



**Japan International Cooperation Agency**

**PREPARATORY SURVEY FOR METRO MANILA  
SEWERAGE AND SANITATION  
IMPROVEMENT PROJECT- PHASE-2**

**FINAL REPORT**

**VOLUME 4**

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***OEC*** ORIGINAL ENGINEERING CONSULTANTS CO., LTD.

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PROJECT STUDY AREA MAP

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 (Source: DENR 2003-30 Procedural Manual)

## MEASUREMENT UNITS

### Length

mm - millimeter  
cm - centimeter  
m - meter  
km - kilometer

### Area

sq m - square meter  
sq km - square kilometer  
ha - hectare

### Weight

g, gr - gram  
kg - kilogram  
t - ton

### Time

s, sec - second  
min - minute  
hr - hour  
dy - day  
mon - month  
yr - year

### Volume

cum - cubic meter  
l, ltr - liter  
mcm - million cubic meter

### Speed

cm/s - centimeter per second  
m/s - meter per second  
km/h - kilometer per hour

# APPENDICES

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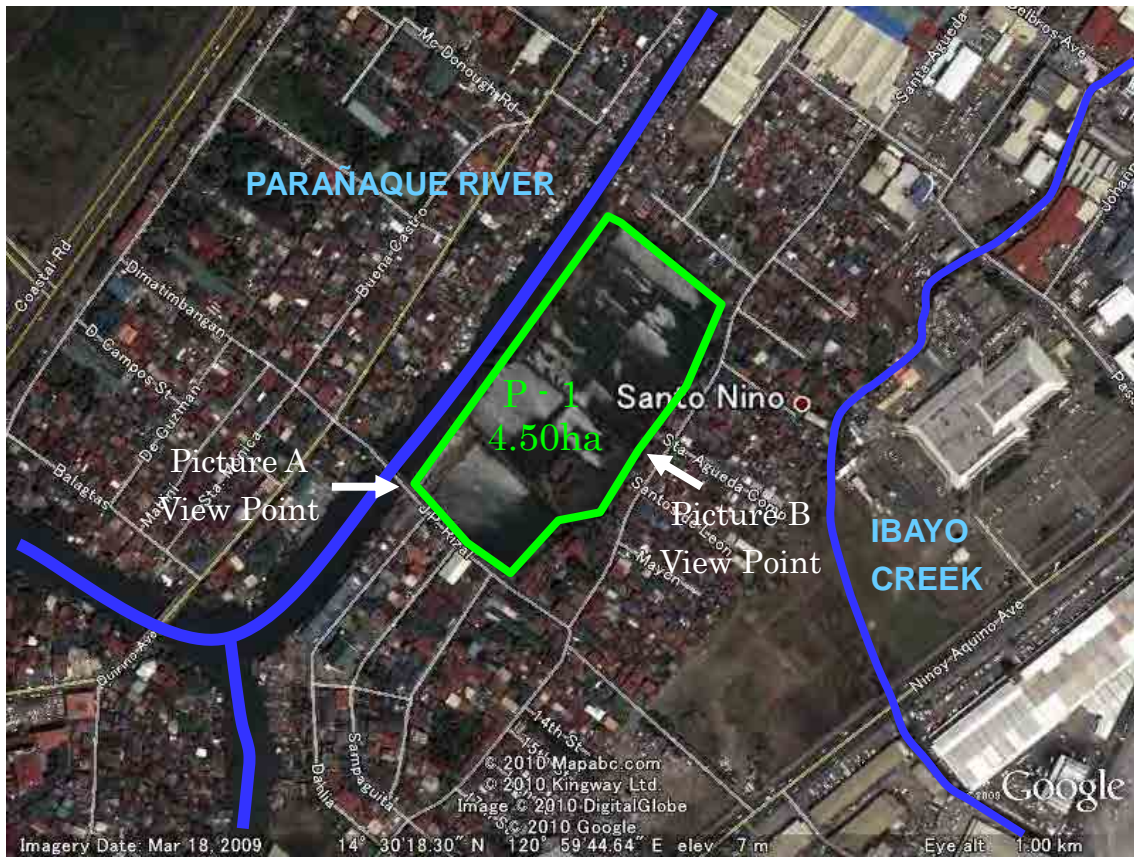
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# 1. DETAILS OF SITE CANDIDATE

Use	Location	Site ID	Page	Use	Location	Site ID	Page		
STP	Parañaque	P-1	AP-3	STP	Las Piñas	L-10	AP-33		
		P-2	AP-4			L-11	AP-34		
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		P-8	AP-10			L-17	AP-40		
		P-9	AP-11			L-18	AP-41		
		P-10	AP-12			L-19	AP-42		
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		P-16	AP-18				PS-3	AP-48	
		P-17	AP-19				PS-4	AP-49	
		P-18	AP-20				PS-6	AP-50	
		Las Piñas	L-A	AP-21					
			L-B	AP-22					
			L-C	AP-23					
	L-1		AP-24						
	L-2		AP-25						
	L-3		AP-26						
	L-4		AP-27						
	L-5		AP-28						
	L-6		AP-29						
	L-7		AP-30						
	L-8	AP-31							
	L-9	AP-32							

Site candidate for Parañaque No.1 (ID: P-1)

① Site location



② Site Picture



③ Site condition

- Figuration: salt field
- Temporal use: vacant
- Residents: none
- Access road: J.P. Rizal and Sta. Agueda streets

Site candidate for Parañaque No.2 (ID: P-2)

① Site location



② Site Picture



③ Site condition

- Figuration is land developed (PIRC Provident International Resources Corp.)
- Temporal use: vacant
- Residents: none
- Access road: NAIA Road

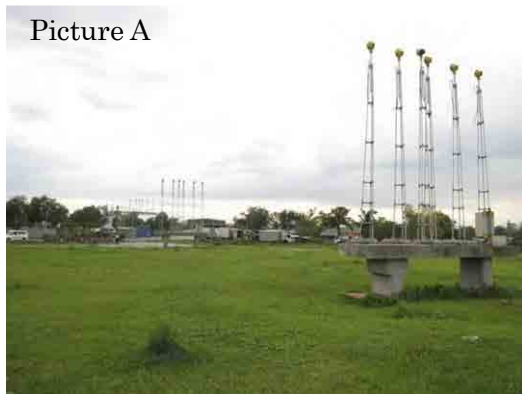


Site candidate for Parañaque No.3 (ID: P-3)

① Site location



② Site Picture



③ Site condition

- Figuration: developed/grass land/airway alignment (SM Corp.)
- Temporal use: vacant
- Resident: none
- Access road: SM Road

Site candidate for Parañaque No.4 (ID: P-4)

① Site location



② Site Picture



③ Site condition

- Figuration: developed/grass land (NAIA)
- Temporal use: vacant
- Resident: none
- Access road: NAIA/airway perimeter road

Site candidate for Parañaque No.5 (ID: P-5)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land (future subdivision)
- Temporal use: vacant
- Residents: none
- Access road: via Pacific Avenue

Site candidate for Parañaque No.6 (ID: P-6)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land (future subdivision)
- Temporal use: vacant
- Residents: none
- Access road: Lincoln Avenue

Site candidate for Parañaque No.7 (ID: P-7)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land
- Temporal use: golf driving range (portion)
- Residents: none
- Access road: Coastal Road, Pacific Avenue, and Diosdado Macapagal Blvd.

Site candidate for Parañaque No.8 (ID: P-8)

① Site location



② Site Picture



③ Site condition

- Figuration: highly vegetated land
- Temporal: vacant
- Residents: none
- Access road: Pacific Avenue

Site candidate for Parañaque No.9 (ID: P-9)

① Site location



② Site Picture



③ Site condition

- Figuration: land being developed (SM warehouse/depot)
- Temporal: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Parañaque No.10 (ID: P-10)

① Site location



② Site Picture



③ Site condition

- Figuration: vegetated and marshy land
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension



Site candidate for Parañaque No.11 (ID: P-11)

① Site location



② Site Picture



③ Site condition

- Figuration: vegetated and marshy land
- Temporal use: vacant
- Residents: none
- Availability: for sale (endorsed by ROW)
- Access road: C5 Road Extension

Site candidate for Parañaque No.12 (ID: P-12)

② Site location



③ Site Picture



④ Site condition

- Figuration: swamp/march land
- Temporal use: vacant
- Residents: none
- Access road: not possible to confirm

Site candidate for Parañaque No.13 (ID: P-13)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land (ALPHA LAND BAY CITY – MIXED USED SUBD.)
- Temporal use: vacant
- Residents: none
- Access road: Aseana Avenue and Bradco Road

Site candidate for Parañaque No.14 (ID: P-14)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land (SUBDIVISION)
- Temporal use: vacant
- Residents: none
- Access road: Bradco Road and Aseana Avenue

Site candidate for Parañaque No.15 (ID: P-15)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land (HOTEL and PAGCOR)
- Temporal use: vacant
- Residents: none
- Access road: Aseana Avenue

Site candidate for Parañaque No.16 (ID: P-16)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land (PAGCOR)
- Temporal: vacant.
- Residents: none
- Access road: none yet

Site candidate for Parañaque No.17 (ID: P-17)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land (TRAIN STATION - LRTA)
- Temporal use: temporary garbage dump/transfer site
- Residents: none
- Access road: A. Santos Avenue and C5 Road Extension

Site candidate for Parañaque No.18 (ID: P-18)

② Site location



③ Site Picture



④ Site condition

- Figuration: salt field
- Temporal use: vacant
- Residents: none
- Access road: C5 extension road



Site candidate for Las Piñas 'A' (ID: L-A)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: Alabang-Zapote Road

Site candidate for Las Piñas 'B' (ID: L-B)

① Site location



② Site Picture

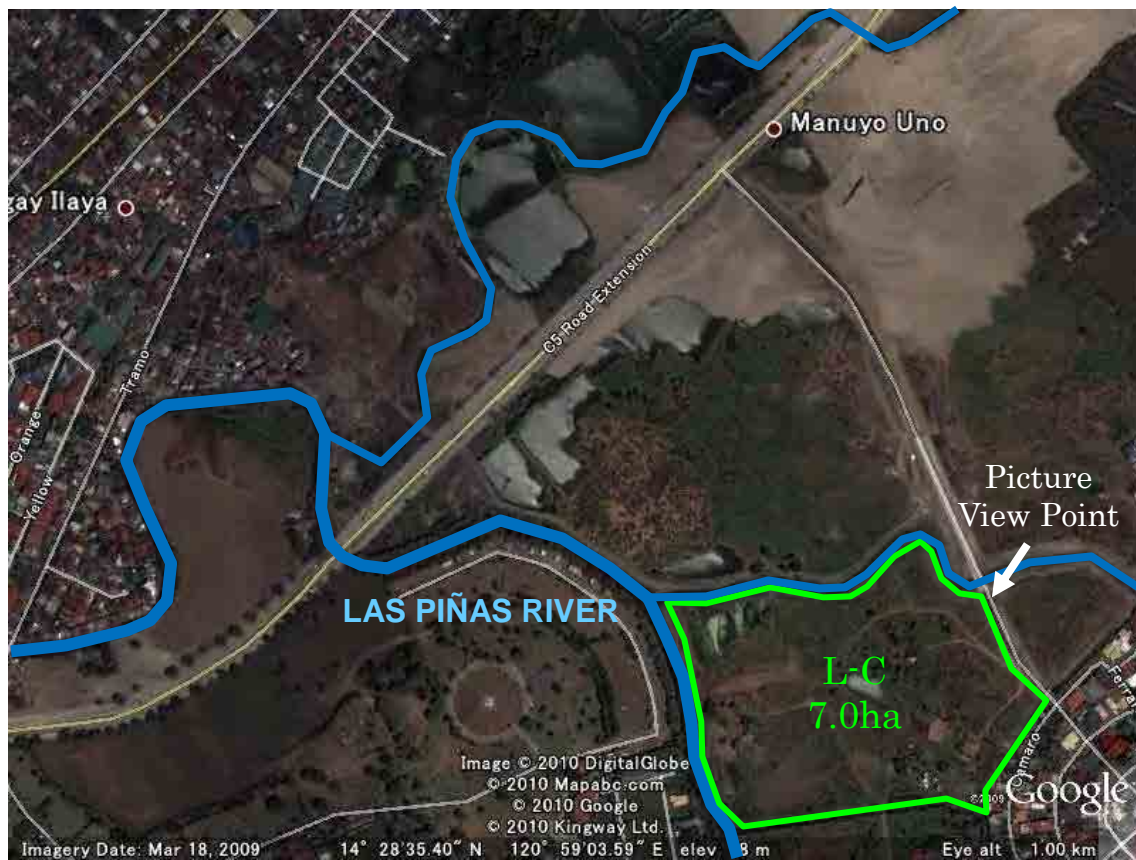


③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Las Piñas 'C' (ID: L-C)

① Site location



② Site Picture

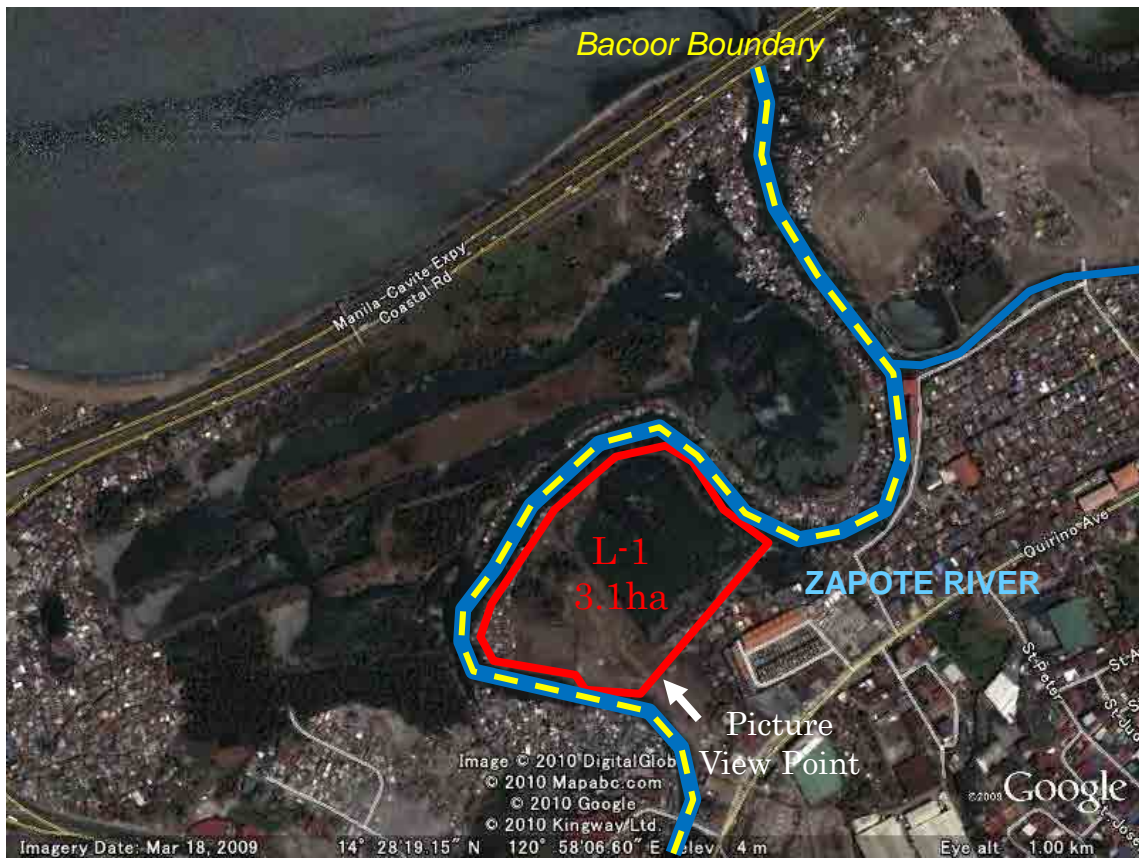


③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: unnamed road

Site candidate for Las Piñas No.1 (ID: L-1)

① Site location



② Site Picture



③ Site condition

- Figuration: vacant space with no construction (Banco Filipino)
- Temporal use: vacant
- Residents: some squatters along Zapote River
- Access road: Qurino Avenue

Site candidate for Las Piñas No.2 (ID: L-2)

① Site location



② Site Picture



③ Site condition

- Figuration: dump site (transfer station) with C5 road construction in central part
- Temporal use: garbage dump
- Residents: some squatters along river and creek
- Access road: unnamed road connected to Quirino Avenue

Site candidate for Las Piñas No.3 (ID: L-3)

① Site location



② Site Picture

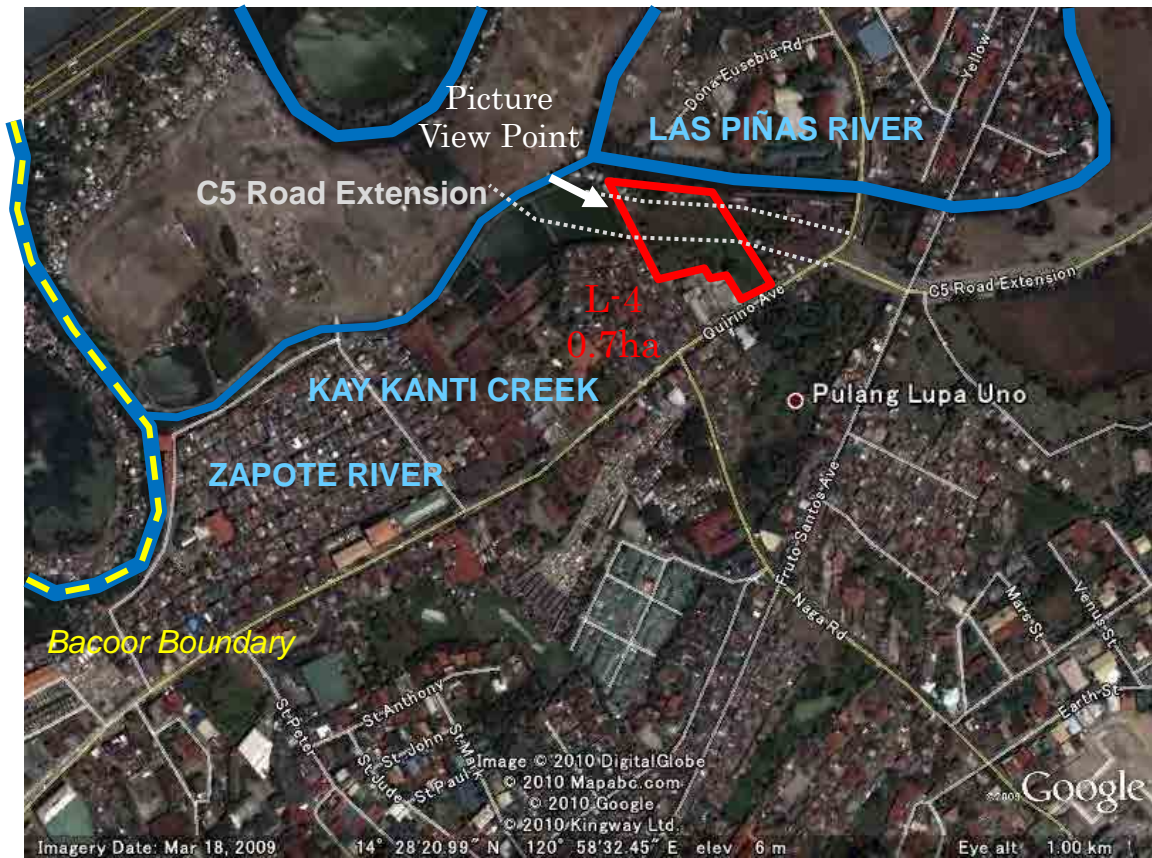


③ Site condition

- Figuration: fish pond with no construction
- Temporal: vacant
- Residents: some squatters around the pond
- Access road: unnamed road connected to Manila-Cavite Coastal Road

Site candidate for Las Piñas No.4 (ID: L-4)

① Site location



② Site Picture



③ Site condition

- Figuration: vacant space with no construction (hit by C5 Road alignment)
- Temporal: vacant
- Residents: none
- Access road: Quirino Avenue

Site candidate for Las Piñas No.5 (ID: L-5)

① Site location



② Site Picture



③ Site condition

- Figuration: ponded area with no construction
- Temporal: vacant
- Residents: some squatters around the pond
- Access road: none



Site candidate for Las Piñas No.6 (ID: L-6)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant.
- Residents: none
- Access road: C5 Road Extension.

●  
Site candidate for Las Piñas No.7 (ID: L-7)

① Site location



② Site Picture

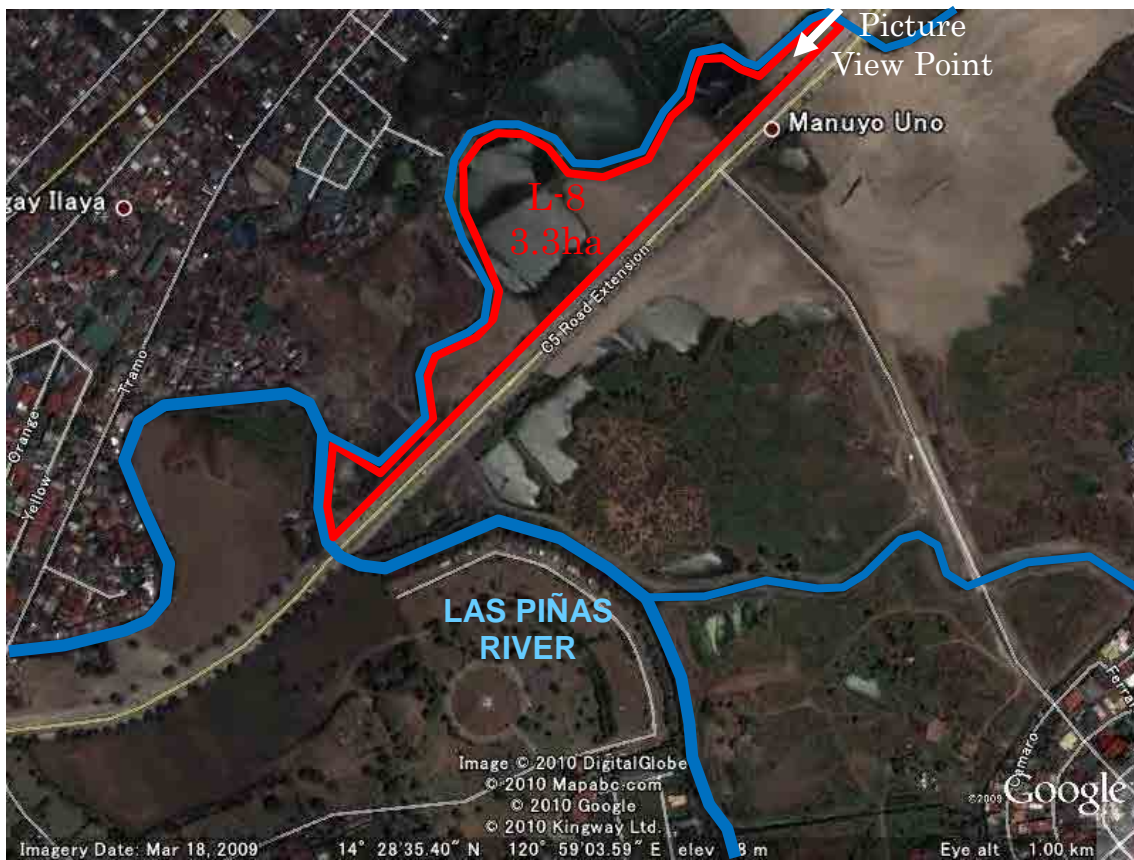


③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: unnamed road connected to Tramo road

Site candidate for Las Piñas No.8 (ID: L-8)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none.
- Access road: C5 Road Extension

Site candidate for Las Piñas No.9 (ID: L-9)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Las Piñas No.10 (ID: L-10)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Las Piñas No.11 (ID: L-11)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Las Piñas No.12 (ID: L-12)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Las Piñas No.13 (ID: L-13)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension



Site candidate for Las Piñas No.14 (ID: L-14)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Las Piñas No.15 (ID: L-15)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: C5 Road Extension

Site candidate for Las Piñas No.16 (ID: L-16)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction (San Fermin Corp.)
- Temporal use: vacant
- Residents: none
- Access road: Alabang-Zapote Road

●  
Site candidate for Las Piñas No.17 (ID: L-17)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction (Phillips Electronics)
- Temporal use: vacant
- Residents: none
- Access road: Alabang-Zapote Road.

Site candidate for Las Piñas No.18 (ID: L-18)

① Site location



② Site Picture

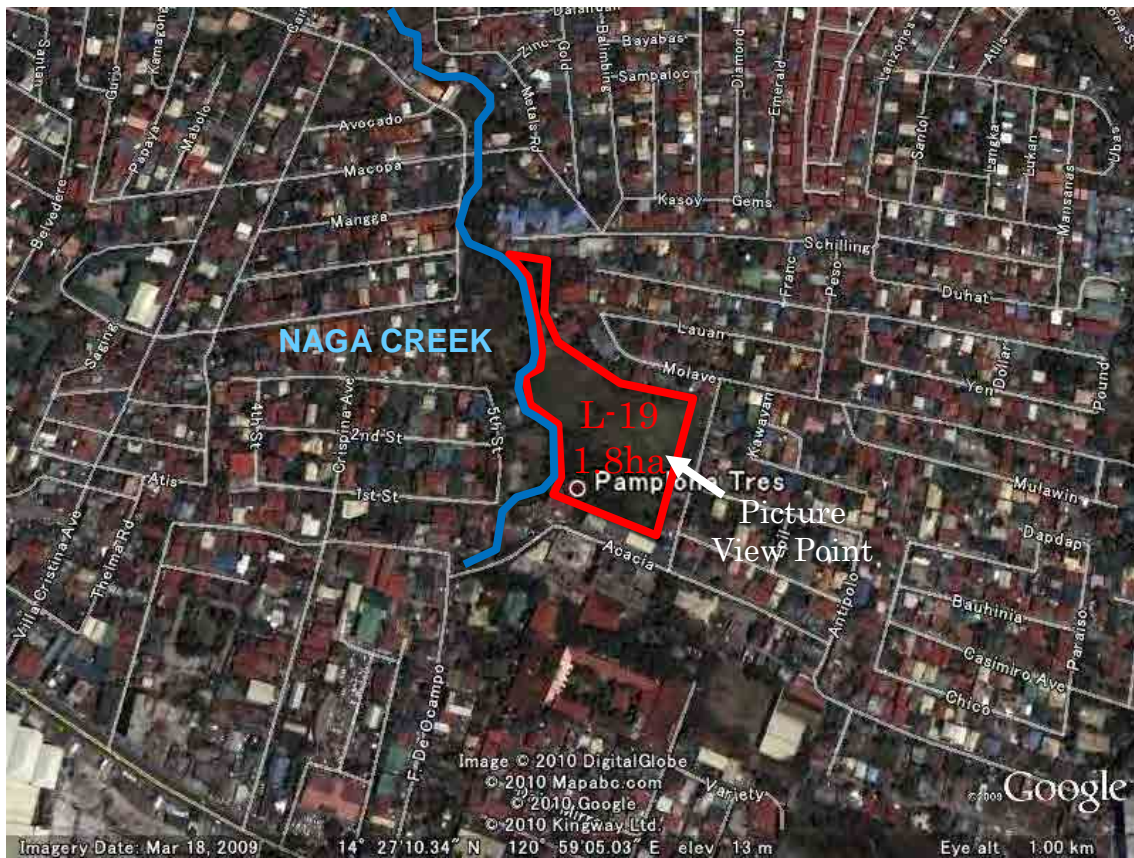


③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: some squatters along the creek
- Access road: an unnamed road in Casimiro Townhomes

Site candidate for Las Piñas No.19 (ID: L-19)

① Site location



② Site Picture

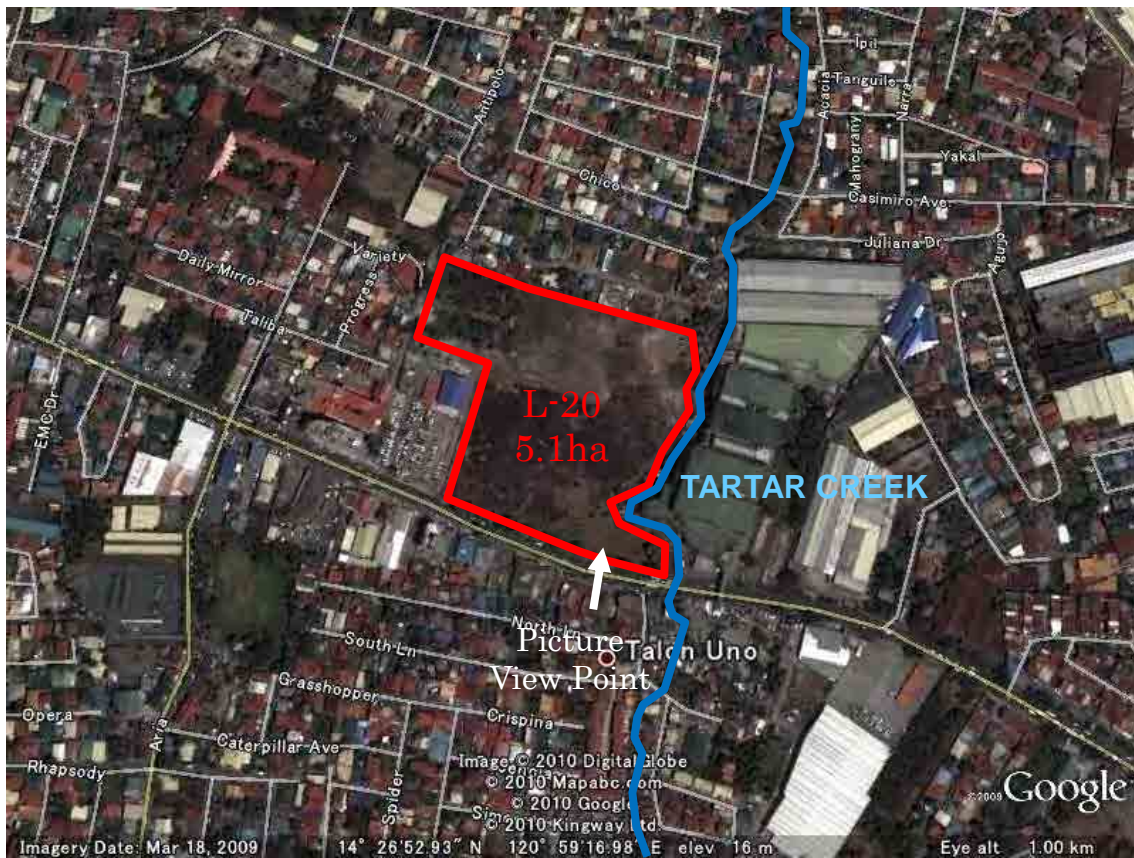


③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: none
- Access road: Apitong Road

Site candidate for Las Piñas No.20 (ID: L-20)

① Site location



② Site Picture

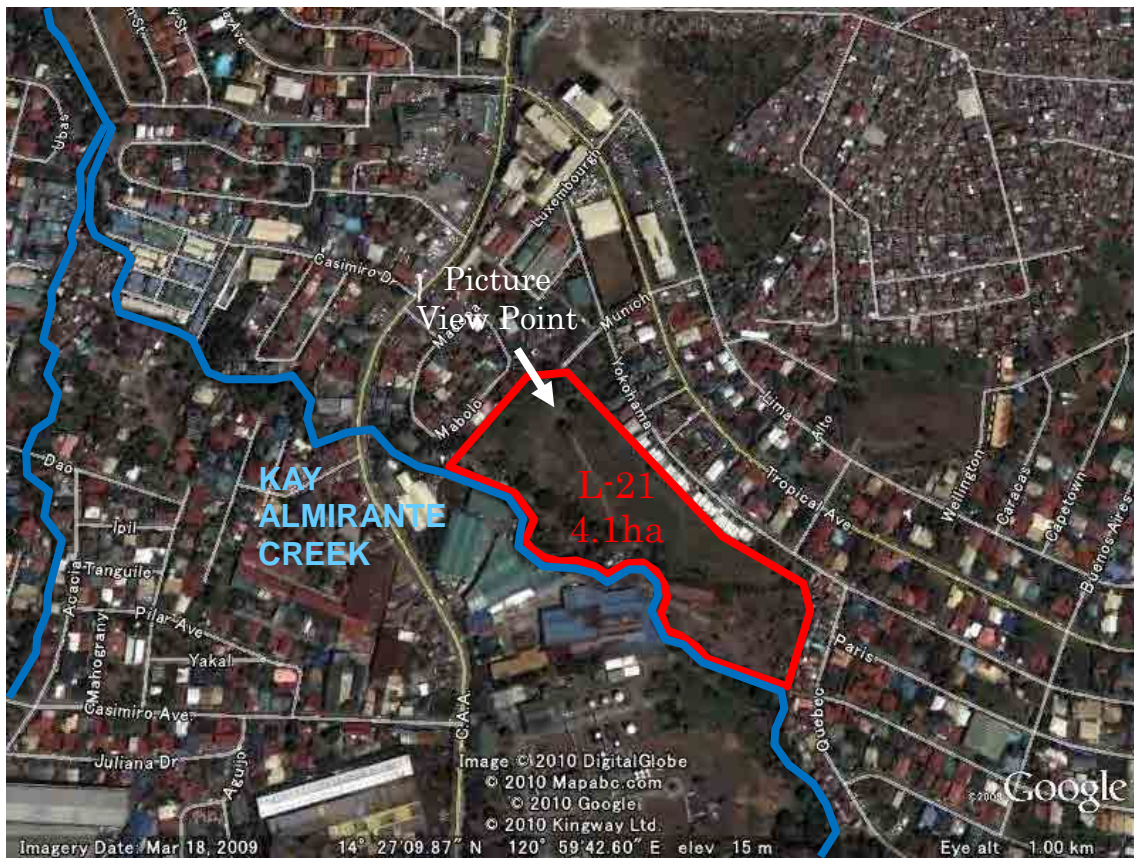


③ Site condition

- Figuration: developed land with no construction
- Temporal use: vacant
- Residents: some squatters along the creek
- Access road: Alabang-Zapote Road

Site candidate for Las Piñas No.21 (ID: L-21)

① Site location



② Site Picture



③ Site condition

- Figuration: developed land with no construction (Philips Co.)
- Temporal use: vacant
- Residents: some squatters along the creek
- Access road: Munich road



Site candidate for Las Piñas No.22 (ID: L-22)

① Site location



② Site Picture



③ Site condition

- Figuration: highly vegetated; there is a ruin of old hotel in NW part (multiple owners identified: Banco Filipino, Land Bank, etc.)
- Temporal use: vacant
- Residents: some squatters around the ruins of old hotel
- Access road: Tropical Avenue

Pump Station Site candidate for Parañaque (ID: PS-1)

① Site location



② Site Picture



③ Site condition

- Figuration: swamp/pond surrounded by trees
- Temporal use: pond
- Residents: some illegal settler's at the south side of the property
- Access roads: C-5 Extension Road and Multinational Avenue

Pump Station Site candidate for Las Pinas (ID: PS-2)

④ Site location



⑤ Site Picture

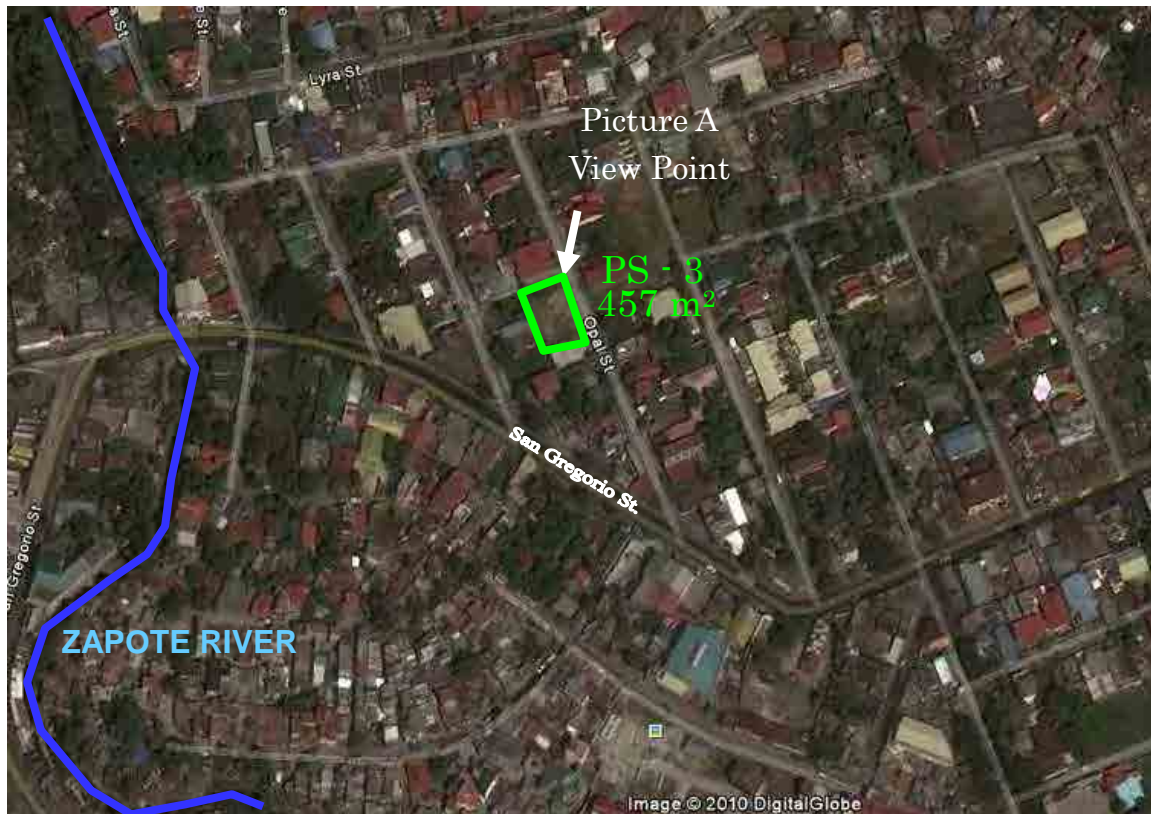


⑥ Site condition

- Figuration: vegetated land with some trees
- Temporal use: vacant
- Residents: none
- Access roads: Pedro Sabido St. and R. Garcia St.

PI Pump Station Site candidate for Las Pinas (ID: PS-3)

⑦ Site location



⑧ Site Picture



⑨ Site condition

- Figuration: lot full of grass (has three different lot owners)
- Temporal use: vacant
- Residents: none
- Access roads: San Gregorio St. and Opal St.

Pump Station Site candidate for Las Pinas (ID: PS-4)

⑩ Site location



⑪ Site Picture



⑫ Site condition

- Figuration: developed land with vegetation
- Temporal use: a little portion is used as auto repair shop and the rest of the area is vacant.
- Residents: none
- Access roads: J. Aguilar Avenue / C.A.A

Pump Station Site candidate for Las Pinas (ID: PS-6)

⑬ Site location



⑭ Site Picture



⑮ Site condition

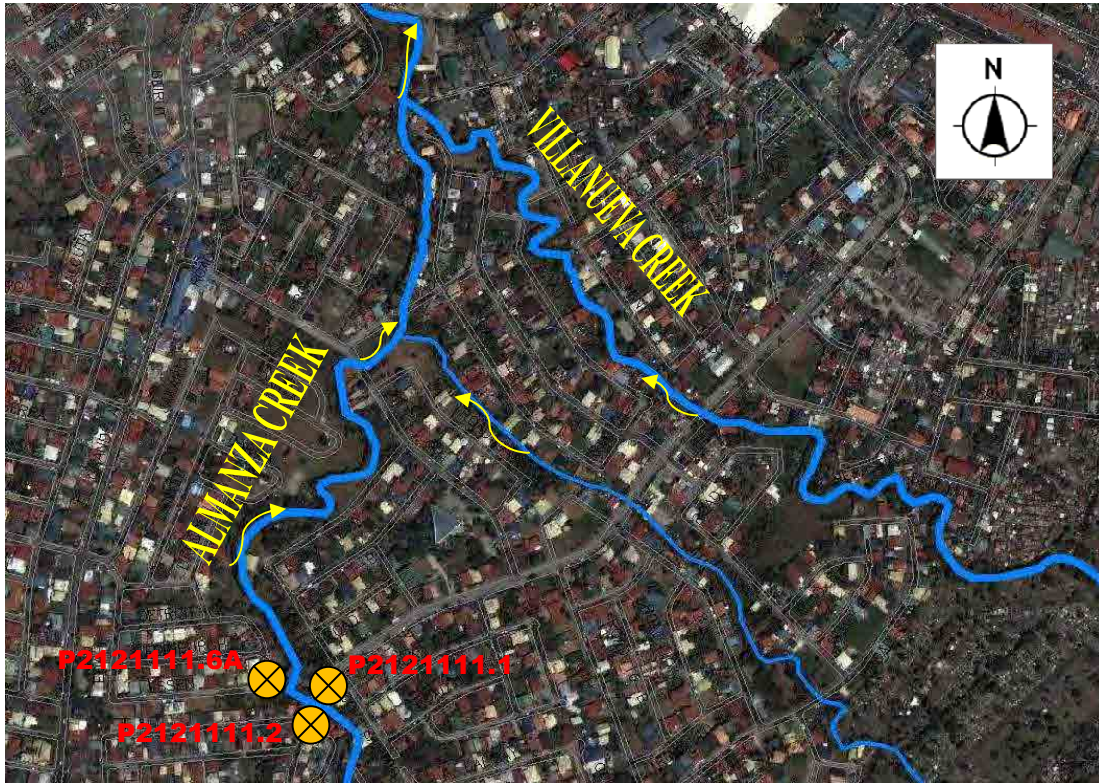
- Figuration: fenced vacant lot with small grasses
- Temporal use: to be built with temporary tents
- Residents: none
- Access roads: Marcos Alvarez Avenue

## 2. DETAILS OF OUTFALLS

Location	Area ID	Page No. (AP-)	Location	Area ID	Page No. (AP-)
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	GP-3	102, 103, 109, 145		GP-33	81, 82, 85, 86
	GP-4	104-106			
	GP-5	105, 114, 141-144			
	GP-6	121-124	Las Piñas	GL-1	203, 218, 262, 263
	GP-7	125, 126		GL-2	202, 219-222, 245
	GP-8	127-130		GL-3	201, 229, 232, 233, 259,260
	GP-9	111, 115-117, 153-155		GL-4	230, 231, 234, 235, 236
	GP-10	108-110, 112, 113		GL-5	223-227, 237
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	GP-17	182-183		GL-12	267, 268, 271
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	GP-25	61, 62		GL-20	240, 241, 272-274
	GP-26	194, 195, 197		GL-21	253, 254
	GP-27	63-65		GL-22	242, 252, 275
	GP-28	66-68		GL-23	261
	GP-29	69-71		GL-24	243
	GP-30	196			

OUTFALL NO. P2121111.1 TO P2121111.2 & P2121111.6A

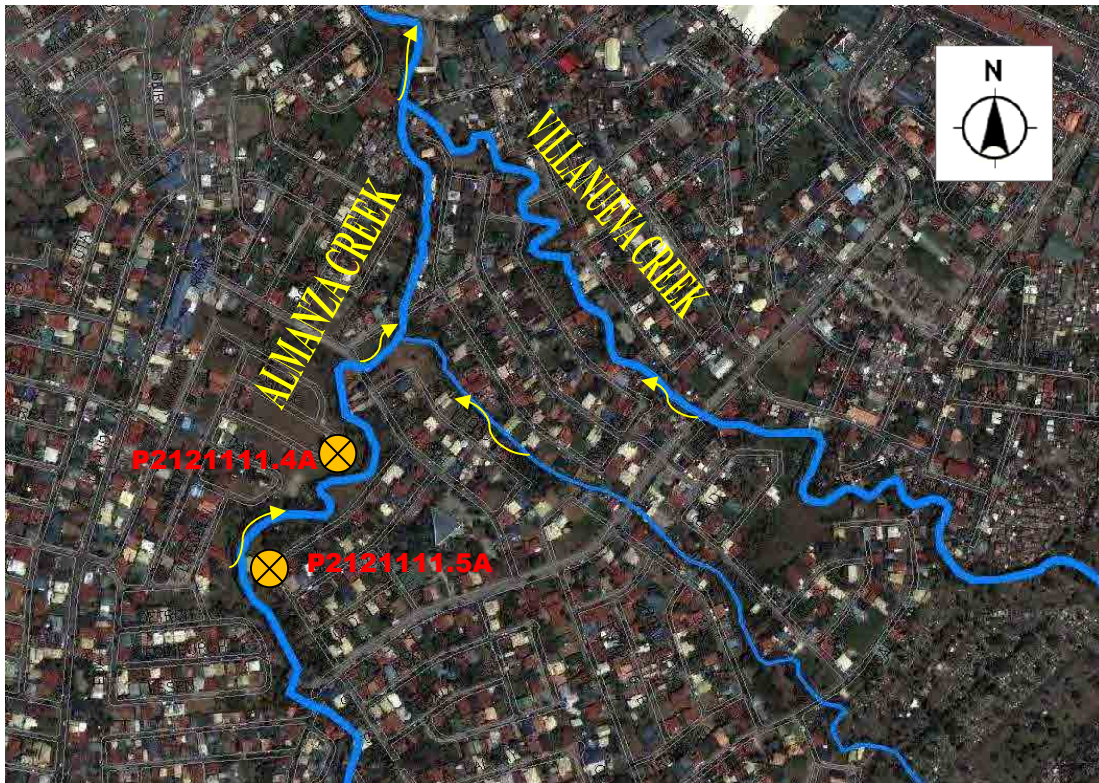
GP22

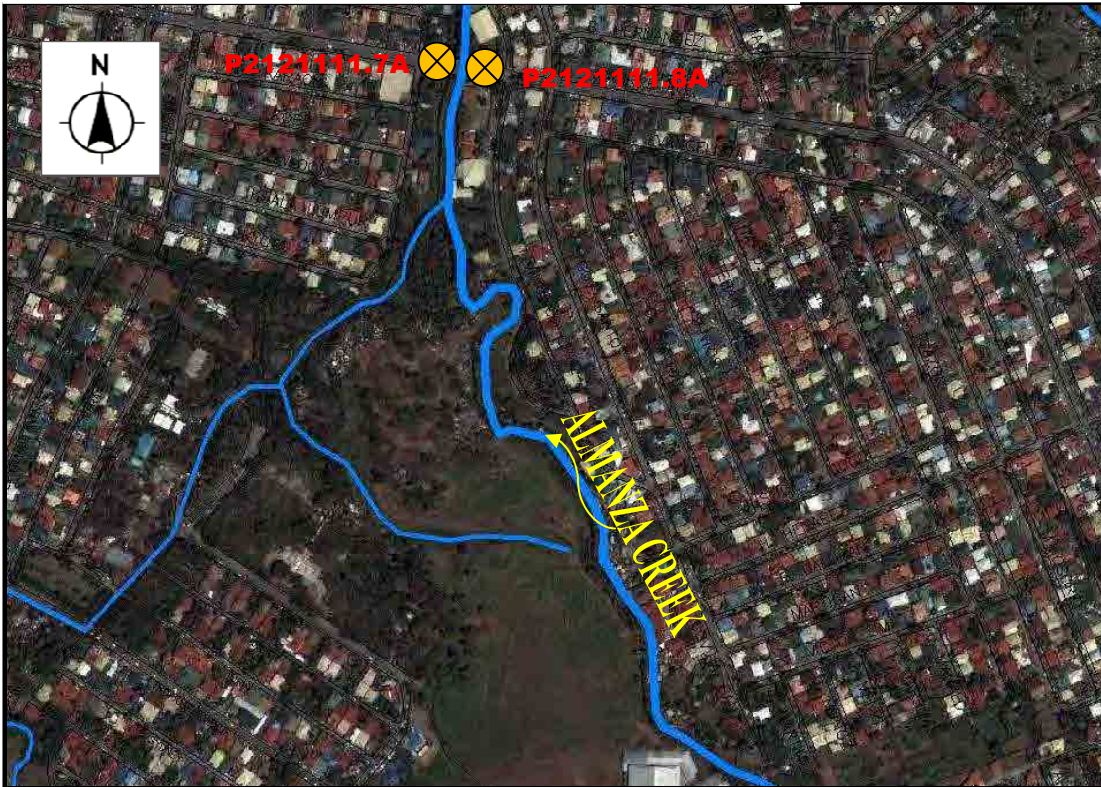


OUTFALL NO. P2121111.1 TO P2121111.2 & P2121111.6A







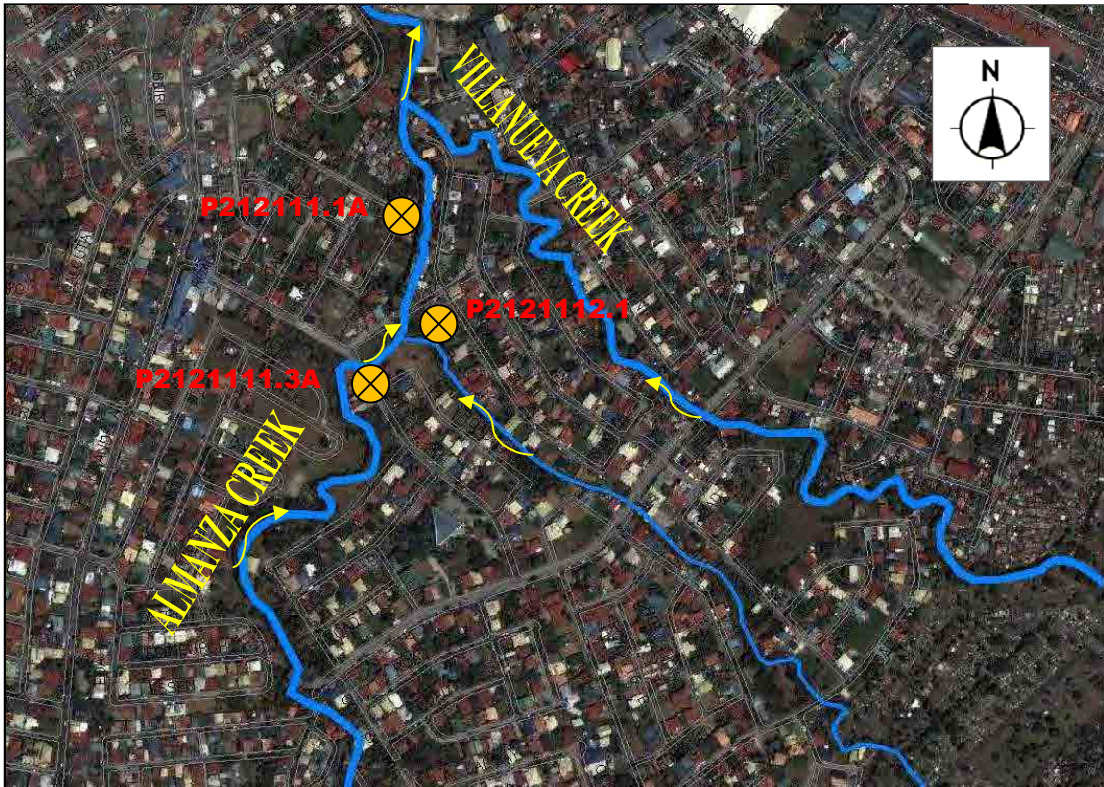


OUTFALL NO. P2121111.7A TO P2121111.8A

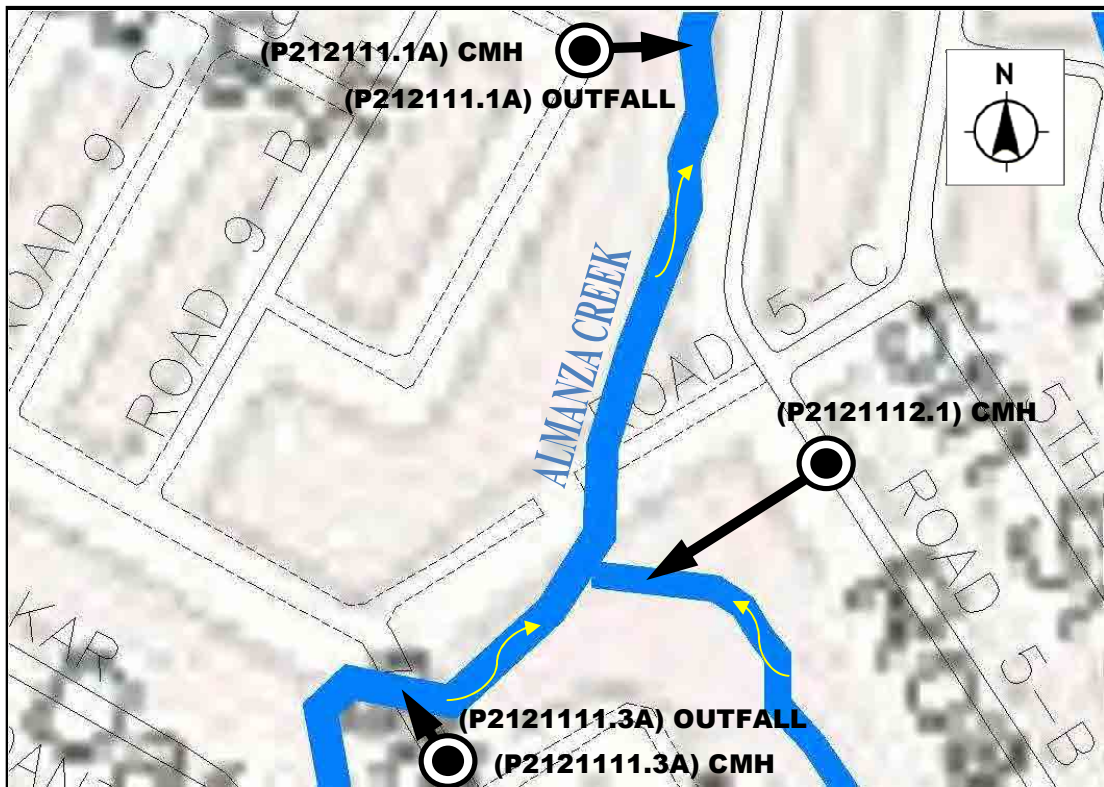


OUTFALL NO. P2121112.1 & P2121111.3A & P212111.1A

GP22

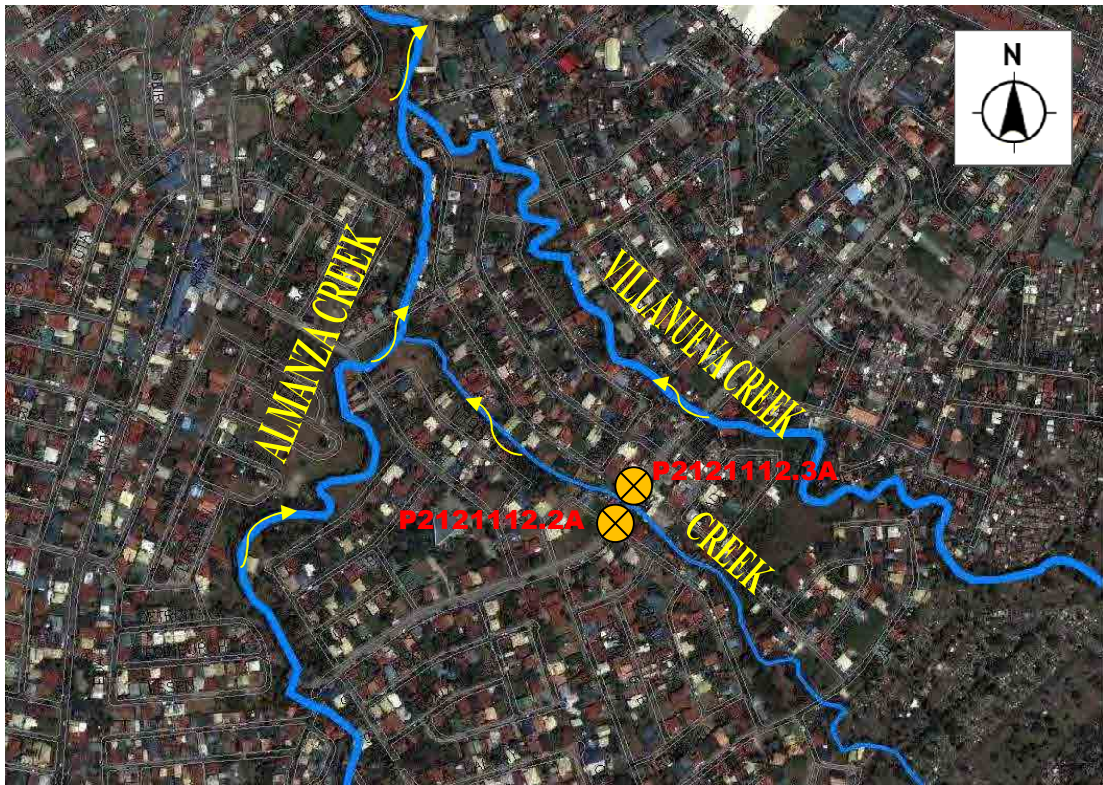


OUTFALL NO. P2121112.1 & P2121111.3A & P212111.1A



OUTFALL NO. P2121112.2A & P2121112.3A

GP22



OUTFALL NO. P2121112.2A & P2121112.3A



OUTFALL NO. P2121112.4A TO P2121112.5A

GP23

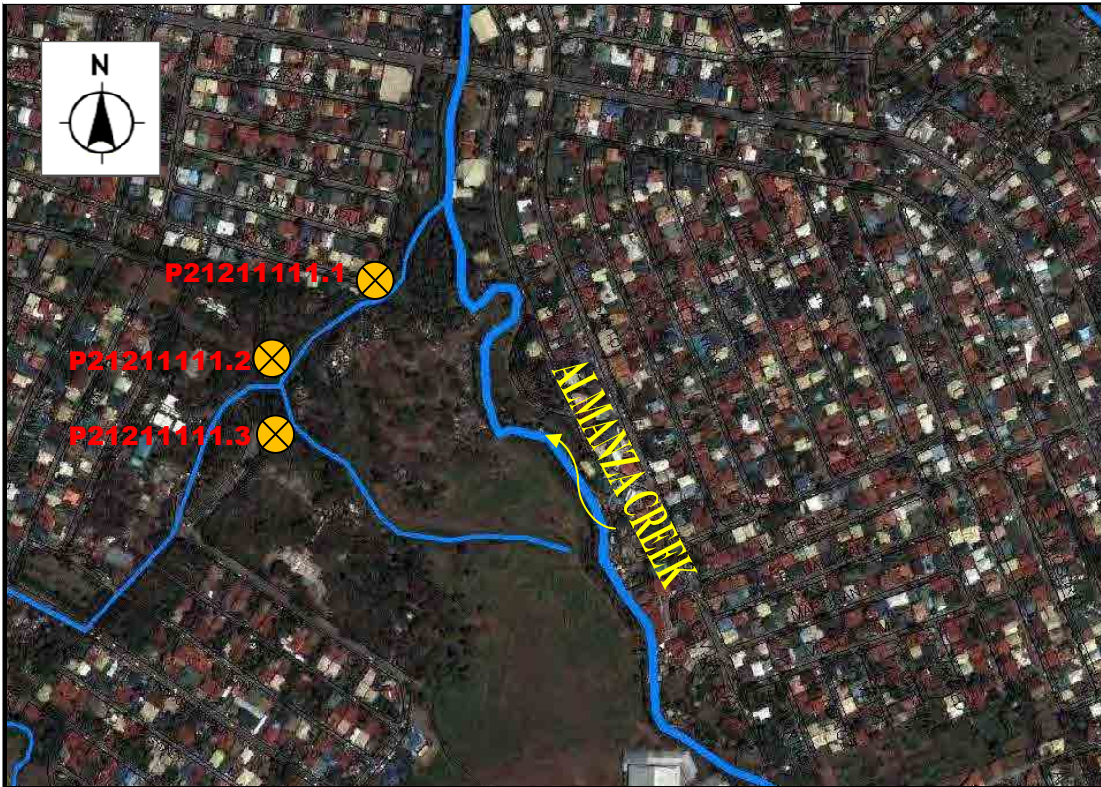


OUTFALL NO. P2121112.4A TO P2121112.5A

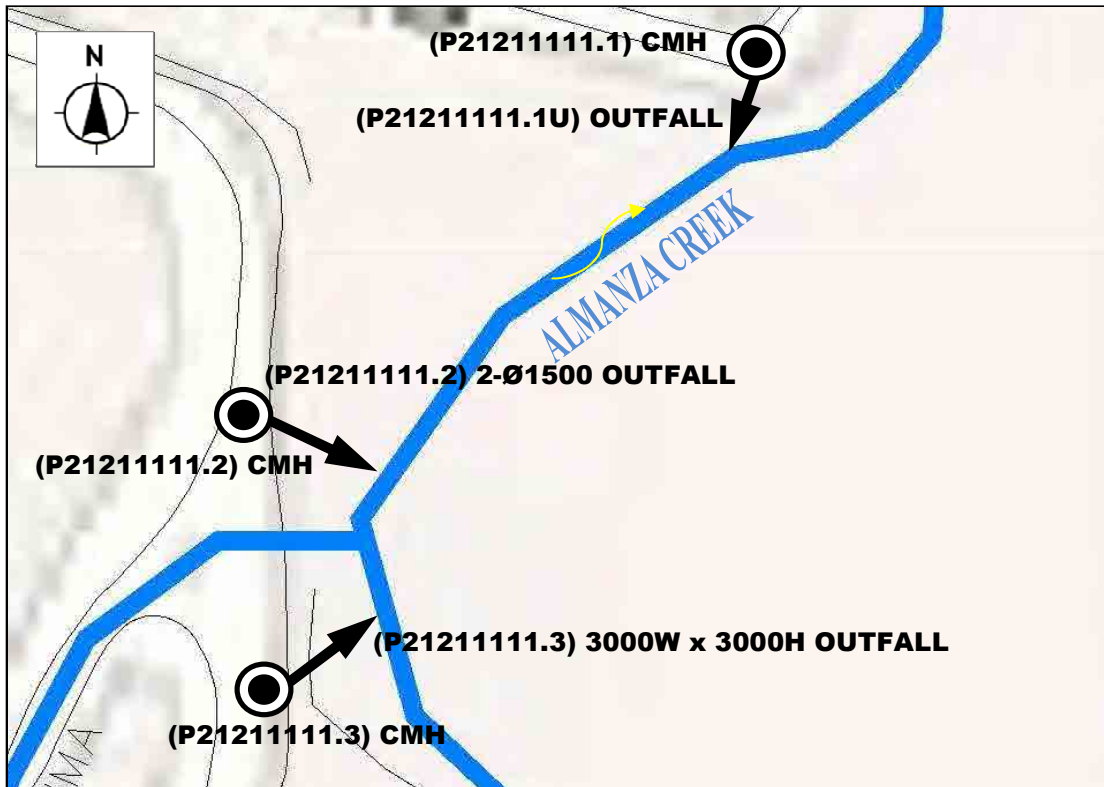


OUTFALL NO. P21211111.1U to P21211111.3

GP24

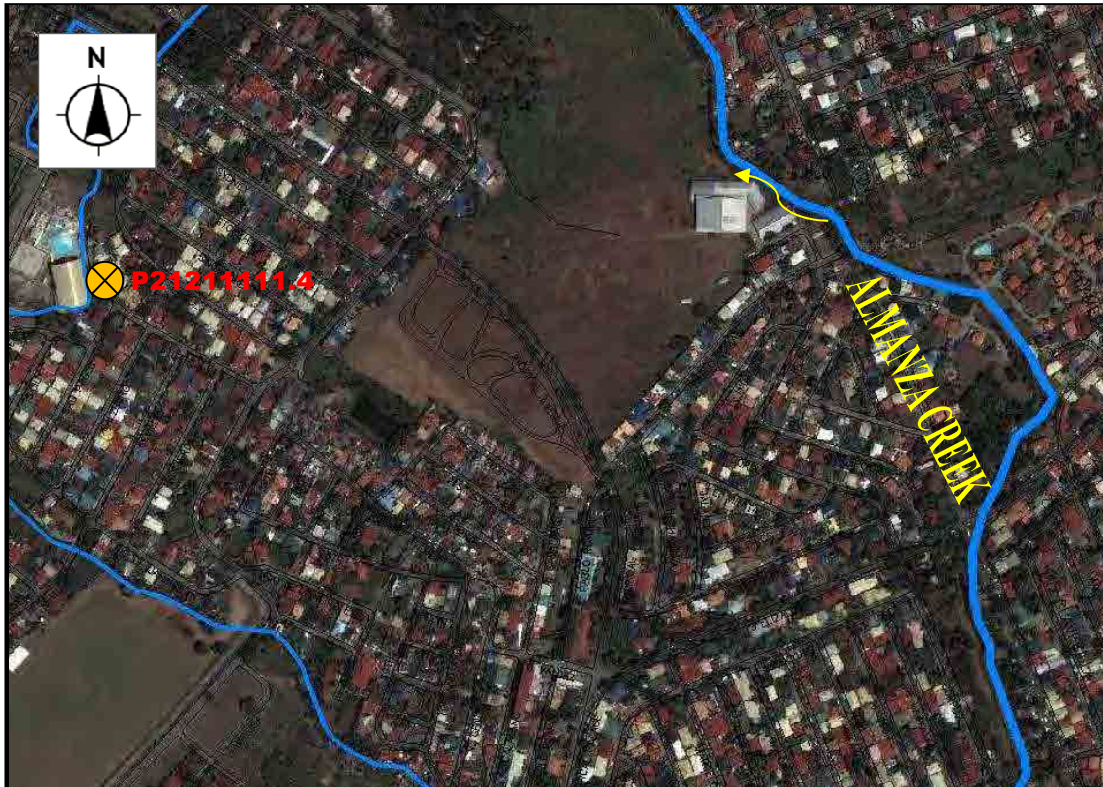


OUTFALL NO. P21211111.1 to P21211111.3

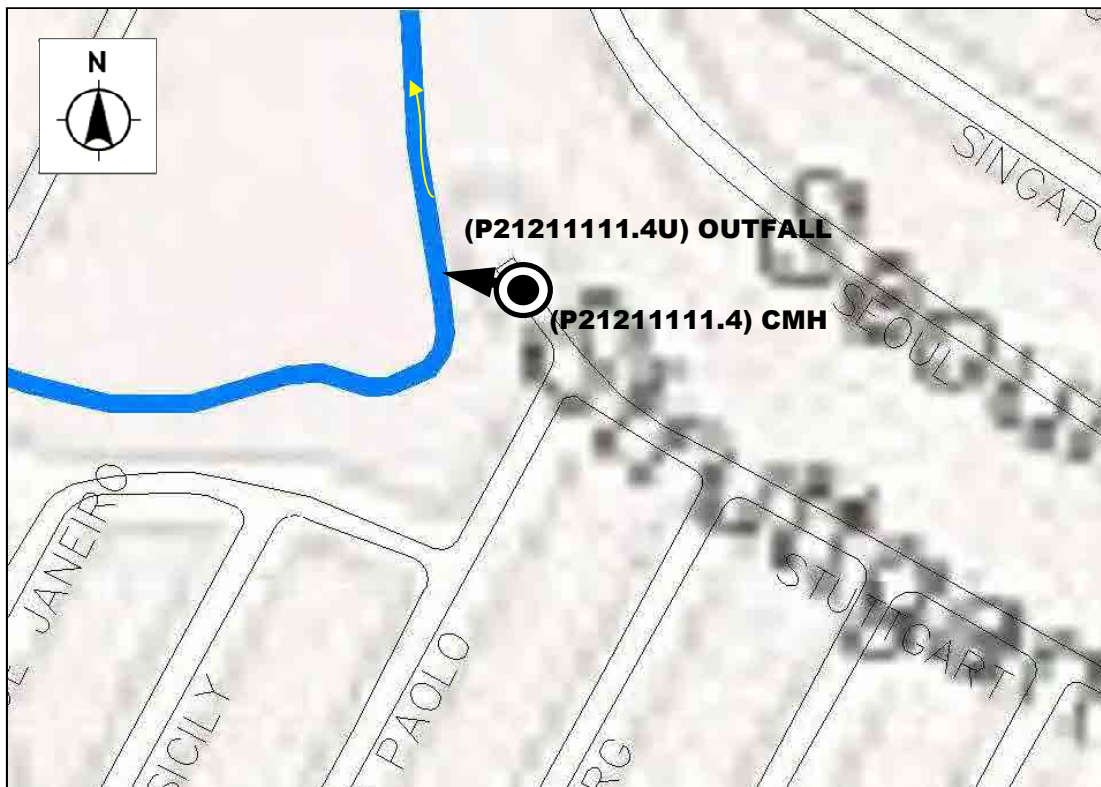


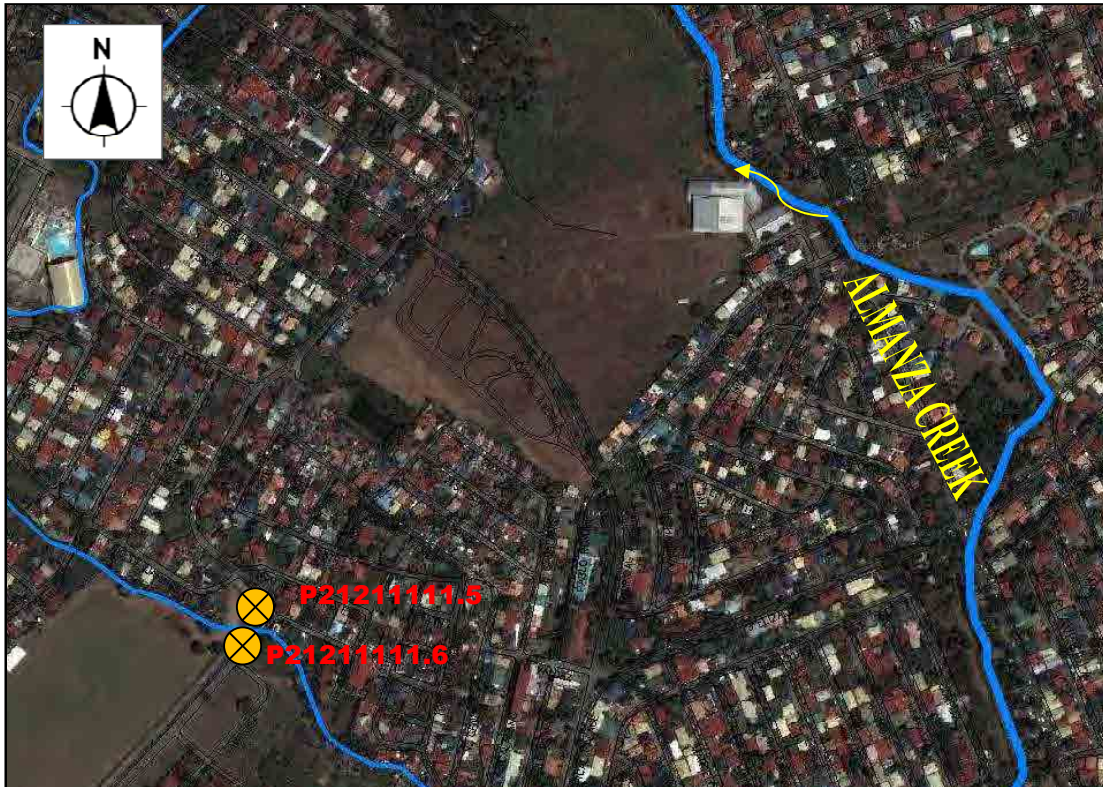
OUTFALL NO. P21211111.4

GP24



OUTFALL NO. P21211111.4

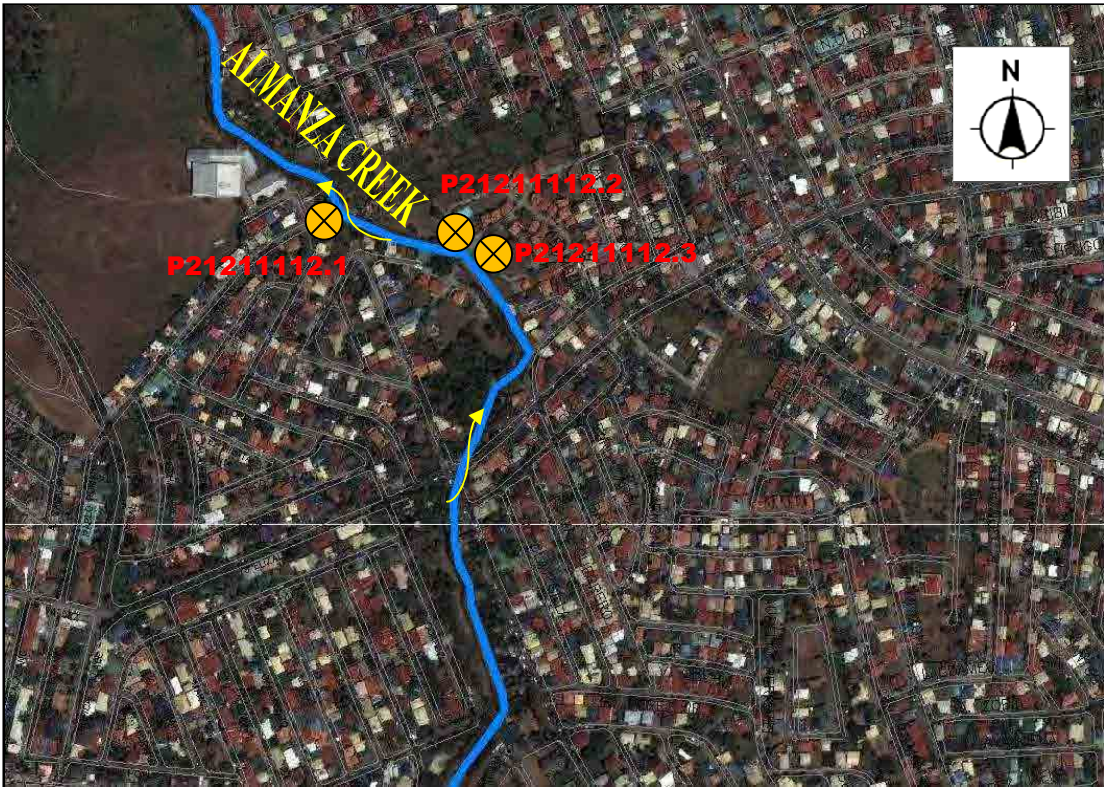




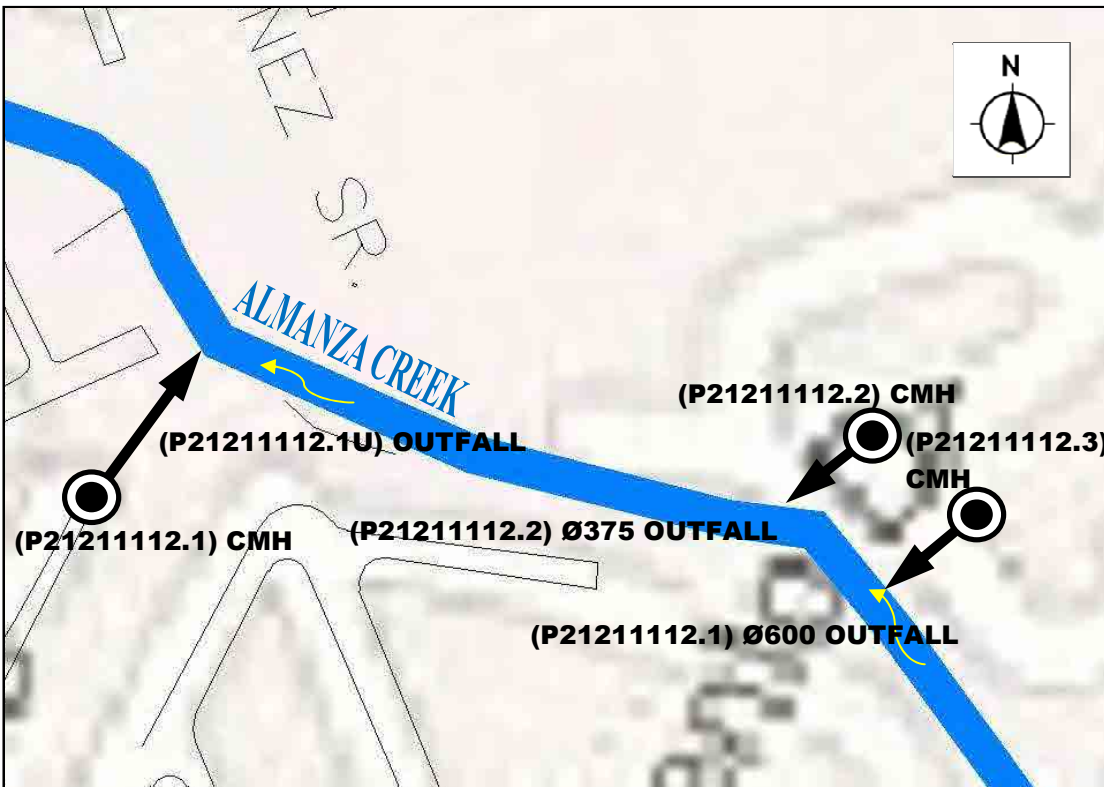


OUTFALL NO. P21211112.1 TO P21211112.3

GP25

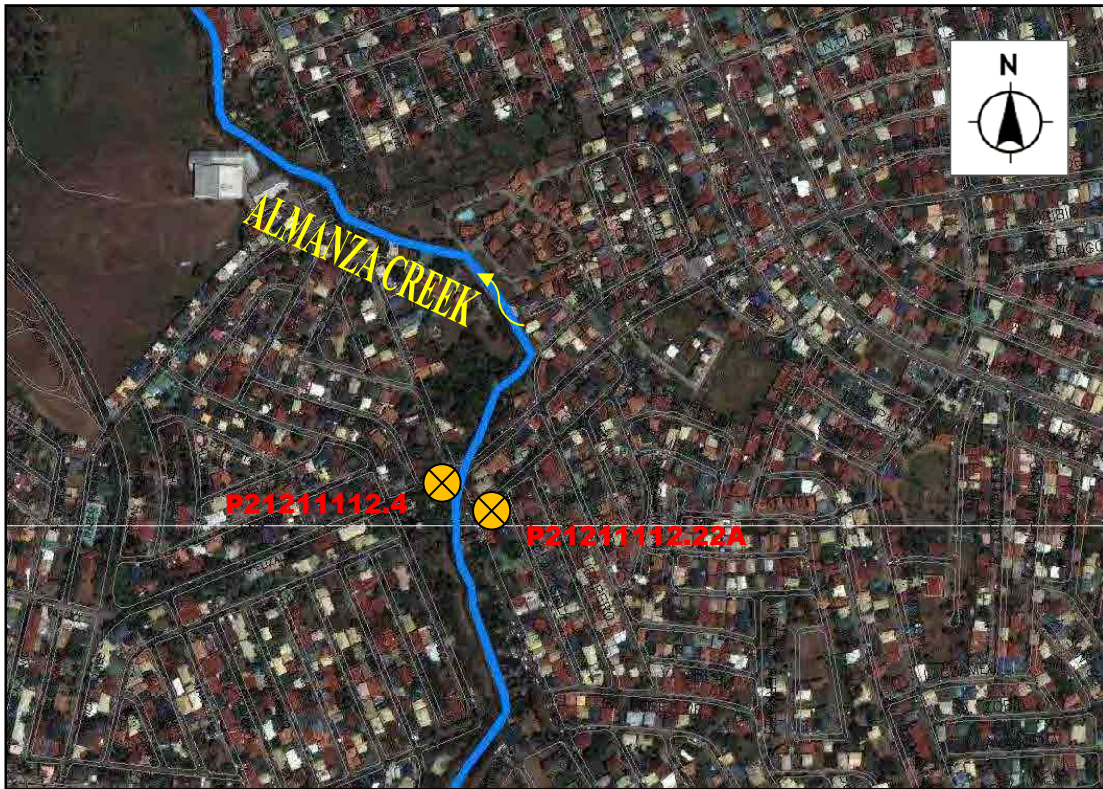


OUTFALL NO. P21211112.1 TO P21211112.3



OUTFALL NO. P21211112.4 & P21211112.22A

GP25

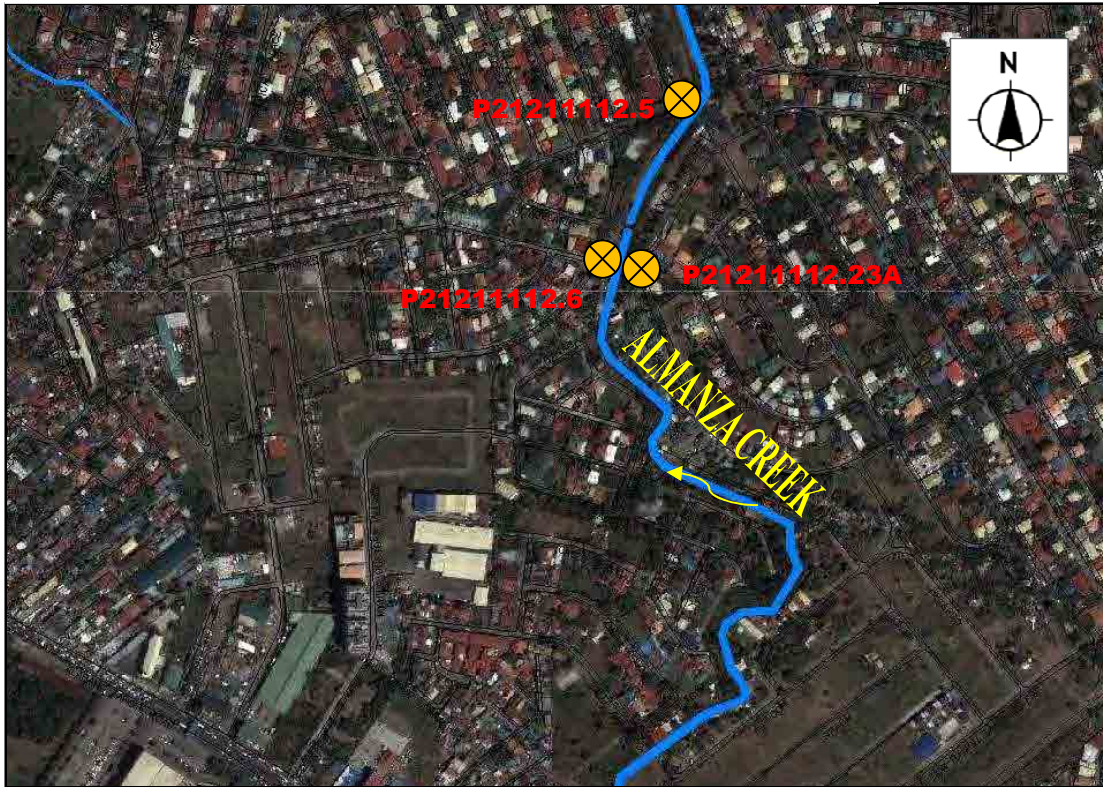


OUTFALL NO. P21211112.4 & P21211112.22A



OUTFALL NO. P21211112.5 to P21211112.6 & P21211112.23A

GP27

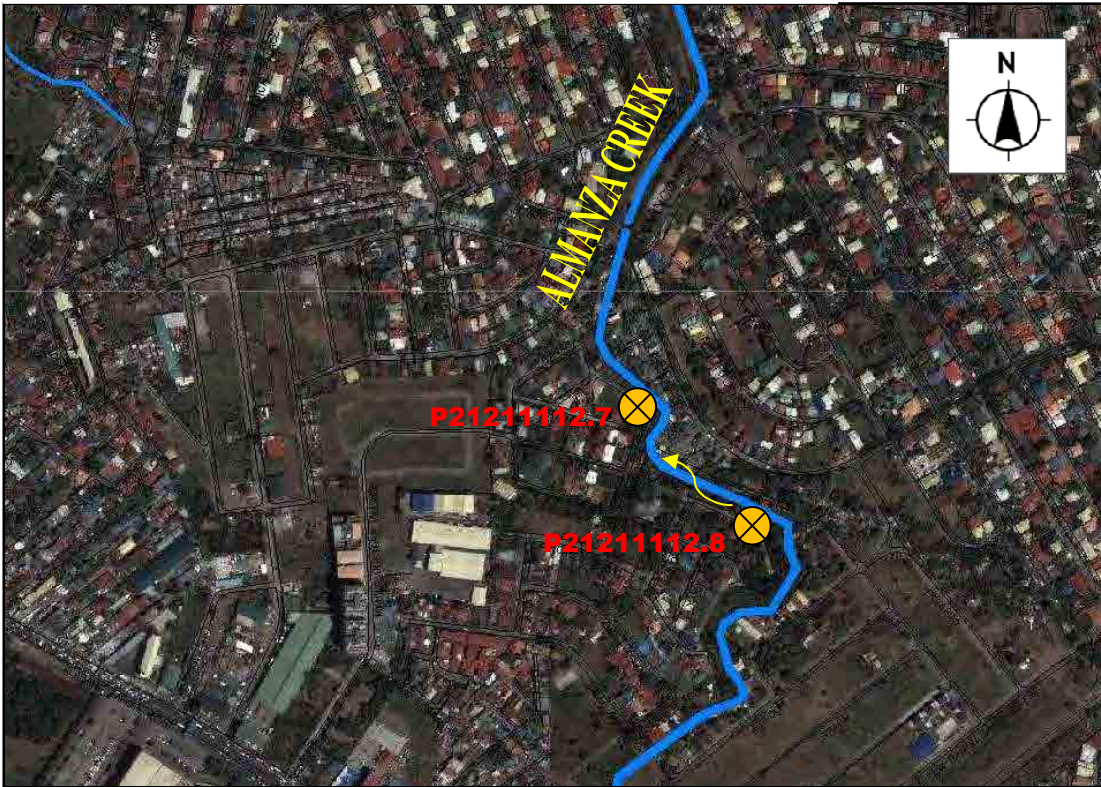


OUTFALL NO. P21211112.5 to P21211112.6 & P21211112.23A



OUTFALL NO. P21211112.7 to P21211112.8

GP27

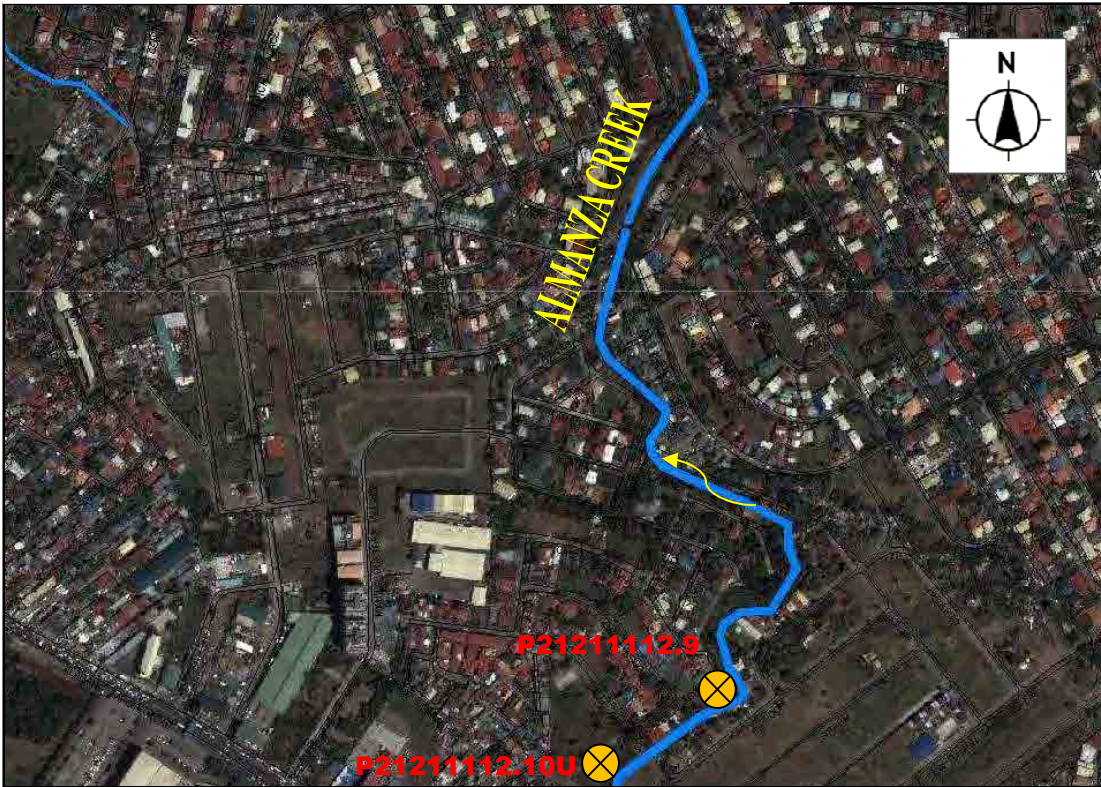


OUTFALL NO. P21211112.7 to P21211112.8

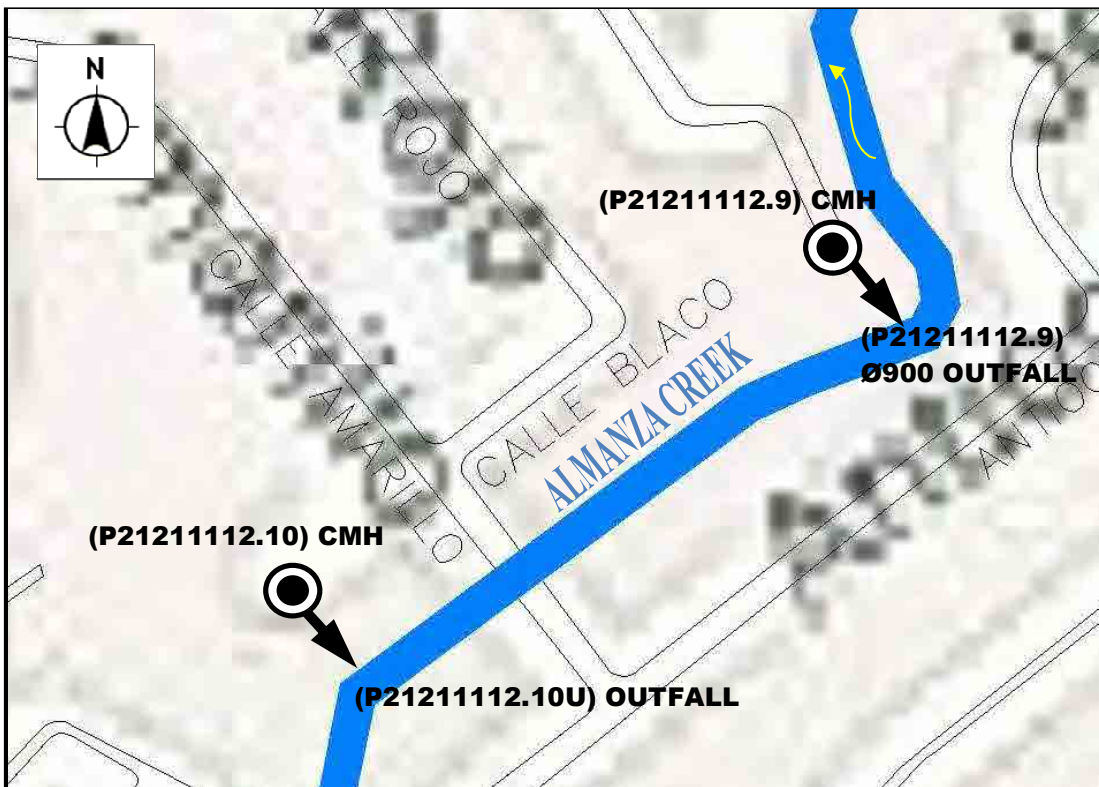


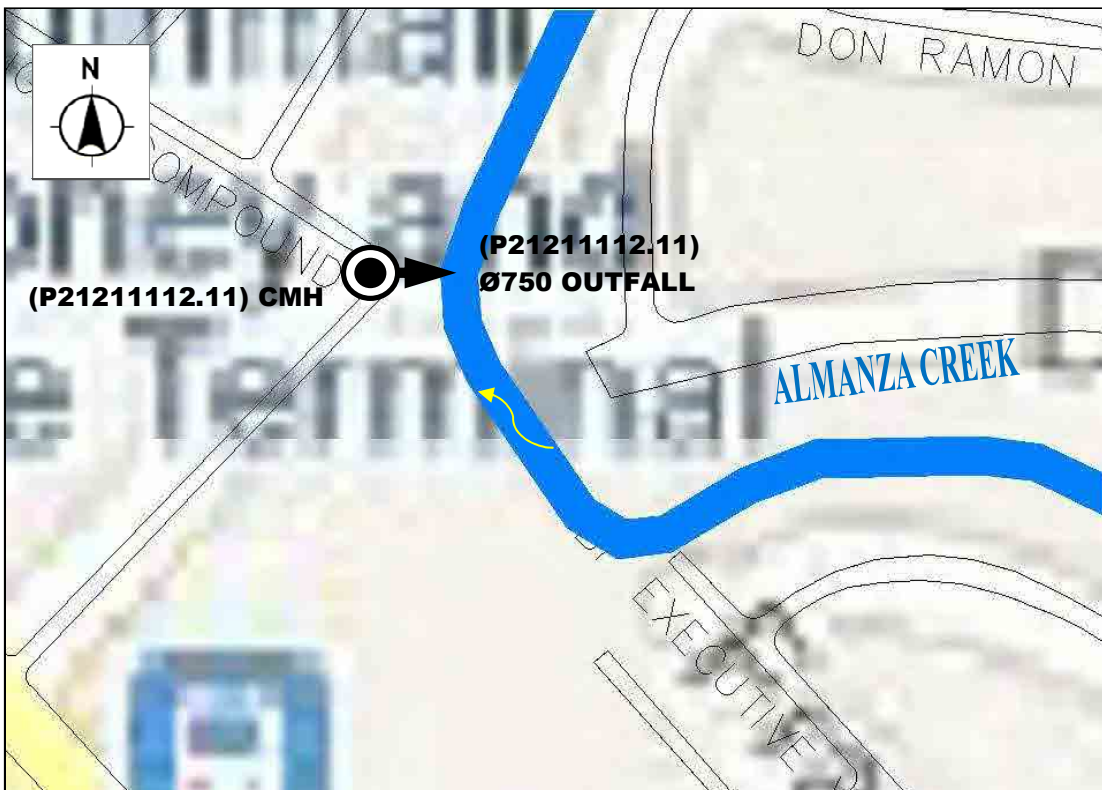
OUTFALL NO. P21211112.9 to P21211112.10

GP27



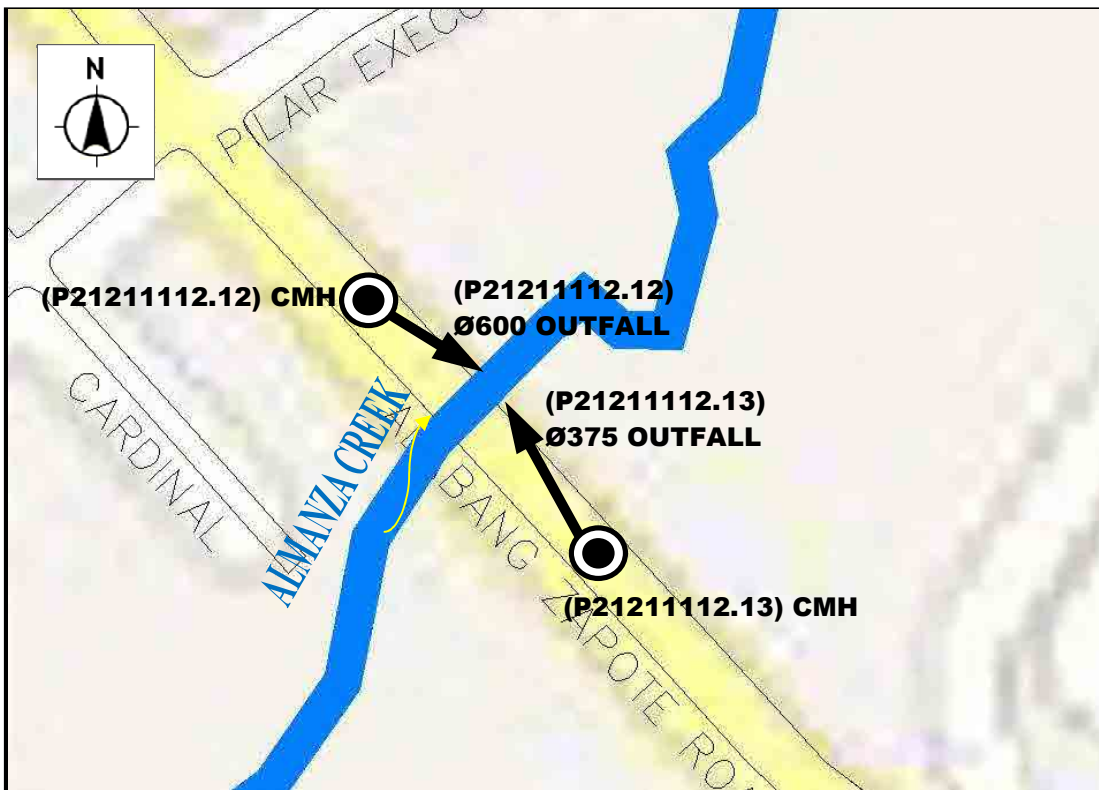
OUTFALL NO. P21211112.9 to P21211112.10U







OUTFALL NO. P21211112.12 to P21211112.13





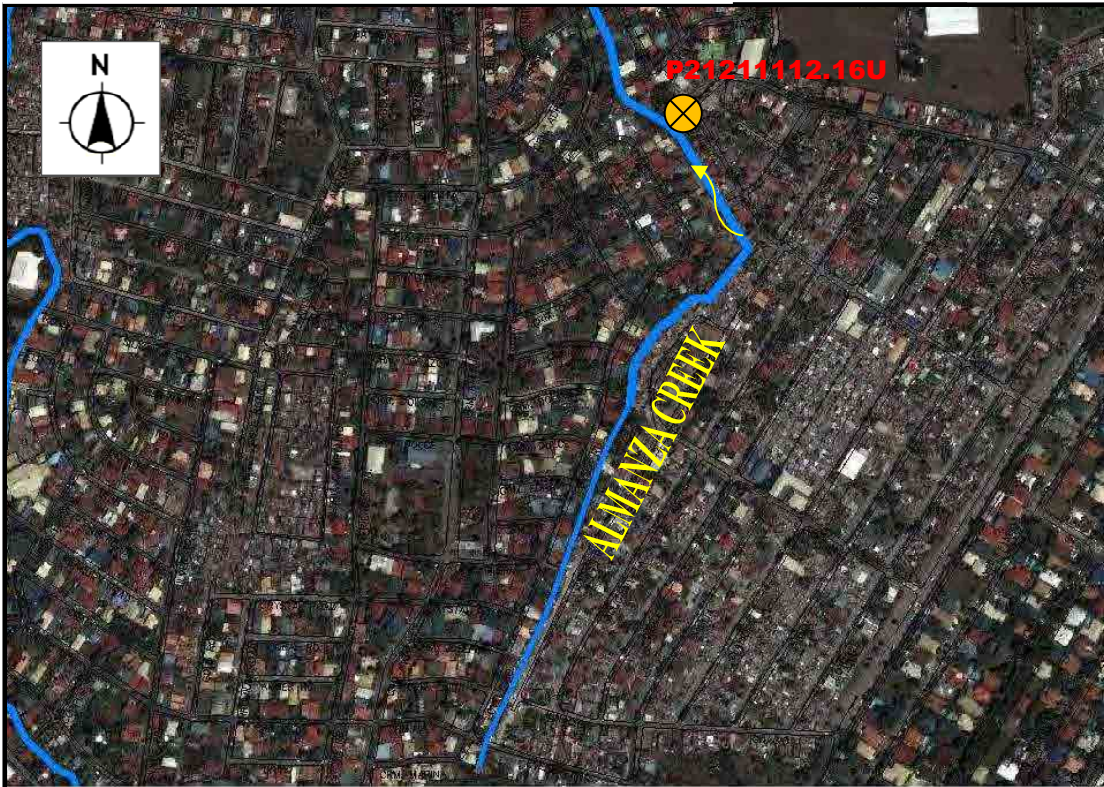
OUTFALL NO. P21211112.14 to P21211112.15U



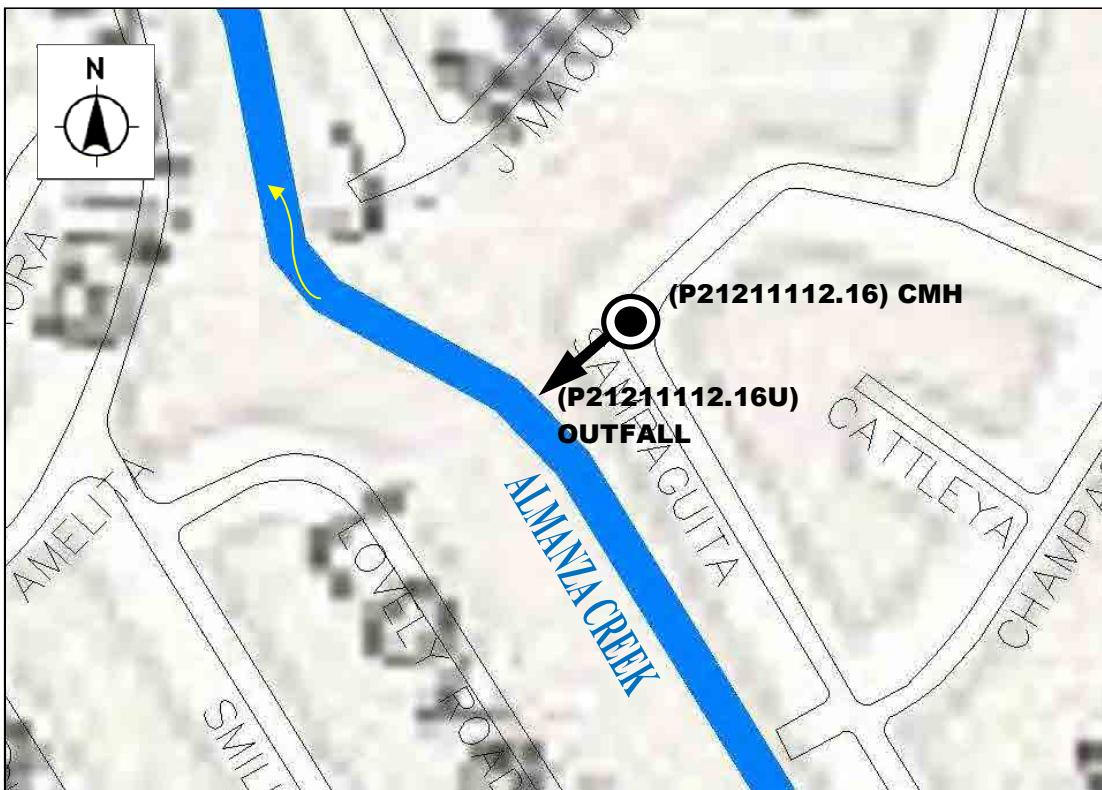


OUTFALL NO. P21211112.16U

GP29

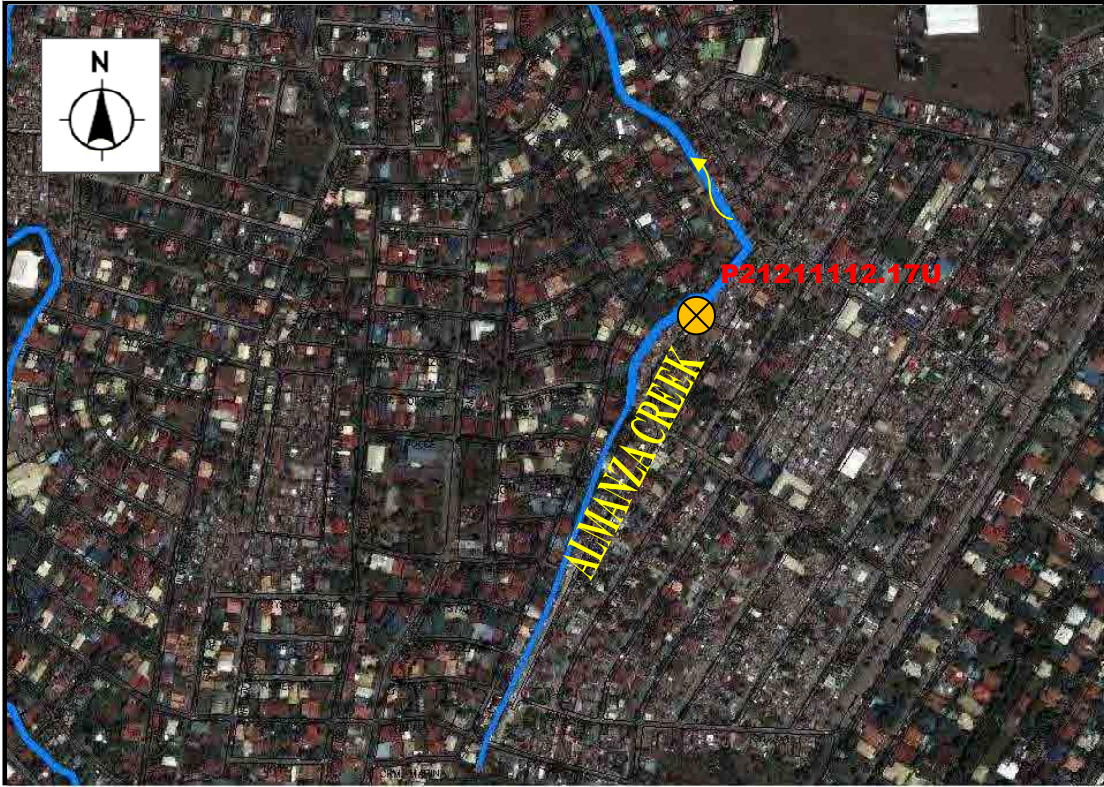


OUTFALL NO. P21211112.16U



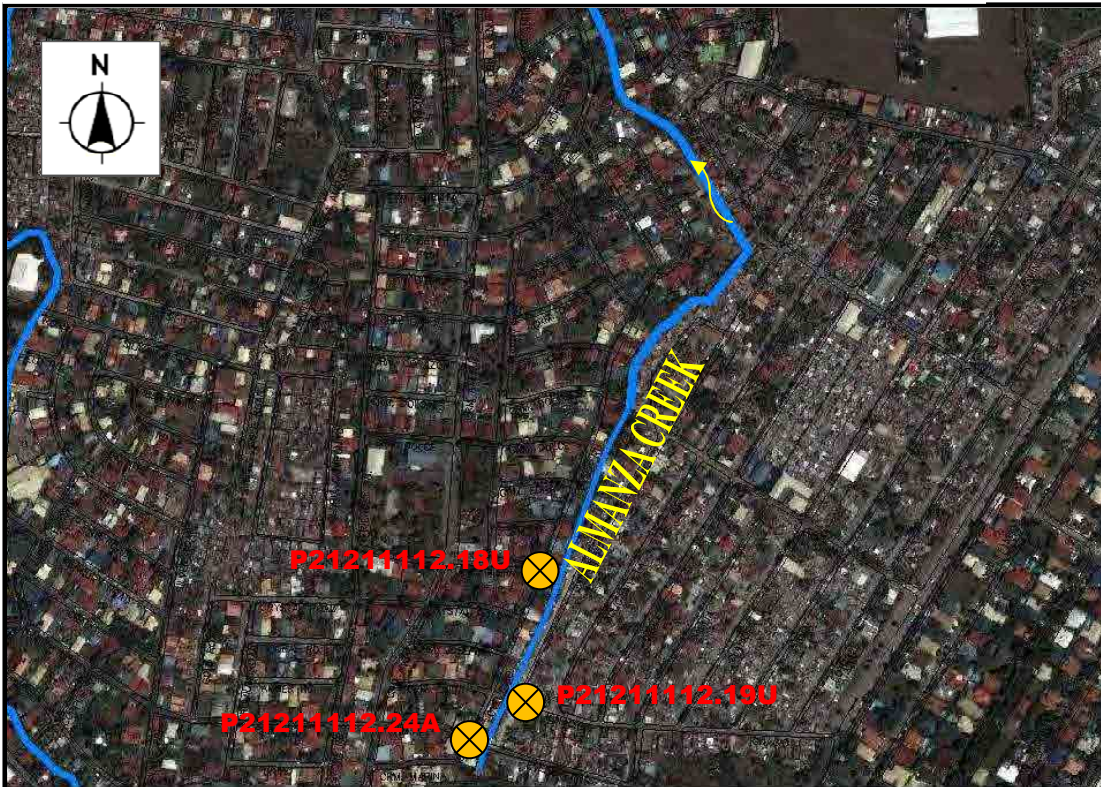
OUTFALL NO. P21211112.17U

GP29



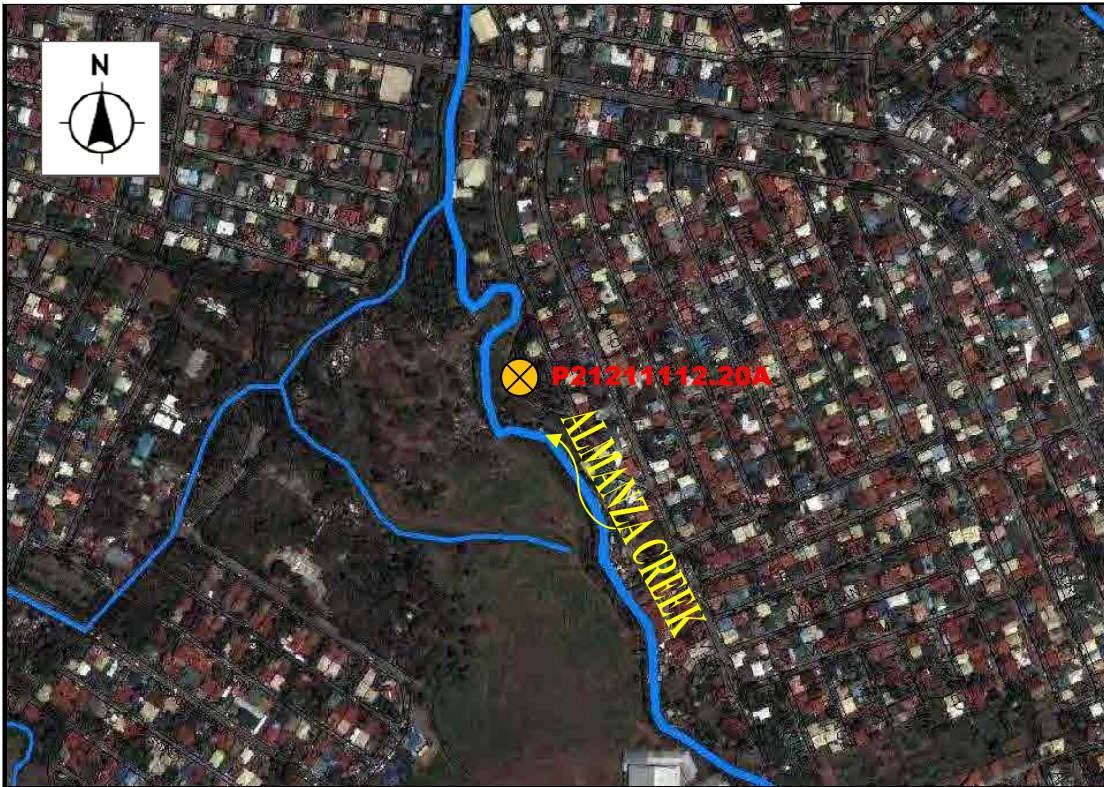
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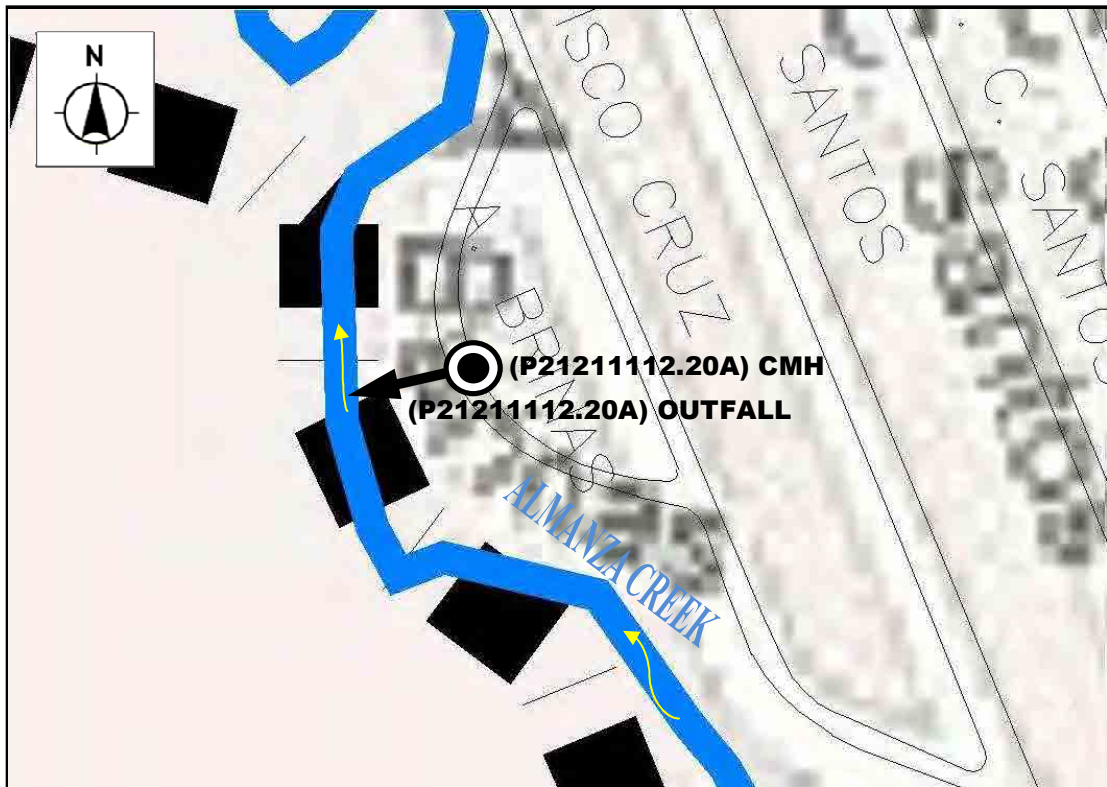


OUTFALL NO. P21211112.20A

GP24

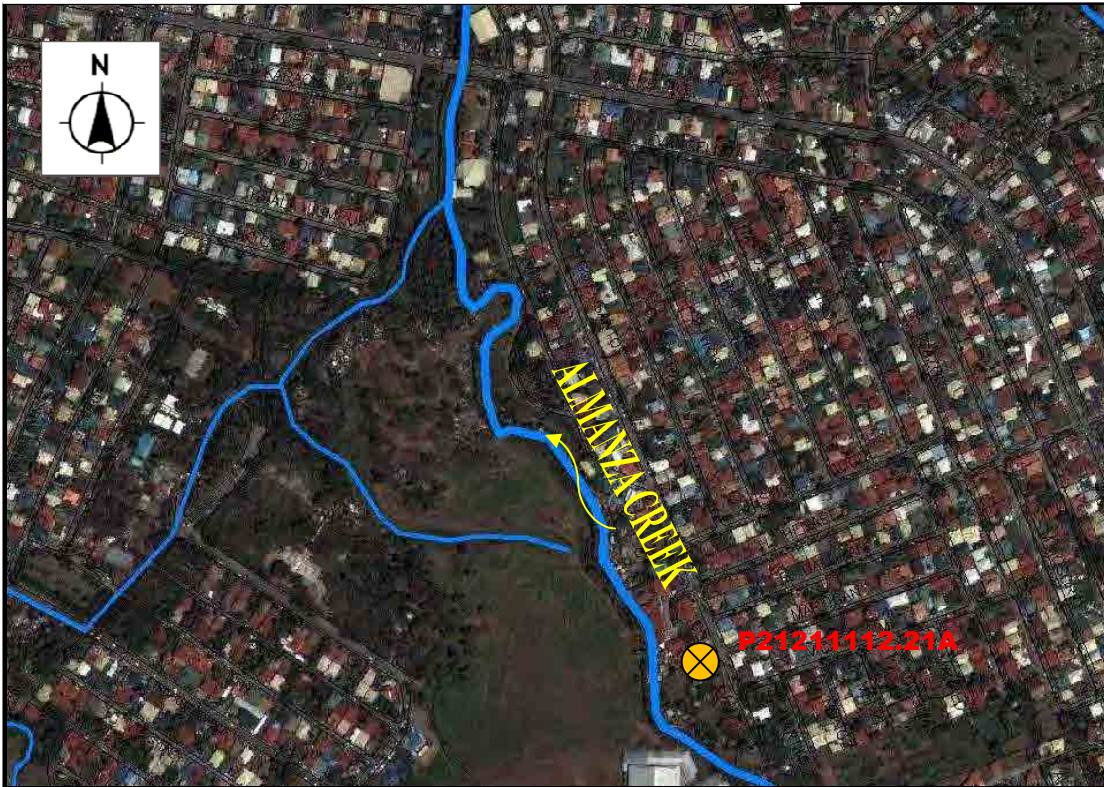


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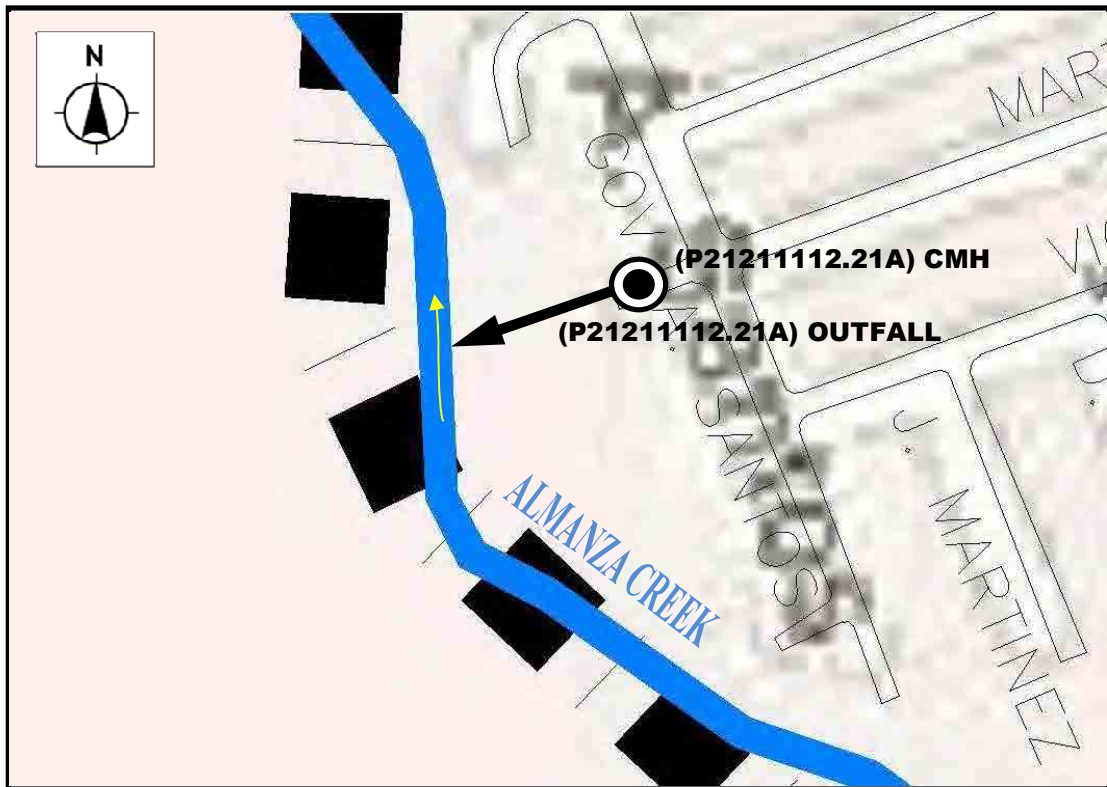


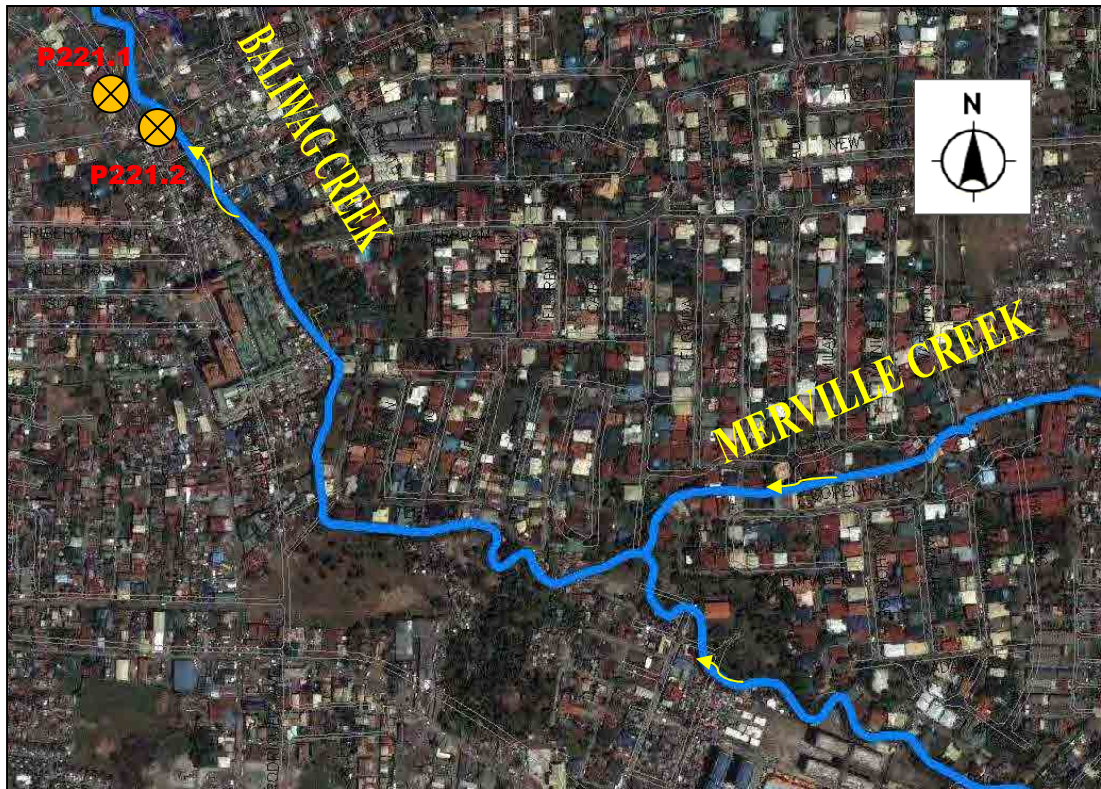
OUTFALL NO. P21211112.21A

GP24

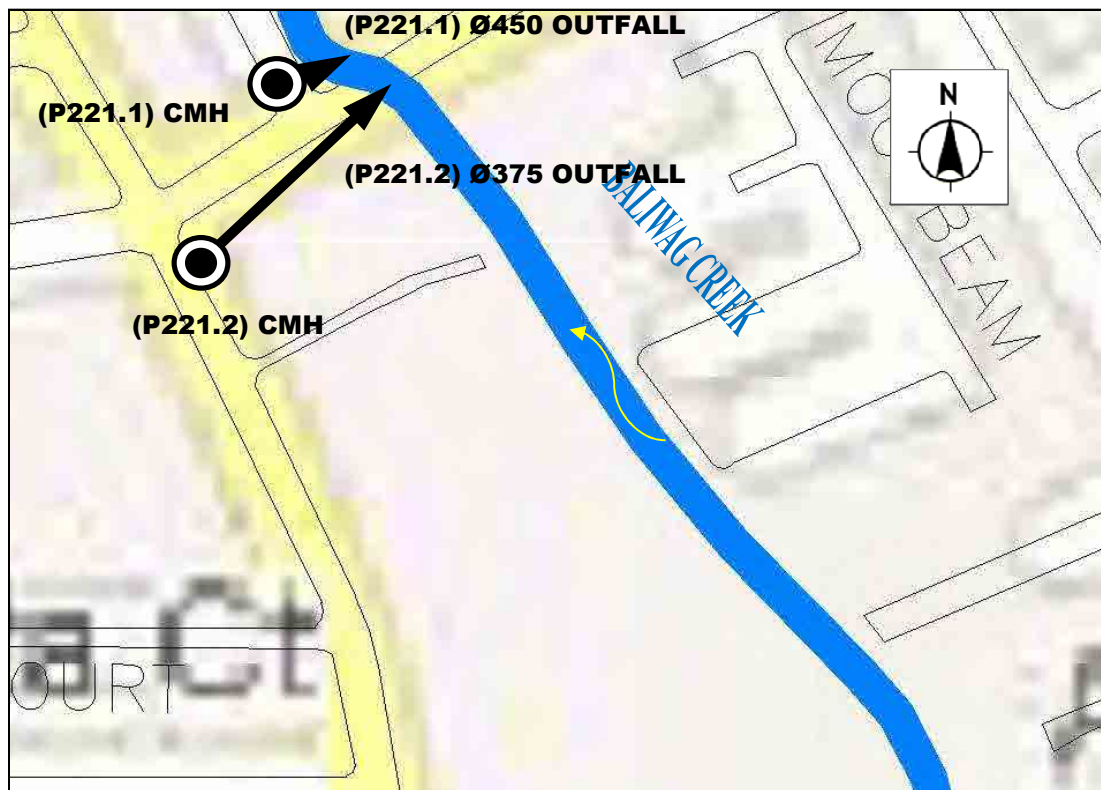


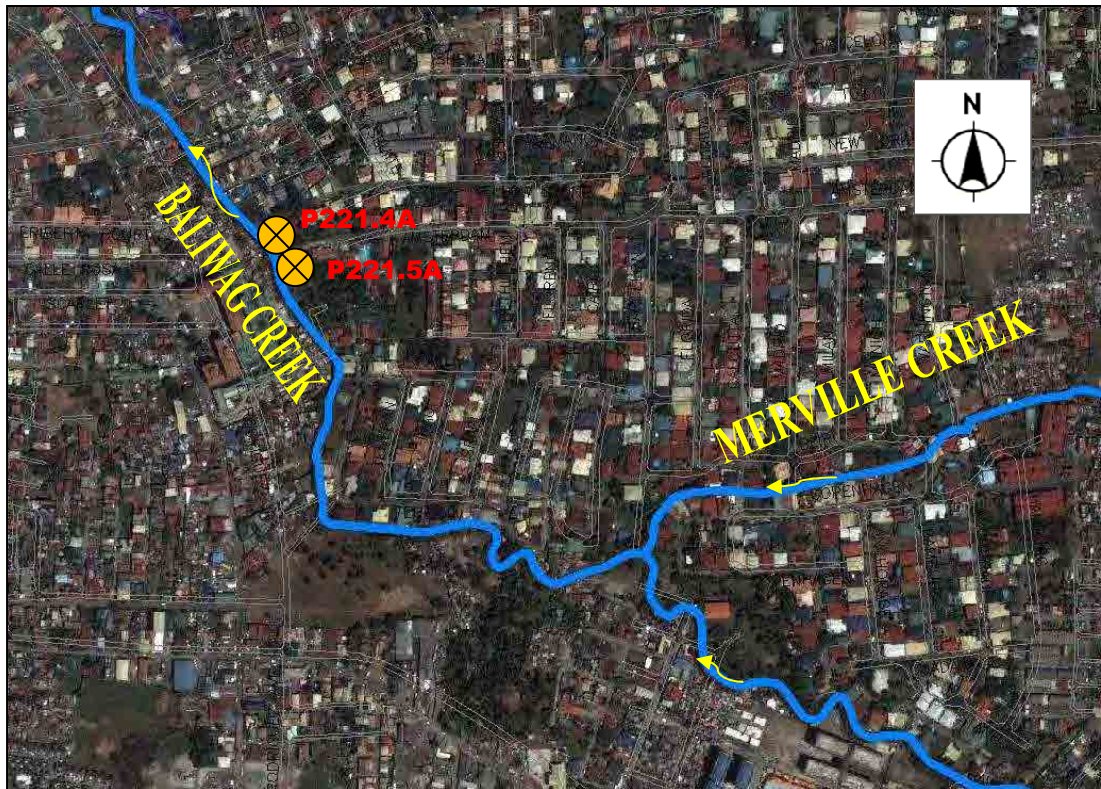
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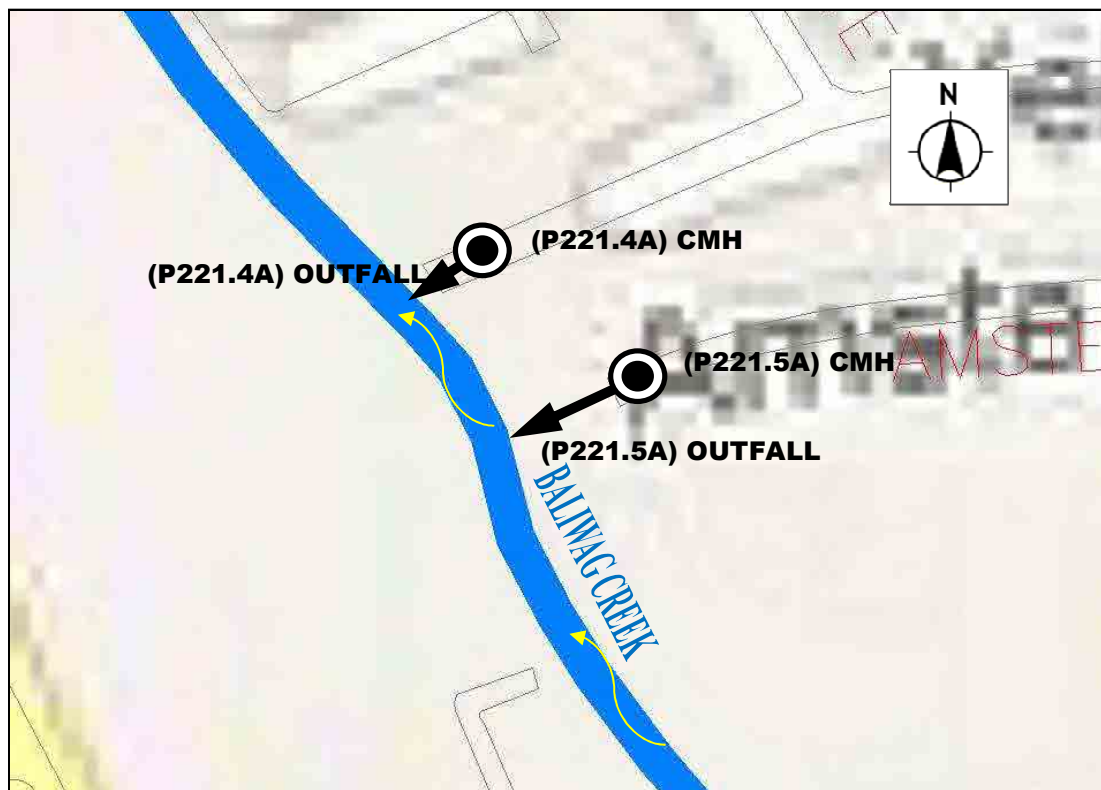


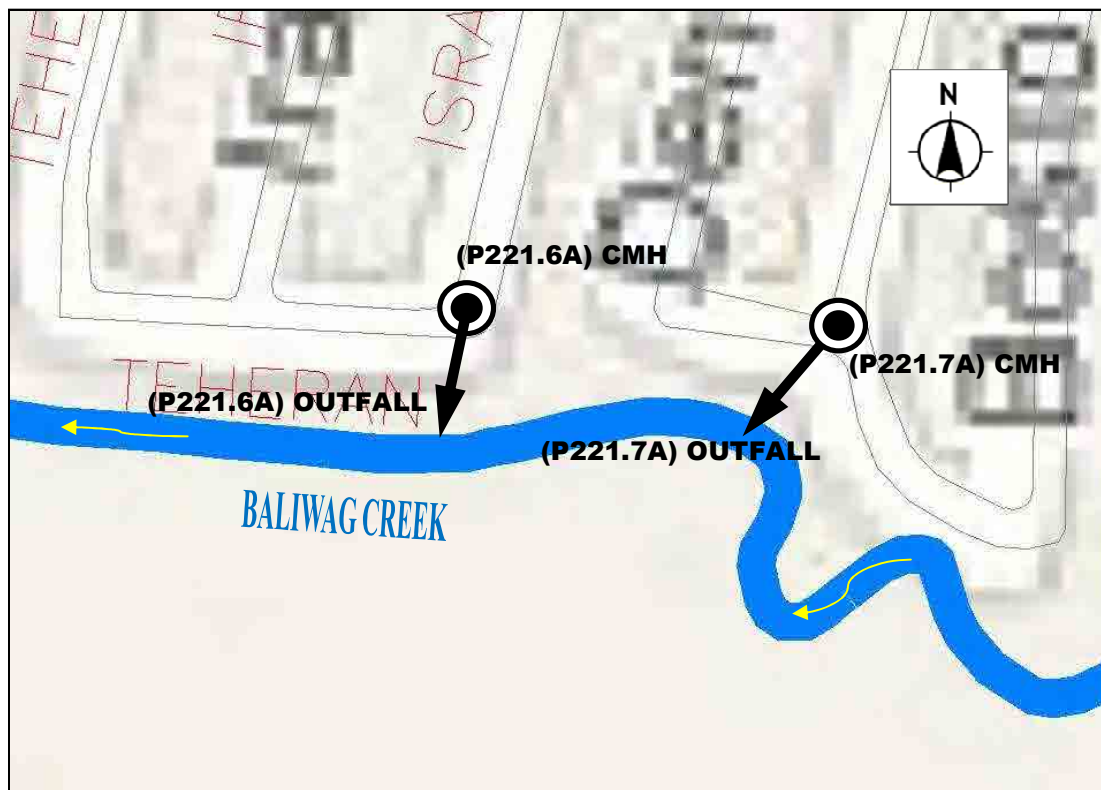
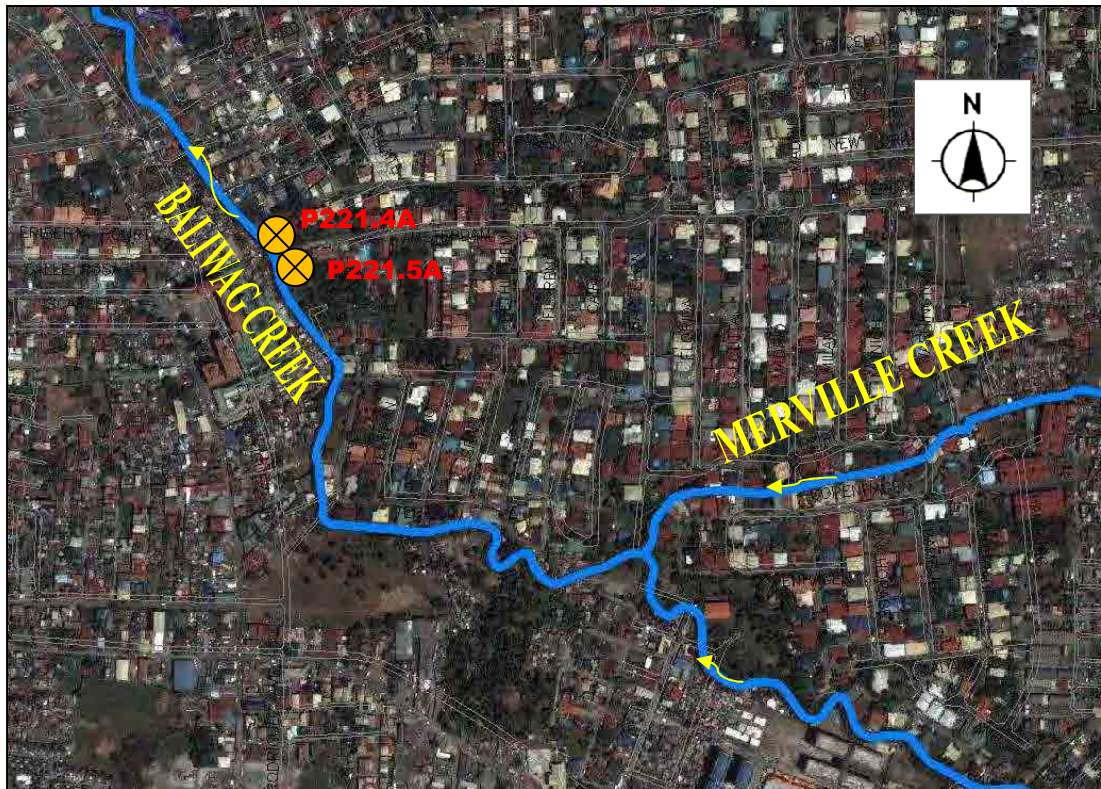
OUTFALL NO. P221.1 TO P221.2





OUTFALL NO. P221.4A TO P221.5A

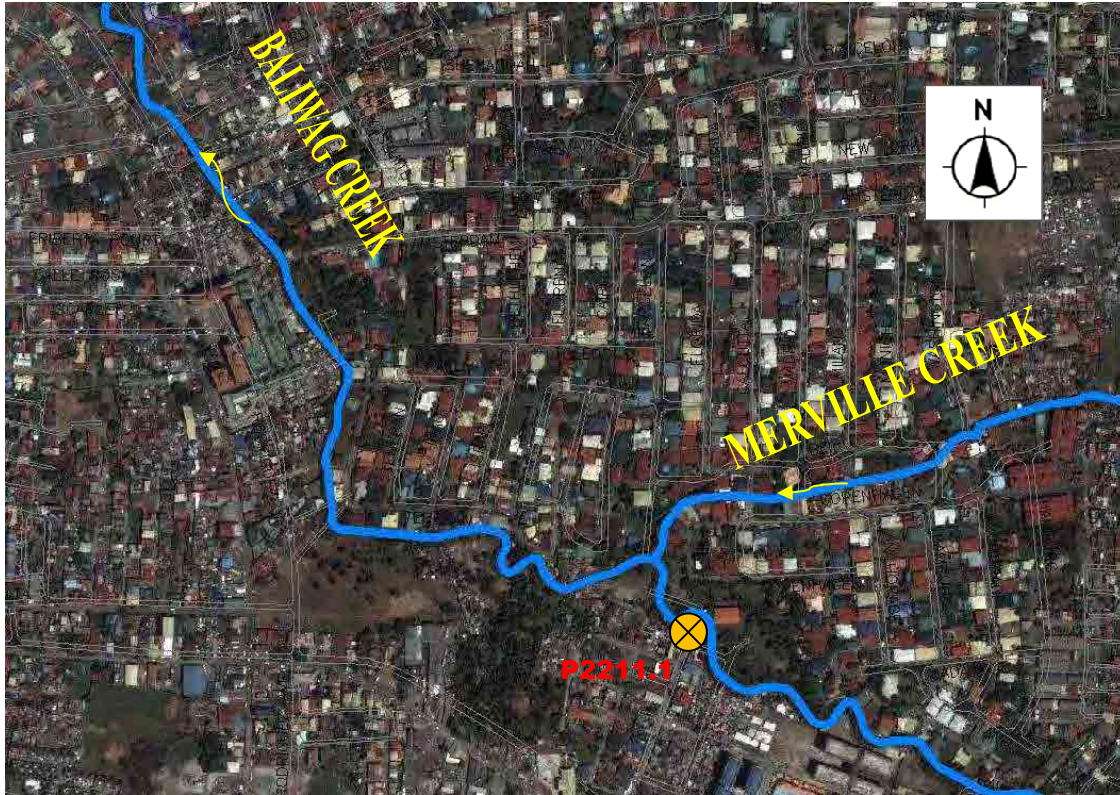




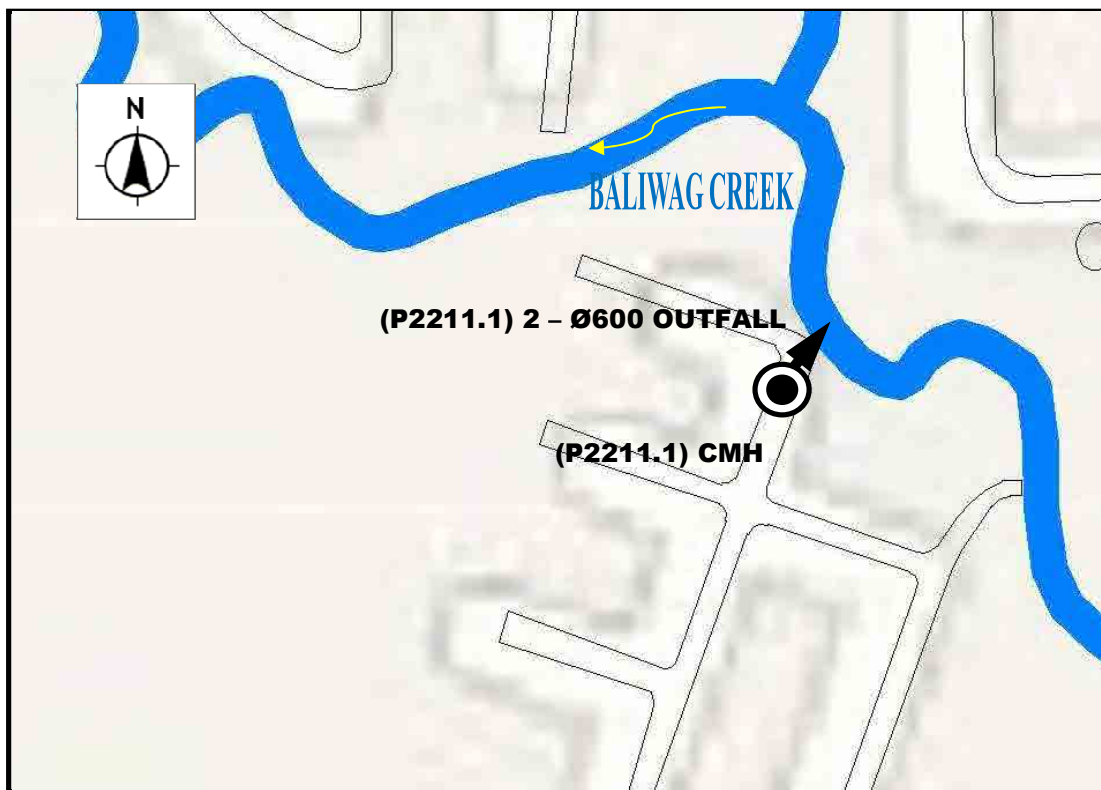


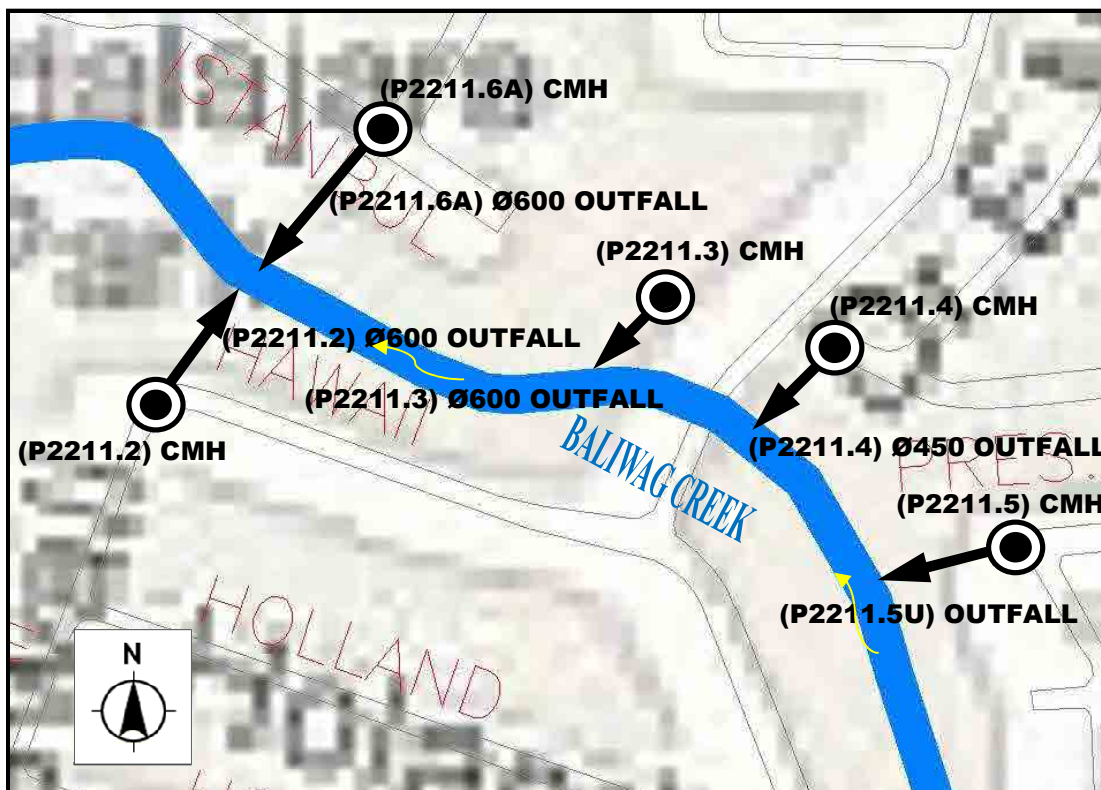
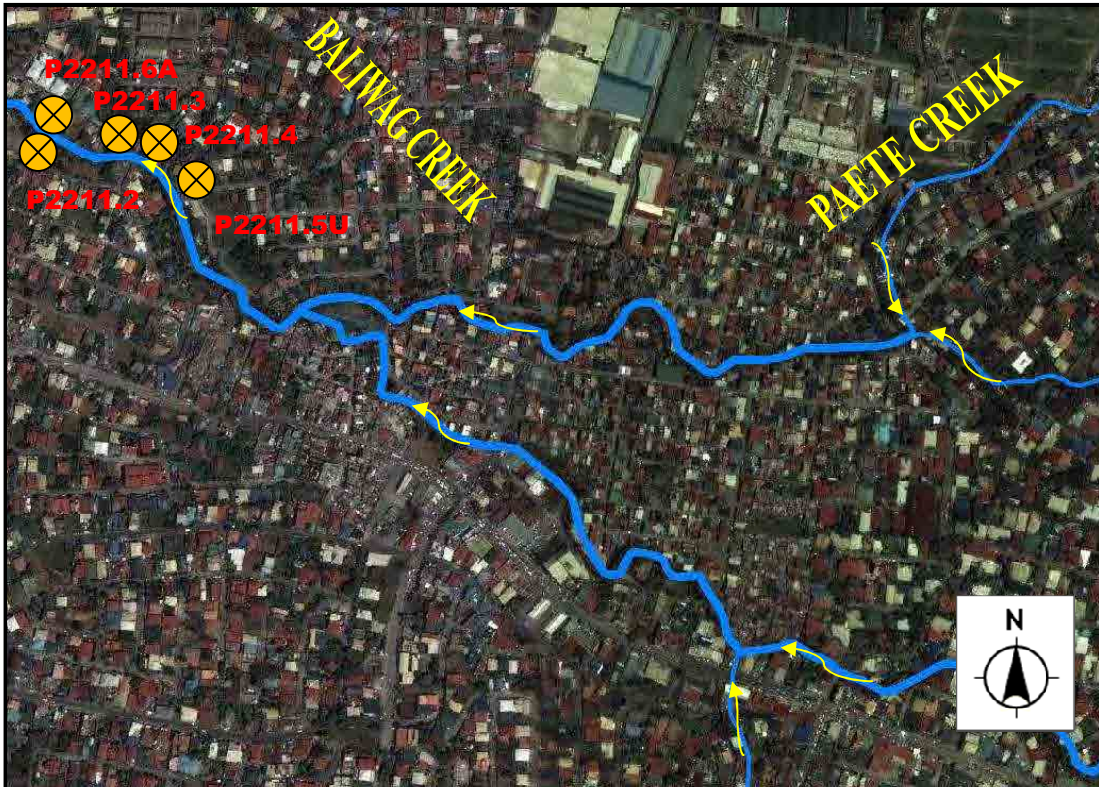
OUTFALL NO. P2211.1

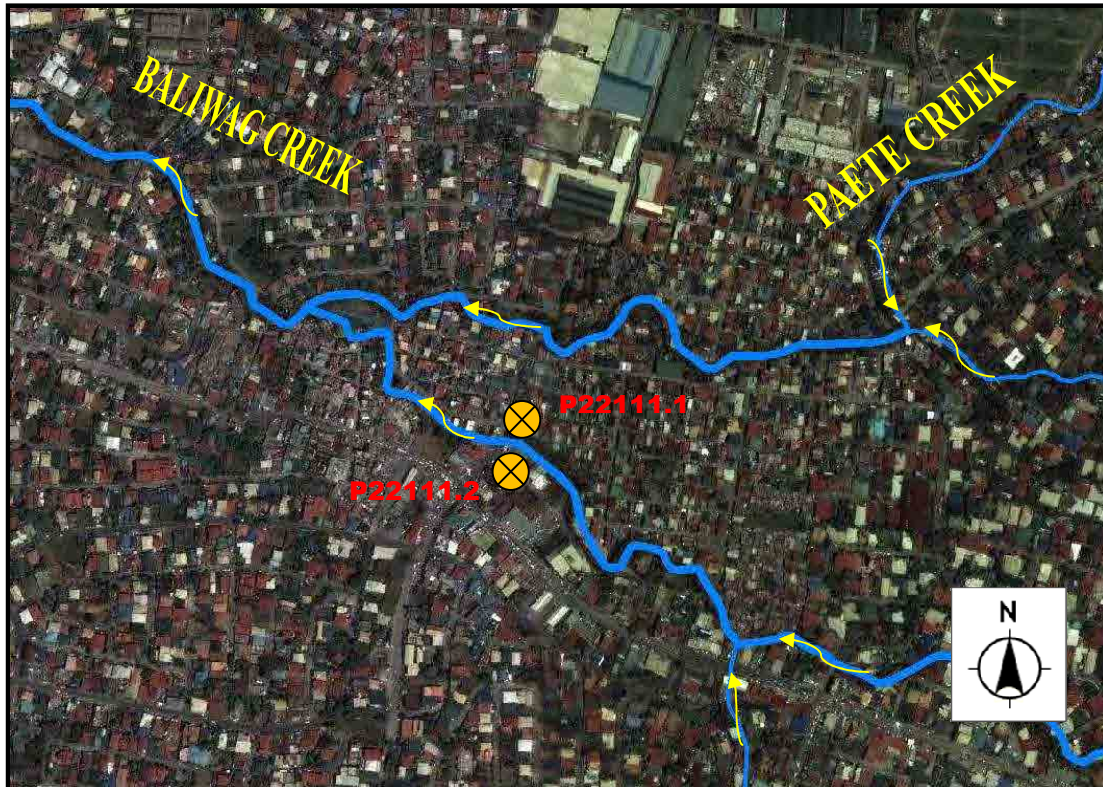
GP11



OUTFALL NO. P2211.1





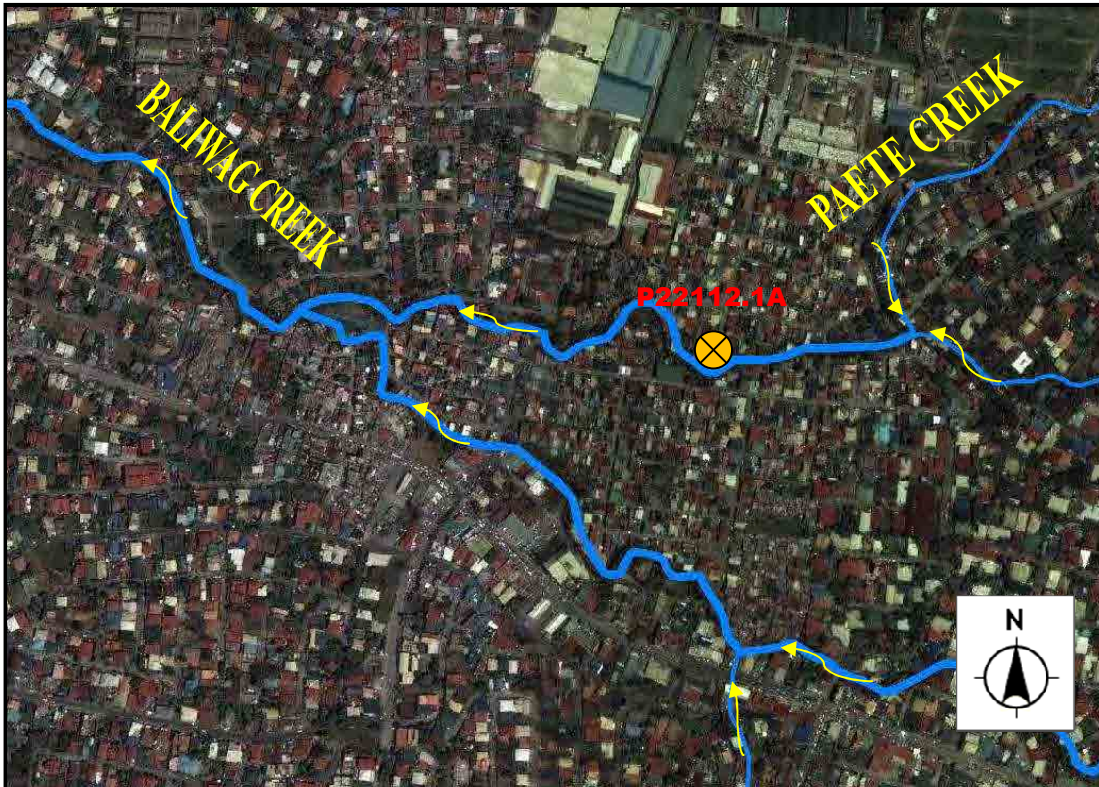


OUTFALL NO. P22111.1 TO P22111.2



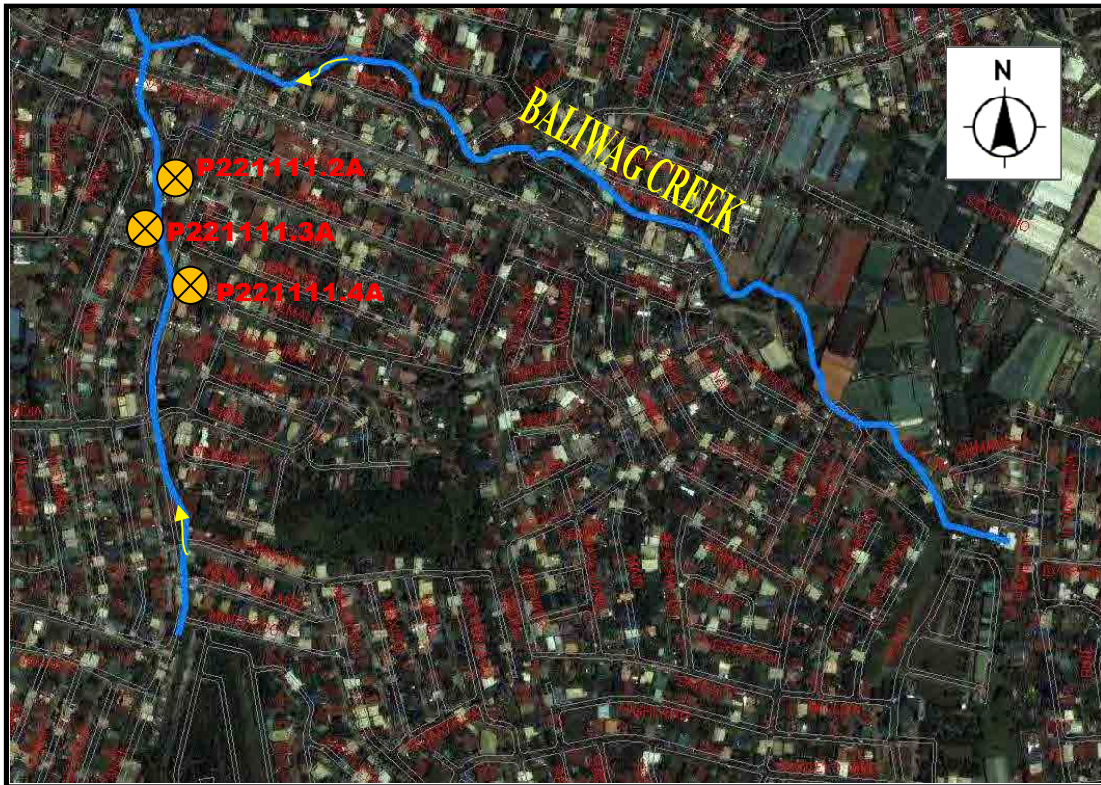
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GP14

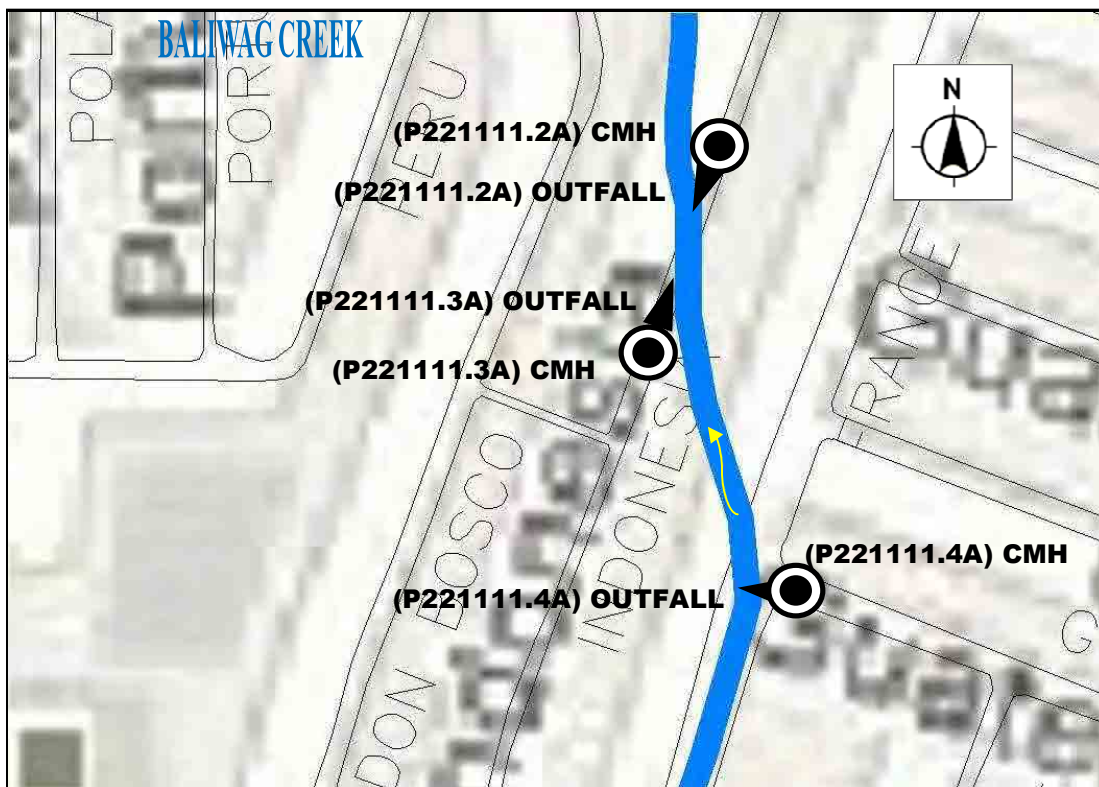


OUTFALL NO. P22112.1A





OUTFALL NO. P221111.2A TO P221111.4A

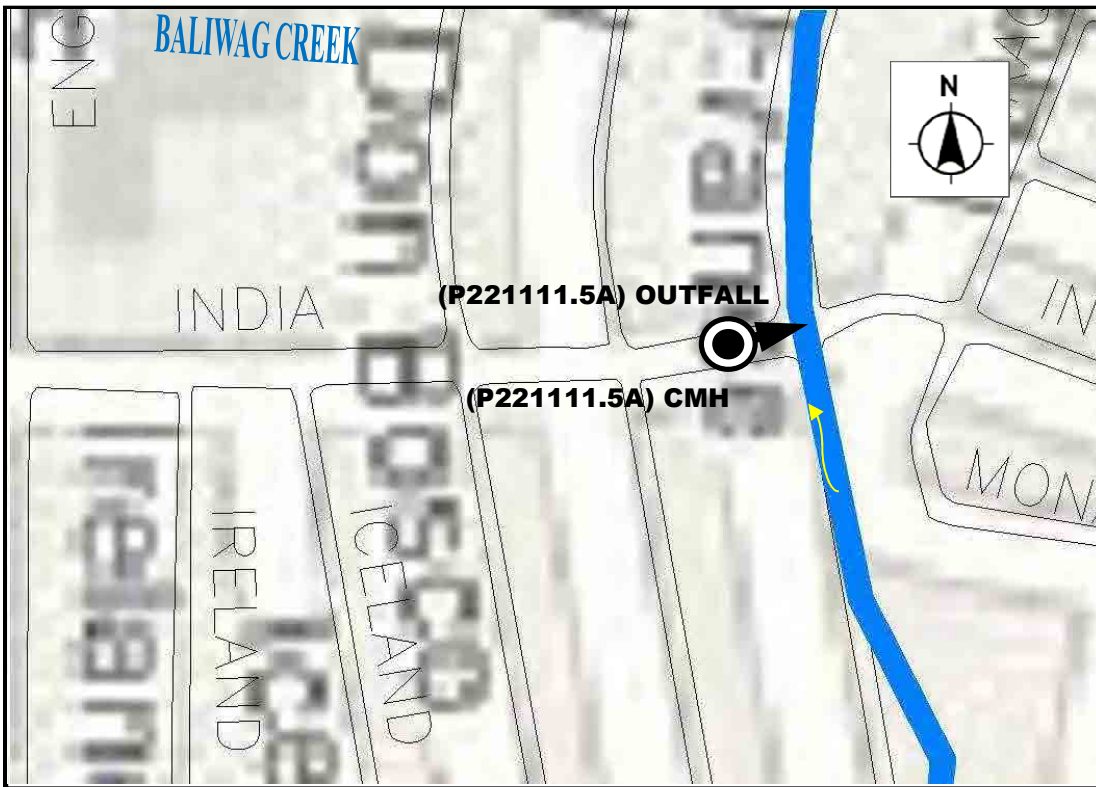


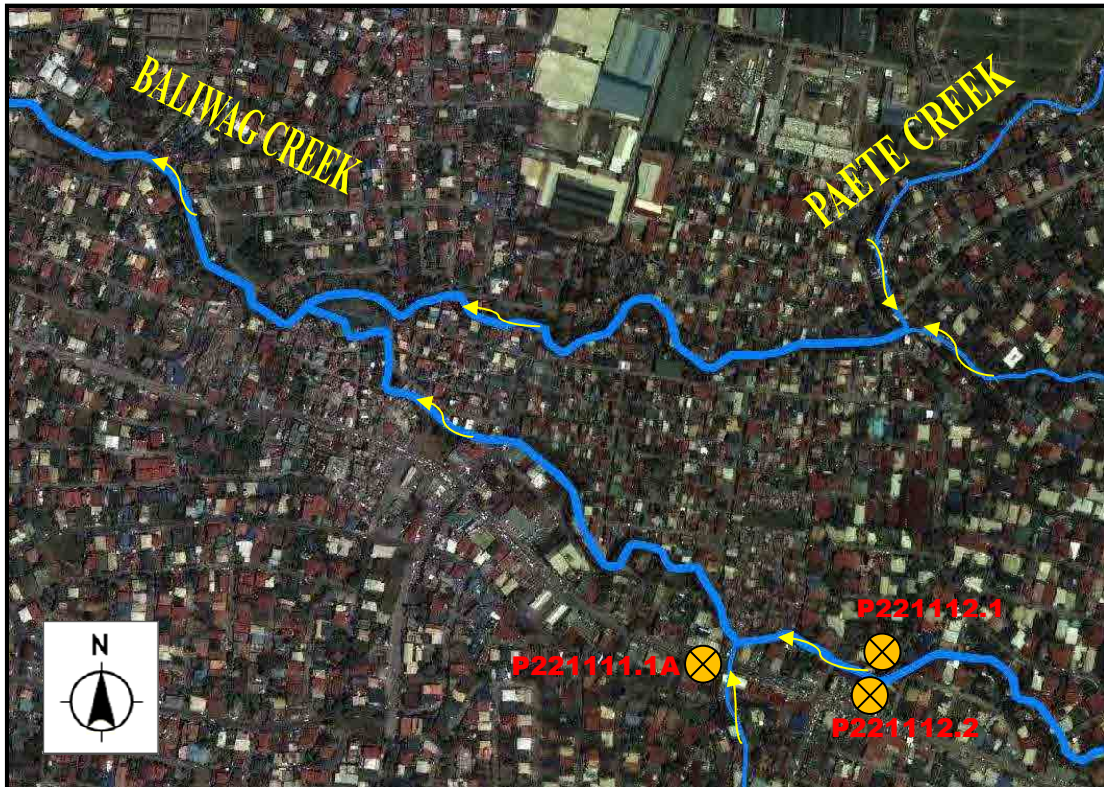
OUTFALL NO. P221111.5A

GP33

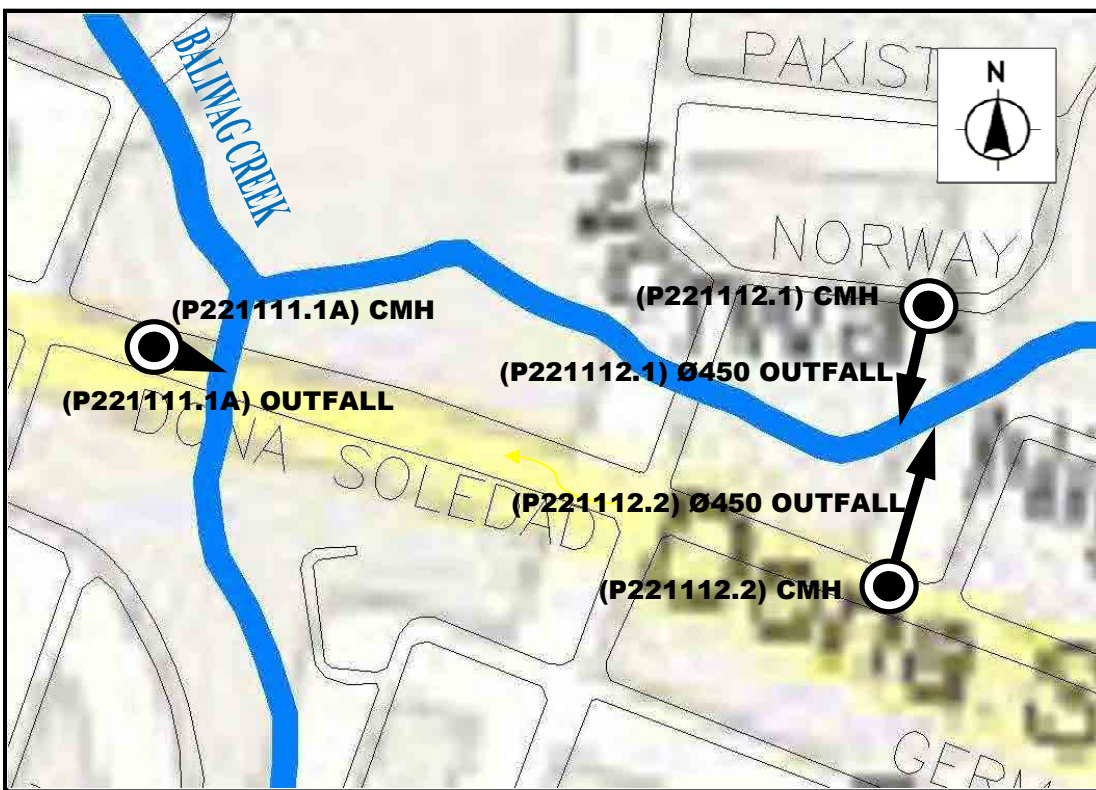


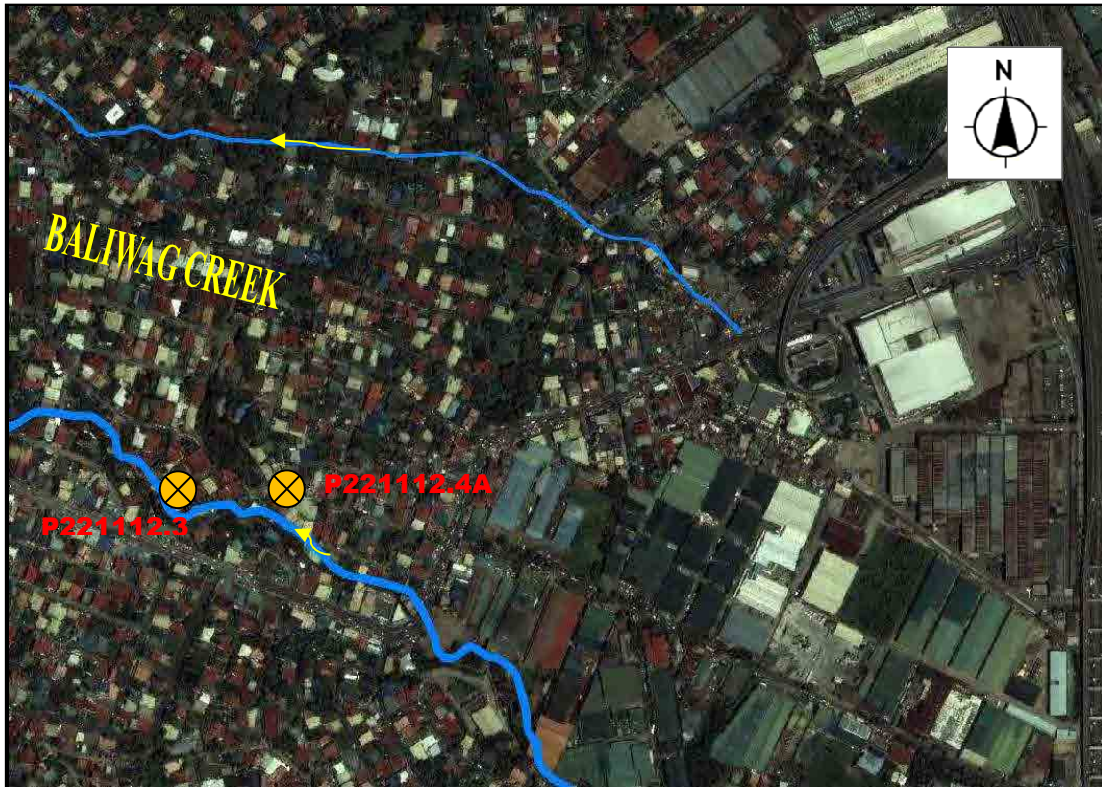
OUTFALL NO. P221111.5A



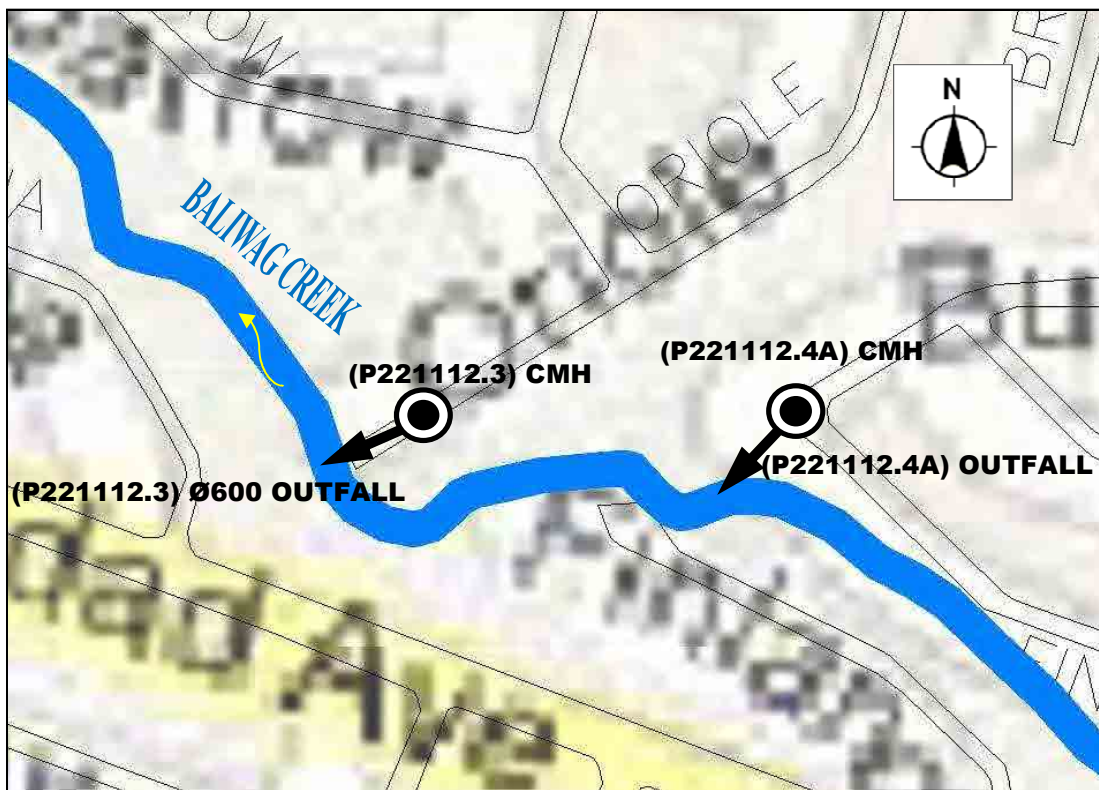


OUTFALL NO. P221112.1 TO P221112.2 & P221111.1A

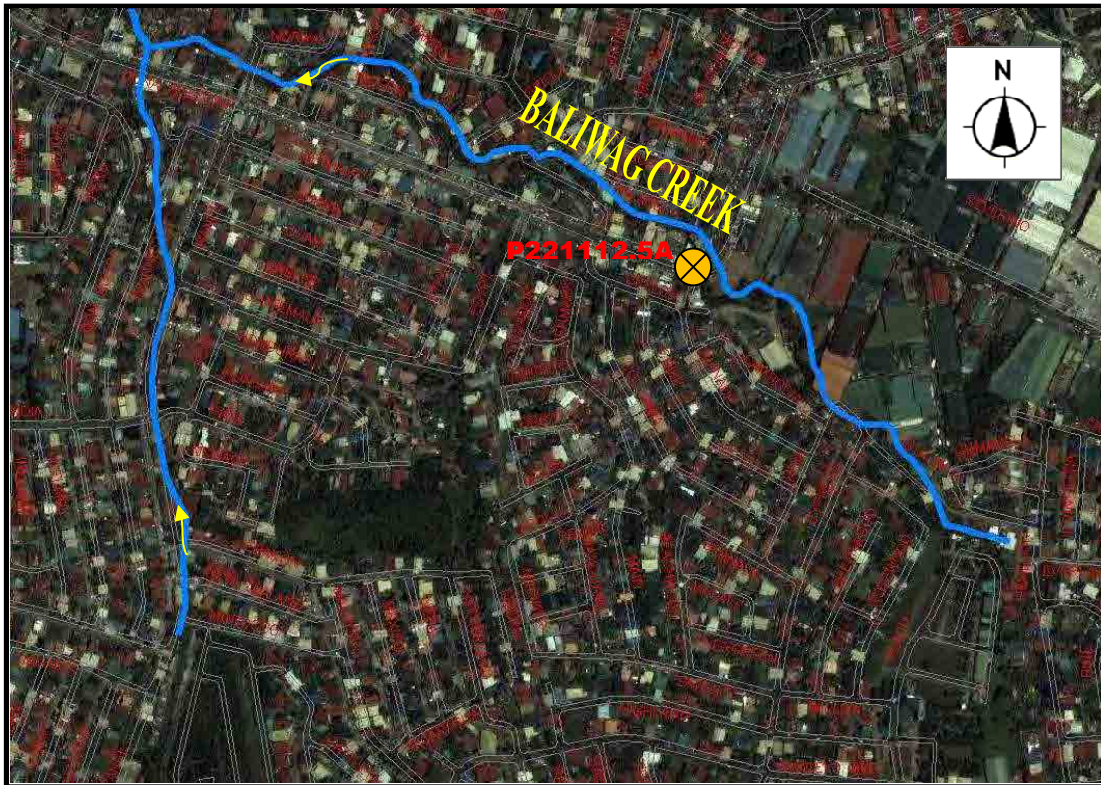




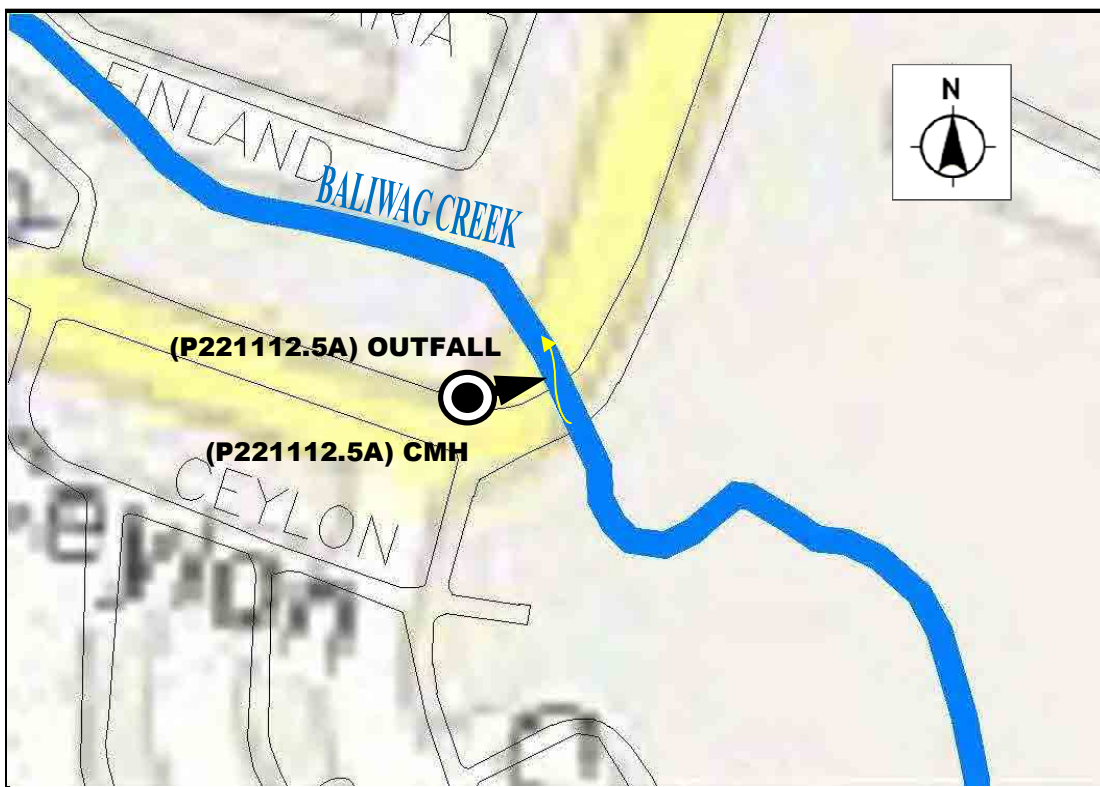
OUTFALL NO. P221112.3 & P221112.4A

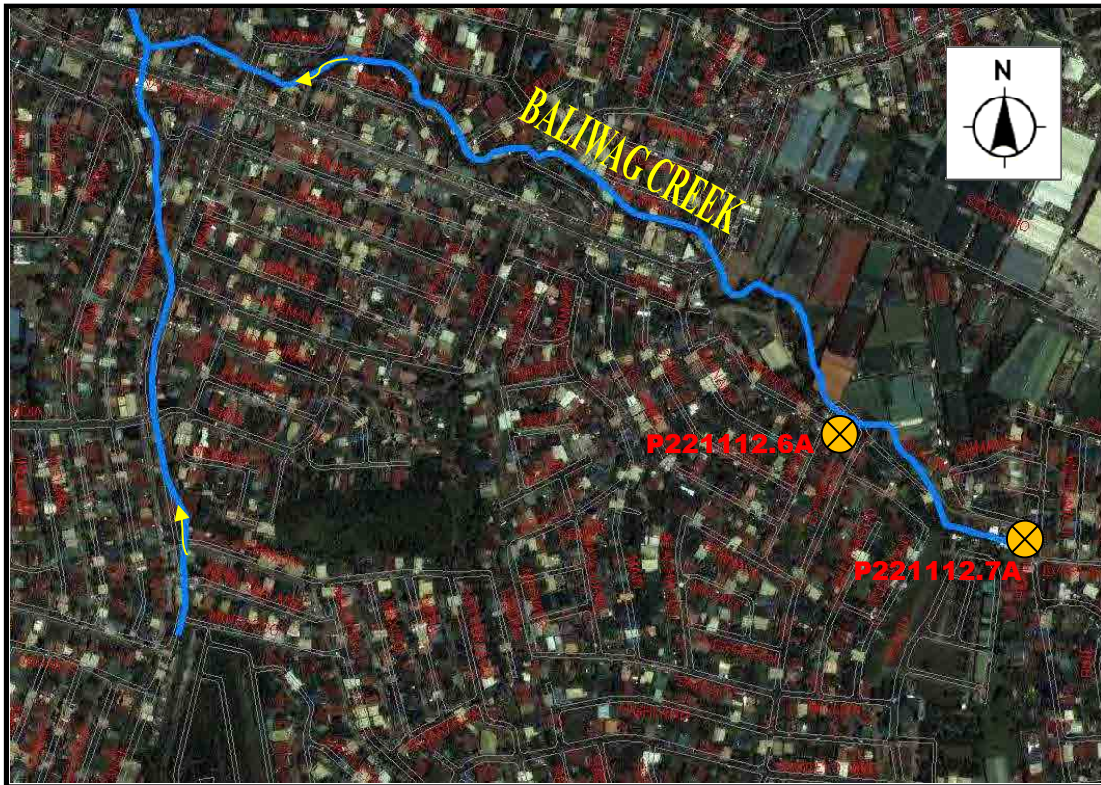




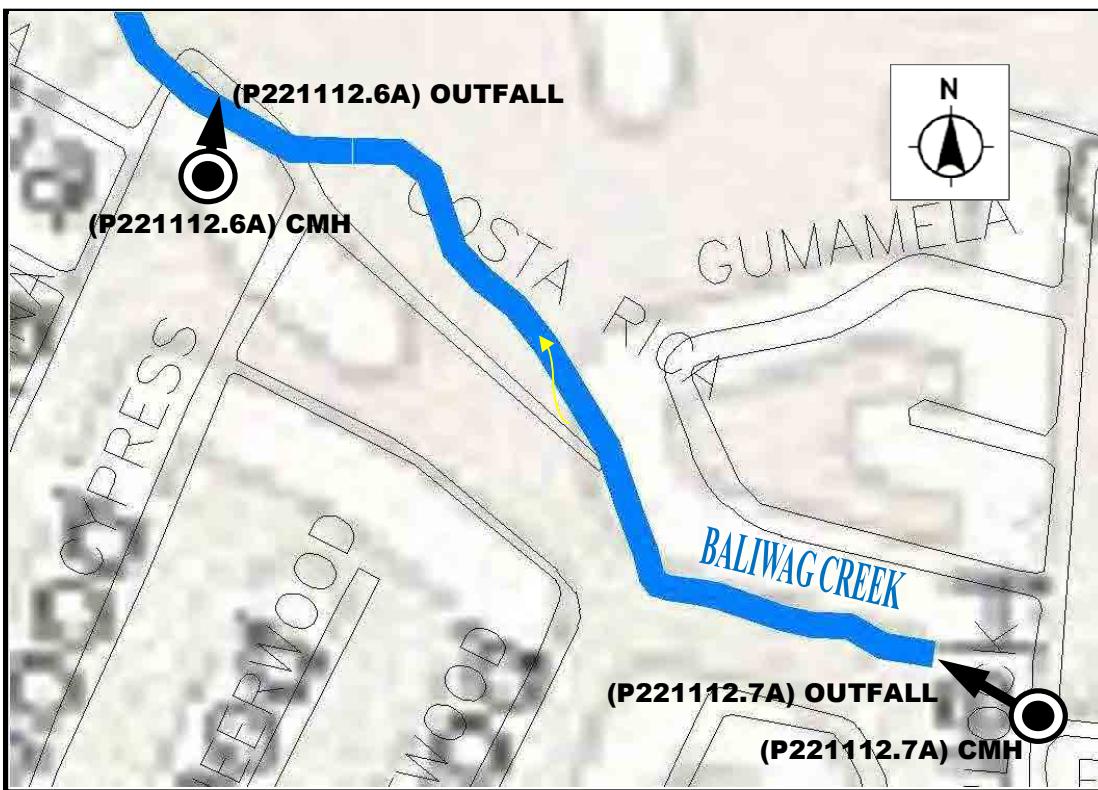


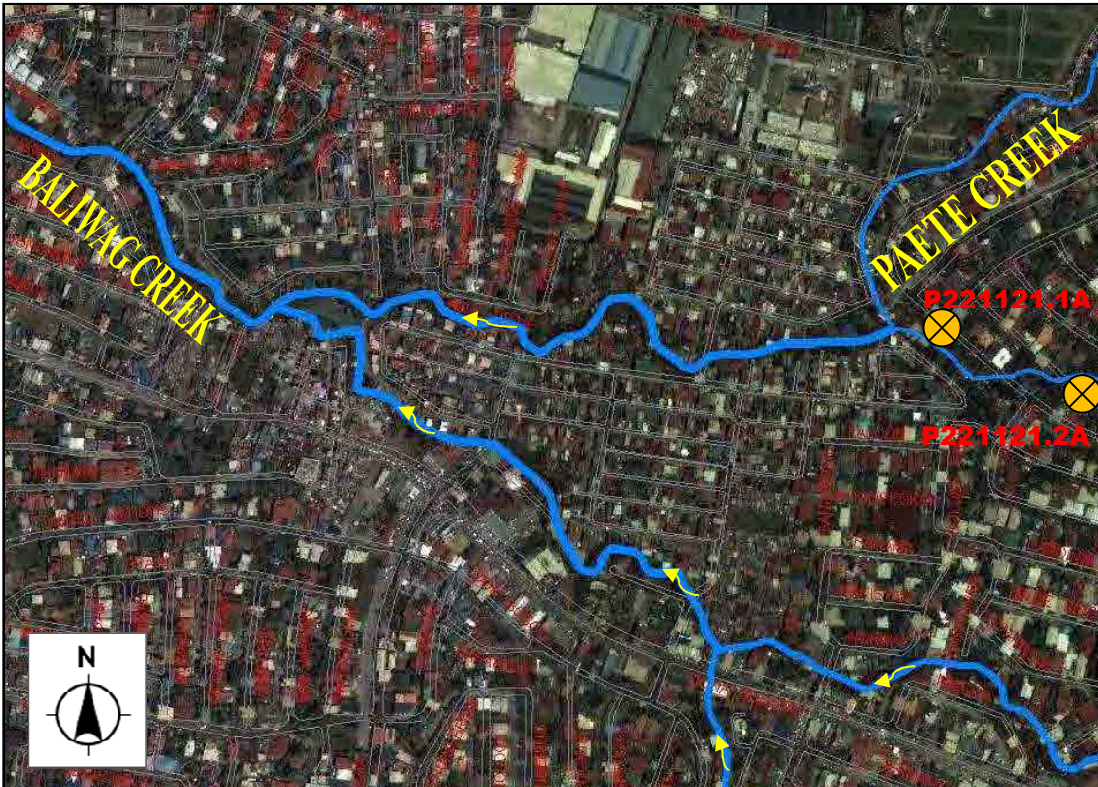
OUTFALL NO. P221112.5A

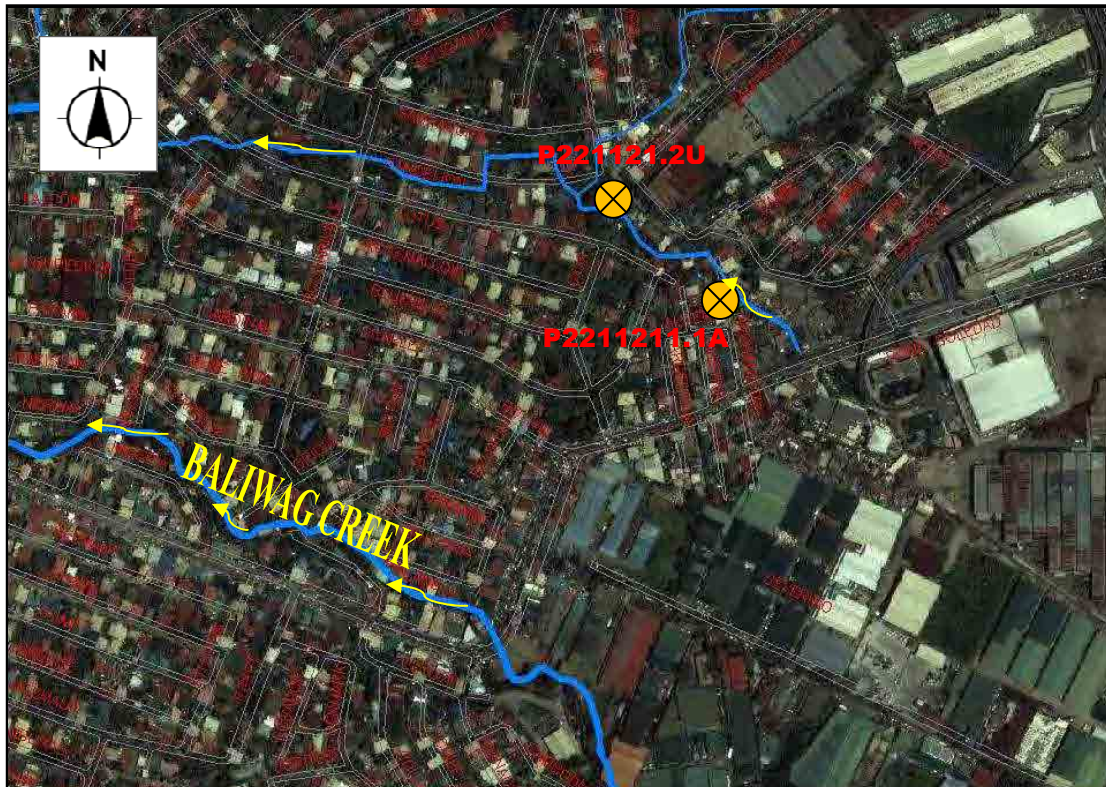




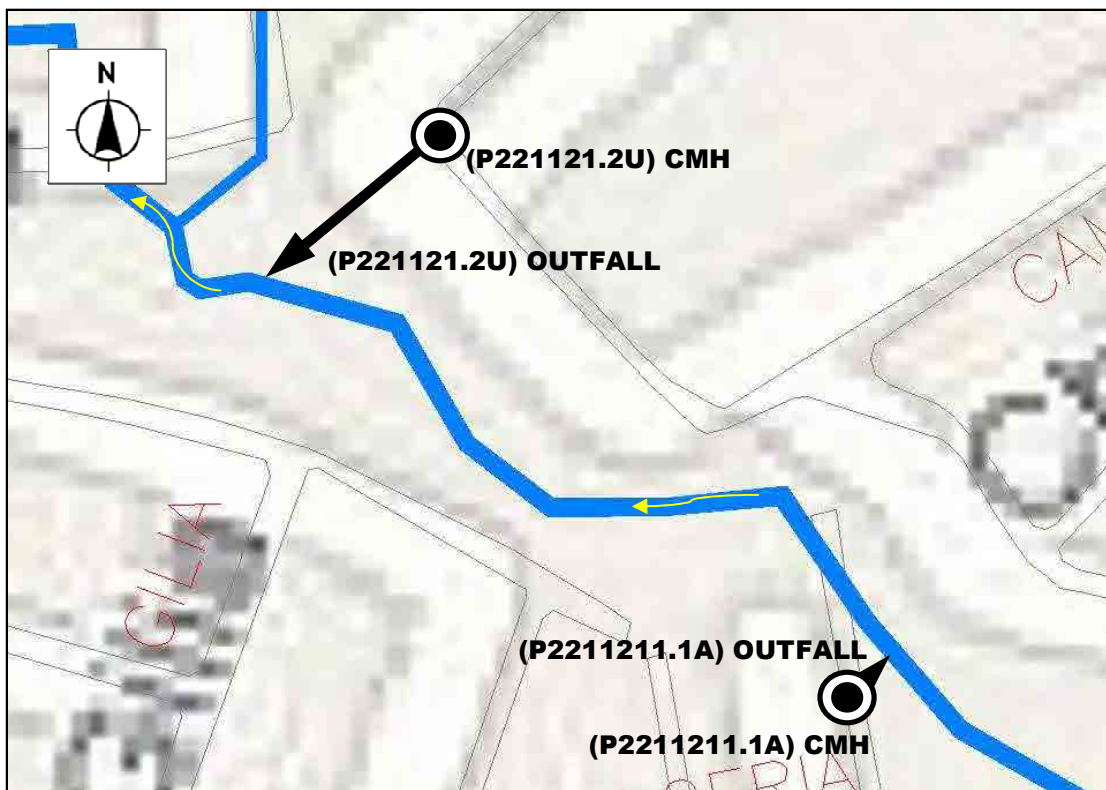
OUTFALL NO. P221112.6A & P221112.7A

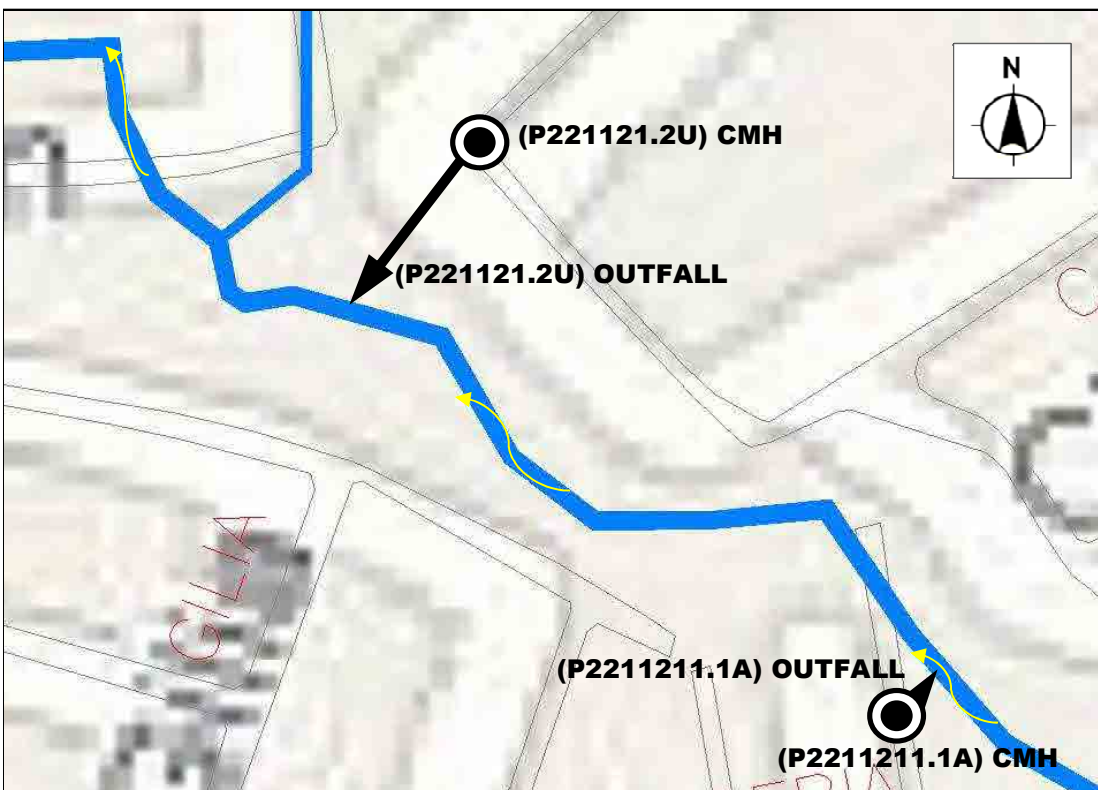
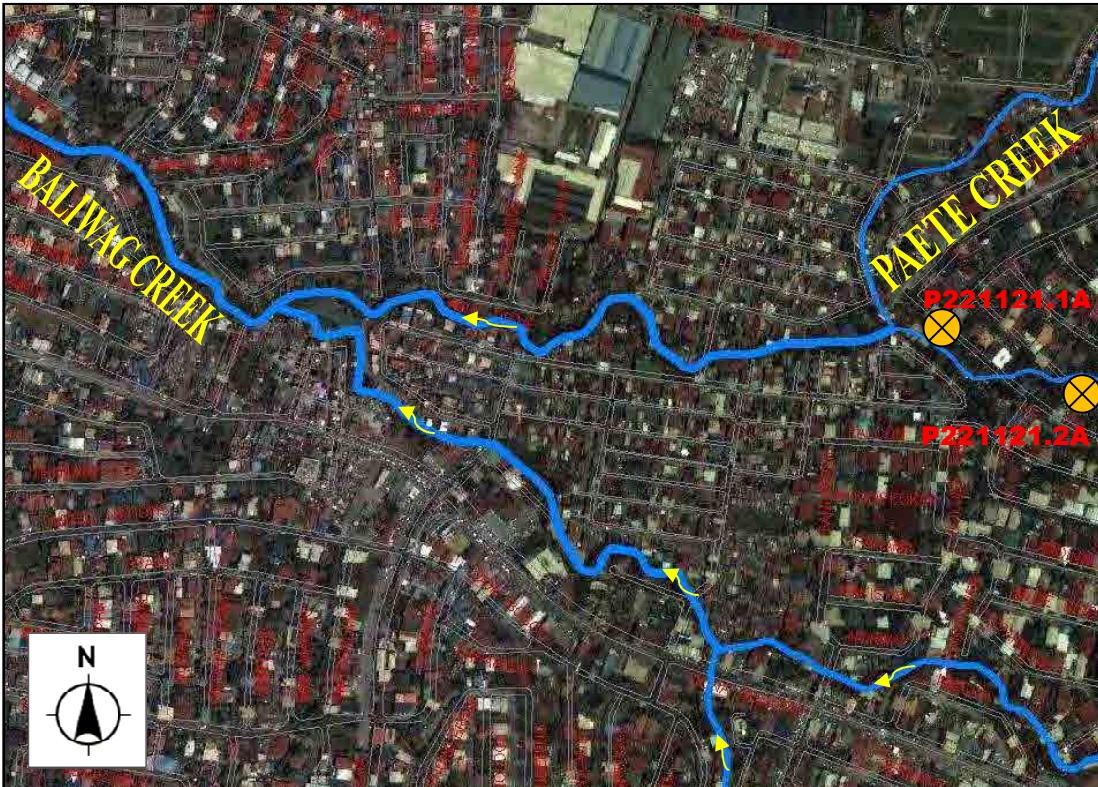






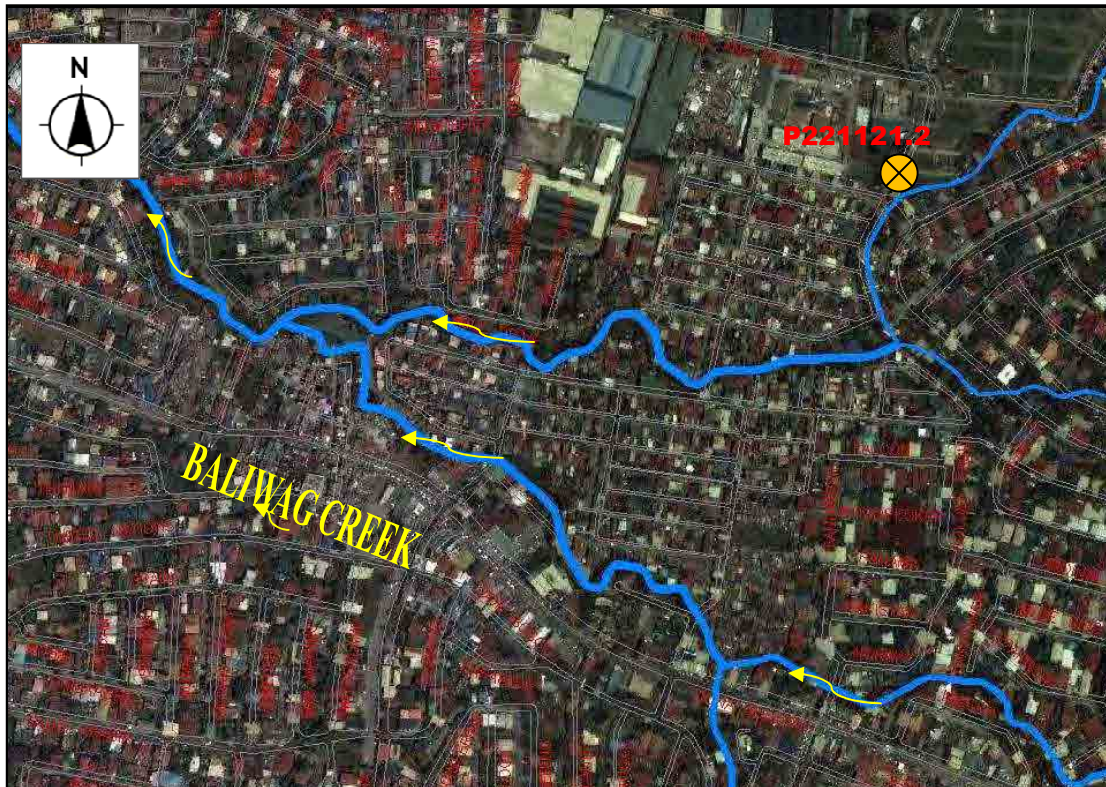
OUTFALL NO. P221121.2U and P2211211.1A





OUTFALL NO. P221122.2

GP15

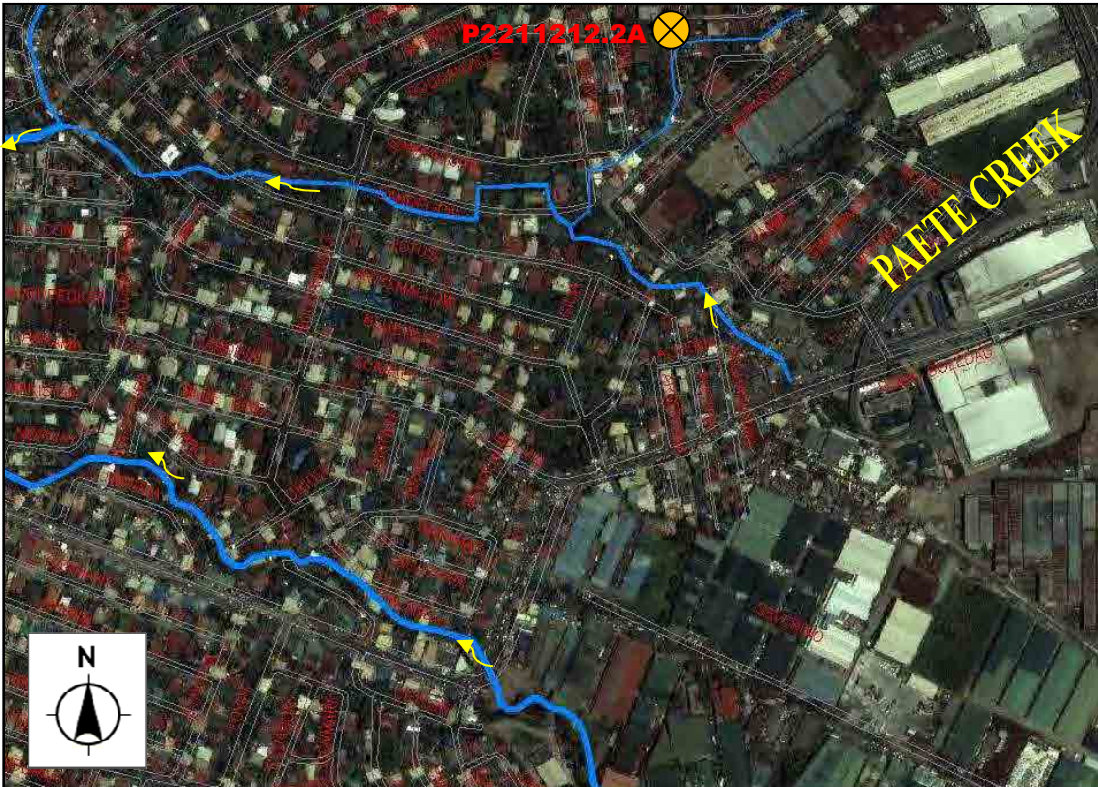


OUTFALL NO. P221122.2



OUTFALL NO. P2211212.2A

GP14



OUTFALL NO. P2211212.2A



OUTFALL NO. P2122.1U

GP13



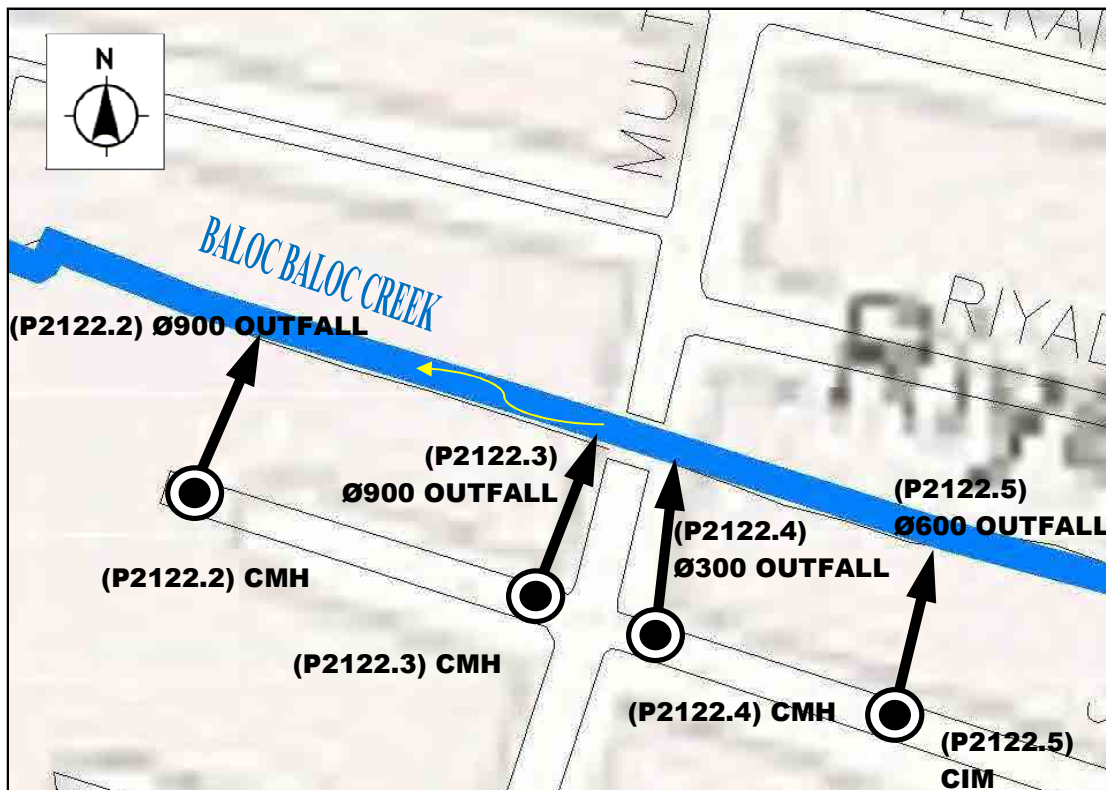
OUTFALL NO. P2122.1 U







OUTFALL NO. P2122.2 TO P2122.5



OUTFALL NO. P2122.6U

GP13

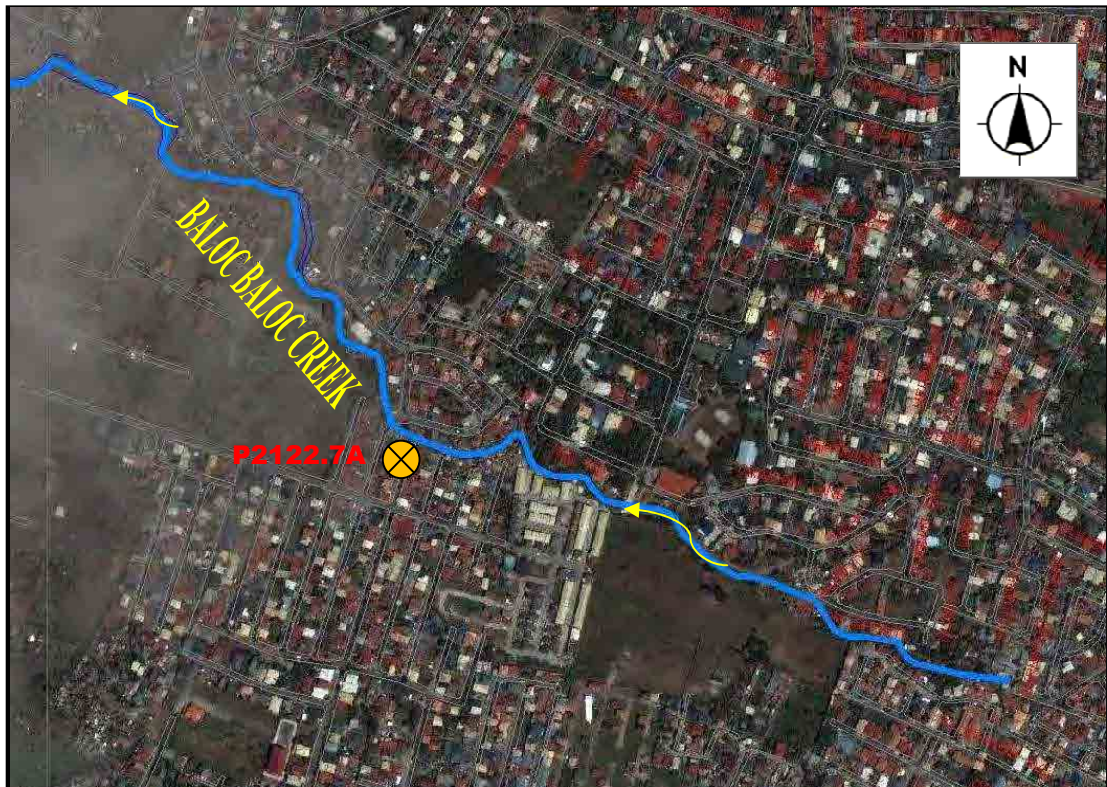


OUTFALL NO. P2122.6U



OUTFALL NO. P2122.7A

GP32

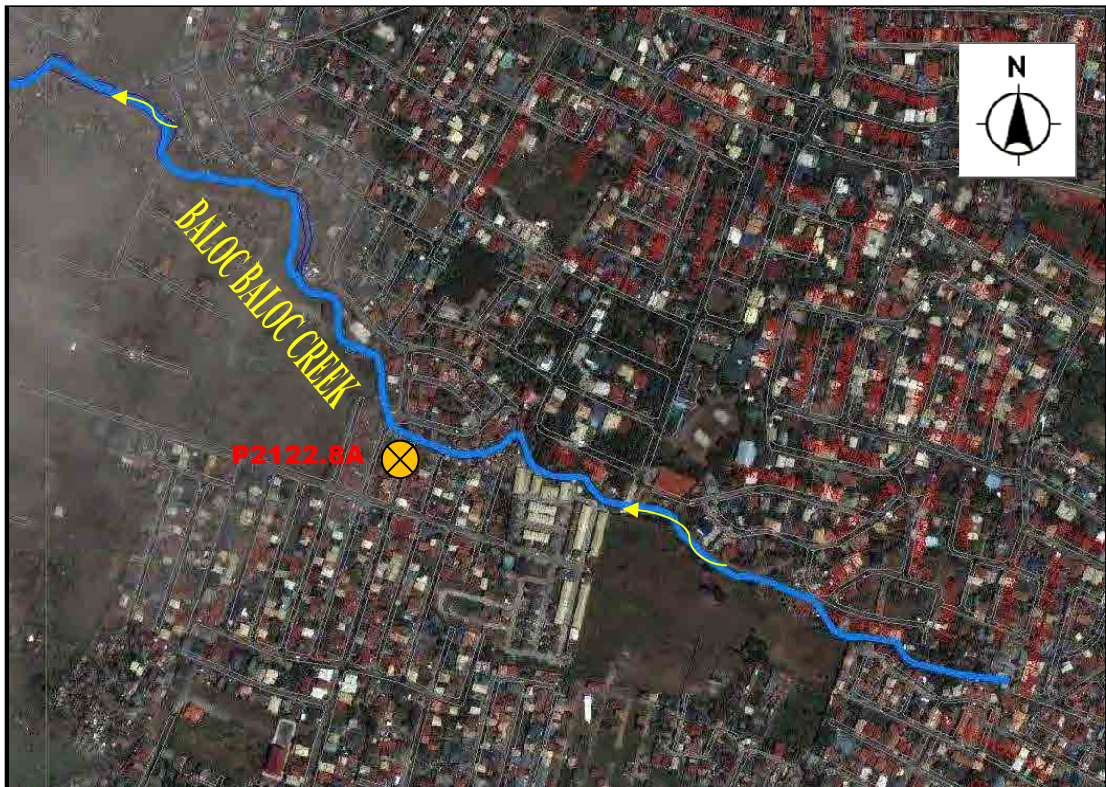


OUTFALL NO. P2122.7A



OUTFALL NO. P2122.8A

GP32



OUTFALL NO. P2122.8A

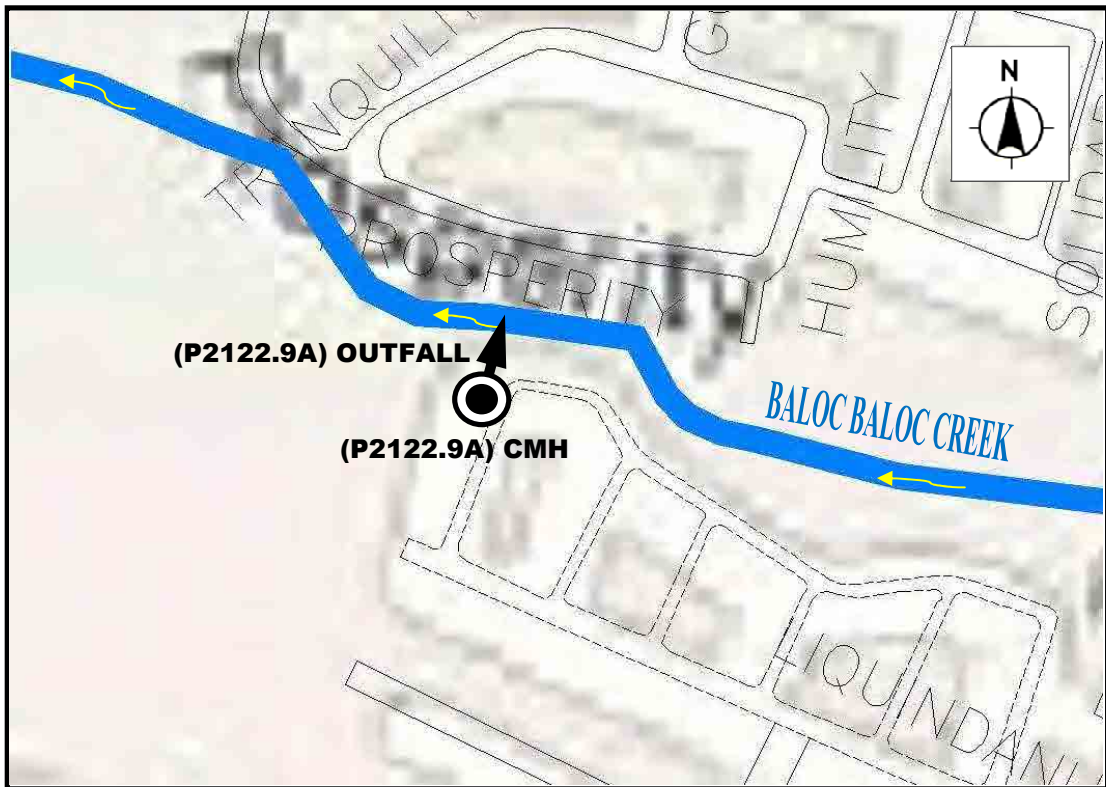


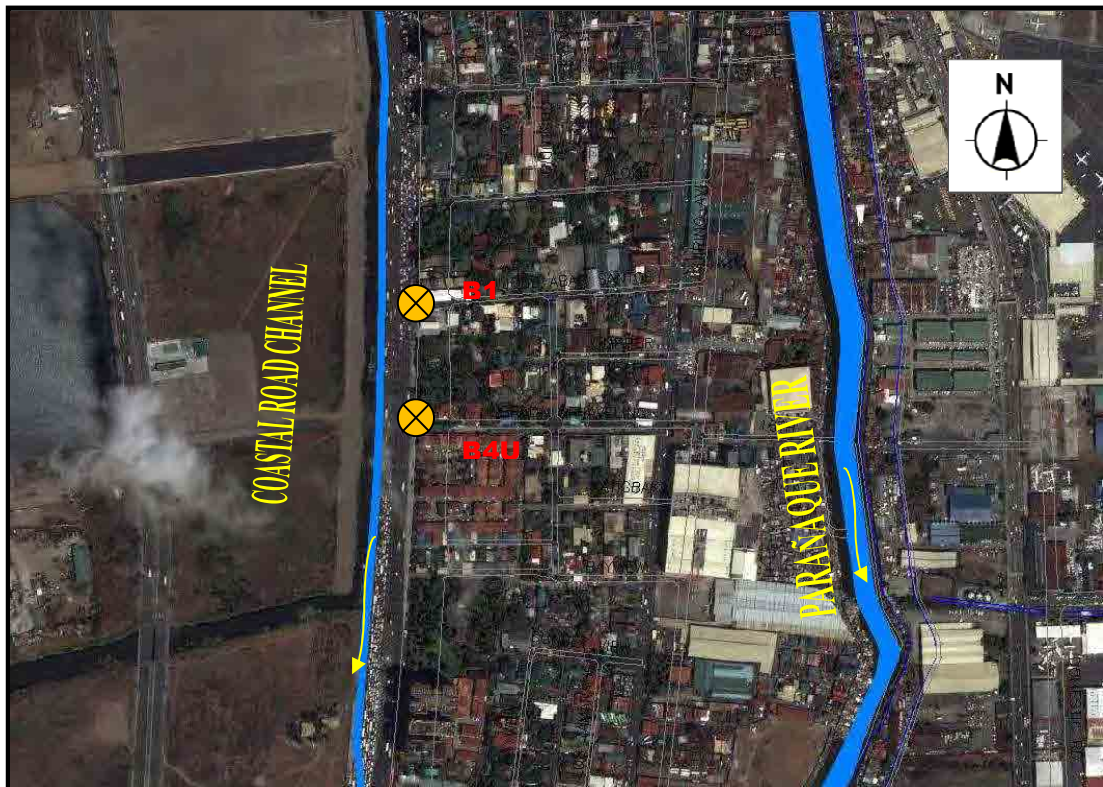
OUTFALL NO. P2122.9A

GP32

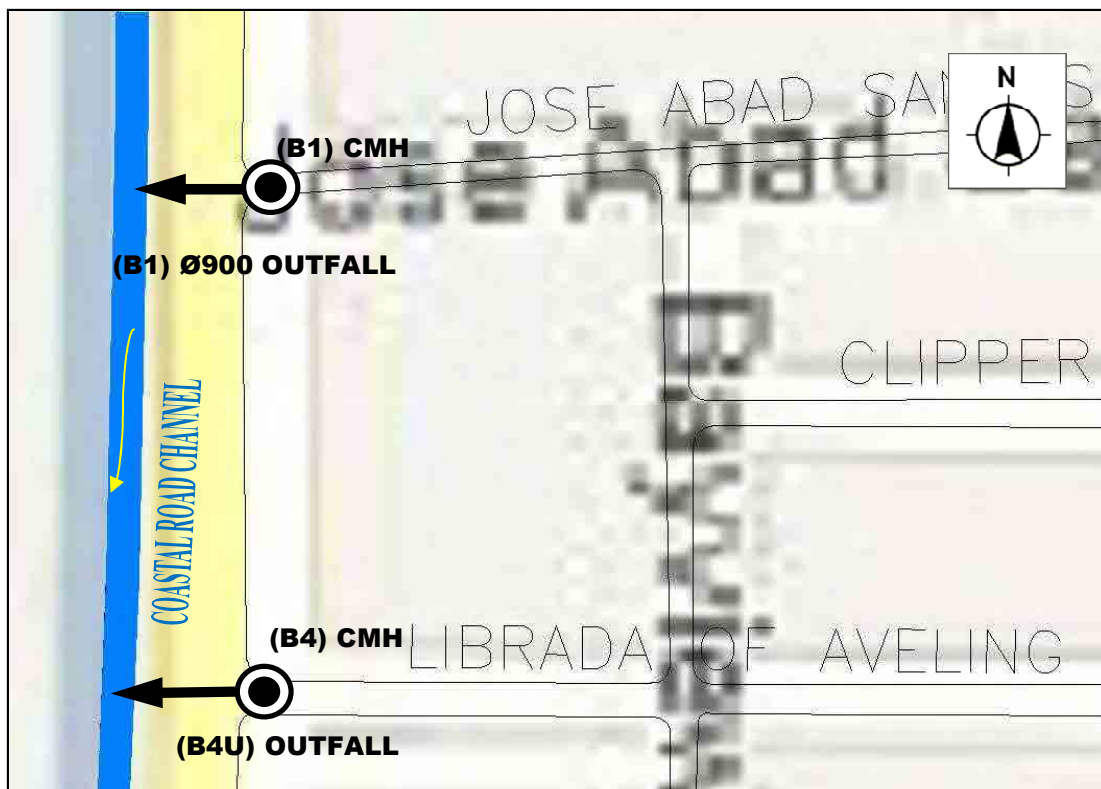


OUTFALL NO. P2122.9A





OUTFALL NO. B1 & B4U

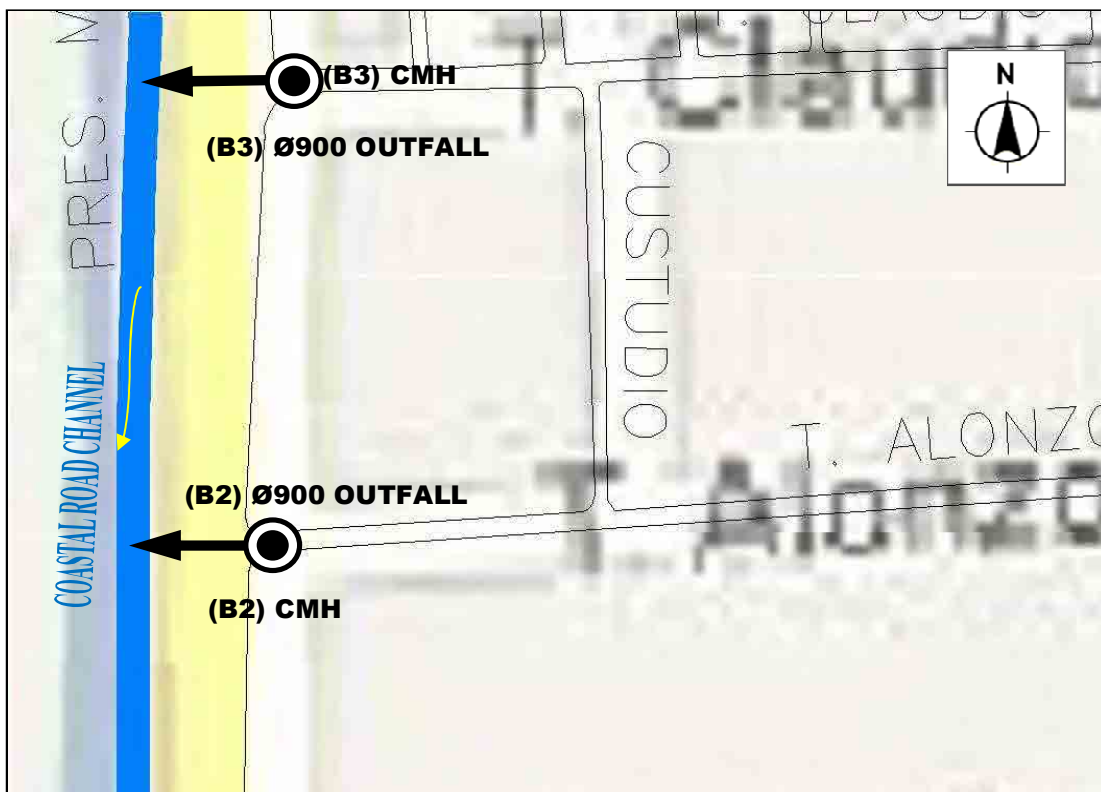


OUTFALL NO. B.2 TO B.3

GP2

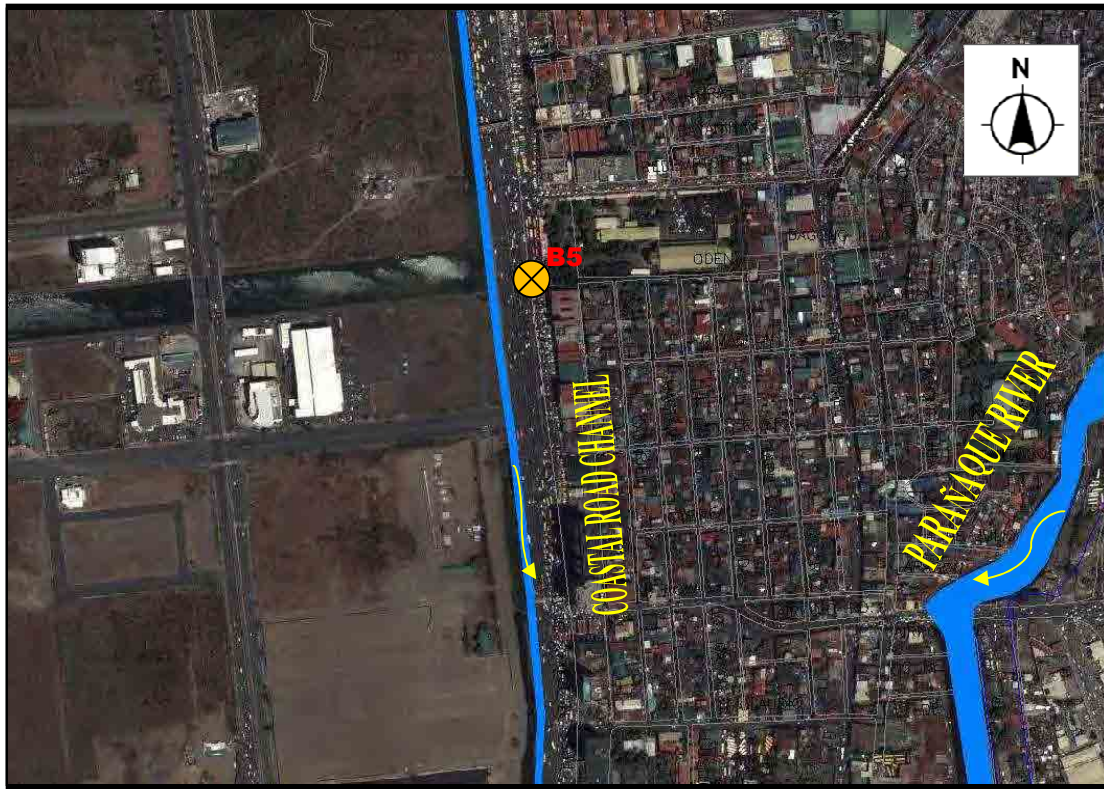


OUTFALL NO. B2 TO B3

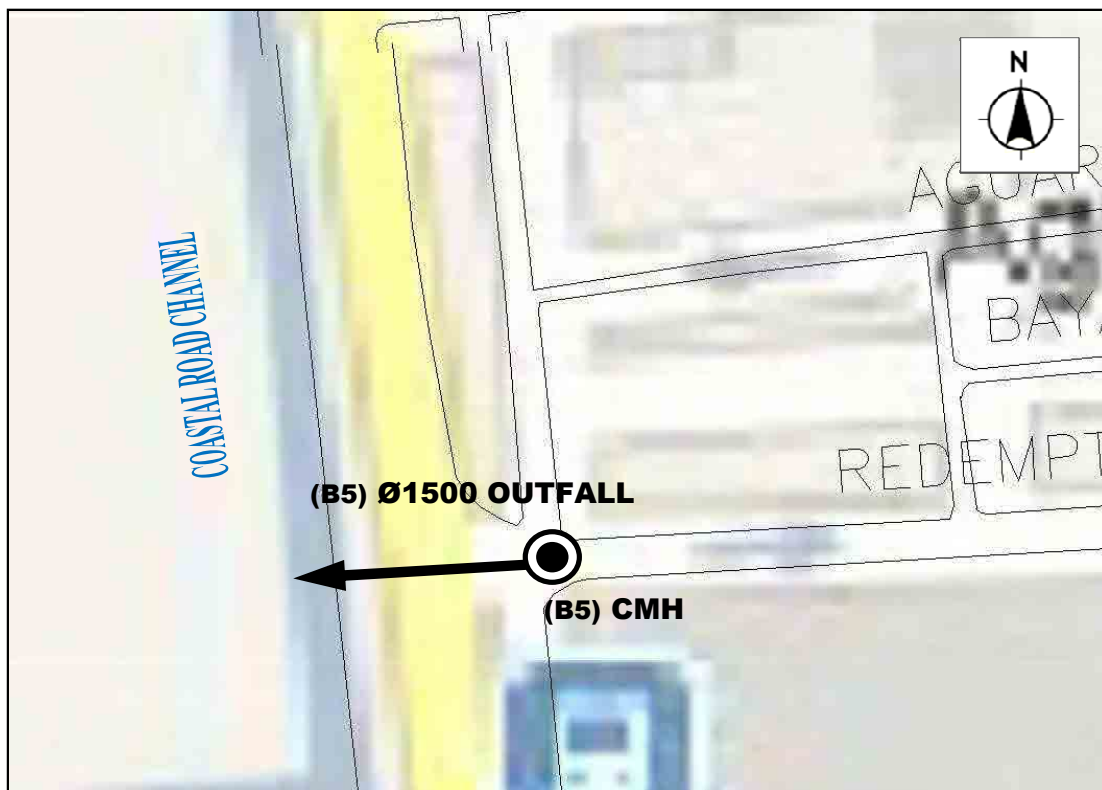


OUTFALL NO. B.5

GP1

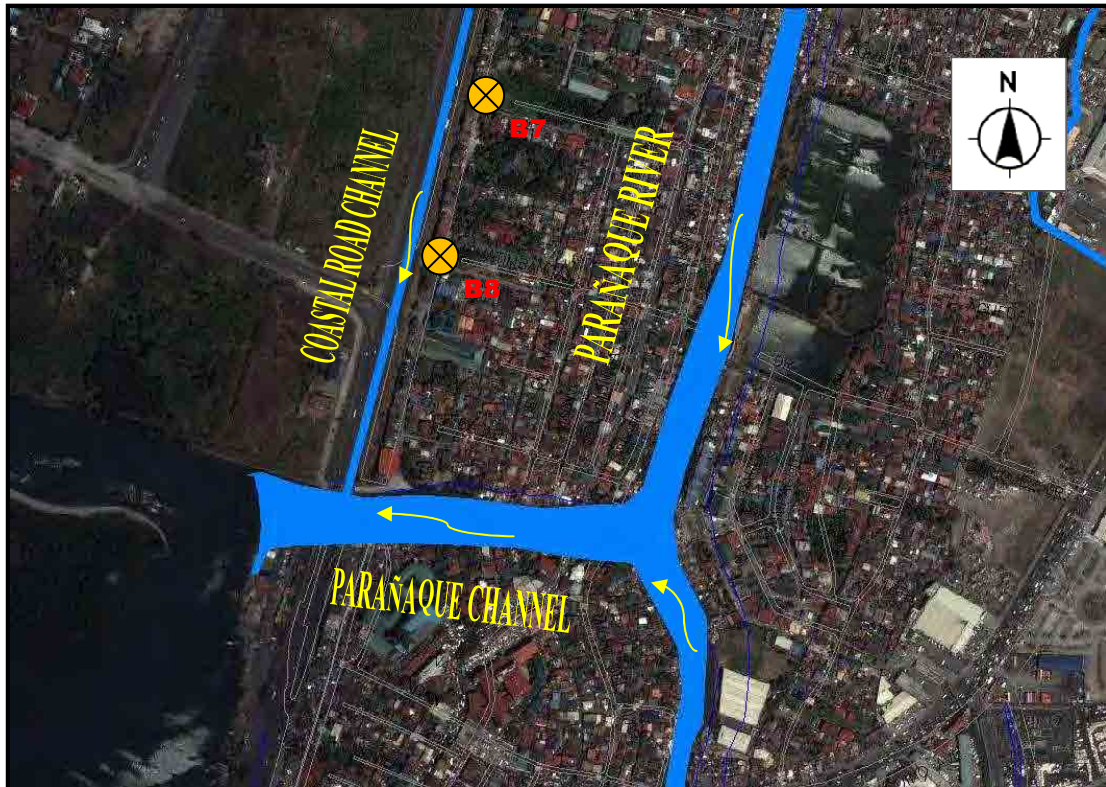


OUTFALL NO. B.5

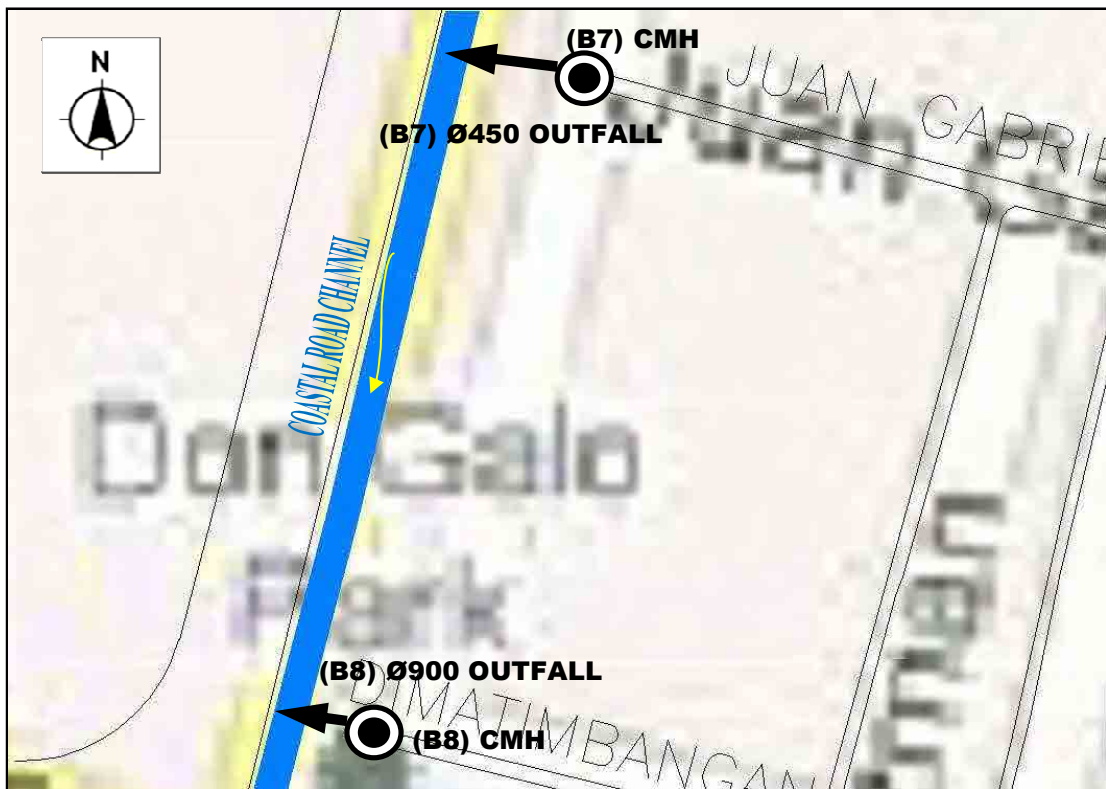


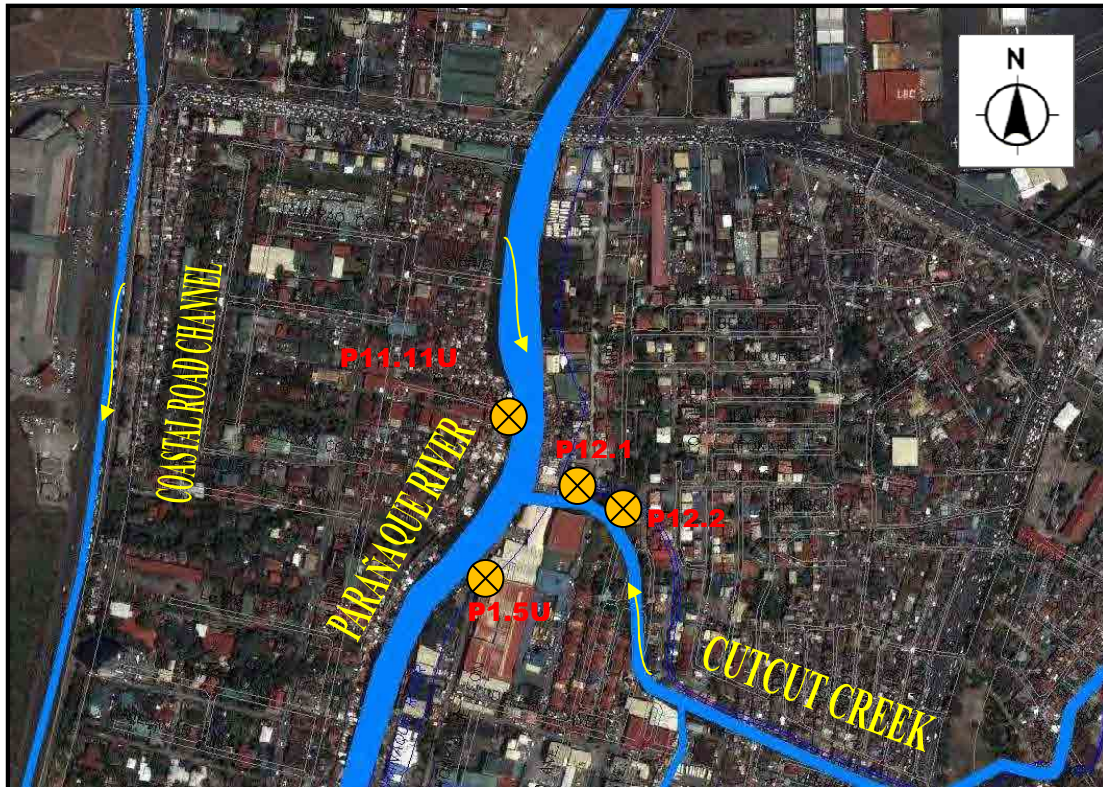
AP-100



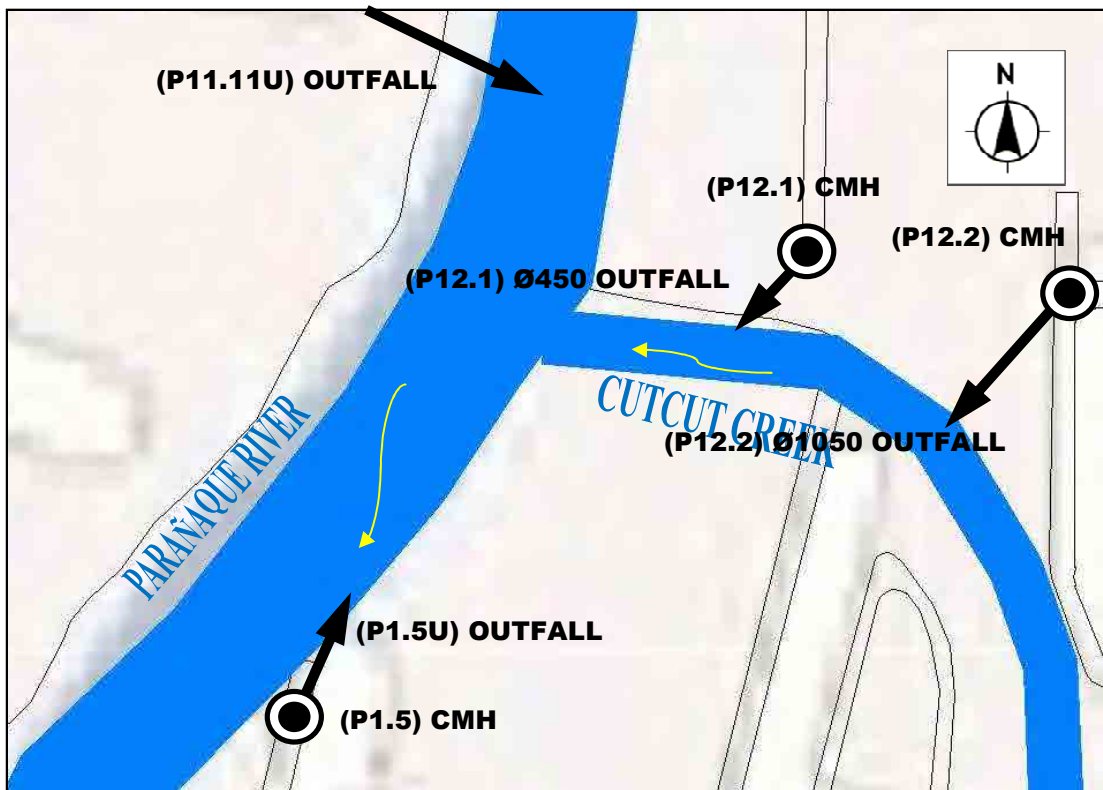


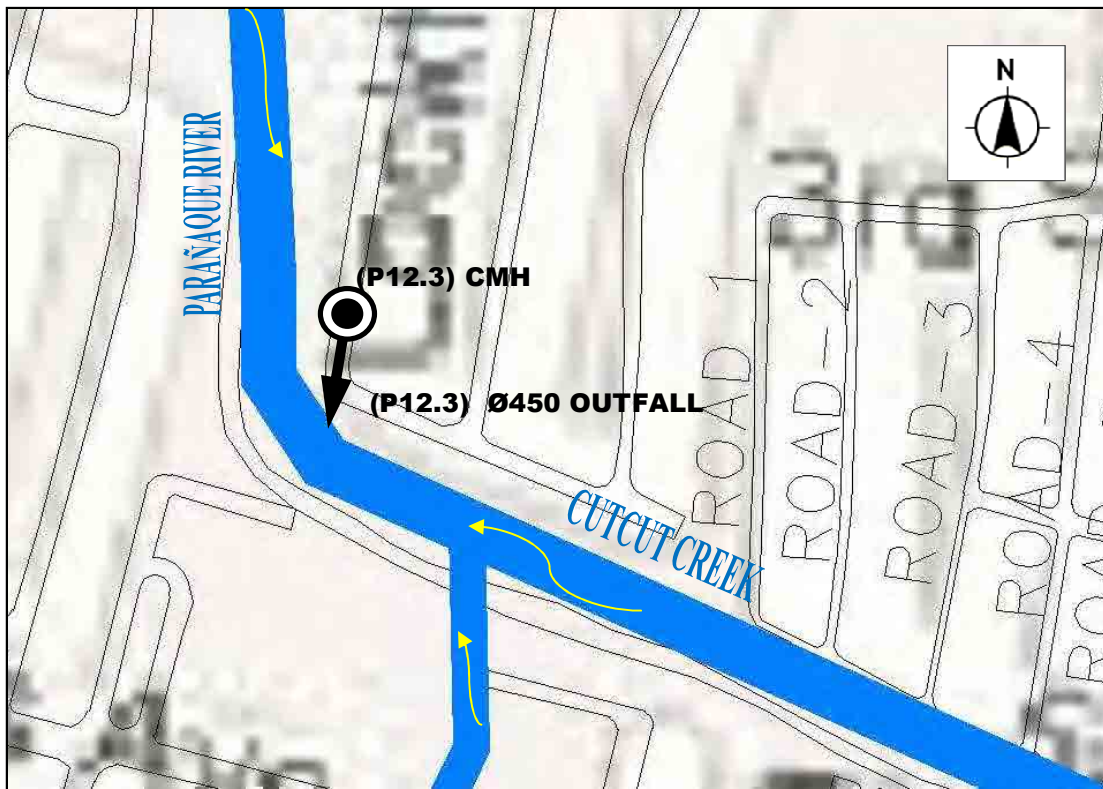
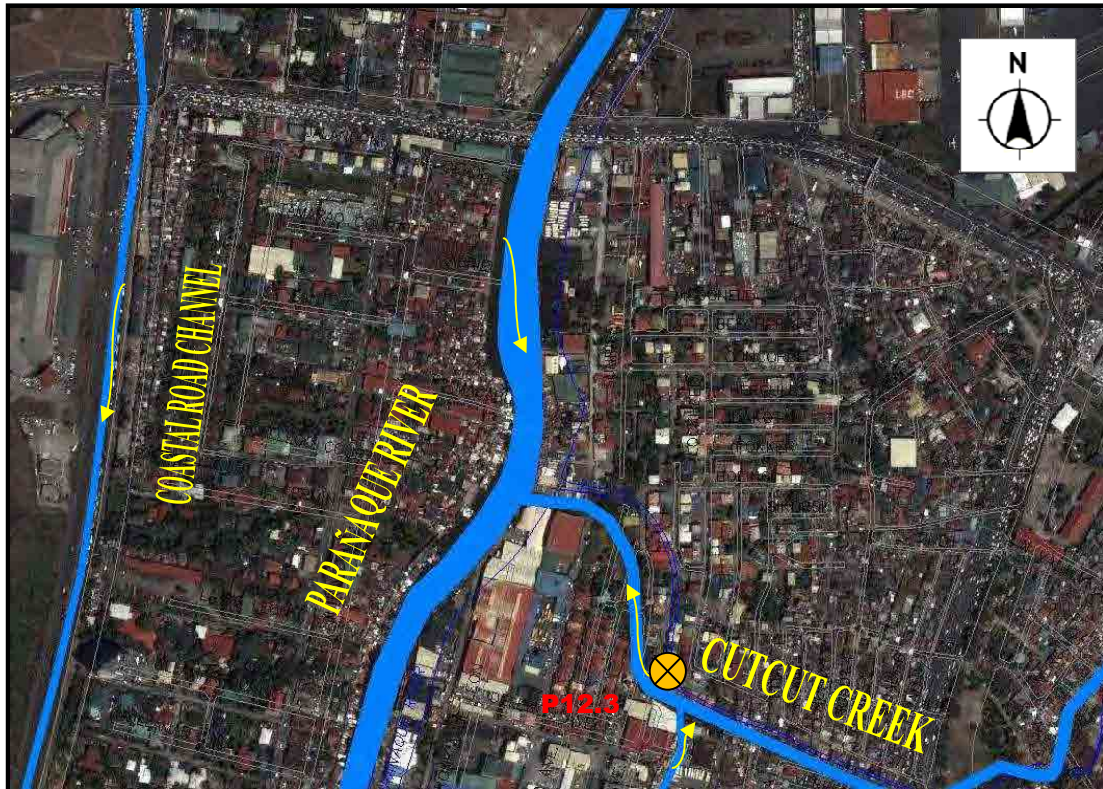
OUTFALL NO. B7 TO B8





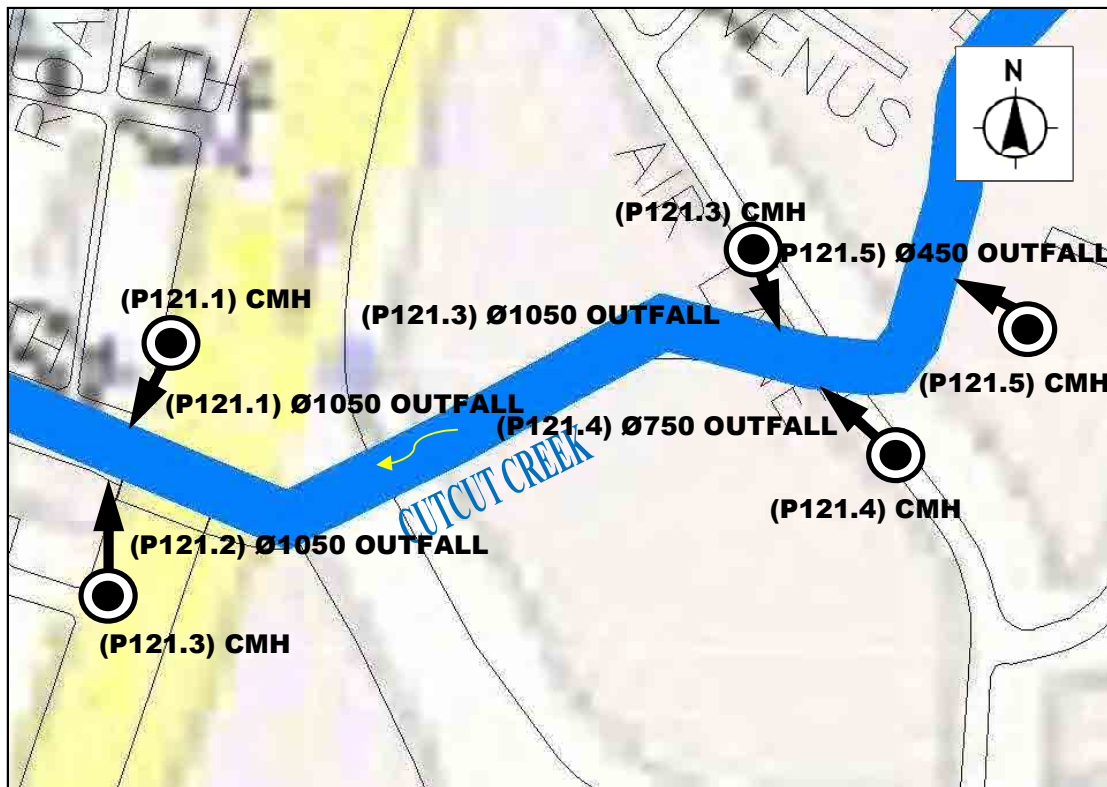
OUTFALL NO. P11.11U & P1.5U & P12.1 TO P12.2

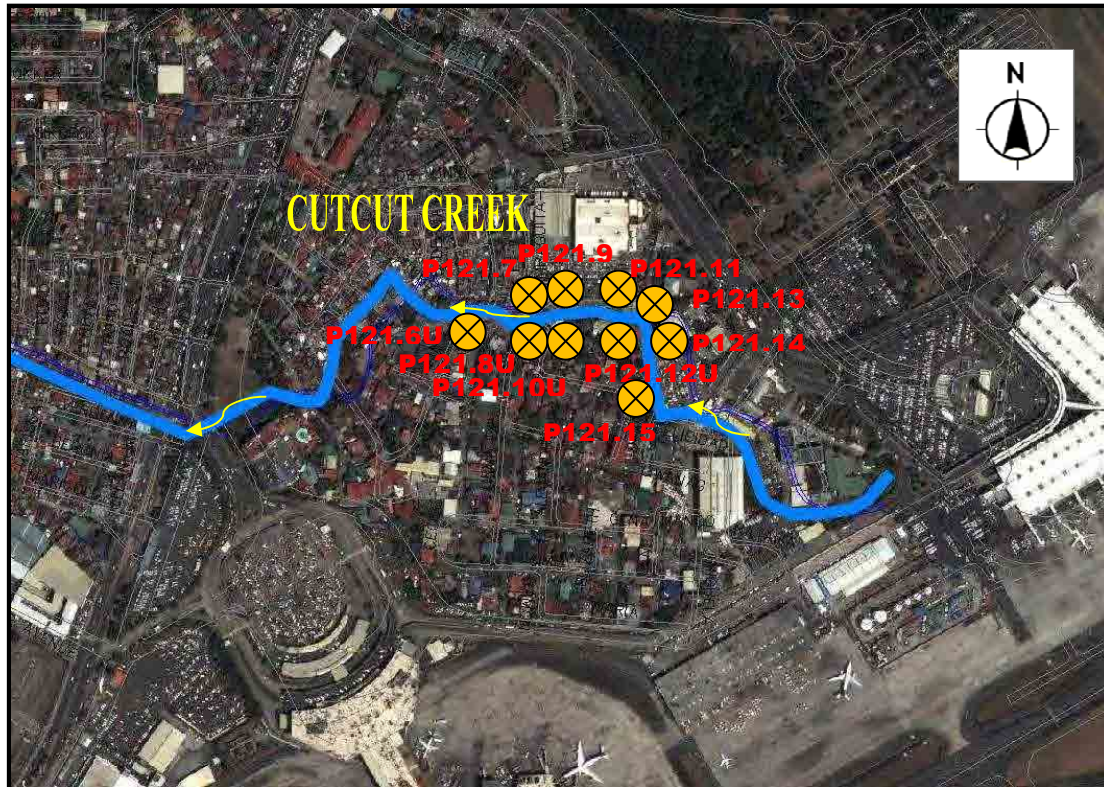




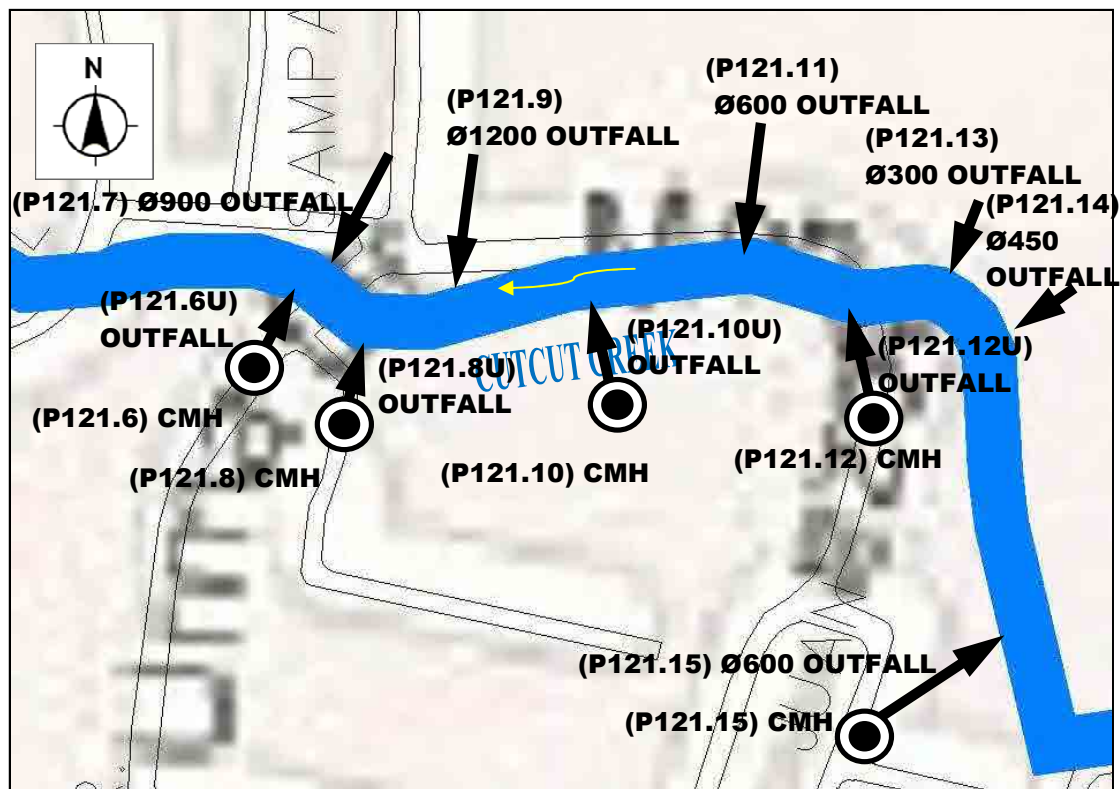


OUTFALL NO. P121.1 TO P121.5



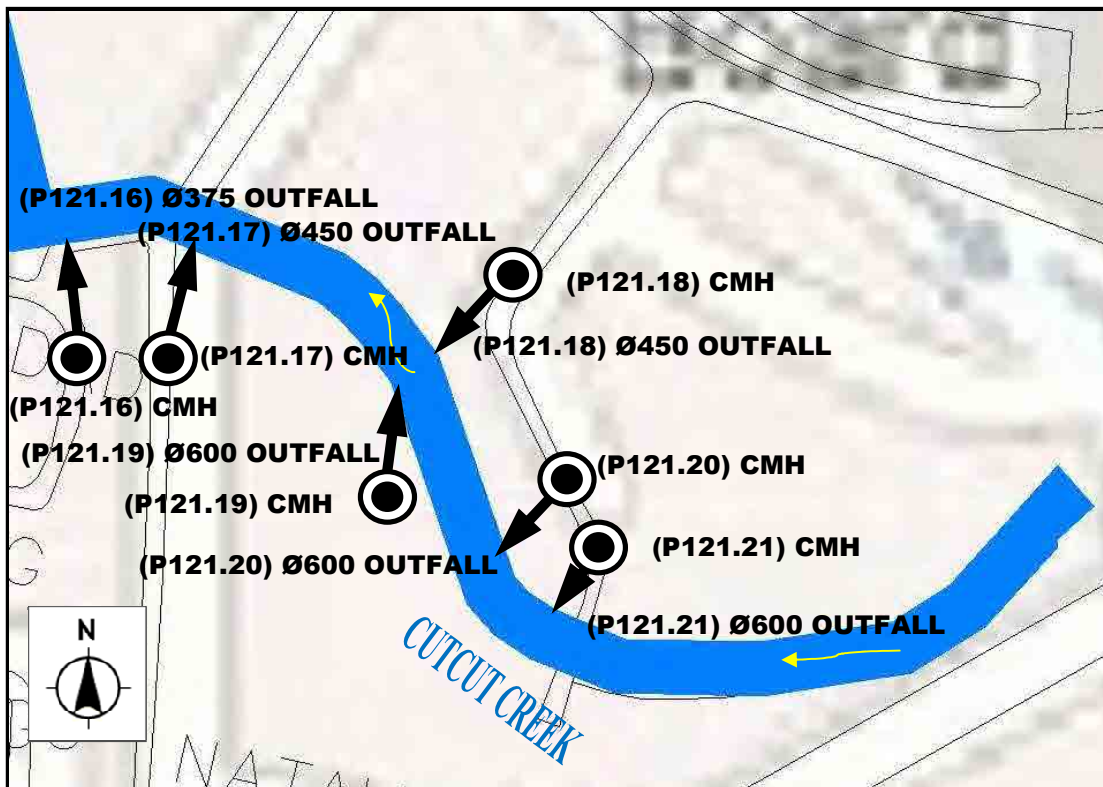


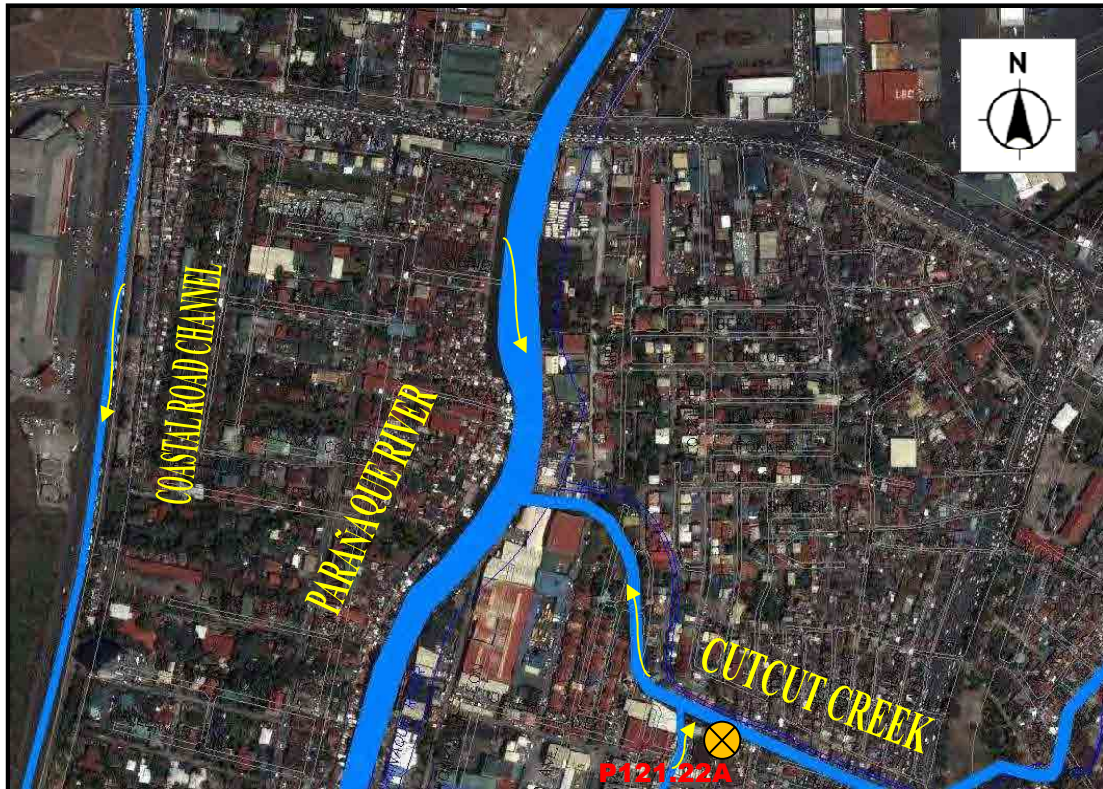
OUTFALL NO. P121.6U TO P121.15



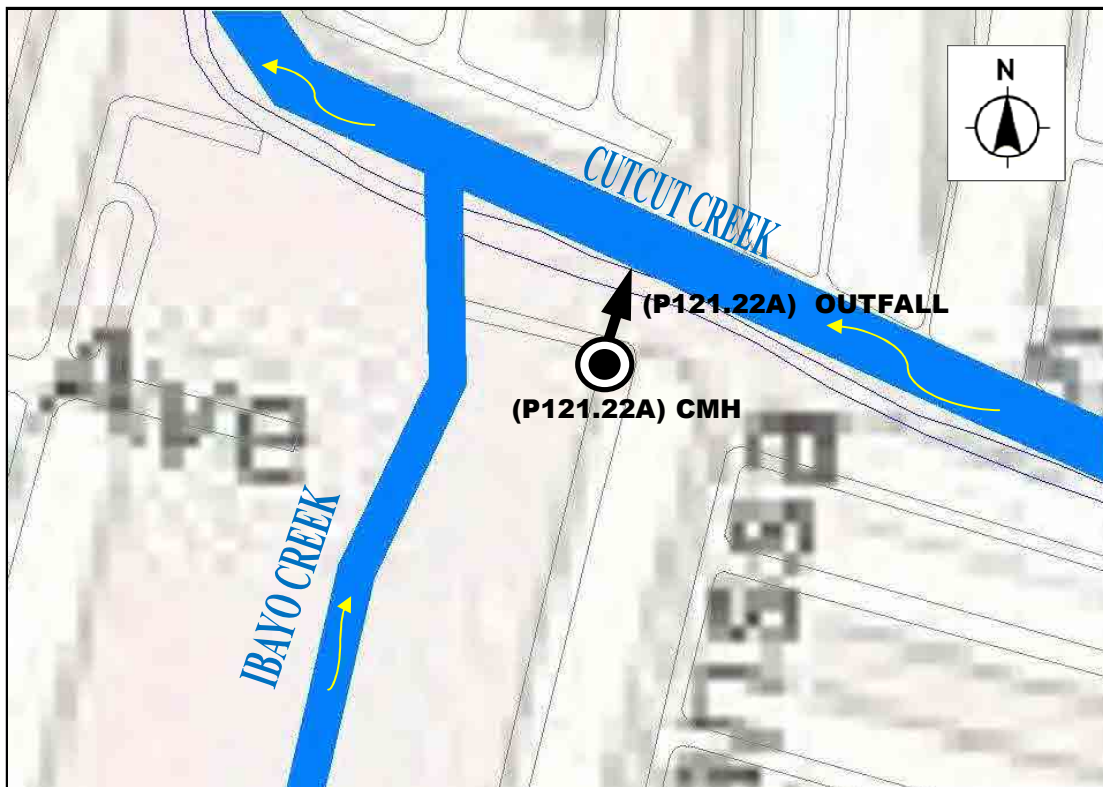


OUTFALL NO. P121.16 TO P121.21



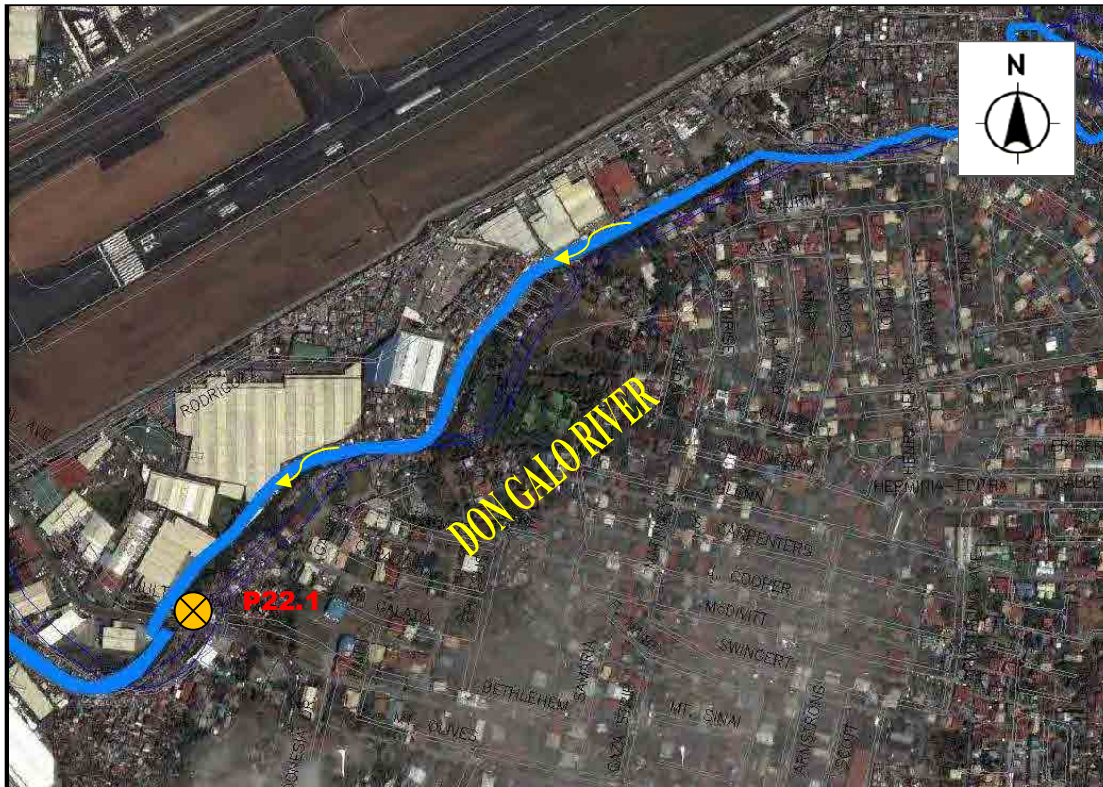


OUTFALL NO. P121.22A



OUTFALL NO. P22.1

GP10



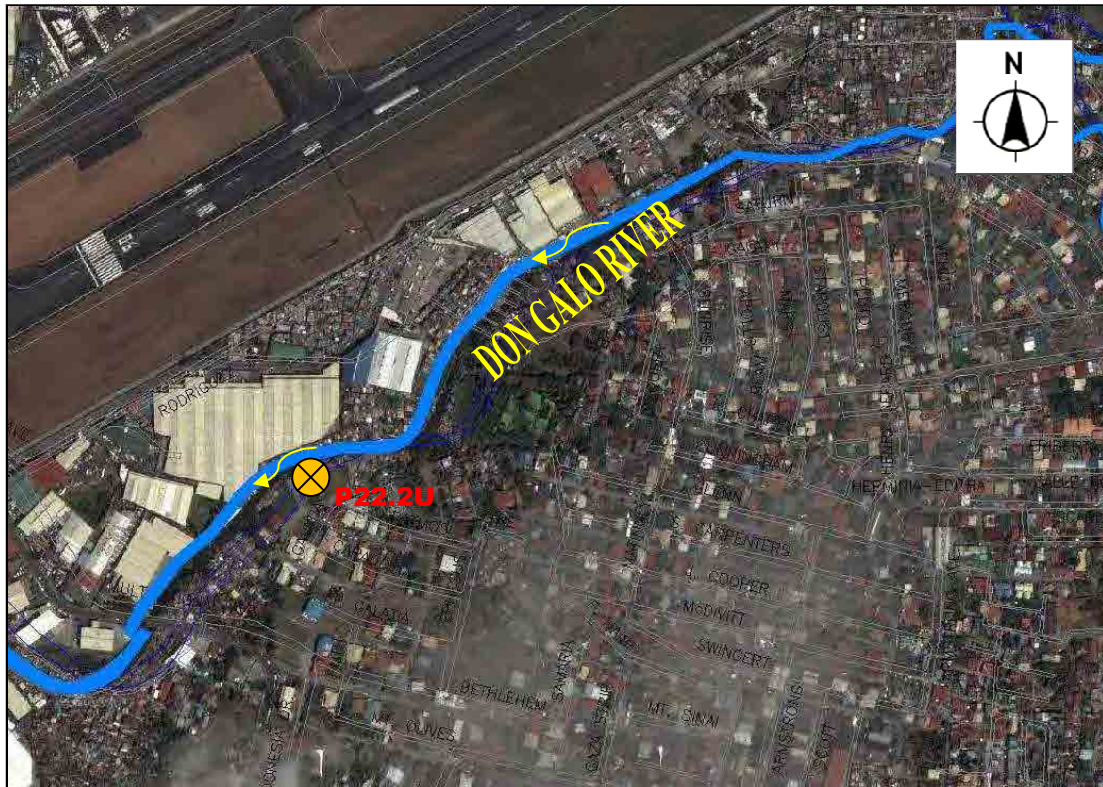
OUTFALL NO. P22.1



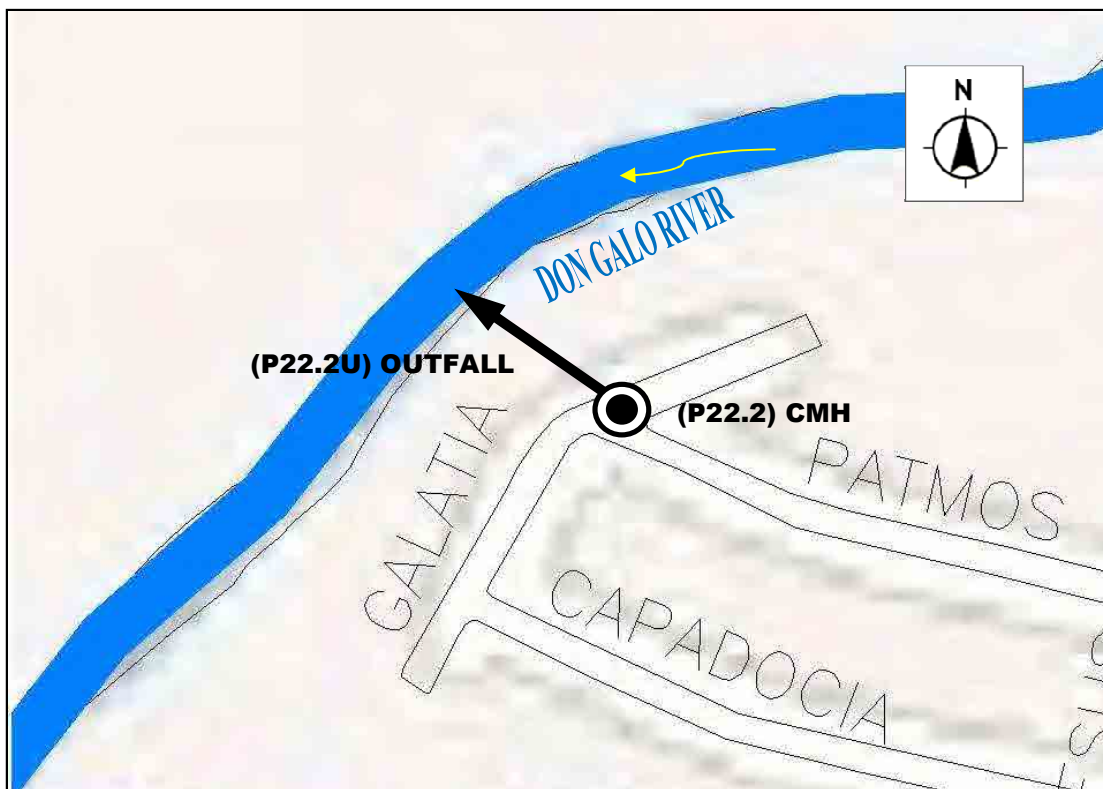


OUTFALL NO. P22.2U

GP10

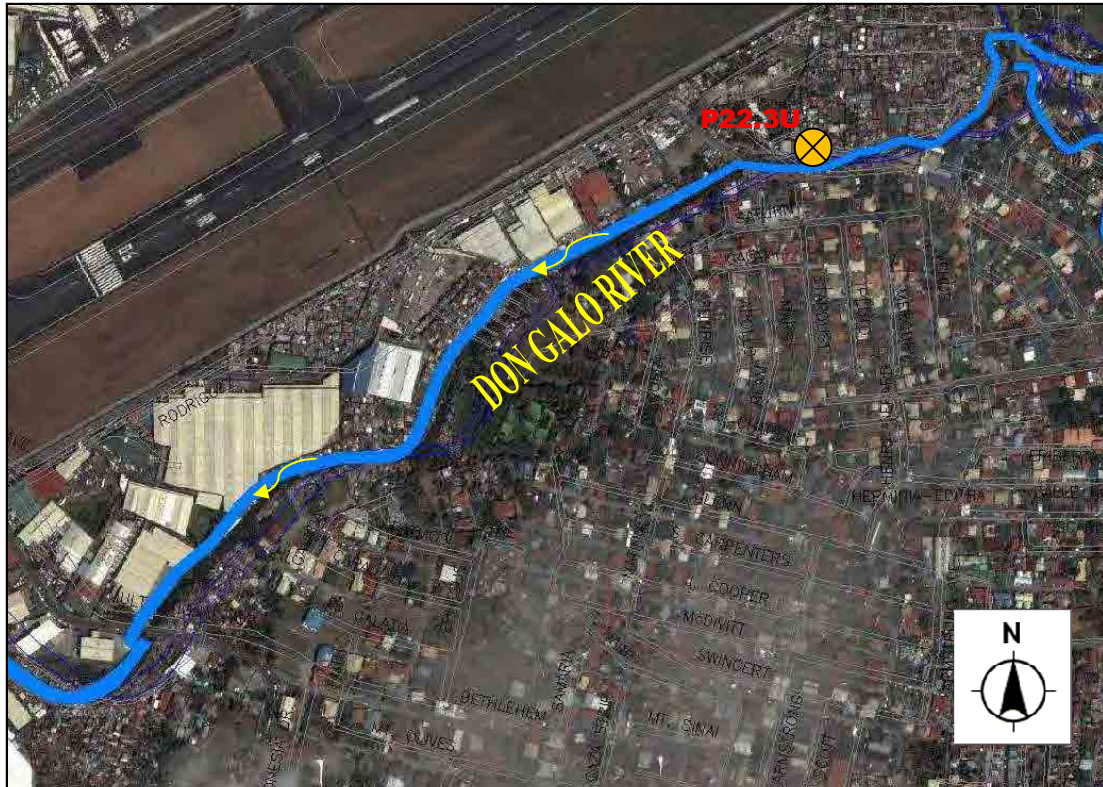


OUTFALL NO. P22.2U

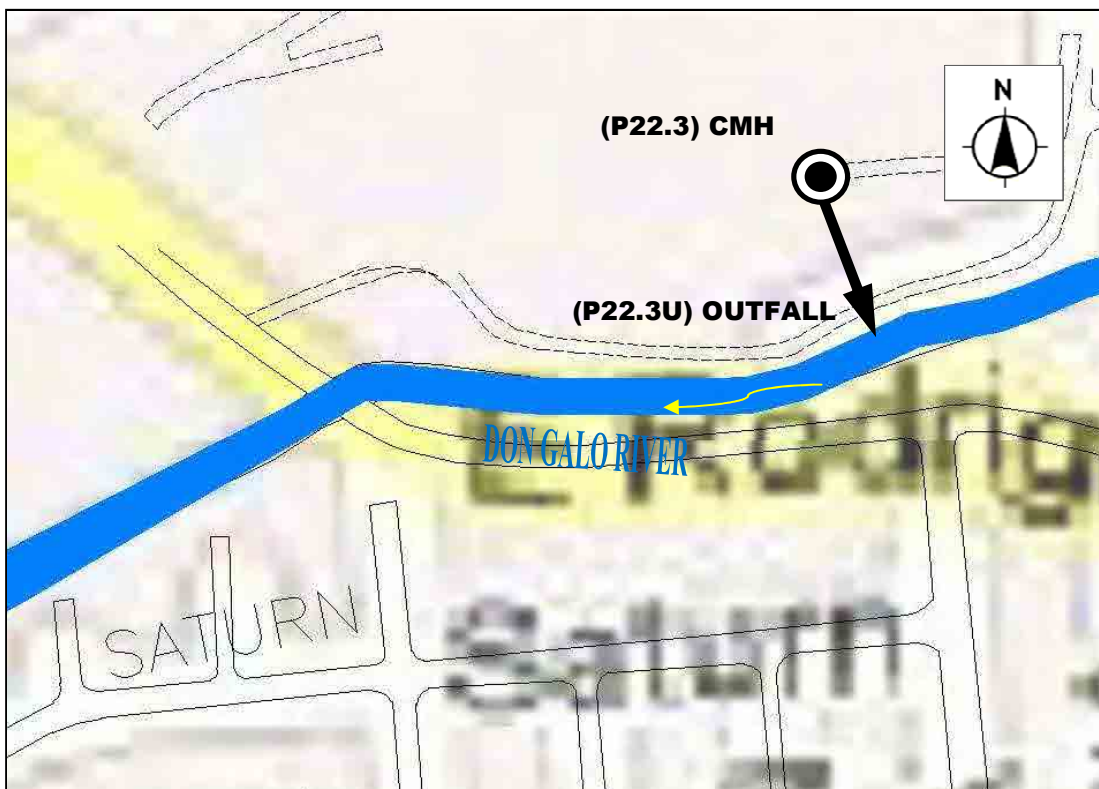


OUTFALL NO. P22.3U

GP10

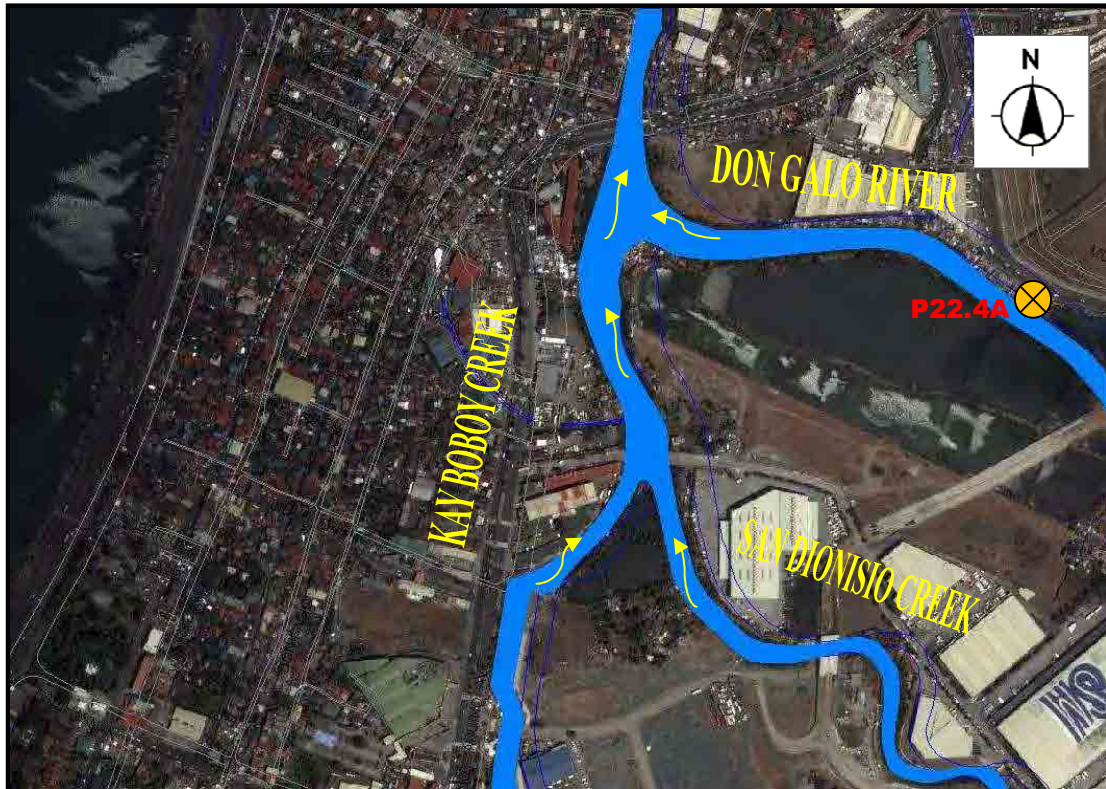


OUTFALL NO. P22.3U

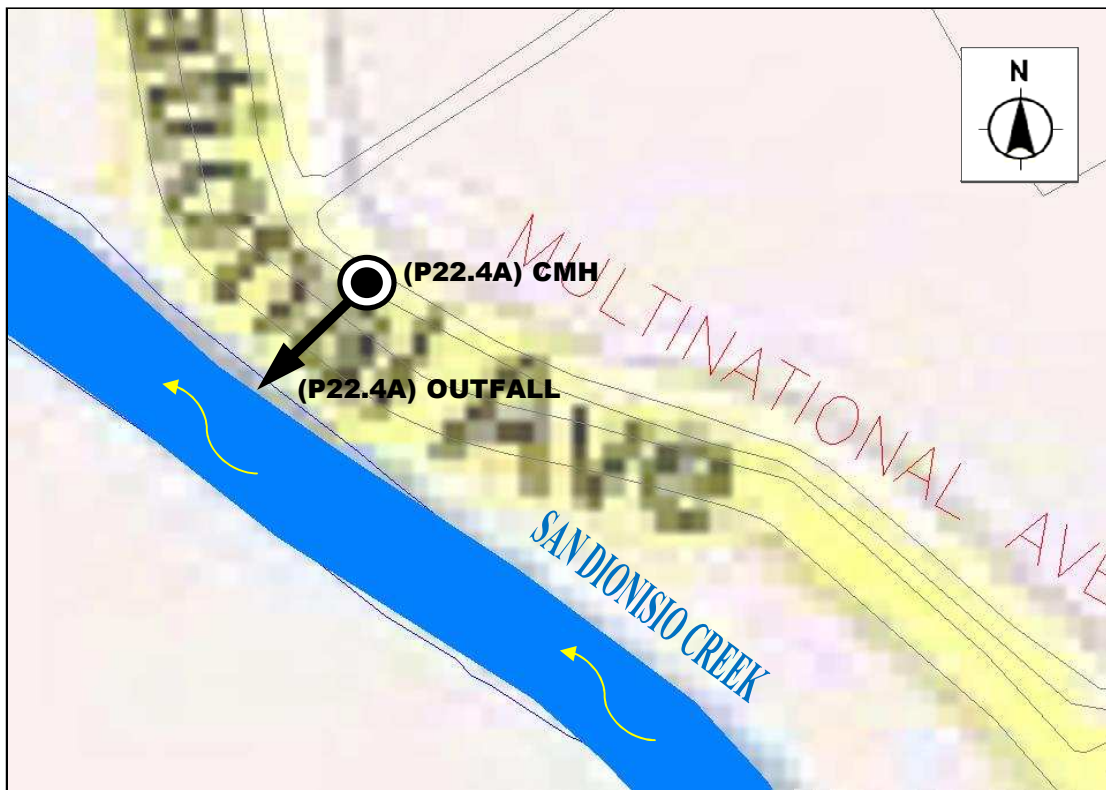


OUTFALL NO. P22.4A

GP9

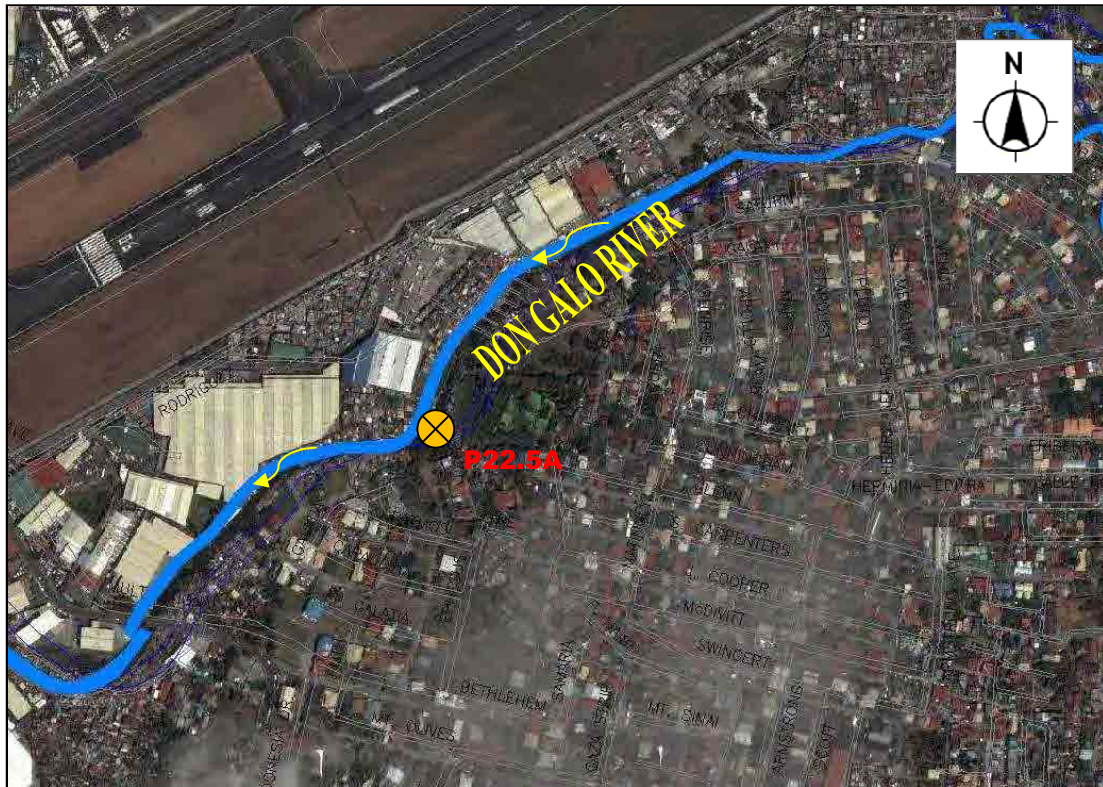


OUTFALL NO. P22.4A

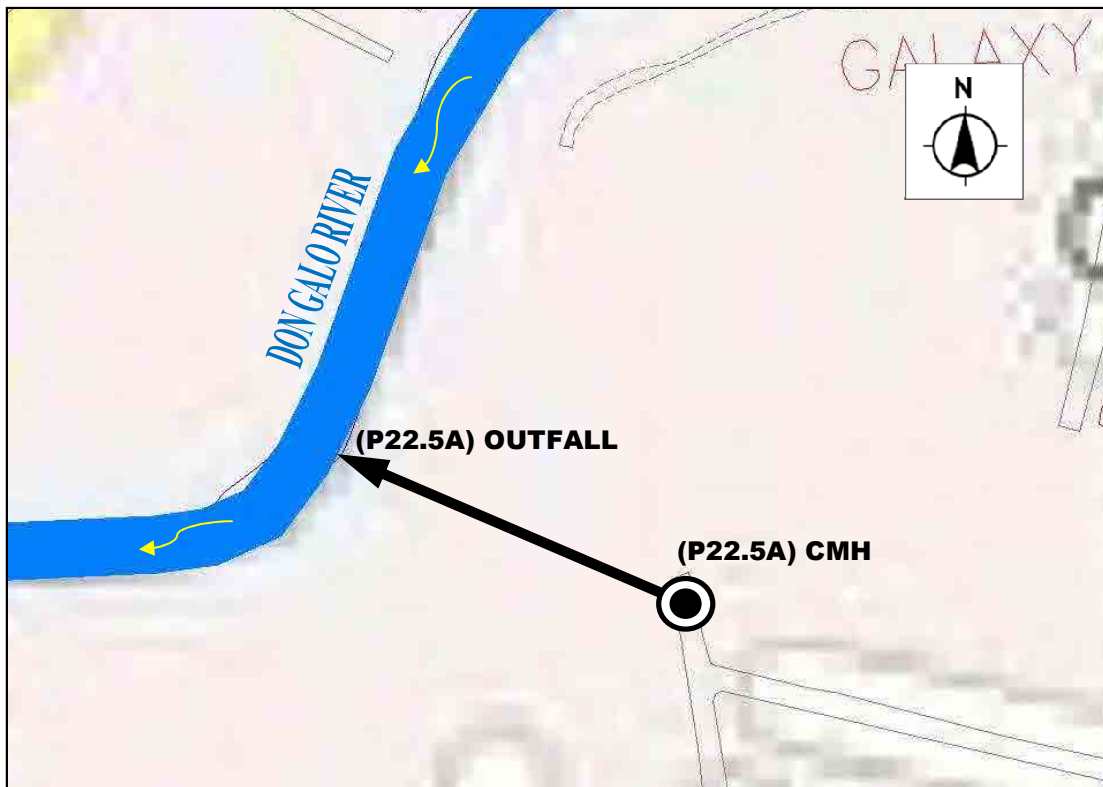


OUTFALL NO. P22.5A

GP10

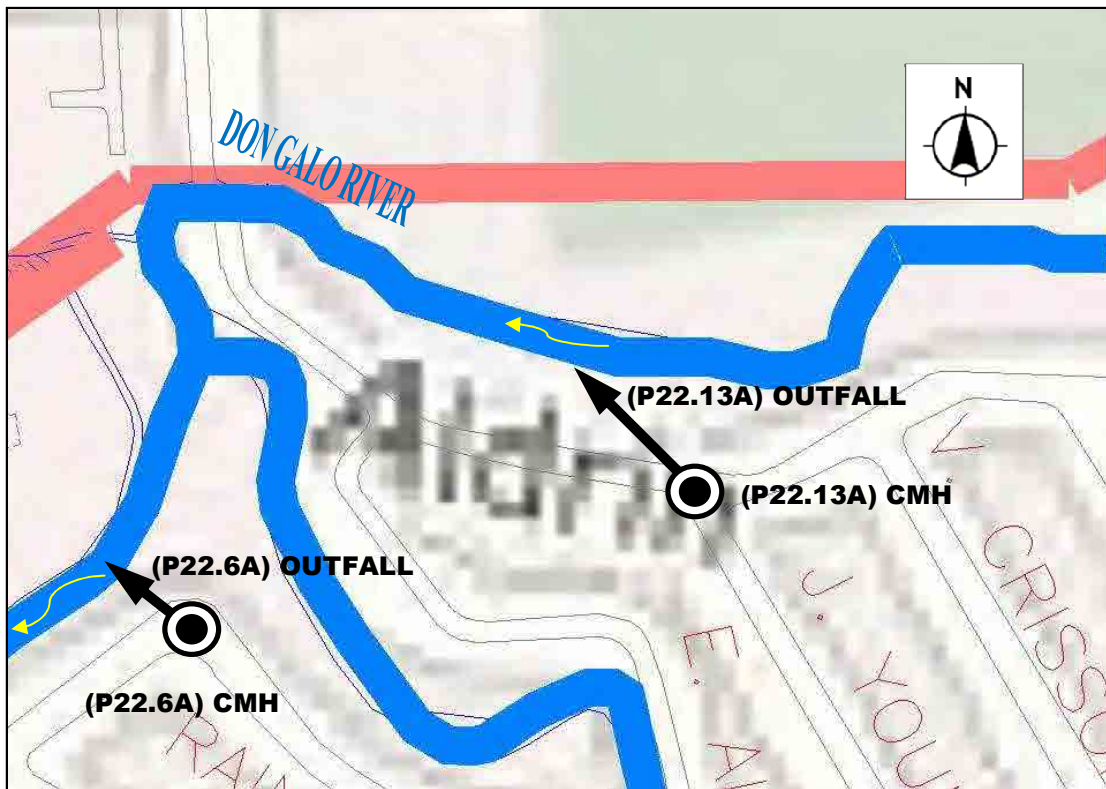


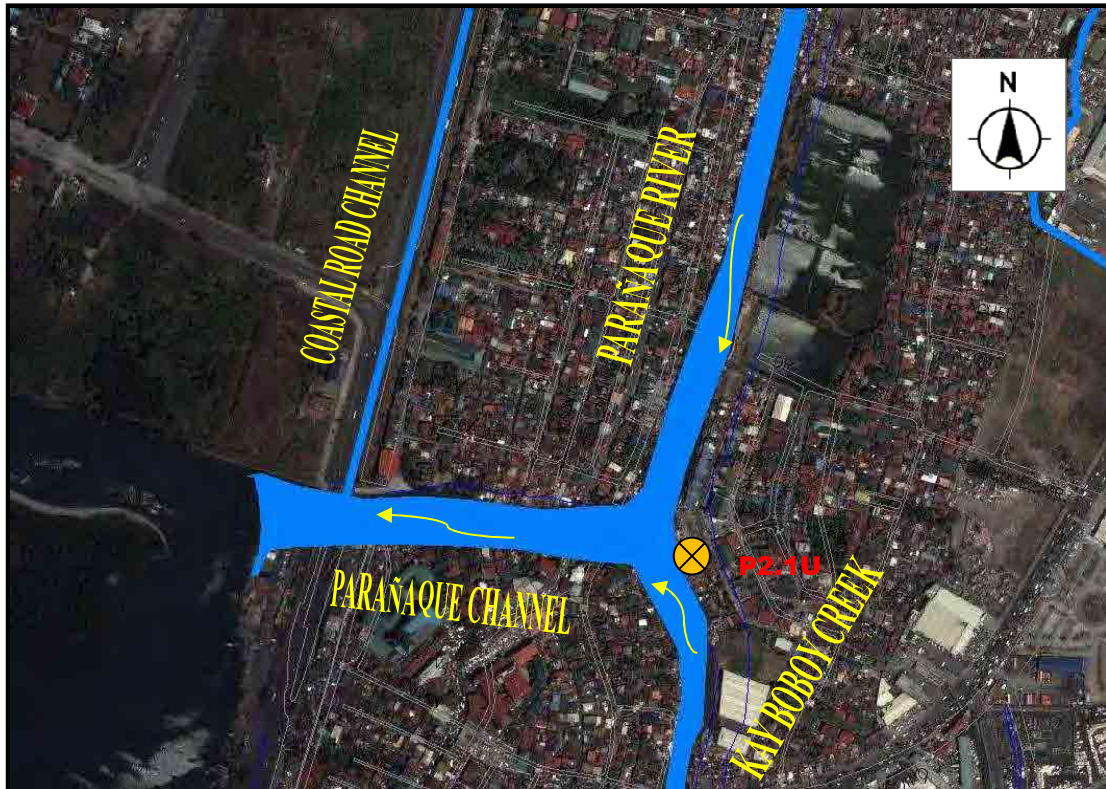
OUTFALL NO. P22.5A





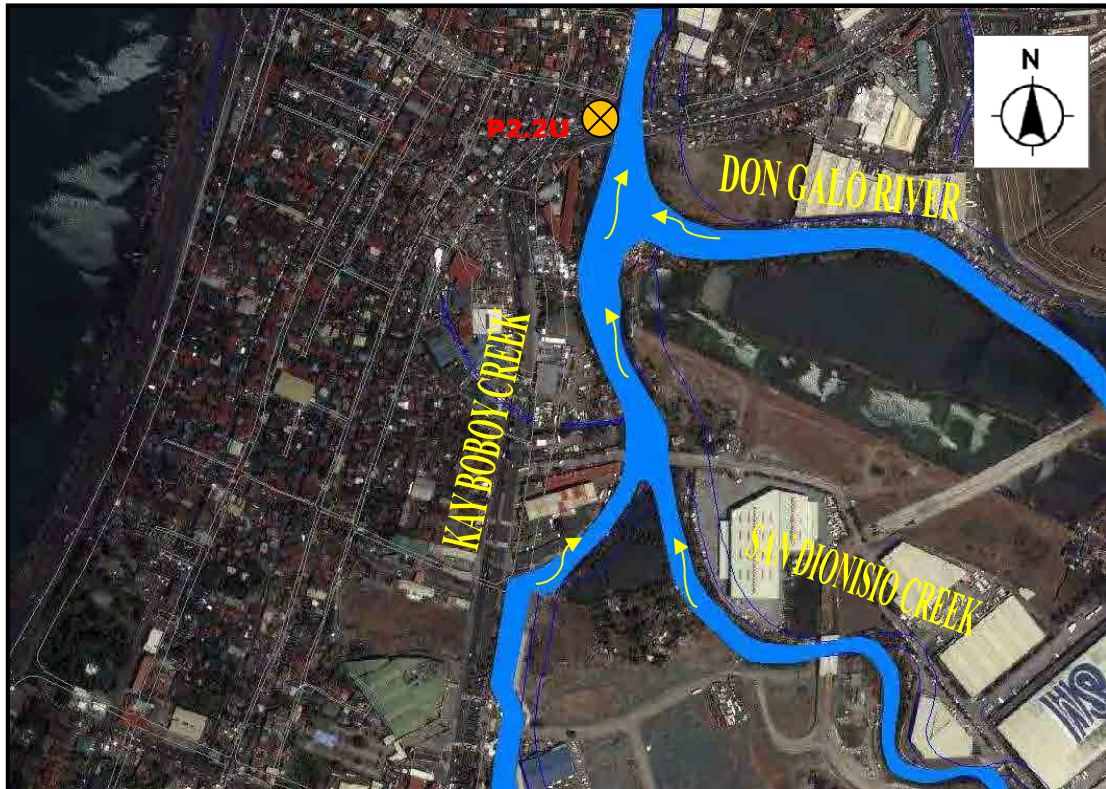
OUTFALL NO. P22.6A and P22.13A





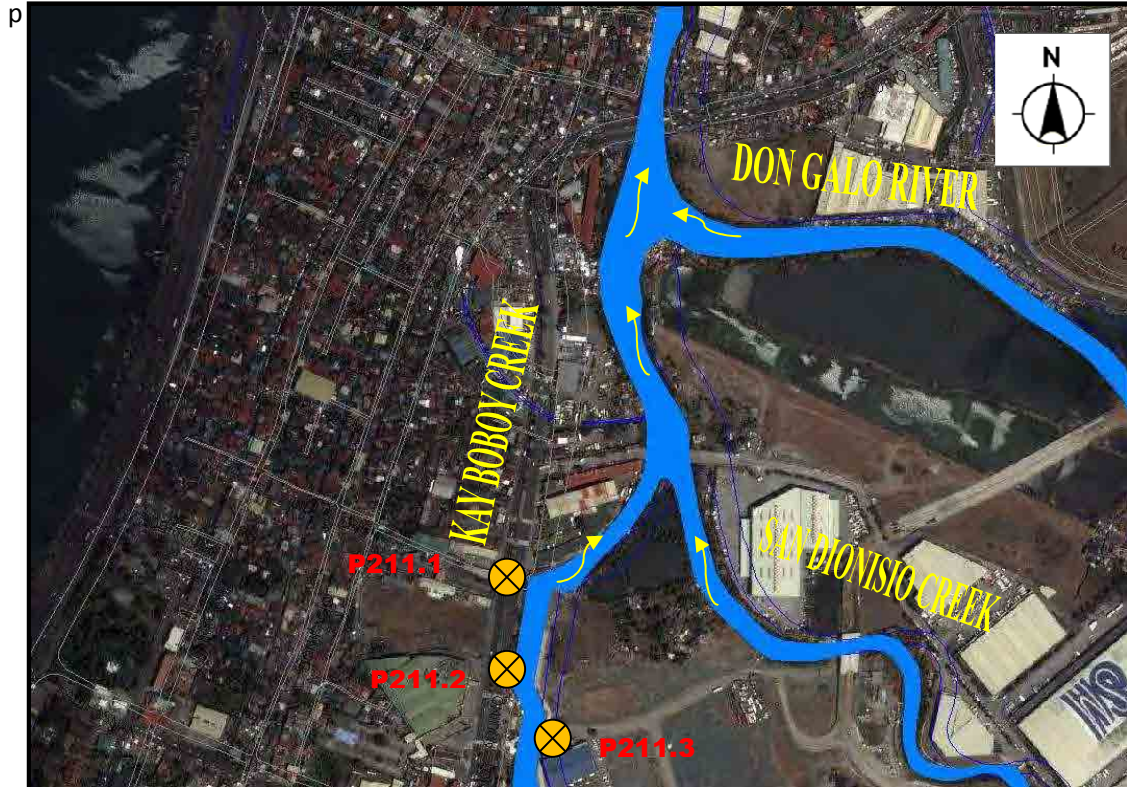
OUTFALL NO. P2.2U

GP9

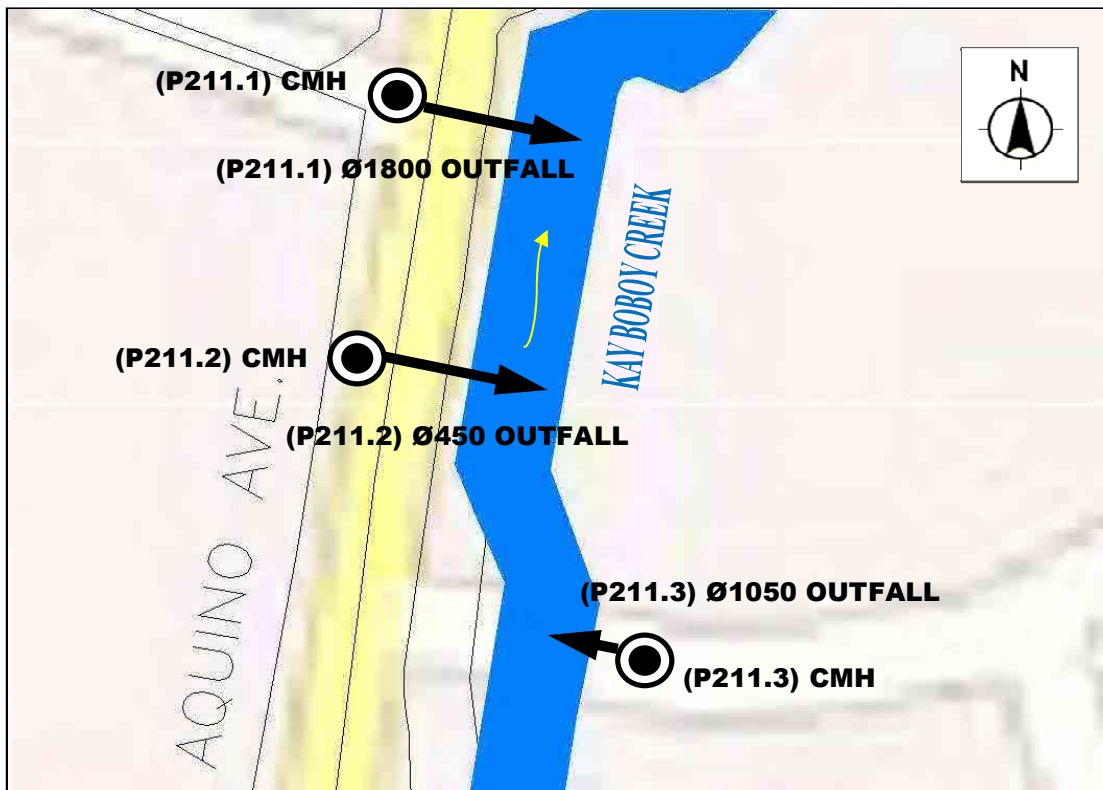


OUTFALL NO. P2.2U

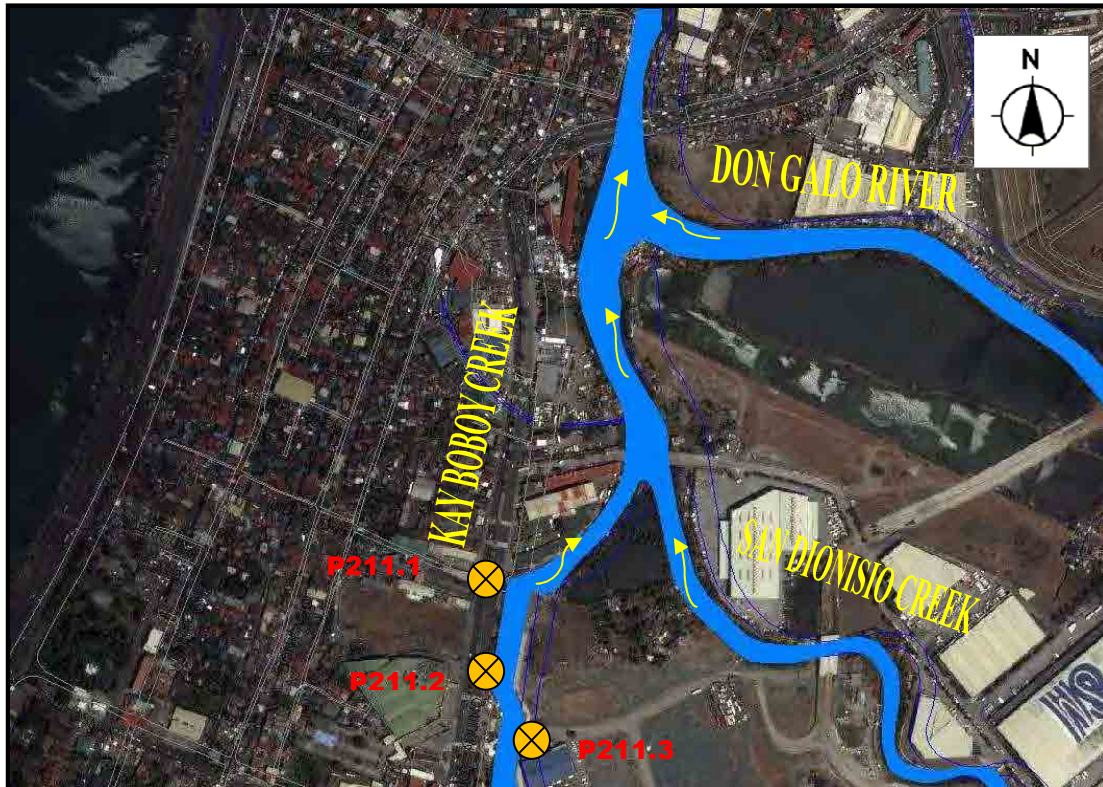




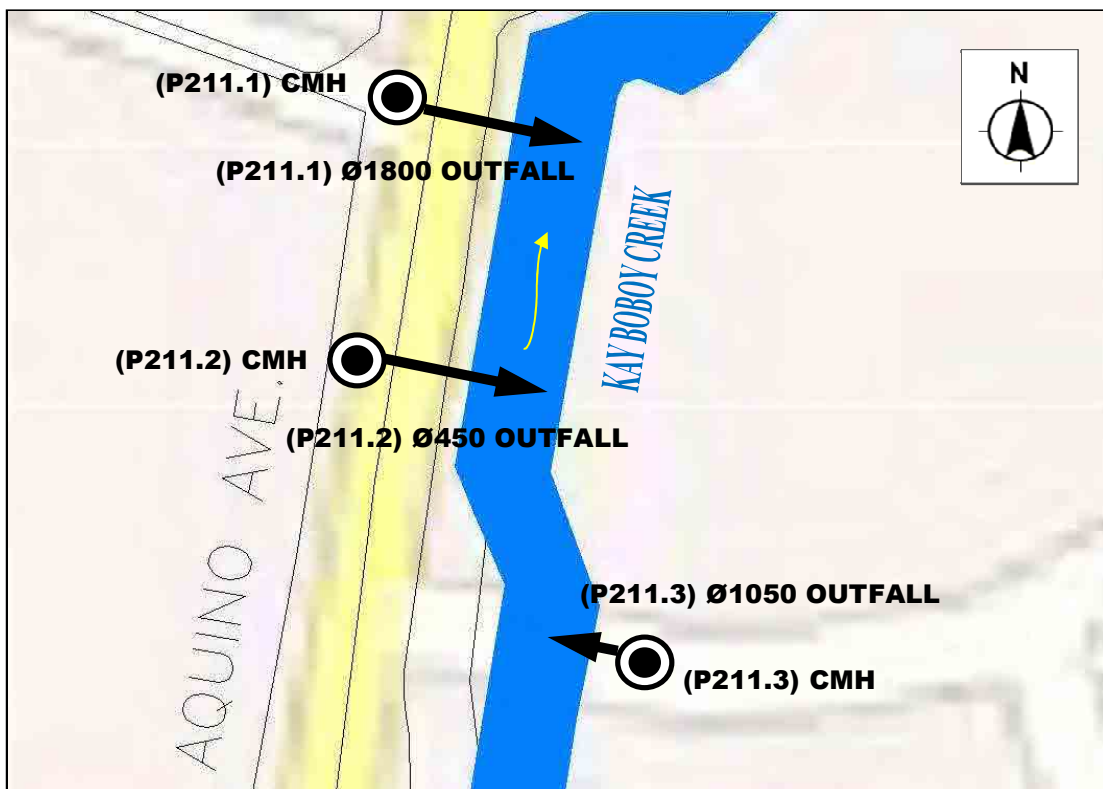
OUTFALL NO. P211.1 TO P211.3





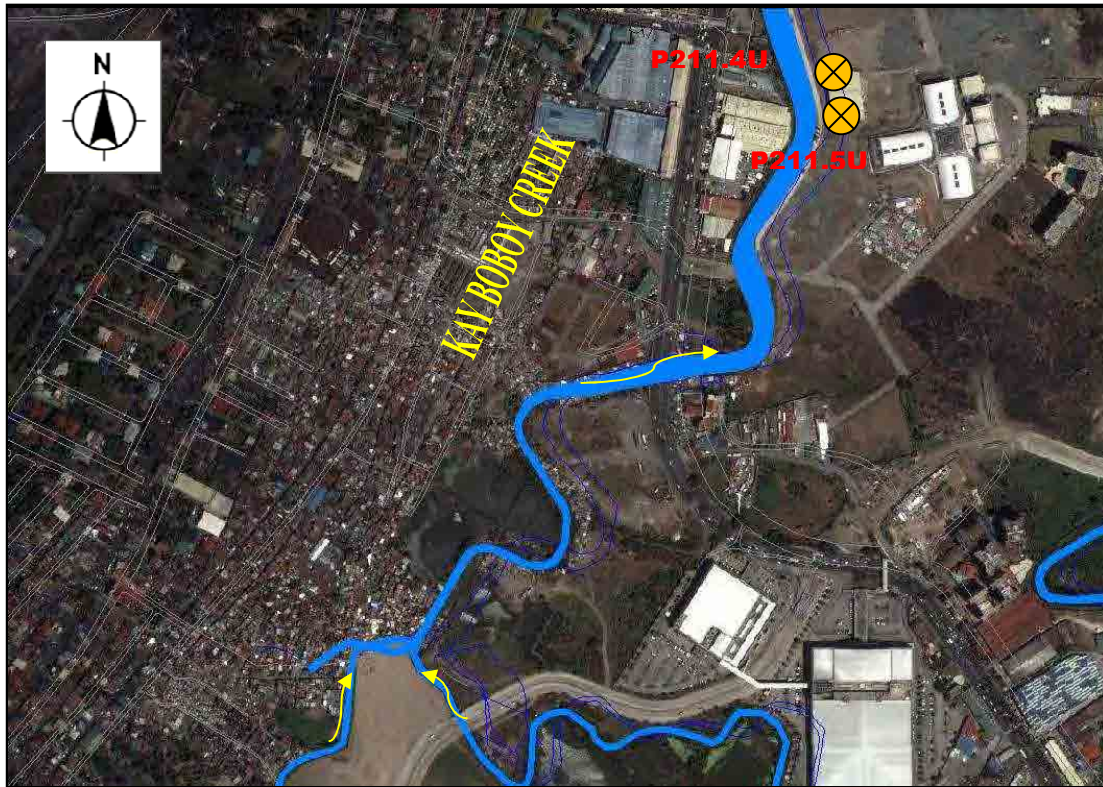


OUTFALL NO. P211.1 TO P211.3

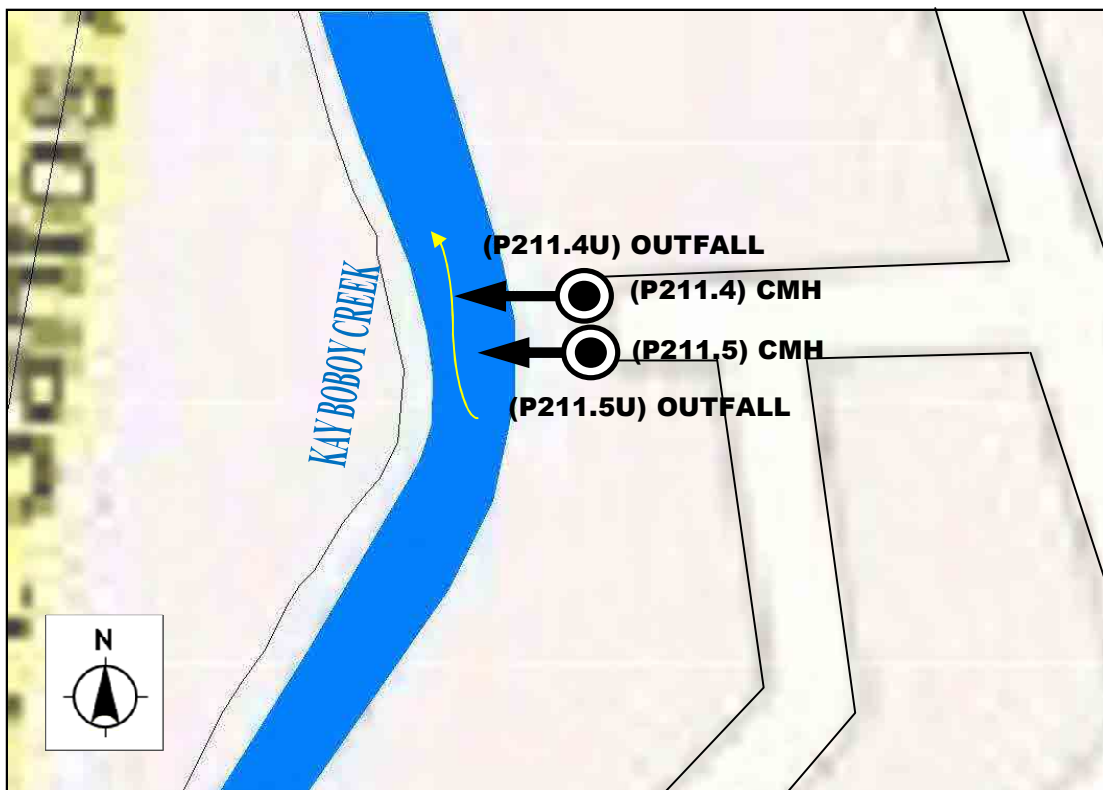


OUTFALL NO. P211.4U TO P211.5U

GP12



OUTFALL NO. P211.4U TO P211.5U





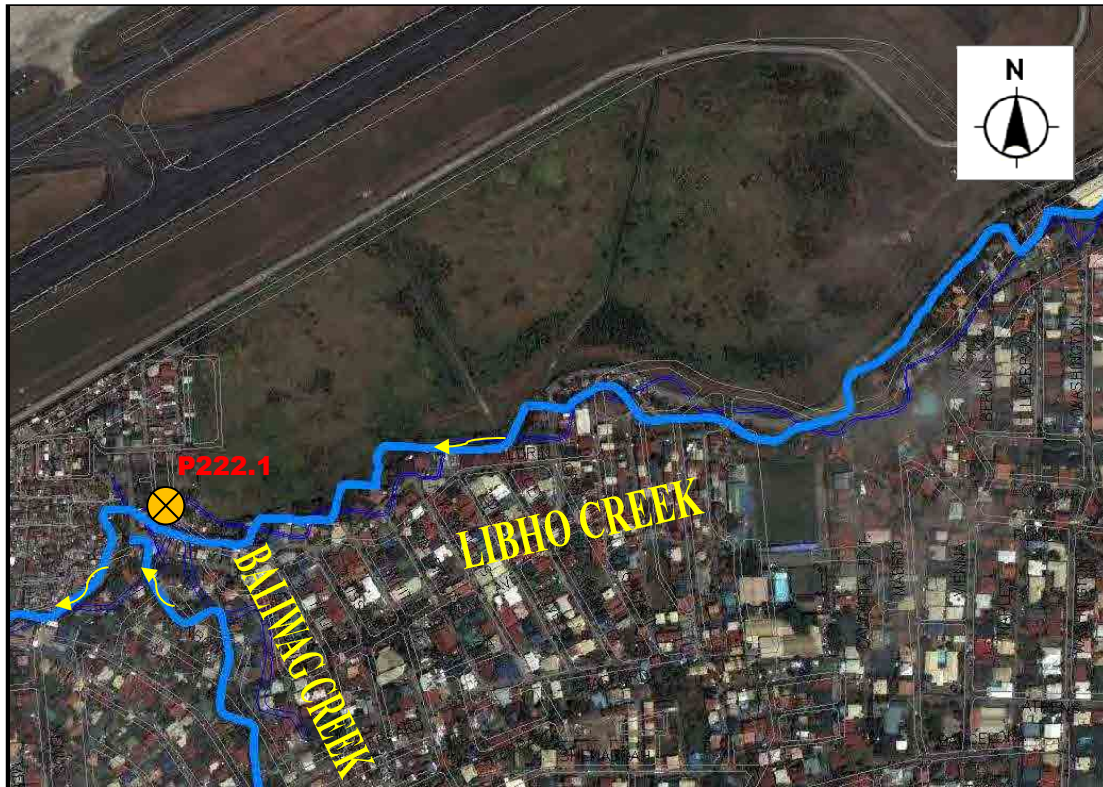
OUTFALL NO. P211.6 TO P211.8



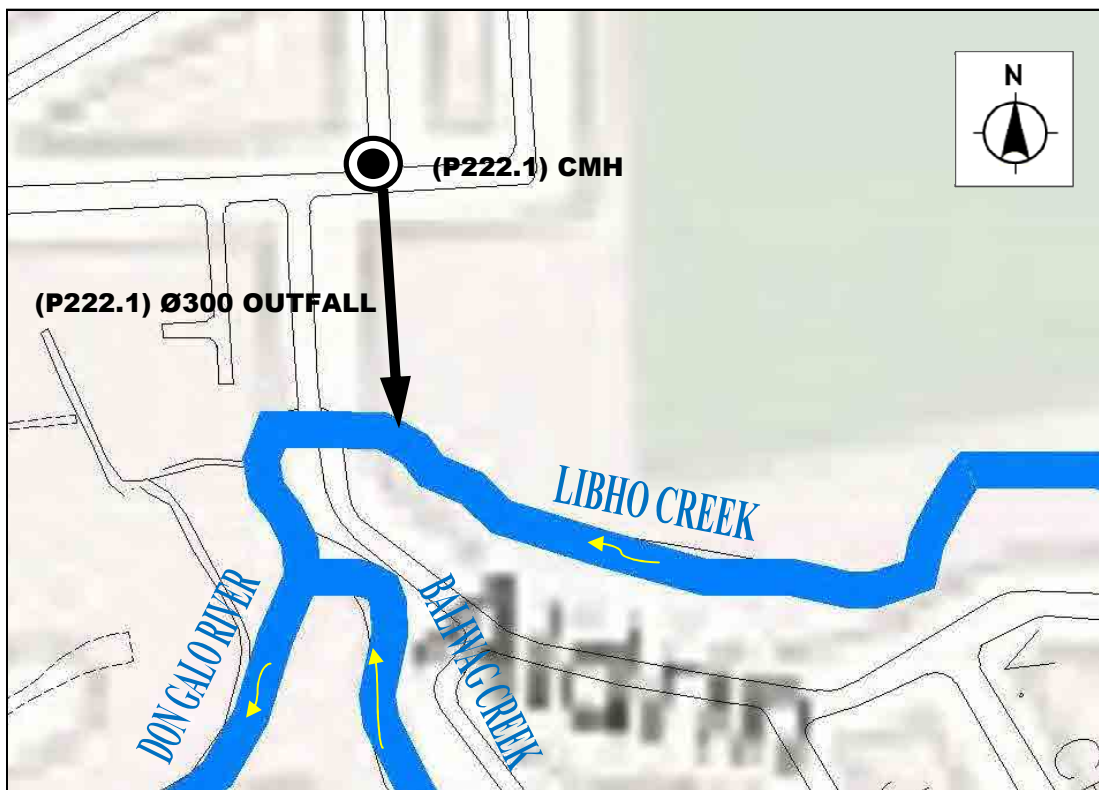


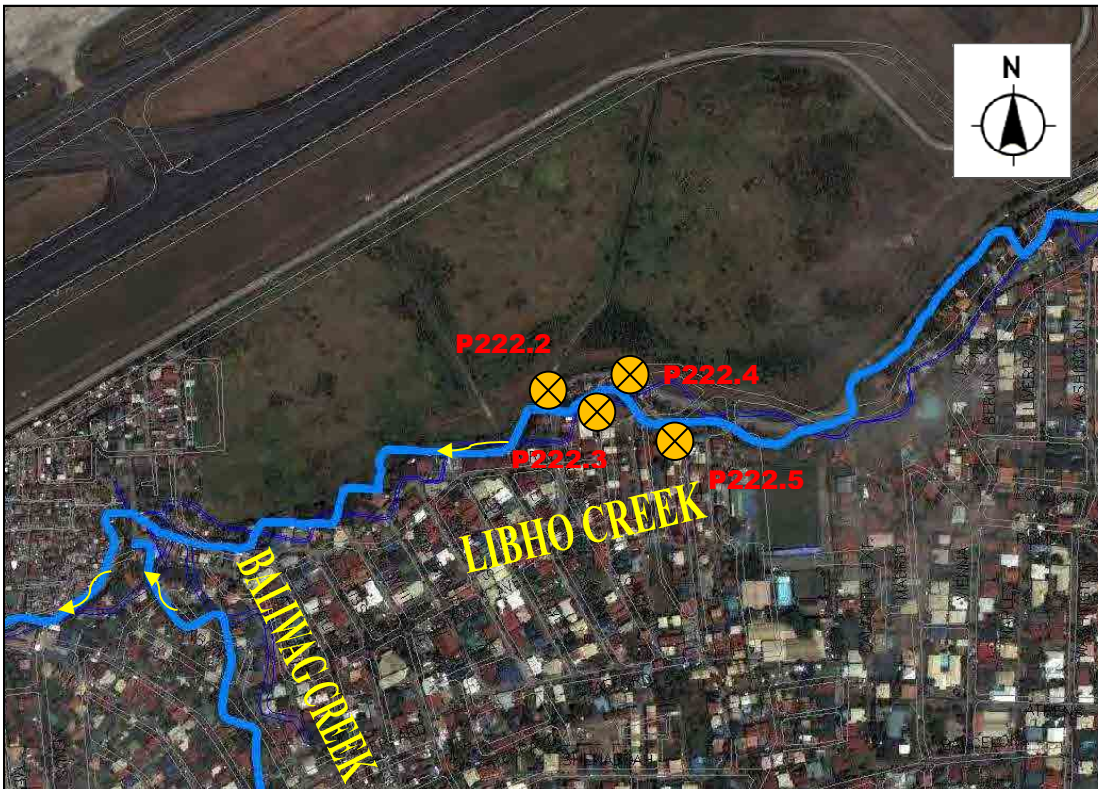
OUTFALL NO. P211.9 TO P211.10



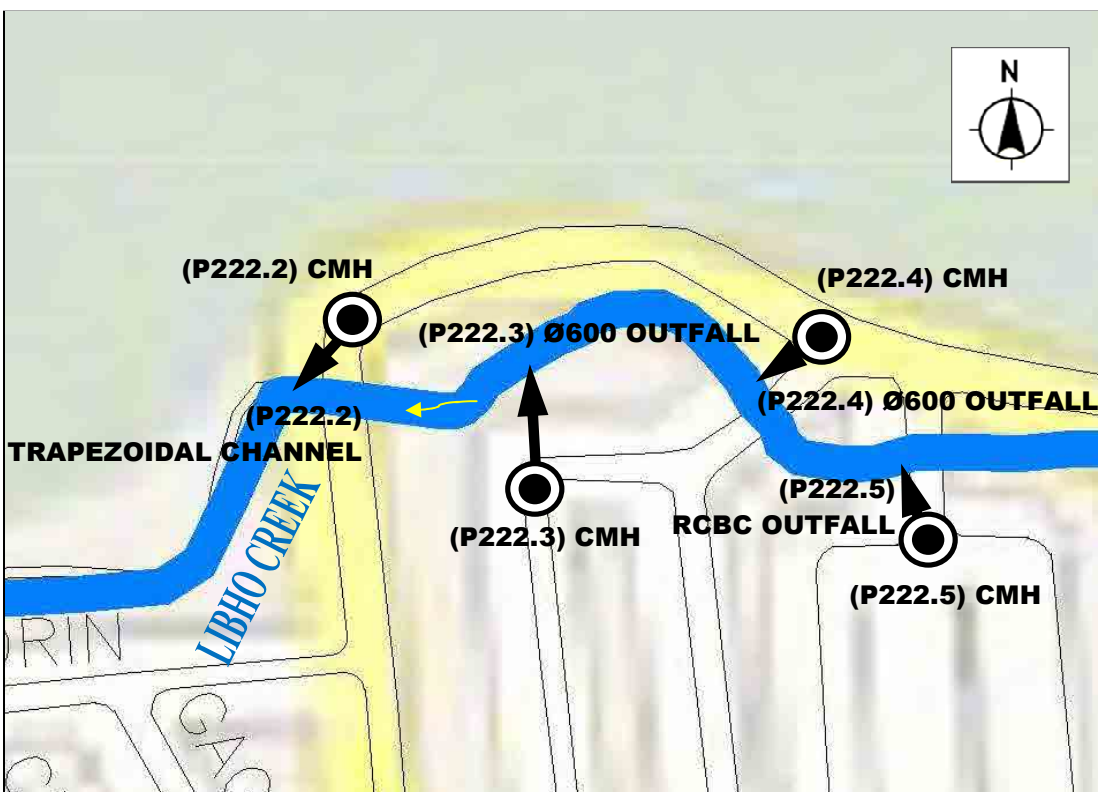


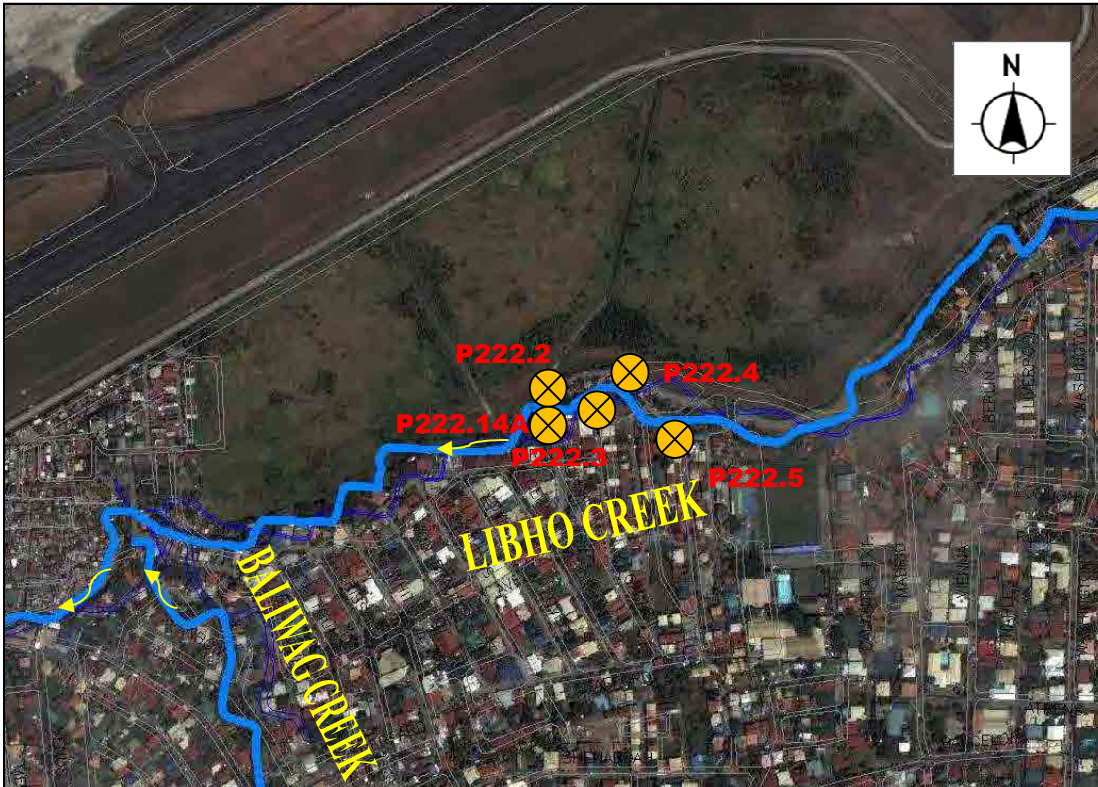
OUTFALL NO. P222.1



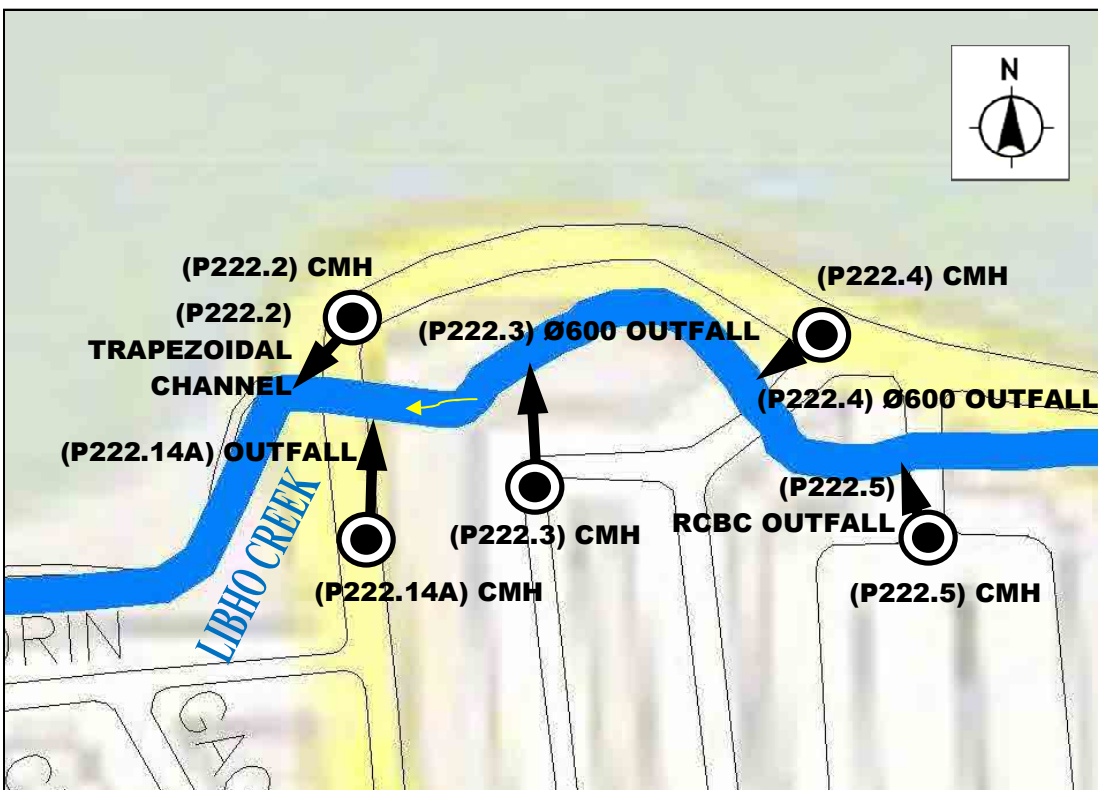


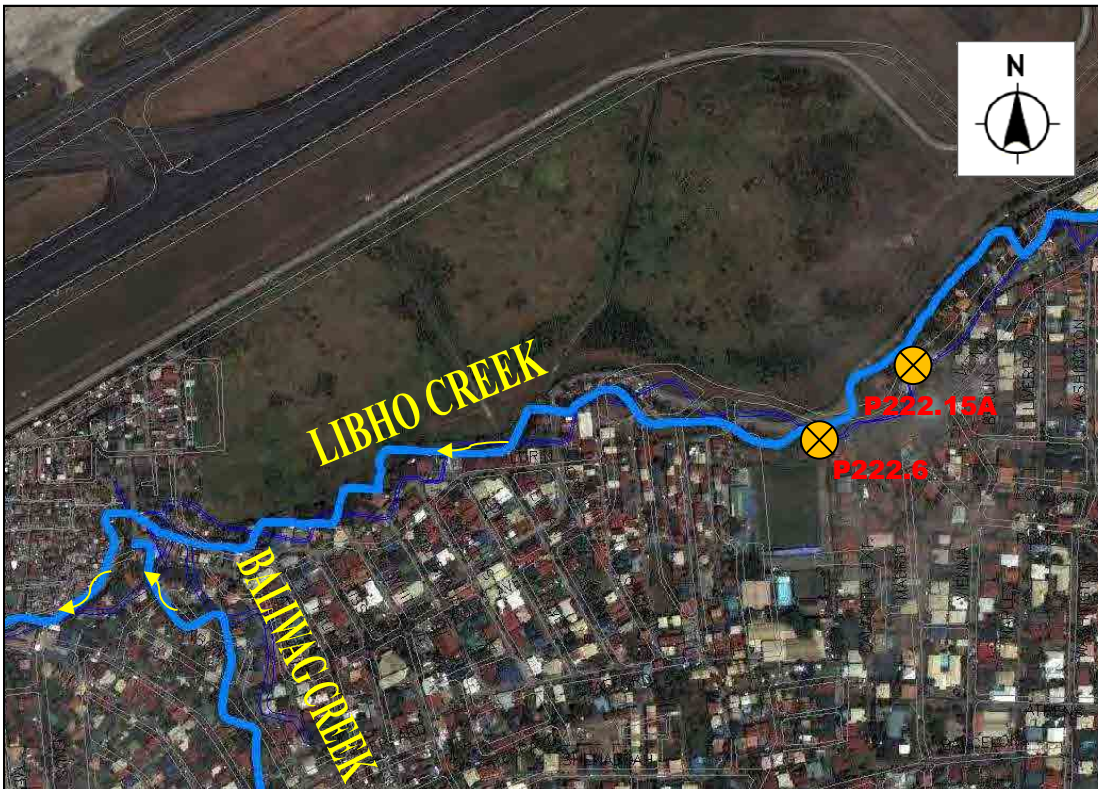
OUTFALL NO. P222.2 TO P222.5



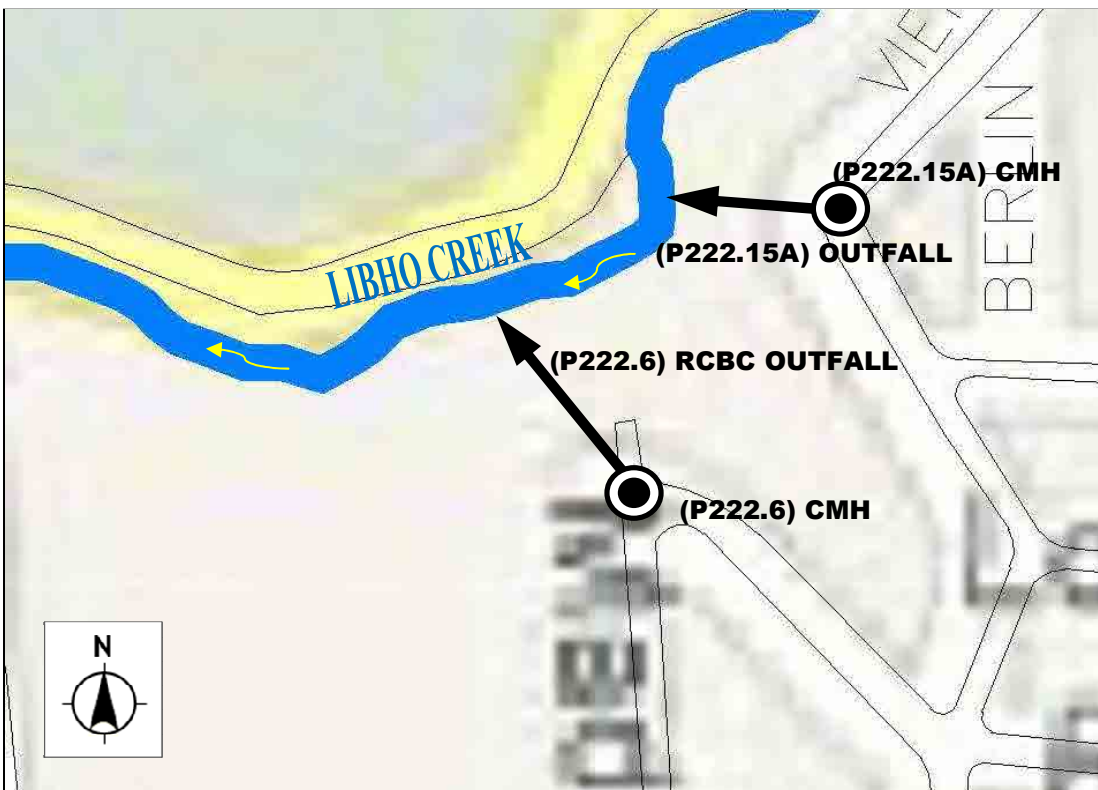


OUTFALL NO. P222.2 TO P222.5, P222.14A

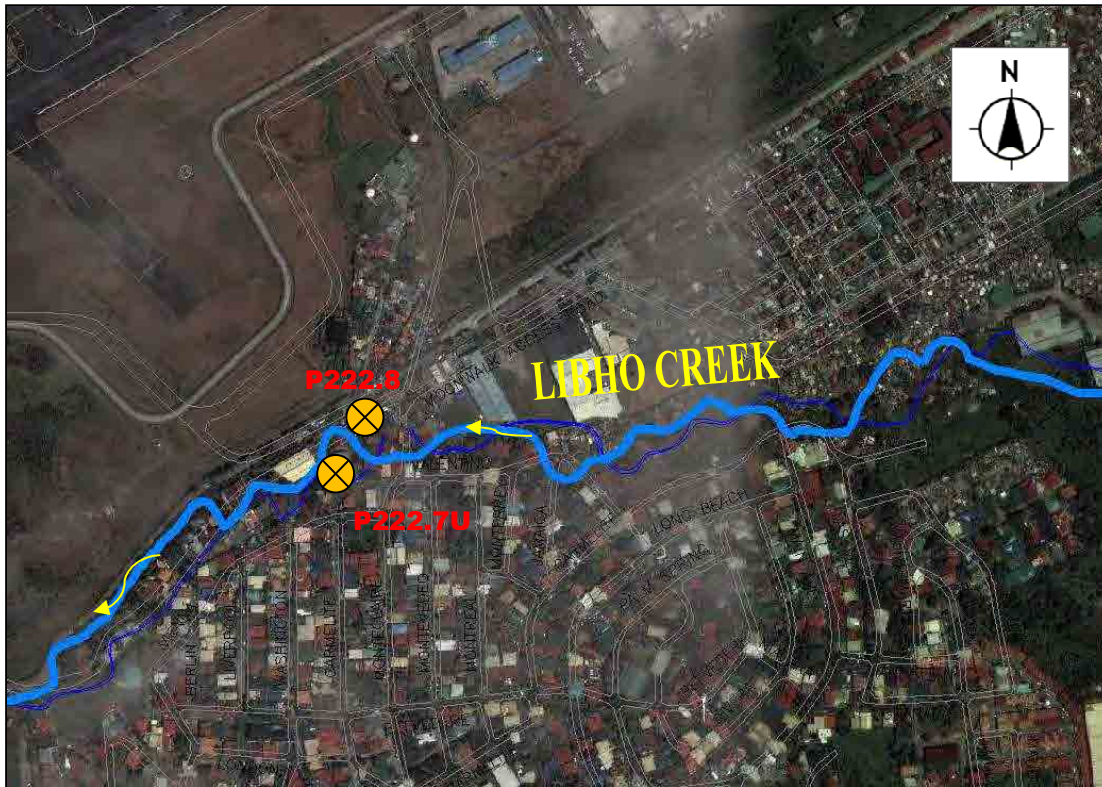




OUTFALL NO. P222.6 and P222.15A





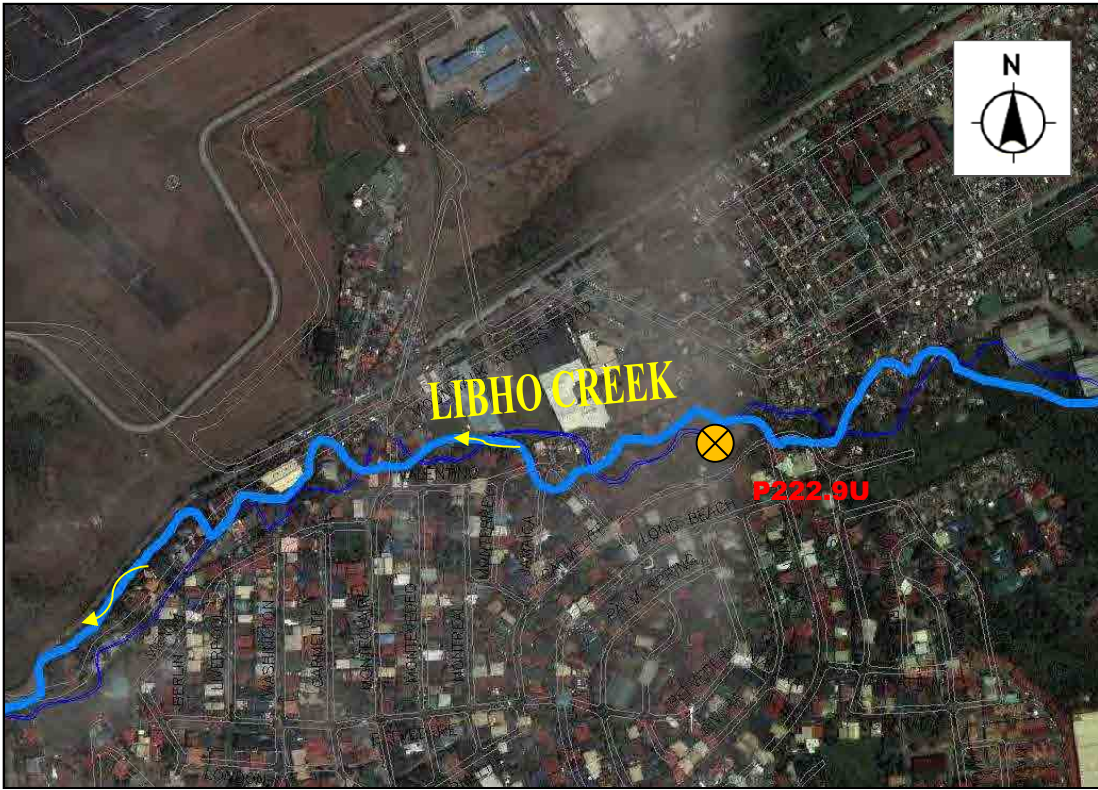


OUTFALL NO. P222.7U TO P222.8



OUTFALL NO. P222.9U

GP7



OUTFALL NO. P222.9U

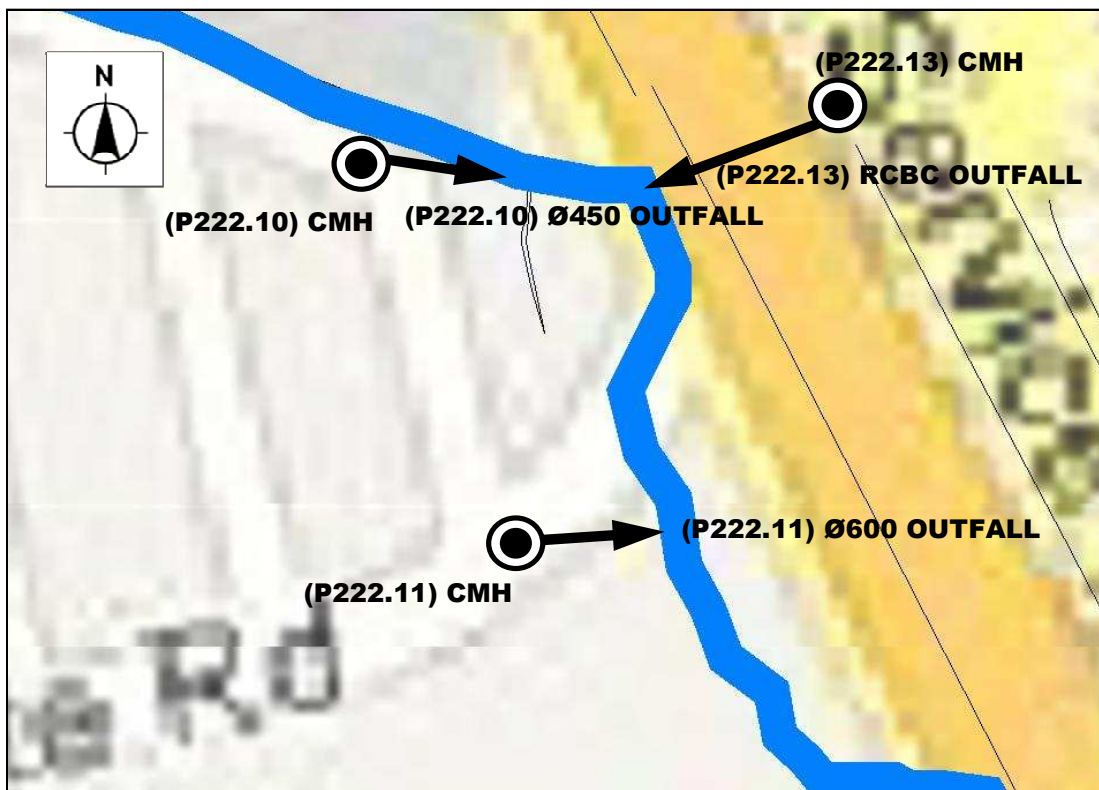


OUTFALL NO. P222.10 TO P222.11 & P222.13

GP8



OUTFALL NO. P222.10 TO P222.11 & P222.13

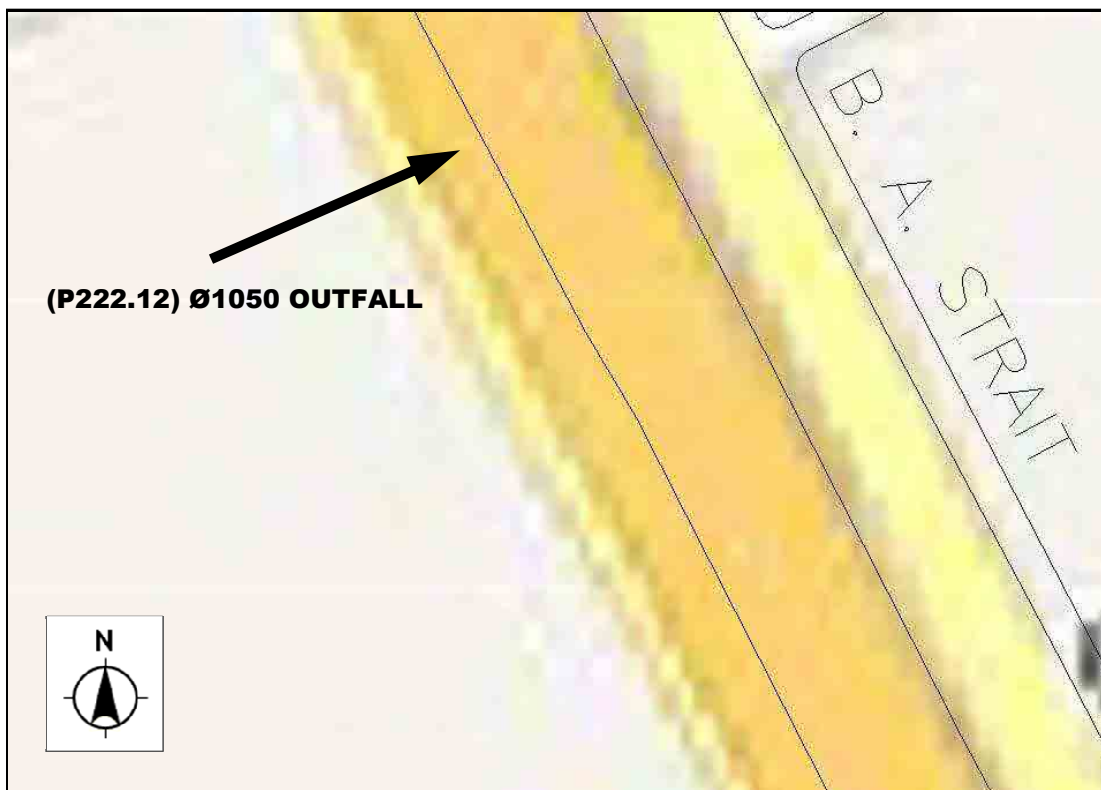


OUTFALL NO. P222.12

GP8



OUTFALL NO. P222.12

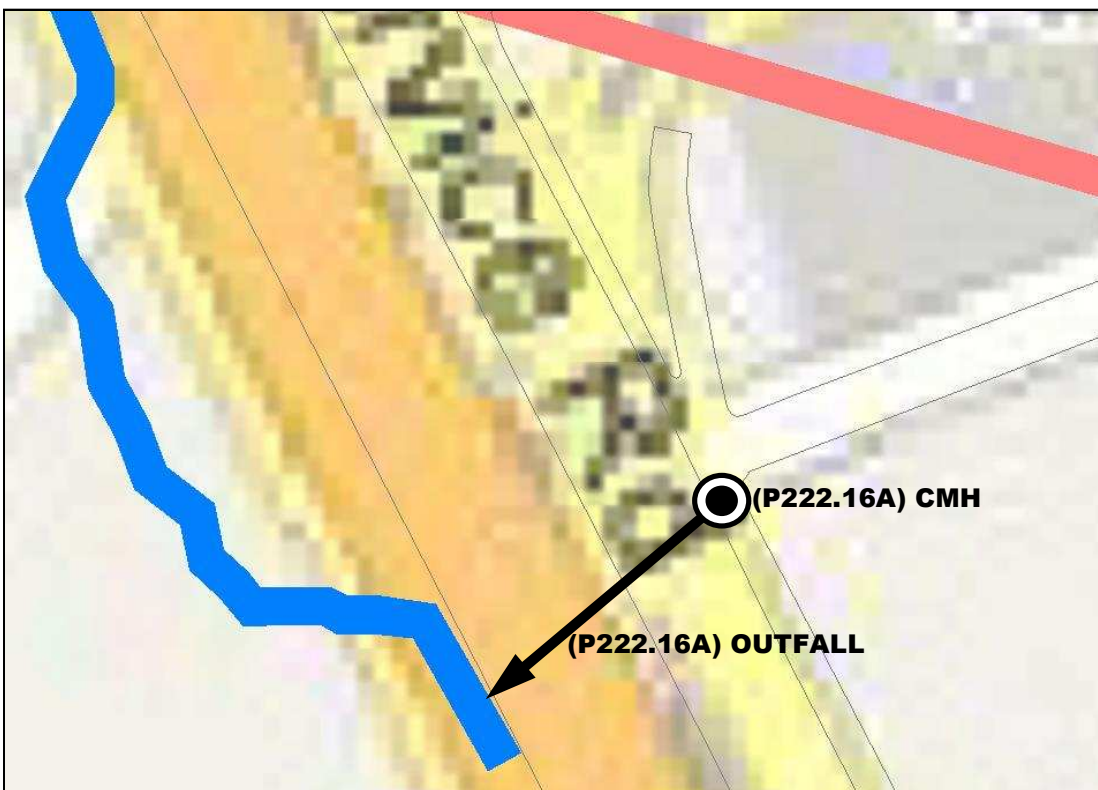


OUTFALL NO. P222.16A

GP8



OUTFALL NO. P222.16A



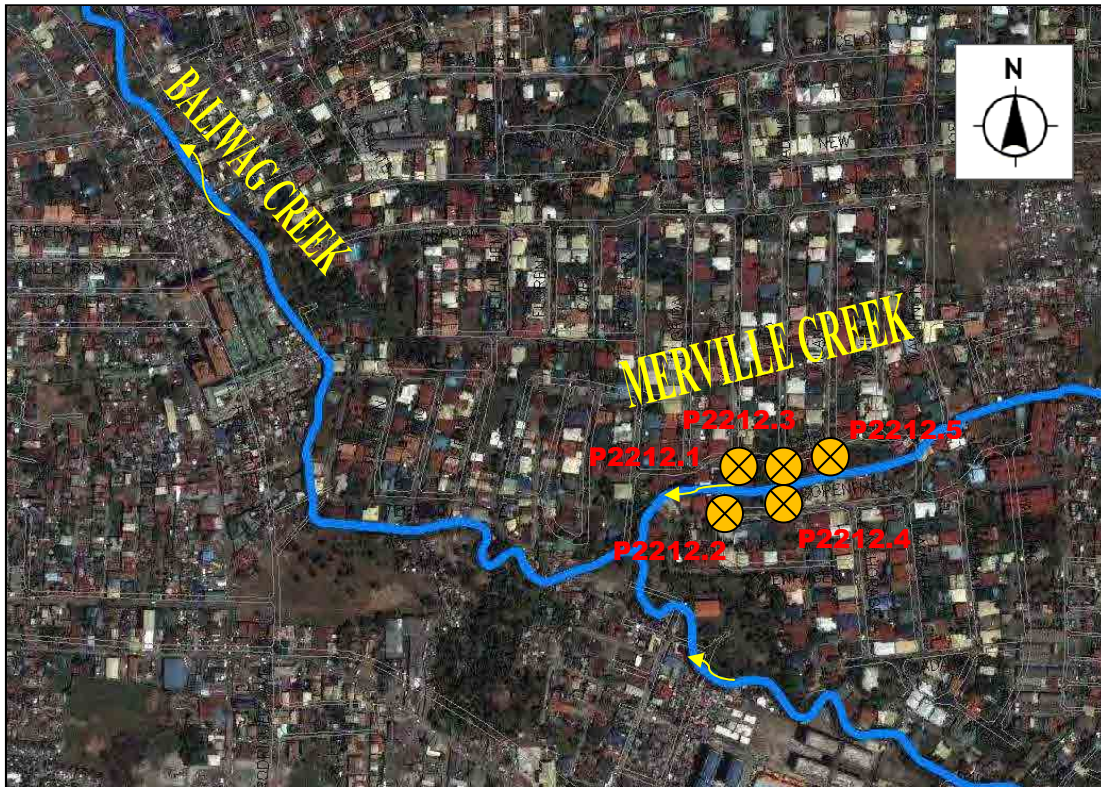
OUTFALL NO. P222.17A

GP8



OUTFALL NO. P222.17A





OUTFALL NO. P2212.1 TO P2212.5





OUTFALL NO. P2212.6A TO P2212.7A





OUTFALL NO. P2212.8A TO P2212.9A

GP11a



OUTFALL NO. P2212.8A TO P2212.9A



OUTFALL NO. P2212.10A TO P2212.11A

GP11a

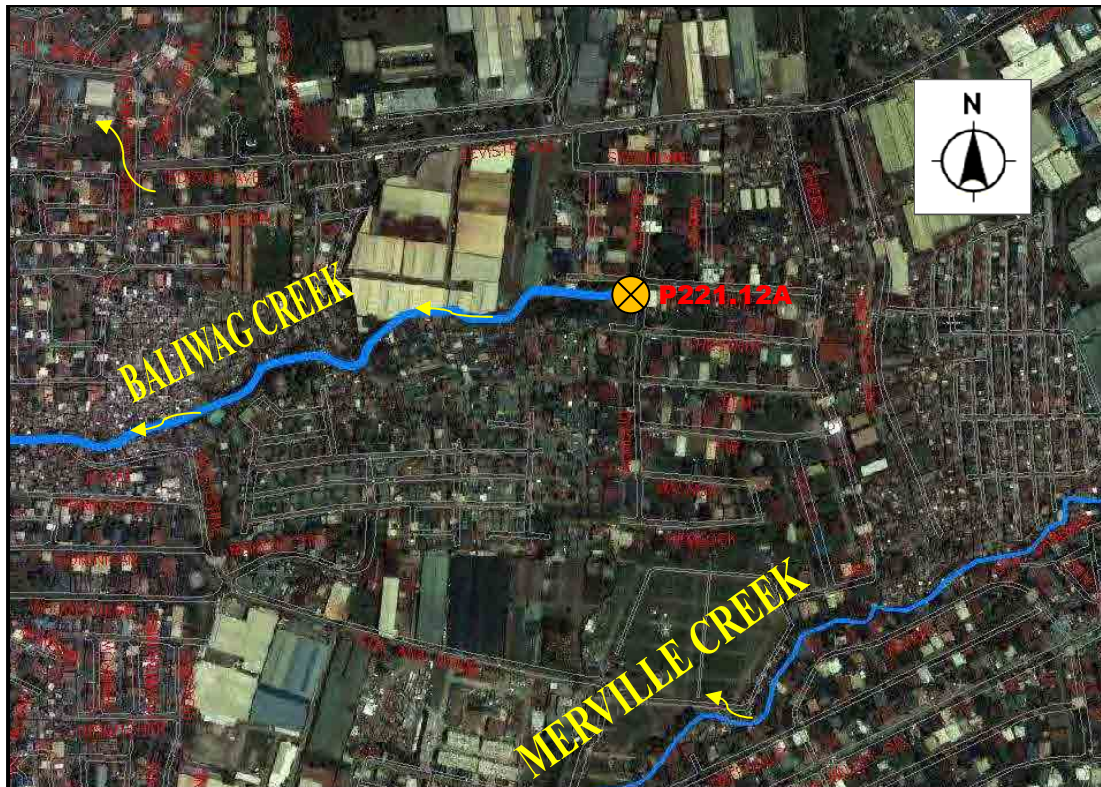


OUTFALL NO. P2212.10A TO P2212.11A

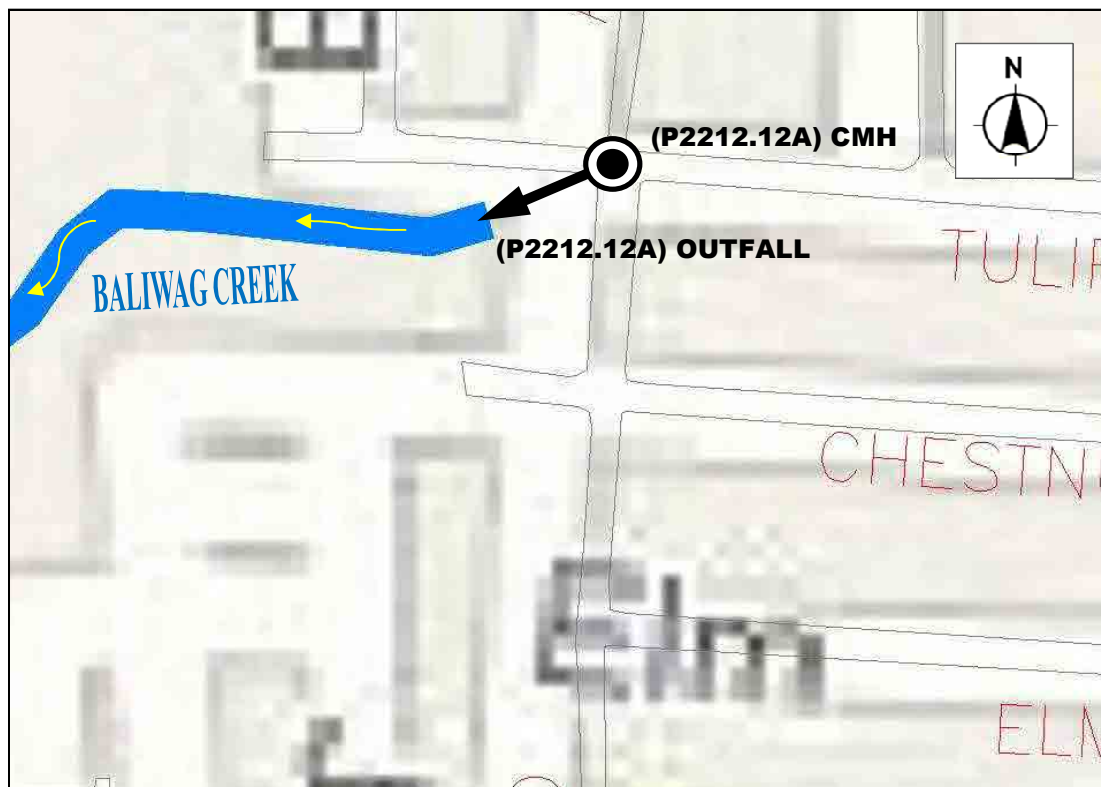


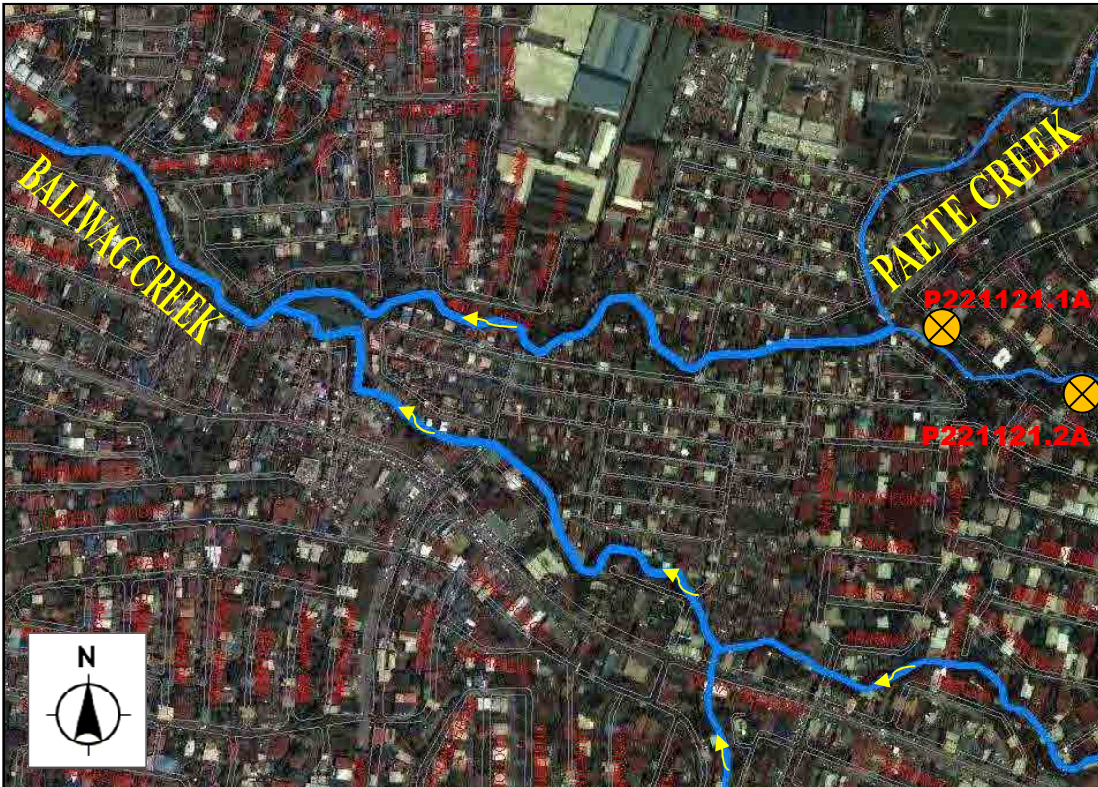
OUTFALL NO. P2212.12A

GP11a

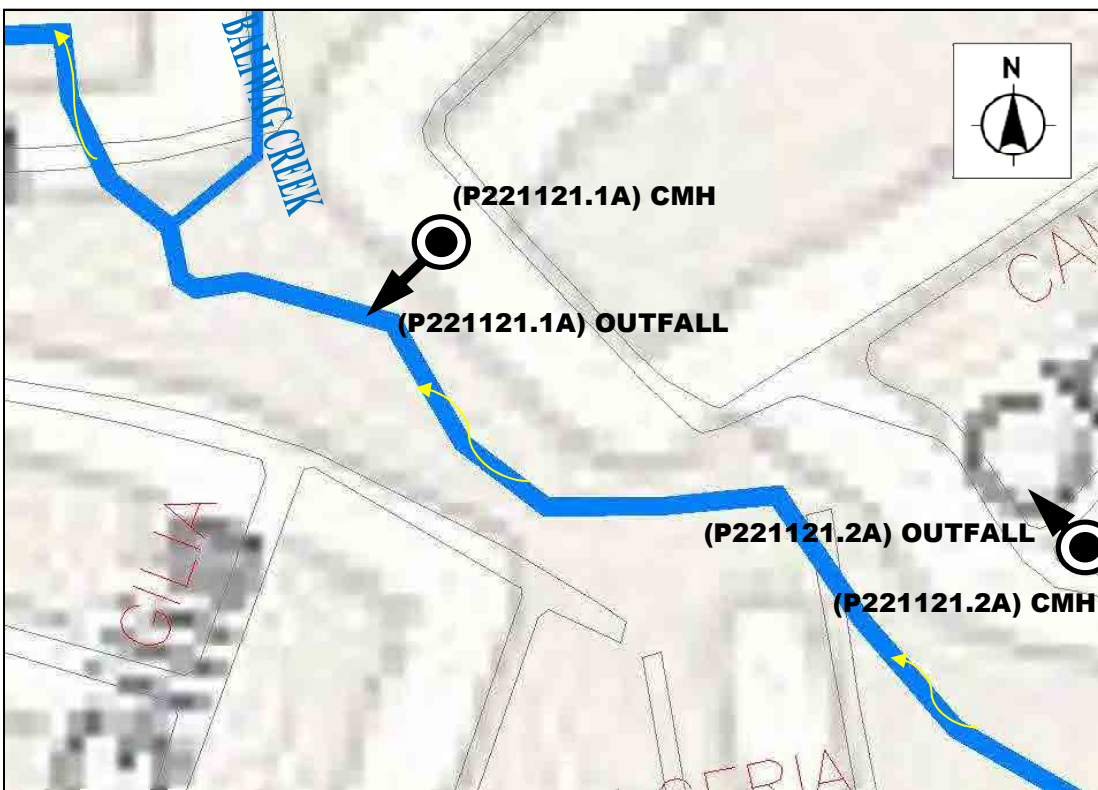


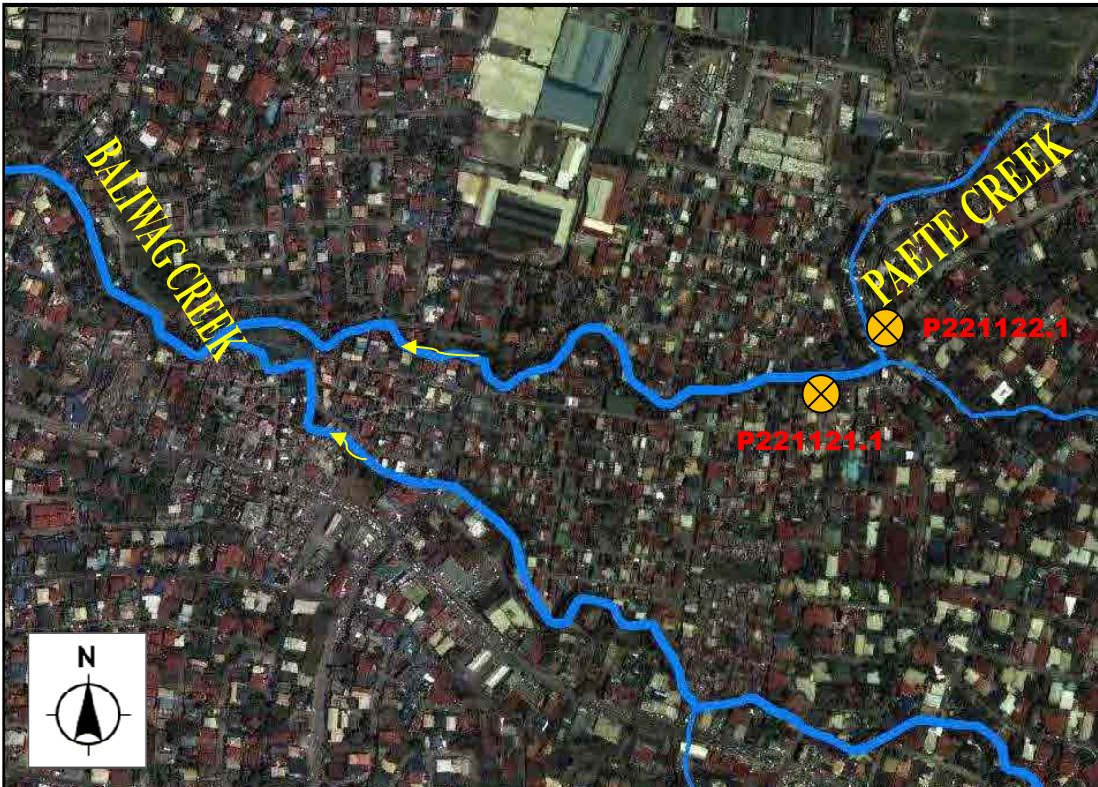
OUTFALL NO. P2212.12A



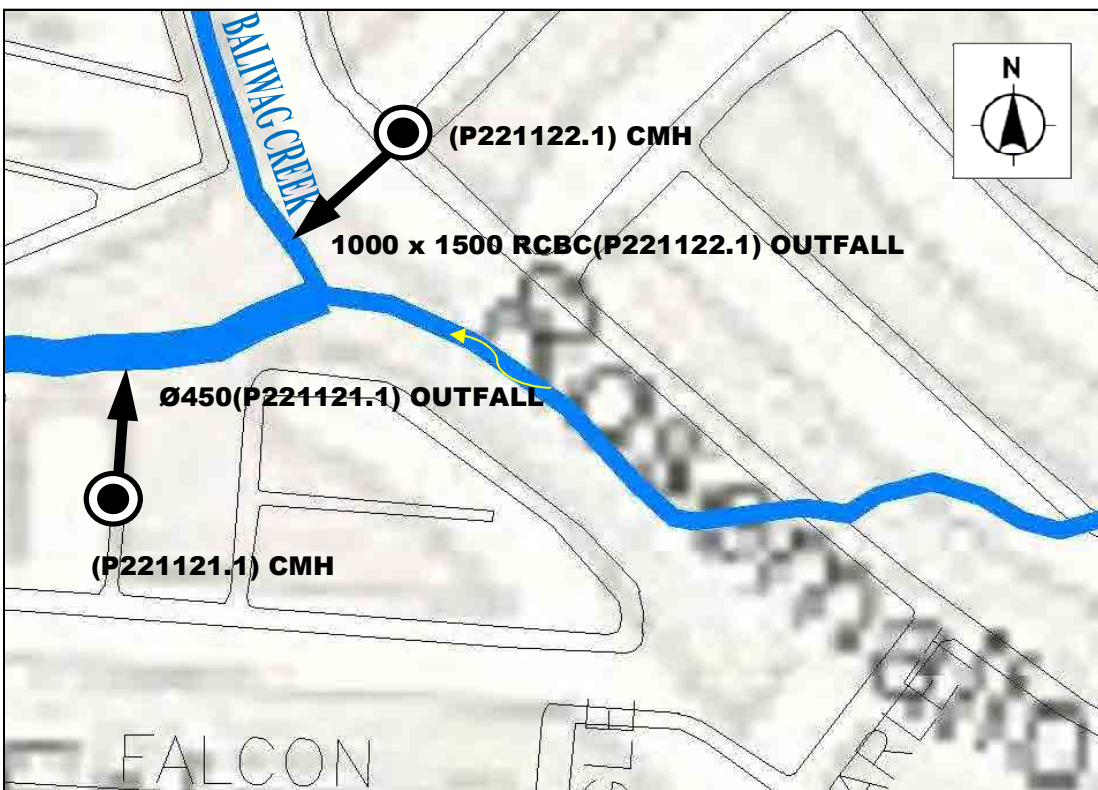


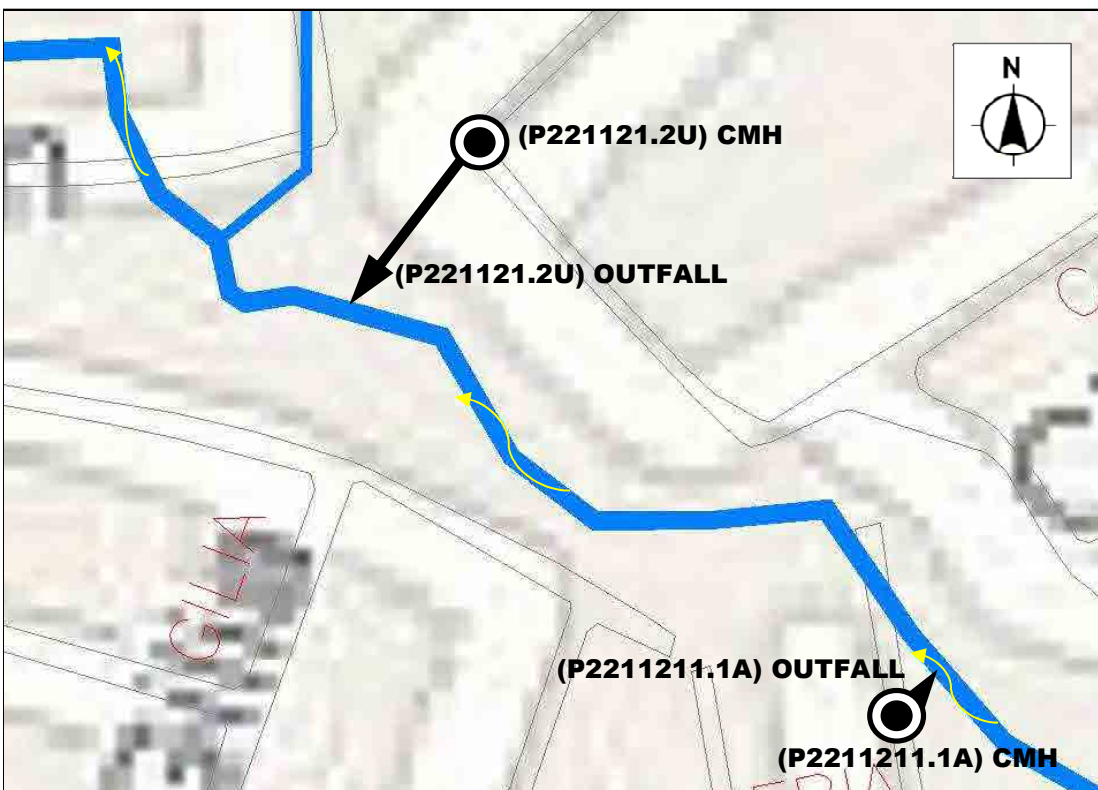
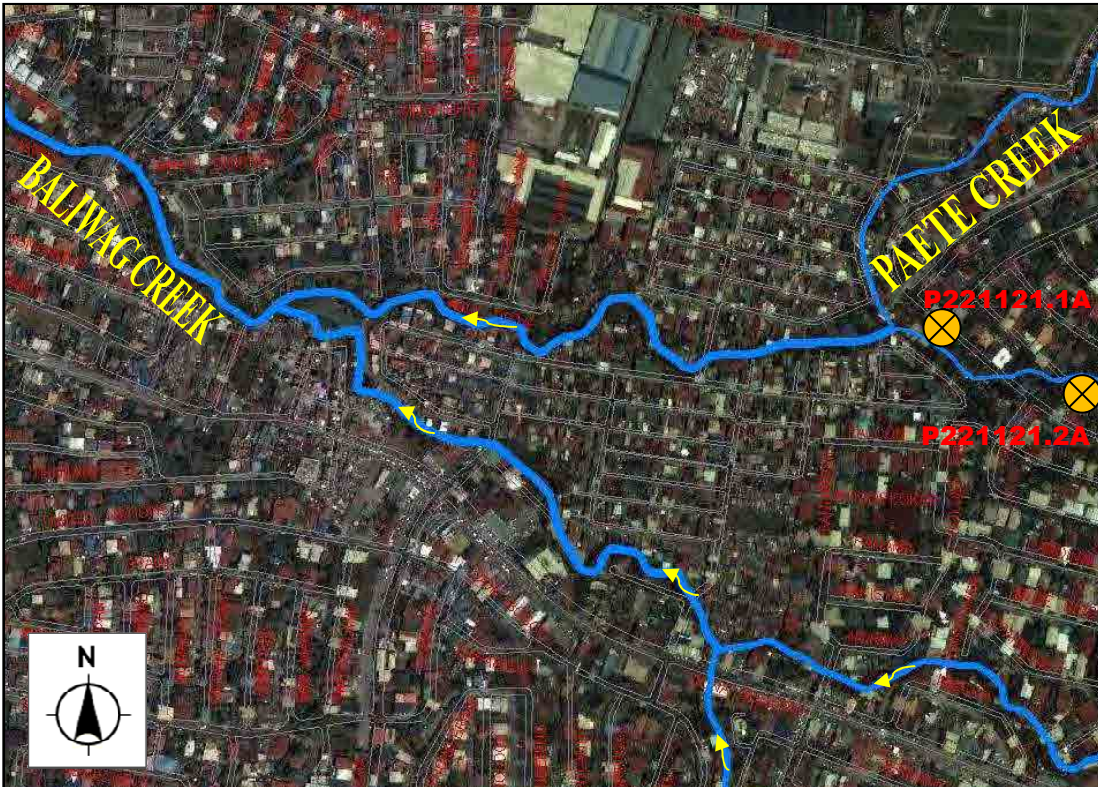
OUTFALL NO. P221121.1A & P221121.2A





OUTFALL NO. P221121.1 & P221122.1





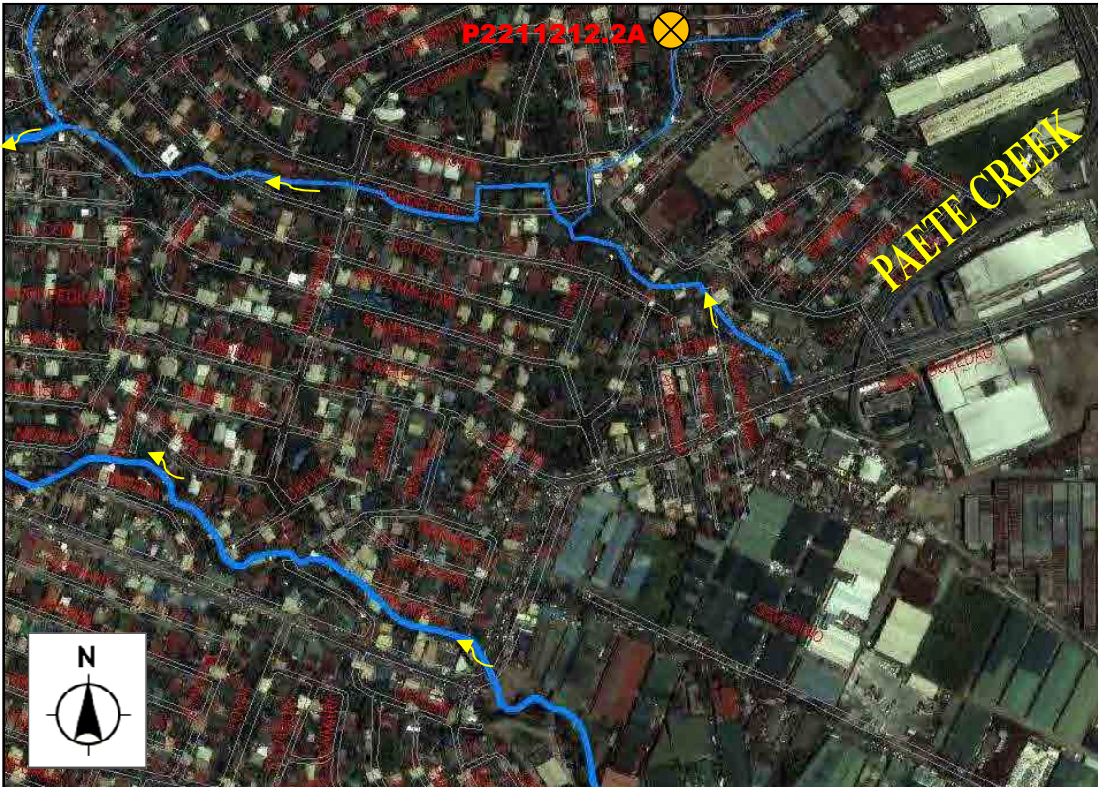


OUTFALL NO. P221122.3A TO P221122.6A

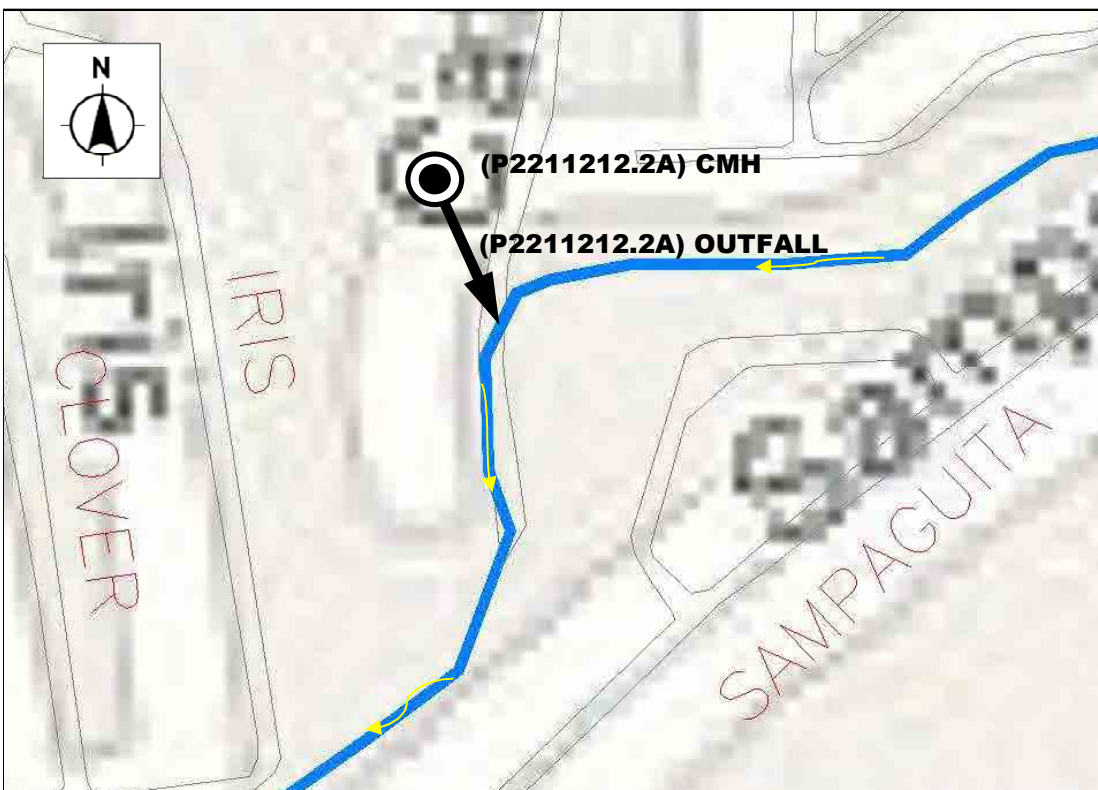


OUTFALL NO. P2211212.2A

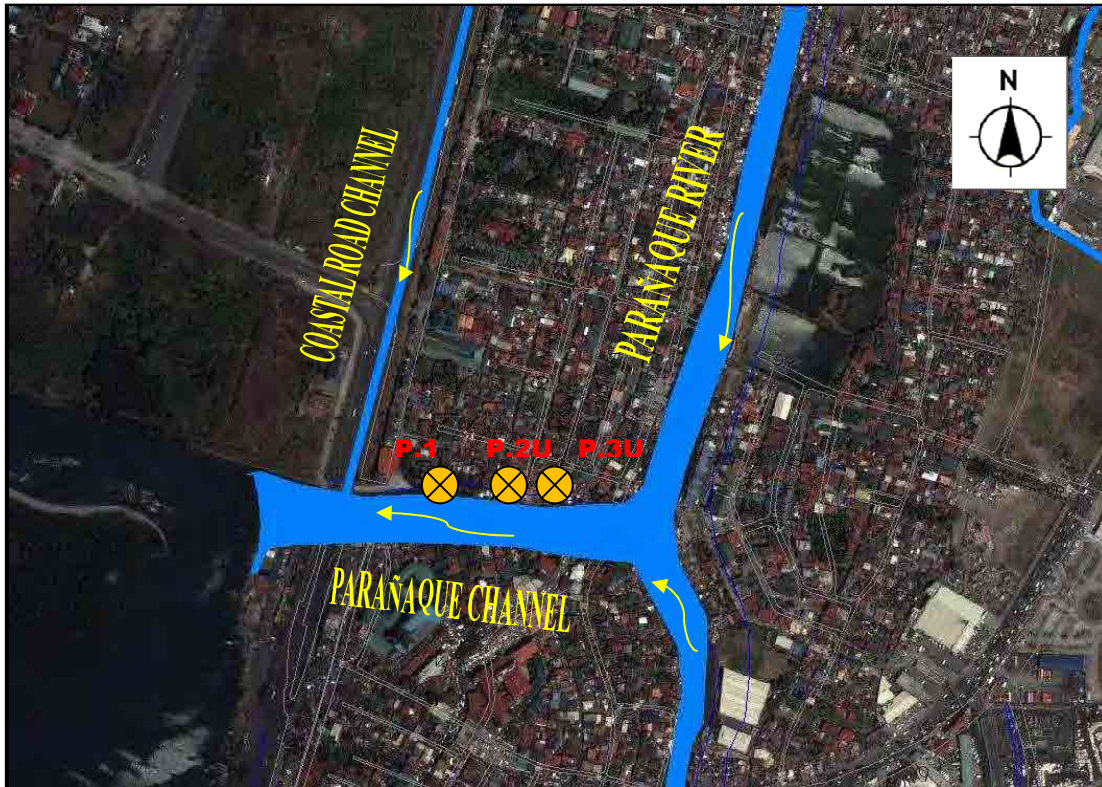
GP14



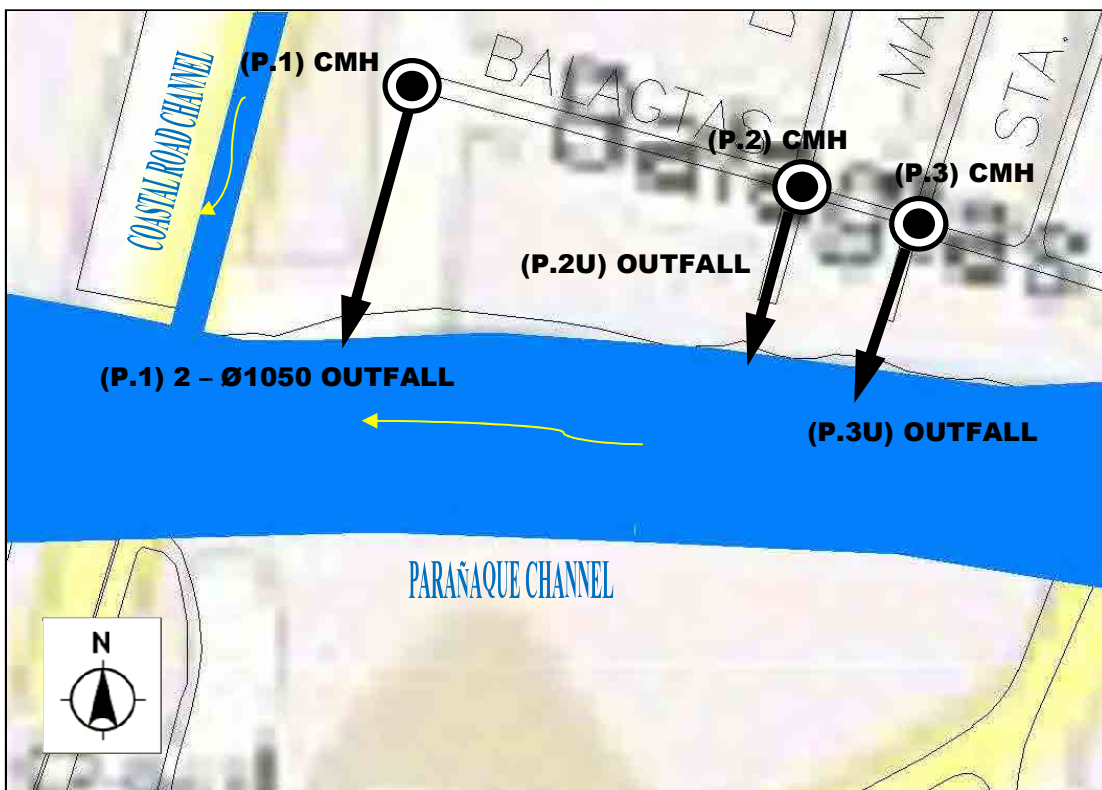
OUTFALL NO. P2211212.2A

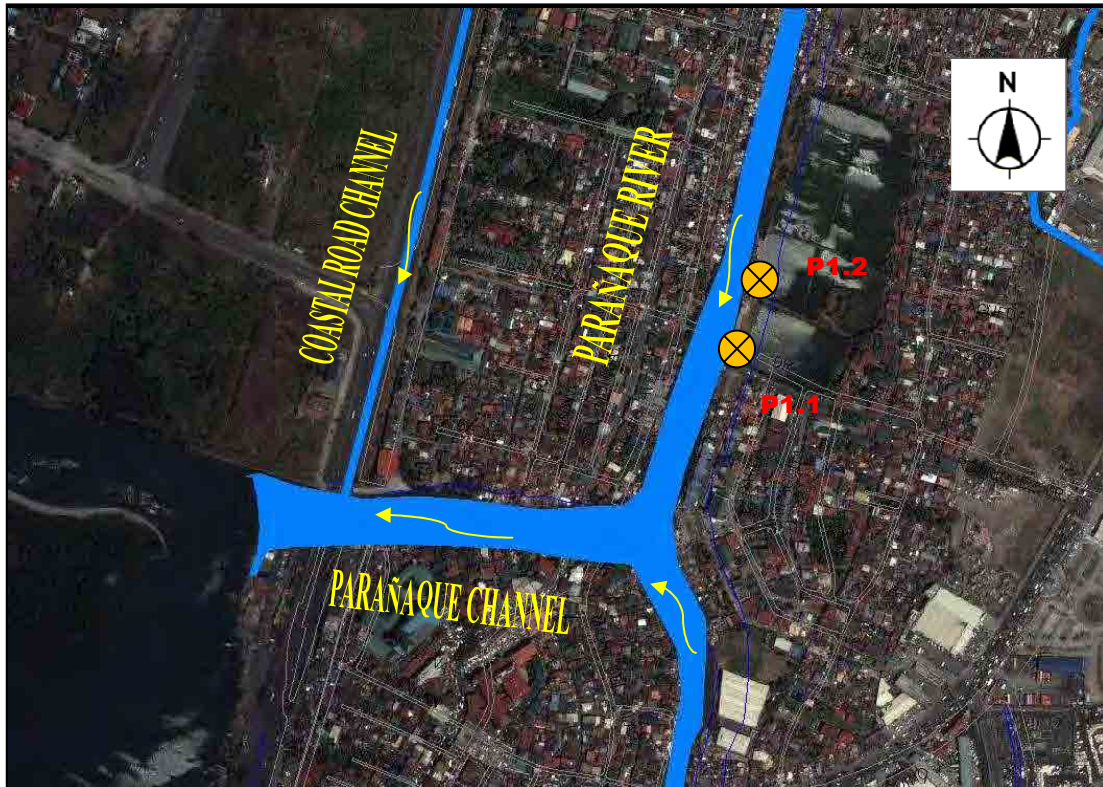




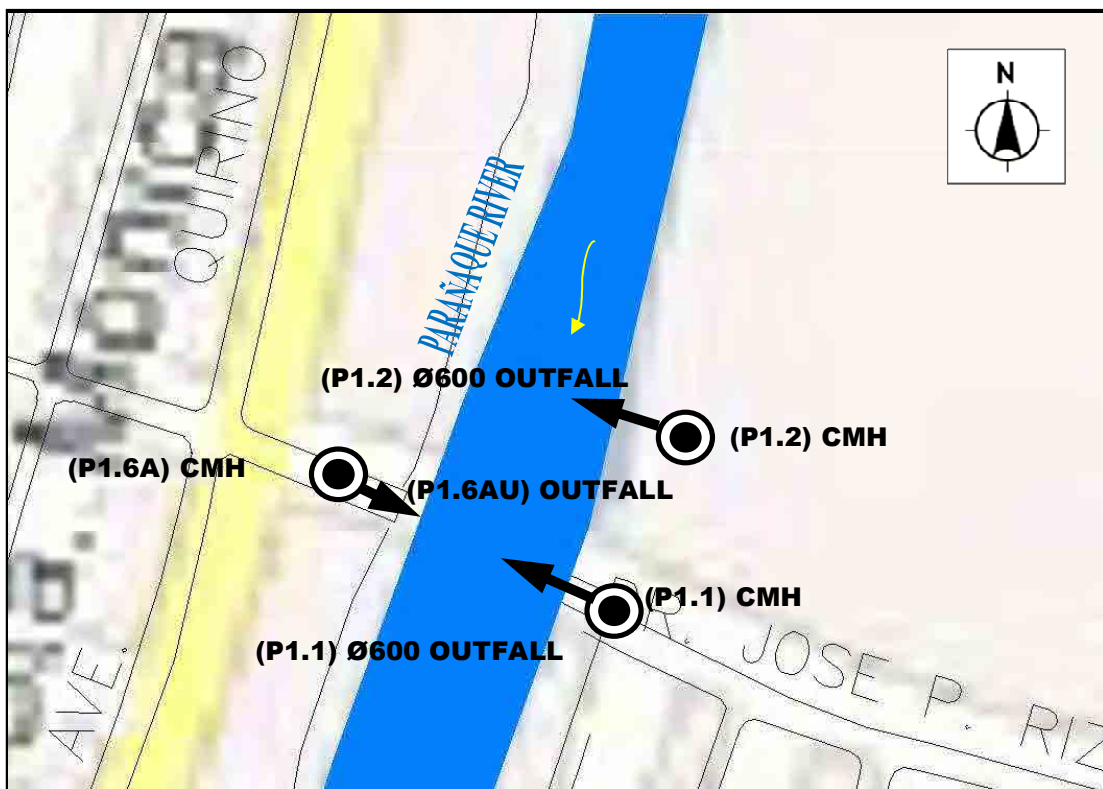


OUTFALL NO. P.1 TO P.3U



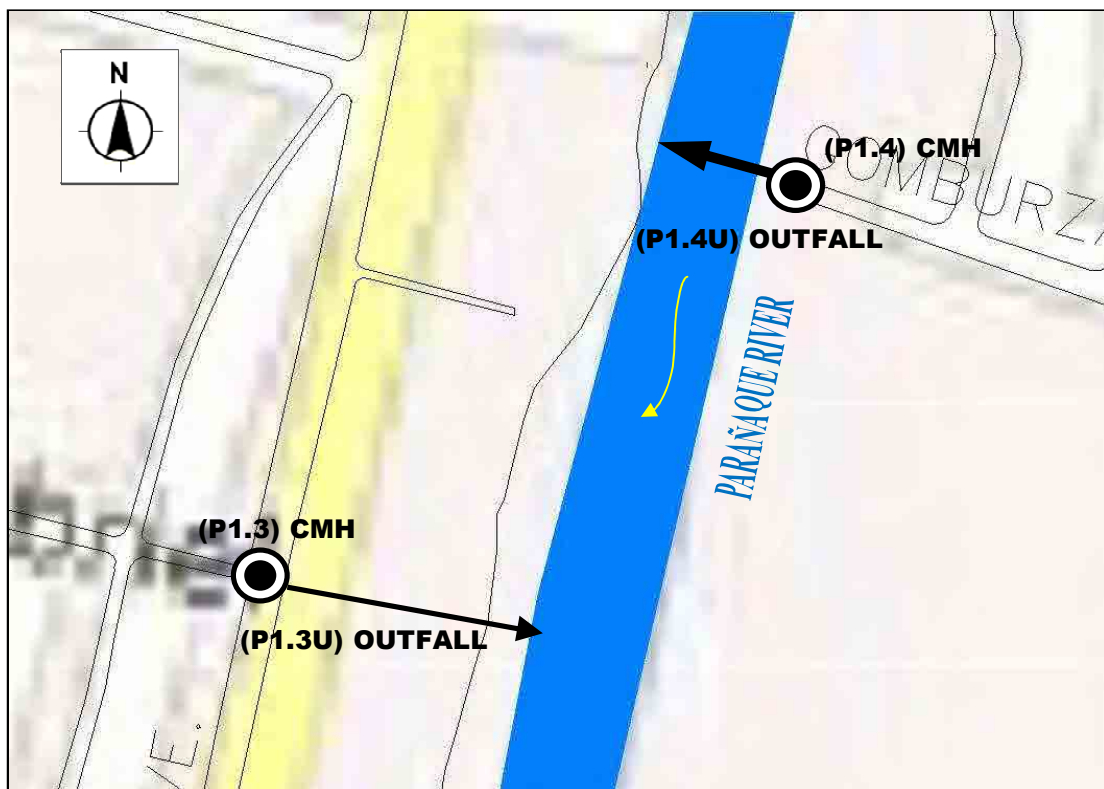


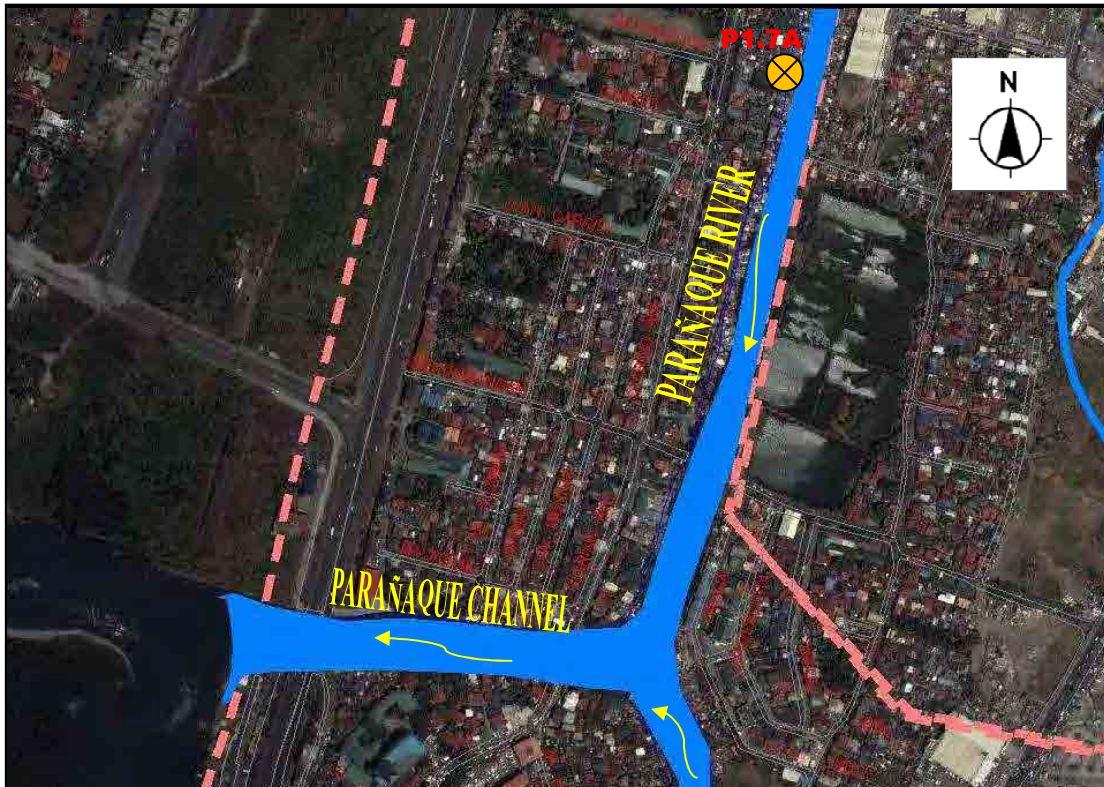
OUTFALL NO. P1.1 TO P1.2



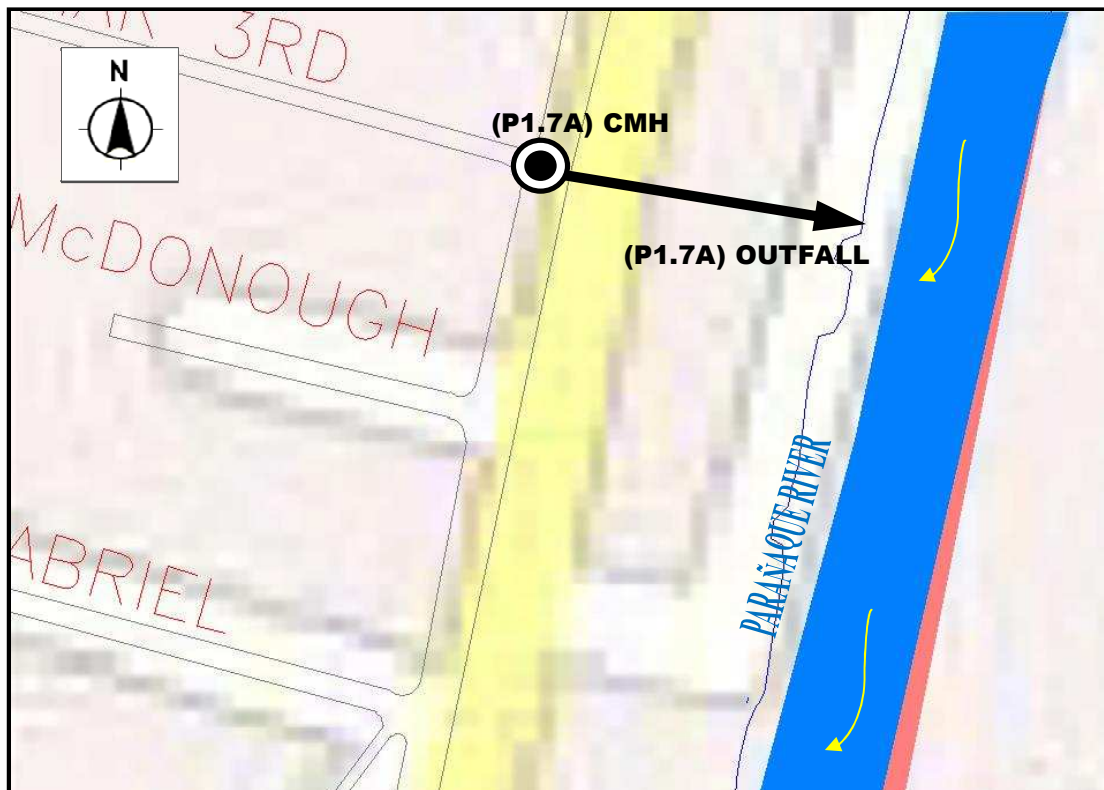


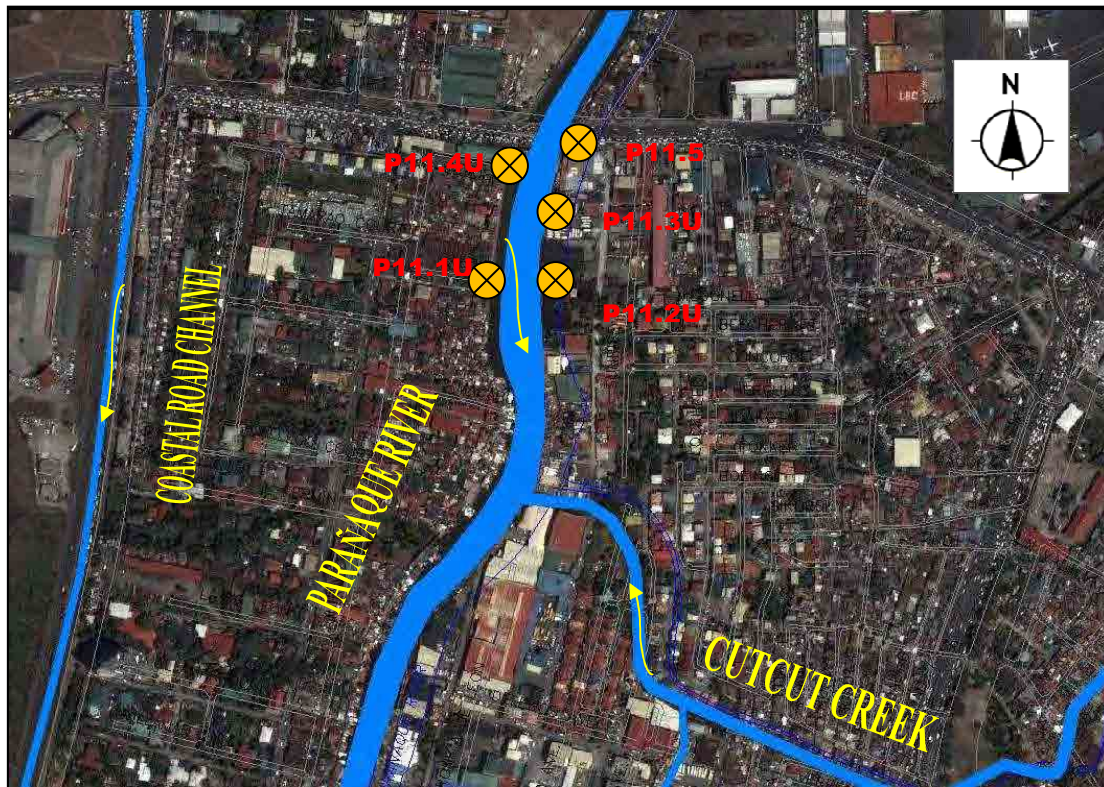
OUTFALL NO. P1.3U TO P1.4U



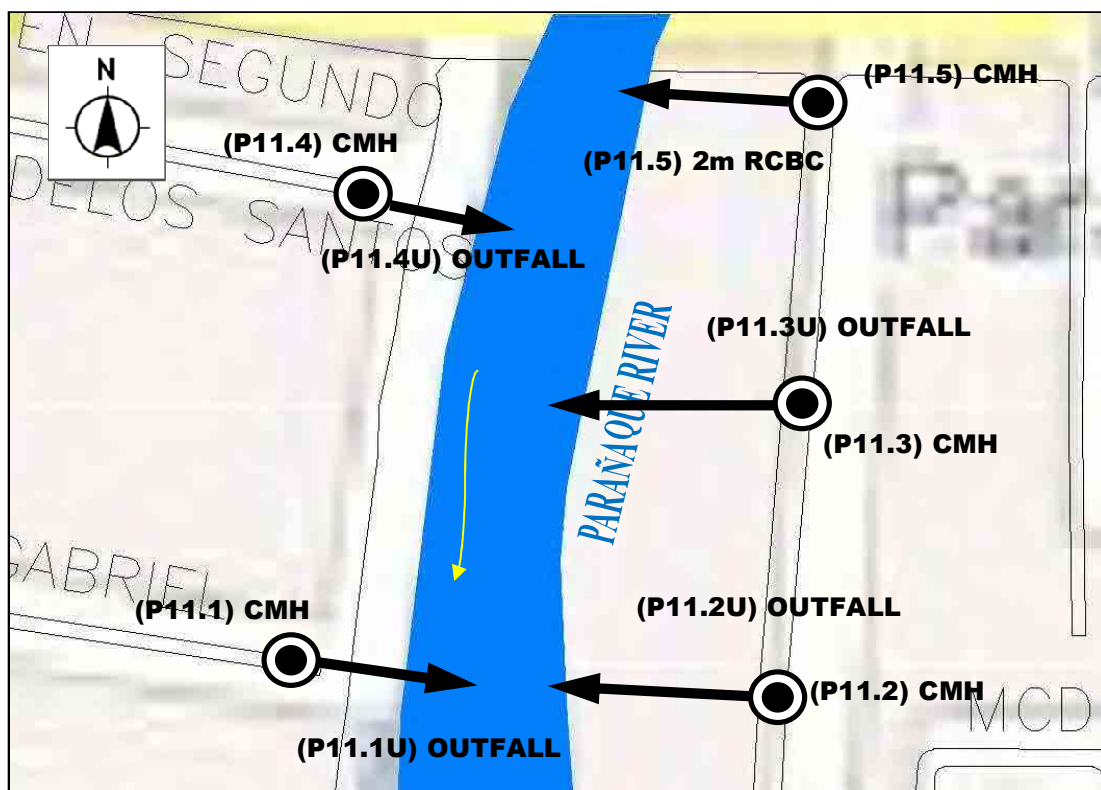


OUTFALL NO. P1.7A





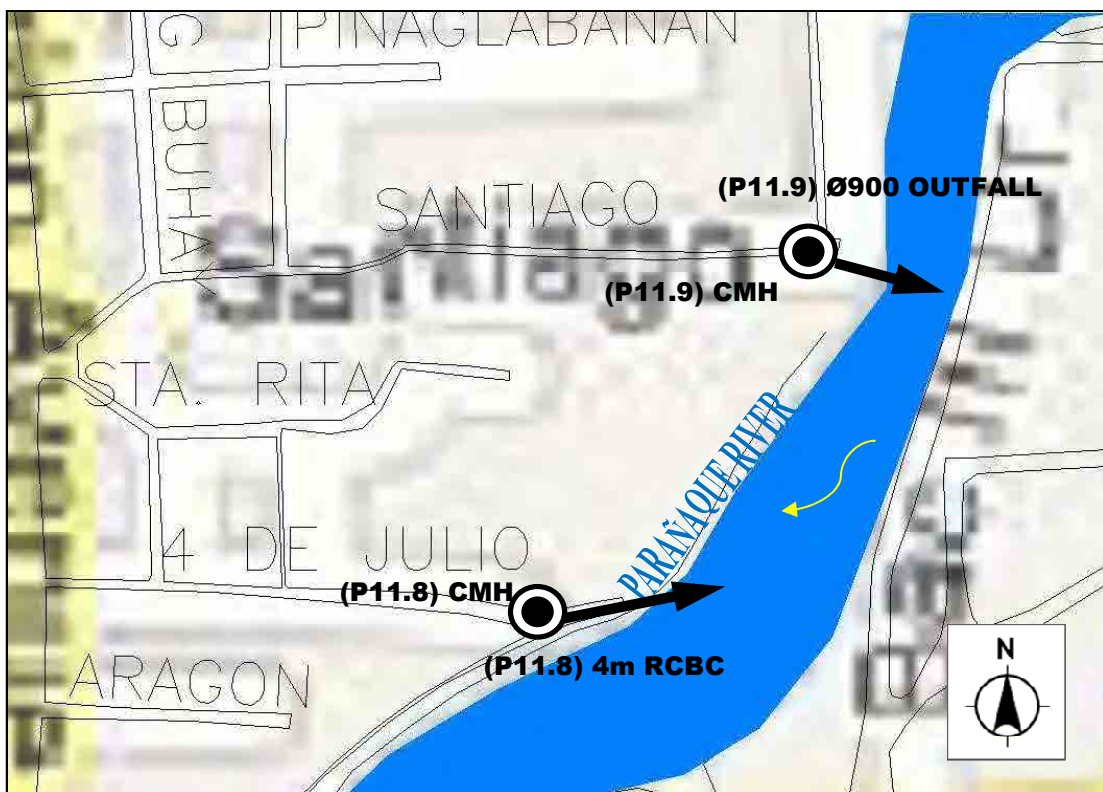
OUTFALL NO. P11.1U TO P11.5





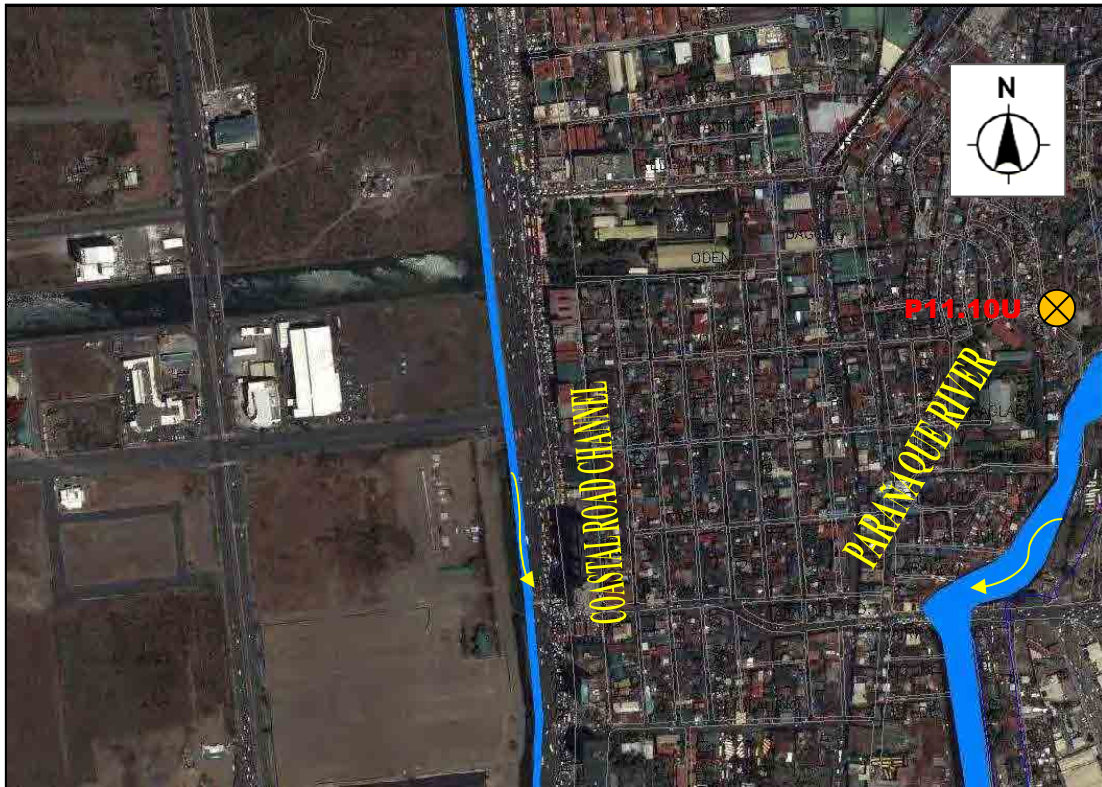
OUTFALL NO. P11.6 TO P11.7U





OUTFALL NO. P11.10U

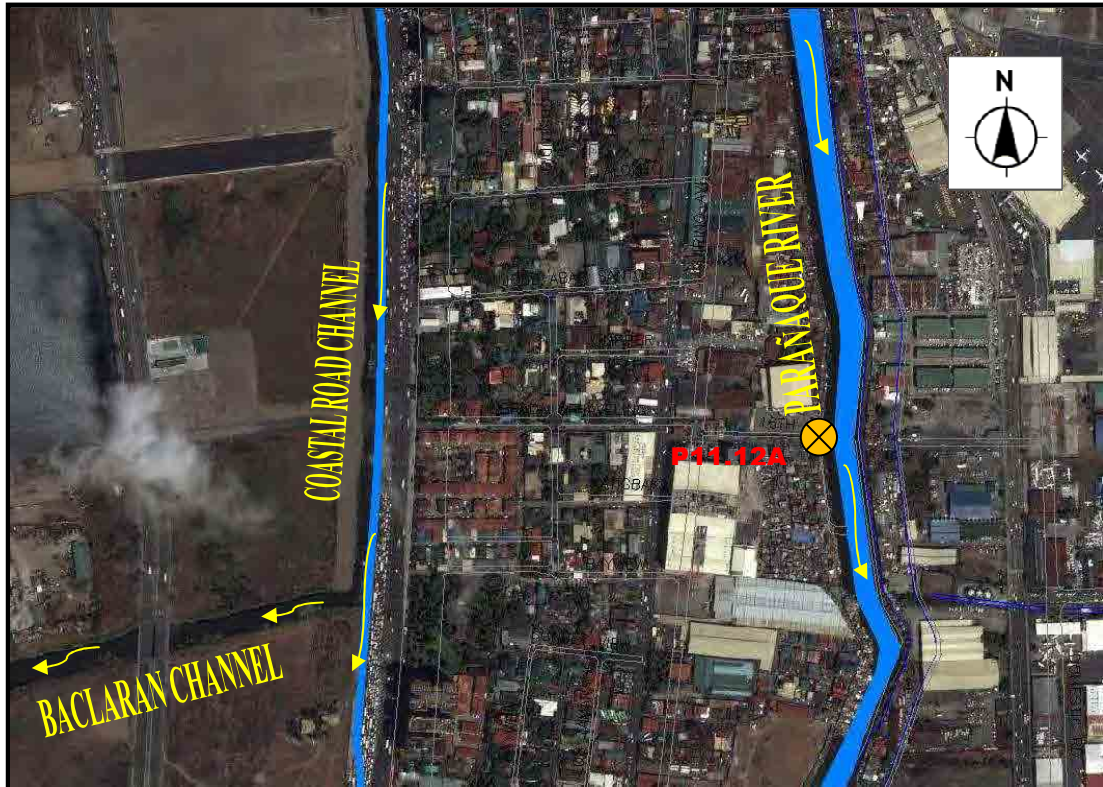
GP1



OUTFALL NO. P11.10U





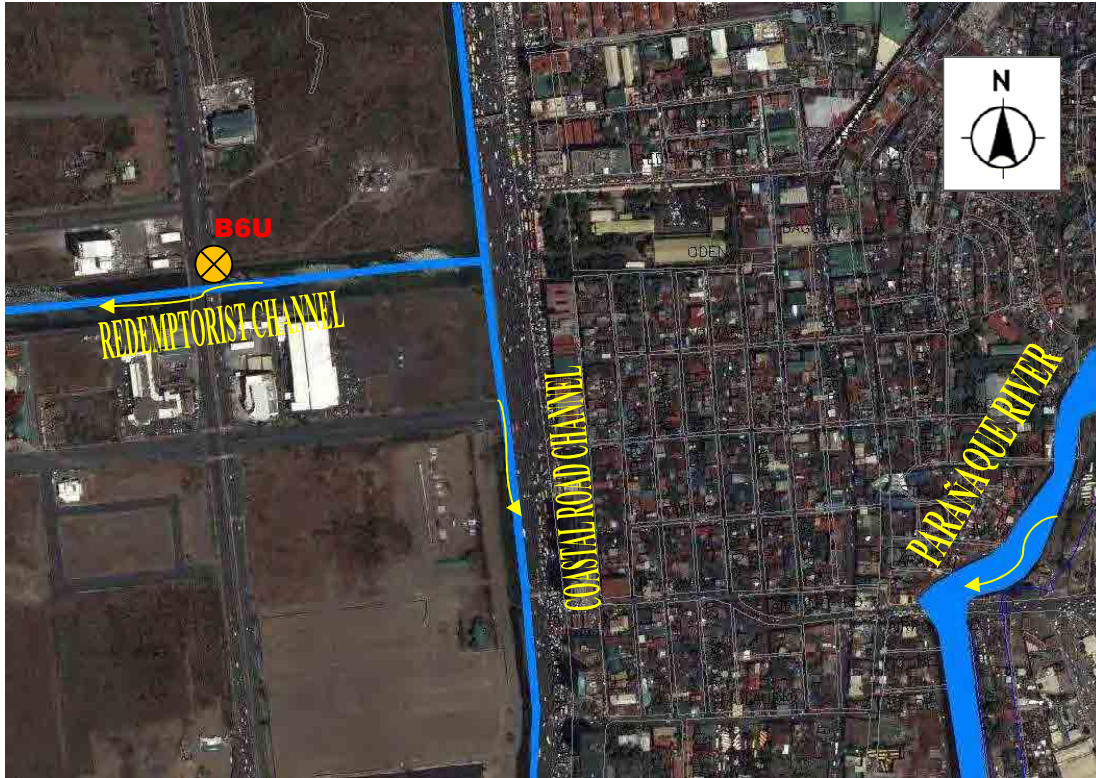


OUTFALL NO. P11.12A

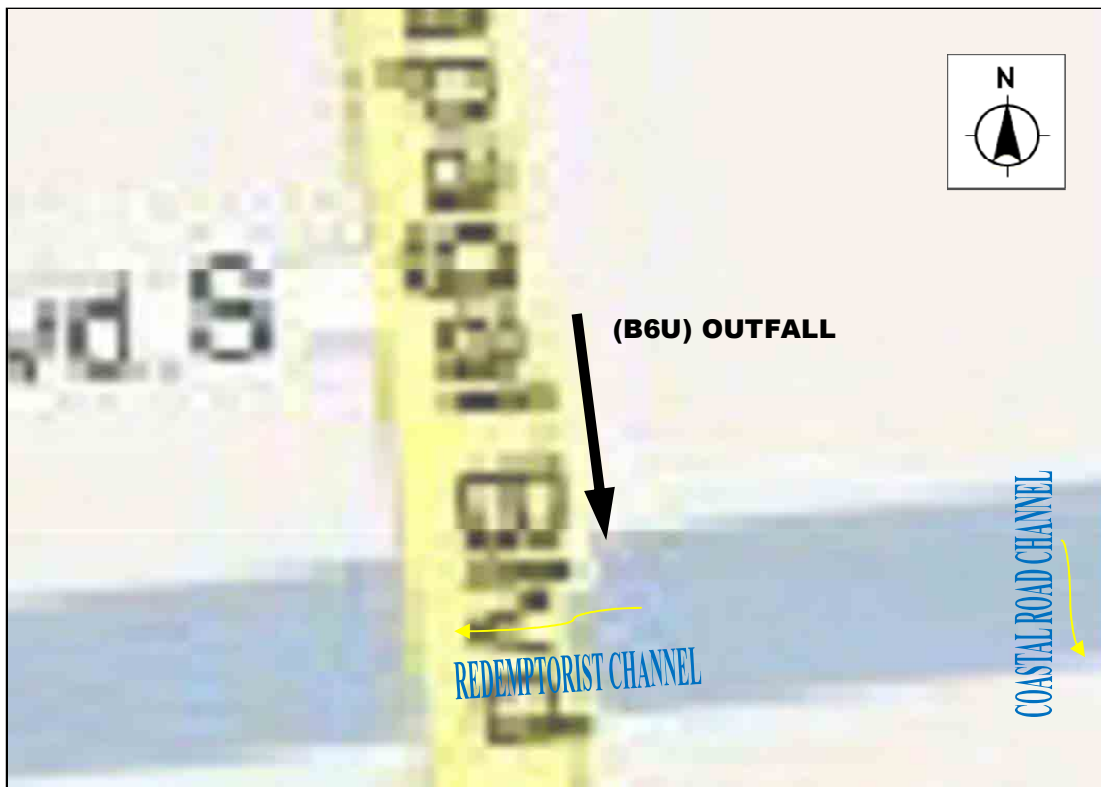


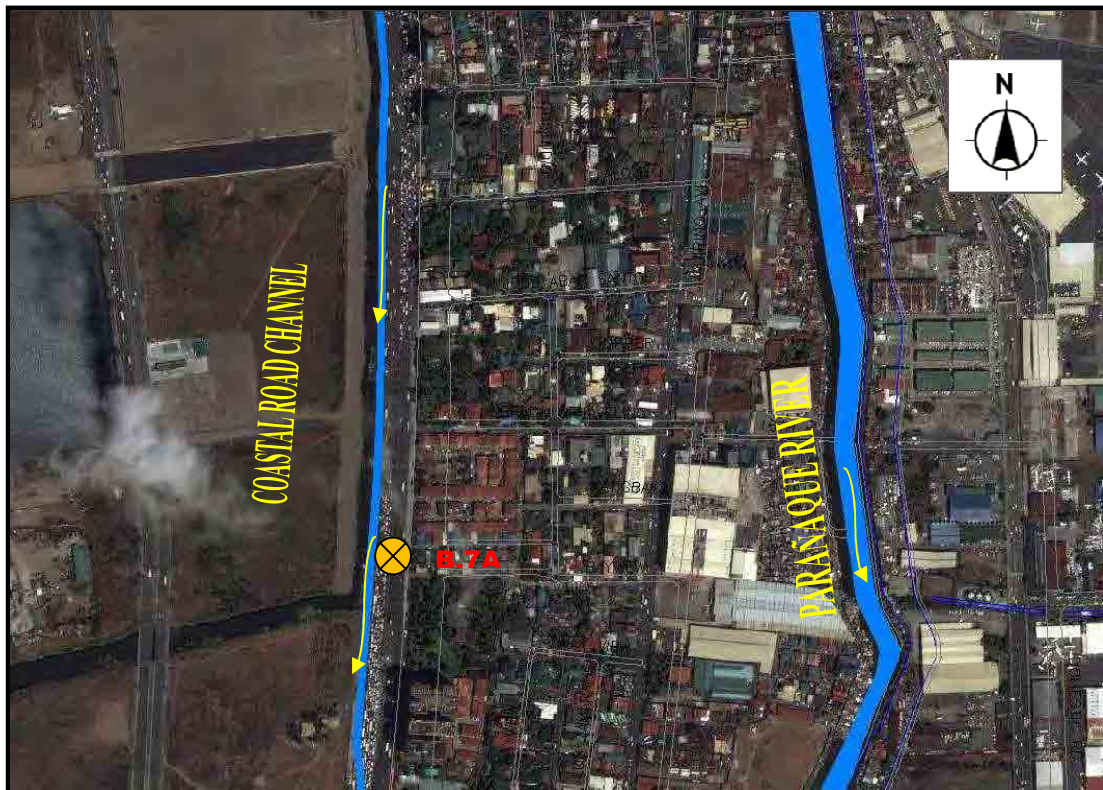
OUTFALL NO. B.6U

GP1

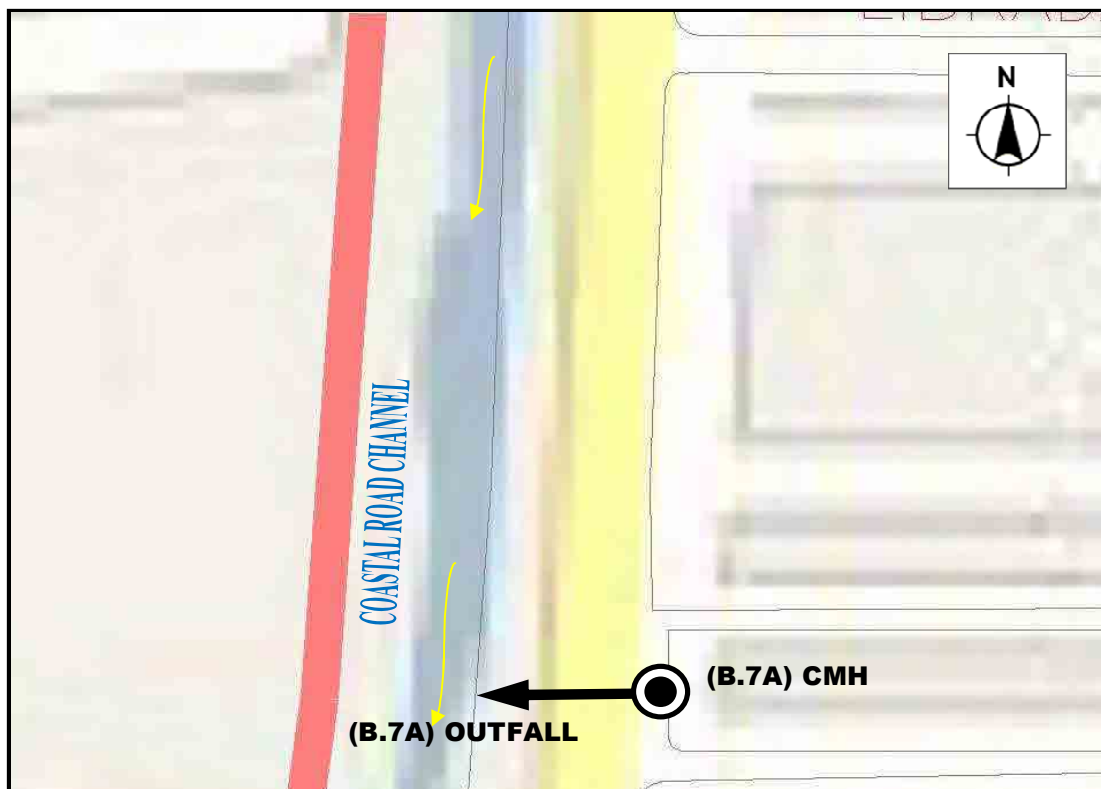


OUTFALL NO. B6





OUTFALL NO. B.7A





OUTFALL NO. B.8A and B.9A

