenance cost

Item	Cost Burden of Kenya (KES million)
Usage fee for water supply	10.00
Usage fee for electricity	11.00
Usage fee for water supply	max. 71
O&M costs for water supply construction	0.71
O&M costs for land development	0.71
Contingent	0.00
Total	13.99

*1: Cost estimated applying stated price escalation rate of 4% in the 1st year and 3% thereafter
*2: It depends on the decision of the KPA, because the 1st phase is available instead of 2nd
*3: Electricity cost: water supply or land and building rental for
*4: Employees' cost is estimated with 100% of construction period by the construction
*5: The public structure of drainage construction, etc. is not necessary.

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Annex 4

Major Undertakings to be taken by the Government of Kenya

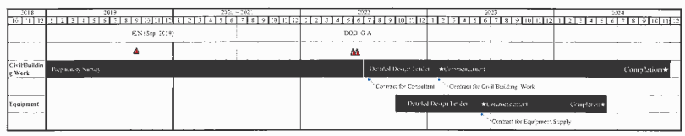
1. Specific obligations of the Government of Kenya which will not be funded with the Grant

(1) Before the Bidding

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To sign the banking arrangement (B/A) with a bank in Japan (the Agent Bank) to open a bank account for the Grant	within 1 month after the signing of the G/A	KPA		
2	To issue the authorization to pay (A/P) to the Agent Bank for the payment to the consultant	within 1 month after the signing of the contract	KPA		
3	To bear the following commissions to the Agent Bank for the banking services based upon B/A		KPA		
	1) Advising commission of A/P	within 1 month after the signing of the contract			
	2) Payment commission for A/P	every payment			
4	To obtain an approval of EIA from NEMA (cost for EIA Study supported by JICA)	before the signing of the G/A	KPA		
5	To implement Environment Management Plan (EMP) and Environmental Monitoring Plan (EMoP), and to submit the updated EMP and EMoP to JICA when any updates are made.	before the bidding	KPA		
6	To submit the environmental monitoring results to JICA, by using the monitoring form on a quarterly basis	once the monitoring completes	KPA		
7	To secure the necessary budget and implement land acquisition procedures including compensation with full replacement cost in accordance with Resettlement Action Plan (RAP) (cost for RAP Study supported by JICA)	before the notice of tender	KPA		
8	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form on a quarterly basis	until land acquisition and resettlement complete	KPA		
9	To secure and clear the Project sites	before the notice of tender	KPA		
10	To obtain the construction permits	before the notice of tender	KPA		
11	To submit the Project Monitoring Report (with the result of the detailed design)	before preparation of the bidding documents	KPA		

(B/A: Banking Arrangement, A/P: Authorization to Pay, EIA: Environmental Impact Assessment, NEMA: National Environment Management Authority, G/A: Grant Agreement)

Annex 3: Project Implementation Schedule



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(2) During the Project Implementation

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To issue A/P to the Agent Bank for the payment to the supplier(s)	within 1 month after the signing of the contract(s)	KPA		
2	To bear the following commissions to the Agent Bank for the banking services based upon the B/A 1) Advising commission of A/P 2) Payment commission for A/P	within 1 month after the signing of the contract(s) every payment	KPA		
3	To ensure prompt unloading and customs clearance at ports of disembarkation in the country of the Recipient and to assist the supplier(s) with internal transportation therein	during the Project	KPA		
4	To accord Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the products and the services such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work	during the Project	KPA		
5	To ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the country of the Recipient with respect to the purchase of the products and/or the services be exempted.	during the Project	KPA		
6	To bear all the expenses, other than those covered by the Grant, necessary for the implementation of the Project	during the Project	KPA		
7	To notify JICA promptly of any incident or accident, which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers.	during the construction	KPA		
8	To submit the Project Monitoring Reports	every month	KPA		
9	To submit the Project Monitoring Report (final)	within 1 month after issuance of Certificate of Completion for the works under the contract(s)	KPA		
10	To submit a report concerning completion of the Project	within 6 months after completion of the Project	KPA		
11	To take measure necessary for security and safety of the Project 1) Maintaining the safety of workers and the general public by thorough implementation of safety measures and immediate action in the case of accident 2) Traffic control around the site(s) and on transportation routes of construction materials 3) Installation of fences around the site(s)	during the construction	KPA		
12	To implement EMP and EMoP	during the construction	KPA		
13	To submit results of environmental monitoring to JICA, by using the monitoring form, on a quarterly basis as a part of the Project Monitoring Reports	during the construction	KPA		

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14	To implement RAP (livelihood restoration program)	for a period based on livelihood restoration program	KPA		
15	To implement social monitoring, and to submit the monitoring results to JICA, by using the monitoring form, on a quarterly basis as a part of the Project Monitoring Reports (The period of the monitoring may be extended if affected persons' livelihoods are not sufficiently restored. Extension of the monitoring will be decided based on agreement between KPA and JICA.)	until the end of livelihood restoration program (In case that livelihood restoration program is provided) - for 2 years after land acquisition and resettlement complete (In case that livelihood restoration program is not provided)	KPA		

(3) After the Project

NO	Items	Deadline	In charge	Estimated Cost	Ref.
1	To implement EMP and EMoP	for a period based on EMP and EMoP	KPA		
2	To submit results of environmental monitoring to JICA, by using the monitoring form, semiannually (The period of environmental monitoring may be extended if any significant negative impacts on the environment are found. The extension of environmental monitoring will be decided based on the agreement between KPA and JICA.)	for 3 years after the Project	KPA		
3	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid 1) Allocation of maintenance cost 2) Operation and maintenance structure 3) Routine check/Periodic inspection	After completion of the construction	KPA		

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2. Other obligations of the Government of Kenya funded with the Grant

NO	Items	Deadline	Amount (Million Japanese Yen)
1	To construct water supply facilities 1) Intake facilities 2) Transmission pipes 3) Booster pumping station 4) Main transmission pipe 5) Distribution pipe 6) Water service center 7) Connection pipe	by the Project completion	TBC
2	To improve river drainage		
3	To develop freeport D1 area 1) Earthwork/land leveling 2) Administration building 3) Building supporting work (internal road, parking area, public toilet and fence)		
4	To construct temporary access road		
5	To purchase cargo handling equipment		
6	To implement detailed design, bidding support, construction supervision (Consulting Service)		
7	Contingencies		
	Total		TBC

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Annex 5 : Tentative Procurement Schedule

	Year	2022																				
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec									
Contract 1 (Construction of D1 and Water	GA																					
	Consulting Contract																					
	Detailed Design																					
	Approval of Tender Documents																					
Contract 2 (Construction of	Tender Notice																					
	Share of Tender																					
	Tender																					
	Tender Evaluation																					
Contract 3 (Construction of	Contract Signing																					
	Detailed Design																					
	Approval of Tender Documents																					
	Tender Notice																					
Contract 4 (Construction of	Share of Tender																					
	For																					
	For																					
	For																					
Contract 5 (Construction of	For																					
	For																					
	For																					
	For																					

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Annex 6-a Environmental Checklist: 14. Water Supply(1)

Category	Environmental Item	Main Check Items	Yes: Y No: N
1 Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(a) Y (b) Y (c) N (d) N
		(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a) Y (b) Y
	(2) Explanation to the Local Stakeholders	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a) Y
2 Pollution Control	(1) Air Quality	(a) Is there a possibility that chlorine from chlorine storage facilities and chlorine injection facilities will cause air pollution? Are any mitigating measures taken? (b) Do chlorine concentrations within the working environments comply with the country's occupational health and safety standards?	(a) N (b) Y
		(a) Do pollutants, such as SS, BOD, COD contained in effluents discharged by the facility operations comply with the country's effluent	(a) Y
	(2) Water Quality	(a) Are wastes, such as sludge generated by the facility operations properly treated and disposed in accordance with the country's	(a) Y
	(3) Wastes	(a) Do noise and vibrations generated from the facilities, such as pumping stations comply with the country's standards?	(a) Y
	(4) Noise and Vibration	(a) In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	(a) N
3 Natural Environment	(1) Protected Areas	(a) Is the project site or discharge area located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	(a) N

Annex 6-a Environmental Checklist: 14. Water Supply(2)

Category	Environmental Item	Main Check Items	Yes: Y No: N
3 Natural Environment	(2) Ecosystem	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site or discharge area encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Is there a possibility that the amount of water used (e.g., surface water, groundwater) by project will adversely affect aquatic environments, such as rivers? Are adequate measures taken to reduce the impacts on the ecosystem?	(a) N (b) N (c) - (d) N
		(a) Is there a possibility that the amount of water used (e.g., surface water, groundwater) by the project will adversely affect surface water and groundwater flows?	(a) N
4 Social Environment	(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? (b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement? (c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? (d) Is the compensations going to be paid prior to the resettlement? (e) Is the compensation policies prepared in document? (f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples? (g) Are agreements with the affected people obtained prior to resettlement? (h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan? (i) Are any plans developed to monitor the impacts of resettlement? (j) Is the grievance redress mechanism established?	(a) Y (b) Y (c) Y (d) Y (e) Y (f) Y (g) Y (h) Y (i) Y (j) Not yet.

Annex 6-a Environmental Checklist: 14. Water Supply(3)

Category	Environmental Item	Main Check Items	Yes: Y No: N
4 Social Environment	(2) Living and Livelihood	(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary? (b) Is there a possibility that the amount of water used (e.g., surface water, groundwater) by the project will adversely affect the existing water uses and water area uses?	(a) Y (b) N
		(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage? Are adequate measures considered to protect these sites in accordance with the	(a) N
	(3) Heritage	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	(a) N
	(4) Landscape	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples? (b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources respected?	(a) - (b) -
	(5) Ethnic Minorities and Indigenous Peoples	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project? (b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials? (c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public health) for workers etc.? (d) Are appropriate measures taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?	(a) N (b) Y (c) Y (d) Y
	(6) Working Conditions	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)? (b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts? (c) If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts? (d) If the construction activities might cause traffic congestion, are adequate measures considered to reduce such impacts?	(a) Y (b) Y (c) Y (d) Y
5 Others	(1) Impacts during Construction		

Annex 6-a Environmental Checklist: 14. Water Supply(4)

Category	Environmental Item	Main Check Items	Yes: Y No: N
5 Others	(2) Monitoring	(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts? (b) What are the items, methods and frequencies of the monitoring program? (c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)? (d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the	(a) Y (b) Y (c) Y (d) Y
6 Note	Reference to Checklist of Other Sectors Note on Using Environmental Checklist	(a) Where necessary, pertinent items described in the Dam and River Projects checklist should also be checked. (a) If necessary, the impacts to transboundary or global issues should be confirmed (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).	(a) - (a) N

1) Regarding the term "Country's Standards" mentioned in the above table, in the event that environmental standards in the country are appropriate environmental considerations are required to be made.
In cases where local environmental regulations are yet to be established in some areas, considerations should be made based on our 2) Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking country and locality in which the project is located.

Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
(a) The report has been prepared to be submitted to NEMA for approval. (b) The ESIA Report has been approved by NEMA on 16 May 2022. (c) The ESIA Report has been approved with some conditions. The condition 2.9 of the EIA license requires separate EIA for the ten community water kiosks. Because such facilities like water kiosks are not listed in "Projects requiring submission of an EIA Study report" of Environmental Management and Co-ordination Act (2015) and establishment and operation of water kiosks will not entail any adverse environmental impact, the necessity of full EIA study needs to be confirmed with NEMA and appropriate actions shall be taken accordingly. The other conditions will be satisfied.
(a) There has been various consultation meetings involving the government bodies, local leaders and Project Affected Persons (PAPs) between January 2019 and March 2020. The information has also been shared/disclosed through meetings. The discussion summary was included in the ESIA (Ch 8) and ARAP (Ch 4), and minutes of public consultation are also attached in the ESIA and ARAP. Additional consultation meetings were held in April 2022 to explain the compensation policy, resettlement site, schedule and change in the size of D1 area (approx. 2.5ha added) and the location of a temporary road for construction. (b) The comments have been incorporated and design reviews done to capture the comments of the local residents. KPA's responses to participants' comments are also summarized in the ESIA (Table 8.7, Table 8.11, Ch 8) and ARAP (Table 4.6, Table 4.9, Ch 4). During the consultation meetings for the compensation policy on April 2022, comments on the compensation policy, resettlement site and others were received and included in the updated ARAP. There is no comments on the specific project design. Mostly, additional consultation and disclosure of NLC's eligible PAP list were requested. On this matter, disclosure of the NLC's eligible PAP list will be done at Chief's office by KPA and NLC together. The disclosure will be name of the eligible PAPs and affected structures, not the compensation amount. The compensation will be disclosed to individual eligible persons only after the disclosure of the eligible PAP list. Since the eligible PAP list will be reviewed by KPA
(a) Alternative plans have been examined for (1) no project scenario, (2) use of alternative technology for water supply, (3) the route options of the supply route and (4) disposal site options with social and environmental considerations in the ESIA (Section 9.2, Ch 9) and ARAP (Section 2.4, Ch2).
(a) Air pollution by chlorine from chlorine related facilities is not anticipated. (b) Working environment at chlorine related facilities will be managed in accordance with Occupational Safety and Health Act, 2007.
(a) Effluents will be managed to meet the standards stipulated by Environmental Management and Coordination (Water Quality) Regulations, 2006.
(a) Wastes will be managed to meet the standards stipulated by Environmental Management and Coordination (Waste Management) Regulations, 2006.
(a) Facilities will be designed to meet the standards stipulated by Environmental Management and Coordination (Noise and Excessive Vibration Pollution)(Control) Regulations, 2009.
(a) Subsidence is prevented by water resource management including monitoring of groundwater level.
(a) The project is not located in a Protected area. The worship areas known as Kaya, will not be affected.

Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
(a) The project site is located near mangrove forests but does not encompass. (b) An avian species designated as Vulnerable by IUCN redlist has been identified around the project site. However, the impact is modest as the project will not deprive their habitat. (c) There is no significant ecological impacts. (d) There is no rivers which might be affected by intake of groundwater.
(a) The water abstraction of this project will not cause the sea water intrusion and groundwater level decrease of existing wells according to numerical simulation results of past studies. In addition, the aquifer will be managed by monitoring to avoid such impacts. (Ch 6, ESIA)
(a) The number of PAP to be physically displaced is approx. 142 persons for the Project. Including other PAPs, as a total, 271 households (540 persons) will be affected in terms of loss of land access, physical displacement, land acquisition outside SEZ, or economic displacement. The impact was minimized by alternative considerations as described in ARAP (Section 2.4, Ch2). Additionally, the impact of land acquisition in the project area outside MSEZ will be reviewed in the D/D stage. (b) Consultation meetings were conducted initially in 2019-2020 for the project site outside/inside SEZ area. Additional consultation meetings with stakeholders and affected people in MSEZ area were conducted in April 2022 to disseminate information on the new compensation policy including provision of resettlement sites for PAPs in MSEZ area and other assistance prior to resettlement as well as the livelihood restoration programme after resettlement. Further consultation will be organized by KPA when the wayleave of water pipelines will be reviewed in the D/D stage as well as when the ARAP is implemented. (c) The compensation policy was developed based on the socioeconomic studies, and it includes provisions of resettlement sites and social amenities, livelihoods restoration programme, and special assistance to vulnerable. Compensation for affected structures is based on replacement cost as per Kenya regulations. (d) Compensation will be paid prior to the resettlement as mentioned in Section 6.2.1, Ch 6 in the ARAP. (e) The compensation policy is included as the entitlement matrix in Ch 6 of the ARAP. (f) The compensation policy has provision of one time cash assistance of 10,000KES for vulnerable people including physically challenged, overaged and orphanage children in the entitlement matrix of the ARAP. (g) Overall agreement with the affected people on the compensation policy was obtained during the consultation meetings conducted in 2019-20 for PAPs outside the SEZ area and in April 2022 for PAPs inside the SEZ area prior to resettlement. (h) KPA will establish the organizational framework and obtain necessary budget as described in Ch 10 Institutional Framework and Ch 11 Costs and Budget of the ARAP. (i) The monitoring plan has been established for both internal and external monitoring in Ch 12 of the ARAP. (j) Grievance redress mechanism will be established as per Ch 9 of the ARAP and has 2 channels for grievances, namely KPA for all aspects of resettlement and NLC for compensation. The GRM also has the PAPs Liaison Committee which consists of PAP representatives.

Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
(a) Income of inhabitants would be affected due to impacts on agriculture and resettlement if compensation and assistance are not properly provided. However, compensation for affected structures at replacement cost, compensation for land only for PAPs outside SEA area, trees and crops at the market price and 15% of disturbance allowance and loss of business will be provided as per Kenyan regulations. Additionally, resettlement assistance including provision of resettlement sites for PAPs in the SEZ area, money management training, vocational training for 1 PAP from each affected household, transitional assistance and special assistance for vulnerable PAPs will be provided. Also, PAPs will be given priority for employment during construction and operation stages. There is a possibility that infectious disease would be spread by construction workers. The contractor will be required to develop and carry out HIV/AIDS prevention/awareness raising plan services. The project area is a remote and sparsely populated area and construction activities are likely to increase traffic in the area. Remediation measures to minimize accidents and impacts on local communities will be prepared in the traffic management plan which will be prepared by the Contractor in the initial stage of the construction stage. The restriction of local people's movement would happen by construction vehicles and construction activities. These impacts will be minimized by the Contractor's traffic management plan as mentioned in (d). The routes should be watered to reduce dust as a mitigation measure described in the ESIA. (b) Contractor will be monitored not to affect the existing water lines. (a) Protected worship areas known as Kaya will not be affected.
(a) There are no particular landscape to be protected.
Ethnic minorities and indigenous people to be considered are not identified around the project site.
(a) KPA is not violating any laws on labour. (b) KPA and the contractor will develop an occupational safety and health plan in accordance with the laws of Kenya. (c) The measures will be planned and implemented based on the occupational safety and health plan. (c) Security guards will be educated and trained properly not to violate local safety.
(a) Measures to reduce impacts during construction have been planned in the Environmental and Social Management Plan in the ESIA. (b) Measures to reduce impacts on natural environment have been planned in the Environmental and Social Management Plan in the ESIA. (c) Measures to reduce impacts on social environment have been planned in the Environmental and Social Management Plan in the ESIA. (d) Existing traffic will be managed when construction activities need to close roads for a temporary period.

Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
(a) Monitoring program has been planned in the ESIA. (b) The details of the monitoring program are described in the ESIA report. (c) The monitoring framework has been planned in the ESIA. (d) The EIA license states that an Environmental Audit report in the first year of occupation/operation/commissioning shall be submitted.
(a) -
(a) The project will not result in any transboundary/global issues.

here the project is located diverge significantly from international standards, comparisons with appropriate standards of other countries (including Japan's experience), into account the characteristics of the project and the particular circumstances of the

Category	Environment al Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
1 Permits and Explanation	(1) EIA and Environment Permits	(a) Have EIA reports been already prepared in official process? (b) Have EIA reports been approved by authorities of the host country's government? (c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? (d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	(a) Y (b) Y (c) N (d) N	(a) This report has been prepared to be submitted to NEMA for approval. The Supplementary EIA (S-EIA) report for additional scope of temporary access road and D1 expansion is under preparation. (b) The EIA Report has been approved by NEMA on 16 May 2022. (c) The EIA Report has been approved with some conditions. The condition 2.9 of the EIA license requires separate EIA for the ten community water kiosks. Because such facilities like water kiosks are not listed in "Projects requiring submission of an EIA Study report" of Environmental Management and Coordination Act (2015) and establishment and operation of water kiosks will not entail any adverse environmental impact, the necessity of full EIA study needs to be confirmed with NEMA and appropriate actions shall be taken accordingly. The other conditions will be satisfied. (d) The following permits need to be obtained before the activities: -Permission to cut forest trees under Forest Management and Conservation Act, 2015 -Permission to cut a road under Road Act, 2007 -Water permit under Water Act, 2012 and Environmental Management and Coordination Act (EMCA), Rev.2015 -Waste disposal permit/effluent discharge permit under EMCA, Rev. 2015
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders? (b) Have the comment from the stakeholders (such as local residents) been reflected to the project design?	(a) Y (b) Y	(a) There has various consultation meetings involving the government bodies, local leaders and Project Affected Persons (PAPs) between January 2019 and March 2020. The information has also been shared/discussed through meetings. The discussion summary was included in the ESIA (Ch 3) and ARAP (Ch 4), and minutes of public consultation are also attached in the ESIA and ARAP. Additional consultation meetings were held in April 2022 to explain the revised compensation policy, resettlement site, schedule and change in the size of D1 area (approx. 2.5ha added) and the location of a temporary road for construction. (b) The comments have been incorporated and design reviews done to capture the comments of the local residents. KPA's responses to participants' comments are also summarized in the ESIA (Table 8.7, Table 8.11, Ch 8) and ARAP (Table 4.6, Table 4.5, Ch 4). During the consultation meetings for the compensation policy in April 2022, comments on the compensation policy, resettlement site and others were received and included in the updated ARAP. There is no comments on the specific project design. Mostly, additional consultation and disclosure of NLC's eligible PAP list were requested. On this matter, disclosure of the NLC's eligible PAP list will be done at Chief's office by KPA and NLC together. The disclosure will be name of the eligible PAPs and affected structures, not the compensation amount. The compensation will be disclosed to individual eligible persons only after the disclosure of the eligible PAP list. Since the eligible PAP list will be reviewed by KPA in consultation with NLC, the review is planned in June 2022, and disclosure of the list is planned in July 2022.
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	(a) Y	(a) Alternative plans have been examined for (1) project scenario, (2) use of alternative technology for water supply, (3) the route options of the supply route and (4) disposal site options with social and environmental considerations in the ESIA (Section 9.2, Ch 9) and ARAP (Section 2.4, Ch2).

Category	Environment al Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
2. Pollution Control	(1) Air Quality	(a) Is there a possibility that air pollutants emitted from the project-related sources, such as vehicles traffic will affect ambient air quality? Does ambient air quality comply with the country's air quality standards? Are any mitigating measures taken? (b) Where industrial areas already exist near the route, is there a possibility that the project will make air pollution worse?	(a) Y (b) N	(a) The emission of temporal dust and exhaust gases from construction vehicle and equipment during the construction are anticipated while frequent traffic is not anticipated during the operation stage because the other port access road will be used for operation of free port zone. The ambient air quality in the area of road construction site complies with Kenya's air quality standard. Several prevention measures of dust and other air pollutants are provided in EMP. (b) There are no industries around the proposed site. There is therefore no significant air pollution from activities.
	(2) Water Quality	(a) Is there a possibility that soil runoff from the bare lands resulting from earthmoving activities, such as cutting and filling will cause water quality degradation in downstream water areas? (b) Is there a possibility that surface runoff from roads will contaminate water sources, such as groundwater? (c) Do effluents from various facilities, such as parking areas/service areas comply with the country's effluent standards and ambient water quality standards? Is there a possibility that the effluents will cause areas not to comply with the country's ambient water quality standards?	(a) Y (b) N (c) N	(a) There are proposed structures to prevent the flow of soil runoff to the ocean. (b) There is no possibility of contaminating groundwater. There are no wells or boreholes in the project area and other open water sources. (c) The effluents from the facility in D1 area will be treated complying with Kenya's effluent standards.
	(3) Wastes	(a) Are wastes generated from the project facilities, such as parking areas/service areas, properly treated and disposed of in accordance with the country's regulations?	(a) Y	(a) The wastes generated during construction shall be disposed in licensed waste handling facility in Mombasa. During operation the Mombasa County Government will be responsible for handling the wastes generated.
	(4) Noise and Vibration	(a) Do noise and vibrations from the vehicle and train traffic comply with the country's standards?	(a) Y	(a) There would be some noise and vibration increased during construction. However, the impact is limited and temporary. Because the SEZ area is sparsely populated, the noise and vibrations from the construction vehicles will not result in significant disturbance to the residents of the area. Furthermore, since the temporary road will be used for construction works and not for permanent access road, noise and vibrations which exceed the country's standards are not anticipated during the operation stage of the Project. The temporary road might be affected by local people during the operation of D1 area, but the traffic volume will be limited. To confirm noise and vibration levels by the project, noise and vibration will be monitored and appropriate countermeasures shall be taken during both construction and operation phases.
3. Natural Environment	(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	(a) N	(a) The project is not located in a Protected area. The close protected washup areas known as Kaya, will not be affected.

Category	Environment al Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
(2) Ecosystem	(a) Does the project site encompass primary forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? (b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? (c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? (d) Are adequate protection measures taken to prevent impacts, such as disruption of migration routes, habitat fragmentation, and traffic accident of wildlife and livestock? (e) Is there a possibility that installation of roads will cause impacts, such as destruction of forests, poaching, desertification, reduction in wetland areas, and disturbance of ecosystems due to introduction of exotic (non-native invasive) species and pests? Are adequate measures for preventing such impacts considered? (f) In cases the project site is located at undeveloped areas, is there a possibility that the new development will result in extensive loss of natural environments?	(a) Y (b) N (c) Y (d) Y (e) N (f) N	(a) The project site is near the Mangrove forest. The impact assessment carried has established that there will be no considerable destruction. (b) The Project site does not encompass any protected habitats. (c) There is no significant ecological impacts that were anticipated during the survey. (d) Ecosystem monitoring will be carried out during both construction and operation phases. Adequate protection measures shall be taken in case some impacts occurred. (e) There is no possibility of these effects and necessary measures have been offered for monitoring during project implementation. (f) The project will not result in significant loss of the natural environment, through the land development for the entire project area will require clearing of around 5,567 trees. By implementation of EMP, the number of trees logged will be minimized and reforestation will be carried out.	
(3) Hydrology	(a) Is there a possibility that alteration of topographic features and installation of structures, such as tunnels will adversely affect surface water and groundwater flows?	(a) N	(a) There is no major alteration of the topography and tunneling works to be done. The leveling works to be done at the Site (ground D1) is not likely to affect the ground water.	
(4) Topography and Geology	(a) Is there any soil ground on the route that may cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides, where needed? (b) Is there a possibility that civil works, such as cutting and filling will cause slope failures or landslides? Are adequate measures considered to prevent slope failures or landslides? (c) Is there a possibility that soil runoff will result from cut and fill areas, waste soil disposal sites, and borrow sites? Are adequate measures taken to prevent soil runoff?	(a) N (b) Y (c) Y	(a) There are no slopes that can result in landslides. (b) There is no possibility of slope failures. (c) There is a possibility that soil runoff may result from the cut and fill areas but necessary measures have been put to prevent this by building structures to prevent the flow of the soil into the ocean.	

Category	Environment al Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
4. Social Environment	(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? (b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement? (c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? (d) Are the compensations going to be paid prior to the resettlement? (e) Are the compensation policies prepared in document? (f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples? (g) Are agreements with the affected people obtained prior to resettlement? (h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan? (i) Are any plans developed to monitor the impacts of resettlement? (j) Is the grievance redress mechanism established?	(a) Y (b) Y (c) Y (d) Y (e) Y (f) Y (g) Y (h) Y (i) Y (j) Not yet	(a) The number of PAP to be physically displaced is approx. 142 persons for the Project. Including other PAPs, as a total, approx. 271 households (540 persons) will be affected in terms of loss of land access, physical displacement, and acquisition outside SEZ, or economic displacement. The impact was minimized by alternative compensation as described in ARAP (Section 2.4, Ch2). (b) Additional consultation meetings with stakeholders and affected people in MSEZ area were conducted in April 2022 to disseminate information on the new compensation policy including provision of resettlement sites for PAPs in MSEZ area and other assistance prior to resettlement as well as the livelihood restoration programs after resettlement. (c) The compensation policy was developed based on the socioeconomic studies, and it includes provisions of resettlement sites and social amenities, livelihoods restoration programs, and special assistance to vulnerable. Compensation for affected structures is based on replacement cost as per Kenya regulations. (d) Compensation will be paid prior to the resettlement as mentioned in Section 6.2.1, Ch 6 in the ARAP. (e) The compensation policy is included as the entitlement matrix in Ch 6 of the ARAP. (f) The compensation policy has provision of one time cash assistance of 10,000KES for vulnerable people including physically challenged, overaged and orphanage children in the entitlement matrix of the ARAP. (g) Overall agreement with the affected people on the compensation policy was obtained during the consultation meetings conducted in April 2022 prior to resettlement. (h) KPA will establish the organizational framework and obtain necessary budget as described in Ch 10 Institutional Framework and Ch 11 Costs and Budget of the ARAP. (i) The monitoring plan has been established for both internal and external monitoring in Ch 12 of the ARAP. (j) Grievance redress mechanism will be established as per Ch 9 of the ARAP and has 2 channels for grievances, namely KPA for all aspects of resettlement and NLC for compensation. The GRM also has the PAPs Liaison Committee which consists of PAP representatives.
	(2) Living and Livelihood	(a) Where roads are newly installed, is there a possibility that the project will affect the existing means of transportation and the associated workers? Is there a possibility that the project will cause significant impacts, such as extensive alteration of existing land uses, changes in sources of livelihood, or unemployment? Are adequate measures considered for preventing these impacts? (b) Is there any possibility that the project will adversely affect the living conditions of the inhabitants other than the target population? Are adequate measures considered to reduce the impacts, if necessary? (c) Is there any possibility that diseases, including infectious diseases, such as HIV will be brought due to immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?	(a) N (b) Y (c) Y (d) Y (e) Y	(a) It is not anticipated since the project will construct a temporary access road within the SEZ Project area. The scope is described in Section 2.2.1 and Figure 2.2 of the ARAP. As for livelihood of inhabitants, it would be affected due to impacts on agriculture and resettlement, if compensation and assistance are not properly provided. However, compensation for affected structures at replacement cost, compensation for trees and crops at the market price and 15% of disturbance allowance and loss of business will be provided as per Kenya regulations. Additionally, resettlement assistance including a resettlement site, money management training, vocational training for 1 PAP from each affected household who need to change jobs, transitional assistance and special assistance to vulnerable PAPs will be provided. Also, PAPs will be given priority for employment during construction and operation stages. (b) The project might cause some inconvenience for non-PAP residents along the water supply pipeline in terms of crossing the existing road, noise and dust during construction. The mitigation measures are prepared in the

Category	Environment al Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
		(d) Is there any possibility that the project will adversely affect road traffic in the surrounding areas (e.g., increase of traffic congestion and traffic accidents)? (e) Is there any possibility that roads will impede the movement of inhabitants? (f) Is there any possibility that structures associated with roads (such as bridges) will cause a sun shading and radio interference?		EMP and will be prepared in the traffic management plan in the initial construction stage. (c) There is a possibility that infectious disease would be spread by construction workers. The contractor will be required to develop and carry out HIV/AIDS prevention/awareness raising plan services. (d) The project area is a remote and sparsely populated area and construction activities are likely to increase traffic in the area. Remediation measures to minimize accidents and impacts on local communities will be prepared in the traffic management plan which will be prepared by the Contractor in the initial construction stage. (e) The restriction of local people's movement would happen by construction vehicles and construction activities. These impacts will be minimized by the Contractor's traffic management plan as mentioned. The routes should be widened to reduce dust as a mitigation measure described in the ESIA. (f) There are no bridges or such structures in project area.
4 Social Environment	(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage? Are adequate measures considered to protect these sites in accordance with the country's laws?	(a) N	(a) There are no such possibility since the available heritage sites and other protected areas are identified in the ESIA and consultation meetings and located at a significant distance.
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	(a) N	(a) The local landscape will not be adversely affected in temporary road alignment. Though the cutting and filling work will partially alter the landscape in D1 area, the area is sparsely populated and it will not result in significant disturbance to local landscape.
	(5) Ethnic Minorities and Indigenous Peoples	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples? (b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources to be respected?	(a) N (b) N	(a) There are no ethnic minorities and indigenous people in the project area. (b) No Indigenous people in the project area.
	(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project? (b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials? (c) Are tangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public health) for workers etc.? (d) Are appropriate measures being taken to ensure that security guards involved in the project not to violate safety of other individuals involved, or local residents?	(a) N (b) Y (c) Y (d) Y	(a) The project proponent KPA is not violating any law on labour. (b) KPA and the contractor will develop an occupational safety and health plan in accordance with the laws of Kenya. (c) The measures will be planned and implemented based on the occupational safety and health plan. (d) Security guards will be educated and trained properly not to violate local safety.

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Category	Environment al Item	Main Check Items	Yes: Y No: N	Confirmation of Environmental Considerations (Reasons, Mitigation Measures)
5 Others	(1) Impacts during Construction	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)? (b) If construction activities adversely affect the natural environment (ecosystems), are adequate measures considered to reduce impacts? (c) If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts?	(a) Y (b) Y (c) Y	(a) Measures to reduce impacts during construction have been planned in the Environmental and Social Management Plan in the ESIA. (b) Measures to reduce impacts on natural environment have been planned in the Environmental and Social Management Plan in the ESIA. (c) Measures to reduce impacts on social environment have been planned in the Environmental and Social Management Plan in the ESIA.
	(2) Monitoring	(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts? (b) What are the items, methods and frequencies of the monitoring program? (c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)? (d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	(a) Y (b) Y (c) Y (d) Y	(a) Monitoring program has been planned in the ESIA. (b) The details of the monitoring program are described in the ESIA report. (c) The monitoring framework has been planned in the ESIA. (d) The EIA license states that an Environmental Audit report in the first year of occupation/operation/commissioning shall be submitted.
6 Note	Reference to Checklist of Other Sectors	(a) Where necessary, pertinent items described in the Forestry Projects checklist should also be checked (e.g. projects including large areas of deforestation). (b) Where necessary, pertinent items described in the Power Transmission and Distribution Lines checklist should also be checked (e.g. projects including installation of power transmission lines and/or electric distribution facilities).	(a) N (b) N	(a) There is no possibility of large area deforestation according to the adapted alignment. (b) There is no installation of power line and distribution lines for this project.
	Note on Using Environmental Checklist	(a) If necessary, the impacts to transboundary or global issues should be confirmed, if necessary (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, or global warming).	(a) N	(a) The project will not result in any transboundary/global issues.

1) Regarding the term "Country's Standards" mentioned in the above table, in the event that environmental standards in the country where the project is located diverge significantly from international standards, appropriate environmental considerations are required to be made. In cases where local environmental regulators are yet to be established in some areas, considerations should be made based on comparisons with appropriate standards of other countries (including Japan's experience).
2) Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking into account the characteristics of the project and the particular circumstances of the country and locality in which it is located.

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Annex 7: List of Key Actions

List of key actions to conditions of EIA License

No.	Conditions	Responding
1.0	General Conditions	
1.1	This project is for Infrastructure development comprising the construction of approximately 46 km water transmission and distribution pipelines, Booster Pumping Station, 1000m ³ reservoir, 100ha land grading, drainage improvement works, associated works, facilities and amenities at the Mombasa Special Economic Zone traversing Kwale and Mombasa Counties.	No specific action by KPA is required.
1.2	The license shall be valid for 24 months (time within which the project shall commence from the date hereof).	In case that the project does not commence within 24 months, KPA will obtain a license renewal from NEMA to extend EIA license validity periods.
1.3	The Director General shall be notified of any transfer, variation or surrender of this license.	No specific action by KPA is required.
1.4	Without prejudice to the other conditions of this license, the proponent shall implement and maintain an environmental management system, organizational structure and allocate resources that are sufficient to achieve compliance with the requirements and conditions of this license.	KPA will ensure to implement and maintain an environmental management system, organizational structure and allocate resources as per EMP and EMAP following the Environmental (Impact Assessment and Audit) Regulations (2003) and JICA guidelines for Environmental and Social Conditions (2010).
1.5	The Authority shall take appropriate action against the proponent in the event of breach of any of the conditions stated herein or any contravention to the Environmental Management and Coordination Act, 1999 and regulations therein.	No specific action by KPA is required.
1.6	This license shall not be taken as statutory defence against charges of environmental degradation or pollution in respect of any manner of degradation/pollution not specified herein.	No specific action by KPA is required.
1.7	The proponent shall ensure that records on conditions of licenses/ approval and project monitoring and evaluation shall be kept on the project site for inspection by NEMA's Environmental Inspectors.	KPA will keep all records and documentation related to EIA licenses and environmental monitoring of the Project in KPA office.
1.8	The proponent shall submit an Environmental Audit report in the first year of occupation/operations/commissioning to confirm the efficacy and adequacy of the Environmental Management Plan.	KPA will prepare an Environmental Audit report, in cooperation with other parties related to implementation of the Project such as CWWDA, which will be responsible for operation of water supply facilities of the Project. In case of the operation of D1 area will be sublet or contracted out to the other party, preparation and implementation of EMP will be the condition for the operator and environmental audit report will be submit to NEMA in the first year of their operation.
1.9	The proponent shall comply with NEMA's improvement orders throughout the project cycle.	KPA will comply NEMA's improvement orders in case that such orders are issued.

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2.0	Construction Conditions	
2.1	The proponent shall obtain the requisite approvals/permissions from the County Governments of Kwale and Mombasa, Water Resource Authority, Coast Water Works Development Agency and all other relevant Authorities prior to commencement of works.	KPA will obtain the following approvals/permissions prior to commencement of construction: ✓ Permission from Kenya Forest Service to remove or replant project affected trees ✓ Construction permit on water supply pipelines in the public lands (AT Highway: KCH/NA/CGR/RA, other roads: Mombasa or Kwale County Government) ✓ Construction permits on a booster pumping station in the premises of the TWI office of CWWDA, ✓ Agreement on water supply with Kwale County Agreement on construction of a new connection pipe with the existing water distribution pipe of Mombasa County
2.2	The proponent shall put up a project signboard as per the Ministry of Transport and Infrastructure standards showing the NEMA EIA license number among other details.	KPA will put up a project signboard at construction site as mentioned in the condition 2.2.
2.3	The proponent shall seek authorization from the Water Resources Authority for the proposed the drainage improvement works and for water abstraction prior to commencement of works.	The water abstraction permit for the Project was already obtained. As for the drainage improvement works, KPA will confirm with WRA for further necessary action to be taken and will follow their instruction.
2.4	The proponent shall ensure that the drainage improvement works do not divert the natural water caseaway and their design capacities shall be adequate to contain the projected highest flood flow.	Any construction works which will divert the natural water caseaway are not planned in the scope of the Project. The drainage pipe will be constructed under the structure of temporary road so that natural water caseaway will have enough capacities for stormwater flow.
2.5	The proponent shall ensure strict adherence to the provisions of Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.	KPA will ensure it in contract documents with construction contractors that any construction works shall comply with conditions of EIA license of the Project including provisions of Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.
2.6	The proponent shall ensure strict adherence to the Occupational Safety and Health Act (OSHA), 2007.	In contract documents with construction contractors, KPA will require construction contractors to comply with conditions of EIA license of the Project including the Occupational Safety and Health Act (OSHA), 2007.
2.7	The proponent shall ensure relocation, compensation and restoration of livelihoods for any project affected persons (PAPs) and develop a consultative plan for emerging issues and grievance redress mechanisms (GRM) as shall be prescribed in the Resettlement Action Plan (RAP).	KPA will ensure relocation, compensation and restoration of livelihoods for PAPs as per Abbreviated Resettlement Action Plan (ARAP) of the Project. KPA will also continue consultation with PAPs based on the ARAP and JICA Guidelines for Environmental and Social Considerations (2010) and develop GRM as per ARAP.
2.8	The proponent shall continually consult with the County Governments of Kwale and Mombasa to ensure that pertinent issues relating to equitable sharing of the abstracted water are resolved amicably to ensure project sustainability.	Sharing water or operation of the water kiosks will be under community management for the equitability, and the water resource will be under management of CWWDA, as CWWDA has technical expertise in maintaining the sustainability of water resources. The coordination during the operation between the communities and CWWDA will be secured as common practice on the water kiosk operation.

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2.9	The proponent shall undertake separate Environmental Impact Assessments for the ten community water kiosks.	Since water kiosks are not listed in 'Projects requiring submission of an EIA Study report' of Environmental Management and Coordination Act (2013), and establishment and operation of water kiosks will not entail any adverse environmental impact, the necessity of full EIA study needs to be confirmed with NEMA and appropriate actions shall be taken by KPA accordingly.
2.10	The proponent shall ensure that workers are provided with adequate personal protection equipment (PPE), sanitary facilities as well as adequate training.	In contract documents with construction contractors, KPA will require construction contractors to provide their workers with PPE, sanitary facilities as well as adequate training.
2.11	The proponent shall ensure strict adherence to the provisions of the National Construction Act of 2011.	In contract documents with construction contractors, KPA will require construction contractors to comply with the conditions of EIA license of the Project including the adherence to the National Construction Act of 2011.
2.12	The proponent shall ensure that no excavated debris or other forms of wastes are disposed off or deposited in the rivers.	In contract documents with construction contractors, KPA will require construction contractors to prepare waste management plan where such illegal waste disposal shall be prohibited.
2.13	The proponent shall ensure stabilization of excavated grounds to prevent soil erosion and mass washout.	At DI area where the large scale of excavation will be required, it is designed that the excavated grounds will be conducted step-wise with gentle slope design, and it will be compacted for the embankment site. However, during the construction, earth work would entail soil erosion and sediment runoff especially in rainy seasons. Therefore, in contract documents with construction contractors, KPA will require contractors to prepare an EMP where measures and monitoring against sediment runoff shall be included.
2.14	The proponent shall ensure that all excavated material and debris is collected, re-used and where need be, disposed of as per the Environmental Management and Coordination (Waste Management) Regulations of 2006.	In contract documents with construction contractors, KPA will require construction contractors to prepare a waste management plan where segregation, re-use and recycle and adequate disposal of waste shall be conducted.
2.15	The proponent shall ensure that activities are undertaken during the day between 0800hrs and 1800hrs and on Saturday between 0800hrs to 1300hrs. No work shall be undertaken on Sundays, and that transportation of construction material to and from site is undertaken during weekdays and Saturdays only during the hours specified herein.	In contract documents with construction contractors, construction activities will be allowed during weekdays and Saturday only during the hours specified in the condition.
2.16	The proponent shall ensure that the development adheres to zoning specifications issued for development of such a project within the jurisdiction of the County Government of Kwale and Mombasa with emphasis on approved land use for the area.	Coordination with the County Governments were made during the master plan stage of the Project, and it was integrated with their land use plan.
2.17	The proponent shall ensure strict adherence to the Environmental Management Plan (EMP) developed throughout the project cycle.	KPA will ensure strict adherence to the EMP of the Project in line with the Environmental (Impact Assessment and Audit) Regulations (2003) and JICA Guidelines for Environmental Social Considerations (2010).
3.0	Operational Conditions	
3.1	The proponent shall adhere to the conditions issued by the Water Resource Authority for in-water works and water use permits.	The water abstraction permit for the Project has been already obtained and the conditions will be followed by CWWDA.

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3.2	The proponent shall maintain the drainage improvement infrastructure to ensure unobstructed water flow throughout the project cycle.	The inwater works are not planned in the scope of the Project. As for the drainage improvement works, KPA will confirm with WRA for further necessary action to be taken and will follow their instruction.
3.3	The proponent shall ensure that sanitary facilities are constructed at suitable places so as to avoid contamination of water bodies and the subsequent water-borne diseases/vectors.	It is designed that wastewater from toilets at administration building of DI area and water supply administration building will be treated by septic tank system to meet with NEMA's effluent standards not to contaminate water bodies downstream.
3.4	The proponent shall ensure that the chemicals used for water treatment (such as Alum) are appropriately handled and disposed off as provided for in their respective Material Safety Data Sheets.	Chlorine injection facilities will be installed Booster Pumping Station and Water Service Center. In the handling over certificates for water supply facilities, KPA will require CWWDA to comply with the conditions of EIA license of the Project as to secure appropriate storage, usage and disposal of chlorine.
3.5	The proponent shall ensure that all waste water is disposed as per the standards set out in the Environmental Management and Coordination (Water Quality) Regulations of 2006.	Wastewater from toilets at administration building of DI area and water supply administration building will be treated by septic tank system to meet with NEMA's effluent standards. In the handling over certificates for water supply facilities, KPA will require CWWDA to comply with the conditions of EIA license of the Project. As for the operation of DI area, KPA will monitor and control wastewater complying with Environmental Management and Coordination (Water Quality) Regulations of 2006.
3.6	The proponent shall ensure strict adherence to the provisions of the Environmental Management and Coordination (Air Quality) Regulations of 2014.	Though it is expected that there will be no emission sources of the Project which could cause a significant adverse impact on air quality during operation, KPA will comply with the provisions of the Environmental Management and Coordination (Air Quality) Regulations of 2014.
3.7	The proponent shall ensure that appropriate and functional efficient air pollution control mechanisms are installed to control all air emissions.	During operation, there will be no emission sources of the Project which could cause a significant adverse impact on air quality. However, KPA will ensure to take appropriate measures if such pollutant emissions are observed or expected.
3.8	The proponent shall ensure that all drainage facilities are fitted, with adequate functional oil water separators and silt traps.	During operation, there will be no facilities or activities which could discharge an oil or silt. However, if such facilities like an oil storage tank are installed in the free port zone, KPA will ensure to install appropriate measures to prevent the water pollution of public water body.
3.9	The proponent shall ensure that rain water harvesting facilities are provided to supplement surface and ground water.	By the construction of the port access road by other project, the natural rainwater retaining basin will be created close to a part of the Project area, and it will have such function of rain water harvesting.
3.10	The proponent shall ensure that all equipment used are well maintained in accordance with the Environmental Management and Coordination (Noise and Excessive Vibration Pollution Control) Regulations of 2009.	In the agreement with CWWDA, it was stated to ensure proper operation and maintenance, which means all equipment used for water supply are well maintained in accordance with the relevant regulations and standard. Furthermore, in the handling over certificates for water supply facilities, KPA will require CWWDA to comply with the conditions of EIA license of the Project to ensure appropriate control of noise and vibration.

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3.11	The proponent shall ensure that all solid waste is handled in accordance with the Environmental Management and Coordination (Waste Management) Regulations of 2006.	As for the operation of DI area, KPA will ensure that all equipment used for free port operation are well maintained as well. In the handling over certificates for water supply facilities, KPA will require CWWDA to comply with the conditions of EIA license of the Project to ensure appropriate waste management.
3.12	The proponent shall ensure that all workers are well protected and trained as per the Occupational Safety and Health Act (OSHA) of 2007.	In the handling over certificates for water supply facilities, KPA will require CWWDA to comply with the conditions of EIA license of the Project to ensure appropriate management of occupational safety and health for all workers. As for the operation of DI area, KPA will ensure the management of Occupational Safety and Health in workplace as per EMP.
3.13	The proponent shall comply with the relevant principal laws, by-laws and guidelines issued for development of such a project within the jurisdiction of the County Government of Kwale and Mombasa, Kenya Forest Service, Ministry of Health, Kenya Rural Roads Authority, Ministry of Land, Housing and Urban Development, Water Resources Authority, and other relevant Authorities.	In the handling over certificates for water supply facilities, KPA will require CWWDA to comply with the conditions of EIA license of the Project to ensure adherence to relevant laws and regulations of Kenya. As for the operation of DI area, KPA will comply with relevant laws and regulations of Kenya as well.
3.14	The proponent shall ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as soil erosion control, functional storm drainage, catchment protection, ground water recharge, river pollution prevention, and equitable water supply mechanisms are designed, constructed and employed simultaneously with the proposed project.	Related to equitable water supply, 10 water kiosks are designed based on opinions from local communities and other stakeholders and will be managed by local communities for securing equitability. As for the operation of DI area, KPA will ensure to prevent pollution and ecological deterioration including soil erosion control, storm drainage and catchment protection as per EMP. In the handling over certificates for water supply facilities, KPA will require CWWDA to comply with the conditions of EIA license of the Project including the implementation of EMP to prevent pollution and ecological deterioration though such specific issues are not expected. Ground water recharge will be made at a retention pond beside DI area which KPA will be responsible for management. KPA will be responsible to take measures to prevent soil erosion control, storm drainage and river pollution prevention at temporary road area, if such issues are confirmed.
4.0	Notification Conditions	
4.1	The proponent shall seek written approval from the Authority for any operational changes under this license.	In case that there are any operational changes under this license, KPA will notify NEMA of such changes and obtain written approval from NEMA.
4.2	The proponent shall ensure that the Authority is notified of any malfunction of any system within 12 hours on the NEMA hotline No. 020 6005041/0786101100 and mitigation measures put in place.	KPA will notify NEMA and take mitigation measures according to the conditions 4.2 in case that the Project cause any malfunctions of environmental management system such as environmental accident.
4.3	The proponent shall keep records of all pollution incidences and notify the Authority within 24 hours.	KPA will keep records of all pollution incidences and notify NEMA within 24 hours in cooperation with other

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4.4	The proponent shall notify the Authority in writing of its intent to decommission the facility three(3) months in advance.	parties related to implementation of the Project such as CWWDA. In case that facilities of the Project are decommissioned, KPA will issue a letter to NEMA to notify the decommission plan three months prior to decommission works.
5.0	Decommissioning Conditions	
5.1	The proponent shall ensure that a decommissioning plan is submitted to the Authority for approval at least three (3) months prior to decommissioning.	KPA will prepare and submit a decommissioning plan to KPA when facilities of the Project are decommissioned.
5.2	The proponent shall ensure that all pollutants and polluted material is contained and adequate mitigation measures provided during the phase.	In a decommissioning plan, KPA will clarify if such pollutants or polluted material will be generated and also clarify adequate treatment or disposal method according to Environmental Management and Coordination (Waste Management) Regulations, 2006.

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Annex 8-a: Environmental and Social Management Plan

Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Pre-construction				
Ecosystem	Vegetation loss	<ul style="list-style-type: none"> Prepare a reforestation plan in consultation with KFS 	KPA DD Consultant	KPA
Land acquisition and resettlement	Displacement of residents due to land acquisition requirement, relocation of structures	<ul style="list-style-type: none"> Implement appropriate and efficient compensation in accordance with ARAP Conduct internal and external monitoring to ensure the proper implementation of relocations Establish and operate a Grievance Redress Mechanism (GRM) Continuous stakeholder engagement to avoid any conflicts Appropriate compensation and assistance to socially vulnerable people shall be implemented as per ARAP 	KPA	NLC
Socially vulnerable people	The socially vulnerable people are sensitive to the environmental changes associated with resettlement		KPA	NLC
Livelihood	Income decreases due to impacts on agriculture	<ul style="list-style-type: none"> Income restoration measures shall be developed by ARAP 	KPA	NLC
Local economy such as employment and livelihood	Loss of income due to land acquisition requirement; relocation of structures and fruit trees	<ul style="list-style-type: none"> Compensation and assistance based on ARAP Sufficient budget for the livelihood restoration 	KPA	NLC
Landscape	Some restrictions on the local land use associated with the	<ul style="list-style-type: none"> Ensure the compensation livelihood restoration against some restrictions on the local land 	KPA	NLC

Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
	land acquisition requirement			
Undisturbance of benefits and damages	Modification of benefits and damages	<ul style="list-style-type: none"> The relocation of PAPs to be guided by the ARAP for the general project and KPA's Compensation Framework prepared for the MSEZ area The ARAP identified the rightful PAHs and provide compensation and assistance to mitigate the negative impacts on PAHs Give priority to PAPs on employment opportunities arising from the project during construction and operation in consultation with the existing PAP committee 	KPA	KPA
Local conflicts of interest	Conflicts for water usage as well as land acquisition requirement and resettlement	<ul style="list-style-type: none"> Explanation and seeking understanding from the communities on the project and impact on water resources NLC and KPA will verify the rightful PAHs to receive compensation and assistance in relevant local government and local leaders Establish the KPA's Grievance Redress Mechanism (GRM) as per the ARAP to solve resettlement related grievance Establish environmental related QDM together with the Contractor during construction KPA will monitor and solve grievances during operation Continue communication with PAHs and local communities to share the progress of the Project with them and identify potential grievances at the early stage Conduct the internal and external social monitoring as per the ARAP and ESIA 	KPA for overall grievance; NLC for compensation related grievance	KPA
Cultural heritage	Negative impact on the potential cultural heritage	<ul style="list-style-type: none"> Prohibit access entry to the cultural heritage areas 	KPA	NMK
	Activities not to affect and degrade the sacred places/sites	<ul style="list-style-type: none"> Avoidance of impacts on the sacred places/sites through the temporary management of resettlement activities, which should be considered and guided by consultation with Kapa elders, local communities and NMK, depending on other SEZ area's development progress 	KPA	NMK

Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Gender	Negative impact on women by the project due to the local patriarchal tradition	<ul style="list-style-type: none"> Guidance and supervision to ensure that women would not be treated unfairly for compensations, assistance to the vulnerable people, and livelihood restoration 	KPA	KPA
During construction				
Air pollution	Temporary emissions of dusts and exhaust gases from the construction vehicles and machinery	<ul style="list-style-type: none"> Ensure compliance with the Environmental Management and Coordination (EMC) (Air Quality) regulations Establish regular inspection program for equipment If visual observations identify vehicles emitting pollutants (such as soot), they must not be operated until they have been repaired Carry out the regular maintenance of vehicles and auxiliary vehicles without an appropriate inspection certificate must not be operated In order to prevent the generation of dusts, drive slowly on unpaved regional roads Trucks to transport the residual soil shall be provided with a cover for the entire loading platform to prevent dusts from scattering The cement asphalt plant shall be of appropriate quality so as not to release pollutants, and it shall be properly maintained Sprinkle water regularly on the access roads and in the construction site to prevent dusts When trucks transport scattering loads such as sand, stone or mud, cover their loading platform with an appropriate cover Provide PPEs including dust masks, eye goggles and coveralls Do not drive or enforce speed limits as much as possible near the residential areas and schools Avoid the long-distance transport whenever possible by the use of resources and material in nearby areas 	Construction Contractor	KPA Construction Supervision Consultant
	Greenhouse gases as emissions when transporting construction materials		Construction contractor	KPA Construction Supervision Consultant

Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Water pollution	Turbid run-off water from the construction site	<ul style="list-style-type: none"> The soil at the land preparation site will be stabilized by appropriate measures Temporary soil erosion control measures (e.g., covering with prevention sheet, sedimentation ponds) will be in place as required during the land development work and earth work Install silt curtains to prevent contamination from spreading where needed Such mitigation measures should be undertaken to minimize the possible adverse impact which could additionally deteriorate the water quality in natural stream, taking into consideration the current situation where it was found that the baseline water quality is contaminated by some toxic, inorganic and organic pollutants 	Construction contractor	KPA Construction Supervision Consultant
	Discharge of untreated contaminated water from a concrete pump and other possible sources	<ul style="list-style-type: none"> Before abstracting and discharging water, the contractor must acquire permits from WRA Water containing any pollutants (e.g. oil and lubricants) shall be discharged into a contingency tank for removal from construction site Prohibit the release of untreated concrete washing water to the environment Concrete washing water shall be treated at the designated facility If releases to the environment are required, obtain a permission from NEMA in accordance with the Environmental Management and Coordination Act Collect and reuse washing water as much as possible Potential pollutants of any kind and in any form shall be kept, stored and used in a such a manner that any escape can be contained and the water table not endangered Wash areas shall be placed and constructed in such a manner so as to ensure that the surrounding area (including surface water bodies) are not polluted The contractor must act promptly on remedying any pollution incidents on site Storage areas or secondary containment should be constructed of water proof reinforced concrete or approved equivalent, which is not 	Construction contractor	KPA Construction Supervision Consultant

Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Soil contamination	Accidental oil spills to ground from the heavy equipment	<ul style="list-style-type: none"> adversely affected by contact with chemicals captured within HERS. Ensure compliance with the Water Act and the EMC (Water Quality) regulations Construction vehicles and machinery will be inspected regularly for prevention of oil and fuel leakage. Vehicles and machinery with problems will not be operated until their repairs are completed. Maintenance shall be carried out at designated facilities equipped with pollution control devices. Devices to respond to oil leaks (ex. absorbents) shall be in place for the immediate use at the construction site. Fuel tanks will be installed on an impervious foundation with spill-prevention walls. 	Construction contractor	KPA Construction Supervision Consultant
	Soil contamination by the earth fill work if the cut earth originally polluted	<ul style="list-style-type: none"> Soil contamination survey shall be carried out before the earth-fill and cut-earth works. 	Construction contractor	KPA Construction Supervision Consultant
Waste	Generation of construction waste	<ul style="list-style-type: none"> Minimize waste generation at source and through its reuse and recycling. Waste will be stored in designated containers at designated locations. Waste will be collected and disposed only by NEMA certified companies. The contractor will develop a construction waste management plan in consultation with the county government and identify the various routes to be generated and their storage and disposal procedures. Appropriate storage of construction remains and measures to prevent soil runoff. Provision of sanitary facilities for use by workers. Compliance with EMC (Waste Management) Regulations. 	Construction contractor	KPA NEMA Construction Supervision Consultant
Noise and vibration	Noise and vibration from construction	<ul style="list-style-type: none"> Restrict works to the nights, Saturday afternoon and Sundays. In principle, transportation of the surplus soil and the excavation of 	Construction contractor	KPA/NEMA

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Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Ground subsidence	vehicles, machines and pile driving	<ul style="list-style-type: none"> Process for the installation of pipelines are not allowed at night. Establish a speed limit for trucks to transport construction the surplus soil. Control noise emission characteristics during selection and mobilization of construction equipment: with preference to low noise technology. Operate vehicles and machines equipped with exhaust mufflers where feasible and perform regular maintenance operations. Avoid driving on roads passing through sensitive areas as much as possible. If unavoidable, drive slowly in such areas to prevent the unnecessary engine operation and idling. Use pile drivers with the lowest noise as possible. Install the main body of a pile-driving machine at least 25m away from the nearest residence. Control pile driving works and other construction work as well as major noise levels so as not to exceed the construction site noise and vibration standards set forth in the Environmental Management and Coordination Act (Noise and Excessive Vibration) Regulations 2009. Compliance with Environmental Management and Coordination Act (Noise and Excessive Vibration) Regulation 2009. 	Construction contractor	Construction Supervision Consultant
	Ground subsidence	<ul style="list-style-type: none"> Control subsidence at construction site Not preferably use groundwater Replace soft clay soil with cut rock from D1 and waste soft clay soil is confined. 	Construction contractor	KPA Construction Supervision Consultant
	Offensive odor	Offensive odor from waste and construction activities	<ul style="list-style-type: none"> Waste collection bins provided with light-drying lids for containment. Route the waste disposal from construction site and contractor's camp zone as frequent as possible to reduce piling and offensive odor due to over-storing. Dedicated trucks should be well covered to suppress possible odours. Prepare waste management plan. The cement and asphalt plants/equipment shall be operated away from residential areas. 	Construction contractor

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Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Sediment	Soil runoff and sedimentation due to land development works and road construction work along natural stream	<ul style="list-style-type: none"> Soil at the land development site shall be stabilized appropriately. Implement erosion control measures on prone areas e.g. steep slopes, erodible material and drainage lines. 	Construction contractor	KPA Construction Supervision Consultant
Ecosystem	Effects on forests, rivers and animals	<ul style="list-style-type: none"> Implement a program for construction workers to prohibit activities such as hunting, poaching, collecting plants, dumping garbage and burning barfires. Minimize the number of trees to be cleared, and transport them as many as practicable. Implement a re-vegetation program with KPA. Use low-impact type construction equipment as much as possible. Stationary machines that generate excessive noise (ex. generators) will be surrounded by noise barriers. Adopt invasive alien species measures at construction sites, e.g. Equipment and tool's brought in the zone from other project sites should be screened and cleared of alien, invasive propagules to avoid introduction in the project area. Maintain emergency response contact list including KWS, C&D. Workers and coordinate with KWS. Proper waste collection that prohibits open dumping or burying waste that may attract scavengers. 	Construction contractor	KPA/NES/KWS Construction Supervision Consultant
Hydrology	Interference with natural stream by temporary road and soil erosion	<ul style="list-style-type: none"> Install drain pipes to prevent run-off from entering the embankment. Clearing of vegetation should be strictly controlled and only done if it's absolutely necessary. Disturbed valley beds and slopes should be re-vegetated to mitigate erosion on completed sections. 	Construction contractor	KPA Construction Supervision Consultant
Topography geology	Topography change and soil erosion by	<ul style="list-style-type: none"> Same as "Soil erosion" 	Construction contractor	KPA

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Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Livelihood	Land development works			Construction Supervision Consultant
	Income decreases due to relocation	<ul style="list-style-type: none"> Livelihood restoration programs shall be developed by ARAP 	KPA	NLC
Local economy and livelihood	Temporary loss of income due to restrictions associated with the construction works	<ul style="list-style-type: none"> Depending on the size of impacts, compensation shall be provided to the affected people as per ARAP. The affected people shall be fully informed about the construction plan in advance, and consideration shall be made to allow them to harvest their crops or continue other business activities. Consider arranging works taking into account the requirements of the local people. Temporary workers shall be preferentially recruited from the local communities. Stakeholder participation in decisions that affect them. 	Construction contractor	KPA Construction Supervision Consultant
	Land use	Temporary restrictions on land uses due to the activities	<ul style="list-style-type: none"> Establish temporary construction yards access roads at locations where land is not used or with limited use. 	Construction contractor
Water use	Poor management of water resources	<ul style="list-style-type: none"> Link up with the local WRA for permits to abstract water for construction in order to realize satisfactory management of water supply issues. Ensure provision of adequate water storage facilities on the construction site to meet project needs during periods of low demand (e.g. late at night). Minimize/avoid water consumption and enhance utilization in coordination with the contractor through strict supervision of construction methods involving water use. The contractor should sensitize construction workers on the importance of proper water management and conservation. 	Construction contractor	KPA Construction Supervision Consultant

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Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Social Infrastructure	Temporary restrictions on road uses	<ul style="list-style-type: none"> Develop a road use plan and traffic management plan, and obtain permission from road authorities (KCHA, KERRA). Notify local communities in advance of the road use restrictions. Limit speed in the construction area with appropriate signage, speed bumps and ensure compliance within the project area. Sensitize workers and area residents on the importance of exercising care in the project area in as far as traffic movement and other safety issues are concerned. 	KPA Construction contractor	KPA KCHNA, KERRA Construction Supervision Consultant
Misdistribution of benefits and damages	Misdistribution of benefits and damages	<ul style="list-style-type: none"> Give priority to PAPs on employment opportunities arising from the project during construction and operation in consultation with the existing PAP committee. 	KPA	KPA
Local conflicts of interest	Conflicts for water usage	<ul style="list-style-type: none"> Explanation to and seeking understanding from the communities on the project and impact on water resources Establish environmental related GRM together with the Contractor during construction Commence consultation with PAPs and local communities to share the progress of the Project with them and identify potential grievances at the early stage. Conduct the internal and external social monitoring as per the ARAP and ESSA. 	KPA for overall grievance; NLC for compensation related grievance; Construction contractor for construction related grievance	KPA
Cultural heritage	Indirect effects on Kivas	<ul style="list-style-type: none"> Prior to the commencement of construction, works a meeting will be held with the Kivas tribes to inform them of the construction schedule and activities, to discuss about required mitigation measures. Prohibit the entry of construction workers to Kivas. Establish a temporary yard far from Kivas as far as possible. Use low-noise type construction equipment as much as possible. Stationary machines that generate noise (generators) will be surrounded by noise barriers. 	KPA Construction contractor	KPA, NMAK
	Destruction of Cultural Artefacts	<ul style="list-style-type: none"> Have in place a chance find procedures that intervenes through the National Museum of Kenya (NMAK) in case of encounter with cultural, or archaeological collections falling within the project area. 	Construction Contractor	KPA, NMAK

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Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Landscape	Loss of Landscape Character	<ul style="list-style-type: none"> Resmit project activities (especially landscape sourcing) in the project area; Screen plant and re-vegetate native plants on disturbed sites to achieve harmony with surroundings and Temporary construction, adopt camouflage colours that blend with the surrounding especially on the imposing features 	Construction Contractor	KPA
Gender	Gender Inequalities	<ul style="list-style-type: none"> Promote gender inclusion within the workforce; Establish and implement a structured and contractor staff sensitization program on the expectations of the code of conduct respecting various rights of different genders within the project workforce; Establish a well-resourced internal grievance management system for staff. 	Construction Contractor	KPA
Child rights	Employment of minor children	<ul style="list-style-type: none"> No children will be employed in accordance with the Employment Act of 2007. 	Construction contractor	KPA
Indigenous diseases such as HIV/AIDS	Spread of infectious diseases due to the inflows of construction workers	<ul style="list-style-type: none"> Contractors shall develop and implement programs for HIV/AIDS prevention awareness raising and against communicable diseases in accordance with Kenyan laws and regulations. Such programs shall include the following among others: <ul style="list-style-type: none"> An ancient tracing program for construction workers Code of conduct for construction workers Other measures (ex. counseling, medical examination) 	Construction contractor	KPA County government Public health officer
Working environment (including occupational safety)	Risk of occupational accidents (ex. falling from high places, falling into deep trenches, erroneous operation of the machinery)	<ul style="list-style-type: none"> Use safety harnesses when working at heights. Install fences around an excavated pit. Ensure provision of appropriate Personal Protective Equipment (PPE) for project personnel and enforce their use. Contractors shall develop an occupational health and safety plan in accordance with Kenyan laws and regulations. Such plan shall include the following among others: <ul style="list-style-type: none"> Risk assessment and safety measures Training programs for construction workers 	Construction contractor	KPA DOSH Construction Supervision Consultant

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Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
		<ul style="list-style-type: none"> Organizational structure Emergency response plan Ensure establishment of a Health and Safety Committee for the project team as per the Health and Safety Committee Rules 2004 of the OSHA Act. Maintain an incident/accident register in accordance with the Occupational Safety and Health Act 2007 and report incidences to the National Safety Officer and DOSHS. 		
Accident	Risk of traffic accidents	<ul style="list-style-type: none"> Prepare traffic management plan Strict adherence to the speed limits Avoid the use of high-risk roads as much as possible All construction vehicles shall be equipped with a vehicle behaviour alarm to notify their left turn, right turn and backward movements. Installation of warning signs and deployment of guides in high-risk areas. Traffic Act should be adhered to enhance road safety. Minimize number of trees cleared by the construction. Implement a reforestation program with KPA. 	Construction contractor	KPA Construction Supervision Consultant
Climate change	Clearing trees	<ul style="list-style-type: none"> Minimize number of trees cleared by the construction. Implement a reforestation program with KPA. 	Construction contractor	KPA Construction Supervision Consultant
During operation				
Water pollution	Oil leaks from vehicles and machines at DI site	<ul style="list-style-type: none"> Thorough maintenance of vehicles and machines. Installation of an oil-water separation facility on site where necessary. Establishment of barriers around fuel stations to prevent spills of fuel. Always have sand to absorb fuel for its potential spills. 	KPA	KPA
	Wastewater from toilet and other building	<ul style="list-style-type: none"> Installation and maintenance of appropriate wastewater treatment facilities at pollution sources. Perforated discharging from septic tank. 	KPA, CW/WDA	KPA

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Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
Soil contamination	Oil leakage from vehicles and equipment	<ul style="list-style-type: none"> Proper maintenance of vehicles. Prevent spills of oil and other potential contaminants in facilities of DI area. 	KPA	KPA
Waste	Various wastes from operation and maintenance works.	<ul style="list-style-type: none"> Reduction of waste and thorough recycling. Thorough sorting and disposal. Record of waste removals. Collection and treatment by a registered company and at designated landfill. 	KPA, CW/WDA	KPA
Noise, vibration	Noise and vibration from driving vehicles	<ul style="list-style-type: none"> Record of vehicle maintenance. Establish speed limits and adhere to them. Ensure grievance redress mechanism to receive any complaints about noise/vibrations and take necessary action. 	KPA	KPA
Erosion control	Possible erosion along natural stream of temporary road	<ul style="list-style-type: none"> Develop an erosion control plan where needed. Ensure storm water runoff by drain pipes. Use of appropriate methods for intercepting and slowing water runoff where needed. 	KPA	KPA
Ground subsidence	Ground subsidence due to reducing water level	<ul style="list-style-type: none"> Water resources management by monitoring of aquifer. 	KPA, CW/WDA	WRA
Water use and water resource	Depletion of water source due to the excessive water intake	<ul style="list-style-type: none"> Continuous monitoring on Tlwi Aquifer. When completed, use water from M'wachie dam. 	KPA, CW/WDA	WRA
Local conflicts of interest (misdistribution of damage and benefit)	Conflicts for water usage and other possible misdistribution of damage and benefit	<ul style="list-style-type: none"> Explanation to and seeking understanding from the communities on the project and impact on water resources Ensure grievance redress mechanism Give priority to PAPs on employment opportunities arising from the project during operation in consultation with the existing PAP committee. KPA will monitor and solve grievances during operation. 	KPA for overall grievance; CW/WDA and Free Port Operator for specific grievance related to each business activities	KPA
Working environment	Occupational accidents associated with	<ul style="list-style-type: none"> The maintenance and operation contractor shall develop an occupational safety and health plan in accordance with Kenyan 	KPA, CW/WDA	KPA

km

km

Item	Influence	Mitigation measures	Responsibility for implementation	Responsibility for supervision
(including occupational safety)	maintenance and operation works	legislation		
Access/roads	Traffic accidents in the access road to D1 site	<ul style="list-style-type: none"> Road traffic signs shall be installed Strict adherence to the speed limits 	KPA	KPA

13

km

Annex 8-b Environmental and Social Monitoring Plan (ESMoP)

Item	Object	Method	Frequency	Responsibility for implementation
Construction	Land acquisition and resettlement, and livelihood	<ul style="list-style-type: none"> Monitor the progress and effectiveness of resettlement Assess whether the compensation and other assistances are provided in line with ARAP Assess whether the measures to restore or enhance livelihood and the means of income are implemented Identify conflicts, problems, challenges, or difficulties associated with the resettlement process Review the record of grievances to confirm that appropriate remedial actions have been taken satisfactory 	Internal monitoring and external monitoring will be done as per the ARAP.	KPA/NLC
Socially vulnerable people	Implementation status of the assistances	<ul style="list-style-type: none"> Assess whether the compensation and other assistances are provided in line with ARAP Assess whether the measures to restore or enhance livelihood and the means of income are implemented Identify conflicts, problems, challenges, or difficulties associated with the resettlement process Review the record of grievances to confirm that appropriate remedial actions have been taken satisfactory 	Internal monitoring and external monitoring will be done as per the ARAP.	KPA
Regional economy such as the employment and livelihood	Confirm the progress and effectiveness of the restoration plan	<ul style="list-style-type: none"> Interview the affected people to confirm their new living conditions after the resettlement 	Internal monitoring and external monitoring will be done as per the ARAP.	KPA
Local conflicts of interest	Confirm the status of conflicts	<ul style="list-style-type: none"> Collect records of complaints submitted to KPA 	Four times/year	KPA

14

km

Item	Object	Method	Frequency	Responsibility for implementation
Gender	Monitor potential unfair treatments to women	<ul style="list-style-type: none"> Assess whether the compensation and other assistances are provided in line with ARAP 	Internal monitoring and external monitoring will be done as per the ARAP.	KPA
During construction	Air pollution	<ul style="list-style-type: none"> On-site measurements of the air quality (PM2.5, PM10, CO, NO2, SO2, Pb, O3) at the pipeline installation sites, road construction sites, land development site and along the transportation route of soil for embankment (six sites in total). Assess the measured air qualities against the national air quality standards. Visual observations of dust emissions from the construction sites and the emissions of exhaust gases from construction vehicles and machines 	<ul style="list-style-type: none"> [Site inspection] Every day [Measurement] Twice/year (measurement) 	Construction contractor
Water pollution	Identification of the source pollution (turbidity) associated with the land development works	<ul style="list-style-type: none"> [Turbidity monitoring] <ul style="list-style-type: none"> Method: On-site measurements of the surface and bottom turbidities (in NTU) at three locations around the earth work and land development area Evaluation criterion: Baseline = 15 NTU. Review the construction method if the turbidity exceeds the established criterion for two consecutive weeks [Other water quality monitoring] <ul style="list-style-type: none"> Water Temperature, pH, Color, DO, BOD, COD, Oil/Grease (Petroleum Ether Extracts), SS, Total Coliforms 	<ul style="list-style-type: none"> [Turbidity monitoring] Every day during the earth work and land development work [Other water quality monitoring] Twice/year 	Construction contractor

15

km

Item	Object	Method	Frequency	Responsibility for implementation
Soil contamination	Monitoring of accidental oil spills to the ground from construction vehicles and heavy equipment	<ul style="list-style-type: none"> Patrol, hearing and review of records Ensure appropriate storage and record the use of hazardous materials and chemicals, mainly lubricants and oils Confirm there is no soil contamination by earth-fill and cut-earth works 	<ul style="list-style-type: none"> Site inspection] Every day during the construction [Recording and report] Monthly 	Construction contractor
Waste	Confirm waste (solid waste and soil waste) is stored and treated in accordance with the contractor's waste management plan	<ul style="list-style-type: none"> Method: On-site inspections and reviews of waste treatment/disposal records. Parameters to be evaluated: Waste storage method, littering at the site, waste treatment/disposal records. 	Every day	Construction contractor
Noise / vibration	Confirm there is no excessive noise from the construction site	<ul style="list-style-type: none"> Method: On-site measurements of the noise level (LAeq) and Vibration level (dB). Traffic volume (at sites which is inspected by road traffic noise) Location: 2 locations at the construction site boundary, and 2 locations in the residential area 	Once/week	Construction contractor

16

km

Item	Object	Method	Frequency	Responsibility for implementation
		<ul style="list-style-type: none"> Evaluation Criteria for the construction site boundary: Noise standards established under the Environmental Management and Coordination Act (Noise and Excessive Vibration Pollution) Regulations 2009. Daytime: 60dB, Nighttime: 55dB Evaluation criteria for residential areas: Noise standards established under the Environmental Management and Coordination Act (noise and excessive vibration and pollution) regulations 2009. Daytime: 50dB, Night-time: 35dB 		
Offensive odor	Monitor offensive odor by construction activities such as cement and asphalt plants and solid waste	<ul style="list-style-type: none"> Site inspection Check a record of complaints from communities 	[Site inspection] Every day [Meeting and report] Monthly	Construction contractor
Sediment	Monitor soil runoff and sediment contamination	<ul style="list-style-type: none"> Inspection, interview to communities (as needed) and self-recording 	Every day	Construction contractor
Ecosystems	Confirm soundness of the local ecosystem.	<ul style="list-style-type: none"> Surveillance to confirm conditions of vegetation cover, bare ground, soil erosion and landscape etc. Record number of logged trees, transplantation and planting of trees 	[Surveillance] Weekly [Others] 2 times/year	Construction contractor KPA

17

KPA

Item	Object	Method	Frequency	Responsibility for implementation
Topography/geology	Monitor topography change and soil erosion	<ul style="list-style-type: none"> Inspection and interview to communities (as needed) and self-recording 	Every day	Construction contractor
Livelihood	Confirm the progress and effectiveness of the livelihood restoration plan	<ul style="list-style-type: none"> Interview the affected people to confirm their new living conditions after the relocation 	Internal monitoring and external monitoring will be done as per the ARAP.	KPA
Local economy such as employment and livelihood	Confirm the progress and effectiveness of the livelihood restoration plan	<ul style="list-style-type: none"> Interview the affected people to confirm their new living conditions after the relocation 	Internal monitoring and external monitoring will be done as per the ARAP.	KPA
Land use	Monitoring of the restriction on local land uses associated with the construction works	<ul style="list-style-type: none"> Patrols and interviews with local residents (as needed) for their records 	Once month during the construction	KPA
Social infrastructure	Monitoring of temporary restrictions on the road use and traffic concerns	<ul style="list-style-type: none"> Confirm that a traffic management plan has been prepared, submitted and approved Keep track of grievance management records 	Once month during the construction	Construction contractor
Local conflicts of interest	Confirm the status of conflicts	<ul style="list-style-type: none"> Keep track of grievance management records 	Once month during the construction	Construction contractor/KPA

18

KPA

Item	Object	Method	Frequency	Responsibility for implementation
Cultural heritage	Confirm no impact on nearby Kaya Encouraging of any archaeological artefacts	<ul style="list-style-type: none"> By patrols, confirm no entry of construction workers to Kaya and no wandering of them around Kaya Record of encountering any archaeological artefacts falling within the project area 	[Site patrols] Every day [Meeting and report] Monthly	Construction contractor
Children's rights	Confirm no child labor	<ul style="list-style-type: none"> Review the contractor's employment registrations (confirm with the local government for their accuracy) 	2 times/year	Construction contractor
Infectious diseases such as HIV/AIDS	Confirm the progress and effectiveness of the prevention plan against HIV/AIDS and other infectious diseases	<ul style="list-style-type: none"> Method: Review meetings and reports Parameters to be evaluated: awareness-raising programs, counselling, and records of the number of participants 	4 times/year	Construction contractor
Occupational health and safety	Confirm that safety procedures are implemented in accordance with the occupational safety and health plan	<ul style="list-style-type: none"> Confirm the occupational safety procedures, and visually inspect the safety equipment. 	Every day	Construction contractor
Accident	Confirm the status of accidents	<ul style="list-style-type: none"> Method: Review meetings and reports Parameters to be evaluated: Number and type of accidents, risk minimization measures 	Twice month	Construction contractor

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KPA

Item	Object	Method	Frequency	Responsibility for implementation
Ecosystem	Confirm soundness of the local ecosystem.	<ul style="list-style-type: none"> Confirm soundness of local animals and plants identified before the construction works. 	4 times/year	KPA
Water pollution	Confirm no impact by the rainwater runoff Confirm no pollution by the eroded sediment	<ul style="list-style-type: none"> Monitor oil slick at the rainwater discharge to confirm that there is no oil leak from vehicles Visually inspect soil erosion status and turbid water run off Measurements of turbidity at the rainwater discharge where needed 	When it rains heavily When it rains heavily	KPA
Wastewater from toilet and buildings	Check maintenance record of septic tank especially for periodical sludge disposal Monitoring water quality of effluent in D1 area: Water temperature, pH, Turbidity, TSS, BOD, Total Coliforms, Color, DO, COD, and Oil/grease	<ul style="list-style-type: none"> Check maintenance record of septic tank especially for periodical sludge disposal Monitoring water quality of effluent in D1 area: Water temperature, pH, Turbidity, TSS, BOD, Total Coliforms, Color, DO, COD, and Oil/grease 	2 times/year	CWWDA for water supply administration building KPA for Free Port Zone at D1 area
Soil contamination	Monitoring of accidental oil spills from vehicles and equipment	<ul style="list-style-type: none"> Check and record any spills of oil and other potential contaminants in facilities of D1 area 	Every day	KPA
Waste	Confirm waste is stored and treated in accordance with the contractor's waste management plan	<ul style="list-style-type: none"> Visually inspect the waste storage, especially wastewater from the water treatment Review records of the waste treatment/disposal. 	4 times/year	KPA/CWWDA

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KPA

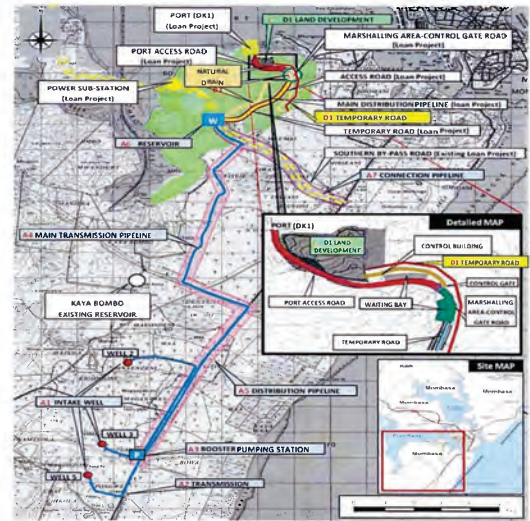


Abbreviated Resettlement Action Plan-ARAP in the Project for Infrastructure Development for the

Table with 5 columns: Item, Object, Method, Frequency, Responsibility for implementation. Rows include Noise and vibration, Ground subsidence, Water use and water resource, Local conflicts of interest, Working environment, and Accidents.

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Mombasa Special Economic Zone (SEZ) Final ARAP Report Volume One: Main Report



Repon Associates

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Revised May 2022

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EXECUTIVE SUMMARY

The Project

The Government of Kenya (GoK) with support of the Japan International Cooperation Agency (JICA) is developing the Mombasa Special Economic Zone (SEZ) as part of the Kenya Vision 2030 Strategy...

Implementation of the Masterplans for Mombasa SEZ is being pursued by the GoK with support of the Government of Japan through combination of Japanese Official Development Aid (ODA) and private investments through Special Purpose Vehicle (SPV).

- Basic infrastructure through Japanese ODA and; Individual areas within the Mombasa SEZ (including Free Trade Zone (FTZ) and Industrial Area) through private investment to SPV.

The need to provide Basic Infrastructure to the M-SEZ

Development of the Mombasa SEZ is guided by the 2014 Masterplan for M-SEZ which seeks to transform the 12 square kilometer Dongo Kundu Property legally owned by the Kenya Ports Authority (KPA) into a commercial hub...

- Resolution of the land ownership and informal occupant problem, which is elaborated in Chapter 1; Provision of transport infrastructure - partly to be resolved through ongoing construction of Mombasa Southern Bypass and proposed Mombasa Gate Bridge; and Provision of basic trunk infrastructure namely grid power connection (underway) and provision of water supply and stormwater drainage.

The Project on Infrastructure Development (PID) seeks to bridge infrastructure gaps mainly through provision of water supply infrastructure; bank protection of natural drainage networks; construction of four roads of different standards; land development & development of KPA offices; and land formation by strategic disposal of excess soil materials accumulated from earth works from PID components.

The need for an Abbreviated Resettlement Action Plan in the PID for M-SEZ

PID components (e.g., land development, land formation/disposal, drainage improvement on selected sites, water reservoir & MDP and road developments) are spread inside Mombasa SEZ villages; while other sections of the PID will traverse already existing way leaves in Kwale County, additional wayleaves will have to be created through land acquisition and attendant displacement.

As per the JICA Guidelines for Environmental and Social Considerations (2010) (hereafter referred to as JICA Guidelines) and the World Bank Operational Policy (WB OP) 4.12

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Involuntary Resettlement which was referred by JICA Guidelines, the ARAP Report was prepared since the observed number of potential PAPs to be physically displaced is 732 is below the 200 person's threshold prescribed by WB OP 4.12 and JICA Guidelines.

Approach and Methodology to the ARAP Process

The main task of this work is to prepare ARAP report in accordance to relevant Kenya's laws/regulations as well as by taking into consideration the requirements of JICA Guidelines and WB OP 4.12.

This Report

This ARAP Report is presented in Four (4) Volumes of which Volume One is the Main Report comprised of 11 chapters, Volume Two contains the Data Appendices including the minutes of public consultation meetings, Volume Three is the Book of Drawings, and Volume Four has the Preliminary Cost Estimate.

Findings from the ARAP Process

Jurisdiction of this ARAP Study

Components of the PID span the two Counties of Kwale and Mombasa Counties. Within Kwale County, the PID traverses both designated road reserves and private property while within Mombasa County, the Project entirely traverses KPA land earmarked for the Mombasa SEZ whose development was recently launched by the Head of State on 18th October 2019.

Administrative Jurisdiction

As designed, the PID traverses the two Counties of Kwale and Mombasa. Within Kwale County, PID components traverse the 3 locations of Tiwi, Waa and Ngomberii. The Mombasa Components are restricted to the Mtongwe Location of Mtongwe Location otherwise called Dongo Kundu (DK).

Management Jurisdiction

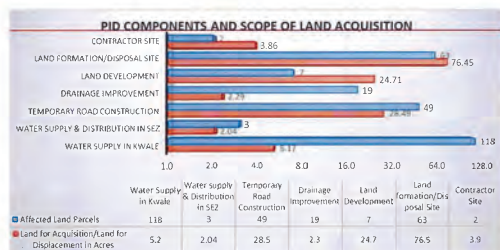
The PID components (water supply) in Kwale County is designed to largely utilize public land and existing road reserves controlled by diverse authorities namely KenHA, KeRRA, KCG, CWWDA. As such, in the creation of a Way Leave for the water supply infrastructure in Kwale, the assumption is that reserves controlled by respective State Agencies are available and will not require acquisition.

Scope of the PID

As observed elsewhere above, scope of PID intervention is relatively small comprised of seven components: water supply in Kwale & Mombasa Counties (water reservoir & Main Distribution Pipeline: MDP); drainage improvement; land development (D1 area); construction of a temporary access road; land formation/disposal site in Free Trade Zone (FTZ) B area; and a contractor site.

Analysis of land requirement and potential scope of acquisition

Land acquisition in Kwale county, and displacement impact of the project both in Kwale and Mombasa counties is therefore modest. Indeed, given that only 261 land parcels will be impacted which include privately owned parcels in Kwale and others from those with stake to land in MSEZ area, while the total number of PAHs and PAPs are 271 households and 540 persons among which, 61 PAHs and 142 PAPs will be physically displaced, the whole undertaking converts into an ARAP.



Source: Prepared by ARAP Consultant Team based on the cadastral map and the alignment data Fig. ES01: Scope of the PID

Creation of a 38.3-kilometer long, 3-metre-wide reserve; water reservoir for water supply; land development (D1 area); drainage improvement of 0.66 kilometer; construction of a temporary access road; land formation/disposal site in FTZ B and a contractor site will require a total of 64.71 ha of land of which, 6.86 are available in the existing reserves leaving out 57.85 ha to be sourced through land acquisition in Kwale and land require displacement in SEZ area. Land formation/disposal site in FTZ B will require the bulk of the land at 53.50%, followed by construction of temporary access road 19.88% and land development at 17.29% as listed in the table ES01 below.

Table ES01: Land requirement and potential scope of acquisition

SN	Project Component	Designated Authority	Length (Km)	Required Land (ha)			Share (%)
				Required Land	Available Land	Land to be acquired for Kwale county and land requires displacement for SEZ area	
1	Water Supply	KeNHA, KeRRA, CWWDA, KPA, KCG	29.32	8.8	6.71	2.09	3.6
2	Water Reservoir & MDP	KPA	5.82	1.75	0.92	0.83	1.4
3	Construction of Temporary Road	KPA	2.5	11.5	0	11.5	19.9
4	Land Development (D1 Area)	KPA	0	10	0	10	17.3

IV

SN	Component	Authority	Required Land	Available Land	Land to be acquired	Share (%)
5	Drainage Improvement	KPA	0.66	0.92	0	0.92
6	Land formation/Disposal	KPA	0	30.95	0	30.95
7	Contractor Site	KPA	0	1.56	0	1.56
Totals			38.3	64.71	6.86	57.85
						100

Source: Prepared by the Consultant based on the cadastral map and the alignment data

Public Consultation Meetings

A series of joint consultative meetings for ARAP and ESIA were conducted from June to November 2019 from the project inception stage to during which census and asset inventory survey were carried and finally during the ARAP/ESIA disclosure stage. Various stakeholders were consulted including National Government Official, County Government Representatives, Lead Agencies i.e., NEMA, KFS etc., Non-Governmental Organizations, Religious Associations, SEZ Committee Members and the affected people.

Additionally, in January and April 2022, additional consultation and information disclosure meetings on **Public Consultation Meeting**, which was reviewed and revised in 2021, were conducted using the brochure in Swahili language. The meetings included 3-high level meetings with National Government Officials, Member of County Assembly, Political leaders, Security Officials and Village Elders and PAPs Committee were conducted. These 3-high level meetings were used to pre-disclose the policy and get views from high level government and county officials. Following, was a big baraza for all affected people from six villages in Dongo Kundu area. The big baraza was chaired by the Regional Commissioner and attended by County officials and Likoni Member of Parliament among others. After the big baraza, affected people were given opportunities for more consultation through village wise meetings, whereby 5 meetings were conducted in which Siji and Mrongondoni villages did a joint meeting. Finally, group wise meetings with vulnerable people including female headed households, elderly PAPs, orphans, disabled and the youth (18-35 years old) were conducted.

The compensation policy was largely accepted by the PAPs who showed concerns on provision of additional infrastructures in the arranged resettlement sites, job opportunities and the timeline for the implementation of the project. On the other hand, PAPs aired their worries on the expected change in livelihood activities from farming to non-farm activities. This was well responded by the consultant on behalf of KPA, citing the phased resettlement plan that would allow people to continue with their farming activities on non-prioritized areas. Apart from the compensation policy, PAPs were briefed about the PID component changes and the plan to conduct the Supplementary ESIA Study on those new area, however insignificant impacts are expected.

Tally and make of structures

PID components will affect a total of 243 structures out of which, 34 (13.99%) are permanent buildings, 37 (15.23%) are semi permanent buildings, 69 (28.40%) are temporary buildings, and 103 (42.39%) are other (minor non-building) structures. Residential use structures are a majority at 72 (29.5%) followed by Commercial use structures at 19 (7.8%).

Table ES02: Summary of affected structures

SN	PID Components	Permanent	Semi-permanent	Temporary	Others	Affected Structures	Share (%)
1	Water Supply in Kwale County	7	7	11	62	87	35.80
2	Water Reservoir & MDP	0	0	0	0	0	0

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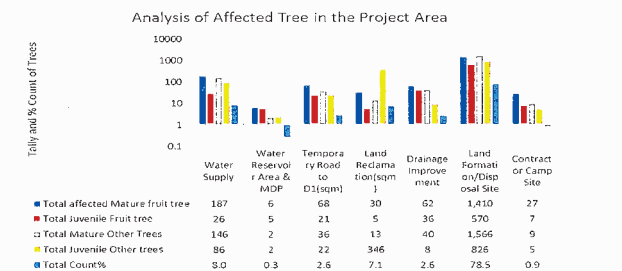
SN	PID Components	Permanent	Semi-permanent	Temporary	Others	Affected Structures	Share (%)
3	Construction of Temporary Road	0	5	5	5	15	6.17
4	Land Development	8	7	5	7	27	11.11
5	Drainage Improvement	0	0	1	2	3	1.23
6	Land Formation/Disposal Site	19	17	48	27	111	45.68
7	Contractor Site	0	0	0	0	0	0
Total Structures		34	37	69	103	243	100

Source: Asset Inventory Survey

Though this study did not encounter any communal cemeteries, presence of 18 private graves on 6 parcels in SEZ area is significant as it introduces a physical-cultural dimension to the Study. Such graves are classified as Others in Table ES02.

Tally and breakdown of tree crops

A total of 5,567 assorted trees representing 64 species were inventoried as shown in figure ES02 below, and in keeping with the trend where coastal agriculture is tree based, coastal agroforestry trees namely Coconut, Neem, Mango, Cashew Nut among others dominate the tally. Bulk of the trees- 1,790 equivalent to 32% is mature trees while 670 equivalent to 12% are juvenile trees implying that they are yet to enter economic production.



Source: Asset Inventory Survey Figure ES02: Tally and breakdown of affected trees.

Community Proprietary Resources (CPRs)

This study did not encounter any community proprietary resources likely to be displaced by the PID. The Mkumbi Shrine in Kiteje touches on the road reserve but it will be avoided in laying out the proposed wayleave since the Kaya is about 20 meters on the opposite site of the main transmission pipeline alignment.

Potentially Displaced Population

The initial analysis on settlement patterns shows that, a total of 72 (65 inside SEZ area and 7 in Kwale) residential structures are likely to be displaced. Incorporating the changes in the PID project components done in early 2022, analysis shows that a total of 61 households made up of 142 individuals are likely to be displaced in the entire project area in Kwale and Mombasa Counties.

Table ES03: Summary of Physically Displaced Households and Population

Location of PID	PID Components	Impact in Households	Household Population
Outside SEZ (Kwale)	Water Supply in Kwale	1	3*
	Water reservoir & MDP	0	0
	Construction of Temporary Road to D1	8	13
	Drainage Improvement	0	0
	Land Development	11	34
	Land formation/Disposal Site	41	92
Within SEZ- Mombasa	Contractor site	0	0
	Total	61	142

Source: Asset Inventory Survey

* Water supply in Kwale is only affecting one household with a population of three individuals. This household will be avoided during detailed design. When the household is avoided, 139 individuals will be displaced by PID inside Mombasa Special Economic Zone.

In addition to the physically displaced households and persons, the total number of the PAHs and PAPs is 271 households and 540 persons as shown below.

Table ES04: Summary of Total PAHs and PAPs

Location of PID	PID Components	PAHs	PAPs
Outside SEZ (Kwale)	Water Supply in Kwale	129	171
	Water reservoir & MDP	3	3
	Construction of Temporary Road to D1	52	57
	Drainage Improvement	19	19
	Land Development	12	68
	Land formation/Disposal Site	54	220
Within SEZ- Mombasa	Contractor site	2	2
	Total	271	540

Source: Asset inventory Survey

Compensation and Entitlements

The PAPs will be compensated following the national legislations on land acquisition and the JICA Guidelines. PAPs will be compensated for their affected land, structure, trees, crops, and business depending on eligibility. The PAPs living outside the SEZ being the legal owner of the affected land, will be compensated for the acquired land, affected structures, trees, crops and other properties on the affected land. On the other hand, PAPs living inside SEZ will be compensated for affected assets and other properties on land and not for the land since land is registered under KPA. However, they will be entitled to **resettlement sites with amenities**. All the affected occupants of land inside SEZ will be allocated a plot of land in the resettlement sites with a title deed to the land. The development of the resettlement sites and paying of the compensation is to be done by the KPA **NLC**. Compensation is based on entitlements including: (i) replacement value for structures, tree, etc. and (ii) market price for the affected land for the Kwale affected people and (iii) loss of business and (iii) livelihood restoration and other resettlement assistance as required to comply **international standards**. Vulnerable households will be eligible for further cash assistance to improve their living condition.

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Table ES05: Draft Updated Entitlement Matrix for PAPs Inside and Outside the Project Area (as of 29 Nov. 2021)

No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)
1	Loss of land a. Agricultural b. Residential c. Commercial d. Other types of land	Title holder both statutory and customary in Kwale county	a) Cash compensation at market price of the affected land b) 15% statutory disturbance allowance which includes land transaction costs c) Farming of crops and grazing of animals will continue along the wayleave land however landowners will not be allowed to grow crops or trees that are deep rooting
		Those without formal legal right in SEZ area	a) Legal ownership of 1/8 acre (0.125 acre) of a land plot in one of the resettlement sites (Residential Areas) within M-SEZ area, OR of legal ownership of 0.312 acre of a land plot in one of the resettlement sites (Enterprise Areas) within M-SEZ area. b) Provide resettlement sites with social amenities including 4 water kiosks (3 in Zone A and 1 Zone B); a marketplace which will be in Zone A; a dispensary located in Zone A, 1 acre of cemetery each in Zone A and B for both Christian and Muslim PAPs, and an access road to resettlement sites. c) Tax for transferring the land to the PAPs, registration fee, and other costs as the land transaction cost for obtaining the land title shall be incurred by the implementing agency. d) Transitional allowance at 15% of Ksh 450,000/acre as originally valued in RAP preparation in 2019 to cover the difference in value between the land lost and a land plot in the resettlement site
2	Structures and Buildings	Private residential/business structures	a) Cash compensation at replacement cost without factoring depreciation. b) Right to salvage materials c) 15% statutory disturbance allowance for structure compensation d) 3-6 months' notice to vacate and reconstruct new structures
		Private movable assets such as Dish Racks	a) Since structures like racks, stands etc. can be relocated, there will be no compensation for them. b) 1 month' notice to remove
		Community Proprietary Resources e.g., Mosques, Churches	a) Cash compensation at replacement cost without factoring depreciation. b) Right to salvage materials c) 15% statutory disturbance allowance for structure compensation d) 3-6 months' notice to vacate and reconstruct new structures
3	Trees	Private owners	a) Cash compensation at market price for each tree based on compensation schedules prepared by the Kenya Forest Service (KFS) for various species depending on age and its future potential b) Tree owners will be allowed to benefit/make use of the wood products from their trees after they have been cut down. c) 3 months' notice to vacate
4	Loss of Annual Crops	Private owners	a) Annual crops will not be compensated since they can be harvested within the notice period of 3 months. b) Where KPA and the contractor are not able to wait for the 3 months, cash compensation at market price will be paid for affected annual crops based on compensation schedules prepared by the Agricultural Department. c) 3 months' notice to remove annual crops before construction commences
5	Loss of Perennial Crops	Private owners	a) Cash compensation at market price for affected perennial crops based on compensation schedules prepared by the Agricultural Department for various perennial crop types depending on age and its future potential

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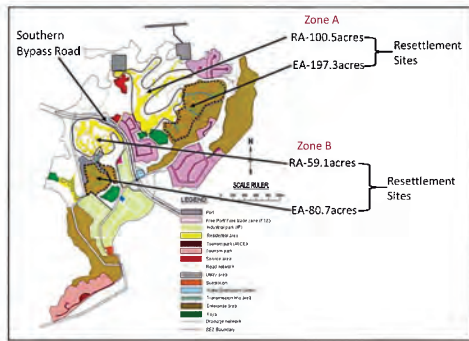
No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)
6	Graves/Grave yard and culturally sensitive areas (e.g., Kayas and Shrines)	Private owners in SEZ area	a) 3 months' notice to remove perennial crops before construction commences b) Community Kaya/Shrines will not be compensated or relocated but shall enjoy in-situ conservation to enable continuity of community cultural practices c) Cash compensation for relocation of graves including costs for performing cultural ceremonies, transportation and court charges in obtaining exhumation orders. c) 3 months' notice to relocate
		Private owners in Kwale county	a) KPA will endeavor not to disturb, relocate, or move any graves along the right of way by making appropriate adjustments. Therefore, there will be no compensation for graves since they will be avoided.
7	Special Assistance for Vulnerable	1. Physically challenged 2. Overage PAPs, >80yrs 3. Orphaned children	a) One-time cash assistance of Ksh 10,000.
8	Livelihood support and restoration	Business owners	a) Net monthly income from the lost business will be paid for a period of three months as a compensation for loss of business.
		a) Prioritized workable PAP b) All PAHs c) Applicable PAHs	a) Give priority to PAPs to work as construction worker during construction stage b) PAPs be given priority to work for the port as well as freeport under KPA's authority, and industrial park under SEZA's authority during project implementation and operation stage. c) Vocational training for 1 person/ household who needs to change jobs due to relocation and need a new skill. Courses and their duration include: 1. Preliminary level for 3 months: Plumbing, Mechanics, Drivers, Carpentry, Welders/fabricators, Tailors, Masonry, Security, Painter. 2. Basic level course for 6 months: Computer Studies, Export Processing, Cargo Handling, Electrical Installation
		All PAHs	a) Money Management Training to avoid wasting compensation money including opening a bank account if not owned by the household head.

Note: Female headed households will be assisted by (i) preparing the household resettlement plan, (ii) providing employment opportunity to a member of the household, and (iii) monitoring their livelihood restoration periodically. If it is found that additional assistance is necessary through monitoring, and assistance measures will be discussed and implemented.
Source: JST

Resettlement Site

Internal resettlement is arranged by KPA to ensure the security of tenure to all affected occupants of land inside the SEZ. Two zones, Zone A and Zone B are proposed for the resettlement of the PAPs (see figure below). Initially, it was proposed that all the affected landowners be allocated 0.125 (1/8)-acre in the Resettlement Areas (RAs). However, due to limited availability of flat land in the RAs, resettlement sites were extended to Enterprise Areas (EAs). The topography of the EA is sloppier, and some earth formation works including cuts and fills, are proposed to make the area suitable for resettlement. Hence, though some PAPs prefer the hilly areas, based on common understanding, to balance advantages and disadvantages of the land plot options, 0.312 acre instead of 0.125 acre will be allocated to all individuals that their resettlement plots will fall into the EAs.

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Source: JST

Figure ES03: Proposed Resettlement Sites

The planned SEZ area being resided by PAPs, has some existing social services including community Kayas, a primary school located in Mwangala village, water facilities, electricity, and a health centre which is at the border of the affected area and non-affected area. The project plans to supplement the available social services by providing an access road to the resettlement sites, water kiosks, a marketplace, and a dispensary, and 2 acres for cemeteries for both Muslim PAPs and Christian PAPs as seen in the table below.

Table ES06: Existing and Proposed Infrastructures in the Resettlement Sites

Social infrastructure	Existing (number)	Proposed (number)
Churches	7	-
Mosques	4	-
Kaya	13	-
Health center	1	-
Primary school	1	-
Government office (DCC)	1	-
Water Kiosks	-	4
Dispensary	-	1
Cemetery	-	2 acres
Market	-	1
Access road	-	a) ROW 9m; b) ROW 12m

Source: JST

Livelihood Restoration Program

To ensure PAPs' livelihood is restored to pre-project levels or enhanced, both livelihood restoration and support measures were designed by the project.

Under the livelihood restoration measures, PAHs will be eligible to compulsory money management training before compensation payment. A head of the household and his/her spouse from each affected household will be invited for this training. Additionally, the project will provide one-time cash compensation of KES 10,000 to all identified vulnerable people. Also, the project will provide an intensive vocational training program to physically

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relocated PAH from the M-SEZ project area that need to change their current livelihood activities. These are mostly households located inside the M-SEZ. Each affected household will identify one family member to participate in the program. KPA will contract the National Industrial Training Authority (NITA) to design and undertake trainings for the affected people. The table below presents the designed courses and course duration under the program.

Table ES07: Proposed courses and duration for the vocational training program

Proposed program	Course duration (in centre training)	Industrial attachment duration (compulsory)	Proposed courses	Trainers
Preliminary level	3 months	3 months	Plumbing, Mechanics, Drivers, Carpentry, Welders/fabricators, Tailors, Masonry, Security, Painter	NITA
Basic level	6 months		Computer Studies, Export Processing, Cargo Handling, Electrical Installation	NITA

Source: JST

For the livelihood support measures, PAPs especially those residing within M-SEZ will be assisted to access both technical and non-technical jobs available at the project site during construction. To ensure this is implemented smoothly by the contractors, a clause may need to be incorporated in the contract document requiring the contractor to make these provisions available. Additionally, during operation phase, PAPs will be given priority to work for the port and free port under KPA authority and for industrial parks under Special Economic Zones Authority (SEZA). This program will be arranged by KPA in coordination with SEZA and PAPs committee.

Costs and Budget in the ARAP

Provisional Cost for the ARAP

A total of Ksh 730,724,396 will be required to offset displacement impacts. It includes the compensation for all developments on land and assistance for PAPs in both Kwale and Mombasa counties, as well as the cost for resettlement site development in the SEZ project area. Additionally, a total of Ksh 10,857,830 will be required to compensate for land acquisition of the private lands in Kwale County. The grand total cost is Ksh 741,582,226.

Table ES08: Provisional Costs

Compensated Items	Total Count (PID)	PID-Grant Project (540 PAPs both physically and non-physically displaced) in Ksh	Cost for acquisition of private land in Kwale County (118 parcels) in Ksh
Land acquisition in Kwale County	2,09ha	-	10,340,790
Structures (@full replacement cost)	243	43,156,853.50	-
a. Permanent	34	27,081,395.09	-
b. Semi-permanent	37	3,373,045.00	-
c. Temporary	69	2,734,666.00	-

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Compensated Items	Total Count (PID)	PID-Grant Project (540 PAs both physically and non-physically displaced) in Ksh	Cost for acquisition of private land in Kwale County (118 parcels) in Ksh
d. Others	103	9,967,747.42	-
Trees (@ market price, based on KFS rates)	5,567	28,085,000	-
Crops and pastures (@ market price, based on County Agriculture Department)	-	-	-
Loss of Business/Income from Fruit Trees	130	10,398,120	-
Relocation Assistance/Disturbance Allowance (15% of structure, trees and crops cost as in the law)	-	10,686,278	-
One time Cash Assistance of 10,000KES for Vulnerable PAs	14	152,500	-
Compensation for BMUs	-	-	-
Money Management Training (For all land and asset owners-540 for PID). 60 PAs/meeting, 3 meetings/day for 3 days, 2hrs/meeting *1	540	246,500	-
Vocational Training for 1 Person/Vulnerable Household (61 for PID-physically displaced households). 1a. Preliminary Level (short term training for 3 months) by National Industrial Training Authority (NITA) for 41 people *2, 1b. Allowance of 500/person/day. No accommodation required. *3, 2. Basic Level (long term training for 6 months for those who basic education background) by NITA for 20 people *4	61	4,447,200	-
Transitional Assistance to Fill the Gap in Land Size	142.99 acres	9,651,825	-
Taxes (4% of land value)	142.99 acres	2,573,820	-
Site preparation for relocation assistance * For entire resettlement sites	-	537,316,600	-
a. Land Grading	-	232,280,000	-
b. Road Gravel Pavement	-	223,277,400	-
c. Public Facilities	-	81,759,200	-
Topographic boundary survey, incl. concrete peg * For entire resettlement sites	450 acre	18,213,300	-
Consultant for the site preparation * For entire resettlement sites	lump sum	21,000,000	-
EIA for the resettlement site * For entire resettlement sites	lump sum	10,000,000	-
Sub-total	-	695,927,997	10,340,790
Contingency (5%)	-	34,796,400	517,040
Total	-	730,724,396	10,857,830
Grand Total	-	-	741,582,226

Note:
1. Money Management Requirements; Trainers (Sociologist and Assistants from consultant team; Venue-DC's Office Likoni); Tents & Chairs 5,000KES/day; Stationary 200KES/person; Print-out 20,000KES; Water 100/person; Transport Allowance for mobilizing team i.e. 6 Village Leaders @600 KES /person/day, 15 PAs Committee @600 KES /person/day, 1 Chief and 1 Assistance Chief @1000 KES /person/day, and 2 County administrators @ 2,000 KES /person/day.
2. NITA Mombasa http://www.nita.go.ke/nita/index.php?option=com_content&view=article&id=137
3. Preliminary Level for 46 people @20,200KES/person/term (90 days). Additionally, 90 days for industrial training as part of the program. Courses include Plumbing, Mechanics, Drivers, Carpentry, Welders/Fabricators, Tailors, Masonry, Security, Painter. 1b. Allowance of 500 KES /person/day. No accommodation required.

4. Basic Level for 20 people @88,700 KES/person/2 terms (6 months) (registration fee-700KES, tuition fee for 2 terms-37,000KES, caution money-1,000KES, accommodation and meal for two terms-Ksh60,000KES). Courses include Computer Studies, Export Processing, Cargo Handling, Electrical Installation for skilled workers.
Source: JST

Contingency Costs

An item to 5% of the total costs was added to cater for contingencies in costs and unknown impacts.

Indirect costs

Additionally, a sum of equivalent to 10% of Direct Costs should be reserved to be drawn by KPA in implementing the ARAP. Expenses envisaged include field costs, capacity building for ARAP structures, setting up of a Project Implementation Team, among others.

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ACRONYMS

ACK	Anglican Church of Kenya
ARAP	Abbreviated Resettlement Action Plan
BMU	Beach Management Unit
BPS	Booster Pumping Station
CBO	Community Based Organization
CDA	Coast Development Authority
CDE	County Director of Environment
CDIP	County Development Integrated Plan
CEO	Chief Executive Officer
CFA	Community Forest Association
CFCU	Coastal Forest Conservation Unit
CG	County Government
CG	Control Gate
CLA	Compulsory Land Acquisition
CO	Chief Officer
CPL	Corporal
CPR	Common Property Resources
CS	Cabinet Secretary
CSR	Corporate Social Responsibility
CWSB	Coast Water Service Board
CWWDA	Coast Water Works Development Agency
DC	District Commissioner
DCC	Deputy County Commissioner
DK	Dongo Kundu
EEZ	Exclusive Economic Zones
EIA	Environment Impact Assessment
E&L	Environment and Land
EMCA	Environmental Management & Coordination Act
ESIA	Environment and Social Impact Assessment
FBOs	Faith Based Organisations
FDI	Foreign Direct Investment
FGD	Focus Group discussion
FRH	Fundamental Right Holders
FTZ	Free Trade Zone
GDP	Gross Domestic Product
GIS	Geographical Information Systems
GOK	Government of Kenya
GRC	Gross Replacement Cost
GRM	Grievance Redress Mechanism
GST	Geospatial and Space Technology
GTI	Government Training Institute
ICT	Information Communications Technology
IDP	Internally Displaced People
IVS	International Valuation Standards
Ha	Hectare
HCA	Head of Conservancy
IFC	International Financial Cooperation
JICA	Japan International Cooperation Agency
JST	JICA Study Team
KCG	Kwale County Government

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km

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Abbreviated Resettlement Action Plan-ARAP in the Project for
Infrastructure Development for the Mombasa Special Economic
Zone (SEZ)

Final Report
May 2022



KCNRN	Kwale County Natural Resource Network
KEFRI	Kenya Forestry Research Institute
KeNHA	Kenya National Highway Authority
KeRRA	Kenya Rural Roads Authority
KETRACO	Kenya Electricity Transmission Company Limited
KHURINET	Kenya Human Rights Network
KFS	Kenya Forest Service
KM	Kilometres
KPA	Kenya Ports Authority
KSG	Kenya School of Government
Ksh	Kenya Shillings
KWAWASCO	Kwale Water and Sewerage Company Limited
KWS	Kenya Wildlife Service
KWTA	Kenya Water Towers Agency
LMH	Legal Mandate Holders
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MCA	Member of County Assembly
MCG	Mombasa County Government
MDGs	Millennium Development Goals
MDP	Main Distribution Pipeline (inside MSEZ area)
MICE	Meetings, Incentive, Conferences, Entertainment
M&E	Monitoring and Evaluation
M-PARD	Mombasa Port Area Roads Development Project
MOIED	Ministry of Industrialization and Enterprise Development
MOU	Memorandum of Understanding
MOTIHUD	Ministry of Transport, Infrastructure, Housing and Urban Development
MOWASSCO	Mombasa Water Supply and Sanitation Company Limited
MP	Members of Parliament
M/RDP	Manager Research Project Development
MS	Mainland South
MSA	Mombasa
M-SEZ	Mombasa Special Economic Zone
MTEP	Medium Term Expenditure Plan
NEMA	National Environment Management Authority
NGAAF	National Government Affirmative Action Fund
NGAO	National Government Administration Officers
NGO	Non-Governmental Organization
NLC	National Land Commission
NLP	National Lands Policy
NMK	National Museums of Kenya
ODA	Overseas Development Agency
ODM	Orange Democratic Movement
OP	Operational Policy
PA	Personal Assistant
PAHs	Potential Affected Households
PAPs	Project Affected Persons
PID	Project on Infrastructure Development
PH	Public Hearing
PLCs	PAPS Liaison Committees
PMU	Project Management Unit
PPE	Personal Protective Equipment

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PSC	Public Service Commission
RAP	Resettlement Action Plan
RC	Resettlement Committee
RCS	Replacement Cost Survey
RD	Road
ROW	Right Of Way
RPF	Resettlement Policy Framework
RPT	Resettlement Project Team
RSP	Retirement Savings Plan
RR	Road Reserve
RVM	Replacement Value Method
SALTO	South Coast Association for Local Tour Operators
SC	Sub- County
Sch	School
SEA	Strategic Environmental Assessment
SEZ	Special Economic Zone
SEZA	Special Economic Zones Authority
SH	Stakeholder
SM	Square Metres
SN	Serial Number
SPV	Special Purpose Vehicle
SS	Socket Statistics
ToR	Terms of Reference
TPIs	Third Party Interests
UNES	University of Nairobi Enterprise Services
UON	University Of Nairobi
WASSCO	Water Sewerage Service Company
WB	World Bank
WRA	Water Resource Authority
WRA CR	Water Resource Authority Coast Region
WRUA	Water Resource Users Association
WWF	Worldwide Fund for Nature



CHAPTER 1: BACKGROUND

1.1: The Project

The Government of Kenya (GoK) with support of the Japan International Cooperation Agency (JICA) is developing the Mombasa Special Economic Zone (SEZ) as part of the Kenya Vision 2030 Strategy aimed at delivering a globally competitive Kenya with high quality of life for all its citizens by the year 2030. Formulation of the Masterplan for Mombasa Special Economic Zone has been completed by the GOK in July 2015 with support of JICA under the Technical Collaboration Projects for "Mombasa Port Master Plan including Dongo Kundu (2015)" and "The Project on Master Plan for Development of Mombasa Special Economic Zone (2015)".

Implementation of the Masterplans for Mombasa SEZ is being pursued through combination of Japanese Official Development Aid (ODA) and private investments through Special Purpose Vehicle (SPV). Phase One of the implementation will entail two broad components namely: -

- Basic infrastructure through Japanese ODA and,
- Individual areas within the Mombasa SEZ (including Free Trade Zone [FTZ] and Industrial Area) through private investment to SPV.

1.2: The need to provide Basic Infrastructure to the M-SEZ

Development of the Mombasa SEZ is guided by the 2015 Masterplan for M-SEZ which seeks to transform the 12 square kilometer Dongo Kundu Property owned by the Kenya Ports Authority (KPA) into a commercial hub riding on marine trade and other opportunities associated with presence of the Kilindini Harbour whose potential largely remains unexploited. Dongo Kundu is one vast bushland currently undergoing systematic conversion to a rural settlement by some land occupants currently numbering about 2,000 and towards realization of a SEZ, the Masterplan stipulated critical anchorage to be put in place as follows: -

- Resolution of land ownership and informal settlement problem in SEZ area;
- Provision of transport infrastructure - partly to be resolved through ongoing construction of Mombasa Southern Bypass and proposed Mombasa Gate Bridge and;
- Provision of basic trunk infrastructure namely grid power connection (underway) and provision of water supply and storm water drainage.

The Project on Infrastructure Development (PID) seeks to bridge infrastructure gaps mainly through provision of water supply infrastructure; bank protection of natural drainage networks; construction of a temporary access road for construction; land development & development of KPA offices; and land formation by strategic disposal of excess soil materials accumulated from earth works from PID components. These infrastructures will level the field in readiness for SEZ Investors.

1.3: The need for a Resettlement Action Plan in the PID for M-SEZ

A full outline and description of physical layout on components making the PID in the M-SEZ is provided in Chapter Two below. PID components (land development, land formation/disposal, drainage improvement on selected sites, water reservoir & MDP and access road development) are spread inside M-SEZ villages; while other sections of the PID will traverse already existing way leaves in Kwale County.



The SEZ area is legally a public land owned by KPA and GoK since 1972; however, there are people who have been living in the project area before 1972, the landownership needed to be validated by the National Land Commission (NLC) as per the Constitution. The NLC's conclusion was that there will not be land compensation for PAPs since the land is registered as the public land, but provision of the resettlement site (alternative land for settlement of PAPs) will be made under the KPA Dongo Kundu Compensation Policy which was approved and adopted in 2016. While sections outside the SEZ area, the Project will mostly traverse already existing wayleaves but in some areas, will require that additional wayleaves be created through land acquisition and attendant displacement. This report unveils findings from the census, the socio-economic survey and asset inventory survey and public consultation for the ARAP Report for all PID components in Mombasa and Kwale Counties and guides resolutions of all displacement impacts associated with the Project.

1.4: Landownership in the SEZ Project Area

Land ownership of Mombasa SEZ is a complicated due to the legal status and the traditionally recognized ownership. Legally, land has been leased to KPA for 99 years from 1972, and currently managed by KPA. On the other hand, there are residents living in the target area for many years long before 1972 and claiming ownership of the land. Additionally, in Kenya, it is customarily considered that land in the coastal area belongs to the community, and registration of the individual land ownership is not progressed. As a countermeasure, the government facilitates the registration process to verify the rightful ownership. More specifically, Article 40(4) of the Constitution of Kenya says, "Provision may be made for compensation to be paid to occupants in good faith of land acquired under clause (3) who may not hold title to the land". However, this clause is not applicable to public land as in the case of M-SEZ.

On the other hand, Section C of the Limitation of Actions Act states that "An action may not be brought by any person to recover land after the end of twelve years from the date on which the right of action accrued to him or, if it first accrued to some person through whom he claims, to that person". Based on this provision, the recognized landownership is validated by the government on a case-by-case basis. For the Mombasa SEZ area, there are residents living in the area who have lived there for more than 30 years. As the results of NLC validation of land and structures ownership in SEZ area, it was concluded that the land in SEZ area is a public land, and the title belongs to KPA. However, NLC requested KPA to consider those with stake to land in the SEZ area by providing a resettlement site for them.

1.5: Approach and Methodology to the ARAP Process

1.5.1: Objective and tasks in the ARAP Study

According to the Terms of Reference (Appendix 1.1) the main task of this work is to prepare ARAP reports in accordance with Kenya's laws/regulations as well as by taking into consideration the requirements of JICA Guidelines and WB OP 4.12 Involuntary Resettlement which is referred by JICA Guidelines.

1.5.2: Tasks in the ARAP Study

The TOR requires the Contractor to work in close cooperation with the JST to prepare ARAP in accordance with Kenya's laws/regulations and the above-mentioned international standards.



The Contractor shall also review the other M-SEZ related resettlement plans. The detailed scope of works is described below.

TOR Tasks: Approach to the ARAP was aligned and ordained to 14 tasks stipulated in the TOR of the Contract namely: -

- Task 2-1 Determination of Cut-Off date
- Task 2-2 Baseline Survey for the Target Area
- Task 2-3 Social Survey of the Project Affected Peoples (PAPs)
- Task 2-4 Evaluation and Determination of the Compensation Target
- Task 2-5 Estimation of Compensation Cost and Determination of Compensation Procedure
- Task 2-6 Livelihood Restoration Strategies and Plan
- Task 2-7 Grievance Redress Mechanism Plan
- Task 2-8 Determination of Relevant Authorities for Resettlement and each Responsibility
- Task 2-9 Implementation Plan for Resettlement
- Task 2-10 Financial Plan for Compensation
- Task 2-11 Implementation Monitoring Plan/ Monitoring Form and Organizational Structure
- Task 2-12 Treatment for Socially Vulnerable Group
- Task 2-13 Public Consultation Meetings
- Task 2-14 Approval Acquisition

Supplementary Study Tasks: Towards ensuring delivery of ARAP Study, requirements and provisions of the Kenyan Policy and Legal regimes, JICA Guidelines and the World Bank's Operational Policies were reviewed to provide anchorage to the study and ensuing Report.

1.5.3: Study Design and Rationalized work plan

Table 1.1 outlines the Planned Work Schedule for the ARAP Study. The same has been arranged to fit into the 8 months (June 2019 and February 2020) study period allowed by the ToR. Actual study period took longer, and the report was finalized in April 2020. Some updates were done by JST members including a Kenyan resettlement consultant member.



Table 1.1: Planned Work schedule for the ARAP Study

TOR task	Time frame in Months							
	June	July	August	October	November	December	January	February
Inception Report								
Task 2-1 Determination of Cut-off date								
Task 2-2 Baseline (topography, asset, photos, etc.) survey for the Target Area								
Task 2-3 Social (family structure, livelihood and its recovery needs, etc.) Survey the Project Affected People (PAPs)								
Task 2-4 Evaluation and Determination of the Compensation								
Task 2-5 Estimation of Compensation Cost and Determination of compensation procedure								
Task 2-6 Livelihood Restoration Strategies and plan								
Task 2-7 Grievance Redress Mechanism/Plan								
Task 2-8 Determination of relevant Authorities for Resettlement and each responsibility								
Task 2-9 Implementation Plan for Resettlement								
Task 2-10 Financial Plan for compensation								
Task 2-11 Implementation Monitoring Plan with monitoring form and Organizational Structure								
Task 2-12 Treatment for socially Vulnerable Group								
Task 2-13 Public Consultation Meetings								
Task 2-14 Approval Acquisition								
Final PAP Report								
Approval of the ESIA Report								
Report								
Draft PAP								
Final PAP								

Source: Inception Report for this Study

1.6: Preparations for ARAP Survey

In sections below, a highlight of the systematic procedure employed in executing TOR Tasks towards delivering on the ARAP Study is outlined.

1.6.1: Stakeholder Engagement/ Public Consultation Meetings: (Task 2-13)

The Stakeholder (SH) Engagement Plan as conceived and executed under the ARAP for PID is provided in tabular form below and fully amplified under Table 1.5.1 below. Stakeholder Engagement was delivered in Three Stages during which meetings were scheduled and held to meet the diverse needs specific to each phase namely, - Inception /Planning, Field Investigations and Disclosure. Outcome of SH Engagement as delivered based on the stated strategy is unveiled in sections below. Stakeholder engagement was conducted together for the ESIA and ARAP studies.

Table 1.5.1: The Stakeholder Engagement Plan

Study Stage	Meetings held	Purpose of Meetings
Inception Stage	Planning and Leaders Meetings	Meetings were held with core stakeholders including Leaders for purposes of introducing both the PID and attendant ESIA and ARAP Studies
	Public Hearing Meetings	These were held for purposes of introducing both the PID and attendant ESIA and ARAP Studies to residents of the traverse areas
Field Investigations	Key Informant Interviews	Working meetings were arranged for Key Informants for purposes of seeking expert opinion on issues pertaining to the Project
	Consultation with Lead Agencies	Working meetings were arranged for Legal Mandate Holders for purposes of investigating relevant issues as part of the ESIA and ARAP Studies

Study Stage	Meetings held	Purpose of Meetings
Disclosure Phase	State launch of the SEZ. ESIA/ARAP Team fully participated in background planning meetings.	A major disclosure of the SEZ took place on 18 th Oct 2019
	Meeting with Corporate Players Public Hearing Meetings	Meetings were held to disclose findings to relevant and affected stakeholders Public hearing meetings were held to disclose outcome of ESIA and ARAP to potentially affected persons
	Additional Consultation & Disclosure Meetings on the developed Compensation Policy	3-High level meetings with government officials and consultation and information disclosure meetings with all PAPs to disseminate information on provisions for arranged resettlement sites and additional resettlement assistances were conducted in January and April 2022.

Source: ARAP Consultant Team

Table 1.5.2: Cut Off Dates in the PID

Proclamation Site	Date	Attendance		
		M	F	Total
Waa Primary- Kombani Central Sub Location	26/07/2019	72	67	139
Kombani Social Hall - Kombani Sub location	29/07/2019	31	12	43
Chidzumu Primary School - Kombani Sub Location	29/07/2019	22	17	39
Kiteje Mwembe- Kiteje Sub location	30/07/2019	51	32	83
Well No 2 Dzangazangani - Matuga Sub location	31/07/2019	36	26	62
Madibwani - Ng'ombeni Sublocation	28/08/2019	19	11	30
Well No 5 -Chai - Simkumbe Sub location	05/09/2019	66	17	83
Dongo Kundu – Deputy County Commissioner (DCC) office in the SEZ area	31/01/2019	294	114	408

Source: Consultation Records

1.6.2: Measures to prevent informal developments on the proposed alignment after the cut-off date: Even though larger part of the PID outside MSEZ area is water supply infrastructures that will be traversing road reserves, access to all the three (3) intake wells located in Tiwi and Waa locations depend on privately owned roads and land. In this case, both the private plot owners and local administration (village elders, sub location chiefs and location administrators) have been fully made aware of the proposed alignment. Further, all the wells and transmission routes from the well to booster pumping station in Tiwi are under security surveillance by local employed youths who are responsible for reporting on new and speculative development in the proposed alignments.

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1.7: Baseline Survey for the Target Area (Task 2-2)

Activities in field work were focussed on addressing TOR Tasks 2-2/2-3 and were approached as highlighted in sections below.

1.7.1: Familiarization with Project Design Layout

As part of Inception phase activity, available project documentation was studied to clearly understand aspects of project design inclusive of components, alignment, scope, and depth of activity among others which have displacement impact.

Diverse documents were reviewed as part of the survey. They include -

- Schematic maps on the layout of Project Components,
- The Masterplan for Mombasa SEZ
- The Strategic Environmental Assessment Report for Mombasa Special Economic Zone,
- JICA Guidelines for Environmental and Social Considerations (2010)
- Kenyan Laws on land and resettlement planning; and
- The Water Master plan for Mombasa County

Information accruing from literature survey was cross checked during field reconnaissance from within the scope of potential displacement impact started emerging. Such information was useful in facilitating design of field inventory and data correction.

1.7.2: Familiarization with the Potentially Affected Areas

Reconnaissance travel was made to the Project area in Mombasa and Kwale Counties for purposes of correlating project design on the ground while simultaneously establishing contacts with respective administrative jurisdiction. A major outcome of field reconnaissance was discovery that for outside the SEZ area, the project largely traversed ROWs commanded by either road agencies, County Government, and the Coast Water Works Development Agency - CWWDA (Table 1.6). Within the SEZ area, the land is legally owned by the KPA and Gok, although the PAPs have been living for a long period. This observation was later verified during later stages of asset survey with outcome as reported in Chapter Four below.

Table 1.6: Analysis of status of reserves to be used by PID Infrastructure

SN.	Project Section	Road Section	Length in Kms	Designated Authority	Width of Road Reserve (RR) in meter	Remarks
1	Well No 5: Transmission pipelines from well no 5 to	Well No 5: Chai to Pongwe Road	1.673	Private and Kenya Rural Roads Authority - KeRRA	12.5	Road passes in close vicinity of a public cemetery
2	booster pumping station	Well No 5 (ii): Pongwe to booster pumping station	0.938	Kenya National Highway Authority - KeNHA	80	Target reserve already hosting the Kwale WASSCO Pipeline to Likoni
3		Well No 3: Chidzumu to	1.391	Private Kwale County	7.5	Width of Road not uniform. Individual

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SN.	Project Section	Road Section	Length in Kms	Designated Authority	Width of Road Reserve (RR) in meter	Remarks
		booster pumping Station		Government roads - KCG		Community members still claim ownership of some section.
4		Well No 2: Dzangazangani - Maganyakulo	1.886	Private KCG	7.5	Width of Road not uniform.
5		Well No 2 (ii) A7 from Maganyakulo – booster pumping station	3.359	KeNHA	40	Width of the Road already marked/has beacons. Uniform Cross-section
6	Section II: Transmission line from booster pumping station to SEZ Reservoir	A7 Road from booster pumping station to Magandiya & Crossing the C 106 at Kombani	7.533	KeNHA	40	Width of the Road already marked/has beacons. Uniform Cross-section
7		Magandiya - Maida (Matuga RD Junction)	2.05	Coast Water Service Board (CWSB)/CWWD	4	ROW already acquired by Coast Water
8		Madibwani-Kiteje-Mkumbi	7.219	KCG	15	Width of road not uniform. Some plots have not been surrendered
9		MSBR from Mkumbi to MSEZ Reservoir	1.235	KeNHA	110	Road already marked. Uniform Cross-section of the Mombasa Southern Bypass
10	Section Three: M-SEZ Reservoir	Within DK	Spatial (2.04 Acres)	KPA	Spatial	Land already acquired under the area by project proponent (KPA)
11	Section IV: Temporary Road to D1	To D1 Area	2.5	KPA	47	Land already acquired under the area by project proponent (KPA)
12	Section V: Drainage Canals within MSEZ	These are likely to be riparian land/natural drainages while	0.66	KPA	Bank protection of up to 4 meters	Land already acquired under the area by project

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SN.	Project Section	Road Section	Length in Kms	Designated Authority	Width of Road Reserve (RR) in meter	Remarks
		all other land was already inventoried for acquisition under the by project proponent (KPA) and no additional land is required				wide and Diversion channels of up to 20 meters wide. proponent (KPA)
13	Land Development Area	Land Leveling in Port Area and road connection up to the Port Gate	Spatial (24.7 Acres)	KPA	Spatial	Land already acquired under the area by project proponent (KPA)
14	Spoil disposal area	Site in FTZB where spoil from the DK1 area will be deposited	Spatial (76.5 Acres)	KPA	Spatial	Land under process of acquisition by KPA
15	Contractor Camp Site	Site within DKV area adjacent to interchange	Spatial (3.9 Acres)	KPA	Spatial	Land under process of acquisition by KPA

Source: Prepared by the Consultant based on the cadastral survey

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Plate 1.1 (a & b): Familiarization with the Project (Source: Field Study)



Plate 1.2: Bare Hole Site No 2. (Source: Field Study)

1.7.3: Census Survey of Households, Individuals and Property

Census survey for households and individuals were executed simultaneously and systematically as follows: -

Design of a data capture tool: A suitable data capture tool in form of questionnaire for use in the census survey for households and individuals was designed and pretested for efficacy (Appendix 1.2).

Mobilization of inventory teams: Given the linear nature of the Project, a single inventory team comprised of a Team Leader, 2 survey assistants, 2 data clerks backed up by 2 village elders was assembled.

Training for enumeration teams: A one day training seminar for all enumerators was held at Tiwi. Training targeted to introduce enumerators to the questionnaire, modalities and conduct during the interview, how to record information and data, the need to dress decently and safely

given prevalence of serpents in the study area among others. As part of the training, the enumerators were deployed to pretest questionnaires under supervision.

Census Survey and Asset Inventory: Census Survey and asset inventory took place simultaneously. Respective Enumeration teams were deployed to pre-determined designated setting out points for each village based on advice from the land survey team. At every starting point, farms were identified and inventoried in sequence starting firstly with the owner of the first property identifying the external boundary to the land survey team. Where there was no dispute, the boundaries were marked with wooden pegs which were numbered sequentially and then geo-referenced against the numbers in line with standard cadastral surveying practice. Census survey proceeded as follows: -

Non-developed properties: Where target property is not built up, the inventory team will fill a questionnaire capturing details of the owner and then count all trees and biannual crops within the plot boundary. The questionnaire will be signed by the owner and counter signed by a village elder.

Built up properties: For settled properties, the inventory team in the company of property owners and a village elder moved to the homestead determine the number of households there-in. In case of only one household surveyed, details of the head of household were captured in a primary questionnaire (e.g. Tiwi 001) his name, age, composition of household, presence of vulnerable members etc. Details of his property were then captured in the questionnaire to include make and size of house and other structures, trees, biannual crops, etc. In the case of other households resident in the same compound such as for son, brother etc., a separate secondary questionnaire (e.g. Tiwi001/1) was filled but annexed to the primary questionnaire signifying that all live on the same piece of land. Details of property owned by the second or third household were captured in their respective questionnaires. That way the asset inventory also served as a census survey. Each respondent was asked to sign their questionnaires for countersigning by respective Village Elders.

At the end of farm inventory, a photograph of each head of household was taken against his main house and the process repeated until all farms in a village have been inventoried. Wherever teams came across bare non-claimed land, the same was inventoried and numbered sequentially to the last farm to ensure that such land is not claimed by speculators in future.

1.7.4: Social Survey of the Project Affected Peoples (Task 2-3)

Census Survey, Socio-economic Survey and Asset Inventory (Household data): The questionnaire for each Landowner/PAP to establish the following: -

- Household composition
- Age and Education Achievement
- Dominant sources of Income
- Annual Income for last 5 years
- Vulnerable persons in Household on account of being orphaned, ill health, old age, physical disability/ challenge, poverty, landlessness, etc.
- Access to essential services etc.

Inventory of Public /Cultural and historical heritage: Inventory of all Common Property Resources (Common Property Resources) took place at 2 levels. Firstly, during the public baraza (meeting), the community was asked to publicly identify all public property starting with schools, medical centers, water projects, mosques, churches, shrines etc. The same were then ascertained through ground trothing followed by inventory.

1.7.5: Evaluation and Determination of the Compensation Target (Task 2-4)

Assembly of Asset Registers: All questionnaires were crosschecked daily to harmonize between the Land Survey and Census teams. Certified questionnaires were then keyed-in sequentially following the Village Codes to yield asset registers for each of the six villages. On their part, the cadastral survey teams keyed-in all geo-referenced plot boundaries to firstly compute the total land area which then fed into the assets registers and secondly produce maps for all land parcels and properties in each village. A suitable data entry format was formulated for the study.

Evaluation and Determination of the Compensation Target (Task 2-4): Upon conclusion of the data entry, Asset Registers were analysed to establish the Dominant Losses/ Displacements to be occasioned by components of the PID. Based on this list an Entitlement Matrix has been explored drawing heavily on JICA Guidelines and Kenyan Laws especially Lands Act 2012, Lands Amendment Act 2016, and Land Regulations 2017. Chapter Six sets out the Entitlement Matrix.

Review of applicable Policy/Legal Frameworks and Guidelines: Towards ensuring delivery of a comprehensive ARAP Study, requirements and provisions of the Kenyan Policy and Legal regimes, JICA Guidelines and the World Bank's OPs were reviewed to provide anchorage to the study and ensuring the report.

1.7.6: Estimation of Compensation Cost and, Determination of Compensation Procedure (Task 2-5)

The Replacement Cost Study: A Replacement Cost Study was undertaken to establish market values for land, property, and Livelihoods. Based on this, all potential losses for each PAP have been computed to develop a Preliminary Cost Estimate and overall compensation Budget. Details are unveiled in Appendix.

Approach to Asset Valuation: All asset valuation was conducted in line with The Land (Assessment of Just Compensation) Rules, 2017 (No. 283 of 2017 which targets to implement provisions of the Land Registration Act 2012 in respect of the amount of compensation to be awarded for land acquired under the Act. It among other things sets out factors to be taken into consideration when assessing compensation. Factors to consider in assessment of compensation shall include: -

- the market value of the land;
- damage sustained or likely to be sustained by persons interested at the time of the National Land Commission's (NLC) taking possession of the land by reason of severing the land from his or her other land;
- damage sustained or likely to be sustained by persons interested at the time of the NLC's taking possession of the land by reason of the acquisition injuriously affecting his or her other property, whether moveable or immovable, in any other manner or his or her actual earnings;

- reasonable expenses incidental to the relocation of any of the persons interested or who will be compelled to change residence or place of business as a consequence of the acquisition; and
- damage genuinely resulting from diminution of the profits of the land between the date of publication in the Gazette of the notice of intention to acquire the land and the date the Commission takes possession of the land.

The outcome of the asset valuation is creation of a Preliminary Cost Estimate which reflect the compensation due to the diverse PAP Categories. It is this record that can form a basis for making awards to any land user likely to be displaced by development of the Infrastructure Project.

Compensation procedure: This is elaborated in Chapter Six below. Compensation in Kenya is always managed by the NLC. Modalities for Land Acquisition after payment of compensation will however be resolved as part of the ARAP Study.

Livelihood Restoration Strategies and Plan (Task 2-6): A Livelihood Restoration Strategy and Plan has been developed as part of the ARAP drawing on lessons from the other internationally financed projects in the vicinity.

Financial Plan for Compensation (Task 2-10): Before the NLC can initiate Land Acquisition; they require evidence of sufficient funds to support the Compulsory Land Acquisition which implies availability of a Financial Plan. Thus, alongside activities for Task 2-9, all Agencies responsible for diverse components of the PID will be engaged on ability to raise funds to pay compensation for displacement occasioned by their components.

Treatment for Socially Vulnerable Group (Task 2-12): Modalities for additional support to vulnerable groups identified during Census Survey are outlined in Chapter Six and Eight below.

1.7.7: Grievance Redress Mechanism (GRM) Plan (Task 2-7)

A GRM is outlined in detail in Chapter Nine below.

1.7.8: Institutional Framework, and Implementation Schedule (Tasks 2-8 & 2-9)

Data applied in formulating the Institutional Framework and Implementation Schedule as outlined in Chapter Ten are largely borne of outcome of stakeholder engagement and review of reigning legal framework.

1.7.9: Implementation Monitoring Plan with Monitoring Form and Organizational Structure (Task 2-11)

JICA has a systematic procedure and criteria for environmental and social safeguards monitoring during the construction and operation stages at both Quarterly and Project Completion Stages. The JICA's environmental and social safeguards monitoring requirements and procedure will be reviewed for adoption in the ARAP for PID. Internal monitoring forms and draft TOR for external monitoring are included in Appendix 10: TORs for External Monitoring, Vol. 2.

1.7.10: Approach to reporting in the ARAP Study

A total of three ARAP Specific Reports have been identified under Task Three of the TORs.

Table 1.7.10: Reporting Procedure in the ARAP Study

Target Report	Strategy to deliver
Task 3-1 Inception Report	Was prepared upon signing of contract with JST. The Inception Report had elaborated on the Methodology for ARAP based on mutual contract discussion and negotiation.
Task 3-4 Draft ARAP Report	Draft ARAP essentially contains all findings of the ARAP Study inclusive of Total PAPS, Assets Register, a Preliminary Cost Estimate, Entitlement Matrix, ARAP Budget, Implementation Schedule among others. It should form the basis of discussion of both entitlement and compensation with PAPS. A redacted version of the ARAP could be subjected to public review upon consultation.
Task 3-5 Final ARAP Report	Final ARAP is prepared once all comments from relevant Stakeholders have been inputted.
Task 3-6 Completion Report	This Report should essentially submit all approvals to the JST.

Source: Inception Report

This ARAP Report is presented in Four (4) as follows: -

- Volume One: Main Report
- Volume Two: Data Appendices including Public Consultation Records, a draft TOR for External Monitoring, and Results of the Replacement Cost Survey
- Volume Three: Books of Drawings
- Volume Four: Preliminary Cost Estimates

Volume One is presented in thirteen (13) Chapters.

1.7.11: Approval Acquisition (Task 2-14):

The ARAP Process in Kenya officially does not have a definite approval of acquisition stage and is not provided for in Lands Act 2012. Therefore, the ARAP needs to be approved by the KPA as a KPA's commitment plan for its project.

CHAPTER 2: PROJECT ON INFRASTRUCTURE DEVELOPMENT FOR THE MOMBASA SPECIAL ECONOMIC ZONE

2.1: Background and Context

2.1.1: Context

The GoK, in an effort to stimulate growth of the economy, adopted the Kenya Vision 2030 – the country's development blueprint covering 2008 to 2030 aimed at transforming the country into a newly industrialized middle-income economy providing high quality life for all the citizens by the year 2030. The Vision is anchored on three key pillars: Economic, Social and Political. One of its goals is the realization of the Millennium Development Goals (MDGs) by the year 2015. Strategies of the economic pillar are aimed at generating sufficient resources to attain the Vision and MDGs which requires, among others, a 25-year economic growth-rate averaging 10% per annum. Towards this, the Economic Pillar has identified six key sectors to drive high and sustainable economic growth, namely tourism, agriculture, wholesale and retail trade, manufacturing, business process outsourcing and financial services. Attainment of the Medium-Term Plan (2008-2012) goal of raising GDP growth to the target 10% by 2012 was pegged on implementation of sectoral flagship projects with capacity to attract foreign direct investment towards increasing export-oriented manufacturing, probably drawing from the experience of Southeast Asian Economies. Under this model, SEZs rank very highly on account of their potential to simultaneously attract Foreign Direct Investment, manufacture for Export, and create employment and were therefore identified priority Flagship Projects to anchor the Economic Pillar. The 1st Medium Term Expenditure Plan (2008-2012) targeted for economic growth however proved elusive to attain as Kenya was hit by several disruptive events; - the post-election violence of 2008 which caused economic activity to plummet in fear of violence and political uncertainty and as the political situation calmed, the agriculture sector faced a severe drought in 2009 which continued to dampen economic output. Propelling GDP growth from the 2012 average of 4.6% up to the target 10% will require aggressive pursuit of the flagship projects hence the re-energized interest in proposed development of SEZ in Nairobi, Mombasa, and Kisumu within the 2nd MTEP (2013 to 2018). This is the rationale and momentum propelling the Master Plan for the proposed Mombasa SEZ.

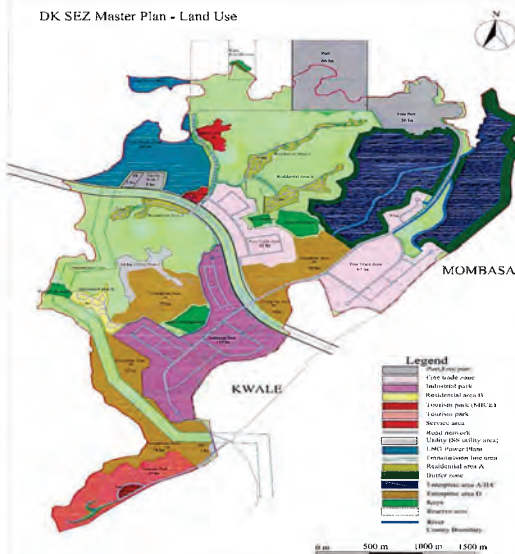
2.1.2: Outputs / Objectives of the Master Plan Study

The Master Plan Study for the Mombasa SEZ will pursue eight specified tasks namely:

- To collect and analyze relevant information,
- To Study vision and concept of the Mombasa SEZ,
- To identify industries and function of the Mombasa SEZ
- To prepare a general plan for infrastructure development required for Mombasa SEZ based on the above study,
- To study financial arrangements for the Mombasa SEZ
- To identify operation and management models for the Mombasa SEZ,
- To formulate a human resource development plan
- To take necessary action for environment and social considerations.

2.1.3: Conceptual Design of Mombasa SEZ

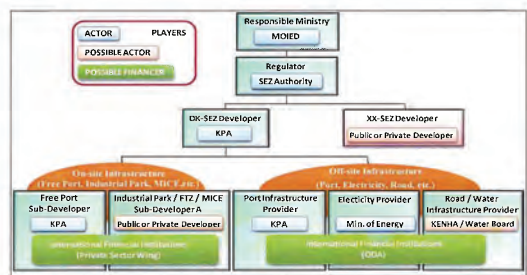
To fully utilize its advantage of the proximity to the international port, DK-SEZ needs to be developed as a logistic and industrial base with components such as Free port, Free Trade Zone (FTZ), Industrial Park and energy base. In addition, residential and tourism function is recommendable to create a modern and integrated SEZ. High grade and globally competitive infrastructure including power supply, water supply, waste treatment and telecommunication should be developed to support the activities of investors. Figure 2.1.3 illustrates various components that form the basis of DK-SEZ development.



Source: JICA Study Figure 2.1.3 Land Use Plan of Mombasa SEZ

2.1.4: Organization Structure

Organization structure for the implementation of SEZ is proposed in harmony with the approved SEZ Bill (draft Act) as summarized in Figure 2.1.4. below.



Source: JICA Study Figure 2.1.4: Proposed Organization Structure

2.2: Project on Infrastructure Development for the Mombasa Special Economic Zone

2.2.1: Scope and Design

Figure 2.2 below is a schematic presentation of the PID Design. The Project targets to provide basic infrastructure (water, temporary access road for construction work, drainage, water distribution system, etc.) to the Mombasa Special Economic Zone through ten interventions namely: -

1. 3 Intake Wells in Kwale County, including Transmission Pipeline to the Booster Pumping Station.
2. Construction of a Booster Pumping Station (BPS) in the CWSB Tiwi Office.
3. Construction of a water Transmission Main and Distribution Main in parallel of length approximately 22km from BPS to water reservoir at SEZ in Mombasa County, including water kiosks.
4. Construction of Mombasa SEZ Reservoir.
5. Construction of Distribution Pipeline of length 12km to supply water from water reservoir to part (DK-1) and freeport (D1) area within Mombasa SEZ.
6. Construction of Connection Pipeline from Mombasa SEZ Reservoir to Mombasa Water Supply and Sanitation Company Limited - MOWASSCO trunk approximately 12km.
7. Improvement of Drainage System within Mombasa SEZ (north part of Mombasa Southern Bypass Road).

8. Land Grading of D1 (freeport) area with approximately 10ha within Mombasa SEZ, including gate and road facilities.
9. Temporary Access Road for construction work
10. Spoil disposal

2.2.2: Project ownership

The Project for Development of Infrastructure to the Mombasa SEZ is an undertaking of the Government of the Republic of Kenya with the support of JICA. For purposes of the ARAP Study however, the KPA is the designated Project Proponent.

2.2.3: Counterpart organizations

In capacity of Proponent, the KPA will provide institutional housing and reference for the ARAP Study. Agencies that have direct impact on both studies include the following: -

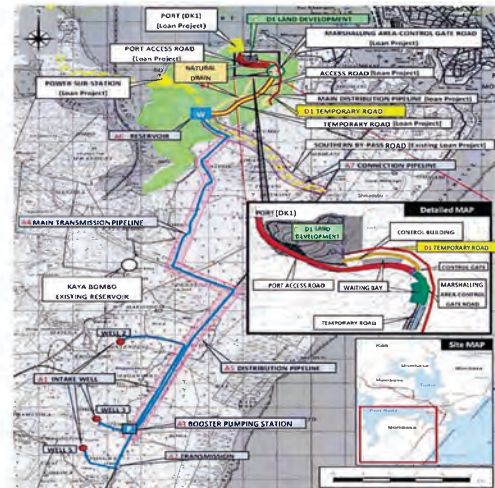
Table 2.2.3: Counterpart Organizations

SN	Institution	Relevance
1	KPA	Designated Project Owner and Proponent to the ARAP Study
2	National Environment Management Authority (NEMA)	Environmental Regulator who will police the ESIA Process
3	NLC	Will handle and manage the land acquisition process
4	CWSB	Owens the land where the booster pump will be constructed
5	KEWASCO	Owens the pipeline linking Mombasa to the source area at Tiwi
6	County Governments of Mombasa and Kwale	Have planning jurisdiction over the project area
7	Ministry of Interior and Coordination of National Government	Have coordination function over all GOK agencies
8	Road Agencies-KENHA and KeRRA	Have mandate for management of road reserves targeted for passage of water infrastructure

Source: ARAP Consultant Team

2.2.4: Project development Schedule

According to the Design Report, Construction is anticipated to take 22 months with different components lasting diverse durations; water-17 months, drainage-6 months, land development-19 months, and temporary road construction- 2 months.



Source: JICA Study
Figure 2.2. Map of PID Traverse in Mombasa and Kwale Counties

2.3: Potential Sources of Displacement Impact

A summary of the main displacement impacts in PID is provided in Table 2.3.1 below. Essentially, displacement impact in Kwale County is anticipated from creation of the 24.08 Km long ROW connecting the 3 No. Intake Wells to the consumption area through both the Tiwi Booster Station and the Mombasa Reservoir. The ROW will carry 4 No. Transmission Lines linking wells to the Tiwi Booster Station, 1 No. Main Transmission Line linking Tiwi Booster Station to the Mombasa Reservoir and another line linking water kiosks along main transmission pipeline to the booster station. A single Main Distribution Line will supply the Port area from the Mombasa Reservoir.

Displacement impact inside MSEZ will be occasioned by construction of temporary access road of 2.5km; drainage improvement; land development and land formation/disposal site for supplies soil (483,000 cubic meters) in the FTZ B as proposed in the land use master plan for

MSEZ. Severe displacement impact will be occasioned by land formation in FTZ B area given that 45.68% of all the displaced households in the entire project area will be affected by land formation.

Table 2.3.1: Potential Sources of Displacement Impact (The Number of the PAHs and PAs)

Location	Source of Displacement	Area (ha)	Impact on Land	No. of Affected parcels	Impact on Structure	(A) HHs to be displaced (H) whose residential structure is affected?	(B) Population to be displaced (Whose residential structure is affected?)	(C) No. of Subunits for core county (HHs) not physically displaced (Provisional)	(D) Population of landowners and PAs with share in land for Mombasa County (HHs) not physically displaced (Provisional)	(E) HHs of Economic Displacement (No. of respective households not physically displaced)	(F) Population of Economic Displacement (No. of respective population not physically displaced)	Total PAHs (A+B+C+E)	Total PAs (D+F)
Outside SEZ (Kwale)	Water Supply in Kwale	30.91	5.16	118	87	1	3	118	158	10	10	129	171
	Water reservoir & MSP	4.24	2.04	3	0	0	0	3	3	0	0	3	3
	Temporary Road to D1	2.5	28.5	48	15	8	13	44	44	0	0	52	57
Within SEZ: Mombasa	Drainage Improvement	0.68	2.29	19	3	0	0	19	19	0	0	19	19
	Land Formation/Disposal	24.7	7	27	11	34	0	0	2	2	2	12	68
	Land Formation/Disposal site	76.45	63	111	41	92	13	128	0	0	0	54	220
	Constructor site	3.85	2	0	0	0	0	2	2	0	0	2	2
Total		38.33	142.99	261	243	61	142	199	354	12	12	272	540

Note: 1. HHs: Households

The number of informal occupants (households and population) in Kwale County is summarized in the following table. Majority of them are informal shops on the road reserve. As for the SEZ area, it was concluded by NLC that, the land is a public land and all the affected PAPs are considered as PAPs with stake to land.

Table 2.3.2: Table of Informal PAHs in Kwale (Outside SEZ)

Section	Admin Jurisdiction	Number of Informal PAHs - Property Owner Households within Road Reserve	
		Household	Population
Well No 5: Chal to Pongwe Road	Simkumbe Sub location, Chal Village	0	11
Well No 5: Chal to Pongwe Road C214	Simkumbe Sub location, Pongwe Village	1	6
Well No 5 (B): Pongwe to booster pumping station	Simkumbe Sub location, Pongwe Village	1	1
Well No 3: Chidzumu to booster pumping station	Kombani Sublocation Chidzumu Village	2	18
Well No 2: Dzangazangani - Maganyakulo	Matuga, Kitivo Sub location (Zangazangani, Mzangaifu, Mwashipi, Gwani Villages)	19	22
Well No 2 (B) A7 from Maganyakulo - booster pumping station	Kitivo, Kombani sub locations	0	0
A7 Road from booster pumping station to Magandiya & Crossing the C 108 at Kombani	Kombani, Kitivo, Ng'ombeni sub-Locations	1	4
Magandiya - Maida (Matuga RD Junction)	Ngombeni Sub location, Maida Village	0	13
Madibweni-Kiteje-Mkumbi	Ng'ombeni and Kiteje Sub locations	20	43
Totals		44	118

Source: Census Survey, Socio-economic Survey, Asset Inventory Survey

2.4: Measures investigated to avoid, reduce, and mitigate displacement impact

2.4.1: Measures to avoid displacement impacts in Kwale County

Measures evaluated here include alternatives that will not entail sourcing and transmitting water from Tiwi. They include: -

(i) The No-Project Scenario

The 'do nothing' or 'without project' option would entail abandoning the project to entirely avoid displacement impact. And given that water supply is an essential ingredient in realizing the M-SEZ and its economic goals, shelving of water supply infrastructure is not really an alternative as it would not achieve both the M-SEZ and Kenya Vision 2030. The without project scenario will perpetuate currently negative impacts associated with developed potential of Kenya's South Coast.

(ii) Use of alternative technology

This entails alternative provision of water to the M-SEZ without creation of the 38.3 km long ROW. In this option, alternatives were assessed as follows: -

- Columns (A) and (5) include all the PAH/PAPs to be physically displaced such as landowners to be physically displaced and informal occupants to be physically displaced to avoid displacement impacts.
 - For this table, the PAHs living in the SEZ area are classified as PAPs with stake to land in 'Form B' in Column (A), (5), (C) and (D) since it was concluded by NLC that land in SEZ area is a public land.
 - The number of total affected households and population are estimated to the possible extent with the collected data, but it is subject to change by assuming complexity of land ownership e.g. one time parcel is owned by one landowner/PAP with stake in land or more than one landowner/PAP with stake in land, and one landowner/PAP with stake in land can have more than one lot parcel sometimes. The number of landowner/PAP with stake in land households and population are provisional since the accurate records cannot be obtained in the field survey for the ARAP and needs to be verified with the legal records in the registration process.
 - Columns (E) and (F) consist of the economically displaced PAHs/PAPs who are not physically displaced since they are not physically displaced since they are not physically displaced.
 - Columns (G) and (H) consist of the informal business on the road reserve for Column (E) and (F).
- Source: Census Survey, Socio-economic Survey, Asset Inventory Survey

Desalination of sea water: Desalination is the removal of dissolved salts from ocean/sea water. This process convert's unusable water to usable water thus renders water fit for both human consumption and industrial applications. Large plants of desalination can produce adequate water to meet both industrial usage and other purposes hence making up the deficit on water resources and thus significantly reduces pressure on freshwater resources. Desalination plants can be erected near demand centers eliminating the need for long pipelines. Erecting a desalination plant in M-SEZ will only require a two-way pipeline of 8.68 kilometers from the plant located in the shore line to the SEZ reservoir. This can eliminate up to 70% of the pipeline length needed for transmission of water from Tiwi to M-SEZ. Existing desalination technologies require substantial amount of fossil fuel energy making the process to be expensive. It is estimated that to produce one cubic meter of freshwater before pumping to the reservoir, 1.45 US\$ is needed. Of the 1.45 US\$ unit cost, 60.7% goes to energy needs while only 39.3% is on initial/investment capital (Source: CWSAB – Water supply master plan 2013). The energy required to produce one cubic meter of freshwater is 10 kilowatts. Working with estimated M-SEZ water demand of 2,000 cubic meters, the plant will require Ksh 290,000 and 20 Megawatts of electricity on its daily operation. The 20 Megawatts daily demand will account for 9% (n=20/225) of the total peak demand for electric power in the entire Mombasa County. Besides operational challenges, siting of desalination plants and associated infrastructures pose significant environmental threats to marine ecosystem; Desalination plants for seawater conversion are always located close to the riparian areas, the plants are further lowered below the sea level to minimize amount of energy needed to lift the sea water to the plant. This may interfere with coral formations and disturb biodiversity. Finally, resultant brine effluent from the desalination plant can affect coral life. As such, desalination is only advisable in areas where freshwater sources are not economically.

Rainwater harvesting: The option of meeting the daily M-SEZ water demand of 2000m³ from rain-water harvesting was also assessed. It was noted that, given the seasonal nature of Mombasa rainfall, rainwater would require to be harvested and stored during the April-June rainy season for use in the ensuing Eight (8) month long dry season between July and March. An Eight (8) month storage for the M-SEZ daily demand translates to 384,000 m³ net of storage required to offset evaporative and seepage losses. Essentially, this would require construction of a 10ha reservoir holding 10m depth of water and this has more displacement impact that the entire 57.88ha required to create the 38.3km ROW. Indirectly though, this is the same intervention being implemented through Mwache dam, which is financed by WB.

2.4.2: Measures to minimize impacts

(i) Waiting for the Mwache Dam Source:

This will mean shelving the proposed development targeting abstraction and transmission of water from Tiwi Aquifer to the M-SEZ in favor of the Mwache dam whose implementation schedule is currently delayed. By implication, the M-SEZ and prospective investors would have to incur delays as an alternative source of water supply is identified. While an operational Mwache dam is the priority source of sustainable water supply to DK and indeed Mombasa and South Coast, it will also entail displacement impact in the laying of transmission and distribution mains.

(ii) Realignment of Transmission ROW

This option involves pursuing PID project on different alignments. As such, impacts expected to occur with the current design would be avoided. But this is short-term as its likely to trigger unforeseen impacts as analyzed in Table 2.3.3 below.

Table 2.3.3: Comparison of diverse options

Alternative Routes	Status of Wayleave	Advantages	Likely adverse impacts
Route One: A7 section of Tiwi to Kibudani: 10.9 Kilometres	Secured Wayleave	PID can capitalize on existing reserve for KenHA to avoid wayleave acquisition and use interchange at Kibudani to avoid damage to the A7 highway. The route is relatively shorter compared to other routes and increases the availability of water to CWWDA connection point. Water infrastructure is secured from vandalism as opposed to other routes.	Relocation of utilities and trees along the ROW. Proposed water kiosks will not benefit communities in Ng'ombeni, and Kiteje sub locations making PID to be socially unacceptable (6 out of 10 proposed kiosks are in Ng'ombeni location). Number of access roads and entrances impacted will remarkably increase due to increased utilization of A7 section. Use of A7 section will increase by 60% from the current proposed route which only uses 6.8 Kms of the road section.
Route one Section of Kibudani to M-SEZ Reservoir KenHA 4.8 Kilometres	Secured Wayleave	PID can utilize the bypass construction window to effectively realign main transmission pipelines during road construction. Kibudani to M-SEZ reservoir had undergone statutory studies and may not need additional study costs. Can accommodate two-way pipeline for main transmission and pipeline from SEZ reservoir to Kkeni for CWWDA utilization.	No impact compensation already done by KenHA and road construction under package three is ongoing. Few water kiosks can be erected along the 4.8 Km corridor.
Route Two: A7 section of Tiwi to Corner Mpya: 18.4 Kilometres	Secured Wayleave	Increased utilization of a secured RR section of A7 corridor and eliminating chances for wayleave acquisition. 79.8% of the main transmission pipeline can utilize A7 Road reserve compared to current route which use 42.0% of the secured RR and alternative one which uses 69.4% of the A7 road.	Relocation of utilities, trees. Potential conflict with another road reserve users. Micro tunneling may be required when crossing several road junctions depending on the alignment of the main transmission pipeline. Increased blocking of access, entrances, and competition for working space with business owners. This is the longest route total pipeline length of 32.27 Kms. It will increase the length of Main transmission pipeline from 16.2 Kms to 23.07 Kms.
Route Two: C109 KeRRA: Corner Mpya to Corner Mbaya 0.96 Kilometres	Secured Wayleave	C109 has secure RR and wayleave will not be required.	Relocation of utilities and displacement of structures encroaching on the Road Reserve; and Potential conflict with other ROW users

Alternative Routes	Status of Wayleave	Advantages	Likely adverse impacts
Route Two: MCG Rd Corner Mpya to Mbuta Junction 2.19 Kilometers	Secured Wayleave	The road section has few developments	Impact on residential entrances; and relocation of a few trees.
Route Two: PA section-Mbuta Junction to SEZ Reservoir. 2.12 Km	Secured Wayleave	Land owned by project proponent -KPA - and has procedures and policy in place to resettle displacements	Removal of trees along the ROW

Source: ARAP Consultant Team

2.4.3: The Preferred Option

Comparative analyses of all options indicate that two options are the most competitive; that is current option and alternative one (route one) under the realignment of transmission option. However, route one has comparative advantage over the current route on land area needed for easement. Decision to use route one will only result in easement of 0.57 Hectares of land occasioned by transmission pipelines from boreholes because some sections traverse private land. Better still, in route one, the entire main transmission pipeline is traversing secured and generous - wide enough - corridors designated only for KeNHA as opposed to current alignment which is passing through three designated authorities (KeNHA, CWSB and Kwale County Government.). Route one also has an added advantage over the current alignment on security of the water infrastructure, and the pipeline can easily be integrated with the ongoing developments in Kibundani to DK section. Finally, DK-Kibundani section of route one can be reused to channel pipeline from SEZ reservoir to Mombasa Water pipeline for water utilization. However, route one is disadvantage in one major component of PID benefit to the local community: the component of providing 10 water kiosks to 10 villages in three locations. Out of the 10 water kiosks proposed to benefit local community, route one can only accommodate four water kiosks: - three at respective boreholes and one at Waa primary School as compared to current alignment which support provision of water in 10 villages in the project area. Component of providing 300 cubic meters of water to 10 villages in Matuga Sub County is perhaps one of the reasons why PID has received overwhelming support from the local community and other stakeholders, as such, any route that is not offering adequate water supply to the community can easily be rejected by local community. It is for this reason that route one may not be the preferred option for PID.

The preferred option therefore is the current alignment which is the only option that can support local community water demand with minimal displacement and shorter pipeline length. But several amendments need to be done to mitigate its potential impacts on structures and minimize the area needed for way leave which apparently is the highest at 28.05% of its total land mass. Table 2.3.4 below shows measures needed to be undertaken:

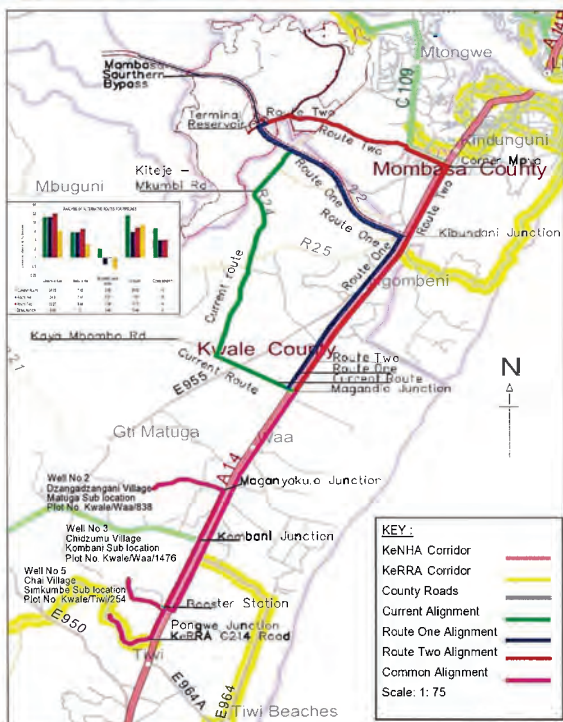
Table 2.3.4: Realignment options on current route

SN	Pipelines	Current Length (Km)	Proposed realignment	Savings upon realignment		
				Length (Km)	New length (Km)	Acquisition area (Ha)
1	Transmission Pipeline -	1.04	Concentrate pipeline in KeRRA C214	0.19	0.85	0.26

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Route	Length (km)	Acquisition Area (Ha)	Water Kiosks	Water Volume (m³)
Route 1	1.04	0.19	4	300
Route 2	1.20	0.85	10	3000
Route 3	1.30	0.90	10	3000

M
49
Kw



Source: ARAP Consultant Team courtesy of KeRRA Kwale County Figure 2.3: Alternative routes analysis

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2.4.4: Additional Analysis of Alternatives to Disposal Site

In addition to the alternative analysis for the alignment of water infrastructure component, another alternative analysis was undertaken for the selection of excess soil disposal site in the Mombasa SEZ area, because the exact soil disposal site for the D1 land development was not specified in the Master Plan for Mombasa SEZ. The alternatives of disposal site targeted three Free Port areas, namely, 1) Free Port/FTZ-A (Alternative-1), 2) Free Port/FTZ-B(Alternative-2), and 3) Free Port/FTZ-C(Alternative-3) as shown in the figure below.



Source: JICA Study Figure 2.4: Alternatives of soil disposal site

Free Port/FTZ-B site has the largest area among three options, though the site is the farthest from the D1 (freeport) area which the excess soil material will be transported from. Free Port/FTZ-B site located between the Free Port/FTZ-A site and Free Port/FTZ-C site has enough capacity to accommodate the transported soil. Free Port/FTZ-C is the nearest to the D1 area, but the site area is too small and will require another disposal site. Based on these characteristics and other site conditions, an economic impact as well as environmental and social impact for each option were analyzed. The result is compared in the following table. It shows that Alternative-2 of Free Port/FTZ-B site was identified as the most preferable option among three options because of the following advantages. In terms of economical aspect, firstly the construction cost of Free-Port/FTZ-B option is lower than other options due to less transport distance from the D1 area. Secondly, the good balance between the soil amount required for filling the site and excess soil volume to be generated in the D1 area will make the Alternative-2 site most utilized without another big investment for development for use of free port. For the viewpoint of environmental impact, though Alternative-A will require the development of bush area, the pollution impact of dust and noise is less because the distance for soil transportation is less. On the other hand, the social impact is evaluated as the same for

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three options because the land acquisition and resettlement will be conducted for the entire area of Mombasa SEZ.

Table 2.3.5: Comparison of alternatives of soil disposal site

Item	Alt-1: FF/FTC-A	Alt-2: FF/FTC-B	Alt-3: FF/FTC-C + other
1 Site Description			
1.1 Area	45.3 ha	47.3 ha	3.0 ha
1.2 Distance	4.500 m	2.700 m	1.800 m
1.3 Soil retaining capacity	2,085,000 m ³	642,000 m ³	42,000 m ³ (10% of total requirement)
1.4 Average filling height (m)	2.40 m	3.90 m	0.69 m
1.5 Disposal soil volume	488,000 m ³	488,000 m ³	488,000 m ³
1.6 Current land uses	Extensively Dry Area	Bush with small farms	Bush with small farms
2 Environmental Impact			
2.1 Construction cost	high (1.5 point) Necessity to transport the soil beyond 7 km increases with current distance of 4.5 km with higher embankment height of 2.4m	low (1.5 point) middle transport distance of 2.7 km	best useful (0 point) shorter transport distance of 1.8 km but necessary to leave other disposal site FF/FTC-A or B, with 2 times site mobilization, since cannot be full within this area
2.2 Mitigation	not much useful (2.5 point) necessary to conduct another site survey on by-pass roads to access this area permanently	very useful (1.5 point) to go back to use a contractor who build other facilities in order to transport	less useful (0 point) the area will be covered at least (2) small land, which are less suitable or use with restriction
2.3 Environmental & Social Impact			
2.4 Natural Environment	low impact (0 point) The number of cut trees for land development and associated natural resource impact will be limited because the affected lands dry area with little plantation.	same impact (1 point) The land development of site for soil disposal site currently bush with small farms.	some impact (1.5 point) Although the area is currently bush with small farms the affected area is much less than Alt-1 and Alt-2, which means the area of tree cutting will be less than required. Alt-3 will need another disposal site which will involve additional adverse impact to natural environment since the area of Alt-3 is not enough for required soil retaining capacity.
2.5 Pollution during construction	higher impact (1.5 point) Temporary dust and noise problem along the access road during the course of the job.	low impact (1 point) Temporary dust and noise problem along the connecting road of 2 km	moderate impact (1.5 point) Temporary dust and noise problem along the connecting road of 1.8 km and 2.7 km or 4.5 km for other additional site
2.6 Land Acquisition & Resettlement	high impact (1.5 point) Minimum 4 houses within this area, but land acquisition will be conducted at once for entire 45.3 area	low impact (1.5 point) Minimum 41 houses within this area. But land acquisition will be conducted at once for entire 47.3 area	low impact (1.5 point) Minimum 3 houses within this area with 40000 m ³ for the additional disposal site, but land acquisition will be conducted at once for entire 3.0 area
total score	-4 points	+2 points	-1 point

Source: JICA Study



CHAPTER 3: POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

3.1: An overview of GOK Policy on access to Land for Public Purpose

Sessional Paper No. 3 of 2009 on National Land Policy
The National Land Policy was formulated with the aim of securing rights over land and provide for sustainable growth, investment, and reduction of poverty in line with Government overall development objectives. The policy will offer a framework of policies and laws designed to ensure the maintenance of a system of land administration and management that will provide:

- All citizens with opportunity to access and beneficially occupy and use land;
- Economically viable, socially equitable and environmentally sustainable allocation and use of land;
- Efficient, effective and economical operation of land markets;
- Efficient and effective utilization of land and land-based resources; and
- Efficient and transparent land dispute resolution mechanisms.

The National Land Policy is relevant to infrastructure development as it provides for land acquisition- the power of the State to extinguish or acquire any title or other interest in land for a public purpose, subject to prompt payment of compensation, and is provided for in the current Constitution. This power is exercised by the Commissioner of Lands on behalf of the State. The current Constitution also permits a modified form of acquisition in the case of Trust Land which may be activated by the President or local authorities.

With regard to the coast region domicile of the MSEZ, the National Land Policy is relevant as it appreciates the complexity of the land question within the Coast region on account of historical and legal origins which resulted in many members of the indigenous coastal communities being deprived of land. To date, the coast region has the largest single concentration of landless indigenous people living as squatters sometimes on ancestral land owned by absentee landlords. Towards resolution, the NLP has recommended establishment of suitable legal and administrative mechanisms to address historical claims arising from the application of the Land Titles Act (Cap 282) of 1908 through which many were deprived of their ancestral lands.

3.2: Laws relating to involuntary resettlement in Kenya

The legislation related to involuntary resettlement in Kenya include Kenya Constitution (2010), Land Act (2012) and Land Registration Act 2012. These legislations provide for involuntary acquisition or purchase of private land for a public purpose or interest. They also provide for prompt and full compensation for loss of land and other assets to all persons determined to have interest in the land, including occupants in good faith of land acquired who may not hold title to the land.

3.2.1: Kenya Constitution 2010

The Kenya Constitution (2010) in Article (40) on right to property provides that every person has the right, either individually or in association with others to acquire and own property of any description in any part of Kenya. However, Article 40(3) provides that the State may deprive a person of property of any description if the deprivation is for a public purpose or in the public interest, and that there is "prompt payment in full of just compensation" to the person.



Article 40(4) provides for compensation to be paid to occupants in good faith of land acquired under clause (3) who may not hold title to the land. These provisions of Article (40) have been legislated for in the Land Act of 2012, Land Registration Act of, 2012 and Electricity Power Act of 1997. However, this clause is not applicable to public land as in the case of MSEZ hence unfit in deciding on modalities for managing displacement in the Masterplan for MSEZ targeted by the Project for Infrastructure Development – PID.

3.2.2: Land Act No 6 of 2012

The Land Act (2012) repealed both the Land Acquisition Act (1983) and the Way Leaves Act (1989) that relate to deprivation of property for a public purpose or in the public interest and provided for the same under Part VIII on compulsory acquisition of interest in land and Part X on easements and analogous rights, respectively.

The Land Act vests the procedures for compulsory acquisition of land in the NLC on behalf of an entity requiring land for a public purpose or public interest and provides under Section 11(1) that if land is acquired compulsorily, "just compensation shall be paid promptly in full to all persons whose interests in the land have been determined".

Section 144(1) of the Act provides for the creation of a wayleave on application to the Commission whether by a State department, county government, public authority, or corporate body. The entity applying for way leave shall serve notice to all persons occupying or have interest in the land and the county government in whose area of jurisdiction land over which the proposed wayleave to be created is located.

Sections 146-147 provide for the procedure to be followed by the Commission in the creation of the way leave that involves consultations with the respective county government and the occupants of the land. The agreed way leave should be delineated, published in the Gazette by the Cabinet Secretary for Lands, notified to the county government, and publicized in any manner to bring it to attention of people occupying or using the land along the route of the way leave. Section 148(1) provides for compensation for a way leave in case of private land to any person in lawful or actual occupation as assessed by a qualified valuer in respect of:

- The use of the land
- The damage suffered in respect of trees, crops, buildings on the route of the way leave
- The damage suffered during any preliminary work undertaken in connection with surveying or determining the route of that way leave.

Section 148(5) provides for recourse to Land and Environment Court for a person entitled to compensation for way leave who is dissatisfied with the amount, mode of payment and time taken to make payment. The Court in determining the amount and method of payment may make additional costs and inconvenience incurred by the person entitled to compensation.

3.2.3: Land Registration Act of 2012

The Land Registration Act (2012) provides for registration of overriding interests in the register for each parcel of land. The overriding interests under Section 28 include among other things rights of way, rights of water, or electric power lines, telephone and telegraph lines or poles, pipelines etc. erected, constructed or laid in pursuance or by virtue any power conferred by any written law. It is a requirement that any way leave, or ROW acquired be gazetted and submitted to the Land Registrar for entry into the particulars of each parcel of land affected.



In retrospect, Kenya has no involuntary resettlement policy, other than the legislations on compensation for compulsory acquisition which require prompt and just compensation. It is important to evolve an appropriate institutional framework at the national level to facilitate resettlement with development. However, for now, where the project is funded externally, there is the tendency to conform to the guidelines on involuntary resettlement required by the lender mostly influenced by World Bank OP 4.12.

3.2.4: The Environment and Land Court Act No. 19 of 2011

This law was assented to on 27th August 2012 and commenced on 30th August 2012 to give effect to Article 162(2) (b) of the Constitution; to establish a superior court to hear and determine disputes relating to the environment and the use and occupation of, and title to, land, and to make provision for its jurisdiction functions and powers, and for connected purposes. Section 13 (1) of the Act gives the Court original and appellate jurisdiction to hear and determine all disputes in accordance with Article 162(2) (b) of the Constitution and with the provisions of this Act or any other written law relating to environment and land. In exercise of its jurisdiction under Article 162 (2) (b) of the Constitution, the Court shall have power to hear and determine disputes relating to environment and land, including disputes: -

- Relating to environmental planning and protection, trade, climate issues, land use planning, title, tenure, boundaries, rates, rents, valuations, mining, minerals and other natural resources;
- Relating to compulsory acquisition of land;
- Relating to land administration and management;
- Relating to public, private and community land and contracts, choses in action or other instruments granting any enforceable interests in land; and
- Any other dispute relating to environment and land.

This statute is deemed relevant to all development proposed for implementation in Kenya as it provides for legal recourse for disputes relating to environment and land. This is a law that any developer including the KPA should familiarize with.

3.2.5: The National Land Commission Act, 2012

The object and purpose of this Act is to provide—
 • for the management and administration of land in accordance with the principles of land policy set out in Article 60 of the Constitution and the national land policy;
 • for the operations, powers, responsibilities and additional functions of the Commission pursuant to Article 67 (3) of the Constitution;
 • a legal framework for the identification and appointment of the chairperson, members and the secretary of the Commission pursuant to Article 250 (2) and (12) (a) of the Constitution; and
 • for a linkage between the Commission, county governments and other institutions dealing with land and land related resources.
 Essentially, this Act supplements the Lands Act of 2012 in defining functions and powers of the National Land Commission.



3.3: Laws and regulations relating to Acquiring Agencies

Following enactment of the Land laws regime in 2012, diverse laws and regulations have been put in place in attempts to provide clarity. A brief overview is provided: -

3.3.1: The Land Laws (Amendment) Act, 2016 (No. 28 of 2016)

The Land Laws (Amendment) Act, 2016 received presidential assent on 31st August 2016 and came into force on 21st September 2016. The Act brings about amendments to the Land Act, 2012, Land Registration Act, 2012 and the National Land Commission Act, 2012 and also introduced some fundamental changes to land law and conveyancing in Kenya. Some of the more salient amendments include: -

Clarification of functions of both the Cabinet Secretary for Lands and the National Land Commission-NLC: A clear distinction has now been drawn between the role of the Cabinet Secretary for Lands (falling under the National Government) vis-à-vis the National Land Commission. The NLC remains the body responsible for managing public land on behalf of national and county governments including the maintenance of records and data in respect of public land. However, the decision to allocate any part or parcel of public land is to be made by the national or county government (as the case may be). The role of the NLC is only to implement the decision to allocate.

Introduction of a Controlled Land Category: The Act has introduced the new concept of "controlled land" which is land within a zone of 25 kilometres from the inland national boundary of Kenya, within the first and second row beach plots in the Coast Region and any other law that may be declared controlled land by statute. The Act requires that "transactions" in controlled land can only proceed with the prior written approval of the Cabinet Secretary and that in considering an application for approval, the Cabinet Secretary must seek approval of the relevant authorities.

This provision also introduces the concept of "ineligible persons" which basically refers to individuals who are not citizens of Kenya, foreign governments or their agencies or subdivisions and corporate bodies whose shareholders are not Kenyan citizens.

The entire Dongo Kundu falls within the land designated as controlled for purposes of these regulations implying that consent of the CS for Lands is mandatory in implementation of this ARAP.

On Compulsory Acquisition: Compensation for compulsory acquisition is to be made by the NLC only after final survey and determination of the acreage, boundaries, ownership and value of the land. If the Commission takes possession of the land before paying the compensation, interest is payable to the owner from the time of taking possession to actual payment at the base lending rate set by the Central Bank of Kenya.

On Eviction of Unlawful Occupiers: Unlawful occupation of any land, whether public, community or private is prohibited. The Act now provides for elaborate procedures for the giving of notice to unlawful occupiers and the carrying out of evictions upon expiry of such notice. Essentially, this subsidiary legislation gives the KPA an unfettered leeway to obtain clear vacancy of the Dongo Kundu land for potential developers but given the increasing tendency of Kenyans seek legal redress to issues, a negotiated settlement holds better promise for a lasting solution.

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3.3.2: Land Registration (General) Regulations, 2017 (S.I. No. 278 of 2017)

Following the enactment of the new Land law regime post-2010 of the Land Act, No. 6 of 2012, the Land Registration Act No. 3 of 2012 and the Community Land Act No 27 of 2016, several rules have been published through the Kenya Gazette Vol. CXIX – No. 180 dated 08 December 2017. These are The Community Land Regulations, 2017, The Land Regulations, 2017, The Land (Extension and Renewal of Leases Rules, 2017, The Land (Conversion of Land) Rules, 2017, The Land (Assessment of Just Compensation) Rules, 2017 and The Land (Allocation of Public Land) Regulations, 2017. Some are deemed relevant to land acquisition as proposed for the as follows: -

The Land Registration (General) Regulations, 2017 which are to regulate the registration of various instruments relating to land. They include ninety-four (94) prescribed forms that range from the form of Power of Attorney, Application for Registration, Application for replacement of lost Title and Application for Official Search etc.

The Land Regulations, 2017 which give guidelines and regulate various procedures to transactions in land. Included are forty (40) prescribed forms that range from Application for Consent to transfer, Application for Land Rent Clearance Certificate and Notice of intention to compulsorily acquire etc.

The Land (Extension and Renewal of Leases) Rules, 2017 which are meant to guide officers of the Ministry of Lands and Physical planning, County Governments, the National Land Commission, Lessees, Professionals and any other persons dealing with matters relating to the extension and renewal of Leases and contains various prescribed forms that range from Application of extension of Lease and Application for renewal of lease etc.

Land (Assessment of Just Compensation) Rules, 2017 (No. 283 of 2017): These Rules of the National Land Commission implement provisions of the Land Registration Act 2012 in respect of the amount of compensation to be awarded for land acquired under the Act. It among other things, sets out factors to be taken into consideration when assessing compensation. Factors to be considered in assessment of compensation shall include: -

- the market value of the land;
- damage sustained or likely to be sustained by persons interested at the time of the Commission's taking possession of the land by reason of severing the land from his or her other land;
- damage sustained or likely to be sustained by persons interested at the time of the Commission's taking possession of the land by reason of the acquisition injuriously affecting his or her other property, whether moveable or immovable, in any other manner or his or her actual earnings;
- reasonable expenses incidental to the relocation of any of the persons interested or who will be compelled to change residence or place of business as a consequence of the acquisition; and
- damage genuinely resulting from diminution of the profits of the land between the date of publication in the Gazette of the notice of intention to acquire the land and the date the Commission takes possession of the land.

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3.3.3: Limitation of Actions Act Cap. 22 revised in 2012

Section 7 An action may not be brought by any person to recover land after the end of twelve years from the date on which the right of action accrued to him or, if it first accrued to some person through whom he claims, to that person.

Section 9. Accrual of right of action in case of present interest in land

Where the person bringing an action to recover land, or some person through whom he claims, has been in possession of the land, and has while entitled to the land been dispossessed or discontinued his possession, the right of action accrues on the date of the dispossession or discontinuance.

Section 13 Right of action not to accrue or continue unless adverse possession

A right of action to recover land does not accrue unless the land is in the possession of some person in whose favour the period of limitation can run (which possession is in this Act referred to as adverse possession), and, where under sections 9, 10, 11 and 12 of this Act a right of action to recover land accrues on a certain date and no person is in adverse possession on that date, a right of action does not accrue unless and until some person takes adverse possession of the land.

Section 38. Registration of title to land or easement acquired under Act

Where a person claims to have become entitled by adverse possession to land registered under any of the Acts cited in section 37 of this Act, or land comprised in a lease registered under any of those Acts, he may apply to the High Court for an order that he be registered as the proprietor of the land or lease in place of the person then registered as proprietor of the land.

3.3.4: The Special Economic Zones Act No. 16 of 2015

Special Economic Zone Act, 2015 (SEZ Act) which came to force on 15th December 2015 and was enacted to provide for the establishment of special economic zones; the promotion and facilitation of global and local investors; the development and management of enabling environment for such investments, and for connected purposes. Section 11 (c) of the Act is relevant as it provides for the Authority to identify, map and, where necessary, procure or avail to developers and operators the areas of land to be, or which have been, designated as special economic zones.

3.4: NLC Guidelines on Compulsory Land Acquisition in Kenya

Under the Lands Act of 2012, the NLC has issued guidelines (19th November 2015) in compulsory land acquisition as follows: -

(i) Proof that compulsory possession is for public good

It is very explicit in the Land Act, 2012, Section 107, that whenever the national or county government is satisfied that it may be necessary to acquire some particular land under section 110 of Land Act 2012, the possession of the land must be necessary for public purpose or public interest, such as, in the interests of public defense, public safety, public order, public morality, public health, urban and planning, or the development or utilization of any property in such manner as to promote the public benefit. Infrastructure projects including public highways are explicitly identified as meriting land acquisition as public utility and the necessity therefore is such as to afford reasonable justification for the causing of any hardship that may result to any person having right over the property, and so certifies in writing, possession of such land may be taken.

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(ii) Respective Government agency or cabinet must seek approval of NLC

The respective Cabinet Secretary or Government agency or the County Executive Committee Member must submit a request for acquisition of private land to the NLC to acquire the land on its behalf. The Commission will prescribe a criteria and guidelines to be adhered to by the acquiring authorities in the acquisition of land. It is important to note that if the NLC is constituted prior to conclusion of land acquisition, it could prescribe criteria and guidelines necessitating variations or revisions to the current RAP. Similar, the Commission has powers to request a request of an acquiring authority, to undertake an acquisition if it establishes that the request does not meet the requirements prescribed.

(iii) Inspection of land to be acquired

NLC may physically ascertain or satisfy itself whether the intended land is suitable for the public purpose, which the applying authority intends to use as specified. If it certifies that indeed the land is required for public purpose, it shall express the satisfaction in writing and serve necessary notices to landowners and or approve the request made by acquiring authority intending to acquire land.

(iv) Publication of notice of intention to acquire

Upon approval, NLC shall publish a notice of intention to acquire the land in the Kenya Gazette and County Gazette. It will then serve a copy of the notice to every person interested in the land and deposit the same copy to the Registrar. The courts have strictly interpreted this provision, requiring that the notice include the description of the land, indicate the public purpose for which the land is being acquired and state the name of the acquiring public body. NLC shall ensure that the provisions are included in her notice.

The Land Registrar shall then make entry in the master register on the intention to acquire as the office responsible for survey, at both national and county level, georeferenced the land intended for acquisition.

(v) Serve the notice of inquiry

Thirty days after the publication of the Notice of Intention to Acquire, NLC will schedule a hearing for public inquiry. NLC must publish notice of this meeting in the Kenya Gazette and County Gazette 15 days before the inquiry meeting and serve the notice on every person interested in the land to be acquired. Such notice must instruct owner of land to deliver to the NLC, no later than the date of the inquiry, a written claim for compensation.

(vi) Holding of a public hearing

NLC then convenes a public hearing not earlier than 30 days after publication of the Notice of Intention to Acquire. On the date of the hearing, NLC must conduct a full inquiry to determine the number of individuals who have legitimate claims on the land, the land value and the amount of compensation payable to each legitimate claimant. Besides, at the hearing, the Commission shall make full inquiry into and determine who are the persons interested in the land; and receive written claims of compensation from those interested in the land. For the purposes of an inquiry, the Commission shall have all the powers of the Court to summon and examine witnesses, including the persons interested in the land, to administer oaths and affirmations and to compel the production and delivery to the Commission (NLC) of documents of title to the land. The public body for whose purposes the land is being acquired, and every person interested in the land, is entitled to be heard, to produce evidence and to call and to

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question witnesses at an inquiry. It will also provide opportunity to landowners to hear the justification of the public authority in laying claims to acquire the land.

(vii) Valuation of the land

Part III of the Land Act 2012, section 113 (2a) states that "the Commission shall determine the value of land with conclusive evidence of (i) the size of land to be acquired; (ii) the value, in the opinion of the Commission, of the land; (iii) the amount of compensation payable, whether the owners of land have or have not appeared at the inquiry." This can be interpreted that NLC must determine the value of the land accordingly and pay appropriate just compensation in accordance with the principles and formulae that it will develop. Nonetheless, just compensation could also be interpreted as market rate. The final award on the value of the land shall be determined by NLC and shall not be invalidated by reason of discrepancy, which may be found to exist in the area.

3.5. Applicable legal procedure in compulsory acquisition of contested properties

Multiple provisions are made in Kenya to allow aggrieved parties to practice their right to due process and right to appeal in case of disputes. Two avenues for grievance redress are provided namely (a) the public inquiry and (b) provision for recourse to courts of law. The 2012 Land Act (section 112) mandates the NLC to hold an inquiry where anyone with interest in the land and who feels aggrieved by the acquisition process can lodge a complaint. The Constitution states that the process of inquiry is to be fair, equitable, transparent, and accountable. The public inquiry stage is critical as it provides for an open grievance redress mechanism. The notice of the inquiry must be advertised in the Gazette 15 days before the date. In addition, the NLC must proactively seek out any persons of interest in the land and hand them this Notice of Inquiry. Any disputes brought forward must be resolved within the period of the Inquiry. Accessibility of these inquiries to the most vulnerable is provided for as the hearings are held on site. In addition, the Constitution of Kenya 2010 provides for aggrieved to file a court case in addition to, or instead of, using the Inquiry set up by the NLC. The Environment and Land Court was established to focus on disputes arising from land or the environment has exclusive jurisdiction to hear and determine disputes, actions and proceedings concerning land under the Land Act, 2012.

3.6. Gaps between JICA Guidelines and Kenyan Law

As earlier mentioned, Resettlement Policy is not available in Kenya so far. Relevant laws and regulations provide the legal framework for compensation and resettlement in Kenya under the absence of resettlement policies. Table 3.1 presents policy gap analysis between JICA Guidelines and Kenya's Country System in regard to land acquisition and resettlement, including measures to fulfill the gaps.

3.7. Policy on land acquisition and creation of Wayleaves in the PID for M-SEZ

Table 3.1 provides an analysis of gaps between JICA requirements for environmental and social considerations and provisions of the GoK. Though the analysis reviews absence of major gaps, for avoidance of doubt, and for purposes of implementation of this ARAP, JICA Guidelines will prevail in all situations.



Table 3.7: Gap analysis between JICA Environmental Guidelines and Kenyan Law

No.	JICA Environmental Guidelines (2010)	Provision of Kenyan law	Perceived Policy/legal Gap	Proposed measures in Gap Resolution
1	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.	National Constitution restricts CLA to land for Public Interest only and provided there is prompt payment of just compensation. Section 146 of Lands Act 2012 provides for compensation for any damage caused to trees, crops and structures	There is a gap since the law does not mention to avoid land acquisition or involuntary resettlement by alternative considerations.	Alternatives should be considered to avoid land acquisition and involuntary resettlement as much as possible as per the international practice.
2	When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken.	As above. Additionally, the Land (Assessment of Just Compensation) Rules, 2017 (No. 283 of 2017) provides criteria towards achieving Just and fair compensation	There is a gap since the law does not mention to minimize land acquisition or involuntary resettlement, though the impact will be mitigated by compensation.	Alternatives should be considered to avoid land acquisition and involuntary resettlement as much as possible as per the international practice.
3	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.	Both the National Constitution and the Lands Act 2012 provide for prompt payment of just compensation (to include land, trees, crops and structures). Section 135 of Land Act 2012 says the Land Settlement Fund is used for (d) provision of shelter and a livelihood to persons in need of settlement programmes, if the settlement scheme is prepared for the affected persons. But the details are not provided.	There is a gap since the Land Act 2012 does not specify livelihood restoration activities clearly.	If the PAH's livelihood is affected, proper mitigation should be provided such as compensation for the loss of livelihood or income, the transitional support, job provision, vocational training or so on.
4	Compensation must be based on the full replacement cost as much as possible.	Lands (Assessment of Just Compensation) Rules, 2017 (No. 283 of 2017) provide that in assessing the appropriate compensation for compulsory acquisition of land, the Commission will consider the following factors: <ul style="list-style-type: none"> The market value of the land The damage sustained or likely to be sustained by persons interested at the time the Commission takes possession of the land Reasonable expenses 	There might be no gap. According to NLC, for government projects in Kenya, structure compensation is at replacement cost. Additionally, land compensation is at the market price and the 15% of the disturbance allowance is	To conduct the Replacement Cost Survey (RCS) to fix value of affected assets.



		incidental to the relocation of any of the persons interested	added to cover the gap between the market price and the replacement cost.	
5	Compensation and other kinds of assistance must be provided prior to displacement	The Land Act 2012, National Land Policy specifies the prompt payment of just compensation; however, its timing to disbursement is not clear.	There is a gap.	The ARAP requires compensation to be paid prior to physical resettlement.
6	For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public.	Guidelines on Compulsory Land Acquisition in Kenya (2015) as issued by NLC require all application for land acquisition to include an RAP Report together with evidence of availability of funds for compensation.	There is no gap in principle. NLC guidelines require preparation of a RAP.	The ARAP was prepared as required by the JICA Guidelines.
7	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance.	The Lands Act in Kenya requires all acquisition of land to be sufficiently disclosed to all affected people. However, since there is no provision of public consultation during planning stage in Kenya since the RAP is not required by the Kenyan legislation. The official language in Kenya is English and Kiswahili; the latter is Lingua Franca in Coast Region hence understood by all.	There is a gap for consultation in the planning stage for the RAP, though the Kenyan's EIA procedure requires public consultation.	Village level consultations were held in course of preparing this ARAP in line with local practices and JICA Guidelines. All consultations took place in Kiswahili which is understood by all.
8	When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.			
9	Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.	The Lands Act require total disclosure of proposed creation of ROW. The requirement of such proposals to be referred to County Governments and to be open to negotiation and public inquiry provides for a participation of affected people in the implementation stage. However, since there is no provision of public consultation during planning stage and monitoring stage in Kenya since the RAP is not required by the	There is a gap for consultation in the planning stage and monitoring stage for the RAP, though the consultation is assured by the Land Act for the implementation stage.	The ARAP has been prepared by following a consultation process with all stakeholders. The monitoring is also planned in the ARAP and affected peoples will be contacted for monitoring.



No.	JICA Environmental Guidelines (2010)	Kenyan legislation	Perceived Policy/legal Gap	Proposed measures in Gap Resolution
10	Appropriate and accessible grievance mechanisms must be established for the affected people and their communities.	The Land Act provides a mechanism for dealing with grievances including holding of public hearings by the NLC, negotiations etc. including lodging complaints to the Environment and Land Court (Section 150). However, the Environment and Land Court deals with disputes, actions and proceedings concerning land under Land Act only; therefore, it is not clear any livelihood restoration or any other assistance besides compensation is covered.	There might be a gap for grievances on livelihood restoration.	As per the common practice, land is a devolved function in Kenya hence all dissatisfied PAPs will take recourse to the County Government which is represented down to the Ward Level. Additionally, the Grievance Redress Mechanism will be established as planned in the ARAP as per the international practice.
11	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits. (WB OP.4.12 Para.6)	Section 54 of the Lands Act (2012). If a person has become entitled to land, lease or charge under any law or by virtue of any order or certificate of sale made or issued under any law, the Registrar, on the application of any interested person supported by such evidence as the person may require shall register the person entitled, as the proprietor. Section 144 (4) of the Land Act 2012 requires an Applicant for a wayleave to serve a notice on— a) all persons occupying land over which the proposed wayleave is to be created, including persons occupying land in accordance with customary pastoral rights; b) The county government in whose area of jurisdiction land over which the proposed wayleave is to be created is located; c) all persons in actual occupation of land in an urban and peri-urban area over which the proposed wayleave is to be created; and d) any other interested person. (5) along the route of the	There is a gap since the legal procedure does not require the RAP preparation. There is no cut off date, the census, socio-economic survey, public consultation, though the asset inventory is covered by the land acquisition procedure.	A census survey, the socio-economic survey and asset inventory are undertaken for the ARAP. Additionally, the cut-off date is set up in the ARAP as per the international practice.



		proposed wayleave calculated to bring the application clearly and in a comprehensible manner to the notice of all persons using land over which the proposed wayleave is likely to be created.		
12	Eligibility of benefits includes the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying. (WB OP4.12 Para.15)	Constitution Article 40 (4) states compensation to be paid to occupants who may not hold title to the land in good faith. On the other hand, Article 40 (6) states that the rights under this Article do not extend to any property that has been found to have been unlawfully acquired. Section 7 of Limitation of Actions Act says an action may not be brought by any person to recover land after the end of twelve years from the date on which the right of action accrued to him or, if it first accrued to some person through whom he claims, to that person.	For the first half of Article 40 of the Constitution, there is no gap, if it is implemented (govt land is not subject to this clause). However, there is a gap for compensation for the informal occupants' structures and resettlement assistance. The provision of the Limitation of Actions Act does not have a gap since it relates to the recognized land rights.	For the ARAP, the asset inventory covers all PAPs irrespective of tenure status, which will be verified by NLC when making the final decision on eligibility.
13	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. (WB OP4.12 Para.11)	Section 114 (2) the Commission may agree with the person who owned that land that instead of receiving an award, the person shall receive a grant of land, not exceeding in value the amount of compensation. Section 136 of Land Act 2012 says the Land Settlement Fund is used for (d) provision of shelter and a livelihood to persons in need of settlement programmes, if the settlement scheme is prepared for the affected persons. But the details are not provided.	There is no gap since there is an option of land for land.	The PAPs preference will be prioritized.
14	Provide support for the transition period (between displacement and livelihood restoration). (WB OP4.12 Para.6)	National law requires prompt payment of just compensation which covers land, structures, trees, crops and any other loss associated with acquisition.	Law does not explicitly provide for post displacement support	The transitional assistance including disturbance allowance and livelihood restoration program need to be provided depending on the impacts on PAPs' livelihood.

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15	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women, and children, ethnic minorities, etc. (WB OP 4.12 Para 8)	The Land Act 2012 Section 134. (4) recognises need for women, youth, and people with special needs to sit in the Committee of Settlement Fund but gives no provision for their cushioning in the resettlement process.	There is a gap in there is no definition of the vulnerable groups and special assistance for land acquisition and resettlement procedure besides the representatives of women, youth and people with special needs in the Committee of Settlement Fund	Displacement impact on vulnerable groups will be mitigated by additional assistance for vulnerable groups such as per the ARAP.
16	For a project that entails land acquisition or involuntary resettlement of more than 200 people, a resettlement action plan is to be prepared (WB OP 4.12 Para.25)	There is no provision	There is a gap.	The ARAP is prepared as per the JICA Guidelines.

Source: Prepared by the Consultation based on the JICA Environmental Guidelines and Kenyan laws

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CHAPTER 4: OUTCOME OF THE PUBLIC CONSULTATION PROCESS

This Chapter outlines the progress and outcome of Stakeholder engagement under auspices of the ARAP Study for PID to the MSEZ. The guiding principle in preparing this ARAP is the need to ensure fair play in developing the proposed MSEZ including the need to safeguard the rights of all potentially affected people in line with the Spirit and Letter of National Constitution.

4.1: Legal Basis for Stakeholder Engagement in Land-Acquisition

4.1.1: Provisions of the National Constitution

Article 35(1) of the National Constitution 2010 confers upon every citizen the right of access to (a) information held by the State; and (b) information held by another person and required for the exercise or protection of any right or fundamental freedom.

Article 61 gives the public, individually or as a group, a say in matters of land including acquisition, management, transfer, disposal, or ownership of private, public and/or community land

4.1.2: Provisions of the Land Act 2012

Sections 107 and 112 of the Lands Act 2012 require that all proposed land acquisition be gazetted and exposed to public inquiry (see section 3.6 above) which affords stakeholders an opportunity to raise concerns specific to their stake in properties targeted for acquisition. This is the same process that will be applied when processing application of a ROW for the PID.

Especially, Section 144 (4) creates room for additional consultation by requiring all applicants for a wayleave to serve a notice on—

- all persons occupying land over which the proposed wayleave is to be created, including persons occupying land in accordance with customary pastoral rights;
- The county government in whose area of jurisdiction land over which the proposed wayleave is to be created is located;
- all persons in actual occupation of land in an urban and per-urban area over which the proposed wayleave is to be created; and
- any other interested person.

(5) along the route of the proposed wayleave calculated to bring the application clearly and in a comprehensible manner to the notice of all persons using land over which the proposed wayleave is likely to be created.

Asset inventory as undertaken for this ARAP was meant to serve this notice while simultaneously collecting baseline information to back application.

4.2: Approach to Stakeholder Analysis

4.2.1: Criteria for Stakeholder Identification/Stratification

Stakeholder identification in the ARAP applied three core criteria as follows.

i) Fundamental Right Holders (FRH)

These may hold fundamental rights to strategic resources in the traverse and receiving area and may include: -

- Stakeholders to land:** This category includes individual, corporate and other categories of owners and occupants to land and land-based resources in the traverse area.

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- Residents along the traverse:** These are the category who will have their lives changed either on account of displacement of private or common property, intensified pressure from land speculators among others.
- Operators of capital resources:** This category includes utility providers owning water, power supply and other infrastructure which may be affected by the pipelines.

ii) Legal Mandate Holders (LMH) within target jurisdiction

Stakeholders identified under this category include those in National Government, County Government and State Corporations whose mandates confer jurisdiction over areas traversed by the PID. From analysis of the legal framework as documented in Chapter Three, numerous Statutes are deemed to have over-bearing influence on the area to be traversed by the PID while simultaneously conferring specific mandates to 9 respective institutions (Table 4.1) as the *bona fide* Legal Mandate Holders for the traverse area.

iii) Third Party Interests (TPI)

This includes any interests outside categories (i) and (ii) such as non-classified access routes traversing the jurisdiction, wildlife migratory corridors in private lands, informal traders, CBOS, NGOs, Faith Based Organizations (FBOs) within the traverse area.

Table 4.1: Analysis of Legal Planning Mandates Covering the Traverse area

SN	Legal Tool	Custodian	Legal mandate	Relevance to PID Project
1.	KPA Act	Kenya Ports Authority	Has mandate in developing Marine Transport in Kenya	KPA is proponent in the PID
2.	Schedule 4 to National Constitution 2010	Allocates non devolved functions for National Government	Coordination of National Government	Administrative oversight, security functions in bridge development and operation
3.	Kenya Roads Act 2007	KeNHA	Development and maintenance of classified roads in Kenya	KeNHA controls the A7 highway reserve targeted to conduct PID infrastructure
		Same creates KeRRA and KURA	Jurisdiction over rural and urban non-classified roads	KeRRA roads will also be used to construct pipelines between Tiwi and Dongo Kundu
		Same designates County Roads	Kwale County has jurisdiction over roads	County road reserves will be used to accommodate PID pipelines
4.	The Physical Planning Act Cap 286	State Department of Physical Planning	Coordinate all spatial planning at National and county level	Proposed development of PID has to harmonize with both National and County Spatial Plans
5.	County Government Act of 2012	County Government of Mombasa and Kwale	Have planning jurisdiction for Mombasa County	Planning for PID has to harmonize with Mombasa County CPID and CSP
6.	CDA Act Cap 446	CDA	Coordinate all development	Has undertaken spatial planning for the area under jurisdiction

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SN	Legal Tool	Custodian	Legal mandate	Relevance to PID Project
			Planning in the Coast region	
7.	Museums and Heritage Act of 2006	NMK	Protection of the cultural and archaeological heritage	Entire coastal strip has a sensitive archaeology
8.	Water Act 2002	WRMA	Management of the National water resource base	Construction in riparian areas requires WRMA approval
		CWWDA	Has jurisdiction for Bulk Water Transfer	Will own and operate the bulk water transfer system.
9.	Forests Act 2005	KFS	National custodian for all vegetation including	Has oversight mandate on all tree biomass
10.	National Land Commission Act 2012	NLC	NLC is designated Land Acquiring Authority in Kenya	NLC will acquire land for the PID
11.	EMCA 1999/2015	NEMA	Has national mandate for environmental regulation.	Need for the ESIA of PID to conform to environmental regulatory standards set by NEMA. Additionally involuntary resettlement is commonly considered as one of the social impacts under the ESIA.
20	Lands Legislation Regime of 2012	Landowners	Provides for land ownership under diverse tenures	Privately owned land may be traversed by PID

Source: Prepared by the Consultant based on the ESIA Study

4.2.2: Stakeholder Engagement Plan

Stakeholder Consultation in the ARAP process is planned as below, and took place at first three phase as follows: -

- Inception phase;
- Field investigation phase;
- Disclosure phase;
- ARAP implementation phase; and
- Post-resettlement phase

Table 4.2: The Stakeholder Engagement Plan

Study Stage	Meetings held	Purpose of Meetings
Inception Stage	Planning and Leaders Meetings	Meetings were held with core stakeholders including Leaders for purposes of introducing both the PID and attendant ESIA and RAP Studies
	Public Hearing Meetings	These were held for purposes of introducing both the PID and attendant ESIA and RAP Studies to residents of the traverse areas
Field	Key Informant	Working meetings were arranged for Key Informants for

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Appendix 4.1 provides a full dossier on outcome of the Stakeholder Engagement Process for this ARAP as well as ESIA. Public consultation in planning stage was conducted together for the ESIA and ARAP since most people engaged in a part of social impacts and do not recognize the ESIA and ARAP activities separately. The public consultation data is summarized in Table 4.3 below. A total of 58 formal forums were arranged during which 2,139 stakeholders were met. Another 336 stakeholders were met during the Census survey and assets inventory implying that probably over 2,400 people were engaged as part of the ARAP Study.

4.3: Progress and Outcome from Stakeholder Engagement

Progress achieved under each stage is highlighted in sections below.

Study Stage	Meetings held	Purpose of Meetings	Investigations	Disclosures	ARAP Implementation (planned)	Post Resettlement (planned)
Investigations	Interviews	Purposes of seeking expert opinion on issues pertaining to the Project	Consultation with Lead Agencies	Working meetings were arranged for Legal Mandate Holders for purposes of investigating relevant issues as part of the ESIA and RAP Studies	Disclosures	ARAP Implementation (planned)
Disclosures	Disclosures	A major disclosure of the SEZ took place on 18 th Oct 2019	Lead Agencies	Holders for purposes of investigating relevant issues as part of the ESIA and RAP Studies	Disclosures	ARAP Implementation (planned)
ARAP Implementation (planned)	ARAP Implementation (planned)	Start consultation and information disclosure to raise awareness of PAFs regarding the resettlement work for various SEZ-related projects, especially within SEZ area. Negotiation with PAFs to agree the compensation amount and assistance; and taken by PAFs and relocation schedule.	Consultation with PAFs	Working meetings were arranged for Legal Mandate Holders for purposes of investigating relevant issues as part of the ESIA and RAP Studies	Disclosures	ARAP Implementation (planned)
Post Resettlement (planned)	Post Resettlement (planned)	Monitoring of PAFs livelihood after compensation payment, assistance provision and physical relocation. The livelihood restoration program will be provided and monitored.	Consultation with PAFs	Working meetings were arranged for Legal Mandate Holders for purposes of investigating relevant issues as part of the ESIA and RAP Studies	Disclosures	ARAP Implementation (planned)

For the additional consultation for the compensation policy that was conducted using the brochure in Swahili language (see Appendix 4.1), 3-high level meetings with National Government Officials, Member of County Assembly, Political leaders, Security Officials and Village Elders and PAFs Committee were conducted. These 3-high level meetings were used to pre-disclose the policy and get views from high government and county officials. Following, was a big baraza for all affected people from six villages in DK area. The big baraza was chaired by the Regional Commissioner and other County officials and Likoni Member of Parliament. After a big baraza, affected people were given opportunities for more consultation through village wise meetings, where by 5 meetings were conducted in which Siji and Mrongonondoni villages did a joint meeting. Finally, group wise meetings with vulnerable people including female headed households, old-aged PAFs, orphans and disabled and the youth (18-35 years old) were conducted.

The compensation policy was largely accepted by the PAFs who showed concerns on provision of additional infrastructures in the arranged resettlement sites, job opportunities and the timeline for the implementation of the project. On the other hand, PAFs aired their worries on the expected change in livelihood activities from farming to non-farm activities. This was well responded by the consultant on behalf of KPA, citing the phased resettlement plan that would allow people to continue with their farming activities on non-prioritized areas. Additionally, PAFs were informed about the changed components for PID project and the plan to conduct the Supplementary ESIA study and that insignificant impacts are expected.

Highlights and outcome from each phase of study is provided in sections below. The full minutes of meetings are included in Appendix 4.1 of the Volume II.

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Table 4.3: Summary outcome of Stakeholder Engagement

SN	Study Phase	Type of meeting	Date	Venue of meeting	Sum outcome							
					Tally	M	F	Total				
1	Inception Meetings	Planning / Leaders Meetings	21/06/2019	Mombasa Golf Hotel	1	7	1	8				
2			21/06/2019	CWSB at Tiwi Pumping Station	1	6	1	7				
3			21/06/2019	Kwale WASSCO Meter Office- Tiwi	1	1	2	3				
4		Public Hearing Meetings		12/7/2019	ACK Guest House Likoni	1	93	33	126			
5				15/07/2019	Kenya School of Government, Matuga	1	53	19	72			
6				25/07/2019	Well No.5 intake site-Chai	1	43	20	63			
7				26/07/2019	Waa Primary	1	72	67	139			
8				29/07/2019	Kombani Social Hall	1	31	12	43			
9				29/07/2019	Chidzumu Primary School	1	22	17	39			
10				30/07/2019	Kiteje Mwendembe	1	51	32	83			
11				30/07/2019	Well No 2-intake site-Dzanganzangani	1	36	26	62			
12				28/08/2019	Maditwani	1	19	11	30			
13				5/9/2019	Well No 5. intake site-Chai	1	66	17	83			
14				Key informant interviews		16/07/2019	Kenya Water Towers Agency	1	3	3	6	
15						23/07/2019	NEMA office-Mombasa	1	5	4	9	
16						24/07/2019	NEMA Kwale Office	1	1	2	3	
17						24/07/2019	KFS Office- Kwale County	1	4	4	8	
18						24/07/2019	KWS Office- Kwale County	1	5	4	9	
19						25/07/2019	CEC Environment and Natural Resources-Kwale County	1	3	6	9	
20	Field Study Phase						25/07/2019	Physical Planning Office-Kwale County	1	4	4	8
21							25/07/2019	Roads and Public Works-Kwale County	1	3	4	7
22							30/07/2019	Mbunguni WRUA Office	1	3	2	5
23		30/07/2019	TUKO NA HOPE CBO- Office				1	3	2	5		
24		21/08/2019	South Coast Local Tour Operators				1	7	4	11		
25		Field Study Phase					23/08/2019	Kwale Human Rights Network - Ukunda Office	1	7	4	11
26							23/08/2019	South Coast Resident Association- Diani Office	1	3	2	5
27							26/08/2019	Tiwi M.C.A Office	1	5	3	8
28							26/08/2019	Sauti ya Wanawake- Tiwi	1	2	7	9
29							27/08/2019	World Wide Fund for Nature - Ukunda office	1	2	3	5
30							27/08/2019	Kwale County Natural Resources Network	1	3	4	7
31							27/08/2019	National Museums of Kenya-Kwale County- CFCU	1	3	2	5
32							28/08/2019	Coast Development Authority	1	3	8	11
33				Consultation with lead Agencies			24/07/2019	KWASSCO office	1	9	6	15
34							29/07/2019	Consultation with Kwale County Secretary	1	3	3	6
35							30/07/2019	WRA CR Offices-Miritini	1	2	1	3

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SN	Study Phase	Type of meeting	Date	Venue of meeting	Sum outcome			
					Tally	M	F	Total
36			20/08/2019	KPA Board Room	1	9	5	14
37			22/08/2019	Kwale County Health Boardroom	1	10	4	14
38			19/09/2019	Kwale Water Harmonization of Water Kiosk sites	1	2	1	3
39			6/11/2019	KWASSCO Boardroom	1	4	1	5
40	Disclosure Meetings	Preparatory Meeting for State launch of SEZ	12/10/2019	Coast Regional Commissioner Office	1	6	0	6
41		State launch of the SEZ	18/10/2019	Mwangala Primary School-Donjo Kundu	1	-	-	<500
42		Meeting with corporate players	13/01/2020	Kwale County- Roads and Public Works Office	1	7	4	11
43			14/01/2020	KPA Corporate Boardroom	1	9	5	14
44			16/01/2020	CWVDA- Head office Mombasa	1	4	2	6
45			20/01/2020	Kwale County Health Board Room	1	18	3	21
46			24/02/2020	KPA Board Room	1	8	3	11
47			3/3/2020	Marketing Conference Room (KPA)	1	7	2	9
48			5/3/2020	CWVDA Board Room	1	12	5	17
49		Public Hearing Meetings	25/01/2020	Well No.2 Dzangadzangani	1	25	11	36
50			25/01/2020	Waa Primary School	1	36	26	62
51			27/01/2020	Konikani Social Hall	1	29	5	34
52			27/01/2020	Chicuzumu Primary School	1	23	5	28
53			28/01/2020	Mwembe Korosho	1	28	13	41
54			29/01/2020	Denyenye	1	33	7	40
55		Records of interrelated Consultations initiated by KPA	24/01/2019	ACK Guest House	1	27	10	37
56			31/01/2019	DC's Office Likoni	1	294	114	408
57			14/03/2019	DC's Office Likoni	1	210	160	370
58			19/03/2019	ACK Guest House	1	21	8	29
59		Additional Consultation for the Compensation Policy	21/01/2022	RC's office (targeted for KPA, NLC, Regional Commissioner (RC), SEZA, National Treasury (NT) and Ministry of Industrialization, Trade and Enterprise Development, Governor's Office)	1	-	-	23
60			5/04/2022	ACK Guest House (targeted for Area MP, Members of County Assembly (MCAs), Regional and County Commissioner (RC/CC), Deputy County Commissioner (DCC), Assistant County Commissioners (ACCs), Chiefs, Security-)	1	-	-	73

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SN	Study Phase	Type of meeting	Date	Venue of meeting	Sum outcome			
					Tally	M	F	Total
61			7/04/2022	ACK Guest House (targeted for Chiefs, PAPS Committee/ Village leaders, Kaya elders, faith-based leaders and Local NGO)	1	-	-	58
62			12/04/2022	DCC ground (targeted for all PAP from the six villages in SEZ)	1	569	345	914
63			19/04/2022	Mkwajuni ground (targeted for PAPS in Mbuta village)	1	156	62	218
64			19/04/2022	Chairman's ground (Chairman Seleman Said) (targeted for Kaya Mtongwe and Siji villages)	1	114	67	181
65			19/04/2022	Football ground at Mrongondoni Village (targeted for PAPS in Mrongondoni village)	1	91	71	162
66			20/04/2022	Mwangala Primary School (targeted for PAPS in Mwangala Village)	1	125	58	182
67			20/04/2022	DCC ground (targeted for PAPS in DK village)	1	119	68	187
68			21/04/2022	DCC Ground (Female Headed Households)	1	-	207	207
69			21/04/2022	DCC Ground (Elderly PAPS)	1	149	41	190
70			21/04/2022	DCC Ground (Youth PAPS)	1	111	22	133

Note:

- The meeting records of public hearing meetings with local residents are attached in Appendix 4.1: Record of Stakeholder Engagement of Vol. 2.
 - For meeting nos. 14, 16, 19, 25, 34 and 35, there were no meeting records since they were relatively short key informant interviews. Additionally, No. 19 was aborted.
 - The meeting records are not prepared for government events such as no. 40 and 41. For meeting no. 59, 60 and 61, only draft meeting records are available as the mandate to prepare official meeting records for those meetings was under KPA.
 - Additional disclosure meetings for the Compensation Policy targeted all the 6 villages in the Iringo Kundu area. However, Mwangala Kaya Mbuta and Siji villages are not affected by the grant project.
- Source: Public consultation records, KPA

4.3.2: Inception Stage Meetings

Two categories of meetings were held under this phase with outcome as highlighted in sections below.

The Leaders Meetings

The entry point to all stakeholder engagement and indeed the ESIA/ARAP process was Leaders Meetings largely called to market the proposed Project to Local Leadership who, upon being convinced would spearhead the process of introducing the project to target grassroots communities. Given that the PID spans the two Counties of Kwale and Mombasa, two (2) separate meetings targeting sub-County level leadership in Matuga (Kwale) and Likoni (Mombasa) were held bringing together 198 diverse leaders from National Government, County Government, Politicians (Members of Parliament: MPs and Members of County Assembly: MCAs), security apparatus, GOK Agencies among others. These forums served as community

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sounding boards from which preliminary public concerns on the proposed project bounced off thus helping to shape and inform preparations for the Public Hearing Meetings.

Public Hearing Meetings

As part of the business transacted during Leaders Meetings, schedules for holding Public Hearing Meetings in all locations in respective sub-Counties were made and immediately rolled out. Six Public Hearing Meetings were held at sub-county level for purposes of engaging with local communities inclusive of potential PAPS. A core agenda in the meetings was to build consensus on the distribution and location of 10 Water Kiosks to be provided under the PID. Other matters addressed during the Public Hearing include: -
The Project was explained to affected communities
The process and procedure in Census Survey were explained,
A Cut Off date was proclaimed,
Consensus was built on the way forward,
Villagers were given an opportunity to raise concerns on the Project,
The schedule and programme for Census Survey was discussed and adopted.

As will appear in Table 4.3, a second public hearing meeting was held at Chai Primary (Item 13 in Table 4.3) for purposes of addressing grievances raised during the first meetings.

4.3.3: Field Investigations Phase

Consultative forums were held at this phase aimed at discussing and interrogating issues with target groups. Details are provided hereunder.

Key Informant Interviews

Under this category, a cross section of stakeholders, key among them Legal Mandate Holders: - civil servants, County Government, Lead Agencies (KWS, WRA, KWTA, KFS, CWSB, NMC, etc.) were engaged for purposes of interrogating issues within their mandate. Consultations took place in respective offices and in the field where possible. Consultations were made either with individual officers or in Focus Group Discussions involving several officers in a group. For this category of stakeholders, a semi-structured questionnaire was used. Discussions started with the consultant team explaining the project to the target officer following which, they were asked to identify their fundamental concerns on the same. After discussion, the officers were requested to fill and sign the form administered by the consultant. This system was deemed useful and as a strategy to cut down on paperwork while capturing signed comments of target informants. Core outcome of such engagement is reported in sections below.

Consultation with Lead Agencies

Planning and coordination meetings were held either to seek support of certain Agencies in rolling out the ESIA and ARAP Studies or to explain the Project to Strategic Coordinators as was the case with Kwale County Government and the Kenya Ports Authority. A total of five such meetings were held.

4.3.4: Disclosure Meetings

Disclosure meetings were arranged to share the overall MSEZ project progress, findings of the Draft ESIA and ARAP Reports with diverse stakeholders. Stakeholders met include: -
• State launch meeting for the SEZ

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- Legal Mandate Holders: Kenya Ports Authority, Kwale County Government, Coast Water Service Board
- Public hearing meetings with Community Groups in six villages.

Apart from ESIA and ARAP disclosure meetings, additional consultation meetings for the Compensation Policy were held with diverse stakeholders including the National Government Officials, Member of County Assembly, Political leaders, Security officials, Village Elders, PAPS Committee and all the PAPS from the six villages within MSEZ. Outcome of meetings are discussed in Section 4.3.5 onwards, and the minutes of meetings and the records of major key informant interviews are included in Appendix 4.1: Record of Stakeholder Engagement of Vol. 2 of APR.

4.3.5: General Outcome

This section analysis in summary form outcome from the entire stakeholder engagement process. Numerous issues were raised, concerns pointed out and frustrations expressed but general conclusions can be made as follows: -

Both the MSEZ and its Infrastructure Complement enjoy overwhelming Support: This study did not encounter any die-hard opposition to both projects and indeed, public expectation is building. The Chai Community, where Well No. 5 is planned, came up with a long list of expected benefits to be reaped from association with both projects.

Property owners are sceptical on prospect of compensation: Owners of property especially land and trees likely to be displaced by the PID are sceptical that compensation as pledged may never materialize.

The Question of Water extraction for Export to Mombasa County: By far, this is the most pertinence concern in developing the PID. Kwale County is concerned that their groundwater resource is increasingly being exploited to feed Mombasa County, yet their taps remain dry, their homesteads go without reliable sources of portable water. The Chai Community even refused to do business with the Retirement Saving Plan (RSP) Team unless this question is satisfactorily resolved.

Benefits of the MSEZ to Kwale County: Sections of Kwale County, which shares a boundary with the MSEZ are at pains to conceive the potential benefits accruing to Kwale County from MSEZ given its restriction to Mombasa. Concerns specific to each broad category of stakeholders are highlighted in section below.

4.3.6: Concerns emanating from Inception Meetings

Major issues arising from 13 forums held under the Inception Phase are summarised in sections below.

The Mombasa Leaders' Meeting of 7th July 2019 (Meeting No. 4 in Table 4.3)

Table 4.4 provides a summary of core issues from the Leaders' meetings organized on 7th July 2019. The PID disclosure meeting for Mombasa intentionally combined two agendas namely: -
• To disclose findings of the ARAP for MSEZ to DK Community and
• To disclose the PID to DK Community.

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Table 4.4: Outcome from the Mombasa County Leaders' Meeting held at ACK Guest House

SN	Category of Stakeholder	Organization	M	F	T	Meeting Outcome
1	National Government officials	Office of the MP, Interior and coordination, NGAO,	12	2	14	Consultation with Kwale County Government before extraction of water is needed. JICA had drilled several boreholes in Kwale to supply water to the SEZ. Water for MSEZ was to be sourced from Mwache Dam whose implementation has delayed. Project to benefit locals through installation of Seven water kiosks are to supply water to the community; Integrated system option in the compensation approach is the best option, a public meeting with the locals would be held to disclose the outcome of the ARAP
2	County Government representatives	Office of the senator, MCA's office, MOWASSCO, NGAAF, PSC,	17	4	21	
3	Lead Agencies (NEMA, KFS, etc.)	NEMA, KFS, KPA, NMK, CWWDA, Navy,	5	1	6	
4	Non-Governmental Organizations	ShikaAdabu Disability group, Peace, and cohesion, Hekima community organization,	9	3	12	
5	JICA and Repton Consultants	JICA study team, Repton Consultants	5	5	10	
6	SEZ Committee members	SEZ committee	7	5	12	
7	Others (religious, associations and Civil Societies)	Likoni queens, Likoni stars, Likoni Staerlets, URATA, PSC, Mombasa-Kilindini CFA, Sauti ya wanawake, Party leader ODM, Youth Leaders, Jipemoyo com, Smart mentorship centre, KIYO, Sheikh, Pastor, Bodaboda committee	38	13	51	
Total			93	33	126	

Source: Public consultation records

As expected, the meeting's record attendance of 126 accounted for the bulk of time and effort discussing the ARAP for the MSEZ. Representatives of PAPs were eager to be told when and how they would be compensated in the land acquisition for MSEZ. Ultimately, it was understood that with their land being acquired for the MSEZ, the PID would ride on the same impact. Their preference was for their land to be acquired under the SEZ to avoid a second round of acquisitions under the PID.

The Kwale (Matuga GTI) Leaders' Meeting of 15th July 2019 (Meeting No. 5 in Table 4.3)

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Mr

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Proceedings of the Matuga Meeting are summarised in Table 4.5 below. Core issues emerged as follows: -

The Question of water transfer to Mombasa County: From Table 4.4 above, discussions in the Kwale Leaders' meeting largely centered on the Question of Water. The shared concern was that water being diverted to Mombasa from Kwale while local residents do not have access to reliable water. The blame seemed to be directed to the Coast Water Development Agency (formerly CWSB) who was accused of supplying more water to Mombasa at the expense of Kwale. It was observed that the water infrastructure operated by the CWDA in Kwale is dilapidated and in need of repair. As well, water needs of Kwale should be first addressed before moving to supply areas outside of County.

The Kwale WASSCO clarified that MSEZ had targeted to source water from the WB funded Mwache Dam but since development of this source had suffered delay, the PID was designed as a stop gap measure. Once Mwache is operational, the PID system would revert to supply Kwale.

Table 4.5: Outcome from the Kwale County Leaders' Meeting -KSG Matuga

Data	Meeting Outcome
Date: 15/07/2019	Kwale Residents lack access to clean and save water for drinking;
Venue: Kenya School of Government, Matuga	Provide water to Kwale residents before transmitting water to Mombasa;
Attendance: 72 (Male 53, Female 19)	Uncontrolled drilling of boreholes and digging of wells is affecting Tiwi aquifer; More stakeholders to be brought on board as part of stakeholder mapping; Locations of water kiosks will be proposed by the local residents; Studies to identify other suitable aquifers should be considered; Tiwi aquifer is being affected by sand harvesting and over abstraction; Proceed with consultative meetings at location level; Reporting and disclosure are to be done at each and every stage; Coast Water works Agency does not distribute water equitably as more water goes to Mombasa County than Kwale County; Most of water networks managed by Coast Water are dilapidated and vandalized this has constrained water supply to the locals; and Consultants to work closely with political leaders.

Source: Public consultation records

Cumulative impacts from groundwater exploitation: The meeting was concerned that non-controlled drilling of boreholes is likely to affect groundwater resource in the area. It was further observed that this aquifer was threatened by sand harvesting and other non sustainable land use practices. The meeting observed the need for expanded studies to identify other aquifers in the region.

Need to reach out to other stakeholders: The meeting observed the need for consultations to be extended to other stakeholders especially the Roads Agencies responsible for target road reserves. Indeed, it was recommended that the Study to work in close consultation with Political Leadership.

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Mr

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Concerns from Public Hearing Meetings (Meeting No. 6-13 in Table 4.3)

A total of Eight (8) Public Hearing Meetings were held under auspices of the ESIA and ARAP Studies for the PID as outlined in Table 8.3. Issues emerging from this sector of public engagement are outlined under specific headings below.

Meetings at Intake No. 1-Chai Village (Meeting No. 6 in Table 4.3): A Public Consultation meeting was held at the grounds of Chia Primary School on 25th July 2019 to cover Simkuba Village which houses Borehole No 1. The meeting proceeded well with the Consultant being accorded all time to make a presentation in disclosure of the PID. In their reaction, the community expressed utter dissatisfaction centered on the following issues: -

- Community is concerned that their water has largely been extracted and pumped to Mombasa, yet their taps have remained dry. Much as they have been promised support in return for their water, the same has not been forthcoming.
- Community is also concerned that, due to drilling of many boreholes, salinity is on the increase causing some boreholes to be abandoned. A total of 5 boreholes have been abandoned.
- Community is therefore unwilling to support another Project which will exploit and export their resource, endanger their groundwater, and leave their taps dry.

After discussion, the consultant was sent away to consult with the County Government which was not represented in the meeting and to reschedule a follow-up meeting to give community time to consult internally and build consensus on their demands on the PID.

Proceeding of the Second Meeting at Chai Village (Meeting No. 13 in Table 4.3): As appointed, and in consultation with the KCG, a second meeting was held at Chai Village purposely to obtain feedback from the community and to allow the Team from Kwale County Government to clarify on issues of concern. Chai community through Mr. Said Salim Mwaigao (Chairman, Tiwi Development Committee) started off by repeating their grievance about water being diverted to the MSEZ while their taps remained dry in spite of having six (6) boreholes in locality, and proceeded to read a list of demands previously agreed upon in a community meeting held at Tiwi Social Hall thus: -

- Provide five (5) water points to be installed at Machema, Sports, Sokoni, Pongwe and Chai Primary School;
- Renovate three (3) primary schools in Chai village;
- Offer on permanent basis employment opportunities (skilled and unskilled labour) for the youths;
- Sponsor needy students at both secondary and University level; and
- Compensate people's properties affected during project implementation.

Other complaints were made as follows:-

- On the question of land acquisition, the community is concerned that land previously acquired for development of public boreholes had not been compensated,
- Residents also complained that water bills remained high even when water was not consumed.
- Rainfed cropping was no longer reliable and construction of a dam at Mwamivi would provide badly needed irrigation water which would enable community to adopt market agriculture.

In reaction, both the Consultant and KCG Team clarified as follows: -

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Mr

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- On the question of Water Supply, Mr. Mwinyi Juma Bwika (sub-County Water Officer) stated that there are boreholes being proposed for drilling. In addition, some boreholes have such as the one next to Mwanayaya, borehole next to the mosque, borehole at Chikola, at Chai Mosque and at Mzee Mwachema's homestead have already been drilled by the KCG and only require equipping. All these will serve Chai Community when operational.
- On the demand for water supply, the consultant explained that each Borehole developed under the PID would be equipped with a Water Kiosk for community Water Supply. The proposal regarding other water site as requested will be escalated to KCG.
- Regarding the question of scholarships, community was advised to approach the County Government through the Ward Leadership.
- Regarding request for job, the community was assured that all labour in the construction of PID pipelines would be sourced locally. The community was immediately requested by the Consultant to identify three young men to be employed as security guards in the Borehole sites.
- On the question of displacement of property, it was clarified that land on which all three boreholes were drilled had been acquired through sale. Further, PID pipelines would exploit existing road reserves but where private property was affected, the same would be compensated for.
- High water bills when water was not consumed will be confirmed with a respective section in Kwale water that deals with such cases like bills that have mistakenly been inflated.
- As for the dam at Mwamivi, studies on a dam at Mwamivi have already been done. The sub county engineer had previously accompanied a contractor to the site. This water will be used for consumption as well as farming in Matuga.
- The boreholes are not part of this project, and it can not be only responded since the land acquisition for boreholes is not our scope.
- Proposal for renovating schools will be discussed separately with the help of the consultant.

On the way forward with the ESIA and ARAP Studies, the community was alerted that many consultants would visit the area to conduct studies. As well, asset inventory for ARAP would start Monday 9th September 2019 and people should be available to identify their properties during normal working days while two elders would be hired to accompany the ARAP Team.

Proceedings from other (6 No) Public Hearing Meetings (Meeting No. 7-12 in Table 4.3)

From experience, Chai Village is the only site where aggression against the project was encountered. All other villages were quite welcoming to the PID and associated studies and will therefore be analysed as a group (Table 4.6). Generally, issues of concern are identified as documented in sections below.

Some roads existing on the ground have no provision in Cadastral Maps: An emerging trend is that some road reserves targeted for exploitation by the PID had not been surveyed and reserved by respective Agencies in which case, they were part of private land causing owners to wonder whether such would be compensated. It was clarified that all private property affected by the PID would be clarified.

On the question of compensation: Yet still, all communities wanted a guarantee that affected properties would be compensated. An assurance was given that property would be compensated for before ground-breaking.

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Location of water kiosks: Each community debated and made comments on suitable location of water kiosks.

On employment: Communities are near unanimous on the need to be allowed access to jobs during construction of the PID.

Direct connection of households to the Main Distribution Line: Community members requested to know whether they would be allowed to tap water from the distribution line along the traverse, but this could not be possible.

Table 4.6: Outcome of other Public Hearing Meetings

Mtg S/N	Meeting Details	Attendance	Meeting Outcome	KPA's Response in the Meeting
7	Public consultation meeting at Waa Village Venue: Waa Primary-Kombani Central sublocation Date: 26/07/2019	139	<ol style="list-style-type: none"> All members in the public baraza proposed that a water kiosk be placed at Waa Primary School and another one at Waa Boys High School; Consultants were requested by the community to continue with engagements with them in decision making at all stages of the project; The community sought to know what would happen if the pipeline passed through their property. 	<ol style="list-style-type: none"> All members in the public hearing agreed unanimously that a water kiosk be placed at Waa Primary School as there was dire need of water in the school and its neighborhoods. For, another proposed Waa Boys High School, it was agreed that the study team would mark the water kiosks. Consultants agreed to continue with engagements with the public in decision making at all stages of the water and drainage infrastructural project for the MSEZ. The community was informed that compensation would be done before start of civil work.
8	Public consultation meeting at Kombani Village Venue: Kombani Social Hall - Kombani sublocation Date: 29/07/2019	43	<ol style="list-style-type: none"> The community wanted to understand why an ornithologist was part of the team. Connecting water into individual homes from the distribution pipeline was requested by the community; The community also wanted to access water from the kiosks freely; The local community requested to get the 	<ol style="list-style-type: none"> They were informed that various research studies were being undertaken on the project on all biodiversity likely to be affected; Connecting water into individual homes from the distribution pipeline would not be allowed; The community would be charged a fee to sustain and manage the water kiosk; CBOs and self-help

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Mtg S/N	Meeting Details	Attendance	Meeting Outcome	KPA's Response in the Meeting
			<ol style="list-style-type: none"> opportunity to provide labour during excavation; The community proposed a water kiosk at Waa Primary School. 	<ol style="list-style-type: none"> groups in the area were proposed to manage the water kiosks; There will be both skilled and unskilled labour demand. The Chief will form committees to look into the employment of the locals in the project. The Special Economic Zone will also provide lots of employment opportunities once operation commences; The team from Repcon Associates was to mark the point.
9	Public consultation meeting at Chidzumu Village Venue: Chidzumu Primary School - Kombani sublocation Date: 29/07/2019	39	<ol style="list-style-type: none"> Community members insisted that the existing road was part of their land as it had not been acquired. The road therefore traversed their land; community members requested the team from Repcon Associates to investigate with County roads department and KERRA to get clear information on the status of the roads to the borehole, a water kiosk was proposed to be placed at Chidzumu primary school, the local community requested to get employment opportunities during excavation. 	<ol style="list-style-type: none"> We will investigate on the ownership of the road so that we get clear information before the project commences These are valid suggestions are we will include them in our report. Additionally, the constitution provides that in any project the locals should be given at least 30% of the employment. The chief will form a committee which will be looking at employment issue during project implementation.
10	Public consultation meeting at Kiteje Venue: Kiteje Mwembe-Kiteje sublocation Date: 30/07/2019	83	<ol style="list-style-type: none"> Members requested to know what would happen if their properties were affected; Local residents requested to provide labour during excavation; Residents wanted to know how an ornithologist was part of the water project; Community members requested to know whether they would be allowed to tap water from the 	<ol style="list-style-type: none"> The community was informed that compensation would be done on all affected properties; According to the constitution of Kenya 2010, 30% allocation of job opportunities should go to the locals. This includes both the skilled and the unskilled labour; The community was informed that the team was

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Mtg S/N	Meeting Details	Attendance	Meeting Outcome	KPA's Response in the Meeting
			distribution line along the traverse where;	<ol style="list-style-type: none"> conducting biodiversity studies on both flora and fauna around the area; They were informed that it could not be possible; water kiosks were proposed to be placed at Mwembe-Koroshu and Mkumbi mosque.
11	Public consultation meeting at BH Three Dzangazangan i Venue: Borehole 3 intake site-Dzangazangan i - Matuga Sub location Date: 31/07/2019	62	<ol style="list-style-type: none"> A water kiosk was proposed to be placed at the borehole site and be managed by a self-help group or a CBO; The community was inquiring whether there would be charges on water from the water kiosks; Community members requested to provide labour force during implementation; Community members sought to know what would happen if their properties were affected; Members sought to know why a bird expert would be part of the project; Community members wanted to know whether they can tap water to their homes; Community members requested that engagements with them in decision making to continue during all stages of the project. 	<ol style="list-style-type: none"> Management of kiosks was proposed to be done by the local self-help groups, NGOs in the area or any Community based organizations within the area is going to be put across during the final report writing; The community was informed that charges would only be for maintenance of the kiosk; According to the constitution during any development in an area, 30% of labour force is expected to come from the community. That includes both skilled and unskilled; Community members were informed that compensation would be done before start of civil work; Members were informed that various experts would be working in the traverse to help in biodiversity mapping; Community members were informed that it will not be allowed as it might leave no water to reticulate to the water kiosks; Consultants need to continue engaging the public in decision making during all stages of the water and drainage infrastructural project to the Mombasa Special Economic

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Mtg S/N	Meeting Details	Attendance	Meeting Outcome	KPA's Response in the Meeting
12	Public consultation at Mlibwani Venue: Madibwani Ng'ombeni Sub-location Date: 28/08/2019	30	<ol style="list-style-type: none"> Water kiosks proposed to be placed at Denyenye primary School, at the mosque and at Salama Bora's Homestead; Local community in the project area requested to be employed during excavation; Local community members had requested to tap water from the distribution pipeline. 	<ol style="list-style-type: none"> Noted; Even if the project uses machines, the constitution provides that 30% of jobs should be given to the community in the project area. Committees headed by the chief will be formed to handle employment issues. Local community members will not be allowed to tap water from the distribution pipeline.

Source: Public consultation records

4.3.7: Outcome of the Field Investigations Phase Meetings

Key Informant Interviews (Meeting No. 14-33 in Table 4.3)

This phase largely relied on Key Informant Interviews and Consultative Forums totaling 26, out of which outcomes of 22 key informant interviews are summarized in Table 4.7 below. The bulk of comments pertain to conservation while those related to land acquisition largely emanated when the ARAP Study Team sought information and data on the management jurisdiction of reserves targeted by the PID. Core among this was the instruction by KeRRA for PID infrastructure to be restricted to within 2 metres of the external boundary of roads.

Table 4.7: Summary outcome from Key Informant Interviews

Institution	Core issues raised
Meeting No. 14 Kenya Water Towers- Coast Region	<ol style="list-style-type: none"> Catchment degradation within Tiwi Aquifer; Sustainable harvesting of ground water resources; Catchment characteristics and conservation of catchment area; Displacement of assets during construction period and compensation of project affected persons; Employment opportunities in PID; Stakeholders engagement in decision making and water management; and Political cohesion and considerations.
Meeting No. 15 Mombasa NEMA Office: County Director- NEMA	<ol style="list-style-type: none"> Effluent waste management and common effluent plan requirements; Categorization of impacts and risks for PID; Storm water management; and Collaboration with relevant agencies for PID approvals
Meeting No. 17 KFS-Kwale County Ecosystem Conservator	<ol style="list-style-type: none"> Presence of endangered flora and fauna species in the project area; Unique ecological formations in the project area; Permission to remove project affected trees; Biological and cultural significance of forests in decision

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Institution	Core issues raised
	making; 16) Community Forest Associations in the project area; and 17) Core conservational challenges in the project area.
Meeting No. 18 Kenya Wildlife Service (KWS)	18) Presence of wildlife corridor in the project area; 19) Endangered wildlife in the project;
Meeting No. 20 County Government of Kwale Department of Environment and Natural Resources.	20) Modalities for engagement with Kwale County Government executives; 21) Details of land adjudication and right of way for pipeline; 22) Stakeholder mapping and engagements.
Meeting No. 21 Physical Planning Office-Kwale County	23) Identification and management of road reserve for county roads; and 24) Availability of spatial planning data of the project area.
Meeting No. 22 County Government of Kwale Road and Public Works	25) Terms and condition for using County designated roads for water utilities; 26) Road Reserves for pipeline transmissions; and 27) Future and or proposed development plans targeting the proposed County roads.
Meeting No. 23 Tsunzambunguni Community Forest Association and Mbunguni WRUA	28) Sub Catchment degradation & other challenges within Mbunguni WRUA; and 29) Management of the ten water Kiosks.
Meeting No. 24 TUOKO NA HOPE CBO- Simkumbe Sub Location	30) Unequitable share and distribution of water resources in Tiwi location; 31) Proposed locations of the 10 water kiosk; and 32) Uncontrolled borehole drillings and Catchment degradation.
Meeting No. 25 South Coast Association of Local Tour Operators -SALTO	33) Relevance of PID to tourism improvement and development in South Coast region; 34) The effects of water scarcity on tourism industry and space for SALTO in MSEZ developments; and 35) Emergent concerns in MSEZ water project.
Meeting No. 26 Kwale Human Rights Network (K-HURINET)	36) Approaches to stakeholders' engagement, project benefit to the locals; and 37) Collaboration and information sharing at grass root level.
Meeting No. 27 South Coast Resident Association.	38) Effects of accelerated industrial growth, urbanization and population pressure on the future of ground water resources in Tiwi Aquifer; 39) Environmental concerns in the project area; 40) Social concerns and considerations in the project area; and 41) Political considerations.
Meeting No. 28 Kwale County Government Member of County Assembly - Tiwi Ward.	42) Water challenges in Tiwi Ward; 43) Corporate Social Responsibilities and other potential project interventions in Tiwi area; 44) Unequitable distribution of ground water resources in Tiwi Ward; 45) Mobilization of labor force and employment of the youths; 46) Criteria for identifying proposed sites for boreholes location; and

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Institution	Core issues raised
Meeting No. 29 Sauti ya Wanawake CBO - Tiwi Location	47) Management of the ten water kiosks. 48) Unequitable distribution of water resources in Kwale County and idealistic water demand for MSEZ; 49) Emerging concerns, criteria for selecting water kiosks location, sustainability of the ten water kiosks; 50) Corporate Social Responsibilities, employment of local youths and other incentives to Tiwi population; and 51) Management of water kiosks; and available benefits to Tiwi community.
Meeting No. 30 World-Wide Fund for Nature (WWF)- South Coast Region	52) Evidence of cultural resources, indigenous forest resources and catchment degradation in the project area; 53) Proposed safeguards and mitigation measures on biological diversities in the project area; and 54) Policies and legislations targeting conservation of diversities.
Meeting No. 31 Kwale County Natural Resource Network (KCNRN)	55) Poor development and access to water infrastructure in Matuga Sub County in favor of Mombasa County; 56) Extent of natural resource base (ground water resources) and governors in Kwale County; 57) Available alternative water sources for MSEZ; 58) Environment and other social consideration for PID;
Meeting No. 32 National Museums of Kenya-Coastal Forest Conservation Unit (CFU)	59) Presence and management of cultural resources and their relevance in the project area; 60) Endangered and or critical plant species that should be flag out in the project area; 61) Potential displacement impacts and mitigation schedules provided for the project; and 62) Water challenges in the region
Meeting No. 33 Coast Development Authority (CDA)	63) The role and position of CDA in the development of MSEZ and other Coastal regional; 64) Infrastructure components of the MSEZ and justification of water infrastructure as a priority component; 65) The ESIA and ARAP processes for PID; 66) Anticipated benefits of MSEZ to entire Coastal region; 67) The Mombasa Water Supply Master Plan and status of Mwache Dam project; and 68) Speculations and priming of developments around MSEZ.

Source: Public consultation records

Concerns raised by the Kwale County Government (Meeting No. 38 in Table 4.3)
In course of undertaking Key Stakeholder Interviews, the Department of lands at Kwale County expressed concern that the PID had not been adequately disseminating within Kwale County Government as some Departments seemed to be in the dark. Subsequently, upon consultation with the County Secretary, a meeting was arranged for senior management of Kwale County with a view to disseminating the PID. The latter meeting was chaired by the County Executive Committee member - CEC for Roads and Infrastructure and brought together 4 senior officers from KCG, 3 from KPA, 2 from the JST and 5 from the Consultant and served largely to clarify any issues outstanding on the study to facilitate smooth implementation. The consultant took advantage of the meeting to raise concerns as follows: -

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- Some Departments of KCG were apparently not aware of the PID in spite of having participated in the Leaders Meeting held for Kwale Country of Government Training Institute (GTI) Matuga;
- The Consultant was yet to receive data on layout of the Tiwi pumping station from either CWWDA or KWASSCO;
- Lack of consensus on location of Water Kiosks;
- Dispute at Chai Village (Borehole 1) whereby community had turned hostile to the PID on concerns of unfair water allocation between Kwale and Mombasa

Upon discussion, matters were clarified as follows:-

Stand of the KCG regarding MSEZ and PID: The Chair clarified that the entire KCG led by the Governor was in full support of the MSEZ and was leveraging so as to tap benefits from his GOK undertaking. KCG will give all support required in actualising the ESIA and ARAP for PID.

Availability of data from Kwale WASSCO: The Consultant was directed by the Chief Officer (CO) water to pick all information from the Kwale WASSCO CEO Mr. Chalela. This information is however yet to be availed.

Regarding allocation of Water Kiosks: It was agreed that a team comprising the ARAP Consultant, Kwale WASSCO, JST, Sub County Water Engineer (Matuga), Ward Admin should meet and harmonize on location of water Kiosks. It however emerged that Kiosk location at Bombo site was contentious as the community was in preference to a location near water consumption area which is about 900m away from the Distribution Pipeline. Nobody between JST, KPA and KCG had a solution to financing the 900m of piping required to bridge the gap. After discussion, it was agreed that all parties will work towards identifying means to solving this problem.

The dispute at Chai Village: Regarding Chai, it was agreed that the Consultant should have involved the KCG in mounting the Public Hearing Meeting. This is because KCG has many interventions planned and ongoing on water supply in Matuga Sub-County (SC) including Chai and such information should have resolved concerns by Chai. It was agreed that a second round of Public Hearing (PH) Meeting be held at Tiwi to be addressed by the SC Staff on Water, Ward Administration, Kwale Water Company among others. This second meeting at Chai was held on 5th September 2019 with representation from KCG and was able to resolve all concerns.

Concerns raised by Other Consultation with Lead Agencies (Meeting No. 36, 37 and 39 in Table 4.3)

Table 4.8: Summary outcome from consultation with Other Lead Agencies

Institution	Core issues raised
Meeting No. 36 Kwale WASSCO Harmonization of Water Kiosk Sites	1) Progress in ESIA and ARAP studies 2) Water kiosks allocation
Meeting No. 37 KPA Board Room	3) Progress report of ESIA and ARAP for this project 4) Water kiosks allocation 5) Stakeholder engagement conducted and planned

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Institution	Core issues raised
Meeting No. 39 Kwale County Government at Health Board Room	6) Progress report of ESIA and ARAP for this project 7) Water kiosks allocation 8) Issues raised by the first public hearing meeting at Borehole 1 intake site, Chai were discussed.

Source: Public consultation records

4.3.8: Outcome of Disclosure Meetings (Meeting No. 42 in Table 4.3)
Disclosure meetings were held for purposes of disseminating outcome of the ESIA Study and ARAP study to core stakeholders. The second round of stakeholder engagement was carried out in line with legal notice no 101 of EIA regulation that requires public meetings to be held with the affected parties and communities to explain the project and its effects, and to receive their oral or written comments. The main aim of conducting the second round of stakeholders' engagement was to:

- Help the ESIA & ARAP processes to address relevant issues, including those perceived as being important by other sectoral agencies, public bodies, local communities, affected groups, and others;
- Help to improve information flows between KPA - (project proponent) and different stakeholder groups hence improving the understanding and 'ownership' of a project; and
- Enable KPA - (project proponent) to better respond to different stakeholders' needs;

A total of thirteen (13) meetings were held between 13th and 28th of January 2020 in Mombasa and Kwale Counties (Table 4.8). From the ten meetings, four were coordination meetings with CWWDA, Kwale County Government and KPA; and six were public hearing meetings in six villages through which 295 stakeholders were met.

Meeting outcomes from four groups participating in second round of stakeholder engagement for ESIA and ARAP is summarized and are presented in Table 4.8 below.

Table 4.8: Summary of outcome from Disclosure Meetings (Coordination Meetings No. 42-48)

Mtg S/No	Venue & Date	Meeting Outcome
42	County Executive Committee member - CEC, Roads and Public Works Office 13/01/2020	Lack of access to wells and meandering roads has potential resource management conflict and user rights challenges between private landowners and county government of Kwale; Pipeline realignment to follow the surveyed road maps also has potential displacement impacts; The teams to attend a meeting scheduled on 21 st January 2020 to discuss in length challenges in accessing the wells with Land officials and other county officials; and Inv/te other relevant departments from Kwale county government and bring project proponent - KPA on board for the next meeting.
43	KPA Corporate boardroom 14/01/2020	ESIA team to select a few key stakeholders; send them soft copies of ESIA report to accommodate their comments in the report before submitting it to NEMA to avoid delays with the report; ESIA and RAP reports to be harmonized mostly on the issue of wayleave acquisition; Realign pipeline route to fit in the existing road reserves and

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Mtg S/No	Venue & Date	Meeting Outcome
		achieve zero wayleave acquisition; Engage Kwale County government to regularize roads missing in the official map.
44	CWWDA-Mombasa County 16/01/2020	The reservoir tanks for the PID and Mwache dam project to be constructed on the same site to minimize technical problems in future. The project to consider alternative power such as solar or wind in pumping the water. KPA/JICA to write to CWWDA through the managing director to be informed on the procedure to follow in constructing a booster station at Tiwi offices.
45	Kwale County Health Board Room 20/01/2020	Repon Associates was assigned to confirm from the landowners whether the sites that hosts the wells were bought. The County Government officials made it clear that they would not approve the current designs until realignment is done. KPA/JICA were advised to agree on which option to take in accessing the wells and get back to Kwale County Government.
46	KPA Board Room	Presentation on the progress of the business plan; Discussion on water operator; Kenya Ports Authority (KPA) obligations with regards to permits; and Progress of the ESIA and ARAP.
47	Marketing Conference Room (KPA)	Presentation on the update on preparatory survey report; KPA obligations with regards to permits; and progress of the ESIA and ARAP.
48	CWWDA Board Room	Presentation on PID to CWWDA; harmonizing the water reservoirs at a similar location; and KPA to consider additional CSRs in the community besides water kiosks.

Source: Consultation records

Table 4.9: Summary of outcome from Disclosure Meetings (Public Hearing Meetings No. 49-55)

Mtg S/No	Venue & Date	Meeting Outcome	KPA's Response in the Meeting
49	Dzangadzangani Village – Matuga Sub location 25/01/2020	1. The alignment to follow the road existing on the cadastral maps to avoid vandalism of the pipeline passing through private land.	1. The alignment to follow the road on the cadastral maps to avoid future challenges with the project. A follow up to be done on landowners whose land host the wells to ensure that they are compensated, and it be in writing.
50	Waa Primary School – Kitivo Sub location 25/01/2020	1. How will people from Kwale benefit after taking water to Mombasa?	1. People from Kwale county will get ten water kiosks (one kiosk will be constructed here in Waa Primary School); and get temporary employment. Kwale county also stands

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Mtg S/No	Venue & Date	Meeting Outcome	KPA's Response in the Meeting
			the highest chance to benefit with the development of SEZ. Kwale county will also take over the water infrastructure after the completion of Mwache dam.
51	Kombani Social Hall – Kombani Sub location 27/01/2020	1. The locals requested for a water kiosk at a public land near Kombani social hall. 2. KPA to carry out more CSRs in the area besides installation of the water kiosks such as constructing nursery schools or sponsoring bright students in the community.	1. These inputs are very important and will be included in the final reports. 2. There are ongoing discussions about CSR between Kwale county government and KPA to help the communities. All suggestions given on CSR will be included in the final reports and will also be presented to KPA.
52	Chidzumu Primary School – Kombani Sub location 27/01/2020	1. The community suggested that realigning the designs to follow the existing road in the cadastral maps would be costly as many structures are constructed on the road reserves and therefore requested for the pipeline to use the designed alignment in well no.3. 2. KPA was urged to install streetlights from the well to Tiwi booster station which would greatly help in manning the pipeline. 3. The locals requested the contractor to consider gender balance during employment of the locals.	1. The projects are weighing on the two options of following the existing road on the ground and acquire way leave or follow the actual road amended in the map. The team has discovered that the true designated roads in most cases have never been graded and there are trees and structures on them. 2. Noted, the proposals will be presented to KPA. 3. The law requires that on hiring there should at least be a third representation of both genders. We had requested the ward administrator to hire at least one female.
53	Kiteje- Mwembe Korosho 28/01/2020	1. The locals requested for an additional water kiosk at Mbononi mosque in Mkumbi village.	1. The proposals will be added in the final reports and presented to KPA.

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Mtg S/No	Venue & Date	Meeting Outcome	KPA's Response in the Meeting
54	Denyenye-Mwembe Bursary 29/01/2020	1. There exist illiterate locals within the community who have great experience in skilled and unskilled labour but have no supporting documents. How will these people secure jobs during construction phase? 2. KPA was urged to carry out more CSRs in the area.	1. The contractor will be advised to consider demonstrated competency during recruitment after the committee have approved such locals. 2. Discussions are ongoing between Kwale County government and KPA to see which other CSRs can be done in the area.

Source: Public consultation records

4.4: Additional meetings for the disclosure of the Compensation Policy

In addition to ESIA and ARAP disclosure meetings, additional consultation meetings were held in six villages in Danga Kundu area, i.e. including those not affected by the grant project, to disseminate and obtain feedback on the Compensation Policy that was developed by KPA, which catered the issue of land, additional resettlement assistance to vulnerable PAPS and livelihood restoration measures. Series of meetings were organized and conducted as per the consultation plan presented in Table 4.10. To start with, 3-high level meetings were conducted. The first high-level meeting chaired by Principal Secretary of industrialization, Ambassador Peter Kaberia, involved following stakeholders; KPA, NLC, Regional Commissioner (RC), SEZA, National Treasury (NT), County Commissioners (Kwale and Mombasa County) JICA Study Team – Mombasa SEZ Loan and Grant projects, KeNHA, KeRRA and Ministry of Interior. In this meeting, concurrence on the Compensation Policy was achieved and suggestions to speedy implementation of the project were aired.

The second high-level meeting involved Area MP, Members of County Assembly (MCAs), Regional and County Commissioner (RC/CC), Deputy County Commissioner (DCC), Assistant County Commissioners (ACCs), Chiefs and Security officers. In this meeting too the concurrence on the compensation policy was achieved and request to compensate the PAPS before relocation was aired.

The third high-level meeting involved Chiefs, PAPS Committee/Village leaders, Kaya elders, faith-based leaders, and Local NGO, and the compensation policy was discussed and the plan for consultation meetings with PAPS was also discussed. After the high-level meetings, an opening baraza chaired by the RC was conducted to all PAPS and dissemination of the policy was done. Followings the big baraza were the village wise meetings to provide more opportunity to the PAPS to understand the policy and share their concerns. The Compensation Policy consultation meetings were closed by the group-wise meetings with vulnerable groups including female headed households, elderly and disabled, and youth (see Appendix 4.1 below).

Table: 4.10 Consultation Plan for the Compensation Policy

No.	Date	Time	Meeting Location	Target Group	Target Number	Facilitators
3 Higher Level Meetings						
1	Friday, 21st Jan 2022	10:00 am	RC's office	KPA, NLC, Regional Commissioner (RC),	23	KPA

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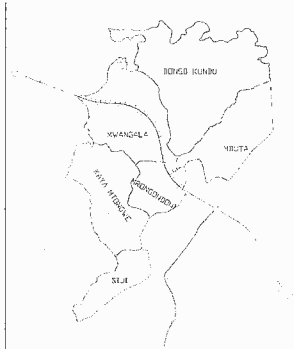


No.	Date	Time	Meeting Location	Target Group	Target Number	Facilitators
				SEZA, National Treasury (NT) and Ministry of Industrialization, Trade and Enterprise Development, Governor's Office (tbc)		
2	Tuesday, 5th April 2022	9:30 am	ACK Guest House	Area MP-1, Members of County Assembly (MCAs)-6, Regional and County Commissioner (RC/CC)-5, Deputy County Commissioner (DCC)-3, Assistant County Commissioners (ACCs)-3, Chiefs (2), Security-10	73	KPA, JST (GIBB)
3	Thursday, 7th April 2022	10:00 am	ACK Guest House	Chiefs (2), PAPS Committee/ Village leaders (15), Kaya elders (8), faith-based leaders (2) and Local NGO	58	KPA, JST (GIBB)
Big Baraza with all the PAPS						
4	Tuesday, 12th April 2022	2:00 pm	DCC Ground	RC, DCC, MCAs, Likoni MP, Security, PAPS Committee and all PAPS	Around 839	KPA, JST (REPCON), GIBB
Village-wise Meetings with PAPS						
5	Tuesday 19th April 2022	9:00-12:00	Mkwajuni	Mbuta Village	391 PAPS	KPA-TA, GIBB-T1
		9:00-12:00	Chairman's ground (Chairman Seleman Said)	Kaya Mtongwe Village	170 PAPS	KPA-TB, GIBB-T2
		2:00-4:00	Football ground at Mrongondoni Village	Siji Village	88 PAPS	KPA-TARTB, GIBB-T1&T2
6	Wednesday 20th April 2022	9:00-12:00	Mwangala Primary School	Mwangala Village	388 PAPS	KPA-TA, GIBB-T1
		9:00-12:00	DCC Ground	DK Village	384 PAPS	KPA-TB, GIBB-T2
Focus Group Discussion with Female House Heads & Vulnerable Households						
7	Thursday 21st April 2022	9:00-12:00	DCC Ground	Female Headed Households	20-30	KPA, GIBB
				Elderly above 80 years	20-30	KPA, GIBB
				Youth	20-30	KPA, GIBB
				Disabled	20-30	KPA, GIBB
				Orphans	20-30	KPA, GIBB

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Source: IST



Source: RAP Study
Figure 4.1: Affected villages within MSEZ

The meetings outcomes for the 3-high level meetings and the village wise meetings are summarised in table 4.11 and 4.12.

Table: 4.11 Meeting outcomes for the 3-high level meetings (Public Disclosure Meetings No. 59-61)

Mtg S/No	Venue & Date	Meeting outcomes
59	RC's office (1 st high-level meeting) 21 Jan 2022	<ol style="list-style-type: none"> 1. Concurrence on the Compensation Policy; 2. Need to accelerate the project by sorting out PAPs compensation; 3. Fishery compensation budget to be included in the entire PAPs compensation budget; 4. Need to develop action plan /matrix showing responsibility of each organization with stake to MSEZ with timelines in regard to compensation funds, land allocation and any other arising issues at the project site; 5. SEZA, KPA, NLC, Mombasa County and all interested stakeholders' representatives to meet and discuss allocation of land with consideration to PAPs land allocation and considering the Master plan. In case there is land constraint, priority for land allocation would be given to SEZA; 6. The Ministry of Interior to construct the police station at the project area for security purpose; and ICT to have fiber installation at the project area;

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60	ACK Guest House (2nd high-level meeting) 5 April 2022	<ol style="list-style-type: none"> 7. NCL to officially inform KPA on the validation report; 8. Treasury to allocate funds for PAPs compensation; 9. SEZA to be allowed to start their activities immediately; 1. Concurrence on the Compensation Policy; 2. Request for a faster implementation process so that the president (Hon. Uhuru Kenyatta) can launch the project before the end of his term and suggested that the chiefs and other stakeholders to be included in the compensation process for purposes of validation; 3. Leaders are thankful that the resettlement areas are still within Dongo Kundu area; 4. Copies (map) of the resettlement areas should be shared; 5. People should be compensated after being given plots so that they can be able to develop the land; 6. The leaders agreed to support the implementation process; 7. Suggestion to conducting a big baraza after disclosure to the PAPs Committee;
61	ACK Guest House (3rd high-level meeting) 7 April 2022	<ol style="list-style-type: none"> 1. Concurrence on the Compensation Policy; 2. Beacons should be put in place for the Kayas and that the Kayas to be guarded by the people themselves; 3. Clarification on the exact measurement of land was communicated (An eighth of an acre is equivalent to a pull plot which is a 50 by 100); 4. Modern standard of housing is expected since the resettlement area will have a town/urban standard, though there is no pressure on the people especially because the compensation won't be the same to everyone; 5. The Public Baraza, to be held the following week (specific date to be communicated), hence PAPs Committee should tell others about the same;

Source: IST

While it was planned to conduct focus group discussion with orphans and disabled, all the orphans and disabled who came for the meetings were below 18 years of age, and not registered by the National Registration Bureau of Kenya. They came with their guardians who were mostly women. The guardians were then requested to join any of the three groups: female-headed households, elderly, and youth, that they find it fit for them. All the female guardians joined the female-headed households group, while the male guardians joined the elderly group.

Table: 4.12 Meeting outcomes for the village-wise meetings and FGD (Public Disclosure Meetings No. 62-70)

Mtg S/No	Venue & Date	Meeting Outcomes	KPA's Response in the Meeting
62	DCC Grounds (Public Baraza) 12 April 2022	<ol style="list-style-type: none"> 1. Request for the timeframe for implementation of the RAP 2. PAPs requested Repton to disclose the PAP list as documented during ARAP study 3. Regular awareness forums undertaken to deepen the 	<ol style="list-style-type: none"> 1. The pace of implementation of the Policy is dependent of speed of acceptance by PAPs. 2. The PAP list is available, and the PAPs

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Mtg S/No	Venue & Date	Meeting Outcomes	KPA's Response in the Meeting
		<ol style="list-style-type: none"> understanding of the PAPs on the Compensation policy. 4. PAPs requested on access to maps and information on the relocation sites 	<ol style="list-style-type: none"> welcomed to suggest where to station it. 3. There are upcoming village level consultation meetings and Focused Group Discussions (FGDs) after the public baraza. 4. Mwangala Village and Dongo Kundu (DCC area) village have been identified as the relocation sites. PAPs to follow up on maps and information on relocation sites during the upcoming consultation meetings.
63	Mkwajuni (Mbuta Village) 19 April 2022	<ol style="list-style-type: none"> 5. Request to consider PAPs who have migrated or died after being inventoried during RAP 6. Why is the PAP compensation list not being publicly disclosed during the village meeting forum? 	<ol style="list-style-type: none"> 1. The cases would be forwarded to the PAP committee for advice on the next of kin. 2. Because of time limit PAPs compensation list cannot be disclosed during the meetings. PAPs should suggest the office to avail the list either in chief's office or DCC office
64	Kaya Mtongwé Village Elder's Compound (Kaya Mtongwé and Siji Villages) 19 April 2022	<ol style="list-style-type: none"> 1. The fate of grave sites established after RAP validation by NLC. 2. Suggestion to have the PAPs List accessible at the area Chief's Office. 3. KPA and PAPs documents an agreement to recognize the existence of the PAPs. 	<ol style="list-style-type: none"> 1. PAPs will be facilitated to relocate them to the resettlement sites. 2. The suggestion was welcomed and to be considered. 3. All PAPs have been listed for compensation as adequate prove.
65	Mrongondoni Playground (Mrongondoni Village) 19 April 2022	<ol style="list-style-type: none"> 1. Disclosure of PAP list 2. PAPs questioned about the missing names in the PAP list 3. PAPs questioned about KPA's ownership of the title for the MSEZ land despite their long existence 4. Request for a drug abuse centre for rehabilitation of addicts 	<ol style="list-style-type: none"> 1. PAP list to be stationed at the Chief's Office. 2. If a few names missing in the PAP list, then PAP Committee can handle. If the number of missing names is high, then further investigations will be done. 3. RAP consultant has no

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Mtg S/No	Venue & Date	Meeting Outcomes	KPA's Response in the Meeting
			<ol style="list-style-type: none"> mandate to investigate to whom the land belongs to or how KPA got the land title deed. 4. The existing Mbuta Medical Centre will be improved to provide primary health care. Other Government agencies (Department of Health) will be called upon to augment services.
66	Mwangala Primary School (Mwangala Village) 20 April 2022	<ol style="list-style-type: none"> 1. Partiality of the PAP Committee in ensuring equal chance for job opportunities. 2. Request on additional social amenities to augment the ones proposed in the Compensation Policy 3. Question about the levels of the grievance redress mechanism (GRM) 4. Call to alert PAPs not to sell allotted plots. 	<ol style="list-style-type: none"> 1. The PAP committee is to be trained on handling grievances and other matters. The Committee is also subject to vetting. The DCC Mr. Kazungu is the overall chair of the committee. 2. The social amenities provided in the compensation policy are determined by Government based on need and population of residents. 3. PAPs are free to escalate their grievances from the PAP Committee level up to Court level. 4. DCC discouraged PAPs from selling plots upon allotment. This may push them into further poverty.
67	DCC Grounds (Dongo Kundu Village) 20 April 2022	<ol style="list-style-type: none"> 1. Availing the PAP list taken during RAP study for scrutiny 	<ol style="list-style-type: none"> 1. PAP list will be availed for scrutiny in the DCC Office, Likoni
68	DCC Grounds (Female Headed Households PAPs) 21 April 2022	<ol style="list-style-type: none"> 1. PAP requested to have a separate entitlement for vulnerable such as orphans and widows. 2. Provision of a special school for Person with Disabilities (PwD) within the resettlement areas. Modernize any other existing 	<ol style="list-style-type: none"> 1. One time assistance of KES 10,000 for vulnerable people including physically challenged and orphans is provided in the compensation policy.

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Mtg S/No	Venue & Date	Meeting Outcomes	KPA's Response in the Meeting
69	DCC Grounds (Elderly PAPA) 21 April 2022	<ol style="list-style-type: none"> Establishing a direct line of communication between PAPA and KPA. Compensating PAPA for development done on land parcels (to be ceded) post validation date. PAPA requested to have another big meeting after the village wise meetings where all the collected views from the PAPA will be discussed and proposed solution declared to all prior to implementation of the Compensation Policy. According to PAPA, this is necessary to ensure that KPA had collected what they had aired and not otherwise. Make public the detailed PAP list describing each item to be compensated and their value. 	<ol style="list-style-type: none"> 2. Suggestions were noted for further advice. 1. Comments and suggestions were noted for internal consultation within KPA. Feedbacks will be provided. 2. The comment was noted by KPA, but no specific answer was provided. 3. The comment was noted by KPA, but no specific answer was provided. 4. The comment was noted by KPA, but no specific answer was provided.
70	DCC Grounds (Youth PAPA) 21 April 2022	<ol style="list-style-type: none"> Provision of a playground within resettlement site as part of the relocation package. Youth requested for longer training periods for them to acquire professional knowledge as opposed to 3- or 6-months training periods proposed in the Compensation Policy. Providing advance notice on job opportunities to allow for adequate preparation or responsive job applications. Youth are worried that they are not presented well by the current PAPA committee especial in issues of job opportunities. Hence, they requested to form a separate functional committee for youth. Adequate notice of invitation for public consultation meetings. What's in place for children whose parents had not sub-divided land. 	<ol style="list-style-type: none"> 1. Views and suggestions collected during the meeting to be presented to the relevant KPA personnel for further advice. 2. The comment was noted by KPA, but no specific answer was provided. 3. The comment was noted by KPA, but no specific answer was provided. 4. The comment was noted by KPA, but no specific answer was provided. 5. The comment was noted by KPA, but no specific answer was provided. 6. The comment was noted by KPA, but no specific answer was provided.

Source: JST



Source: JST
Figure 4.2: Consultation activities for the disclosure of Compensation Policy

4.5: Way forward with Stakeholder Engagement

Stakeholder engagement is a continuous process. With the ARAP process now proceeding to the implementation stage, a window of opportunity for further engagement will be present for public hearing of the compensation and resettlement procedure as well as continuous consultation as per the international requirements, which will be recorded and monitored as per the monitoring plan of the ARAP.

CHAPTER 5: OUTCOME OF CENSUS, SOCIO-ECONOMIC SURVEY, ASSET INVENTORY AND MAPPING

This Chapter outlines findings from the Census, socio-economic survey, and asset inventory for the PID to the MSEZ.

5.1: The PID to MSEZ

5.1.1: Jurisdiction of this ARAP Study

Table 5.1 traces the span of PID Components across administrative and management sectoral jurisdictions. Components of the PID span the two Counties of Kwale and Mombasa. Within Kwale, the PID traverses both designated road reserves and private property while within Mombasa, the Project entirely traverses KPA land earmarked for the MSEZ whose development was recently launched by the Head of State on 18th October 2019. Land targeted for the MSEZ was recently the subject of a RAP whose report is in the process of review by both the KPA and SEZA in preparation for implementation while the rest is already being processed for development of the Mombasa Southern Bypass Road. Given that a separate RAP exists for the MSEZ land, a decision was taken that a parallel ARAP Study includes water supply in Kwale County and PID components within the MSEZ only.

5.1.2: Administrative Jurisdiction

As designed, the PID traverses the two Counties of Kwale and Mombasa (Table 5.1). Within Kwale County, PID components traverse the 3 locations of Tiwi, Waa and Ngombeni. The Mombasa Components are restricted to the Mtongwe Sub Location of Mtongwe Location otherwise called DK. The entire traverse is a rural settlement with minor markets at Kombani and Kiteje. No informal settlements are traversed.

Table 5.1: Administrative and Management jurisdiction of the PID Traverse

SN	Road Section	Designated Authority	County	Location	Site/location	Village
1	Intake One: Chai to Pongwe Road	KCG	Kwale	Tiwi	Simkumbe	Chai Village
2	Intake One: Chai to Pongwe Road C214	KeRRA				Pongwe Village
3	Intake One (ii): Pongwe to Tiwi Station (A7)	KeNHA				
4	Intake Two: Chidzumu to Tiwi Station	KCG		Waa	Kombani	Chidzumu Village
5	Intake III: Dzangazangani - Maganyakulo	KCG			Matuga	Dzangazangani, Mzangulu, Mwanishi, Gwizani Villages
6	Intake Three (ii) A7 from Maganyakulo - Tiwi Station	KeNHA			Kilvo, Kombani	Majengo Masya, Mganyakulo
7	Twi Pumping Station	CWWDA		Waa	Kombani	Mabriva Village
8	A7 Road from Tiwi Station to Magandya & Crossing the C 106 at Kombani	KeNHA		Waa & Ngombeni	Kombani, Kilvo, Ngombeni	Majengo Masya, Mganyakulo
9	Magandya - Maida (Matuga RD Junction)	CWWDA		Ngombeni	Ngombeni	Maida Village
10	Medibwani - Kiteje-Mkumbi	KCG			Ngombeni and Kiteje	Bombo, Kiteje Ziwani, Mkumbi, Kiteje One
11	MPARD III: Mkumbi to MSEZ Reservoir	KeNHA	Kwale & Mombasa	Ngombeni Mtongwe	Kiteje Mtongwe	Bombo, Kiteje Ziwani, Mkumbi, Kiteje One Mbula and Mrongondoni

SN	Road Section	Designated Authority	County	Location	Site/location	Village
12	MSEZ Reservoir to MOWASCO	KeNHA	Mombasa Kwale	Mtongwe	Mtongwe, Kiteje, Ngombeni	Mrongondoni, Mbula Kiteje One, Mkumbi, Ziwani, Pungu
13	Mombasa Reservoir	KPA	Mombasa	Mtongwe		Mrongondoni
14	Temporary Access Road to D1 Area	KPA				Mbula and Ndongo Kundu
15	Land formation in FTZ B Area	KPA				Mbula
16	Drainage Infrastructure	KPA				DK and Mbula
17	Land Leveling in Port Area	KPA				DK
18	Contractor Camp Site	KPA				Mrongondoni

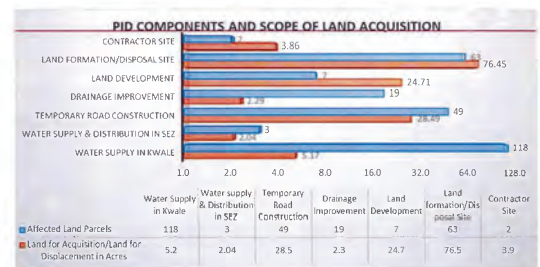
Source: Thus Study

5.1.3: Management jurisdiction

The PID is designed to largely utilize existing reserves controlled by diverse authorities namely KeNHA, KeRRA, KCG, CWWDA and the KPA. As such, in the creation of a Way Leave for the PID, the assumption is that reserves controlled by respective State Agencies are available and will not require acquisition. Indeed, the same has been discussed and confirmed with respective Agencies. Compensation, therefore, will only be paid for private land and land-based assets including of those occurring in the road reserve. In addition to way leaves, there are some other PID components which require land acquisition.

5.1.4: Scope of the PID

As observed elsewhere above, scope of PID intervention is quite small comprised of four components: water supply; drainage improvement; land development; temporary access road construction and land formation/disposal site in FTZ B area. Displacement impact of the project is therefore modest. Indeed, given that 261 privately owned parcels will be impacted, while the number of PAHs and PAPA are 271 households and 540 persons respectively, the whole undertaking converts into an ARAP.



Source: Census Survey for the ARAP
Figure 5.1: Scope of Land Acquisition by PID Components



5.2: Outcome of land inventory

5.2.1: Analysis of land requirement and potential scope of acquisition

Table 5.1a and 5.1b presents analysis of land requirements and affected households in Kwale and Mombasa Counties. Land requirement and scope of acquisition for PID in the two Counties is analysed as follows:

In Kwale county, creating the 30.91.-kilometre wayleave from the three intake wells to booster pumping station to MSEZ reservoir and from Reservoir to MOWASCO pipeline. Creation of a 24.83-kilometre long, 3-metre-wide reserve will require a total of 7.45 ha of land of which, 5.36ha (71.9%) are available in the existing reserves leaving out 2.09ha (28.1%) to source through land acquisition. Apart from land, the decision to use the proposed alignment will further affect only one household in Simkumbe sub location with three people residing in the target house. However, realignment of the transmission pipeline from well no. 5 has been proposed at chainage 0 + 820 to avoid the affected household. It is worth noting that the decision to use the proposed alignment will occasion zero displacement because all the affected structures are only clipped by a small margin of about 5 to 10% leaving the residual structures fit for reuse and land use for the affected plots will not change because only three meters cross section will be required for both pipeline and side works. Affected houses, residential status and displacement potential are listed in table 5.2b below.

While in Mombasa SEZ, land requirement is analysed against six (6) main PID components namely: (1) Water reservoir & MDP; (2) land development; (3) land formation/disposal site; (4) drainage improvement of selected sites; (5) contractor camp site; and (6) construction of a temporary access roads of 47 meter wide to facilitate access to the port area during construction. Cumulatively, the stated components will require a total of 64.71 hectares of land area. The infrastructures in MSEZ will also displace 243 structures, with 72 residential structures sheltering 61 households and 19 commercial structures. PID inside SEZ will entirely utilize KPA land earmarked for the Mombasa Special Economic Zone development.

Table 5.1a: Analysis of land requirements for PID in Kwale and Mombasa

Project Component	Designated Authority	Length (Km)	Required acquisition (ha)		
			Required Land	Available Land	Land to be acquired for Kwale county and land requires displacement for SEZ area
Well No 5: Chai to Pongwe Road	KCG	0.96	0.34	0.11	0.23
Well No 5: Pongwe Road C214 to A7	KeRRA	0.6	0.18	0.1	0.08
Well No 5 (ii): Pongwe to Booster pumping station	KeNHA	0.99	0.3	0.3	0
Well No 3: Chidzumu to Booster pumping Station	KCG	1.38	0.41	0.15	0.26
Well No 2: Dzangazangani - Maganyakulo	KCG	1.82	0.55	0.25	0.3

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Well No 2 (ii) A7 from Maganyakulo - Booster pumping Station	KeNHA	3.48	1.04	1.04	0
A7 Road from Tiwi Station to Magandiya & Crossing the C.106 at Kombani	KeNHA	6.77	2.03	1.94	0.09
Magandiya - Maida (Matuga RD Junction)	CWSB	2.05	0.62	0.25	0.36
Madibwani- Kiteje- Mkumbi	KCG	6.78	2.03	1.26	0.77
Mkumbi - Water-reservoir	KeNHA	1.21	0.36	0.37	0
Water Reserve Area	KPA	0	0.83	0	0.83
Reservoir to MOWASCO	KeNHA	4.86	1.09	1.09	0
Temporary Road to D1	KPA	2.5	11.5	0	11.5
Land Development/D1 Area	KPA	0	10	0	10
Drainage Improvement	KPA	0.66	0.92	0	0.92
Land formation/Disposal Site	KPA	0	30.95	0	30.95
Contractor Camp Site	KPA	0	1.56	0	1.56
Totals		38.3	64.71	6.86	57.85

Source: Prepared by the Consultant based on the drawings and cadastral maps

Table 5.1b: Displacement Status in land requirement for PID

SN	PID Components in Kwale and Mombasa Counties	Landowner households/Households with stake to land		
		Not physically displaced	Physically displaced	Total landowners in Kwale and PAPs with stake to land in MSEZ
1	Water Supply in Kwale	118	0	118
2	Water Reservoir & MDP	0	3	3
3	Temporary Road to D1	44	5	49
4	Land Development	0	7	7
5	Drainage improvement	19	0	19
6	Land formation/disposal site	13	50	63
7	Contractor camp site	0	2	2
	Total	194	67	261

Source: Asset Inventory for ARAP

5.2.2: Tally of parcels for PID with changed components

Table 5.3 and Figure 5.1 below provide a summary of a tally of all PAPs/Interest holders to the PID in Kwale and Mombasa Counties. The details are provided in Appendix 5.1 and 5.2. In Kwale County, creation of a Wayleave for the PID will require acquisition of 2.09 hectares of land distributed in 118 privately owned parcels of land. The PID will touch of 44 other parcels' located in road reserves where the interest in terms of this ARAP is only the standing property

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meaning that the affected persons are only entitled to replacement cost of assets minus/without land compensation. From Table 5.2 below, Road Reserve means land area that is public and secured therefore requires no easements during project implementation; private land denotes land parcels with individual land tenure security - titled land registered under Registration of Land Act and thus land compensation shall be required before project implementation. In Mombasa (inside SEZ), decision to implement the listed components will affect 261 land parcels with land formation/disposal site in FTZ B affecting majority of the land parcels followed by construction of temporary access road and land .

Table 5.2: Share of land among villages of traverse

Section	Admin jurisdiction	Total acquisition/Requirement		
		(a)No. of Parcels within Road Reserve (No land acquisition)	(b)No. of Parcels within Private Land in Kwale county/land occupied in SEZ area	(c)Total Parcels touched
Kwale County				
Well No 5: Chai to Pongwe Road	Simkumbe Sub location, Chai Village	0	11	11
Well No 5: Chai to Pongwe Road C214	Simkumbe Sub location, Pongwe Village	1	6	7
Well No 5 (ii): Pongwe to booster pumping station	Simkumbe Sub location, Pongwe Village	1	1	2
Well No 3: Chidzumu to booster pumping station	Kombani Sublocation Chidzumu Village	2	18	20
Well No 2: Dzangazangani - Maganyakulo	Matuga, Kivo Sub location (Zangazangani, Mzanga'lu, Mwamshipi, Gwirani Villages)	19	22	41
Well No 2 (ii) A7 from Maganyakulo - booster pumping station	Kivo, Kombani sub locations	0	0	0
A7 Road from booster pumping station to Magandiya & Crossing the C.106 at Kombani	Kombani, Kivo, Ngombeni sub-Locations	1	4	5
Magandiya - Maida (Matuga RD Junction)	Ngombeni Sub location, Maida Village	0	13	13
Madibwani- Kiteje- Mkumbi	Ngombeni and Kiteje Sub locations	20	43	63
MSEZ area in Mombasa County				
Mkumbi - Water-reservoir	Kiteje and Mlongwe sub locations, Mkumbi, Mbuta and Mrongondoni Villages	0	0	0
Water Reserve Area	Mlongwe sub location - Mrongondoni Village	0	3	3
Reservoir to MOWASCO	Mlongwe, Kiteje, Pungu and Sikaadabu sub locations	0	0	0
Temporary Road D1	Mlongwe sub location - Mbuta and Dongo Kundu Villages	0	49	49

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Section	Admin jurisdiction	Total acquisition/Requirement		
		(a)No. of Parcels within Road Reserve (No land acquisition)	(b)No. of Parcels within Private Land in Kwale county/land occupied in SEZ area	(c)Total Parcels touched
Land Development	Mlongwe sub location - Dongo Kundu Village	0	7	7
Drainage Improvement	Mlongwe sub location - Mbuta and Dongo Kundu Villages	0	19	19
Land formation/Disposal site	Mlongwe sub location - Mbuta village	0	63	63
Contractor Camp Site	Mlongwe sub location - Mrongondoni Village	0	2	2
Totals		44	261	305

Note: *Pongwe to Tiwi booster station road section is designated for KeNHA therefore land acquisition is not occasioned because the section is secured public land hence 0 ha Source: Prepared by the Consultant with the drawings and cadastral maps

5.2.3: Tally and make of structures for PID

The 38.3-kilometre-long Wayleave will affect a total of 87 structures in Kwale County (Table 5.3) out of which, 73 (84%) are either temporary or other (minor non-building). Inside MSEZ area, implementation of PID will affect 156 structures of which 27(17.2%) are permanent, 31 (19.7%) are semi permanent and 62(39.5%) are temporary buildings. The project will also affect 38 other structures (minor non-buildings) in MSEZ.

Table 5.3: Tally of Structures affected by PID in Kwale and Mombasa

Section	Affected Structures					Share (%)
	Permanent	Semi-permanent	Temporary	Other	Total	
Kwale County						
Well No 5: Chai to Pongwe Road	0	1	1	2	4	1.65
Well No 5: Pongwe Road C214 to A7	1	1	1	4	7	2.89
Well No 5 (ii): Pongwe to booster pumping station	0	0	0	1	1	0.41
Well No 3: Chidzumu to booster pumping station	0	0	0	2	2	0.82
Well No 2: Dzangazangani - Maganyakulo	1	0	0	4	5	2.06
Well No 2 (ii) A7 from Maganyakulo - booster pumping station	3	3	5	14	25	10.28
A7 Road from Tiwi Station to Magandiya & Crossing the C.106 at Kombani	0	2	3	23	28	11.52
Magandiya - Maida (Matuga RD Junction)	1	0	0	5	6	2.47
Madibwani- Kiteje-	1	0	1	7	9	3.70

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Mkumbi						
MSEZ area in Mombasa County						
Mkumbi - Water-reservoir	0	0	0	0	0	0
Water Reservoir/ MDP	0	0	0	0	0	0
Reservoir to MOWASCO	0	0	0	0	0	0
Temporary Road to D1	0	5	5	5	15	6.17
Land Reclamation/ D1 Area	8	7	5	7	27	11.11
Drainage Improvement	0	1	0	2	3	1.23
Land formation/ Disposal site	19	17	48	27	111	45.68
Contractor Camp Site	0	0	0	0	0	0
Totals	34	37	69	103	243	100

Source: Asset Inventory Survey

5.2.4: Tally and breakdown of tree crops for PID

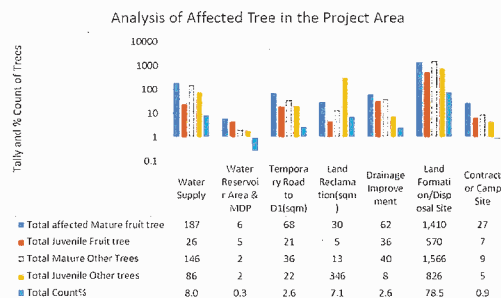
Table 5.6 provides a tally of trees encountered for PID. A total of 5,567 assorted trees representing 64 species were inventoried, and in keeping with the trend where coastal agriculture is tree based, coastal agroforestry trees namely Coconut, Neem, Mango, Cashew Nut among others dominate the tally. Bulk of the trees- 1,790 equivalent to 32% is mature trees while 670 equivalent to 12% are juvenile trees implying that they are yet to enter economic production. The PID will also affect 66 (21 in Kwale & 45 inside SEZ) farmlands with most of farms having seasonal crops that include maize, vegetables and cassavas.

Analysis of impact of PID on vegetation/tree cover by each component revealed that land formation/disposal site in the FTZ B area has the severest impact biomass impact given that 73.9% of all the total biomass count and 81.2% of all the species count are affected by land formation component targeting 30.95 hectares of land area for soil disposal and leveling as shown in figure 5.2 below. The rest of the components have between 0.8 to 8.7% impact on project biomass count.

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Source: Asset Inventory Survey
Figure: 5.2: Analysis of biomass impact.

5.3: The Physical Displacement Impact

Physical displacement in PID will be occasioned in two-fold: Total loss/total displacement or Partial loss/displacement of assets.

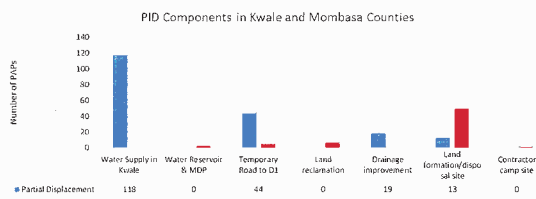
- Total loss: is occasioned if the whole land and its land-based assets will be removed or where the residual land after land acquisition is less than 25% or not viable for any sustainable development; and
- Partial loss: is occasioned if part of the land and its land-based assets only be clipped or partially affected, and the residual land is more than 75%. Such land is still viable for development and the assets/structures can be reconstructed/repared.

Figure 5.3 below show analysis of displacement potential for PID components. Water supply component in Kwale, construction of a temporary road and drainage improvement of selected sites have only occasioned partial displacement. The rest of the components have occasioned total/full displacement with land formation/disposal site accounting for the highest number of fully displaced PAPs.

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Source: Asset Inventory Survey
Figure: 5.3: Analysis of physical displacement impact.

5.3.1: Tally and breakdown of Physical Displacement Impact in Kwale County (outside the SEZ)

Table 5.3.1 below provides a summary of assets to be affected physically by water supply component of PID in Kwale County. Total physical displacement/relocation will not be occasioned by development of the proposed wayleave of 3 meters wide by 24.56 meters long for pipeline installations. As such, affected structures will only be partially clipped and reconstructed backwards away from the wayleave. From the table, the main physical impact in terms of land and land-based assets is anticipated from main transmission pipeline from the booster pumping station towards the terminal reservoir in MSEZ area. However, partial displacement impacts in Kwale County can be minimized by realignment of both borehole transmission pipeline and Main transmission pipeline during detailed design studies.

Table: 5.3.1: Breakdown of physical displacement in Kwale County

SN	Physical Displacement Impact for PID in Kwale County	Borehole Transmission Pipeline	Main Transmission Pipeline	Total for Water supply in Kwale
1	Affected Land parcels	58	60	118
2	Affected land Area in Acres	2.14	3.03	5.17
3	Total Displaced Households	1	0	1
4	Total displaced population	3	0	3
5	Total structures	42	45	87
6	Area of Permanent Houses	129.39	98	227.39
7	Area of Semi-permanent houses	105.15	19.66	124.81
8	Area of Temporary Houses	156.6	46.91	202.51
9	Other Structures	234.09	386.59	620.68
10	Total affected Mature fruit tree	77	110	187
11	Total affected juvenile fruit trees	7	19	26
12	Total affected Mature other trees	50	96	146
13	Total affected juvenile other trees	25	61	86

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Source: Asset Inventory Survey

5.3.2: Tally and breakdown of Physical Displacement Impact in Mombasa County (within the SEZ)

Table 5.3.2 below provides a summary of assets to be displaced physically by diverse PID components within the SEZ in Mombasa. Displacement impacts in SEZ area entails total relocation for all the components except for the component of drainage improvement on selected sites and construction of a temporary road which is linearly and partially affected 19 and 49 plots respectively. Without exception, the main physical displacement impact in terms of land and land-based assets is anticipated from land formation/disposal site accounting for 63.1% of all the displaced households, 70.7% of all the displaced structures, and 79.5% of all trees to be affected by its implementation.

Table: 5.3.2: Breakdown of physical displacement in Mombasa County (within SEZ)

SN	Physical Displacement Impact in Mombasa County (within SEZ)	Water Reservoir Area & MDP	Temporary Road to D1 (sqm)	Land Reclamation (sqm)	Drainage Improvement	Land Formation/Disposal Site	Contractor Camp Site	Total Impact
1	Affected Land parcels	3	49	7	19	63	2	143
2	Affected land Area in Acres	2.04	29.5	24.7	2.29	76.45	3.85	137.84
3	Total Displaced Households	0	8	11	0	41	0	60
4	Total displaced population	0	13	34	0	92	0	139
5	Total structures	0	15	27	3	111	0	156
6	Area of Permanent Houses			407.27		951.94		1369.21
7	Area of Semi-permanent houses		104	219.56	32	290.39		645.95
8	Area of Temporary Houses		77	80.52		717.49		865.01
9	Other Structures			61.94		152.5		224.44
10	Total affected Mature fruit tree	6	68	30	62	1,410	27	1603

Source: Asset Inventory Survey

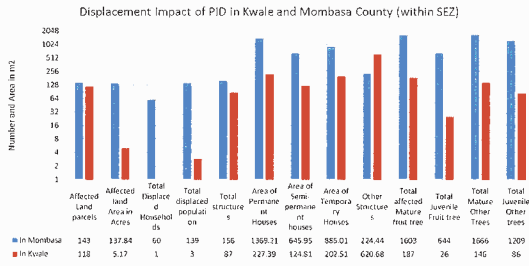
5.3.2: Tally and breakdown of Physical Displacement Impact in Mombasa and Kwale Counties

Figure 5.3 below provides a summary of assets to be displaced physically by diverse PID components in Mombasa County (within the SEZ) and Kwale County. From the figure, severe displacement impacts will be occasioned by PID activities in Mombasa County (inside SEZ area) than in Kwale County.

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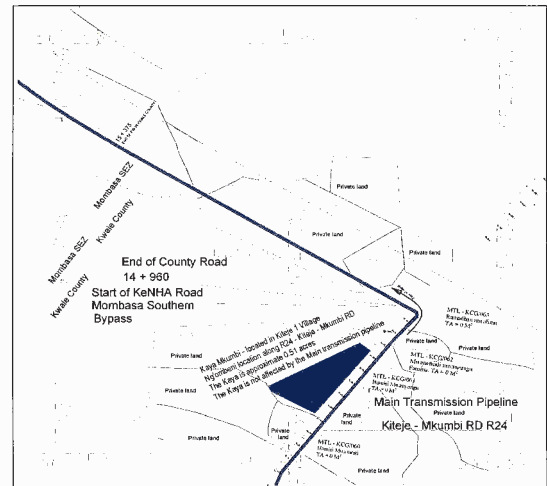


Source: Asset Inventory Survey
Figure 5.3.2: Summary of physical displacement impact for PID

5.4: Other resources of interest

5.4.1: Community Proprietary Resources (CPRs)

This study did not encounter any community proprietary resources likely to be displaced by creation of the proposed wayleave. The Mkumbi Shrine in Kiteje touches on the road reserve but it will be avoided in the laying out the proposed wayleave as shown in Figure 5.4 below.



Source: Prepared by the Consultant based on the alignment data
Figure 5.4 Location of Kaya Mkumbi

5.4.2: The Factor of Social Capital

Social Capital refers to the resourcefulness of a people and entities on account of their networks which are mainly driven by a sense of unity of purpose, shared norms, values, beliefs, trust, social relations, and institutions that facilitate cooperation and collective action for mutual benefits. In both rural and urban Kenya, the act of people coming together (unity is strength) to pull and mobilize resources for a common cause, be it service delivery or welfare for an individual or community, is strongly established and its common to come across network organisations forged and operated for such purpose sometimes with capacity that rivals that of government agencies.

The traverse area is no exception, and many social groups were encountered during the inventory inclusive of stakeholder engagement. However, given that development of a wayleave for the PID will not physically route out communities from their areas of residence, it is unlikely that a social network could be disrupted.

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5.5: The Socio-economic Profile of Potentially affected population

The purpose of the socio-economic survey was to facilitate documentation of the baseline characteristics of population along the traverse but was also used to facilitate social stratification of the potentially affected people and to document social features including wellbeing and levels of vulnerability.

5.5.1: Administrative profile

Two parallel administrative systems are operational in Kenya namely, the Central Government and County Government and both will be found within the traverse for the PID thus: -

National Government set-up

Table 5.5 shows the national government system at play within the traverse area. The PID Project traverses the two coastal Kenyan Counties of Mombasa and Kwale. Within Kwale, the PID traverse three locations in Matuga subcounty then terminates in the Mtongwe location of Likoni Sub- County in Mombasa. A total of seven sub-locations and sixteen villages are traversed.

Table 5.5: Distribution of PAPs by administrative jurisdiction

County	Sub-County	Locations	Sub-locations	Villages		
Kwale	Matuga	Tiwi	Simkumbe	Chai Pongwe		
			Waa	Kombani	Chidzumu Majengo Mapya Dzangadzangani Mzangatifu Mwamshipi	
				Kitvo	Gwirani	Maganyakulo
		Ng'ombeni			Maida Madibwani	
		Kiteje		Bombo	Kiteje Ziwani	
			Mkumbi	Kiteje 1		
		Mombasa	Likoni	Mtungwe	Mtungwe	Mrongondoni Mbuta Dongo Kundu

Note: Only three villages in MSEZ are affected by the grant project: Mrongondoni, Mbuta and Dongo Kundu villages.
Source: the Consultant

Parliamentary system: The Project will traverse the two constituencies of Matuga and Likoni in Kwale and Mombasa respectively.

County Government Set Up: Under the devolved system of government, the project will traverse both County 001 and County 002, Mombasa and Kwale respectively. Within Kwale, the project falls under the Tiwi and Waa Electrical Wards while in Mombasa, the PID falls under the Mtongwe Ward.

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5.5.2: Potentially displaced population

From analysis of structures, a total of 72 residential structures are likely to be displaced. However, as at the time of updating the ARAP study due to component change, 61 residential structures were complete and occupied by 142 people. This is the population likely to be physically displaced in the entire PID in the two Counties.

Table 5.6: Summary of Physically Displaced Households and Population

Location of PID	PID Components	Affected Residential Structures - Impact in Households	Household Population
Outside SEZ (Kwale)	Water Supply in Kwale	1	3*
	Water reservoir & MDP	0	0
Within SEZ-Mombasa	Construction of Temporary Road	8	13
	Drainage Improvement	0	0
	Land Development	11	34
	Land formation/Disposal Site	41	82
	Contractor site	0	0
Total		61	142

Source: Asset Inventory Survey
* Water supply in Kwale is only affecting one household with a population of three individuals. This household will be avoided during detailed design. When the household is avoided, 139 individuals will be displaced by PID inside Mombasa Special Economic Zone.

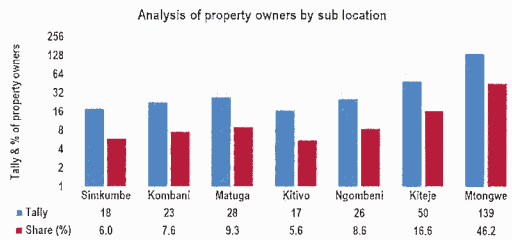
5.5.3: The Socio-economic Profile of Potentially affected population

5.5.3.1: Distribution of PAPs by Administrative jurisdiction

Since sampling for social-economic survey was conducted among PAHs that were available for the survey on the ground at the time of field survey (mainly residents), Figure 5.5.3.1 presents an analysis of distribution of PAPs along sublocations traversed by the PID.

From the 139 potentially identified PAPs in MSEZ area with 60 households, 22 households were surveyed. Similarly, from 118 potential PAPs with 129 households in Kwale, 39 household were surveyed. As such, a total of 61 households from 257 PAPs were surveyed for PID. With 257 potential PAPs, Mtongwe sub location accounts for 46.2% of the potentially affected population with the rest commanding an almost equal share between 5.4 and 14.9%.

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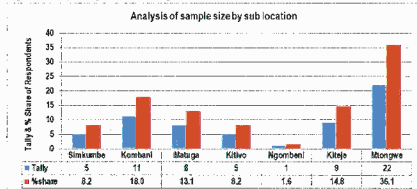
Source: socio-economic survey
Figure 5.5.3.1: Distribution of PAPs within the traverse

5.5.3.2: Sample size in the socio-economic survey

The socio-economic survey relied on a sample of 61 respondent households (39 in Kwale and 22 in MSEZ) equivalent to 23.7% of 257 property owners. In Kwale however, considering that out of 162 affected persons, seven (4.3%) were institutions that included two primary schools, designated road authorities and corporate persons for which social economic profiling is futile, another 23 (14.2%) were unknown property owners that could not be identified with village elders, another 93 (57.4%) known property owners did not present themselves personally in the survey, choosing rather to send representatives, the sample of 39 PAPs used in the socio-economic survey actually represents 100% of available individual PAPs on which a socioeconomic analysis is possible.

5.5.3.3: Sampling intensity

Figure 5.5.3.3 shows the distribution of 61 respondent households according to their sublocations of domicile. Though Ngombeni sub-location has a high tally of Project Affected Households (PAHs) at 26, only one was available for the socio-economic survey hence the low representation of 1.4%. Mtongwe had the highest representation at 36.1% followed by Ngombeni, Kiteje and Matuga.

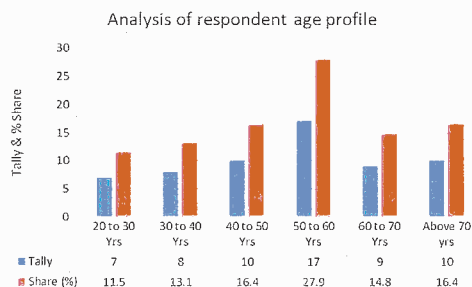


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Source: socio-economic survey
Figure 5.5.3.3: Sampling intensity within the traverse

5.5.4: Age characteristics of property owners

As a policy, socioeconomic survey only covered respondents aged 20 and above with the highest age observed to be above 70 years (Figure 5.5.4). 89.1% of respondents are aged 50 and above implying that land and land-based assets are controlled by the elderly as is typical of rural settlements. The 16.4% of PAPs aged over 70 years are vulnerable on account of age by given that development of the PID will entail relocation from current assets, vulnerability is assessed as a major concern in this Project.



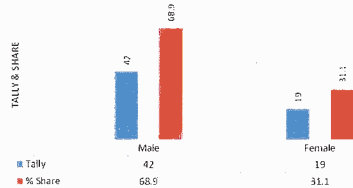
Source: socio-economic survey
Figure 5.5.4: Age profile of property owners

5.5.5: Gender characteristics of property owners

Forty-two (42) of the 61 respondent (68.9%) were male which is in keeping with the strong patriarchal system typical of rural coastal Kenya. Among the 61 respondents, 80.2% reported belonging to male-headed households with the remainder 19.8% falling under female-headed households goes to confirm that decision making largely vests with the male gender.

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GENDER CHARACTERISTICS OF RESPONDENTS



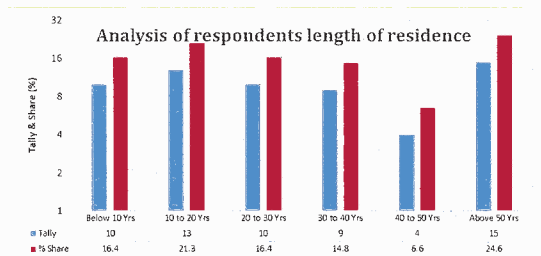
Source: socio-economic survey
Figure 5.5.5: Gender characteristics of property owners

5.5.6: Marital Status and Religion characteristics of property owners

83.6% of respondents are married, 16.4% are single or remained unmarried/single as at the time of the survey. As well, 96.7% of respondents profess the Islamic faith with the remainder 3.3% being Christian.

5.5.7: Length of residence among respondents:

A timeline analysis for the PID traverse based on recorded length of residence for heads of households is presented in Figure 5.5.7 below. 62.3% of potential PAPs have lived in the area for over 20 years with 45.9% having lived for over 30 years. 24.6% of all PAPs have lived in the area for over 50 years implying that this is a rural ancestral settlement.



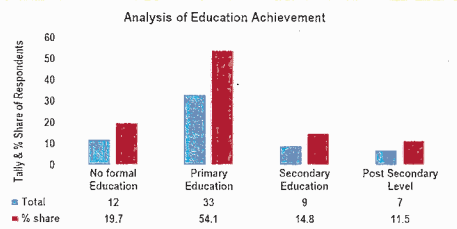
Source: socio-economic survey

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Figure 5.5.7: Length of residence for sampled property owners

5.5.8: Level of education attainment among property owners

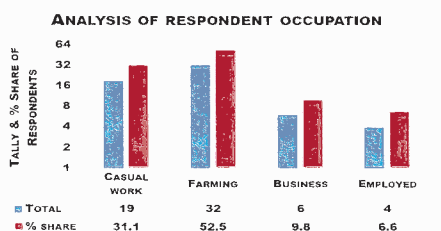
The bulk (54.1%) of respondents are of primary school education and below with 19.7% having had no access to formal education. Implication here is that PAPs have very little in terms of skills development and are therefore entirely reliant on extractive production systems based on exploitation of both land and sea-based resources.



Source: socio-economic survey
Figure 5.5.8: Education attainment among respondents

5.5.9: Occupation of Property Owners

Farming and casual labor are the dominant means to livelihood for 83.6% of respondents (Figure 5.5.9) with the rest being accounted for by business and employment. Given the rural nature of the traverse, it is probable that most of casual and formal employment is on-farm based while farm products also dominate the business sector. As such, it's probable that agriculture is the dominant means to livelihood within the traverse.



Source: Socio-economic survey

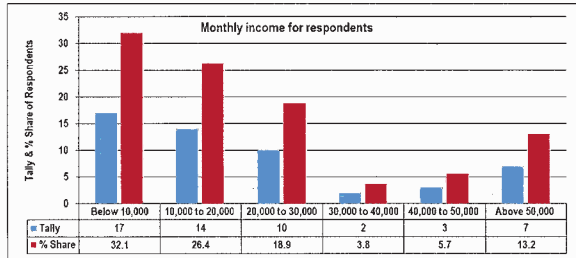
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Figure 5.5.9: Analysis of status of wellbeing

5.6: Income and Expenditure

5.6.1: Monthly Income

Income profiles are shown in Figure 5.6.1 below. 77.4% of all respondents reported monthly household incomes of Ksh 30,000 and below. At a household size of 5.7 in both Kwale and Mombasa counties, a monthly income of Ksh 20,000 translates to a daily per capita income of Ksh 116 implying that 26.4% of respondents subsist on the poverty line of 1.90 dollar per day and below while all the 32.1% of respondents earning below Ksh 10,000 subsist at a daily per capita of Ksh 89 which is below the poverty line. As such, close to 58% of respondents live in poverty.

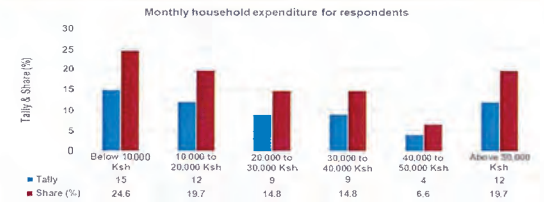


Source: Socio-economic survey
Figure 5.6.1: Analysis of income patterns

5.6.2: Monthly expenditure

Just like income, household expenditure is an indicator of economic status and wellbeing. Within the PID traverse area, overwhelming majority (44.3%) of respondents spend below Ksh 20,000 monthly out of which, 24.6% spend below 10,000 Ksh per month, again indicating a spending below the poverty line of 1.90 dollar per day. Main expenditure items are school fees, food and Medicare in order of priority.

<https://poverty.data.worldbank.org/poverty/country/ken>



Source: Socio-economic survey
Figure 5.6.2: Expenditure profile for respondents

5.6.3: Scale of vulnerability among respondents:

Vulnerable PAPs were identified during the socio-economic survey. Vulnerability has been determined following three parameters and they are eligible for the one-time special cash assistance due to the nature of destructive vulnerability.

- physically challenged, on account of blindness, disability, dumbness and hearing impairment;
- over aged (>80 years); and
- orphanage children.

A total of 14 PAPs residing within MSEZ were identified as vulnerable. On the other hand, the PID project has no potential to significantly affect any of the vulnerable groups within the traverse and neither does it have potential to escalate vulnerability. Just and adequate compensation for all structures, trees and land displaced will greatly tone down potential impact on vulnerable groups.

As for other vulnerabilities, the people living in the SEZ area are considered in general as vulnerable due to lack of legal land ownership. Therefore, a resettlement site and other livelihood restoration assistance will be provided to them. Additionally, the number of PAPs below poverty is estimated around 30% or more based on the socio-economic survey results. Since the number of the applicable PAPs is relatively larger, and those who are mostly covered by the people living in the SEZ area who will be provided by above mentioned assistance, the below poverty PAPs are not considered for the one-time special cash allowance.

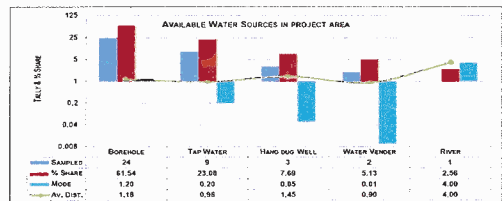
Similarly, the number of female households heads is 11 in MSEZ area and 6 in Kwale county. The actual impact needs to be reassessed especially for those who in Kwale, since the ROW for water supply in Kwale will be reviewed to minimize the land acquisition impact in the D/D stage. At this stage, these female headed households will be assisted by (1) preparing the livelihood restoration menu for each female headed household, (2) prioritizing employment opportunity to a member of the households, and (3) monitoring their livelihood restoration periodically. If it is found that additional assistance is necessary through monitoring, any additional measure will be discussed and implemented.

5.7: Access to basic facilities

5.7.1: Sources of water in project

Six main water resources for domestic usage were documented for this study in Kwale and Mombasa counties. The six sources are: Underground water abstracted from boreholes; piped water supplied by Kwale Water and Sewerage Company; surface water from one seasonal river (River Tembo in Kiteje Mkwabi); water supplied from water vendors; water from shallow wells; and a spring in Mrongondoni village in SEZ area. From a list of six water sources, two sources were identified as improved sources of water in the project area namely protected boreholes and piped water while four water sources were identified as unimproved sources namely water from Mrongondoni Spring, River Tembo, unprotected wells and water from vendors. Five water sources were documented in Kwale County while three sources were documented in MSEZ area. Analysis of availability of and access to portable water sources in the two-project area revealed that project affected persons in Kwale section have more water sources options but travel longer distances to access the sources. On average, PAPs in Kwale travel 1.2 & 2.4 times longer than their SEZ counterparts in search of borehole and well water sources respectively.

Availability of and access to portable water sources is therefore an important aspect of PID in Kwale County given that water will be distributed to affected communities in ten water kiosks as part of project benefits to the locals. It is envisaged that PID will provide suitable water and bridge the distance traveled by local communities as they endeavor to access to water resources. Figure 5.7.1 below provides available water sources for community use in Kwale County; mean distance travelled in kilometers to access water and percentage share of each water source. From the figure: More than half (61.54%) of the sampled PAPs in Kwale County depend on borehole water and can travel an average distance of 1.18 kilometers in pursuit of borehole water; Tapped Water supplied by Kwale Water and Sewerage Company accounts for 23.08% of the sampled PAPs water sources with an average distance of 0.96 meters to the nearest tap water source. Cumulatively, protected water sources support 84.62% of sampled PAPs domestic water needs compared to 15.62% from unimproved water sources.



Source: Socio-economic survey
Figure 5.7.1 Analysis of available water sources

5.7.2: Tally of schools and health facilities

Tally of Schools:

The team documented a total of 18 Public and Private schools (11 Primary schools and 7 Secondary Schools) in Kwale County and Seven public schools (four Primary schools & three secondary school) in Mombasa County for the entire project area. Out of eleven primary schools in Kwale County, only two are privately owned while the rest are government managed Primary schools. There is no private secondary school mentioned within Kwale County. The average distances to the nearest schools were calculated and results indicate that PAPs have greater access to primary school education than Secondary school education in that the mean distance to all the eleven listed primary schools is 1.52 Kilometers while the mean distance to all the seven Secondary schools is 2.69 Kilometers.

Under the PID, two primary schools (Waa and Ningawa Primary Schools) will be supported with water kiosks hence providing access to clean water for the school.

Table 5.5.2a: List of Primary and Secondary Schools in Kwale project Area

SN	Nearest Primary Schools	Category	Distance (Km)
1	Bridge International Academy	Private	1.2
2	Swabina Academy	Private	0.5
3	Chai Primary school	Public	2.3
4	Chidzumu Primary School	Public	1.2
5	Denyenye primary	Public	1.5
6	Kiteje primary	Public	3.0
7	Mkumbi primary School	Public	1.4
8	Mrongwe Primary School	Public	1.4
9	Ningawa primary School	Public	0.5
10	Tiwi primary school	Public	3.0
11	Yeje Primary School	Public	1.8
SN	Nearest Secondary Schools	Category	Distance (Km)
1	Kiteje Secondary School	Public	2.3
2	Kombani Secondary	Public	2.7
3	Mwanambeyu Secondary	Public	8.0
4	Siji Secondary	Public	2.8
5	Tiwi Girls Secondary school	Public	3.0

SN	Nearest Primary Schools	Category	Distance (Km)
6	Waa Boys Secondary School	Public	2.0
7	Waa Girls Secondary School	Public	1.0

Source: Socio-economic survey

Table 5.5.2b: List of Primary and Secondary Schools in M-SEZ project Area

SN	Nearest Primary Schools for M-SEZ	Category	Mean Dist. In Km
1	Longo Primary School	Public	2.4
2	Mkumbi Primary School	Public	1.0
3	Mtongwe Primary School	Public	3.0
4	Mwangala Primary School	Public	1.9

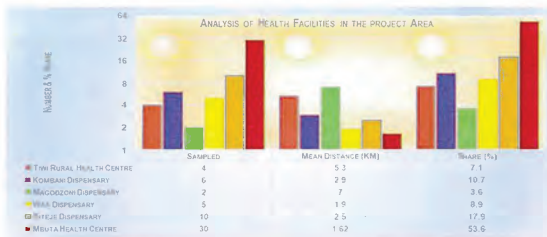
SN	Nearest Secondary Schools	Category	Mean Dist. In Km
1	Bububu Boys High School	Public	1.43
2	Longo Girls High School	Public	1.75
3	Mtongwe Girls High School	Public	2.7

Source: Socio-economic survey

Tally of Health facilities

Nearest Health facilities in the project area were documented basically to help in analysis of primary health care sources available for affected persons. Access to health facilities in this study refers to the timely use of personal health services to achieve the best health outcome. According to Kwale County Website, Kwale County has a total of three (3) government hospitals, eight health Centers and 64 dispensaries located in Msambweni, Kwale/Matuga and Kinango constituencies. The doctor and nurse population ratio stand at 1:76,741 and 1:3,133 respectively. In addition, the county has 2 level three private hospitals. The average distance to the nearest health facility within the County is seven kilometers as opposed to the required maximum of three kilometers. The study recorded a total of five dispensaries in the three locations of project area in Kwale County while only one health centre was recorded in M-SEZ area. In Kwale County, Tiwi Location had two dispensaries namely Magodzoni and Tiwi Rural Health Centre; Waa location had two dispensaries namely Waa dispensary and Kombani Dispensary; while Ngombeni Location had only Kiteje Dispensary. Mombasa had Mbuta Health Centre. The average distance to the nearest health facility within the project area reported by the sampled property owners is 4.7 Kilometers which is considerably lower than the county average. However, there is locational difference on average distance to the nearest hospitals with Tiwi location having the longest distance to the nearest hospital followed by Waa location and Ngombeni location with the shortest average distance to the nearest dispensary as indicated in Figure 5.7.2 below.

Access to affordable primary health care is a major component of socioeconomics' status in the project area. When monthly household expenditures were evaluated, results revealed that among the respondents, medical expenses are ranked third after food and education. Medical expenses contributed close to 10% and 6.6% of the total monthly household expenditures in Kwale and Mombasa respectively.



Source: Socio-economic survey

Figure 5.7.2: Analysis of Health Facilities in the project Area

CHAPTER 6: RESETTLEMENT MEASURES AND ENTITLEMENT MATRIX

6.1: Eligibility

This chapter sets out eligibility criteria, which are necessary to determine who will be eligible for resettlement and benefits, and to discourage inflow of ineligible people.

6.1.1: Criteria for Eligibility

JICA Environmental Guidelines requires that Involuntary Resettlement and loss of means of livelihood to be avoided when feasible by exploring all viable alternatives. When, after such an examination, avoidance is proved unfeasible, effective measures to minimize impact and to compensate for losses must be agreed upon with the people who will be affected. JICA further requires that people who must be resettled involuntarily and people whose means of livelihood will be hindered or lost be sufficiently compensated and supported by project proponents etc. in a timely manner. Prior compensation, at full replacement cost, must be provided as much as possible.

Thus, for purposes of the ARAP for the PID, JICA Environmental Guidelines clearly identify involuntary displacement and loss of means to livelihood to be the core criteria in determining eligibility for compensation. Subsequent to this view, as a policy, this ARAP will make provision to compensate all aspects of involuntary displacement.

6.1.2: The Cut-off Date

The Cut-off Date for eligibility for compensation for displacement impacts was proclaimed on diverse. In M-SEZ, it was proclaimed between 31st January 2019; and in Kwale County it was proclaimed between 25th July 2019 to 5th of September 2019 to coincide with dates of Public Hearing Meetings in each of the 6 Villages traversed. During these meetings, PAPs were encouraged to be vigilant and watch out for speculators intent either to infiltrate the area or cheat locals out of land through cheap buyouts. The same message was amplified by the local leadership.

Fieldwork was then mounted and concluded within one month of the declaration to permanently seal the Cut off.

6.2: The Entitlement Matrix

6.2.1: The rationale for entitlement

An entitlement matrix detailing out (i) eligibility and (ii), entitlement in compensation is provided in Tables 6.2 (a) and (b) below. For any PAPs, the compensation and assistance need to be provided before relocation and/or land acquisition as per the international practice.

The entitlement matrix for PAPs in the SEZ area was approved by the Kenyan Government as the matrix applicable for all the PAPs in the SEZ area, not only for the PAPs in the SEZ area for this PID project, the JICA financed grant project. KPA will apply the entitlement matrix for all the PAPs in the SEZ area based on the government's decision.

Table 6.1(a): Draft Updated Entitlement Matrix for Project on Infrastructure Development in M-SEZ for PAPs inside SEZ Area (as of 29 Nov. 2021)

No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Agency
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No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Agency
1.	Loss of land a. Agricultural b. Residential c. Commercial d. Other types of land	Those without formal legal right	a) Legal ownership of 1/8 acre (0.125 acre) of a land plot in one of the resettlement sites (RAS) within M-SEZ area, OR of legal ownership of 0.312 acre of a land plot in one of the resettlement sites (EAs) within M-SEZ area. b) Provide a resettlement sites with amenities including 4 water kiosks (3 in Zone A and 1 Zone B); a marketplace which will be in Zone A; a dispensary located in Zone A; 1 acre of cemetery each in Zone A and B for both Christian and Muslim PAPs and an access road to resettlement sites. c) Tax for transferring the land to the PAPs, registration fee, and other costs as the land transaction cost for obtaining the land title shall be incurred by the implementing agency. d) Transitional allowance at 15% of Ksh 450,000/acre as originally valued in RAP preparation in 2019 to cover the difference in value between the land lost and a land plot in the resettlement site	KPA & NLC
2	Structures and Buildings	Private residential/business structures	a) Cash compensation at replacement cost without factoring depreciation. b) Right to salvage materials c) 15% statutory disturbance allowance for structure compensation d) 3-6 months' notice to vacate and reconstruct new structures	KPA & NLC
		Private movable assets such as Dish Racks	a) Since structures like racks, stands etc. can be relocated, there will be no compensation for them. b) 1 month' notice to remove	KPA
		Community Proprietary Resources Mosques, Churches, e.g.,	a) Cash compensation at replacement cost without factoring depreciation. b) Right to salvage materials c) 15% statutory disturbance allowance for structure compensation d) 3-6 months' notice to vacate and reconstruct new structures	KPA & NLC
3	Trees	Private owners	a) Cash compensation at market price for each tree based on compensation schedules prepared by the Kenya Forest Service (KFS) for various species depending on age and its future potential b) Tree owners will be allowed to benefit/make use of the wood products from their trees after they have been cut down. c) 3 months' notice to vacate	KPA & NLC

No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Agency
4	Loss of Annual Crops	Private owners	a) Annual crops will not be compensated since they can be harvested within the notice period of 3 months. b) Where KPA and the contractor are not able to wait for the 3 months' cash compensation at market price will be paid for affected annual crops based on compensation schedules prepared by the Agricultural Department. c) 3 months' notice to remove annual crops before construction commences	KPA & NLC
5	Loss of Perennial Crops	Private owners	a) Cash compensation at market price for affected perennial crops based on compensation schedules prepared by the Agricultural Department for various perennial crop types depending on age and its future potential b) 3 months' notice to remove perennial crops before construction commences	KPA & NLC
6	Graves/Graveyard and culturally sensitive areas (e.g., Kayas and Shrines)	Private owners	a) Community Kaya/Shrines will not be compensated or relocated but shall enjoy in-situ conservation to enable continuity of community cultural practices b) Cash compensation for relocation of graves including costs for performing cultural ceremonies, transportation and court charges in obtaining exhumation orders. c) 3 months' notice to relocate	KPA & NLC
7	Special Assistance for Vulnerable	1. Physically challenged 2. Overage PAPs, >80yrs 3. Orphaned children	a) One-time cash assistance of KES 10,000	KPA
8	Livelihood support and restoration	Business owners	a) Net monthly income from the lost business will be paid for a period of three months as a compensation for loss of business. b) PAPA's be given priority to work for the port as well as freeport under KPA's authority, and industrial park under SEZA's authority during project implementation and operation stage. c) Vocational training for 1 person/ household who needs to change jobs due to relocation and need a new skill. Courses and their duration include: 1. Preliminary level for 3 months: Plumbing, Mechanics, Drivers, Carpentry, Welders/Fabricators, Tailors, Masonry, Security, Painter. 2. Basic level course for 6 months: Computer Studies, Export Processing,	KPA & NLC

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No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Agency
			Cargo Handling, Electrical Installation	
			d) Money Management Training to avoid wasting compensation money including opening a bank account if not owned by the household head.	KPA

Note: eligible needed individuals will be assessed by (i) providing the livelihood restoration plan for each family headed household, (ii) providing employment opportunity to a member of the household, and (iii) monitoring their livelihood restoration performance. If it is found that additional assistance is necessary through the contractor any additional measure will be proposed and implemented.

Source: JST

Table 6.1(b): Draft Updated Entitlement Matrix for Project on Infrastructure Development in M-SEZ for PAPA's outside SEZ Area (in Kwate County) (as of 29 Nov. 2021)

No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Agency
1.	Loss of land a. Agricultural b. Residential c. Commercial d. Other types of land	Title holder both statutory and customary	a) Cash compensation at market price of the affected land b) 15% statutory disturbance allowance which includes land transaction costs c) Farming of crops and grazing of animals will continue along the wayleave land however landowners will not be allowed to grow crops or trees that are deep rooting	KPA & NLC
2	Structures and Buildings	Private residential/business structures	a) Cash compensation at replacement cost without factoring depreciation. b) Right to salvage materials c) 15% statutory disturbance allowance for structure compensation d) 3-6 months' notice to vacate and reconstruct new structures	KPA & NLC
		Private movable assets such as Dish Racks	a) Since structures like racks, stands etc. can be relocated, there will be no compensation for them. b) 1 month's notice to remove	KPA
		Community Proprietary Resources e.g., Mosques, Churches	a) Cash compensation at replacement cost without factoring depreciation. b) Right to salvage materials c) 15% statutory disturbance allowance for structure compensation d) 3-6 months' notice to vacate and reconstruct new structures	KPA & NLC

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No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Agency
3	Trees	Private owners	a) Cash compensation at market price for each tree based on compensation schedules prepared by the Kenya Forest Service (KFS) for various species depending on age and its future potential b) Tree owners will be allowed to benefit/make use of the wood products from their trees after they have been cut down. c) 3 months' notice to vacate	KPA & NLC
4	Loss of Annual Crops	Private owners	a) Annual crops will not be compensated since they can be harvested within the notice period of 3 months. b) Where KPA and the contractor are not able to wait for the 3 months' cash compensation at market price will be paid for affected annual crops based on compensation schedules prepared by the Agricultural Department. c) 3 months' notice to remove annual crops before construction commences	KPA & NLC
5	Loss of Perennial Crops	Private owners	a) Cash compensation at market price for affected perennial crops based on compensation schedules prepared by the Agricultural Department for various perennial crop types depending on age and its future potential b) 3 months' notice to remove perennial crops before construction commences	KPA & NLC
6	Graves/Graveyard and culturally sensitive areas (e.g., Kayas and Shrines)	Private owners	a) KPA will endeavor not to disturb, relocate, or move any graves along the right of way by making appropriate adjustments. Therefore, there will be no compensation for graves since they will be avoided.	KPA & NLC
7	Special Assistance for Vulnerable	1. Physically challenged 2. Overage PAPs, >80yrs 3. Orphaned children	a) One-time cash assistance of KES 10,000	KPA
8	Livelihood support and restoration	Business owners	a) Net monthly income from the lost business will be paid for a period of three months as a compensation for loss of business. b) PAPA's be given priority to work for the port as well as freeport under KPA's authority, and industrial park under SEZA's authority during project implementation and operation stage. c) Vocational training for 1 person/ household who needs to change jobs due to relocation and need a new skill. Courses and their duration include: 1. Preliminary level for 3 months:	KPA & NLC

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No.	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation Package)	Responsible Agency
			Plumbing, Mechanics, Drivers, Carpentry, Welders/Fabricators, Tailors, Masonry, Security, Painter. 2. Basic level course for 6 months: Computer Studies, Export Processing, Cargo Handling, Electrical Installation	
		All PAPA's	a) Money Management Training to avoid wasting compensation money including opening a bank account if not owned by the household head.	KPA

Note: eligible needed individuals will be assessed by (i) providing the livelihood restoration plan for each family headed household, (ii) providing employment opportunity to a member of the household, and (iii) monitoring their livelihood restoration performance. If it is found that additional assistance is necessary through the contractor any additional measure will be proposed and implemented.

Source: JST

Disclosure of the NLCs eligible PAPA list (e.g. the name of the eligible PAPA's and affected structures) to PAPA's will be done at Chief's office by KPA and NLC together. The compensation will be disclosed to individual eligible persons only after the disclosure of the eligible PAPA list.

6.3: Valuation and compensation for losses

6.3.1: Introduction

Valuation for this project is based on principles provided in the JICA Guidelines and WB OP on involuntary resettlement as well as various national laws that are triggered by this project among them, the Constitution, Land Act 2012 (Chapter VIII: on compulsory acquisition), among others.

In property valuations there are 5 generally accepted methods or approaches to value. These are the Sales Comparison, the Contractors Approach, the Gross Replacement Cost Method (GRC), the Residual, and the Profits method: -

The first method comparative approach to value that considers the sales of similar of substitute properties and related market data and establishes a value estimate by processes involving comparison. Property prices need to be analyzed and interpreted in order to obtain the corresponding values utilized in the comparison analysis. This method is the preferred approach in valuing land in an active market where a trend of prices can be established.

The second method is a contractor's approach that considers income and expense data relating to the property being valued and estimate value through a capitalization process. This method is applied when income generating capabilities is present and is considered by the market as forming the primary basis for value. The capital value arrived at is the value attributed to the right to an annual income stream. This approach, to name a few, entails a research and analysis of transaction prices of similar or comparably substituting properties, rental rates, expense ratios, yields, capitalization rates, tenant covenants, and risk. In essence this approach entails an income stream from which expenses are deducted, the net income is then capitalized (income is converted to capital) by dividing it with a capitalization factor. Although the value is determined by capitalization, the basis of information researched and analyzed by utilizing the comparison approach. This method, therefore, is a combination of income and expense data though valued by processes of comparison.

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The third method, known as the Gross Replacement Cost method (GRC) evaluates the current cost of replacing an asset with its modern equivalent asset less deductions for physical deterioration and all the relevant forms of optimization such as the expected optimum land productivity. It is also used in acquisition of properties. This is appropriate when little or no market evidence is available, and the property does not transact readily in the market. The approach entails the measuring of the improvements (buildings, site works) to which the appropriate construction costs are applied, resulting in the new replacement (or reproduction) cost. The market value of the land as if unimproved is then to be determined and added to this amount with the total amount reflecting the market value for the property.

The fourth method, known as the residual method, is the estimated amount that an entity can obtain from the disposal of an asset after deducting the estimated costs of disposal, if the asset were already of the age and in condition expected at the end of its useful life. This approach is applicable where a valuation is to be conducted for undeveloped land or where redevelopment of an obsolescent piece of land demands it. The first step is to estimate the value of the development as complete, whether it's a township development or residential development or any other use or type of building. Then an allowance for development costs, professional fees, advertising and marketing costs, financing costs, developer's profit and risk is deducted from the value as complete which results in the residual value.

The fifth method is the profit's method and is sometimes referred to as the accounting method. The method entails an estimation of the gross annual income or turnover from which cost of sales and operating expenses are deducted. The net balance is then divided into a rent and profit split. The rental split is capitalized at an appropriate capitalization factor. In addition, the goodwill is to be ascertained at a market related multiplier with the market represented by the total of these two amounts. The second approach takes the estimated net profit only, divides it into a rental and profit split, and capitalizes the rental amount in order to determine the value of the business "lock, stock and barrel".

6.3.2: Valuation methodology analysis

A critical role of social safeguards to protect the project affected persons from being adversely impacted by the project. As such, a sound basis of valuation is necessary to ensure fair compensation. The process for land valuation for compulsory acquisition is governed by provisions of the Land Act (No 6 of 2012).

The five principal methods that are applicable in the valuation of land and the assets there-in as highlighted above are summarized as shared with the affected person in the barazas.

These include: -

- Direct comparison of capital values that entails the analysis of sales recorded over a period for properties with similar characteristics
- Contractors cost Method (replacement method) assumes that the buyer would be willing to pay for the property what it would cost him to procure similar accommodation elsewhere
- Profits method: Valuation is based on volume of trade or business carried on as reflected by records and compared with similar properties elsewhere
- The development or residual method is based on the present capital value of estimated future income less anticipated costs to be invested to realize the income including an allowance for risk inherent in such investment.
- Investment method entails establishing the present capital value of a future income flow discounted at an appropriate rate of interest. The income that the property will produce and the appropriate rate of interest at which to discount that income is considered.

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For the purpose of loss valuation in the ARAP for PID, the replacement method was disclosed to the people and utilized as the preferred method as it ensures that the project affected persons is restored at least to the level he would have been if there was no involuntary displacement and is in line with JICA Guidelines.

6.3.3: Basis for Valuation in the RAP

In preparation of the ARAP, the consultant explained to would be affected persons the valuation process. This is premised on the national and international regulations that trigger resettlement whenever land is needed for public interest. Nationally the major regulations include Constitution of Kenya (2010), Land Act (2012), and Valuers Act Cap 532. Internationally, valuation is based on International Valuation Standards (IVS) following the principles provided in the Africa Development Bank- AfDB policy on Involuntary Resettlement.

Structures

The method adopted is the Replacement Value Method and comparable method for land that evaluates the current cost of replacing an asset without depreciation. The approach entails the measuring of the improvements (buildings, site works) to which the appropriate construction costs are applied, resulting in the new replacement (or reproduction) cost. An addition of 15% is added to the value as statutory allowance to cater for disturbance.

Land Values

Establishing land values in this area was not difficult since there is a vibrant market and comparable sales are easily available and these figures were obtained and used. An average value was adopted per homogenous section. Projections were however considered since such a project is expected to bring about a substantial increase to prices as speculation causes demand that leads to escalation of land values.

Trees

The trees have been valued based on compensation schedules prepared by the Kenya Forest Service for various species depending on age and its future potential. The valuation of the trees has also considered the extent of utilization, type of species, quality of logs, diameter of the logs and quality of the log as well as the opportunity cost for fruit trees like mangoes and palm trees.

Though tree crops produce shall be harvested before the project commences, it is assumed that the owners will be duly notified not to replant any perennial crops like Cow Peas after the property is compensated to allow for project works. The crops which are on the affected land as at the time of construction will be valued based on the schedules prepared by the Ministry of Agriculture for various types and age but taking into account the level of management.

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CHAPTER 7: RESETTLEMENT SITE

7.1: Background

In total, the M-SEZ Project in Dongo Kundu area affects 1,648 land occupants, and a total of 2,319 Project Affected People (PAPs) of which totalling to 369 PAPs are affected by this PID within the SEZ area (outside SEZ area, there are 171 PAPs, total 540 PAPs for the PID project).

The valuation of affected assets and properties for the SEZ area was conducted by the NLC on September 2019, covering only developments because the land falls within public land registered under KPA. NLC, on its letter to the Ministry of Transport, Infrastructure Housing, Urban Development and Public Works advised KPA to provide an alternative land for settlement of PAPs, though PAPs in the SEZ area are considered ineligible for land compensation by NLC. Additionally, KPA decided to develop the resettlement sites for PAPs in the SEZ area as an additional assistance to ensure security of tenure. This means, all the cost for the preparation of the resettlement sites will be incurred by KPA and not part of the grant project.

7.2: Alternative Considerations of the Resettlement Sites

The resettlement options such as provision for the resettlement sites inside/outside SEZ area and self-relocation were conceived in the Master Plan (M/P) study in September 2015 and was again studied while preparing the ARAP. As an optimal solution to resolve the issue of PAPs in SEZ area, internal resettlement was selected by KPA and stakeholders due to 2 major reasons. First, since the project land is registered under KPA, it would be against the national law for KPA to acquire and compensate for land so that PAPs can relocate outside of the project area. Secondly, since the area is already provided with social infrastructures including community Kayas, a school and others, it would be a better option for PAPs to relocate within the SEZ area and continue to utilize the social amenities, which will not disturb PAPs' live significantly.

7.3: Location and Area of the Resettlement Sites

Land allocation in the M/P for M-SEZ has provision for residential use within the project area. Two zones, Zone A and Zone B located in the Residential Areas (RA) were proposed for the resettlement of PAPs to be affected by the implementation of the M/P in Dongo Kundu area. Zone A is located at the north of the Mombasa Southern Bypass Road while Zone B is at the south of the Southern Bypass Road as seen in Figure 7.1 below. The amount of land in each zone is provided in Table 7.1.

Table 7.1: Available land of resettlement sites in the RA

Zone	RA Land Size (acres)	Available Flat Land for Resettlement (acres)
Zone A	100.5	76
Zone B	59.1	39.2

Source: JST

The constrain in the availability of flat land for resettlement in the designated RAs has forced the resettlement sites to be extended to lands designated for the Enterprise Areas (EAs). The amount of land allocated from the EAs, and the total land size of the resettlement site is as presented in Table 7.2 below.

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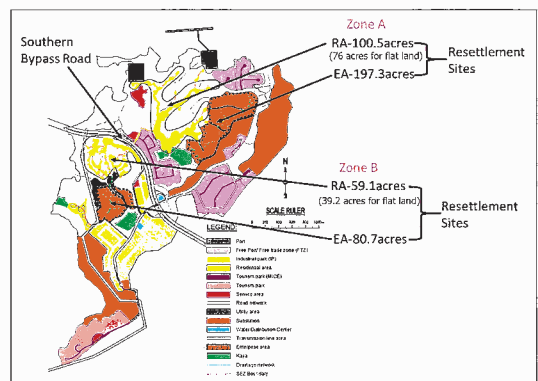
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Table 7.2: Distribution of available land for resettlement sites in RA and EA

Land Sources	Zone A (acre)	Zone B (acres)	Total (acres)
Residential Area	76	39.2	115.2
Enterprise Area	197.3	80.7	278
Total		393.2	

Source: JST



Source: JST

Figure 7.1: Proposed relocation sites

7.4: Allocated plot size for each PAHs in SEZ area

It was proposed among stakeholders that the size of a land plot of the resettlement site in RA for each PAHs in SEZ area is 0.125 (1/8) acre, considering the limited available land area and the minimum required area to register the legal land ownership so that the legal ownership will be provided to the PAPs. However, as mentioned in Section 7.3, some PAPs will be allocated a land plot in the EAs due to limited availability of flat land in the RAs. The topography of the EA is sloppier, and some earth formation works including cuts and fills, are proposed to make the area suitable for resettlement. Hence, though some PAPs prefer the hilly areas, to balance advantages and disadvantages of the land plot options, 0.312 acre instead of 0.125 acre will be allocated to all individuals who select a land plot in the EAs.

7.5: Infrastructures and social services available at resettlement site

The Dongo Kundu area being resided by PAPs, has some social services including community Kayas, a primary school, water facilities, electricity, and a health centre which is at the border of the affected area and non-affected area. The number of available social services and their location is as shown in the Table below.

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Table 7.3a: Existing social infrastructure in Dongo Kundu area

Social infrastructure	Number	Location in villages
Churches	7	Dongo Kundu and Mwangala villages
Mosques	4	Mwongondoni and Mbuta villages
Kaya	13	Dongo Kungu village, Mbuta village, Mwongondoni village, Kaya Mtongwe village and Siji village
Health center	1	Mbuta village
Primary school	1	Mwangala village
Government office (DCC)	1	Dongo Kundu village

Source: JST

Table 7.3b: Location data for the Existing Kayas in Dongo Kundu area

Sn	Village	Community Kayas	Area in Ha	Perimeter in KM	X - Coordinates (Arc 1960)	Y -- Coordinates (Arc 1960)
1	Dongo Kundu	Jiwe la Kurlunza	0.439	0.4	566757.508874	9551079.090000
2		Kaya Kibuyuni	0.1515	0.17	567479.691900	9551015.396500
3		Kaya Mikadini	0.087	0.16	567658.384670	9551007.382667
4		Kaya Ngombeni	0.547	0.29	567064.157000	9549050.709000
5		Kaya Mihongani	6.9159	1.05	567443.121215	9549032.722299
6	Mbuta	Kaya Mduguduni	0.297	0.24	568284.038475	9548003.189212
7		K. Nchimbembere1	0.543	0.29	568273.500072	9548257.905590
8		K. Nchimbembere2	0.236	0.2	568227.915032	9546417.398897
9	Mwongondoni	Kaya Mwongondoni	4.025	1.05	566426.778011	9547744.947403
10	Kaya Mtongwe	Kaya Tembo	1.89	0.66	566382.203541	9546763.139123
11		Kaya Mtongwe	2.02	0.735	565164.789453	9548129.411851
12	Siji	Kaya Nkhonza	0.7114	0.366	566013.443386	9545901.249609
13		Kaya Siji	0.7112	0.474	565509.716181	9545277.619700
		Total	18.574	5.985		

Source: JST

Table 7.3c: Location data for the Existing Churches and Mosques in Dongo Kundu area

Villages	Name of Church/Mosque	X - Coordinates (Arc 1960)	Y -- Coordinates (Arc 1960)
Dongo Kundu	Pefa Church	567124.582138	9549898.005572
	Sauli Nyikani	567318.578163	9549531.759518
	JCC church - Mbuta	567383.182802	9550030.860286
Mwangala	Gospel Turbanacle	565117.514624	9549158.175526
	Redeemed Gospel	565366.664996	9549383.568267
	Mwangala Catholic Church	565969.643471	9548768.334795
	Mwangala Baptist Church	565963.613137	9549260.707816
Mwongondoni	Mwongondoni Mosque	566572.373475	9548155.341012

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Villages	Name of Church/Mosque	X - Coordinates (Arc 1960)	Y -- Coordinates (Arc 1960)
Mbuta	IDDI ALI Mosque	566996.375637	9547517.866968
	NURIA Mosque	568951.301866	9548852.277072
	Mbuta Mosque	568775.025909	9548681.964944

Source: JST

In addition to the existing social services available in the resettlement sites, the project plans to supplement them by providing an access road to the resettlement sites, water kiosks, a marketplace, and a dispensary, and two acres of cemeteries for Muslim PAPs and Christian PAPs. The planning of the proposed number and location of the additional infrastructure followed the ongoing practice and complied with Kenyan standards. Planning for water supply facilities followed Practice Manual for Water Supply Services Oct. 2005 (Part A Water Supply), and location was maintained within walking distance (around 1km). Planning for a dispensary followed Health Infrastructure Norms & Standards February 2017 (Ministry of Health Kenya) and guidance from Department of Health-Mombasa County, while for a market followed existing similar facilities of Shika Adabu Retail Market (Likoni sub-county) as a benchmark and guidance from Department of Public Works-Mombasa County. Planning for cemeteries followed existing similar facilities of Kikwani Muslim Cemetery and Mbaraki Christian Cemetery (Mombasa) as a benchmark and guidance from Department of Public Works-Mombasa County.

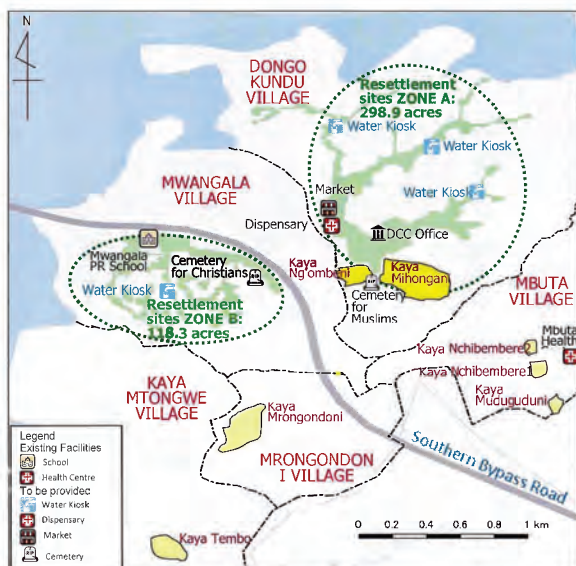
The location map for the planned social infrastructures is as seen in Table 7.4 and Figure 7.2 below.

Table 7.4: Proposed infrastructure for the resettlement sites

Infrastructure	Unit	Zone A	Location	Zone B	Location
Water Kiosks	number	3	X = 566483.7051 Y = 9549056.7706	1	X = 566483.7051 Y = 9549056.7706
Dispensary	number	1	X = 566483.7051 Y = 9549056.7706	-	-
Cemetery	acres	1	X = 566483.7051 Y = 9549056.7706	1	X = 566483.7051 Y = 9549056.7706
Market	number	1	X = 566483.7051 Y = 9549056.7706	-	-
Access road	-	-	a) ROW 9m; b) ROW 12m	-	-

Source: JST

km
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Source: JST

Figure 7.2: Proposed infrastructure in Zone A and B

7.6: Challenges and Measures

It is important to note that the designated RAs are currently occupied by approximately 159 households. **PWA using their finances**, intends to officially survey and demarcate the resettlement sites before allocating a land plot to each eligible PAPs in SEZ area. This act may induce temporary relocation of households residing in the planned resettlement sites. To mitigate any impacts associated with temporary relocation of the existing residents, the project plans to undertake the exercise in consultation with the existing residents, and give a relocation priority to existing residents, and ensure that they are relocated near to their original locations as much as possible so that their livelihood or lives are not bothered significantly.

Additionally, before construction activities, the resettlement sites need to undertake the Environmental Impact Assessment (EIA) procedure (e.g. Project Report or EIA depending on

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the scale of the impacts) as per the national legislation and obtain approval from NEMA. The EIA study needs to be started shortly to meet the timeline of the Project implementation.

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CHAPTER 8: Livelihood Restoration Programme (LRP)

International best practice including JICA Guidelines, requires the project proponent to restore PAPs livelihoods to levels prevailing before the project and/or even enhance it. Additionally, special assistance is required for vulnerable PAPs who cannot tap into project benefits. Therefore, the logic behind the LRP is to ensure that PAPs' lives do not fall below standards to which they were before the project; instead, they should either be maintained or even optimized.

Under this context, the project proponent, KPA, acknowledges the responsibility not just to pay compensation for losses but also to assist PAPs and vulnerable groups to restore their livelihoods and improve their standard of living. Before undertaking any proposed livelihood support and restoration measure, extensive engagement will be undertaken to ensure that all PAPs are well informed of the opportunities open to them and are given adequate opportunity to participate.

I. Proposed Livelihood Support and Restoration Measures

As mentioned above, PAHs in Dongo Kundu area will reside in the resettlement sites within the SEZ area and have opportunities to engage more on off-farm as compared to their originally on-farm livelihood activities. However, there are only few skilled and semi-skilled labourers within the affected community. Hence both supporting measures including assisting PAPs access the off-farm works and provision of technical support for the improvement of off-farm work skills is crucial to PAHs. Additionally, PAHs will require training in relation to financial management for them to sufficiently manage their compensation money. Detailed below are the proposed livelihood restoration measures for this project

8.1: Livelihood Restoration Measures

8.1.1: Money Management Training

Almost all the PAHs are not accustomed to receiving large amounts of cash and may misuse it. This is partly attributed to low literacy levels prevailing in the affected community.

To ensure that PAHs have adequate money management skills and to assist them to handle and use their cash compensation sensibly to restore their livelihoods and build a sustainable future, money management training will be conducted before receiving compensation payments. All PAHs including those outside the SEZ area will be eligible for this training. Each head of the PAH and their spouses will be invited to the training. The training will cover topics including how to successfully use the compensation amount to rebuild the lost structures, plans on savings using bank accounts, and expenditure, and good ways to invest if they have extra money. The project proponent with assistance from an experienced consultant team will design and conduct the training. The consultant team with local bank(s) will provide a lecture to PAHs. Going hand in hand with the training, the project proponent will assist the PAHs to open bank accounts as they prepare to receive their compensation.

8.1.2: Cash Assistance for Vulnerable PAPs

Under this project, the vulnerability has been determined following three parameters which are physically challenged, over aged (>80 years) and orphanage children. A total of 14 PAPs were

identified as vulnerable under the grant project. All the identified vulnerable PAPs are entitled to one-time cash assistance of KES 10,000 to assist them in rebuilding their lost livelihoods.

8.1.3: Vocational Training Support

As mentioned above, the main occupation of the PAPs especially those living inside SEZ area is subsistence farming and livestock keeping. PAPs have no or limited skills for off-farm works. To help them attain the required skills for off farm activities and increase their chances to access job opportunities that will be available at the SEZ, intensive vocation training programs will be implemented by the project. The programs will be open to PAHs who will be physically relocated from the SEZ project area and that need to change their current livelihood activities. These are mostly households located inside the SEZ. Each affected household will identify one family member to participate in the program. KPA will contract the National Industrial Training Authority (NITA) which is a professional institution in the implementation of vocation training programs in the country to design and undertake trainings for the affected people.

Two programs are proposed, one targeting affected people who are in principle above 35 years old (however, below 35 can also apply if the applicant meets requirements of the criteria), and who have limited time due to their responsibilities in the family. These PAPs will be involved in a Preliminary level program which is mainly for skill uplifting. The program will be tailored to fit to the time limit of the PAPs.

The second program, the Basic level program will target affected youth, particularly those with required education level including Form IV, Form VI, and college level education (see Table 8.1 below). According to initial consultations with local leaders, for the grant project, there are at maximum 20 youth members with the adequate education level for the Basic level program. The detail of the proposed programs including course duration and course type is presented in Table 8.2. Appendix 7.1 provides for detailed information of the available courses at NITA-Mombasa branch, <https://www.nita.go.ke/training-centres/nita-mombasa.html>.

Table 8.1: Criteria of the targeted trainees for vocation program

Proposed program	Targeted trainee	Education level required
Preliminary level	Affected household heads above 35 years with limited time (below 35 can also apply)	No specific education certificate required
Basic level	Affected youth (below 35 years)	Form IV, Form VI, or college level education certificate

Source: JST

Table 8.2: Proposed courses and duration for the vocational training program

Proposed program	Course duration (in centre training)	Industrial attachment duration (compulsory)	Proposed courses	Trainers
Preliminary level	3 months	3 months	Plumbing, Drivers, Welders/Fabricators, Carpentry, Mechanics, Tailors, Masonry, Security, Painter	NITA
Basic level	6 months		Computer Studies, Export Processing, Cargo Handling, Electrical Installation	NITA

Source: JST

Note: After the in-centre training, the trainee is required to go for a 3-month industrial attachment (on the job training) for the course to be completed and certificate awarded.



Source: NITA
Figure 8.1: NITA students in their workshops

8.2: Livelihood Support Measures

8.2.1: Employment Opportunities from the Project

After the implementation of the vocational training, PAPs especially those residing within SEZ will be assisted to access both technical and non-technical jobs available at the project site during construction. To ensure this is implemented smoothly by the contractors, a clause may need to be incorporated in the contract document requiring the contractor to make these provisions available. Additionally, during operation phase, PAPs will be given priority to work for the port and free port under KPA authority and for industrial parks under Special Economic Zones Authority (SEZA). This program will be arranged by KPA in coordination with SEZA and PAPs committee. Provision of employment opportunities will ensure sustainable income sources and improve PAPs' living standards.

II. Livelihood Support and Restoration Cost Estimate

The cost estimate for LRP is KES 4,855,200 as indicated in the table below. The cost to implement livelihood support and restoration measures will be under the responsibility of KPA.

Table 8.3: Cost estimate for livelihood restoration measures

Livelihood activities	Requirements	Cost (KES)	No. of Beneficiaries	Budget estimate (KES)
Preliminary level	Tuition fee/person/90days	20,200	Approx. 41	828,200
	Allowance/person/day	500		1,845,000
Basic level	Registration fee	700	Approx. 20	14,000
	Tuition fee/person/ 2 terms	37,000		740,000
	Caution money	1,000		20,000
	Meal and accommodation/person/2 terms	50,000		1,000,000
Money management	Tents & Chairs/day	5,000	-	20,000
	Print-out	20,000	-	20,000

Livelihood activities	Requirements	Cost (KES)	No. of Beneficiaries	Budget estimate (KES)
Training (4days)	Stationary/person	200	540	108,000
	Water/person	100		54,000
	Transport allowance for Village Leaders/person/day	500	6	12,000
	Transport allowance for PAPs Committee/person/day	500	15	30,000
	Transport allowance for Chief and Assistant Chief/person/day	1,000	2	8,000
	Transport allowance for County administrators/person/day	2,000	2	16,000
Cash Assistance for Vulnerable PAPs	One time cash assistance	10,000	14	140,000
Total				4,855,200

Source: JST

Note: Compensation for loss of income and transitional assistance are not included in this cost estimate since the nature of compensation and assistance is less livelihood restoration related.

CHAPTER 9: GRIEVANCE REDRESS MECHANISM

9.1: Overview

Regardless of its scale, involuntary resettlement inevitably gives rise to grievances among the affected population over issues ranging from eligibility criteria, rates of compensation, and others. Timely redress of such grievances is vital to the satisfactory implementation of resettlement and to completion of the project on schedule.

Grievance procedures may be invoked at any time, depending on the complaint and no person or community from whom land, or other productive assets are to be taken will be required to surrender those assets until any complaints he/she has about the method or value of the assets or proposed measures are satisfactorily resolved. In order to deal with the grievance that may rise during the implementation, this ARAP has identified procedures to allow affected people to lodge a complaint or a claim (including claims that derive from customary law and usage) without cost and with the assurance of a timely and satisfactory resolution of that complaint or claim in which case, dialogue is a vital element. The grievance redress mechanism is designed with the objective of solving disputes at the earliest possible time which will be in the interest of all parties concerned and therefore implicitly discourages referring such matters to the Environment and Land Court which would otherwise take a considerably longer time. The grievance procedure will be simple, administered as far as possible at the local levels to facilitate access, flexible and open to various proofs.

For purposes of the ARAP in the Project for Infrastructure Development in the M-SEZ, a two-phase GRM has been put in place as follows: -

- Compensation stage GRM
- Post-compensation stage GRM

Procedures put in place at every stage are highlighted in section 9.2 below.

9.2: The Grievance Redress Mechanism (GRM)

9.2.1: GRM during Compensation Stage

This ARAP recognizes four forums active in the Compensation Stage GRM process.

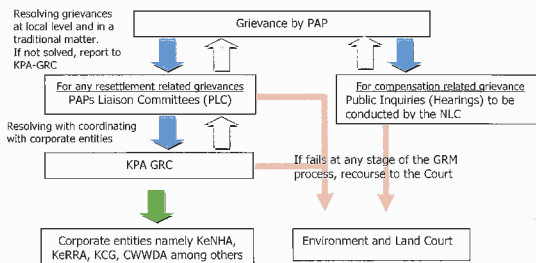
- The PAPs Liaison Committees (PLC) to be established by PAPs through initiative of KPA. PAPs will be mobilized to elect their own PAP Committee to draw membership from Affected persons in each village (max three), and Chair of any community projects affected. PLCs will henceforth provide linkage between the PAPs and the KPA-Grievance Redress Committee (GRC) on all aspects of resettlement and will also play a role in resolving basic conflicts.
- Grievance management through Public Inquiries (Hearings) to be conducted by the NLC. The NLC will gazette all land targeted for acquisition and then conduct public inquiries as to who the owners of the properties area. By advertising the Public Inquiries in the local press and holding the public hearings in a court-like sessions, the NLC officially accords all stakeholders to land who may have missed out at the Asset Inventory Stage, an opportunity to come out and stake their claims thereby minimizing future grievance at the compensation stage.
- Grievance Redress Committee within the KPA:

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In the capacity of Acquiring Agency, KPA will constitute an apex Grievance Redress Committee (the KPA-GRC) spearheaded by the Corporate Affairs Department and drawing membership from the Surveying and Environment Units respectively. Within the KPA-GRC, a Senior Surveyor will be designated to liaise with the NLC on all matters relating to proposed acquisitions. The KPA GRC Team will keep an inventory of PAPs receiving payment and resolve those declining towards obtaining clear vacancy of target ROW.

The KPA-GRC will be a secretariat of the GRM, provide liaison with corporate entities namely KeNHA, KeRRA, KCG, CWDA among others to solve the grievances, feedback the solution to the PAPs through PLC, keep records of any grievances related to involuntary resettlement, and monitor them until they are solved. Further, it will be the responsibility of KPA-GRC to provide liaison with corporate entities namely KeNHA, KeRRA, KCG, CWDA among others, who control the bulk of ROW targeted by the PID.

- Recourse to the Environment and Land Court: Any party who fails to get justice at any stage of the GRM process can take recourse to the Environment and Land Court.



Source: ARAP Consultant Team
Figure 9.1: Grievance Redress Flow

9.2.2: GRM during Post Compensation Stage

The PLC and KPA-GRC will be the major player for the GRM after compensation and resettlement. The Grievances will be solved by PLC, and/or KPA-GRC and if necessary other relevant government organizations and monitored by KPA-GRC.

9.2.3: Grievance Redress at the pre-compensation Stage

Although there was no official GRC for this project at the pre-compensation stage, some grievances were already discussed and solved as described below.

Grievance Redress during the Census Survey

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Three major grievances were encountered in the early stages of stakeholder engagement and were resolved as briefly highlighted in sections below.

Water-centered conflict at Chai Community: During a Public Hearing Meetings at Chai Village (Borehole One), the community bitterly complained about diversion of their groundwater to another country, yet their taps remained dry and without adequate compensation. Essentially, though their grievance is quite valid, Water Sector being a devolved function, the grievance was escalated to the Kwale County Government who was deemed best placed agency to deal with that matter. A meeting was convened with the Kwale County Government where the matter was tabled and discussed. It was directed that the ARAP Team be accompanied to Chai Community by Officers from Departments of Water, Administration and Kwale Water Company where the public would be educated on the overall strategies put in place to address water issues in both Chai and Matuga County as a whole. A meeting was subsequently convened at Chai Primary School as directed and the same matter was resolved amicably but not before the community read out a generous list of needs that they required resolved.

Lack of consensus on location of water Kiosks: Design of the Project for Infrastructure development has provision for 10 water kiosks targeted to be distributed along transmission pipeline for purposes of community water supply in Kwale. One community is aggrieved that proposed location of their Water Kiosk along the transmission line falls 900m from their preferred location and is therefore too far. A meeting called between KPA, Kwale County Government and the JST failed to resolve this matter which remains outstanding to date. The common ground is for the Kiosk to be cited at the Community preferred location while all Stakeholders will then work to secure funding for the piping to bridge the 900m distance between the pipeline and the Kiosk.

Grievance management during Asset Inventory Stage

The ARAP Process started with entry point meetings called to explain the Project to communities within the Project Area and explain that land acquisition would be inevitable. The community were allowed time to discuss and internalize the proposed project following which, they were asked to make their stand on whether they support the project or not. Upon achieving consensus on support for the Project the need to declare a cutoff date to forestall influx of speculators was discussed and declared. Villagers were then asked to set up a date when the ARAP Team would conduct inventory of assets, and during which time all asset owners were expected to be present and identify their assets. Further, the villagers were asked to appoint two respected villager elders knowledgeable in property matters and who would mobilize non-resident PAPs to appear for their asset inventory. By following such a transparent process, the Asset Inventory process served to forestall and reduce many would be grievances.

This ARAP Team can report that asset related grievances were never encountered in course of this Study.

9.3: Costs in the Grievance Redress Mechanism

For purposes of fair play, aggrieved PAPs should be assisted to pursue justice contingent to which therefore, the GRM process is free at all the stages. However, any PAPs resulting to the Environment and Land Court must identify a budget and other resources needed to support the process.

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CHAPTER 10: THE INSTITUTIONAL FRAMEWORK AND IMPLEMENTATION SCHEDULE

10.1: Overview of the Institutional Framework

10.1.1: Institutional analysis

The PID is one simple project targeting transmission of water from Tiwi to the MSEZ. Operationally, the PID is a complex affair as it touches on interests of a multitude of sectors each with specific mandates. Table 10.1 presents an analysis of potentially affected interests.

Table 10.1: Analysis of institutions relevant to the PID

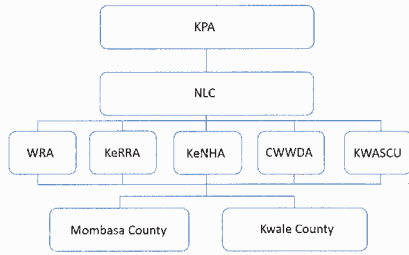
Section	Target resource	Responsible sector	Mandate	Relevance to the RAP
Intake area to Tiwi pumping station	Groundwater	Water Resource Authority-WRA	Management of National Water Resource base	Relevant: Compensation for environmental resources
		Residents	Concerns about resource/benefit sharing and CSR	
	Land for intakes and pipelines Land for transmission lines	Kwale County Government	Has administrative jurisdiction over the people, land resources, road reserves and community water supply.	Relevant: Core issues is access to land under diverse tenure
		NLC	National land acquiring agency	
Land for Booster Pumping Station	Land for Boosters	Local landowners	Loss of land and assets	Peripheral: Issue is benefit sharing among agencies
		KeRRA	Management of classified roads	
		CWDA	Operates the Tiwi Pumping Station	
Tiwi to Magandia	Road reserve to conduct pipelines	KeNHA	Control of national trunk roads and reserves	Relevant
		Local residents	Physical assets within road reserve	Relevant
Magandia to Mombasa Reservoir	Land for pipelines and reservoir	CWDA	Owns the reserve	Relevant: Issue here is access to both public and private land
		Kwale County Government	Controls R24 road reserve	
		KeNHA	Reserve of the MSBR (MPARD/II)	
		KPA	Controls DK land	
		Local residents	Own land partly traversed by Project	
Mombasa County Government	Has administrative jurisdiction			

Source: ARAP Consultant Team

10.1.2: Implementation Structure for the ARAP

Among relevant institutions, the KPA is responsible for implementation of the ARAP for the PID, and the land acquisition and resettlement will be conducted by KPA together with the NLC which is fully responsible for the official land acquisition procedure. Additionally, corporate entities and County governments are also coordinated by KPA for the ARAP implementation as shown in Figure 10.1.

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Note: KPA: Kenya Port Authority, NLC: National Land Commission, WRA: Water Resources Authority, KeRRA: Kenya Rural Roads Authority, KeNHA: Kenya National Highway Authority, CWWDA: Coast Water Works Development Agency, KWASCO: Kenya Water and Sewerage Company Limited. Source: JICA Study Team. Figure 10.1 Implementation Structure for the ARAP

10.1.3: Need for KPA to play a coordinating role

From Table 10.1, a total of 11 stakeholders to the development of the PID ROW can be recognized. It is apparent that development of PID will require close liaison including negotiation with diverse mandate holders among them those controlling land on which to lay infrastructure for water transmission. KPA in capacity of Project Proponent will require to institute action to access required water resources, required facilities at Tiwi currently controlled by CWWDA, negotiate modalities for accessing water supply from KWASSCO, negotiate entry and use of both private and public land and address concerns on benefit sharing as emerged from diverse quarters. This is the institutional role for the KPA in PID. In sections below, the institutional and implementation mechanism for land acquisition is explored.

10.2: Implementation schedule for land acquisition

10.2.1: Due process at Detailed Design Stage

At Detailed Design Stage, KPA will fine-tune the alignment of water supply in Kwale to minimize the impacts on PAPs. This will entail review of the Assets Registers, and if necessary, the ARAP in case any new PAP categories and additional PAPs are captured during the detailed design stage. As well, the ARAP will be screened to align with any changes in the Policy/Legal Environment after finalizing this ARAP.

10.2.2: Application for land acquisition by KPA

Guidelines for Compulsory Land Acquisition issued by the NLC in line with requirements of Part VII of the Land Act 2012 will apply. In processing applications for Compulsory Land Acquisition in Kenya, the NLC requires as follows: -

- Section 107(1) of the Land Act 2012 requires the acquiring body to obtain prior approval from their respective Cabinet Secretary before the Commission commences the acquisition process
- Cadastral drawings showing how the infrastructure excises each land parcel, the parcel list table detailing land parcel numbers, total area of land parcels and acreage affected by the infrastructure for each parcel. These drawings shall be submitted to the Commission for scrutiny and records
- Provide a listing for parcel numbers indicating the plot reference number, registered owner and affected acreage column in acres (for easy appreciation by project affected persons). This should be submitted in both soft and hard copy
- Official searches of affected land parcels. The Commission shall assist where necessary.
- The Environmental Impact Assessment Report (EIA) and appropriate approvals/ certification for the project.
- The Abbreviated Resettlement Action Plan (ARAP) report.
- Acknowledgement on availability of funds to allow prompt compensation as provided in the Constitution. The Commission will request the entities to remit compensation money into the Land Compensation Fund (Section 153 of the Land Act 2012) to be administered by the Commission. This is in the purview that in previous acquisitions, the compensation payments were delayed as opposed to the promptness required by the Law
- All applicants will have to take the Land Acquisition and Committee sub-committee members on a site tour for general appreciation of the project in respective locations that will be affected. This will enable informed decision making.
- A final survey for vesting of the acquired land to the National or County Government will have to be done by the acquiring authority. The Commission can assist in this exercise at costs borne by the acquiring body.

This is the process that will trigger acquisition of land for the PID. However, to save on time, it is recommended for the Land Acquisition process to start and possibly end long before Construction Stage. Due process will follow as outlined in sections below.

10.3: Due process by the NLC

There is a possibility that, at the Detailed Design Stage, the PID outside SEZ Area will be realigned to restrict in existing road reserves thus eliminating requirement for land acquisition. In such case, the ARAP process will end at the Detailed Design Stage without resulting to the NLC. However, if the current alignment is retained, the updated plan will be submitted to the NLC by KPA. Upon receipt of an application from an Acquiring Agency, the NLC in capacity of National Acquiring Authority will put in place a mechanism as follows: -

10.3.1: Gazetting of target land parcels

Upon receipt of the application for acquisition from the KPA, the NLC will arrange field visits to familiarize and confirm layout of the target land following which, the Assets register will be cross-checked on the ground to ascertain the final list of PAPs and the status of their assets. The NLC will then issue a Notice of Intention to Acquire and publicize the dates and venues for public inquiries. On appointed dates, the NLC will open public inquiries in which anybody with claims on target properties will present evidence and be cross examined under oath. At the close of the inquiry, the NLC will finalize the List of PAPs and proceed to revalidate the valuation.

10.3.2: Making of awards

Upon revalidation of it is also expected that prior to payment, all those entitled to payment under a PAPs account will have been brought together to agree on monies due to them and on

the mode of disbursement. This caution is issued as many households were observed to request that assets be recorded under one brother, and this is likely to bring family conflicts once compensation is released. The PAPs' Committee will come in handy in fostering consensus among composite PAPs.

10.3.3: Final award and signing of contracts

Upon finalization of the assets register and revaluation by the NLC, the final compensation sum will be computed and adjusted for inflation and other processes. Based on this sum, offers /contracts will be issued to PAPs who will sign their approval witnessed by their respective chairmen of PAPs' Committee and the area chief. Within this contract, each PAP will undertake to remove affected assets within one month of receipt of compensation. The PAPs will then be assisted to open bank accounts through which, payments will be made directly to PAPs.

10.3.4: Preparation of PAPs by the PMU

Kenya is replete with people who squandered entire proceeds from compensation/ terminal benefits or even credit and ended up destitute and miserable. This normally is associated with ignorance and shock reaction to exposure to apparently huge amounts of money instantly. To forestall such incidence in the case of road upgrading project, a compulsory money management training will be conducted to affected households by the consultant team in coordination with the PMU to empower PAPs to cope with the expected proceeds. Indeed, this ARAP recommends that as part of the training, each PAP will be assisted to develop a budget for the expected payment under the money management training. The reality of how little the anticipated payments is, is likely to cut down on adventures.

10.3.5: Removal of Assets

Upon compensation, all PAPs will be required to re-build their lost structures in the allocated residential plots and remove their assets from the project area within the specified notice period.

Table 10.2: ARAP Implementation Schedule

Task	2018	2019	2020	2021
1.0: ARAP Preparation				
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CHAPTER 11: COSTS AND BUDGET

11.1: Overview on the budgetary process

All resettlement funds will be provided by the Exchequer through KPA based on the financing plan agreed by the Government of Kenya and JICA. Land acquisition, compensation, relocation and rehabilitation of income and livelihood will be considered as an integral component of project costs.

11.2: The ARAP Budget

Appendix 9.1 provides the entire Preliminary Cost Estimate for all assets. This will be subject to revalidation by the NLC. Especially, the land compensation within SEZ area needs to be reviewed based on the NLC's validation results.

11.2.1: Direct Costs in the Budget

Table 11.1 provides a breakdown of Direct Costs in the budget for ARAP. A total of Ksh 730,724,396 will be required to offset impacts on all developments made on land for PAPs in both Kwale and Mombasa counties, and preparation of resettlement sites in SEZ area. Additionally, Ksh 10,857,830 will be required to offset impacts on PAPs of acquisition of private lands and resettlement in Kwale County.

Table 11.1: Provisional Costs in the ARAP

Compensated Items	Total Count (PID)	PID-Grant Project (540 PAPs both physically and non-physically displaced) in Ksh	Cost for acquisition of private land in Kwale County (118 parcels) in Ksh
Land acquisition in Kwale County	2.09ha	-	10,340,790
Structures (@full replacement cost)	243	43,156,853.50	-
a. Permanent	34	27,081,395.09	-
b. Semi-permanent	37	3,373,045.00	-
c. Temporary	69	2,734,866.00	-
d. Others	103	9,967,747.42	-
Trees (@ market price, based on KFS rates)	5,567	28,085,000	-
Crops and pastures (@ market price, based on County Agriculture Department).		-	-
Loss of Business/Income from Fruit Trees	130	10,398,120	-
Relocation Assistance/Disturbance Allowance (15% of structure, trees and crops cost as in the law).		10,686,278	-
One time Cash Assistance of 10,000 for Vulnerable PAPs	14		

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		152,500	
Compensation for BMUs			-
Money Management Training (For all land and asset owners 540 for PID), 60 PAPs/meeting, 3 meetings/day for 3 days, 2hrs/meeting *1	540	246,500	-
Vocational Training for 1 Person/Vulnerable Household (61 for PID-physically displaced households). 1a. Preliminary Level (short term training for 3 months) by National Industrial Training Authority (NITA) for 41 people 2. Allowance of 500/person/day. No accommodation required. *3. 2. Basic Level (long term training for 6 months for those who basic education background) by NITA for 20 people *4	61	4,447,200	-
Transitional Assistance to Fill the Gap in Land Size	142.99 acres	9,651,825	-
Taxes (4% of land value)	142.99 acres	2,573,820	-
Site preparation for relocation assistance * For entire resettlement sites.		537,316,600	-
e. Land Grading		232,280,000	-
f. Road Gravel Pavement		223,277,400	-
g. Public Facilities		81,759,200	-
Topographic boundary survey, incl. concrete peg * For entire resettlement sites.	450 acre	18,213,300	-
Consultant for the site preparation * For entire resettlement sites.	lump sum	21,000,000	-
EIA for the resettlement site * For entire resettlement sites.	lump sum	10,000,000	-
Sub-total		695,927,897	10,340,790
Contingency (5%)		34,796,400	517,040
Total		730,724,396	10,857,830
Grand Total			741,582,226

Source: JST

11.2.2: Contingency Costs

An item to 5% of the total costs was added in the cost estimate to cater for contingencies in costs and unknown impacts.

11.2.3: Indirect costs

Additionally, a sum of equivalent to 10% of Direct Costs should be reserved to be drawn by KPA in implementing the ARAP. Expenses envisaged include field costs, capacity building for ARAP structures, setting up of a Project Implementation Team, among others.

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The Exchequer should be approached to provision the funds alongside the Direct Costs Budget.



CHAPTER 12: PROCEDURE FOR MONITORING AND EVALUATION

This Chapter unveils the Monitoring and Evaluation Plan for the ARAP for PID implementation process.

12.1: The basis for monitoring

12.1.1: JICA requirements in Project Monitoring

Article 8 of Appendix 1 to the JICA's Guidelines make requirements for monitoring as follows: -

- After projects begin, project proponents etc. monitor whether any unforeseeable situations occur and whether the performance and effectiveness of mitigation measures are consistent with the assessment's prediction. They then take appropriate measures based on the results of such monitoring.
- In cases where sufficient monitoring is deemed essential for appropriate environmental and social considerations, such as projects for which mitigation measures should be implemented while monitoring their effectiveness, project proponents etc. must ensure that project plans include feasible monitoring plans.
- Project proponents etc. should make efforts to make the results of the monitoring process available to local project stakeholders.
- When third parties point out, in concrete terms, that environmental and social considerations are not being fully undertaken, forums for discussion and examination of countermeasures are established based on sufficient information disclosure, including stakeholders' participation in relevant projects. Project proponents etc. should make efforts to reach an agreement on procedures to be adopted with a view to resolving problems.

12.1.2: Monitoring in the PID implementation

Right from the onset, this ARAP acknowledges that given the scope, magnitude, and strategic importance, MSEZ Project will attract huge attention from many stakeholders keen to monitor progress. Project development should therefore seek to develop own database for monitoring results that will be readily availed to interested parties. Monitoring allows project participants (1) to keep track of project activities, (2) to determine whether project objectives are being achieved, and (3) to make whatever changes are necessary to improve project performance. For purposes of this ARAP, monitoring will involve collection and analysis of data on land acquisition, resettlement and livelihood restoration activities whereby accruing information will be applied to guide and redirect project implementation and management towards target project objectives.

As per the international practices, the monitoring will be conducted at a 2-tier system, namely internal monitoring by the project proponent (KPA) and the external monitoring by an independent agency for effectiveness and transparency. Moreover, there are 2 types of the monitoring stages, such as monitoring before physical resettlement (mostly the pre-construction stage) and monitoring after resettlement (mostly during construction), so called post-resettlement monitoring.

Additionally, evaluation is also commonly conducted in addition to monitoring. Evaluation is more comprehensive analysis to assess effectiveness, analyze unexpected challenges

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and make additional recommendations at project milestones, e.g. when compensation and physical resettlement are completed or 2-3 years after physical resettlement. In principle, evaluation will be done by an external agency, but also could be done by internally as a part of the project evaluation. The above-mentioned monitoring and evaluation activities are summarized in following table.

Table 12.1: Outline of Internal and External Monitoring and Evaluation

Stage	Monitoring Type	Monitoring Objectives	Monitoring Items	Frequency	Implementation
During Compensation Payment & Physical Resettlement	Internal	Confirmation of progress and issues of compensation and physical resettlement	- Progress of money management training and compensation payment - Progress of physical resettlement - Number of consultations with PAPs and agenda - Grievance raised by PAPs and other concerned parties	Every month up to completion of physical resettlement and compensation payment; a monitoring report will be prepared by quarterly	KPA
	External	Examination of compensation and physical resettlement procedure and effectiveness of ARAP implementation	- Review of the internal monitoring results - Progress of compensation payment - Progress of physical resettlement - Effectiveness of consultation and GRM - Necessity of further measures	One time when compensation payment and physical resettlement are completed.	External monitoring expert (individual or firm/NGO) hired by KPA
After Compensation Payment & Physical Resettlement (Post Resettlement)	Internal	Confirmation of physical resettlement progress and progress and issues of livelihood restoration	- Progress of livelihood restoration programme - Number of consultations with PAPs and agenda - Grievance raised by PAPs and other concerned parties - Overall effectiveness of ARAP implementation (impact & effect)	Every month up to completion of livelihood restoration programme (approximately 2-3 years after physical resettlement); a monitoring report will be prepared by quarterly	KPA
	External	Examination of resettlement procedure and effectiveness of livelihood restoration	- Review of the internal monitoring results - Progress of livelihood restoration programme - Effectiveness of consultation and GRM - Overall effectiveness of ARAP implementation (impact & effect) - Necessity of further measures	One time 2-3 years after physical resettlement	External monitoring expert (individual or firm/NGO) hired by KPA
Evaluation	External (Could be done by Internal)	Examination of resettlement procedure and effectiveness of livelihood restoration	- Review of the internal and external monitoring results - Overall effectiveness of ARAP implementation (impact & effect) - Any identified issues and emerging challenges - Lessons learned and recommendations	One time 2-3 years after physical resettlement	External monitoring expert (individual or firm/NGO) hired by KPA

Source: ARAP Consultant Team

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12.2: Internal Monitoring

The M&E Plan for PID ARAP allows two levels of monitoring thus: -

- Internal Monitoring including Evaluation
- External Monitoring including Evaluation

In sections below, the process for both levels of monitoring is highlighted.

Figure 12.1 outlines the schematic procedure for internal monitoring proposed for the MSEZ.

Focus of Internal Monitoring: For purposes of this ARAP, internal monitoring will focus on tracking implementation of the Entitlement Matrix. Delivery of outputs outlined in the Entitlement Matrix will be monitored routinely and communicated through periodic reports produced by the PMU (e.g. monthly progress for PMU's internal meeting and quarterly report to be reported to respective government stakeholders including JICA) and backed up by signed consent certificates by PAPs. These reports will form the basis for routine external monitoring by both GOK agencies and other parties.

Responsibility for Internal Monitoring: Routine monitoring and reporting will be the responsibility of KPA through its designated Units. Within the internal monitoring framework, the KPA will establish a secretariat at DK to be staffed by among others an M&E Officer who will routinely file Project Status Reports to the Head of Secretariat who, upon review will submit the same to KPA Head Office. The latter will review and synthesize monitoring reports to: -

- Provide timely information about all land acquisition and resettlement arising as a result of development of the PID.
- Identify any grievances that have not been resolved at local level and require resolution through the involvement of the PMU.
- Document the timely completion of project land acquisition and resettlement obligations for all permanent and temporary losses;
- Evaluate whether all PAPs have been compensated in accordance with the requirements of this ARAP and that PAPs have higher living standards in comparison to their living standards before physical or economic displacement.

Upon internal verification of all reports, KPA will submit the same to both GOK and other interested parties (including JICA) for review and advice through a feedback mechanism. Appendix 10 provides a draft TOR for the external monitoring which will be hired by the KPA.

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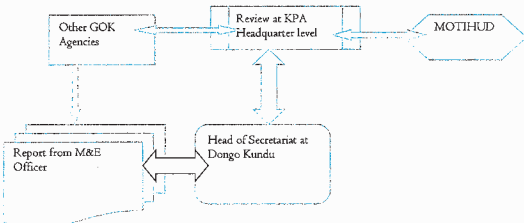


Figure 12.1: Framework for Internal Monitoring

Criteria for Internal Monitoring: Internal monitoring will employ criteria as outlined in Table 12.1 and each monitoring stage; the detailed monitoring form needs to be developed based on the criteria. At the initial stage, the institutional readiness (KPA's manpower), progress and process of land acquisition and physical resettlement needs to be monitored. Once the compensation and assistance are provided to PAPs, the external monitoring needs to be done to make sure all entitlements are provided to PAPs as per the ARAP. In the post-compensation/resettlement, monitoring on livelihood restoration and a component for impact/effect monitoring needs to be conducted, which will be used to measure the extent to which the immediate objectives have been achieved and give an idea of the results emanating from implementing the ARAP e.g., percentage of new investments made by PAPs on account of being successfully resettled. Impact/effect monitoring is also useful in documenting lessons learned from project implementation and will be best achieved through routine and End of Project Evaluation conducted by the KPA.

Frequency of internal monitoring: Internal monitoring will be a routine process. However, Table 12.2 will be used to file quarterly reports. Specifically, this is the system that will generate data to gauge success towards implementation of this ARAP in terms of impact of the resettlement on the PAPs.

Table 12.2: Criteria and Indicators for Monitoring

Component	Achievements within reporting period					Cumulative achievement			
	Period	Units	Target	Achieved	%	Target	Achieved	%	Remarks
Part A: Preparation for Land Acquisition (LA) and Compensation									
Final ARAP Report submitted to NLC & NEMA for their reference									
If any change in the wayleave in Kwale County, updated RoW data will be submitted to NLC for LA and compensation									
All NLC conditions in LA fulfilled									
Target land gazetted by NLC									
Disclosure & Public Inquiry held by NLC									

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Component	Achievements within reporting period					Cumulative achievement			
	Period	Units	Target	Achieved	%	Target	Achieved	%	Remarks
Grievances resolved by NLC									
Grievances resulting to the Env. & Land Court									
Review of Cost Estimate/ Costed Assets Register by NLC Valuers									
Pre-compensation sensitization training (incl. money management training & opening bank account)									
GRM put in place									
Part B: Resettlement Site Preparation & Development (only for PAPs in the SEZ area)									
Consultation with PAPs on the Resettlement Site Planning									
Approval of the Resettlement Site Planning by KPA									
Procurement of the Contractor									
Procurement of the EIA consultant									
Design of the Resettlement Site Development									
Progress of the EIA preparation and NEMA's approval									
Construction of the Resettlement Site Development									
Allocation of the land plots to PAPs									
Physical relocation from the project site to the resettlement site									
Continuous consultation during relocation period and post relocation period including social integration									
Part C: Payment of Compensation									
Compensation by NLC									
PAPs accepting awards									
PAPs rejecting awards									
PAPs already received payment									
Compensation and Assistance by KPA									
PAPs accepting awards									
PAPs rejecting awards									
PAPs already received payment									
Notice to Vacate issued									
Grievances heard and resolved by GRC									
Outstanding grievances									
Part D: Rehabilitation of PAPs									
Census of PAHs resettled by location									
Number of PAHs settled within SEZ									
Number of over-age PAPs fully settled and other socially vulnerable PAHs									
Enrollment at Primary School									
Part E: On livelihood restoration									
Tally of PAPs entitled to livelihood restoration									
Number of PAPs settled									

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Component	Achievements within reporting period					Cumulative achievement				
	Period	Unit	Target	Achieved	%	Target	Achieved	%	Remarks	
livelihood restored and enhanced										
Number of PAPs employed in the MSEZ										
New livelihoods started by PAP category										
Number of PAPs enrolled in different cases under the resettlement program										
Number of PAPs provided in livelihood services as follows:										
Part F: On socio-cultural rehabilitation										
Attendance to mosques										
Pattern of Sunday church attendance										
Grassroots groups active in SEZ										
Any other criteria										

Source: JST

12.3: External Monitoring

External monitoring of the ARAP will be undertaken alongside that of other project components. It is expected that KPA will mount routine monitoring in response to PMU reports while other agencies will routinely monitor progress including implementation of social mitigation. Towards this, it is expected that KPA in the capacity of Implementing Agency will identify and procure the services of a competent external monitoring agency, preferably a research or consulting agency, university department or development NGO. The tasks of the external agency are to: -

- Verify results of internal monitoring;
- Assess whether resettlement objectives have been met; specifically, whether livelihoods and living standards have been restored or enhanced;
- Assess resettlement efficiency, effectiveness, impact, and sustainability, drawing lessons as a guide to future resettlement policy making and planning; and
- Ascertain whether the resettlement entitlements were appropriate to meeting the objectives, and whether the objectives were suited to PAP conditions.
- Undertake any other assessment relevant to the resettlement process.

Draft TOR to guide recruitment and conduct of the External Monitoring Expert are provided in Appendix 10. Essentially, the Draft TOR outlines the core pillars of the evaluation studies namely; -

- Aims and objectives of external M&E in relation to objectives of ARAP and Financier Policy
- Information needed to meet these objectives, with reference to the ARAP
- Method and approach to provide the information
- Detailed methodology, use of the existing baseline census and survey, periodic updates, sampling frame, arrangements for data collection, collation and analysis, quality control, and development of a recording and reporting system
- Participation of key stakeholders, especially PAPs, in monitoring and evaluation
- Resources required, including expertise in sociology, social anthropology, and resettlement
- Time frame for M&E
- Reporting requirements

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CHAPTER 13: CONCLUSION AND RECOMMENDATIONS

13.1: The need to provide Basic Infrastructure to the MSEZ

Development of the MSEZ is guided by the 2015 Masterplan for MSEZ which seeks to transform the 12 square kilometer Dongo Kundu Property owned by the KPA into a commercial hub riding on marine trade and other opportunities associated with presence of the Kilindini Harbour whose potential largely remains unexploited. Towards realization of a SEZ, the Masterplan stipulated critical anchorage to be put in place as follows: -

- Resolution of the land ownership and informal occupant problem, which has been resolved through the provision of residential plots within SEZ for each affected PAPs with stake to land in the SEZ;
- Provision of transport infrastructure - partly to be resolved through ongoing construction of Mombasa Southern Bypass and proposed Mombasa Gate Bridge; and
- Provision of basic trunk infrastructure namely grid power connection (underway) and provision of water supply and stormwater drainage.

The PID seeks to bridge infrastructure gaps mainly through provision of mains water supply and drainage infrastructure and thus further level the field in readiness for SEZ Investors.

13.2: Findings from the ARAP Process

Creation of a 38.3-kilometer long, 3-metre-wide reserve, and water reservoir for water supply; land development; Drainage Improvement of 0.66 kilometer; construction of four roads; land formation in FTZ B and a camp yard for contractor will require a total of 64.71 ha of land of which, 6.86 are available in the existing reserves leaving out 57.85 ha to be sourced through land acquisition in Kwale county and land requires displacement in SEZ area.

PID components will affect a total of 243 structures, and 61 residential structure occupied by 142 persons will be physically displaced. As a total, 271 PAHs and 540 PAPs are going to be affected by the PID. However, the PAPs will be compensated and assisted by the entitlement policy in Chapter 6 of this report, which was prepared based on the Kenyan legislation as well as the international standards.

13.3: Recommendations for the Future Implementation

Firstly, since the MSEZ related projects are very complex, were studied in a phased manner, and are now implemented or being implemented, continuous consultation and communication are very important to update the PAPs regarding the project progress including compensation and resettlement of this project to avoid unnecessary confusion or concerns.

Secondly, to implement the ARAP of this project, early establishment of the project management unit in charge of land acquisition and resettlement (e.g. Resettlement Implementation Unit, Environmental and Social Management Unit) at KPA is necessary since the activities for land acquisition and resettlement need to be started soon and completed before the construction, which means before establishing the Project Management Unit for this project.

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Thirdly, preparation of the resettlement sites takes time and needs to be started immediately in parallel with compensation and assistance provision to PAPs and planning of the resettlement site. More specifically, the Project Report (equivalent to the scoping report of the EIA) or ESIA for the resettlement sites needs to be prepared, the detailed planning of the resettlement sites needs to be prepared and implemented.

Fourthly, considering the socio-economic status of the PAPs, additional in-kind assistance to PAPs is highly suggested for further benefit sharing as a part of KPA's Corporate Social Responsibility (CSR) activities. Such assistance can be shared with PAPs and local communities.

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ANNEXURES:

Volume Two: Appendices

- Appendix 1.1: Terms of Reference
- Appendix 1.2: Data Capture Tool
- Appendix 4.1: Record of Stakeholder Engagement
 - 4.1.1: Stage one: Inception stage
 - 4.1.1.1 Public Hearing meetings
 - 4.1.2: Stage Two: Field Investigation Stage
 - 4.1.2.1: Key informant interviews
 - 4.1.3: Stage Three: Disclosure Stage
 - 4.1.3.1: Public Hearing meetings
 - 4.1.4: Additional Disclosure Meetings for the Compensation Policy
 - 4.1.4.1: Draft Schedule for Consultation Meetings and Information Disclosure for Mombasa SEZ
 - 4.1.4.2: Compensation Policy Brochure
 - 4.1.4.3: Disclosure Meetings for the Compensation Policy
 - 4.1.4: Records of inter-related consultation
- Appendix 5.1: Assets Register
- Appendix 5.2: Pictorial Asset Register
- Appendix 7.1: Courses Structure at NITA
- Appendix 10: TORs for External Monitoring
- Appendix 11: Social Monitoring form

Volume Three: Book of drawings

- Volume Four: Preliminary Cost Estimates
 - Appendix 9.2: Preliminary Cost Estimate

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**Annex 11 PROVISIONAL ENV. MONITORING FORM
(Standard Template)**

If environmental reviews indicate the need of monitoring by JICA, JICA undertakes monitoring for necessary items that are decided by environmental reviews. JICA undertakes monitoring based on regular reports including measured data submitted by the project proponent. When necessary, the project proponent should refer to the following monitoring form for submitting reports.

When monitoring plans including monitoring items, frequencies and methods are decided, project phase or project life cycle (such as construction phase and operation phase) should be considered.

The actual environmental monitoring form will be prepared by the Contractor with assistance from the supervision consultant based on this standard form at the initial stage of the construction stage before the commencement of physical construction.

[Construction Phase]

1. Responses/Actions to Comments and Guidance from Government Authorities and the Public

Monitoring Item	Monitoring Results during Report Period
ex.) Number and contents of formal comments made by the public	
ex.) Responses/actions to comments and guidance from government authorities	

2. Pollution

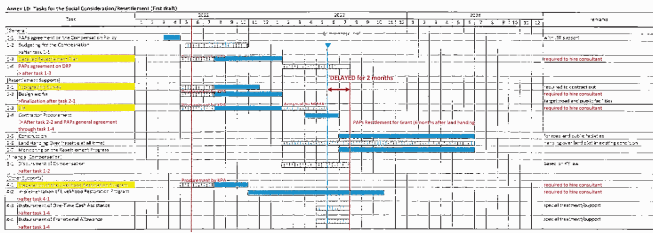
- Air Quality (Ambient Air Quality)

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
PM _{2.5}						
PM ₁₀						
CO						
NO ₂						
SO ₂						
Pb						
O ₃						

- Water Quality (Effluent/Wastewater/Ambient Water Quality)

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
Turbidity						
Water temperature						
pH						
Color						

1



km

m

m

km

DO						
BOD						
COD						
Oil and grease						
SS						
Total Coliforms						

- Soil contamination

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
Cd						
Cr						
Cu						
Pb						
Hg						
Ni						
Ag						
Zn						
As						

- Waste

Monitoring Item	Monitoring Results during Report Period
ex.) Records of waste treatment/disposal	

- Noise / Vibration

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
Noise level						
Vibration level						

- Offensive odor

Monitoring Item	Monitoring Results during Report Period

- Sediment/Soil runoff

Monitoring Item	Monitoring Results during Report Period

3. Natural Environment

- Ecosystem

Monitoring Item	Monitoring Results during Report Period
ex.) Progress of reforestation (number of logged)	

2

tree, number of planted trees etc.)	
ex.) Conditions of vegetation cover, bare ground, soil erosion and landscape etc.	

- Topography and soil erosion

Monitoring Item	Monitoring Results during Report Period
ex.) Status of soil erosion	

4. Social Environment

- Cultural heritage

Monitoring Item	Monitoring Results during Report Period
ex.) Encountering of any archaeological artefacts	

- Infectious diseases such as HIV/AIDS

Monitoring Item	Monitoring Results during Report Period
ex.) Record of awareness-raising programs	

[After the Construction]

1. Responses/Actions to Comments and Guidance from Government Authorities and the Public

Monitoring Item	Monitoring Results during Report Period
ex.) Number and contents of formal comments made by the public	
ex.) Responses/actions to comments and guidance from government authorities	

2. Pollution

- Air Quality (Ambient Air Quality)

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
PM _{2.5}						
PM ₁₀						
CO						
NO ₂						
SO ₂						
Pb						
O ₃						

- Water Quality (Effluent/Wastewater/Ambient Water Quality)

3

m

km

m

km

Item	Unit	Measured Value (Mean)	Measured Value (Max.)	Country's Standards	Referred International Standards	Remarks (Measurement Point, Frequency, Method, etc.)
Turbidity						
Water temperature						
pH						
Color						
DO						
BOD						
COD						
Oil and grease						
SS						
Total Coliforms						

- Soil contamination

Monitoring Item	Monitoring Results during Report Period
ex.) Any spills of oil and other potential contaminants	

- Waste

Monitoring Item	Monitoring Results during Report Period
ex.) Records of waste treatment/disposal	

- Noise / Vibration

Monitoring Item	Monitoring Results during Report Period
ex.) Records of received grievance and actions or measures taken against complaints on noise/vibrations	

- Water resource

Monitoring Item	Monitoring Results during Report Period
ex.) Groundwater level	
ex.) Abstracted water volume	
ex.) Groundwater quality at boreholes/wells	

- Sediment/soil erosion

Monitoring Item	Monitoring Results during Report Period
ex.) Status of soil erosion	

3. Natural Environment

- Ecosystem

Monitoring Item	Monitoring Results during Report Period
ex.) Soundness of local animals and plants	

4. Social Environment
-(If any)

Monitoring Item	Monitoring Results during Report Period
(If any)	

4

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Annex 12 Provisional Social Monitoring Form Template

(Table 12.2: Criteria and Indicators for Monitoring of ARAP as of May 2022)

The following form is a template for the social monitoring form for (1) compensation & assistance for all PAPs and (2) resettlement site for PAPs in the SEZ area. The actual & more detailed monitoring form will be developed based on this template during the RAP implementation stage.

Component	Achievements within reporting period					Cumulative achievement				
	Period	Unit	Target	Achieved	%	Target	Achieved	%	Remarks	
Part A: Preparation for Land Acquisition (LA) and Compensation										
Final ARAP Report submitted to NLC & NEMA for their reference										
If any change in the wayleave in Kwale County, updated RoW data will be submitted to NLC for LA and compensation										
All NLC conditions in LA fulfilled										
Target land gazetted by NLC										
Disclosure & Public Inquiry held by NLC										
Grievances resolved by NLC										
Grievances resulting to the Env. & Land Court										
Review of Cost Estimate/ Costed Assets Register by NLC Valuers										
Pre-compensation sensitization training (incl. money management training & opening bank account)										
GRM put in place										
Part B: Resettlement Site Preparation & Development (only for PAPs in the SEZ area)										
Consultation with PAPs on the Resettlement Site Planning										
Approval of the Resettlement Site Planning by KPA										
Procurement of the Contractor										
Procurement of the EIA consultant										
Design of the Resettlement Site Development										
Progress of the EIA preparation and NEMA's approval										
Construction of the Resettlement Site Development										
Allocation of the land plots to PAPs										
Physical relocation from the project site to the resettlement site										
Continuous consultation during relocation period and post relocation period including social integration										
Part C: Payment of Compensation										
Compensation by NLC										

1 / 2

Component	Achievements within reporting period					Cumulative achievement				
	Period	Unit	Target	Achieved	%	Target	Achieved	%	Remarks	
PAPs accepting awards										
PAPs rejecting awards										
PAPs already received payment										
Compensation and Assistance by KPA										
PAPs accepting awards										
PAPs rejecting awards										
PAPs already received payment										
Notice to Vacate issued										
Grievances heard and resolved by GRC										
Outstanding grievances										
Part D: Rehabilitation of PAPs										
Census of PAHs resettled by location										
Number of PAHs settled within SEZ										
Number of over-age PAPs fully settled and other socially vulnerable PAHs										
Enrollment at Primary School										
Part E: On livelihood restoration										
Tally of PAPs entitled to livelihood restoration										
Number of PAPs employed in the MSEZ										
New livelihoods started by PAP category										
Number of Female headed households assisted and monitored										
Number of PAPs enrolled in different courses of the vocational training program										
Number of PAPs graduated by receiving certificate										
Part F: On socio-cultural rehabilitation										
Attendance to mosques										
Pattern of Sunday church attendance										
Grassroots groups active in SEZ										
Any other criteria										

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Ref.No.TC-22-067 (NT)

April 21, 2022

Managing Director
 Kenya Ports Authority
 P.O.Box 95009 – 80104, Mombasa
 Attention: Head of Projects Development & Management

Dear Sir,

Re: Request for KPA Confirmation of the Draft Grant Agreement for THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE AT DONGO KUNDU AREA

With regard to the titled project (hereinafter referred to as "the Project"), we would like to notice Kenya Ports Authority (hereinafter referred to as "KPA") as following.

1. JICA would like to request KPA to give written no objection to the attached Draft Grant Agreement (Annex 1), if possible, by Monday April 25, 2022.
2. The Draft Grant Agreement (Annex 1) is based on our detailed discussion as per attached Minutes of Discussion (Attachment 1) and the purpose of this letter is to confirm the contents is acceptable by KPA for signing after the conditions per Article 3 of this letter is satisfied.
3. Regardless of Article 1 and 2 above, JICA will only sign the Grant Agreement if the following conditions are fulfilled.
 - A. Resettlement Action Plan (RAP) and Environmental Impact Assessment (EIA) Reports are submitted to JICA and JICA confirms both documents as compliant with JICA's Environmental and Social Guidelines to its satisfaction.
 - B. Minutes of Discussion for the Draft Outline Design Mission is signed and confirmed to be compliant with all of JICA's operational policy including JICA Environmental and Social Guidelines to its satisfaction.
4. Regardless of Article 1 and 2 above, this letter will not be considered as JICA's commitment for provision of grant for the Project.

Yours Sincerely,

IWAMA Hajime
 Chief Representative
 JICA Kenya Office

Annex 1: Draft Grant Agreement
 Attachment 1: Minutes of Discussion dated March 4, 2022

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Grant Agreement No.1960360

ANNEX 1

GRANT AGREEMENT

For

THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE AT DONGO KUNDU AREA

Between

THE JAPAN INTERNATIONAL COOPERATION AGENCY

And

KENYA PORTS AUTHORITY

Dated Month Date, Year

On the basis of the Exchange of Notes between the Government of Japan and the Government of the Republic of Kenya dated September 20, 2019 (hereinafter referred to as "the E/N") concerning Japanese grant assistance for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area (hereinafter referred to as "the Programme") operated by the Government of the Republic of Kenya, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), and Kenya Ports Authority of the Republic of Kenya on behalf of the Government of the Republic of Kenya (hereinafter referred to as "the Recipient") have agreed to conclude the following grant agreement (hereinafter referred to as "the G/A"):

Article 1 Amount and Purpose of the Grant

For the purpose of contributing to the implementation of the Programme, JICA shall extend a grant of six billion Japanese Yen (JPY6,000,000,000) (hereinafter referred to as "the Grant") to the Government of the Republic of Kenya in accordance with the relevant laws and regulations of Japan and within the scope of the E/N.

Article 2 Availability of the Grant

The Grant shall be available during the period between the date of entry into force of the G/A and December 31, 2025, unless the period is extended by mutual consent between JICA and the Recipient.

Article 3 Use of the Grant

The Grant and its accrued interest shall be used by the Government of the Republic of Kenya properly and exclusively for the purchase of such products and services of eligible source countries which shall be Japan and the country of the Recipient necessary for the implementation of the Programme (hereinafter respectively referred to as the "Products" and the "Services"), as well as for the payment of such fees necessary for the implementation of the Programme. Notwithstanding the above, when JICA and the Recipient deem it necessary, the Grant may be used for the purchase of the Products and/or the Services of countries other than Japan or the country of the Recipient for the implementation of the Programme.

Article 4 Subprojects

(1) The Programme shall be composed of several subprojects and shall be conducted by implementing agencies designated by the Recipient, as specified in Schedule 1

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attached hereto (hereinafter respectively referred to as "the Subprojects" and "the Implementing Agencies").

(2) JICA will conduct surveys to formulate the Subprojects based on the requests from the Recipient.

(3) The Subprojects are to be implemented by either of the two procedures respectively described in Articles 7 and 8.

(4) General information about the Subprojects shall be described in Schedule 1. Schedule 1 may be modified by the mutual consent of JICA and the Recipient.

(5) Each Subproject shall be commenced after JICA and the Recipient confirm the results of the surveys related to the Subprojects.

Article 5 Procurement Guidelines

The Recipient shall ensure that the Products and the Services for the Subprojects are procured in accordance with JICA's Procurement Guidelines as designated in Schedule 1 (hereinafter referred to as "the Procurement Guidelines").

Article 6 Misconduct

(1) The Recipient will take all measures necessary to prevent any offer, gift, or payment of any consideration or benefit, which would be construed as a corrupt practice or fraudulent practice in the Republic of Kenya from being made as an inducement or reward for the award of the contracts related to the G/A. JICA and the Recipient understand that when any corrupt practice or fraudulent practice of any type above occurs, the Recipient will refund to JICA a portion of the Grant equivalent to the amount spent in such corrupt practice or fraudulent practice, as determined by JICA.

(2) JICA may, in addition, exercise other remedies under the G/A. Under JICA's Japanese Grant Aid policy, the Recipient, as well as any tenderers and contractors under contracts funded with Japanese Grant Aid or other forms of Japanese ODA, are to observe the highest standards of ethics during the procurement and execution of such contracts. In pursuance of this policy, JICA;

(a) will reject a proposal for an award if it determines that the tenderer recommended for

the award has engaged in any corrupt practice or fraudulent practice in competing for the contract in question; and

(b) will recognize a physical or juridical person as ineligible, for a period determined by JICA, to become a party to, to become a subcontractor under, or to be delegated any responsibilities under, any contract funded with Japanese Grant Aid or any other form of Japanese ODA if JICA, at any time, determines that the person has engaged in any corrupt practice or fraudulent practice in competing for, or in executing, another contract funded with Japanese Grant Aid or any other form of Japanese ODA.

(3) If JICA receives information related to suspected any corrupt practice or fraudulent practice in the competition for, or in the execution of contracts to be funded out of the proceeds of the Grant, the Recipient shall provide JICA with such information as JICA may reasonably request, including information related to any official and/or public organizations of the Recipient.

(4) The Recipient shall not unfairly or unfavorably treat physical persons and/or juridical persons that provide information related to suspected corrupt practices or fraudulent practices in the competition for, or in the execution of, contracts to be funded out of the proceeds of the Grant to JICA and/or the Recipient.

Article 7 Procedures for Implementation of the Subproject(s) (Procurement by the Recipient)

Article 7-1 Verification of Contracts

The Recipient shall enter into contracts in Japanese Yen with Japanese nationals for the purchase of Products and Services for the Subproject(s) (Procurement by the Recipient) described in Schedule 1. JICA shall verify the eligibility of such contracts for the Grant for the Subproject(s) (Procurement by the Recipient). (The term "Japanese nationals" means Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons.)

Article 7-2 Payments

JICA shall execute the Grant for the Subproject(s) (Procurement by the Recipient) by making payments in Japanese Yen to cover the obligations incurred by the Recipient under the contracts verified in accordance with Article 7-1 (hereinafter referred to as "the

Verified Contracts") to a bank account (hereinafter referred to as the "the Account") for the Subproject(s) (Procurement by the Recipient) to be opened within thirty (30) days from the date of entry into force of the G/A at a bank in Japan designated by the Recipient (hereinafter referred to as "the Bank for the Subproject(s) (Procurement by the Recipient)").

Article 7-3 Banking Arrangement for the Subproject(s) (Procurement by the Recipient)

The sole purpose of the Account for the Subproject(s) (Procurement by the Recipient) referred to in Article 7-2 is to receive the payments in Japanese Yen from JICA and to pay to the Japanese nationals who are parties to the Verified Contracts. The procedural details concerning the credit to and debit from the Account for the Subproject(s) (Procurement by the Recipient) referred to in Article 7-2 will be agreed upon through consultation between the Bank for the Subproject(s) (Procurement by the Recipient) and the Recipient.

Article 7-4 Authorization to Pay

In order to execute the procedures in the banking arrangement (hereinafter referred to as "the Banking Arrangement"), the Recipient shall issue an authorization to make payments to the Bank in connection with each contract verified by JICA, within thirty (30) days after the conclusion of the contract. The payments referred to in Article 7-2 shall be made when payment requests are presented by the Bank for the Subproject(s) (Procurement by the Recipient) to JICA under an authorization to pay issued by the Recipient.

Article 7-5 Modification of the Subproject(s) (Procurement by the Recipient)

Before making any necessary modification to plan and/or design of a Subproject (Procurement by the Recipient), the Recipient shall consult with JICA to obtain its consent in accordance with the Procurement Guidelines.

Article 8 Procedures for Implementation of the Subproject(s) (Procurement by the Agent)

Article 8-1 Procurement and Management

(1) To ensure that Products and Services for the Subproject(s) (Procurement by the Agent) are purchased effectively, smoothly, and appropriately as described in Schedule 1, and that the Recipient receives other necessary supports, the Recipient shall conclude employment contract(s) with the independent and competent agent to be selected by JICA

(hereinafter referred to as "the Agent"), in principle within sixty (60) days after JICA's notice, as the entity to act on behalf of the Recipient in accordance with the scope of the Agent's services set forth in Schedule 2 attached herewith. By making this selection of the Agent, JICA shall assume none of the responsibilities that the Agent is to bear to the Recipient.

(2) JICA shall issue a written approval of the employment contract(s) referred to in sub-paragraph (1) above to verify that they are eligible for the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest.

Article 8-2 Banking Arrangement for the Subproject(s) (Procurement by the Agent) and Payments

(1) The Recipient shall open Yen ordinary deposit account(s) for the Subproject(s) (Procurement by the Agent) at a bank in Japan (hereinafter referred to as "the Account for the Subproject(s) (Procurement by the Agent)") within thirty (30) days from the date of entry into force of the G/A and shall notify JICA in the written form prescribed in Schedule 3 attached herewith of the completion of the procedures for the opening of the Account(s) for the Subproject(s) (Procurement by the Agent) within seven (7) days from the date of the opening of the Account(s) for the Subproject(s) (Procurement by the Agent).

(2) JICA shall execute the Grant for the Subproject(s) (Procurement by the Agent) by making payments in Japanese Yen to the Account(s) for the Subproject(s) (Procurement by the Agent) during the period referred to in Article 2 and on or after the date of receipt of the written notification referred to in sub-paragraph (1) above.

(3) The sole purpose of the Account(s) for the Subproject(s) (Procurement by the Agent) is to receive the payments in Japanese Yen from JICA referred to in sub-paragraph (2) above and to make payments necessary for the purchase of Products and Services and the fees referred to in Schedule 1.

Article 8-3 Disbursement Procedures

(1) The Recipient shall ensure that the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest are completely disbursed from the Account for the Subproject(s) (Procurement by the Agent) and available for the payments necessary for the purchase of the Products and/or the Services, as well as for the fees referred to in Schedule 1, within a period of twelve (12) months after the date of the execution of the

Grant, unless the period is extended by mutual consent between JICA and the Recipient.

(2) The Recipient and the bank referred to in sub-paragraph (1) of Article 8-2 (hereinafter referred to as the "Bank for the Subproject(s) (Procurement by the Agent)") shall conclude a fund transfer arrangement under which the Recipient designates the Agent as the representative acting on behalf of the Recipient concerning all fund transfers to the Agent.

(3) The Agent shall request the Bank for the Subproject(s) (Procurement by the Agent) to transfer funds to cover the expenses necessary for the purchase of all or part of the Products and Services and for the fees referred to in Schedule 1. Each fund transfer request shall be accompanied by a detailed estimate of the expenses to be covered by the funds transferred and a copy of the approval by JICA referred to in sub-paragraph (2) of Article 8-1. Copies of the request and estimation shall be sent to the Recipient at the same time.

(4) Pursuant to the Agent's request referred to in sub-paragraph (3) above, the Bank for the Subproject(s) (Procurement by the Agent) shall notify the Recipient of the request made by the Agent. The Bank for the Subproject(s) (Procurement by the Agent) shall pay the amount specified in the request (hereinafter referred to as "the Advances") to the Agent from the Account for the Subproject(s) (Procurement by the Agent) unless the Recipient expresses opposition in writing to such payment within ten (10) working days after the notification by the Bank for the Subproject(s) (Procurement by the Agent). The Agent shall make payments to the supplier(s) and/or provider(s) of the Products and/or the Services from the funds received in accordance with the terms of the contract(s) with them.

(5) The Recipient shall present to JICA, through the Agent, a report prepared in a written form acceptable to JICA on the transactions on the Account for the Subproject(s) (Procurement by the Agent), without delay when the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest are completely disbursed from the Account for the Subproject(s) (Procurement by the Agent) in accordance with the provisions of sub-paragraph (1) above or upon the request of JICA.

Article 8-4 Modification of the Subproject(s) (Procurement by the Agent)
Before making any necessary modification to a plan and/or design of the Subproject(s)

the Agent) and its accrued interest for the Subproject(s) (Procurement by the Agent), as well as on potential end-users related to the Subproject(s) (Procurement by the Agent);

(d) to identify problems related to the Subproject(s) (Procurement by the Agent) that may delay the execution of the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest, and to explore solutions to such problems;

(e) to exchange views on publicity related to the execution of the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest for the Subproject(s) (Procurement by the Agent);

(f) to discuss any other matters related to the Subproject(s) (Procurement by the Agent) that may arise from or in connection with the G/A; and

(g) to provide the Committee for the Programme referred to in Article 10 with information on the progress of the Subproject(s) (Procurement by the Agent) and problems related to the Subproject(s) (Procurement by the Agent).

Article 8-6 Refund

When any amount of funds remains in the Account for the Subproject(s) or any amount of the Advances remains (hereinafter referred to collectively as "the Remaining Amount") after the completion of the Subproject(s), JICA shall notify the Recipient of the procedures for refunding the Remaining Amount. The Recipient shall refund the Remaining Amount to JICA without delay through such procedures as notified above.

Article 9 Obligations of the Recipient

(1) The Recipient shall take necessary measures:

(a) to ensure that customs duties, internal taxes and other fiscal levies which may be imposed in the Republic of Kenya with respect to the purchase of the Products and/or the Services for the Programme be exempted;

(b) to give due environmental and social consideration in the implementation of the Programme;

(c) to ensure that the Products and/or the Services of the Programme be maintained and

(Procurement by the Agent), the Recipient shall consult with JICA to obtain its consent in accordance with the Procurement Guidelines.

Article 8-5 Subcommittee

(1) The Recipient shall establish consultative committee(s) for the Subproject(s) (Procurement by the Agent) (hereinafter referred to as "the Subcommittee") in order to discuss any matter related to the Subproject(s) (Procurement by the Agent) that may arise from or in connection with the G/A.

(2) The Subcommittee shall be chaired by the head of the representatives of the Recipient. The members of the Subcommittee shall be defined in Schedule 4.

(3) Immediately after the employment contract referred to in sub-paragraph (1) of Article 8-1 is concluded, the Agent shall appoint a representative who is to participate on behalf of the Agent in the meetings of the Subcommittee as an adviser. Representative(s) of organizations other than the Agent may be invited, whenever necessary, to participate and provide advices in the meetings of the Subcommittee.

(4) In principle, the first meeting of the Committee shall be held in the Republic of Kenya immediately after JICA approves the employment contract referred to in sub-paragraph (2) of Article 8-1. The meetings thereafter will be held upon the request of either JICA or the Recipient whenever JICA deems it necessary to call such meetings. The Agent may advise JICA and the Recipient on the need to call a meeting of the Subcommittee.

(5) The terms of reference of the Subcommittee shall be as follows:

(a) to confirm an implementation schedule for Subproject(s) (Procurement by the Agent) for the speedy and effective execution of the Grant for the Subproject(s) (Procurement by the Agent) and its accrued interest;

(b) to discuss the need for and appropriateness of modifications of the Subproject(s) (Procurement by the Agent), including modifications of a plan and/or design of the Subproject(s);

(c) to exchange views on allocations of the Grant for the Subproject(s) (Procurement by

used properly and effectively for the implementation of the Programme;

(d) to secure a lot of land necessary for the implementation of the Programme and to clear the sites;

(e) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities necessary for the implementation of the Programme outside the sites referred to in (d) above;

(f) to ensure prompt unloading and customs clearance at ports of disembarkation in the Republic of Kenya and to assist internal transportation therein of the Products for the Programme;

(g) to accord the Japanese physical persons and/or physical persons of third countries whose services may be required in connection with the supply of the Products and/or the Services for the Programme such facilities as may be necessary for their entry into the country of the Recipient and stay therein for the performance of their work; and

(h) to bear all the expenses, other than those covered by the Grant and its accrued interest, necessary for the implementation of the Programme.

(2) If the employment contract with the Agent referred to in (1) of Article 8-1 is concluded, the Recipient shall take following necessary measures, in addition to observing the provisions of sub-paragraph (1) above:

(a) to ensure that customs duties, internal taxes, and other fiscal levies that may be imposed in the Republic of Kenya with respect to the employment of the Agent be exempted;

(b) to accord Japanese physical persons and/or physical persons of third countries employed by the Agent whose services may be required in connection with the supply of the Products and/or the Services for the Programme such facilities as may be necessary for their entry into the Republic of Kenya and stay therein for the performance of their work; and

(c) to present to JICA, through the Agent, a report prepared in a written form acceptable

to JICA on the transactions on the account referred to (1) of Article 8-2, upon the request of JICA.

(3) The Recipient shall provide JICA with periodic progress reports on the Programme, a completion report upon the completion of the Programme, and any other necessary information related to the Programme, upon the request of JICA.

(4) With regard to the shipping and marine insurance of the Products and/or the Services for the Programme, the Recipient shall refrain from imposing any restrictions that may hinder fair and free competition among the shipping and marine insurance companies.

(5) The Products for the Programme shall not be exported or re-exported from the Republic of Kenya.

(6) The Recipient shall ensure that no official of the Recipient undertakes any part of the Japanese nationals' work and/or the work of nationals of third countries on purchase of the Products and/or the Services for the Programme.

(7) Any other matter confirmed in writing between JICA and the Implementing Agencies to be an obligation of the Recipient for the implementation of Subprojects shall constitute part of the G/A.

Article 10 Committee

(1) The Recipient shall establish a committee for the Programme (hereinafter referred to as "the Committee") in order to discuss any matter, at the Programme level, that may arise from or in connection with the G/A.

(2) The members of the Committee shall be as defined in Schedule 4.

(3) In principle, a regular meeting of the Committee shall be held in the Republic of Kenya semiannually, and other meetings may be held upon the request of either JICA or the Recipient whenever JICA deems it necessary to call such meetings.

(4) The terms of reference of the Committee shall be as follows:

(a) to confirm an implementation schedule for the Programme for the speedy and effective

execution of the Grant and its accrued interest;

(b) to discuss modifications of the Programme, including modifications of the allocation of the Grant for Subprojects;

(c) to identify problems that may delay the implementation of the Programme or the execution of the Grant and its accrued interest, and to explore solutions to such problems;

(d) to exchange views on publicity related to the Programme; and

(e) to discuss any other matters that may arise from or in connection with the G/A.

Article 11 Applicable Laws

The validity, interpretation and performance of the G/A shall be governed by the relevant laws and regulations of Japan.

Article 12 Amendments

The G/A may be amended within the scope of the E/N by written agreement between JICA and the Recipient. An amendment to the G/A shall enter into force on the date of signature of such written agreement by JICA and the Recipient.

Article 13 Consultation

JICA and the Recipient shall consult with each other to resolve any matter that may arise from or in connection with the G/A.

Article 14 Effectiveness and Termination

(1) The G/A shall enter into force on the date of signature by JICA and the Recipient, provided that the E/N is in force.

(2) When JICA recognizes any of the following situations, JICA may, by issuing a notification to the Recipient, suspend in whole or in part the rights of the Recipient and/or require the Recipient to remedy the situation. When the Recipient will not remedy the situation within a period of thirty (30) days from the date of receipt of such notification, JICA may, with the consent of the Government of Japan, terminate the G/A:

(a) default of the Recipient in the fulfillment of any obligations or in compliance with the

terms and conditions under the E/N or the G/A;

(b) a fundamental change of any circumstance relating to the Recipient with regard to those existing at the time of the entry into force of the G/A; and

(c) any emergency, unforeseen circumstances, or force majeure such as a war, civil war, earthquake, or flood, that seriously impedes the implementation of the Programme.

Venue (City), Signing Date

For

JAPAN INTERNATIONAL
COOPERATION AGENCY

IWAMA Hajime
Chief Representative
JICA Kenya Office

For

KENYA PORTS AUTHORITY

Amb. John Mwangemi
Managing Director
Kenya Ports Authority

Schedule 1

The Subprojects and Indicative Amount of the Grant allocated under the Programme for the Project for Infrastructure Development in Mombasa Special Economic Zone at Donga Kundu Area

Title(s) of the Subprojects	Indicative Amount of the Grant allocated (million Japanese Yen)	Components (the Products and/or the Services)	Implementation Type (Procurement by the Recipient / Procurement by the Agent)	Implementing Agency	JICA Procurement Guidelines applied
Water Supply		<ul style="list-style-type: none"> • Intake facilities • Transmission pipeline • Booster Pumping Station • Main Transmission pipeline (from BPS to WSC) • Distribution pipeline (from BPS to Water 	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016

		(Kisaka) - Water Kiosks - Water Service Center - Concrete pipeline			
Drainage		Drainage for the north area of the southern by-pass road. (improvement of existing stream)	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016
Freeport D1 Area		- Earthwork - Administration Building - Public transportation facilities	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2015
Road		New temporary road	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016

Cargo Equipment	Handling	Procurement by the Recipient	KPA	Procurement Guidelines for the Japanese Grants (Type I), January 2016
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Schedule 2

Scope of the Agent's Services for the Subproject(s) (Procurement by the Agent)

1. Provision of information and advice to the Subcommittee.
2. Conclusion of an agreement for detailed design works and construction supervision with the consultants.
3. Ensuring that the Recipient fully understand the procedures to employ the Agent and the procedures for the purchase of the Products and/or the Services for the Subproject(s) (Procurement by the Agent).
4. (1) The preparation of the specifications for the Products for the Recipient, including, where necessary, detailed discussions with the end-users.
 (2) The preparation of tender documents appropriate for the values and types of the Products and/or the Services for the Subproject(s) (Procurement by the Agent) to be purchased.
 (3) Advertisements and announcements of the tenders and where the international competitive bidding is to be held, the wording of which is to be agreed with the Recipient.
 (4) Evaluation of the tenders from both technical and financial standpoints.
 (5) Submission of recommendations to the Recipient for the approval of orders with the suppliers and providers of the Products and/or the Services for the Subproject(s) (Procurement by the Agent).
5. Receipt and use of the Advances in accordance with the employment contract with the Recipient.
6. Negotiation and conclusion of contracts with the suppliers and providers of the Products and/or the Services for the Subproject(s) (Procurement by the Agent), including arrangements for satisfactory payments and shipment and inspection

arrangements, where necessary.

7. Monitoring of the progress of the Subproject(s) (Procurement by the Agent) to ensure that the delivery schedules of the Products and/or the Services provided are as contracted.
8. Provision of documents containing detailed information on the progress of orders, notifications of orders placed, amendments to contracts, delivery and service information, shipping documents, etc., to the Recipient and end-users.
9. Payments to the suppliers and providers of the Products and/or the Services for the Subproject(s) (Procurement by the Agent) from the Advances.
10. The preparation of periodic progress reports for JICA and the Recipient with comprehensive information on enquiries, orders, order status, values, deliveries, services provided, etc.
11. Submission of quarterly statements to JICA and the Recipient detailing the balance against the Grant and its accrued interest and all disbursements for the quarter.
12. Submission to JICA of an overall evaluation report with comprehensive details on all of the Products and/or the Services, source countries (if applicable), delivery dates / service provision periods, the values of Products and/or Services (including relevant charges), and the total amounts disbursed and remaining.

Date:
Ref:

To: JAPAN INTERNATIONAL COOPERATION AGENCY, JAPAN

Notification of the Opening of the Account for the Subproject(s) (Procurement by the Agent) and Request for the (the title of the Subproject(s)) Grant payment for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area

In accordance with the provisions of Article 8-2 of Grant Agreement No. 1960360 between the Japan International Cooperation Agency and the Recipient dated G/A Month Date, Year, we would like to notify JICA of the completion of the procedures for the opening of the Yen ordinary deposit account, and to request JICA to make the grant payments specified in Schedule 1 of the above-mentioned Grant Agreement in accordance with the following details:

1. The amount to be paid (Japanese Yen): six billion Japanese Yen (JPY6,000,000,000)
2. Bank name:
3. Bank address:
4. Account number:
5. Account name:
6. Account type (Non-Resident Account or Resident Account)

(Authorized Signature)

Name
Title
KENYA PORTS AUTHORITY

The Members of the Committee for the Grant for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area

1. The Recipient side
Managing Director of Kenya Ports Authority
Chief Executive Officer of Coast Water Works Development Agency
2. JICA side
Chief Representative of Kenya Office

The Members of the Sub-Committee for (the title of the Subproject(s))

1. The Recipient side
2. JICA side

END

Attachment 1


Minutes of Discussions
on the Preliminary-Detailed Outline Design Mission for
Infrastructure Development in Mombasa Special Economic Zone
at Dongo Kundu Area in the Republic of Kenya

Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched relevant JICA officers for the Preliminary Detailed Outline Design Mission for the Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area in the Republic of Kenya (hereinafter referred to as "the Project") and held series of discussions with the Kenya Ports Authority (hereinafter referred to as "KPA") from March 2, 2022 to March 17, 2022 as per Appendix I. Both sides confirmed that nothing in this Minutes of Discussion will be interpreted as JICA's commitment to provide grant for the Project and everything confirmed in this Minutes of Discussion is tentative and not legally binding.


Mombasa, March 17, 2022


For Japan International Cooperation Agency


For Kenya Ports Authority


Iwama Hajime
Chief Representative
JICA Kenya Office


Amr John Mwangemi
Managing Director
Kenya Ports Authority


Tatsuya Nikai
Representative
JICA Kenya Office


Eng Vincent Sidai
General Manager
Kenya Ports Authority


Dr. Stephen Mogere
Infrastructure Advisor
JICA Kenya Office

APPNEDIX I: MAIN POINTS DISCUSSED

1. Objective of the Project
The objective of the Project is to improve business environment of Dongo Kundu area in Mombasa through developing a part of infrastructure, thereby contributing to improving socio-economic environment and economic development.
2. Title of the Project
Both sides confirmed the title of the Project as "The Project for Infrastructure Development in Mombasa Special Economic Zone at Dongo Kundu Area in the Republic of Kenya."
3. Project Site
Both sides confirmed that the sites of the Project are in Mombasa and Kwale, which is shown in Annex 1.
4. Responsible Authority for the Project
Both sides confirmed that Kenya Ports Authority (hereinafter referred to as "KPA") will be the executing agency for the Project (hereinafter referred to as "the Executing Agency").
The Executing Agency shall coordinate with all the relevant authorities, including but not limited to social and environment measures. The Executing Agency shall also ensure smooth implementation of the Project and ensure that the undertakings for the Project shall be managed by relevant authorities, especially on water supply component, as described in Annex 2, properly and on time under coordination with Coast Water Works Development Agency. Moreover, the Executing Agency should provide sufficient compensation and assistance to the PAPs which will be determined in detailed later in updated Abbreviated Resettlement Action Plan (hereinafter referred to as "ARAP"). Compensation policy for PAPs within the SEZ area is described in Annex 3.
5. Cost estimate
Both sides confirmed that the cost estimate is provisional and will be examined further by both side based on changes such as price adjustment.

6. Confidentiality of the cost estimate and technical specifications
Both sides confirmed that the cost estimate and technical specifications of the Project will be re-explained at the Detailed Outline Design Mission (hereinafter referred to as "DoD Mission") and should never be disclosed to any third parties until all the contracts under the Project are concluded.

7. Scope of the Project

7-1. As a result of discussions, both sides confirmed that the items requested by the Government of Kenya are as follows:

- (a) Water Supply
- Intake facilities
 - Transmission pipeline (from well to Booster Pumping Station (BPS))
 - Booster Pumping Station (BPS; with security post and fencing)
 - Main Transmission pipeline (from BPS to Water Supply Center (WSC))
 - Distribution pipeline (from BPS to Water Kiosks)
 - Water Kiosks
 - Water Service Center (WSC; with security post and fencing)
 - Connection pipeline (from WSC to Mombasa Water pipeline)
- (b) Drainage
- Drainage for the north area of the Southern Bypass road
- (c) Freeport D1 Area
- Land leveling and surface protection up to 10ha
 - Administration building and related facilities
 - Public transportation rotaries and public toilet
- (d) Road
- Temporary construction road (from D1 to disposal site/FTZ-B)
- (e) Cargo Handling Equipment, with following conditions
- The equipment may consist of reach stacker, forklift and tractor with chassis, which the item and unit number will be determined after determination of the budget balance
 - The equipment will be made in Japan, including necessary spare parts and training specifications
 - In case of the bidding price (contractor's price proposal) has exceeded the predetermined price, primarily the quantity of equipment will be adjusted for re-bidding.
 - In case completion of DK-1 under loan project delays, after handing over

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of Grant Project, KPA may utilize the equipment at the existing terminal until completion of DK-1, with condition that; (1) KPA shall move the equipment to DK-1 and utilize them under its own expense and responsibility, and (2) KPA shall properly maintain the equipment even after the defect period (one year after handing over) of the equipment

- (f) Consulting Service
- Detailed Design
 - Tender Preparation and Assistance
 - Construction Supervision

8. Procedures and Basic Principles of Japanese Grant

8-1. The Kenyan side confirmed and agreed that the procedures and basic principles of Japanese Grant as described in Annex 4 shall be applied to the Project. In addition, the Kenyan side agreed to take necessary measures according to the procedures.

9. Schedule of the Preparatory Survey for the Project

Both sides confirmed and agreed that:

- 9-1. JICA will prepare a draft Preparatory Survey Report and dispatch the DoD Mission to Kenya around End of March 2022, in order to finalize the detailed project outline (including confirmation on the contents of Preparatory Survey Report, approval of EIA by NEMA and finalization of ARAP by KPA) and undertakings to be taken by the Kenyan side.
- 9-2. If the contents of the Preparatory Survey Report are accepted by the Kenyan side, JICA will finalize the Preparatory Survey Report and send it to Kenya around May 2022.
- 9-3. The above schedule is tentative and subject to change. As for reference, implementation schedule for the Project is attached in Annex 5.

10. Timeline for the project implementation

JICA Mission explained to the Kenyan side that the expected timeline for the project implementation is as attached in Annex 5. Both sides shall take the necessary steps to follow the agreed schedule.

11. Expected outcomes and indicators

Both sides agreed that key indicators for expected outcomes are as follows. The Kenyan side will be responsible for the achievement of agreed key indicators targeted

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in year 2029 and shall monitor the progress for Ex-Post Evaluation based on those indicators.

[Quantitative indicators]

Indicator	Basic Value (actual for year 2022)	Target Value (year 2029) [4 years after completion]*
*Water Supply Capacity (m ³ /day)	0 m ³ /day	2,000 m ³ /day
Occupancy Ratio of D1 Area (%)	0%	50%

*remarks: Main water distribution pipeline which connecting WSC and D-1/DK-1 will be constructed under KenHA loan project and it will be handing over to KPA after completion, also it will be transferred from KPA to CWWDA as stated in the MOU.

[Qualitative indicators]

1. Improvement of the drainage within the Project area.
 2. Improvement of the investment climate of the Project area by provision of the necessary infrastructure for SEZ.
 3. Economic promotion of Kenya.
12. Ex-Post Evaluation
JICA will conduct ex-post evaluation after four years from the project completion, in principle, with respect to five evaluation criteria (Relevance, Effectiveness, Efficiency, Impact, Sustainability). The result of the evaluation will be publicized. The Kenyan side is required to provide necessary support for the data collection.
13. Undertakings of the Project
- 13-1. Both sides confirmed that Kenyan side will take necessary measures as undertakings of the Project as described in Annex 6 for smooth implementation of the Project.
- 13-2. With regards to Land acquisition and access out of SEZ area from intake wells to public road, booster pumping station site, both sides confirmed that such relevant permits and licenses shall be clarified before the bidding.
- 13-3. With regard to exemption of customs duties, internal taxes and other fiscal levies as per No. 5 of (2) Annex 6, both sides confirmed that such customs duties, internal taxes and other fiscal levies, shall be clarified in the bid documents by KPA during the implementation stage of the Project.

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13-4. The Kenyan side assured to take the necessary measures and coordination including allocation of the necessary budget which are preconditions of implementation of the Project.

14. Monitoring during the implementation

The Project will be monitored by the Executing Agency and reported to JICA by using the form of Project Monitoring Report (PMR) attached as Annex 7. The PMR will be submitted every quarter of the year.

15. Project completion

Both sides confirmed that the definition of the term of the project completion is when all the facilities constructed and equipment procured by the Grant are in operation. The completion of the Project will be reported to JICA promptly, but in any event not later than six months after completion of the Project.

16. Other Relevant Issues

16-1. Both sides confirmed that the consultant and construction procurements will follow JICA Procurement Guidelines for the Japanese Grants. The contract will be one package each for the consultant and the construction (including equipment).

17. Draft Grant Agreement

- 17-1. JICA Mission explained that, in principle, Draft Grant Agreement can only be generated upon successful completion of the DoD Mission as scope may change while waiting for the finalization of the ARAP. That the DoD Mission can only be dispatched after the ARAP is completed and confirmed compliant of JICA Environmental and Social Guidelines.
- 17-2. However, JICA Mission further explained that technical component of the Project is, in principle, confirmed by this Minutes of Discussion and the ARAP is expected to complete in near future. That, therefore, for purpose of timely initiation of the Project, JICA Mission provided the Draft Grant Agreement to KPA as per Annex 8 for their review for possible signing after successful completion of the DoD Mission.
- 17-3. JICA Mission further explained that Annex 8 is tentative version based on the current understanding as per this Minutes of Discussion, which can change during the DoD Mission. That Annex 8 cannot be signed until the DoD Mission

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is completed and JICA Mission's provision of Annex 8 will not be interpreted as JICA's commitment to provide grant for implementation of the Project.

17-4. While JICA Mission explained that any change of the Draft Grant Agreement is difficult due to global operation policy of JICA and the policy of the Government of Japan, KPA explained that following section is difficult for KPA to accept.

Clause	Wording per Draft Grant Agreement (Annex 8)	KPA Proposal
Article 8	Procedures for Implementation of the Subprojects(s) (Procurement by the Agent)	Entire Article 8 to be deleted as no Procurement by the Agent is planned.
Signing Page	THE GOVERNMENT OF Name of the Recipient Country	To be replaced to "For Kenya Ports Authority".
Article 7-1, Article 10, Schedule 3	Article 7-1: ...Procurement by the Authority... Article 10: ...be held upon the request of either JICA or the Authority... Schedule 3: name of the Recipient country / name of the authority of the Recipient country, name of the Recipient country	To be replaced with "the Recipient" as "the Authority" is not defined within the draft Grant Agreement.

[END]

List of Attachments:

- Annex 1 Project Site
- Annex 2 Tentative Stakeholder Matrix
- Annex 3 Compensation Policy
- Annex 4 Principles of Japanese Grant
- Annex 5 Project Implementation Schedule
- Annex 6 Major Undertakings to be taken by the Government of Kenya
- Annex 7 Project Monitoring Report (template)
- Annex 8 Draft Grant Agreement (tentative)

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Office of the Managing Director

CDD/PD/3/1/06

22nd April 2022

Mr. Iwama Hajime,
Chief Representative
JICA Kenya Office
P. O. Box 50572-00200
NAIROBI

Dear *Iwama Hajime,*


RE: REQUEST FOR KPA CONFIRMATION OF THE DRAFT AGREEMENT FOR THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE AT DONGO KUNDU AREA

We refer to your letter dated **Ref No. TC-22-067 (NT)** dated 21st April 2022 on the above subject matter.

This is to confirm that Kenya Ports Authority has no objection to the Draft Grant Agreement (Annex 1) attached.

Yours *Sincerely,*

[Signature]
Amb. John Mwangemi
Ag. MANAGING DIRECTOR



Kenya Ports Authority

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Kenya Ports Authority

6. 参考資料

先に示した重要打合せの議事録を以下に示す。

(1) 2019年7月23日協議

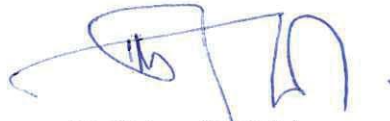
打合せ議事録を次頁以降に示す。

**MINUTES OF MEETING HELD ON 8/08/2019 AT FINANCIAL CONFERENCE ROOM, KPA
MONBASA**

Project Title	Infrastructure Development in Mombasa Special Economic Zone		
Subject	Minutes of the presentation of design concepts for the project components for Mombasa SEZ		
Date & Time	23/07/2019	12:00 am	Venue KPA Regional Office
Attendance:			
<ol style="list-style-type: none"> 1. Eng. Nuru BwanaKombo (KPA) 2. Mr. Mohamed I. Golicha (KPA) 3. 2 Economists (KPA) 4. Mr.Masanori TEDDY (JICA Study Team) 5. Mr.Akira YAMADERA (JICA Study Team) 6. Mr.Isao TANABE (JICA Study Team) 7. Mr.Tatsuya KAWAHARA (JICA Study Team) 8. Ms.Satomi TABATA (JICA Study Team) 9. Eng. Jokastah KALUNGU (JICA Study Team) 			
Agenda: Presentation on the Design Concepts of Mombasa SEZ components			
<p>i) The JICA Study Team presented the design criteria of the four (4) components to KPA staffs.</p> <p>ii) There was consensus amongst the participants and the presentation was successful.</p> <p>iii) Regarding the leakage of water supply pipe, it shall be discovered by the water amount balance measured of flow meter at inlet and outlet pipeline.</p> <p>iv) The JICA Study Team was requested to include pedestrian strip in the road design. Mr. Tanabe replied to KPA staffs pedestrian strip (foot path) is already included in the design showing a typical cross section.</p> <p>v) The JICA Study Team was requested to take in consideration the erosive nature of the soil when designing and if possible include tree planting. Slope protection ought to be factored in the design. Mr. Tanabe replied slope protection is also already considered in the design.</p> <p>vi) The JICA Study Team was advised to use a 10 years rainfall data from Mombasa airport as it was more accurate. Mr. Tanabe mentioned he would try to collect the rainfall data and check the design rainfall scale, based on the information collected from Mombasa meteorological department.</p> <p>vii) KPA requested the JICA Study Team to send geotechnical report and BoQ which has already been shared with KPA Staff.</p> <p>viii) Eng. Nuru confirmed that there were no BoQ shared with KPA.</p>			
		Delivered by JICA study Team ● Presentations materials	



Masanori TEDDY
Team Leader
JICA Study Team



Mr. Mohamed I. Golicha
Principal Statistician
Kenya Ports Authority

(2) 2019年8月8日協議

打合せ議事録を次頁以降に示す。

MINUTES OF MEETING HELD ON 8/08/2019 AT FINANCIAL CONFERENCE ROOM, KPA
MONBASA

Project Title	Infrastructure Development in Mombasa Special Economic Zone		
Subject	Minutes of the presentation of progress of design works for the project components for Mombasa SEZ		
Date & Time	8/08/2019	11:00 am	Venue KPA Finance Conference Room
Attendance:			
<ol style="list-style-type: none"> 1. Eng. Nuru BwanaKombo (KPA) 2. Mr. Mohamed I. Golicha (KPA) 3. Mr. Ngumbau (KPA) 4. Mr. Akira YAMADERA (JICA Study Team) 5. Mr. Isao TANABE (JICA Study Team) 6. Eng. Jokastah KALUNGU (JICA Study Team) 			
Agenda: Presentation on the progress of Mombasa SEZ components			
<p>The meeting started with invitation of the participants by Mr. Golicha after which Eng. Nuru invited Mr. Yamadera to make the presentations. Mr. Yamadera informed the team that the outline of the presentation which consists of the following components:</p> <ol style="list-style-type: none"> i) Drainage ii) Access Road iii) Other design works <p>The aim of the presentation was to build a consensus on the above components so as to hasten the completion of design works.</p>			
Results of the presentations			
<p>The following were important points to note;</p> <ol style="list-style-type: none"> a) Drainage <ul style="list-style-type: none"> ➤ Mr. Tanabe explained why the design work considered monthly data from previous studies. ➤ Mr. Tanabe also confirmed that a 10 year or larger return period was used for culverts while a 5 year return period was used for road side ditches in the previous studies. ➤ Mr. Tanabe informed KPA that the office was not able to source for daily data from the concerned authorities however the office is trying its level to get such data ➤ Eng. Nuru was concerned that using data from previous studies risks the current design work inheriting errors from the previous studies. She urged the JICA Study Team to try and get accurate and current data from meteorological department. ➤ Mr. Tanabe explained use of 25 year return period was reasonable for design of box culvert, showing comparison of rainfall intensity curves which were estimated in previous studies and that the same return period was applied for the design of Mombasa South By-pass Road under construction. ➤ Eng. Nuru asserted that any storm water should be collected and disposed professionally. ➤ Eng. Nuru noted that the area is prone to erosion and therefore well designed drainage system is required. ➤ KPA accepted design criteria regarding rainfall scale to be applied for the drainage design. b) Road access <ul style="list-style-type: none"> ➤ Mr. Yamadera explained to KPA the different access options to KPA offices both for KPA staff, visitors and also access by public transport. ➤ There are three (3) options with the only difference being the location of KPA offices in relation to D1. ➤ The costs were Ksh 70 million, Ksh 224 million and Ksh 91 million for option A, B and C, respectively. 			

**MINUTES OF MEETING HELD ON 8/08/2019 AT FINANCIAL CONFERENCE ROOM, KPA
MONBASA**

- The area including KPA office, KPA parking and visitors parking for all the options is 1 hectare.
- KPA preferred Options A due to strategic positioning of KPA offices in relations to D1.
- Mr. Yamadera informed KPA that the marshalling area of entrance and exit was approximately 2,000m² each similar to the current one. It can handle a maximum of 19 Lorries and 10 small cars for the entrance and the exit in total. It was agreed that since there is provision of waiting lane, this capacity was enough.
- Eng. Nuru sought to know the possibility of visiting other countries with modern ports for bench marking. After a brief discussion, it was agreed that the issue will be discussed internally within KPA authority and the way forward will be communicated to the team later on.
- Eng. Nuru also sought to know if the access roads will have a lighting system.
- Mr. Yamadera clarified that lighting among other items will be not covered under grant project.

c) Design works for other components

- Mr. Yamadera showed the current draft technical drawings of the following items:
 - i. Details of boreholes - Submersible motor pumps, layouts of well 2, 3, 5, gantry crane details, guard house etc
 - ii. Details of Booster pump station – suction tanks, plan, sections etc
- There was no comments on the drawings
- However, Eng Nuru advised the JICA Study Team to get details on rules governing the pipes installation through county and KeRRA roads
- Mr. Yamadera confirmed that already the JICA Study Team had visited the concerned offices and all the conditions are being adhered to.
- The JICA Study Team was also notified that all water kiosks as proposed by Kwale Water will be located in public land and they will not encroach to any road reserve.
- KPA requested to provide well water quality data with them.
- Mr. Golicha suggested to JICA Study Team that during the presentations to key stakeholders in Kwale County, the water kiosk component should have a column showing the beneficiary county.
- Mr Golicha in addition requested JICA Study Team to make a comprehensive power point presentations showing both the components of grant and loan projects during such a meeting.
- The presentations should show clearly how Kwale County would benefit from the project since water will be abstracted from their county to be used at SEZ located in Mombasa County.
- The presentations should be sent to KPA for review before presenting to the stakeholders at Kwale County at a date which will be communicated in near future.
- Since the building component was at raw stage, the component was not discussed in details.

Wrap up for the meeting

Mr. Golicha thanked the participants for their presentation and attending the meeting.

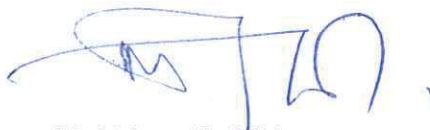
The meeting ended at 13:00 hours

	Delivered by JICA study Team ● Presentations materials
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**MINUTES OF MEETING HELD ON 8/08/2019 AT FINANCIAL CONFERENCE ROOM, KPA
MONBASA**



**Masanori TEDDY
Team Leader
JICA Study Team**



**Mr. Mohamed I. Golicha
Principal Statistician
Kenya Ports Authority**

(3) 2019年11月26日協議

打合せ議事録を次頁以降に示す。

MINUTES OF MEETING HELD ON 26/11/2019 AT KPA MONBASA

Project Title	Infrastructure Development in Mombasa Special Economic Zone		
Subject	Minutes of the presentation of Draft Preparatory Survey Report (DPSR) for Mombasa SEZ		
Date & Time	26/11/2019	9:00 pm	Venue KPA Finance Conference Room

Attendance:

Find the attached

Agenda:

1. Briefing of the content of the project in DPSR
2. Presentation and Discussion of Outline Design of Water Supply Component
3. Presentation and Discussion of Outline Design of Drainage Component
4. Presentation and Discussion of Outline Design of D1 and Land Component and Building
5. Presentation and Discussion of Outline Design of Road Component
6. Presentation and Discussion of Obligation of receipt country including the Implementation Schedule

The meeting started with invitation of the participants by the Chair, Mr. William Tenay of Kenya Ports Authority (KPA) who invited the participants to introduce themselves. Afterwards the Chair invited the JICA Study Team (JST) to steer the day's presentations. Mr. Yamadera of JST expounded on the agenda of the meeting. The KPA informed the presentations were spread across the four days of the week but there was consensus that all the presentations to be made within the same day.

Results of the presentations

The following were important points to note;

A. Water Component

The JST made a presentation on the Outline Design of Water Supply component and the KPA inquired about the following points.

- 1) The KPA inquired about the land space where water supply pipes were installed, and the existing structures/buildings to be affected by the pipe installation works. The JST answered that EIA report, in which land acquisition/compensation matters along the pipe routes are addressed, is now being finalized. This EIA report will be submitted to the KPA shortly.
- 2) The KPA inquired about the responsible organization of O&M of Water Kiosks to be provided under the Project. The JST replied that Kwale Water would be responsible for management of Water Kiosk.
- 3) The KPA asked a question that water pipe connection to Mombasa was made from the water pipe before Water Reservoir or after, and who will manage the water supply to Mombasa. The JST answered that the connection pipe started after Water Reservoir and the KPA was the responsible organization for the water supply.
- 4) The KPA presented a concern about lifetime of the borehole wells to be used as water sources, in terms of potential of the aquifer. The JST mentioned that it was difficult to reply at the meeting because those wells were provided from the 'Design Mission for Mombasa Special Economic Zone Development Zone' of JICA. The JST would check this subject.
- 5) The KPA inquired that the borehole wells to be used for Mombasa SEZ were same wells as used for Shimoni or not. The JST mentioned the borehole wells was developed only for the Mombasa SEZ.
- 6) The KPA expressed a concern about the water sales by the KPA to Kwale County where the water intake wells were located.
- 7) The KPA inquired which organization would take care of the water supply pipes and the related facilities provide under the Project. The JST mentioned that it will be the KPA.
- 8) The KPA inquired that the design catered for the distribution lines within the Mombasa SEZ area. The JST answered that branching facilities for distribution lines were provided on the main distribution pipe at some locations.

MINUTES OF MEETING HELD ON 26/11/2019 AT KPA MONBASA

B. Drainage

Mr. Tanabe of JST made a presentation on the Outline Design of Drainage component and the KPA commented and inquired about the following points.

- 1) The KPA commented regarding the future land use map that the legend for Residential Area needed to be amended, so there was need to revise the color coding. The JST agreed to revise the legend.
- 2) The KPA asked a question if the designer considered the future development in the drainage design. The JST answered that the design was made applying runoff discharge from the basin accommodating future development of SEZ.
- 3) The KPA inquired how the flash floods would be absorbed given that the design is based on natural drainage. The JST answered that there would two diversion channels provided for such occurrences so that flood flow can be diverted without damages to the embankment of new road facilities.
- 4) The KPA asked a question that sewerage system was included in the design. It was confirmed by both parties that sewage system was not considered in the Project scope.
- 5) The KPA recommended to consider on river bank improvement, how the seepage be handed from the sides and to consider some reinforcement extends to behind the gabions so as to avoid scoring due to seepage. The JST noted this.
- 6) The KPA asked a question if the design took note of the land out crops at Dongu Kundu which was hilly and undulated area may affect the natural drainage after leveling. The JST answered a proper drainage facility should be considered together with respective land levelling plans in the future.

C. Land Development

Mr. Kawahara of JST made a presentation on the Outline Design of Land Development component and the KPA commented and inquired about the following points.

- 1) The KPA inquired why the designer for land development used temporary drainage for the D1 land development area. The JST answered that it is because the land was a virgin land and layout design for the future land use or development of the KPA was not known at present.
- 2) The KPA inquired that where the excess soil would be taken to or where it would be used. The JST answered that normal excess soil would be used for road embankment and foundation of water reservoir, and black cotton soil would be disposed in soil disposal area in the SEZ.
- 3) The KPA inquired if there was possibility that foundation of the gabion structure in front of the concrete retaining wall located at the slope end of the north embankment was scored by wave action. The KPA advised to check the design considering low tide water level. The JST noted this.

D. Road component

Mr. Tanabe of JST made a presentation on the outline design of Road component and the KPA commented and inquired about the following points.

- 1) The KPA inquired why the initial 2.78 km section of access road is referred to Temporary Road. The KPS further mentioned that it should be referred to Phase 1 of Port Access Road. The JST explained that any pavement would not be provided to this road section and it was used only for access to construction work sites, therefore this road section is considered to be a temporary road.
- 2) The KPA inquired if there was provision for foot paths on the Temporary Road. The JST answered that foot path would be provided on one side.
- 3) The KPA inquired if there was provision for road side ditch on the Port Access Road. The JST answered that road side ditch is provided for the slope end of cut slope and embankment slope.
- 4) The KPA inquired if there was provision for guardrail and street lighting on the road. The JST answered that guardrail was provided for the Internal Access Road and Access Road to Management Building, but street lighting would not be provided.
- 5) The KPA inquired if tree planting was considered along the road as protective measure. The JST answered that vegetation was planning for slope protection purpose of embankment slope, but no tree planting.

E. Implementation schedule


Mr. Yamadera of JST explained the outline of the Project Implementation Schedule and, especially, items

MINUTES OF MEETING HELD ON 26/11/2019 AT KPA MONBASA

<p>to be undertaken by KPA before the Bidding.</p> <p>F. Building Design</p> <p>Mr. Yamadera of JST went through the earlier comments from the KPA for the buildings and demonstrated how it was applied to the outline design. The comments are as follows.</p> <p>- elevator, consideration of persons with special needs, a brief of building, to accommodate benches and serving counters/benches of ground floor, open space of second floor, the position of reception area, location of board room</p>	
<p>Wrap up for the meeting</p>	<p>The KPA understood and agreed the outline design and the obligation of the receipt country including the implementation schedule for the Grant Project. The design comment from KPA shall be reflected to the Final Preparatory Survey Report.</p> <p>Mr. Tenay of KPA thanked the participants for their presentation and attending the meeting.</p> <p>The meeting ended at 16:00 hours</p>
	<p>Delivered by JICA study Team</p> <ul style="list-style-type: none">- Draft Preparatory Survey Report (6 sets)- Draft Outline Design Drawing (1 set)- Presentation Materials of Outline Design (5 sets)

for

Masanori TEDDY
Team Leader
JICA Study Team


 29.11.19
William K. Tenay
Principal Civil Engineer (P&D)
Kenya Ports Authority


(4) 2019年11月28日協議

打合せ議事録を次頁以降に示す。

MINUTES OF MEETING HELD ON 28/11/2019 AT KPA MONBASA

Project Title	Infrastructure Development in Mombasa Special Economic Zone		
Subject	Minutes of the presentation on the update of Draft Preparatory Survey Report for Mombasa SEZ		
Date & Time	28/11/2019	10:00 am	Venue Head Cooperate Room
Attendance:			
<ol style="list-style-type: none"> 1. Mr. Martin Mutuku (KPA) 2. Mr. Mohamed Golicha (KPA) 3. Mr. William Tenay (KPA) 4. Mr. Akira Yamadera (JST) 5. Mr. Isao Tanabe (JST) 6. Mr. Tatsuya Kawahara (JST) 7. Ms. Jokastah Kalungu (JST) 			
Agenda:			
Update the head of cooperate on design works as well as Kenya Ports Authority (KPA) obligations			
Results of the presentations			
The following were important points to note;			
<ul style="list-style-type: none"> ✓ The JICA Study Team (JST) introduced the progress of the outline design in the Project and the KPA obligations including the implementation schedule. ✓ The KPA would like to know who is obliged to bear the cost for banking arrangement of the Project. The JST will inform to the KPA. ✓ The KPA would like to clarify who will undertake the environmental monitoring of the project. The JST will inform to the KPA in due course. ✓ It is confirmed to urgently have a meeting with the CWWDA to clarify on the mandate of stakeholders involved in water infrastructure, distribution and selling. The KPA is tasked to organize the meeting between the KPA and the CWWDA as soon as possible. 			
Wrap up for the meeting			
Mr. Mutuku thanked the participants for their presentation and attending the meeting.			
The meeting ended at 12:00 hours			
	Delivered by JICA study Team ● Presentations materials		

for

 Masanori TEDDY
 Team Leader
 JICA STUDY TEAM


 Martin Mutuku
 Head of Corporate Development
 Kenya Ports Authority

(5) 2020年1月21日協議

打合せ議事録を次頁以降に示す。

MINUTES OF MEETING HELD ON 21/1/2020 AT KPA MONBASA

Project Title	Infrastructure Development in Mombasa Special Economic Zone		
Subject	Minutes of the presentation on the update of Draft Preparatory Survey Report for Mombasa SEZ		
Date & Time	21/1/2020	10:00 am	Venue Finance Conference Room
Attendance: See the attachment			
Agenda: Revised Work Items of the Project			
Results of the presentations The following were important points to note;			
<ul style="list-style-type: none"> • Arch. James Rai welcomed the team for the meeting and requested a recap of the previous meeting held on 26th November 2020. • Mr. Yamadera introduced the project in details for the four components • The JICA Study Team (JST) explained the progress of the preparatory survey for the Project and presented the necessity of revision of the work items in the project to meet the limited budget. The KPA agreed to the revised work items in the Project. • The KPA and the JST discussed the progress of the KPA's obligation of the Project. To achieve the implementation schedule as shown in the Minutes of Meeting in November 26, 2019, the KPA shall continue to undertake the necessary action. 			
Wrap up for the meeting Eng. Mjambili thanked the participants for their presentation and attending the meeting.			
The meeting ended at 11:33am			
	Delivered by JICA study Team • Revised Work Item of the Project (3 sheets)		

f.r.
 Masanori TEDDY
 Team Leader
 JICAA STUDY TEAM

M. Jambili
 Geoffrey Mjambili
 Principle Electrical Engineer
 Kenya Ports Authority

Table 1.1.1 Work item in the Project (1/3)

Red Text: Revised Record of Draft Preparatory Survey Report in Nov.2019

As of Dec.2019

Component	Item	
Water Supply	1. Intake Facilities (3 wells)	
	1) Submersible Pump	Submersible Pump: - Well No.2; $q=0.417 \text{ m}^3/\text{min}$, $H=74 \text{ m}$ - Well No.3; $q=0.625 \text{ m}^3/\text{min}$, $H=77 \text{ m}$ - Well No.5; $q=0.556 \text{ m}^3/\text{min}$, $H=61 \text{ m}$ instrument: 3 sets
	2) Pump pipe	Steel Pipe, Water Meter, Pressure Meter, Valves; 3 sets
	3) Accessories	well protection, gantry crane, fence, gate: 3 sets
	4) Management House	Concrete (incl. PE tank and water kiosk): 3 sets
	2. Transmission Pipe (well - BPS)	
	1) Pipe Installation	HDPE Pipe (OD160 mm): $L=9.2 \text{ km}$
	2) Accessories	Thrust block, road crossing, river crossing, valve chamber, line marker and etc.: 1 set
	3. Booster Pumping Station	
	1) Pump Admi. Building	RC (8 m x 5 m x 3 m): 1 set
	2) Underground Reservoir	RC (8.5 m x 5.5 m x 3.6 m): 1 nos.
	3) Transmission Pump	$q=0.868 \text{ m}^3/\text{min}$, $h=86 \text{ m}$: 3 nos. (incl. standby)
	4) Distribution Pump	$q=0.146 \text{ m}^3/\text{min}$, $h=147 \text{ m}$: 2 nos. (incl. standby)
	5) Pipe Installation	steel pipe, water meter, valves: 1 set
	6) Instrument	water gauge, control panel and etc.: 1 set
7) Generator	100 kVA (incl. fuel tank): 1 set	
8) Generator	50 kVA (incl. fuel tank): 1 set	
9) Chlorine Injector	1 set	
10) Accessories	Replacement of fence and gate: 1 set	
4. Main Transmission Pipe (BPS - WSR)		
1) Pipe Installation	HDPE Pipe (OD280 mm): $L=16.2 \text{ km}$	
2) Accessories	Thrust block, road crossing, valve chamber, line marker and etc.: 1 set	
5. Distribution Pipe (Kuwale WSP)		
1) Pipe installation	HDPE Pipe (OD90 mm): $L=14.5 \text{ km}$	
3) Accessories	Thrust block, road crossing, valve chamber, line marker and etc.: 1 set	
3) Water Kiosk	RC: 7 nos.	
6. Water Service Center		
1) Earthwork	$11,250 \text{ m}^2$	
2) Water supply Admi. Building	RC (incl. water quality labo.): 1 nos.	
3) Reservoir	RC ($1,000 \text{ m}^3$) 1 nos.	
4) Elevated Tank	Steel Panel Tank (50 m^3 , $h=15 \text{ m}$): 1 nos.	
5) Control Chamber	1 nos.	
6) Pump	$q=0.083 \text{ m}^3/\text{min}$, $h=20 \text{ m}$: 1 nos.	
7) Pipe Installation	thrust block, water meter, valves and etc.: 1 set	
8) Generator	5.5 kVA: 1 nos.	
9) Instrument	water gauge, control panel and etc.: 1 set	
10) Chlorine injector	1 set	
11) Accessories	fence, gate: 1 set	
7. Main Distribution Pipe		
1) Pipe Installation	HDPE Pipe (OD90 mm - 280 mm): $L=4.3 \text{ km}$	
2) Accessories	Thrust block, road crossing, valve chamber, line marker and etc.: 1 set	
8. Connection Pipe (to Mombasa WSP)		
1) Pipe Installation	HDPE Pipe (OD225 mm): $L=6.0 \text{ km}$	
2) Accessories	Thrust block, road crossing, valve chamber, line marker and etc.: 1 set	

Table 1.1.1 Work item in the Project (2/3)

Red Text: Revised Record of Draft Preparatory Survey Report in Nov.2019

As of Dec.2019

Component	Item	
Drainage Improvement	1. Diversion Channel-1 1) open channel at upstream 2) open channel at downstream	wet masonry: W x D=5.0 m x 2.1 m, bottom slope = 1.0 ‰, side slope = 1:2.0, L=188 m wet masonry: W x D=20.0 m x 2.5 m, bottom slope = 0.5 ‰, side slope = 1:2.0, L=120 m
	2. Diversion Channel-2 1) open channel at upstream 2) open channel at middle stream 3) open channel at down stream 3. Bank Protection 1) natural channel (3 nos.)	RC: W x D = 4.0 m x 1.5 m, bottom slope = 1.0 ‰, L=60 m wet masonry: W x D = 4.0 m x 1.5 m, bottom slope = 1.0 ‰, side slope = 1:2.0, L = 137 m wet masonry & unsupported excavation: W x D=4.5 m x 1.9 m, bottom slope = 0.5 ‰, side slope = 1:2.0, L=159 m gabion: W = 5 m, max.side lope = 1:1.0, h = 2~3 m, L = 135 m
Land Reclamation	1. Earthwork 1) Felling & Grubbing 2) Cutting 3) Filling 4) Removal of Surplus Work 5) Slope Protection 6) Drainage	88,600 m ² 630,700 m ³ 88,800 m ³ 315,000 m ³ Concrete Shotcreting: t=100 mm, 4,680 m ² Concrete Frame (incl. planting works): 6,894 m ² Retaining Wall: 110 m Slope drain: 588 m Slope vertical drain: 787 m Connection basin: 34 nos. Discharging pipe (HDPE 300 mm, wave type): 10 m Step drain: 23 m Drain pipe (HDPE 300 mm, wave type): 260 m Unsupported canal: 1,108 m
	2. Building Support Work 1) Parking 2) Fence	Concrete pavement: 3,190 m ² 450 m
	3. Administration Building	2nd floor (2 x 400 m ²): 1 set

Table 1.1.1 Work item in the Project (3/3)

Red Text: Revised Record of Draft Preparatory Survey Report in Nov.2019

As of Dec.2019

Component	Item	
Component	Item	
Road Construction	1. Temporary Road	L=2.78 km
	1) Cutting	40,800 m ³
	2) Filling	189,100 m ³
	3) Drainage	- box culvert type 2: RC (L=50 m, W=2.0 m, H=2.0 m, 2 lane, bottom slope=3.0 ‰) - box culvert type 3: RC (L=47 m, W=2.5 m, H=2.2 m, 4 lane, bottom slope=1.9 ‰) - drain ditch (L=2,100 m, W=500 mm, D=500 mm)
	2. Waiting Bay - Control Gate Road	L=0.36 km, waiting bay (2,310 m ²)
	1) Cutting	35,200 m ³
	2) Embankment	23,400 m ³
	3) Slope Protection	- concrete Shotcreting: t=100 mm, 178 m ² - concrete flame incl.planting work: 2,100 m ²
	4) Drainage	drain ditch (L=270 m, W=500 mm, D=500 mm)
	3. Internal access Road	L=1.10 km incl. foot path (two sides, W=2.5 m), marshalling area (2,310 m ²)
1) Cutting	206,100 m ³	
2) Embankment	80,400 m ³	
3) Slope Protection	- concrete Shotcreting: t=100 mm, 13,700 m ² - concrete flame incl.planting work: 10,100 m ²	
4) Drainage	- box culvert type 1: RC (L=62 m, W=2.0 m, H=2.0 m, 1 lane, bottom slope=3.0 ‰) - pipe culvert: Hume concrete pipe (L=45 m, 1,200 mm dia., 1 lane, bottom slope=5.0 ‰) - drain ditch: concrete (L=1,040 m, W=600 mm, D=600 mm) - drain ditch: concrete (L=550 m, W=700 mm, D=700 mm)	
5) Ancillary Works	Guardrail: 2,200 m	
4. Access road to Administration building	L=0.83 km, incl. foot way (one side, W=2.5 m)	
1) Cutting	600 m ³	
2) Embankment	75,900 m ³	
3) Slope Protection	- Concrete Shotcreting: 550 m ² - Concrete Frame (incl. planting work): 13,600 m ²	
4) Pavement	- carriage way: concrete pavement - footpath: asphalt pavement	
	- 2 lane carriage way (sub-base course: 175 mm, base course: 150 mm, concrete slab: 300 mm), W=3.5 m - footpath (base course: 100 mm, asphalt concrete surface: 30 mm), W=3.5m	
5) Drainage	- box culvert type 4: RC (L=59 m, W=2.0 m, H=2.3 m, 1 lane, bottom slope=3.0 ‰) - drain ditch: concrete (L=660 m, W=600 mm, D=600 mm)	
6) Ancillary Works	Guardrail: 1,515 m, fence: 690 m	

資料-2 図面

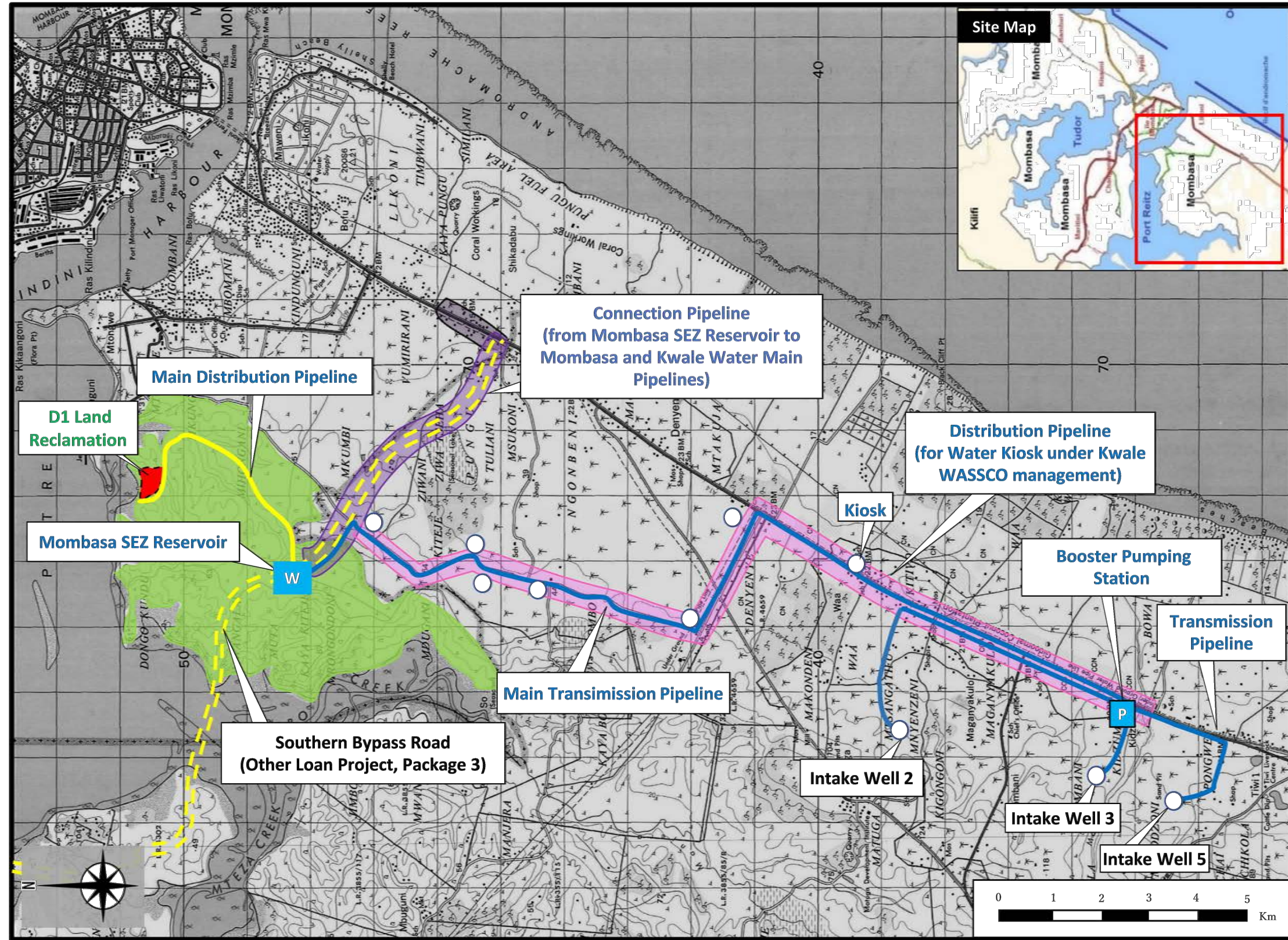
モンバサ経済特区インフラ整備計画準備調査


準備調査報告書

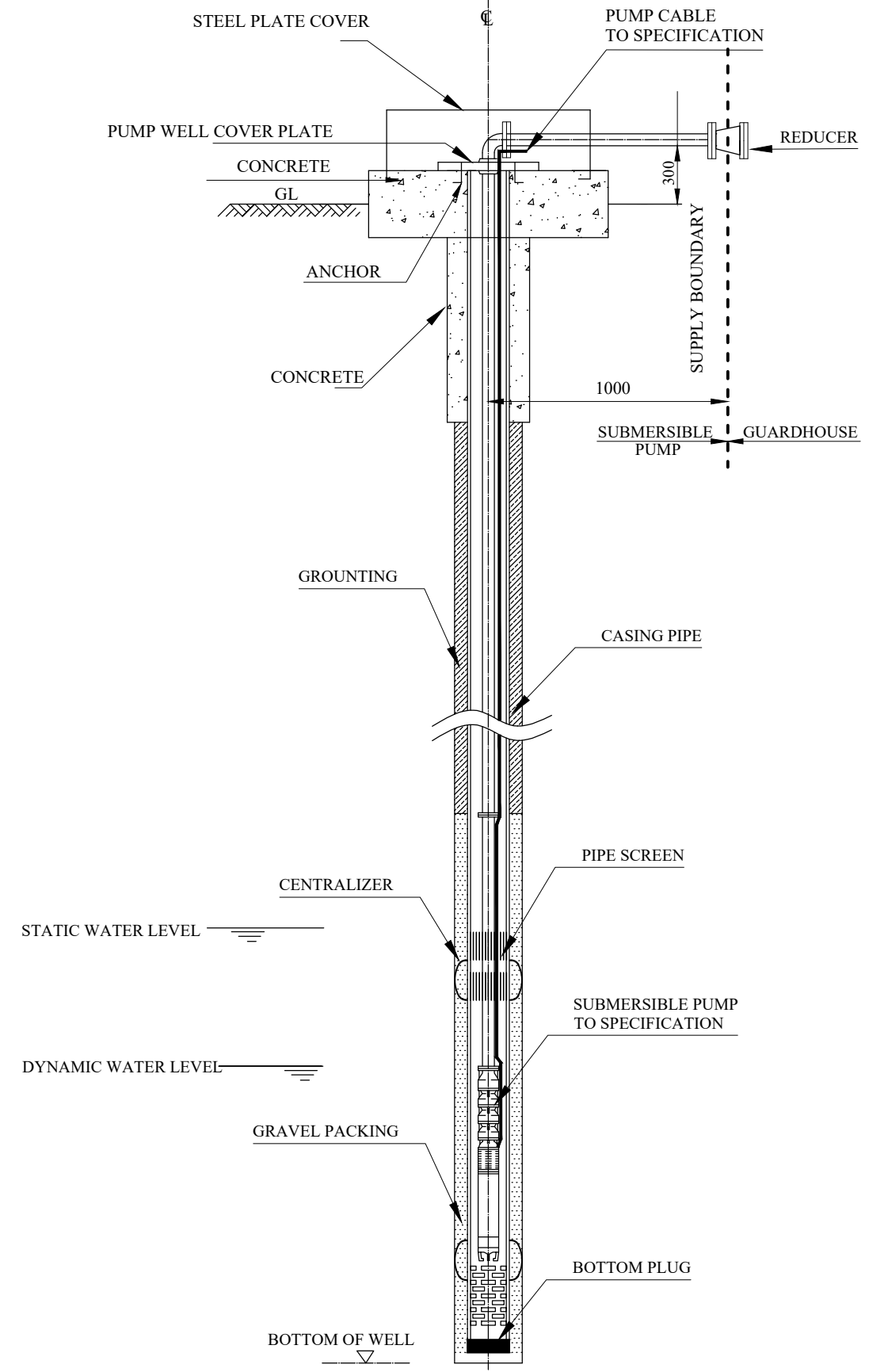
概略設計図面集 給水コンポーネント

NO.	DRAWING NO.	TITLE
LOCATION MAP OF PLANNED FACILITIES (WATER SUPPLY)		
WS-1	WS-GEN-001	LOCATION MAP OF PLANNED FACILITIES (WATER SUPPLY)
BOREHOLE FACILITIES		
WS-2	WS-BH-001	SUBMERSIBLE MOTOR PUMP
WS-3	WS-BH-002	LAYOUT PLAN OF WELL NO.2
WS-4	WS-BH-003	LAYOUT PLAN OF WELL NO.3
WS-5	WS-BH-004	LAYOUT PLAN OF WELL NO.5
WS-6	WS-BH-005	PIPE WORK AT GUARDHOUSE
WS-7	WS-BH-006	GANTRY CRANE DETAILS
WS-8	WS-BH-007	GUARDHOUSE WITH KIOSK (1/4)
WS-9	WS-BH-008	GUARDHOUSE WITH KIOSK (2/4)
WS-10	WS-BH-009	GUARDHOUSE WITH KIOSK (3/4)
WS-11	WS-BH-010	GUARDHOUSE WITH KIOSK (4/4)
WS-12	WS-BH-011	GATE AND DRAIN DETAILS
WS-13	WS-BH-012	FENCE DETAILS
PIPELINE STRUCTURE (TRANSMISSION PIPE)		
WS-14	WS-TP-037	AIR VALVE CHAMBER
WS-15	WS-TP-038	BLOW-OFF CHAMBER
WS-16	WS-TP-039	PIPE INSTALLATION, LINE MARKER AND THRUST BLOCK
WS-17	WS-TP-040	RIVER AND ROAD CROSSING OF PIPE
BOOSTER PUMPING STATION		
WS-18	WS-BPS-001	LAYOUT PLAN
WS-19	WS-BPS-002	LAYOUT OF SUCTION TANK
WS-20	WS-BPS-003	DETAIL OF SUCTION TANK (1/2)
WS-21	WS-BPS-007-1	CONTROL ROOM PLAN(1/3)
WS-22	WS-BPS-007-2	CONTROL ROOM PLAN(2/3)
WS-23	WS-BPS-007-3	CONTROL ROOM PLAN(3/3)
WS-24	WS-BPS-008	CONTROL ROOM SECTION
MOMBASA SEZ RESERVOIR		
WS-25	WS-MSR-002	LAYOUT PLAN OF MOMBASA SEZ RESERVOIR

NO.	DRAWING NO.	TITLE
WS-26	WS-MSR-003	SECTION OF MOMBASA SEZ RESERVOIR
WS-27	WS-MSR-004-1	LAYOUT OF RESERVOIR(1/3)
WS-28	WS-MSR-004-2	SECTION OF RESERVOIR
WS-29	WS-MSR-005-1	DETAIL OF RESERVOIR (1/3)
WS-30	WS-MSR-005-2	DETAIL OF RESERVOIR (2/3)
WS-31	WS-MSR-005-3	DETAIL OF RESERVOIR (3/3)
WS-32	WS-MSR-008	ELEVATED TANK (1/3)
WS-33	WS-MSR-009	ELEVATED TANK (2/3)
WS-34	WS-MSR-010	ELEVATED TANK (3/3)
WS-35	WS-MSR-011	CONTROL CHAMBER PLAN AND SECTION
WS-36	WS-MSR-012	CONTROL CHAMBER VIEWS
WS-37	WS-MSR-015	BRANCH CHAMBER 1
WS-38	WS-MSR-016	BRANCH CHAMBER 2
WS-39	WS-MSR-017	BRANCH CHAMBER 3
WS-40	WS-MSR-018	CHAMBER 1
WS-41	WS-MSR-019	CHAMBER 2
WATER KIOSK (DISTRIBUTION PIPE)		
WS-42	WS-DP-006	WATER KIOSK (1/4)
WS-43	WS-DP-007	WATER KIOSK (2/4)
WS-44	WS-DP-008	WATER KIOSK (3/4)
WS-45	WS-DP-009	WATER KIOSK (4/4)
WATER SUPPLY ADMINISTRATION BUILDING		
WS-46	WS-AB-001	LAYOUT PLAN
WS-47	WS-AB-002	FLOOR PLAN, ELEVATION, SECTION




<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE:</p> <p>LOCATION MAP OF PLANNED FACILITIES (WATER SUPPLY)</p>		
		<p>SCALE:</p> <p>1:8000</p>	<p>DATE:</p> <p>OCT 2022</p>	<p>DRAWING NO.:</p> <p>WS - GEN - 001</p>	

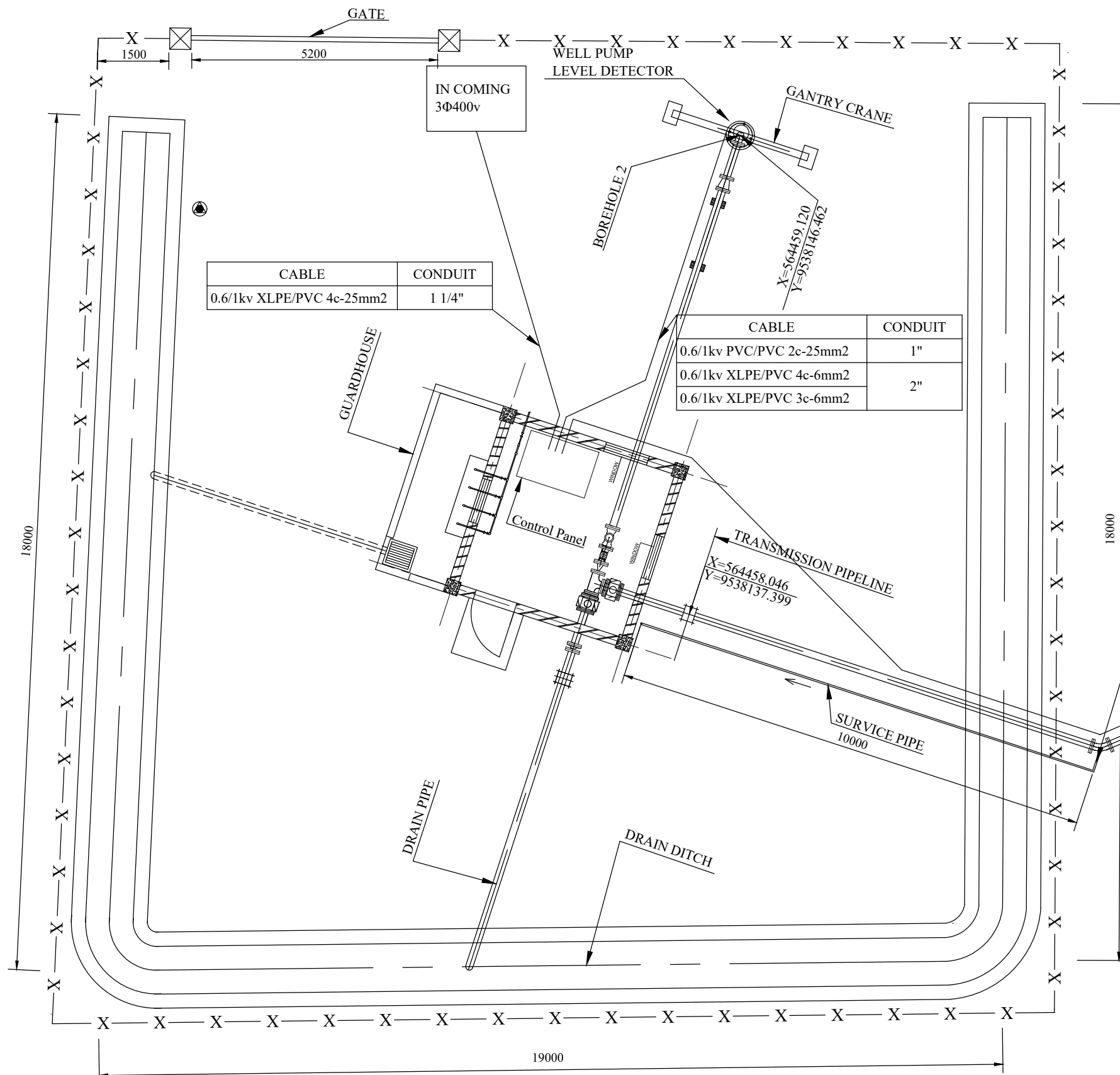


DESIGN DATA FOR PUMPS

Borehole No.	Borehole Depth (GL-m)	Outer Diameter (mm)	Casing Material	Static Water Level (GL-m)	Dynamic Water Level (GL-m)	Discharge/Yield (m ³ /hr)
2	80	203	GI	48.50	59.52	25.2
3	80	203	GI	43.80	65.30	38.5
5	63	152	uPVC	45.01	47.33	35.0

NOTE: Electrode shall be equipped in the borehole.(One pole for low and the other for common)

OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: BOREHOLE FACILITIES SUBMERSIBLE MOTOR PUMP		
			SCALE: N.T.S	DATE: OCT 2022	DRAWING NO.: WS - BH - 001



LEGEND

● : BENCH MARK


— X — : FENCE

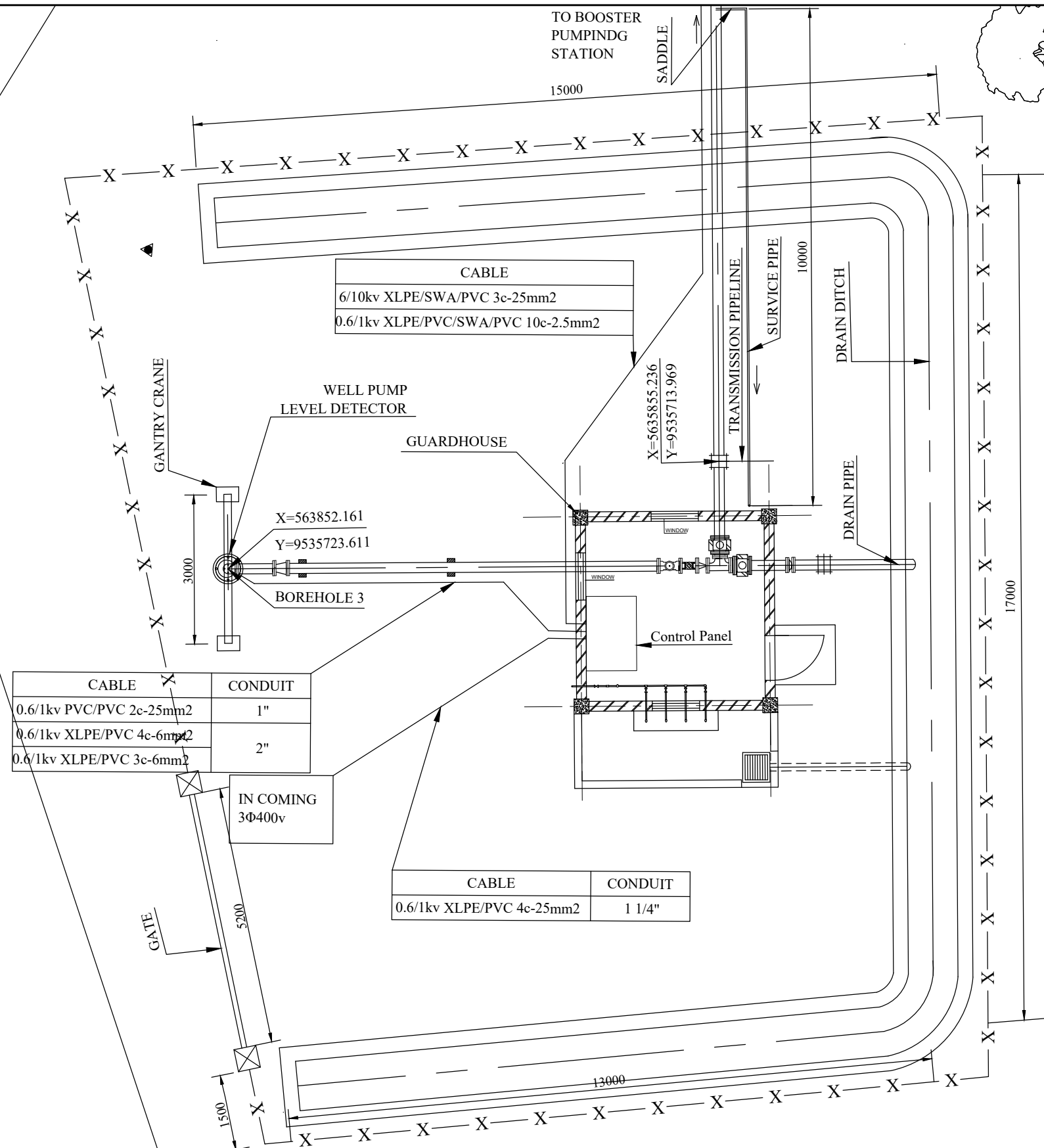
CABLE	CONDUIT
0.6/1kv XLPE/PVC 4c-25mm ²	1 1/4"

CABLE	CONDUIT
0.6/1kv PVC/PVC 2c-25mm ²	1"
0.6/1kv XLPE/PVC 4c-6mm ²	2"
0.6/1kv XLPE/PVC 3c-6mm ²	

CABLE
6/10kv XLPE/SWA/PVC 3c-25mm ²
0.6/1kv XLPE/PVC/SWA/PVC 10c-2.5mm ²

- NOTES**
1. THE EXISTING GATE AND FENCE SHALL BE REPLACED BY THE PROJECT
 2. FOR DETAILS OF DRAIN DITCH, GATE AND FENCE SEE DRAWINGS NO. WS-BH-011/012
 3. DETAIL OF SADDLE SEE DRAWINGS NO. WS-MDP-008

OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: BOREHOLE FACILITIES LAYOUT PLAN OF WELL No.2		
			SCALE: 1:100	DATE: OCT 2022	DRAWING NO.: WS - BH - 002



CABLE
6/10kv XLPE/SWA/PVC 3c-25mm ²
0.6/1kv XLPE/PVC/SWA/PVC 10c-2.5mm ²

CABLE	CONDUIT
0.6/1kv PVC/PVC 2c-25mm ²	1"
0.6/1kv XLPE/PVC 4c-6mm ²	2"
0.6/1kv XLPE/PVC 3c-6mm ²	

CABLE	CONDUIT
0.6/1kv XLPE/PVC 4c-25mm ²	1 1/4"

LEGEND

- : BENCH MARK
- : FENCE

NOTES

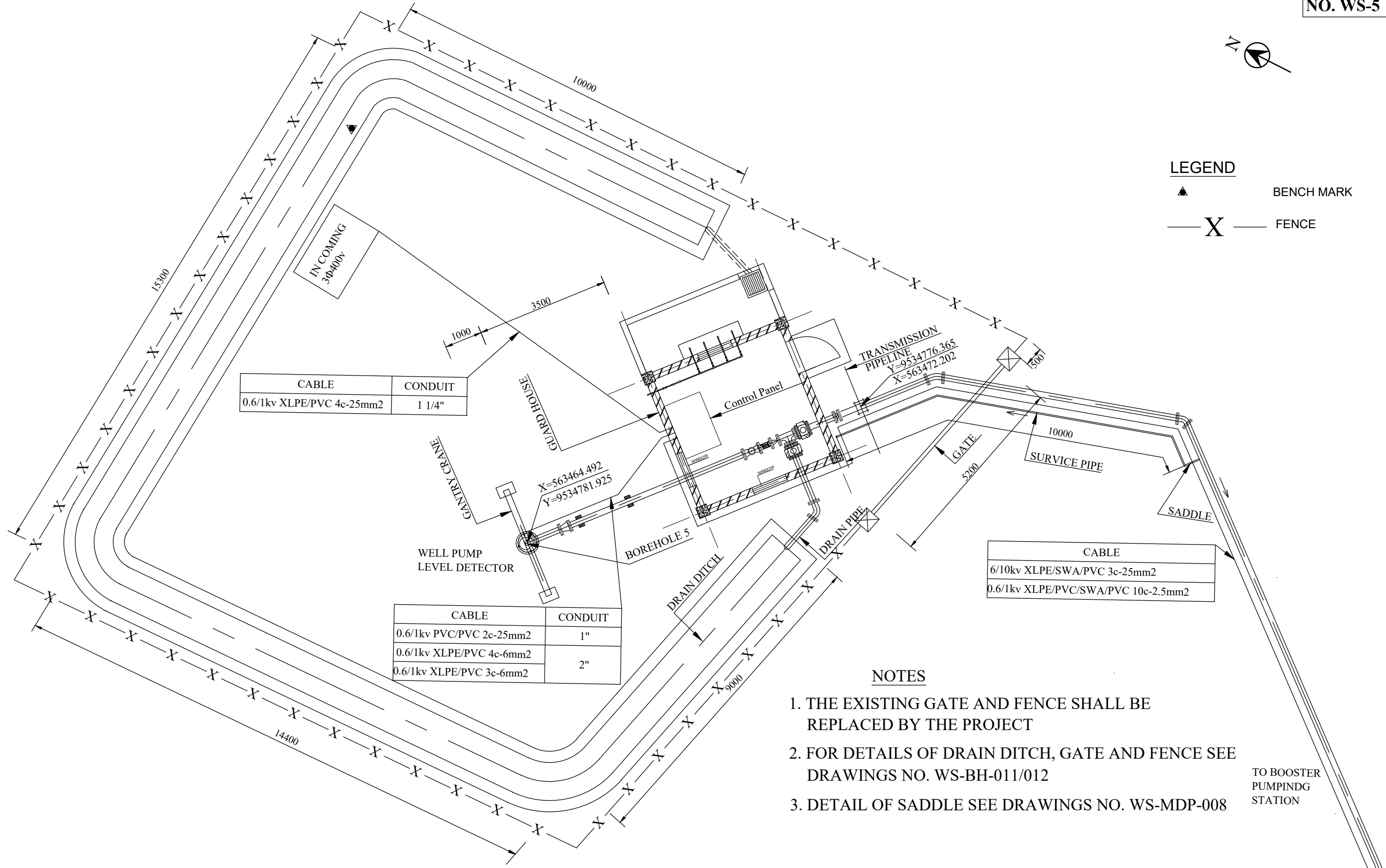
1. THE EXISTING GATE AND FENCE SHALL BE REPLACED BY THE PROJECT
2. FOR DETAILS OF DRAIN DITCH, GATE AND FENCE SEE DRAWINGS NO. WS-BH-011/012
3. DETAIL OF SADDLE SEE DRAWINGS NO. WS-MDP-008

<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE:</p> <p>BOREHOLE FACILITIES LAYOUT PLAN OF WELL No.3</p>
		<p>SCALE:</p> <p>1:100</p>	<p>DATE:</p> <p>OCT 2022</p>
		<p>DRAWING NO.:</p> <p>WS - BH - 003</p>	



LEGEND


- ▲ BENCH MARK
- X — FENCE



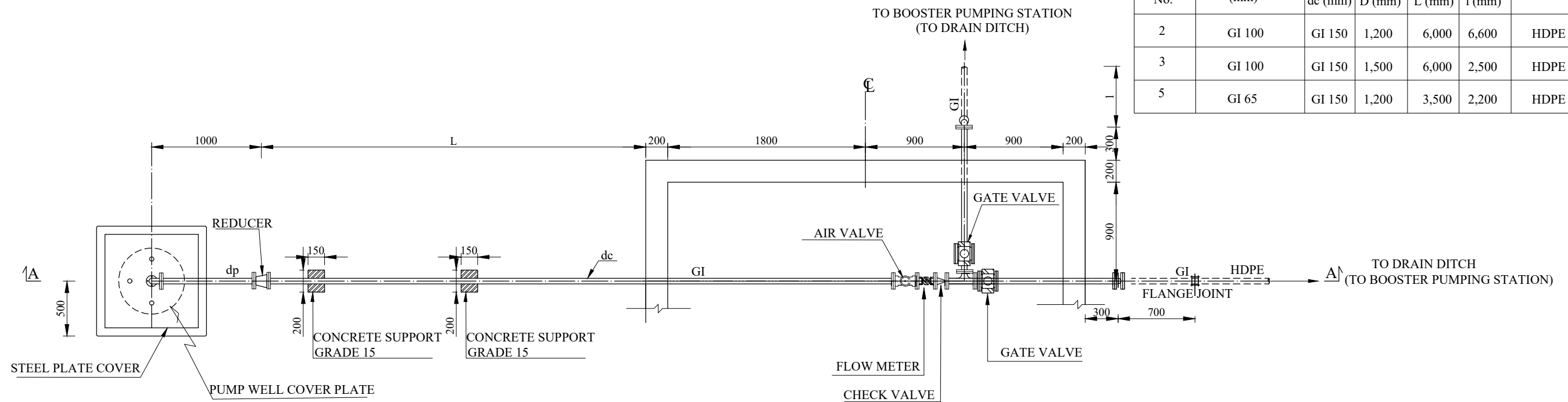
NOTES

1. THE EXISTING GATE AND FENCE SHALL BE REPLACED BY THE PROJECT
2. FOR DETAILS OF DRAIN DITCH, GATE AND FENCE SEE DRAWINGS NO. WS-BH-011/012
3. DETAIL OF SADDLE SEE DRAWINGS NO. WS-MDP-008

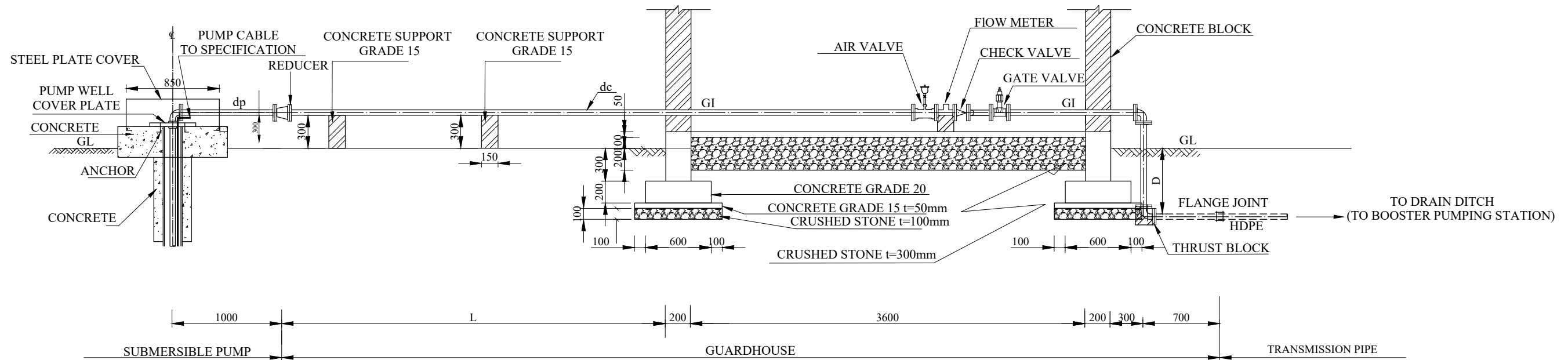
TO BOOSTER PUMPINDG STATION

<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: BOREHOLE FACILITIES LAYOUT PLAN OF WELL No.5</p>		
		<p>SCALE: 1:100</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - BH - 004</p>	

WELL No.	PUMPING PIPE dp (mm)	GUARDHOUSE				TRANSMISSION PIPE
		dc (mm)	D (mm)	L (mm)	l (mm)	
2	GI 100	GI 150	1,200	6,000	6,600	HDPE 160
3	GI 100	GI 150	1,500	6,000	2,500	HDPE 160
5	GI 65	GI 150	1,200	3,500	2,200	HDPE 160



PLAN OF GUARDHOUSE



SECTION A-A

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

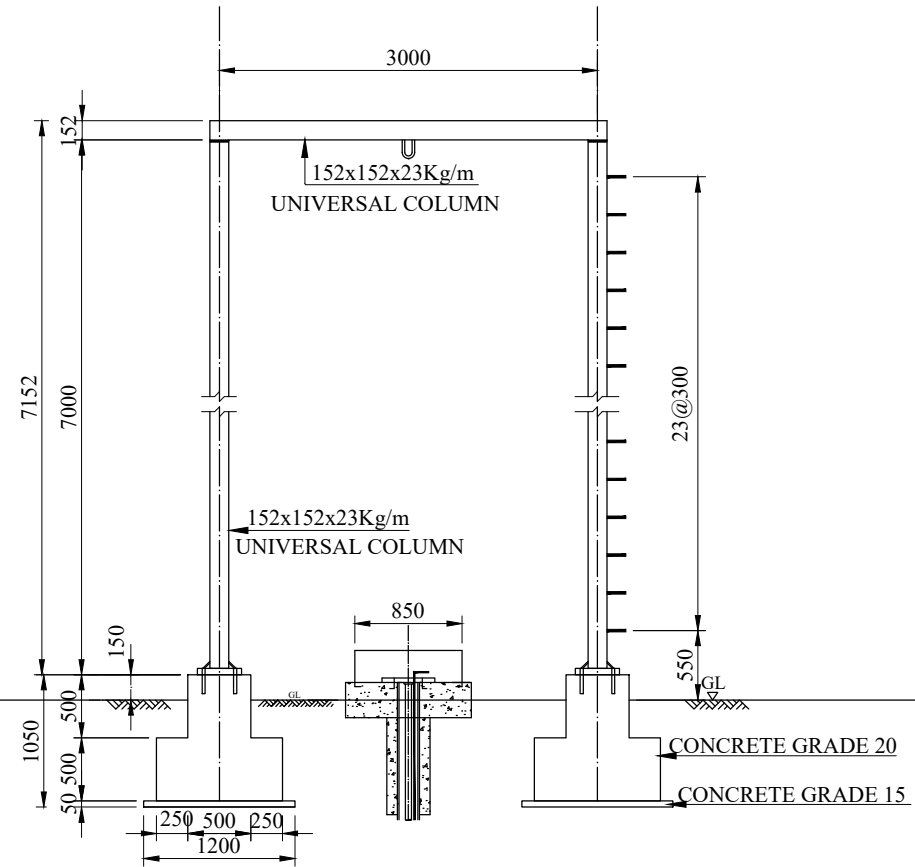
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
BOREHOLE FACILITIES
PIPE WORK AT GUARD HOUSE

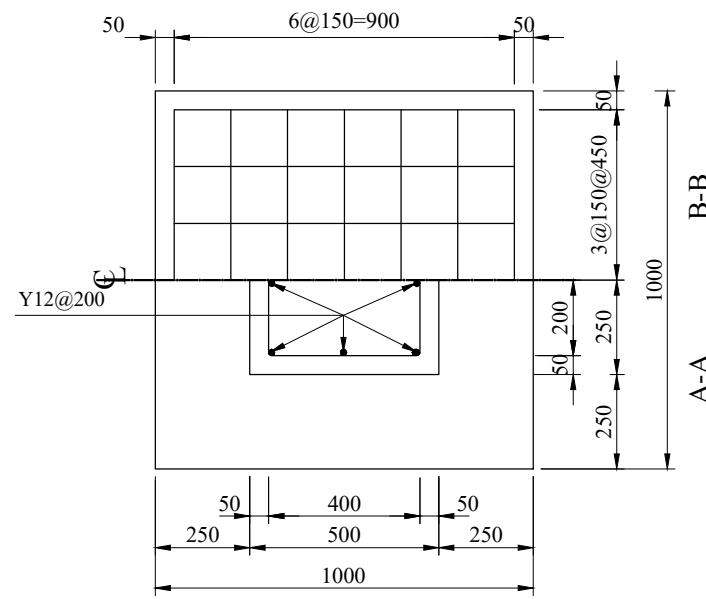
SCALE:
1:40

DATE:
OCT 2022

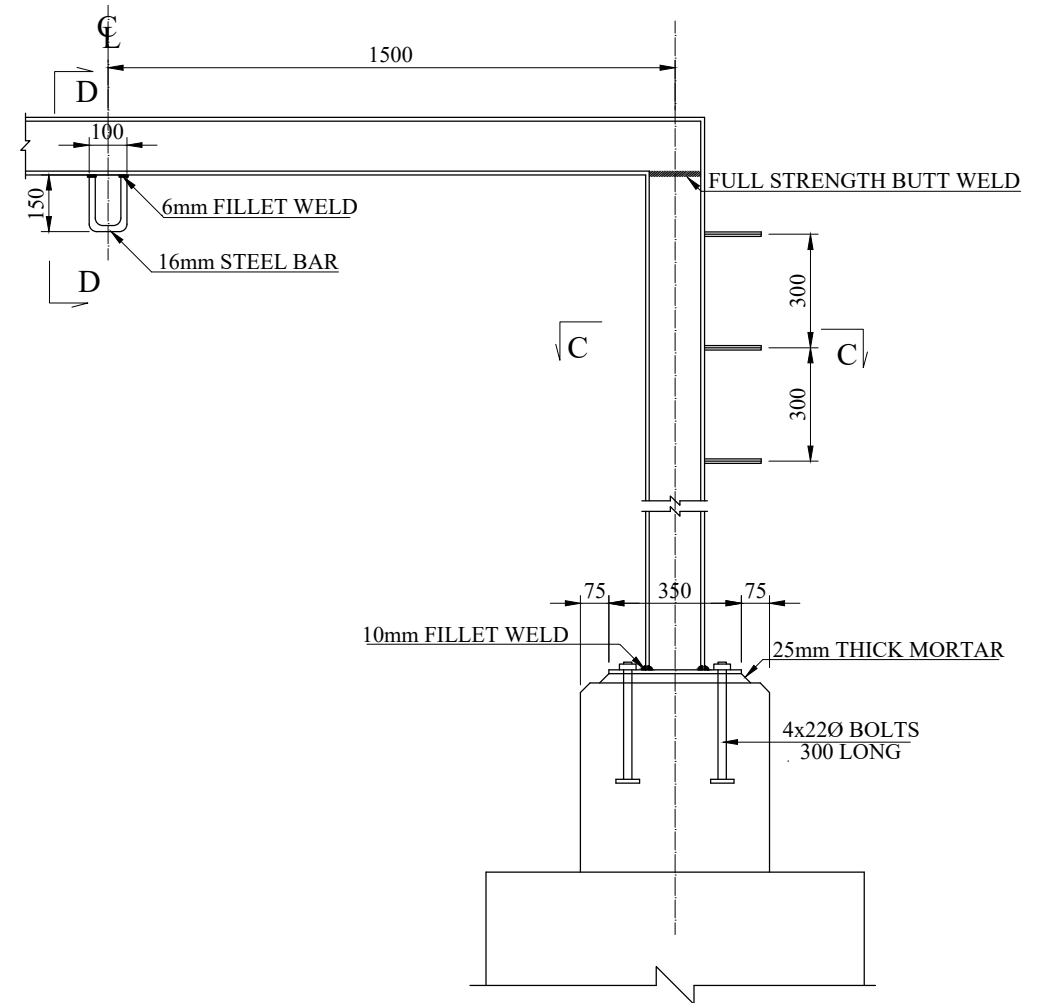
DRAWING NO.:
WS - BH - 005



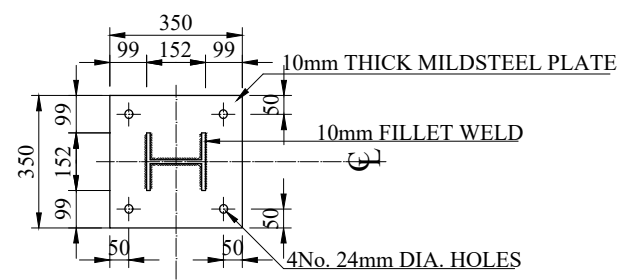
GANTRY CRANE
SCALE 1:60



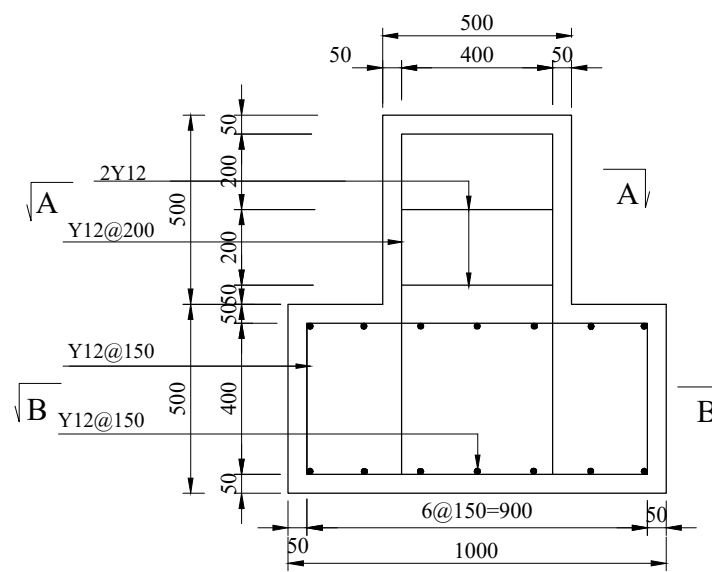
SECTIONAL PLAN A-A & B-B
SCALE 1:20



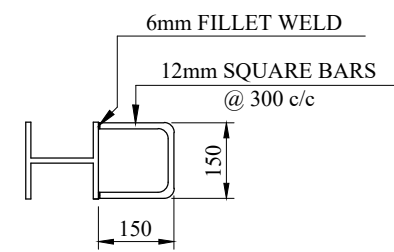
DETAIL OF GANTRY
SCALE 1:20



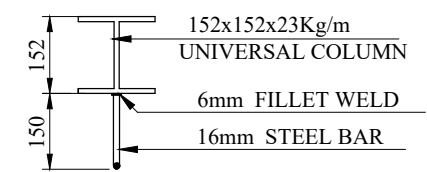
DETAIL OF BASE PLATE
SCALE 1:20



FOUNDATION BASE
SCALE 1:20



SECTION C-C
SCALE 1:15




SECTION D-D
SCALE 1:15

NOTE
THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NO. SP-046.

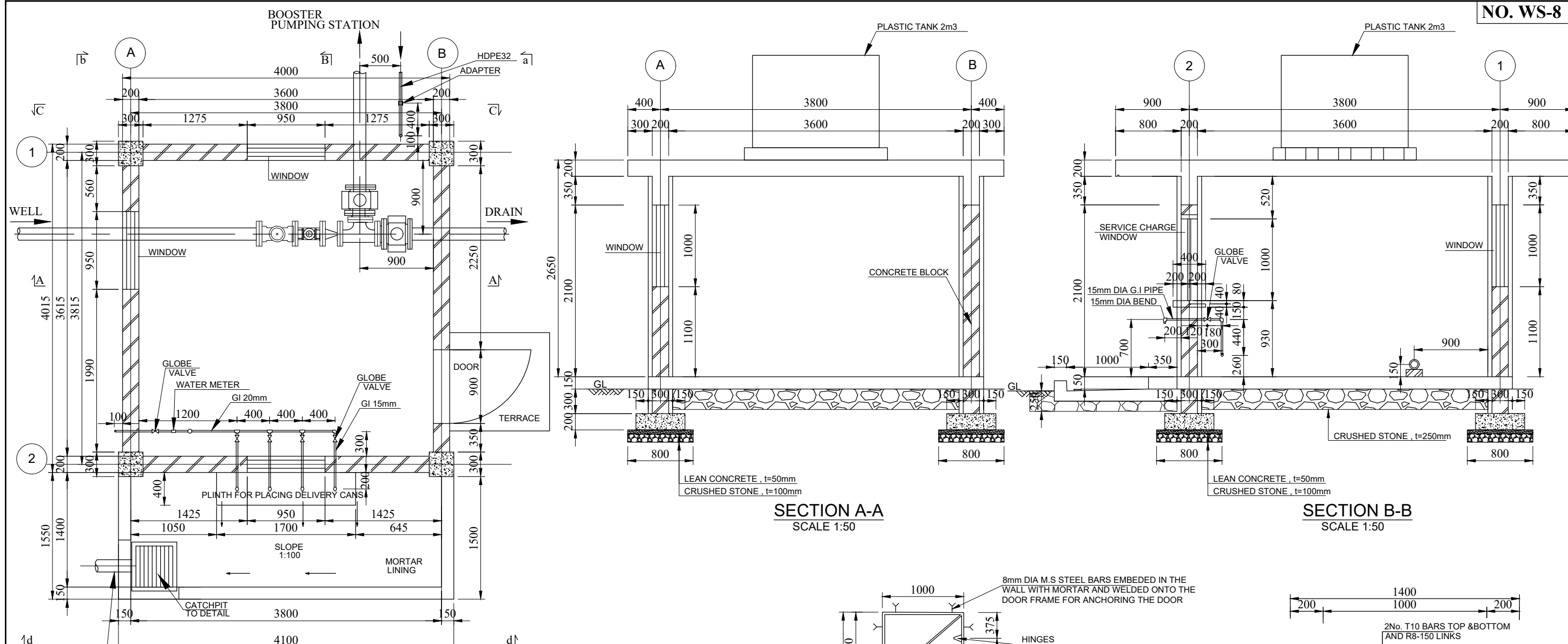
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
BOREHOLE FACILITIES
GANTRY CRANE DETAILS

SCALE: 1:60/1:20/1:15	DATE: OCT 2022	DRAWING NO.: WS - BH - 006
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PLAN
SCALE 1:50

SECTION A-A
SCALE 1:50

SECTION B-B
SCALE 1:50


DETAIL OF CATCHPIT
SCALE 1:50

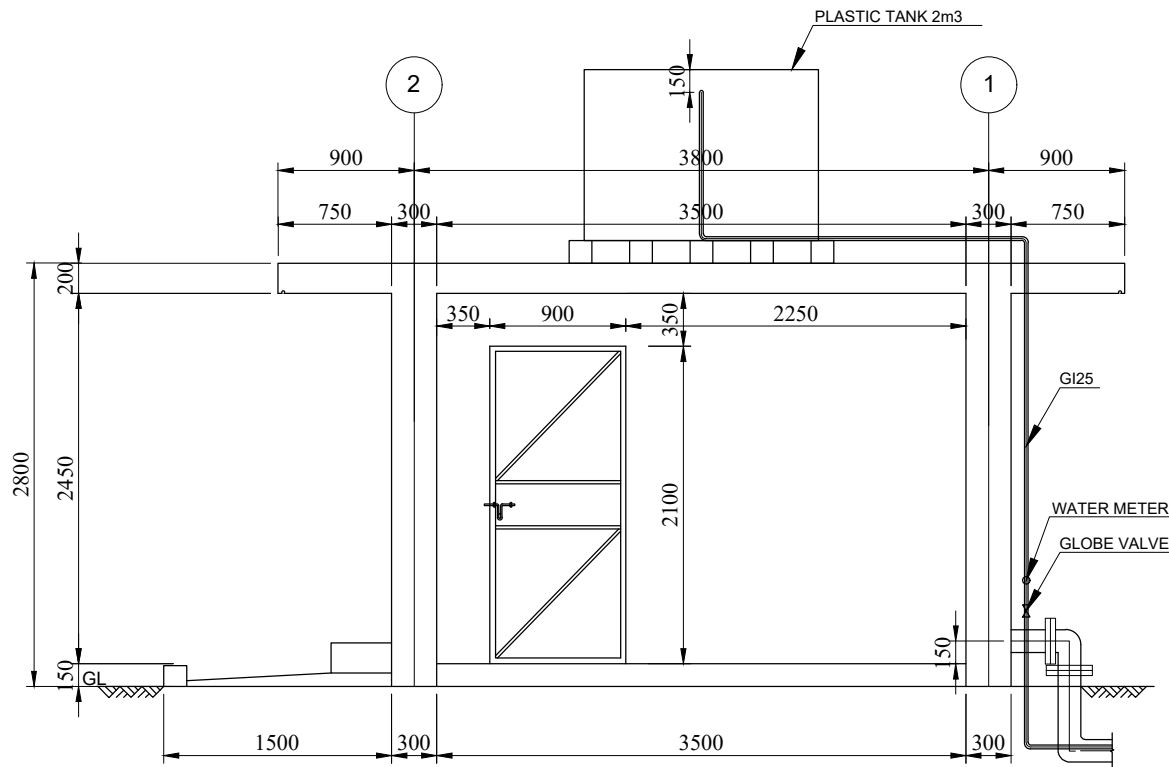
WINDOW DETAIL
SCALE 1:50

DOOR DETAIL
SCALE 1:50

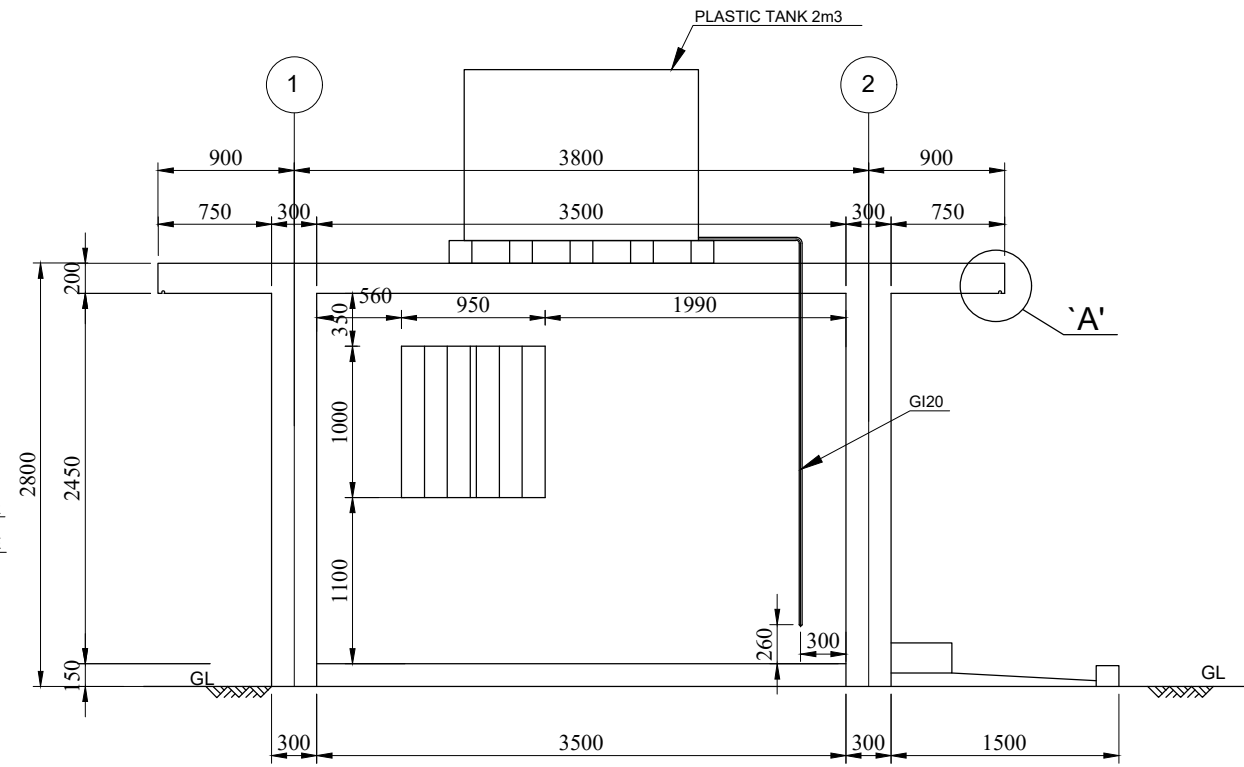
LINTEL DETAIL
SCALE 1:25

LOCKING HINGE DETAIL
SCALE 1:10

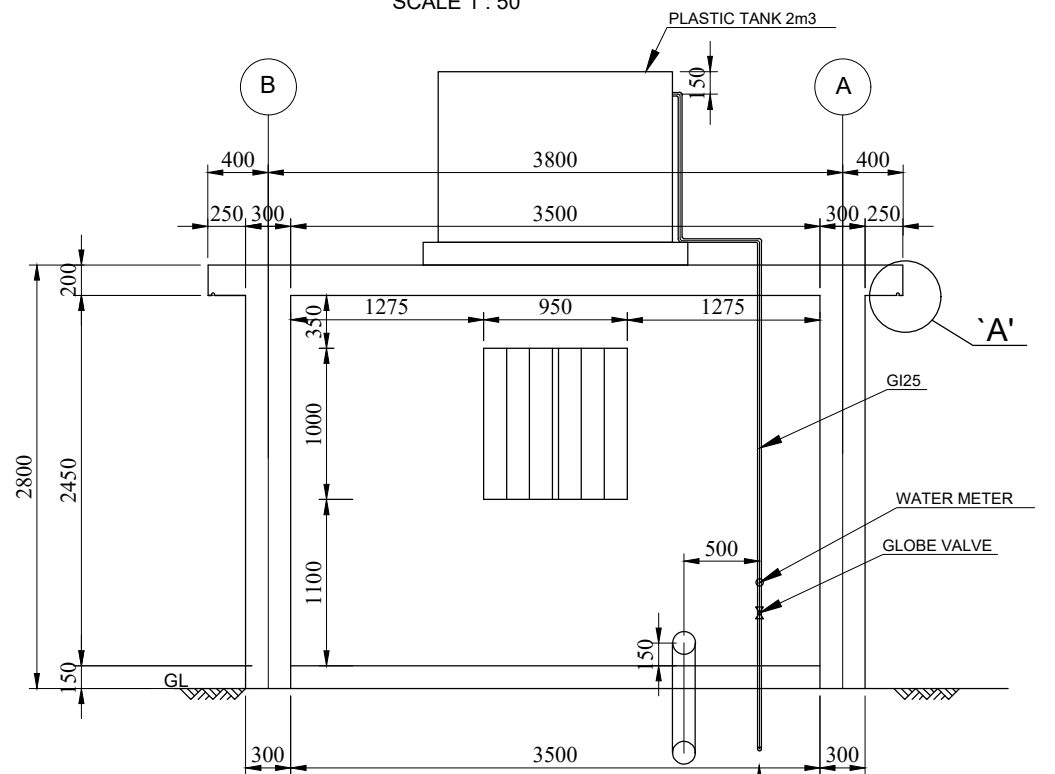
<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: BOREHOLE FACILITIES GUARD HOUSE WITH KIOSK (1/4)</p> <table border="1"> <tr> <td data-bbox="2077 1837 2270 1995">SCALE: 1:50/1:25/1:10</td> <td data-bbox="2270 1837 2522 1995">DATE: OCT 2022</td> <td data-bbox="2522 1837 2819 1995">DRAWING NO.: WS - BH - 007</td> </tr> </table>	SCALE: 1:50/1:25/1:10	DATE: OCT 2022	DRAWING NO.: WS - BH - 007
SCALE: 1:50/1:25/1:10	DATE: OCT 2022	DRAWING NO.: WS - BH - 007				



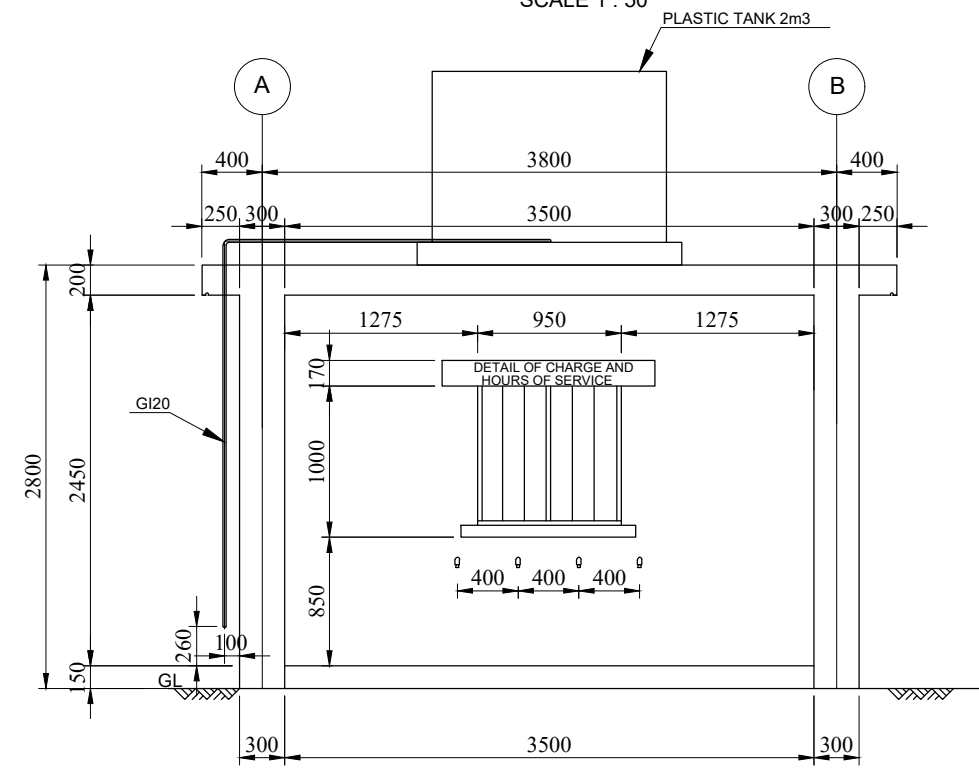
VIEW a-a
SCALE 1 : 50



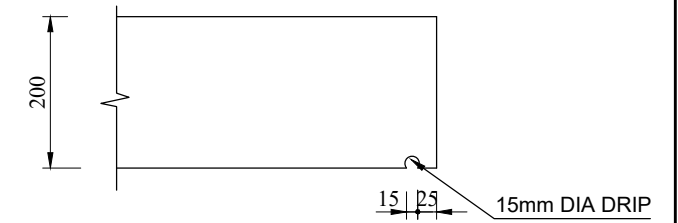
VIEW b-b
SCALE 1 : 50



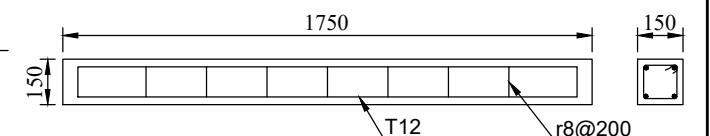
VIEW c-c
SCALE 1 : 50



VIEW d-d
SCALE 1 : 50



DETAIL 'A'
SCALE 1:10



CONCRETE SLEEPER DETAIL
SCALE 1:25

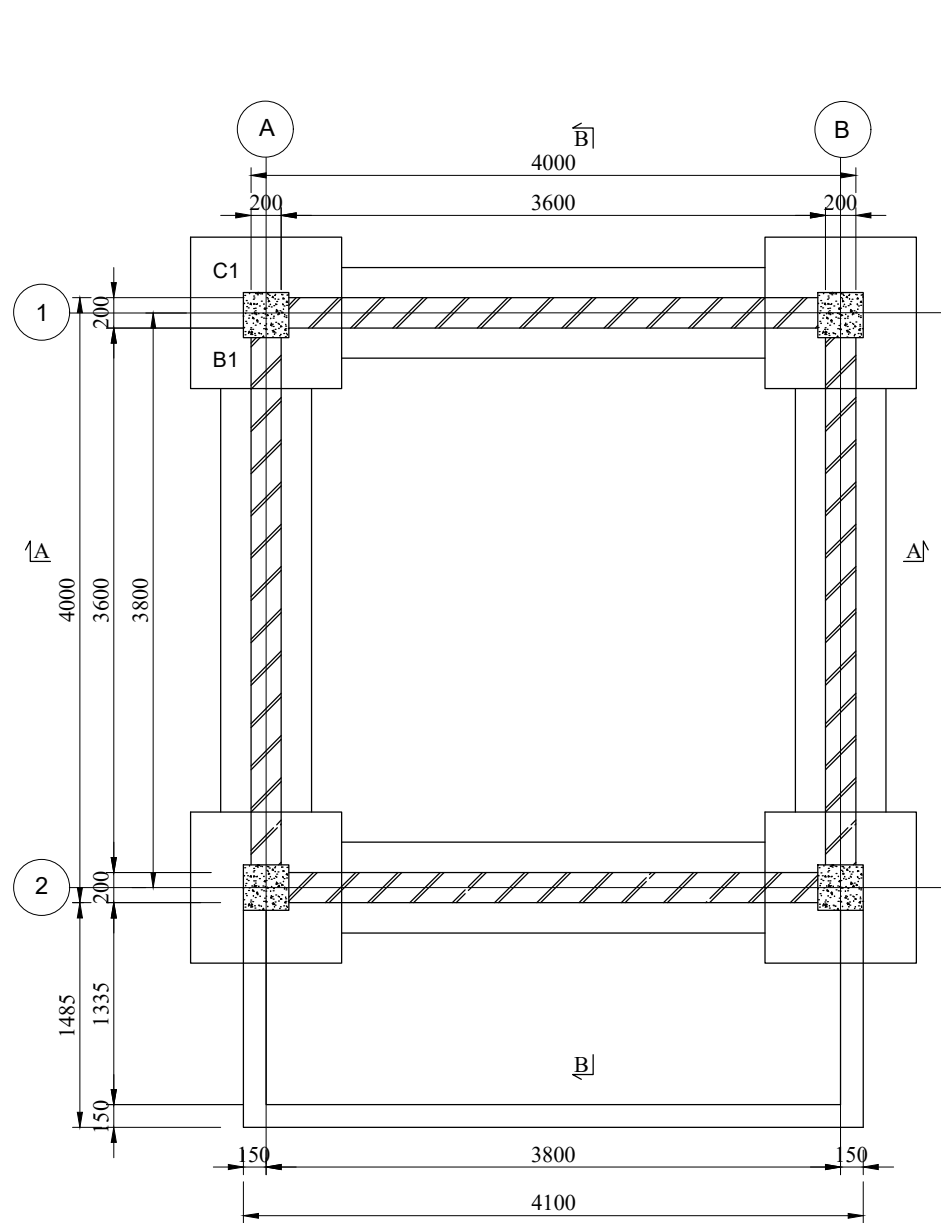
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

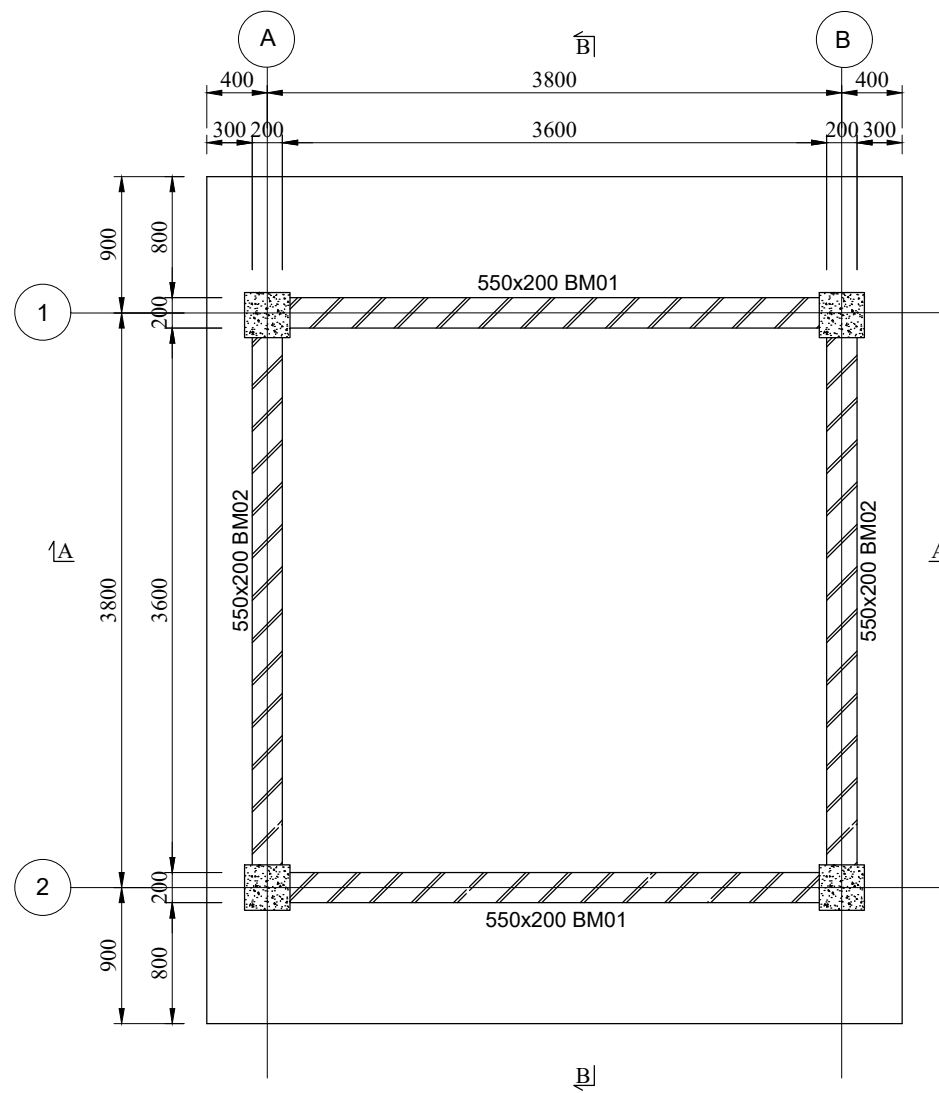
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
BOREHOLE FACILITIES
GUARD HOUSE WITH KIOSK (2/4)

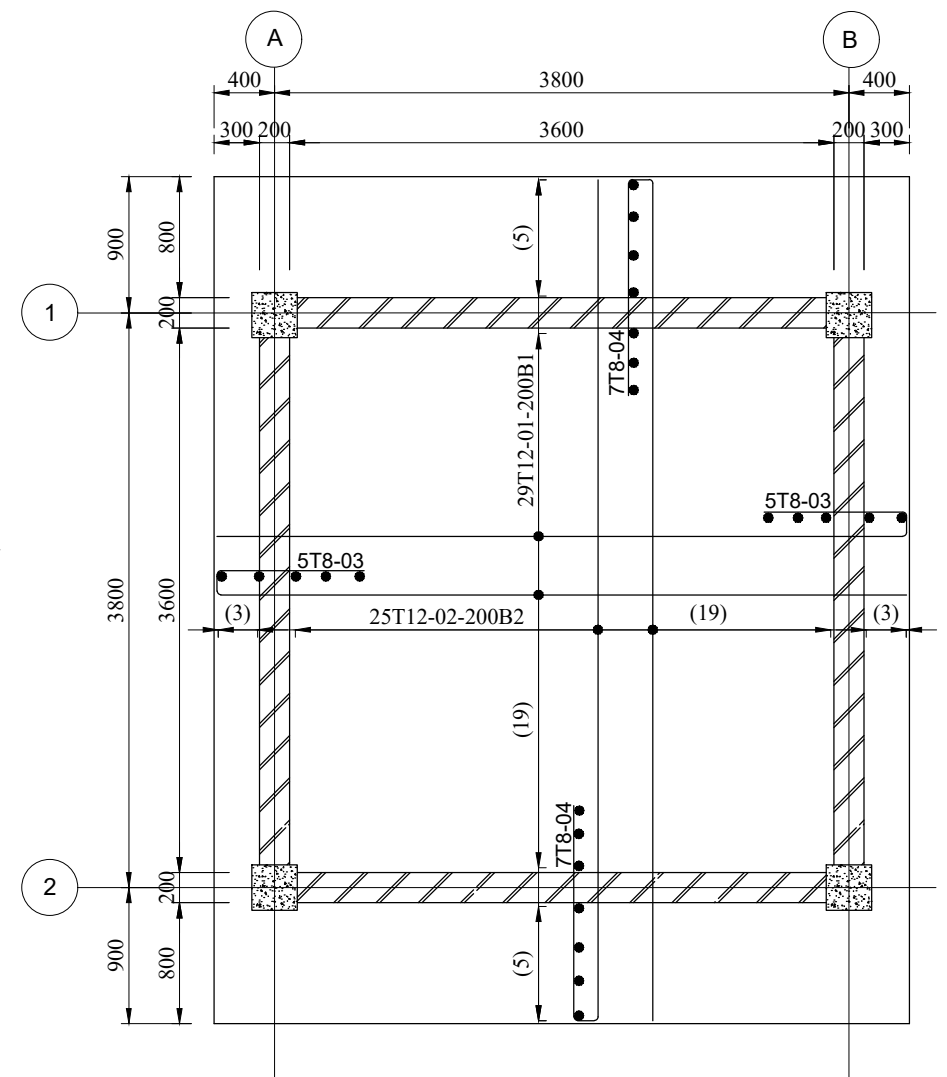
SCALE: **1:50/1:25/1:10** DATE: **OCT 2022** DRAWING NO.: **WS - BH - 008**



FOUNDATION LAYOUT
SCALE 1:50



ROOF SLAB LAYOUT
SCALE 1:50



ROOF SLAB RC DETAILS
SCALE 1:50

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

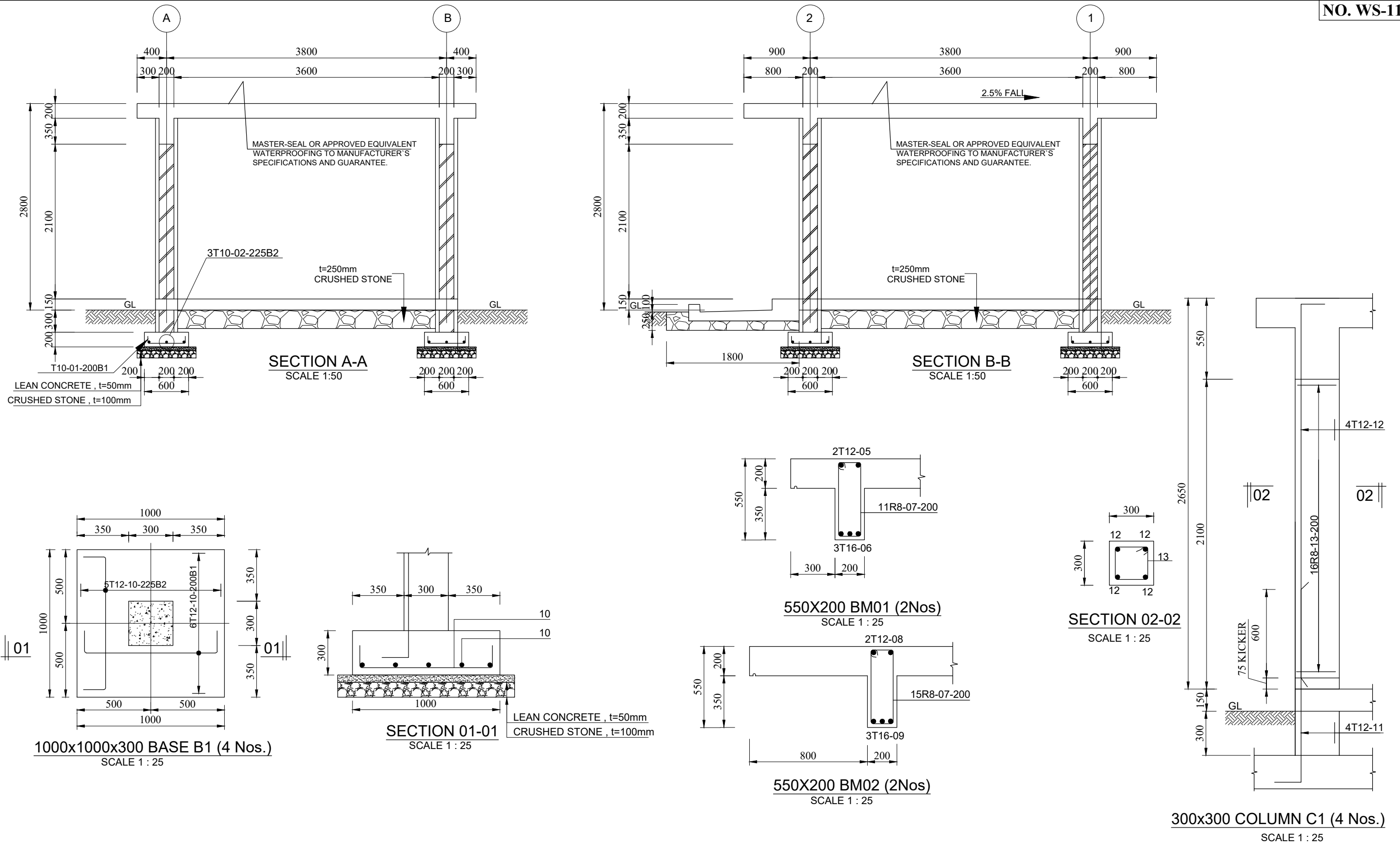
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.


TITLE:
BOREHOLE FACILITIES
GUARD HOUSE WITH KIOSK (3/4)

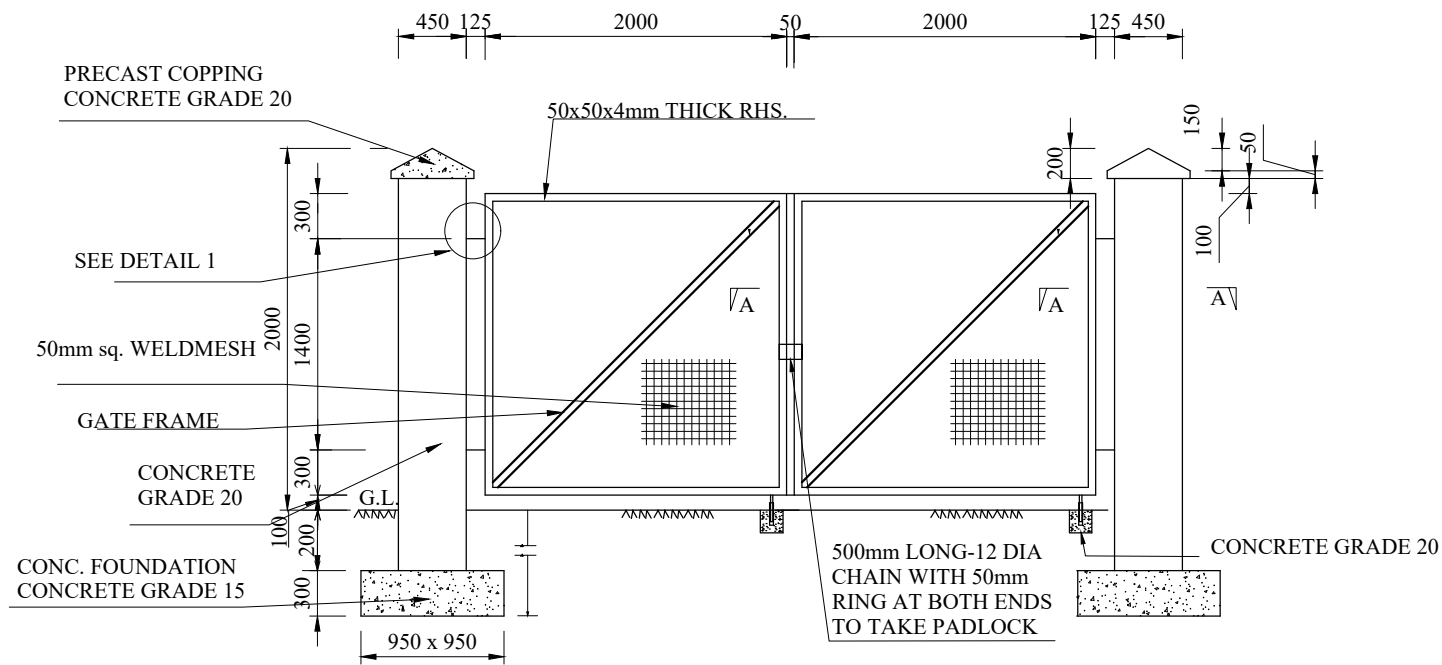
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DATE:
OCT 2022

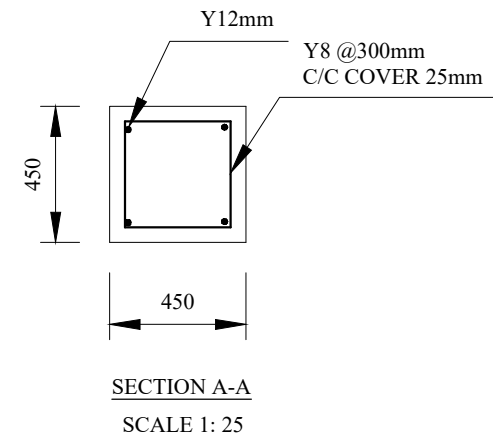
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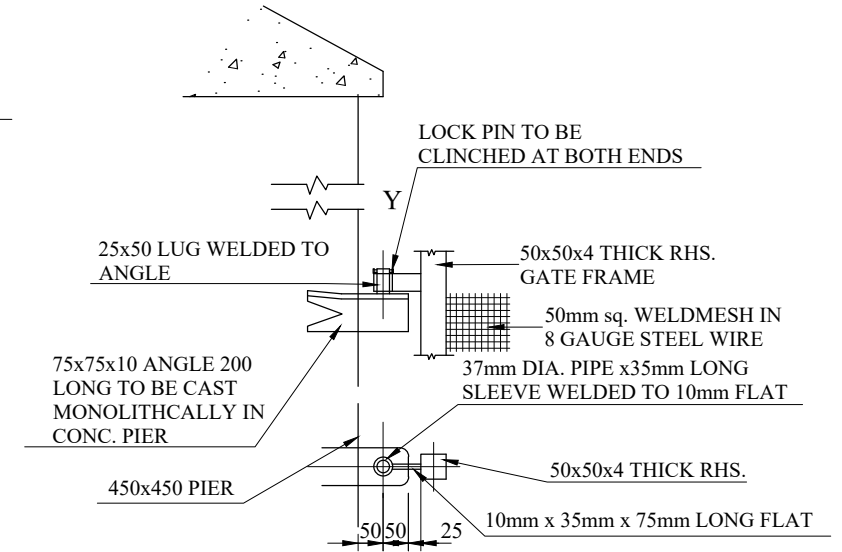
<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: BOREHOLE FACILITIES GUARD HOUSE WITH KIOSK (4/4)</p>		
		<p>SCALE: 1:50/1:25</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - BH - 010</p>	



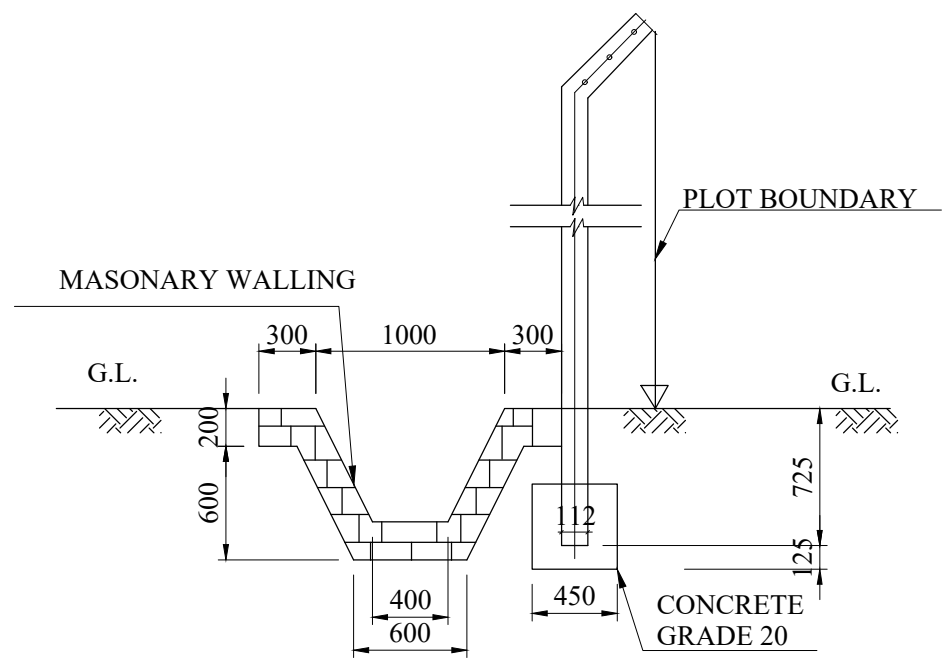
ELEVATION
DETAILS OF 2m WIDE GATE
SCALE 1:50



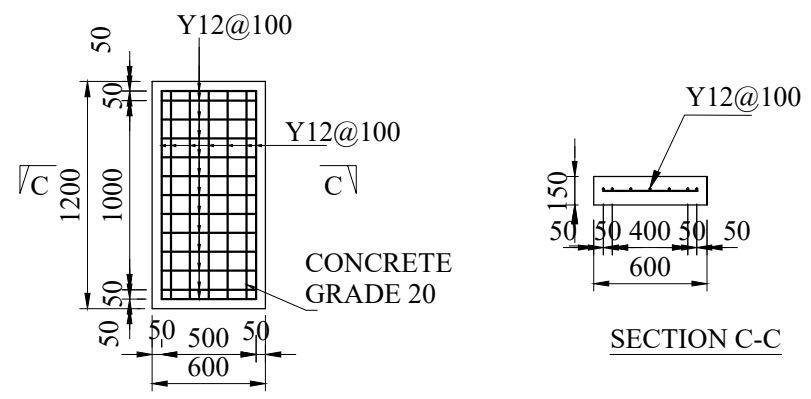
SECTION A-A
SCALE 1: 25



DETAIL 1: GATE HINGE
SCALE 1:15




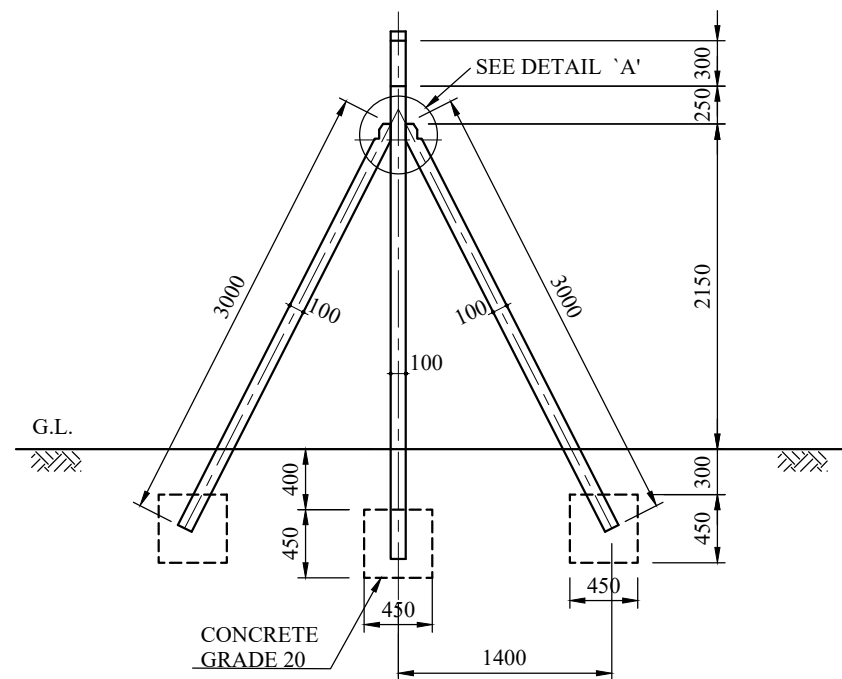
DETAILS OF DRAIN DITCH
SCALE 1:40



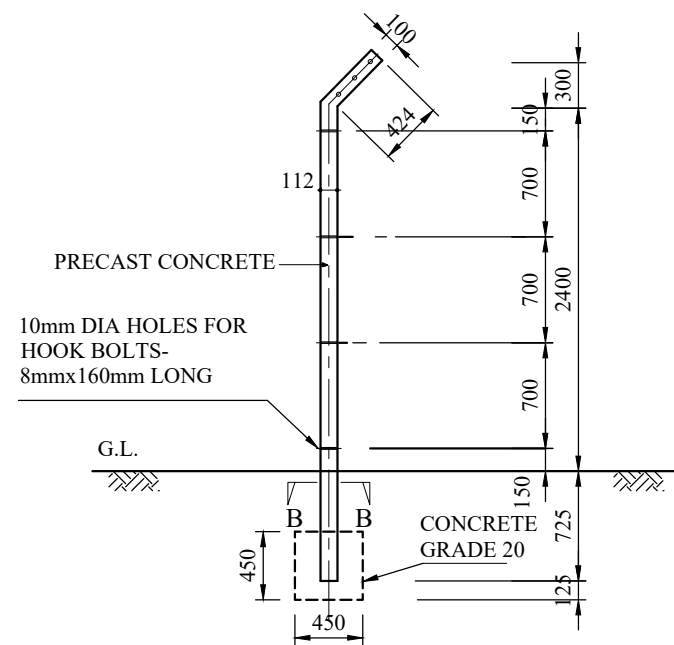
PRECAST CONCRETE COVER OVER DRAIN AT GATE
SIZE 1.2x0.6x0.15m
SCALE 1:40

NOTE:
1. ALL STEEL WORK TO BE CLEANED OF RUST AND PAINTED TO ENGINEERS SATISFACTION

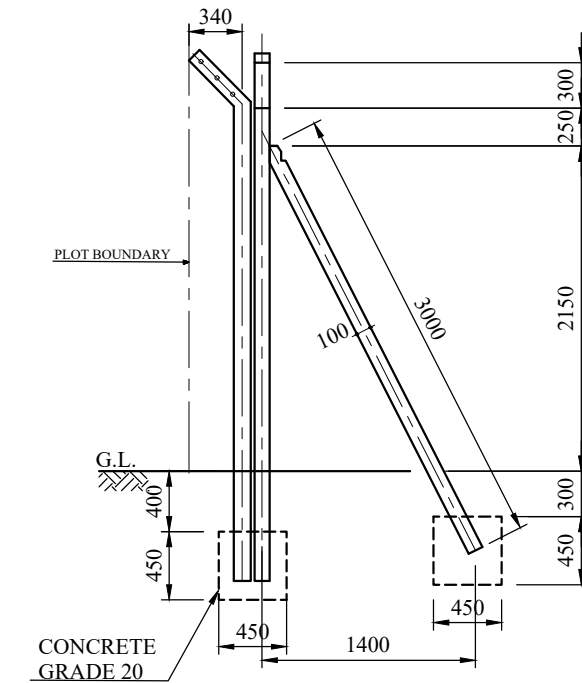
<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: BOREHOLE FACILITIES GATE AND DRAIN DETAILS</p>		
		<p>SCALE: 1:50/1:40/ 1:25/1:15</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - BH - 011</p>	



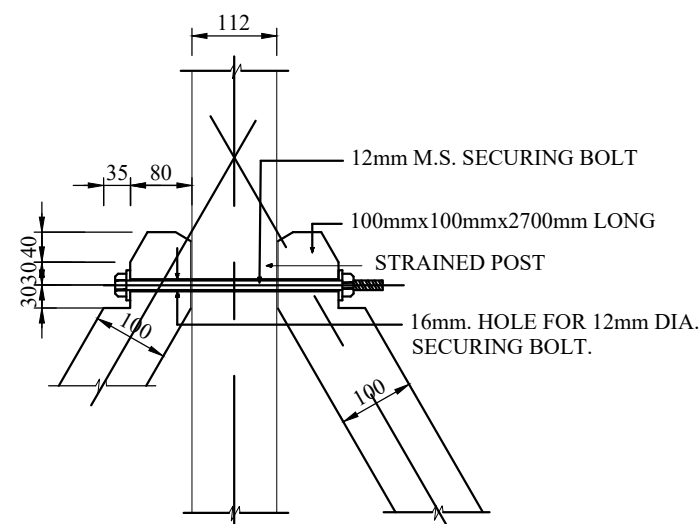
DETAILS OF STRAINING P.C.C. POST FOR
CHAIN LINK FENCE AT 33.3m. C/C
SCALE 1:50



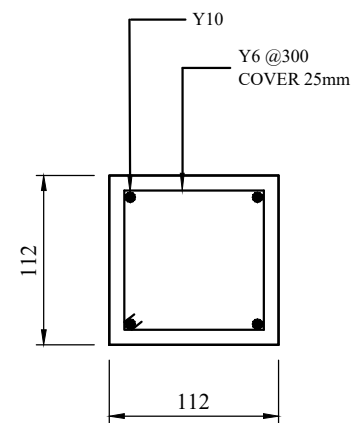
DETAILS OF SINGLE P.C.C.
POST AT 3.30m C/C
SCALE 1:50



DETAILS OF CORNER POSTS
SCALE 1:50



DETAIL 'A'
SCALE 1:10



SECTION B-B
SCALE 1:5

NOTES

- APPROXIMATELY EVERY 10th POST TO BE STRAINED
- POST TO BE AT 3300mm CENTRES
- CONCRETE MIXES FOR:
 - POSTS GRADE 20
 - STRAINER POSTS GRADE 20
 - FOUNDATION BLOCK GRADE 20
- CHAIN LINK TO BE IN GAUGE 12 GALVANISED STEEL WIRE.
- STRAINING WIRES TO BE 12 GAUGE GALVANISED STEEL PLAIN WIRES.
- WIRES ON CRANK TO BE 12 GAUGE GALVANISED STEEL BARBED WIRE.
- ALL STRUCTURAL OPENING DIMENSIONS TO BE CONFIRMED ON SITE BEFORE COMMENCING ANY FABRICATION
- STRAINING WIRES TO BE FIXED TO POST WITH GALVANIZED HOOK BOLTS 8mm DIA.x60mm LONG
- ALL DIMENSIONS ARE IN mm. UNLESS OTHERWISE STATED.
- C/C = CENTRE TO CENTRE.
- CTs. = CENTRES.
- M.S = MILD STEEL.
- P.C.C = PRECAST CEMENT CONCRETE.
- R.H.S = RECTANGULAR HOLLOW SECTION.

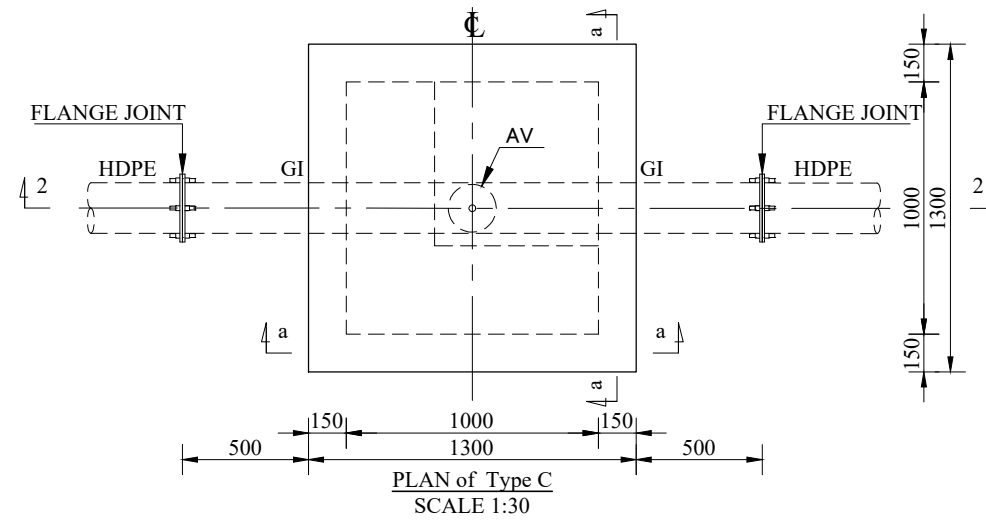
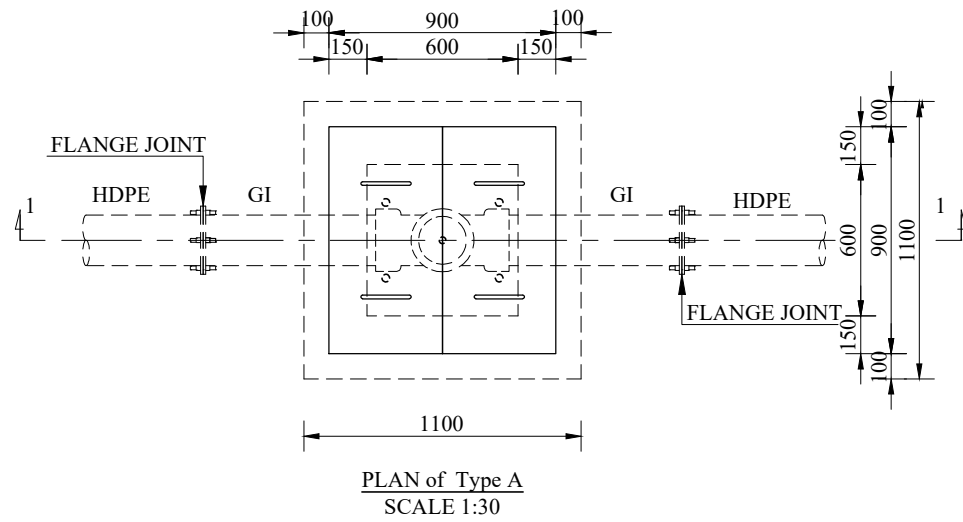
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

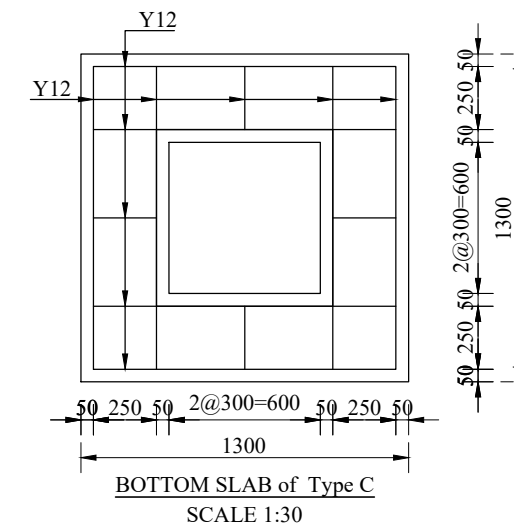
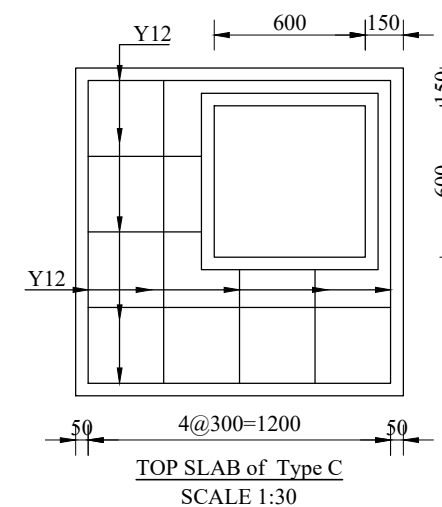
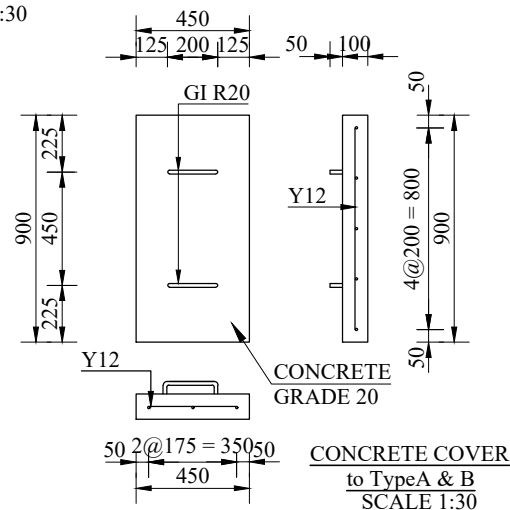
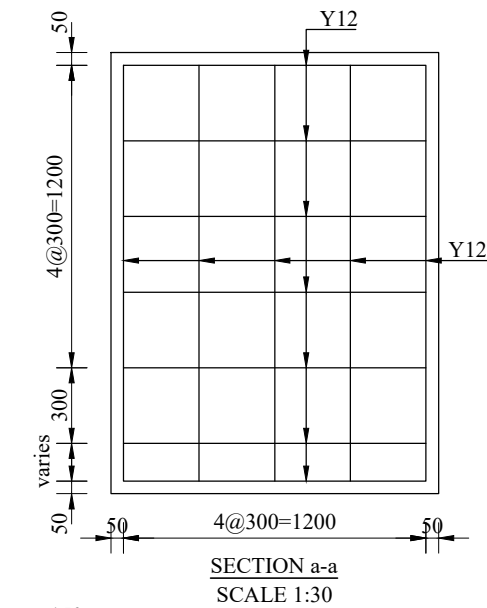
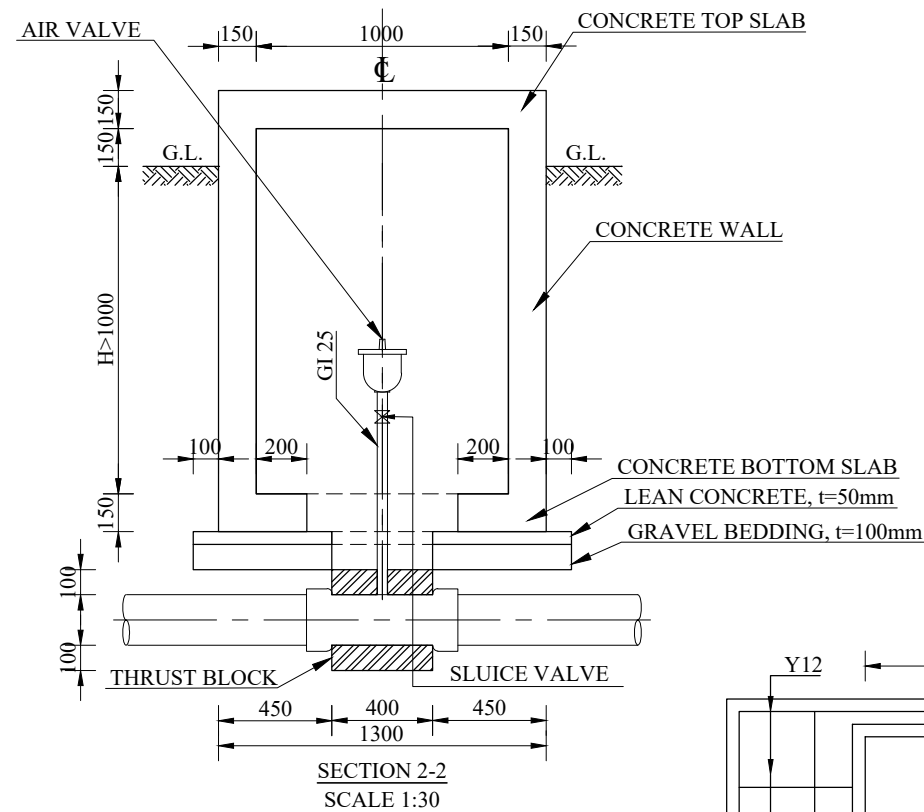
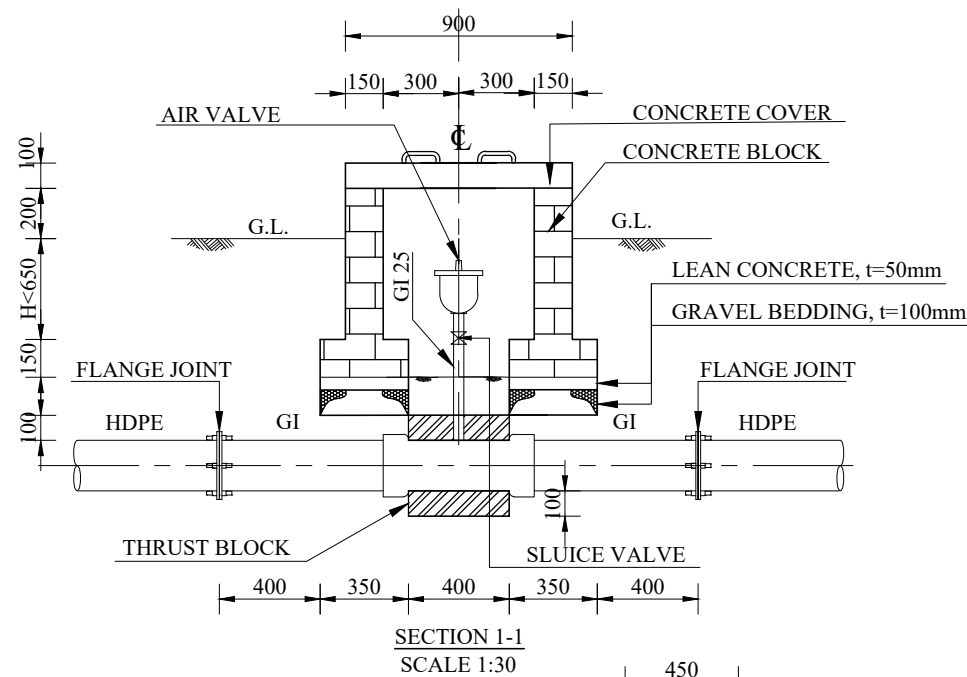
TITLE:
BOREHOLE FACILITIES
FENCE DETAILS

SCALE: 1:50/1:10/1:5	DATE: OCT 2022	DRAWING NO.: WS - BH - 012
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Schedule of Air Valve Chamber

Pipeline	Chainage	Pipe Diameter		H(mm)	Chamber Type
		GI	HDPE		
Well No2 to BPS	0+200.000	150	160	222	TypeA
	0+474.014	150	160	216	TypeA
	1+480	150	160	235	TypeA
	2+820	150	160	1,105	TypeC
	3+440	150	160	1,265	TypeC
Well No3 to BPS	4+000	150	160	1,105	TypeC
	0+864	150	160	260	TypeA
Well No5 to BPS	1+128	150	160	390	TypeA
	1+780	150	160	1,200	TypeC
	2+199	150	160	1,040	TypeC



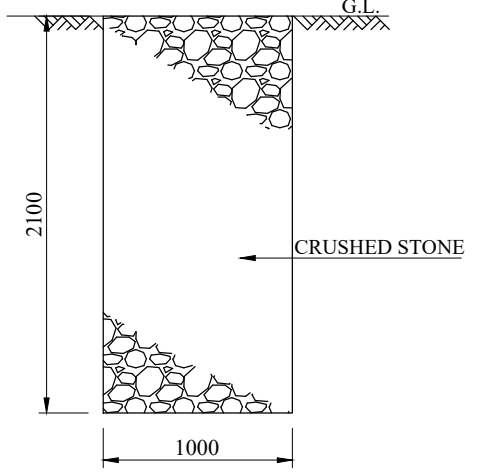
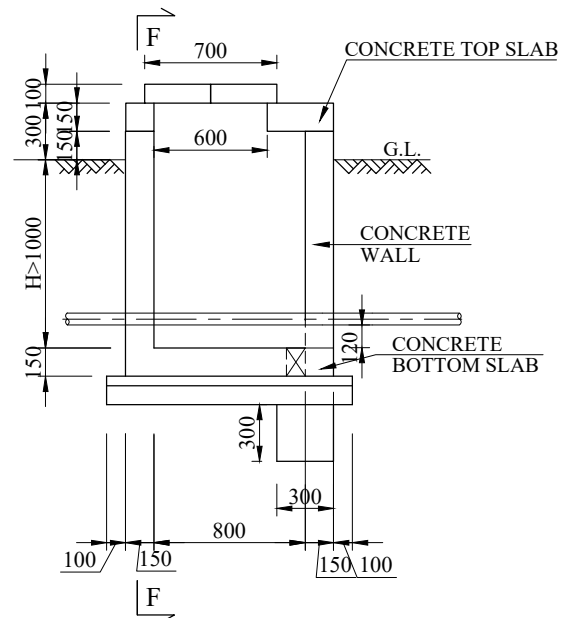
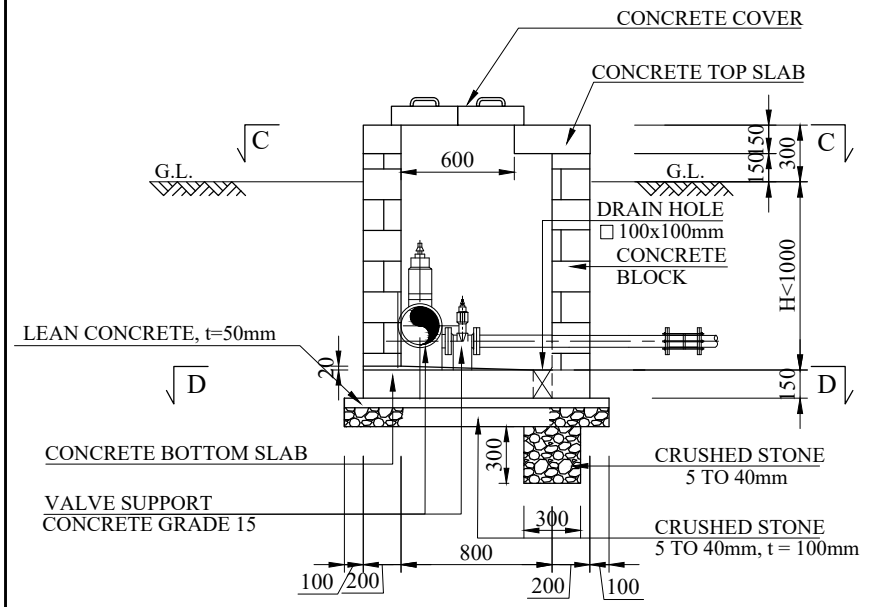
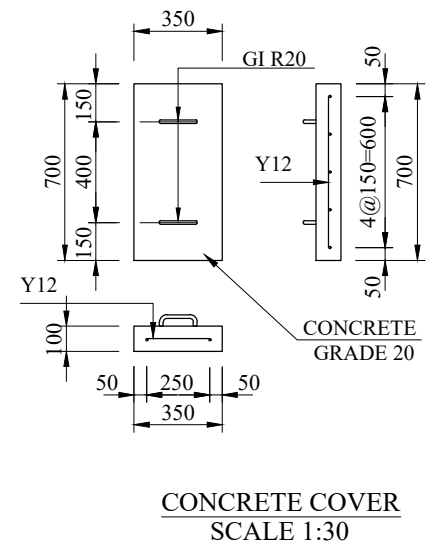
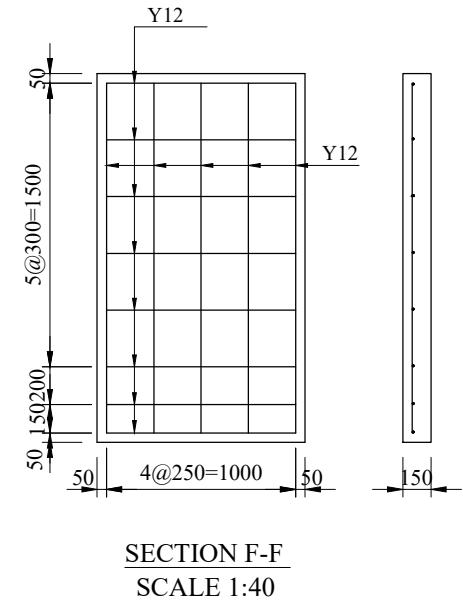
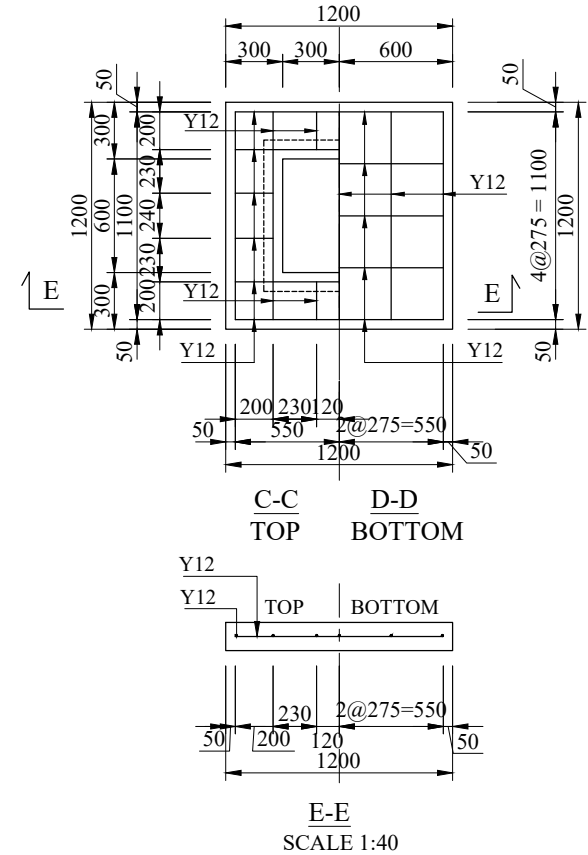
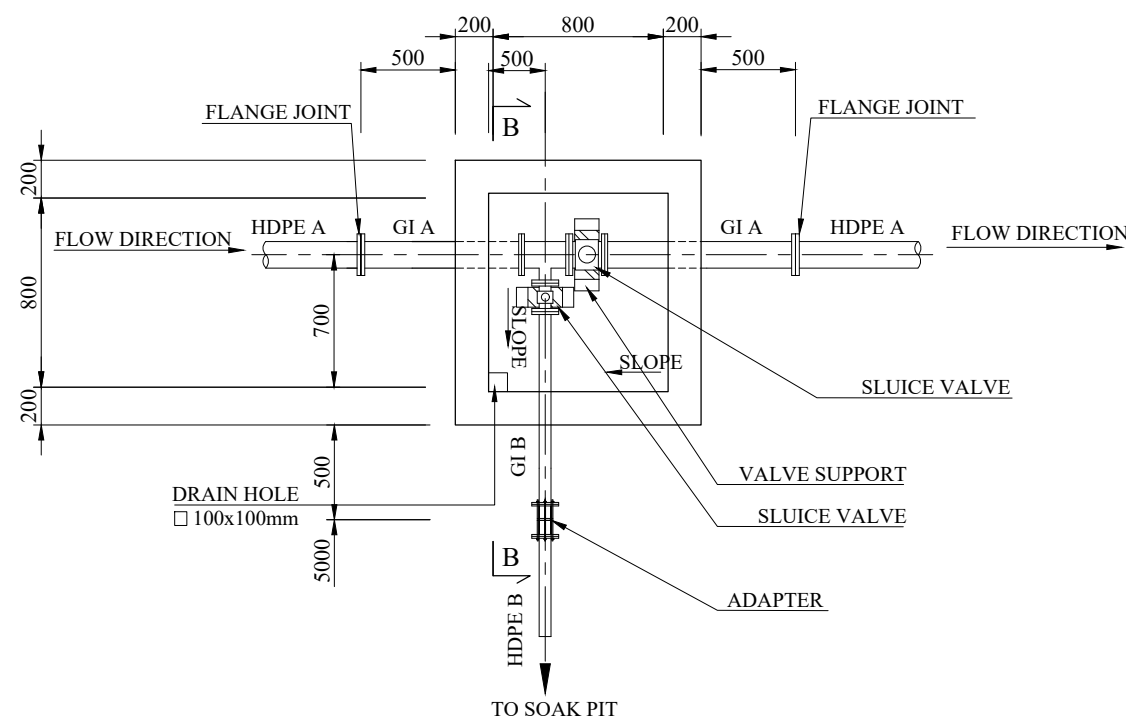
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
PIPELINE STRUCTURE (TRANSMISSION PIPE)
AIR VALVE CHAMBER

SCALE: 1:30	DATE: OCT 2022	DRAWING NO.: WS - TP - 037
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SCHEDULE OF BLOW-OFF CHAMBER

PIPELINE	CHAINAGE	PIPE DIAMETER(mm)				H(mm)
		GI A	HDPE A	GI B	HDPE B	
WELL No2 TO BPS	0+150.231	150	160	40	50	891
	0+433.33	150	160	40	50	895
	2+025.661	150	160	40	50	1,795
	2+949.00	150	160	40	50	1,856
4+679.264	150	160	40	50	1,801	
WELL No3 TO BPS	1+050	150	160	40	50	910
WELL No5 TO BPS	2+420	150	160	40	50	2,120

- NOTE:
 1. SURFACE OF STONE BLOCK SHALL BE PLASTERED WITH 25mm THICKNESS.
 2. DIMENSION OF VALVE SUPPORT SHALL BE VARIED BASED ON THE VALVE LENGTH.

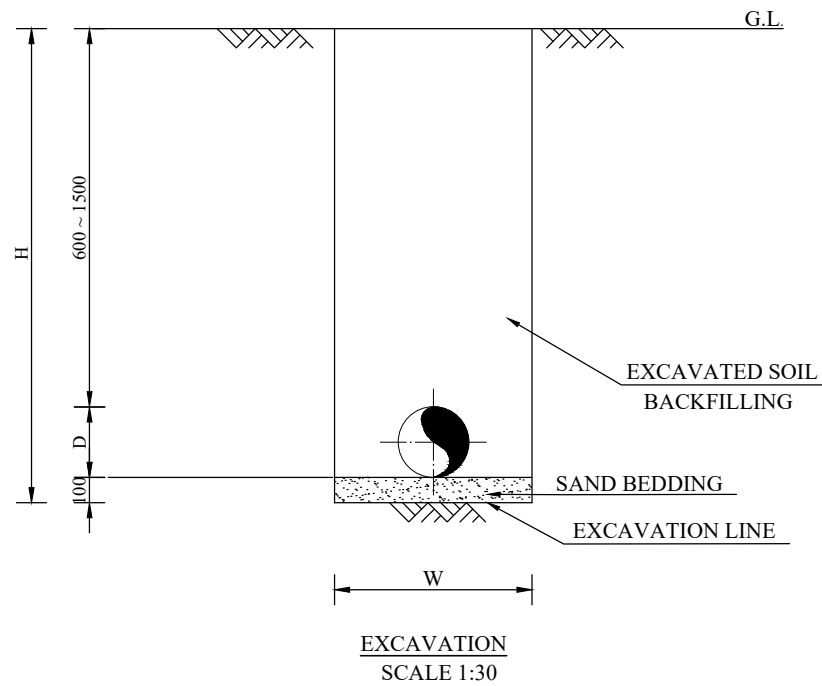
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 NIPPON KOEI CO.,LTD.
NIPPON KOEI Urban Space CO., LTD.

TITLE:
PIPELINE STRUCTURE (TRANSMISSION PIPE)
BLOW - OFF CHAMBER

SCALE: **1:40/1:30** DATE: **OCT 2022** DRAWING NO.: **WS - TP - 038**

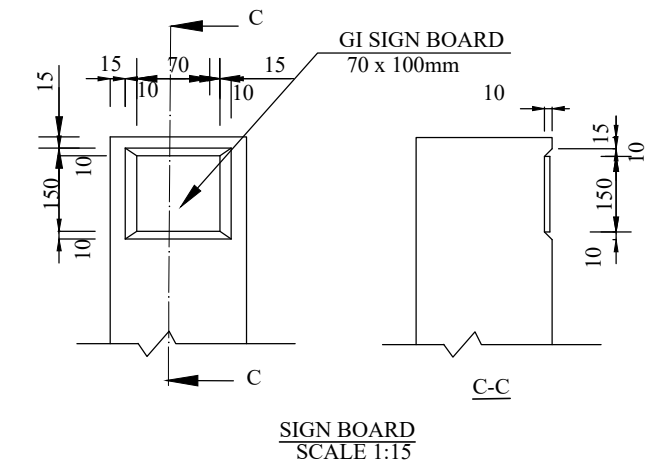
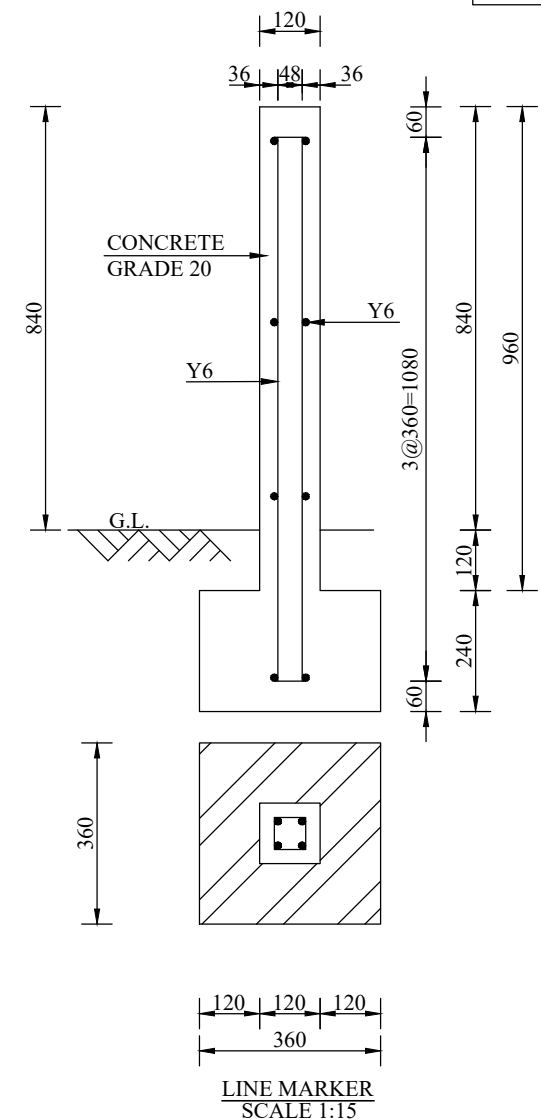
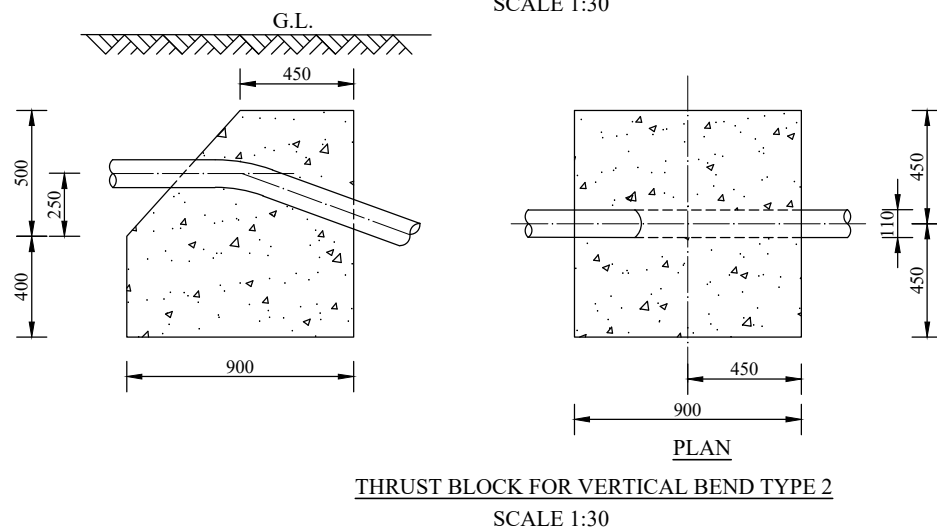
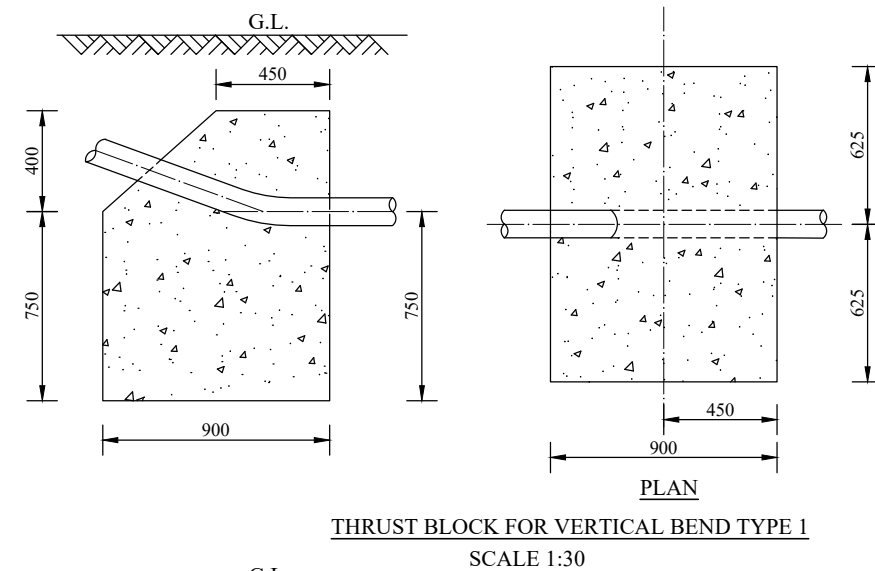
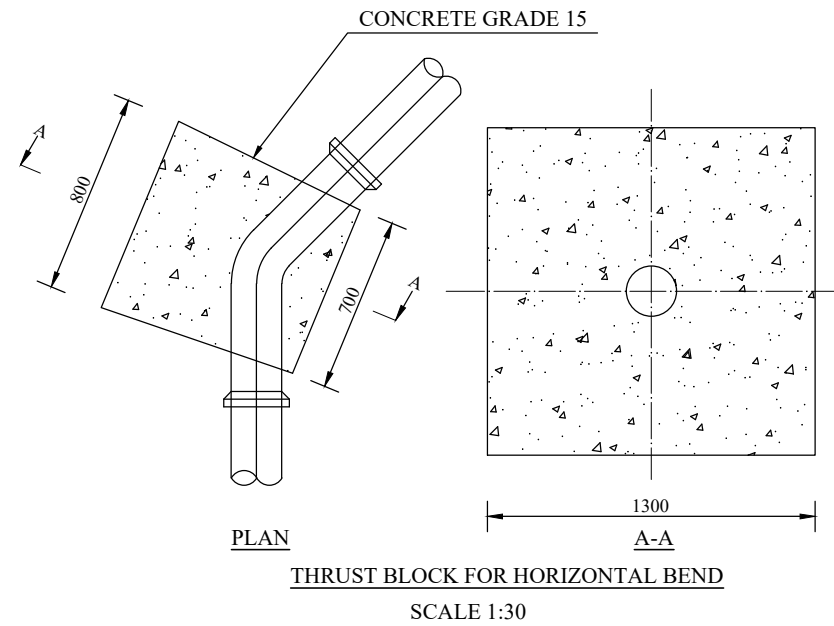


Dimension of Excavation

Pipe Diameter D (mm)	Width: W (mm)	Excavation Depth: H (mm)
160	700	800 ~ 1760

Note: Excavation depth shall be referred to Profile Drawngs No. WS-TP-001 ~ 036

- :Excavated soil shall be used for backfilling
- : Surplus soil shall be spoiled.
- : Sand with 100mm in thickness shall be bedded below the pipe .
- : Line marker shall be installed at valve chambers and at all changes of horizontal alignment of pipeline at 200m intervals
- : Thrust block shall be installed at all changes of vertical and horizontal alignment of pipeline



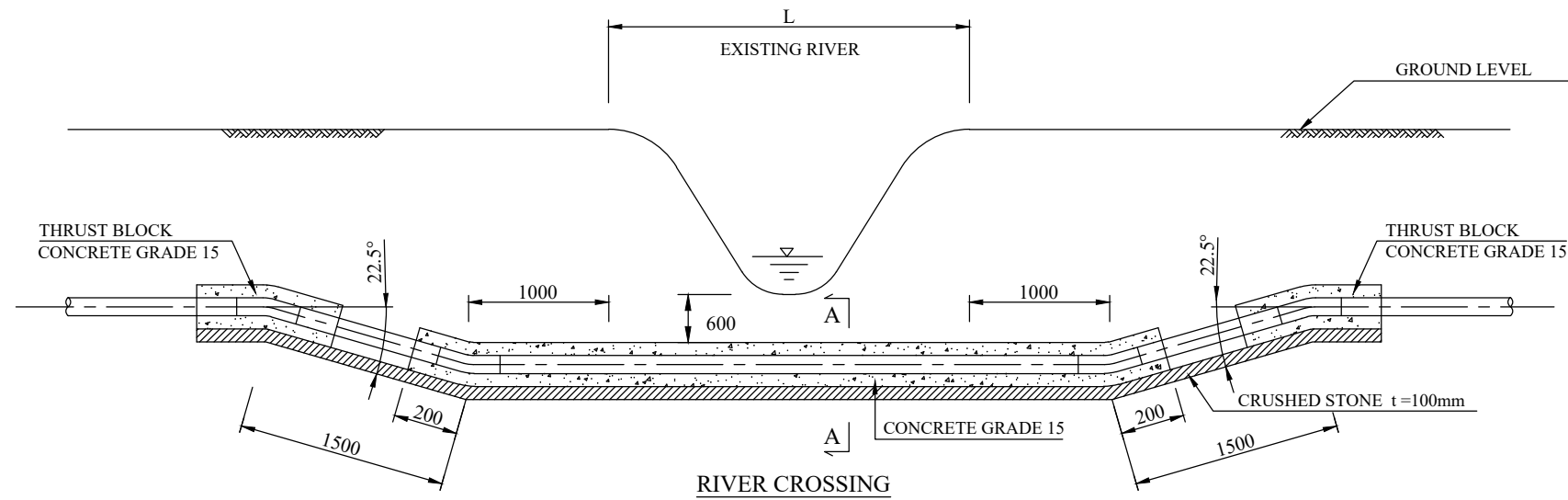
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

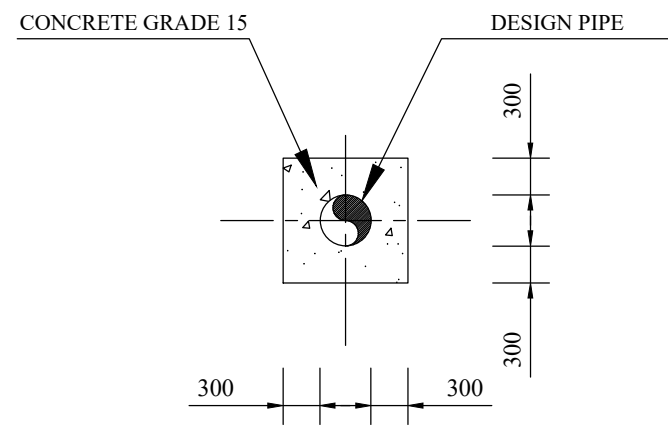
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
PIPELINE STRUCTURE (TRANSMISSION PIPE)
PIPE INSTALLATION, LINE MARKER AND THRUST BLOCK

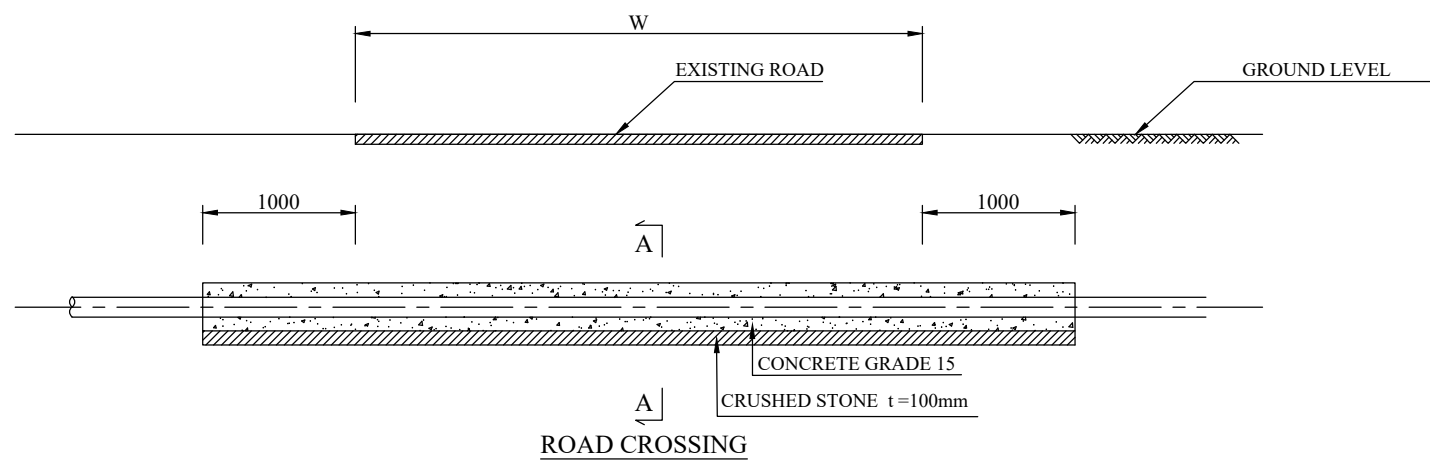
SCALE: 1:30/1:15	DATE: OCT 2022	DRAWING NO.: WS - TP - 039
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Note: "L" shall be indicated in Profile Drawings.



SECTION A-A



Note: "W" shall be indicated in Profile Drawings.

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THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

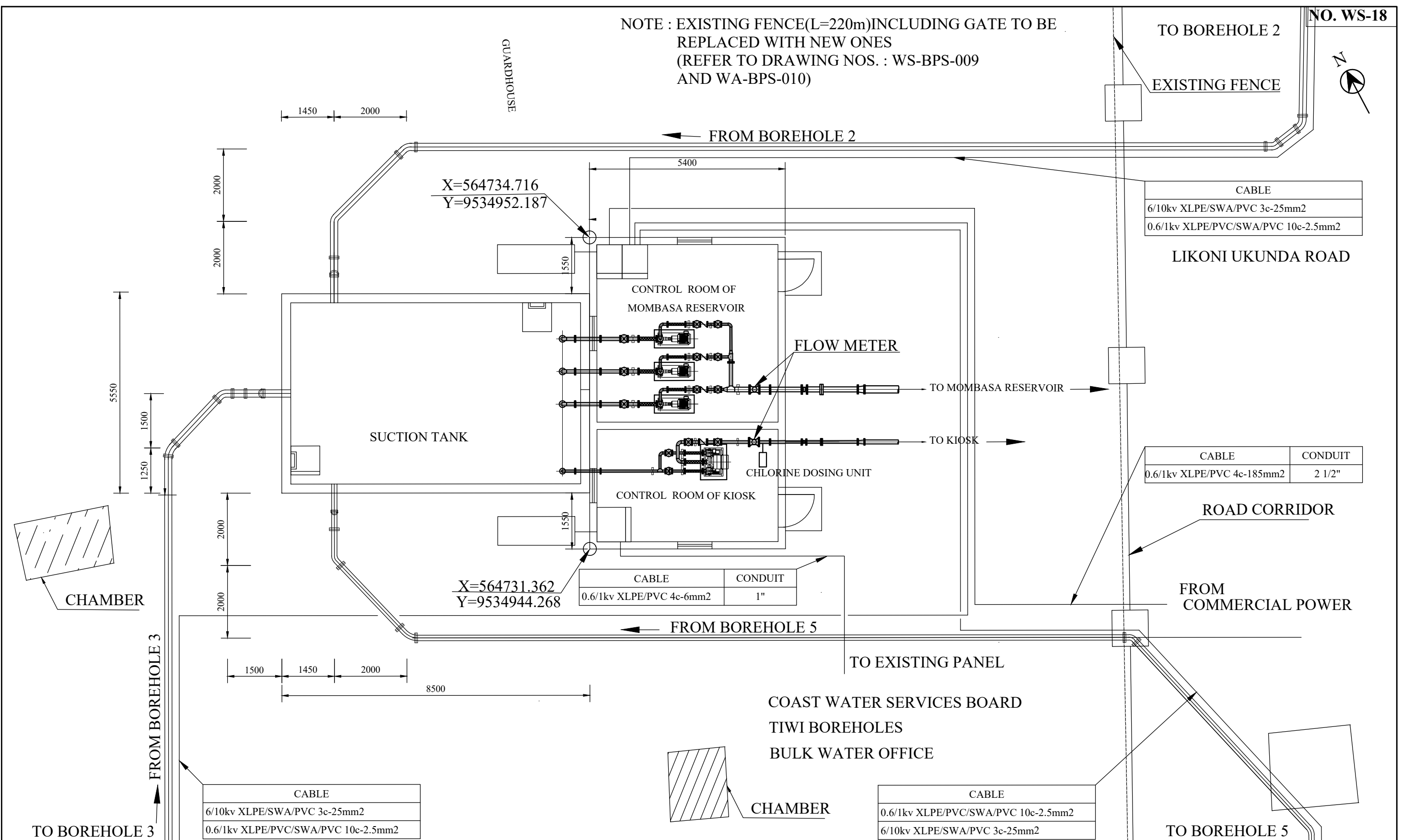
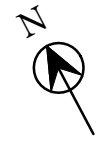
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.


TITLE:
PIPELINE STRUCTURE (TRANSMISSION PIPE)
RIVER AND ROAD CROSSING OF PIPE

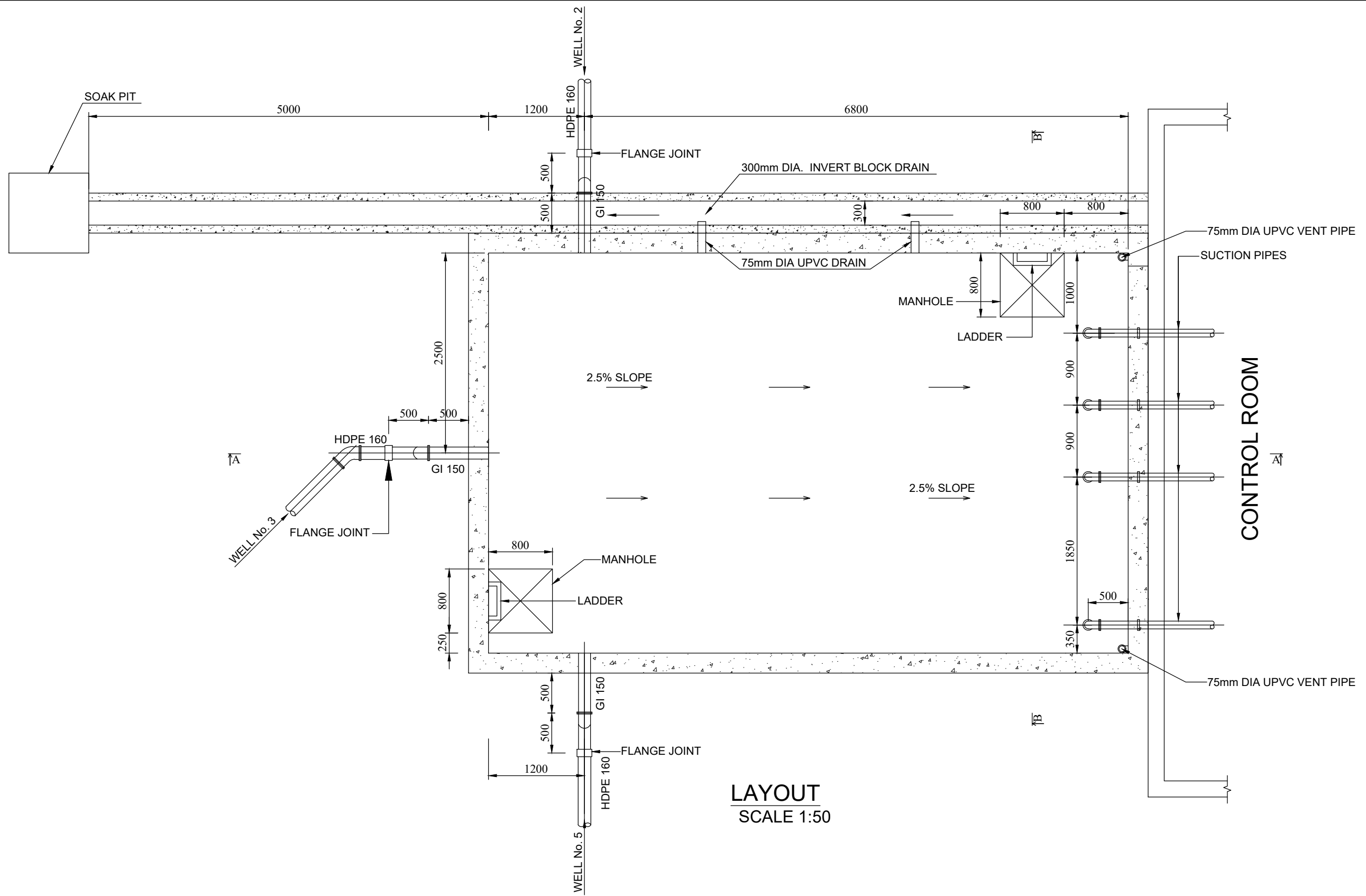
SCALE: N.T.S	DATE: OCT 2022	DRAWING NO.: WS-TP - 040
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NOTE : EXISTING FENCE(L=220m)INCLUDING GATE TO BE REPLACED WITH NEW ONES (REFER TO DRAWING NOS. : WS-BPS-009 AND WA-BPS-010)

NO. WS-18



<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: BOOSTER PUMPING STATION LAYOUT PLAN</p>		
		<p>SCALE: 1:100</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - BPS - 001</p>	

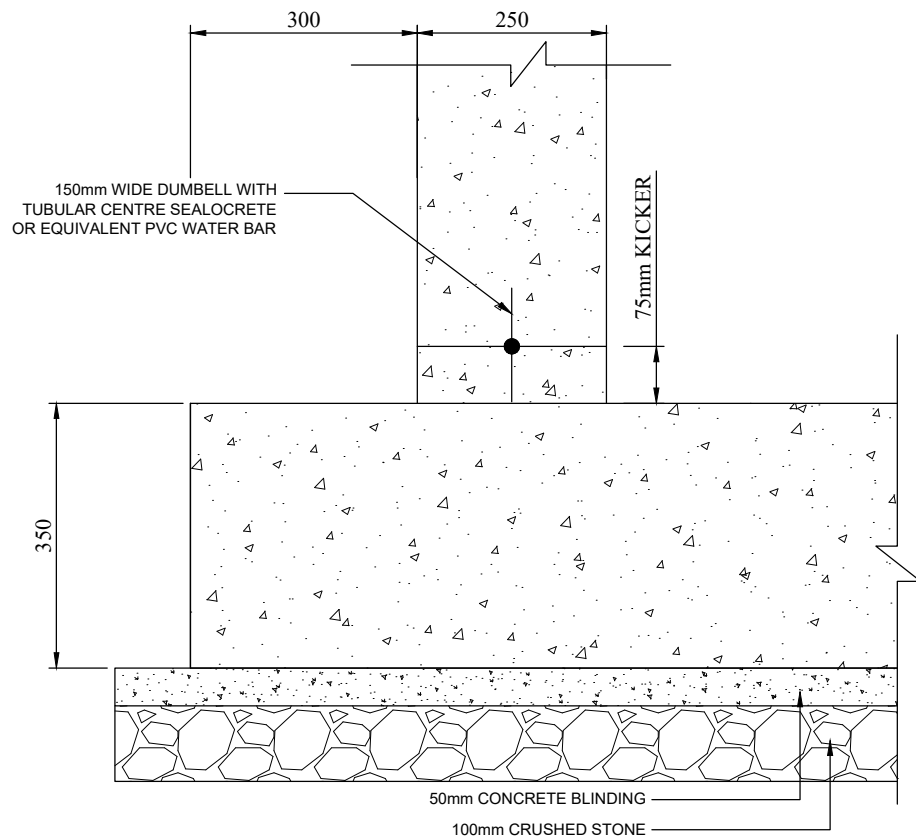


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KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

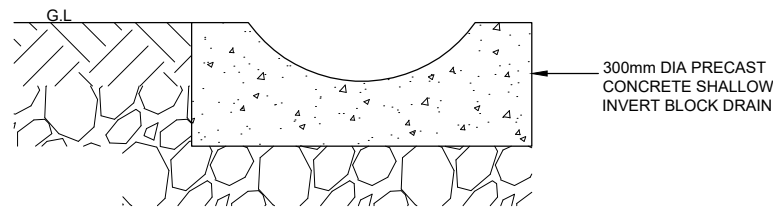
PROJECT NAME:
**THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE**

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

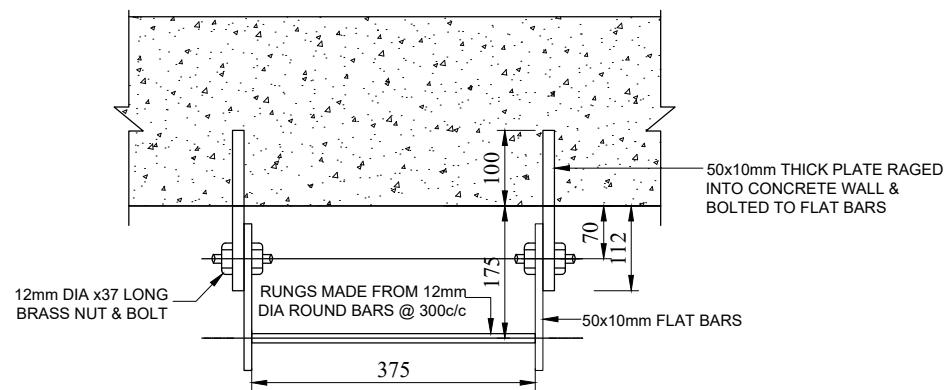
TITLE: BOOSTER PUMPING STATION LAYOUT OF SUCTION TANK		
SCALE: 1:50	DATE: OCT 2022	DRAWING NO.: WS - BPS - 002



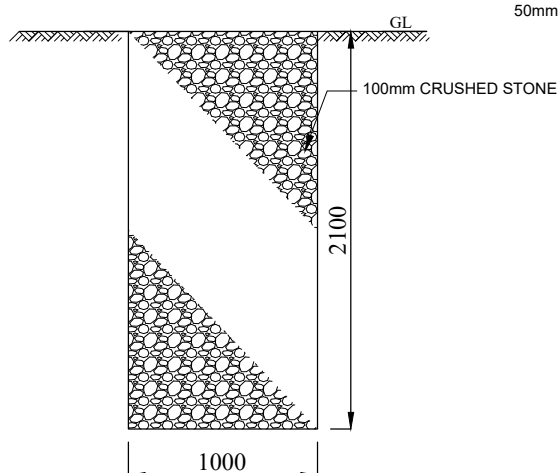
DETAIL OF JOINT AT BASE OF WALL
SCALE 1:10



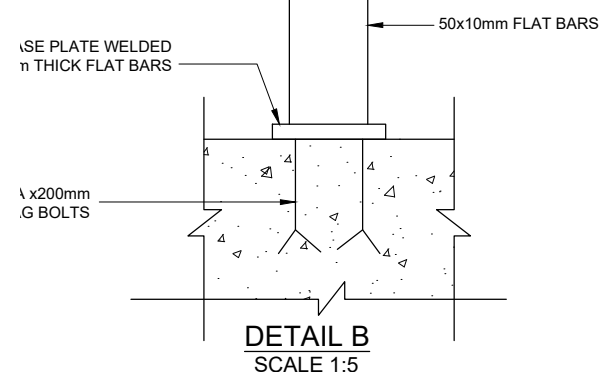
INVERT BLOCK DRAIN DETAIL
SCALE 1:10



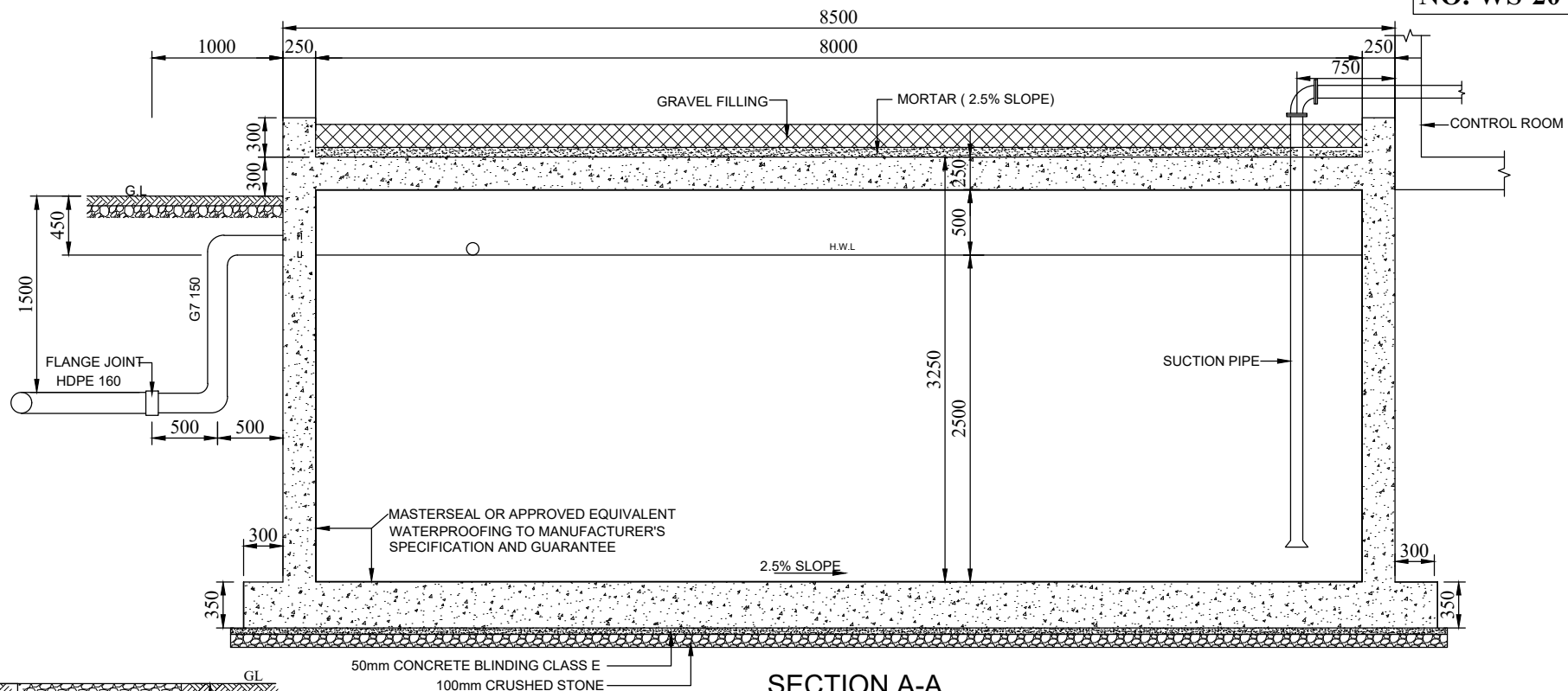
DETAIL A
SCALE 1:10



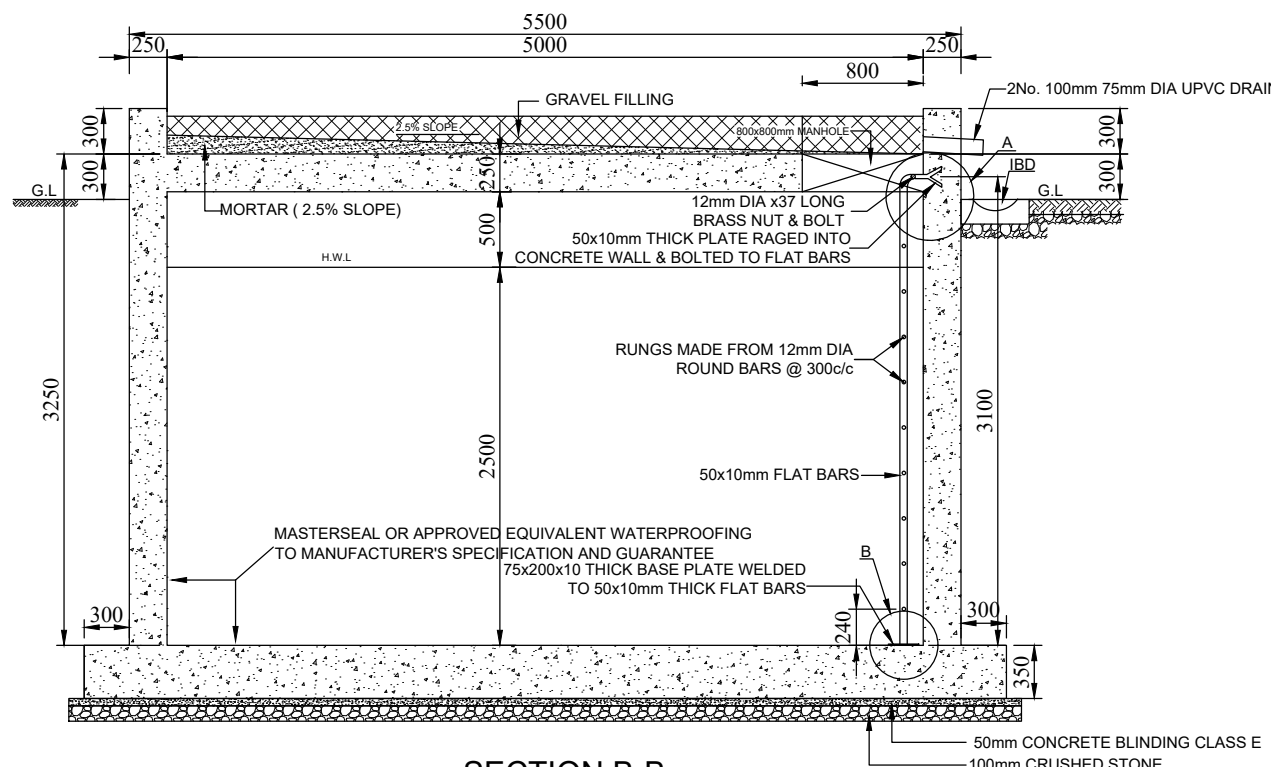
SOAK PIT
SCALE 1:40



DETAIL B
SCALE 1:5



SECTION A-A
SCALE 1:50



SECTION B-B
SCALE 1:50

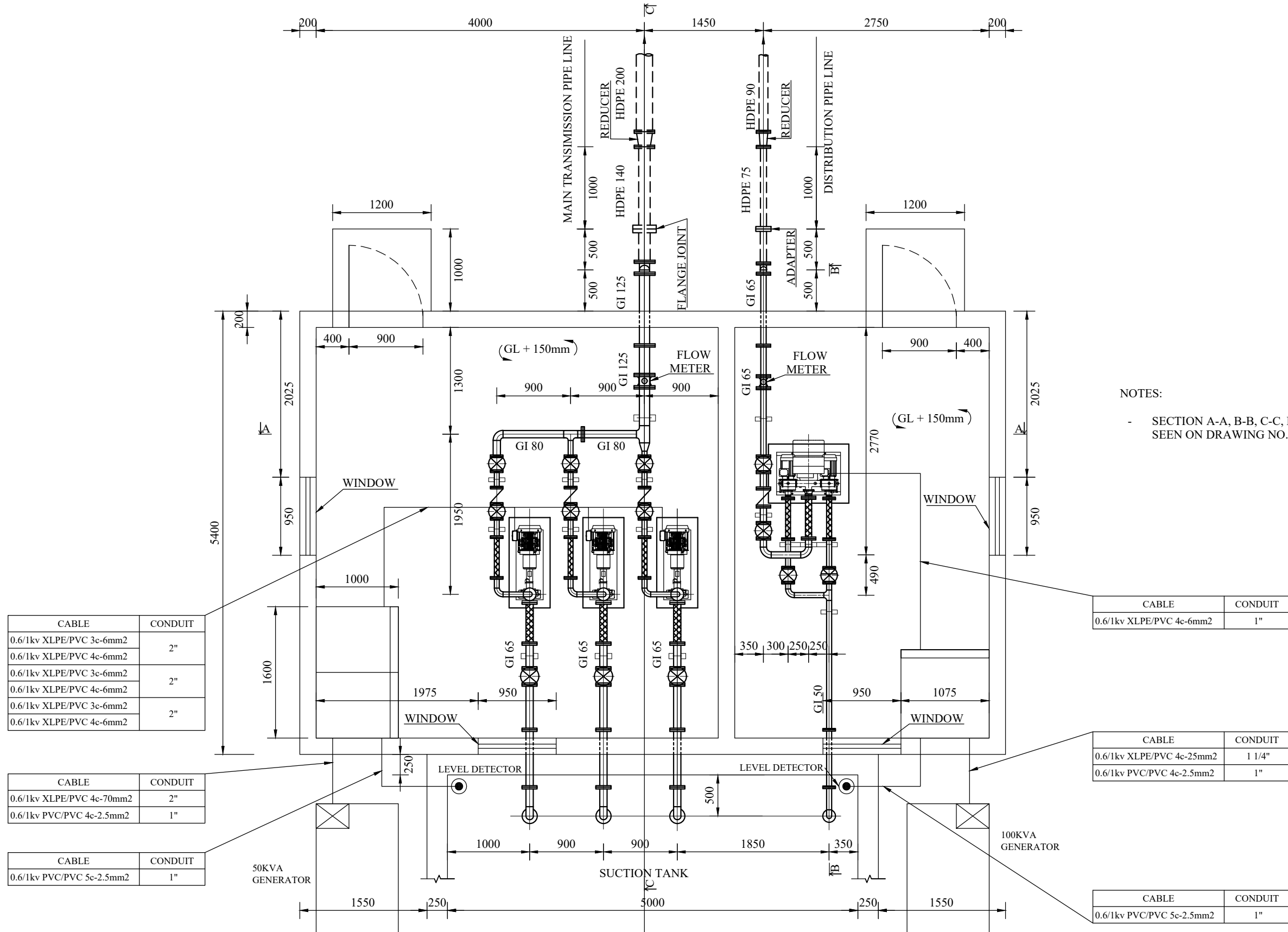
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
BOOSTER PUMPING STATION
DETAIL OF SUCTION TANK (1/2)

SCALE: 1:50/1:40 /1:10/1:5	DATE: OCT 2022	DRAWING NO.: WS - BPS - 003
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NOTES:
 - SECTION A-A, B-B, C-C, D-D SHALL BE SEEN ON DRAWING NO.WS-BPS-005

CABLE	CONDUIT
0.6/1kv XLPE/PVC 3c-6mm2	2"
0.6/1kv XLPE/PVC 4c-6mm2	
0.6/1kv XLPE/PVC 3c-6mm2	2"
0.6/1kv XLPE/PVC 4c-6mm2	
0.6/1kv XLPE/PVC 3c-6mm2	2"
0.6/1kv XLPE/PVC 4c-6mm2	

CABLE	CONDUIT
0.6/1kv XLPE/PVC 4c-70mm2	2"
0.6/1kv PVC/PVC 4c-2.5mm2	1"

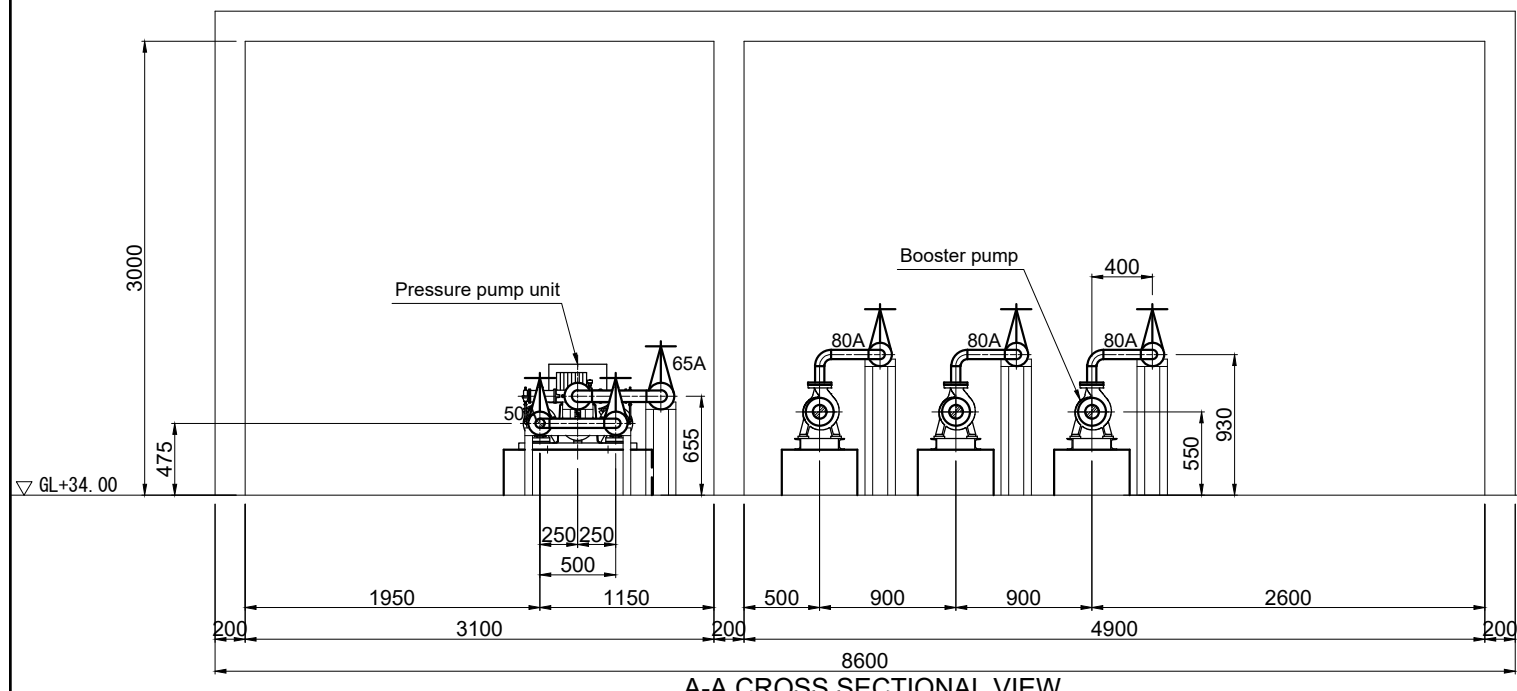
CABLE	CONDUIT
0.6/1kv PVC/PVC 5c-2.5mm2	1"

CABLE	CONDUIT
0.6/1kv XLPE/PVC 4c-6mm2	1"

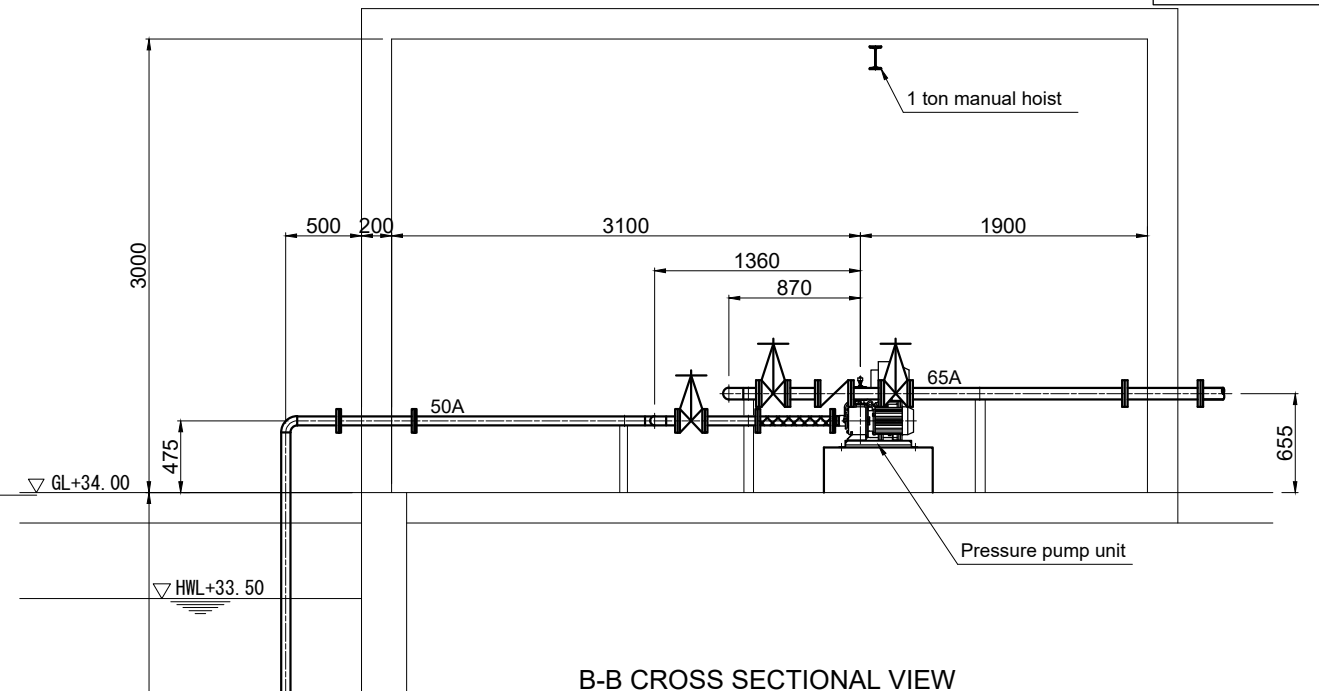
CABLE	CONDUIT
0.6/1kv XLPE/PVC 4c-25mm2	1 1/4"
0.6/1kv PVC/PVC 4c-2.5mm2	1"

CABLE	CONDUIT
0.6/1kv PVC/PVC 5c-2.5mm2	1"

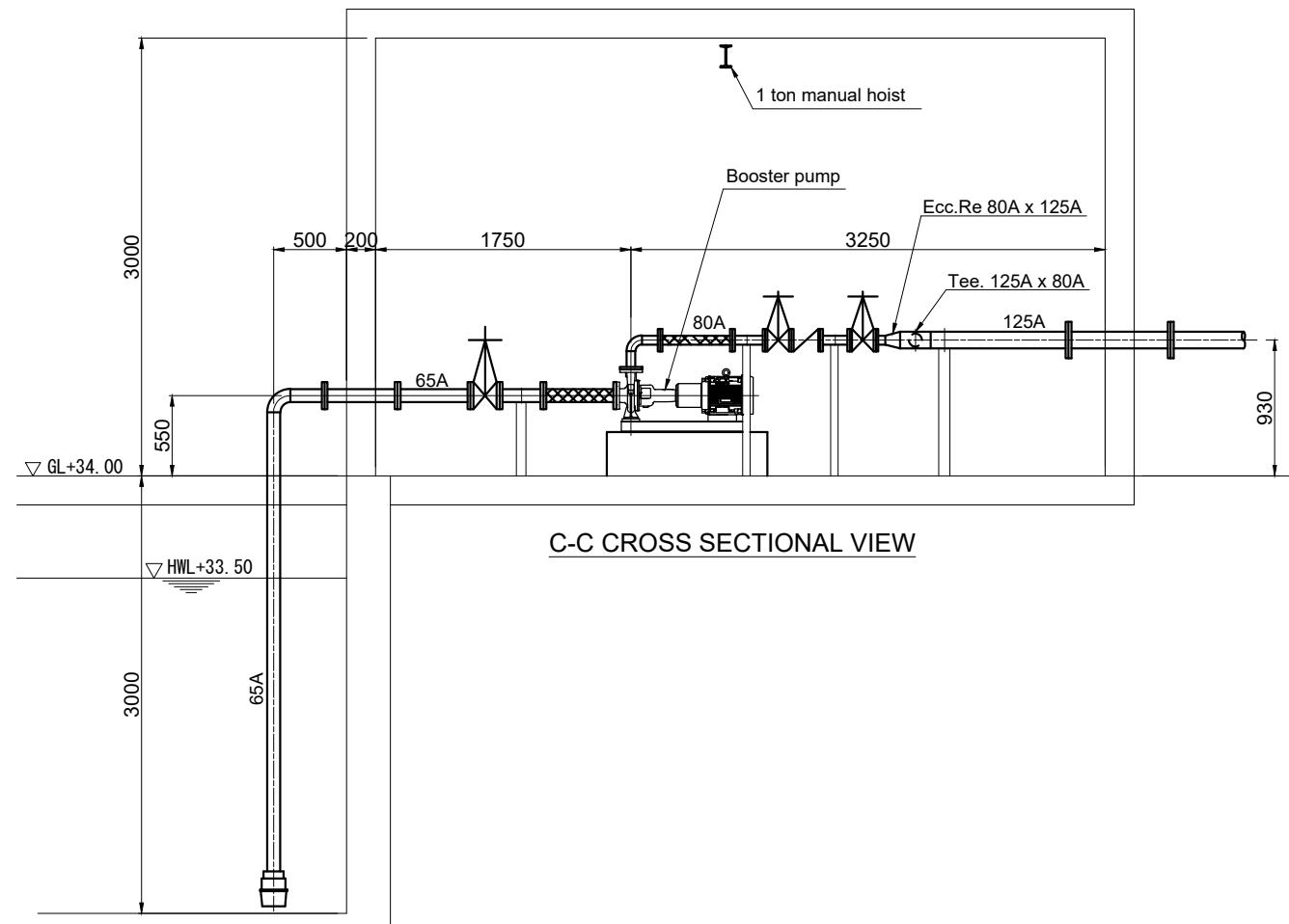
<p>OWNER:</p> <p style="text-align: center;">KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p style="text-align: center;">THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p style="text-align: center;"> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE:</p> <p style="text-align: center;">BOOSTER PUMPING STATION CONTROL ROOM PLAN(1/3)</p>
		<p>SCALE:</p> <p style="text-align: center;">1:50</p>	<p>DATE:</p> <p style="text-align: center;">OCT 2022</p>
		<p>DRAWING NO.:</p> <p style="text-align: center;">WS - BPS - 007-1</p>	



A-A CROSS SECTIONAL VIEW



B-B CROSS SECTIONAL VIEW



C-C CROSS SECTIONAL VIEW

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

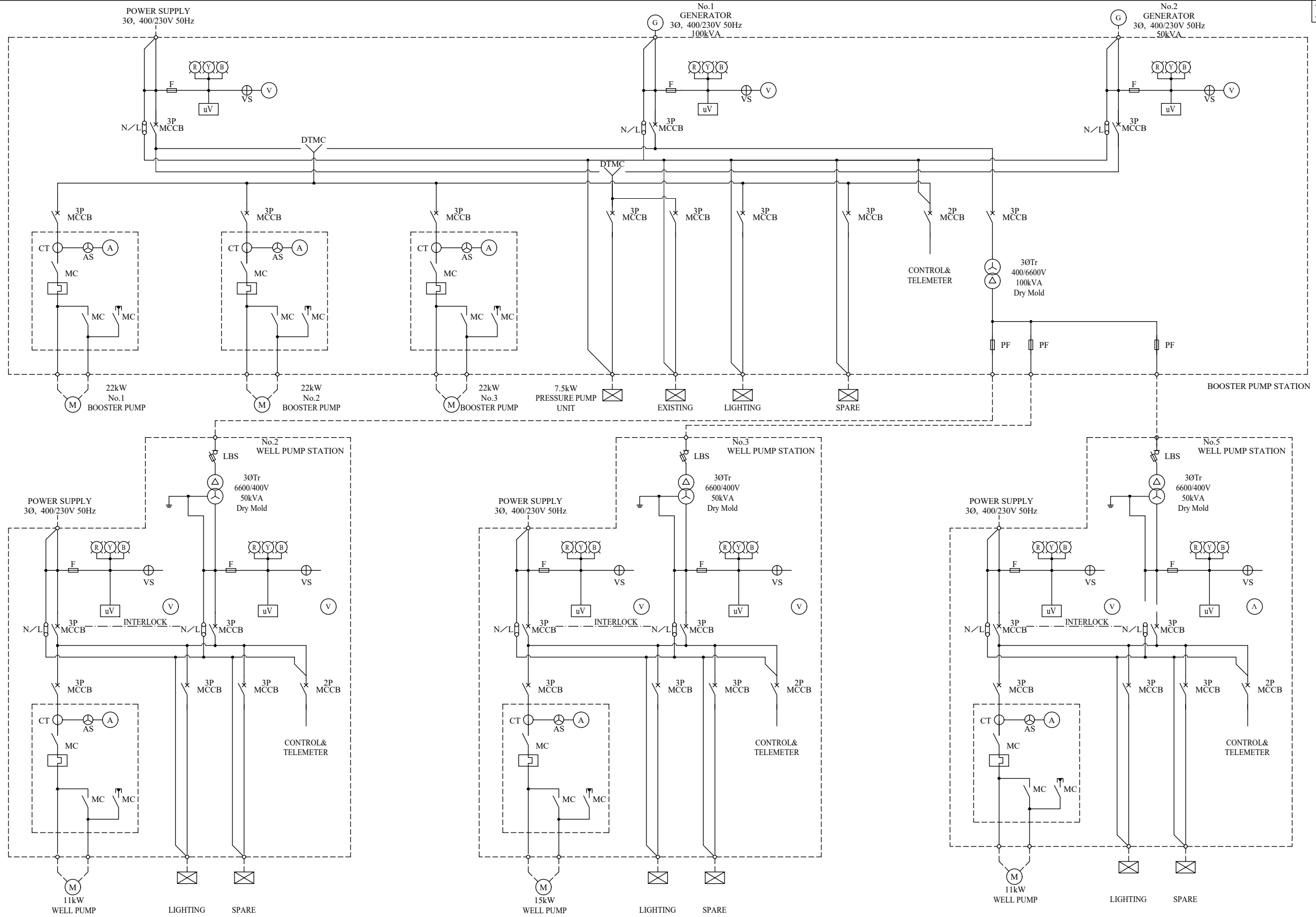
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
BOOSTER PUMPING STATION
CONTROL ROOM PLAN(2/3)

SCALE:
1:50

DATE:
OCT 2022

DRAWING NO.:
WS - BPS - 007-2

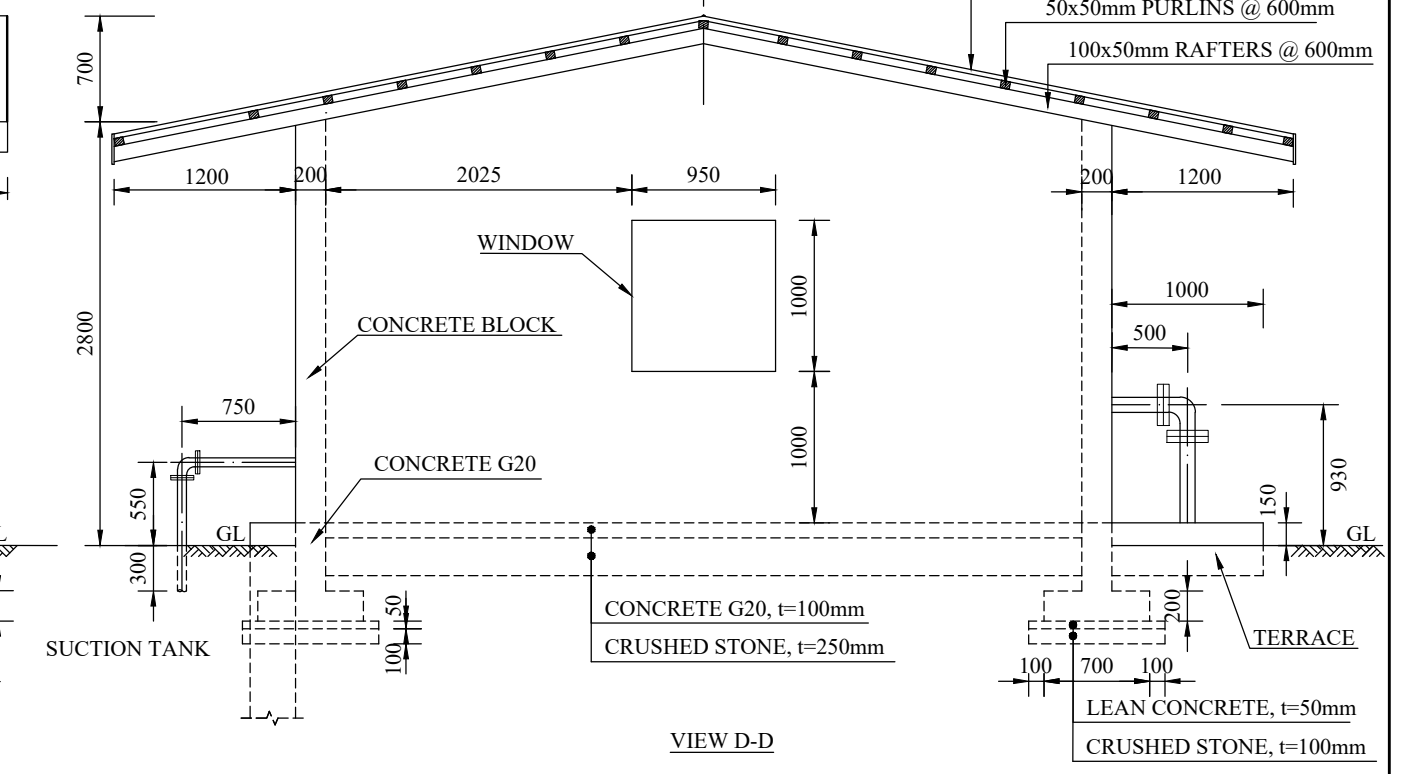
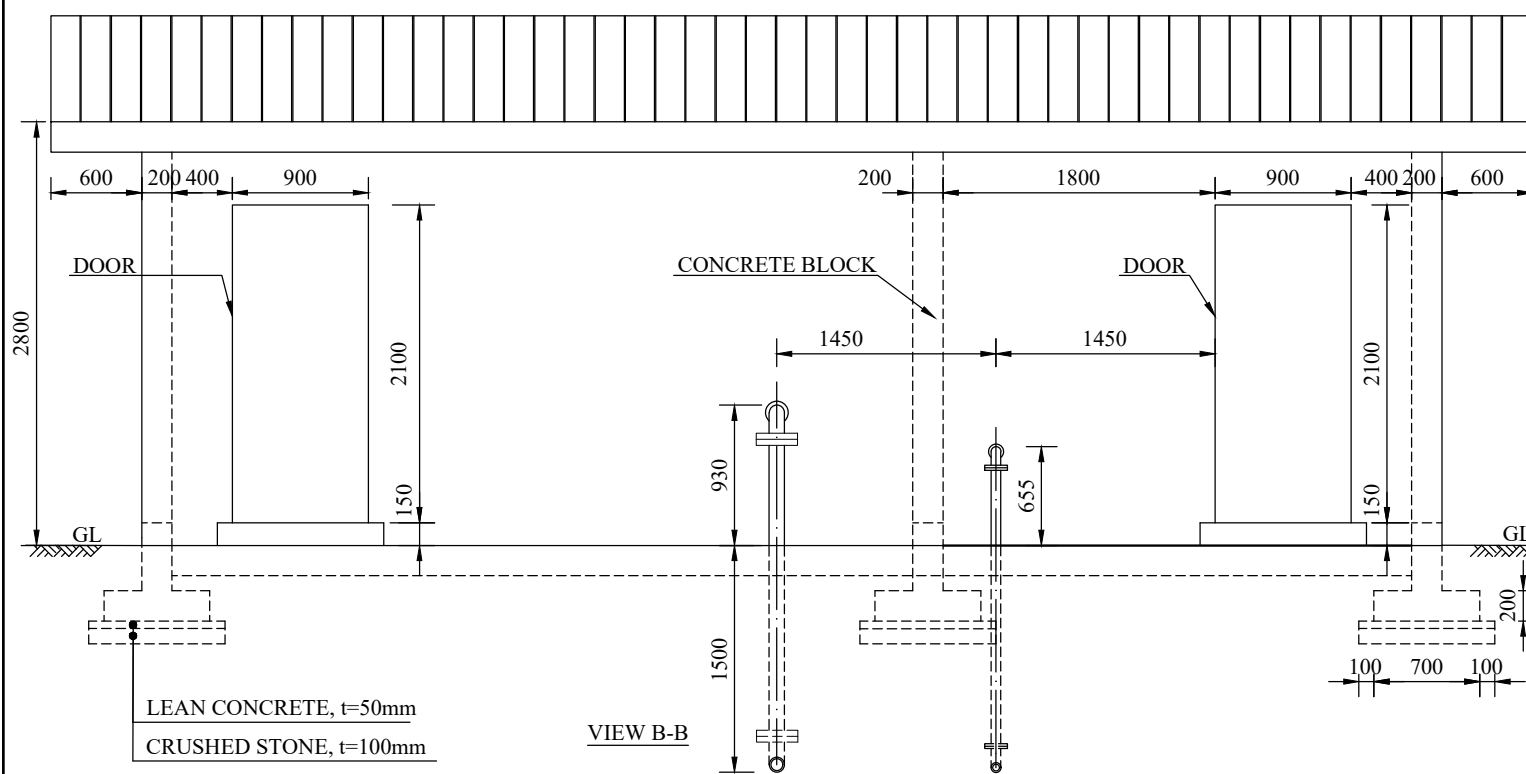
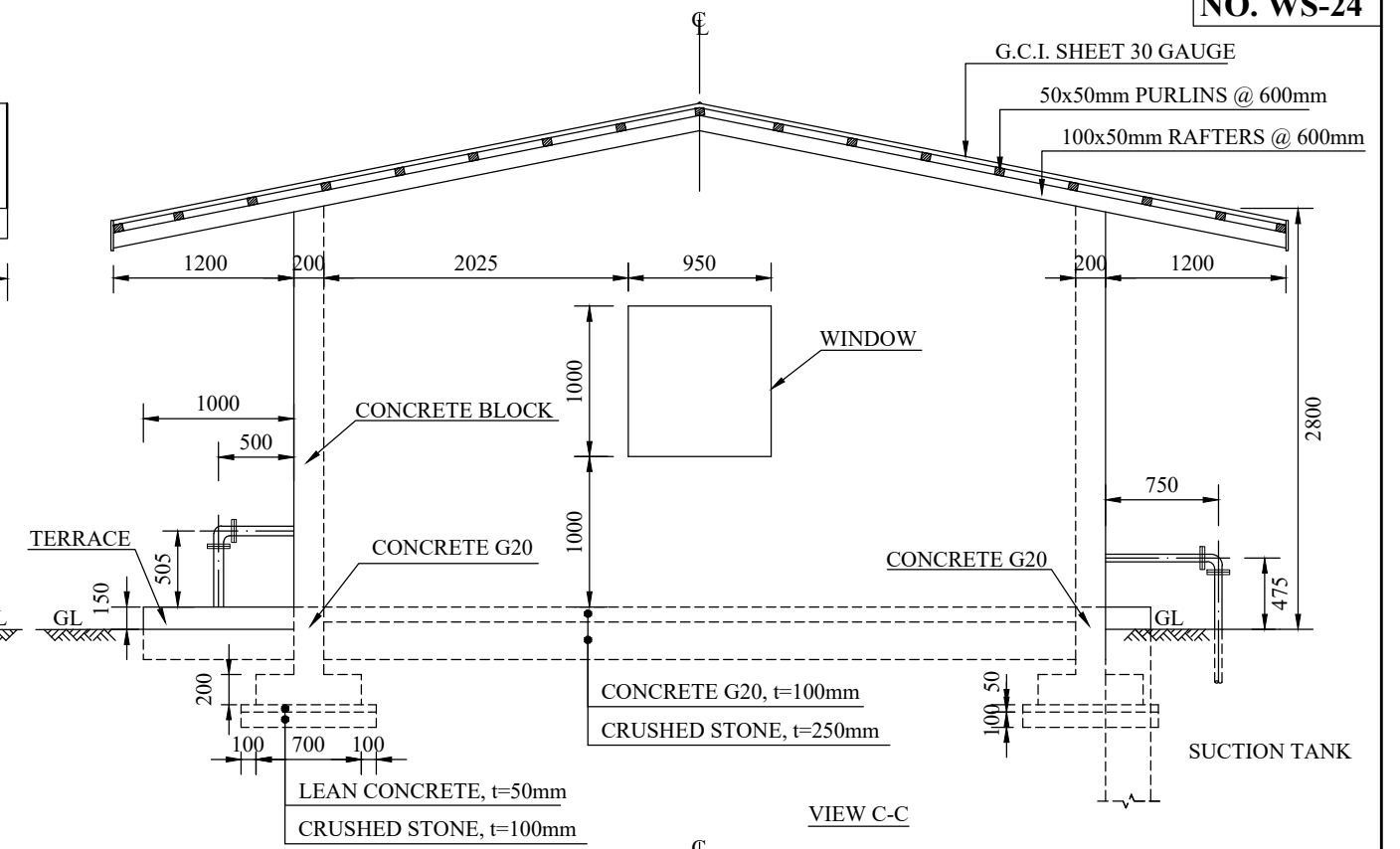
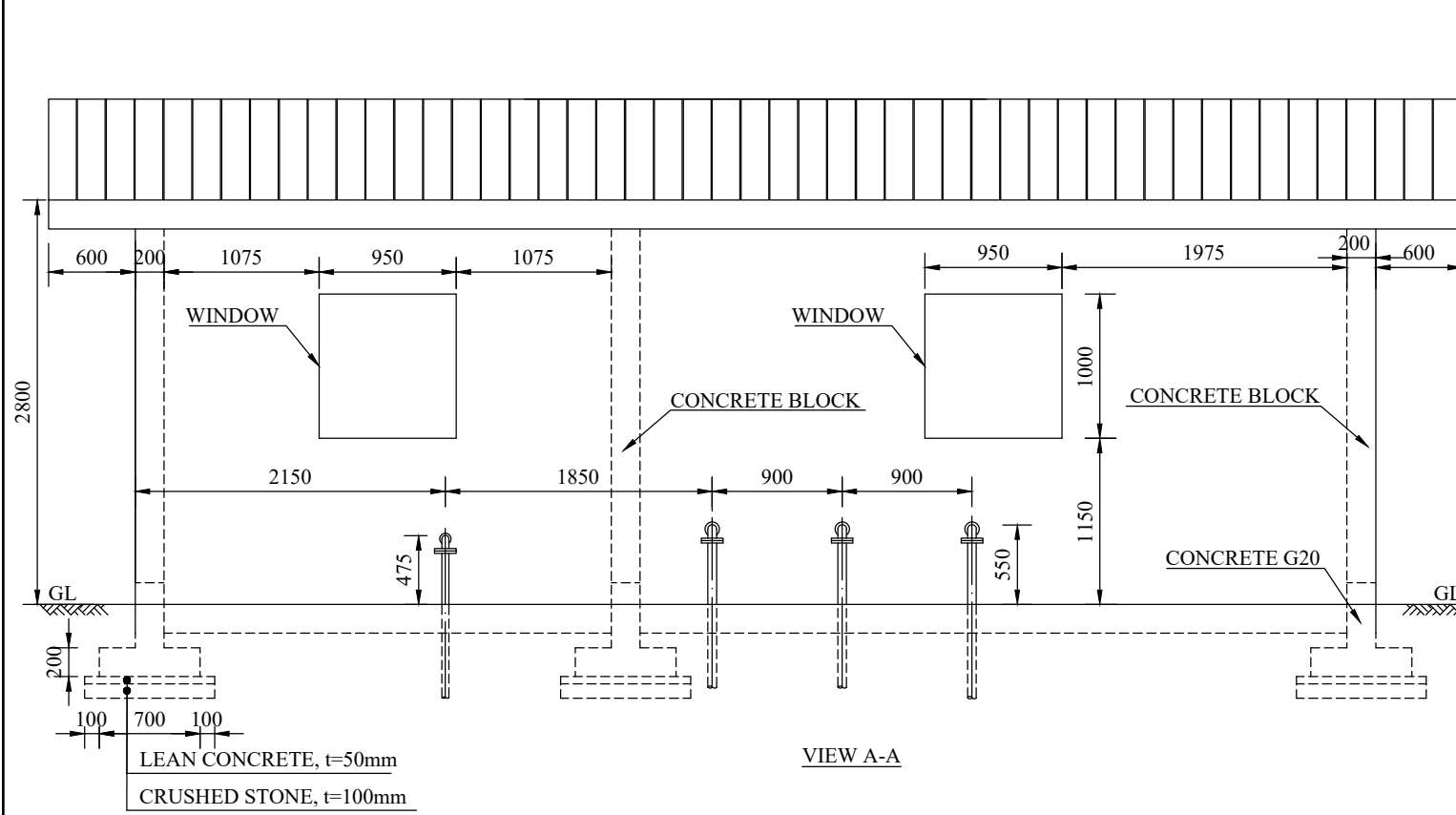


OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE: BOOSTER PUMPING STATION CONTROL ROOM PLAN(3/3)		
SCALE: 1:50	DATE: OCT 2022	DRAWING NO.: WS - BPS - 007-3



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

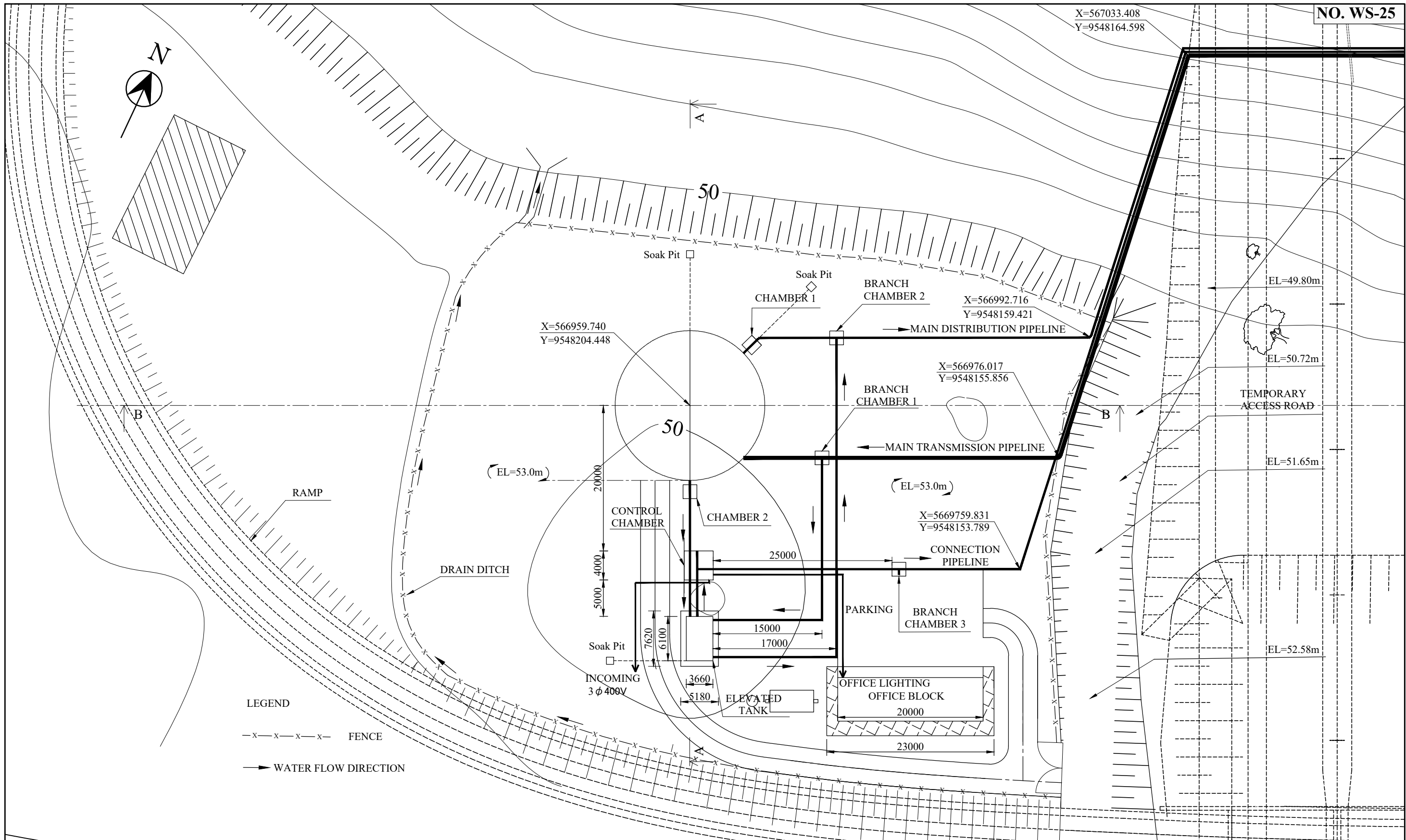
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
BOOSTER PUMPING STATION
CONTROL ROOM SECTION


SCALE: 1:50	DATE: OCT 2022	DRAWING NO.: WS - BPS - 008
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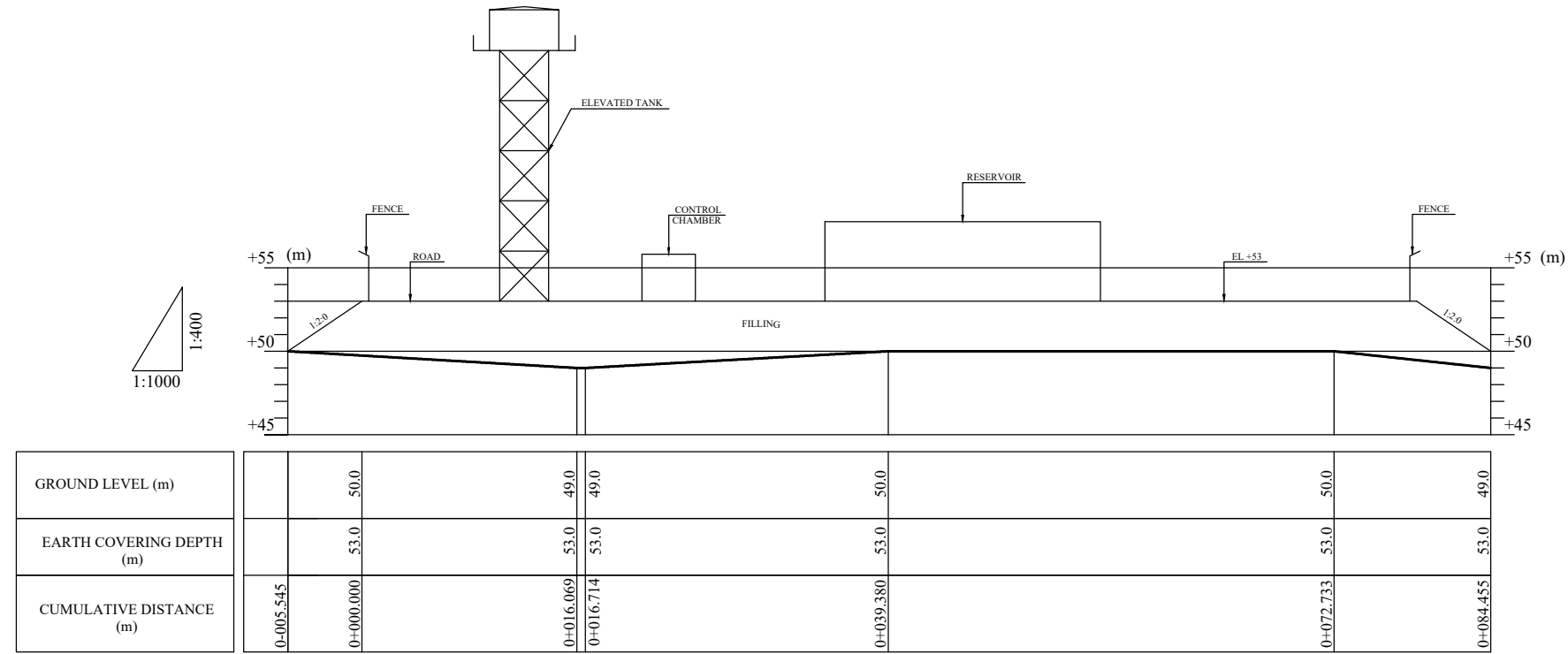
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NO. WS-25

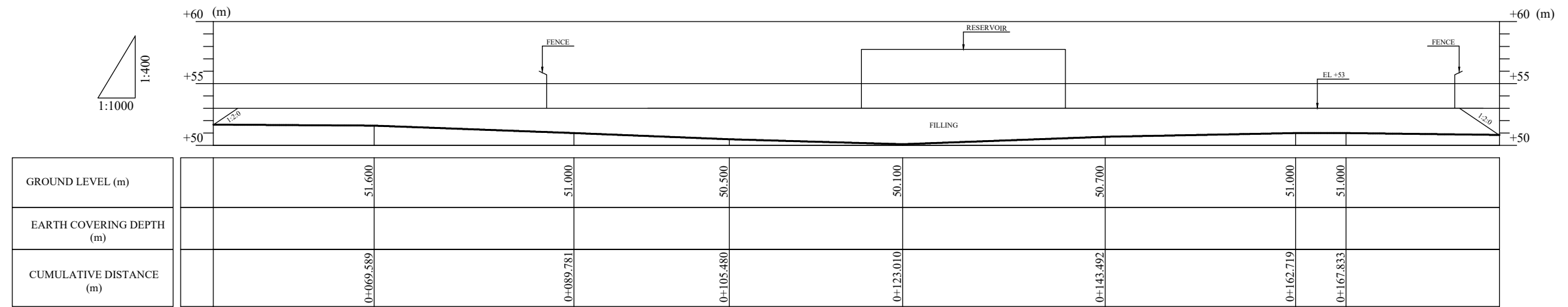


LEGEND
 -x-x-x-x-x- FENCE
 → WATER FLOW DIRECTION

<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: MOMBASA SEZ RESERVOIR LAYOUT PLAN OF MOMBASA SEZ RESERVOIR</p>		
		<p>SCALE: 1:500</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - MSR - 002</p>	



SECTION A-A



SECTION B-B

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

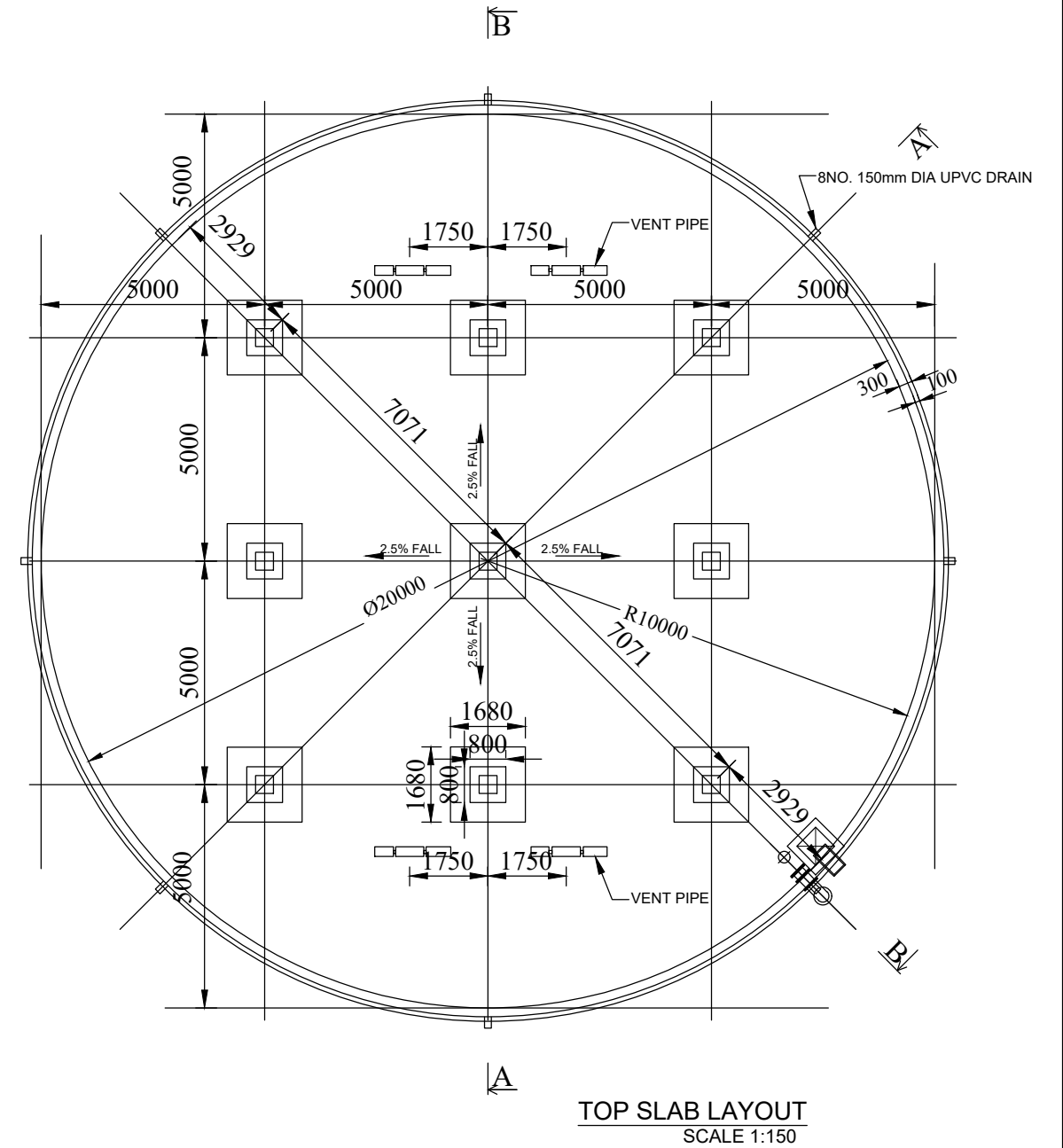
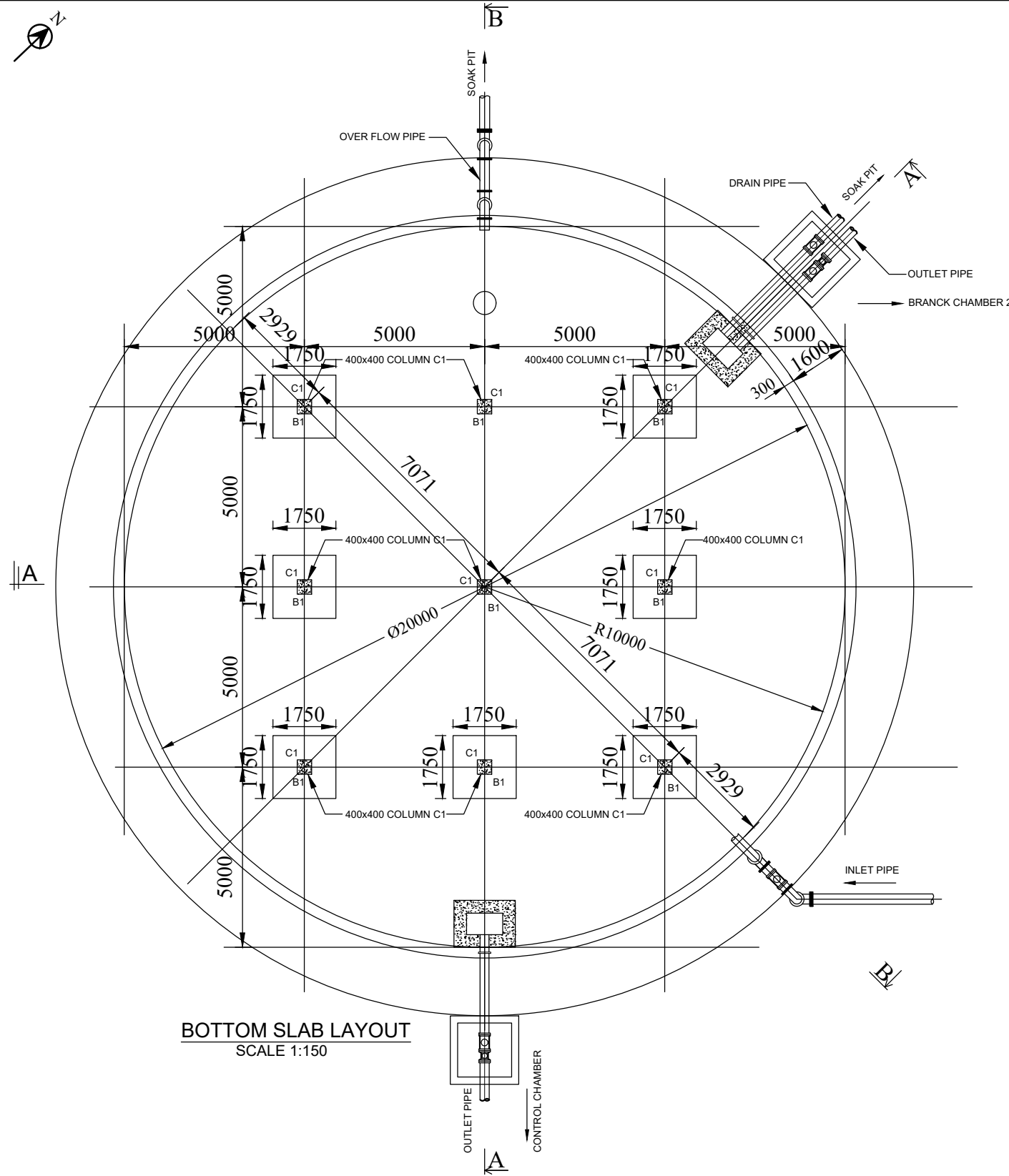
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
SECTION PLAN OF MOMBASA SEZ RESERVOIR

SCALE:
H:1000
V:400

DATE:
OCT 2022

DRAWING NO.:
WS - MSR - 003



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

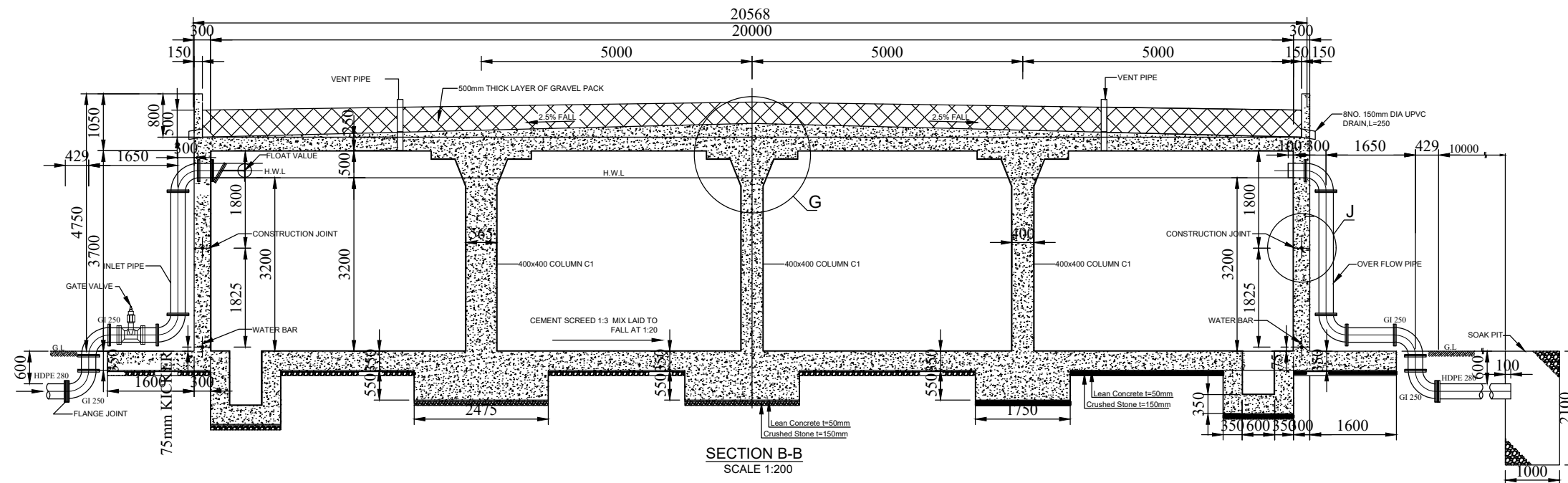
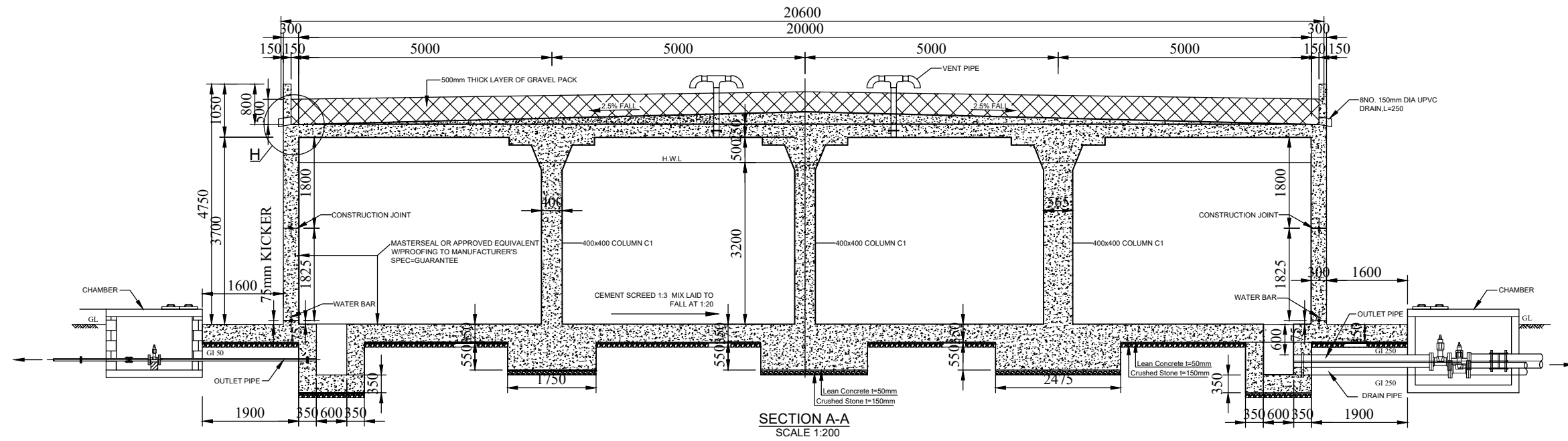
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
LAYOUT OF RESERVOIR(1/3)

SCALE:
1:150

DATE:
OCT 2022

DRAWING NO.:
WS - MSR - 004-1



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

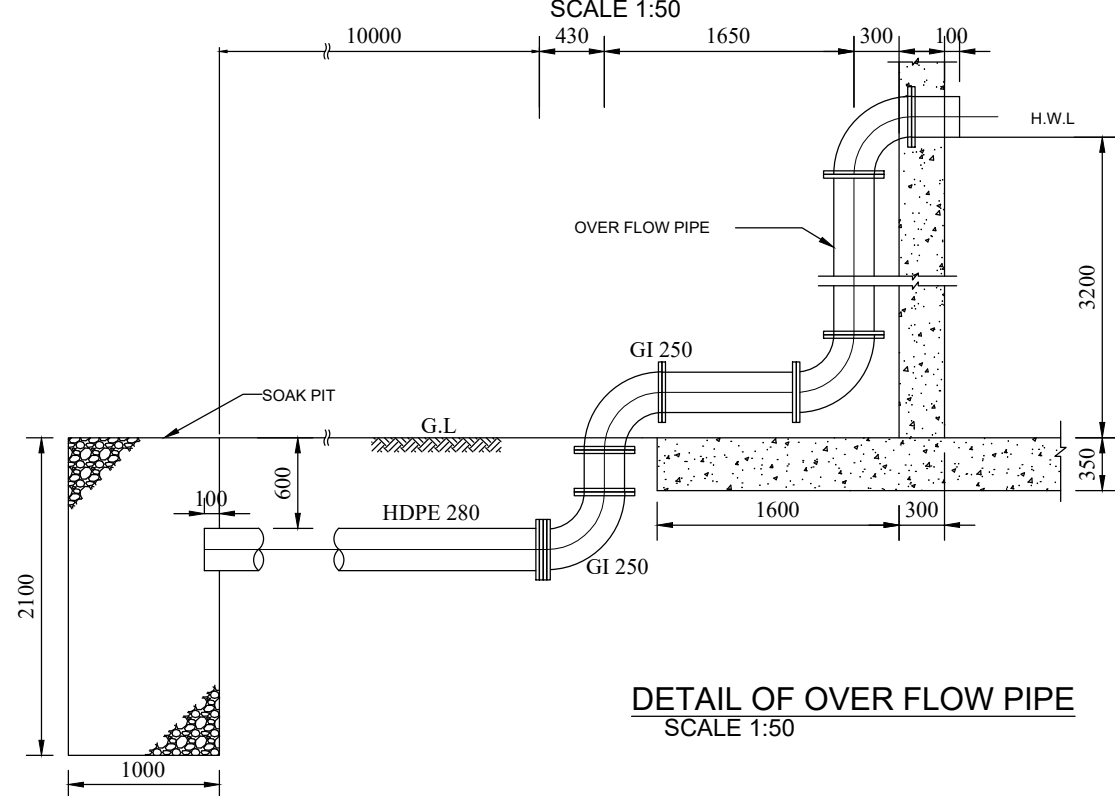
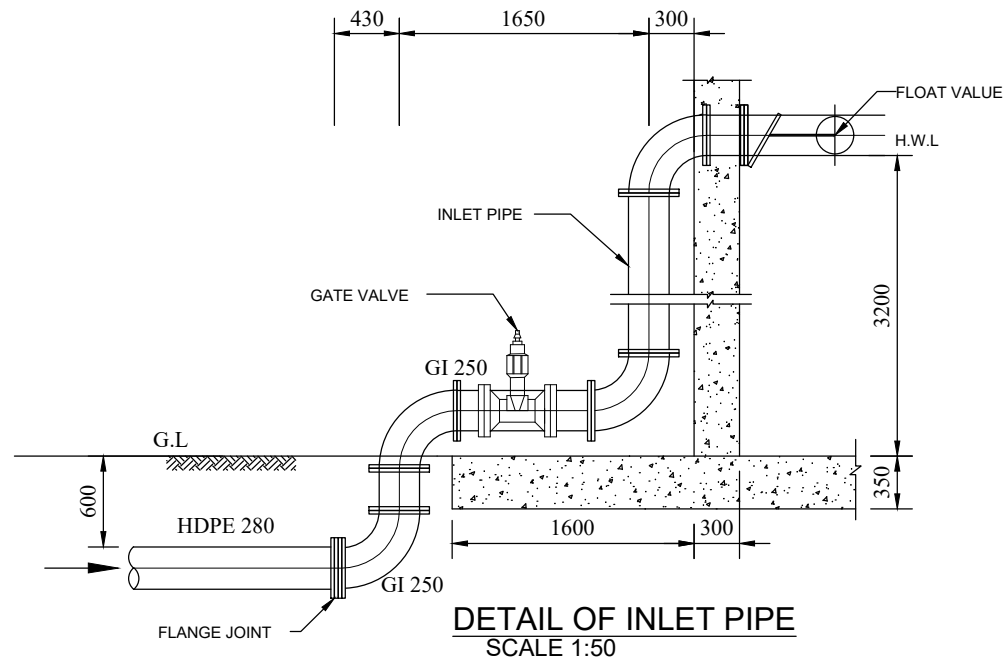
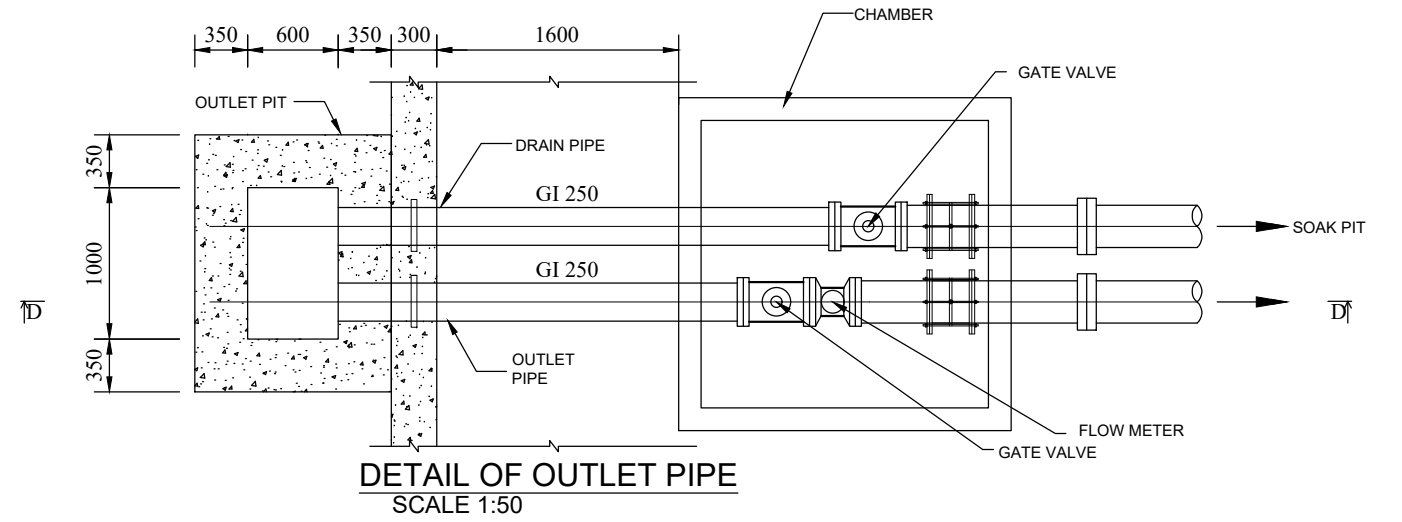
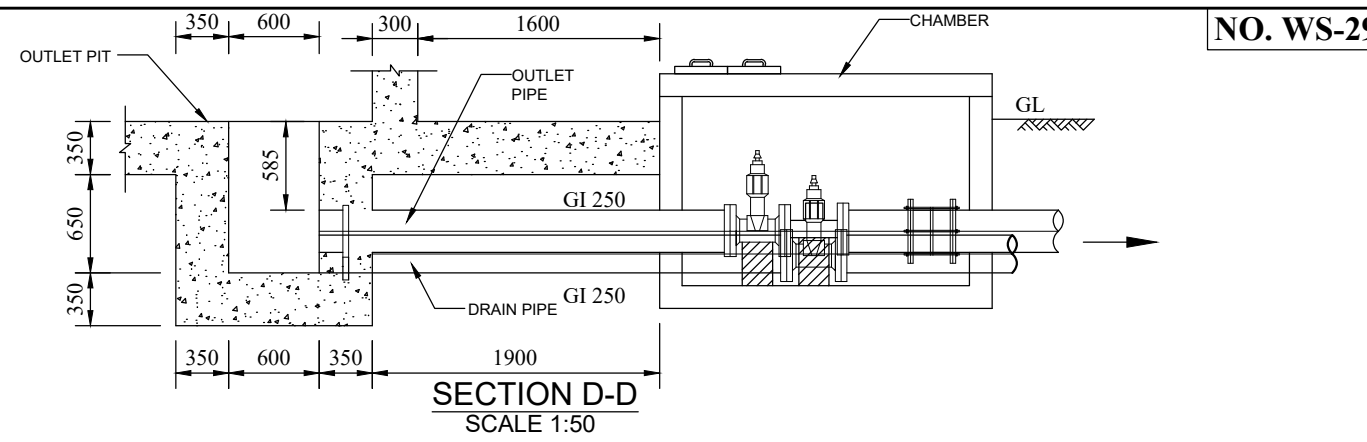
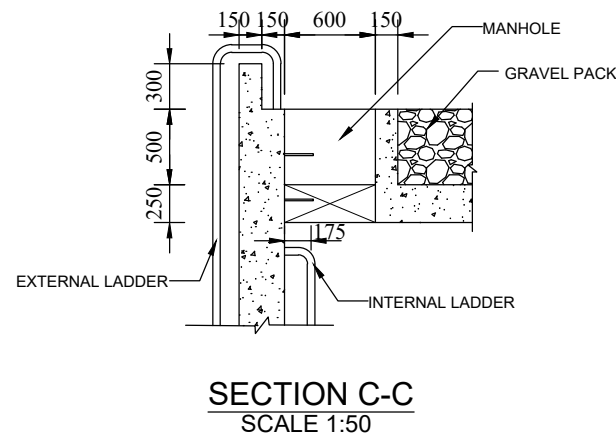
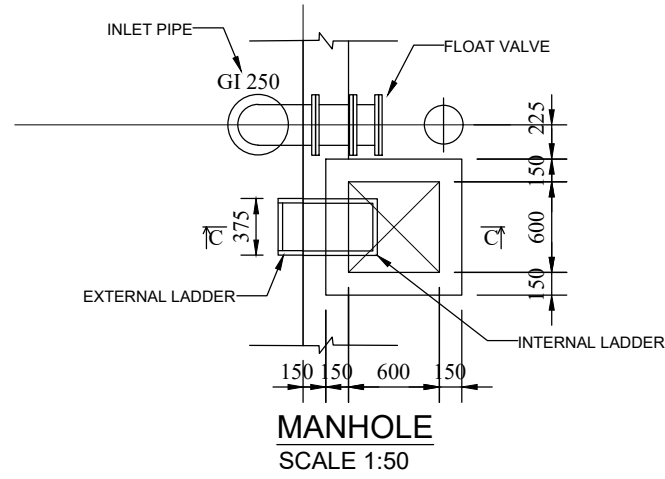
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
SECTION OF RESERVOIR

SCALE:
1:200

DATE:
OCT 2022

DRAWING NO.:
WS - MSR - 004-2



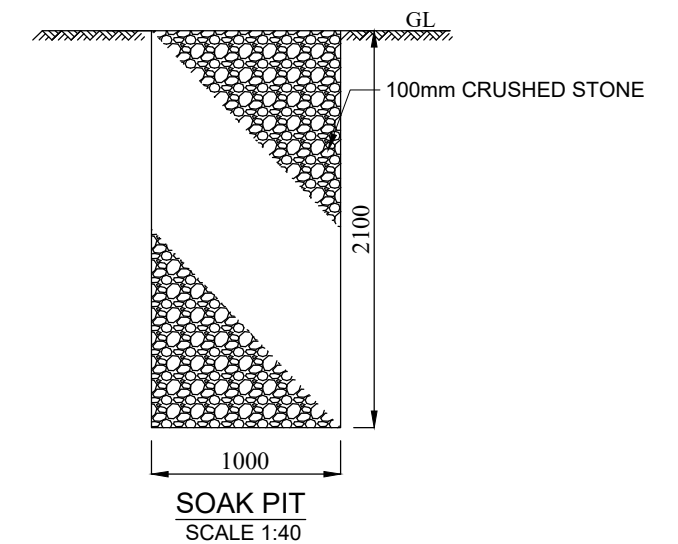
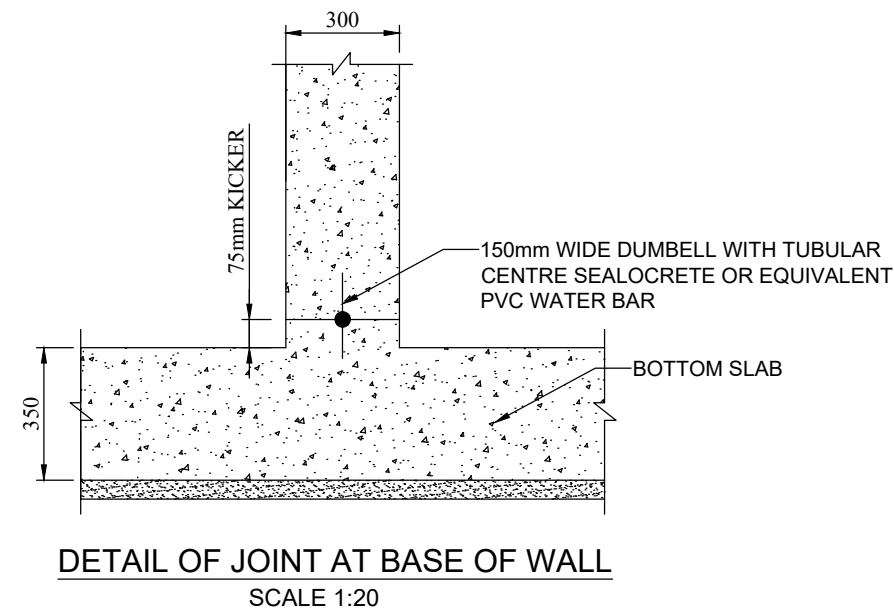
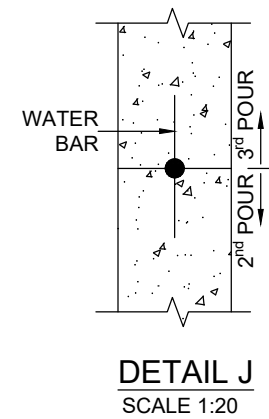
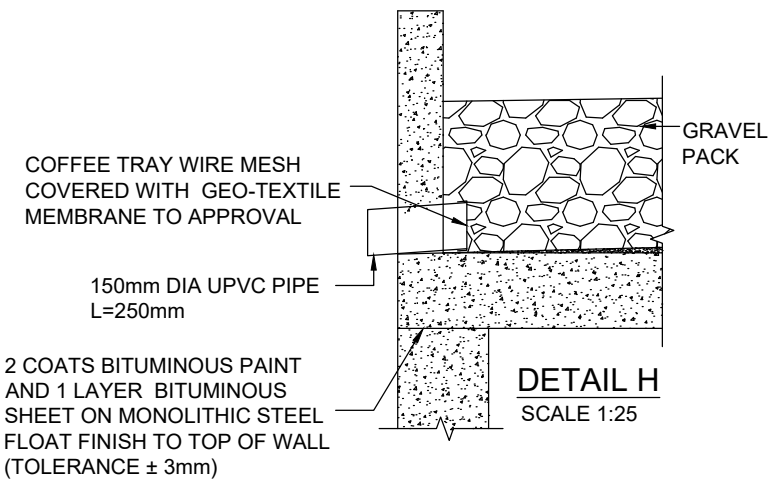
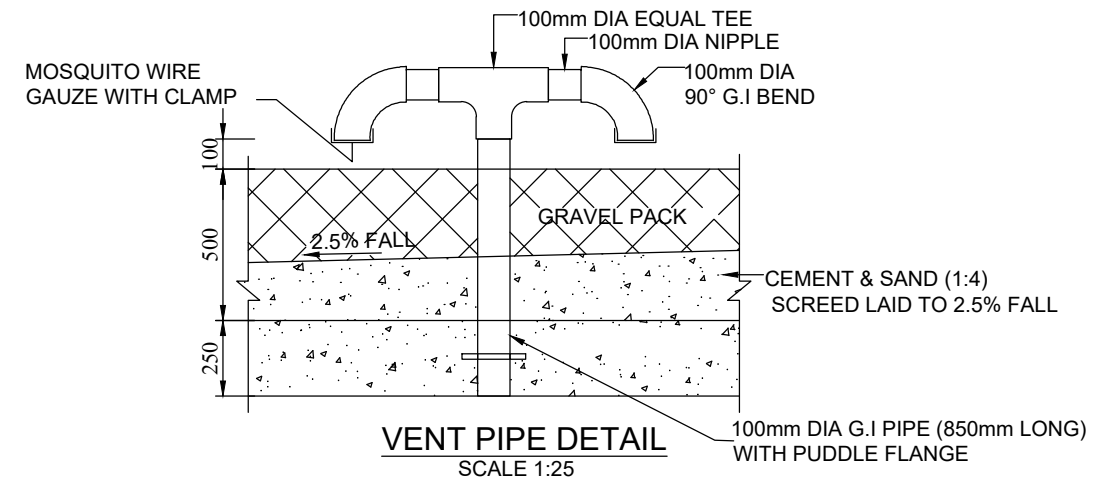
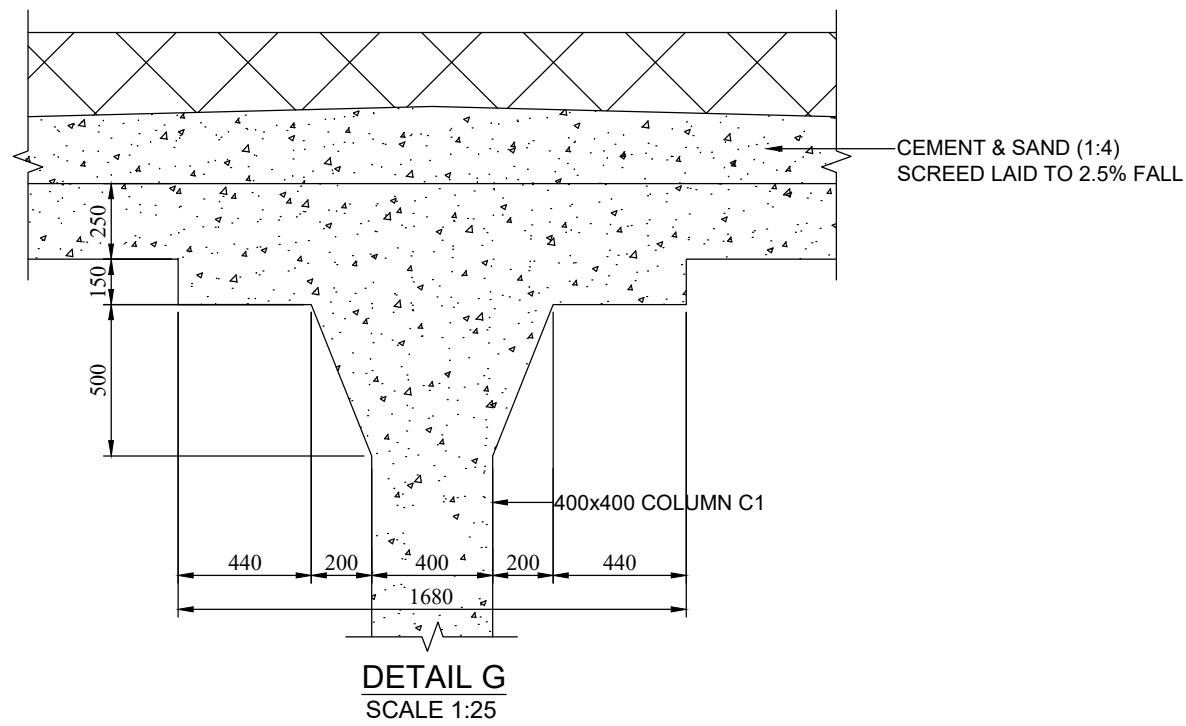
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
DETAIL OF RESERVOIR(1/3)

SCALE: 1:50	DATE: OCT 2022	DRAWING NO.: WS - MSR - 005-1
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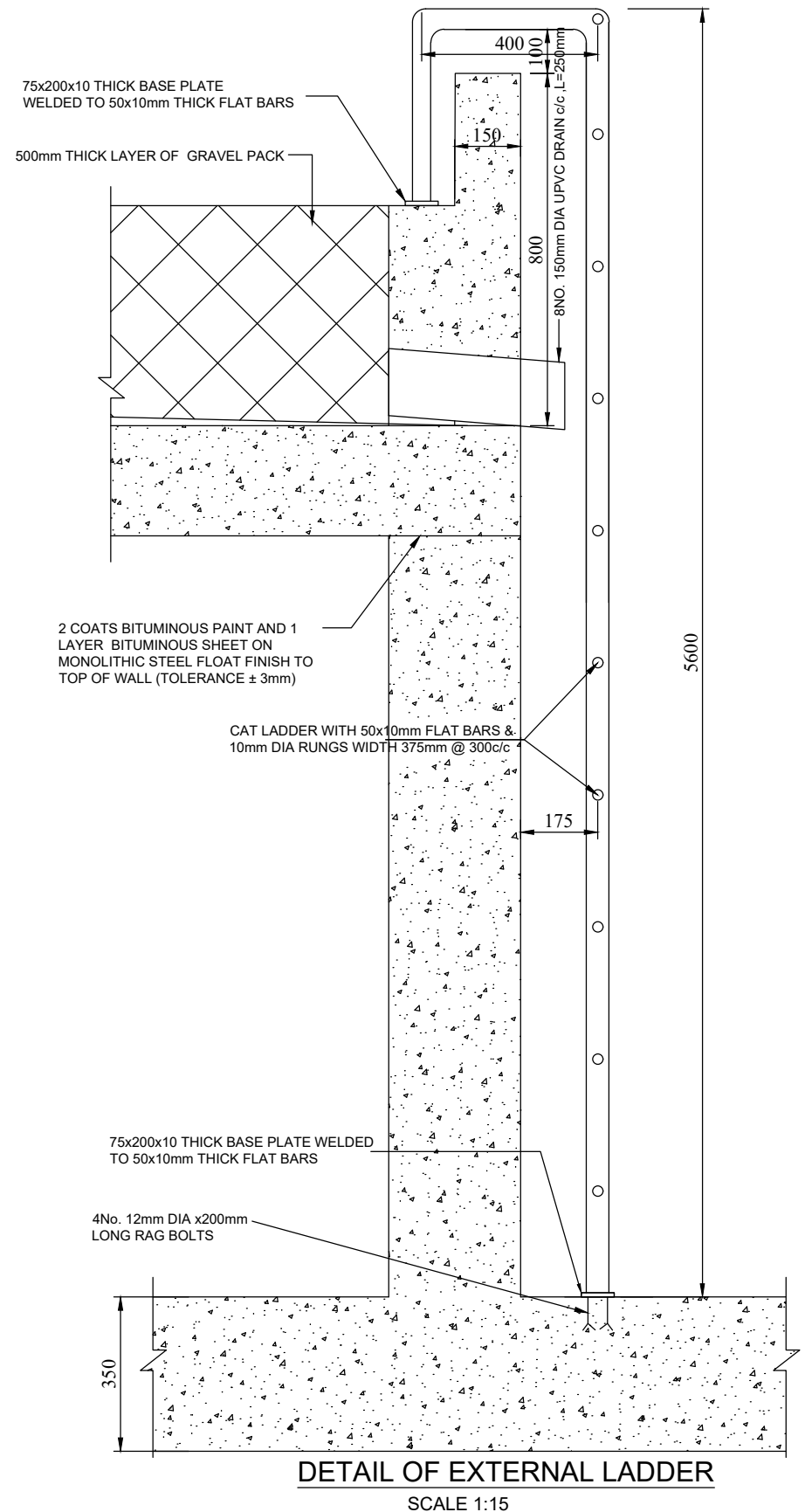
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
**THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE**

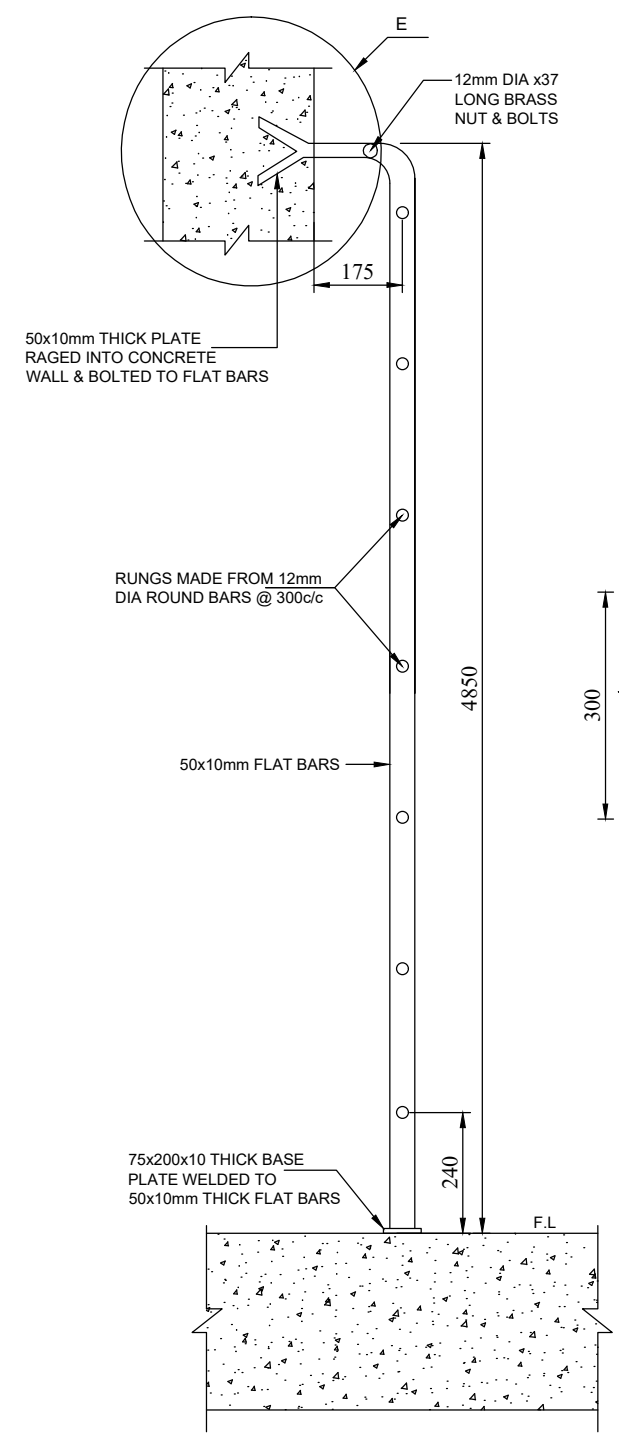
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**MOMBASA SEZ RESERVOIR
DETAIL OF RESERVOIR(2/3)**

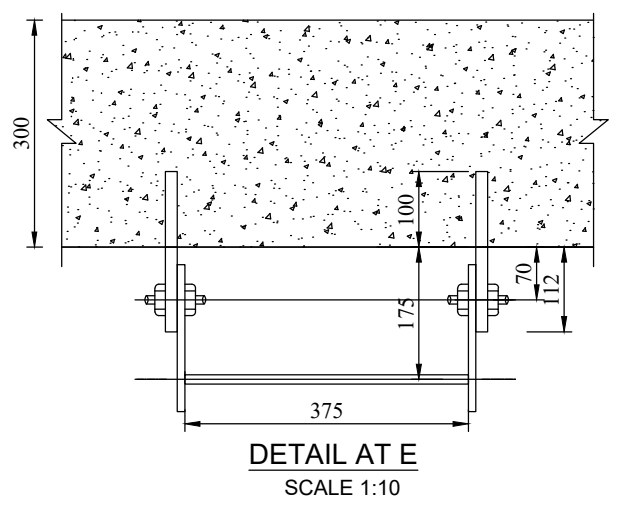
SCALE: 1:40/1:25/1:20	DATE: OCT 2022	DRAWING NO.: WS - MSR - 005-2
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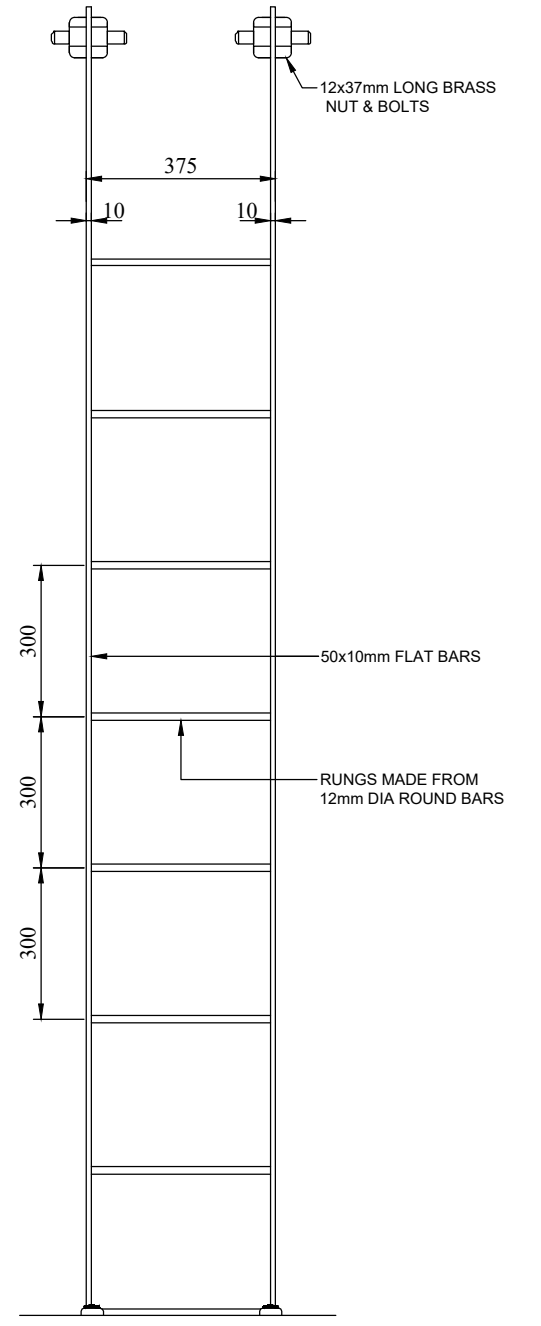
DETAIL OF EXTERNAL LADDER
SCALE 1:15




DETAIL OF INTERNAL LADDER
SCALE 1:15

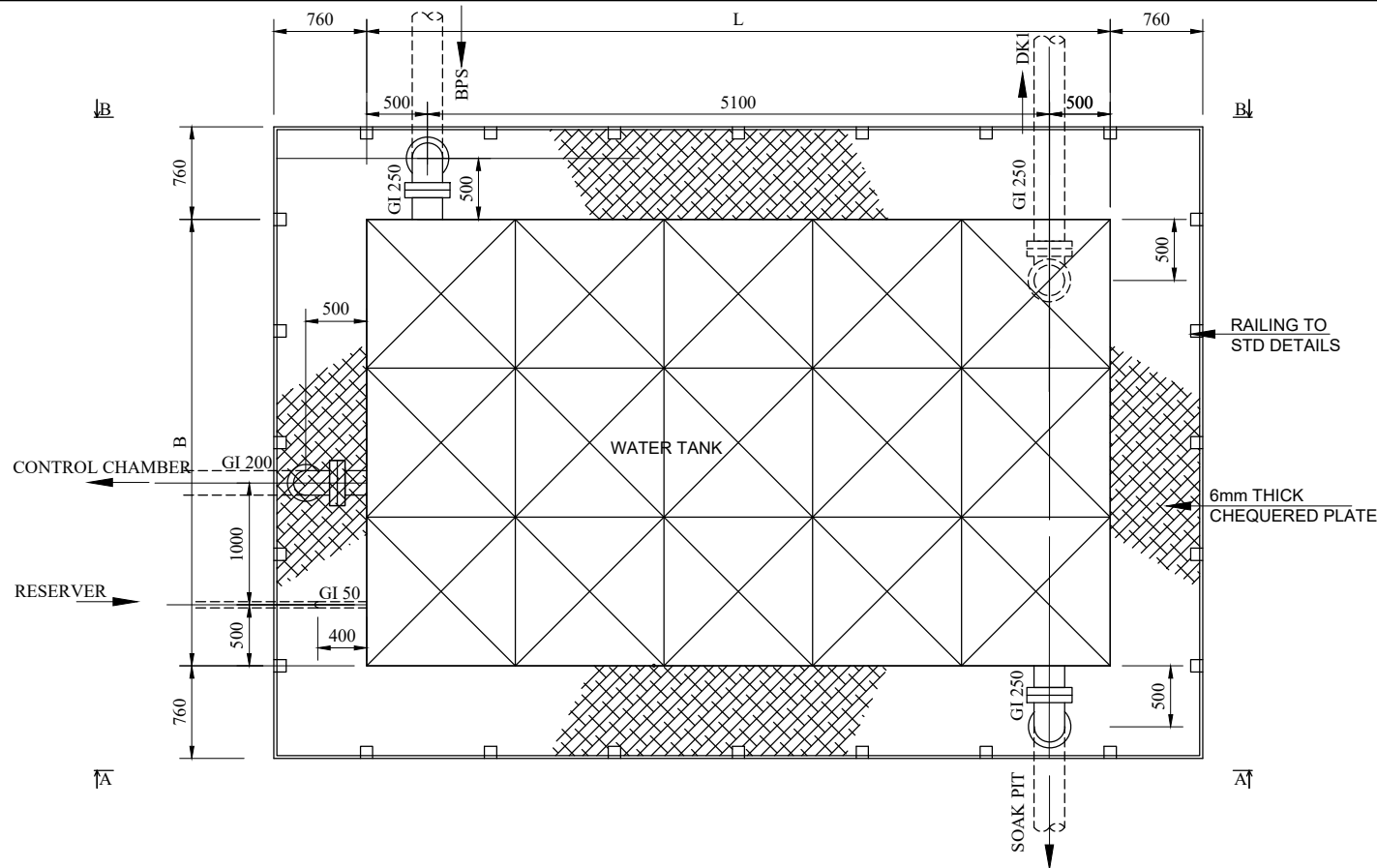


DETAIL AT E
SCALE 1:10



LADDER ELEVATION
SCALE 1:15

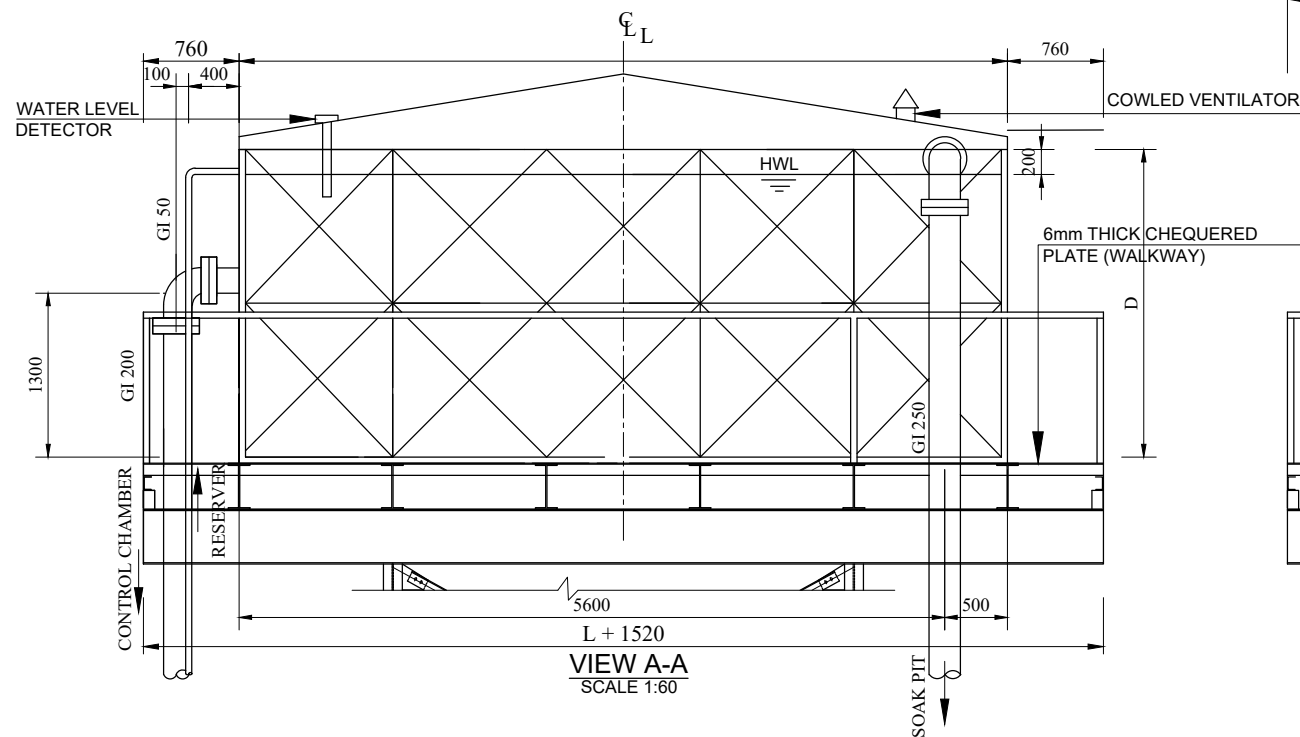
<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: MOMBASA SEZ RESERVOIR DETAIL OF RESERVOIR(3/3)</p>		
		<p>SCALE: 1:15/1:10</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - MSR - 005-3</p>	



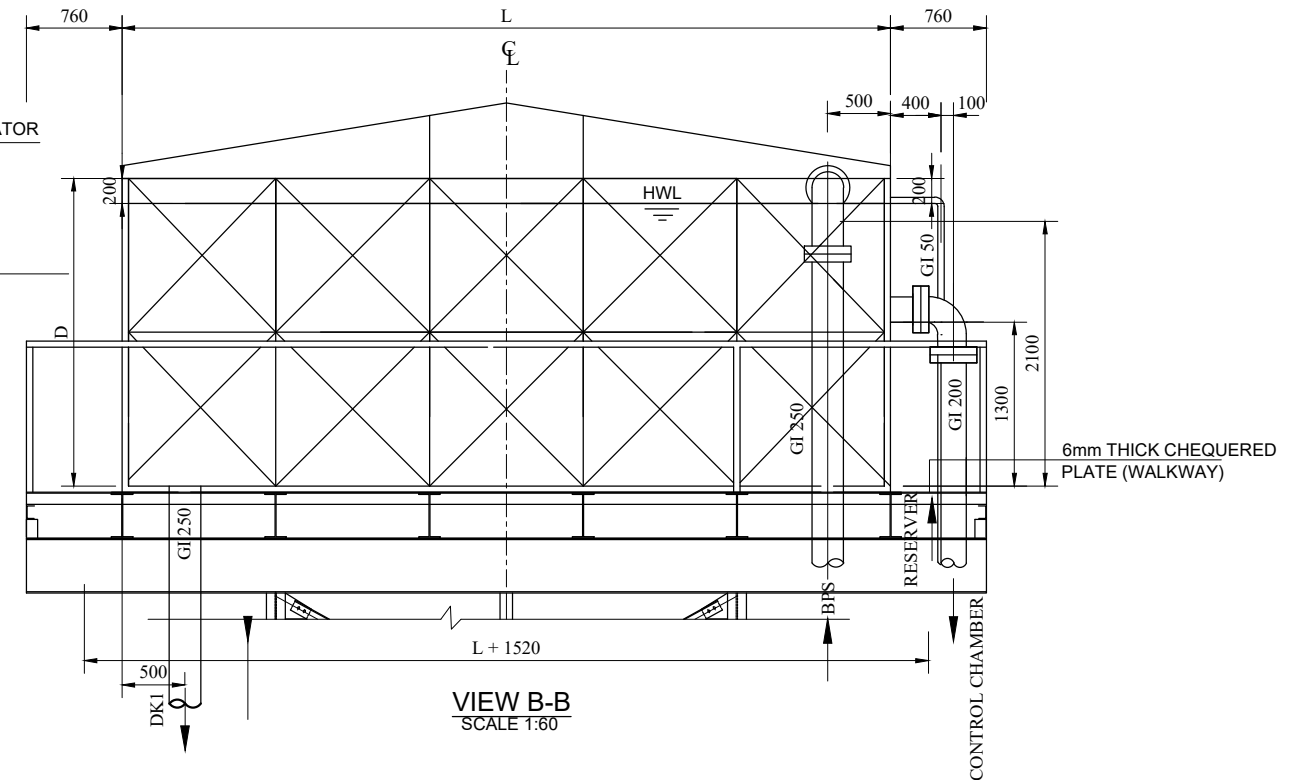
Tank Type	Storage Tank Volume		Square Side	Dimension & Number						Weight & Tank	
	Class (m³)	Actual (m³)	l (m)	L (m)	NL (nos.)	B (m)	NB (nos.)	D (m)	ND (nos.)	Empty (t)	Full Water (t)
V50	50.0	54.5	1.22	6.10	5	3.66	3	2.44	2	4.8	59.2

PIPE	DIMENSION(mm)
INLET FROM BPS	GI 50
INLET FROM RESERVER	GI 50
OUTLET TO DKI	GI 250
OUTLET TO CONTROL CHAMBER	GI 200
OVER FLOW	GI 250

TYPICAL LAYOUT PLAN OF ELEVATED STORAGE TANK
SCALE 1:60



VIEW A-A
SCALE 1:60



VIEW B-B
SCALE 1:60

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

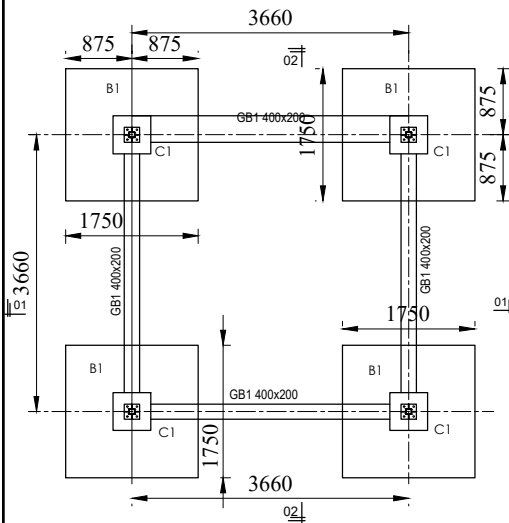
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
ELEVATED TANK (1/3)

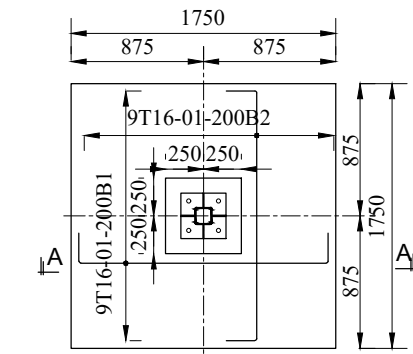
SCALE:
1:60

DATE:
OCT 2022

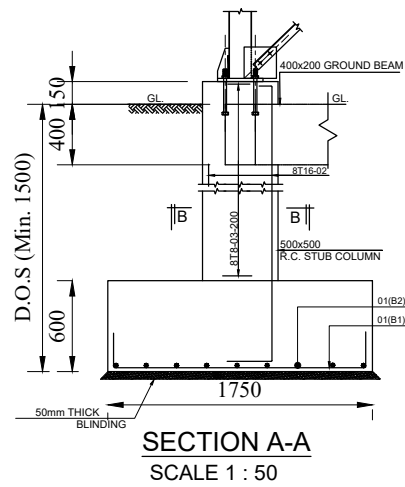
DRAWING NO.:
WS - MSR - 008



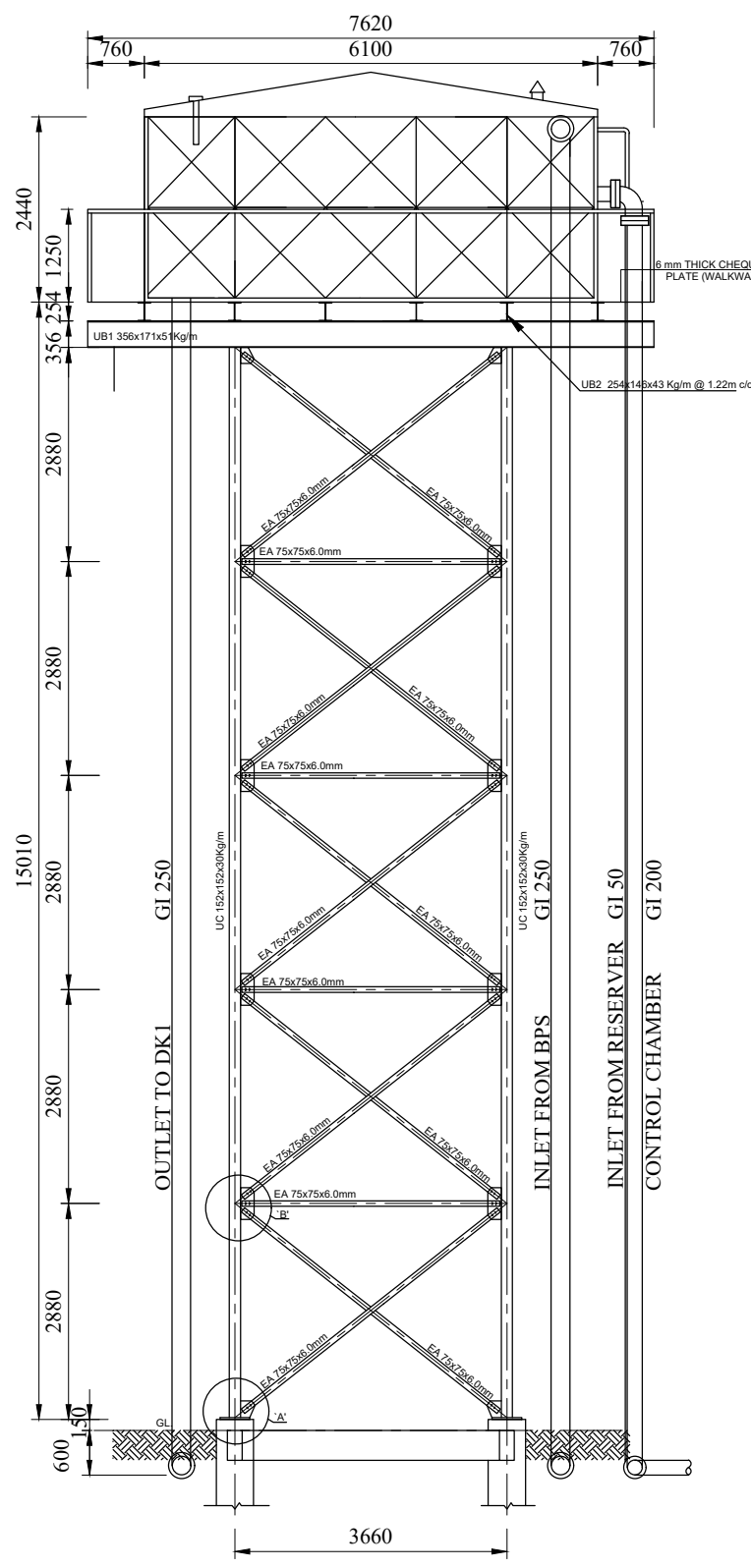
FOUNDATION LAYOUT
SCALE 1 : 100



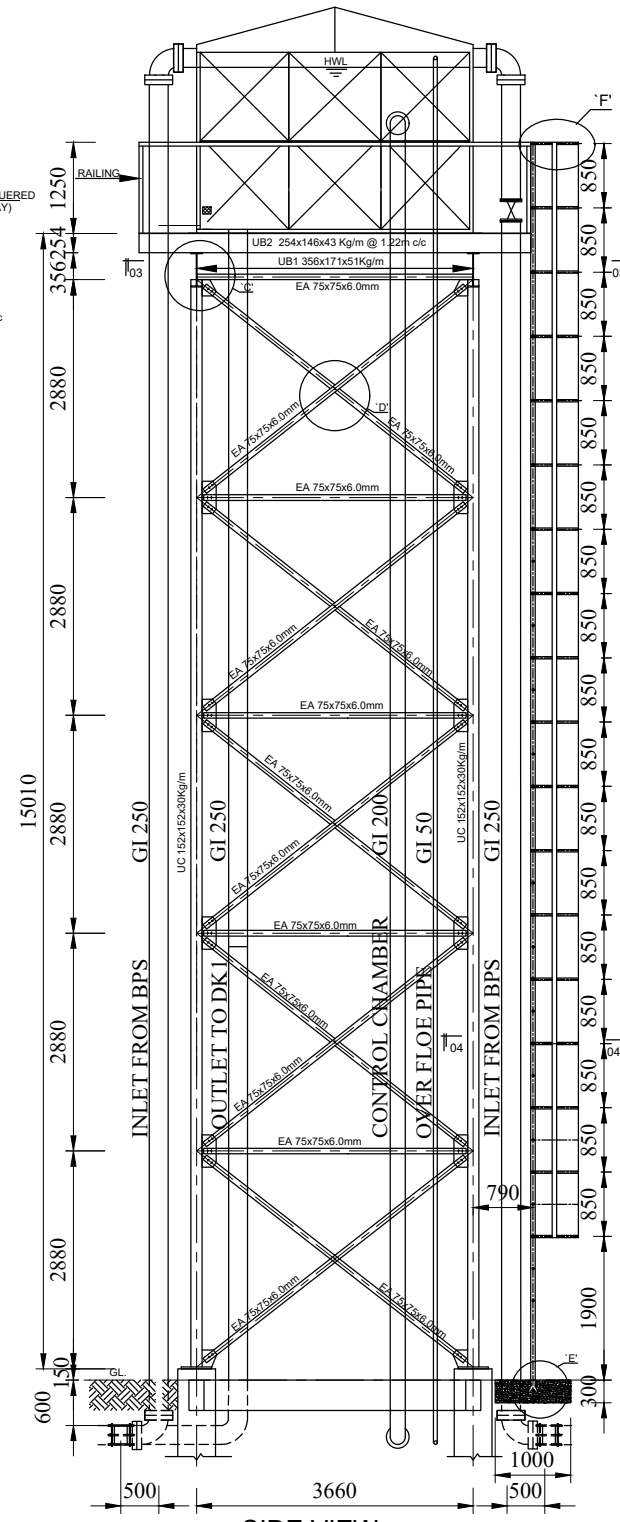
1750X1750X600 BASE B1(4No's)
SCALE 1 : 50



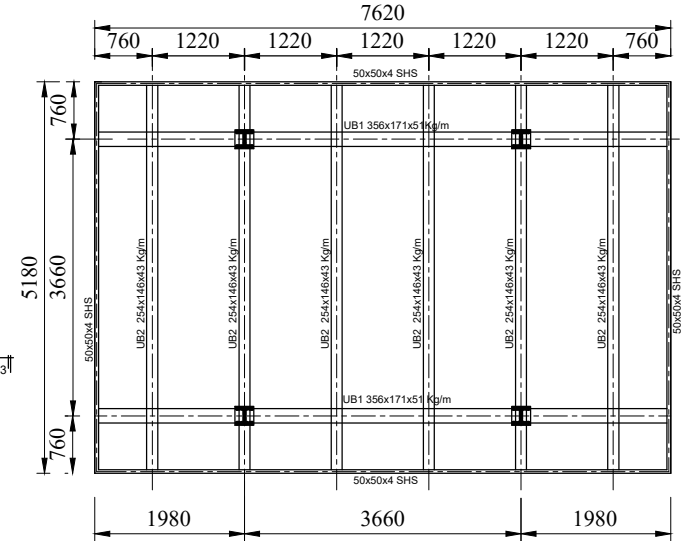
SECTION A-A
SCALE 1 : 50



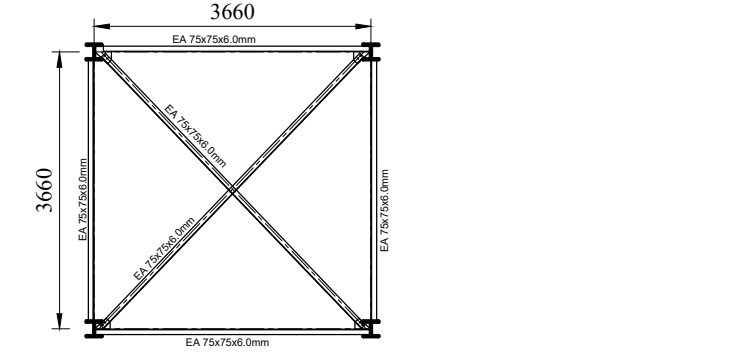
FRONT VIEW
SCALE 1:100



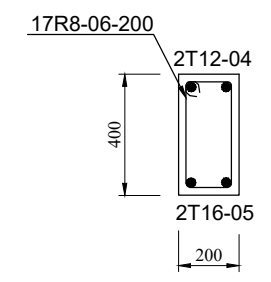
SIDE VIEW
SCALE 1:100



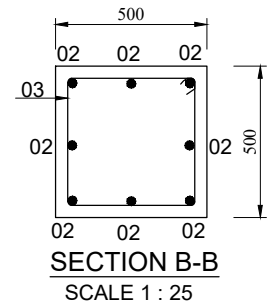
SECTION 3-3
SCALE 1:100



BRACING AT EVERY LEVEL EXCEPT TOP AND BOTTOM
SCALE 1:100



400X200 GB01 (4Nos)
SCALE 1 : 25



SECTION B-B
SCALE 1 : 25

OWNER:

KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:

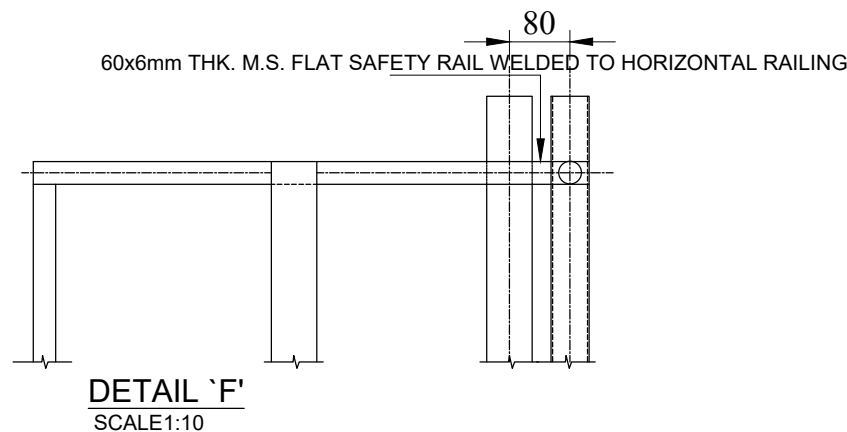
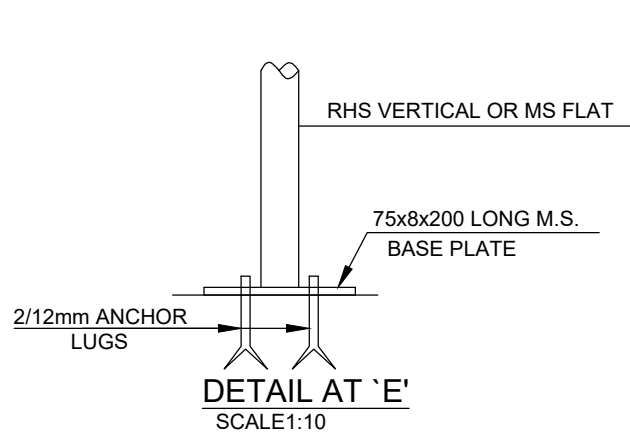
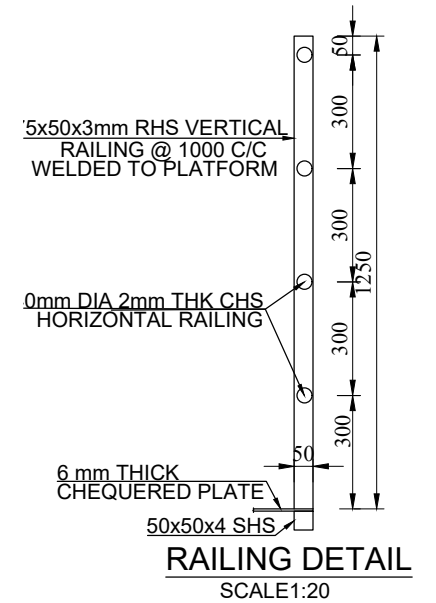
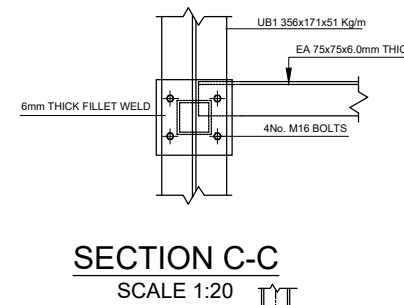
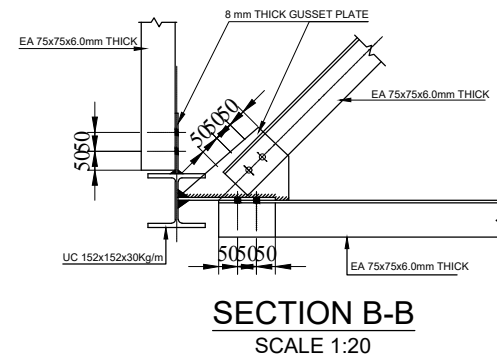
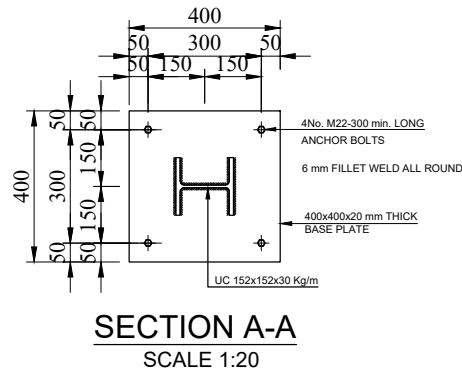
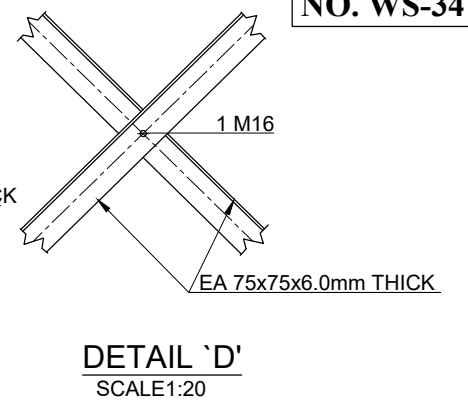
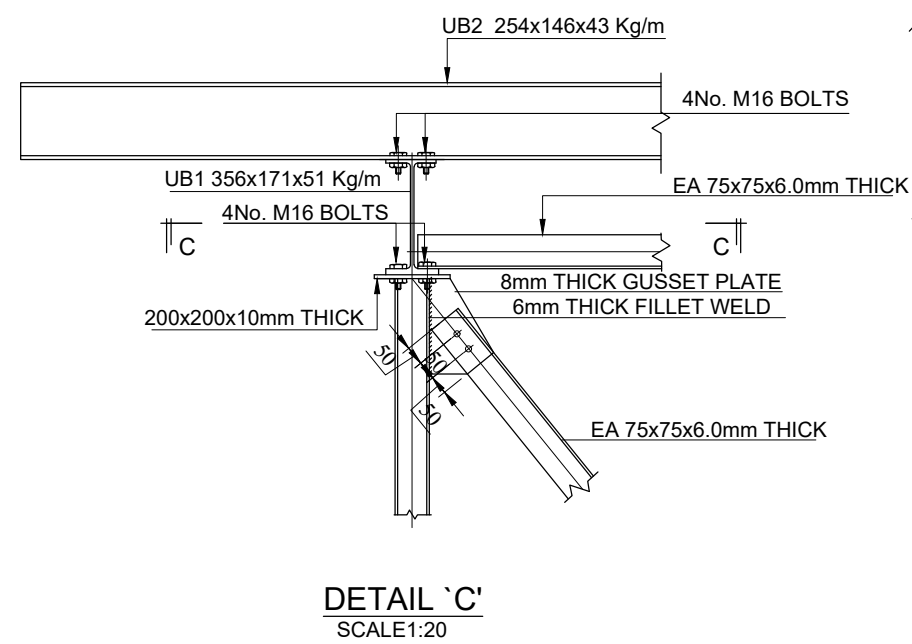
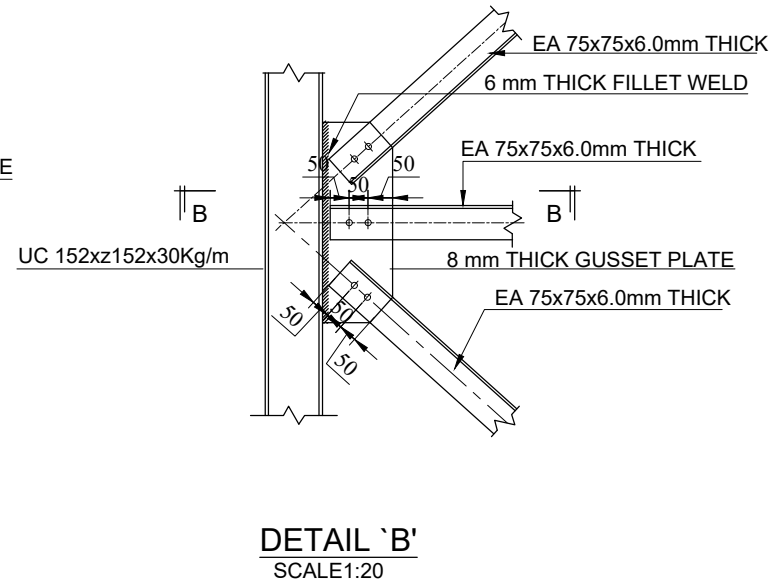
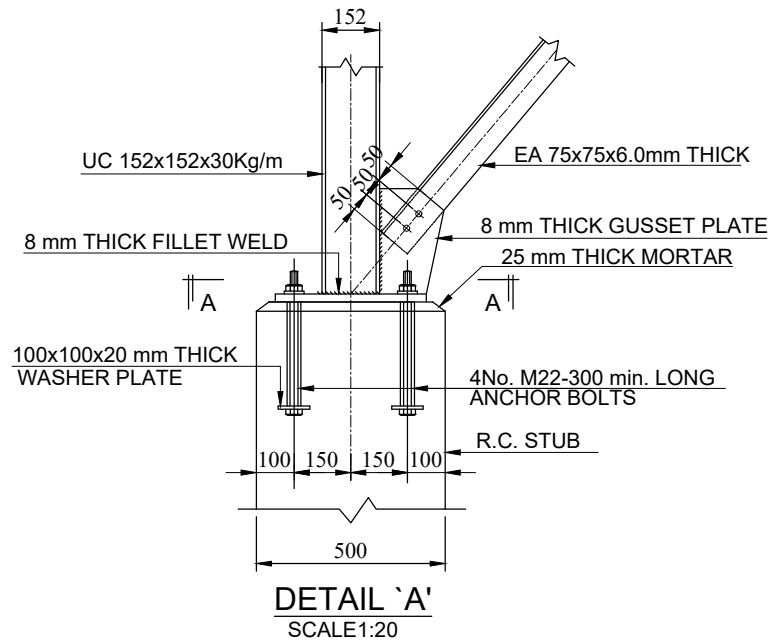
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:

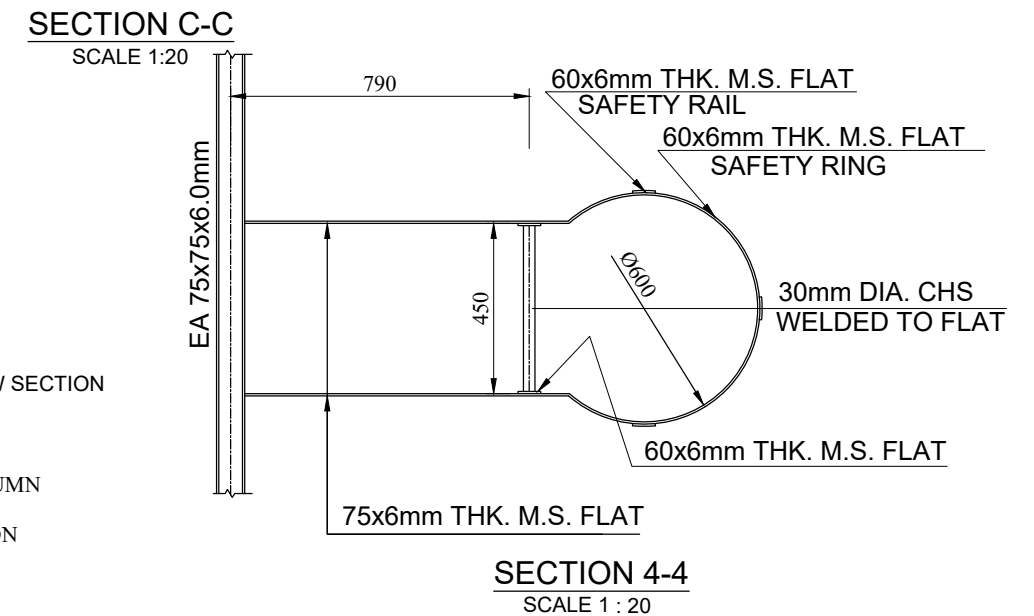
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
ELEVATED TANK (2/3)

SCALE: 1:100/1:50/ 1:25	DATE: OCT 2022	DRAWING NO.: WS - MSR - 009
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NOTE:
 SHS - SQUARE HOLLOW SECTION
 UB - UNIVERSAL BEAM
 UC - UNIVERSAL COLUMN
 CH - CHANNEL SECTION
 EA - EQUAL ANGLE



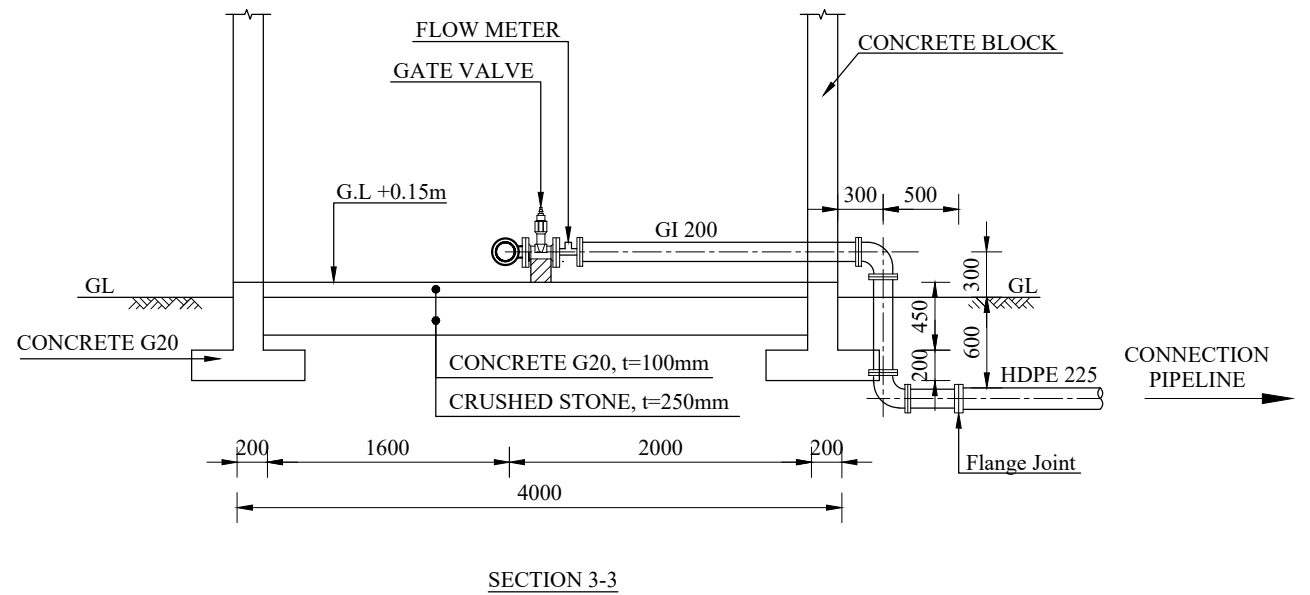
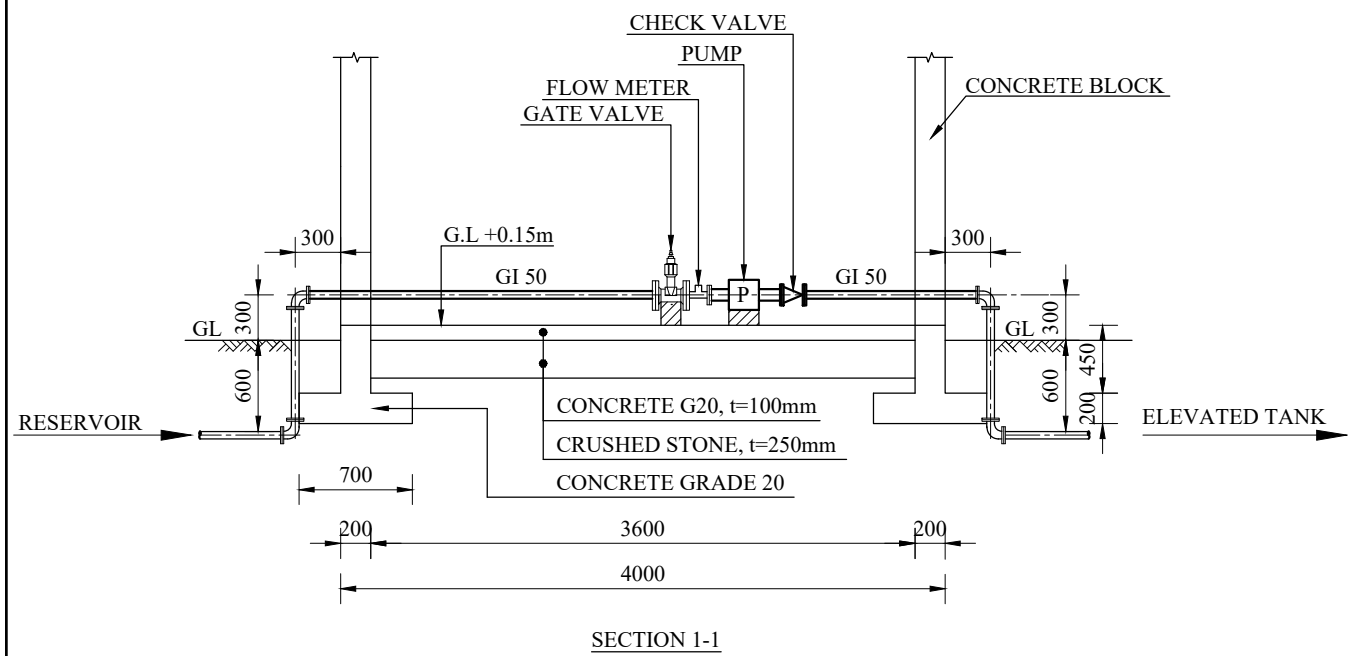
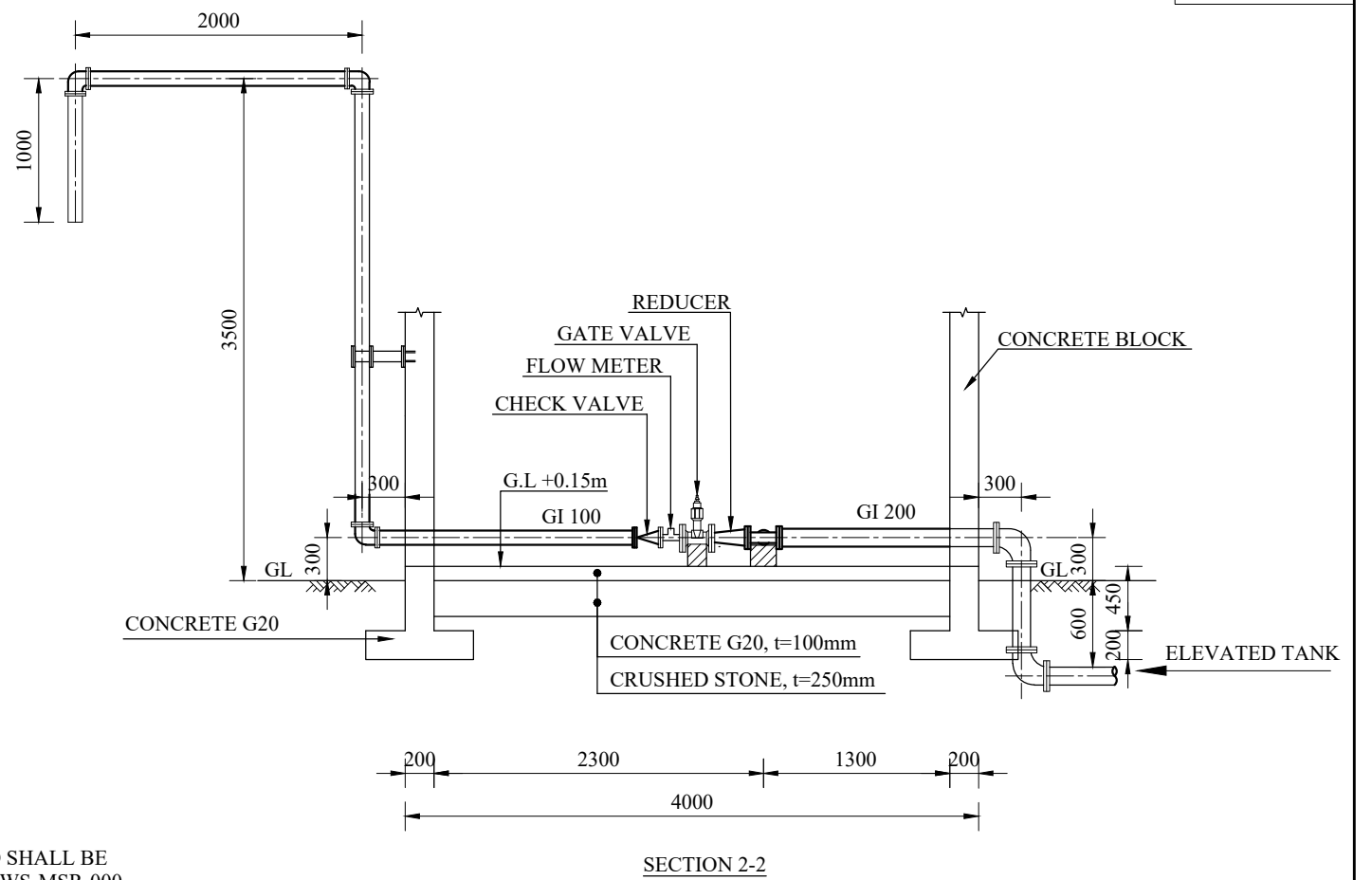
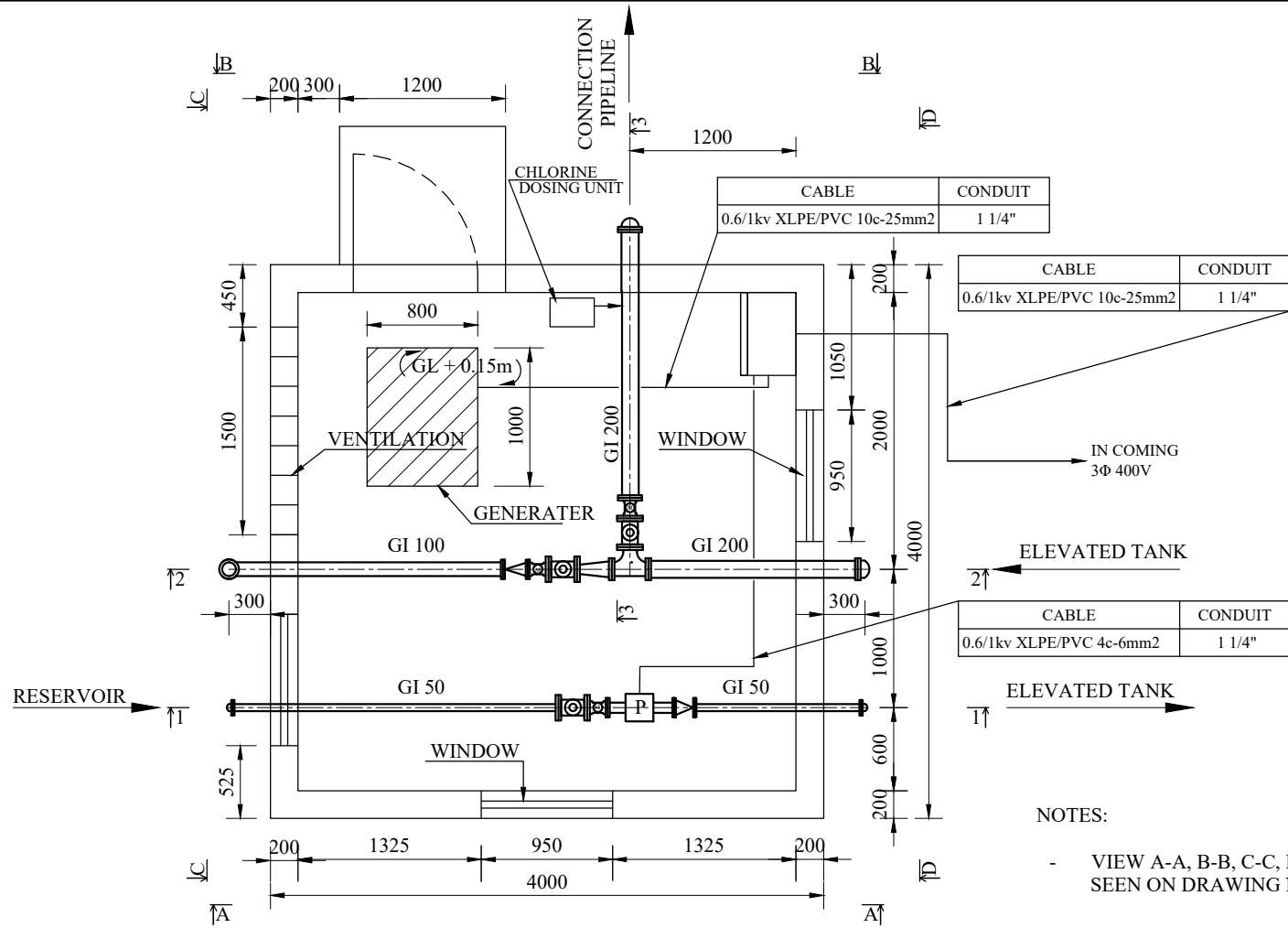
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
 NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
ELEVATED TANK (3/3)

SCALE: 1:20/1:10	DATE: OCT 2022	DRAWING NO.: WS - MSR - 010
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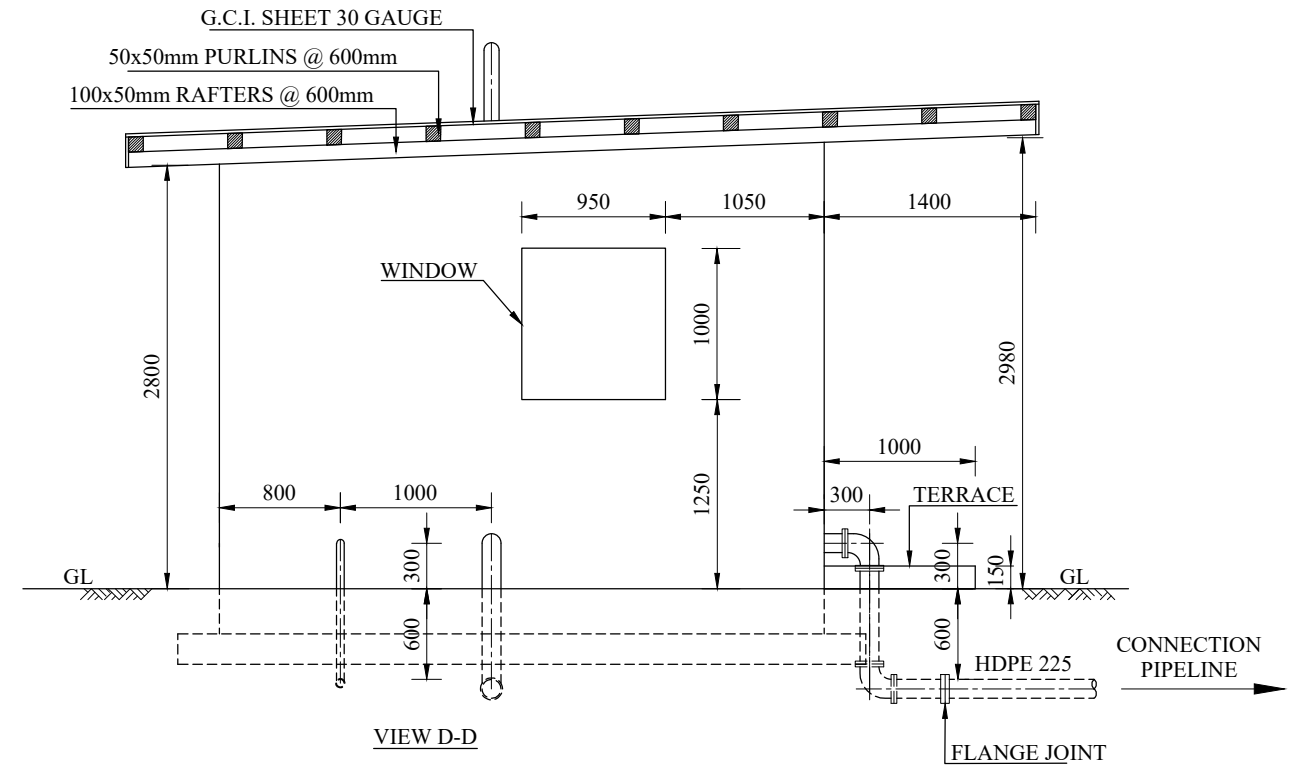
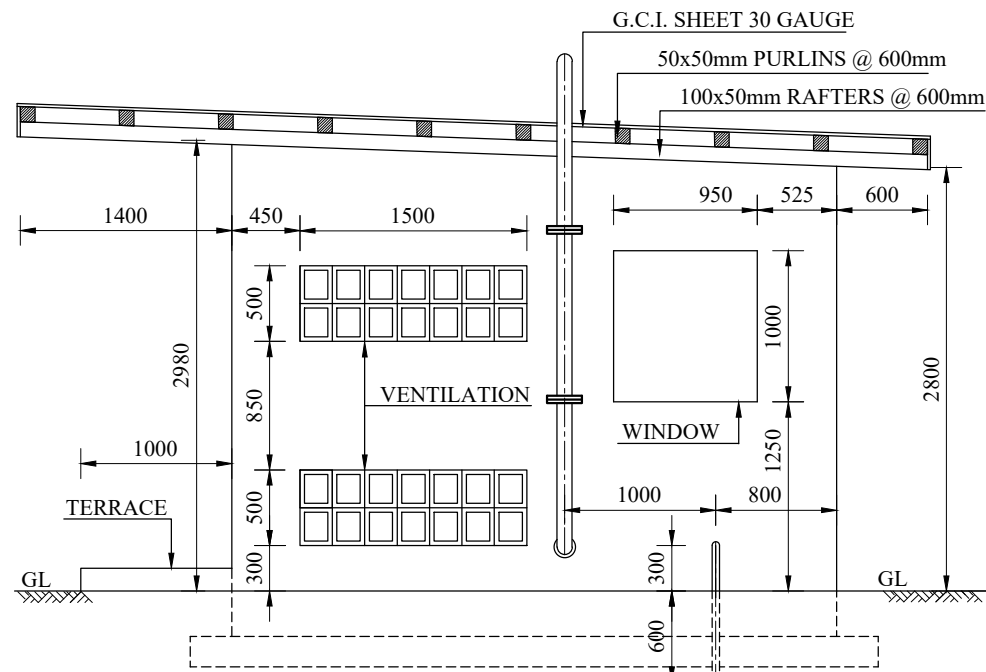
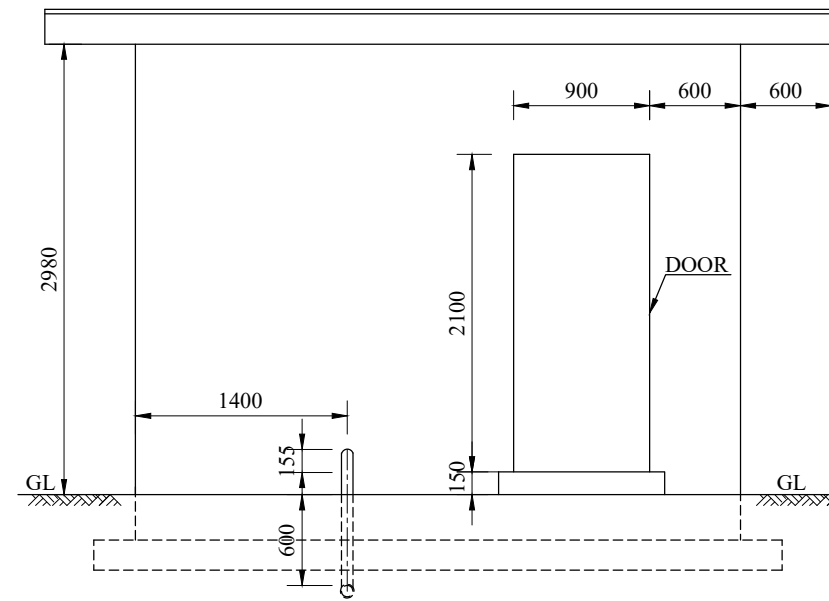
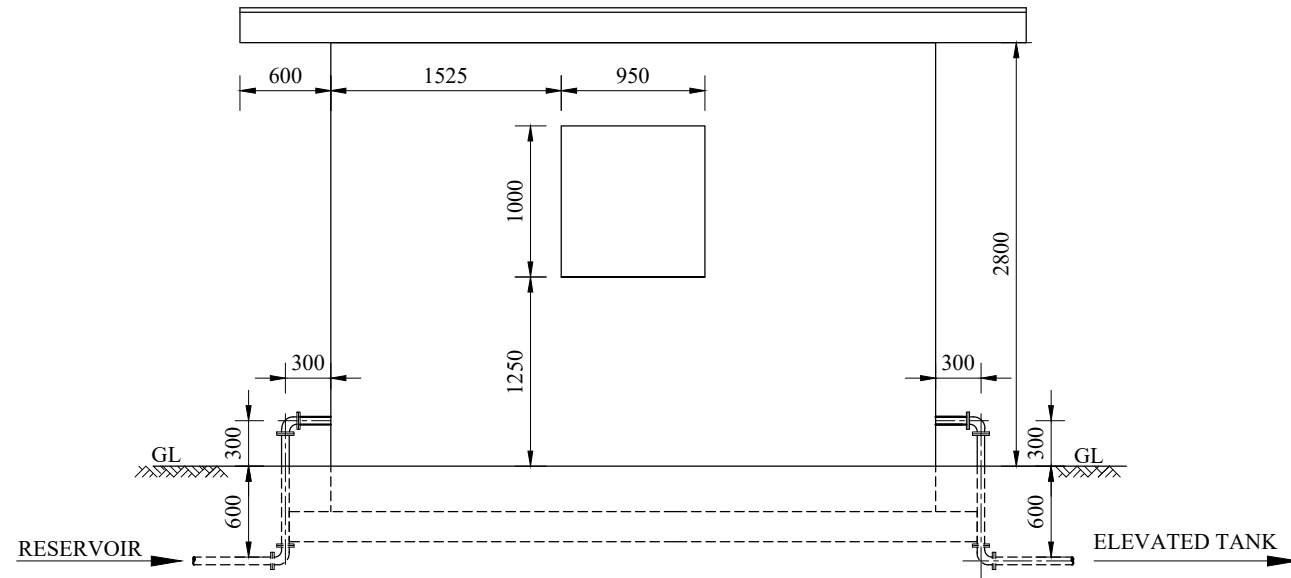
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
CONTROL CHAMBER PLAN AND SECTION

SCALE: 1:50	DATE: OCT 2022	DRAWING NO.: WS - MSR - 011
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OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

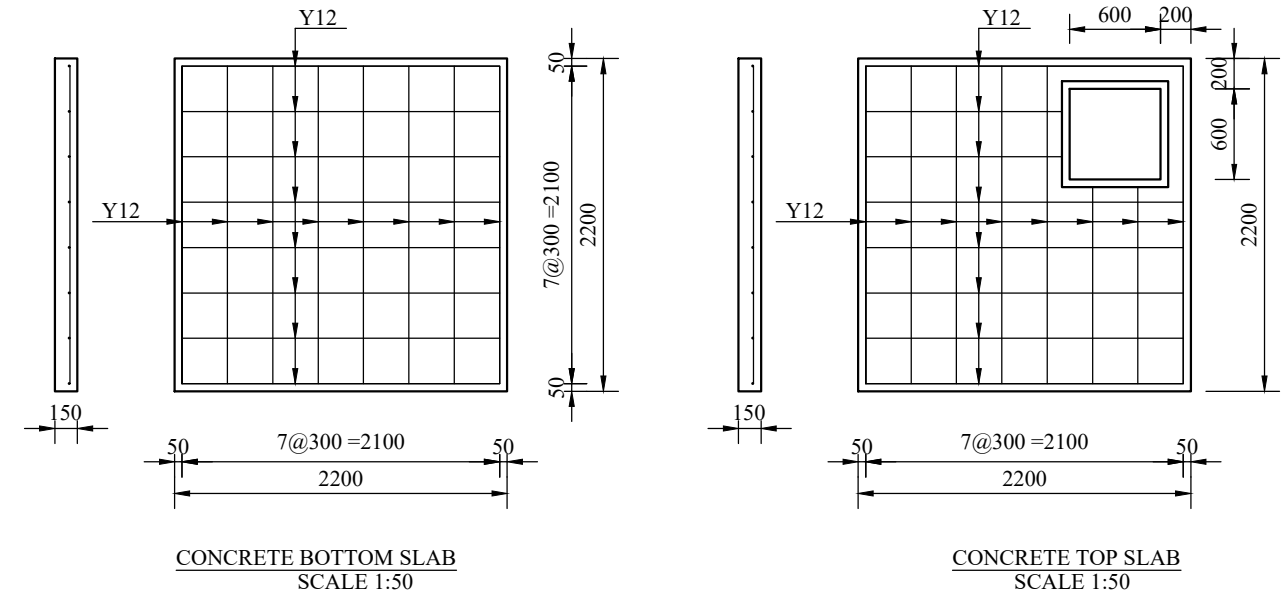
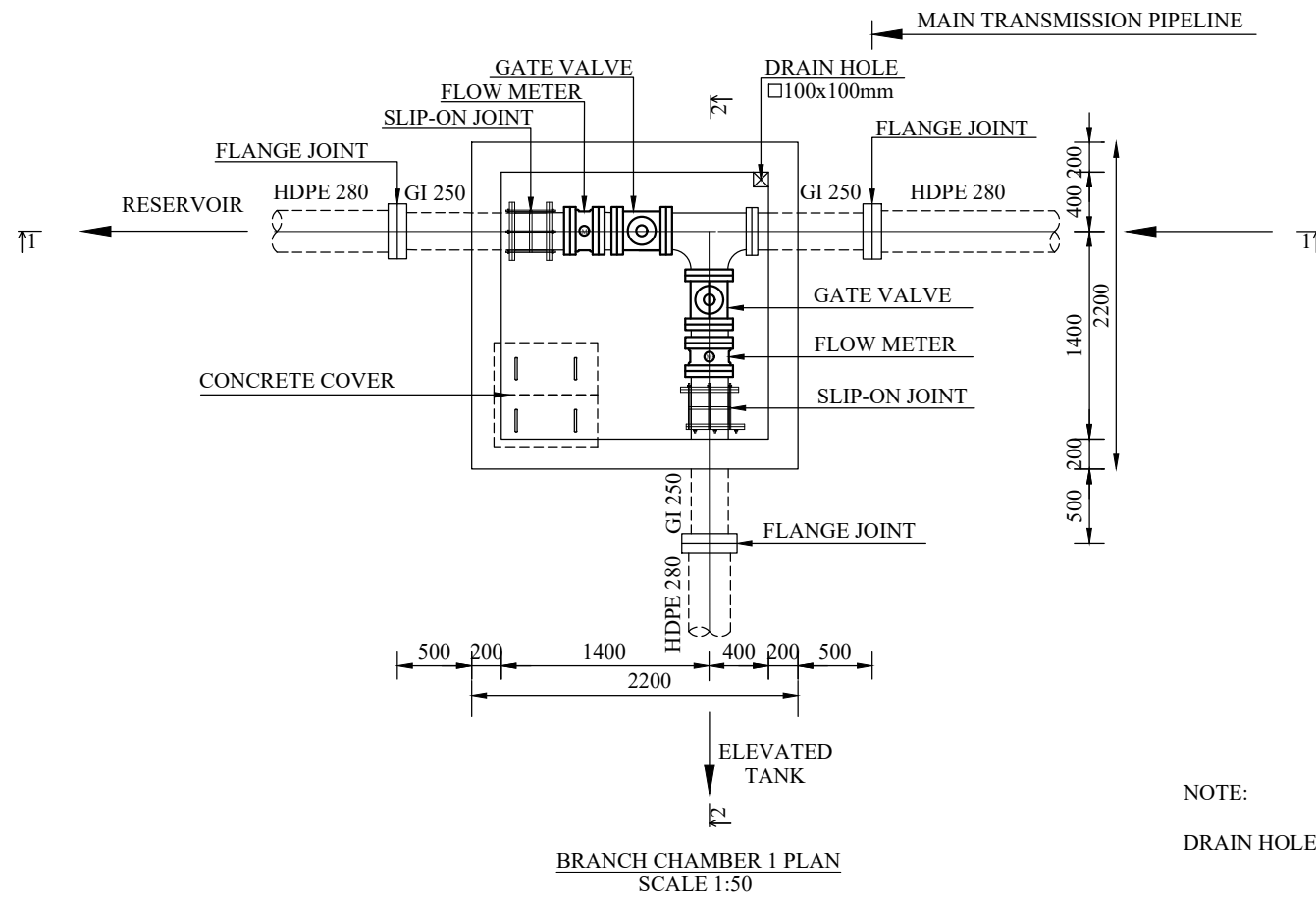
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
MOMBASA SEZ RESERVOIR
CONTROL CHAMBER VIEWS

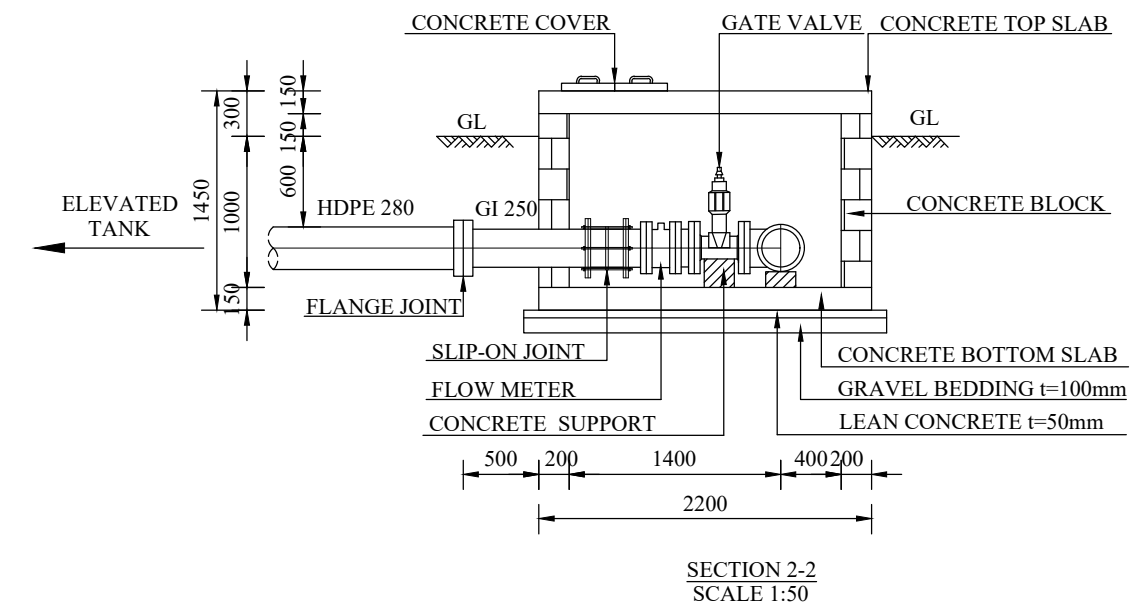
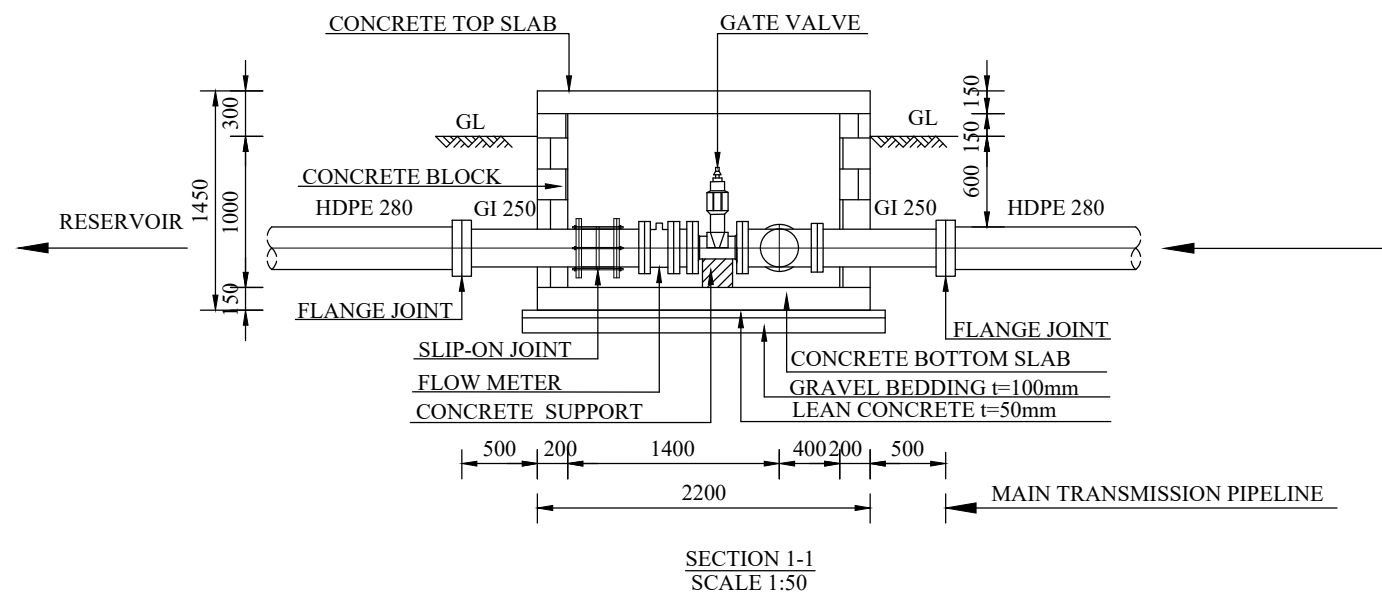
SCALE:
1:50


DATE:
OCT 2022

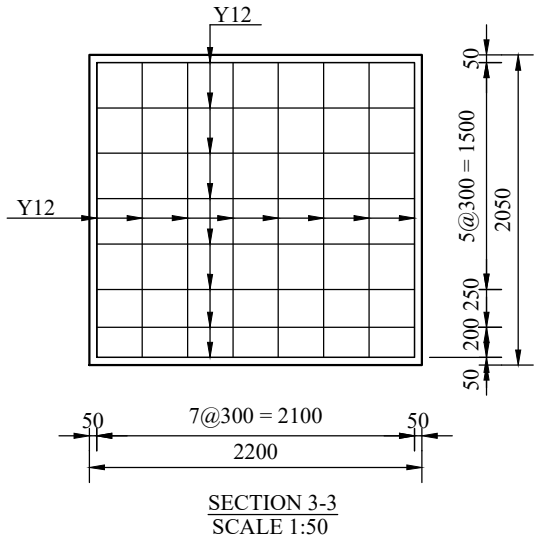
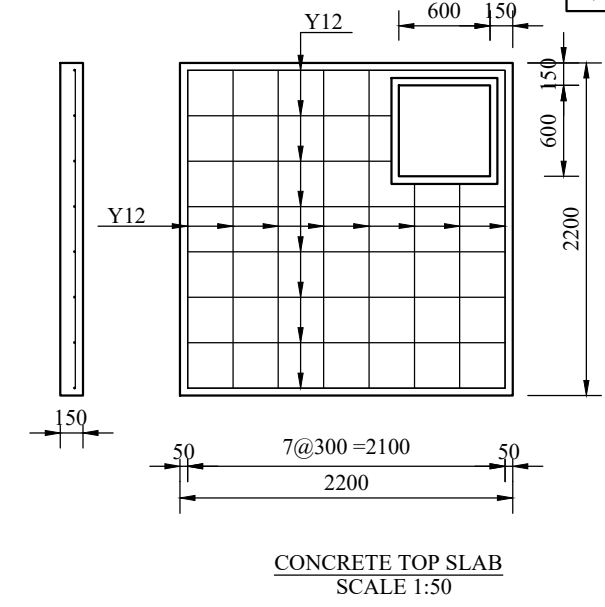
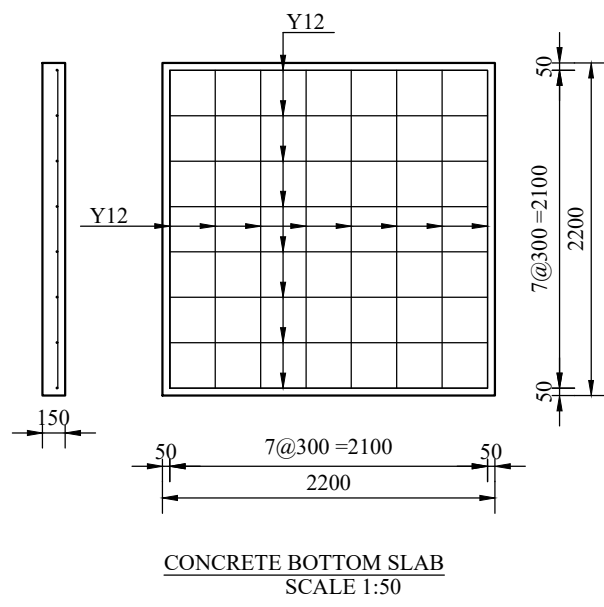
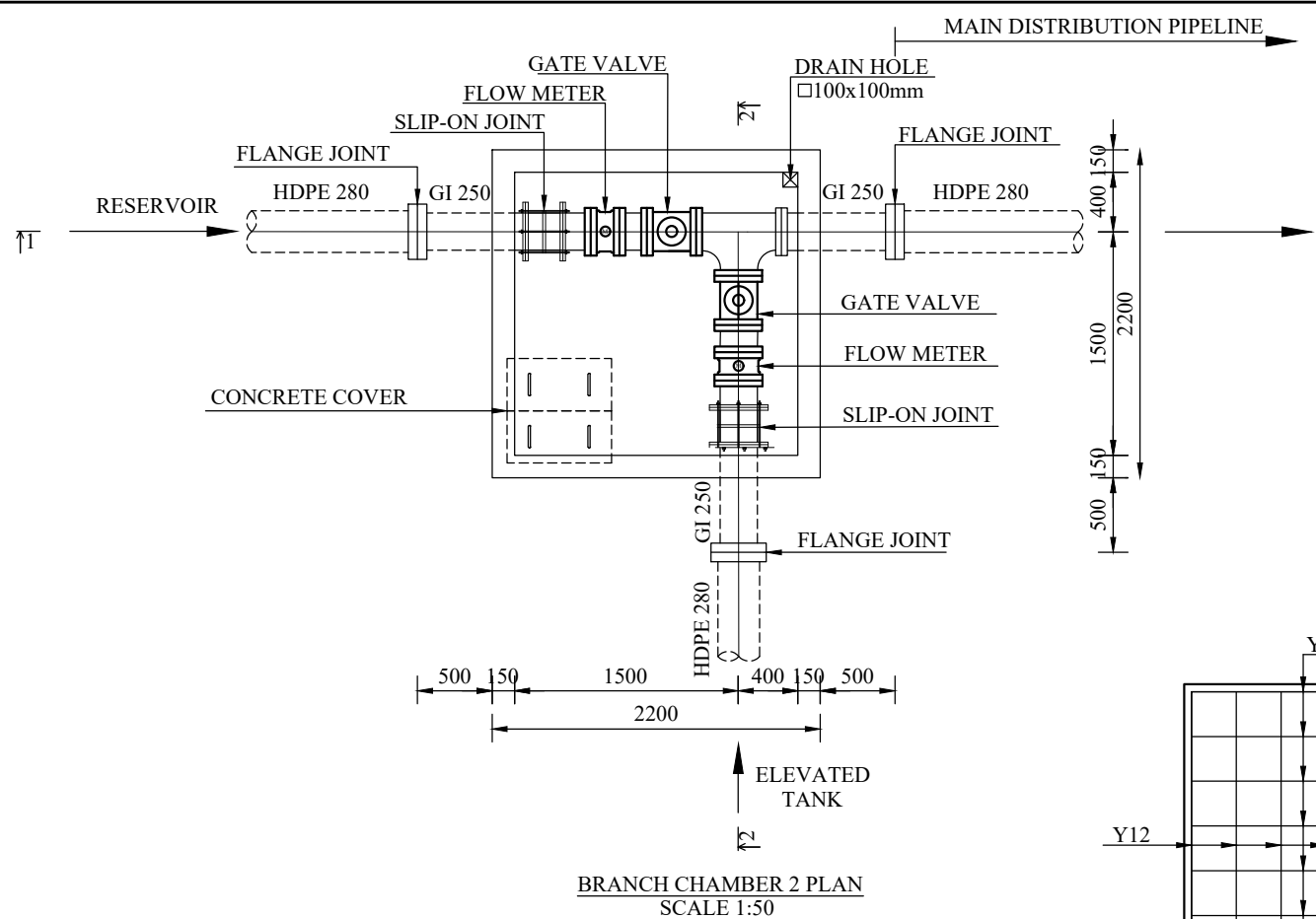
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WS - MSR - 012



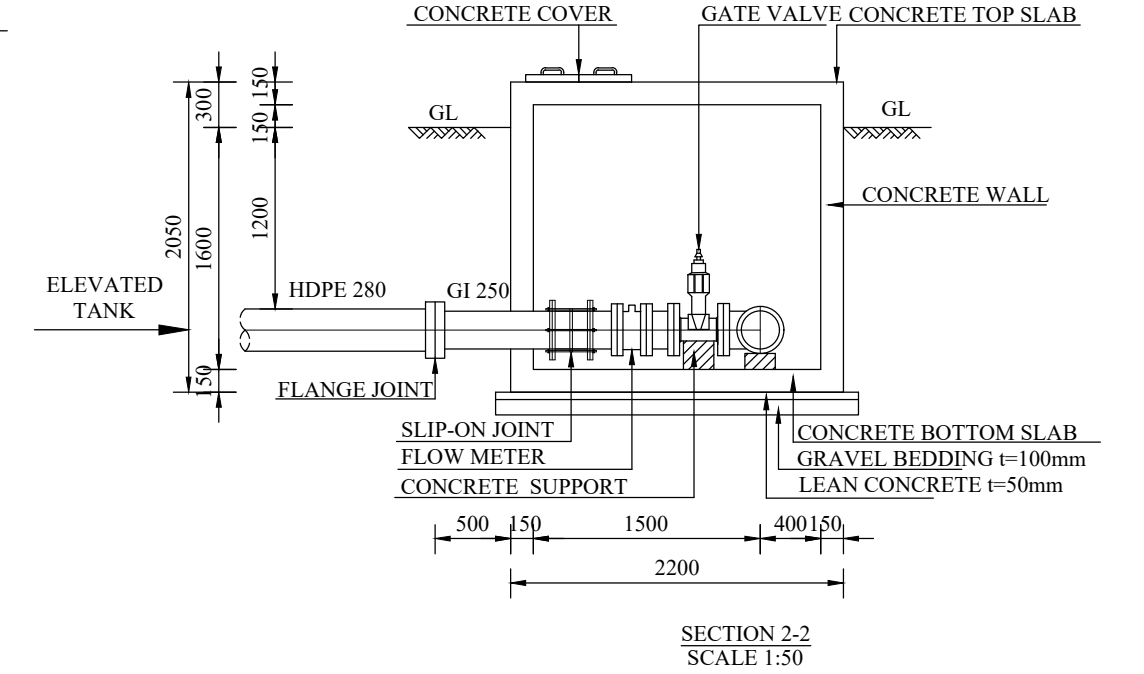
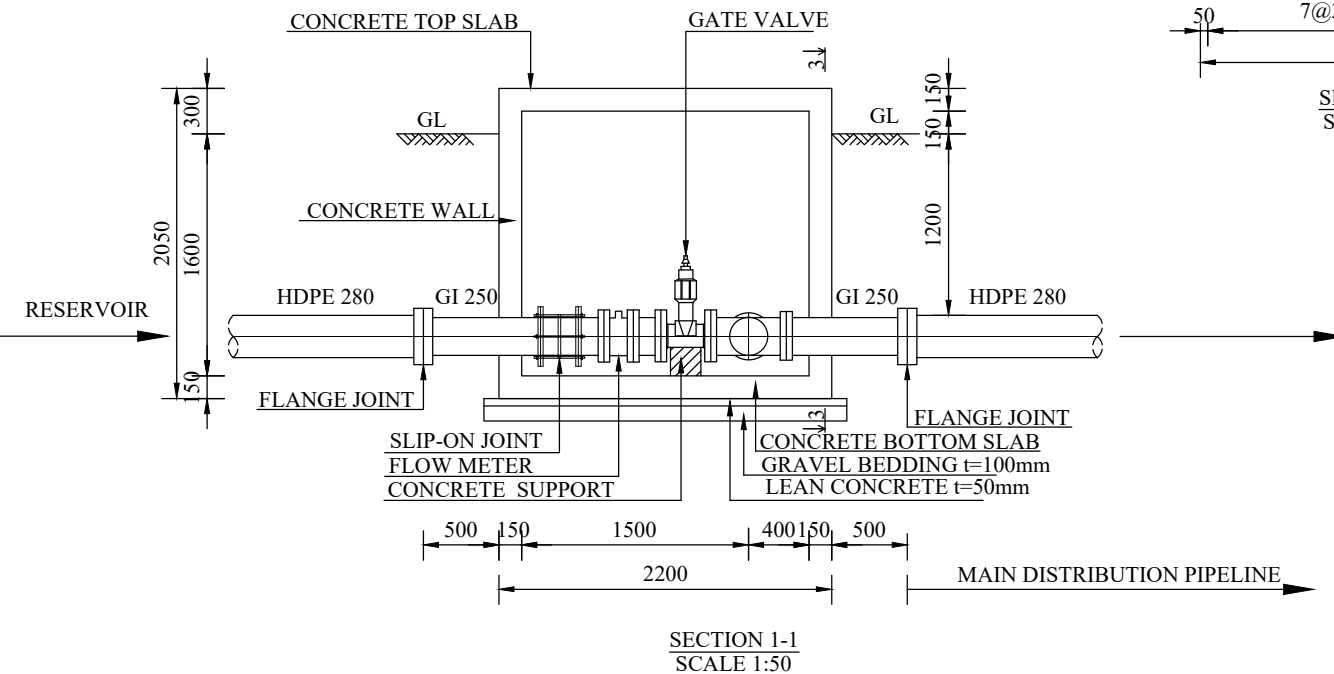
NOTE:
DRAIN HOLE AND CONCRETE COVER SHALL BE REFERRED TO DRAWING NO:WS-MSR-018




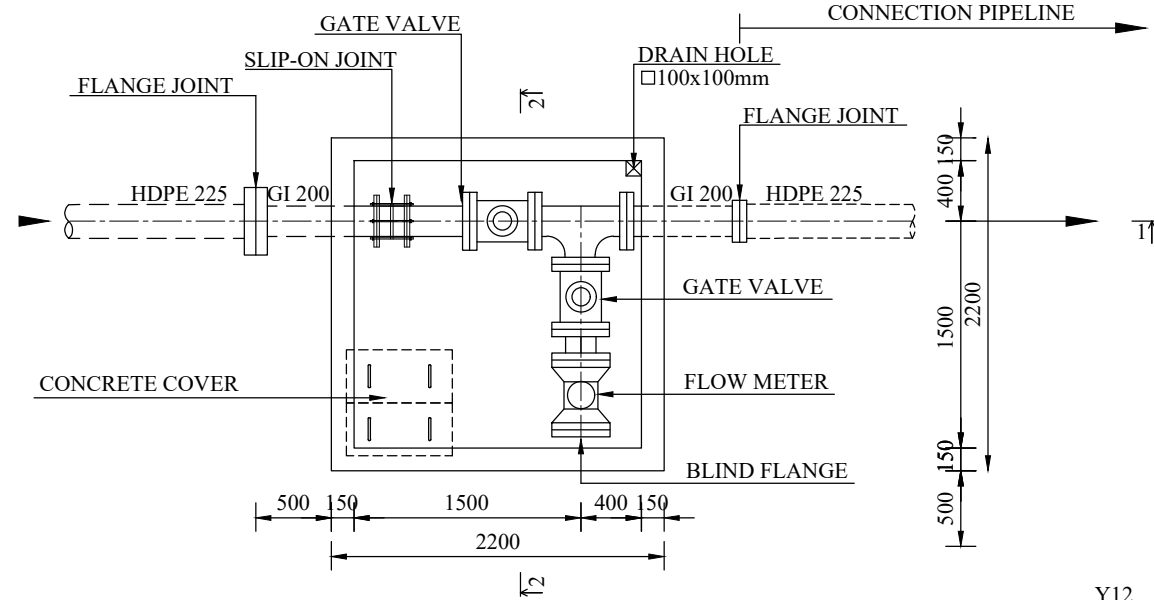
<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: MOMBASA SEZ RESERVOIR BRANCH CHAMBER 1</p>		
		<p>SCALE: 1:50</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - MSR - 015</p>	



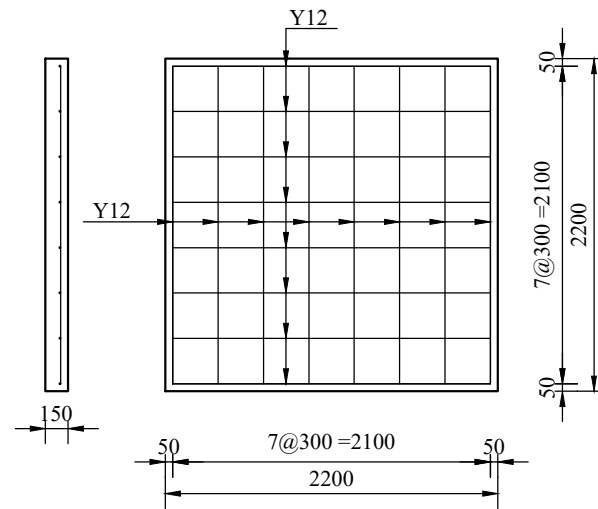
NOTE:
DRAIN HOLE AND CONCRETE COVER SHALL BE REFERRED TO DRAWING NO:WS-MSR-018



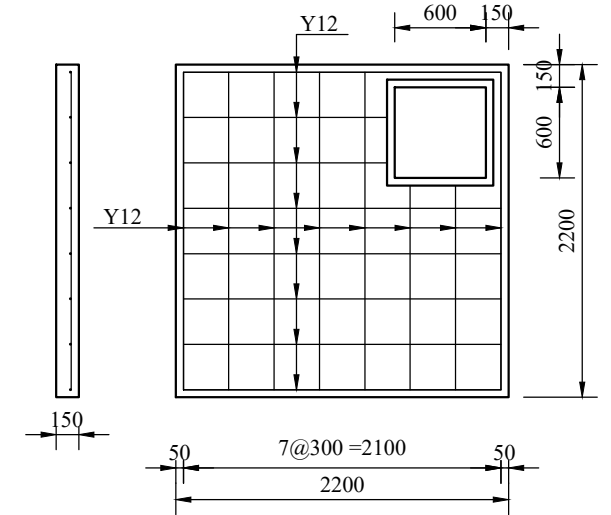
<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: MOMBASA SEZ RESERVOIR BRANCH CHAMBER 2</p>		
		<p>SCALE: 1:50</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: WS - MSR - 016</p>	



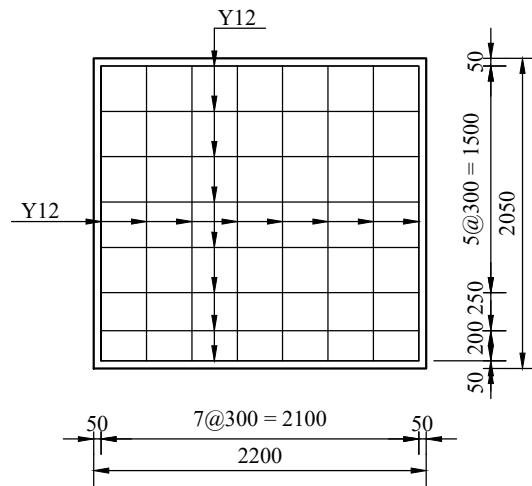
BRANCH CHAMBER PLAN
SCALE 1:50



CONCRETE BOTTOM SLAB
SCALE 1:50



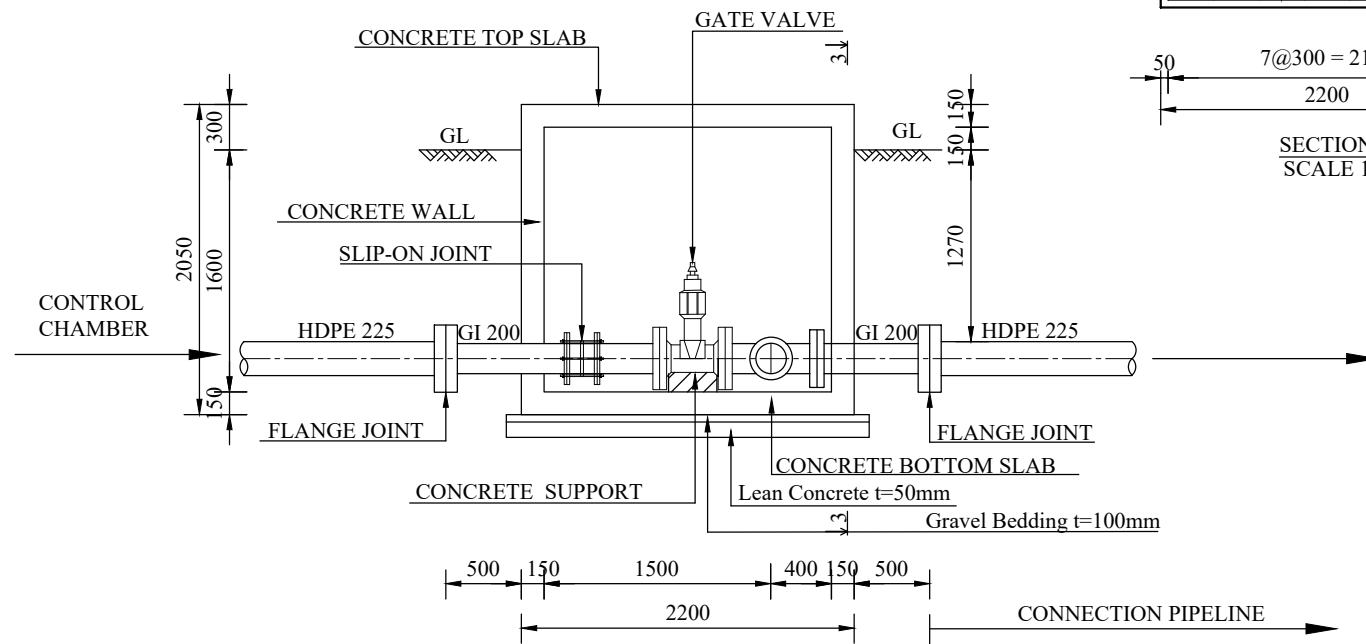
CONCRETE TOP SLAB
SCALE 1:50



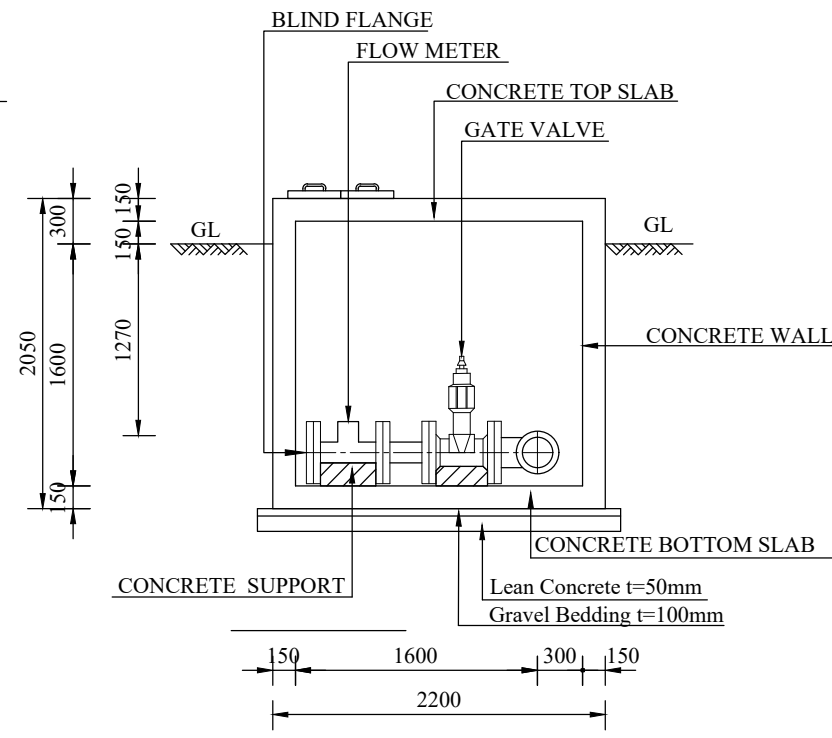
SECTION 3-3
SCALE 1:50

NOTE:

DRAIN HOLE AND CONCRETE COVER SHALL BE REFERRED TO DRAWING NO: WS-MSR-018
SOAK PIT (0.3x0.3x0.3) IS EQUIPPED UNDER DRAIN HOLE



SECTION 1-1
SCALE 1:50



SECTION 2-2
SCALE 1:50

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
**THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE**

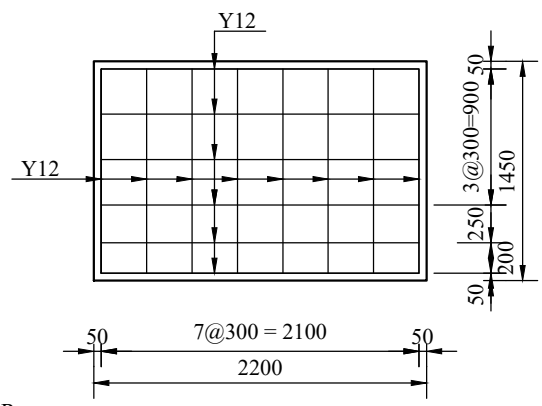
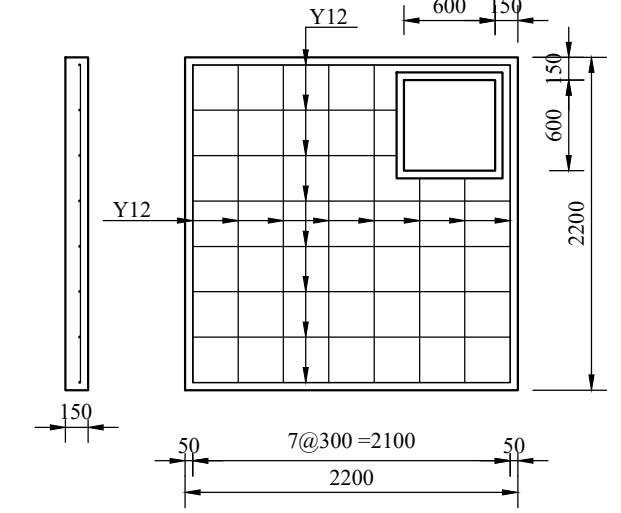
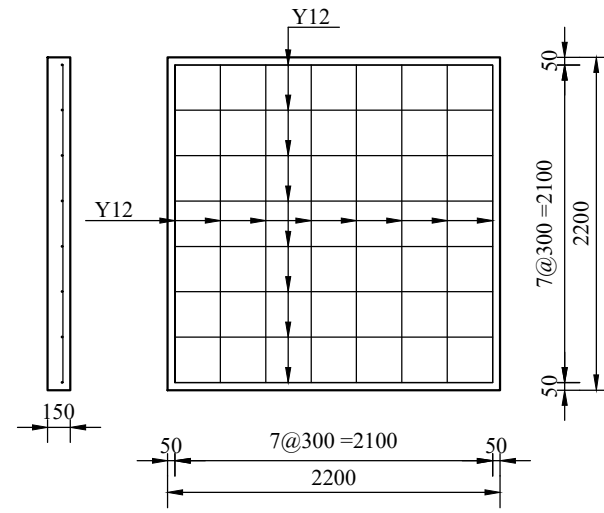
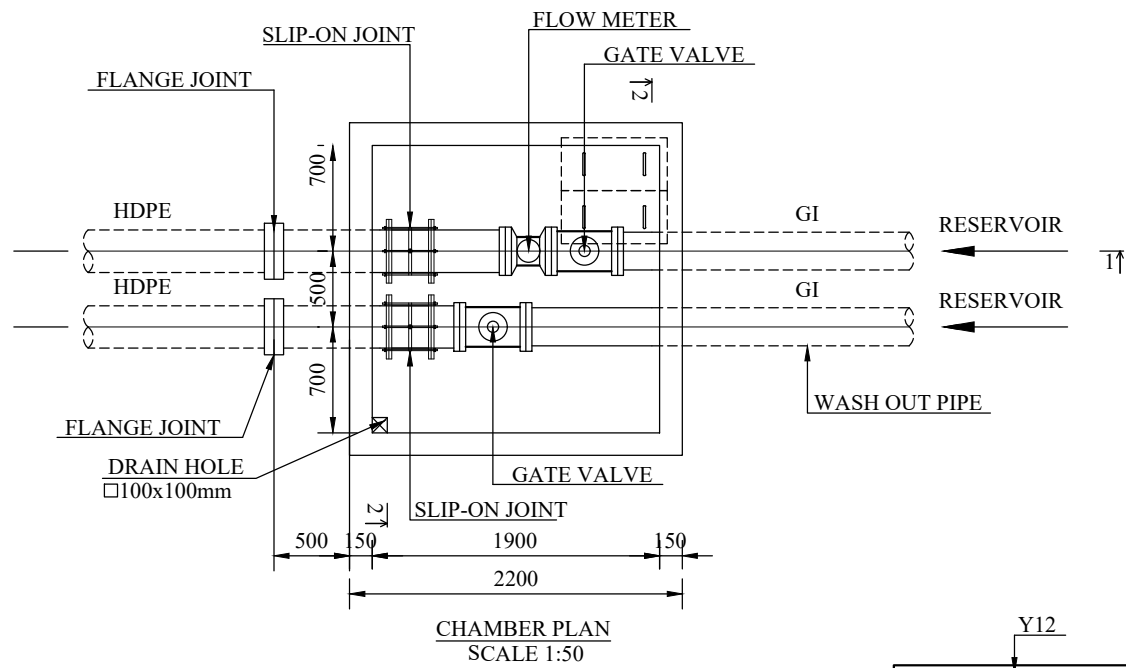
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**MOMBASA SEZ RESERVOIR
BRANCH CHAMBER 3**

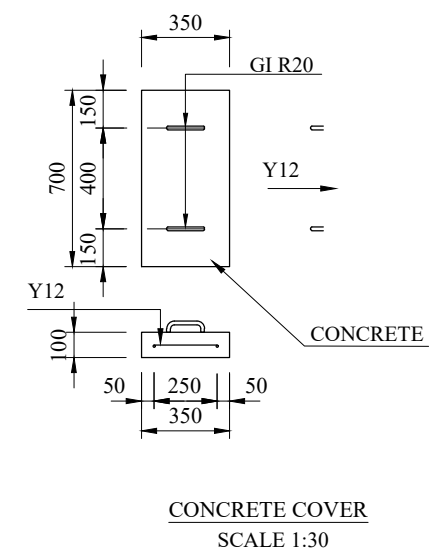
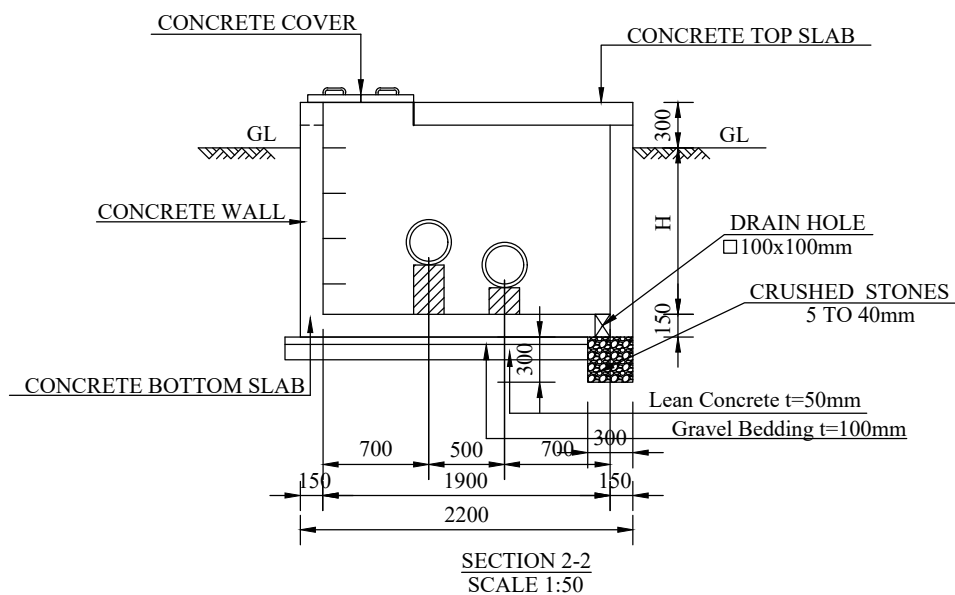
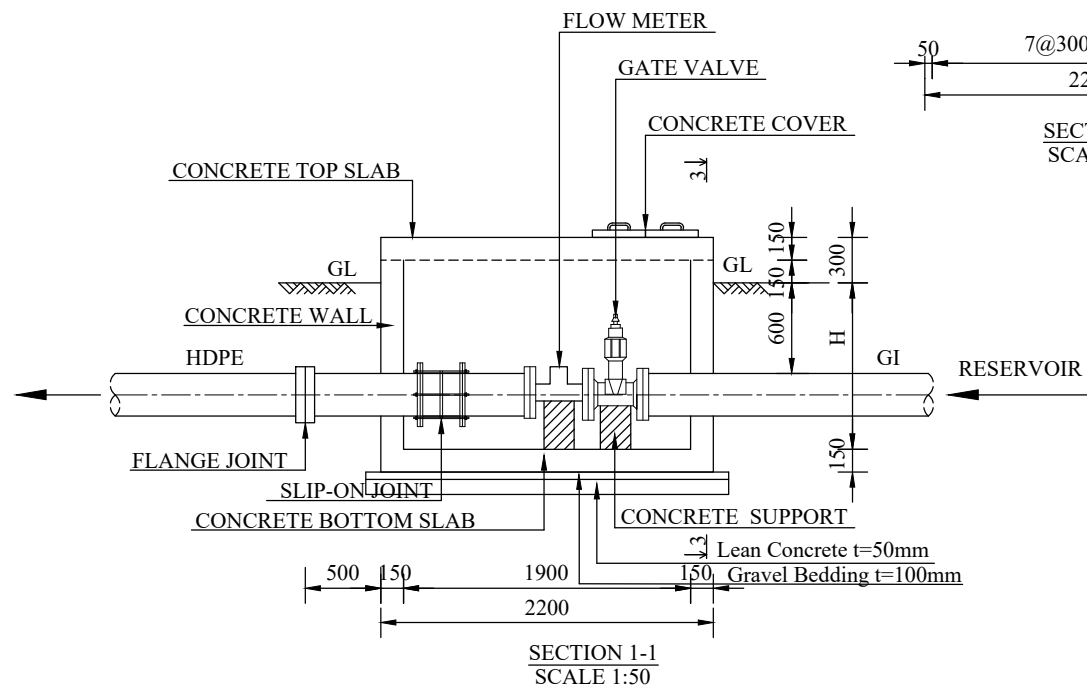
SCALE:
1:50

DATE:
OCT 2022

DRAWING NO.:
WS - MSR - 017



CHAMBER NO.	PIPE	H(mm)	WASH OUT PIPE
1	GI250 / HDPE 280	1100	GI250 / HDPE 280



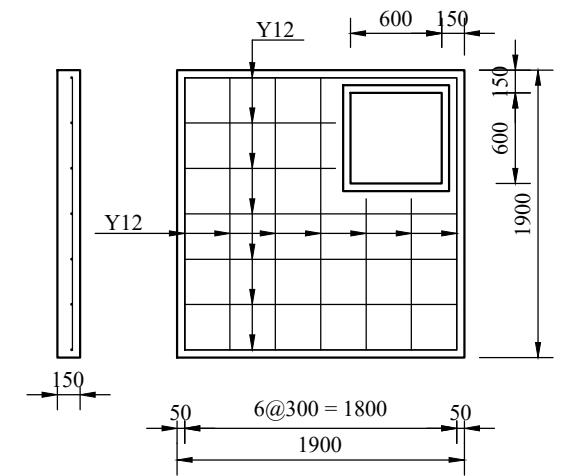
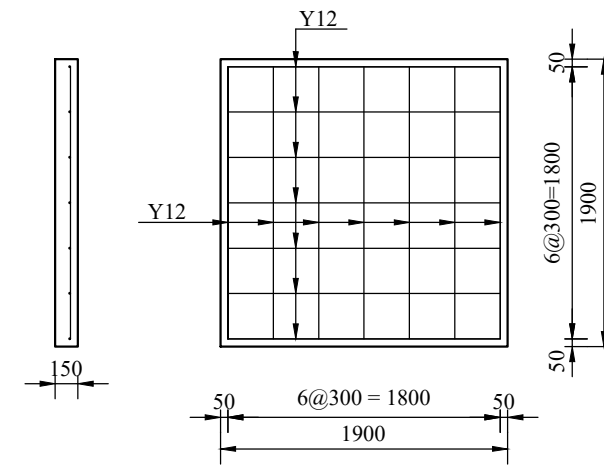
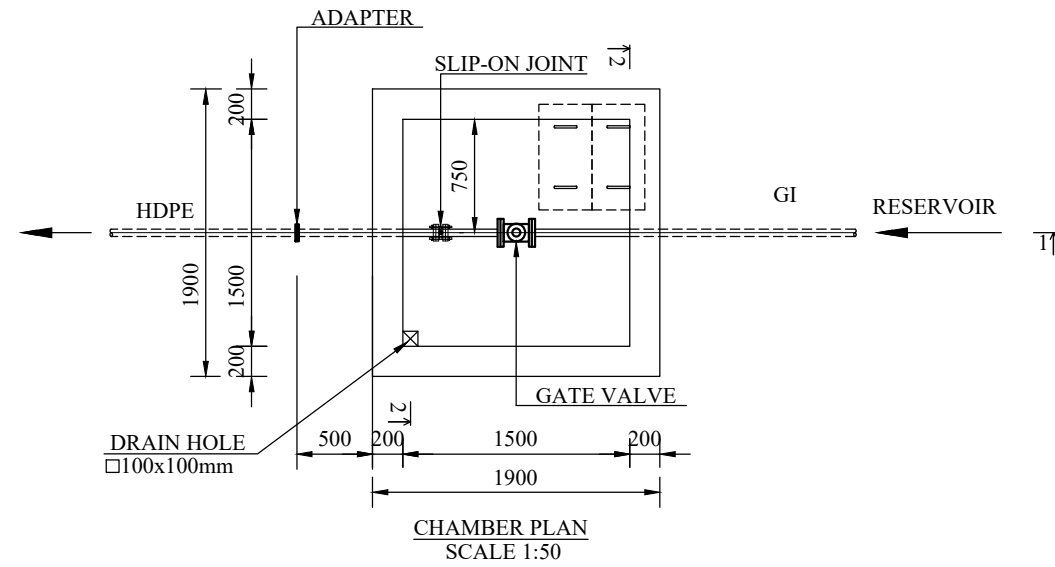
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE: **MOMBASA SEZ RESERVOIR**
CHAMBER 1

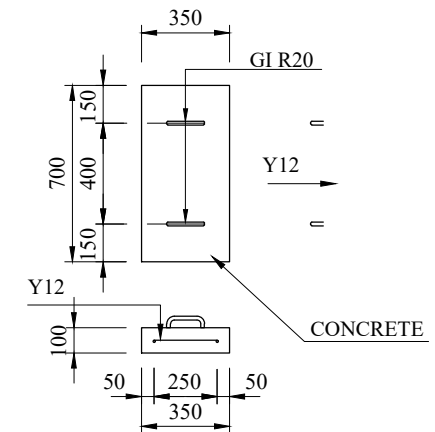
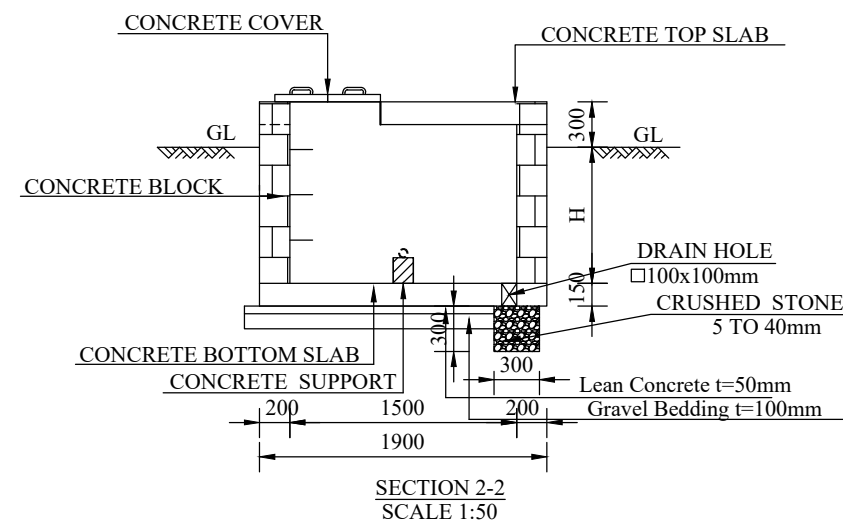
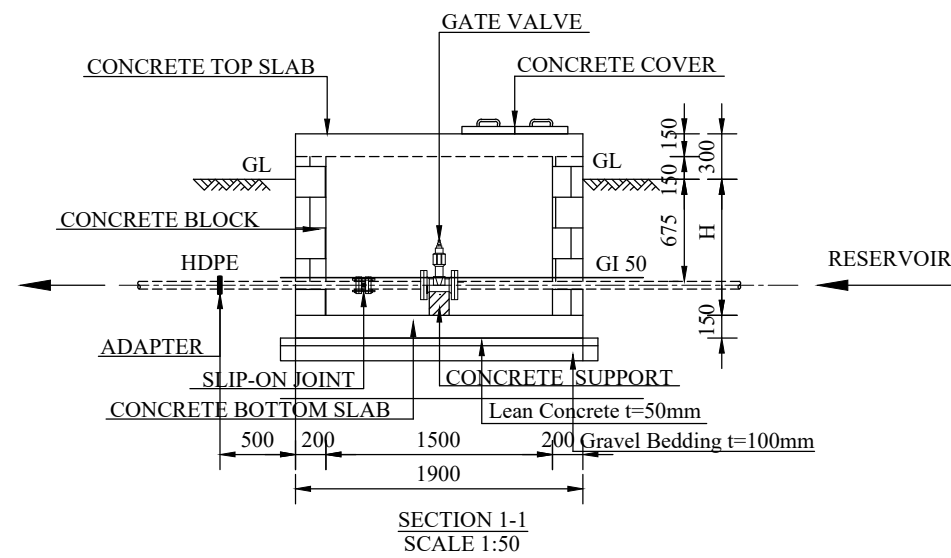
SCALE: 1:50/1:30	DATE: OCT 2022	DRAWING NO.: WS - MSR - 018
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CONCRETE BOTTOM SLAB
SCALE 1:50

CONCRETE TOP SLAB
SCALE 1:50

CHAMBER NO.	PIPE	H(mm)	WASH OUT PIPE
2	GI50 HDPE 50	900	-



CONCRETE COVER
SCALE 1:30

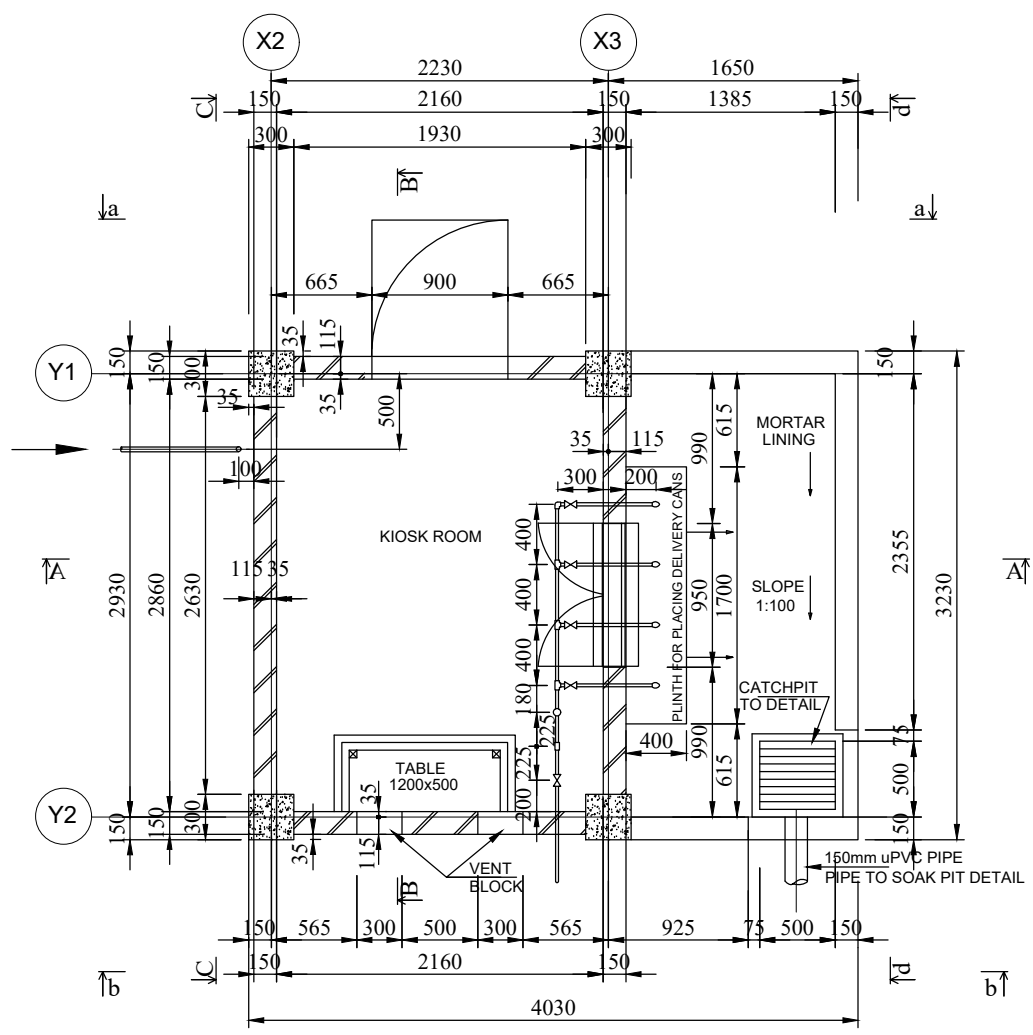
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
**THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE**

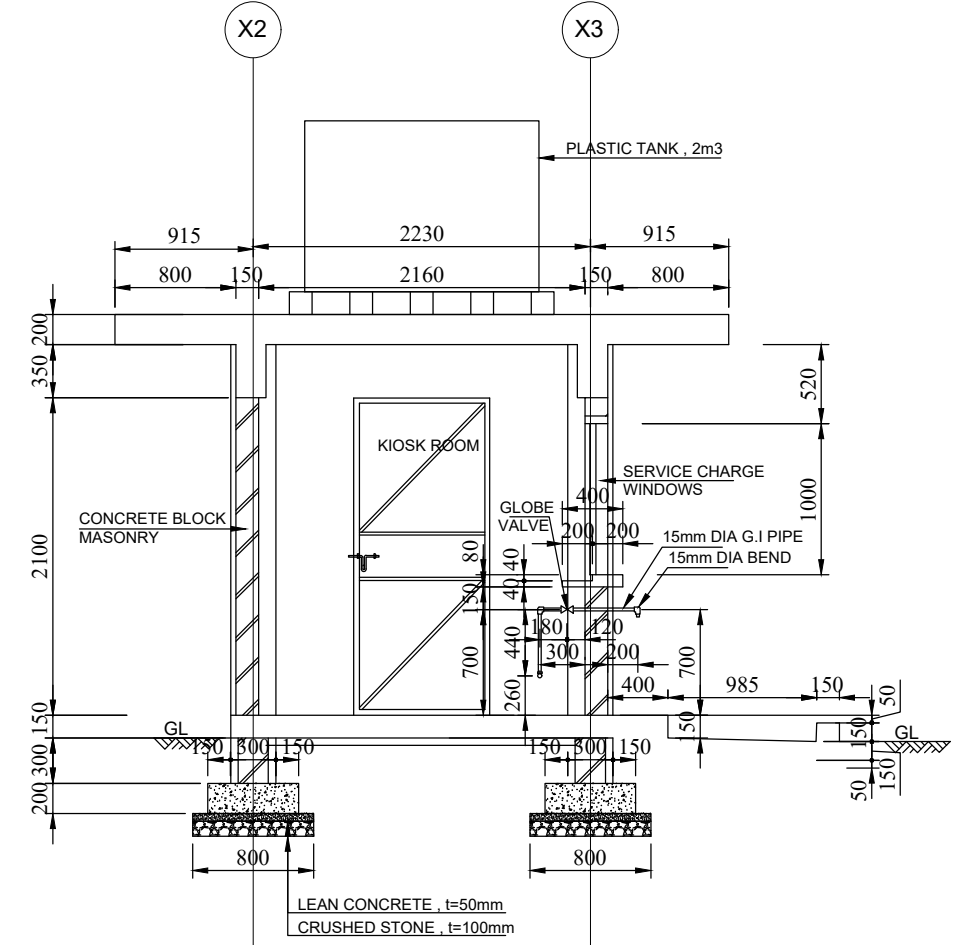
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**MOMBASA SEZ RESERVOIR
CHAMBER 2**

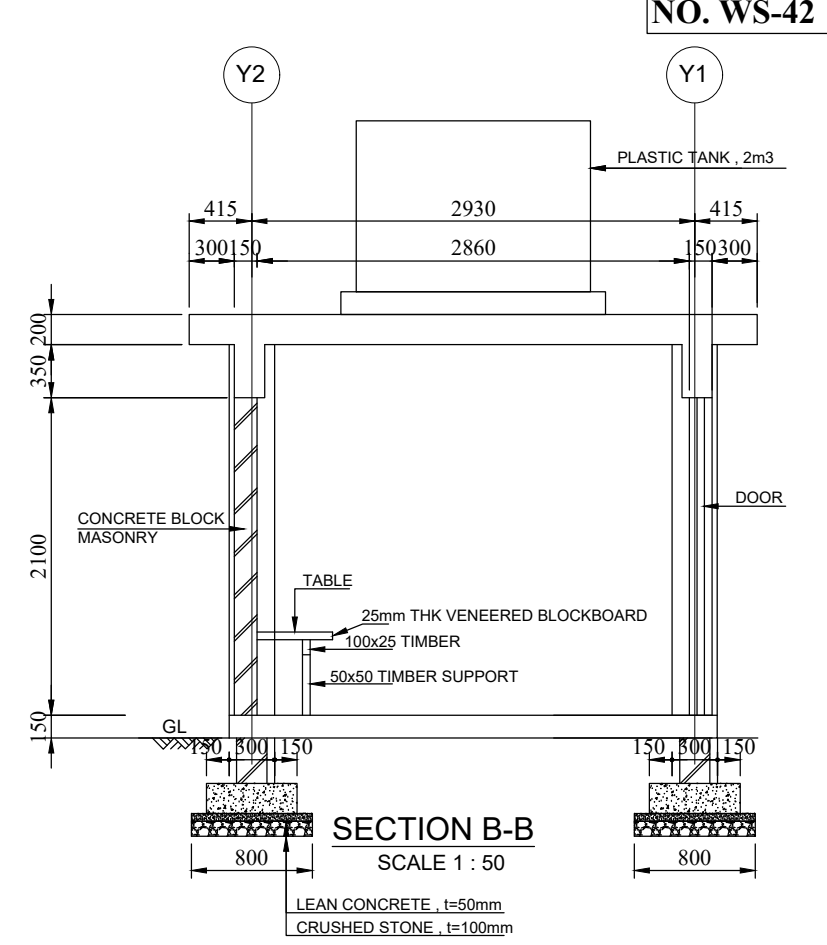
SCALE: 1:50/1:30	DATE: OCT 2022	DRAWING NO.: WS - MSR - 019
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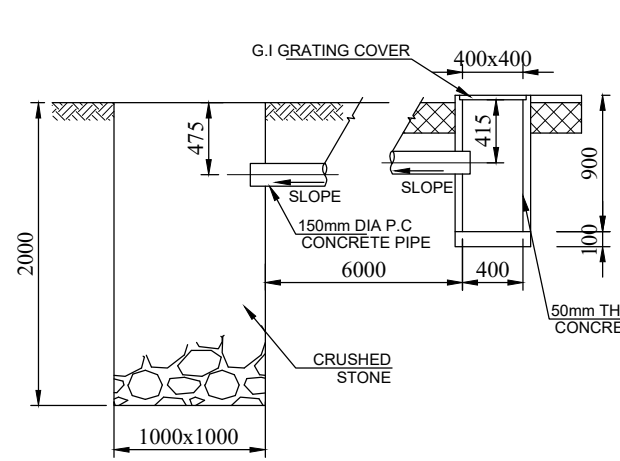
PLAN
SCALE 1:50



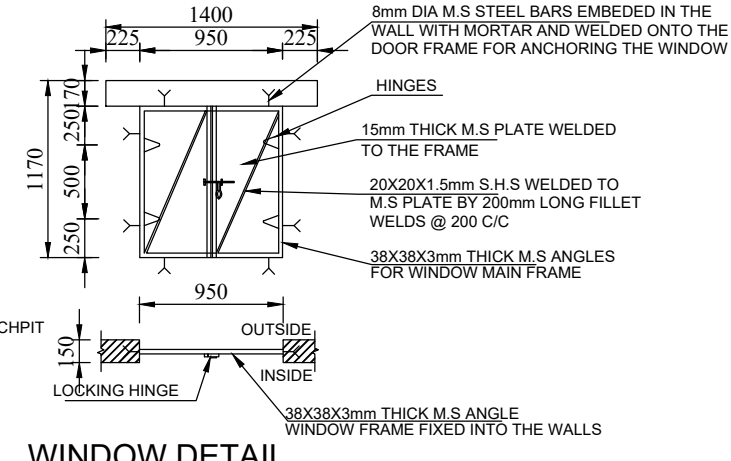
SECTION A-A
SCALE 1:50



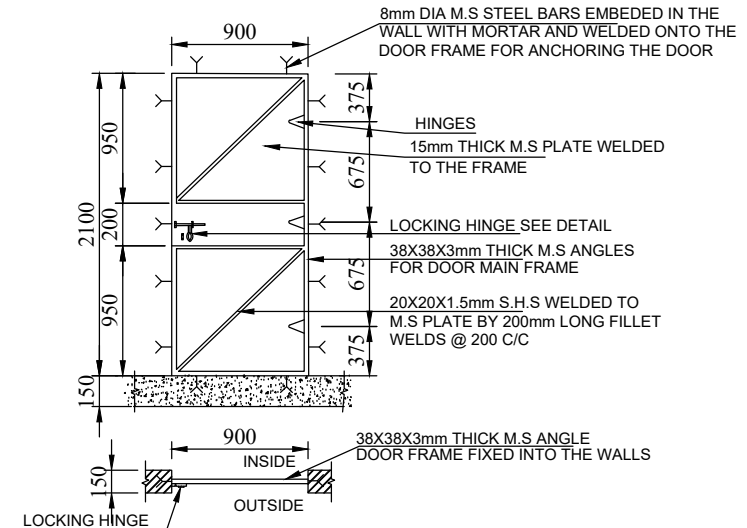
SECTION B-B
SCALE 1:50



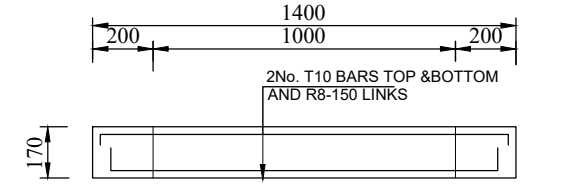
DETAIL OF SOAK-PIT AND CATCHPIT
SCALE 1:50



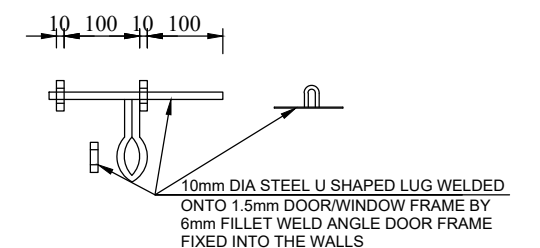
WINDOW DETAIL
SCALE 1:50




DOOR DETAIL
SCALE 1:50

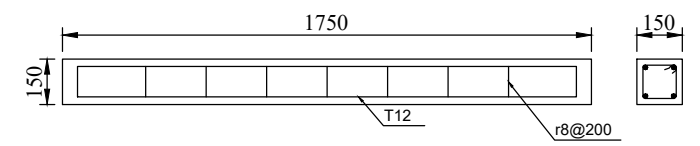
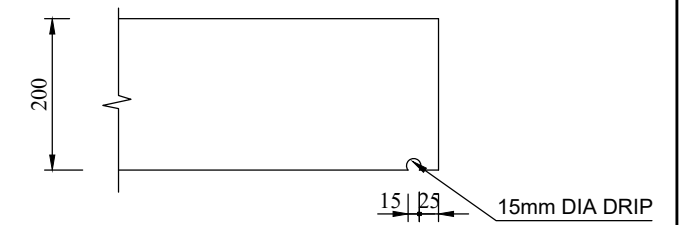
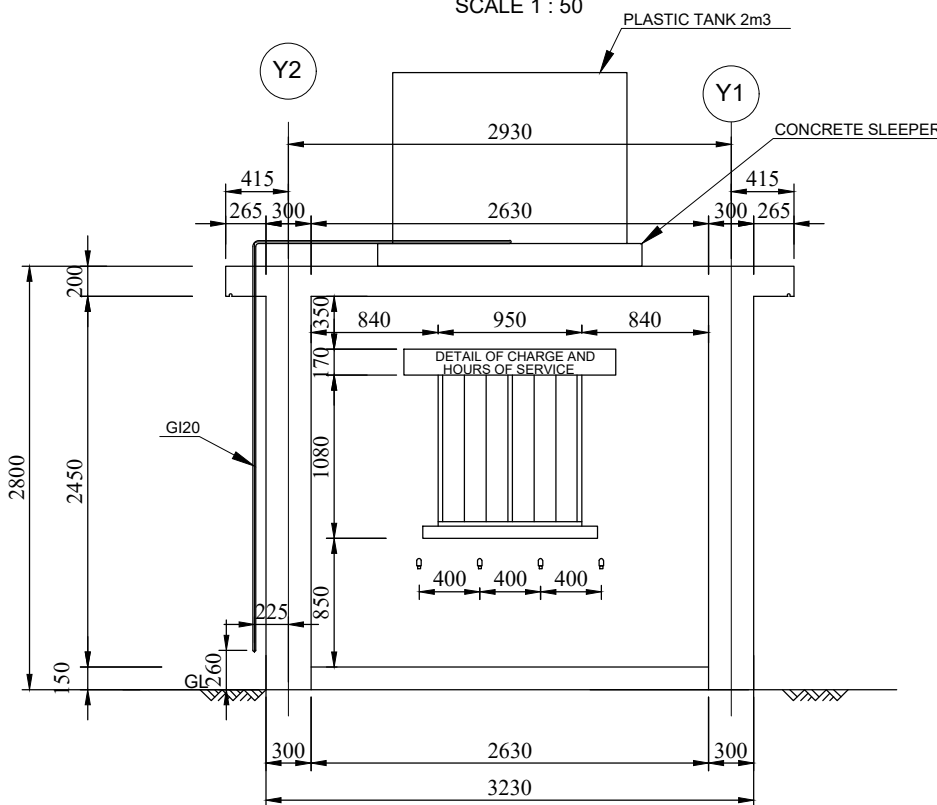
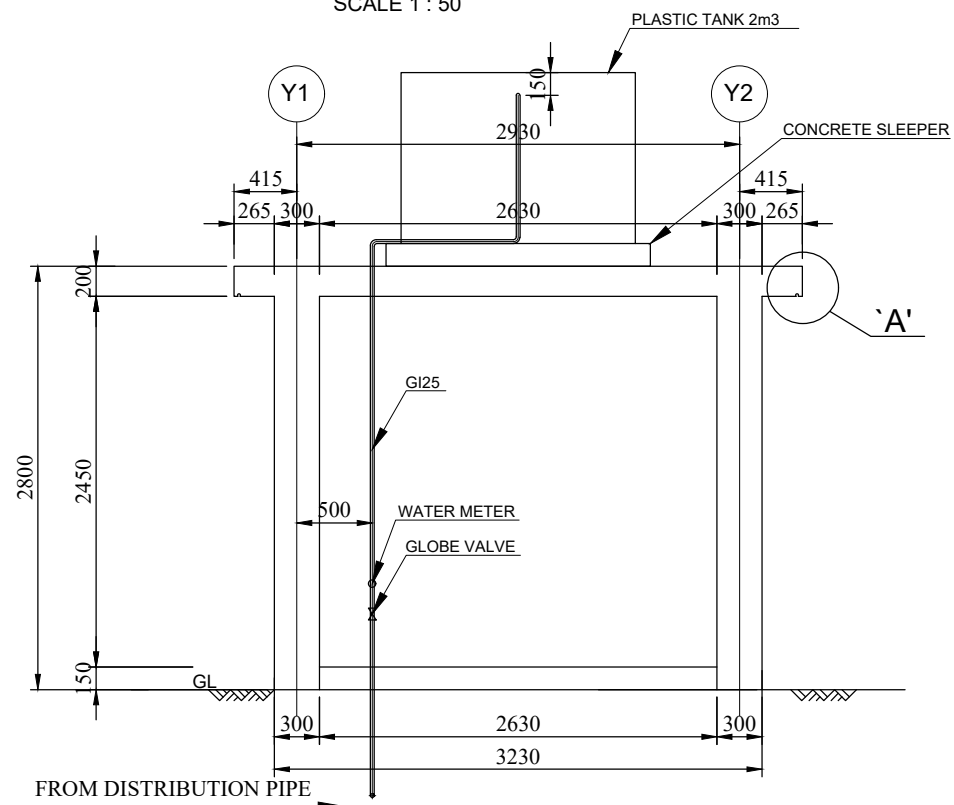
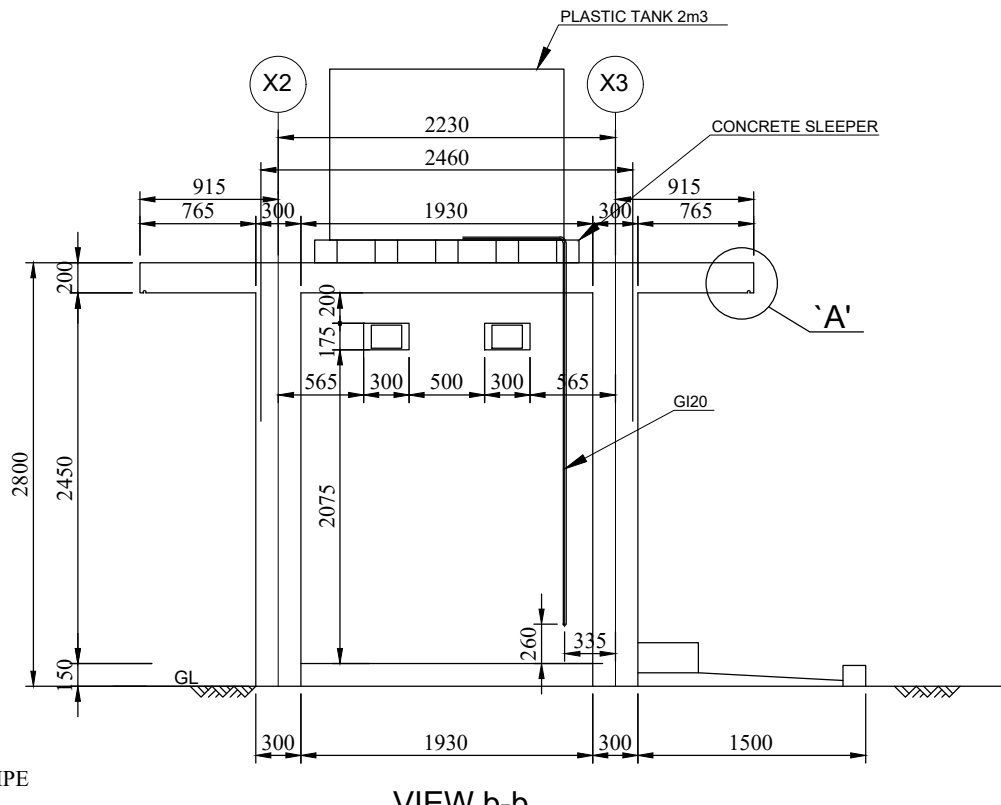
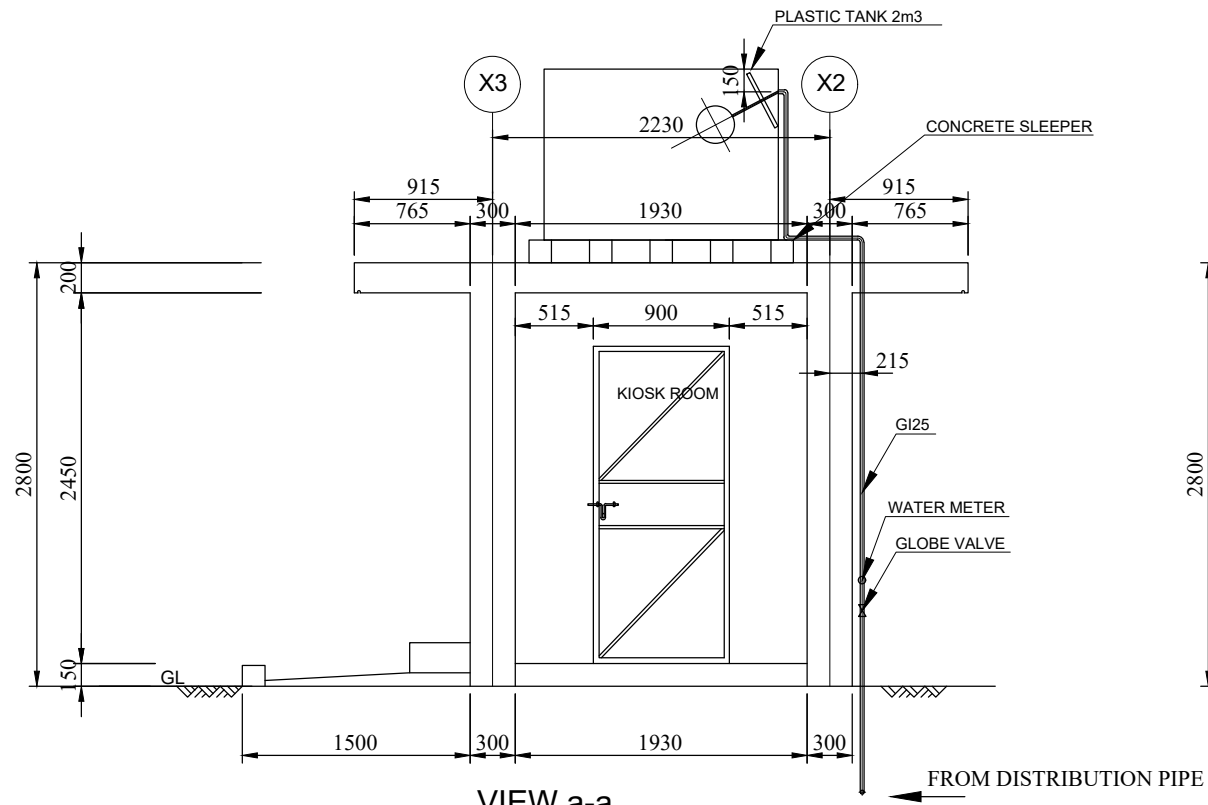


LINTEL DETAIL
SCALE 1:25



LOCKING HINGE DETAIL
SCALE 1:10

<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: WATER KIOSK (DISTRIBUTION PIPE) WATER KIOSK(1/4)</p> <table border="1"> <tr> <td data-bbox="2077 1837 2270 1995">SCALE: 1:50/1:25/1:10</td> <td data-bbox="2270 1837 2537 1995">DATE: OCT 2022</td> <td data-bbox="2537 1837 2849 1995">DRAWING NO.: WS - DP - 006</td> </tr> </table>	SCALE: 1:50/1:25/1:10	DATE: OCT 2022	DRAWING NO.: WS - DP - 006
SCALE: 1:50/1:25/1:10	DATE: OCT 2022	DRAWING NO.: WS - DP - 006				



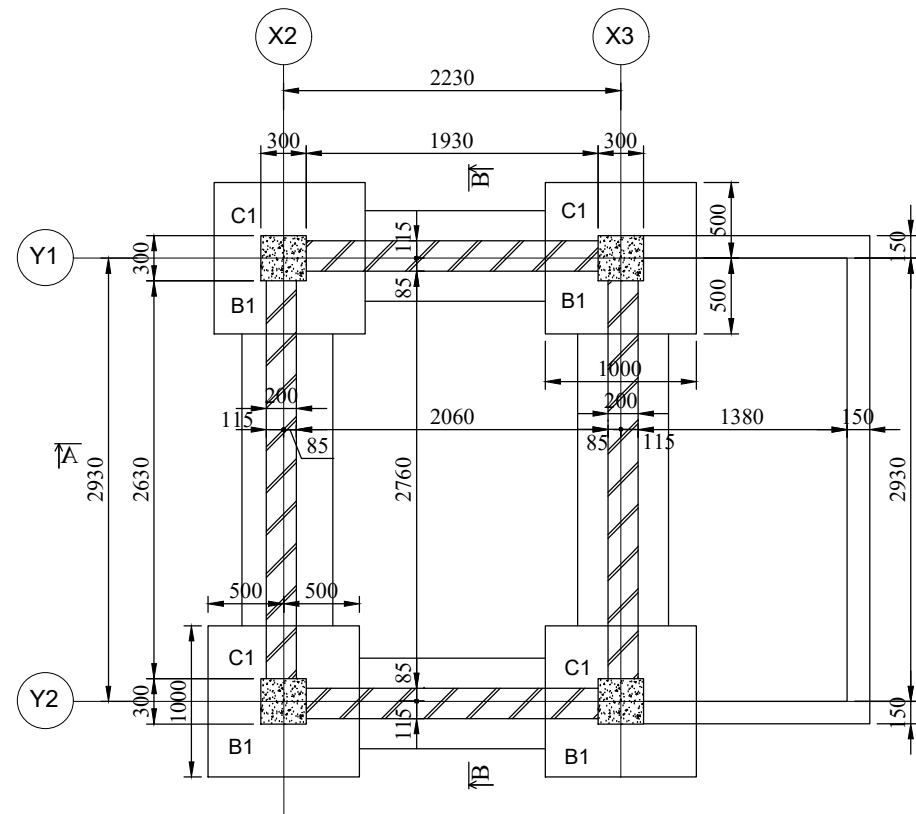
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

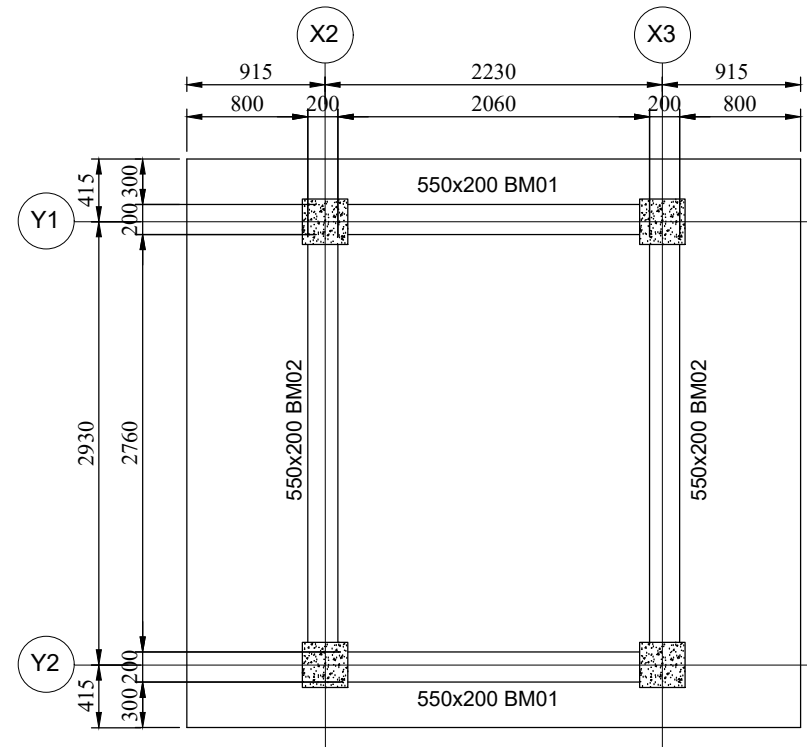
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
WATER KIOSK (DISTRIBUTION PIPE)
WATER KIOSK(2/4)

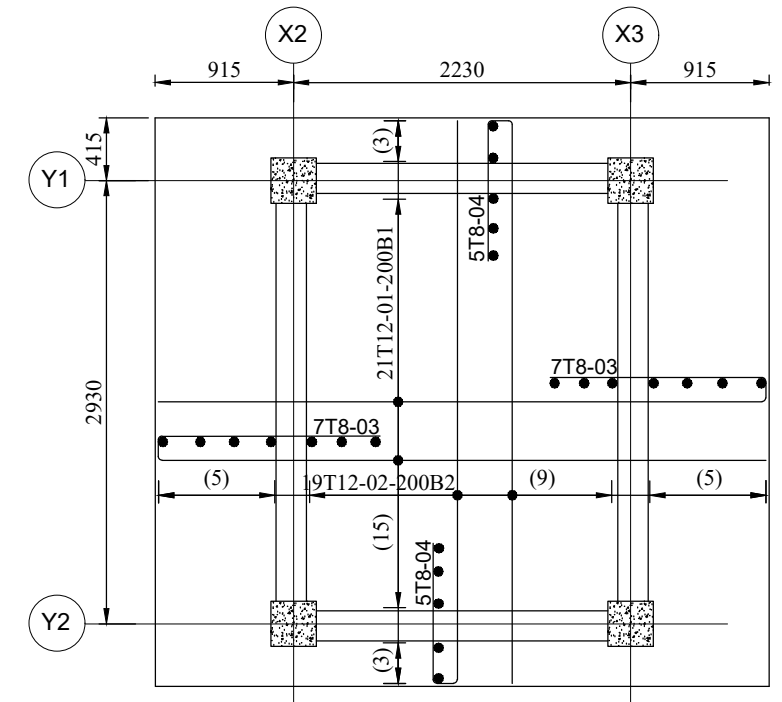
SCALE: 1:50/1:25/1:10	DATE: OCT 2022	DRAWING NO.: WS - DP - 007
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FOUNDATION LAYOUT
SCALE 1:50



ROOF SLAB LAYOUT
SCALE 1:50



ROOF SLAB RC DETAILS
SCALE 1:50

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

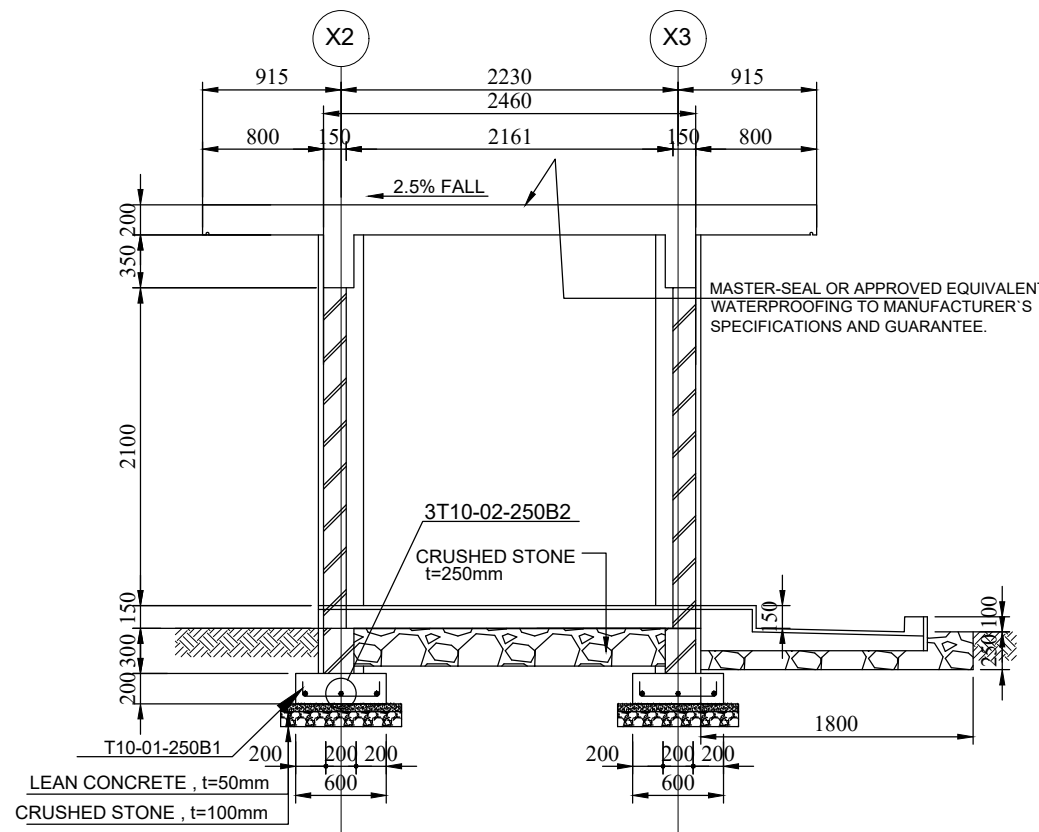
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
WATER KIOSK (DISTRIBUTION PIPE)
WATER KIOSK(3/4)

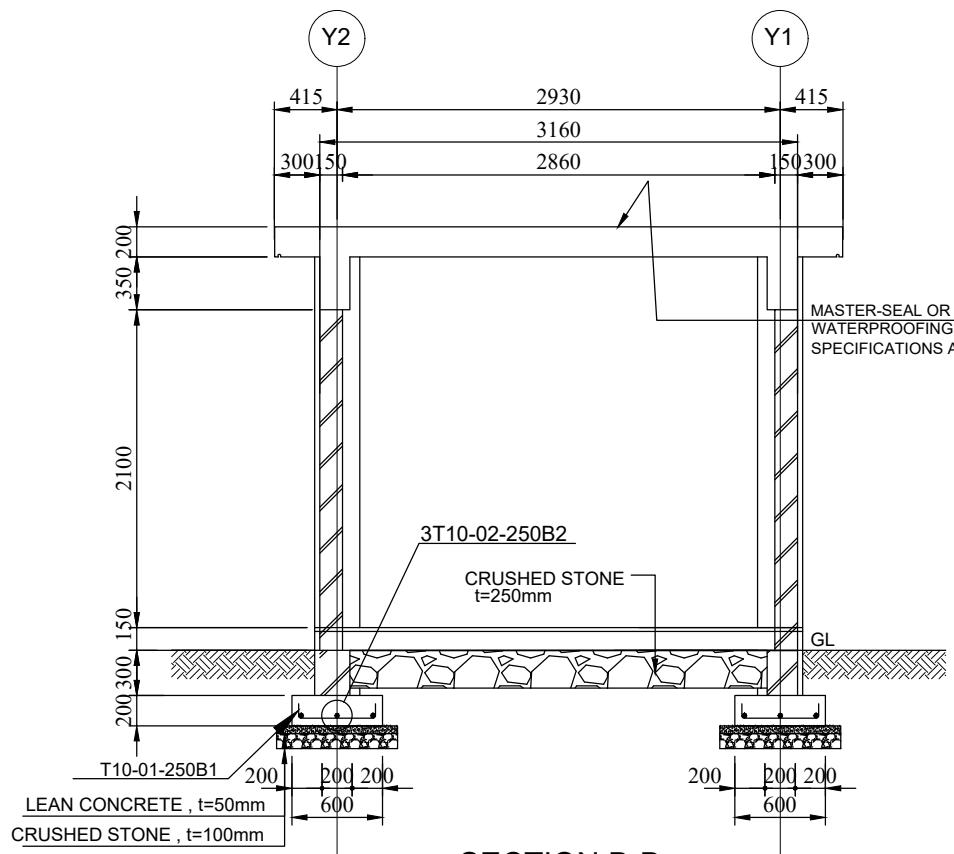
SCALE:
1:50

DATE:
OCT 2022

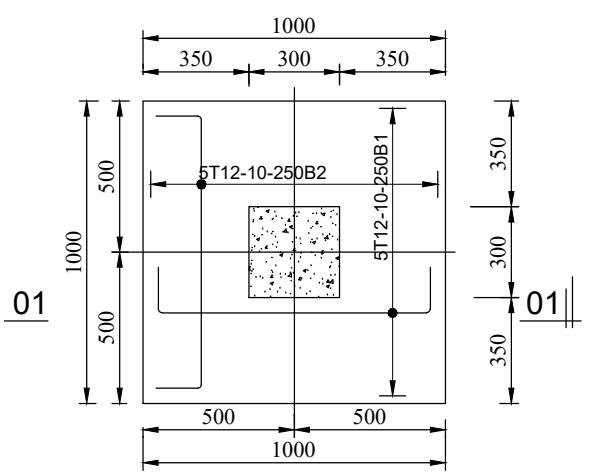
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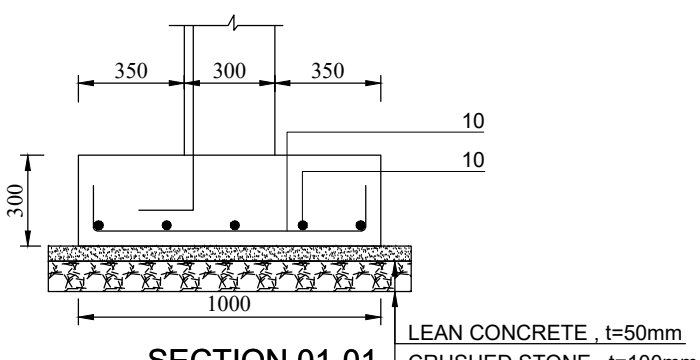
SECTION A-A
SCALE 1 : 50



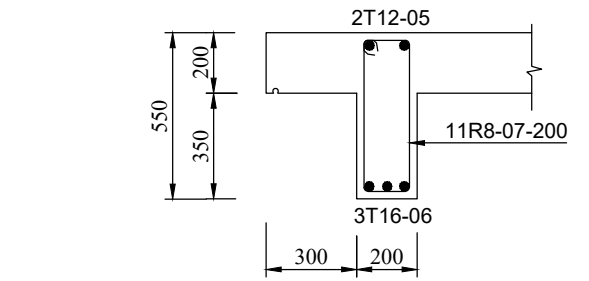
SECTION B-B
SCALE 1 : 50



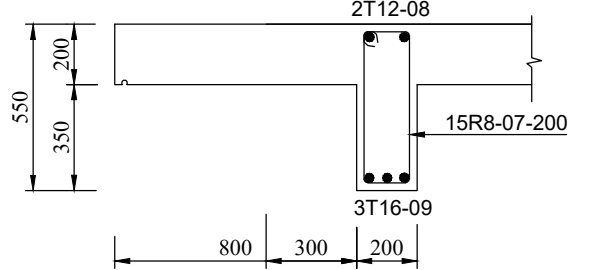
1000x1000x300 BASE B1 (4 Nos.)
SCALE 1 : 25



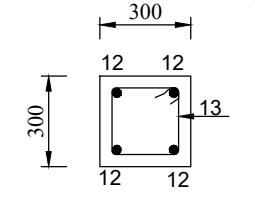
SECTION 01-01
SCALE 1 : 25



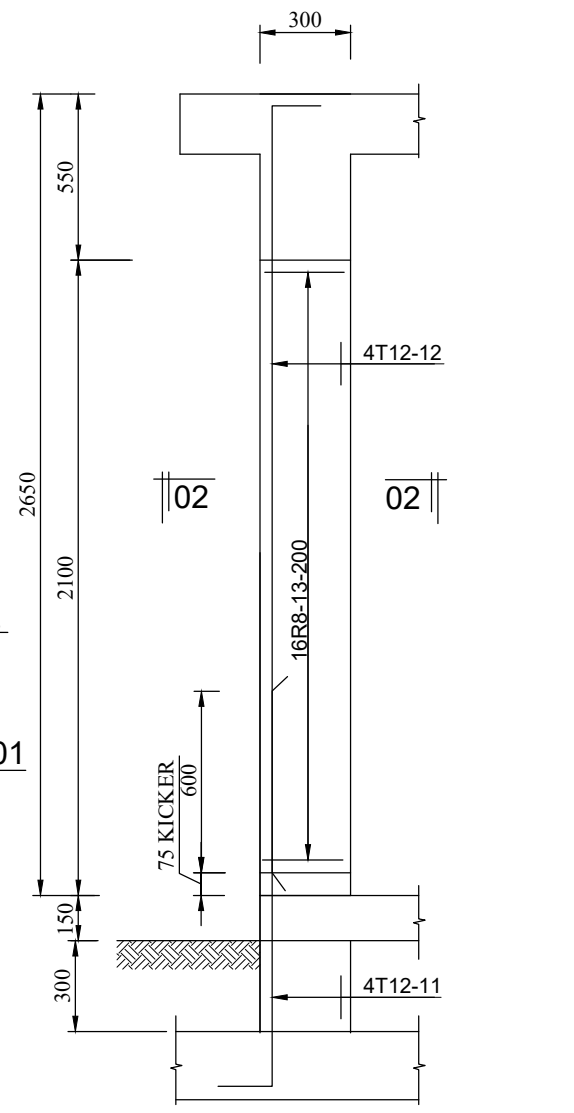
550X200 BM01 (2Nos)
SCALE 1 : 25



550X200 BM02 (2Nos)
SCALE 1 : 25



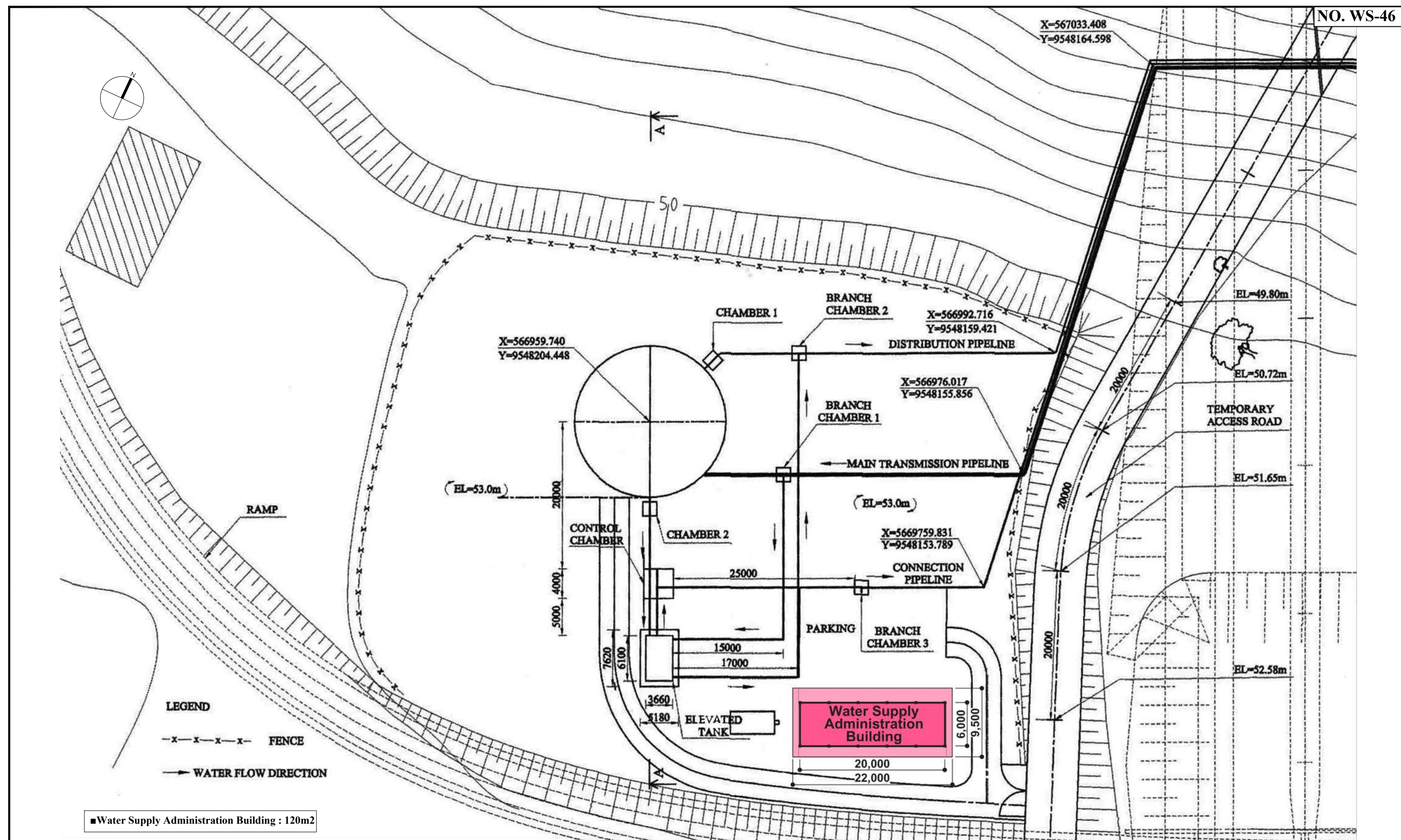
SECTION 01-01
SCALE 1 : 25



300x300 COLUMN C1 (4 Nos.)
SCALE 1 : 25

OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS: NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: WATER KIOSK (DISTRIBUTION PIPE) WATER KIOSK(4/4)		
			SCALE: 1:50/1:25	DATE: OCT 2022	DRAWING NO.: WS - DP - 009

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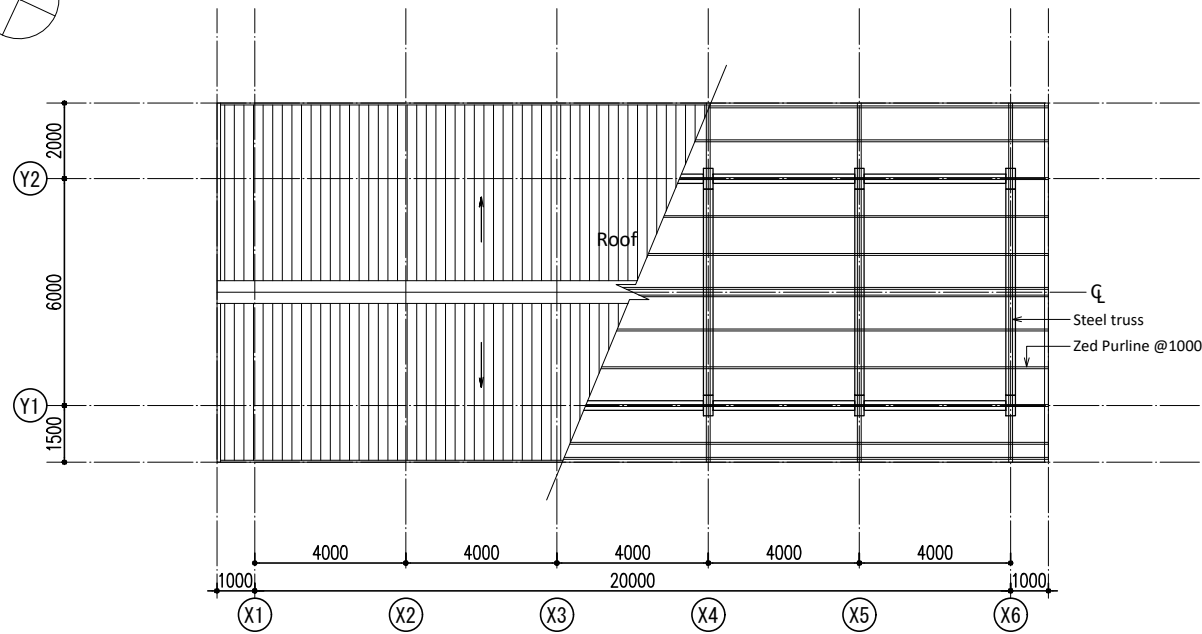
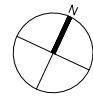
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
**THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE**

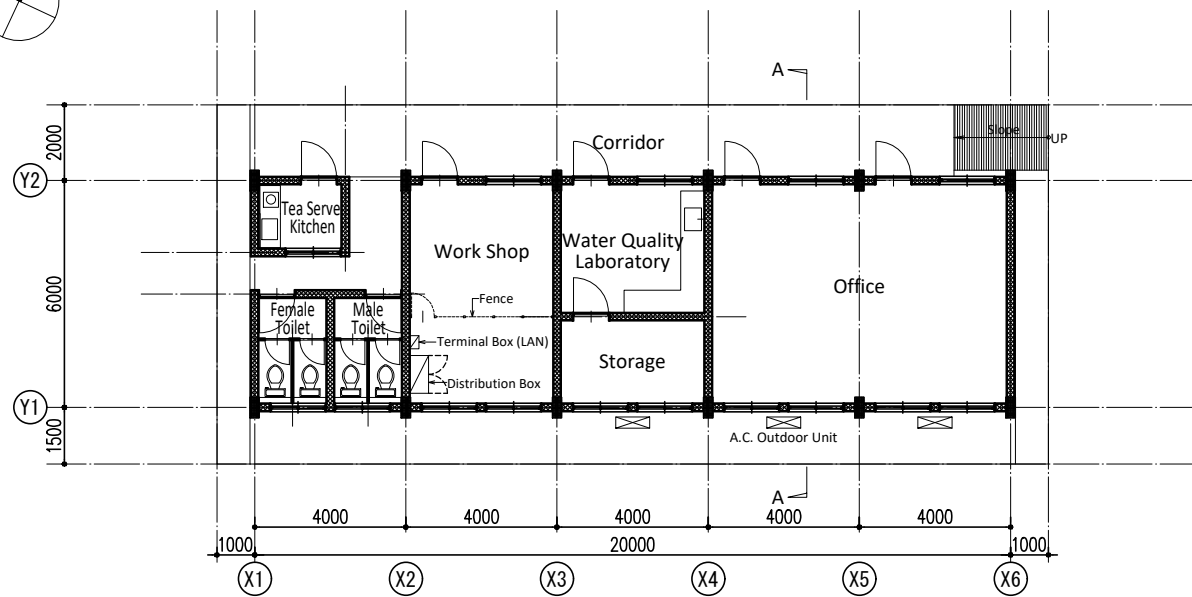
CONSULTING ENGINEERS:
NIPPON KOEI CO.,LTD.
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**WATER SUPPLY ADMINISTRATION BUILDING
LAYOUT PLAN**

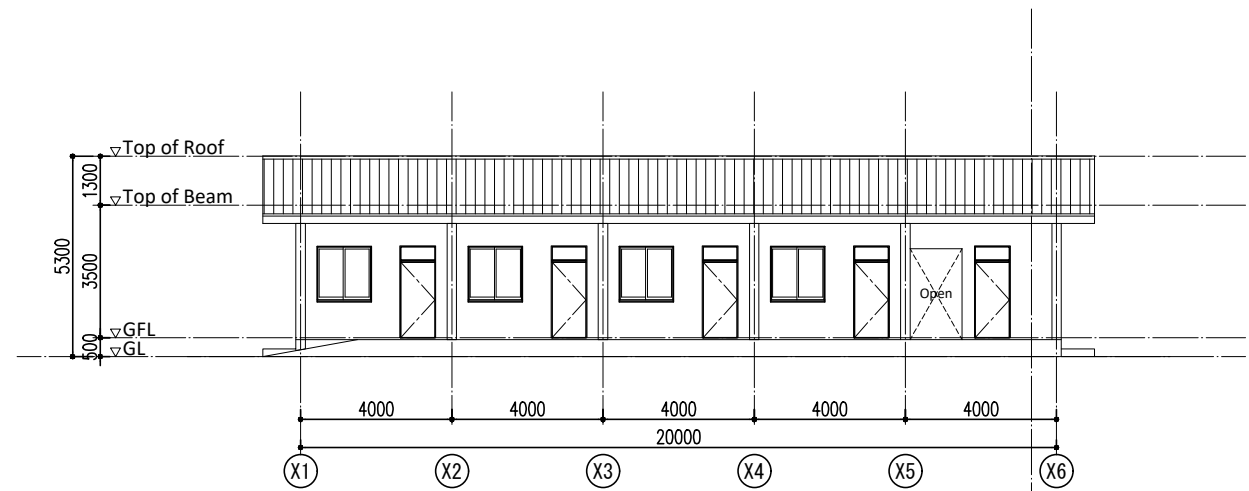
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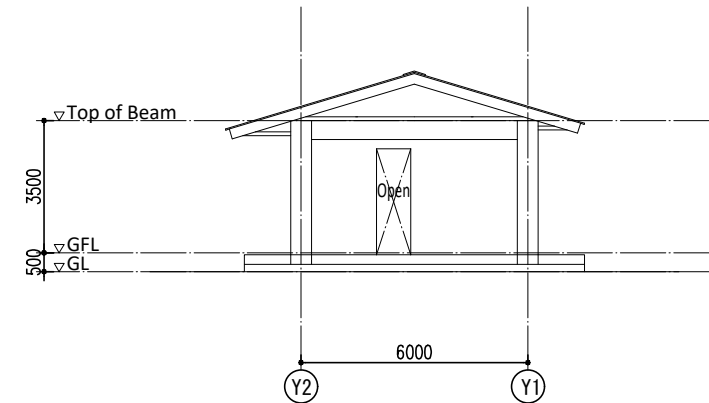
Roof Plan



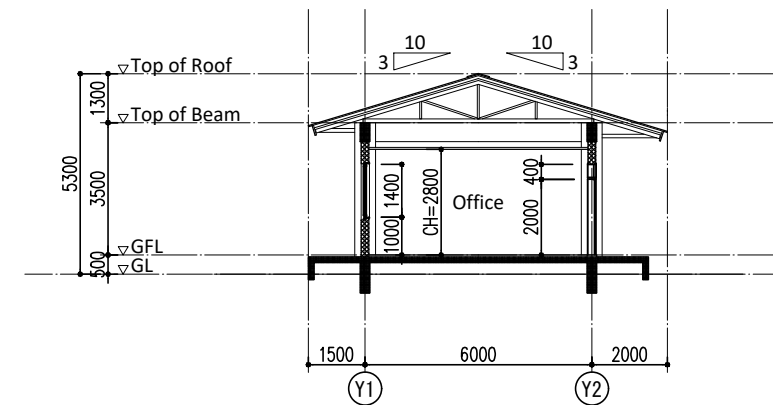
Ground Floor Plan



North Elevation



West Elevation



A-A Section

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

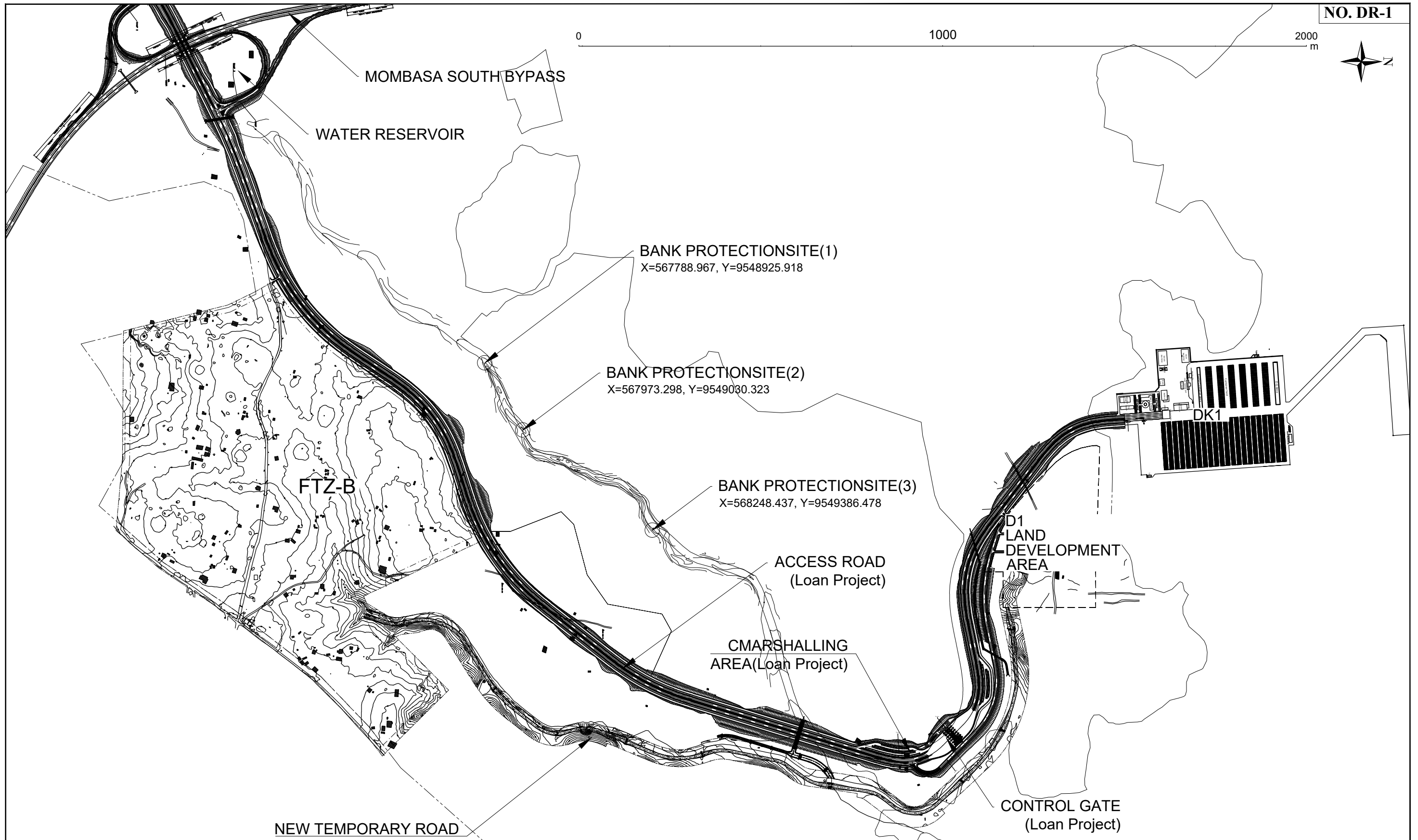
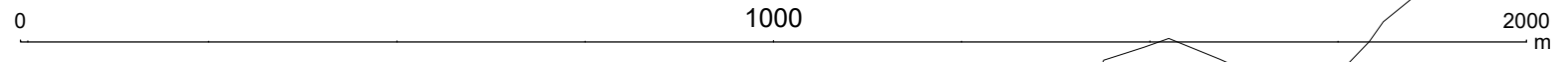
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.


TITLE:
WATER SUPPLY ADMINISTRATION BUILDING
FLOOR PLAN, ELEVATION, SECTION

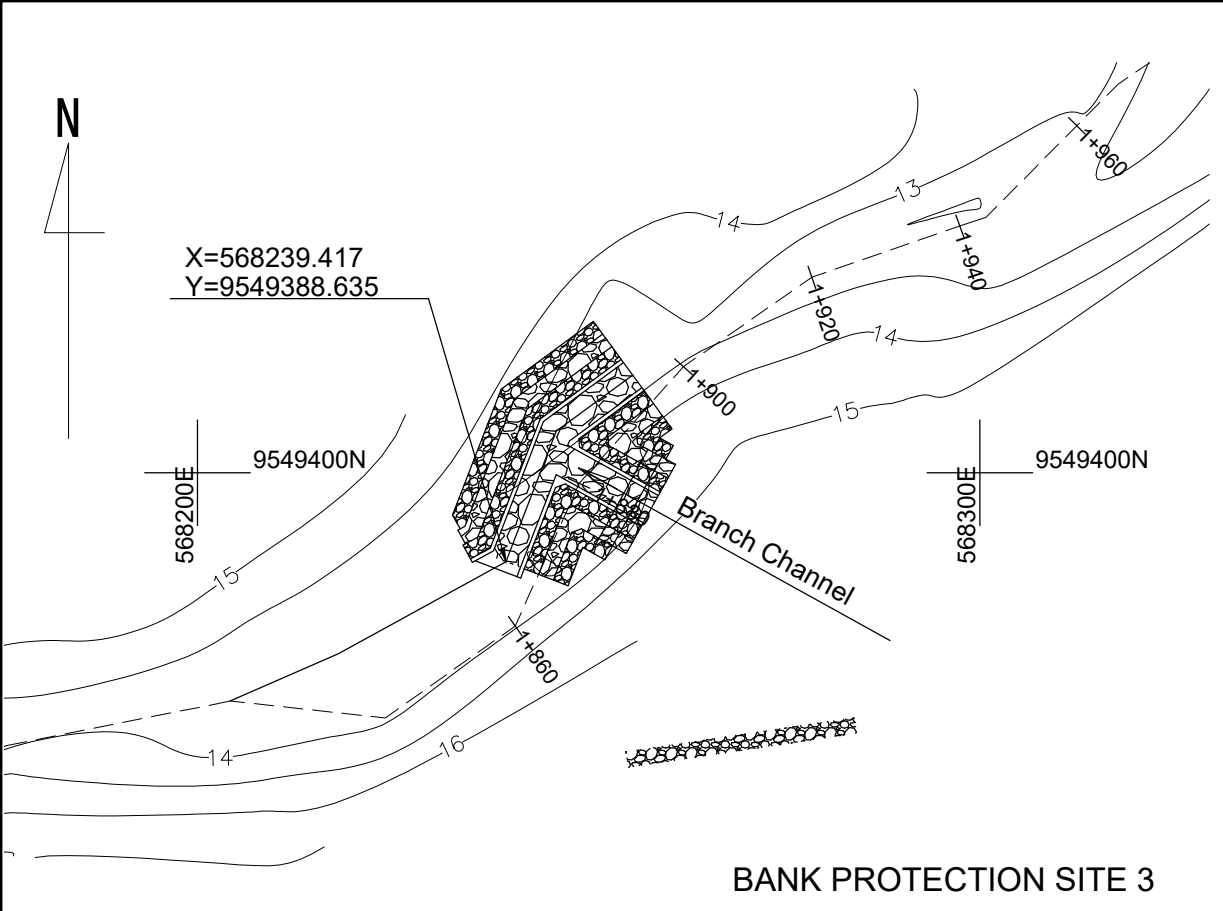
SCALE:
1:200

DATE:
OCT 2022

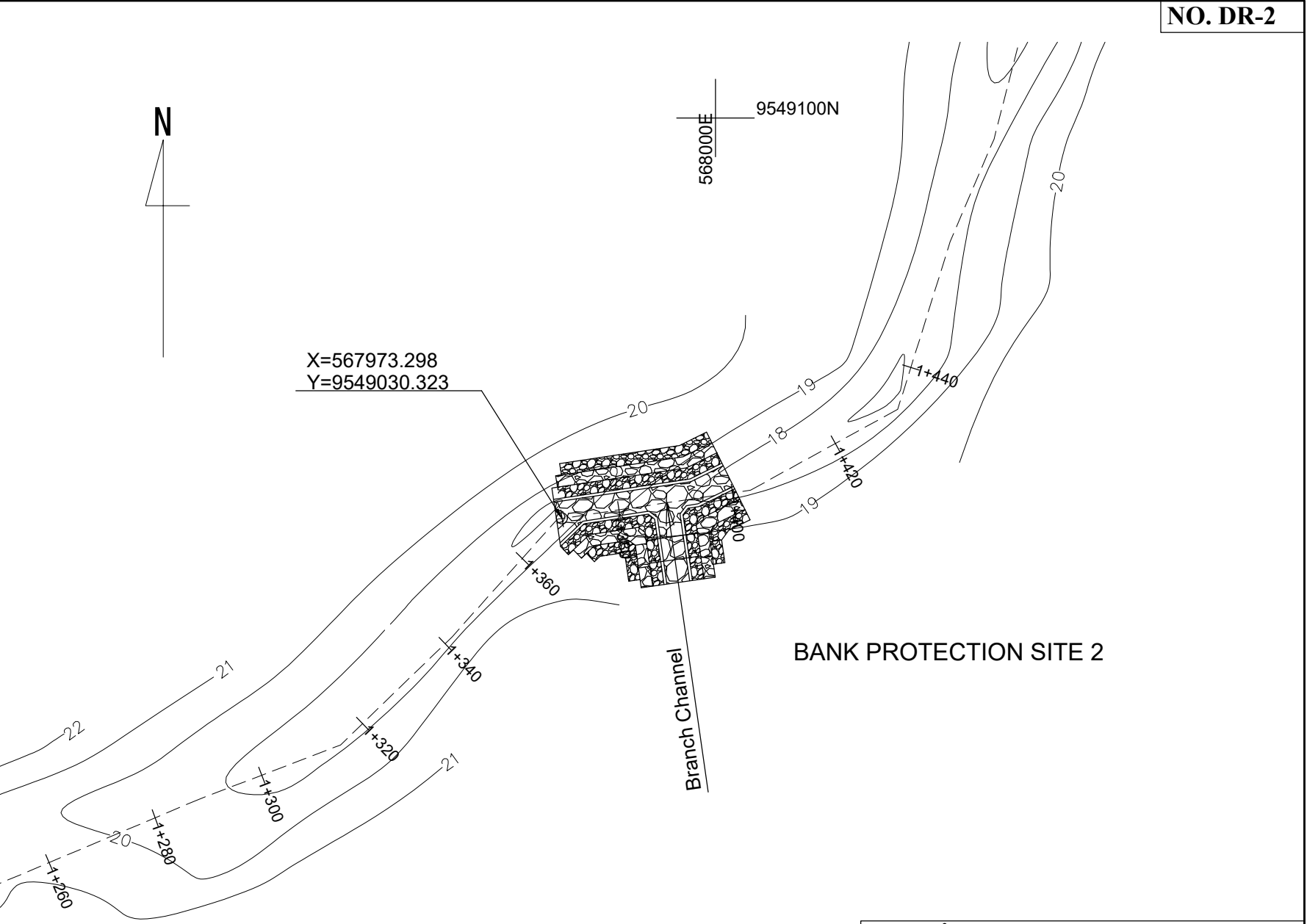
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WS - AB - 002



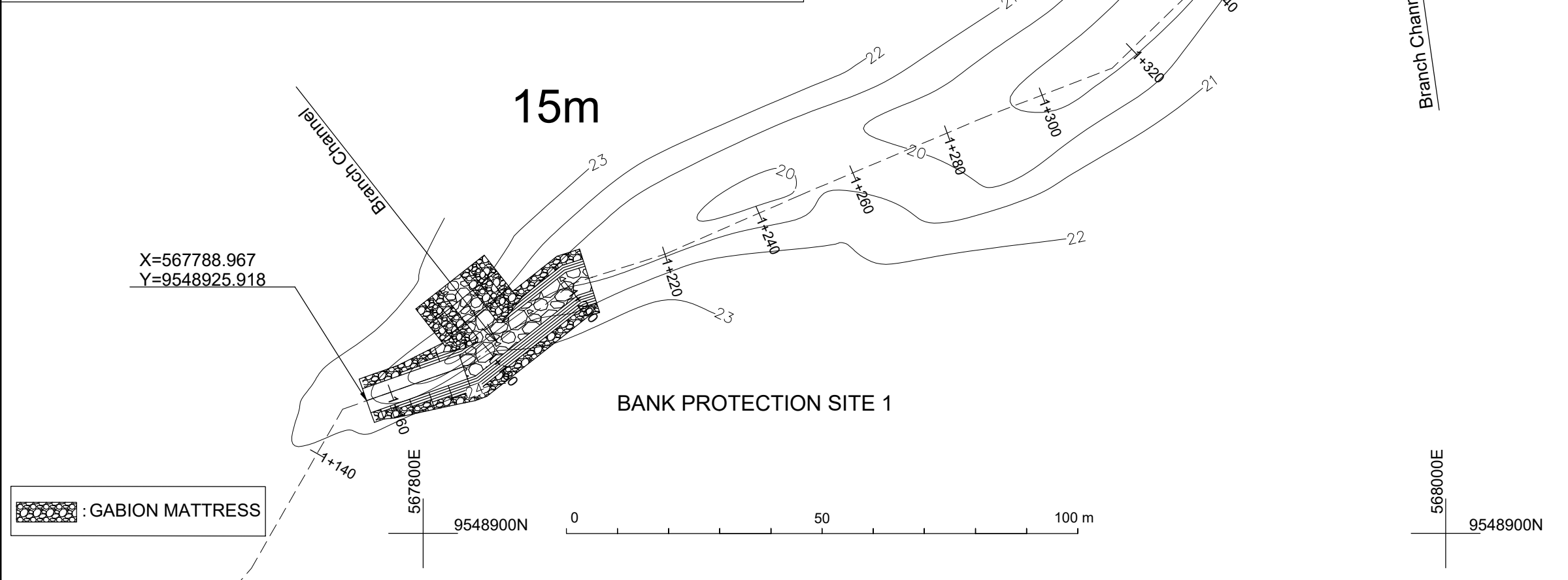
<p>OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: LOCATION MAP OF PLANNED FACILITIES (DRAINAGE)</p>		
		<p>SCALE: 1:10,000(A3)</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: DR-GEN-001</p>	



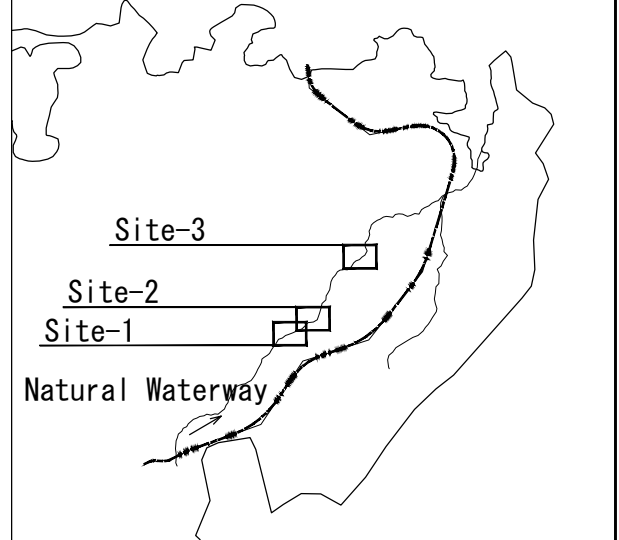
BANK PROTECTION SITE 3




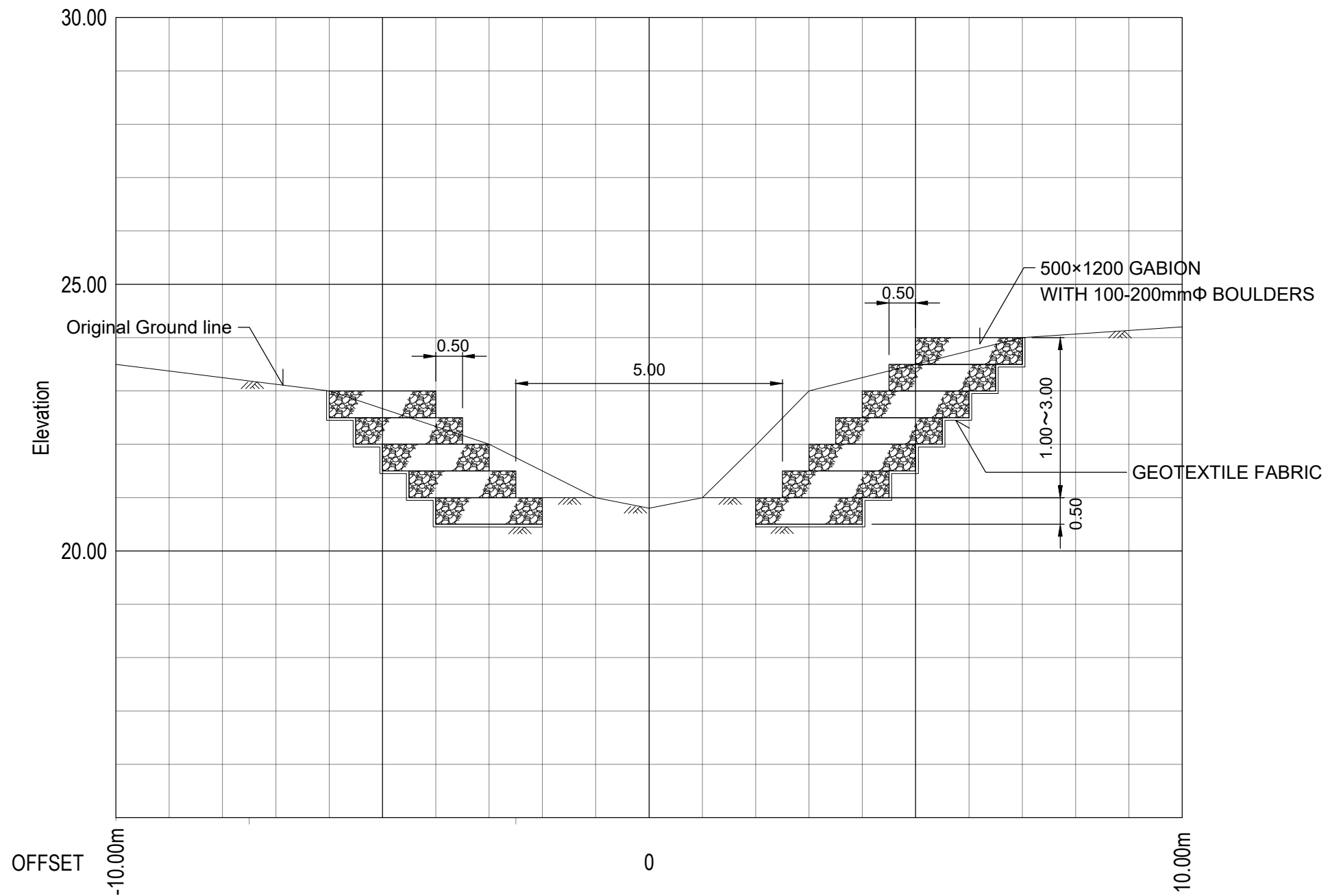
BANK PROTECTION SITE 2




BANK PROTECTION SITE 1

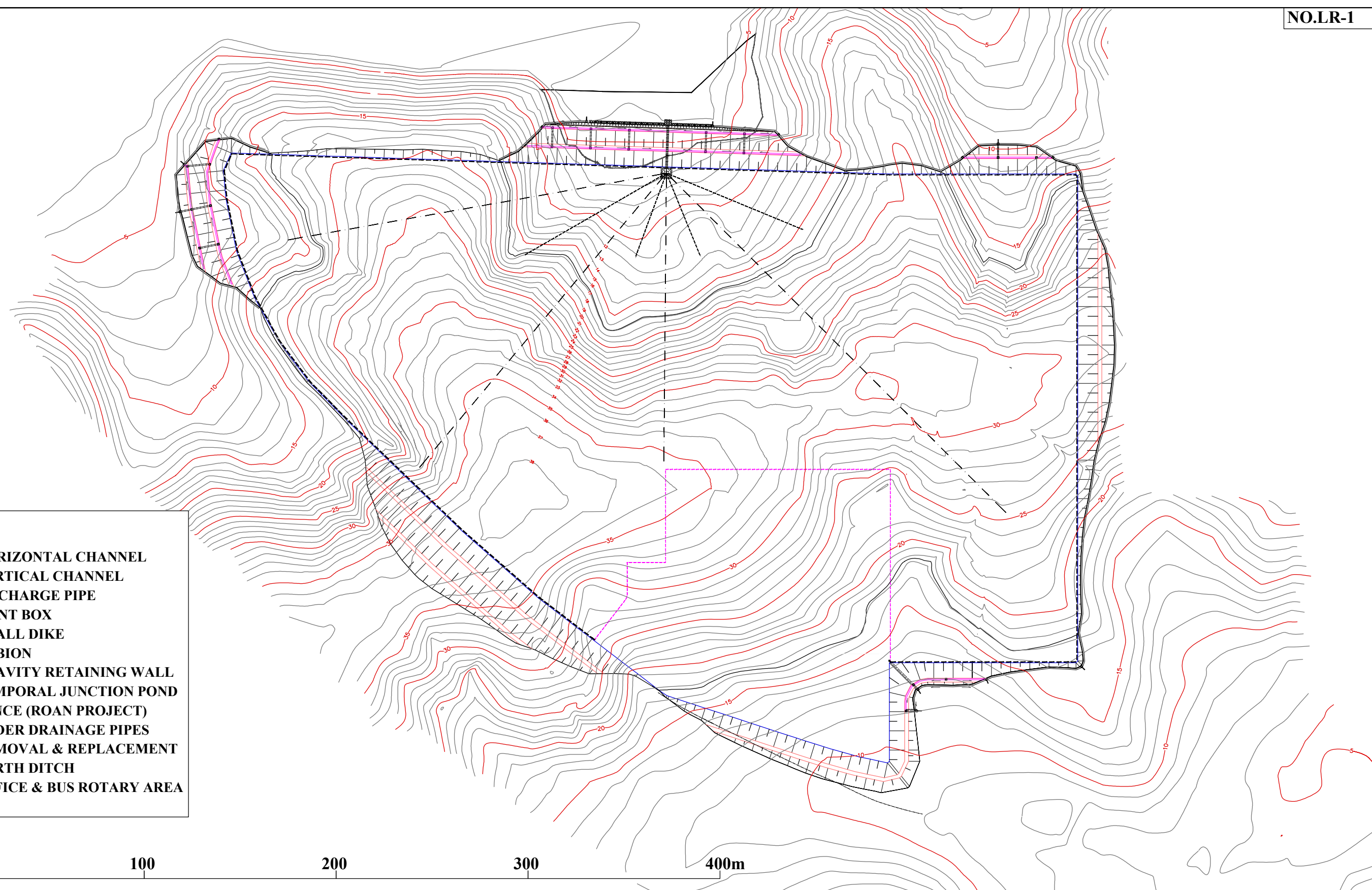


OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: BANK PROTECTION BANK PROTECTION SITE		
			SCALE: 1:1000	DATE: OCT 2022	DRAWING NO.: DR - BPT - 001



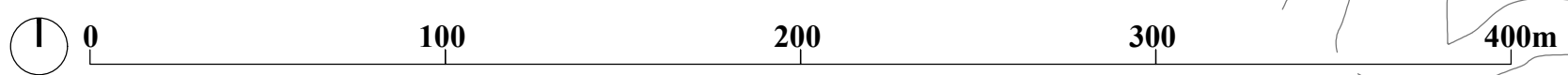
TYPICAL SECTION OF RIVER BANK PROTECTION

OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: BANK PROTECTION TYPICAL CROSS SECTION OF BANK PROTECTION		
			SCALE 1/100	DATE OCT 2022	DRAWING NO. DR-BPT-002

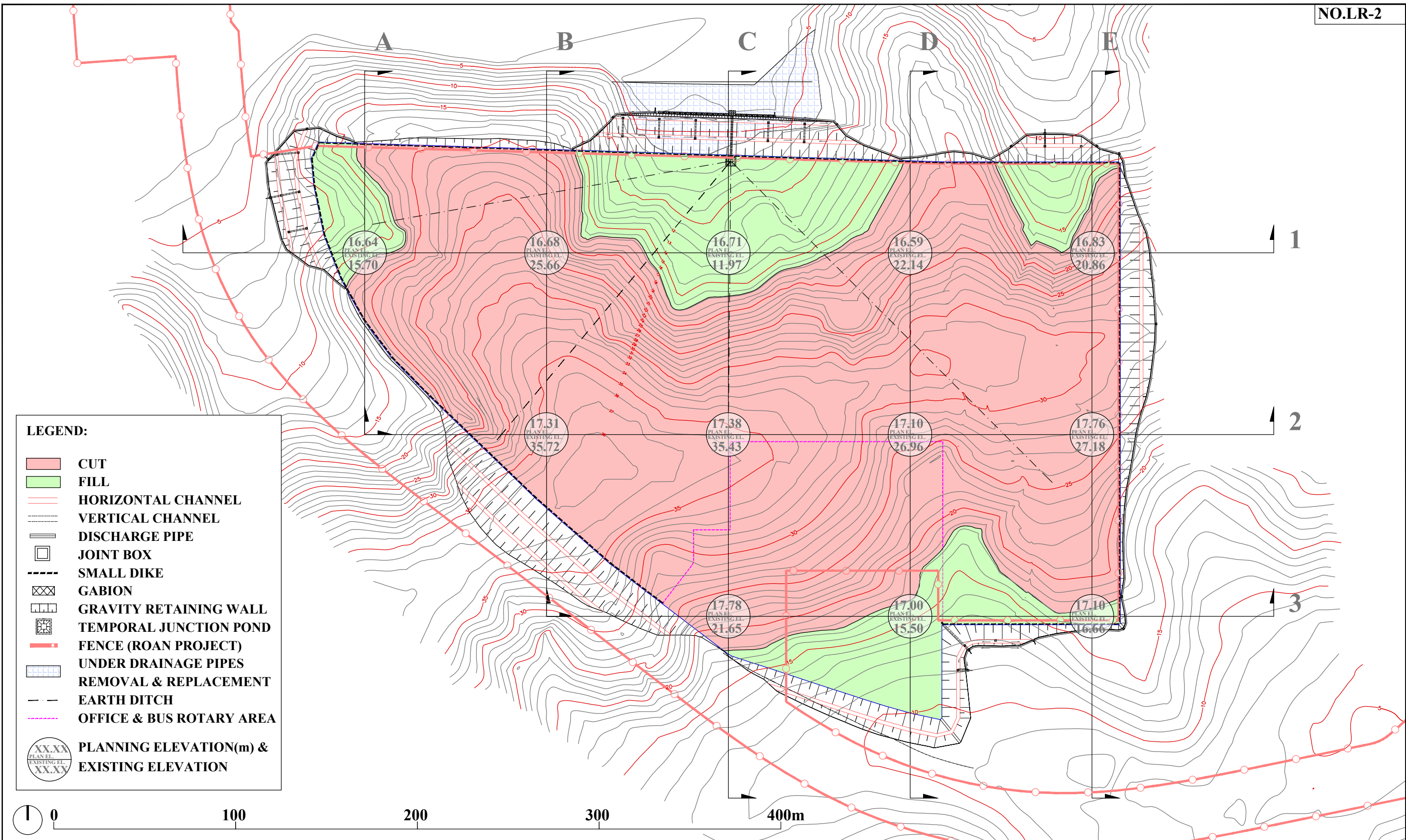


LEGEND:

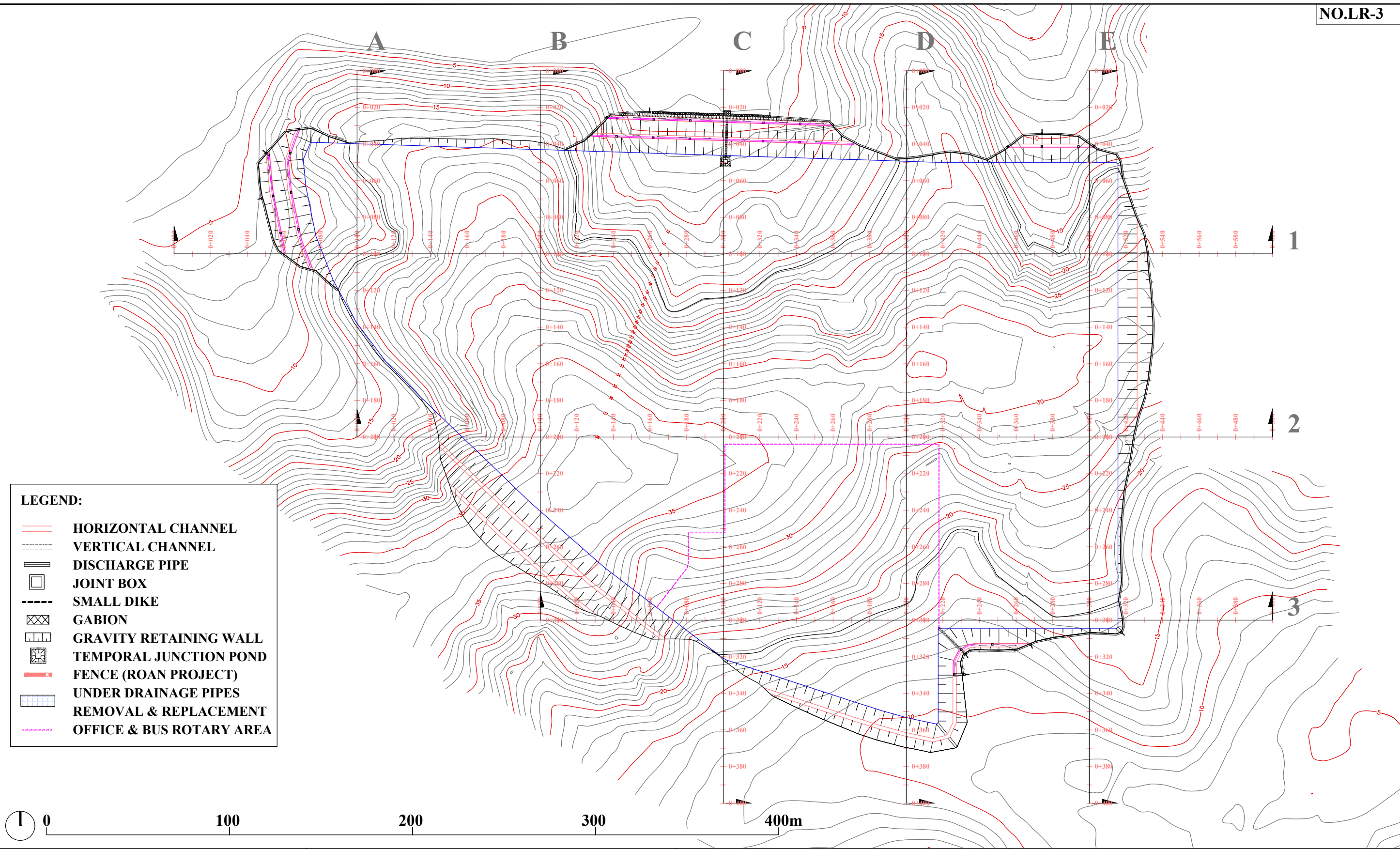
	HORIZONTAL CHANNEL
	VERTICAL CHANNEL
	DISCHARGE PIPE
	JOINT BOX
	SMALL DIKE
	GABION
	GRAVITY RETAINING WALL
	TEMPORAL JUNCTION POND
	FENCE (ROAN PROJECT)
	UNDER DRAINAGE PIPES REMOVAL & REPLACEMENT
	EARTH DITCH
	OFFICE & BUS ROTARY AREA



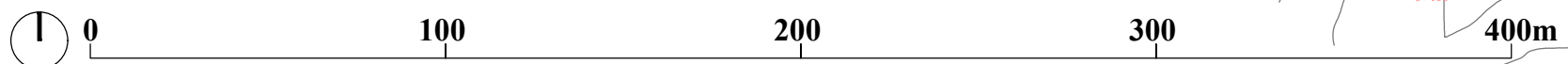
<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: LOCATION MAP OF PLANNED FACILITIES (LAND DEVELOPMENT) LAYOUT PLAN OF MOMBASA SEZ DI LAND</p>		
			<p>SCALE: 1:2,000(A3)</p>	<p>DATE: OCT 2022</p>	<p>DRAWING NO.: LR-MSL-001</p>



OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS: NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: LAND DEVELOPMENT GENERAL PLAN OF CUT-FILL WORK		
			SCALE: 1:2,000(A3)	DATE: OCT 2022	DRAWING NO.: LR-MSL-002



- LEGEND:**
- HORIZONTAL CHANNEL
 - VERTICAL CHANNEL
 - DISCHARGE PIPE
 - JOINT BOX
 - SMALL DIKE
 - GABION
 - GRAVITY RETAINING WALL
 - TEMPORAL JUNCTION POND
 - FENCE (ROAN PROJECT)
 - UNDER DRAINAGE PIPES REMOVAL & REPLACEMENT
 - OFFICE & BUS ROTARY AREA

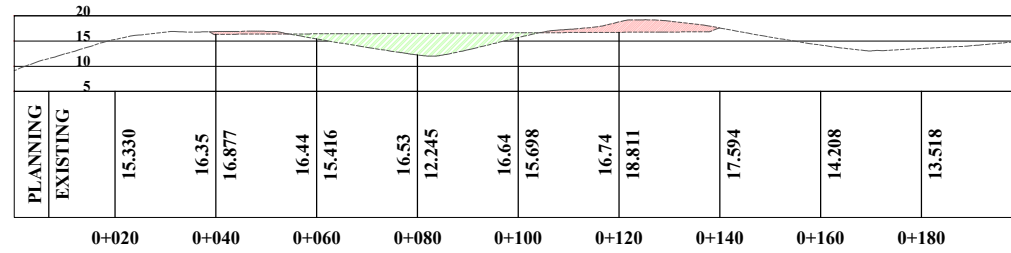


<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE:</p> <p>LAND DEVELOPMENT LOCATION OF CROSS SECTIONS</p>		
			<p>SCALE:</p> <p>1:2,000(A3)</p>	<p>DATE:</p> <p>OCT 2022</p>	<p>DRAWING NO.:</p> <p>LR-MSL-003</p>

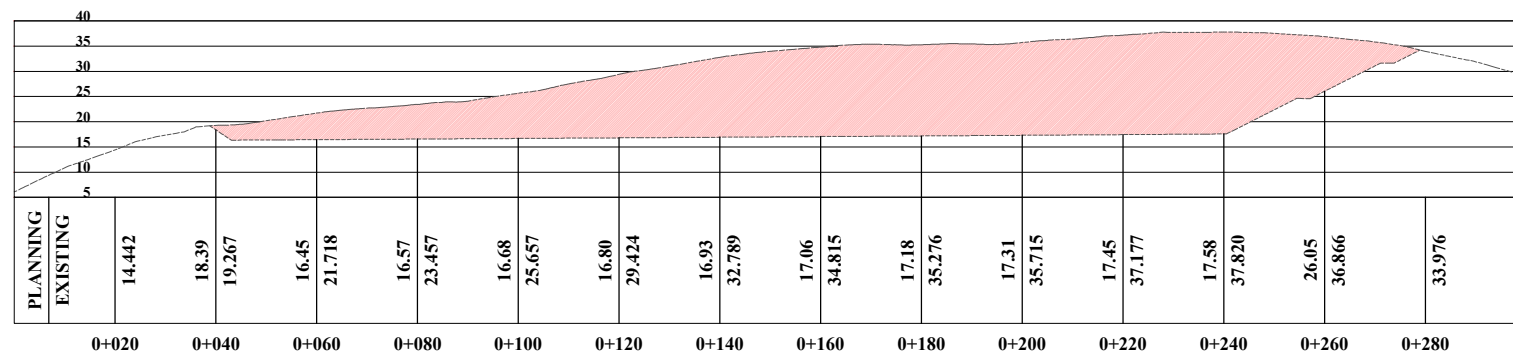
LEGEND:

- CUT
- FILL

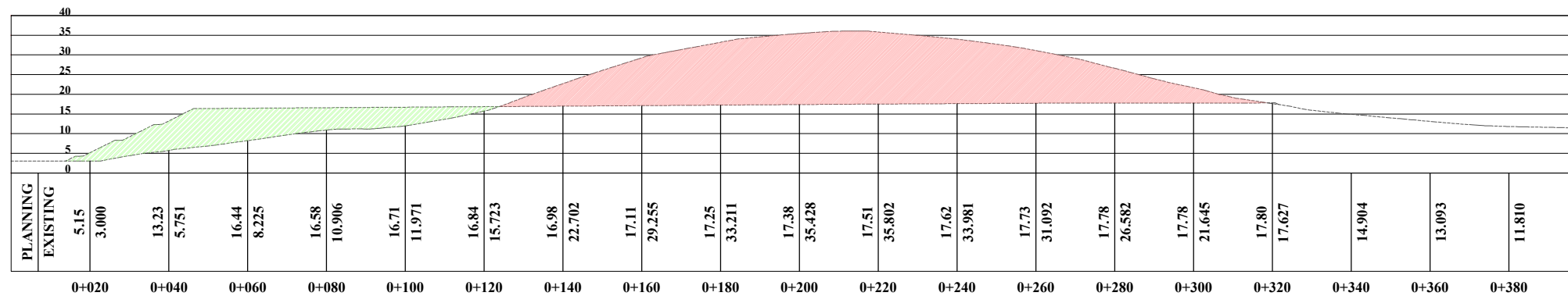
A PROFILE



B PROFILE



C PROFILE



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
LAND DEVELOPMENT
CROSS SECTION (1/3)

SCALE:
1:1,500(A3)

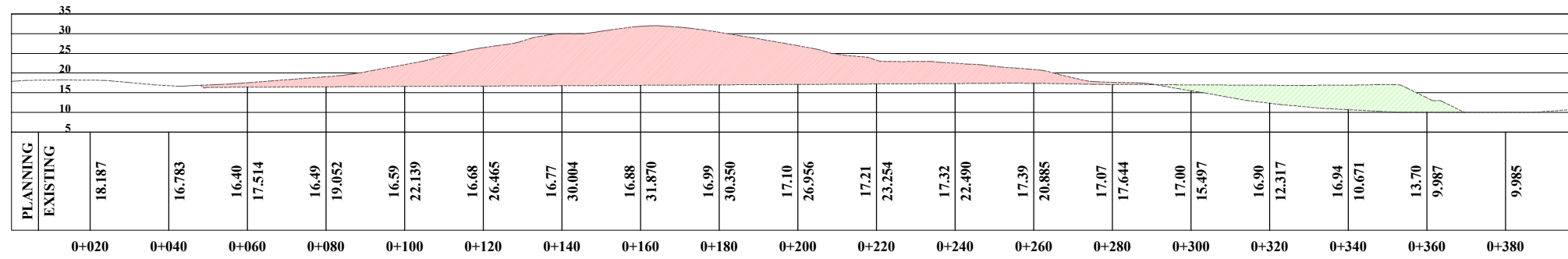
DATE:
OCT 2022

DRAWING NO.:
LR-MSL-004

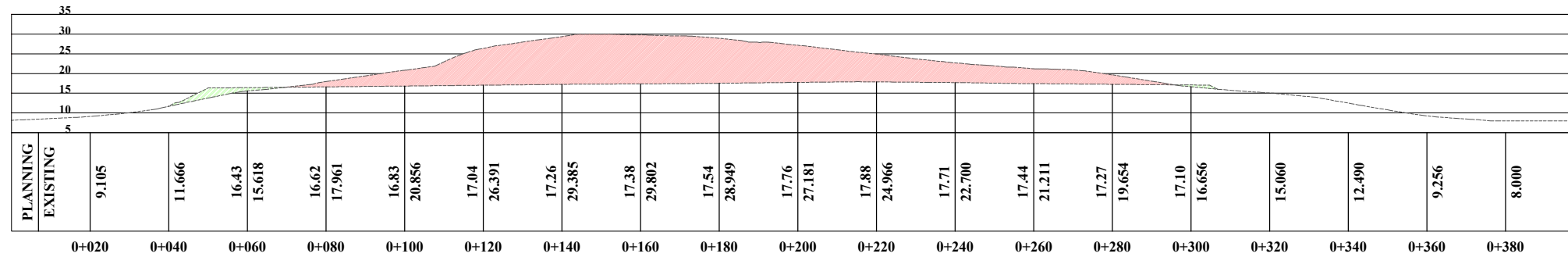
LEGEND:

- CUT
- FILL

D PROFILE



E PROFILE



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

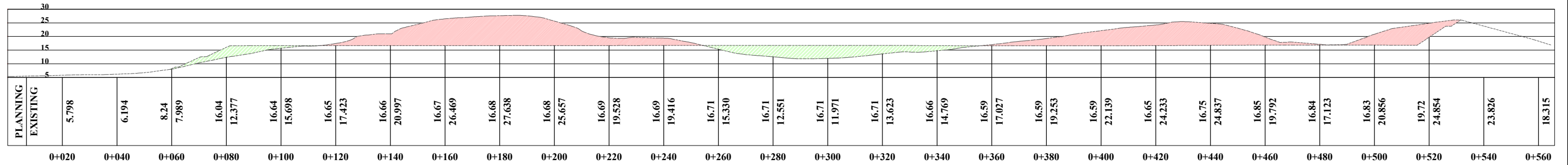
PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
NIPPON KOEI CO.,LTD.
 NIPPON KOEI Urban Space CO., LTD.

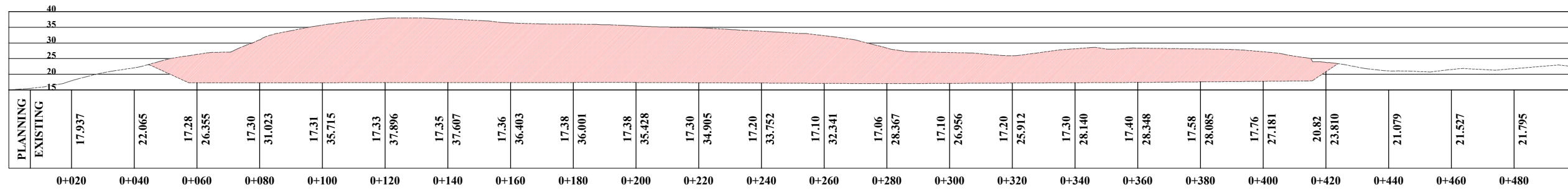
TITLE: LAND DEVELOPMENT CROSS SECTION (2/3)		
SCALE: 1:1,500(A3)	DATE: OCT 2022	DRAWING NO.: LR-MSL-005

LEGEND:
 CUT
 FILL

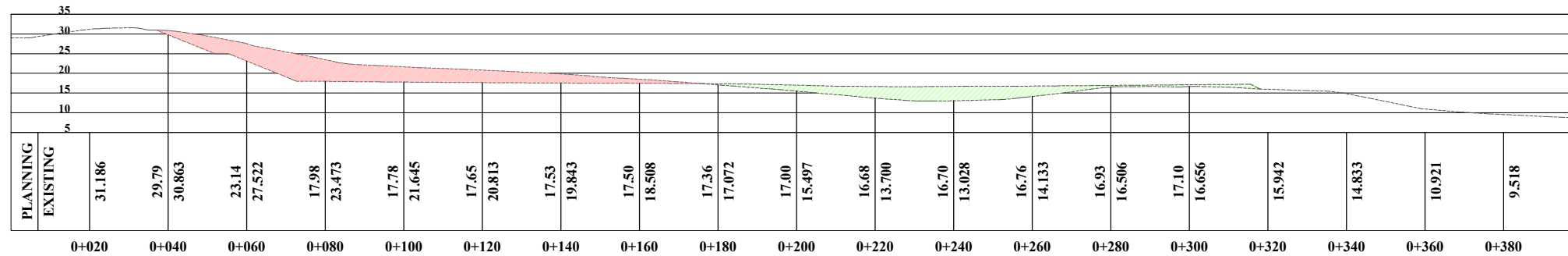
1 PROFILE



2 PROFILE



3 PROFILE



OWNER:
 KENYA PORTS AUTHORITY
 THE REPUBLIC OF KENYA

PROJECT NAME:
 THE PROJECT FOR
 INFRASTRUCTURE DEVELOPMENT
 IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
 NIPPON KOEI Urban Space CO., LTD.

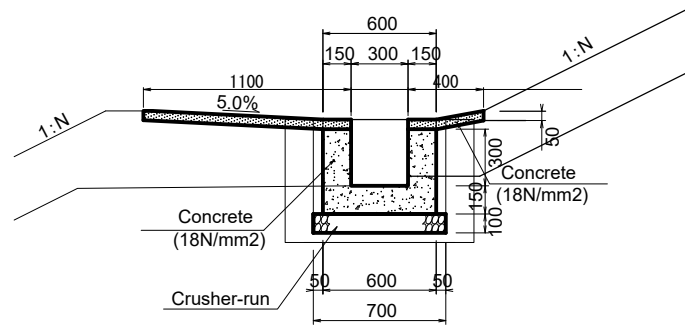
TITLE:
**LAND DEVELOPMENT
 CROSS SECTION (3/3)**

SCALE:
 1:2,000(A3)

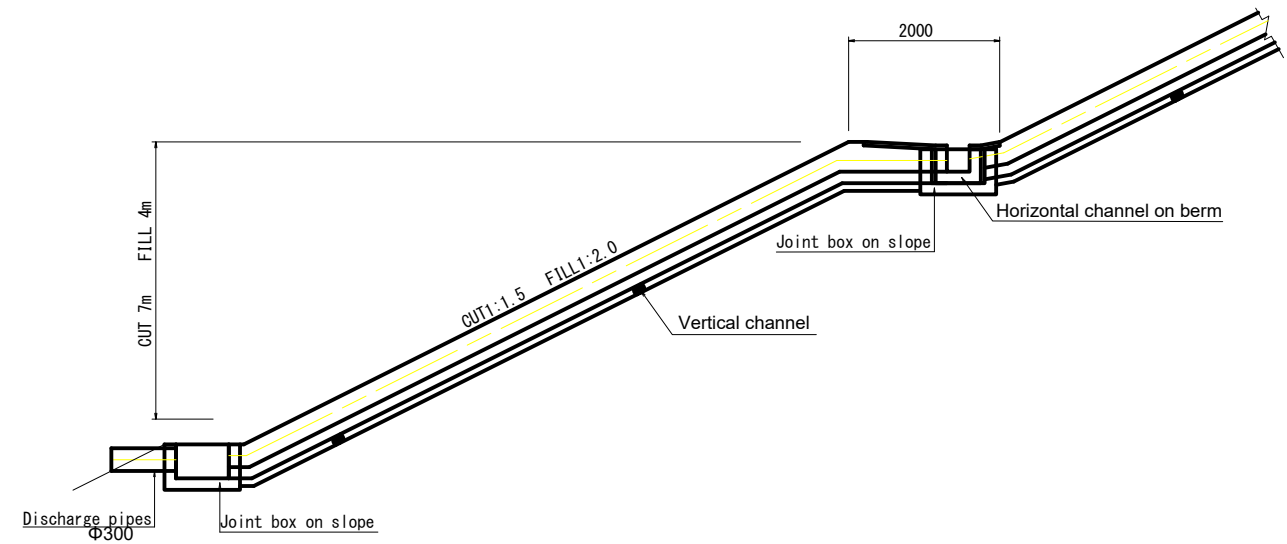
DATE:
 OCT 2022

DRAWING NO.:
 LR-MSL-006

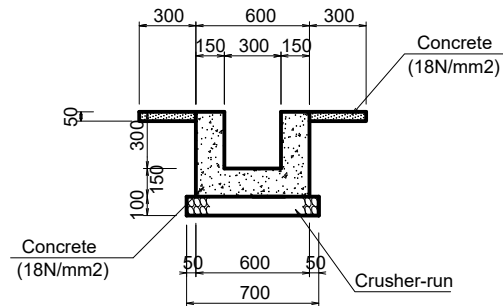
Horizontal channel
(300×300) S=1/20



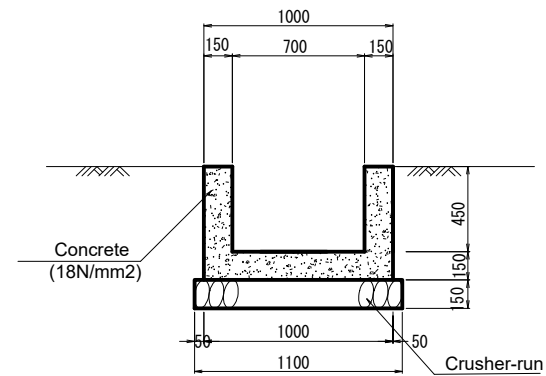
Side view
S=1/50



Vertical channel
(300×300) S=1/20



Joint box on slope
(700×450) S=1/20



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
LAND DEVELOPMENT
STRUCTURAL DRAWING (1)

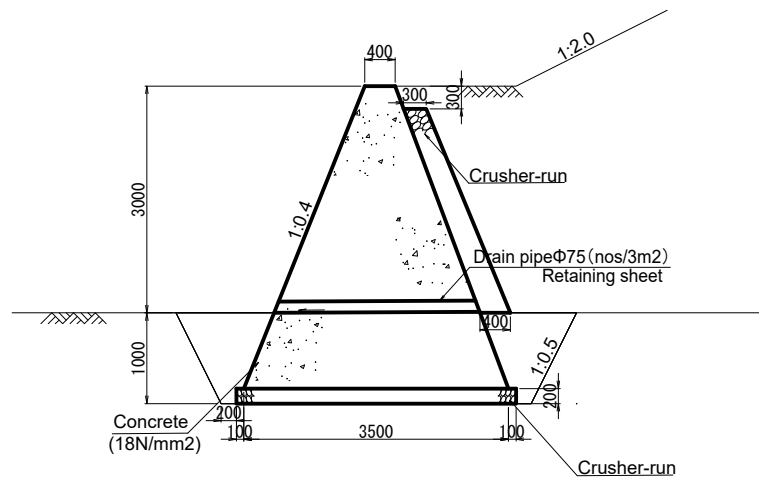
SCALE:
1:20
1:50

DATE:
OCT 2022

DRAWING NO.:
LR - MSL - 007

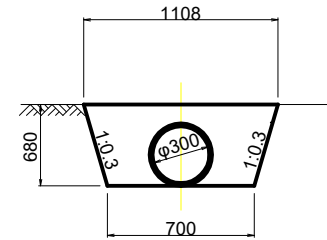
Gravity retaining wall

S=1/100



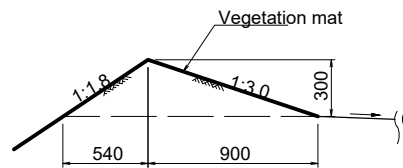
**Under drainage pipes(perforated)
Discharge pipes**

(φ300) S=1/40



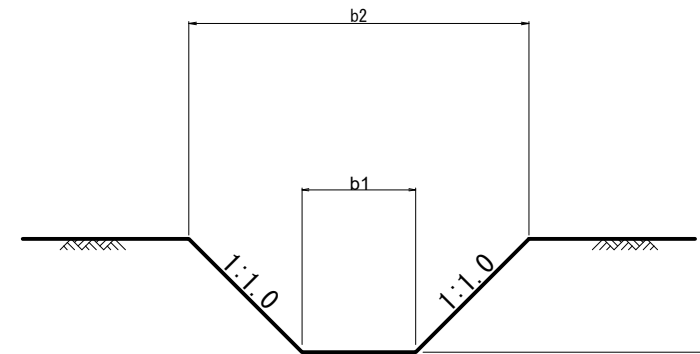
Small dike

S=1/40



Earth ditch

S=1:40



DIMENSIONS	b1	b2	h
900/300×300	300	900	300
1200/400×400	400	1200	400
1800/600×600	600	1800	600
2400/800×800	800	2400	800

OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

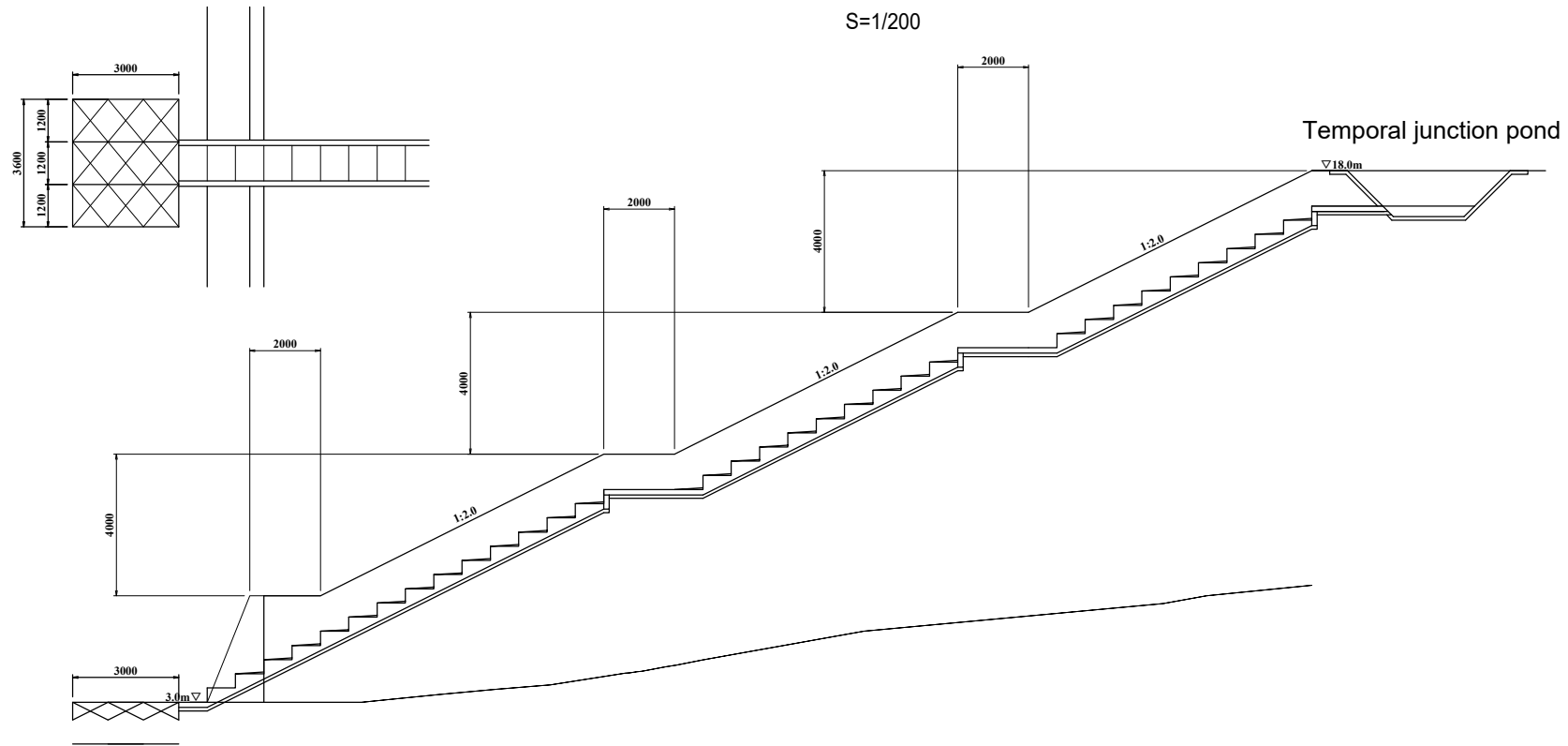
PROJECT NAME:
**THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE**

CONSULTING ENGINEERS:
NIPPON KOEI CO.,LTD.
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**LAND DEVELOPMENT
STRUCTURAL DRAWING (2)**

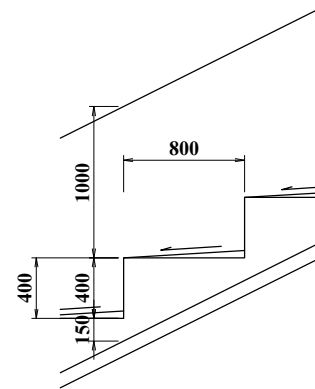
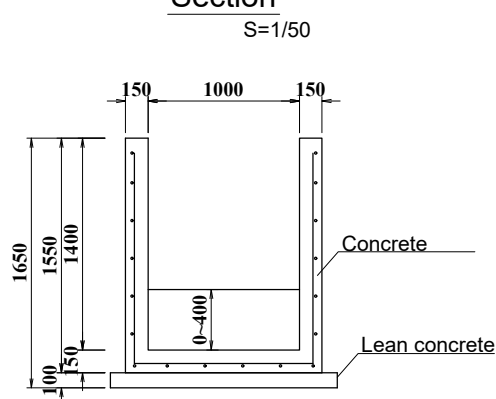
SCALE: 1:100 1:40	DATE: OCT 2022	DRAWING NO.: LR - MSL - 008
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STEPPED DRAINAGE



Section

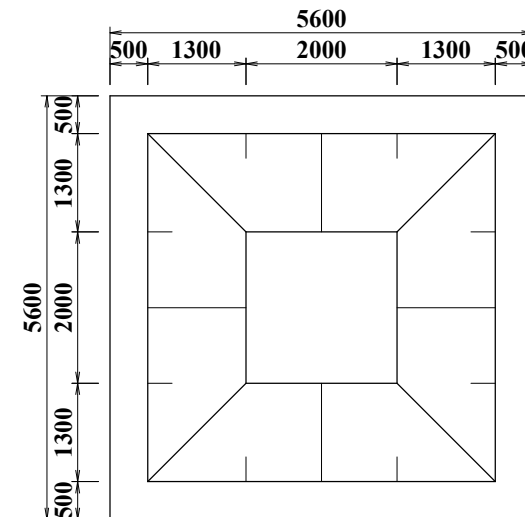
S=1/50



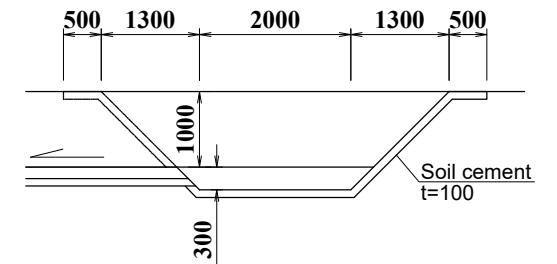
Temporal junction pond

S=1/100

Plan



Section



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

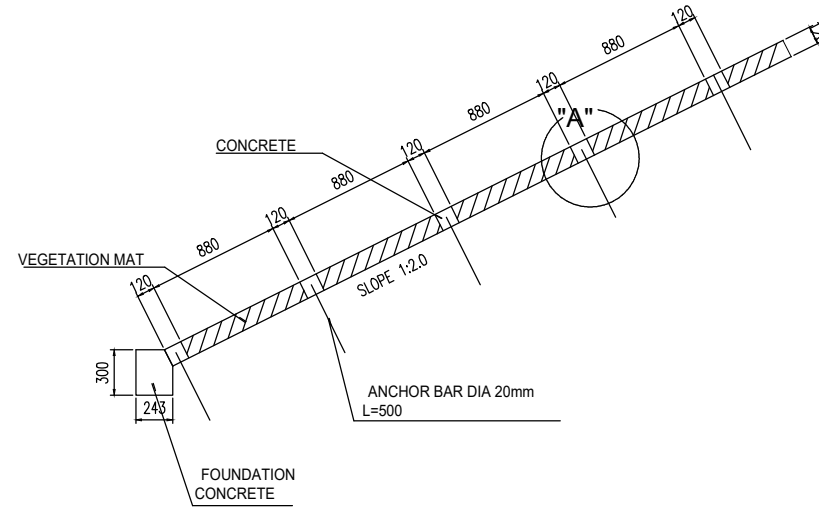
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE: LAND DEVELOPMENT STRUCTURAL DRAWING (3)		
SCALE: 1:200 1:100 1:50	DATE: OCT 2022	DRAWING NO.: LR - MSL - 009

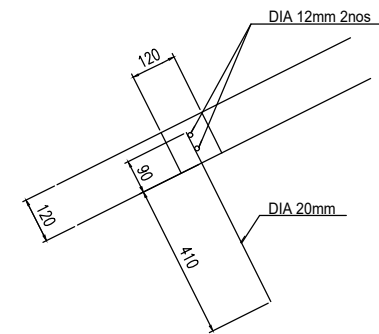
GENERAL DRAWING OF CAST-IN-PLACE CONCRETE CRIB

SCALE 1:50

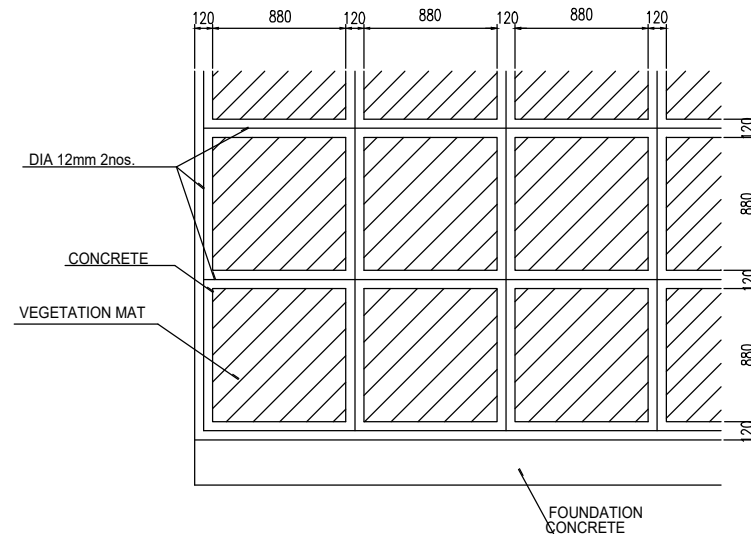
SIDE VIEW



DETAIL OF "A" SCALE 1:20




DEVELOPMENT



OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

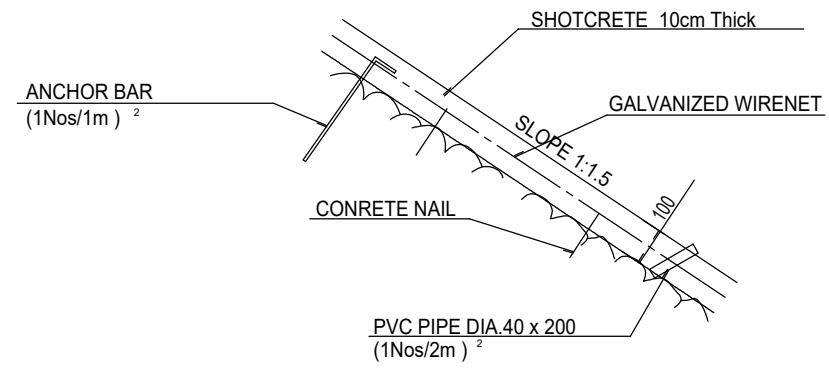
PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE


CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

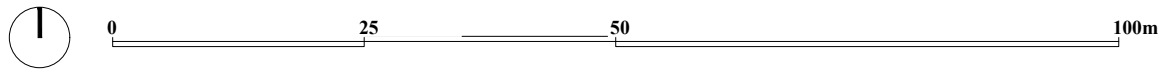
TITLE: LAND DEVELOPMENT GENERAL DRAWING OF CAST-IN-PLACE CONCRETE CRIB		
SCALE: 1:50 1:20	DATE: OCT 2022	DRAWING NO.: LR - MSL - 010

GENERAL DRAWING OF SHOTCRETE WORK

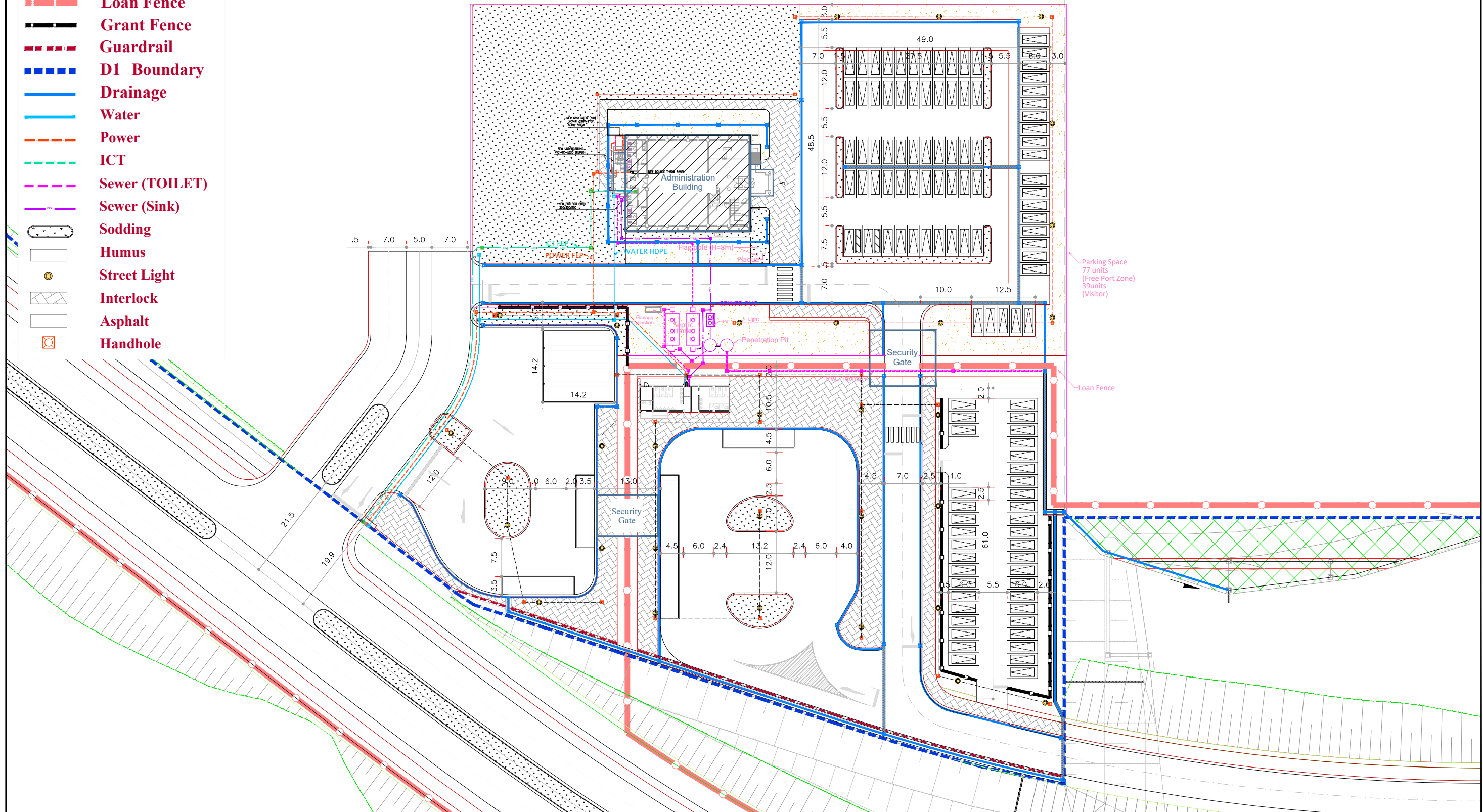
SCALE 1:20



<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: LAND DEVELOPMENT GENERAL DRAWING OF SHOTCRETE WORK</p>		
			<p>SCALE:</p> <p>1:20</p>	<p>DATE:</p> <p>OCT 2022</p>	<p>DRAWING NO.:</p> <p>LR - MSL - 011</p>



- — — — — Loan Fence
- — — — — Grant Fence
- - - - - Guardrail
- - - - - D1 Boundary
- — — — — Drainage
- — — — — Water
- - - - - Power
- - - - - ICT
- - - - - Sewer (TOILET)
- - - - - Sewer (Sink)
- Sodding
- Humus
- Street Light
- Interlock
- Asphalt
- Handhole

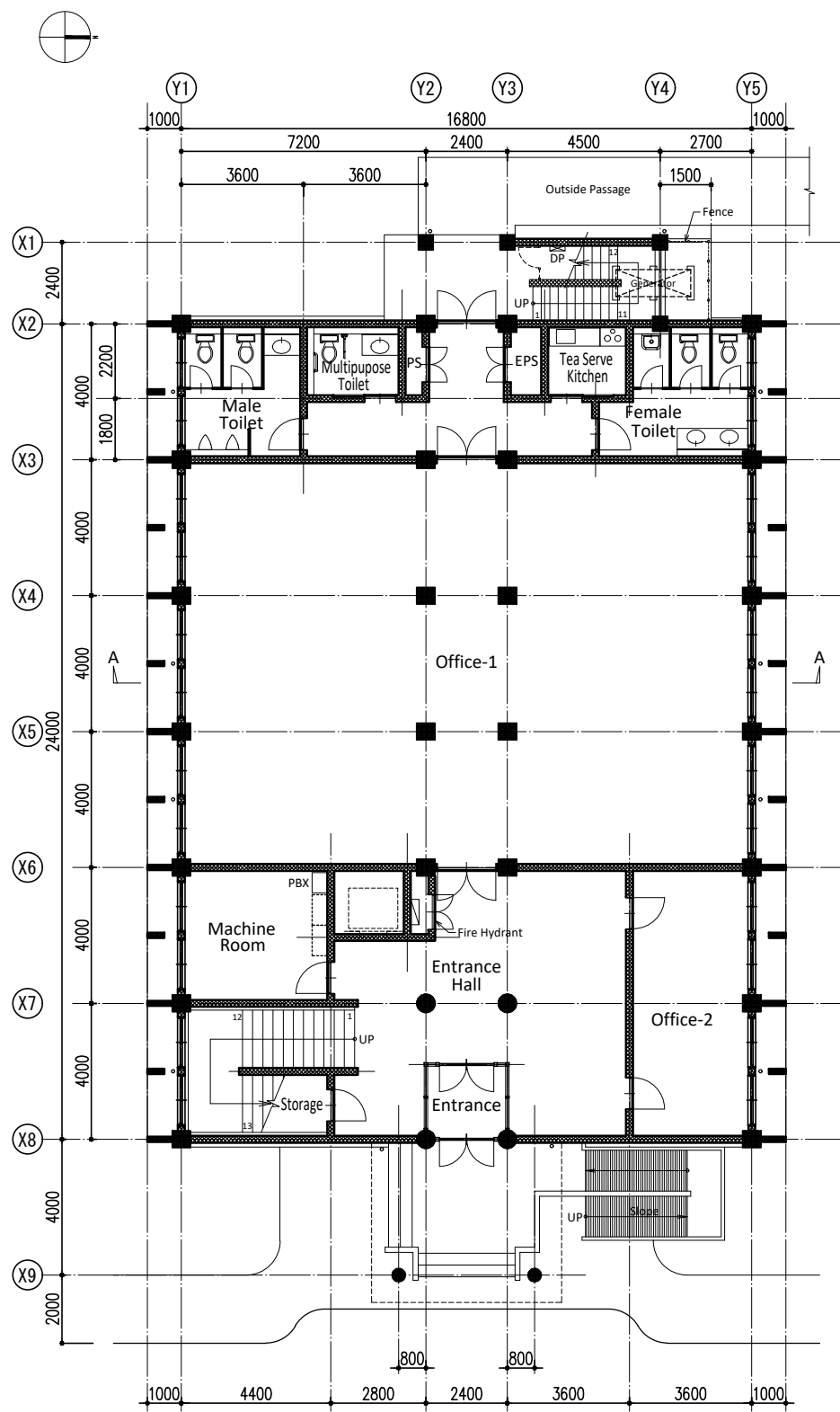


OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

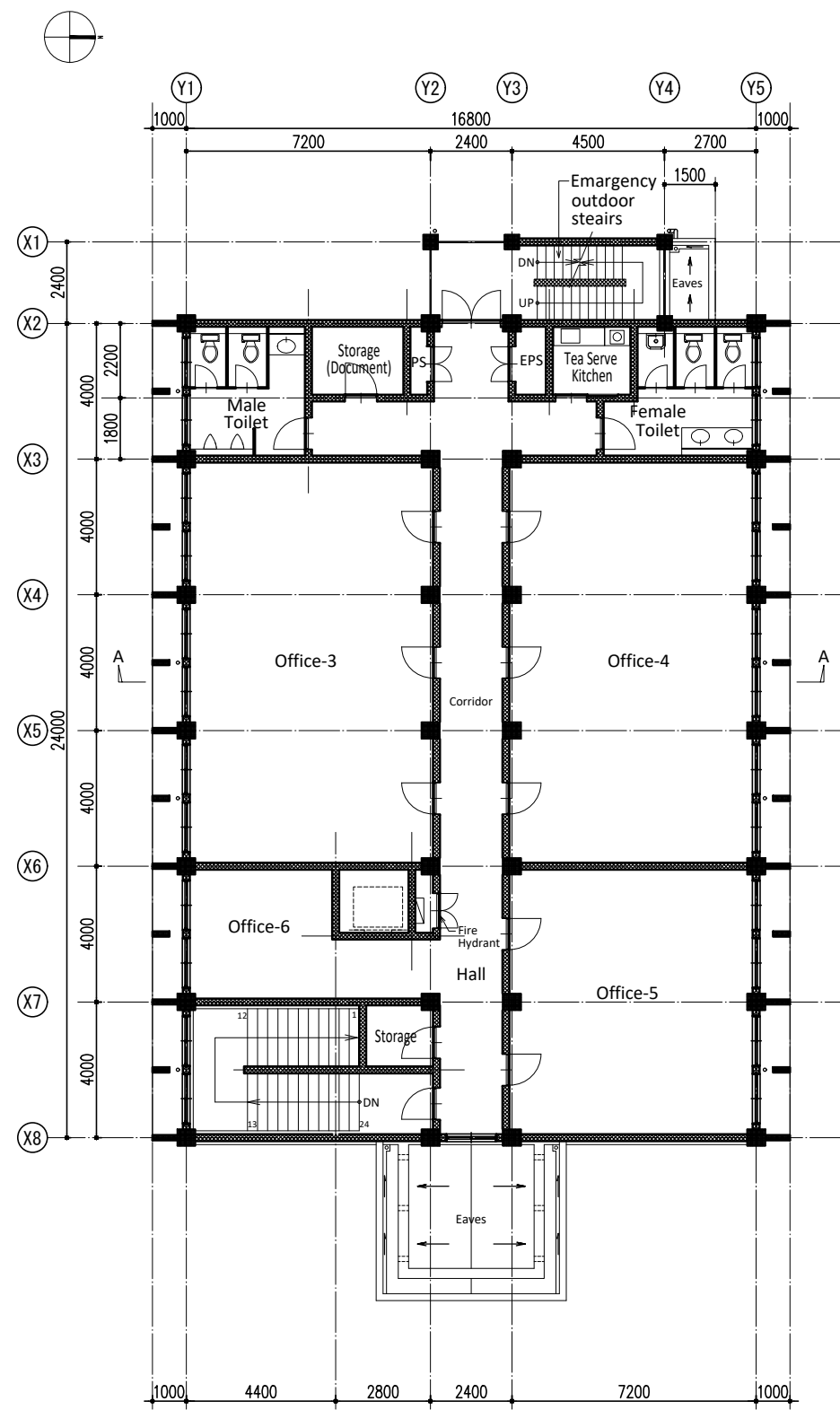
PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
NIPPON KOEI CO.,LTD.
 NIPPON KOEI Urban Space CO., LTD.

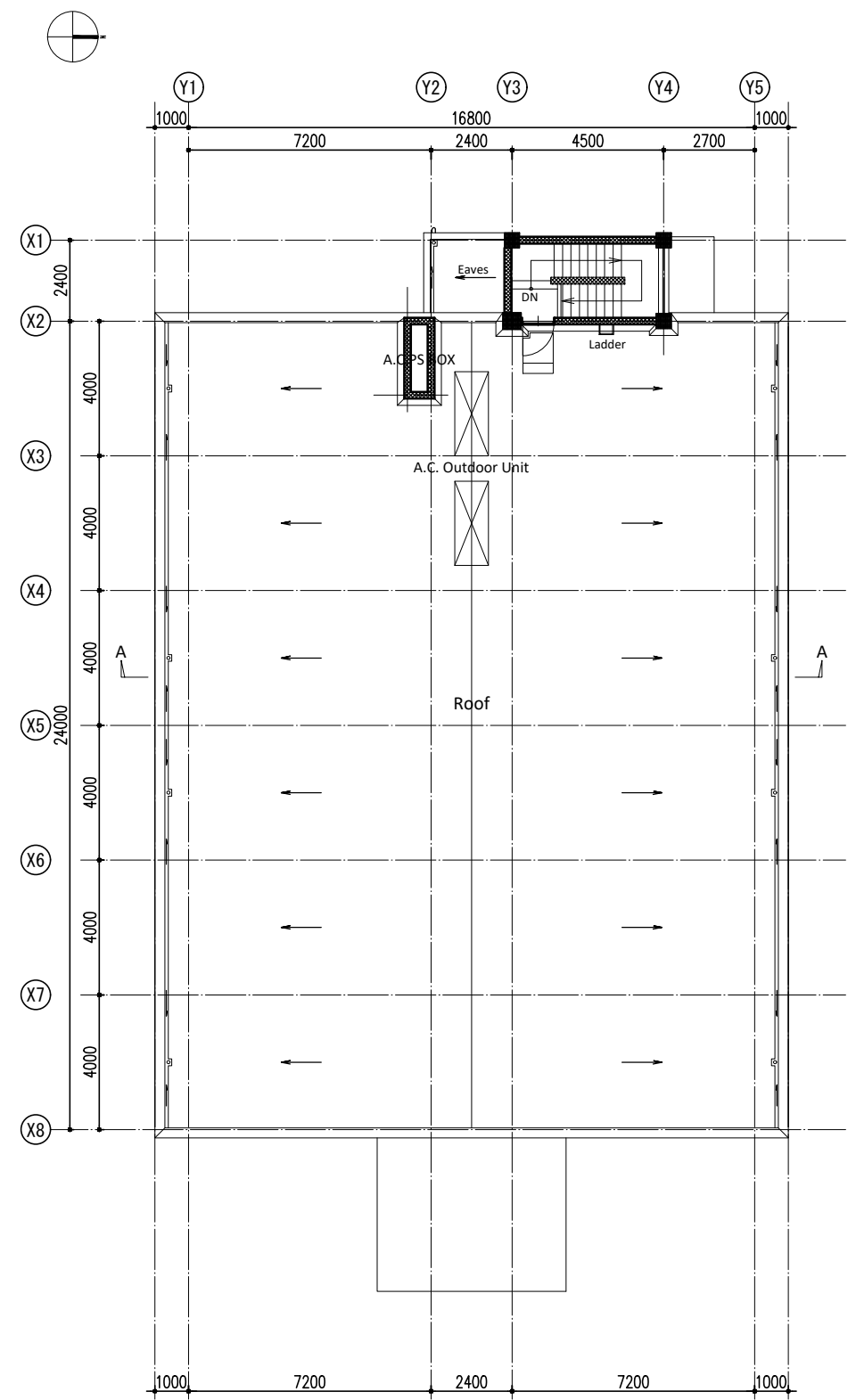
TITLE: ADMINISTRATION BUILDING LAYOUT PLAN		
SCALE: 1:750 (A3)	DATE: OCT 2022	DRAWING NO.: LR-AB-001



Ground Floor



First Floor



Roof Floor

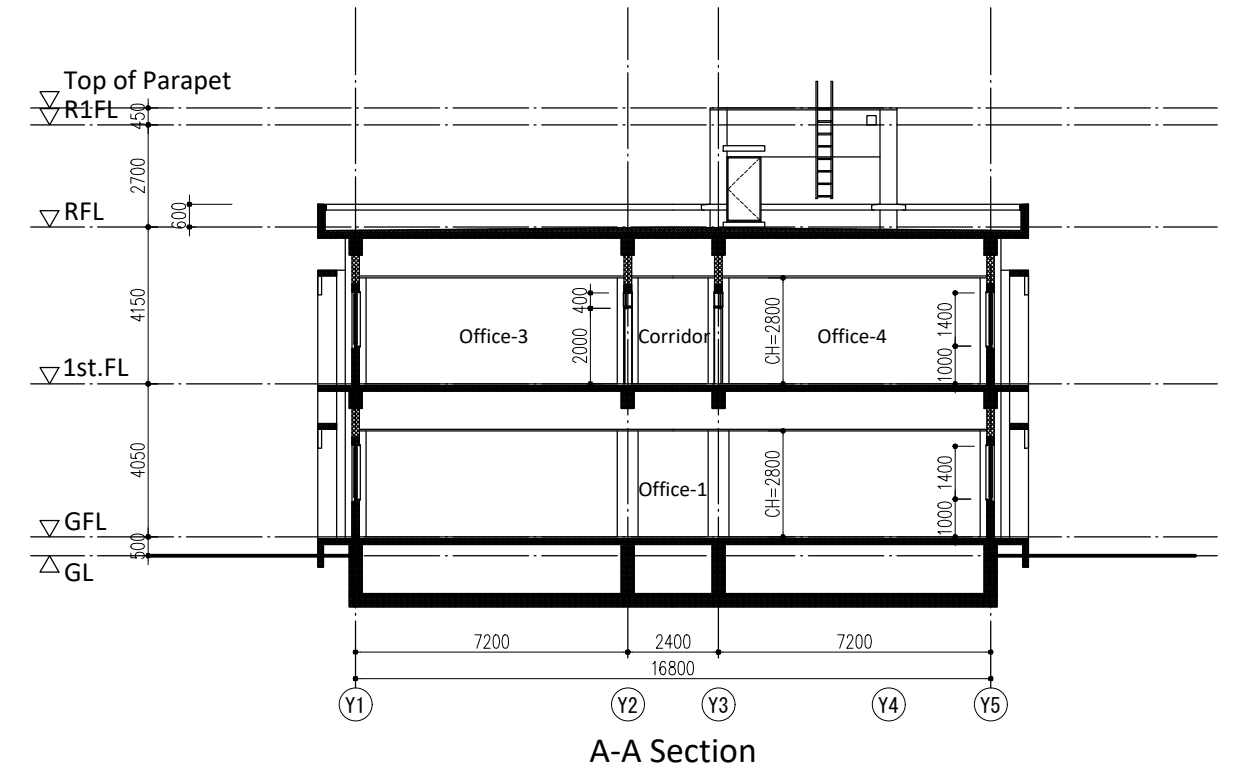
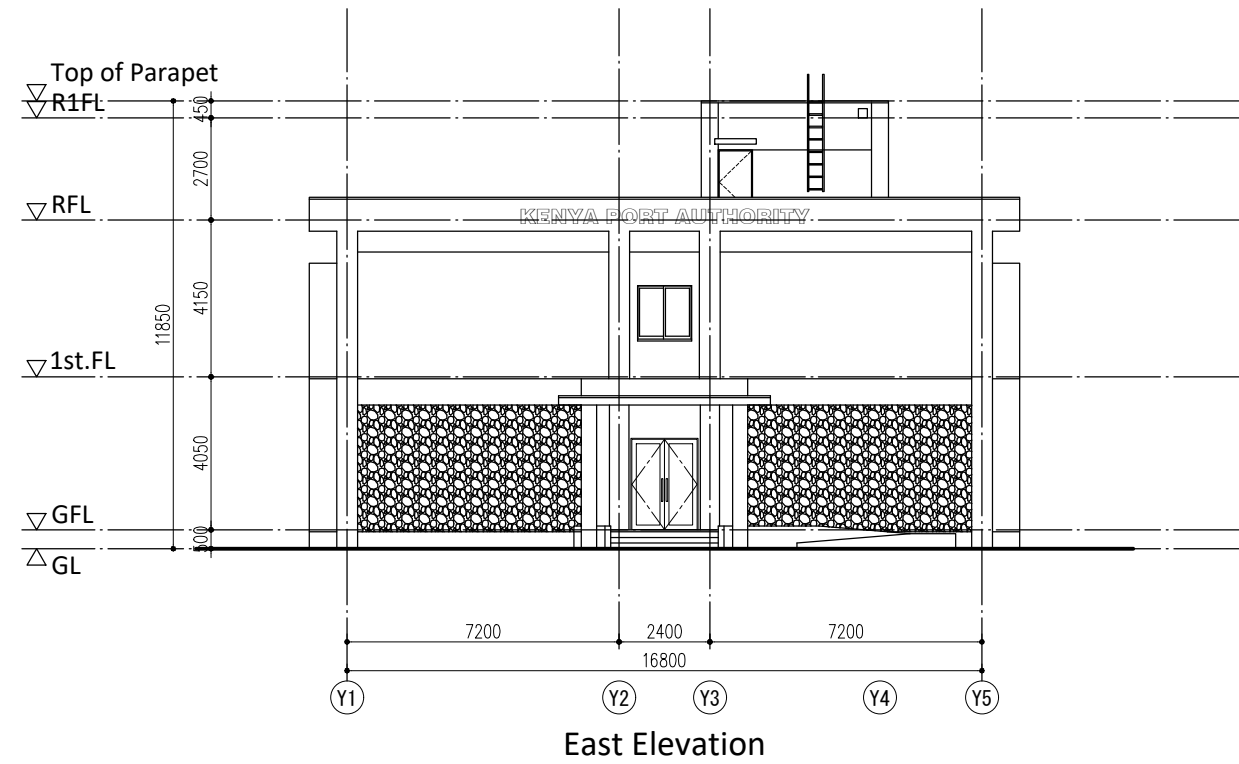
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE: **ADMINISTRATION BUILDING**
FLOOR PLAN

SCALE: 1:200	DATE: OCT 2022	DRAWING NO.: LR - AB - 002
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OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

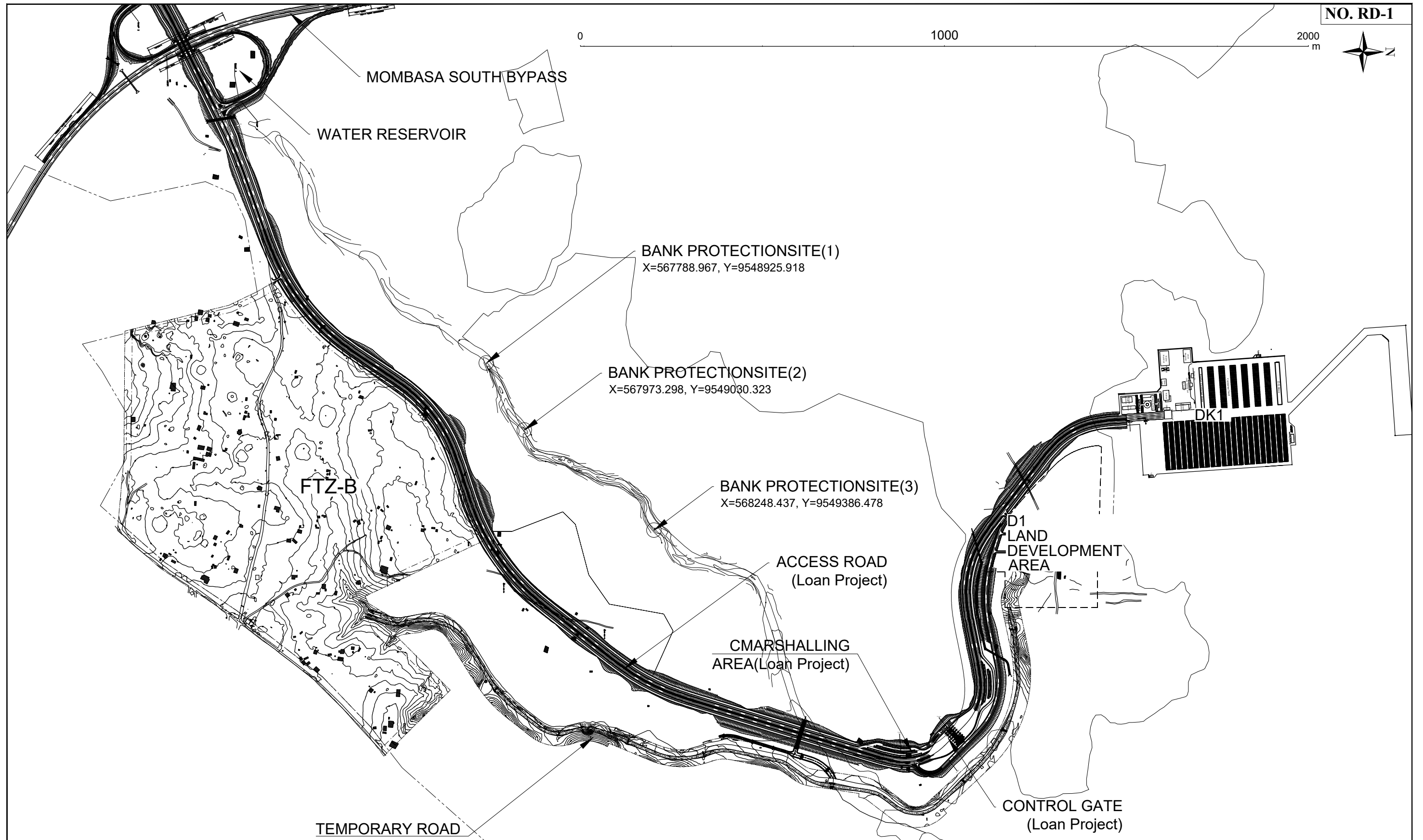
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.


TITLE: **ADMINISTRATION BUILDING**
ELEVATION , SECTION

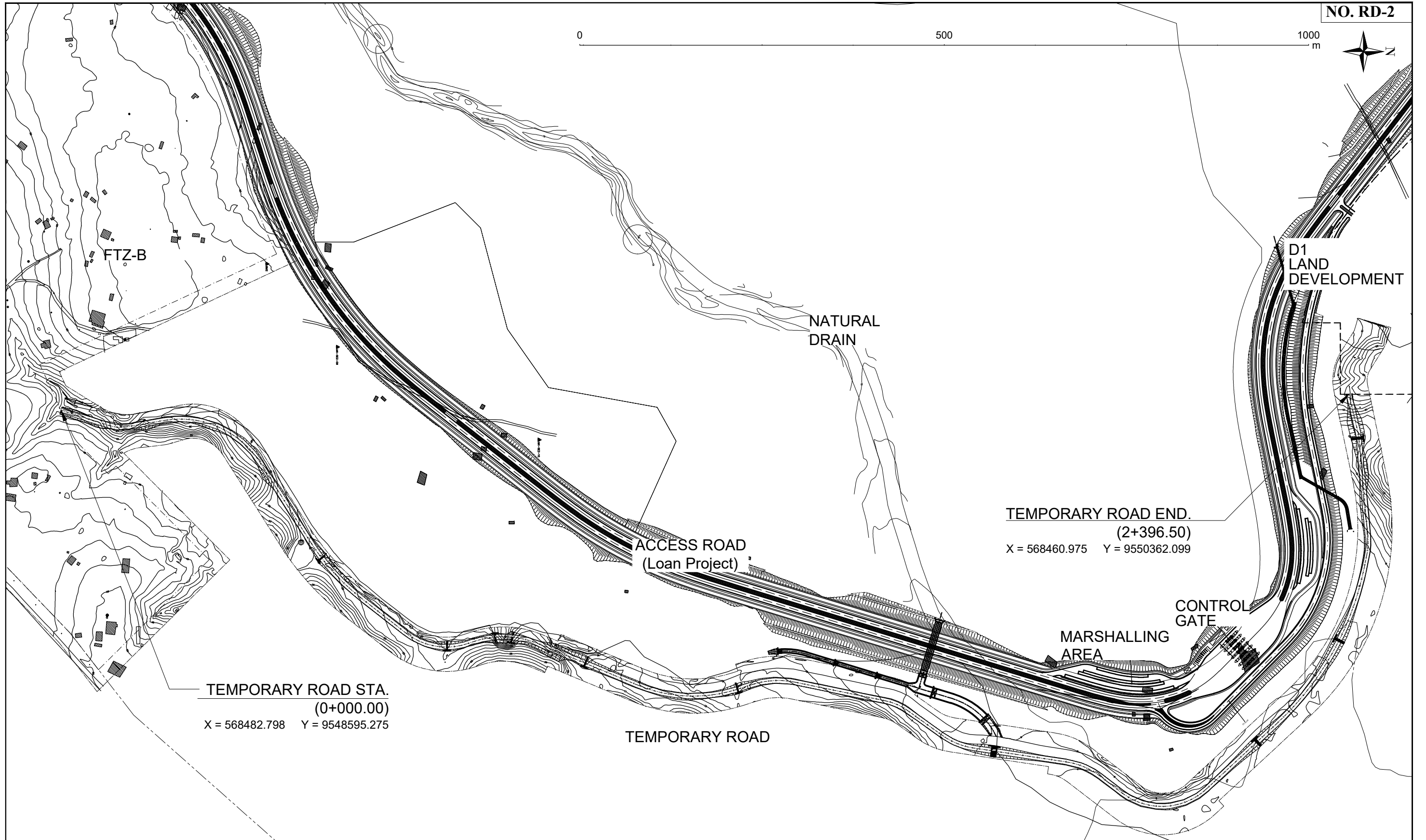
SCALE:
1:200


DATE:
OCT 2022

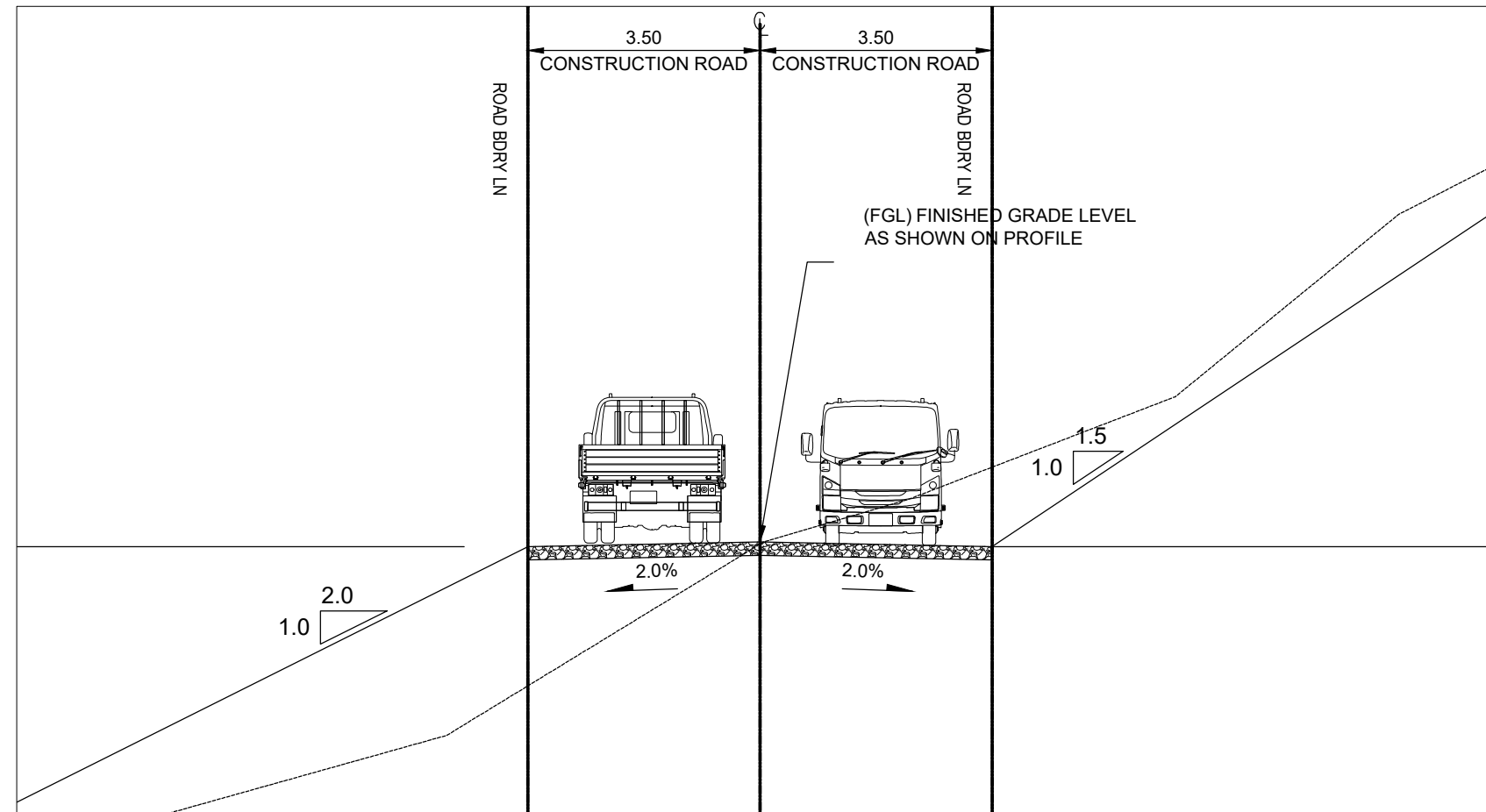
DRAWING NO.:
LR - AB - 003



OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: LOCATION MAP OF PLANNED FACILITIES (ROAD)		
			LOCATION MAP OF ROAD FACILITIES		
			SCALE: 1:10,000(A3)	DATE: OCT 2022	DRAWING NO.: RD-GEN-001




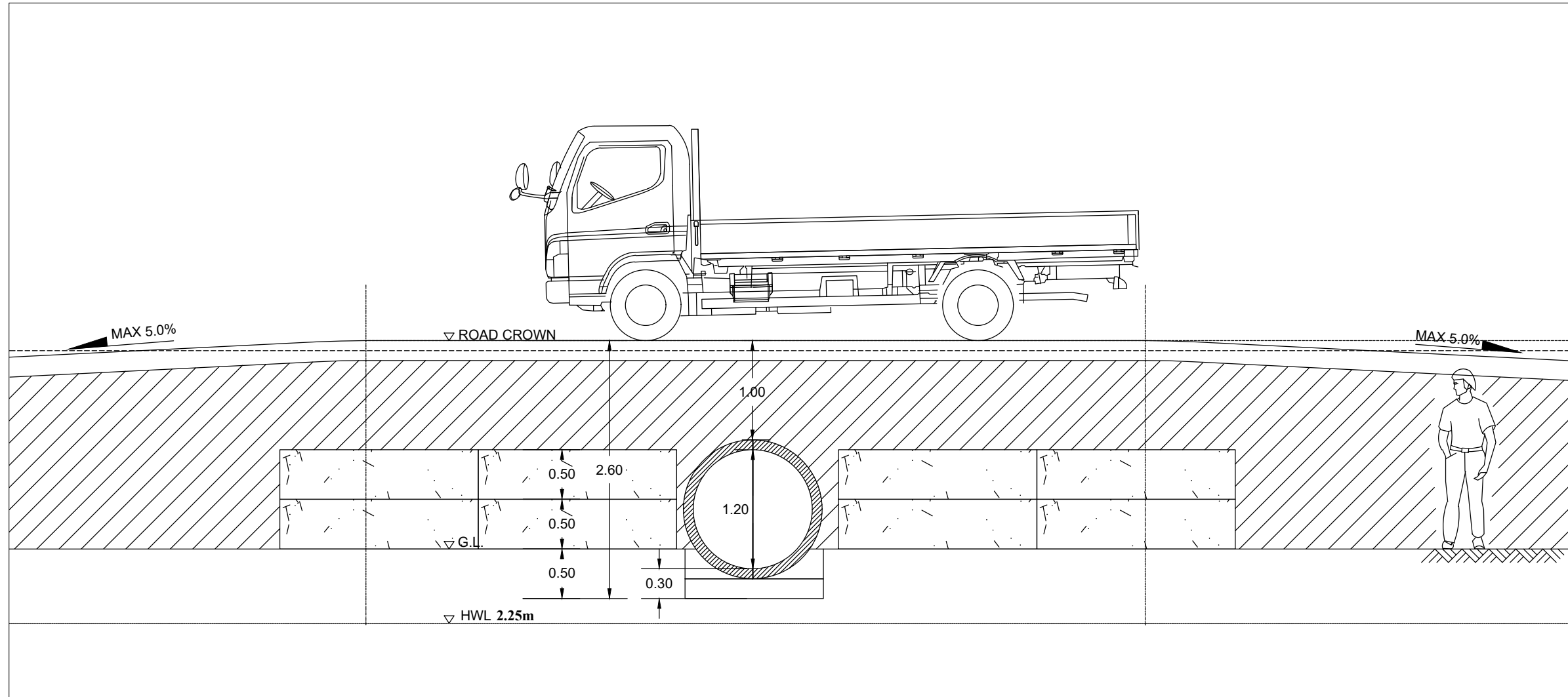
OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: LOCATION MAP OF PLANNED FACILITIES (ROAD) GENERAL LAYOUT OF TEMPORARY ROAD		
			SCALE: 1:5,000(A3)	DATE: OCT 2022	DRAWING NO.: RD-GEN-002



3
ALL SECTION


TYPICAL CROSS SECTION (7M TEMPORARY ROAD FOR CONSTRUCTION)
SCALE 1:100(A3)

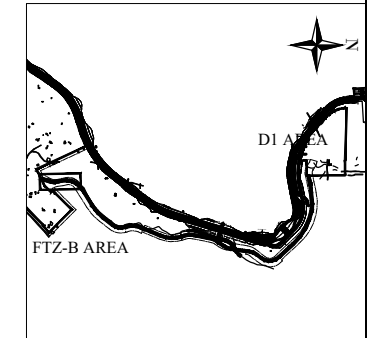
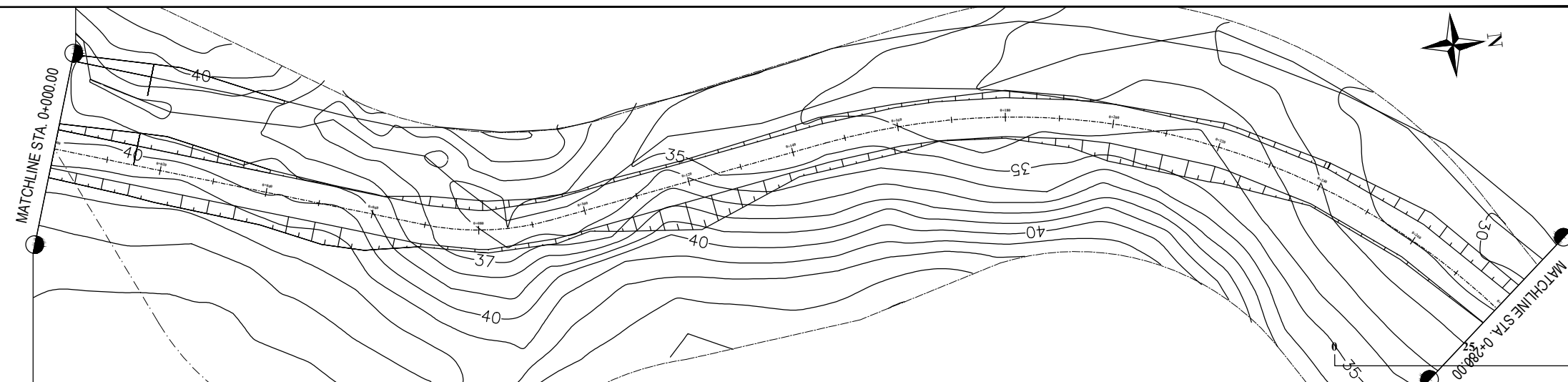
<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: TEMPORARY ROAD TYPICAL CROSS SECTION OF ROAD</p>		
			<p>SCALE:</p> <p>1:100 (A3)</p>	<p>DATE:</p> <p>OCT 2022</p>	<p>DRAWING NO.:</p> <p>RD-TMP-001</p>



4
STA 1+187.00

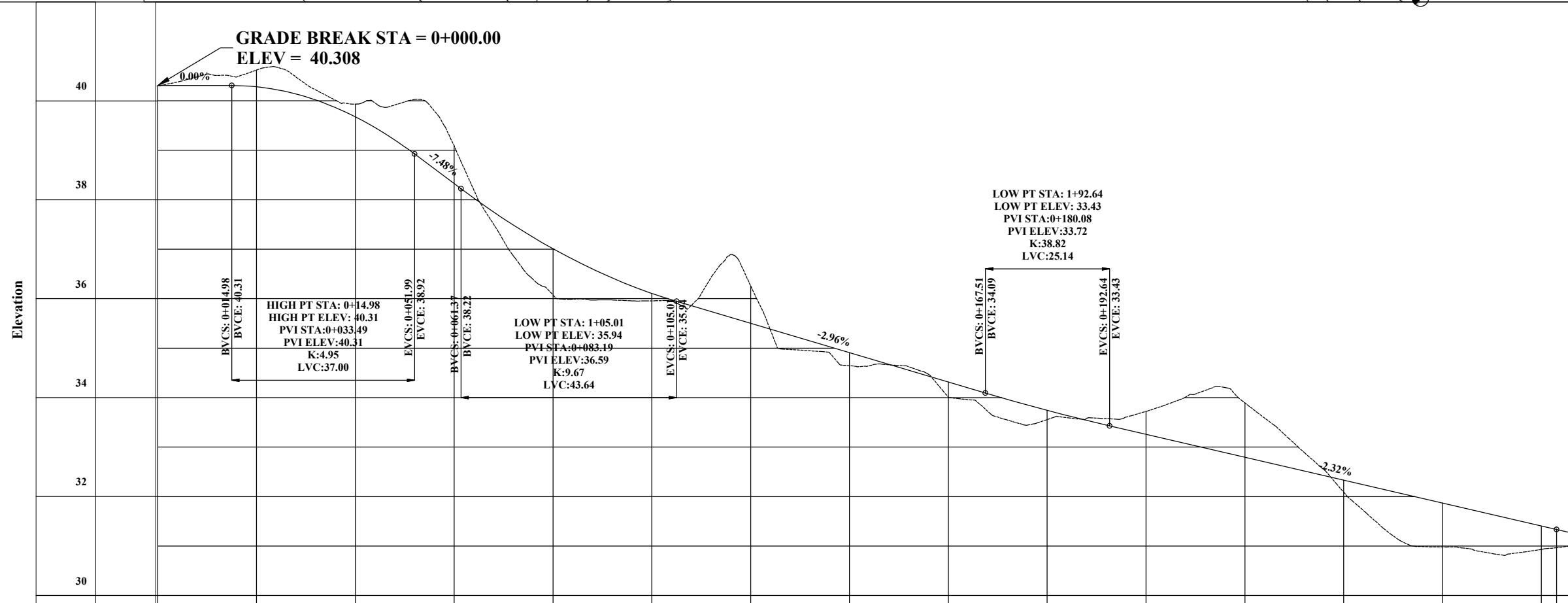
TYPICAL CROSS SECTION (7M TEMPORARY ROAD FOR CONSTRUCTION)
SCALE 1:50(A3)

<p>OWNER:</p> <p>KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME:</p> <p>THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE</p>	<p>CONSULTING ENGINEERS:</p> <p> NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.</p>	<p>TITLE: TEMPORARY ROAD TYPICAL SECTION OF ROAD CROSS DRAIN CHANNEL</p>		
			<p>SCALE:</p> <p>1:50 (A3)</p>	<p>DATE:</p> <p>OCT 2022</p>	<p>DRAWING NO.:</p> <p>RD-TMP-002</p>



KEY MAP 1:50,000 (A3)


SCALE 1:1,000(A3)



Profile Data	0+000	0+020	0+040	0+060	0+080	0+100	0+120	0+140	0+160	0+180	0+200	0+220	0+240	0+260	0+280
Finished Grade Level	40.31	40.28	39.68	38.33	37.01	36.11	35.50	34.91	34.32	33.74	33.26	32.80	32.33	31.87	31.41
Existing Grade Level	40.31	40.62	39.93	39.09	36.08	35.96	36.26	34.64	34.01	33.56	33.72	33.89	32.09	30.98	30.93
Cut(m)	0.00	0.34	0.26	0.76	0.93	0.15	0.76	0.26	0.31	0.19	0.46	1.10	0.24	0.89	0.47
Fill(m)	0.00														
Vertical Geometry	L=14.98		L=37.00		L=43.64		L=62.50		L=25.14		L=90.45				
Horizontal Geometry	L=69.77			L=23.75		L=52.74			L=152.63						

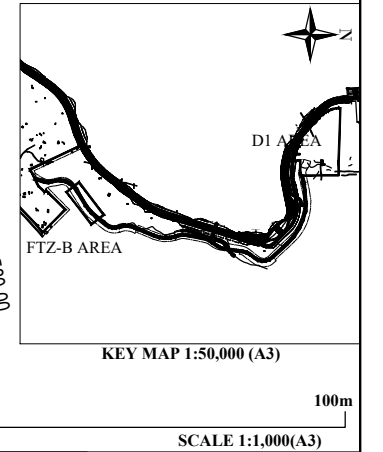
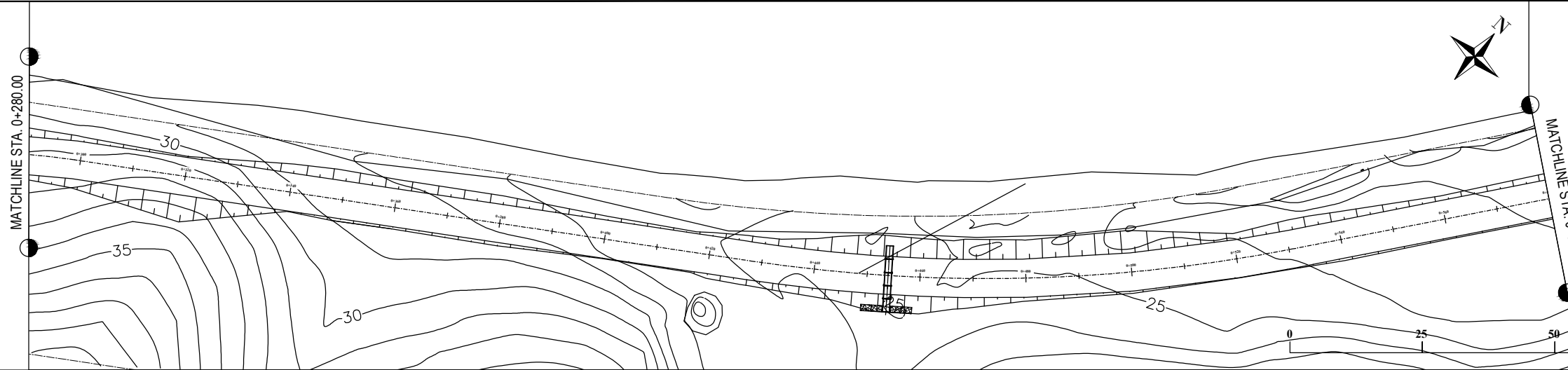
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

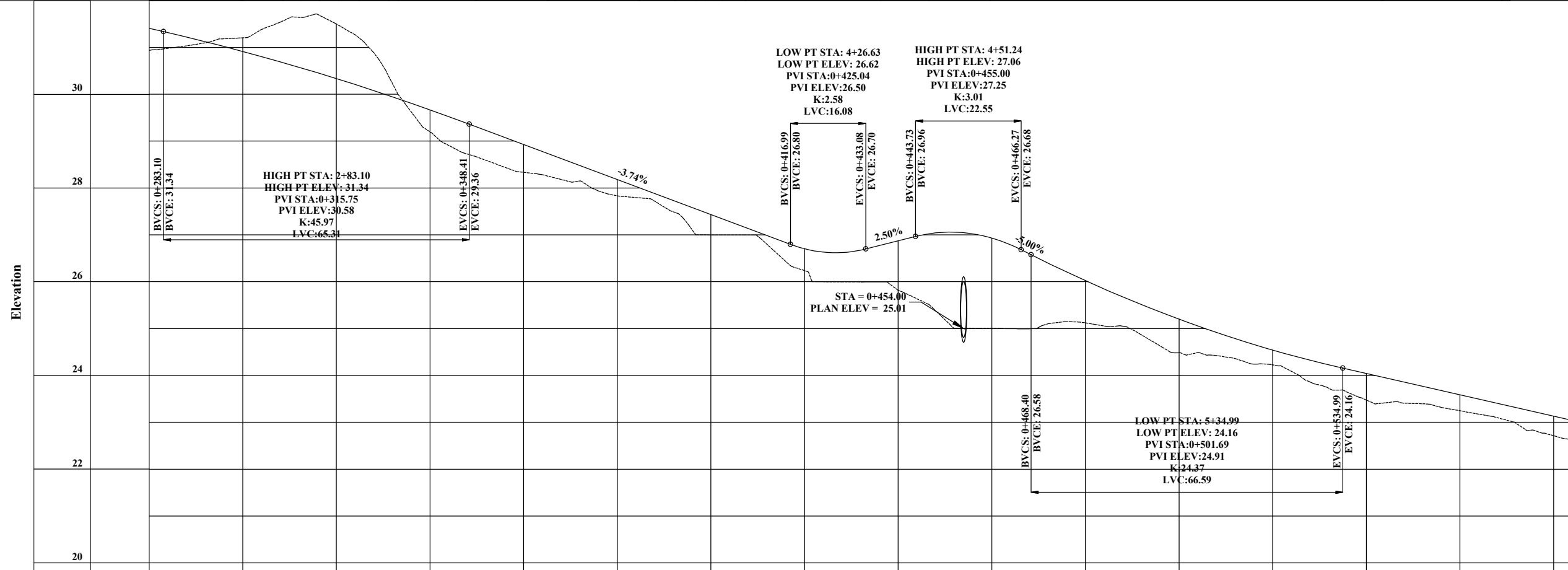
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**TEMPORARY ROAD
PLAN AND PROFILE (1/9)**

SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-003
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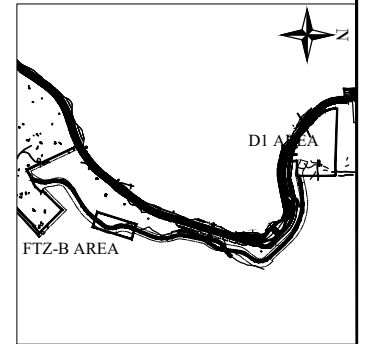
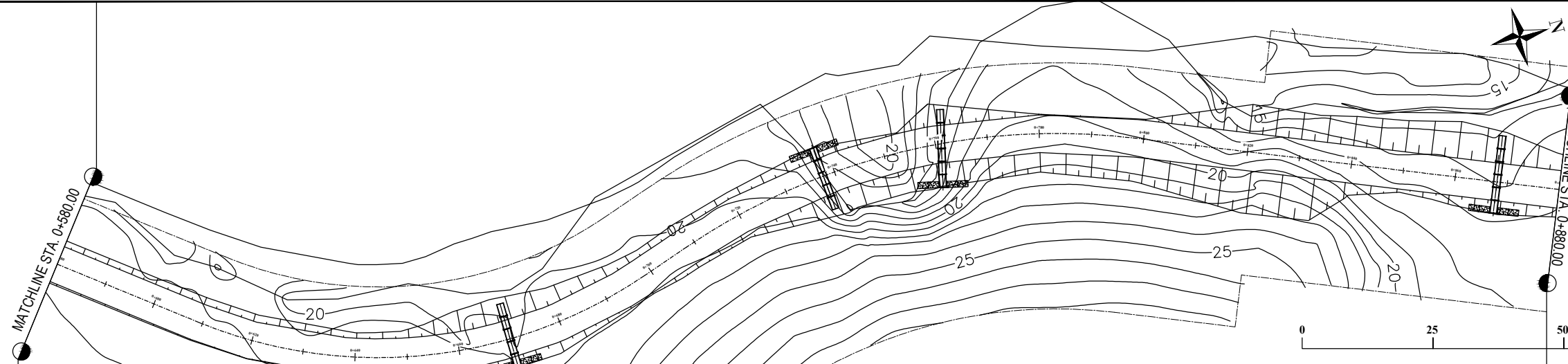


SCALE 1:1,000(A3)



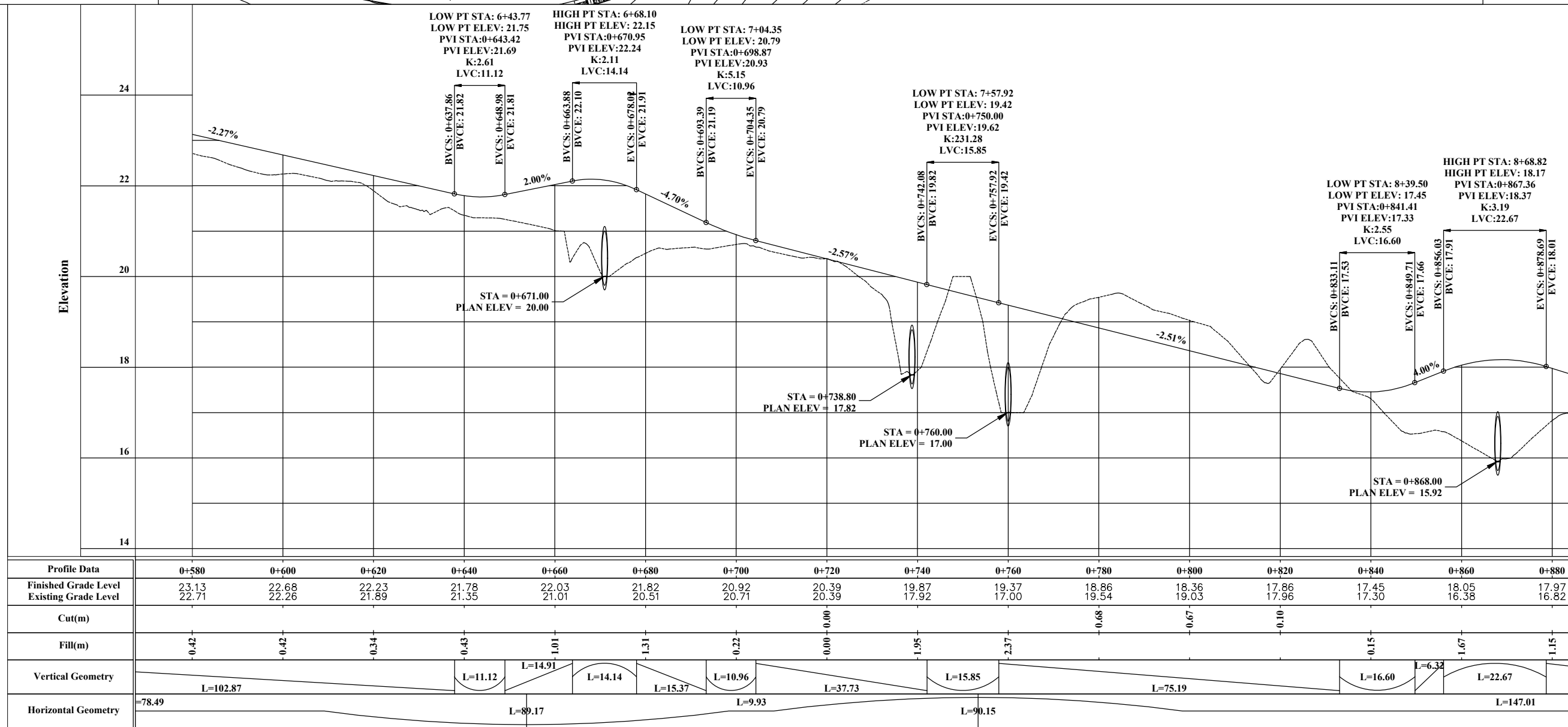
Profile Data	0+280	0+300	0+320	0+340	0+360	0+380	0+400	0+420	0+440	0+460	0+480	0+500	0+520	0+540	0+560	0+580
Finished Grade Level	31.41	30.91	30.33	29.67	28.93	28.18	27.43	26.70	26.87	26.93	26.02	25.20	24.54	24.04	23.59	23.13
Existing Grade Level	30.93	31.20	31.50	29.20	28.33	27.83	27.00	26.24	25.82	25.00	25.12	24.48	24.22	23.48	23.25	22.71
Cut(m)		0.29	1.17													
Fill(m)	0.47			0.47	0.50	0.35	0.43	0.47	1.05	1.93	0.90	0.72	0.32	0.57	0.34	0.42
Vertical Geometry	L=65.31			L=129.22			L=68.59		L=16.08	L=10.65	L=22.55	L=21.13	L=66.59			L=78.49
Horizontal Geometry	L=102.55															

OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS: NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: TEMPORARY ROAD PLAN AND PROFILE (2/9)		
			SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-004

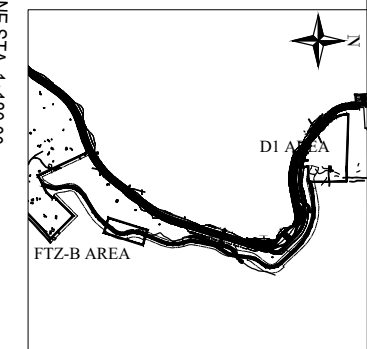


KEY MAP 1:50,000 (A3)

SCALE 1:1,000(A3)

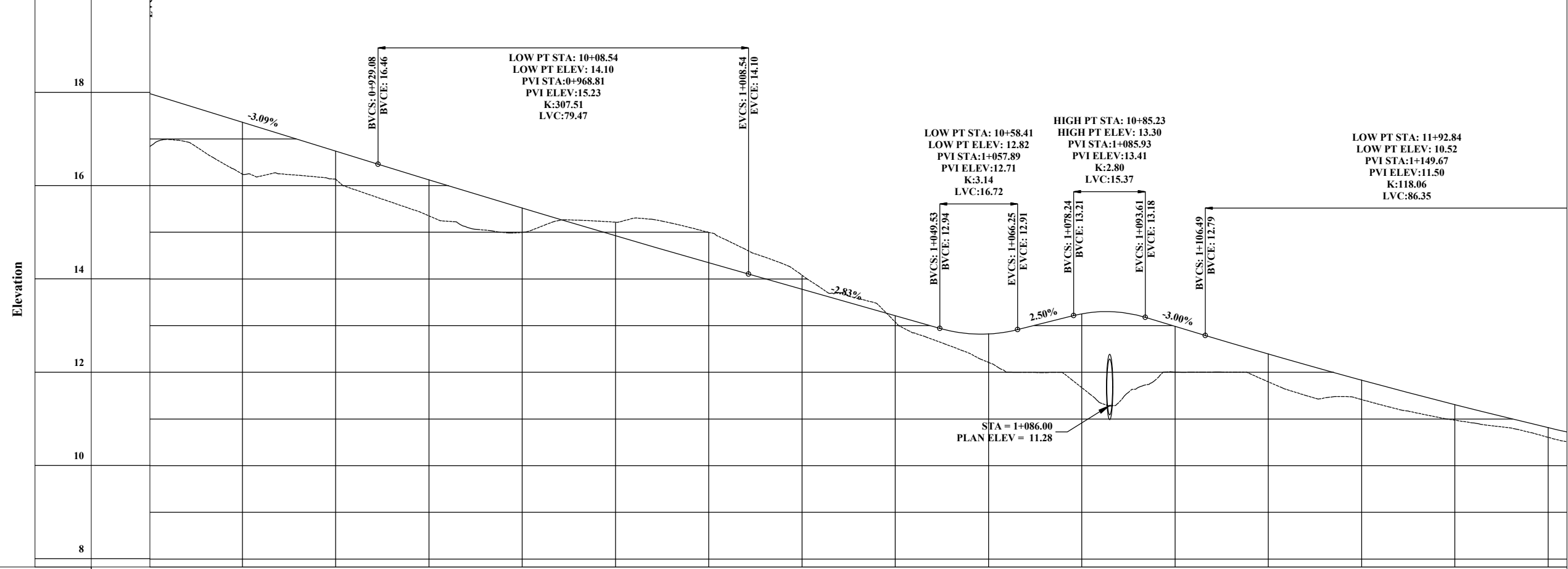
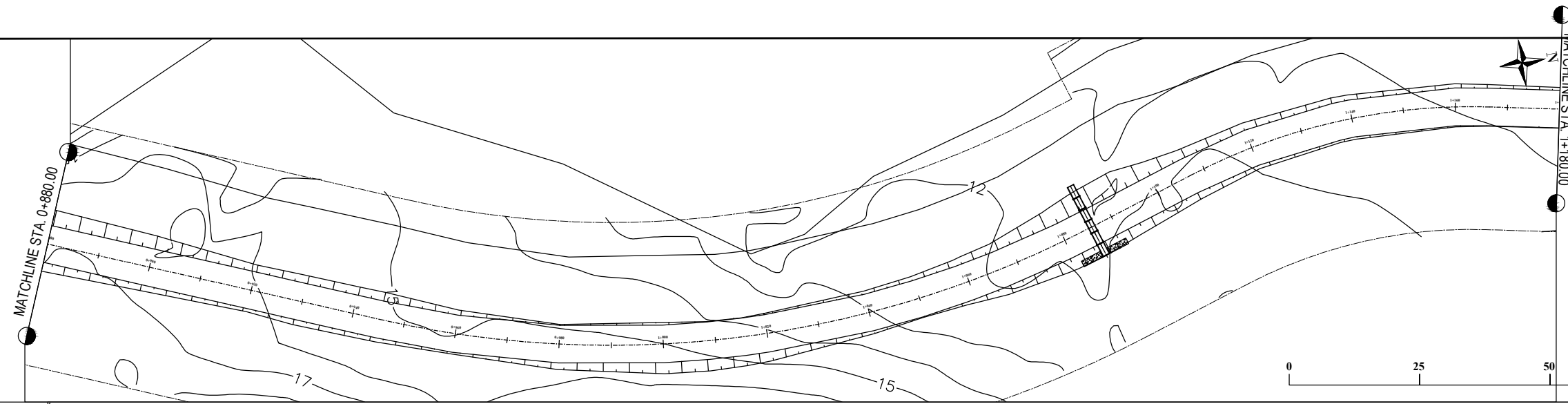


OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS: NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: TEMPORARY ROAD PLAN AND PROFILE (3/9)		
			SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-005



KEY MAP 1:50,000 (A3)

SCALE 1:1,000(A3)



Profile Data	0+880	0+900	0+920	0+940	0+960	0+980	1+000	1+020	1+040	1+060	1+080	1+100	1+120	1+140	1+160	1+180				
Finished Grade Level	17.97	17.36	16.74	16.12	15.52	14.93	14.35	13.78	13.21	12.82	13.25	12.98	12.39	11.83	11.31	10.82				
Existing Grade Level	16.82	16.24	16.14	15.35	14.99	15.21	15.00	14.08	13.07	12.21	11.67	12.00	11.80	11.42	10.97	10.61				
Cut(m)						-0.29	-0.65	-0.30												
Fill(m)	1.15	1.11	0.60	0.77	0.52			0.14		0.61	1.58	0.98	0.60	0.42	0.33	0.21				
Vertical Geometry	2.67		L=50.38			L=79.47			L=40.99		L=16.72		L=12.00		L=15.37		L=12.88		L=86.35	
Horizontal Geometry	L=147.01		L=140.17														L=21.57		L=59.40	

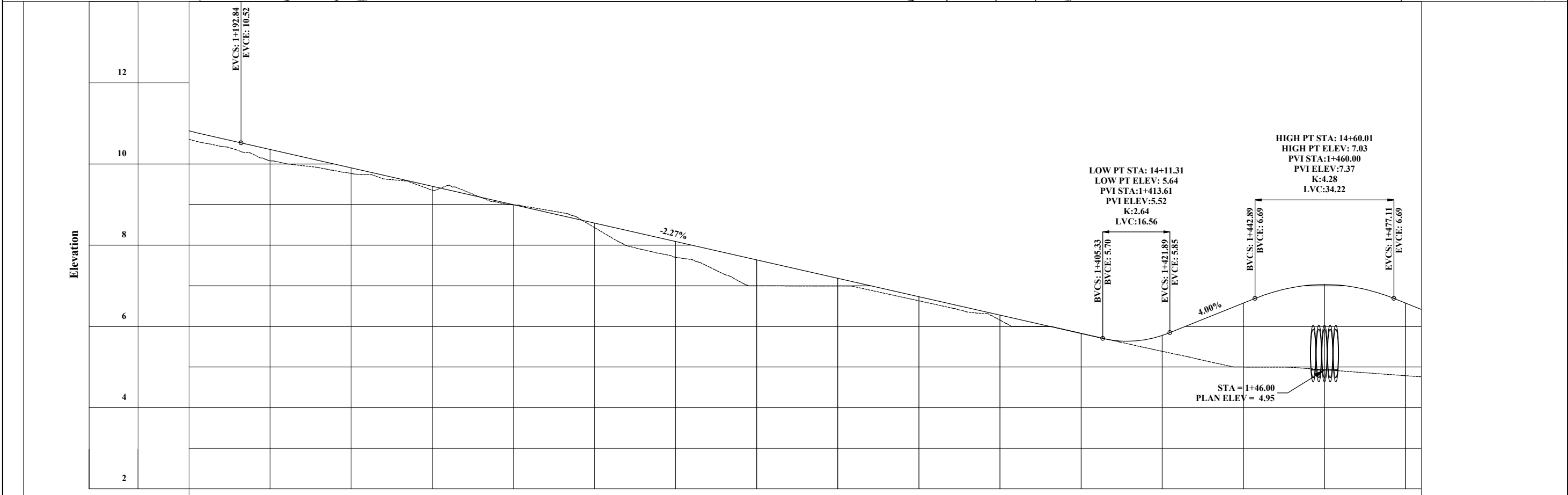
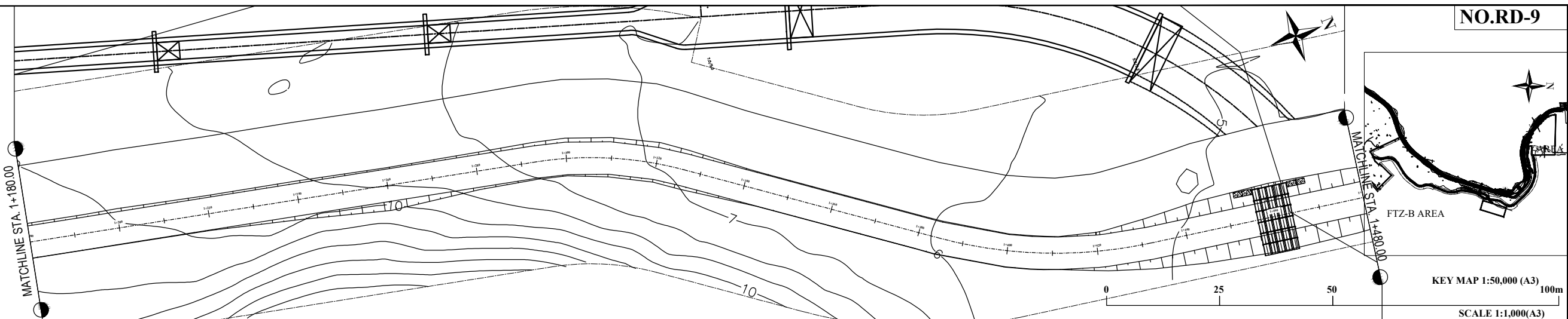
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE


CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

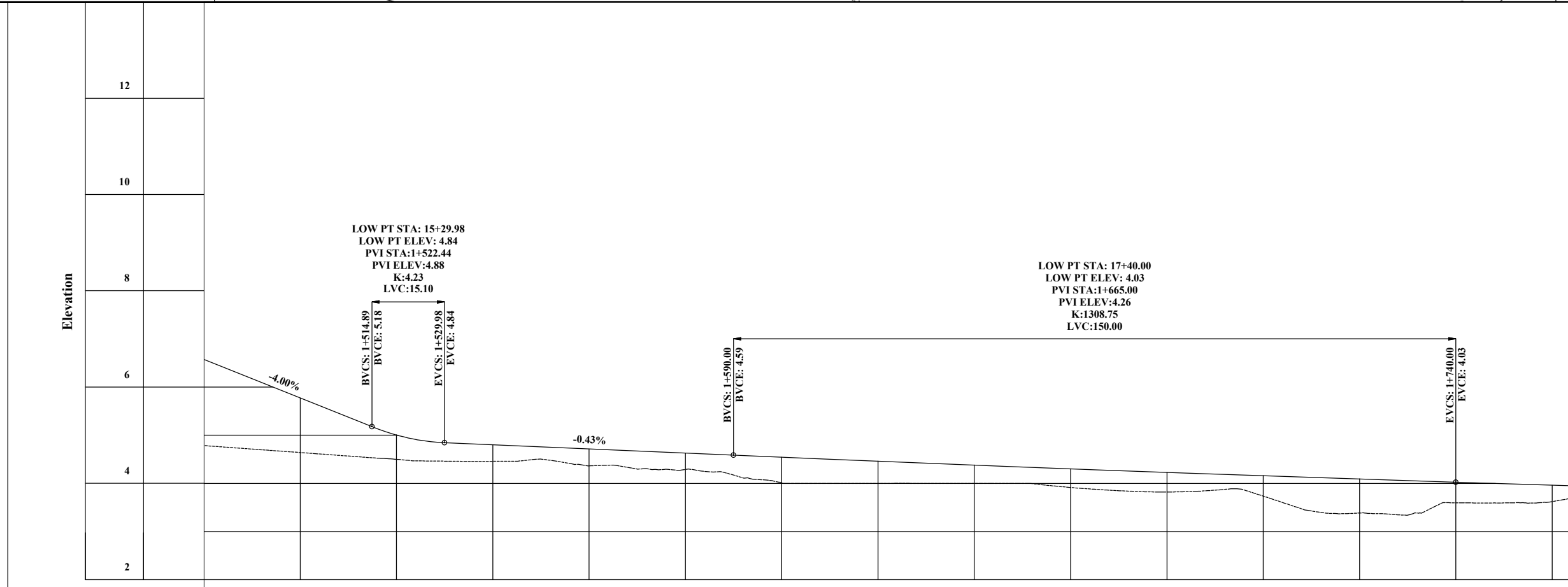
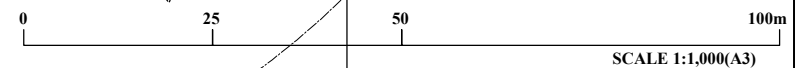
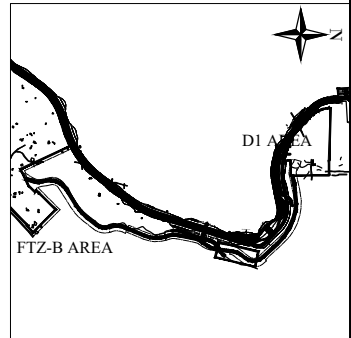
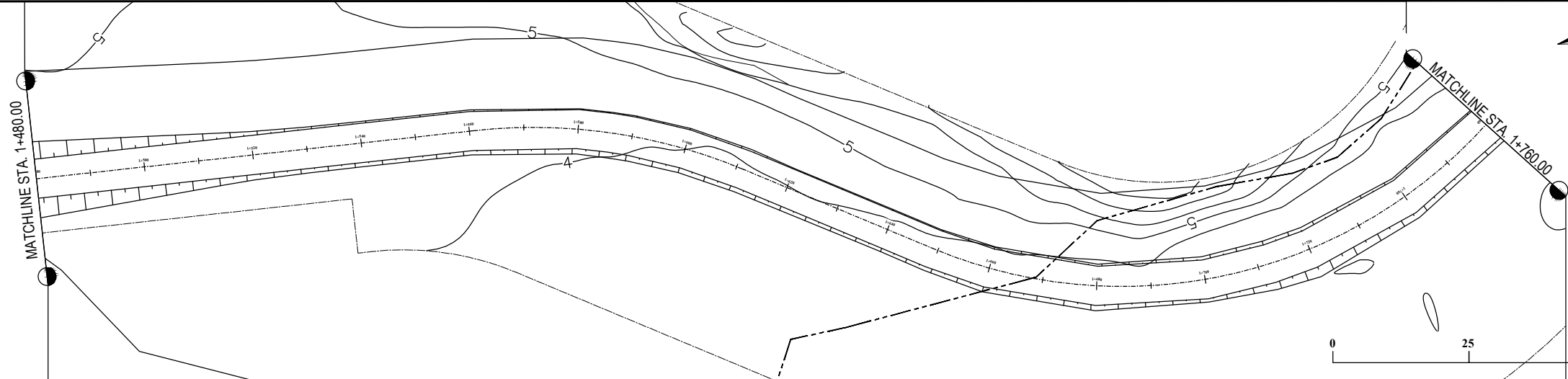
TITLE:
**TEMPORARY ROAD
PLAN AND PROFILE (4/9)**

SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-006
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Profile Data	1+180	1+200	1+220	1+240	1+260	1+280	1+300	1+320	1+340	1+360	1+380	1+400	1+420	1+440	1+460	1+480
Finished Grade Level	10.82	10.36	9.90	9.45	9.00	8.54	8.09	7.64	7.18	6.73	6.28	5.82	5.78	6.57	7.03	6.57
Existing Grade Level	10.61	10.08	9.77	9.35	8.99	8.44	7.70	7.00	6.99	6.63	6.15	5.83	5.39	5.00	4.93	4.79
Cut(m)					0.00							0.01				
Fill(m)	0.21	0.28	0.13	0.10	0.00	0.11	0.30	0.64	0.19	0.10	0.13	0.39	1.57	2.10	1.79	
Vertical Geometry													L=16.56	L=21.00	L=34.22	
Horizontal Geometry	L=126.50				L=212.49				L=33.19	L=17.50	L=40.68		L=47.32			


OWNER: KENYA PORTS AUTHORITY THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR INFRASTRUCTURE DEVELOPMENT IN MOMBASA SPECIAL ECONOMIC ZONE	CONSULTING ENGINEERS:  NIPPON KOEI CO.,LTD. NIPPON KOEI Urban Space CO., LTD.	TITLE: TEMPORARY ROAD PLAN AND PROFILE (5/9)		
			SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-007



Profile Data	1+480	1+500	1+520	1+540	1+560	1+580	1+600	1+620	1+640	1+660	1+680	1+700	1+720	1+740	1+760
Finished Grade Level	6.57	5.77	5.01	4.80	4.72	4.63	4.54	4.46	4.38	4.30	4.23	4.16	4.09	4.03	3.96
Existing Grade Level	4.79	4.64	4.50	4.46	4.37	4.29	4.01	4.00	4.00	3.92	3.82	3.74	3.38	3.60	3.62
Cut(m)															
Fill(m)	1.79	1.13	0.50	0.34	0.35	0.34	0.53	0.46	0.38	0.39	0.41	0.42	0.71	0.43	0.34
Vertical Geometry	L=37.78		L=15.10		L=60.02			L=150.00							
Horizontal Geometry	L=128.67					L=50.94		L=37.70			L=126.28				

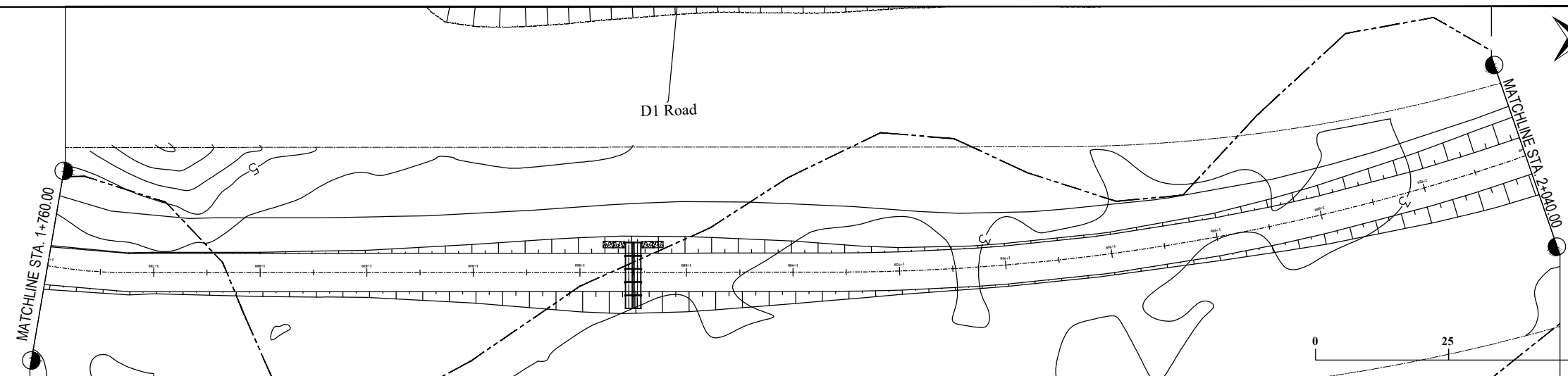
OWNER:
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PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

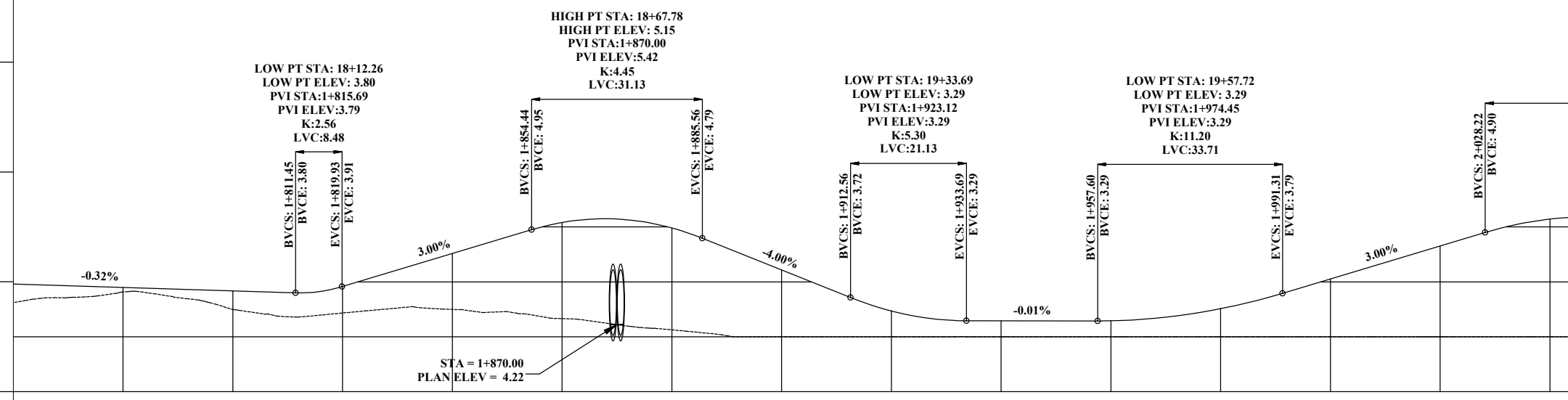
TITLE:
**TEMPORARY ROAD
PLAN AND PROFILE (6/9)**

SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-008
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Elevation


12
10
8
6
4
2



Profile Data	1+760	1+780	1+800	1+820	1+840	1+860	1+880	1+900	1+920	1+940	1+960	1+980	2+000	2+020	2+040			
Finished Grade Level	3.96	3.90	3.84	3.92	4.52	5.08	4.98	4.22	3.47	3.29	3.29	3.51	4.05	4.65	5.14			
Existing Grade Level	3.62	3.82	3.50	3.43	3.50	3.33	3.13	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00			
Cut(m)																		
Fill(m)	0.34	0.08	0.34	0.48	1.02	1.75	1.85	1.22	0.47	0.29	0.29	0.51	1.05	1.65	2.14			
Vertical Geometry	L=71.45		L=8.48		L=34.50		L=31.13		L=27.00		L=21.13		L=23.91		L=33.71		L=36.92	
Horizontal Geometry	L=132.04															L=249.36		

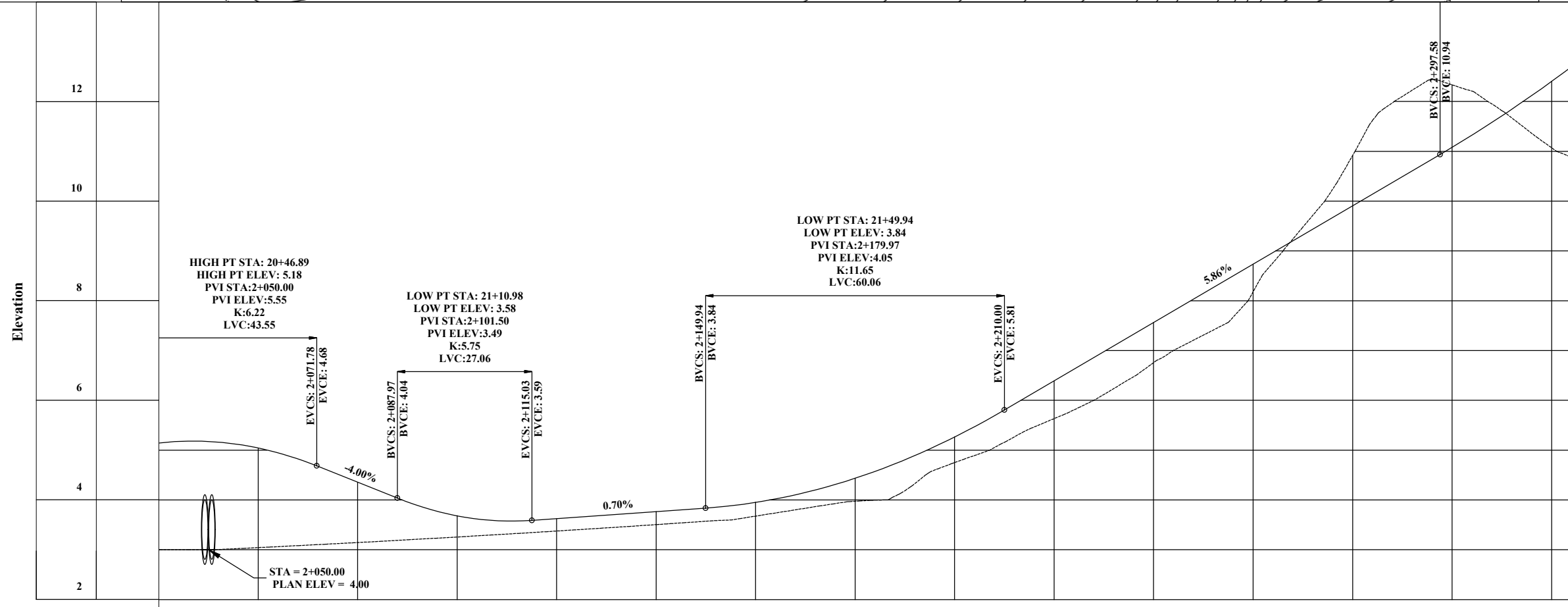
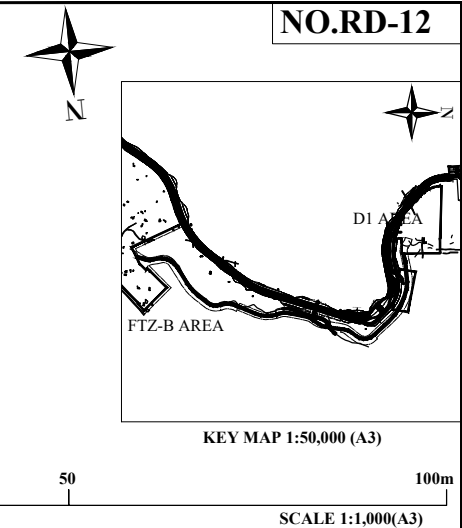
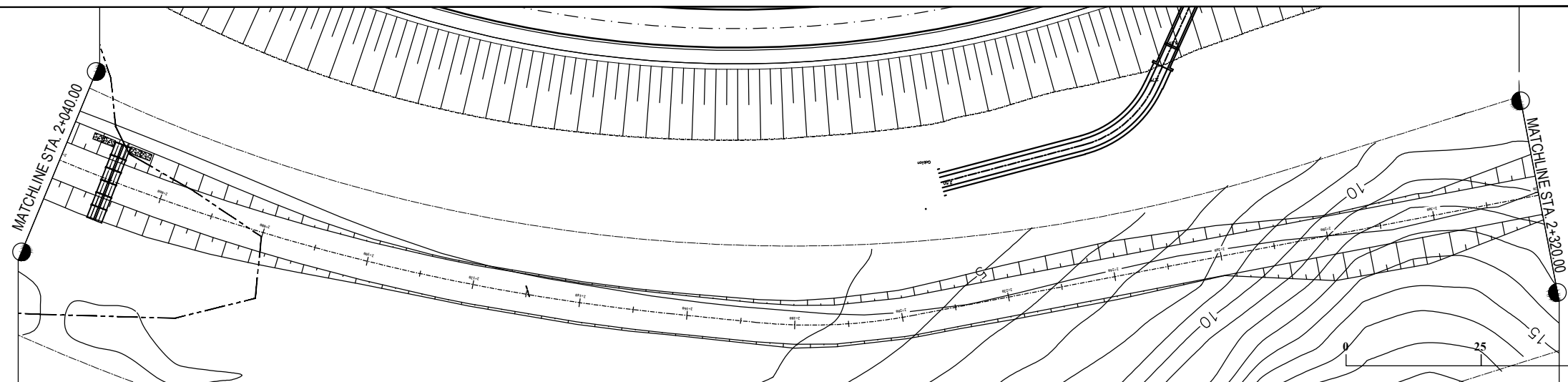
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
**THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE**

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**TEMPORARY ROAD
PLAN AND PROFILE (7/9)**

SCALE: H:10,00(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-009
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Profile Data	2+040	2+060	2+080	2+100	2+120	2+140	2+160	2+180	2+200	2+220	2+240	2+260	2+280	2+300	2+320	
Finished Grade Level	5.14	5.04	4.35	3.68	3.62	3.77	3.95	4.43	5.26	6.39	7.56	8.73	9.91	11.08	12.40	
Existing Grade Level	3.00	3.04	3.14	3.26	3.38	3.50	3.67	3.97	4.75	5.63	6.76	8.18	10.91	12.33	11.07	
Cut(m)													1.01	1.25		
Fill(m)	2.14	2.00	1.21	0.43	0.25	0.26	0.27	0.46	0.51	0.76	0.81	0.56			1.33	
Vertical Geometry	L=43.55		L=16.20	L=27.06		L=34.90			L=60.06			L=87.58		L=36.34		
Horizontal Geometry	L=249.36															
	L=16.22															
	L=29.03															
	L=134.23															

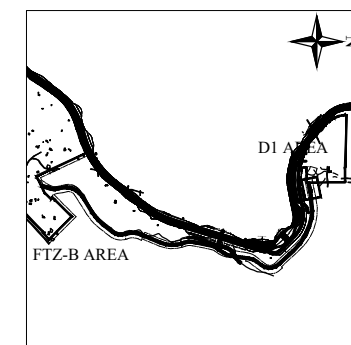
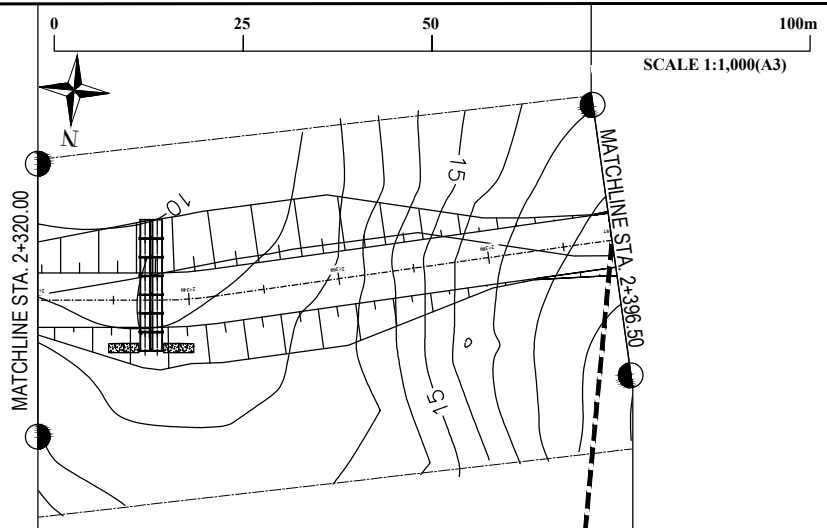
OWNER:
KENYA PORTS AUTHORITY
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

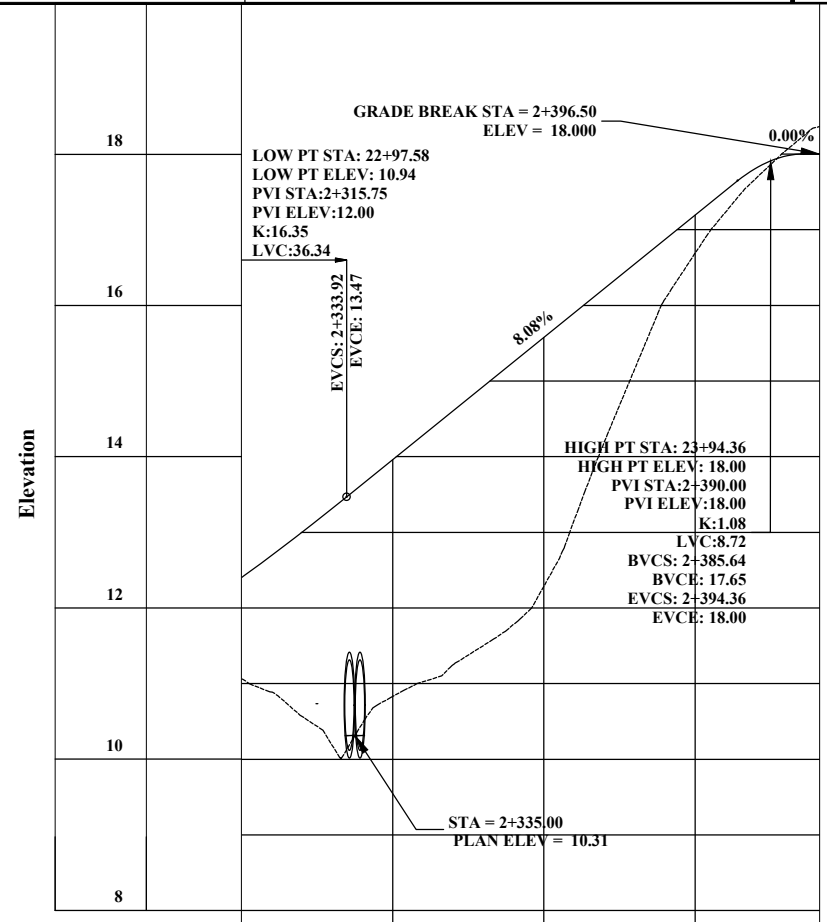
CONSULTING ENGINEERS:
 NIPPON KOEI CO.,LTD.
NIPPON KOEI Urban Space CO., LTD.

TITLE:
**TEMPORARY ROAD
PLAN AND PROFILE (8/9)**

SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-010
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KEY MAP 1:50,000 (A3)



Profile Data	2+320	2+340	2+360	2+380
Finished Grade Level	12.40	13.96	15.58	17.19
Existing Grade Level	11.07	10.83	12.29	16.69
Cut(m)				
Fill(m)	1.33	3.13	3.29	0.50
Vertical Geometry	L=36.34		L=51.72	L=2.14 L=8.72
Horizontal Geometry		L=7.02	L=53.26	

OWNER:
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PROJECT NAME:
THE PROJECT FOR
INFRASTRUCTURE DEVELOPMENT
IN MOMBASA SPECIAL ECONOMIC ZONE

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**
NIPPON KOEI Urban Space CO., LTD.

TITLE:
TEMPORARY ROAD
PLAN AND PROFILE (9/9)

SCALE: H:1,000(A3) V:100 (A3)	DATE: OCT 2022	DRAWING NO.: RD-TMP-011
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