

# **APPENDIX 9**

## **Soil Investigation Data**

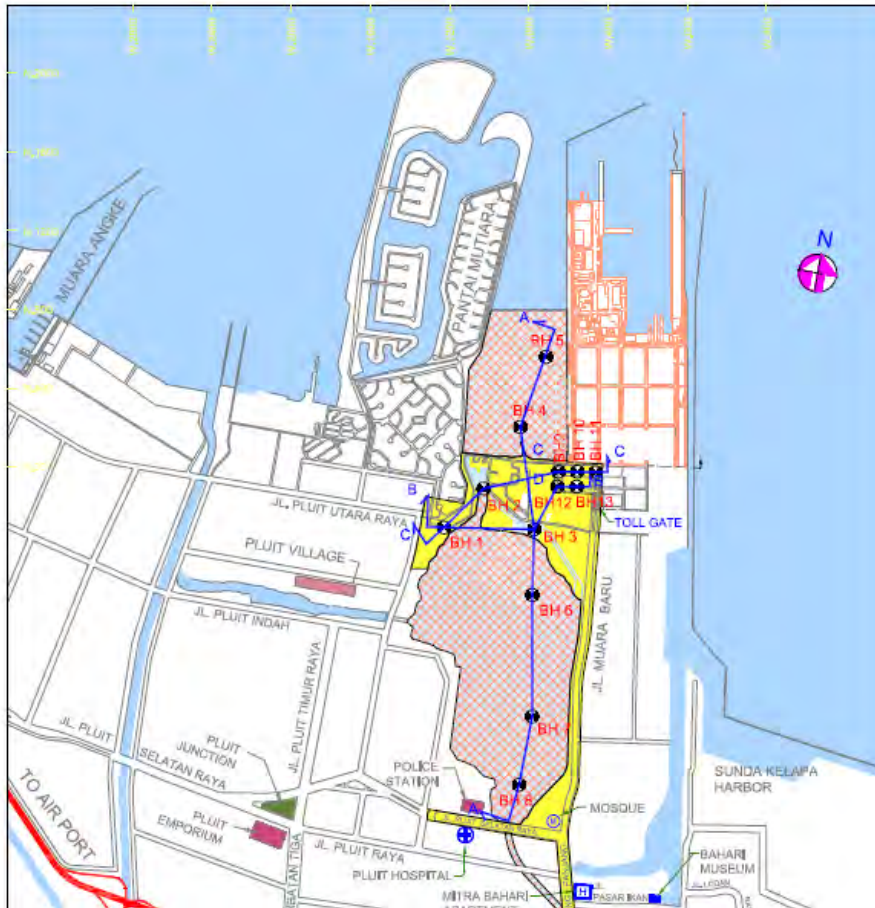


Fig. 9-1 Location of Soil Boring and Orientation of Soil Profiles

| FIG DRILLING LOG              |                |   |                |                            |              |                          |                             |   |            |            |                      |                       |           |    |  |
|-------------------------------|----------------|---|----------------|----------------------------|--------------|--------------------------|-----------------------------|---|------------|------------|----------------------|-----------------------|-----------|----|--|
| Project No. 2304              |                | Project On-Shore S for Wholesale Dist. Market Development in Muara Baru |                | Type of Drilling Wash Bore |              | Date 25 Nov - 1 Apr 2021 |                             | Remarks<br>P : Standard Penetration Test<br>SIS : Open-Drive Undisturbed Sampling<br>S : SBR02/20<br>T : IS20K02/06                     |            |            |                      |                       |           |    |  |
| Hole Number BH-1 (PAZ 1 of 2) |                | Elevation 4.6230 m  |                | Driller                    |              | Ref (No)                 |                             |   |            |            |                      |                       |           |    |  |
| Water Table 4.67 m            |                | Elevation 4.6230 m  |                | Driller                    |              | Ref (No)                 |                             |   |            |            |                      |                       |           |    |  |
| Scale in m                    | Elevation in m | Depth in m  | Thickness in m | Legend                     | Type of Soil | Colour                   | Soil Density or Consistency | General Remarks   | Sampling   |            |                      |                       |           |    |  |
|                               |                |   |                |                            |              |                          |                             |   | Depth in m | Sample No. | N-Value (Blows/30cm) | Blows Per Reach 10 cm | N - Value |    |  |
|                               |                |   |                |                            |              |                          |                             |   |            | 10         | 20                   | 30                    | 40        | 50 |  |
| 1                             | -1.17          | 1.50  | 1.50           |                            | Silty Clay   | Reddish Brown            | Very Soft                   | Fill material   |            |            |                      |                       |           |    |  |
| 2                             |                |   |                |                            | Silty Clay   | Dark Gray to Black       | Very Soft                   | With decomposed wood at top portion. With top shell fragment from 0.50m to 1.00m. With a lot of fine gravel sand at bottom portion.     |            |            |                      |                       |           |    |  |
| 3                             |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 4                             |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 5                             |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 6                             |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 7                             |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 8                             |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 9                             |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 10                            |                |   |                |                            | Blank Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 11                            | -38.01         | 13.30   | 8.30           |                            | Silty Clay   | Reddish Brown            | Medium                      | With the gravel sand at 0.10m to 1.00m. Weakly cemented.  |            |            |                      |                       |           |    |  |
| 12                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 13                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 14                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 15                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 16                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 17                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 18                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 19                            | -39.11         | 18.50   | 7.50           |                            | Clayey Silty | Dark Grey Brown          | Hard                        | With fine gravel sand. Weakly cemented. Surface with no local fragment of 0.2-0.50m. With a lot of fine gravel at 0.200m to 0.40m.      |            |            |                      |                       |           |    |  |
| 20                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 21                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 22                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 23                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 24                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 25                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 26                            | -25.06         | 25.45   | 6.93           |                            | Silty Clay   | Darkish Grey             | Stiff to Very Stiff         | Spotted with fine shell fragment from 0.200m to 0.40m and 0.2-0.50m to 0.60m. Surface with brown from 0.200m to 0.40m. Weakly cemented. |            |            |                      |                       |           |    |  |
| 27                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 28                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 29                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 30                            |                |   |                |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |
| 31                            | -38.06         | 38.45   | 11.00          |                            | Silty Clay   |                          |                             |   |            |            |                      |                       |           |    |  |

Fig. 9-2 (1) BH-1 Drilling Log

| FIG DRILLING LOG              |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
|-------------------------------|----------------|---|----------------|----------------------------|-------------------|--------------------------|-----------------------------|---|------------|------------|----------------------|-----------------------|-----------|----|--|
| Project No. 2304              |                | Project On-Shore S for Wholesale Dist. Market Development in Muara Baru |                | Type of Drilling Wash Bore |                   | Date 25 Nov - 1 Apr 2021 |                             | Remarks<br>P : Standard Penetration Test<br>SIS : Open-Drive Undisturbed Sampling<br>S : SBR02/20<br>T : IS20K02/06                     |            |            |                      |                       |           |    |  |
| Hole Number BH-1 (PAZ 2 of 2) |                | Elevation 4.6230 m  |                | Driller                    |                   | Ref (No)                 |                             |   |            |            |                      |                       |           |    |  |
| Water Table 4.67 m            |                | Elevation 4.6230 m  |                | Driller                    |                   | Ref (No)                 |                             |   |            |            |                      |                       |           |    |  |
| Scale in m                    | Elevation in m | Depth in m  | Thickness in m | Legend                     | Type of Soil      | Colour                   | Soil Density or Consistency | General Remarks   | Sampling   |            |                      |                       |           |    |  |
|                               |                |   |                |                            |                   |                          |                             |   | Depth in m | Sample No. | N-Value (Blows/30cm) | Blows Per Reach 10 cm | N - Value |    |  |
|                               |                |   |                |                            |                   |                          |                             |   |            | 10         | 20                   | 30                    | 40        | 50 |  |
| 31                            |                |   |                |                            | Silty Clay        | Darkish Grey             | Stiff to Very Stiff         | Spotted with fine shell fragment from 0.200m to 0.40m and 0.2-0.50m to 0.60m. Surface with brown from 0.200m to 0.40m. Weakly cemented. |            |            |                      |                       |           |    |  |
| 32                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 33                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 34                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 35                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 36                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 37                            | -38.06         | 38.45   | 11.00          |                            | Clayey Silty      | Darkish Grey             | Very Stiff to Hard          | Sand to fine to medium grained. Weakly to moderately cemented.  |            |            |                      |                       |           |    |  |
| 38                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 39                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 40                            |                |   |                |                            | Silty Clay        |                          |                             |   |            |            |                      |                       |           |    |  |
| 41                            | -40.06         | 40.45   | 4.00           |                            | -END OF DRILLING- |                          |                             |   |            |            |                      |                       |           |    |  |
| 42                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 43                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 44                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 45                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 46                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 47                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 48                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 49                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 50                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 51                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 52                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 53                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 54                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 55                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 56                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 57                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 58                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 59                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 60                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |
| 61                            |                |   |                |                            |                   |                          |                             |   |            |            |                      |                       |           |    |  |

Fig. 9-2 (2) BH-1 Drilling Log









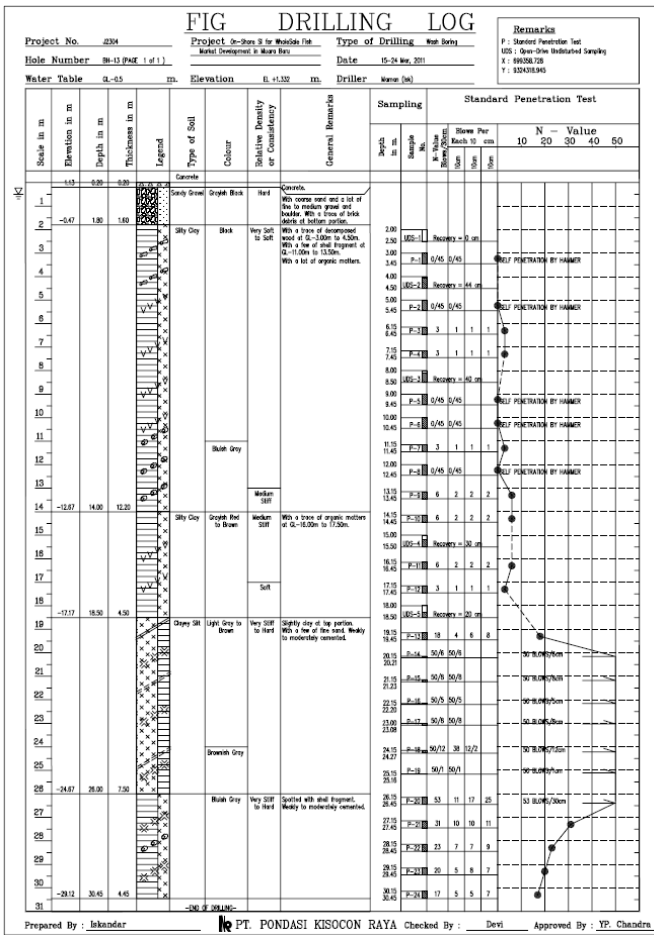


Fig. 9-14 BH-13 Drilling Log

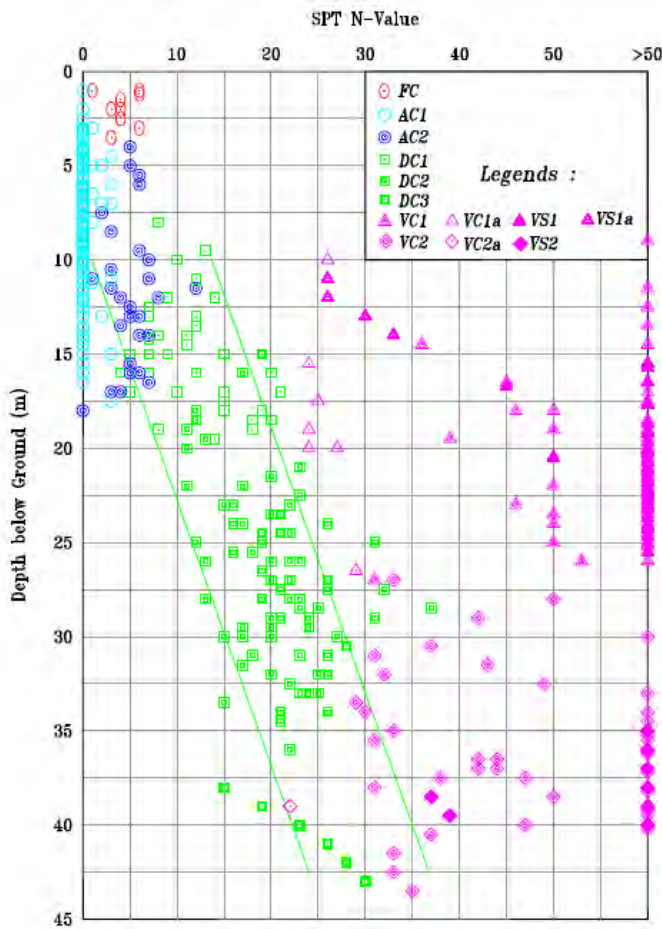


Fig. 9-15 Standard Penetration Test N-Value

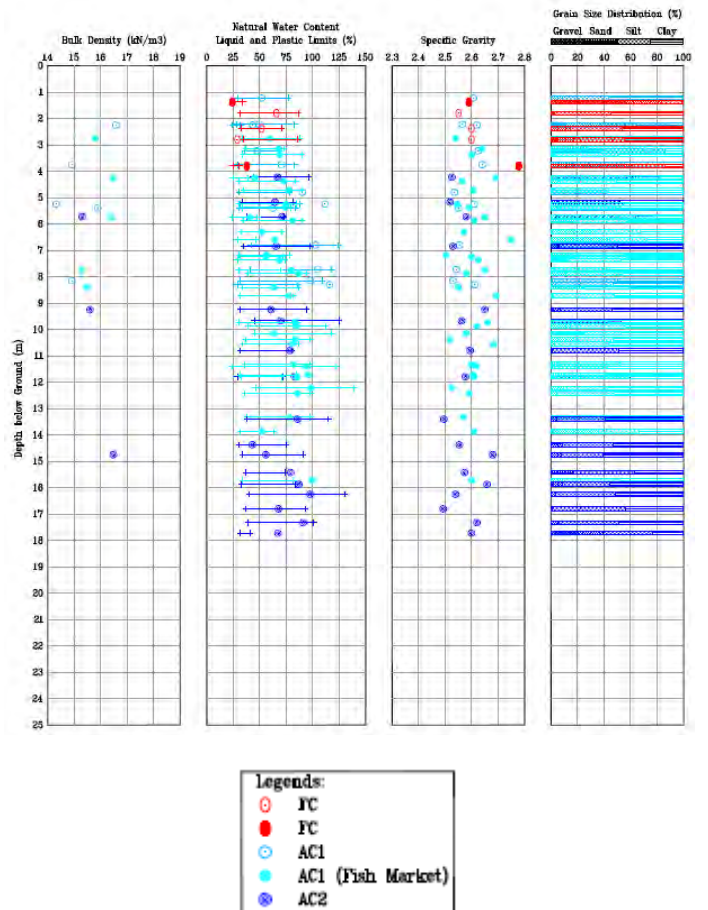


Fig. 9-16 Index of Properties

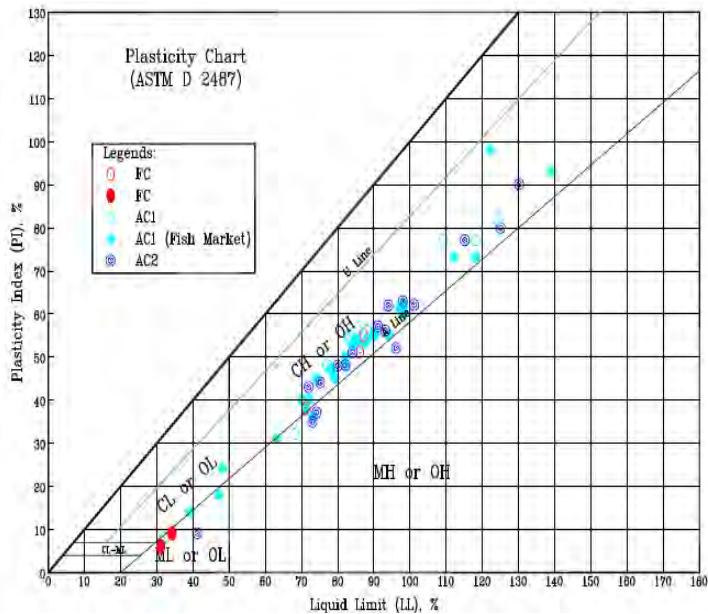


Fig. 9-17 Classification of Plasticity

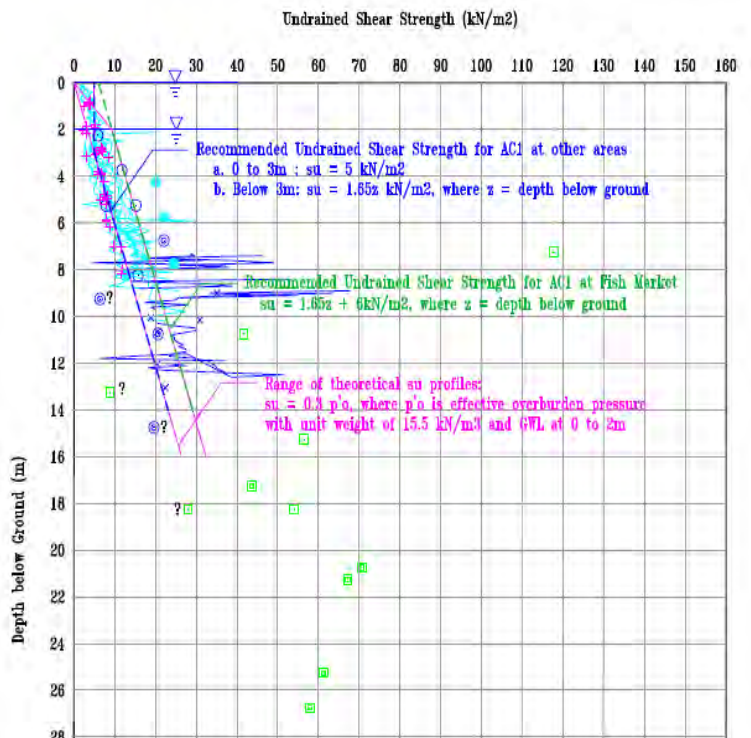


Fig. 9-18 Undrained Shear Strengths

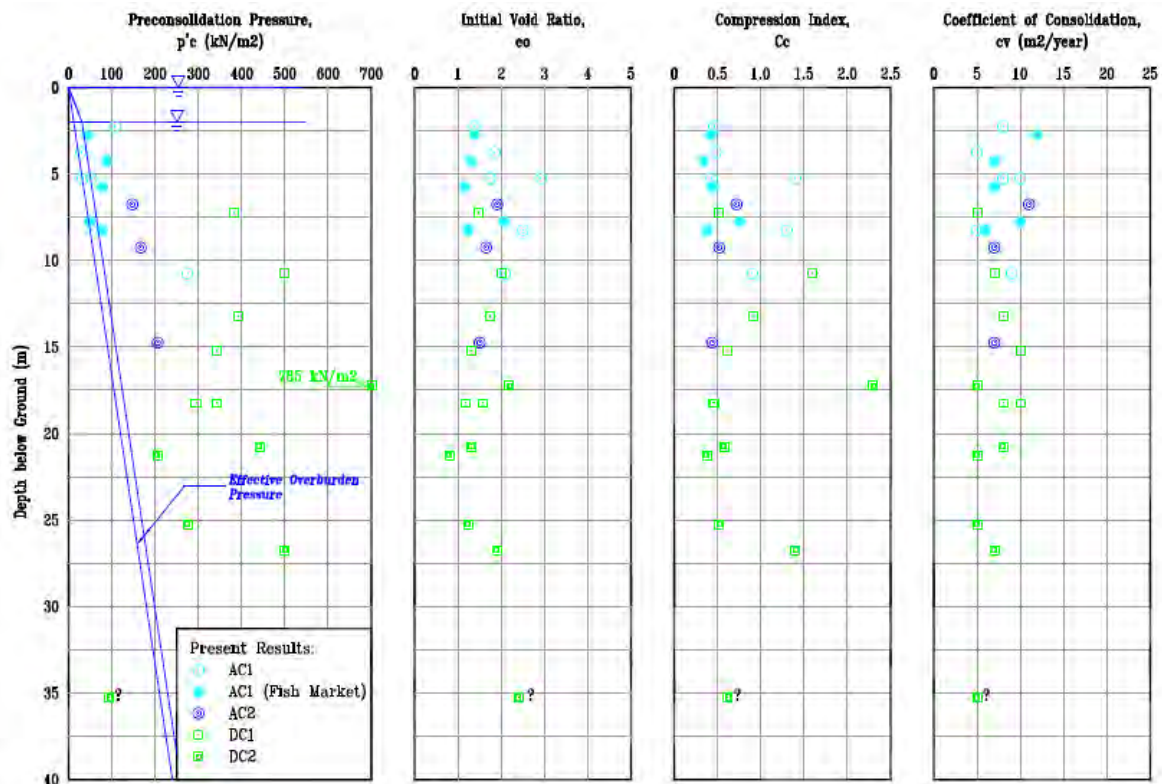
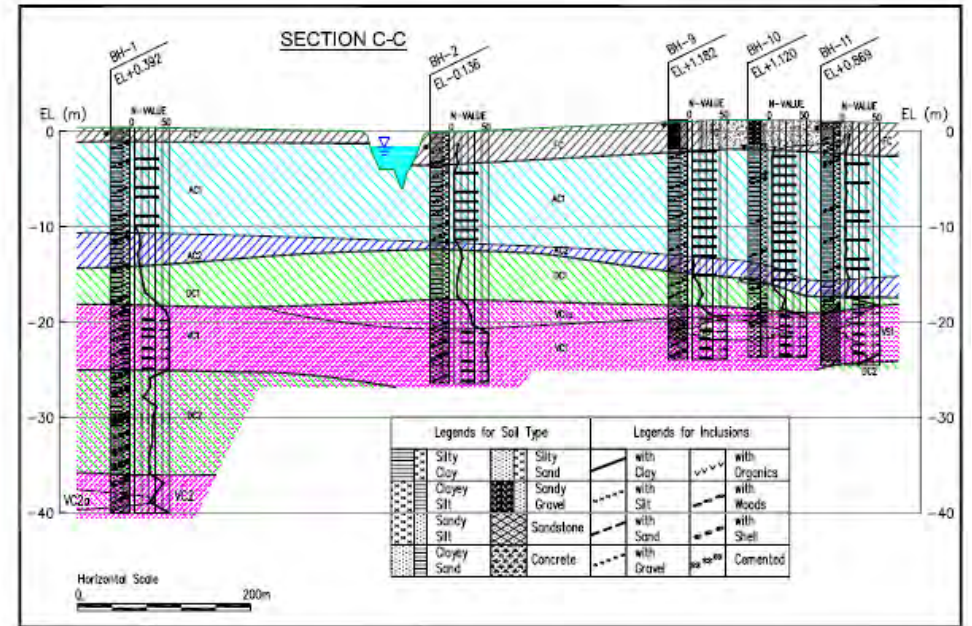
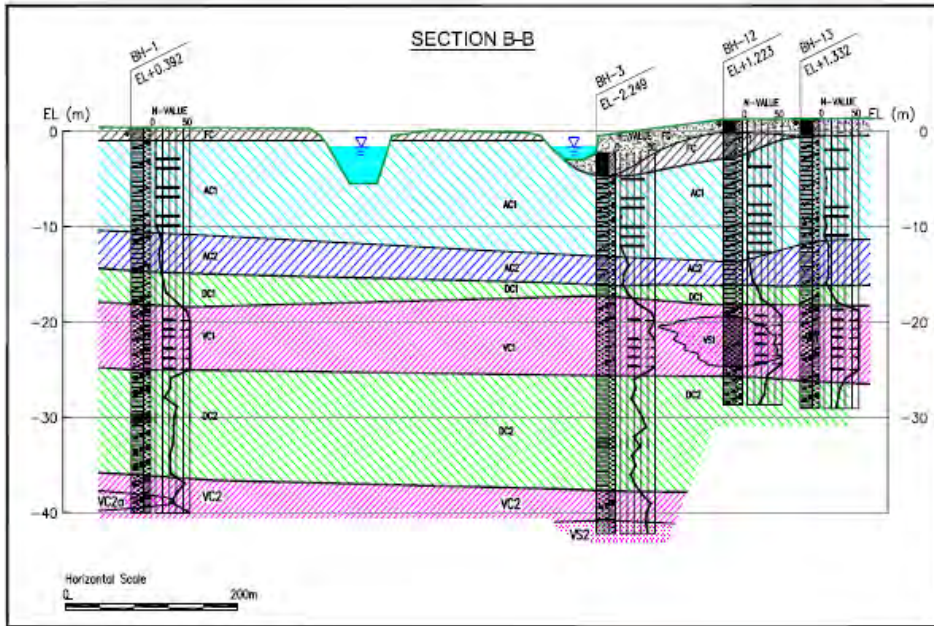
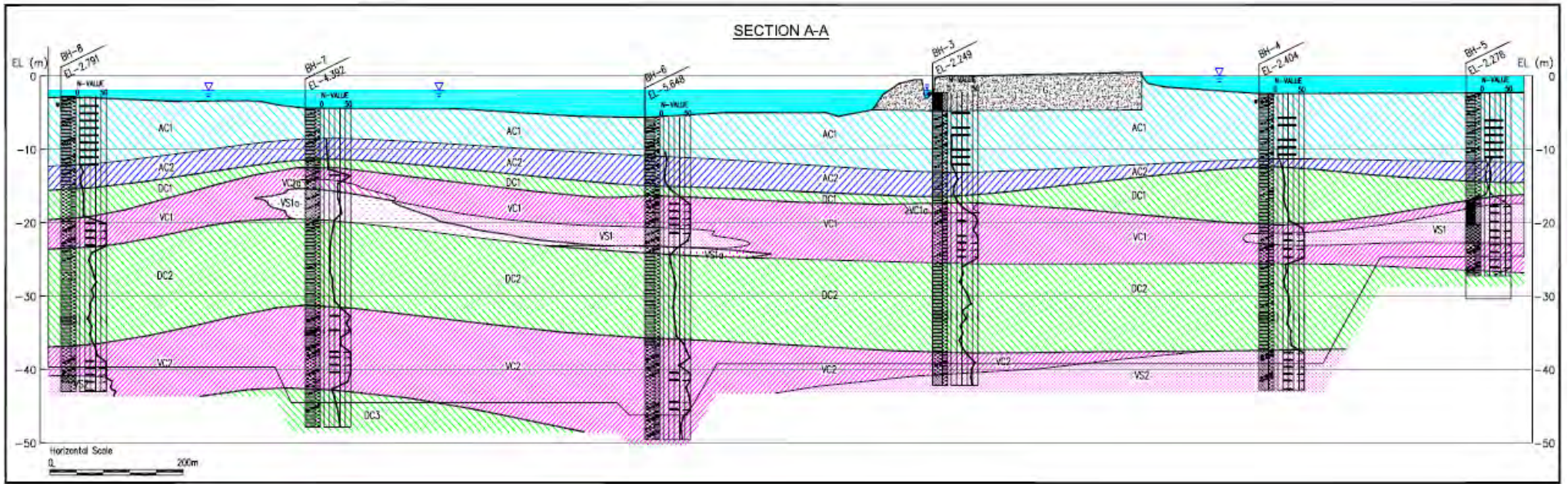


Fig. 9-19 Consolidation Properties of Soil





**Fig. 9-20 Soil Profiles**

# **APPENDIX 10**

## **Water Quality Test Results**



**PEMERINTAH PROVINSI DAERAH KHUSUS IBUKOTA JAKARTA**  
**BADAN PENGELOLA LINGKUNGAN HIDUP DAERAH**  
**LABORATORIUM LINGKUNGAN HIDUP DAERAH**

Jl. Casablanca Kav. 1 Kuningan Telp. 5209651 - 5209653, Fax. 52960584, e-mail : llhddkijakarta@yahoo.com  
JAKARTA

Kode Pos : 12950

No. Akreditasi : LP - 126 - IDN

**LAPORAN HASIL UJI**

Nomor Contoh : 0344 - 0346/ LAB. 2G - LC/IV/2011  
Contoh Dari : OAFIC - JICA  
Alamat : Jalan Pelabuhan Perikanan Nizam Zachman, Gd Perum Cabang Lt II, Jakarta  
Jenis Industri / Kegiatan : Study Pasar Ikan  
Tanggal Penerimaan Contoh : 07 April 2011  
Tanggal Pengujian : 07 April 2011 - 18 April 2011  
Jenis Contoh : Air Limbah  
Tipe Lokasi : Buangan Langsung Hasil Pencucian

| No | Parameter                    | Satuan | Hasil Uji |          |          | Baku Mutu | Metoda              |
|----|------------------------------|--------|-----------|----------|----------|-----------|---------------------|
|    |                              |        | 0344      | 0345     | 0346     |           |                     |
| 1  | BOD (20°C, 5 hari)           | mg/L   | 1,588.60  | 1,594.00 | 1,067.00 | 75.0      | SNI 6989.72:2009    |
| 2  | COD (Dichromat)              | mg/L   | 3,096.77  | 3,870.97 | 4,645.16 | 100.0     | SNI 6989.73:2009    |
| 3  | Zat Padat Tersuspensi        | mg/L   | 1,142.0   | 1,180.0  | 922.0    | 60.0      | Spektrofotometer    |
| 4  | Minyak dan Lemak             | mg/L   | 16.82     | < 1.13   | 1.75     | 5.0       | Spektrofotometer    |
| 5  | pH                           |        | 6.5       | 6.5      | 6.4      | 6 - 9     | SNI 06-6989.11-2004 |
| 6  | Organik (KMnO <sub>4</sub> ) | mg/L   | 2,191.33  | 1,742.43 | 2,093.87 | 85.0      | SNI 06-6989.22-2004 |

**Keterangan :**

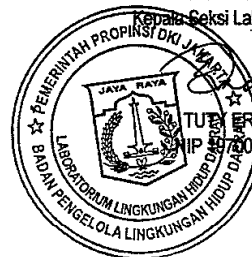
0344 = JFP - OAFIC Jam 19.00  
0345 = JFP - OAFIC Jam 21.00  
0346 = JFP - OAFIC Jam 23.00

Baku Mutu sesuai Keputusan Gubernur Provinsi DKI Jakarta Nomor 582 Tahun 1995  
Parameter yang tercetak tebal telah diakreditasi oleh KAN

Jakarta,

a.n. KEPALA LABORATORIUM LINGKUNGAN HIDUP DAERAH  
PROVINSI DKI JAKARTA

Kepala Seksi Laboratorium Pengujian,



TUTY ERWAWATI S, ST  
NIP. 197002141998032002

Halaman 1 dari 1

Catatan : 1. Laporan hasil uji hanya berhubungan dengan contoh yang diuji  
2. Laporan hasil uji tidak boleh digandakan kecuali seluruhnya, tanpa persetujuan tertulis dari laboratorium

DP/5.10.5/SMM-LL; Rev 1; 01 Februari 2006



Mari bersama memasyarakatkan penggunaan produk Industri Daur Ulang

Fig. 10-1 Test Result of Waste Water in the Existing Wholesale Market Hall

**Table10-1 Result of Water Quality Test Conducted by the Team****1. Test Result of Water quality (Apr 11, 2011, PM 4:00)**

(1) Sampling point of sea water (Sea side of East Breakwater near East Revetment)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 7.92 | 4.9          | 33        | 6.2              | 28.7        | 3.2  | 30    | 20               |

(2) Sampling point of sea water (Sea side, at the corner of West Breakwater)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 7.3  | 6.6          | -         | 3.5              | 29.1        | 3.2  | 34.8  | 24.3             |

(3) Sampling point of sea water (Sea side of West Revetment near Sewage Treatment Plant)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 7.45 | 4.4          | 35        | 3.5              | 29.2        | 2.6  | 26.5  | 17.0             |

TDS: Total Dissolved Solids

**2. Test Result of Water quality (Apr 12, 2011, AM 10:20)**

(1) Sampling point of sea water (Sea side of East Breakwater near East Revetment)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 8.1  | 5            | 23        | 8                | 29.2        | 3.3  | 30    | 20               |

(2) Sampling point of sea water (Sea side, at the corner of West Breakwater)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 7.33 | 3.8          | 21        | 4.6              | 29.3        | 2.5  | 23.0  | 14.0             |

(3) Sampling point of sea water (Sea side of West Revetment near Sewage Treatment Plant)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 7.2  | 4.2          | 37.0      | 3.7              | 29.1        | 2.9  | 27.0  | 18.0             |

(4) Sampling point of water (Mouth of PLUIT Pond)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 7.23 | 0.2          | 35.0      | 5.3              | 29.3        | 0.1  | 1.5   | 0.0              |

(5) Sampling of water: Effluent water after Desalination treatment (Channel at WISMA MINA)

| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 7.43 | 7.7          | 36.8      | 5.6              | 30.4        | 4.0  | 45.0  | 35.0             |

(6) Sampling of water: Drainage inside the existing Wholesale market

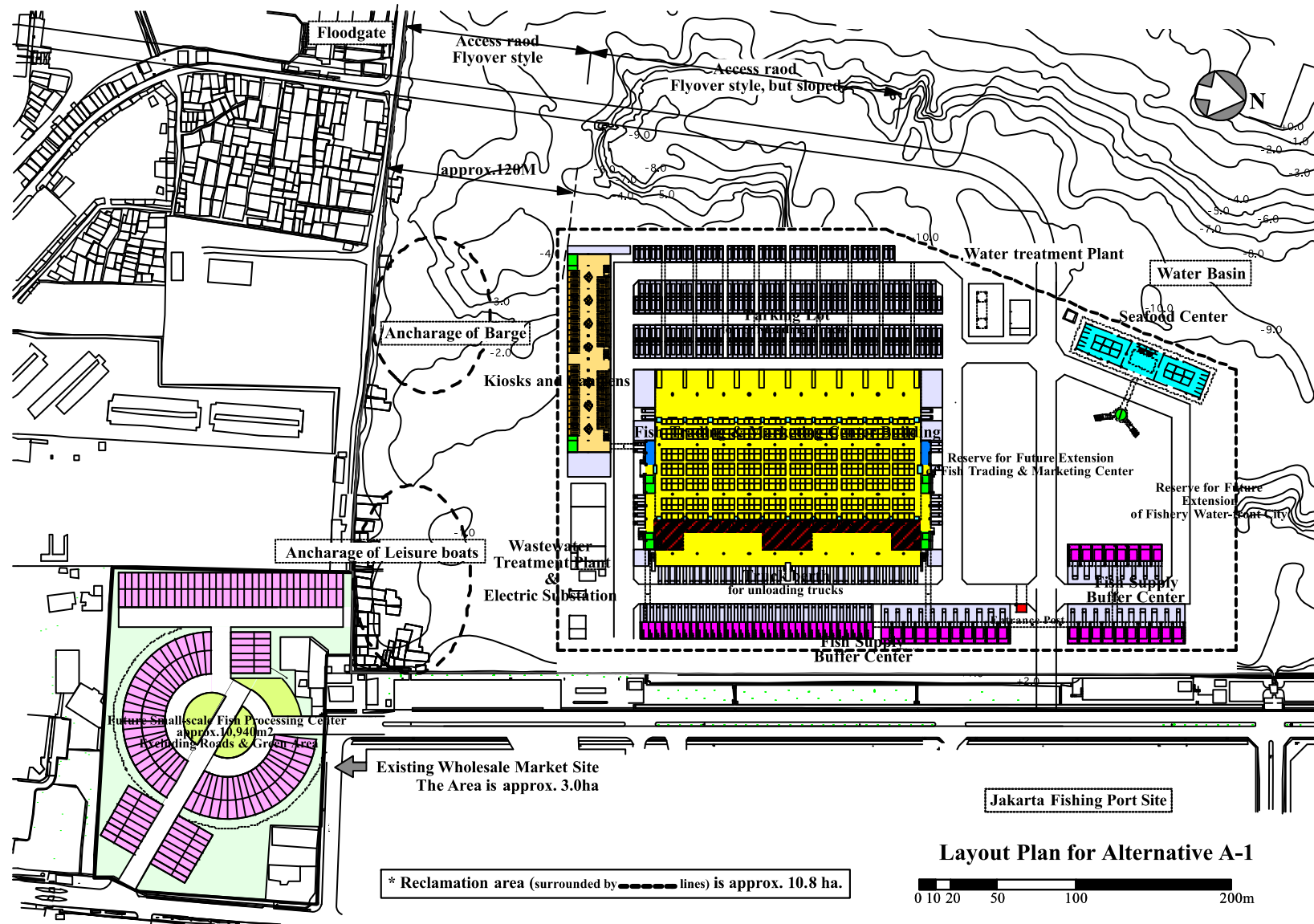
| pH   | Conductivity | Turbidity | Dissolved Oxygen | Temperature | Salt | TDS   | Specific Gravity |
|------|--------------|-----------|------------------|-------------|------|-------|------------------|
| (pH) | (S/m)        | (mg/l)    | (mg/l)           | (Degree. C) | %    | (g/l) | (1/ 1,000+1)     |
| 6.59 | 5.6          | 0.0       | 4.9              | 25.7        | 3.5  | 32.0  | 24.0             |

# **APPENDIX 11**

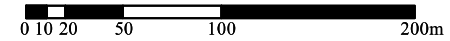
**Site Plans/Layout Plans  
(including alternative plans)**

APPENDIX 11-1 Site Plan / Layout Plan – Alternative A-1 (Island Type Reclamation)

A-11-1

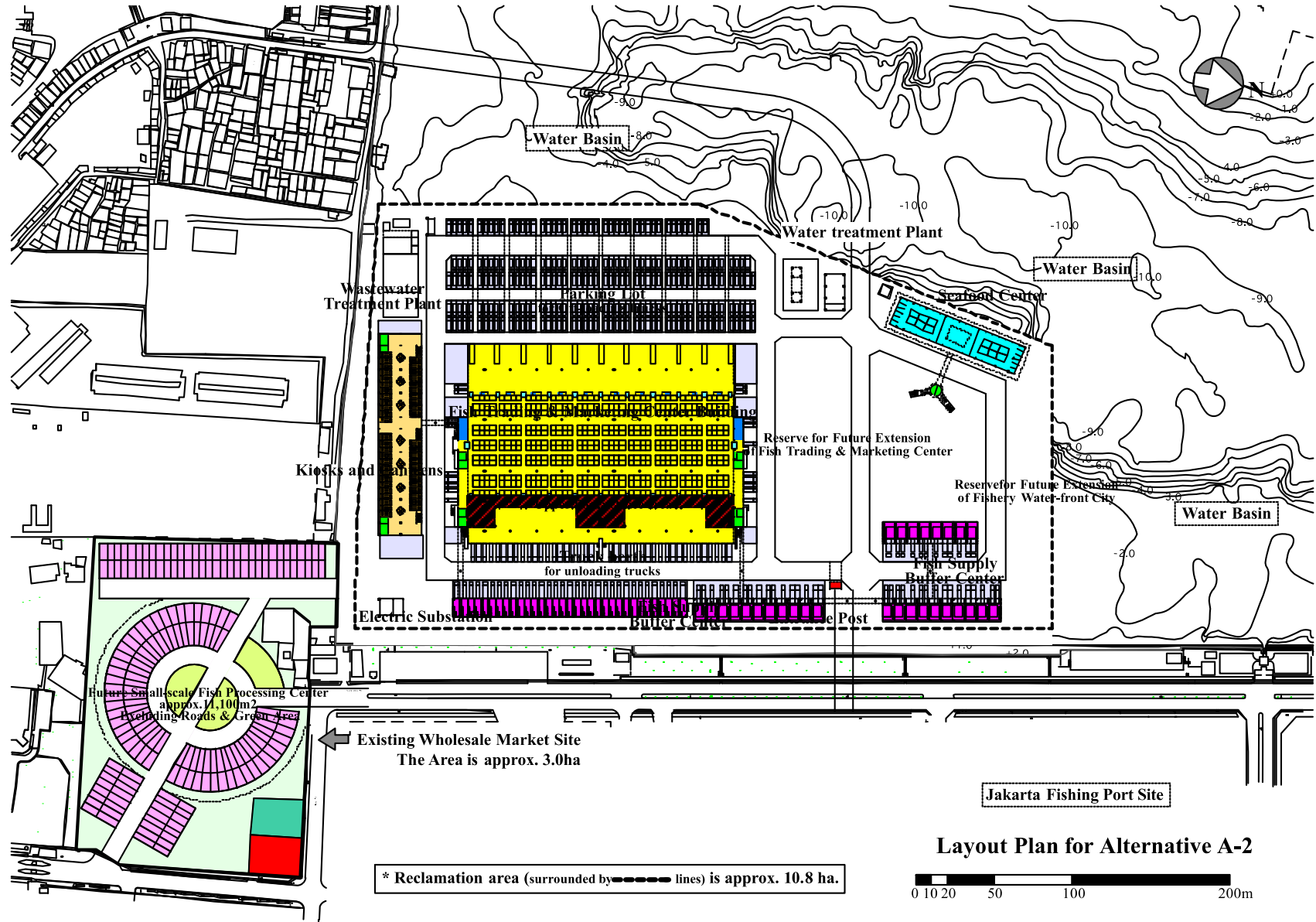


Layout Plan for Alternative A-1



APPENDIX 11-2 Site Plan / Layout Plan – Alternative A-2 (Attached directly to the Existing Land)

A-11-2



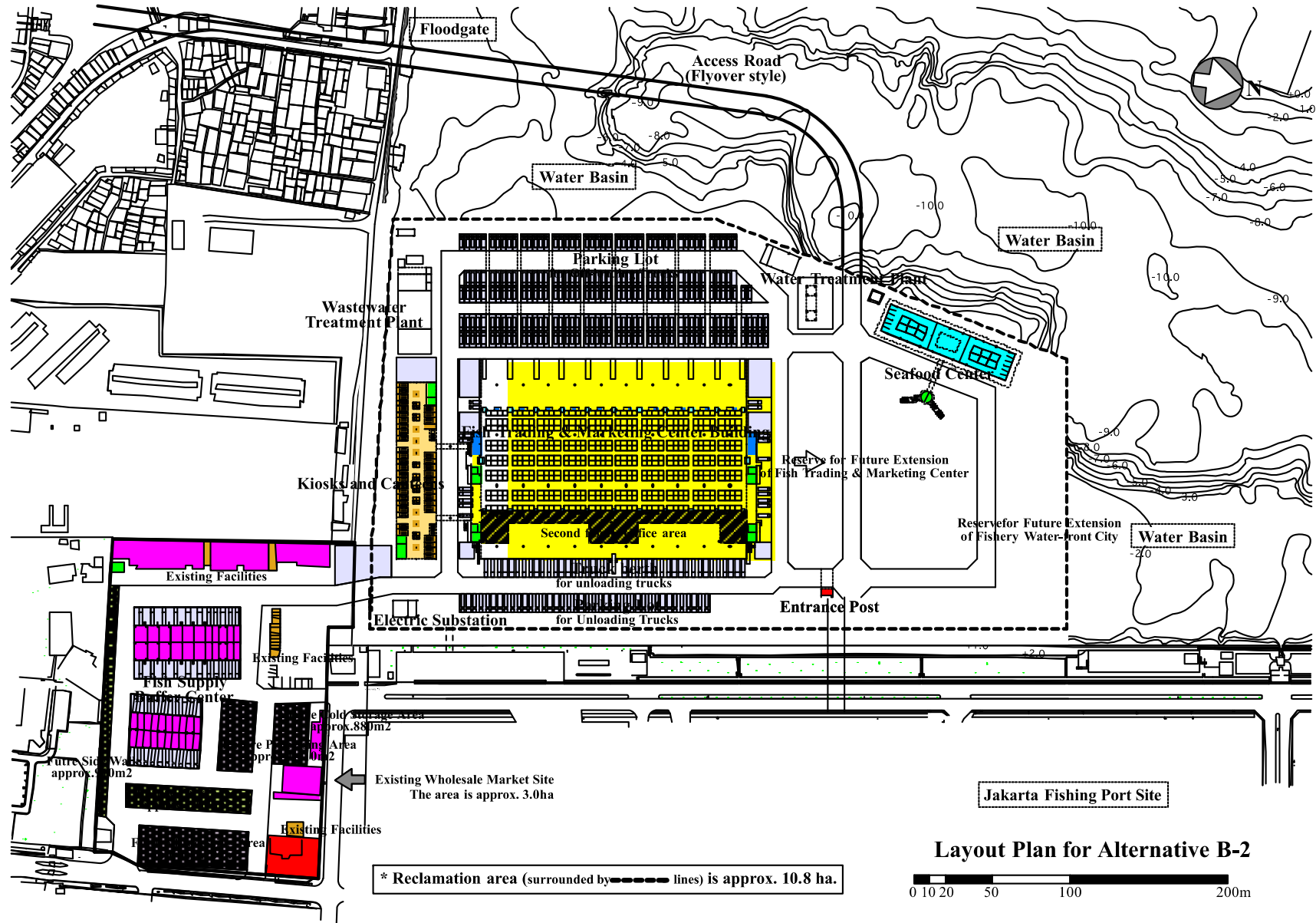
\* Reclamation area (surrounded by - - - - lines) is approx. 10.8 ha.

Layout Plan for Alternative A-2

0 10 20 50 100 200m

APPENDIX 11-3 Site Plan / Layout Plan – Alternative B-2 (Combination Land Use with the Existing Site)

A-11-3



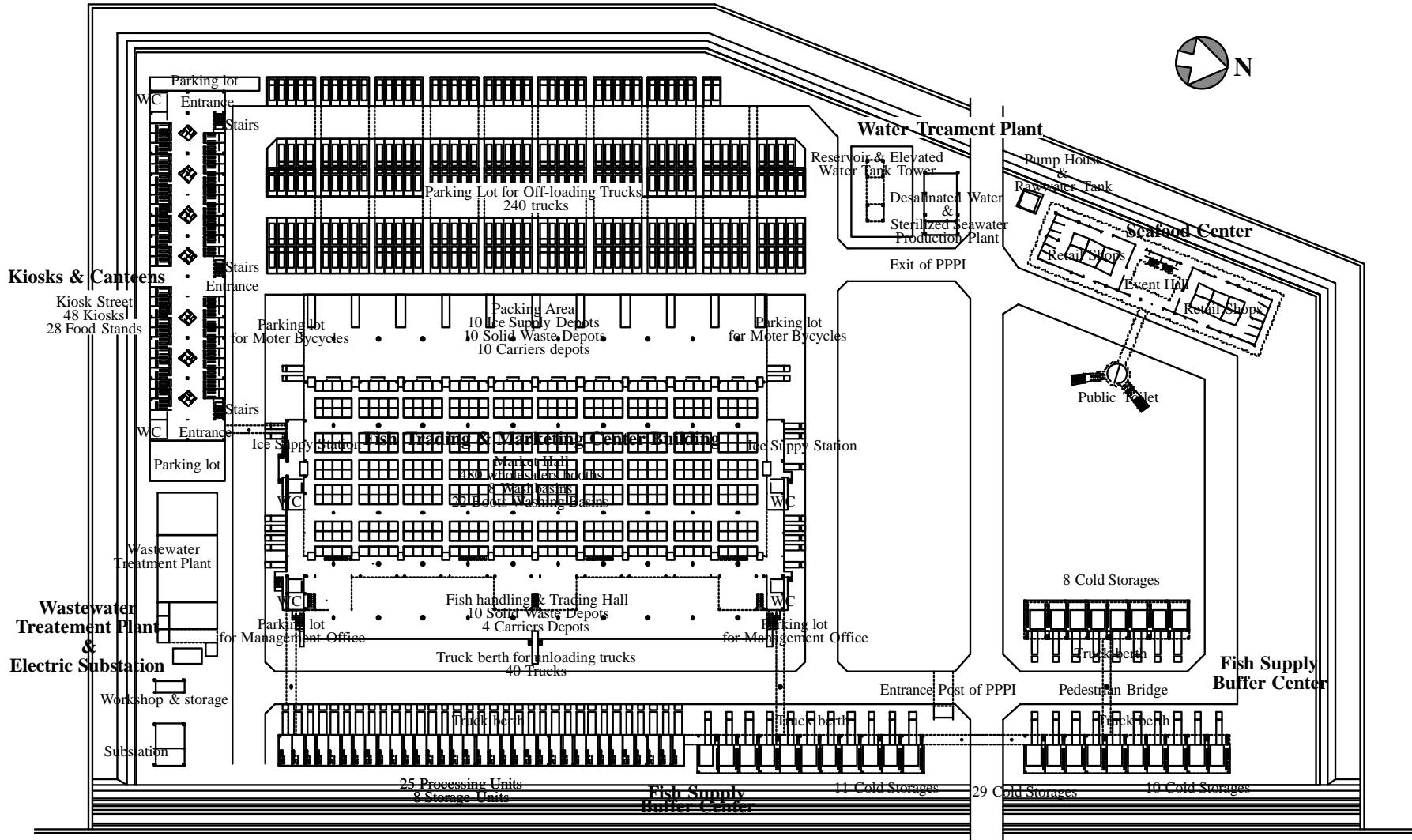
\* Reclamation area (surrounded by - - - lines) is approx. 10.8 ha.

0 10 20 50 100 200m

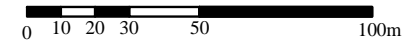


APPENDIX 11-4 Ground Floor Plan of the Facilities in Fish Trading & Marketing Center Complex (In the case of A-1)

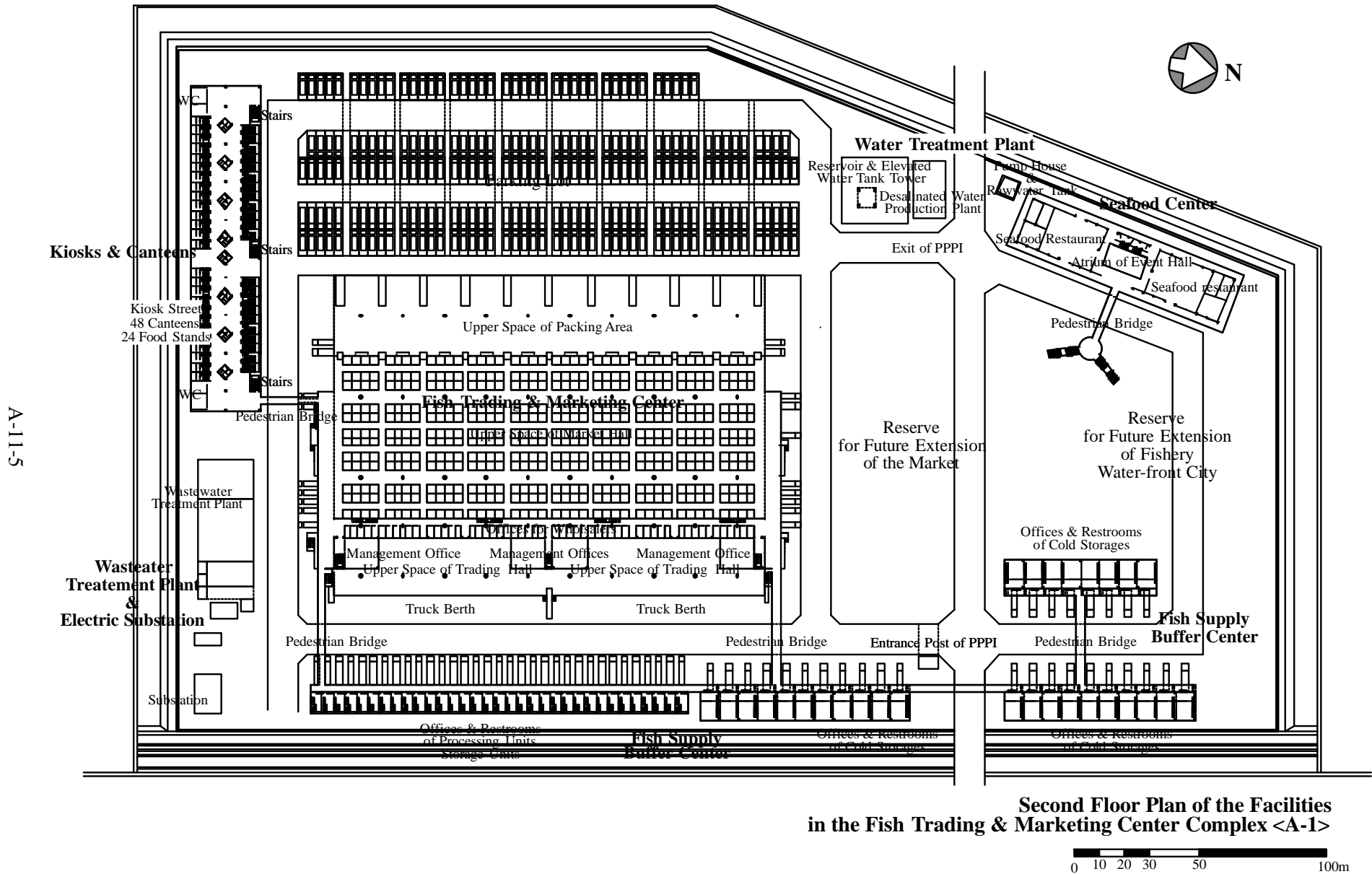
A-11-4



Ground Floor Plan of the Facilities in the Fish Trading & Marketing Center Complex <A-1>



APPENDIX 11-5 Second Floor Plan of the Facilities in Fish Trading & Marketing Center Complex (In the case of A-1)



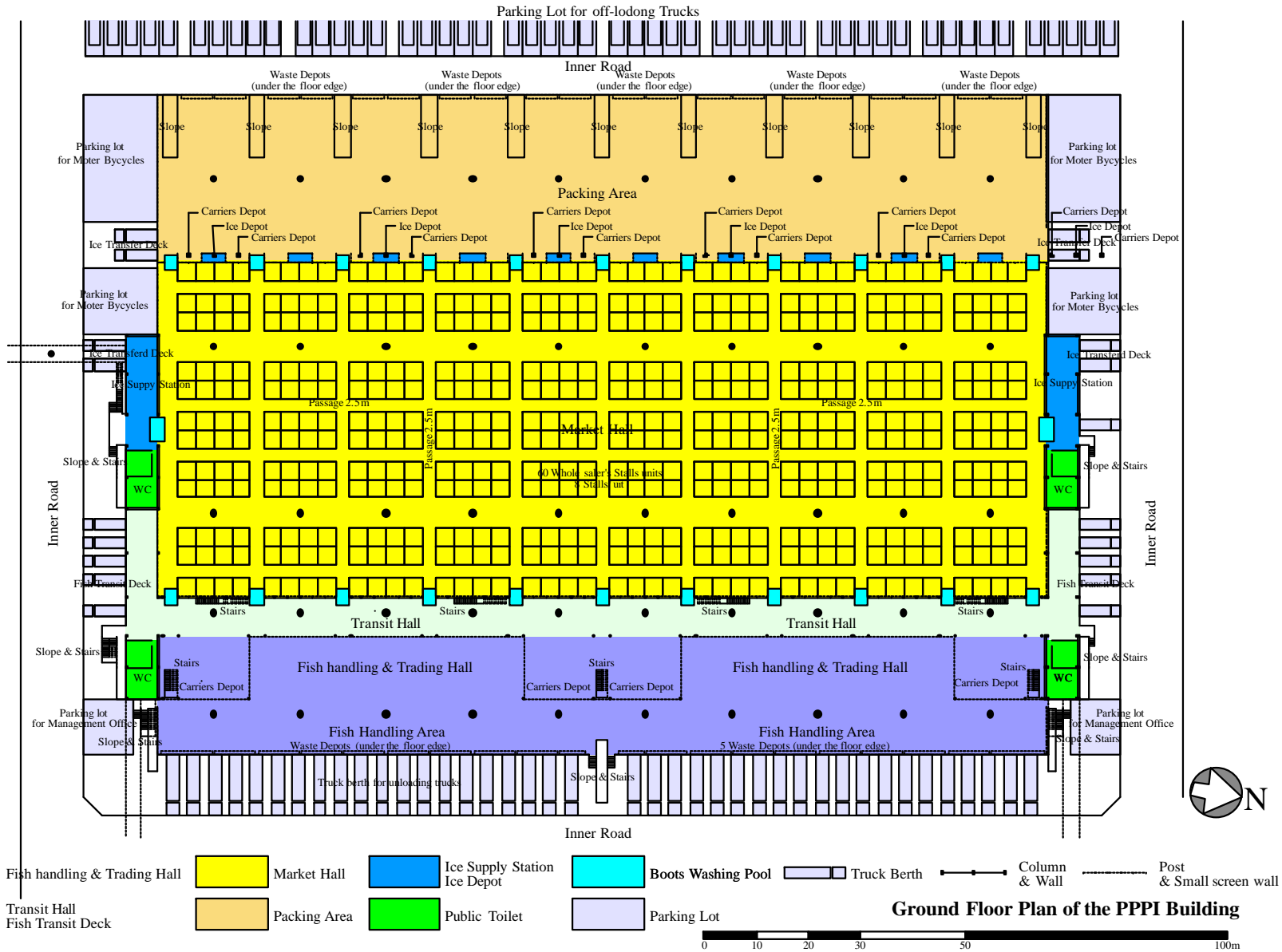
A-11-V

Second Floor Plan of the Facilities in the Fish Trading & Marketing Center Complex <A-1>

0 10 20 30 50 100m

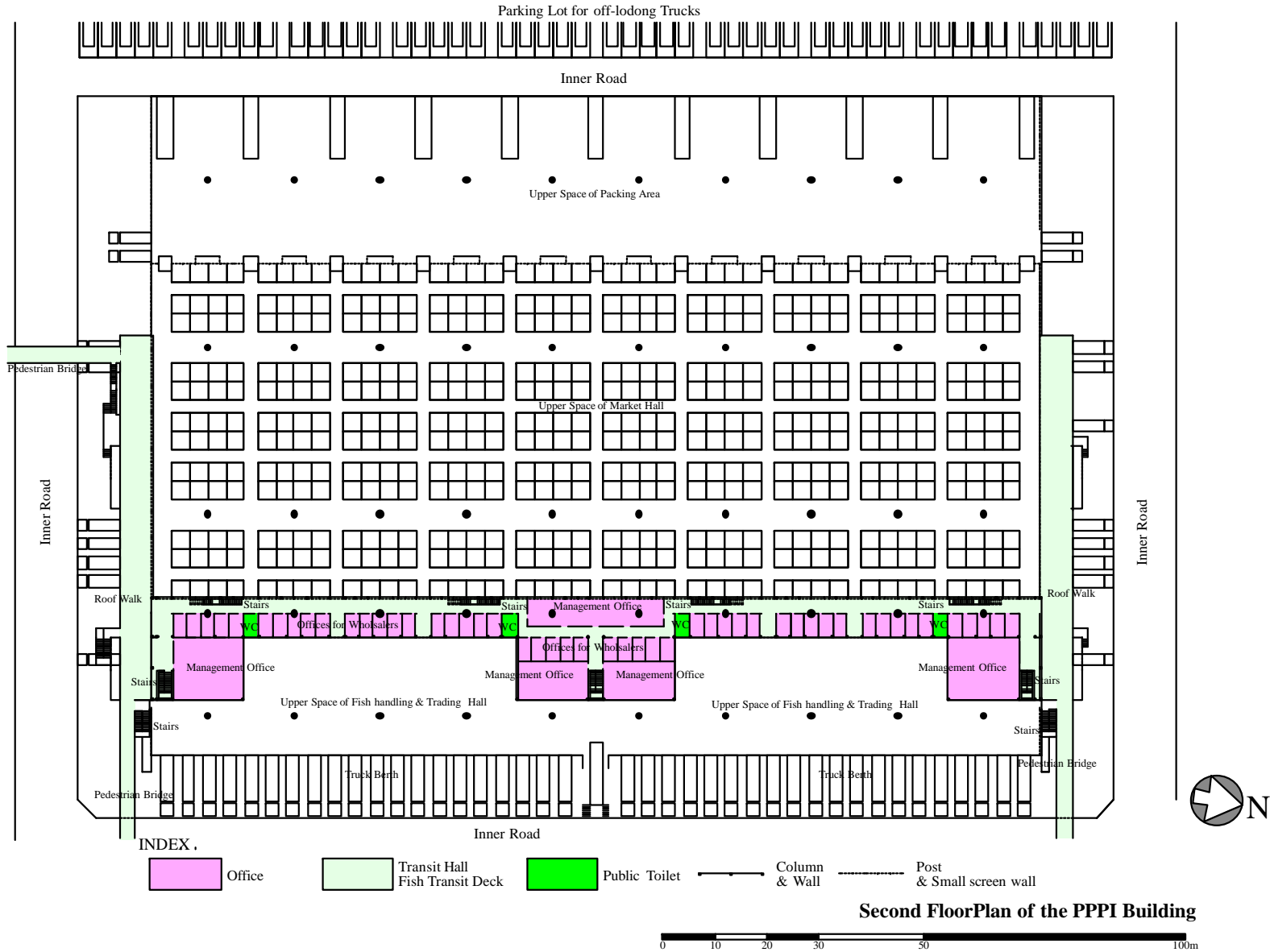
APPENDIX 11-6 Ground Floor Plan of PPPI (Fish Trading & Marketing Center)

A-11-V

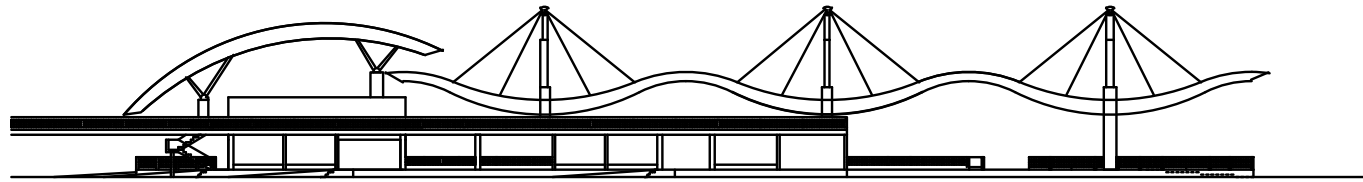


APPENDIX 11-7 Second Floor Plan of PPPI (Fish Trading & Marketing Center) Building

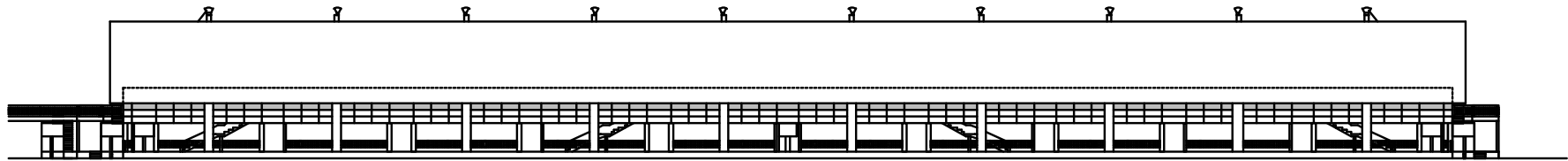
A-11-7



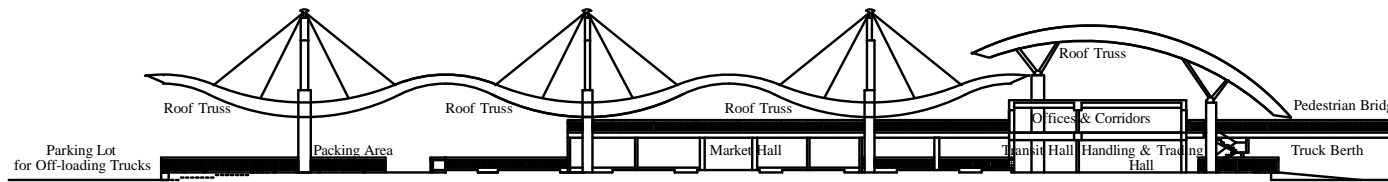
**APPENDIX 11-8 Elevation and Sectional Plan of PPPI (Fish Trading & Marketing Center) Building**



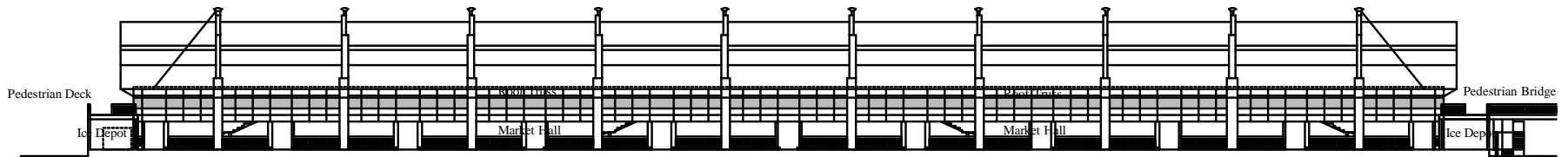
North Elevation



East Elevation



West-East Sectional Plan



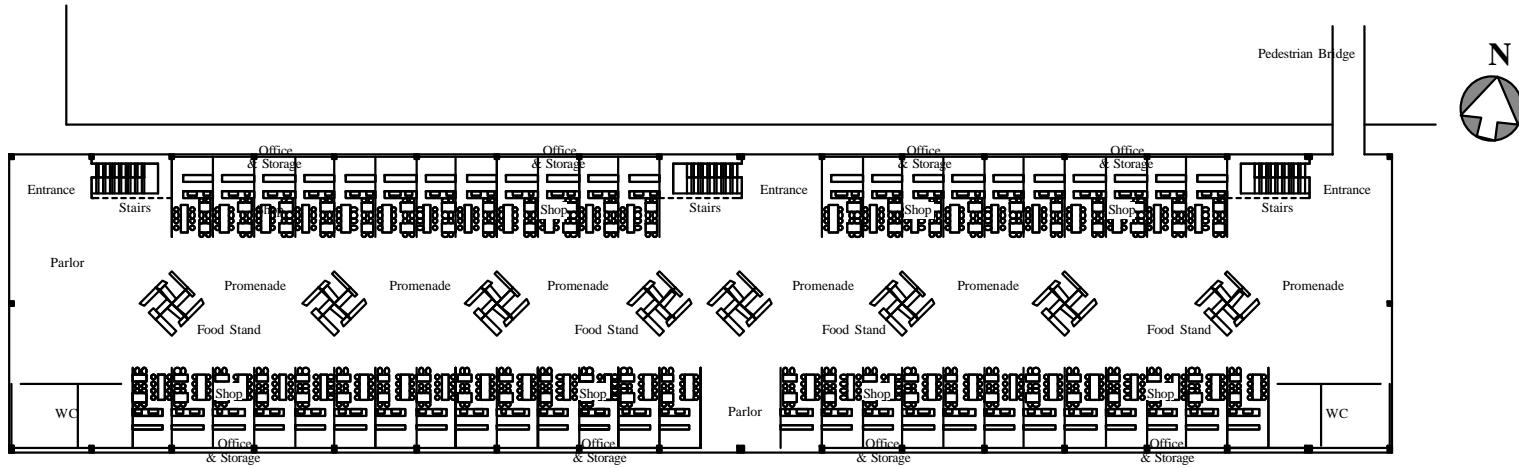
North-South Sectional Plan

A-11-8

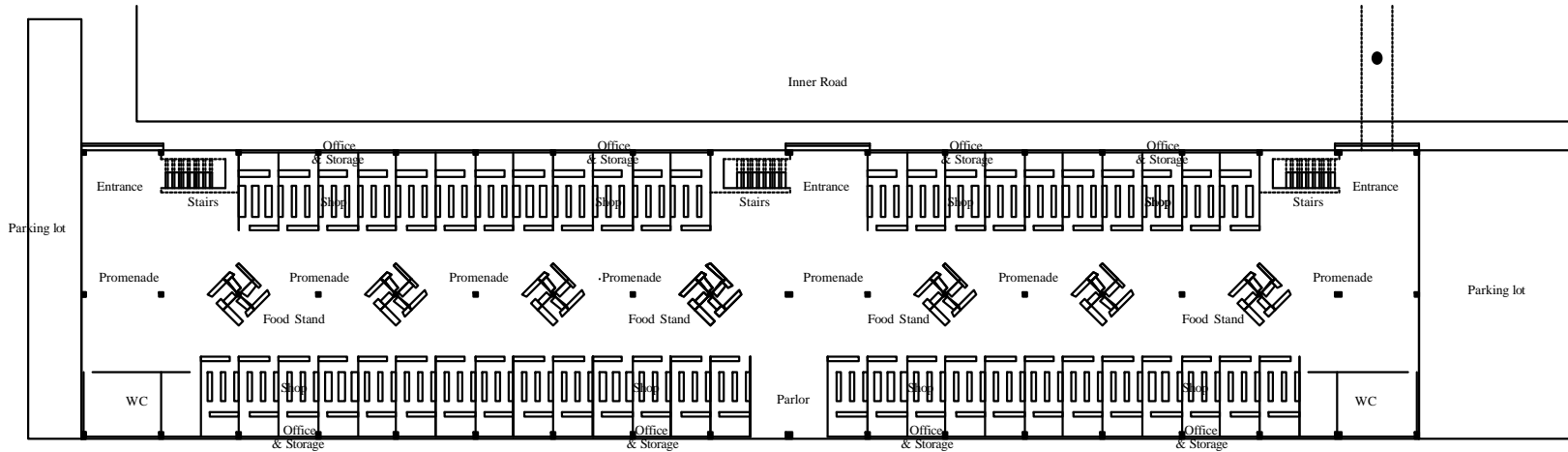
**Elevation and Sectional Plan of PPPI**



APPENDIX 11-9 Plan of Kiosks and Canteens



Second Floor Plan

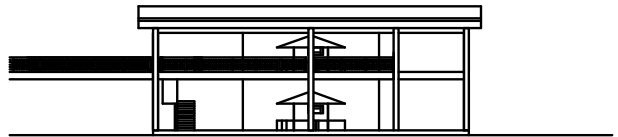


Ground Floor Plan of Kiosks & Canteens

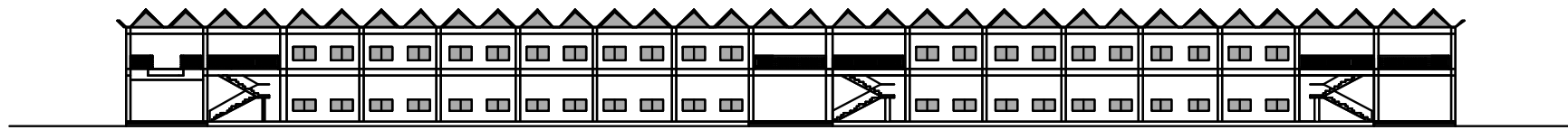


A-11-V  
6-11-9

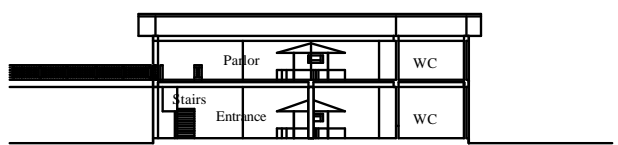
**APPENDIX 11-10 Elevation and Sectional Plan of Kiosks and Canteens**



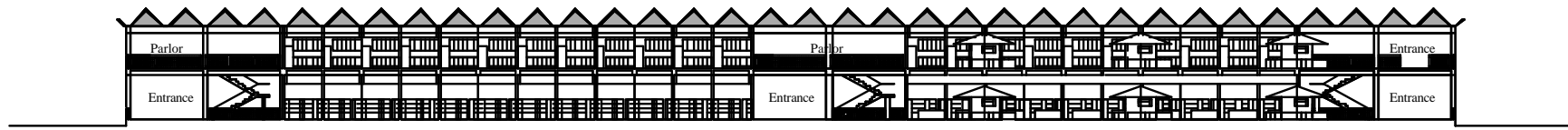
West Elevation



North Elevation



Entrance & Parlor North -South Sectional Plan



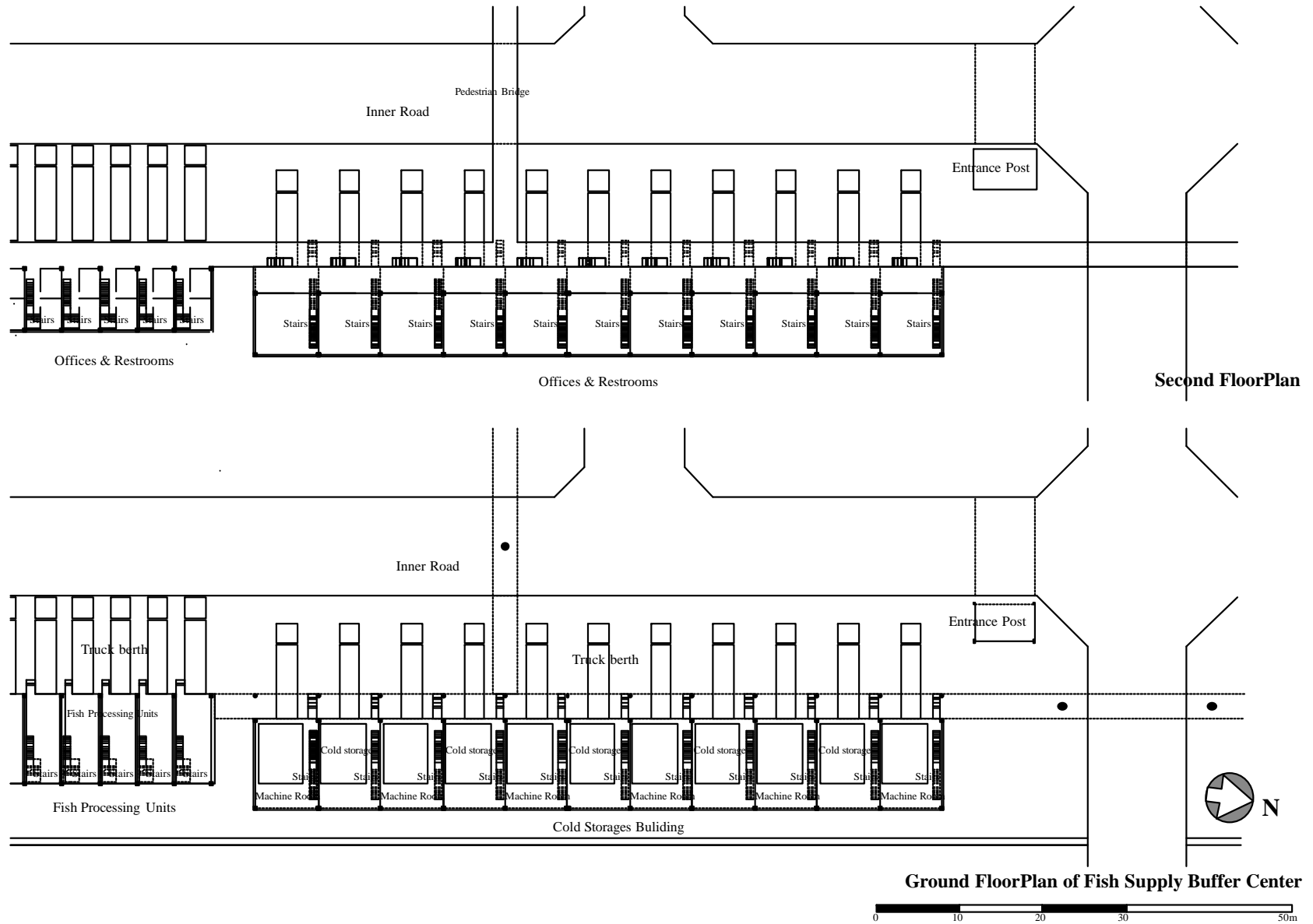
Kiosks & Canteens Promenade (Food Stand) West-East Sectional Plan

A-11-10

**Elevations and Sectional Plan of Kiosks & Canteens**



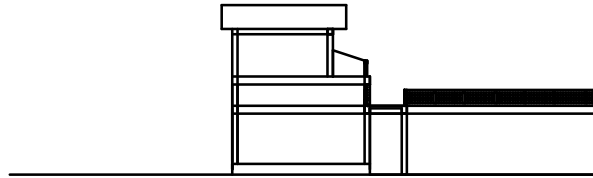
**APPENDIX 11-11 Plan of Fish Supply Buffer Center**



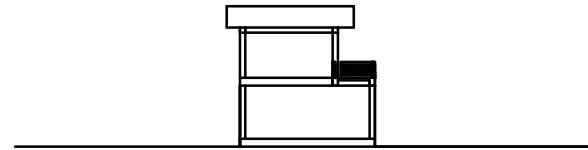
A-11-11



**APPENDIX 11-12 Elevation and Sectional Plan of Fish Supply Buffer Center**



Cold Storage Buildings



Fish Processing Units

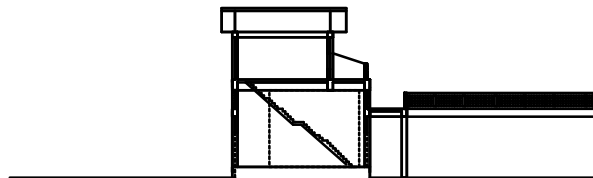
North Elevation



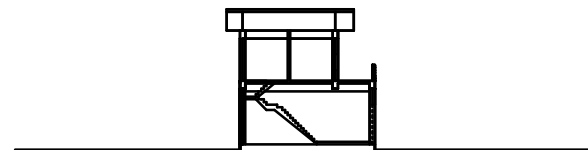
Cold Storage Buildings

Fish Processing Units

West Elevation



Cold Storage Buildings



Fish Processing Units

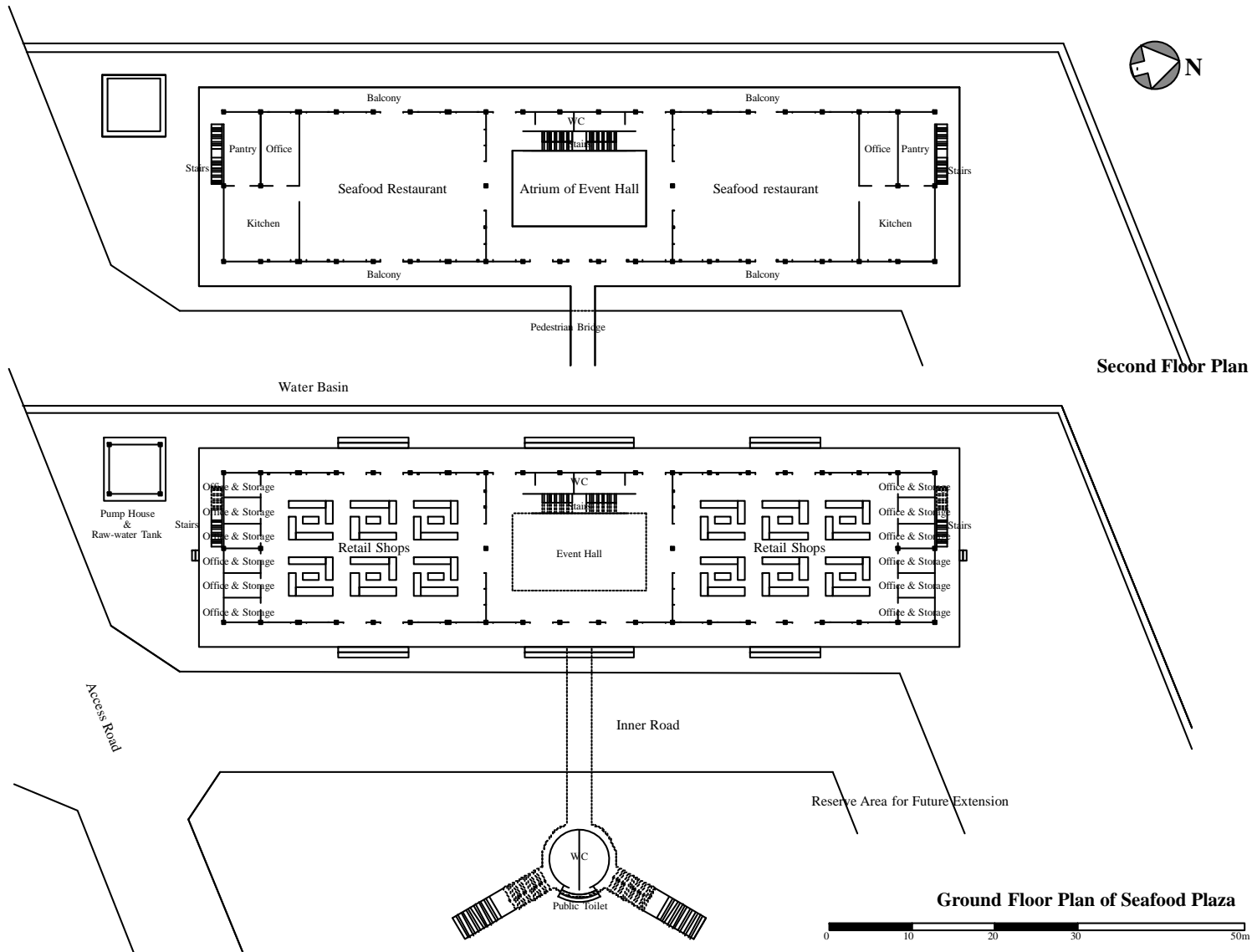
East-West Sectional Plan

A-11-12

**Elevations and Sectional Plan of Seafood Center**

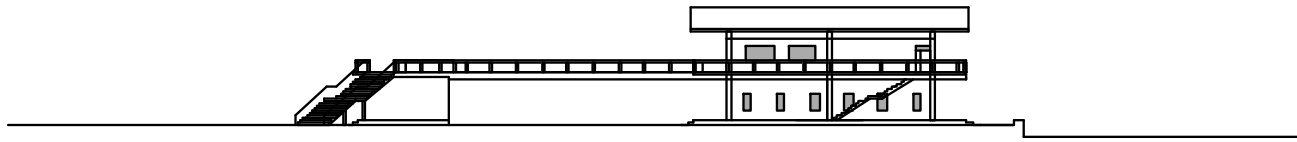


**APPENDIX 11-13 Plan of Seafood Plaza**

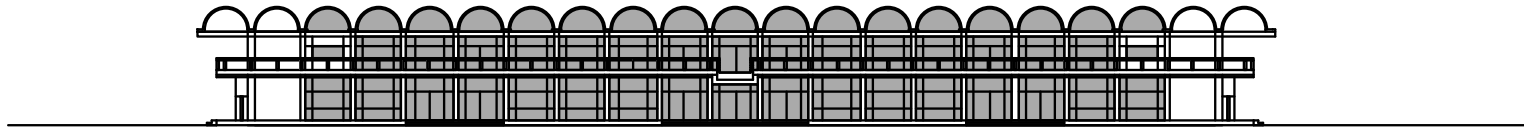


A-11-13

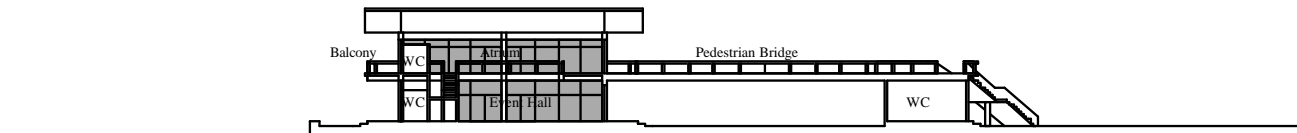
**APPENDIX 11-14 Elevation and Sectional Plan of Seafood Plaza**



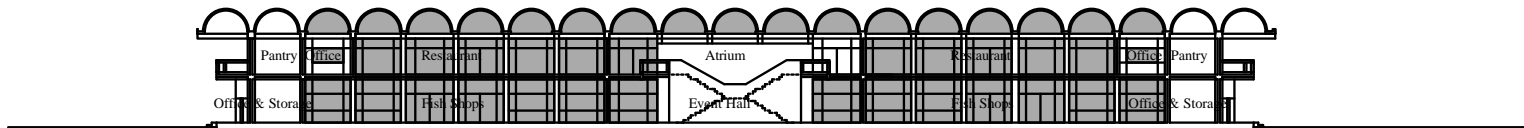
North Elevation



East Elevation



Water Basin      Seafood Center      Inner Road      Public Toilet      Reserve  
West-East Sectional Plan



Seafood Center

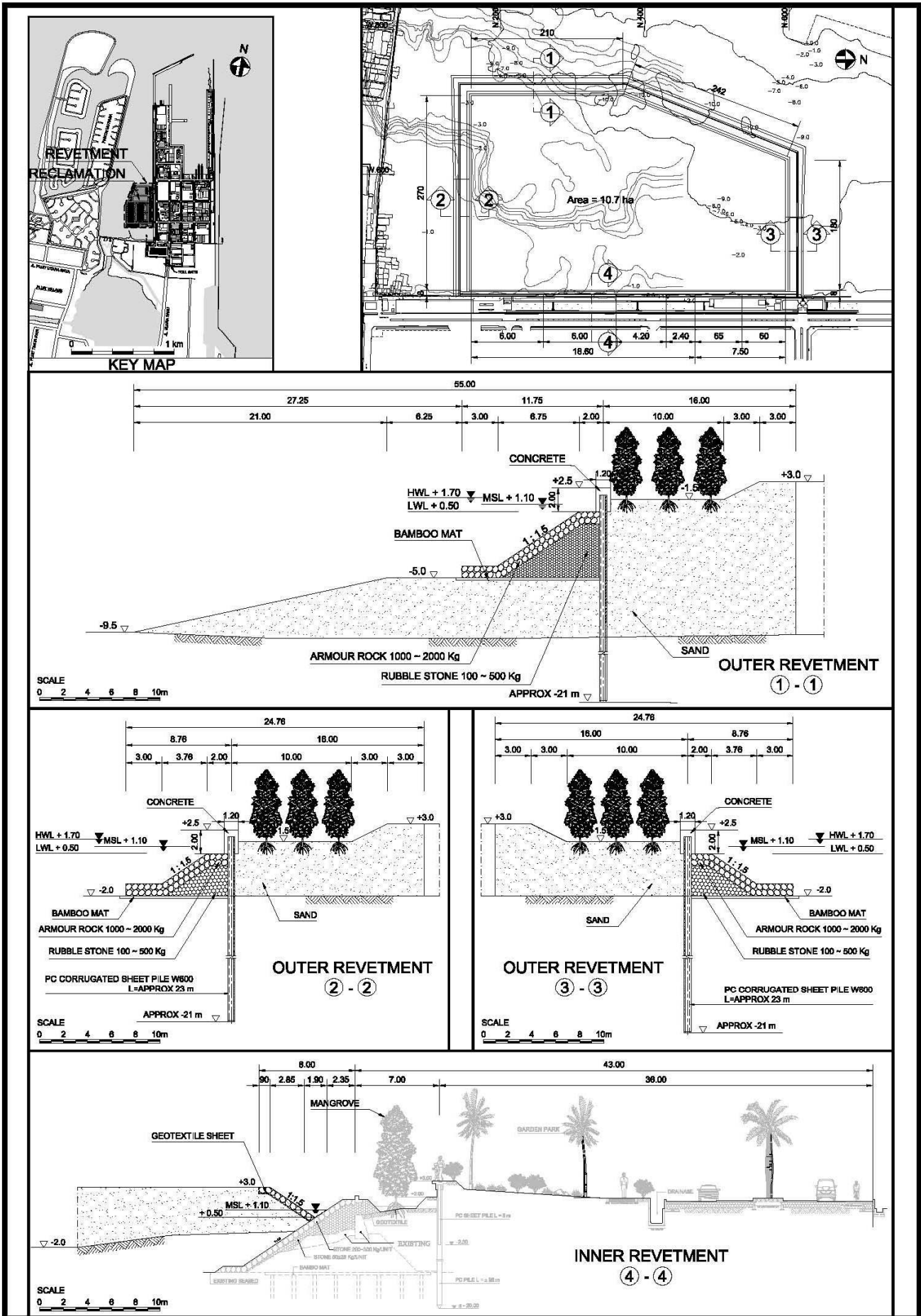
South-North Sectional Plan

A-11-14

**Elevations and Sectional Plan of Seafood Plaza**



APPENDIX 11-15 Condition of Wind, Wave, Water Flow, and Revetment



## APPENDIX 11-16 Impact to Discharge Rainwater by Site Construction of Reclamation

In case of the rain, the rainwater is discharged to pump up from flood control gate area in Pluit Pond to sea. Those discharge rainwater speeds are about  $11\text{m}^3/\text{sec}$  in the ordinary rain and about  $34\text{m}^3/\text{sec}$  in the extraordinary rain. The existing width between the east seawall along Pantai Mutiara and the west seawall/breakwater along Jakarta Fishing Port is around 130m to 500m. In the site construction planning, the waterway of the reclamation side secures more than 200m in width. In this situation, water level fluctuation based on the influence of reclamation was confirmed by the calculation of non-uniform flow. The water level was calculated by computer program of HEC-RAS which was developed by US Army Corps of Engineers. In the results of computation, the level fluctuation was nothing, therefore, site construction of reclamation is not affected to the water level in waterway of the reclamation side.

### 1. Result of Calculation

|                               |   |   |
|-------------------------------|---|---|
| (1)                           | (2) W.L.=1.7m <D Section>                                 | (3) W.L.=0.5m <D Section>                                 |
| (4) Existing Section          | (5) (Case1-1)<br>(6) W.L.=1.7m on each section (A to D)   | (7) (Case1-2)<br>(8) W.L.=0.5m on each section (A to D)   |
| (9) Section after reclamation | (10) (Case2-1)<br>(11) W.L.=1.7m on each section (A to D) | (12) (Case2-2)<br>(13) W.L.=0.5m on each section (A to D) |

### 2. Outline of Calculation

Software of Calculation : Hydrologic Engineering Centers River Analysis System (HEC-RAS)

Applied Methodology : Calculation of non-uniform flow

Boundary Condition : Discharge volume from Pluit Pump Station:  $34\text{m}^3/\text{s}$  <A Section>  
W.L.=1.7m (Maximum height) and 0.5m (Minimum height) <D Section>

Case of Calculation : 4 cases in above table

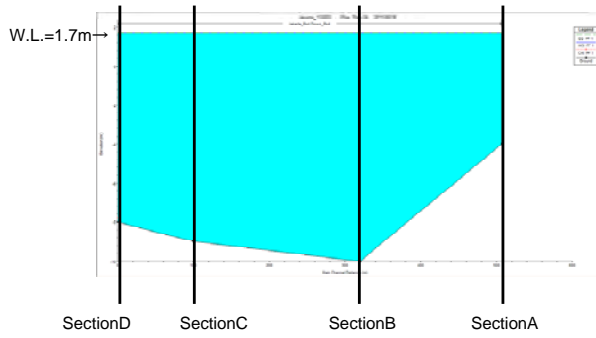
Roughness Coefficient :  $n=0.035$

### 3. Outline of Calculation Result of Each Cases

#### (Case1-1)

| Case 1-1 | XS       | River Sta | Q Total                   | W.S. Elev | Vel Chnl | Flow Area        | Top Width |
|----------|----------|-----------|---------------------------|-----------|----------|------------------|-----------|
|          |          |           | ( $\text{m}^3/\text{s}$ ) | (m)       | (m/s)    | ( $\text{m}^2$ ) | (m)       |
|          | SectionA | 507       | 34                        | 1.7       | 0.02     | 2040.06          | 502.99    |
|          | SectionB | 320       | 34                        | 1.7       | 0.01     | 2850.39          | 488.07    |
|          | SectionC | 100       | 34                        | 1.7       | 0.01     | 2758.38          | 412.81    |
|          | SectionD | 0         | 34                        | 1.7       | 0.02     | 2155.29          | 360.09    |

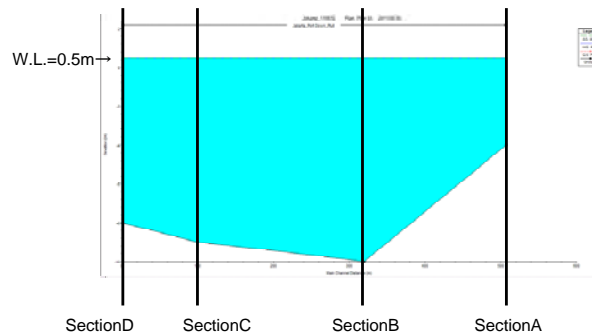
< Longitudinal Section >



(Case1-2)

| Case 1-2 | XS       | River Sta | Q Total<br>(m <sup>3</sup> /s) | W.S. Elev<br>(m) | Vel Chnl<br>(m/s) | Flow Area<br>(m <sup>2</sup> ) | Top Width<br>(m) |
|----------|----------|-----------|--------------------------------|------------------|-------------------|--------------------------------|------------------|
|          | SectionA | 507       | 34                             | 0.5              | 0.02              | 1436.49                        | 502.96           |
|          | SectionB | 320       | 34                             | 0.5              | 0.02              | 2264.74                        | 488.02           |
|          | SectionC | 100       | 34                             | 0.5              | 0.02              | 2263.53                        | 410.78           |
|          | SectionD | 0         | 34                             | 0.5              | 0.02              | 1723.21                        | 360.04           |

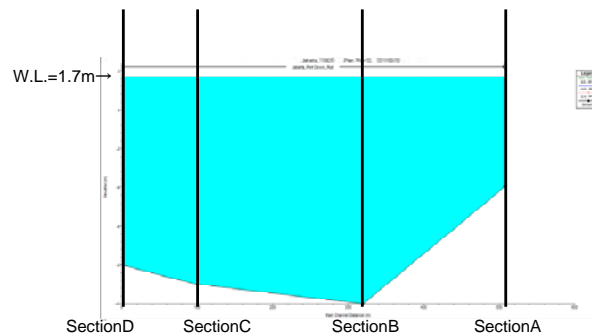
< Longitudinal Section >



(Case2-1)

| Case 2-1 | XS       | River Sta | Q Total<br>(m <sup>3</sup> /s) | W.S. Elev<br>(m) | Vel Chnl<br>(m/s) | Flow Area<br>(m <sup>2</sup> ) | Top Width<br>(m) |
|----------|----------|-----------|--------------------------------|------------------|-------------------|--------------------------------|------------------|
|          | SectionA | 507       | 34                             | 1.7              | 0.04              | 933.5                          | 205.34           |
|          | SectionB | 320       | 34                             | 1.7              | 0.03              | 1278.7                         | 189.6            |
|          | SectionC | 100       | 34                             | 1.7              | 0.03              | 1148.19                        | 207.41           |
|          | SectionD | 0         | 34                             | 1.7              | 0.02              | 2155.29                        | 360.09           |

< Longitudinal Section >



(Case2-2)

| Case 2-2 | XS       | River Sta | Q Total<br>(m <sup>3</sup> /s) | W.S. Elev<br>(m) | Vel Chnl<br>(m/s) | Flow Area<br>(m <sup>2</sup> ) | Top Width<br>(m) |
|----------|----------|-----------|--------------------------------|------------------|-------------------|--------------------------------|------------------|
|          | SectionA | 507       | 34                             | 0.5              | 0.05              | 687.12                         | 205.3            |
|          | SectionB | 320       | 34                             | 0.5              | 0.03              | 1051.21                        | 189.55           |
|          | SectionC | 100       | 34                             | 0.5              | 0.04              | 899.32                         | 207.36           |
|          | SectionD | 0         | 34                             | 0.5              | 0.02              | 1723.21                        | 360.04           |

<Longitudinal Section>

