

SWIM PROJECT PROFILE		File No. : 23
Regist. No. : Agency No. : DPWH-33	Name: LIBASAN SWIP	
Region: 11	Province: DAVAO DEL NORTE	Municipality: NABUNTURAN
Present Status: 1. Pre-F/S( )    ② F/S(1984)    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 10 m
	: Effective Storage Capacity	: 371,861 m <sup>3</sup>
	: Embankment Volume	: 15,480 m <sup>3</sup>
	: Design Flood Discharge	: N.D. m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 136 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: 0 m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 32 ton/year
Technical Assessment:		
1. Survey and Investigation: Results of survey and investigation are not mentioned.		
2. Planning Run-off analysis, flood analysis and determination of reservoir capacity are not carried out. Formulation of irrigation development plan is not mentioned. Agricultural benefit is over-estimated. Environmental conservation plan is not formulated.		
3. Design Plan of dam is not shown in the reports. Spillway is designed as a gated inlet type, but it is recommended to modify the design to a chute type one.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Fund for Review	: 0	EIRR : 16.6 %
2. Feasibility Study	: 285	Priority Rating:
3. Detailed Design	: 570	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 7,888	Review : -
Irrigation	: 3,155	F/S : 1985
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1986; 6 months
Watershed Protection	: 0	
5. Grand Total	: 11,807	

Layout:

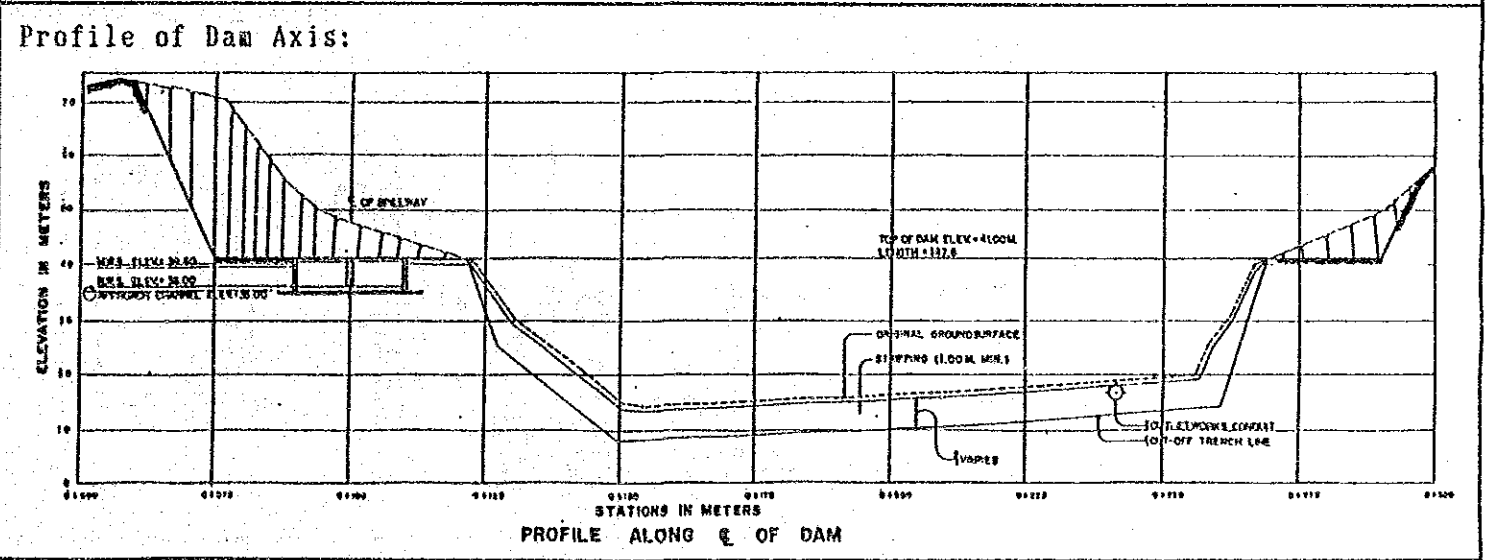
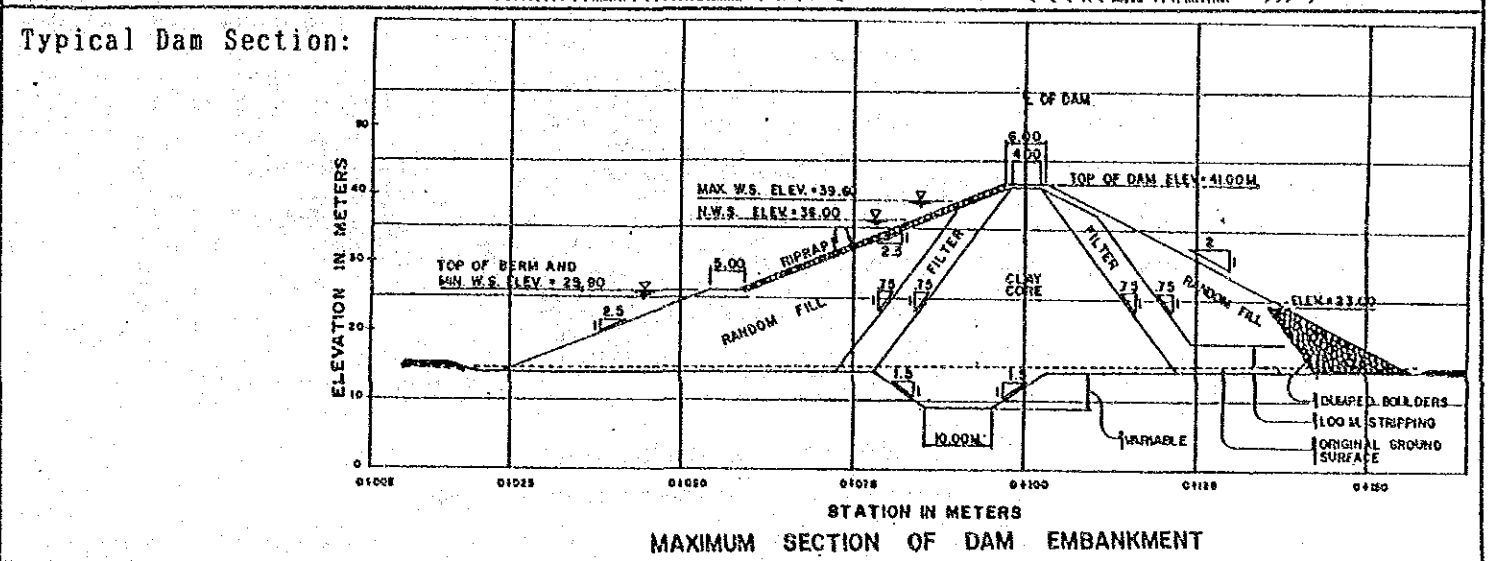
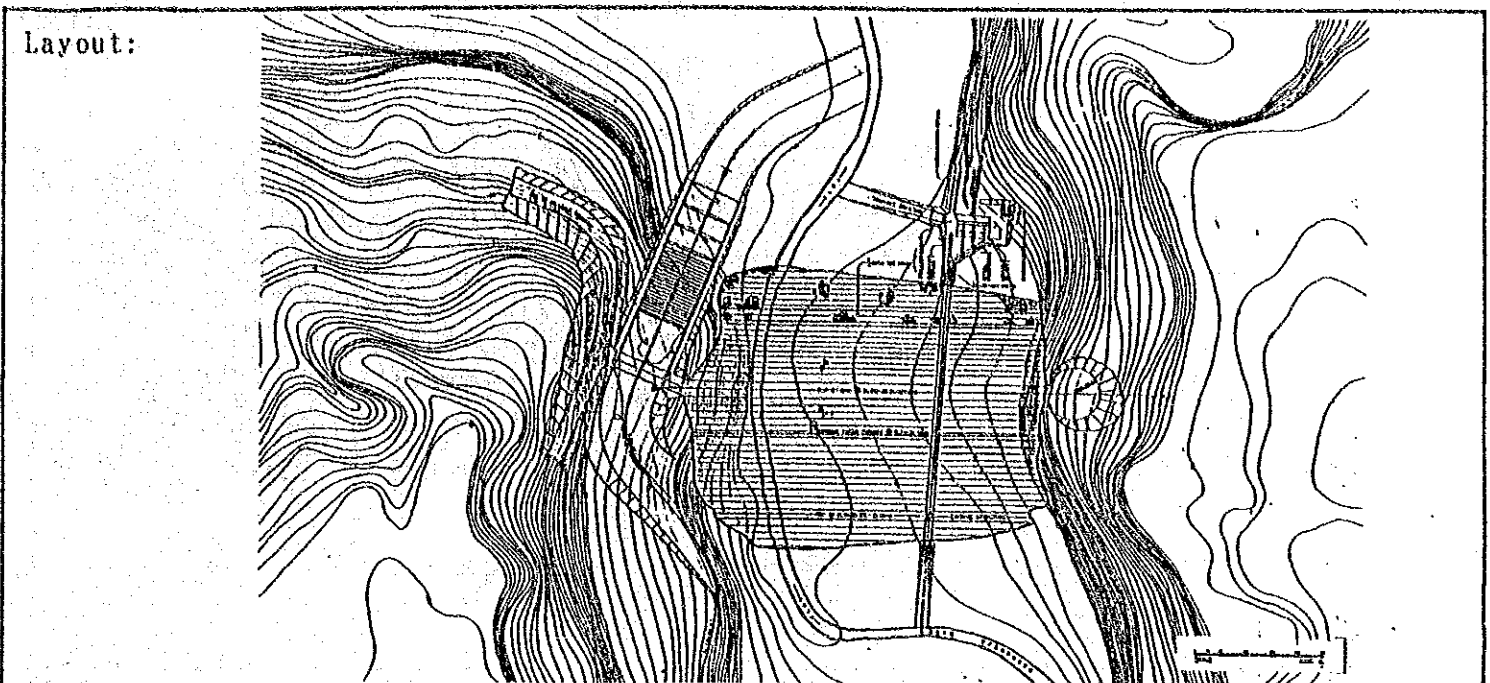
Typical Dam Section:

Profile of Dam Axis:

Note:

No design drawing in report.

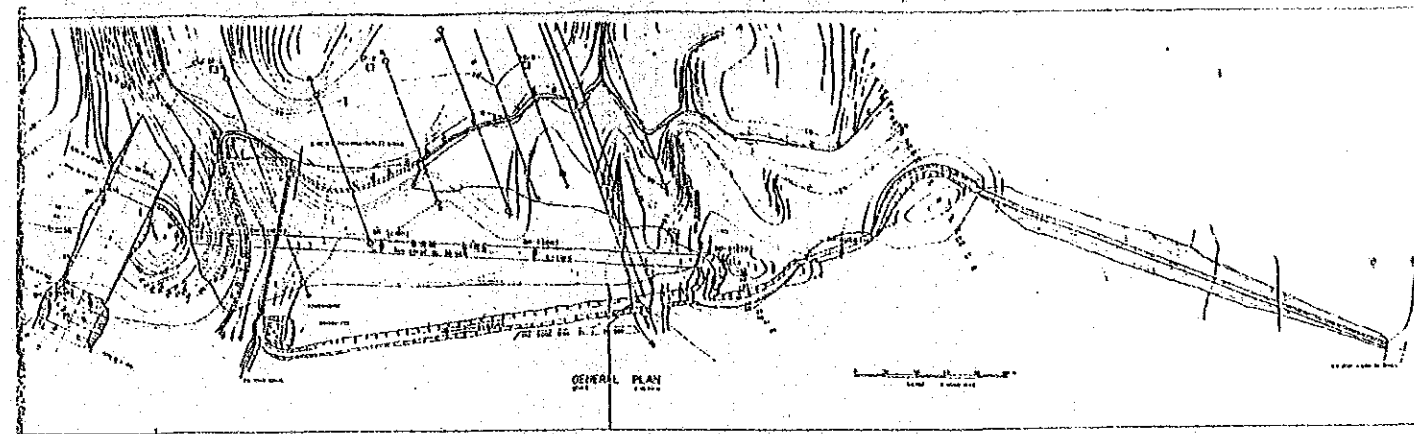
SWIM PROJECT PROFILE		File No. : 24
Regist. No. : Agency No. : NIA-4	Name: PARPAGOJA SWIP	
Region: 4	Province: ROMBLON	Municipality: SAN ANDRES
Present Status: 1. Pre-F/S( )    ② F/S(1982)    ③ D/D( - )		
Purpose: Major : Irrigation Incidental : IF, FC, MH, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 21 m	
	Effective Storage Capacity : 2,800,000 m <sup>3</sup>	
	Embankment Volume : 168,000 m <sup>3</sup>	
	Design Flood Discharge : 349 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 500 ha	
3. Mini-hydropower	Installed Capacity : 225 kW	
4. Watershed Man.	Watershed Protection Area : 842 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 82 ton/year	
Technical Assessment:		
1. Survey and Investigation: Scale of topographic maps for the dam site shall be more than 1/500 and 1/2,000 for the reservoir site. Available volume for the dam embankment materials shall be estimated before construction. Soil mechanical test for the dam embankment materials shall be conducted.		
2. Planning Mini-hydro. benefit is over-estimated. Environmental conservation plan and watershed management plan are not formulated. Project planning shall be re-formulated.		
3. Design Permeability in the dam foundation is high due to gravel and cobble layer. As for the foundation treatment, combination of impervious blanket and continuous underground wall is recommended. Stability of the downstream slope shall be checked. Inlet of the outlet works shall be slightly shifted to upstream side. Diversion discharge estimated based on 1 year's flood would be less.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Fund for Review	: 546	EIRR : 8.7 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction	:	(OECF Candidate)
Dam	: 46,198	Implementation Schedule:
Irrigation	: 15,736	Review : within 1st 5 years
Mini-Hydropower	: 6,968	F/S : Completed
Water Supply	: 0	D/D : Completed
Watershed Protection	: 12,390	Construction: within 1st 5 years
5. Grand Total	: 81,838	



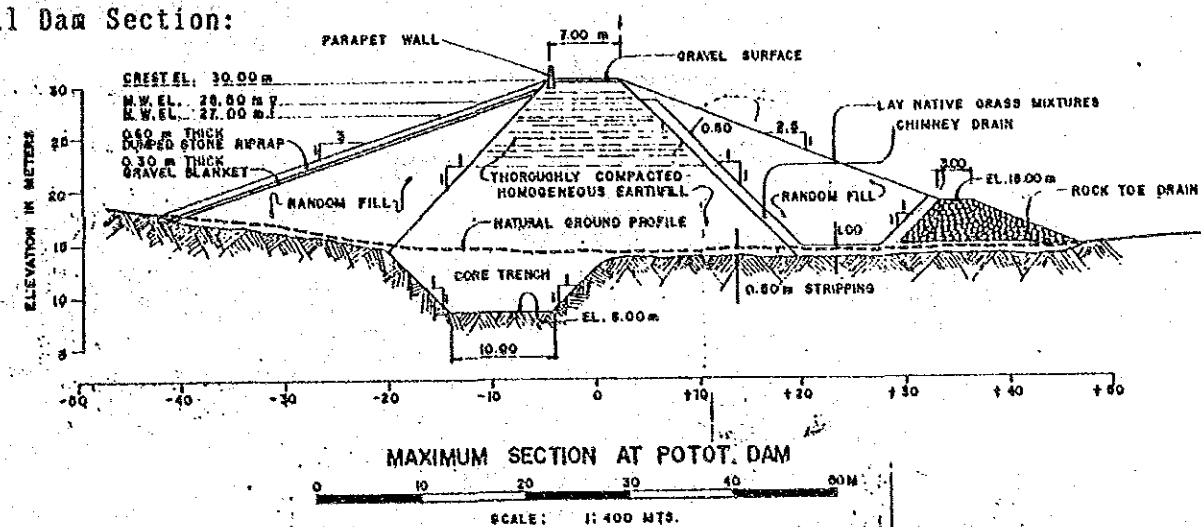
Note:  
Gravel and cobble layer with 15-20 meter's depth covers on the substratum of schist. Construction of core trench against percolation is difficult.

SWIM PROJECT PROFILE		File No. : 25
Regist.No. : Agency No. : NIA-6	Name: POTOT SWIP(SCHEME-1)	
Region: 5	Province: MASBATE	Municipality: MILAGROS
Present Status: 1. Pro-F/S( )    ② F/S(1981)    ③ D/D( - )		
Purpose: Major : Irrigation Incidental : IF, FC, MH		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 18 m
	: Effective Storage Capacity	: 3,144,000 m <sup>3</sup>
	: Embankment Volume	: 125,830 m <sup>3</sup>
	: Design Flood Discharge	: 233 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 300 ha
3. Mini-hydropower	: Installed Capacity	: 165 kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 69 ton/year
Technical Assessment:		
1. Survey and Investigation:		
Scale of the topographic maps for the dam site shall be more than 1/500 and 1/2,000 for the reservoir site.		
Soil mechanical test for the dam embankment materials shall be conducted.		
Test of consolidation, bearing capacity, strength and permeability in layer shall be conducted.		
2. Planning		
Scale of mini-hydropower is not reasonable.		
Agricultural benefit and mini-hydro. benefit are over-estimated.		
Environmental conservation plan is not formulated.		
3. Design		
Excavation line of core trench shall be in clay layer.		
Weir shall be provided in the spillway.		
Inlet of outlet works is recommended to be located in outside of dam embankment.		
Design discharge for diversion works is not mentioned.		
Conduit with 0.60 m diameter for diversion works would be small.		
4. Operation and Maintenance		
Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Fund for Review	: 270	EIRR : 13.2 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : A
4. Construction	: 22,244	(OECF Candidate)
Dam	: 6,656	Implementation Schedule:
Irrigation	: 6,357	Review : within 1st 5 years
Mini-Hydropower	: 0	F/S : Completed
Water Supply	: 0	D/D : Completed
Watershed Protection	: 0	Construction: within 1st 5 years
5. Grand Total	: 35,528	

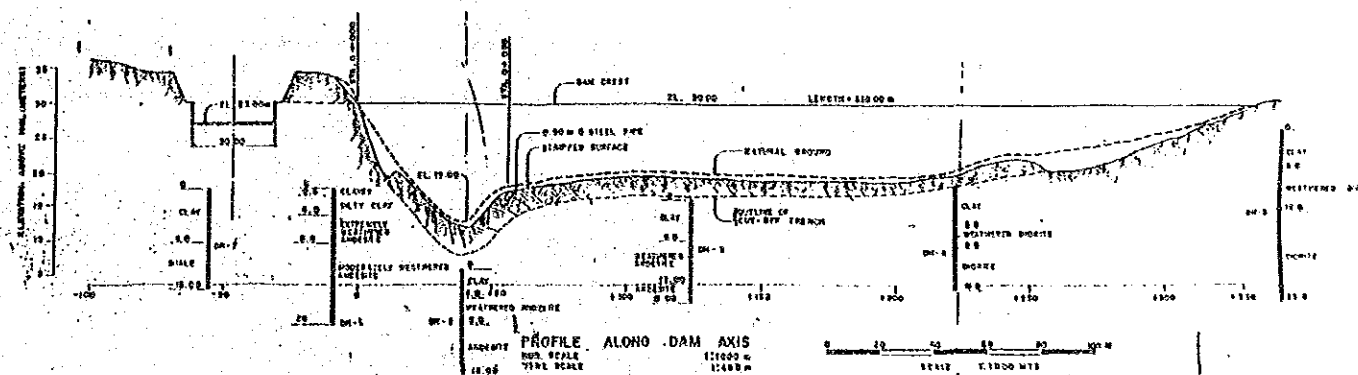
Layout:



Typical Dam Section:



Profile of Dam Axis:

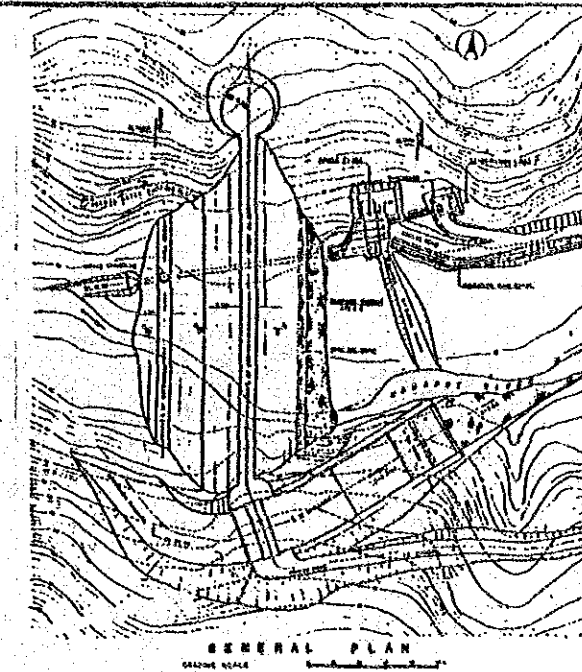


Note:

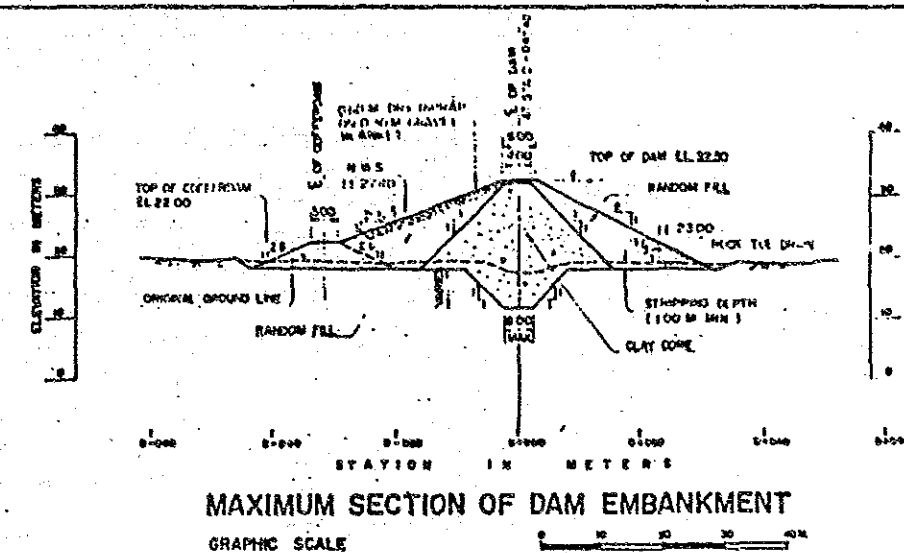
Dam foundation is highly weathered. Additional survey on consolidation, bearing capacity and permeability for clay layer are required for final dam design.

SWIM PROJECT PROFILE		File No. : 26
Regist. No. : Agency No. : NIA-7	Name: CARAMOAN SWIP	
Region: 5	Province: CAMARINES SUR	Municipality: CARAMOAN
Present Status: 1. Pre-F/S( )    ② F/S(1981)    ③ D/D( - )		
Purpose: Major : Irrigation Incidental : IF, FC, MH, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 15 m	
	Effective Storage Capacity : 586,000 m <sup>3</sup>	
	Embankment Volume : 65,646 m <sup>3</sup>	
	Design Flood Discharge : 271 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 350 ha	
3. Mini-hydropower	Installed Capacity : 240 kW	
4. Watershed Man.	Watershed Protection Area : 1,000 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 32 ton/year	
Technical Assessment:		
1. Survey and Investigation: Scale of the topographic maps for the reservoir site shall be more than 1/2,000. Boring works in the river bed shall be conducted to estimate the river bed dipositions. Soil mechanical test for the dam embankment materials shall be conducted.		
2. Planning Mini-hydro. benifit is over-setimated. Watershed management plan is not formulated.		
3. Design Design of core trench in river bed shall be determined after confirmation of deposit's extent. Inlet of outlet works is recommended to be located in outside of the dam embankment.		
4. Operation and Maintonance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Fund for Review :	0	EIRR : 16.4 %
2. Feasibility Study :	0	Priority Rating:
3. Detailed Design :	0	Group : A
4. Construction :		(OECF Candidate)
Dam :	22,508	Implementation Schedule:
Irrigation :	7,766	Review : -
Mini-Hydropower :	3,542	F/S : Completed
Water Supply :	0	D/D : Completed
Watershed Protection :	14,581	Construction: within 1st 5 years
5. Grand Total :	48,396	

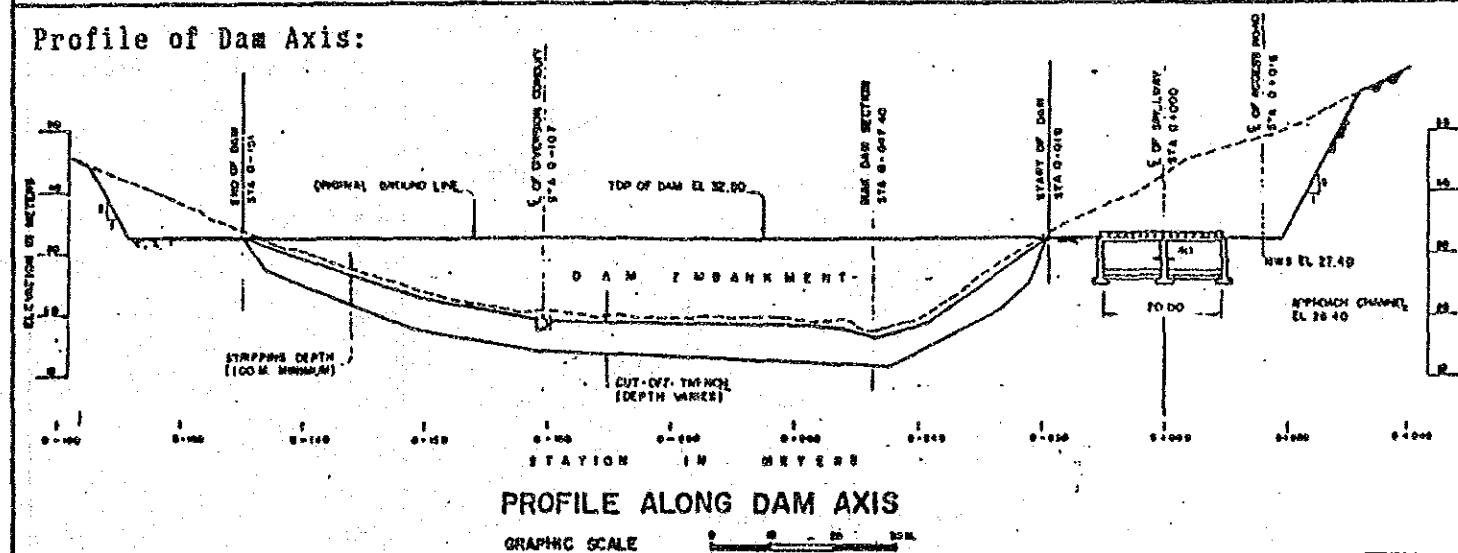
Layout:



Typical Dam Section:



Profile of Dam Axis:

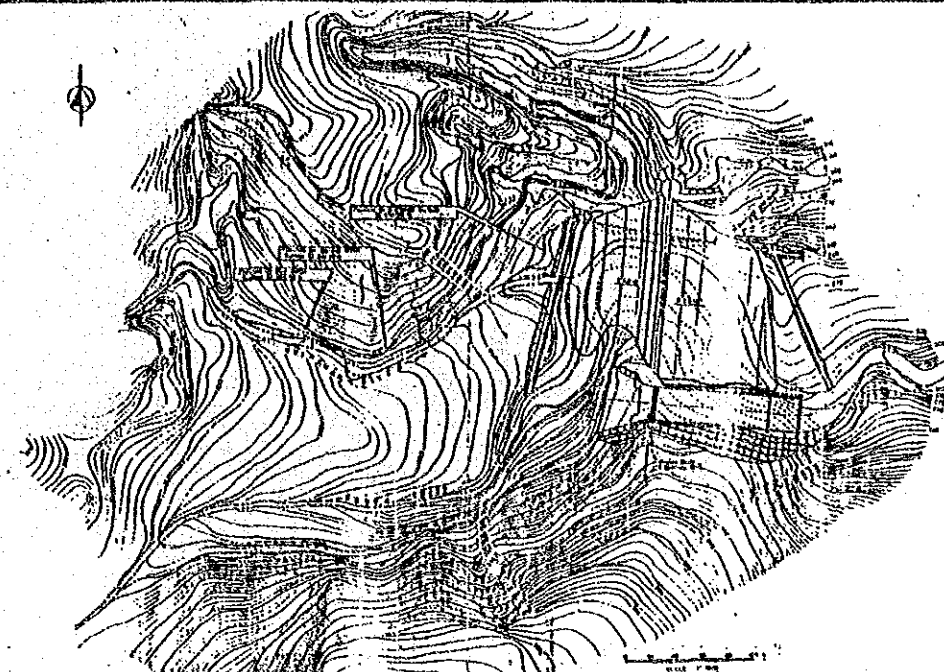


Note:

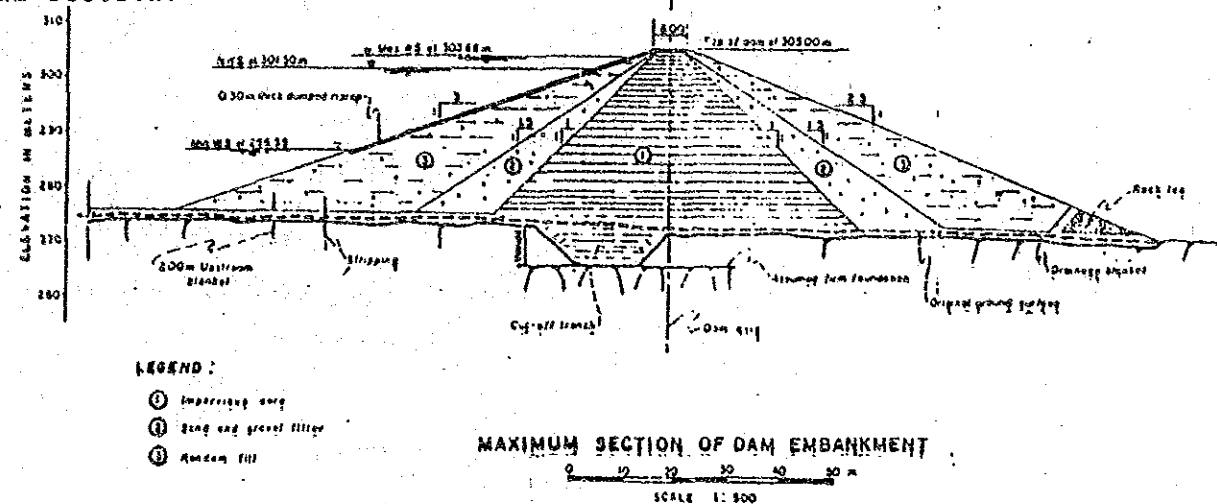
As to both side abutments, 0.5-1.0 m excavation is enough judging from N value. Grouting is not necessary since basic schist have been considerably weathered and no anxiety of percolation through rock crack.

SWIM PROJECT PROFILE		File No. : 27
Regist. No. : Agency No. : NIA-8	Name : NASIG-ID SWIP	
Region : 7	Province : NEGROS ORIENTAL	Municipality : ZAMBOANGUITA
Present Status: 1. Pre-F/S( ) ② F/S( 1985) ③ D/D( - )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL Dam Height : 30 m Effective Storage Capacity : 466,000 m <sup>3</sup> Embankment Volume : 160,900 m <sup>3</sup> Design Flood Discharge : 182 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 500 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 482 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 10 ton/year	
Technical Assessment:		
1. Survey and Investigation: Scale of the topographic map for the dam site shall be more than 1/500. Permeability test under pressure condition shall be conducted to determine the foundation treatment and construction methods. Soil mechanical test for the dam embankment materials shall be conducted.		
2. Planning Environmental conservation plan and watershed management plan are not formulated. Project planning shall be re-formulated.		
3. Design Grouting works under the core trench is recommended to avoid the percolation failure. Inlet of outlet works is recommended to be located in outside of dam embankment. Design discharge shall be estimated.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Fund for Review	: 1,764	EIRR : 4.9 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction		Implementation Schedule:
Dam	: 48,407	Review : 1992
Irrigation	: 60,366	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 0	Construction: Jul. 1989; 18 months
Watershed Protection	: 12,989	
5. Grand Total	: 124,535	

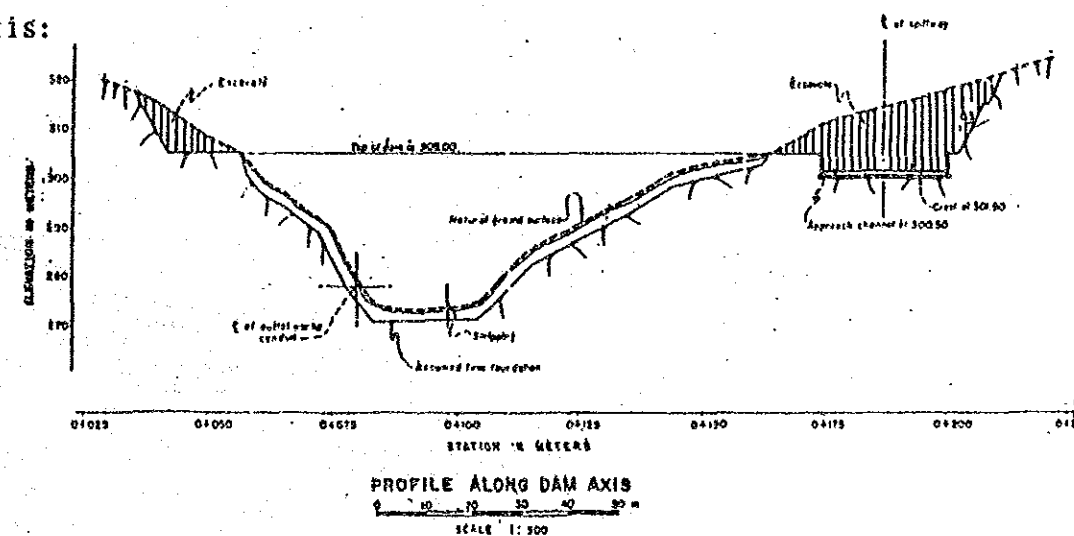
Layout:



Typical Dam Section:



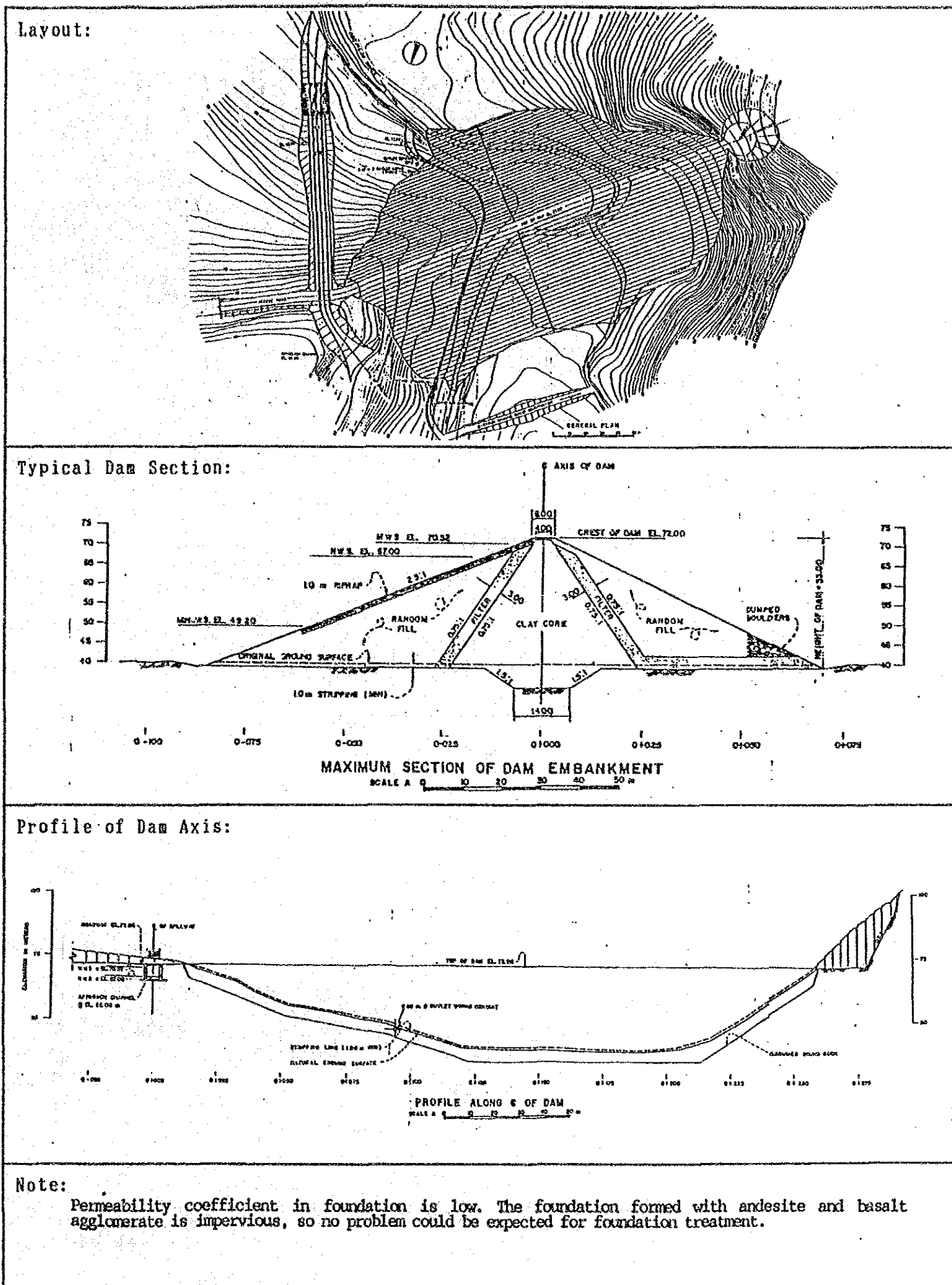
Profile of Dam Axis:



Note:

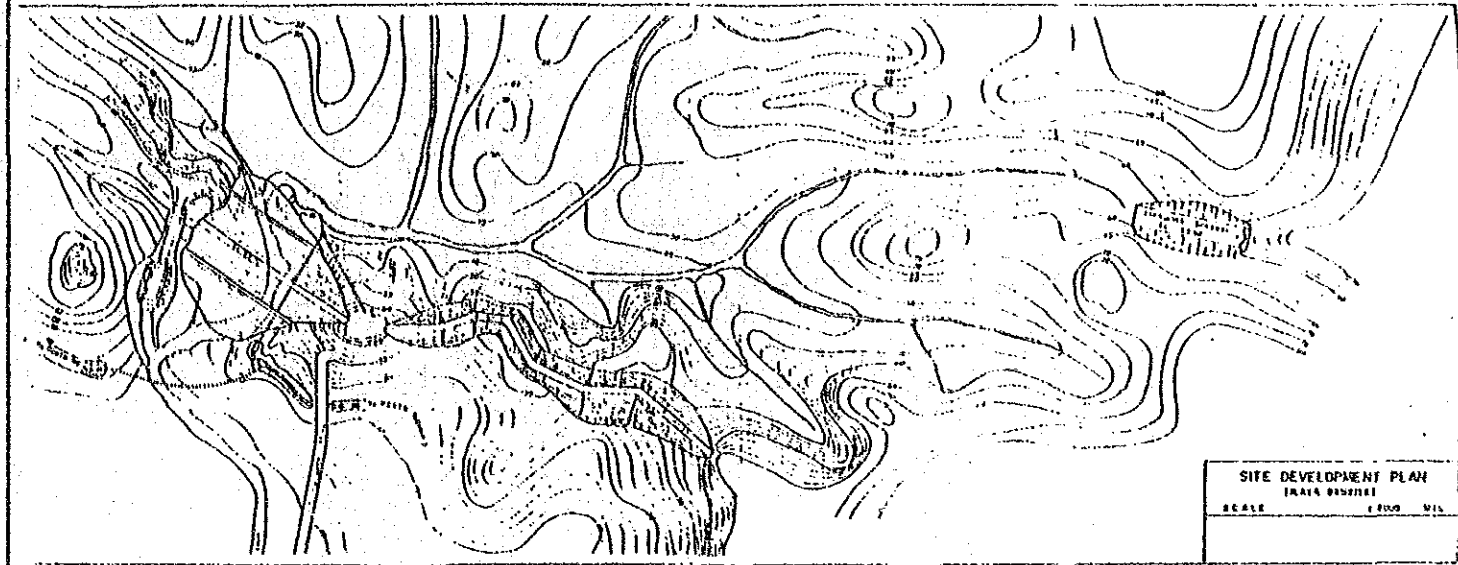
Treatment of the stratum's contact face in left abutment against percolation is troublesome. Method of excavating works in boulder with 10 m depth for core trench shall be well studied. (grouting area is estimated to be 6,100 m<sup>2</sup>)

SWIM PROJECT PROFILE		File No. : 28
Regist. No. : Agency No. : NIA-11	Name: TUGAS SWIP	
Region: 7	Province: BOHOL	Municipality: CANDIJAY
Present Status: 1. Pre-F/S( )    ② F/S (1982)    ③ D/D( - )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 33 m	
	Effective Storage Capacity : 2,080,000 m <sup>3</sup>	
	Embankment Volume : 368,500 m <sup>3</sup>	
	Design Flood Discharge : 95 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 250 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 0 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 29 ton/year	
Technical Assessment:		
1. Survey and Investigation: Soil mechanical test for the dam embankment materials shall be conducted. Confirmation of strength and permeability in the upper high weathered layer is required.		
2. Planning Environmental conservation plan is not formulated. Project planning shall be re-formulated.		
3. Design Centerline of conduit is recommended to be straight. Design discharge shall be estimated.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Fund for Review	: 368	EIRR : 6.6 %
2. Feasibility Study	: 0	
3. Detailed Design	: 0	
4. Construction	: 40,606	Priority Rating: Group : A (OECF Candidate)
Dam	: 40,606	Implementation Schedule:
Irrigation	: 5,547	Review : within 1st 5 years
Mini-Hydropower	: 0	F/S : Completed
Water Supply	: 0	D/D : Completed
Watershed Protection	: 0	Construction: within 1st 5 years
5. Grand Total	: 46,521	

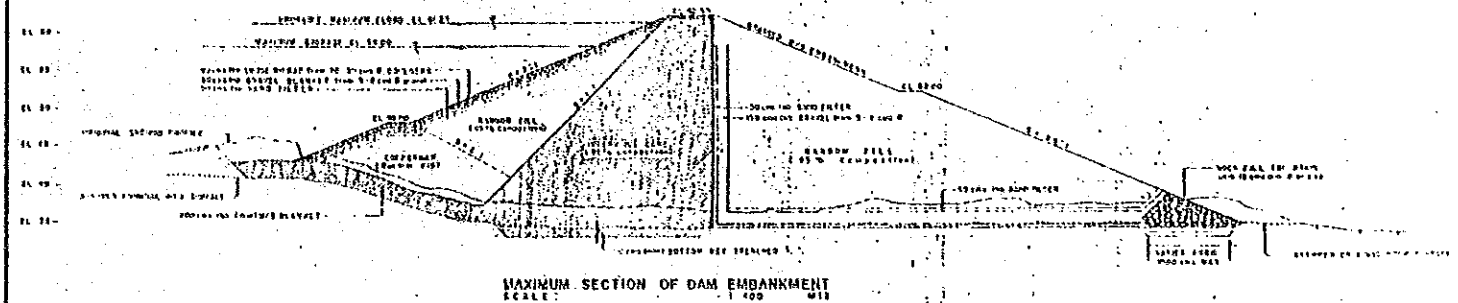


SWIM PROJECT PROFILE		File No. : 29
Regist. No. : Agency No. : NIA-12	Name: ILAYA SWIP	
Region: 7	Province: BOHOL	Municipality: UBAY
Present Status: 1. Pre-F/S( )    ② F/S( 1986)    ③ D/D( - )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 25 m	
	Effective Storage Capacity : 3,370,000 m <sup>3</sup>	
	Embankment Volume : 232,400 m <sup>3</sup>	
	Design Flood Discharge : 158 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 450 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 500 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 78 ton/year	
Technical Assessment:		
1. Survey and Investigation: Scale of the topographic map shall be more than 1/500 for the dam site and 1/2,000 for the reservoir site. Soil mechanical test for the dam embankment materials shall be conducted. Confirmation of bearing capacity and permeability in the upper weathered layer is requested.		
2. Planning Environmental conservation plan and watershed management plan are not formulated.		
3. Design Adequate design is made.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Fund for Review	: 0	EIRR : 19.4 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : A
4. Construction		Implementation Schedule:
Dam	: 32,795	Review : -
Irrigation	: 9,984	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 0	Construction: Jul. 1991; 18 months
Watershed Protection	: 8,486	
5. Grand Total	: 51,266	

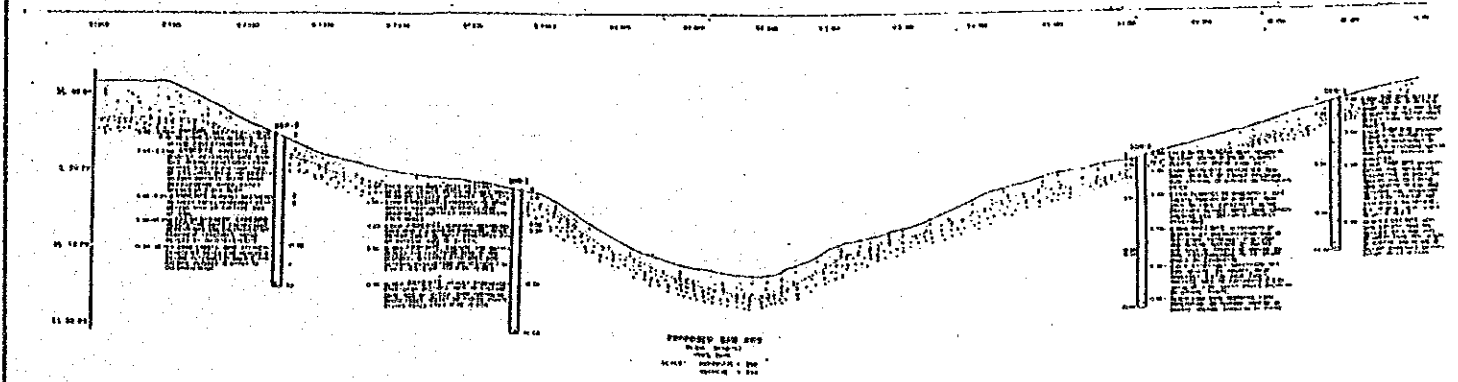
Layout:



Typical Dam Section:



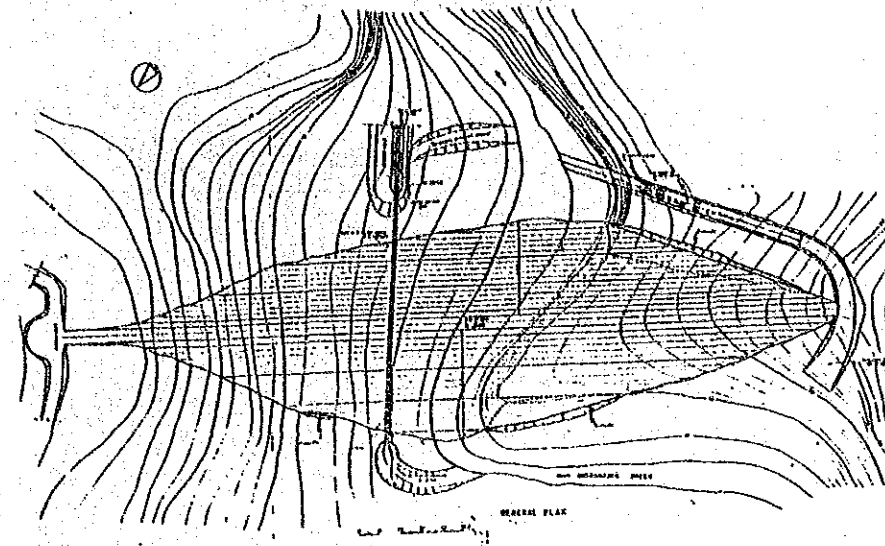
Profile of Dam Axis:



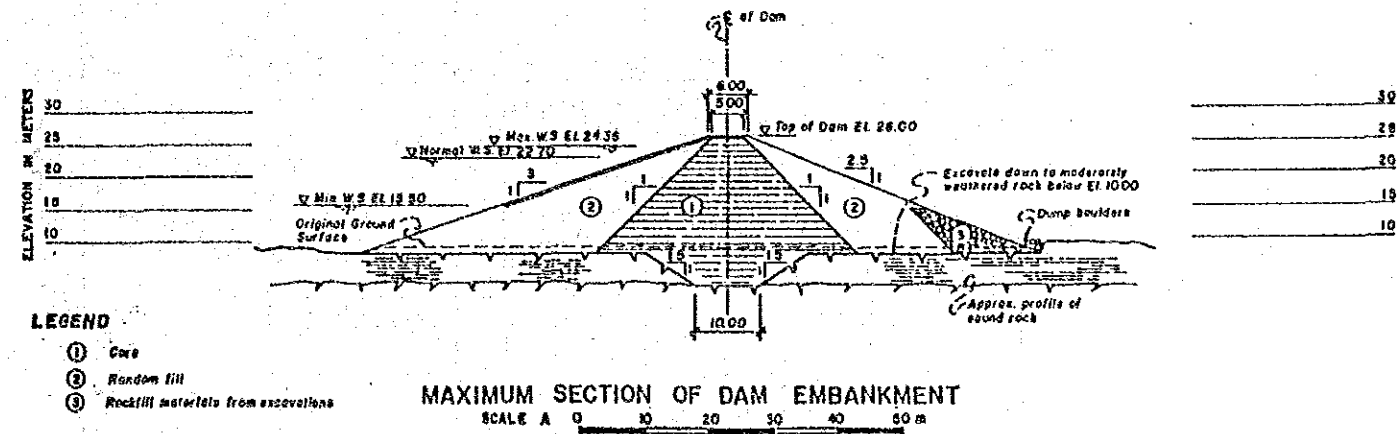
Note:  
Andesite forming the foundation is generally fractured/fragmented, but it could be estimated a good foundation for earthfill dam. Impervious blanket in the upstream side is imperative for percolation failure.

SWIM PROJECT PROFILE		File No. : 30
Regist. No. : Agency No. : NIA-14	Name: SAGDUSURON SWIP (SCHEME-1)	
Region: 8	Province: NORTHERN SAMAR	Municipality: CATUBIG
Present Status: 1. Pre-F/S( )    ② F/S( 1982)    ③ D/D( - )		
Purpose: Major : Irrigation Incidental : FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 14 m	
	Effective Storage Capacity : 1,570,000 m <sup>3</sup>	
	Embankment Volume : 212,500 m <sup>3</sup>	
	Design Flood Discharge : 50 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 230 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 150 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 34 ton/year	
Technical Assessment:		
1. Survey and Investigation: N value of the foundation shall be measured for sliding study on the foundation. Soil mechanical test for the dam embankment materials shall be conducted.		
2. Planning Environmental conservation plan and watershed management plan are not formulated.		
3. Design N value is widely ranging 6-12 in the abutment. Study for sliding on the foundation shall be conducted. Compaction near the spillway shall be carefully carried out to avoid percolation failure. Inlet of outlet works is recommended to be located in outside of dam embankment.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 12.4 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : B
4. Construction		Implementation Schedule:
Dam	: 26,005	Review : -
Irrigation	: 5,103	F/S : Completed
Mini-Hydropower	: 0	D/D : Completed
Water Supply	: 0	Construction: Jan. 1996; 21 months
Watershed Protection	: 4,380	
5. Grand Total	: 35,488	

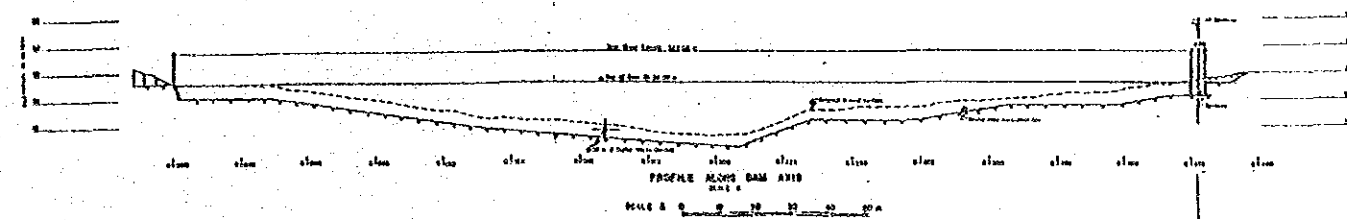
Layout:



Typical Dam Section:



Profile of Dam Axis:



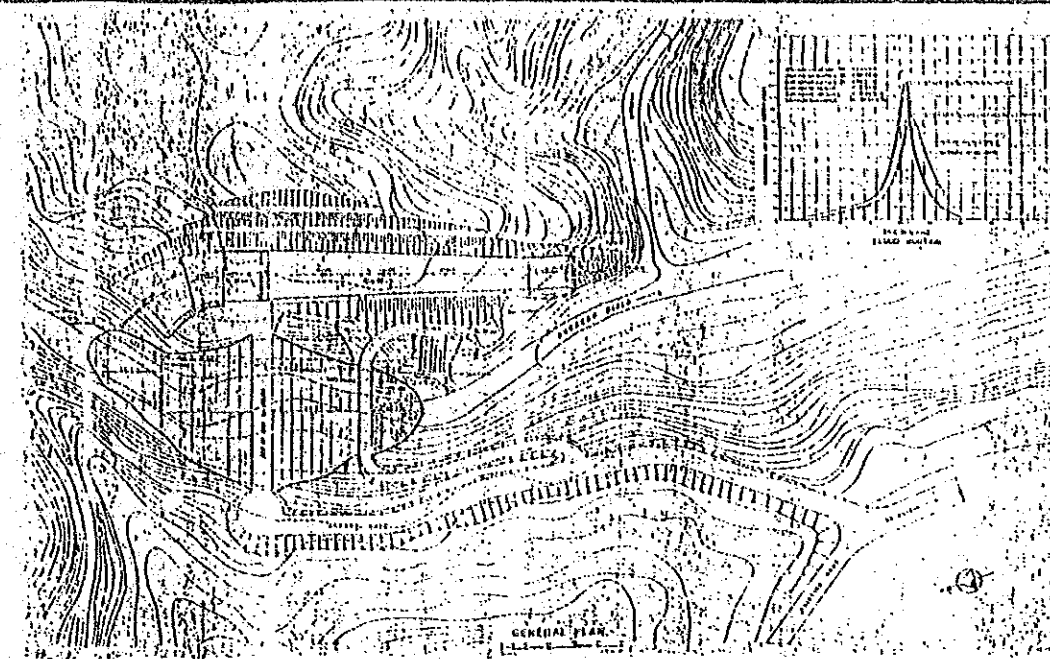
Note:

Sliding study through the foundation is necessary in spite of low dam. Because the foundation, which are alternately layered by mud and sand stone in tertiary period are deeply weathered.

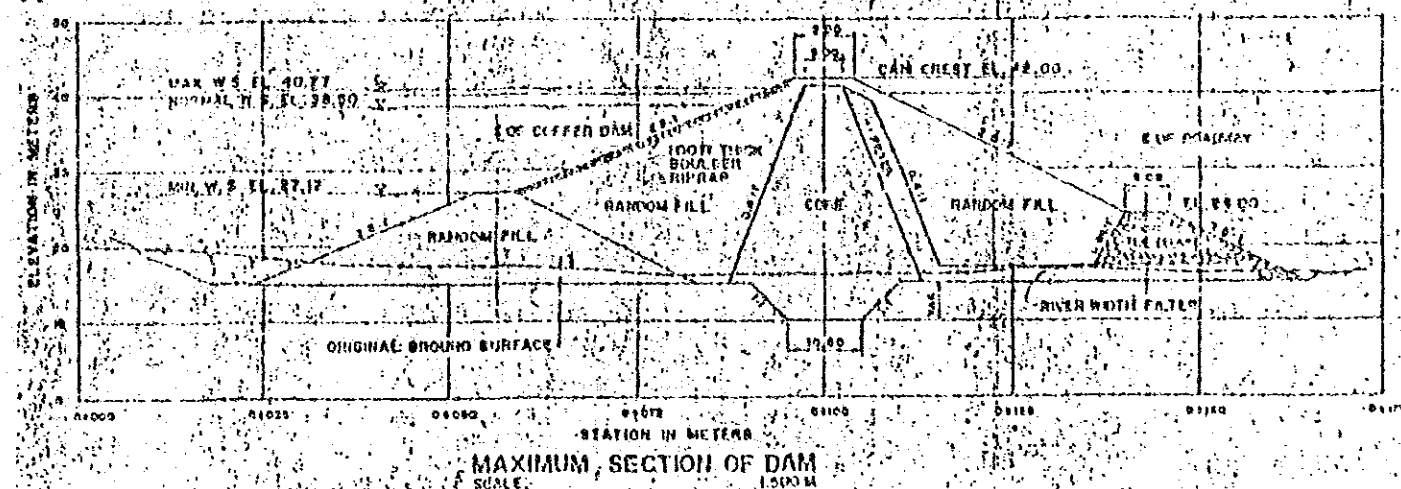


SWIM PROJECT PROFILE		File No. : 31
Regist. No. : Agency No. : NIA-15	Name: BUCACAO SWIP	
Region: 9	Province: ZAMBOANGA DEL SUR	Municipality: ALICIA
Present Status: 1. Pre-F/S( ) ② F/S( 1982) ③ D/D( - )		
Purpose: Major : Irrigation Incidental : IF, FC, MH		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 26 m
	: Effective Storage Capacity	: 1,630,000 m <sup>3</sup>
	: Embankment Volume	: 68,500 m <sup>3</sup>
	: Design Flood Discharge	: 223 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 410 ha
3. Mini-hydropower	: Installed Capacity	: 180 kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 40 ton/year
Technical Assessment:		
1. Survey and Investigation: Confirmation of permeability in foundation is required. Soil test for the dam embankment materials shall be conducted.		
2. Planning Mini-hydro. benefit is over-estimated. Environmental conservation plan is not formulated.		
3. Design Permeability in Andesite foundation is considerably high. Grouting works is recommended for foundation treatment. Stability of the downstream slope of dam shall be checked. Width of supercritical flow section is recommended to be reduced. Inlet of outlet works is recommended to be located in outside of dam embankment.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 499	EIRR : 10.7 %
2. Feasibility Study	: 0	Priority Rating:
3. Detailed Design	: 0	Group : A
4. Construction	: 41,235	(OECF Candidate)
Dam	: 12,053	Implementation Schedule:
Irrigation	: 9,293	Review : within 1st 5 years
Mini-Hydropower	: 0	F/S : Completed
Water Supply	: 0	D/D : Completed
Watershed Protection	: 0	Construction: within 1st 5 years
5. Grand Total	: 63,080	

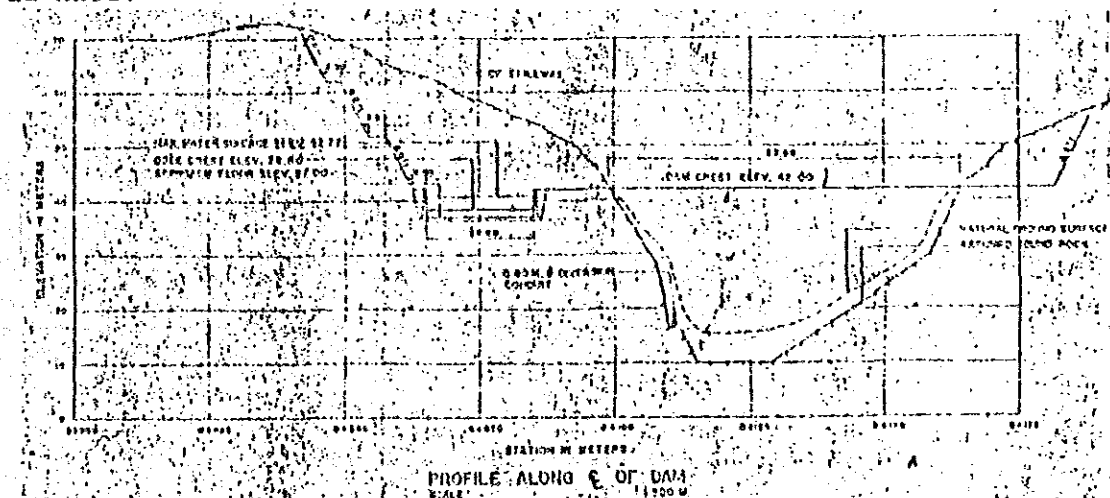
Layout:



Typical Dam Section:



Profile of Dam Axis:



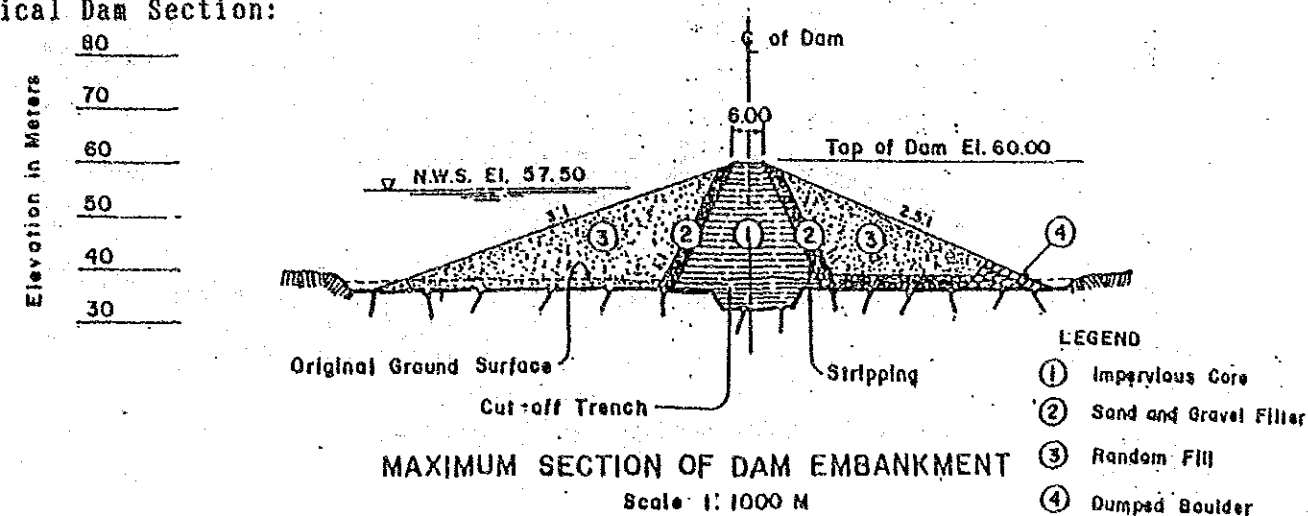
Note:

Excavation of core trench is easy since there is a shallow river deposits. Grouting is required to decrease the percolation loss (Grouting length is about 6,630 m).

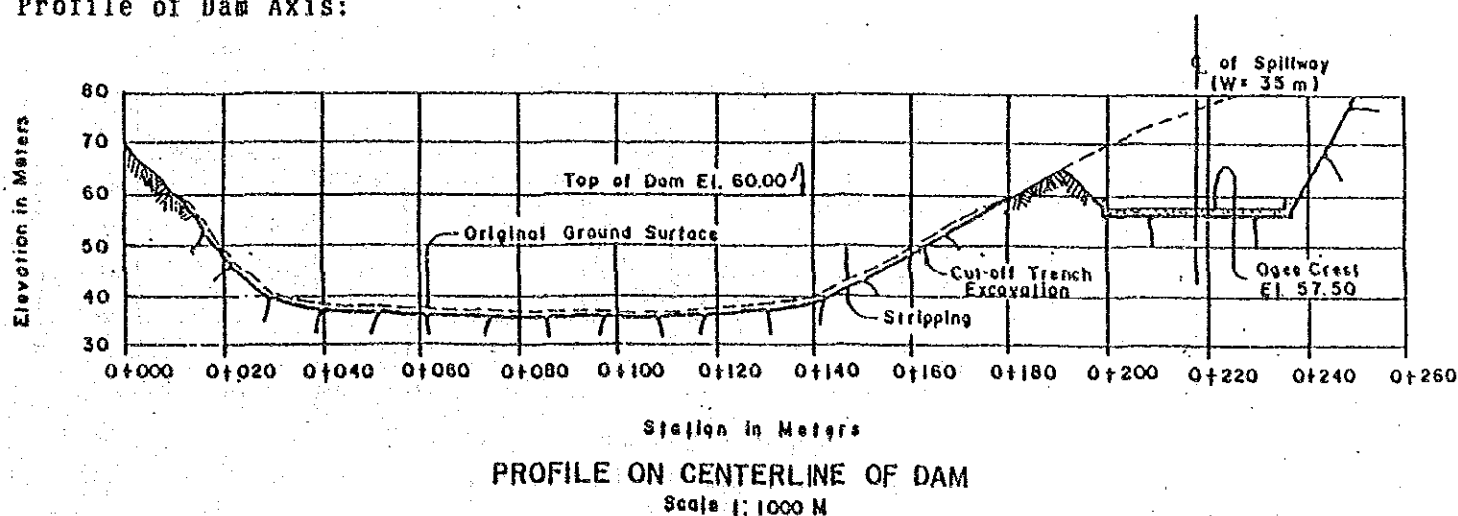
SWIM PROJECT PROFILE		File No. : 32
Regist. No. : Agency No. : NIA-20	Name: MALOYO SWIP	
Region: 1	Province: LA UNION	Municipality: BALAOAN
Present Status: (1) Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 23 m	
	Effective Storage Capacity : 5,409,000 m <sup>3</sup>	
	Embankment Volume : 100,300 m <sup>3</sup>	
	Design Flood Discharge : 207 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 430 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 955 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 136 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 17.4 %
2. Feasibility Study	: 1,178	Priority Rating:
3. Detailed Design	: 2,357	Group : B
4. Construction		Implementation Schedule:
Dam	: 35,503	Review : -
Irrigation	: 10,408	F/S : 1996
Mini-Hydropower	: 0	D/D : 1997
Water Supply	: 0	Construction: Jan. 1998; 12 months
Watershed Protection	: 13,930	
5. Grand Total	: 63,376	

Layout:

Typical Dam Section:



Profile of Dam Axis:

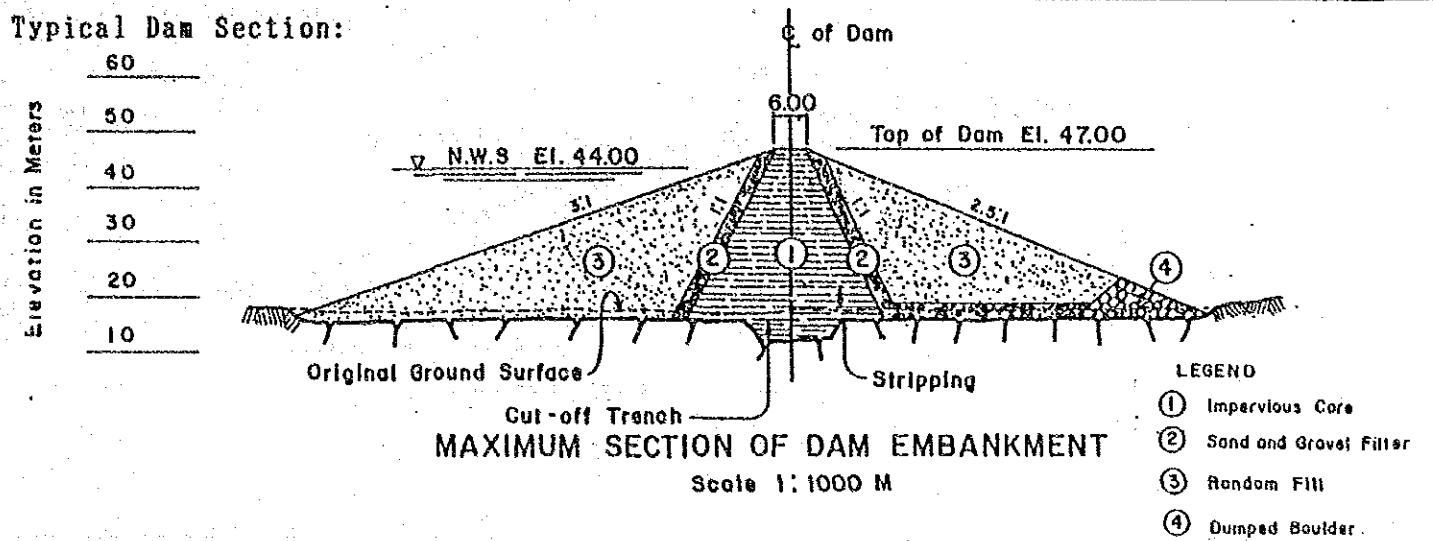


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

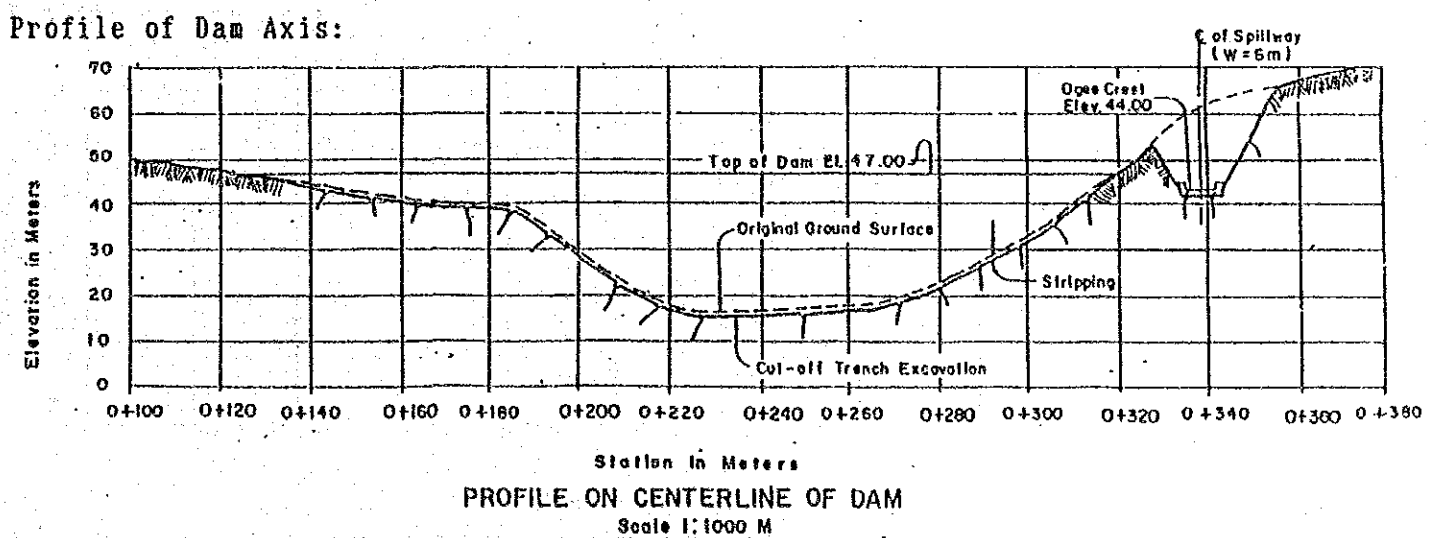
SWIM PROJECT PROFILE		File No. : 33
Regist.No. : Agency No. : NIA-21	Name : MAGSIPING SWIP	
Region : 1	Province : LA UNION	Municipality : LUNA
Present Status : (1) Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 3,153,000 m <sup>3</sup>
	: Embankment Volume	: 126,500 m <sup>3</sup>
	: Design Flood Discharge	: 56 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 100 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 400 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 66 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted		
4. Operation and Maintenance Not studied.		
Fund Requirement:(1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 10.2 %
2. Feasibility Study	: 629	Priority Rating:
3. Detailed Design	: 1,257	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 21,991	Review : -
Irrigation	: 2,420	F/S : 1997
Mini-Hydropower	: 0	D/D : 1997
Water Supply	: 0	Construction: Jul.1998;12 months
Watershed Protection	: 10,495	
5. Grand Total	: 36,782	

Layout:

Typical Dam Section:



Profile of Dam Axis:



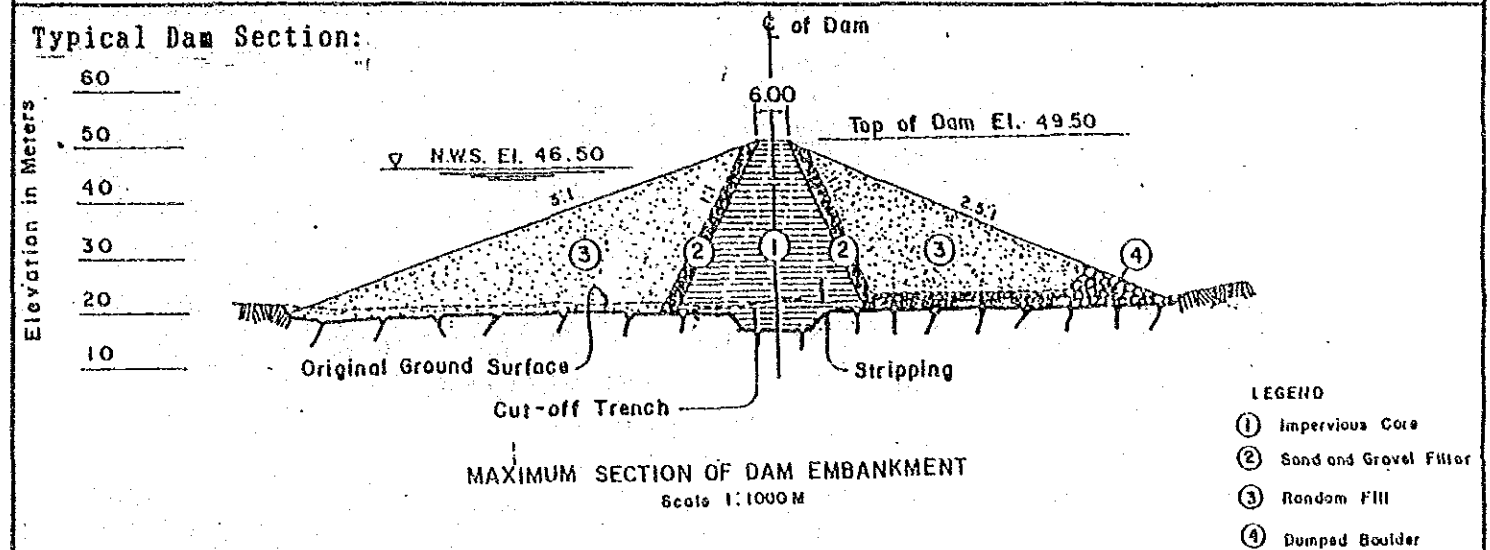
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment, width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

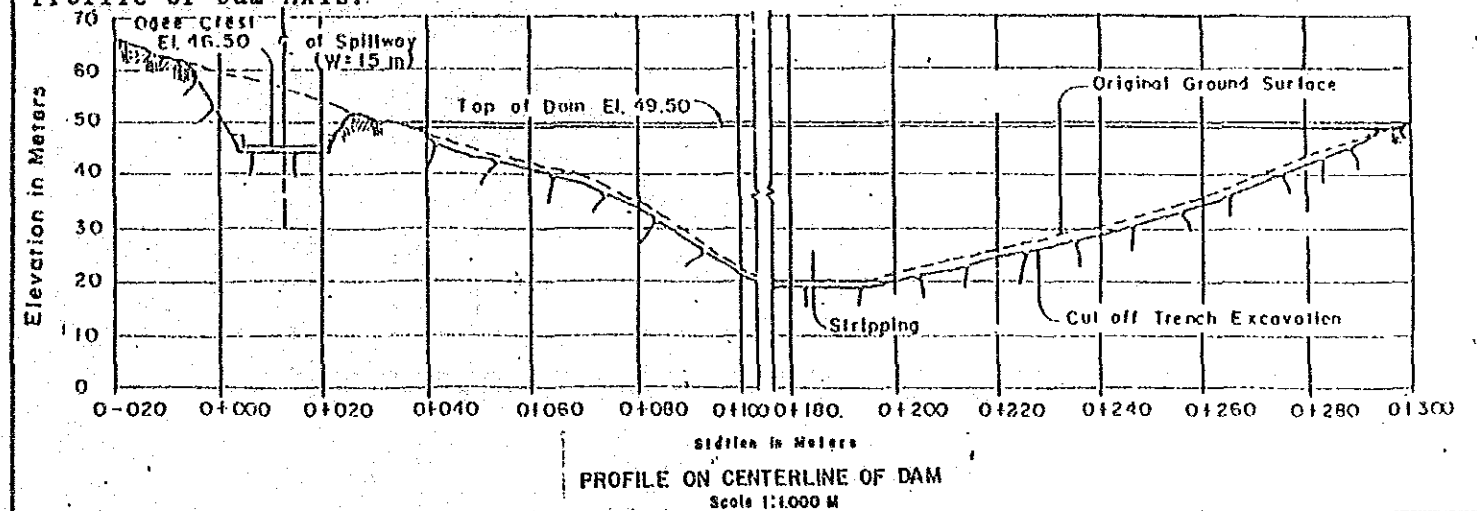
SWIM PROJECT PROFILE		File No. : 34
Regist. No. : Agency No. : NIA-22	Name : SAN FELIPE SWIP	
Region : 1	Province : LA UNION	Municipality : TUBAO
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 1,364,000 m <sup>3</sup>
	: Embankment Volume	: 141,600 m <sup>3</sup>
	: Design Flood Discharge	: 92 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 140 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 600 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 32 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 111	EIRR : 8.4 %
2. Feasibility Study	: 798	Priority Rating:
3. Detailed Design	: 1,596	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 27,028	Review : 1991
Irrigation	: 3,389	F/S : 1998
Mini-Hydropower	: 0	D/D : 1998
Water Supply	: 0	Construction: Jul. 1999; 12 months
Watershed Protection	: 11,442	
5. Grand Total	: 44,364	

Layout:

Typical Dam Section:



Profile of Dam Axis:



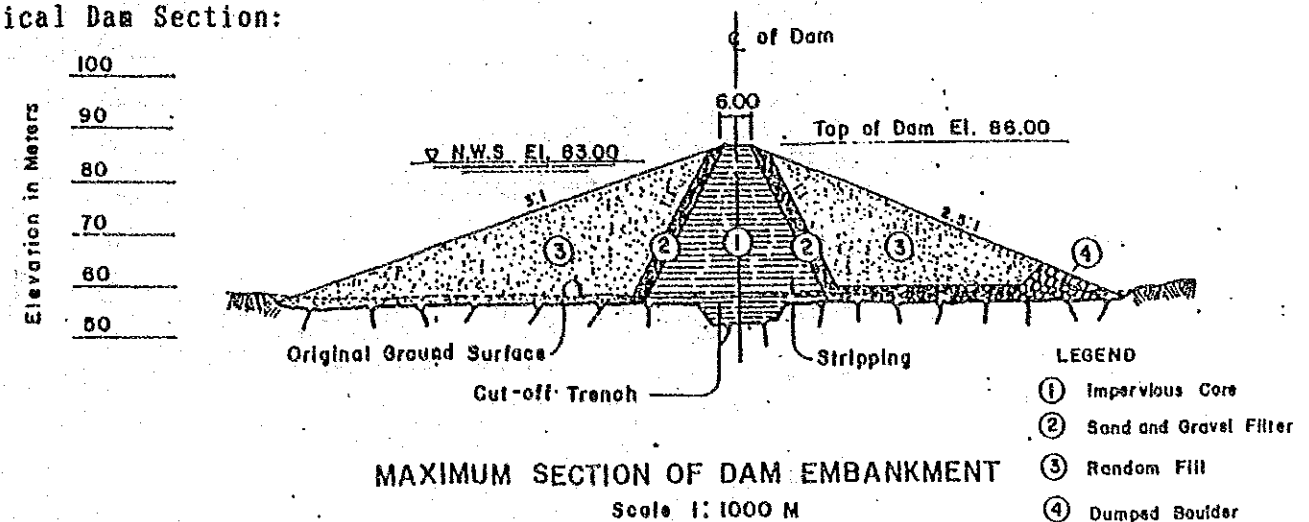
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

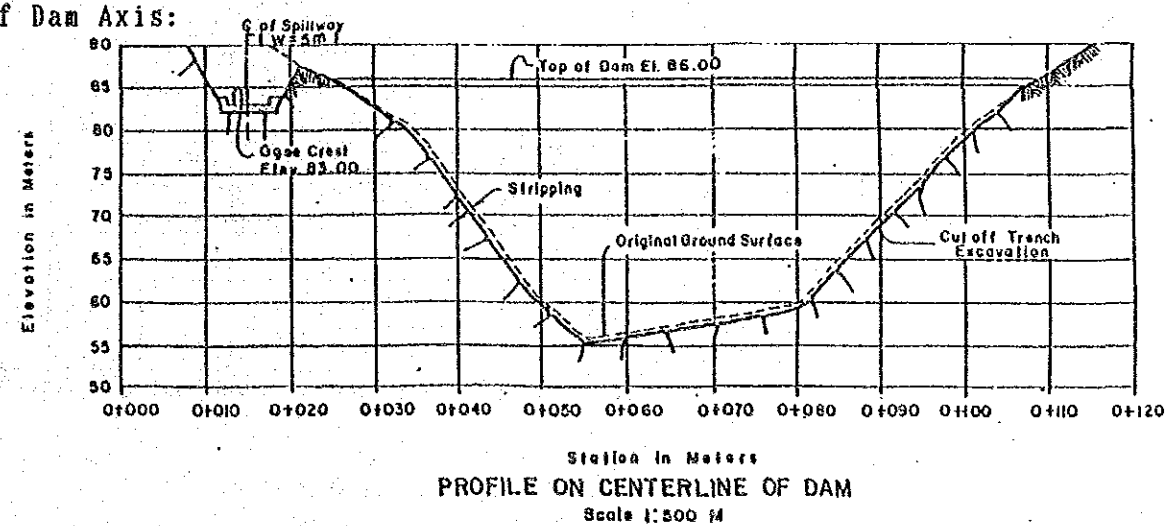
SWIM PROJECT PROFILE		File No. : 35
Regist. No. : Agency No. : NIA-23	Name: MACABATO SWIMP	
Region: 1	Province: LA UNION	Municipality: ARINGAY
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 30 m	
	Effective Storage Capacity : 682,000 m <sup>3</sup>	
	Embankment Volume : 55,000 m <sup>3</sup>	
	Design Flood Discharge : 37 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 60 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 320 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 1 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be reformulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review : 47		EIRR : 6.4 %
2. Feasibility Study : 342		Priority Rating:
3. Detailed Design : 683		Group : B
4. Construction :		Implementation Schedule:
Dam : 11,641		Review : 1991
Irrigation : 1,452		F/S : 1998
Mini-Hydropower : 0		D/D : 1999
Water Supply : 0		Construction: Jan. 2000; 9 months
Watershed Protection : 8,580		
5. Grand Total : 22,746		

Layout:

Typical Dam Section:



Profile of Dam Axis:

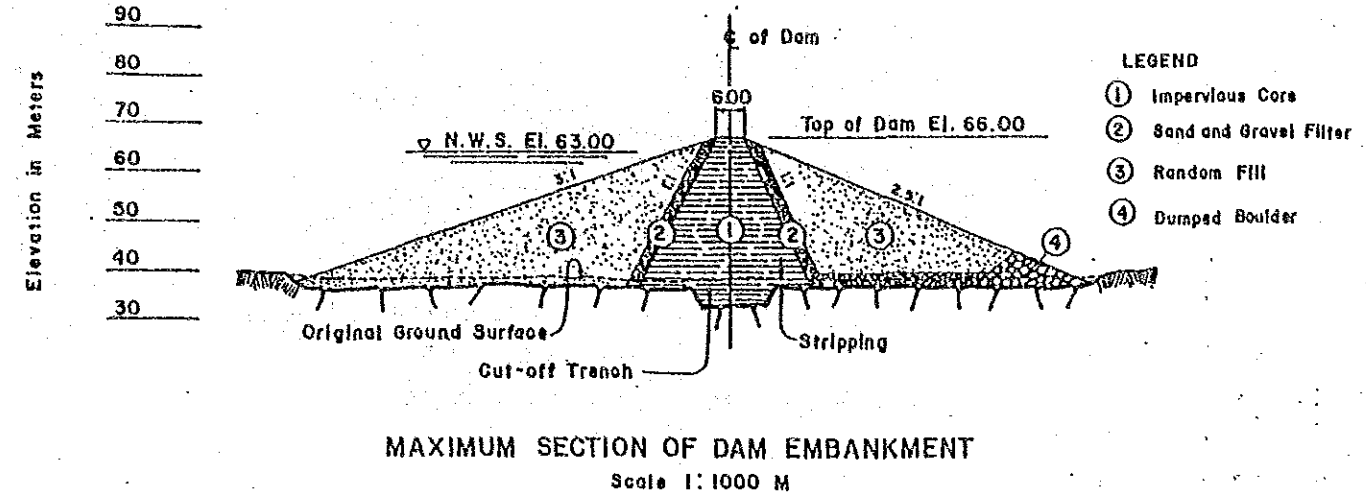


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

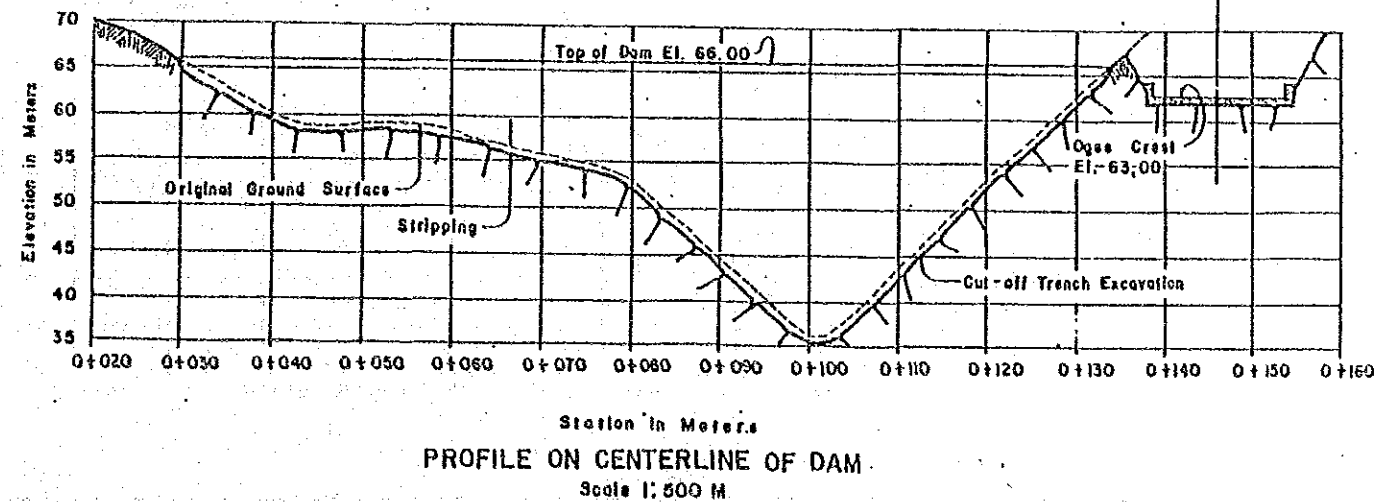
SWIM PROJECT PROFILE		File No. : 36
Regist. No. : Agency No. : NIA-25	Name : MASIDEM SWIP	
Region : 1	Province : PANGASINAN	Municipality : BANI
Present Status : ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 1,957,000 m <sup>3</sup>
	: Embankment Volume	: 82,000 m <sup>3</sup>
	: Design Flood Discharge	: 120 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 440 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 380 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 45 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 17.4 %
2. Feasibility Study	: 796	Priority Rating:
3. Detailed Design	: 1,591	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 19,824	Review : -
Irrigation	: 10,650	F/S : 1992
Mini-Hydropower	: 0	D/D : 1993
Water Supply	: 0	Construction: Jan. 1994; 12 months
Watershed Protection	: 10,170	
5. Grand Total	: 43,031	

Layout:

Typical Dam Section:



Profile of Dam Axis:

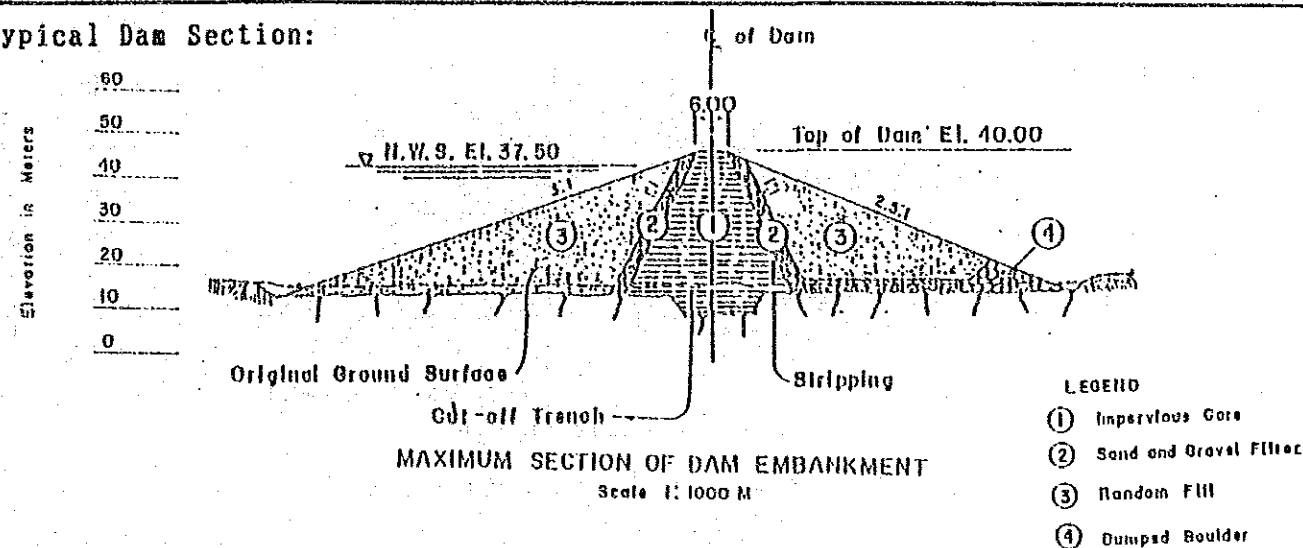


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

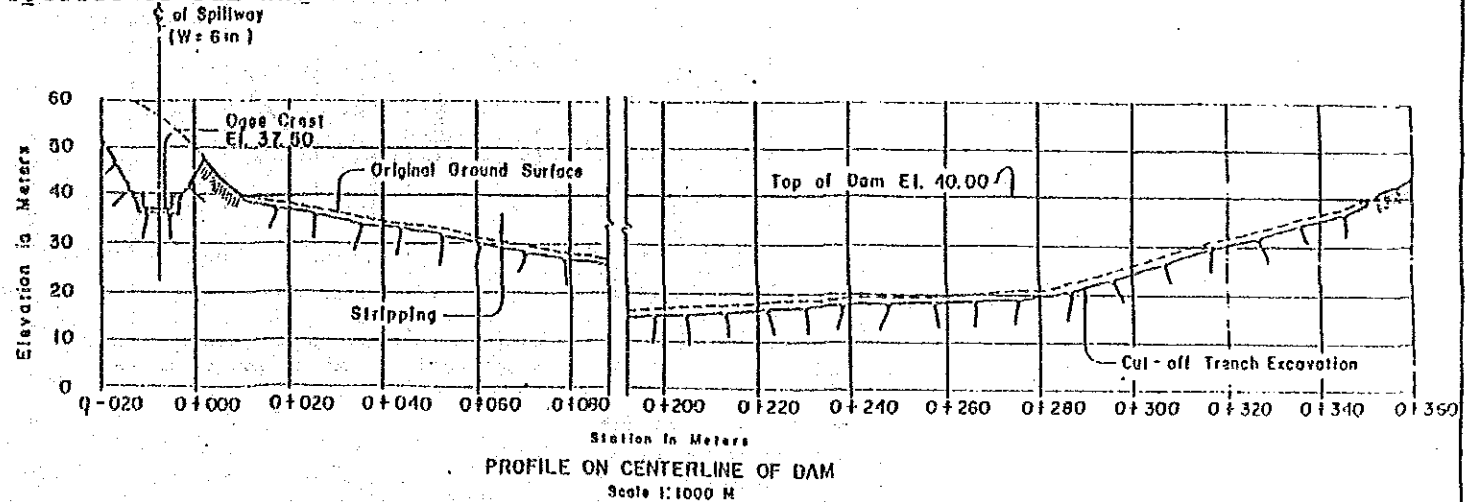
SWIM PROJECT PROFILE		File No. : 37
Regist. No. : Agency No. : NIA-26	Name: OBOY-OBOY SWIP	
Region: 1	Province: PANGASINAN	Municipality: BANI
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 25 m
	: Effective Storage Capacity	: 1,792,000 m <sup>3</sup>
	: Embankment Volume	: 200,900 m <sup>3</sup>
	: Design Flood Discharge	: 49 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 60 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 120 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 37 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 112	EIRR : 1.1 %
2. Feasibility Study	: 803	Priority Rating:
3. Detailed Design	: 1,606	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 29,197	Review : 1993
Irrigation	: 1,452	F/S : 1998
Mini-Hydropower	: 0	D/D : 1998
Water Supply	: 0	Construction: Jul. 1999; 15 months
Watershed Protection	: 3,220	
5. Grand Total	: 36,390	

Layout:

Typical Dam Section:



Profile of Dam Axis:



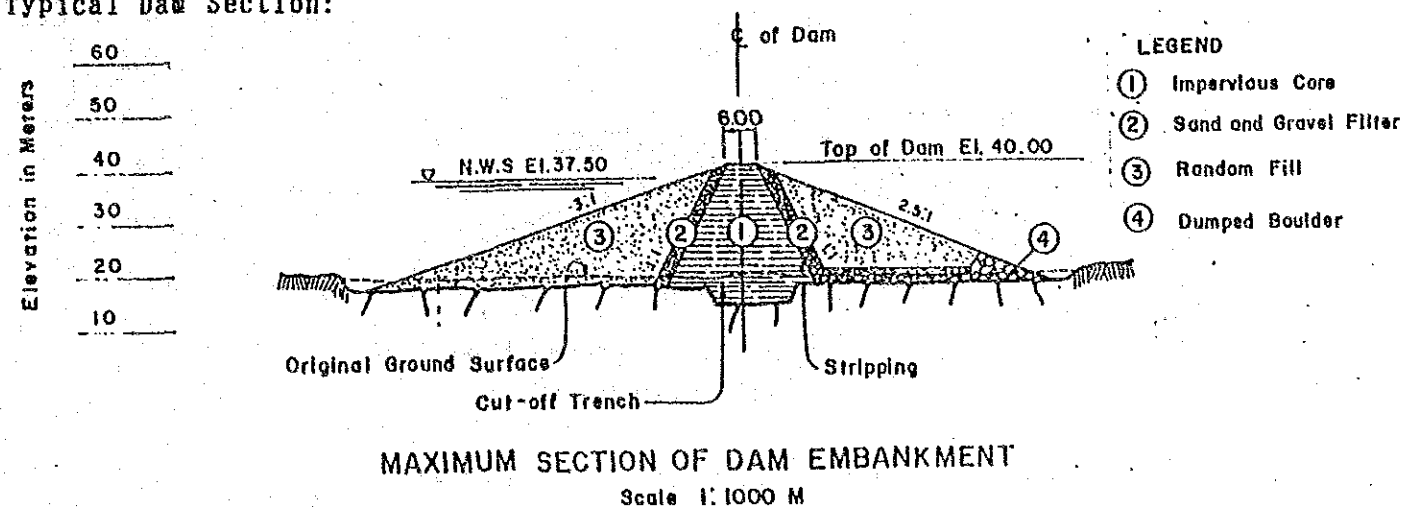
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone; shape of core trench; necessity of impervious blanket, would be decided through F/S, D/D stage.

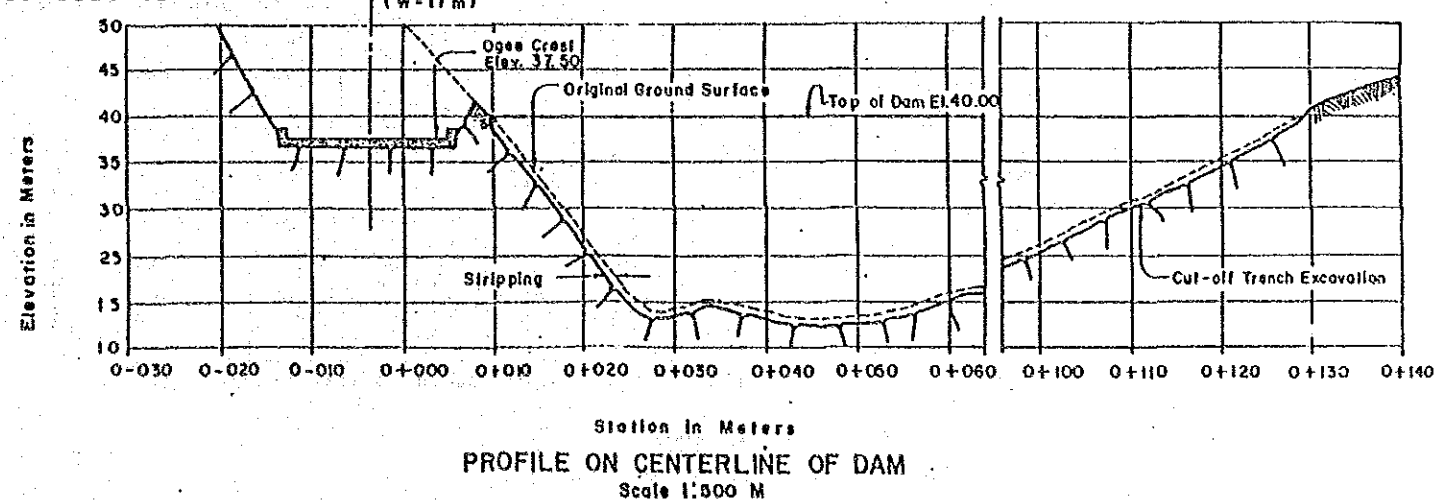
SWIM PROJECT PROFILE		File No. : 38
Regist. No. : Agency No. : NIA-27	Name: VEGA SWIP	
Region: 1	Province: PANGASINAN	Municipality: DASOL
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 22 m
	: Effective Storage Capacity	: 4,269,000 m <sup>3</sup>
	: Embankment Volume	: 51,000 m <sup>3</sup>
	: Design Flood Discharge	: 136 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 100 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 520 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 122 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 16.6 %
2. Feasibility Study	: 488	Priority Rating:
3. Detailed Design	: 975	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 17,312	Review : -
Irrigation	: 2,420	F/S : 1991
Mini-Hydropower	: 0	D/D : 1992
Water Supply	: 0	Construction: Jan. 1993; 9 months
Watershed Protection	: 9,910	
5. Grand Total	: 31,106	

Layout:

Typical Dam Section:



Profile of Dam Axis:



Note:

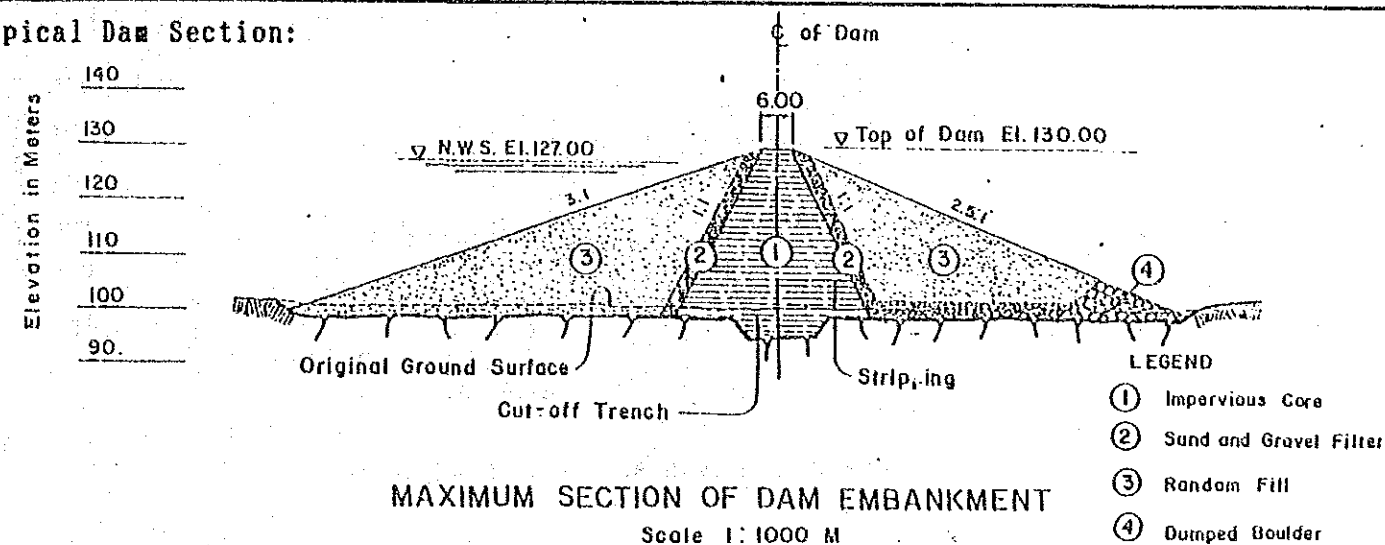
Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.



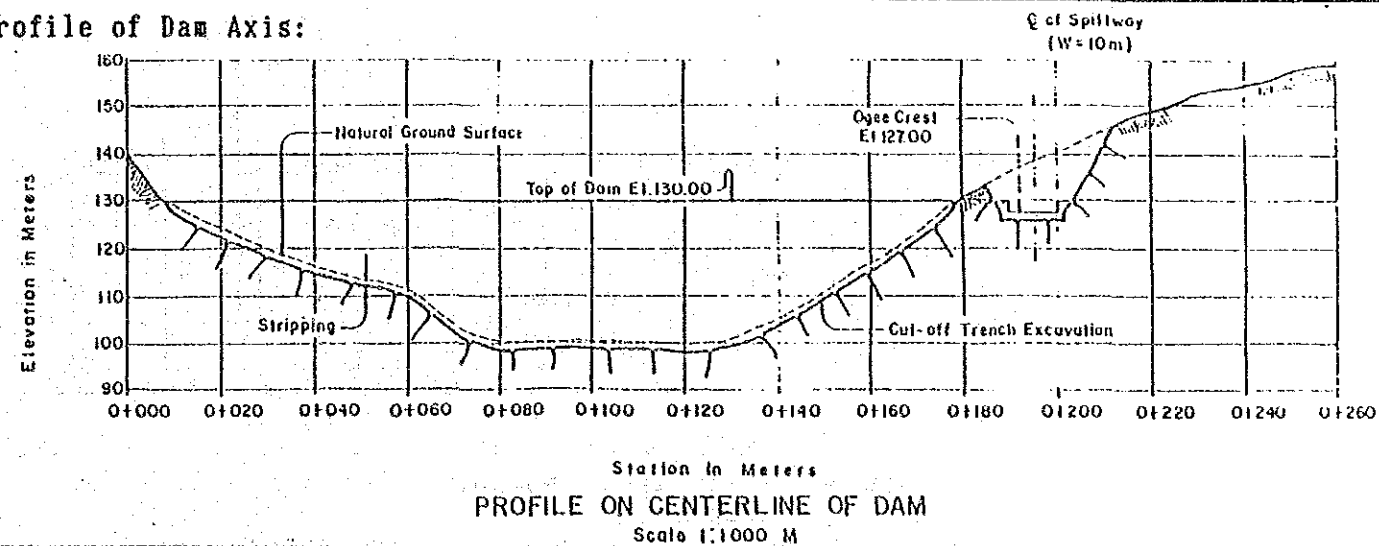
SWIM PROJECT PROFILE		File No. : 39
Regist. No. : Agency No. : NIA-29	Name: ALIBENG SWIP	
Region: 1	Province: PANGASINAN	Municipality: SISON
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 30 m	
	Effective Storage Capacity : 1,730,000 m <sup>3</sup>	
	Embankment Volume : 127,000 m <sup>3</sup>	
	Design Flood Discharge : 115 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 250 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 0 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 42 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 12.9 %
2. Feasibility Study	: 729	Priority Rating:
3. Detailed Design	: 1,457	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 21,857	Review : -
Irrigation	: 6,051	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 12 months
Watershed Protection	: 0	
5. Grand Total	: 30,094	

Layout:

Typical Dam Section:



Profile of Dam Axis:



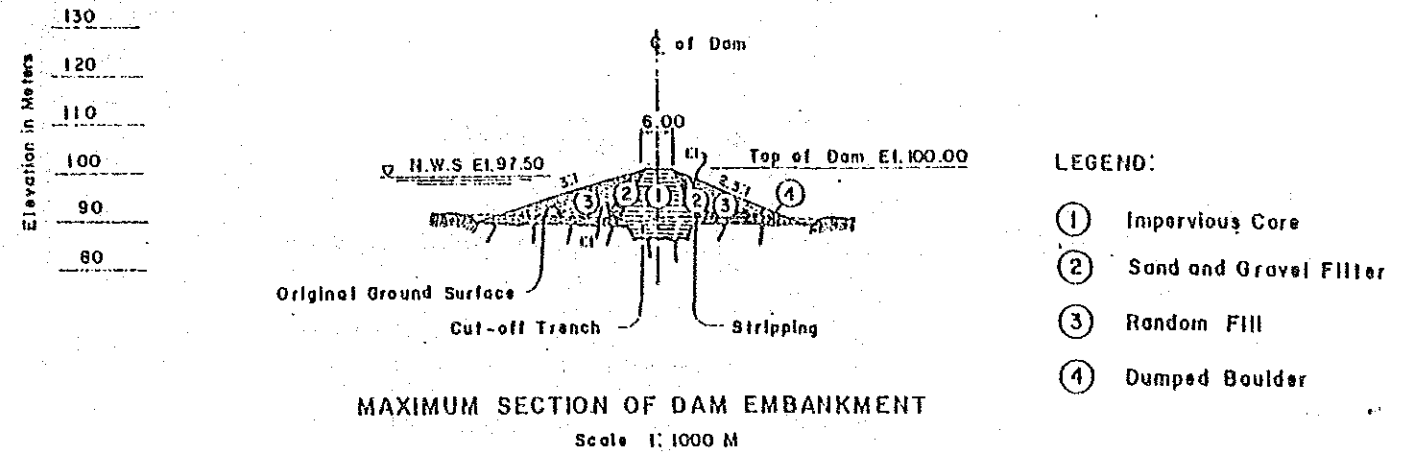
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

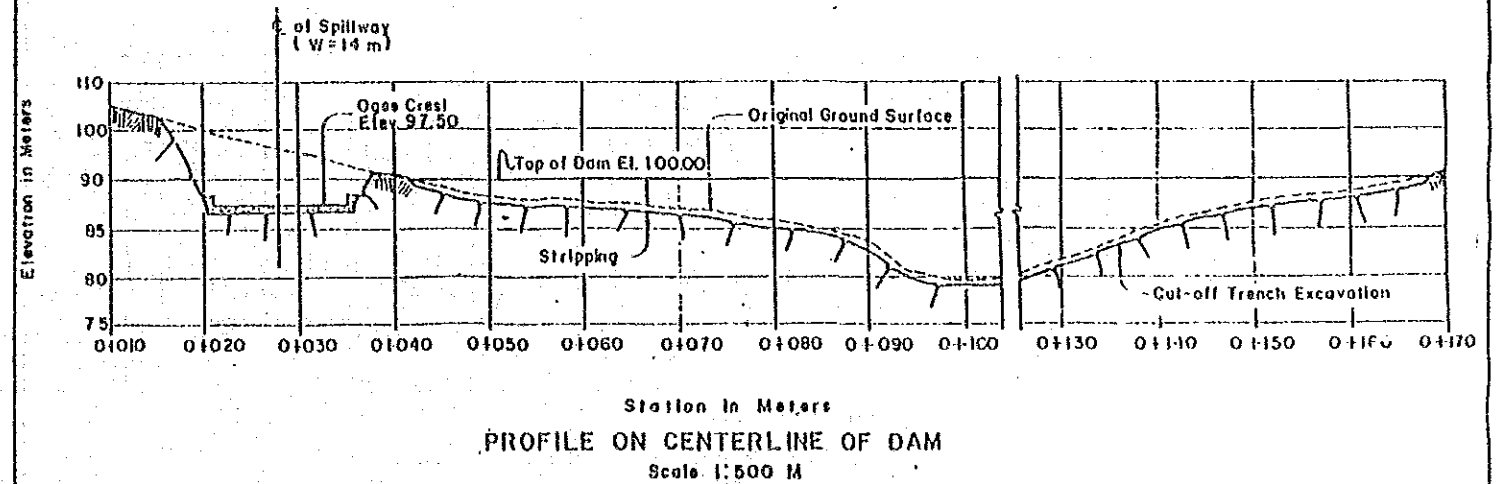
SWIM PROJECT PROFILE		File No. : 40
Regist. No. : Agency No. : NIA-31	Name : DIGAP SWIP	
Region : 1	Province : PANGASINAN	Municipality : UMINGAN
Present Status : ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 10 m	
	Effective Storage Capacity : 71,000 m <sup>3</sup>	
	Embankment Volume : 14,550 m <sup>3</sup>	
	Design Flood Discharge : 6 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 40 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 49 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 6 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 15	EIRR : 8.2 %
2. Feasibility Study	: 111	Priority Rating:
3. Detailed Design	: 221	Group : B
4. Construction		Implementation Schedule:
Dam	: 3,264	Review : 1991
Irrigation	: 968	F/S : 1988
Mini-Hydropower	: 0	D/D : 1998
Water Supply	: 0	Construction: Jul. 1989; 6 months
Watershed Protection	: 1,263	
5. Grand Total	: 5,843	

Layout:

Typical Dam Section:



Profile of Dam Axis:



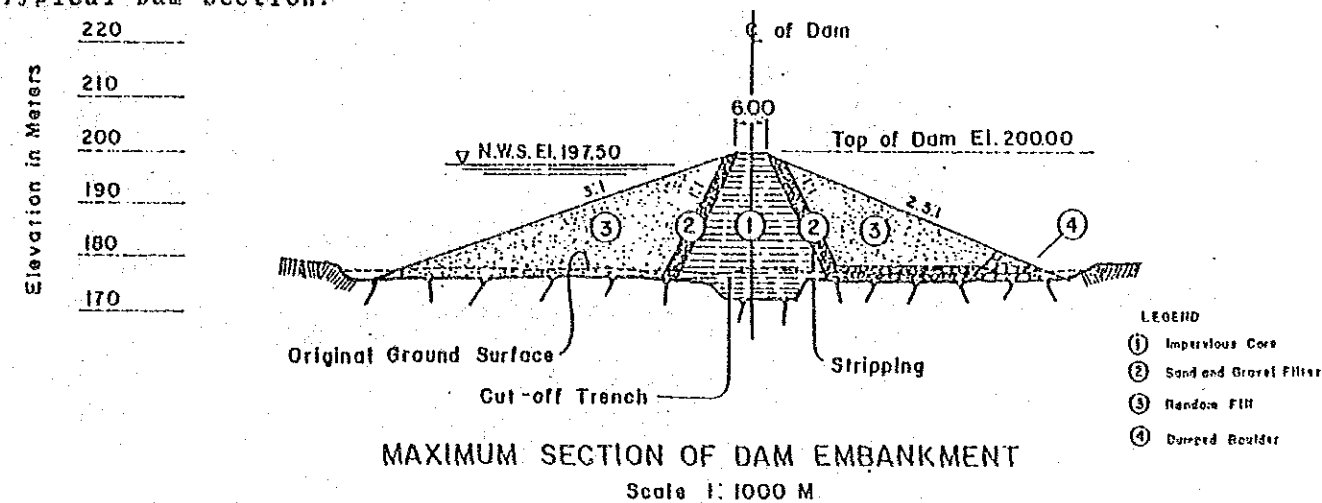
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

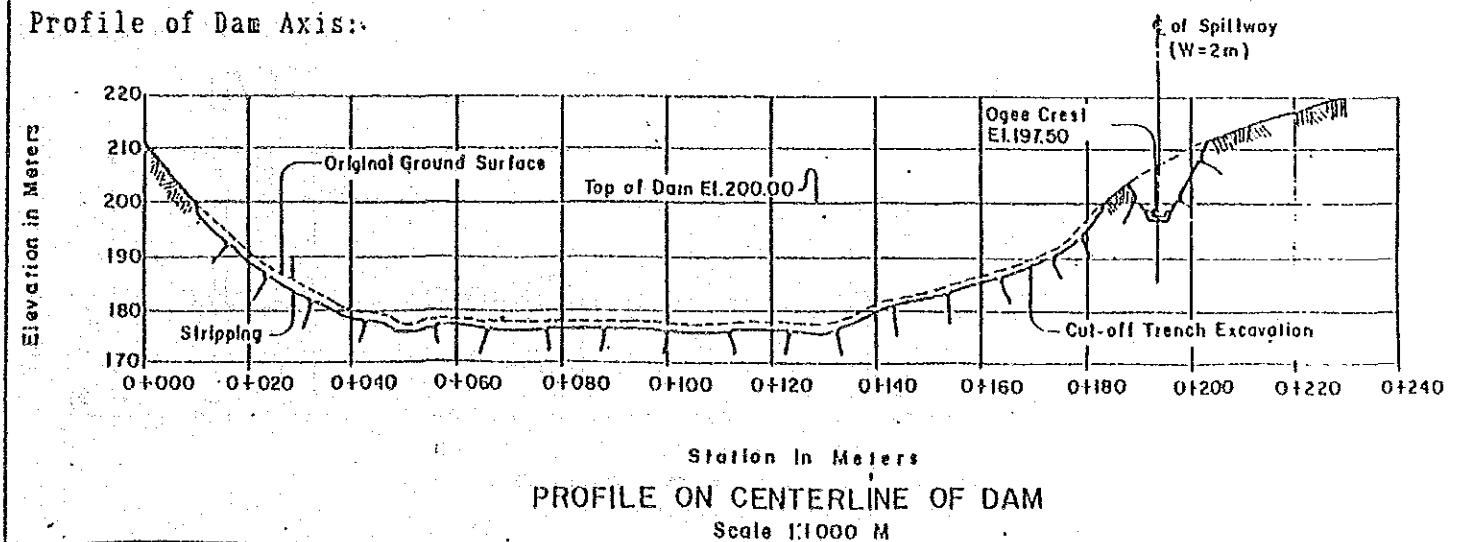
SWIM PROJECT PROFILE		File No. : 41
Regist. No. : Agency No. : NIA-32	Name: DIKET SWIP	
Region: 1	Province: PANGASINAN	Municipality: UMINGAN
Present Status: ① Pro-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 23 m	
	Effective Storage Capacity : 368,000 m <sup>3</sup>	
	Embankment Volume : 75,500 m <sup>3</sup>	
	Design Flood Discharge : 10 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 75 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 52 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 13 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10%. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 53	EIRR : 1.6 %
2. Feasibility Study	: 382	Priority Rating:
3. Detailed Design	: 764	Group : B
4. Construction		Implementation Schedule:
Dam	: 12,710	Review : 1993
Irrigation	: 1,815	F/S : 1998
Mini-Hydropower	: 0	D/D : 1999
Water Supply	: 0	Construction: Jan.2000;12 months
Watershed Protection	: 1,340	
5. Grand Total	: 17,064	

Layout:

Typical Dam Section:



Profile of Dam Axis:



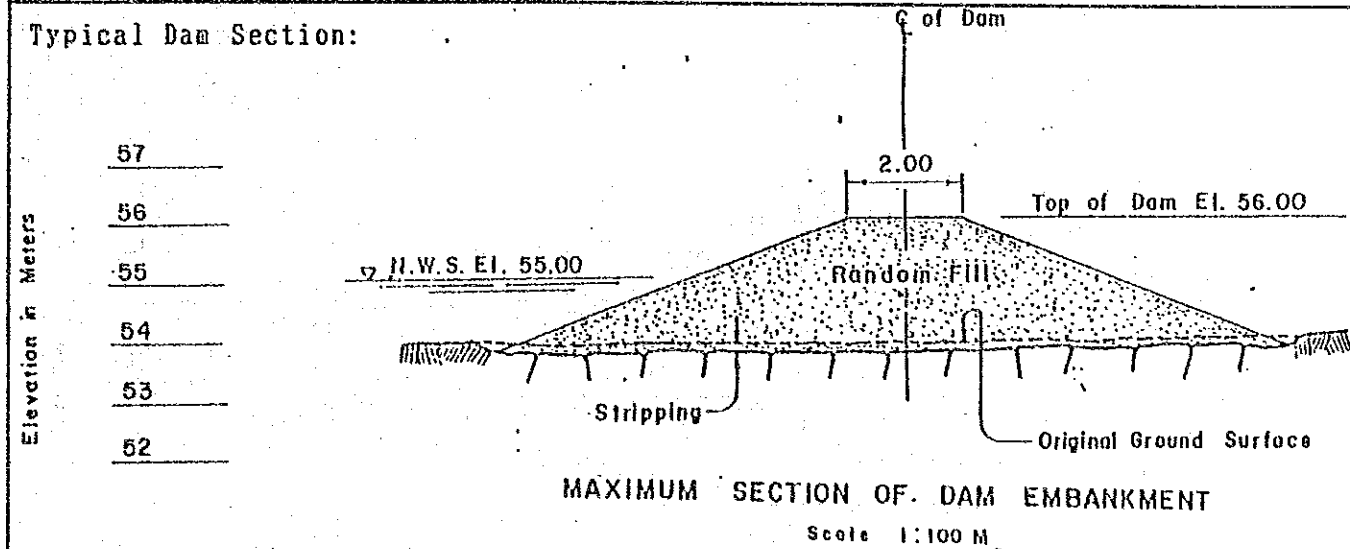
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

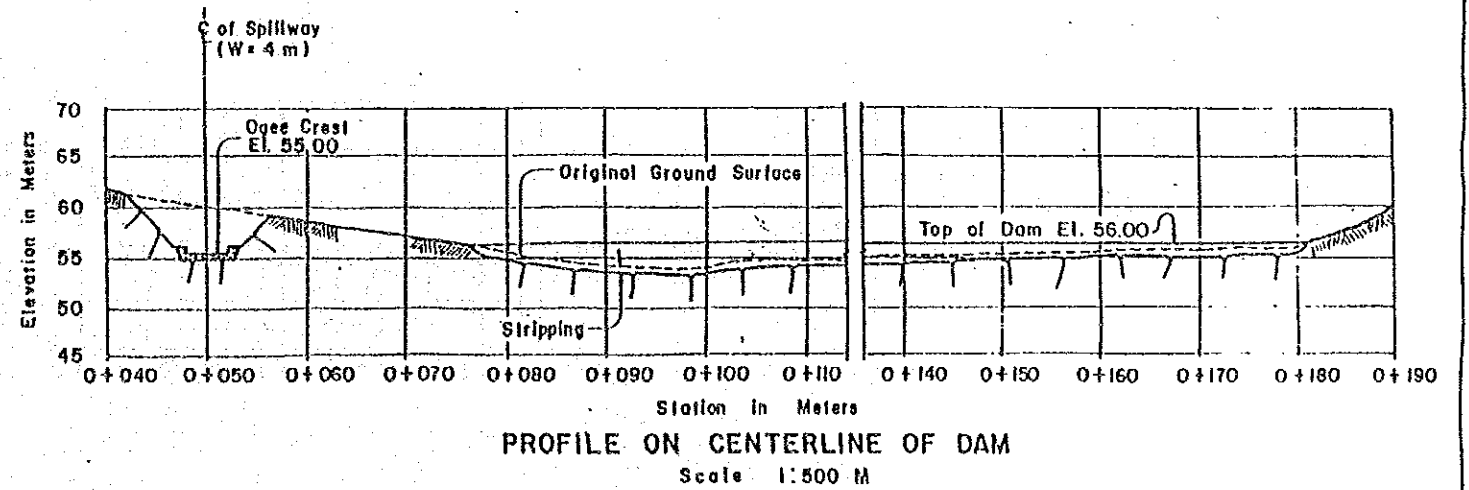
SWIM PROJECT PROFILE		File No. : 42
Regist. No. : Agency No. : NIA-47	Name: MAYAMOT CIP	
Region: 3	Province: NUEVA ECIJA	Municipality: GUIMBA
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 2 m
	: Effective Storage Capacity	: 18,000 m <sup>3</sup>
	: Embankment Volume	: 1,515 m <sup>3</sup>
	: Design Flood Discharge	: 30 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 5 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 8 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 57.9 %
2. Feasibility Study	: 8	Priority Rating:
3. Detailed Design	: 16	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 267	Review : -
Irrigation	: 121	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 6 months
Watershed Protection	: 0	
5. Grand Total	: 411	

Layout:

Typical Dam Section:



Profile of Dam Axis:



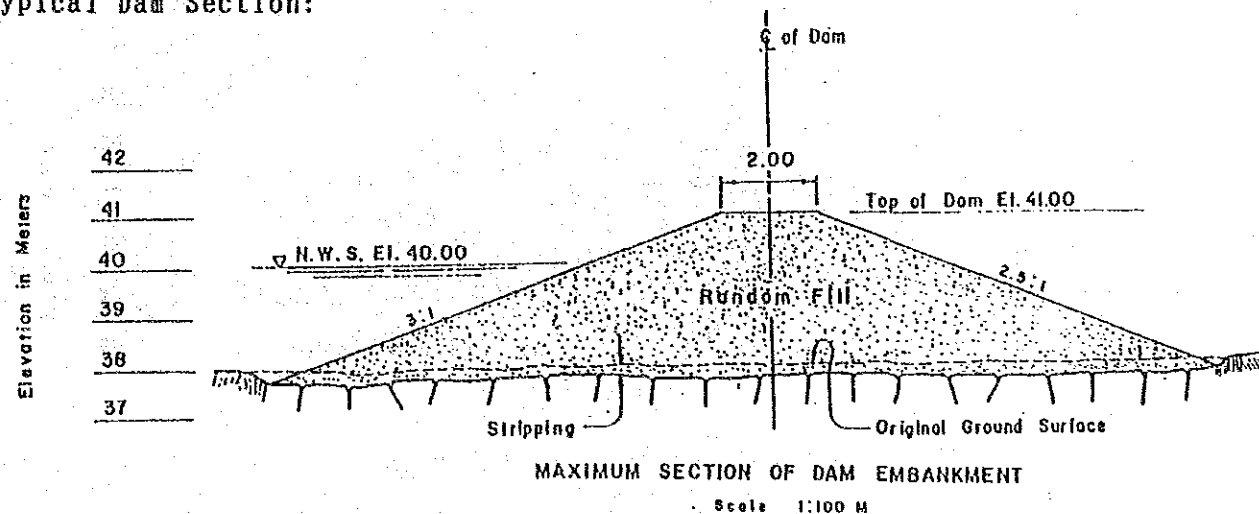
Note:

Dam configuration is reasonably proposed taking low dam into consideration. If foundation show the slightly weathered or hard rock by sub-surface exploration, concrete weir should be studied as an alternative. Combined dam with earth and concrete must be avoided. Additional 0.5 m freeboard is necessary.

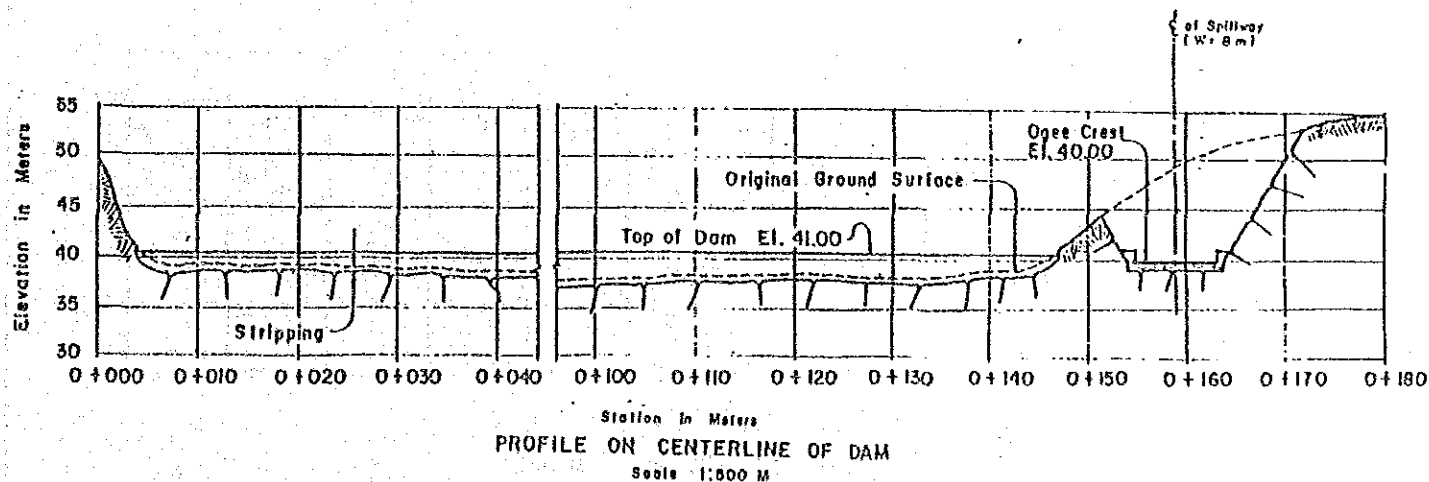
SWIM PROJECT PROFILE		File No. : 43
Regist. No. : Agency No. : NIA-48	Name : SAN FELIPE CIS	
Region : 3	Province : NUEVA ECIIJA	Municipality : GUIMBA
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: HOMOGENEOUS EARTHFILL
	: Dam Height	: 3 m
	: Effective Storage Capacity	: 20,000 m <sup>3</sup>
	: Embankment Volume	: 2,430 m <sup>3</sup>
	: Design Flood Discharge	: 63 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 5 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 5 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 30.8 %
2. Feasibility Study	: 11	Priority Rating:
3. Detailed Design	: 23	Group : B
4. Construction	: 357	Implementation Schedule:
Dam	: 121	Review : -
Irrigation	: 0	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 6 months
Watershed Protection	: 0	
5. Grand Total	: 512	

Layout:

Typical Dam Section:

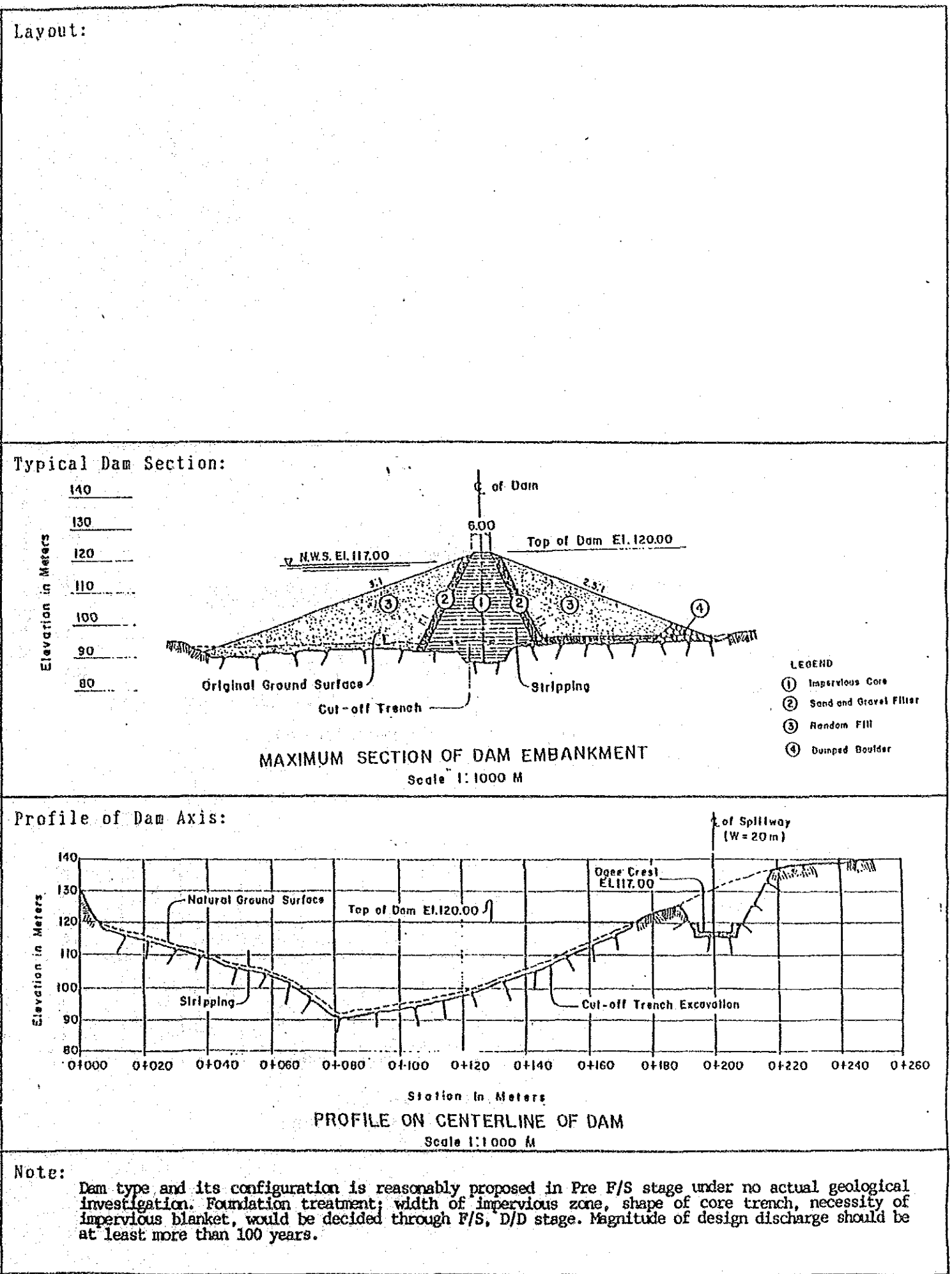


Profile of Dam Axis:



Note: Dam configuration is reasonably proposed taking low dam into consideration. If foundation show the slightly weathered or hard rock by sub-surface exploration, concrete weir should be studied as an alternative. Combined dam with earth and concrete must be avoided. Additional 0.5 m freeboard is necessary.

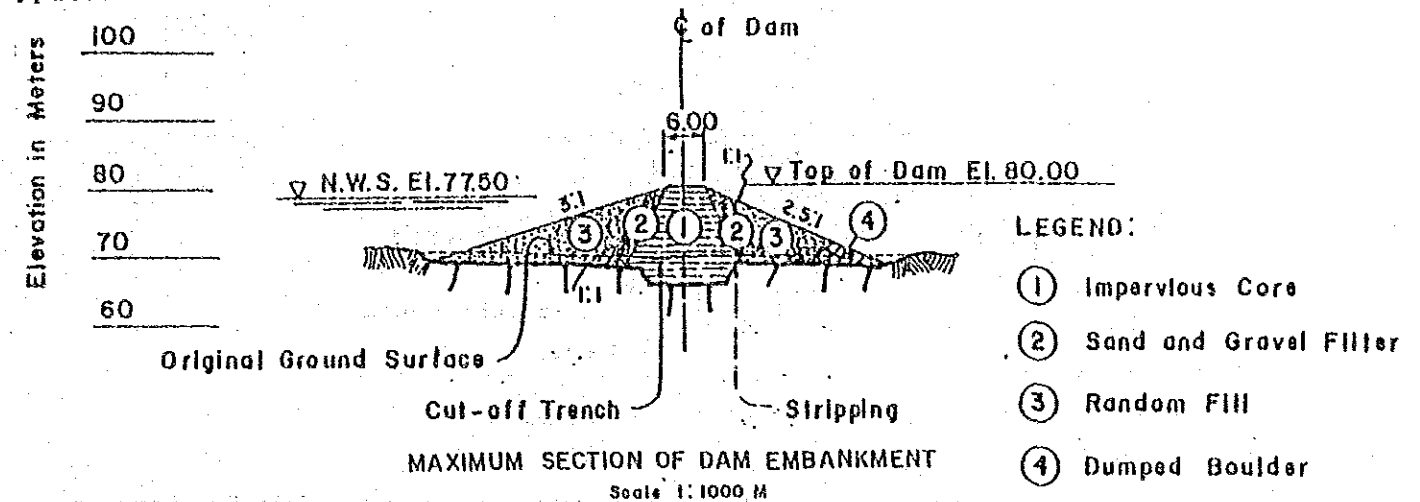
SWIM PROJECT PROFILE		File No. : 44
Regist. No. : Agency No. : NIA-49	Name: BAYOG CIS	
Region: 3	Province: NUEVA ECIJA	Municipality: LAUR
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 28 m	
	Effective Storage Capacity : 7,706,000 m <sup>3</sup>	
	Embankment Volume : 81,000 m <sup>3</sup>	
	Design Flood Discharge : 175 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 230 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 467 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 238 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Flood analysis is not applicable. Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 29.5 %
2. Feasibility Study	: 287	Priority Rating:
3. Detailed Design	: 575	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 9,103	Review : -
Irrigation	: 1,815	F/S : 1991
Mini-Hydropower	: 0	D/D : 1991
Water Supply	: 0	Construction: Jul. 1992; 9 months
Watershed Protection	: 11,592	
5. Grand Total	: 23,372	



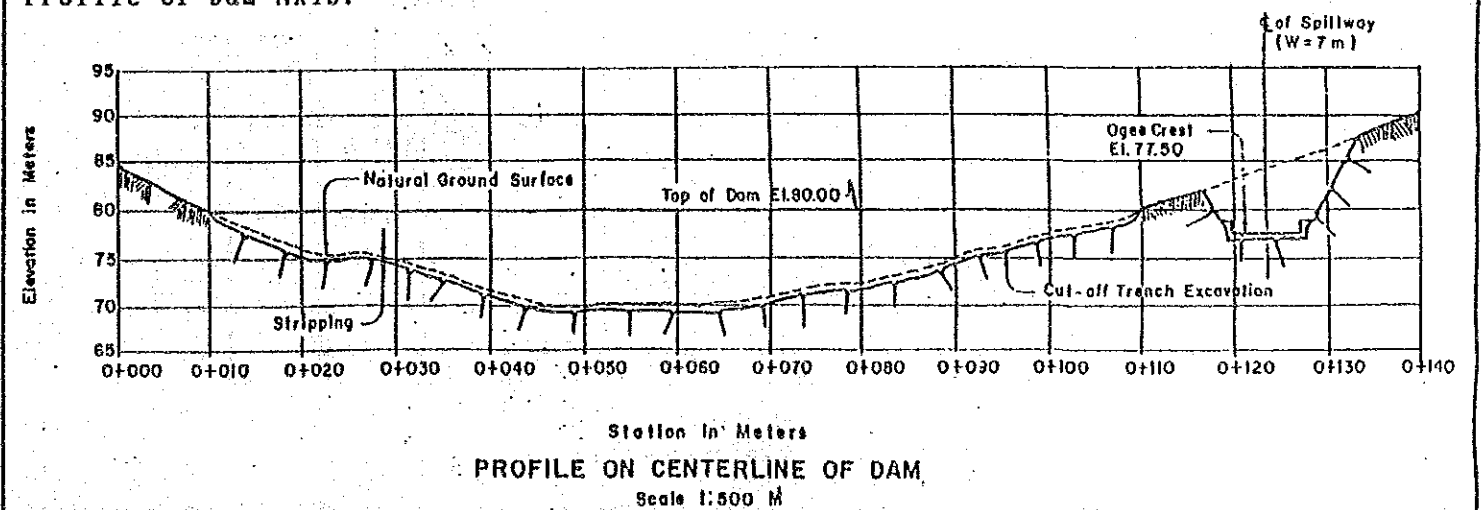
SWIM PROJECT PROFILE		File No. : 45
Regist. No. : Agency No. : NIA-53	Name: MANTEDTED CIP	
Region: 3	Province: NUEVA ECIJA	Municipality: SAN JOSE CITY
Present Status: (1) Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 10 m	
	Effective Storage Capacity : 1,184,000 m <sup>3</sup>	
	Embankment Volume : 21,000 m <sup>3</sup>	
	Design Flood Discharge : 64 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 75 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 60 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 88 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review : 0		EIRR : 33.0 %
2. Feasibility Study : 150		Priority Rating:
3. Detailed Design : 300		Group : A
4. Construction :		Implementation Schedule:
Dam : 4,827		Review : -
Irrigation : 1,815		F/S : 1994
Mini-Hydropower : 0		D/D : 1994
Water Supply : 0		Construction: Jul. 1995; 6 months
Watershed Protection : 1,615		
5. Grand Total : 8,707		

Layout:

Typical Dam Section:



Profile of Dam Axis:



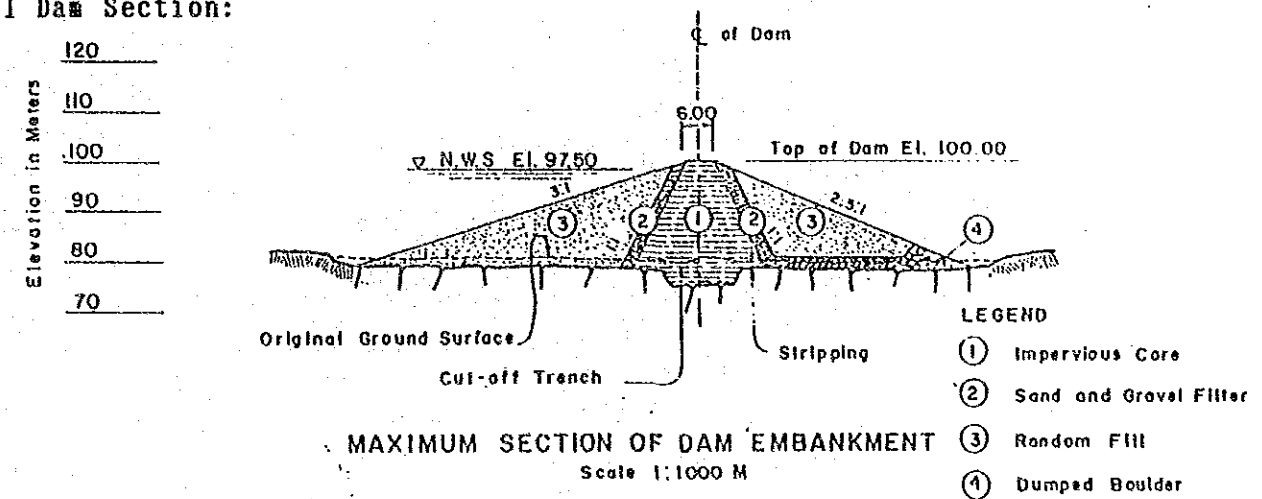
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

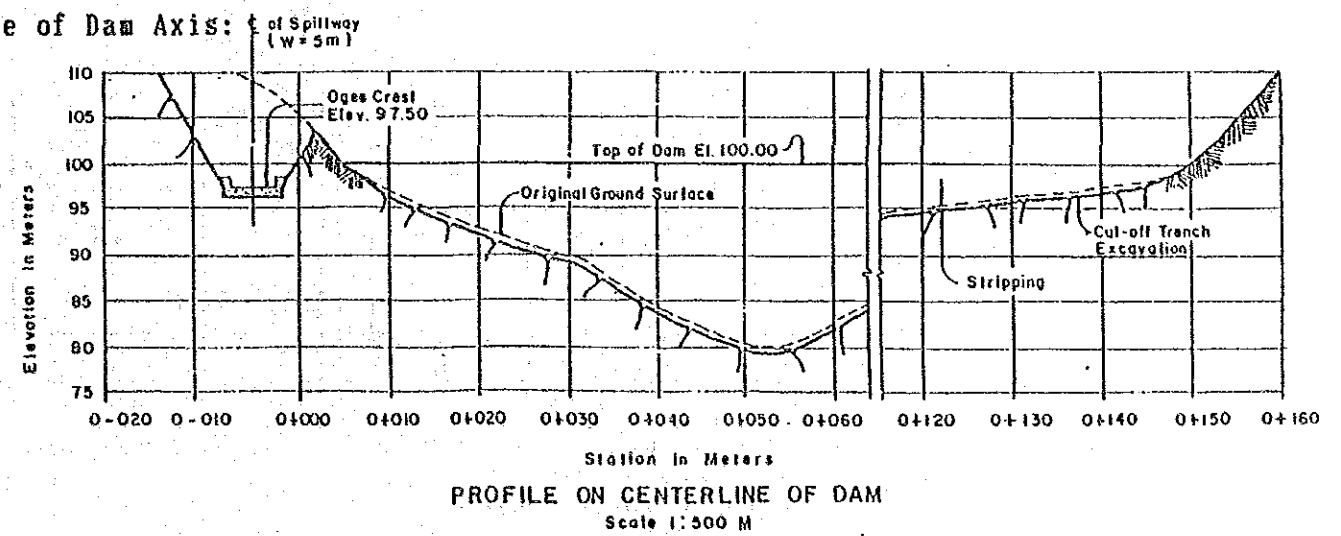
SWIM PROJECT PROFILE		File No. : 46
Regist. No. : Agency No. : NIA-55	Name: DALAYAP SWIP	
Region: 3	Province: PAMPANGA	Municipality: ARAYAT
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 20 m
	: Effective Storage Capacity	: 95,000 m <sup>3</sup>
	: Embankment Volume	: 48,900 m <sup>3</sup>
	: Design Flood Discharge	: 33 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 55 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 5 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement:(1,000 Pesos)		Project Evaluation:
1. Review	: 31	EIRR : -0.2 %
2. Feasibility Study	: 223	Priority Rating:
3. Detailed Design	: 446	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 7,115	Review : 1993
Irrigation	: 1,331	F/S : 1998
Mini-Hydropower	: 0	D/D : 1998
Water Supply	: 0	Construction: Jul.1998;9 months
Watershed Protection	: 0	
5. Grand Total	: 9,146	

Layout:

Typical Dam Section:



Profile of Dam Axis:



Note:

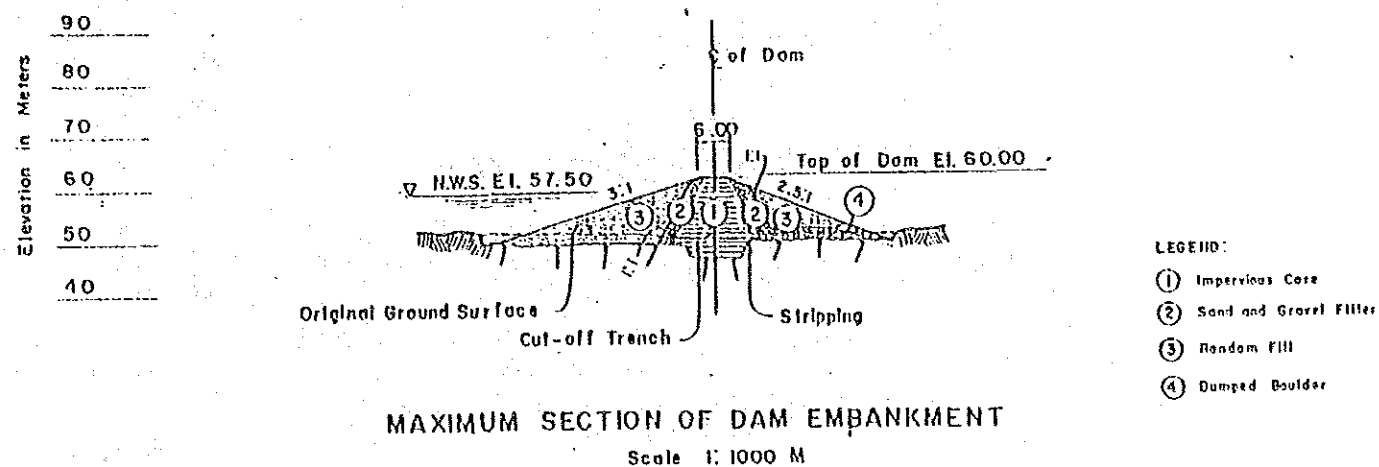
Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.



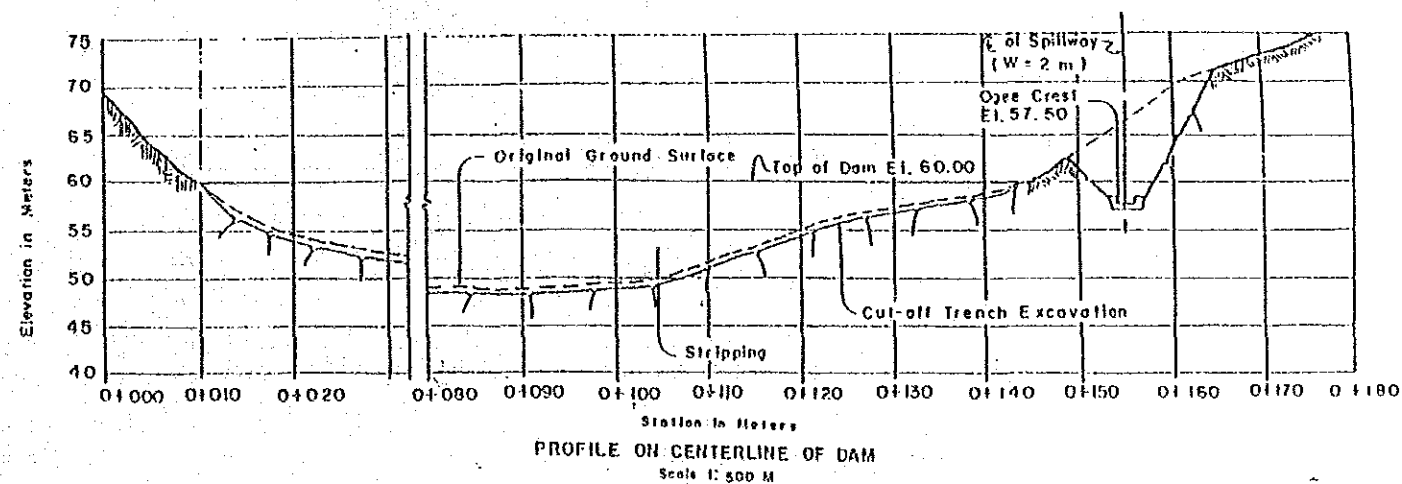
SWIM PROJECT PROFILE		File No. : 47
Regist. No. : Agency No. : NIA-56	Name : BLISS II SWIP	
Region : 3	Province : PAMPANGA	Municipality : MAGALANG
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 11 m
	: Effective Storage Capacity	: 40,000 m <sup>3</sup>
	: Embankment Volume	: 19,800 m <sup>3</sup>
	: Design Flood Discharge	: 16 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 20 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 3 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 16	EIRR : 3.7 %
2. Feasibility Study	: 112	Priority Rating:
3. Detailed Design	: 224	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 3,764	Review : 1993
Irrigation	: 484	F/S : 1999
Mini-Hydropower	: 0	D/D : 1999
Water Supply	: 0	Construction: Jul.2000;6 months
Watershed Protection	: 0	
5. Grand Total	: 4,600	

Layout:

Typical Dam Section:



Profile of Dam Axis:

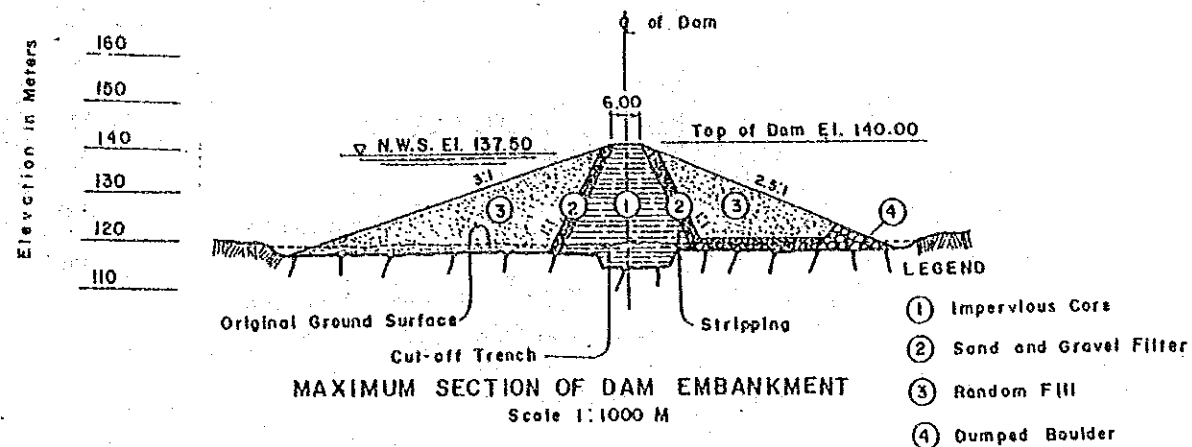


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

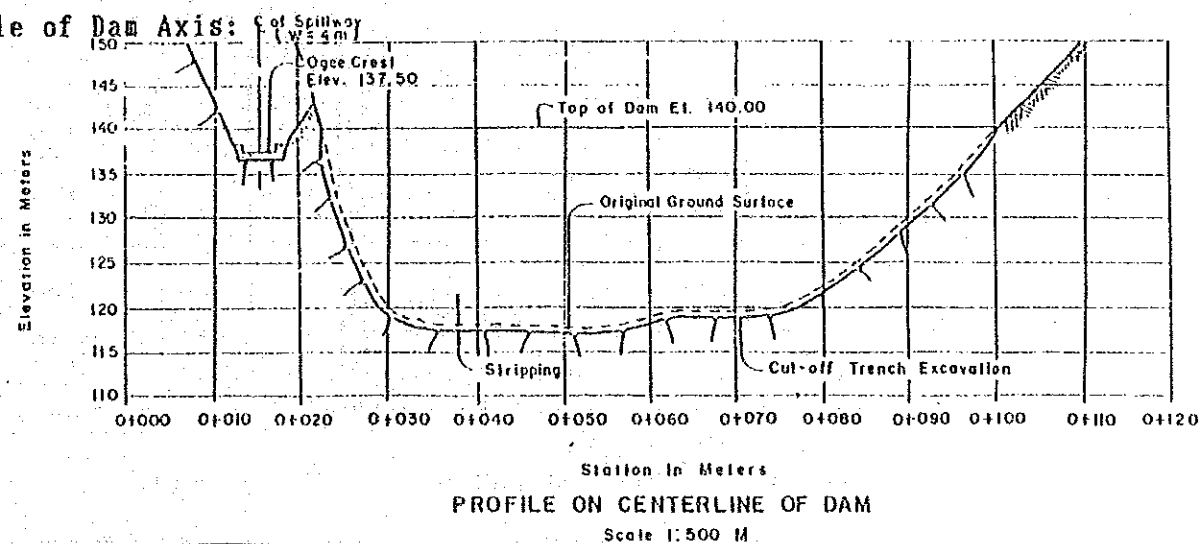
SWIM PROJECT PROFILE		File No. : 48
Regist. No. : Agency No. : NIA-57	Name: BIGBIGA CIS	
Region: 3	Province: TARLAC	Municipality: MAYANTOC
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 22 m
	: Effective Storage Capacity	: 439,000 m <sup>3</sup>
	: Embankment Volume	: 45,500 m <sup>3</sup>
	: Design Flood Discharge	: 35 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 200 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 161 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 123 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 17.8 %
2. Feasibility Study	: 387	Priority Rating:
3. Detailed Design	: 774	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 11,129	Review : -
Irrigation	: 4,841	F/S : 1993
Mini-Hydropower	: 0	D/D : 1994
Water Supply	: 0	Construction: Jan.1995;6 months
Watershed Protection	: 4,370	
5. Grand Total	: 21,502	

Layout:

Typical Dam Section:



Profile of Dam Axis:



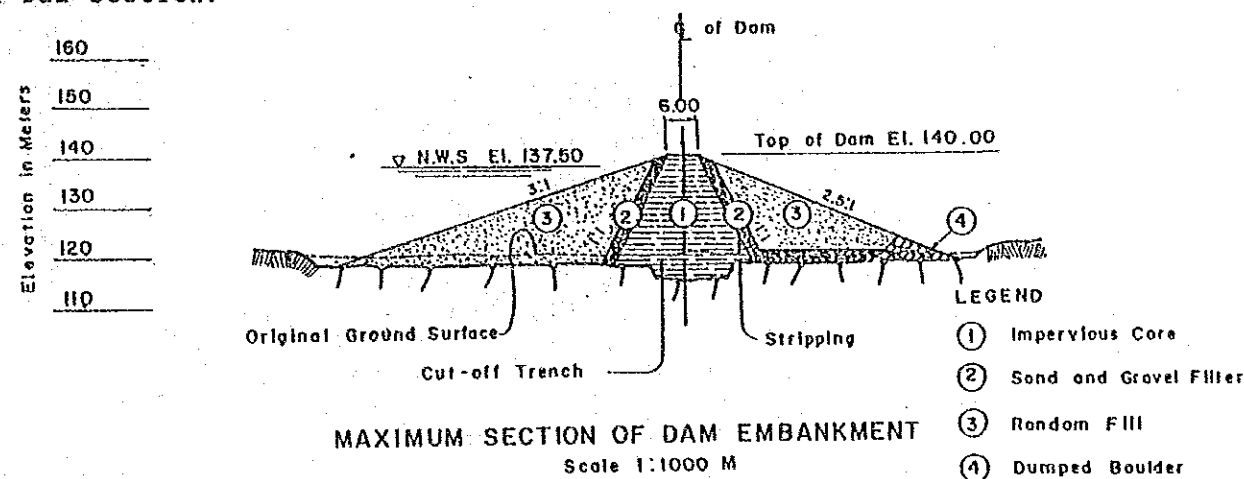
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

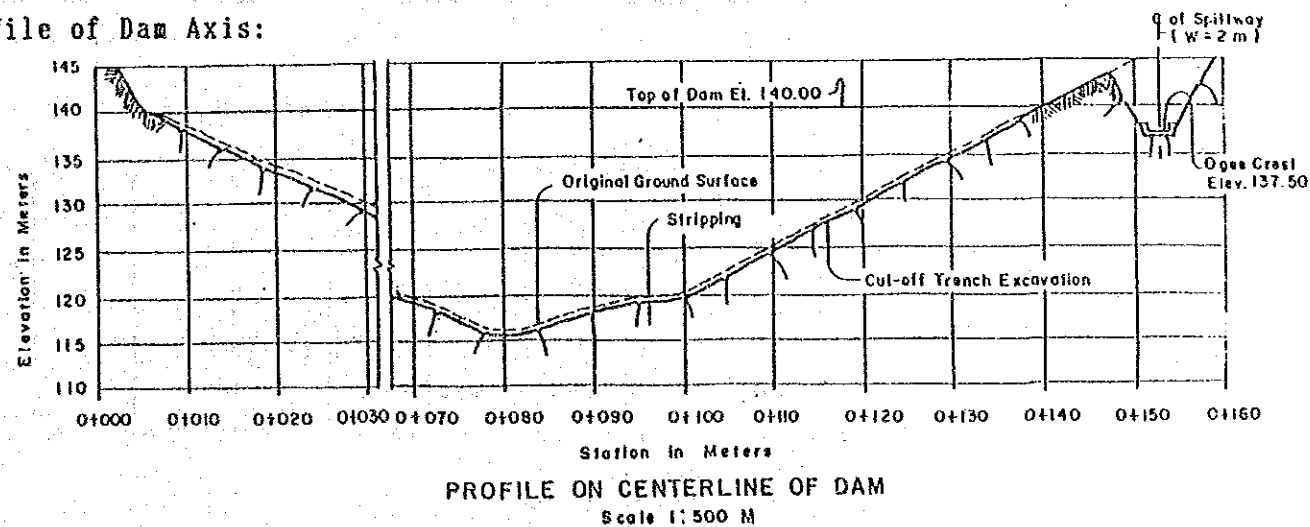
SWIM PROJECT PROFILE		File No. : 49
Regist. No. : Agency No. : NIA-58	Name : TANGCARANG CIP	
Region : 3	Province : TARLAC	Municipality : MAYANTOC
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 21 m
	: Effective Storage Capacity	: 278,000 m <sup>3</sup>
	: Embankment Volume	: 21,600 m <sup>3</sup>
	: Design Flood Discharge	: 14 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 100 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 80 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 8 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 16.8 %
2. Feasibility Study	: 167	Priority Rating:
3. Detailed Design	: 335	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 3,976	Review : -
Irrigation	: 2,420	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 6 months
Watershed Protection	: 2,150	
5. Grand Total	: 9,048	

Layout:

Typical Dam Section:



Profile of Dam Axis:



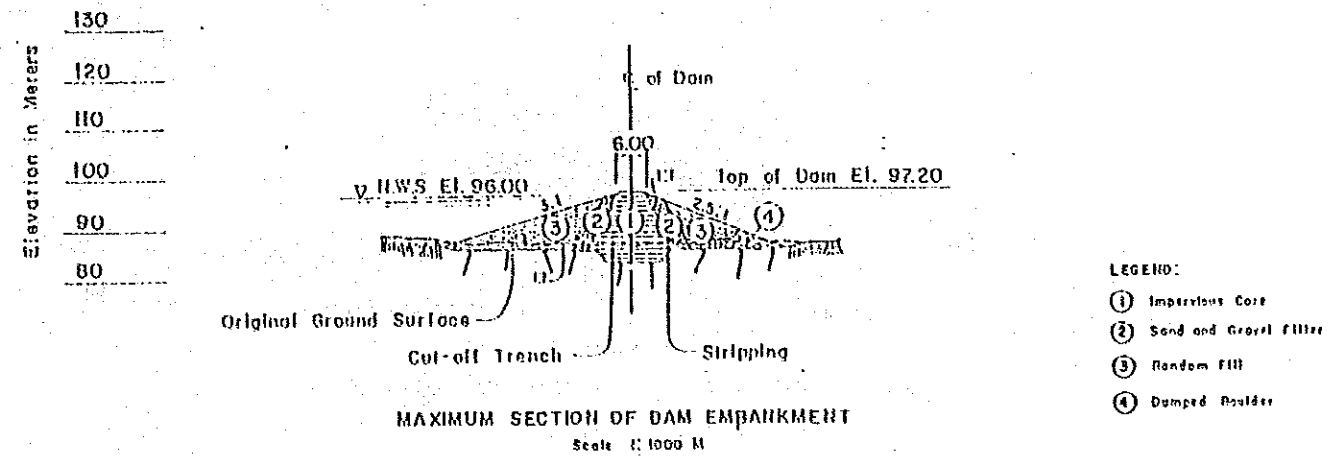
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

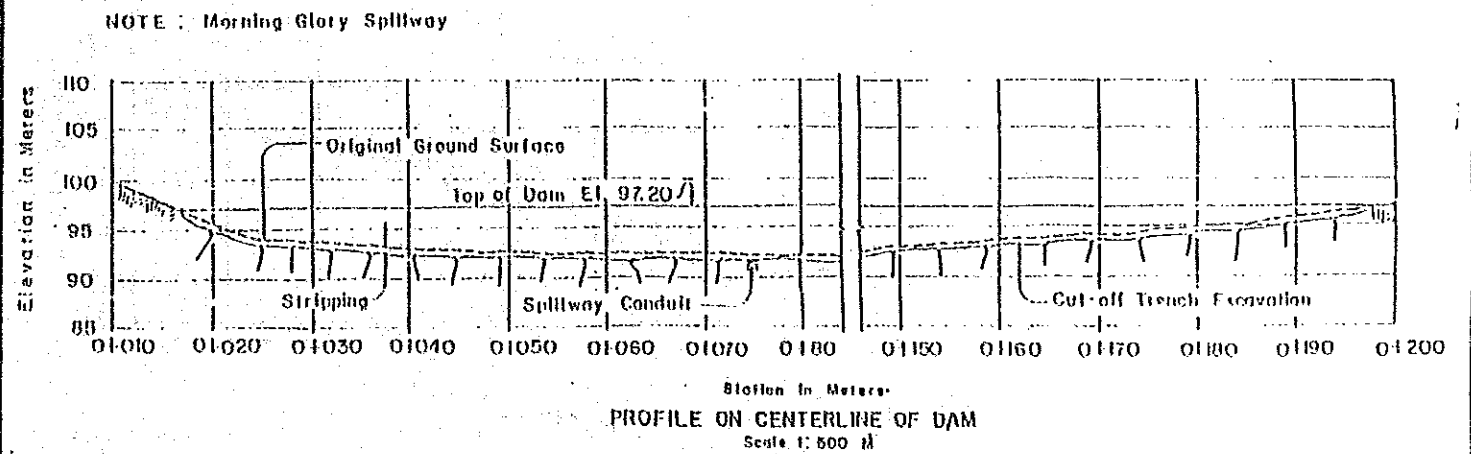
SWIM PROJECT PROFILE		File No. : 50
Regist. No. : Agency No. : NIA-59	Name: LAWACAMULAG CIP	
Region: 3	Province: TARLAC	Municipality: TARLAC
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHFILL	
	Dam Height : 9 m	
	Effective Storage Capacity : 719,000 m <sup>3</sup>	
	Embankment Volume : 36,000 m <sup>3</sup>	
	Design Flood Discharge : 17 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 120 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 0 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 54 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review : 0		EIRR : 21.4 %
2. Feasibility Study : 217		Priority Rating:
3. Detailed Design : 434		Group : B
4. Construction :		Implementation Schedule:
Dam : 5,886		Review : -
Irrigation : 2,905		F/S : 1995
Mini-Hydropower : 0		D/D : 1995
Water Supply : 0		Construction: Jul. 1986; 9 months
Watershed Protection : 0		
5. Grand Total : 9,442		

Layout:

Typical Dam Section:



Profile of Dam Axis:



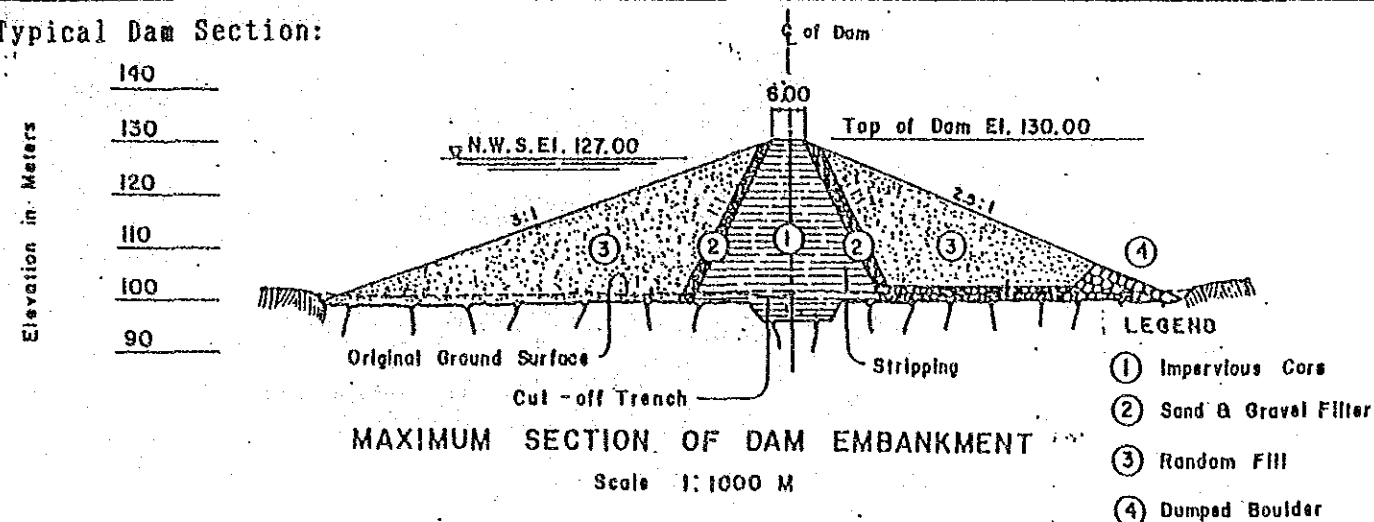
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

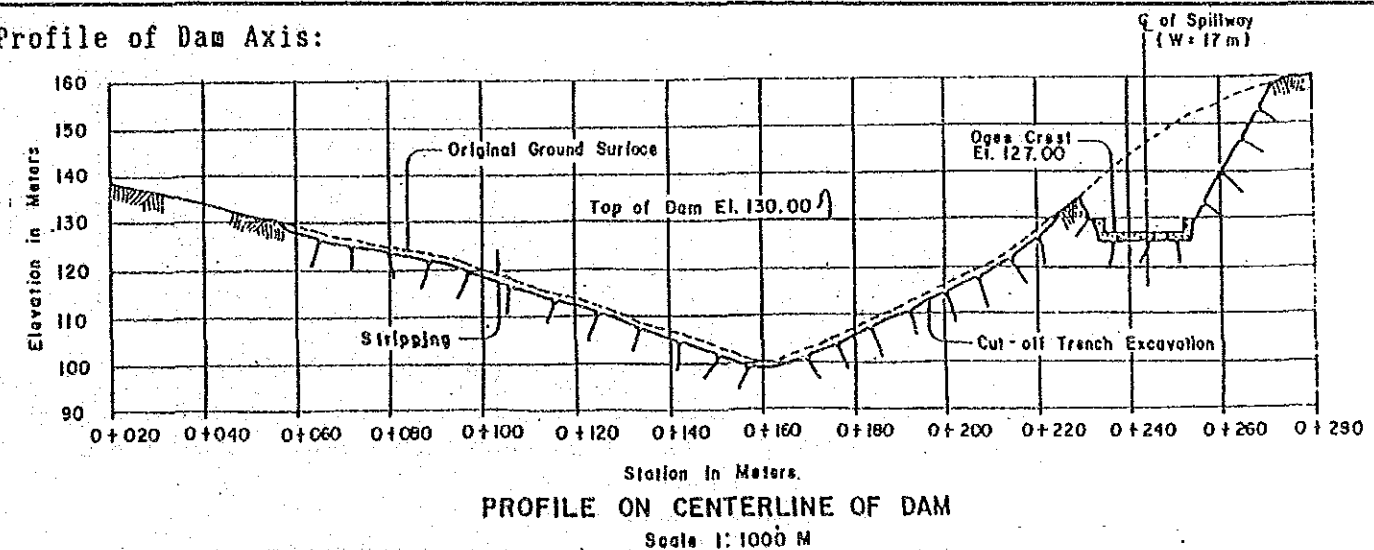
SWIM PROJECT PROFILE		File No. : 51
Regist. No. : Agency No. : NIA-72	Name : MATIKIW SWIP	
Region : 4	Province : LAGUNA	Municipality : PAKIL
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 30 m
	: Effective Storage Capacity	: 447,000 m <sup>3</sup>
	: Embankment Volume	: 136,100 m <sup>3</sup>
	: Design Flood Discharge	: 150 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 100 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 11 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning EIRR is less than 10 %. Project planning shall be re-formulated.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 81	EIRR : 0.8 %
2. Feasibility Study	: 580	Priority Rating:
3. Detailed Design	: 1,161	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 19,567	Review : 1993
Irrigation	: 2,420	F/S : 1988
Mini-Hydropower	: 0	D/D : 1988
Water Supply	: 0	Construction: Jul. 1999; 12 months
Watershed Protection	: 0	
5. Grand Total	: 23,810	

Layout:

Typical Dam Section:



Profile of Dam Axis:

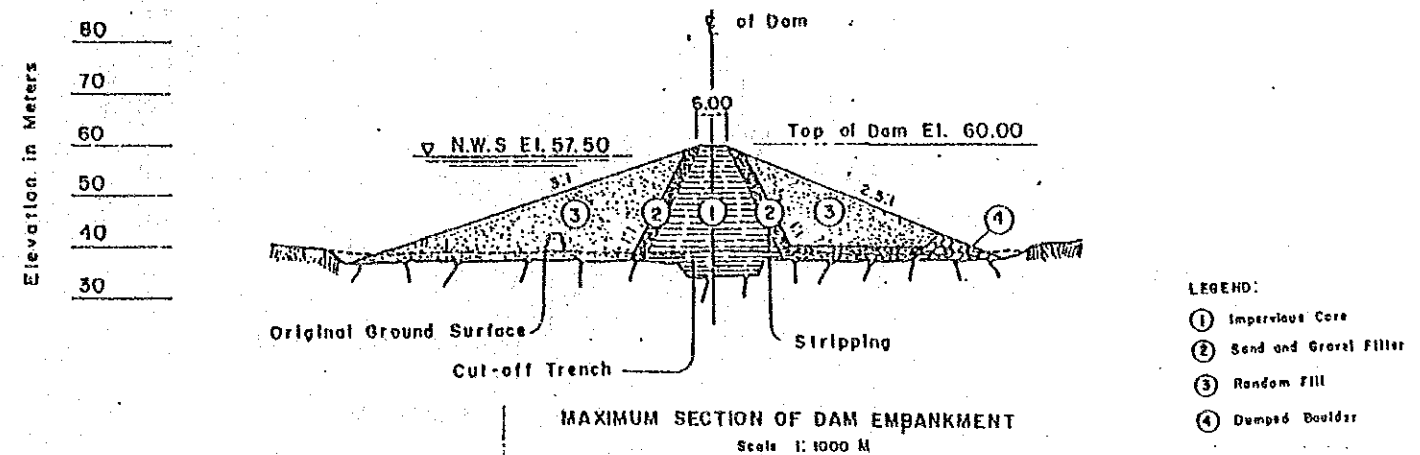


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

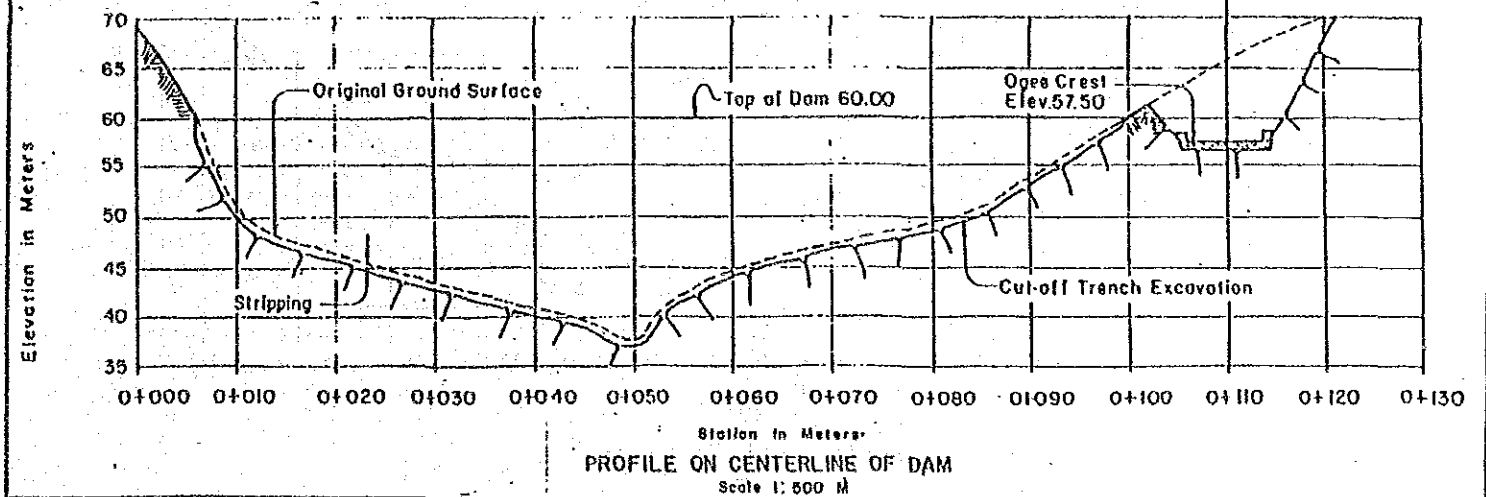
SWIM PROJECT PROFILE		File No. : 52
Regist. No. : Agency No. : NIA-97	Name: DOMOROG SWIP	
Region: 5	Province: MASBATE	Municipality: CATAINGAN
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 22 m
	: Effective Storage Capacity	: 1,147,000 m <sup>3</sup>
	: Embankment Volume	: 57,500 m <sup>3</sup>
	: Design Flood Discharge	: 70 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 120 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 34 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not studied.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 16.4 %
2. Feasibility Study	: 345	Priority Rating:
3. Detailed Design	: 691	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 10,474	Review : -
Irrigation	: 2,905	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 9 months
Watershed Protection	: 0	
5. Grand Total	: 14,414	

Layout:

Typical Dam Section:



Profile of Dam Axis:



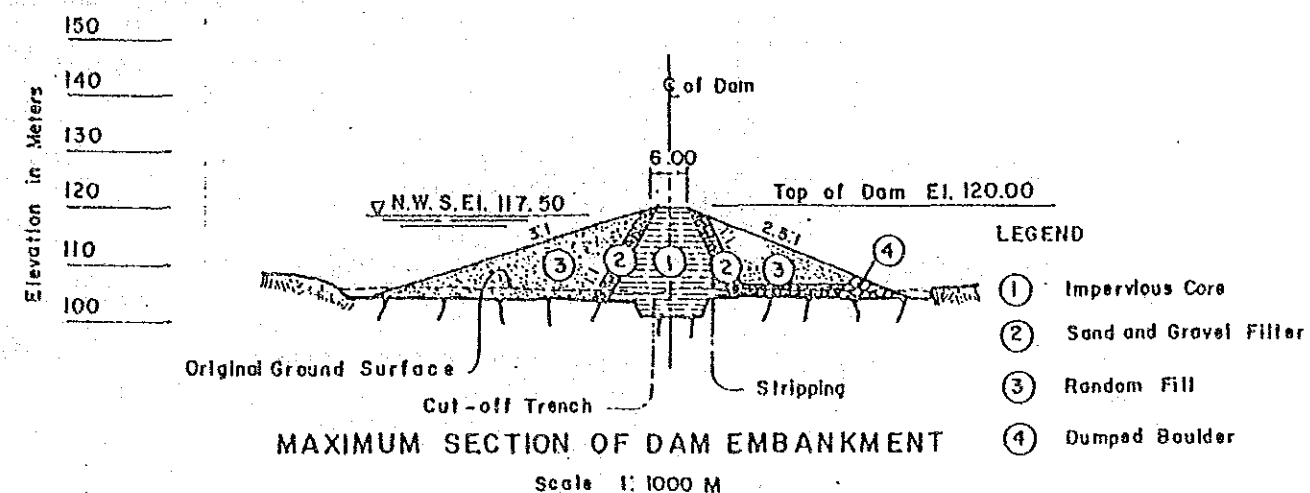
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

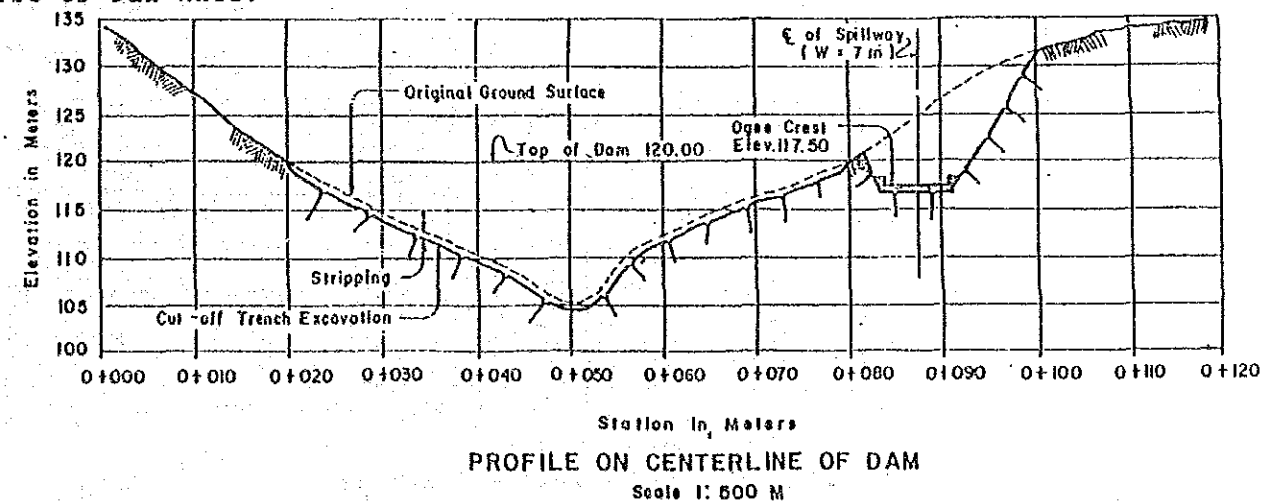
SWIM PROJECT PROFILE		File No. : 53
Regist. No. : Agency No. : NIA-98	Name: BATONGAN CIP	
Region: 5	Province: MASBATE	Municipality: MANDAON
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 15 m
	: Effective Storage Capacity	: 1,818,000 m <sup>3</sup>
	: Embankment Volume	: 52,500 m <sup>3</sup>
	: Design Flood Discharge	: 46 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 150 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 0 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 80 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 24.7 %
2. Feasibility Study	: 327	Priority Rating:
3. Detailed Design	: 654	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 9,593	Review : -
Irrigation	: 3,631	F/S : 1993
Mini-Hydropower	: 0	D/D : 1994
Water Supply	: 0	Construction: Jan. 1995; 9 months
Watershed Protection	: 0	
5. Grand Total	: 14,204	

Layout:

Typical Dam Section:



Profile of Dam Axis:



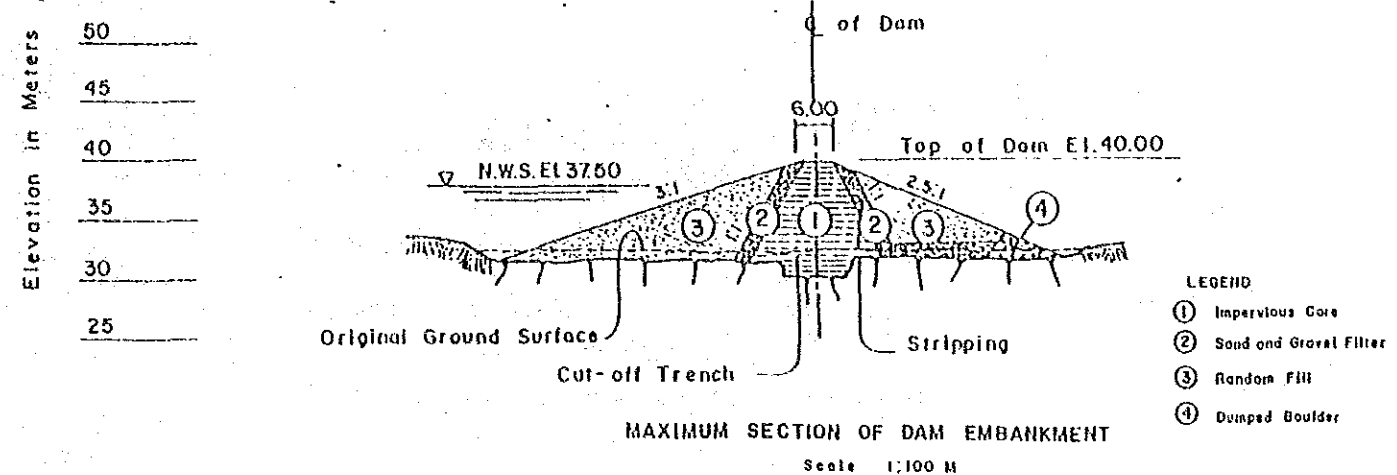
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

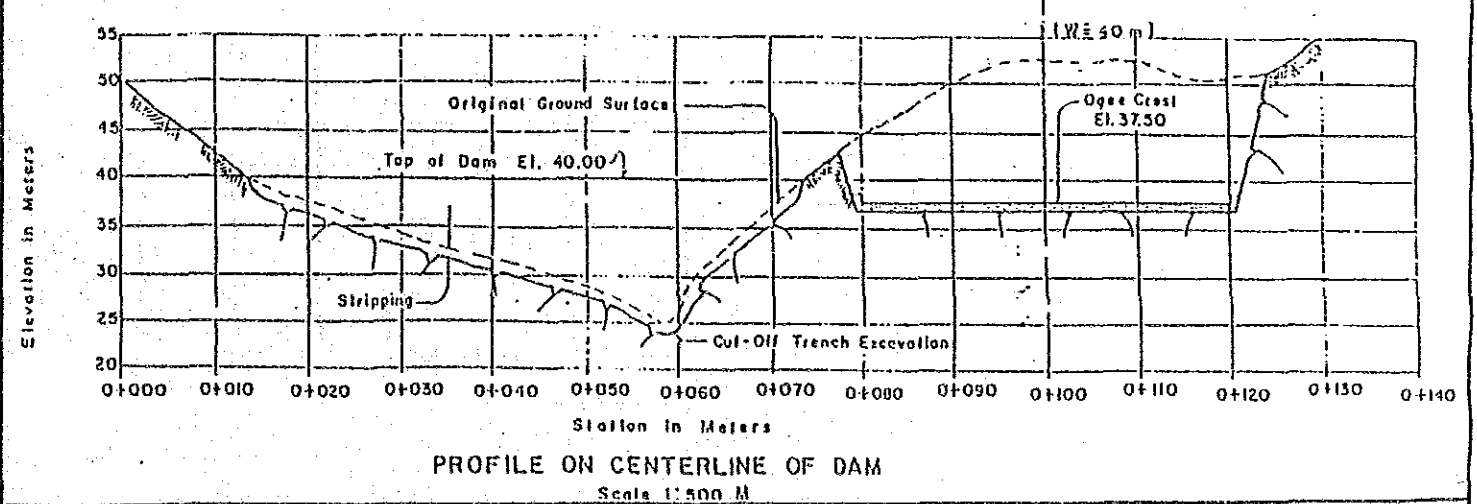
SWIM PROJECT PROFILE		File No. : 54
Regist. No. : Agency No. : NIA-99	Name: JAMORAWON CIP	
Region: 5	Province: MASBATE	Municipality: MILAGROS
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IP, FC, WM		
Project Feature:		
1. Dam	Dam Type : ZONED EARTHPILL	
	Dam Height : 15 m	
	Effective Storage Capacity : 4,280,000 m <sup>3</sup>	
	Embankment Volume : 77,000 m <sup>3</sup>	
	Design Flood Discharge : 340 m <sup>3</sup> /sec.	
2. Irrigation	Irrigation Area : 400 ha	
3. Mini-hydropower	Installed Capacity : - kW	
4. Watershed Man.	Watershed Protection Area : 950 ha	
5. Water Supply	Design Supply Capacity : - m <sup>3</sup> /day	
6. Inland Fishery	Annual Production : 266 ton/year	
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review : 0		EIRR : 28.7 %
2. Feasibility Study : 885		Priority Rating:
3. Detailed Design : 1,771		Group : A
4. Construction :		Implementation Schedule:
Dam : 26,660		Review : -
Irrigation : 9,682		F/S : 1993
Mini-Hydropower : 0		D/D : 1993
Water Supply : 0		Construction: Jul. 1994; 12 months
Watershed Protection : 13,770		
5. Grand Total : 52,768		

Layout:

Typical Dam Section:



Profile of Dam Axis:



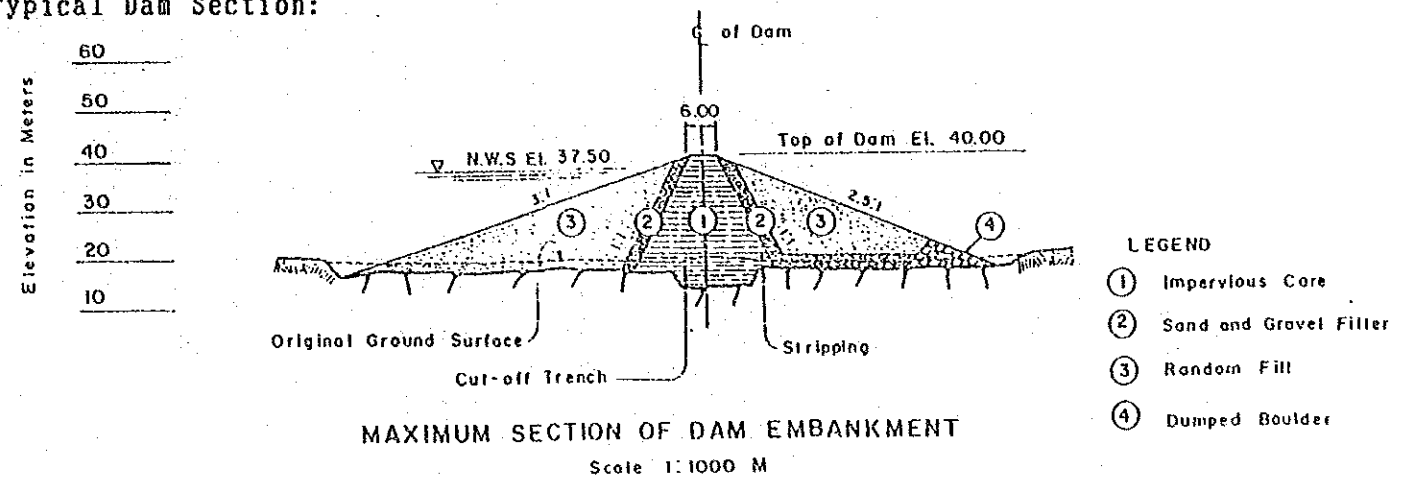
Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.



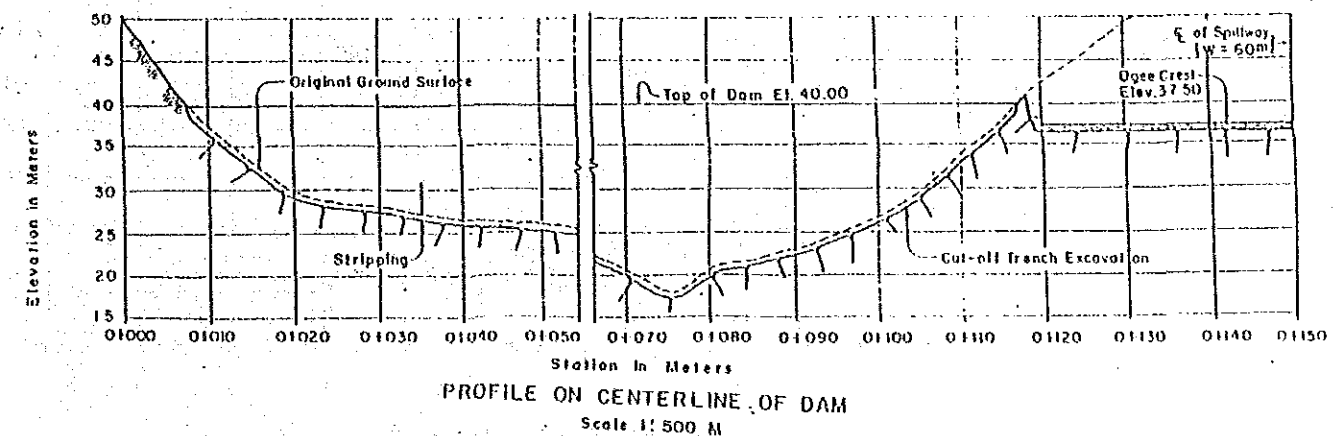
SWIM PROJECT PROFILE		File No. : 55
Regist. No. : Agency No. : NIA-100	Name : CABANGCALAN CIP	
Region : 5	Province : MASBATE	Municipality : PLACER
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 22 m
	: Effective Storage Capacity	: 12,485,000 m <sup>3</sup>
	: Embankment Volume	: 70,700 m <sup>3</sup>
	: Design Flood Discharge	: 540 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 200 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 1,530 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 370 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 22.9 %
2. Feasibility Study	: 912	Priority Rating:
3. Detailed Design	: 1,825	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 33,680	Review : -
Irrigation	: 4,841	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 12 months
Watershed Protection	: 22,330	
5. Grand Total	: 63,588	

Layout:

Typical Dam Section:



Profile of Dam Axis:

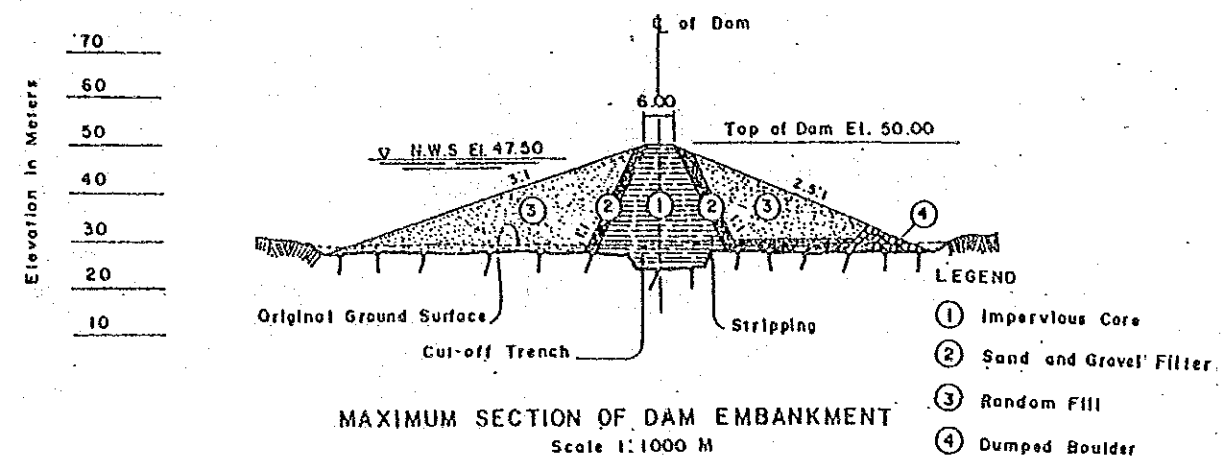


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

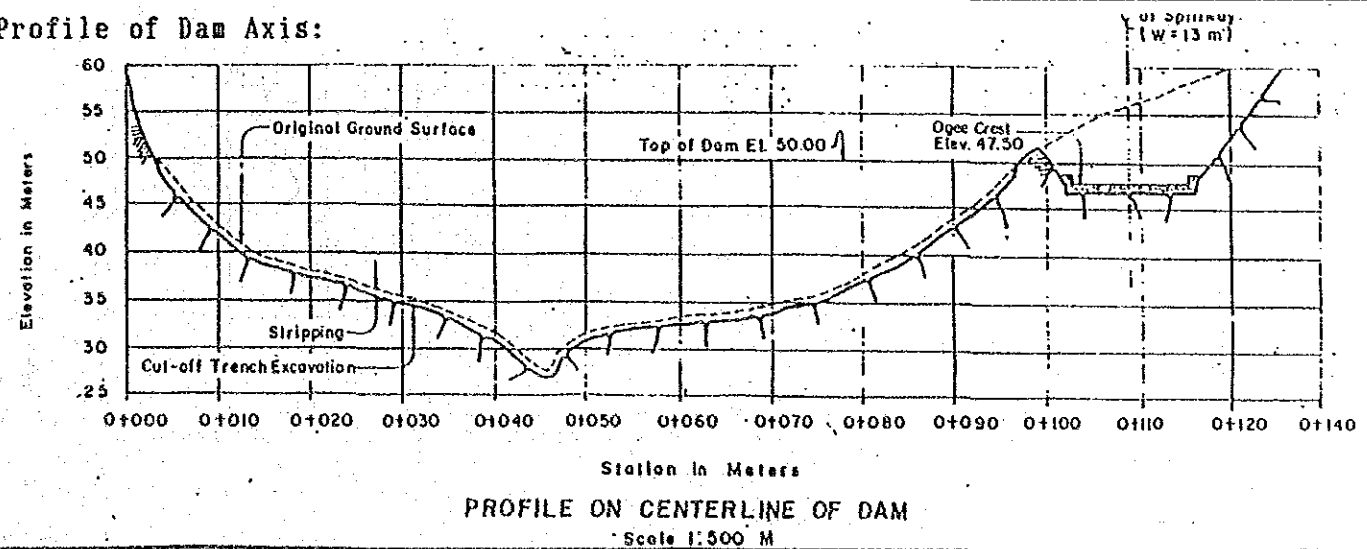
SWIM PROJECT PROFILE		File No. : 56
Regist. No. : Agency No. : NIA-101	Name : POSIAGON SWIMP	
Region : 5	Province : MASBATE	Municipality : PLACER
Present Status : ① Pre-F/S(1989)    2. F/S( )    3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 22 m
	: Effective Storage Capacity	: 4,928,000 m <sup>3</sup>
	: Embankment Volume	: 89,000 m <sup>3</sup>
	: Design Flood Discharge	: 105 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 250 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 160 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 152 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement:(1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 23.9 %
2. Feasibility Study	: 630	Priority Rating:
3. Detailed Design	: 1,260	Group : A
4. Construction	:	Implementation Schedule:
Dam	: 19,380	Review : -
Irrigation	: 6,051	F/S : 1992
Mini-Hydropower	: 0	D/D : 1993
Water Supply	: 0	Construction: Jan.1994:12 months
Watershed Protection	: 4,240	
5. Grand Total	: 31,571	

Layout:

Typical Dam Section:



Profile of Dam Axis:

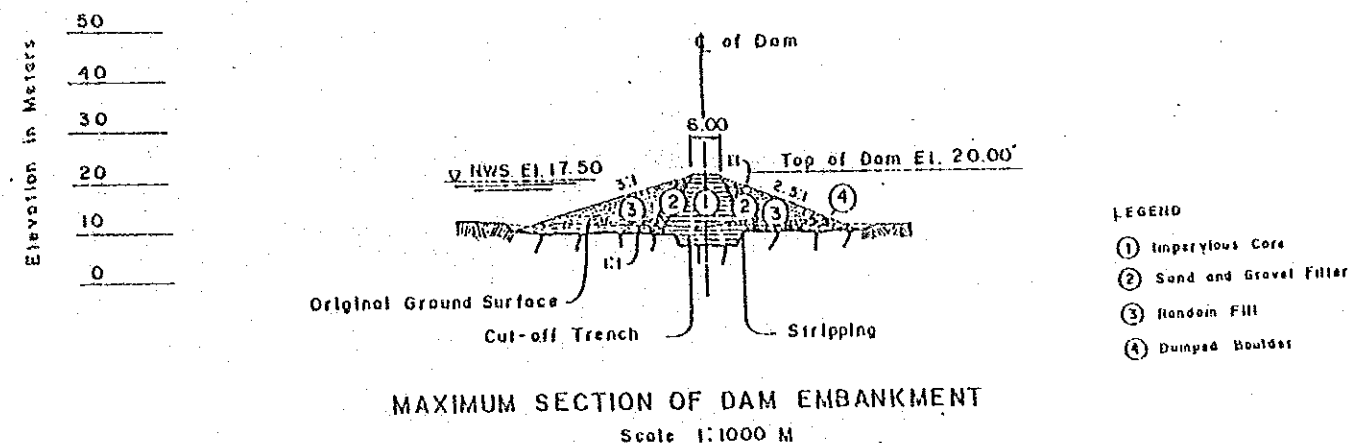


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

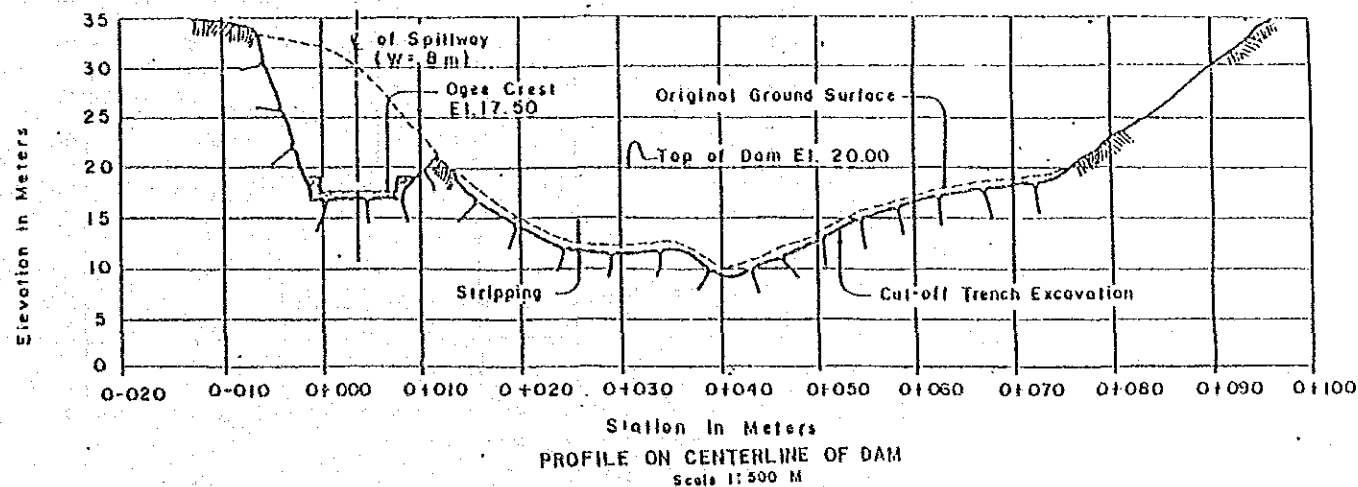
SWIM PROJECT PROFILE		File No. : 57
Regist. No. : Agency No. : NIA-102	Name: PILI SWIMP	
Region: 5	Province: MASBATE	Municipality: PLACER
Present Status: ① Pro-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Features:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 10 m
	: Effective Storage Capacity	: 727,000 m <sup>3</sup>
	: Embankment Volume	: 24,000 m <sup>3</sup>
	: Design Flood Discharge	: 54 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 80 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 60 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 58 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design shall be conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 29.9 %
2. Feasibility Study	: 175	Priority Rating:
3. Detailed Design	: 349	Group : A
4. Construction	: -	Implementation Schedule:
Dam	: 5,282	Review : -
Irrigation	: 1,936	F/S : 1991
Mini-Hydropower	: 0	D/D : 1991
Water Supply	: 0	Construction: Jul. 1992; 9 months
Watershed Protection	: 1,610	
5. Grand Total	: 9,353	

Layout:

Typical Dam Section:



Profile of Dam Axis:

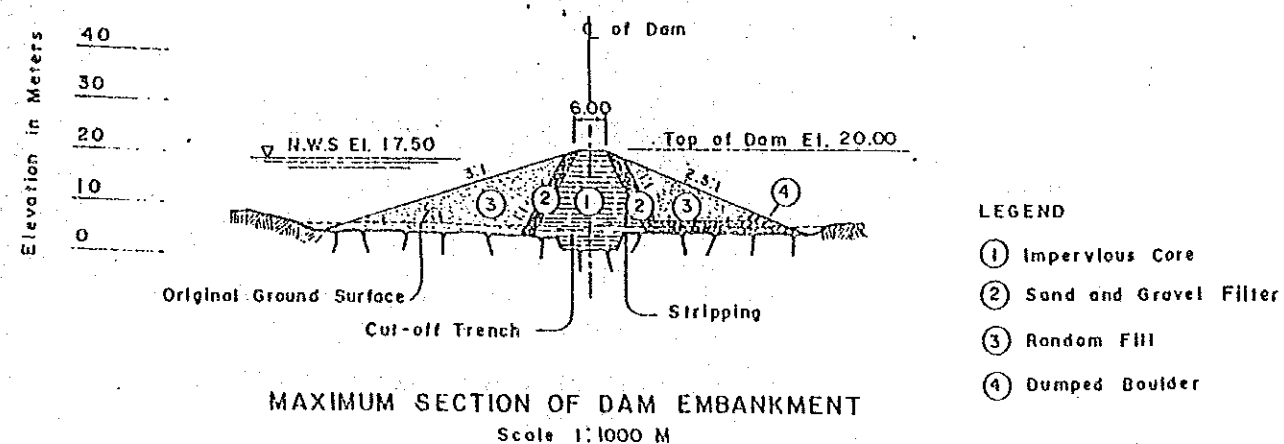


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage.

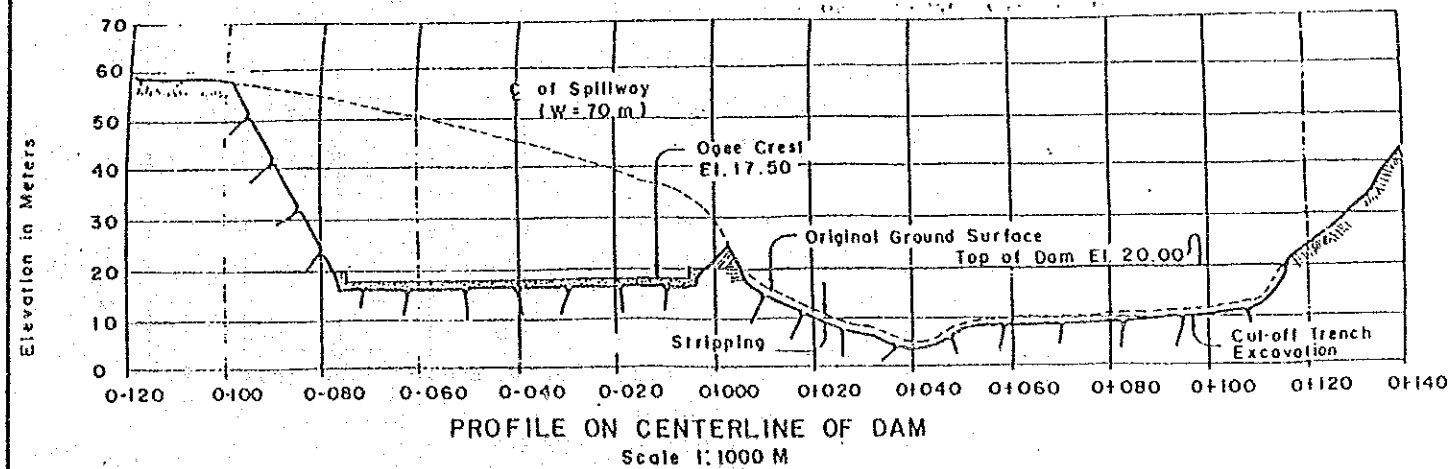
SWIM PROJECT PROFILE		File No. : 58
Regist. No. : Agency No. : NIA-103	Name: BITO SWIMP	
Region: 5	Province: MASBATE	Municipality: SAN FERNANDO
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 15 m
	: Effective Storage Capacity	: 1,404,000 m <sup>3</sup>
	: Embankment Volume	: 49,000 m <sup>3</sup>
	: Design Flood Discharge	: 588 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 200 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 1,400 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 53 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 11.6 %
2. Feasibility Study	: 879	Priority Rating:
3. Detailed Design	: 1,758	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 28,860	Review : -
Irrigation	: 4,841	F/S : 1996
Mini-Hydropower	: 0	D/D : 1997
Water Supply	: 0	Construction: Jan. 1988; 9 months
Watershed Protection	: 20,430	
5. Grand Total	: 56,768	

Layout:

Typical Dam Section:



Profile of Dam Axis:

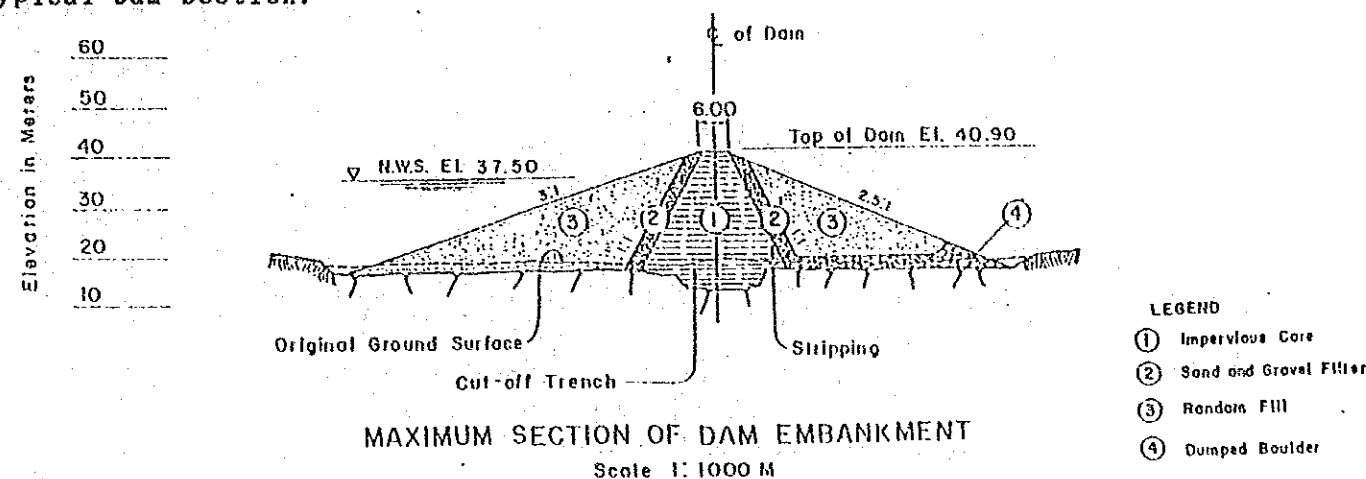


Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

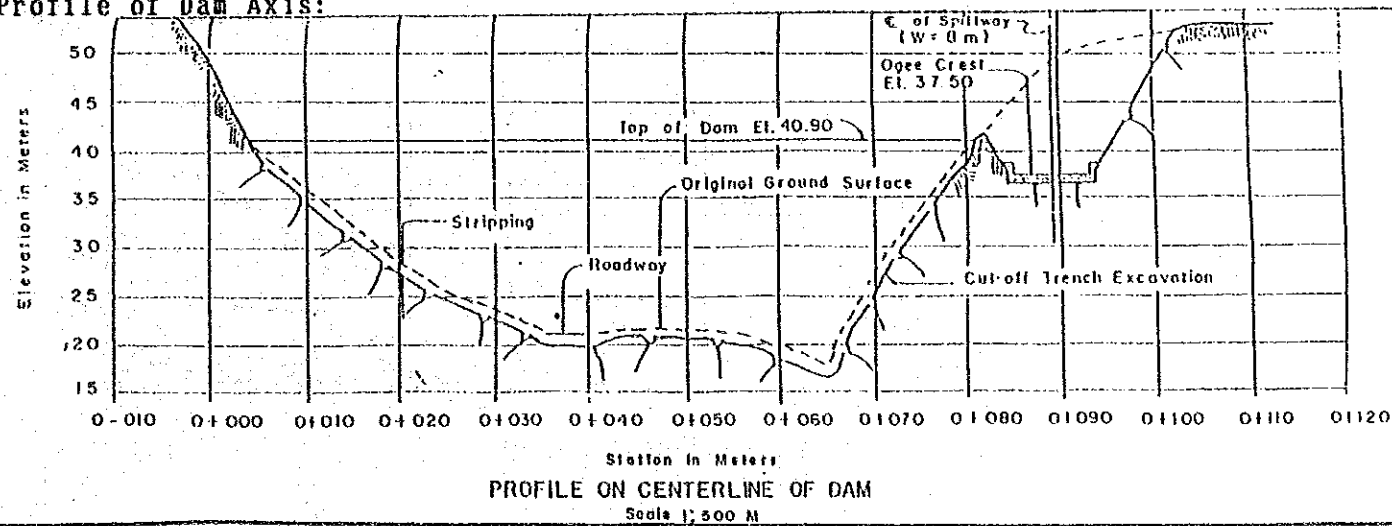
SWIM PROJECT PROFILE		File No. : 59
Regist. No. : Agency No. : NIA-104	Name: RIZAL SWIMP	
Region: 5	Province: MASBATE	Municipality: SAN FERNANDO
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 23 m
	: Effective Storage Capacity	: 2,479,000 m <sup>3</sup>
	: Embankment Volume	: 65,200 m <sup>3</sup>
	: Design Flood Discharge	: 54 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 120 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 192 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 34 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 14.3 %
2. Feasibility Study	: 371	Priority Rating:
3. Detailed Design	: 741	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 11,438	Review : -
Irrigation	: 2,905	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 9 months
Watershed Protection	: 5,145	
5. Grand Total	: 20,600	

Layout:

Typical Dam Section:



Profile of Dam Axis:



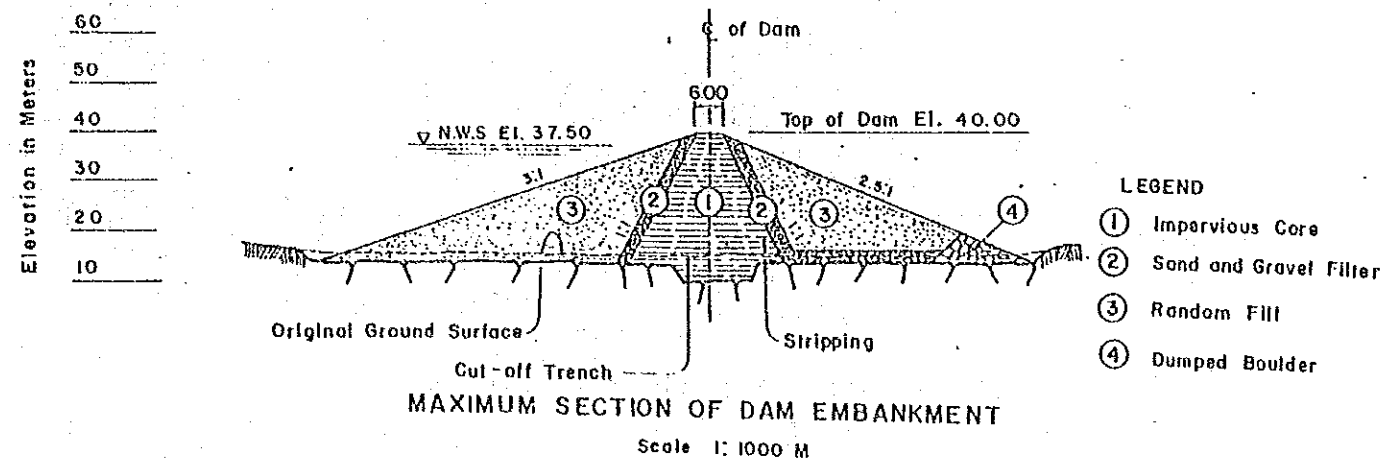
Note:

Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.

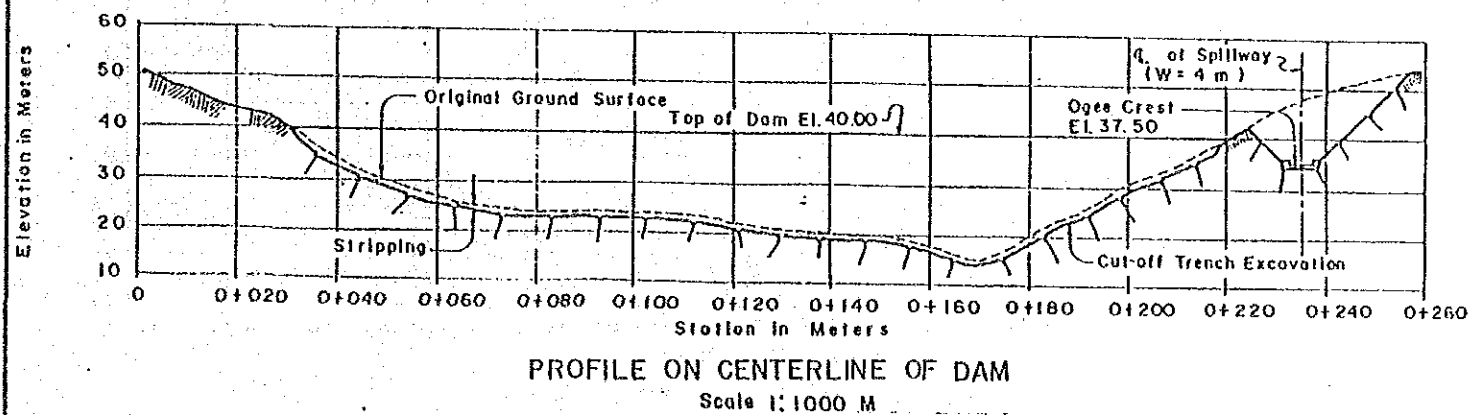
SWIM PROJECT PROFILE		File No. : 60
Regist. No. : Agency No. : NIA-106	Name: BONTOLAN SWIMP	
Region: 5	Province: MASBATE	Municipality: USON
Present Status: ① Pre-F/S(1989) 2. F/S( ) 3. D/D( )		
Purpose: Major : Irrigation Incidental : IF, FC, WM		
Project Feature:		
1. Dam	: Dam Type	: ZONED EARTHFILL
	: Dam Height	: 25 m
	: Effective Storage Capacity	: 2,505,000 m <sup>3</sup>
	: Embankment Volume	: 73,400 m <sup>3</sup>
	: Design Flood Discharge	: 24 m <sup>3</sup> /sec.
2. Irrigation	: Irrigation Area	: 100 ha
3. Mini-hydropower	: Installed Capacity	: - kW
4. Watershed Man.	: Watershed Protection Area	: 105 ha
5. Water Supply	: Design Supply Capacity	: - m <sup>3</sup> /day
6. Inland Fishery	: Annual Production	: 58 ton/year
Technical Assessment:		
1. Survey and Investigation: Detailed survey and investigation are not conducted.		
2. Planning Feasibility study shall be conducted.		
3. Design Detailed design is not conducted.		
4. Operation and Maintenance Not studied.		
Fund Requirement: (1,000 Pesos)		Project Evaluation:
1. Review	: 0	EIRR : 16.5 %
2. Feasibility Study	: 314	Priority Rating:
3. Detailed Design	: 628	Group : B
4. Construction	:	Implementation Schedule:
Dam	: 10,053	Review : -
Irrigation	: 2,420	F/S : 1995
Mini-Hydropower	: 0	D/D : 1995
Water Supply	: 0	Construction: Jul. 1996; 9 months
Watershed Protection	: 2,810	
5. Grand Total	: 16,225	

Layout:

Typical Dam Section:



Profile of Dam Axis:



Note: Dam type and its configuration is reasonably proposed in Pre F/S stage under no actual geological investigation. Foundation treatment; width of impervious zone, shape of core trench, necessity of impervious blanket, would be decided through F/S, D/D stage. Magnitude of design discharge should be at least more than 100 years.