

(1) Agricultural Civil Engineering Words (Illustration) in Africa

Reference

Illustration Agricultural Civil Engineering Words

Illustration Civil Engineering Words

Publisher

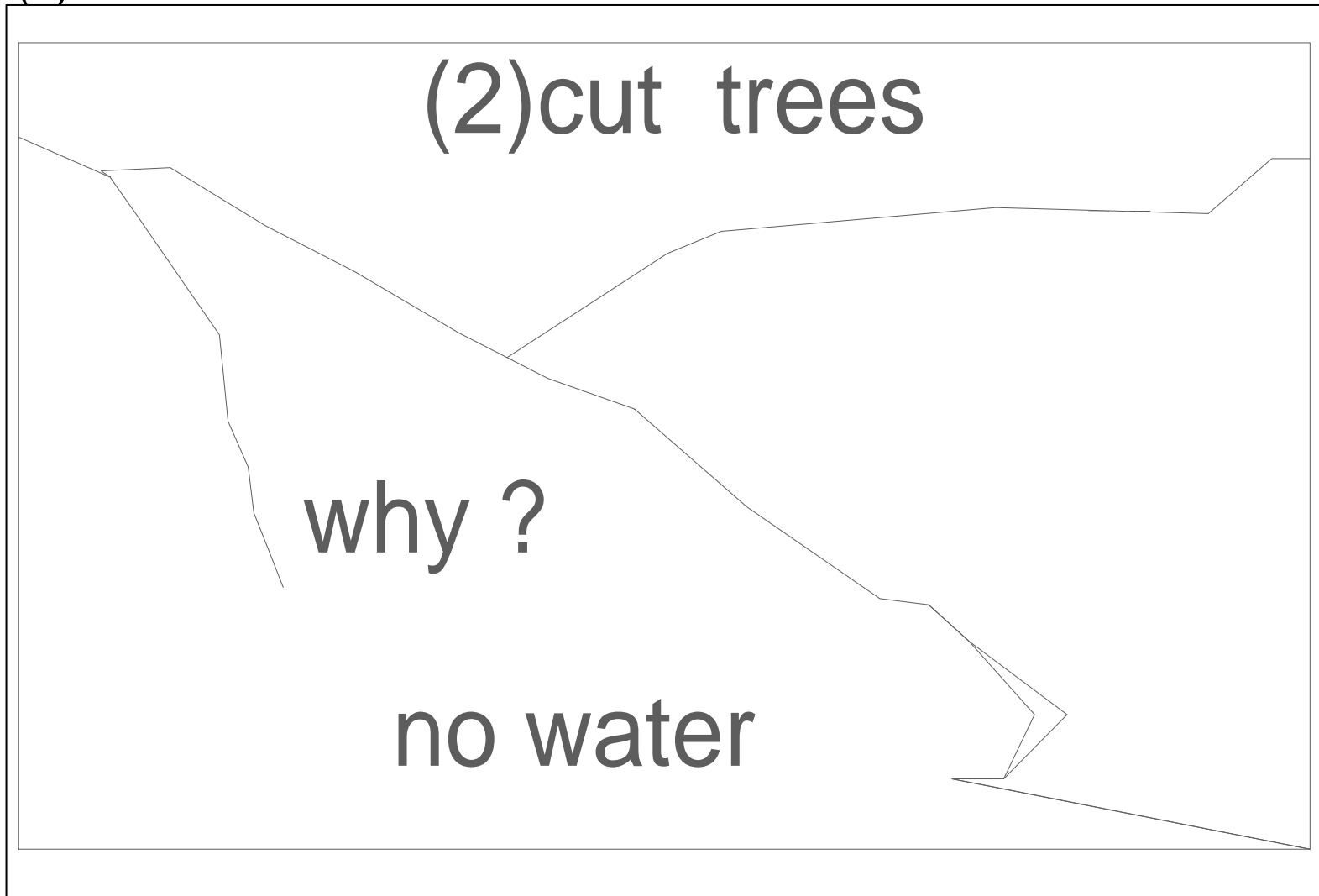
Touyou-Bookstore Japan

Jikkyo-Bookstore Japan

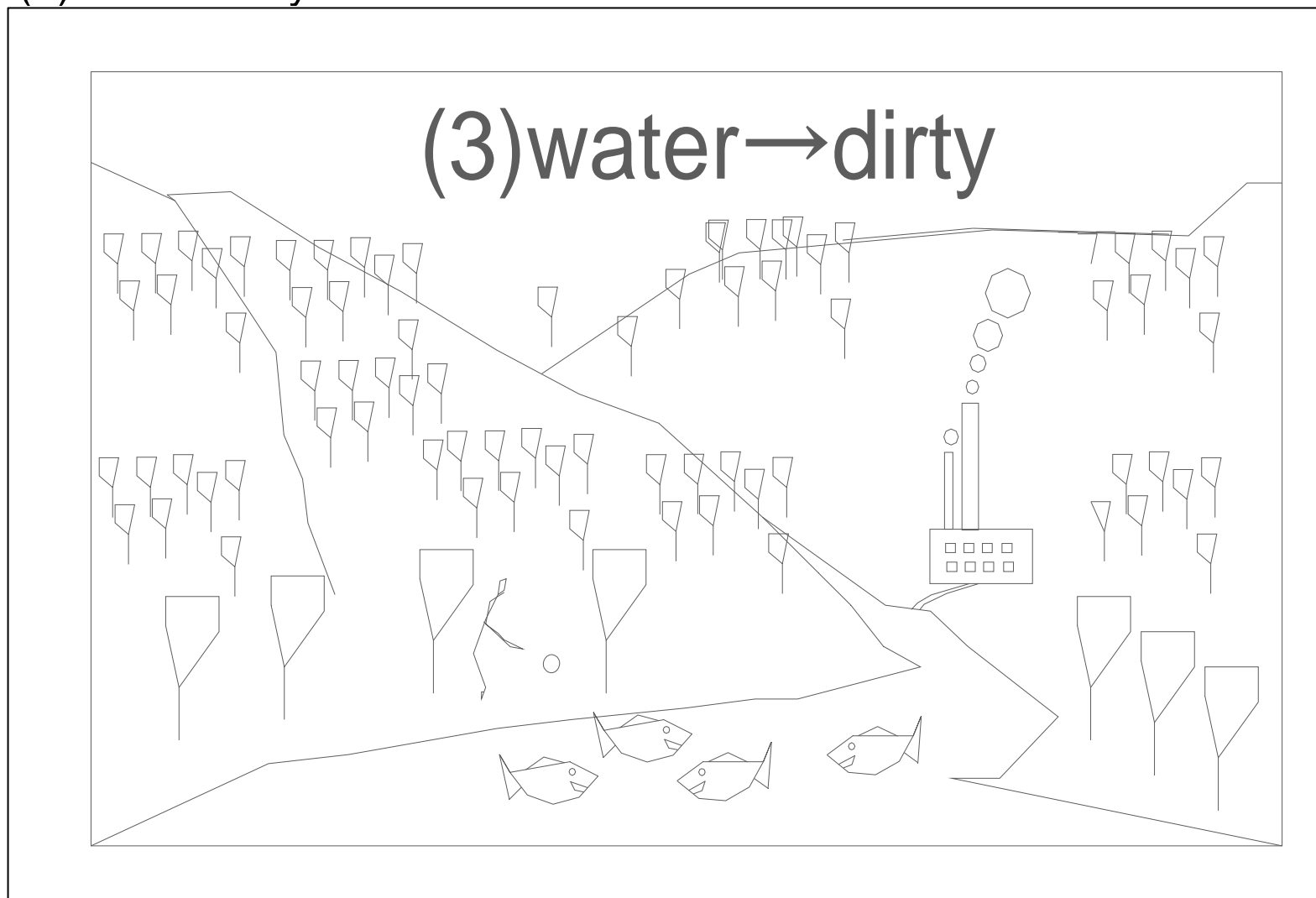
Tadano Toshio

只野 敏夫

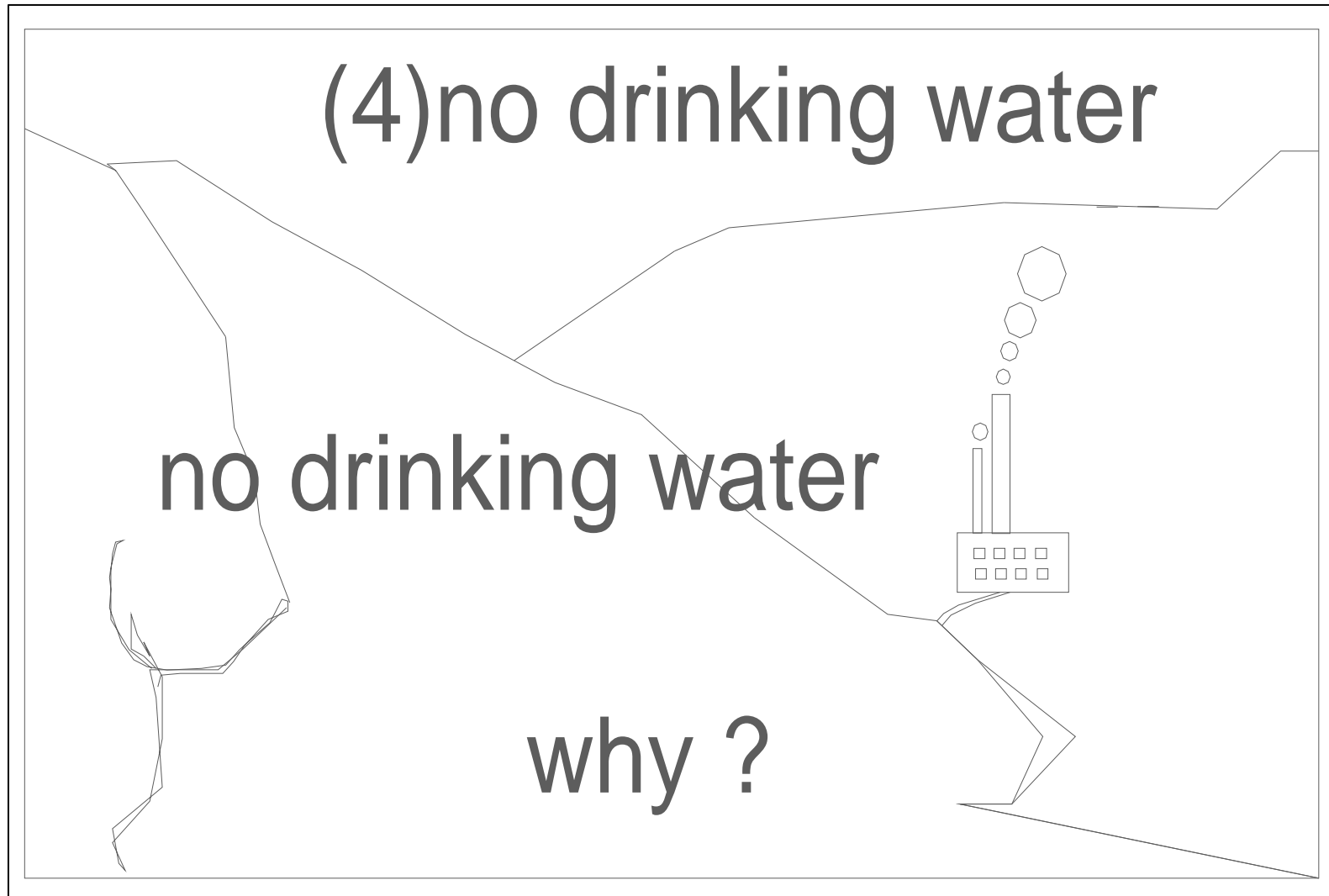
(2)cut trees



(3)water→dirty

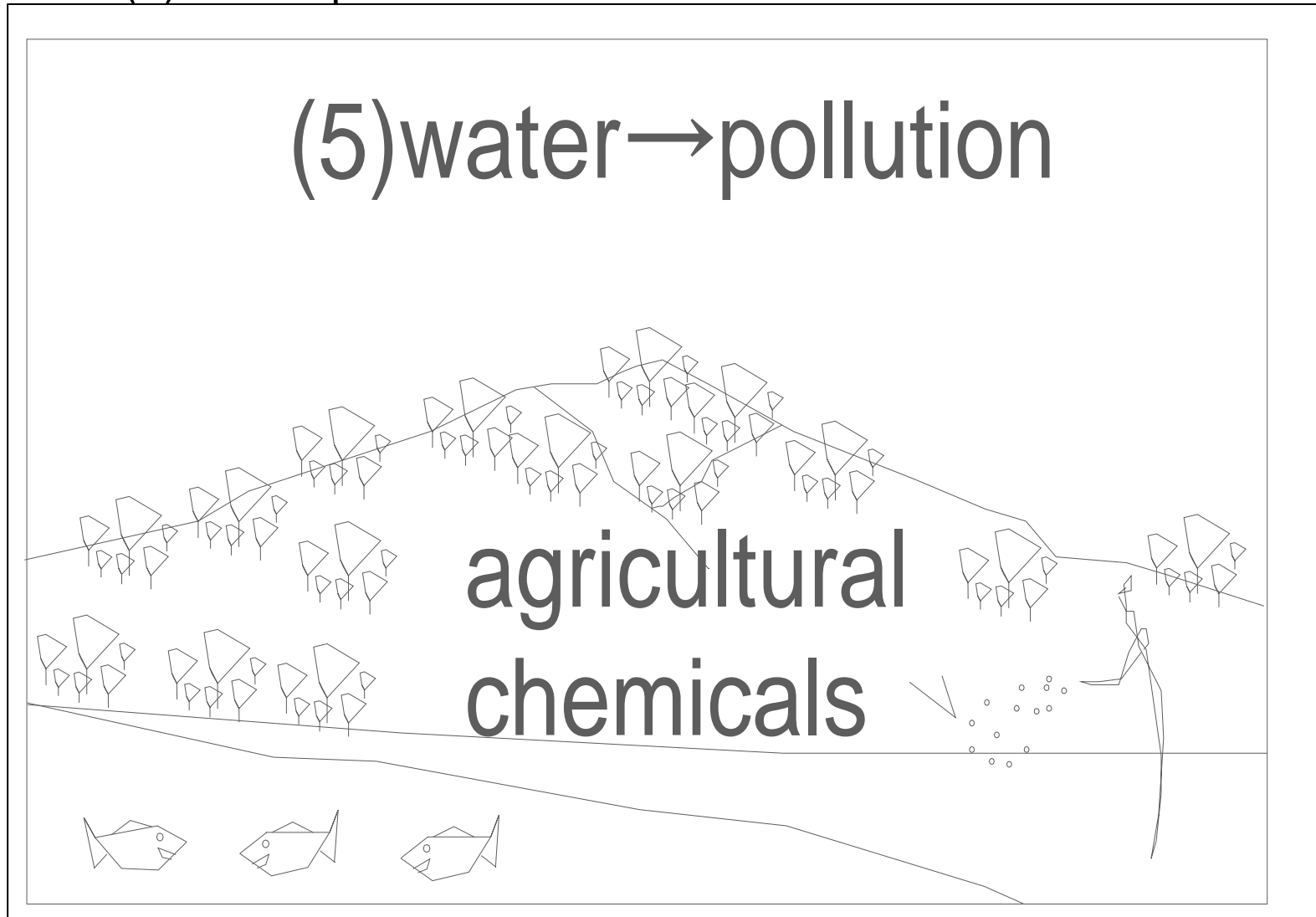


(4)no drinking water



(5)water→pollution

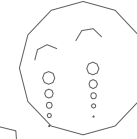
(5)water→pollution



(6)water→pollution

(6)water→pollution

no dream !

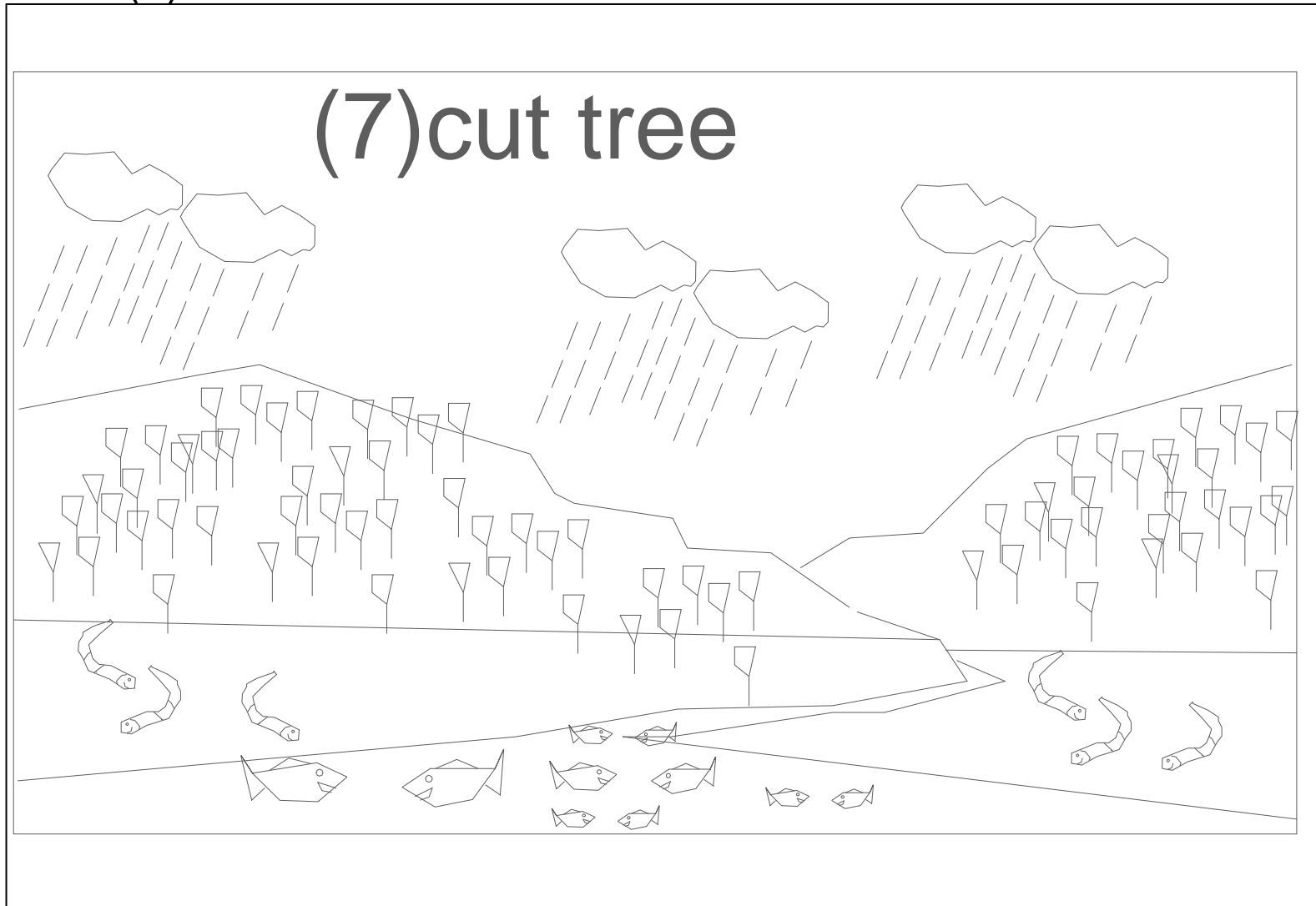


why ?

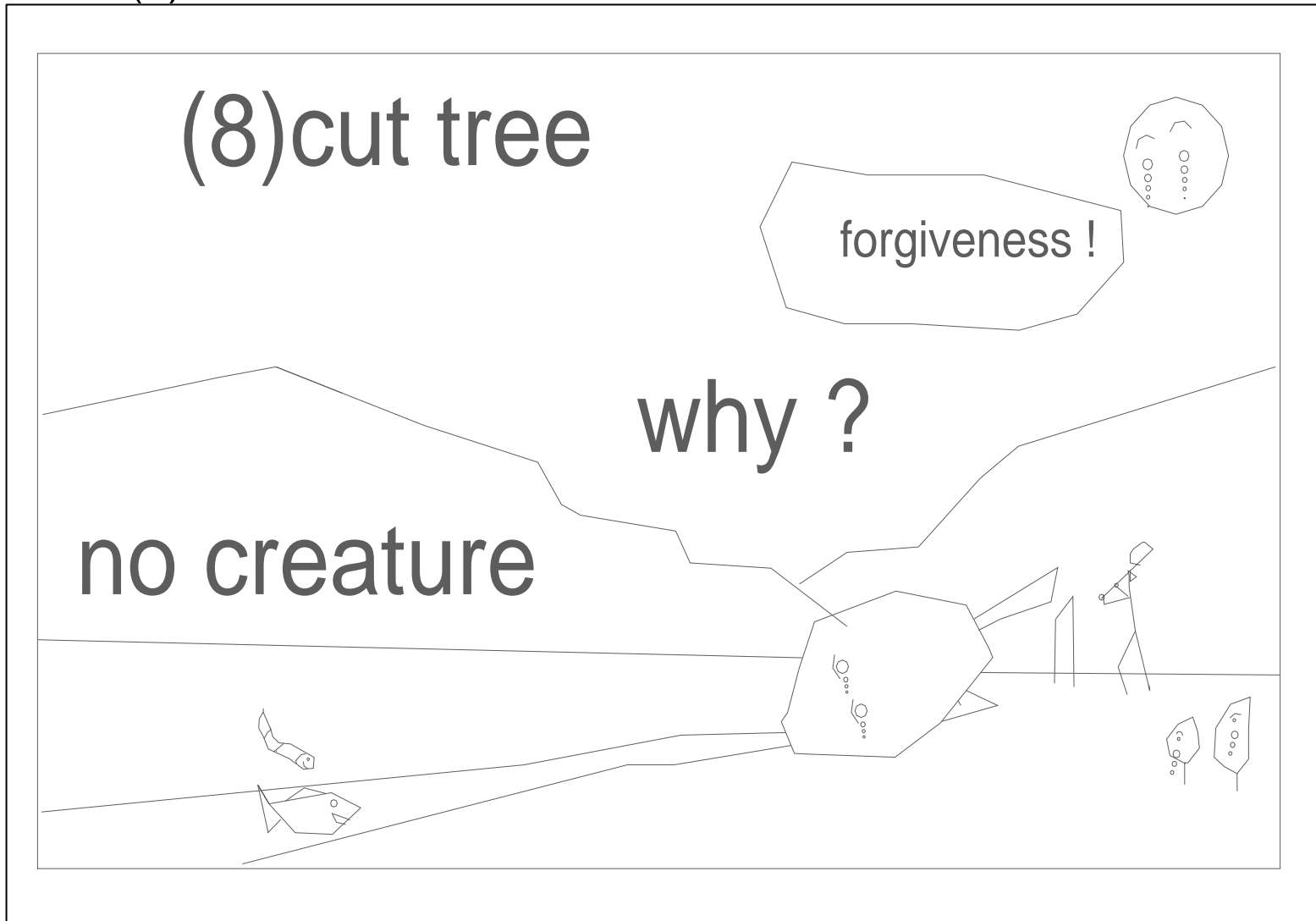
no creature

no fish

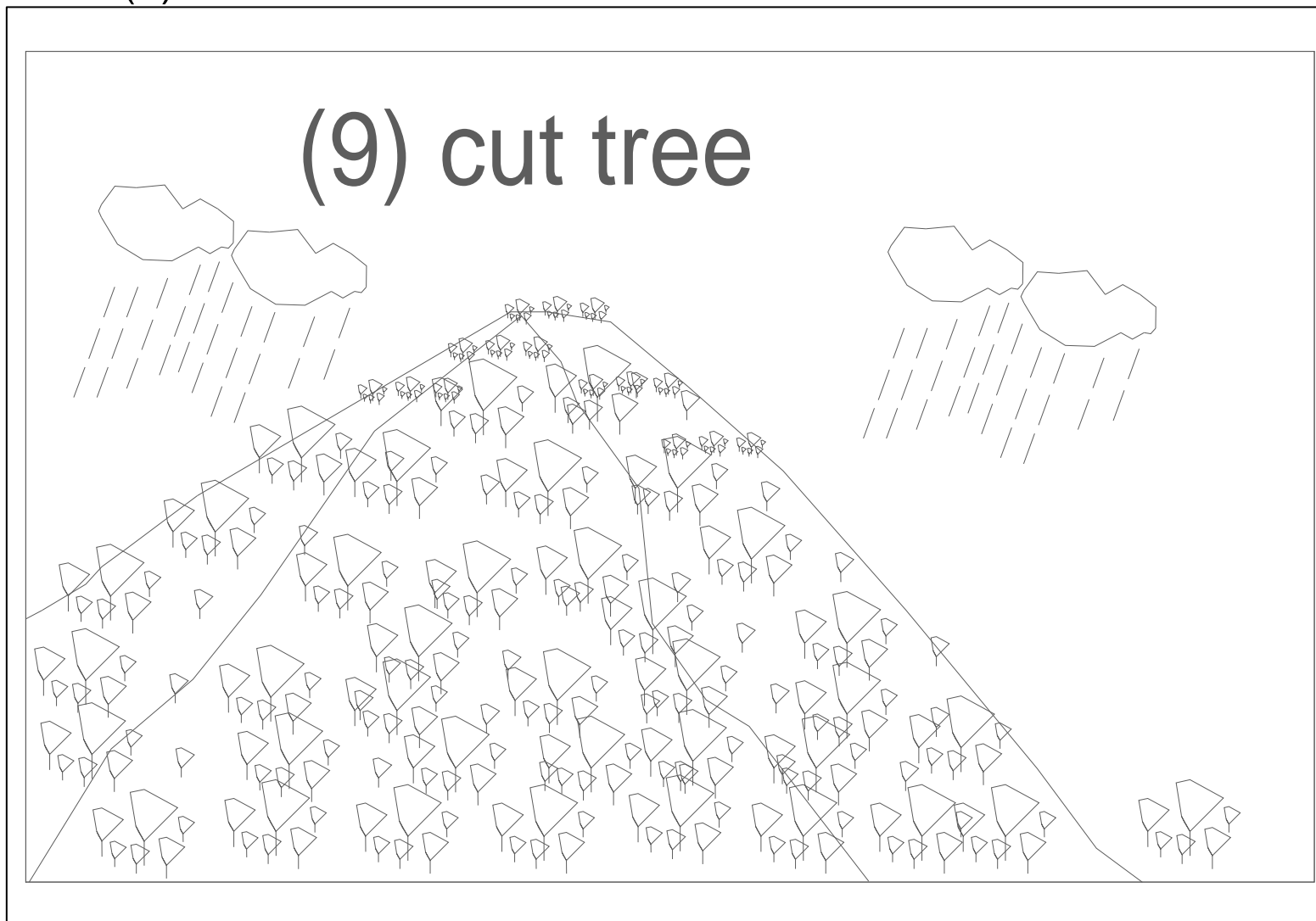
(7)cut tree



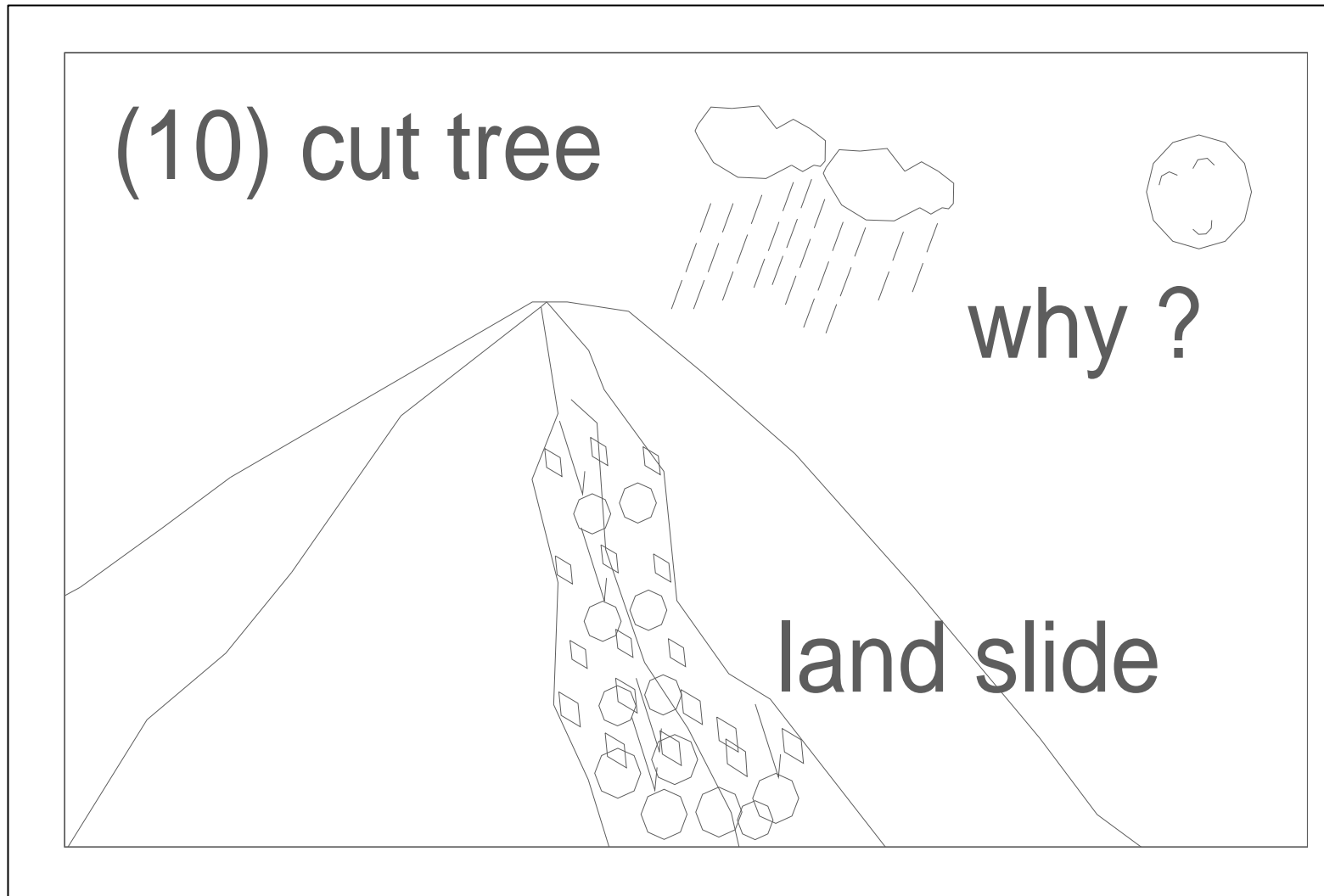
(8)cut tree



(9)cut tree



(10)cut tree

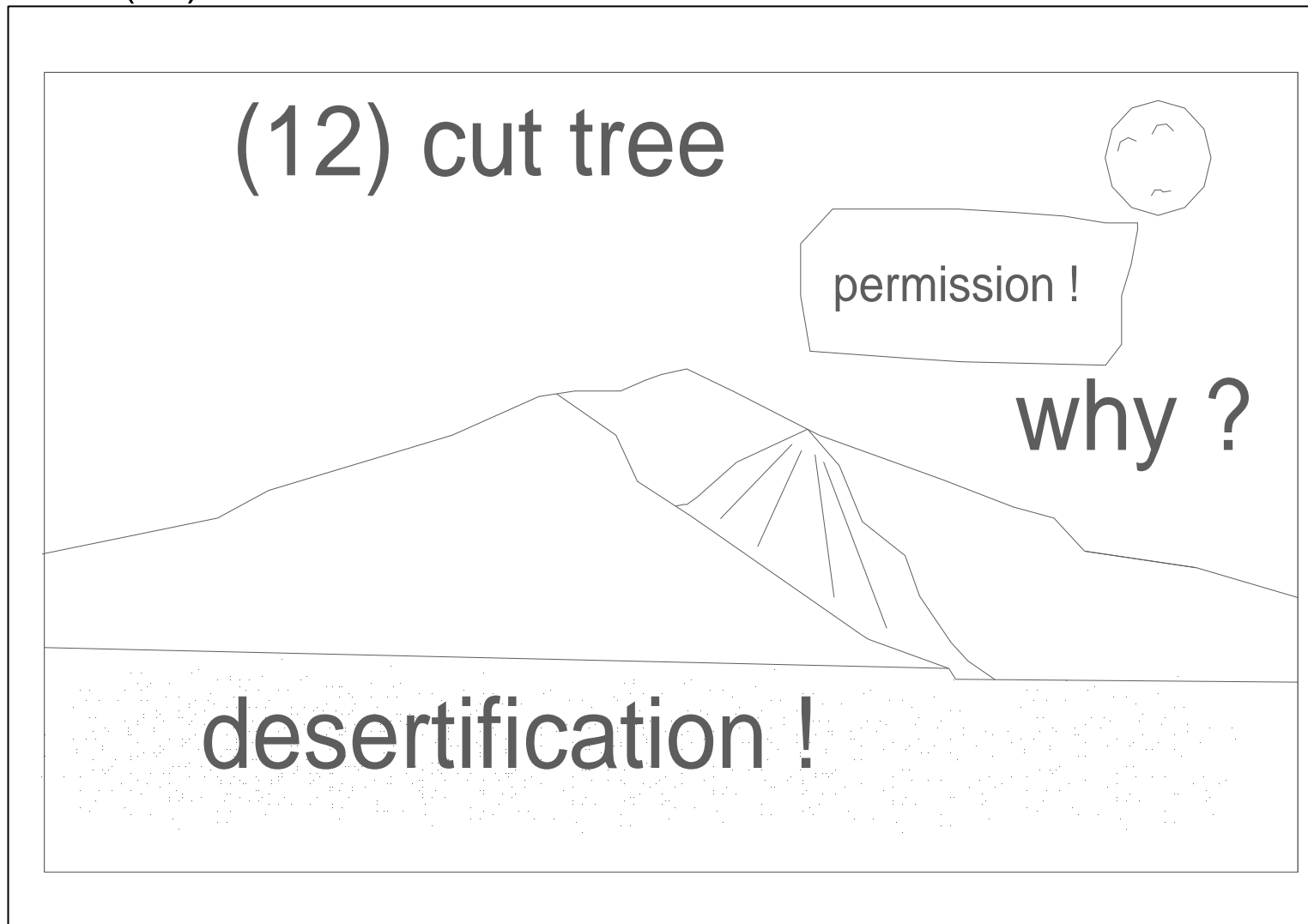


(11)cut tree

(11) cut tree

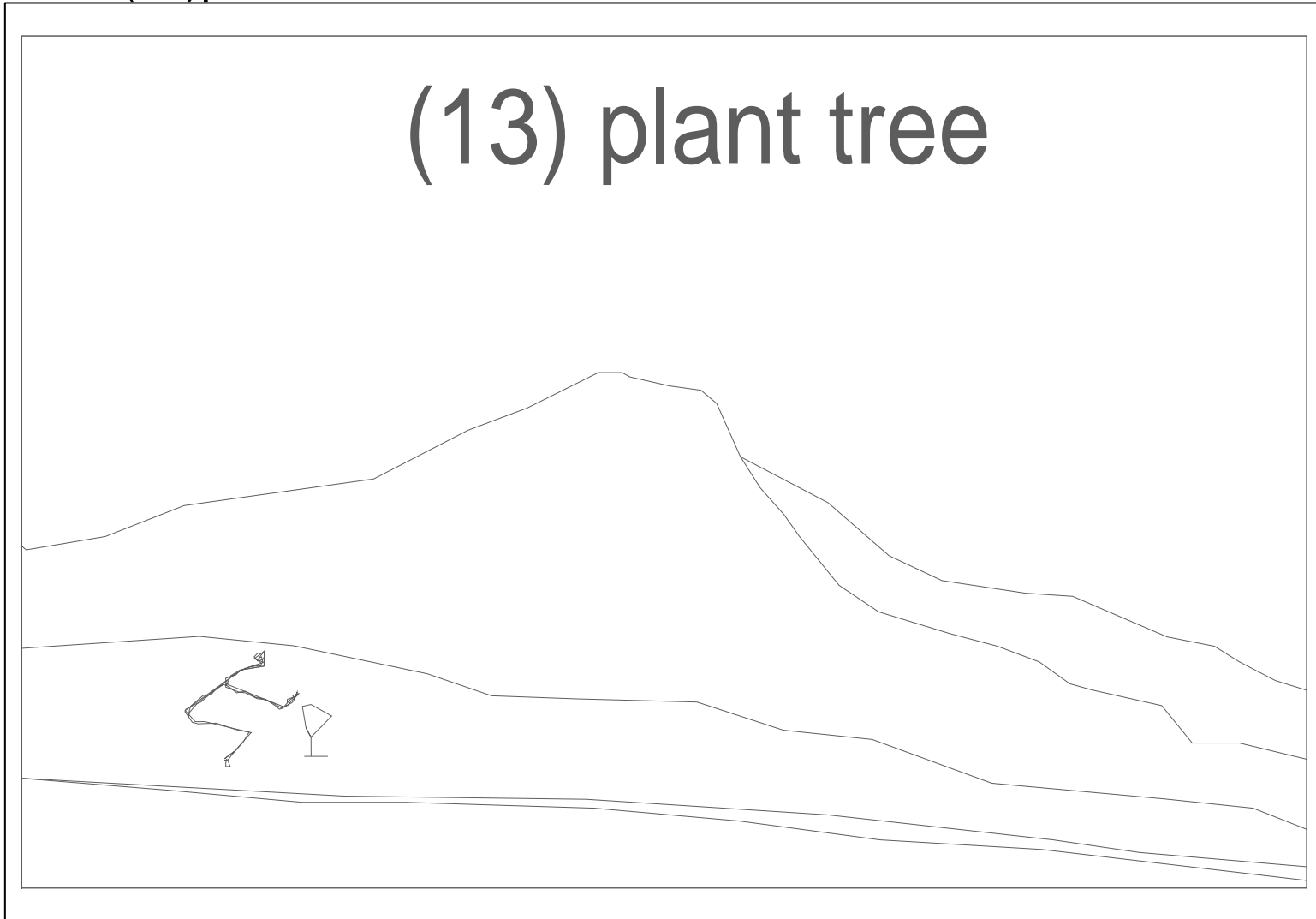


(12)cut tree

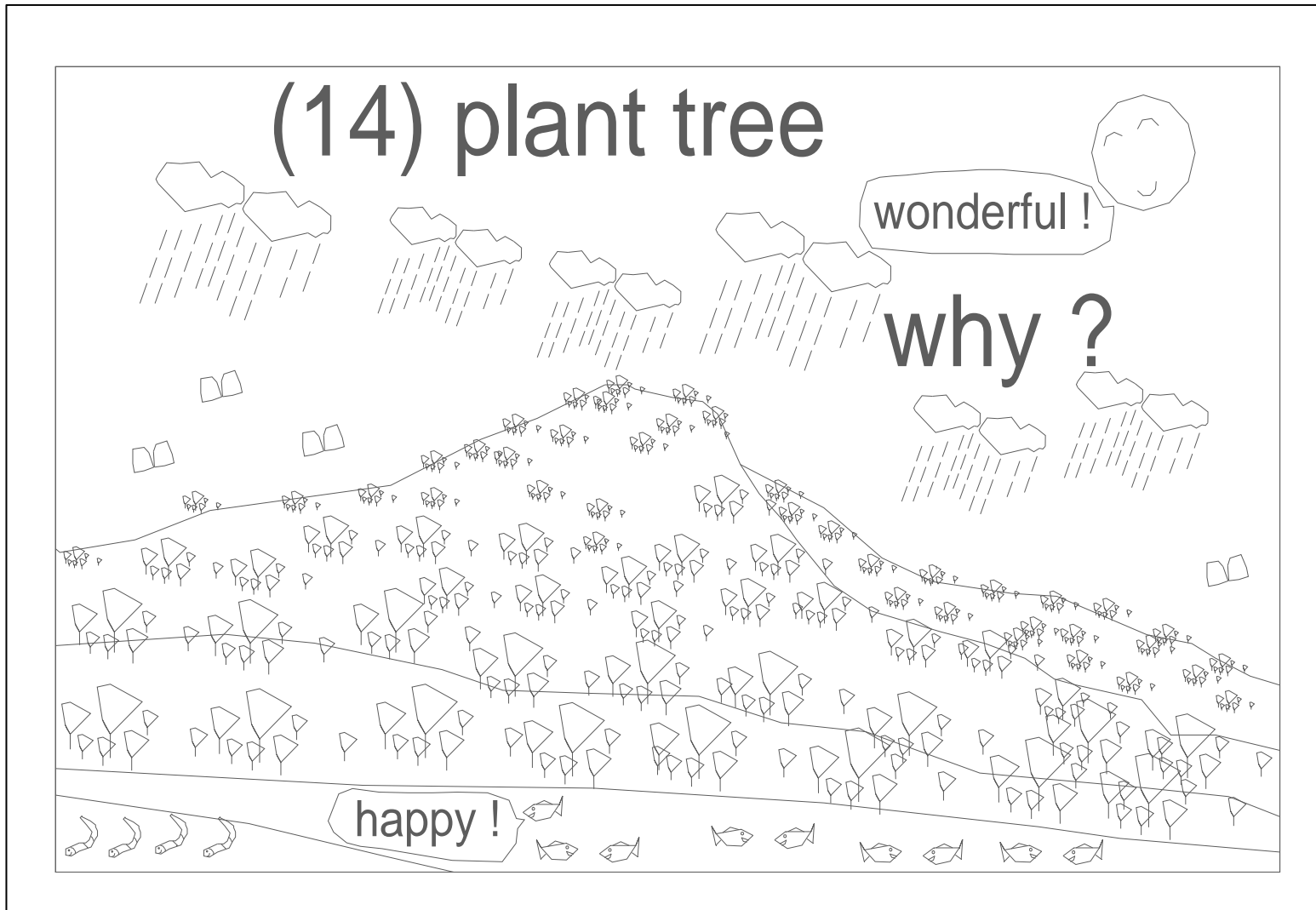


(13)plant tree

(13) plant tree

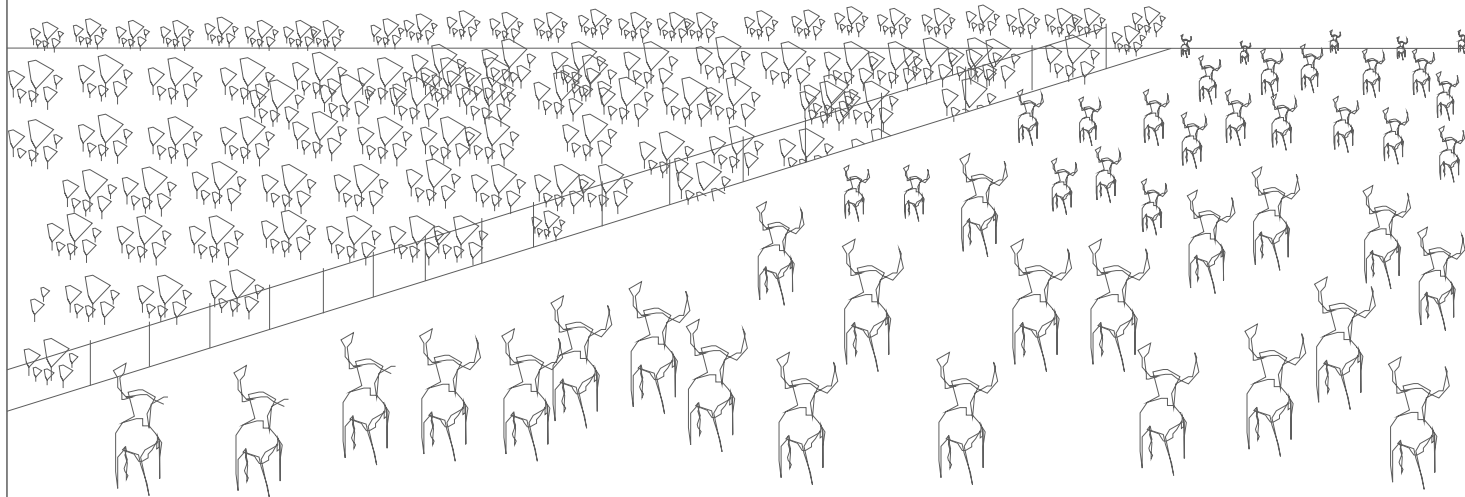


(14)plant tree



(15)desertification !

(15) desertification ! domestic animal

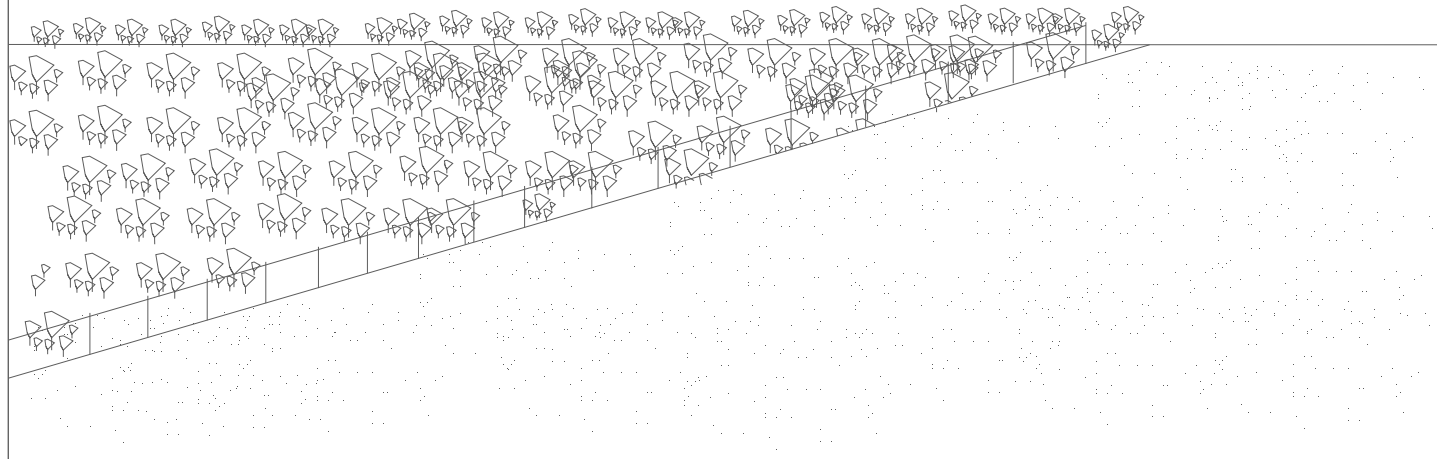


(16)desertification

(16) desertification !

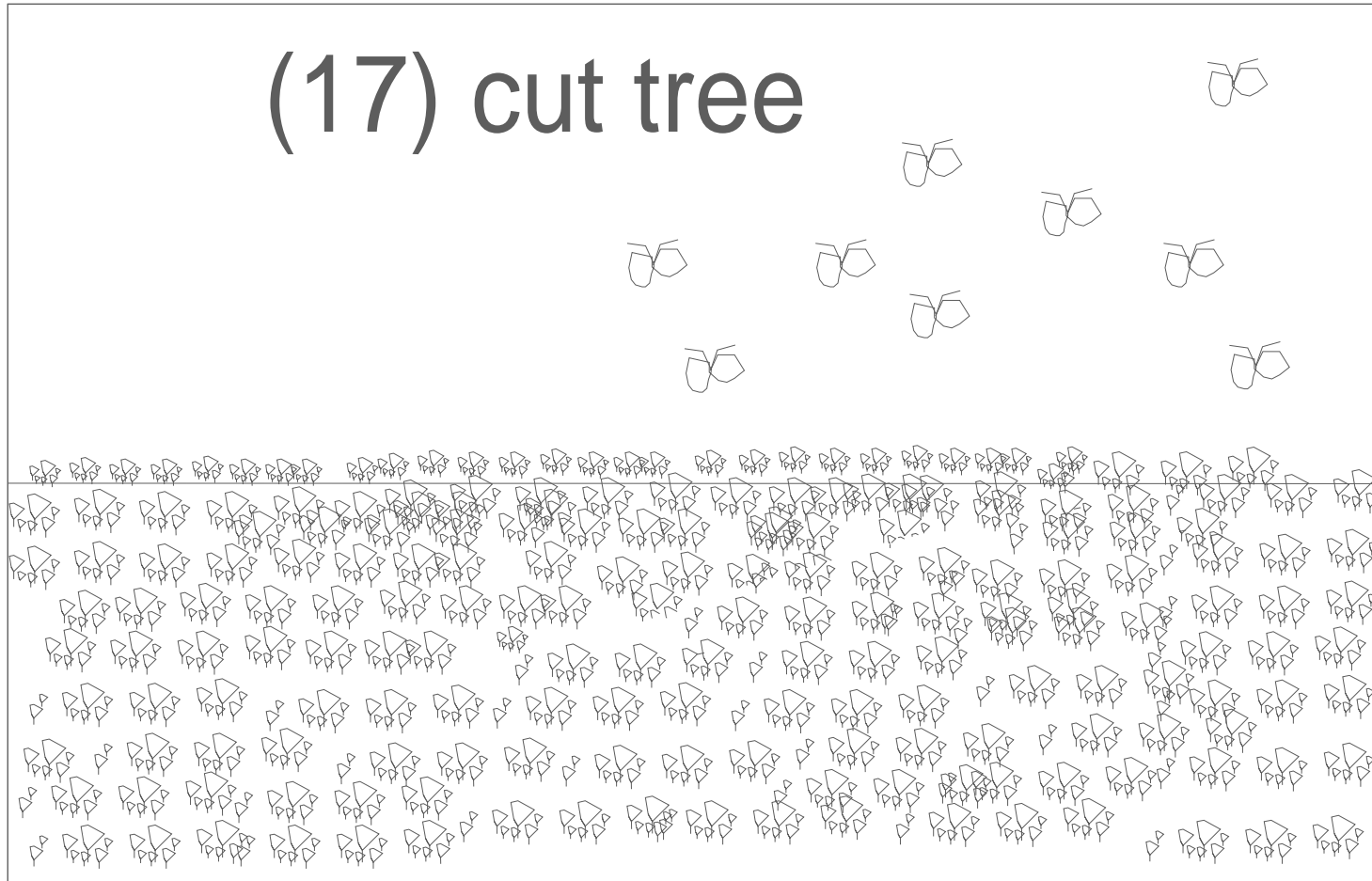
why ?

greedy !



(17)cut tree

(17) cut tree

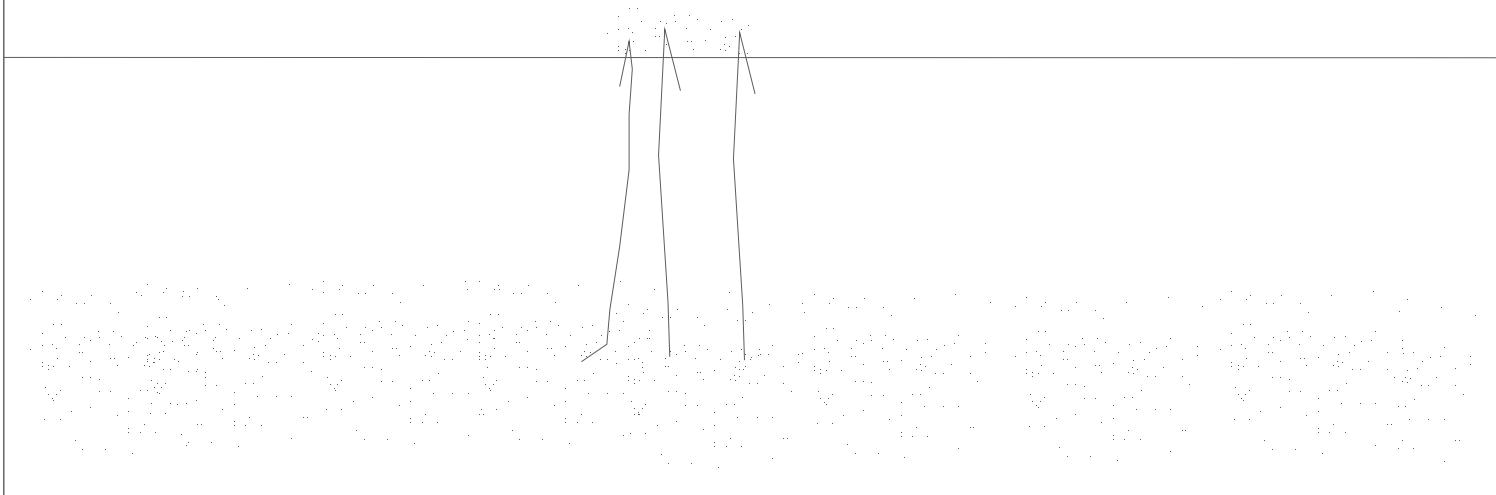


(18)damage from salt

(18) damage from salt



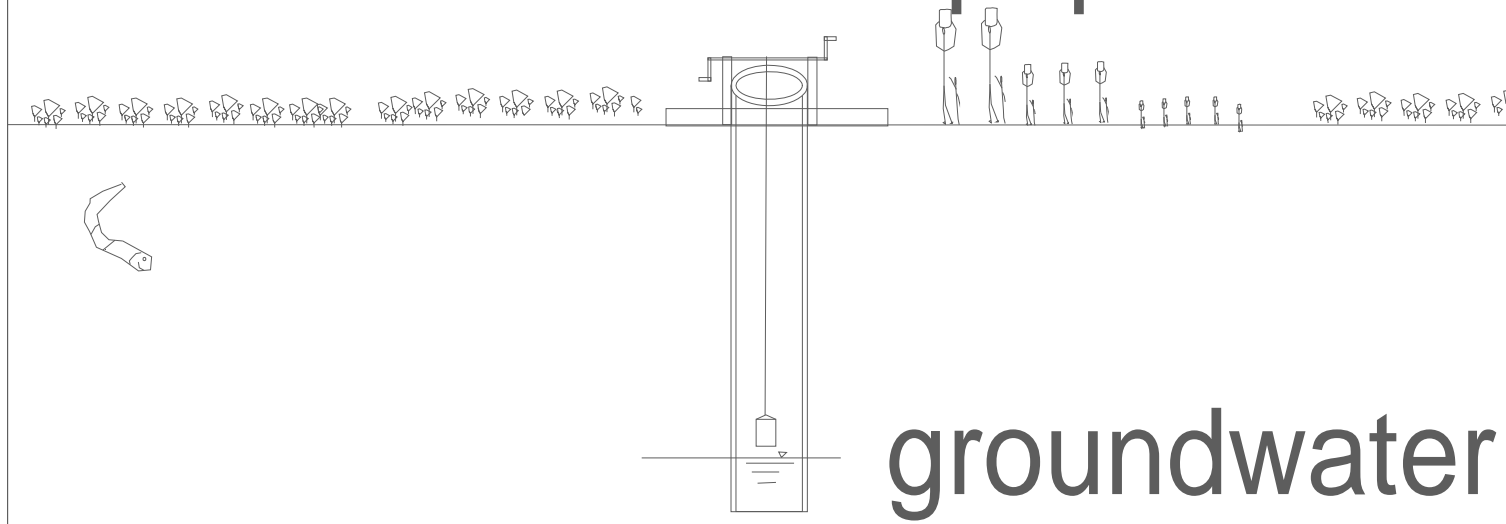
desertification !



(19)water shortage

(19) water shortage
large

well population

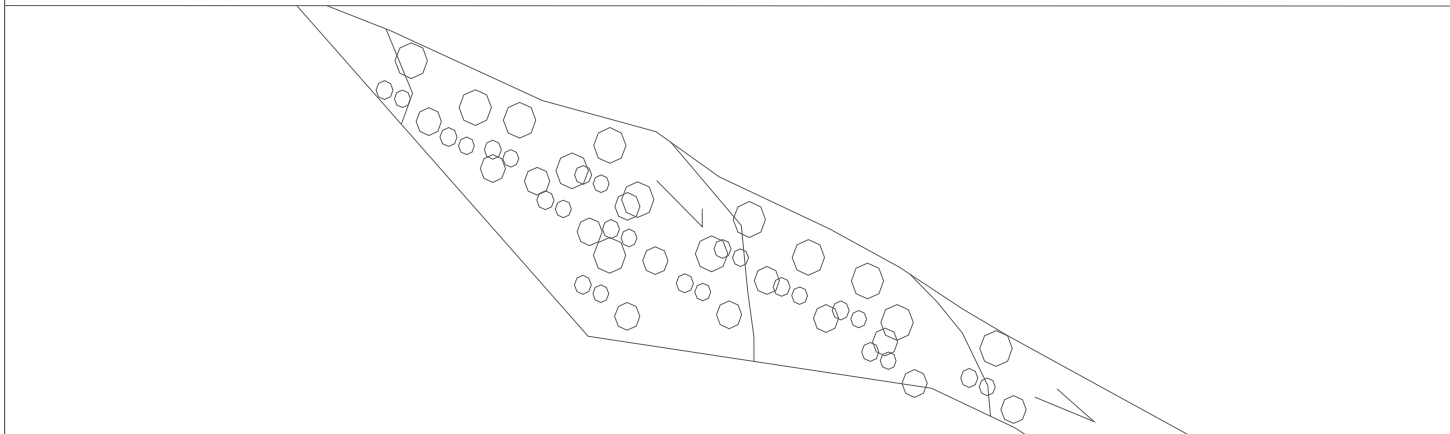


(20)soil erosion

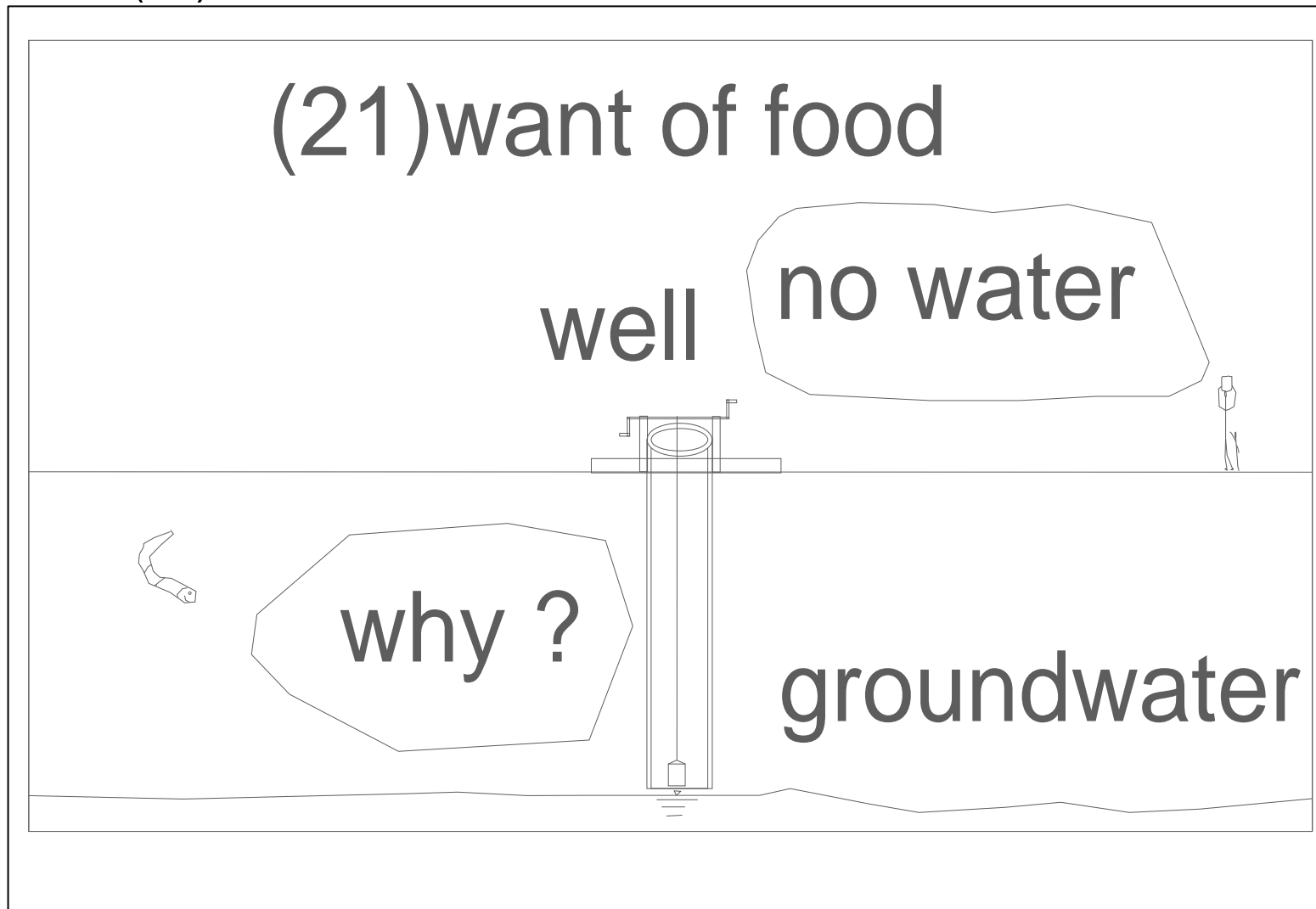
(20) soil erosion



fertilizer(rich soil) > poor soil



(21)want of food



(22)temperature rising

(22) temperature rising

sorry !



too much hot !



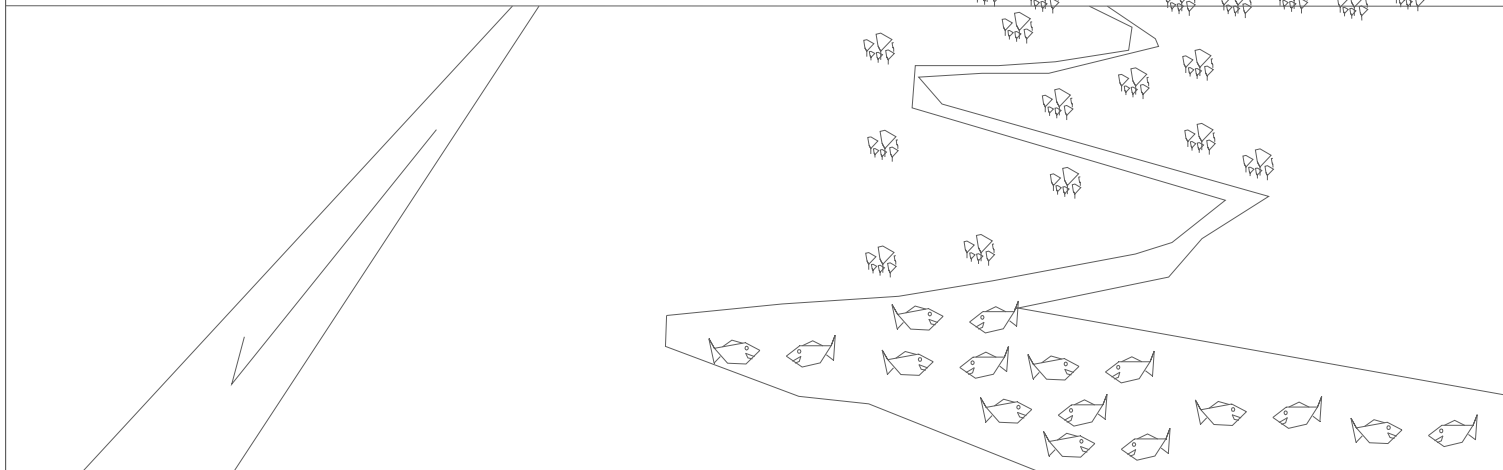
(23) river reclamation

(23) river reclamation

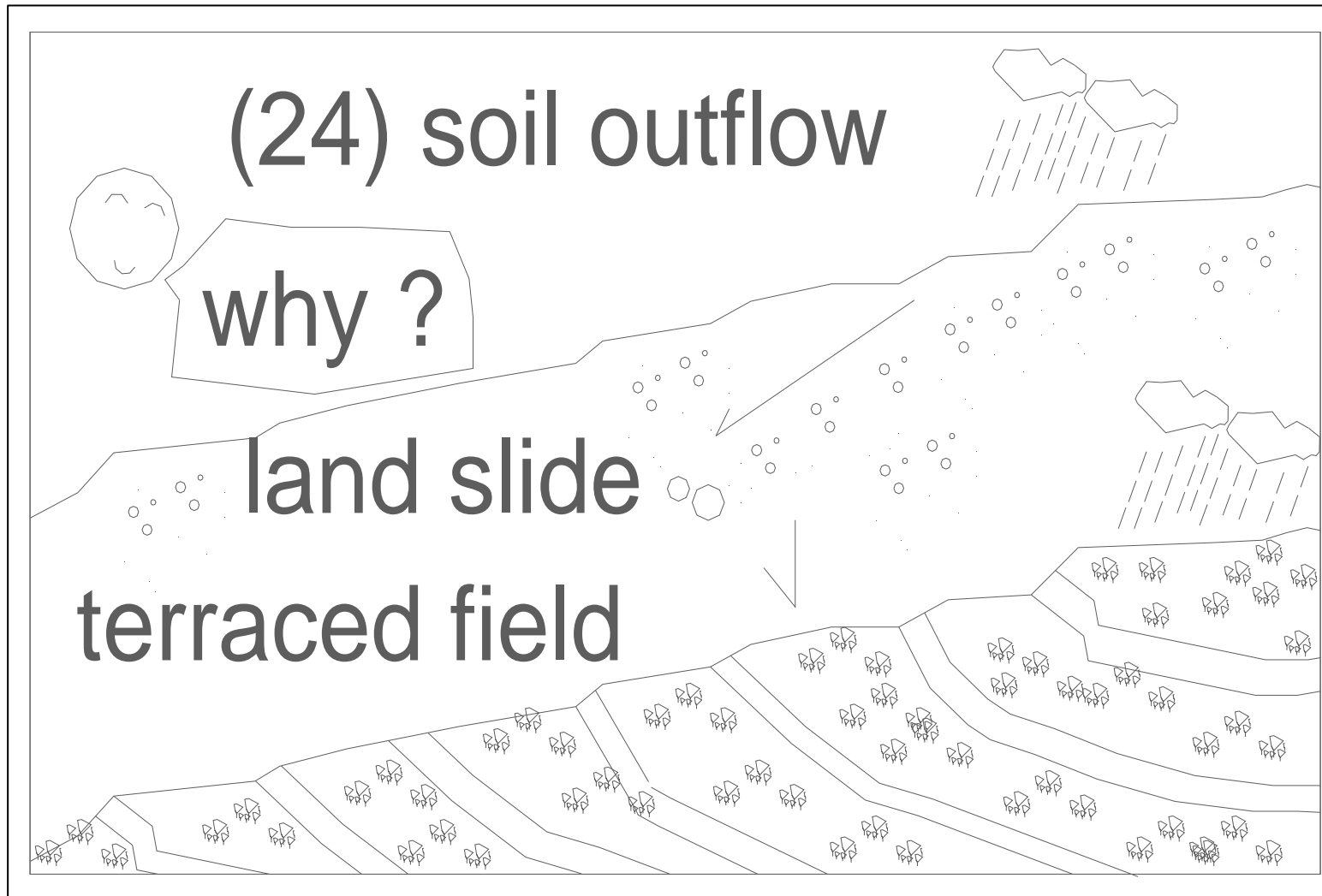


artificial river

natural river

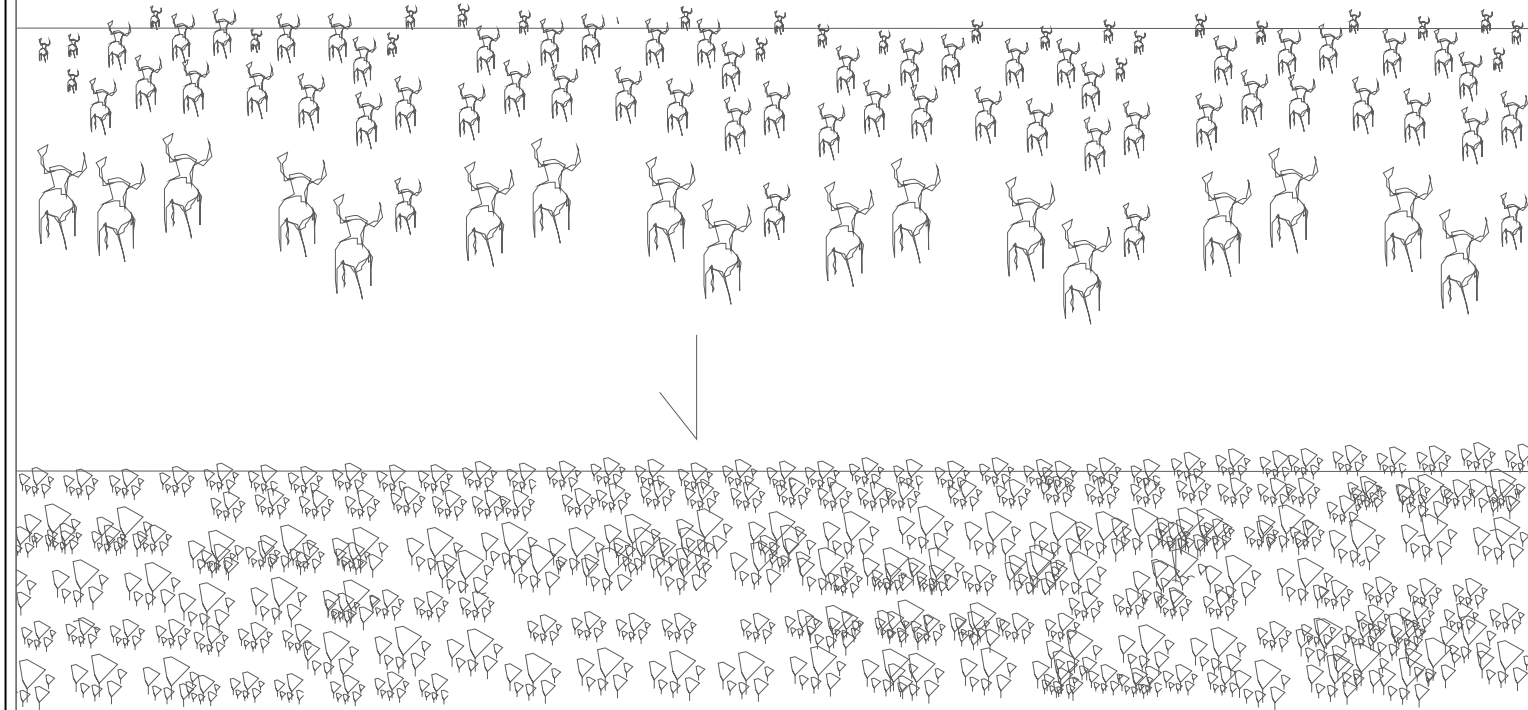


(24)soil outflow



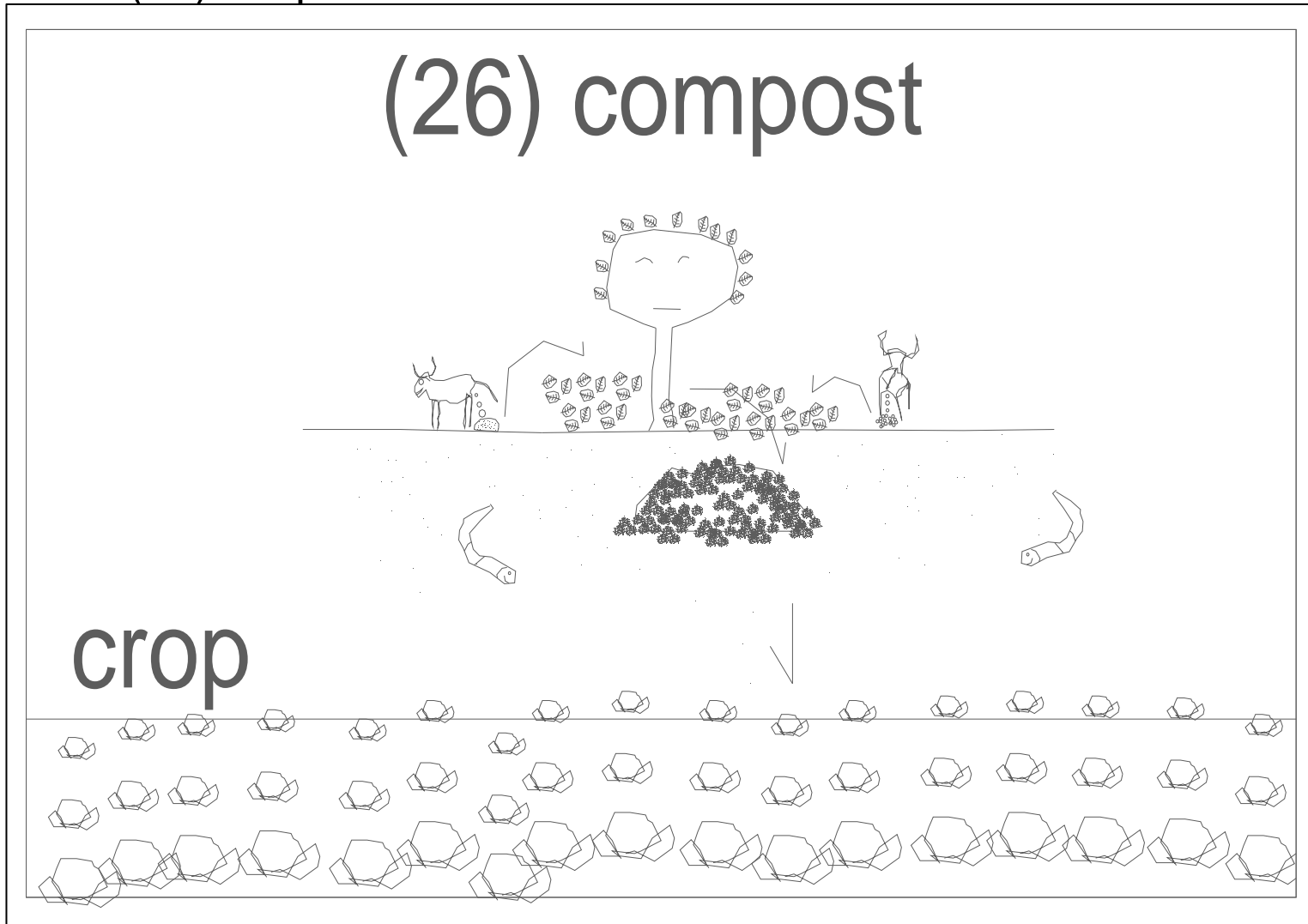
(25) pasturage prohibition

(25) pasturage prohibition stop !



(26)compost

(26) compost



(27)organic fertilizer

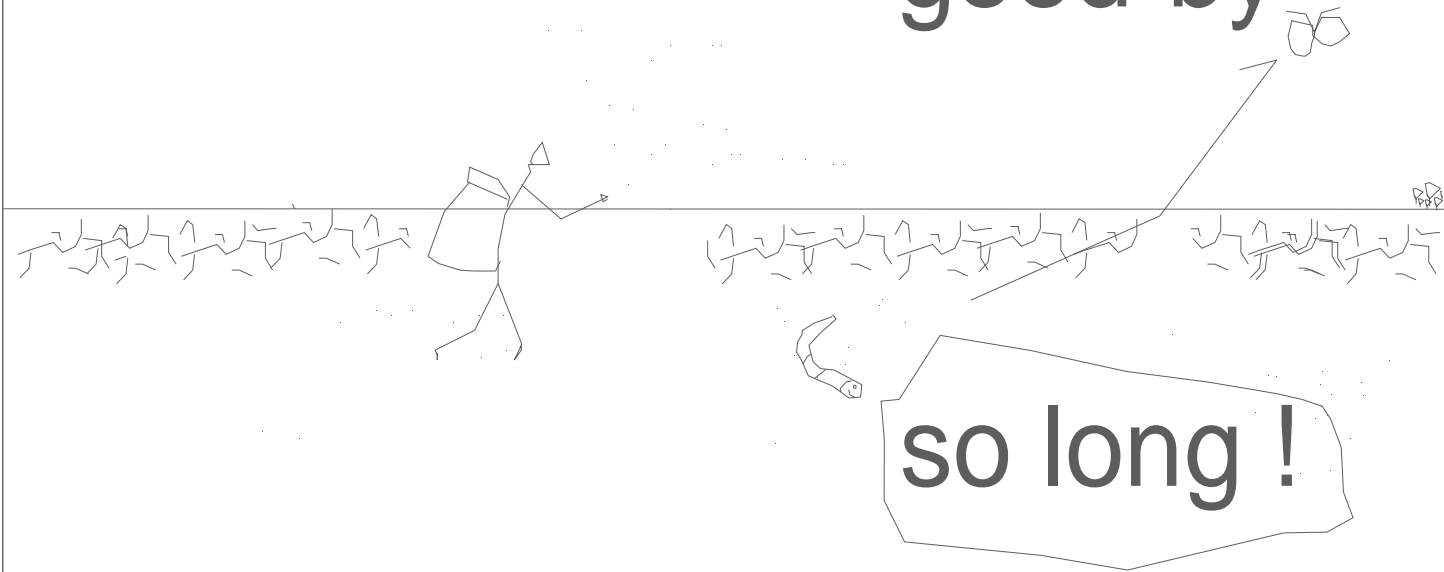
(27) organic fertilizer



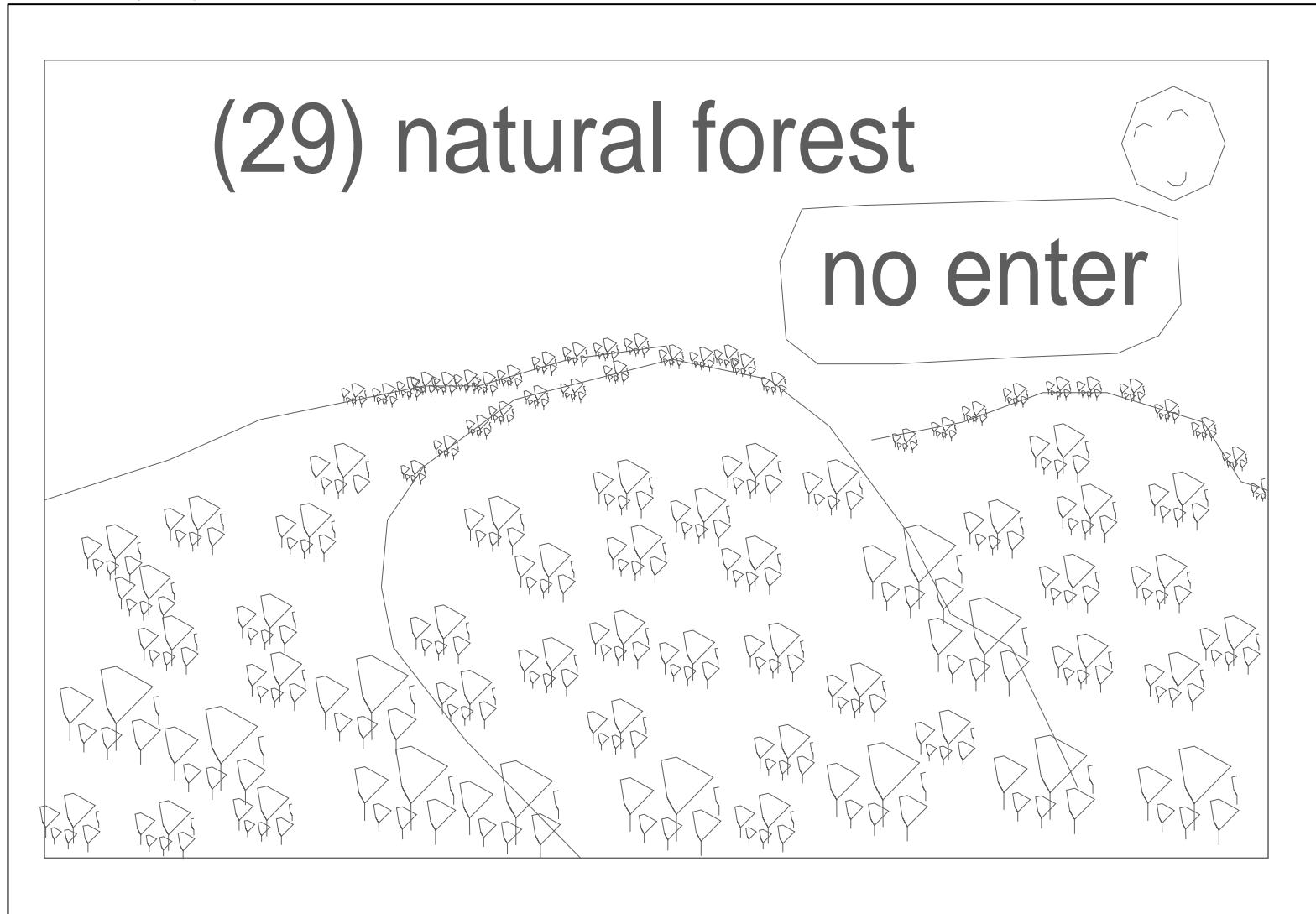
(28)chemistry fertilizer

(28) chemistry fertilizer

good-bye



(29) natural forest

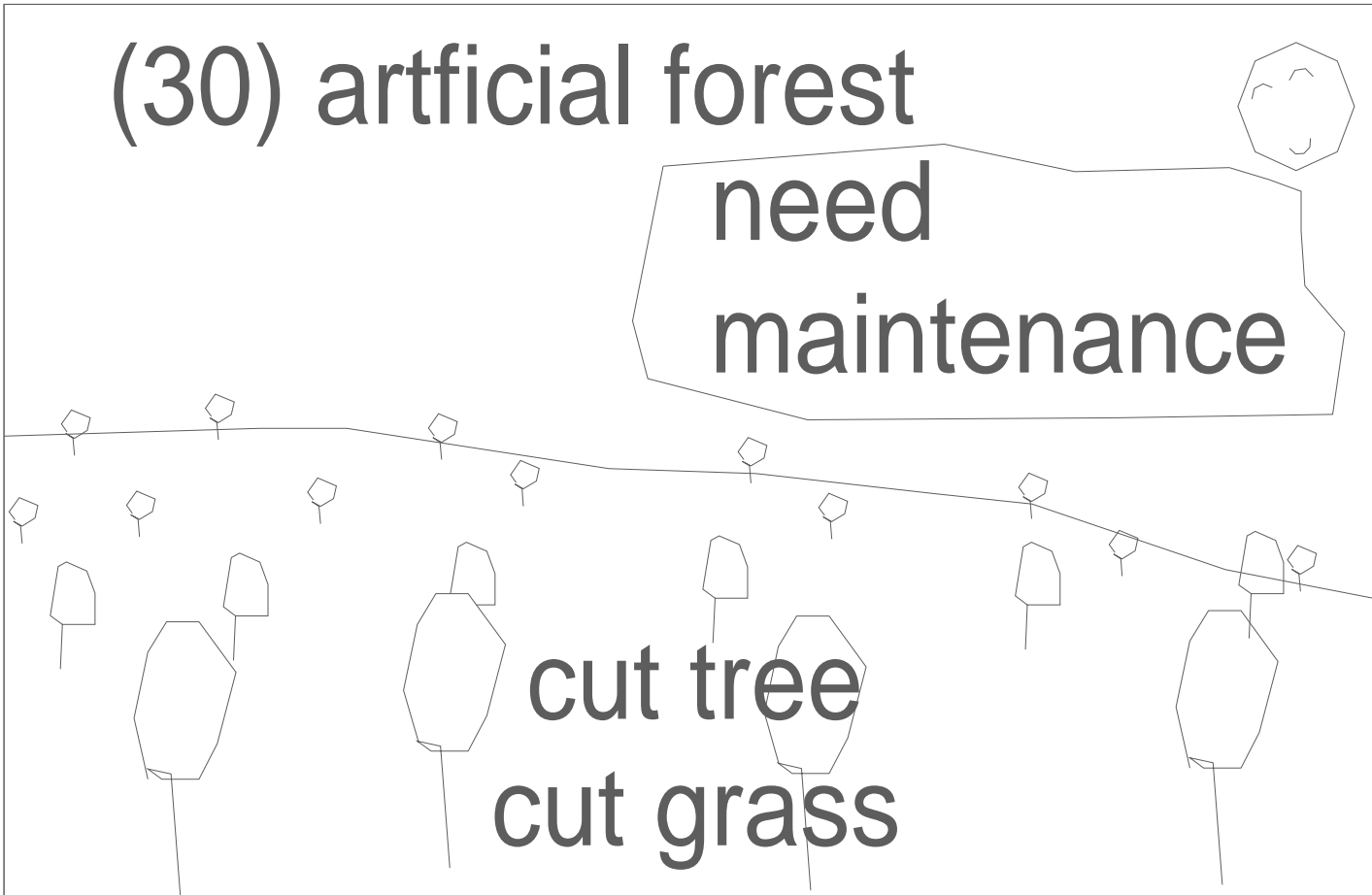


(30) artificial forest

(30) artificial forest

need
maintenance

cut tree
cut grass

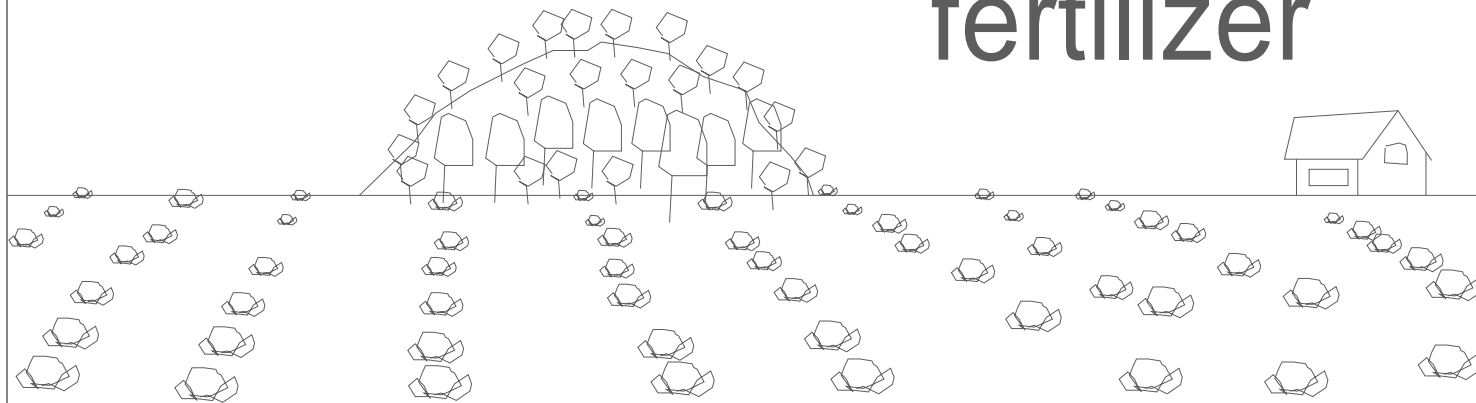


(31)satoyama

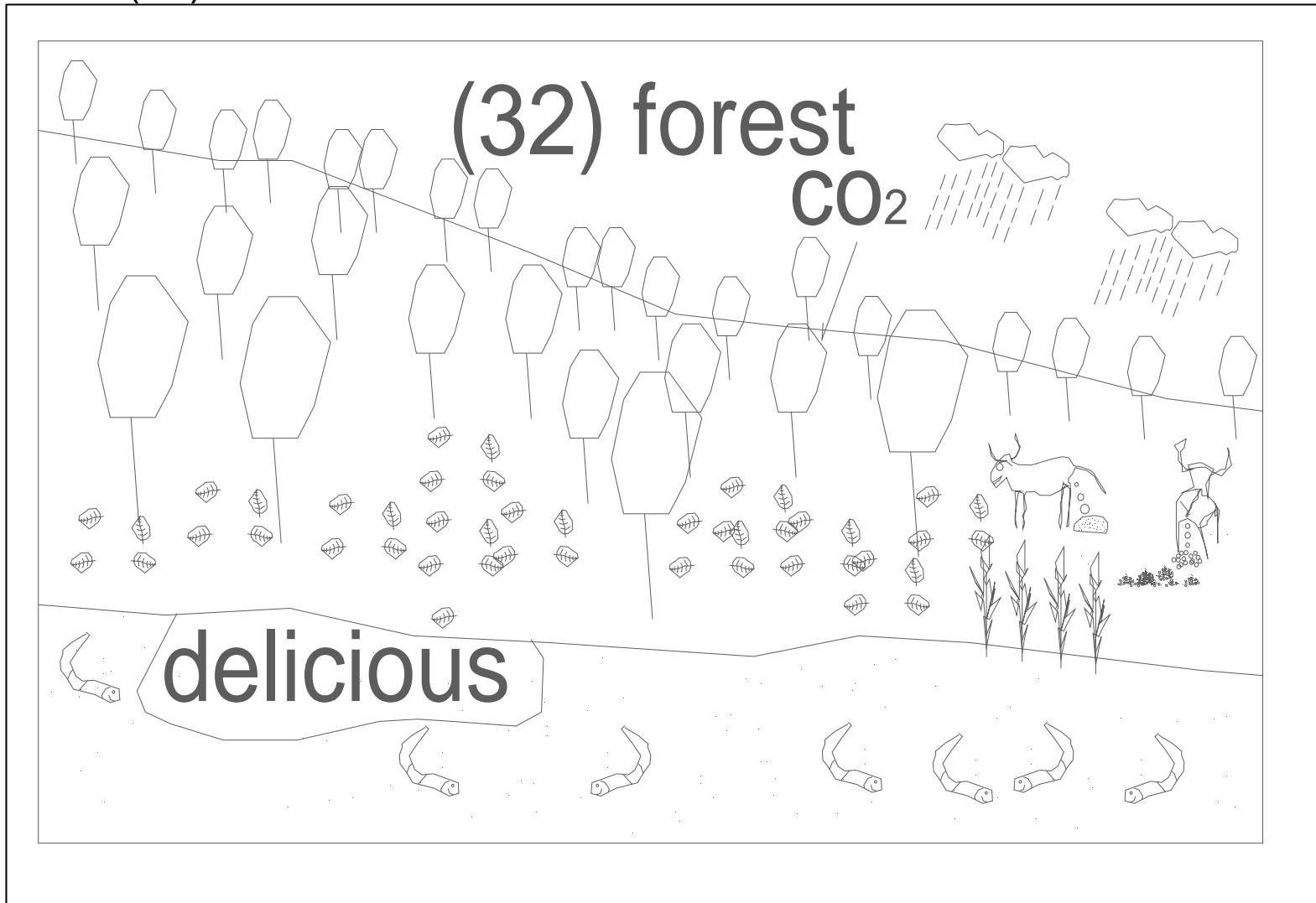
(31) satoyama



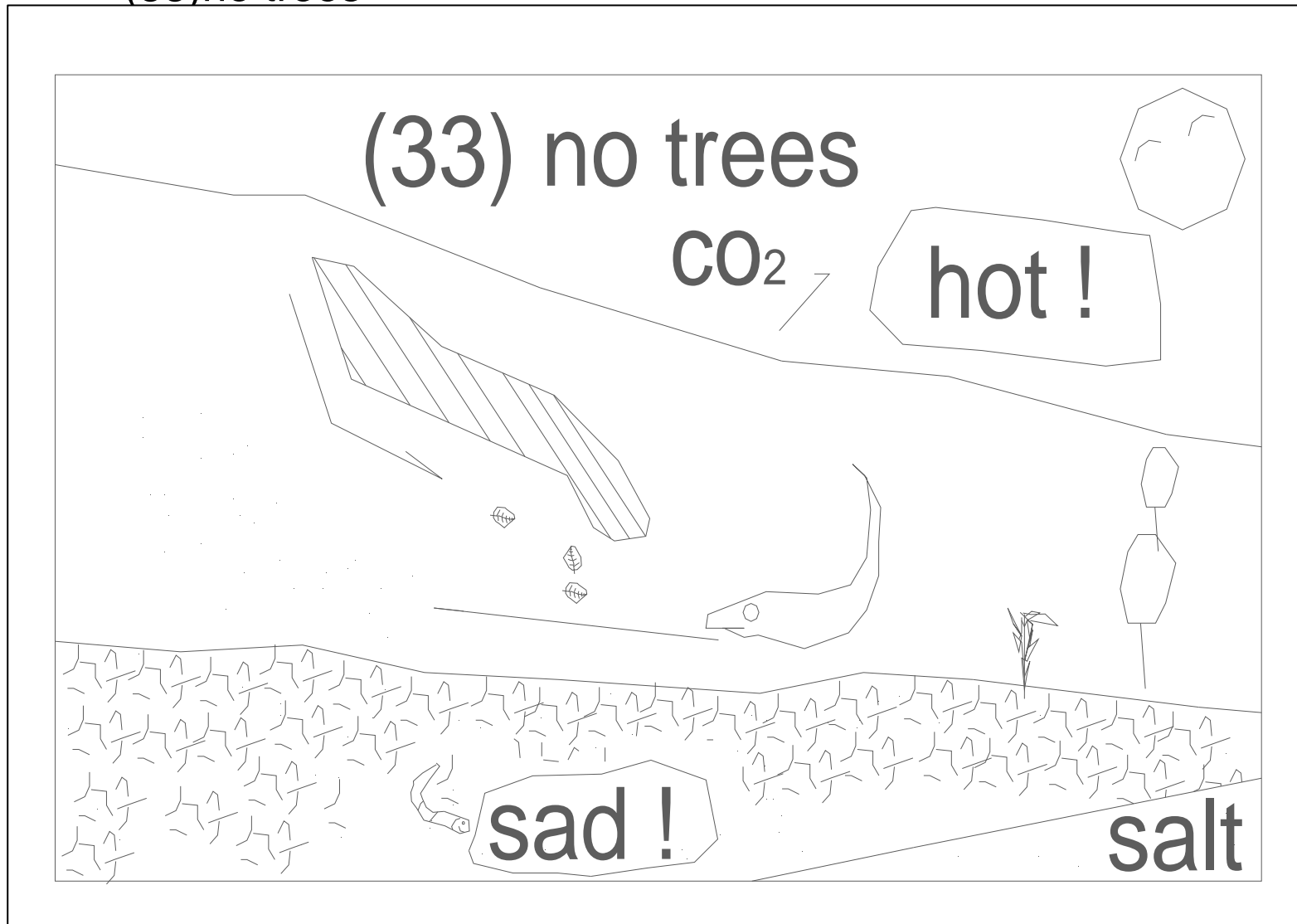
organic
fertilizer



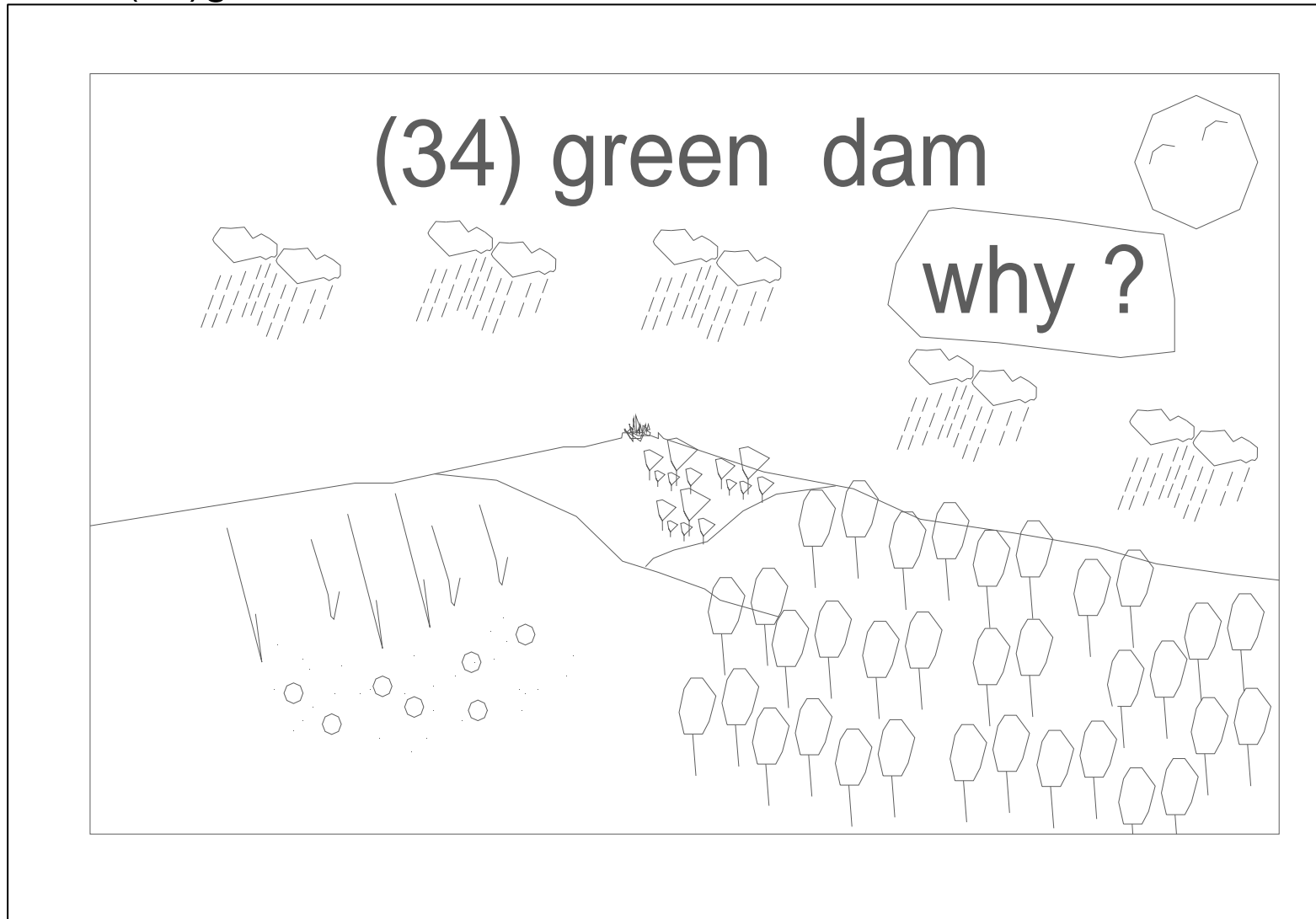
(32)forest



(33)no trees



(34)green dam



(35)reservoir

(35) reservoir

but !

dry !

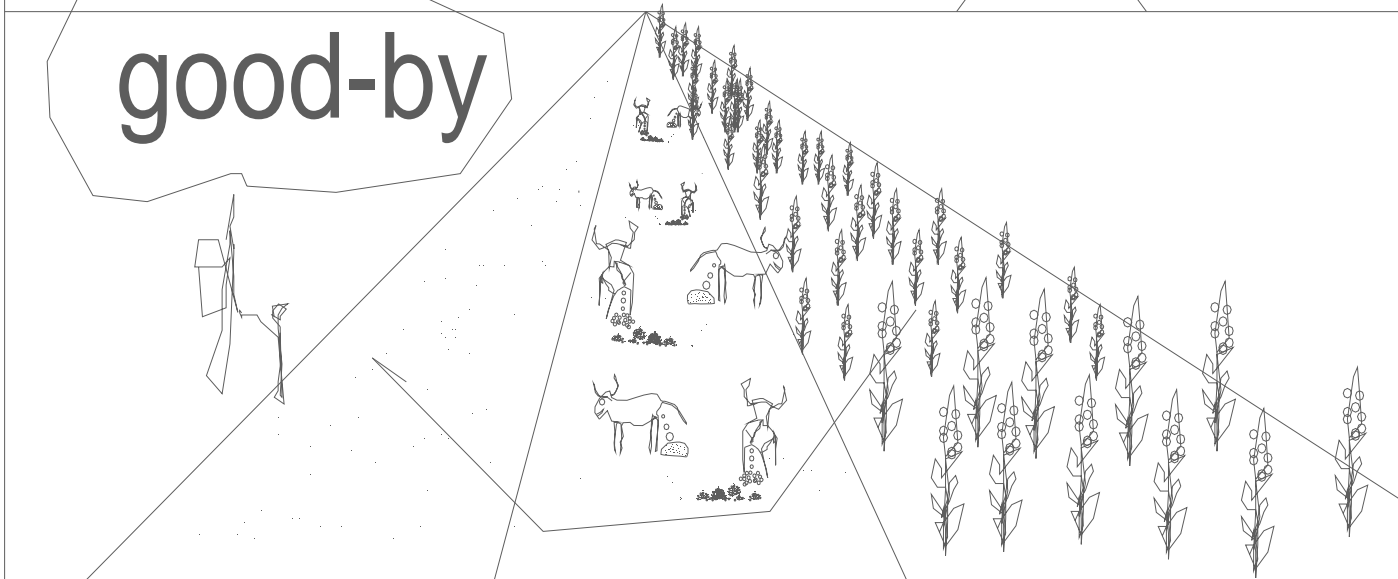


(36) rotate crops

(36) rotate crops

need rest

good-bye



(37) slash-and-burn agriculture

(37) slash-and-burn agriculture

far past

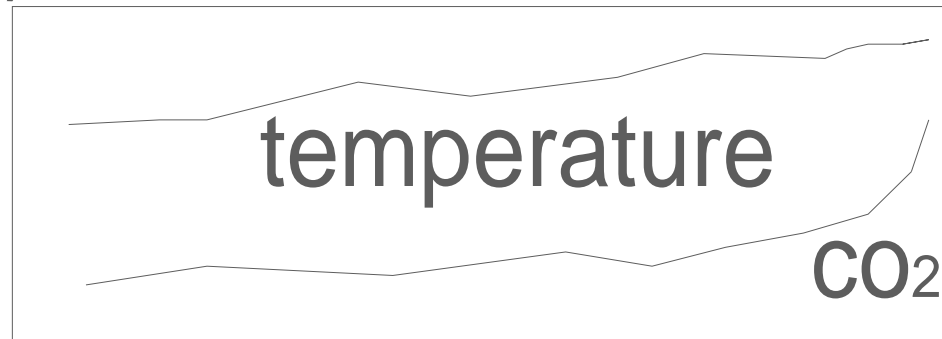
dad!

here!



(38)weak the earth

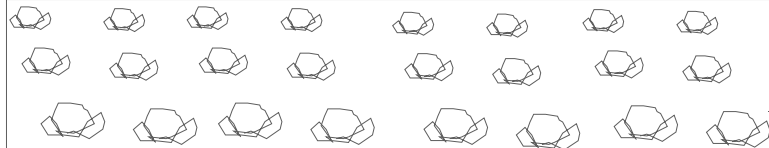
(38) weak the earth



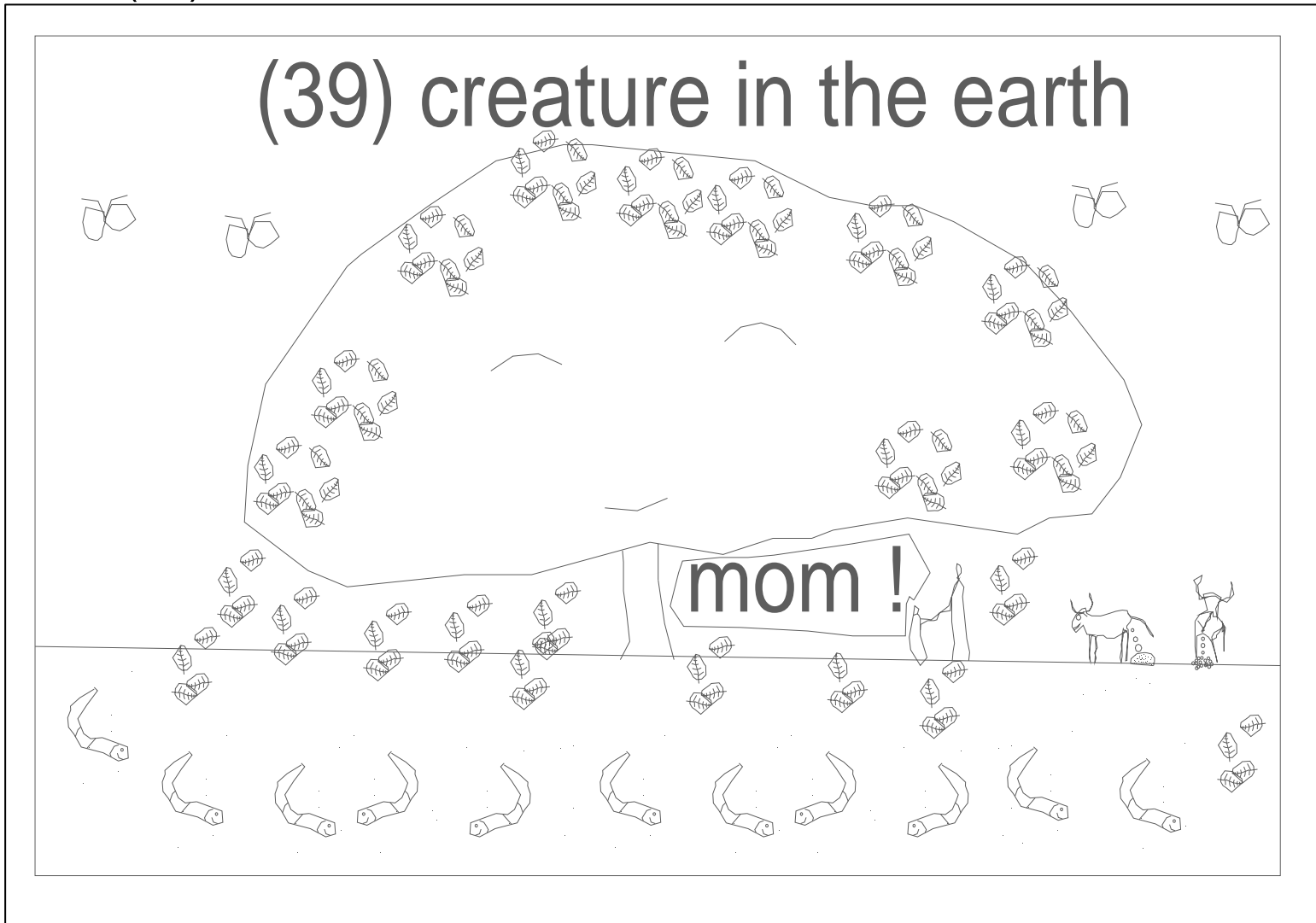
past

now

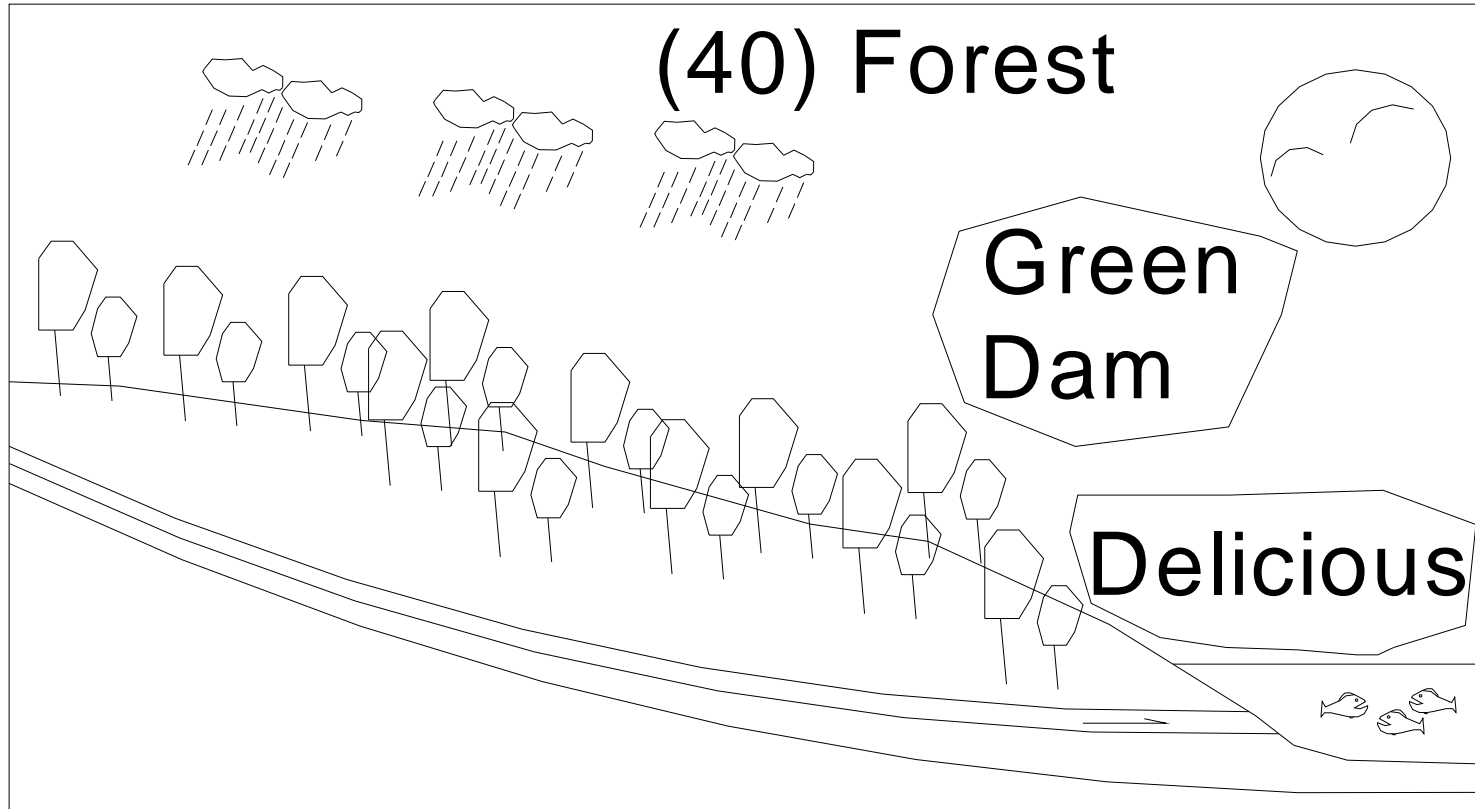
regret



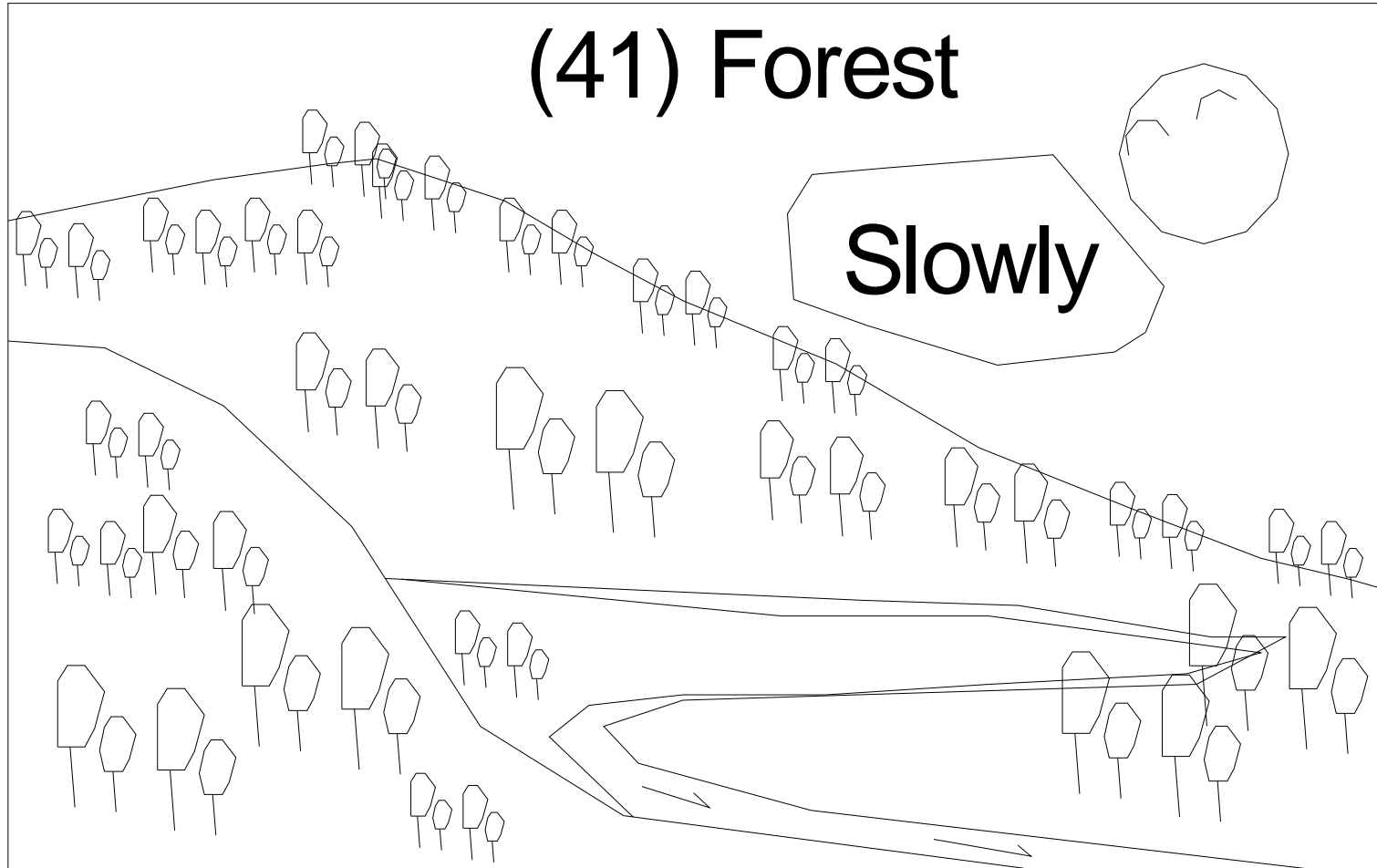
(39) creature in the earth



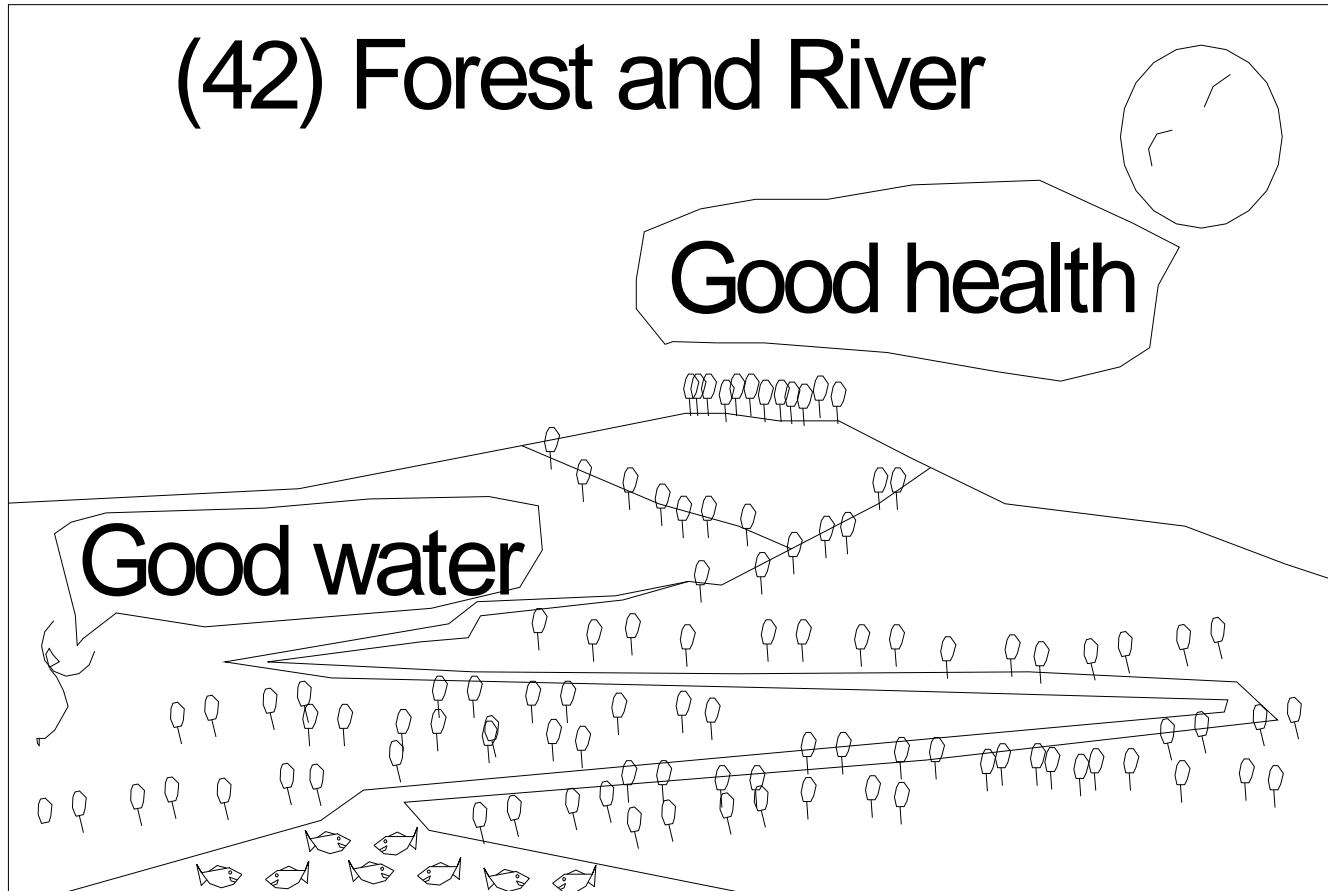
(40) Forest



(41) Forest



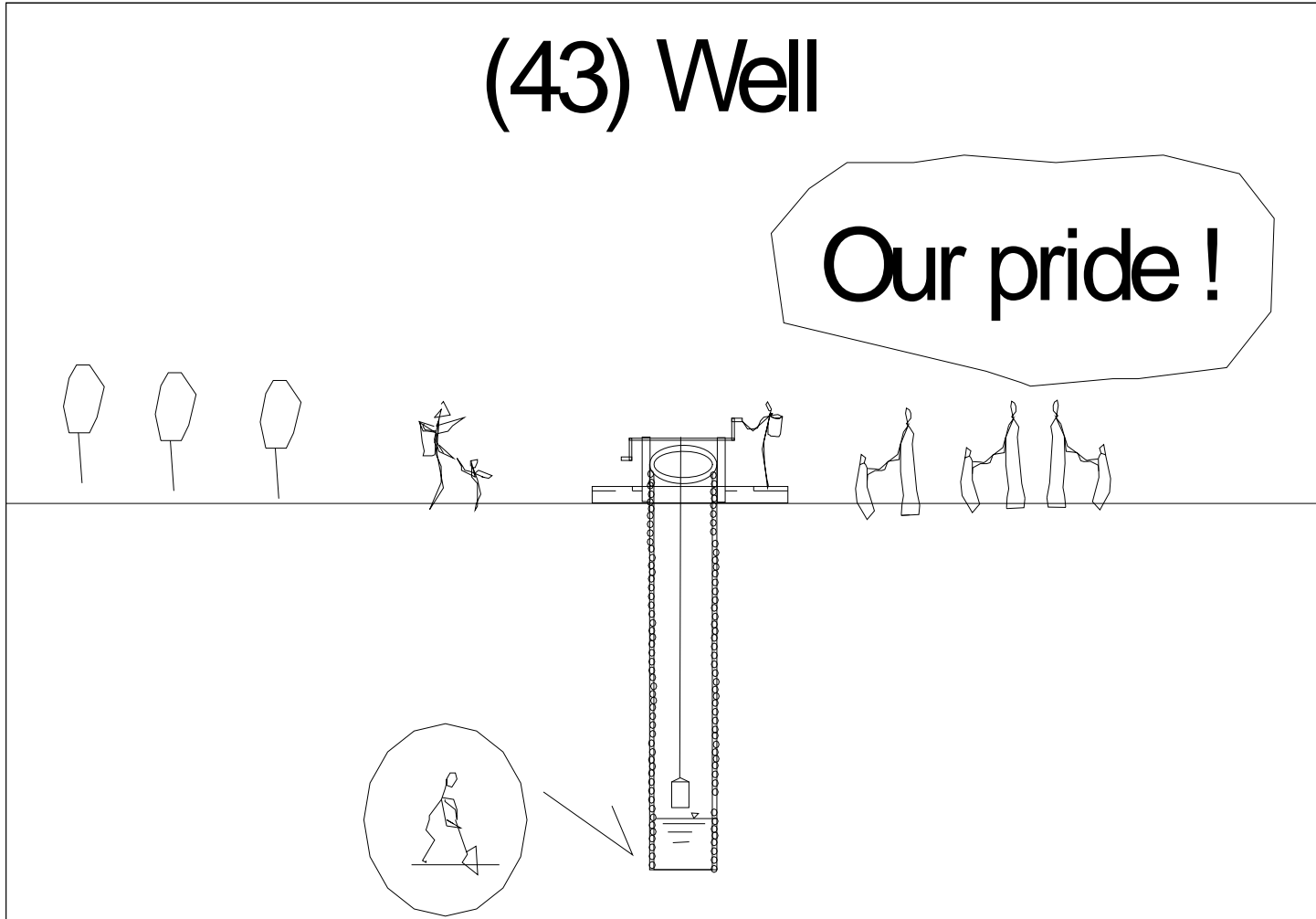
(42) Forest and River



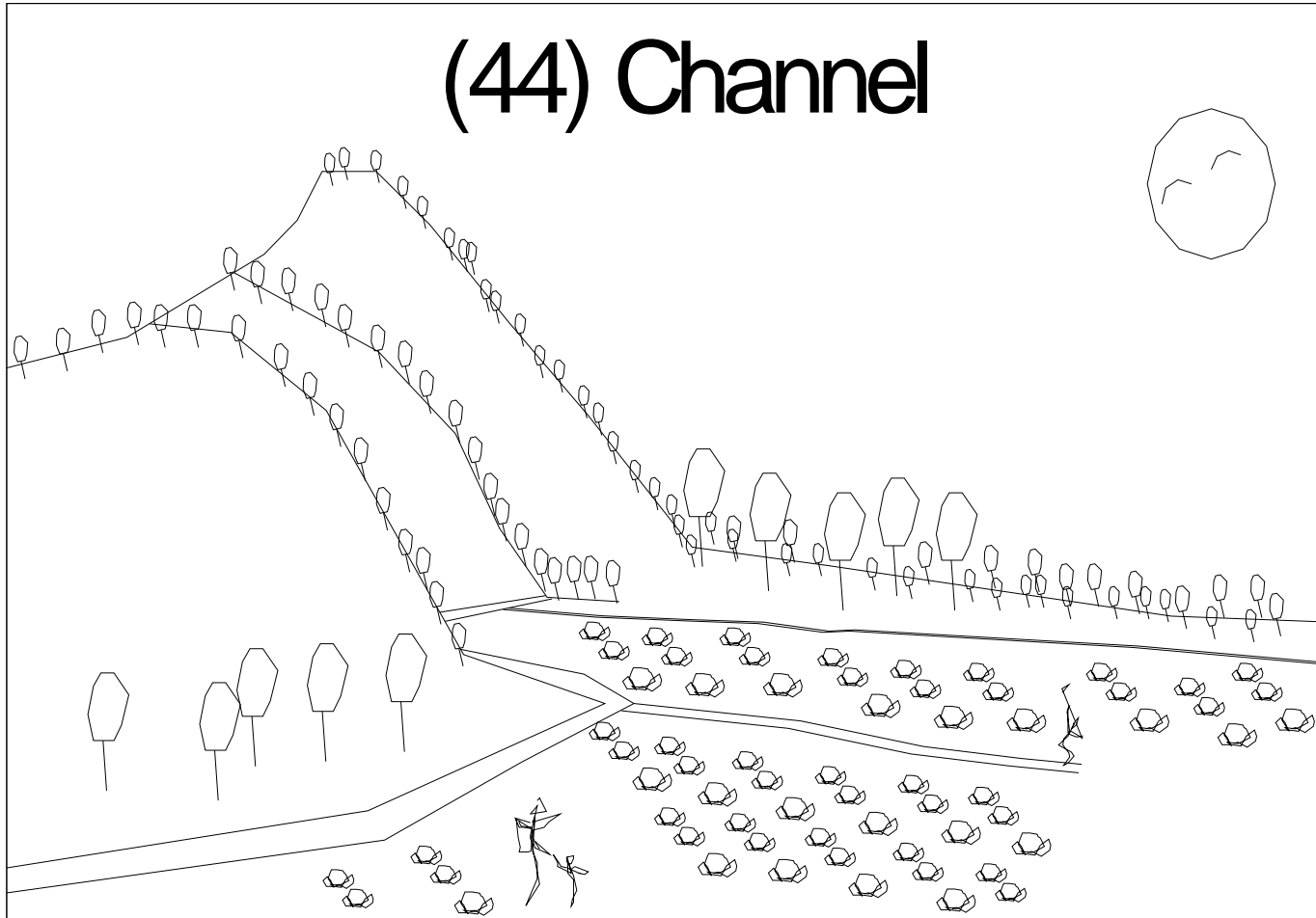
(43) Well

(43) Well

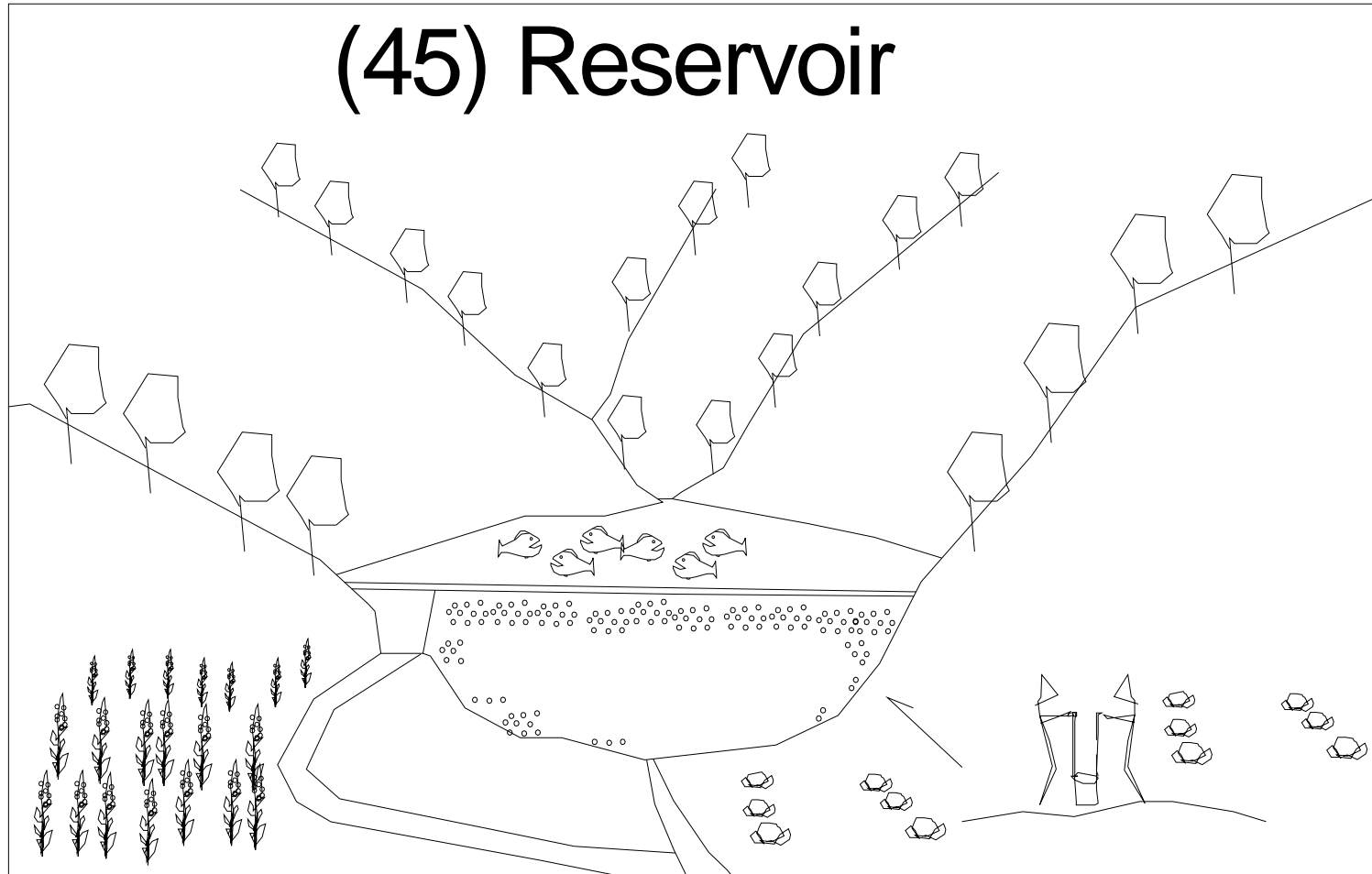
Our pride !



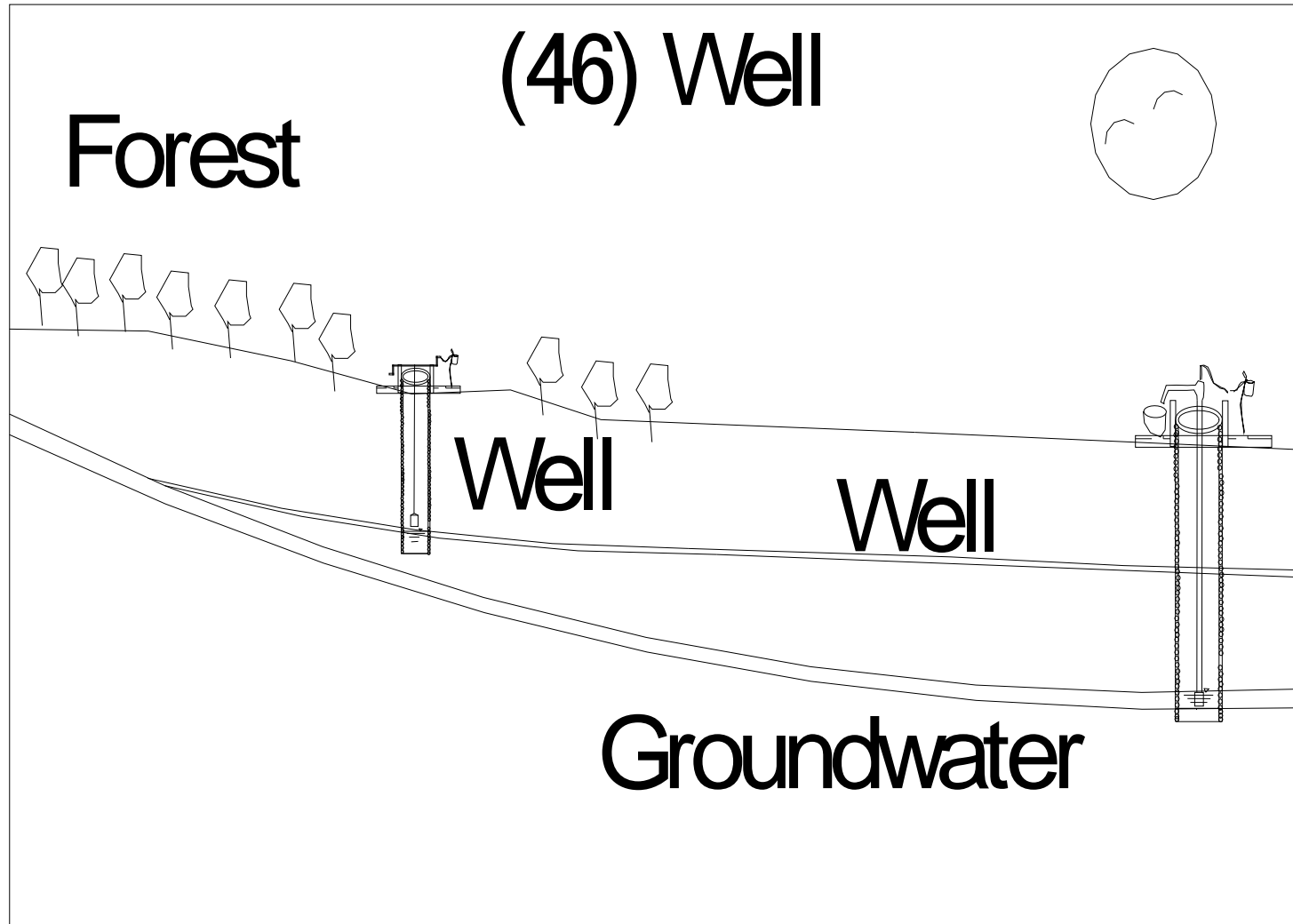
(44) Channel



(45) Reservoir

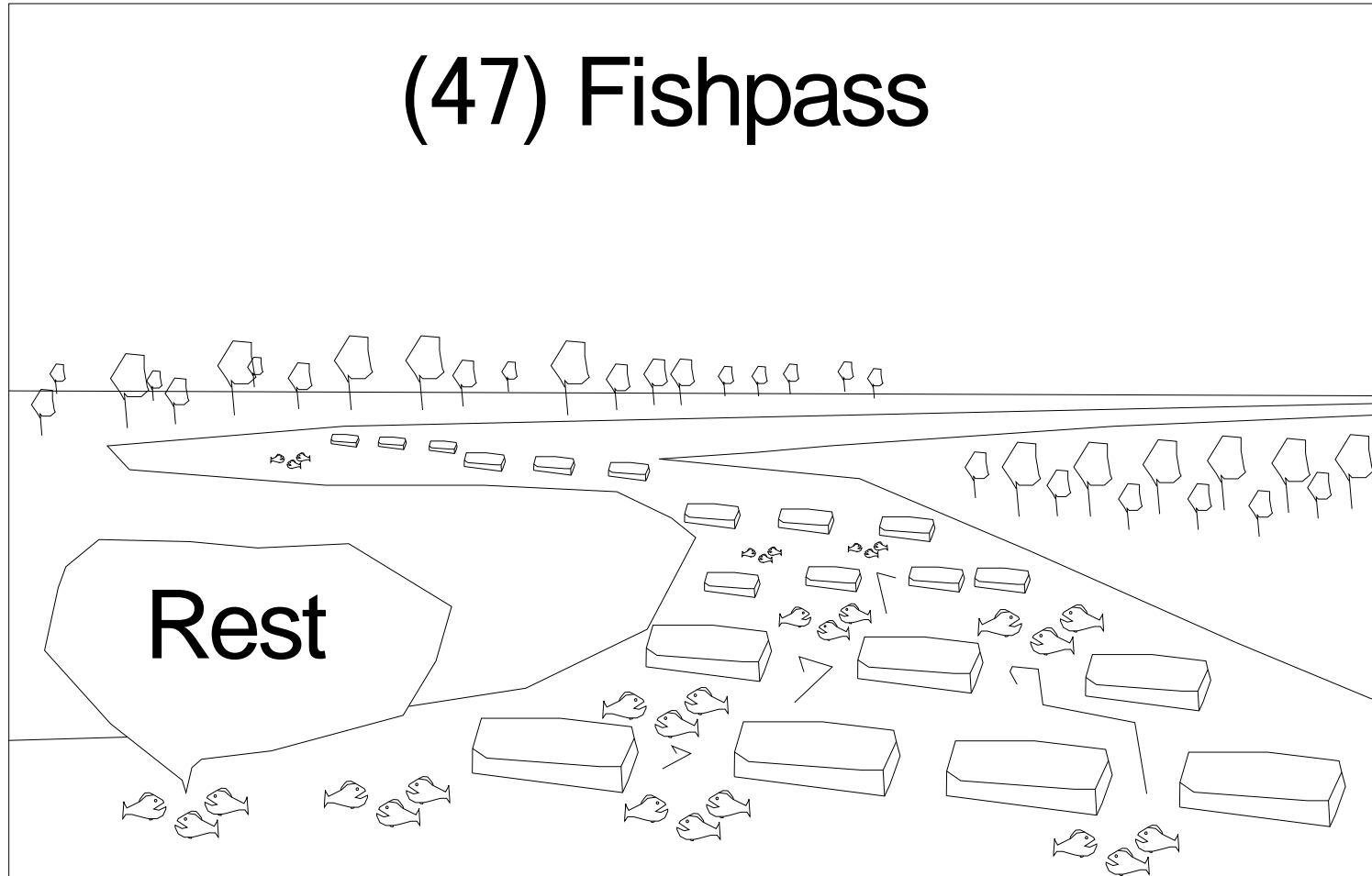


(46) Well



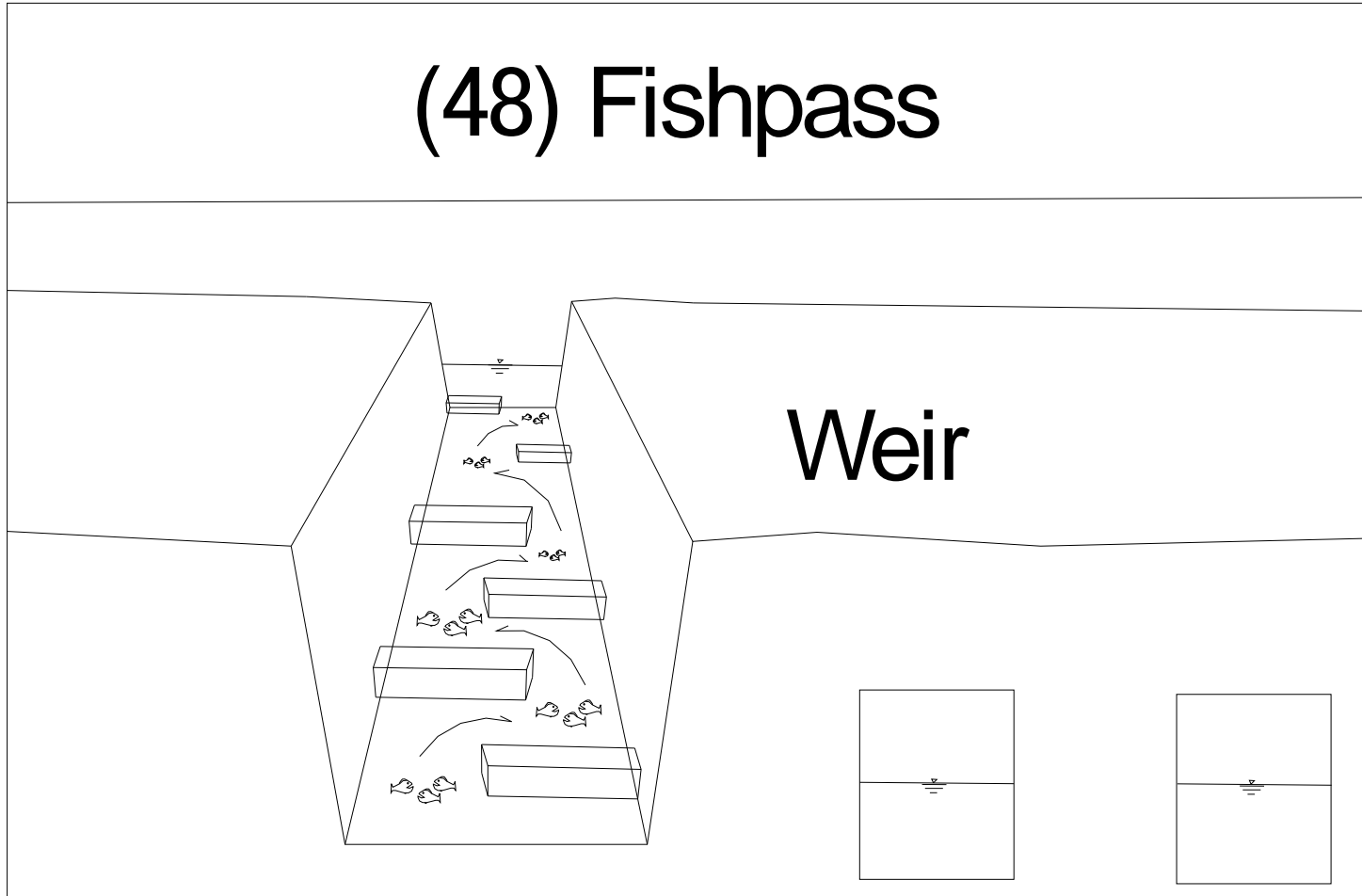
(47) Fishpass

(47) Fishpass



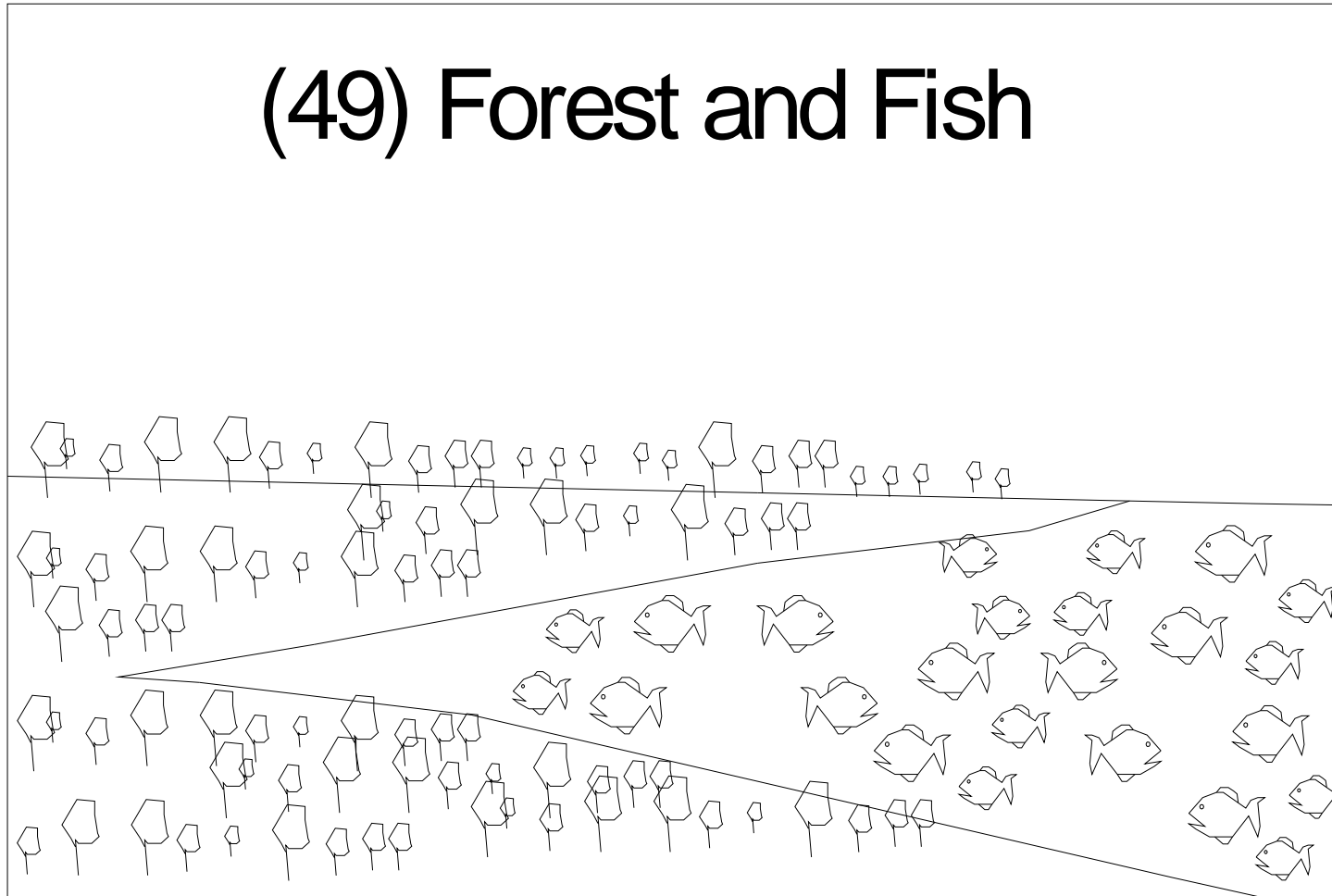
(48) Fishpass

(48) Fishpass



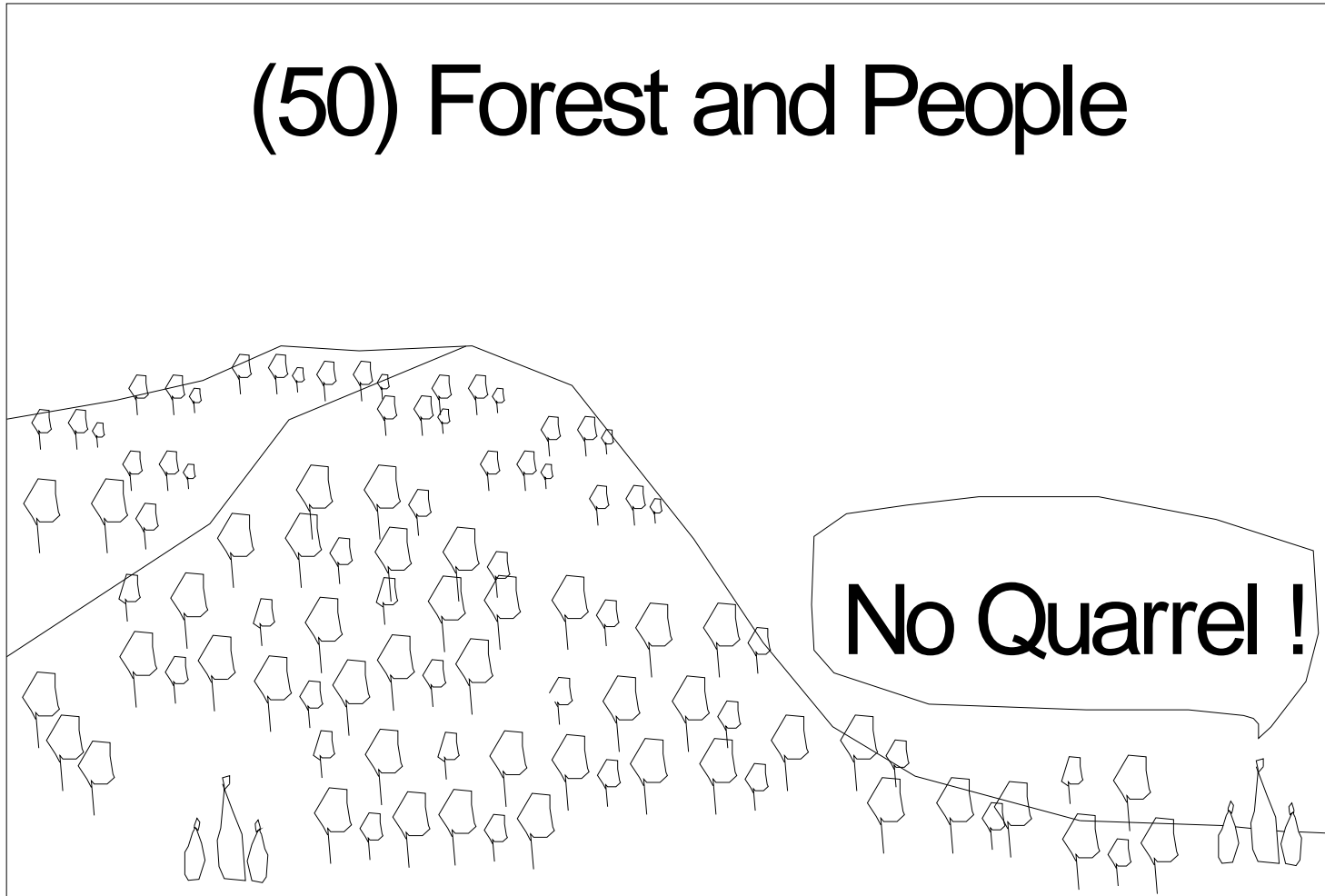
(49) Forest and Fish

(49) Forest and Fish



(50) Forest and People

(50) Forest and People

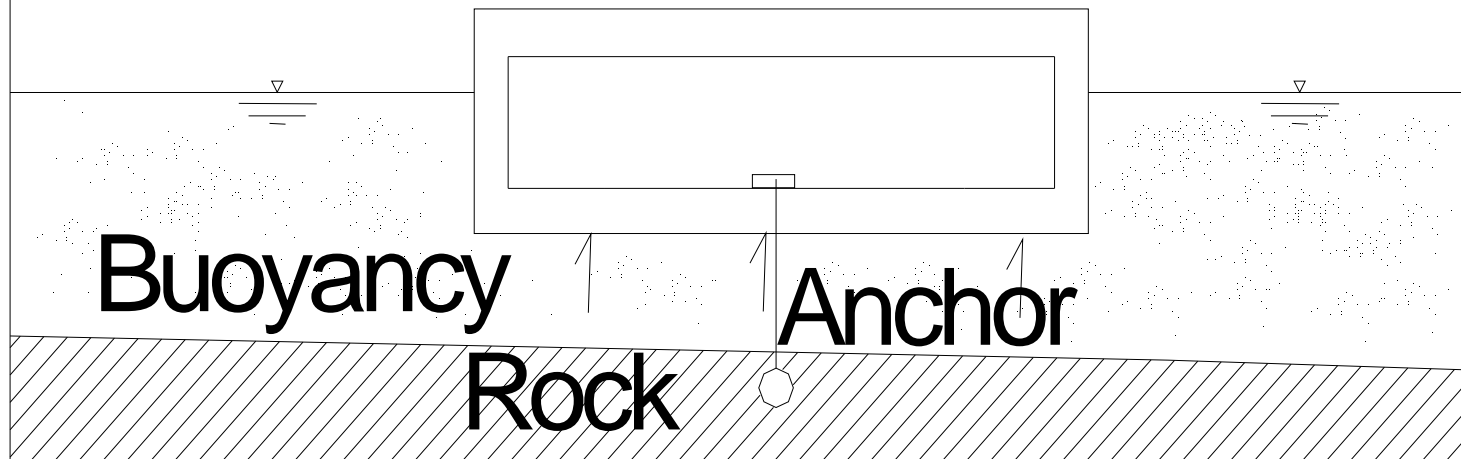


(51) Underground Water

(51) Underground Water

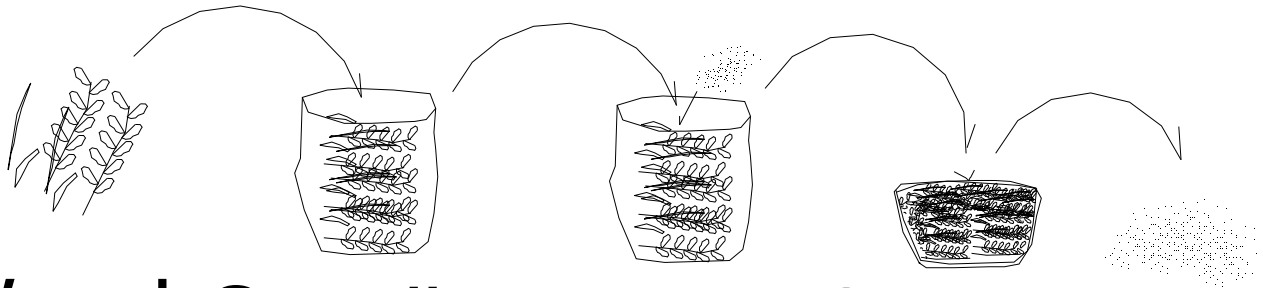
Groundsurface

Box Culvert



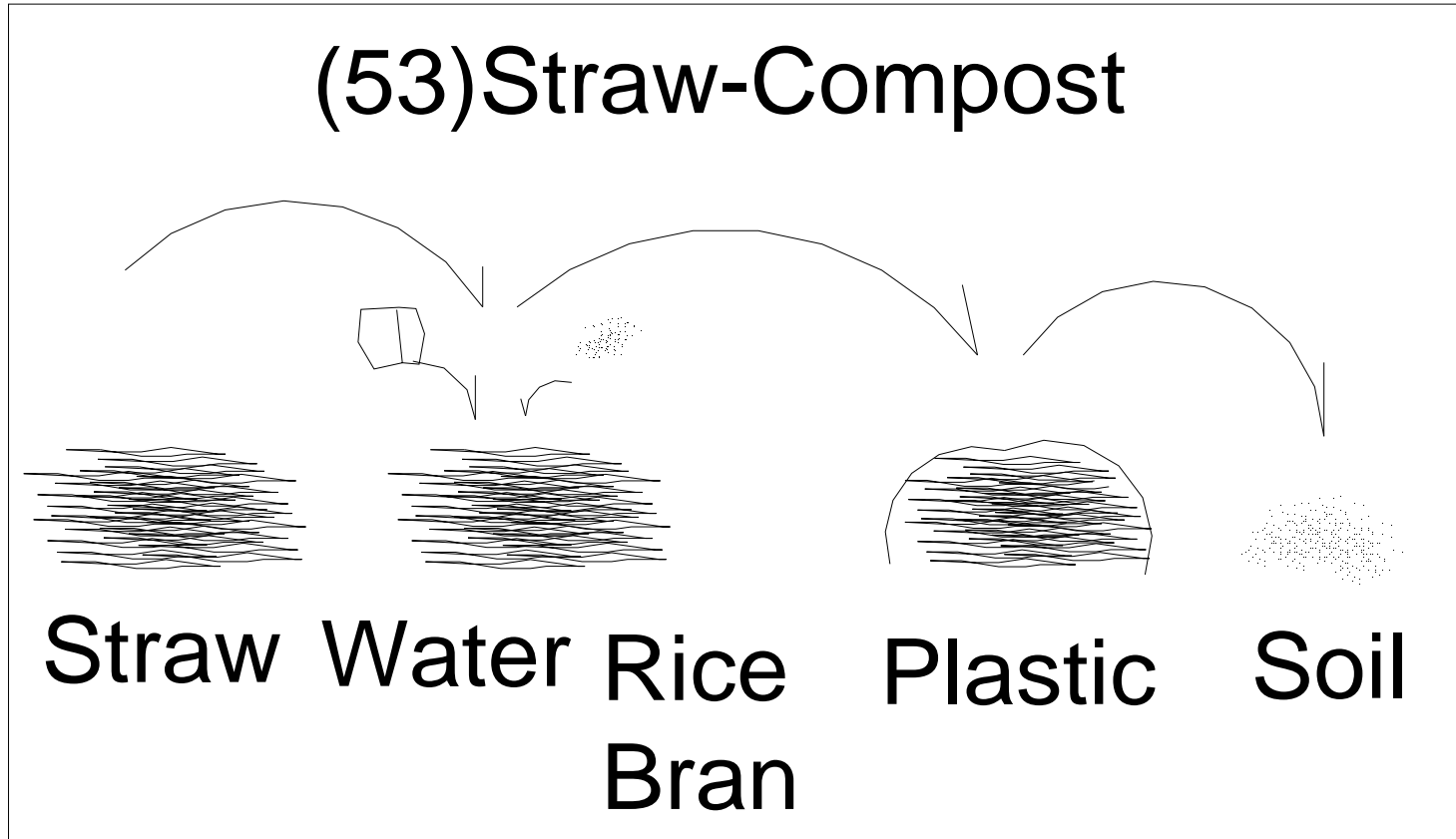
(52) Weed-Fertilizer

(52) Weed-Fertilizer

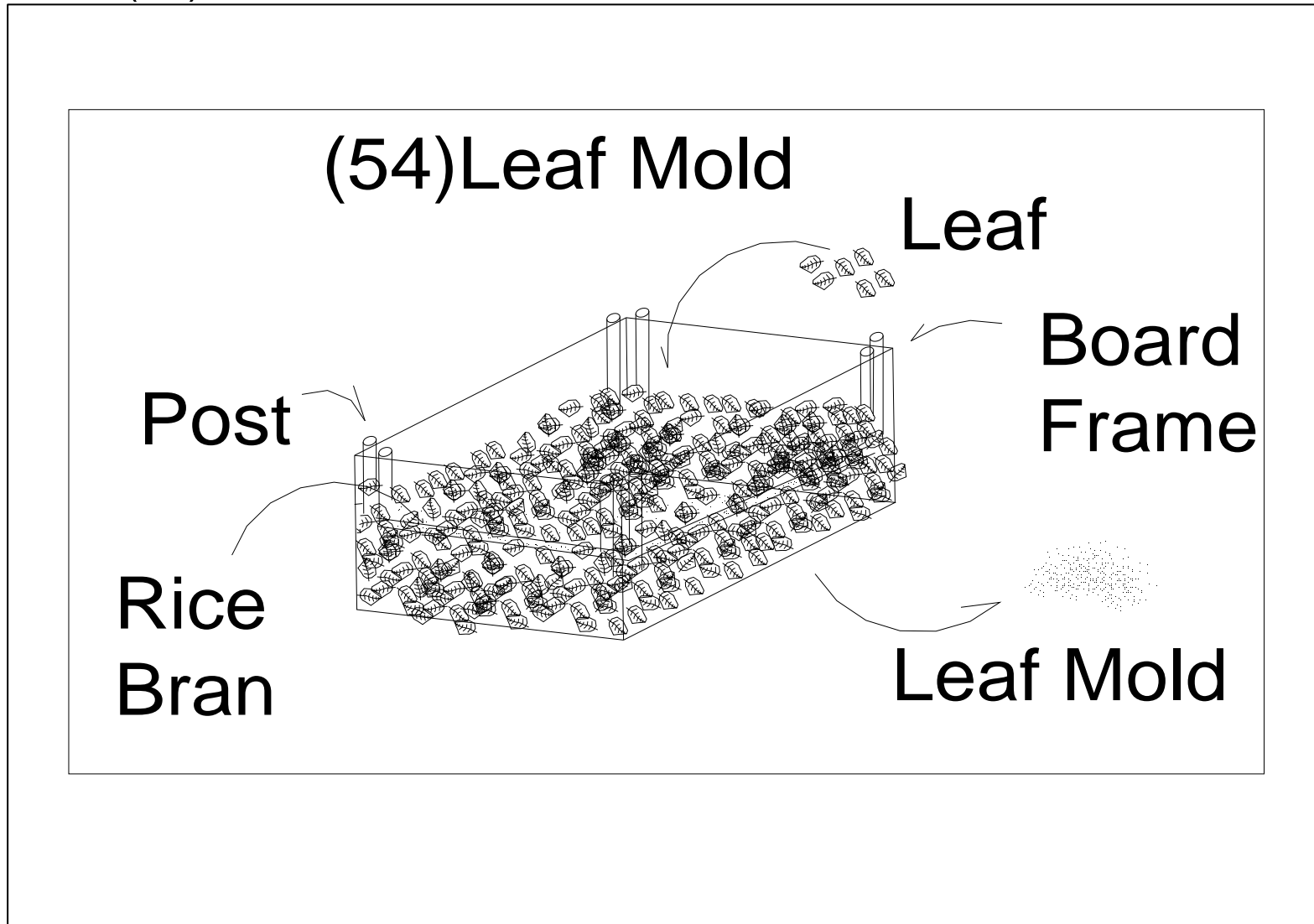


Weed Sandbag Rice String Soil
Bran

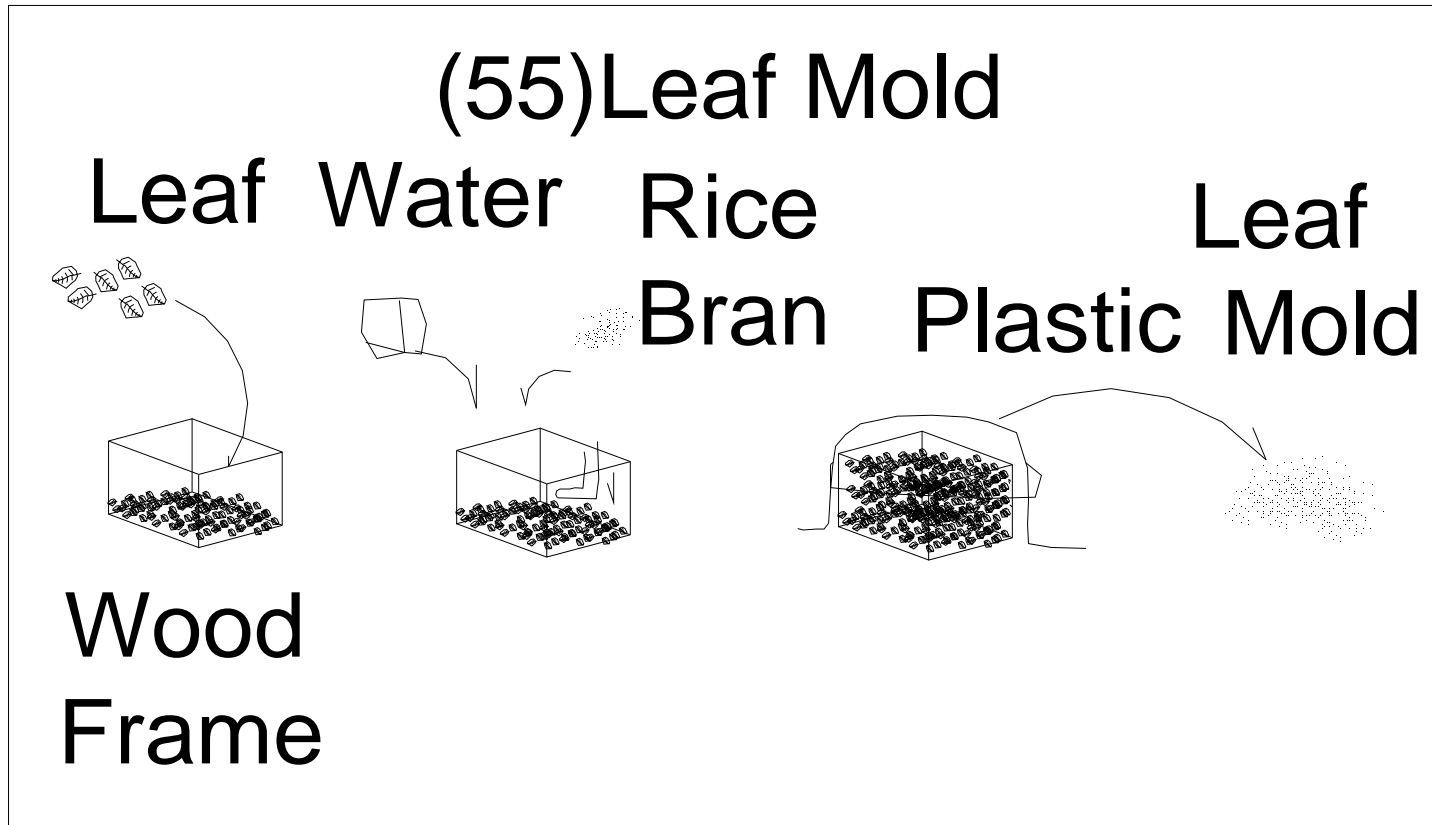
(53)Straw-Compost



(54) Leaf Mold



(55)Leaf Mold



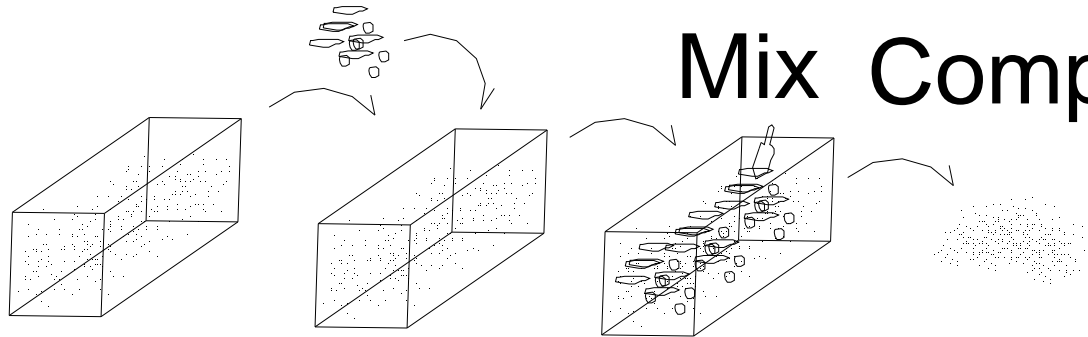
(56)Garbage Compost

(56)Garbage Compost

Soil

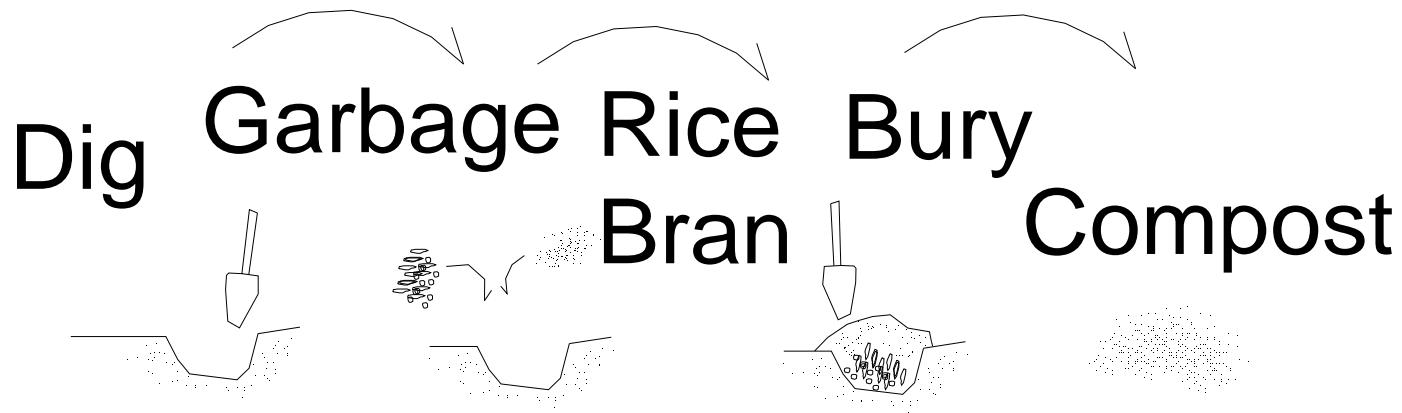
Garbage(20%)

Mix Compost



(57)Garbage Compost

(57)Garbage Compost

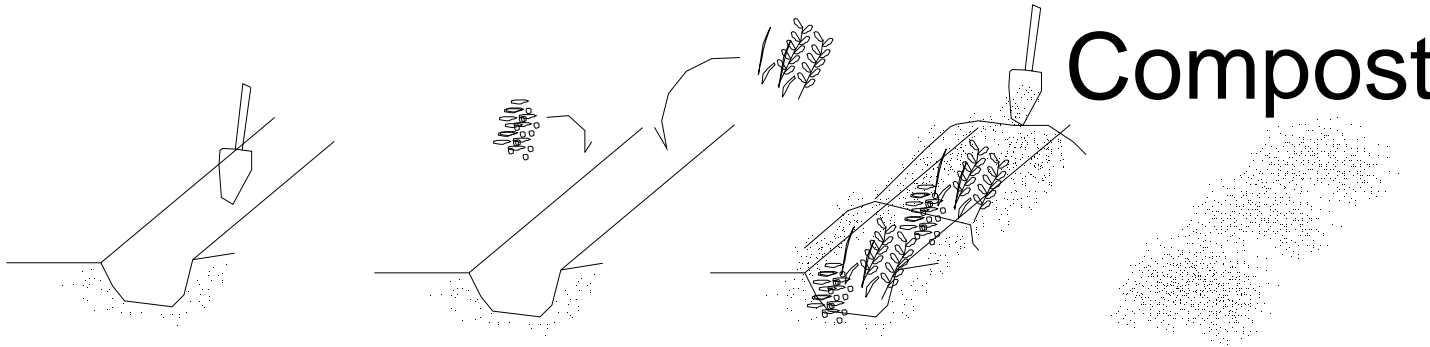


(58)Garbage,Weed -Compost

(58)Garbage,Weed -Compost

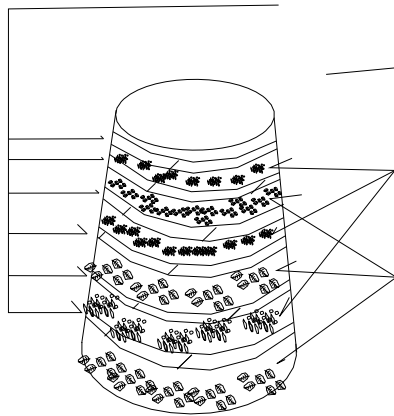
Dig Garbage Weed Bury

Compost

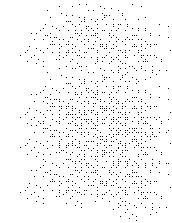


(59) Garbage Liquid Fertilizer

(59) Garbage, Leaf and Soil
Soil -Compost



Garbage+ Rice
Fallen Bran
Leaves



Compost

(60)Vegetation Ash

(60)Vegetation Ash

Dry
Weed



Dry
Leaf



Burn



Vegetation
Ash



Stop Vermin



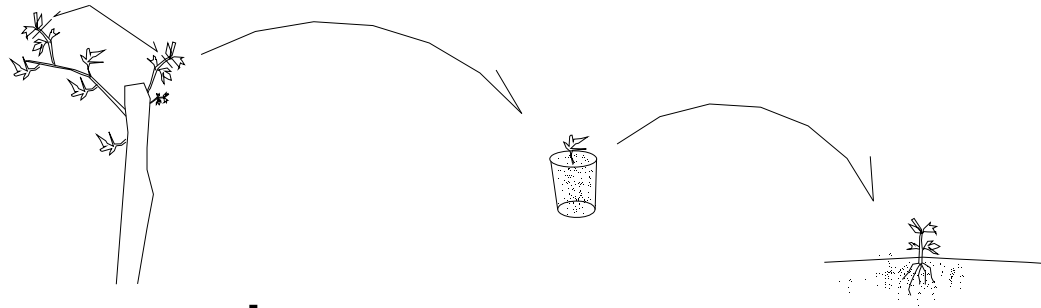
good
-bye



(61)Graft

(61)Cutting

Cut

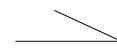


Chrysanthemum

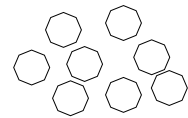
(62)Organic Fertilizer(1)Natural

(62)Organic Fertilizer(1)Natural
Soybean

Rapeseed



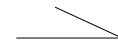
Oil Cake



Squeeze



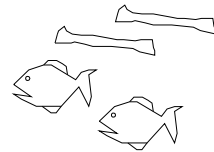
Bone Meal



Fermen

Fish Bone

Oil Cake



Fermentation

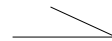


(63)Organic Fertilizer(2) Natural

(63)Organic Fertilizer(2) Natural

Animal Bone — Bone Meal

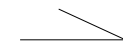
Steam, Grinder



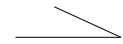
(64)Organic Fertilizer(3) Natural

(64)Organic Fertilizer(3) Natural

Chicken
Droppings



Dry



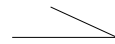
Dry
Chicken
Droppings



(65)Organic Fertilizer(4) Natural

(65)Organic Fertilizer(4) Natural

Grass Natural
Branch Vegetation
Leaves Burn Ash

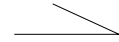


(66)Organic Fertilizer(5) Natural

(66)Organic Fertilizer(5) Natural

Shell

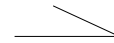
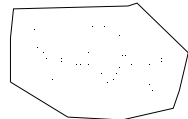
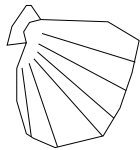
Limestone



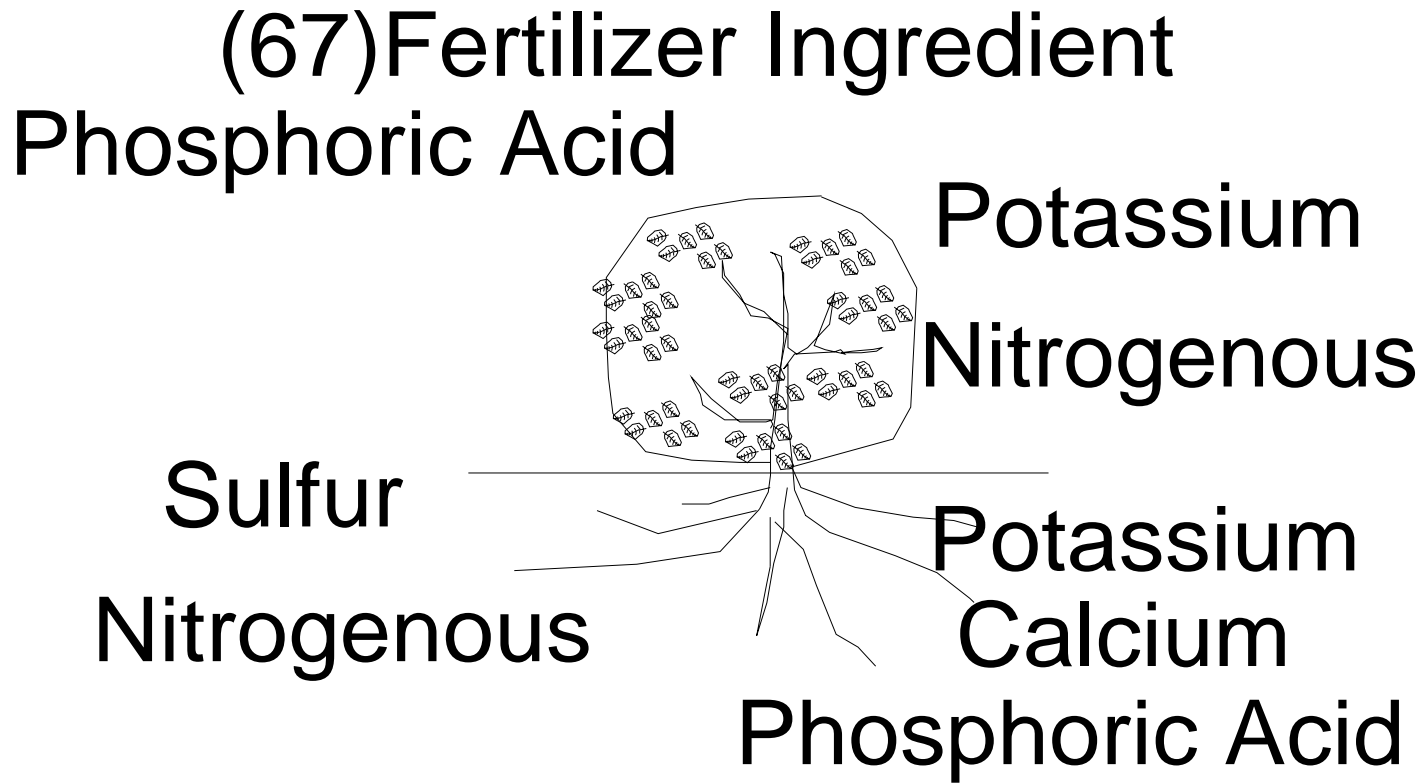
Limestone

Fertilizer

Dry Grinder



(67)Fertilizer Ingredient



(68)Fertilizer Ingredient

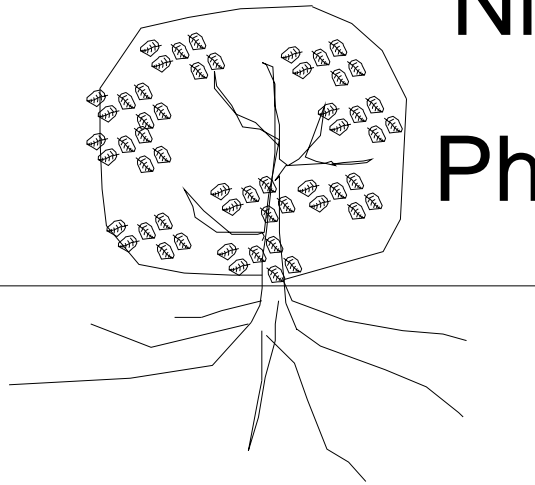
(68)Fertilizer Ingredient

Nitrogenous \supset Growth

Phosphoric Acid

\supset Nutrition

Potassium \supset Resistance



(69)Organic Farming Compost

(69)Organic Farming Compost

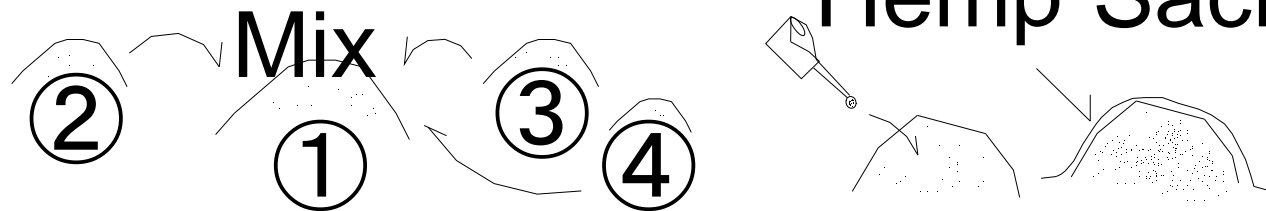
① Soil 500L

② Chaff 200L

③ Rice Brown 200L

④ Rapeseed Oil Cake 100L

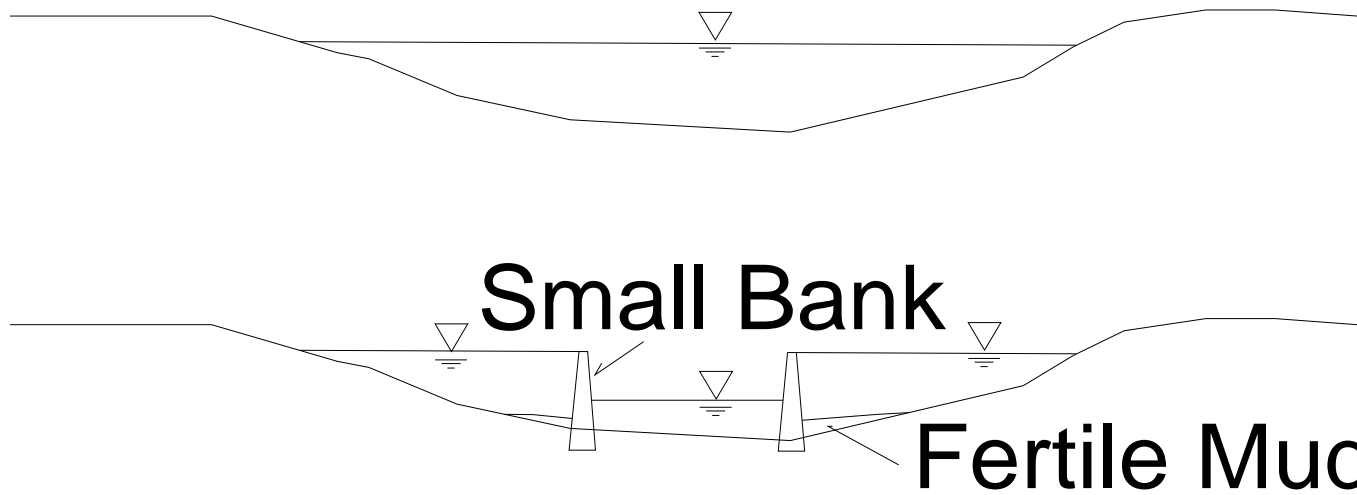
Hemp Sack



(70)River Irrigation(Egypt)1

(70)River Irrigation(Egypt)1

Flood Season



(71)River Irrigation(Egypt)2

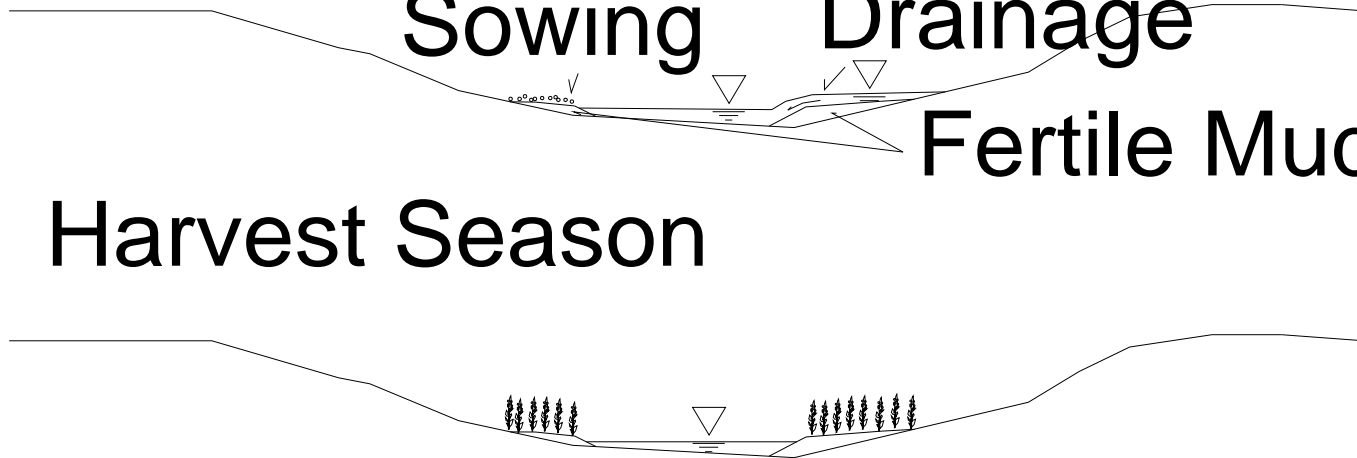
(71)River Irrigation(Egypt)2

Sowing Season

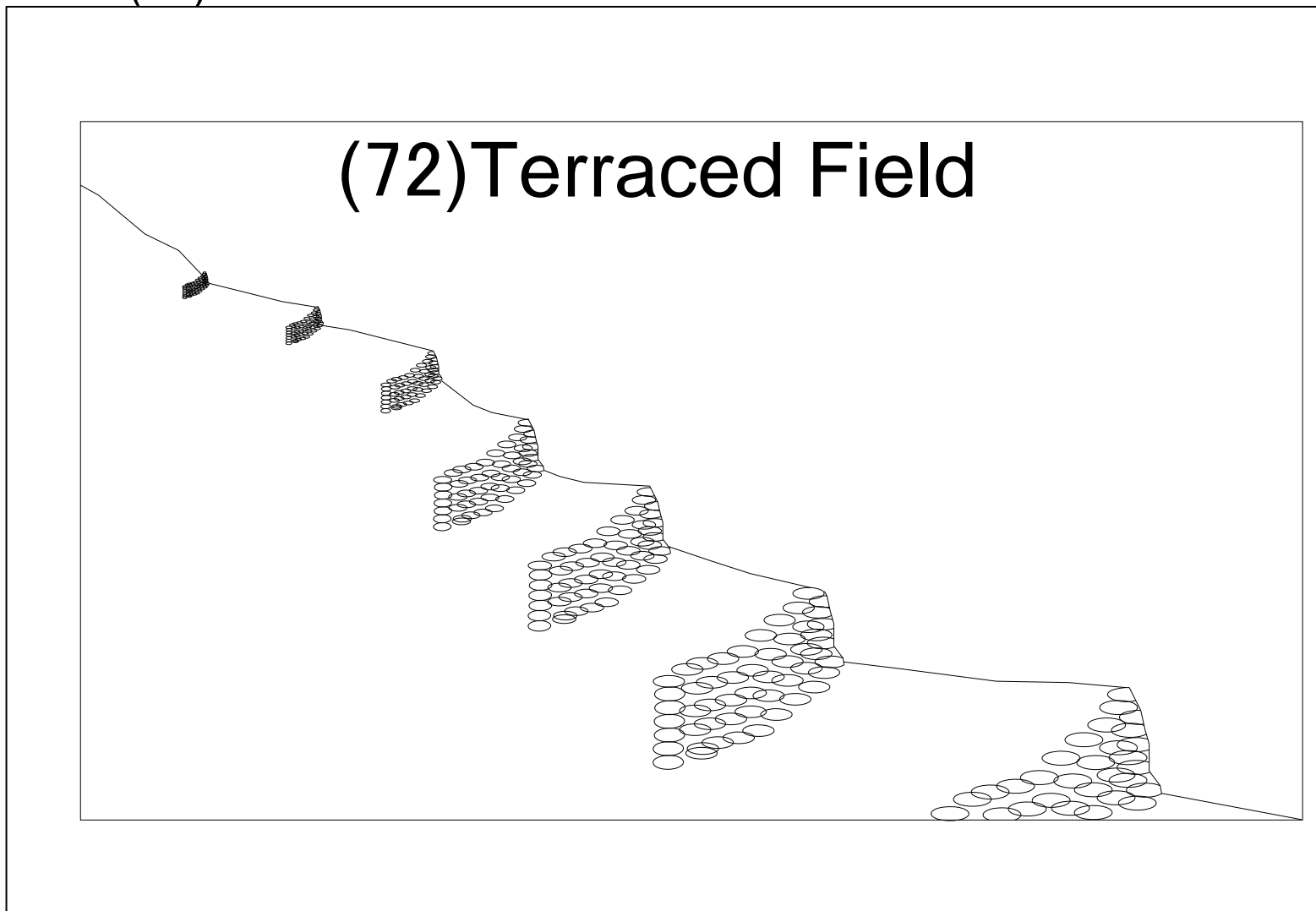
Break Small Bank
Sowing Drainage

Fertile Mud

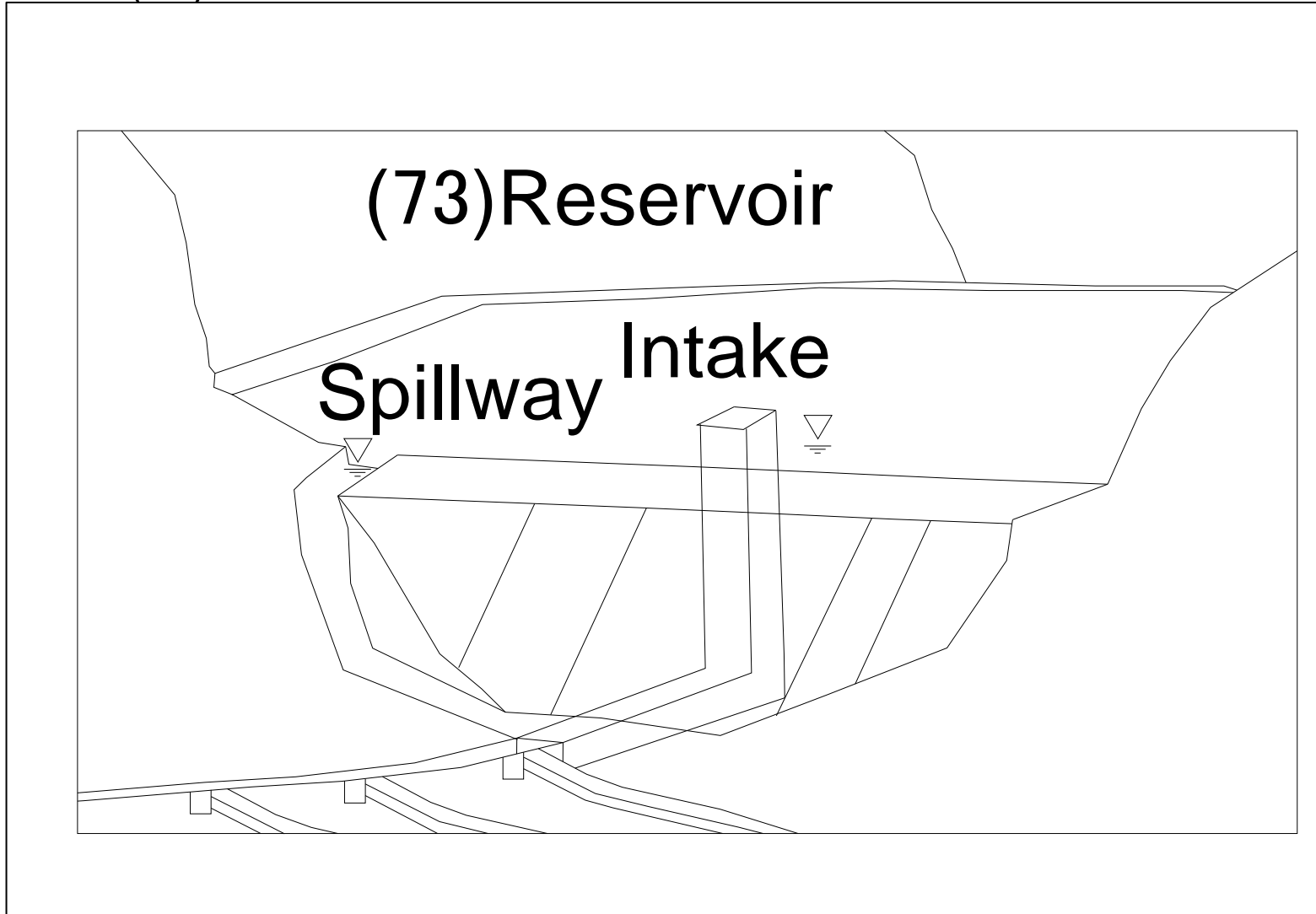
Harvest Season



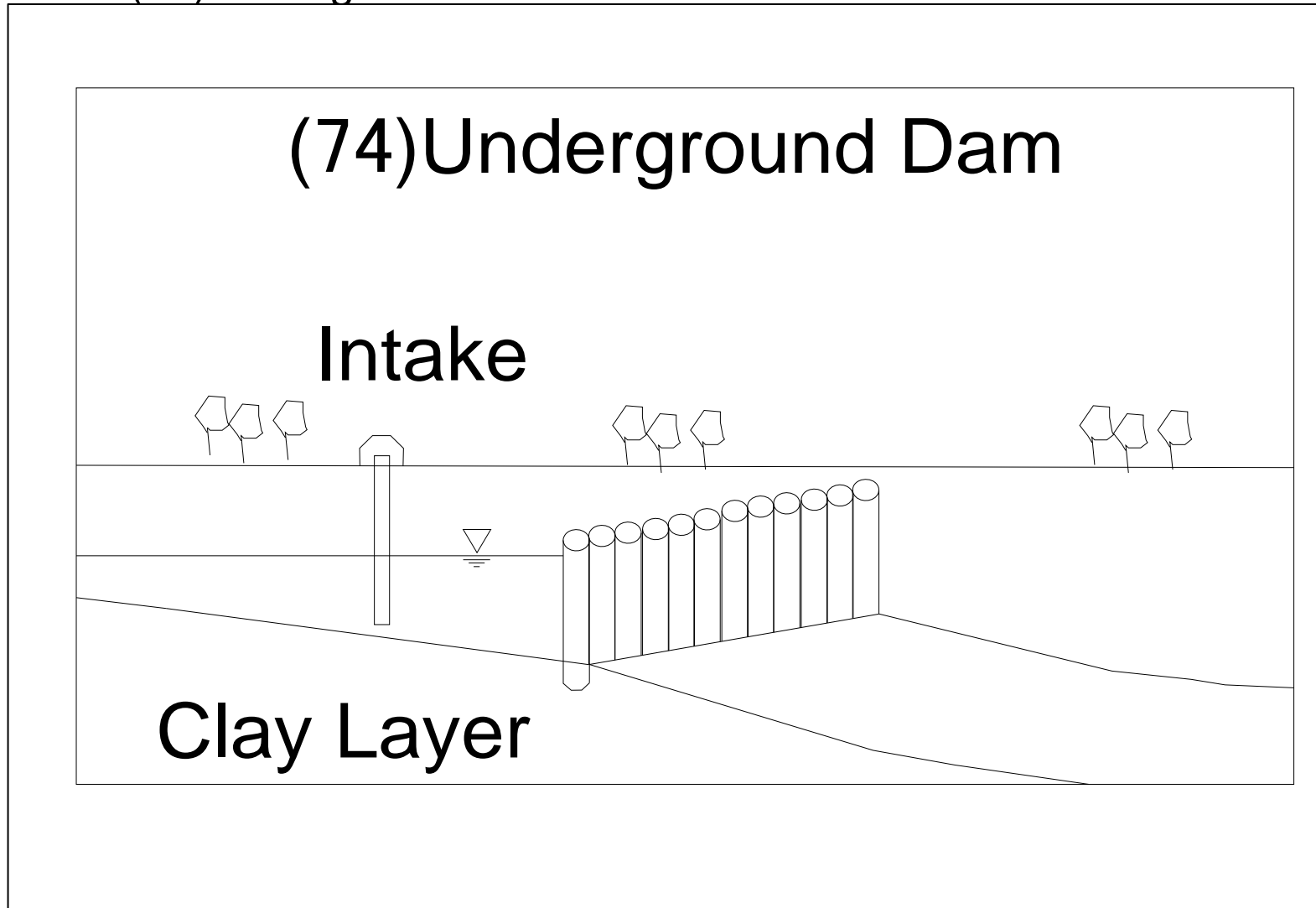
(72) Terraced Field



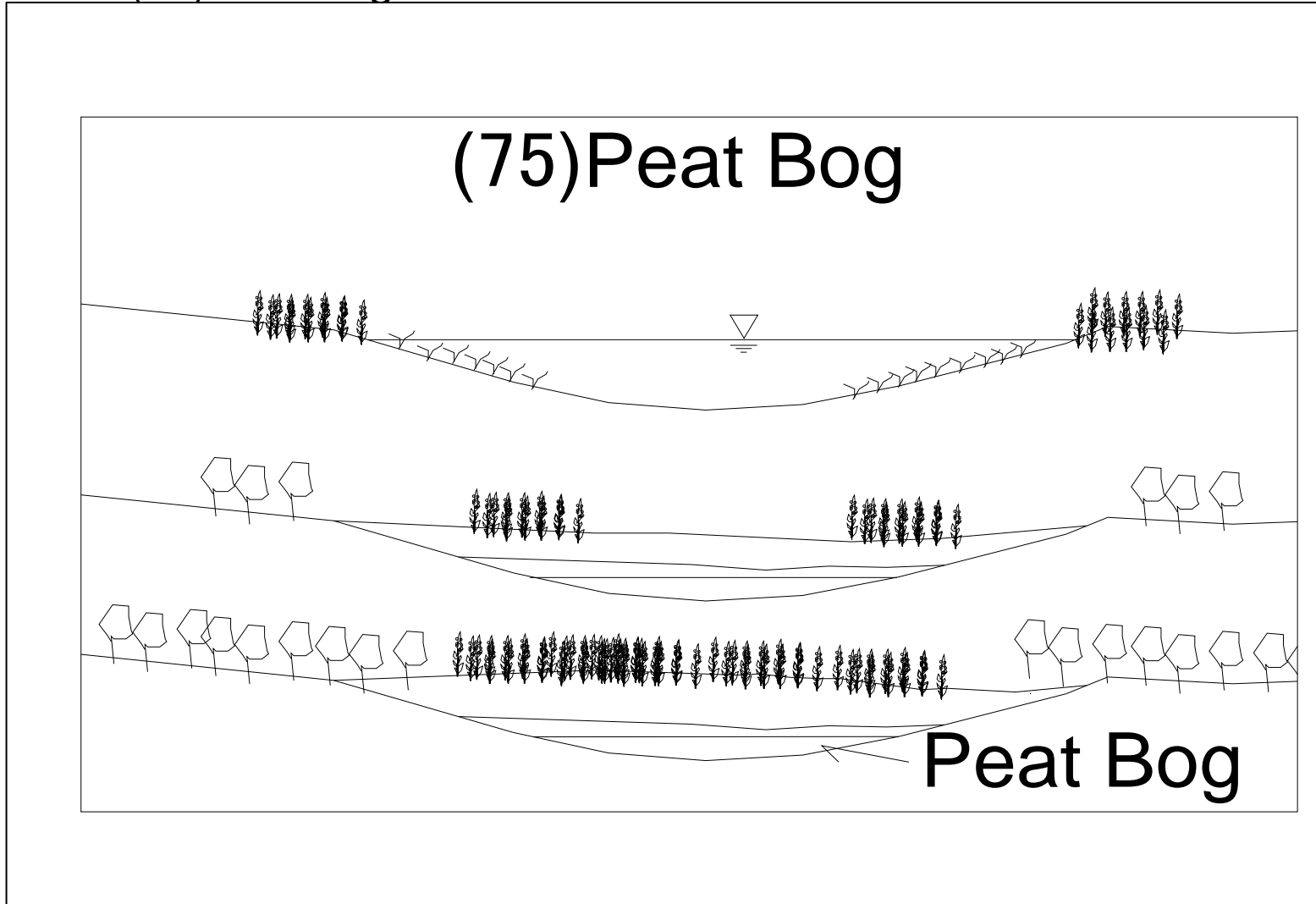
(73)Reservoir



(74)Underground Dam

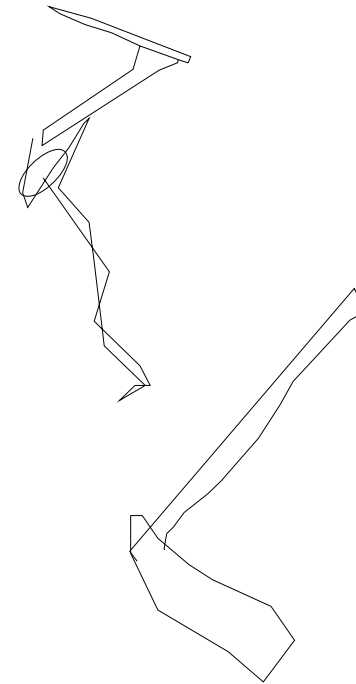
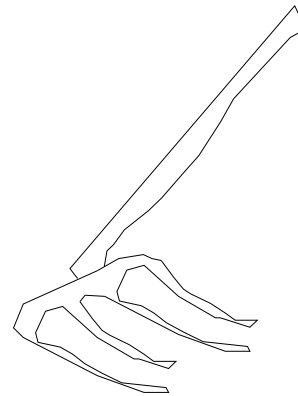
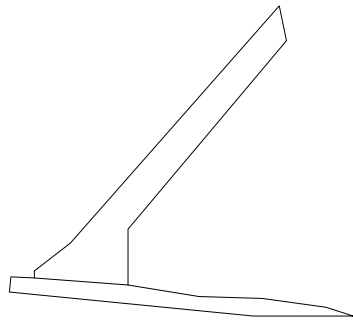


(75)Peat Bog



(76)Hoe

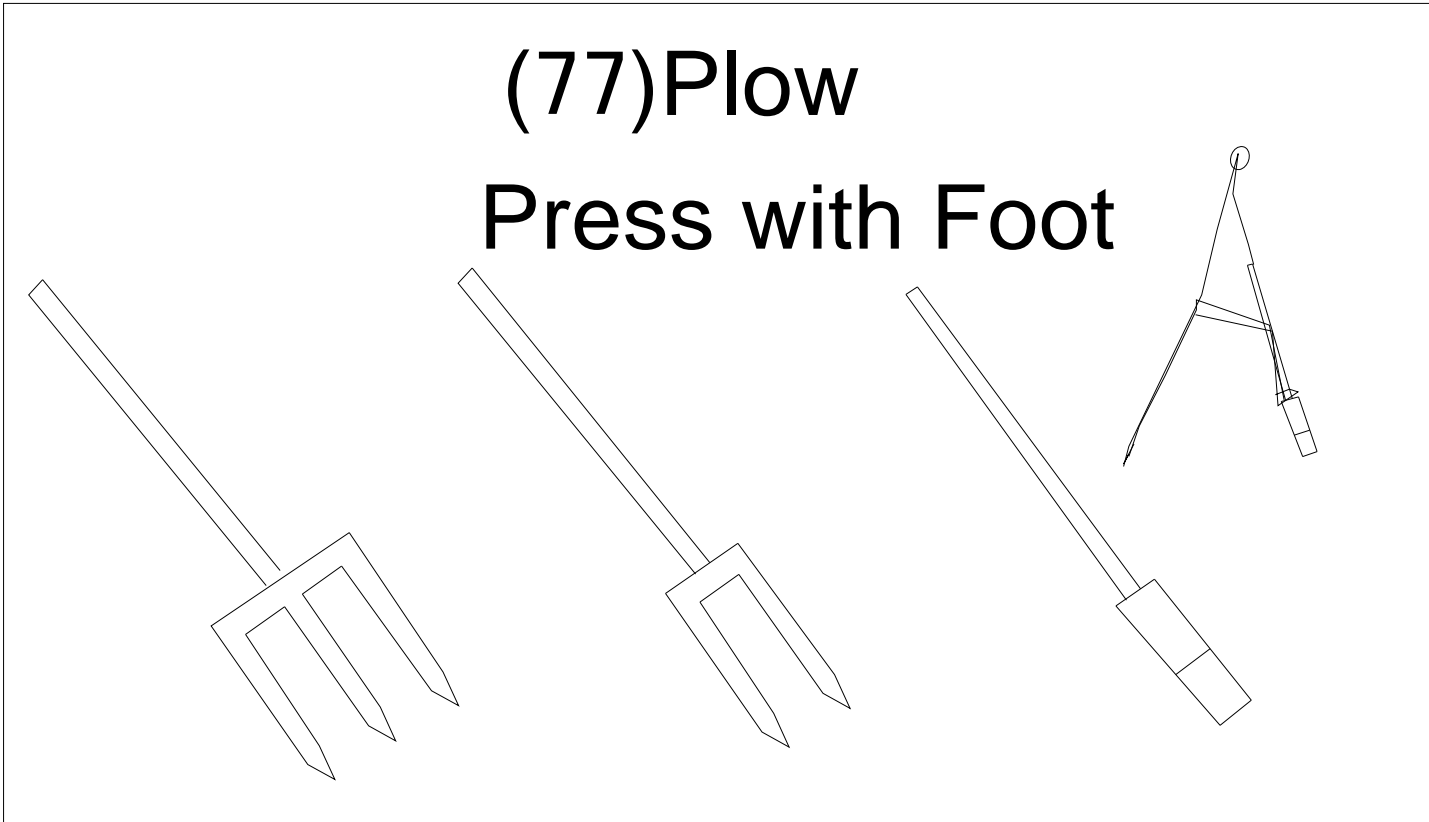
(76)Hoe
Swing Down



(77)Plow

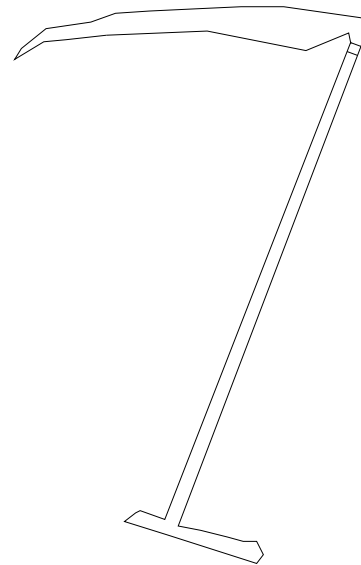
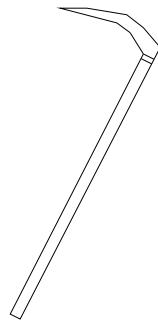
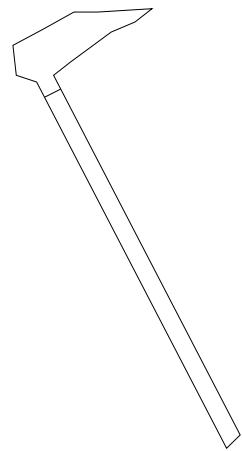
(77)Plow

Press with Foot



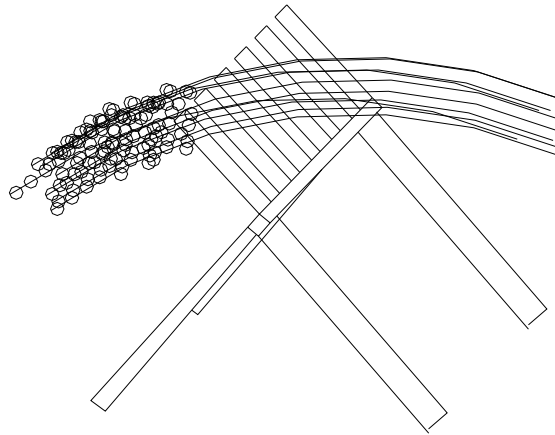
(78)Sickle

(78)Sickle



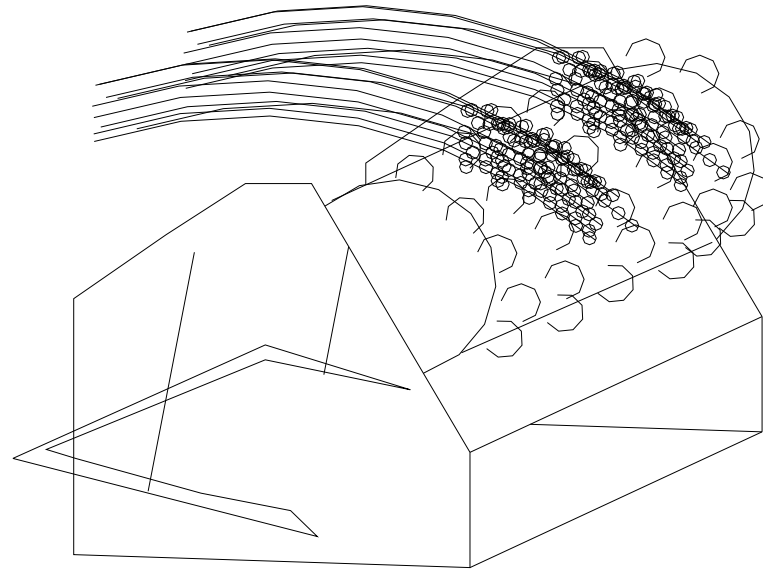
(79)Threshing 1

(79)Threshing 1

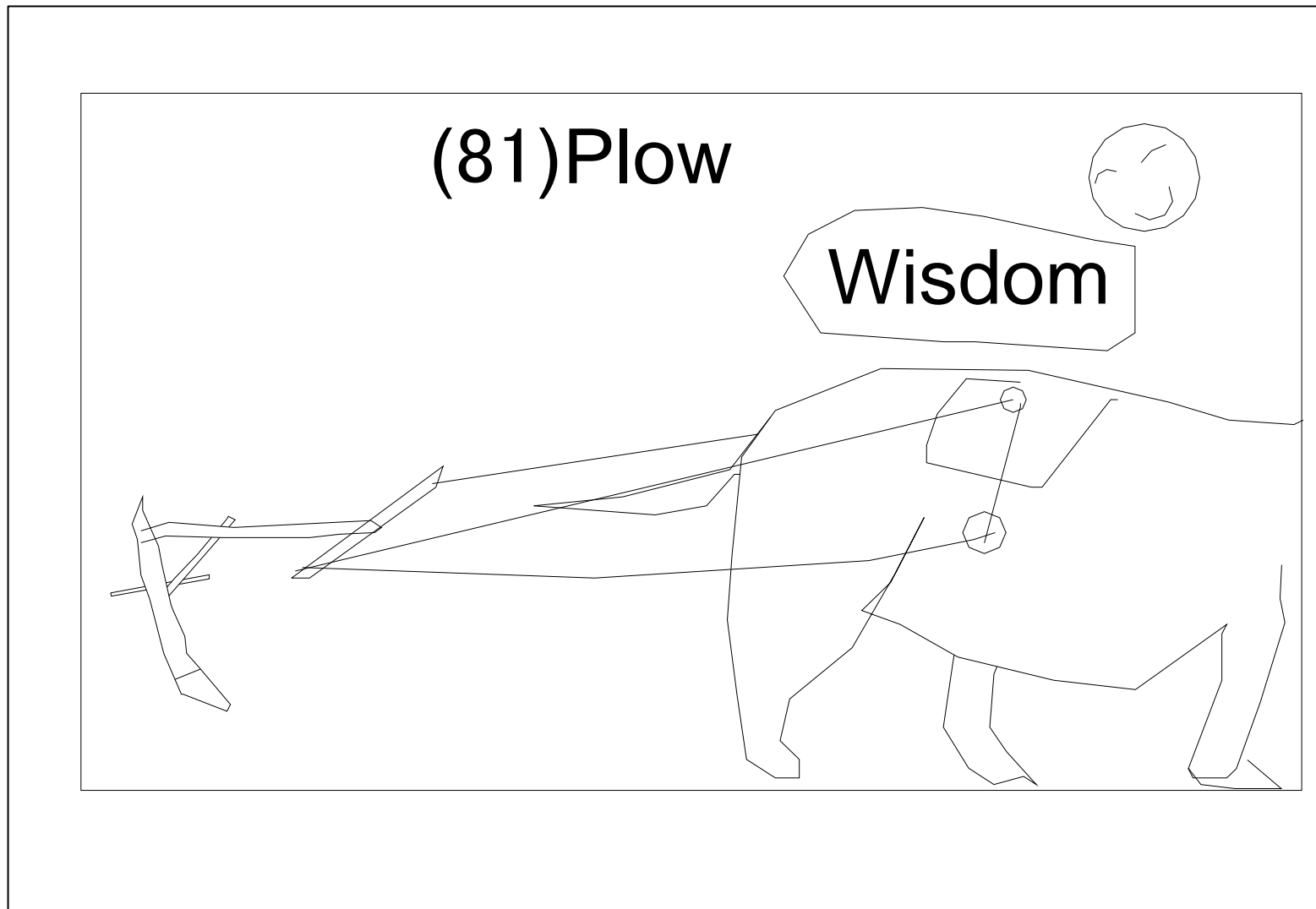


(80)Threshing 2

(80)Threshing 2



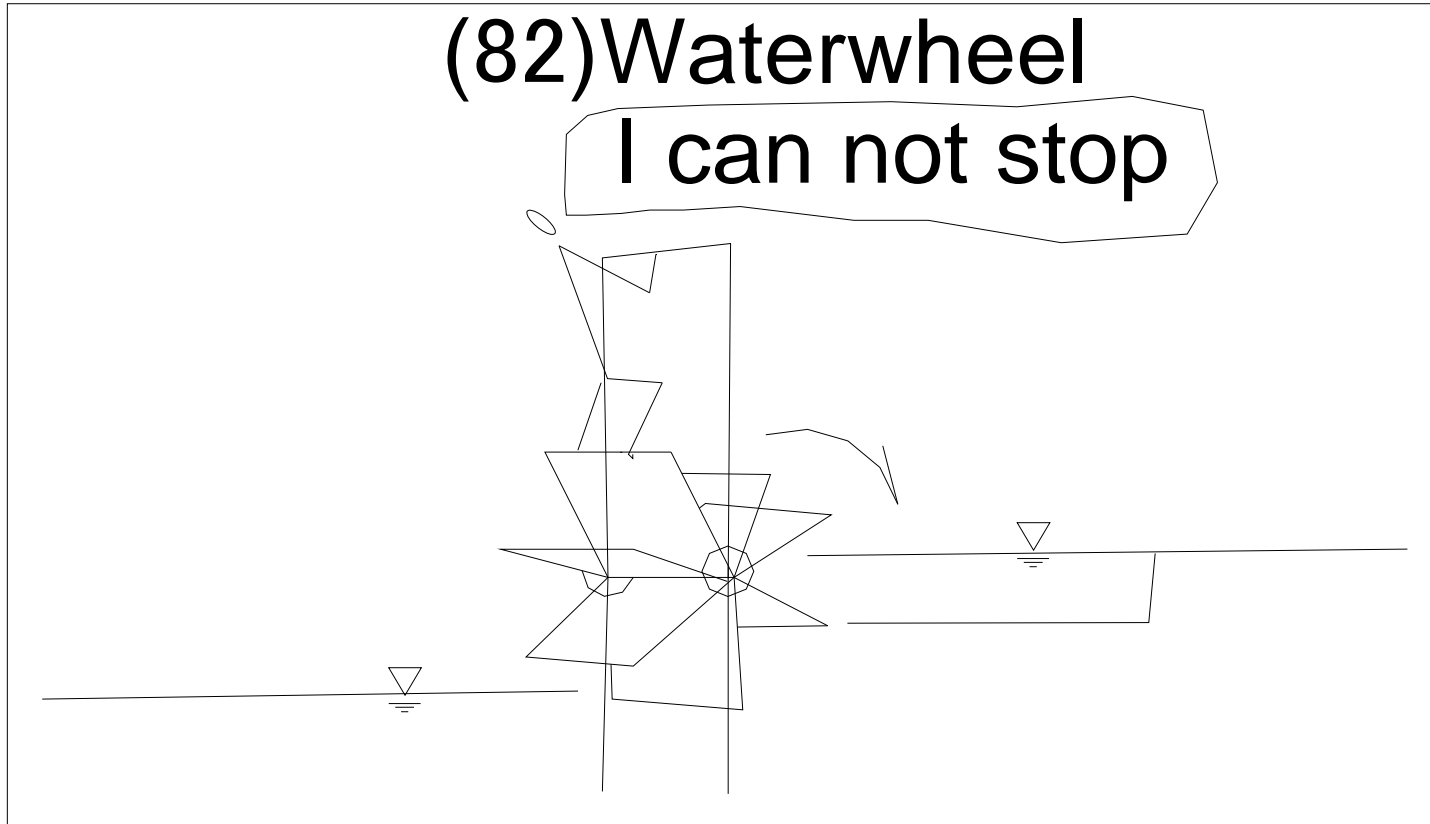
(81)Plow



(82)Waterwheel

(82)Waterwheel

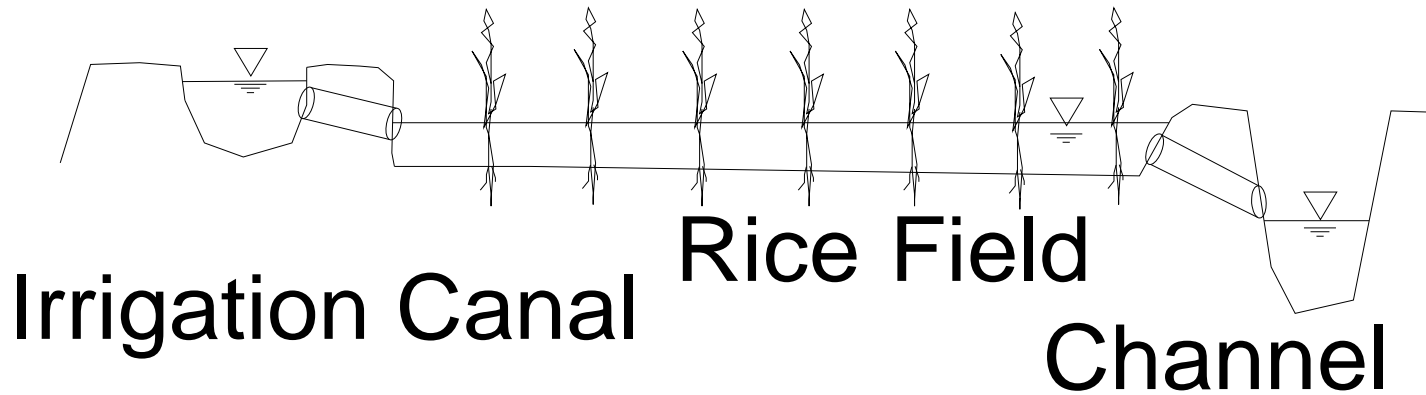
I can not stop



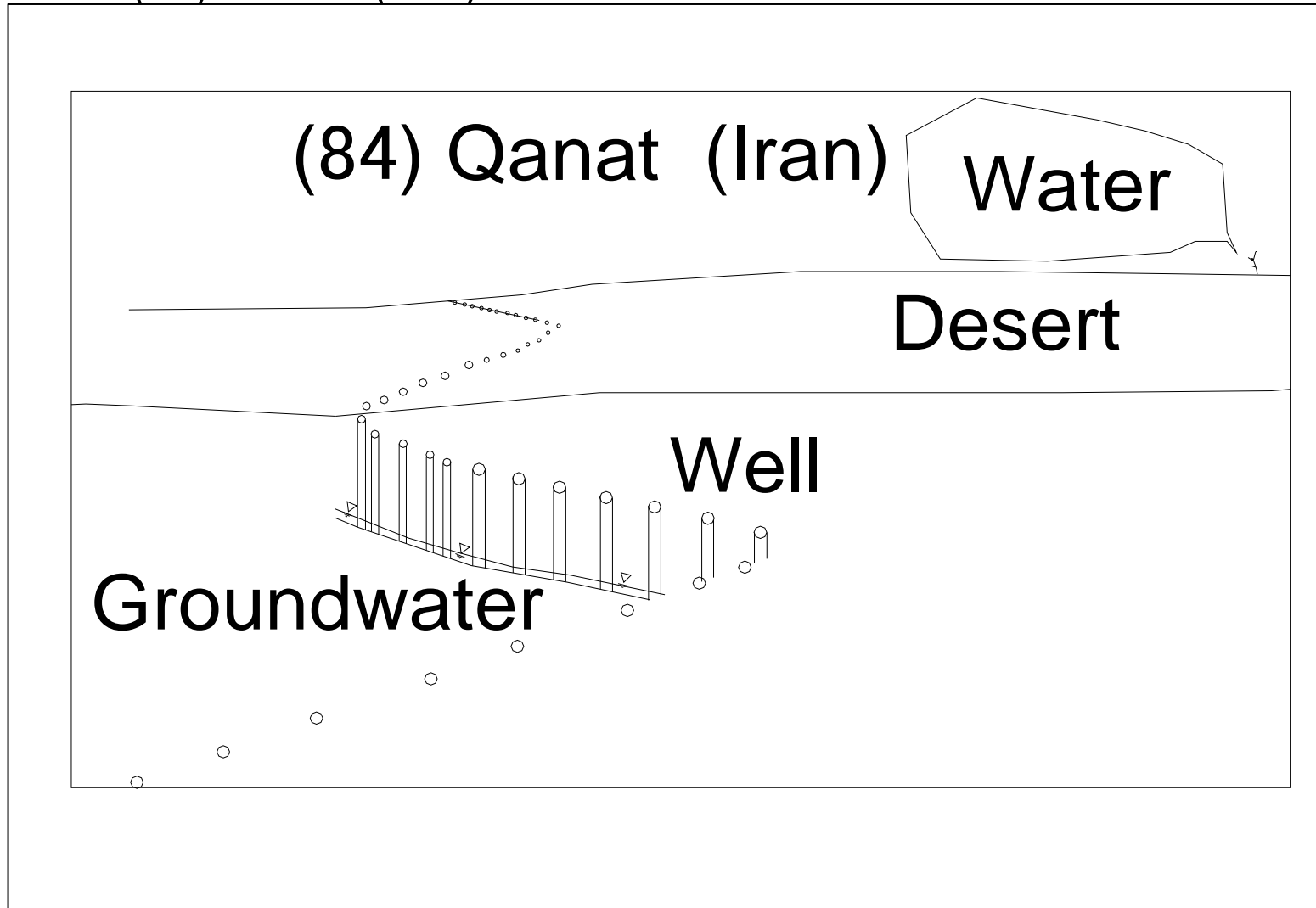
(83)Irrigation Canal and Channel

(83)Irrigation Canal and Channel

Rice Farming
help The Earth



(84) Qanat (Iran)

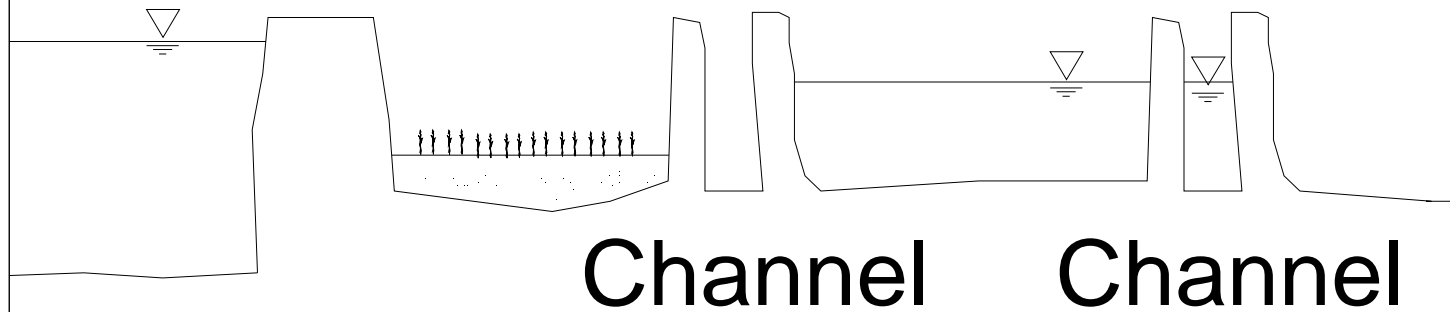


(85)River Irrigation(Mesopotamia)1

(85)River Irrigation(Mesopotamia)1

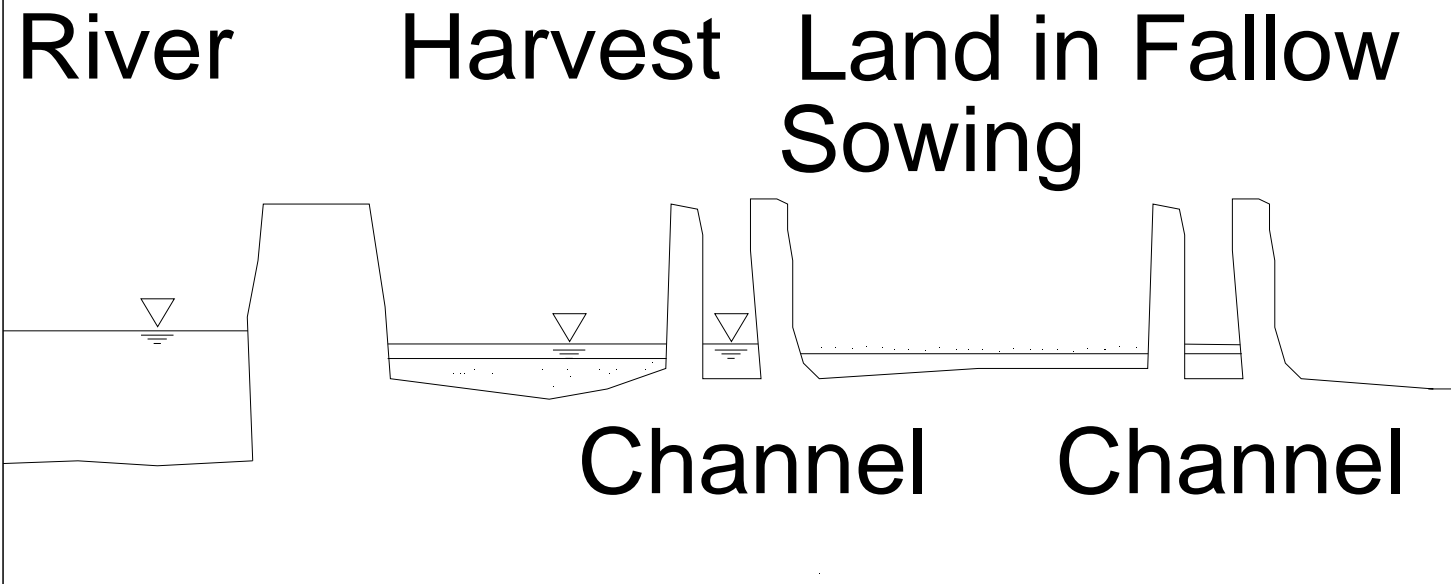
Flood Period

River Harvest Land in Fallow



(86)River Irrigation(Mesopotamia)2

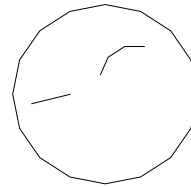
(86)River Irrigation(Mesopotamia)2



(87)Water Level Meter(Nile Meter)

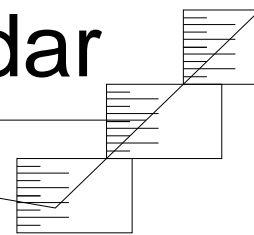
(87)Water Level Meter(Nile Meter)

The God
of Agriculture



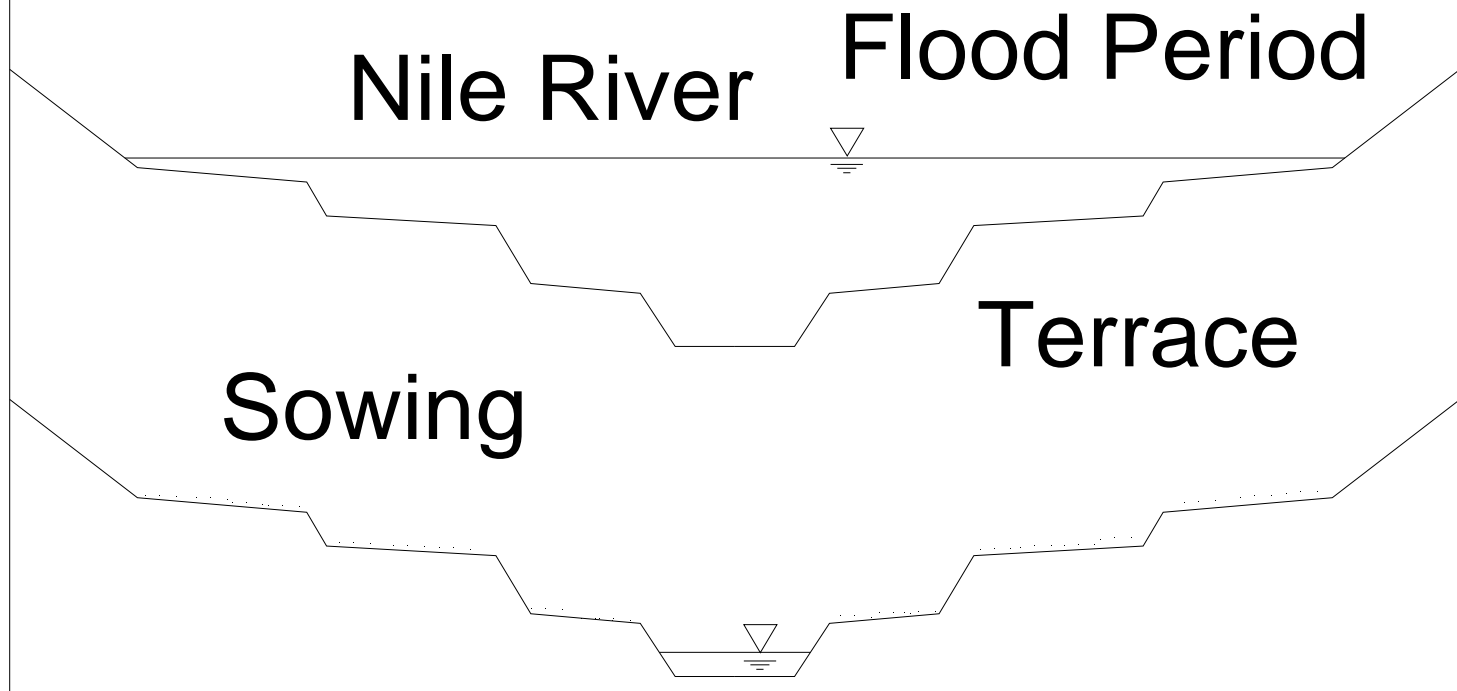
Nile River

Calendar

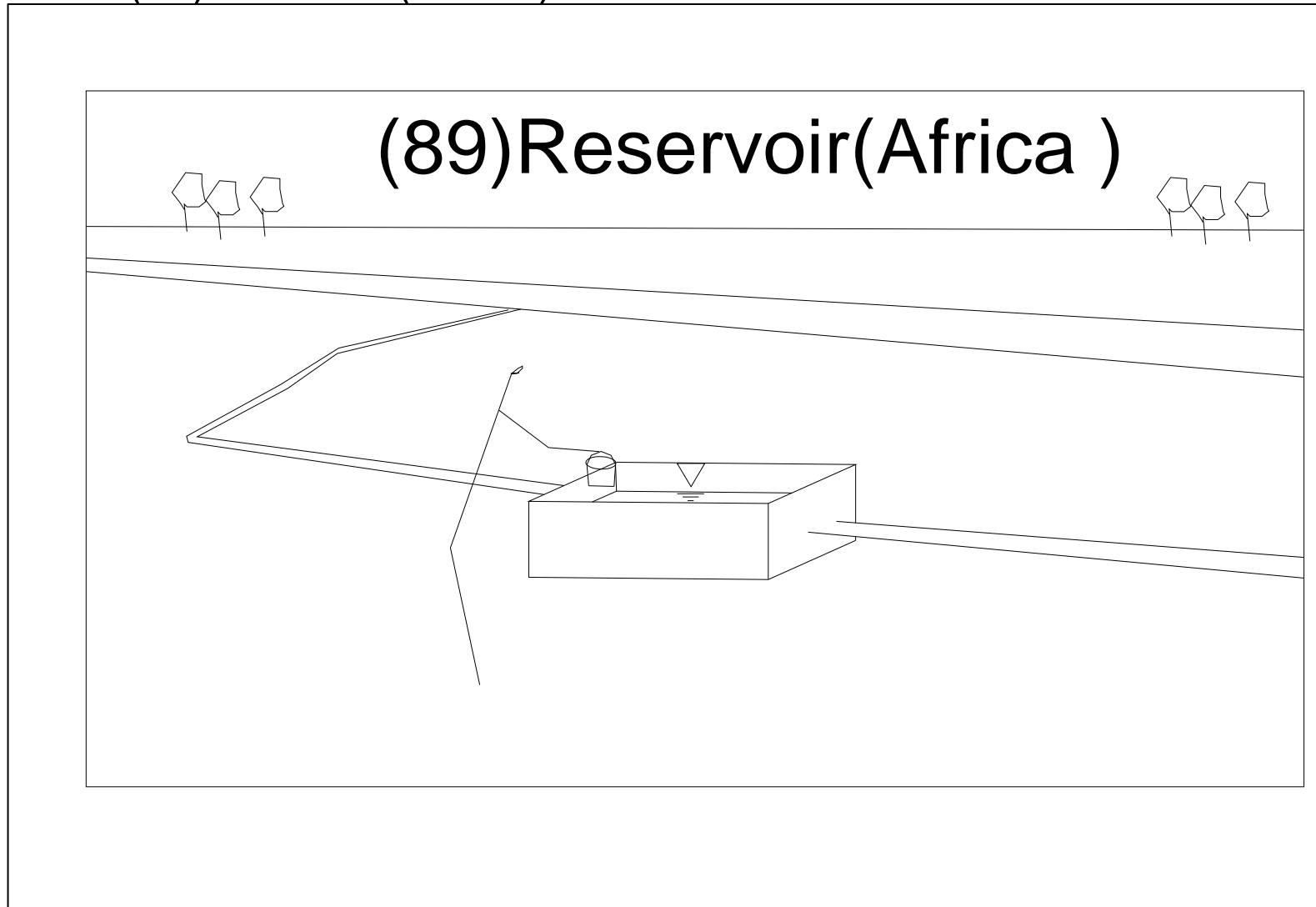


(88)Terrace Agriculture (Indus)

(88)Terrace Agriculture (Indus)



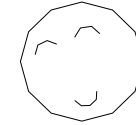
(89)Reservoir(Africa)



(90) Satoyama(Japan)

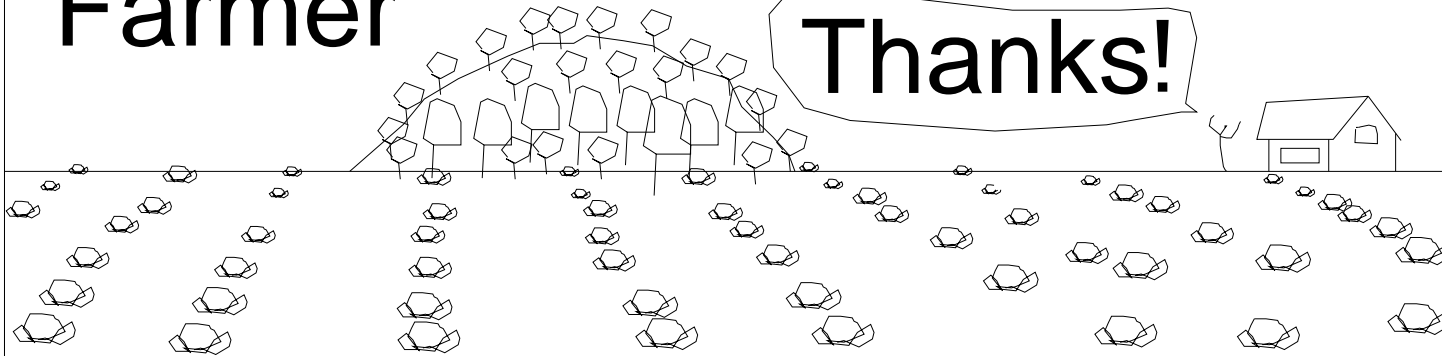
(90) Satoyama(Japan)

Field Copse
River Reservoir
Farmer



Organic
Fertilizer

Thanks!



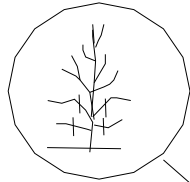
(91) Satoyama(Japan)

(91) Satoyama(Japan)

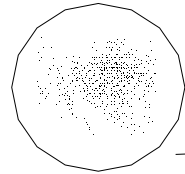


Fallen Leaves
Undergrowth

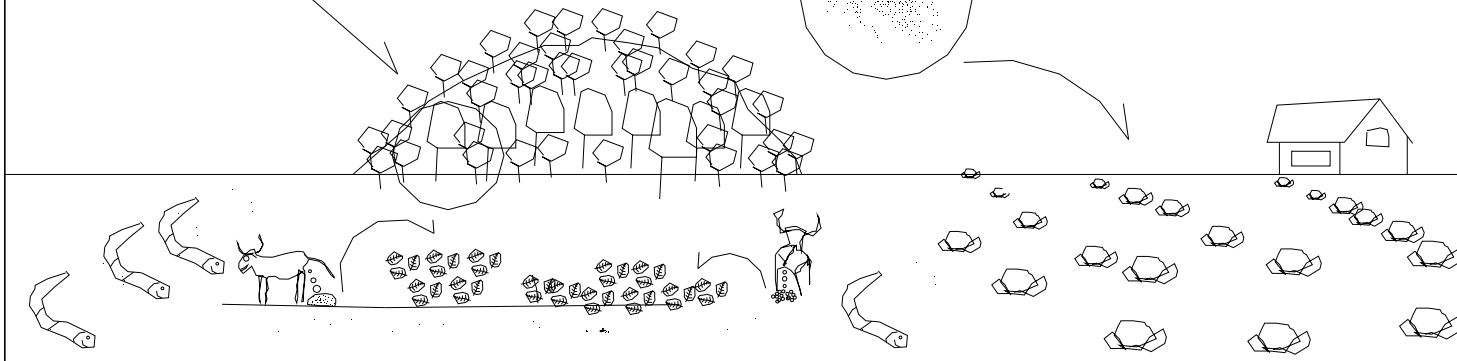
→ Feed, Compost



Branch → Fuel, Charcoal

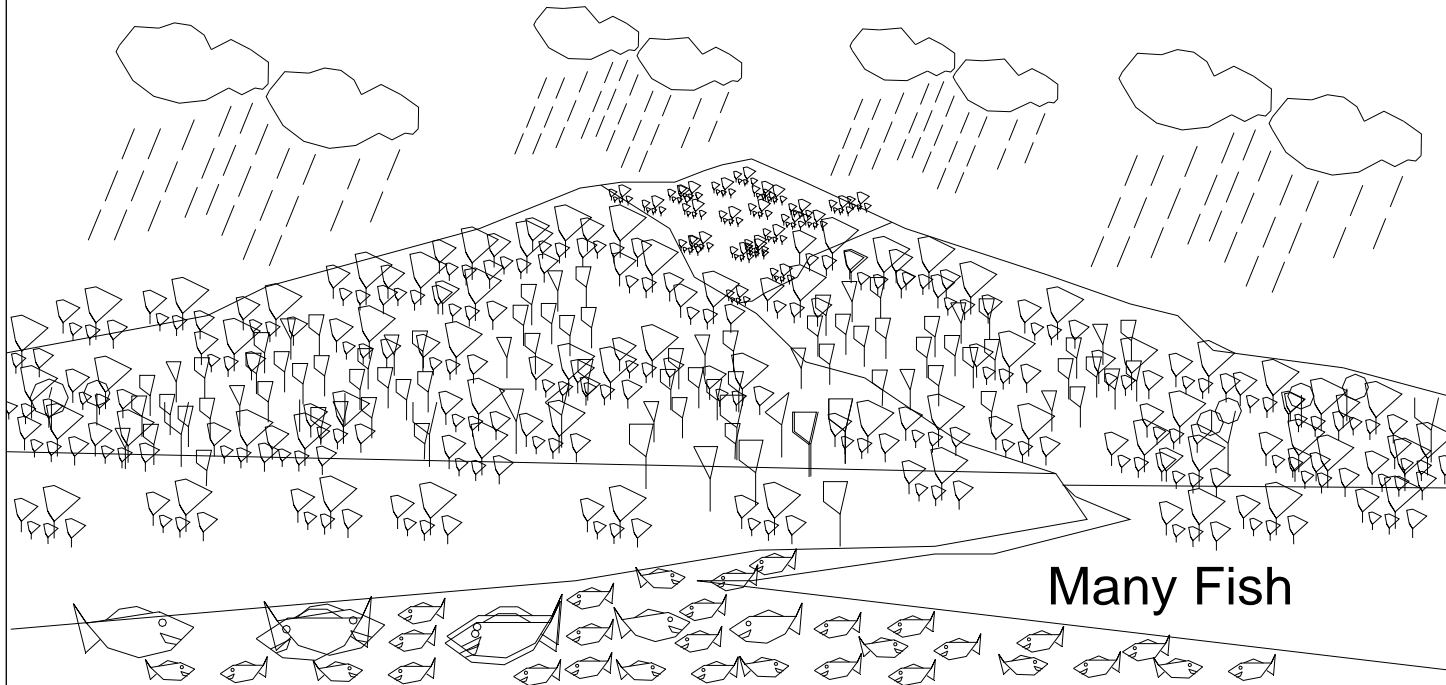


Ash

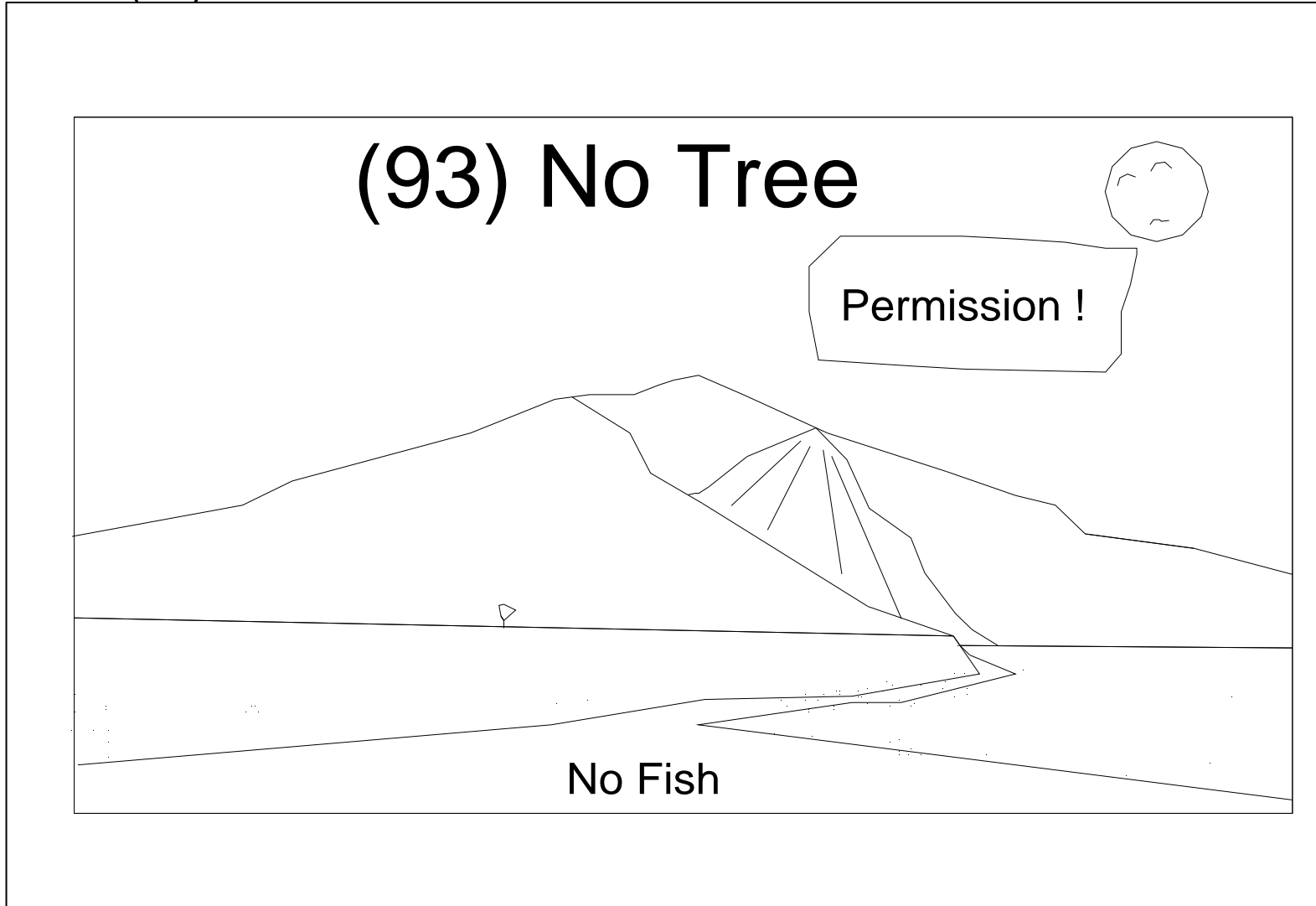


(92) Many Trees

(92) Many Trees

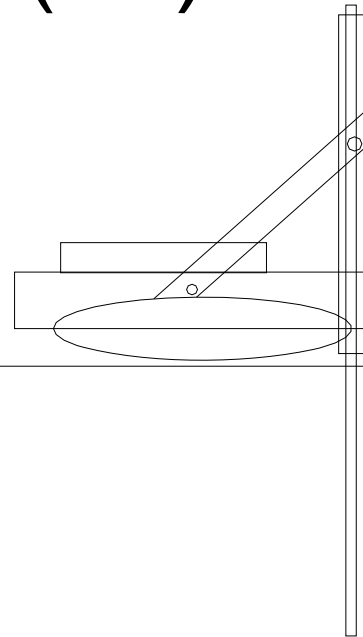


(93) No Tree



(94) Earth Auger

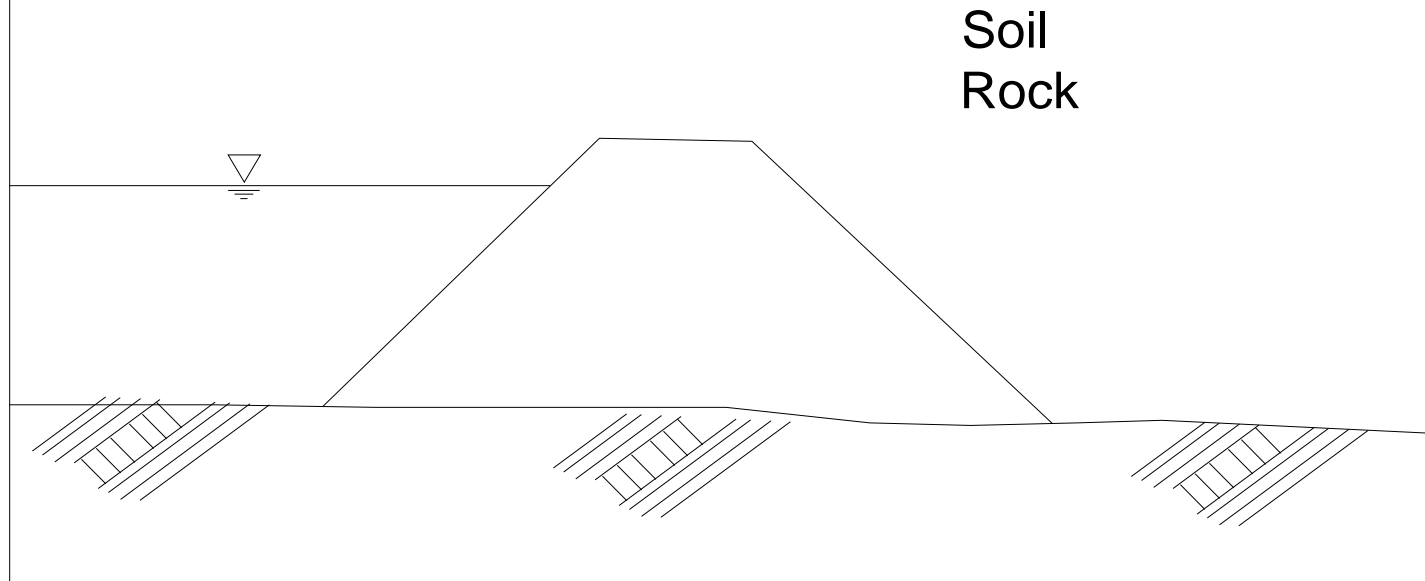
(94) Earth Auger



concrete
cast-in-place pile

(95) Earth Dam: Fill-type Dam

(95) Earth Dam: Fill-type Dam



(96) Earth Drill

(96) Earth Drill

(1) Dig

(2) Casing Tube

(3) Bentonite

(4) Reinforcing Bar Cage

(1)

(2)

(3)

(4)

(5)

(6)

(7)

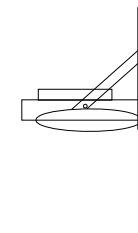
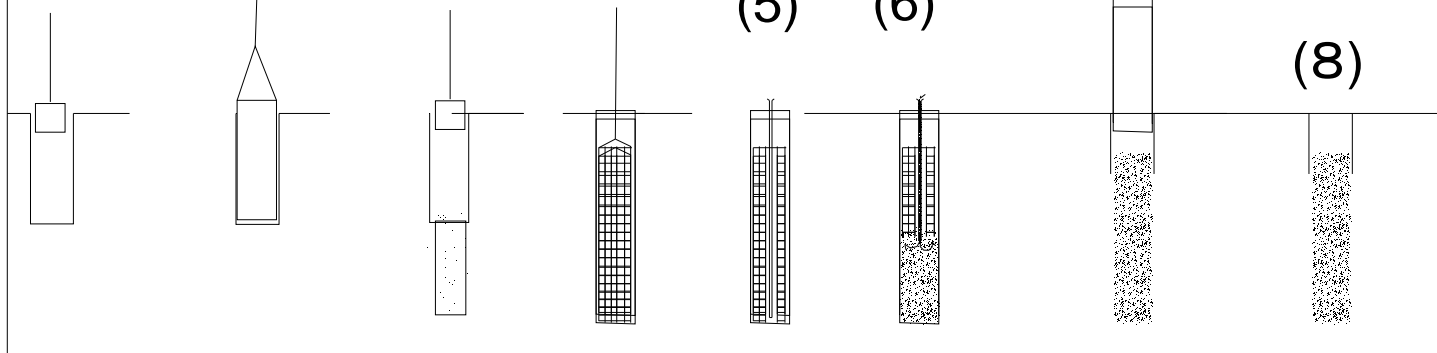
(8)

(5) Tremie Pipe

(6) Ready Mixed Concrete

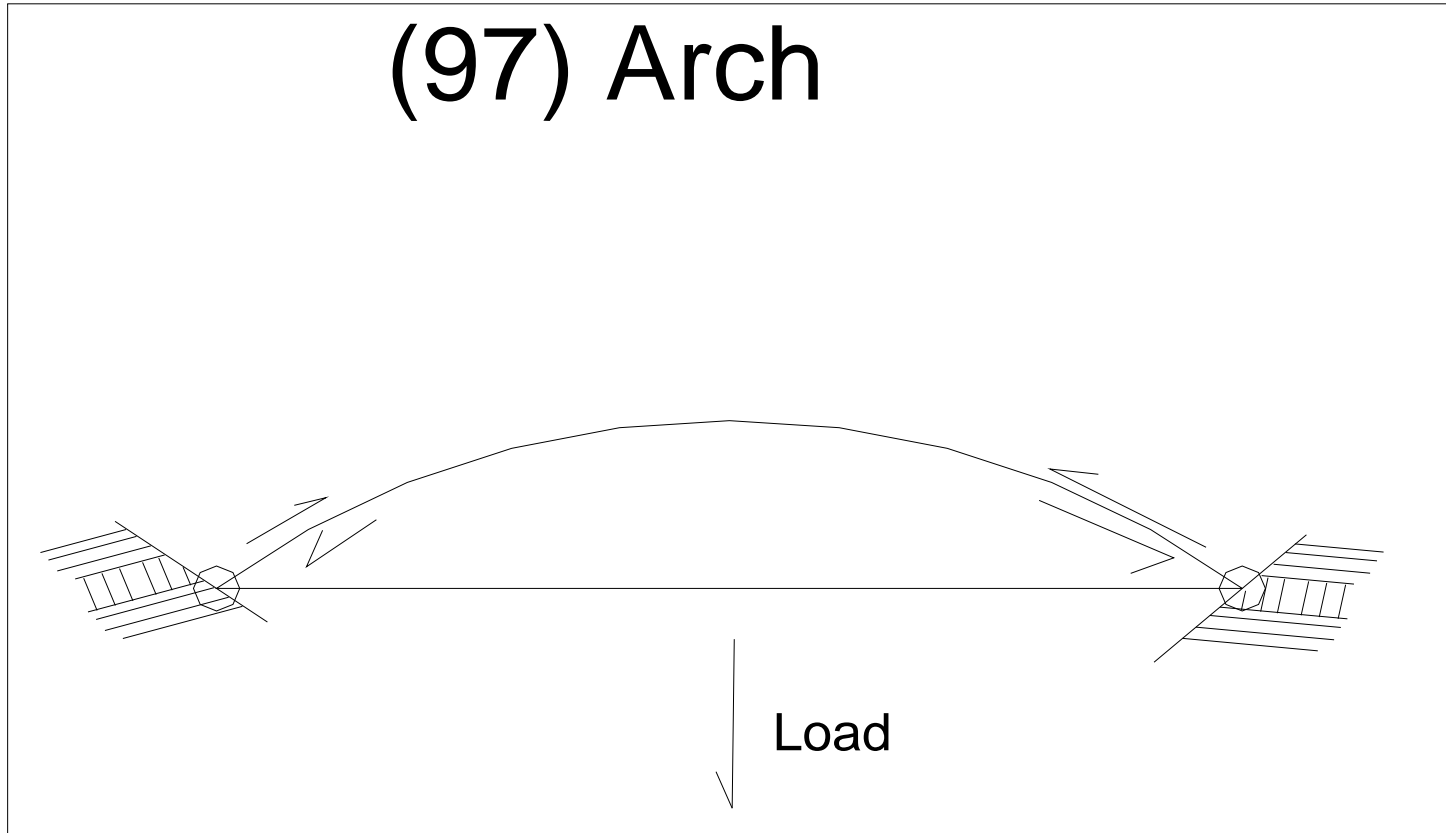
(7) Pull out Casing

(8) Back Fill



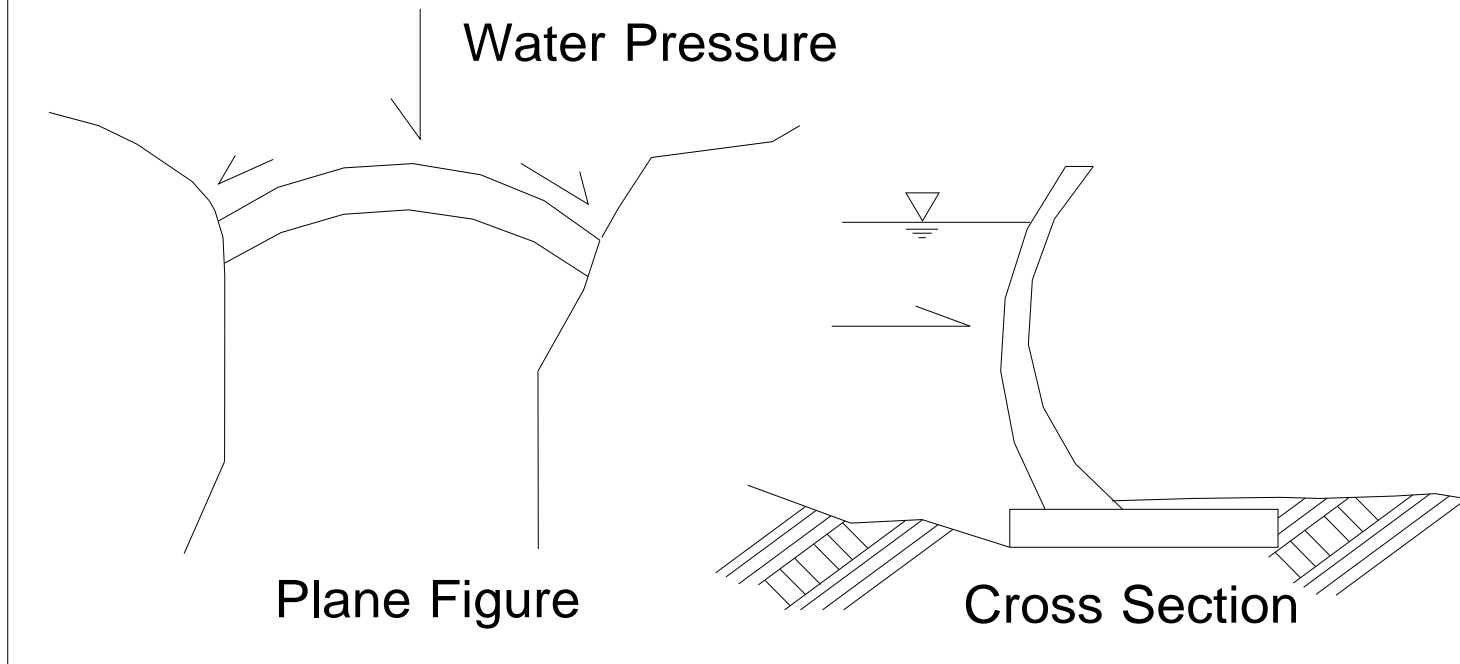
(97) Arch

(97) Arch



(98) Arch Dam

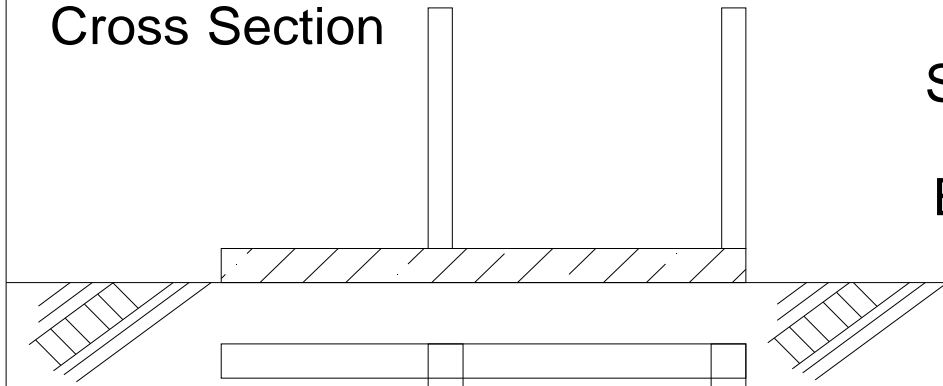
(98) Arch Dam



(99) Shallow Foundation

(99) Shallow Foundation

Cross Section



Structure

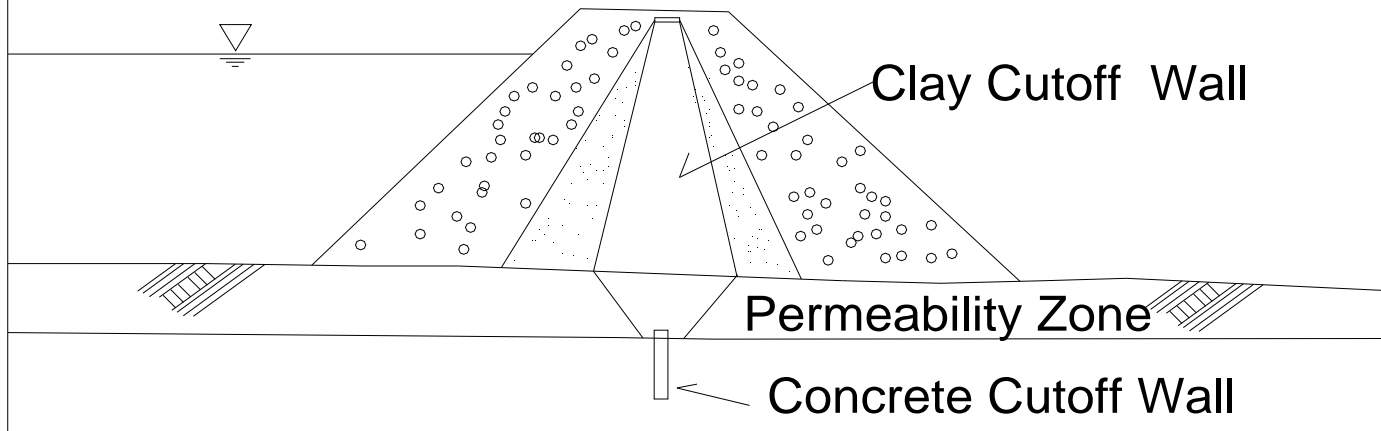
Bearing power

Plane Figure



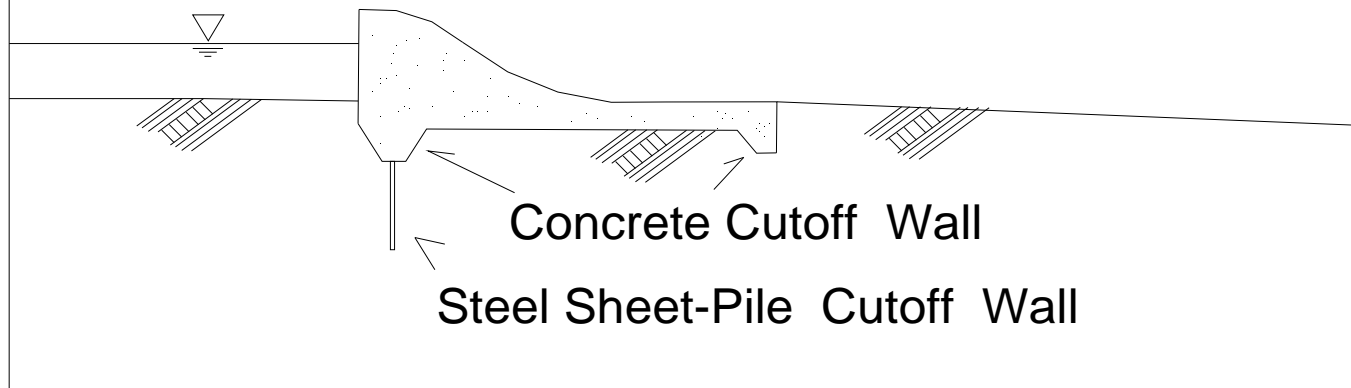
(100) Cutoff Wall 1

(100) Cutoff Wall 1



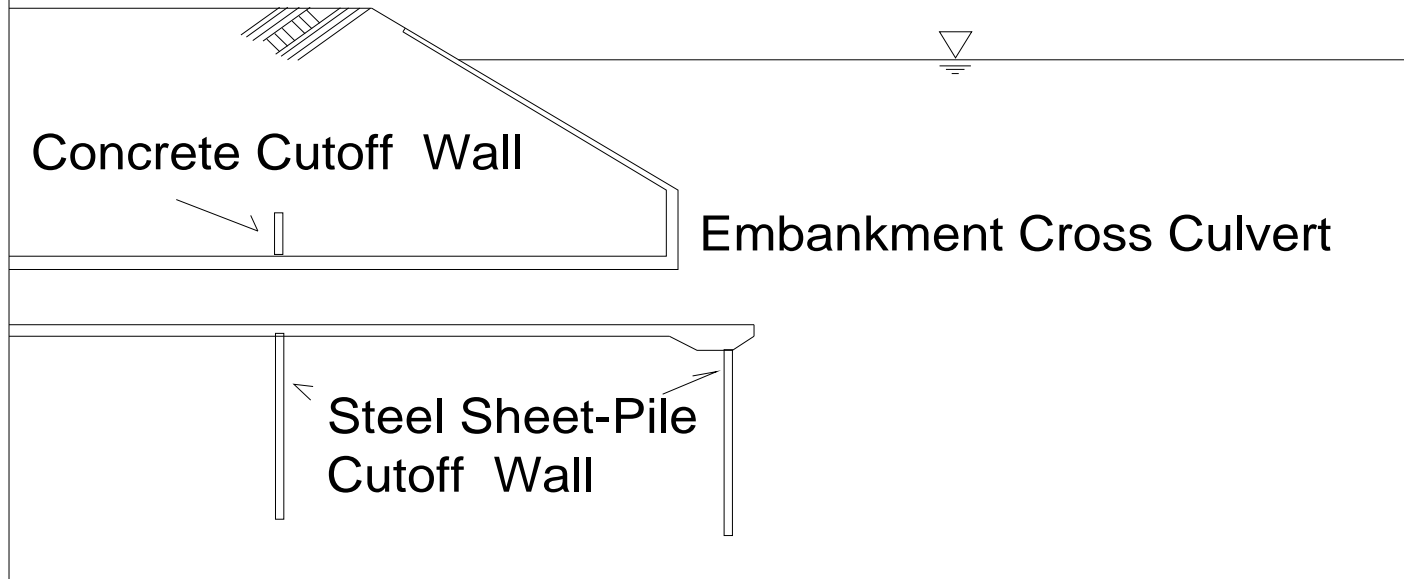
(101) Cutoff Wall 2

(101) Cutoff Wall 2



(102) Cutoff Wall 3

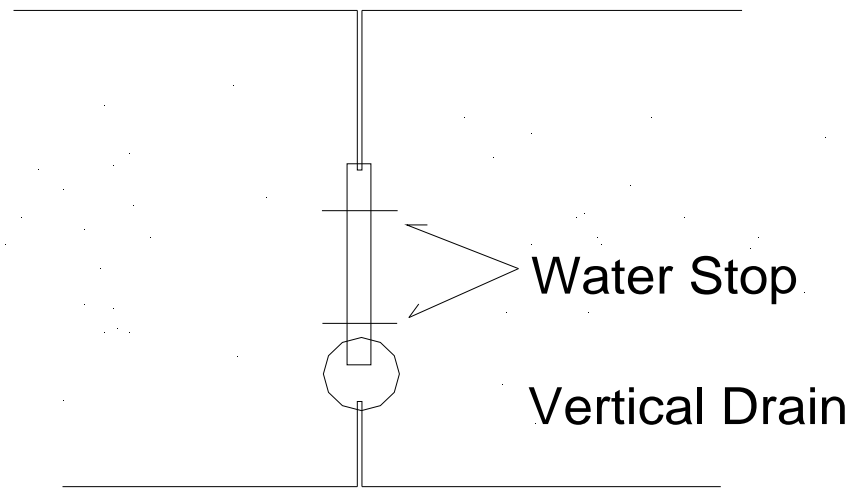
(102) Cutoff Wall 3



(103) Water Stop 1

(103) Water Stop 1

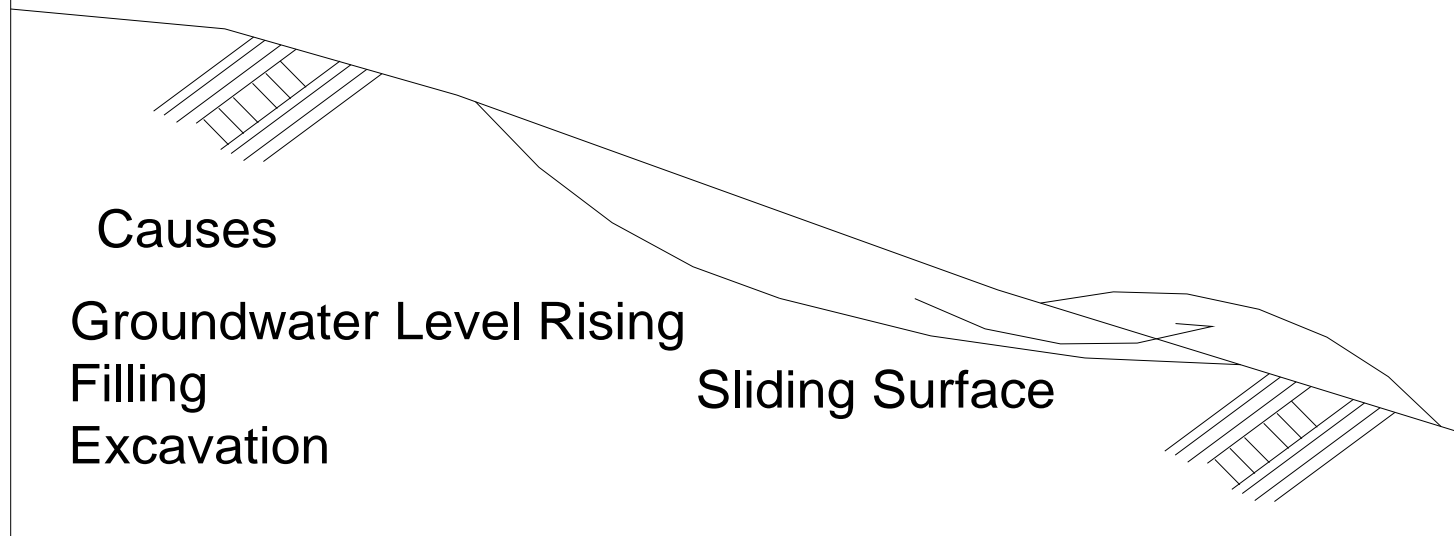
Reservoir Side



Plane Figure

(104) Land Slide

(104) Land Slide



Causes

Groundwater Level Rising

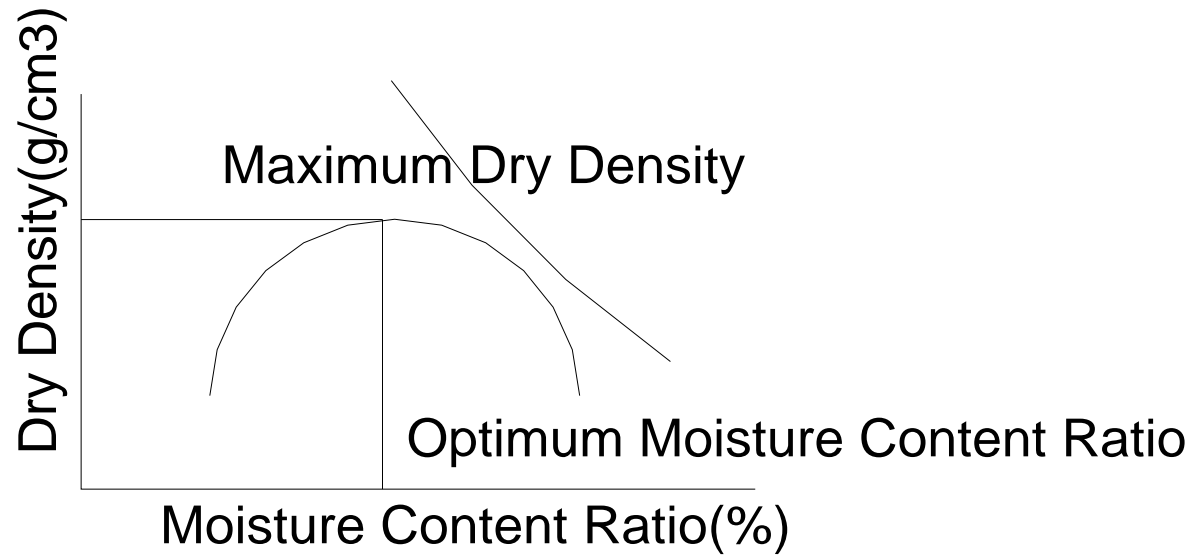
Filling

Excavation

Sliding Surface

(105) Compaction Curve

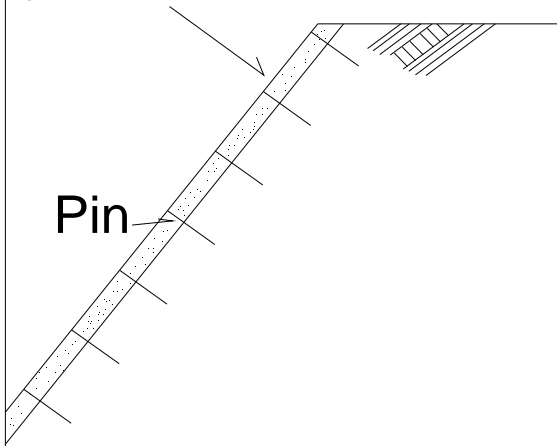
(105) Compaction Curve



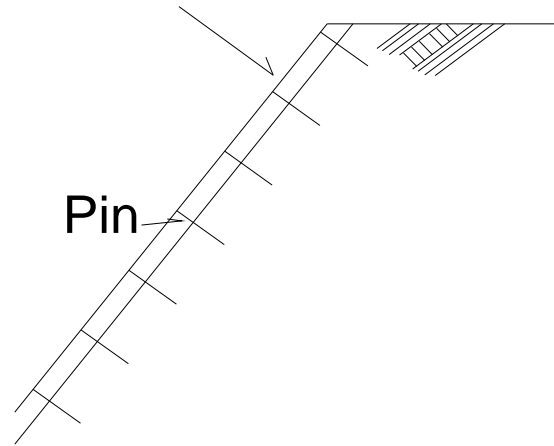
(106) Sodding

(106) Sodding

Vegetation Mat
(Include Seed, Fertilizer)

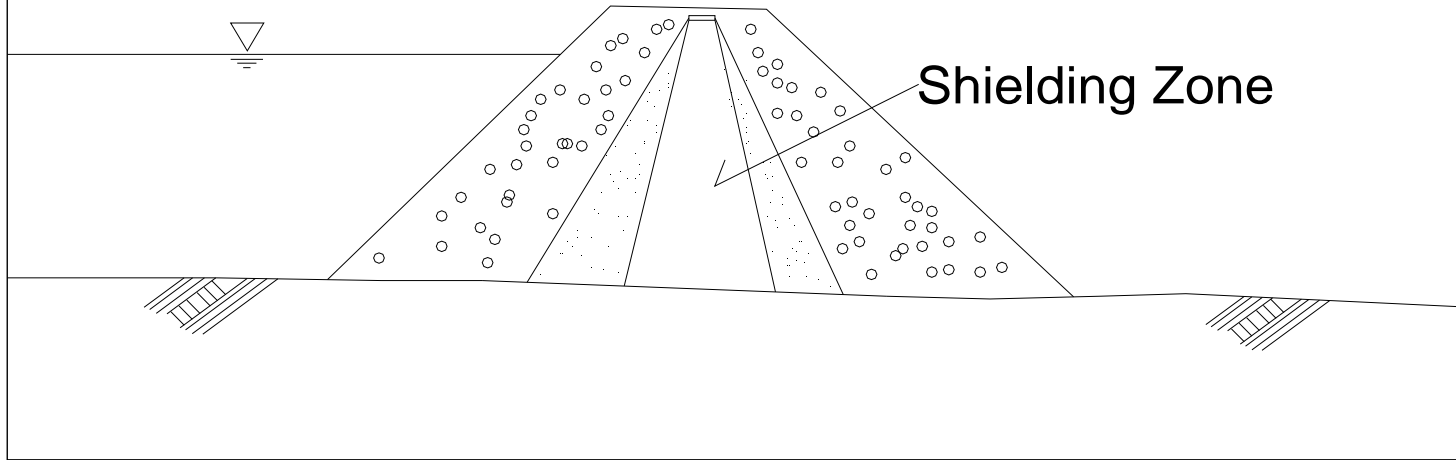


Sodding



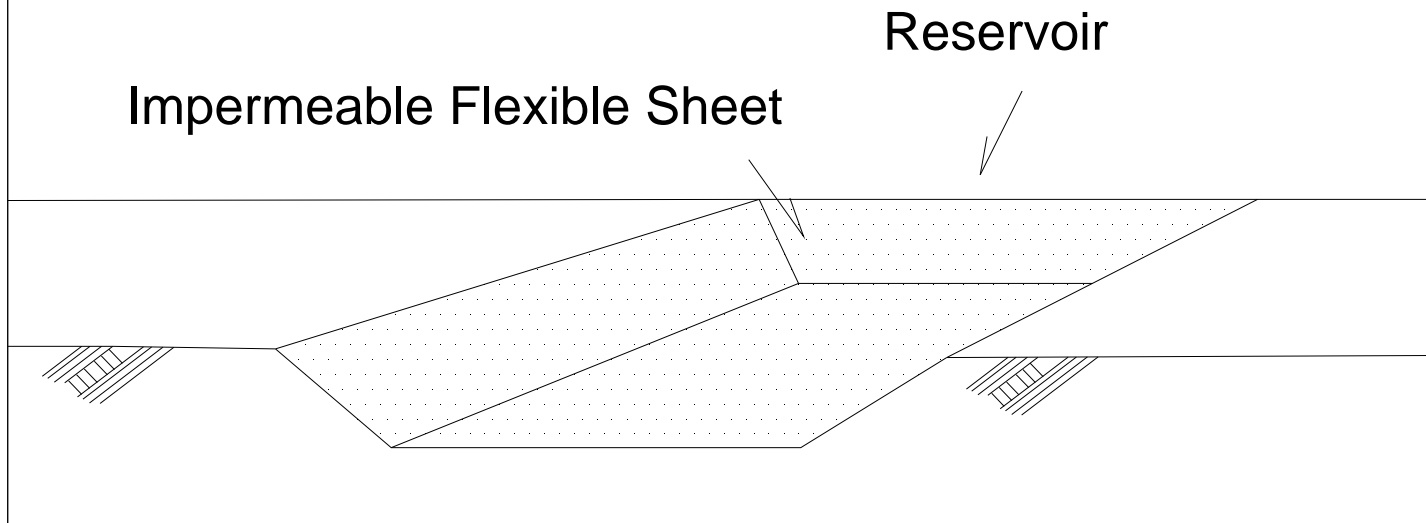
(107) Shielding Zone

(107) Shielding Zone



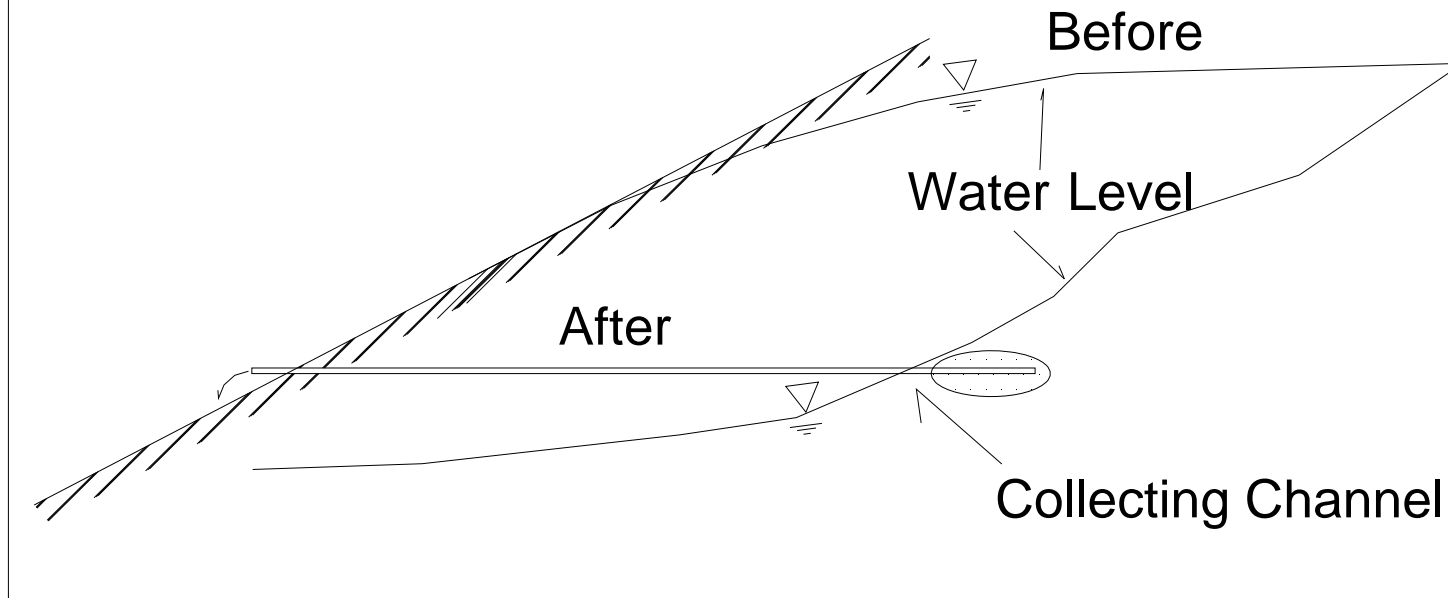
(108) Impermeable Flexible Sheet

(108) Impermeable Flexible Sheet



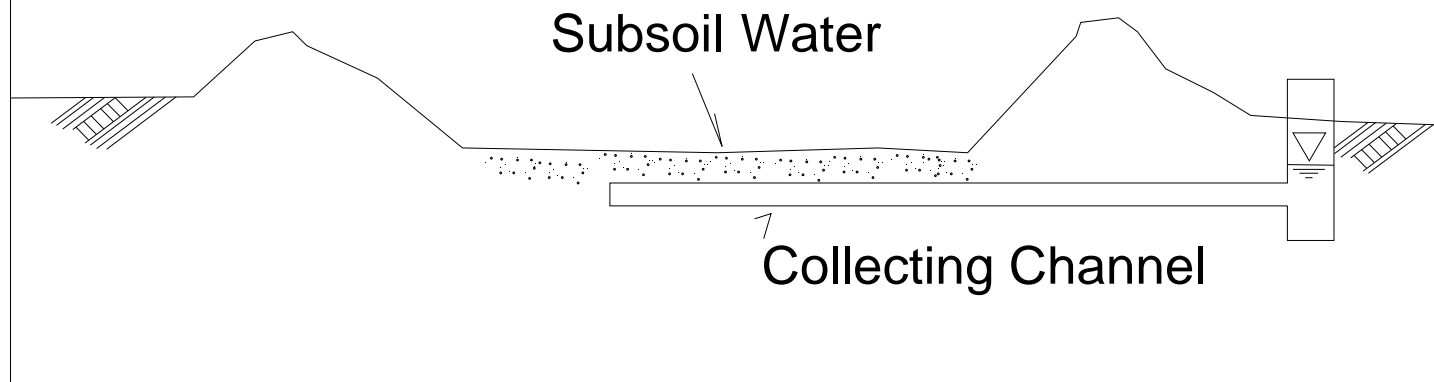
(109) Collecting Channel 1

(109) Collecting Channel 1



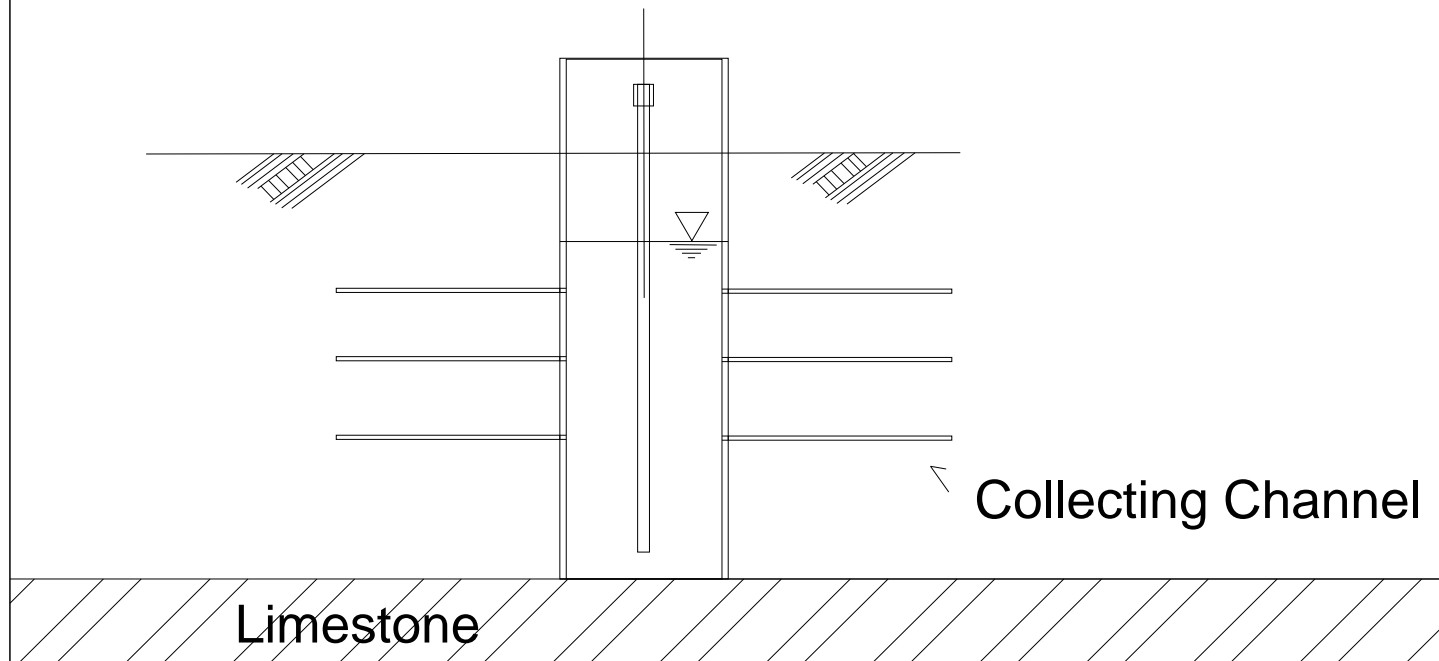
(110) Collecting Channel 2

(110) Collecting Channel 2



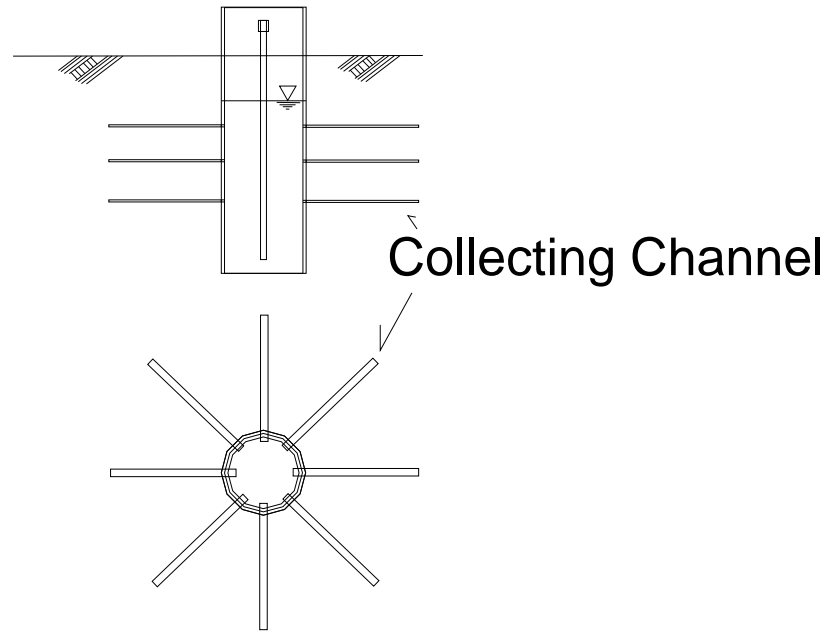
(111) Collecting Drain 1

(111) Collecting Drain 1



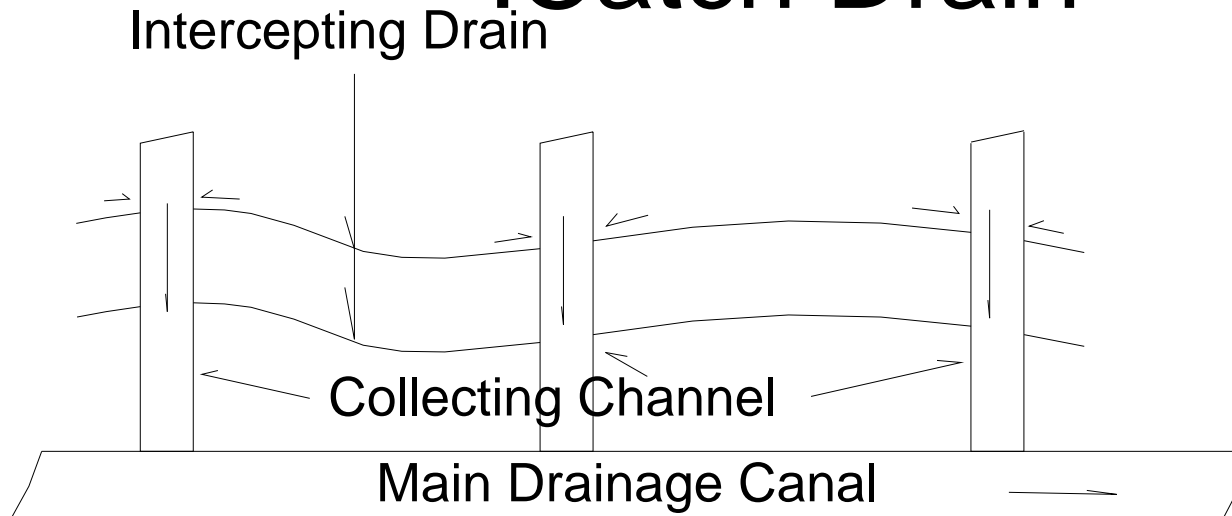
(112) Collecting Drain2

(112) Collecting Drain2



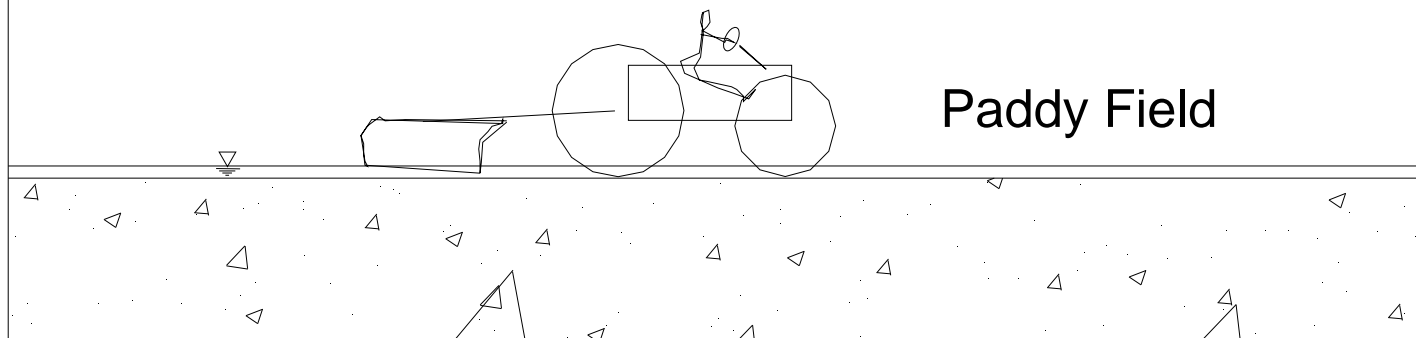
(113) Intercepting Drain :Catch Drain

(113) Intercepting Drain :Catch Drain



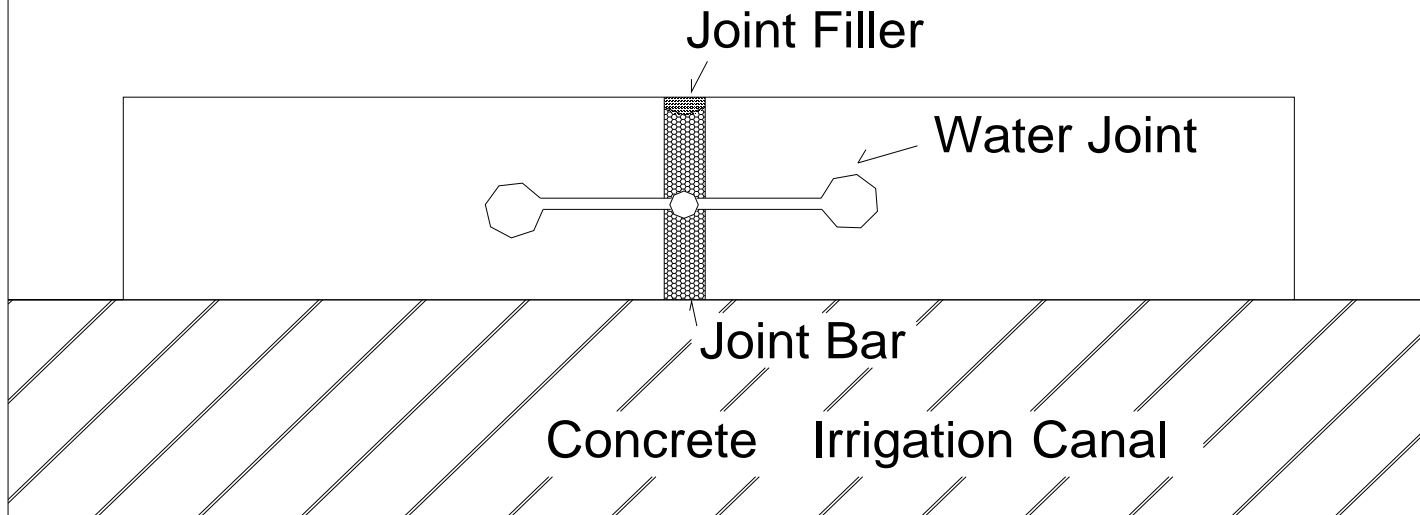
(114) Surface Soil Paddling

(114) Surface Soil Paddling



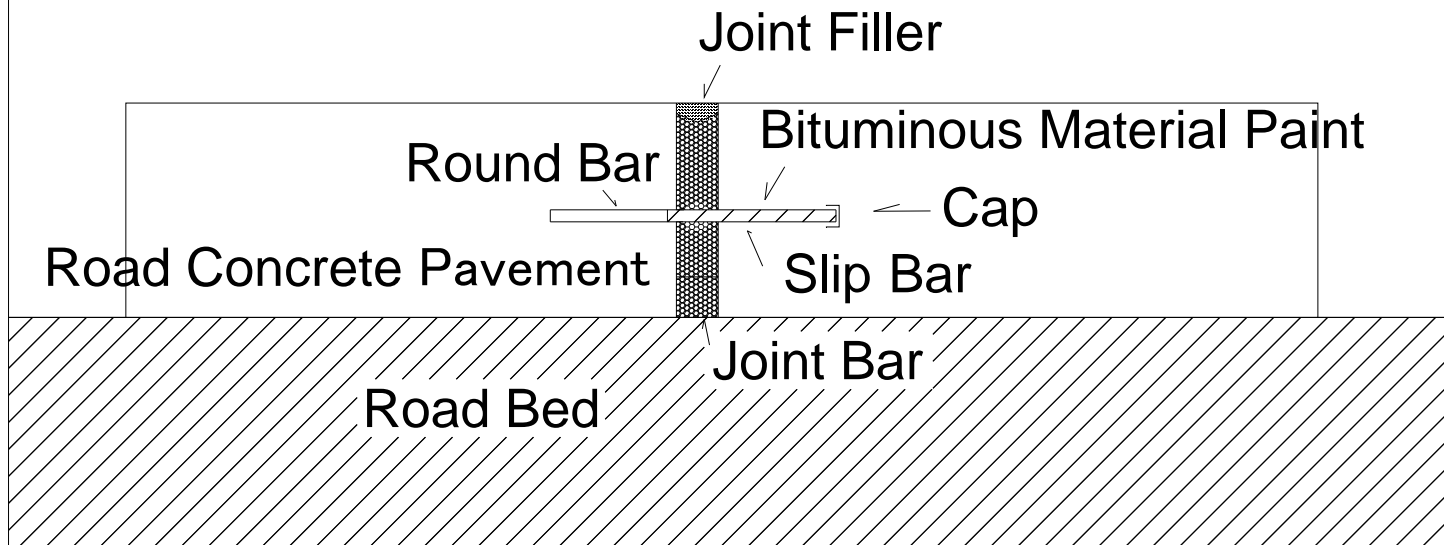
(115) Expansion Joint 1

(115) Expansion Joint 1



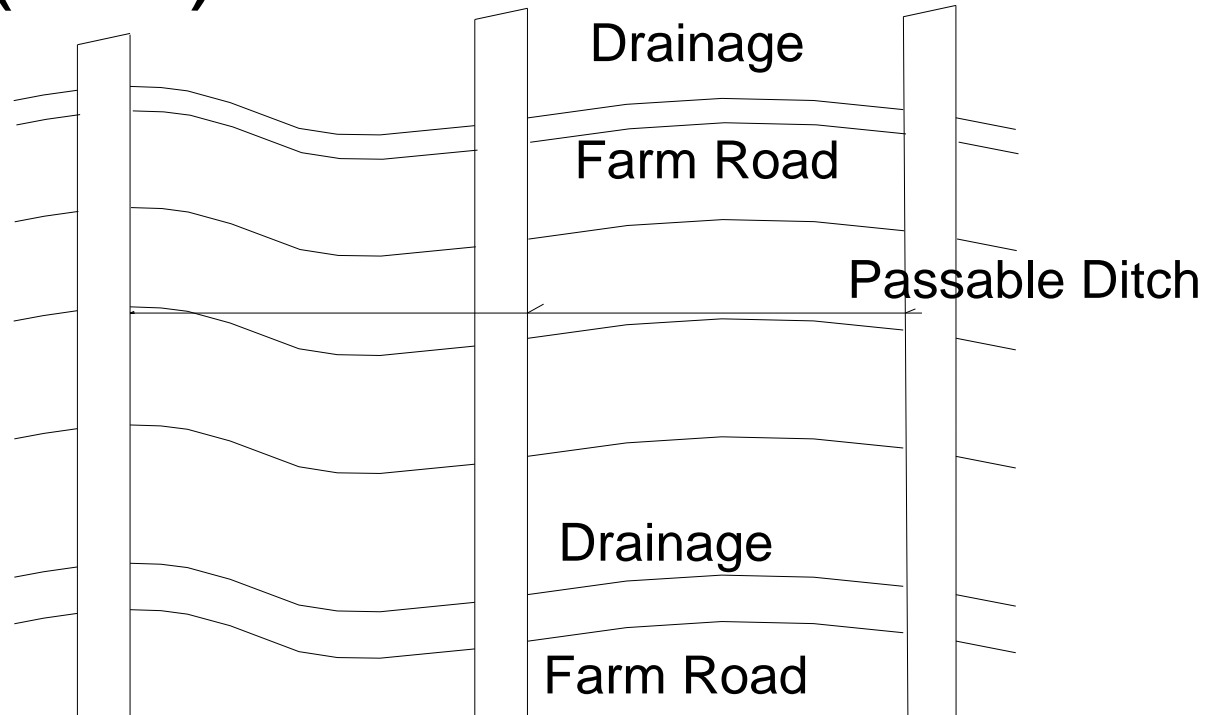
(116) Expansion Joint 2

(116) Expansion Joint 2



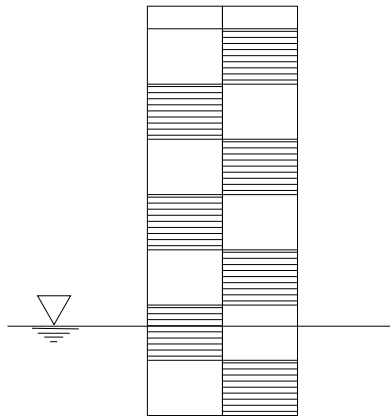
(117) Passable Ditch

(117) Passable Ditch

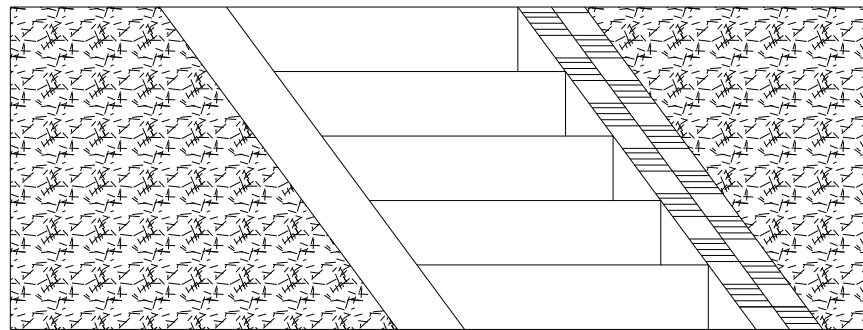


(118) Water Level Gage

(118) Water Level Gage



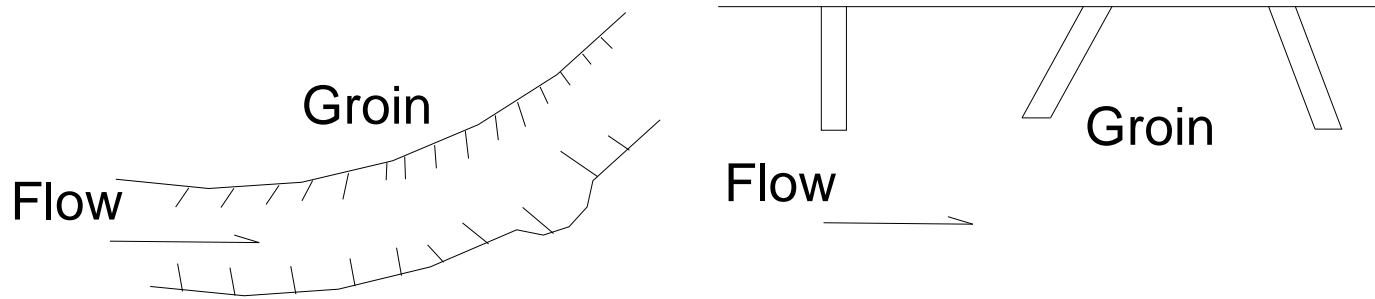
Erection Type



Slope Type

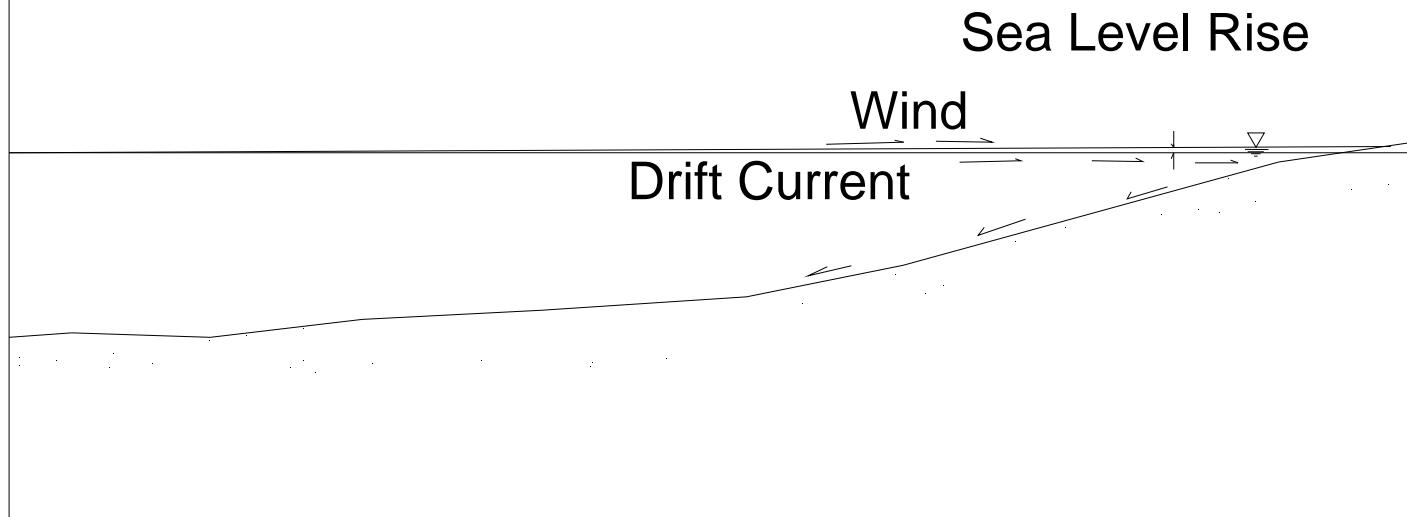
(119) Groin

(119) Groin

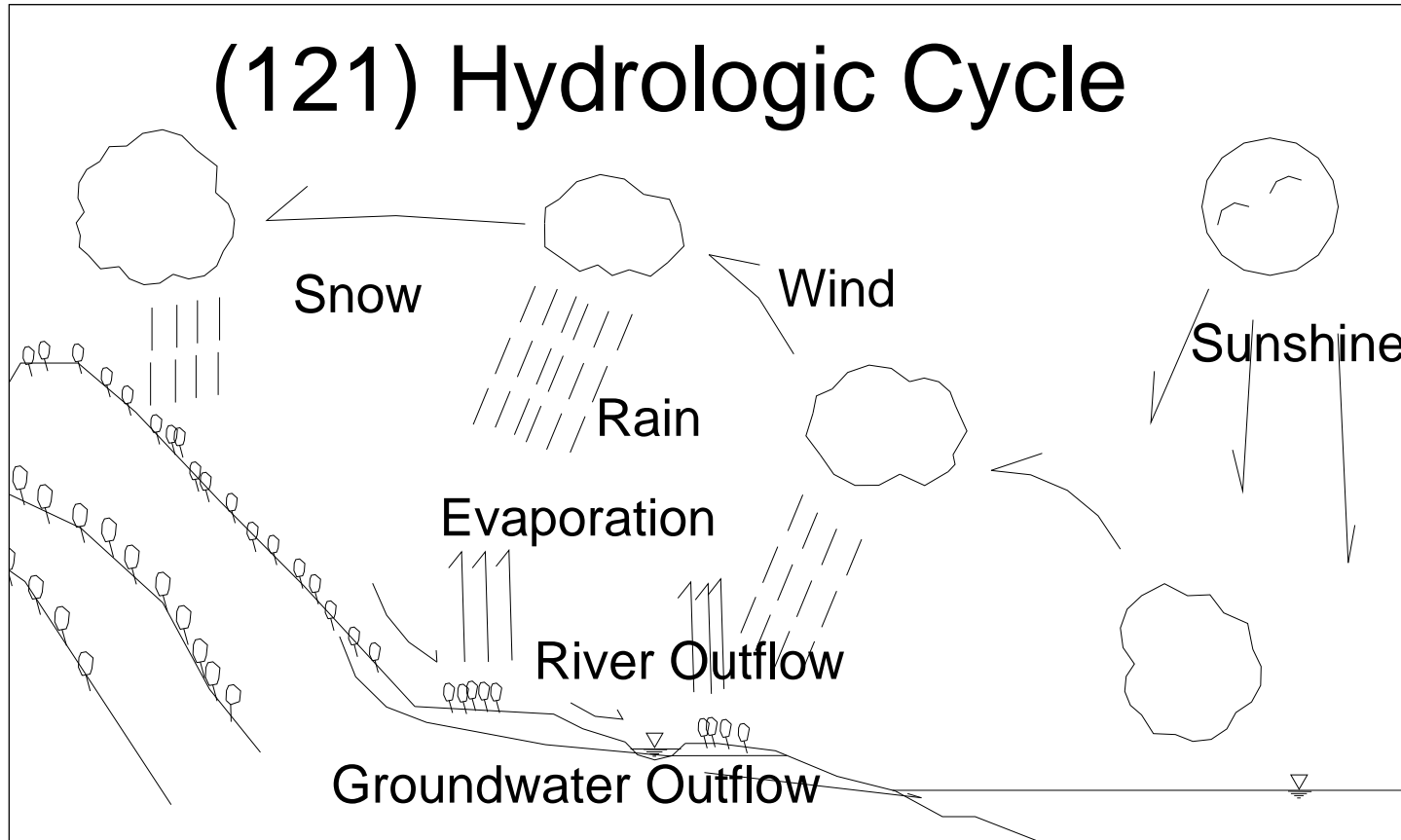


(120) Drift Current

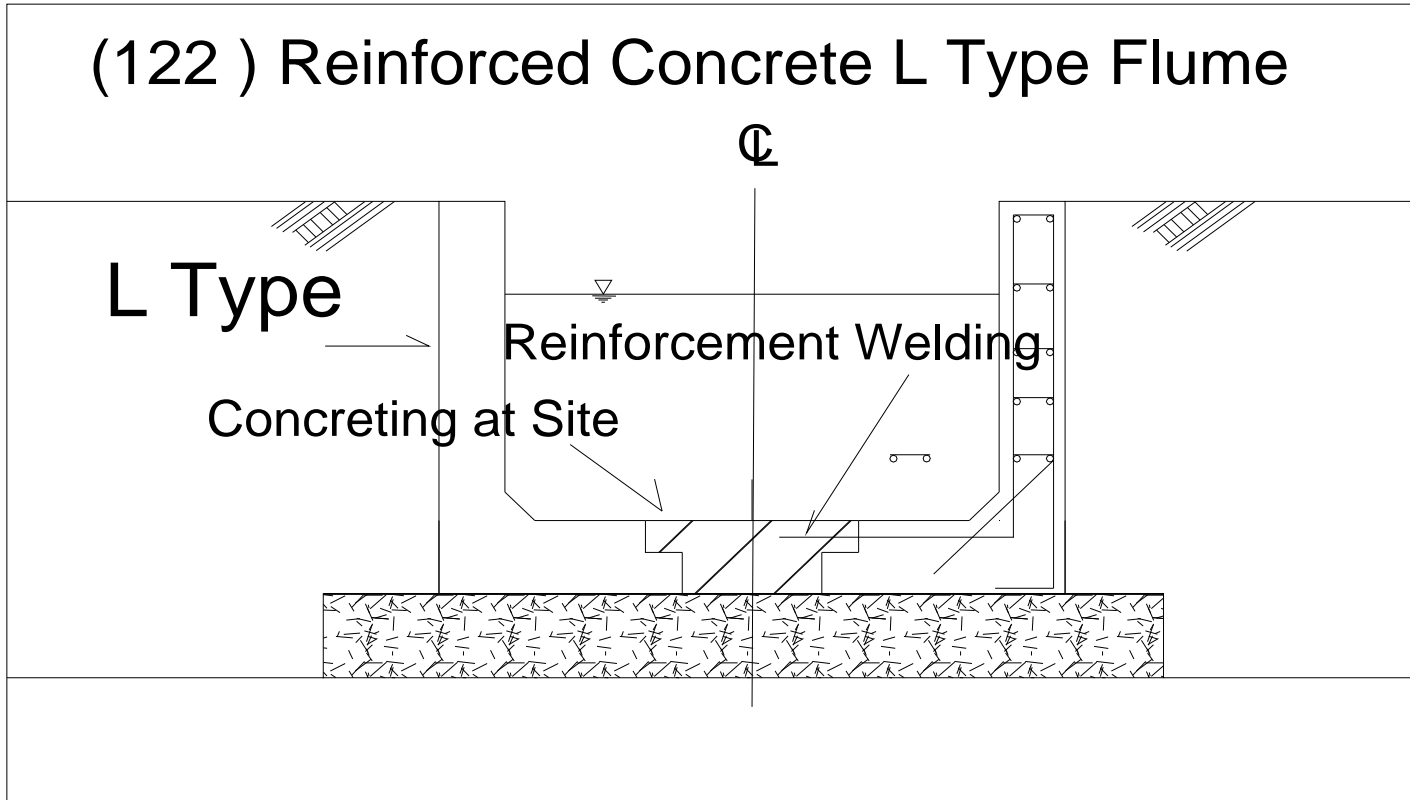
(120) Drift Current



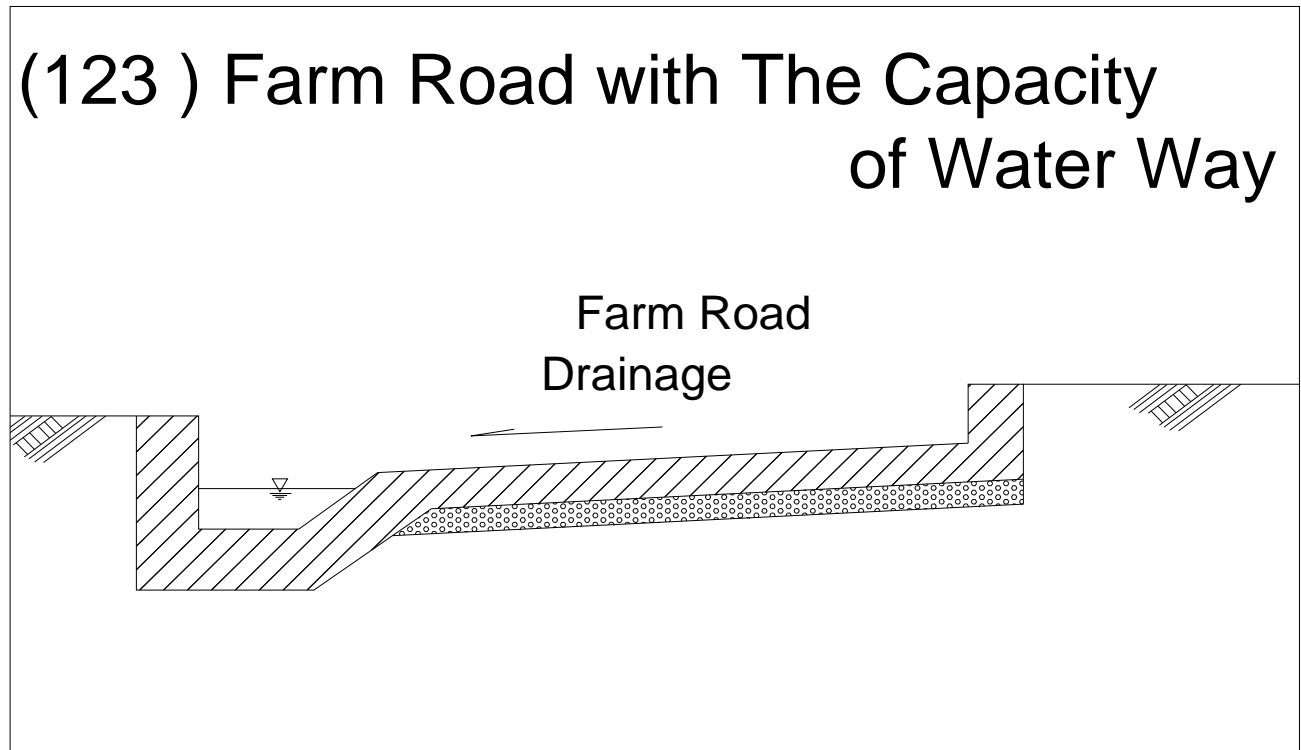
(121) Hydrologic Cycle



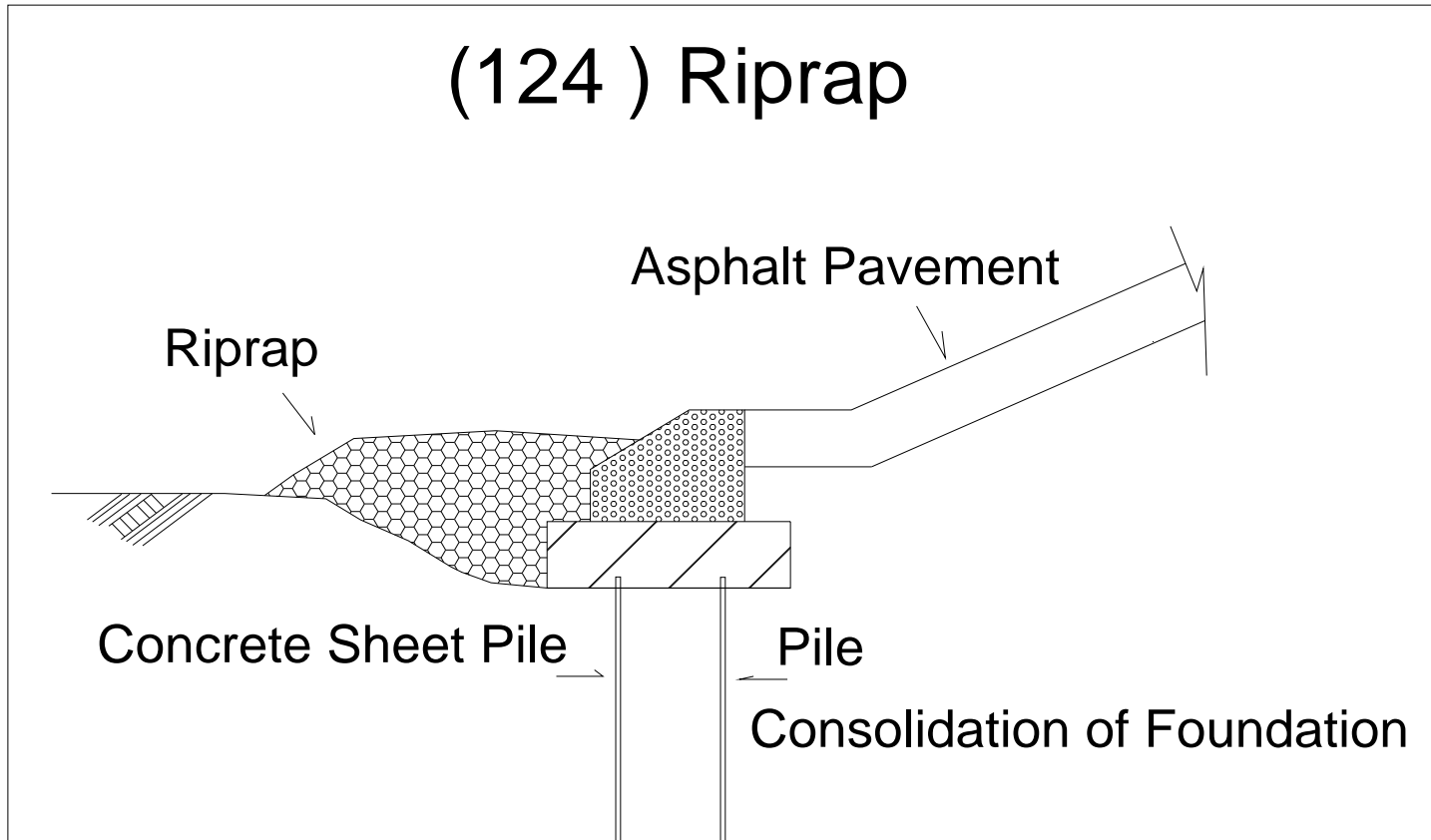
(122) Reinforced Concrete L Type Flume



(123) Farm Road with The Capacity of Water Way

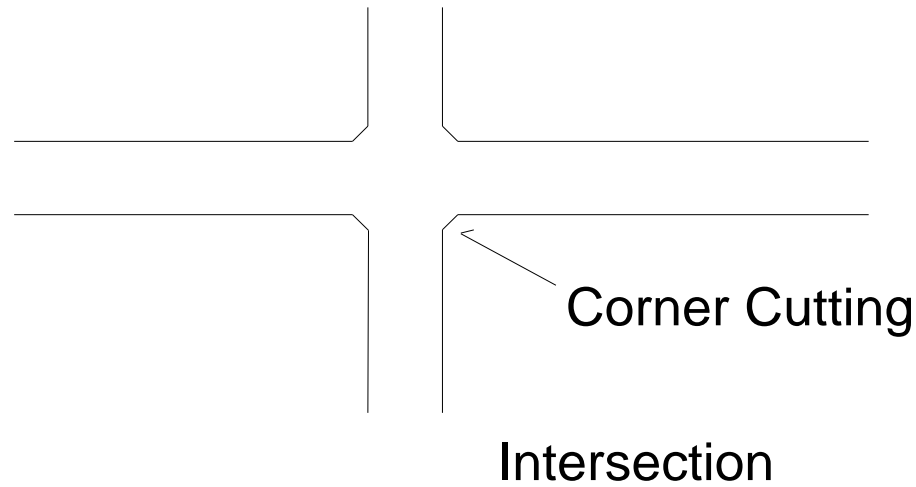


(124) Riprap



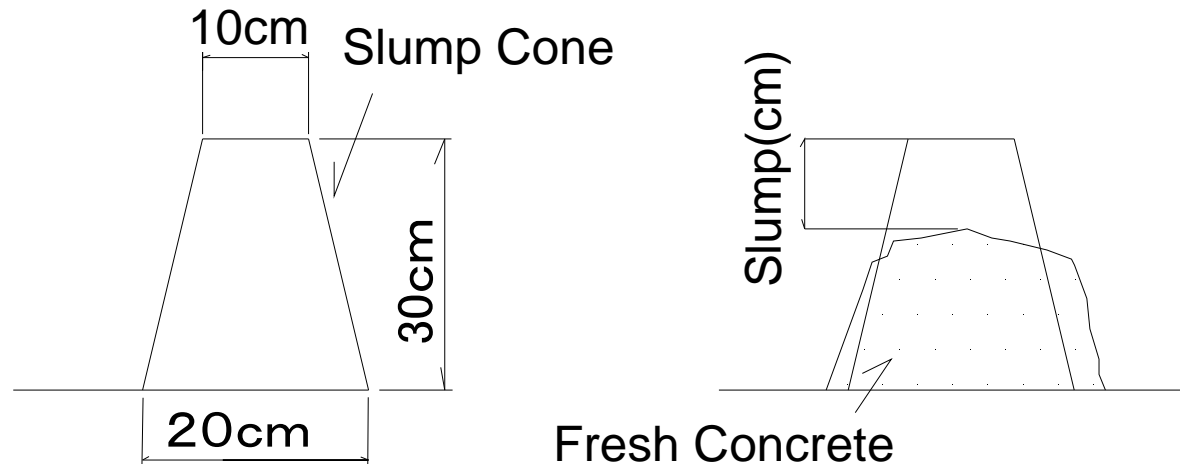
(126) Corner Cutting

(126) Corner Cutting



(127) Slump Test

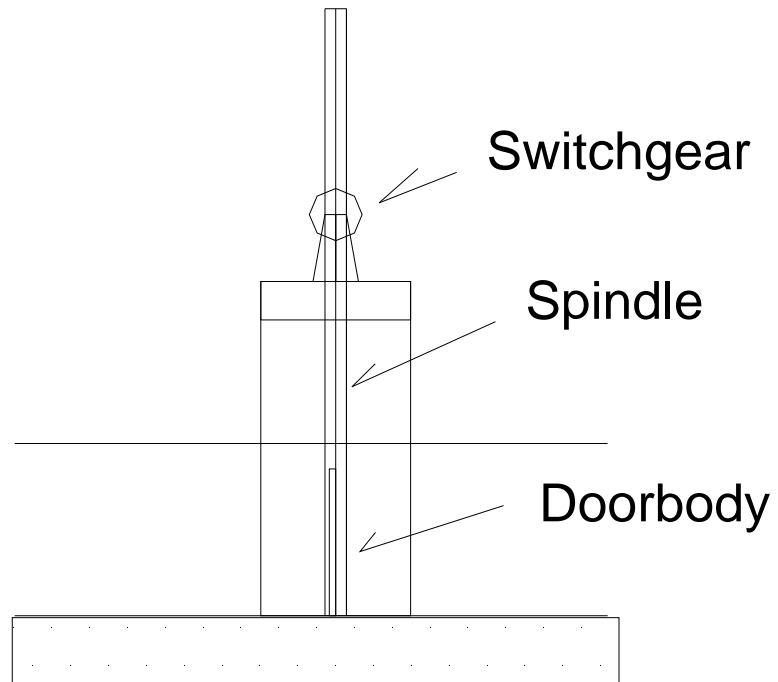
(127) Slump Test



Fresh Concrete
Judge Softness Degree

(128) Slide Type Gate

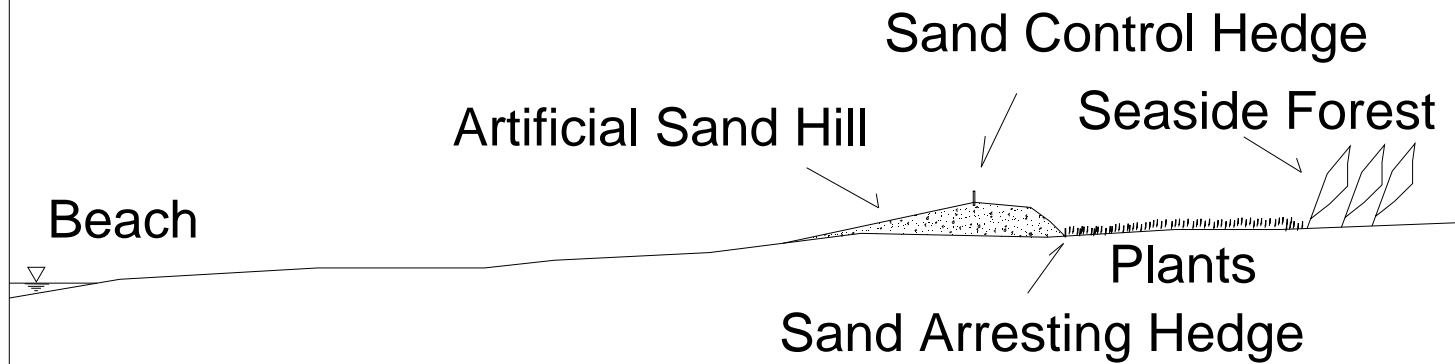
(128) Slide Type Gate



(129) Sand Control Hedge

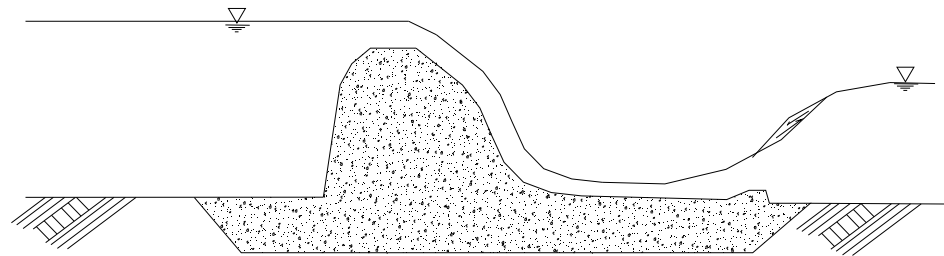
(129) Sand Control Hedge

Wind Erosion Prevention



(130) Weir 1

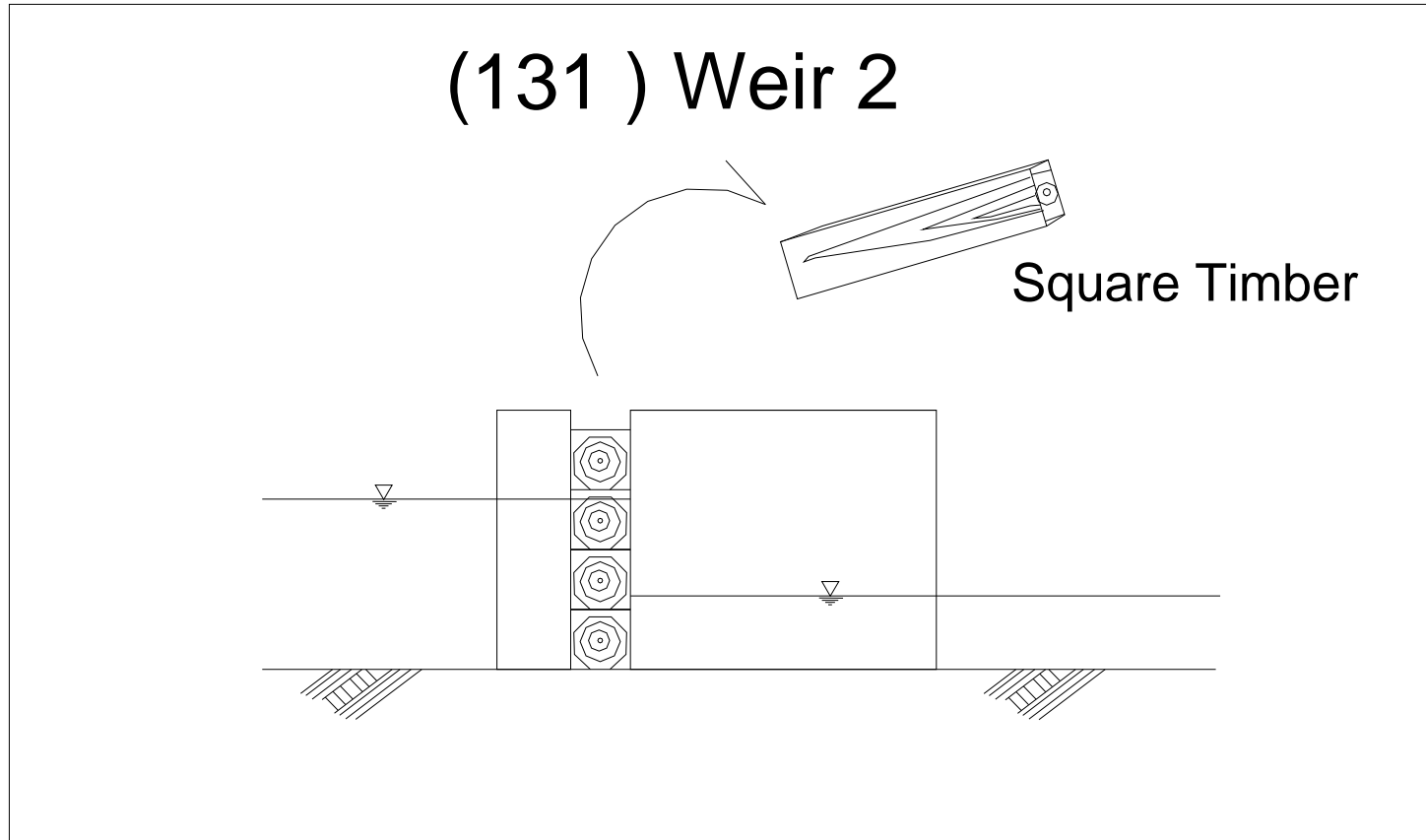
(130) Weir 1



Fixed Weir

Water Level Rising
Irrigation Water Intake
Water Diversion

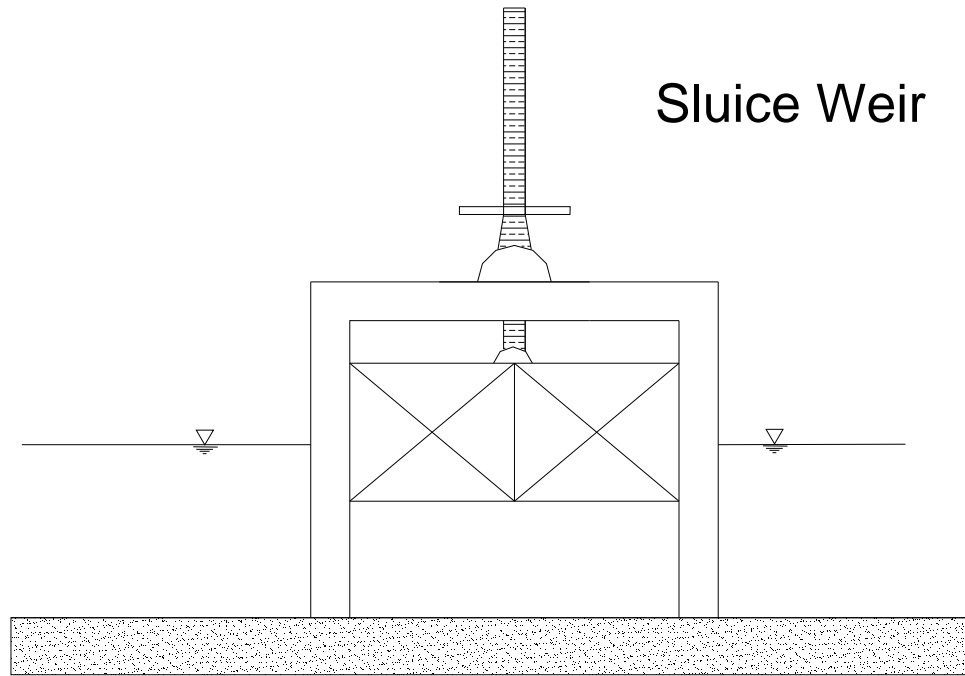
(131) Weir 2



(132) Weir 3

(132) Weir 3

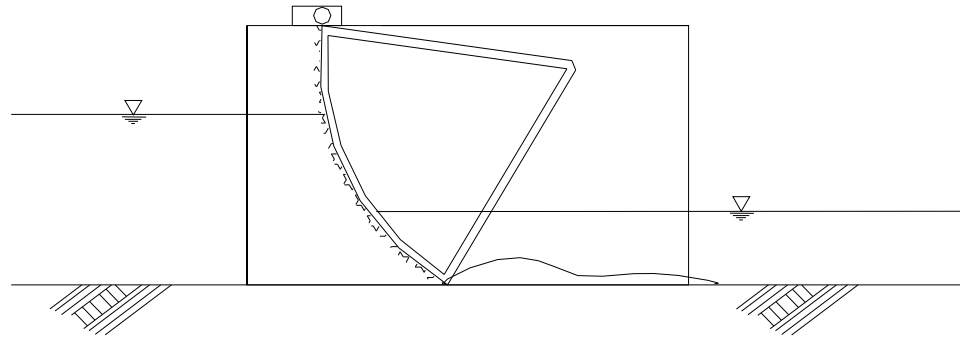
Sluice Weir



(133) Weir 4

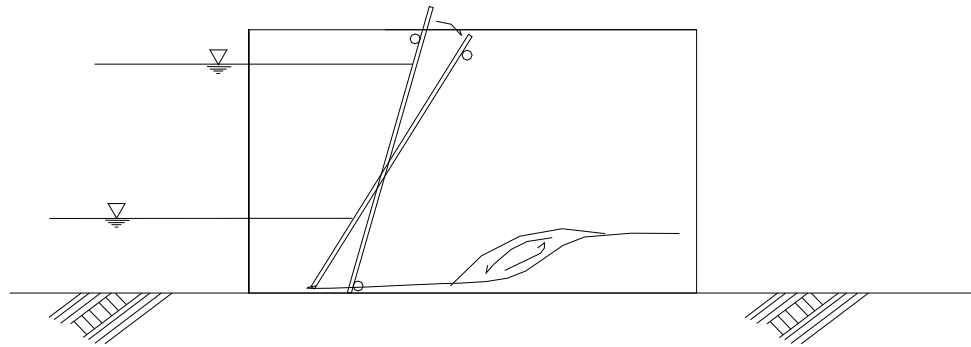
(133) Weir 4

Tainter Gate



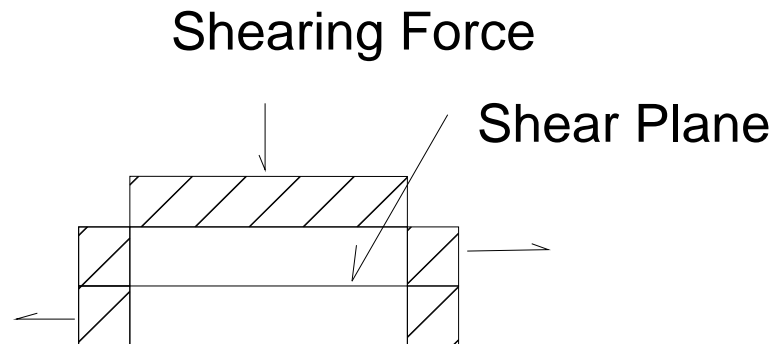
(134) Weir 5

(134) Weir 5



(135) Shear Test

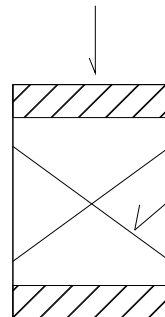
(135) Shear Test



(136) Shear Test

(136) Shear Test

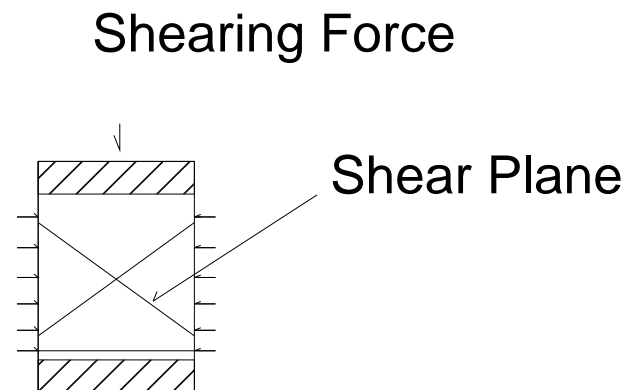
Shearing Force



Shear Plane

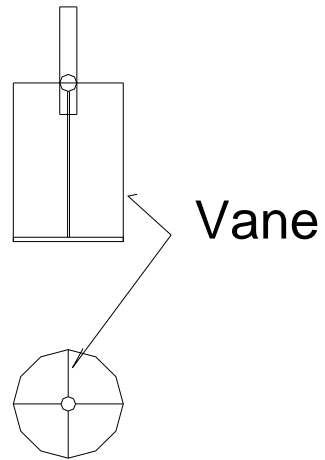
(137) Triaxial Shear Test

(137) Triaxial Shear Test

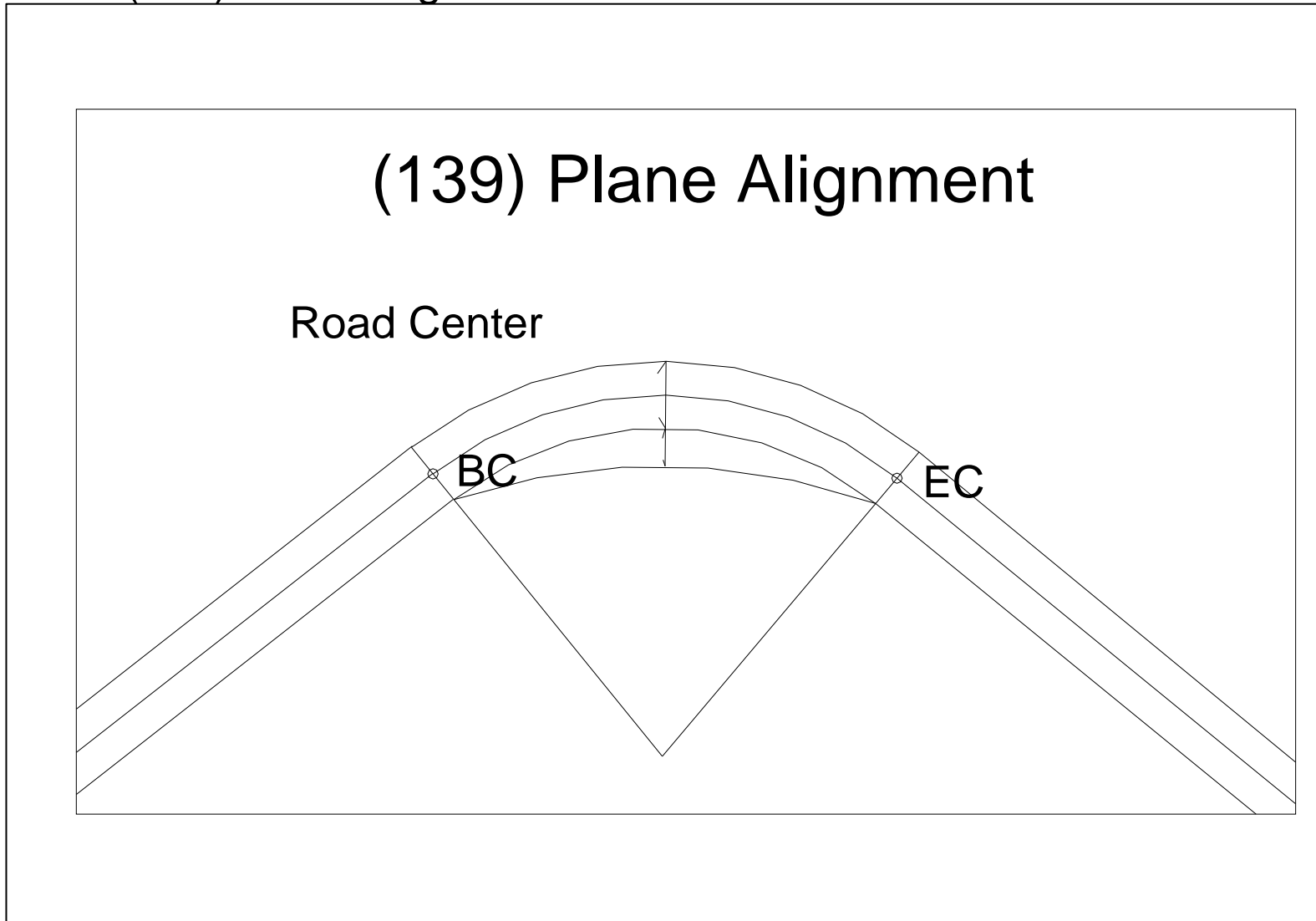


(138) Vane Test

(138) Vane Test

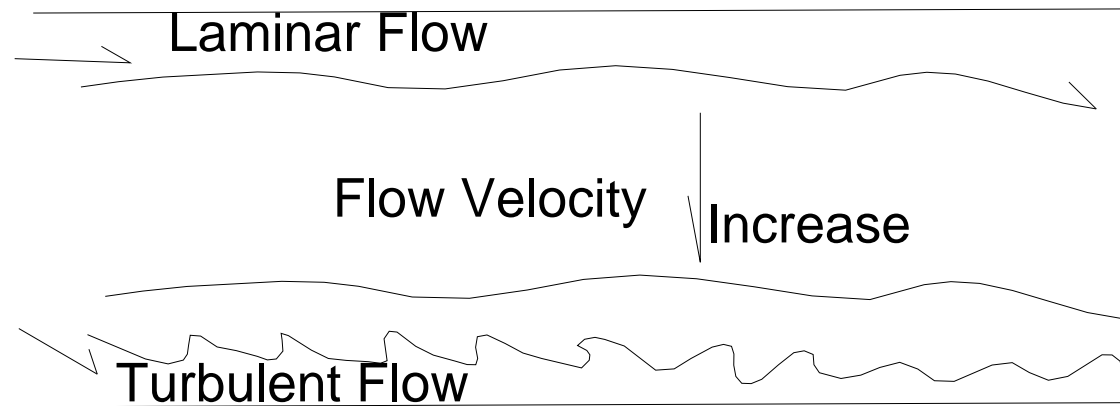


(139) Plane Alignment



(140) Laminar Flow

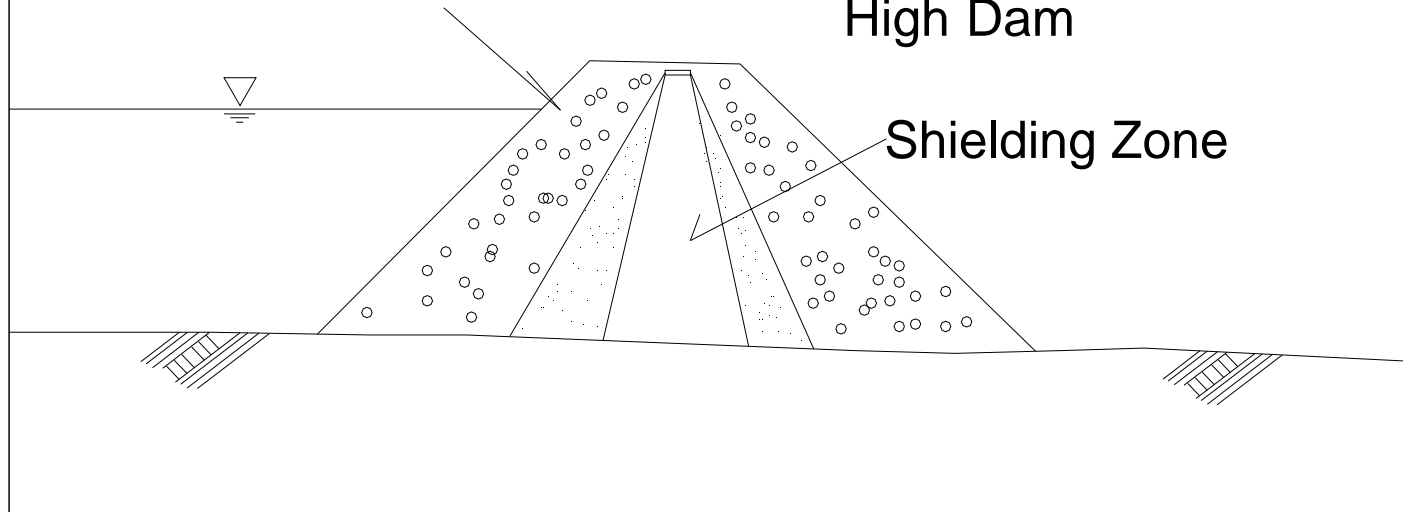
(140) Laminar Flow



(141) Zoned Fill-type Dam

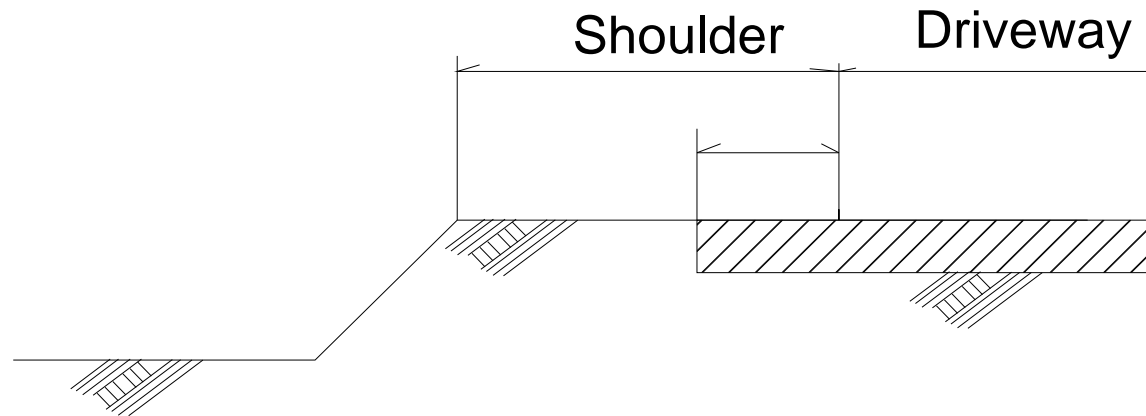
(141) Zoned Fill-type Dam

Material-Shearing Strength-Big
Percolation Zone Pore Water Pressure-Dispersion
High Dam



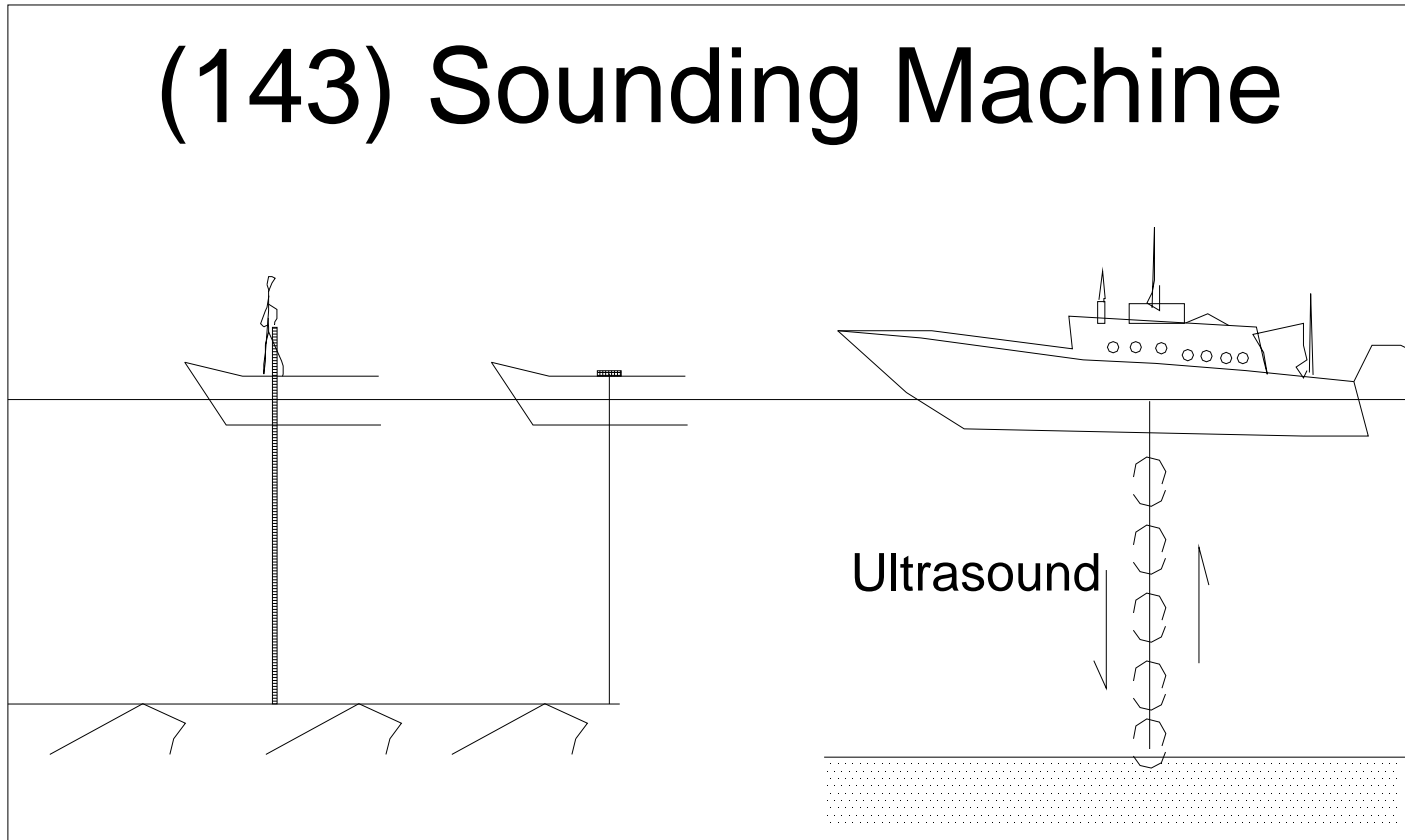
(142) Marginal Strip

(142) Marginal Strip



(143) Sounding Machine

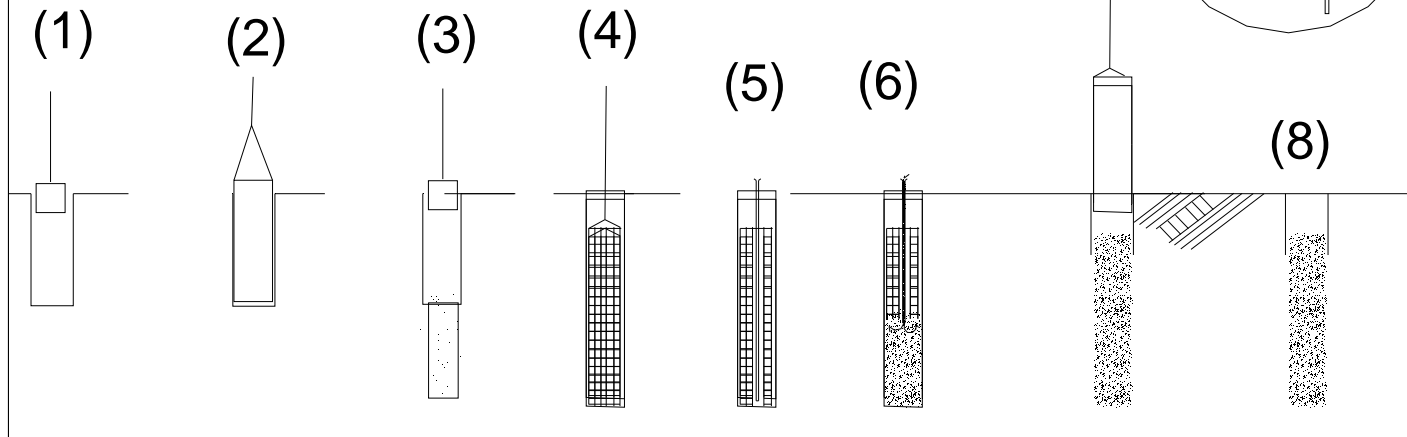
(143) Sounding Machine



(144) Foundation Earth Drilling Equipment

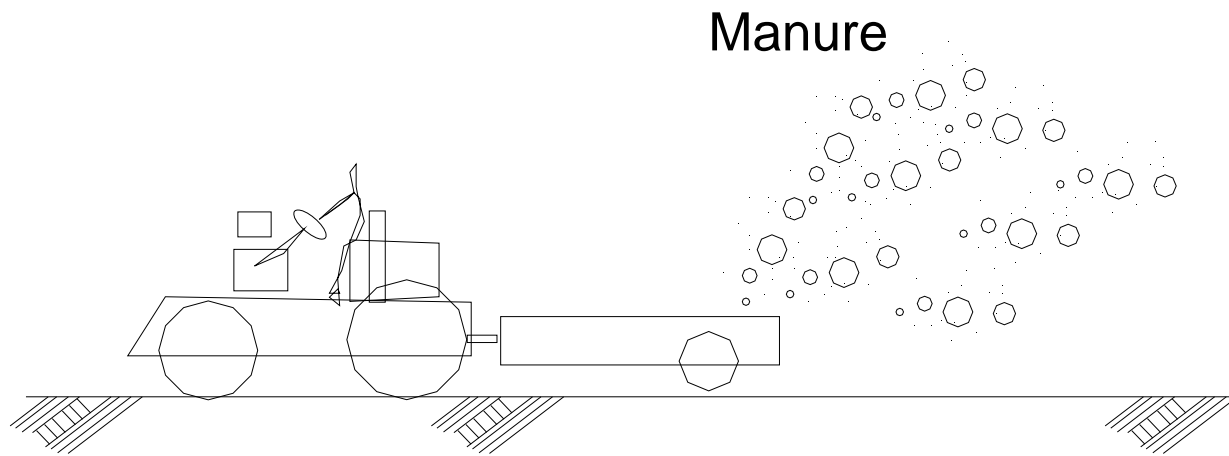
(144) Foundation Earth Drilling Equipment

- (1) Dig
- (2) Casing Tube
- (3) Bentonite
- (4) Reinforcing Bar Cage
- (5) Tremie Pipe
- (6) Ready Mixed Concrete
- (7) Pull out Casing
- (8) Back Fill



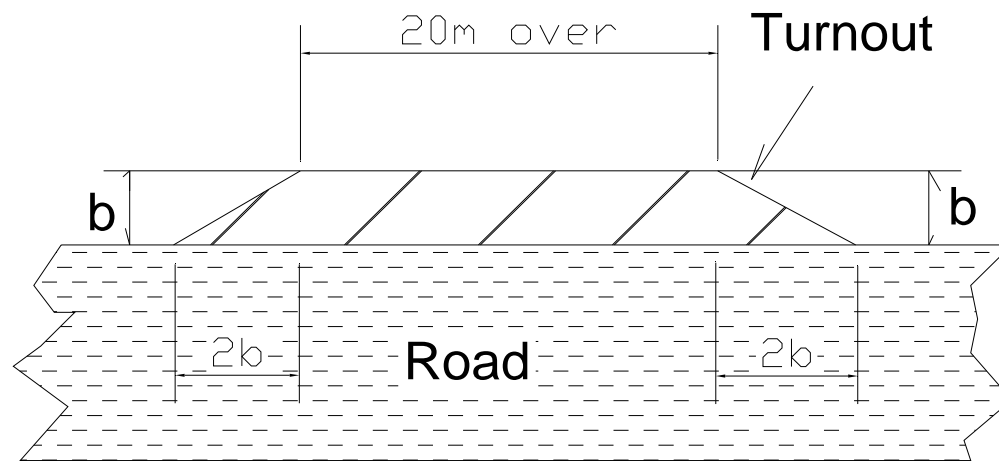
(145)Manure Spreader

(145)Manure Spreader



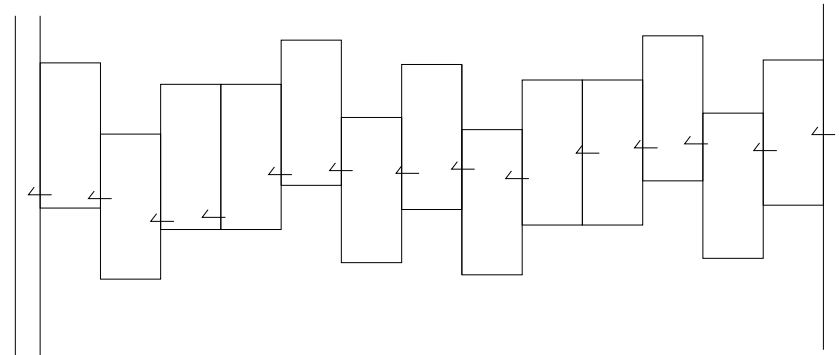
(146)Turnout

(146)Turnout



(147)Plot-to-Plot Irrigation

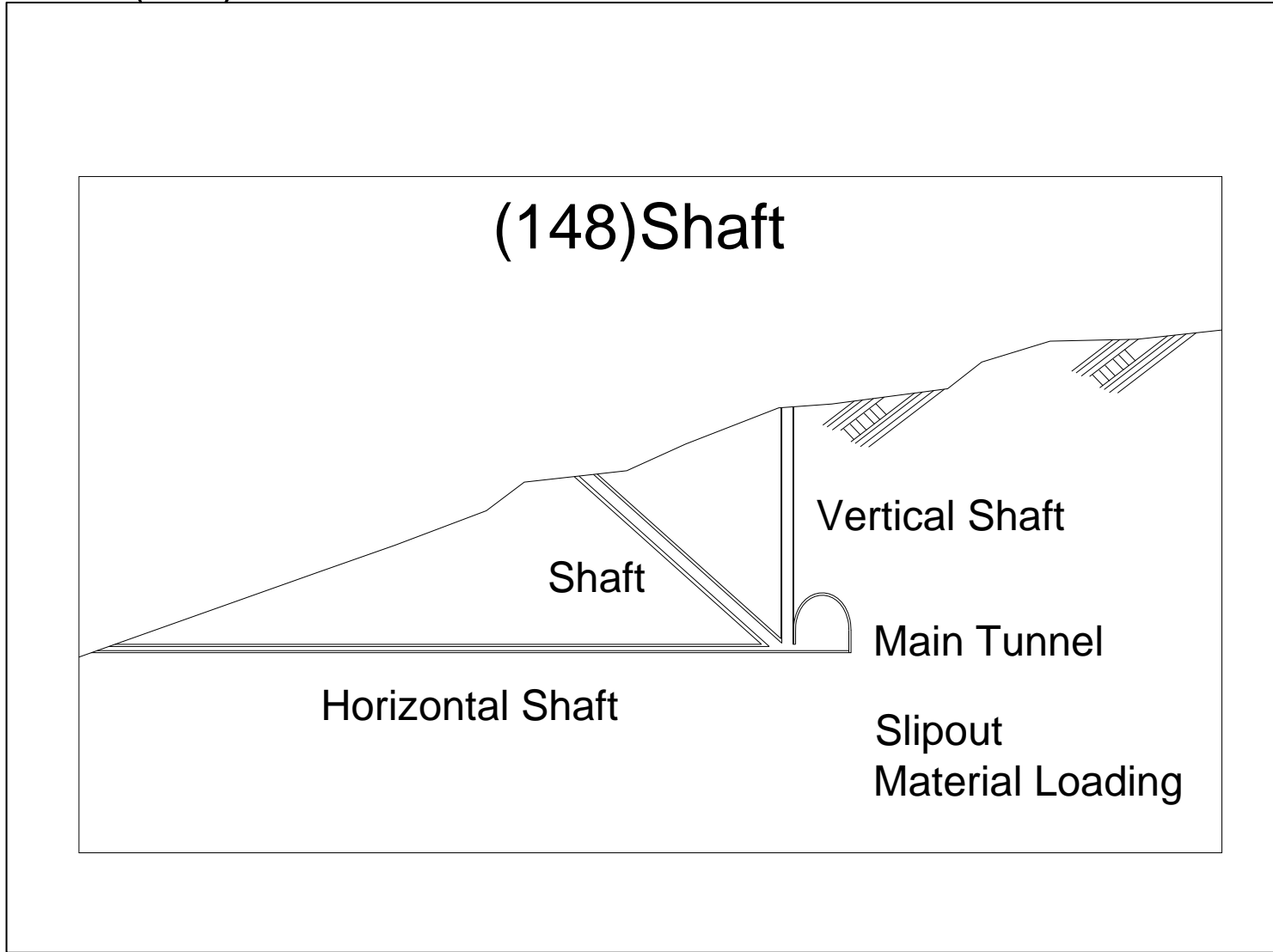
(147)Plot-to-Plot Irrigation



Drainage Canal

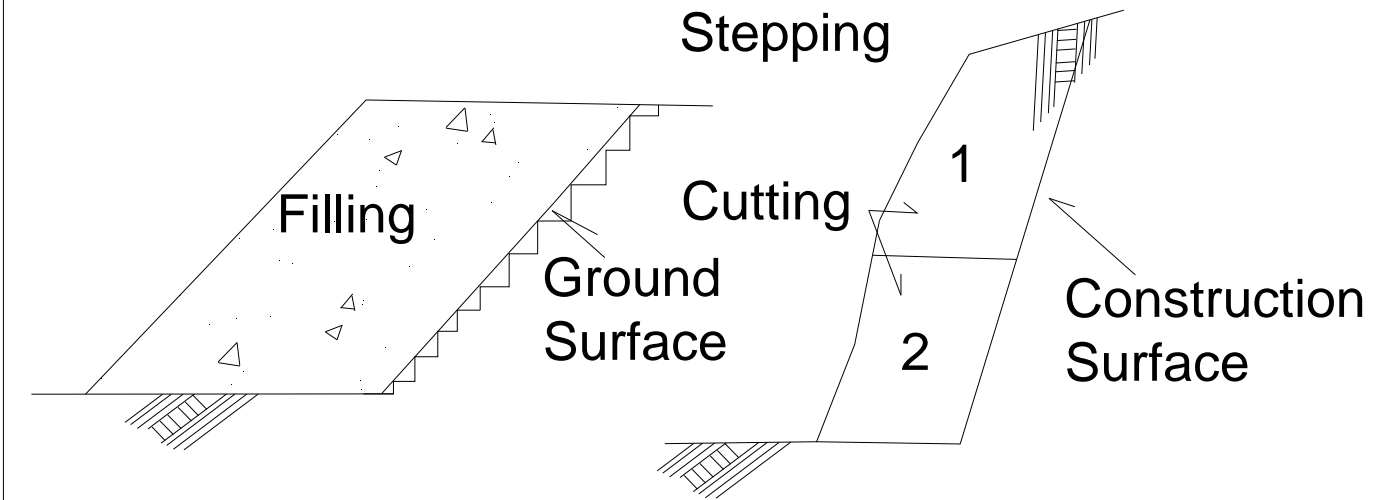
Irrigation Canal

(148)Shaft



(149)Stepping

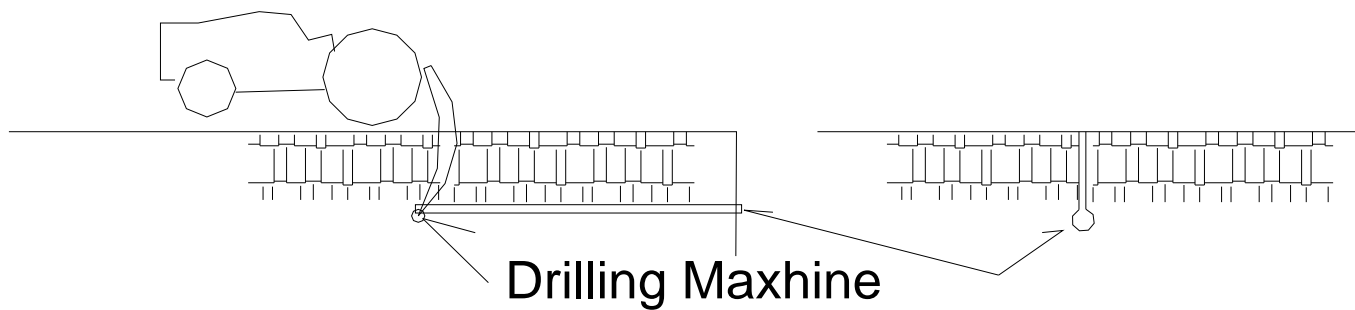
(149)Stepping



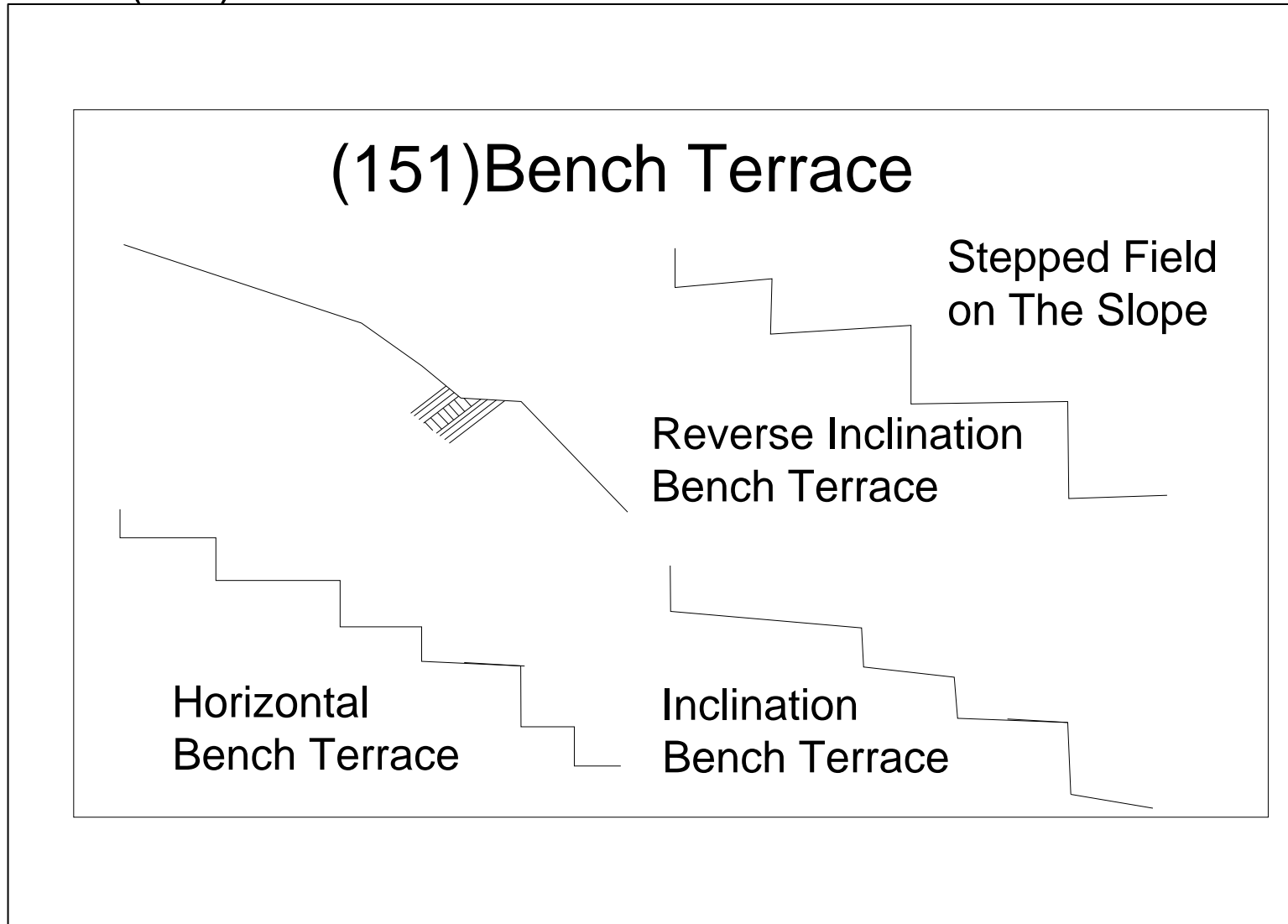
(150)Mole Drain

(150)Mole Drain

Tractor

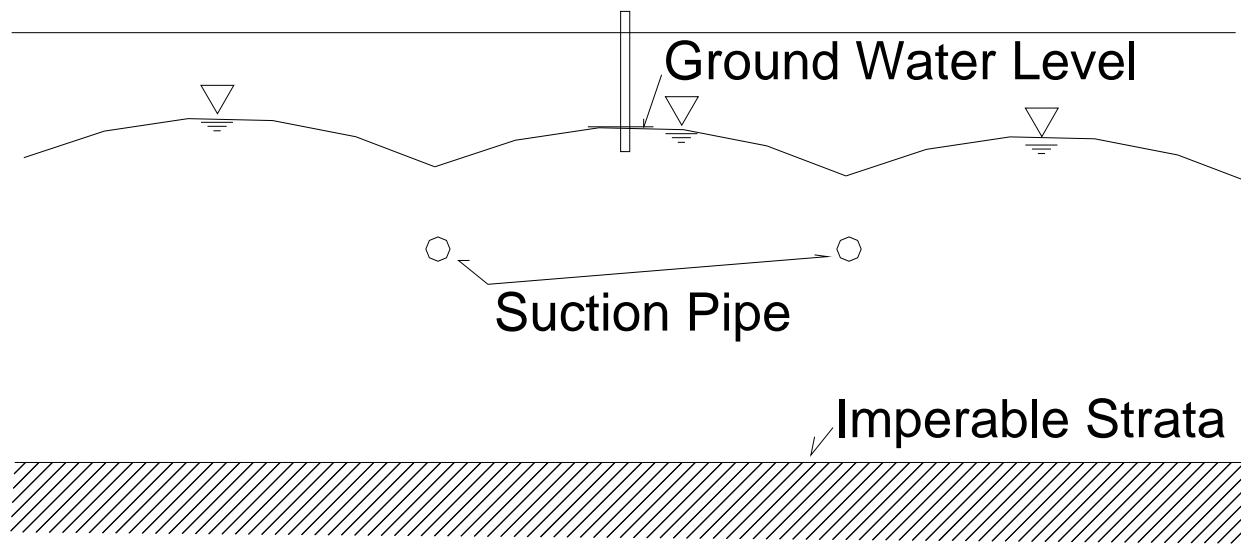


(151)Bench Terrace

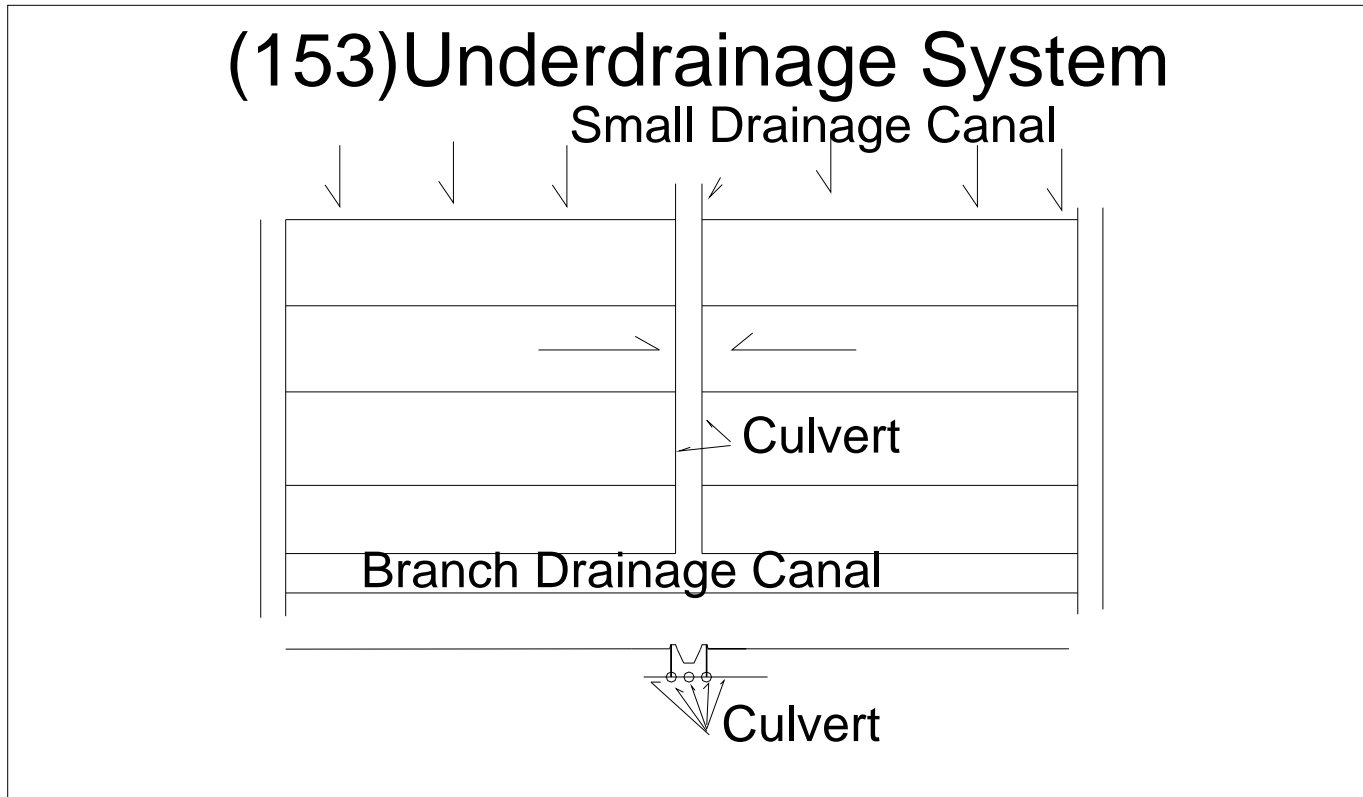


(152)Groundwater Table

(152)Groundwater Table

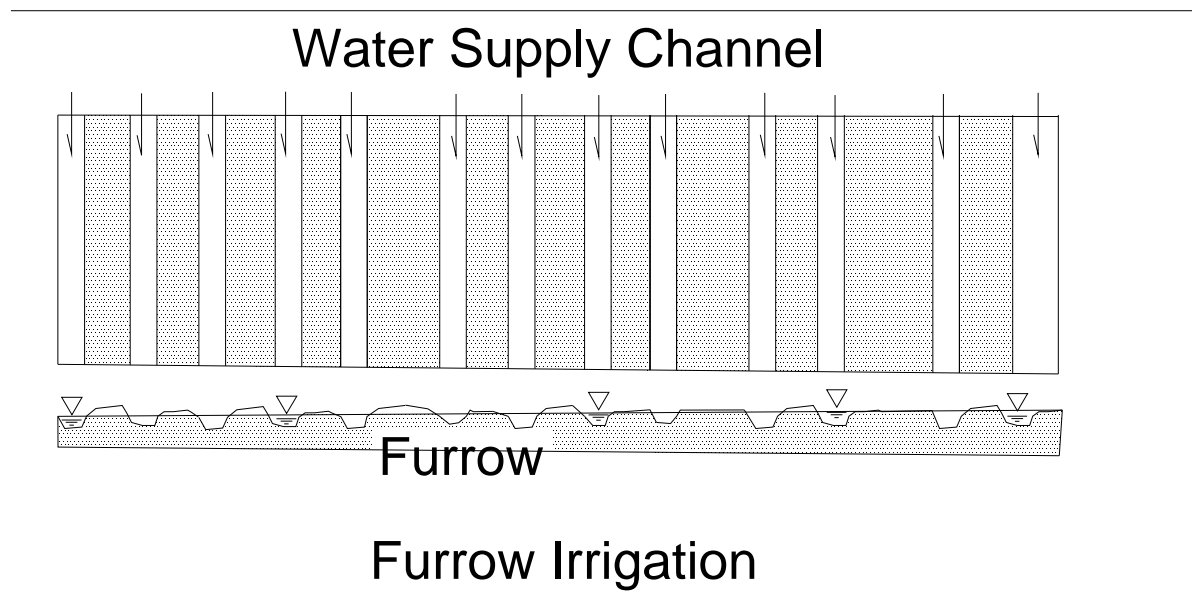


(153) Underdrainage System



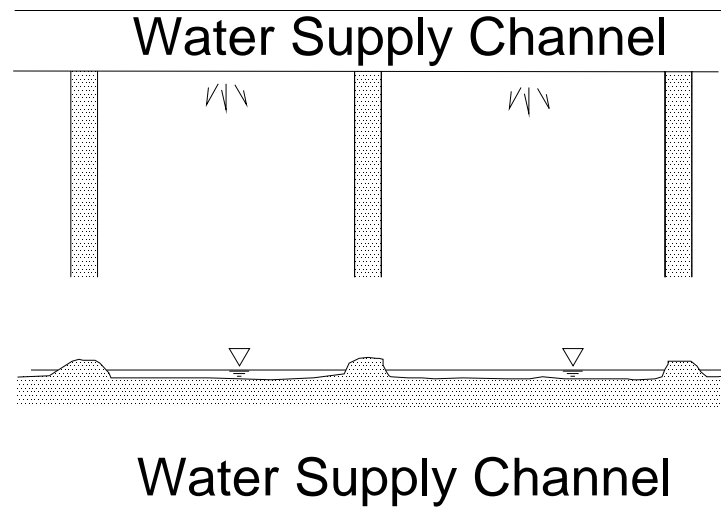
(154)Surface Irrigation(1)

(154)Surface Irrigation(1)



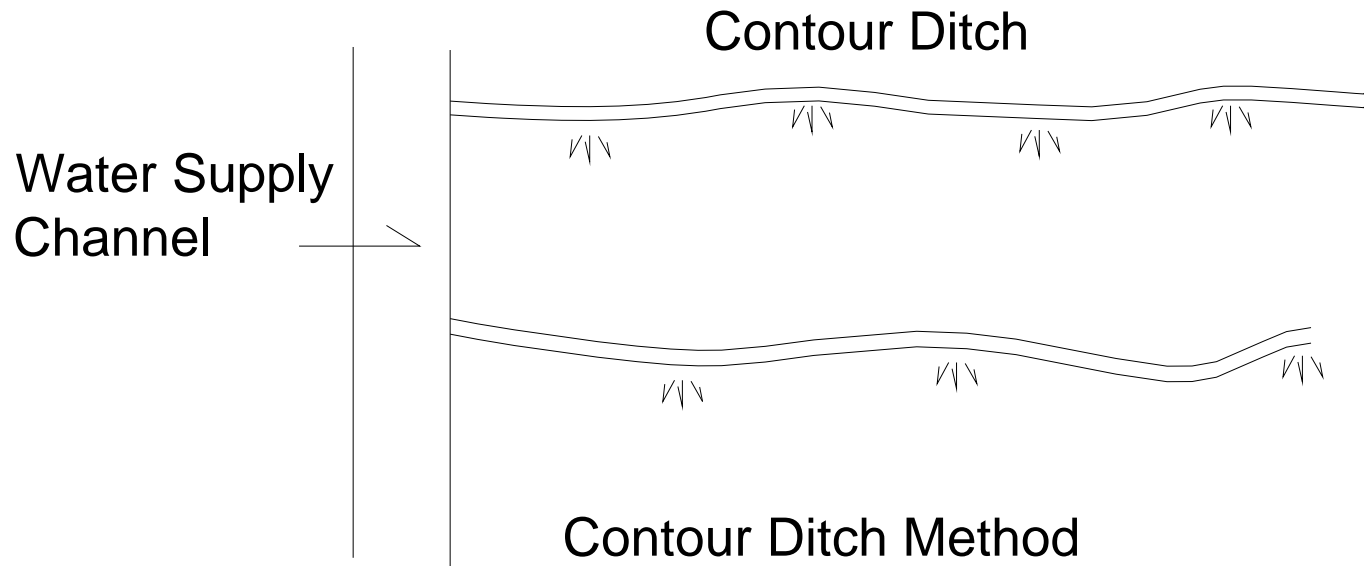
(155)Surface Irrigation(2)

(155)Surface Irrigation(2)



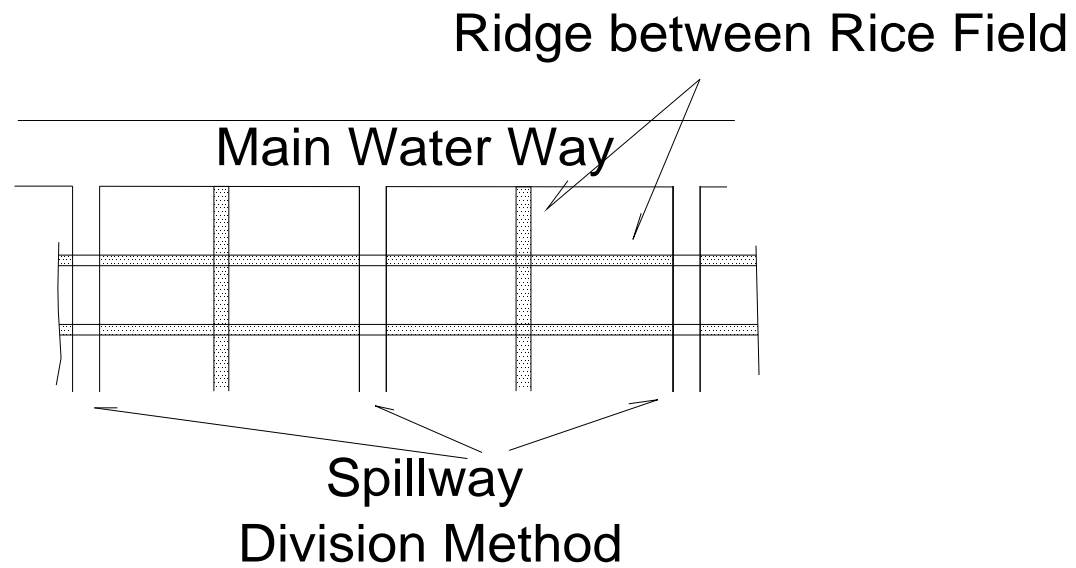
(156)Surface Irrigation(3)

(156)Surface Irrigation(3)



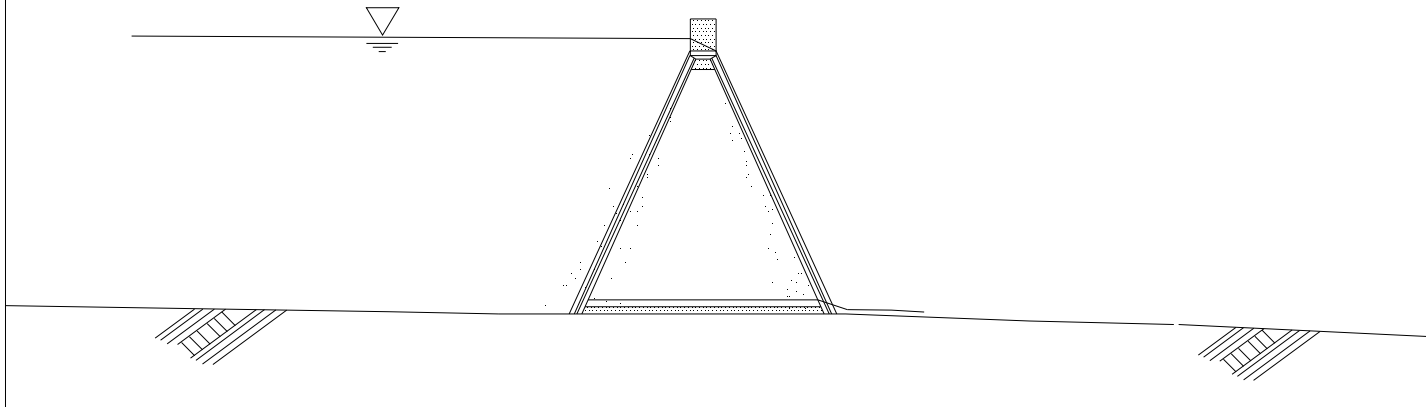
(157)Surface Irrigation(4)

(157)Surface Irrigation(4)



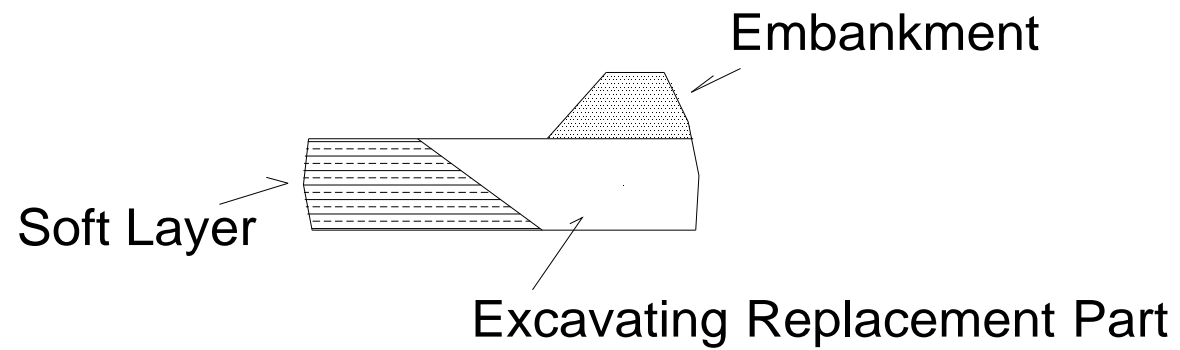
(158)Hollow Gravity Dam

(158)Hollow Gravity Dam



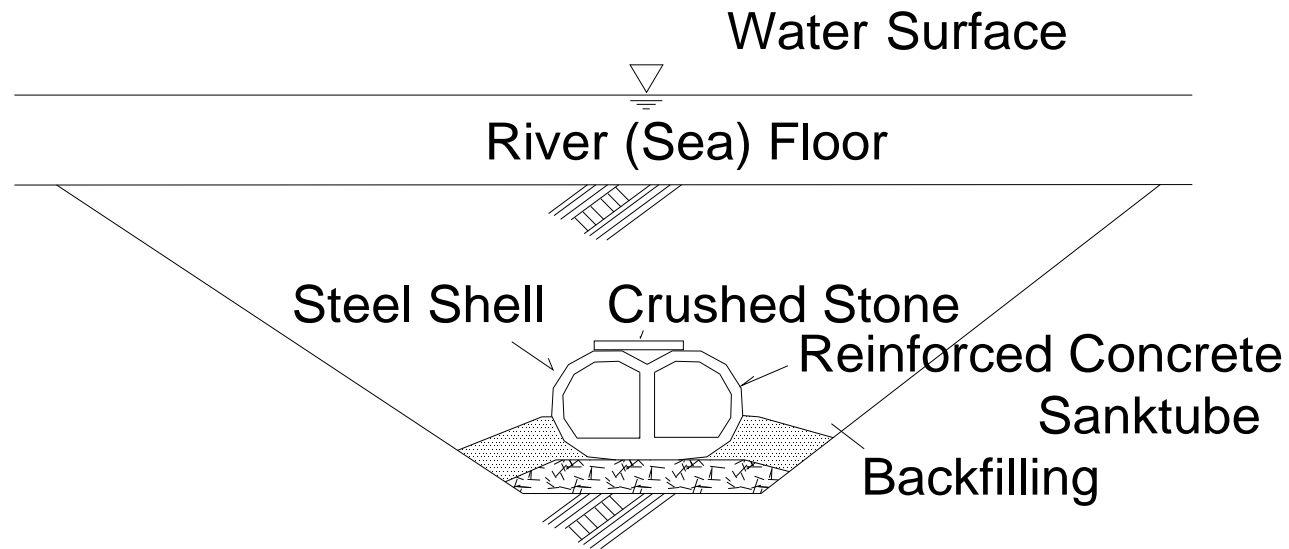
(159)Replacement Method(1)

(159)Replacement Method(1)

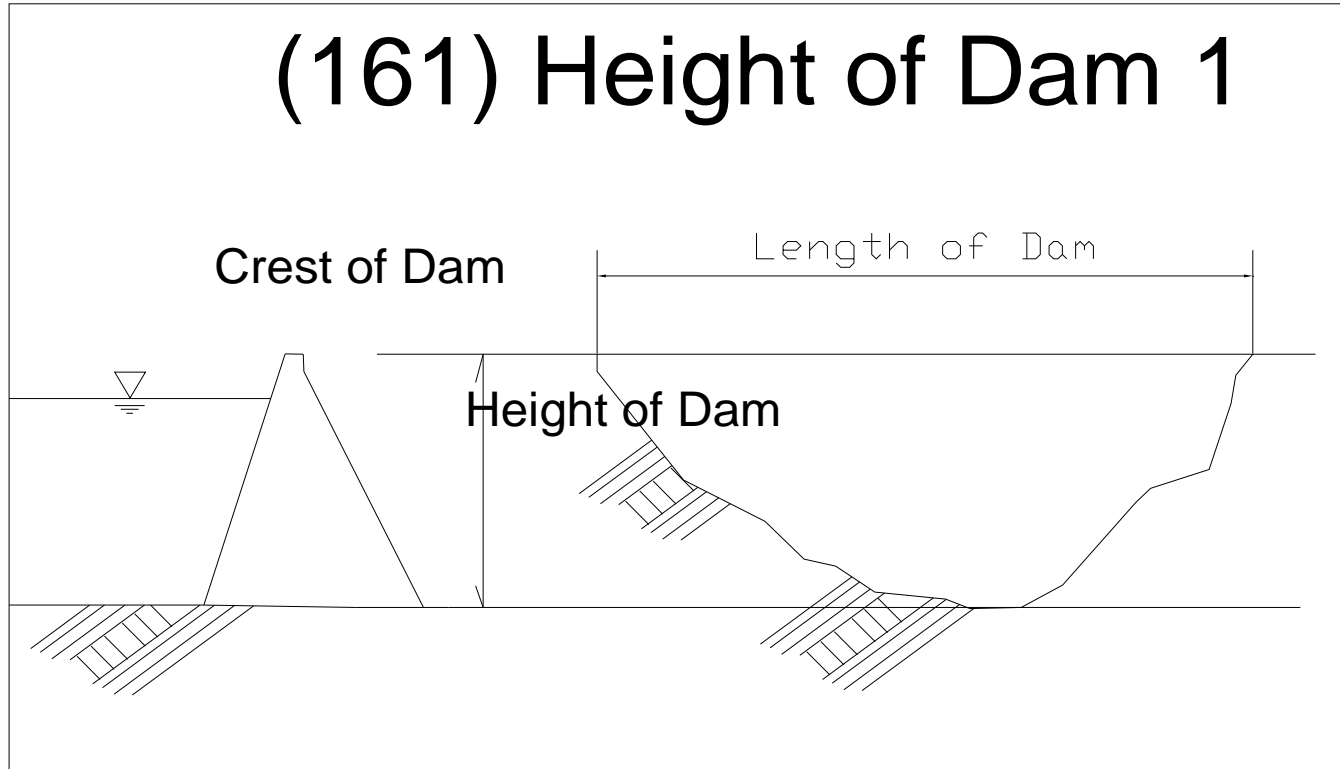


(160)Shinking Method:Trench Method

(160)Shinking Method:Trench Method

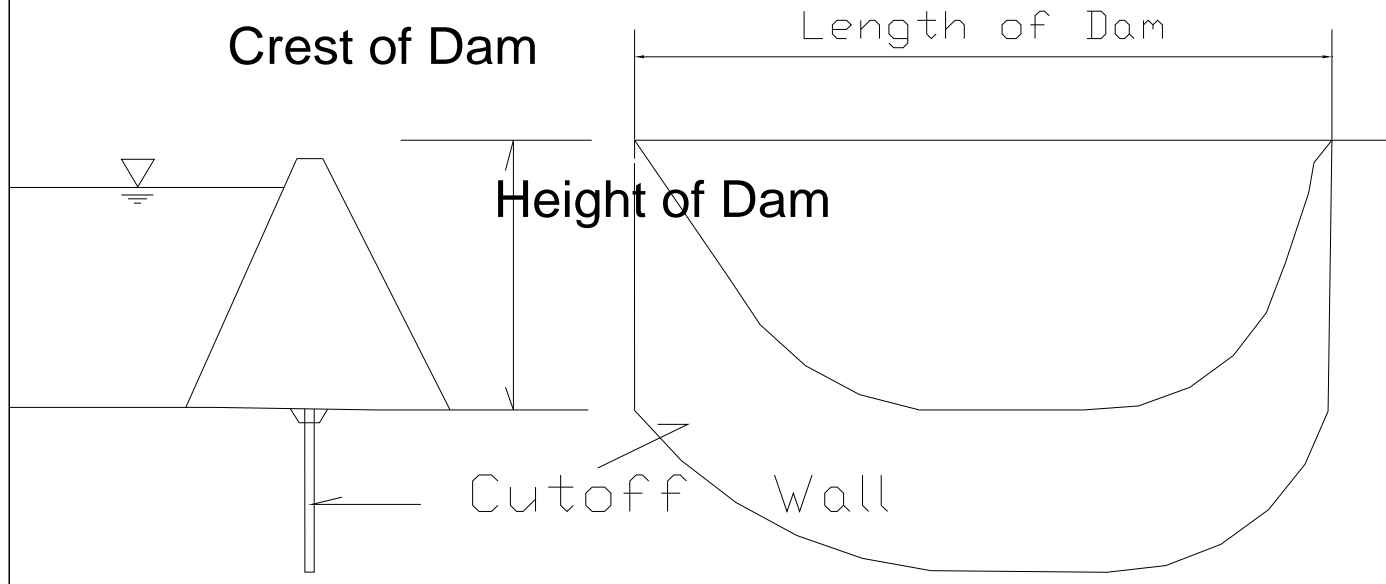


(161) Height of Dam 1



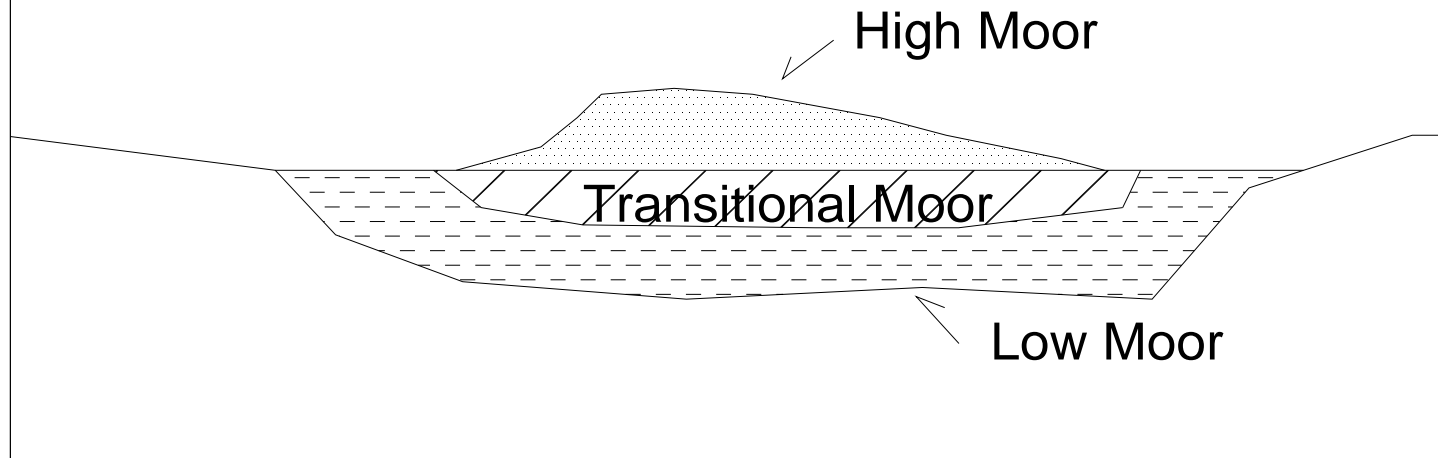
(162) Height of Dam 2

(162) Height of Dam 2

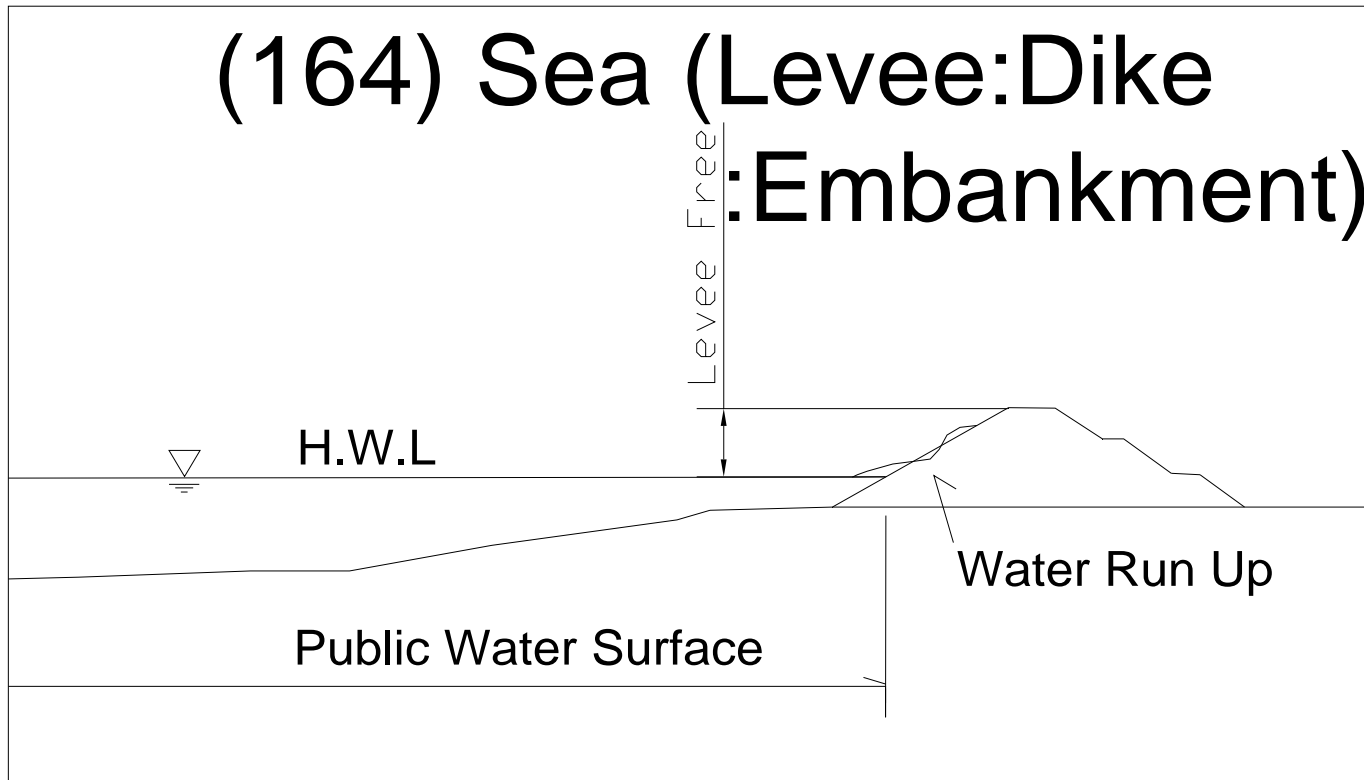


(163) Peat

(163) Peat

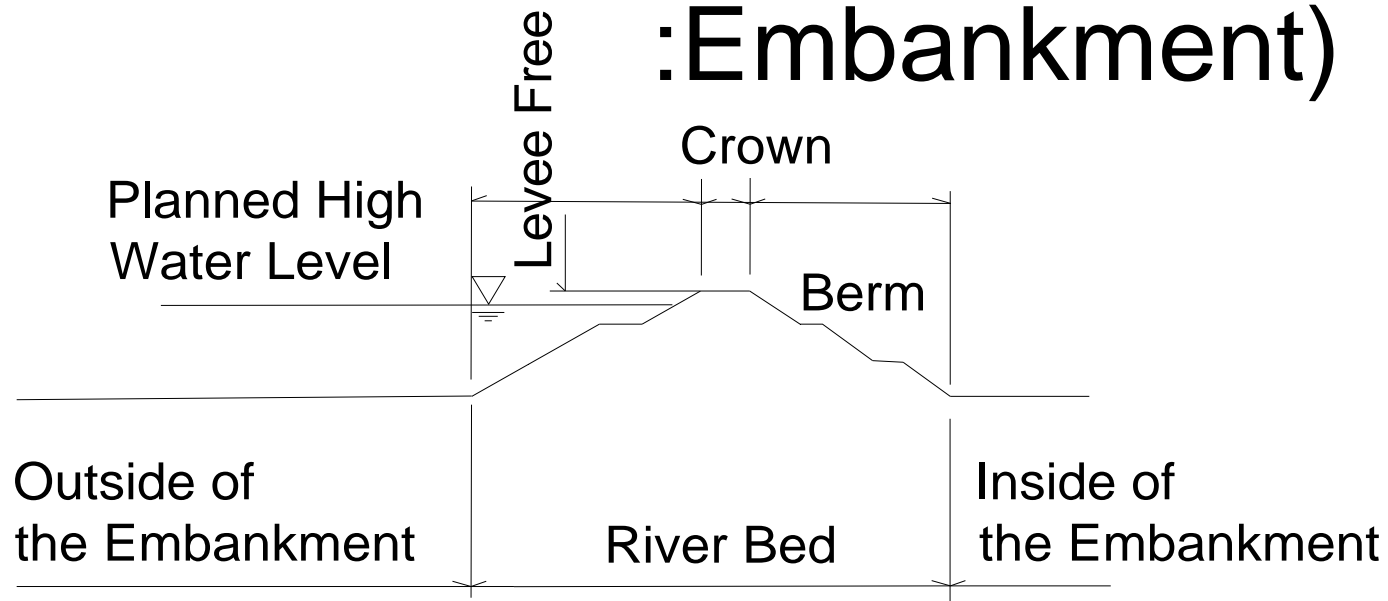


(164) Sea (Levee:Dike:Embankment)



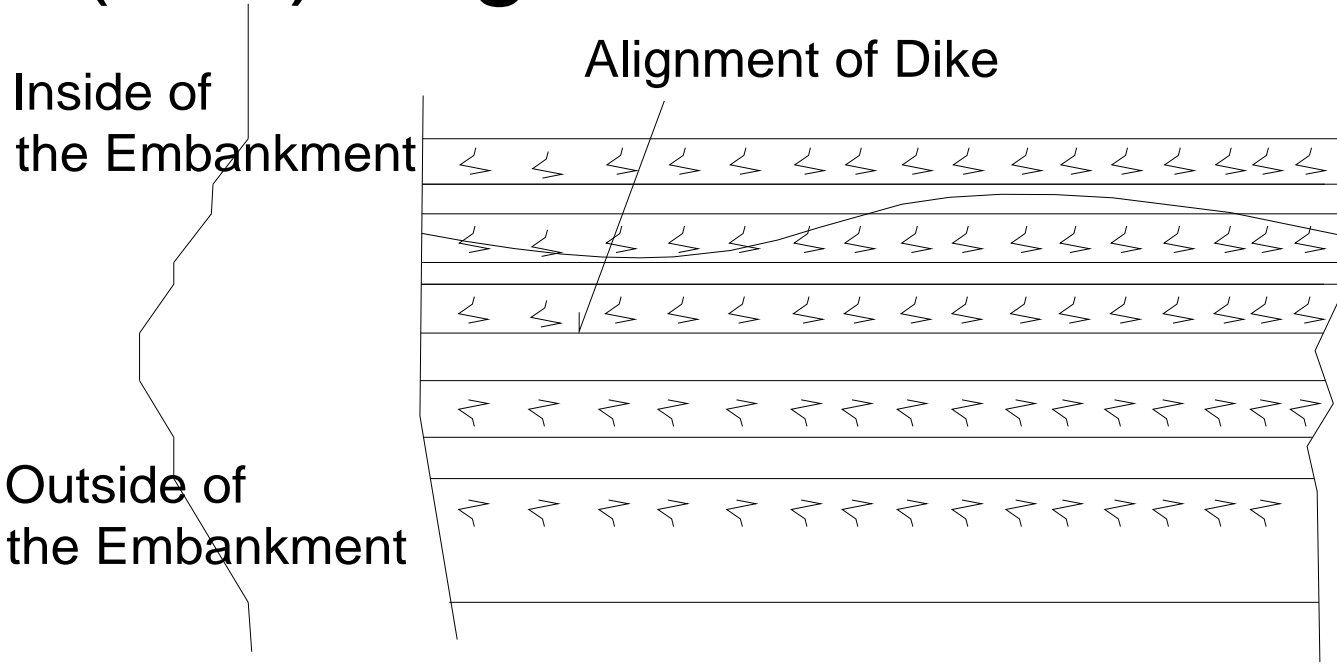
(165) River (Levee:Dike:Embankment)

(165) River (Levee:Dike :Embankment)



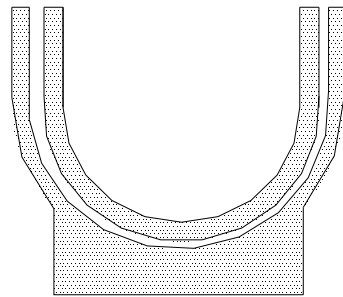
(166) Alignment of Dike

(166) Alignment of Dike

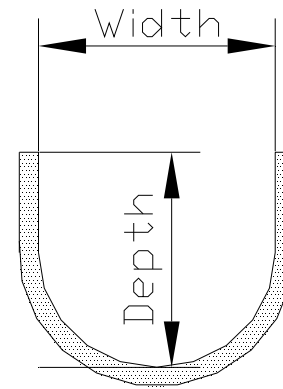


(167) Reinforced Concrete Flume

(167) Reinforced Concrete Flume

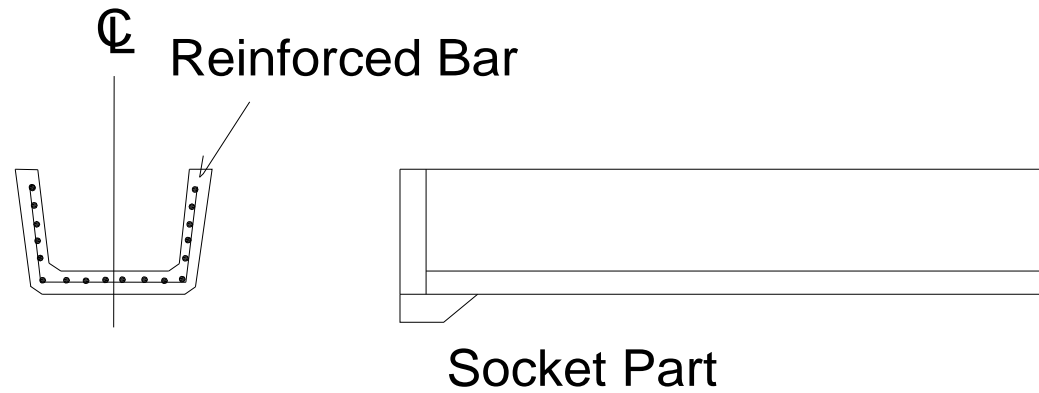


Cradle



(168) Reinforced Concrete Bench Flume

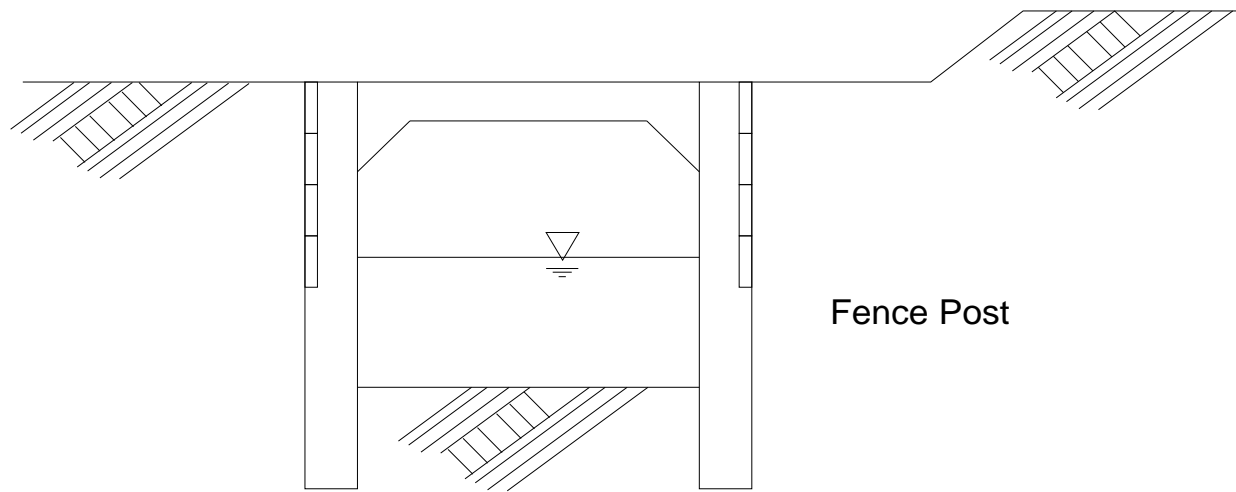
(168) Reinforced Concrete Bench Flume



Socket Type Bench Flume

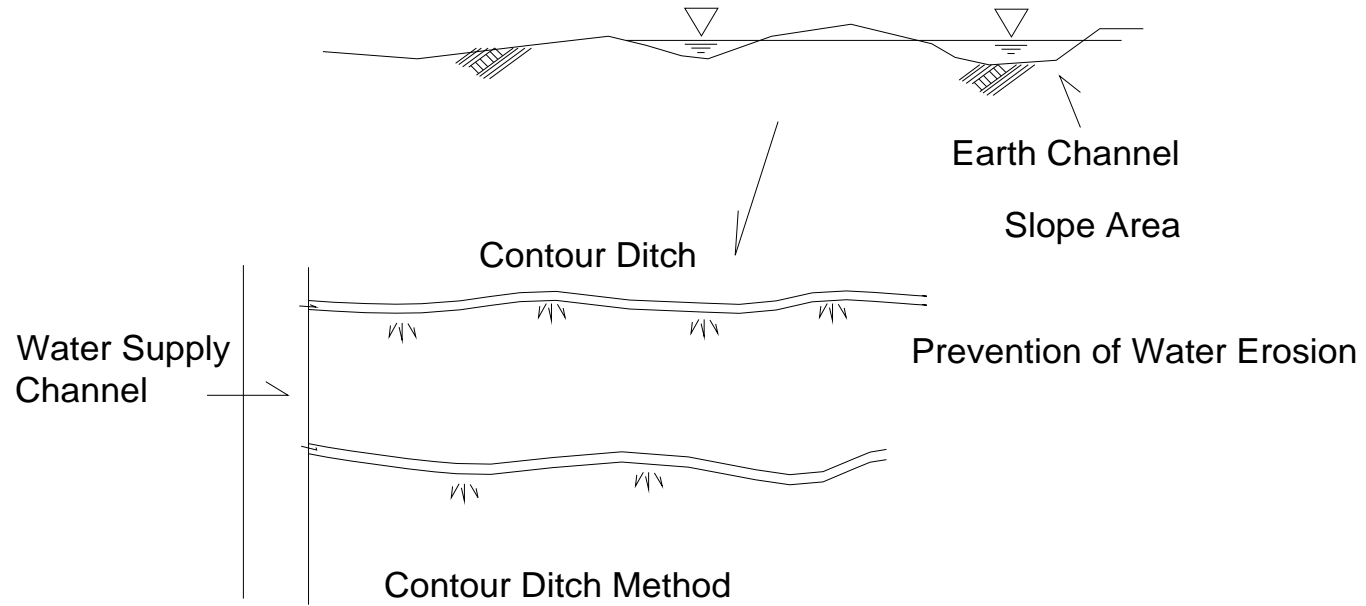
(169) Reinforced Concrete Built up Canal

(169) Reinforced Concrete Built up Canal



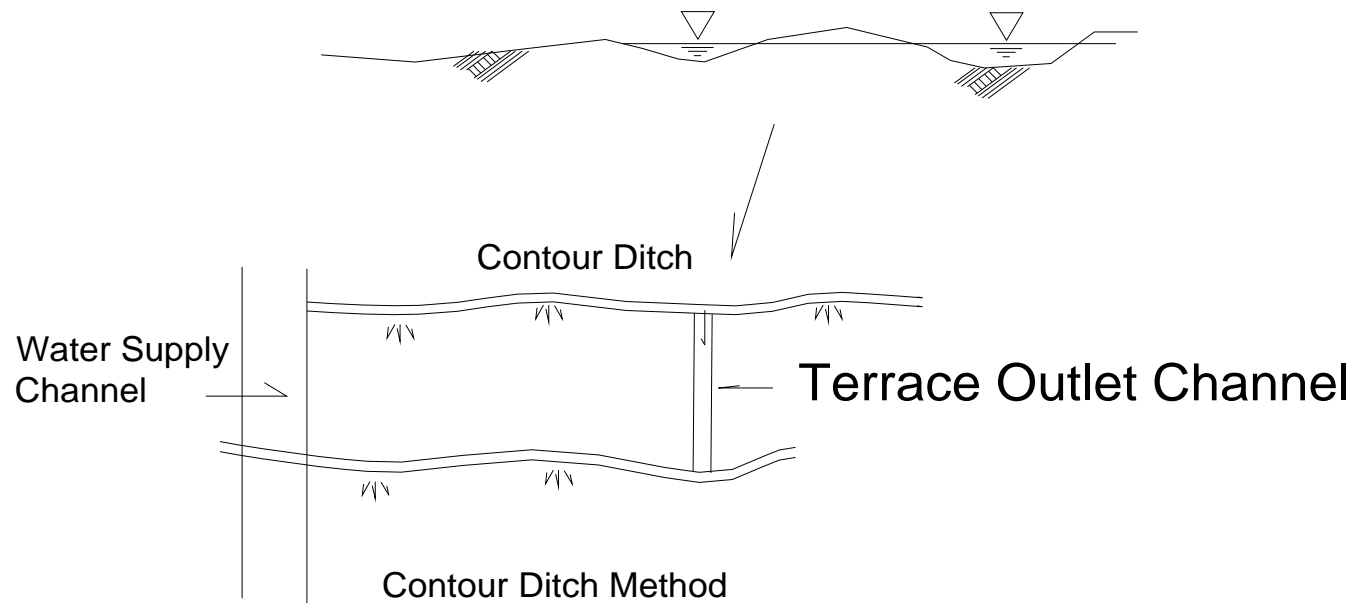
(170)Terrace Channel

(170)Terrace Channel



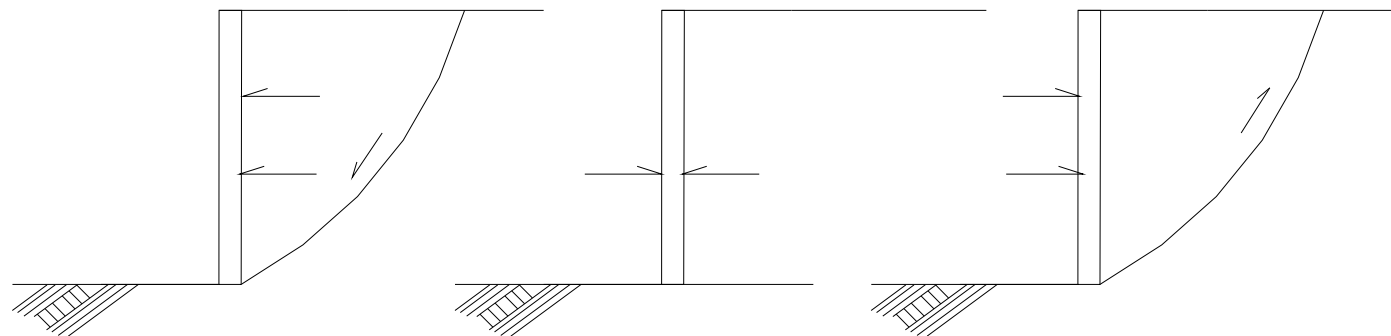
(171)Terrace Outlet Channel

(171)Terrace Outlet Channel



(172) Earth Pressure

(172) Earth Pressure



Static Earth Pressure

Active Earth Pressure

Passive Earth Pressure

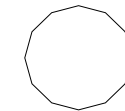
(173) Unified Soil Classification

(173) Unified Soil Classification

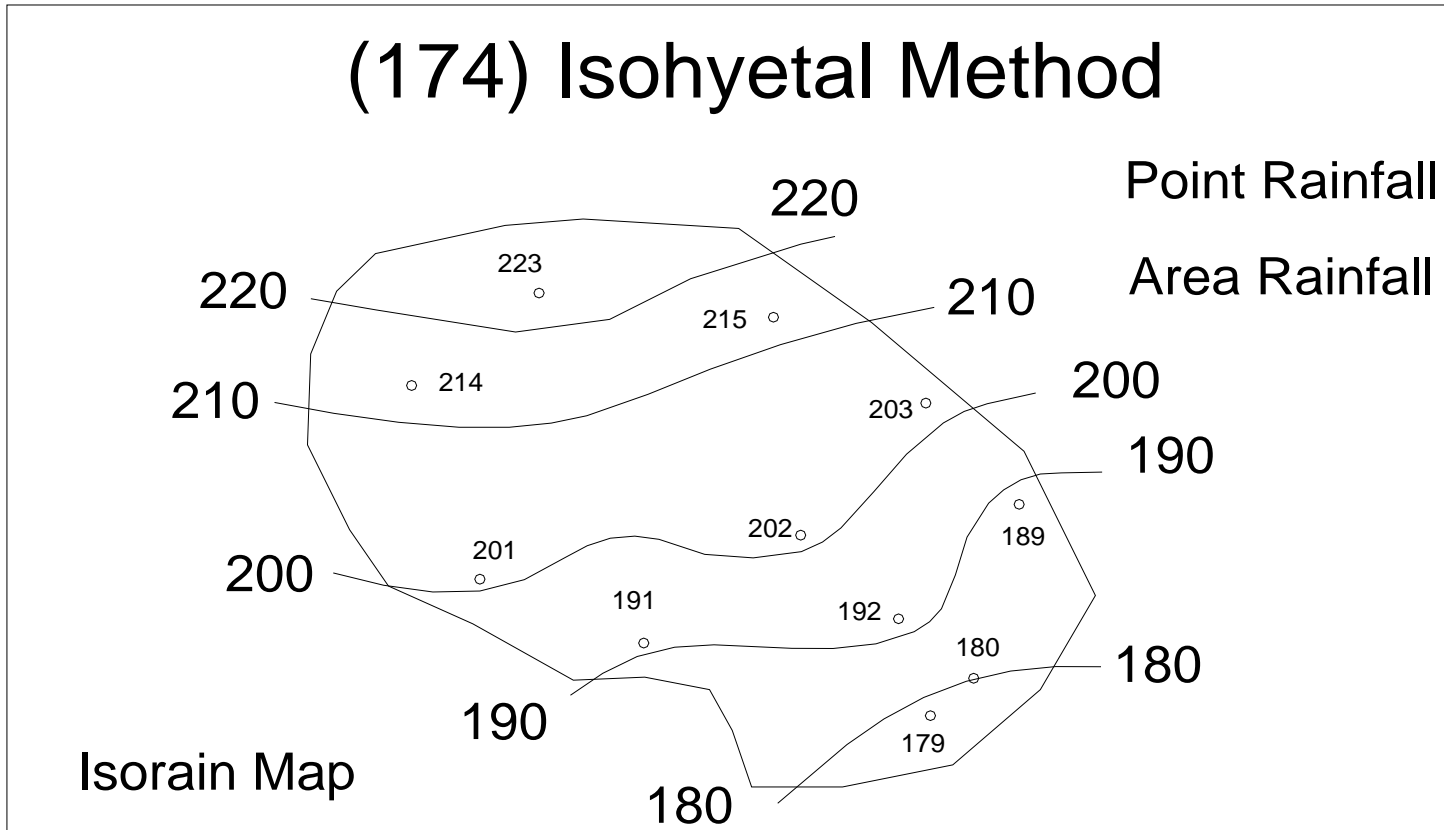
2.0mm 20mm

1 μ 5 μ 74 μ 0.42mm 5.0mm 75mm 30cm

Colloid			Fine Sand	Coarse Sand	Fine Gravel	Medium Gravel	Coarse Gravel	Boulder
Clay	Silt		Sand		Gravel		Cobble	
Soil Material							Rocky Material	

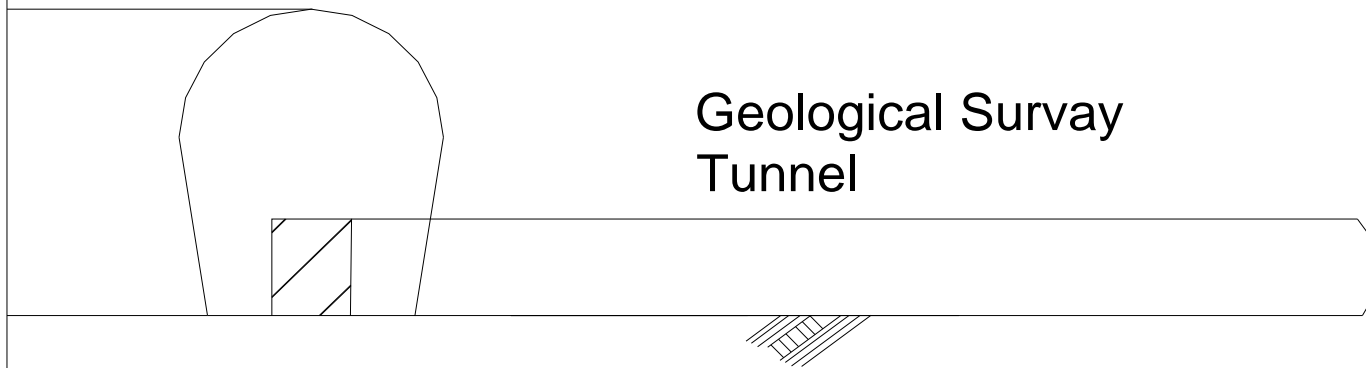


(174) Isohyetal Method



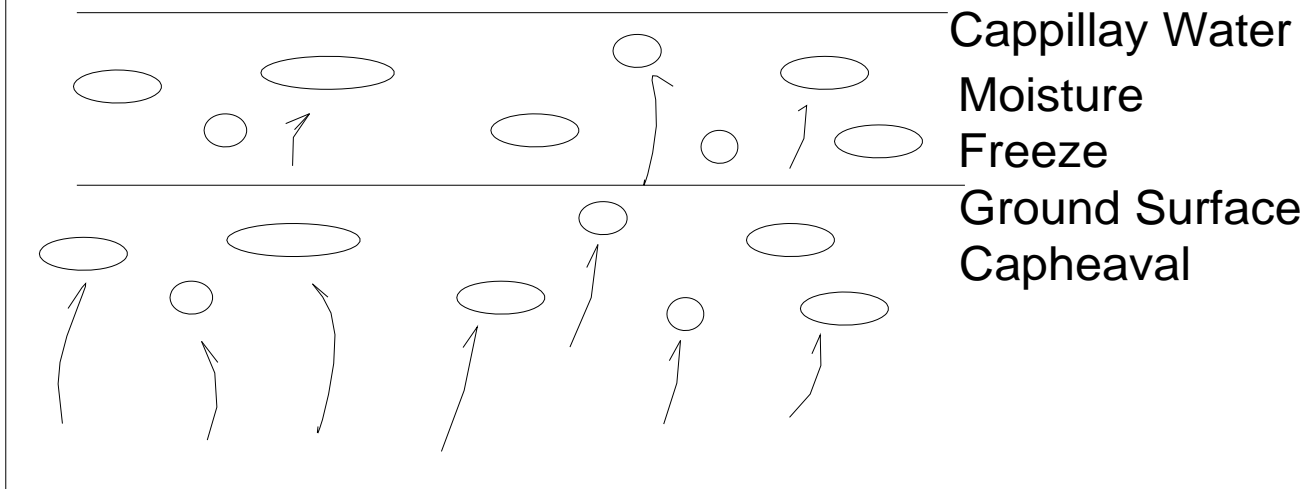
(175) Heading:Drift

(175) Heading:Drift

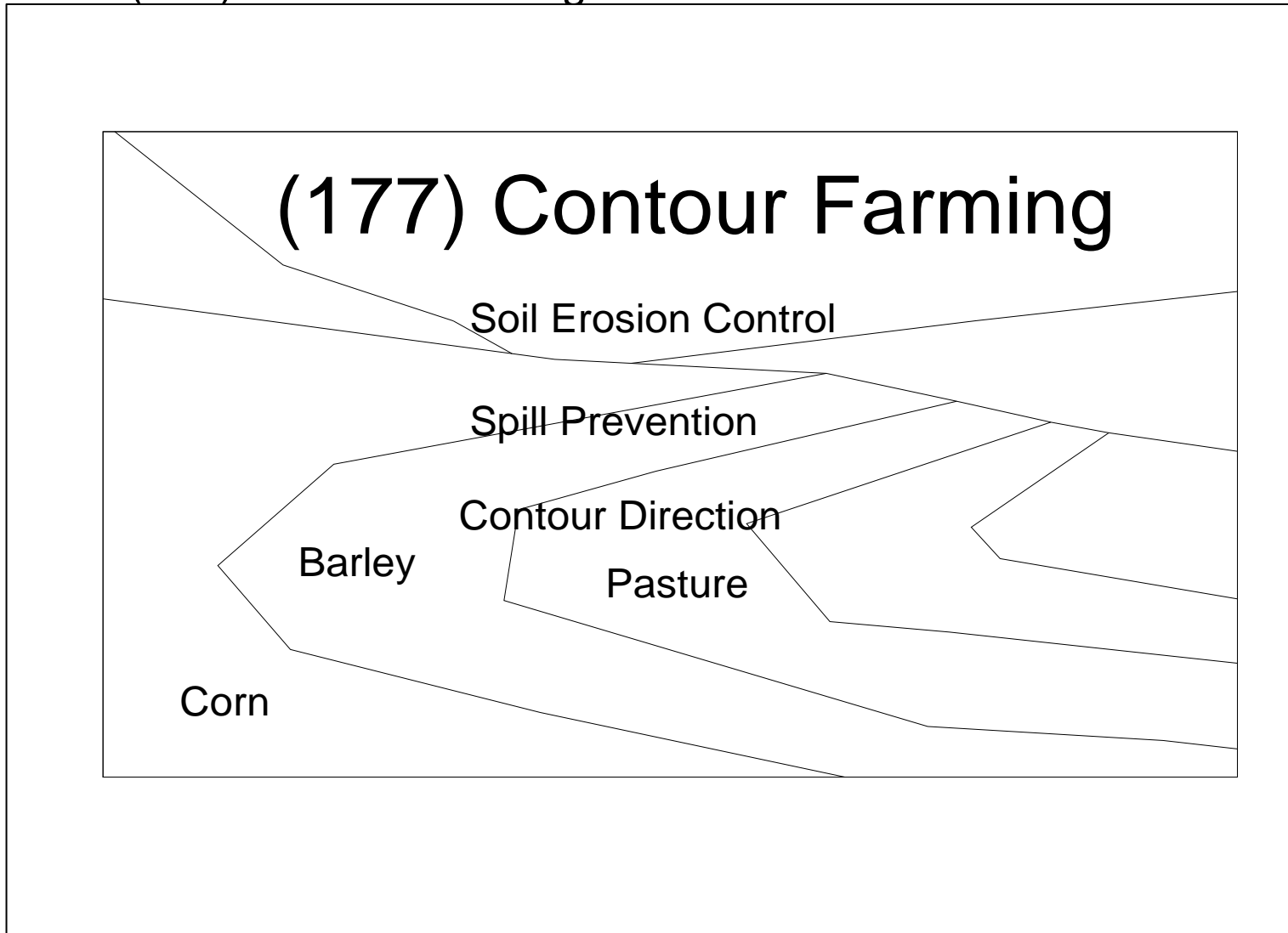


(176) Frost Heave

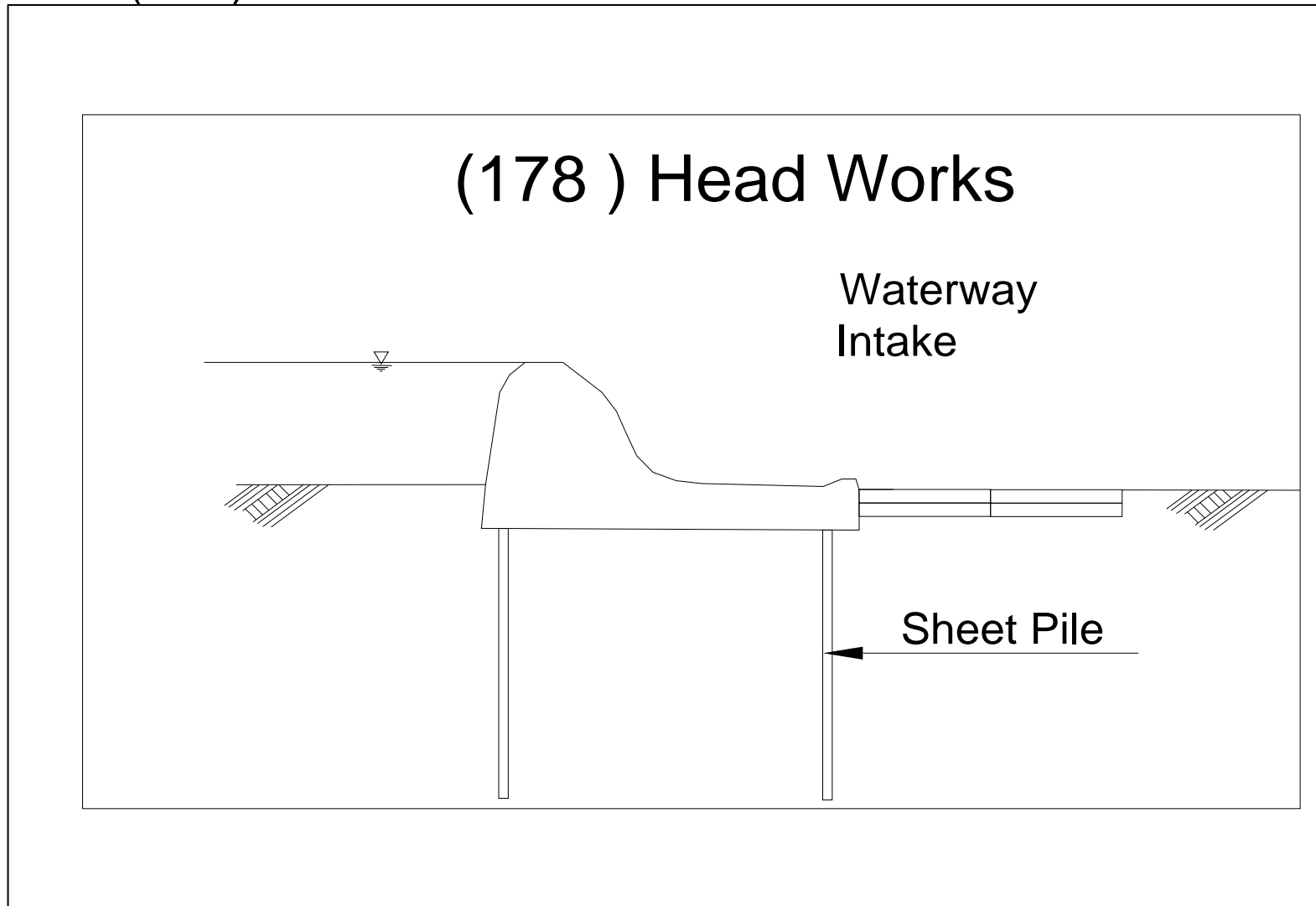
(176) Frost Heave



(177) Contour Farming

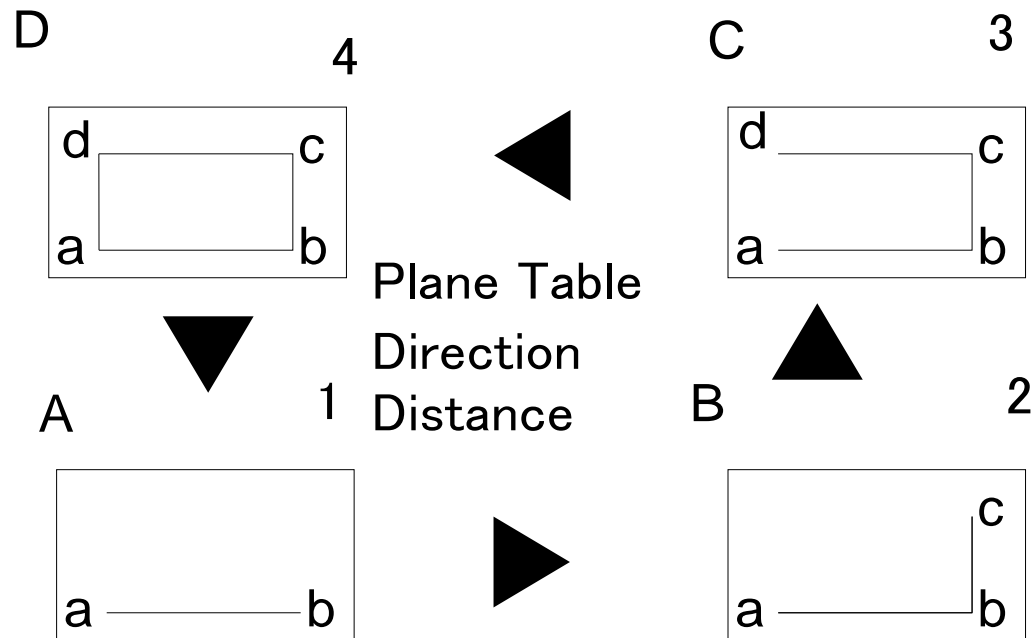


(178) Head Works



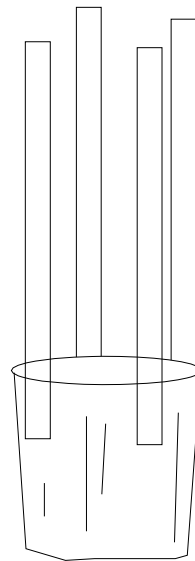
(179) Traversing Method

(179) Traversing Method



(180) Tamping by Wooden Rammer

(180) Tamping by Wooden Rammer



Handle

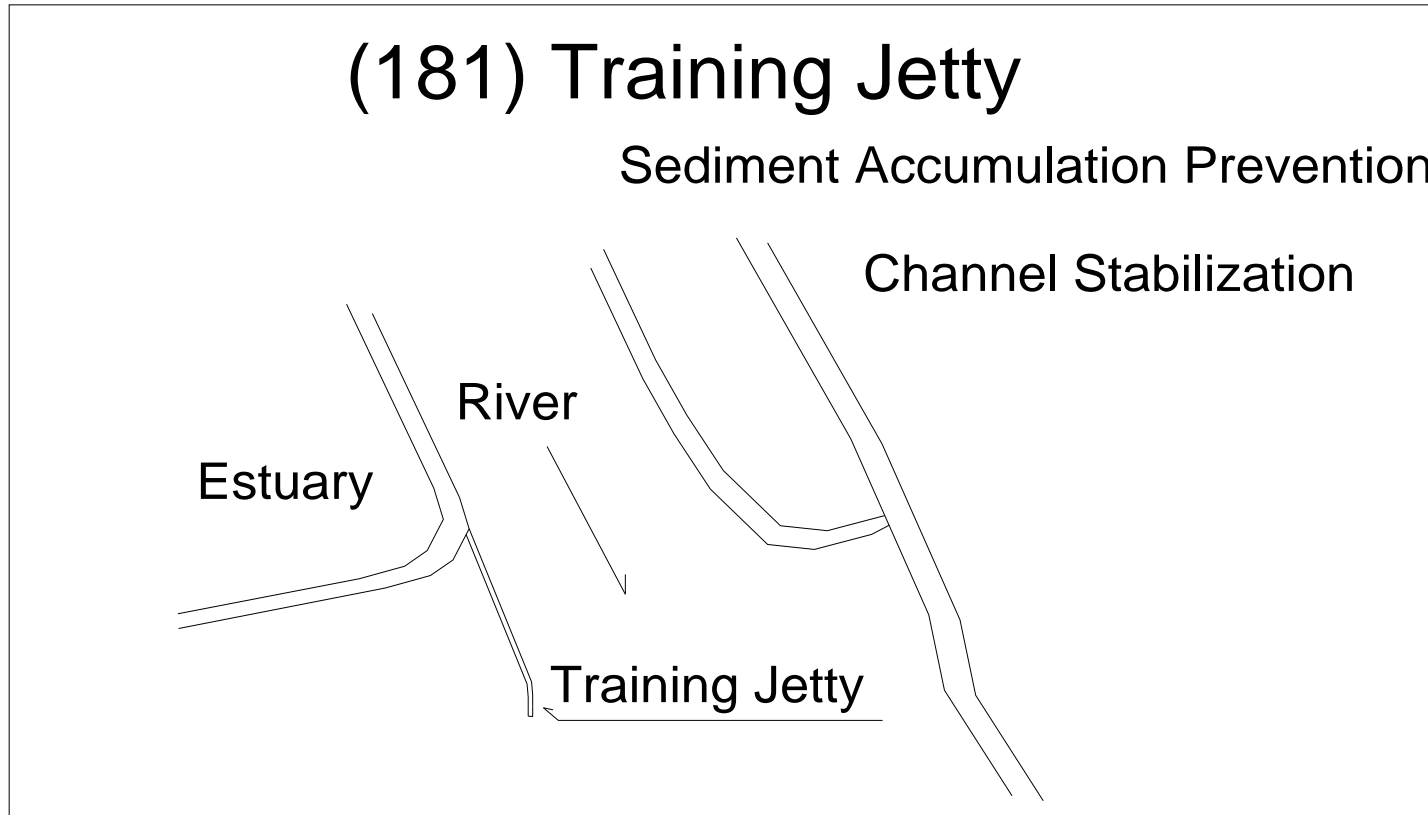
Embankment

Backfilling

Log

Tamping

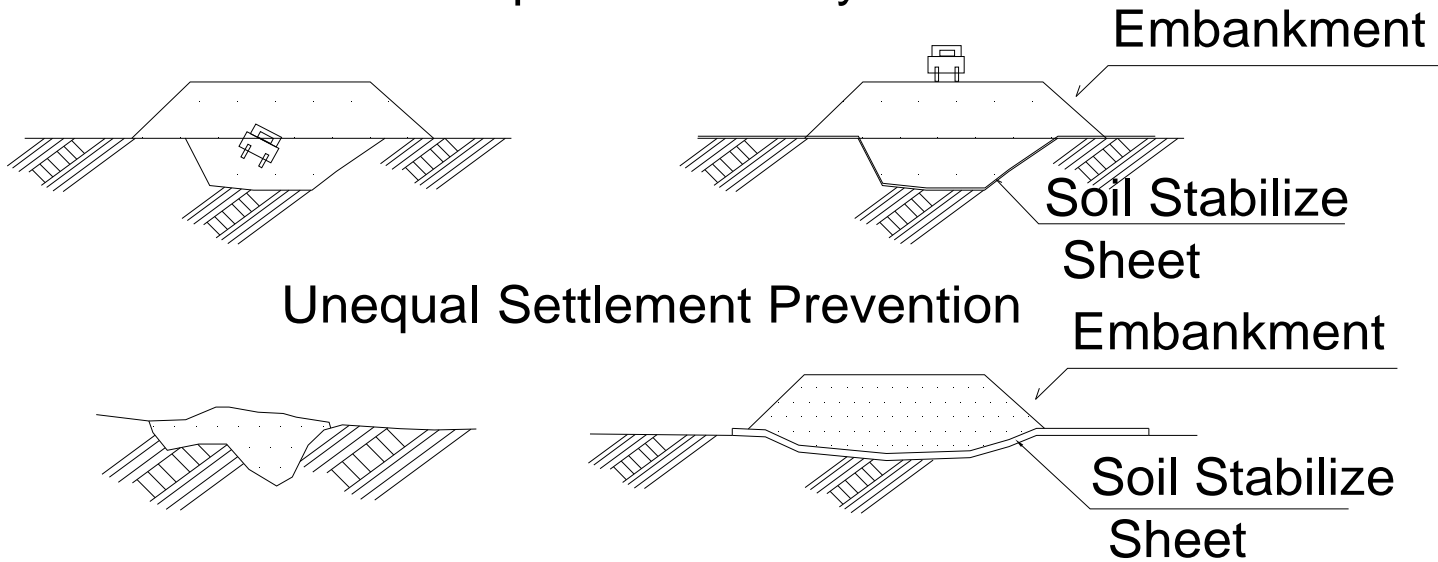
(181) Training Jetty



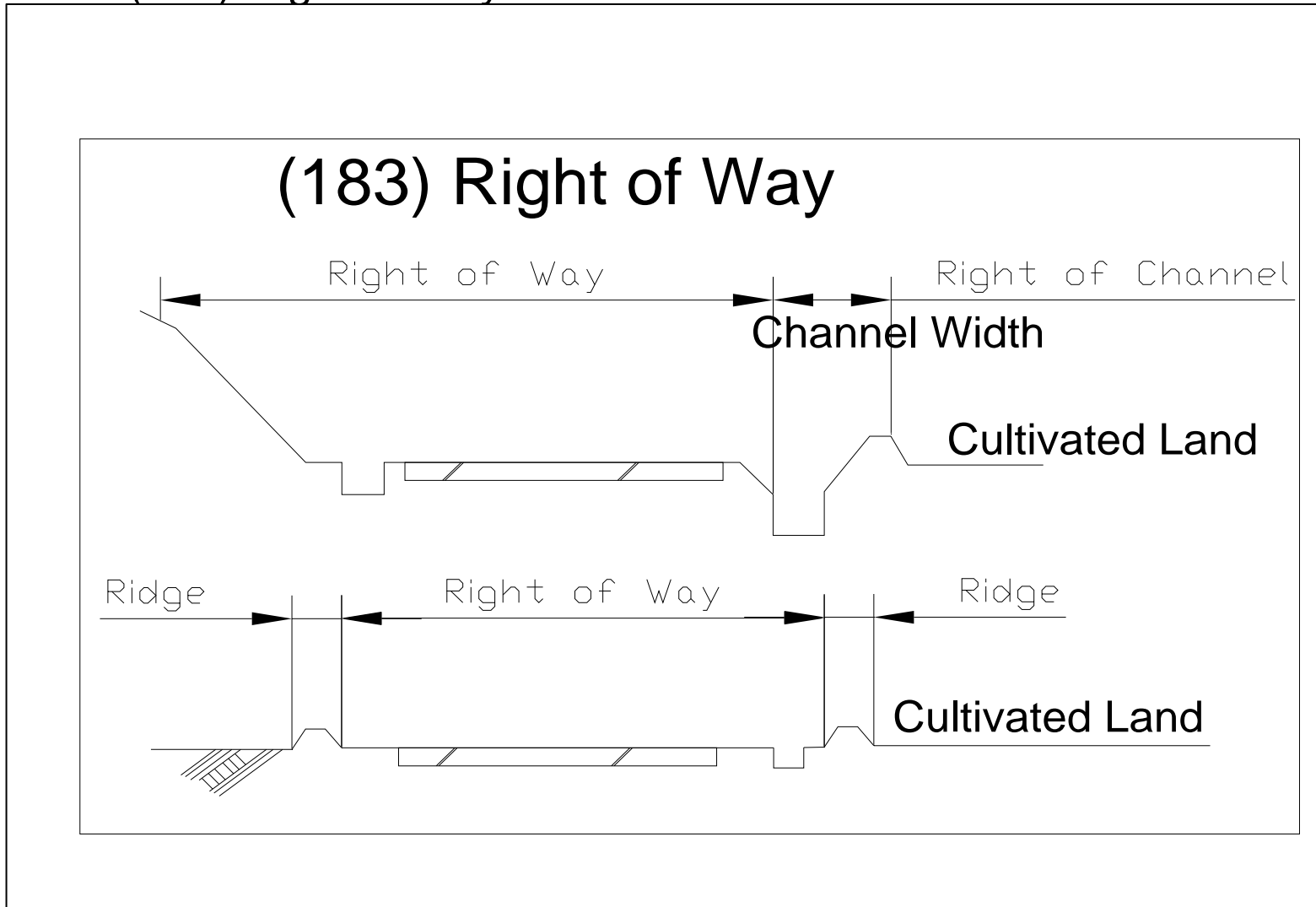
(182) Soil Stabilize Sheet

(182) Soil Stabilize Sheet

Keep Traffic Ability

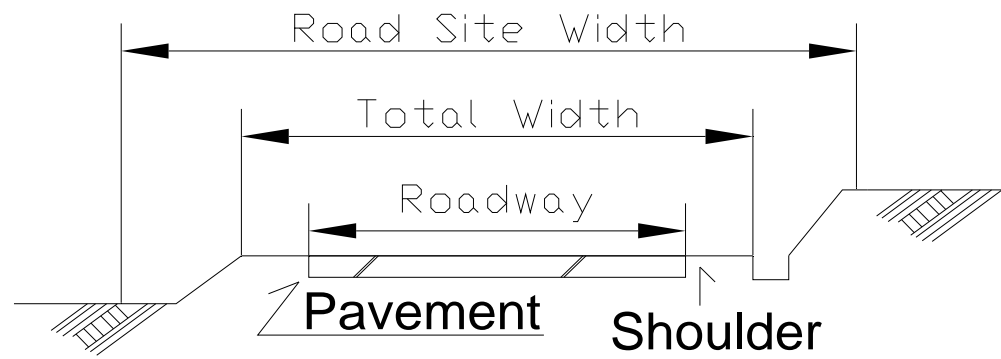


(183) Right of Way



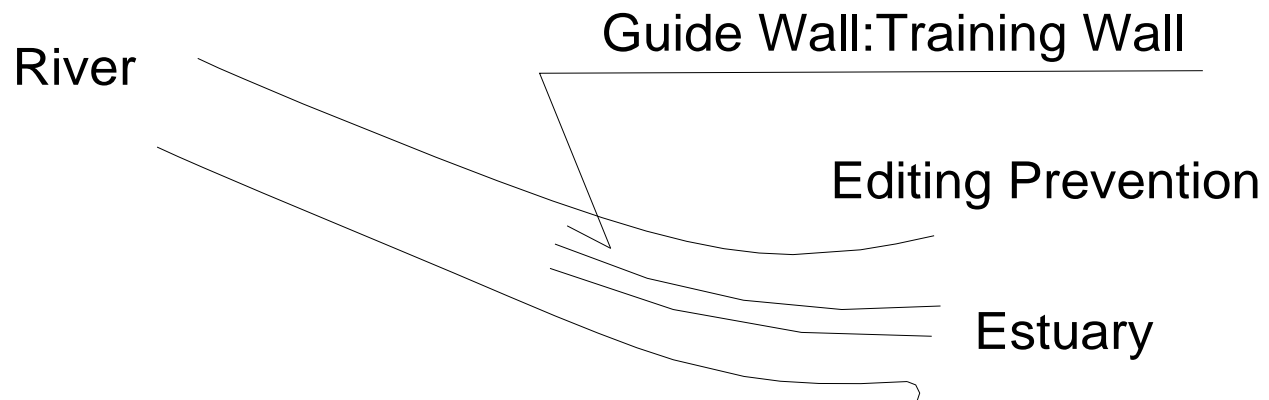
(184) Road Width

(184) Road Width



(185) Guide Wall:Training Wall

(185) Guide Wall:Training Wall



(186) Clay Pipe:Earthen Pipe

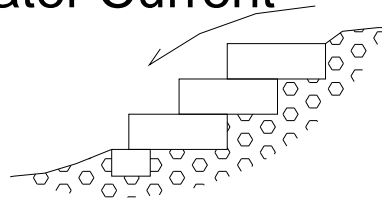
(186) Clay Pipe:Earthen Pipe



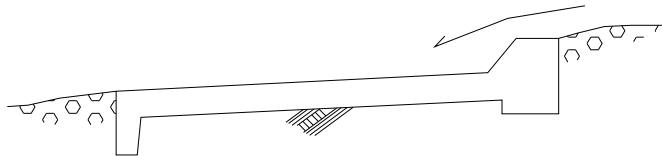
(187) Ground Sill

(187) Ground Sill

Water Current



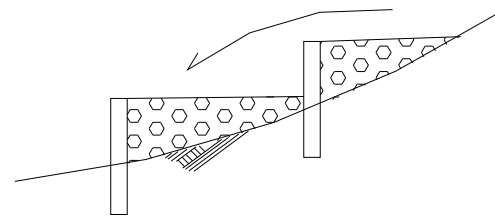
Water Current



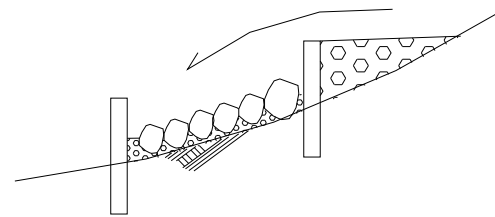
Steep Slope

Scour Prevention

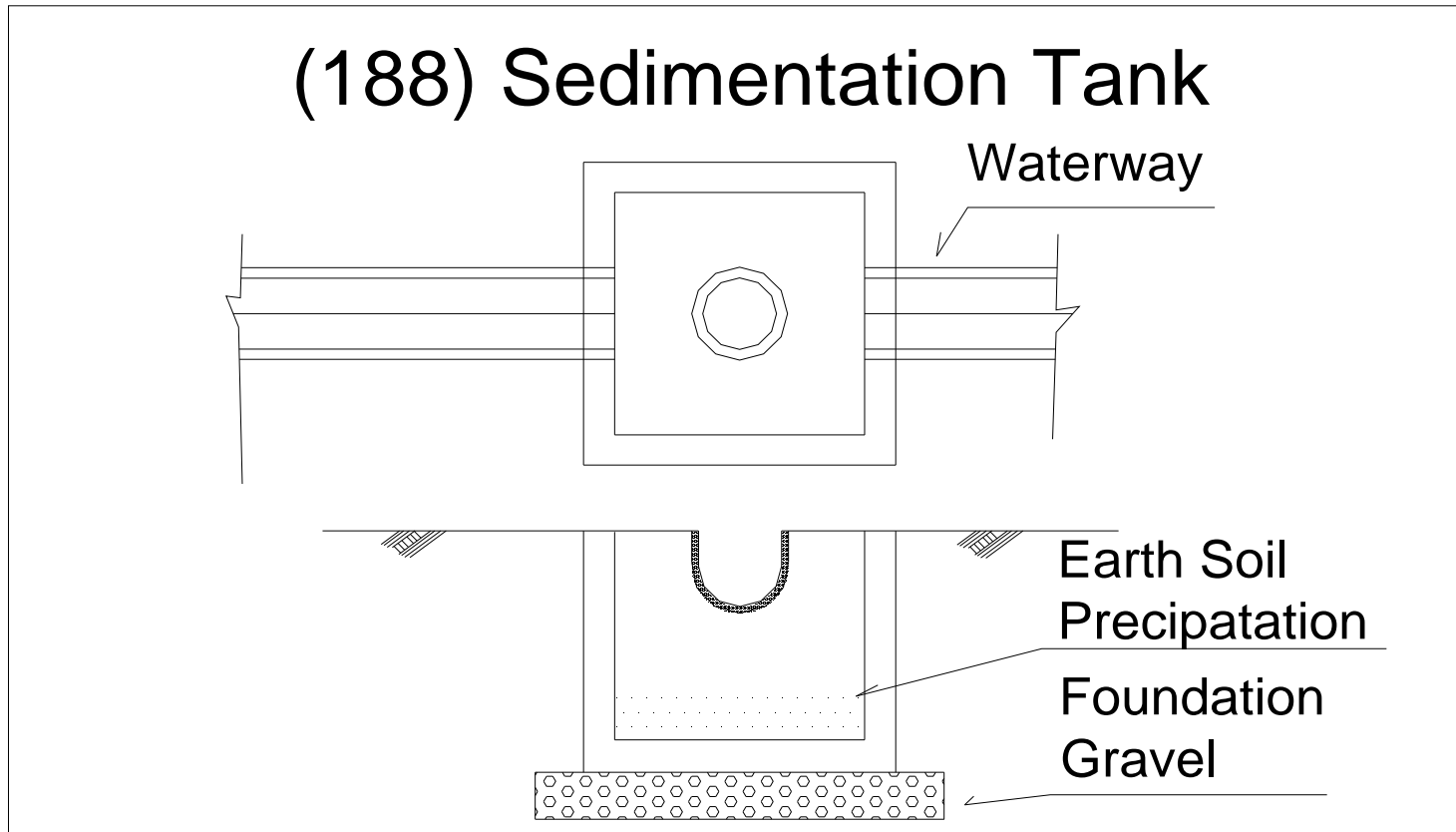
Water Current



Water Current

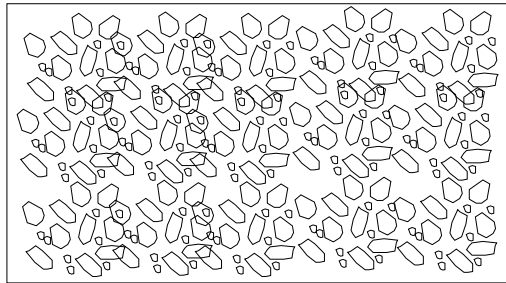


(188) Sedimentation Tank



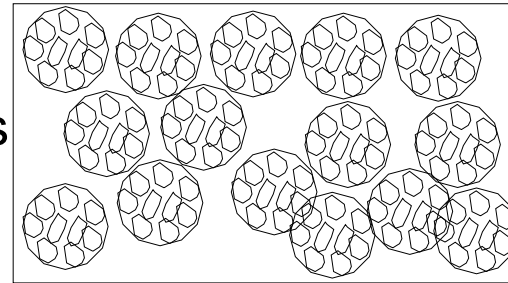
(189) Soil Structure

(189) Soil Structure

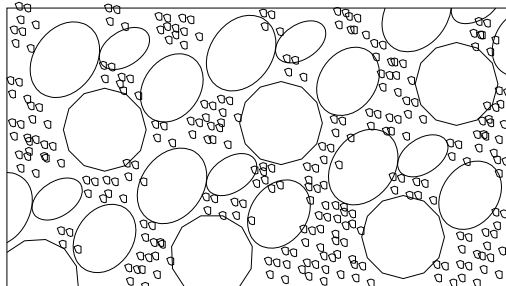


(a) Single Grained Structure

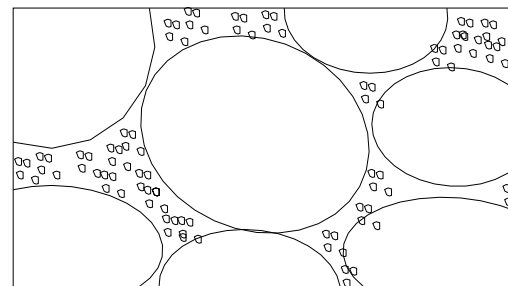
Soil
Particles



(b) Crumb Structure



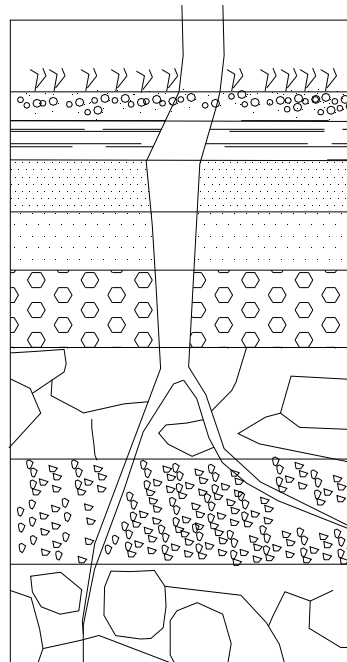
(c) Honey Comb Structure



(d) Cilia Structure

(190) Soil Horizon

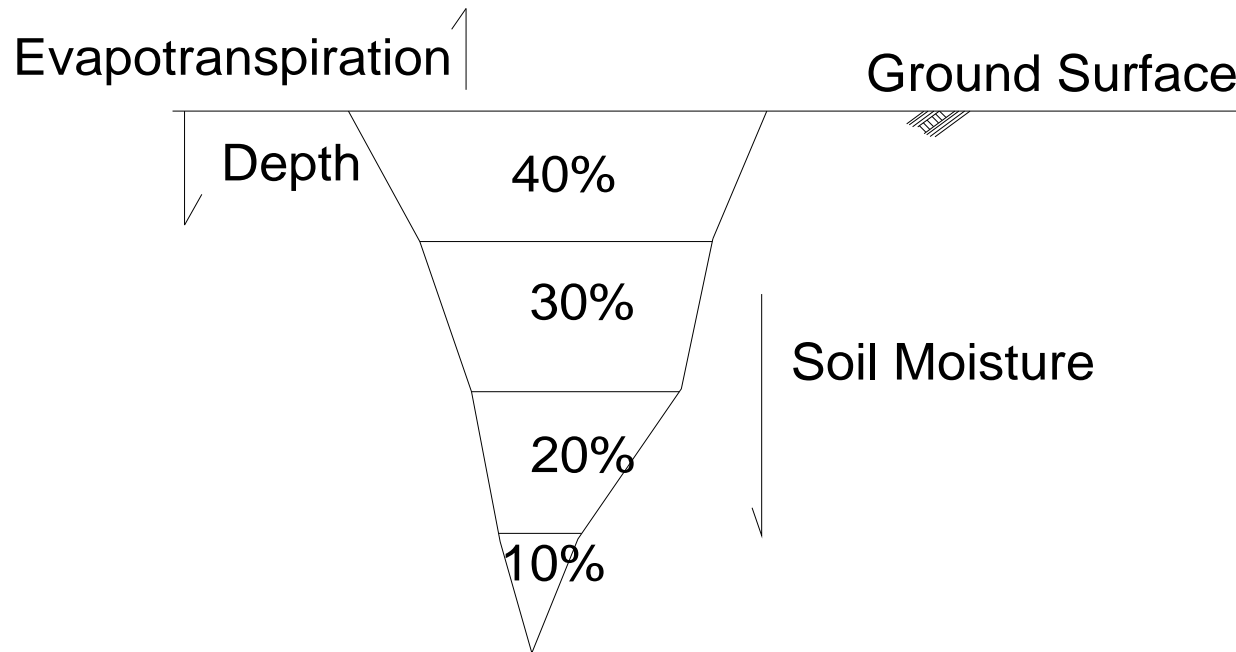
(190) Soil Horizon



A0
A1
A2
A3
B1
B2
B3
C1
C2
D

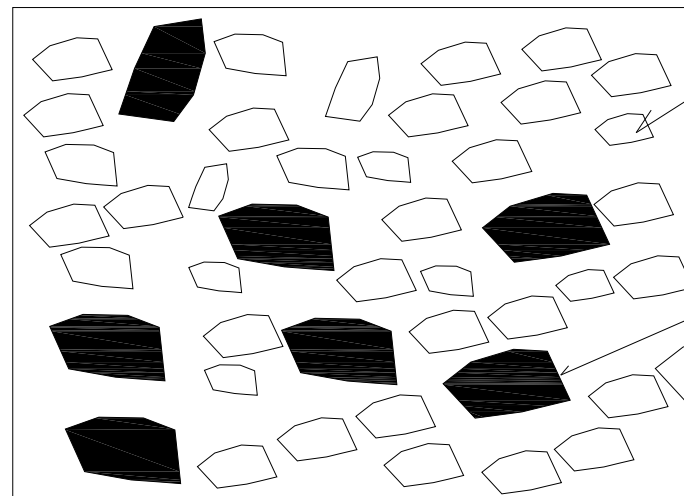
(191) Soil Moisture Extraction Pattern

(191) Soil Moisture Extraction Pattern



(192) Three Phases of Soil

(192) Three Phases of Soil

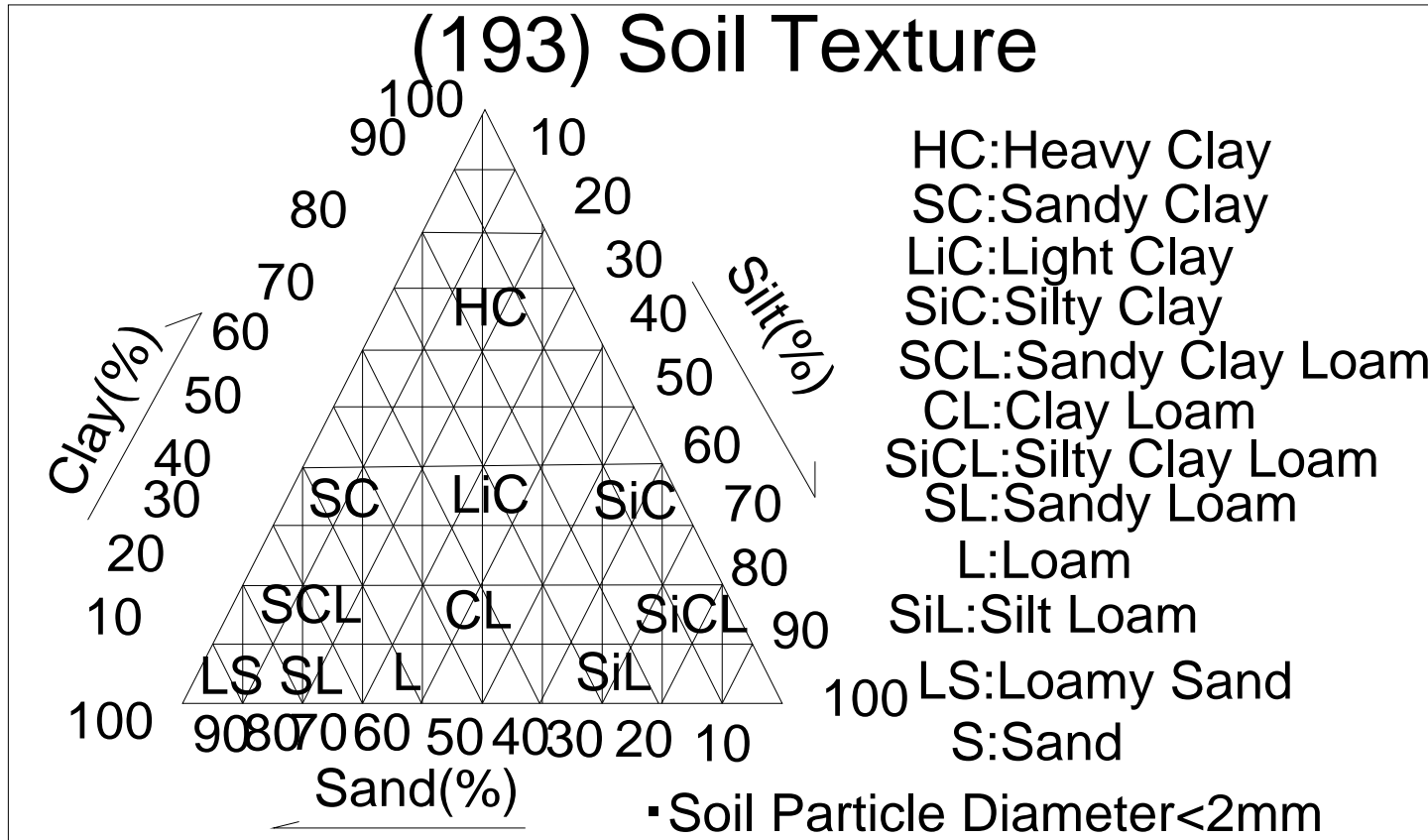


Solid

Liquid

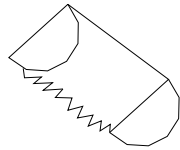
Gas

(193) Soil Texture

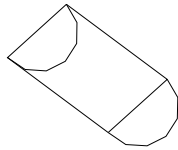


(194) Tractor Shovel Attachment

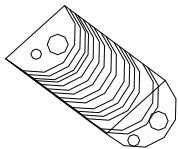
(194) Tractor Shovel Attachment



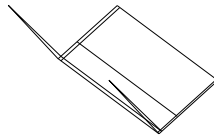
a: Standard
Bucket



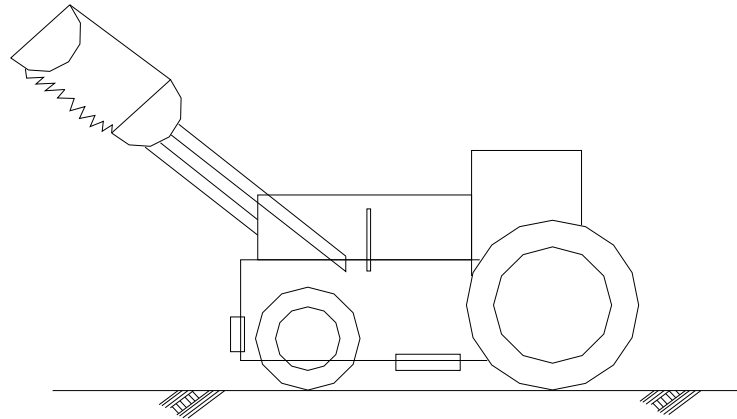
b: Slug
Bucket



c: Skelton
Bucket

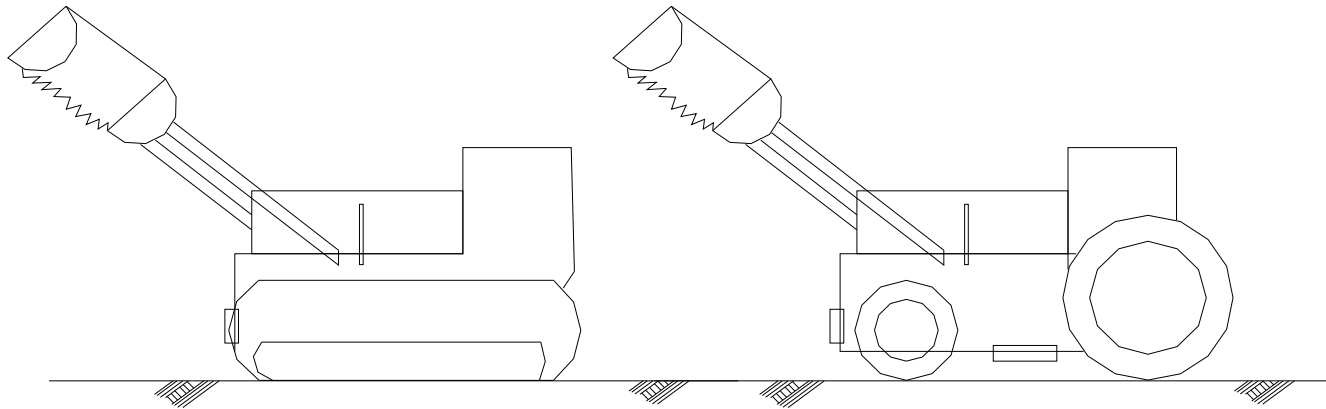


d: Logfork
Bucket



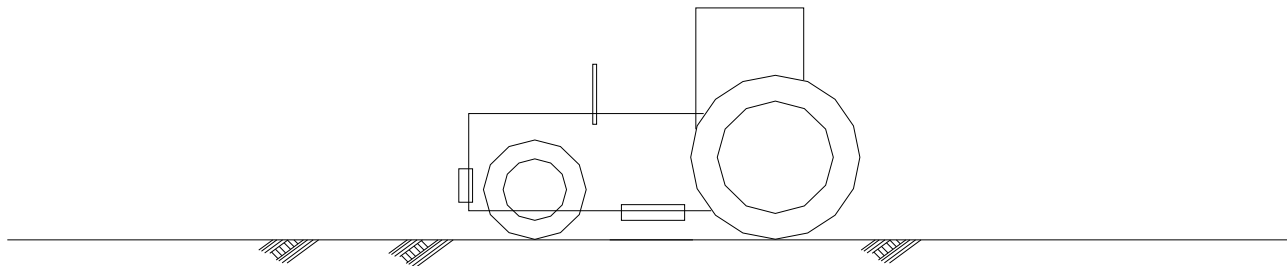
(195) Tractor Shovel

(195) Tractor Shovel
(Crawler Type) (Wheel Type)



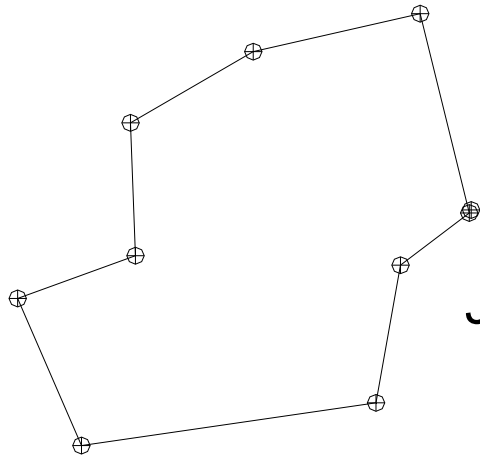
(196) Tractor

(196) Agricultural Tractor
(Wheel Type)



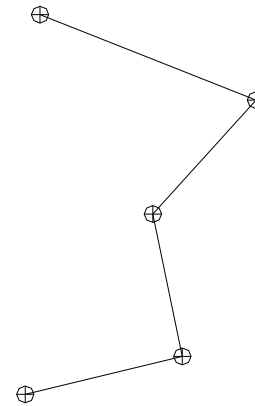
(197) Traverse Surveying

(197) Traverse Surveying



Closed Traverse

Joint Traverse



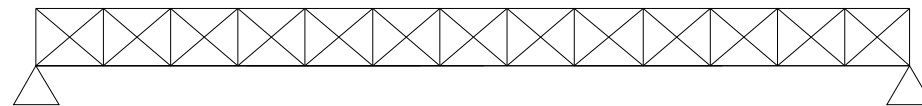
Joint Traverse

(198) Truss

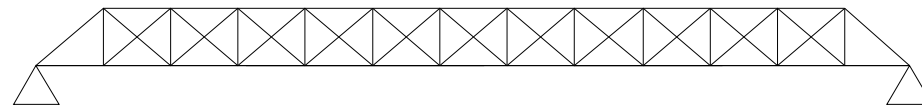
(198) Truss



a:Warren Truss

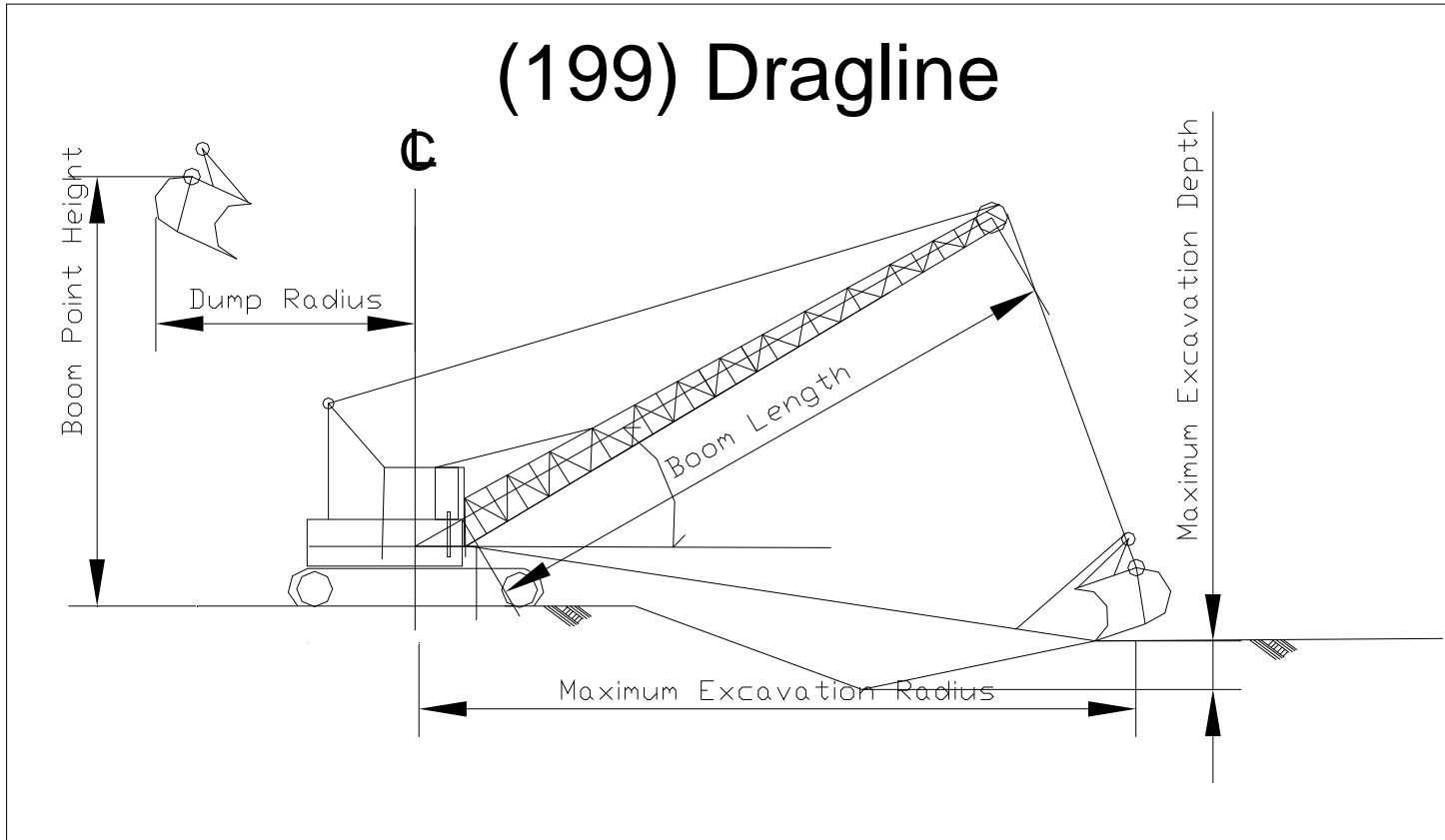


b:Howe Truss

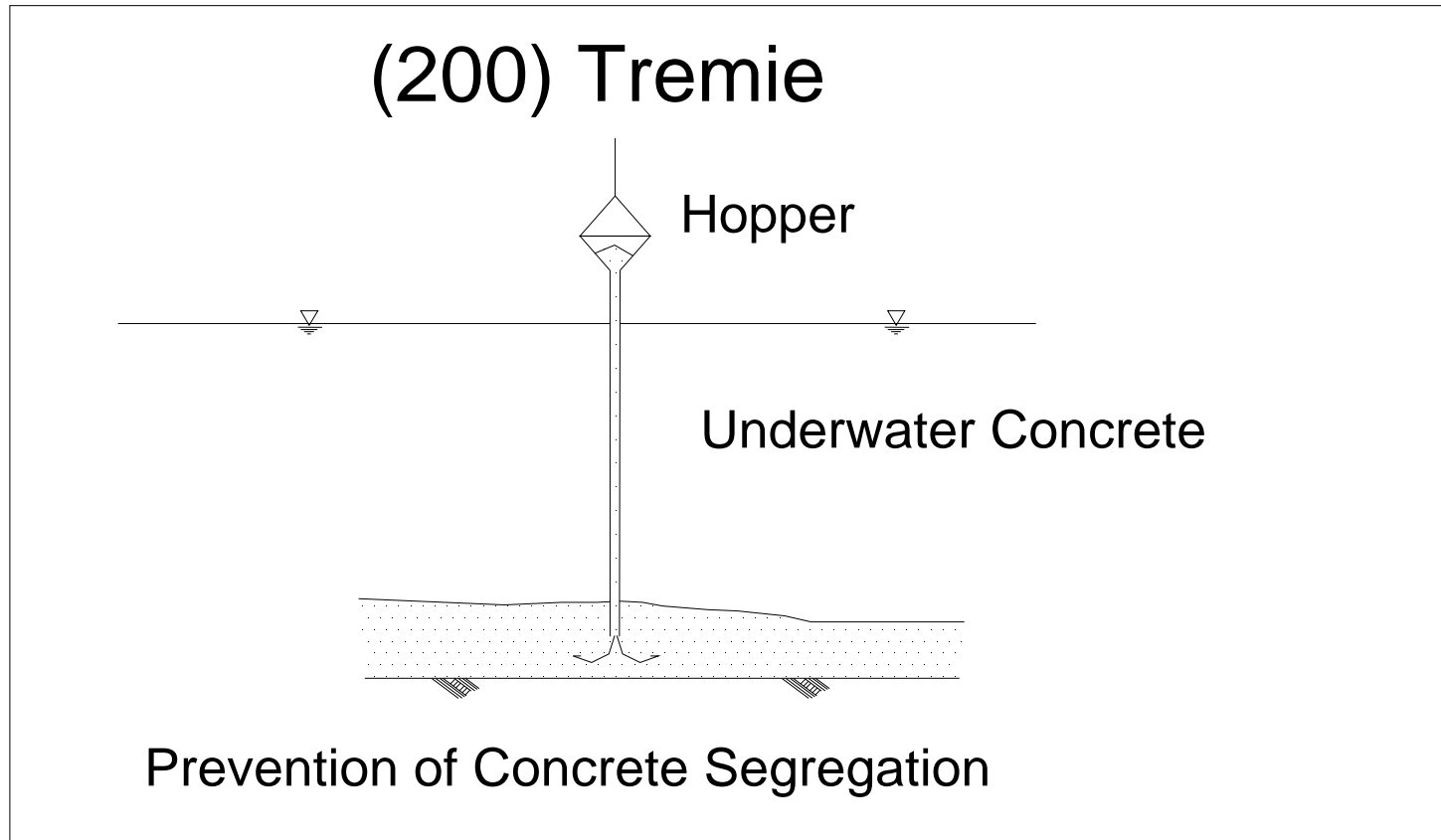


c:Platt Truss

(199) Dragline

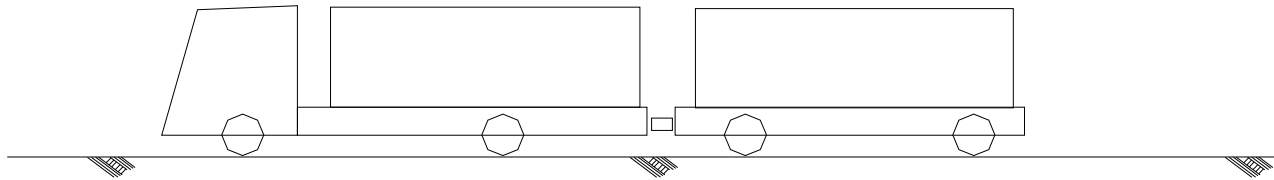


(200) Tremie



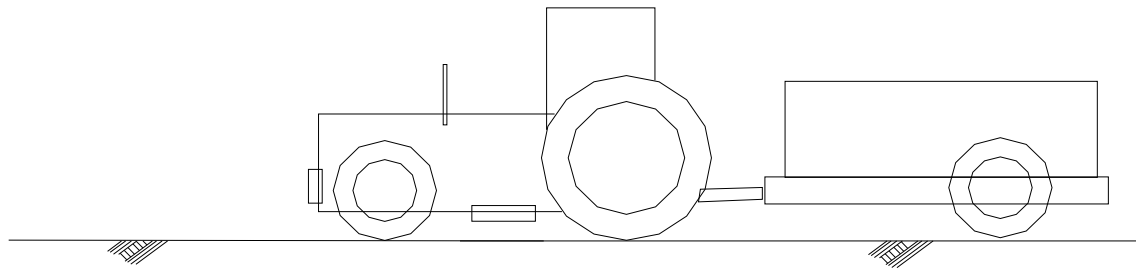
(201) Trailer

(201) Trailer

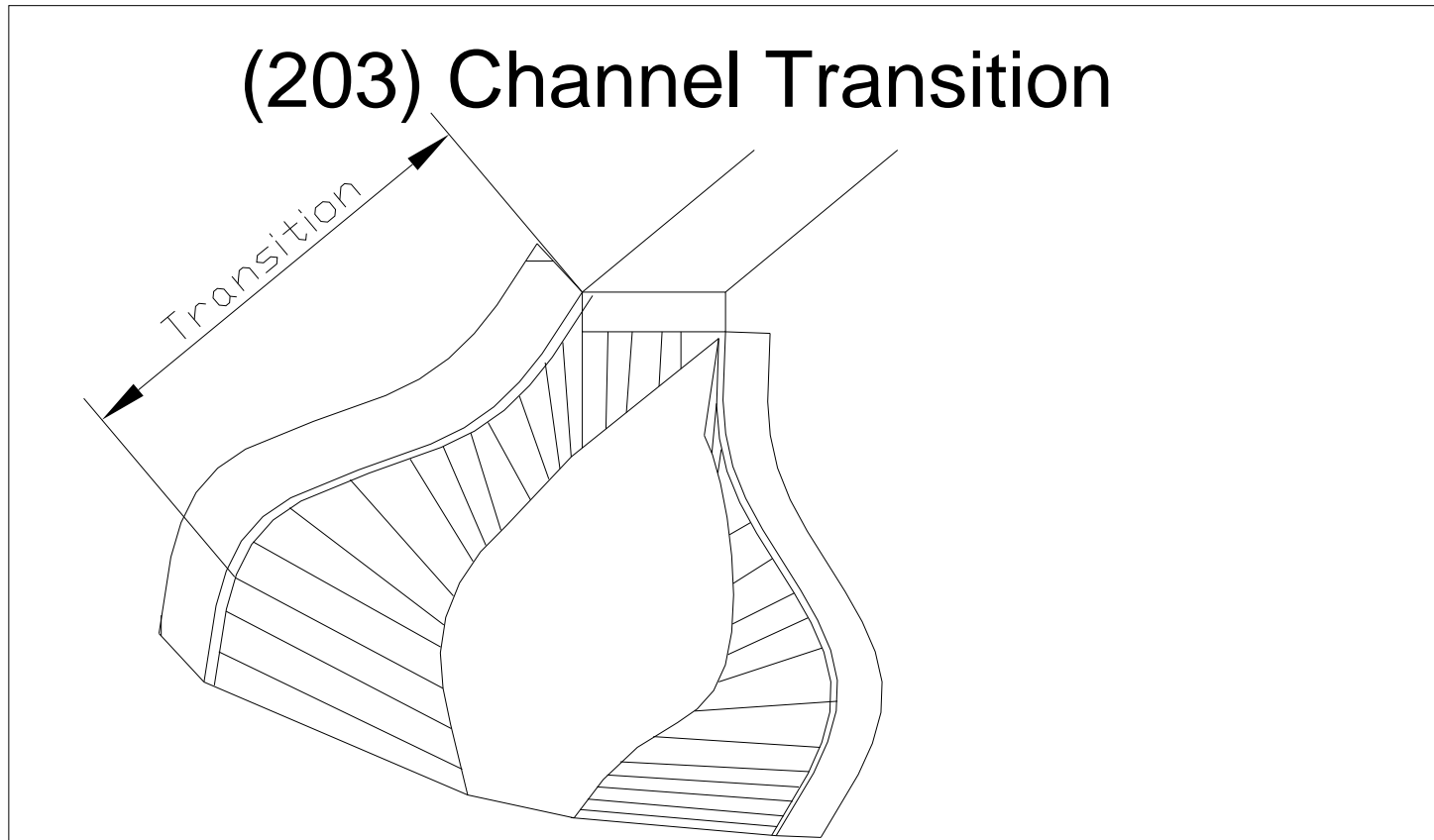


(202) Agricultural Trailer

(202) Agricultural Trailer



(203) Channel Transition



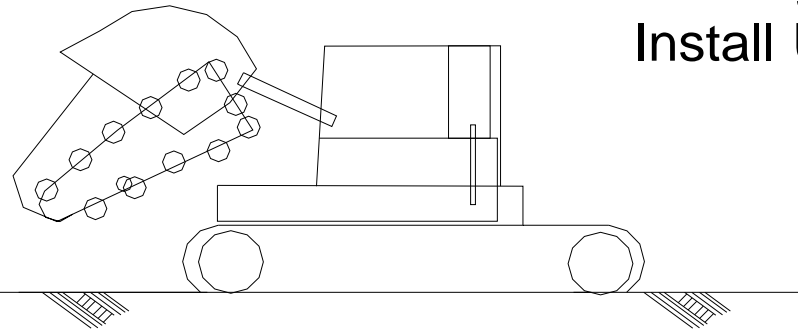
(204) Trencher

(204) Trencher

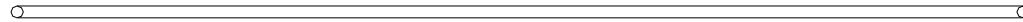
Underdrain Drilling

Drainage Pipe

Install Underground



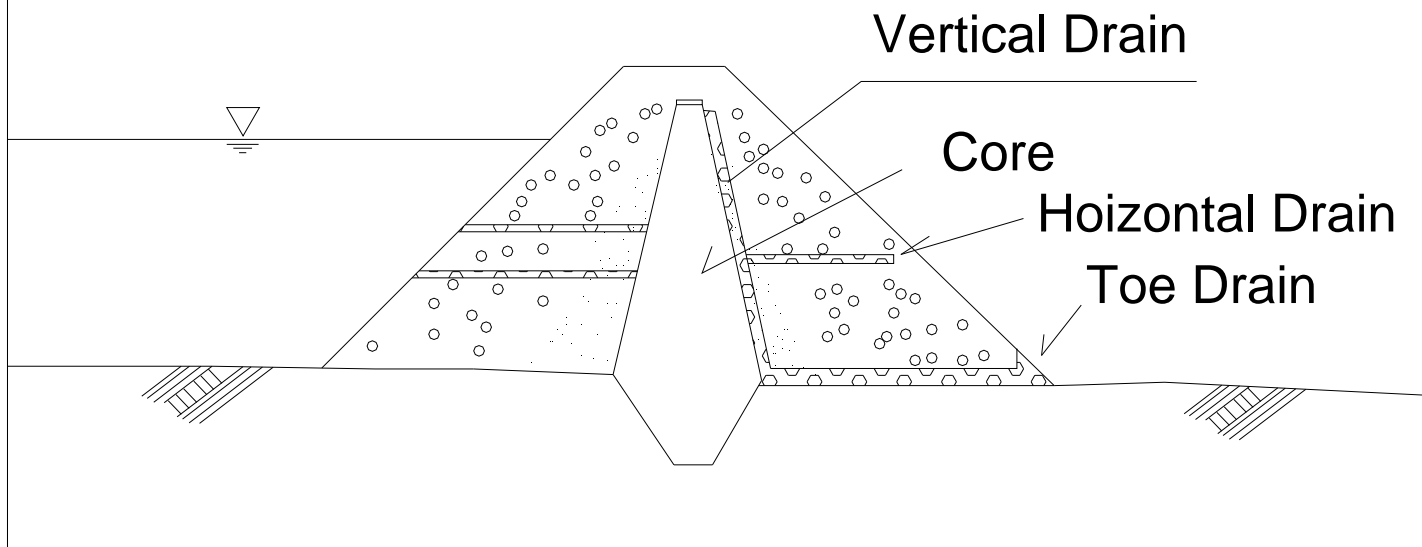
Paddy Field



(205) Drain

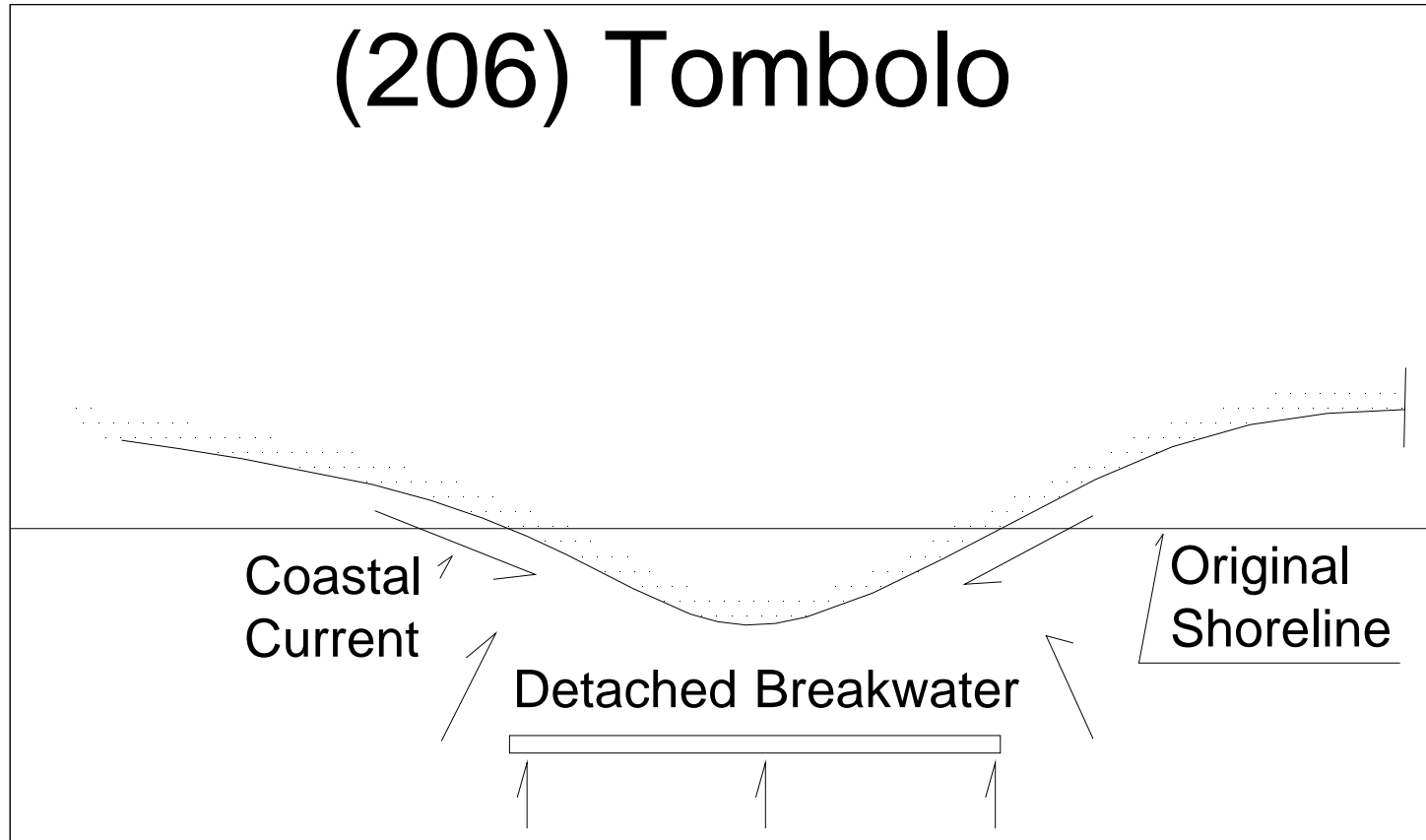
(205) Drain

(Uplift Pressure Pore Water Pressure)
Reduction



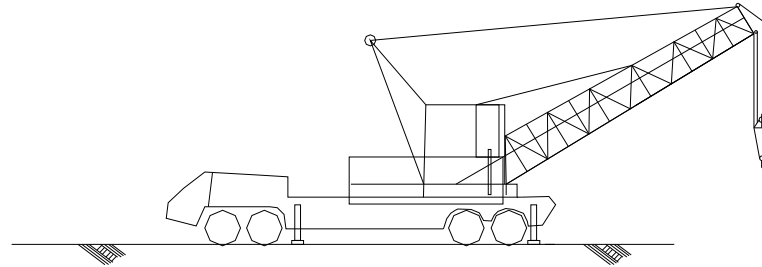
(206) Tombolo

(206) Tombolo



(207) Track Crane

(207) Track Crane



(208) Bulk Factor of Soil

(208) Bulk Factor of Soil

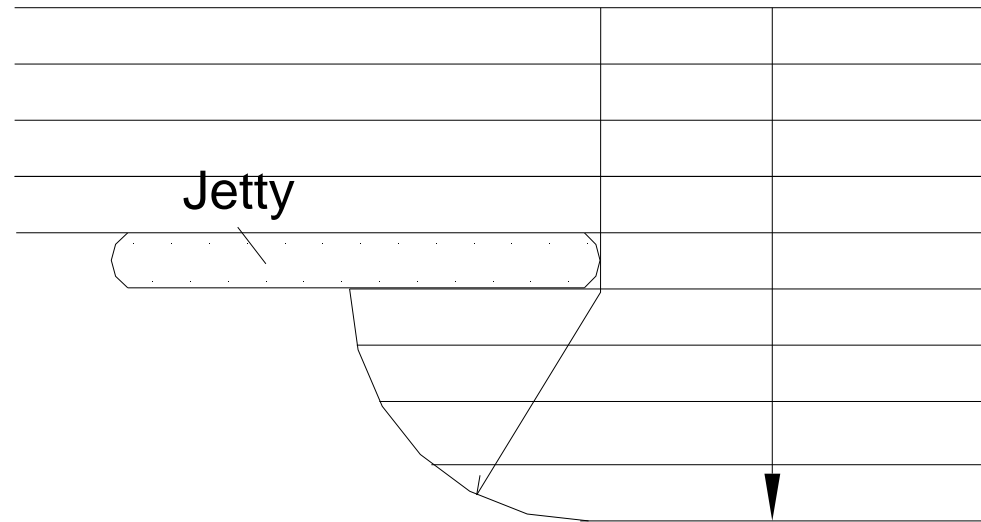
		Change rate of soil		
		Natural Condition	Excavated Loosed Condition	Compacted Condition
Sand		1.00	1.20	0.95
Sand soil		1.00	1.25	0.90
Clay		1.00	1.35	0.90
Gravel		1.00	1.20	1.00
Rock	Small Rock	1.00	1.50	1.20
	Rock	1.00	1.60	1.30

- 1.Change rate of soil:Natural ground soil:Volume ratio
- 2.Not included loss amount under construction work

(209) Diffraction of Wave:Reference of Wave

(209) Diffraction of Wave:Reference of Wave

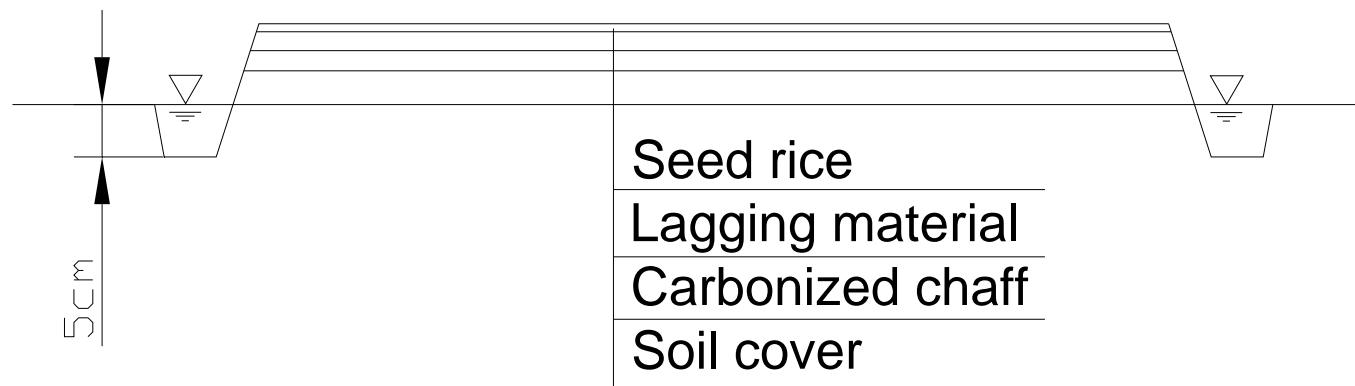
Water direction



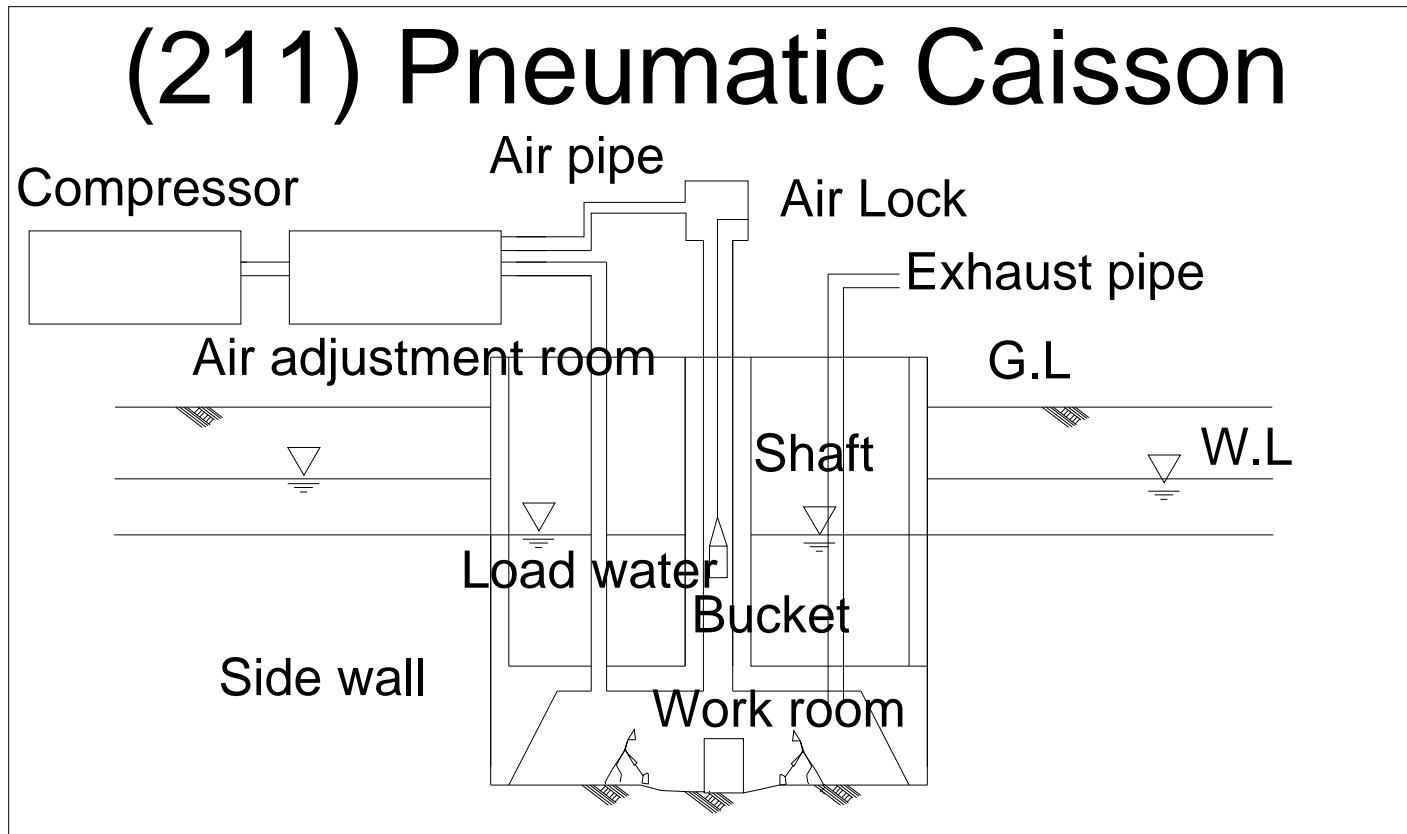
Huygens Theory

(210) Nursery Bed

(210) Nursery Bed

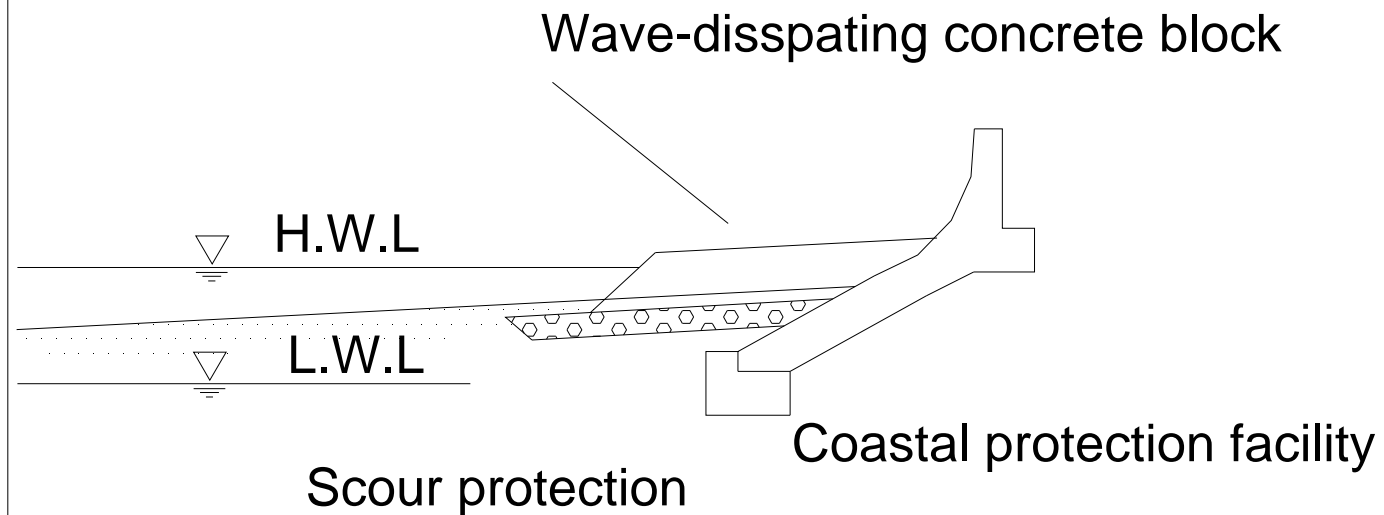


(211) Pneumatic Caisson



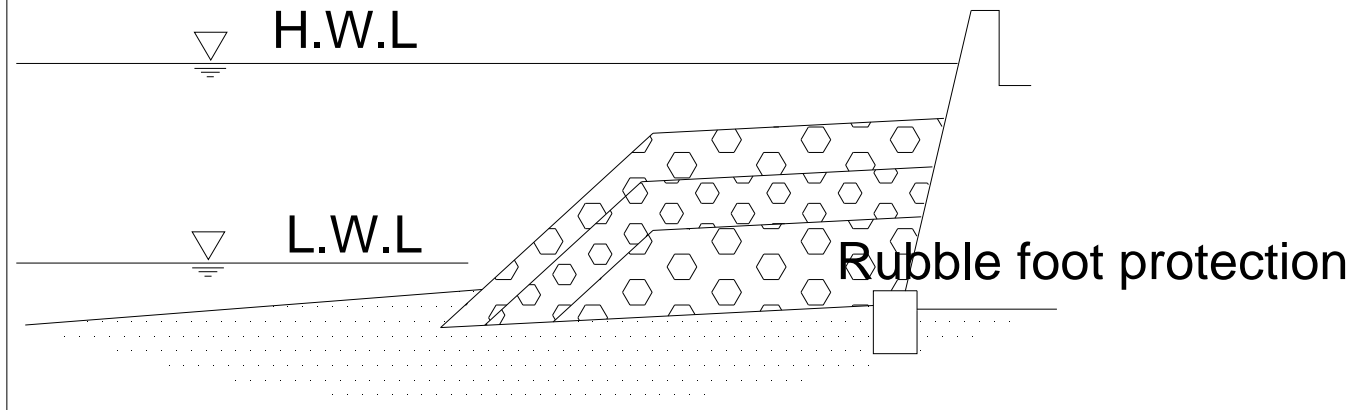
(212) Foot Protection 1

(212) Foot Protection 1



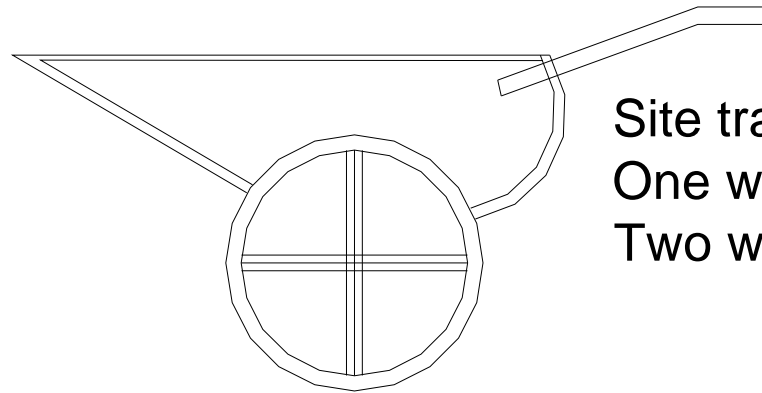
(213) Foot Protection 2

(213) Foot Protection 2



(214) Wheel Barrow:Hand Cart

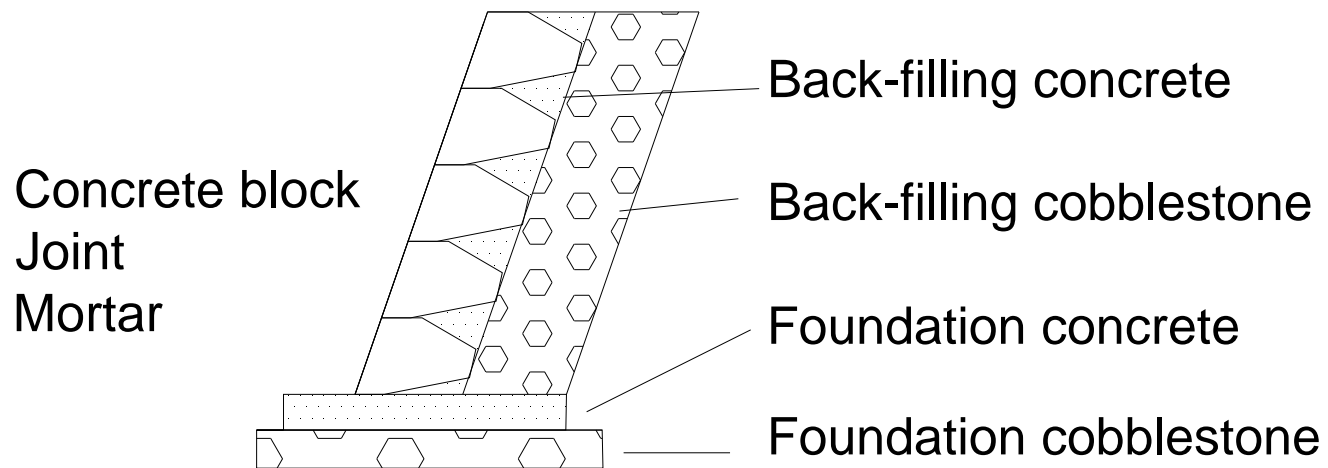
(214) Wheel Barrow:Hand Cart



Site transportation
One wheel
Two wheels

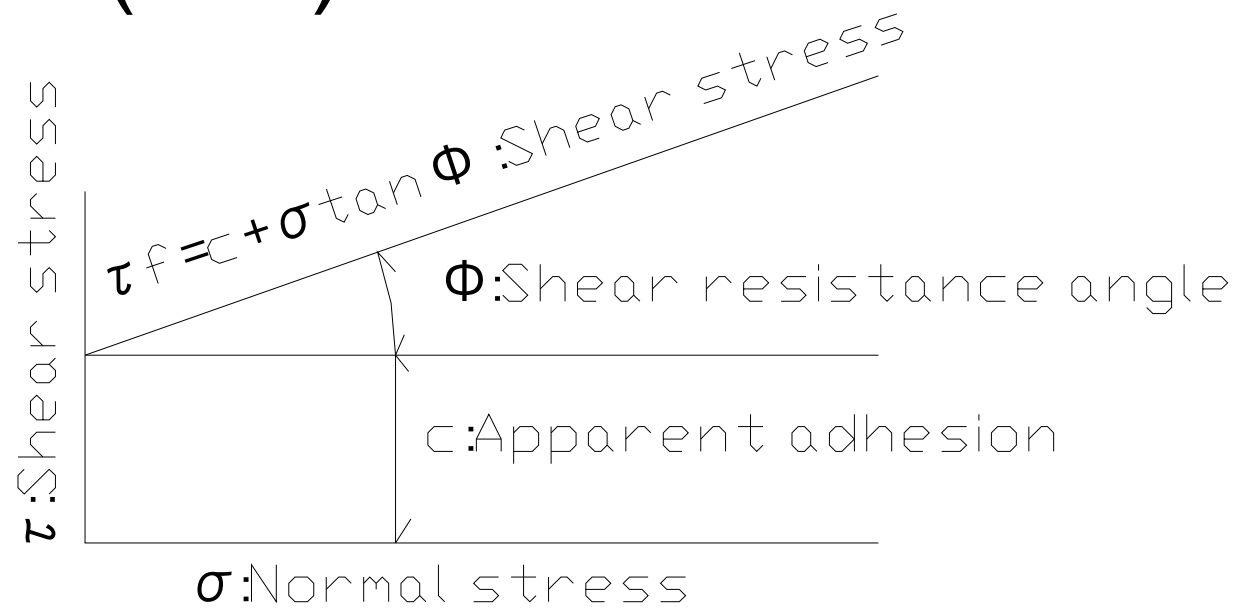
(215) Wet Masonry

(215) Wet Masonry



(216) Cohesion

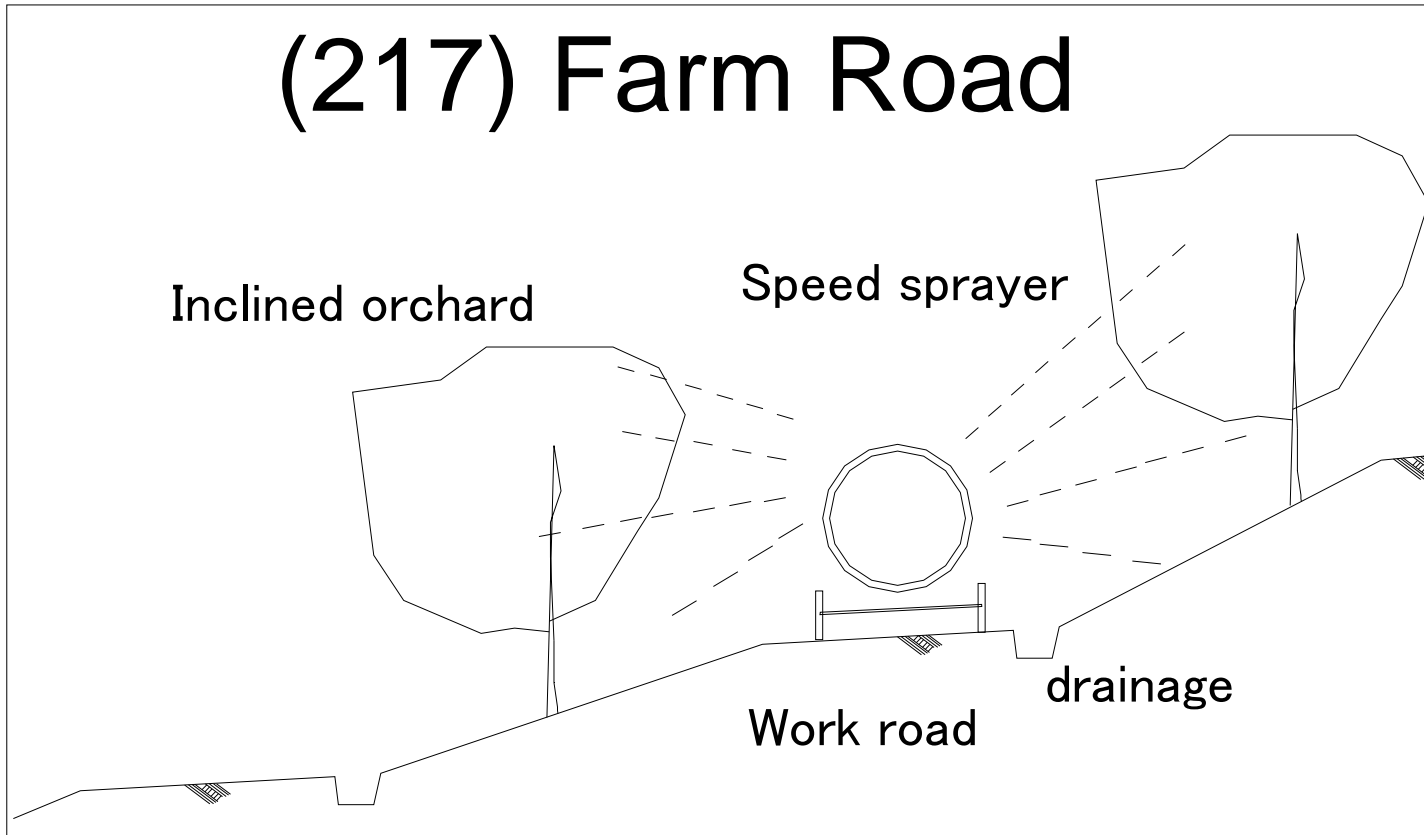
(216) Cohesion



Shear test

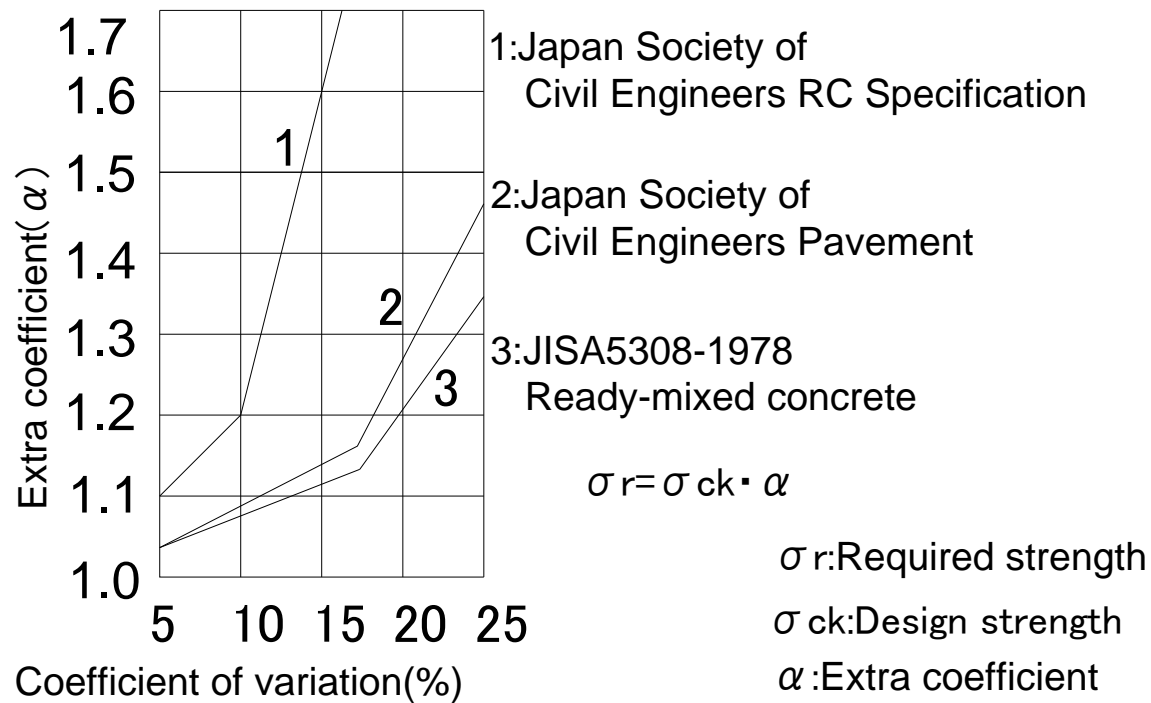
(217) Farm Road

(217) Farm Road

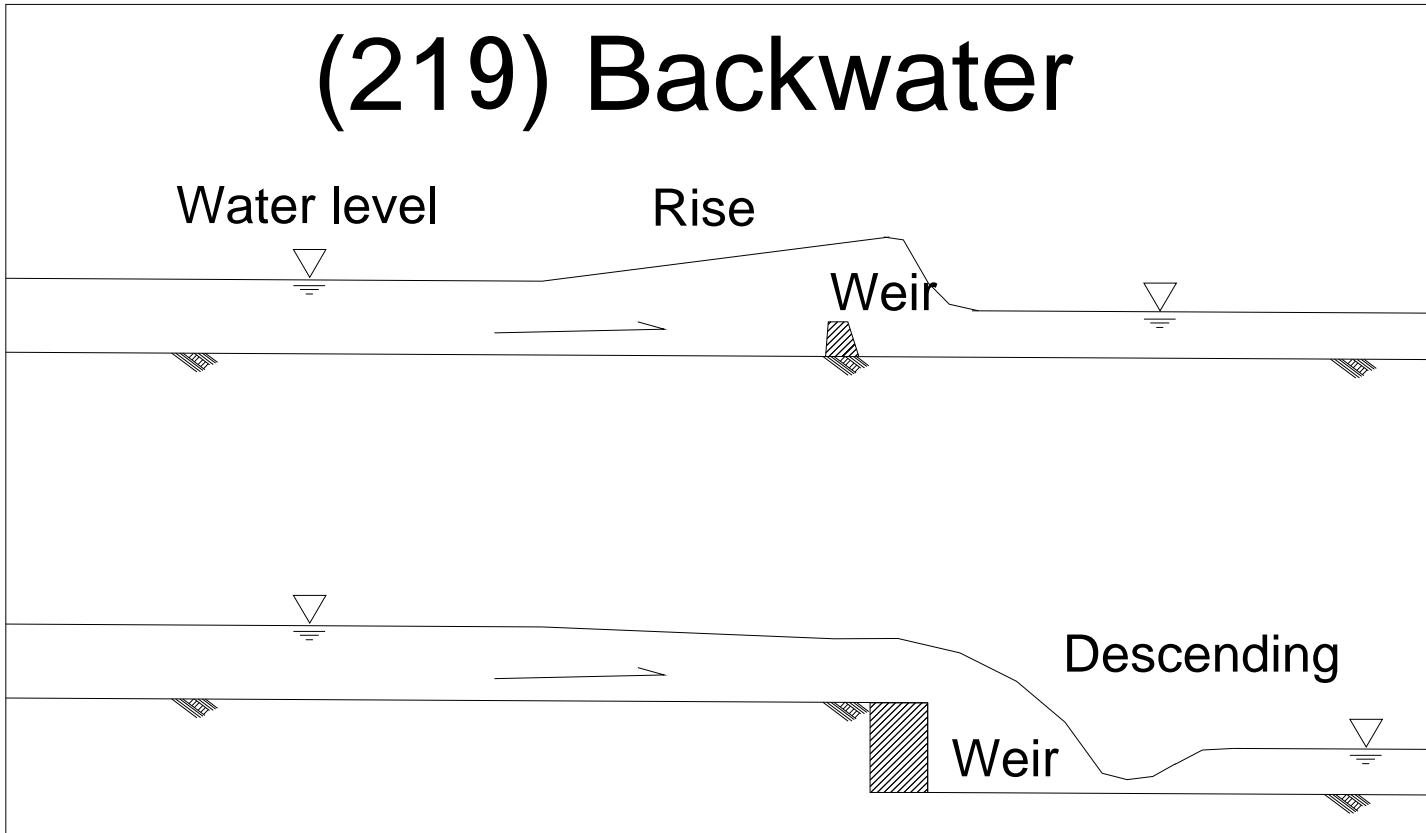


(218) Average strength required

(218) Required strength

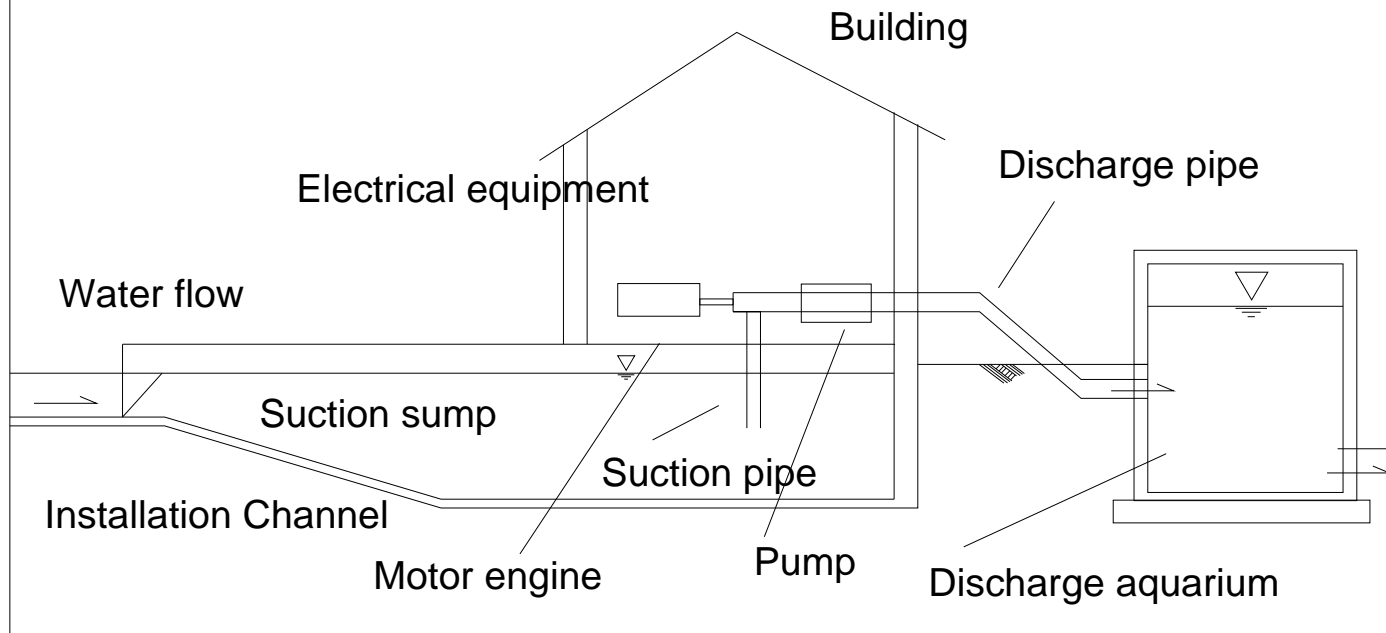


(219) Backwater



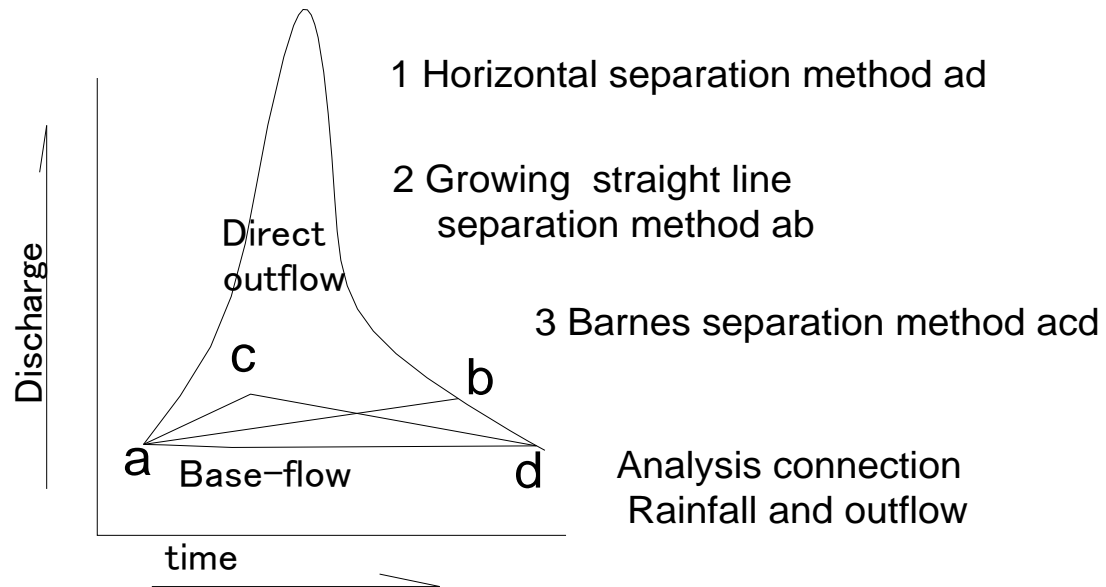
(220) Drainage pump station

(220) Drainage pump station

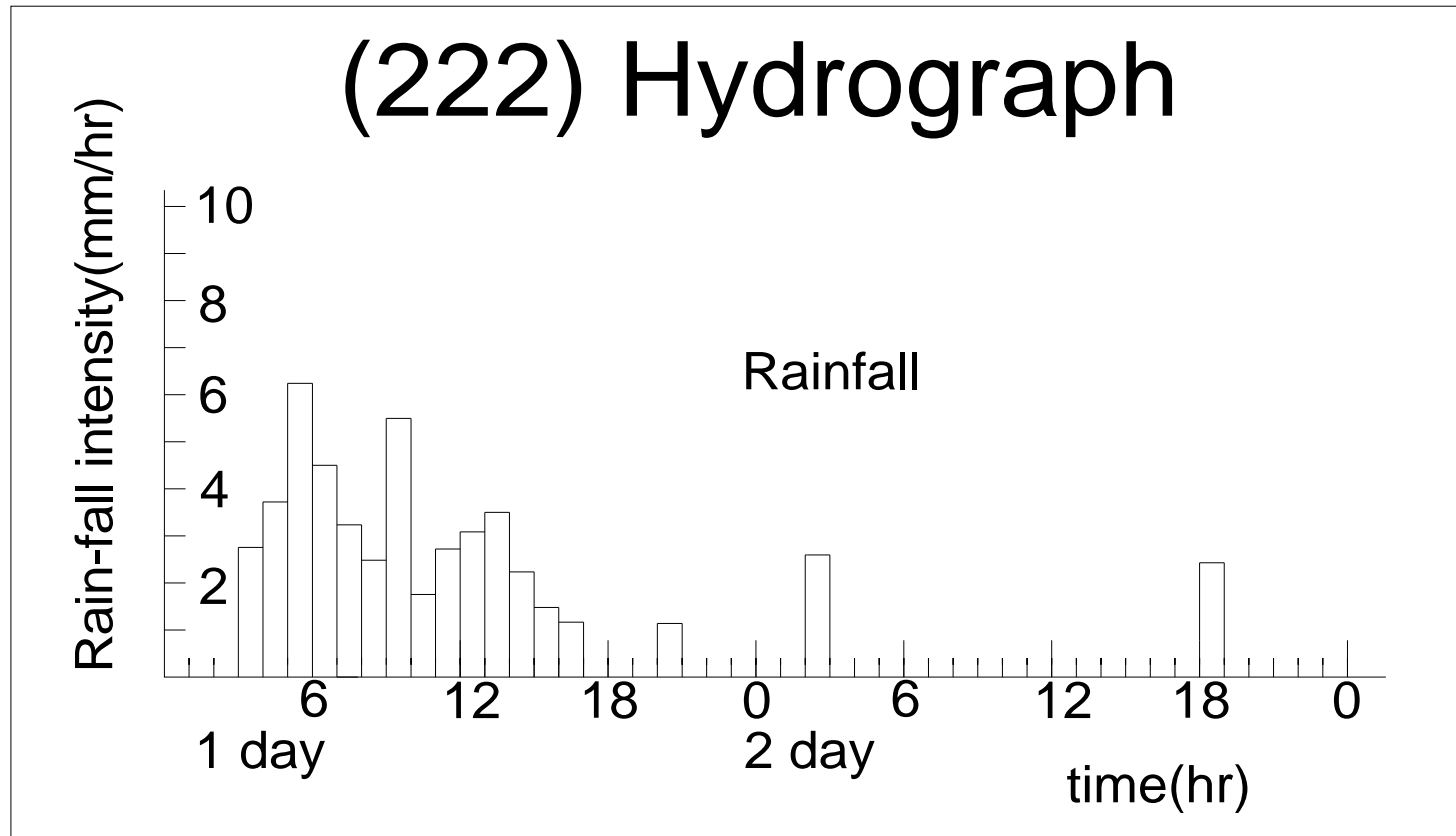


(221) Hydrograph separation

(221) Hydrograph separation



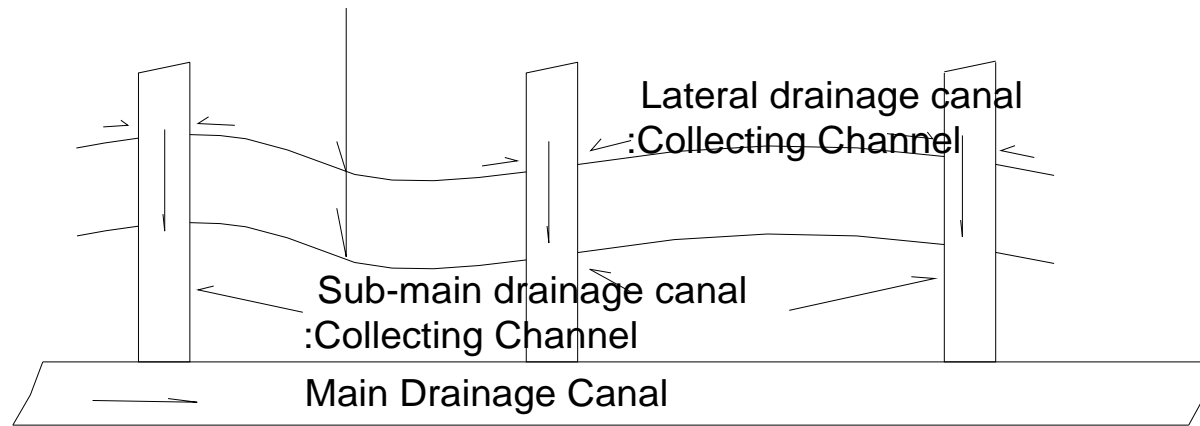
(222) Hyetograph



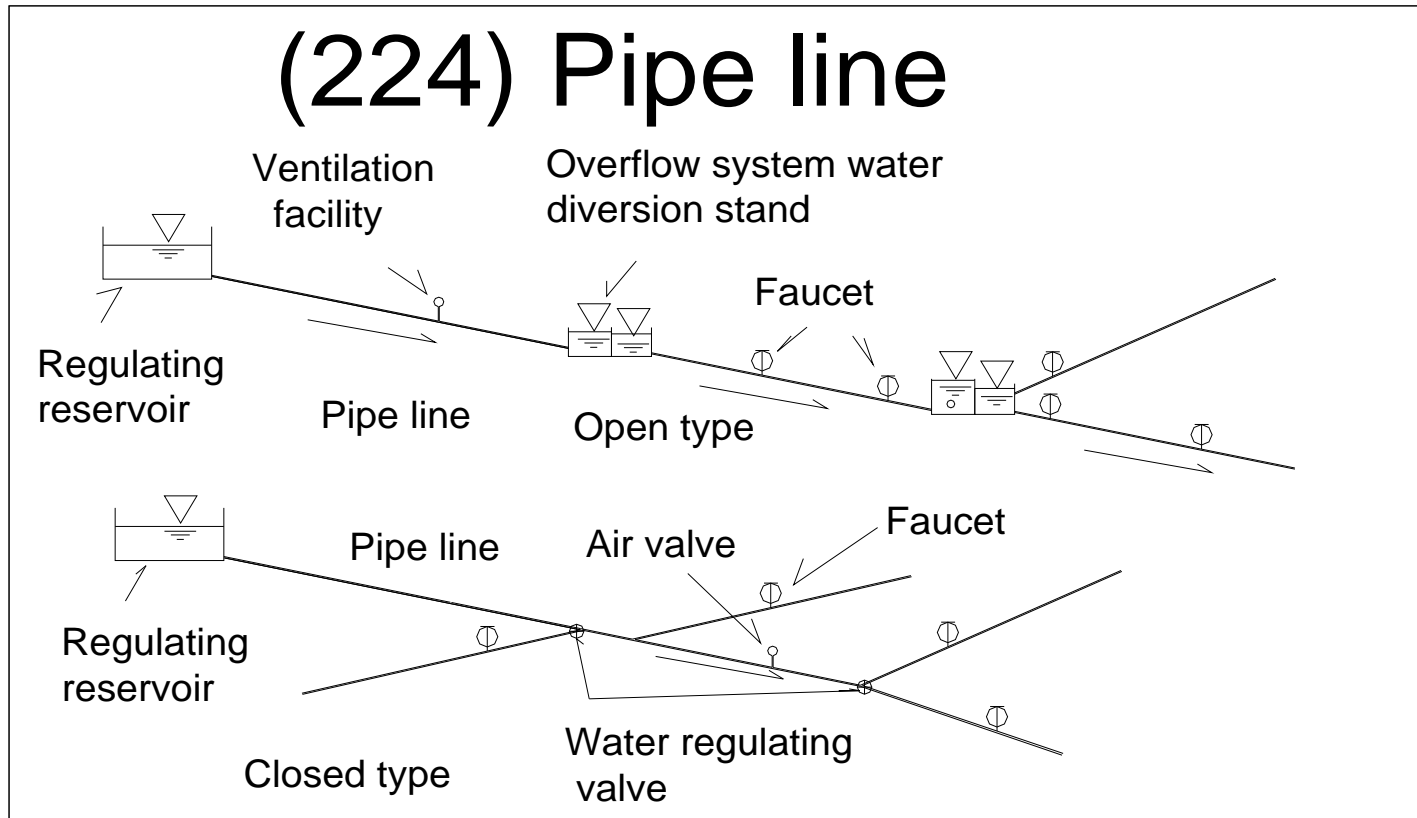
(223) Drainage canal

(223) Drainage canal

Lateral drainage canal: Intercepting Drain

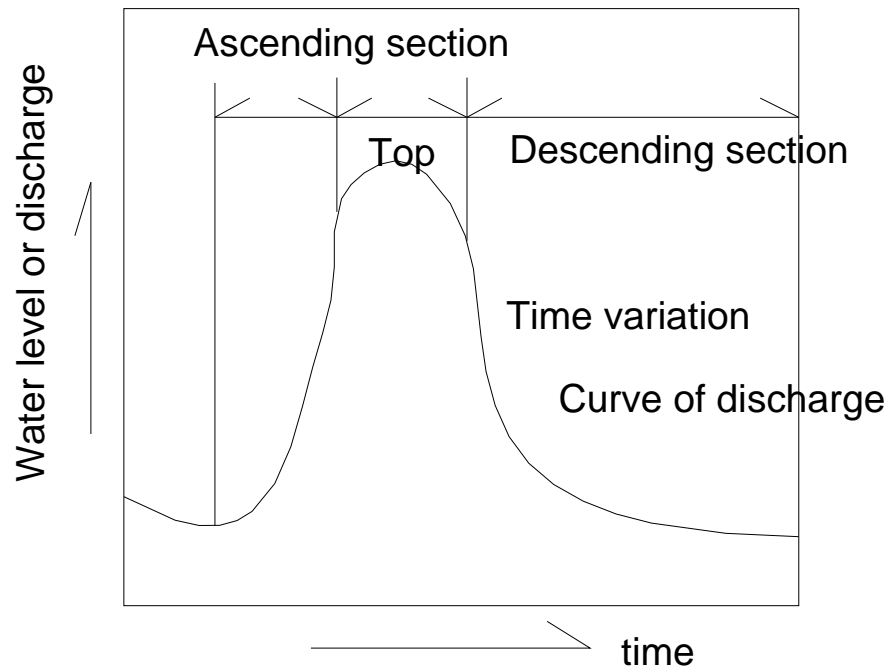


(224) Pipe line

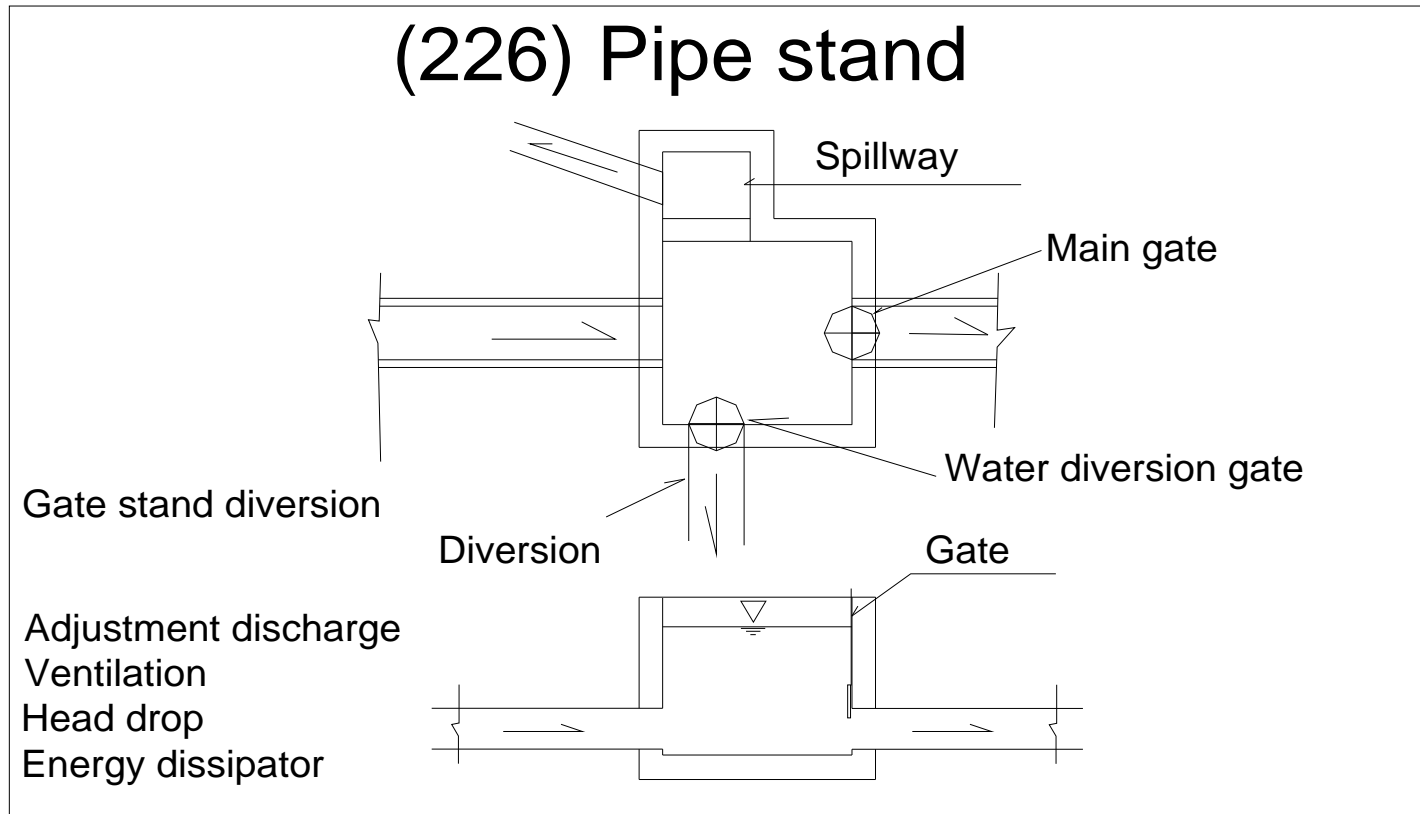


(225) Hydrograph

(225) Hydrograph

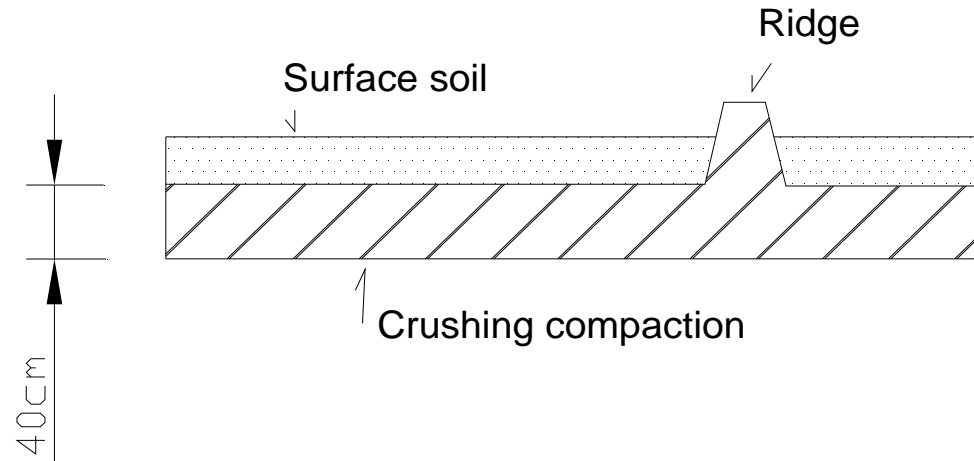


(226) Pipe stand



(227) Crushing and compaction method

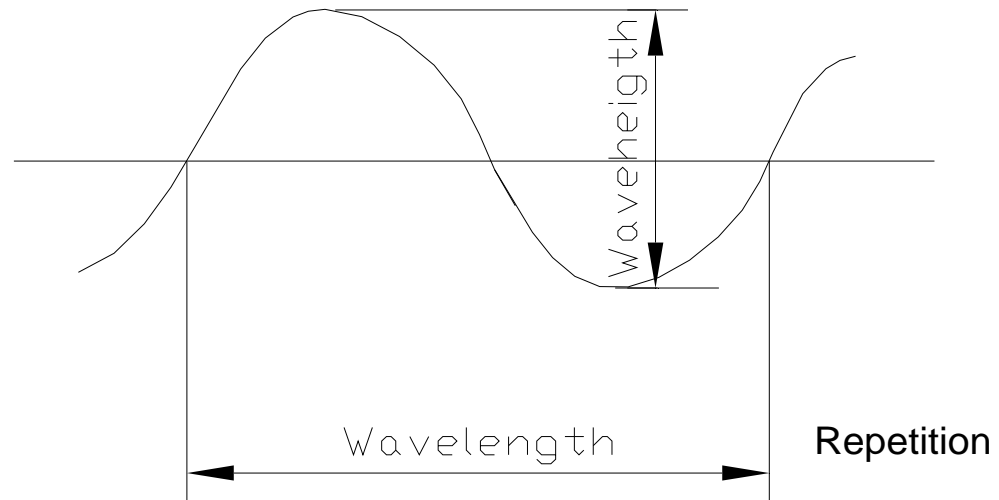
(227) Crushing and compaction method



Plowing crushing
Impermeable layer
Water leakage prevention

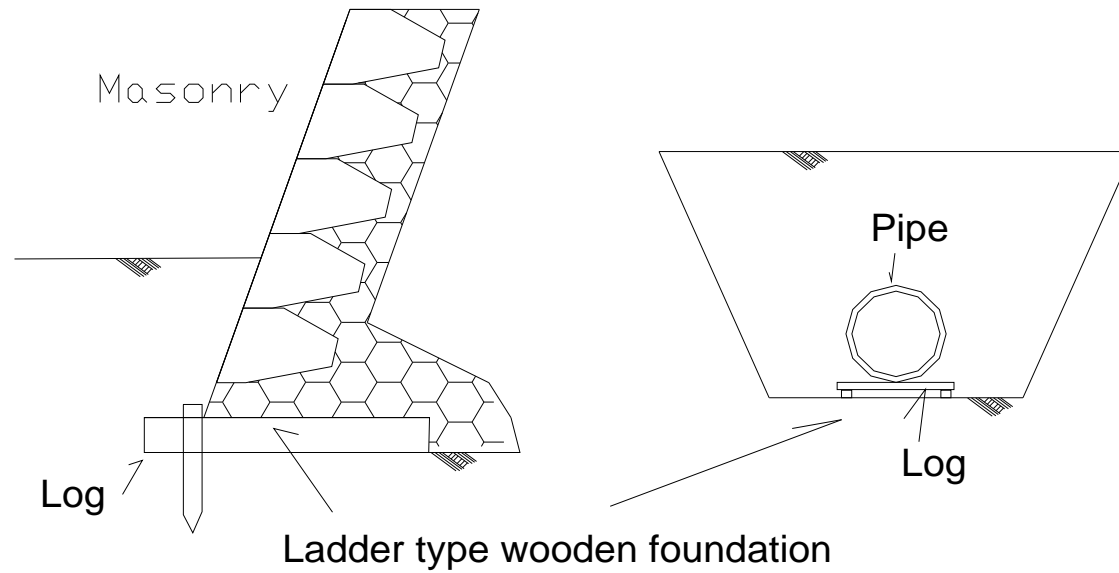
(228) Wave height

(228) Wave height



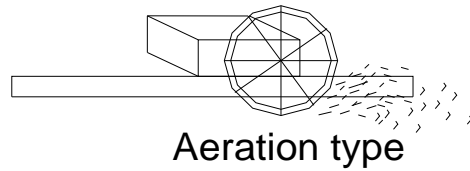
(229) Ladder type wooden foundation

(229) Ladder type wooden foundation

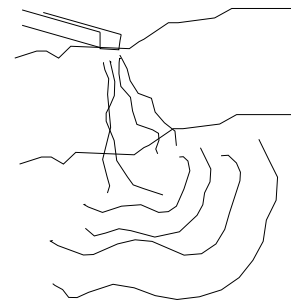


(230) Aeration

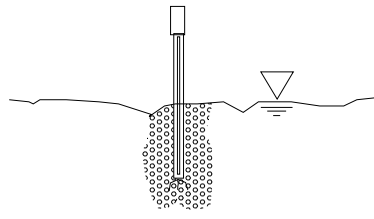
(230) Aeration



Aeration type

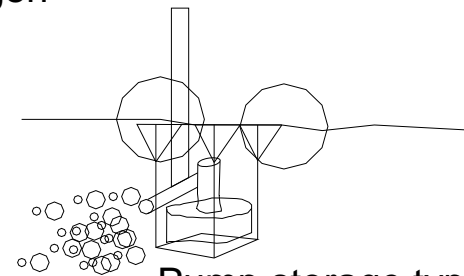


Utilization Landform



Bubble type

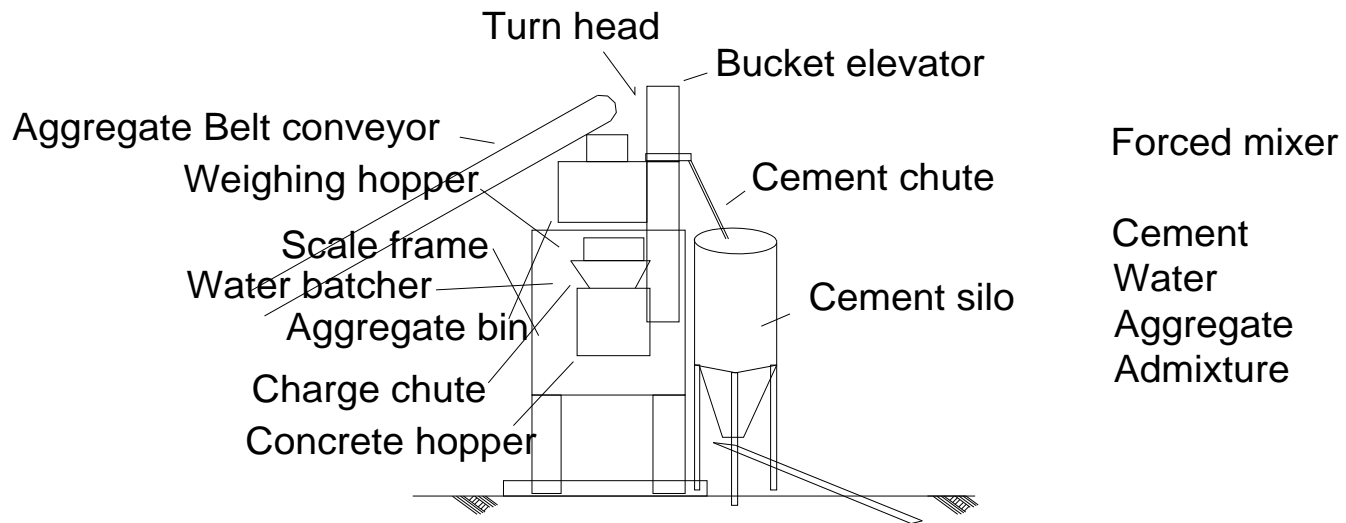
Air entrainment
Dissolved oxygen
Fountain
Water drop



Pump storage type

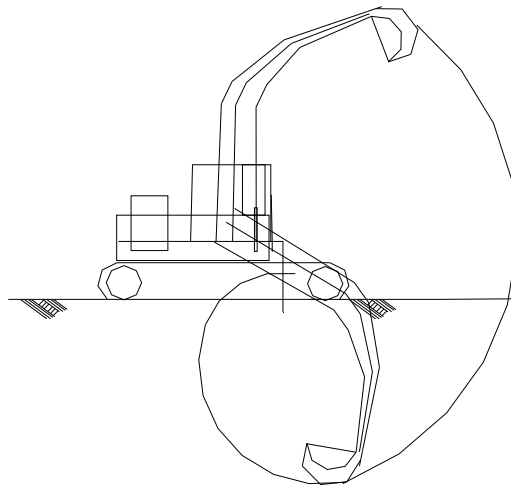
(231) Batching Plant

(231) Batching Plant



(232) Back hoe

(232) Back hoe



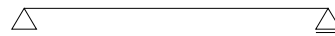
Hydraulic excavator

Hight place-Excavation
Ground-Dig down

(233) Beam

(233) Beam

Static beam



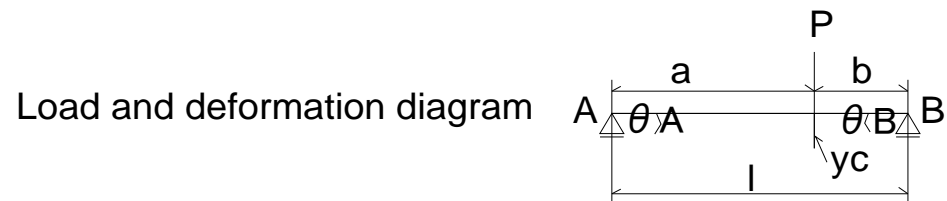
Simple beam



Bouncing beams

(234) Stress and deformation of simple beam

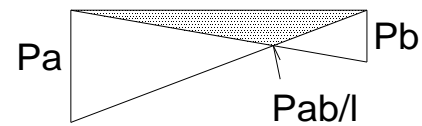
(234) Stress and deformation of simple beam



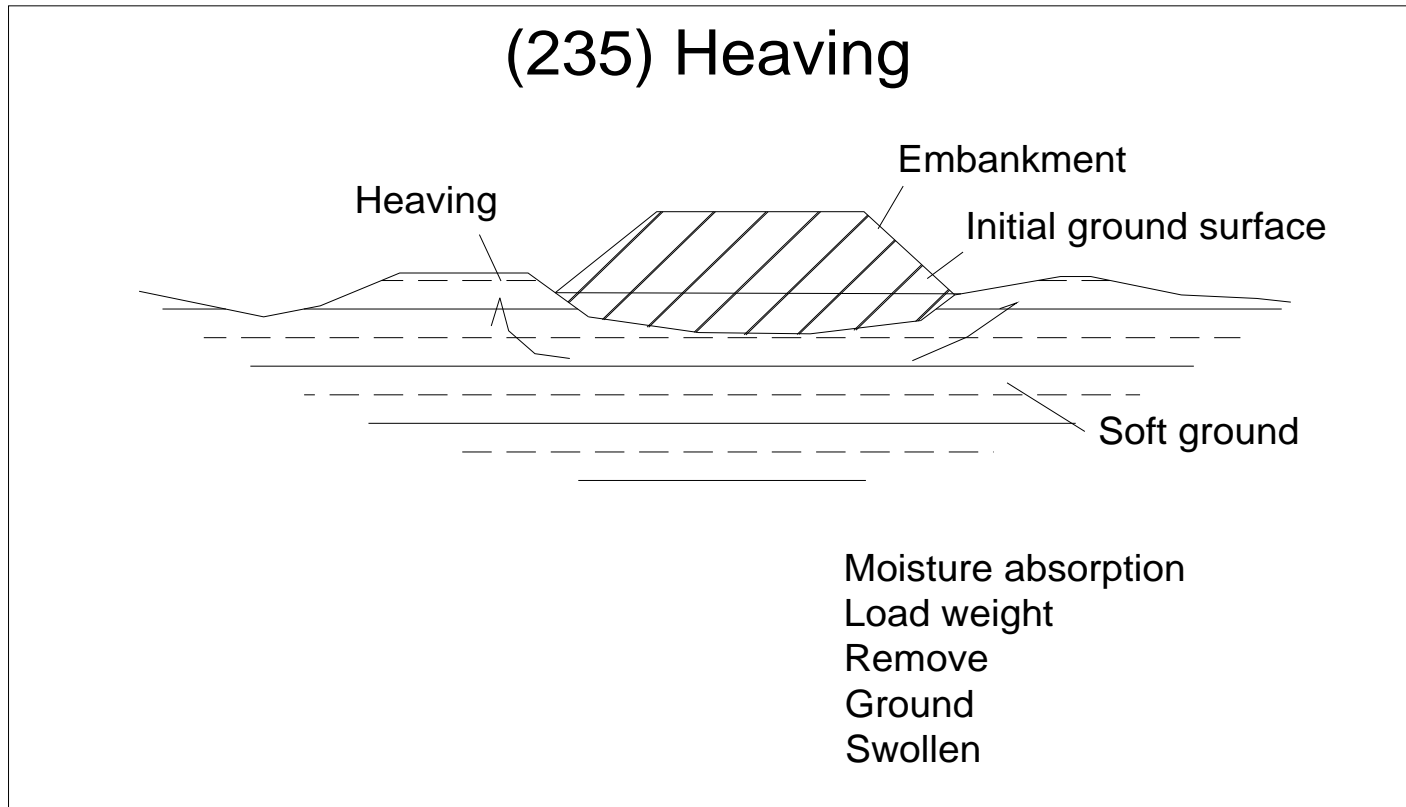
Q diagram



M diagram

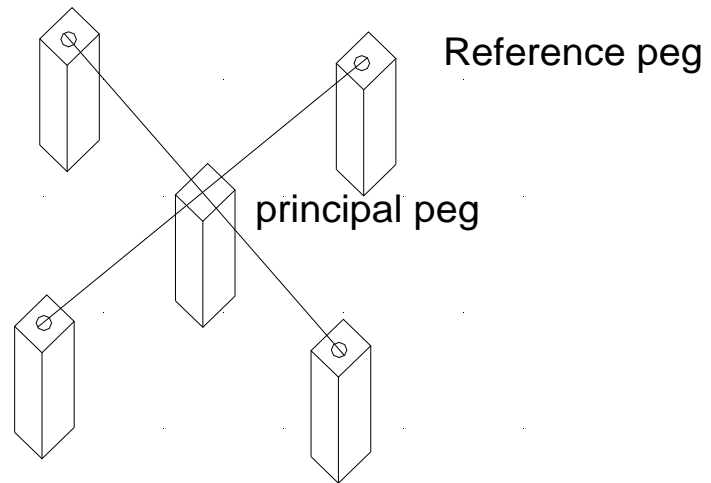


(235) Heaving

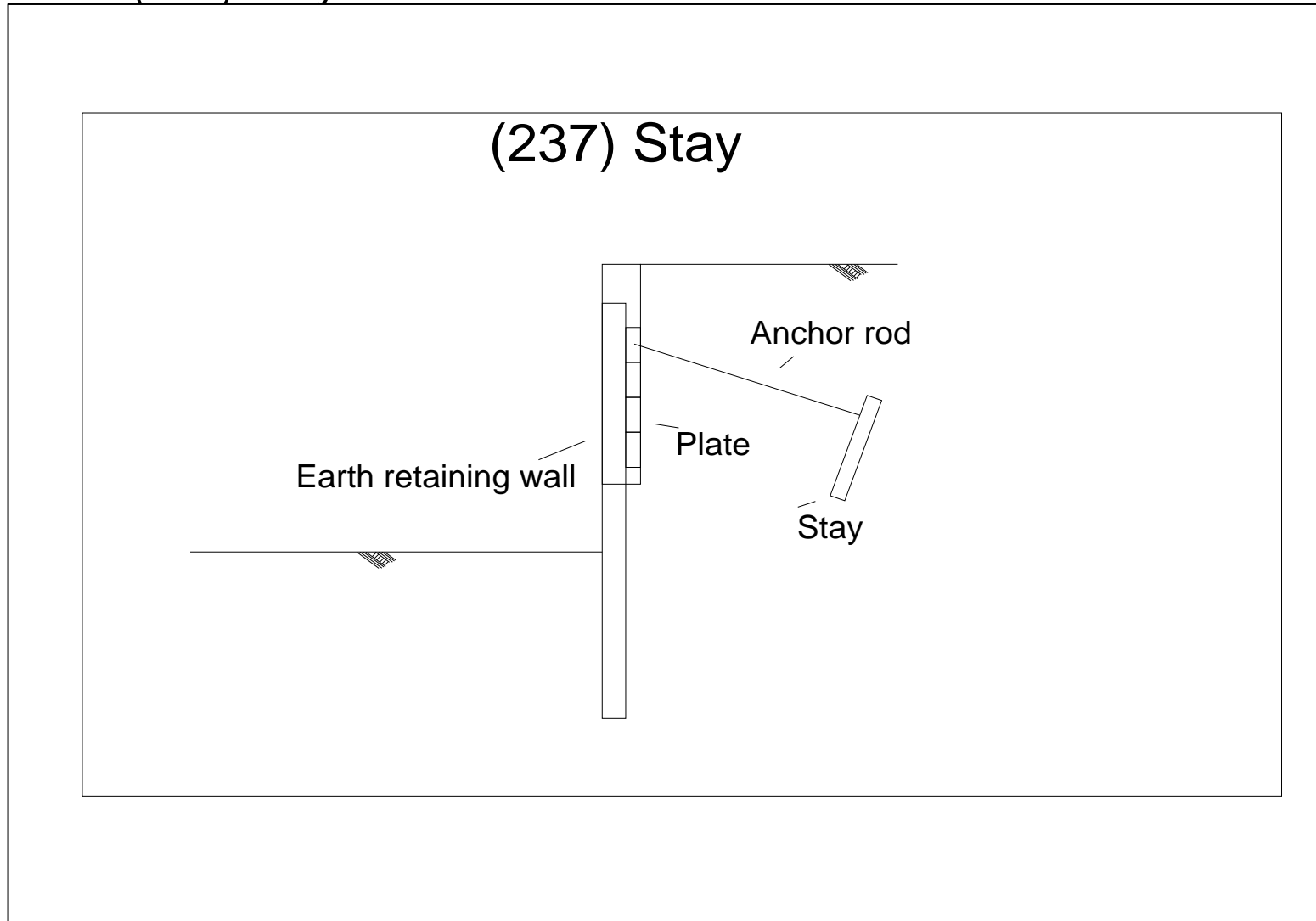


(236) Checking peg

(236) Checking peg

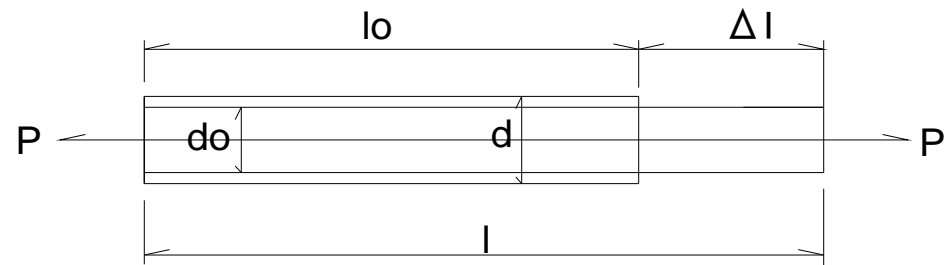


(237) Stay



(238) Strain

(238) Strain



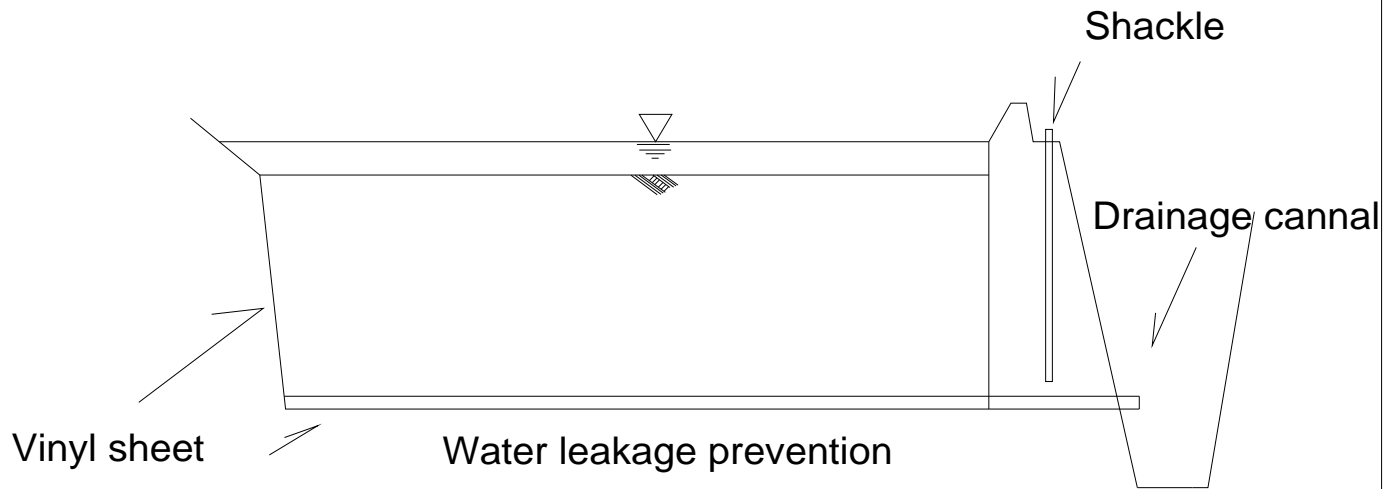
Vertical strain $\epsilon_l = (l - l_0) / l_0 = \Delta l / l_0, \Delta l = l - l_0$

Lateral strain $\epsilon_t = (d - d_0) / d_0 = \Delta d / d_0, \Delta d = d - d_0$

Poisson Ratio $\epsilon_t / \epsilon_l = 1/m = \nu$

(239) Paddy field with underlying plastic sheet

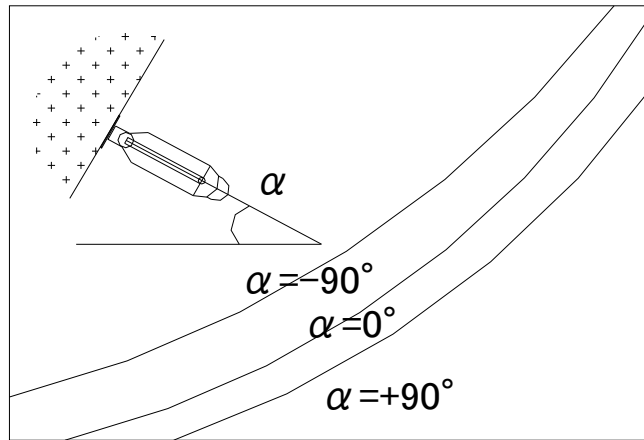
(239) Paddy field with underlying plastic sheet



(240) Non-destructive testing

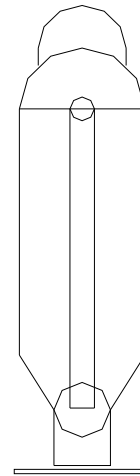
(240) Non-destructive testing

Cylindrical compressive strength (kgf/cm²)

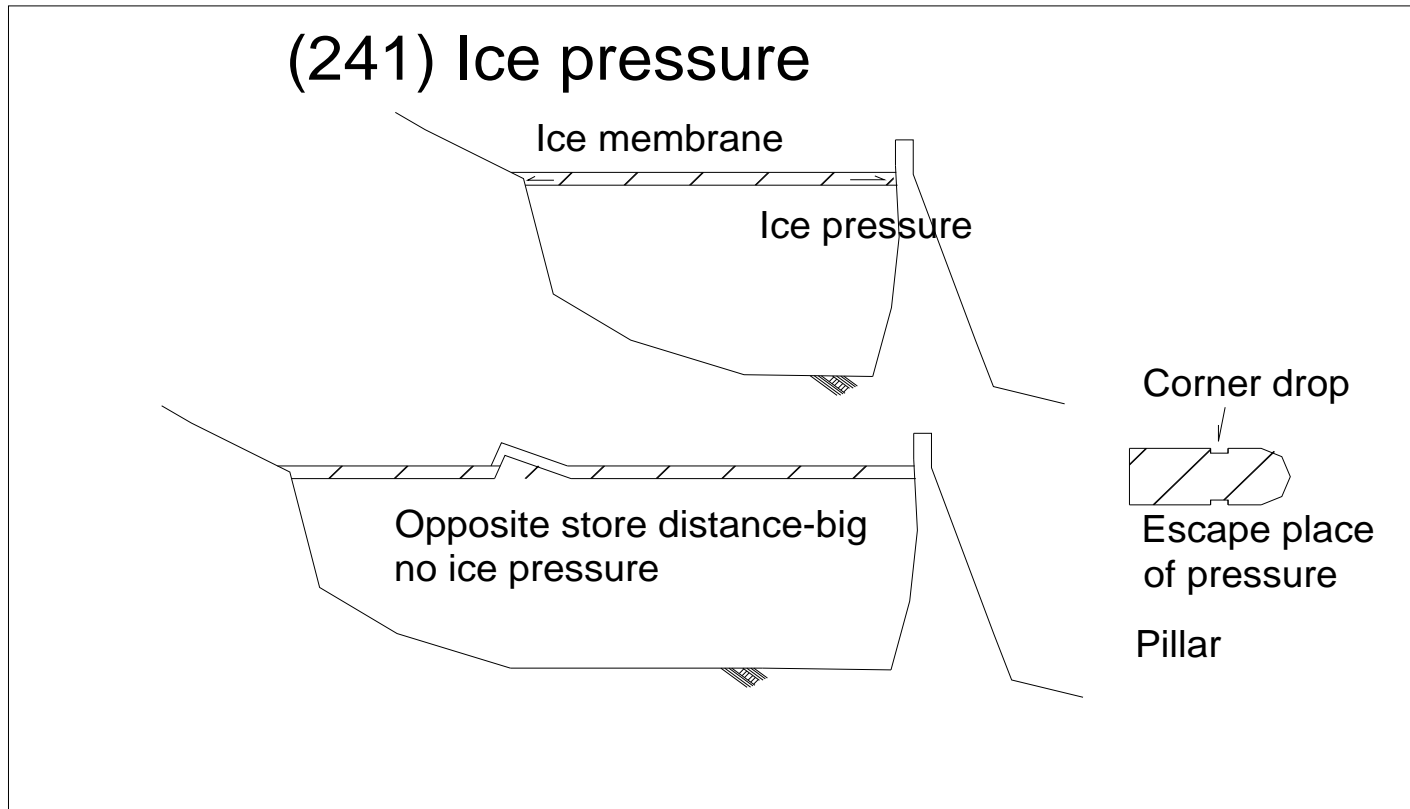


Degree of repulsion

Schmid Hammer Test

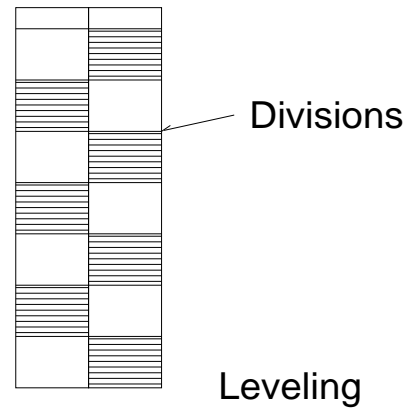


(241) Ice pressure



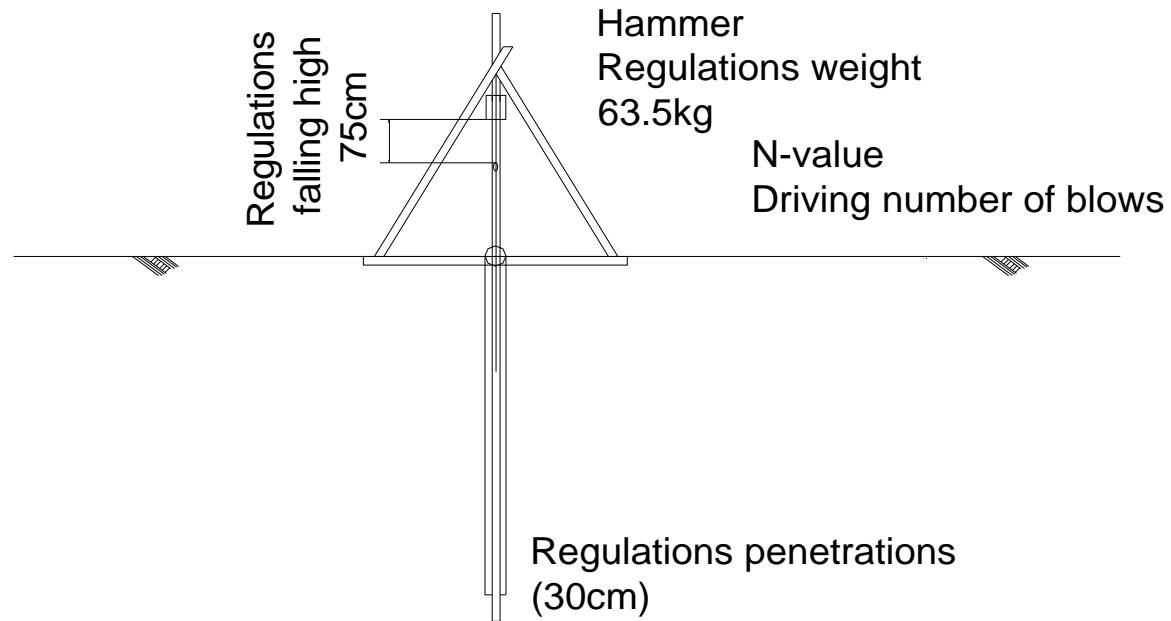
(242) Staff:Leveling rod

(242) Staff:Leveling rod



(243) Standard penetration test

(243) Standard penetration test



(244) Saturated surface-dry condition

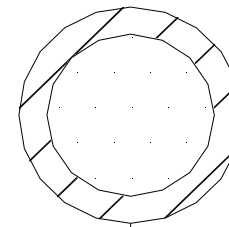
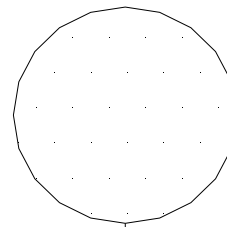
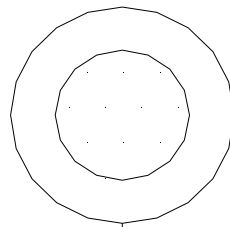
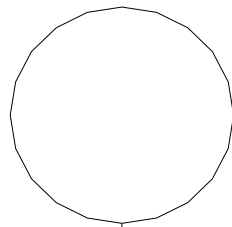
(244) Saturated surface-dry condition

Furnance drying
condition

Air dryness

Saturated surface-
dry condition

Wet conditions

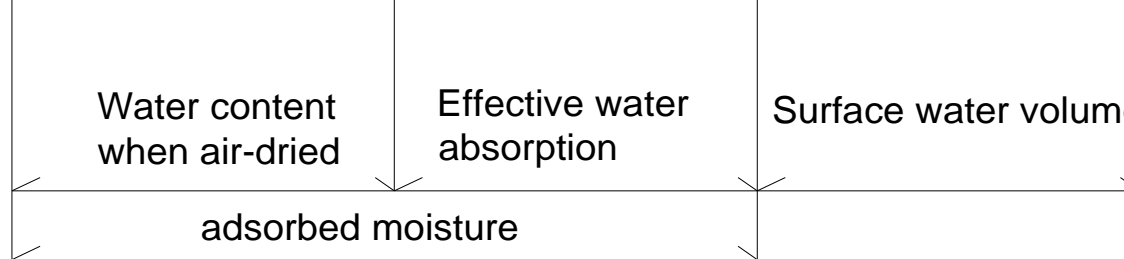


Water content
when air-dried

Effective water
absorption

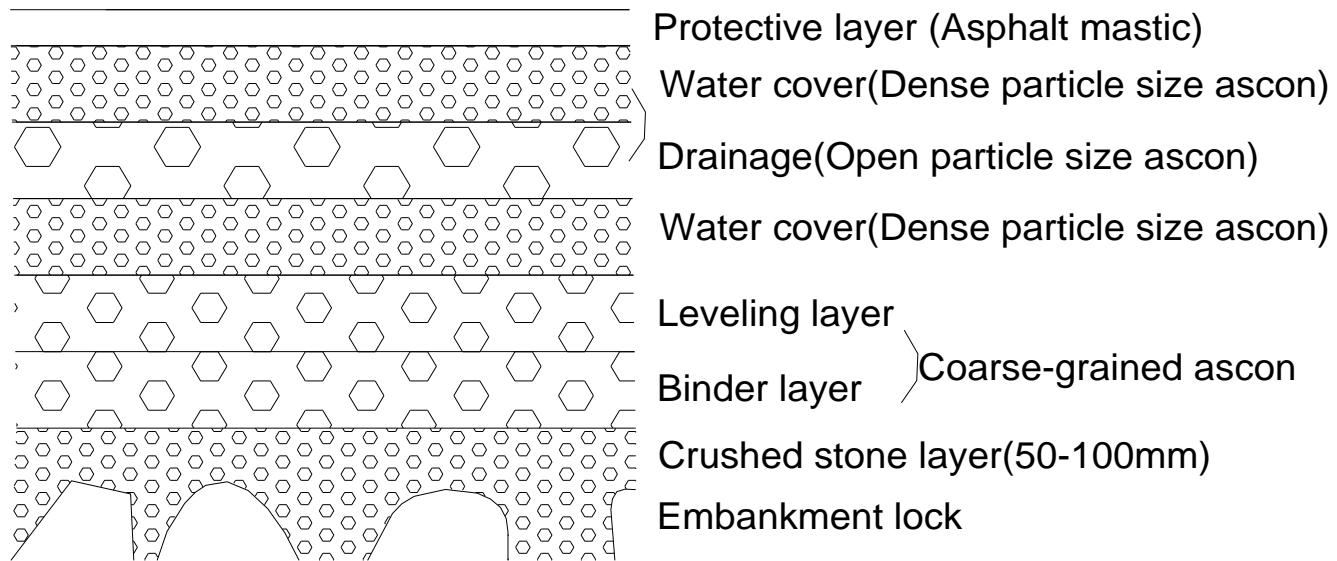
Surface water volume

adsorbed moisture

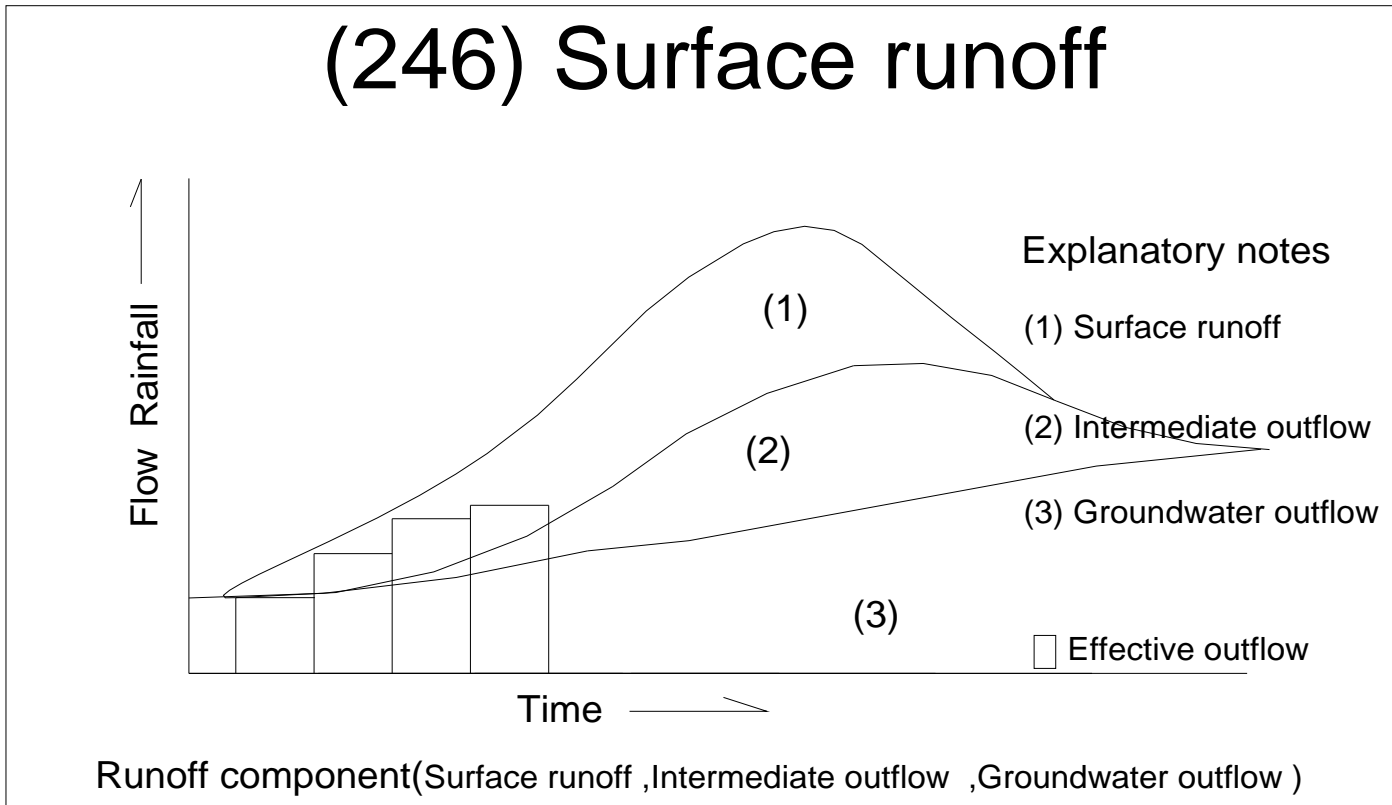


(245) Facing type dam

(245) Facing type dam

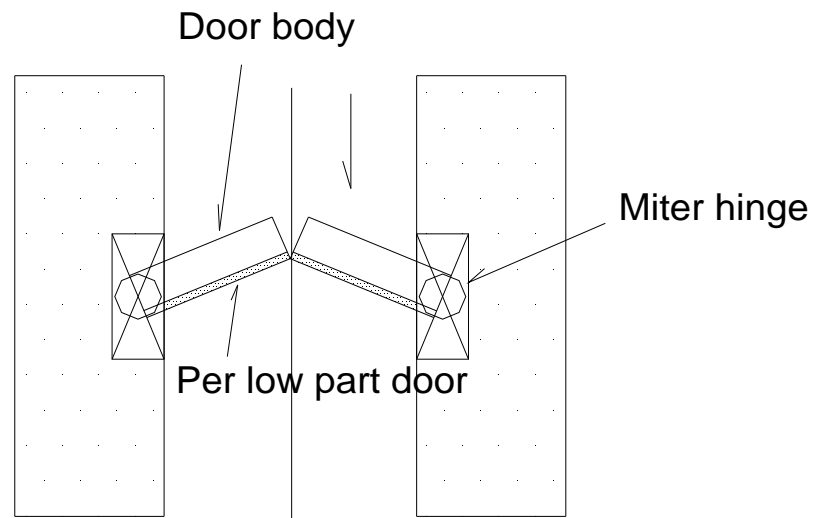


(246) Surface runoff



(247) Miter gate

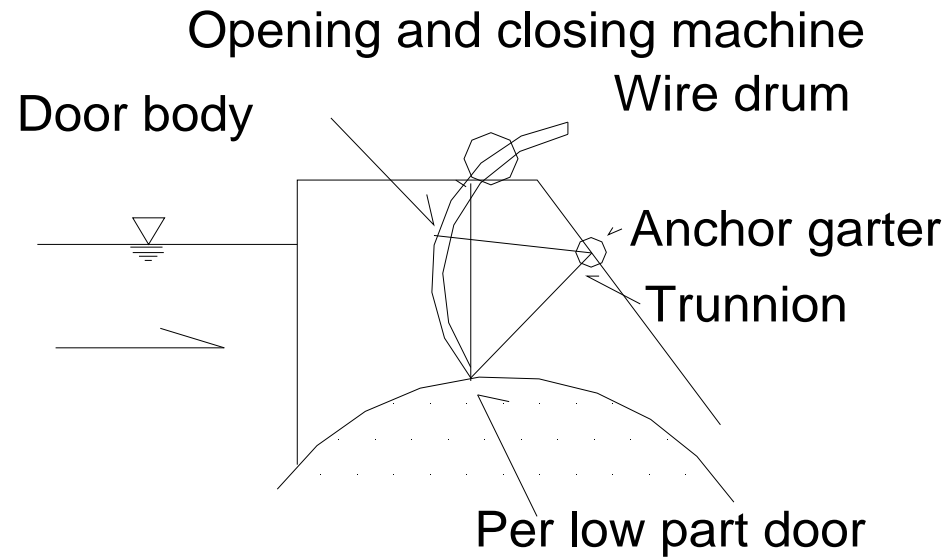
(247) Miter gate



Miter gate(Hinged gate)

(248) Radial gate

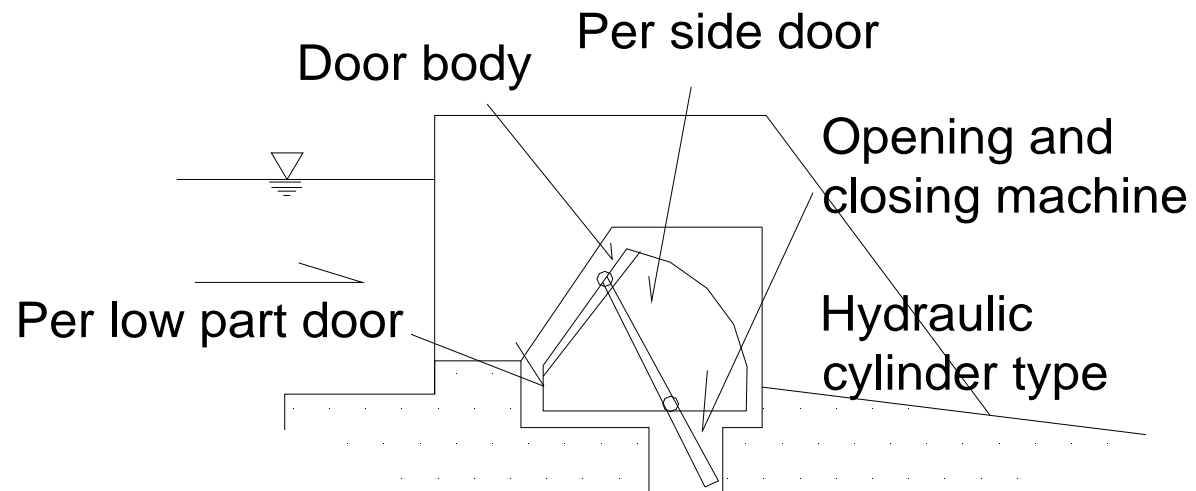
(248) Radial gate



(249) Hinge type gate

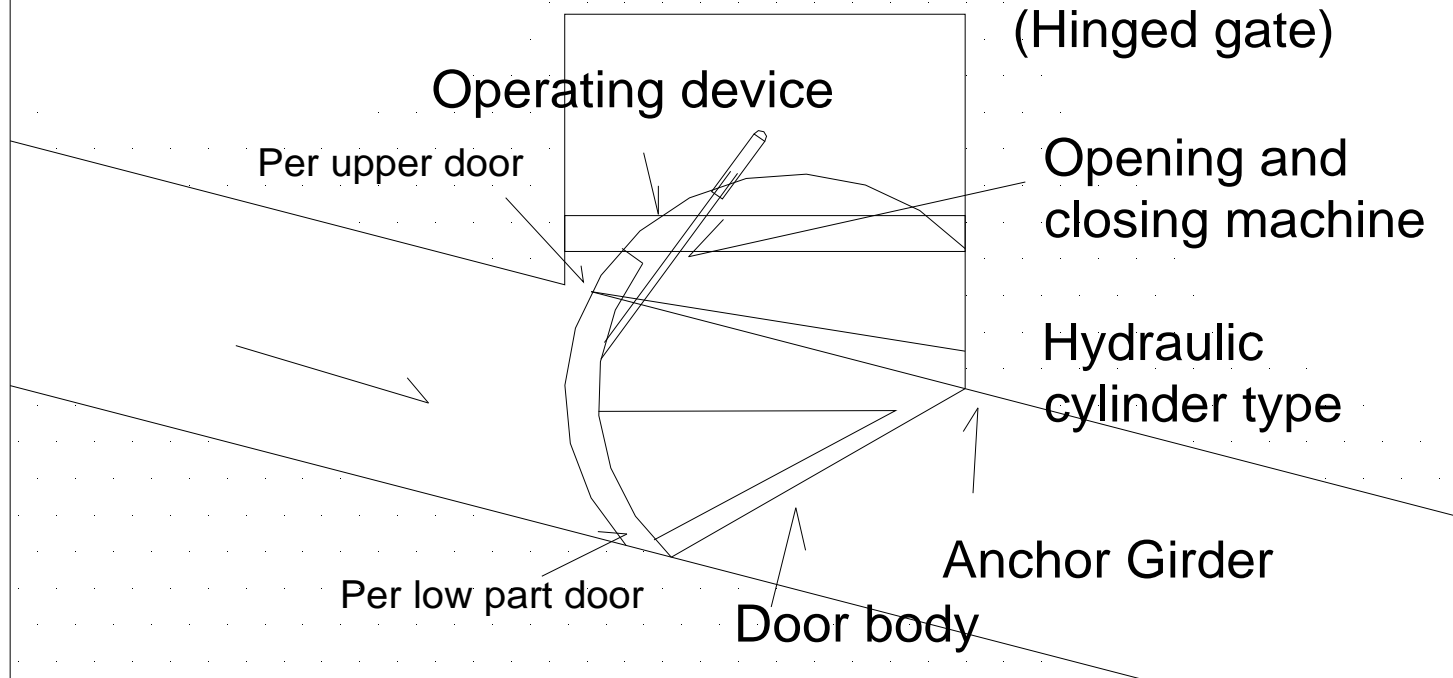
(249) Hinge type gate

(Tipping gate)



(250) High pressure radial gate

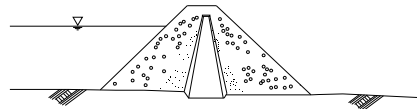
(250) High pressure radial gate



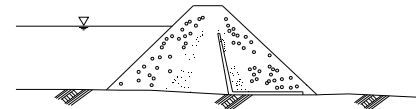
(251) Fill dam

(251) Fill dam

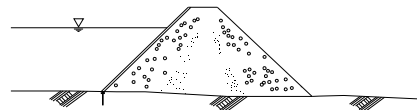
Soil
Gravel
Rock



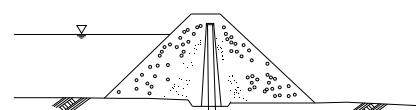
Zone type



Uniform type



Surface water-impervious dam



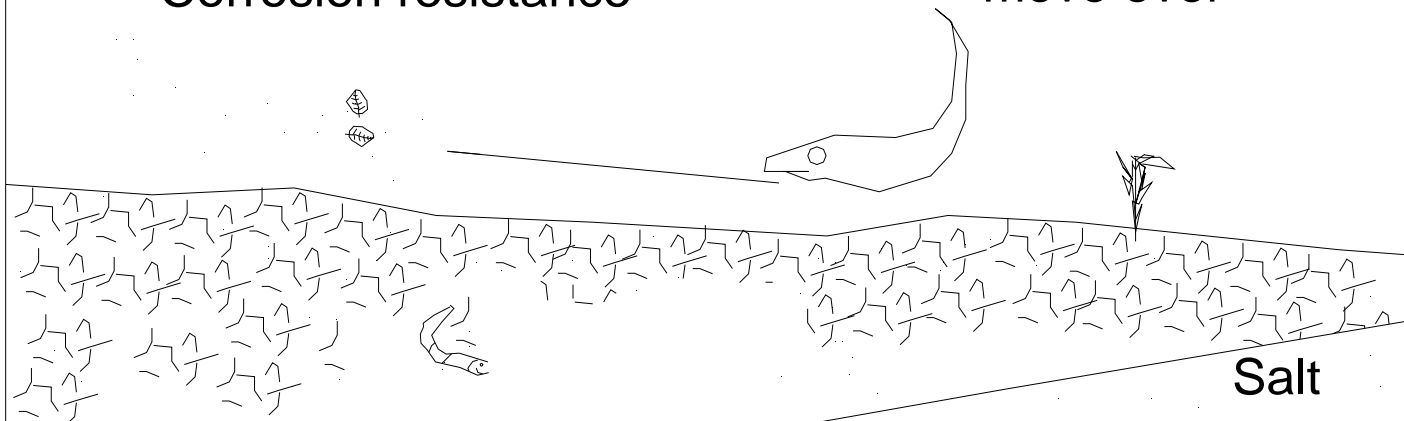
Core dam

(252) Wind erosion

(252) Wind erosion

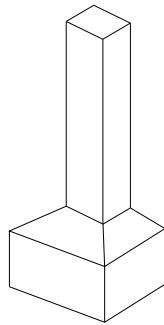
Measures
Windbreaks
Irrigation
Corrosion resistance

Soil particles
Scattering
move over

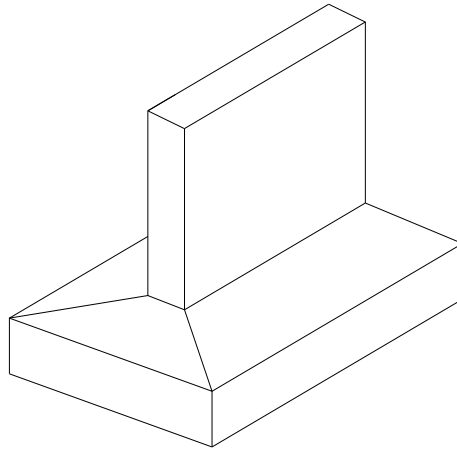


(253) Footing foundation

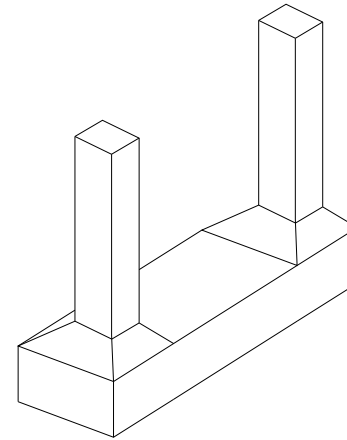
(253) Footing foundation



Base independent footing



Continuous footing(Long strip footing)

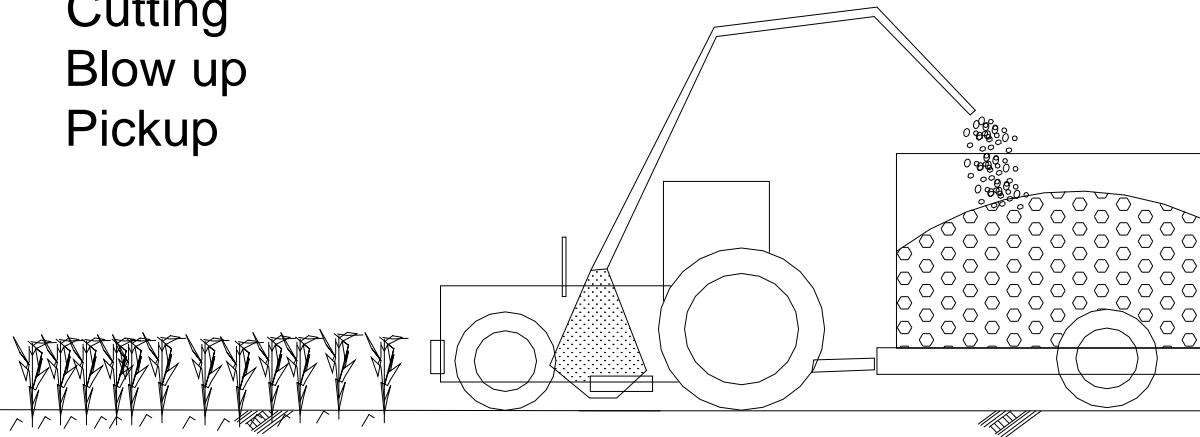


Combined footing

(254) Forage harvester

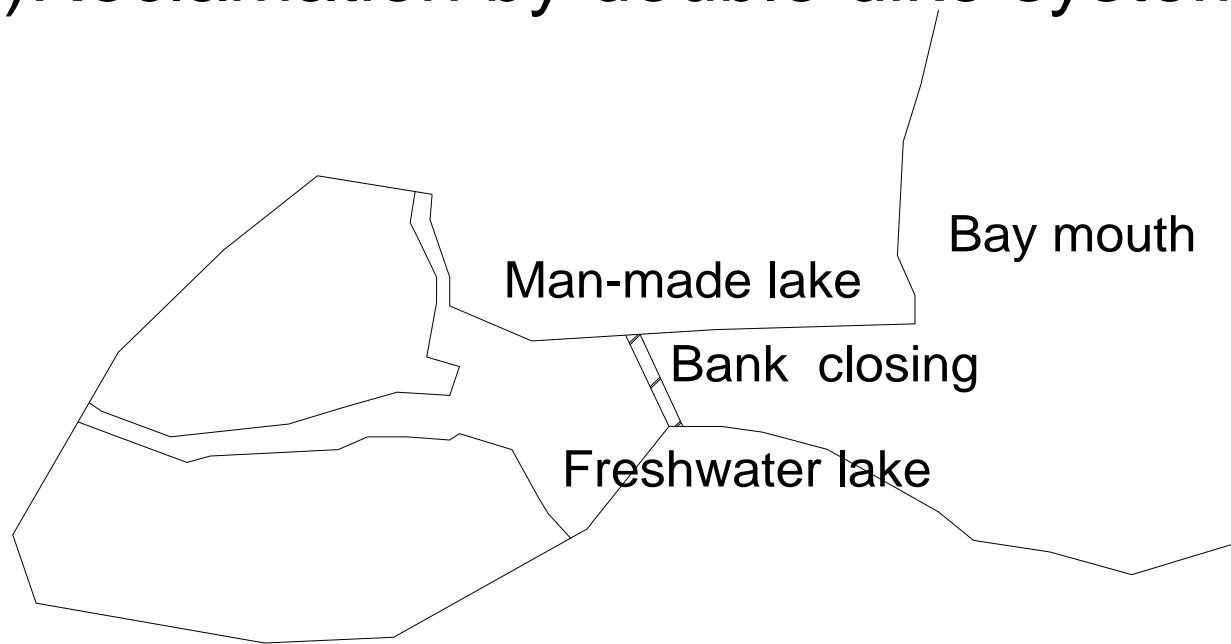
(254) Forage harvester

Mowing
Cutting
Blow up
Pickup



(255)Reclamation by double dike system

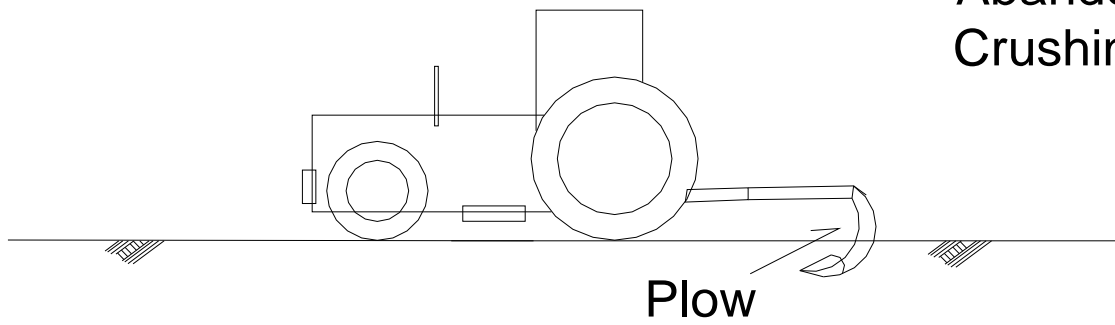
(255)Reclamation by double dike system



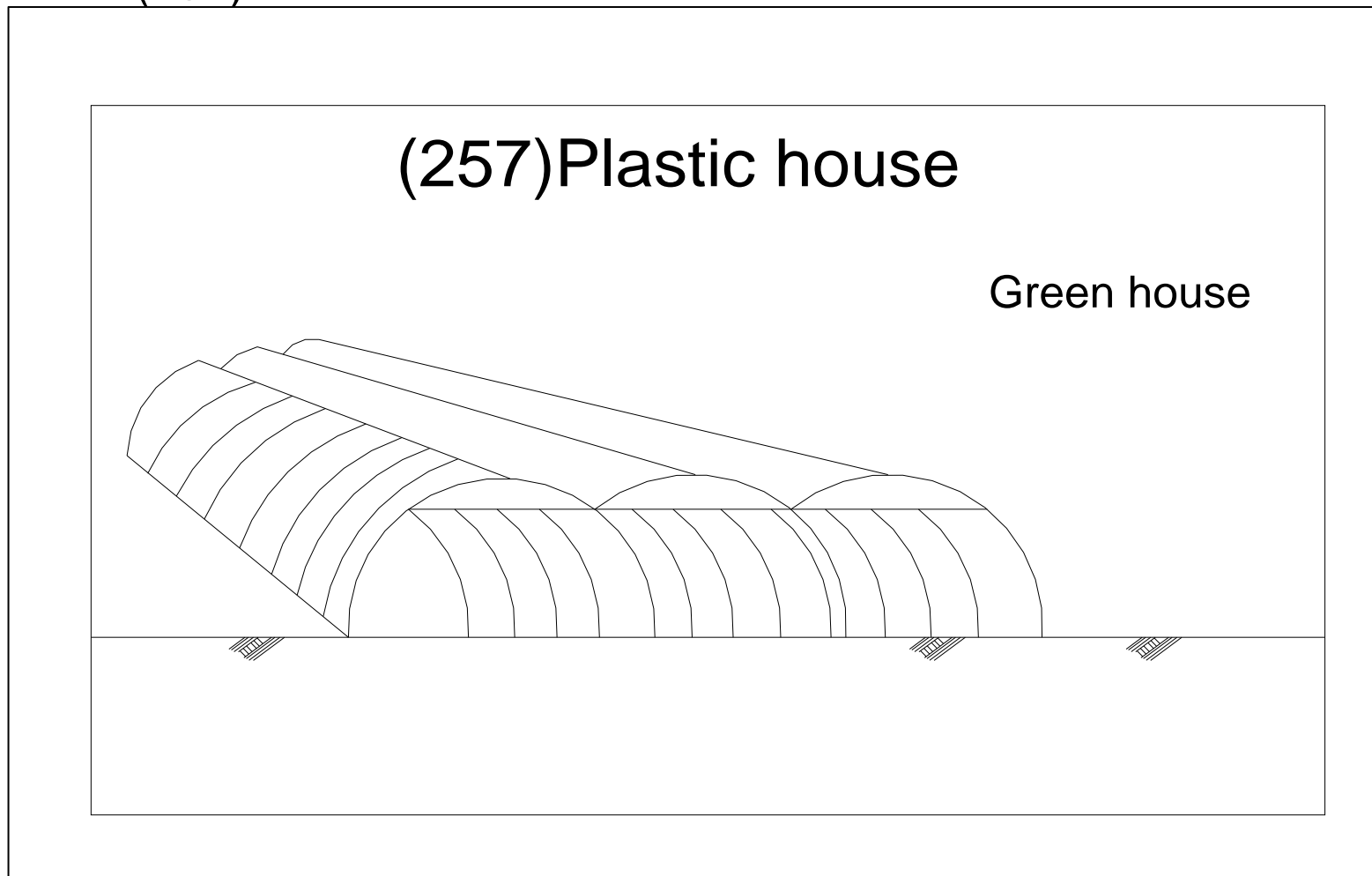
(256)Plow

(256)Plow

Tilling up
Flip
Abandonment
Crushing

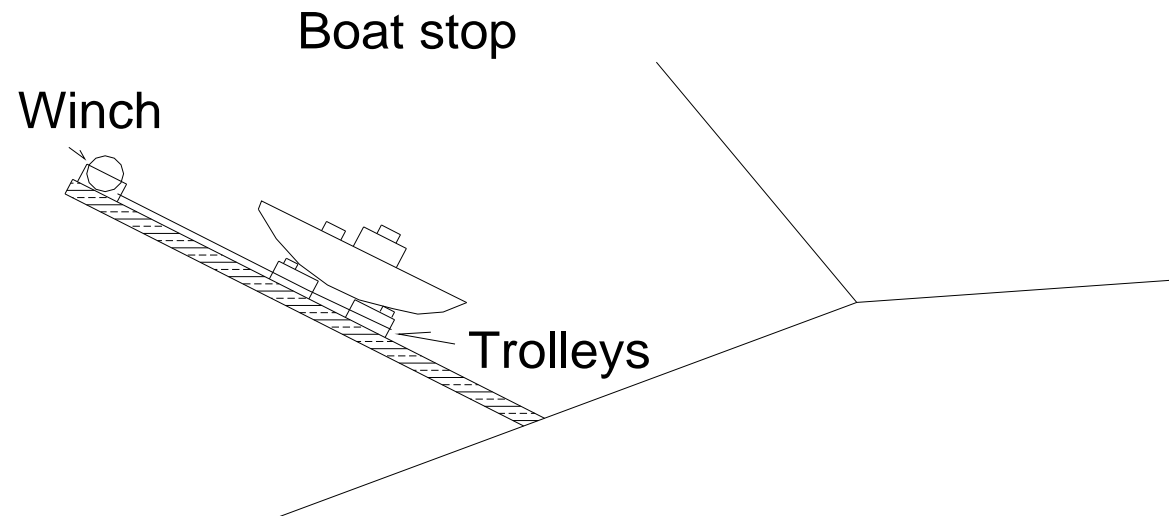


(257)Plastic house

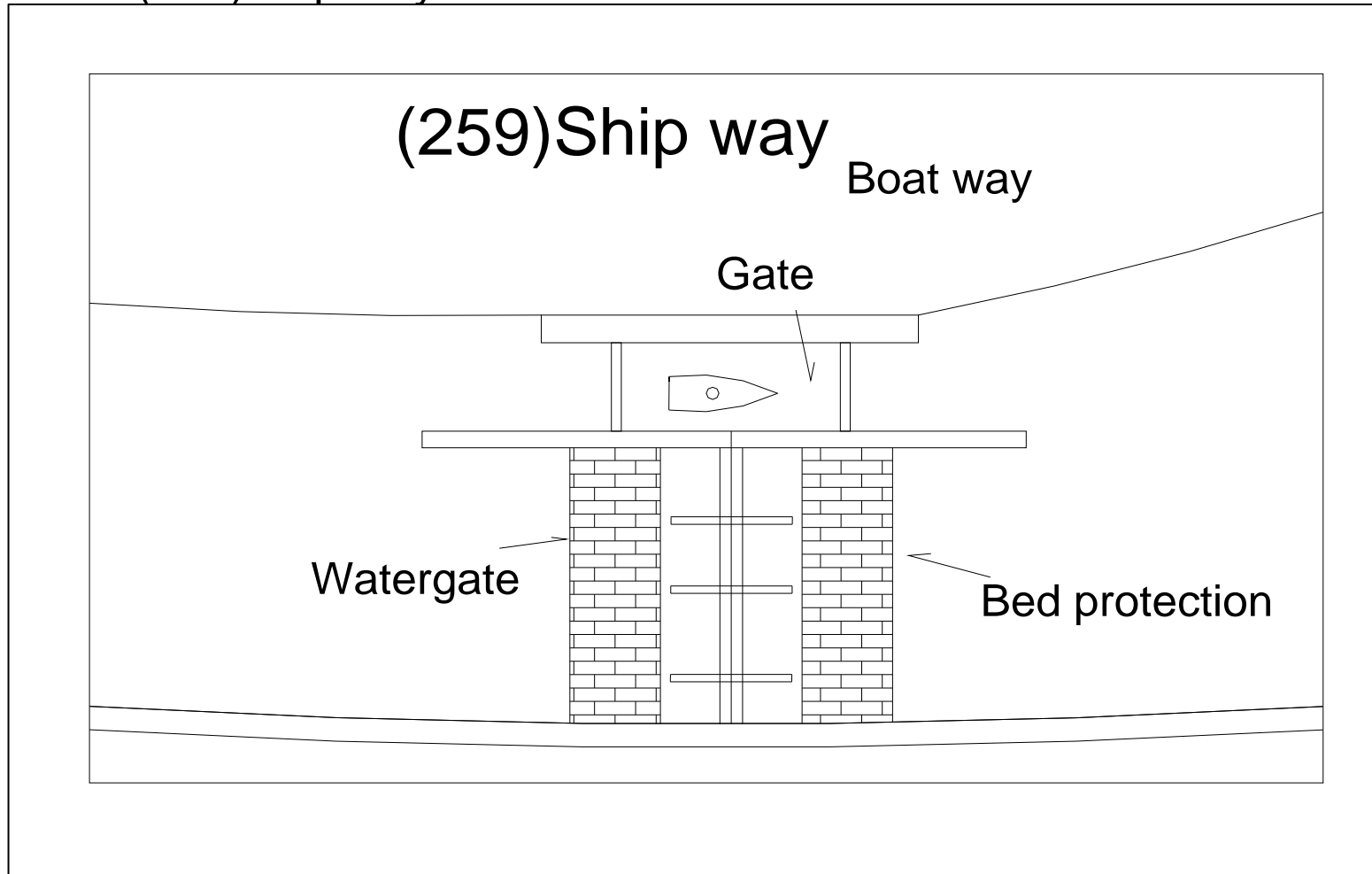


(258)Quay of landing

(258)Quay of landing

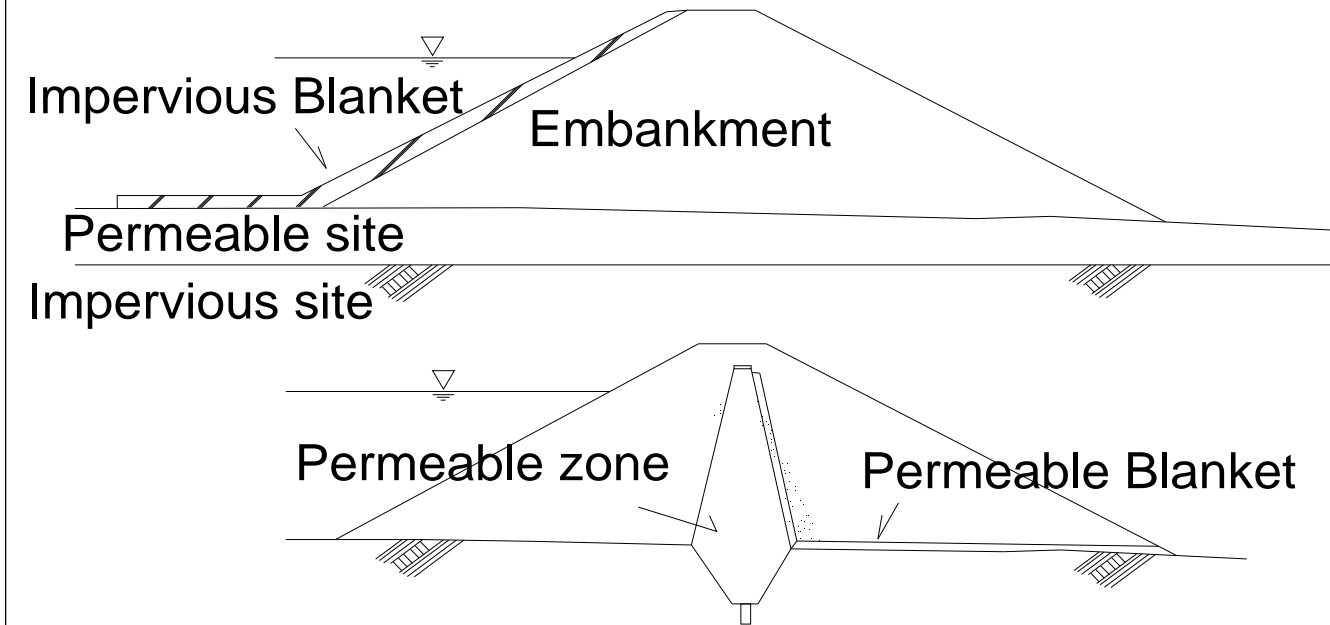


(259)Ship way



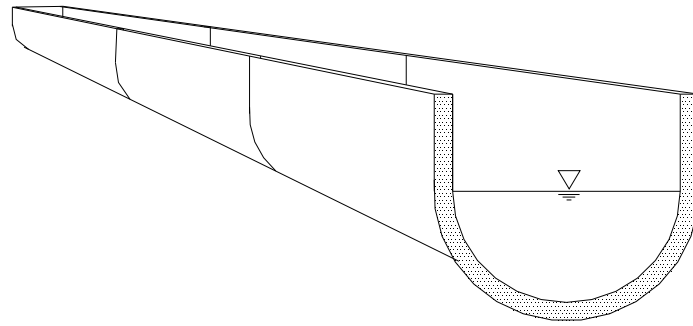
(260) Blanket

(260) Blanket

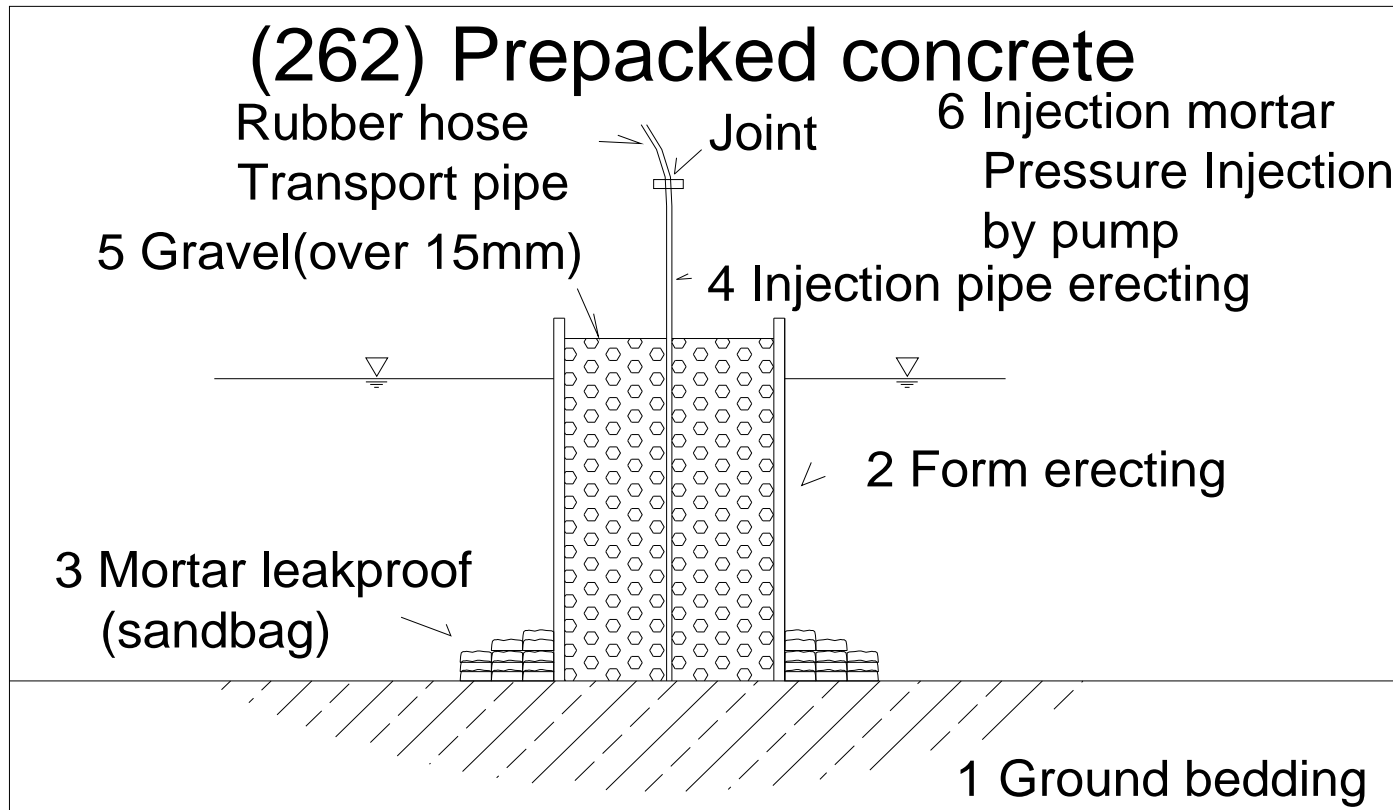


(261) Flume (U flume)

(261) Flume (U flume)

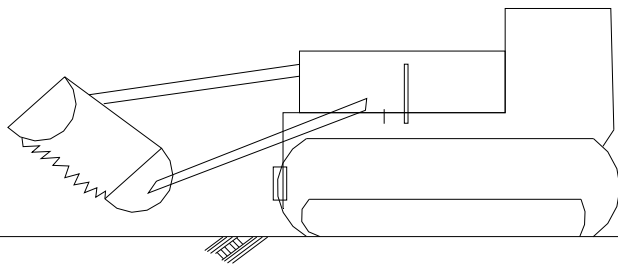


(262) Prepacked concrete

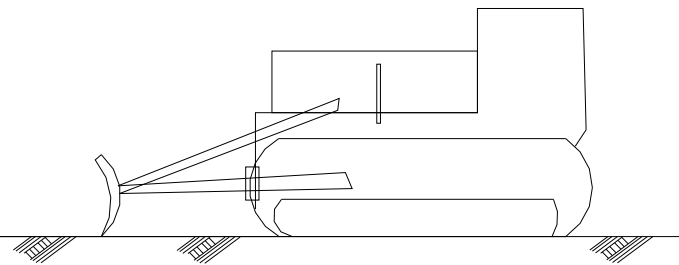


(263) Dozer (Drained board)

(263) Dozer (Drained board)
(Crawler Type)



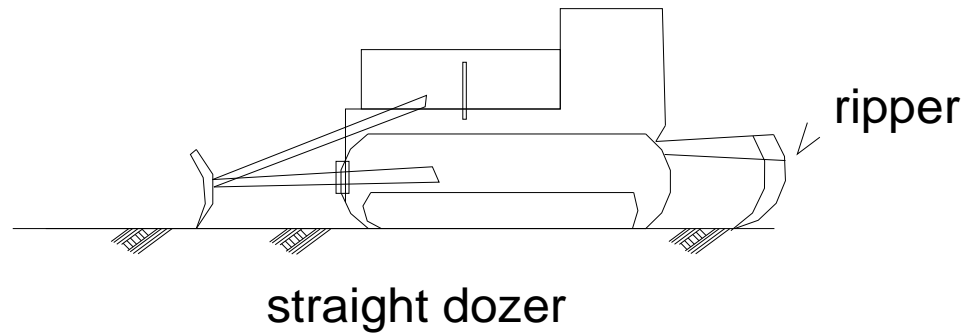
Bucket Dozer



Straight Dozer

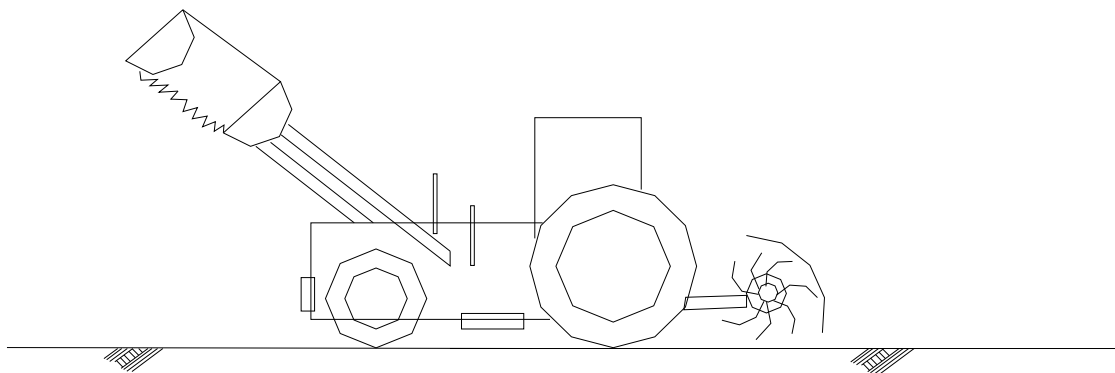
(264) Bulldozerr

(264) bulldozer
(crawler type+ripper)



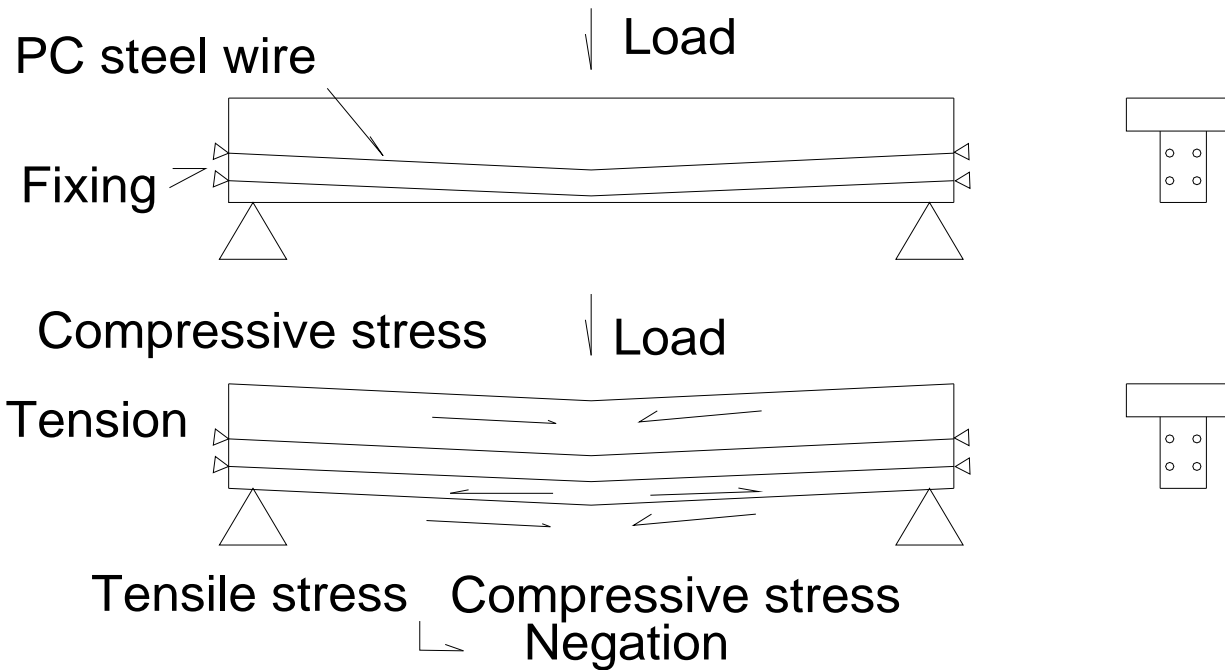
(265) Front loader

(265) Front loader



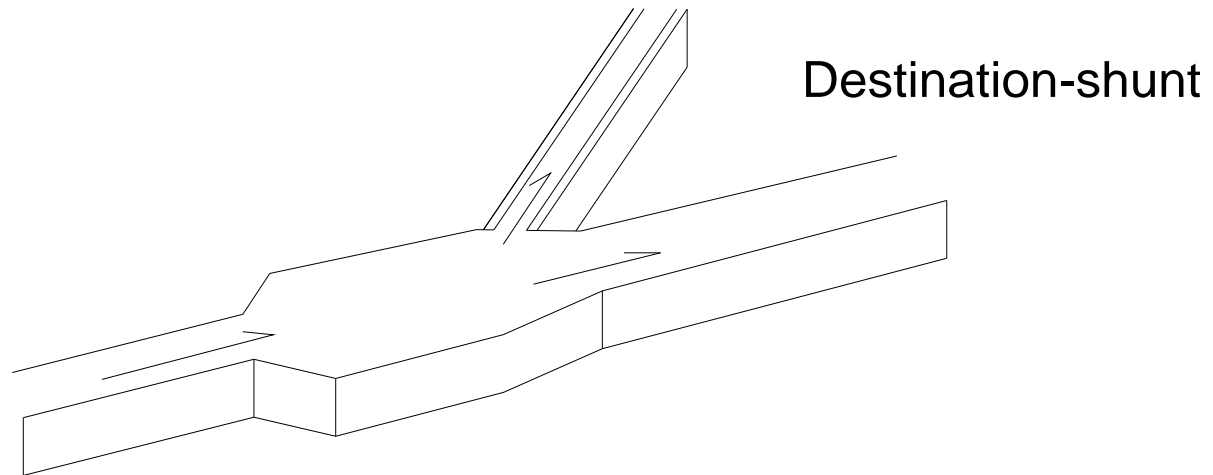
(266) Prestressed concrete

(266) Prestressed concrete



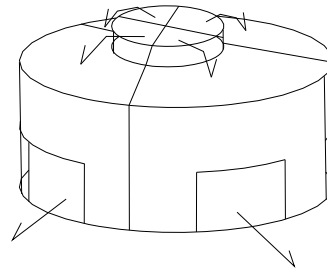
(267) Diversion works Turn out

(267) Diversion works Turn out



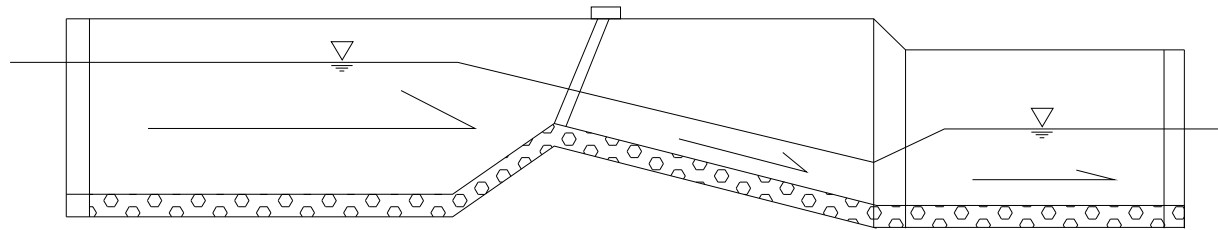
(268) Cylindrical water diversion

(268) Cylindrical water diversion

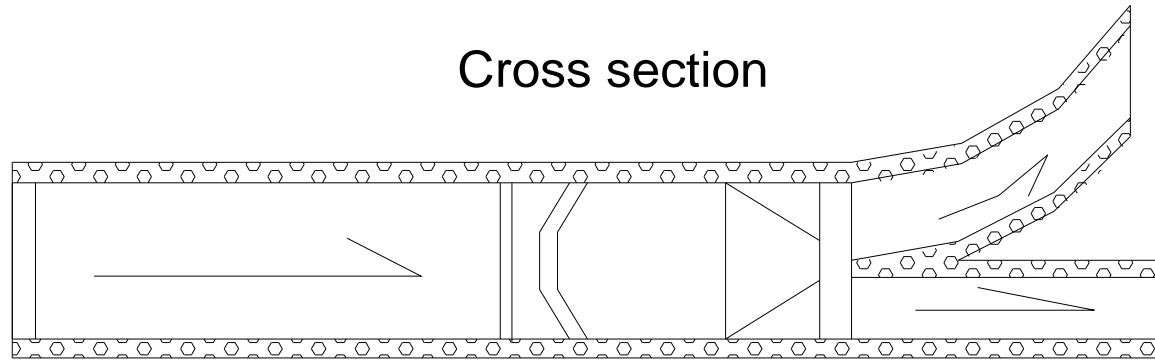


(269) French type proportional diversion

(269) French type proportional diversion



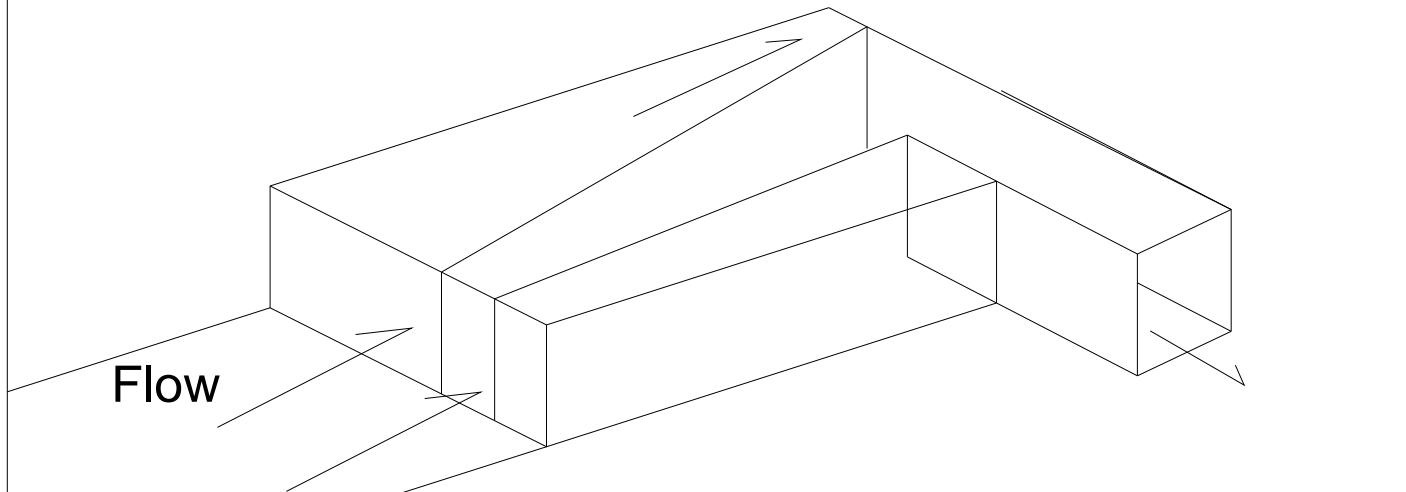
Cross section



Plan section

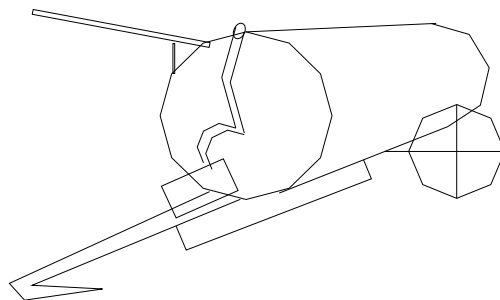
(270) American type proportional diversion

(270) American type proportional diversion



(271) Manure spreader

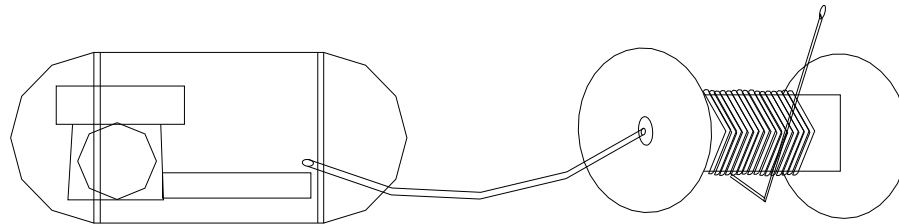
(271) Manure spreader



(272) Power sprayer

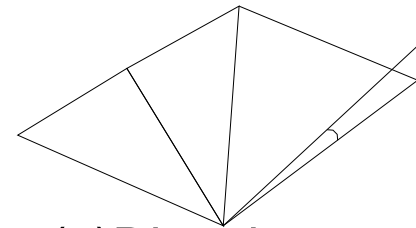
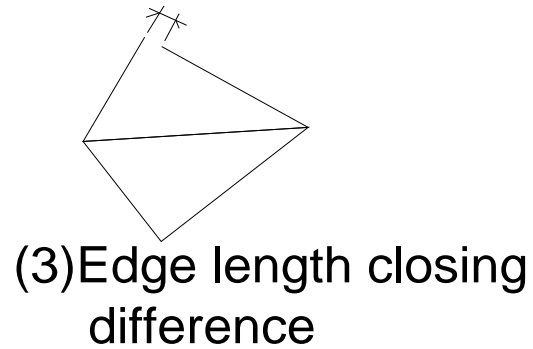
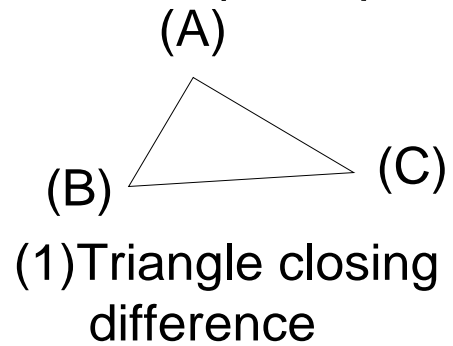
(272) Power sprayer

Pest
Weed
Control

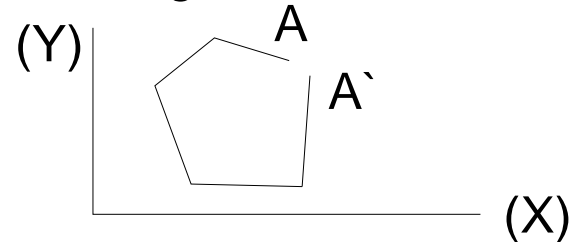


(273) Closing difference

(273) Closing difference



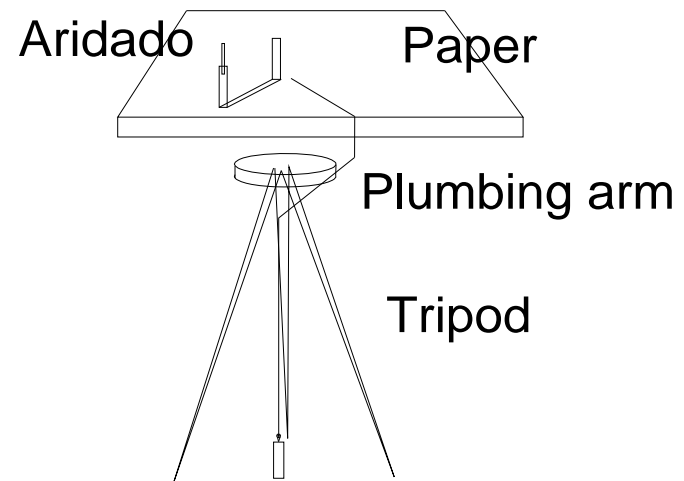
(2) Direction angle closing difference



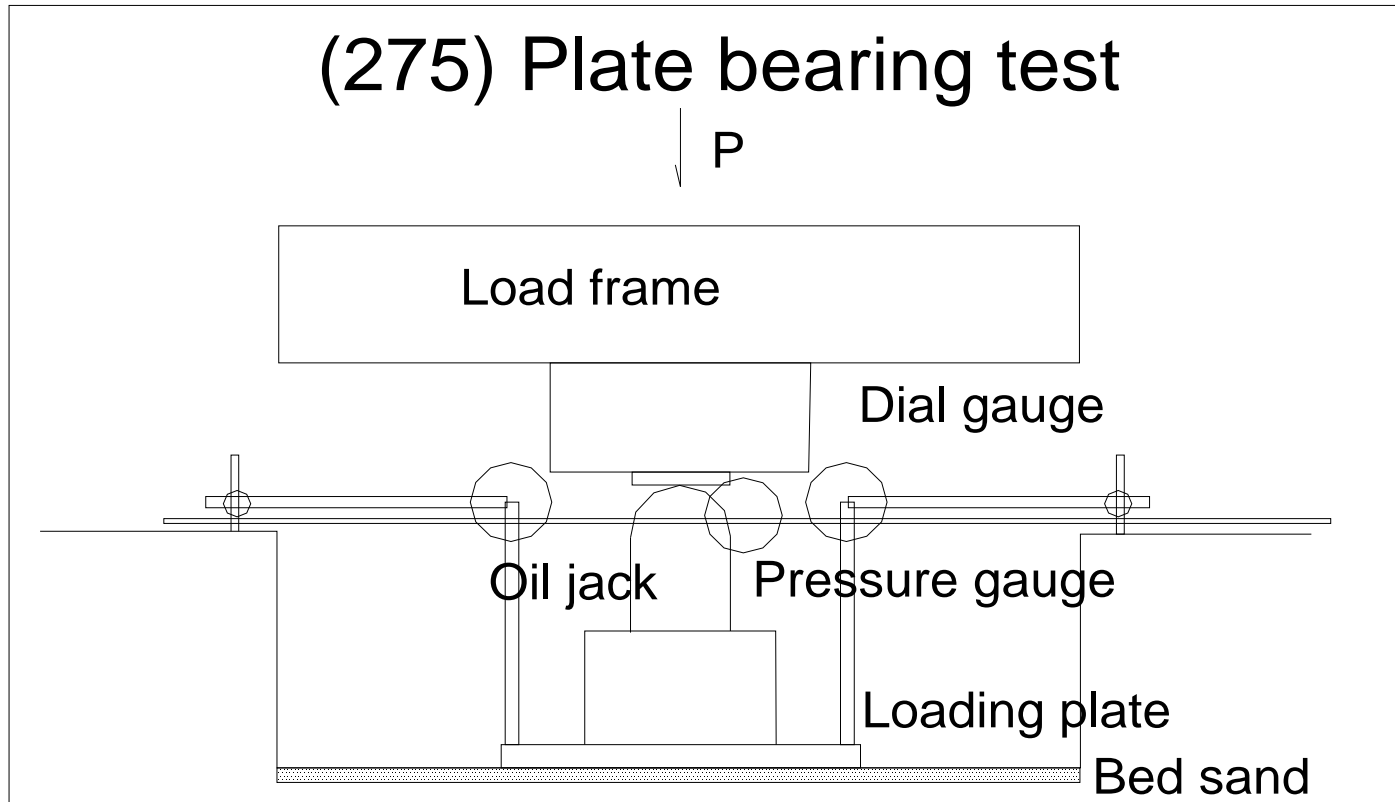
(4) Position coordinates closing difference

(274) Plane table survey

(274) Plane table survey



(275) Plate bearing test

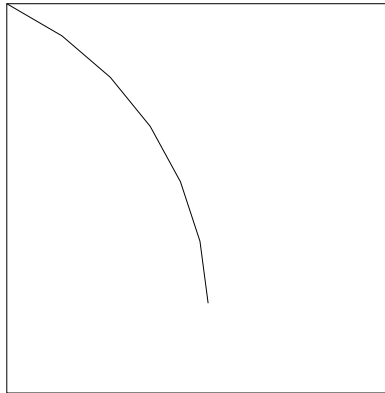


(276) Plate bearing test :Load strength-Settlement curve

(276) Plate bearing test
:Load strength-Settlement curve

P:Load strength(kgf/cm²,KN/m²)

S:Settlement (cm)

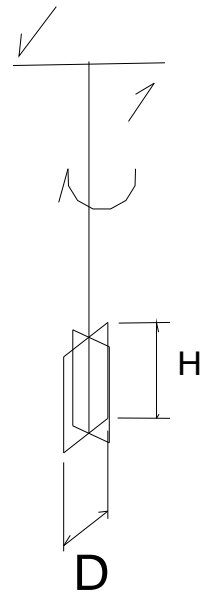


Bearing capacity factor(K value)
(Road bed)

$$K=P/S$$

(277) Vane shear apparatus: Vane test

(277) Vane shear apparatus: Vane test



Orthogonal blades

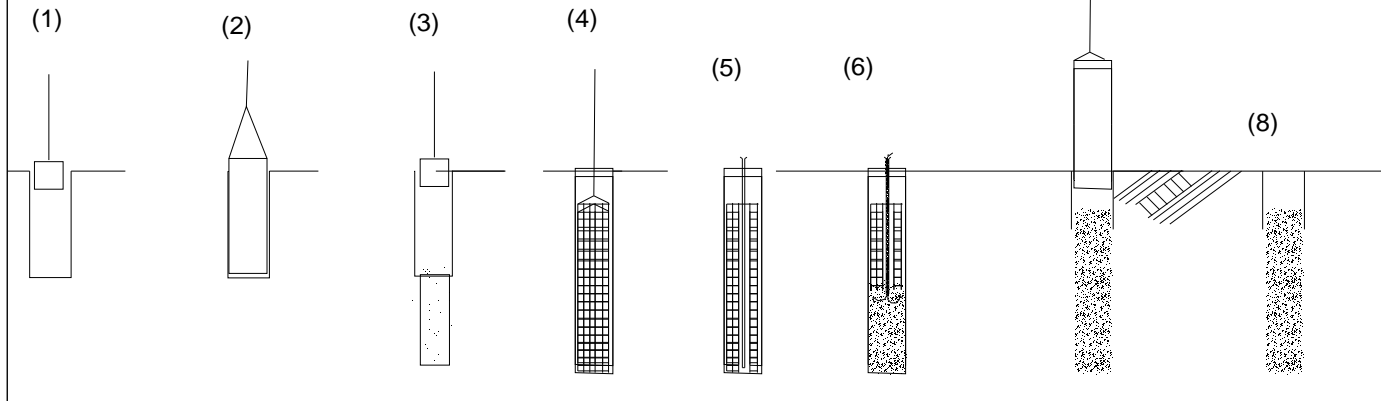
Shear resistance

Soil

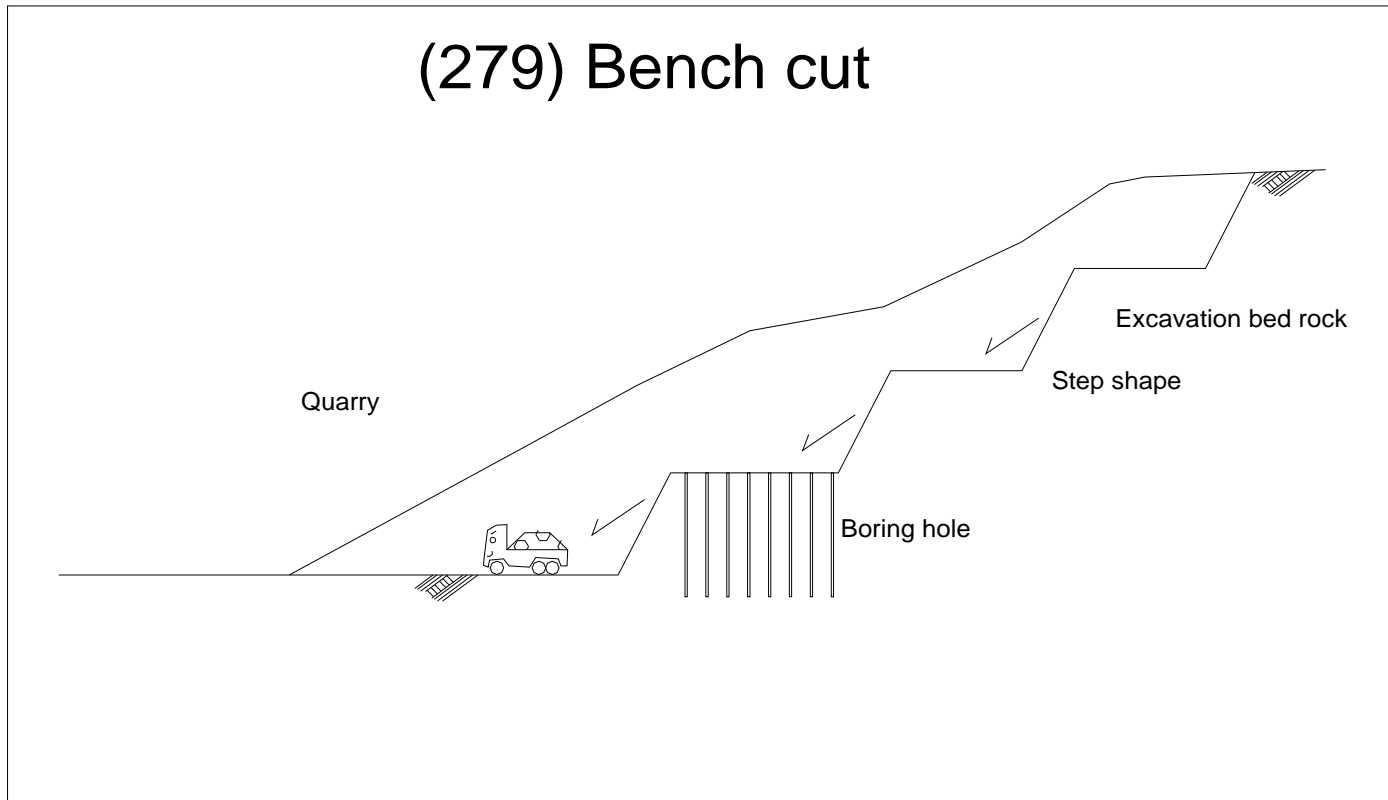
(278) Benoto method

(278) Benoto method

- (1) Casing tube penetration
Excavation with hammer grab
- (2) Casing tube extension
- (3) Excavation completed
Mud pump
- (4) Reinforced basket penetration
- (5) Tremie tube penetration
- (6) Concrting
- (7) Casing tube withdraw
- (8) Complete

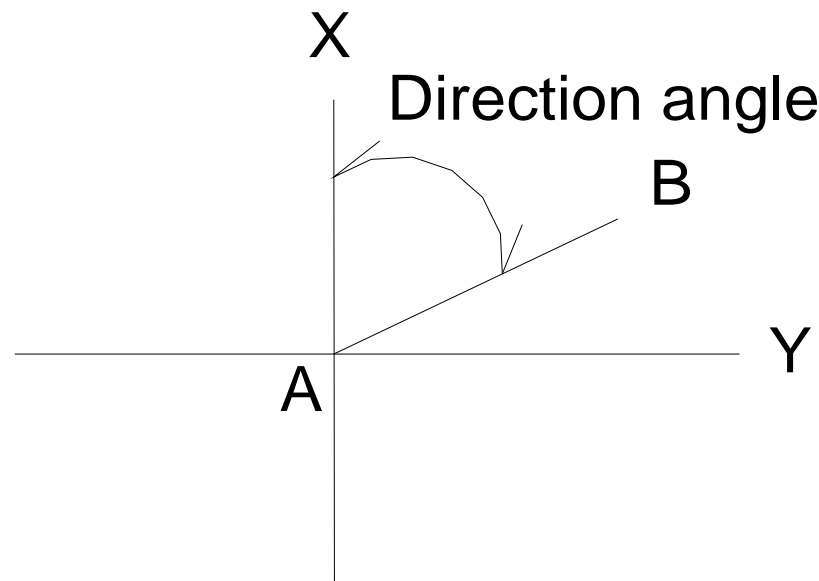


(279) Bench cut



(280) Direction angle

(280) Direction angle



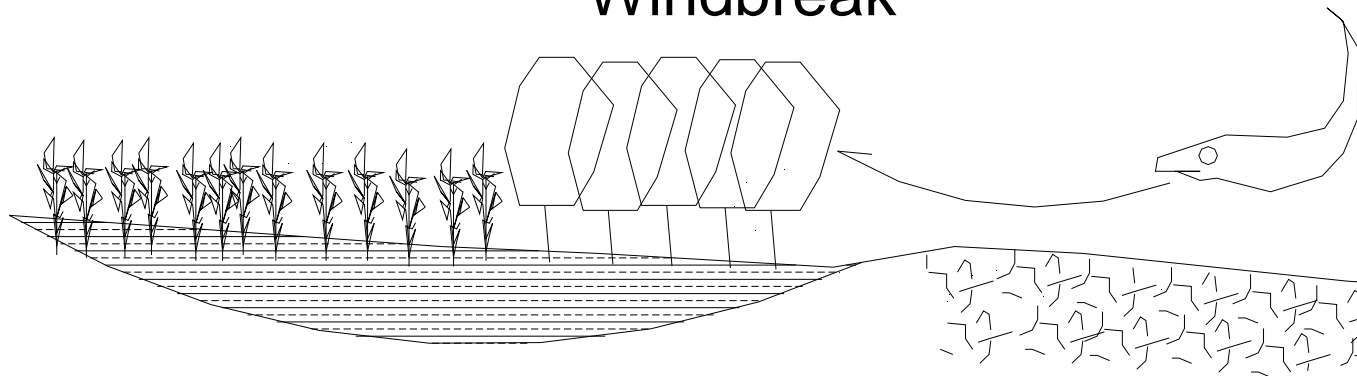
(281) Windbreak

(281) Windbreak

Wind velocity--decrease

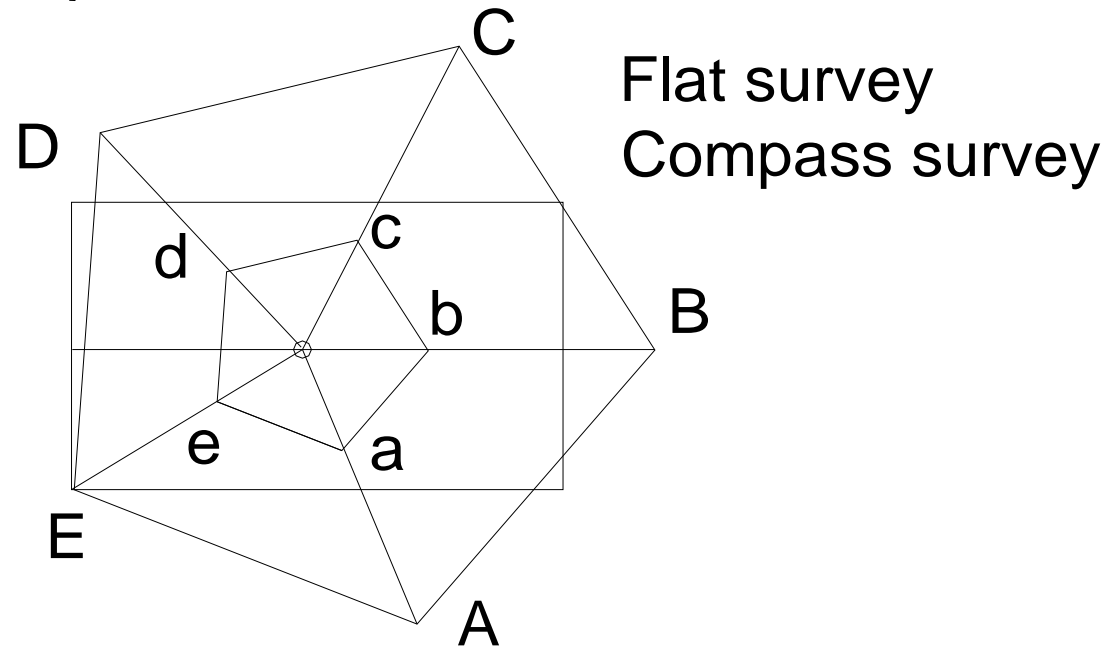
Wind erosion--prevention

Windbreak



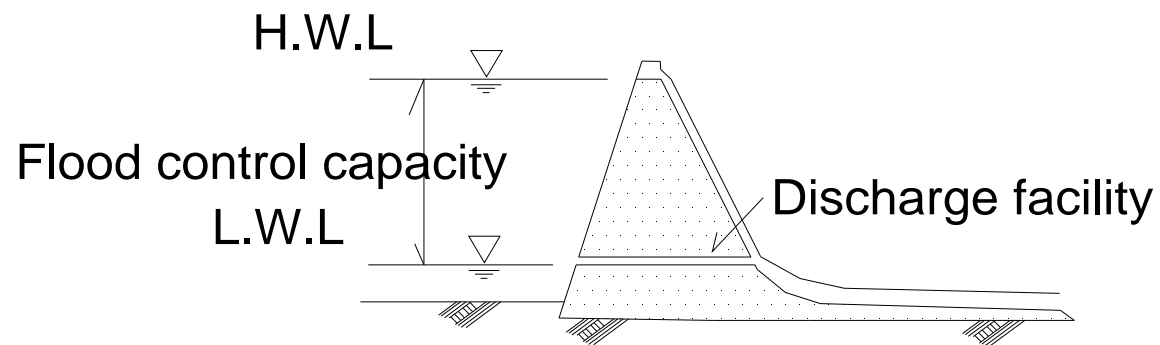
(282) Radiation method

(282) Radiation method



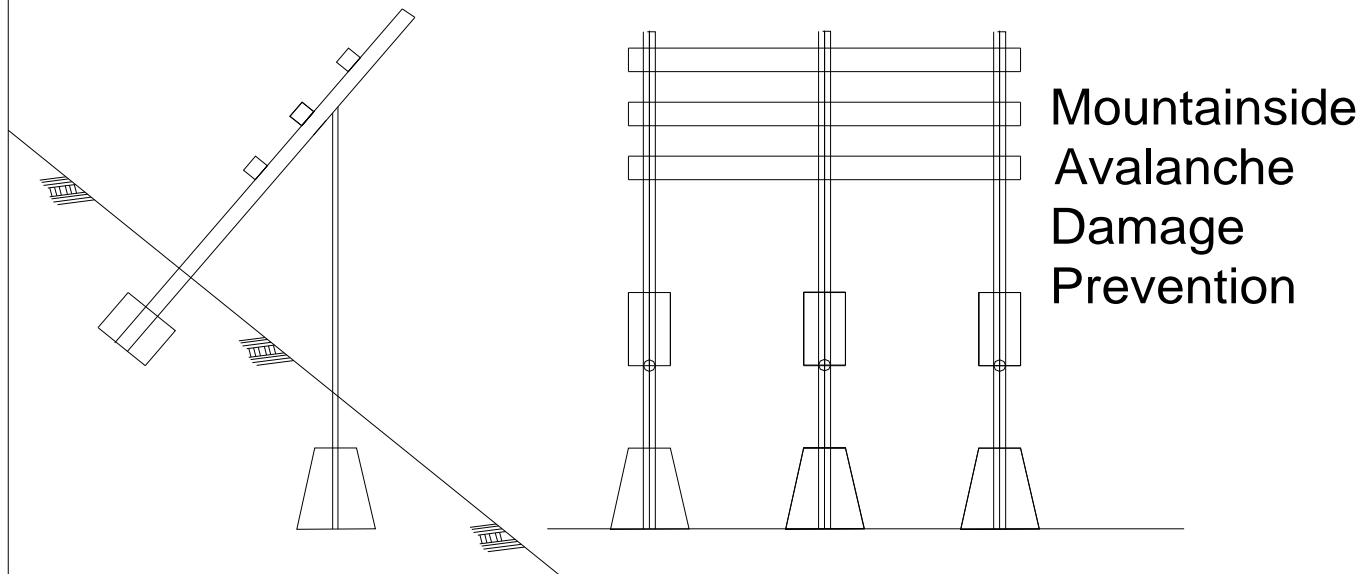
(283) Flood control dam

(283) Flood control dam



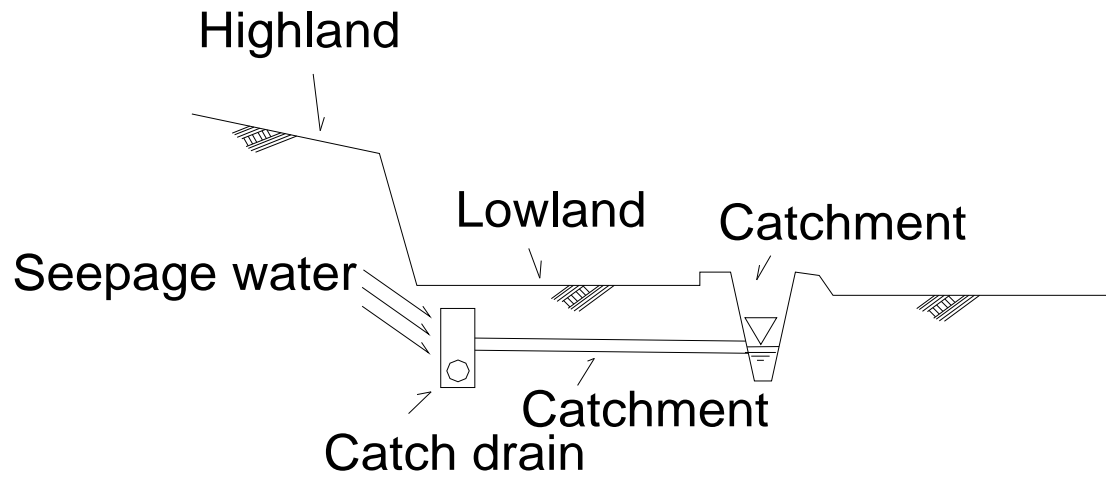
(284) Snowslip control fence

(284) Snowslip control fence



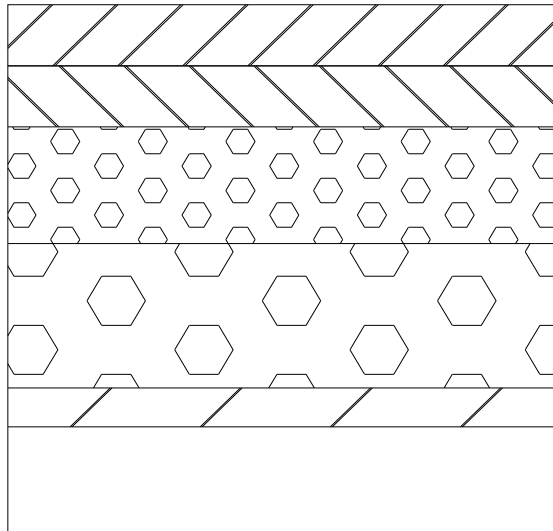
(285) Catch drain

(285) Catch drain



(286) Pavement

(286) Pavement



Asphalt pavement

Surface

Base layer

Upper roadbed

Lower roadbed

Interception layer

Roadbed(about 1m)

Flatness

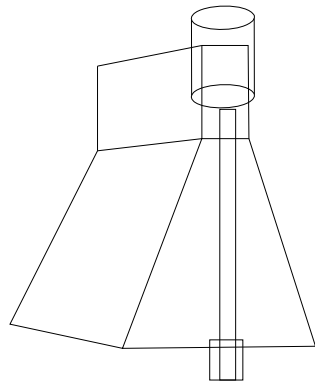
Traffic load

Roadbed

Dispersion

(287) Boring machine

(287) Boring machine



Geological survey

Sampling

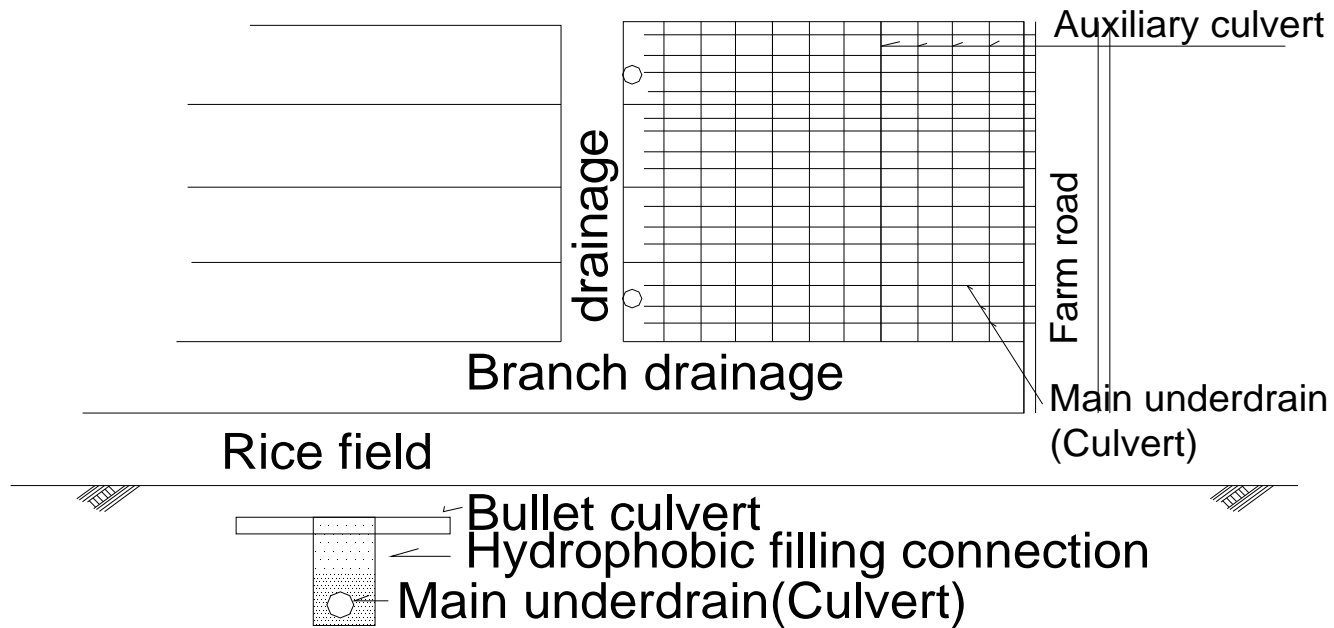
Groundwater level measurement

In-situ testing

Well drilling

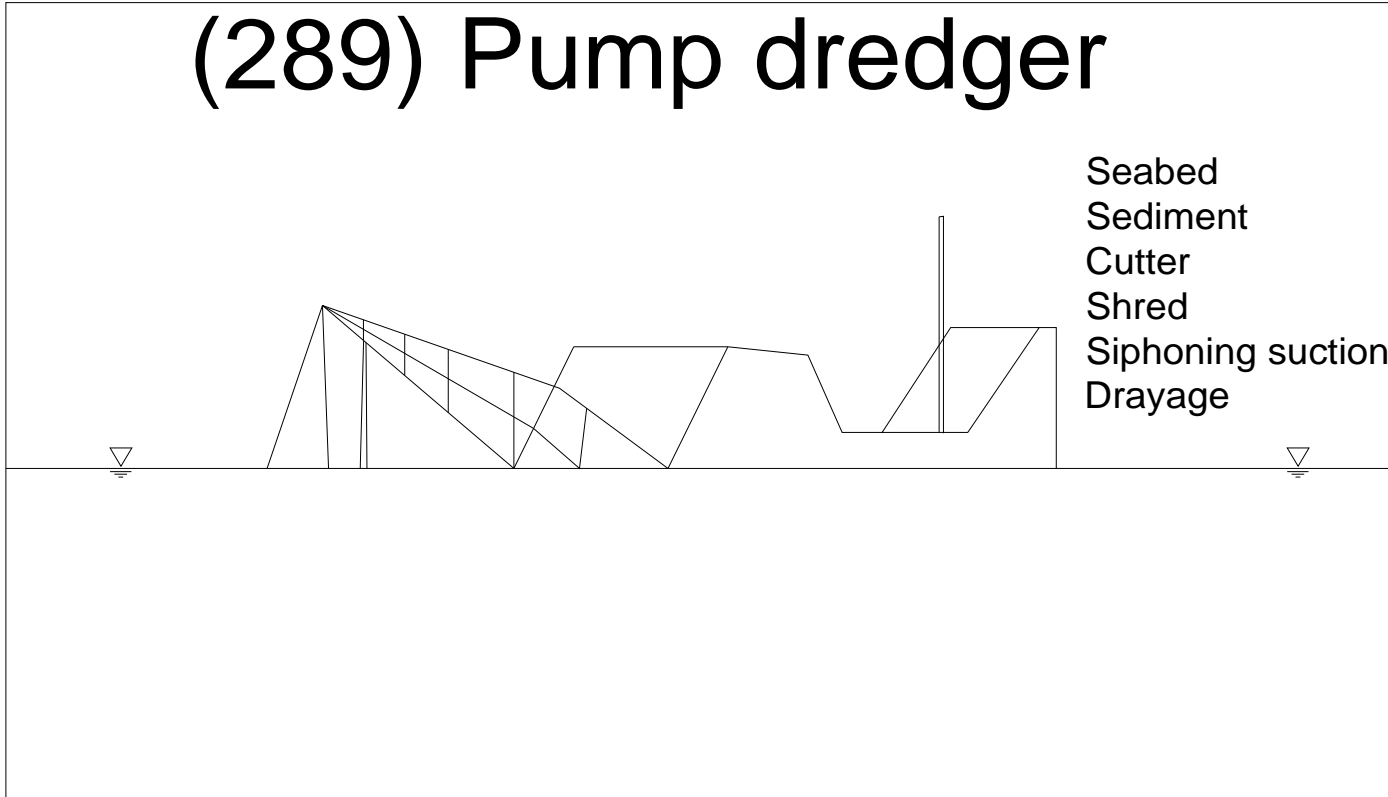
(288) Main underdrain(Culvert)

(288) Main underdrain(Culvert)



(289) Pump dredger

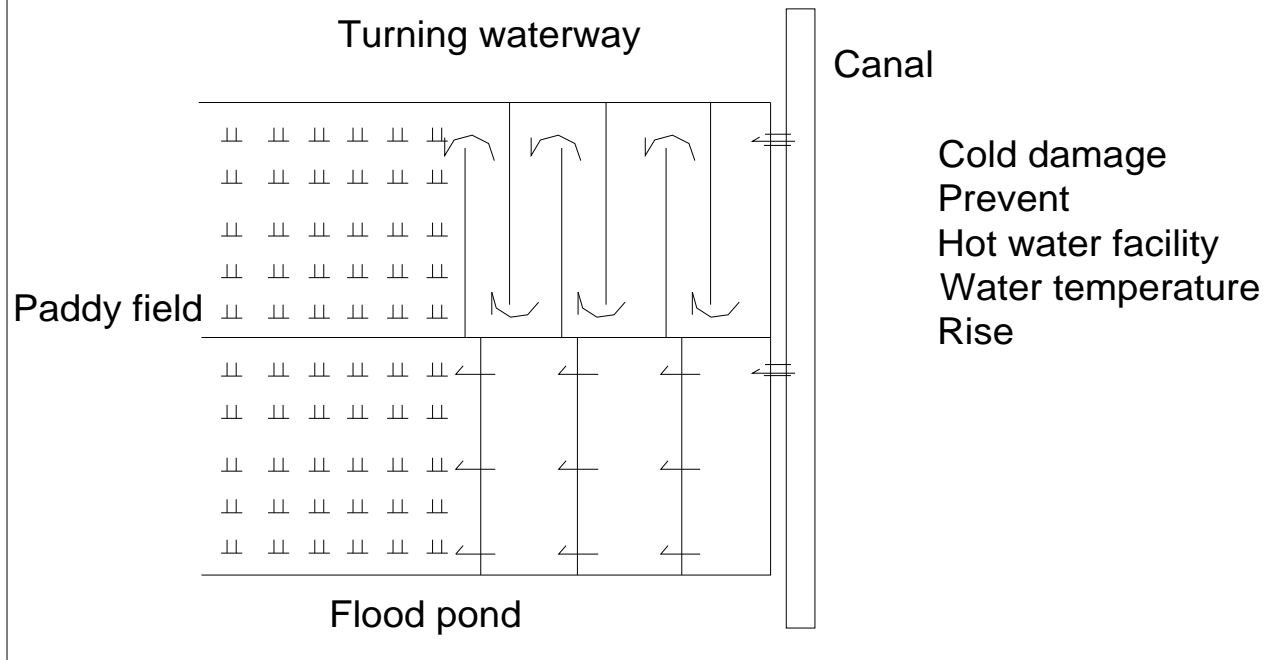
(289) Pump dredger



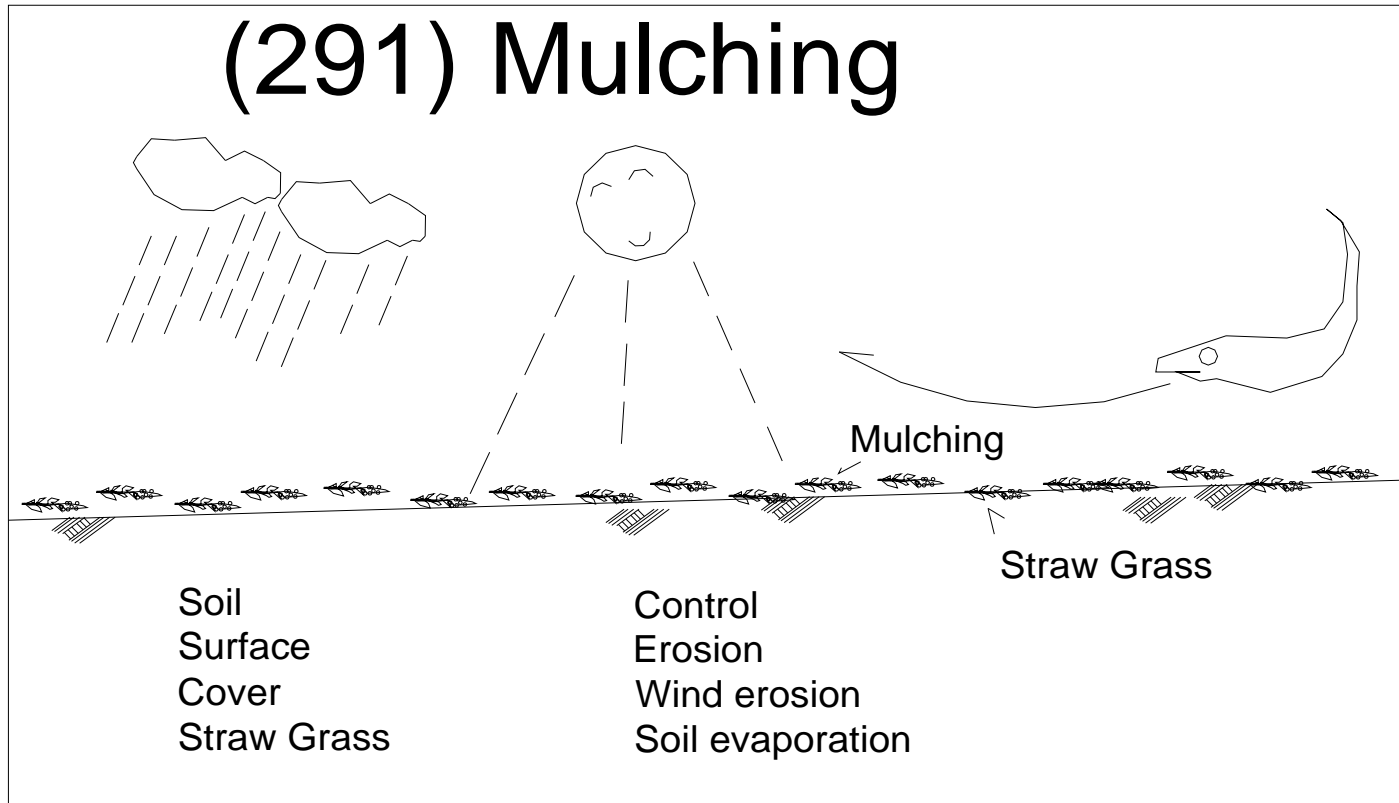
Seabed
Sediment
Cutter
Shred
Siphoning suction
Drayage

(290) Detour waterway

(290) Detour waterway

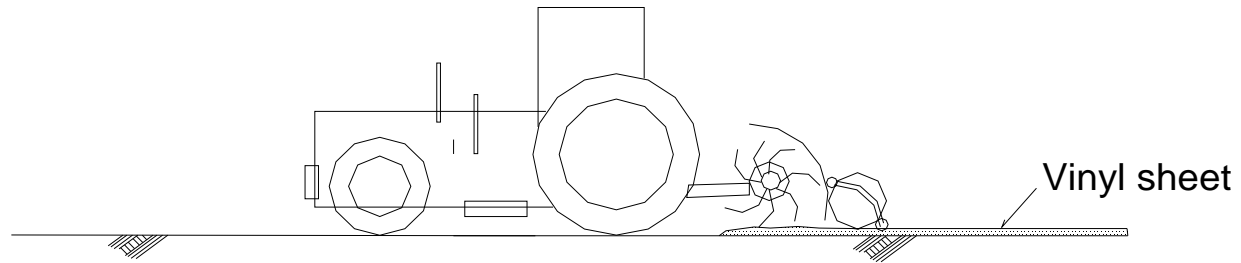


(291) Mulching



(292) Mulch layer

(292) Mulch layer



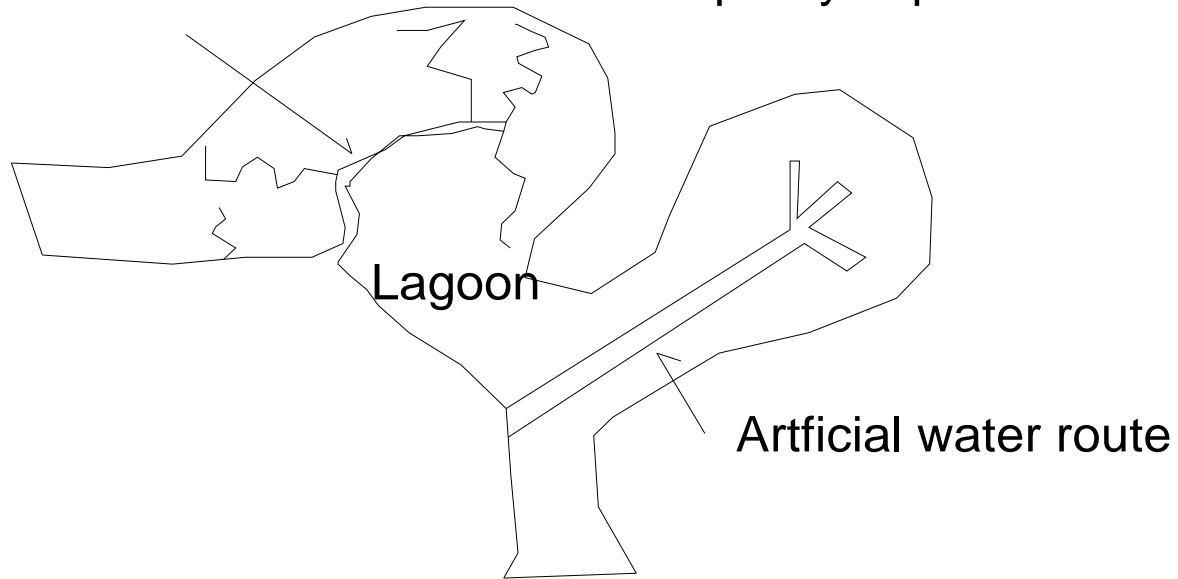
Keep
Ground temperature
Water absorption
Spread
Vinyl sheet

(293) Water route

(293) Water route

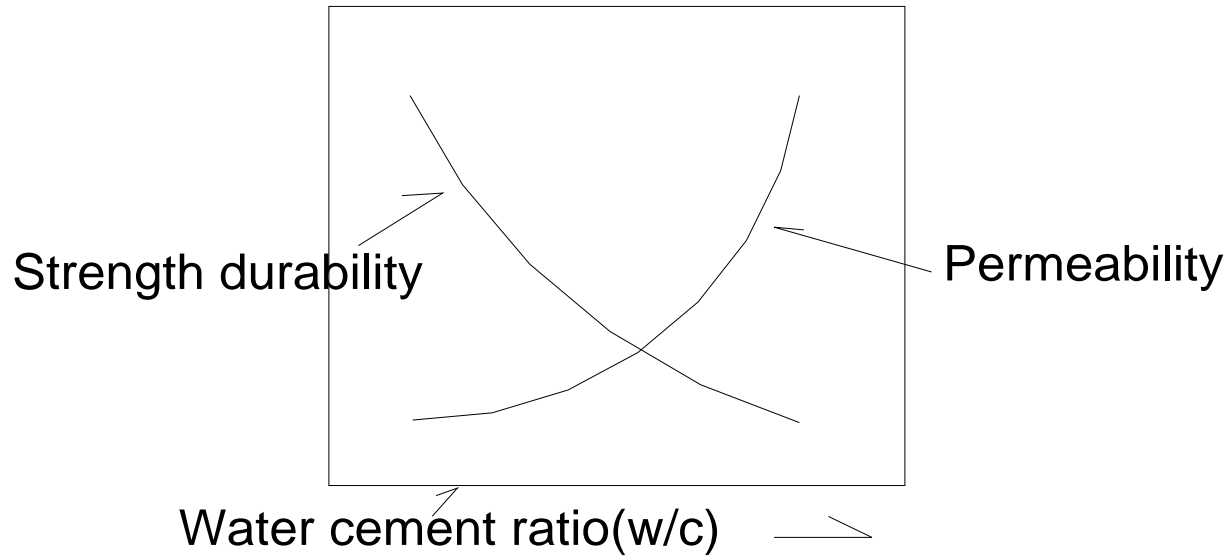
Natural water route

Water quality improvement



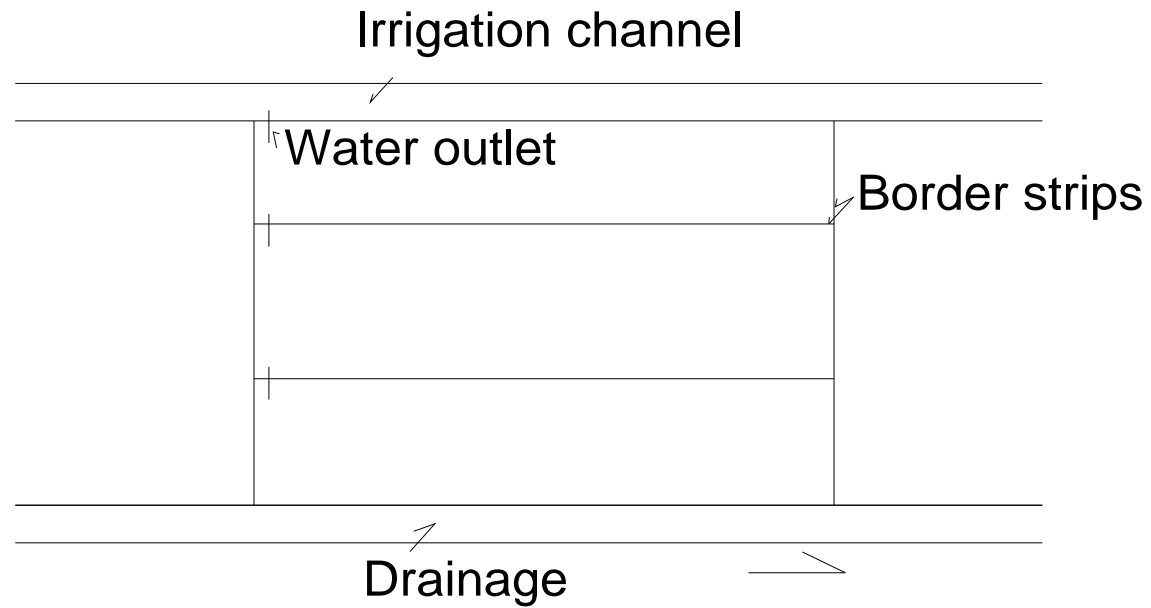
(294) Water cement ratio

(294) Water cement ratio(w/c)



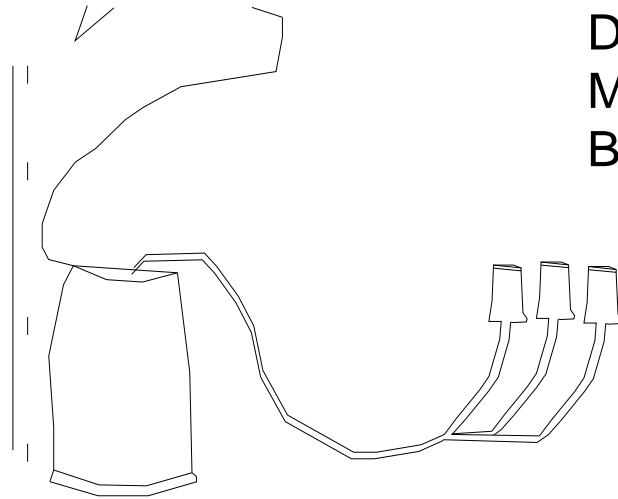
(295) Inlet for irrigation water

(295) Inlet for irrigation water



(296) Milker

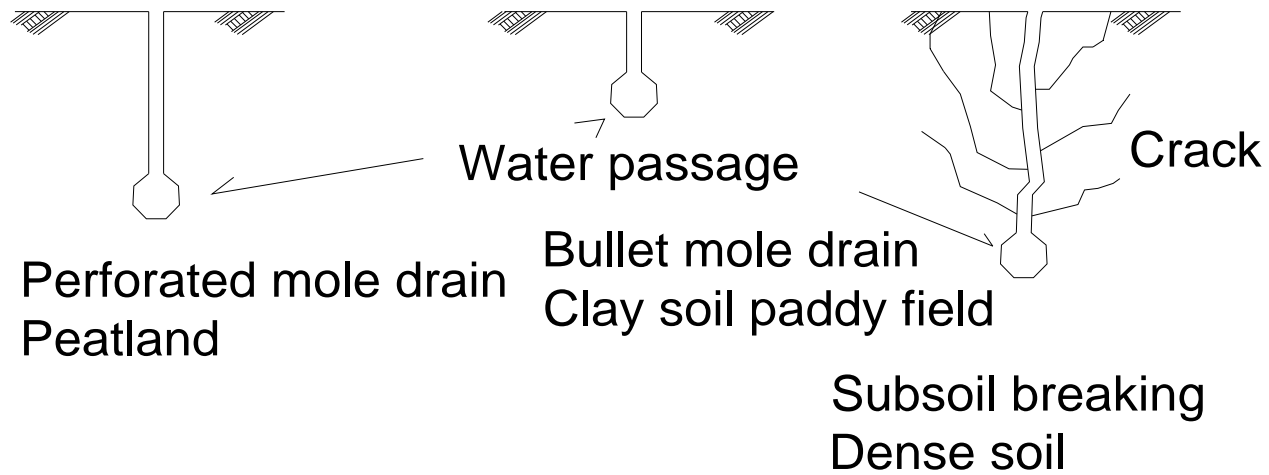
(296) Milker



Dairy cow
Milking machine
Bucket type

(297) Mole drain

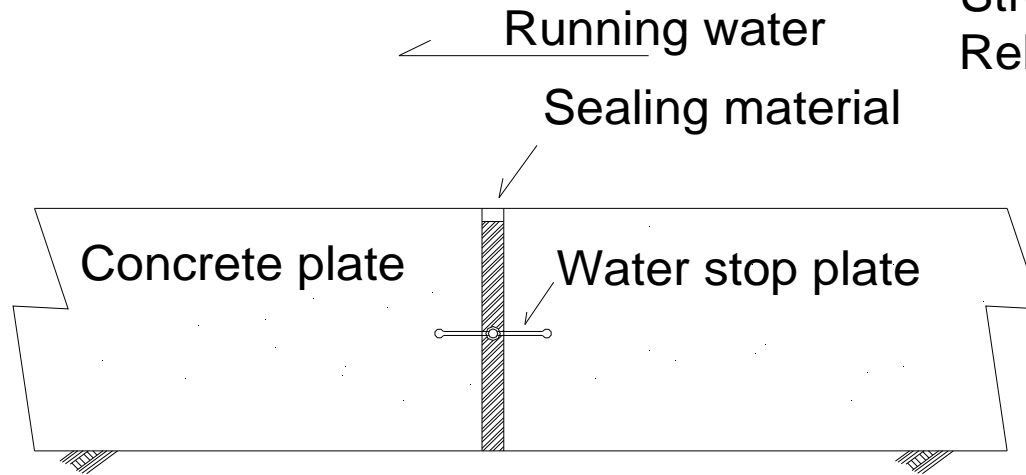
(297) Mole drain



(298) Joint filler

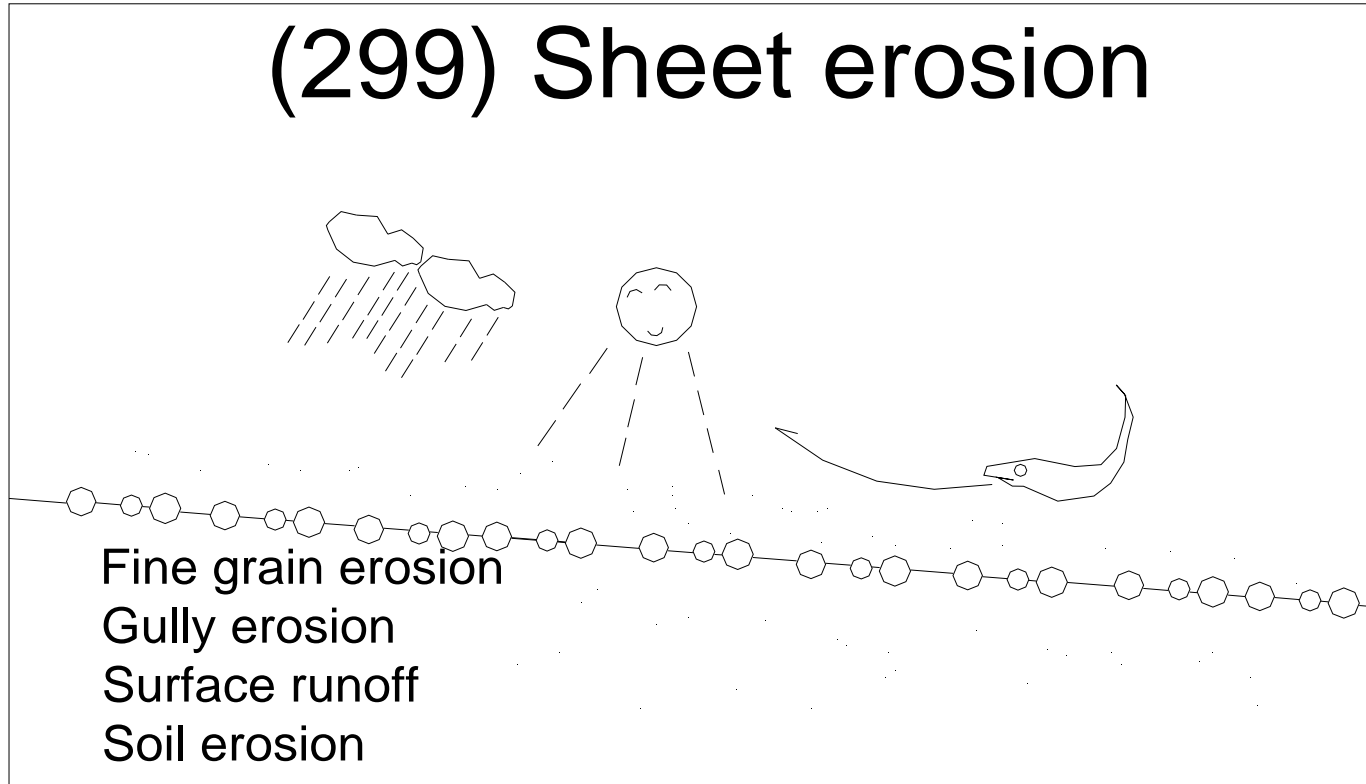
(298) Joint filler

Waterway
Expansion joint
Stress
Relaxation



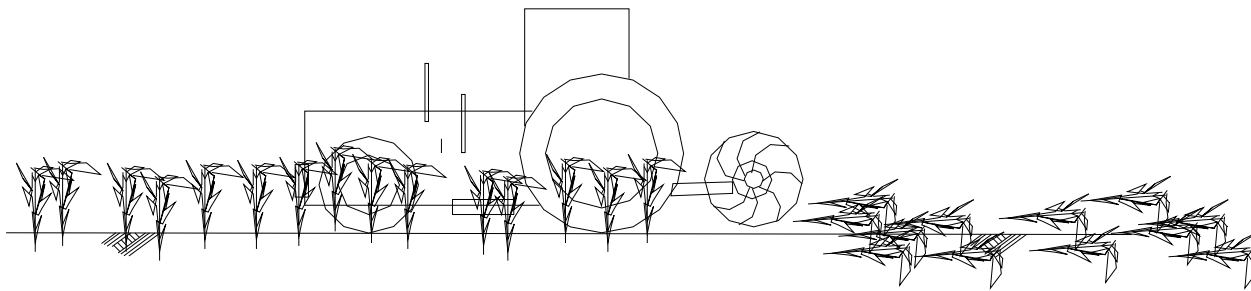
(299) Sheet erosion

(299) Sheet erosion



(300) Mower

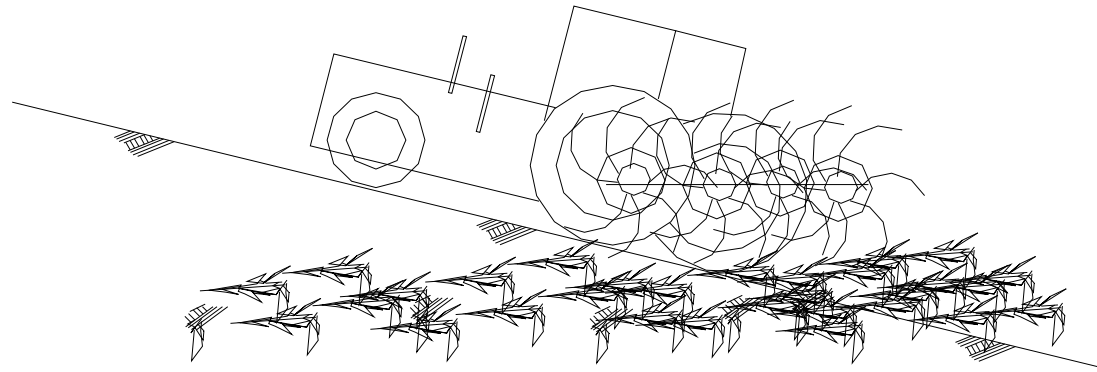
(300) Mower



Weed
Pasture
Mowing
Weed cutter

(301) Grass side rake

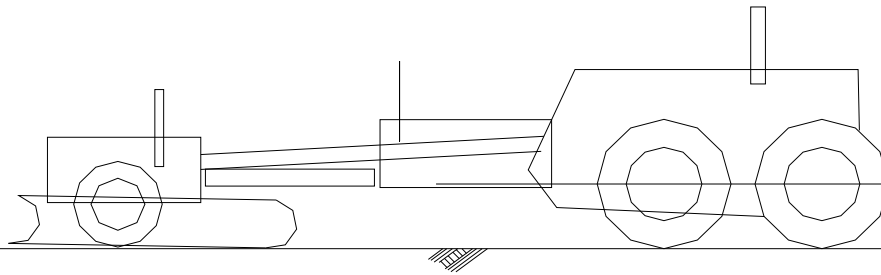
(301) Grass side rake



Grass collection

(302) Motor grader

(302) Motor grader

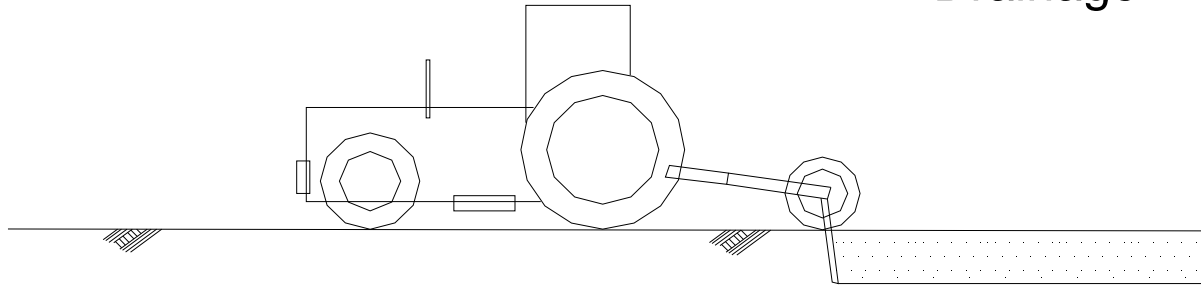


Gravel road
Maintenance
Leveling
Finishing
Spread and level

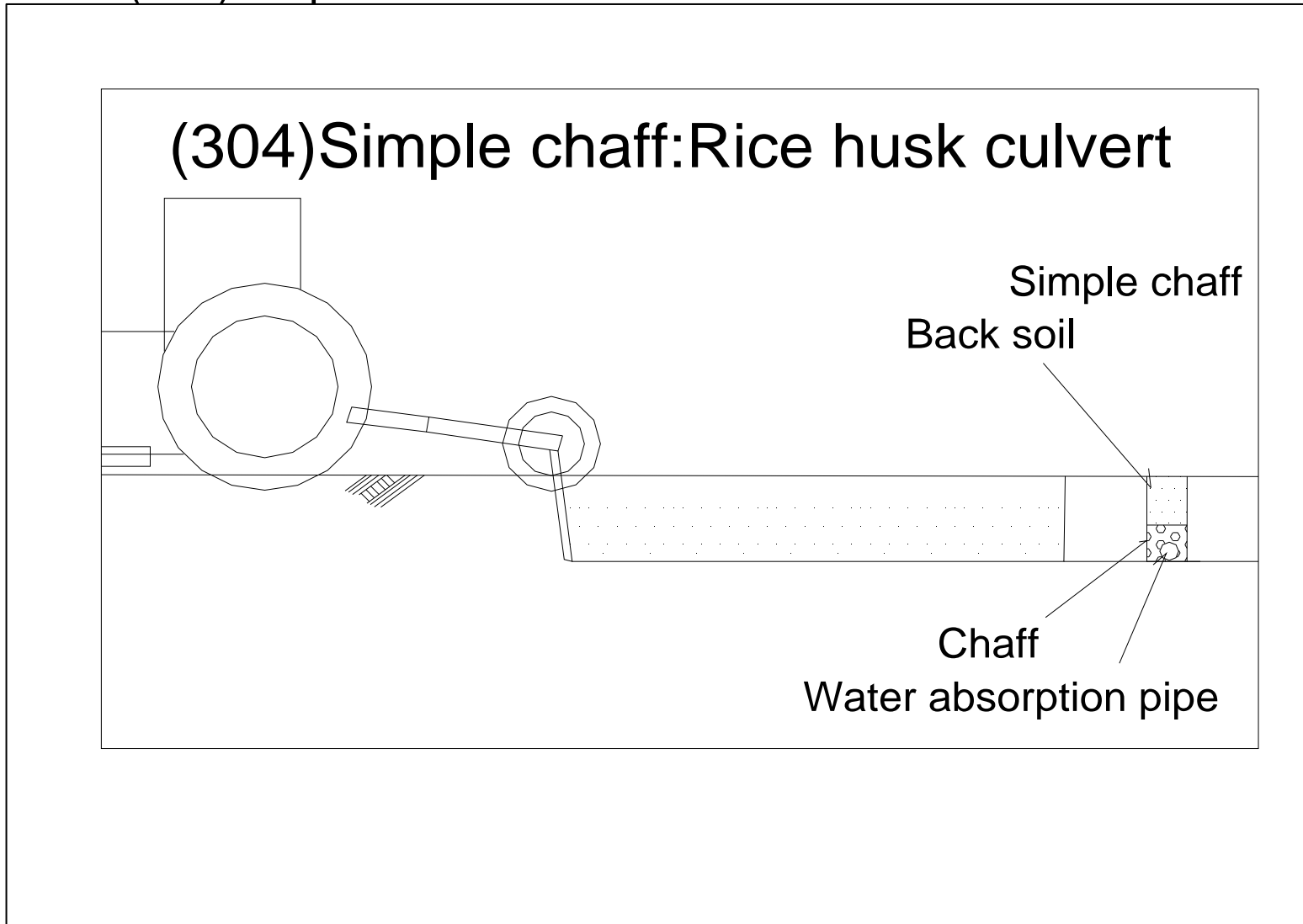
(303)Mole drain

(303)Mole drain

Mold lane
Drainage

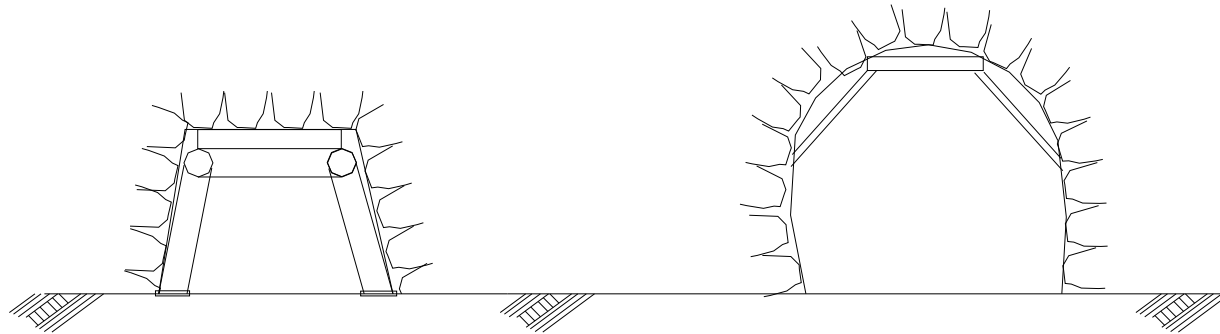


(304) Simple chaff:Rice husk culvert



(305)Timbering

(305)Timbering



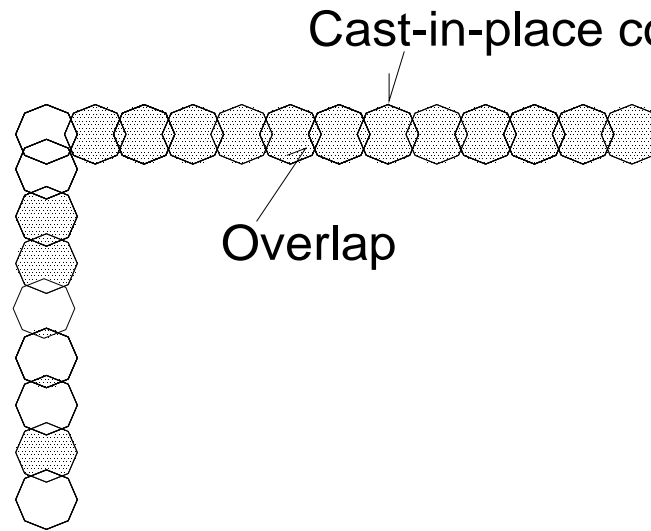
Guide shaft support

Principal rafter

Tunnel
Wooden
Timbering

(306)Land-slide protection wall 1

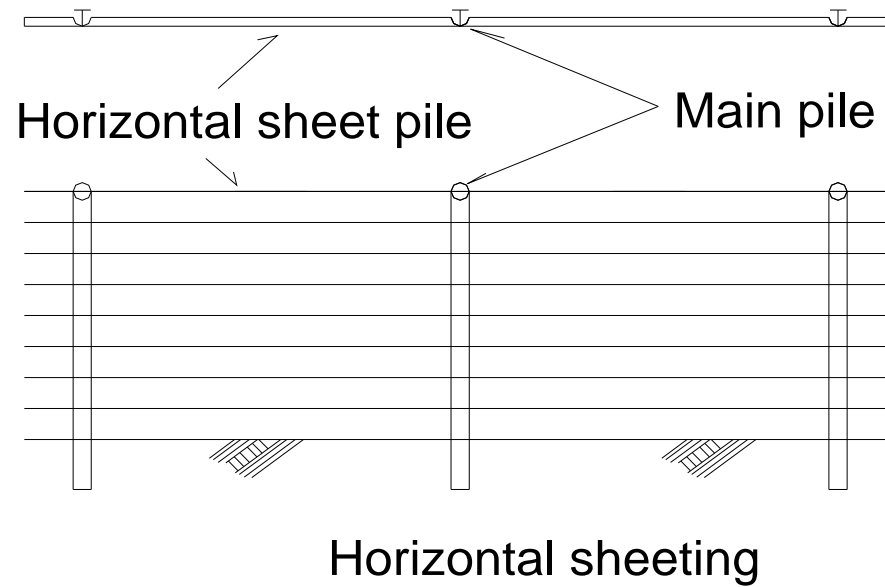
(306)Land-slide protection wall 1



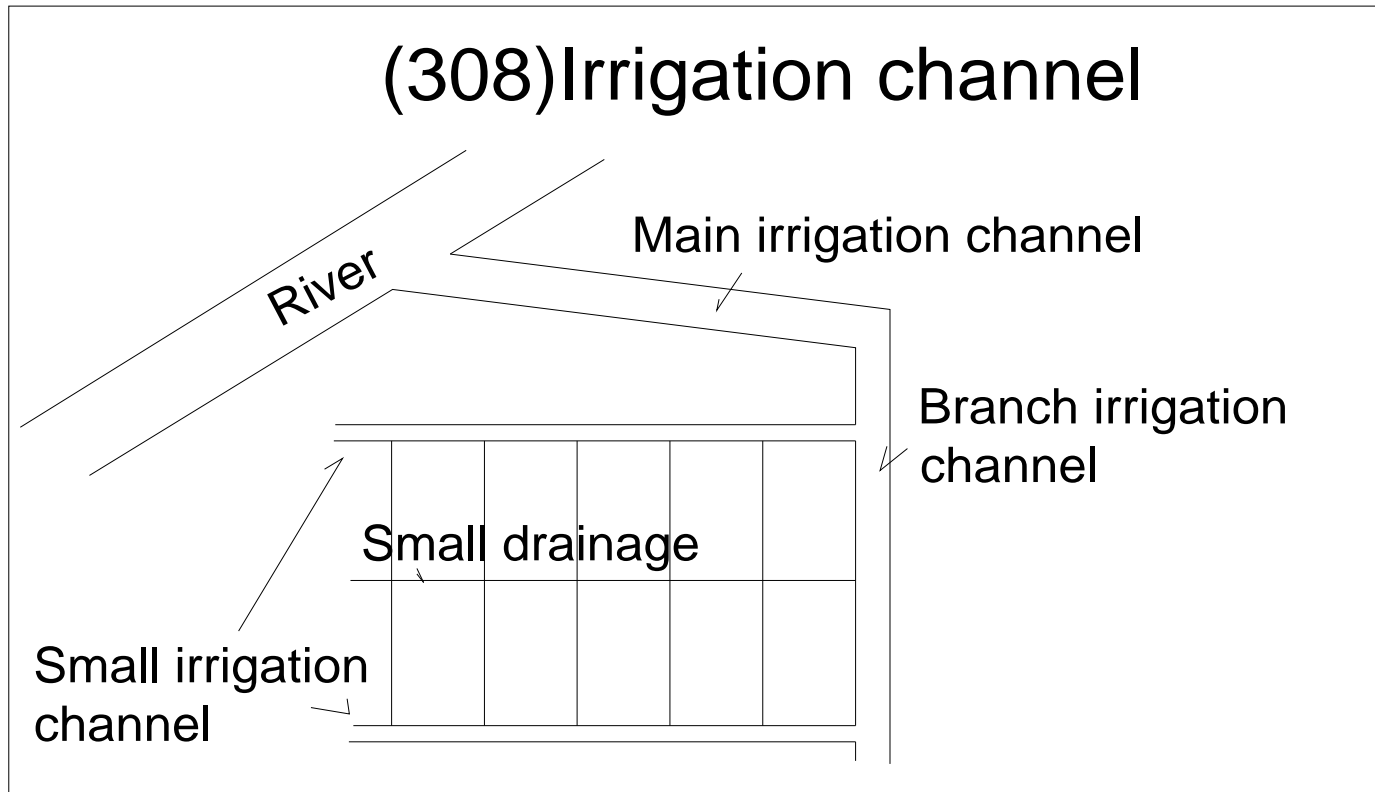
Underground continuous wall construction method

(307)Land-slide protection wall 2

(307)Land-slide protection wall 2

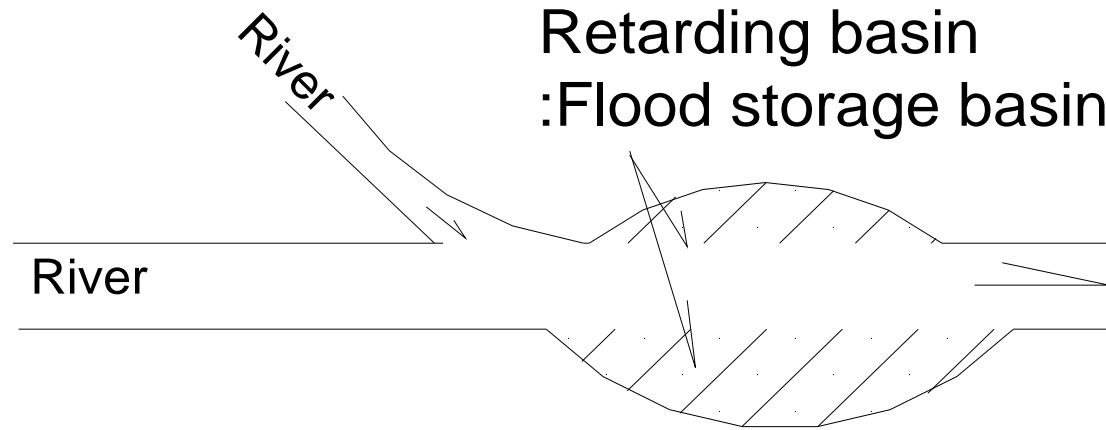


(308)Irrigation channel

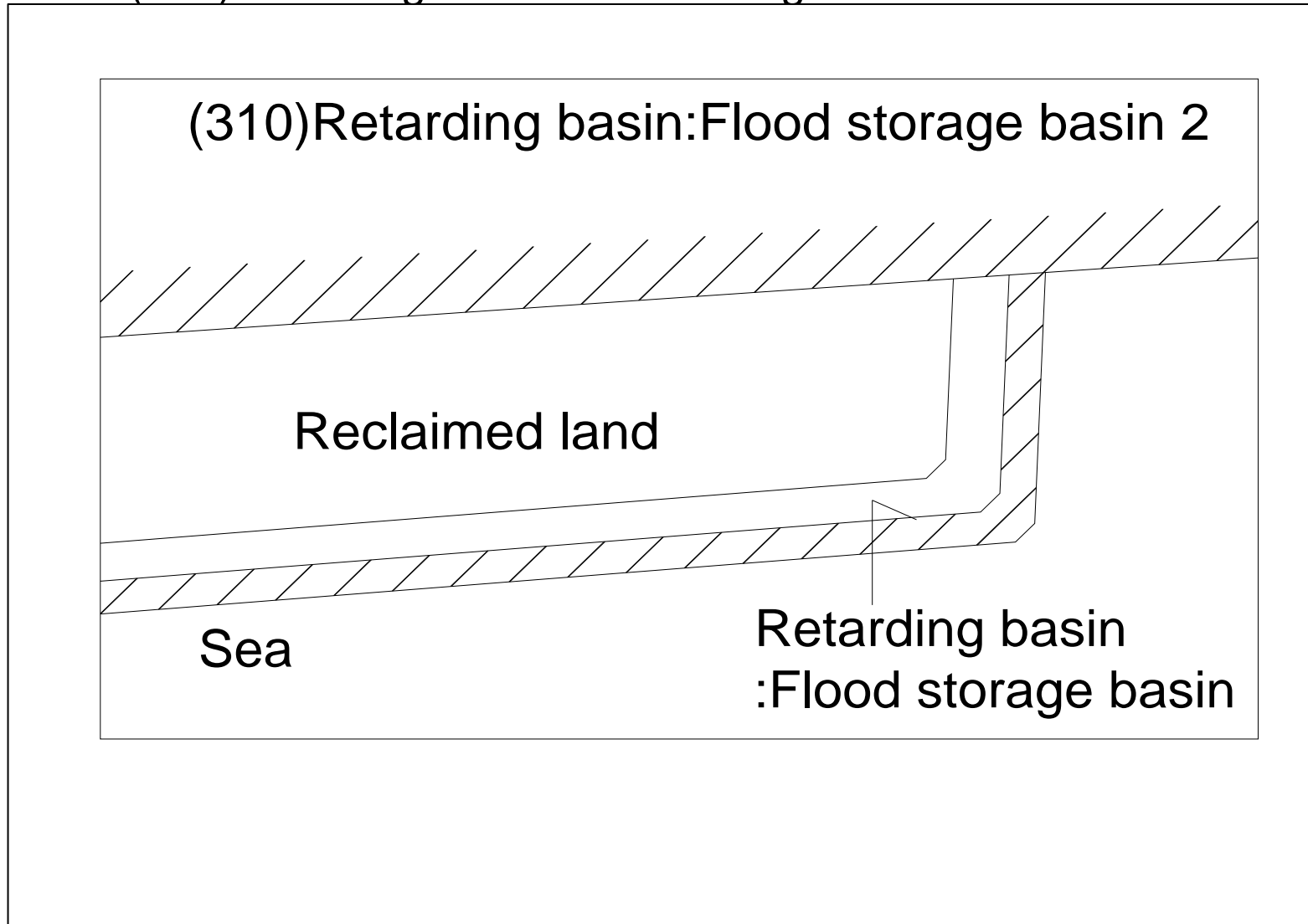


(309)Retarding basin:Flood storage basin

(309)Retarding basin:Flood storage basin 1

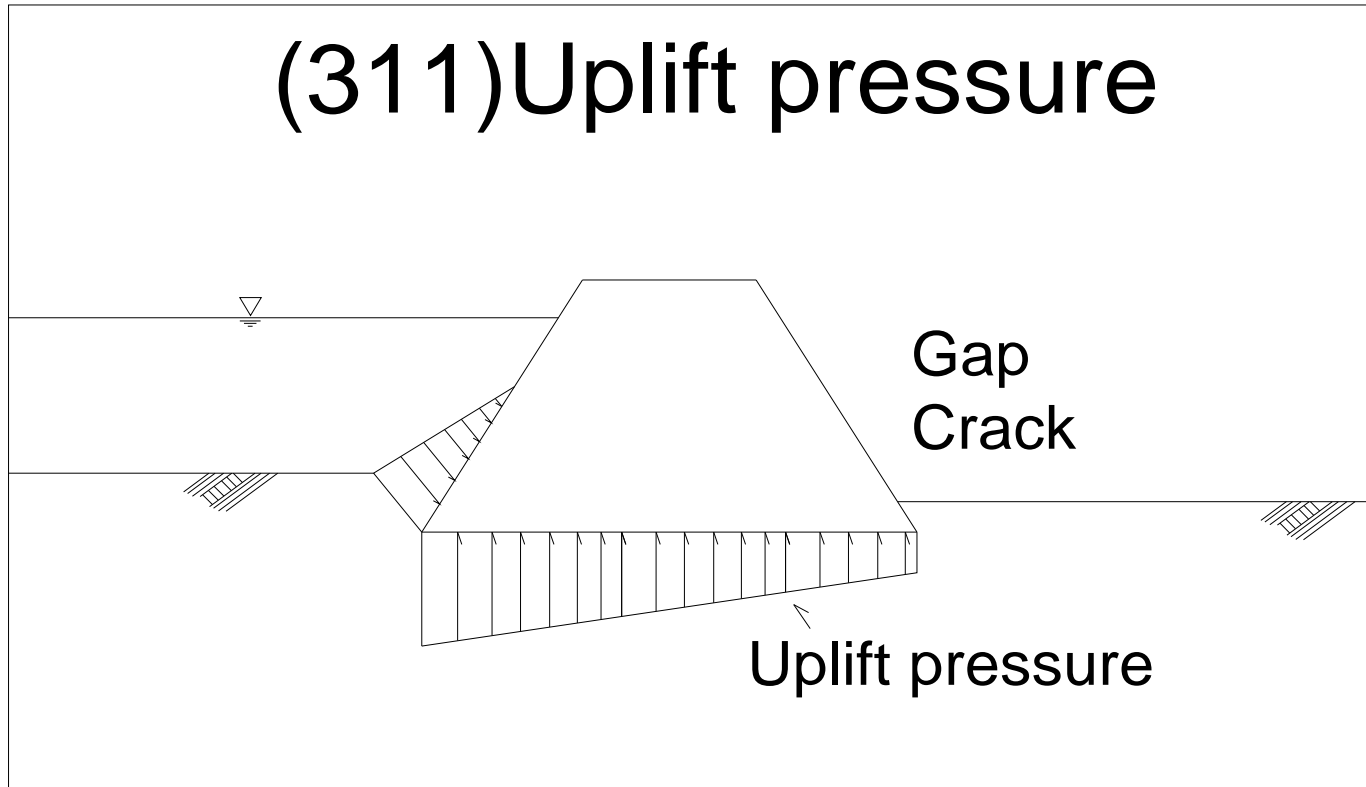


(310)Retarding basin:Flood storage basin 2



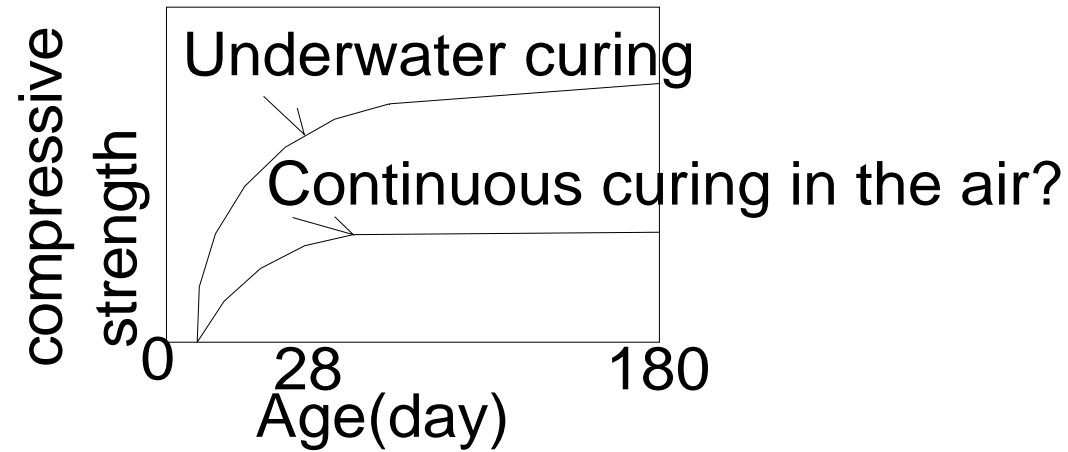
(311)Uplift pressure

(311)Uplift pressure



(312)Cure and compressive strength

(312)Cure and compressive strength



(313)Extra banking

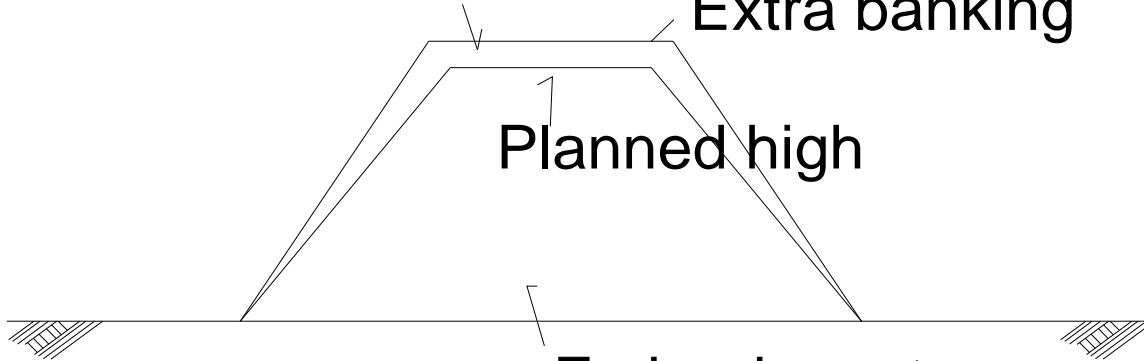
(313)Extra banking

Surplus height

Extra banking

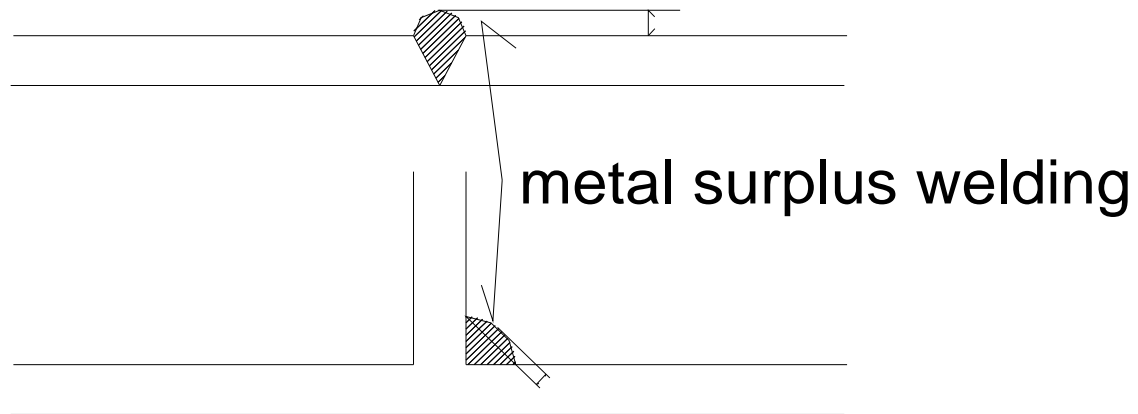
Planned high

Embankment



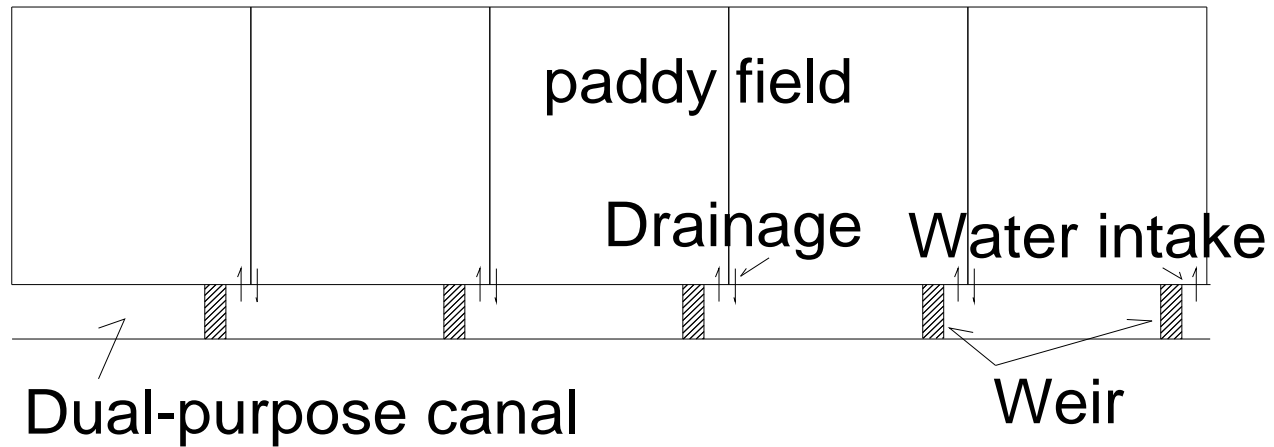
(314) Reinforcement of weld

(314) Reinforcement of weld

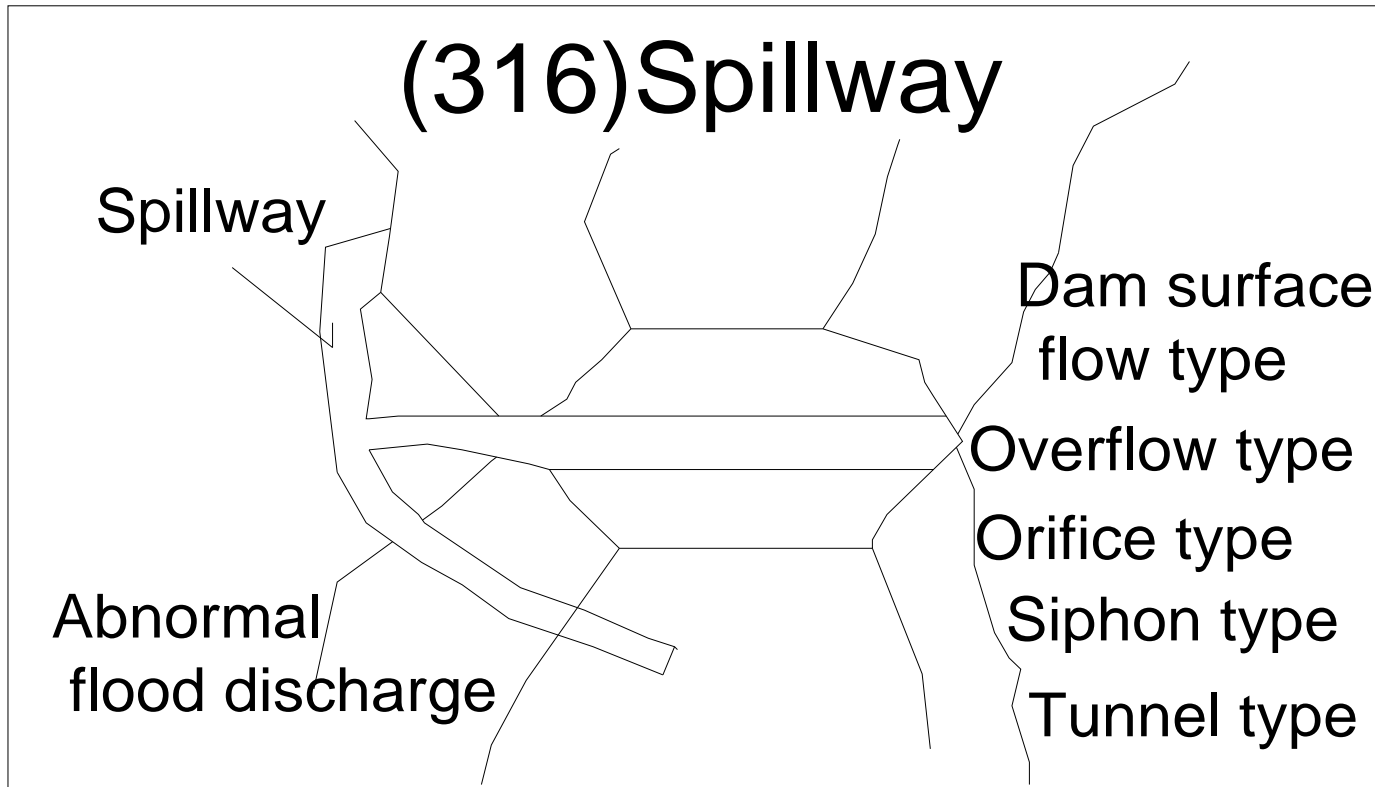


(315)Dual-purpose canal

(315)Dual-purpose canal



(316)Spillway



(317)Rigid frame:Rahmen

(317)Rigid frame:Rahmen

Connection point-Rigid connection
External force-resistance
bending



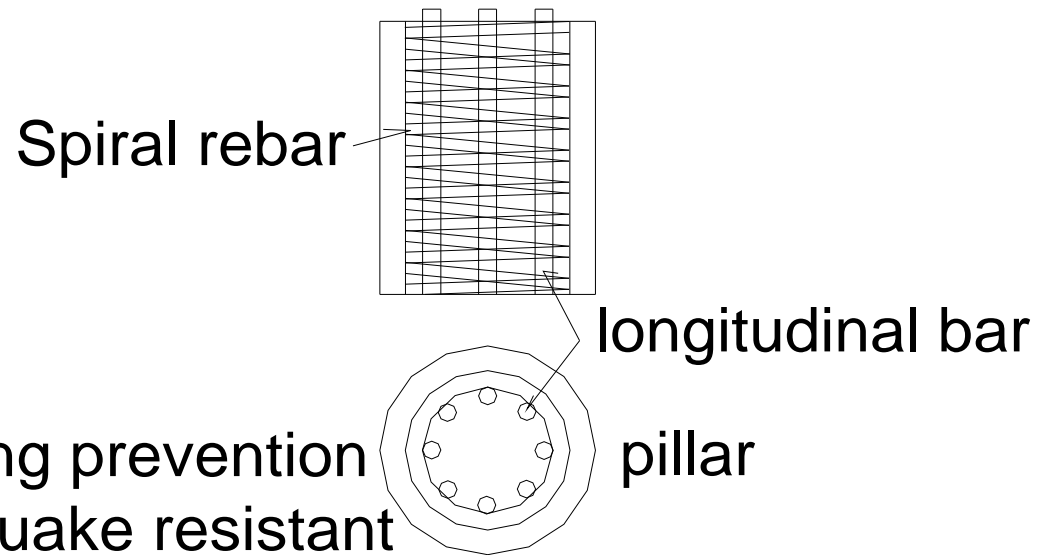
Gate type rigid-frame

2 Hinges

Fixed

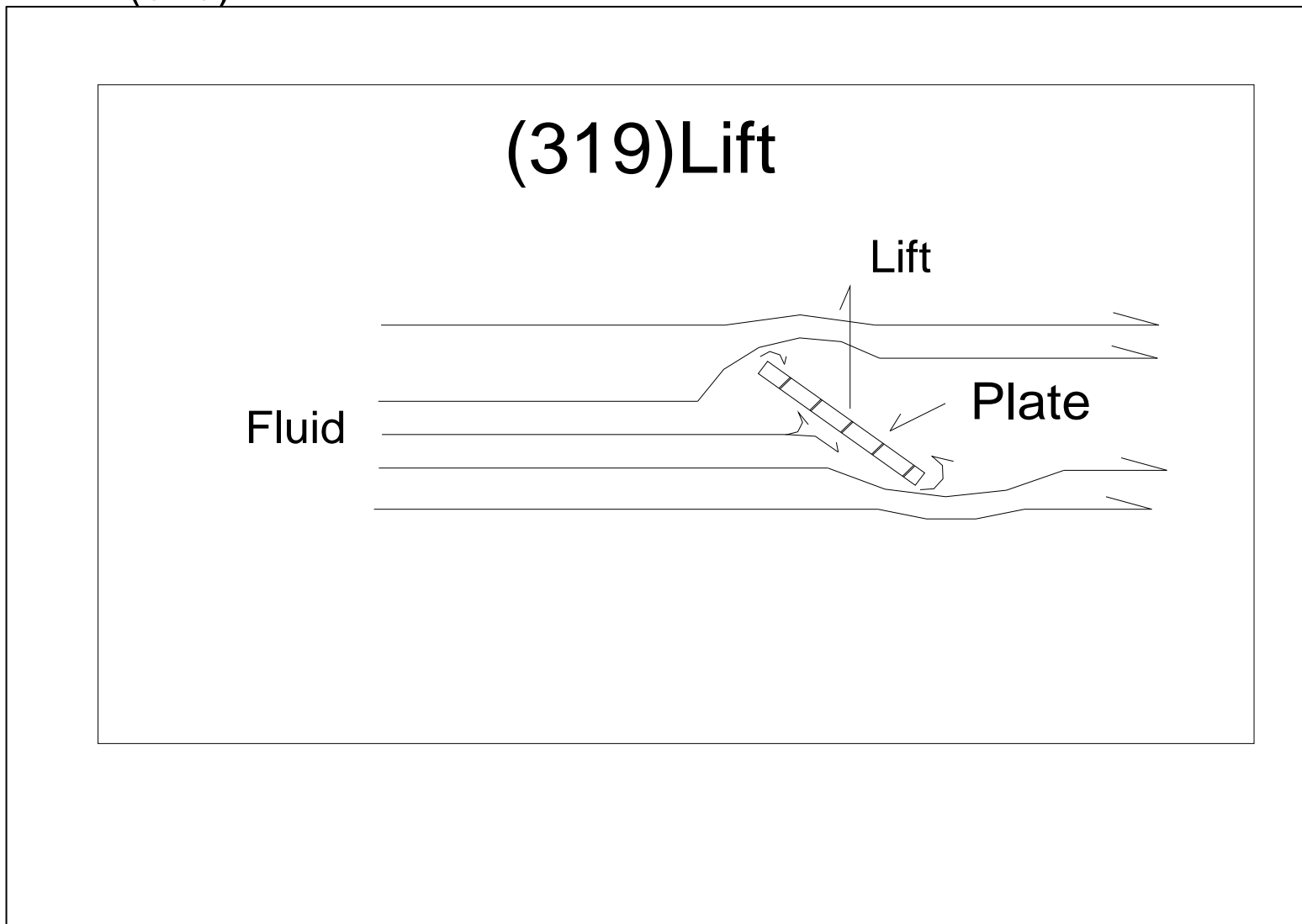
(318)Spiral hoop reinforcement

(318)Spiral hoop reinforcement



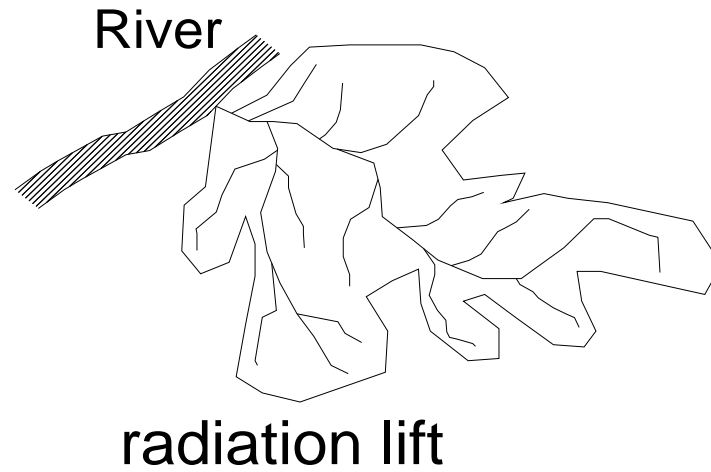
Swelling prevention
earthquake resistant
compressive strength test

(319)Lift

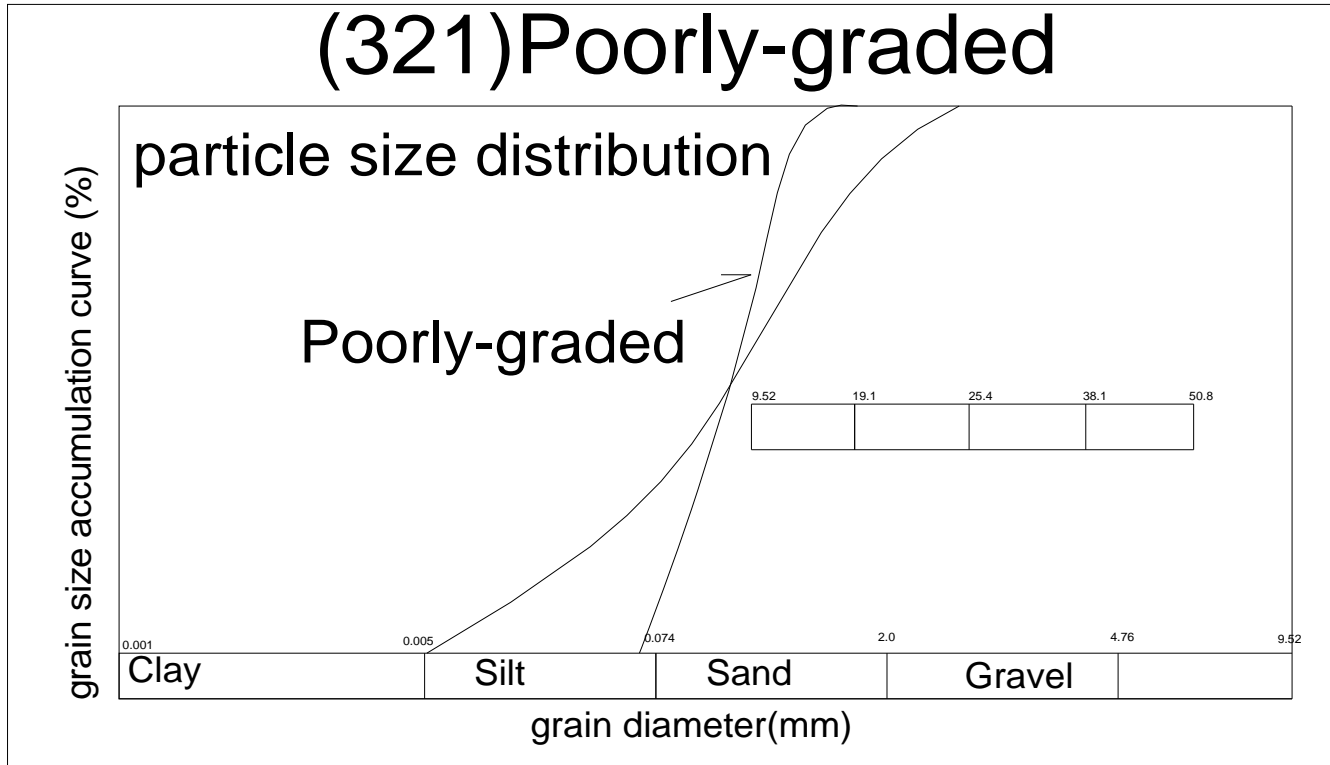


(320)Drainage basin

(320)Drainage basin



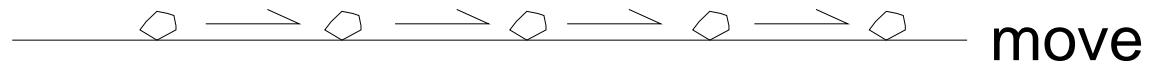
(321) Poorly-graded



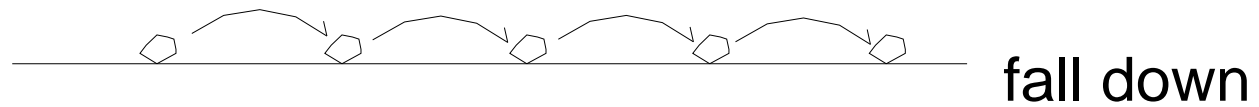
(322)Sediment load

(322)Sediment load

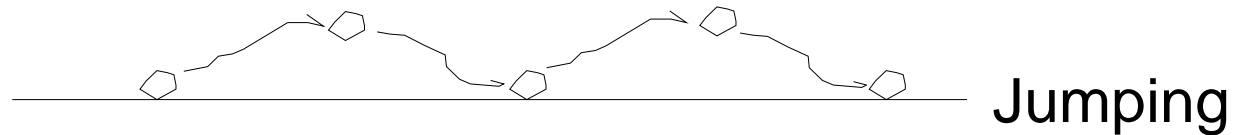
In the waterway



move

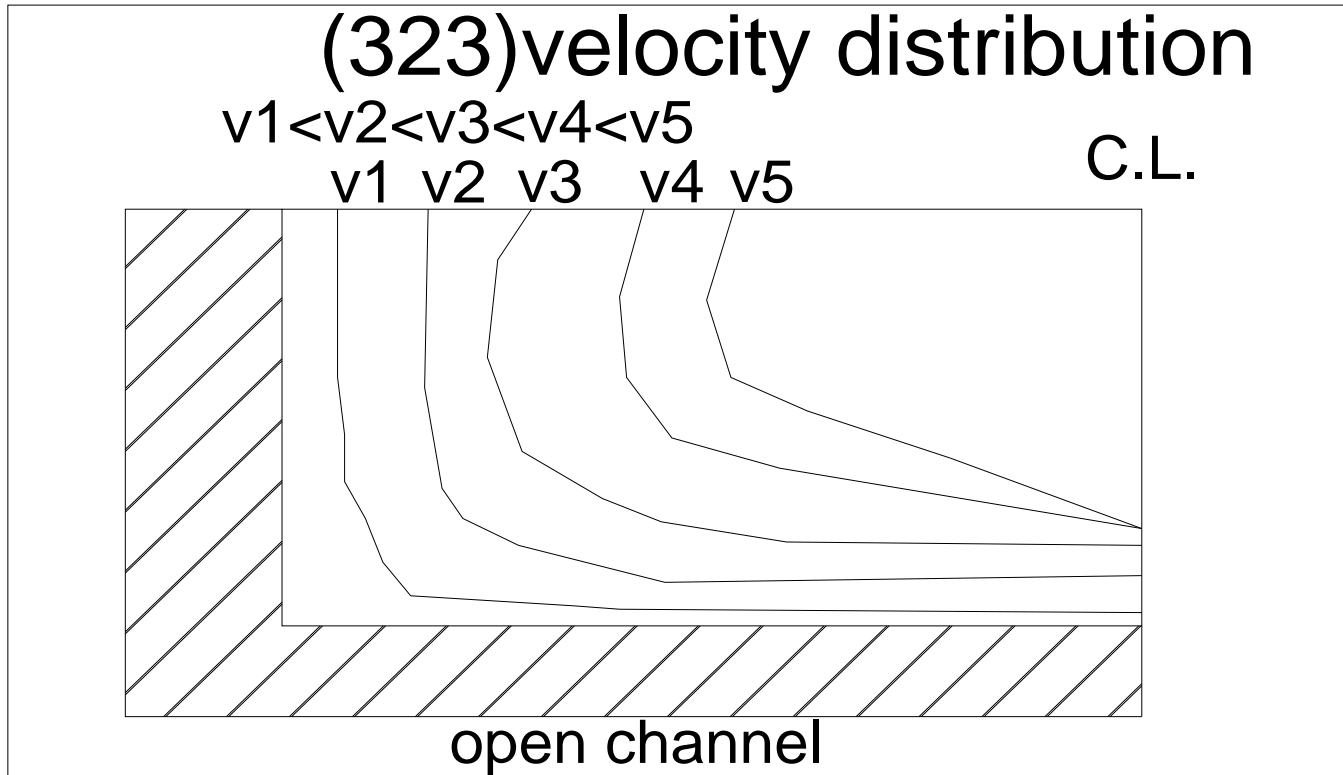


fall down

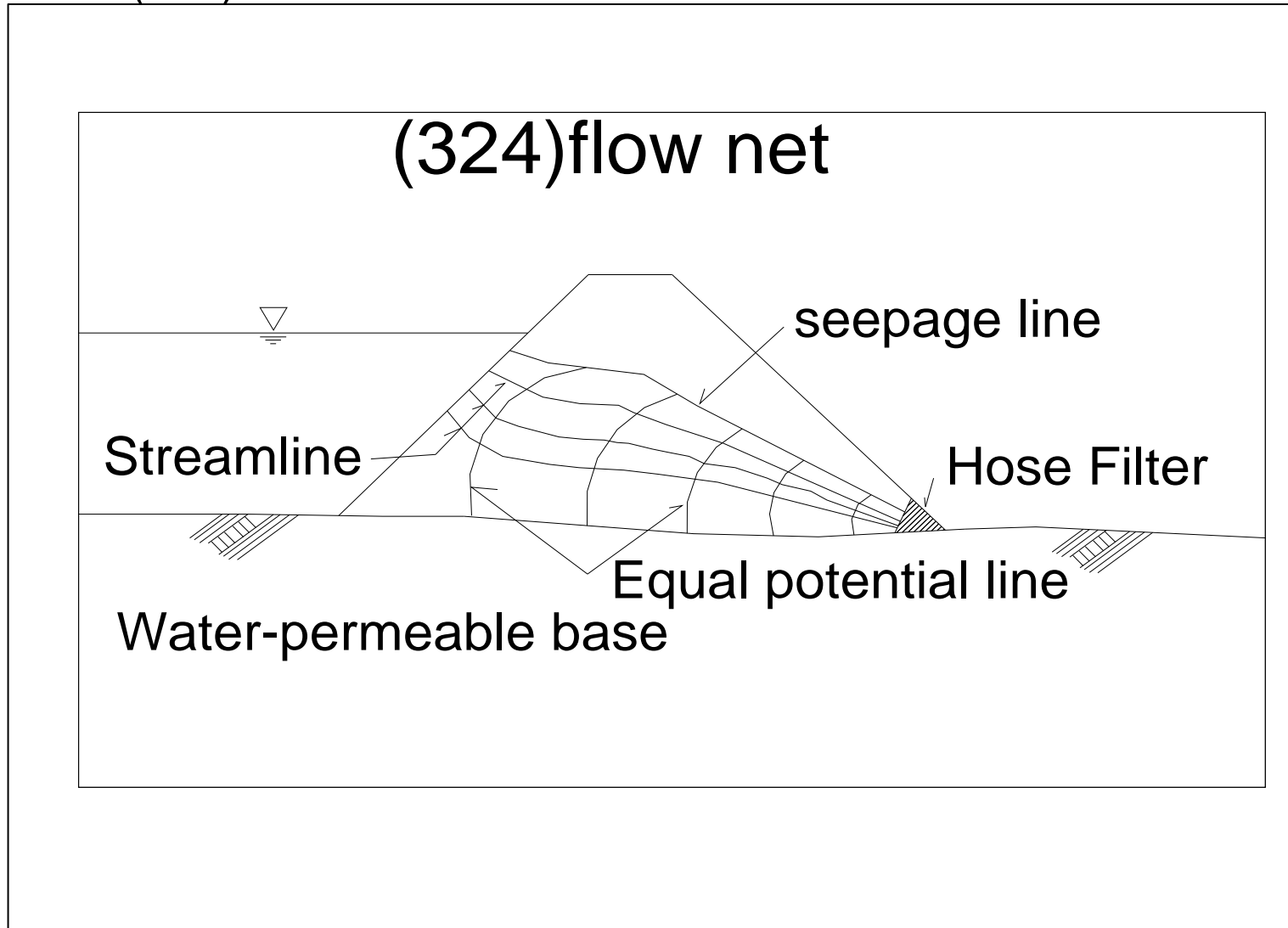


Jumping

(323)velocity distribution



(324)flow net



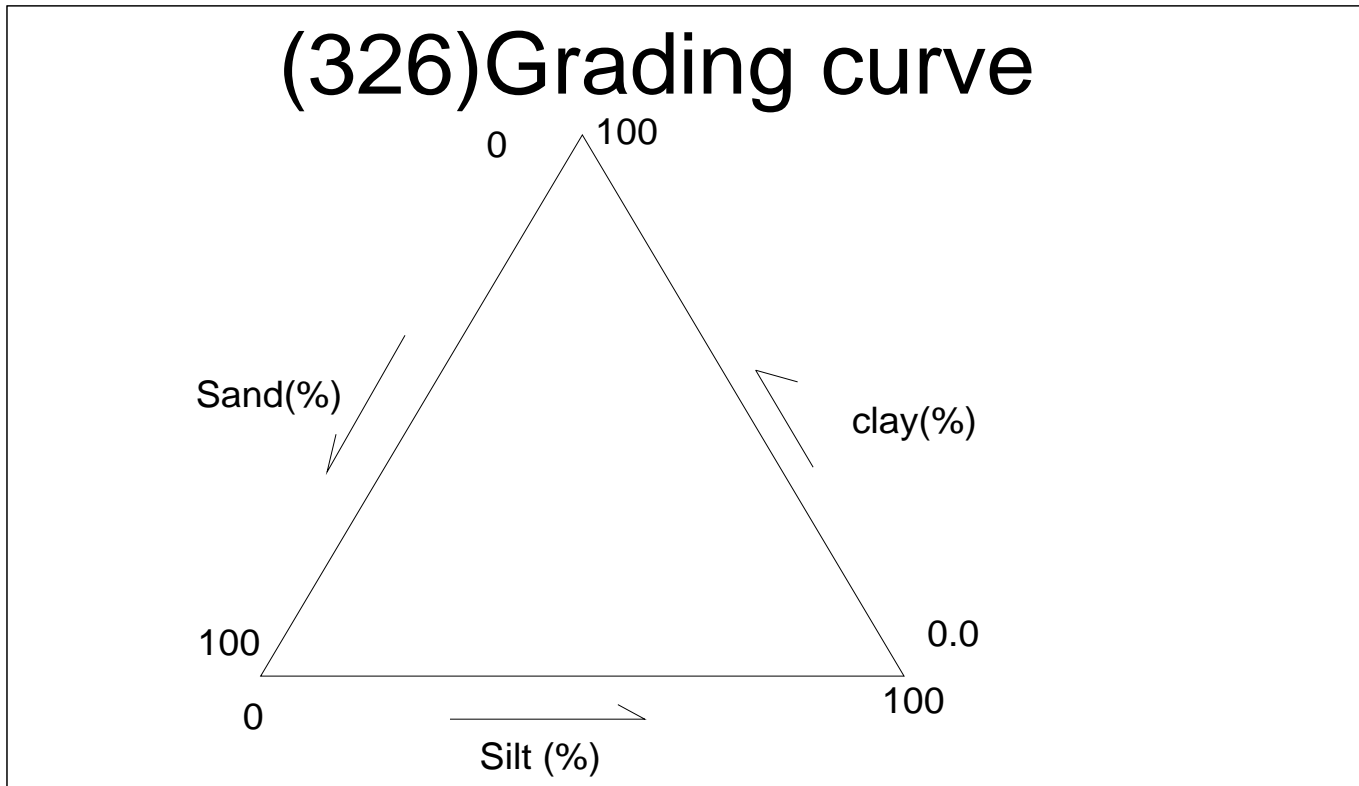
(325)particle size analysis

(325)particle size analysis

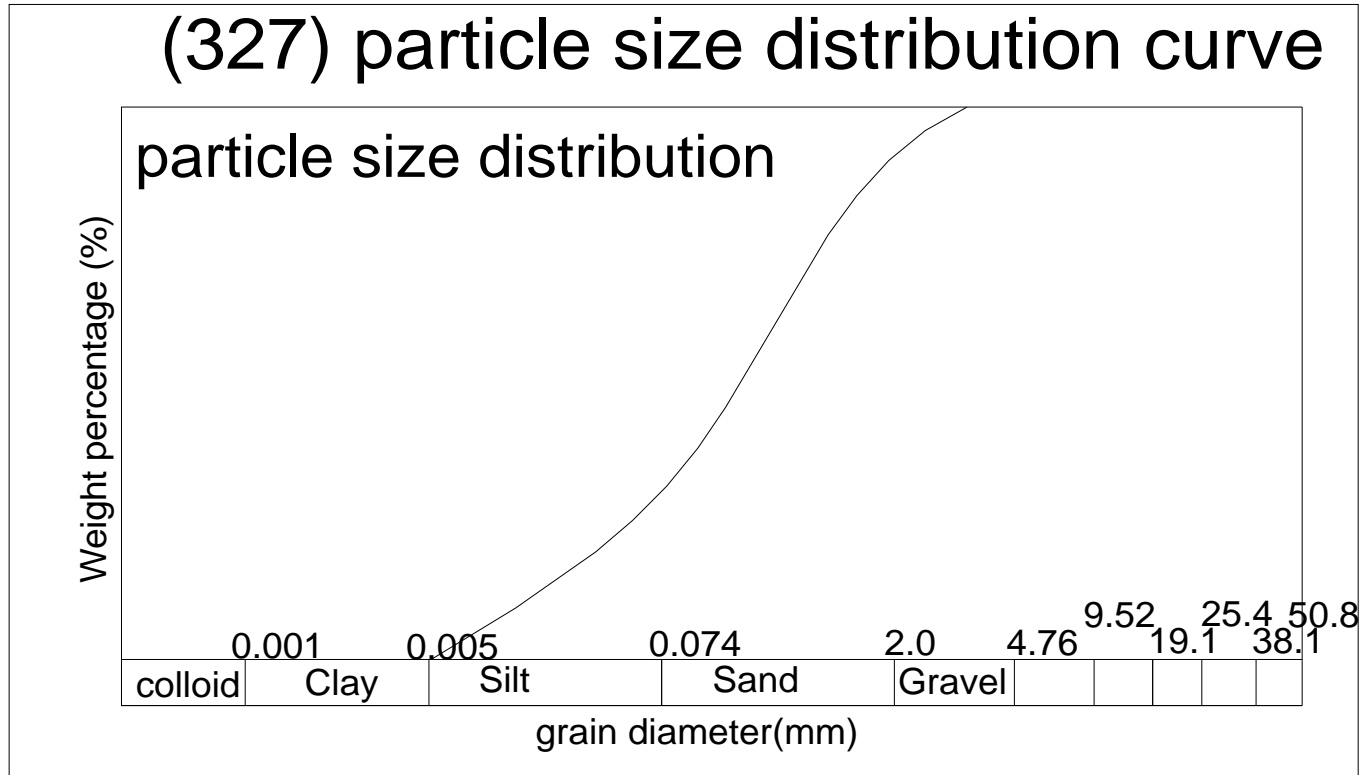
International Law

	2.0	0.2	0.02	0.002	
Gravel	Coarse sand	fine sand	Silt	Clay	
grain diameter(mm)					

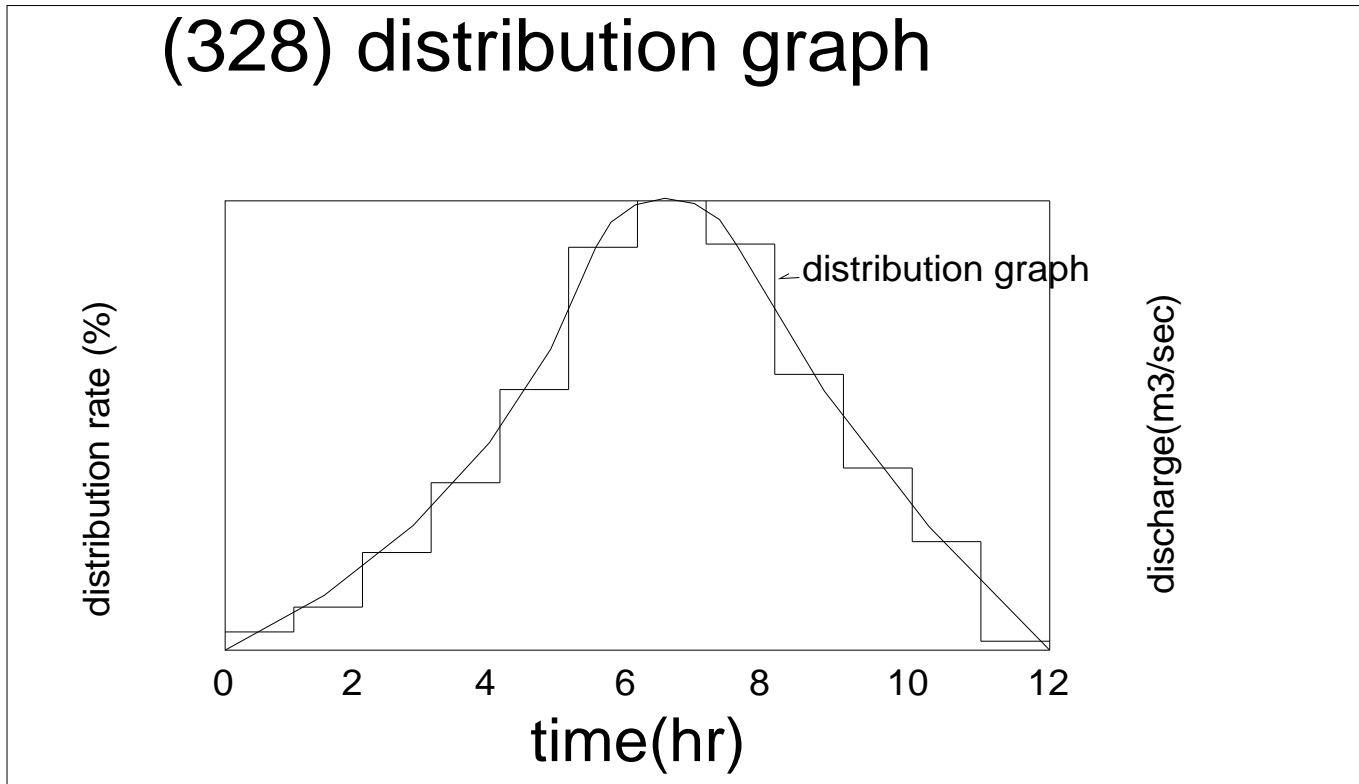
(326)Grading curve



(327) particle size distribution curve



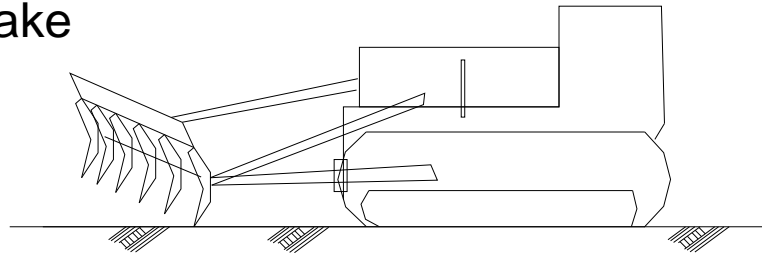
(328) distribution graph



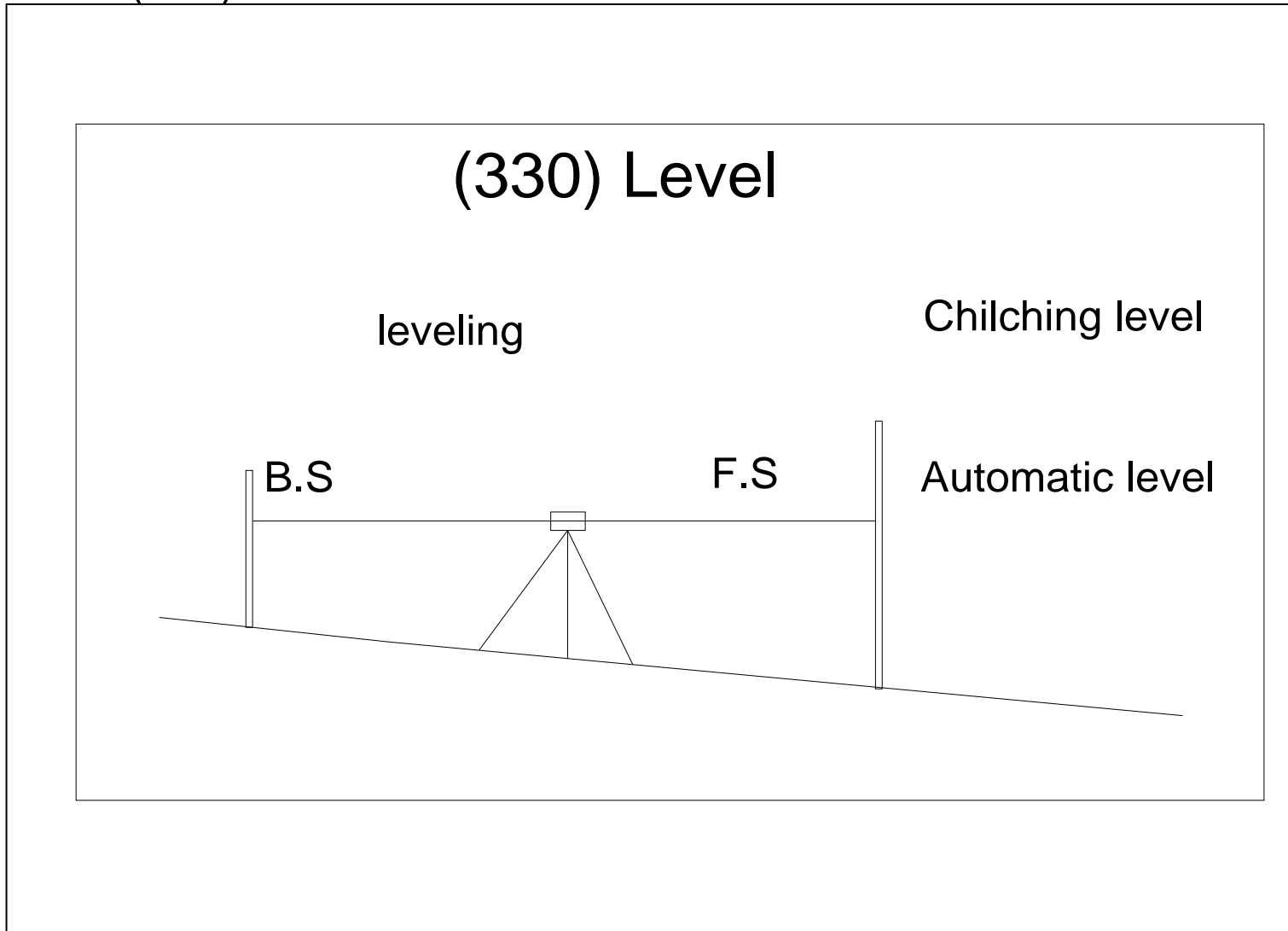
(329) Rake dozer

(329) Rake dozer
(Crawler Type+Rake)

Attachment
Rake



(330) Level



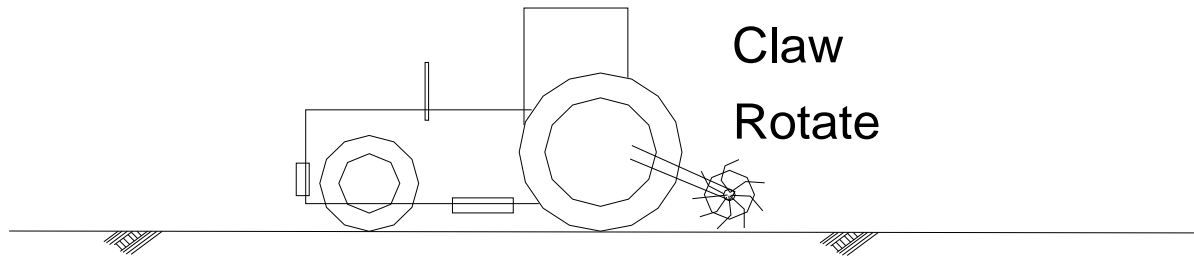
(331) Rotary

(331) Rotary

plowing and weeding

Claw

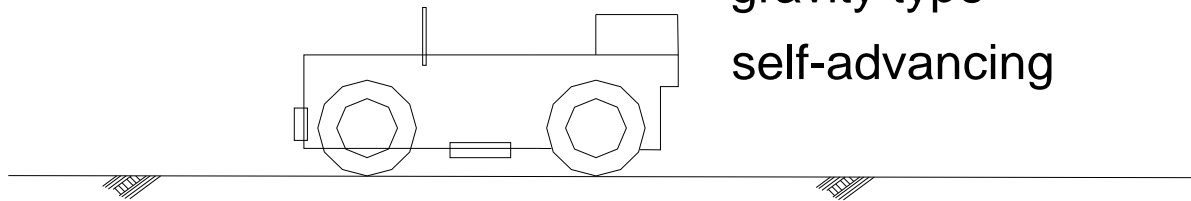
Rotate



(332) Tire roller

(332) Tire roller

Compacting machine
gravity type
self-advancing



(333) Vibrating road roller

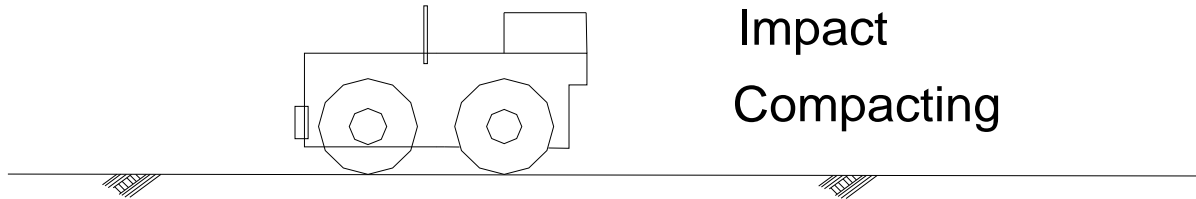
(333) Vibrating road roller

Compacting machine

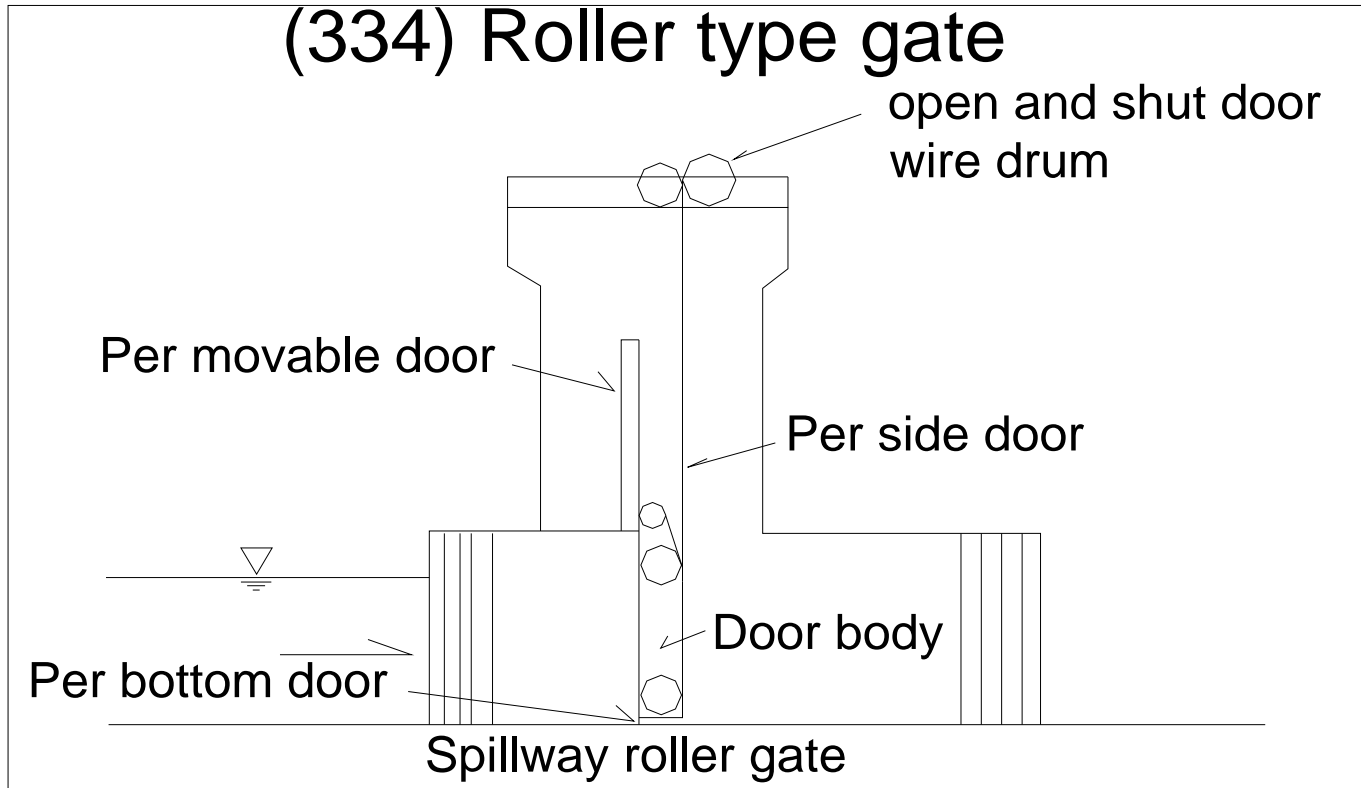
Vibration

Impact

Compacting

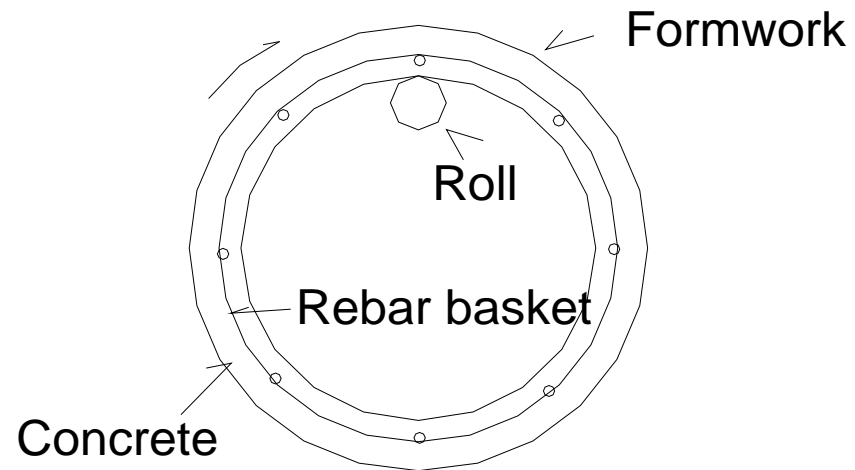


(334) Roller type gate



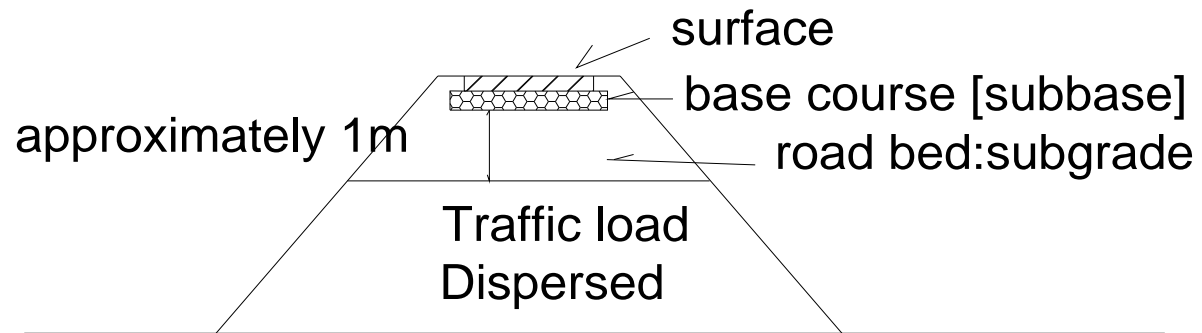
(335) Rolled reinforced concrete pipe

(335) Rolled reinforced concrete pipe



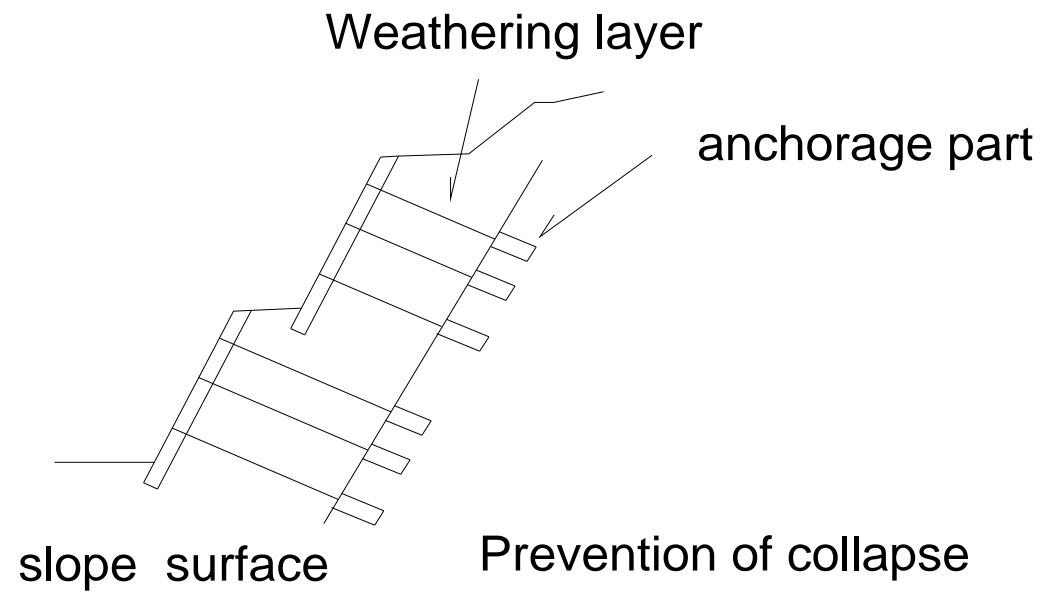
(336)Road bed(subgrade)

(336) Road bed(subgrade)

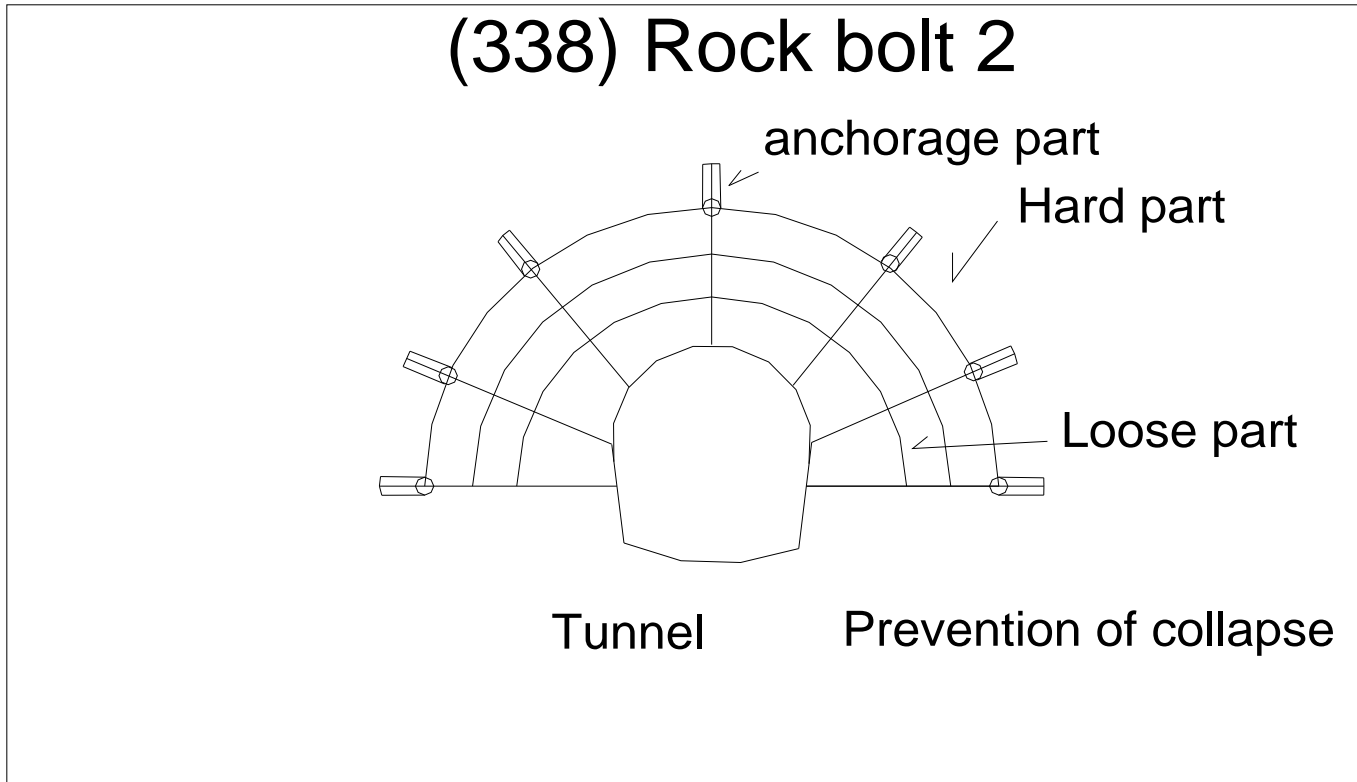


(337) Rock bolt 1

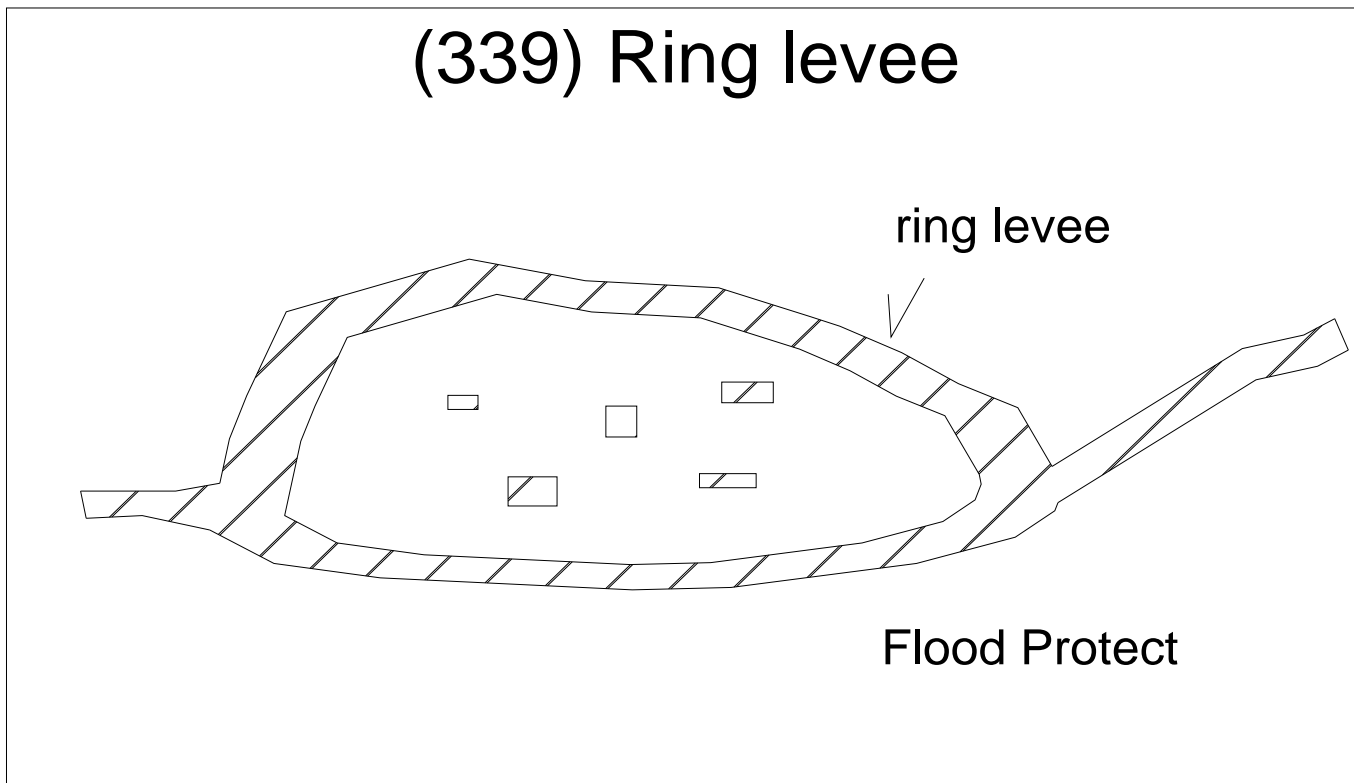
(337) Rock bolt 1



(338) Rock bolt 2



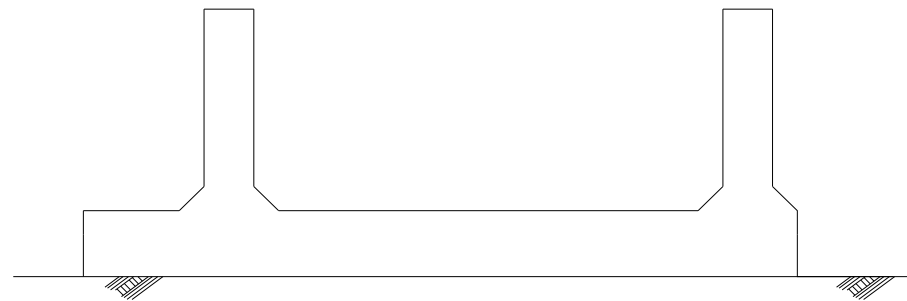
(339) Ring levee



(340) Shallow foundation

(340) Shallow foundation

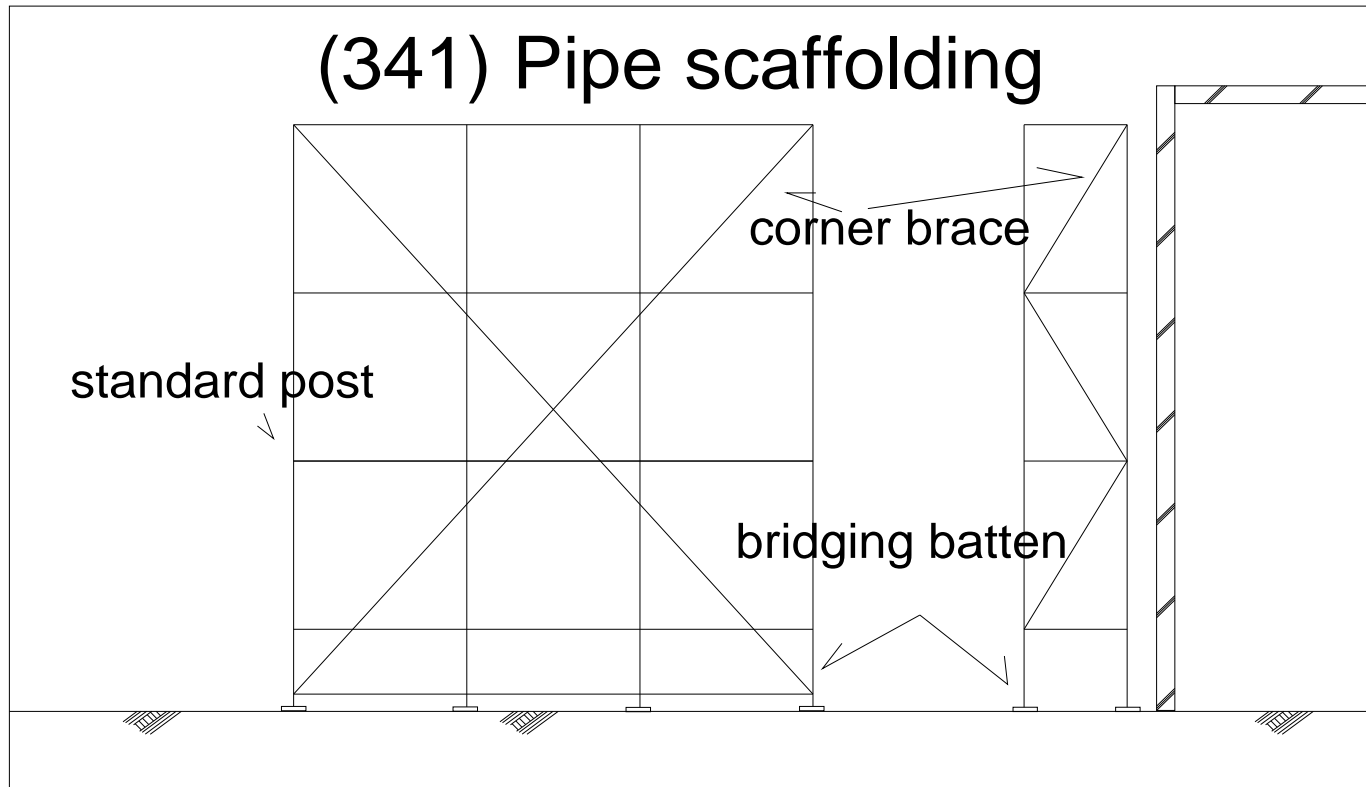
Shallow foundation



bearing capacity
large

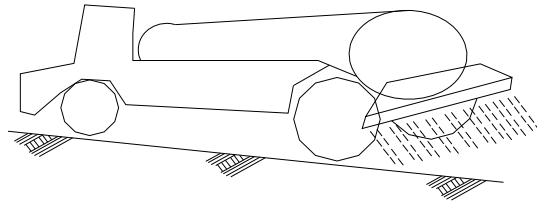
Structure Weight.
Light

(341) Pipe scaffolding



(342) asphalt sprayer (Distributor)

(342) asphalt sprayer (distributor)

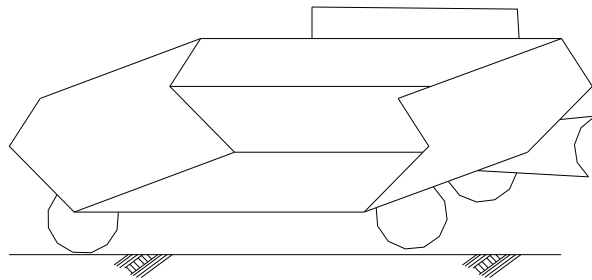


pavement construction

Spreading machine

(343) Asphalt finisher

(343) Asphalt finisher



Asphalt mixture

Spreading machine

Mixture

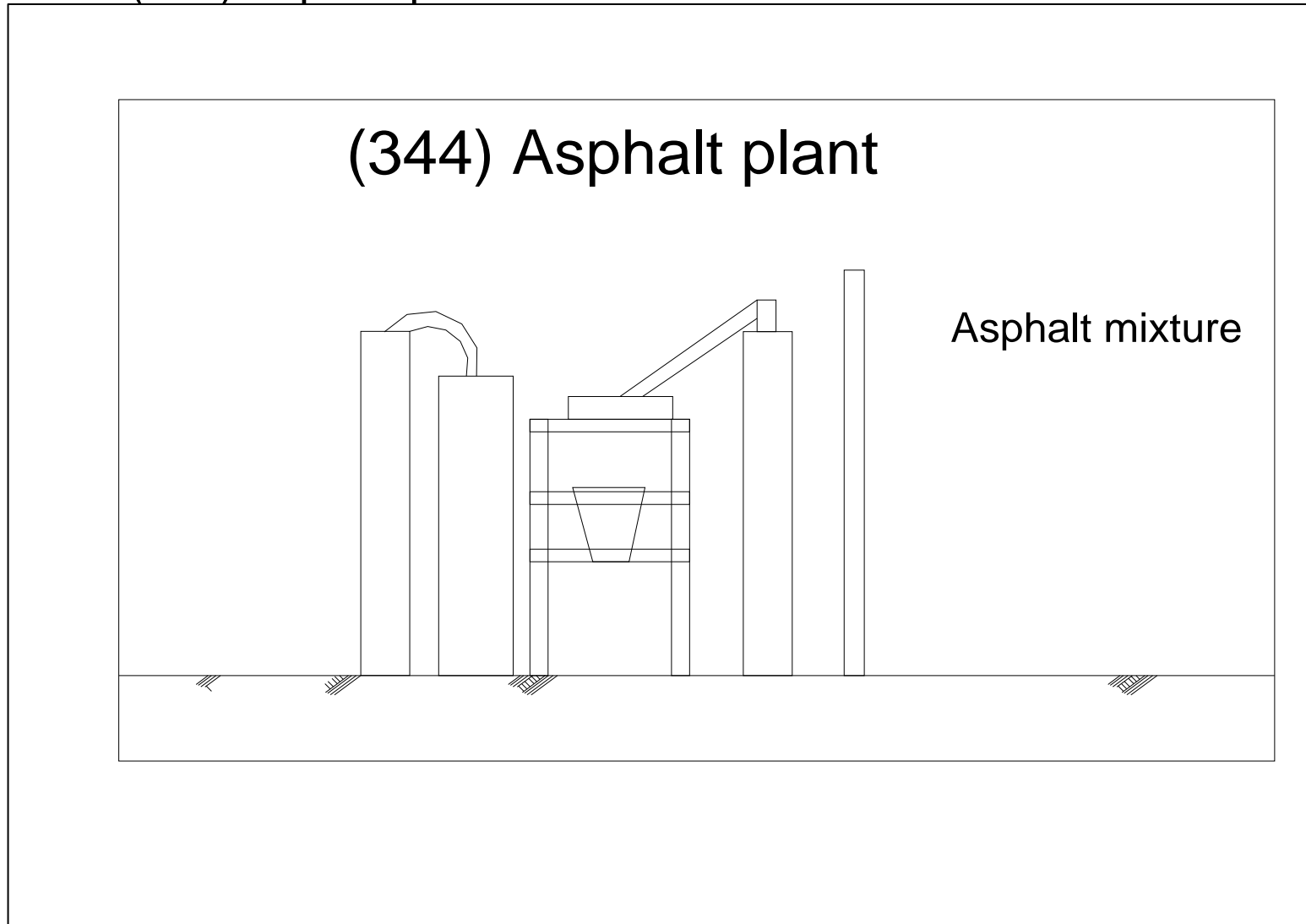
leveling placement method

tamping

Surface finish

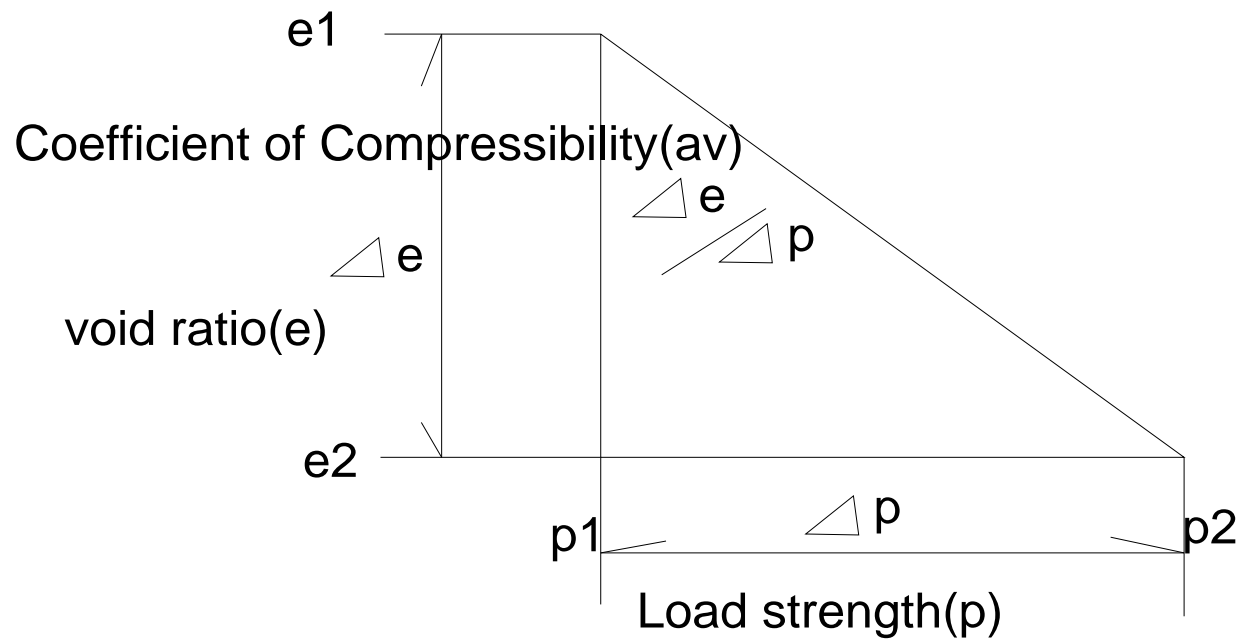
Screw spreader

(344) Asphalt plant



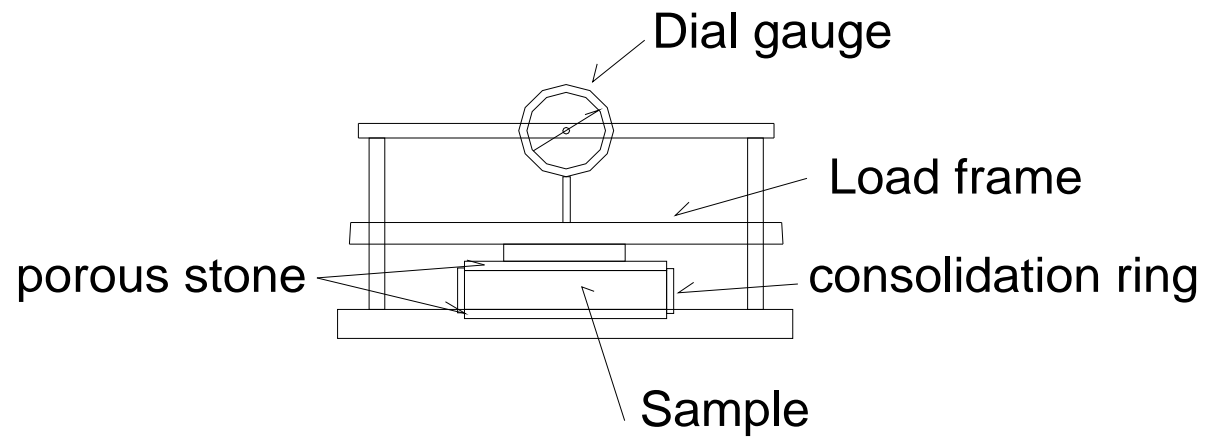
(345) Coefficient of Compressibility

(345) Coefficient of Compressibility

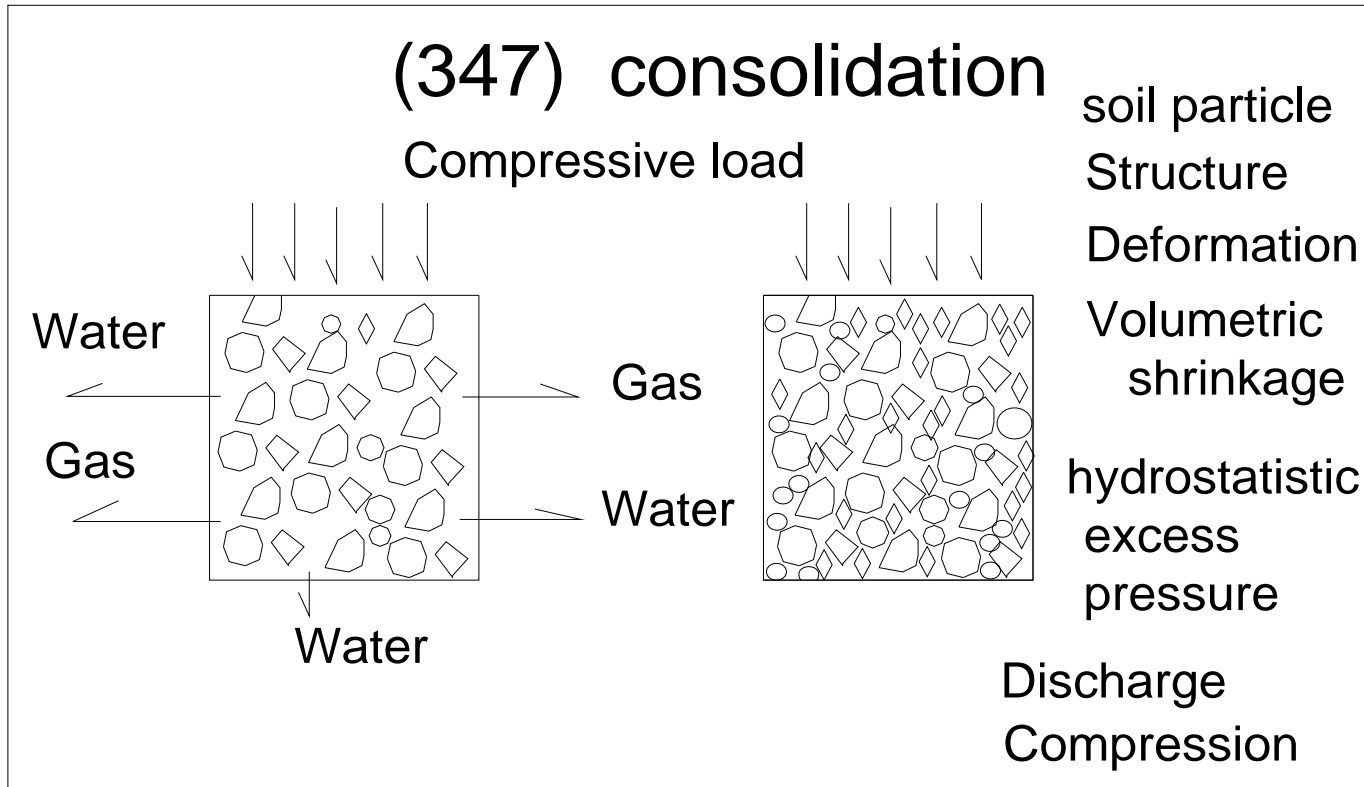


(346) consolidation test

(346) consolidation test

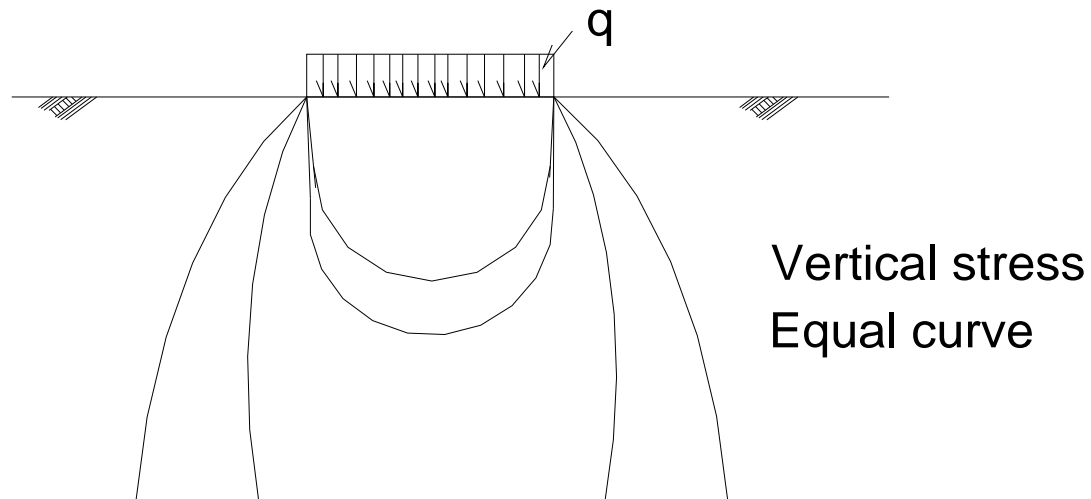


(347)consolidation



(348) Pressure bulb

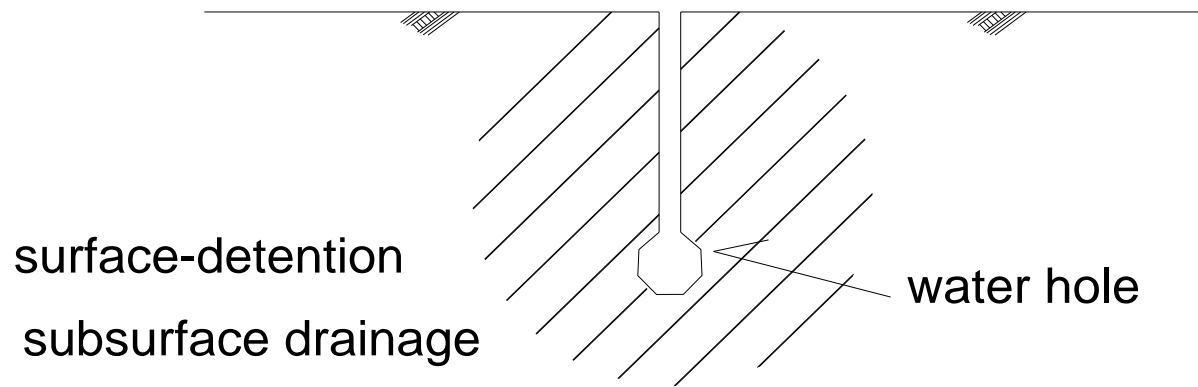
(348) Pressure bulb



(349) Culvert1

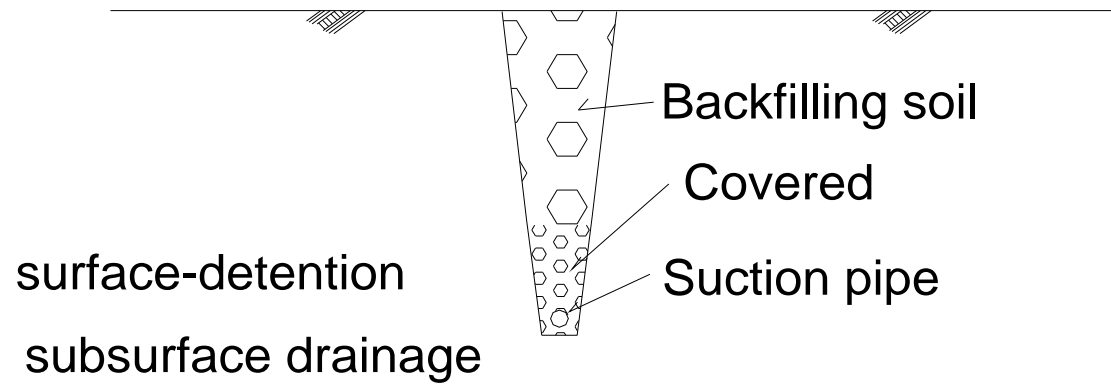
(349) Culvert1

mole drain



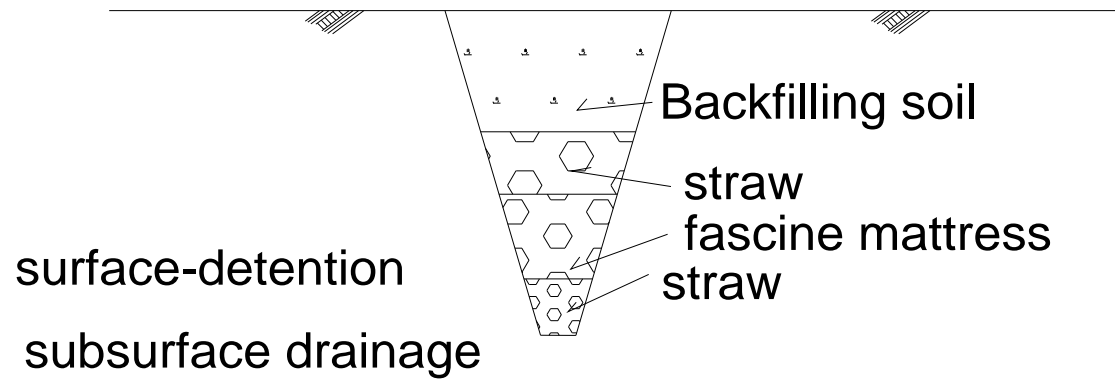
(350) Culvert2

(350) Culvert2 completely drain

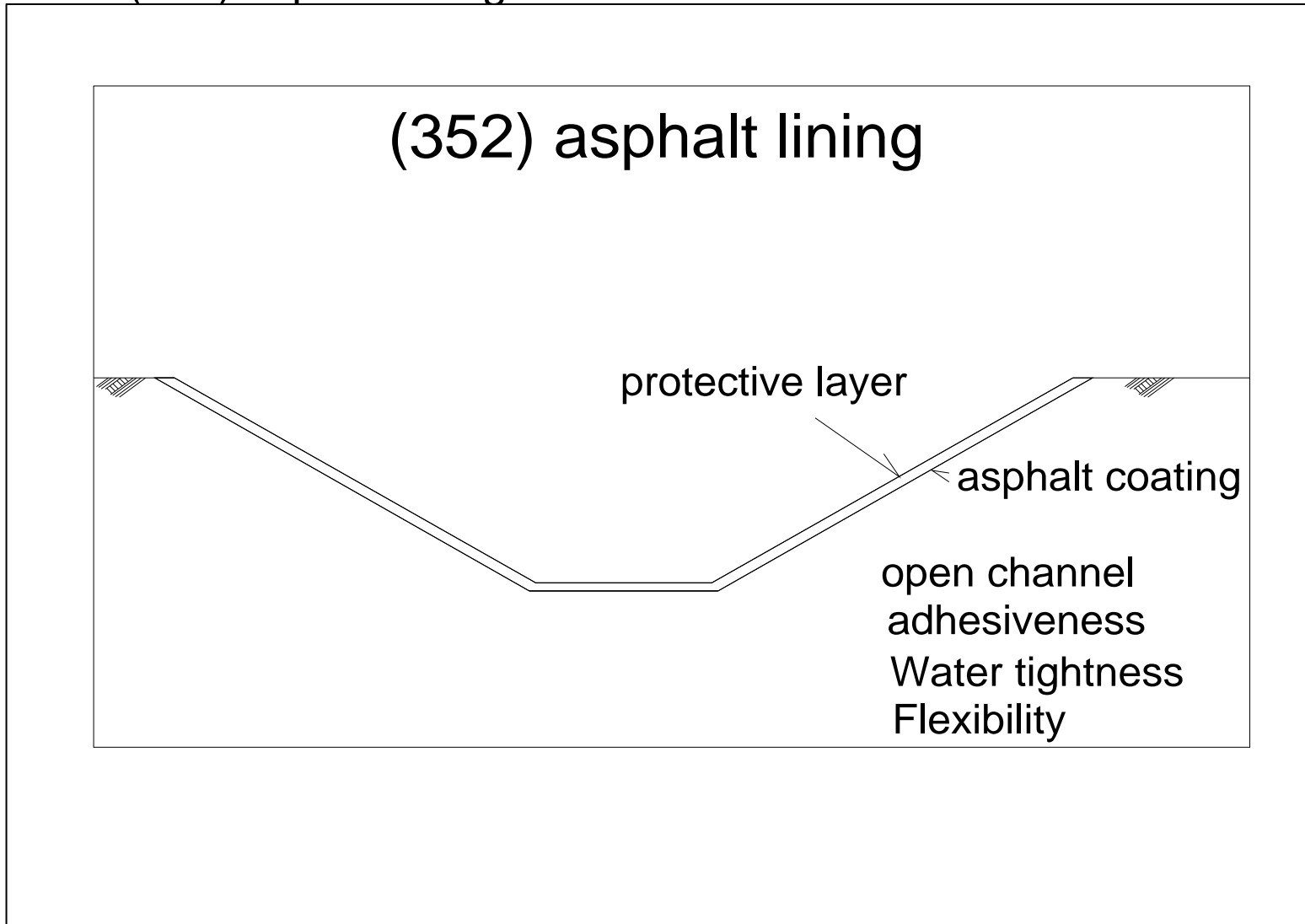


(351) Culvert3

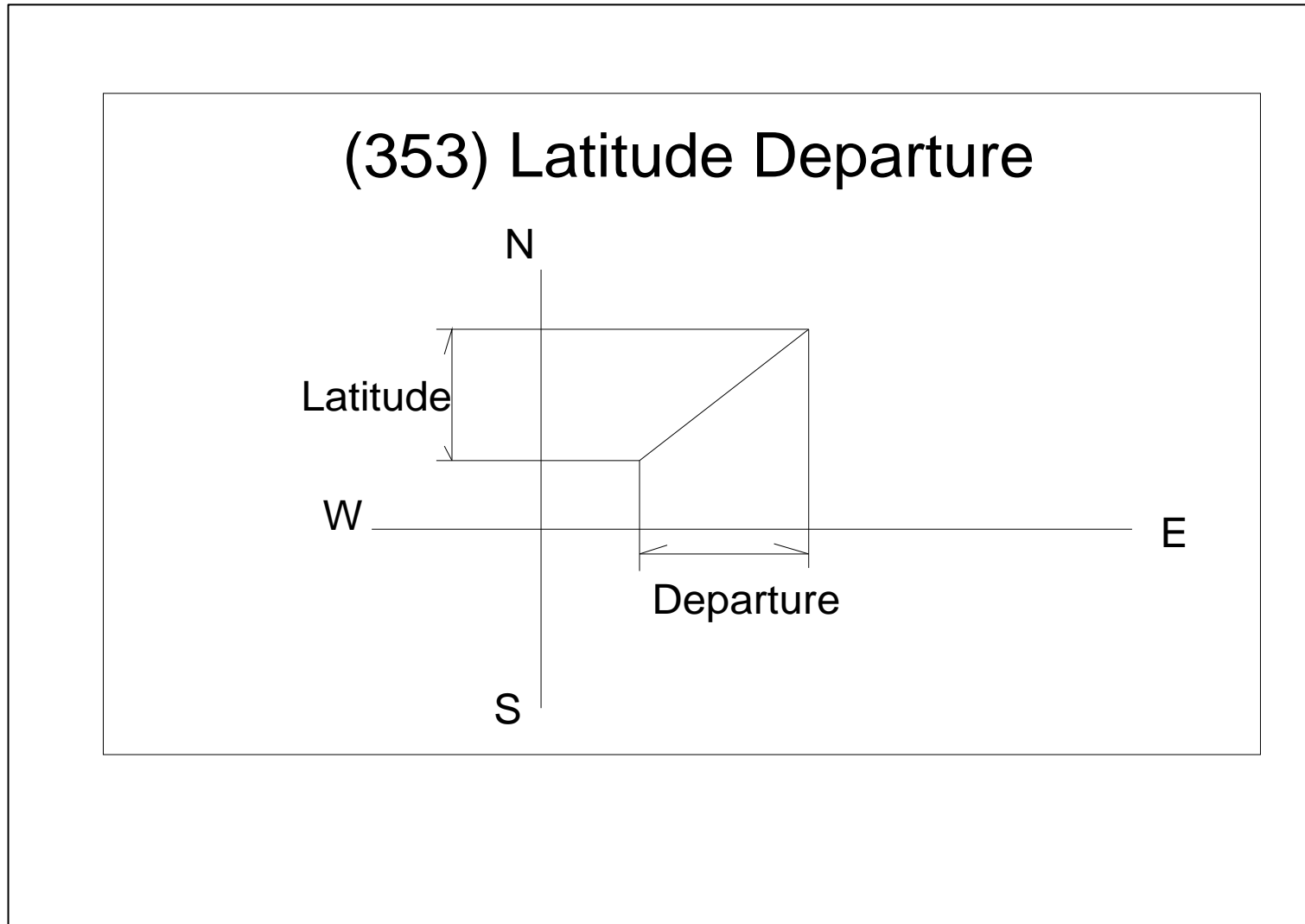
(351) Culvert3 Simple drain



(352) asphalt lining



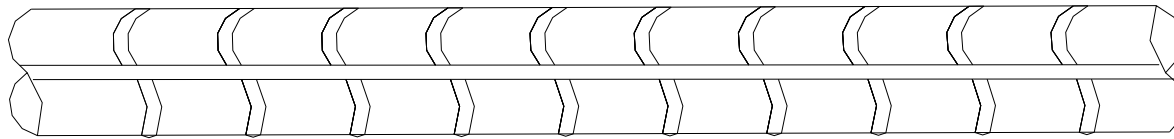
(353) Latitude Departure



(354) Deformed bar

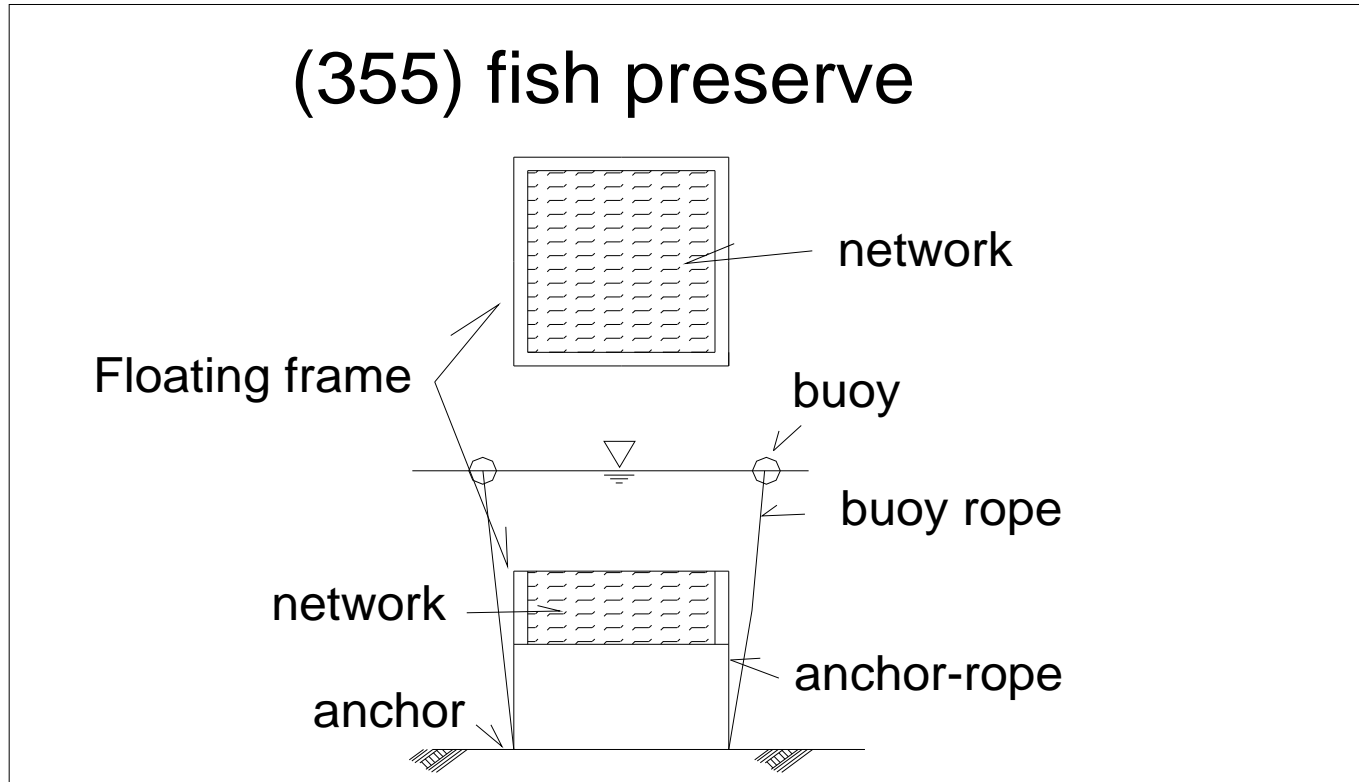
(354) Deformed bar

Reinforcing bar



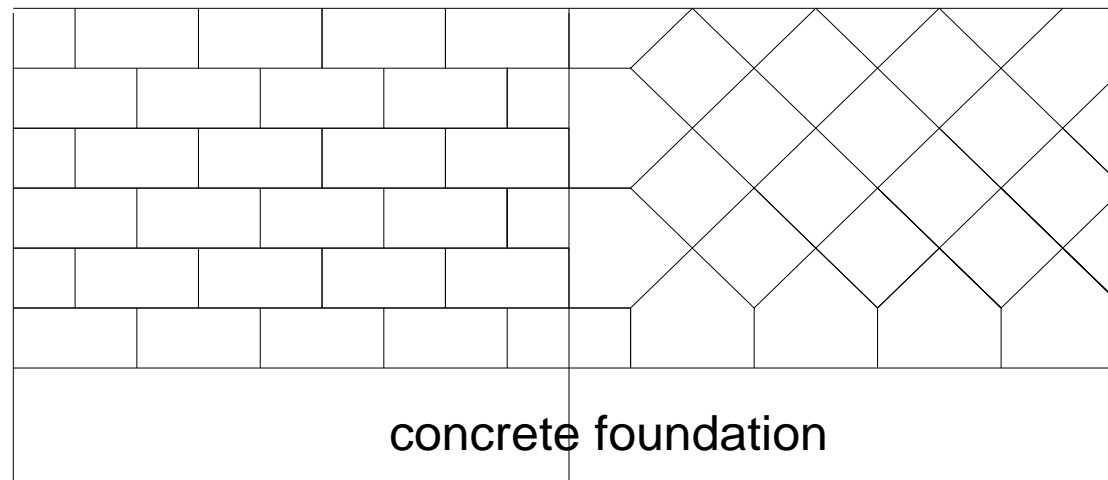
node
protrusion
adhesion

(355) fish preserve



(356) Masonry

(356) Masonry

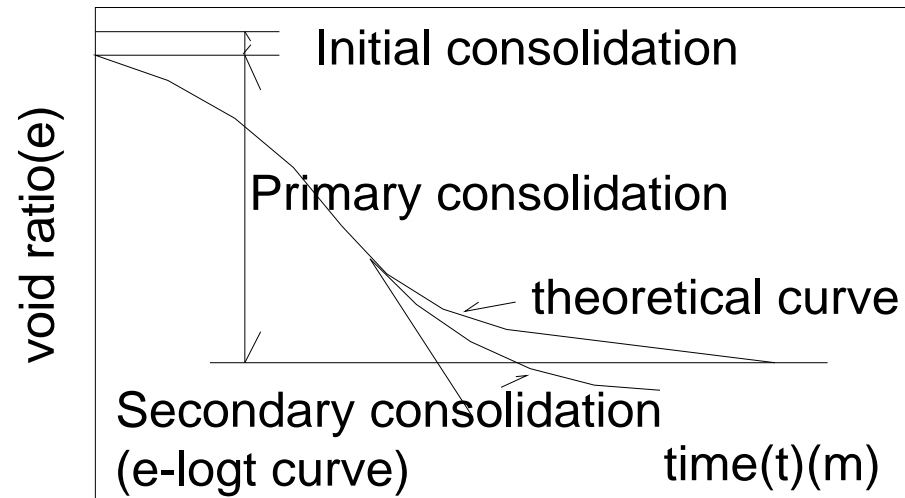


coursed masonry

uncoarsed masonry

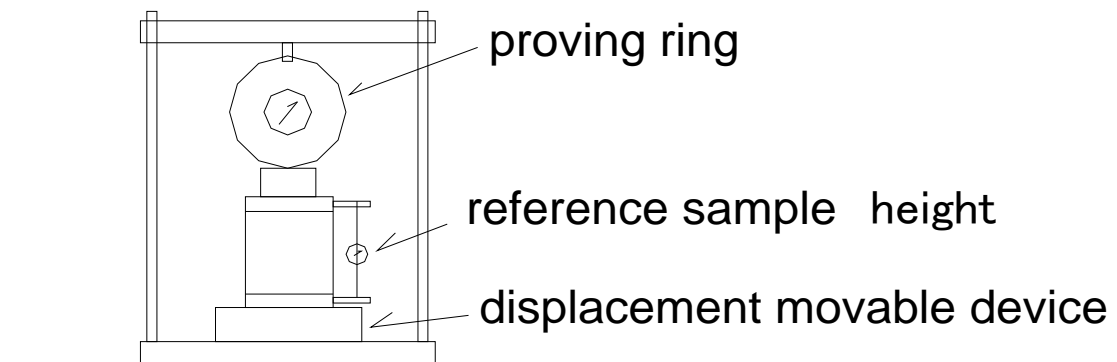
(357) Primary consolidation

(357) Primary consolidation



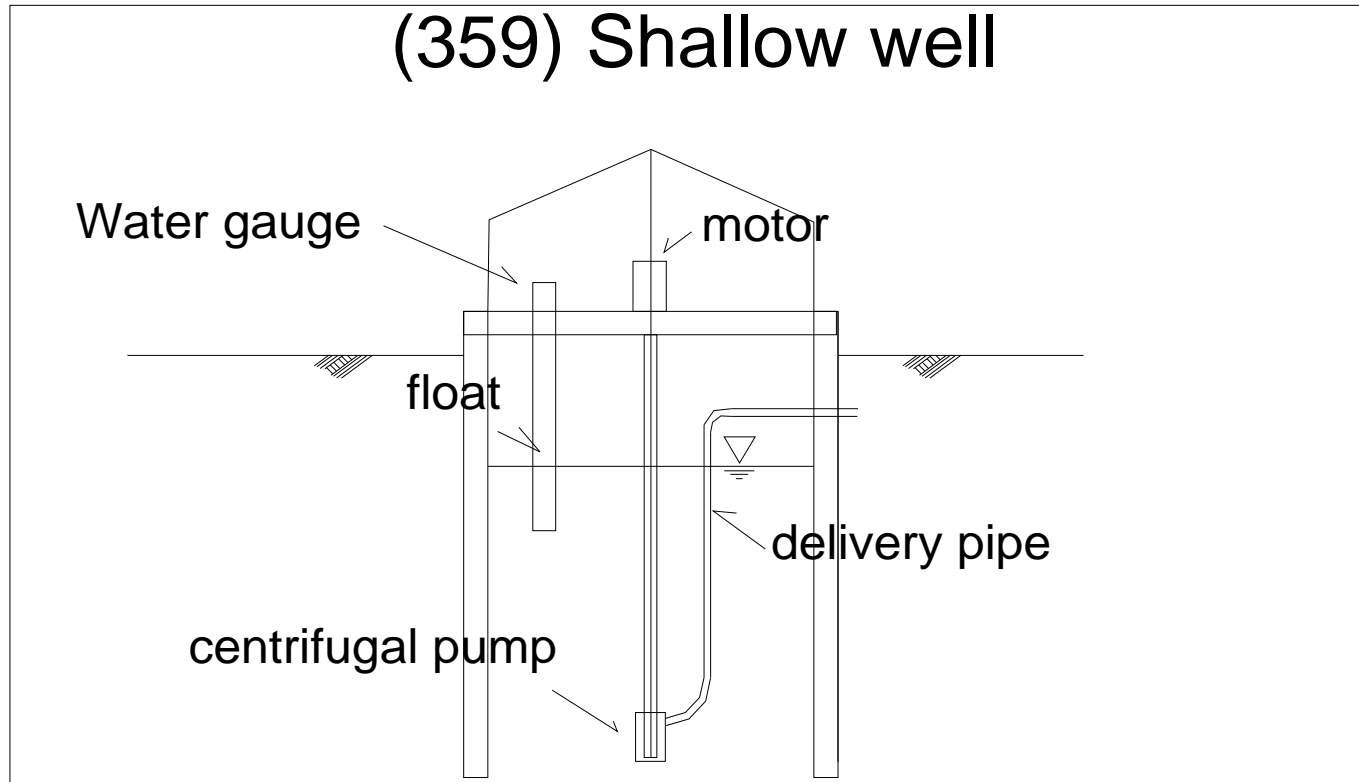
(358) Unconfined compression test

(358) Unconfined compression test

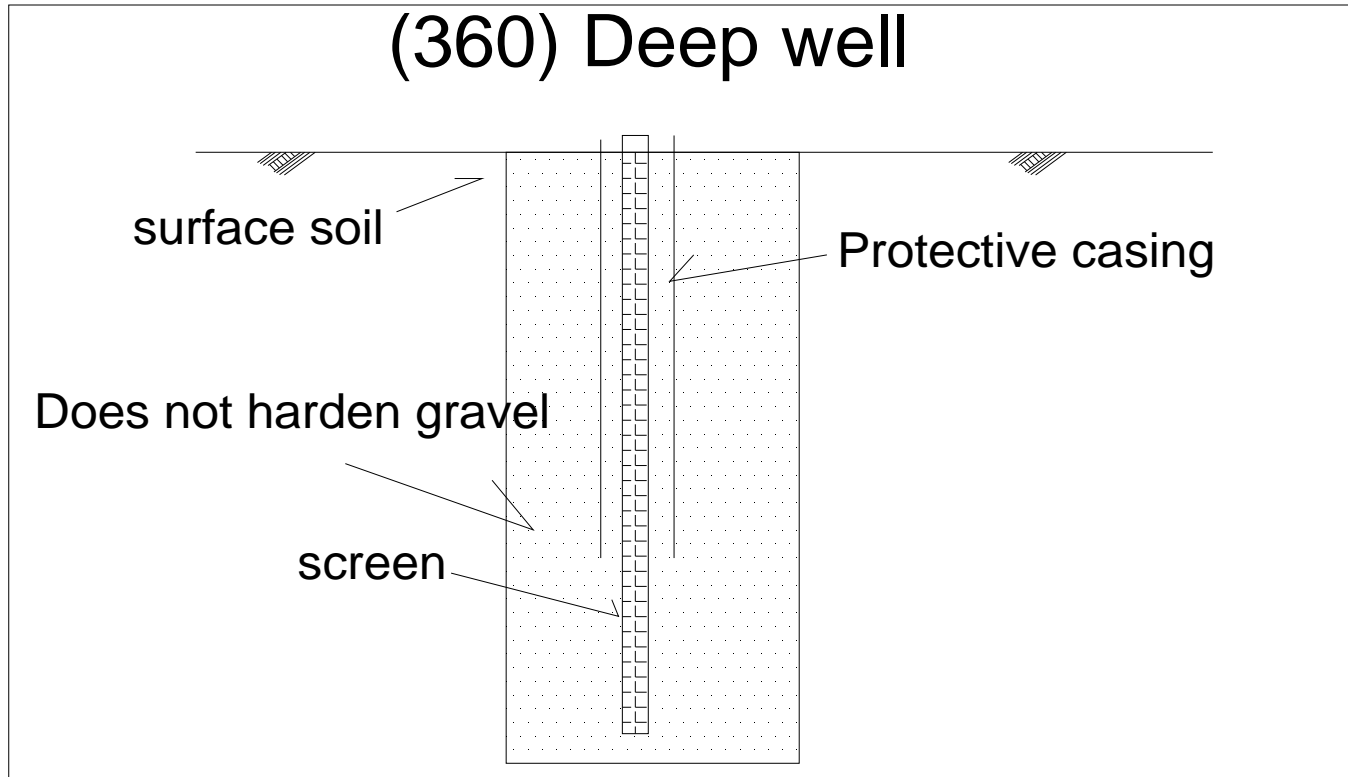


unconfined compression test

(359) Shallow well

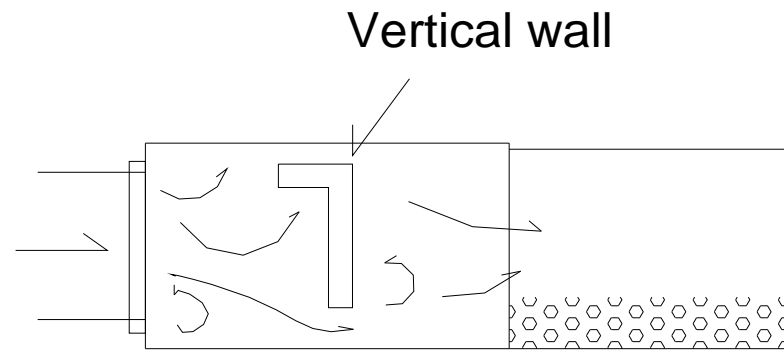


(360) Deep well



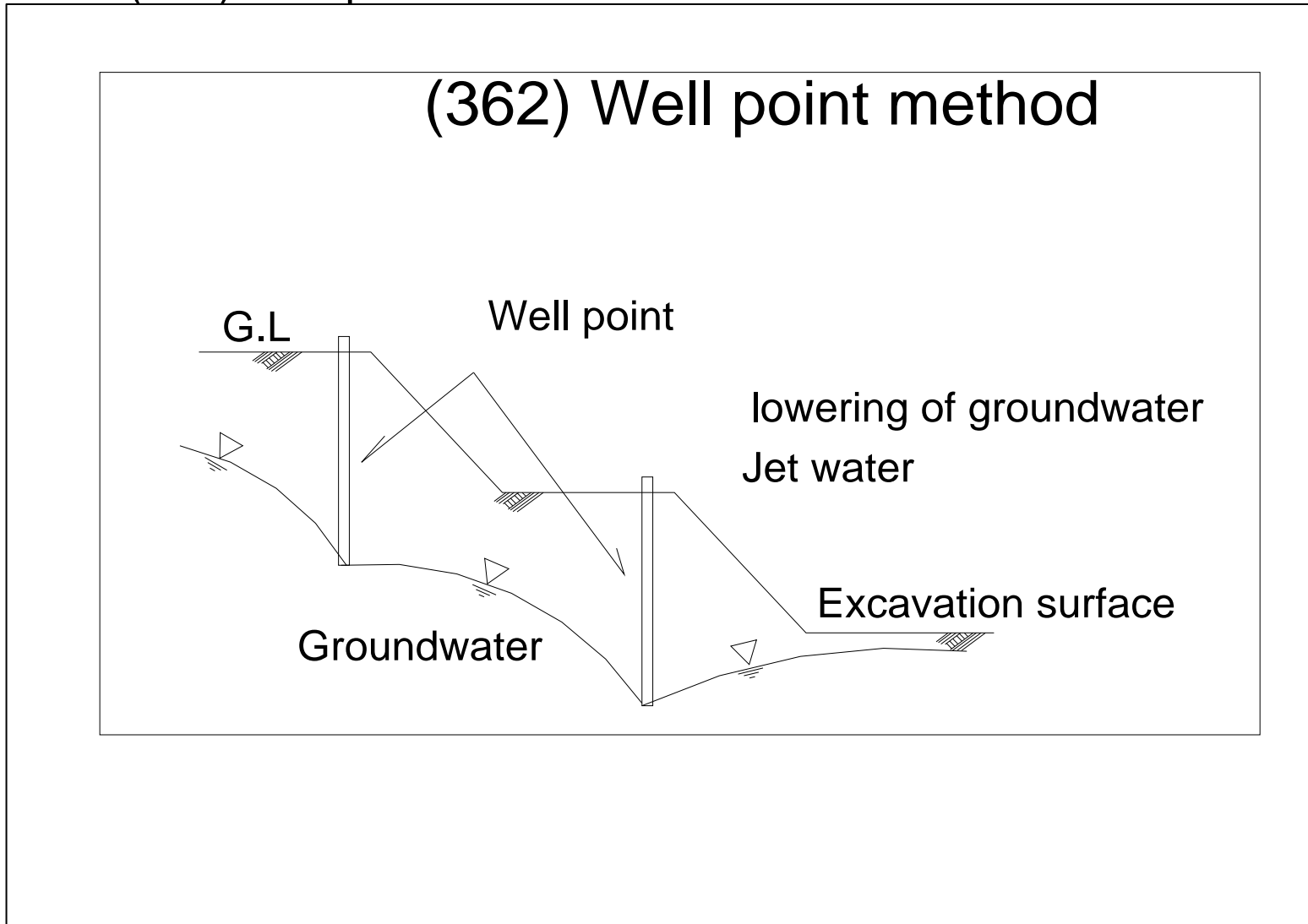
(361) Impact box

(361) Impact box

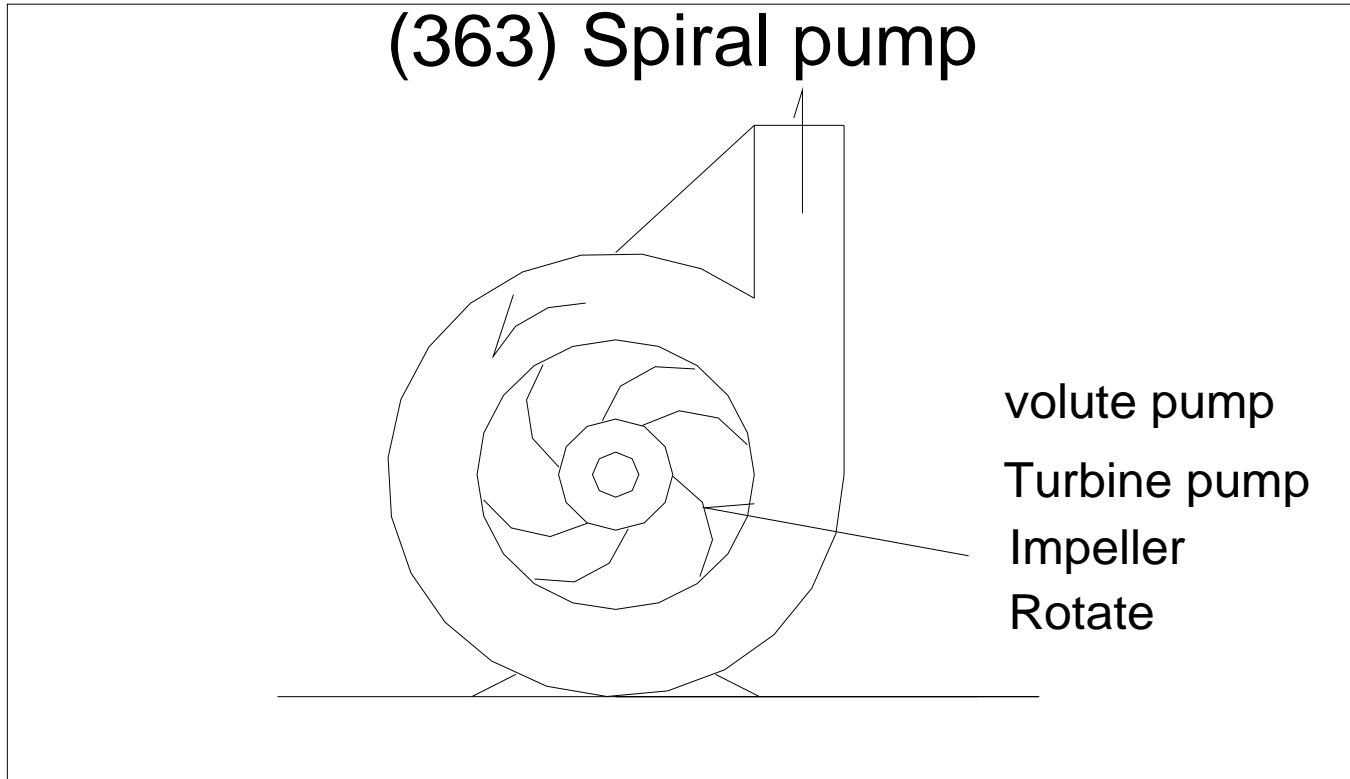


Impact-type reduction

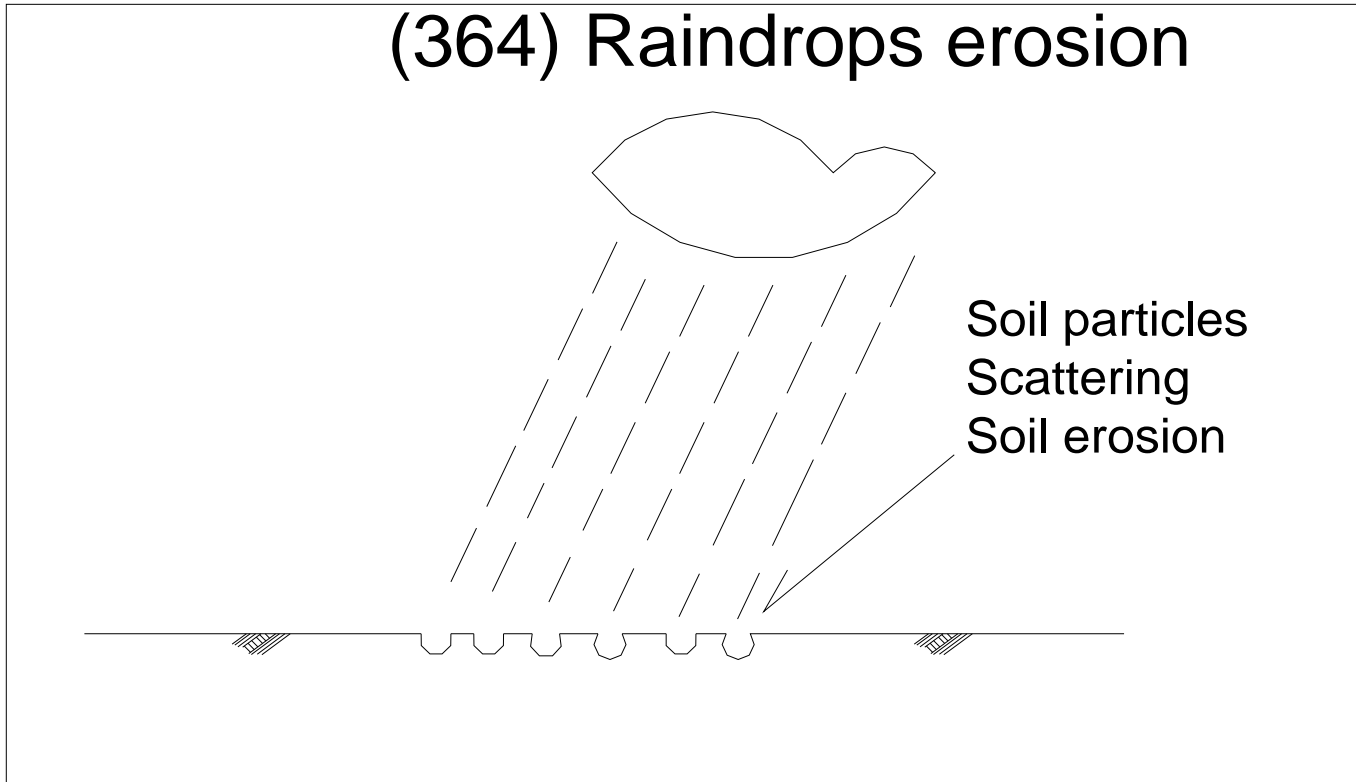
(362) Well point method



(363) Spiral pump

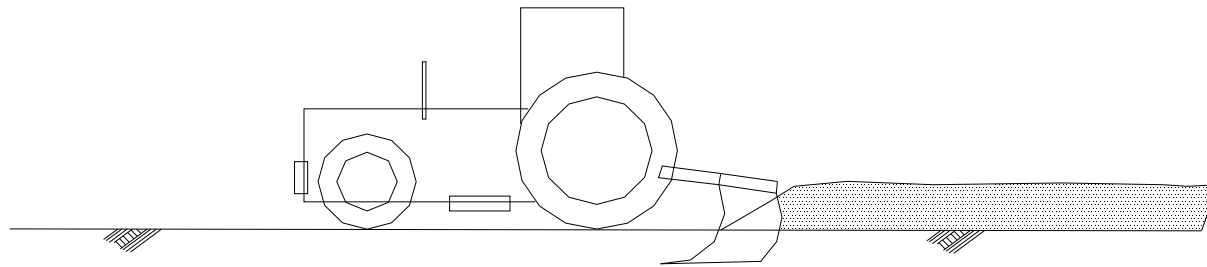


(364) Raindrops erosion



(365) Ridger

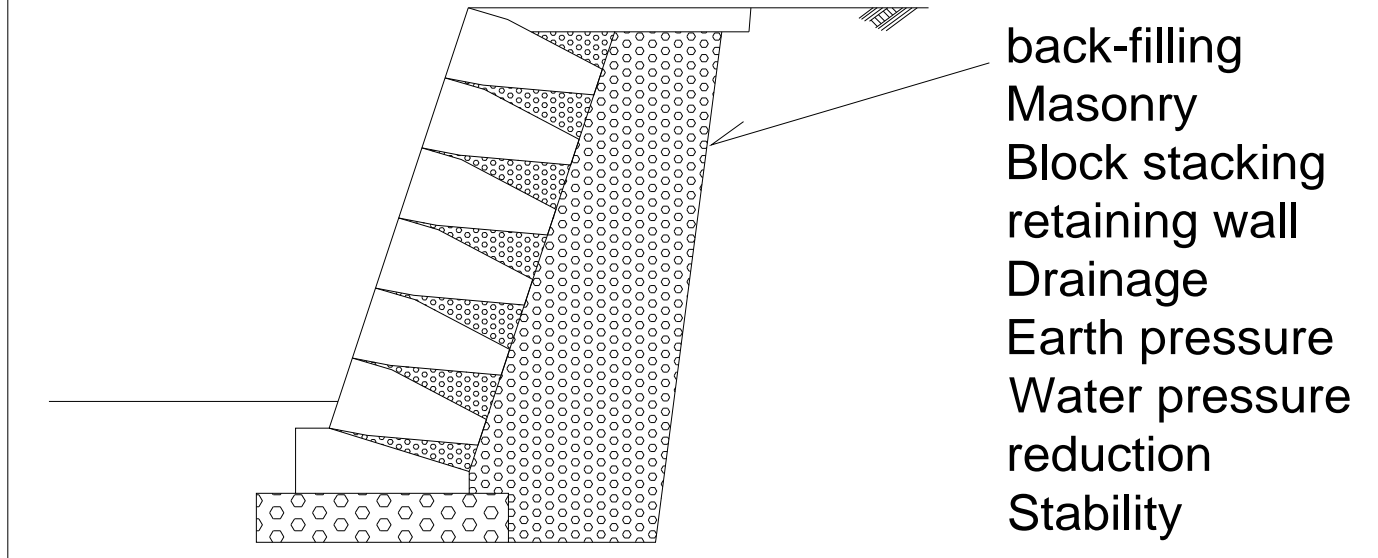
(365) Ridger



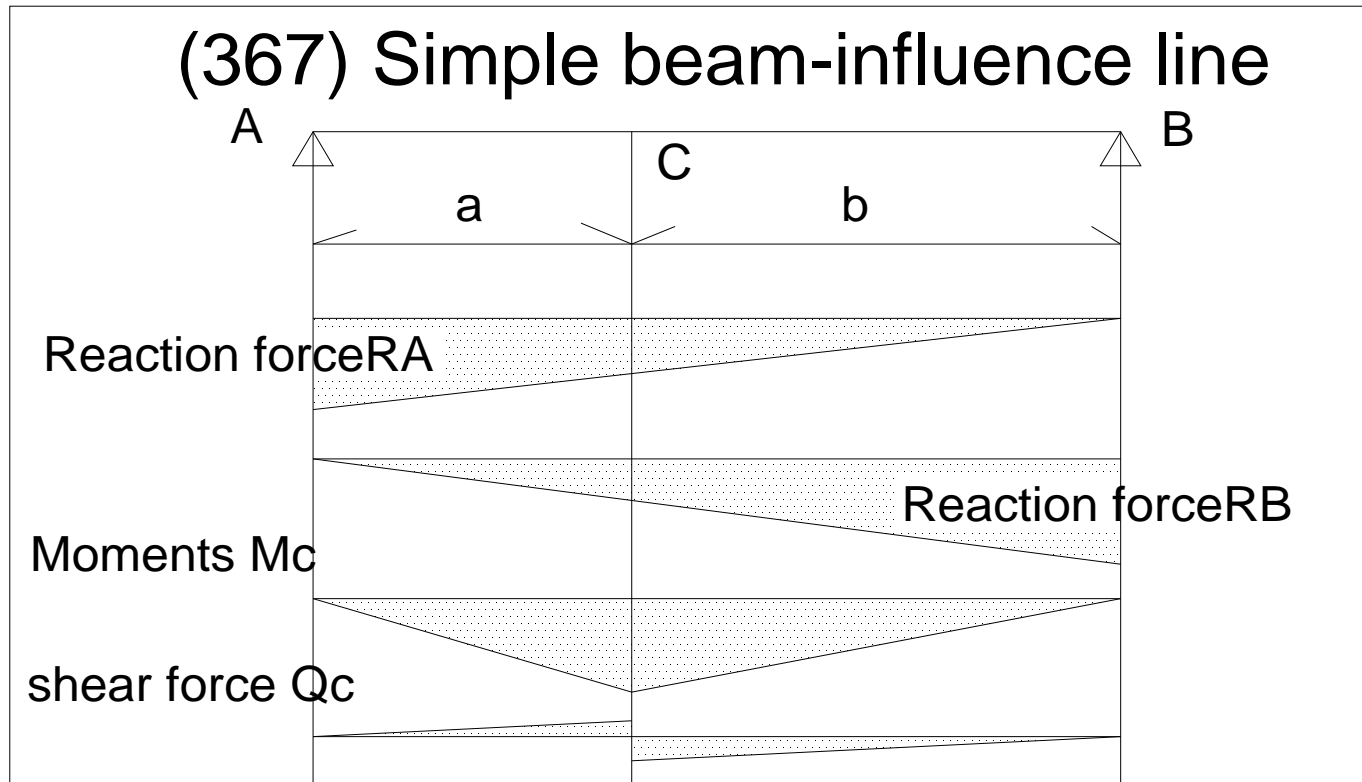
Tractor
Traction
earthing up, moulding

(366) back-filling

(366) back-filling

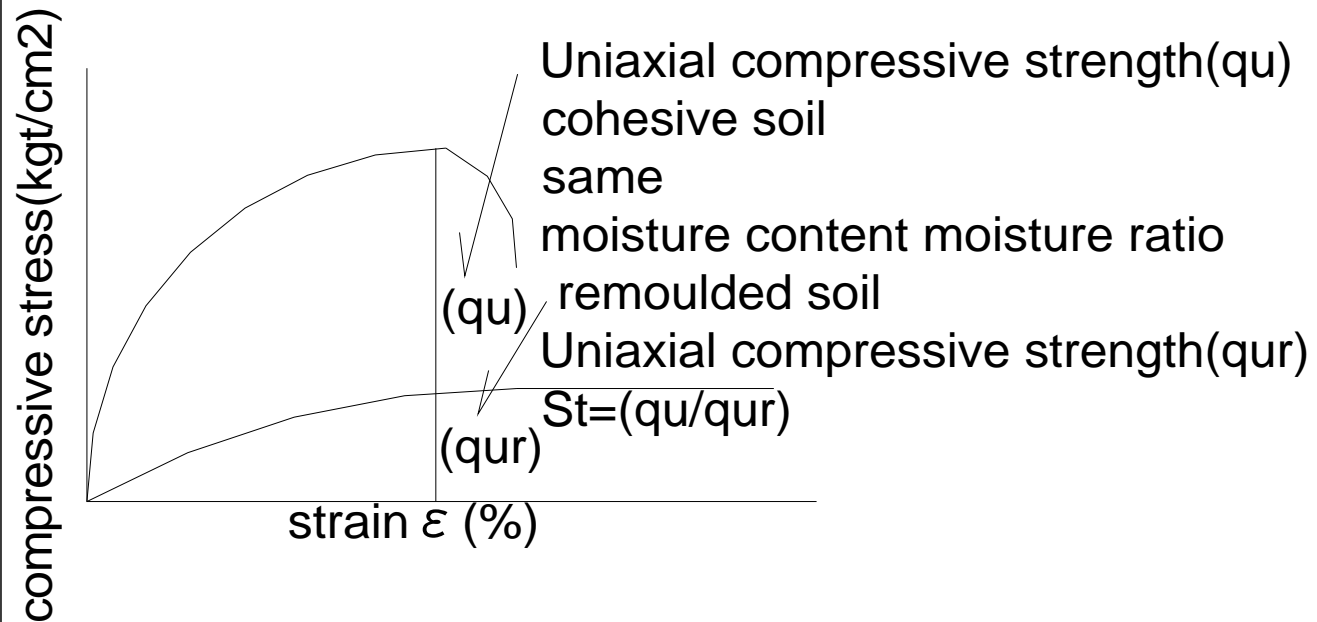


(367) Simple beam-influence line

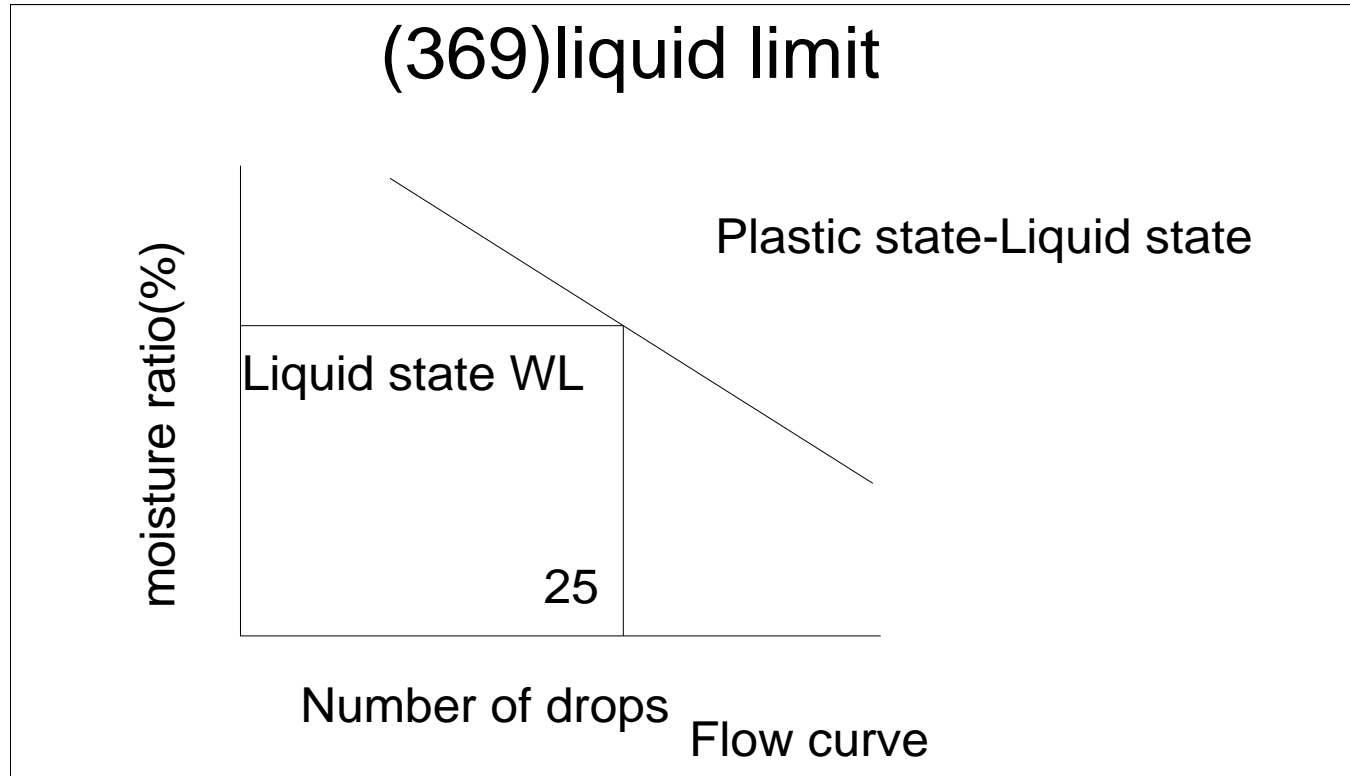


(368)sensitivity ratio(St)

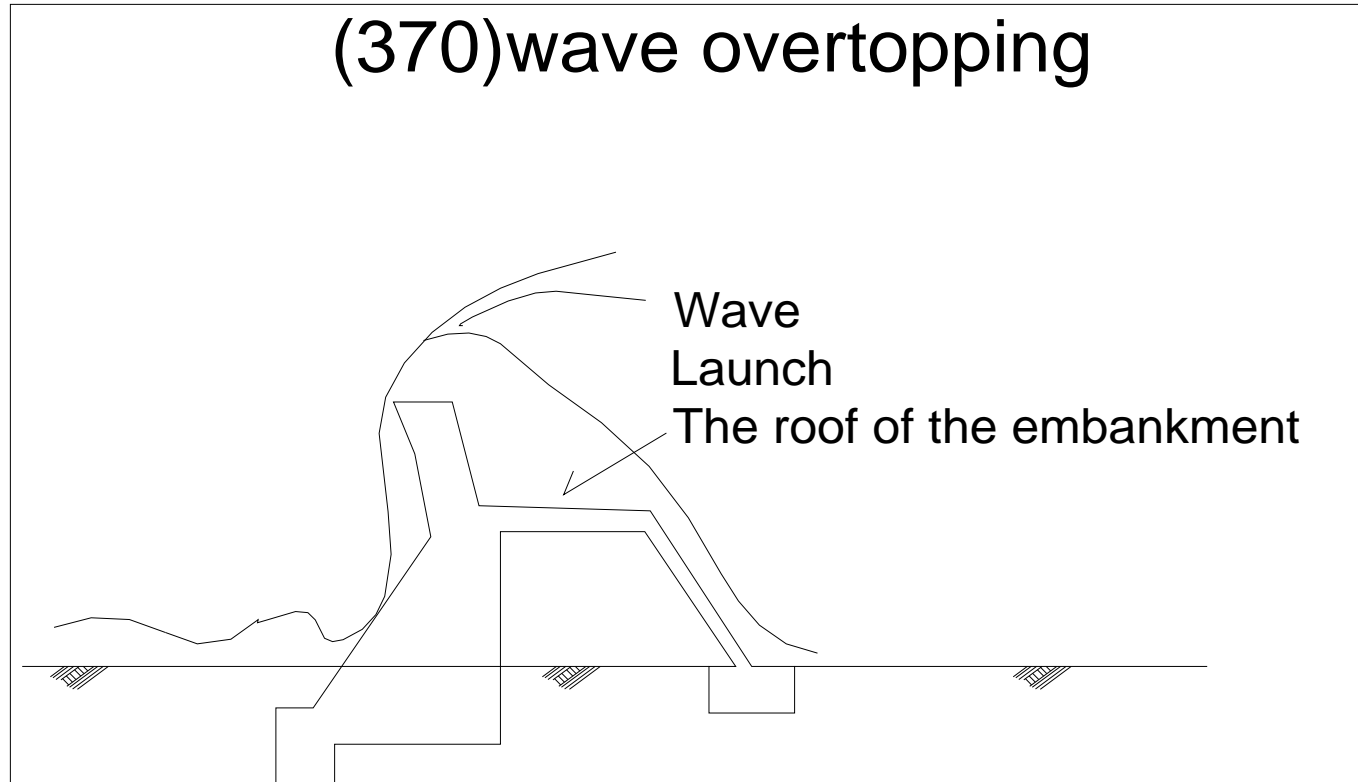
(368)sensitivity ratio(St)



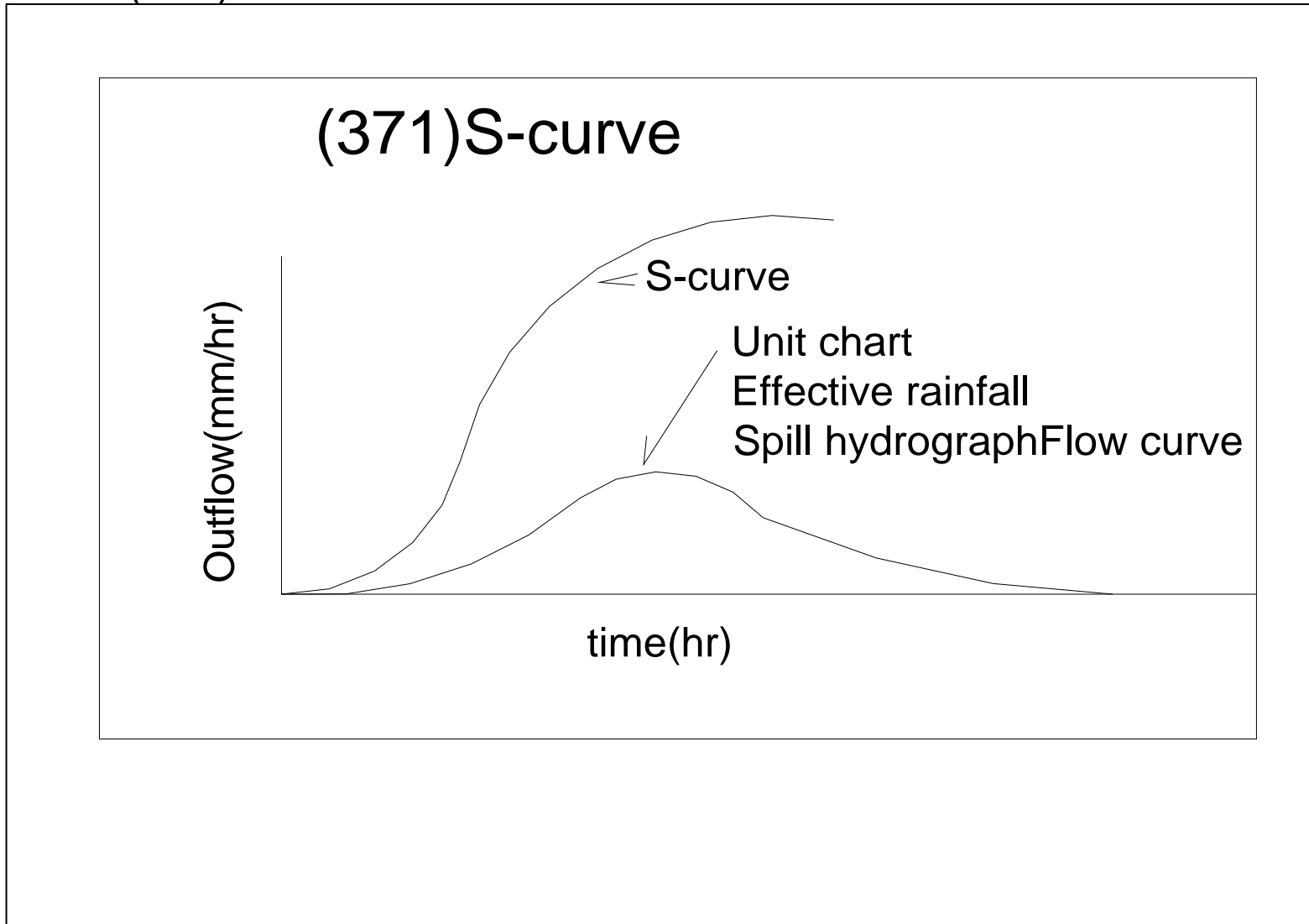
(369)liquid limit



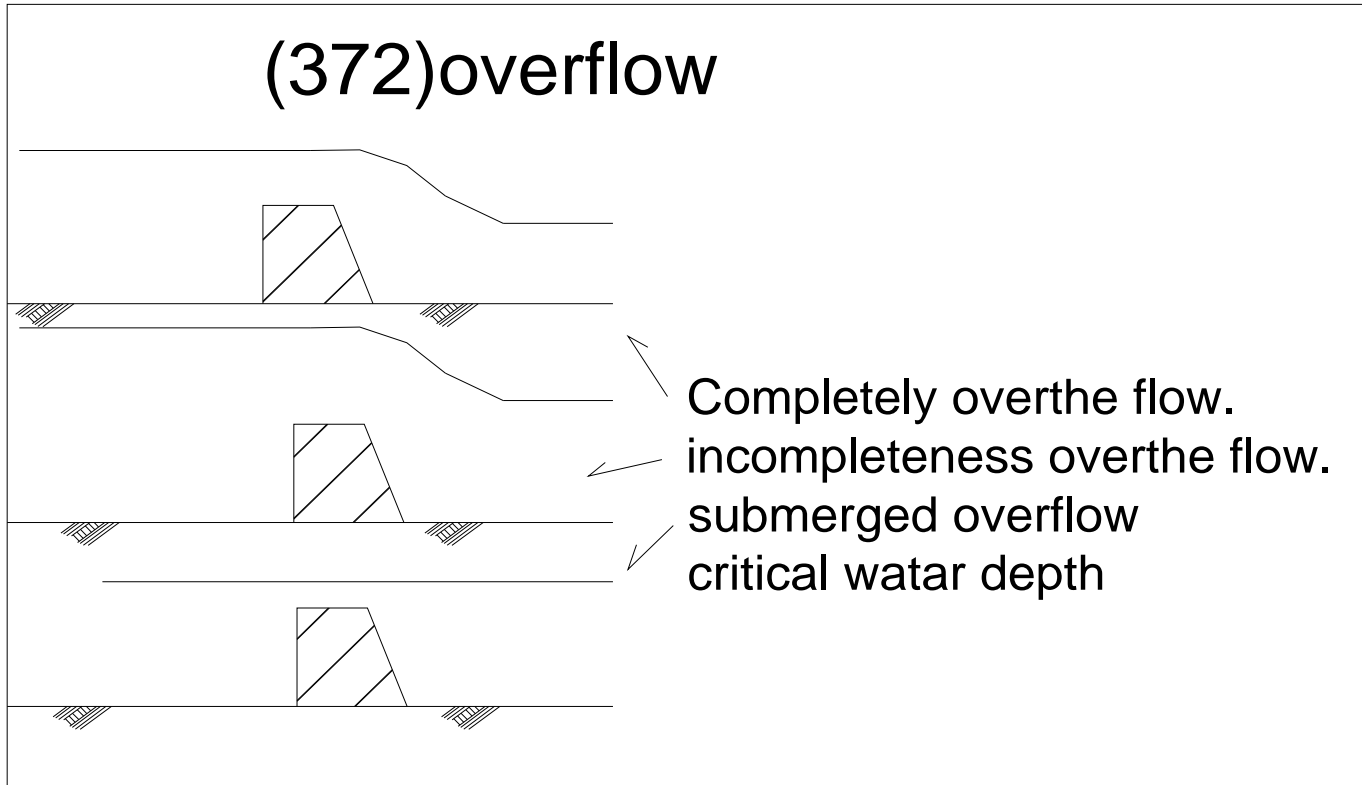
(370)wave overtopping



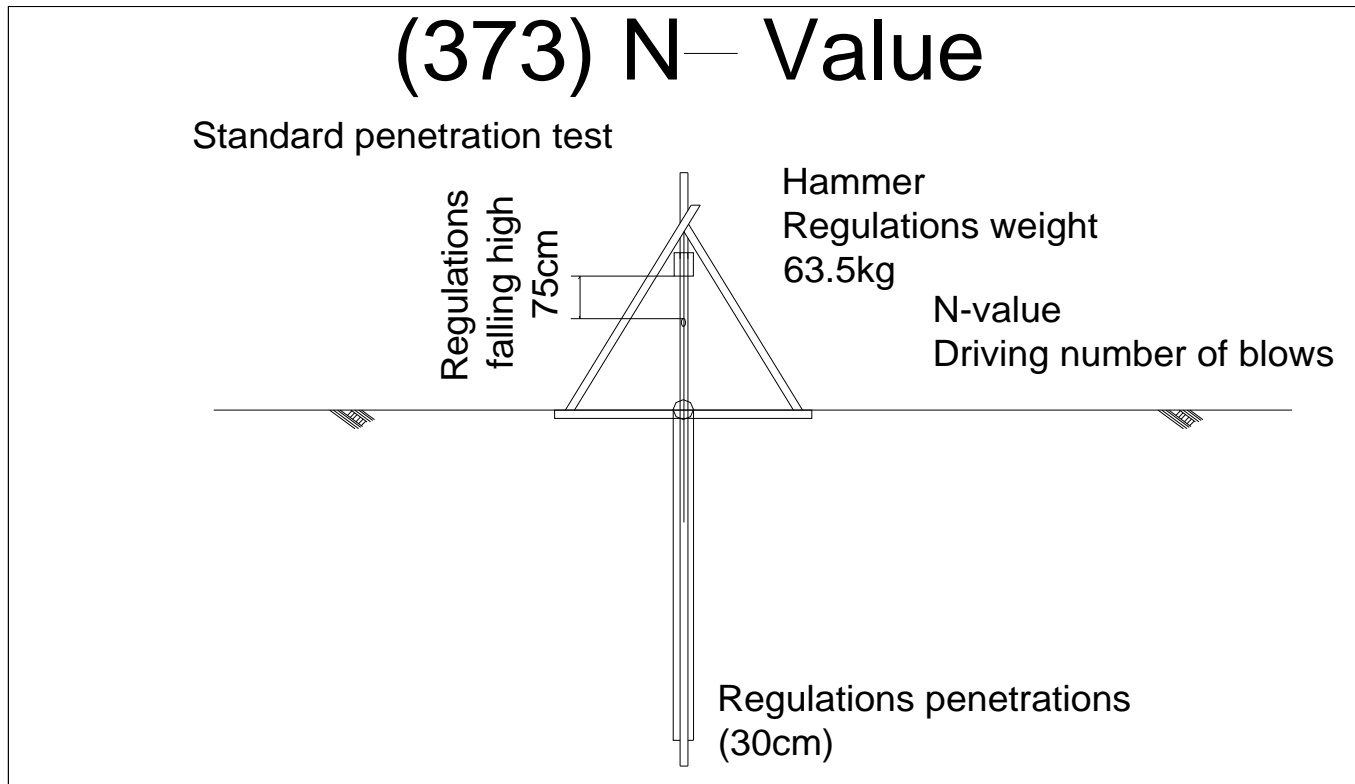
(371)S-curve



(372)overflow



(373) N-Value



(374) geologic columnar section

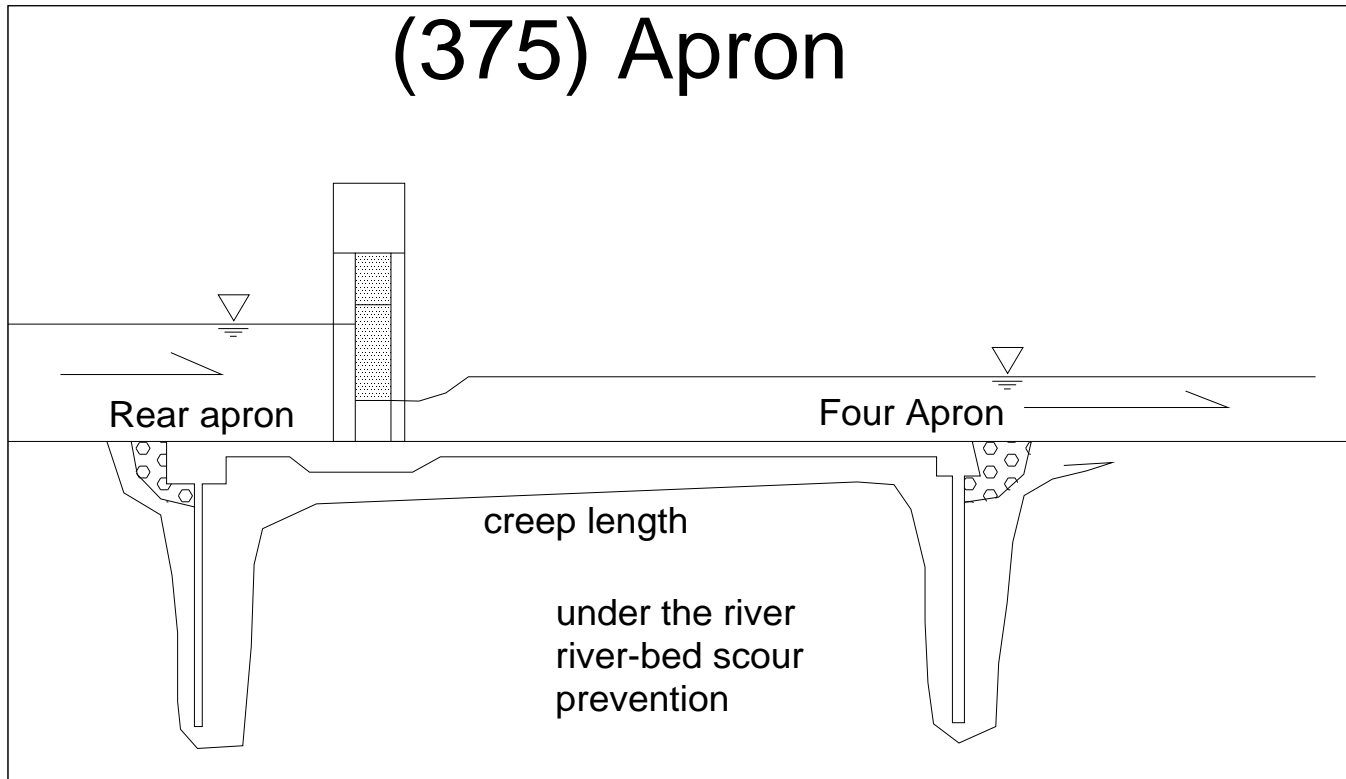
(374) geologic columnar section

1	2	3	4	5	6	7	8	9					10				
								11	12	13			14		15	16	
										10cm	20cm	30cm	010	20	30	40	50
																	

- 1 Staff(m)
- 2 altitude(m)
- 3 depth(m)
- 4 Layer thickness
- 5 symbol
- 6 Color tone
- 7 soil classification system.
- 8 Observation

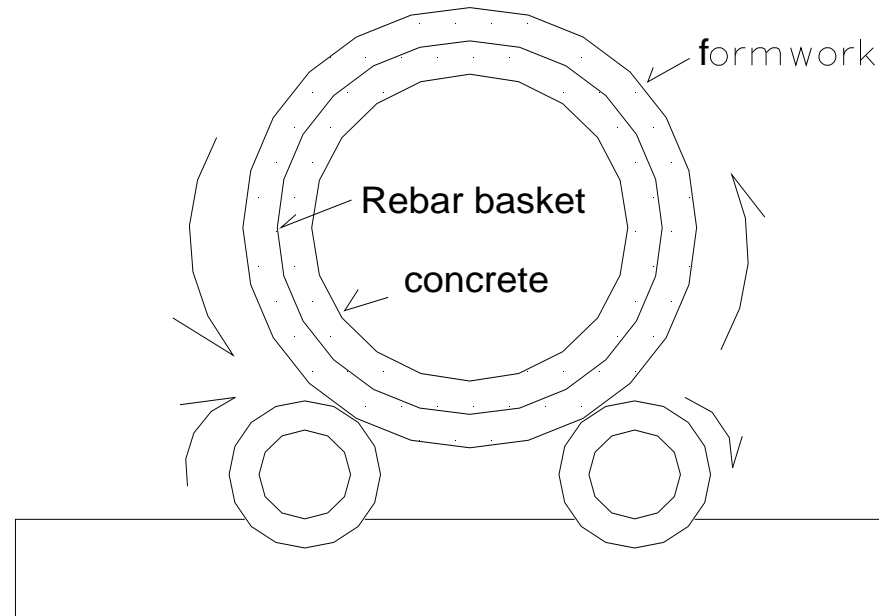
- 9 Standard penetration test
- 10 sample
- 11 depth(m)
- 12 N-value
- 13 Number of hits/10cm
- 14 N-value
- 15 collection method
- 16 Sampling depth(m)

(375) Apron

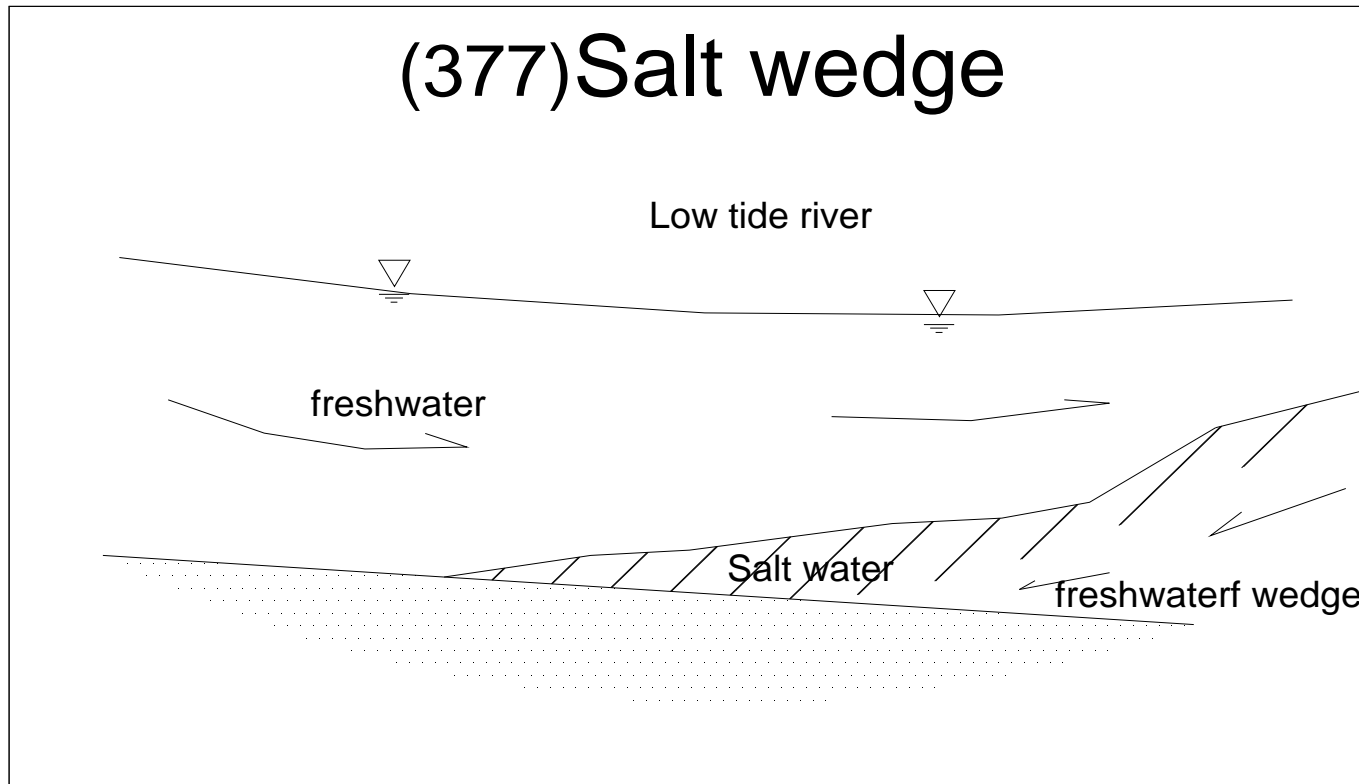


(376)Centrifugal reinforced concrete

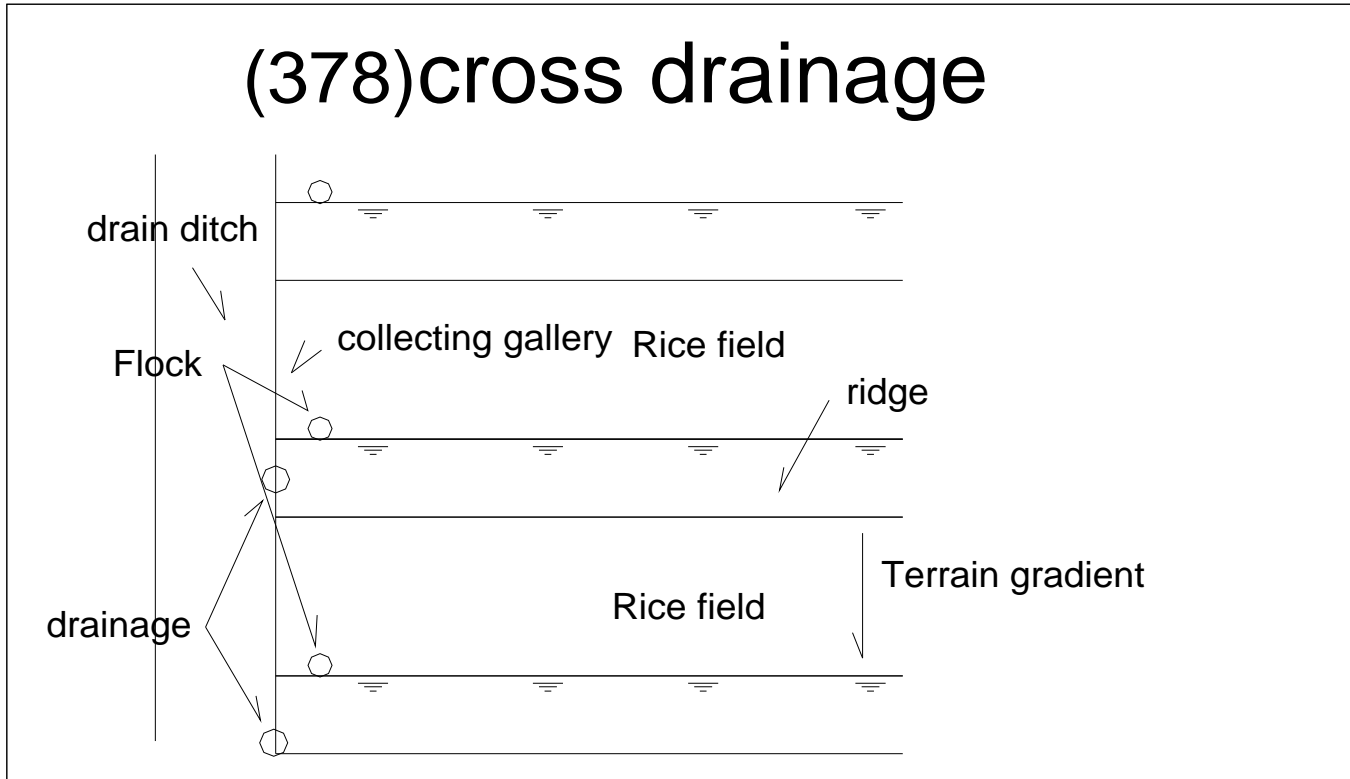
(376)Centrifugal reinforced concrete



(377)Salt wedge

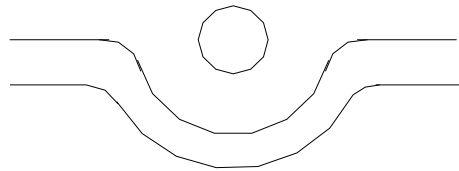


(378)cross drainage



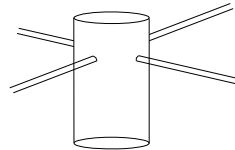
(379)cross culvert

(379)cross culvert



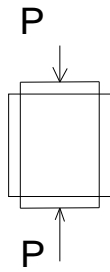
Cross siphon

underground installation

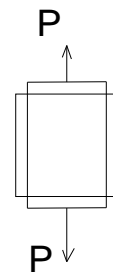


(380)stress

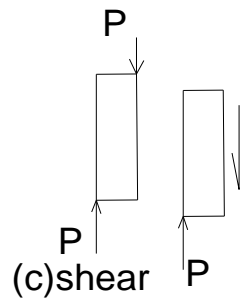
(380)stress



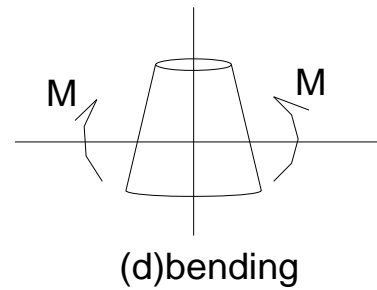
(a)compression



(b)tension



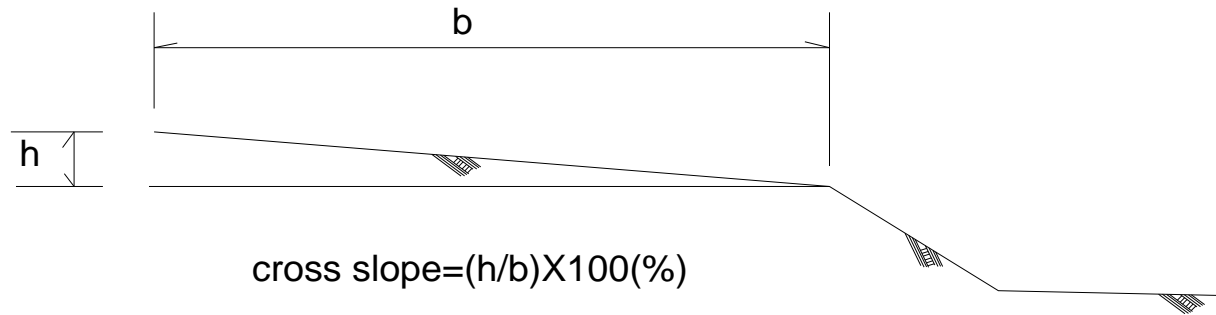
(c)shear



(d)bending

(381)cross slope

(381)cross slope

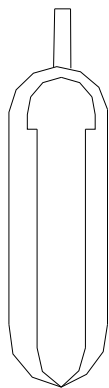


$$\text{cross slope} = (h/b) \times 100(\%)$$

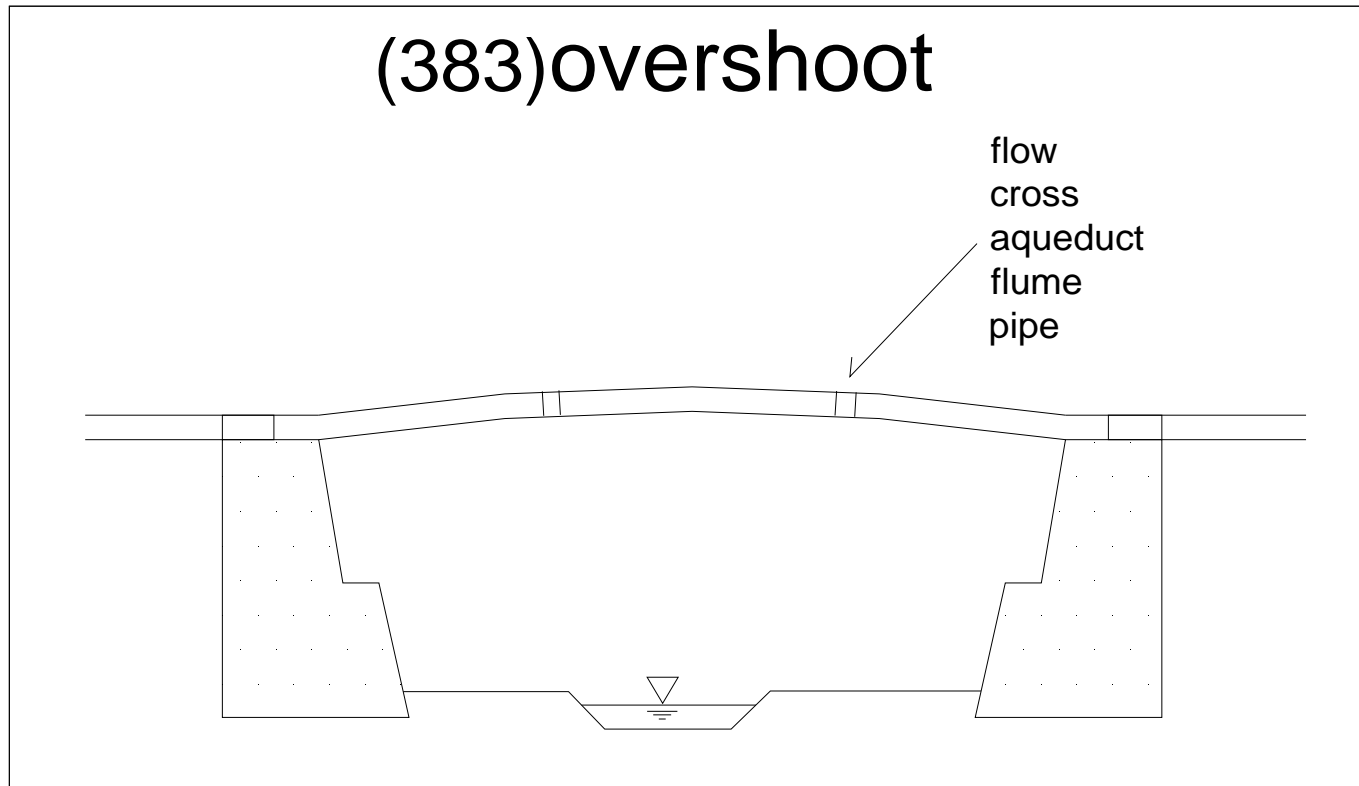
road surface
drainage
pavement
1.5%? 2.0%
gravel

(382)auger

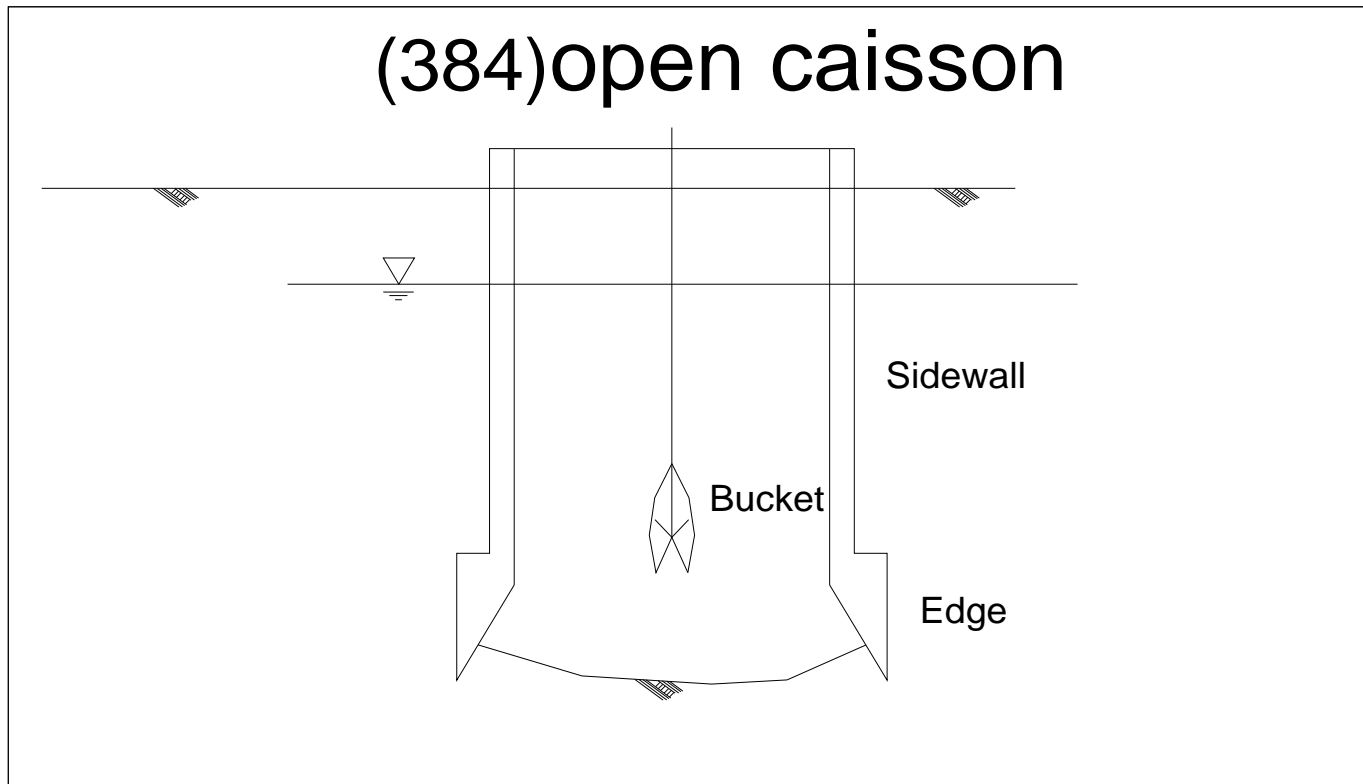
(382)auger



(383)overshoot



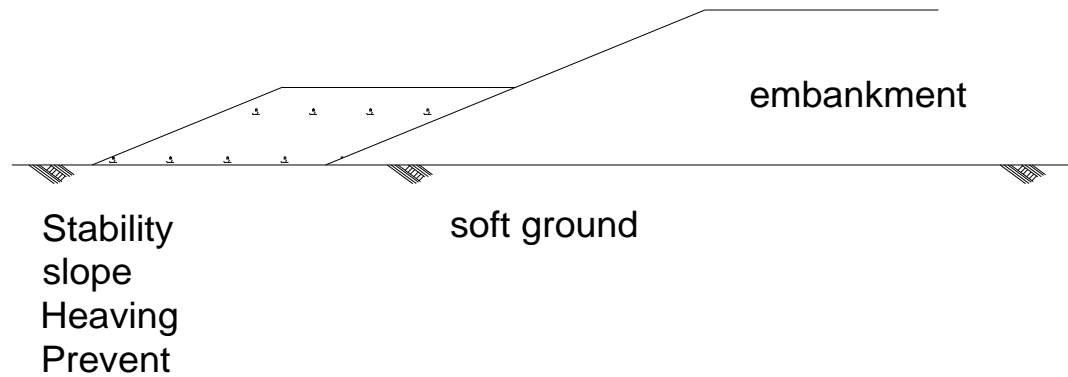
(384)open caisson



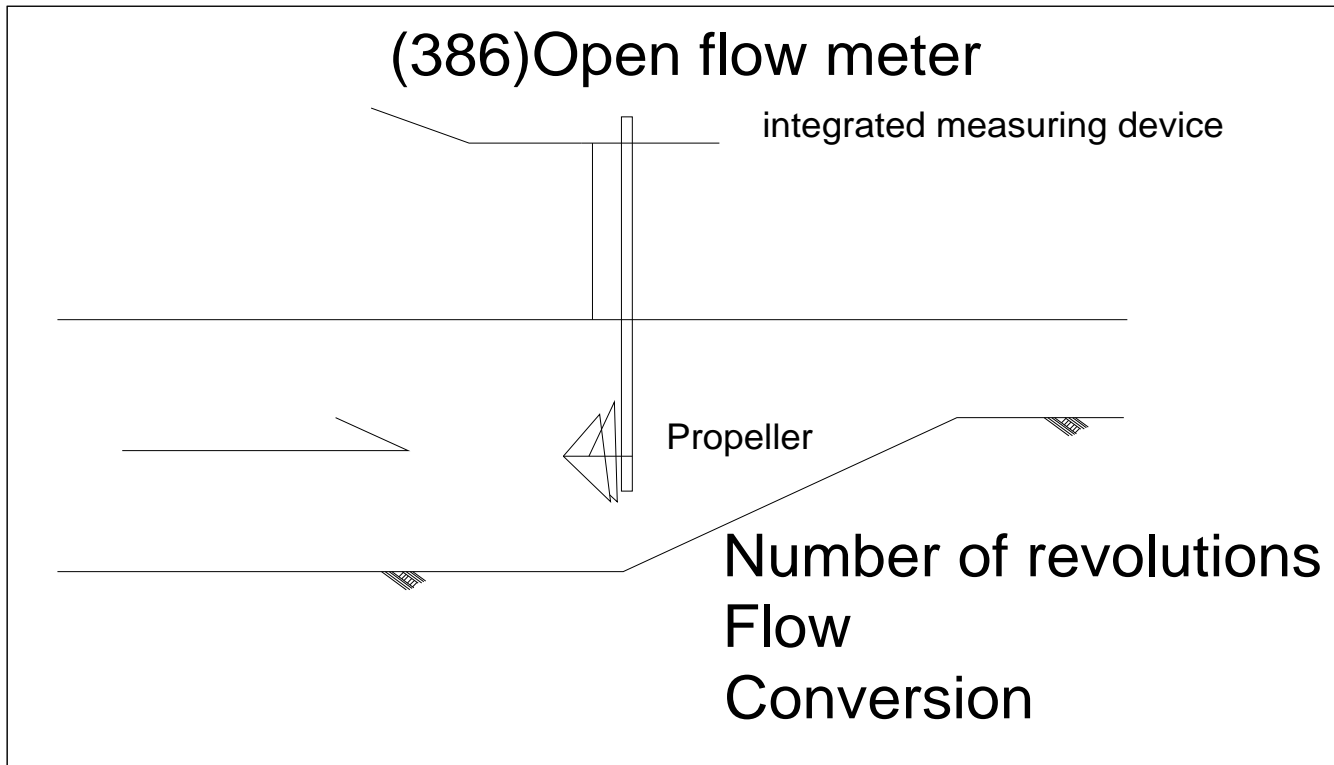
(385)loading berm; counterweight fill

(385)loading berm; counterweight fill

loading berm
counterweight fill

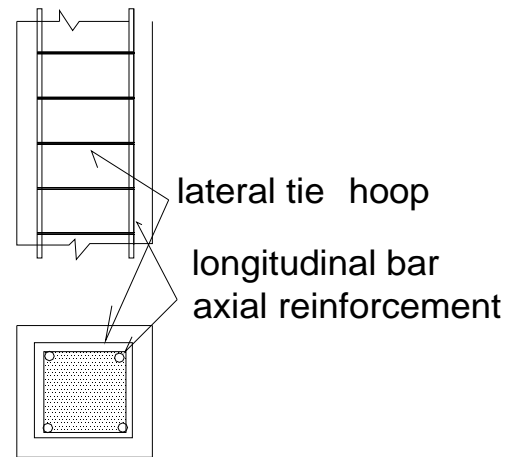


(386)Open flow meter



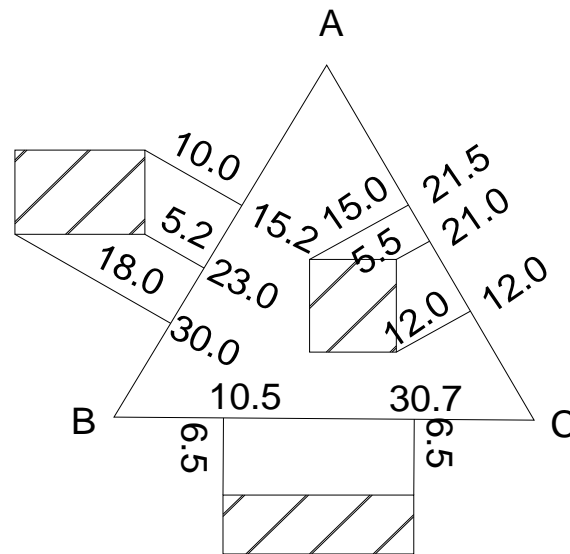
(387)lateral tie hoop

(387)lateral tie hoop



(388)Offset survey

(388)Offset survey



field notebook

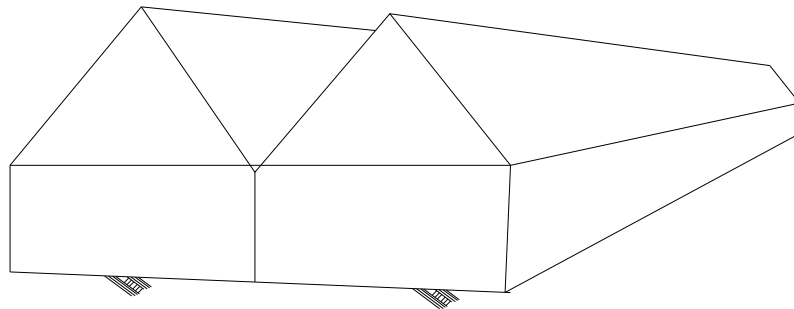
Plan sketch

Vertical distance

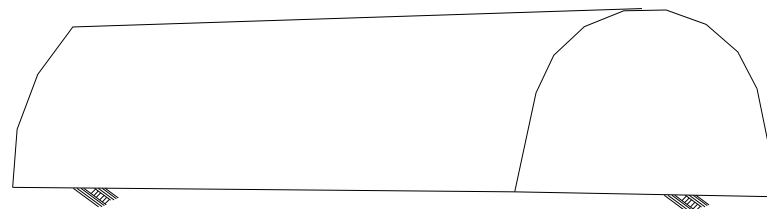
Siding

(389)Greenhouse

(389)Greenhouse



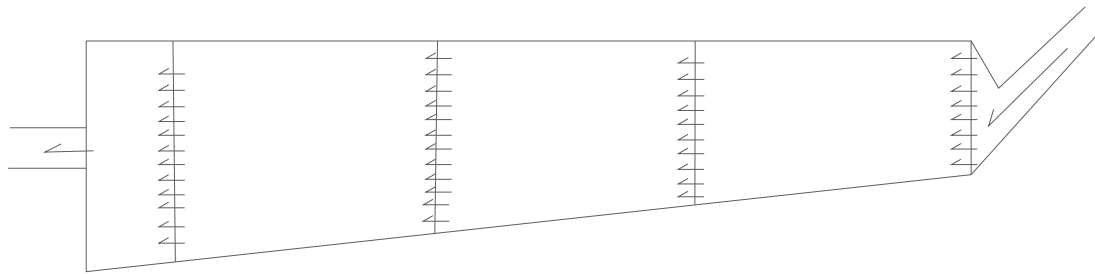
Steel-framed glass



Pipe Houses

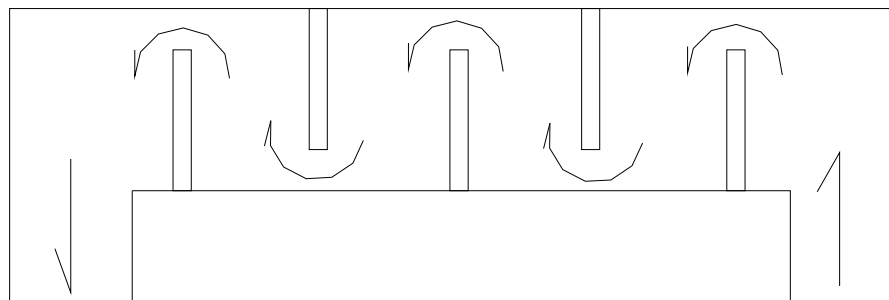
(390)water warming facilities1

(390)water warming facilities1



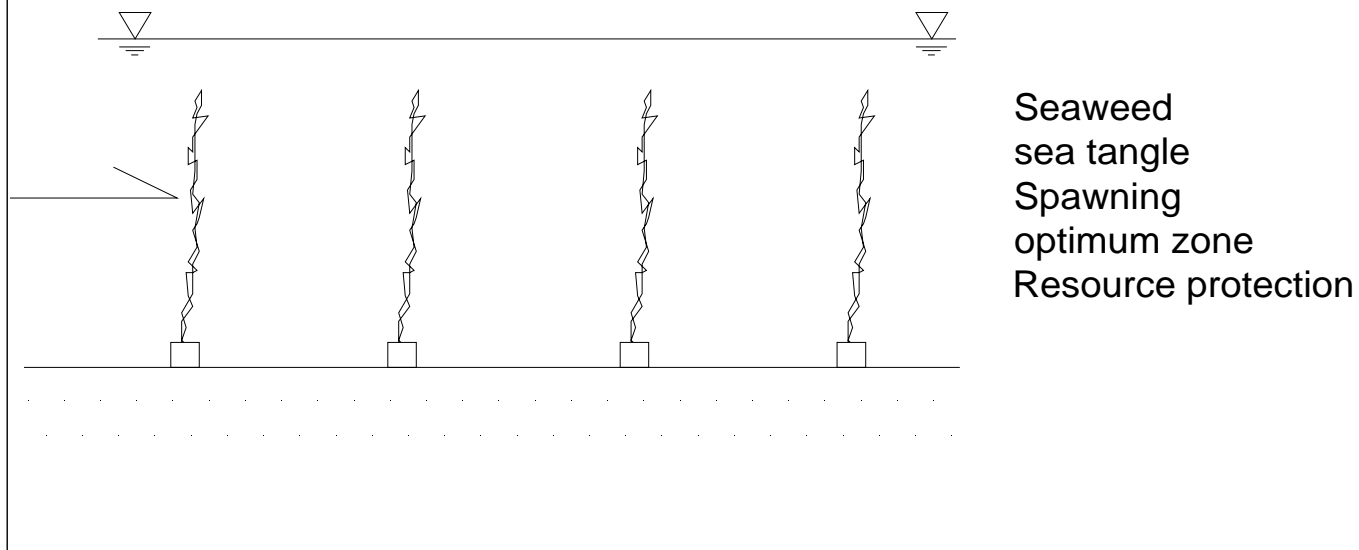
(391)water warming facilities2

(391)water warming facilities2

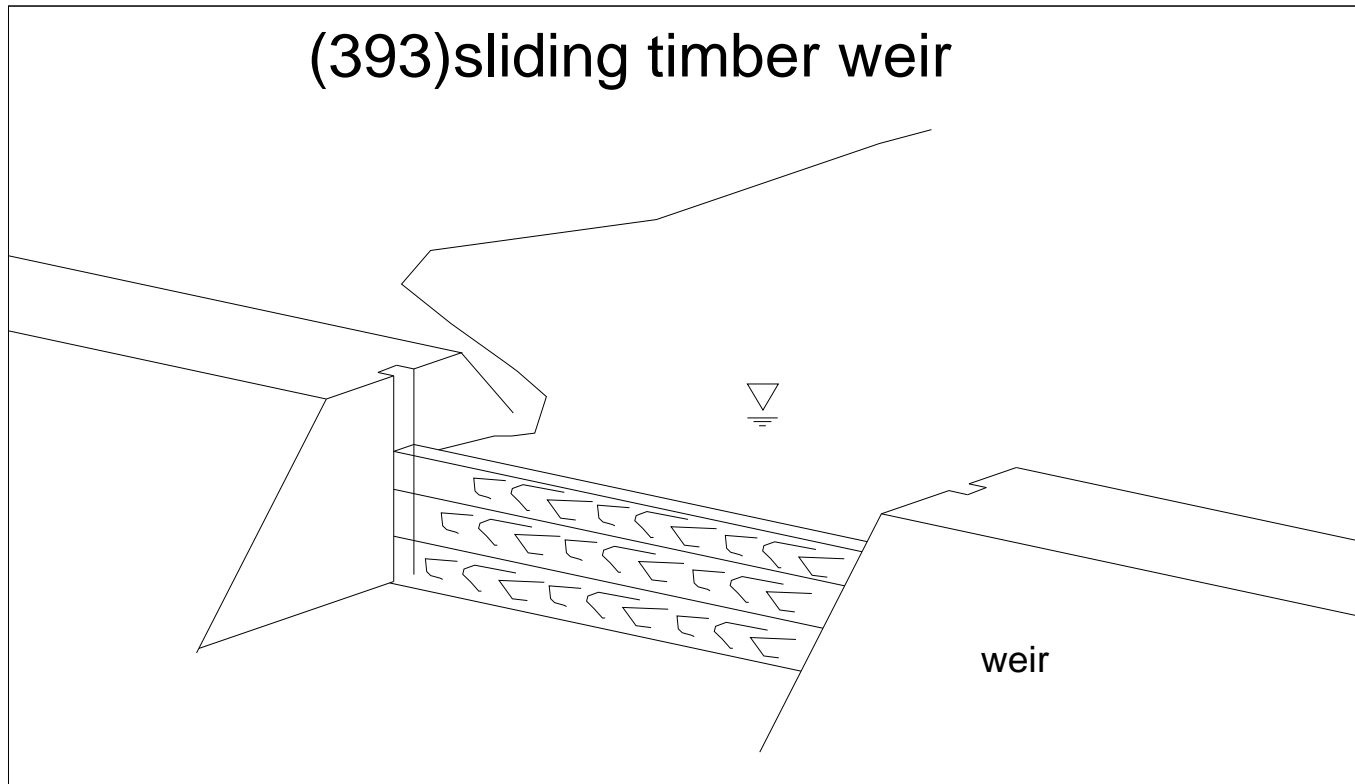


(392) Seaweed field

(392) Seaweed field

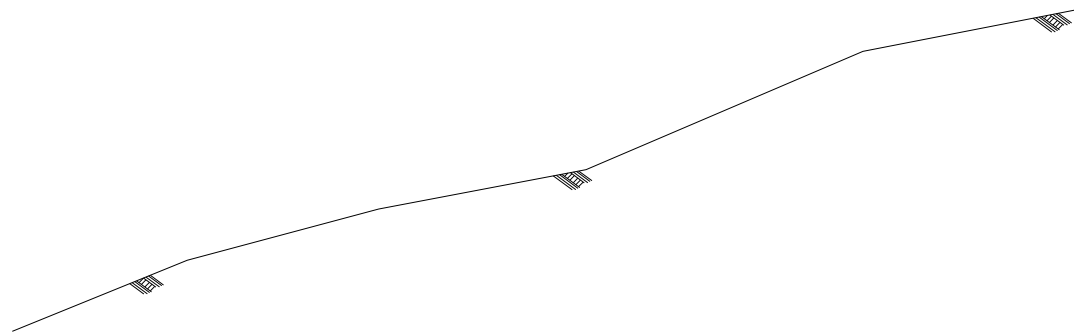


(393)sliding timber weir



(394)The mountains reclamation-cultivation

(394)The mountains reclamation-cultivation

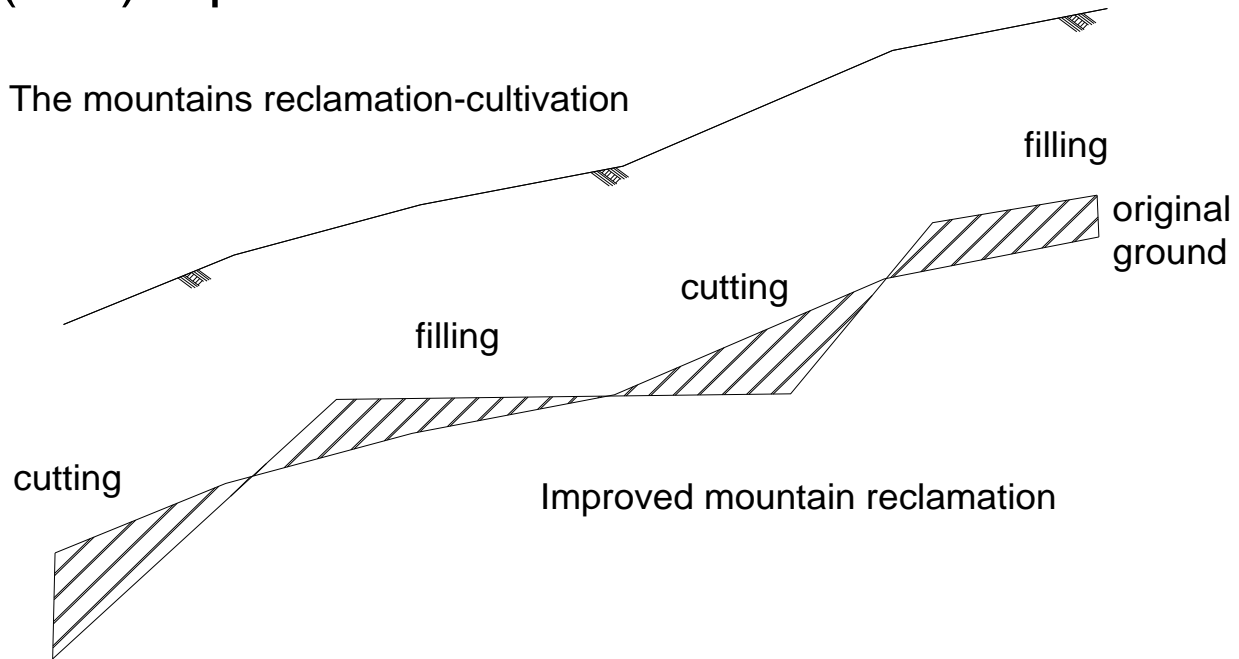


The mountains reclamation-cultivation

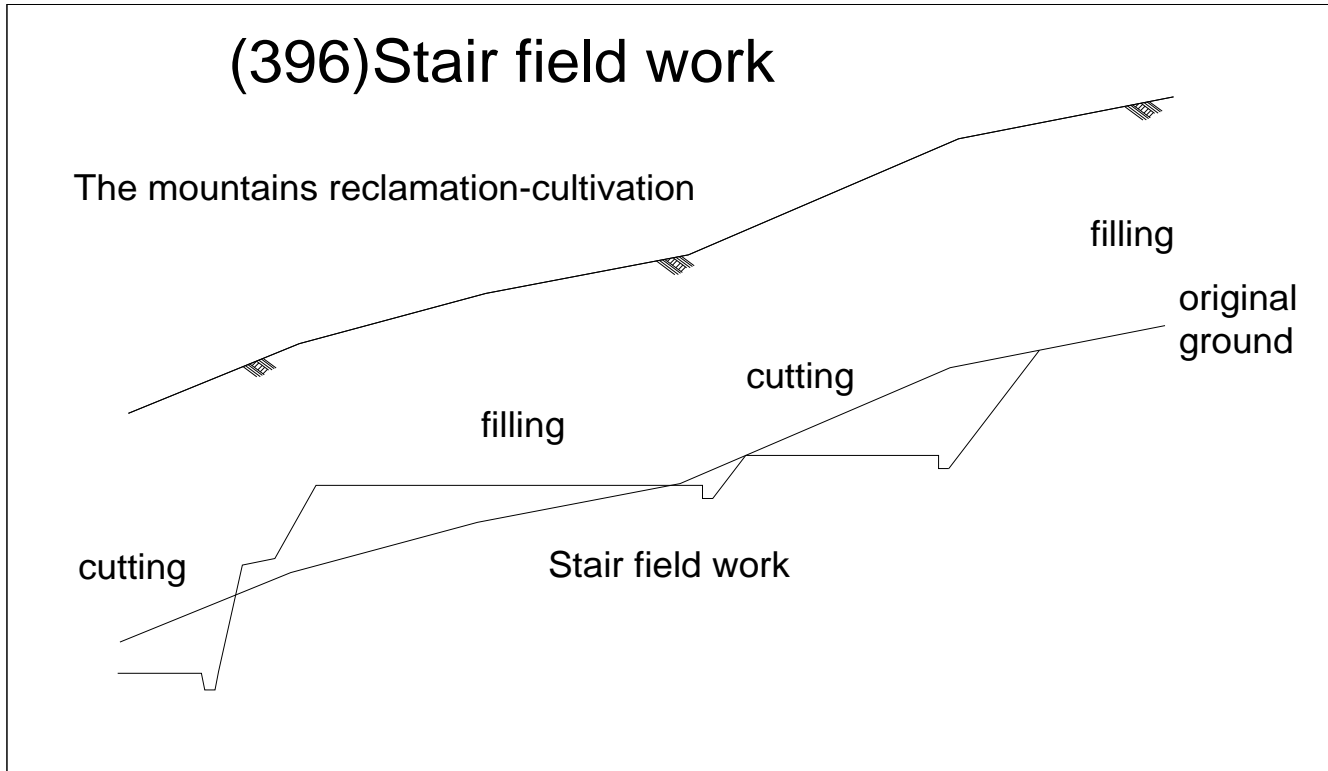
(395) Improved mountain reclamation

(395) Improved mountain reclamation

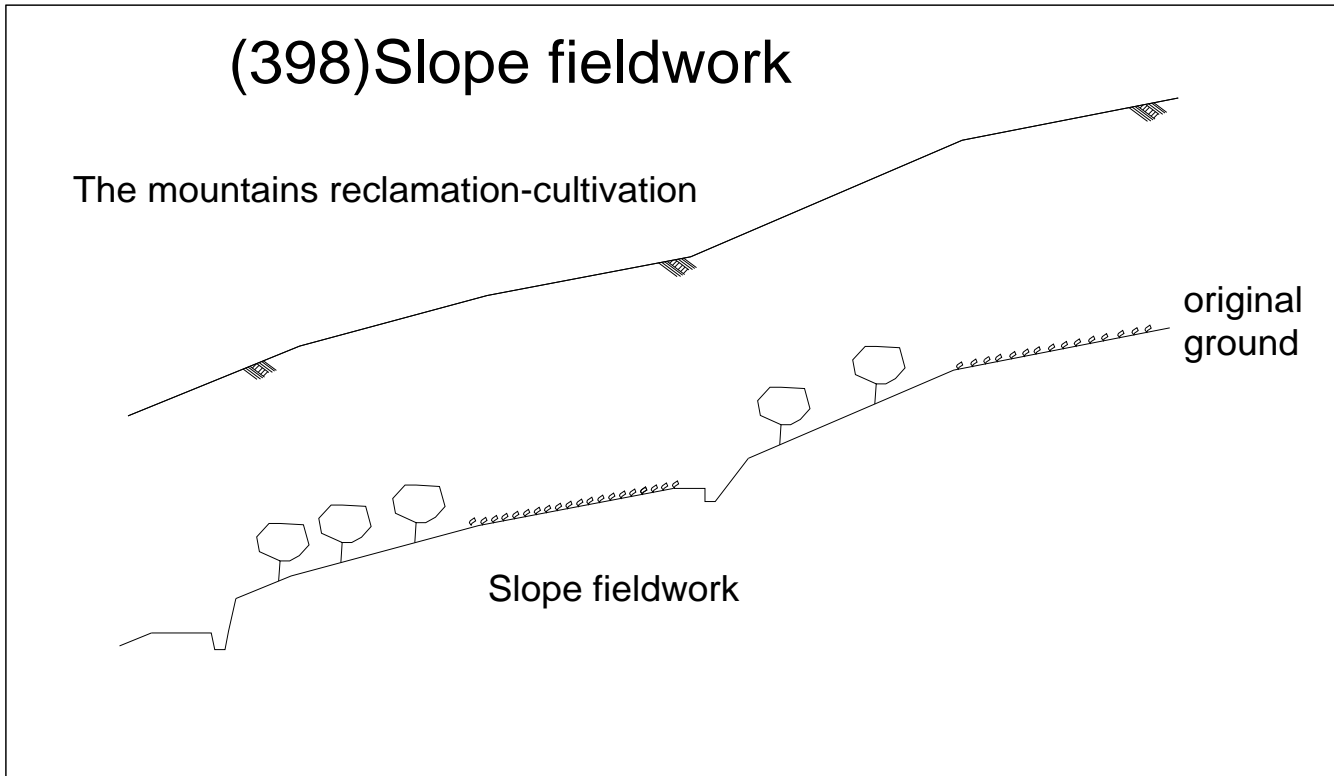
The mountains reclamation-cultivation



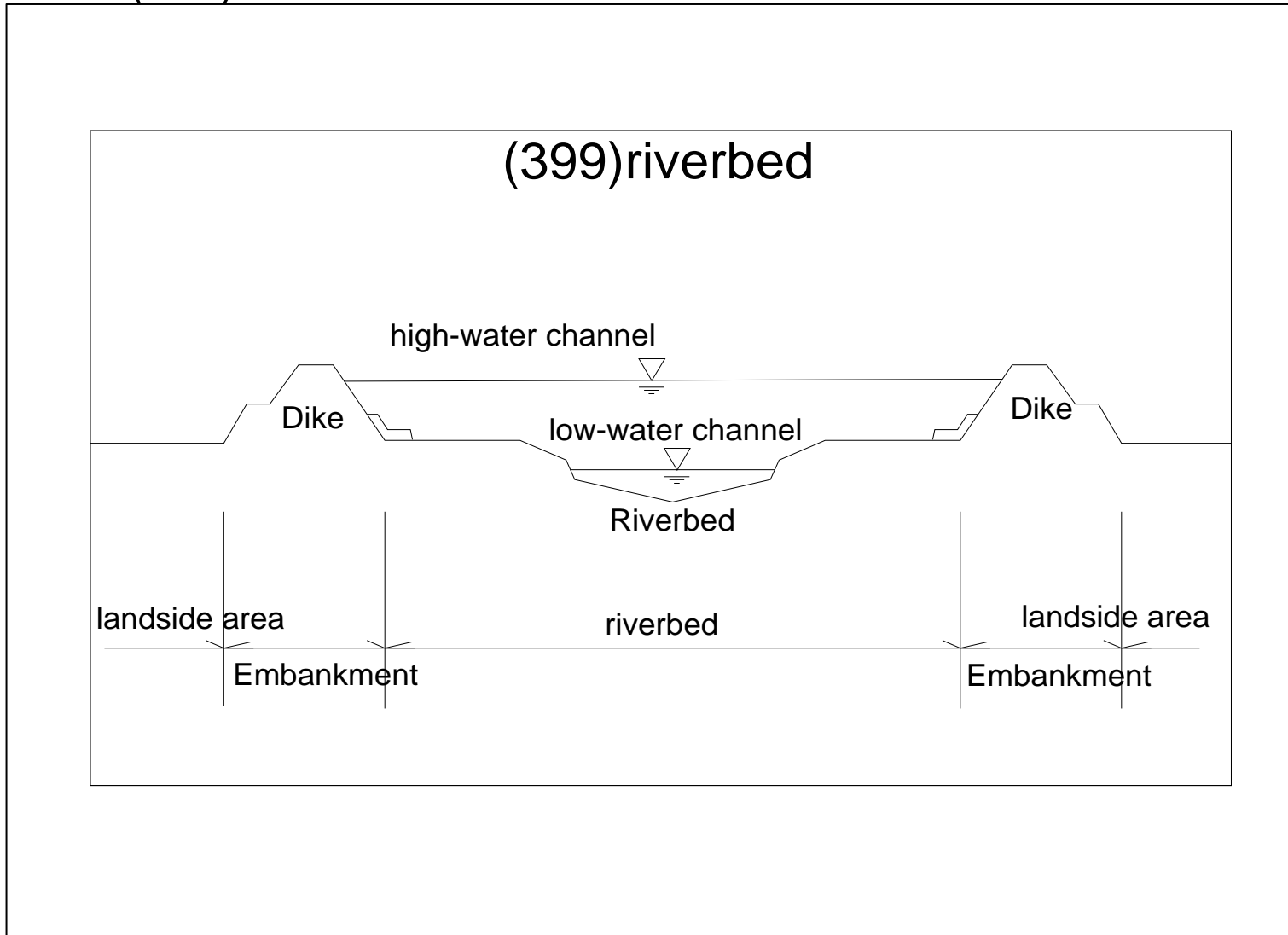
(396)Stair field work



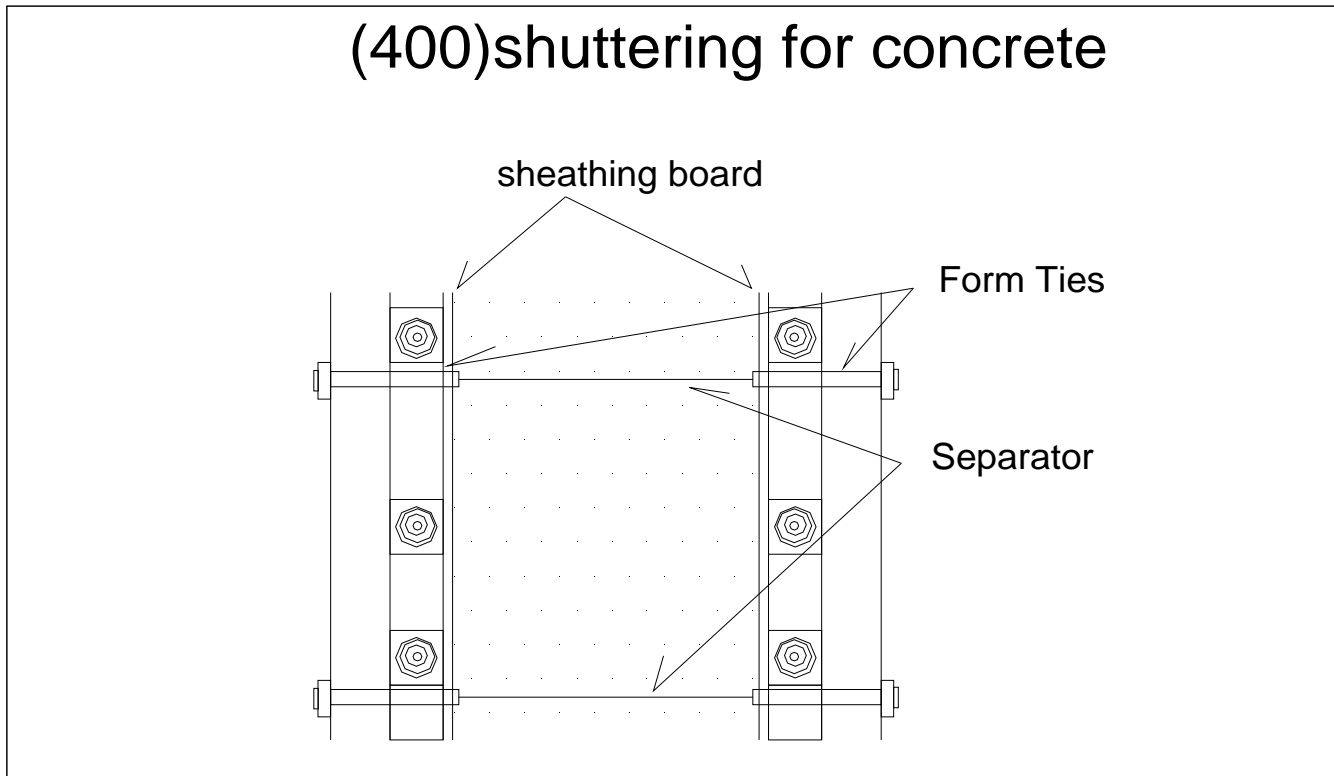
(398) Slope fieldwork



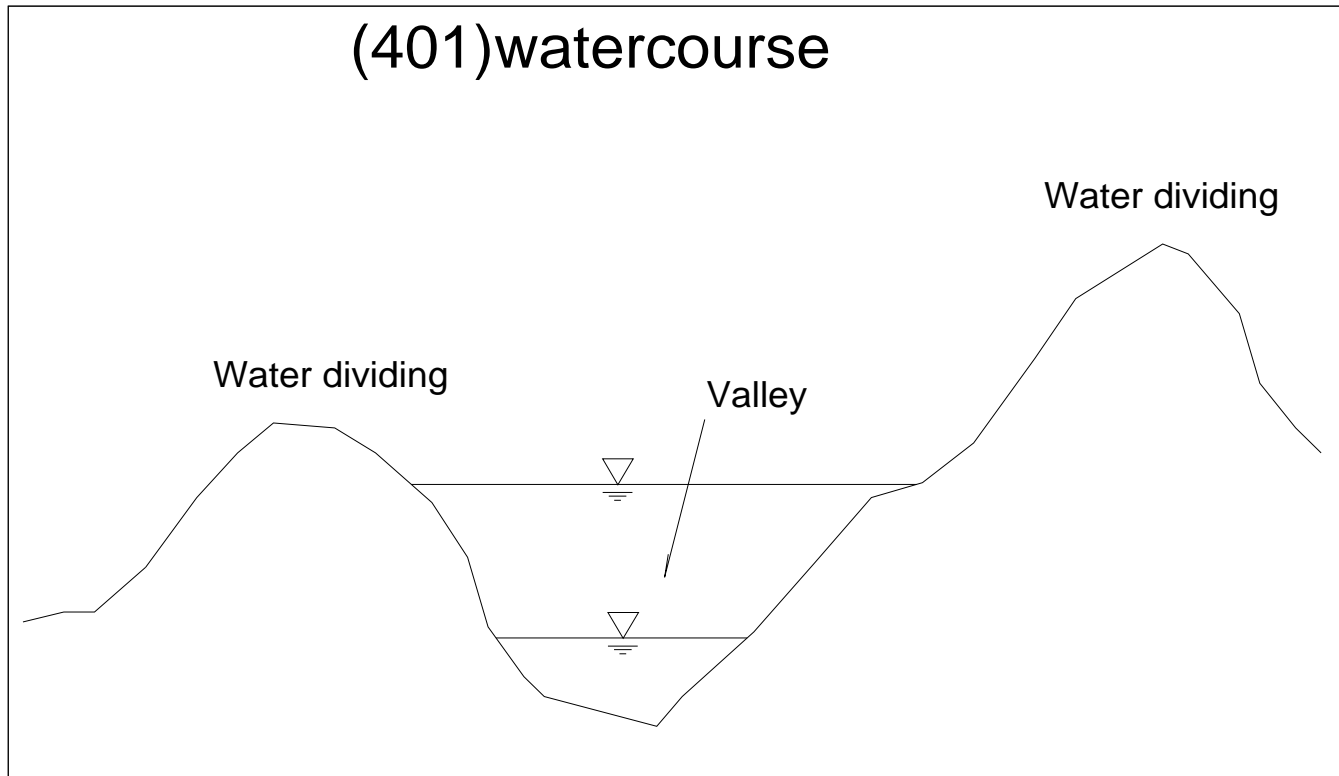
(399)riverbed



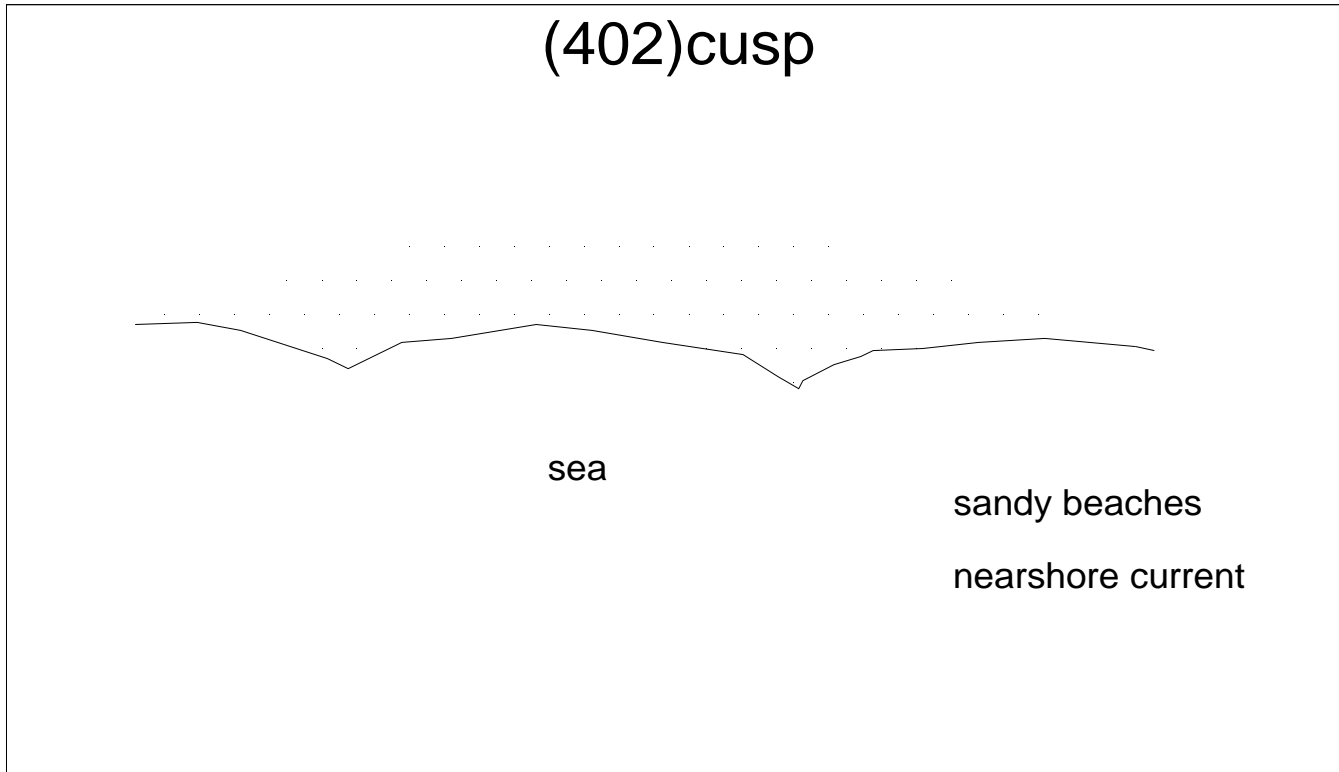
(400)shuttering for concrete



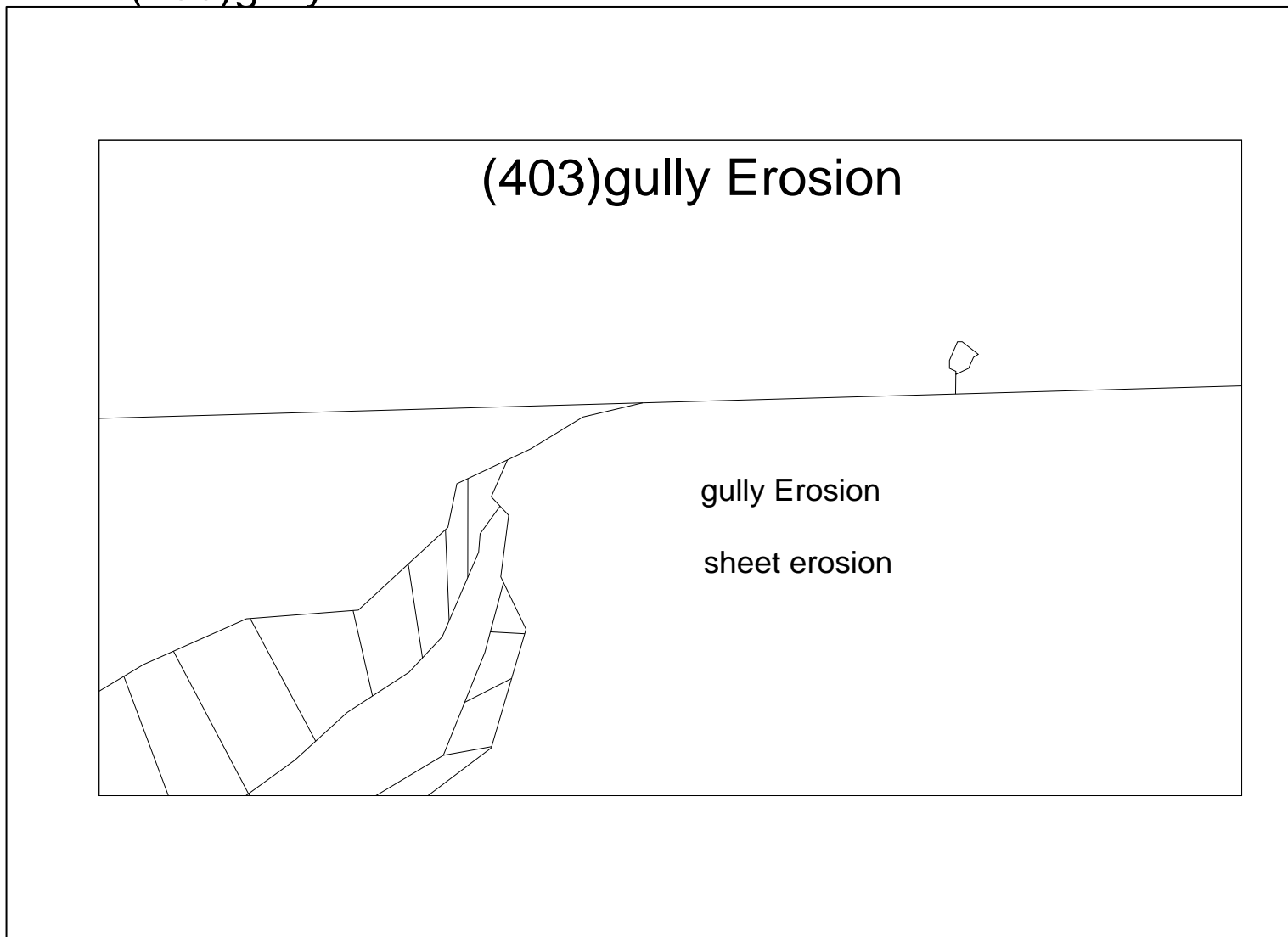
(401)watercourse



(402)cusp

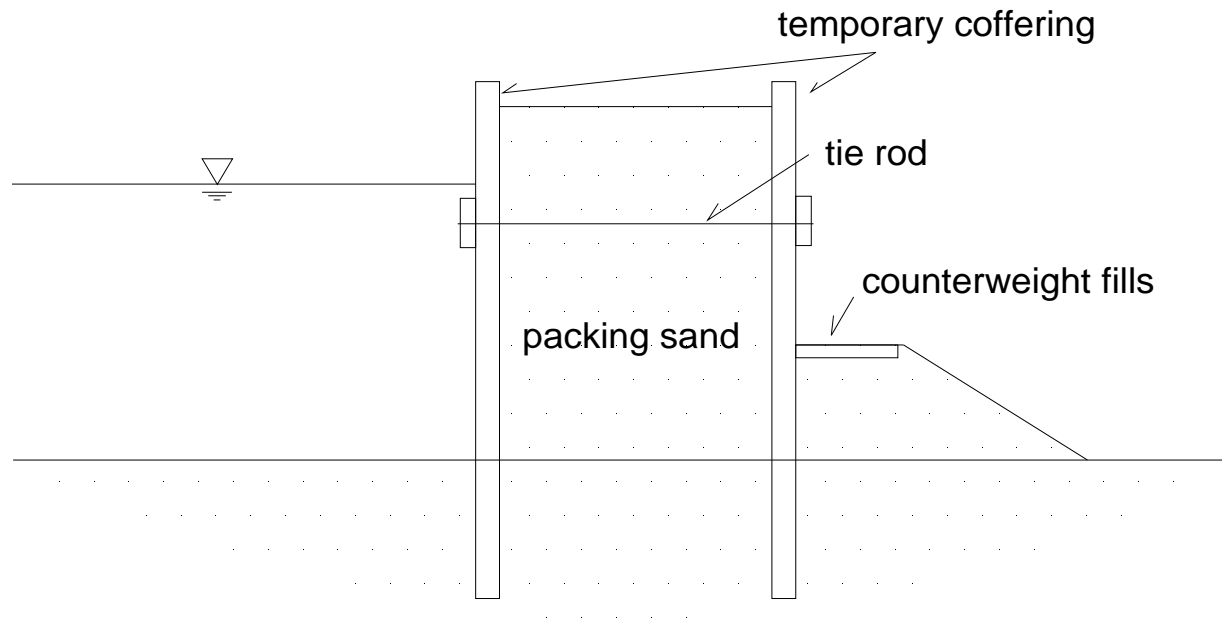


(403)gully Erosion

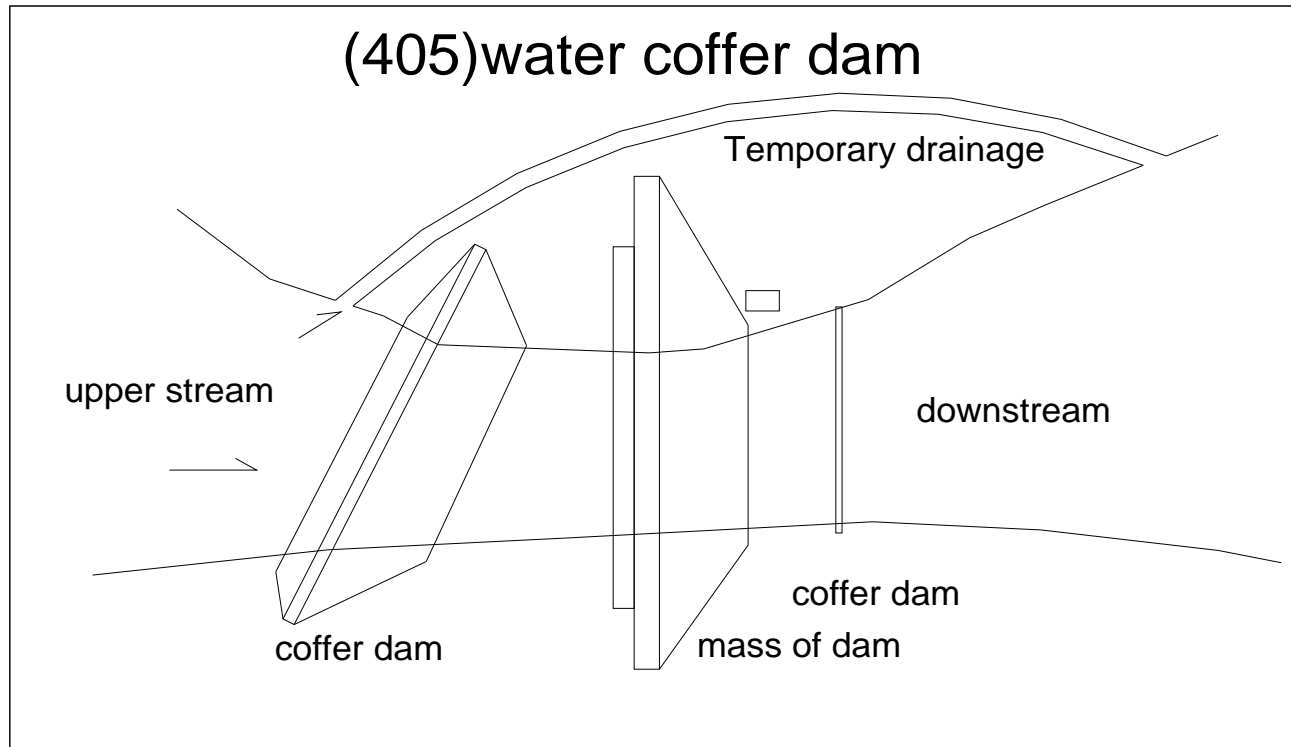


(404)steel sheet double temporary coffering

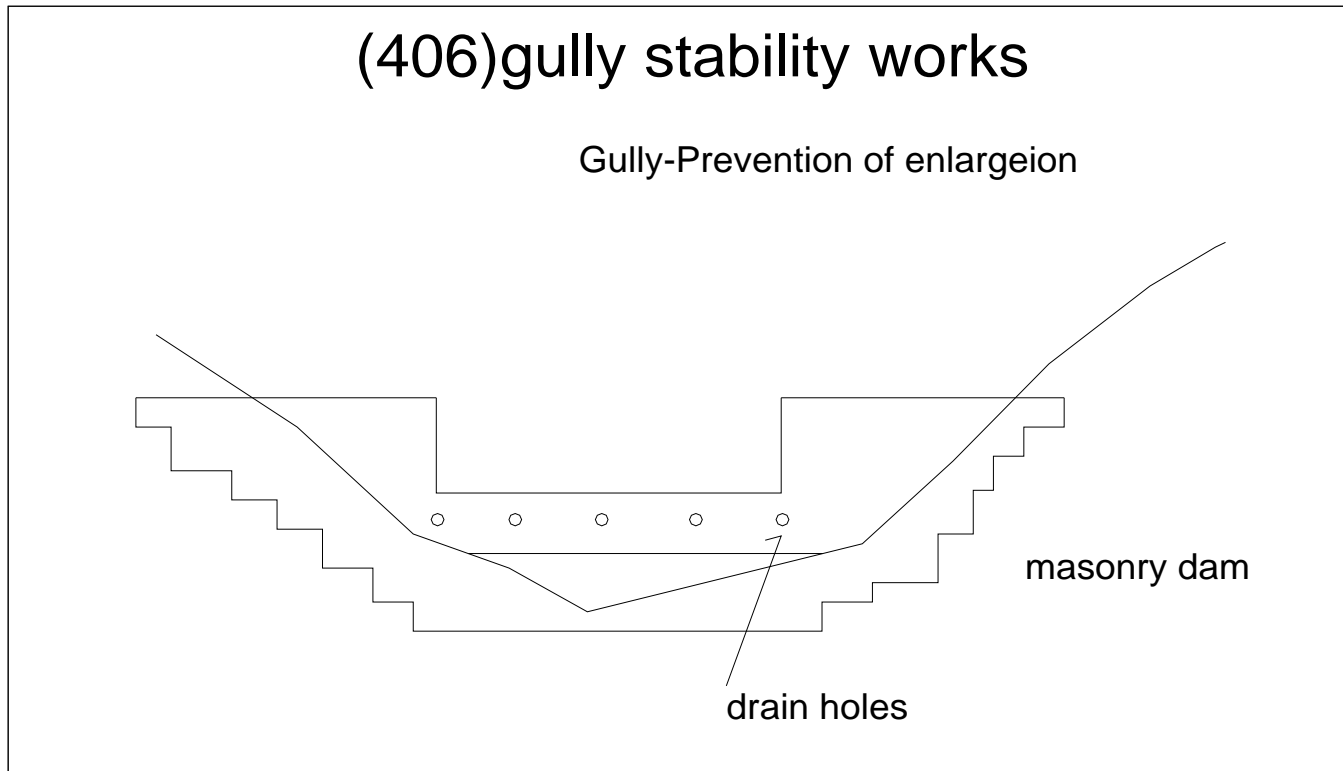
(404)steel sheet double temporary coffering



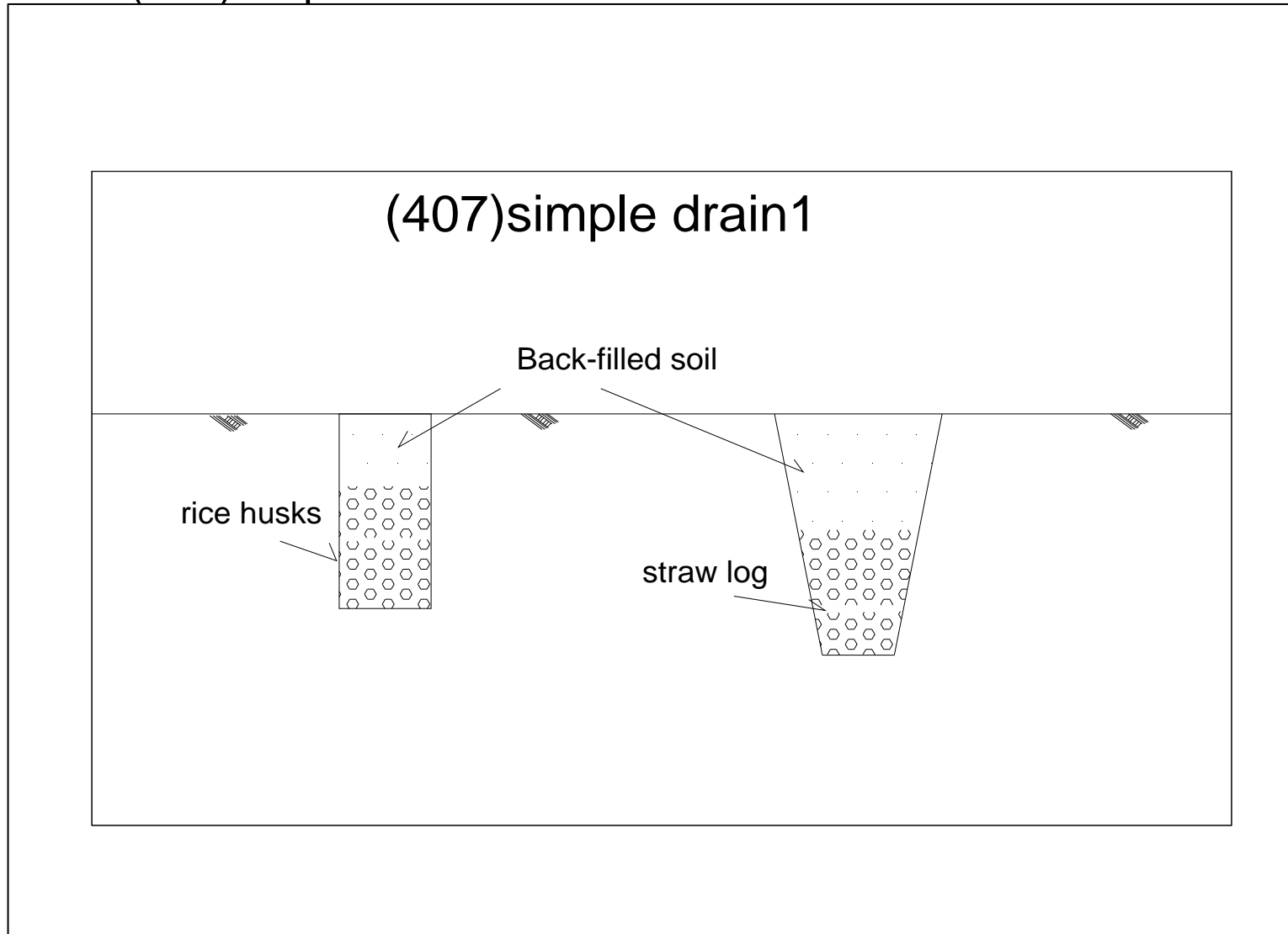
(405)water coffer dam



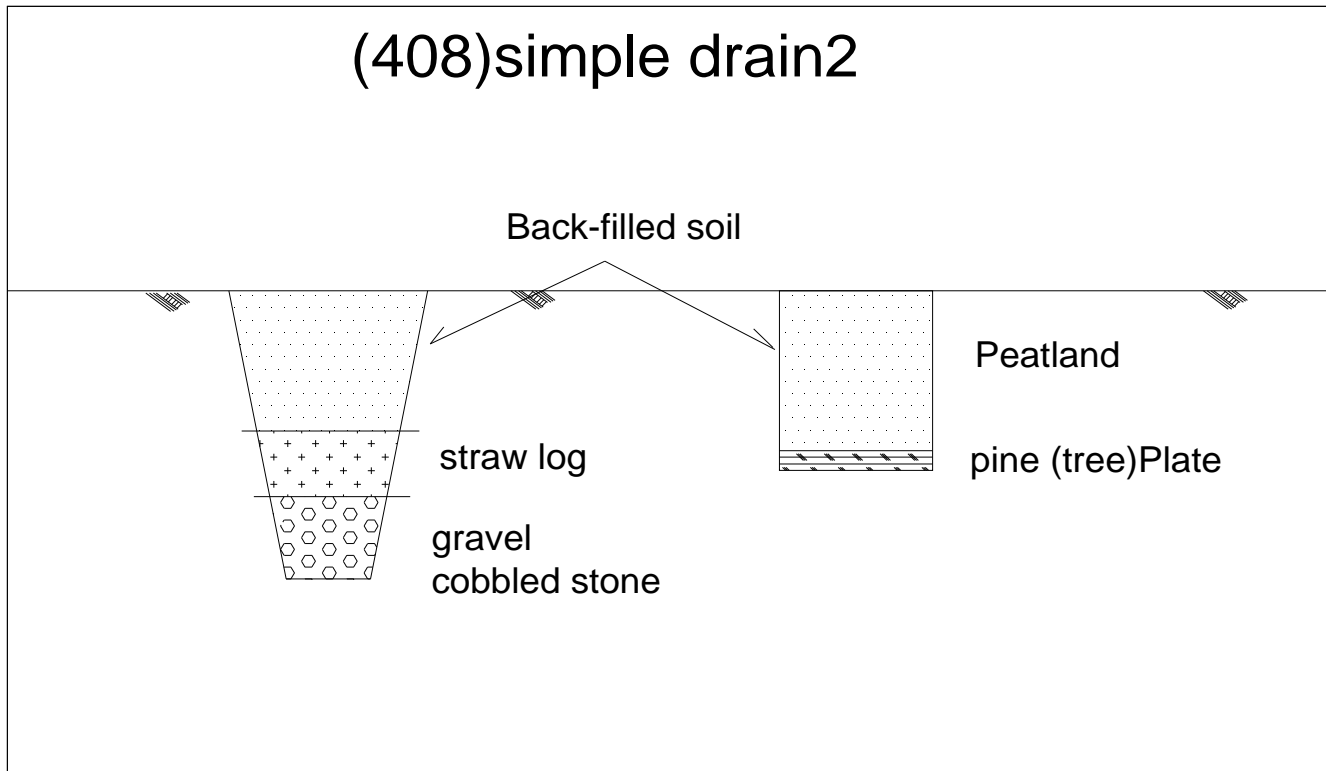
(406)gully stability works



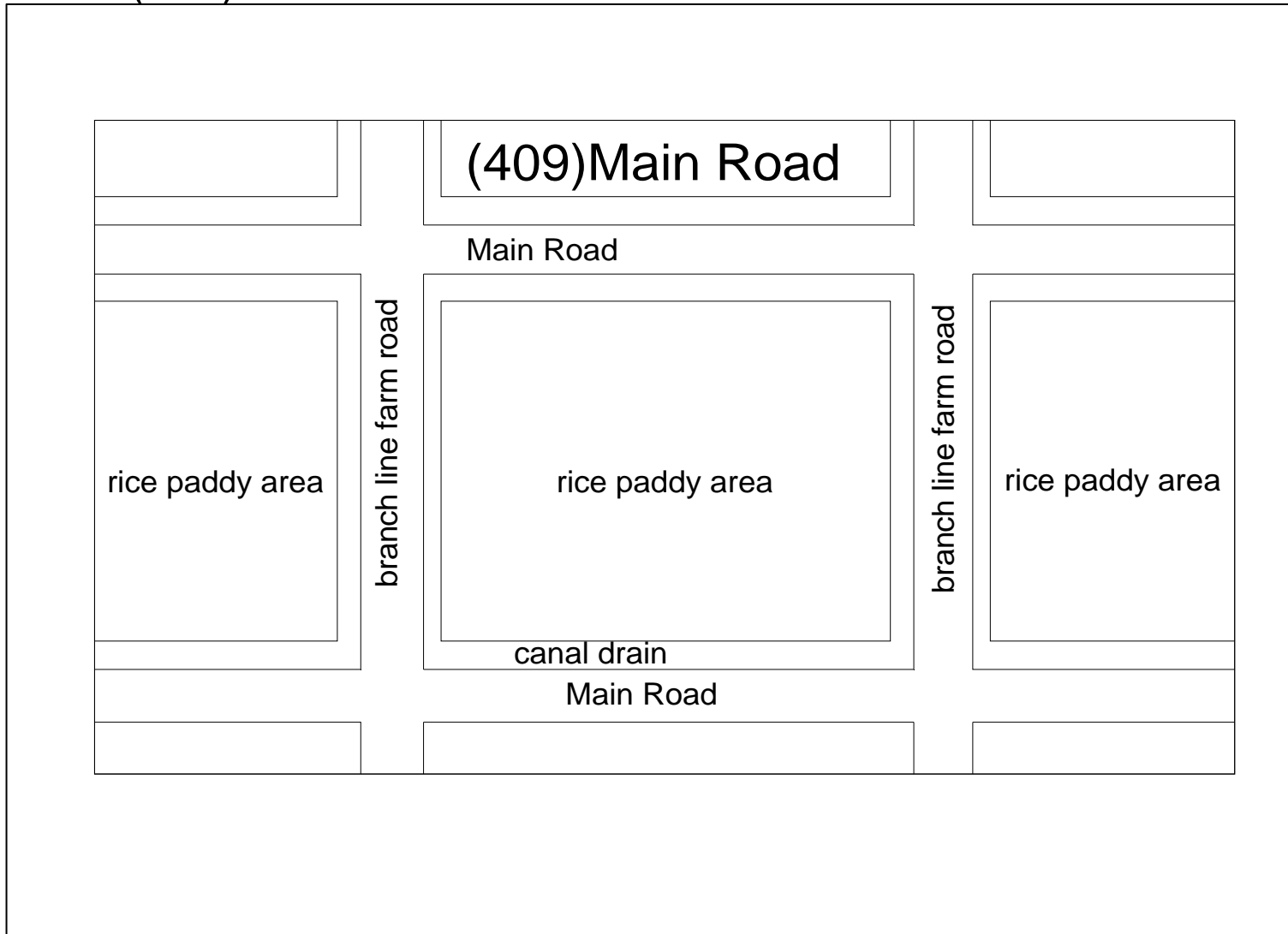
(407)simple drain1



(408)simple drain2

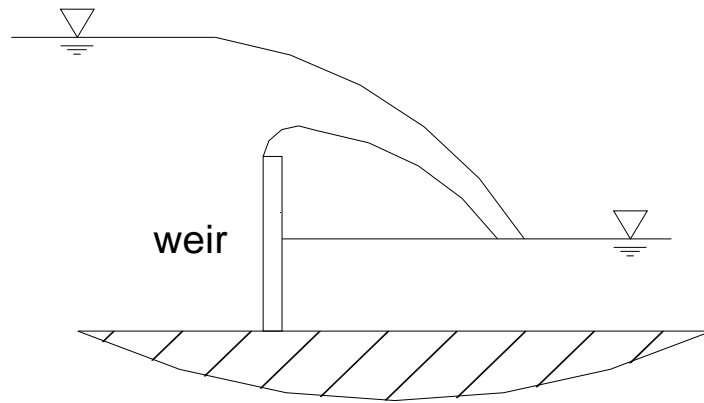


(409)Main Road

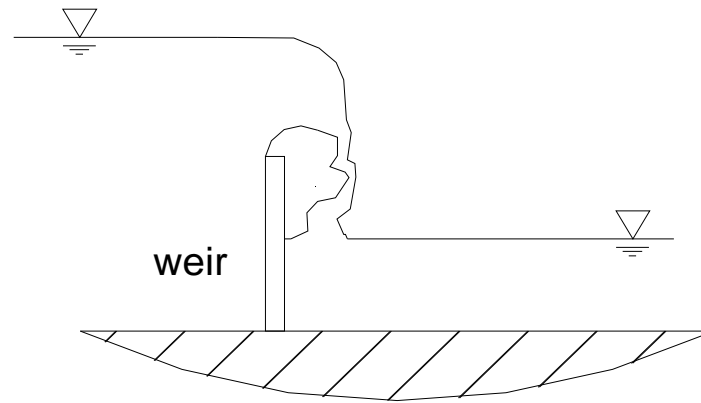


(410) Complete nappe and Incomplete nappe

(410) Complete nappe and Incomplete nappe

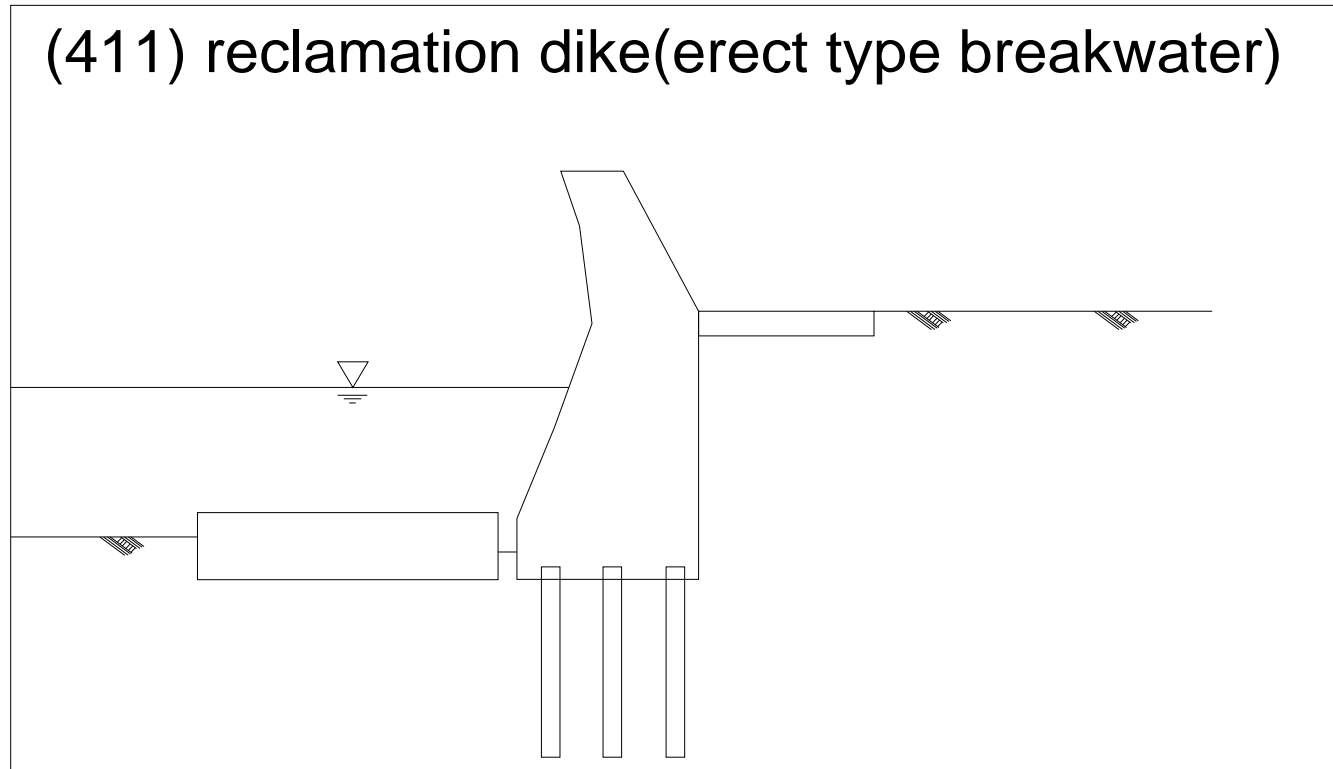


Complete nappe

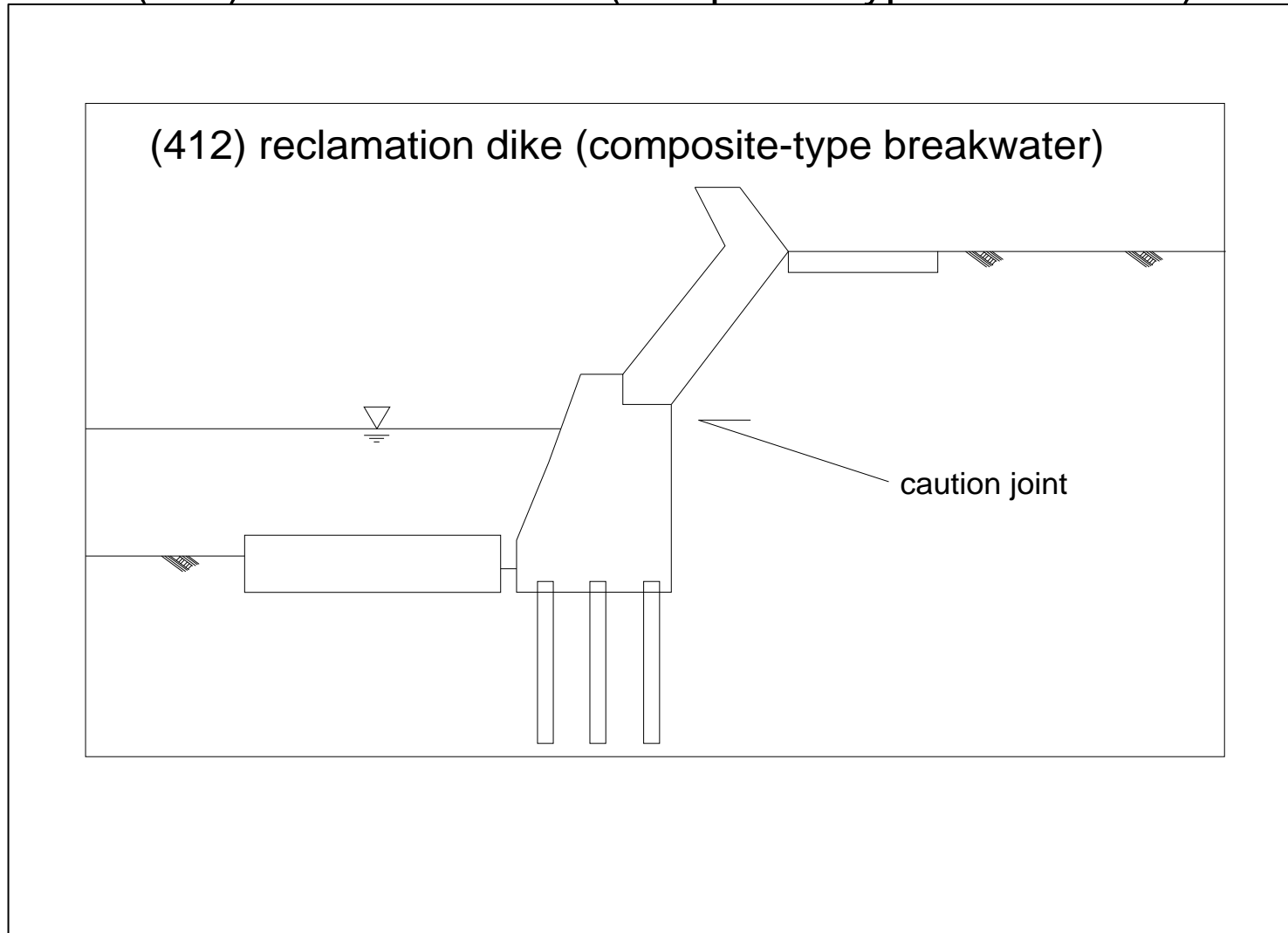


Incomplete nappe

(411) reclamation dike(erect type breakwater)

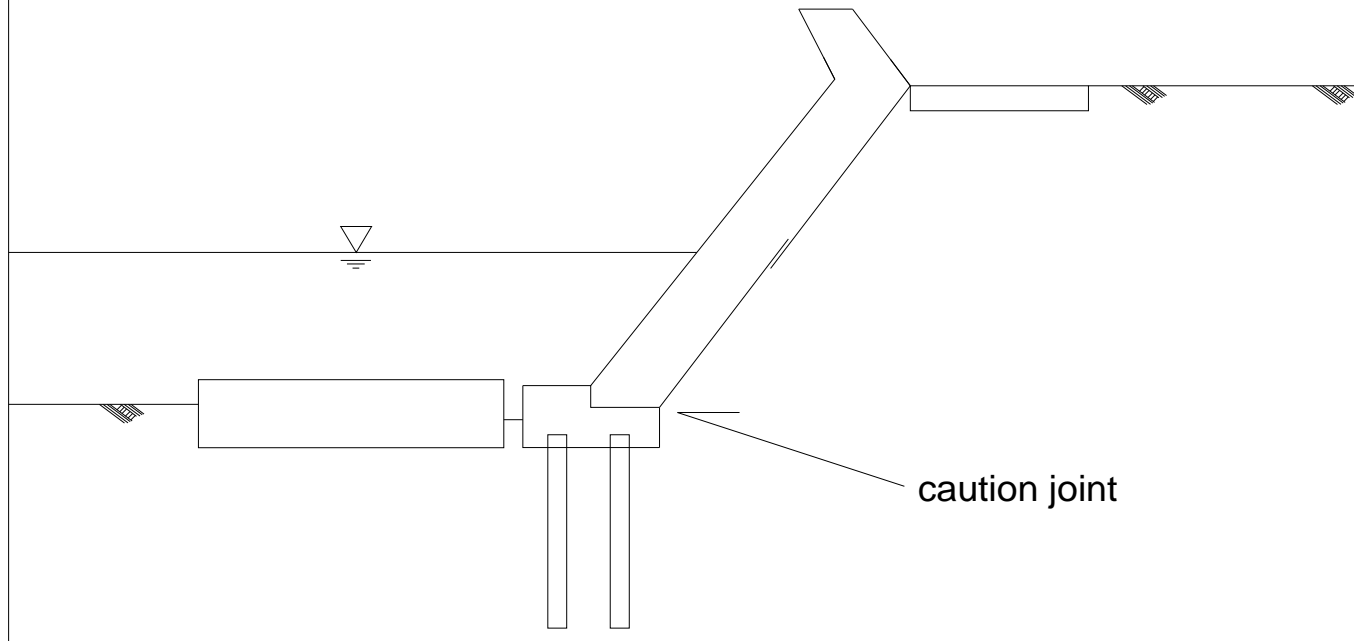


(412) reclamation dike (composite-type breakwater)



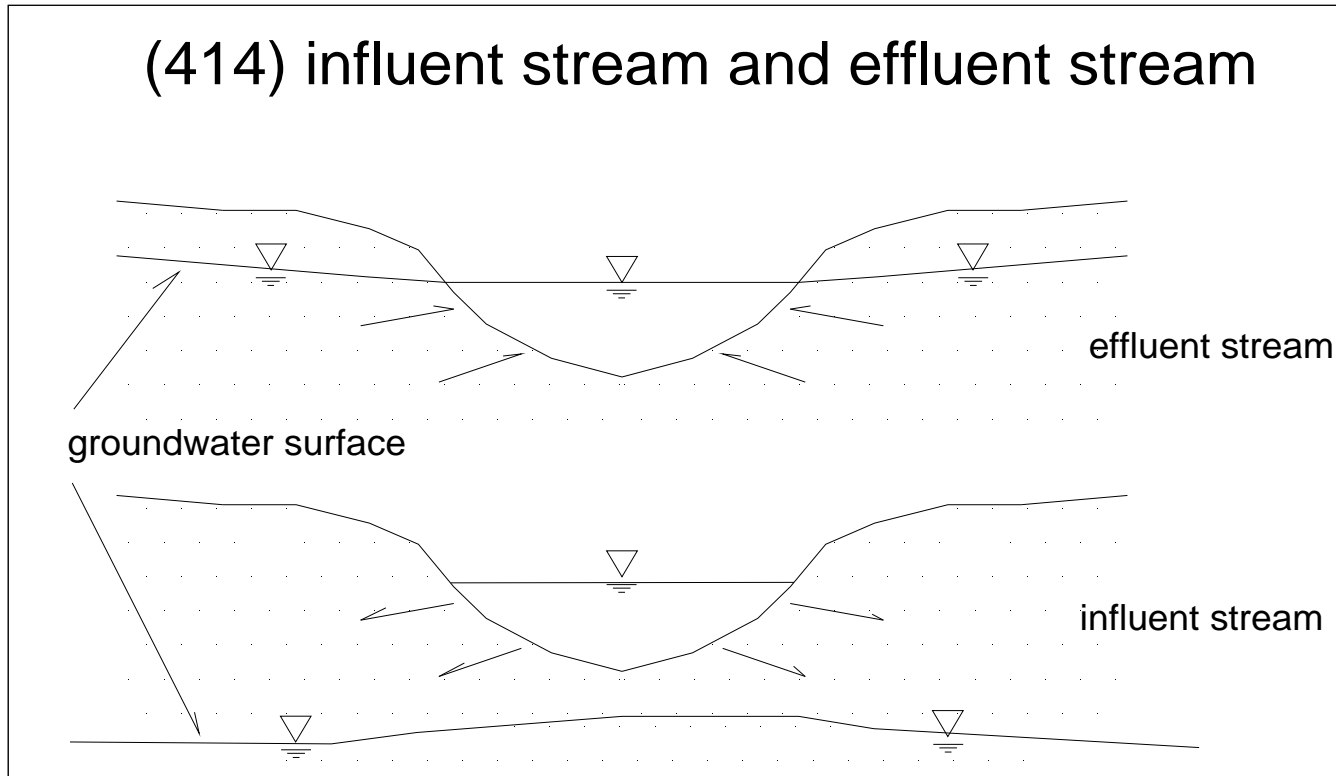
(413) reclamation dike(mound-type breakwater)

(413) reclamation dike(mound-type breakwater)

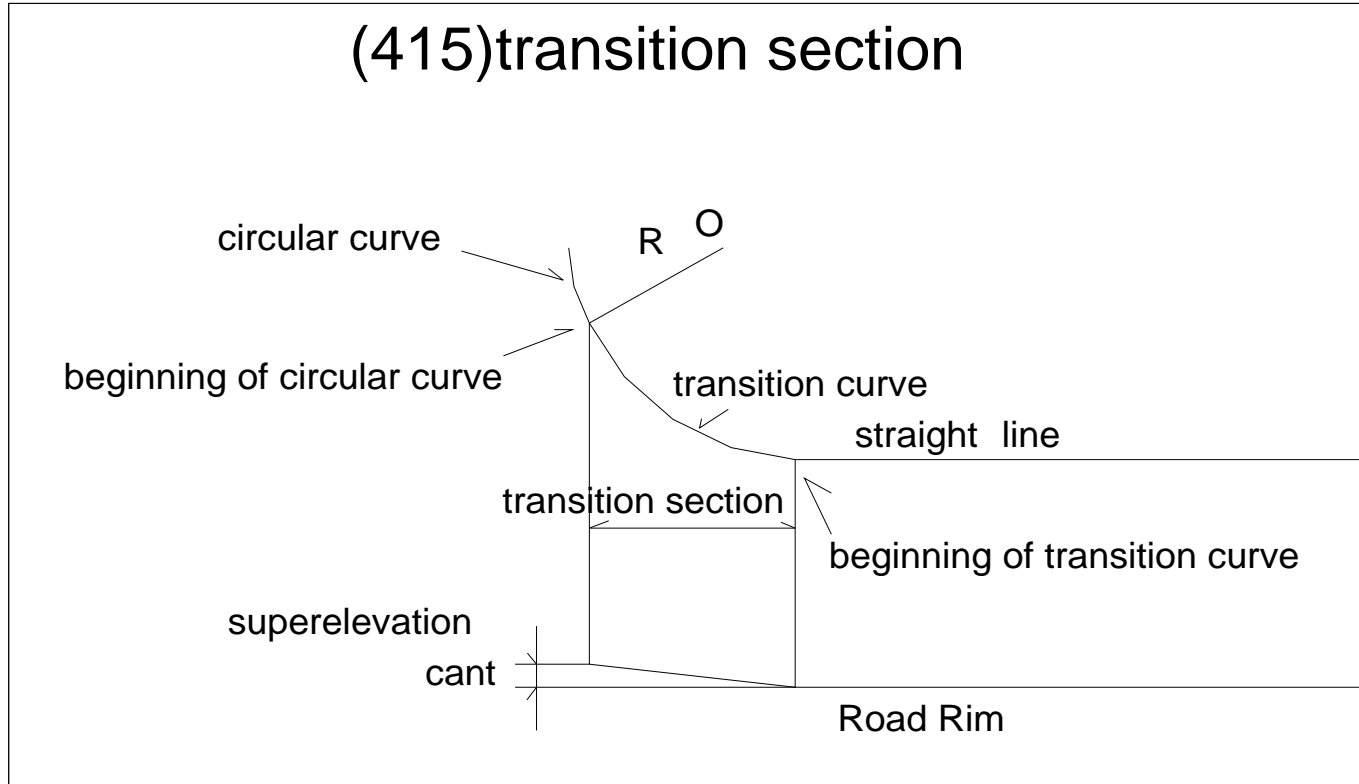


(414) influent stream and effluent stream

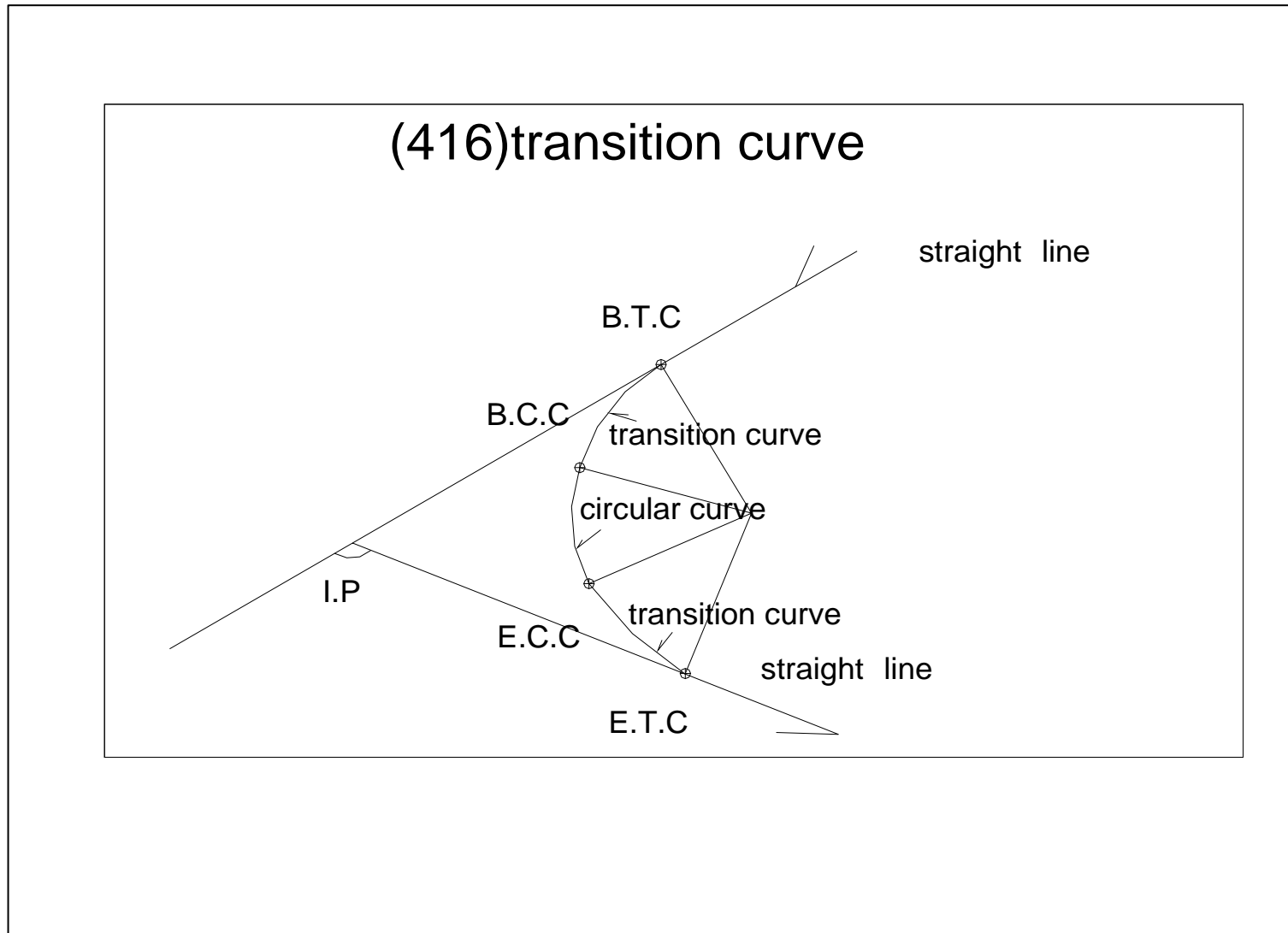
(414) influent stream and effluent stream



(415)transition section

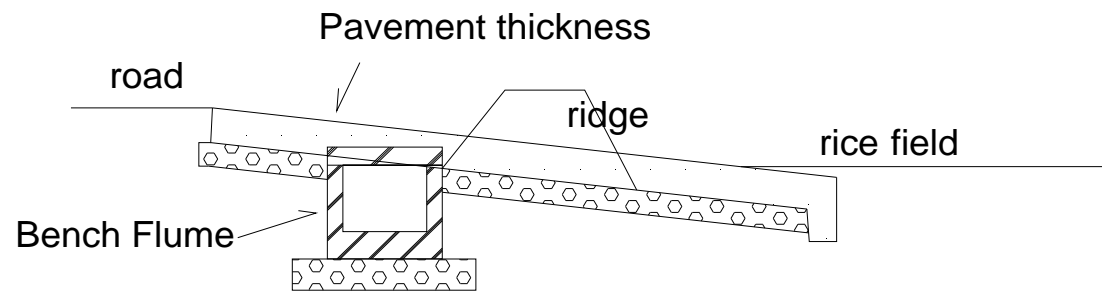


(416)transition curve

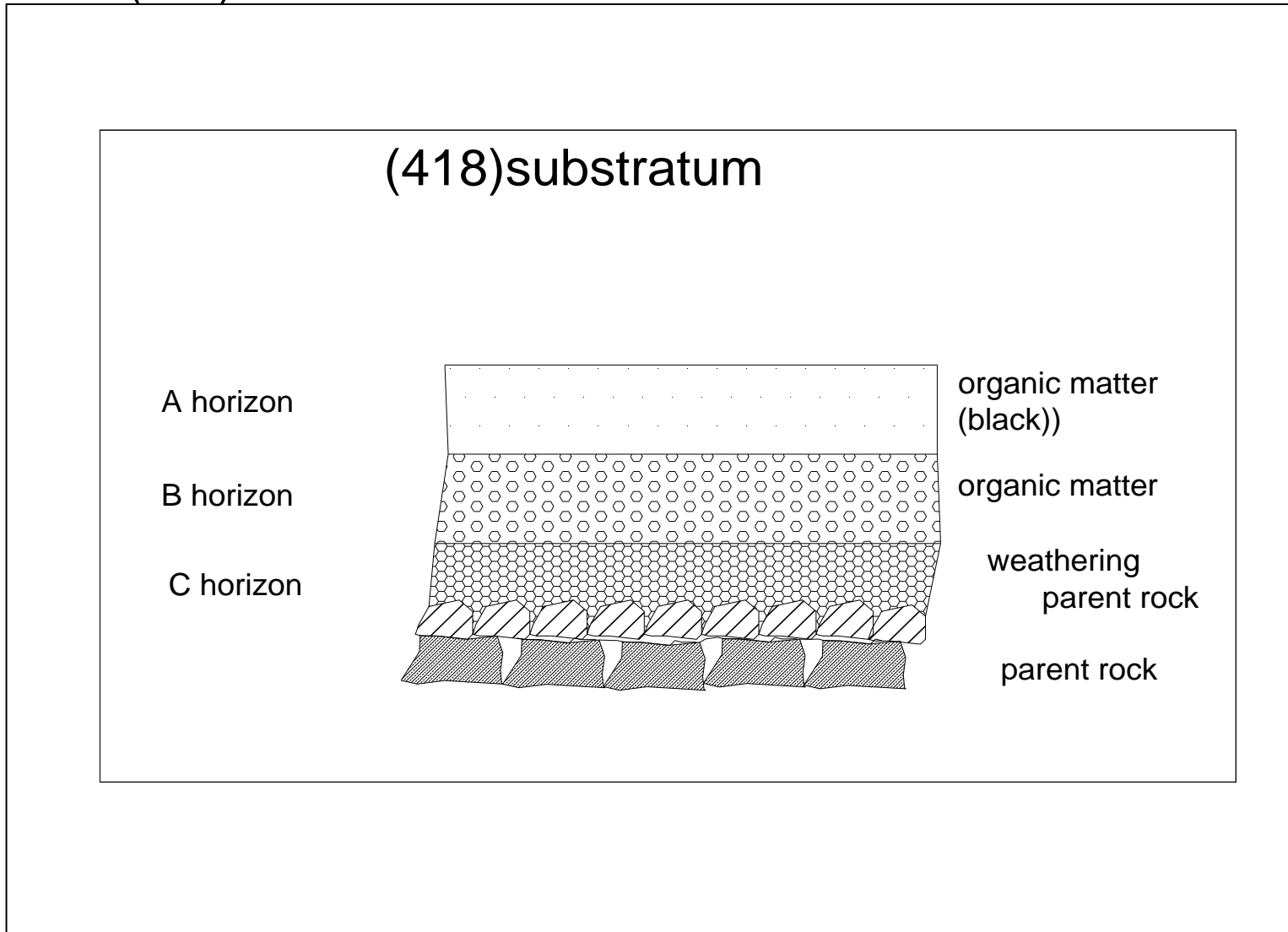


(417)field machinery passage

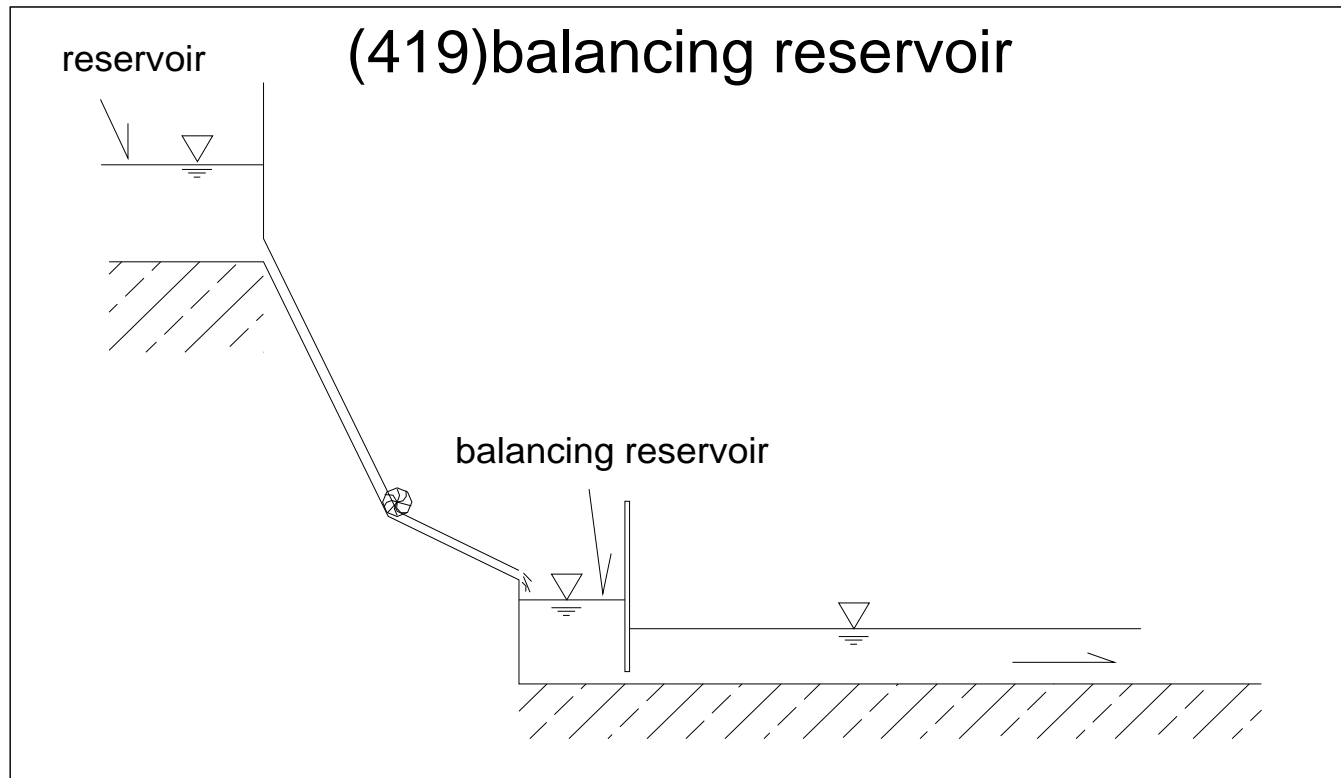
(417)field machinery passage



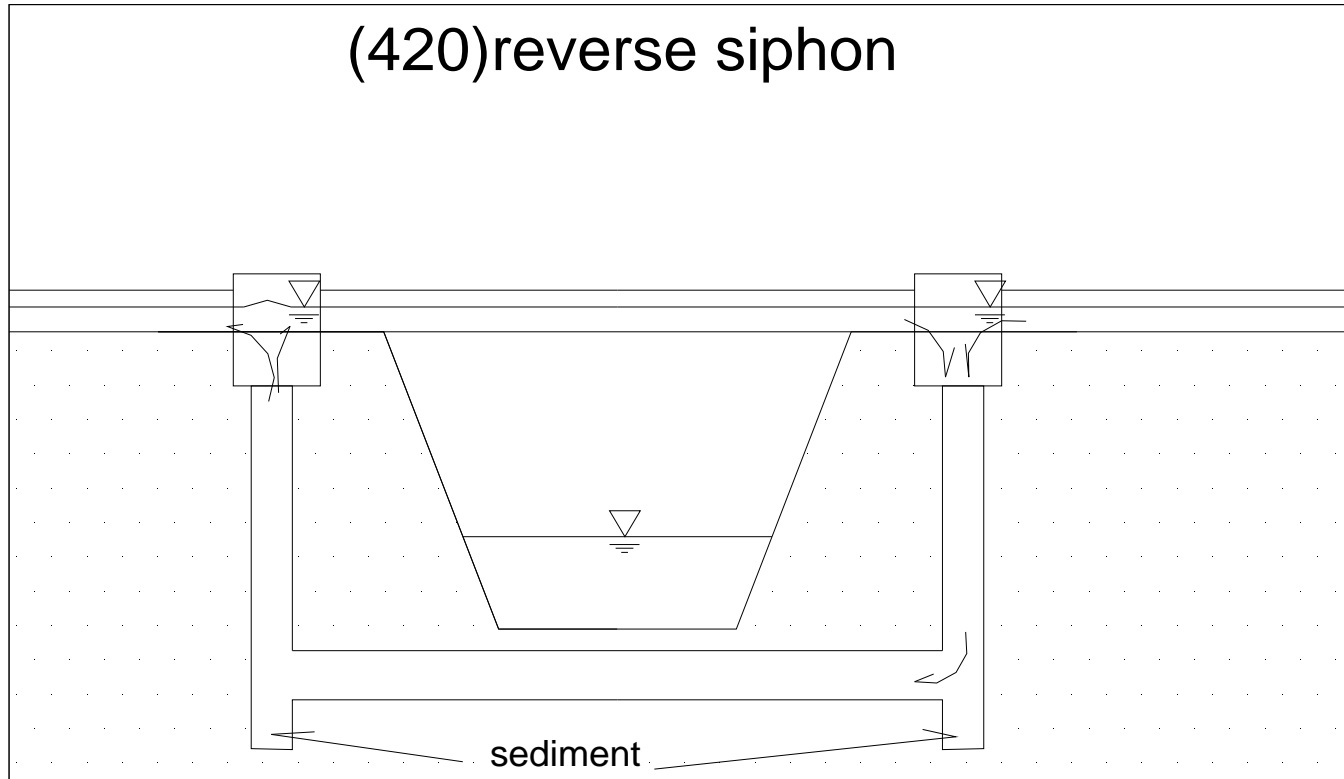
(418)substratum



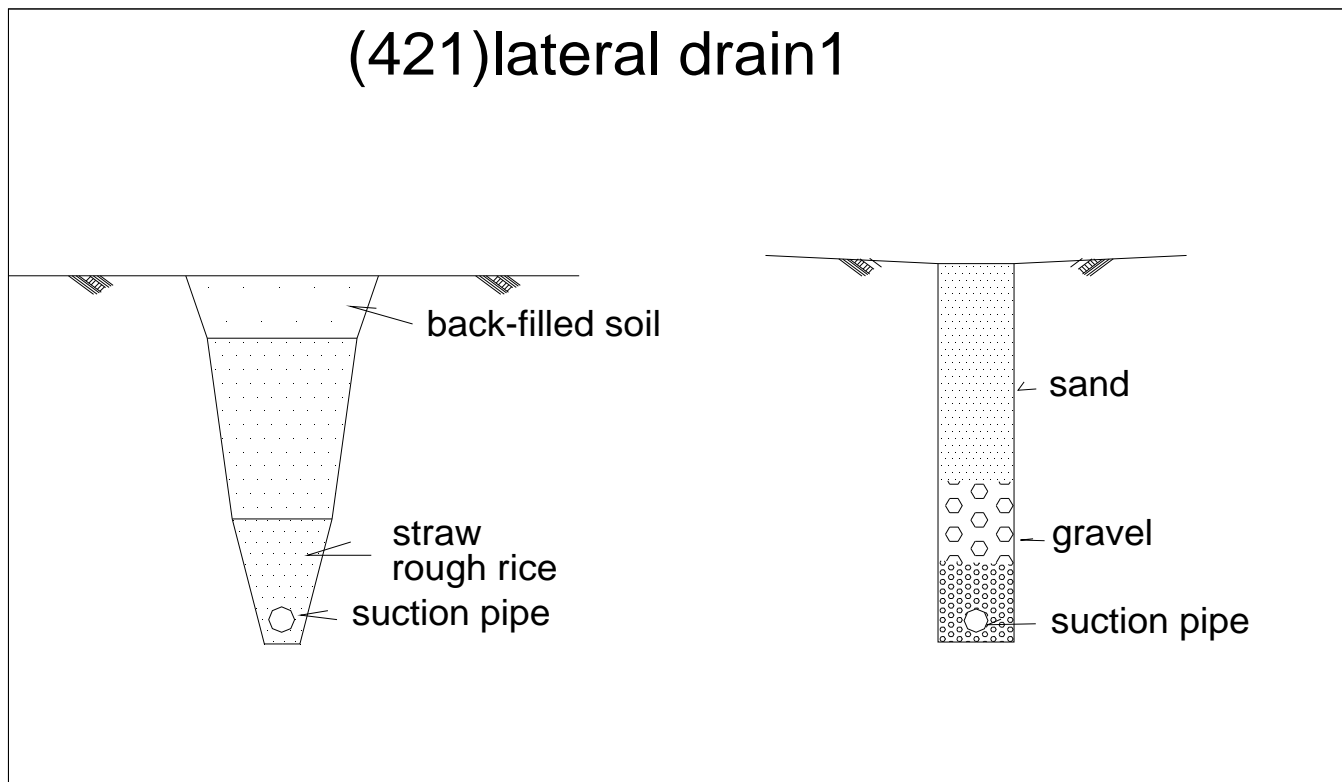
(419)balancing reservoir



(420)reverse siphon

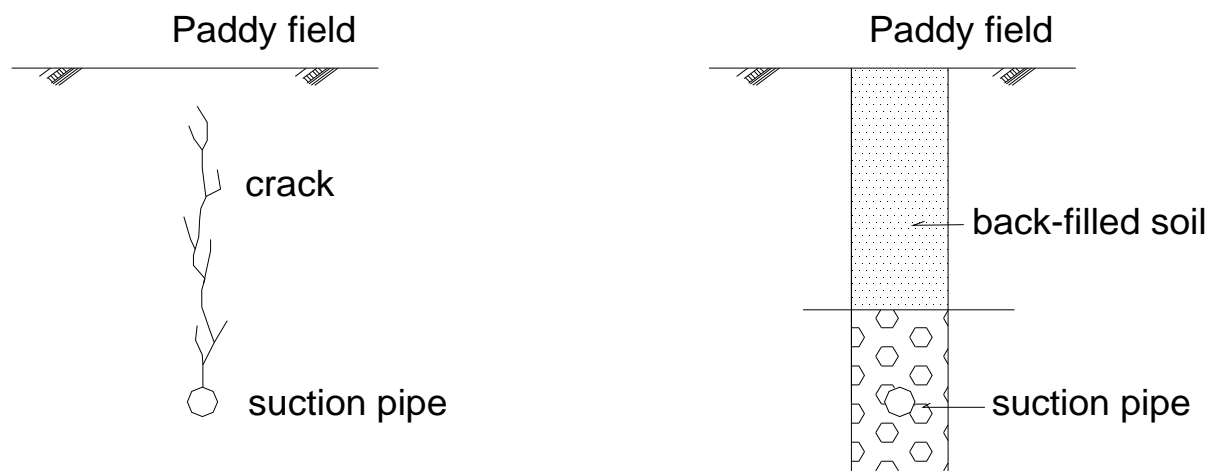


(421)lateral drain1

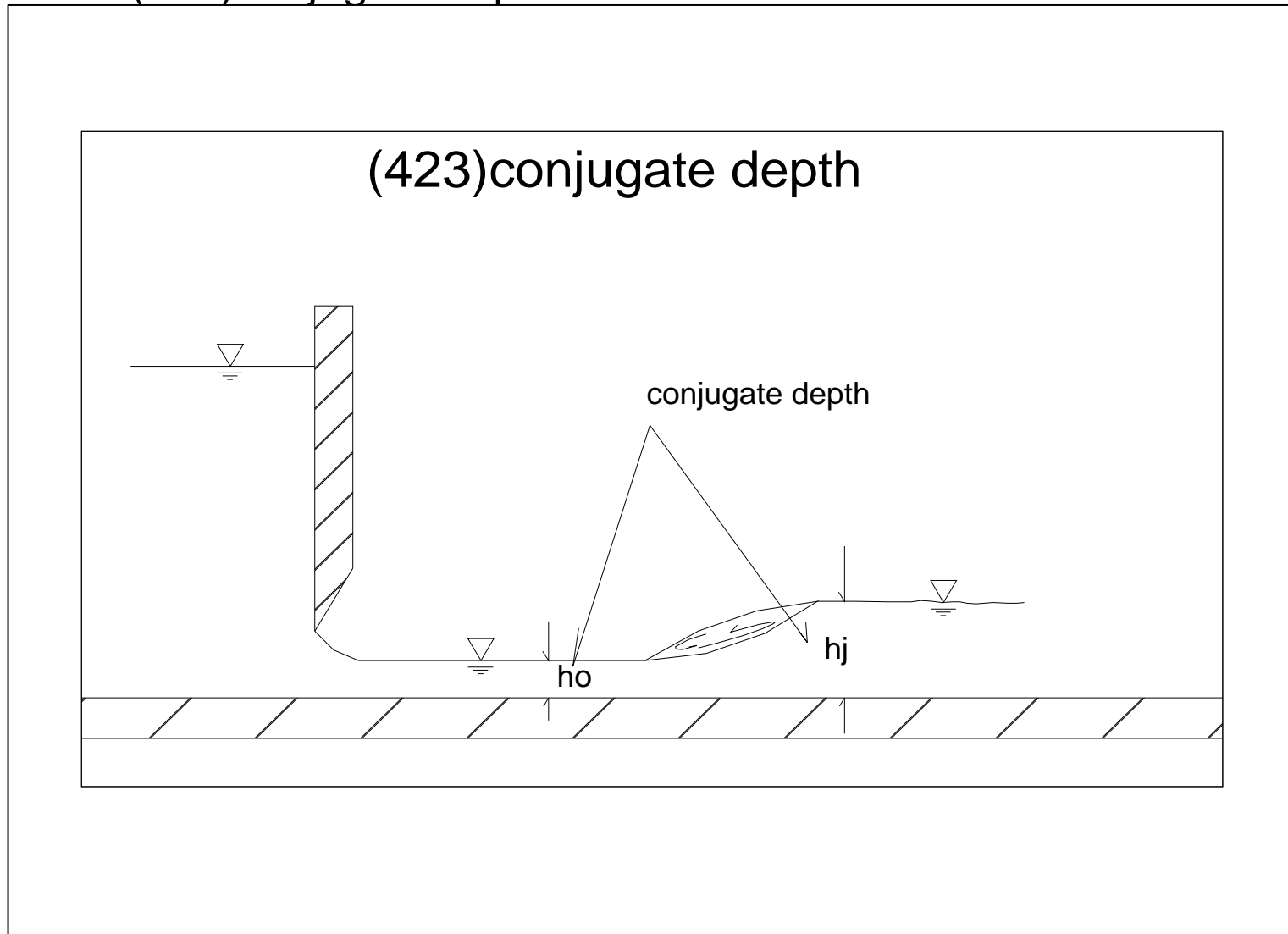


(422)lateral drain2

(422)lateral drain2

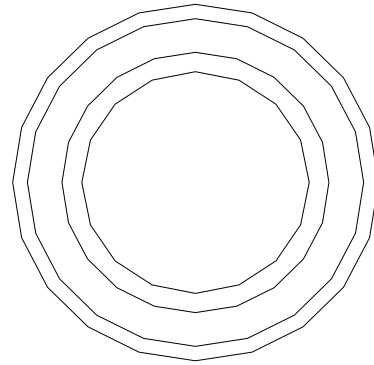


(423)conjugate depth



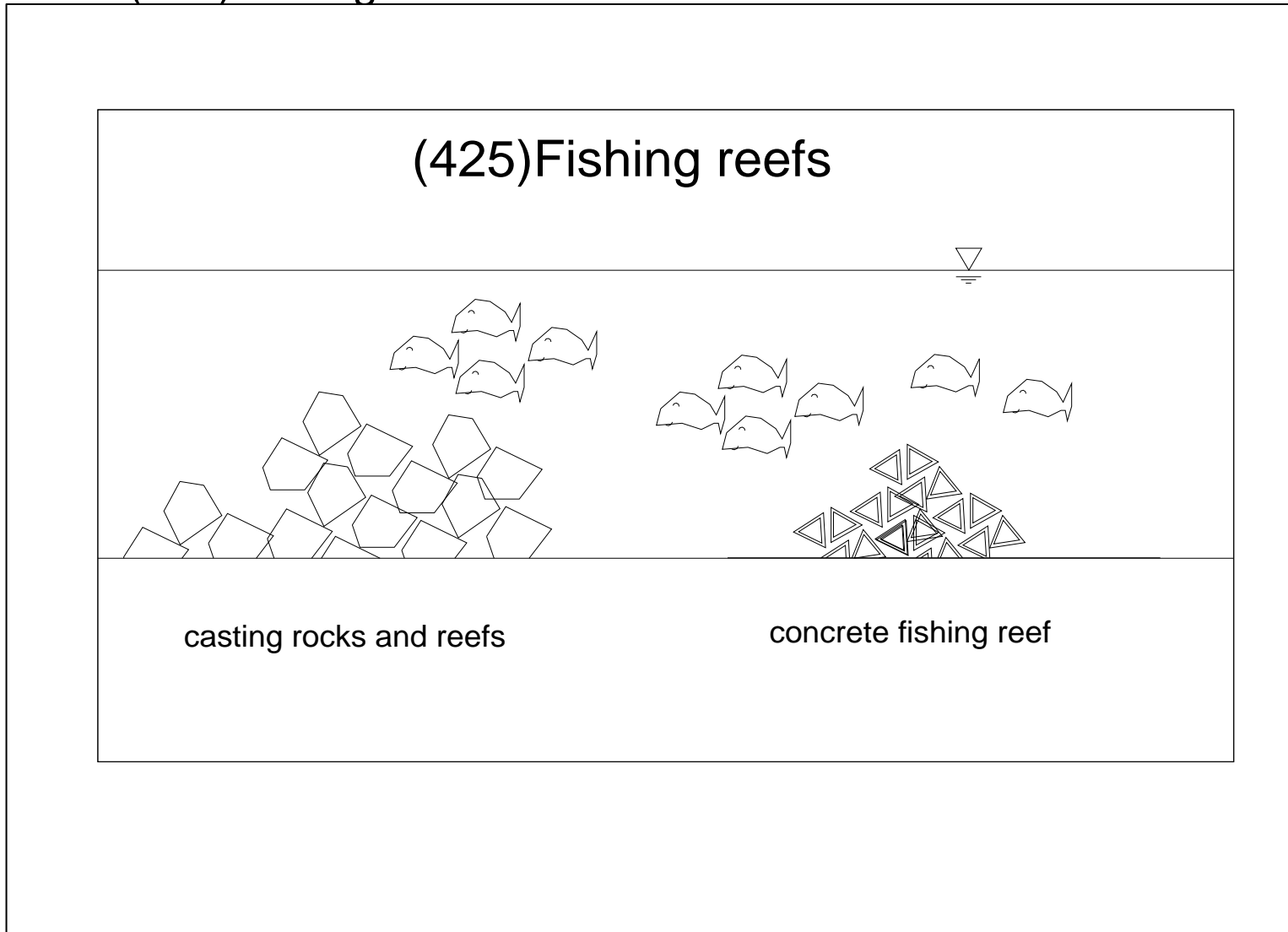
(424) Reinforced plastic composite

(424) Reinforced plastic composite



light
strength
corrosion resistance
agriculture pipes

(425)Fishing reefs

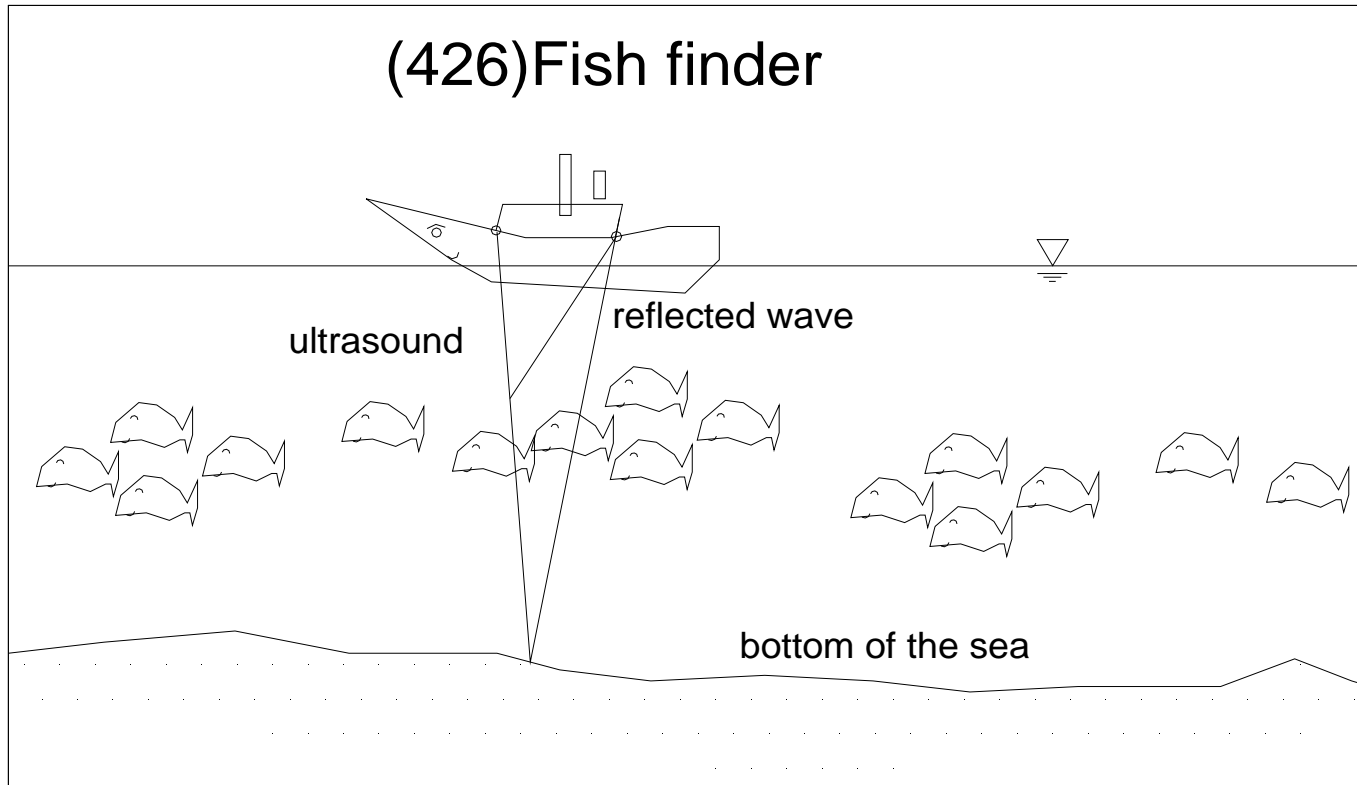


(425)Fishing reefs

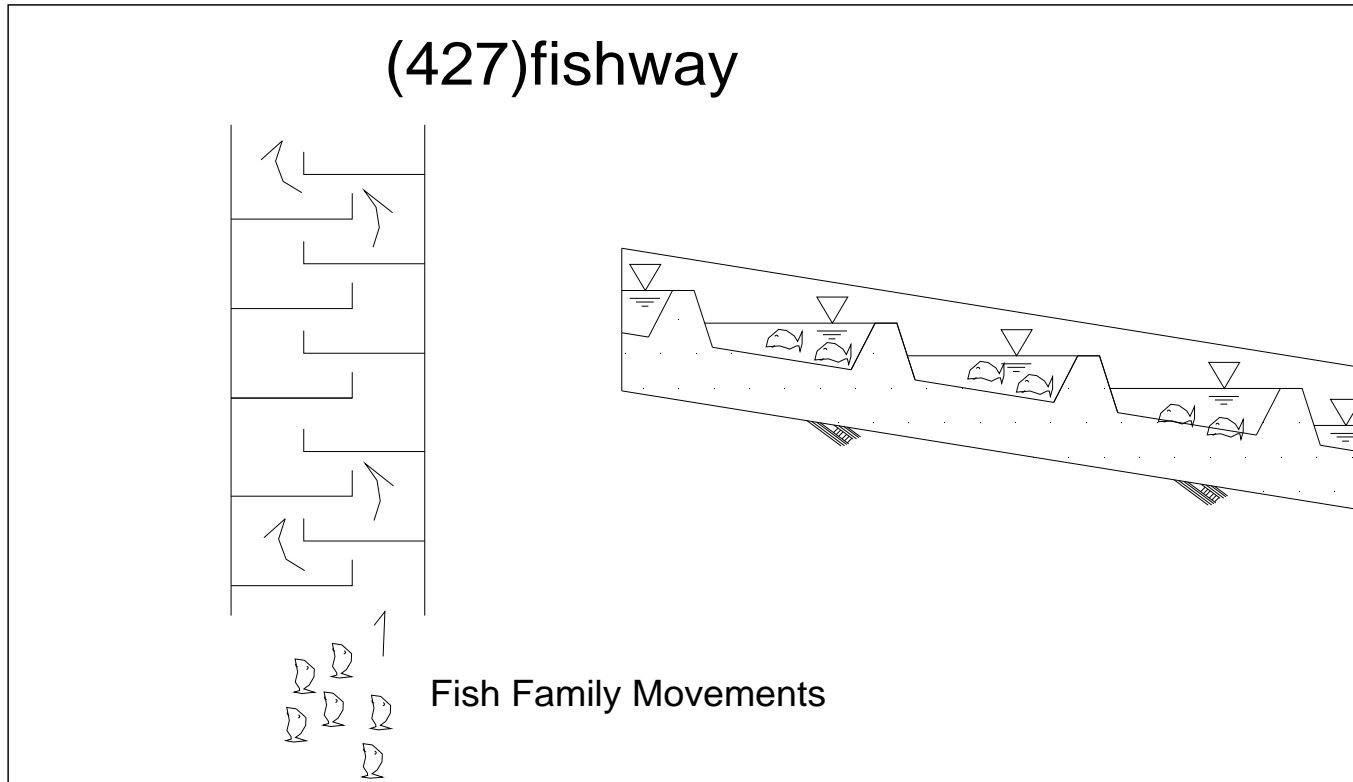
casting rocks and reefs

concrete fishing reef

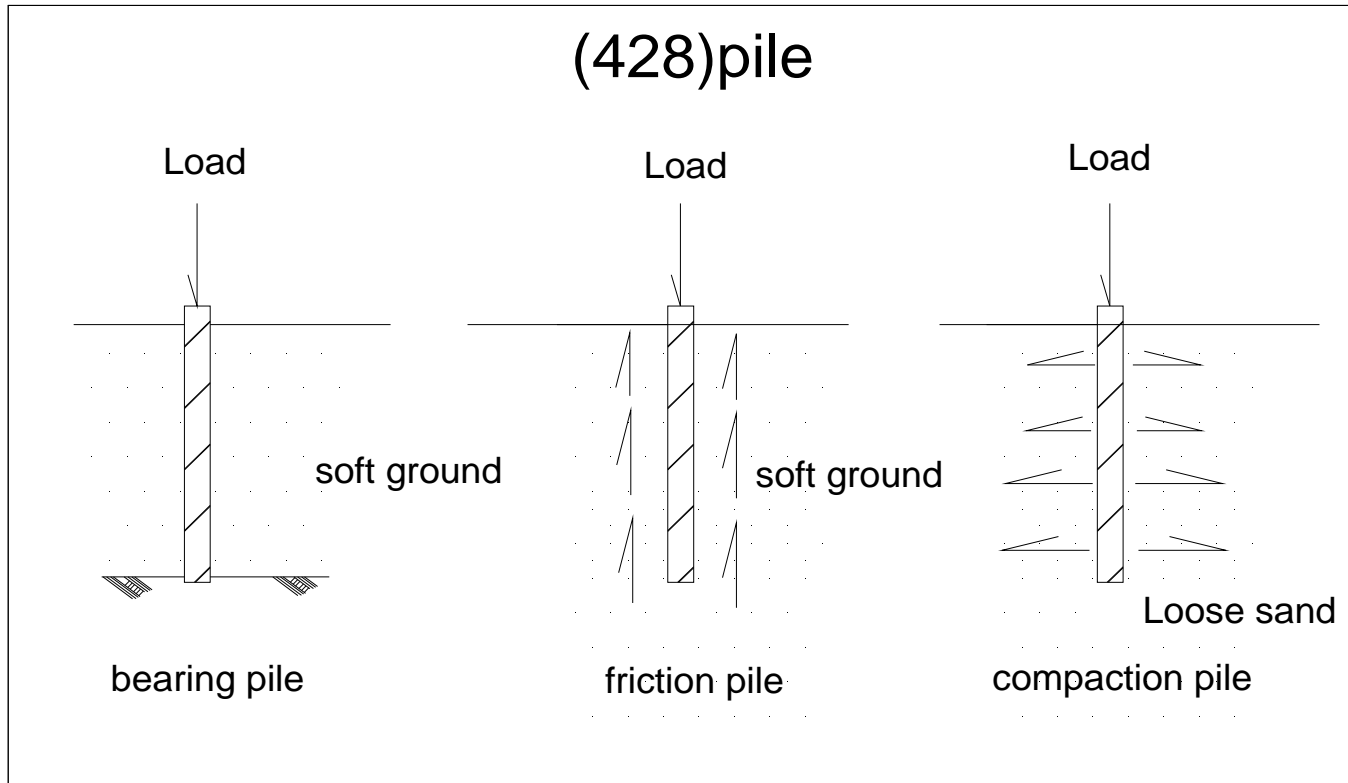
(426)Fish finder



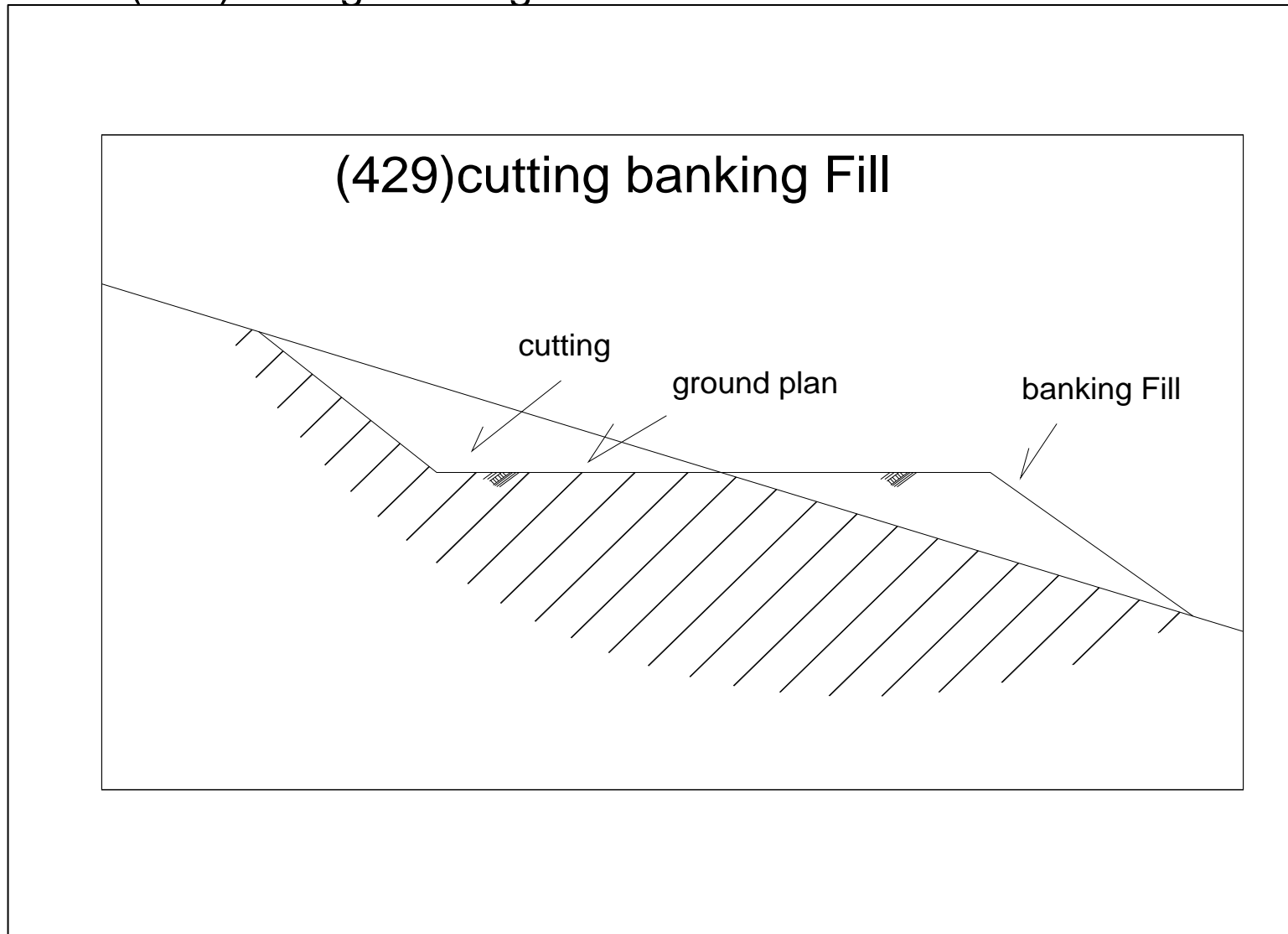
(427)fishway



(428)pile

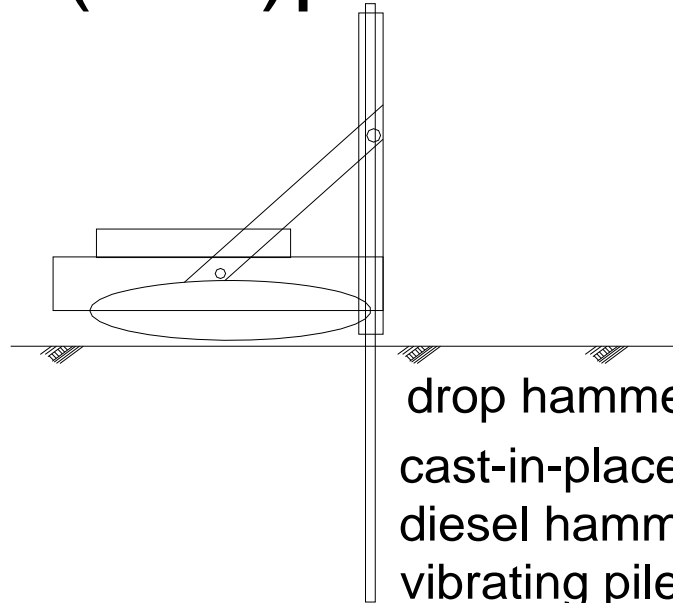


(429)cutting banking Fill



(430)pile driver

(430)pile driver



drop hammer

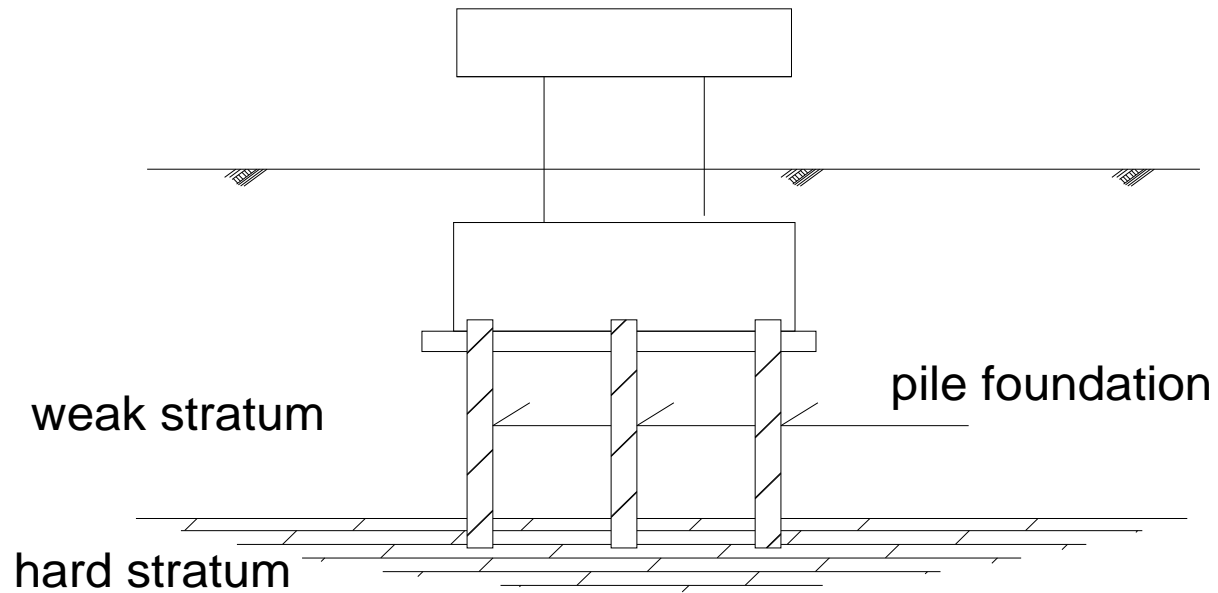
cast-in-place pile

diesel hammer

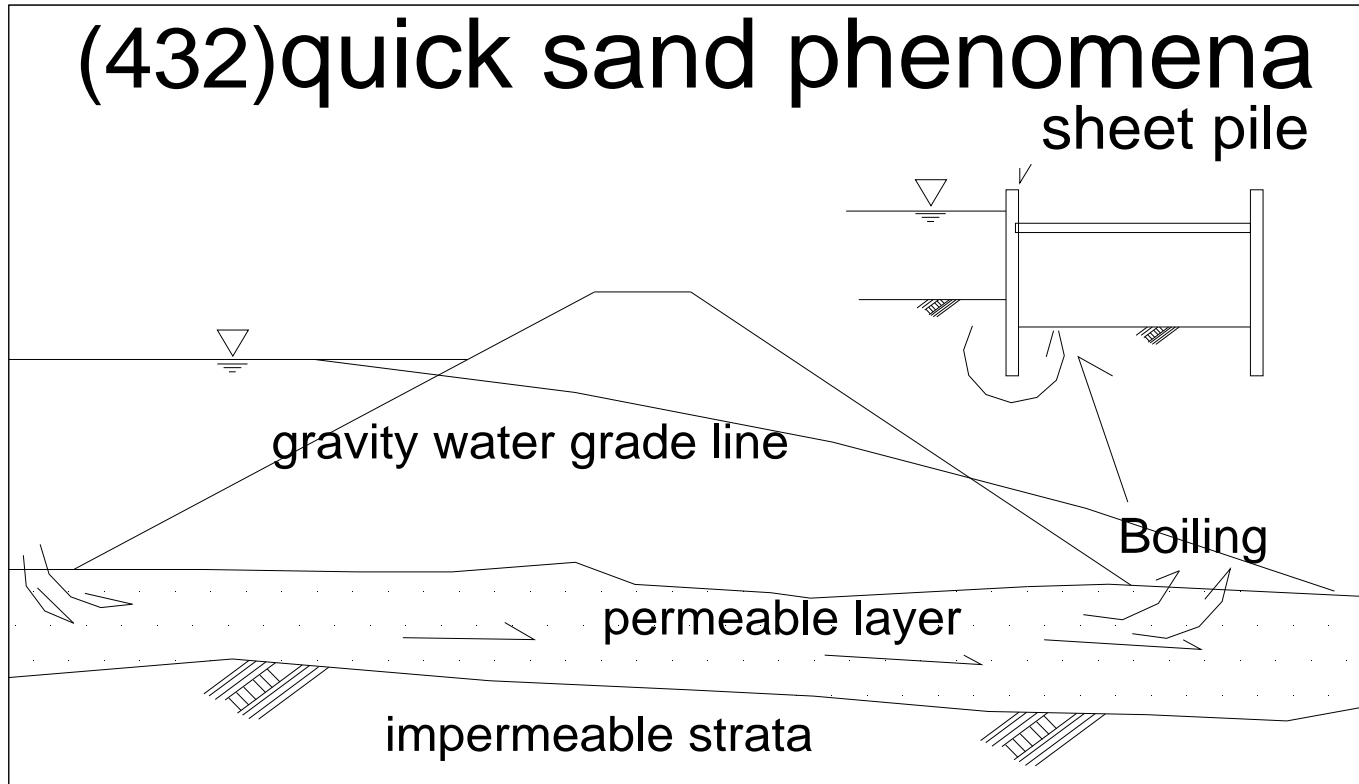
vibrating pile-hitting machine

(431)pile foundation

(431)pile foundation



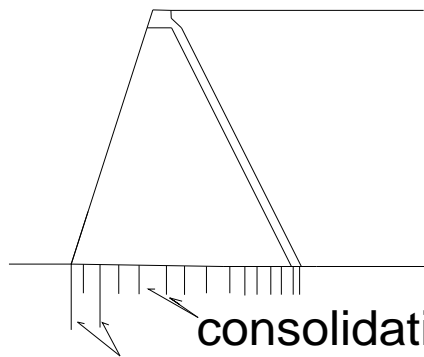
(432)quick sand phenomena



(433)grouting

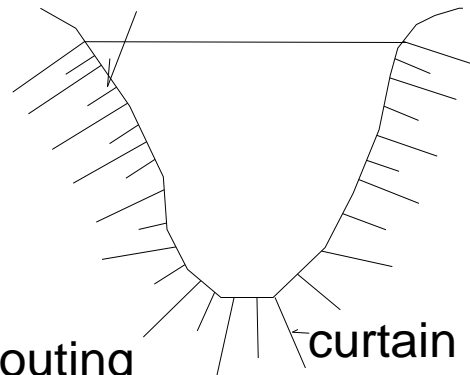
(433)grouting

consolidation grouting
contact grouting



consolidation grouting

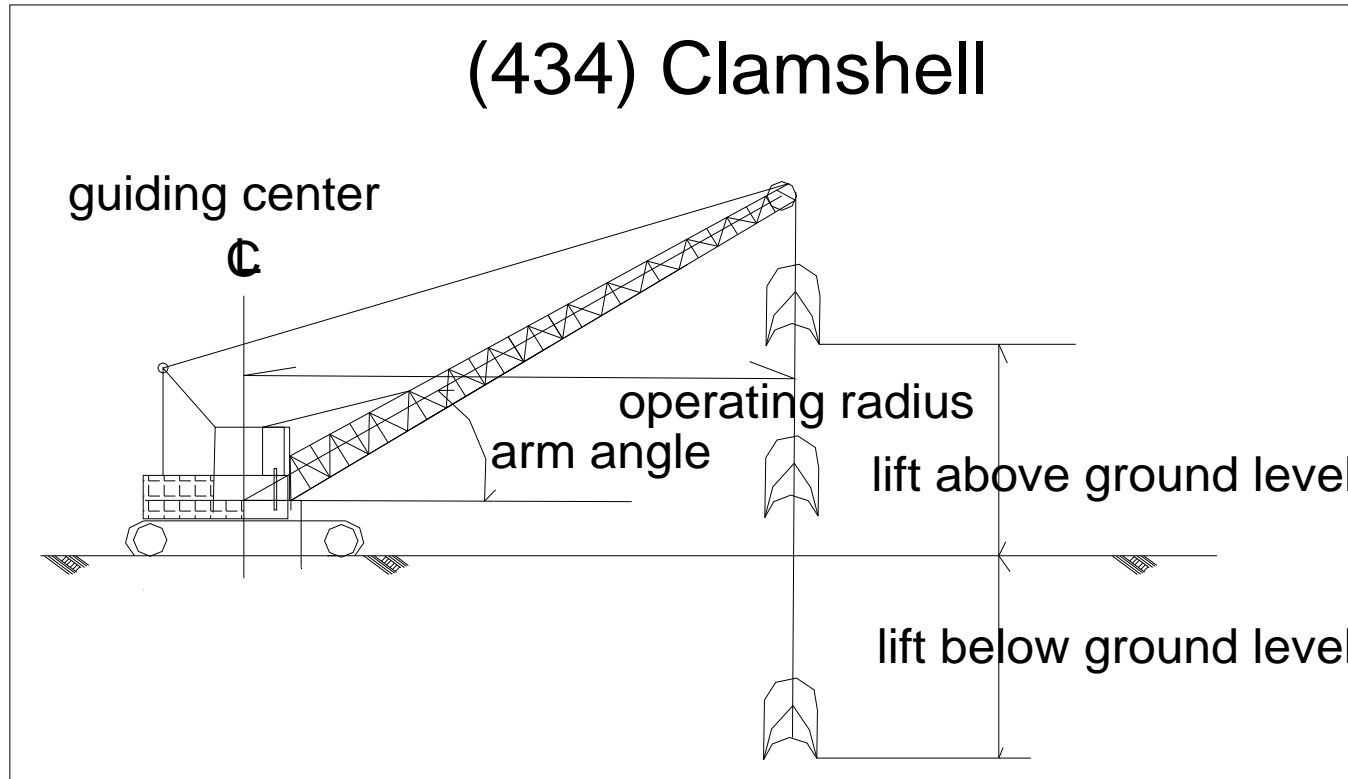
curtain grouting



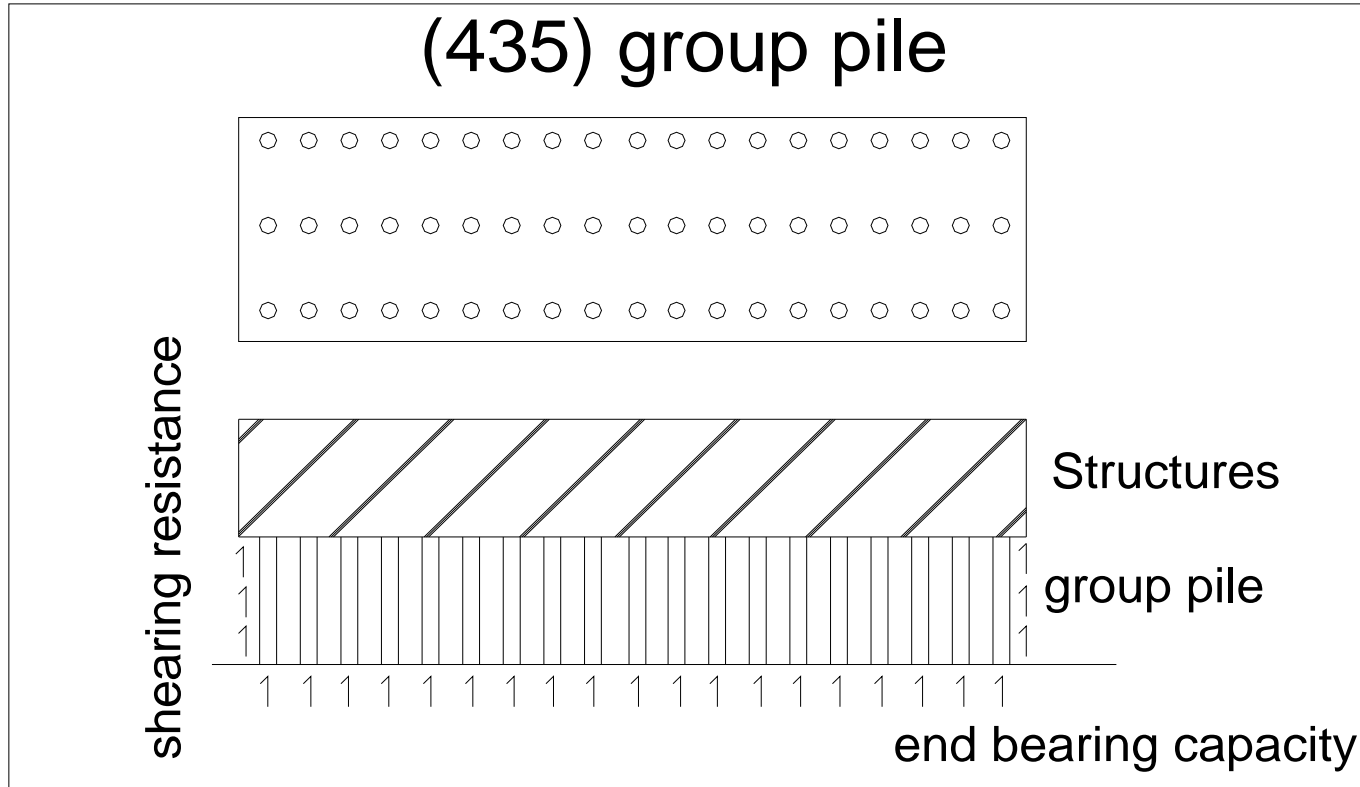
curtain grouting

ground solidification
increased support bearing

(434) Clamshell

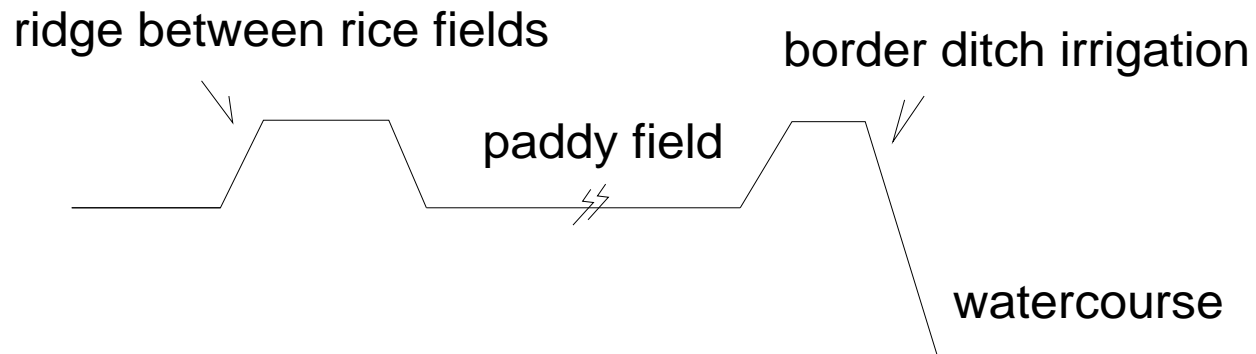


(435) group pile

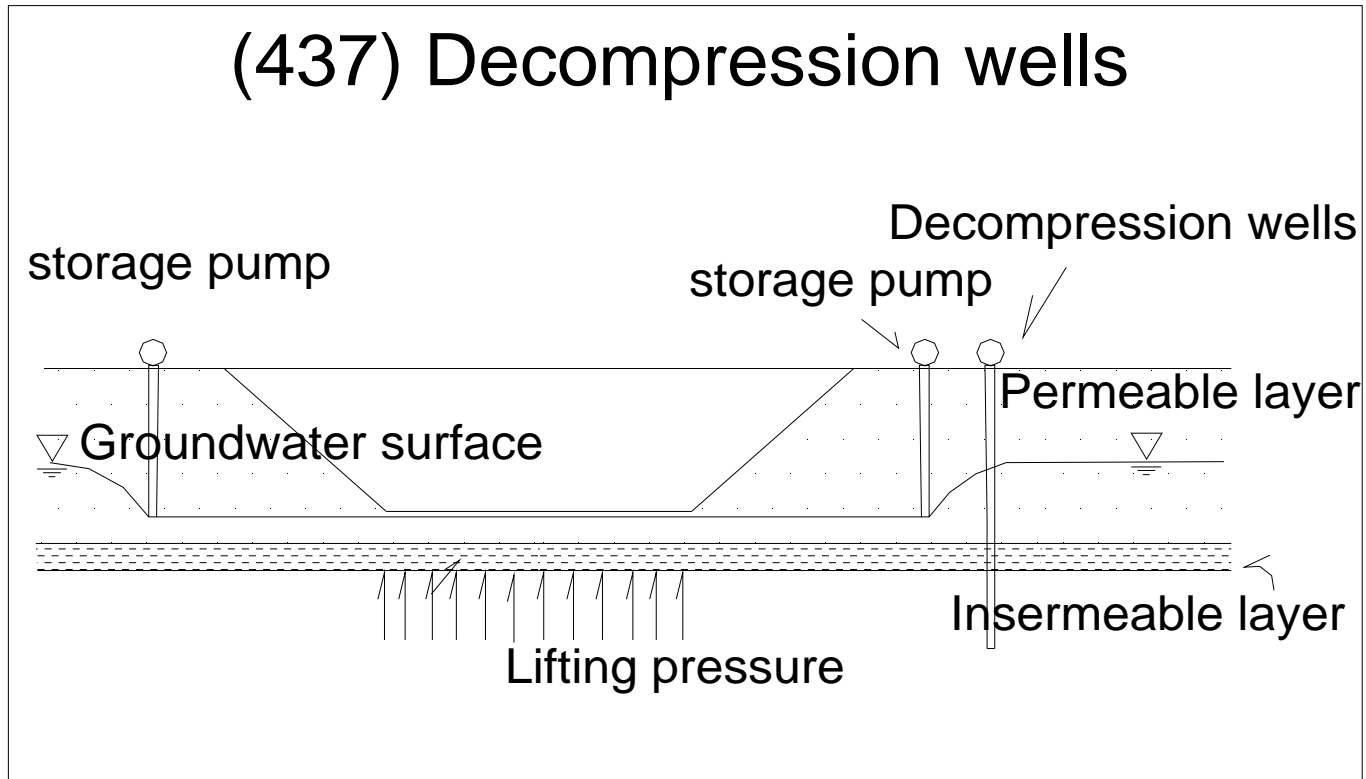


(436) ridge between rice fields, border ditch irrigation

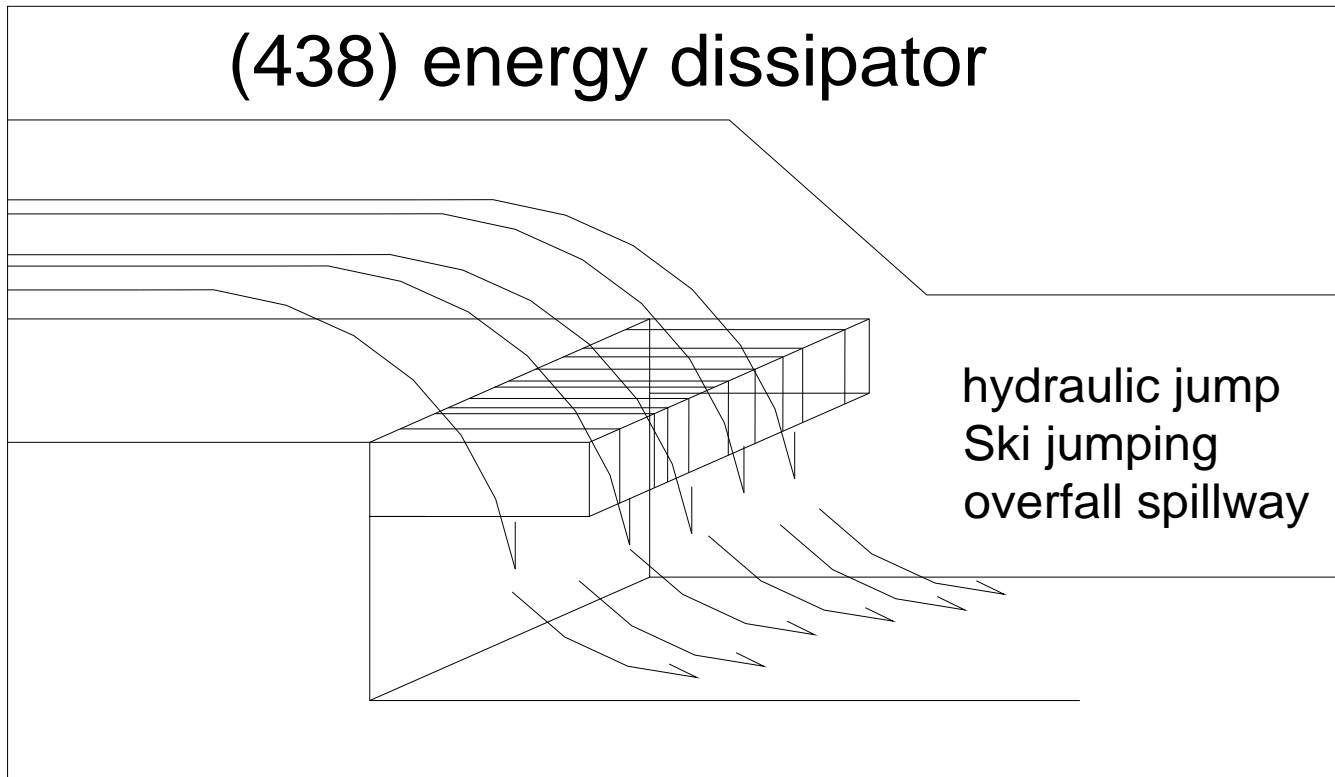
(436) ridge between rice fields, border ditch irrigation



(437) Decompression wells

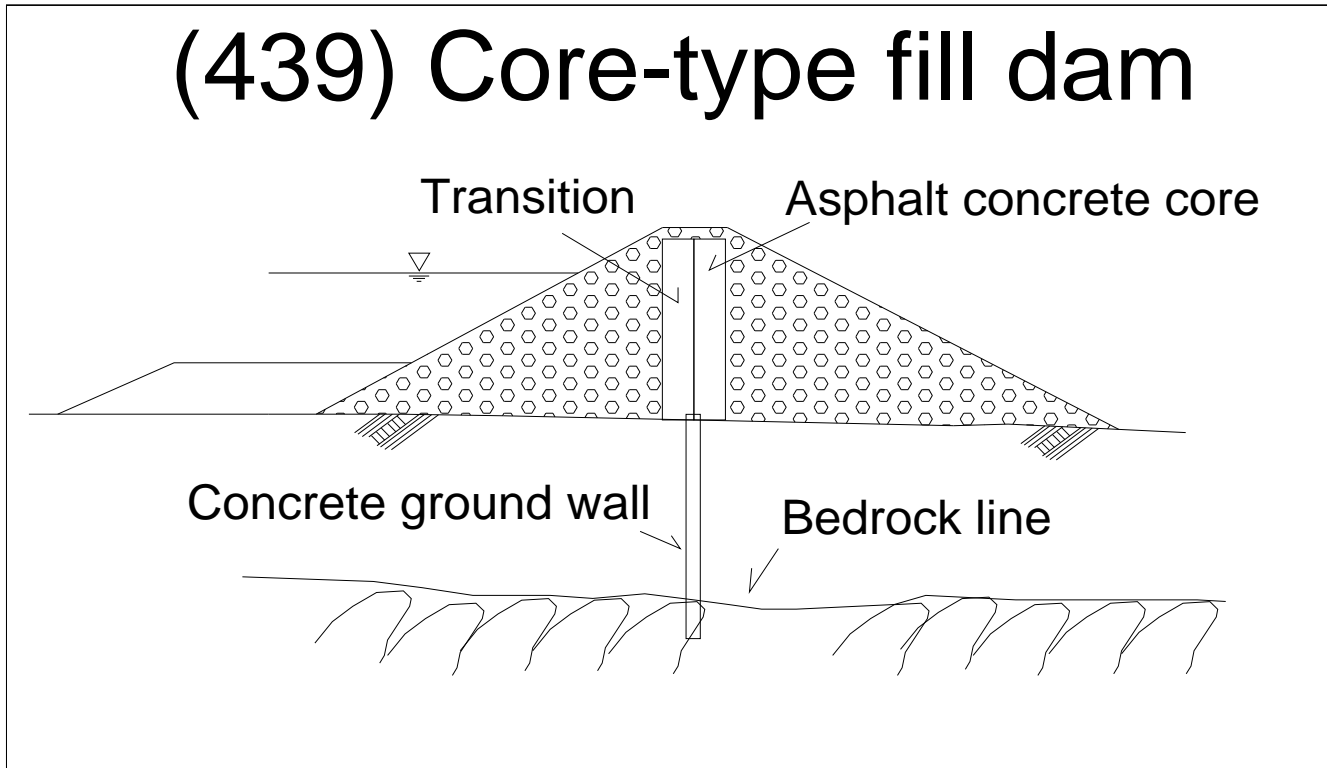


(438) energy dissipator



(439) Core-type fill dam

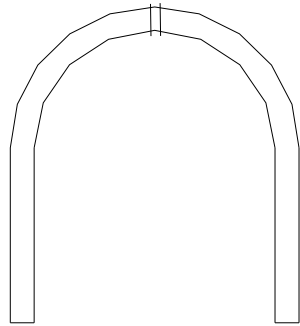
(439) Core-type fill dam



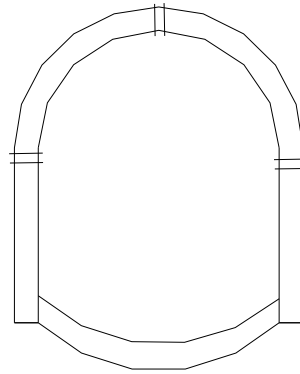
(440) arched timbering

(440) arched timbering

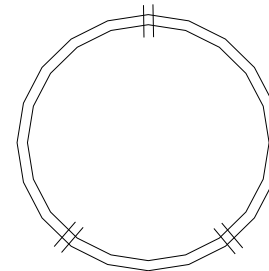
Tunnel



Consecutive ribs

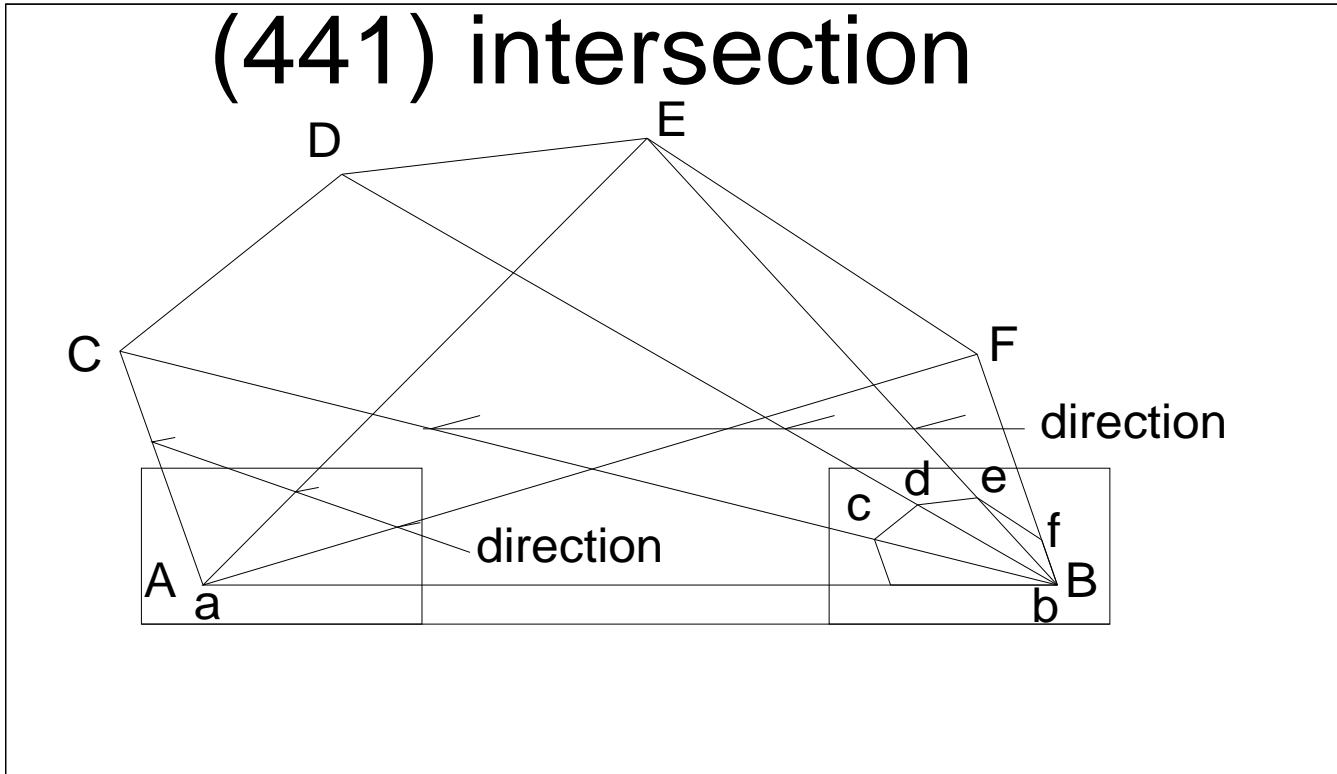


Invert Strut



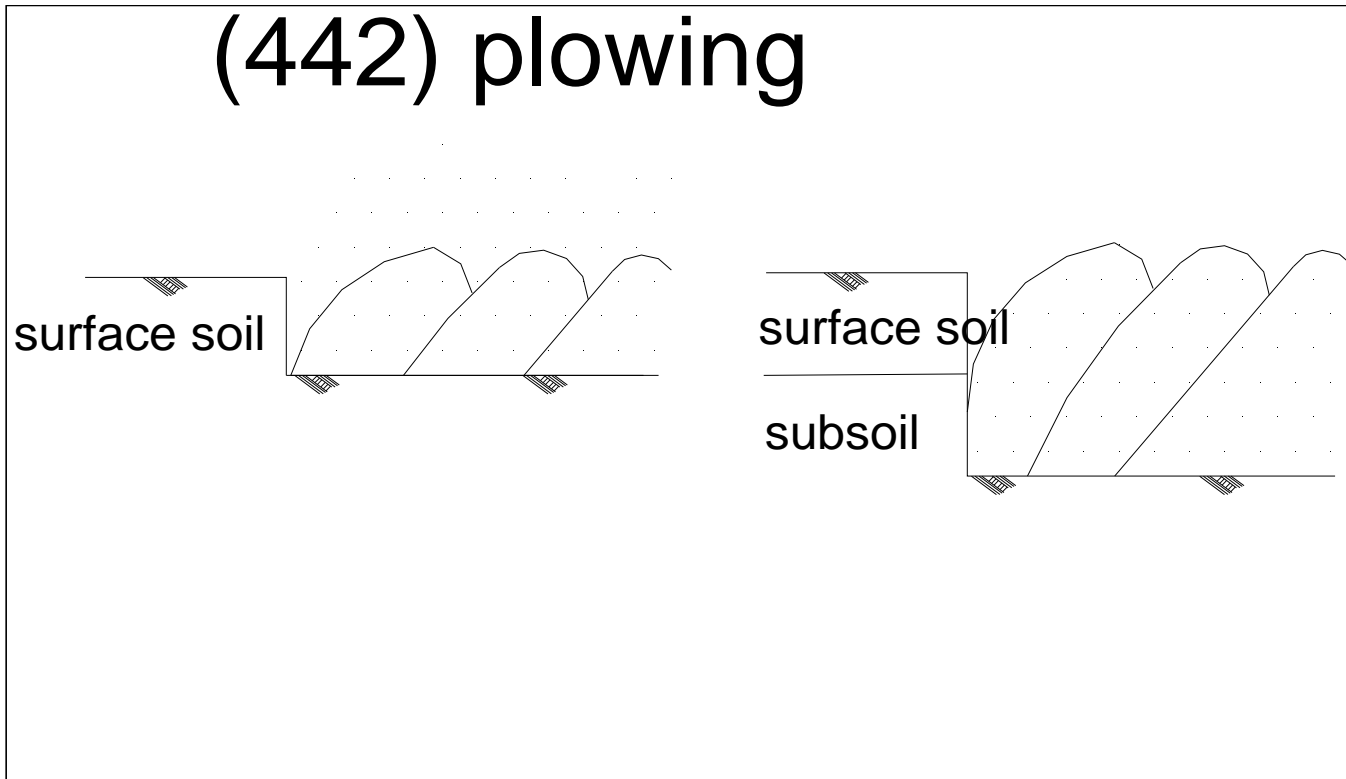
Circular ribs

(441) intersection

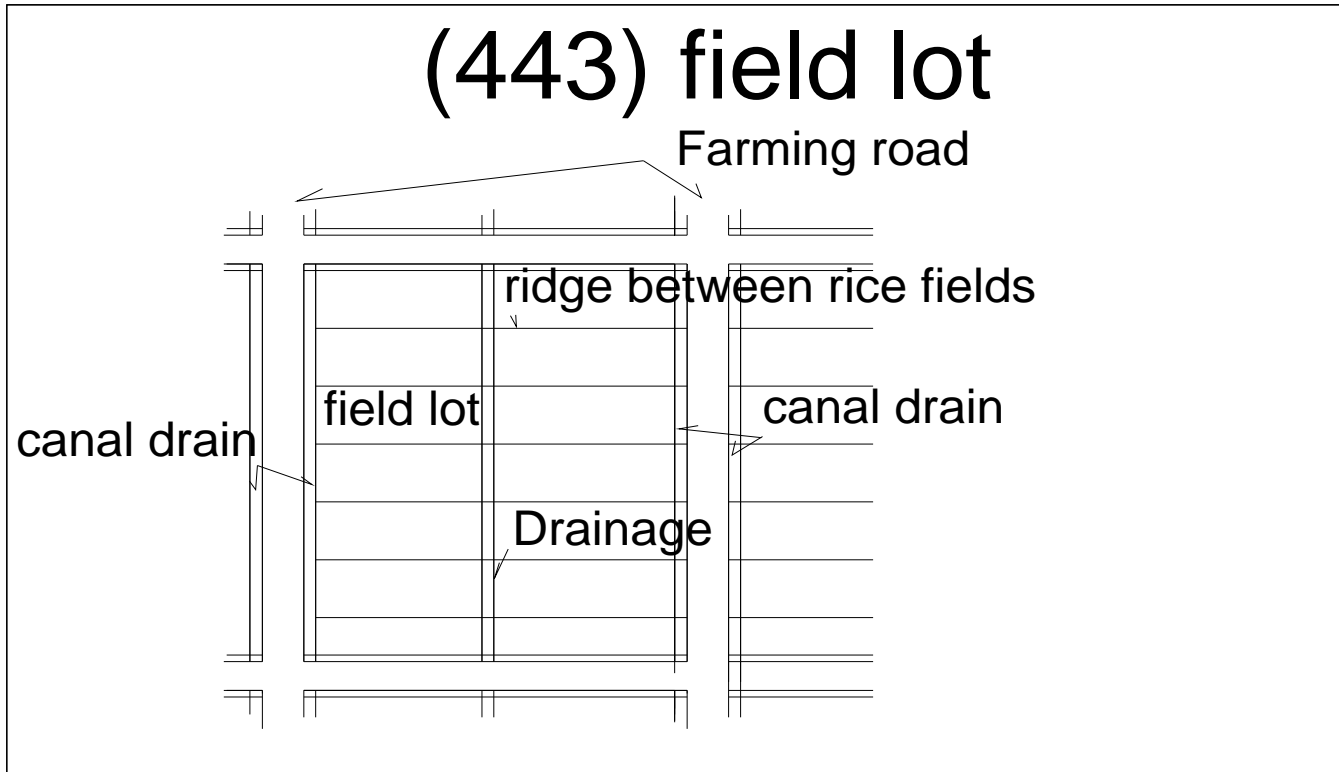


(442) plowing

(442) plowing

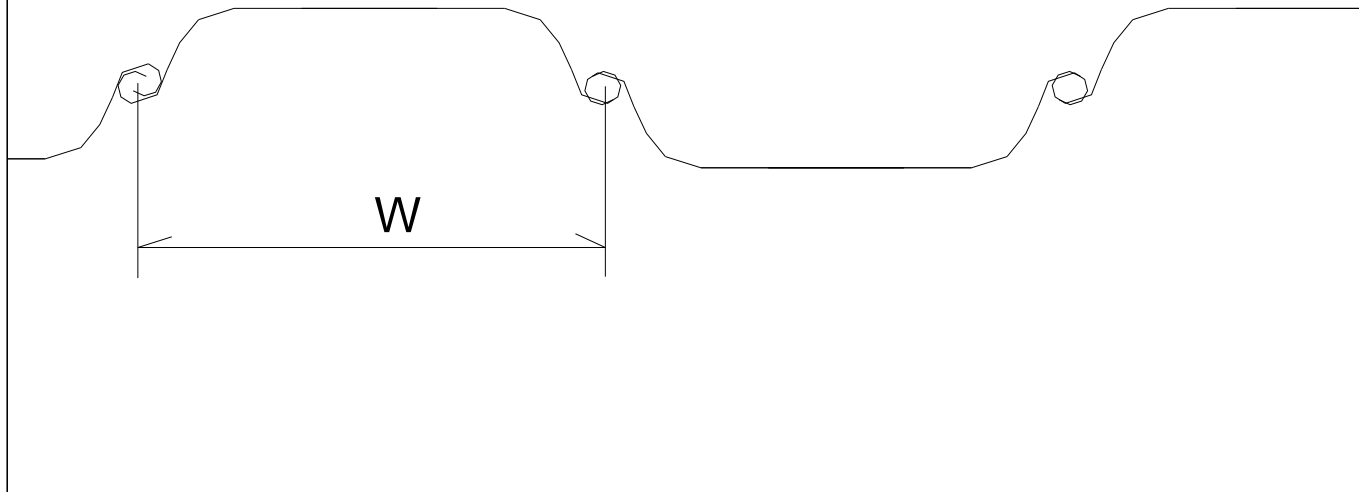


(443) field lot



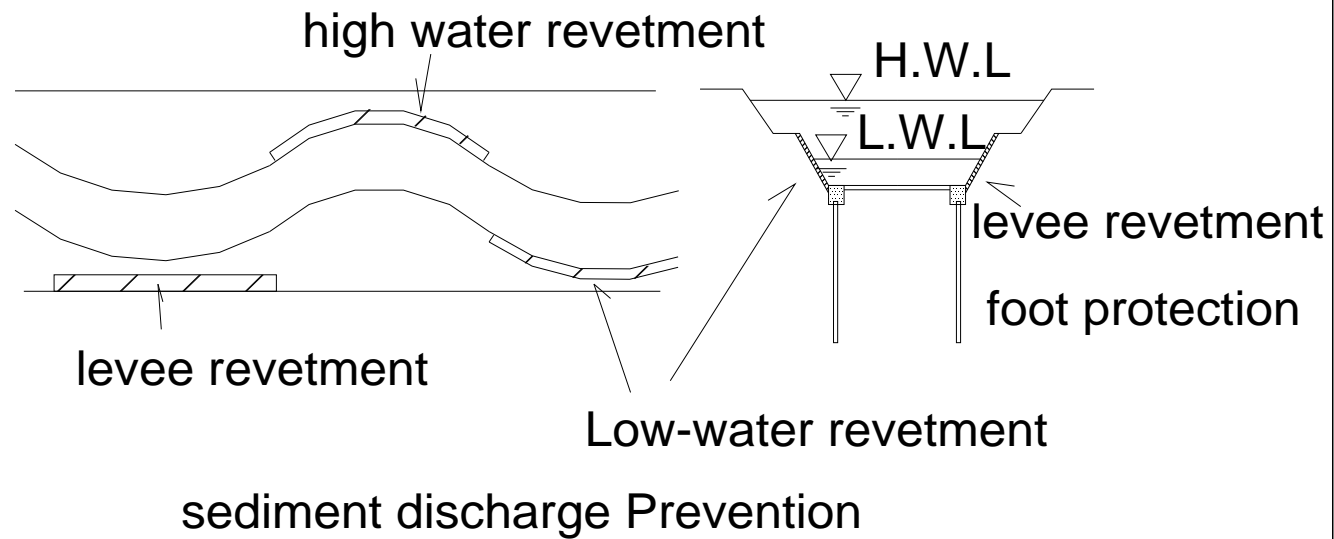
(444) steel sheet pile

(444) steel sheet pile



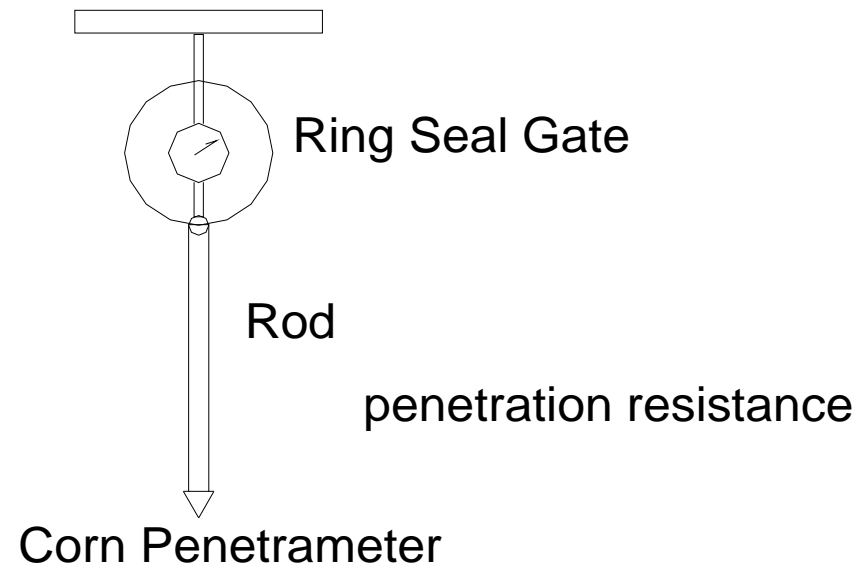
(446)Revetment

(446)Revetment



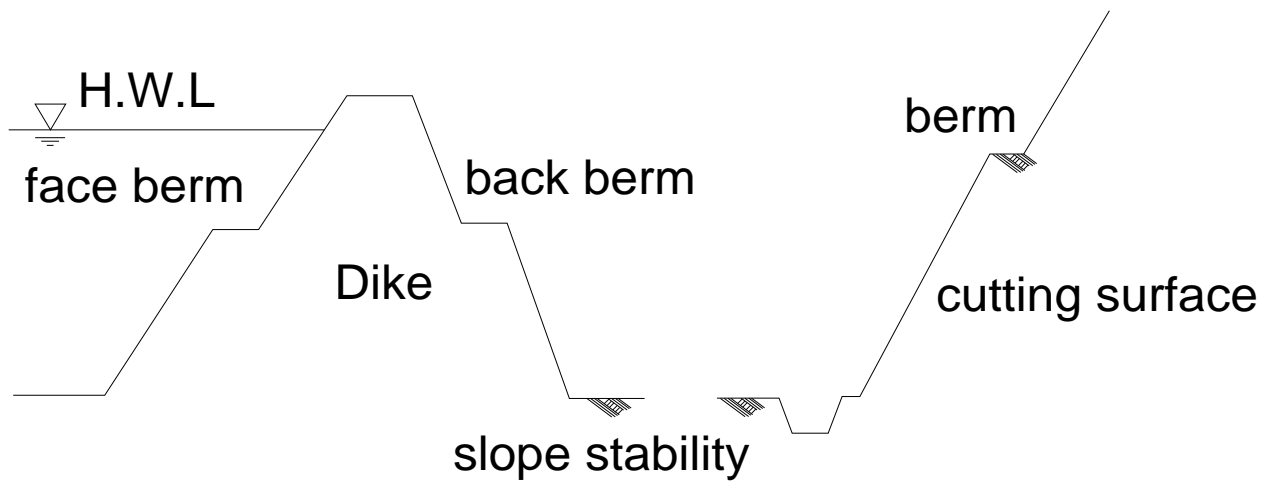
(447)cone index

(447)cone index



(448)banquette; berm

(448)banquette; berm

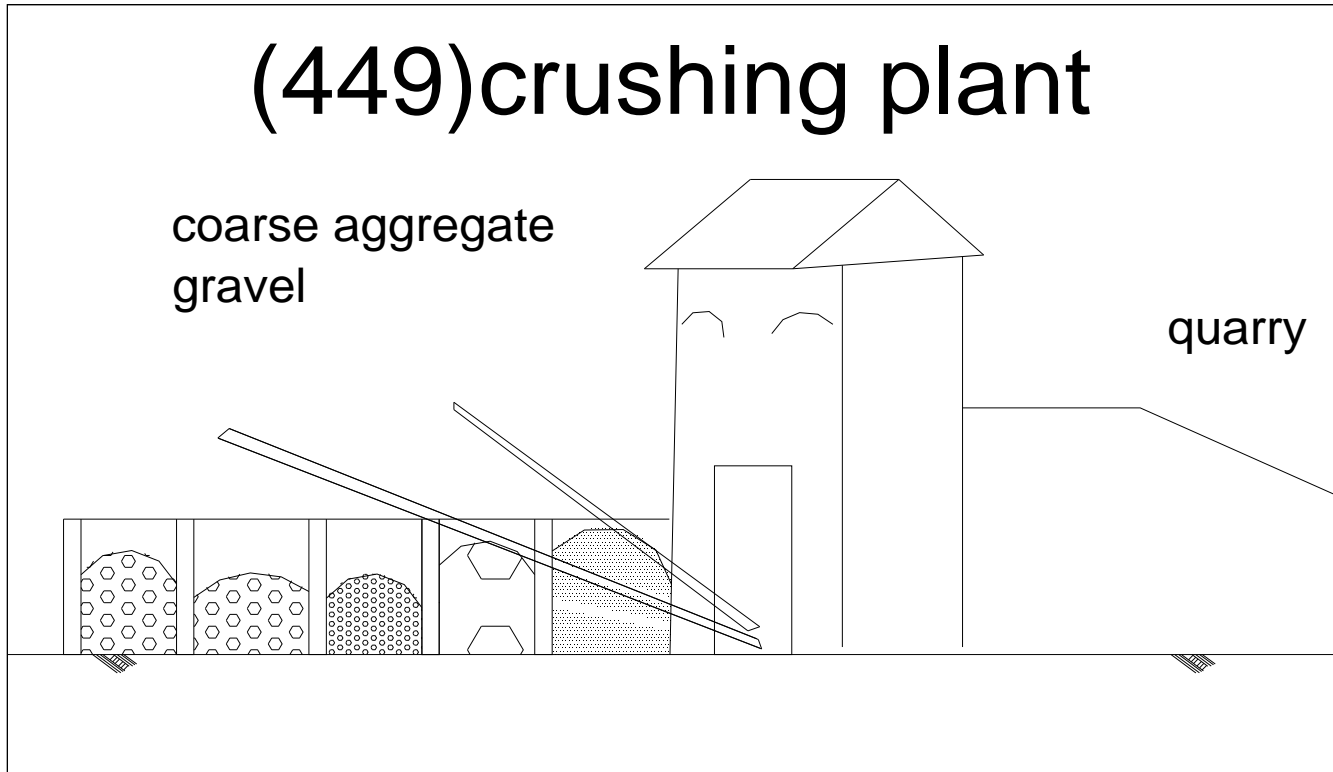


(449)crushing plant

(449)crushing plant

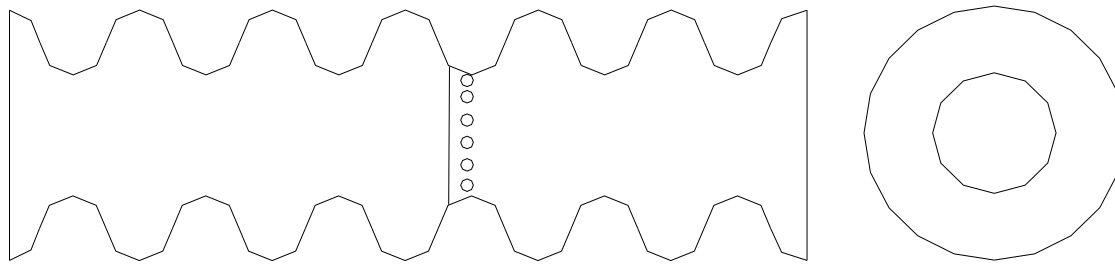
coarse aggregate
gravel

quarry



(450)Colgate Pipes

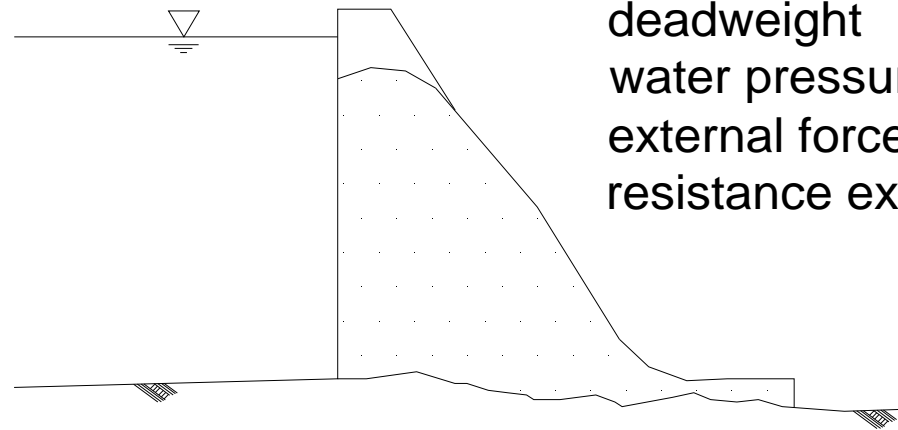
(450)Colgate Pipes



lightweight
corrosion resistance
execution

(451)concrete gravity dam

(451)concrete gravity dam

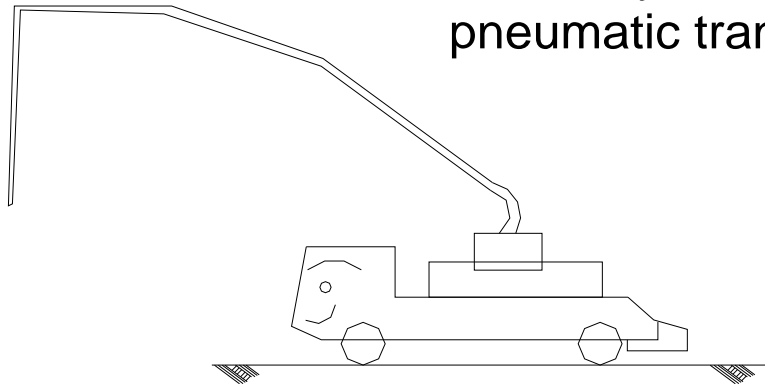


deadweight
water pressure
external force
resistance execution

(452)Concrete Pump

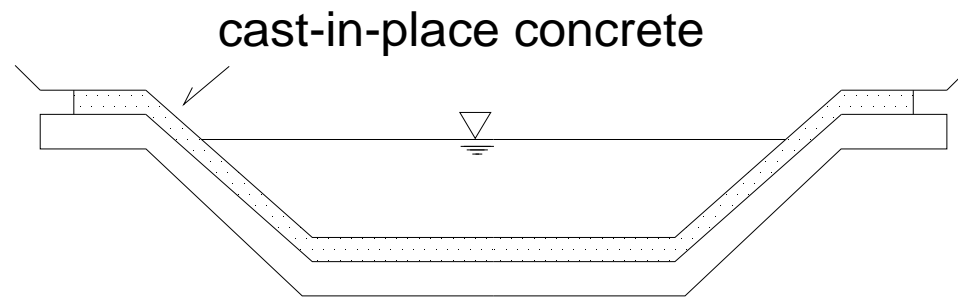
(452)Concrete Pump

narrow space
High places
continuity
pneumatic transportation



(453)concrete block lining

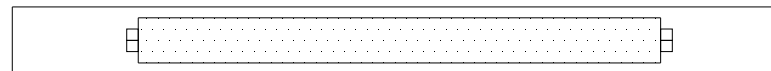
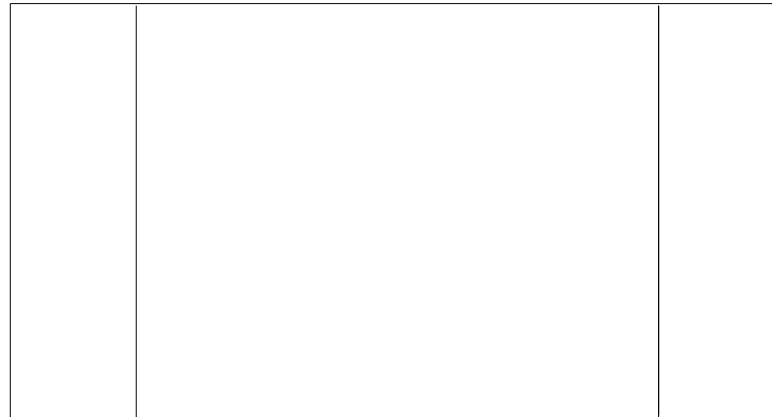
(453)concrete block lining



Concrete-walled waterway

(454)concrete sheet pile

(454)concrete sheet pile



cross section

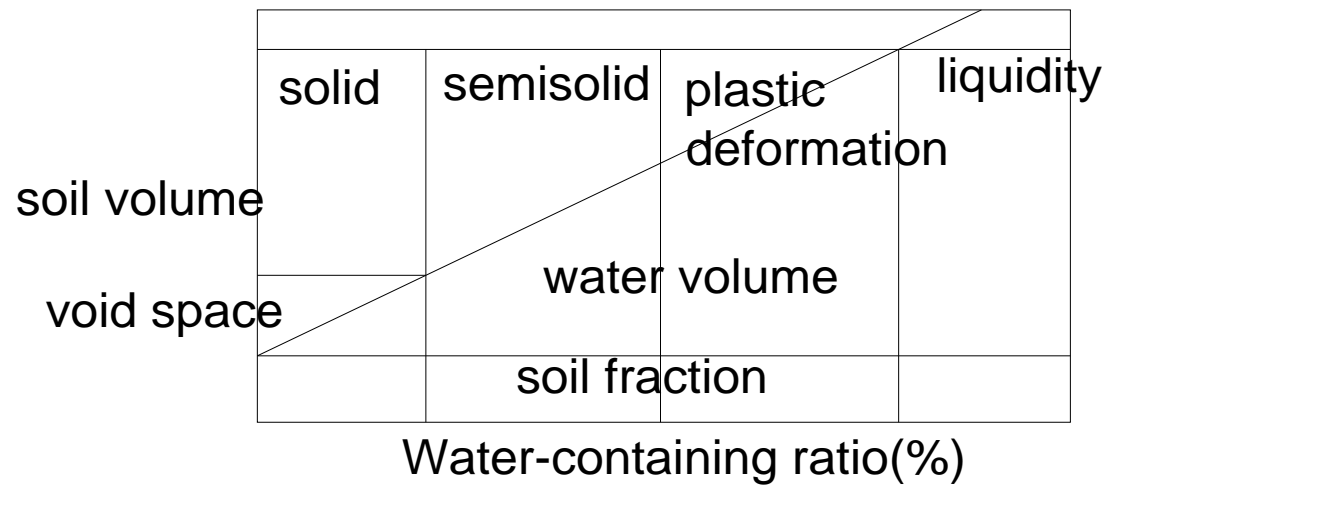
(455)blended cement

(455)blended cement

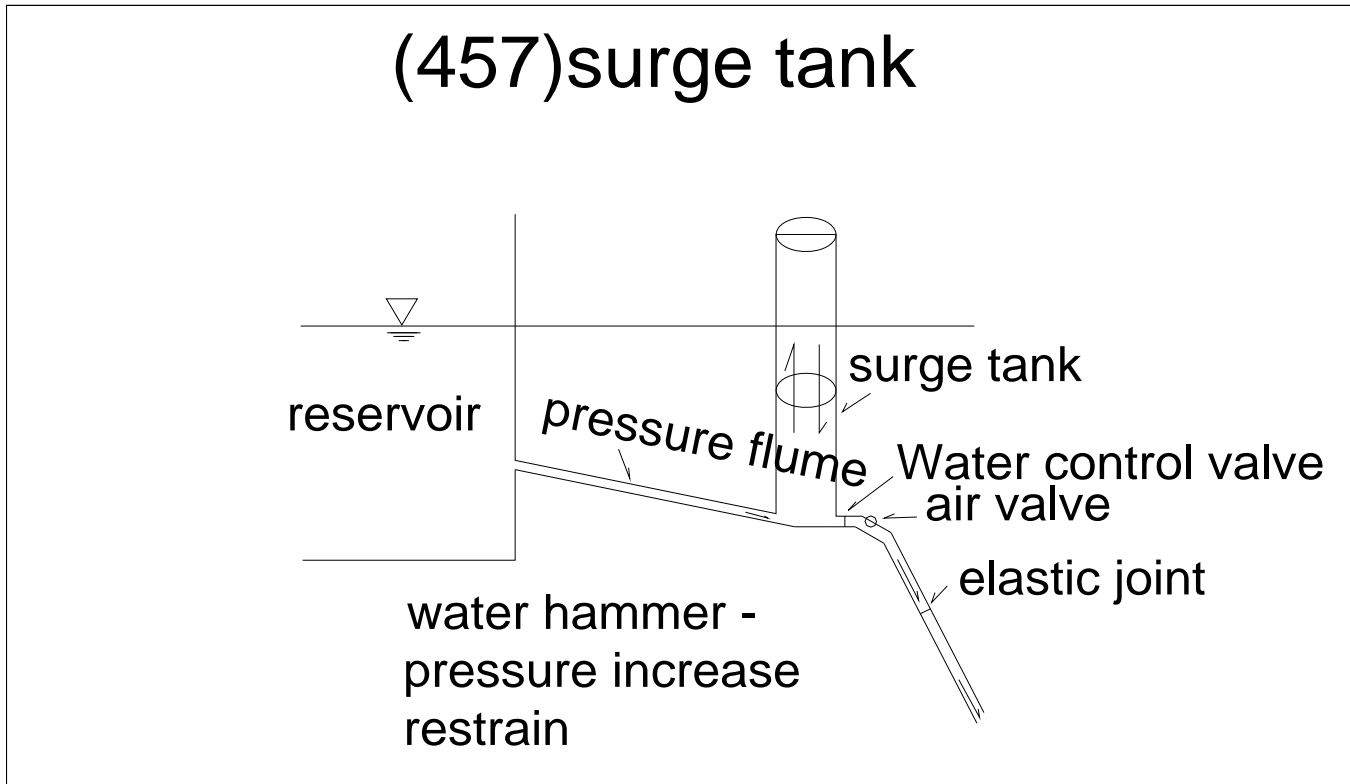
	admixture(weight%)		
	A	B	C
Blast furnace cement	5-30	30-60	60-70
Silica cement	5-10	10-20	20-30
Fly Ash Cement	5-10	10-20	20-30

(456)Moisture content

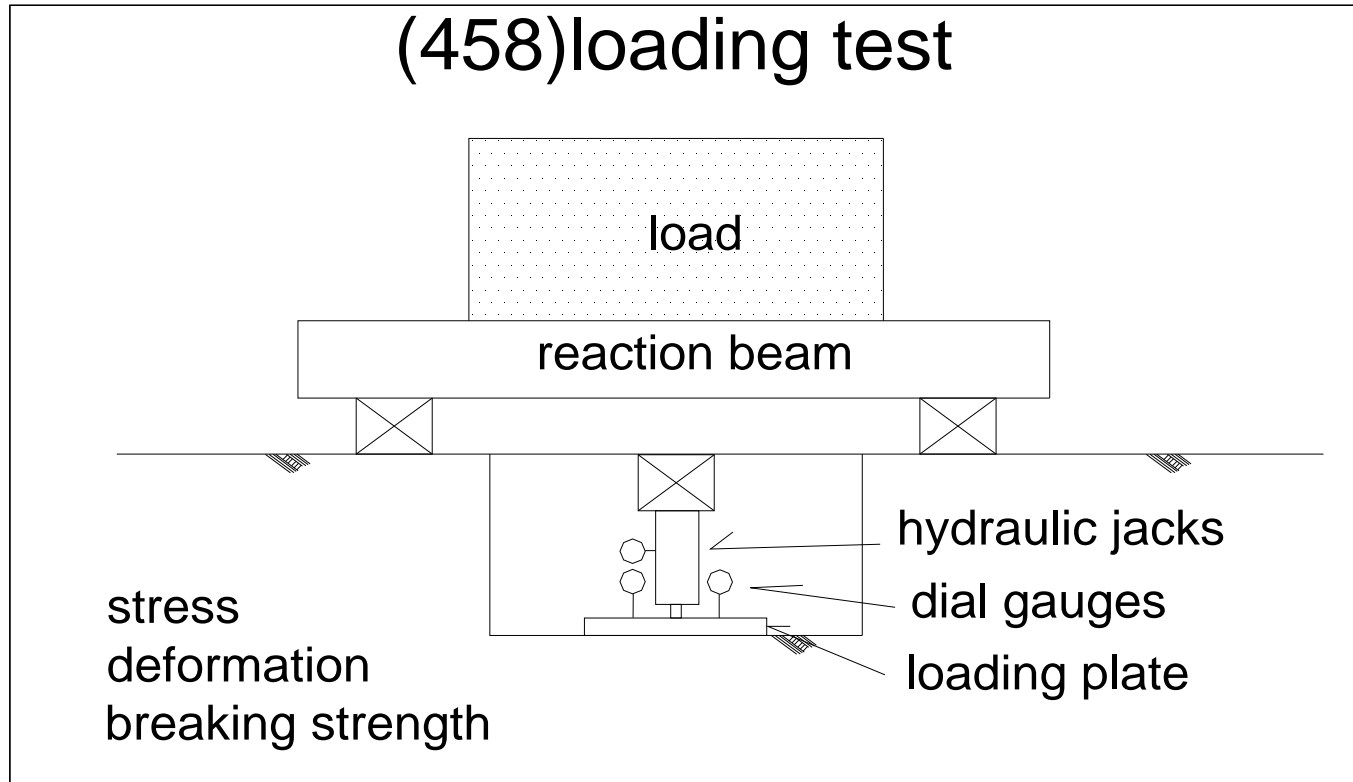
(456)Moisture content
and consistency limit



(457) surge tank



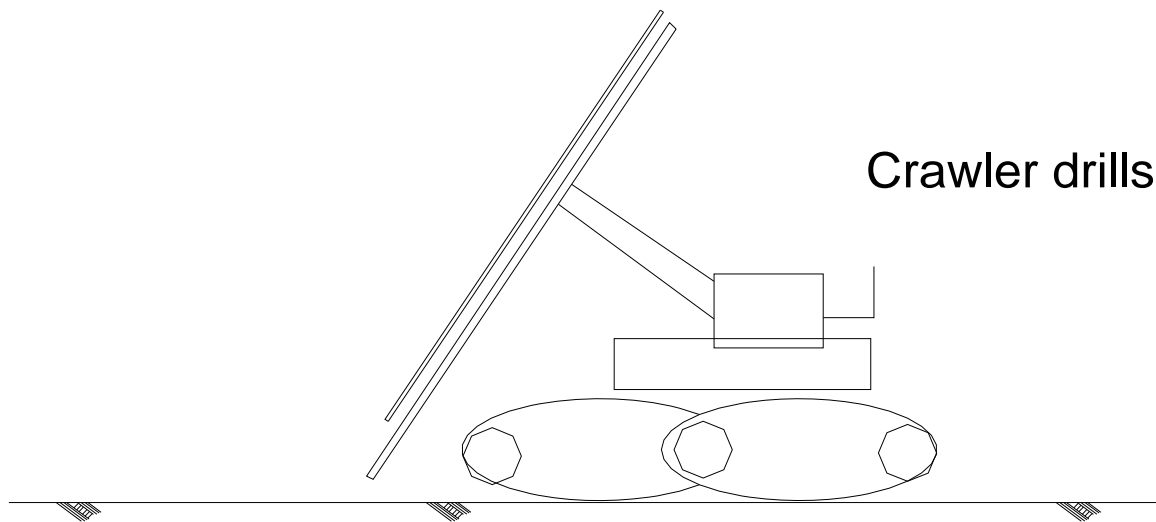
(458)loading test



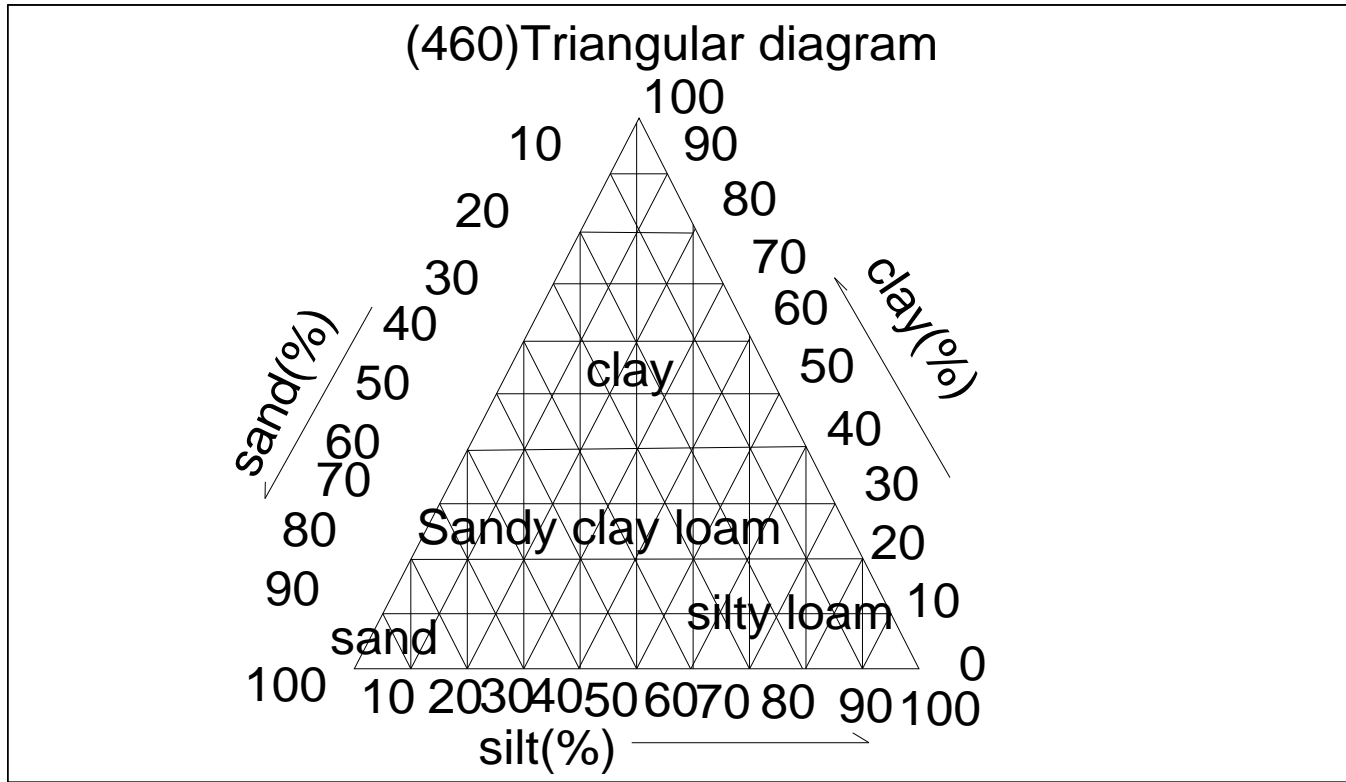
(459)jackhammer

(459)jackhammer

Crawler drills

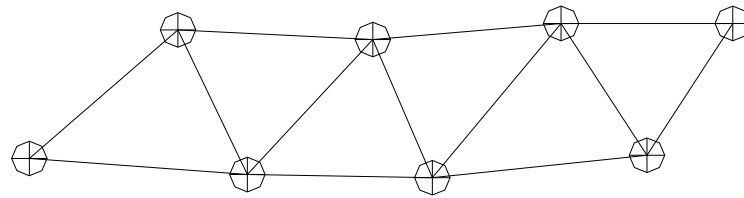


(460)Triangular diagram



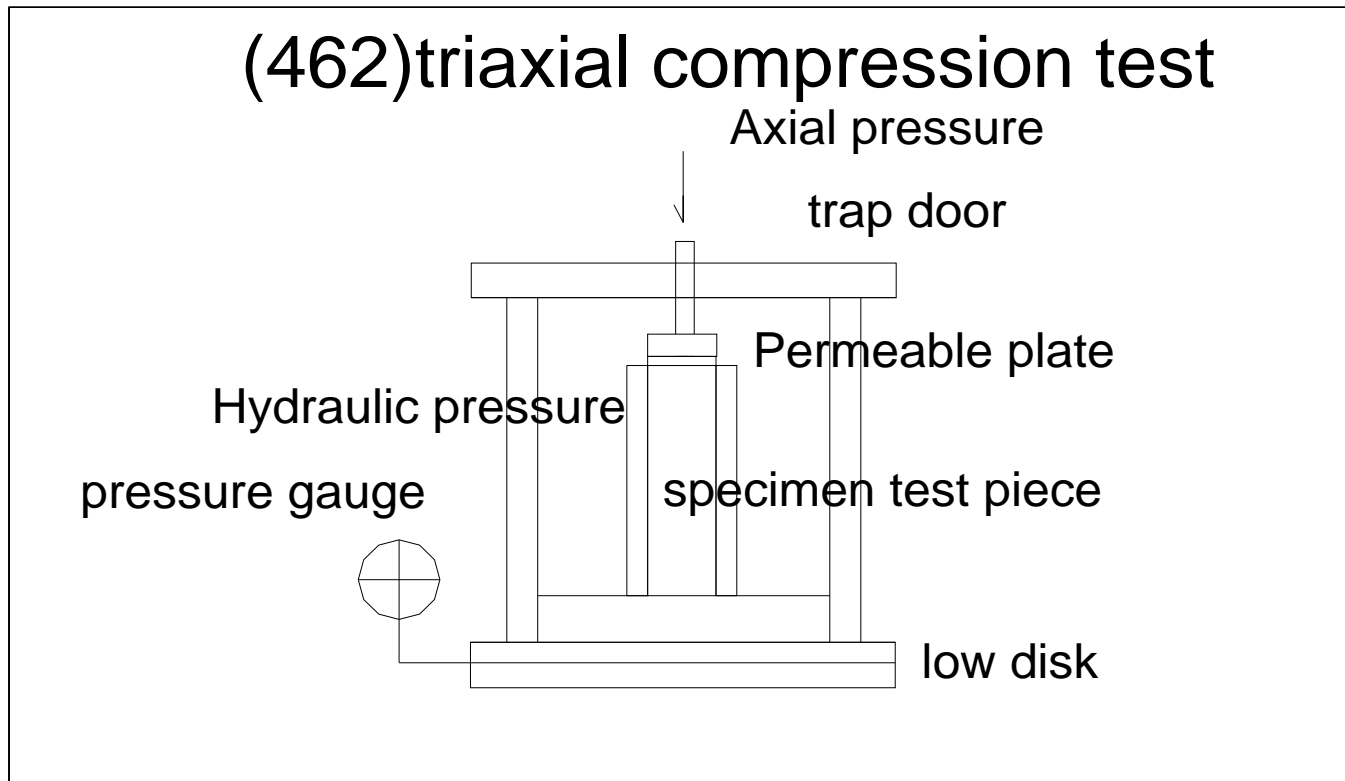
(461)Triangulation

(461)Triangulation



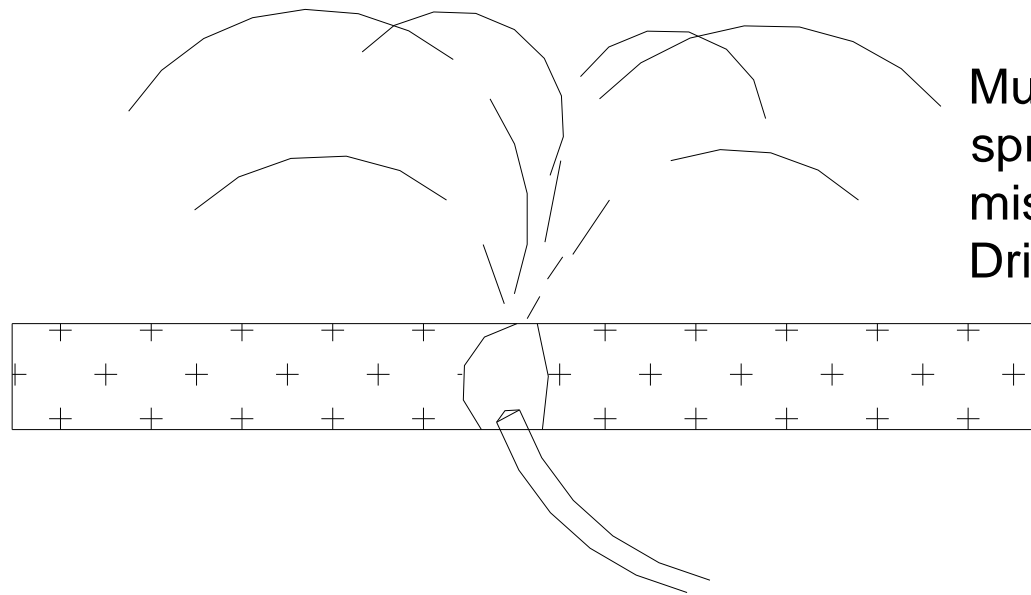
triangulation chain

(462)triaxial compression test



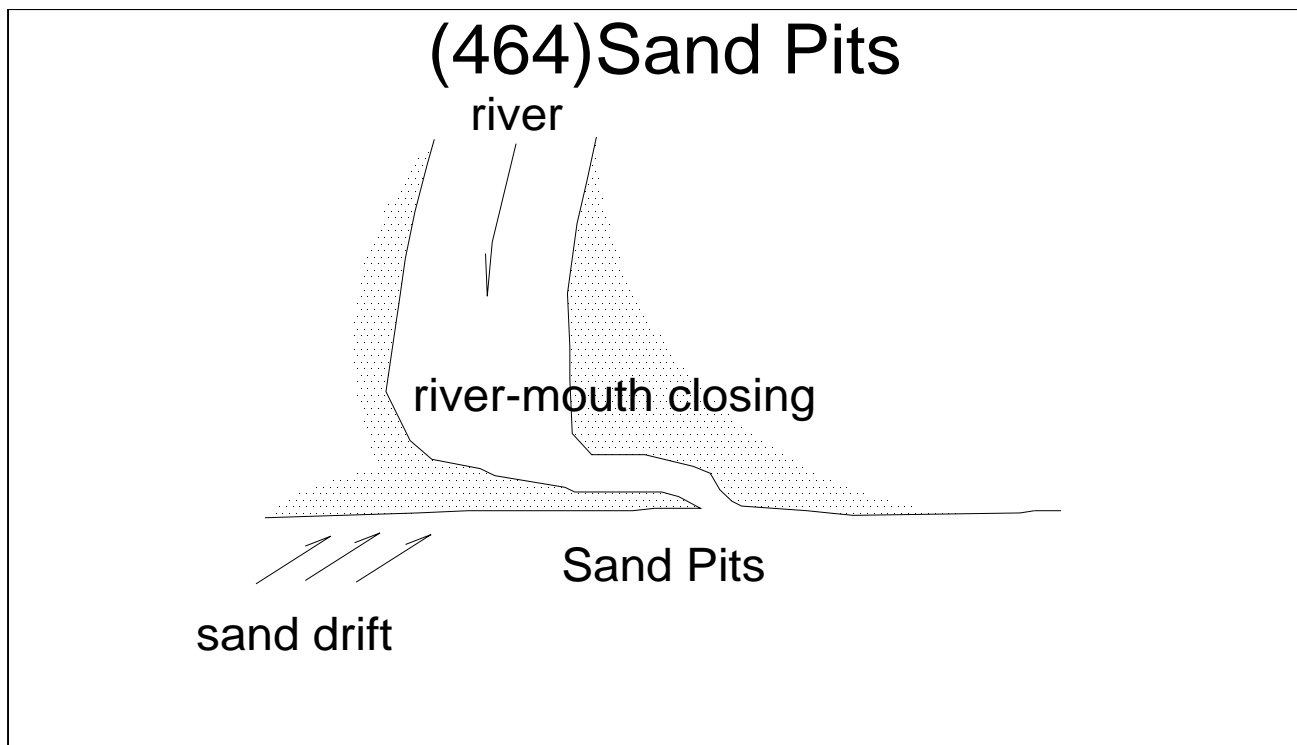
(463)sprinkle with water

(463)sprinkle with water

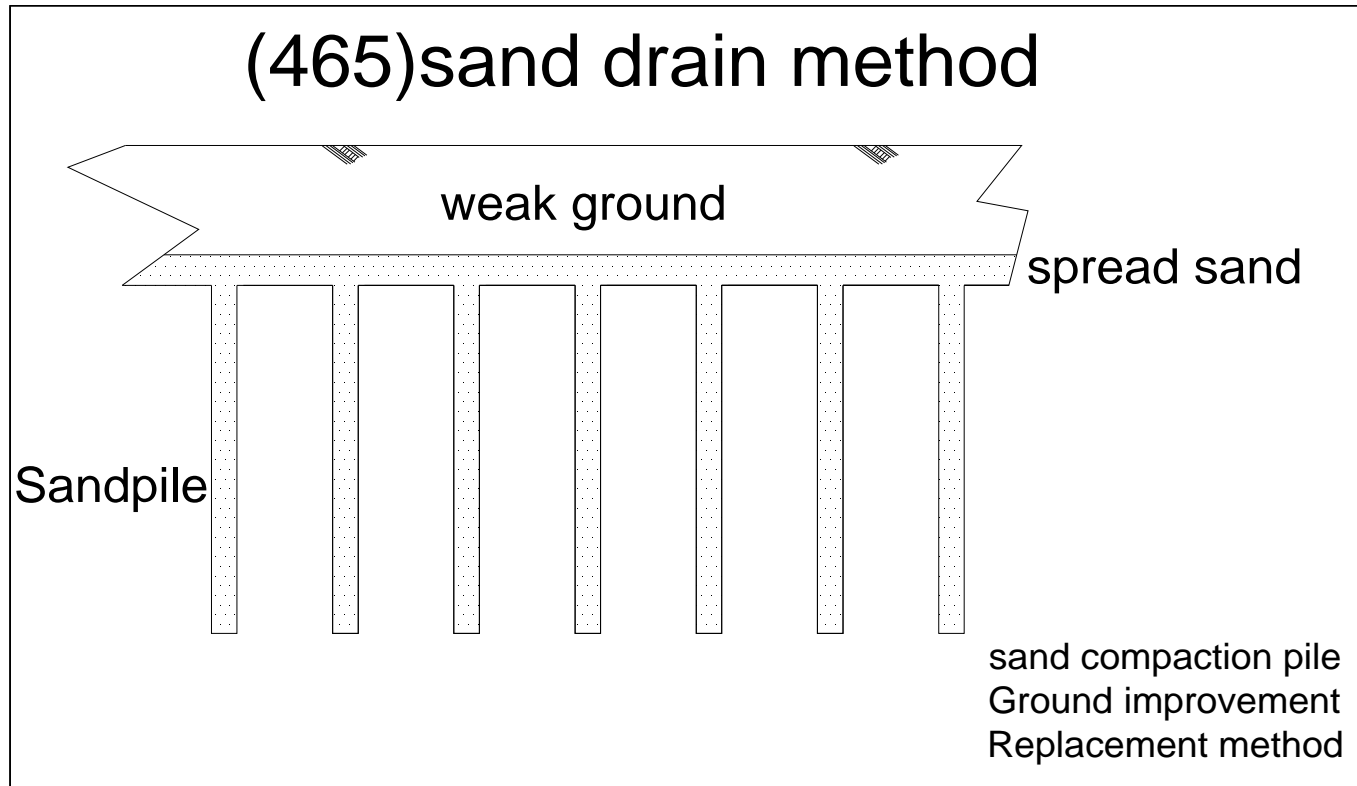


Multi-hole tube
sprinkler
mist irrigation
Drip irrigation

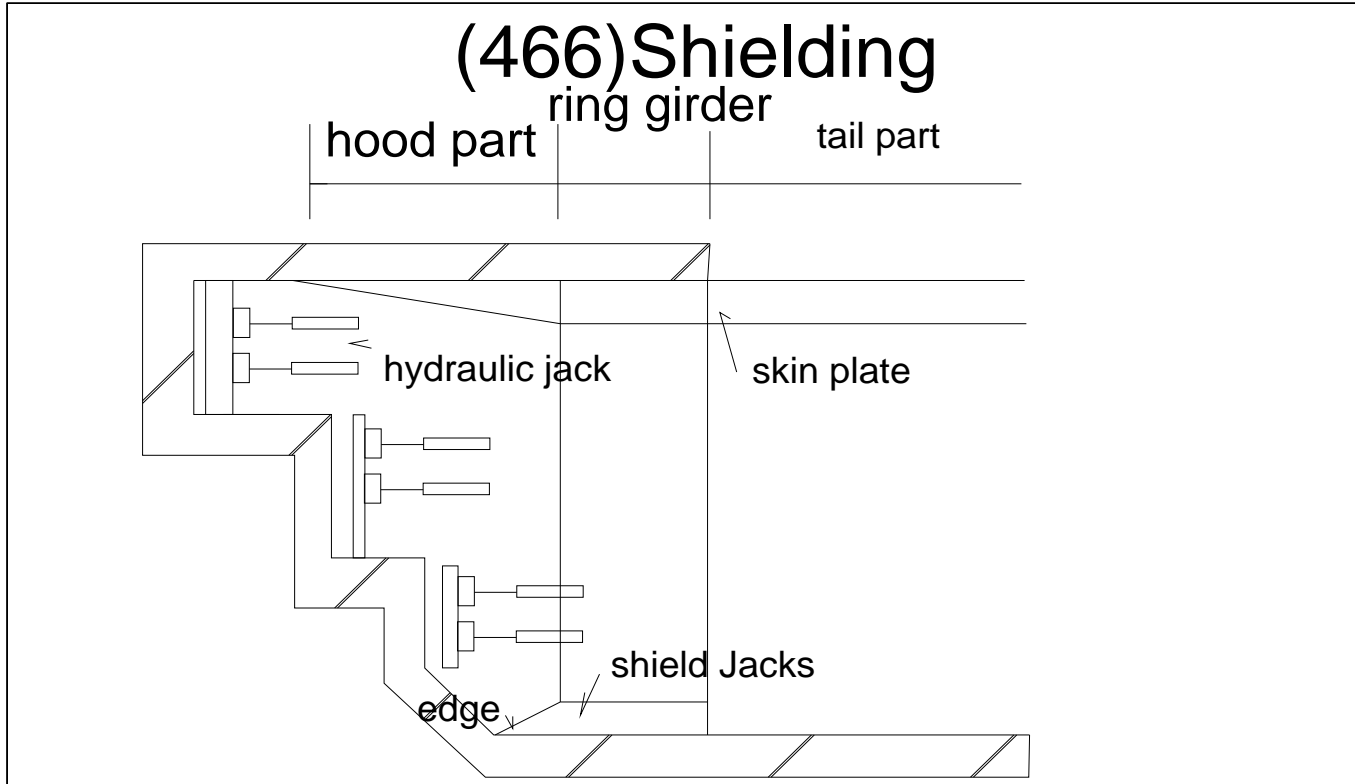
(464) Sand Pits



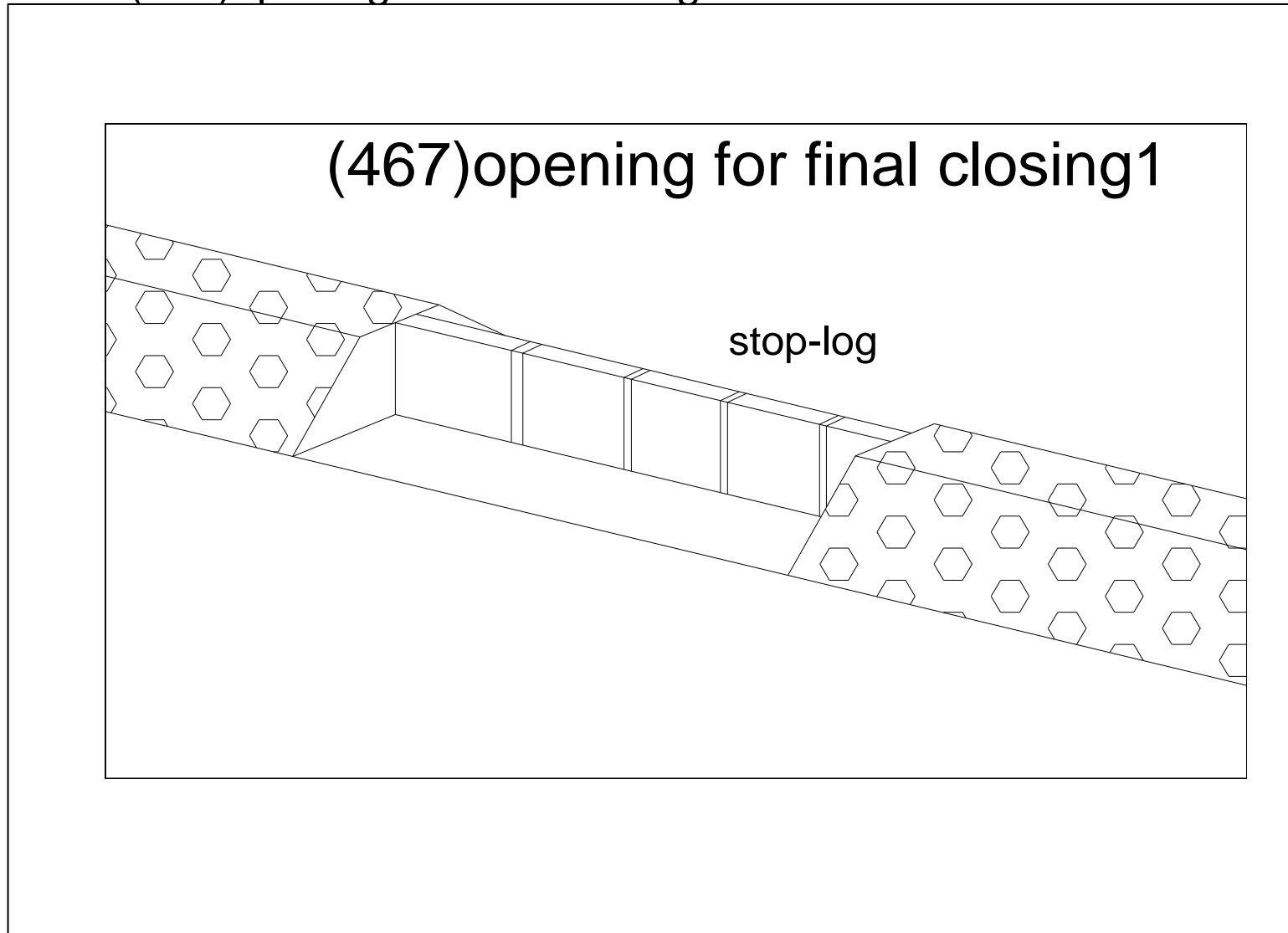
(465)sand drain method



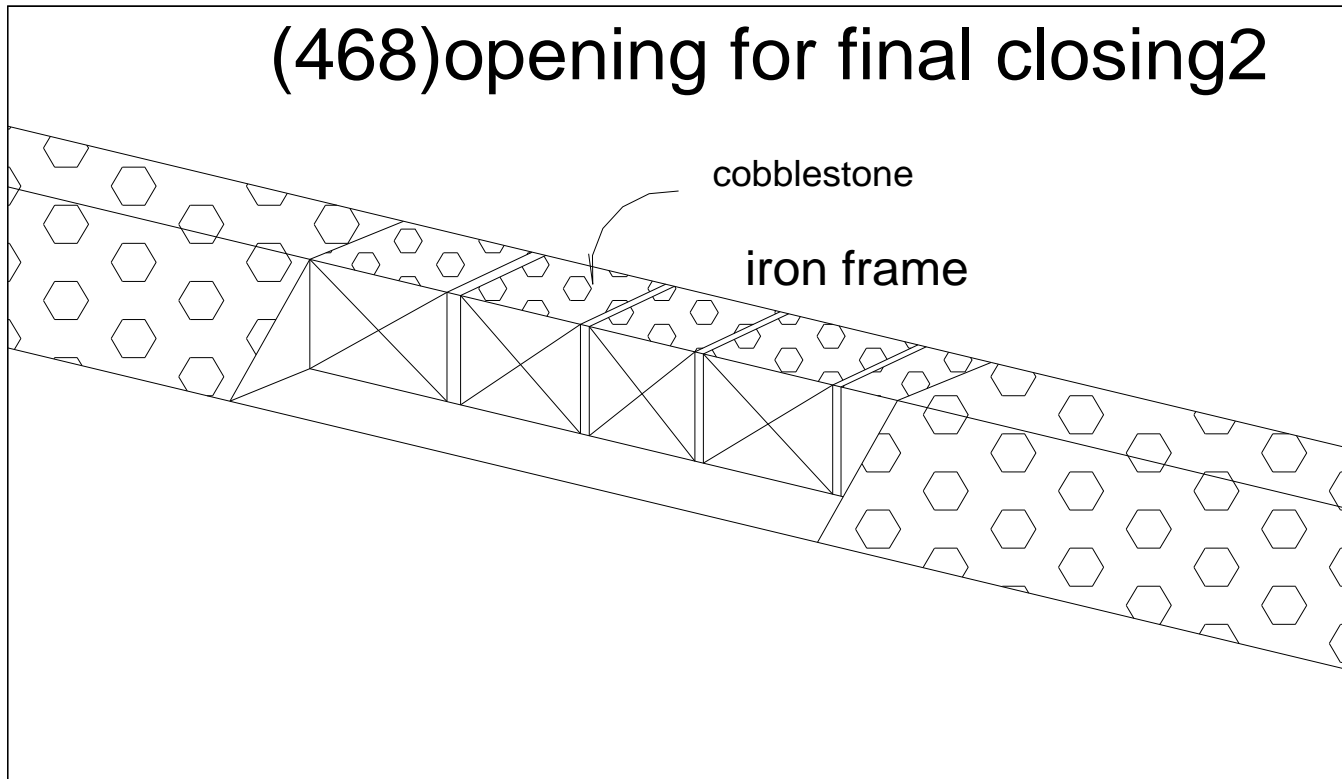
(466)Shielding



(467)opening for final closing1

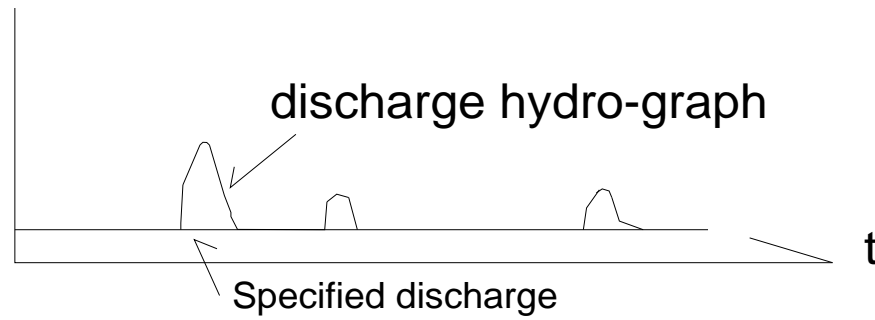
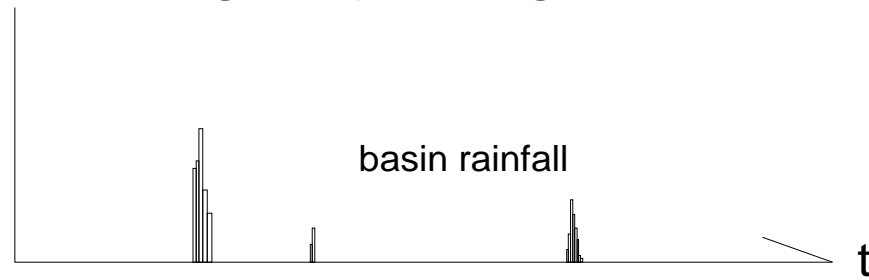


(468)opening for final closing2



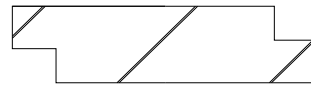
(469)discharge hydro-graph

(469)discharge hydro-graph



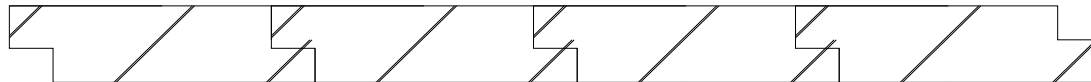
(470)rebated joint

(470)rebated joint

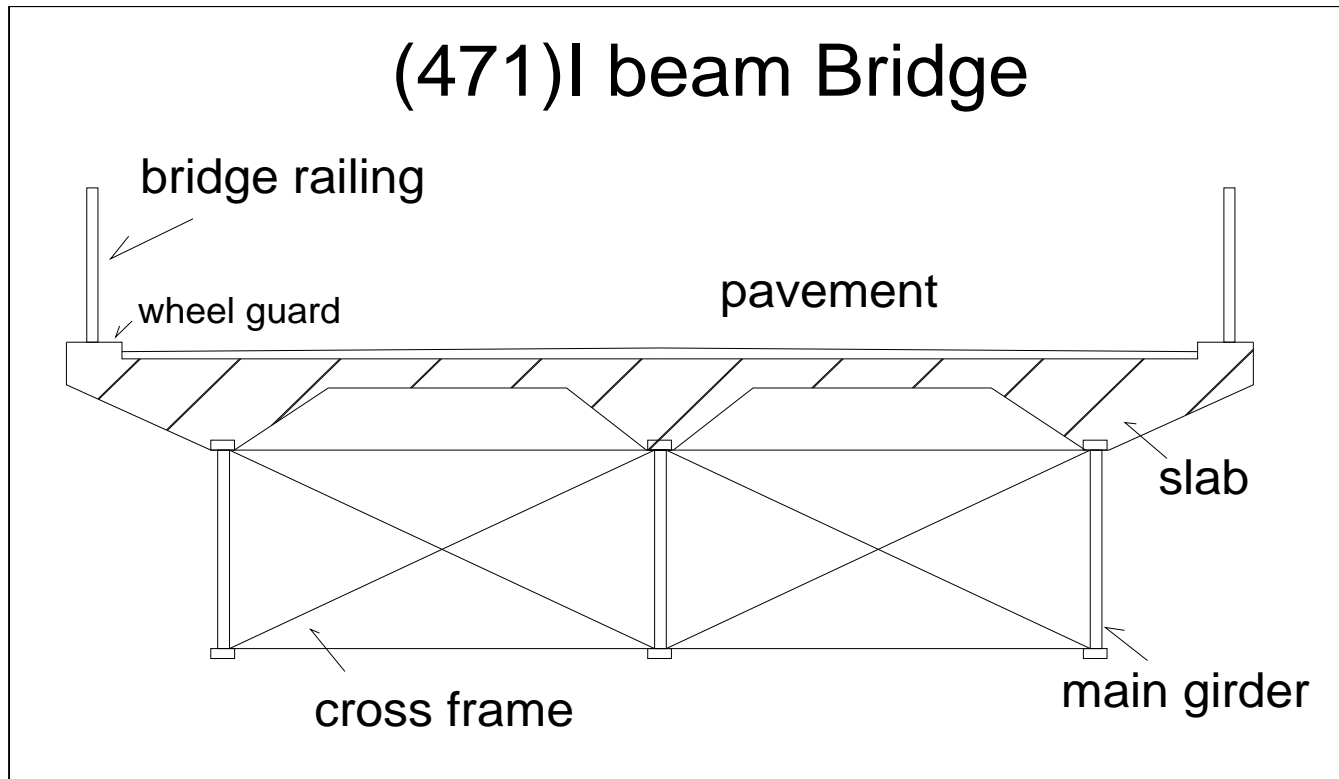


wood timber

joining

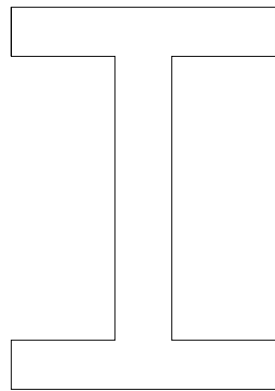


(471)I beam Bridge

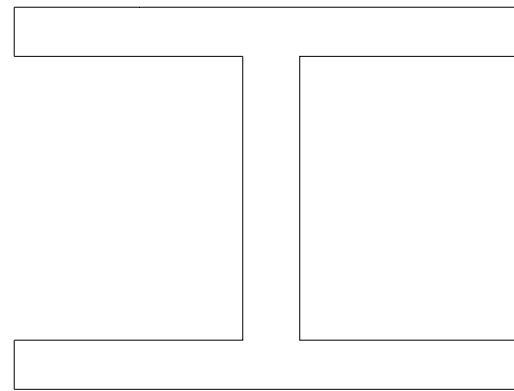


(472)I steel

(472)I steel

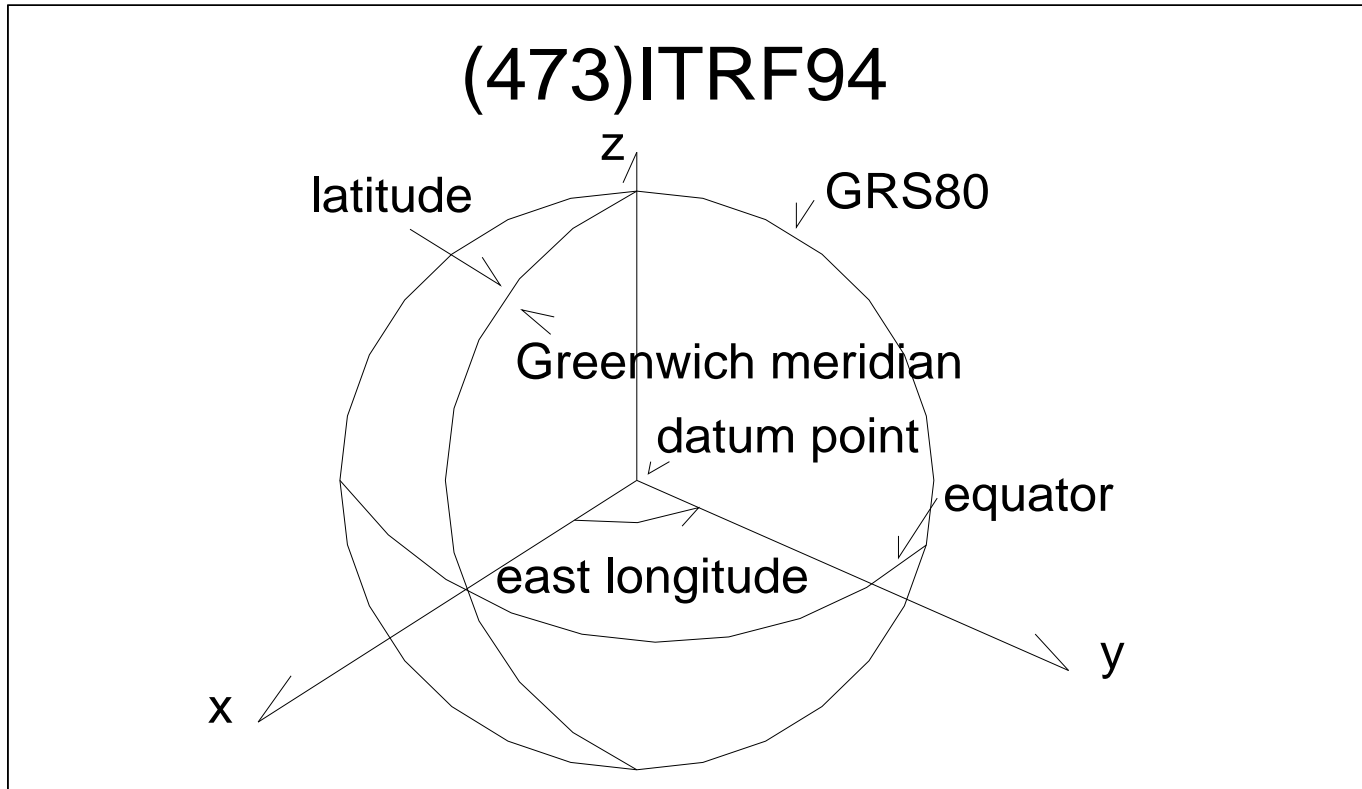


I-shaped steel

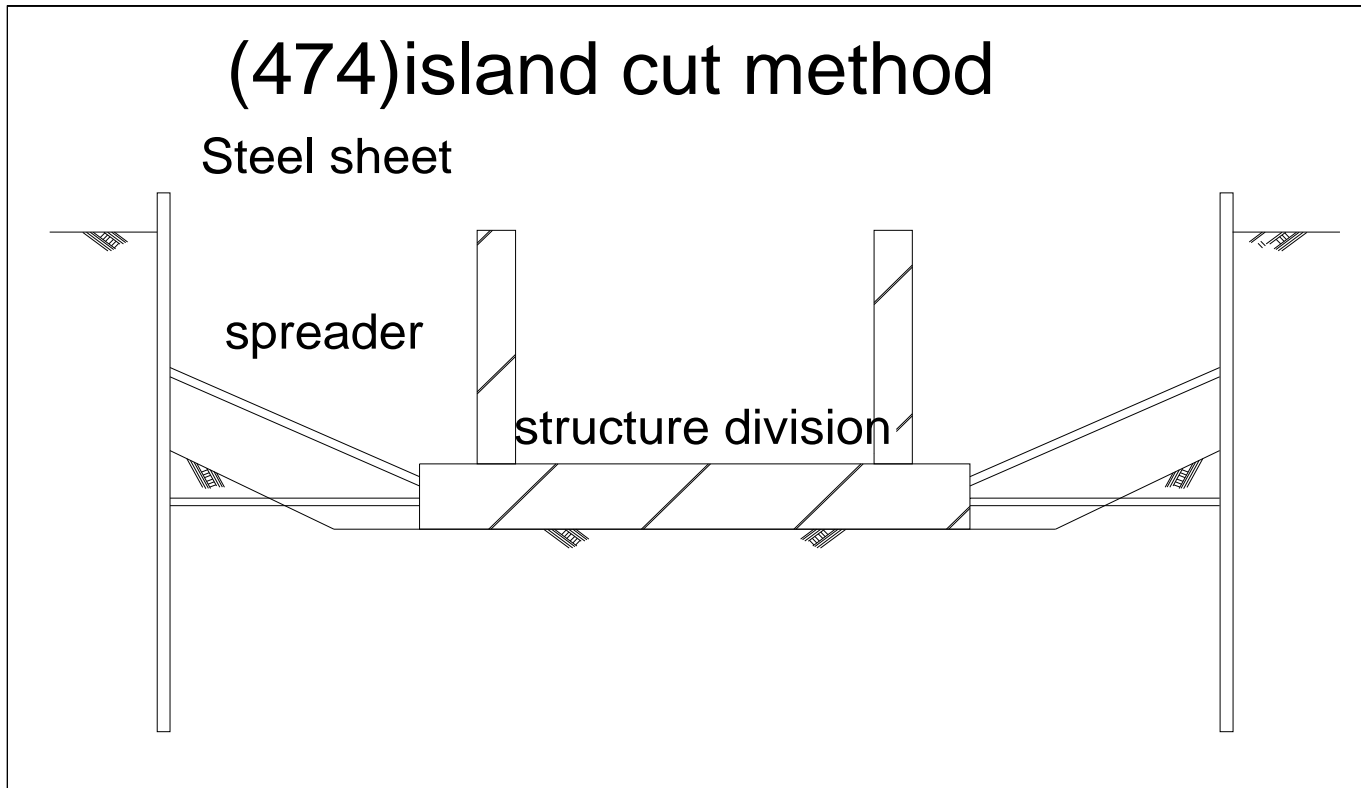


H-section steel

(473)ITRF94

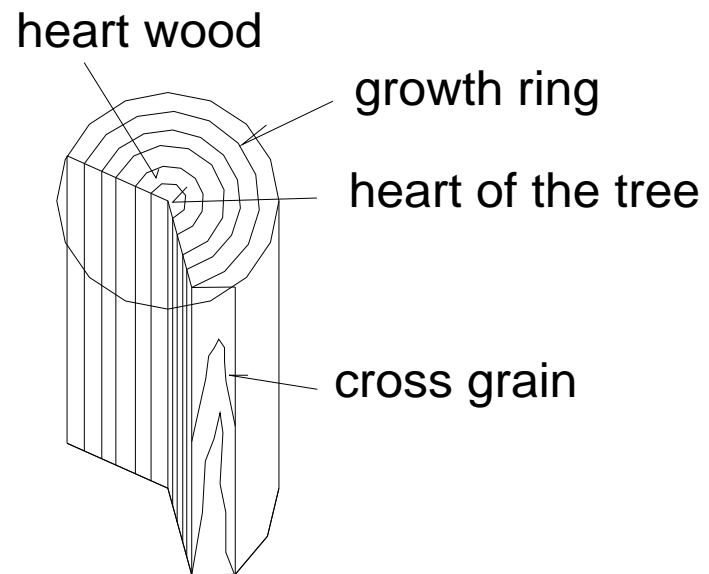


(474)island cut method



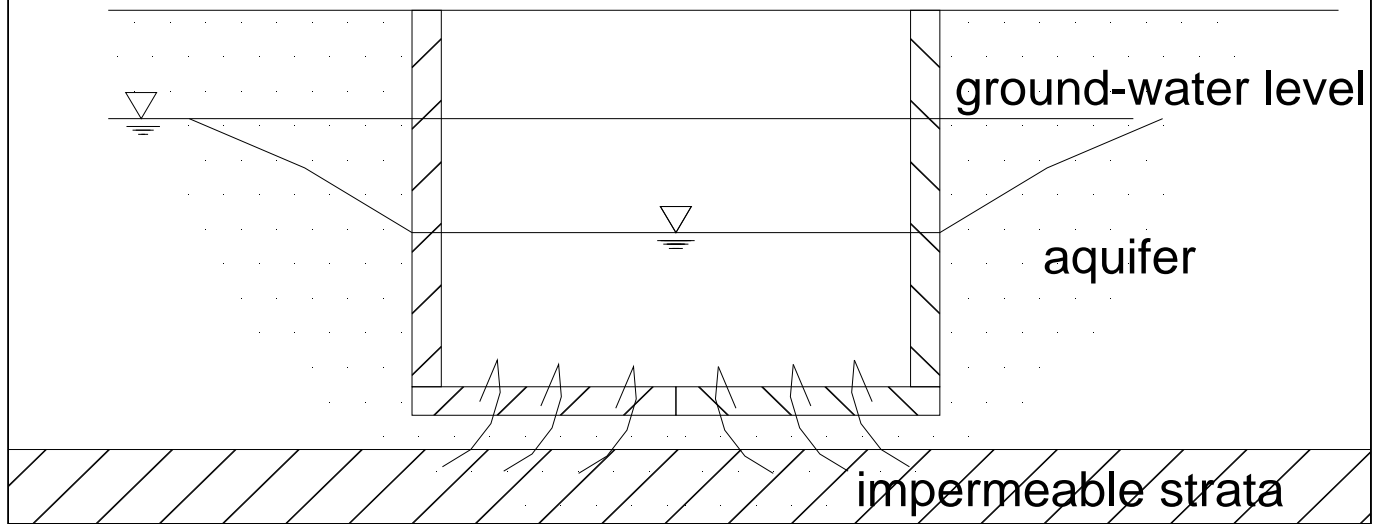
(475)heart wood

(475)heart wood



(476)shallow well

(476)shallow well

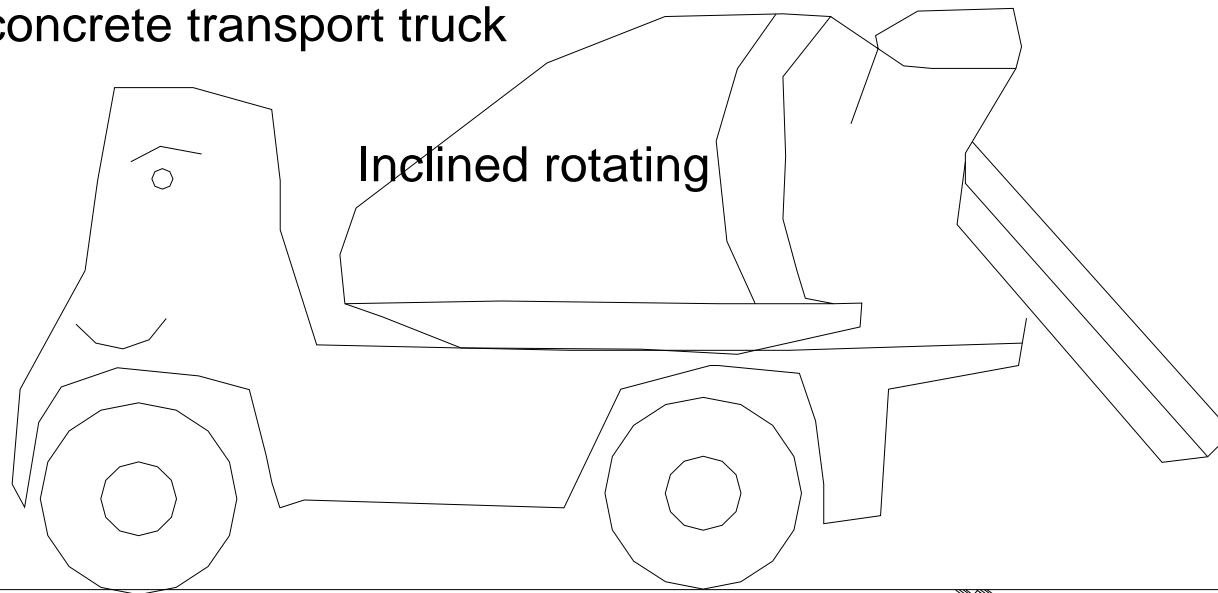


(477)agitator

(477)agitator

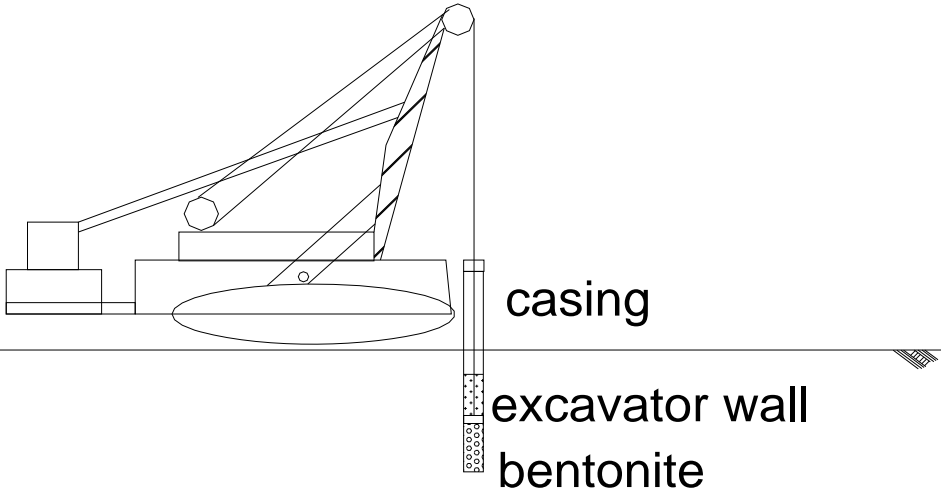
concrete transport truck

Inclined rotating



(478) earth drill

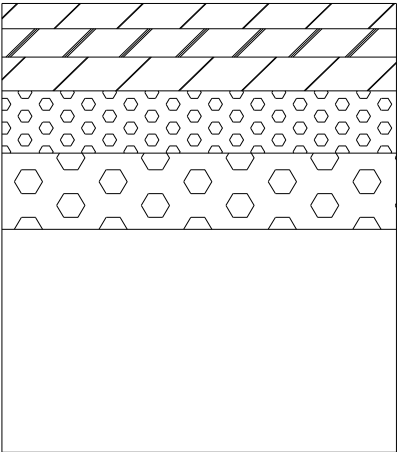
(478) earth drill



(479) asphalt concrete

(479) asphalt concrete

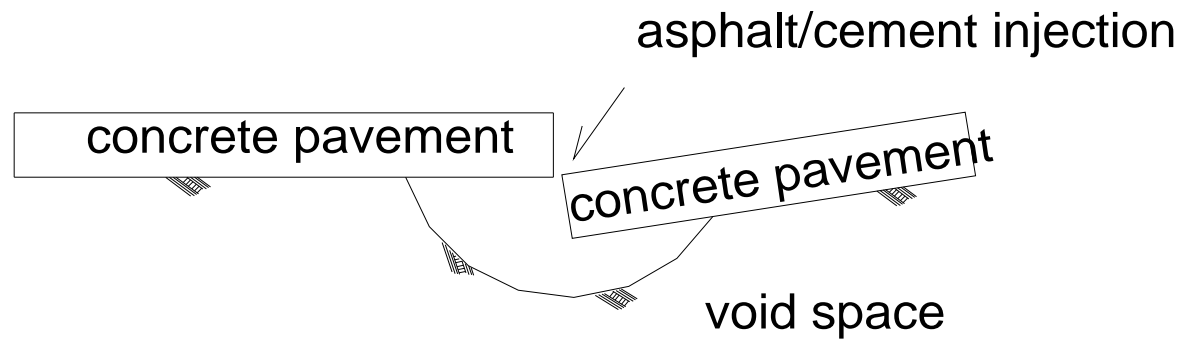
pavement
roadbed
(about 1m)



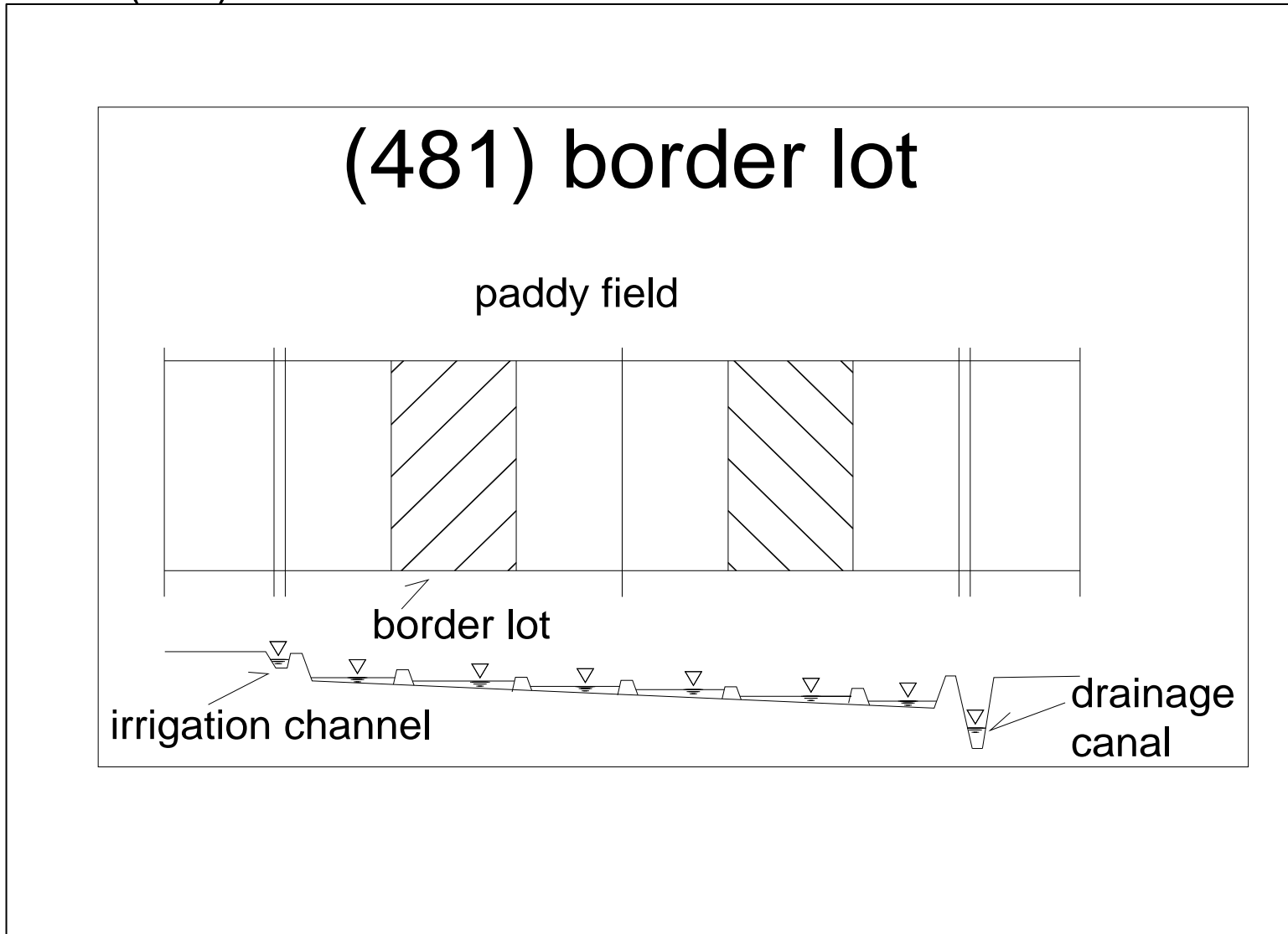
surface course
substratum
base course
subbase course
roadbed

(480) Asphalt sub-sealing

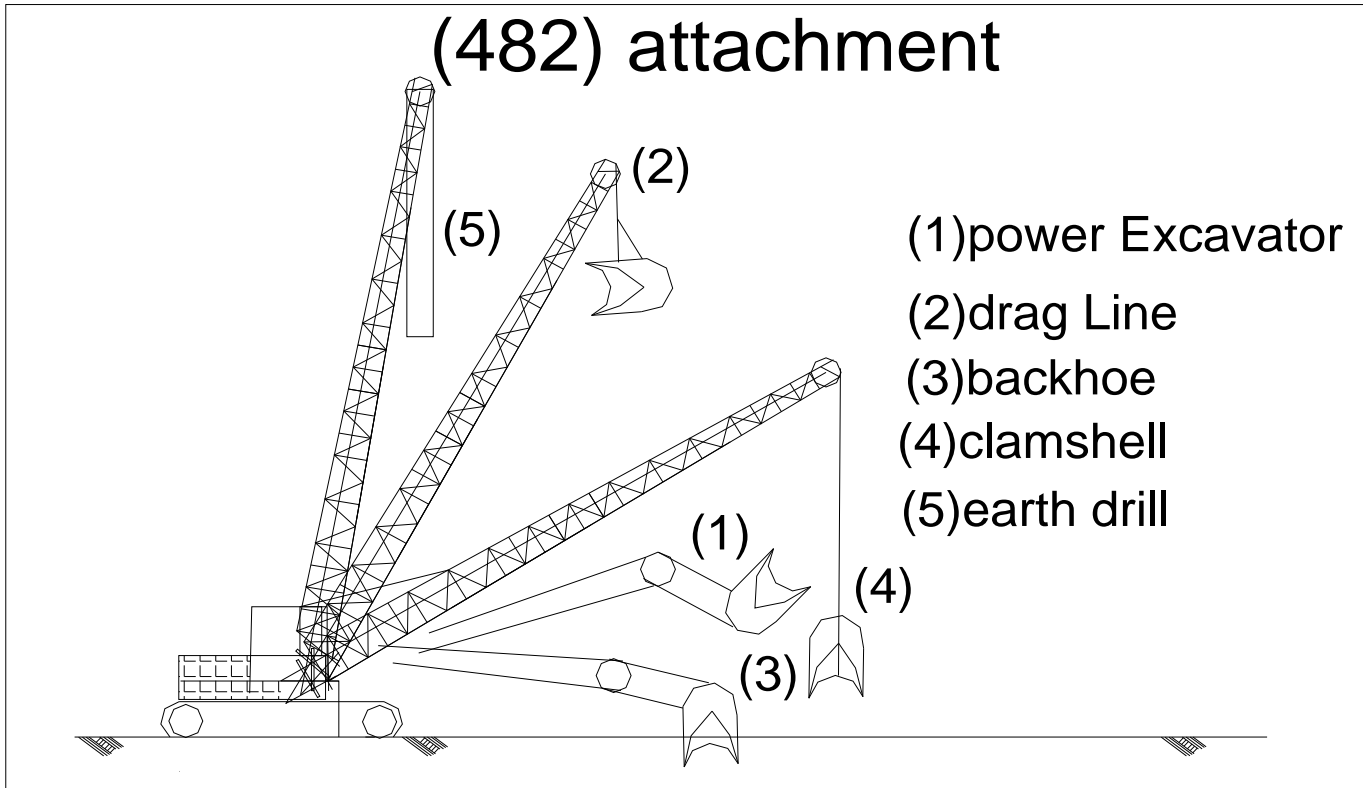
(480) Asphalt sub-sealing



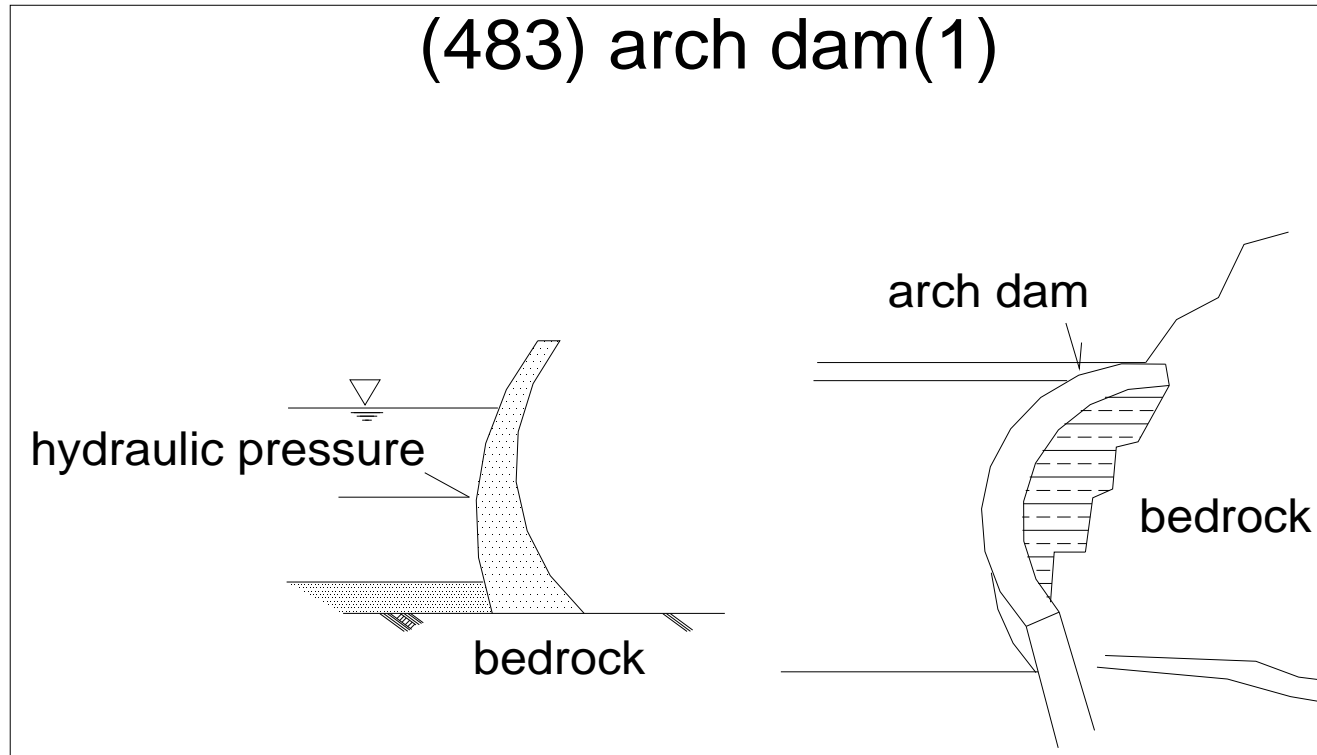
(481) border lot



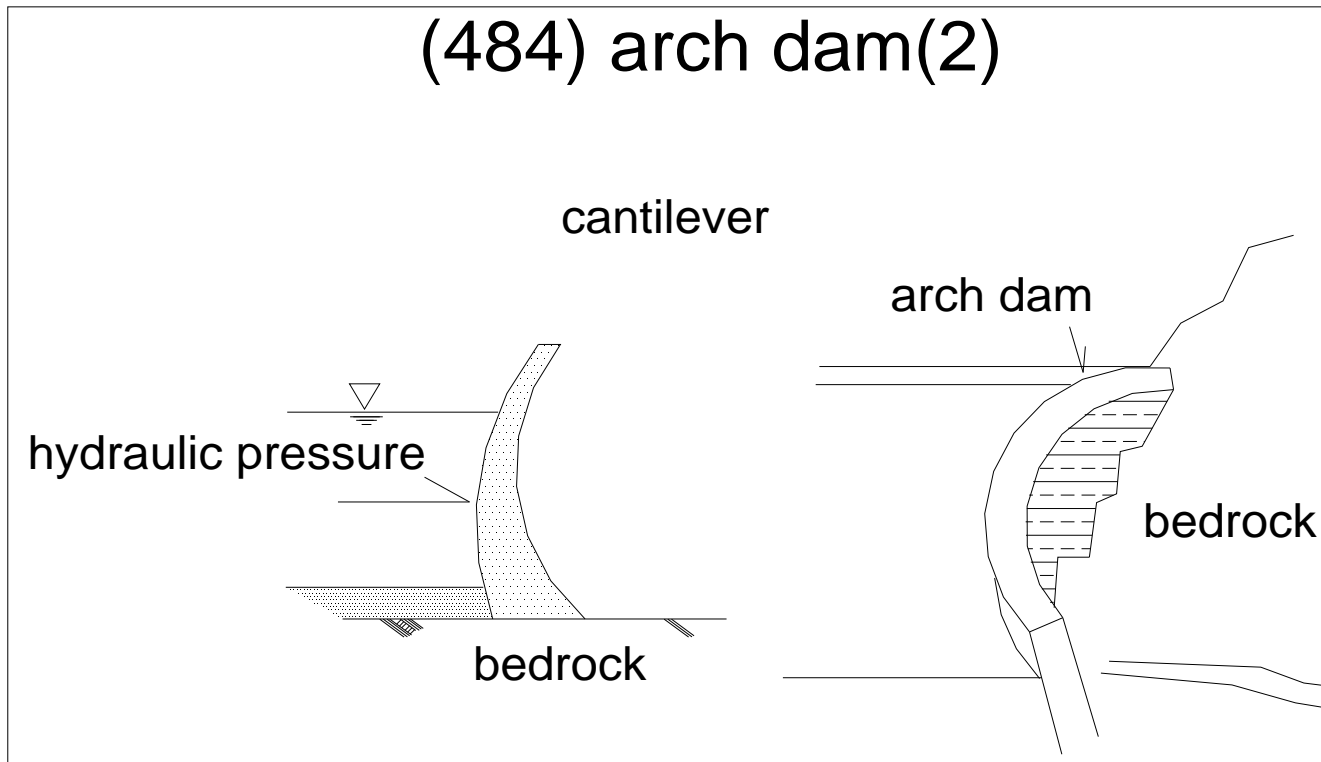
(482) attachment



(483) arch dam(1)

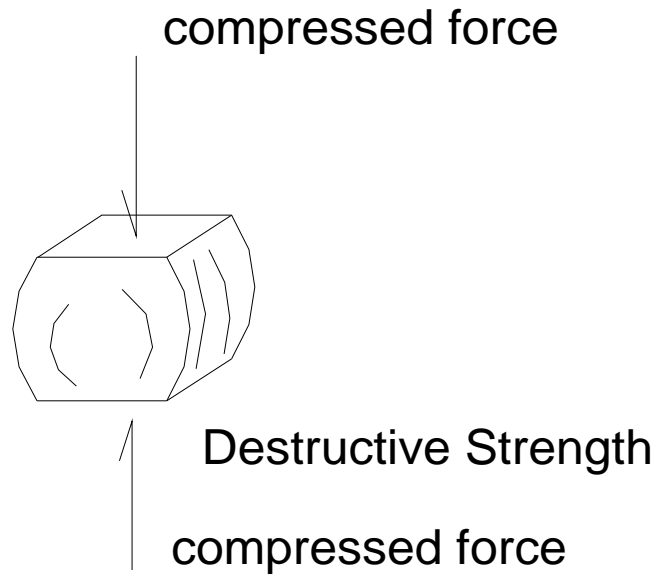
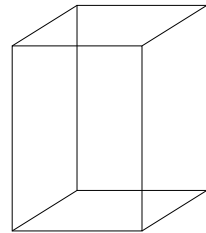


(484) arch dam(2)

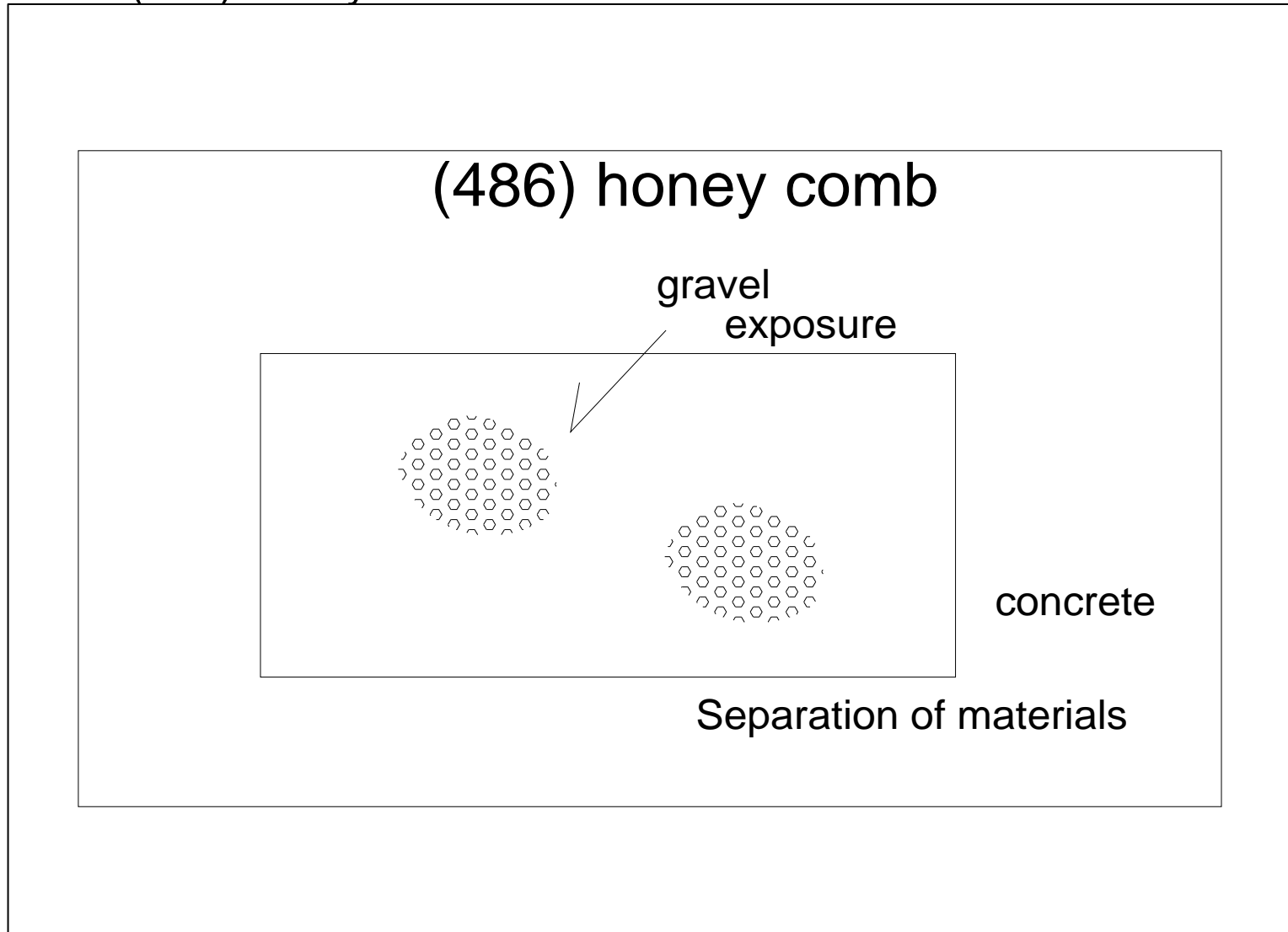


(485) squashing

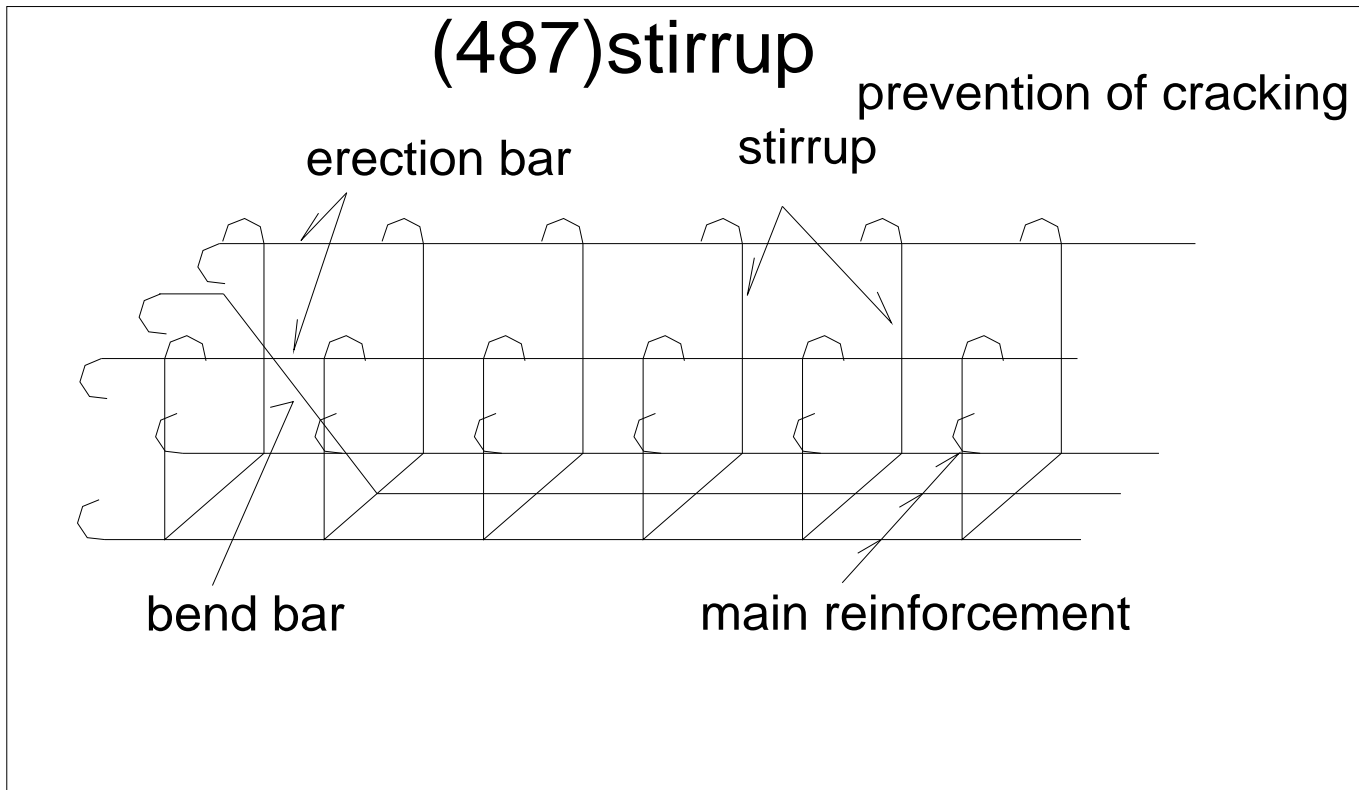
(485) squashing



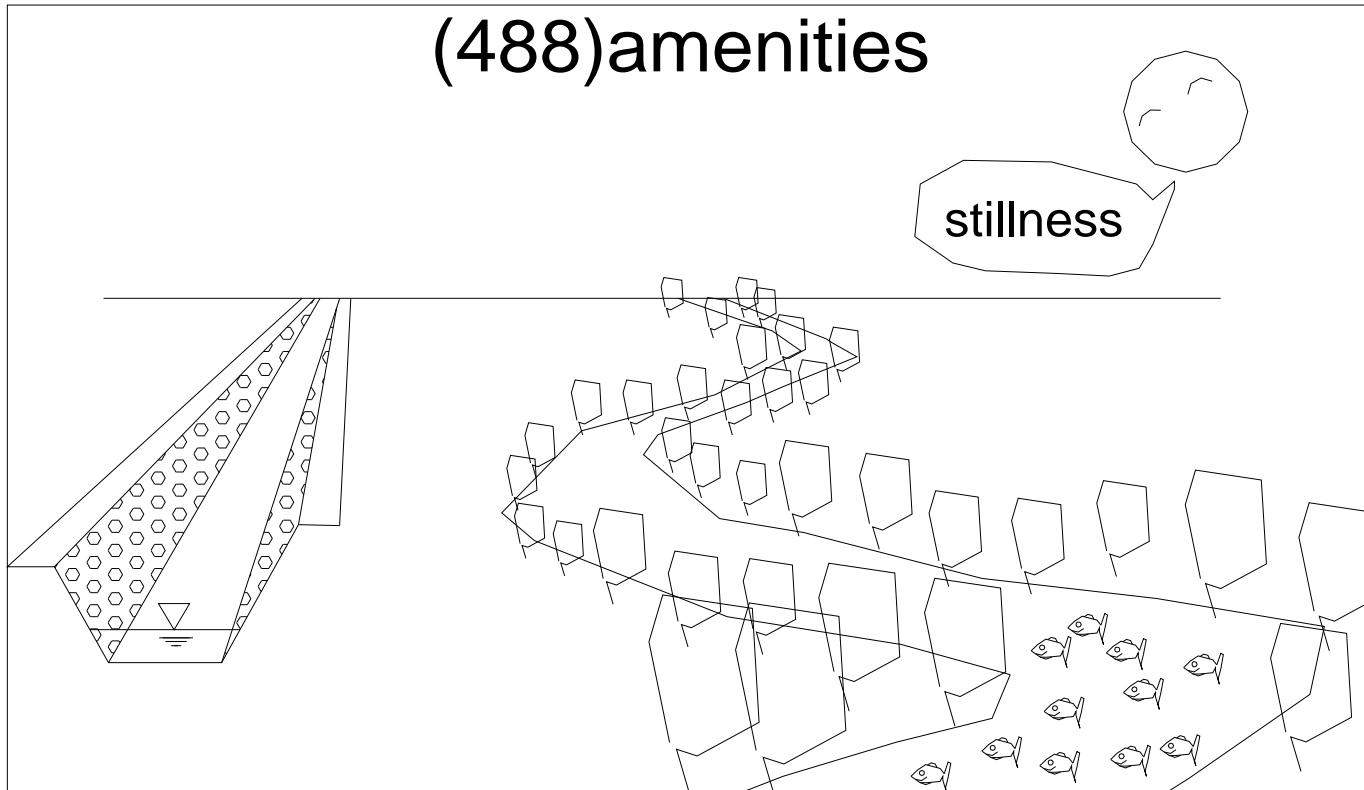
(486) honey comb



(487)stirrup



(488)amenities

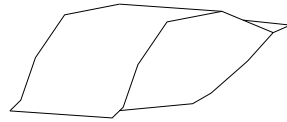


(489)Alkaline aggregate reaction

(489)Alkaline aggregate reaction

cement

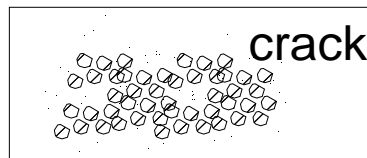
aggregate



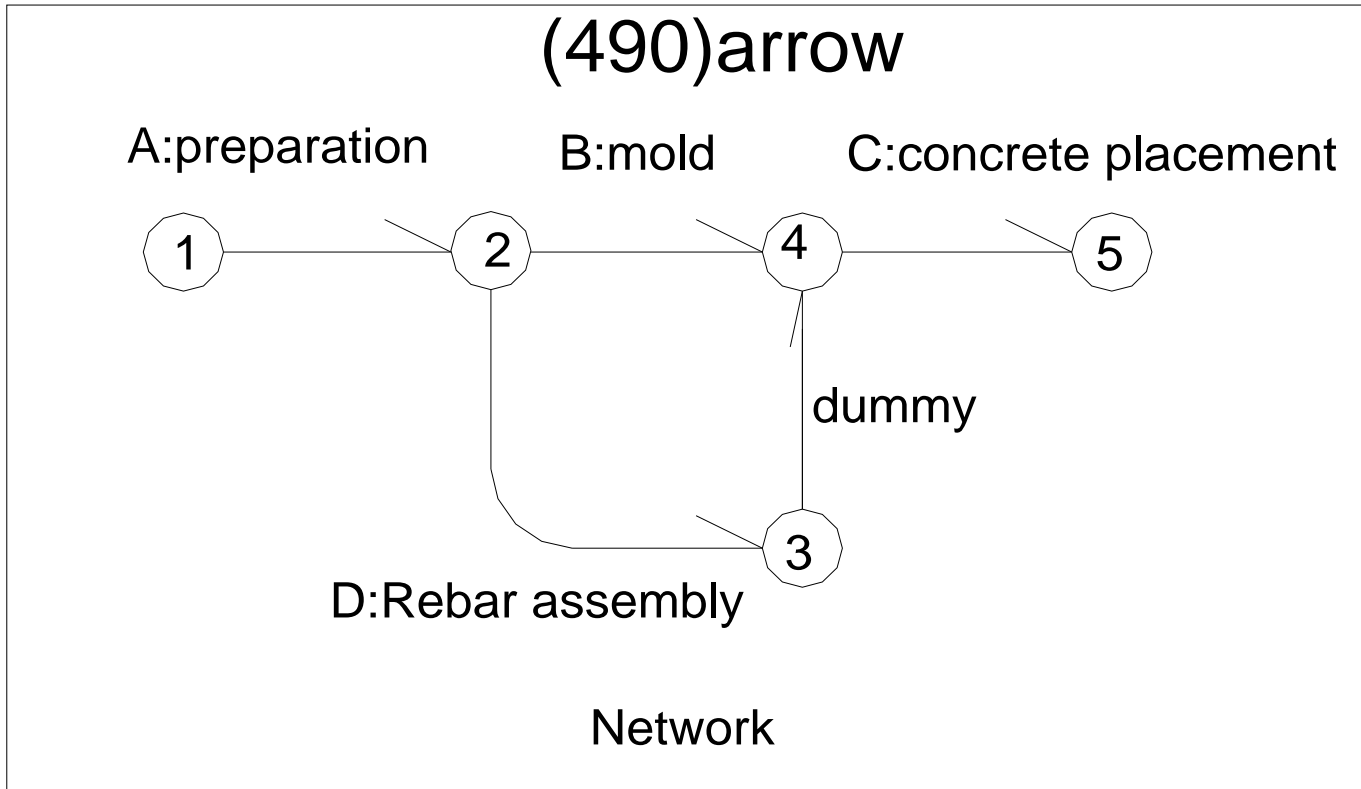
Alkaline

silica

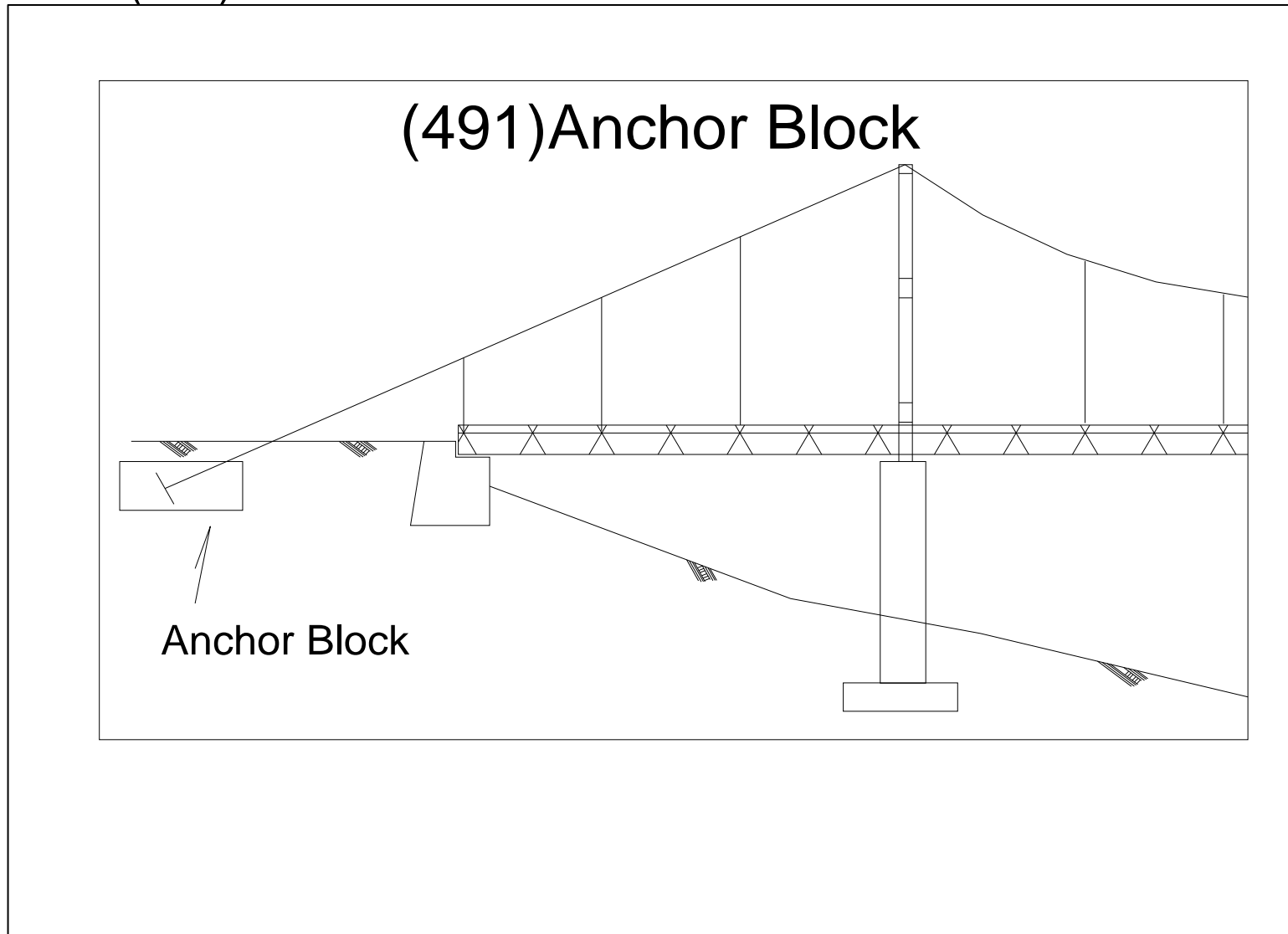
Alkaline aggregate reaction



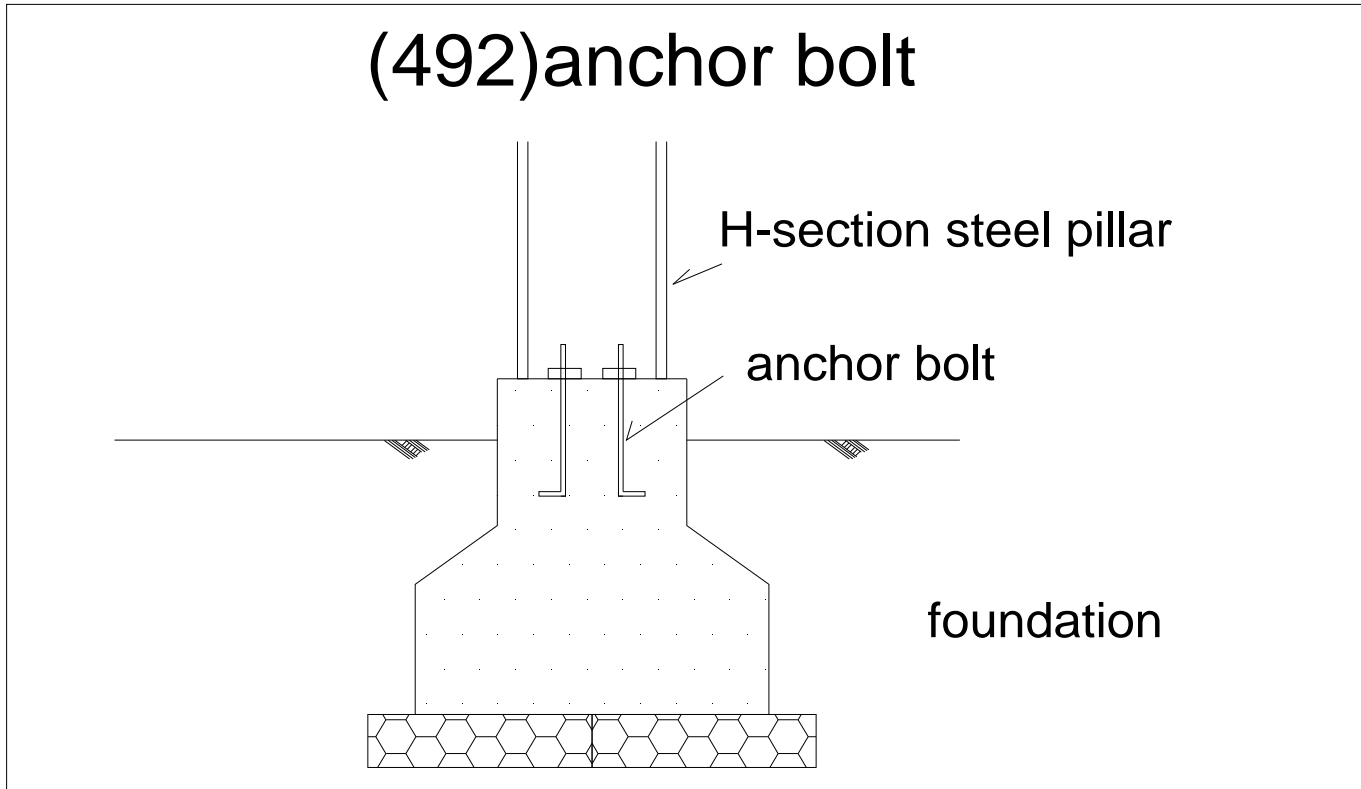
(490)arrow



(491)Anchor Block

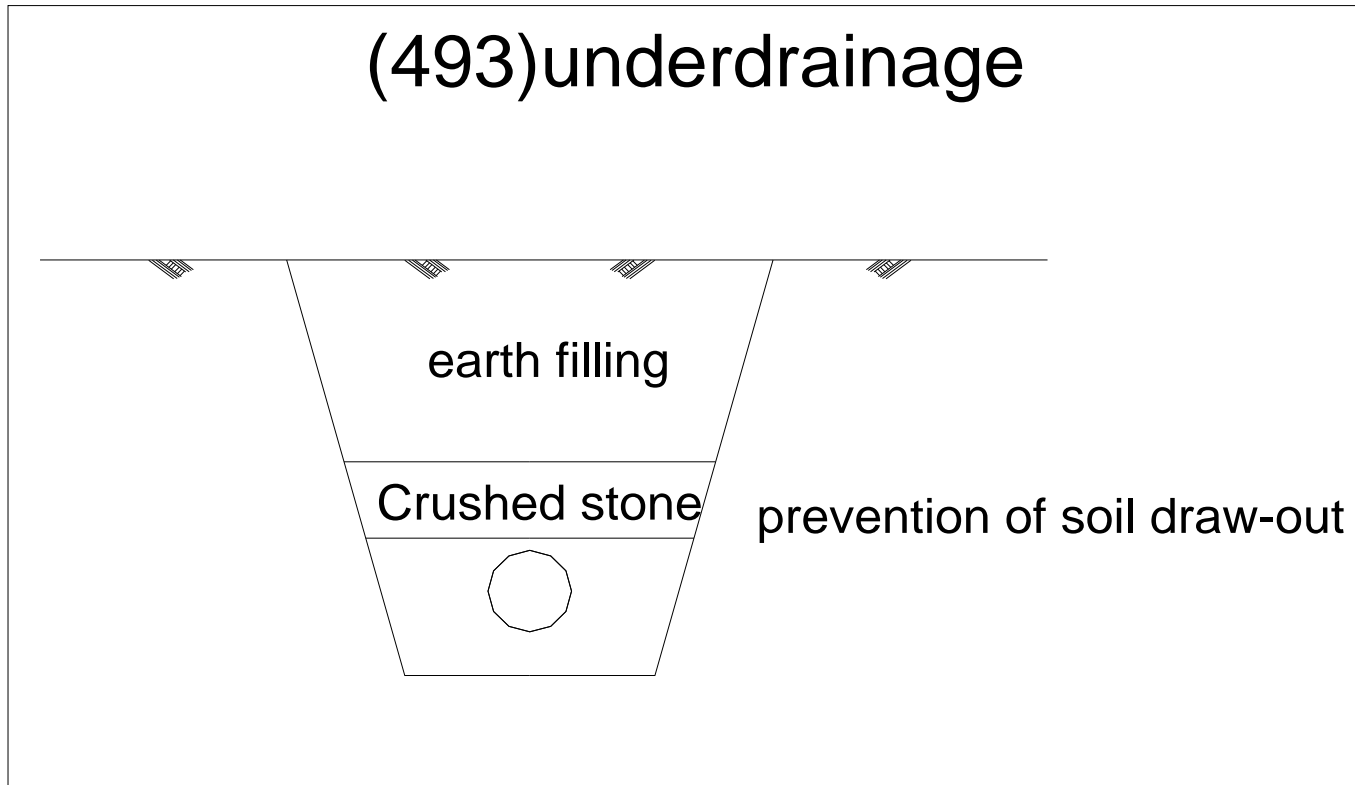


(492)anchor bolt



(493)underdrainage

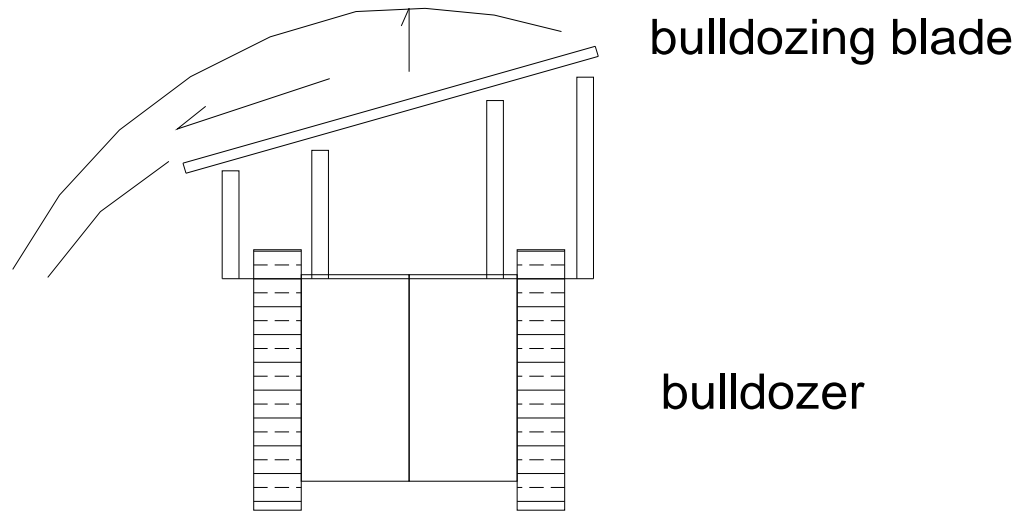
(493)underdrainage



(495)safety control 1

(494)Angledozer

movement direction

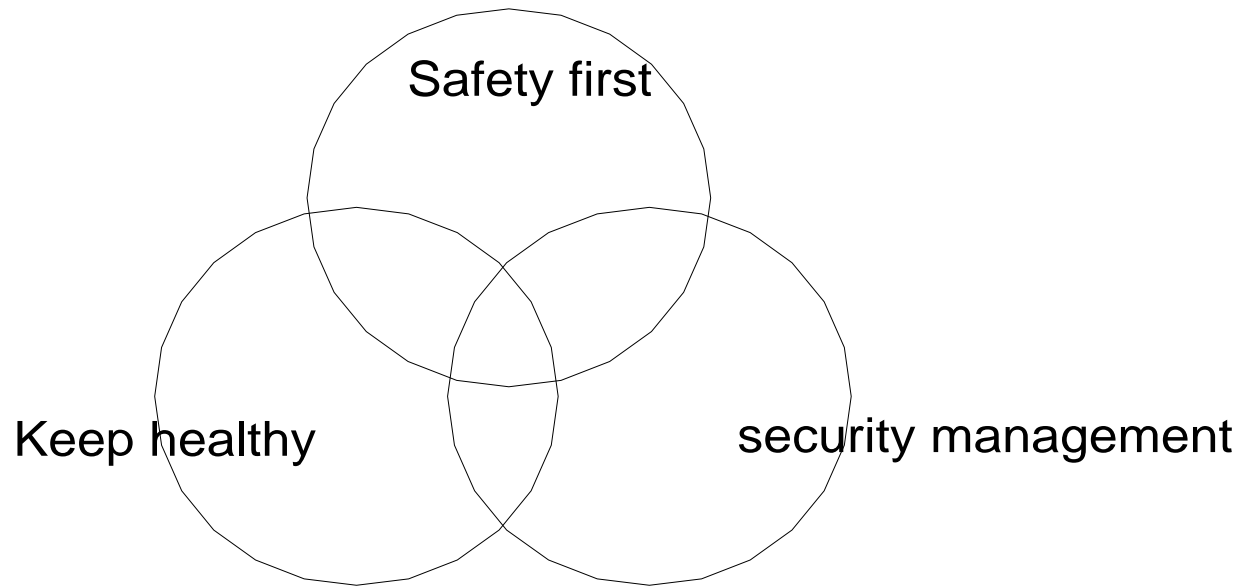


bulldozing blade

bulldozer

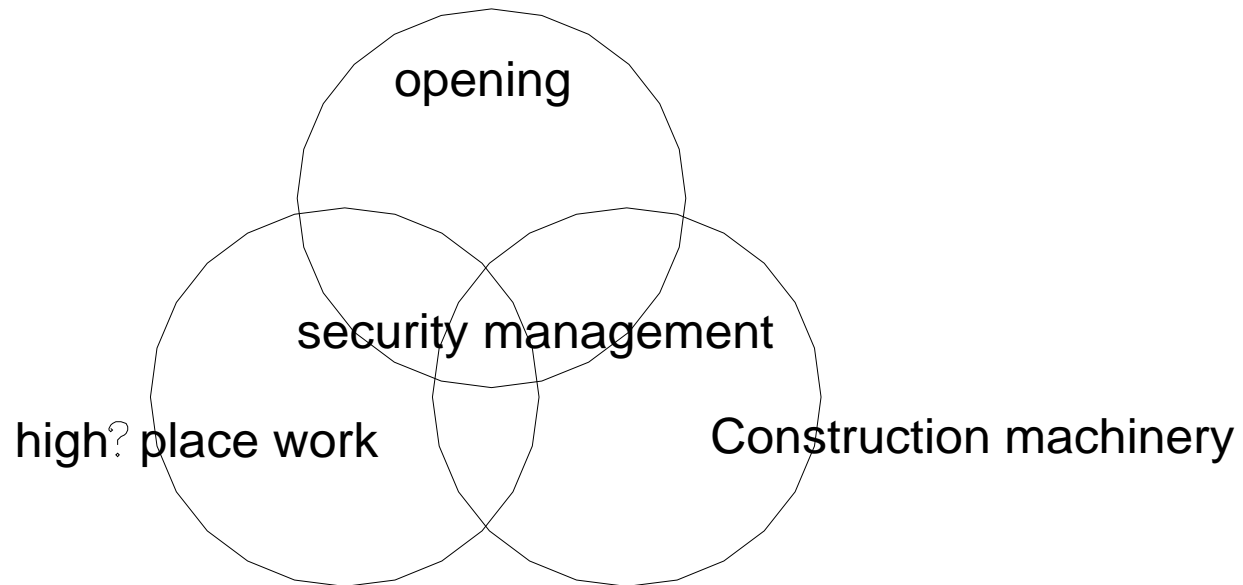
(495)safety control 1

(495)safety control 1



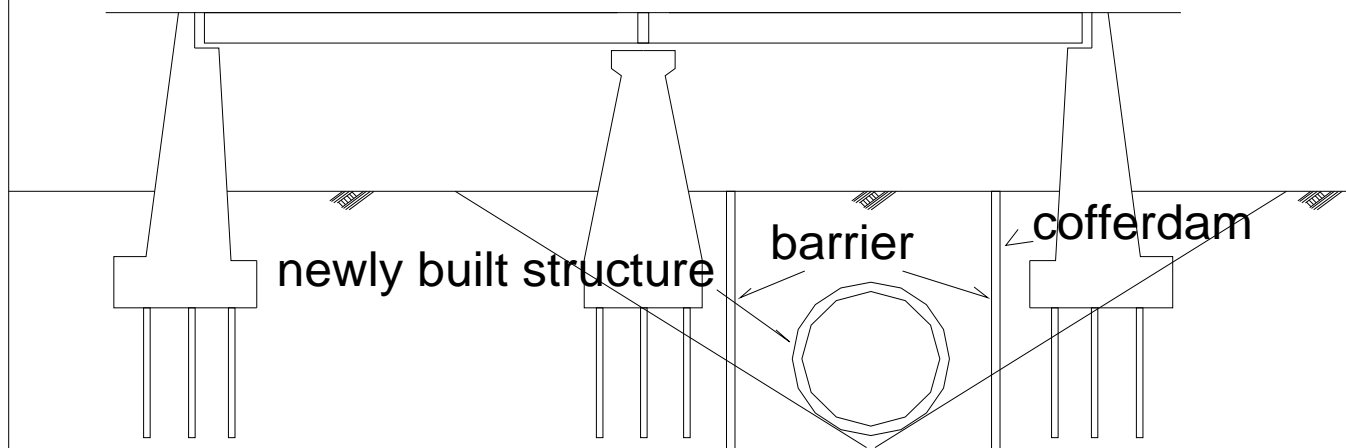
(496)safety control 2

(496)safety control 2



(497)underpinning method

(497)underpinning method



(498)stabilization

(498)stabilization

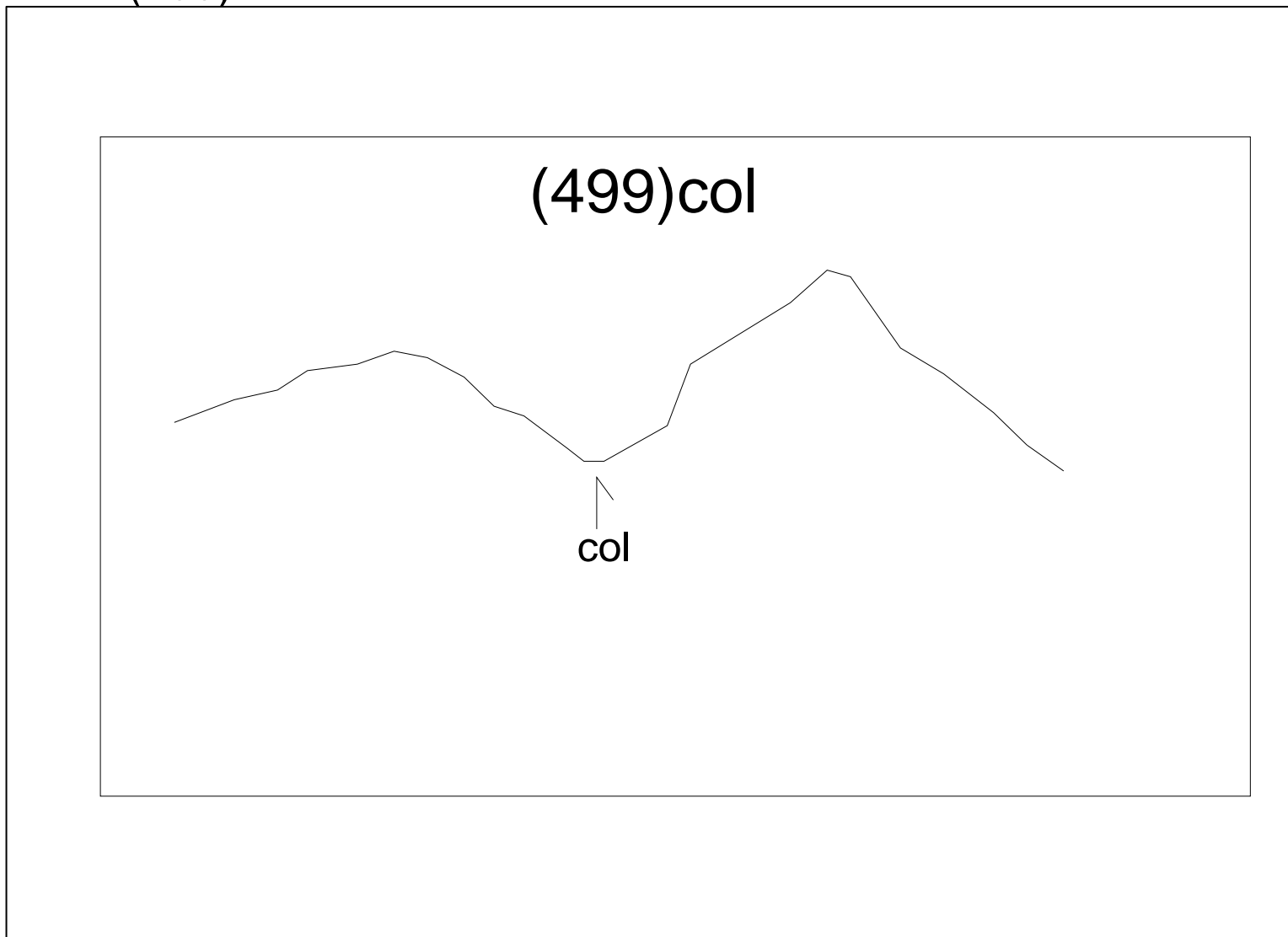
Soil at the site+aggregate-----particle size distribution

wet soil+lime-----strength development strength development

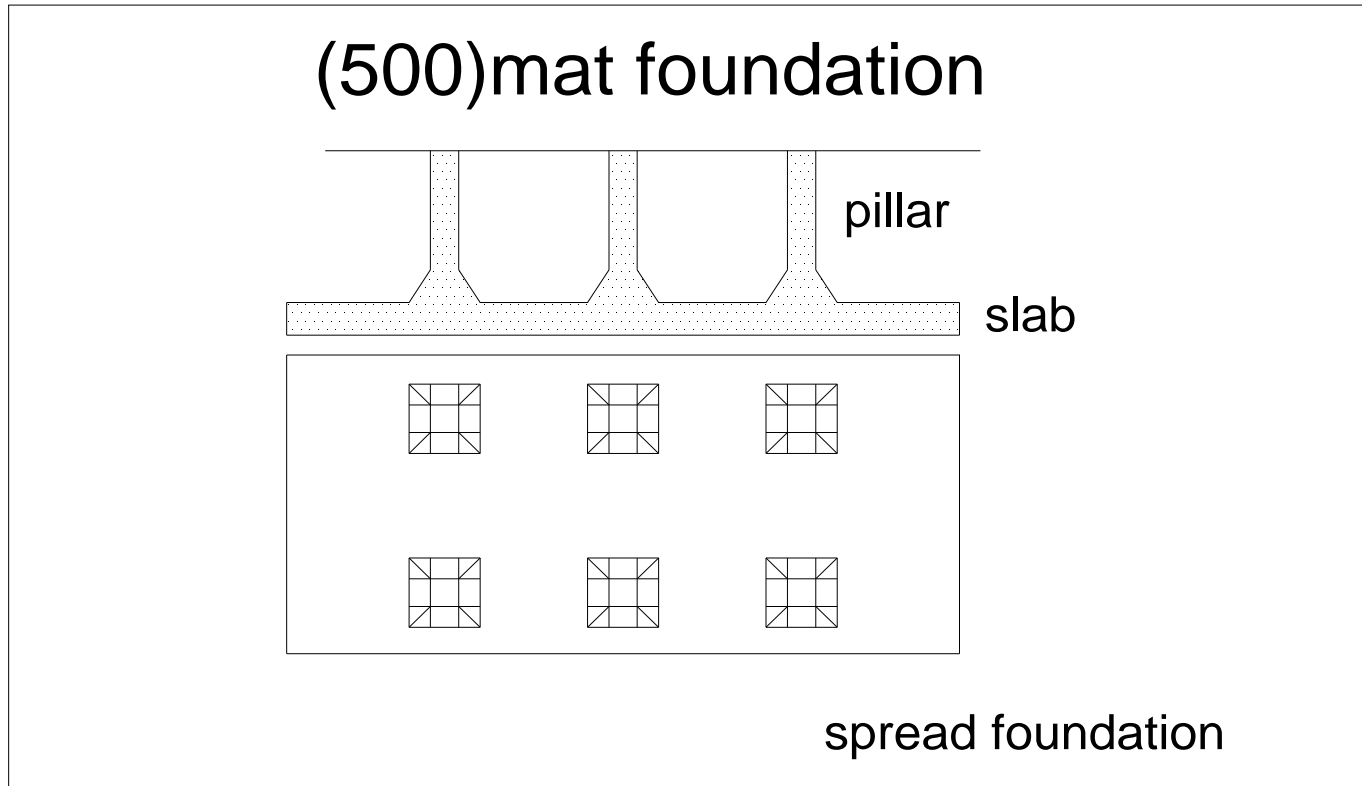
wet soil+cement-----soil cement strength development

Soil at the site+bituminous materials---Waterproof

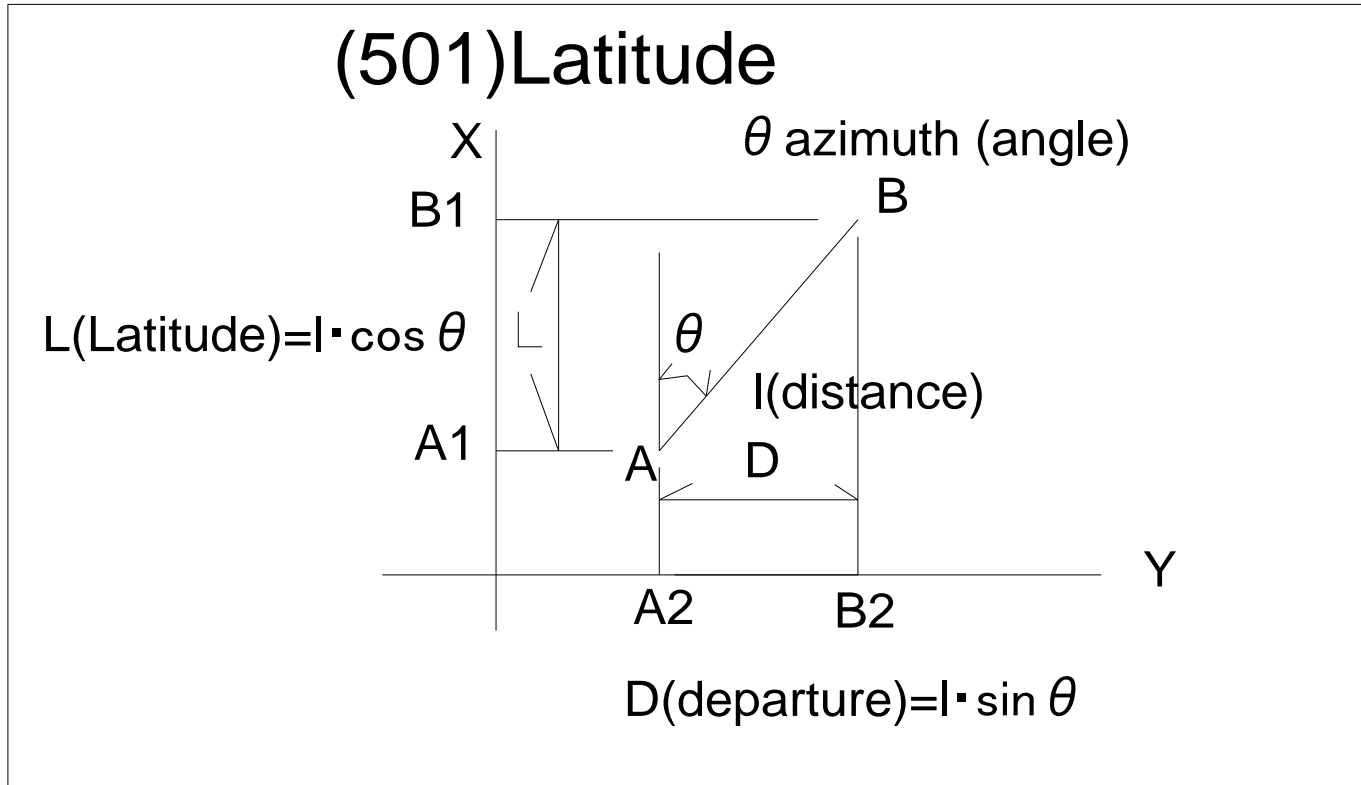
(499)col



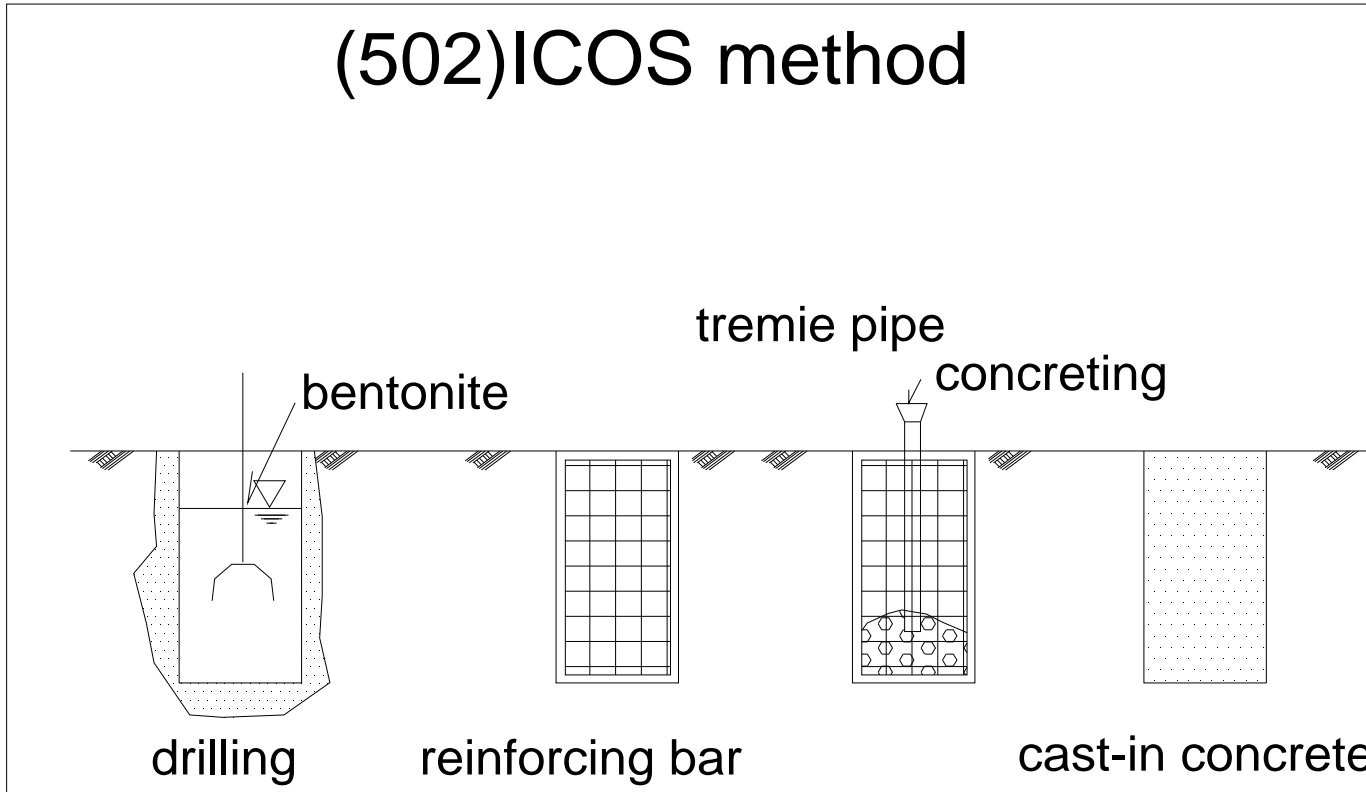
(500)mat foundation



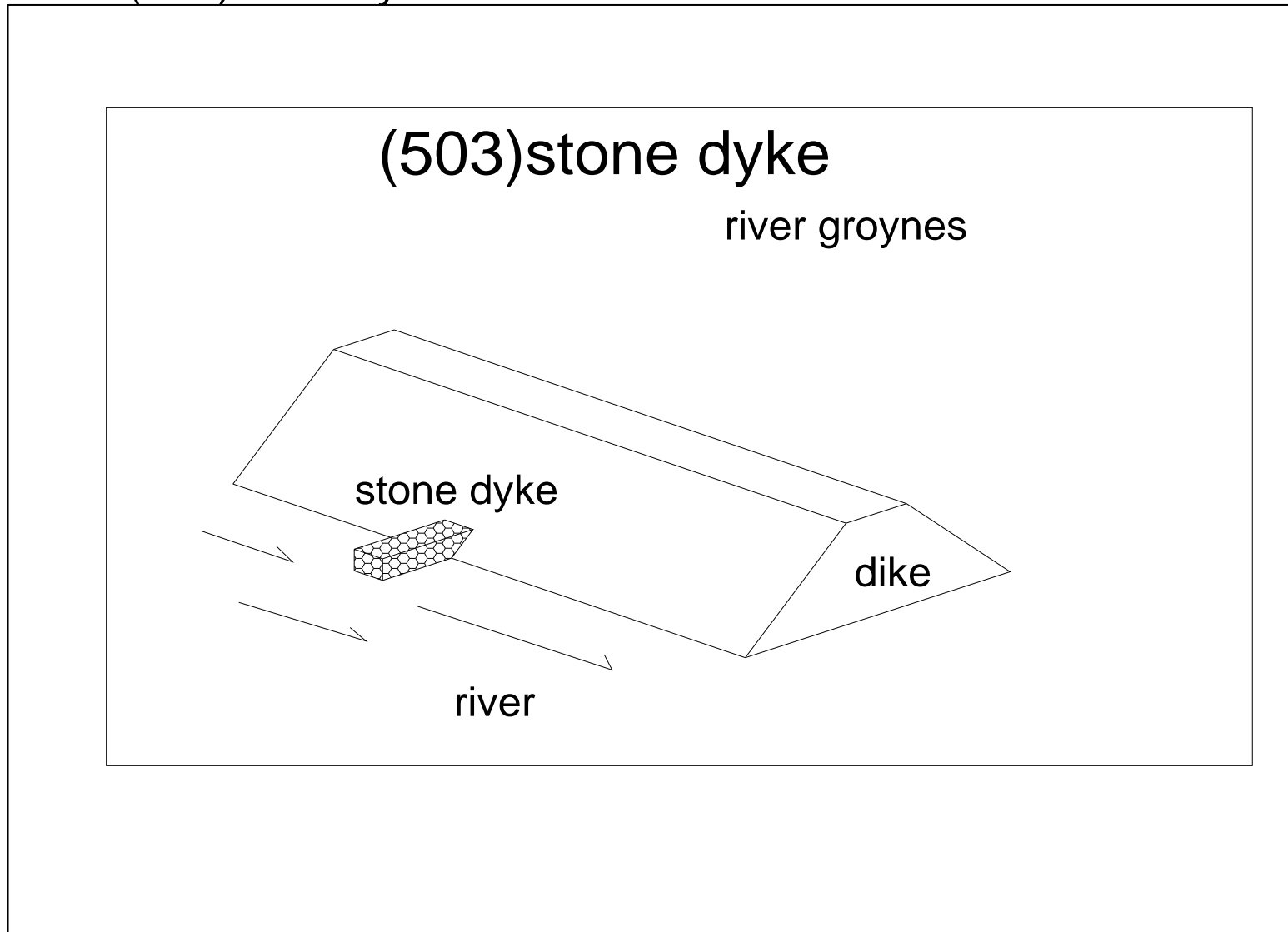
(501)Latitude



(502)ICOS method



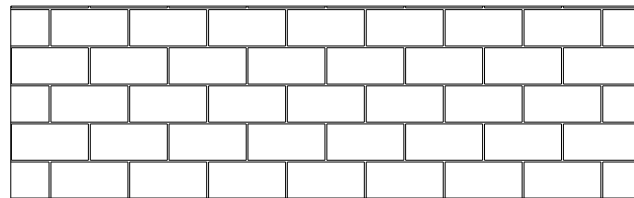
(503)stone dyke



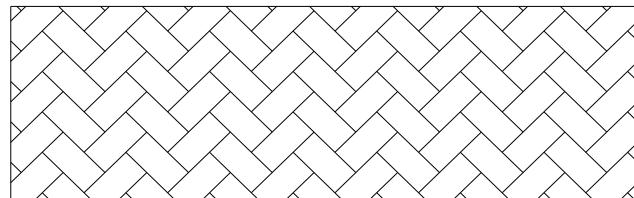
(504)stone masonry

(504)stone masonry

masonry

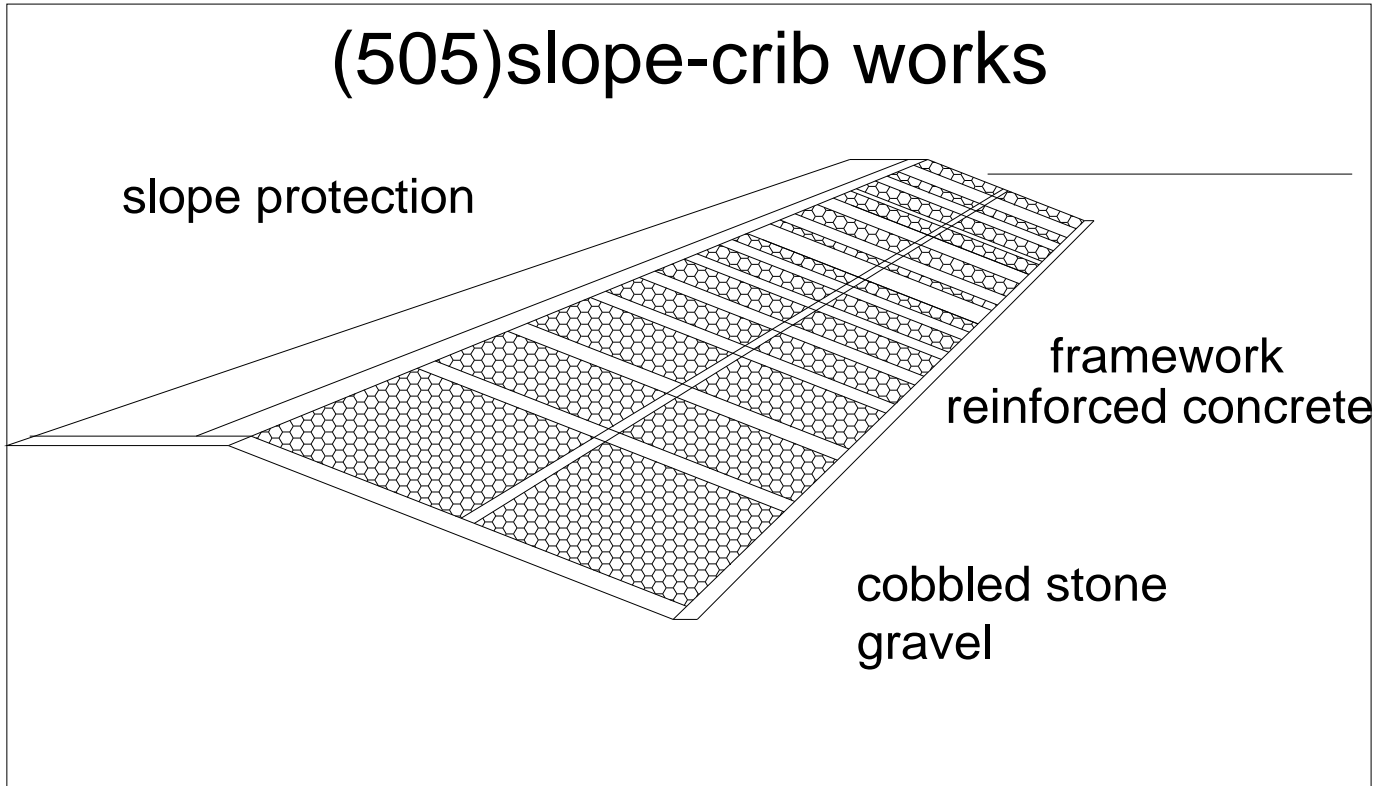


coursed masonry

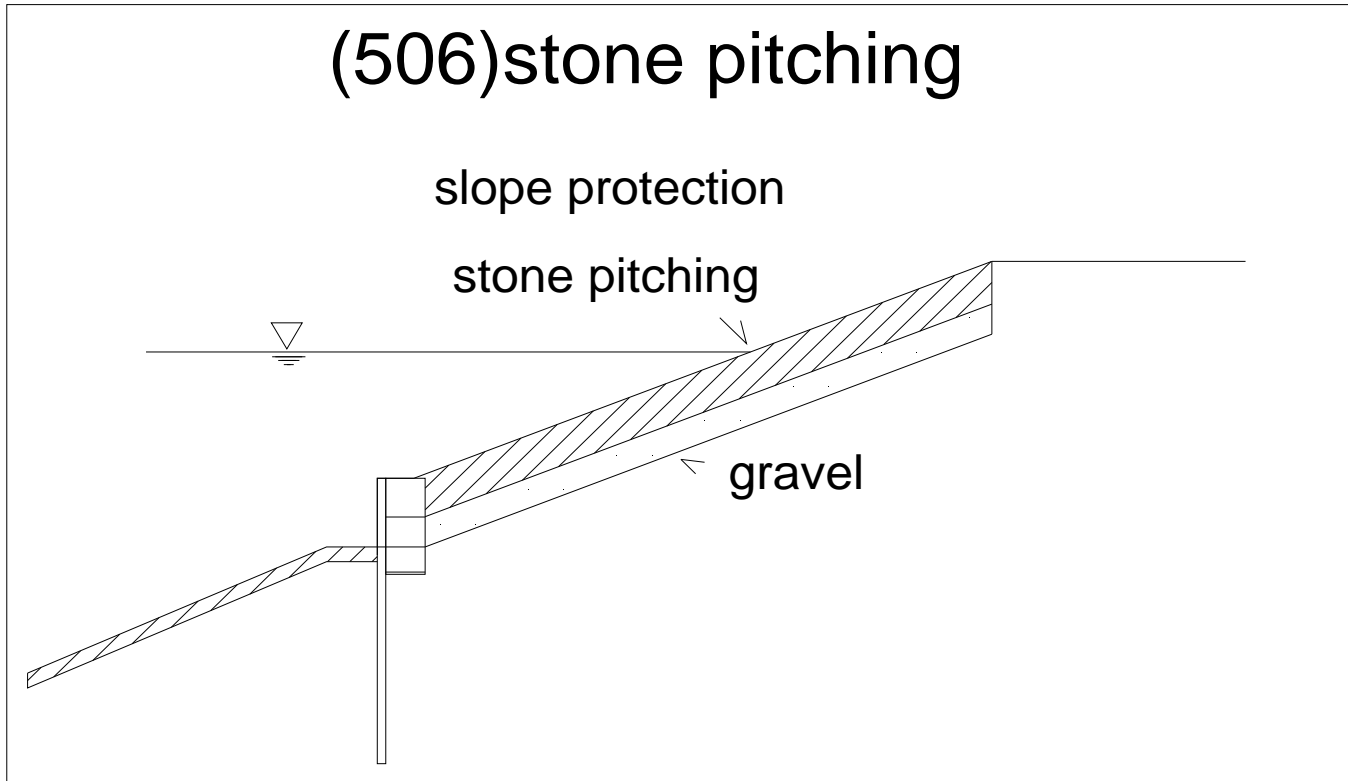


uncoursed masonry

(505)slope-crib works

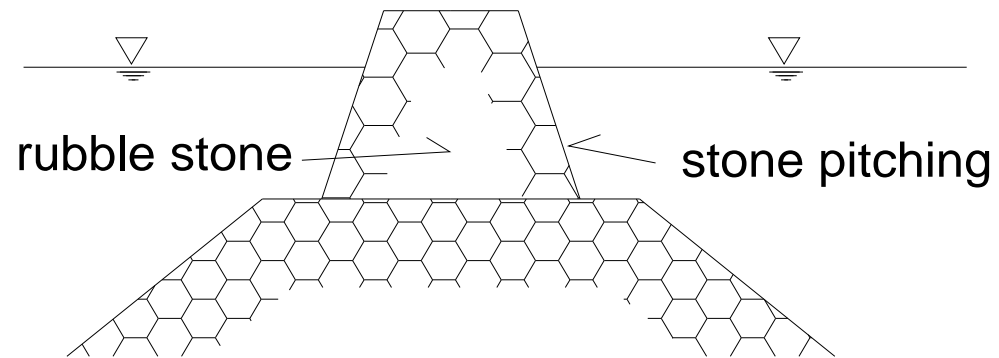


(506)stone pitching



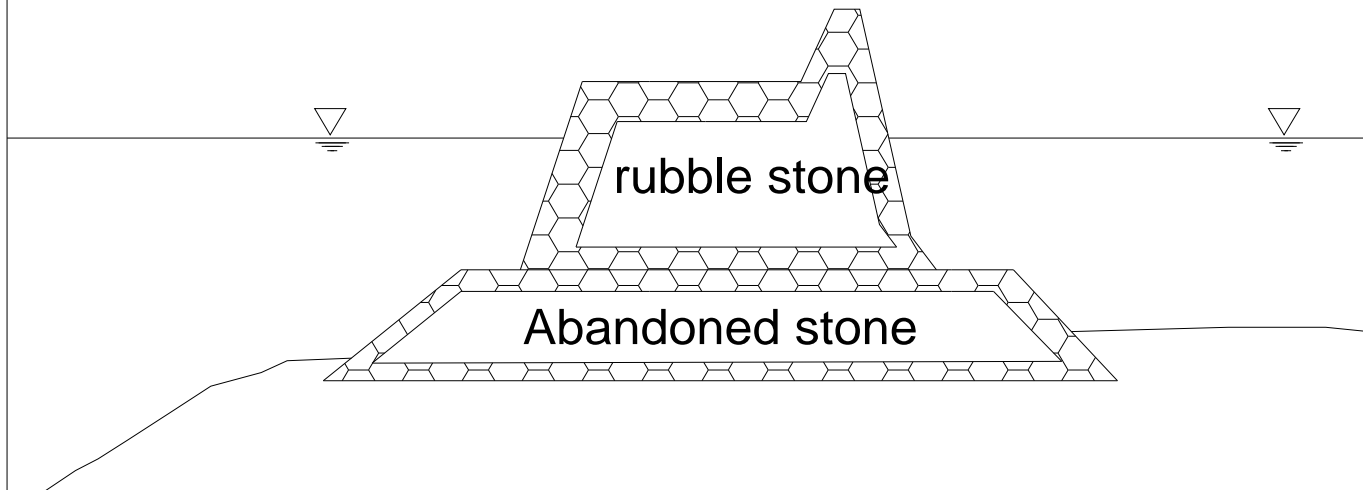
(507)stone pitching breakwater

(507)stone pitching breakwater

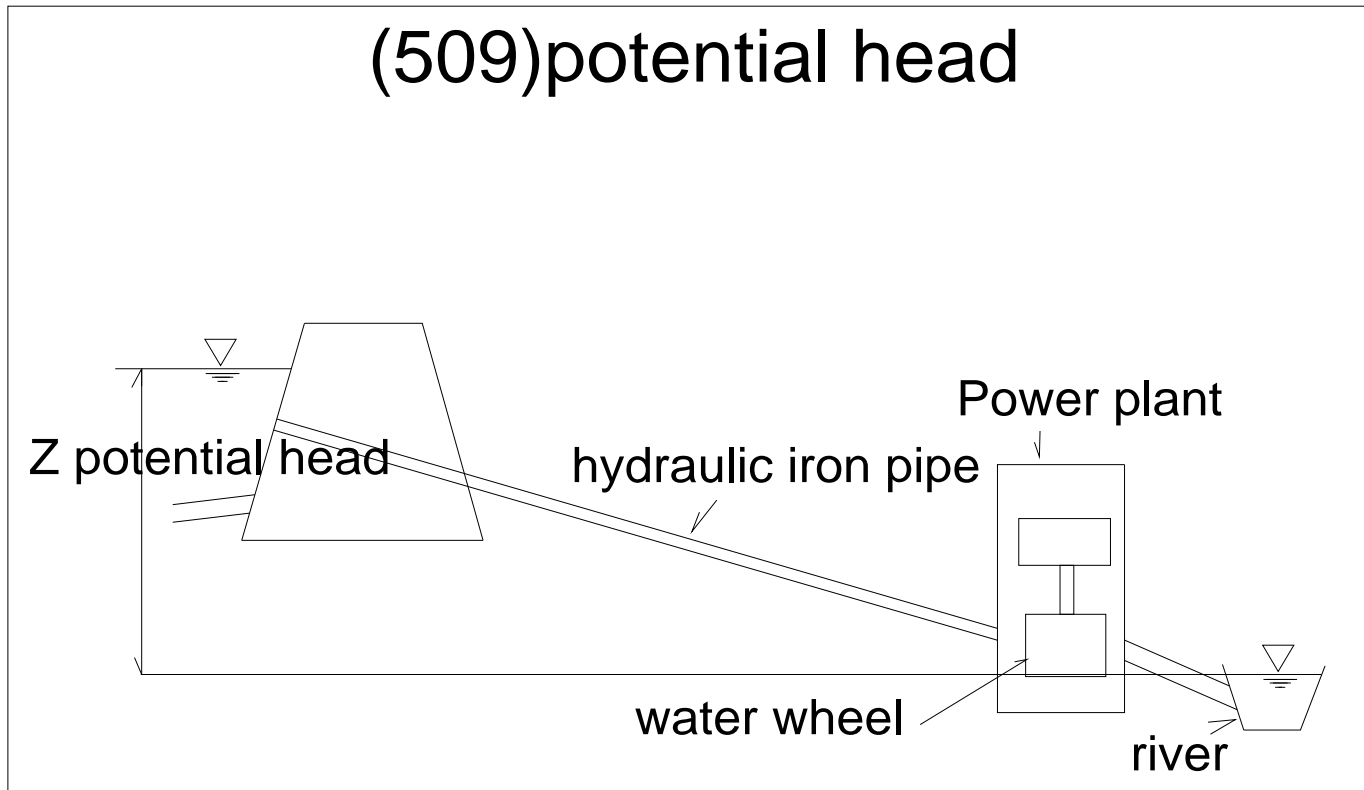


(508)rock filled breakwater

(508)rock filled breakwater

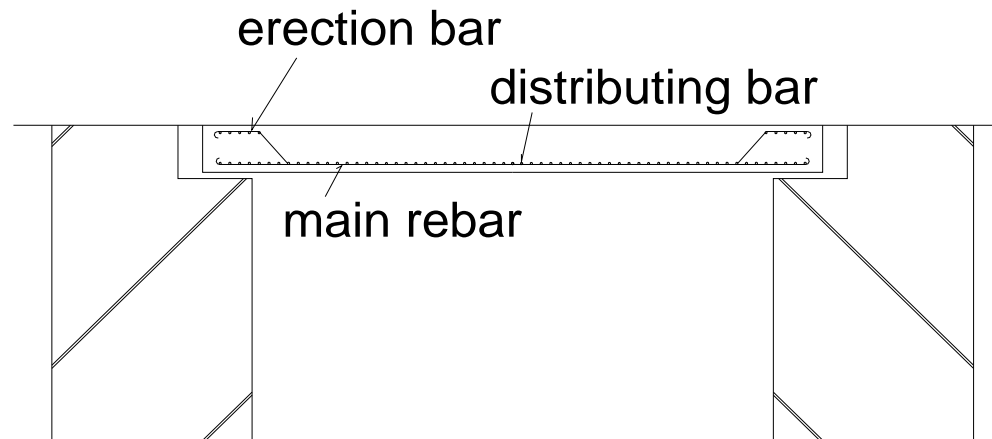


(509)potential head



(510)one-way slab(508)rock filled breakwater

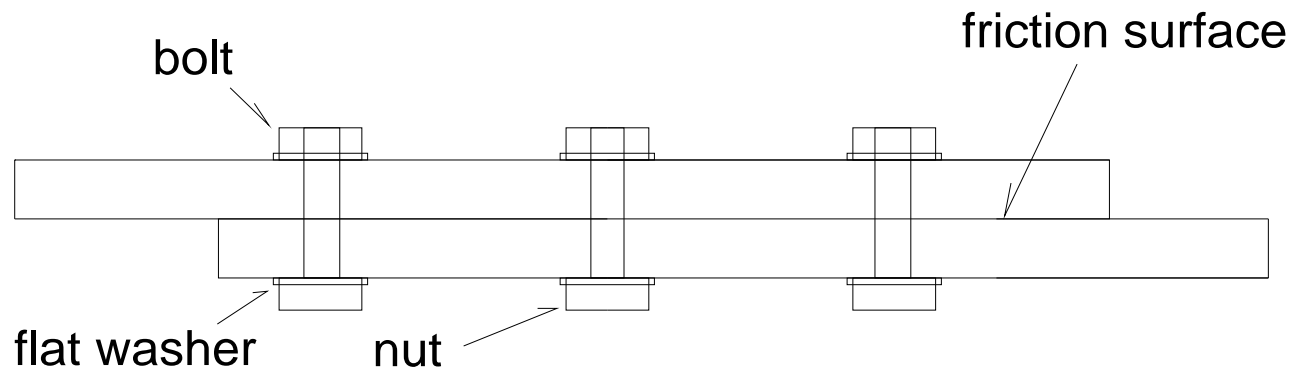
(510)one-way slab



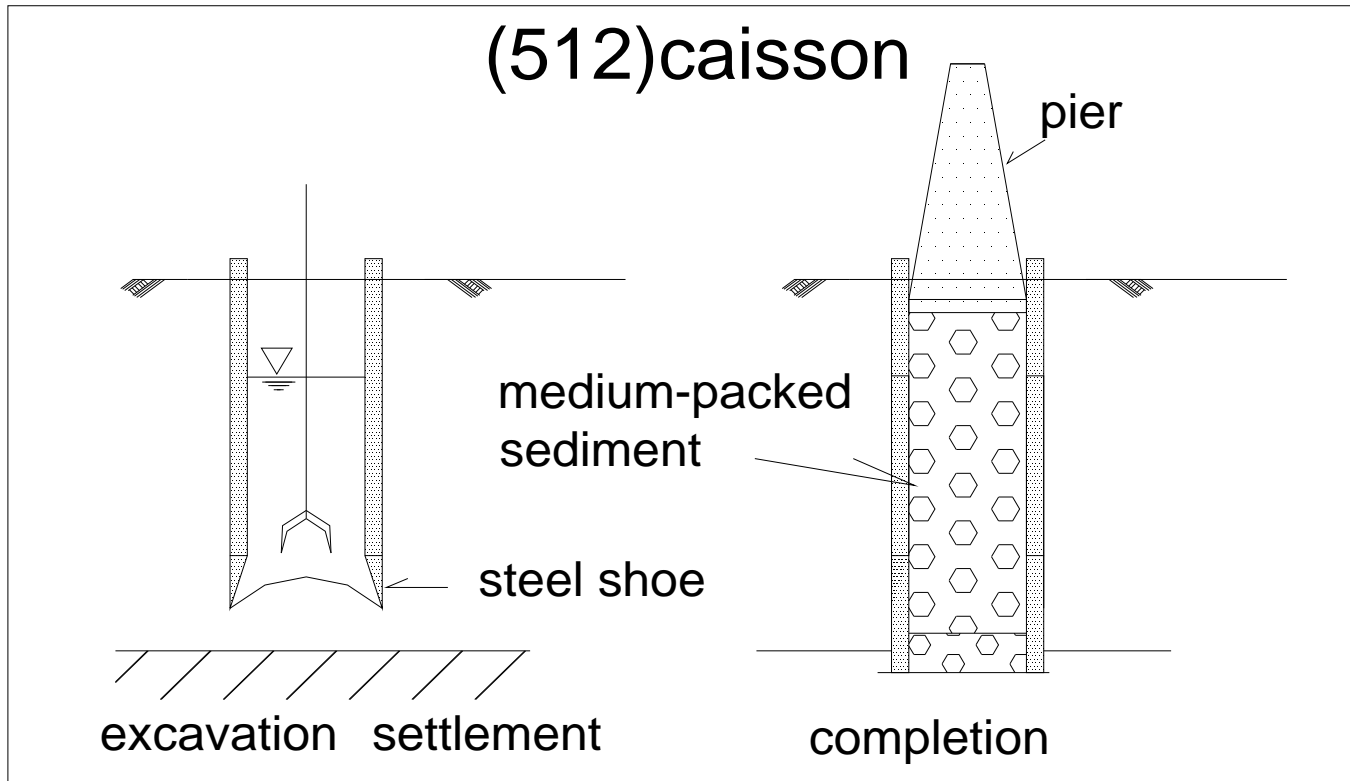
(511) simple friction joint

(511) simple friction joint

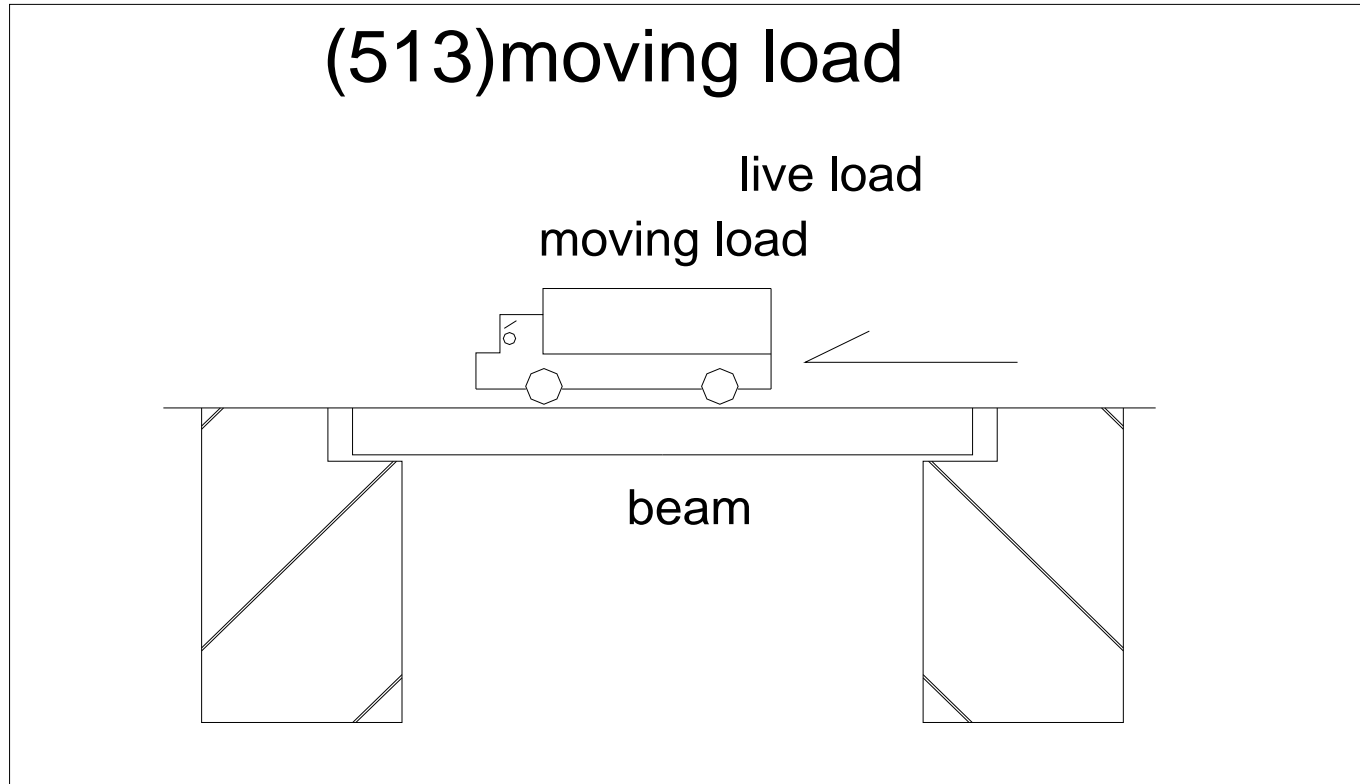
bolted connection



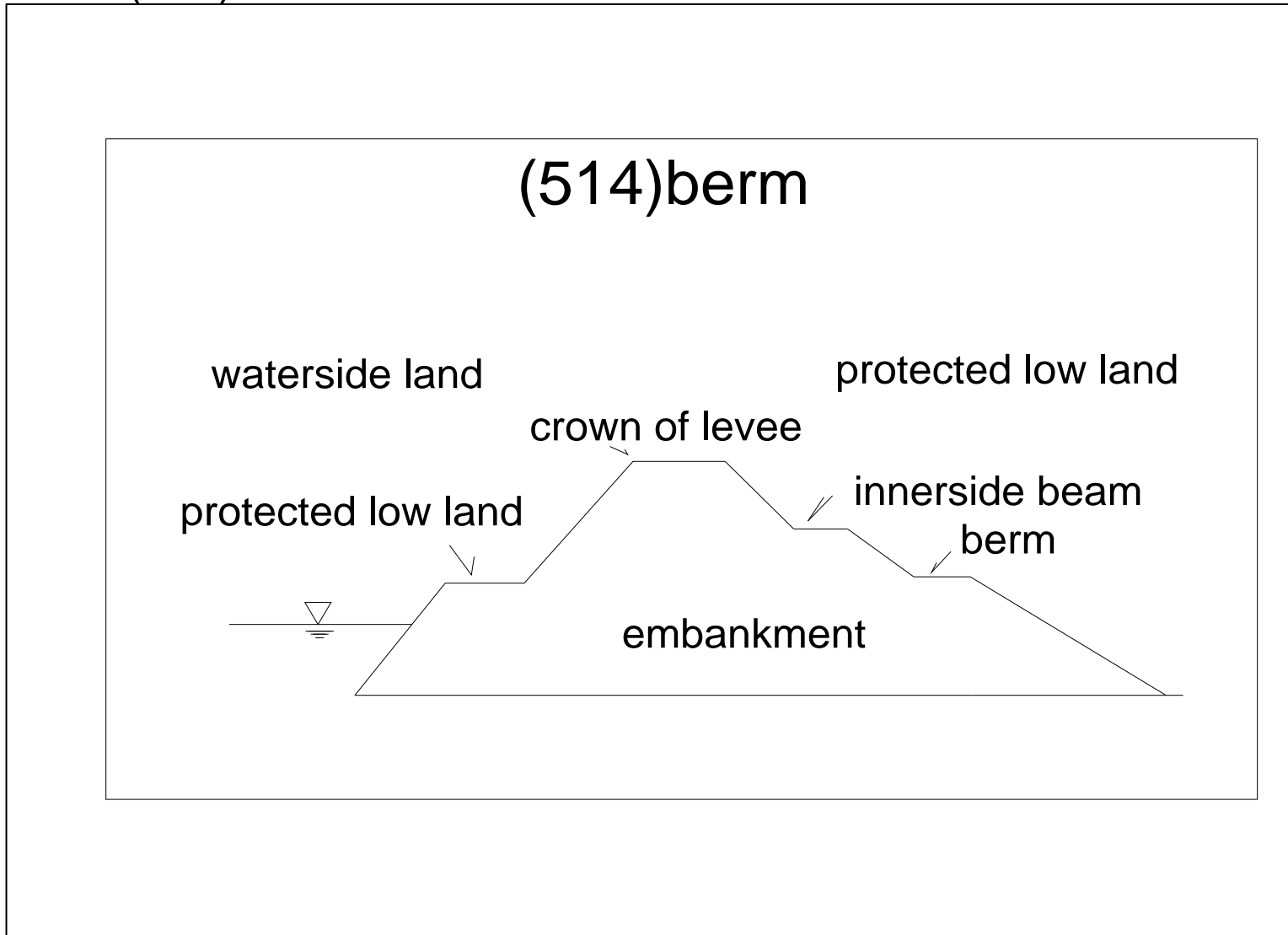
(512)caisson



(513)moving load

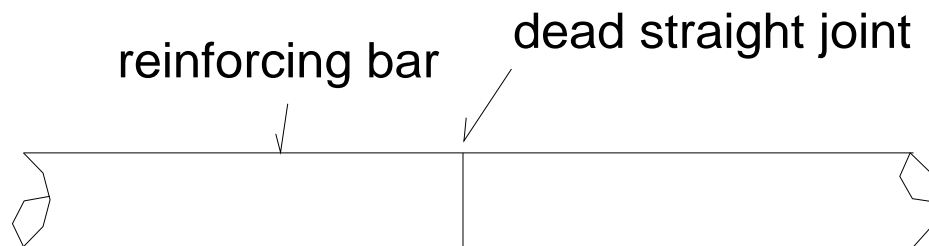


(514)berm



(515)dead straight joint

(515)dead straight joint



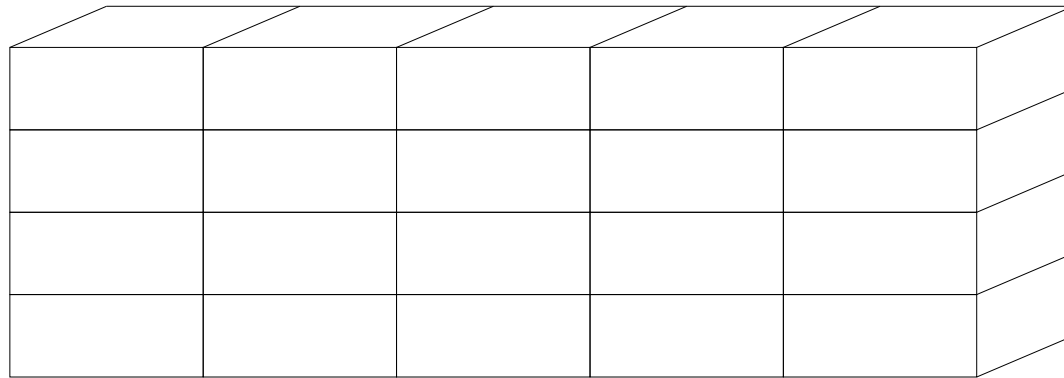
(516)straight joint

(516)straight joint

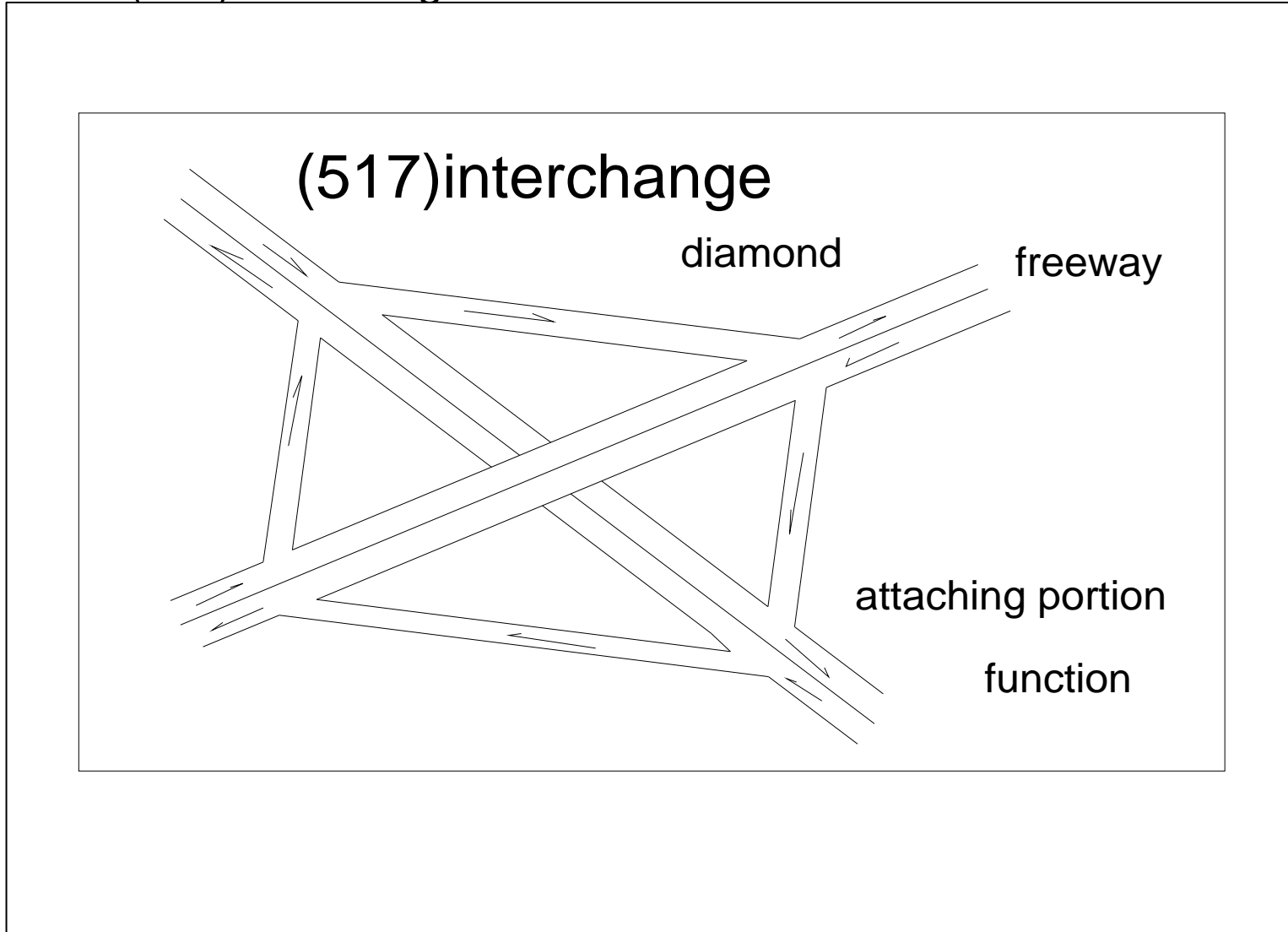
block storing

straight joint

vertical joint



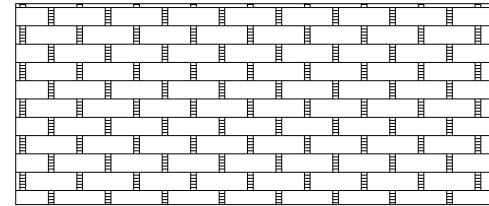
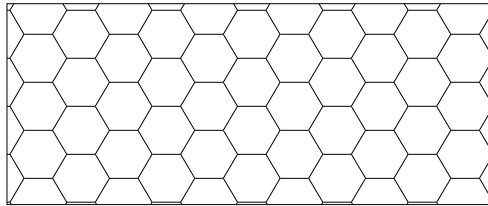
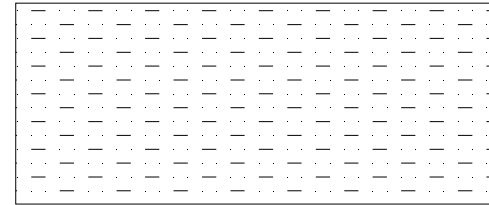
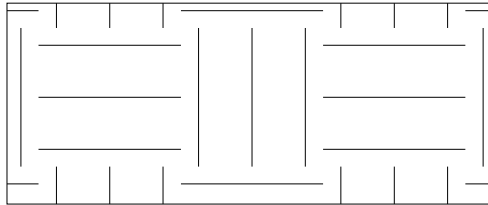
(517)interchange



(518)Interlocking

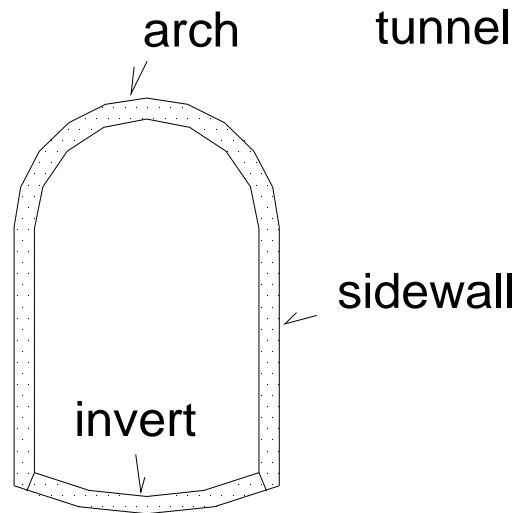
(518)Interlocking

concrete block

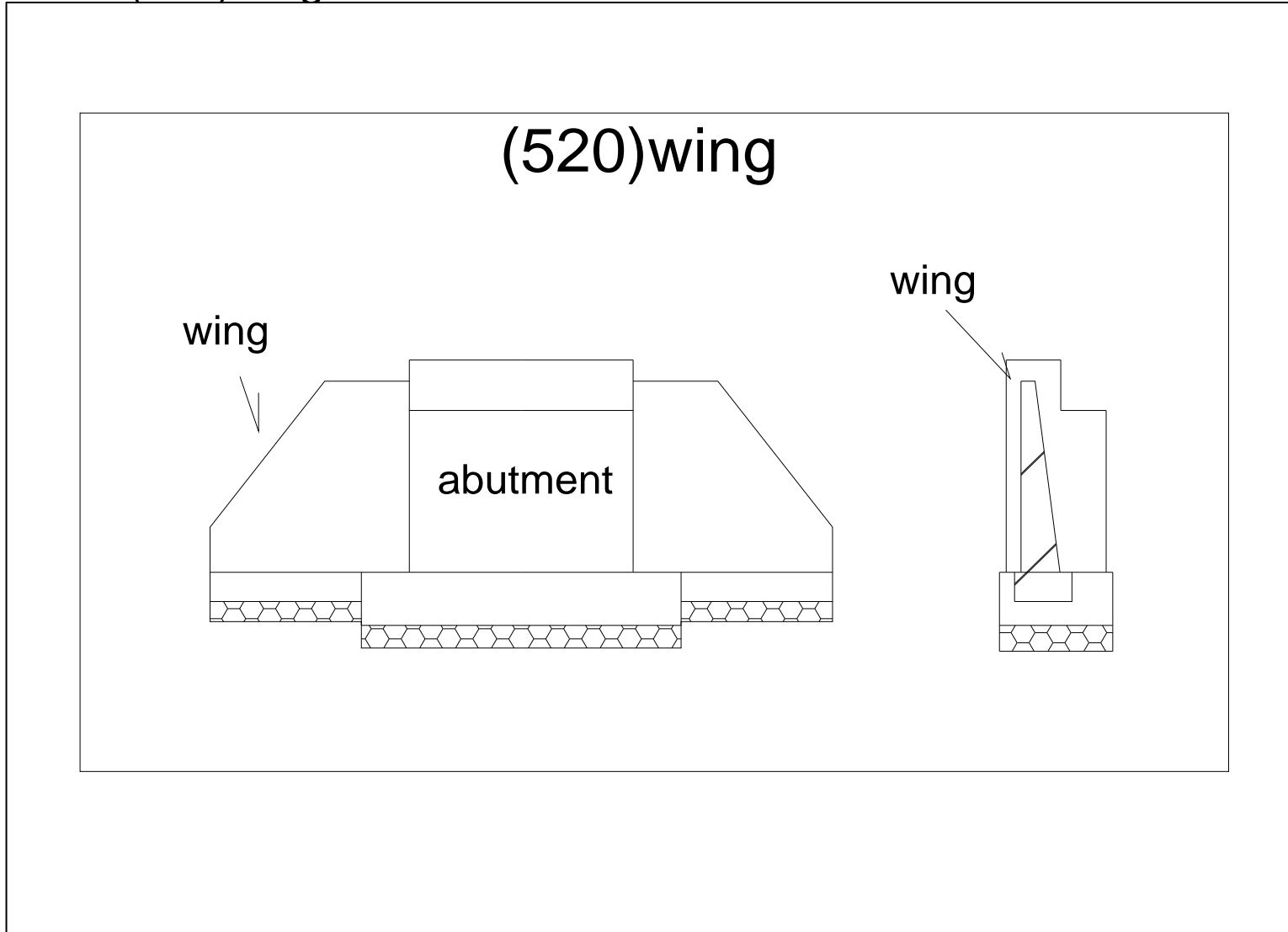


(519)invert

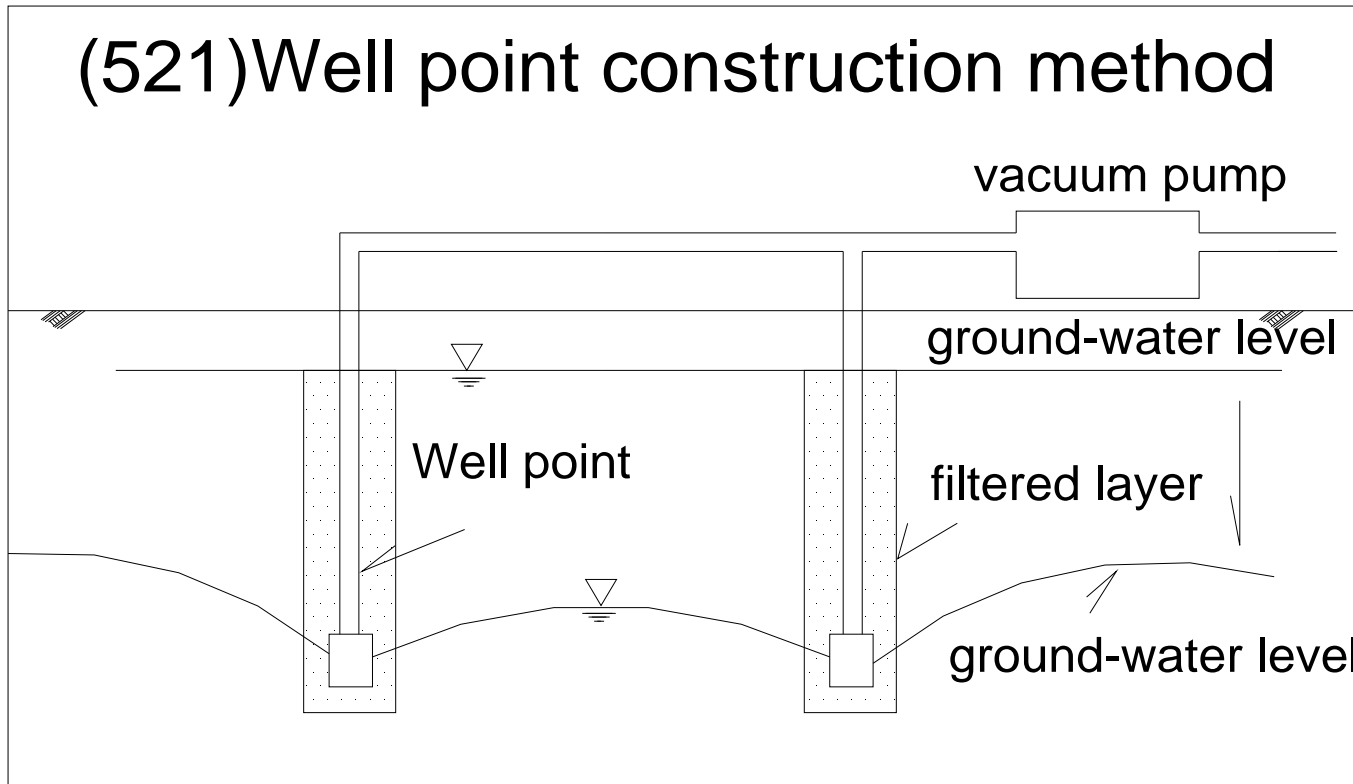
(519)invert



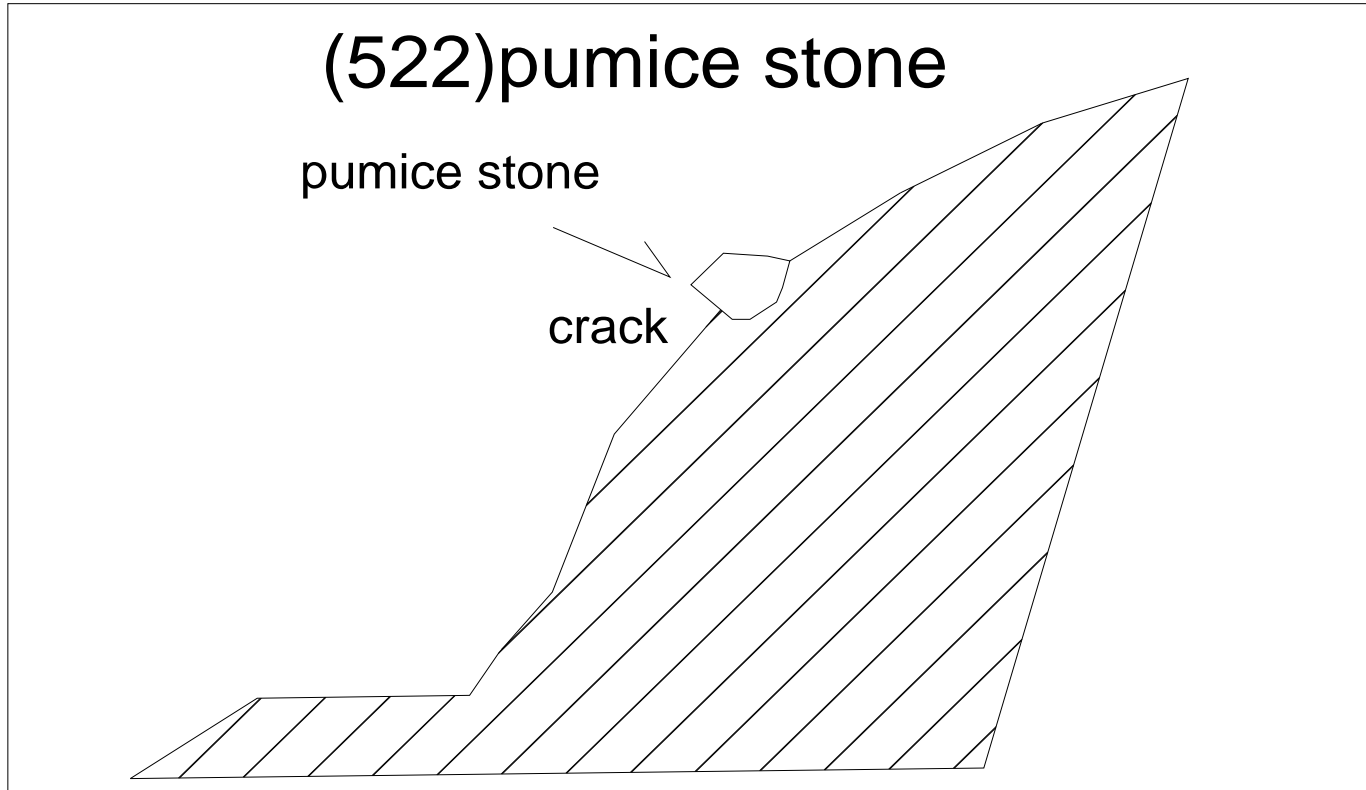
(520)wing



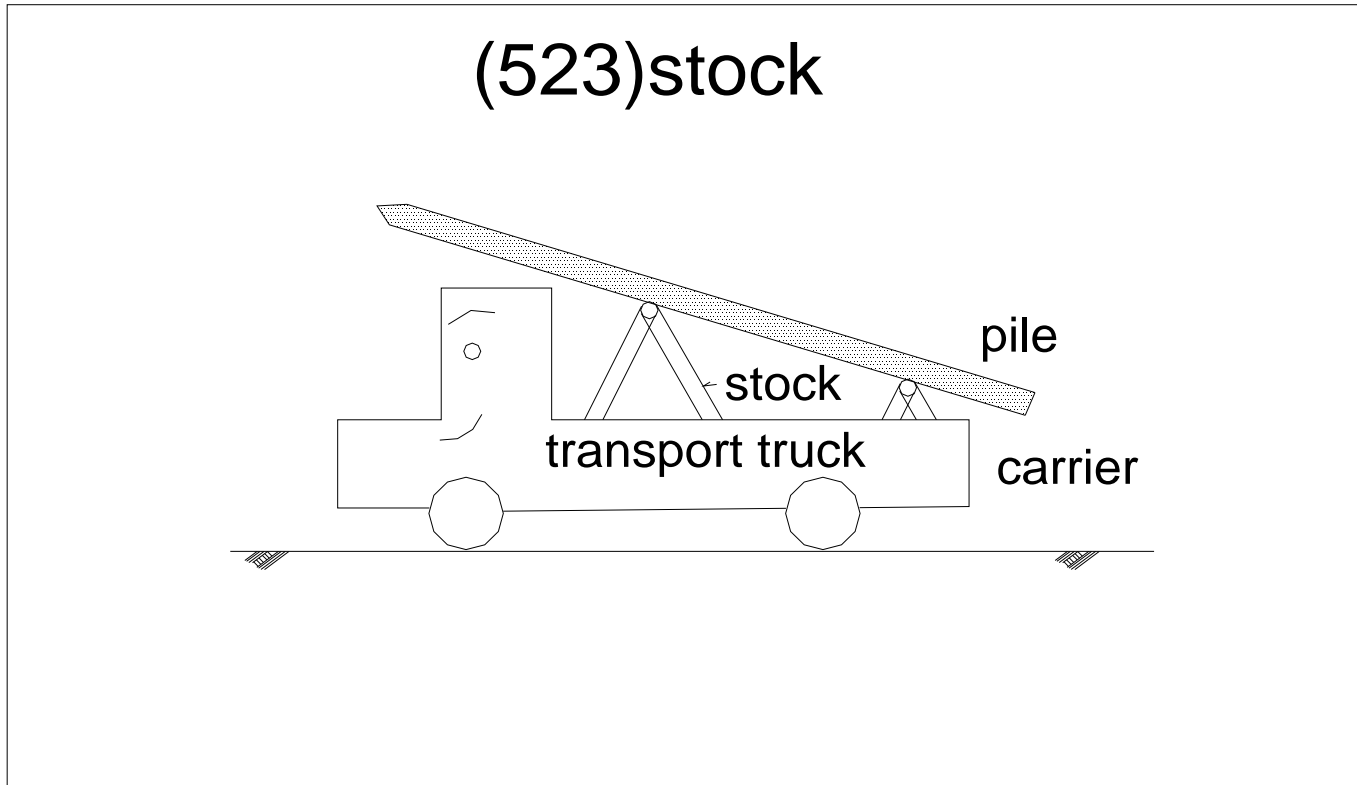
(521)Well point construction method



(522)pumice stone

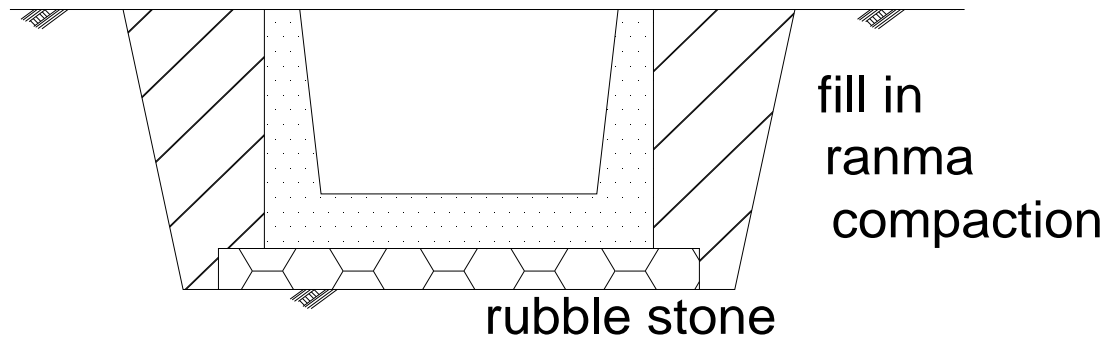


(523)stock

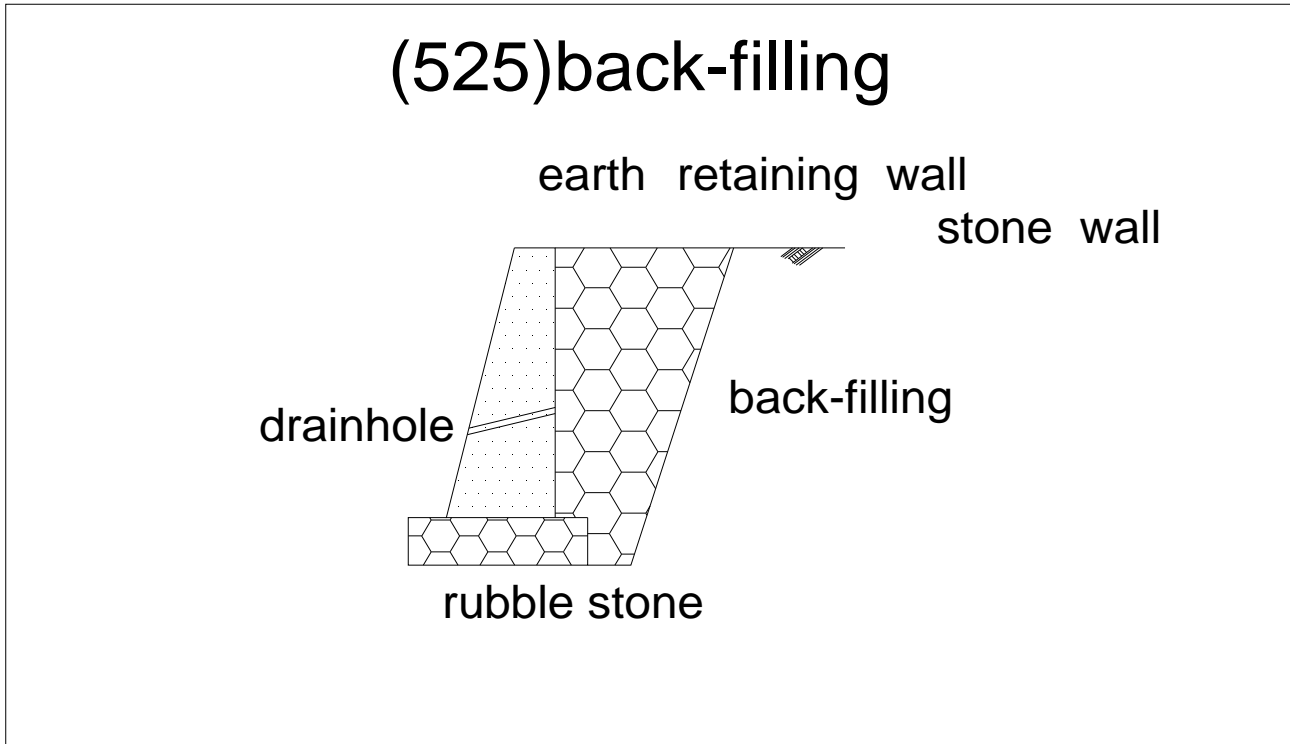


(524) Fill in

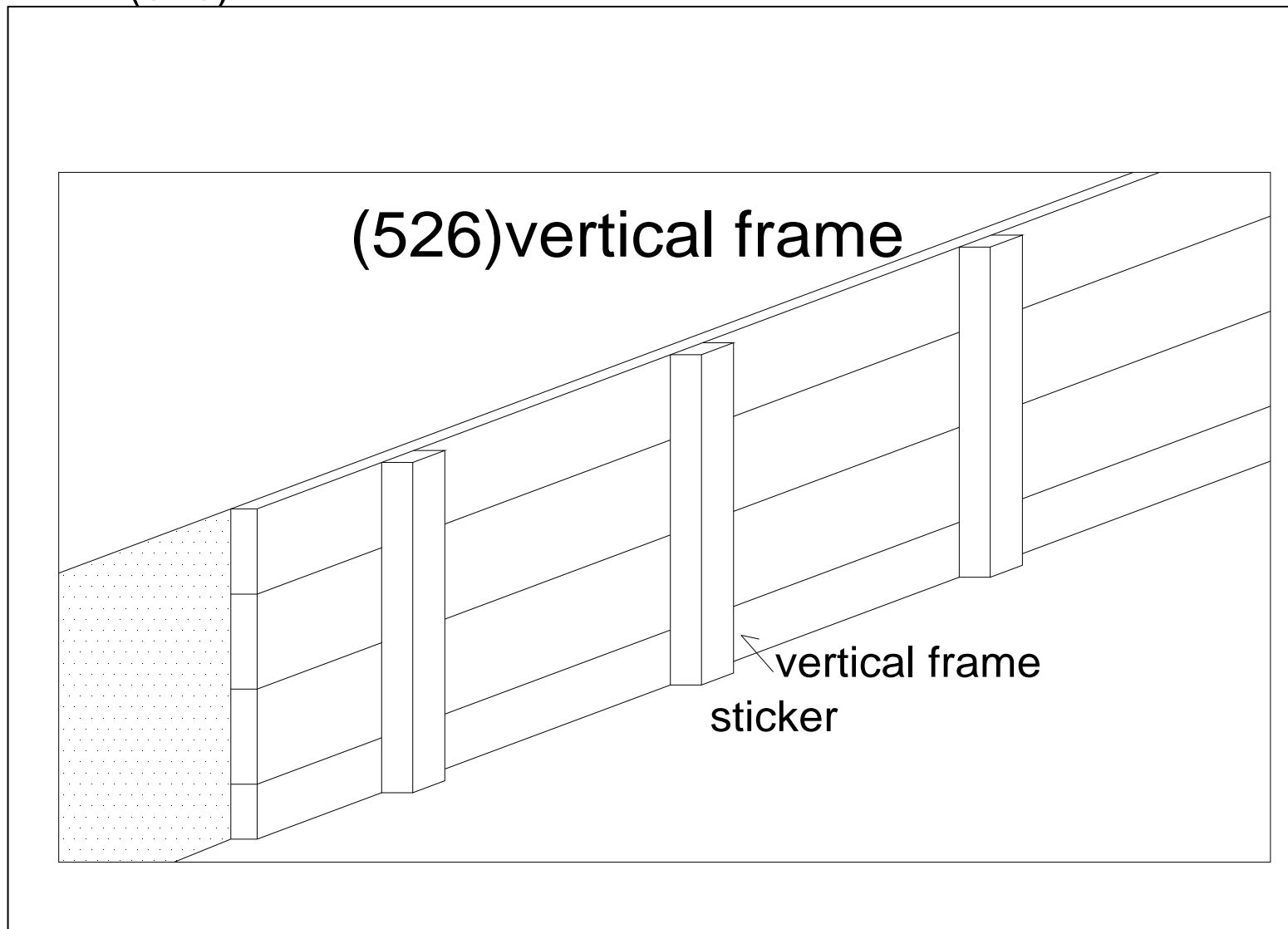
(524) Fill in



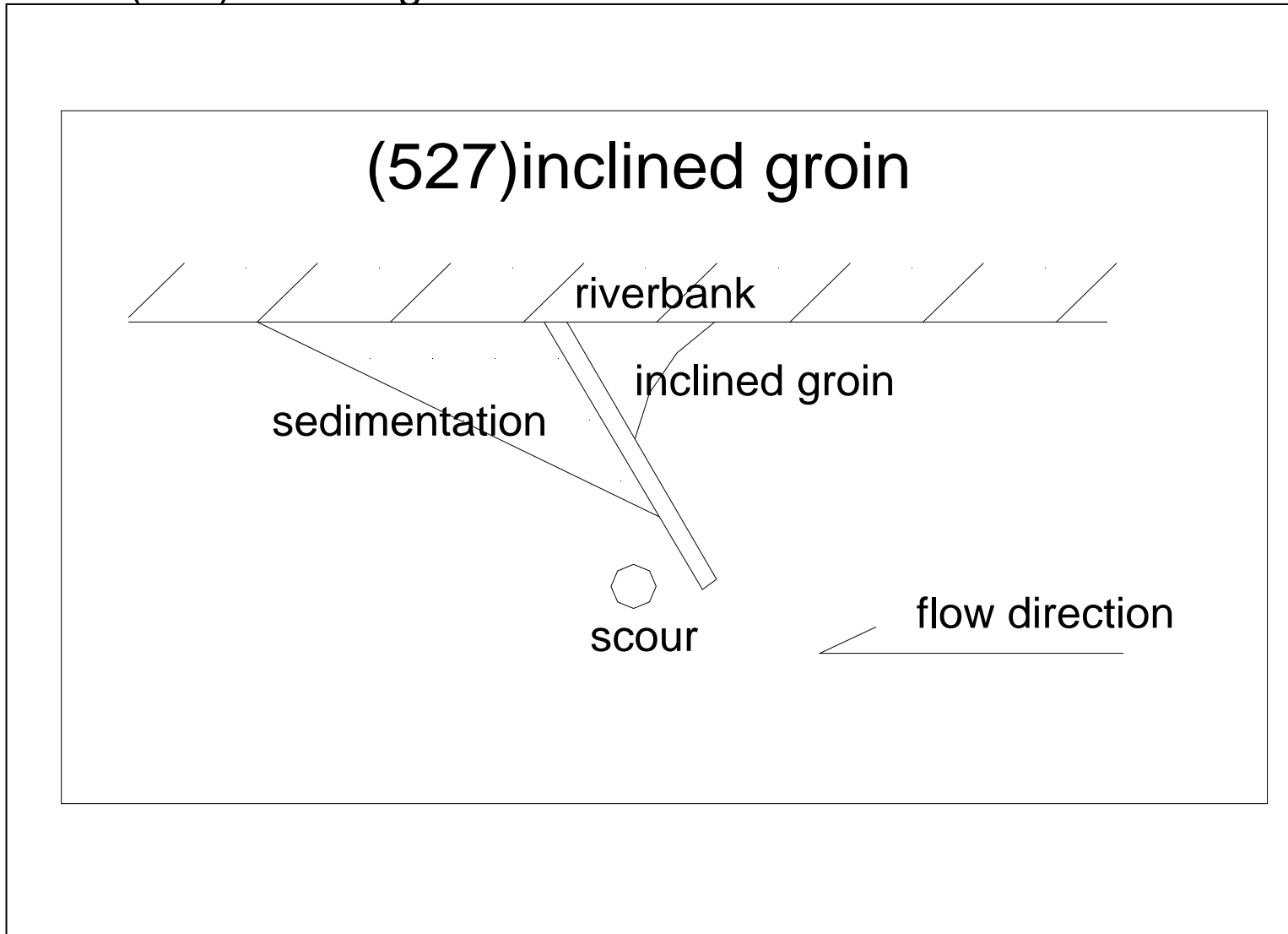
(525)back-filling



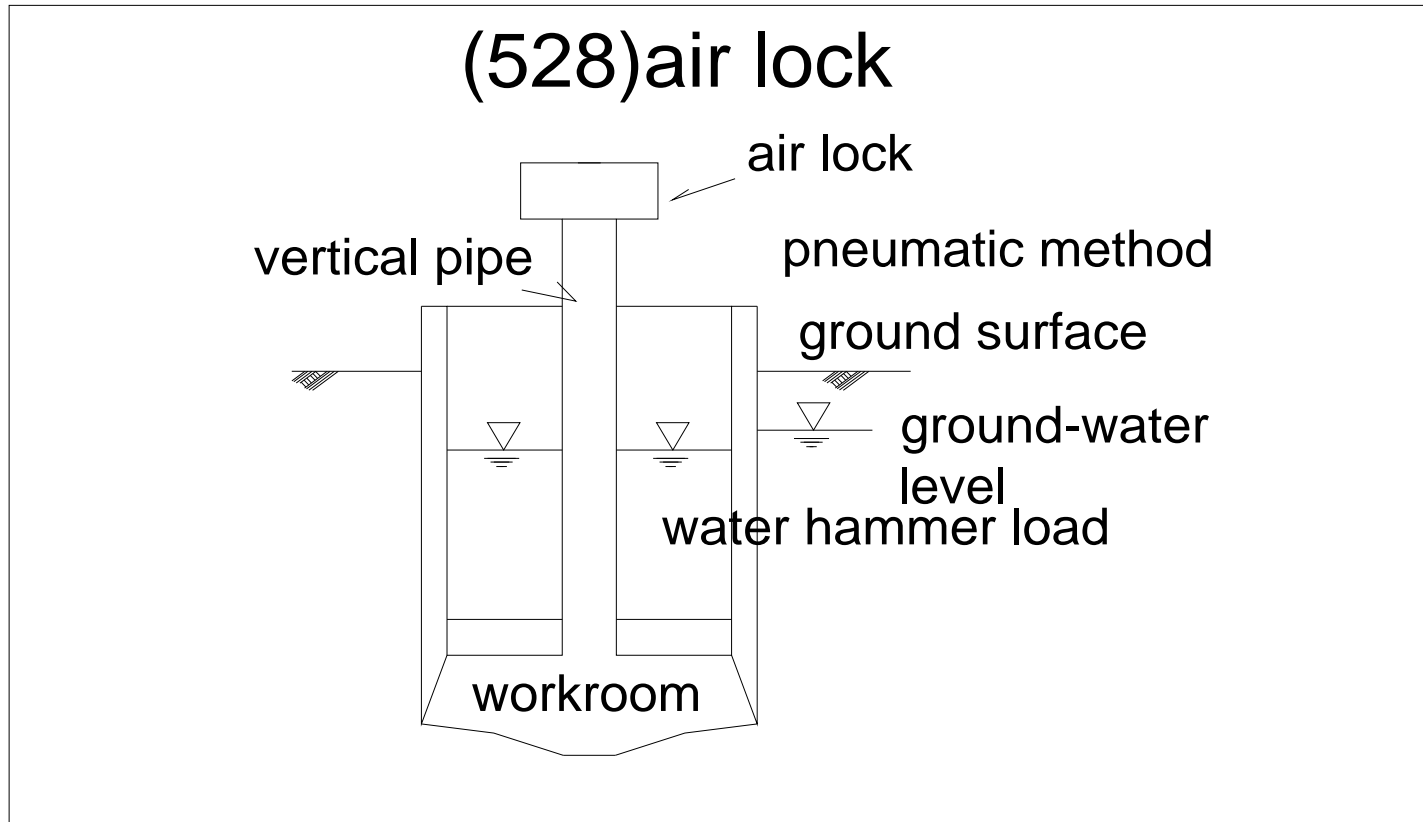
(526)vertical frame



(527)inclined groin



(528)air lock

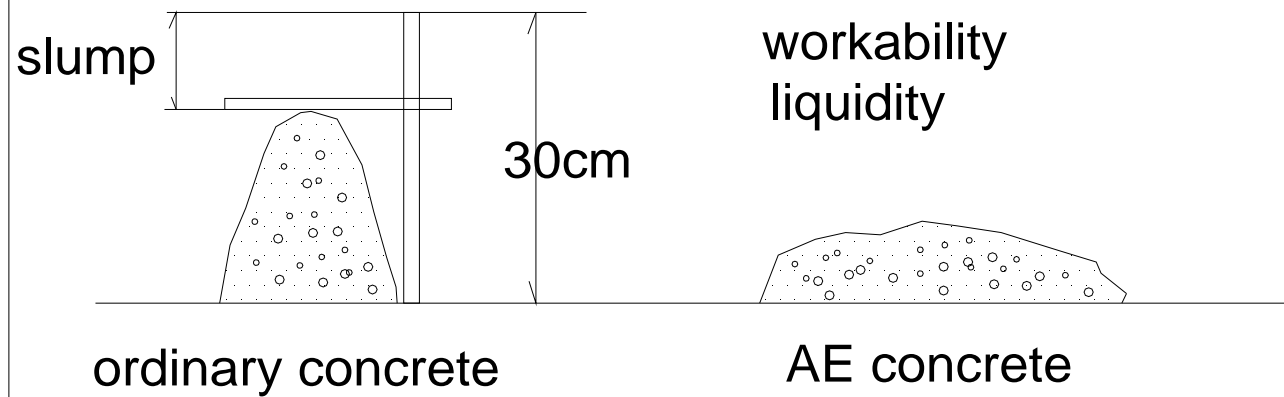


(529)AE concrete

(529)AE concrete

water content identity

AE agents (air entraining agents)



workability
liquidity

30cm

ordinary concrete

AE concrete

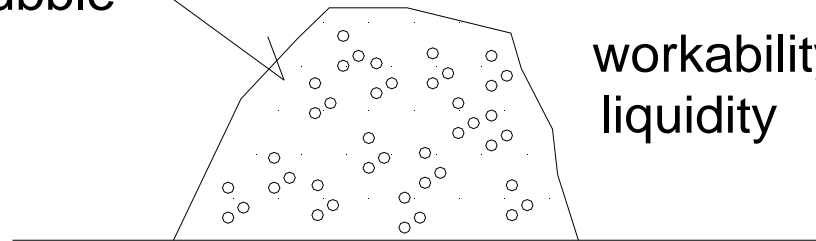
(530) AE agents(air entraining agents)

**(530)AE agents
(air entraining agents concrete)**

microscopic air
bubble

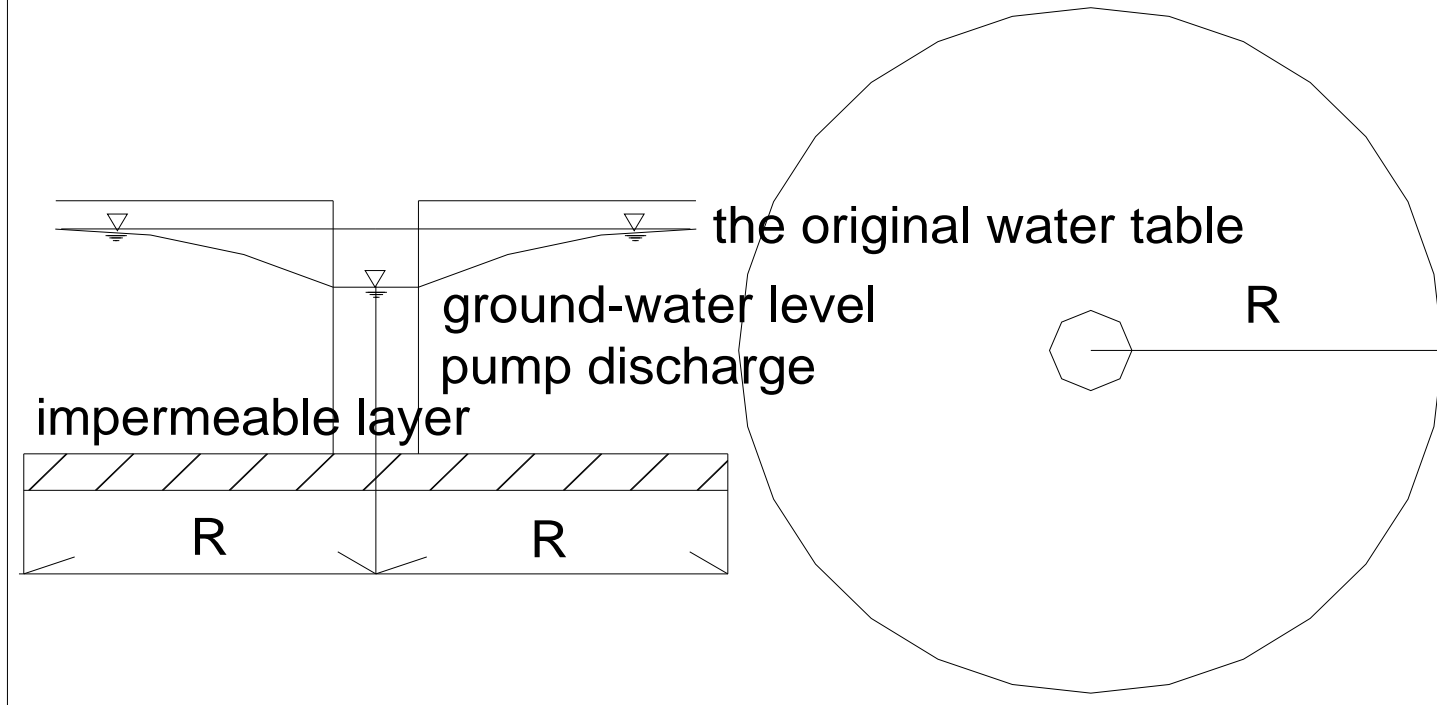
bearing

workability
liquidity



(531)circle of influence

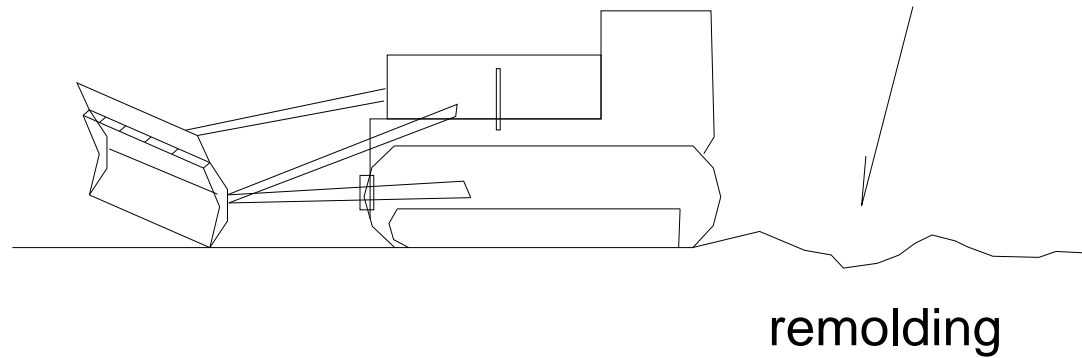
(531)circle of influence



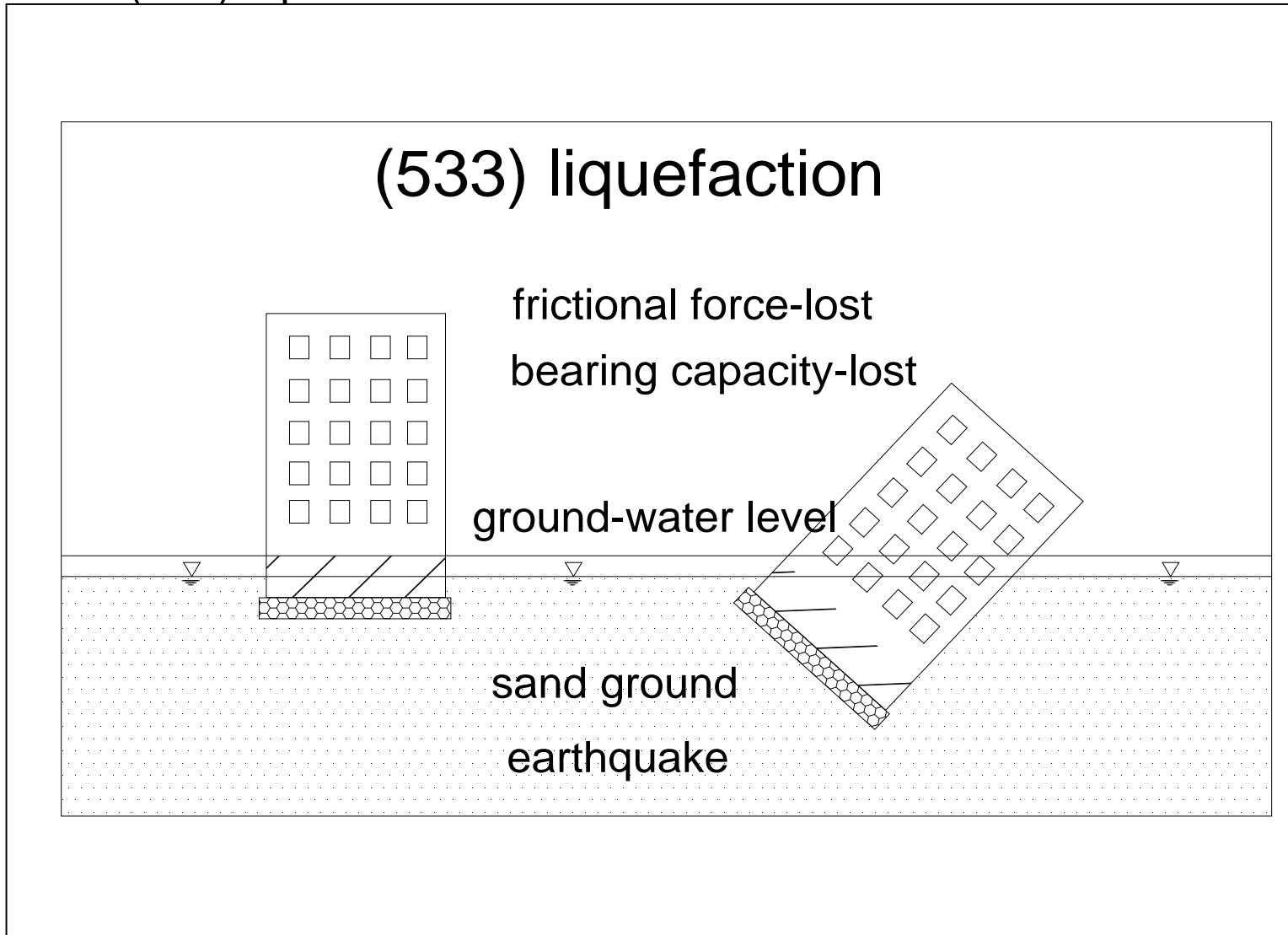
(532) sensitivity ratio

(532) sensitivity ratio

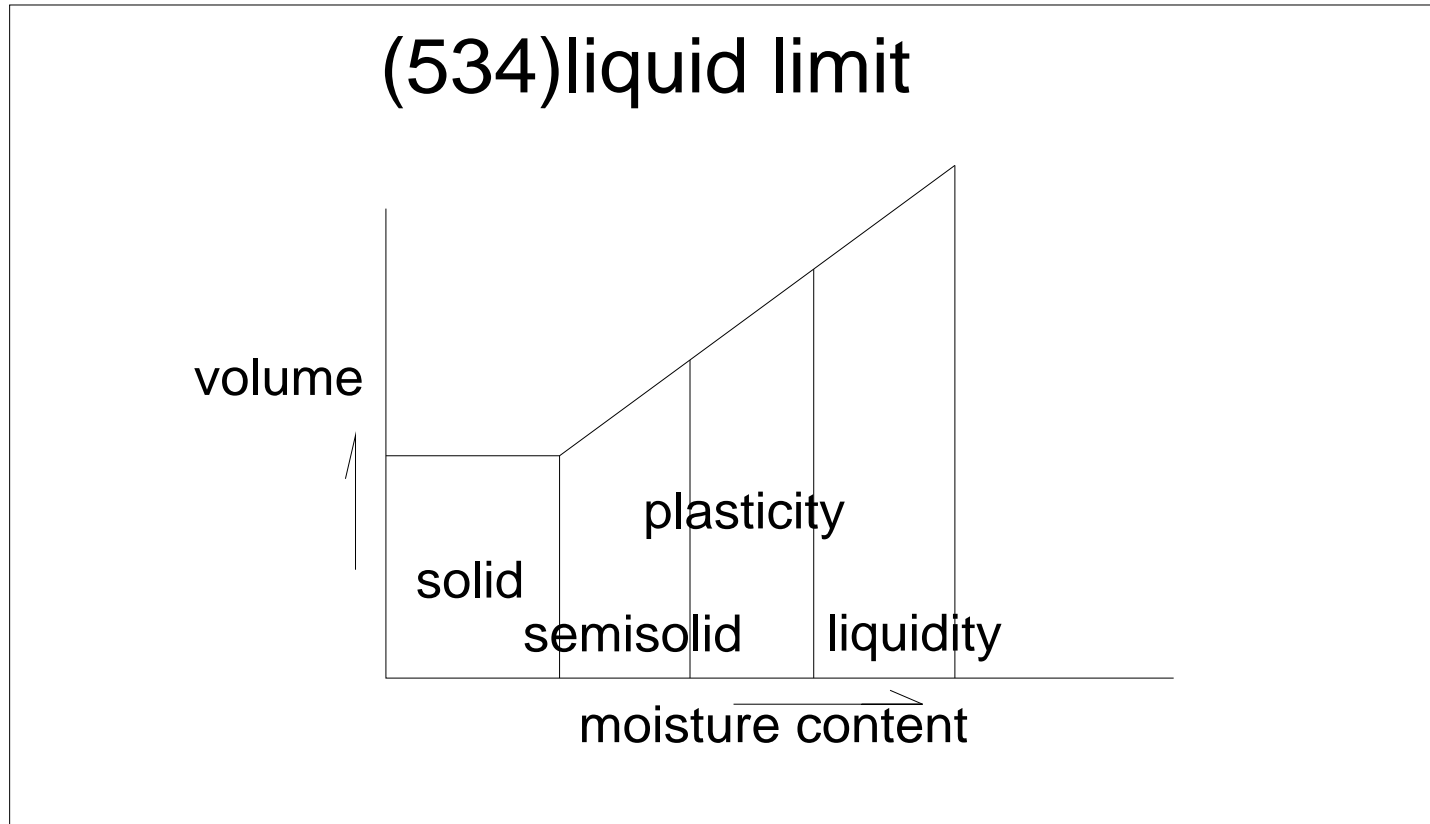
soft ground-sensitivity ratio-large



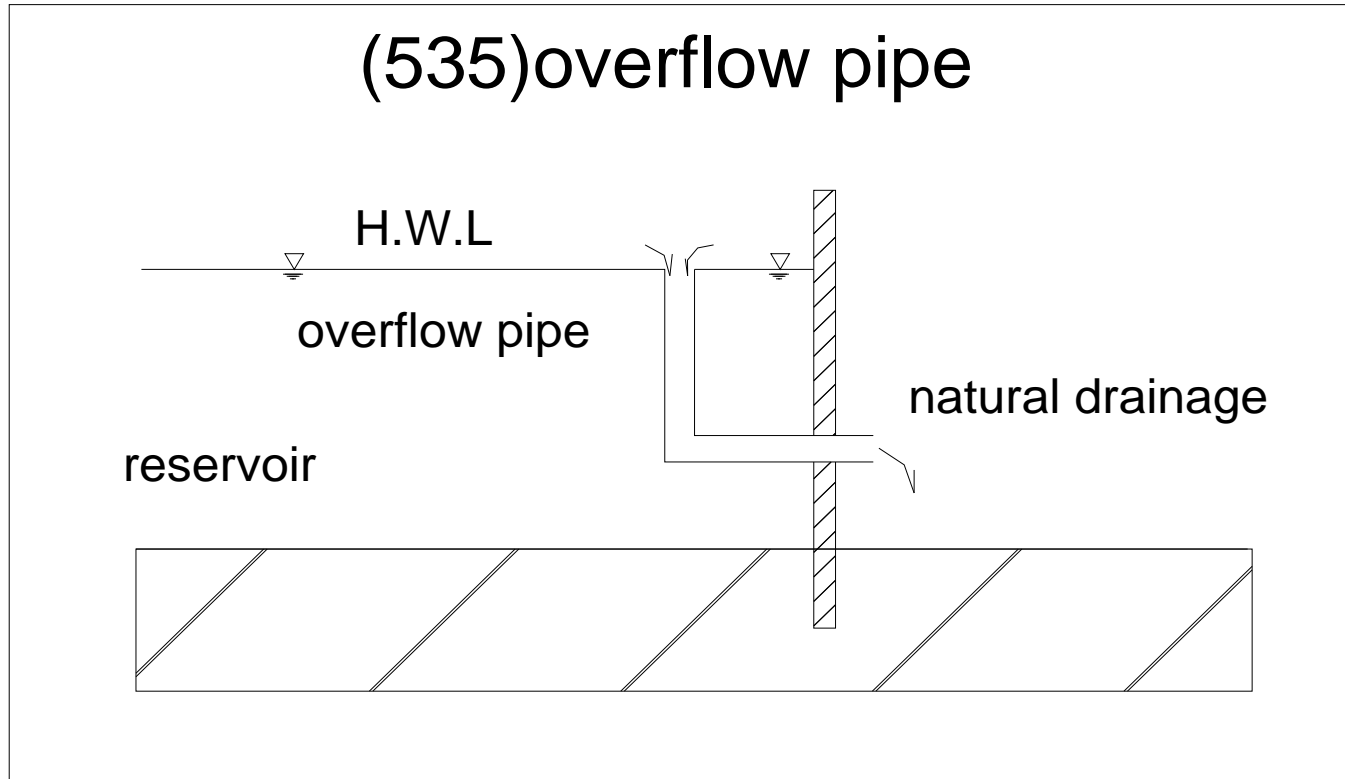
(533) liquefaction



(534)liquid limit

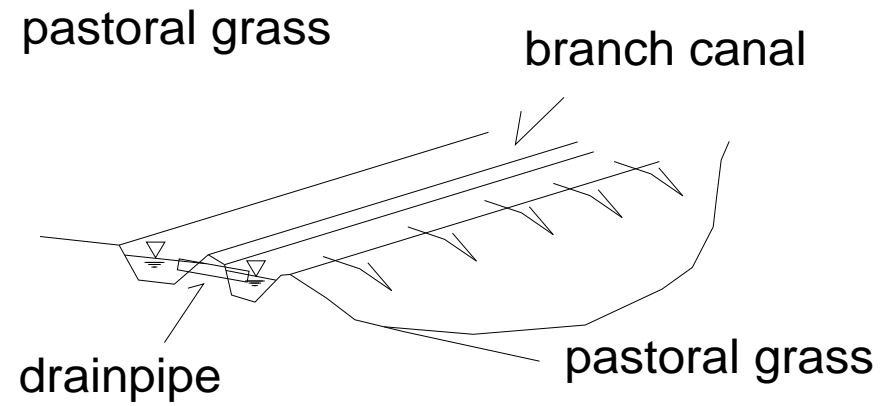


(535)overflow pipe

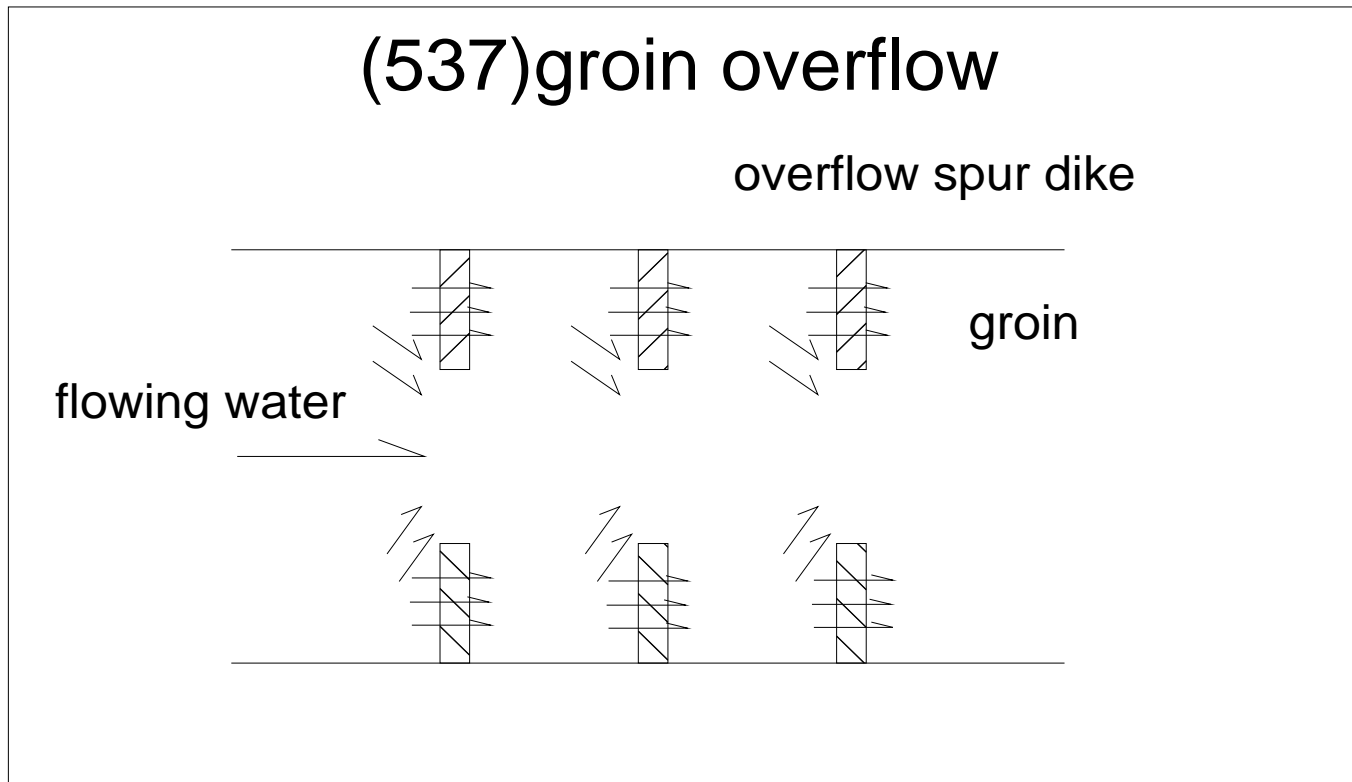


(536)overflow irrigation

(536)overflow irrigation

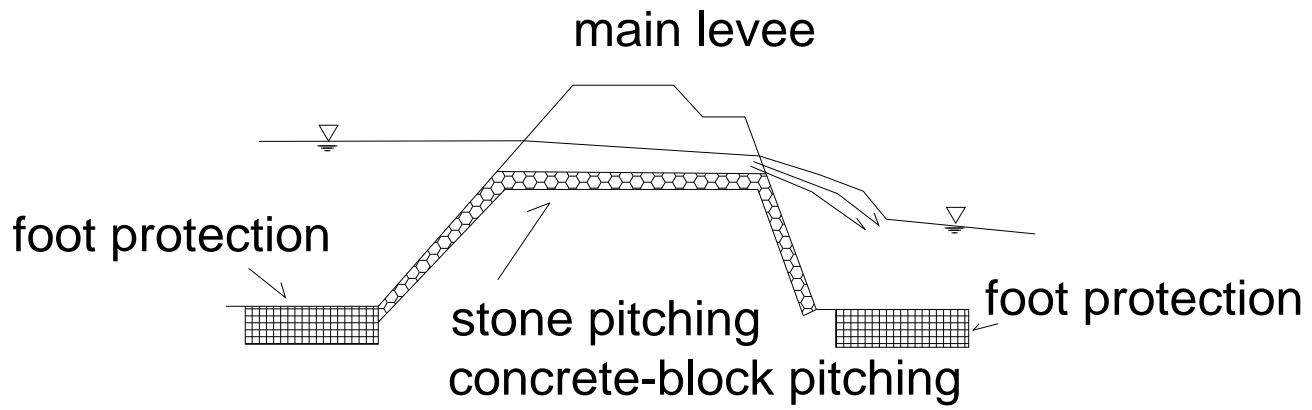


(537)groin overflow



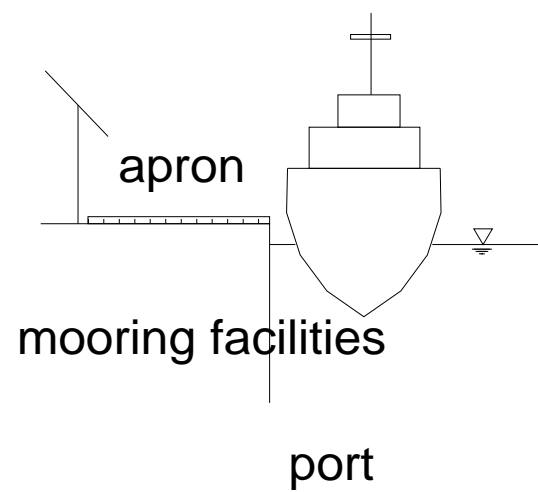
(538)deversoir

(538)deversoir



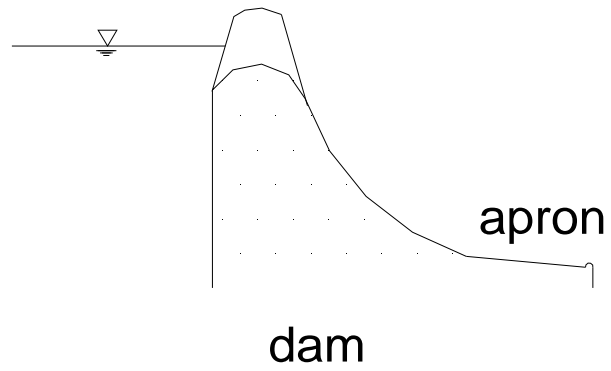
(539)apron 1

(539)apron 1



(540)apron 2

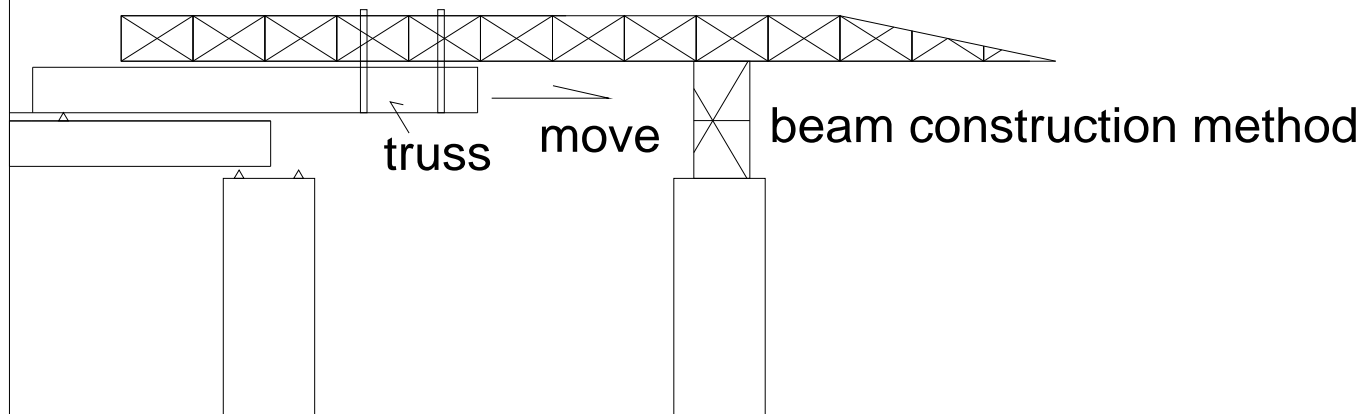
(540)apron 2



(541)election truss

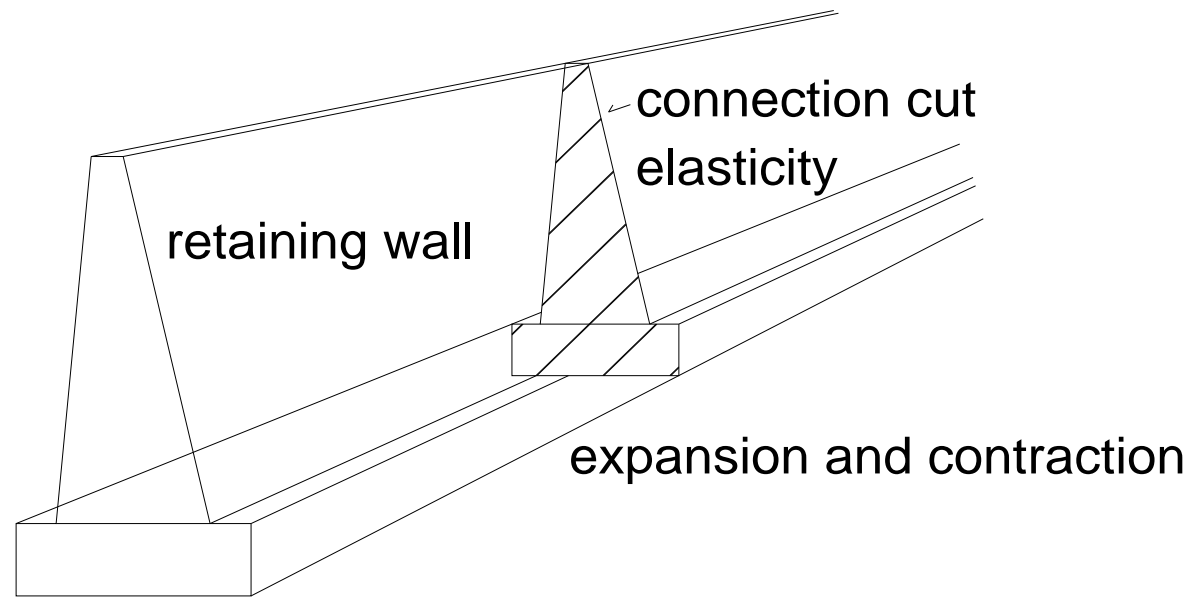
(541)election truss

election truss



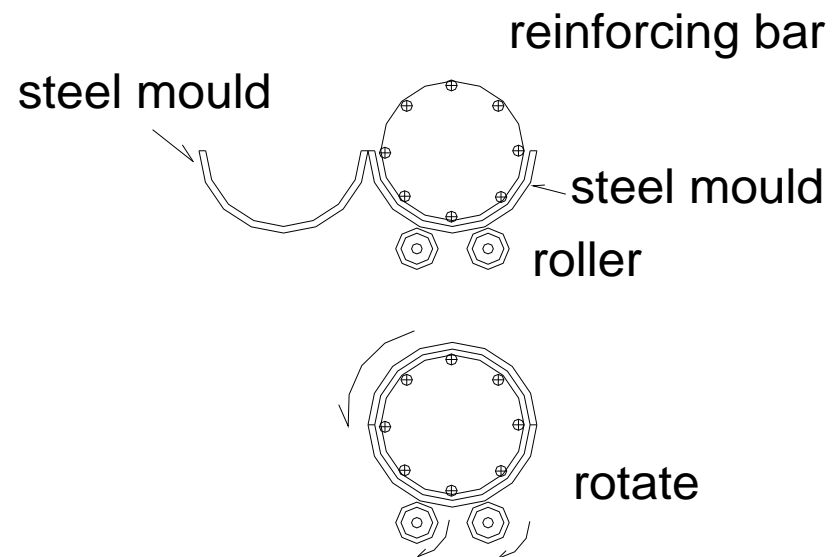
(542)connection cut

(542)connection cut



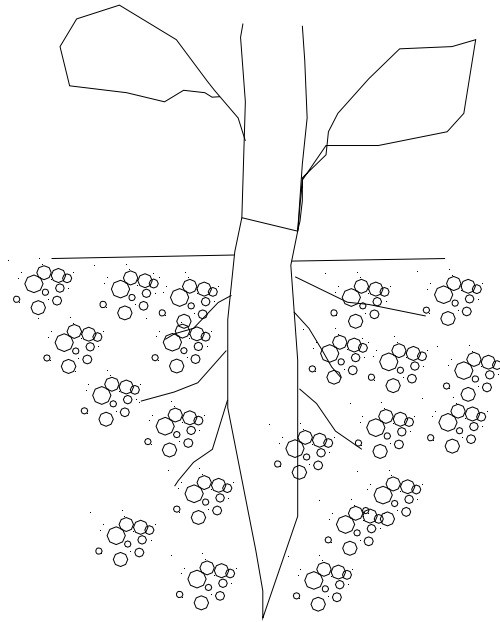
(543)centrifugal reinforcement concrete pipe

(543)centrifugal reinforcement
concrete pipe



(544)Soil

(544)Soil



Ventilation

Drain

Keep Water

Keep Fertilizer

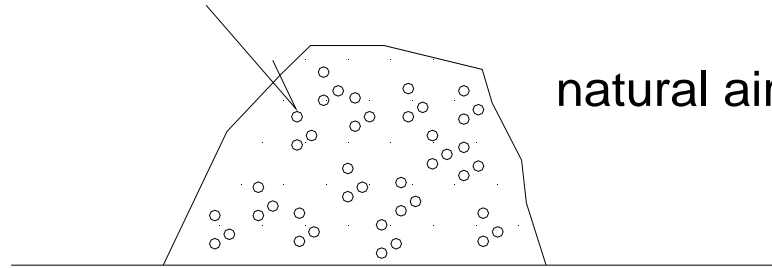
(545)entrapped air

(545)entrapped air

not use admixture
air entraining agents

entrapped air

natural air



(546)entrained air

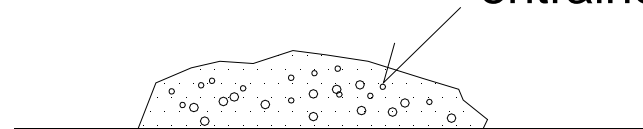
(546)entrained air

AE agents (air entraining agents)

workability

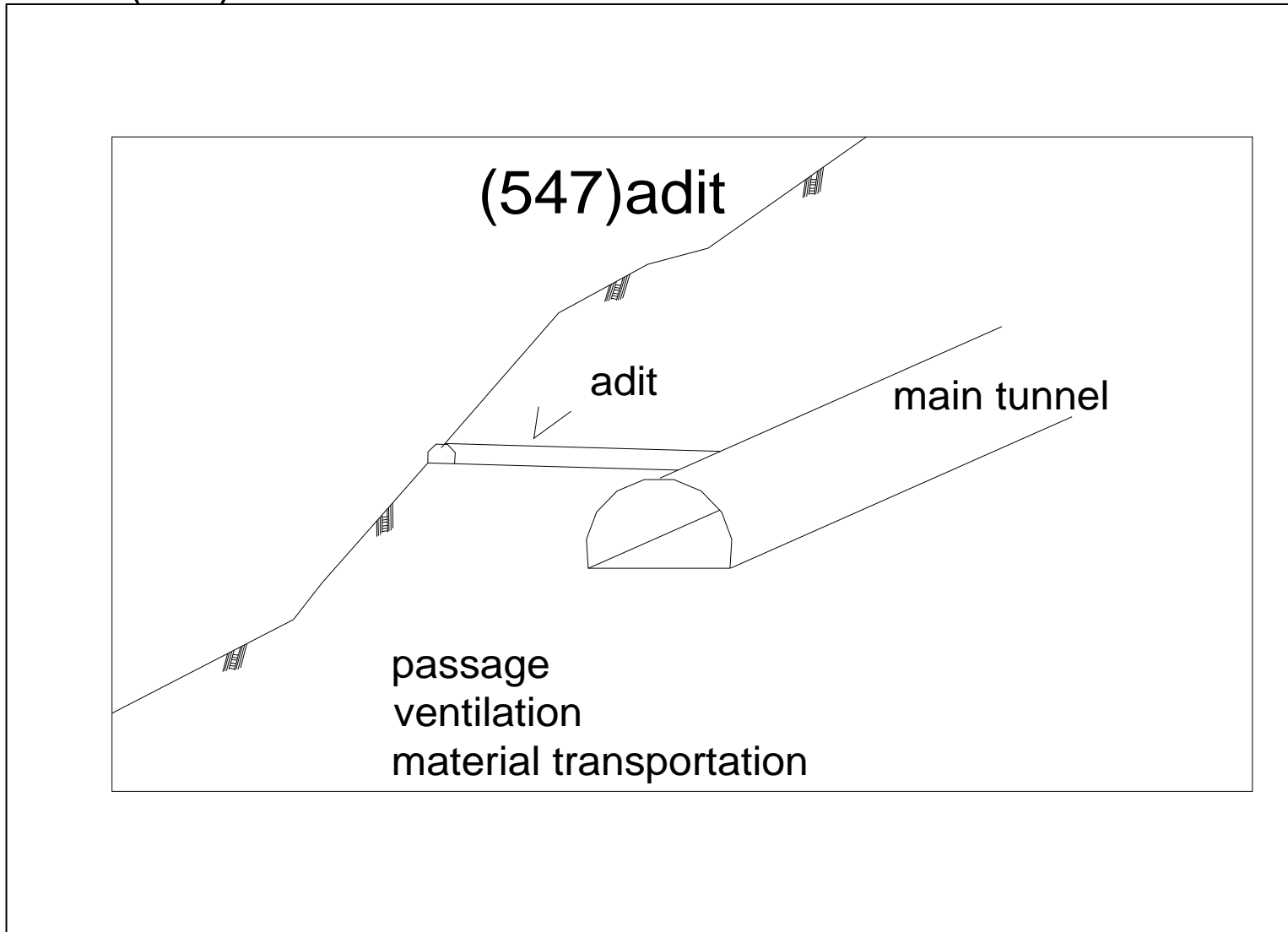
liquidity

entrained air



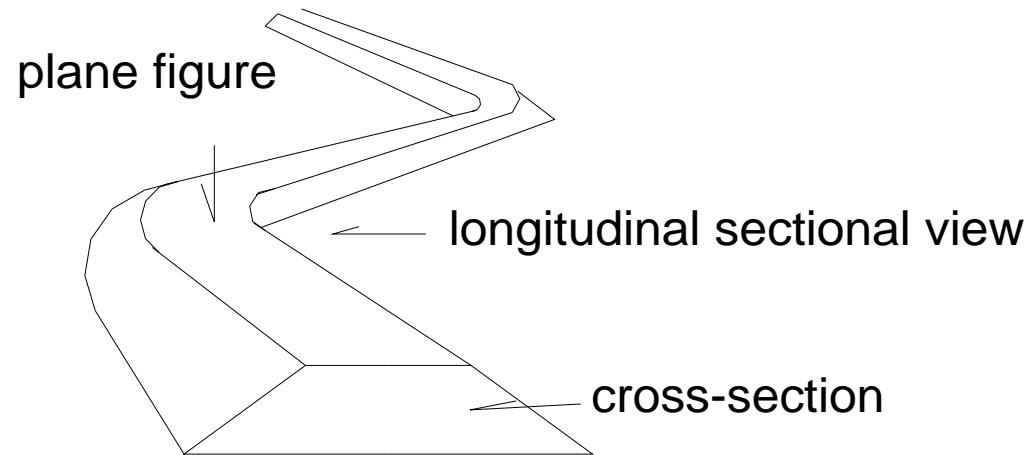
AE concrete

(547)adit



(548)cross-sectional drawings

(548)cross-sectional drawings

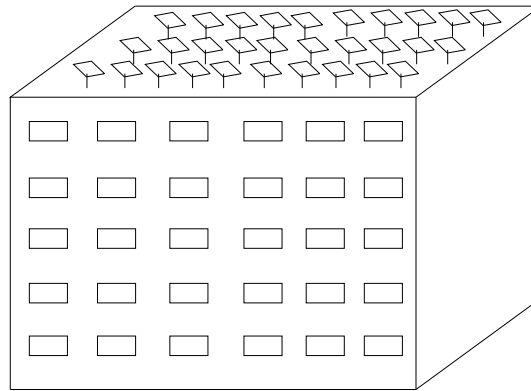


(549)rooftop greening

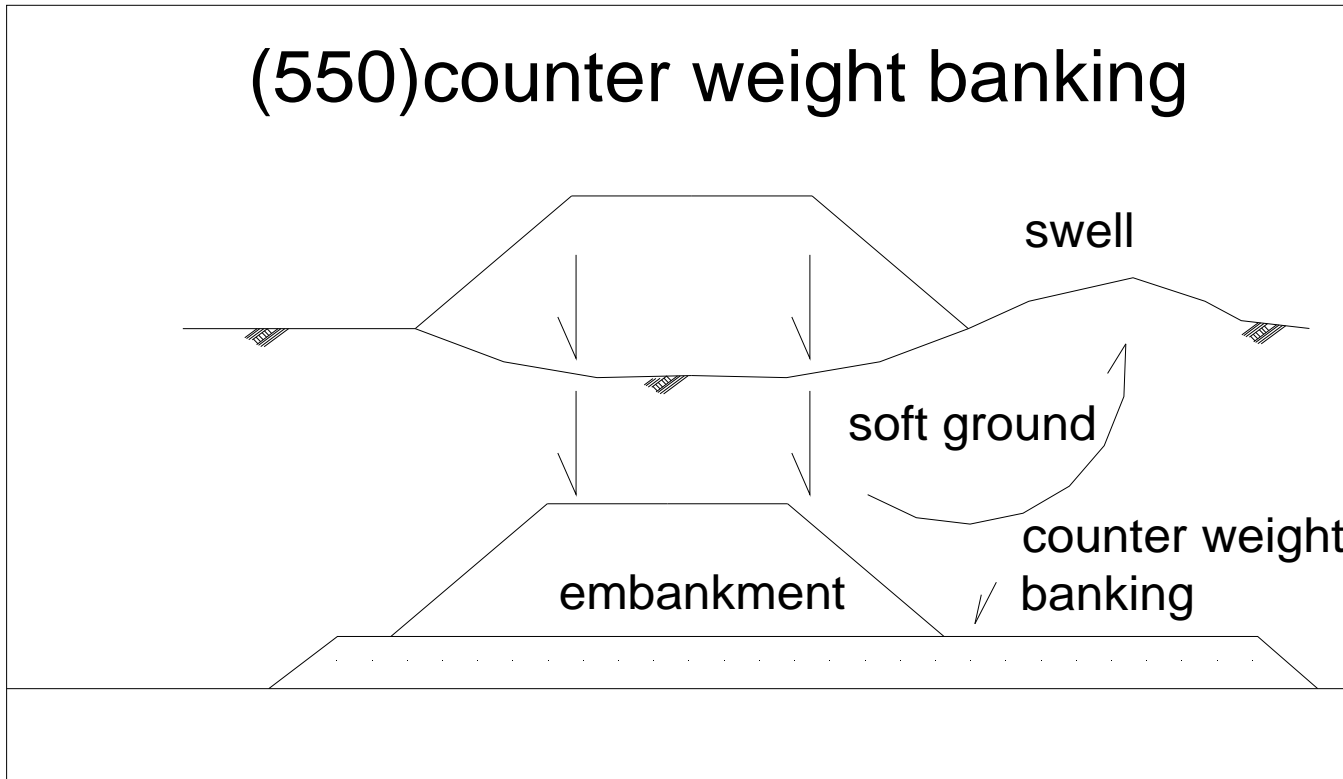
(549)rooftop greening

control heat island countermeasures

plant greening

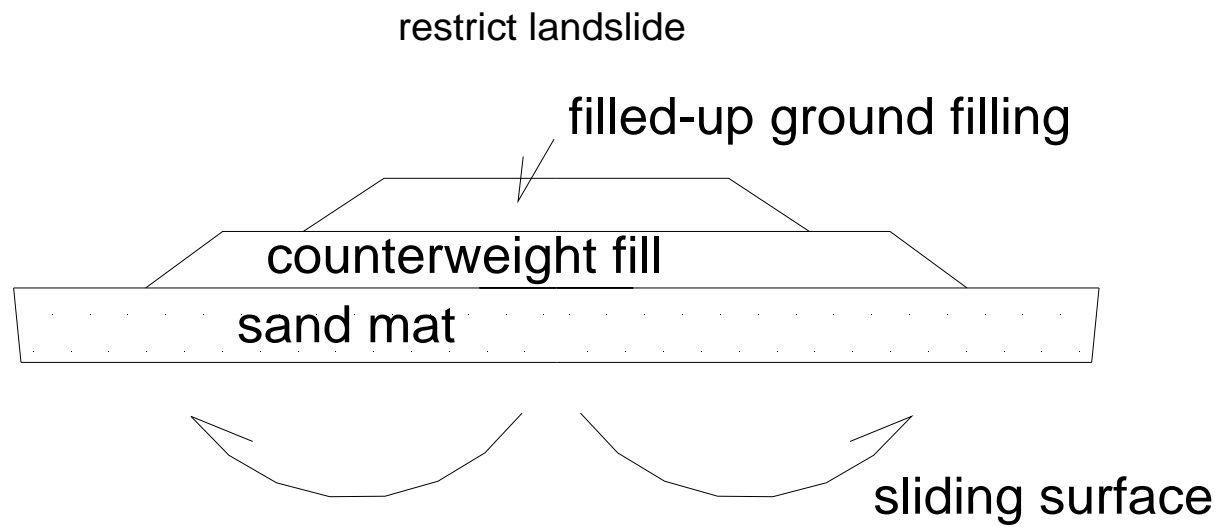


(550)counter weight banking

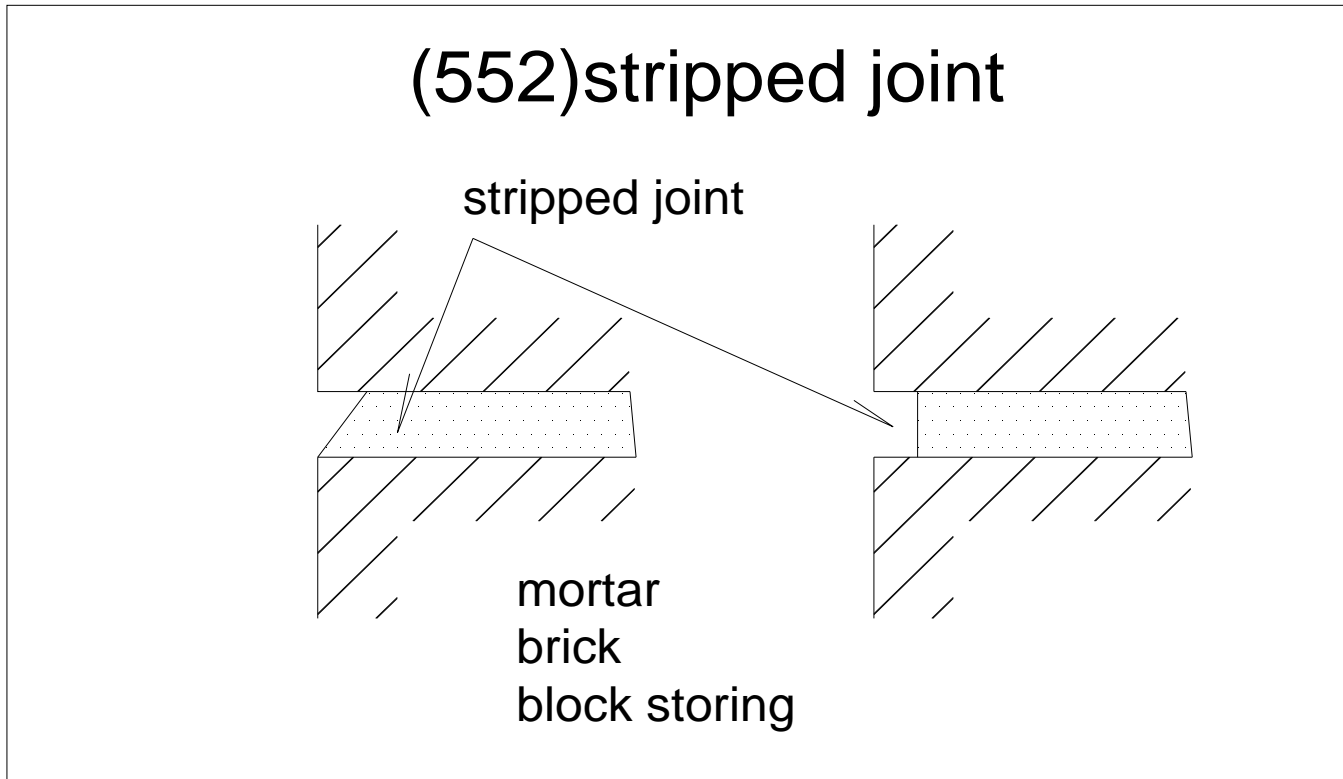


(551)counterweight fill method

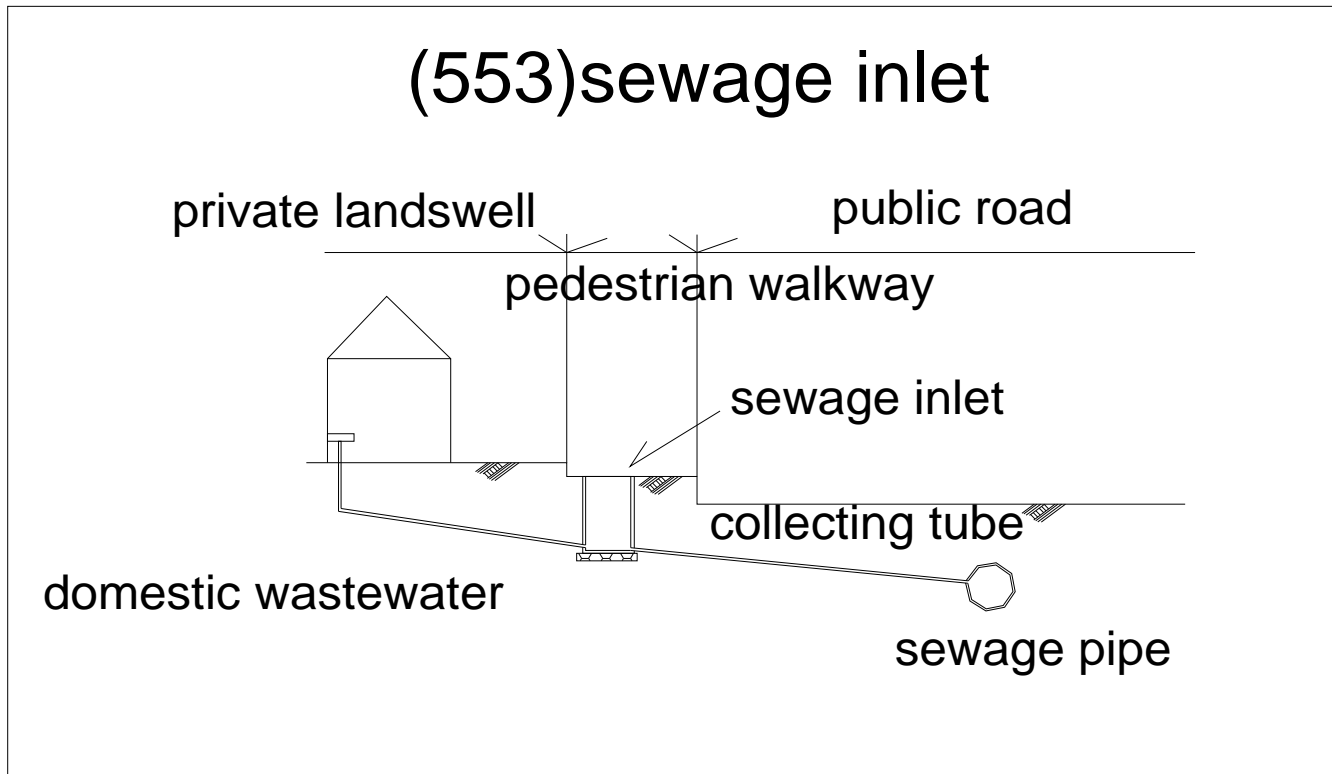
(551)counterweight fill method



(552)stripped joint

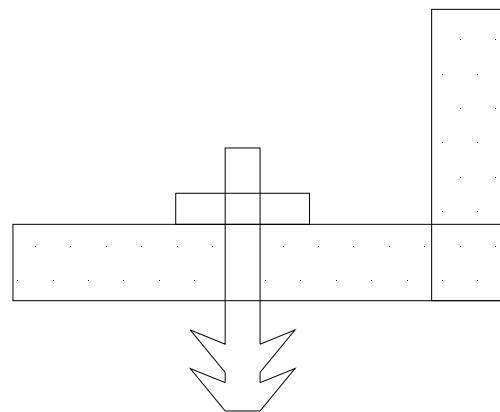


(553)sewage inlet



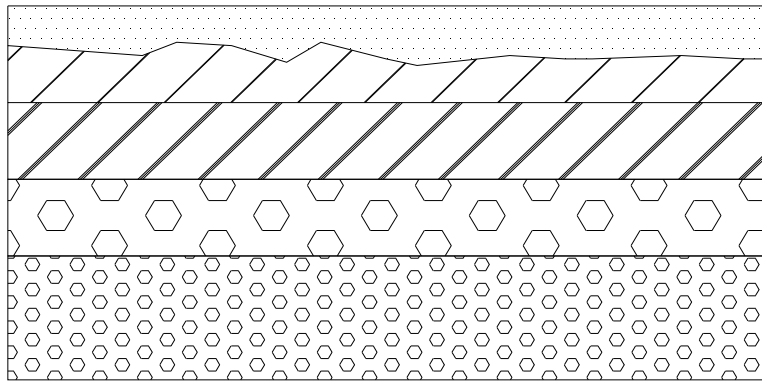
(554)fang bolt

(554)fang bolt



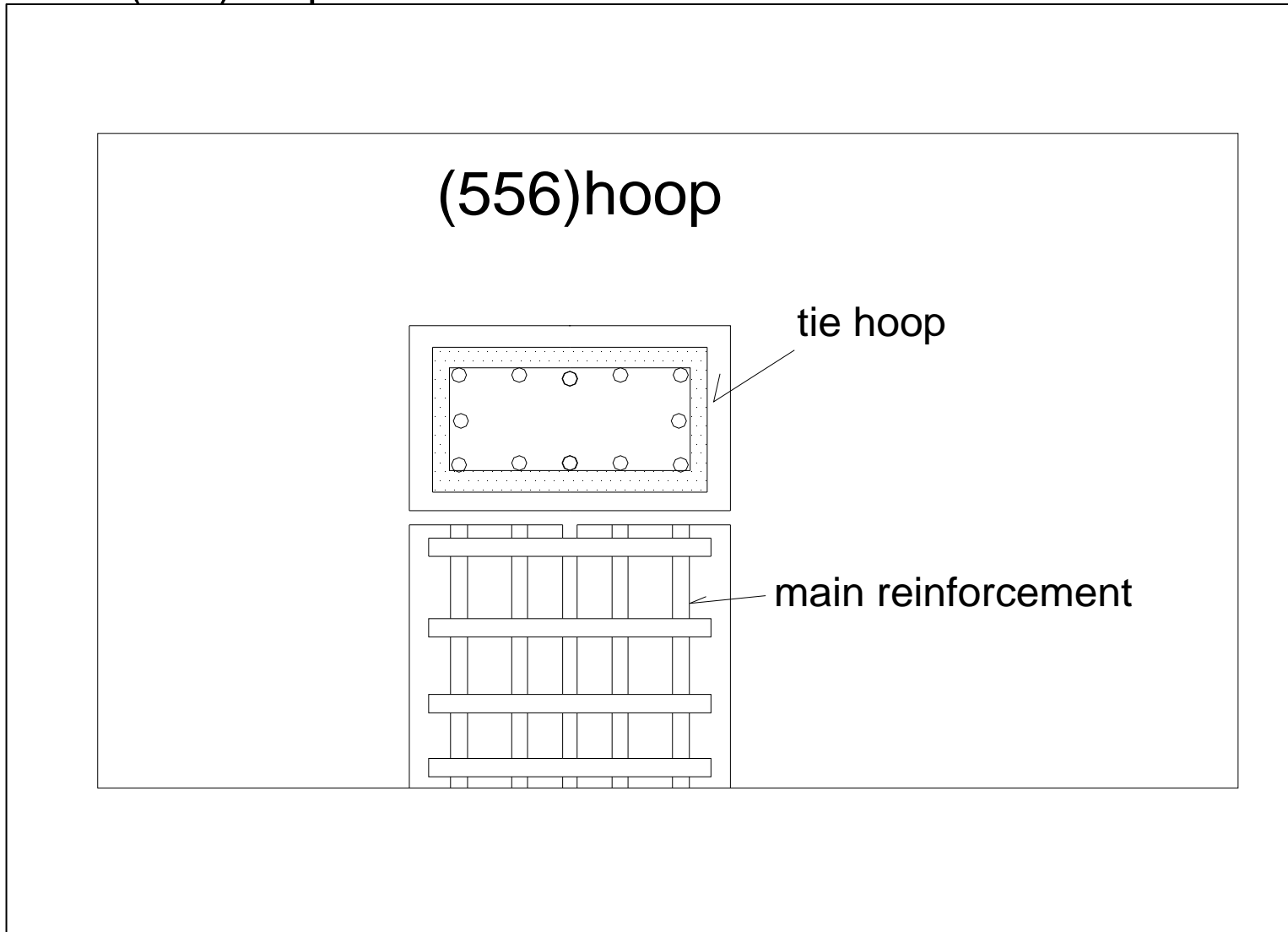
(555)overlay

(555)overlay

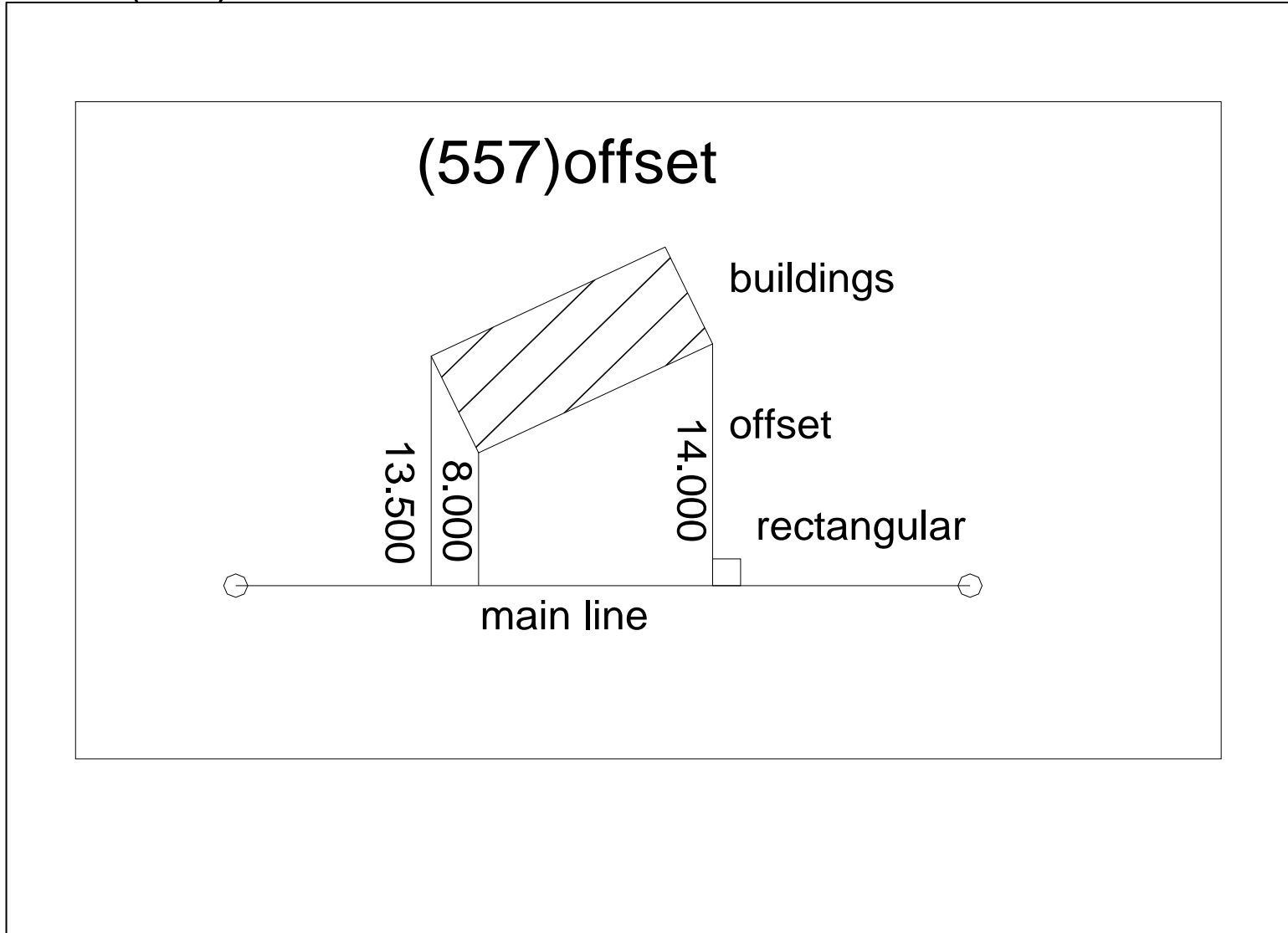


asphalt mixture
overlay
conventional pavement
load force
decrement
impact mitigation
rain
prevention from
entering
pavement
flatness

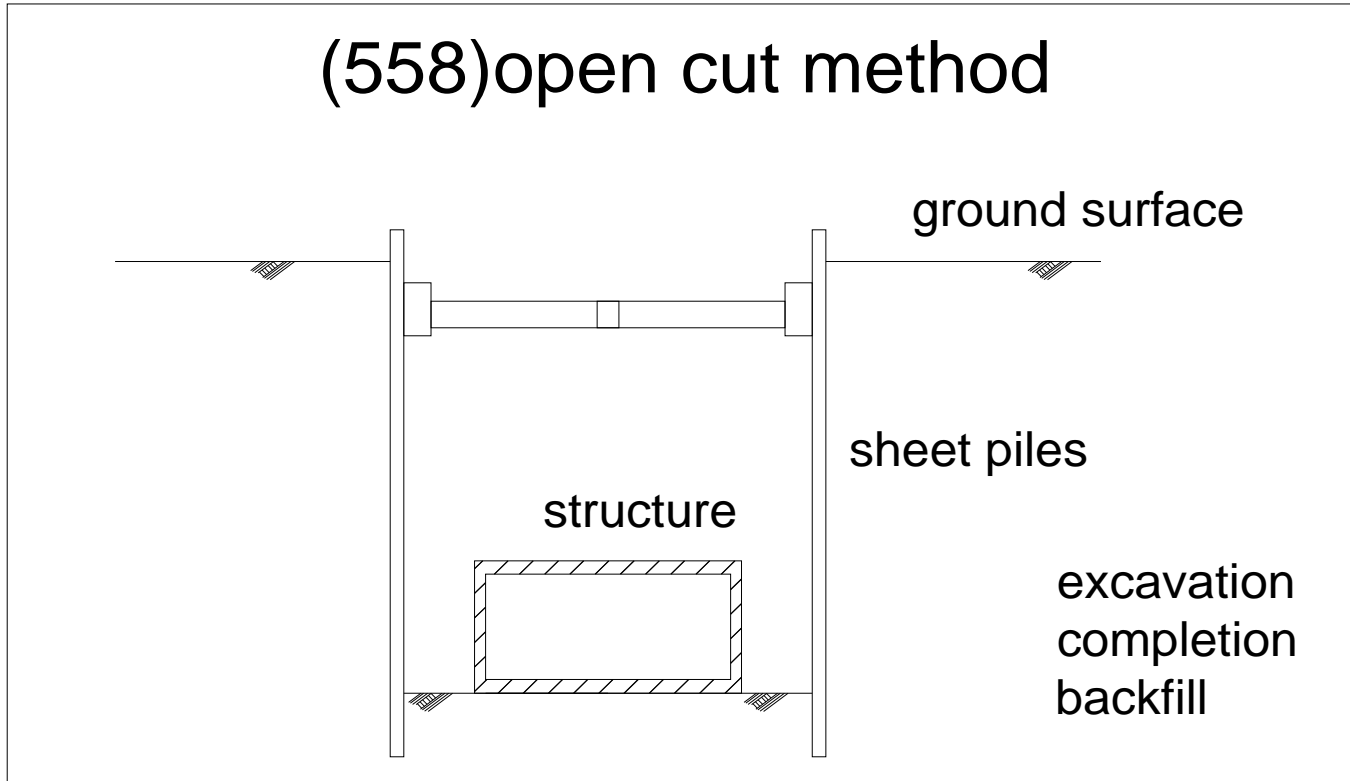
(556)hoop



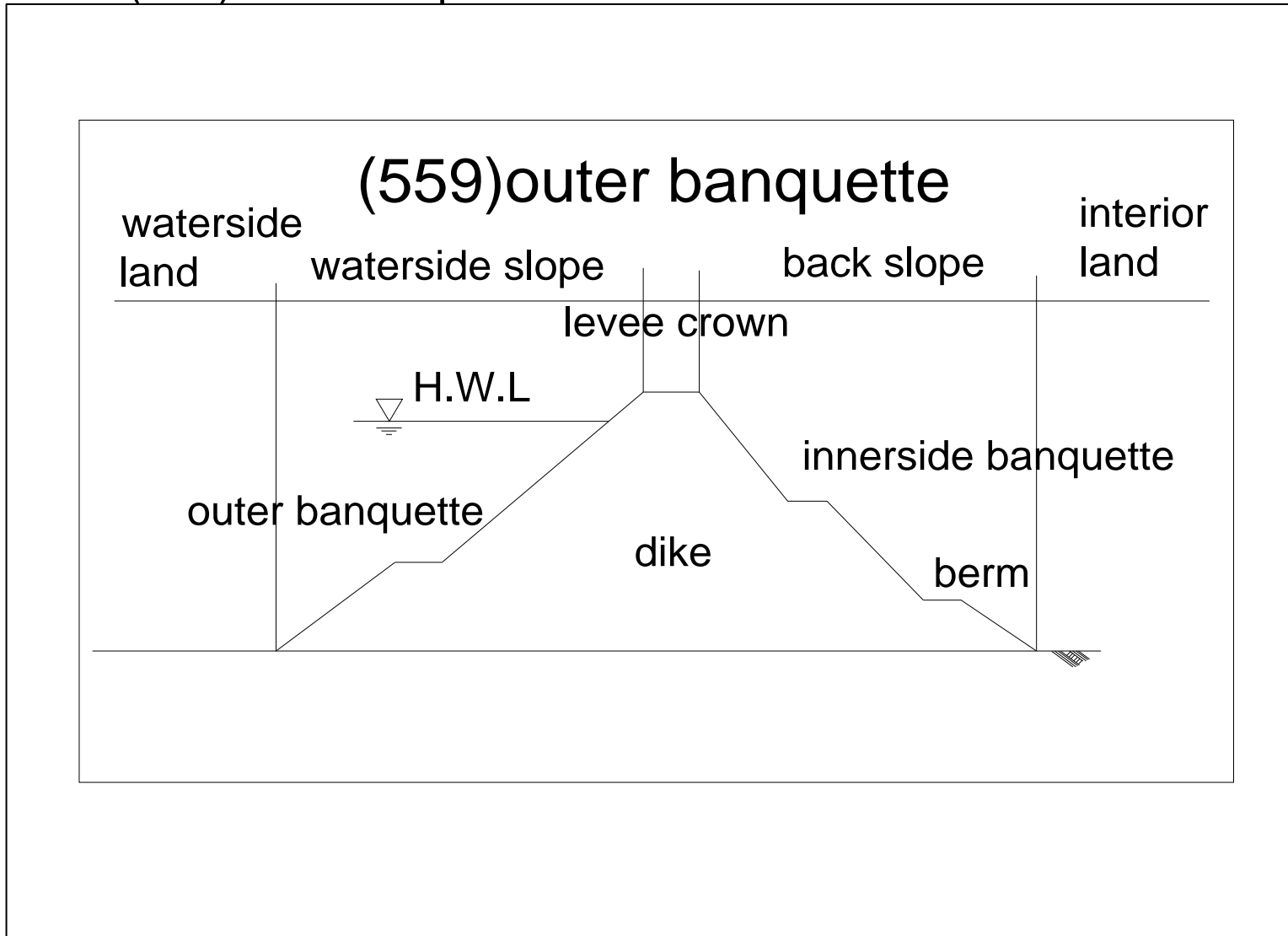
(557)offset



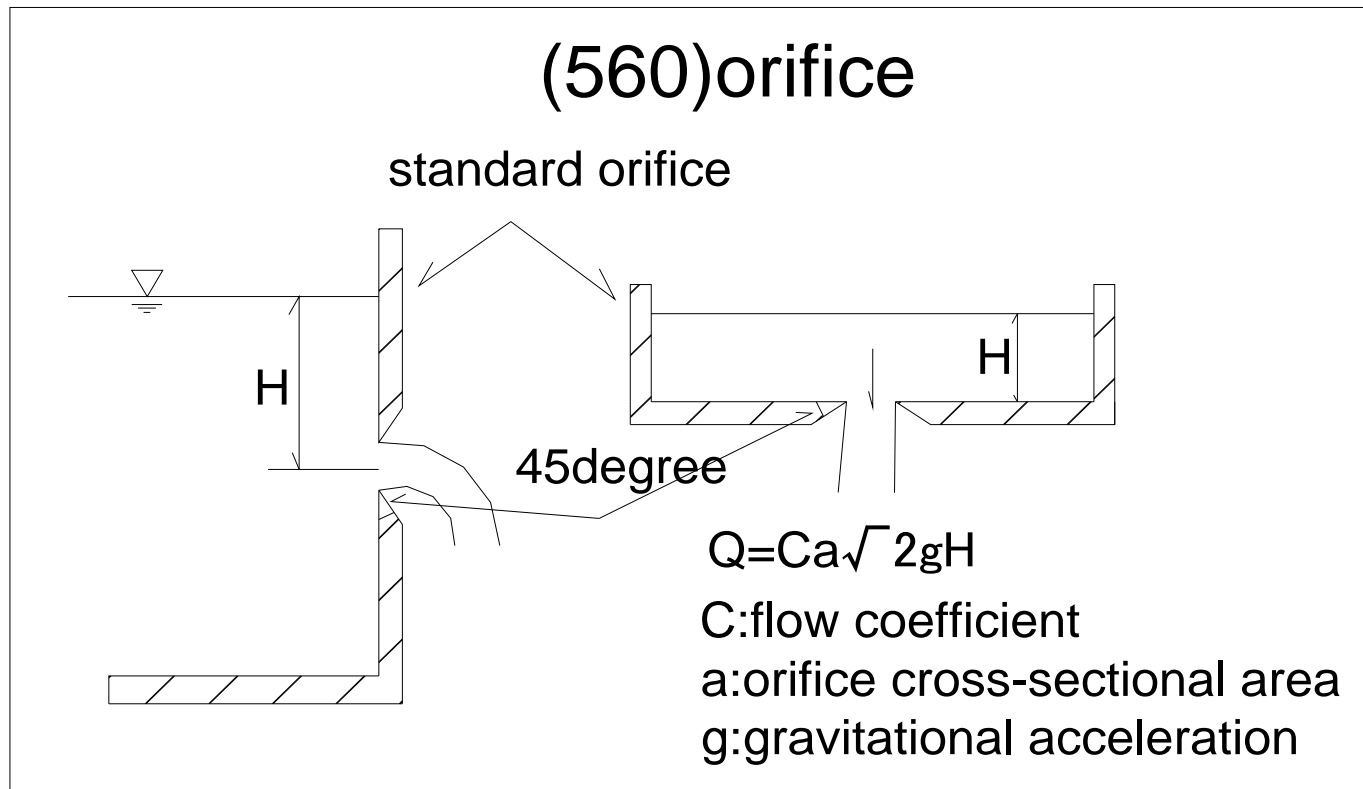
(558)open cut method



(559)outer banquette



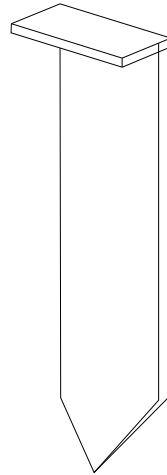
(560)orifice



(561)brad

(561)brad

wooden bridge
board fixed

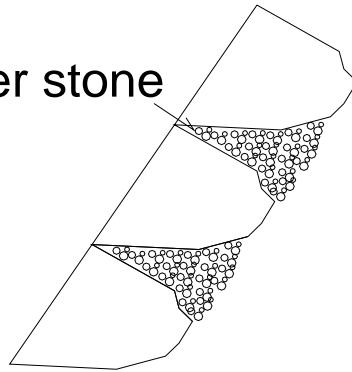


(562)stopper stone

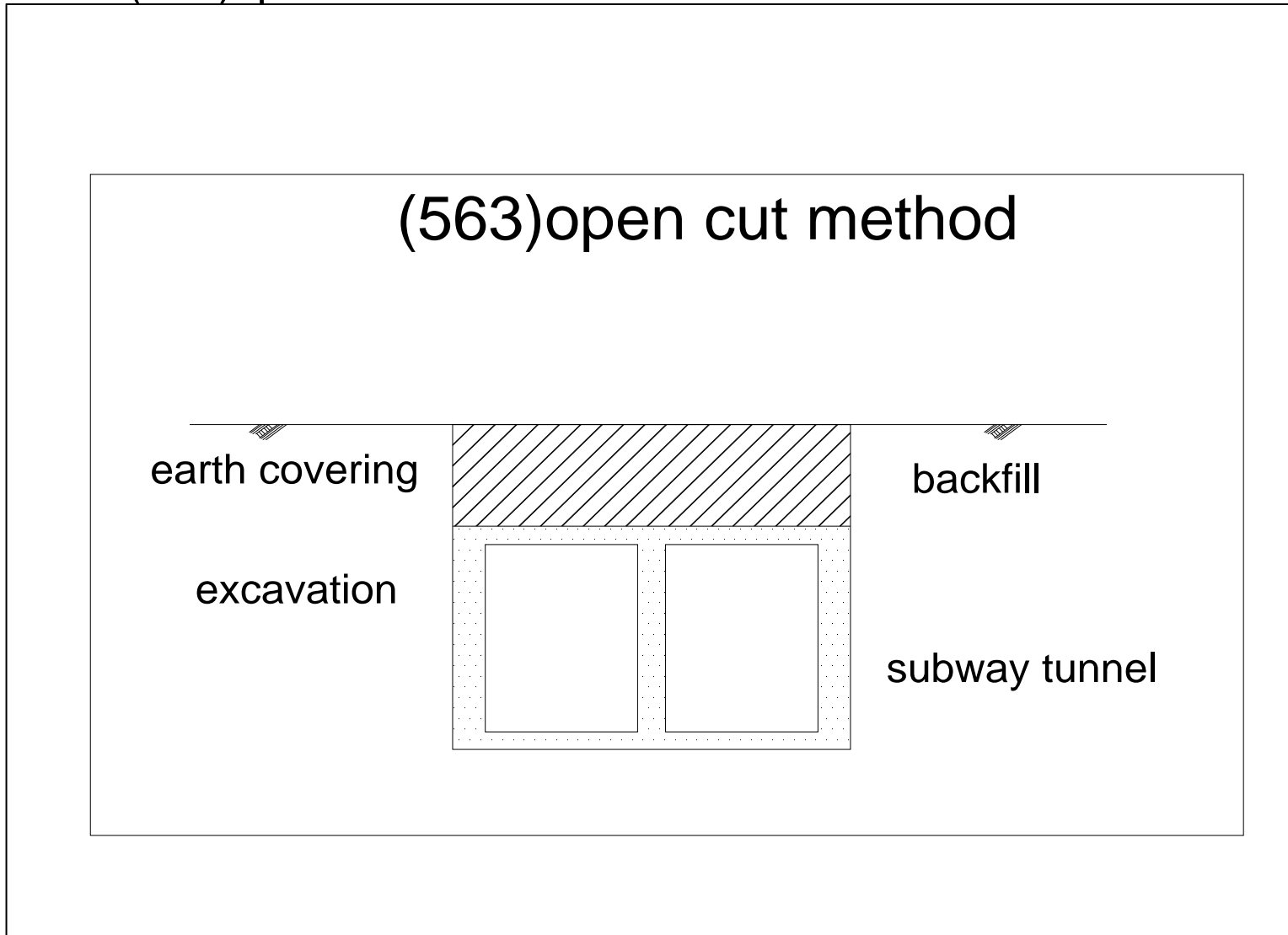
(562)stopper stone

masonry

stopper stone



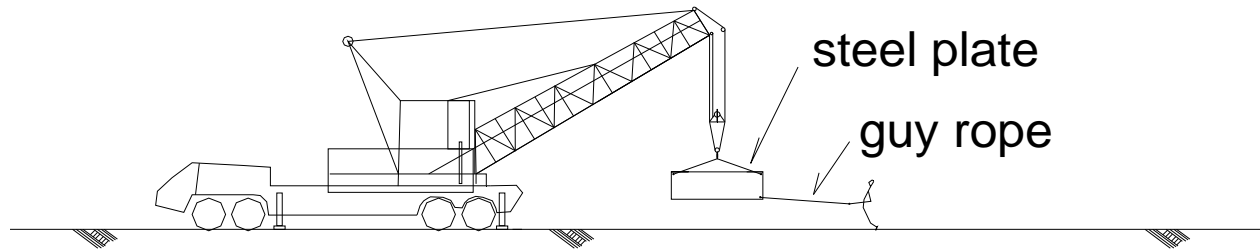
(563)open cut method



(564)guy rope

(564)guy rope

track crane



steel plate

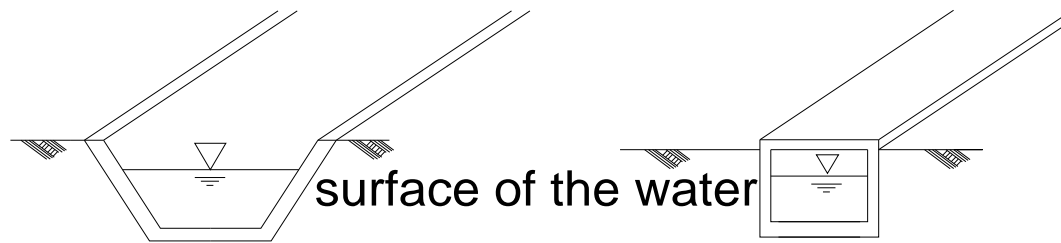
guy rope

(565) open channel

(565) open channel

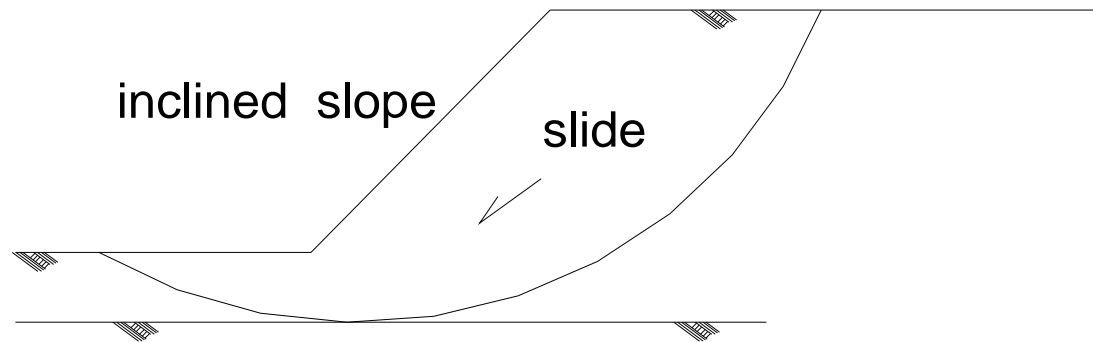
open channel

culvert



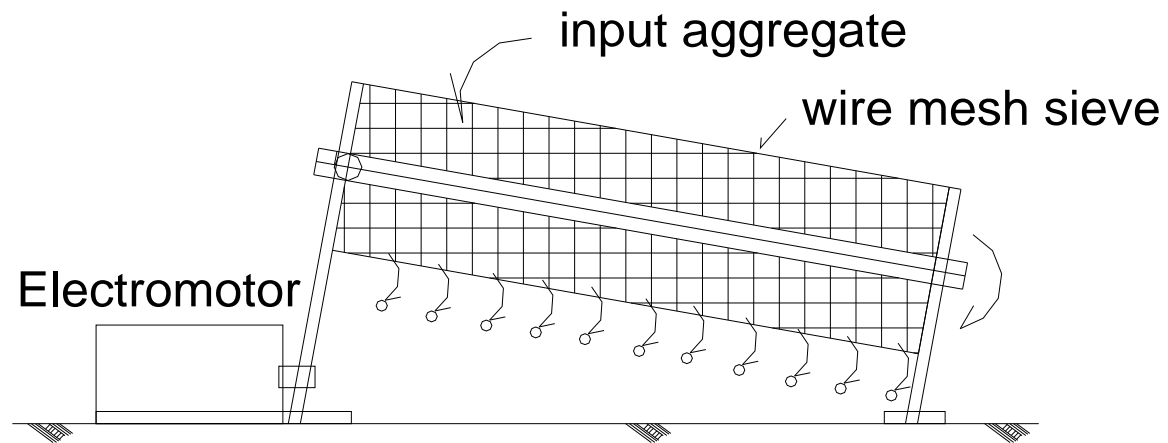
(566) revolutionary landslide

(566) revolutionary landslide

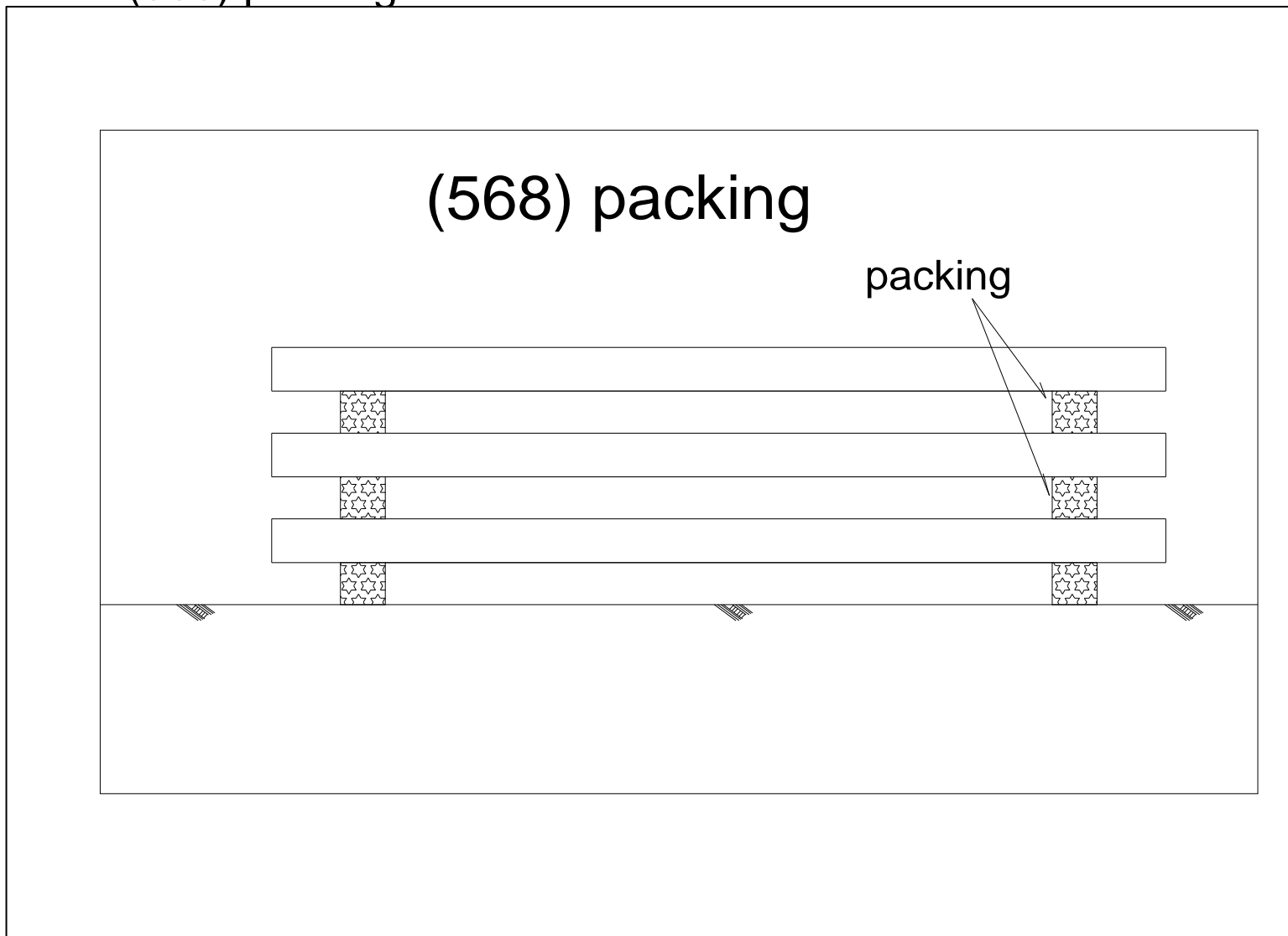


(567) revolving screen

(567) revolving screen



(568) packing



(569)key-type steel sheet pile

(569)key-type steel sheet pile

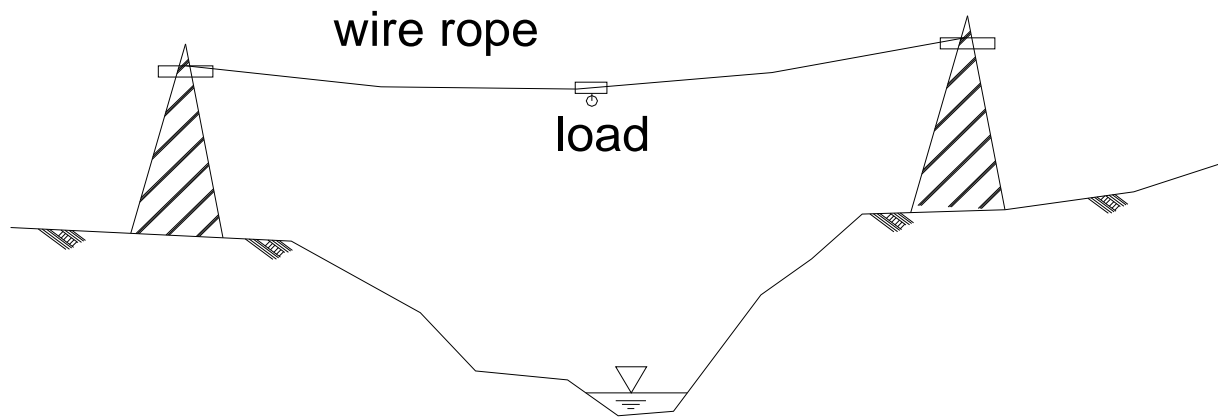
steel sheet pile



water tightness

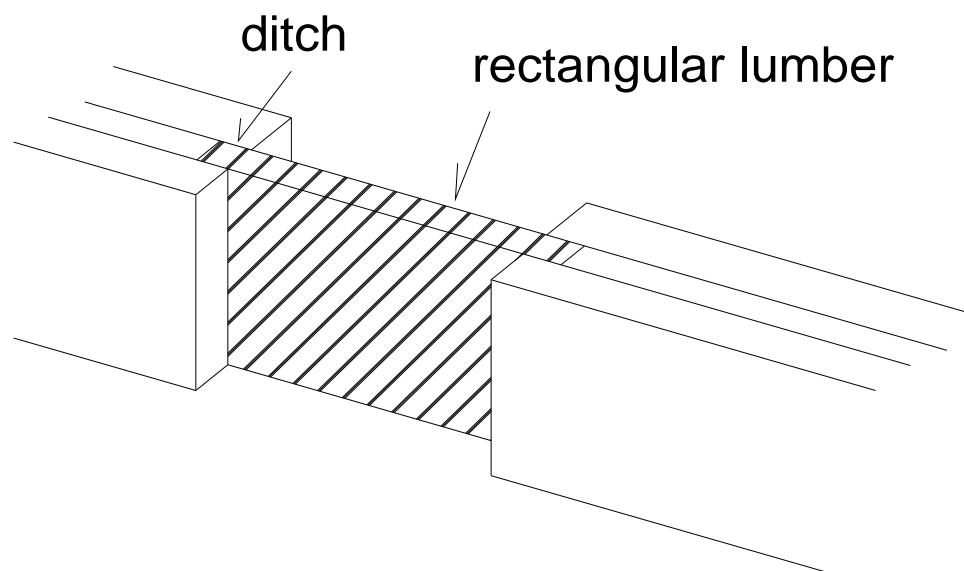
(570) aerial cableway

(570) aerial cableway



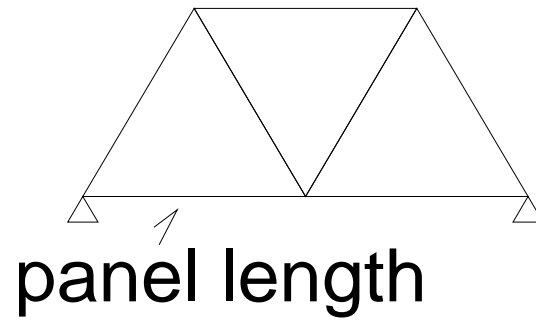
(571)stop-log

(571)stop-log



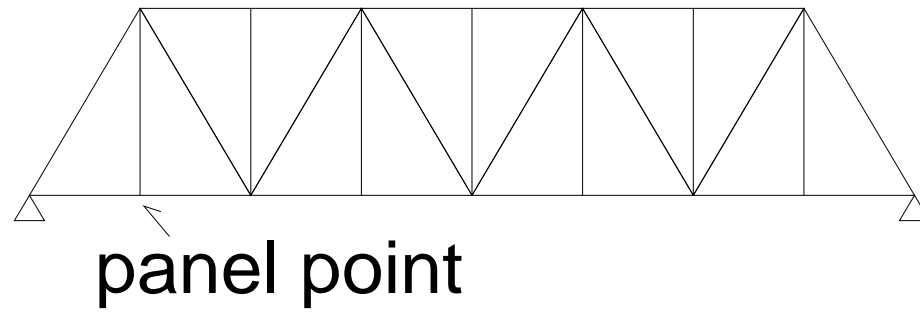
(572)truss structure 1

(572)truss structure 1

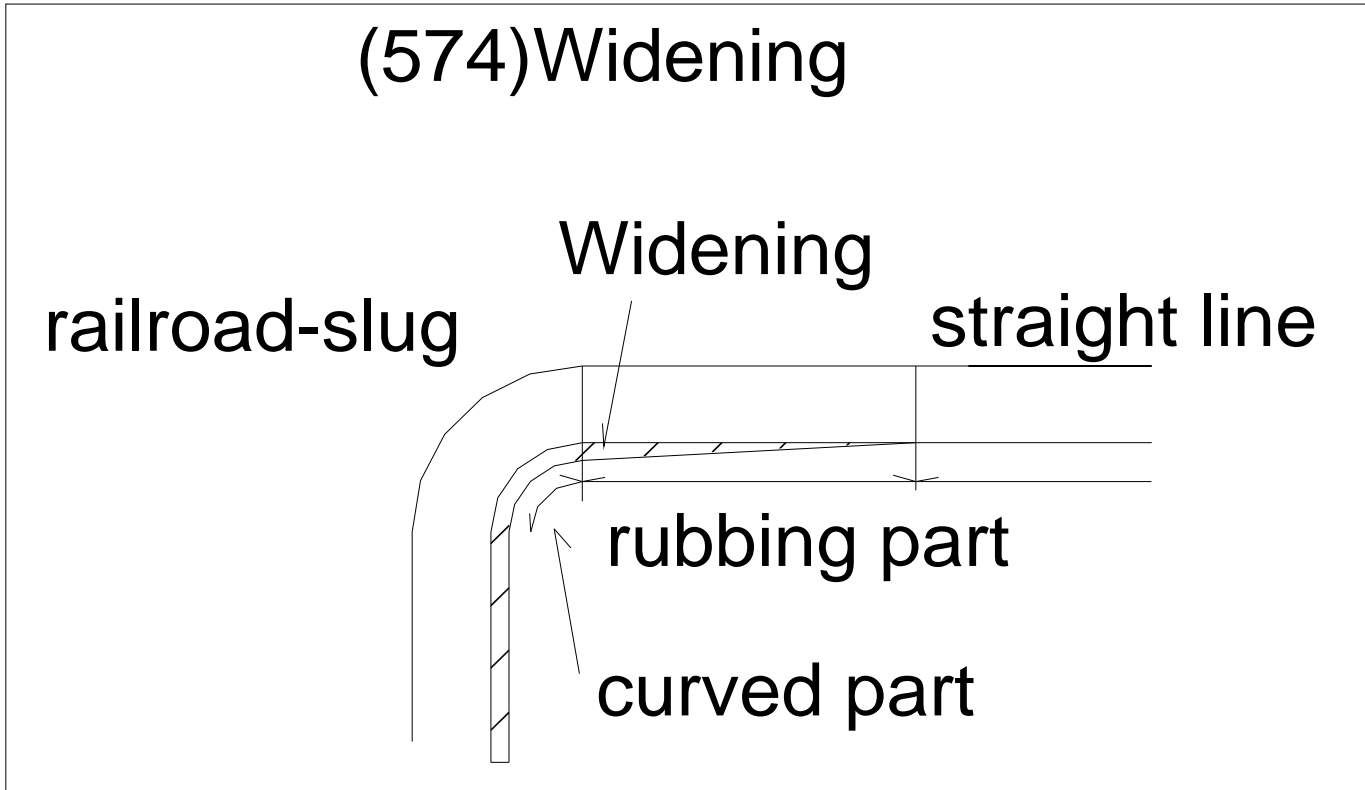


(573)truss structure 2

(573)truss structure 2



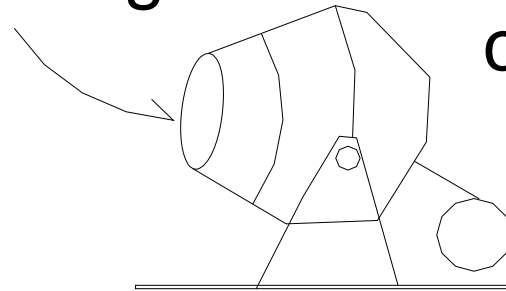
(574)Widening



(575)tilting mixer

(575)tilting mixer

discharge
opening

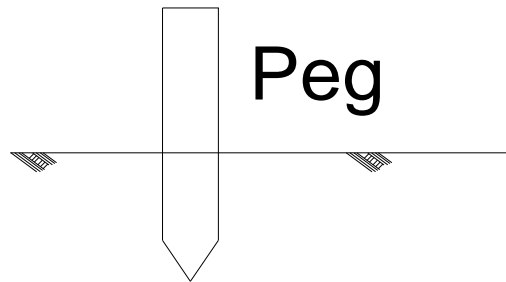


tilting gravity mixer

concrete agitator

(576)wooden maul

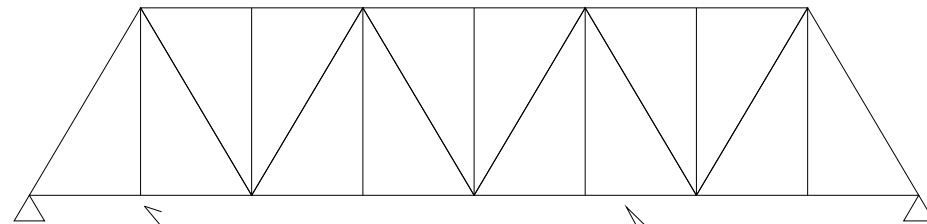
(576)wooden maul
wooden maul



Peg

(577)truss structure 3 lower chord member

(577)truss structure 3
lower chord member



panel point

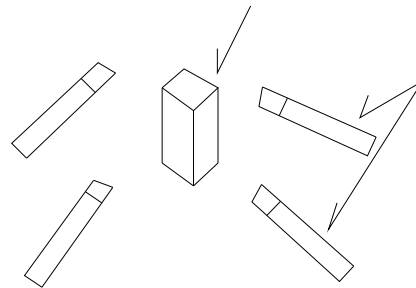
lower chord member

(578)protective stake

(578)protective stake

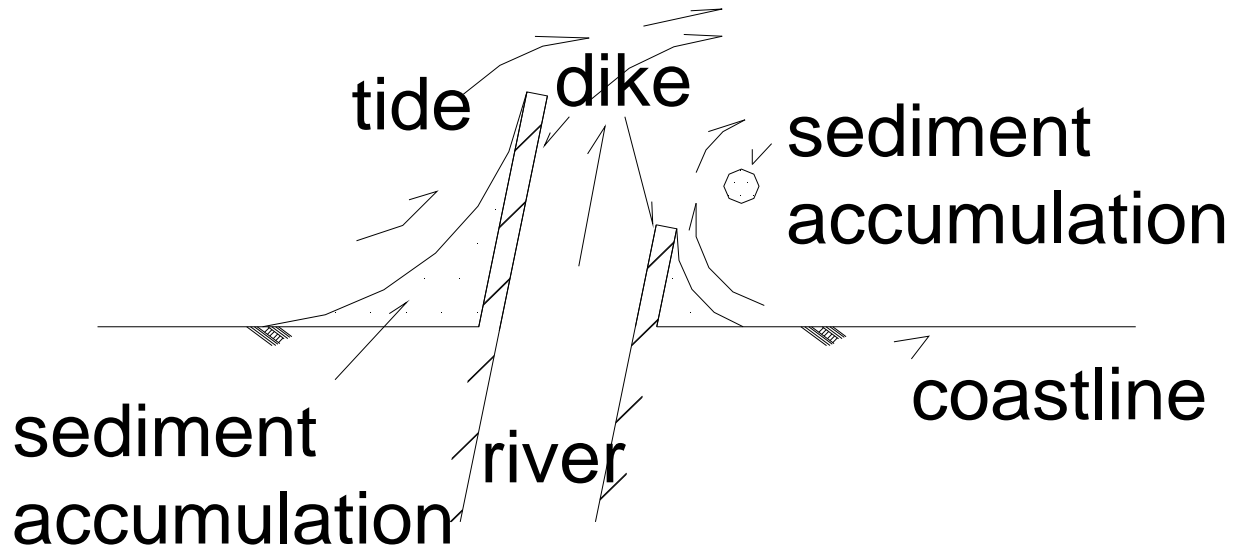
surveying stake

protective stake

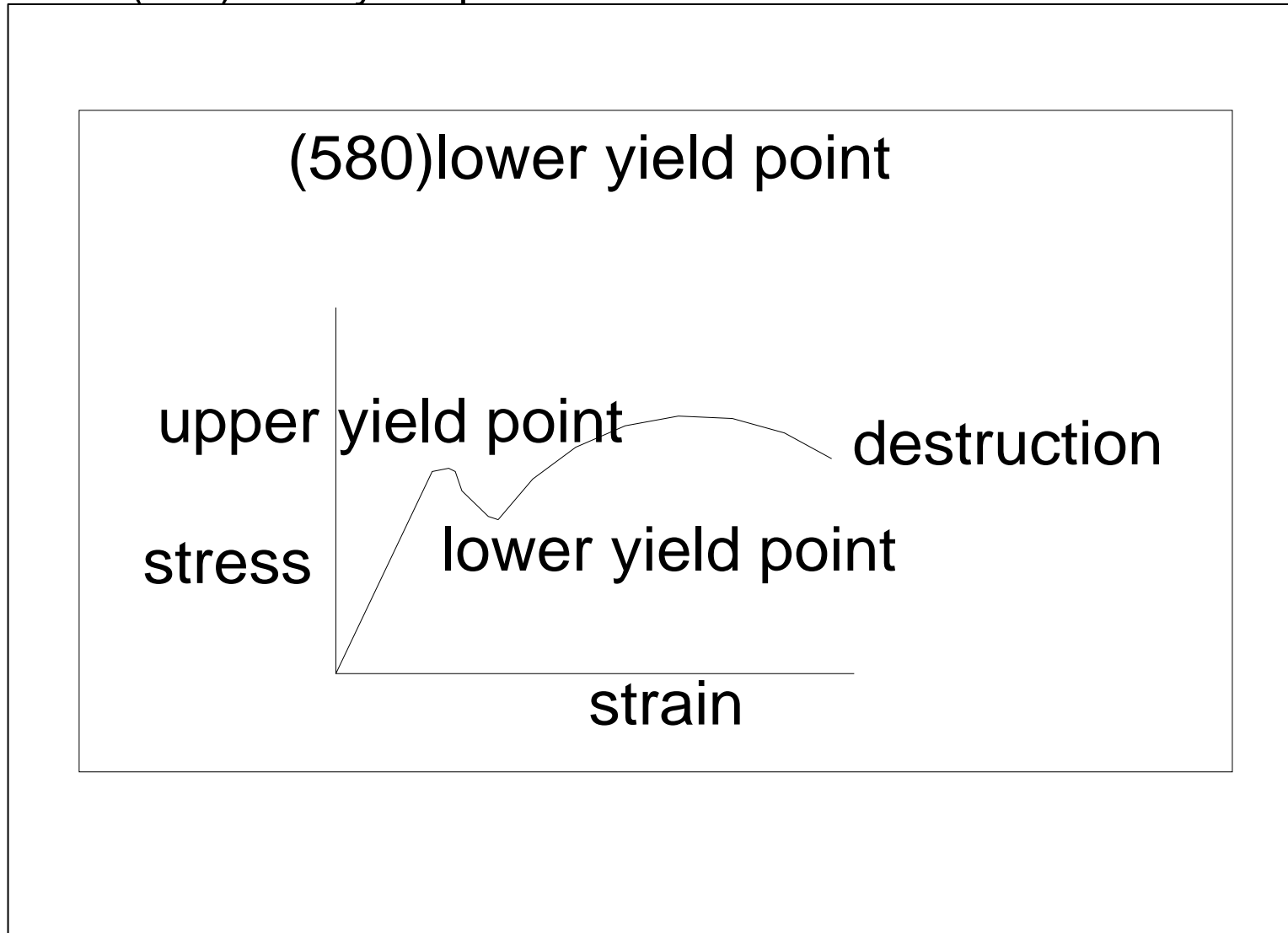


(579)estuary improvement

(579)estuary improvement



(580)lower yield point



(581)levee raising

(581)levee raising

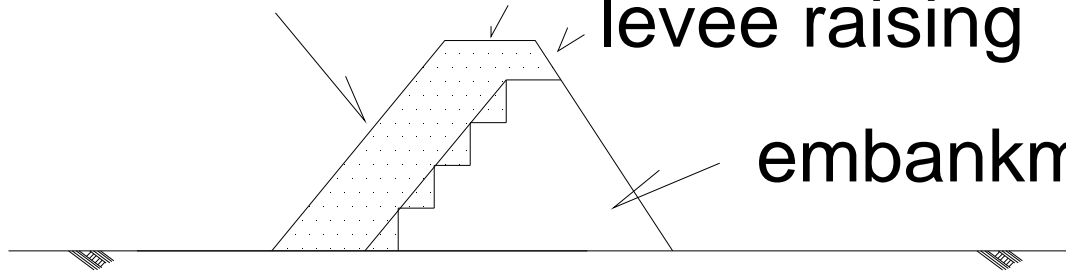
levee

enlargement

levee crown

levee raising

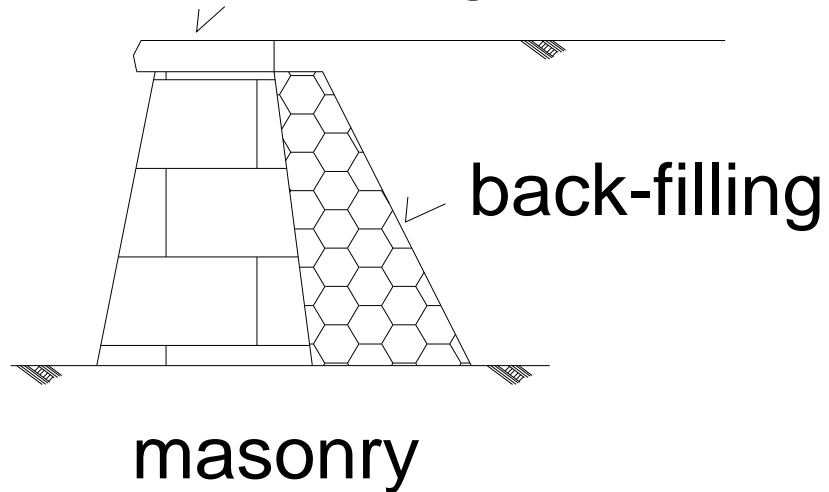
embankment



(582)capping stone

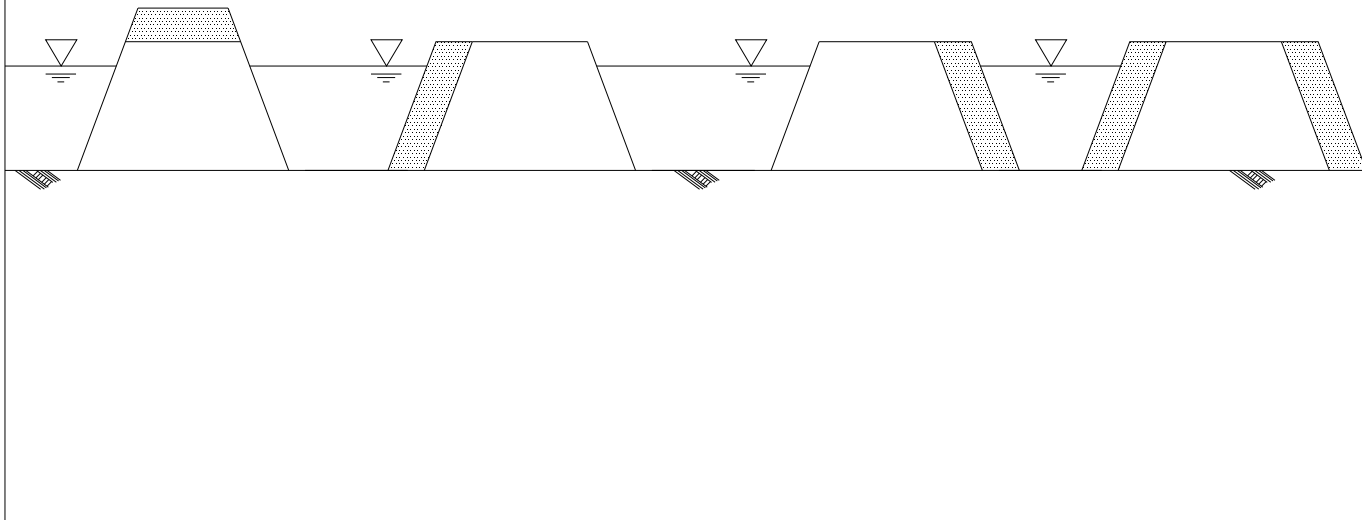
(582)capping stone

capping stone



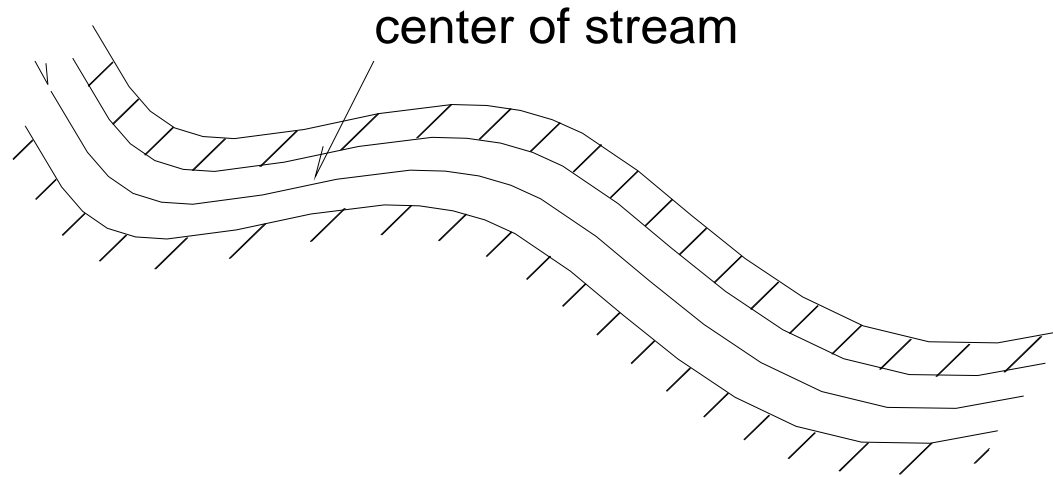
(583)raising of embankment

(583)raising of embankment



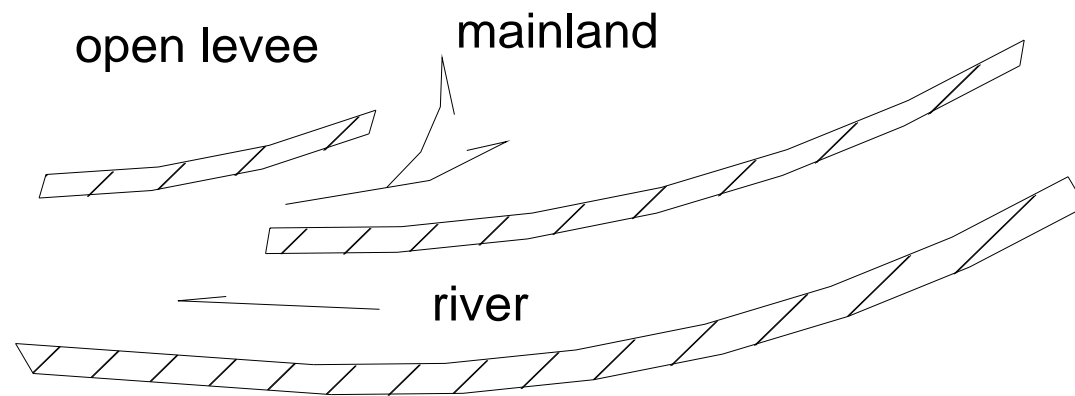
(584)center of stream

(584)center of stream



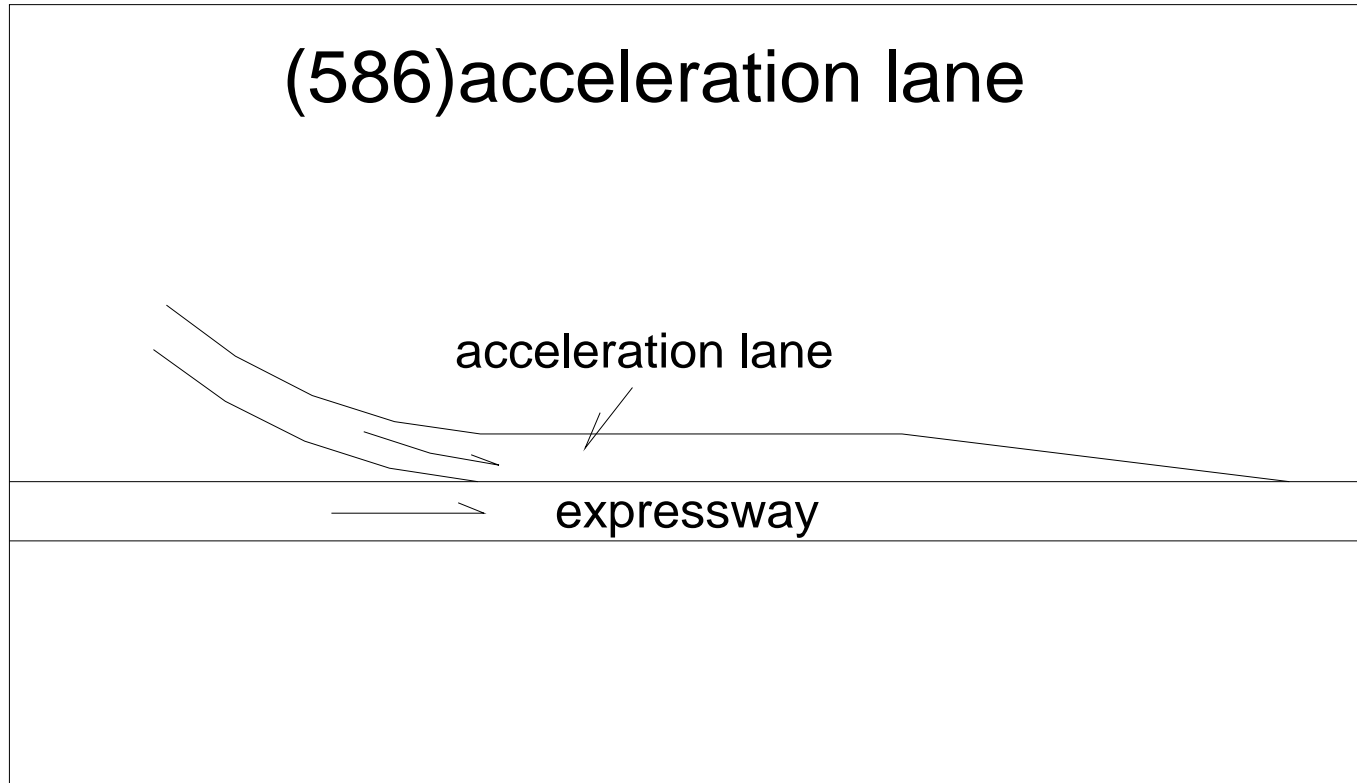
(585)open levee

(585)open levee



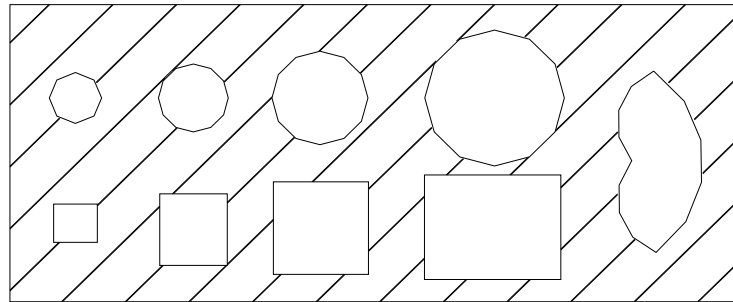
(586)acceleration lane

(586)acceleration lane



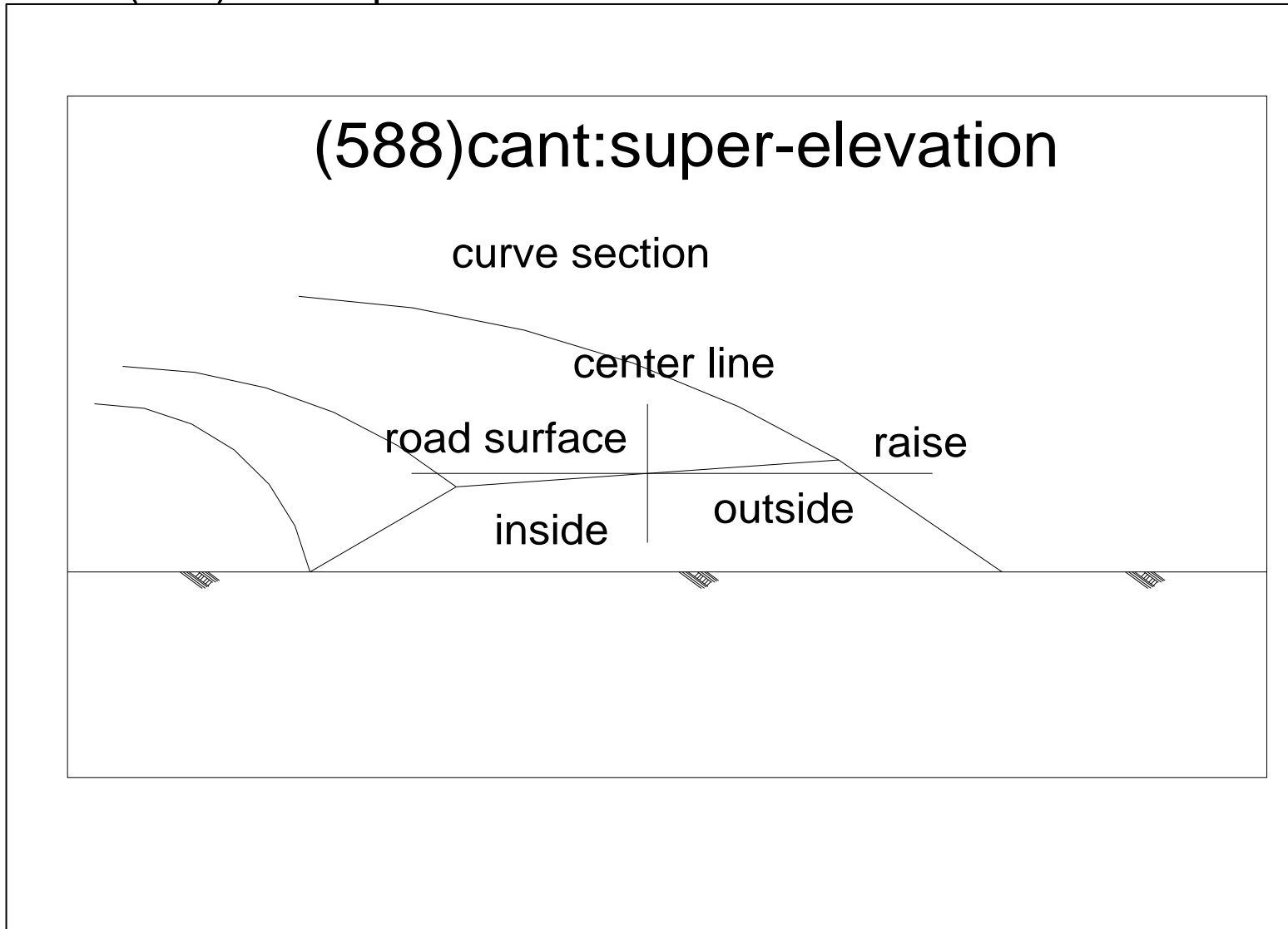
(587)template

(587)template



plastic

(588)cant:super-elevation



(589)hardness test

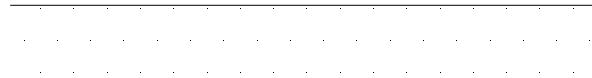
(589)hardness test

impact
repulsion



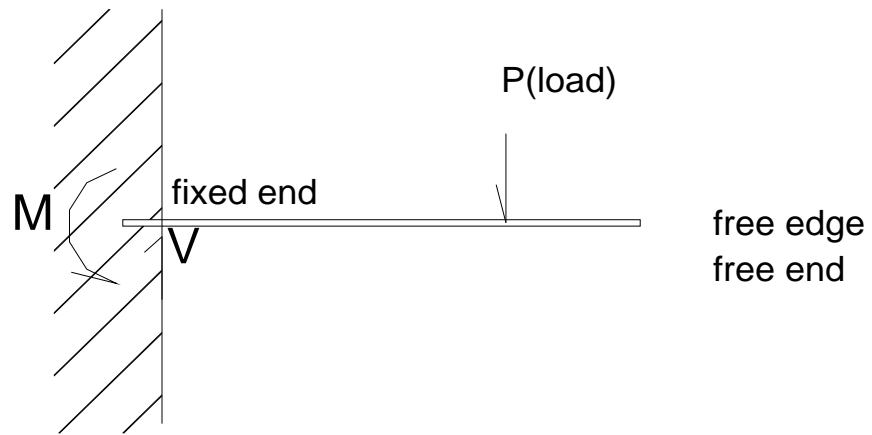
divisions scale

concrete surface

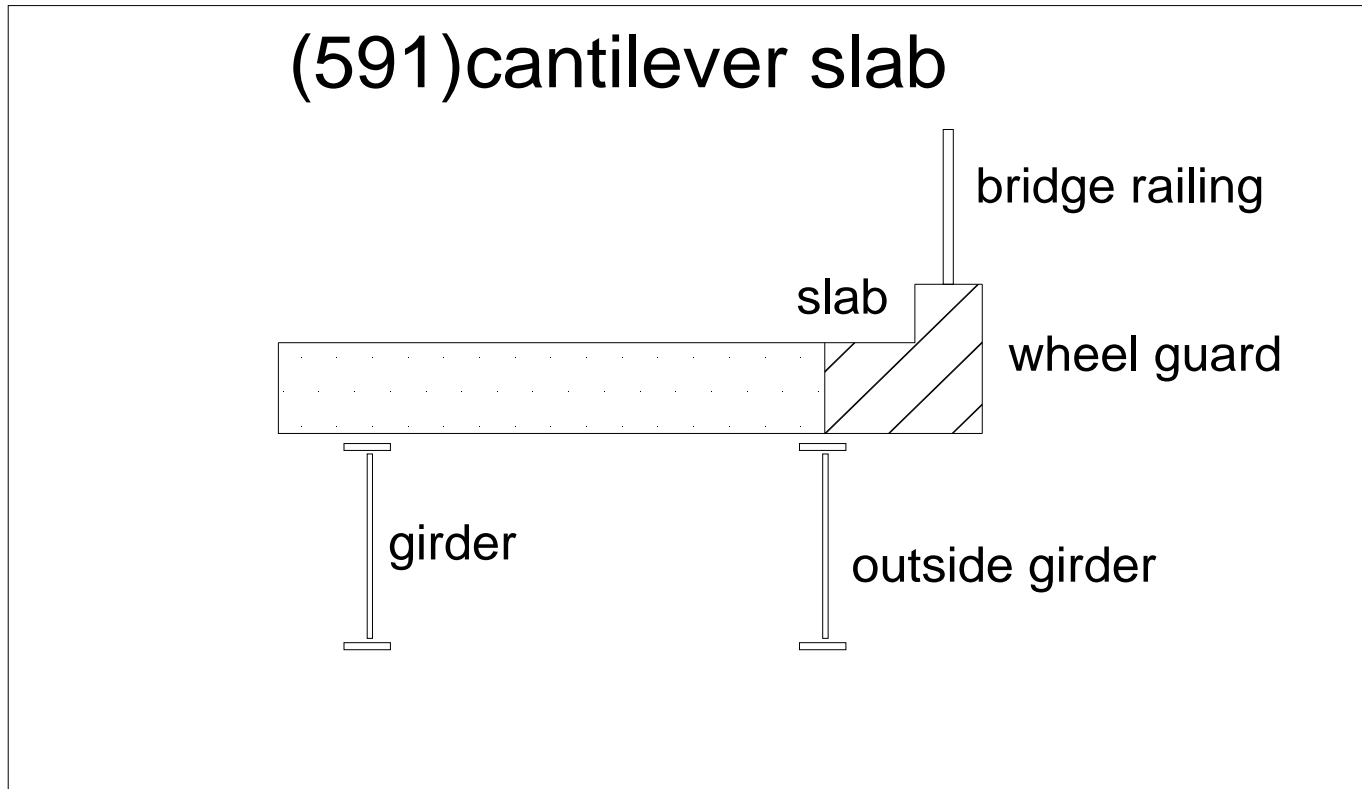


(590)cantilever

(590)cantilever

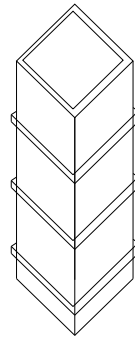


(591)cantilever slab



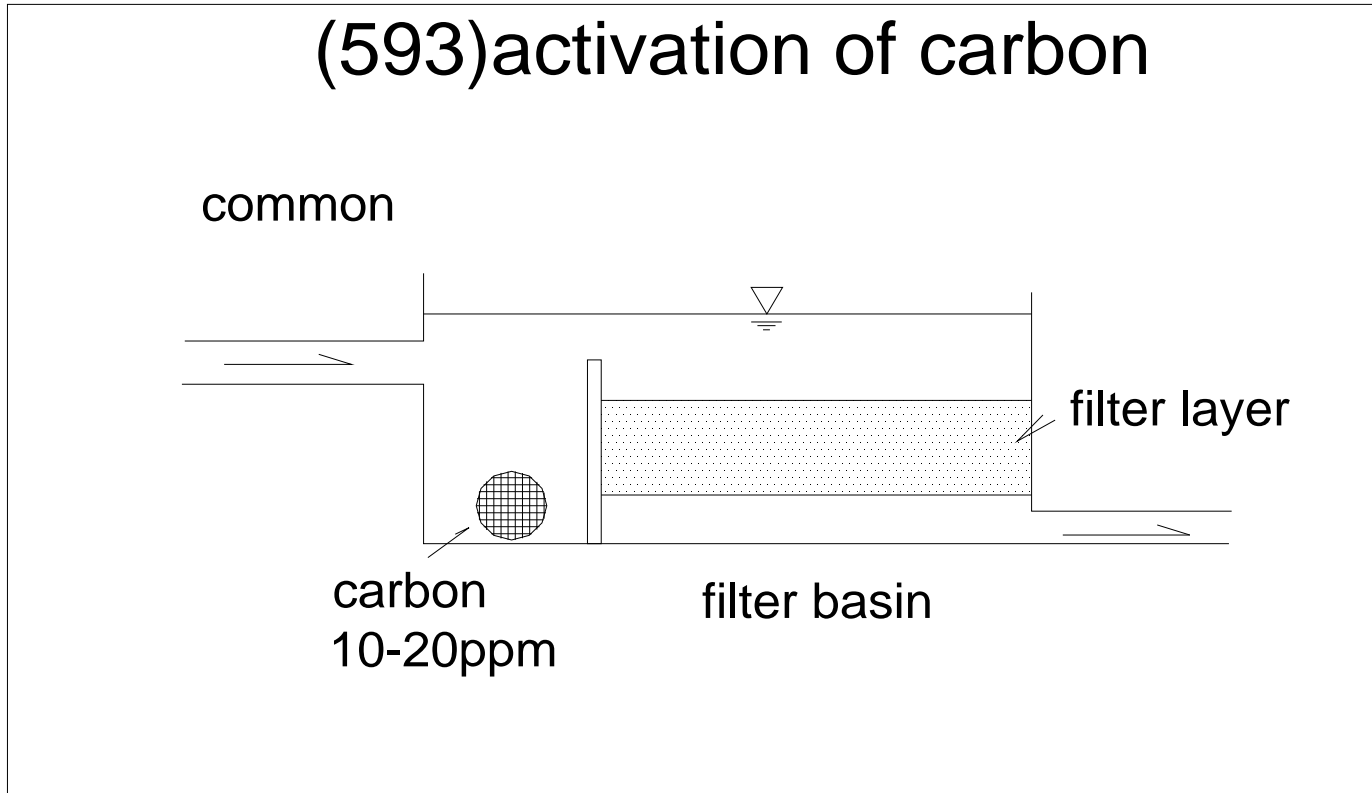
(592)form

(592)form



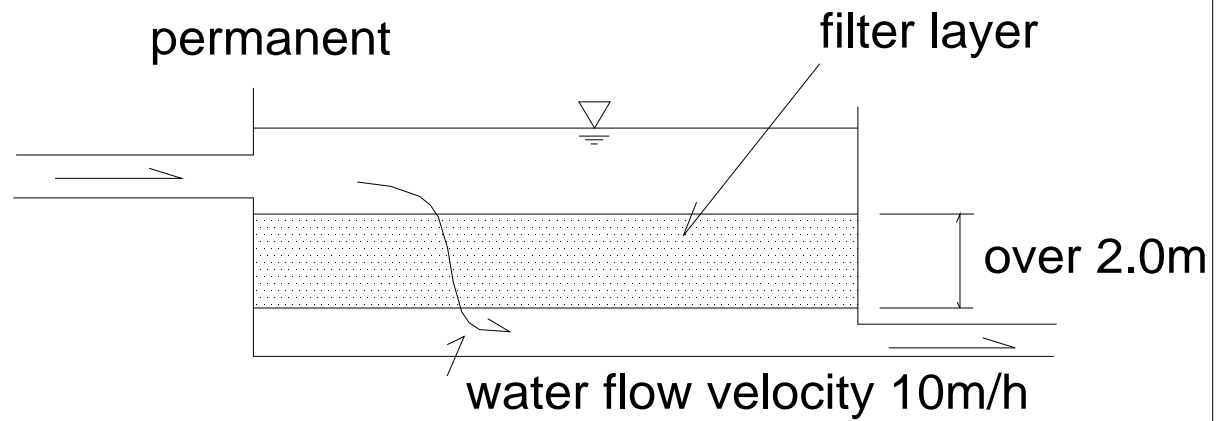
steel formwork

(593)activation of carbon

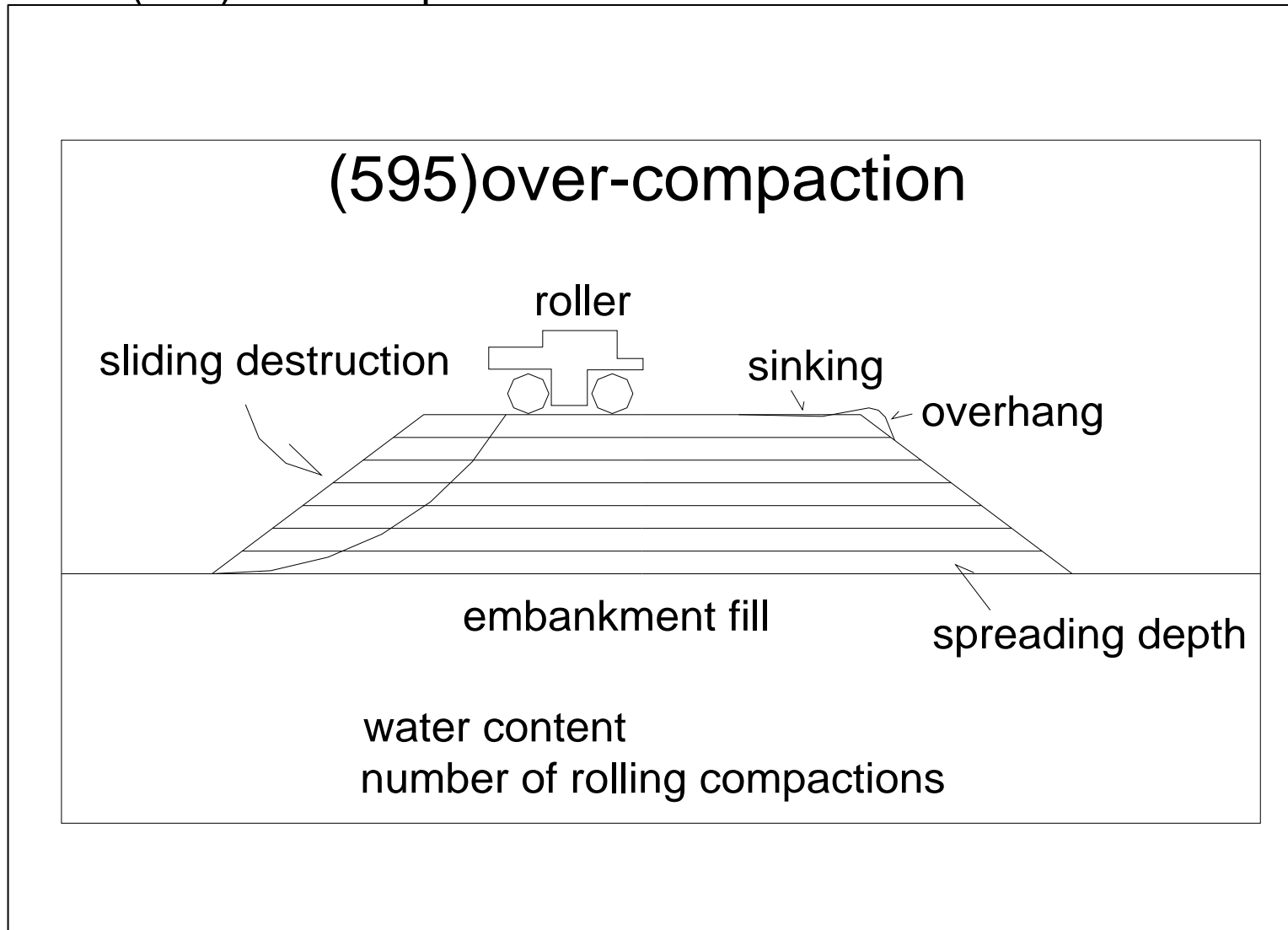


(594)activation of carbon

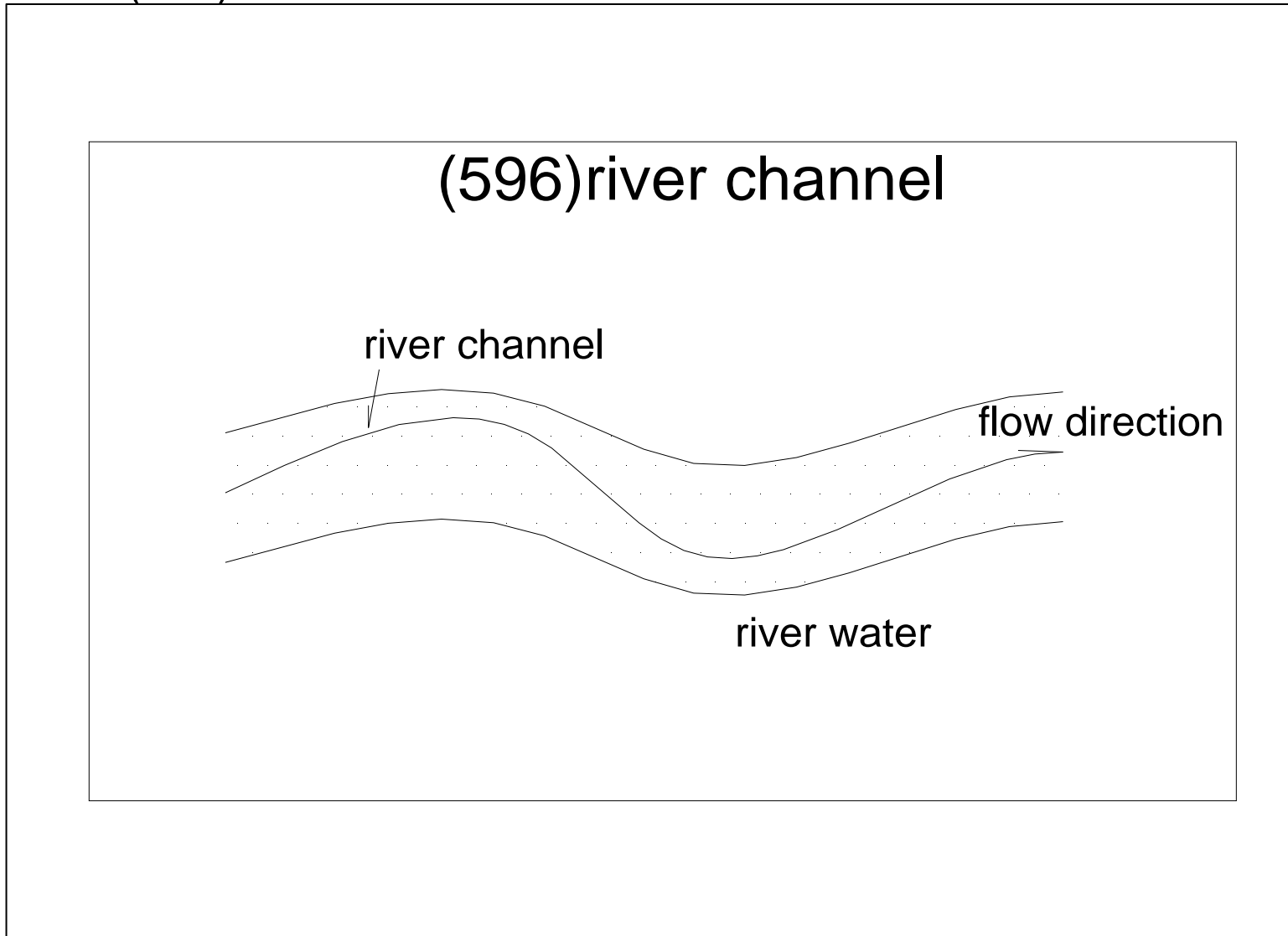
(594)activation of carbon



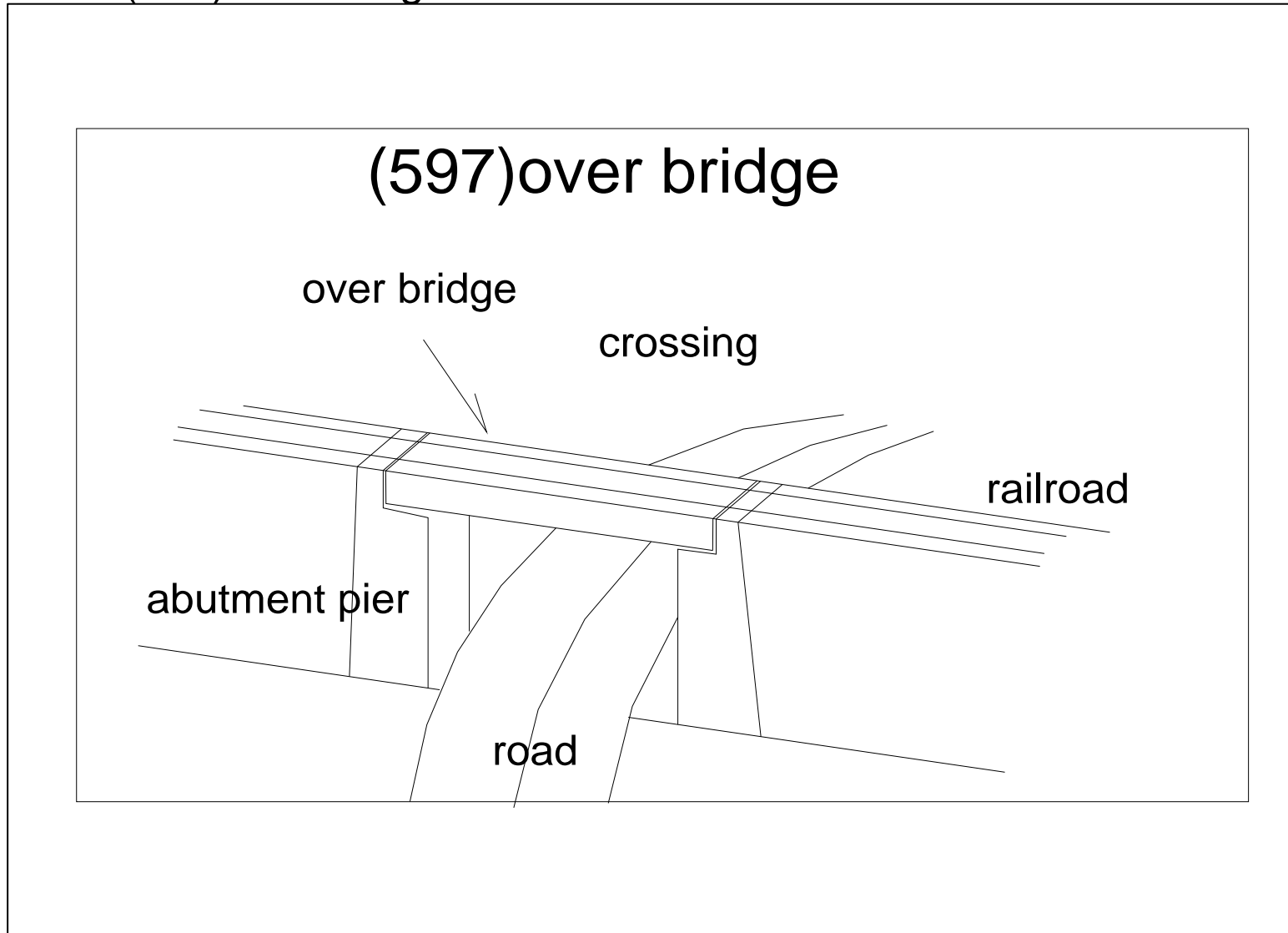
(595)over-compaction



(596)river channel

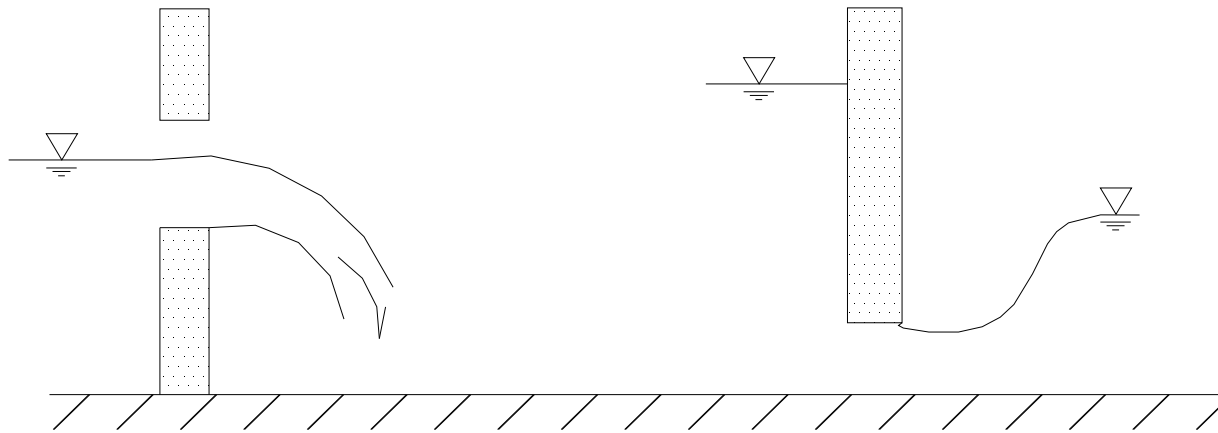


(597)over bridge



(598)movable weir 1

(598)movable weir 1

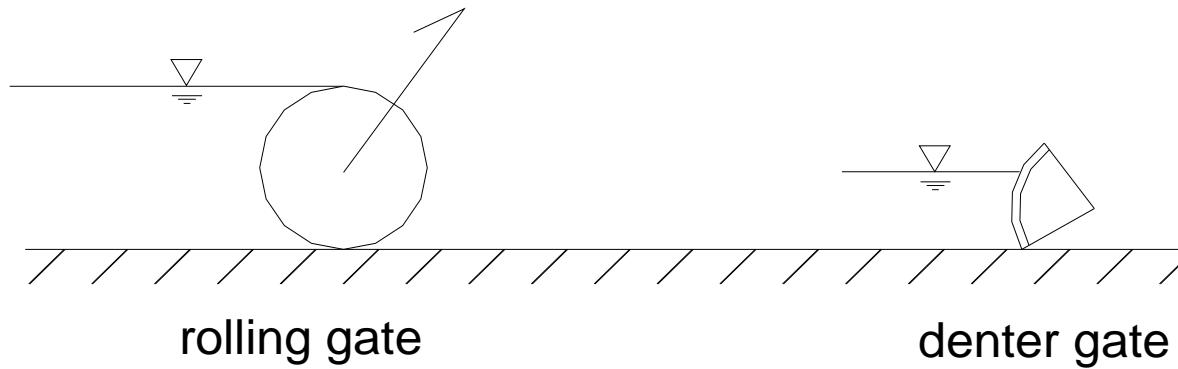


sliding-timber weir

sluice gate

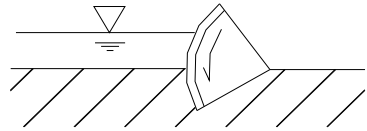
(599)movable weir 2

(599)movable weir 2

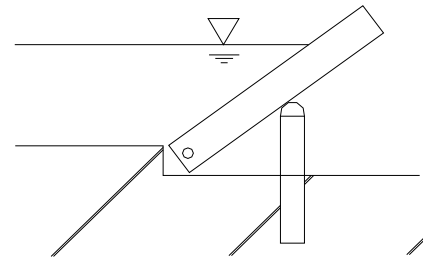


(600)movable weir 3

(600)movable weir 3

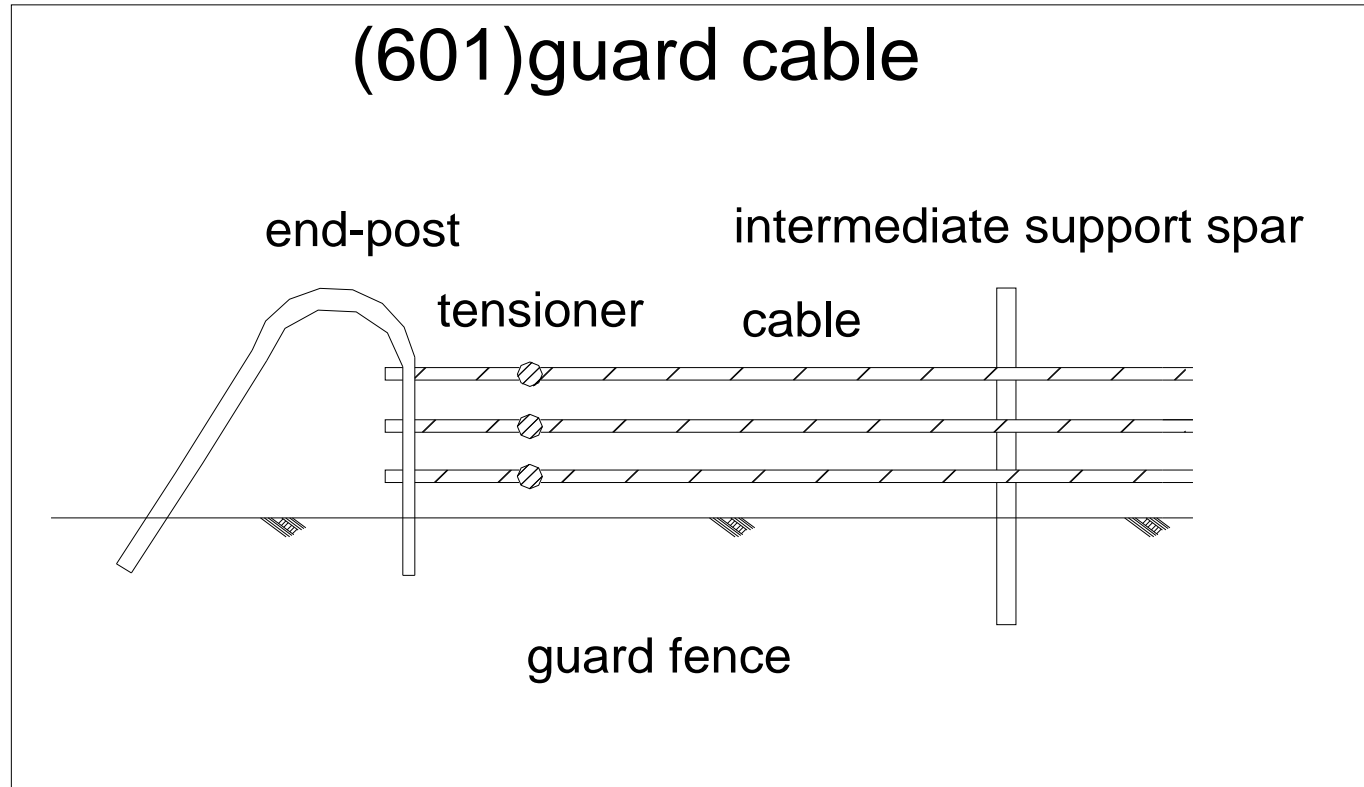


drum gate

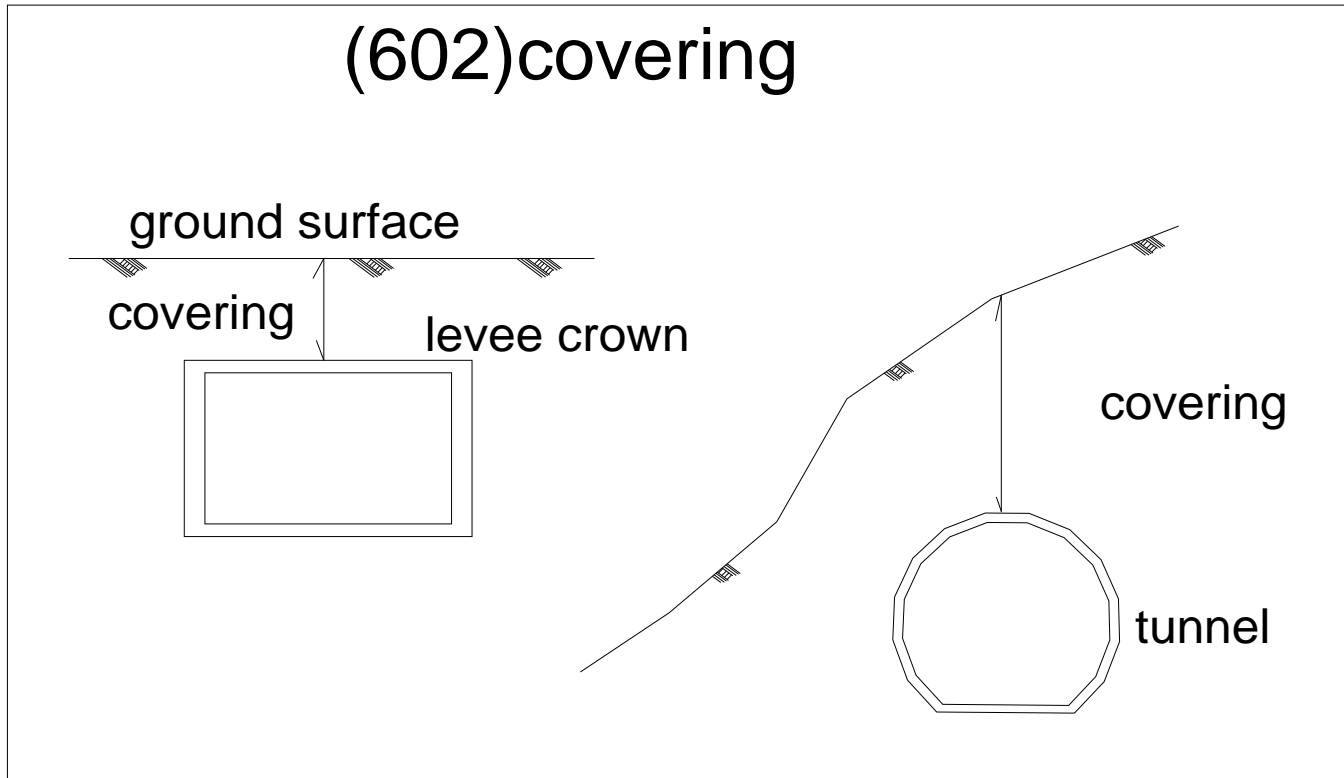


canal gates

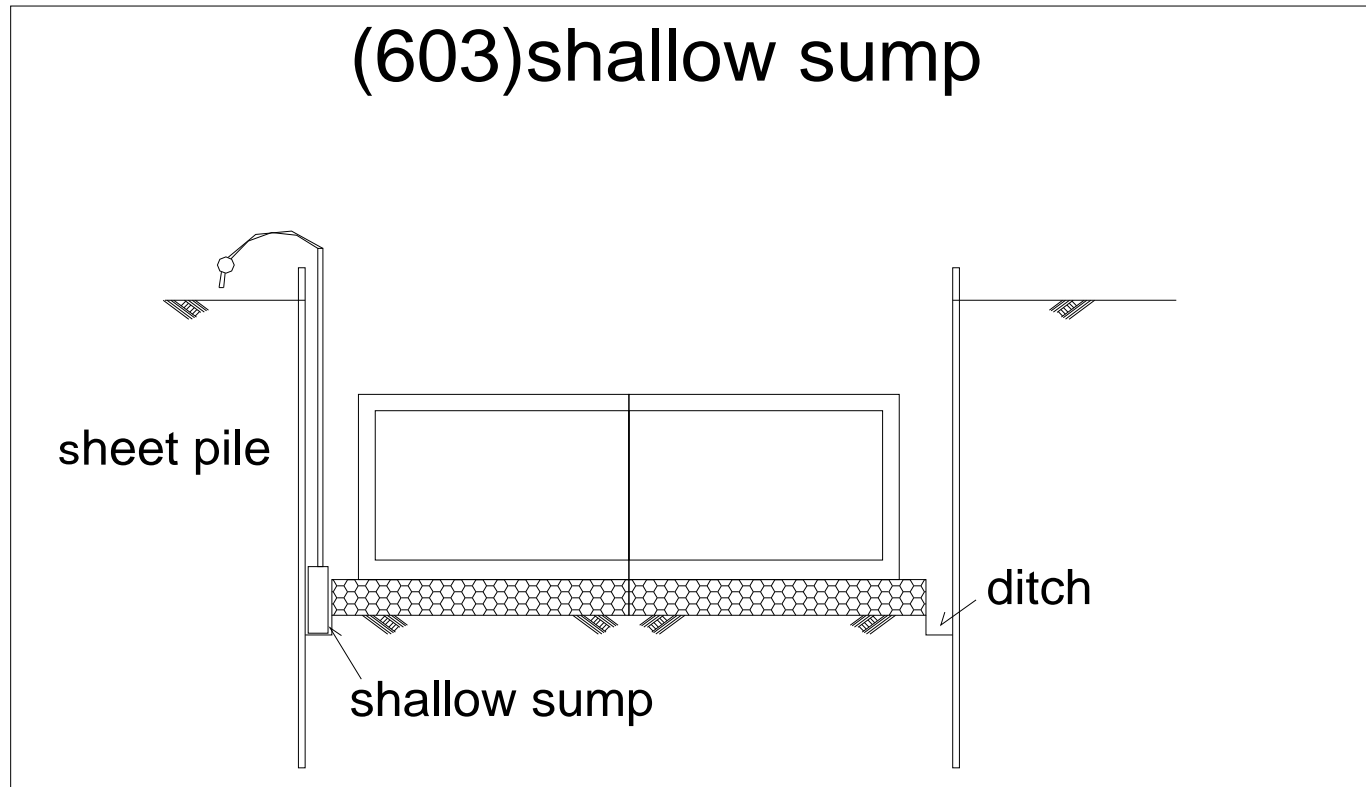
(601)guard cable



(602)covering

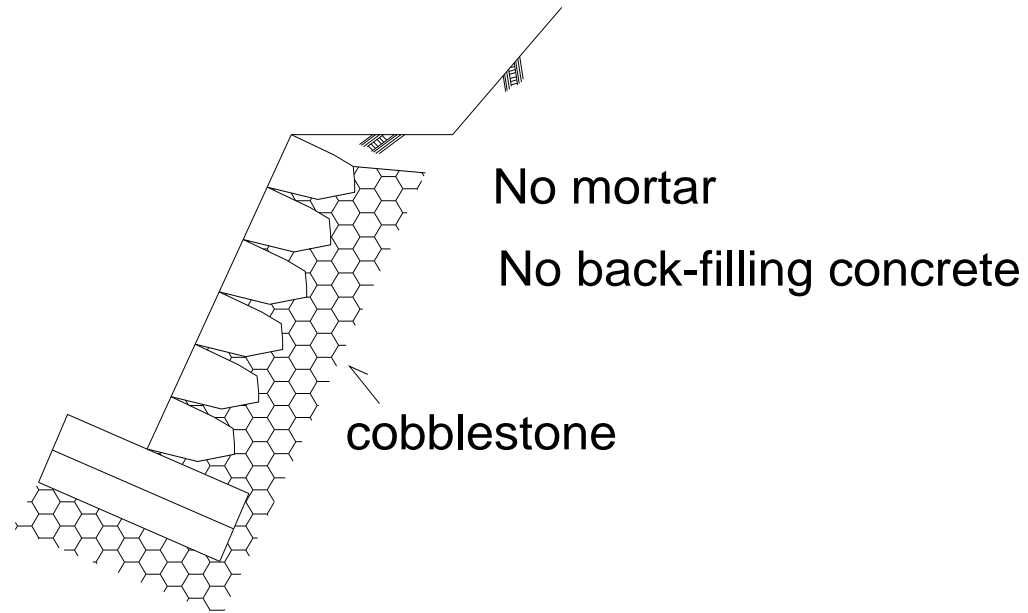


(603)shallow sump

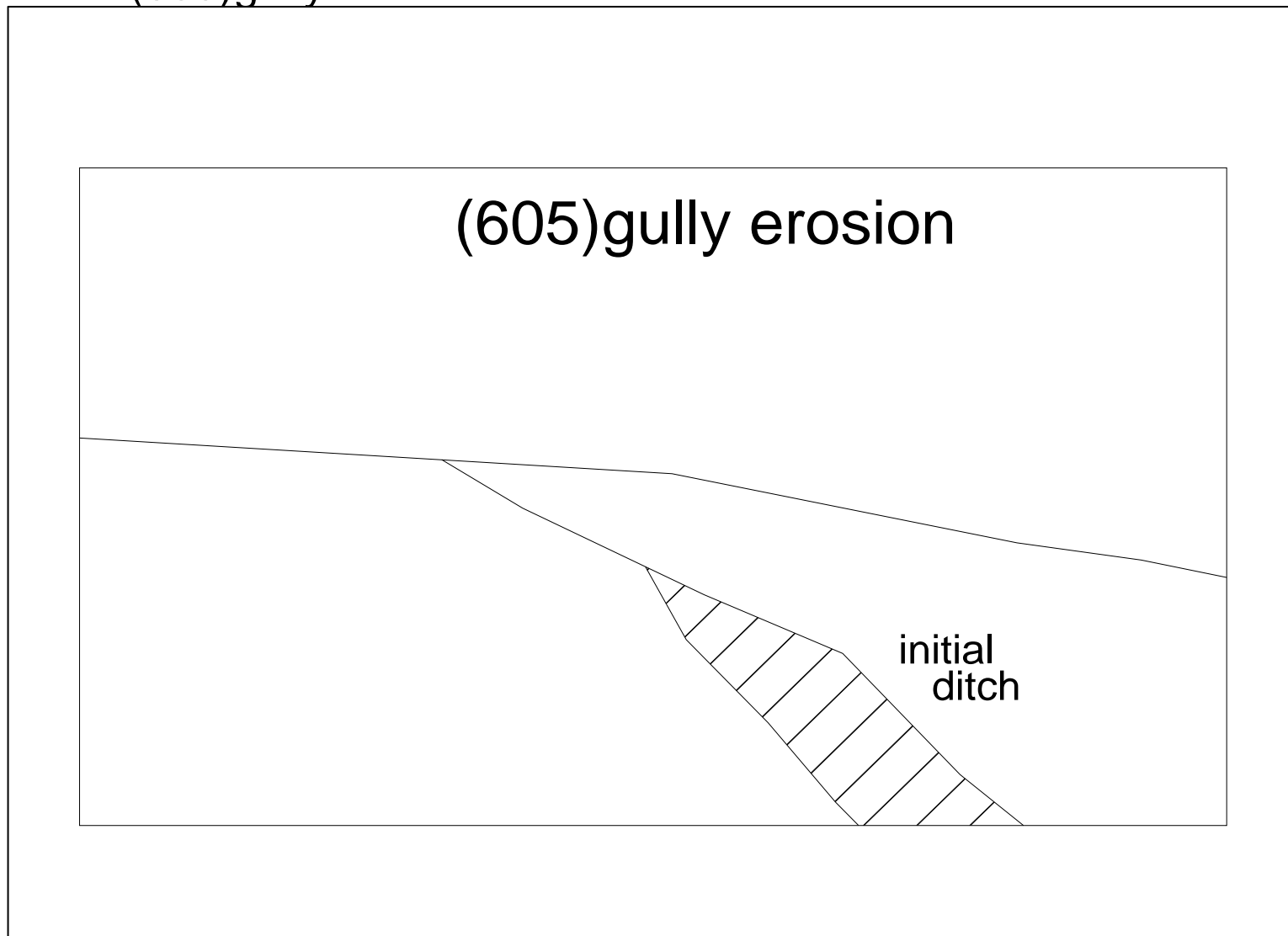


(604)dry masonry

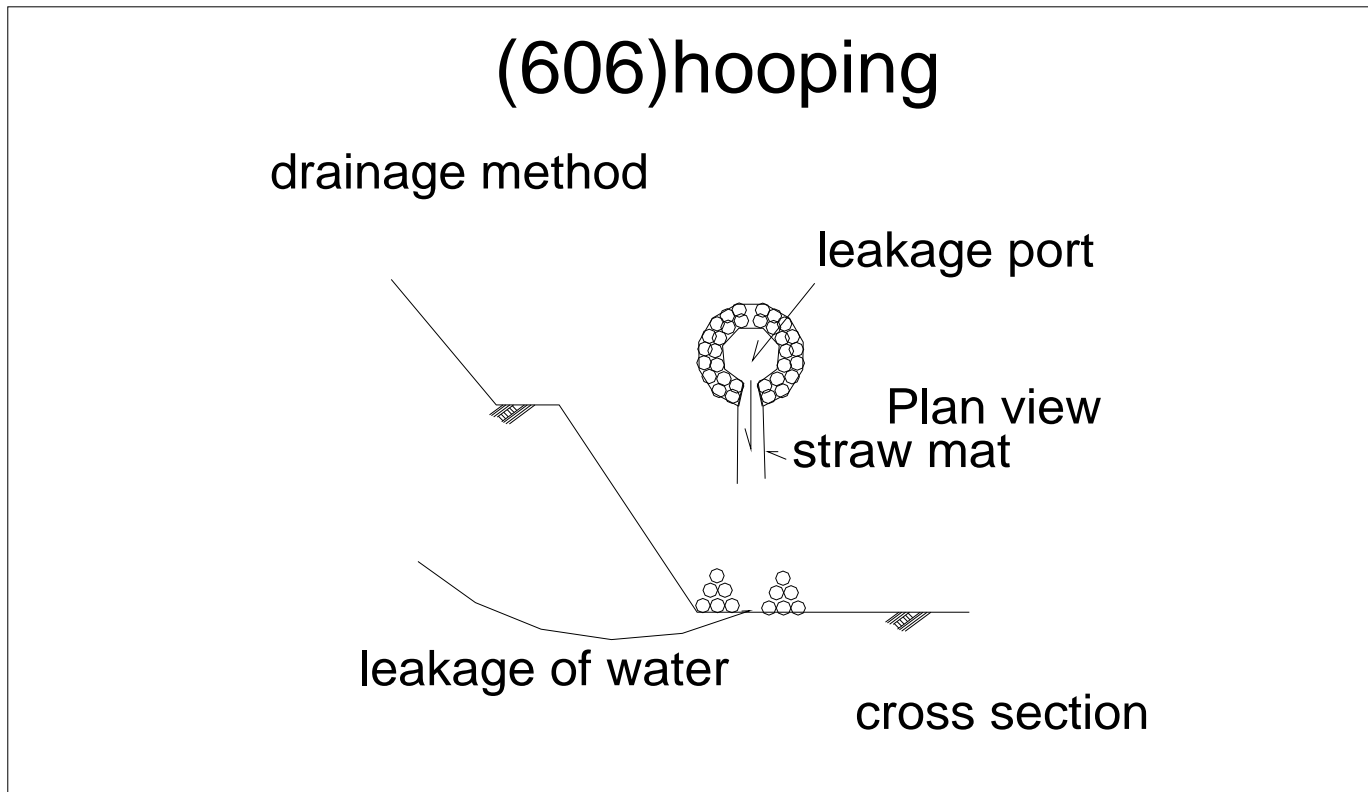
(604)dry masonry



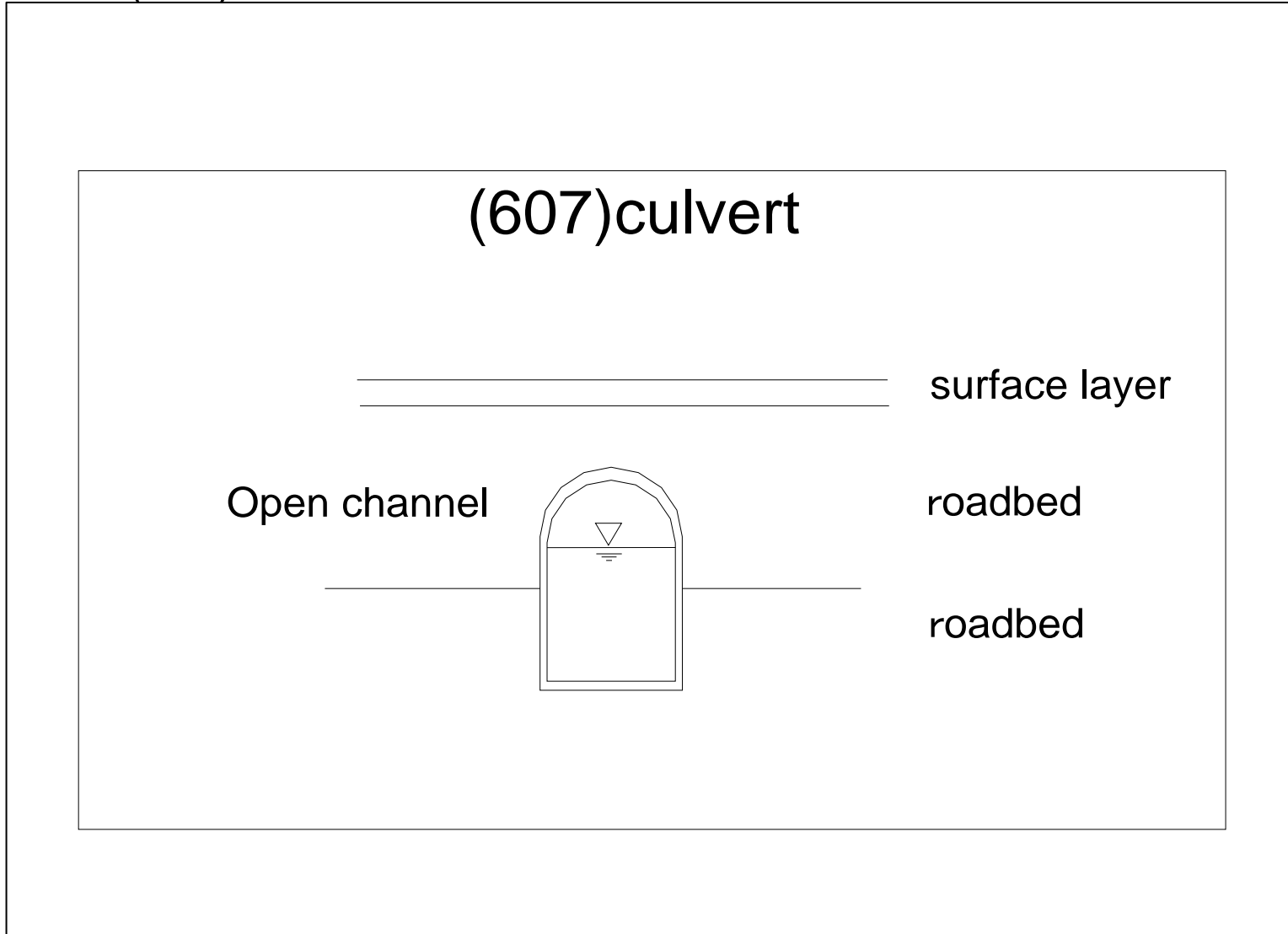
(605)gully erosion



(606)hooping

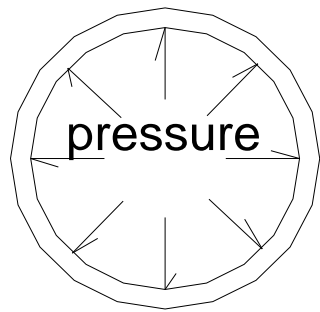


(607)culvert



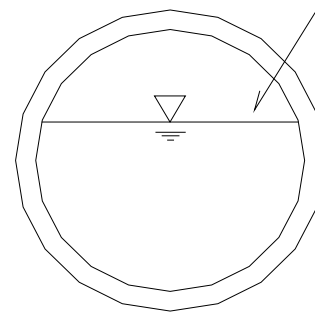
(608)pipeline

(608)pipeline



pressure

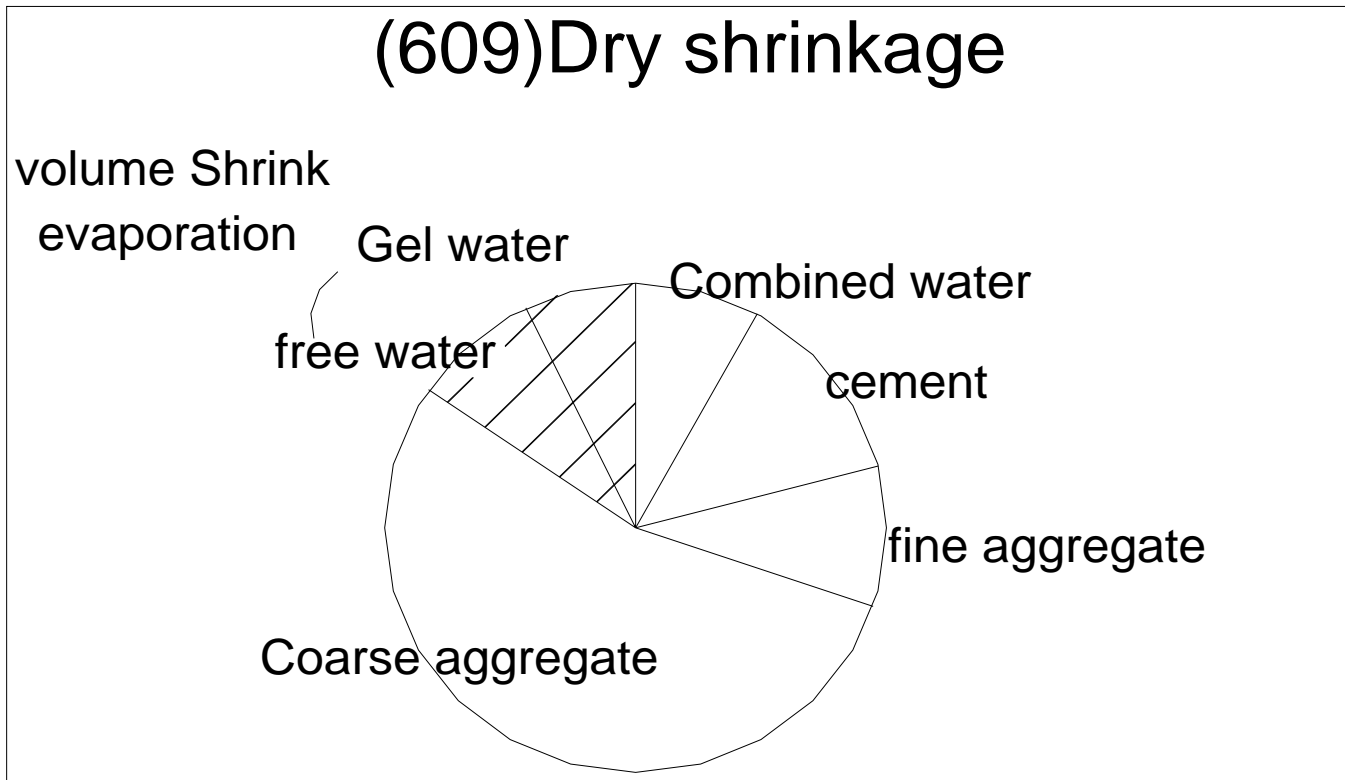
pipeline



water table

Open channel

(609)Dry shrinkage



(610)cold weather concreting

(610)cold weather concreting

air entraining agents

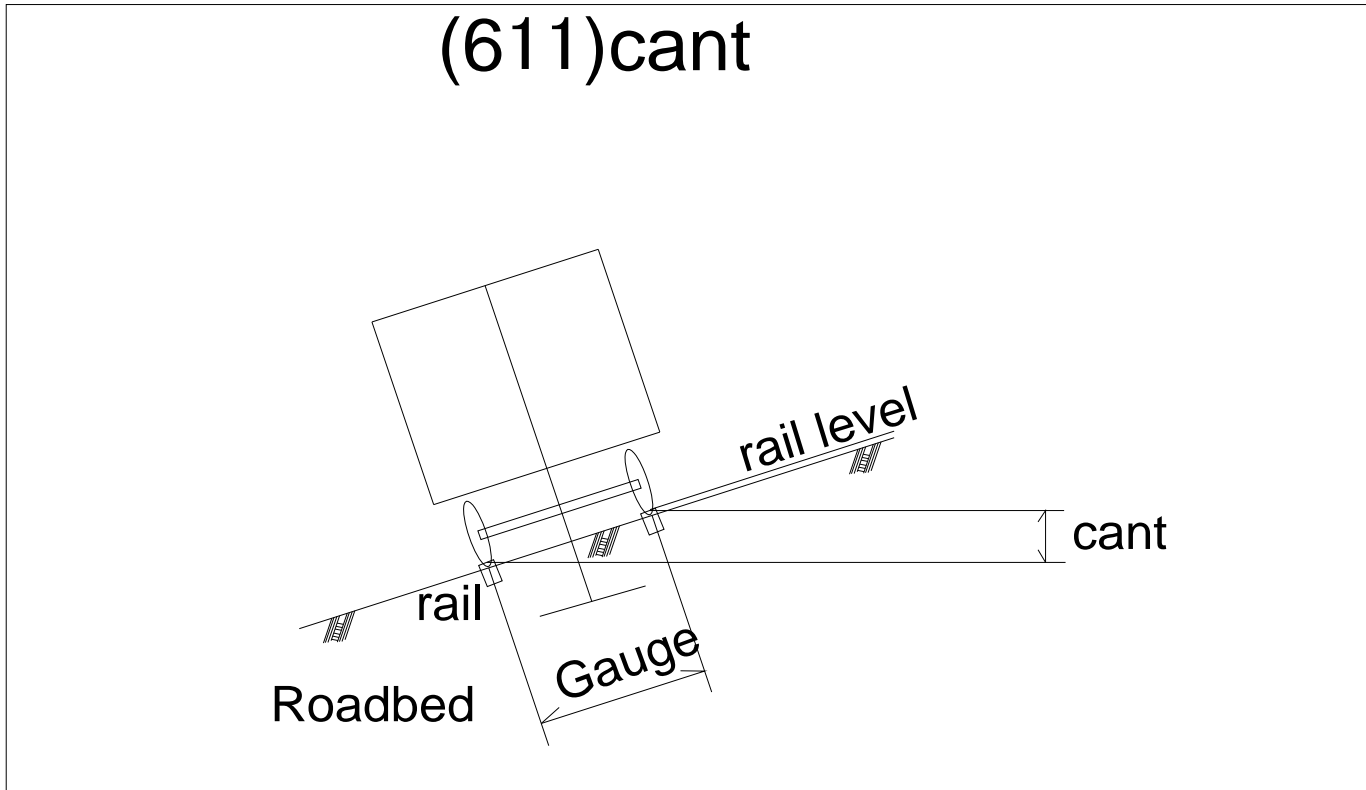
concrete temperature

Water aggregate heating

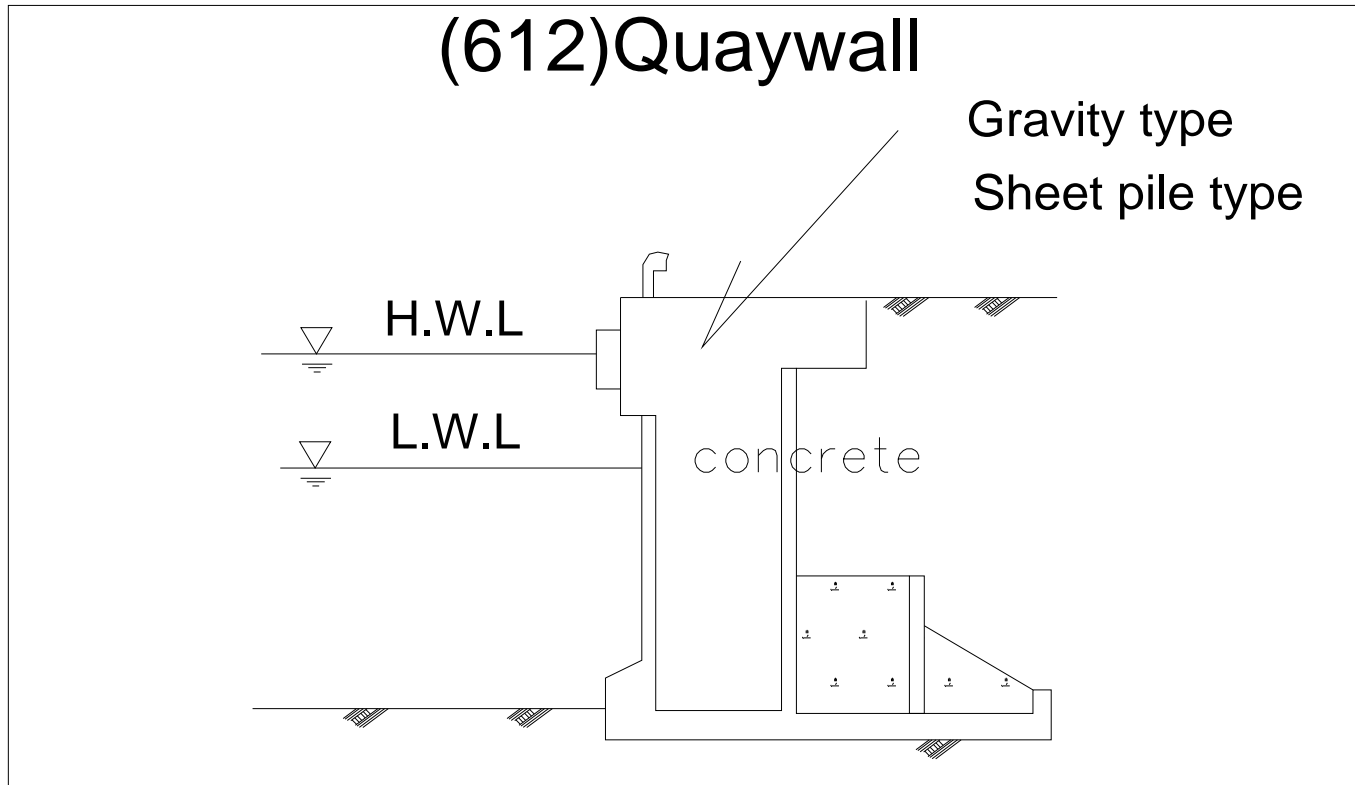
insulated curing

heat curing

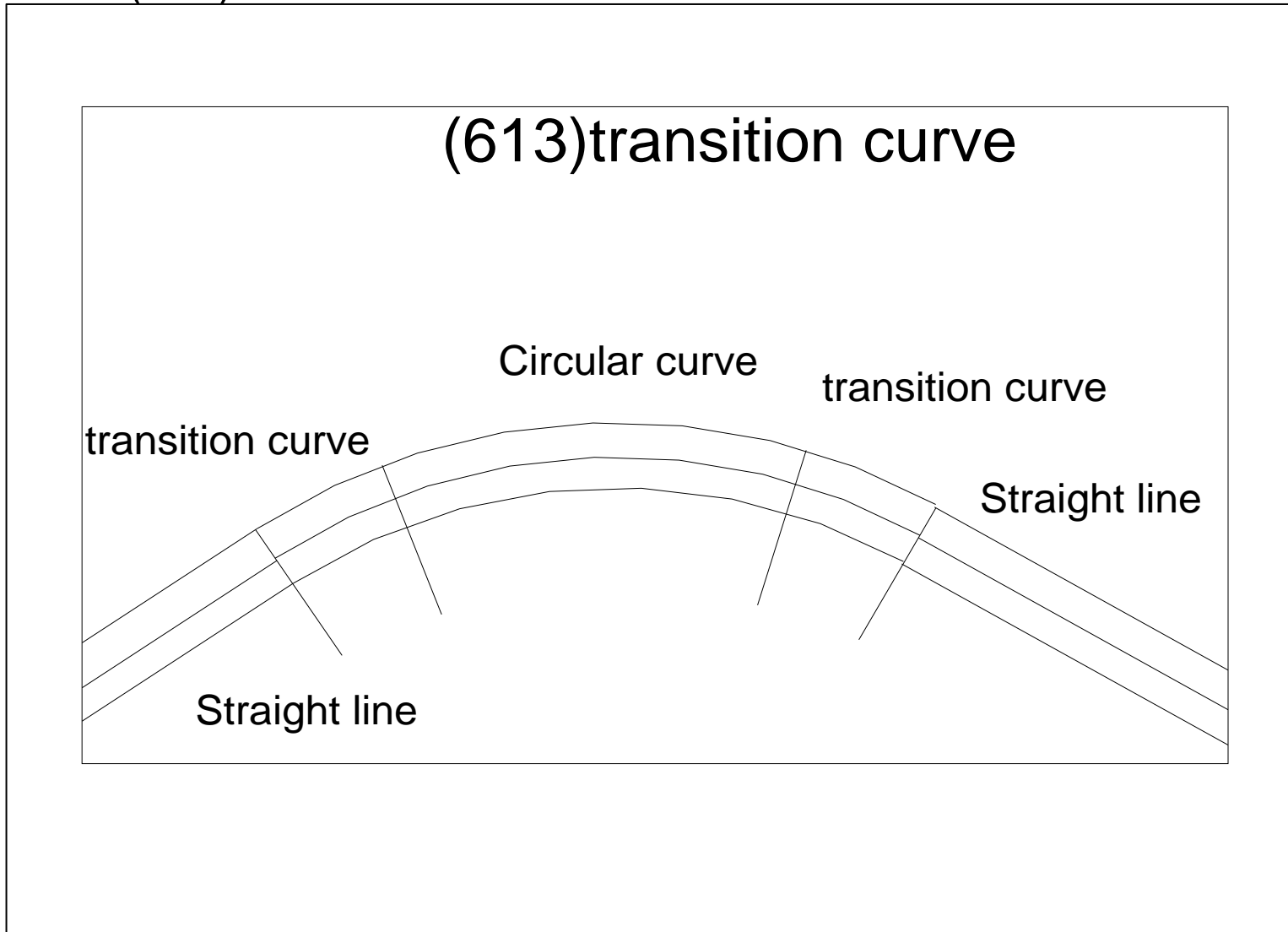
(611)cant



(612)Quaywall



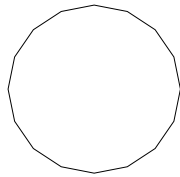
(613)transition curve



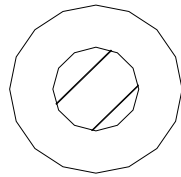
(614)air-dried state

(614)air-dried state

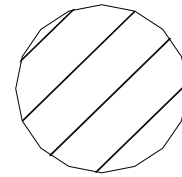
aggregate



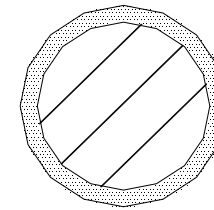
absolute dry
condition



air-dried
state



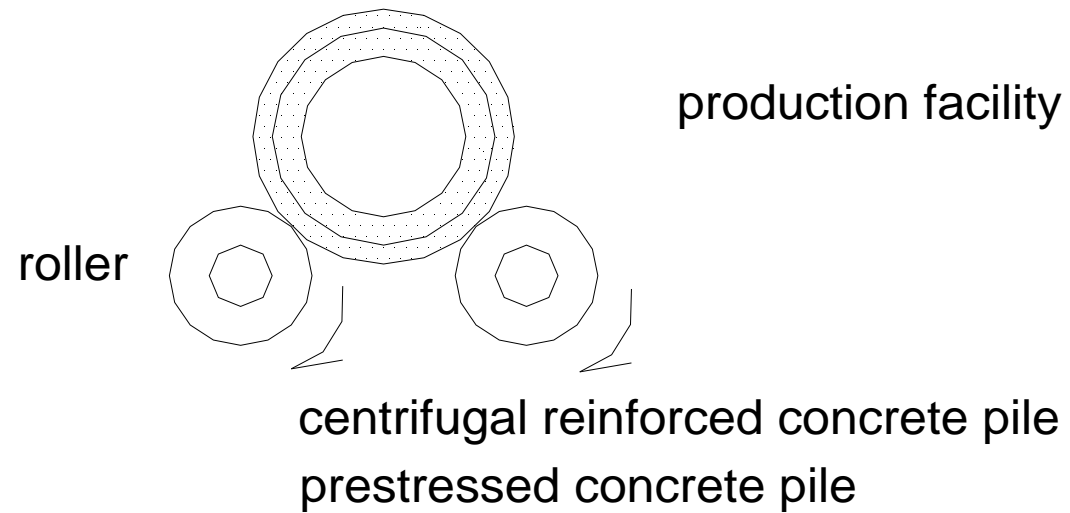
saturated surface
dry state



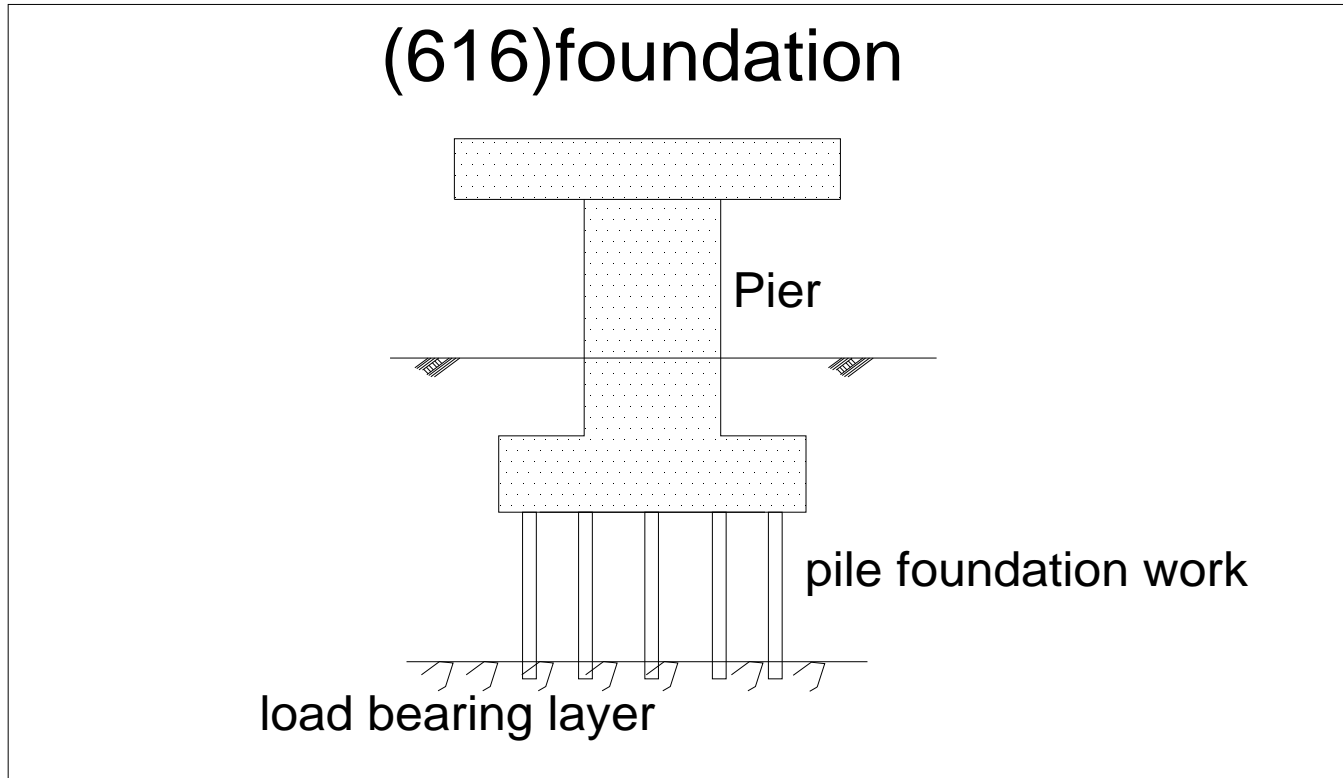
Wet condition

(615)precast concrete pile

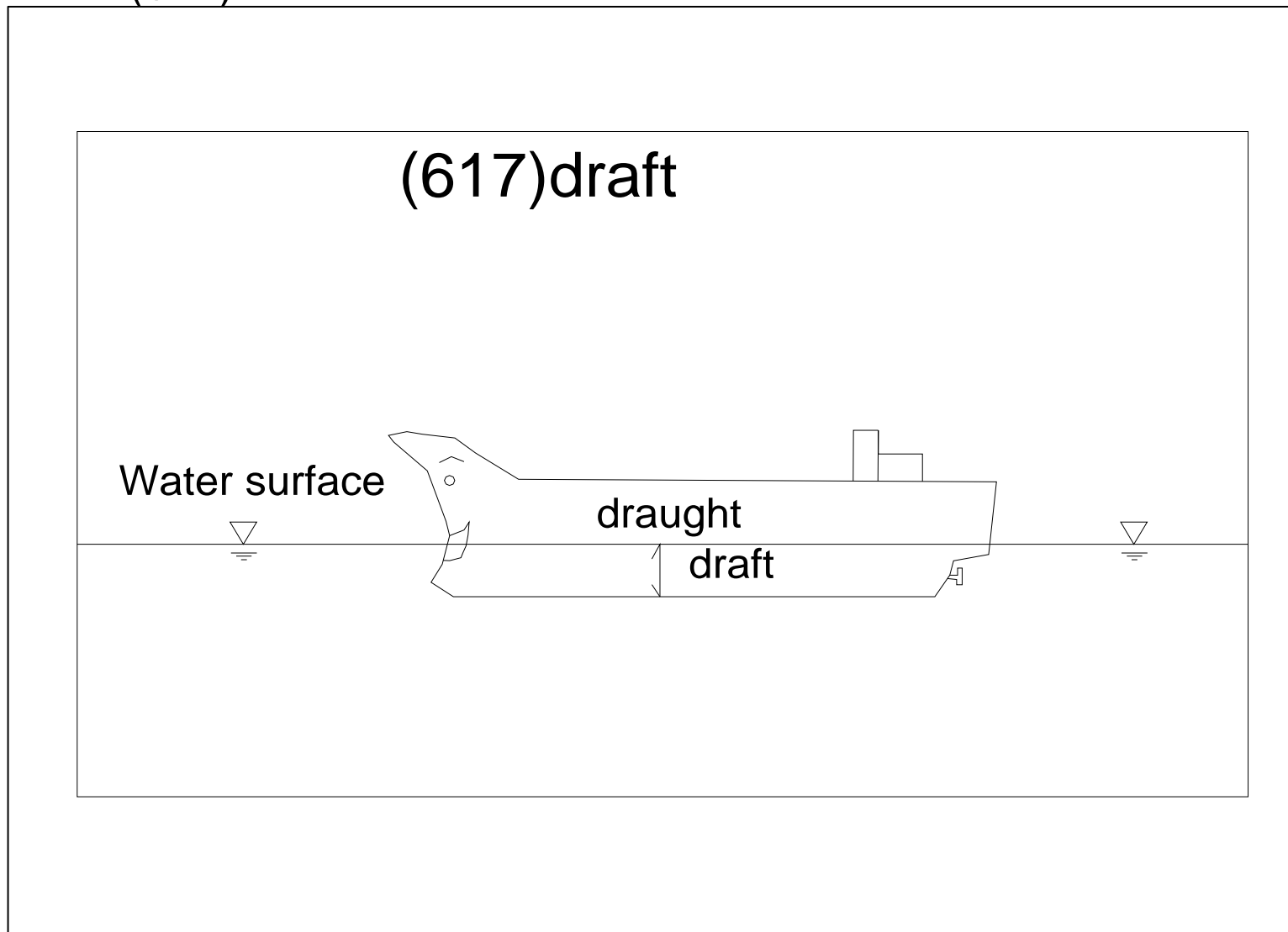
(615)precast concrete pile



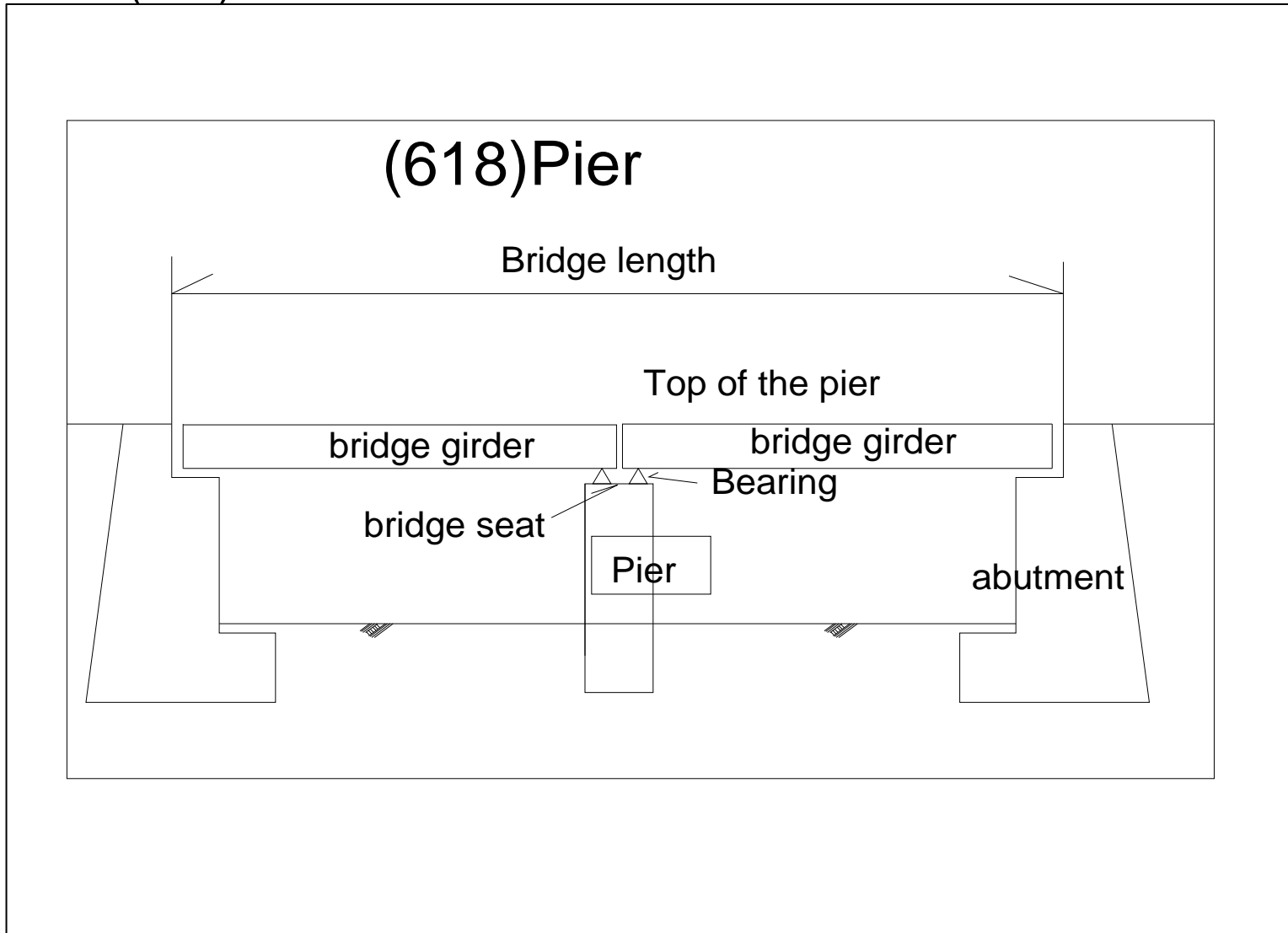
(616)foundation



(617)draft



(618)Pier

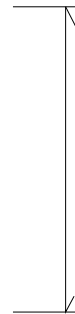
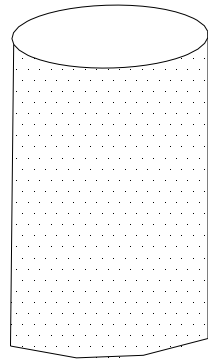


(619)test piece

(619)test piece

diameter

$D=15\text{cm}$



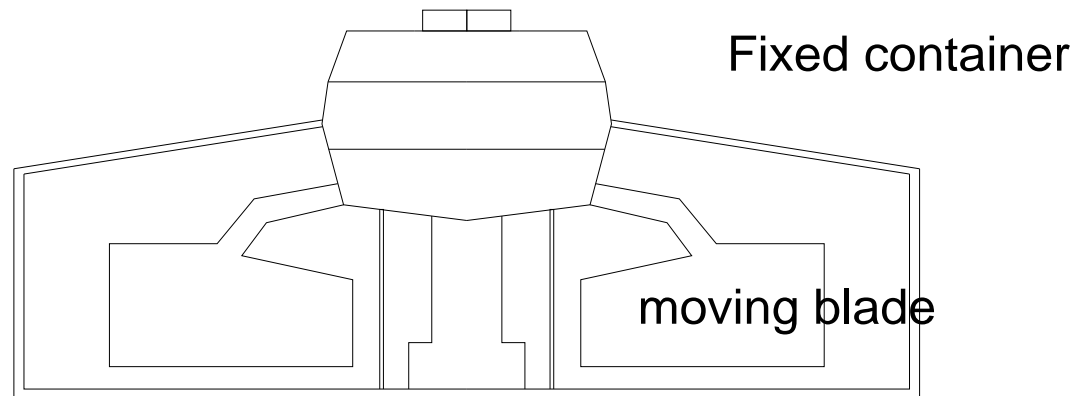
height

$h=30\text{cm}$

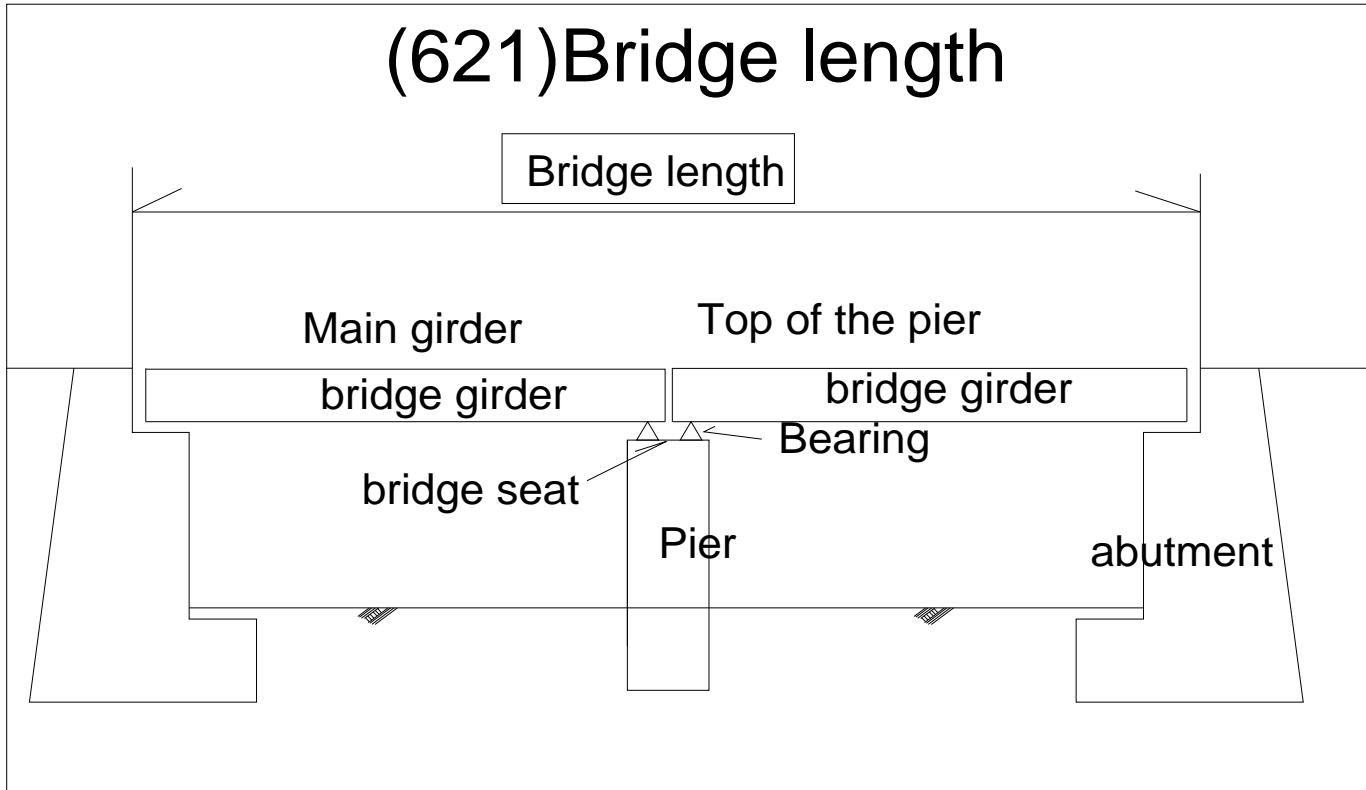
concrete

(620) Forced mixer

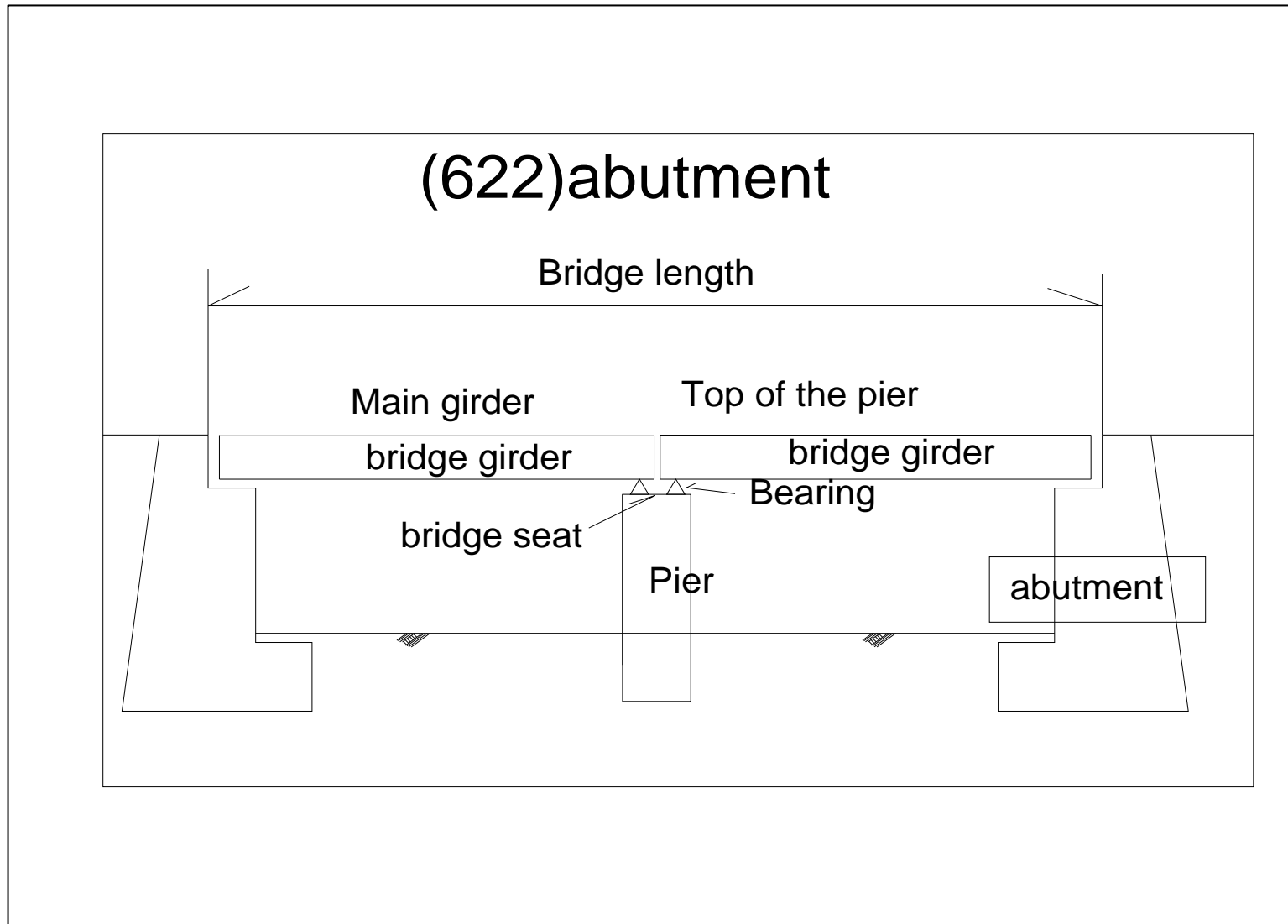
(620) Forced mixer



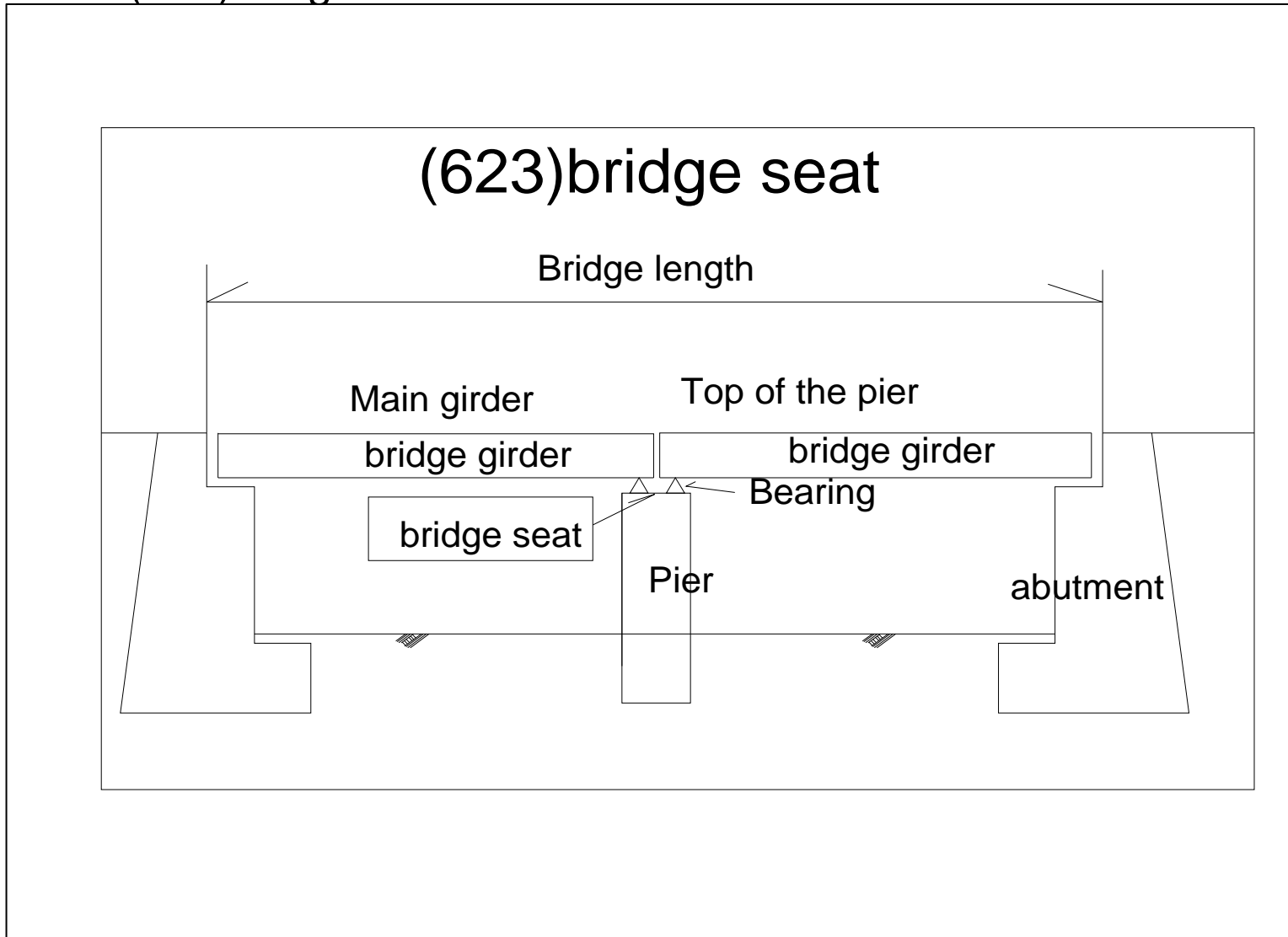
(621)Bridge length



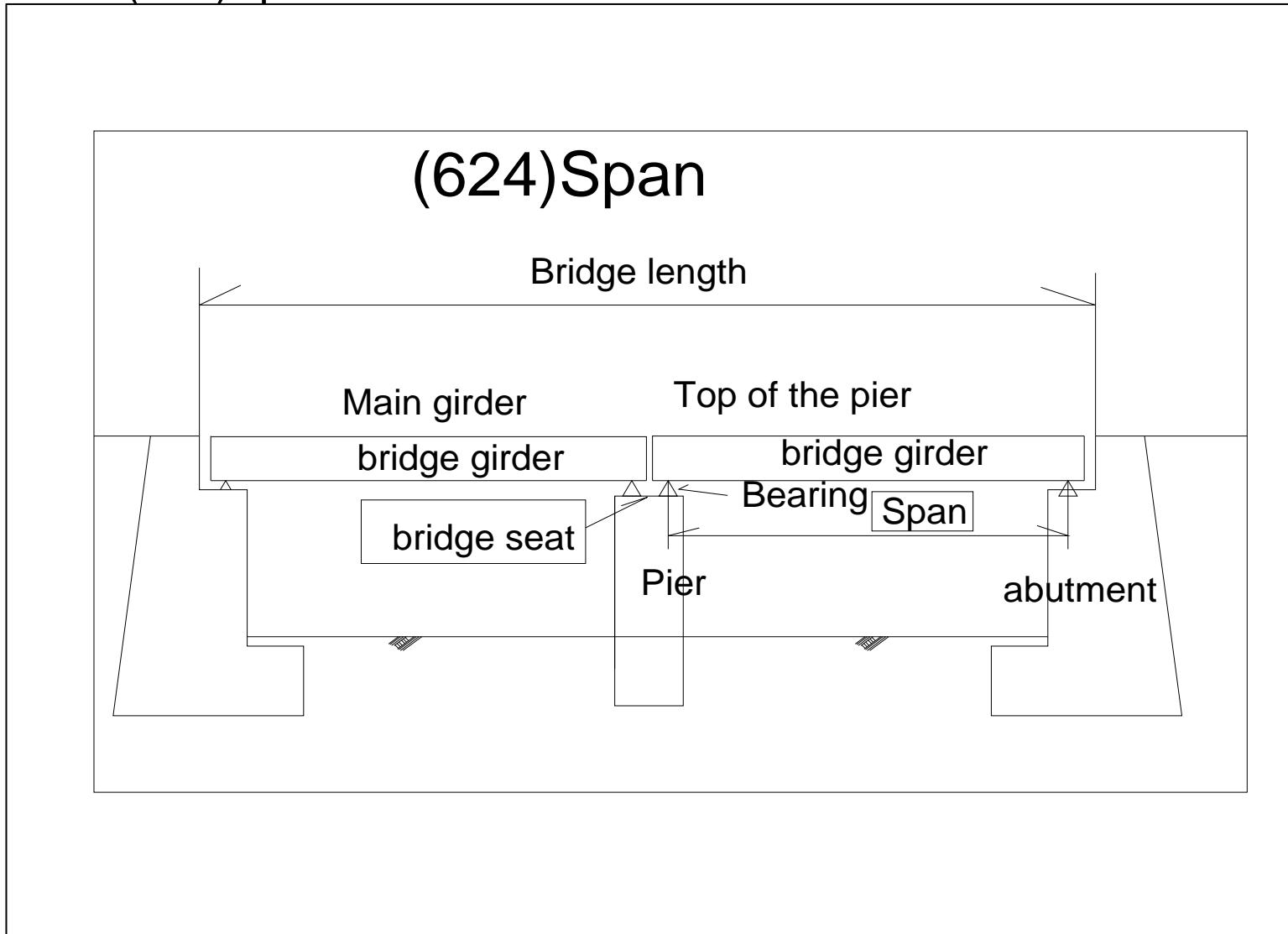
(622)abutment



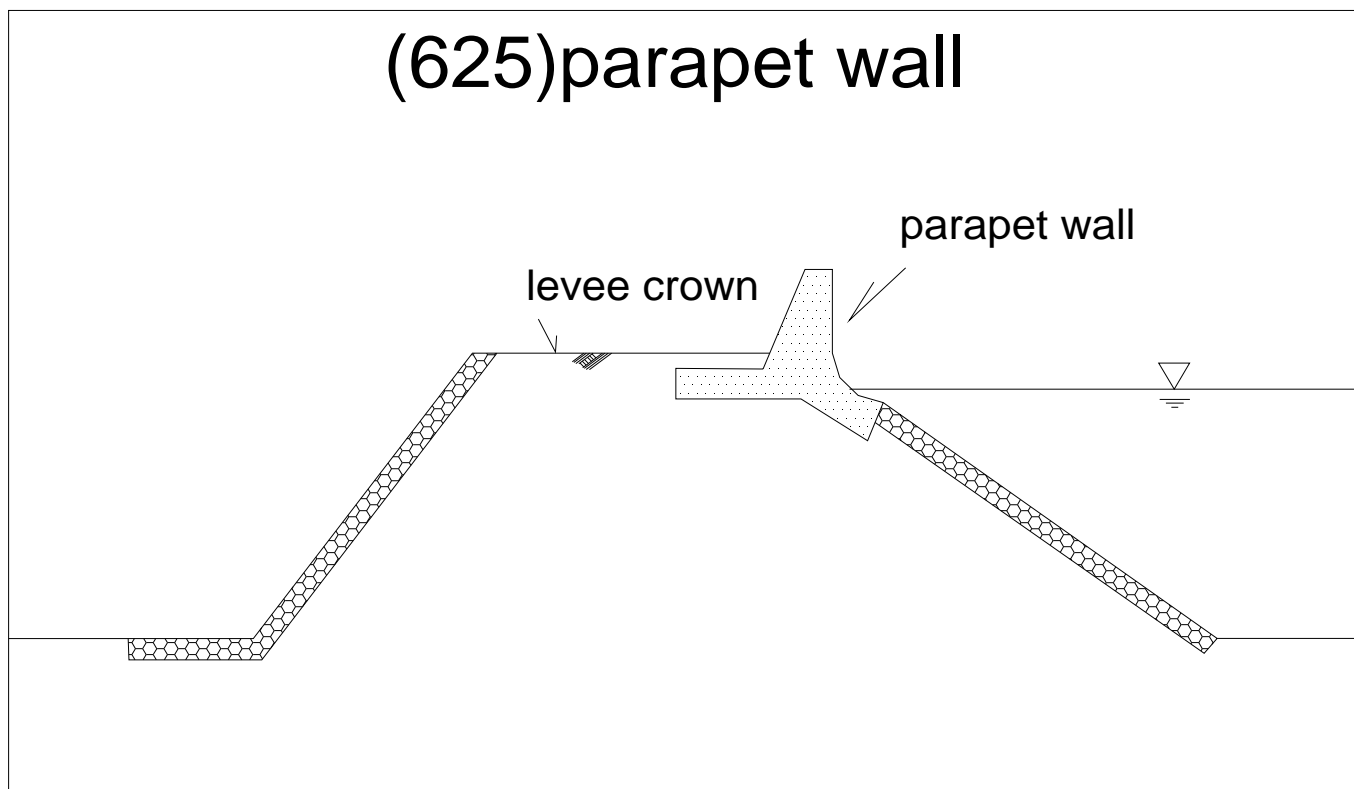
(623)bridge seat



(624)Span



(625)parapet wall



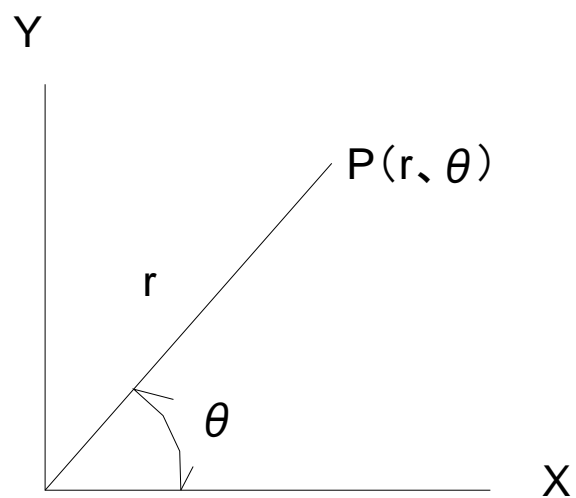
(626)ultimate strength

(626)ultimate strength

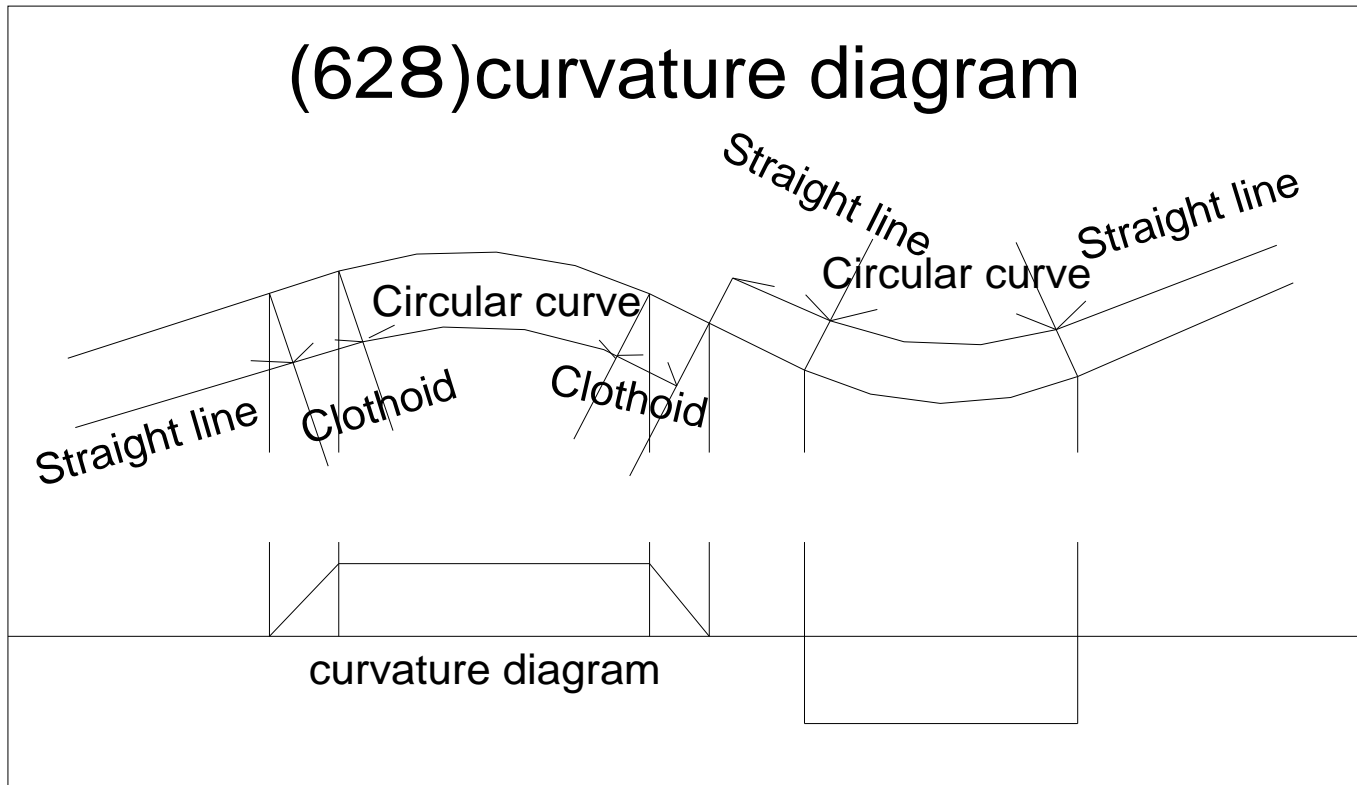


(627)Polar coordinates

(627)Polar coordinates

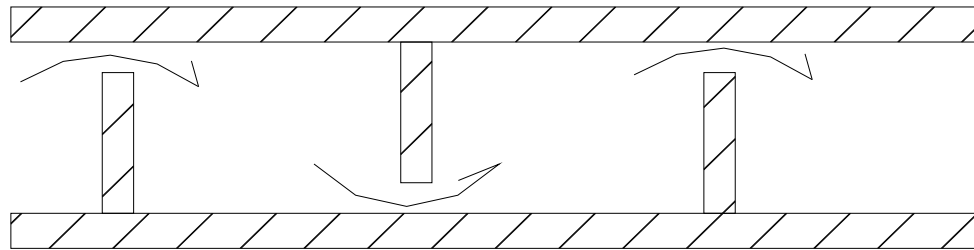


(628)curvature diagram



(629)Fishladder

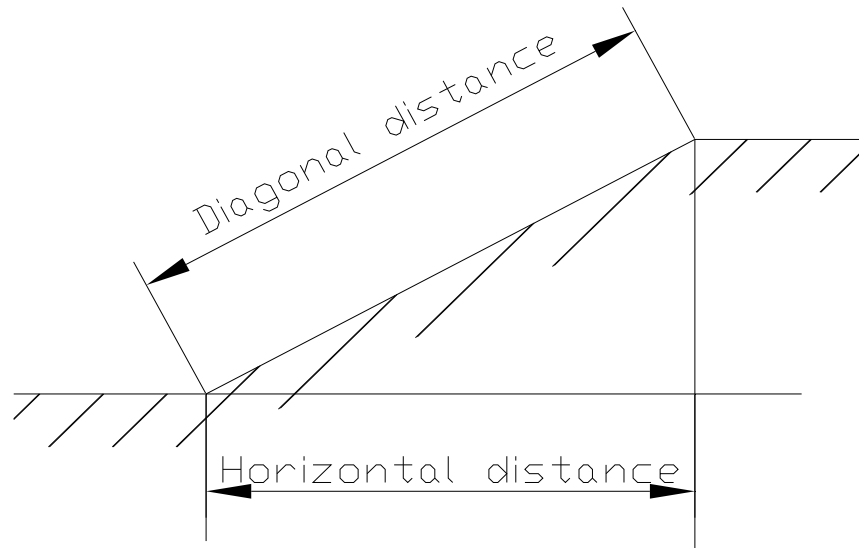
(629)Fishladder



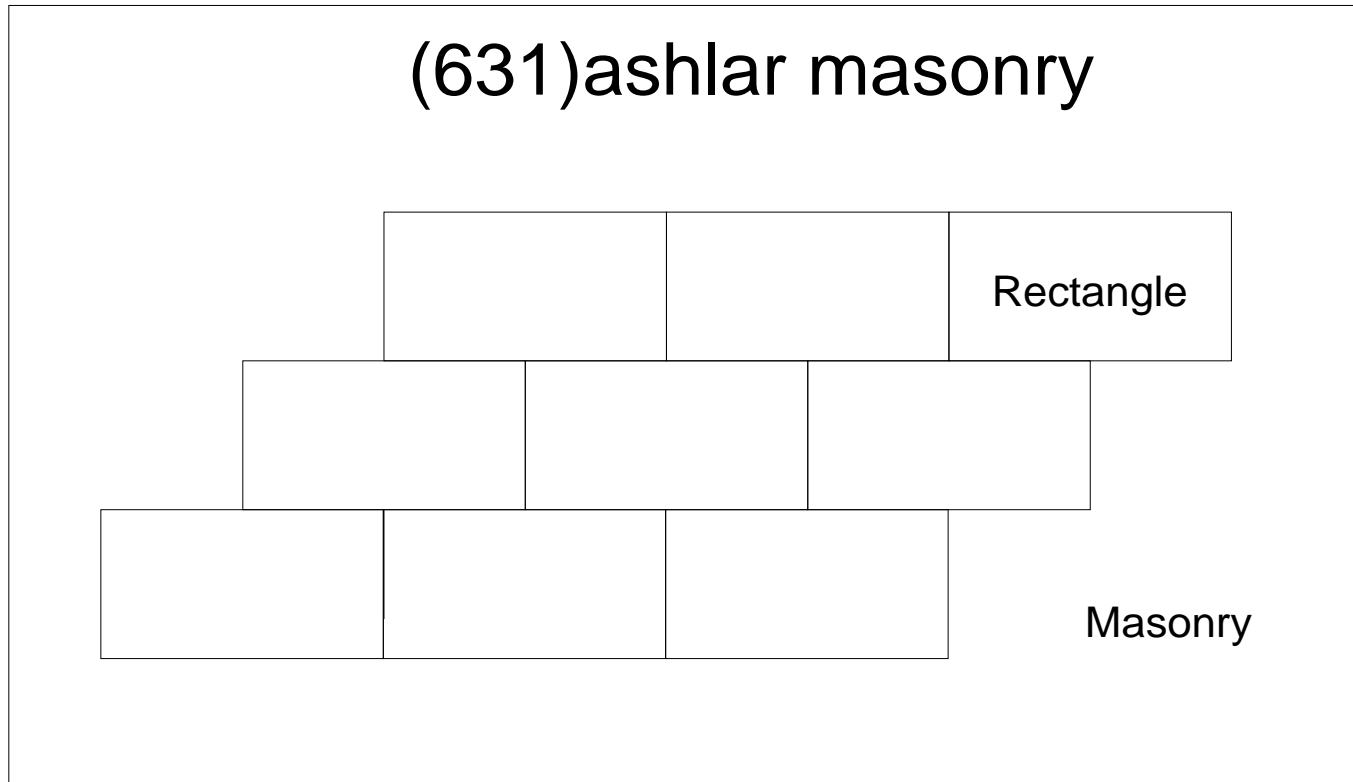
Water level difference

(630)distance survey

(630)distance survey

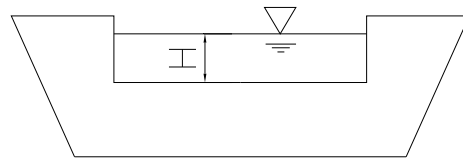


(631)ashlar masonry

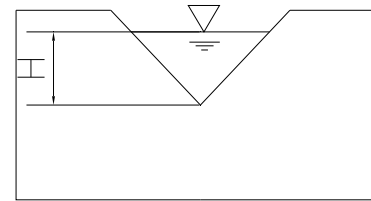


(632)Notch

(632)Notch



rectangular notch



triangular weir

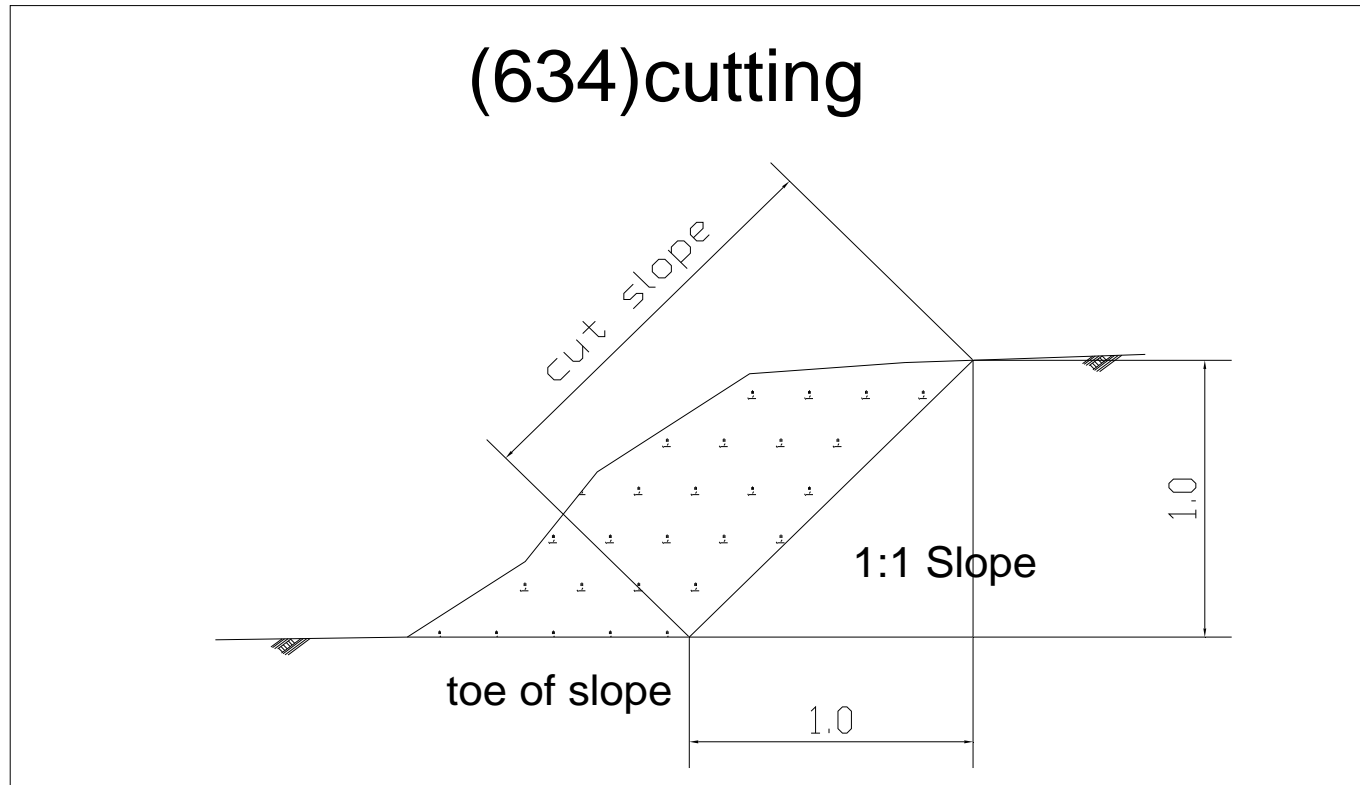
H:Overflow
Water depth
discharge rate

(633)unscreened gravel

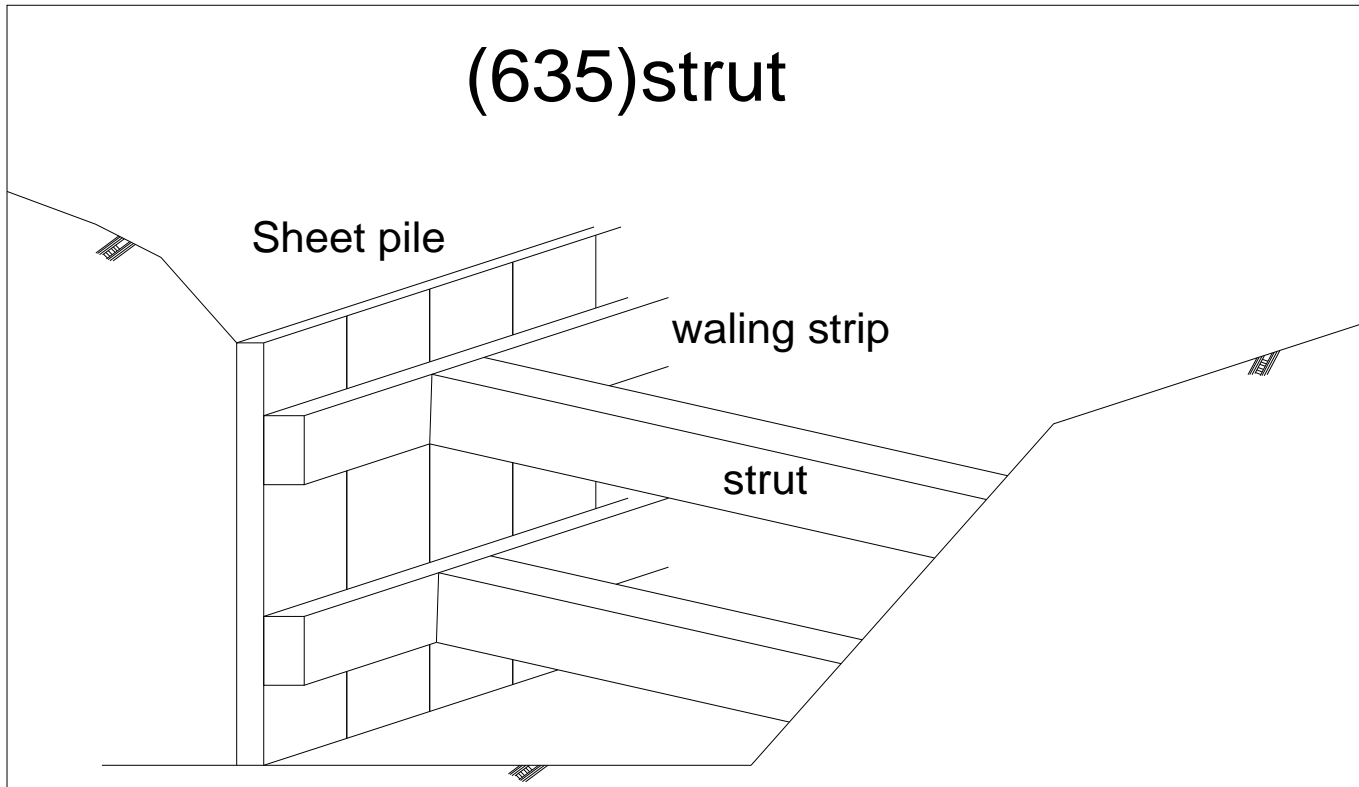
(633)unscreened gravel

unscreened gravel $\xrightarrow[\text{Wash with water}]{\text{Sieving}}$ aggregate

(634)cutting

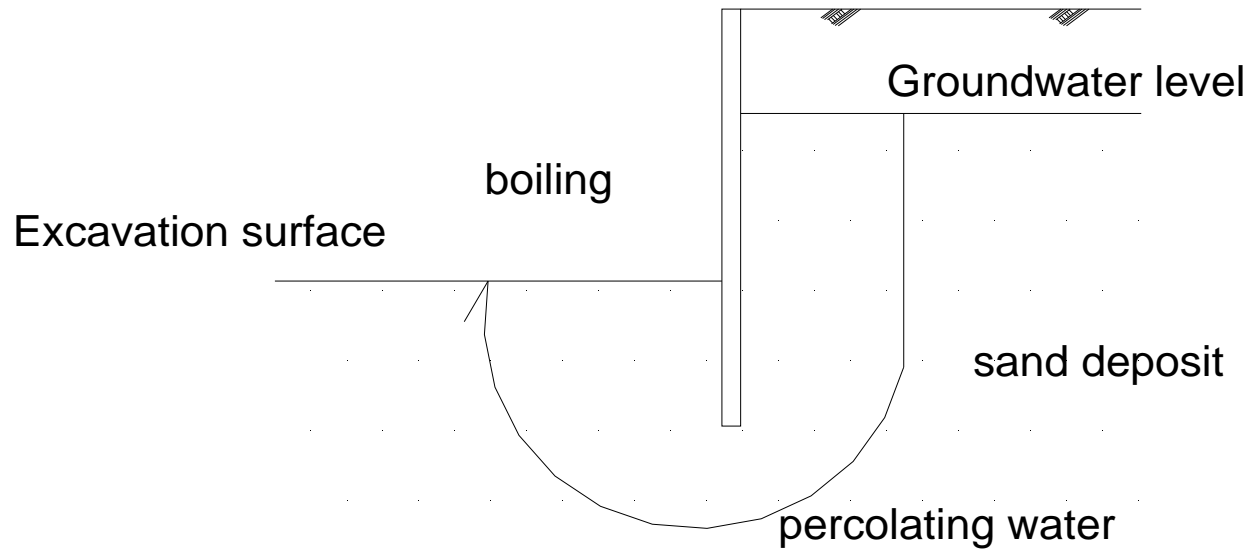


(635)strut



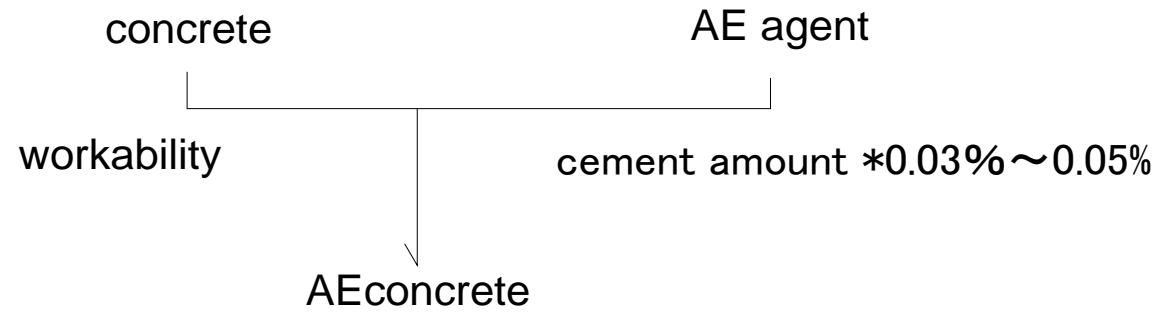
(636)quick sand phenomena

(636)quick sand phenomena



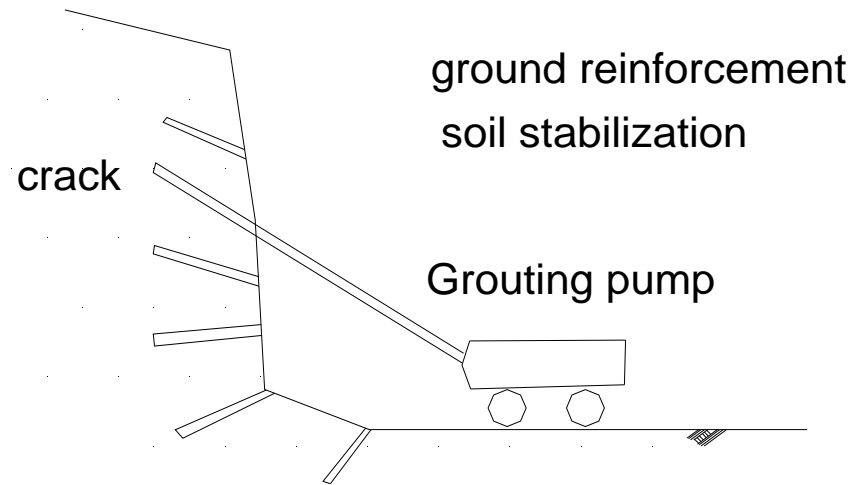
(637)air entraining agent

(637)air entraining agent



(638)Grouting

(638)Grouting



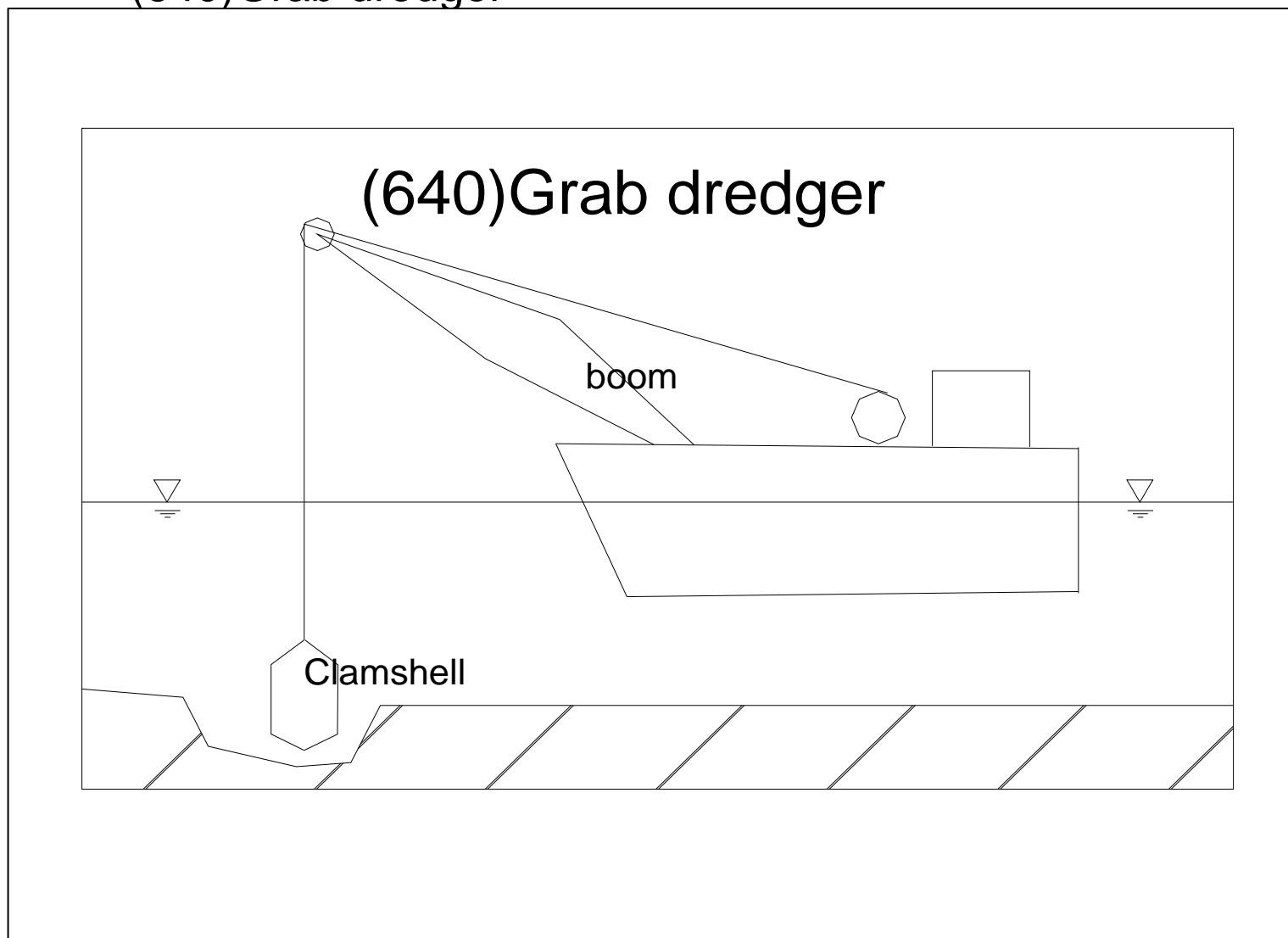
(639)grout

(639)grout

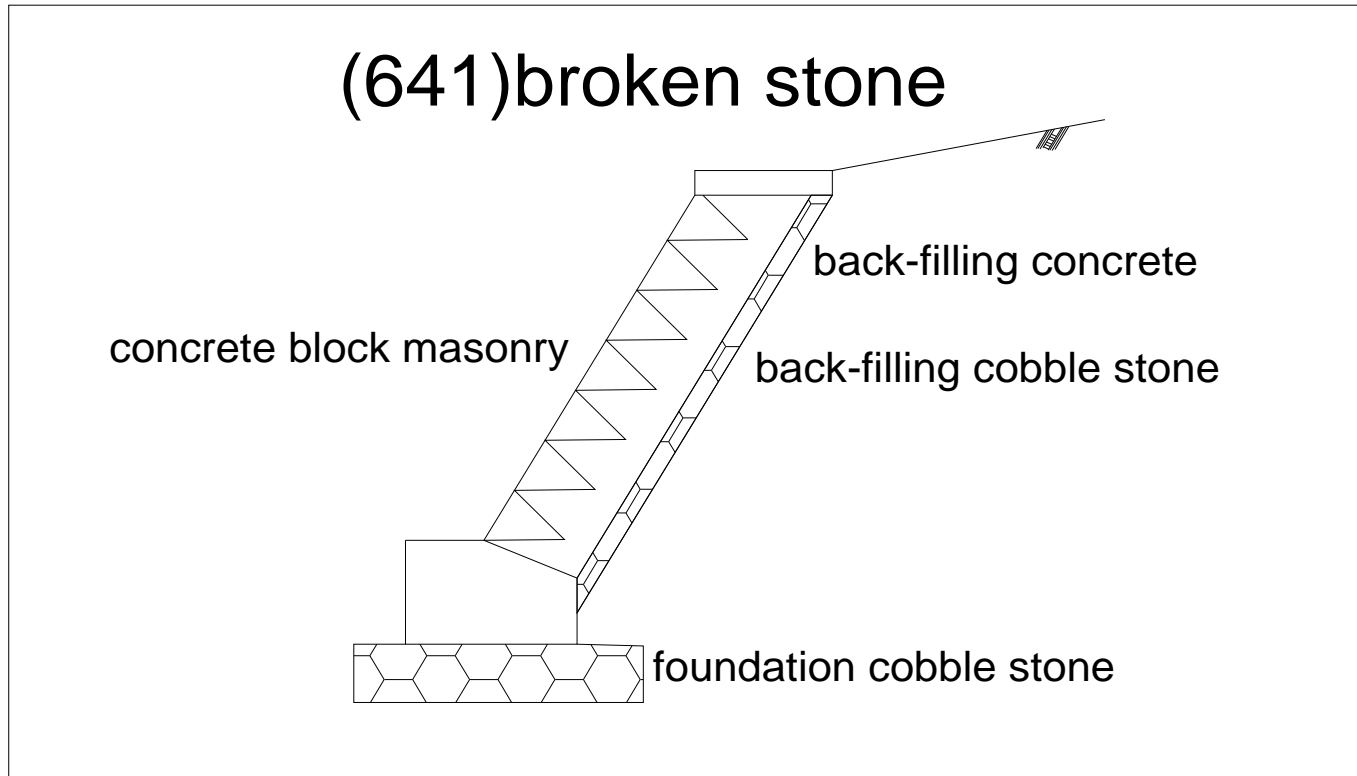
grout

- Cement paste
- cement mortar
- Fly ash cement
- asphalt
- Chemical solution

(640)Grab dredger

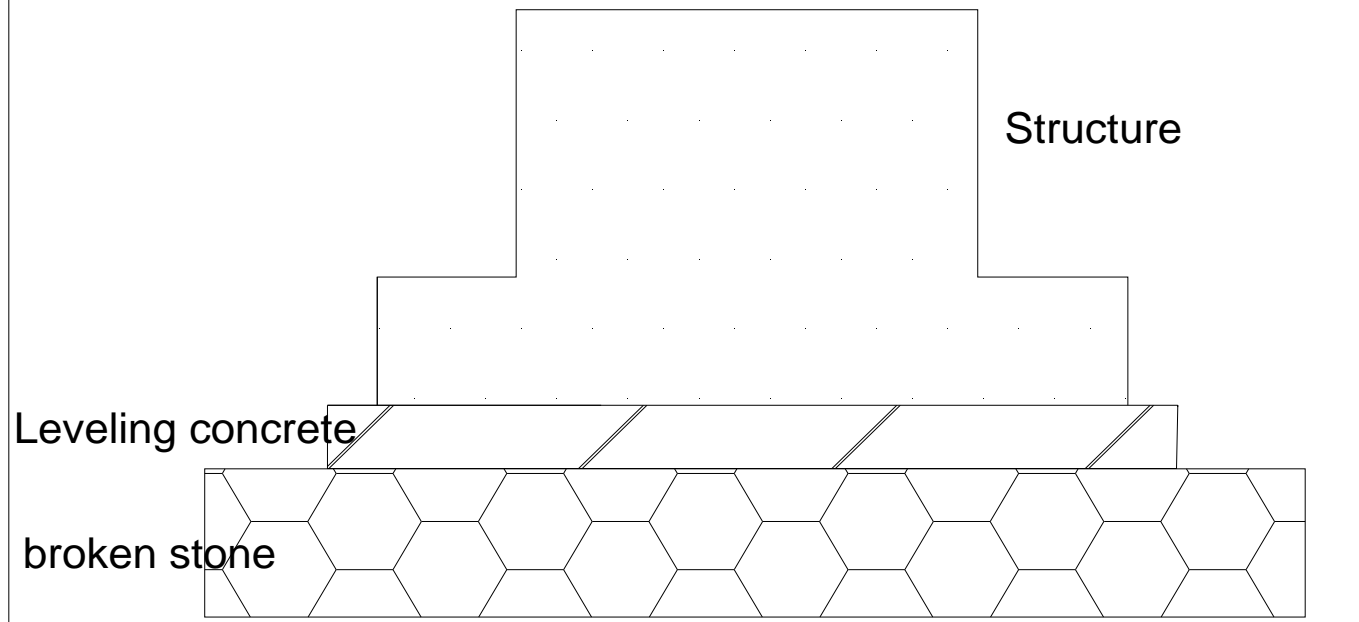


(641)broken stone

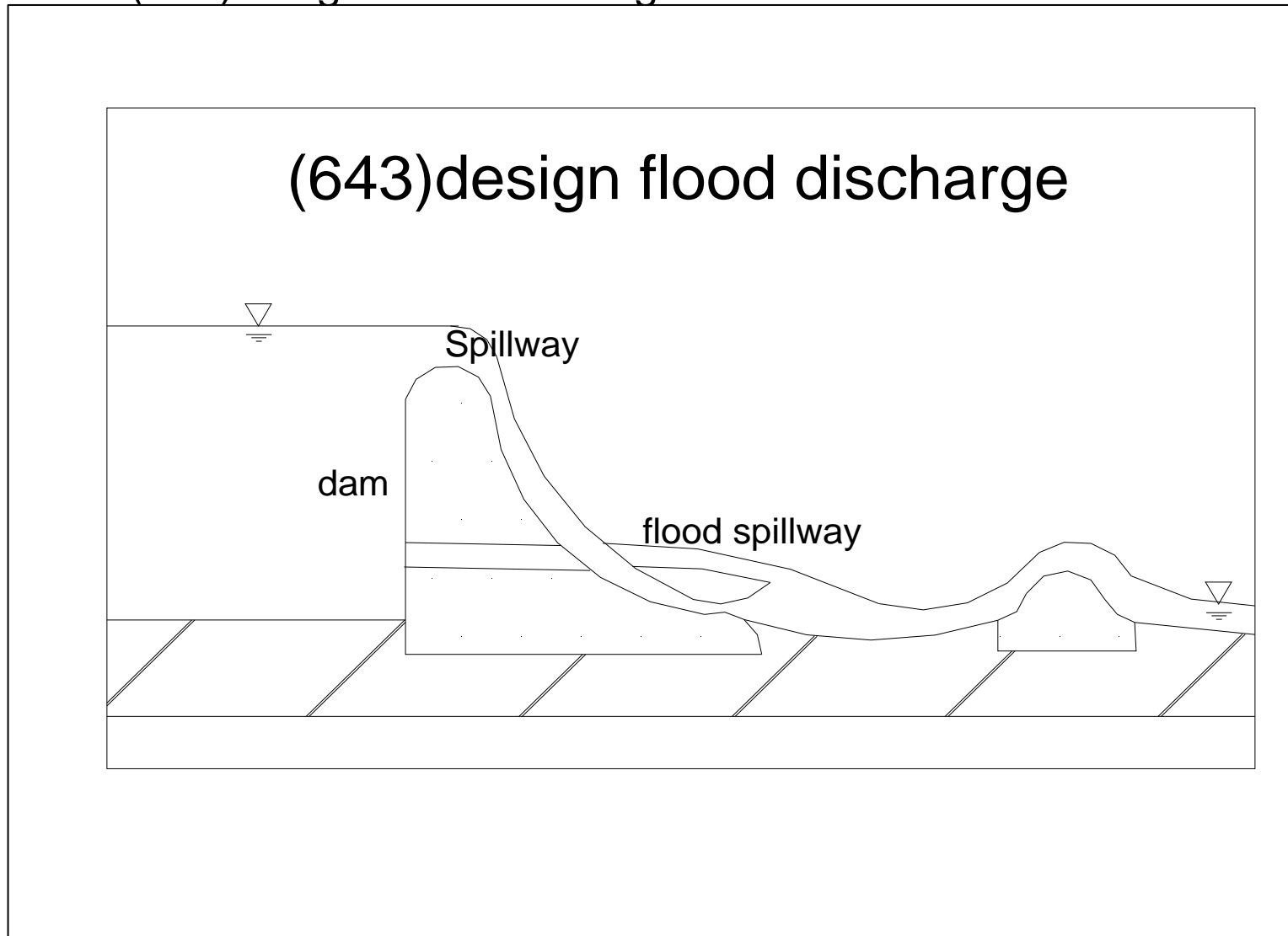


(642)foundation broken stone

(642)foundation broken stone

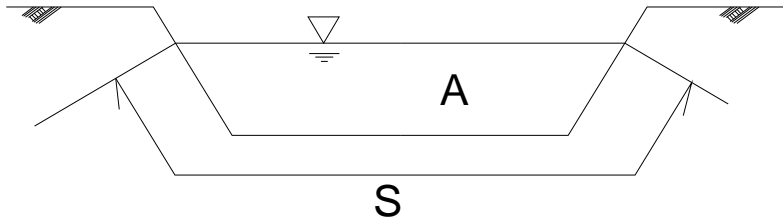


(643)design flood discharge

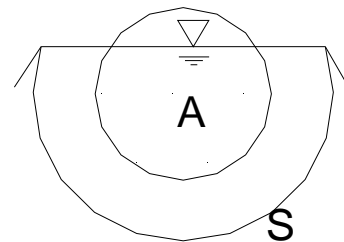


(644)hydraulic radius

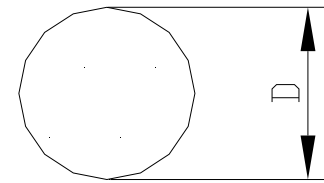
(644)hydraulic radius



$$R=A/S$$



Open channel

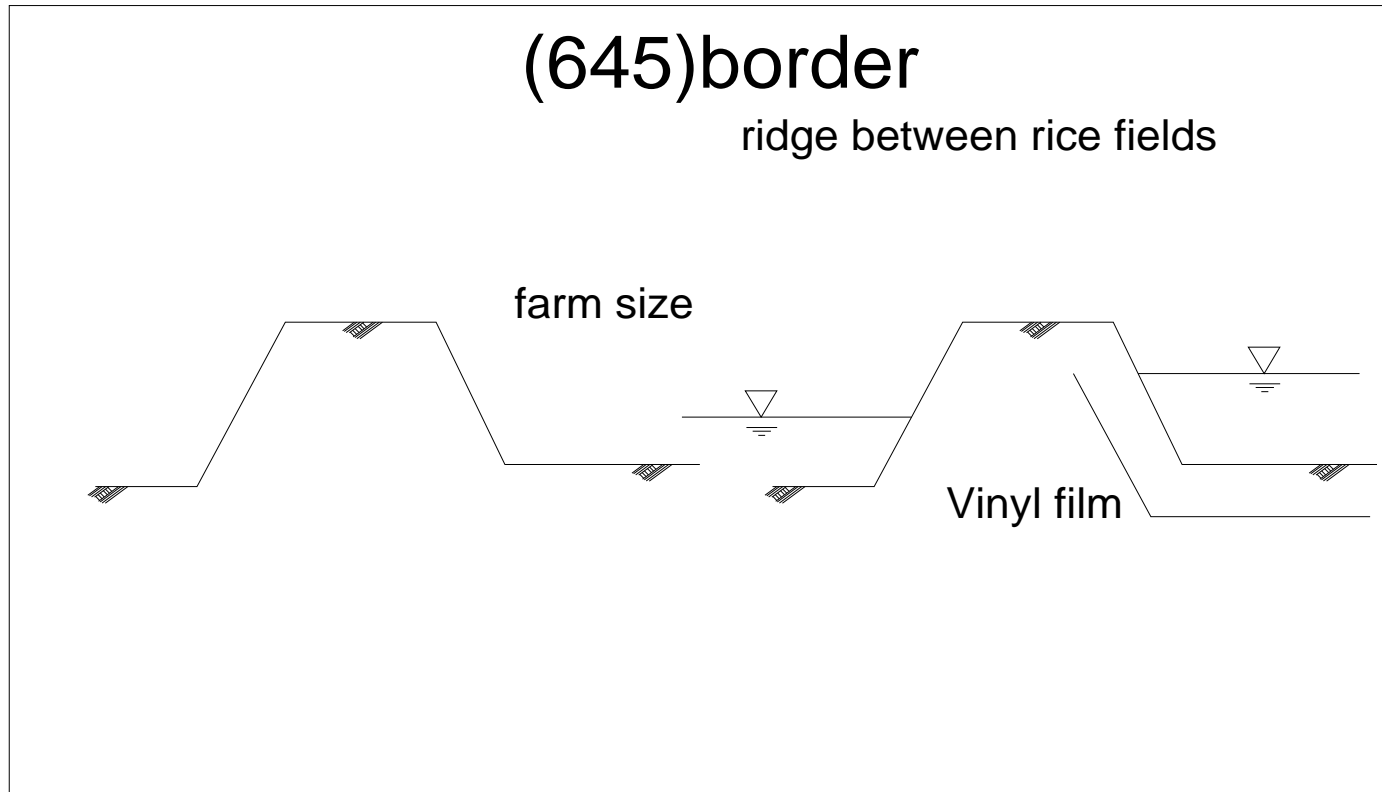


pipeline

$$R=D/4$$

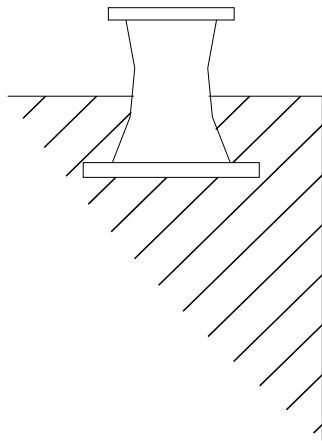
D:diameter

(645)border

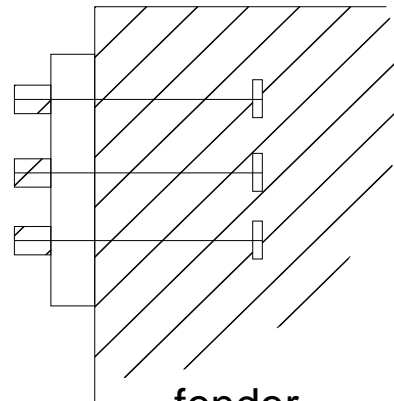


(646) Mooring facility

(646) Mooring facility



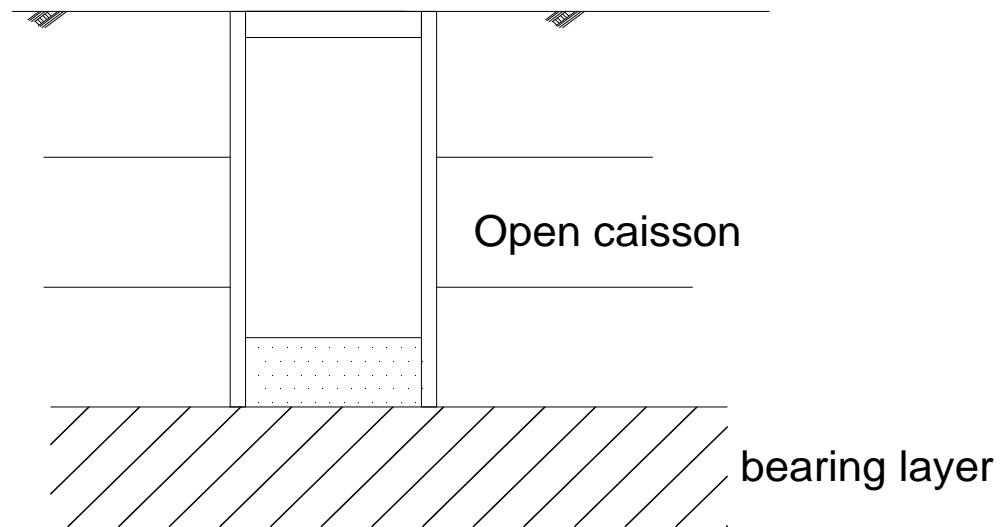
Mooring facility



fender

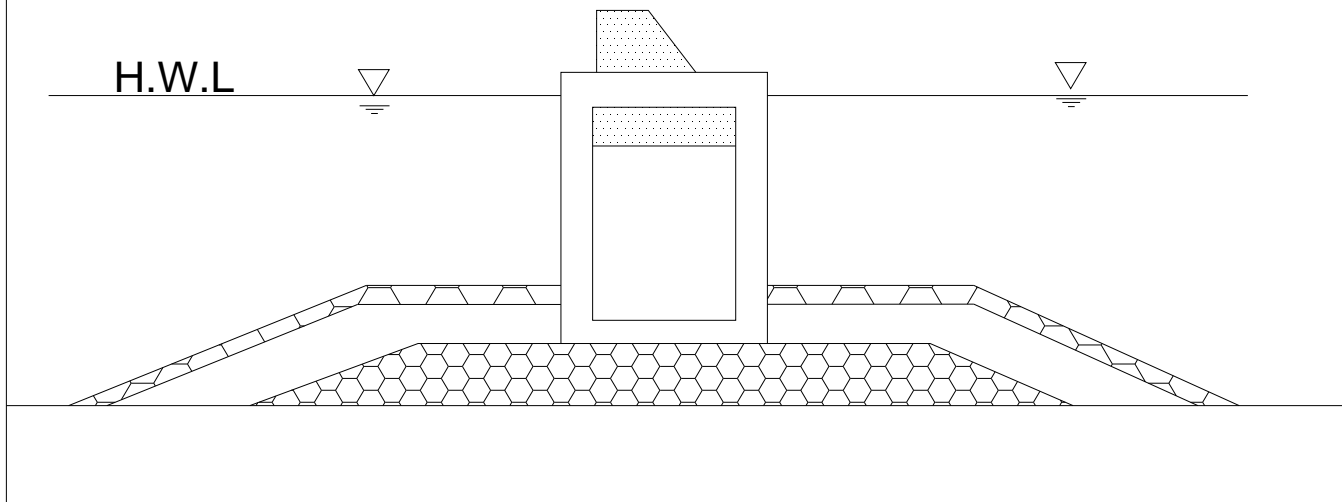
(647)caisson foundation

(647)caisson foundation



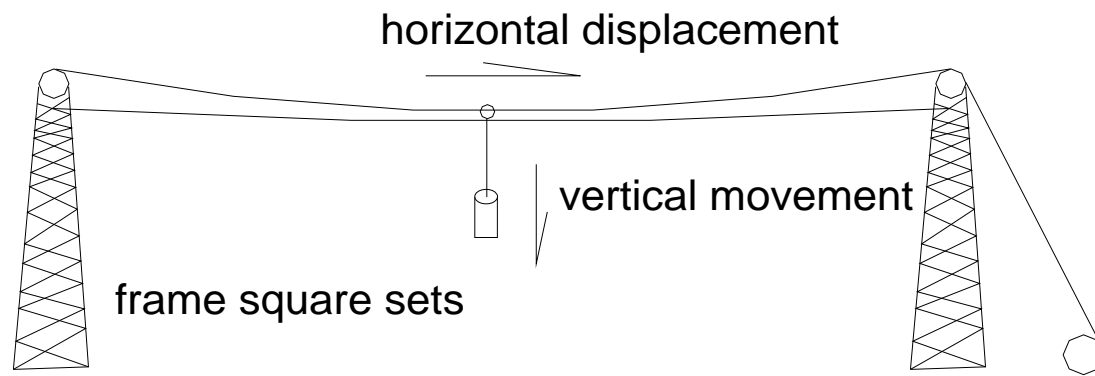
(648)concrete-caisson breakwater

(648)concrete-caisson breakwater

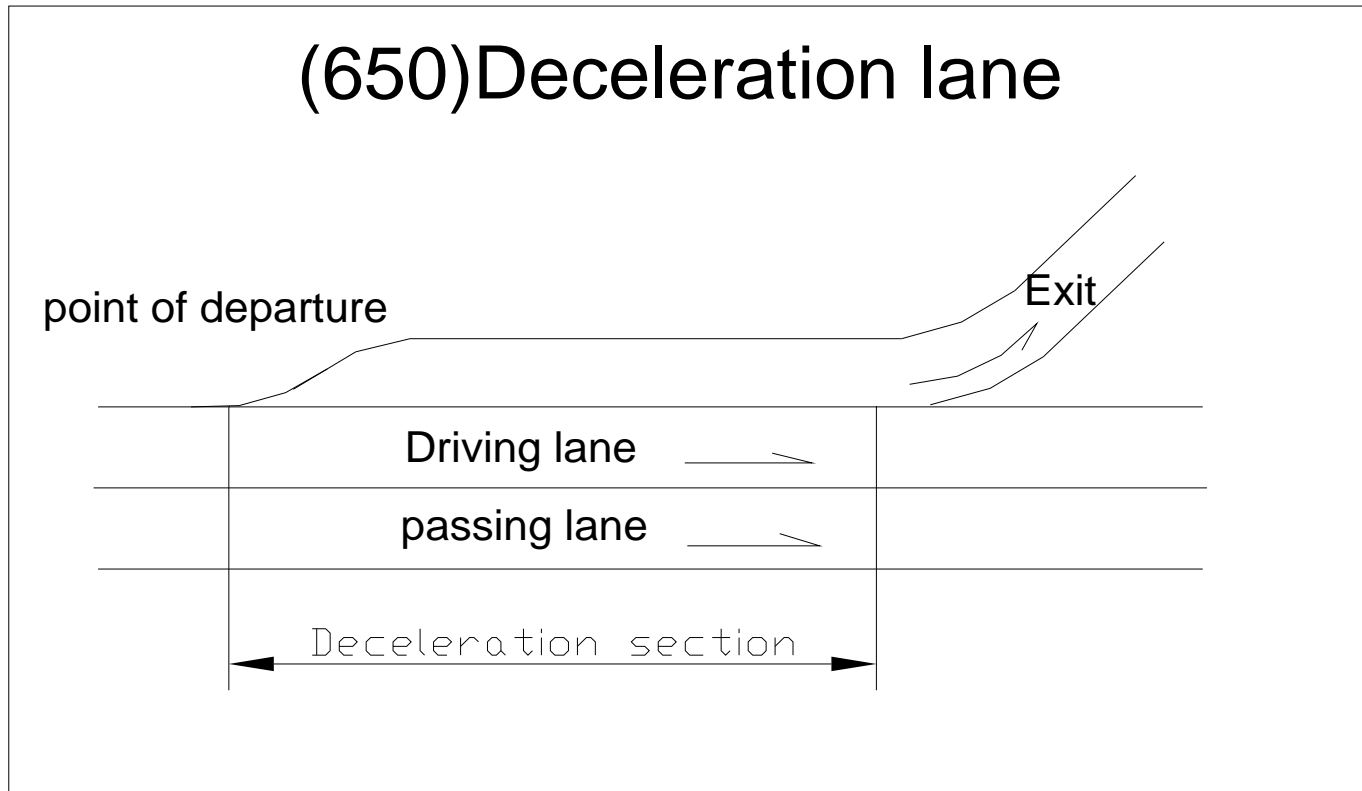


(649)cable crane

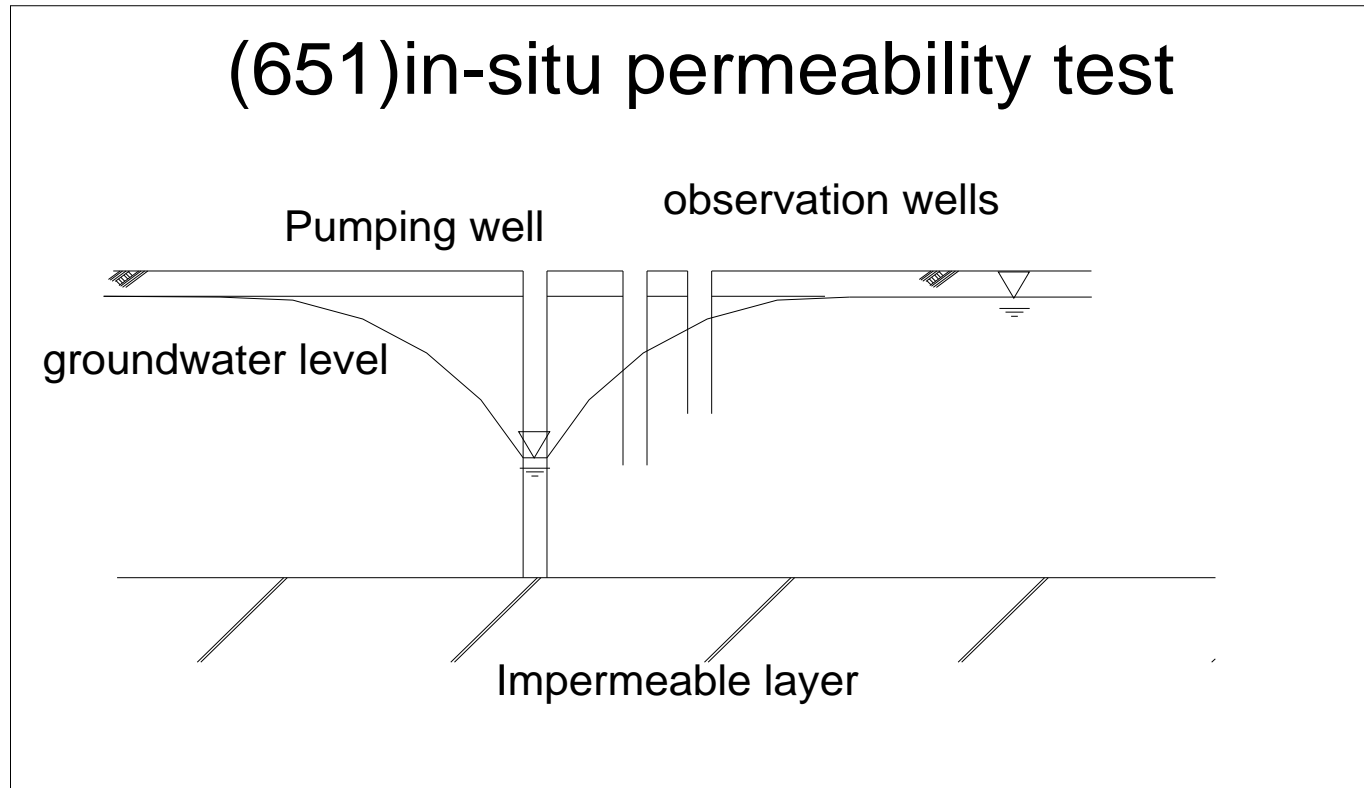
(649)cable crane



(650)Deceleration lane

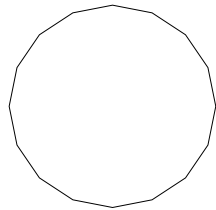


(651)in-situ permeability test

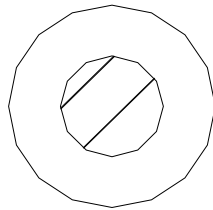


(652)aggregate moisture content

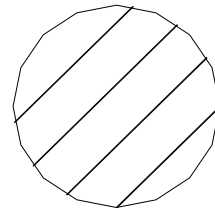
(652)aggregate moisture content



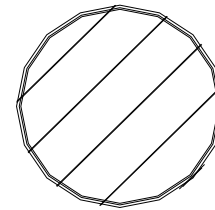
absolute
dry condition



Air dry state

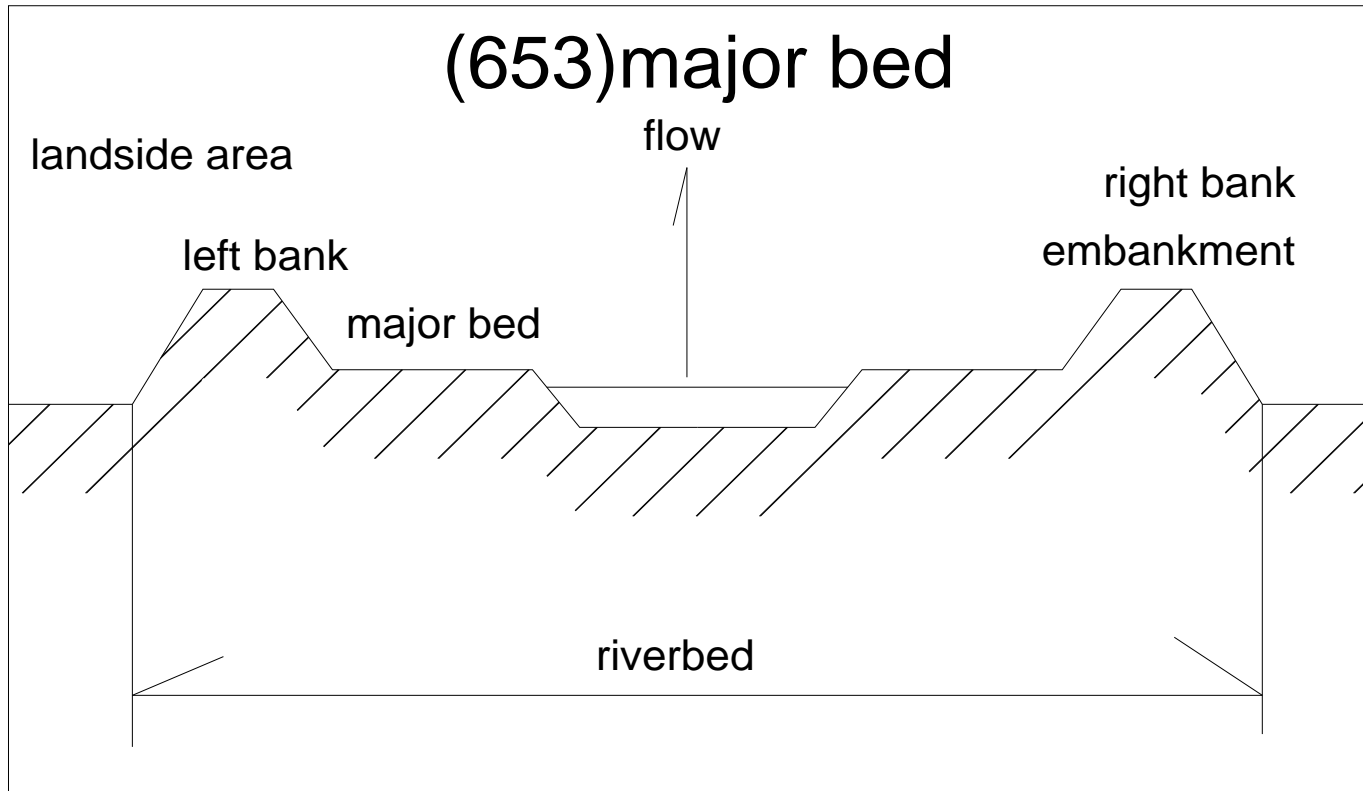


saturated
surface? dry state

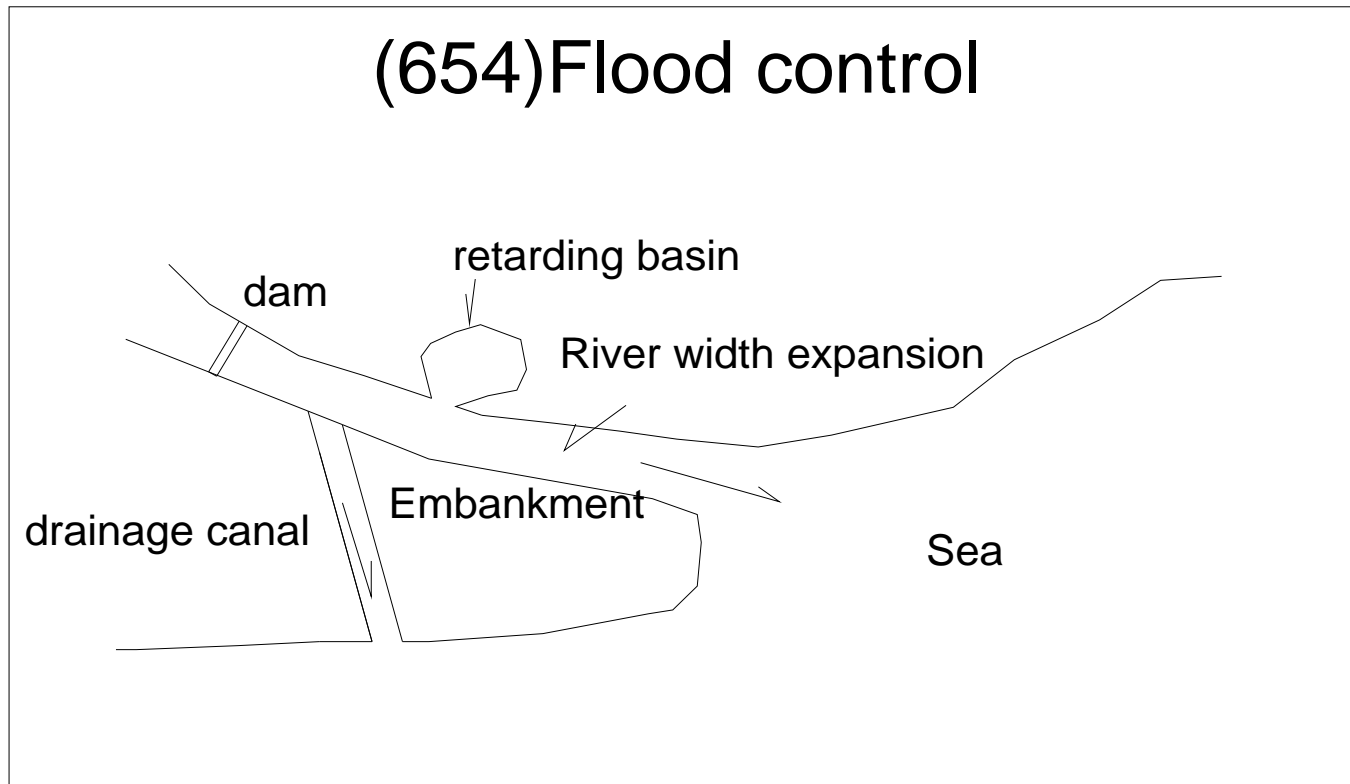


Wet condition

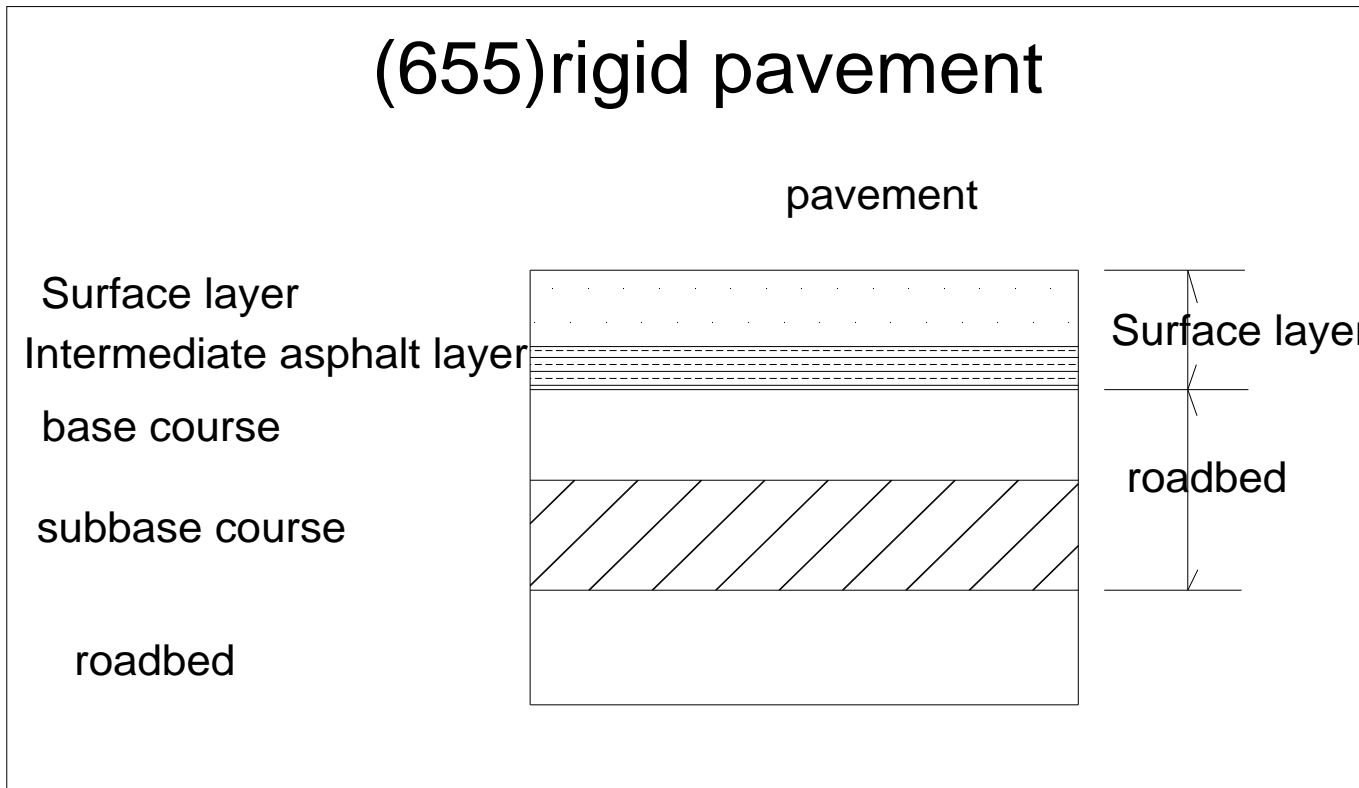
(653)major bed



(654)Flood control



(655)rigid pavement



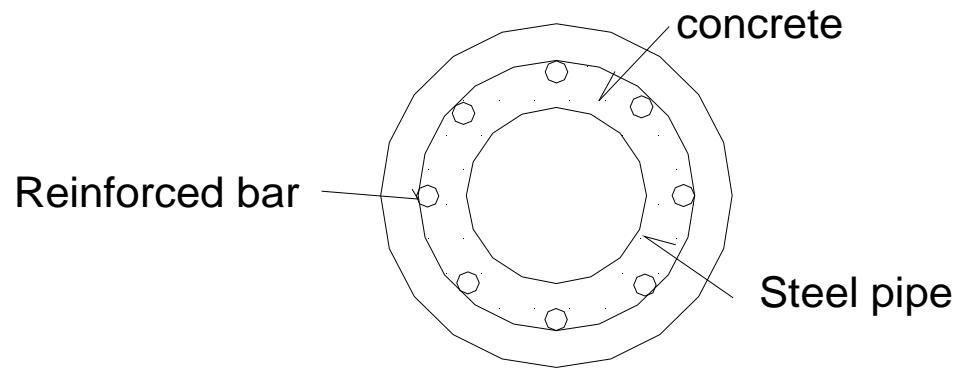
(656)Hard stone

(656)Hard stone

Stone	Compressive strength (N/mm ²)
Hard stone	over60
semi-hard stone	60-20
Soft stone	under20

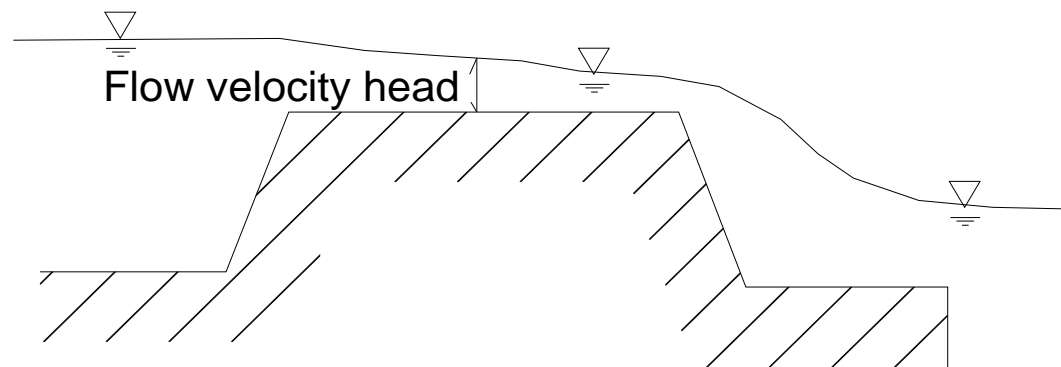
(657)composite column

(657)composite column

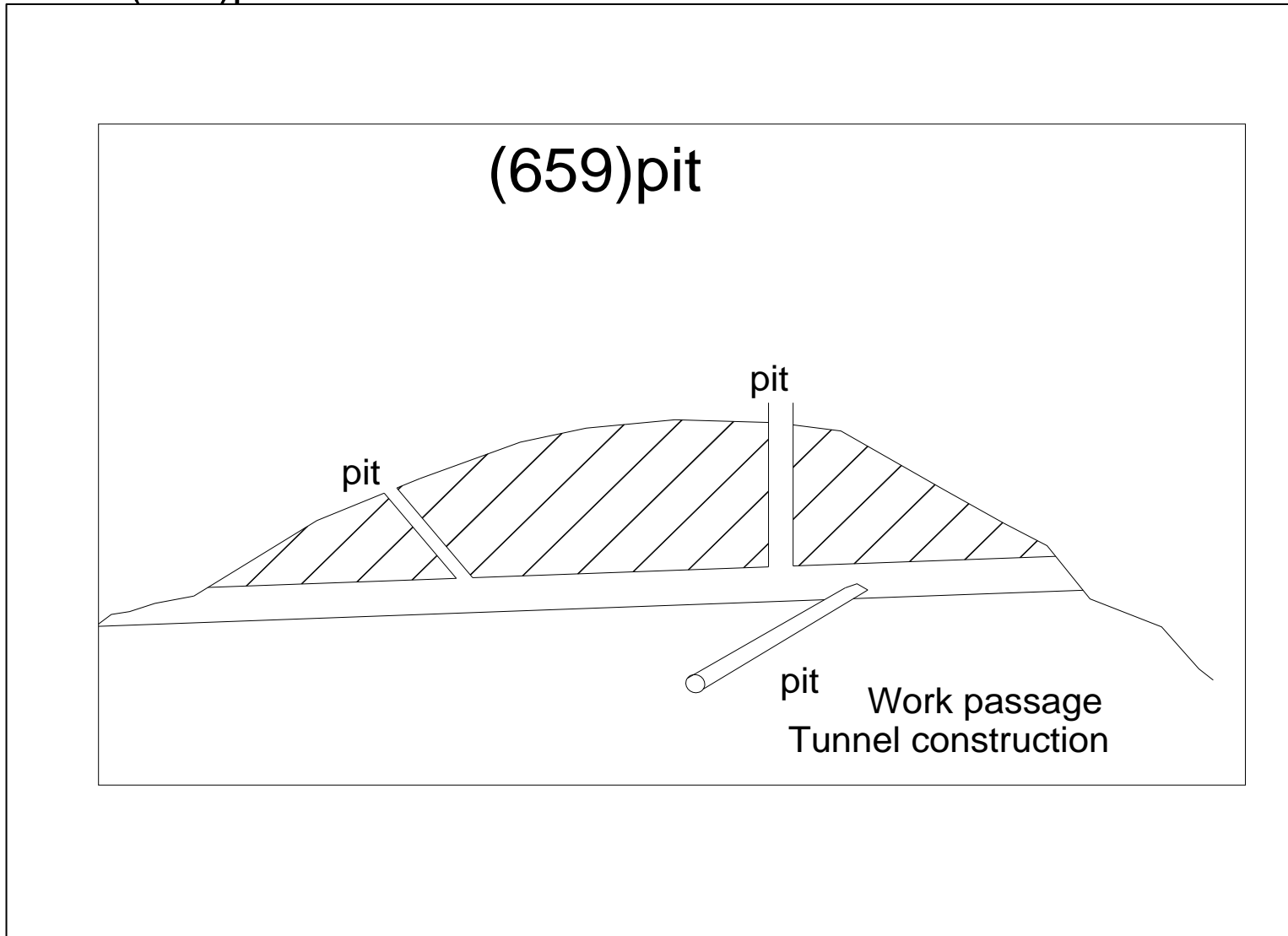


(658) broad-crested weir

(658) broad-crested weir

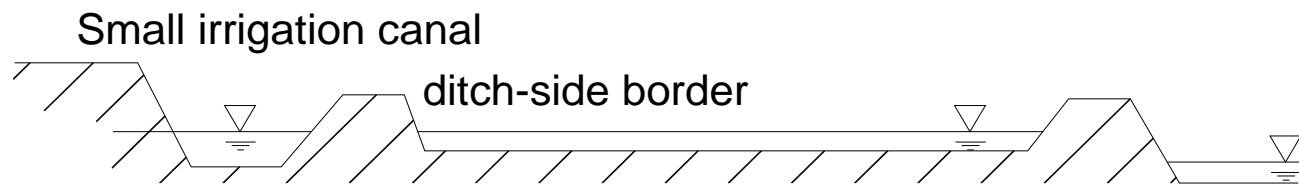


(659)pit

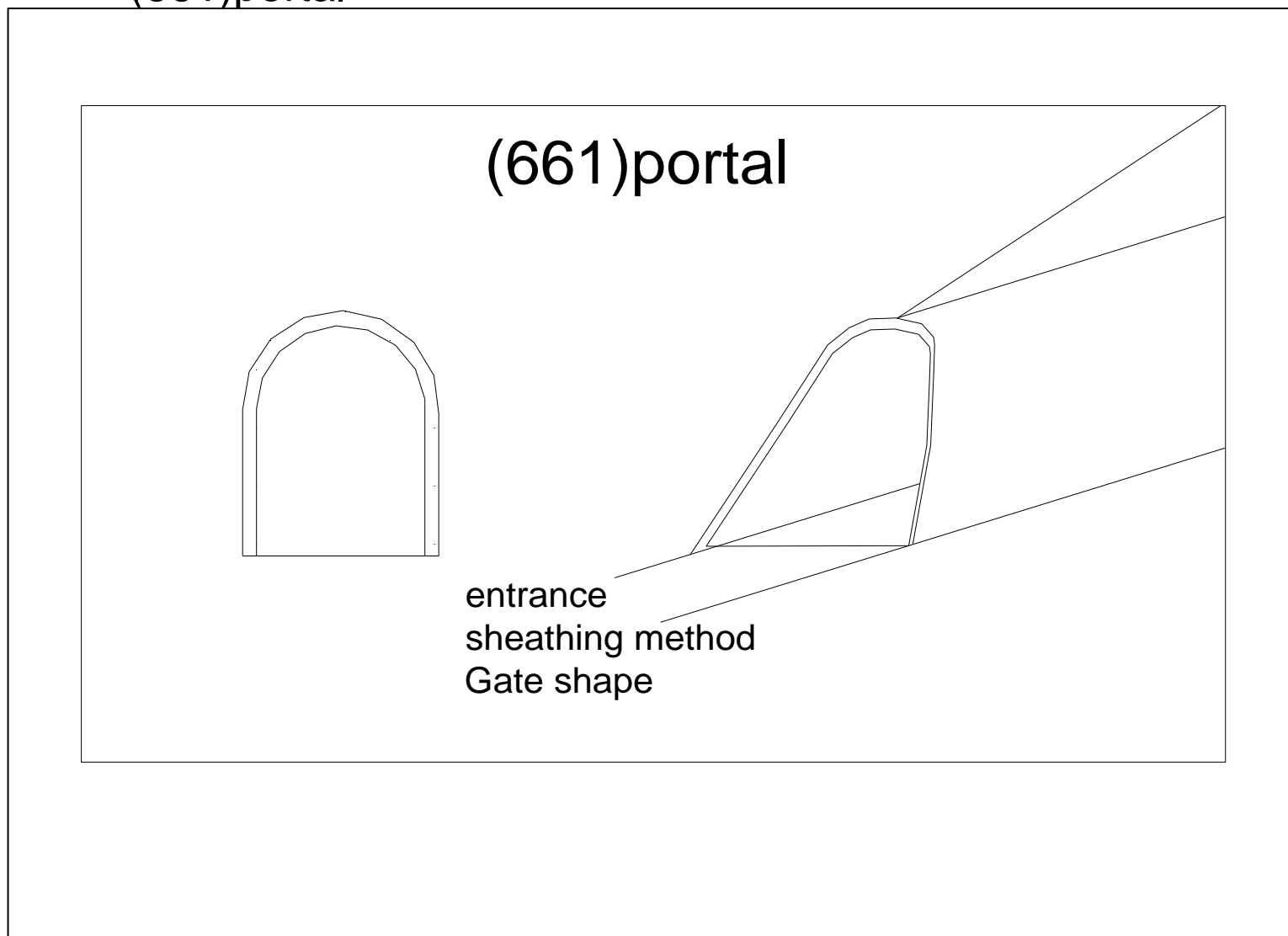


(660)ditch-side border

(660)ditch-side border

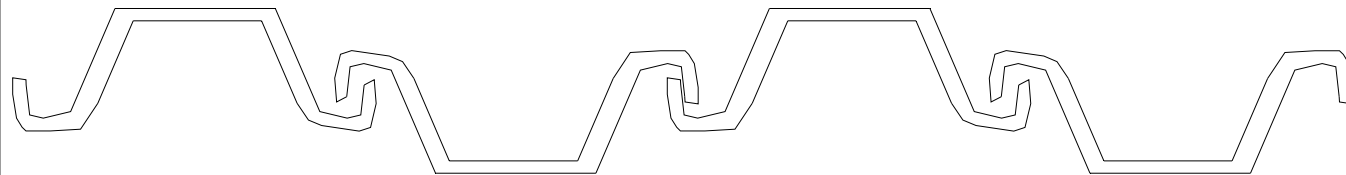


(661)portal



(662)steel sheet pile

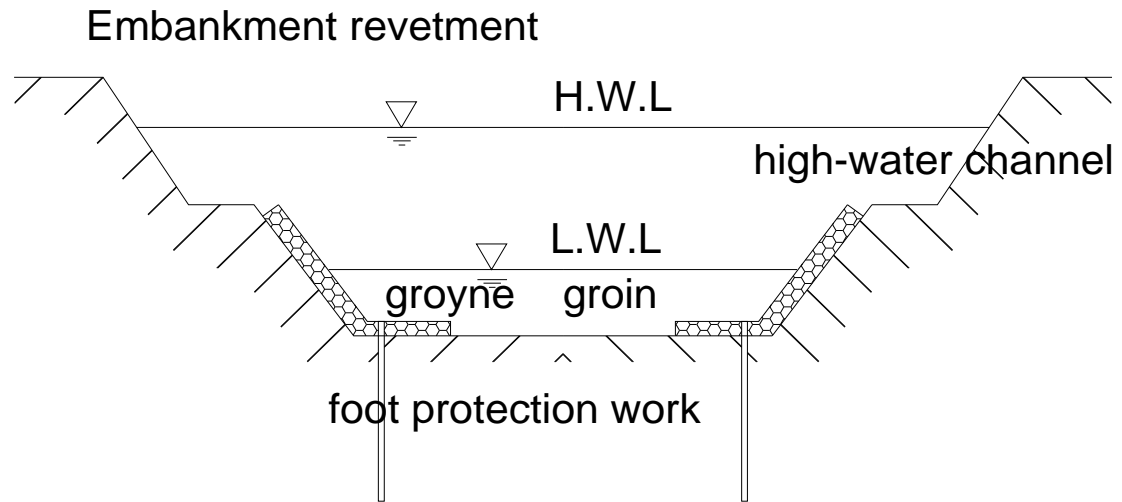
(662)steel sheet pile



U type

(663)bank protection

(663)bank protection



(664)Blast furnace cement

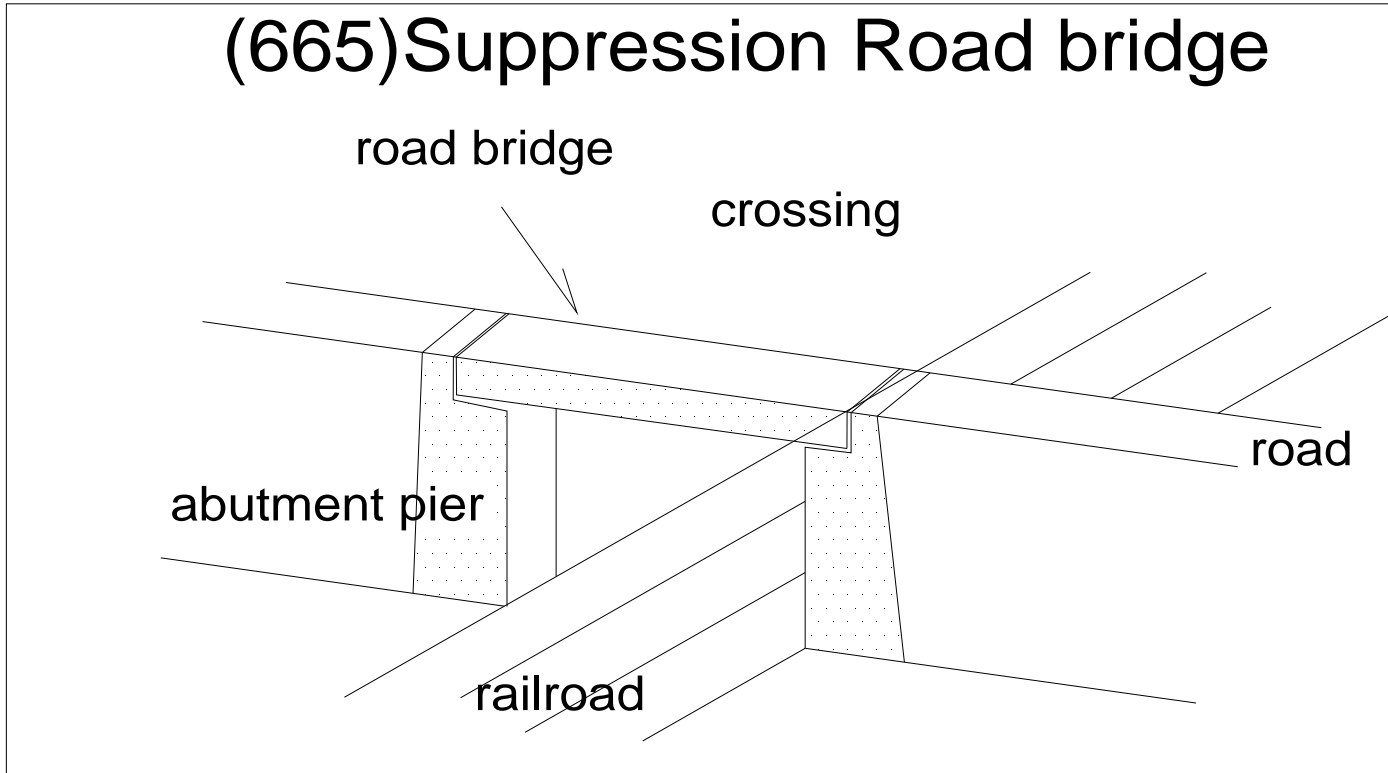
(664)Blast furnace cement

	Content
A type	below 30
B type	30-60
C type	60-70

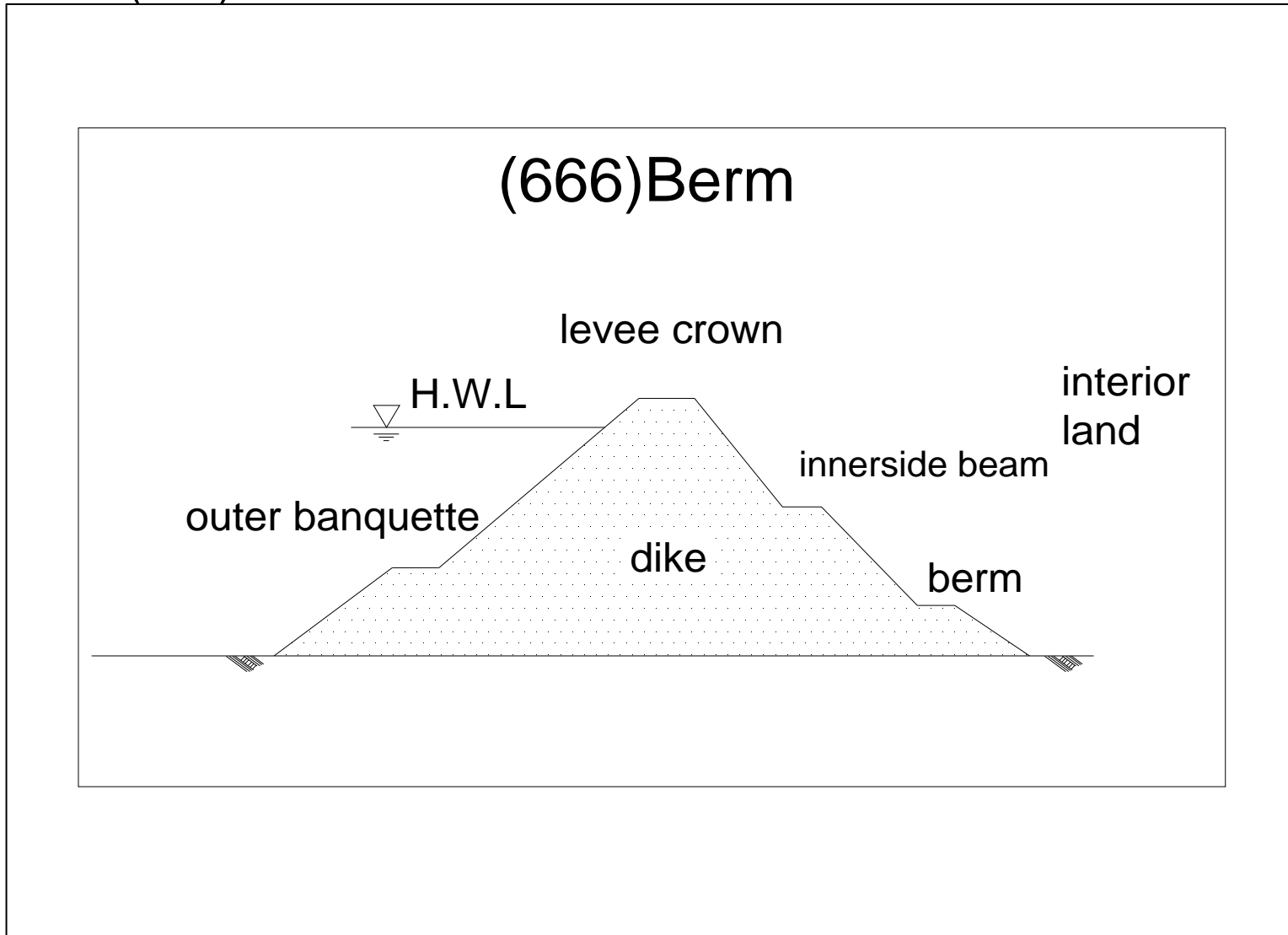
Blast furnace slag
long term strength
Chemical resistance
Low heat of hydration

River coastal works
Alkali-aggregate reaction countermeasures
Suppression

(665) Suppression Road bridge



(666)Berm



(667)aggregate

(667)aggregate

Natural aggregate

River Sand

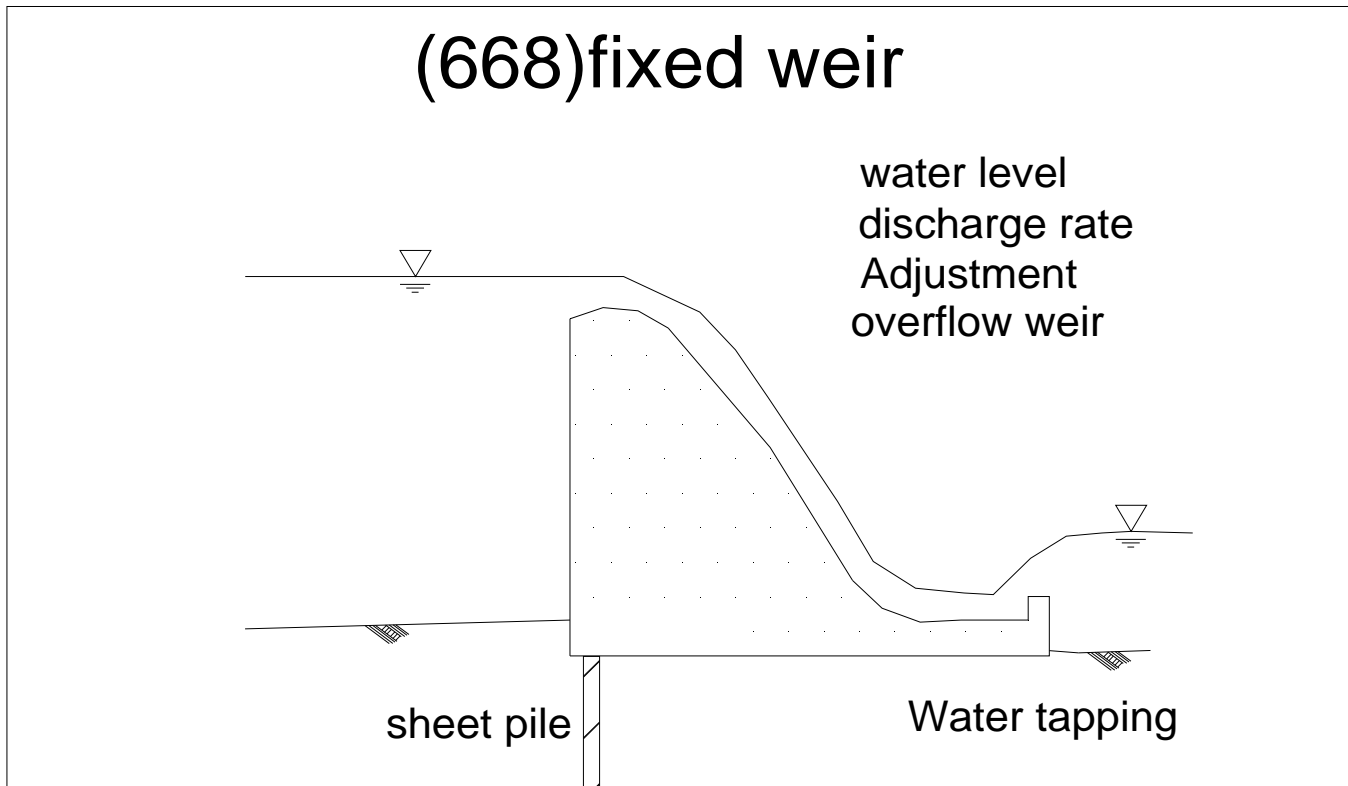
River Gravel

Artificial Gravel

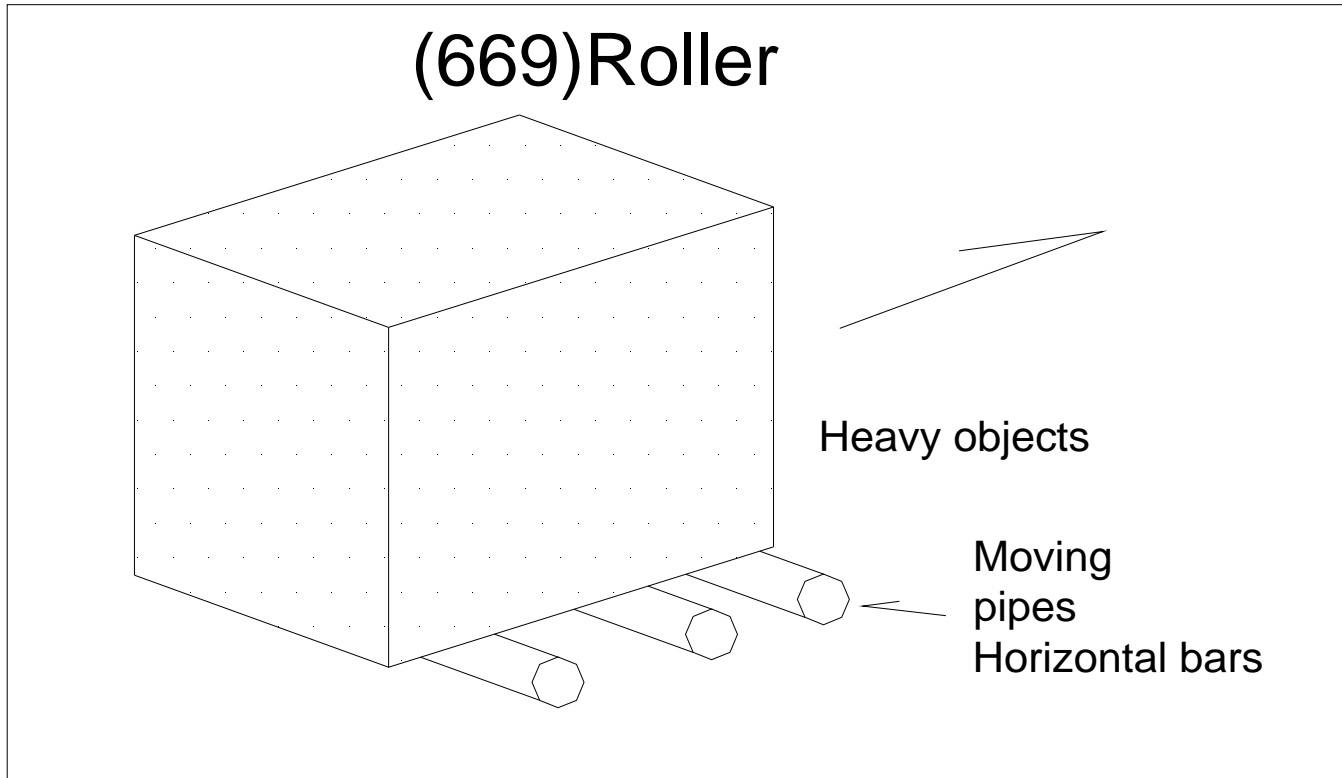
Crushed sand

crushed aggregate

(668)fixed weir



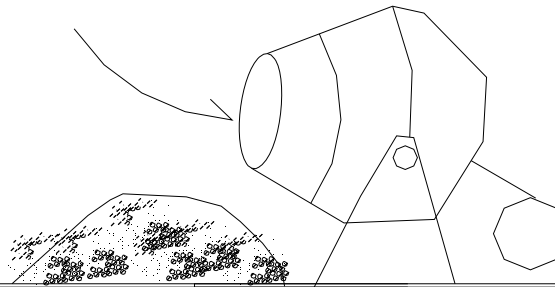
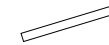
(669)Roller



(670)Concrete

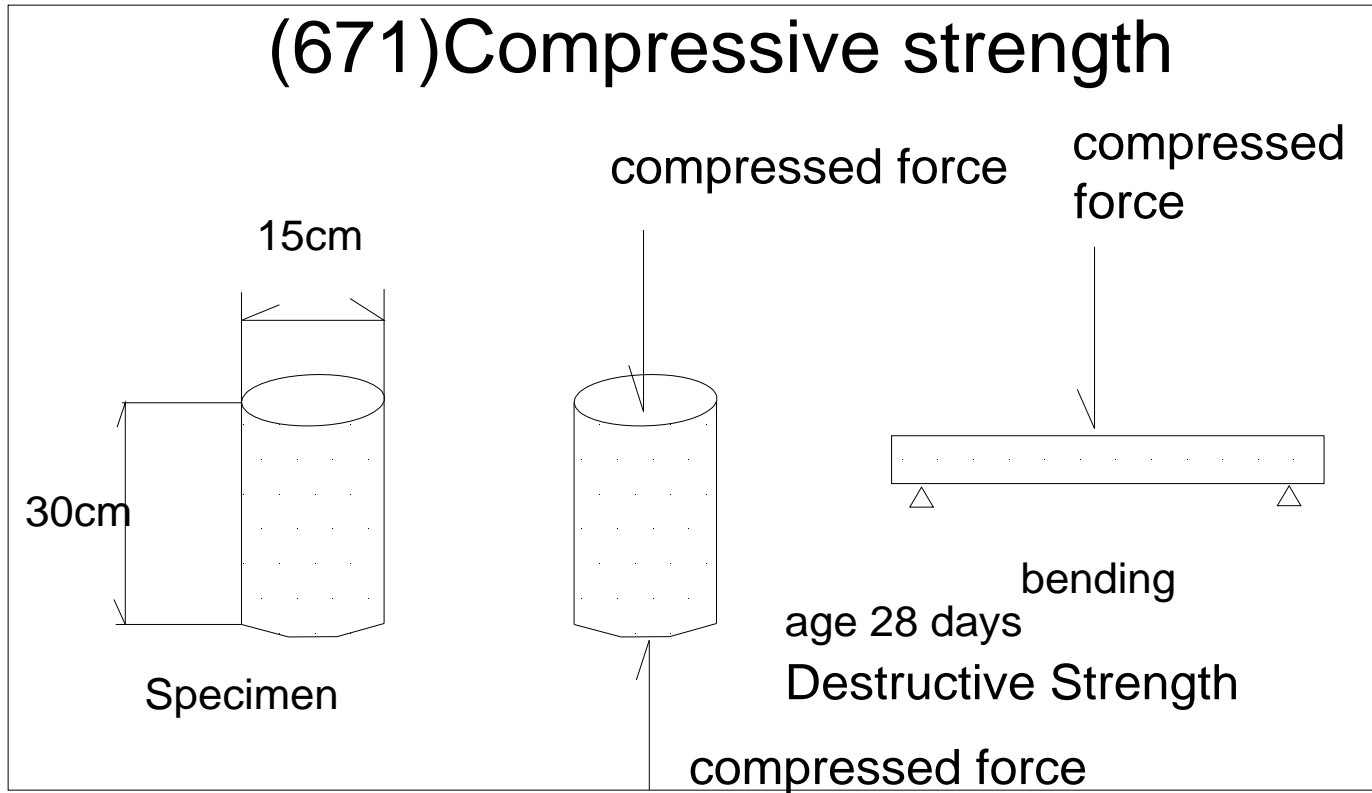
(670)Concrete

Cement+Water+Fine Aggregate+Coarse Aggregate+air+Admixture
Mixed

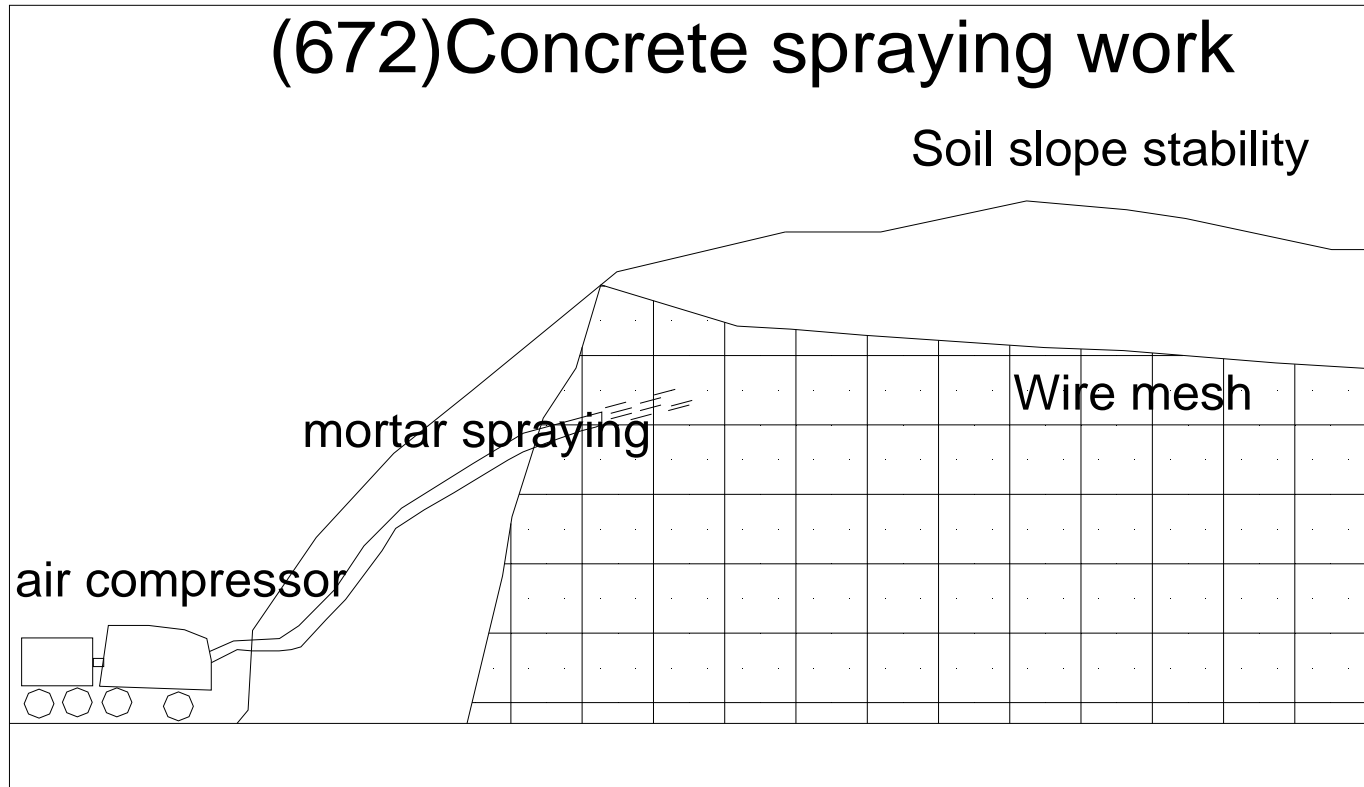


concrete
agitator

(671) Compressive strength

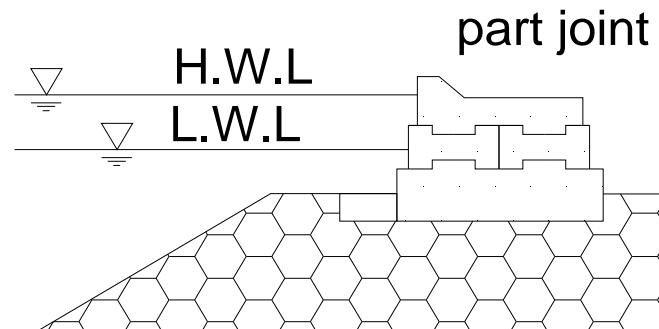


(672)Concrete spraying work

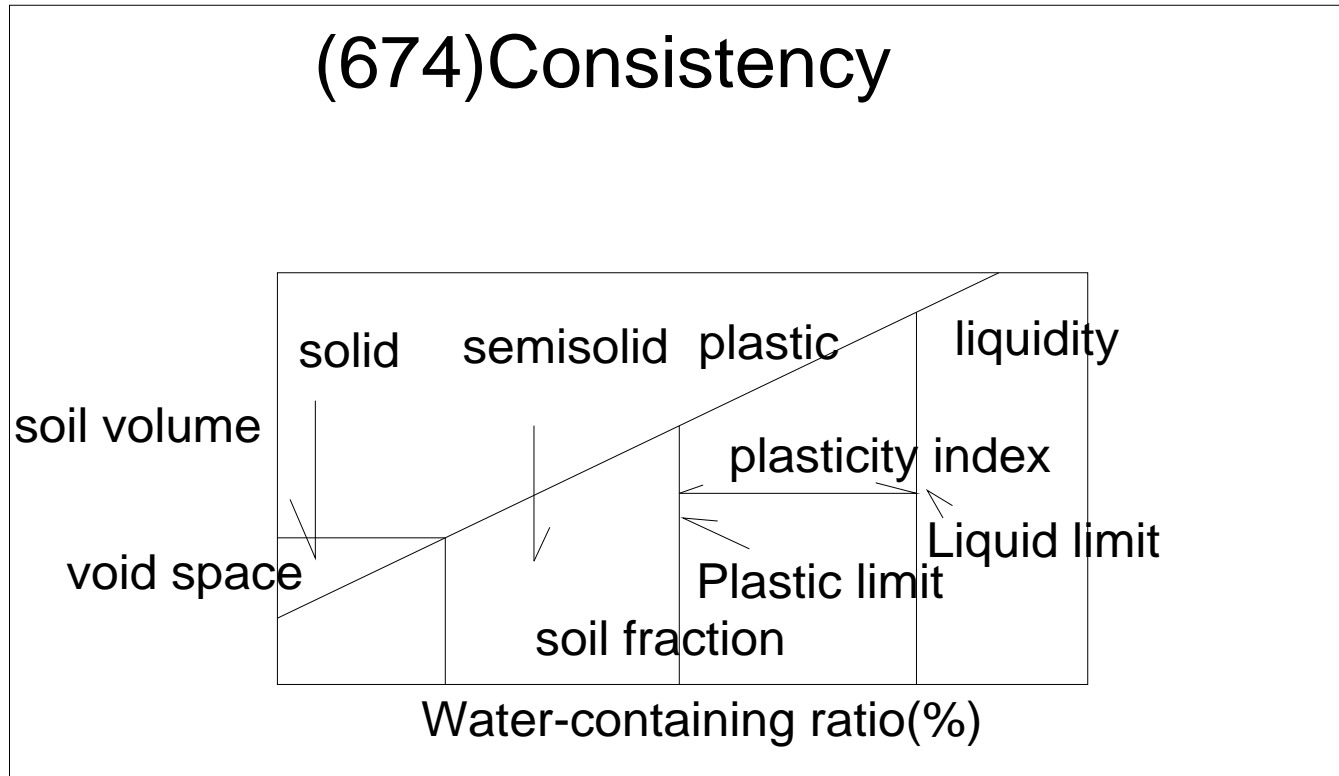


(673)Concrete block breakwater

(673)Concrete block breakwater

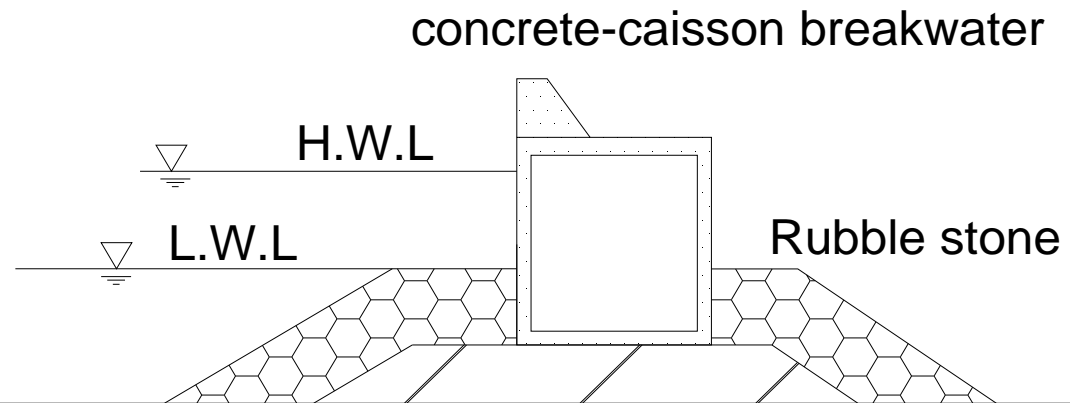


(674)Consistency

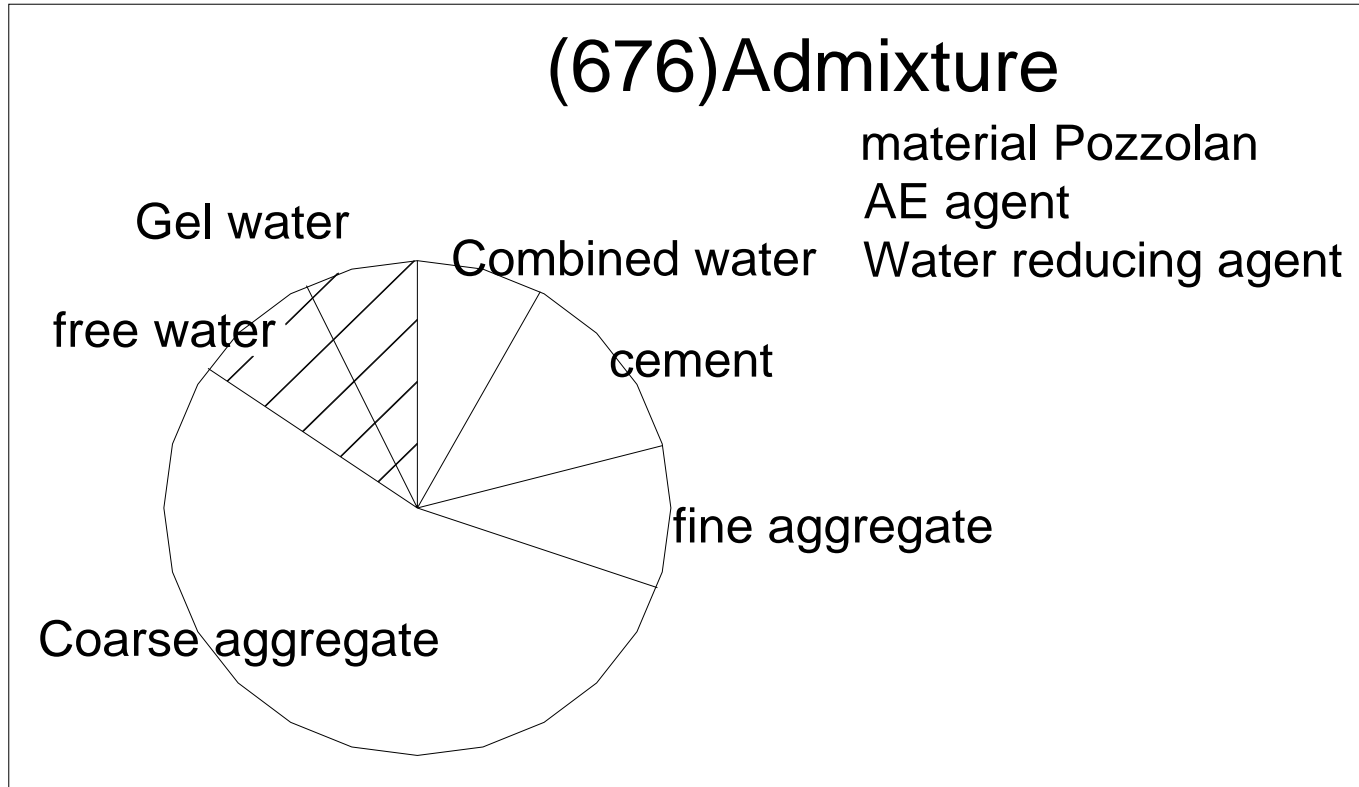


(675)composite breakwater

(675)composite breakwater

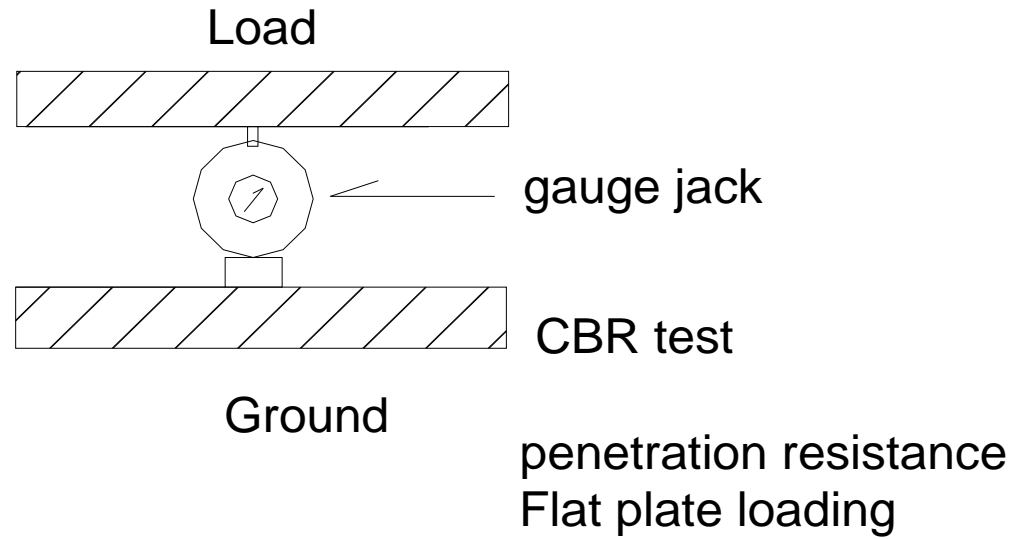


(676)Admixture



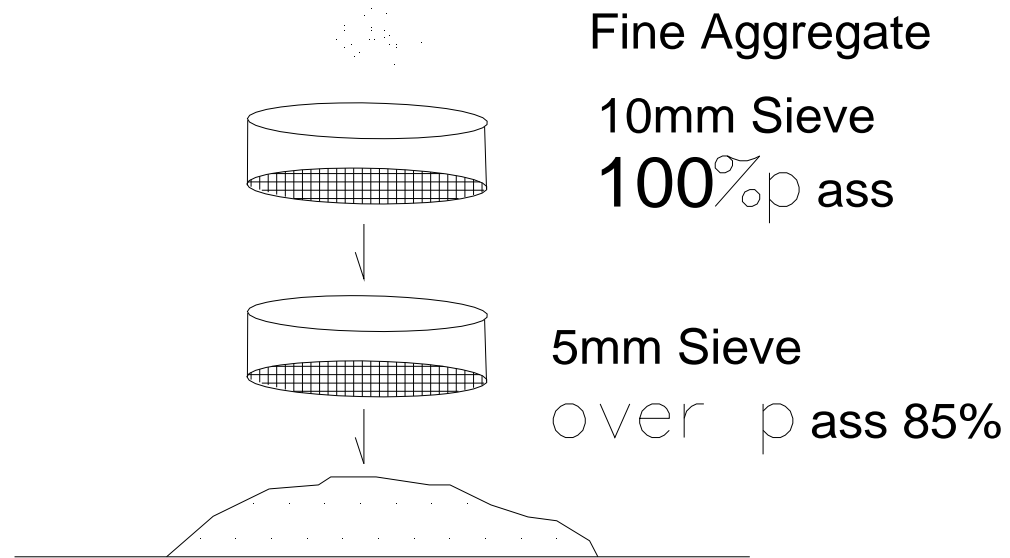
(677)Loading test

(677)Loading test

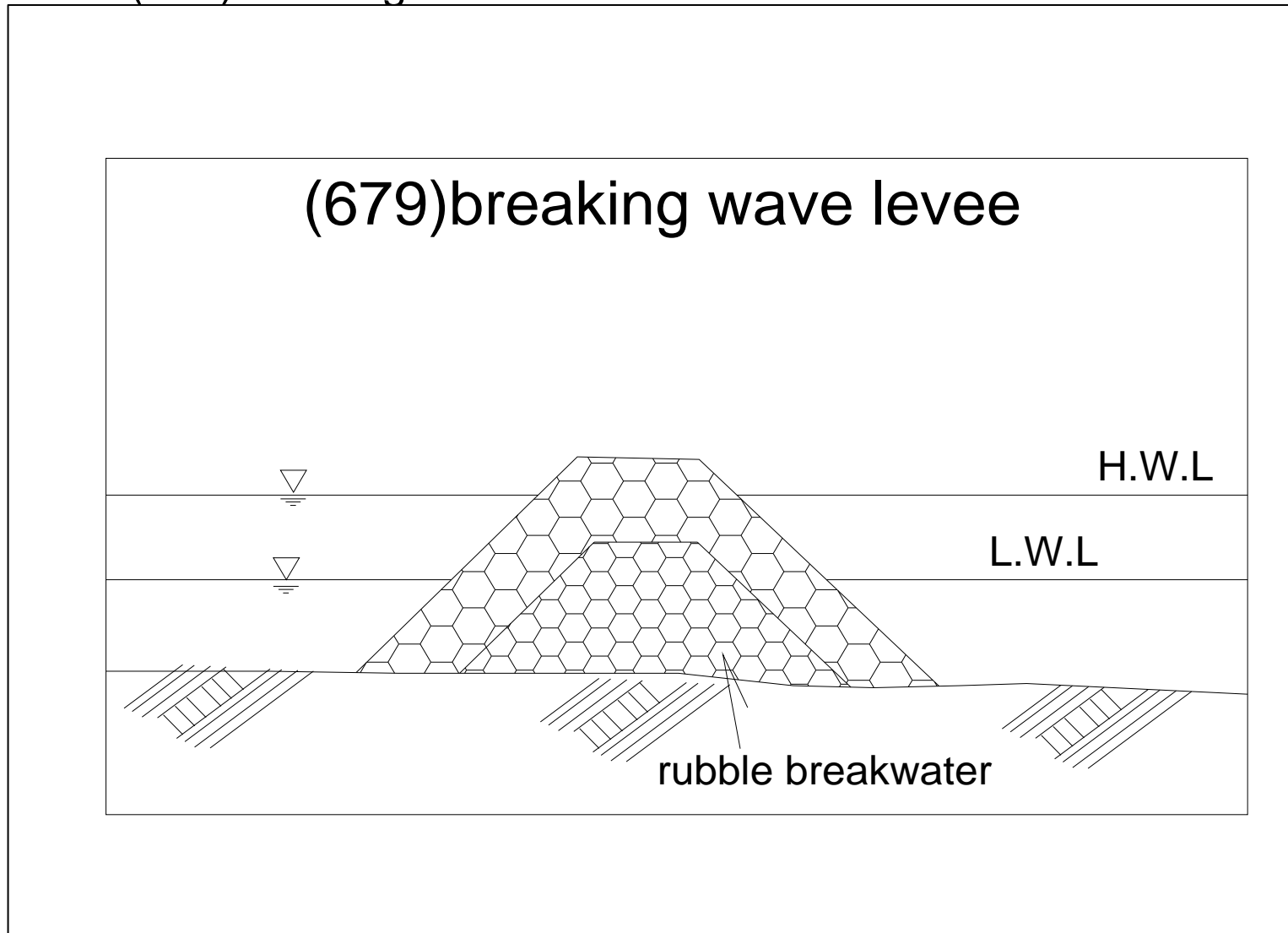


(678)Fine Aggregate

(678)Fine Aggregate

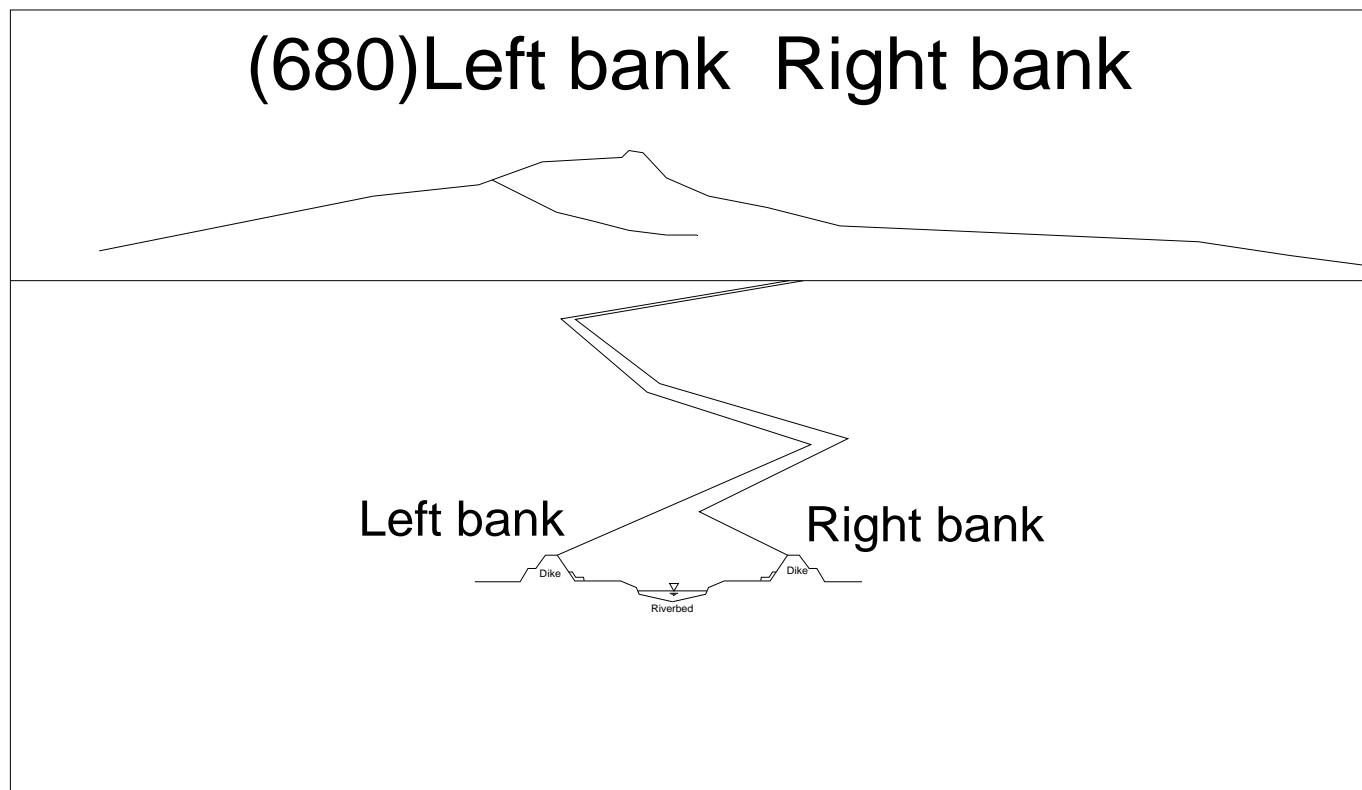


(679)breaking wave levee



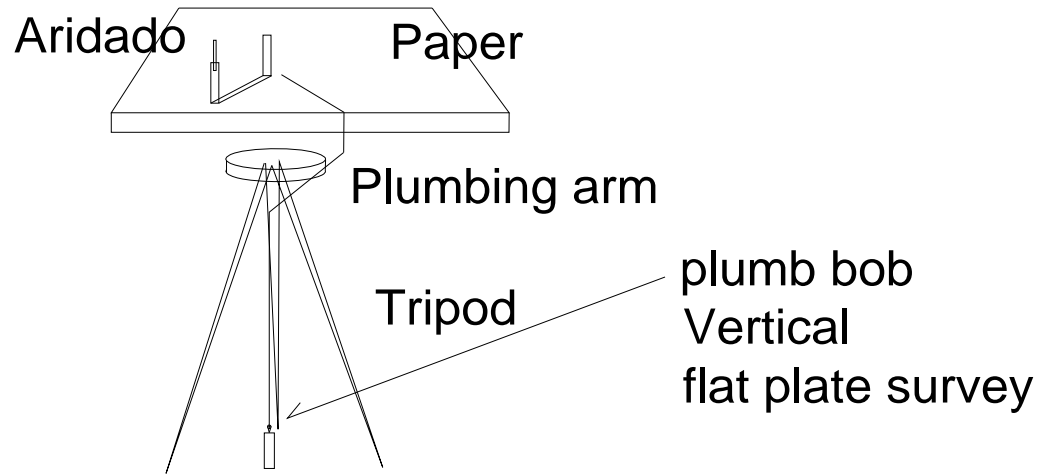
(680)Left bank Right bank

(680)Left bank Right bank



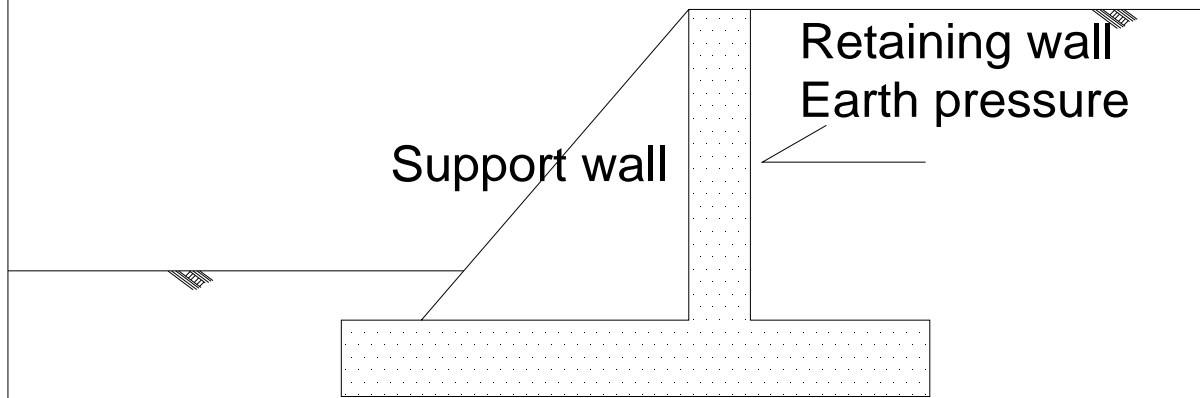
(681)plumb bob

(681)plumb bob



(682)butressed type retaining wall

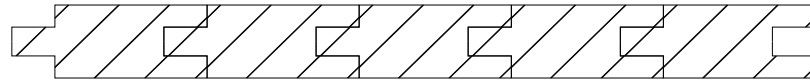
(682)butressed type retaining wall



(683)rabbet joint

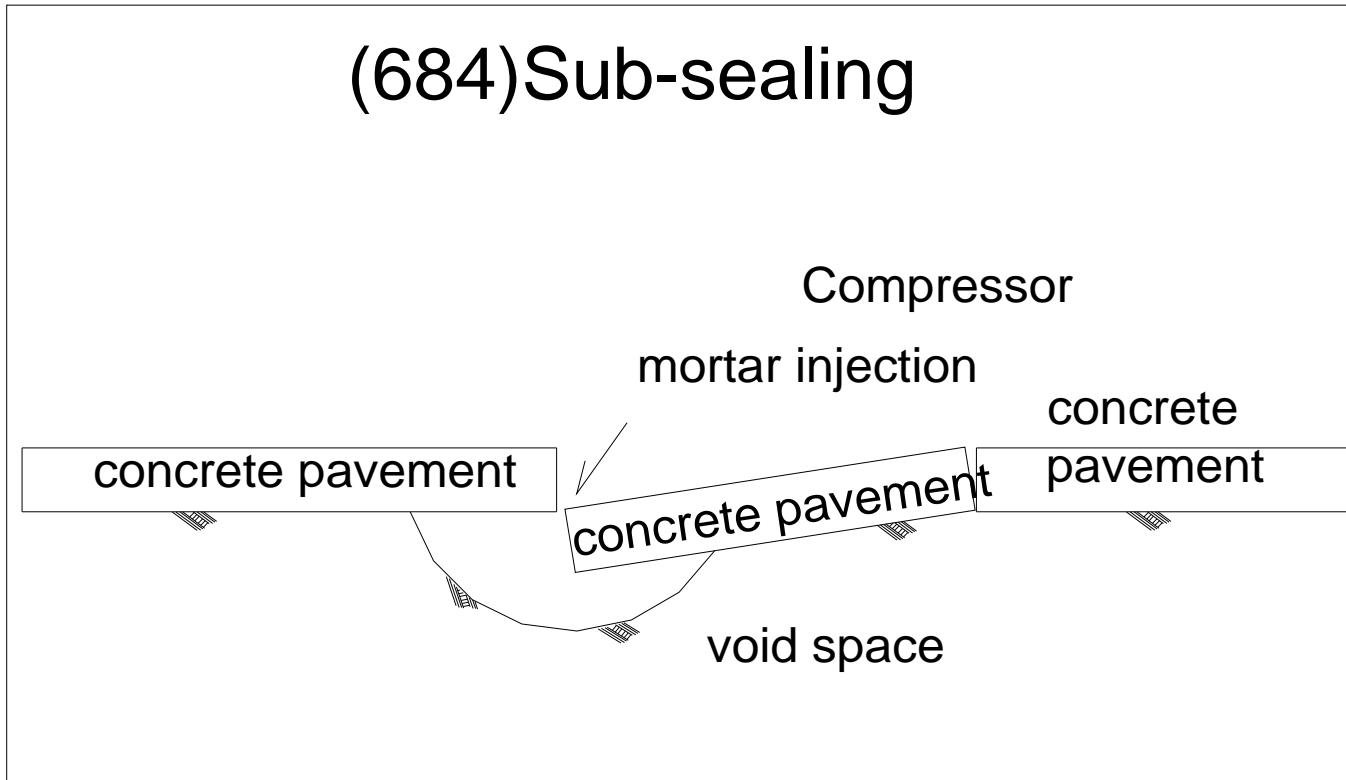
(683)rabbet joint

Floor board

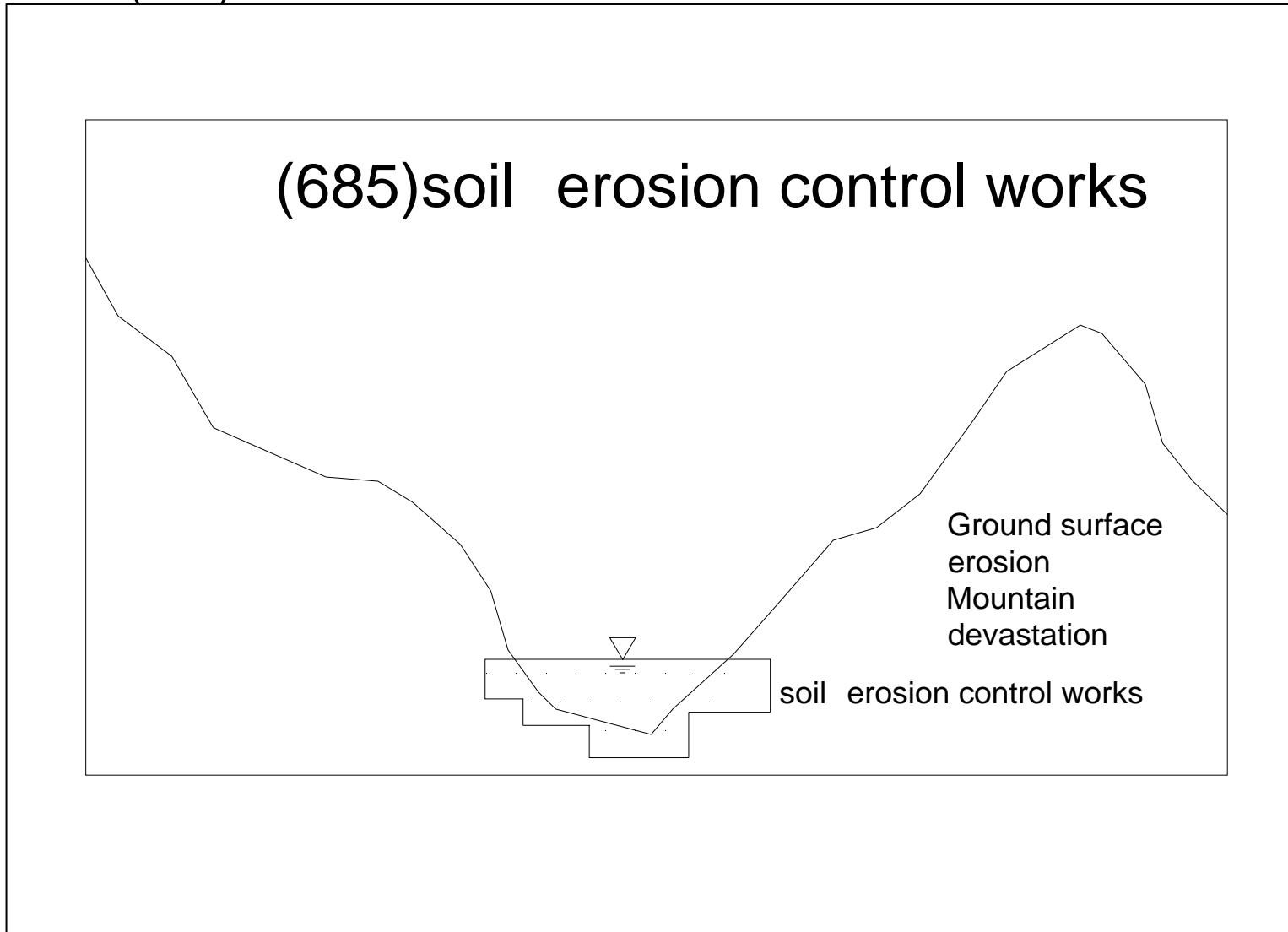


tongue and groovewooden sheet pile

(684)Sub-sealing

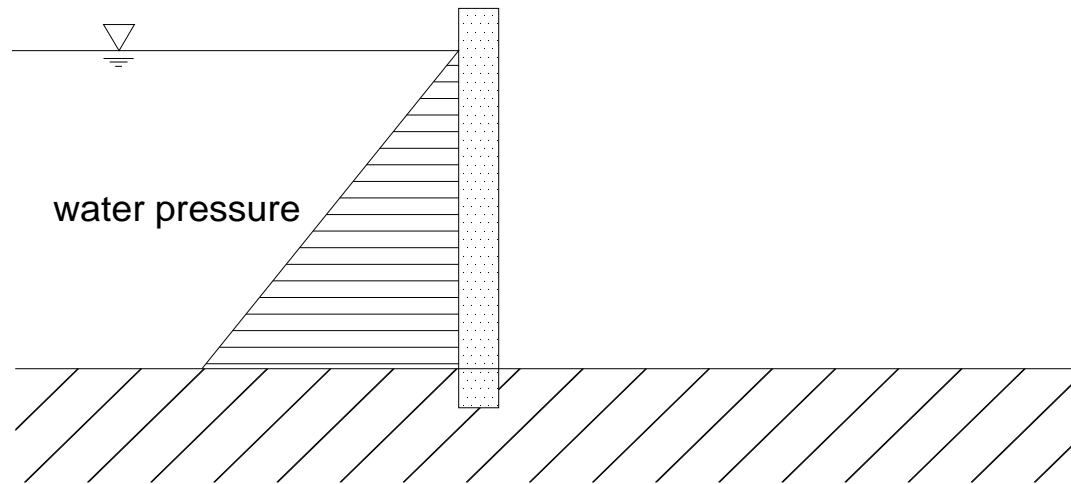


(685)soil erosion control works

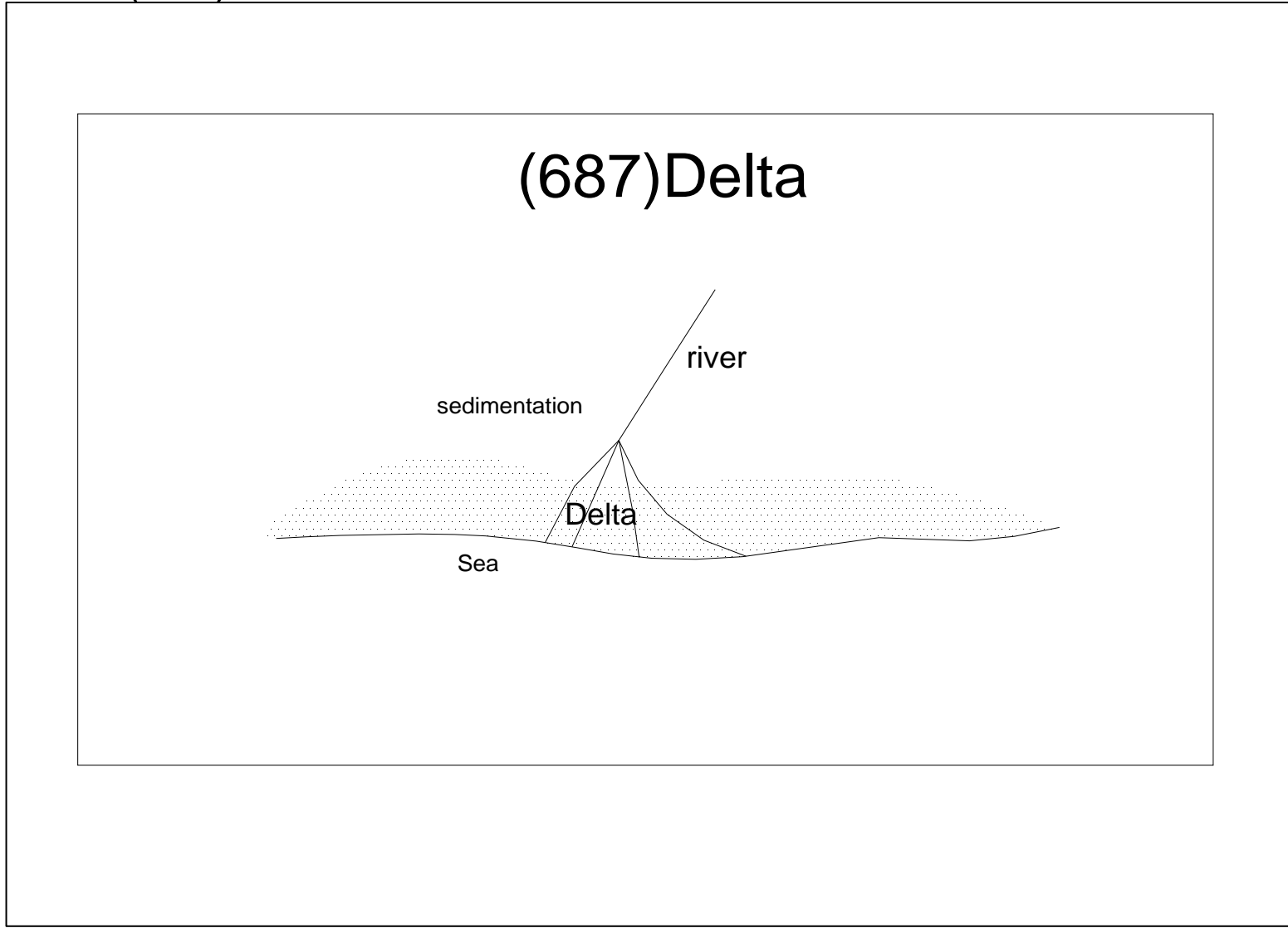


(686)uniformly varying load

(686)uniformly varying load

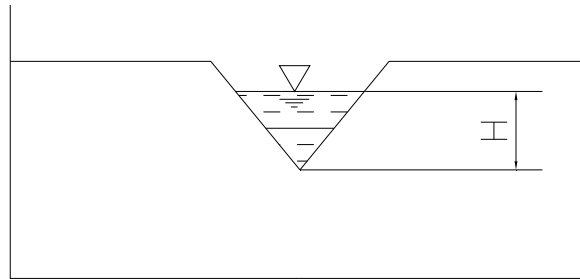


(687)Delta



(688) Triangular weir

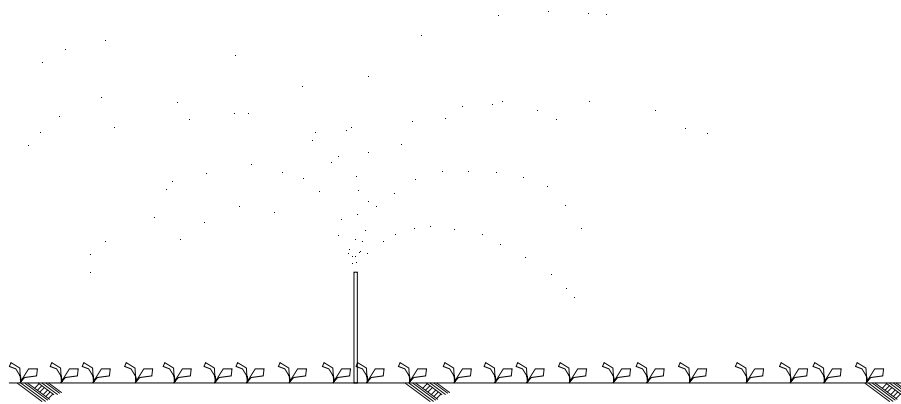
(688) Triangular weir



overflow section
cross-sectional area of flow
discharge rate

(689)sprinkler irrigation

(689)sprinkler irrigation

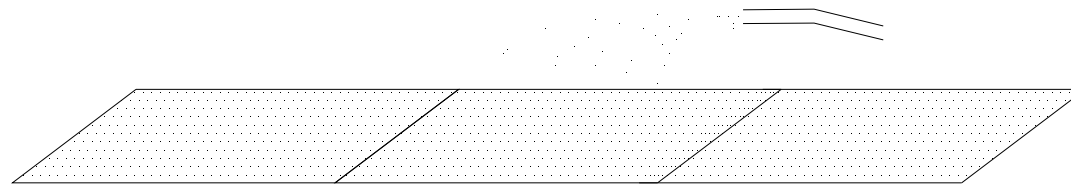


(690)sprinkler curing

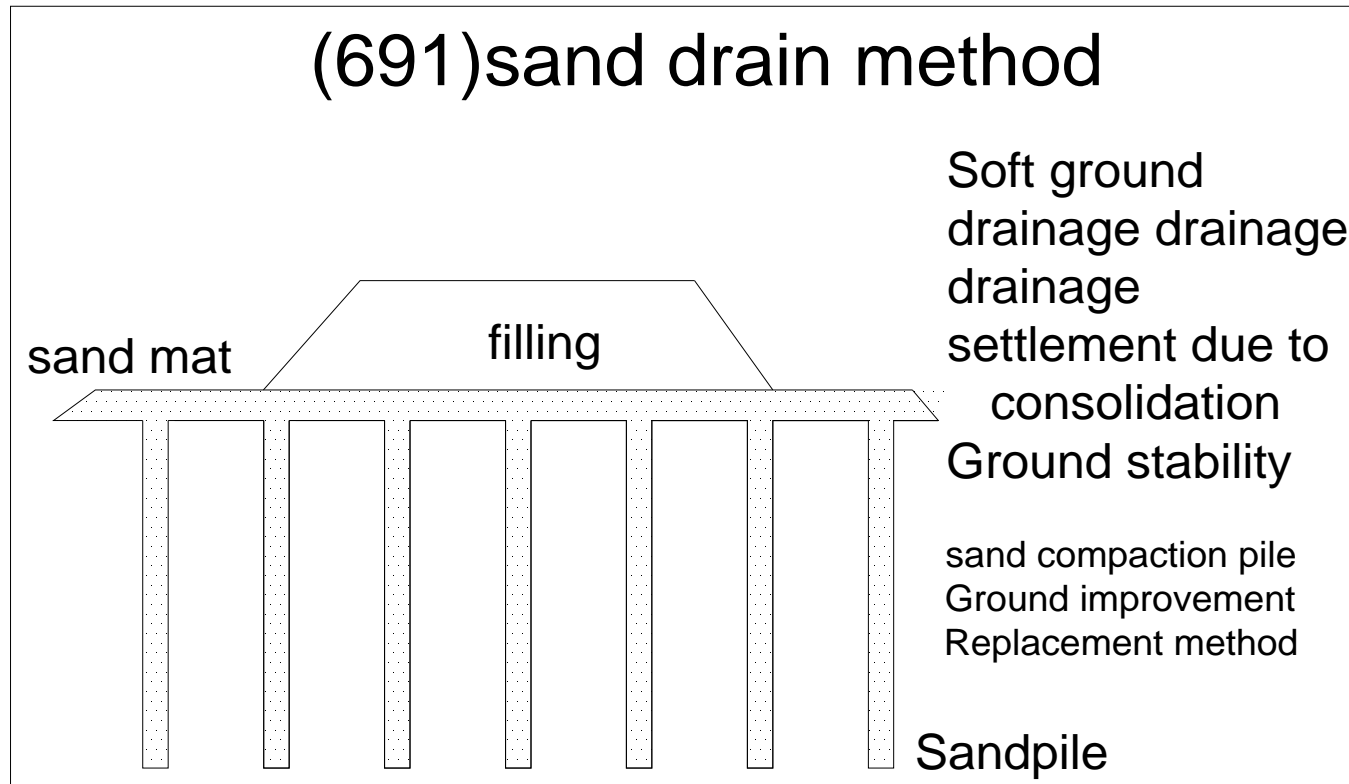
(690)sprinkler curing

Concrete placement
Wet curing

Watering

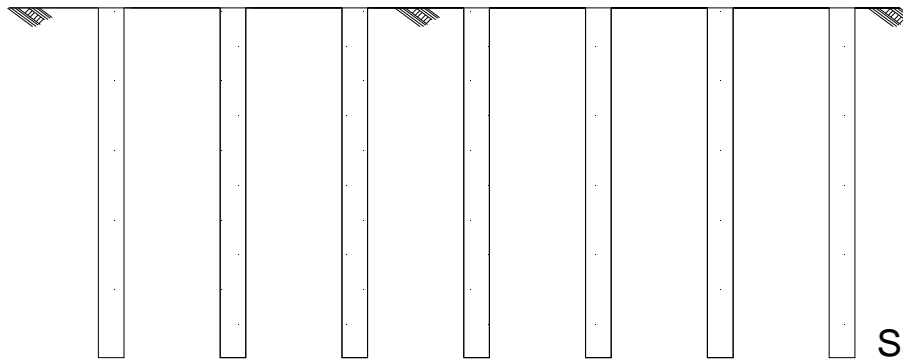


(691)sand drain method



(692)Sand pile

(692)Sand pile



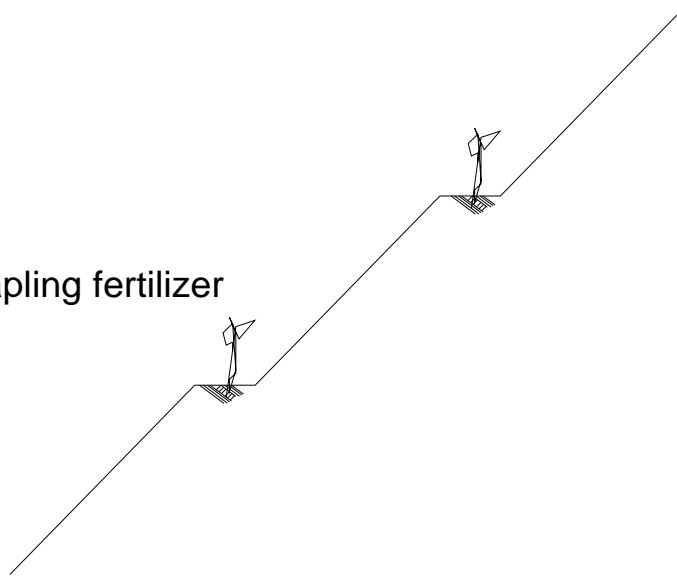
sand compaction pile
Ground improvement
Replacement method

Sandpile

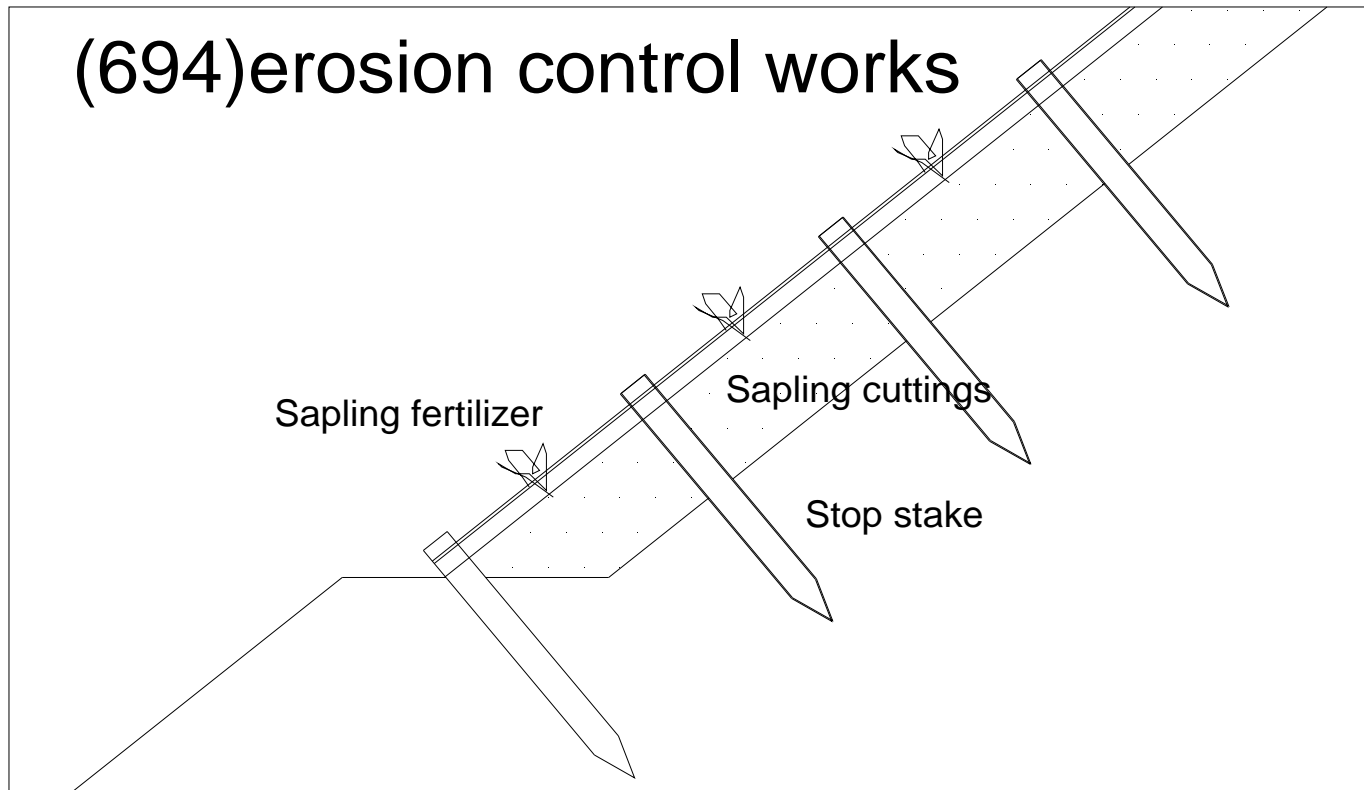
(693)soil erosion control works

(693)soil erosion control works

Sapling fertilizer



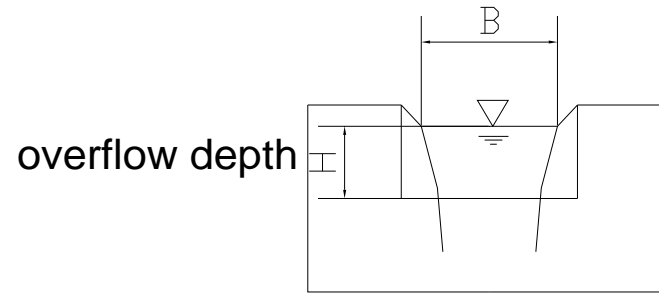
(694)erosion control works



(695) Square weir

(695) Square weir

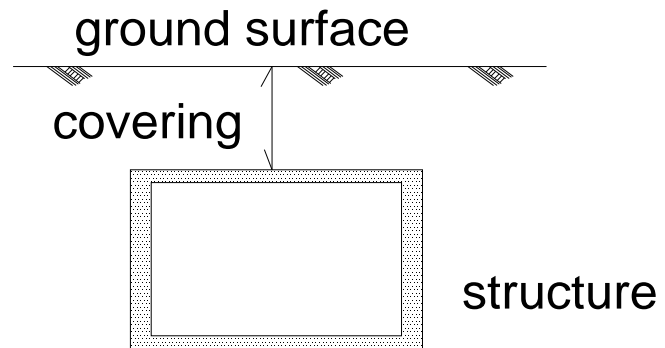
water cross section



Square weir

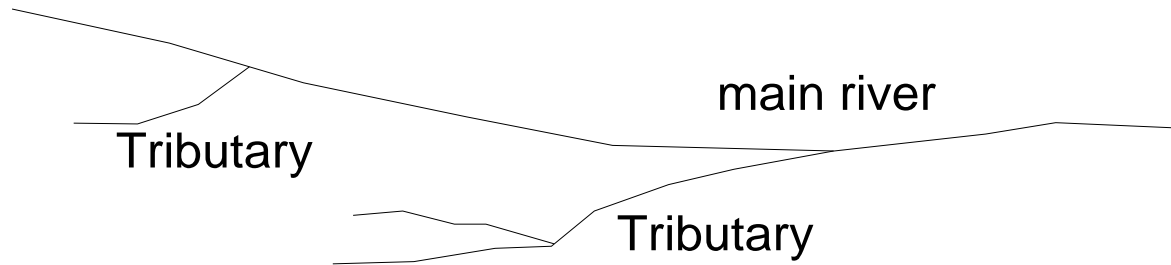
(696)soil cover

(696)soil cover

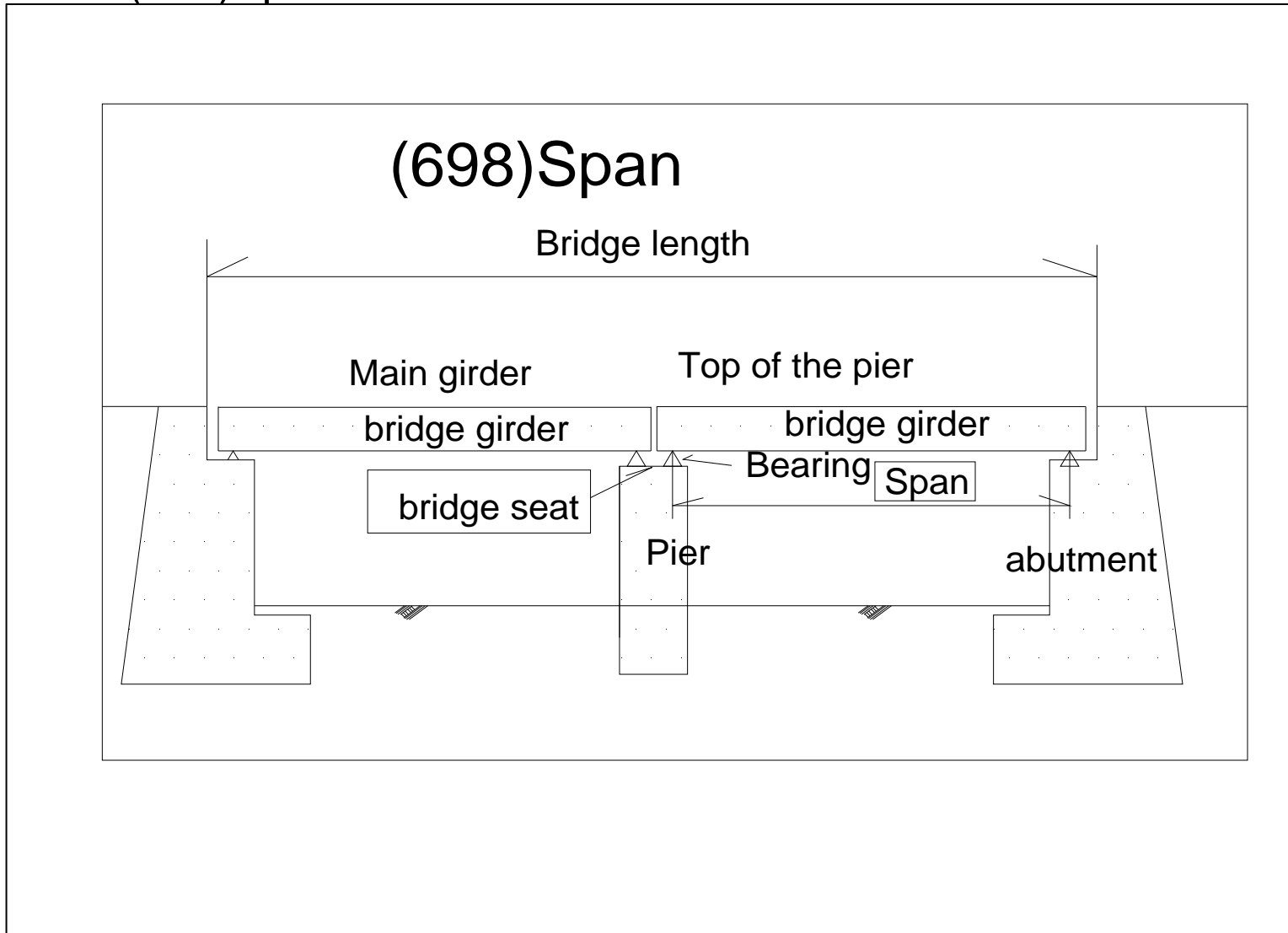


(697)Tributary

(697)Tributary

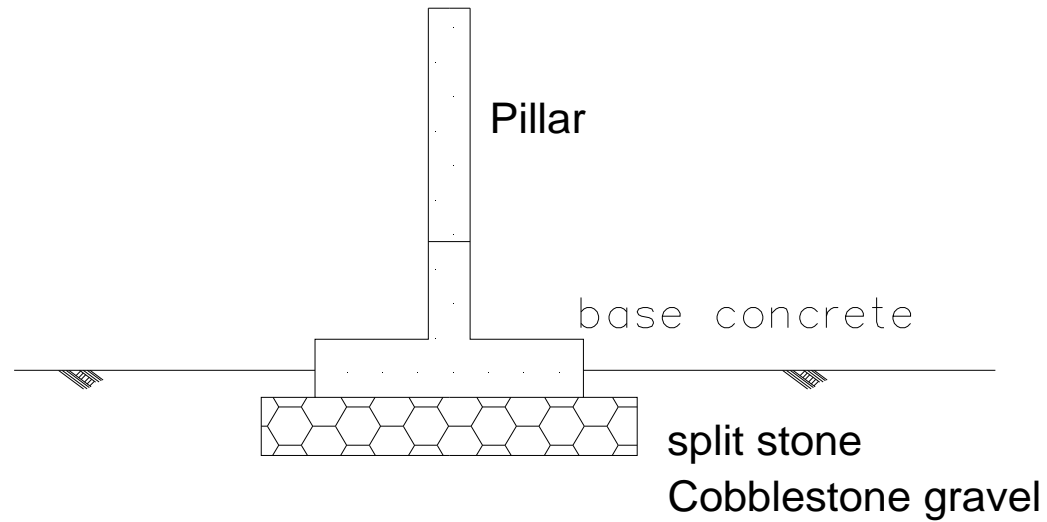


(698)Span



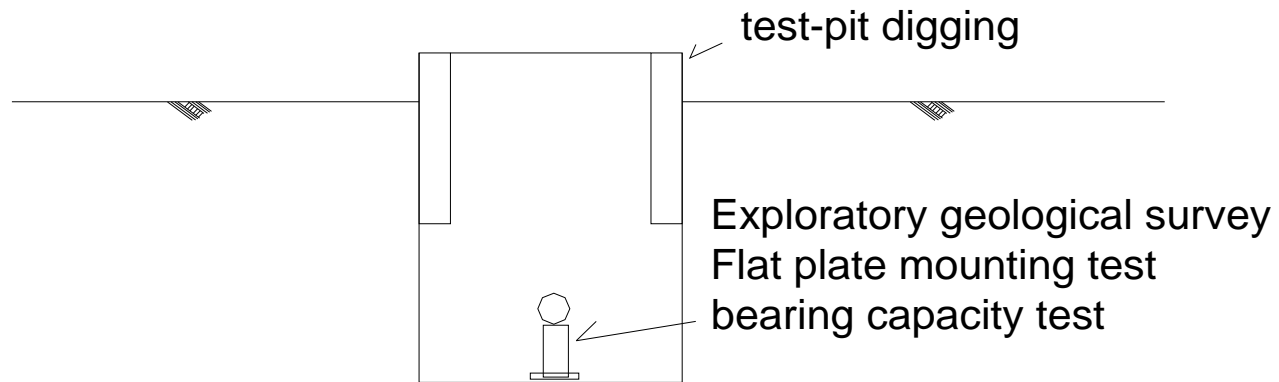
(699)housing foundation concrete

(699)housing foundation concrete

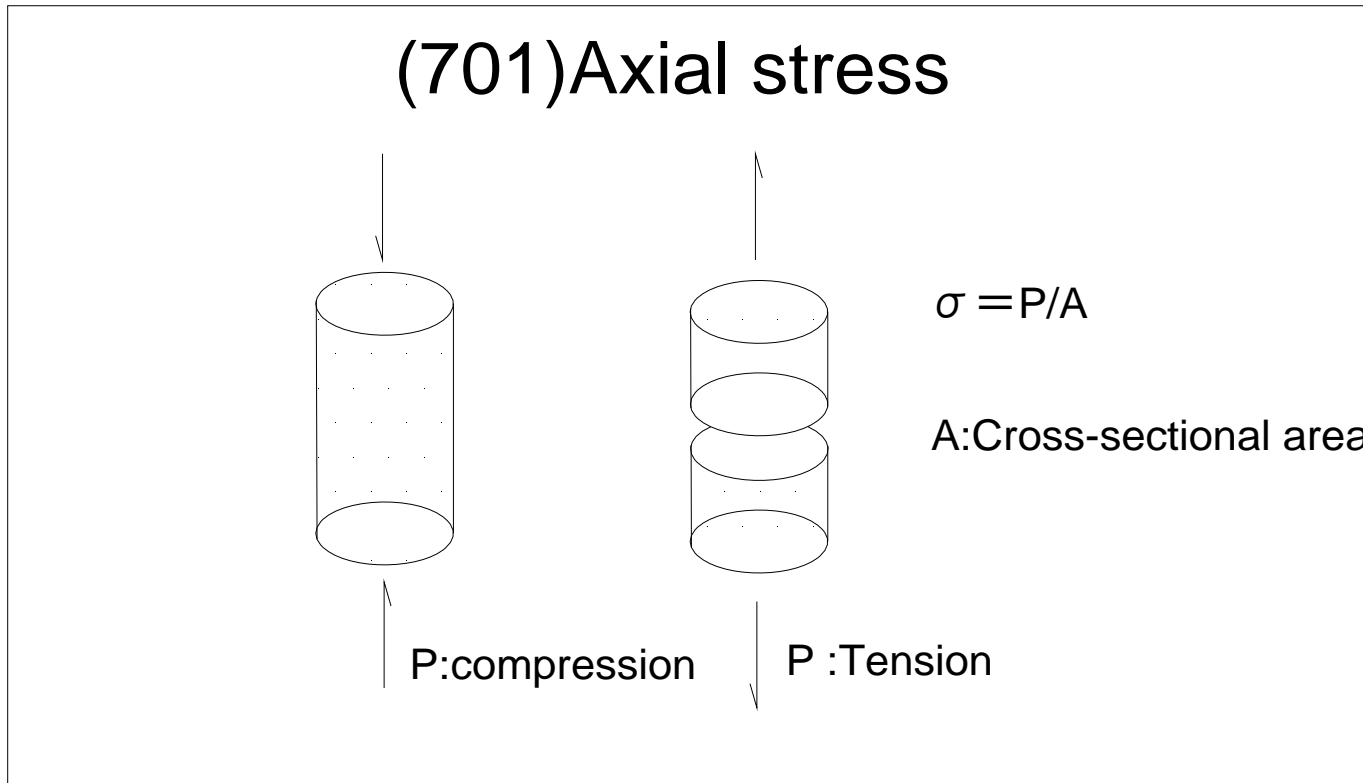


(700)test-pit digging

(700)test-pit digging

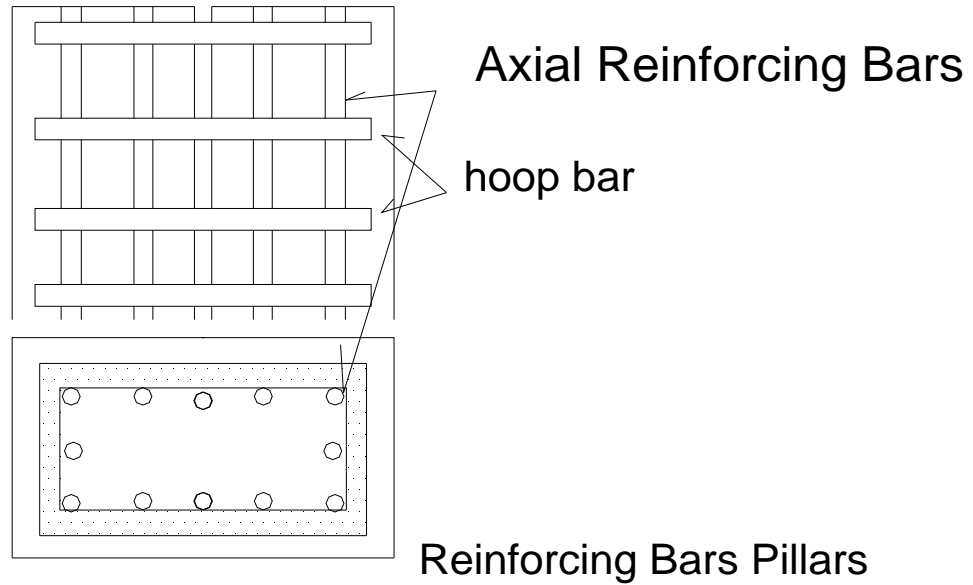


(701)Axial stress



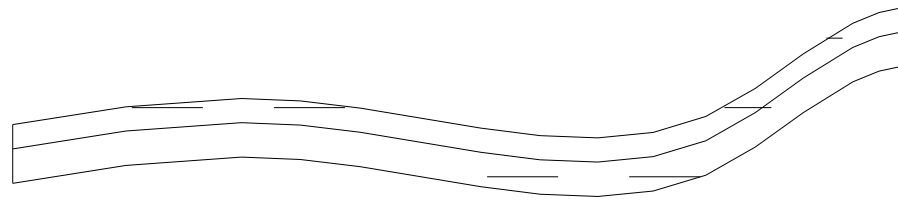
(702)Axial Reinforcing Bars

(702)Axial Reinforcing Bars



(703)Flexible curve ruler

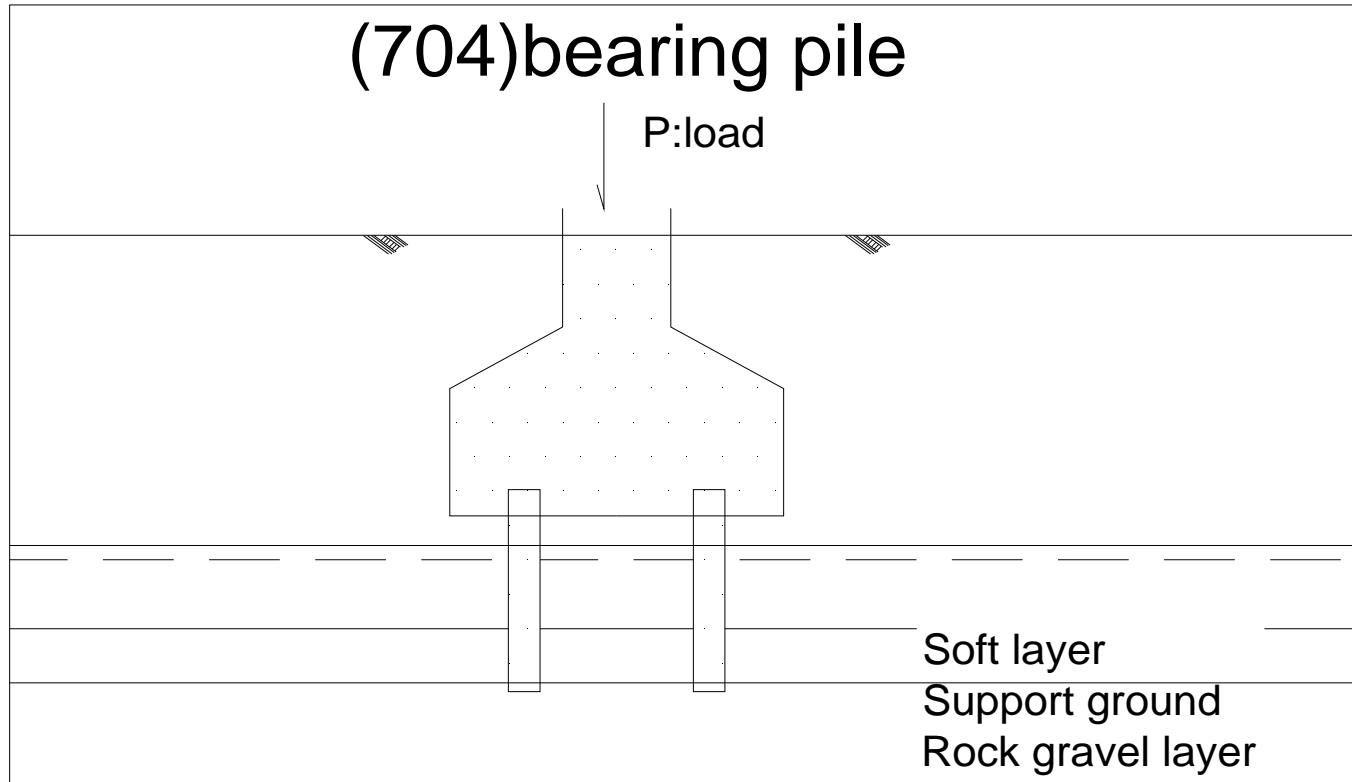
(703)Flexible curve ruler



plastic lead

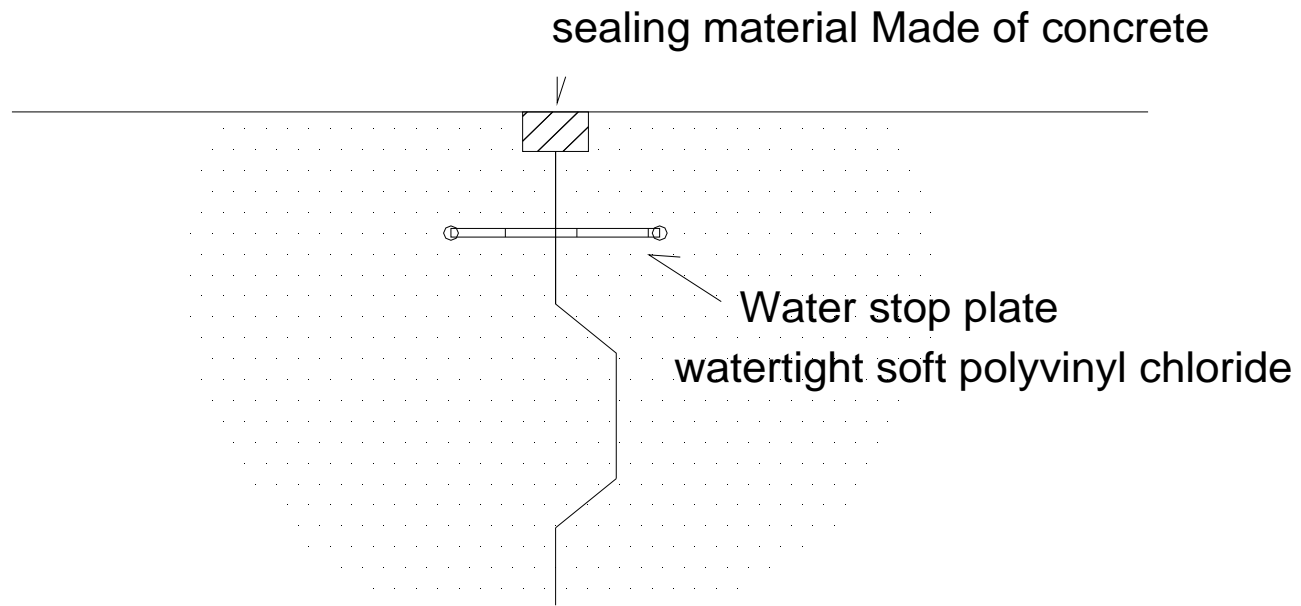
lead curve

(704)bearing pile

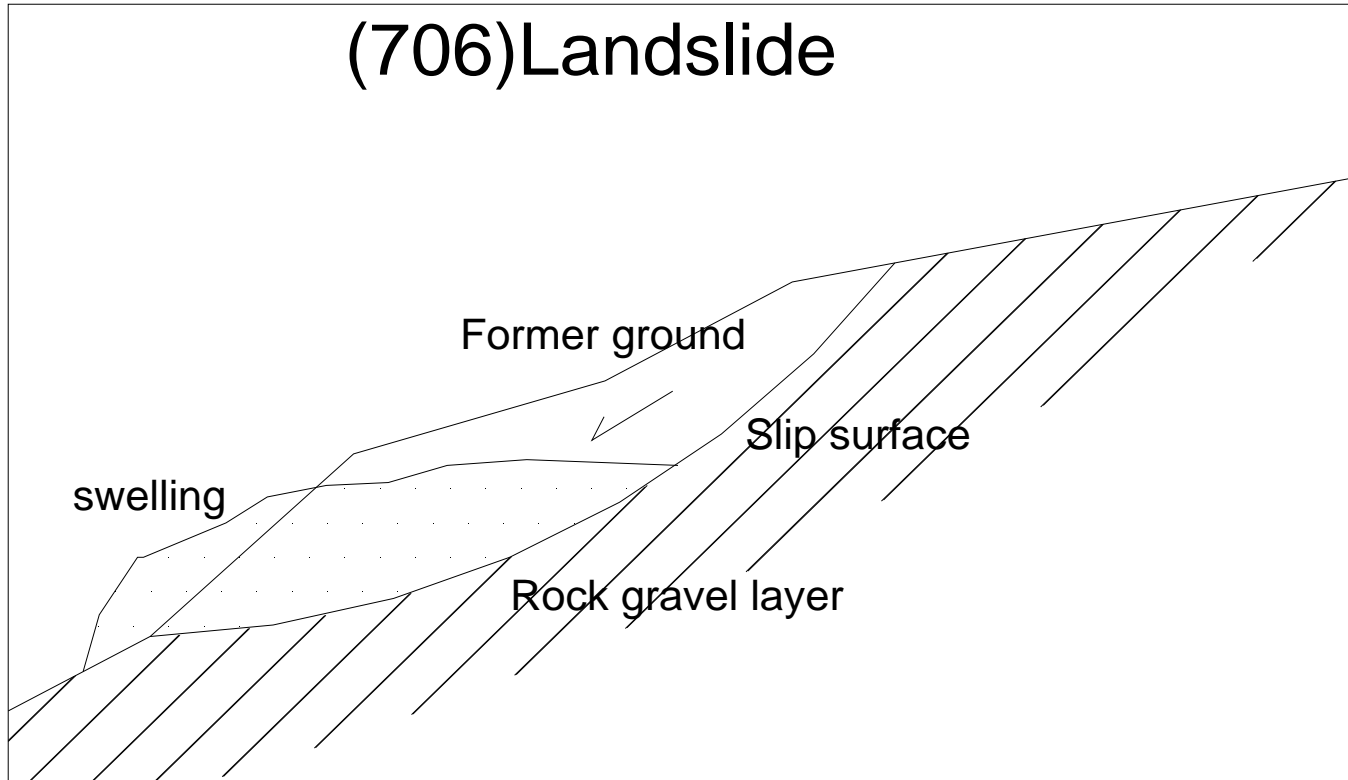


(705)Water stop

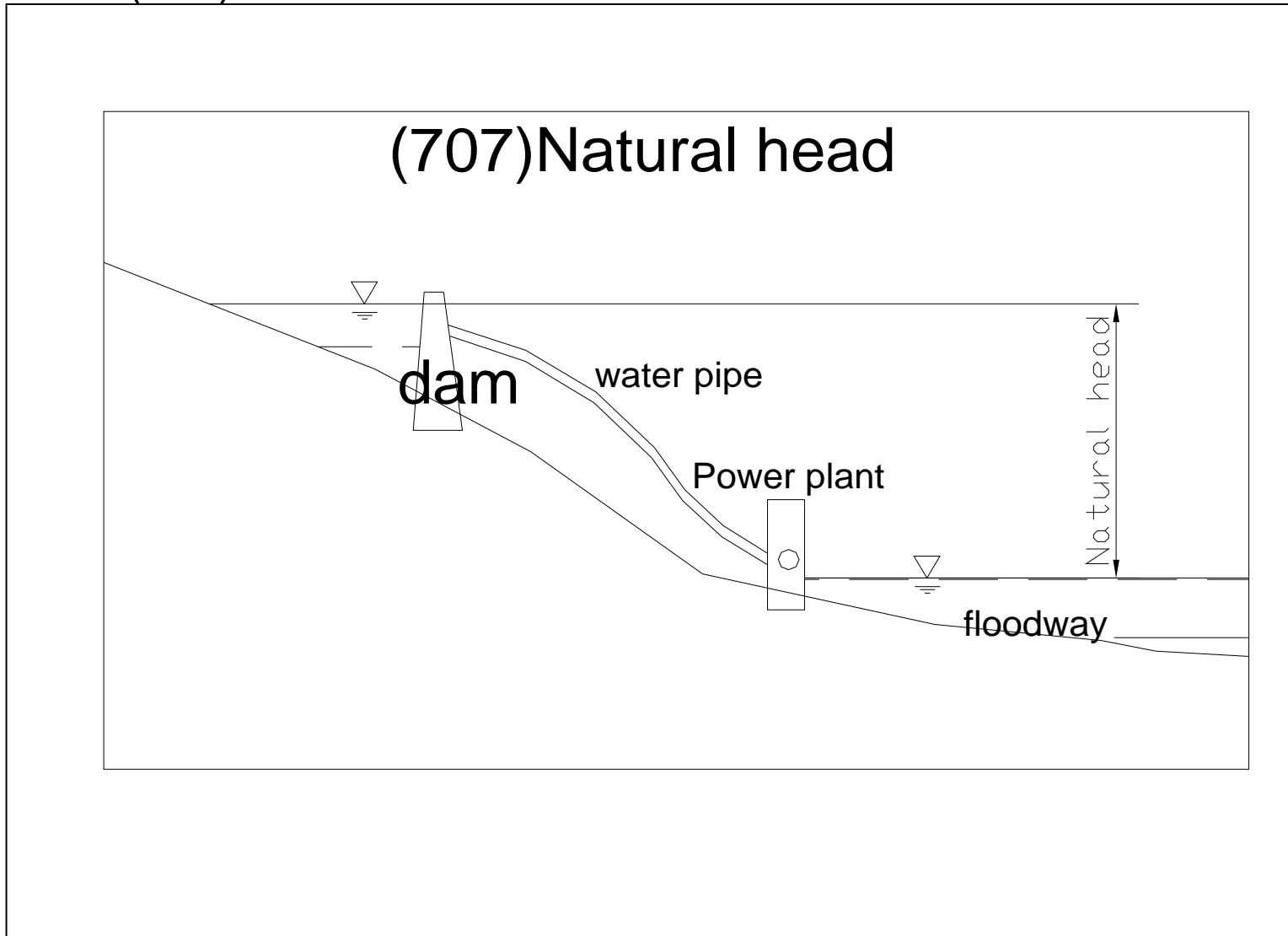
(705)Water stop



(706)Landslide

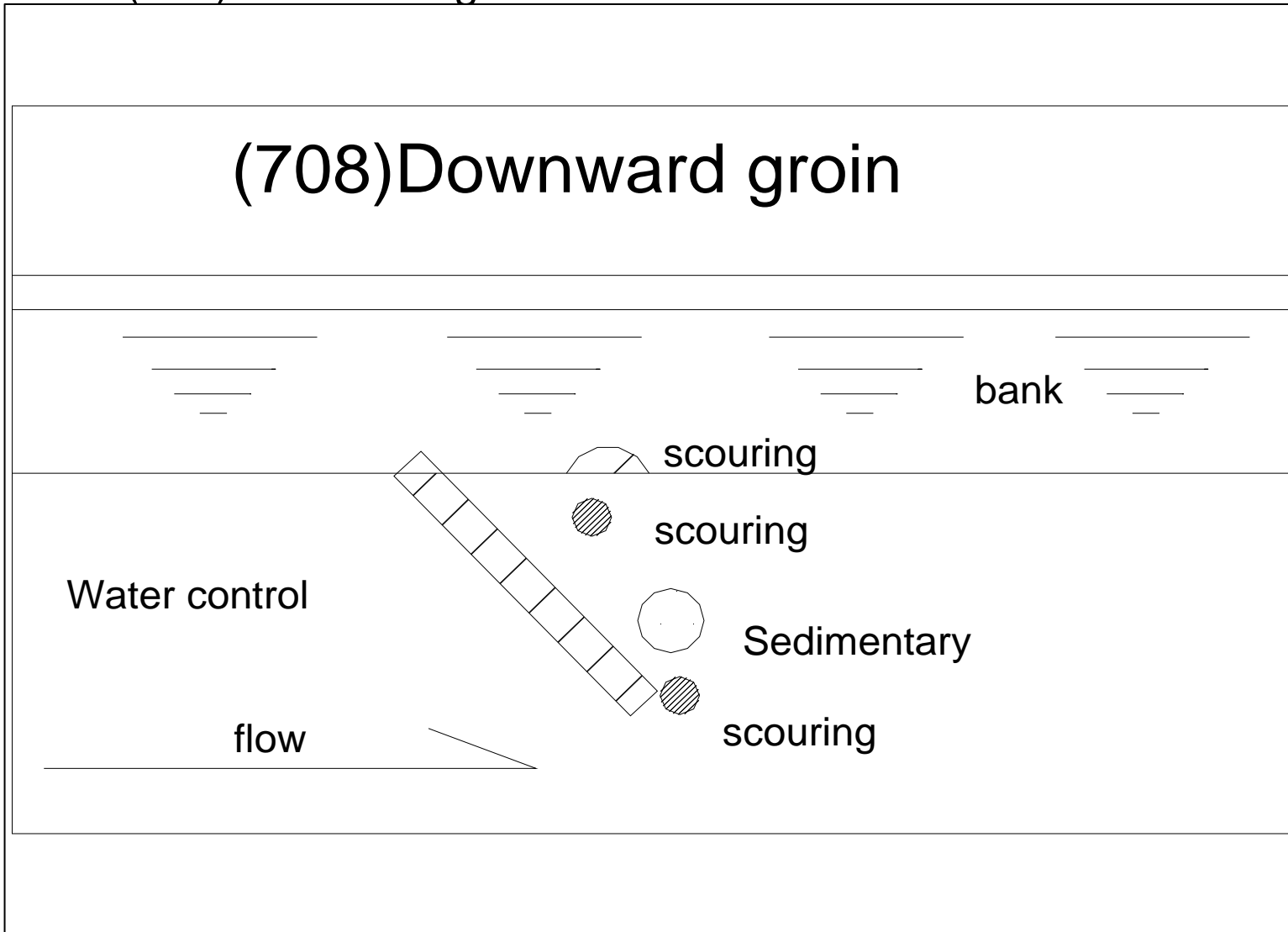


(707)Natural head



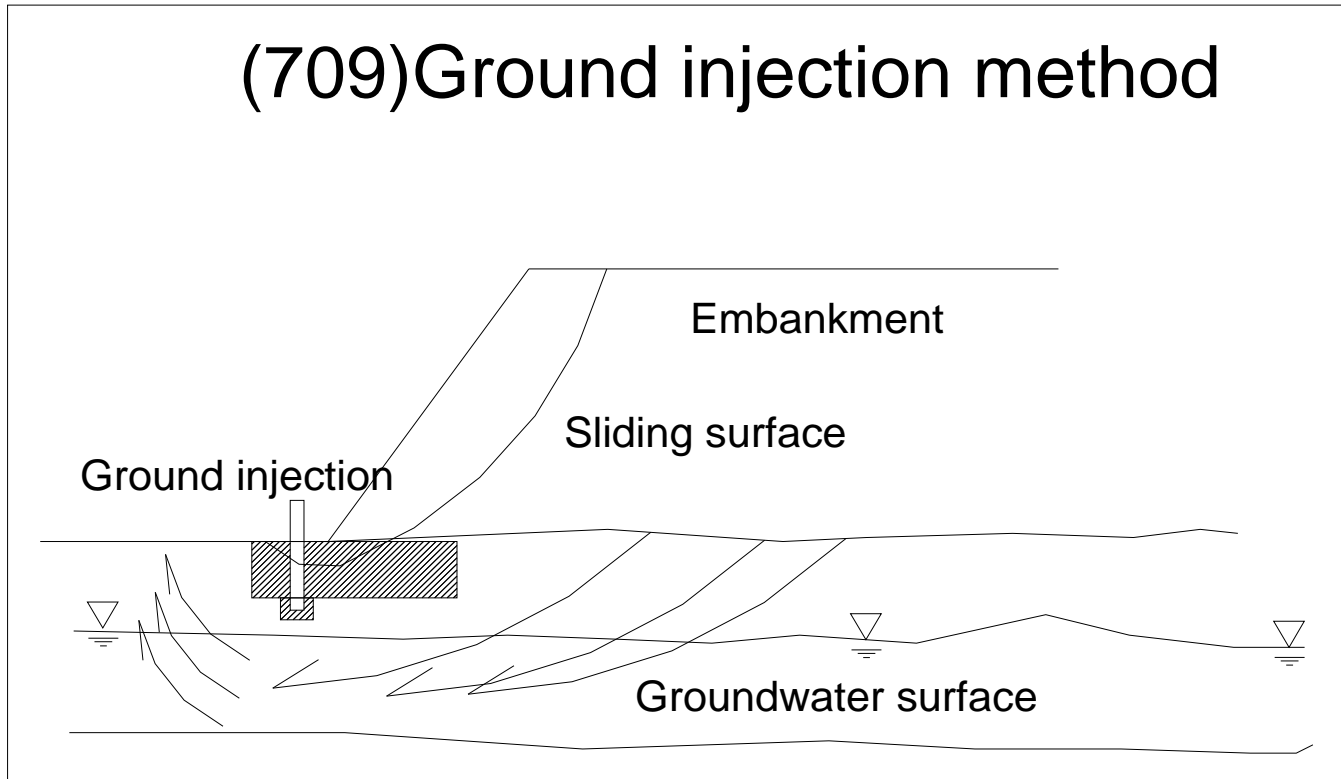
(708)Downward groin

(708)Downward groin



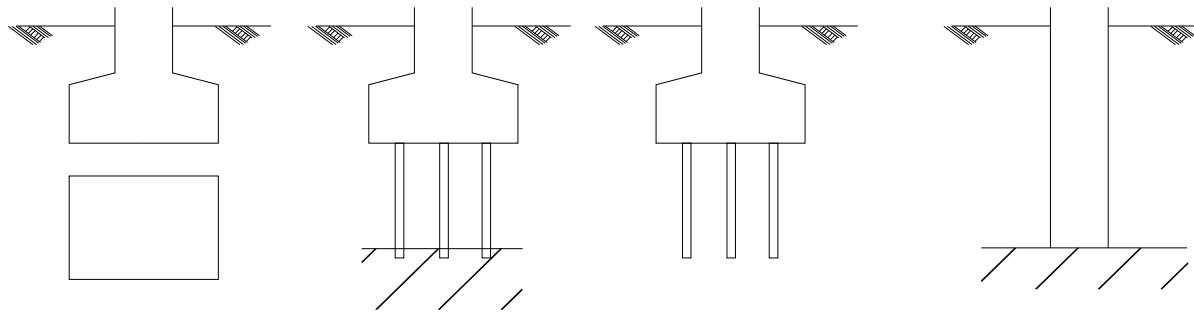
(709)Ground injection method

(709)Ground injection method



(710) allowable bearing capacity

(710) allowable bearing capacity



spread foundation

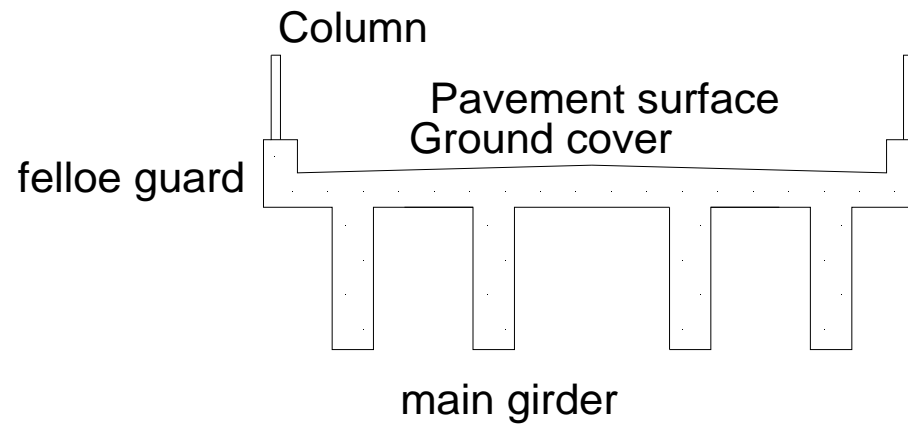
bearing pile

friction pile

caisson

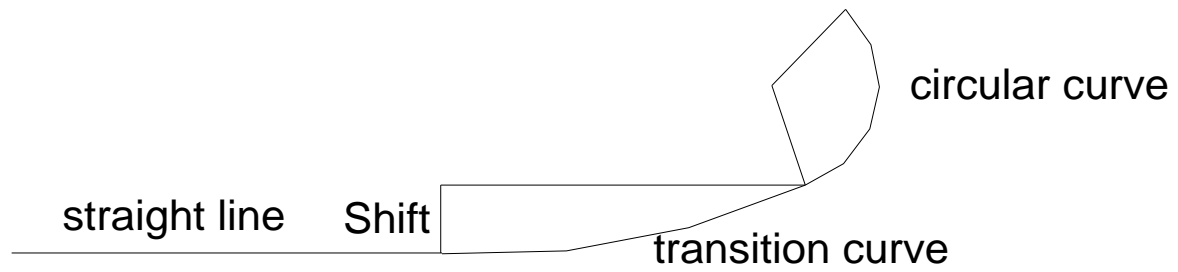
(711)felloe guard

(711)felloe guard



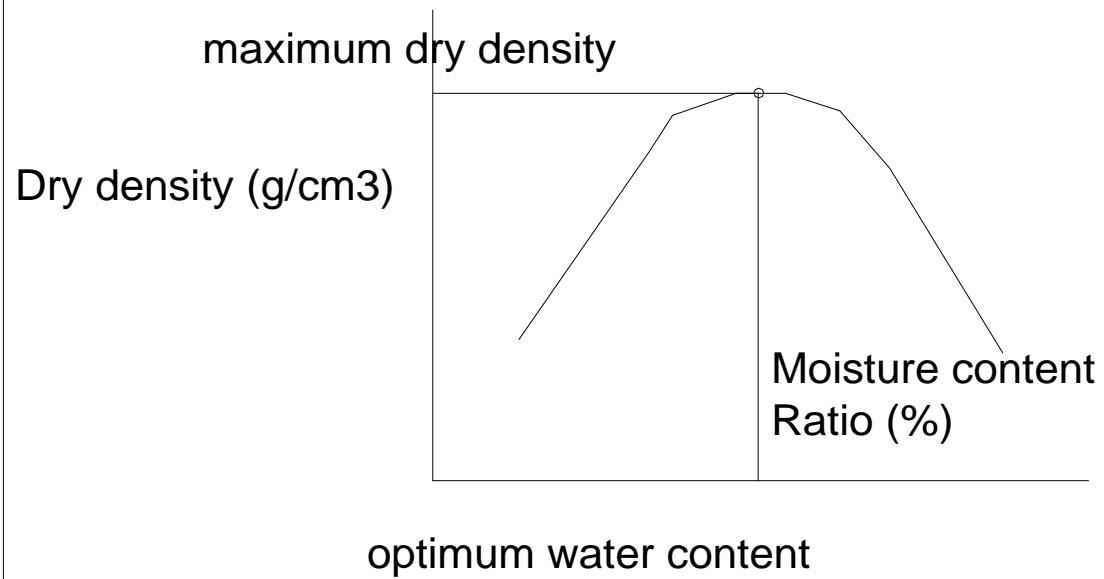
(712)Shift

(712)Shift



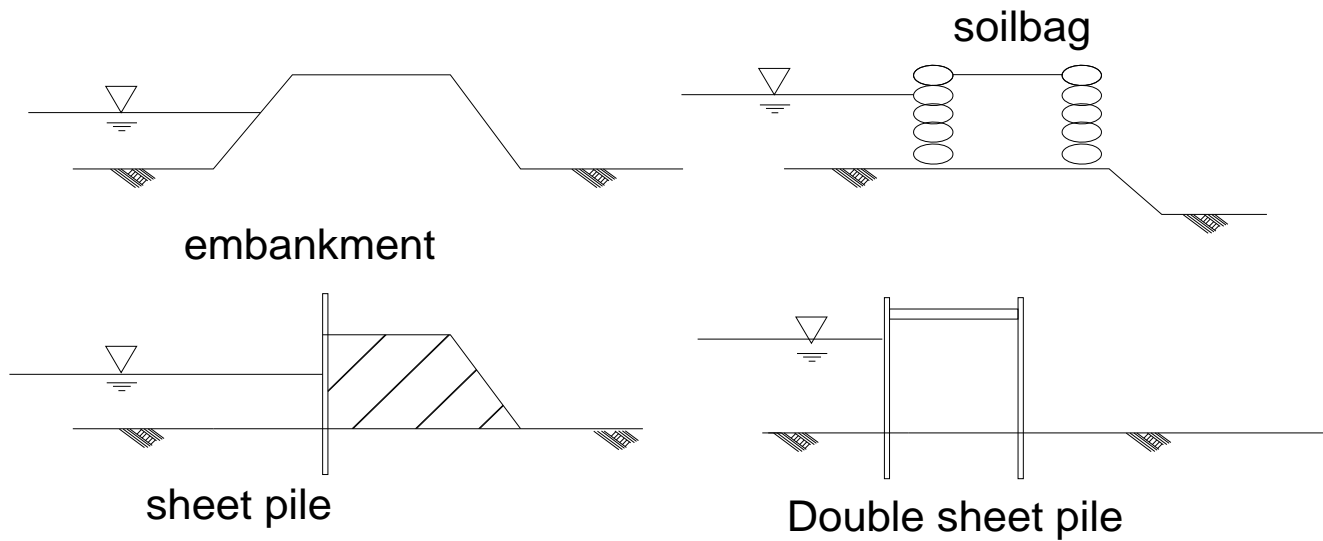
(713)Compaction test

(713)Compaction test



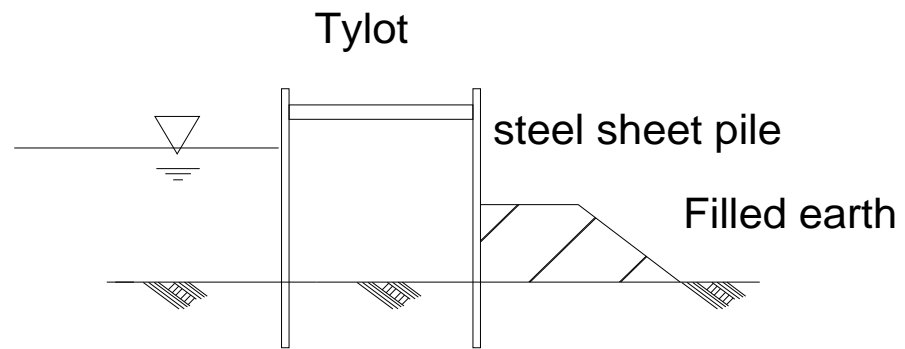
(714)cofferdam

(714)cofferdam



(715)closing dyke

(715)closing dyke



(716)wire cylinder

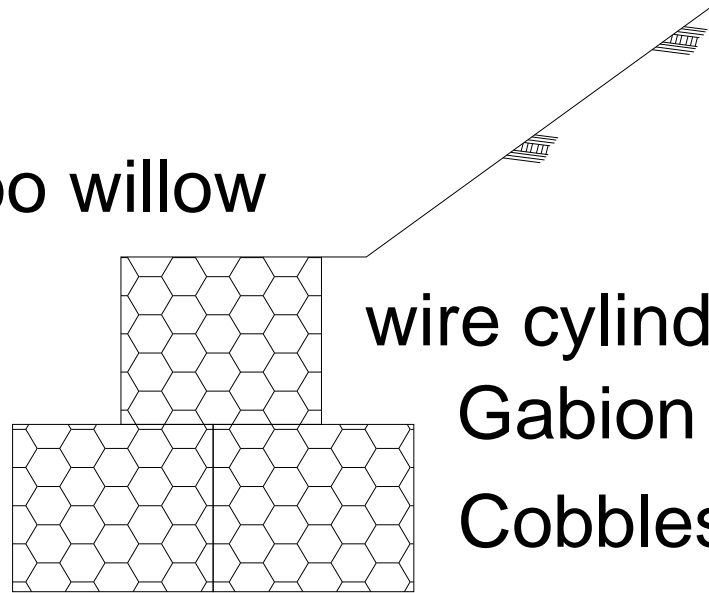
(716)wire cylinder

Bamboo willow

wire cylinder

Gabion

Cobblestone



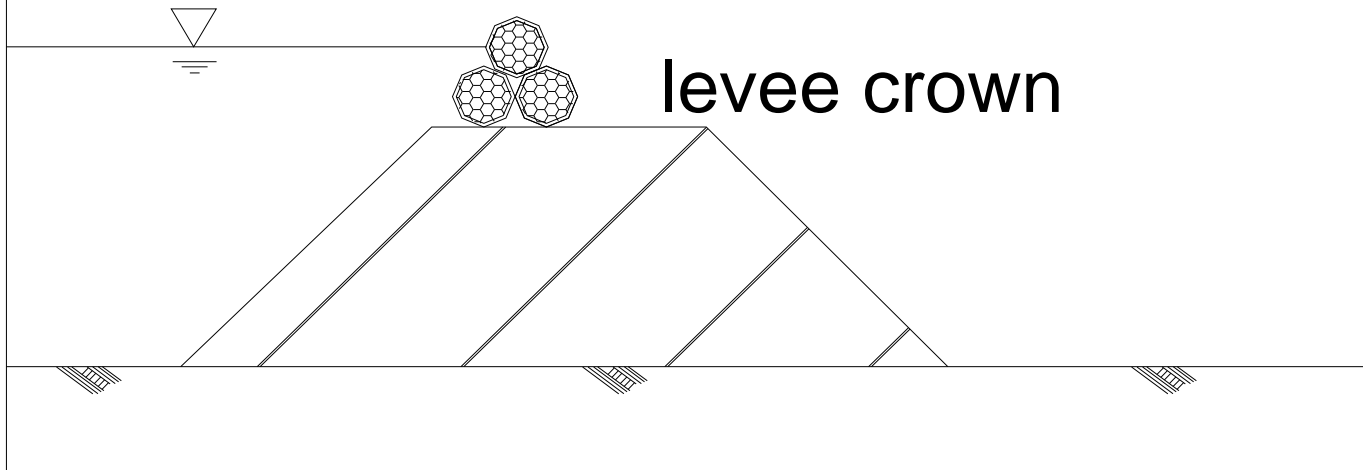
(717)wire cylinder masonry

(717)wire cylinder masonry

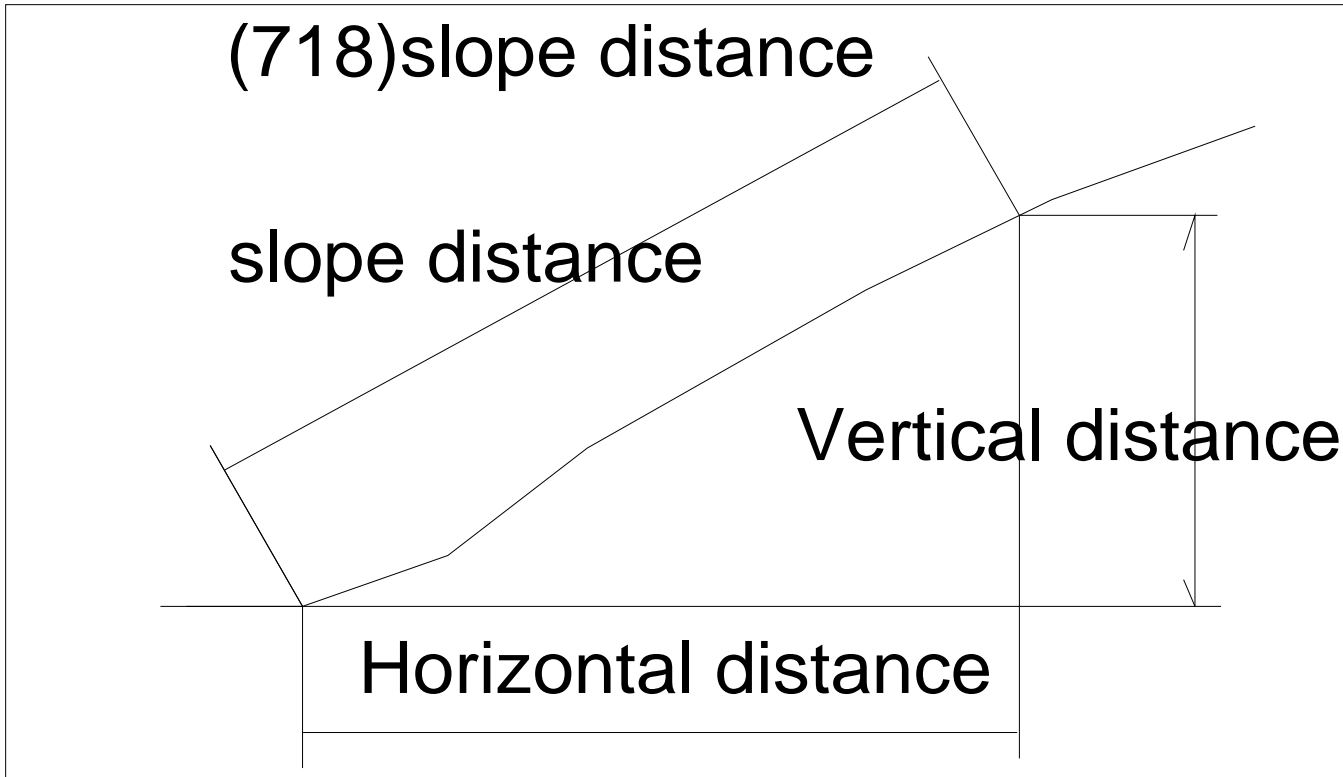
wire cylinder

Gabion

levee crown



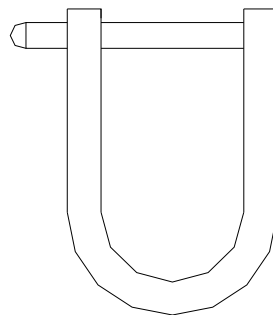
(718)slope distance



(719)Shackle

(719)Shackle

wire rope

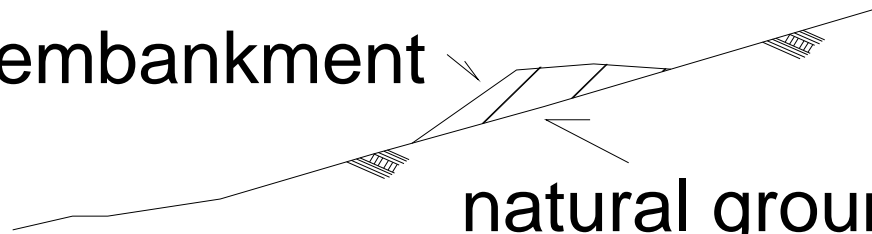


(720)natural ground

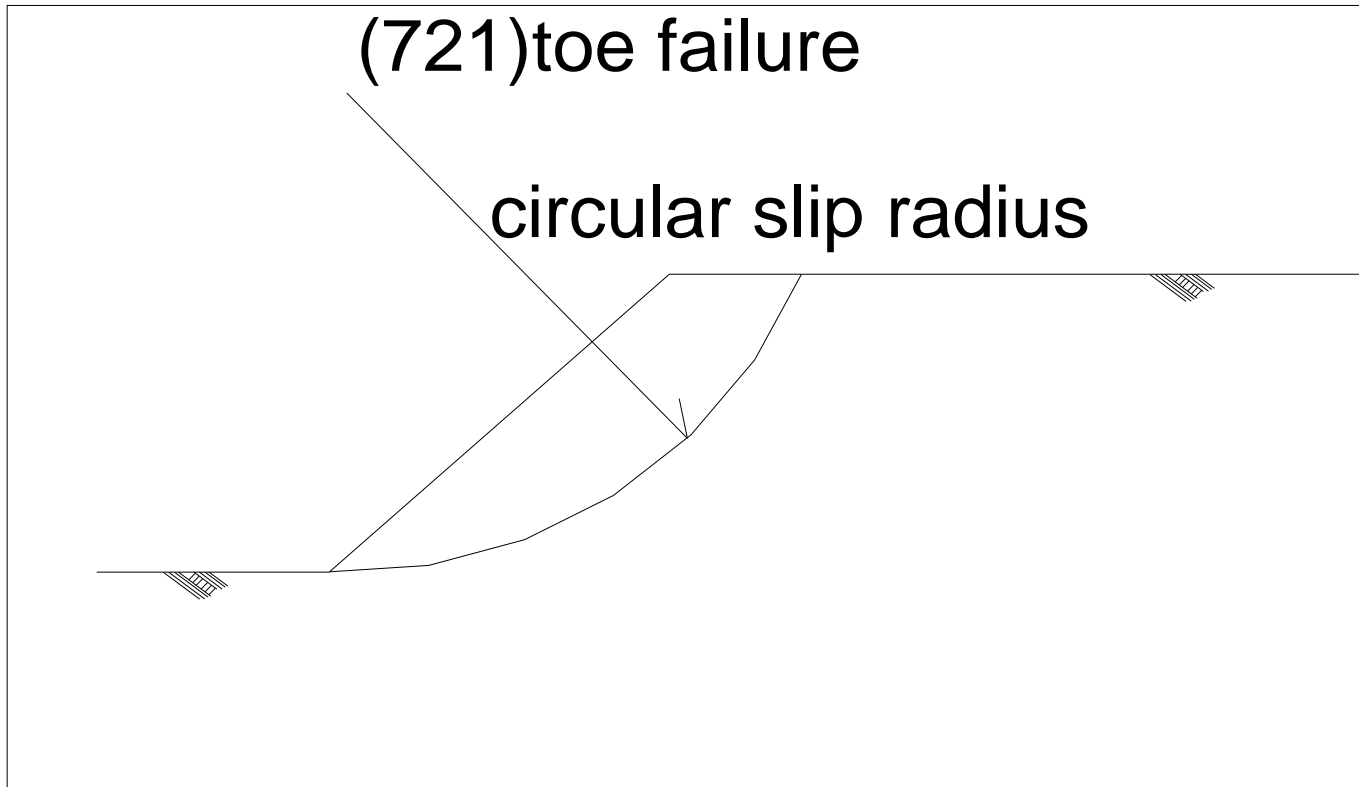
(720)natural ground

embankment

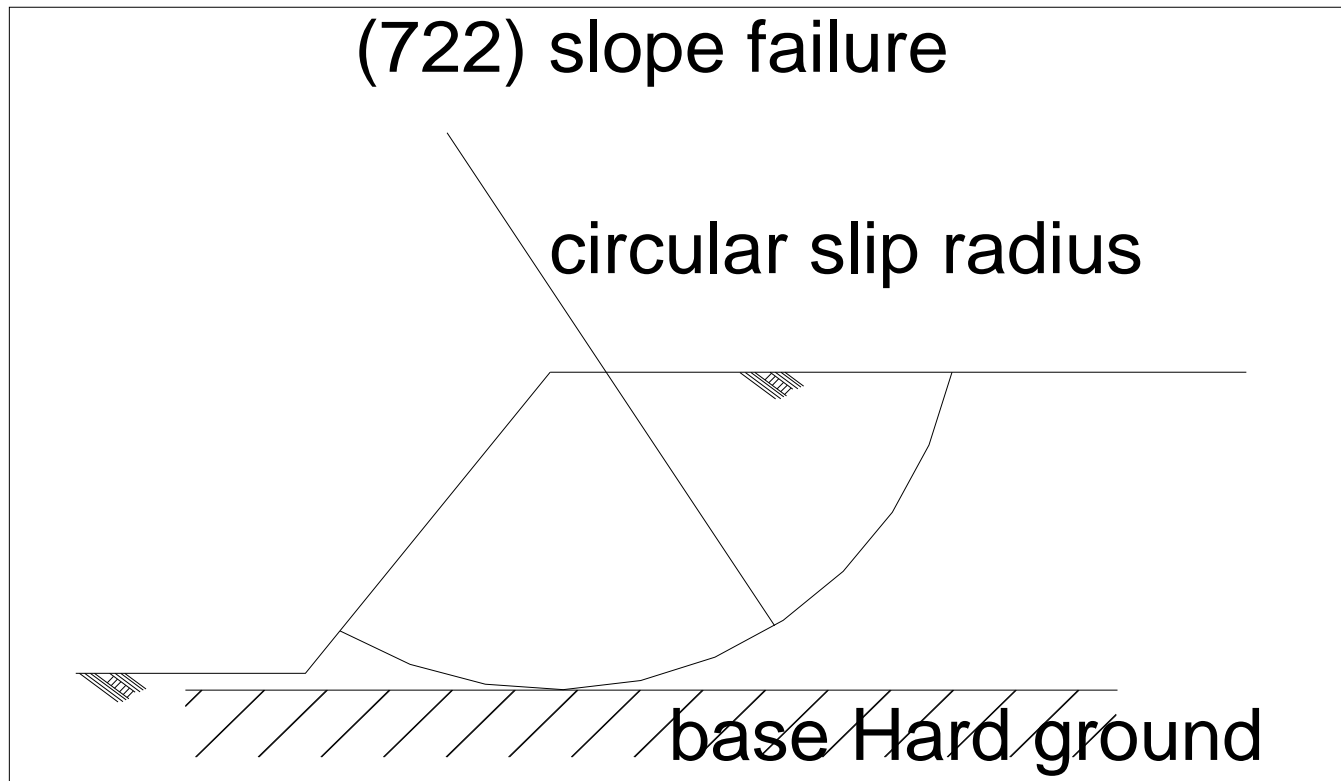
natural ground



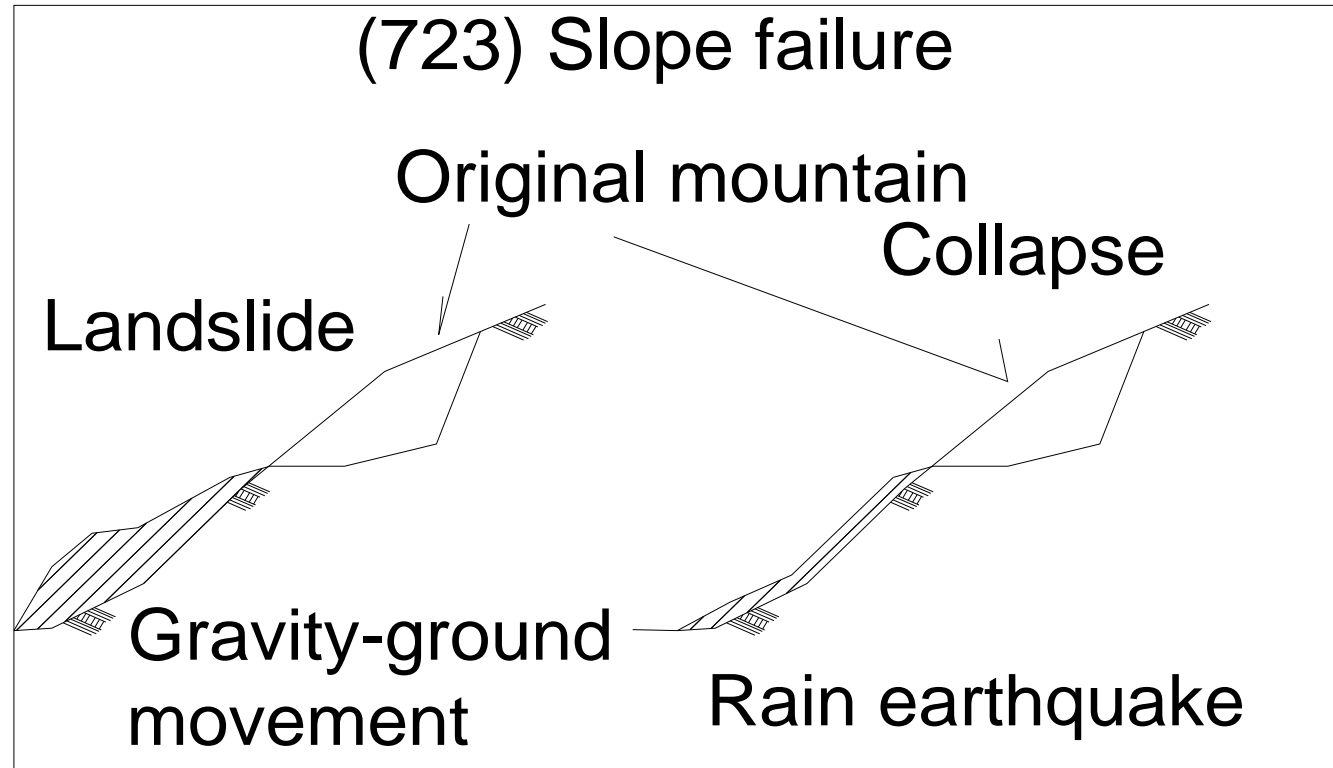
(721)toe failure



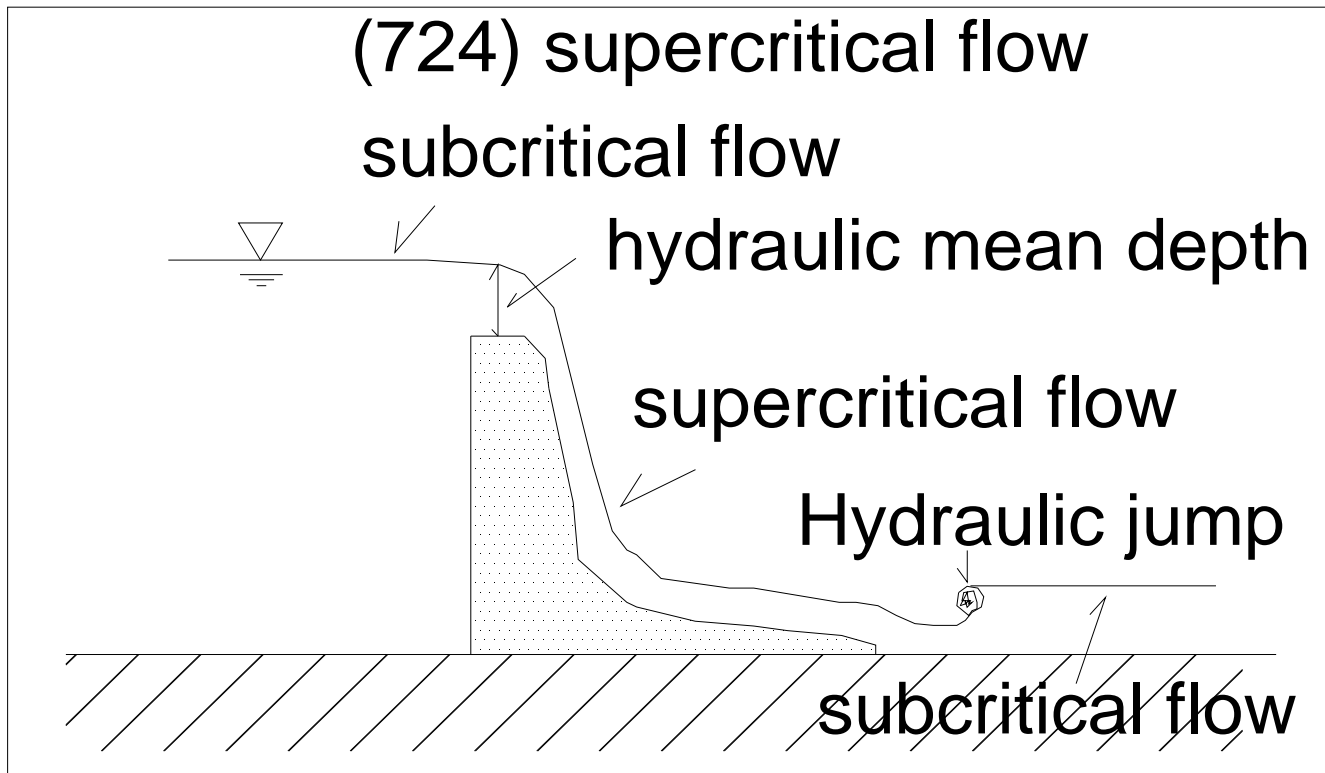
(722) slope failure



(723) Slope failure



(724) supercritical flow



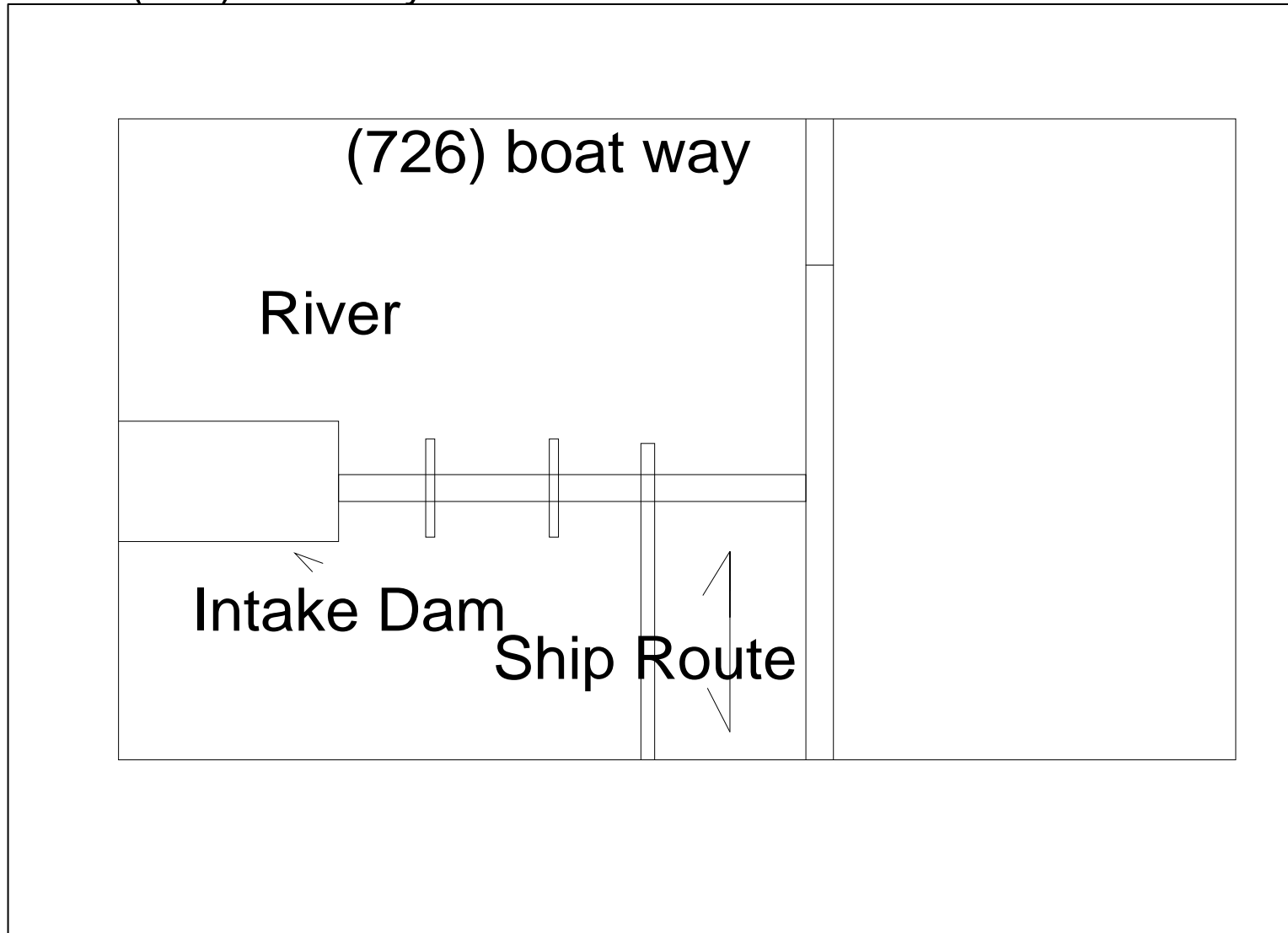
(725) honey comb

(725) honey comb

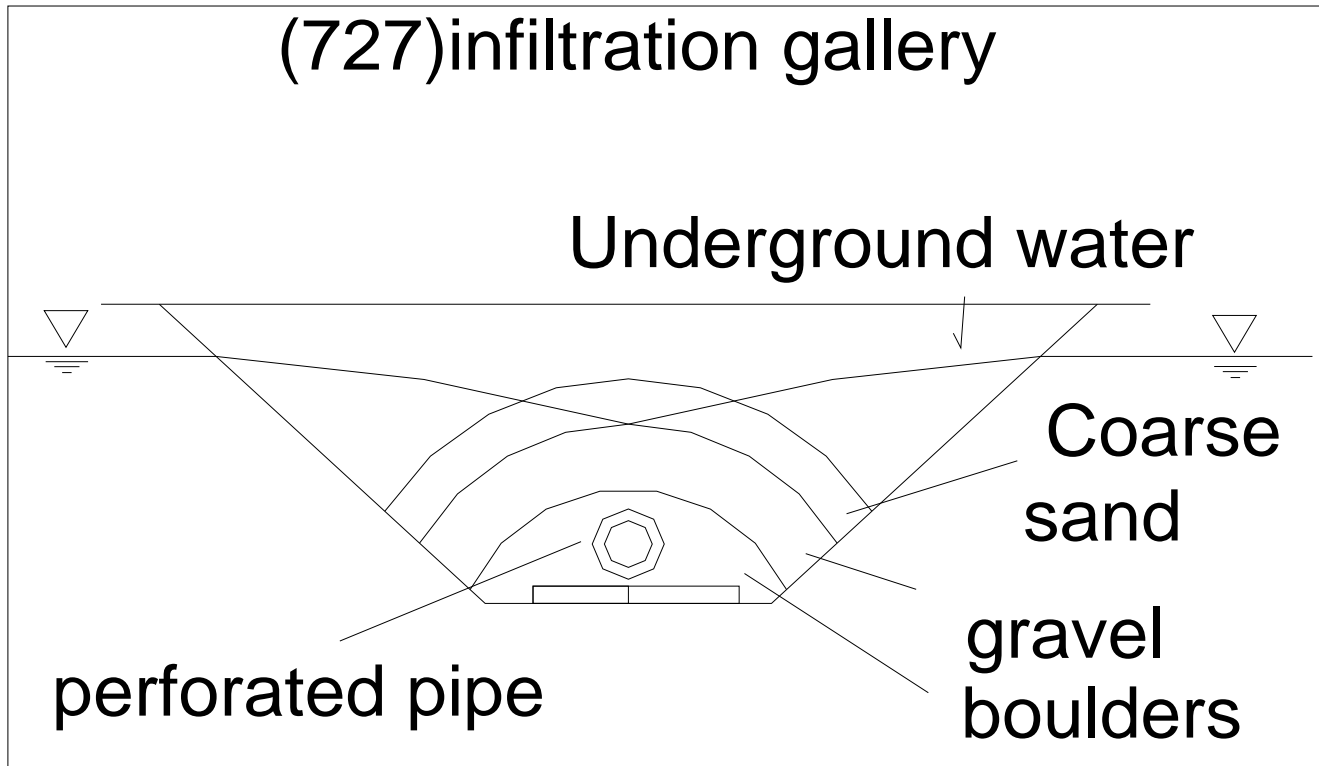


concrete surface placement

(726) boat way



(727)infiltration gallery



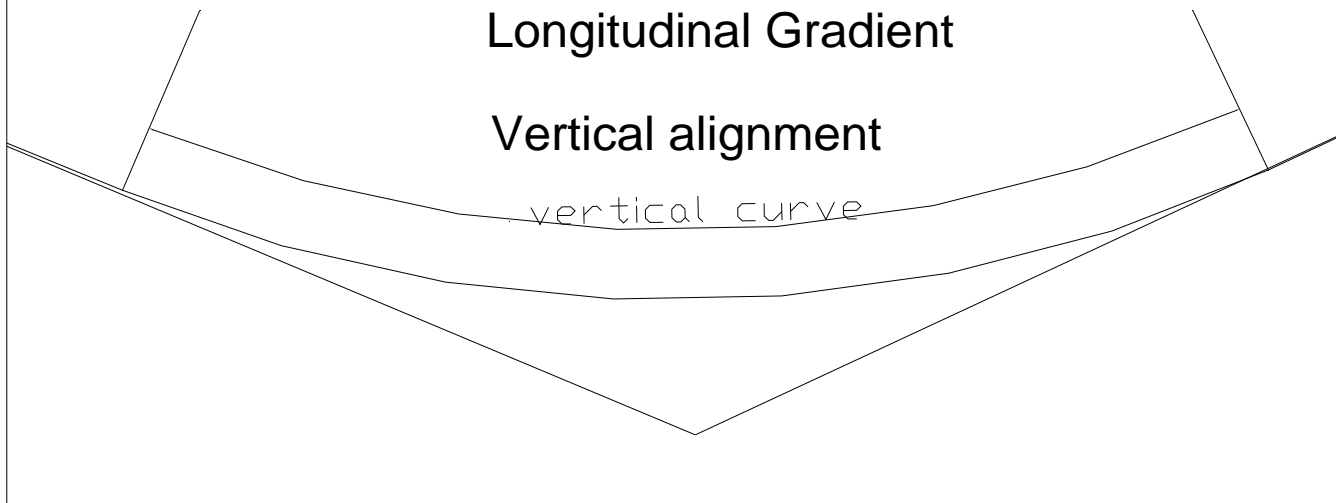
(728)Vertical curve

(728)Vertical curve

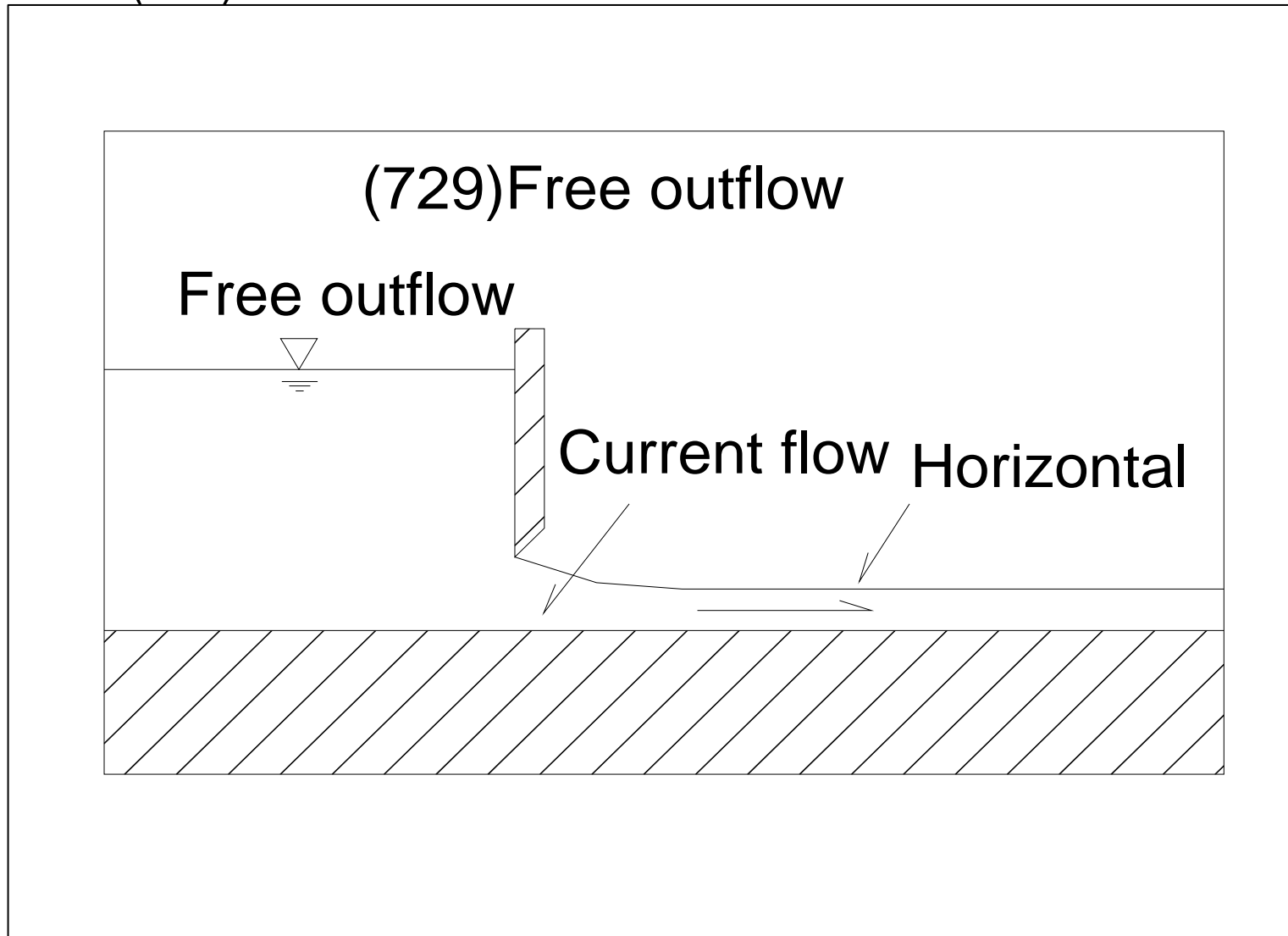
Longitudinal slope

Longitudinal Gradient

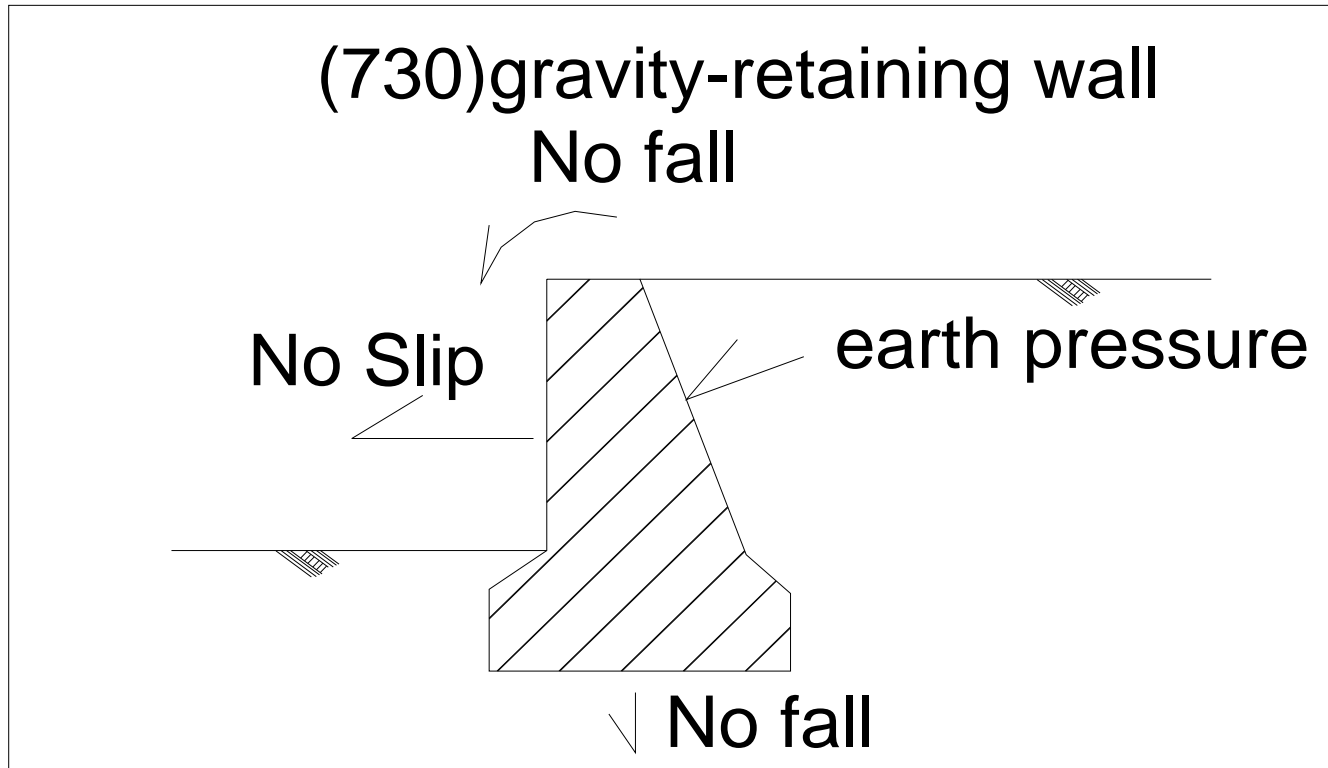
Vertical alignment



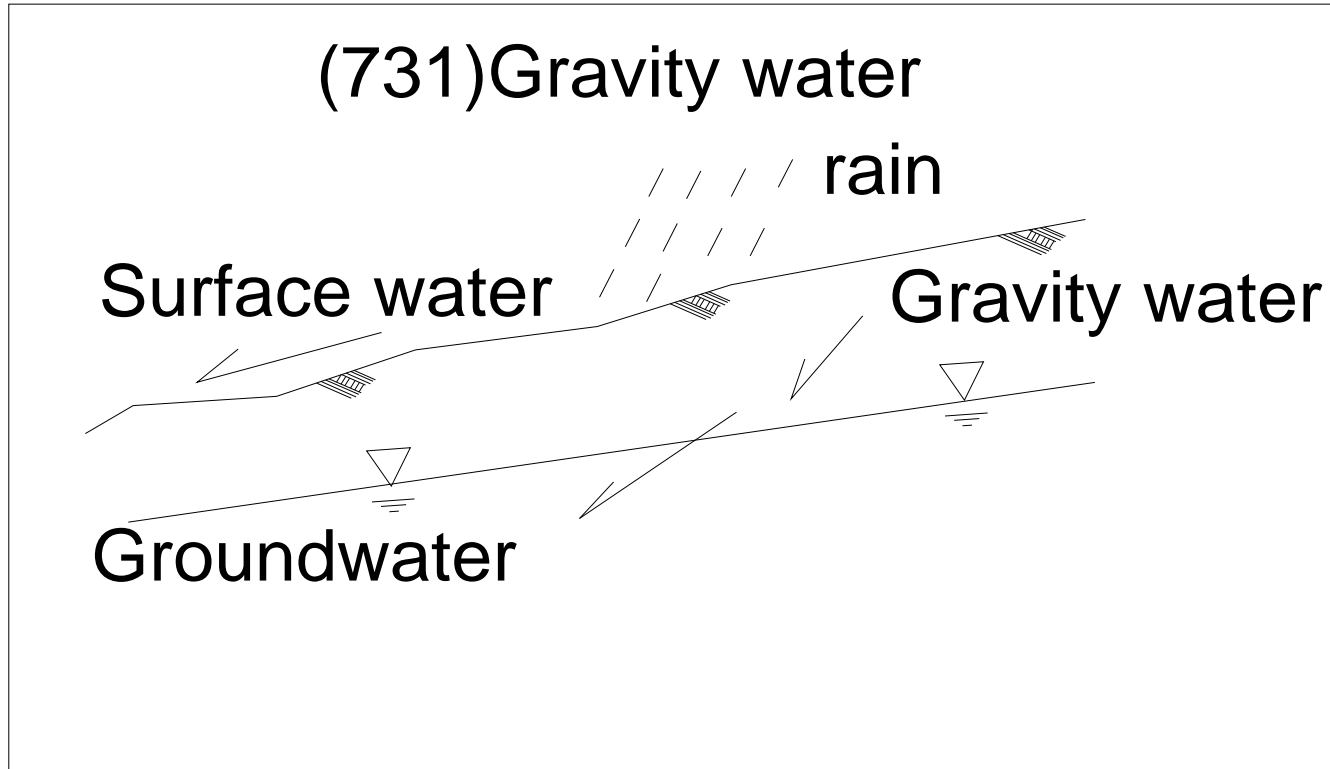
(729)Free outflow



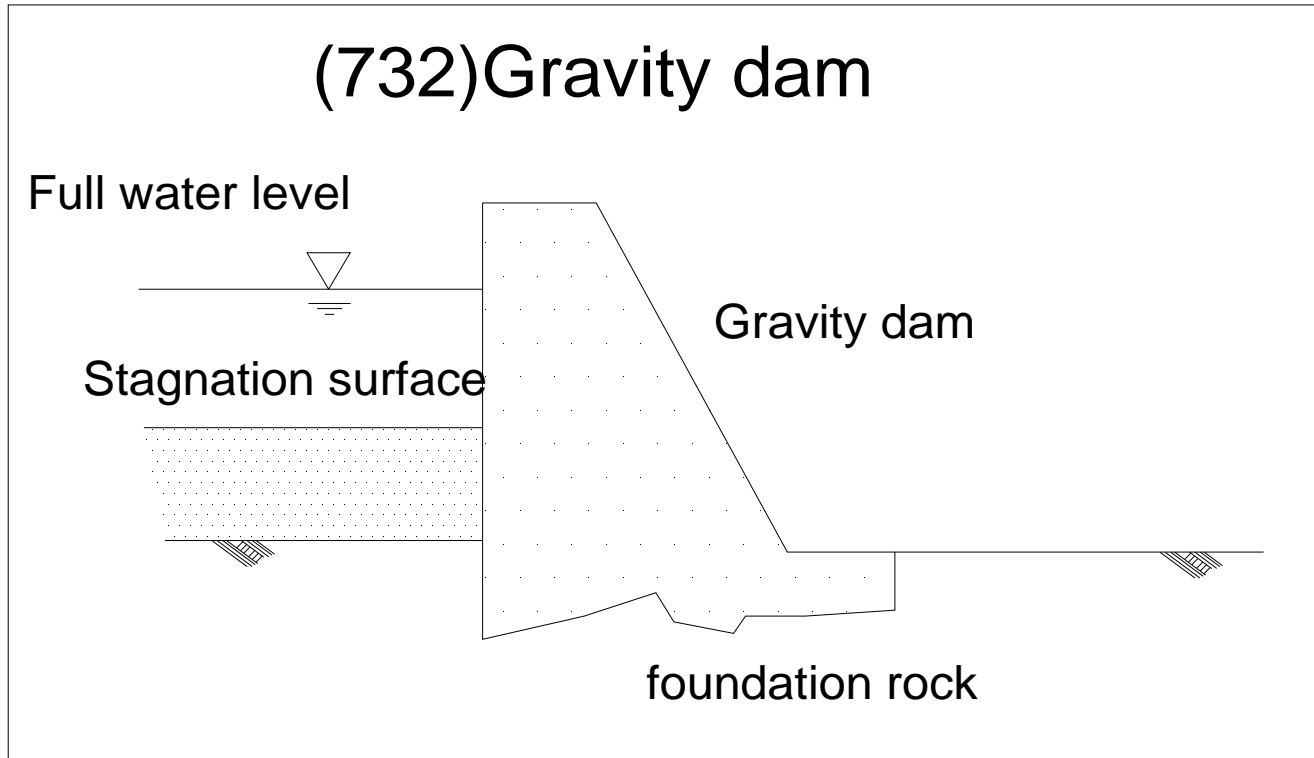
(730)gravity-retaining wall



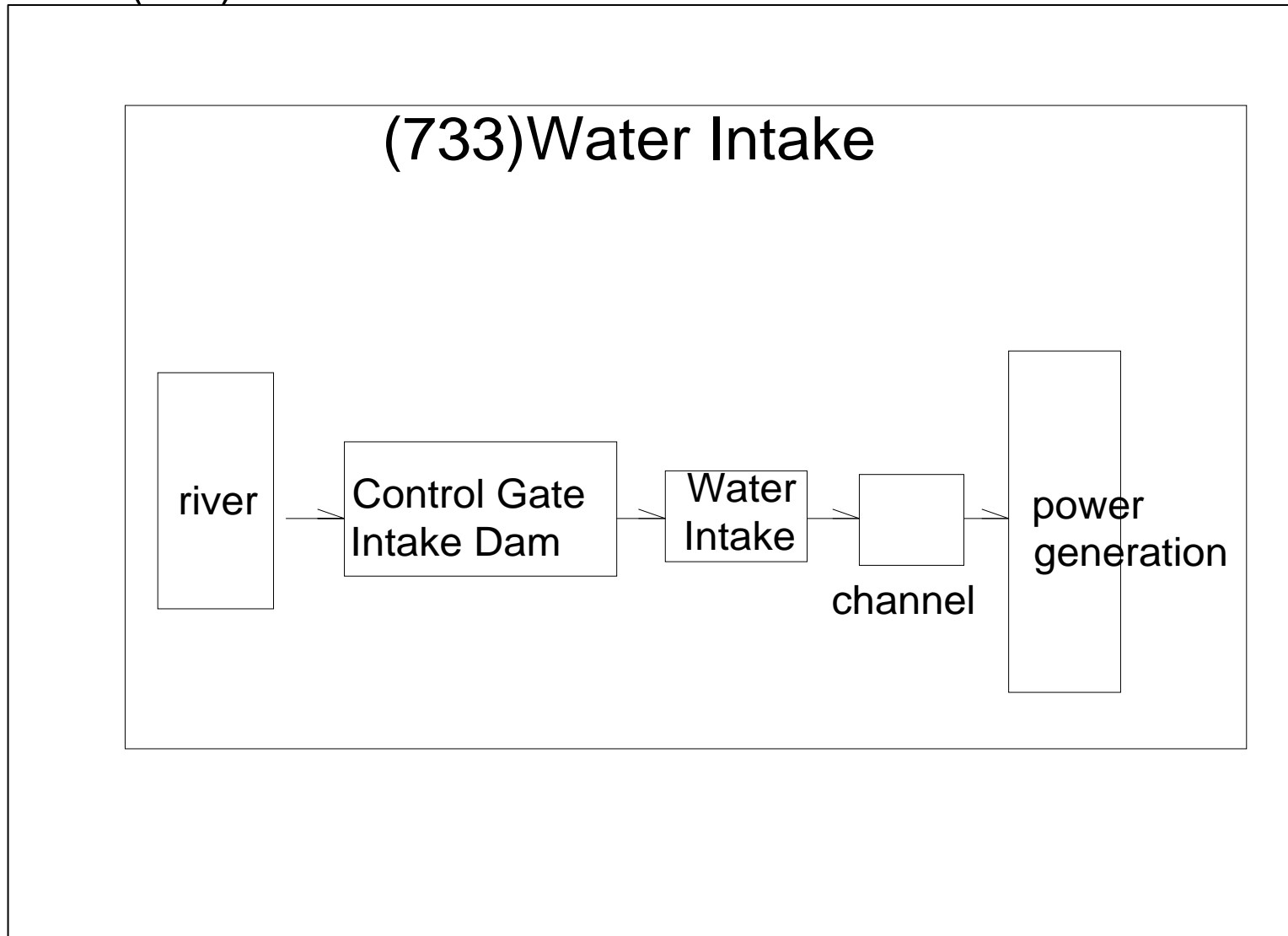
(731)Gravity water



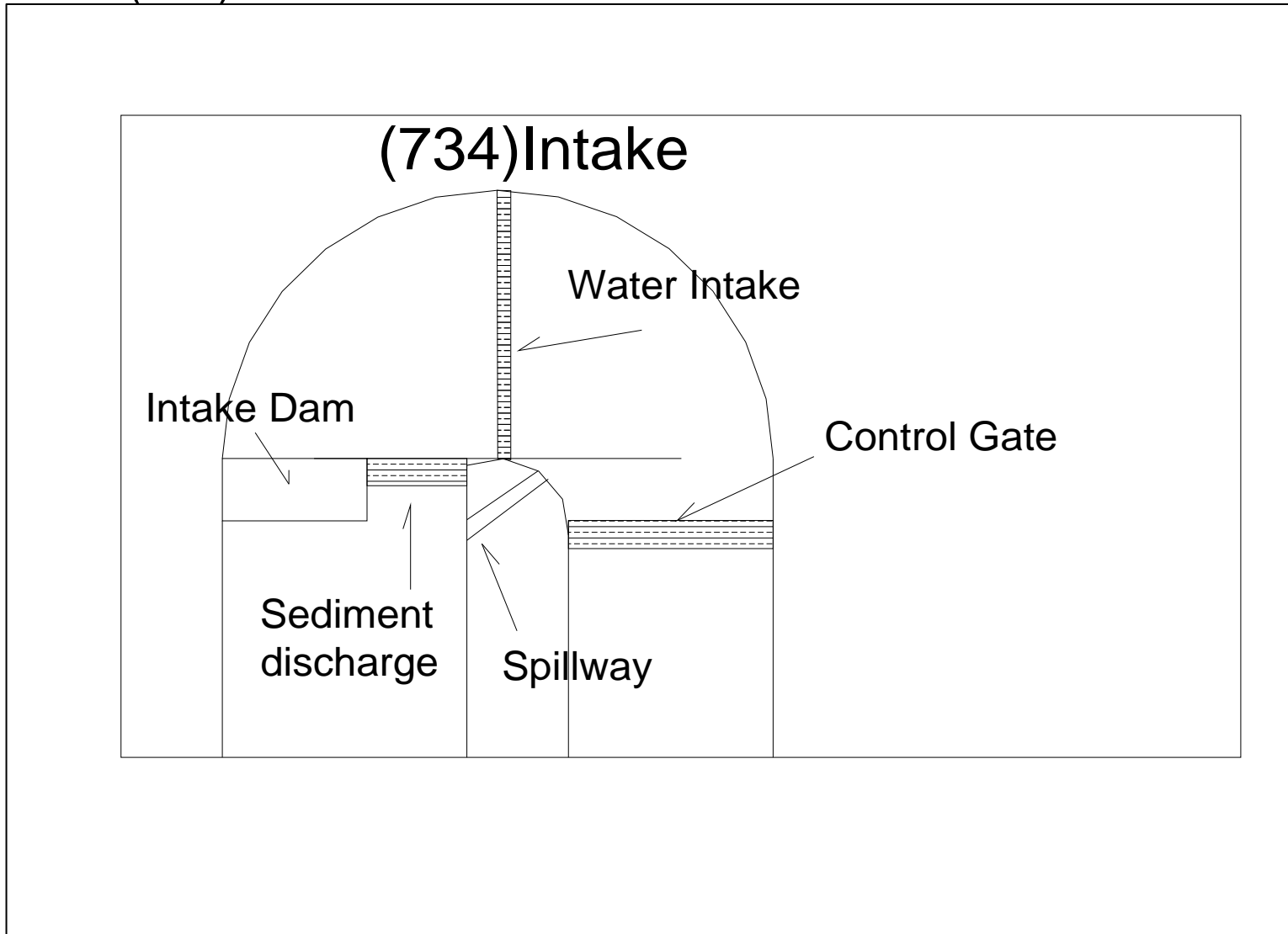
(732) Gravity dam



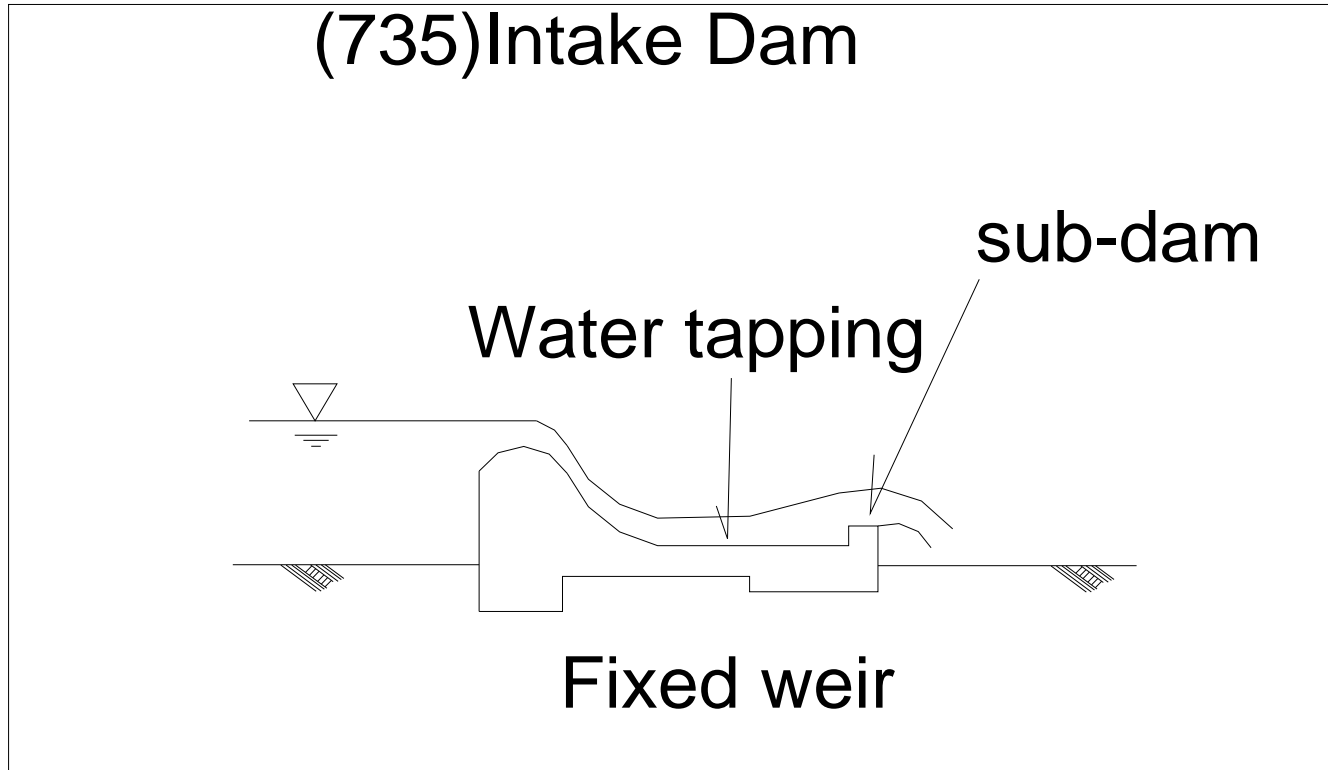
(733)Water Intake



(734)Intake

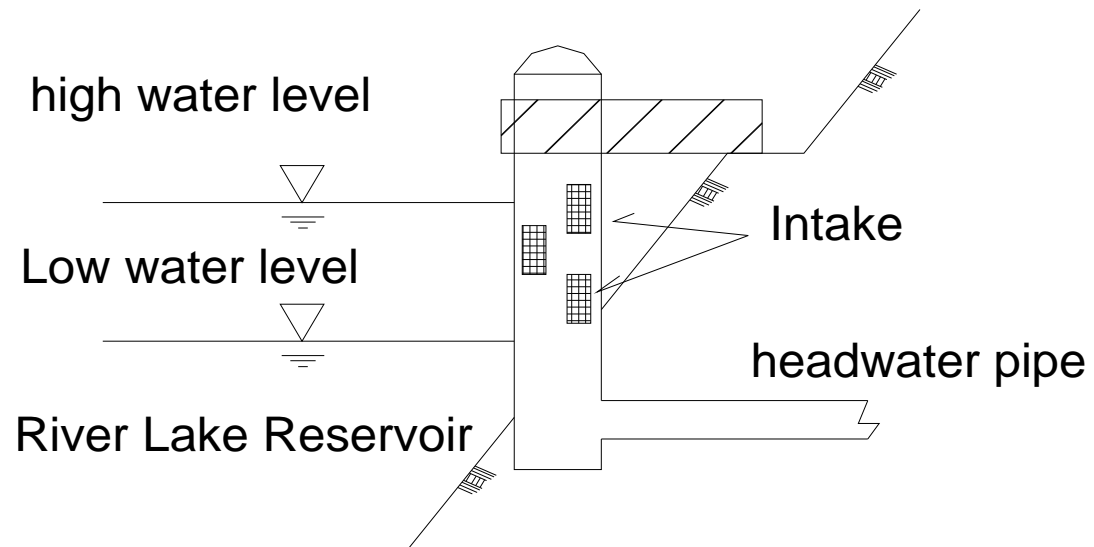


(735)Intake Dam



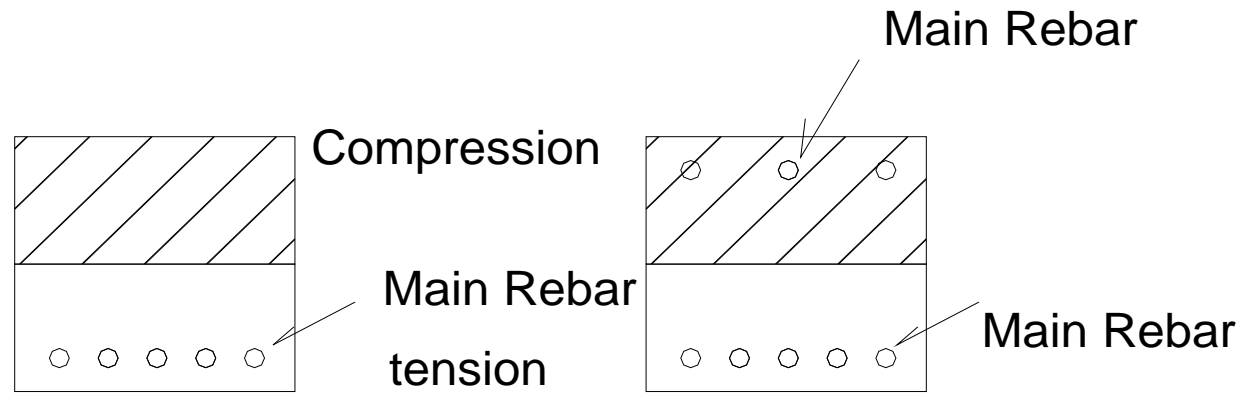
(736) Intake tower e

(736) Intake tower

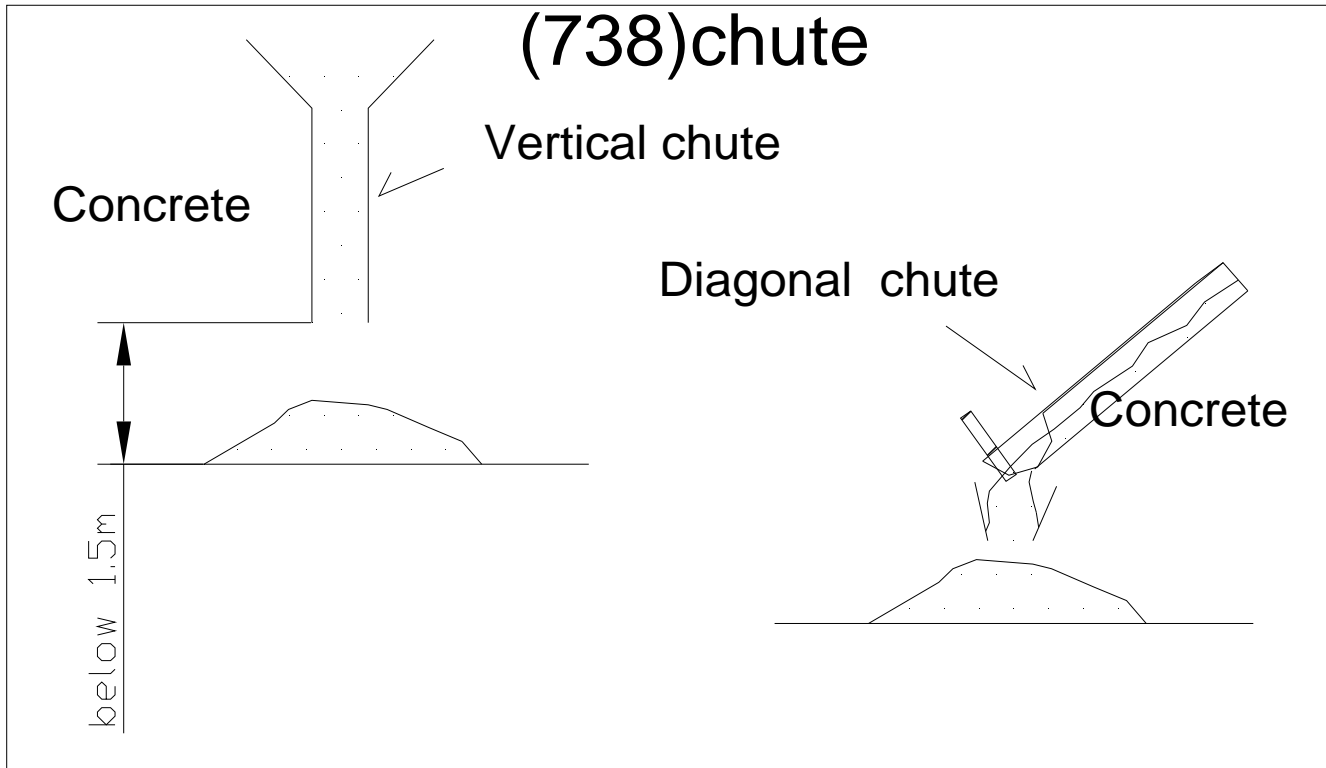


(737)Main Rebar

(737)Main Rebar

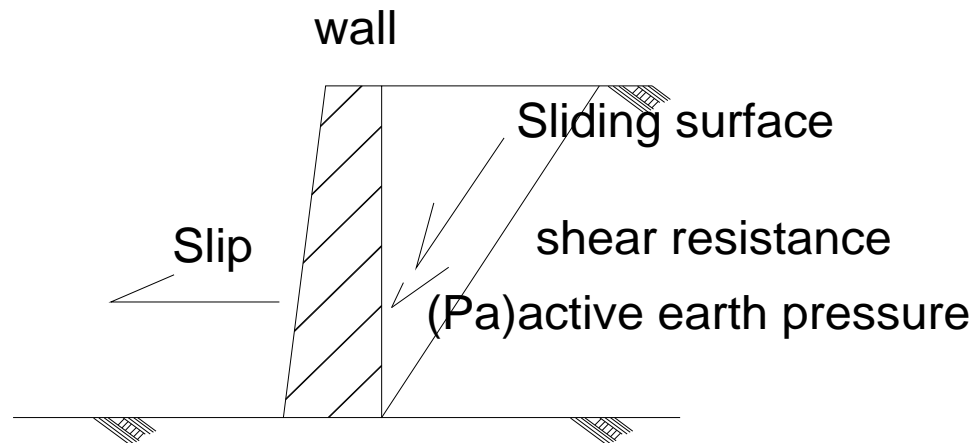


(738)chute



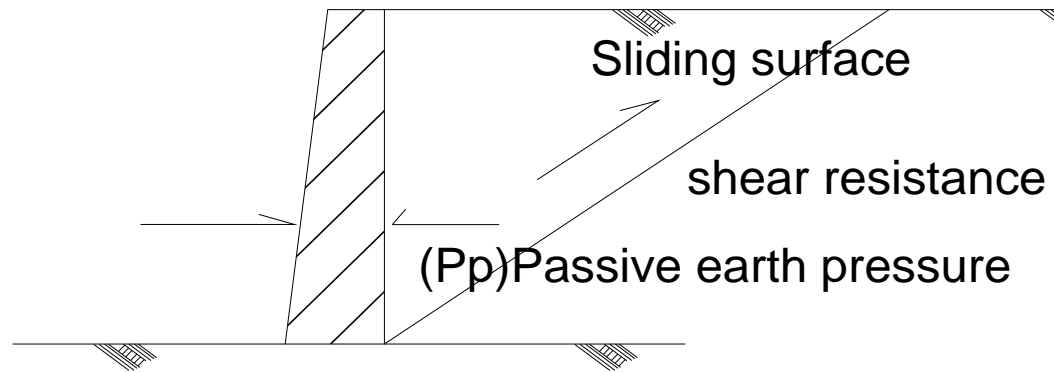
(739)active earth pressure

(739)active earth pressure

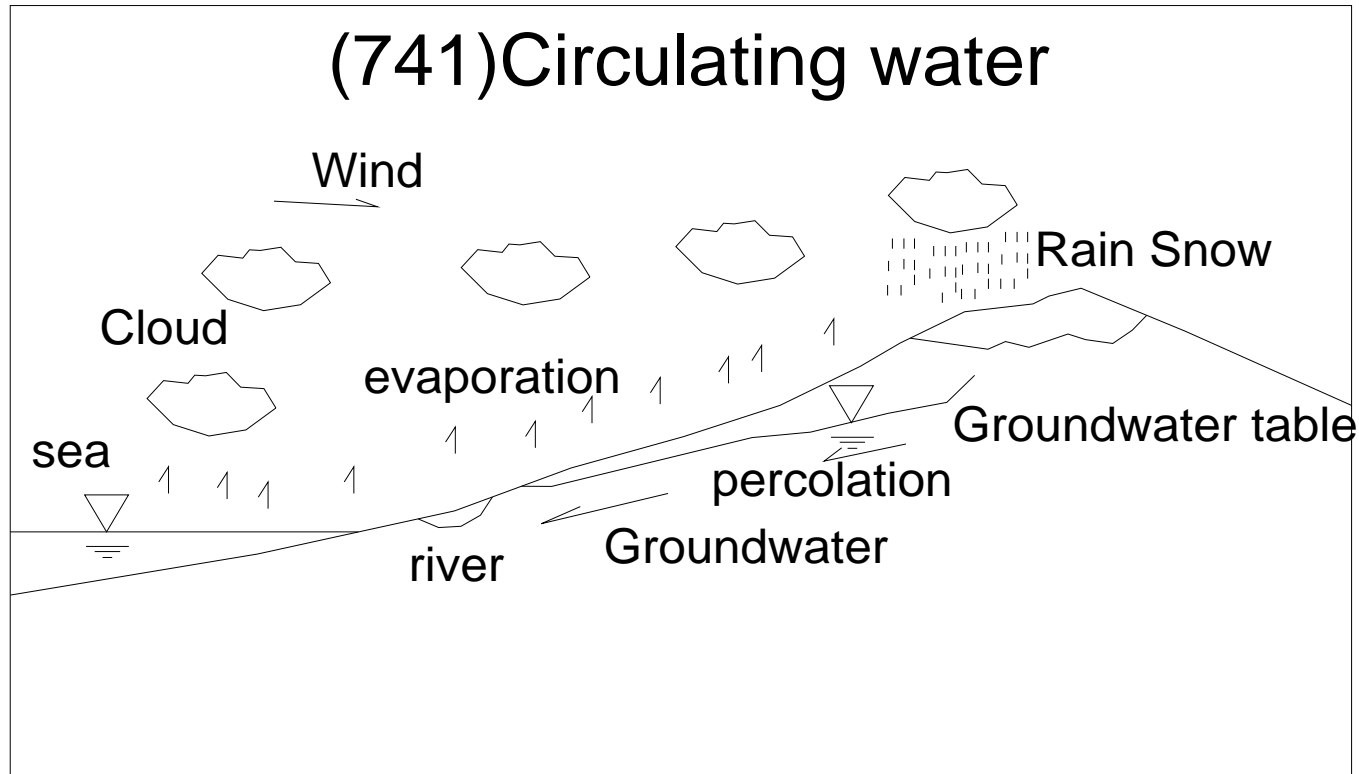


(740) Passive earth pressure

(740) Passive earth pressure

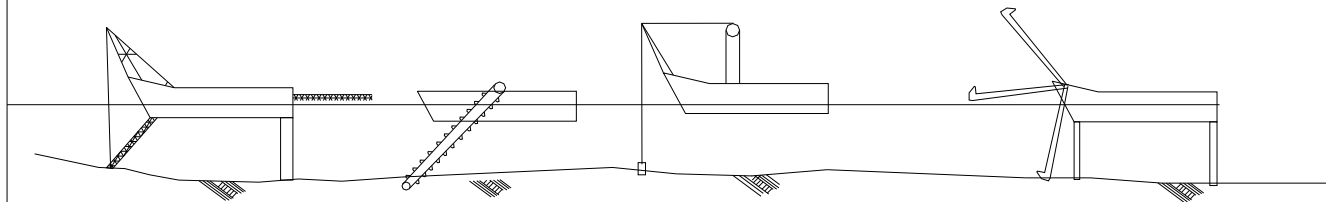


(741)Circulating water



(742)Dredging

(742)Dredging



Pump Ship

Bucket Ship

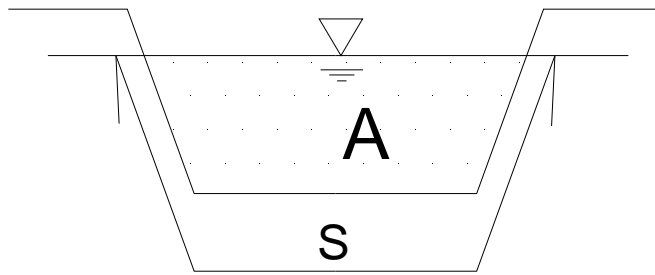
Grab Ship

Dipper Ship

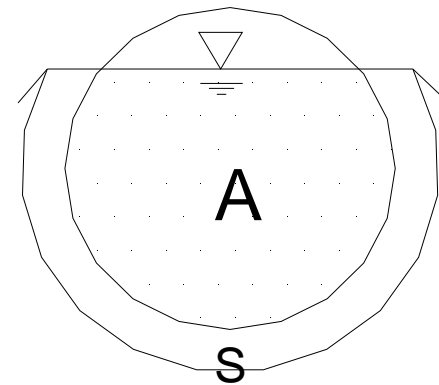
(743)wetted perimeter®

(743)wetted perimeter(R)

$$R=A/S$$

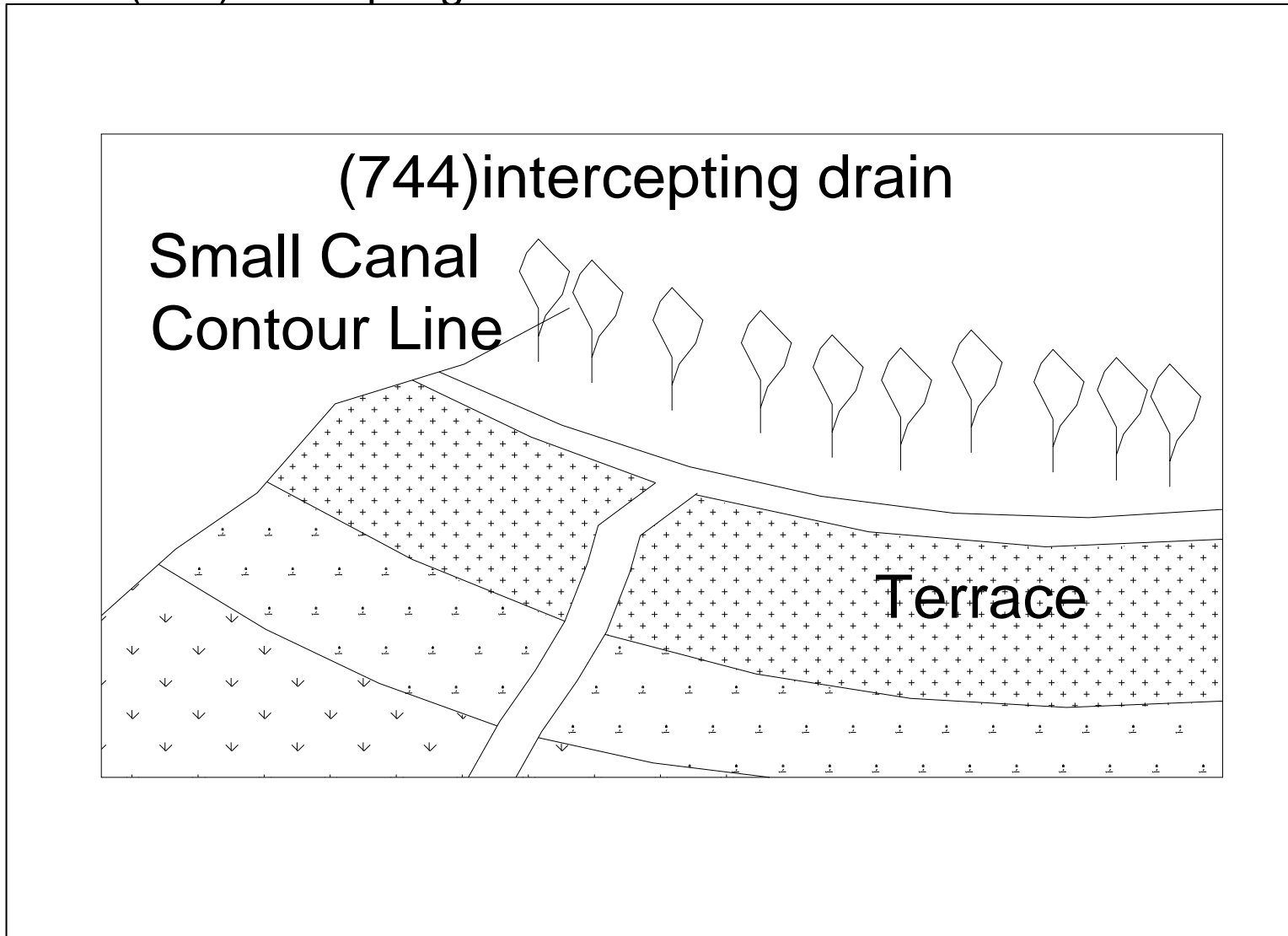


trapezoidal channel

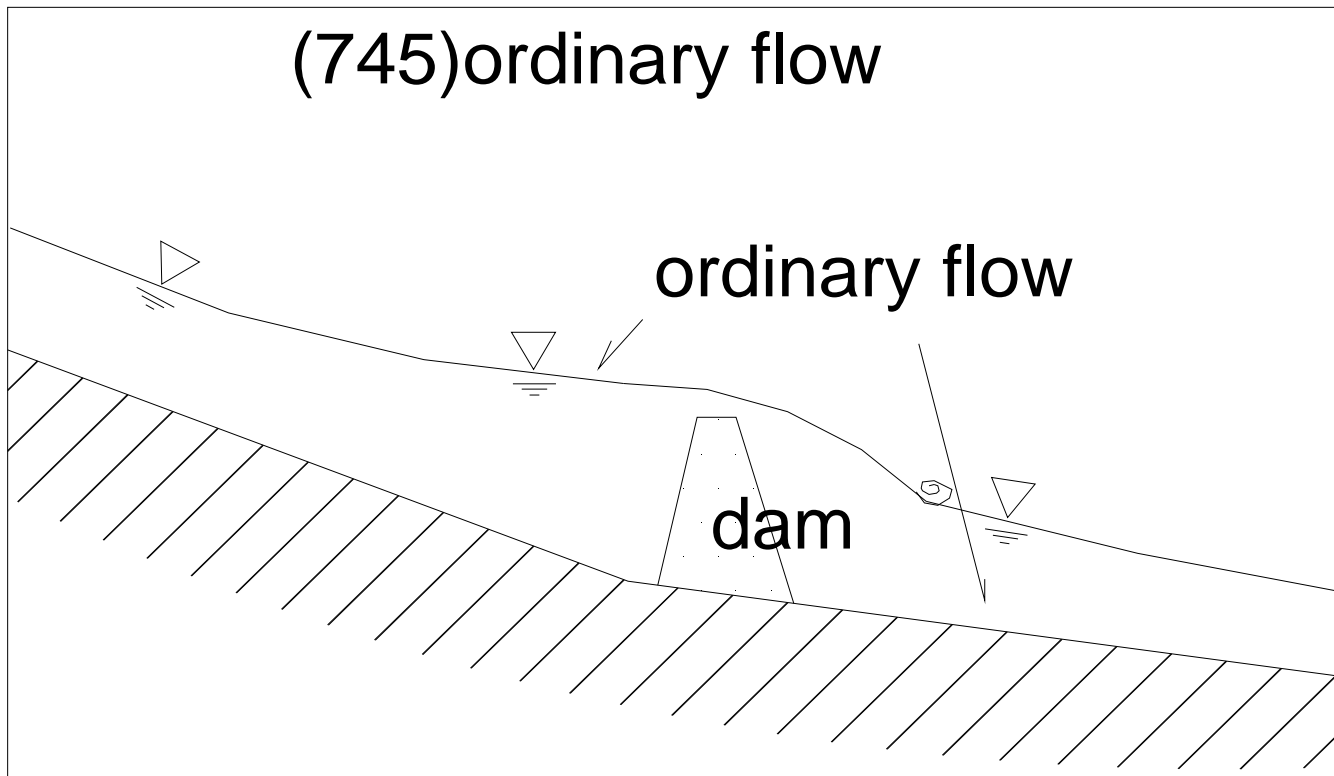


circular channel

(744)intercepting drain



(745)ordinary flow

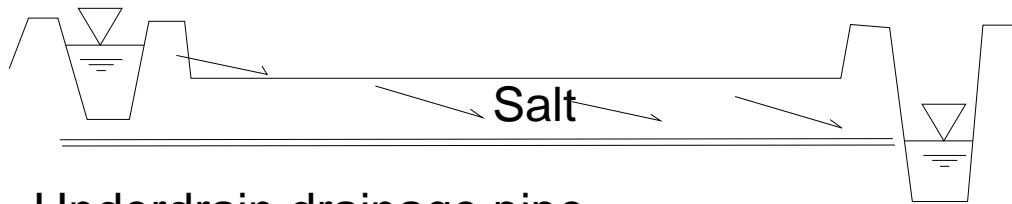


(746)Salt Desalination

(746)Salt Desalination

Salt Desalination

Freshwater

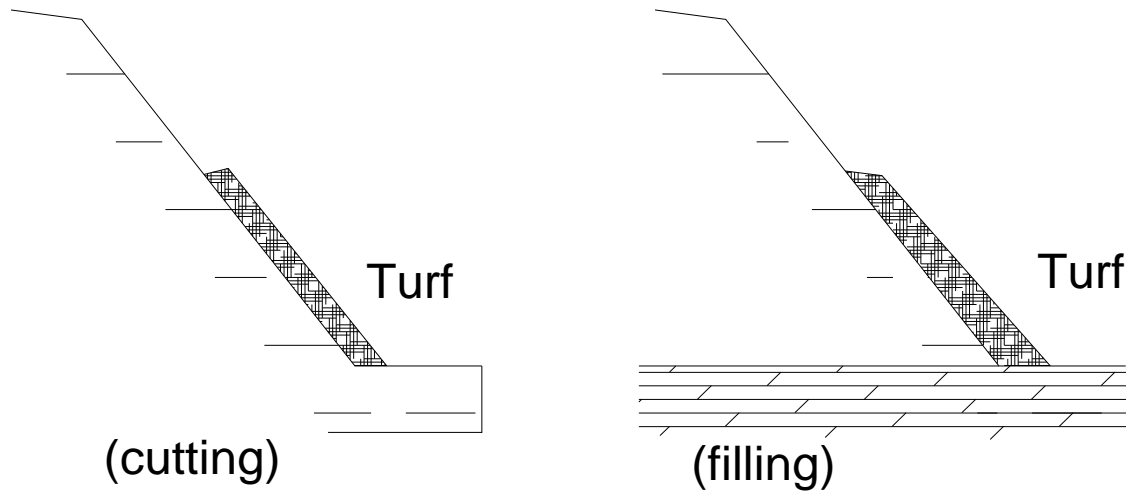


Underdrain drainage pipe

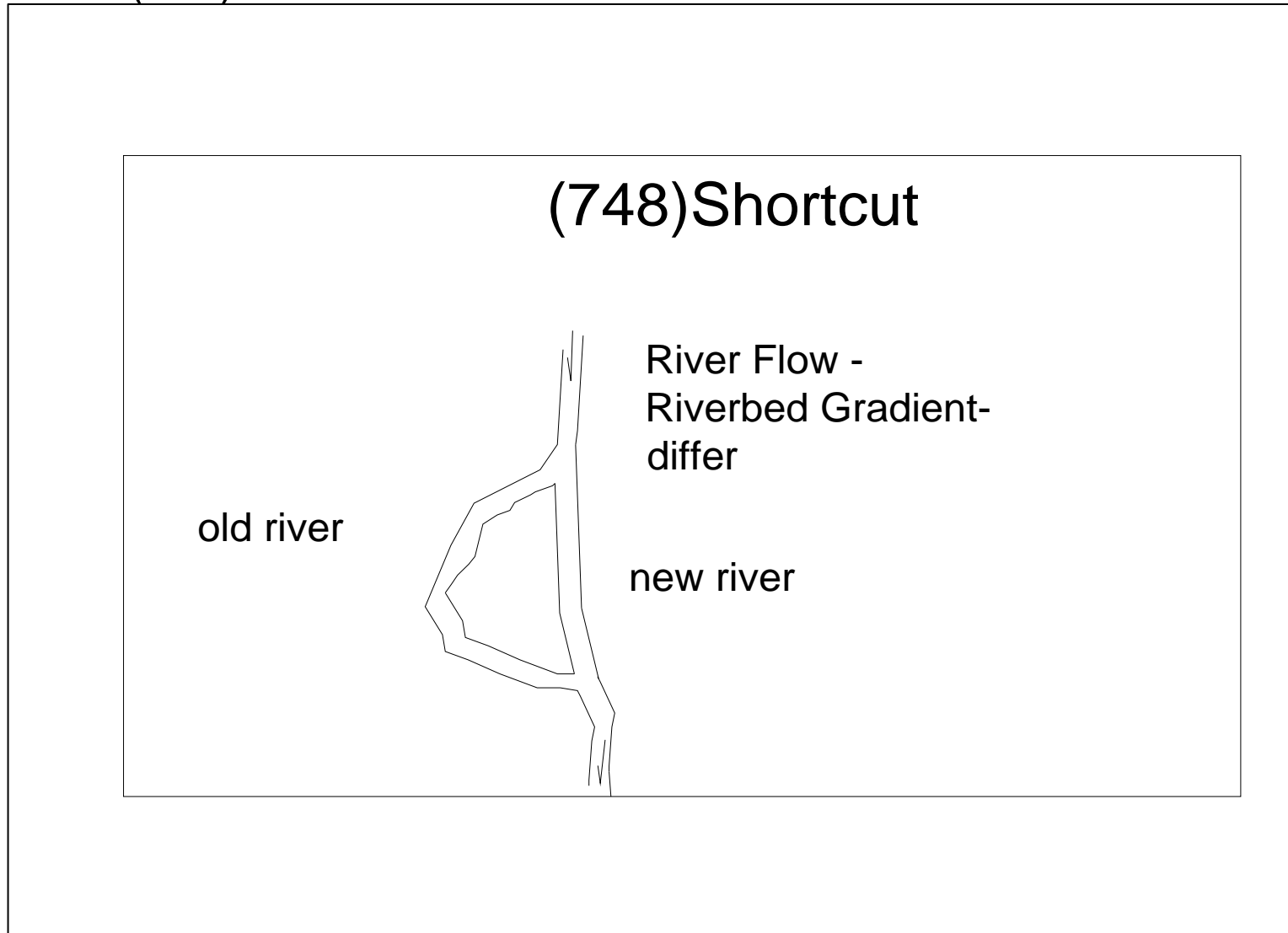
Desalination Salt

(747)vegetation works(slope protection)

(747)vegetation works
(slope protection)



(748)Shortcut



(749)hotweather concreting

(749)hotweather concreting

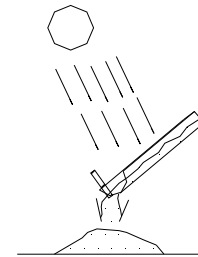
Long-term strength-reduction

concreting temperature-35 degrees or less

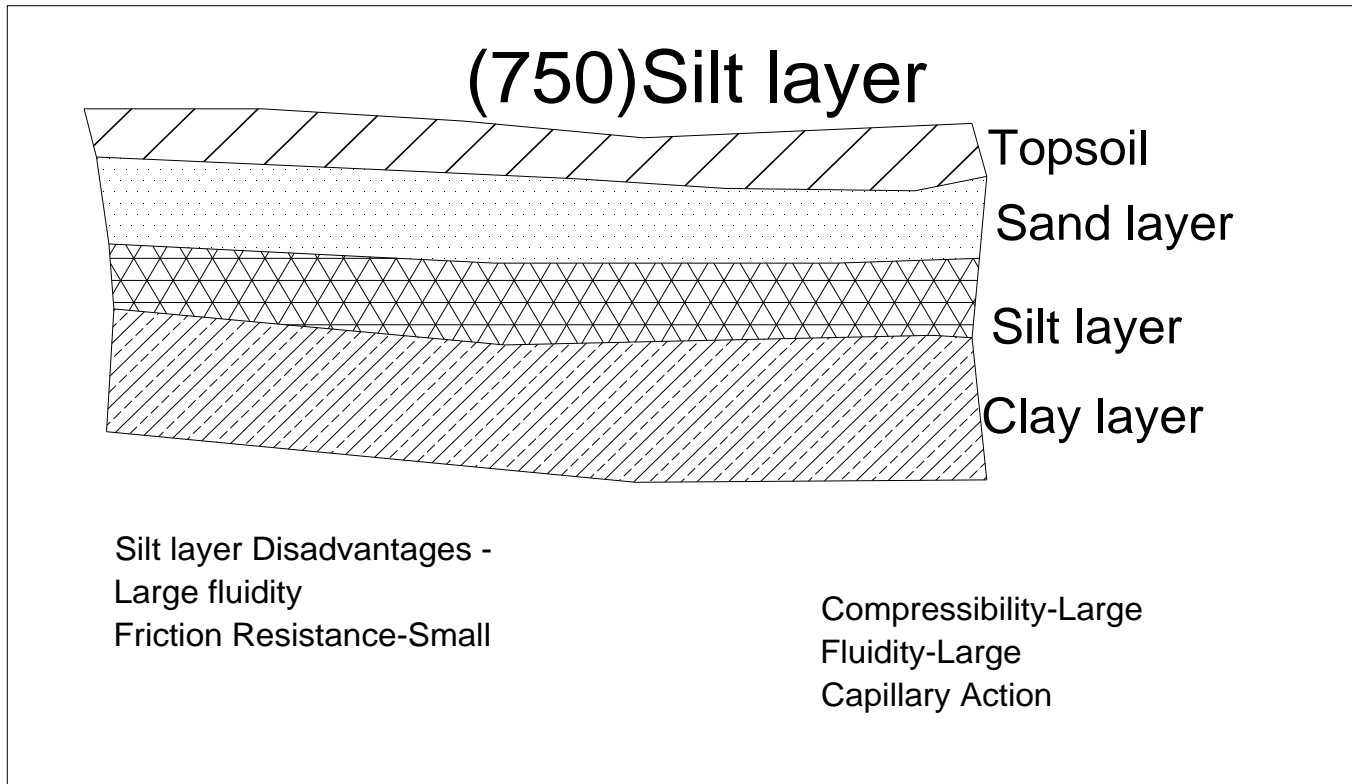
concreting end within 1.5 hours

cover Aggregate -Water cooling

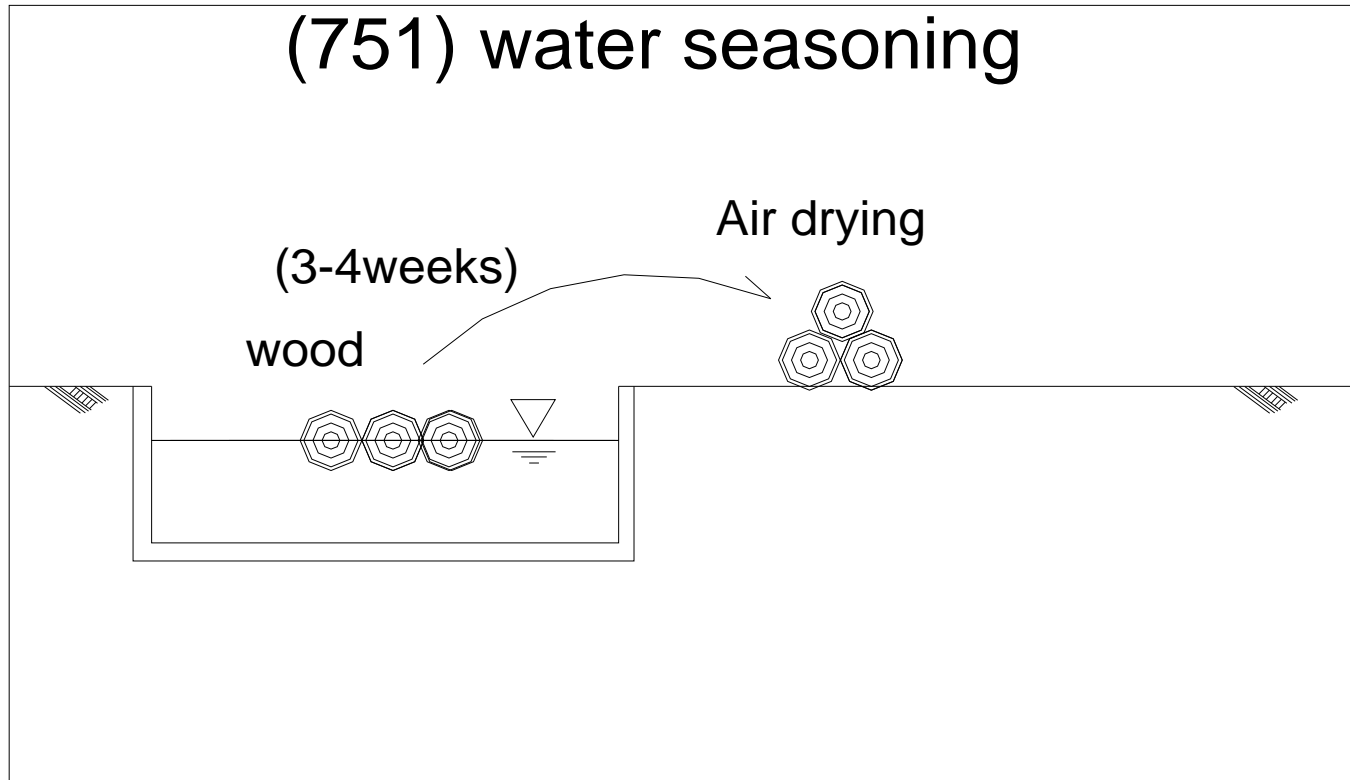
Curing -Night casting



(750)Silt layer

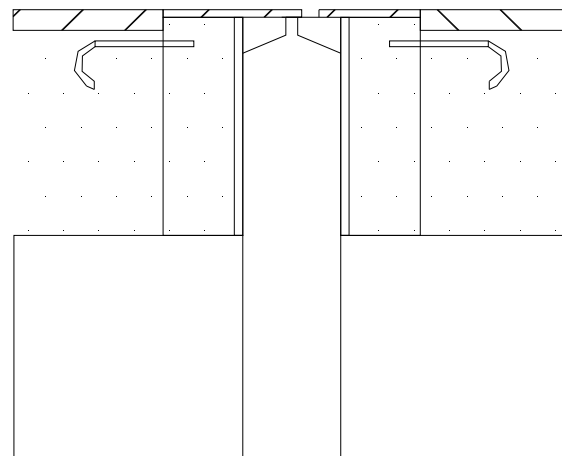


(751) water seasoning



(752) expansion device

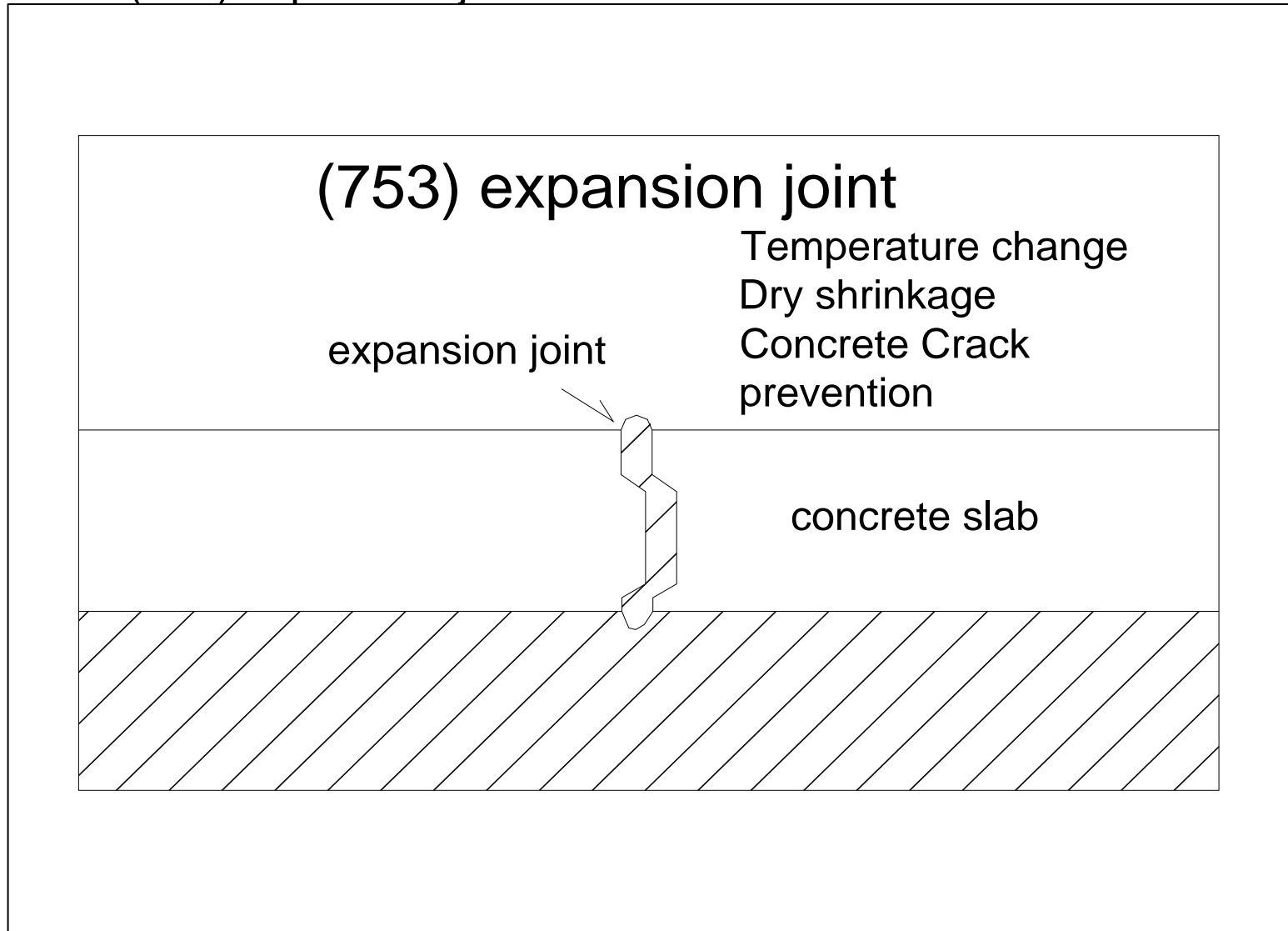
(752) expansion device



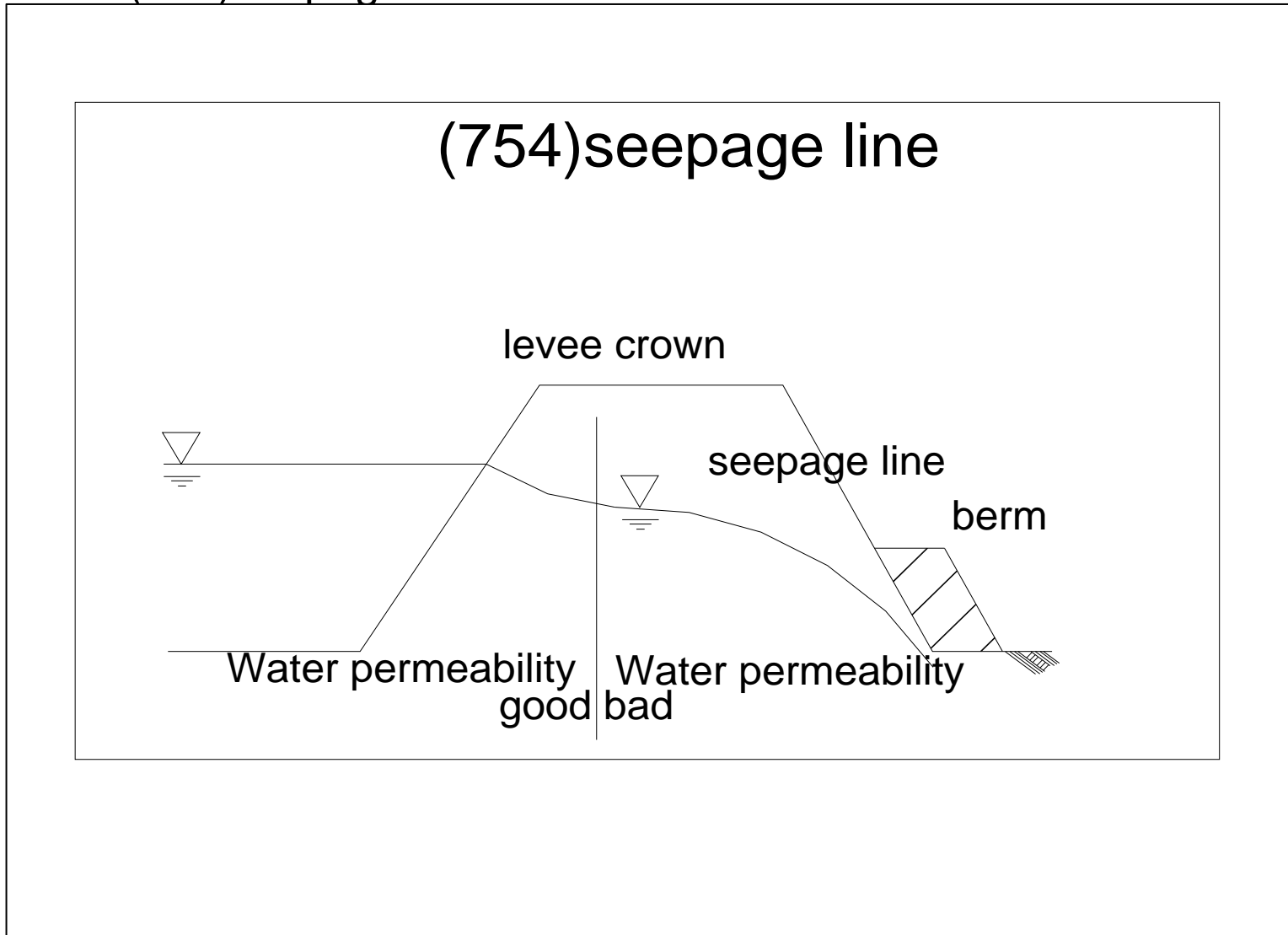
Seam-smooth

Bridge floor

(753) expansion joint

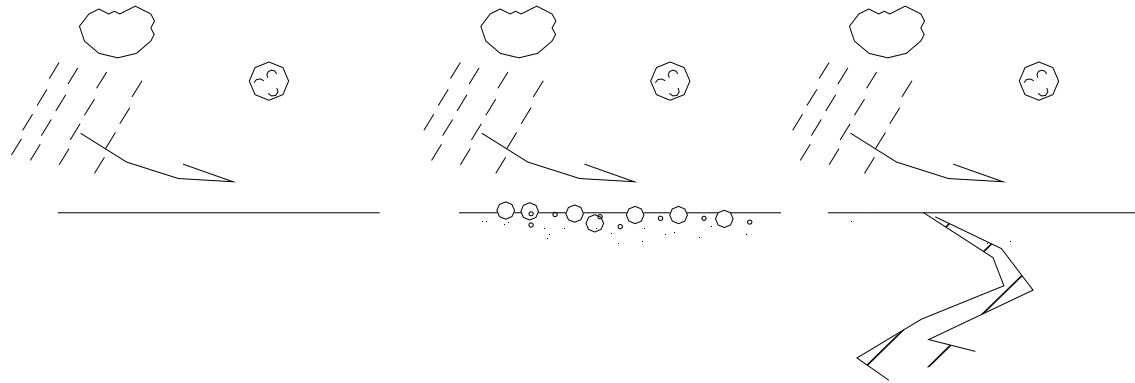


(754)seepage line



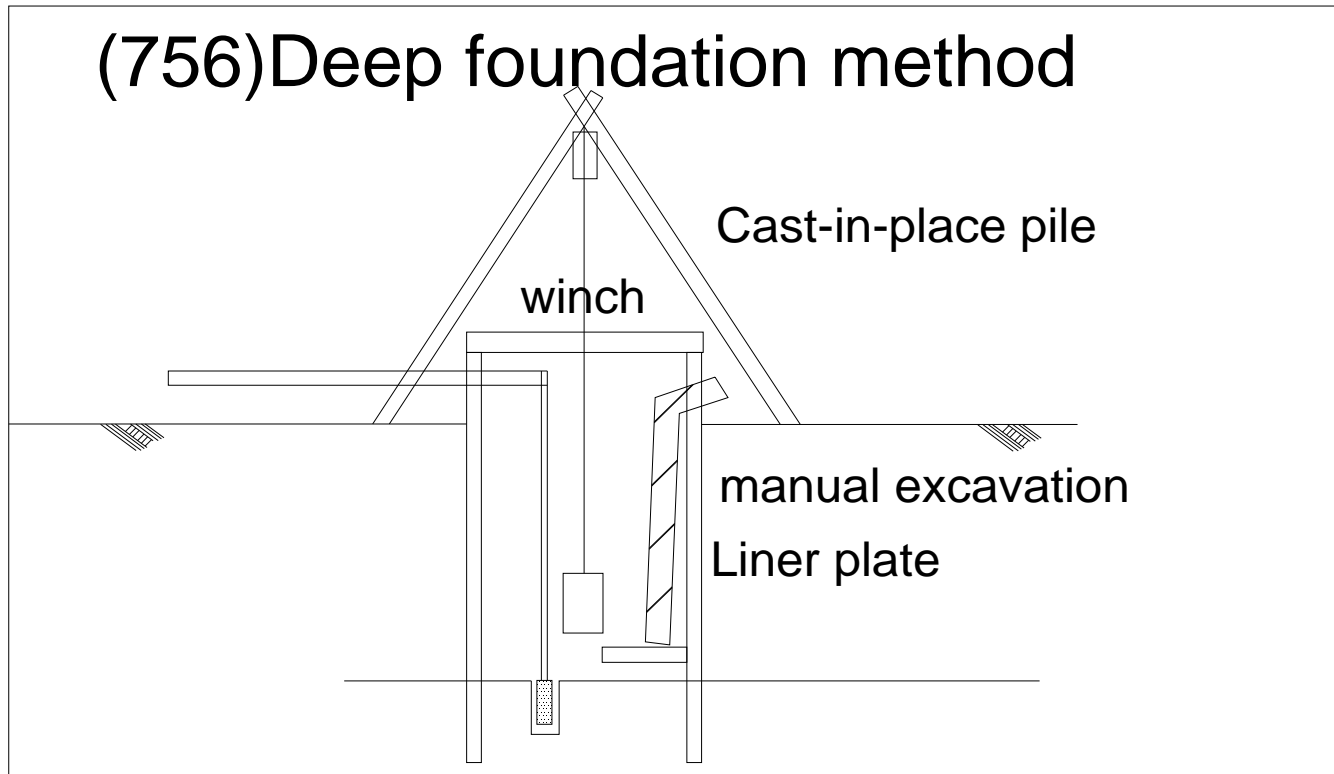
(755) Cycle of erosion

(755) Cycle of erosion



Plane Topography change

(756)Deep foundation method

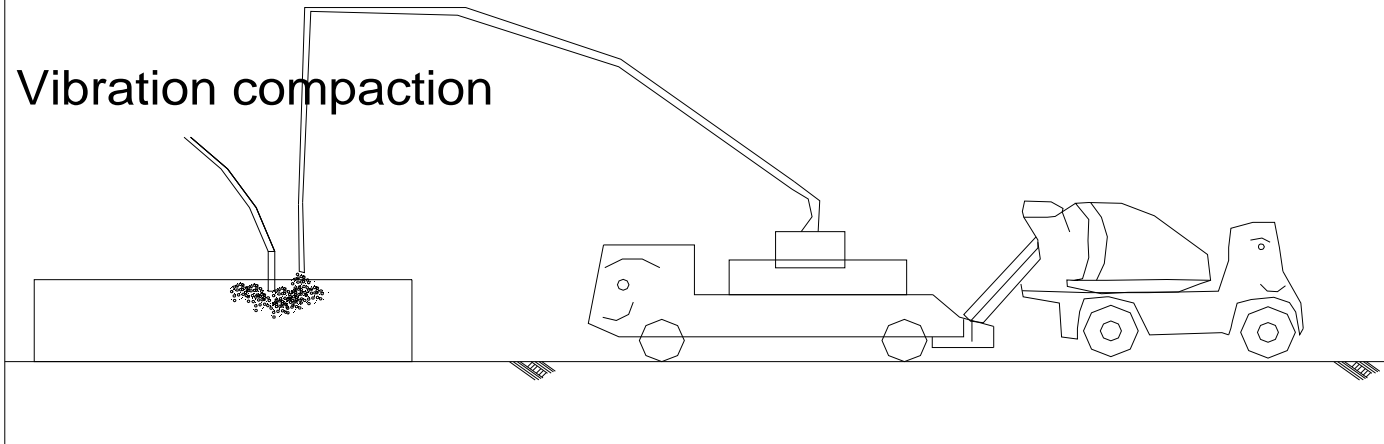


(757)Vibration compaction

(757)Vibration compaction

Fresh concrete

Vibration compaction



(758)Vibration Roller

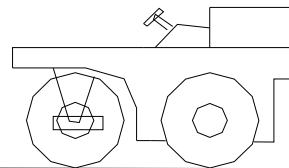
(758)Vibration Roller

Compacting machine

Vibration

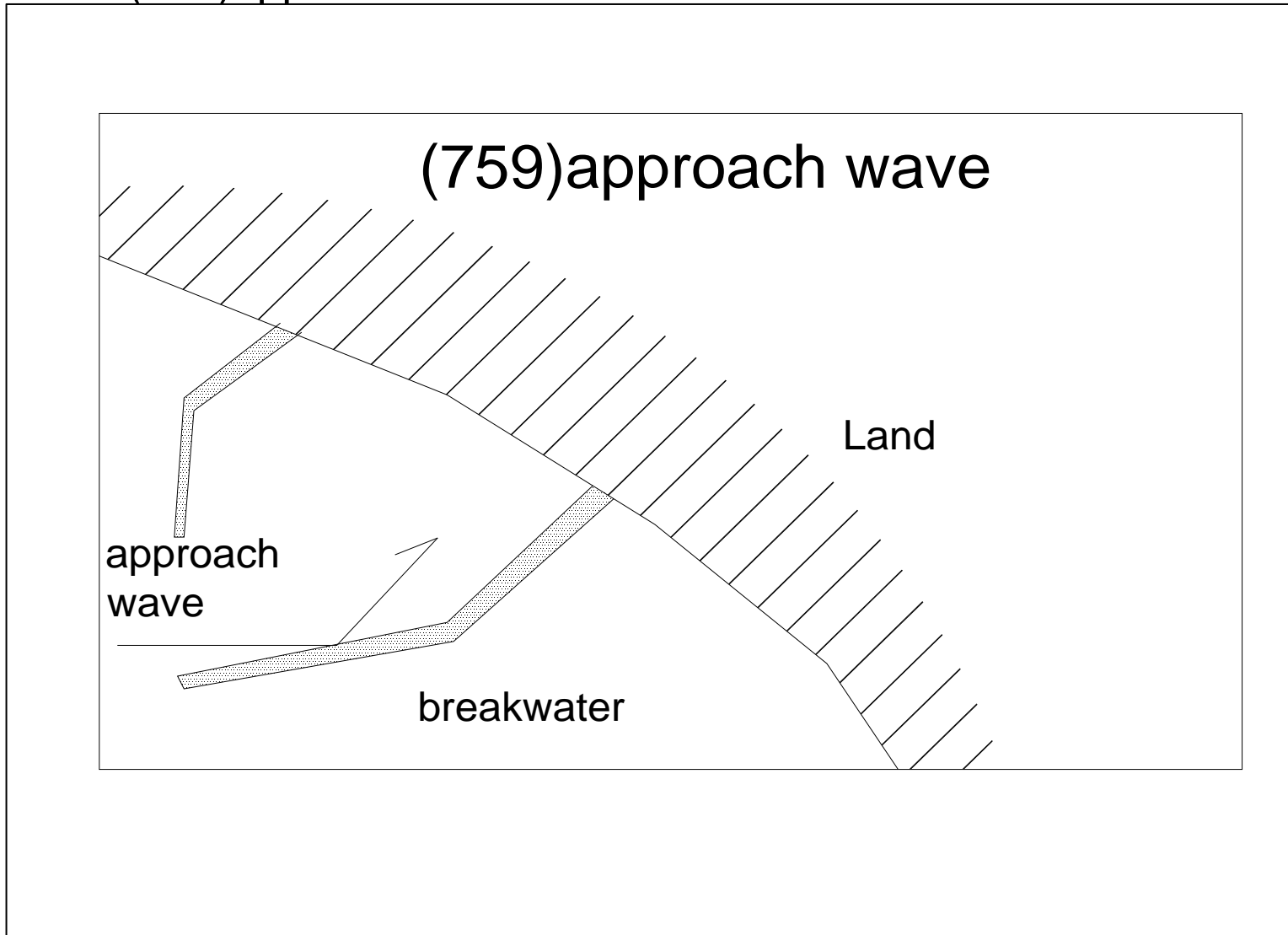
Impact

Compacting



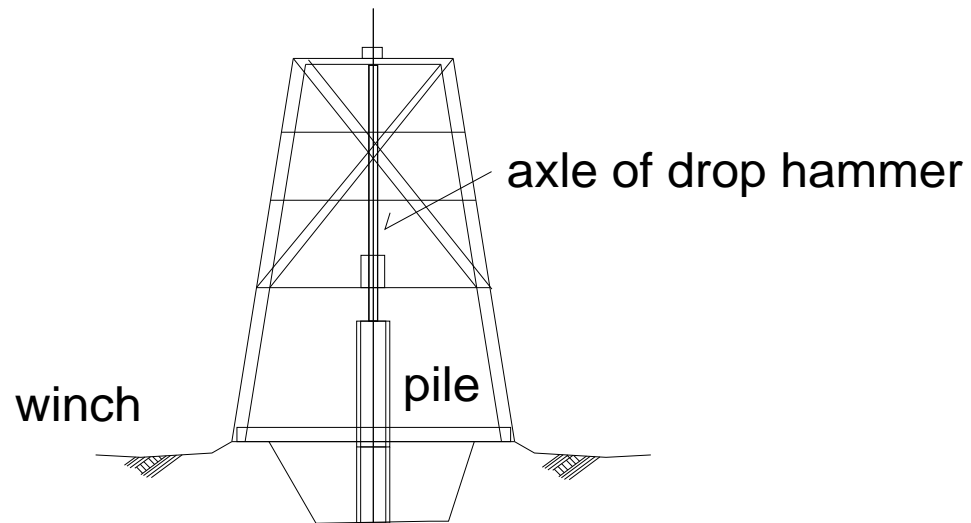
Tandem Vibration Roller

(759) approach wave



(760)axle of drop hammer

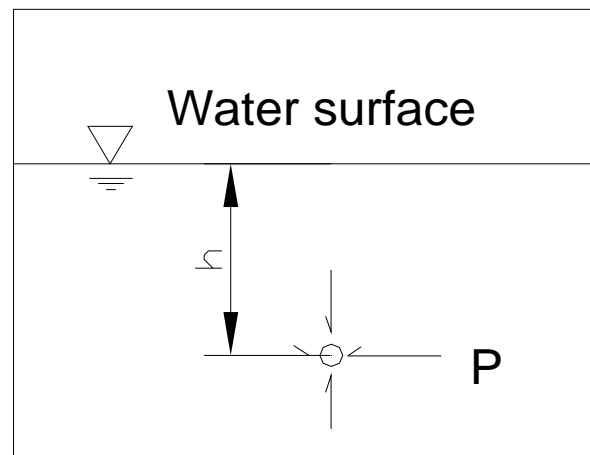
(760)axle of drop hammer



(761)Water pressure

(761)Water pressure

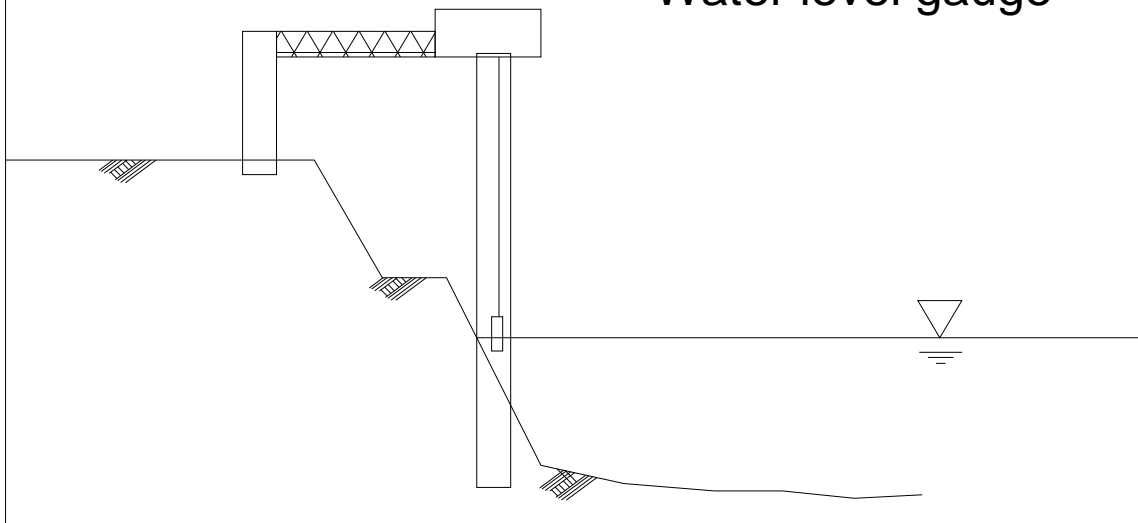
$$P=wh$$



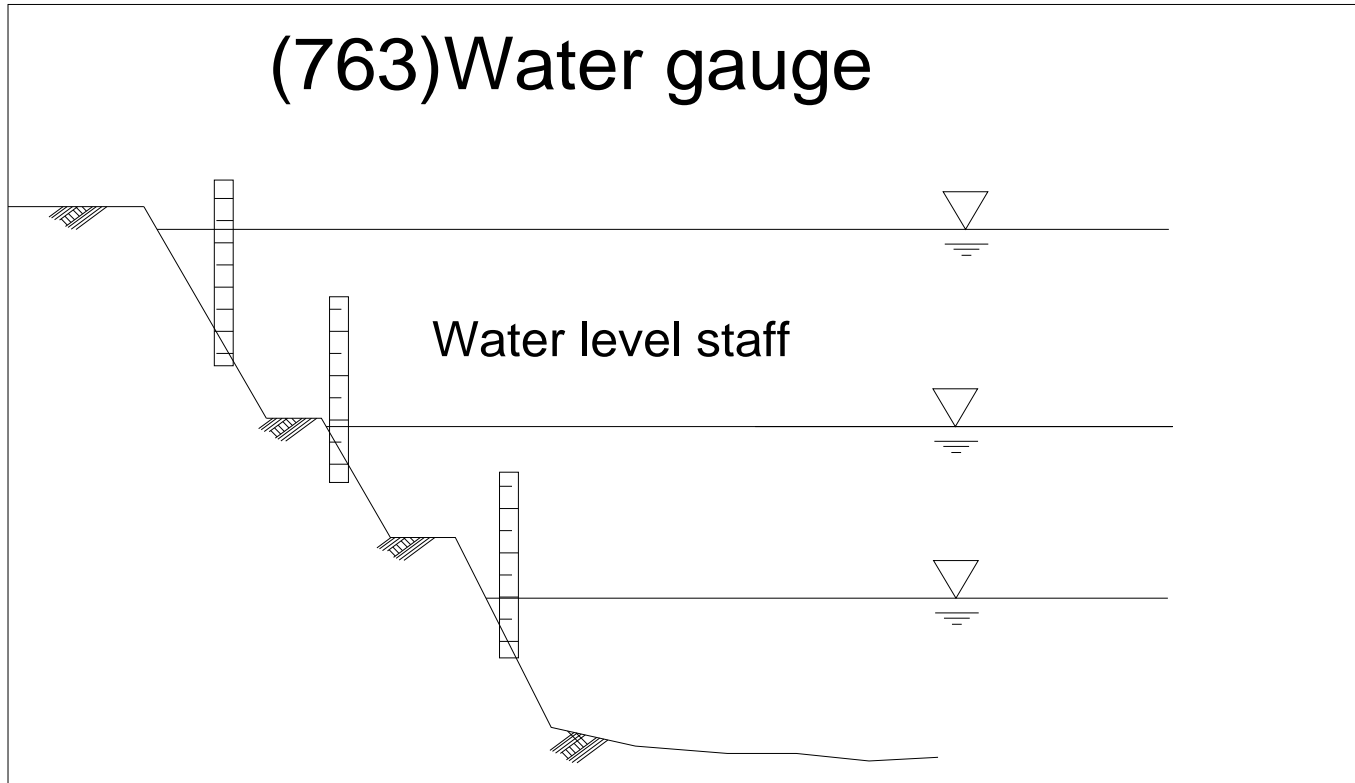
(762)Water level recorder

(762)Water level recorder

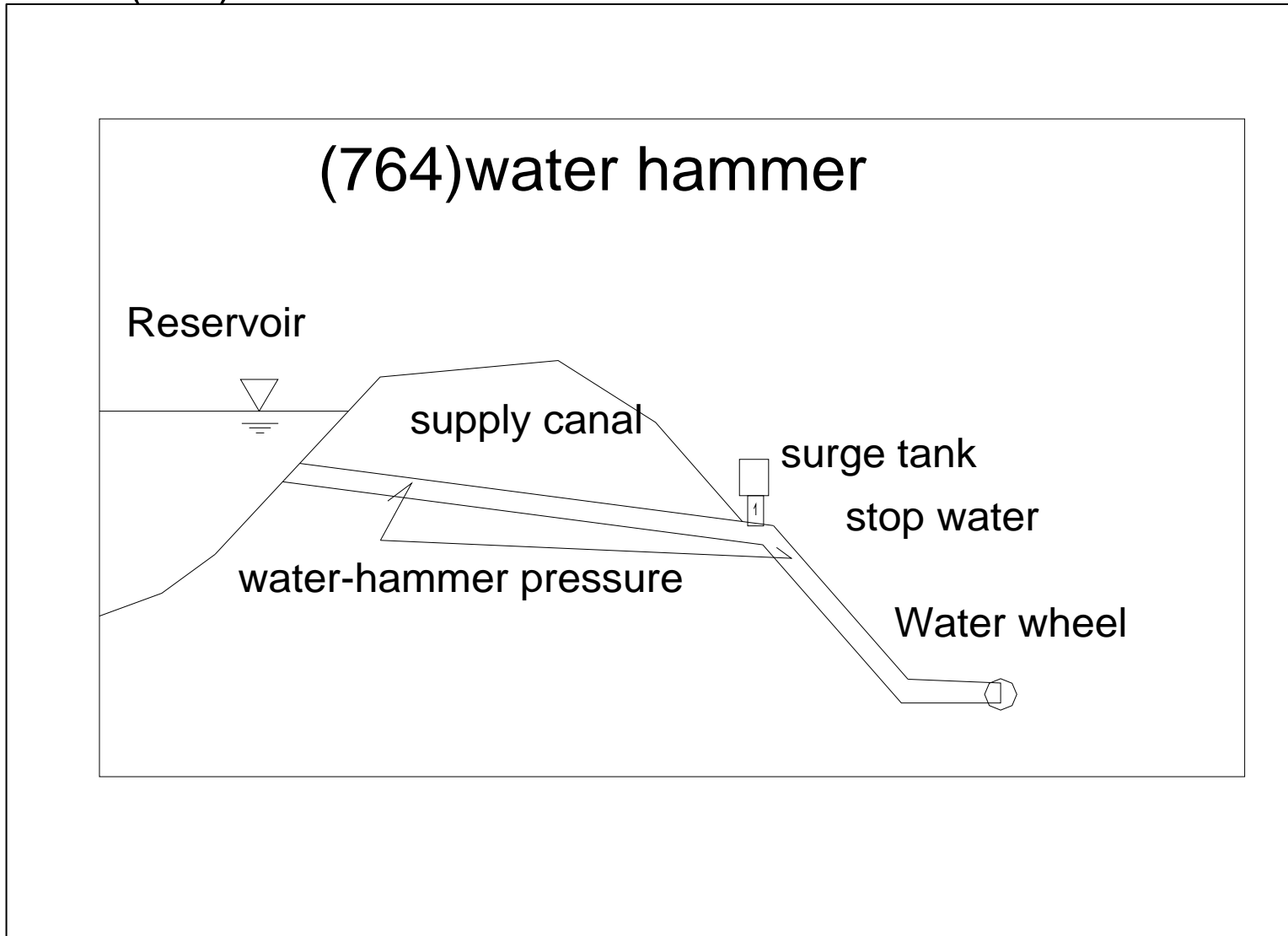
Water level gauge



(763)Water gauge

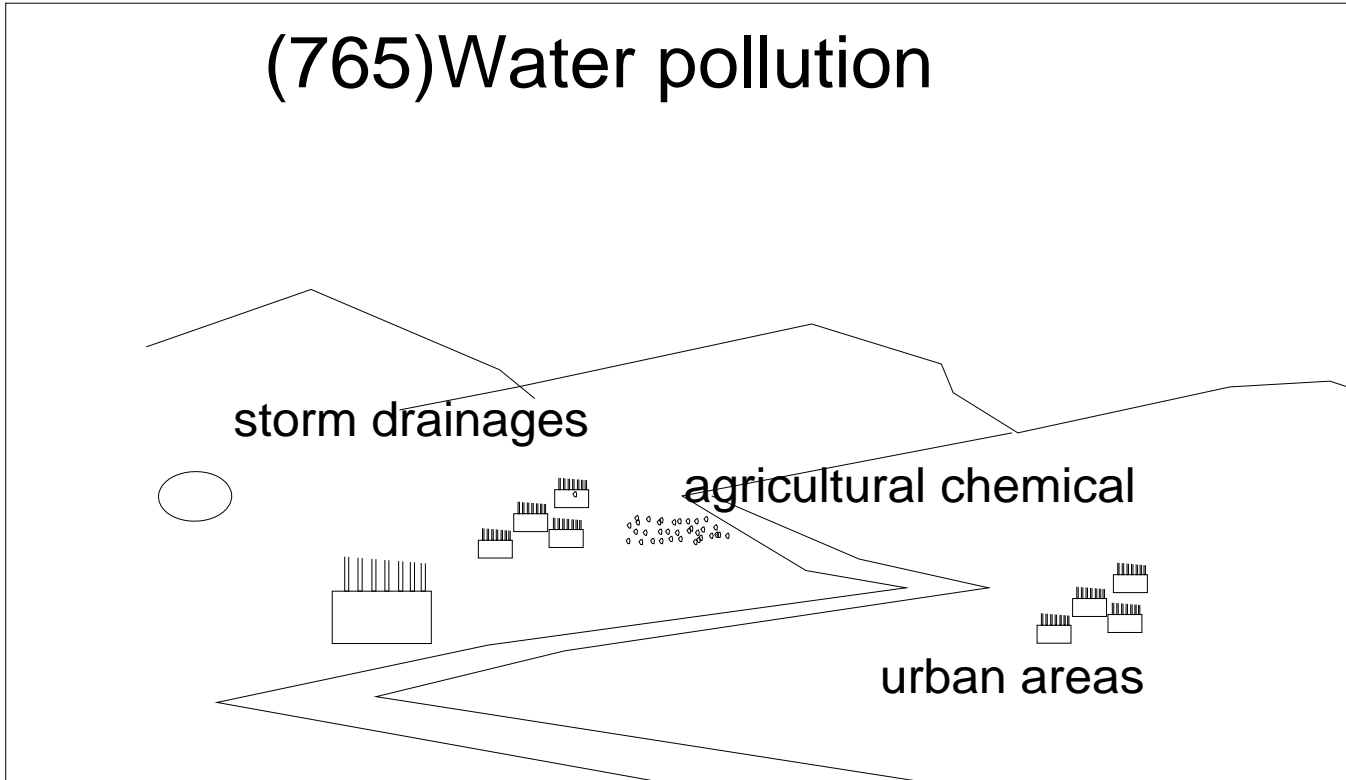


(764)water hammer

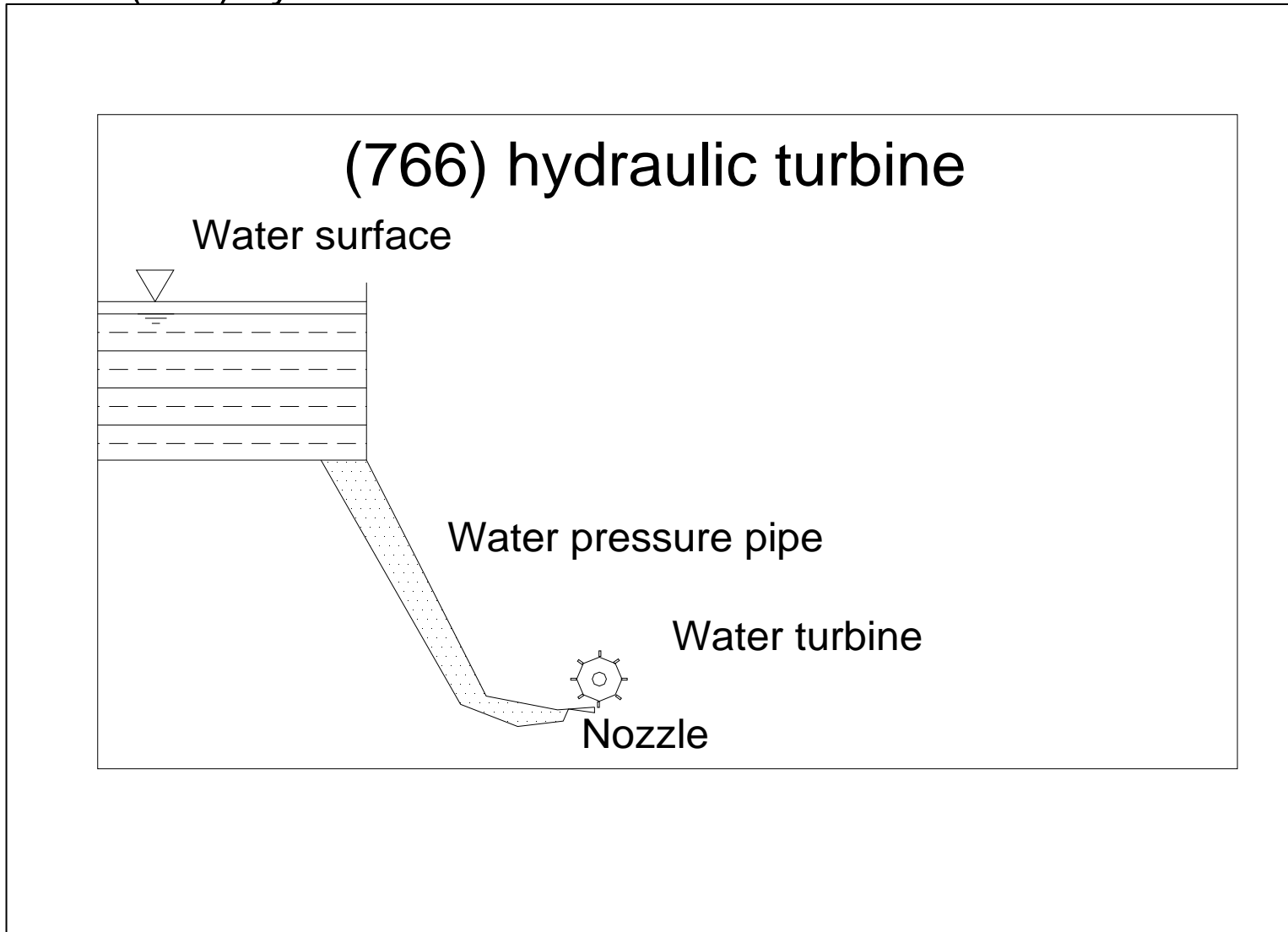


(765)Water pollution

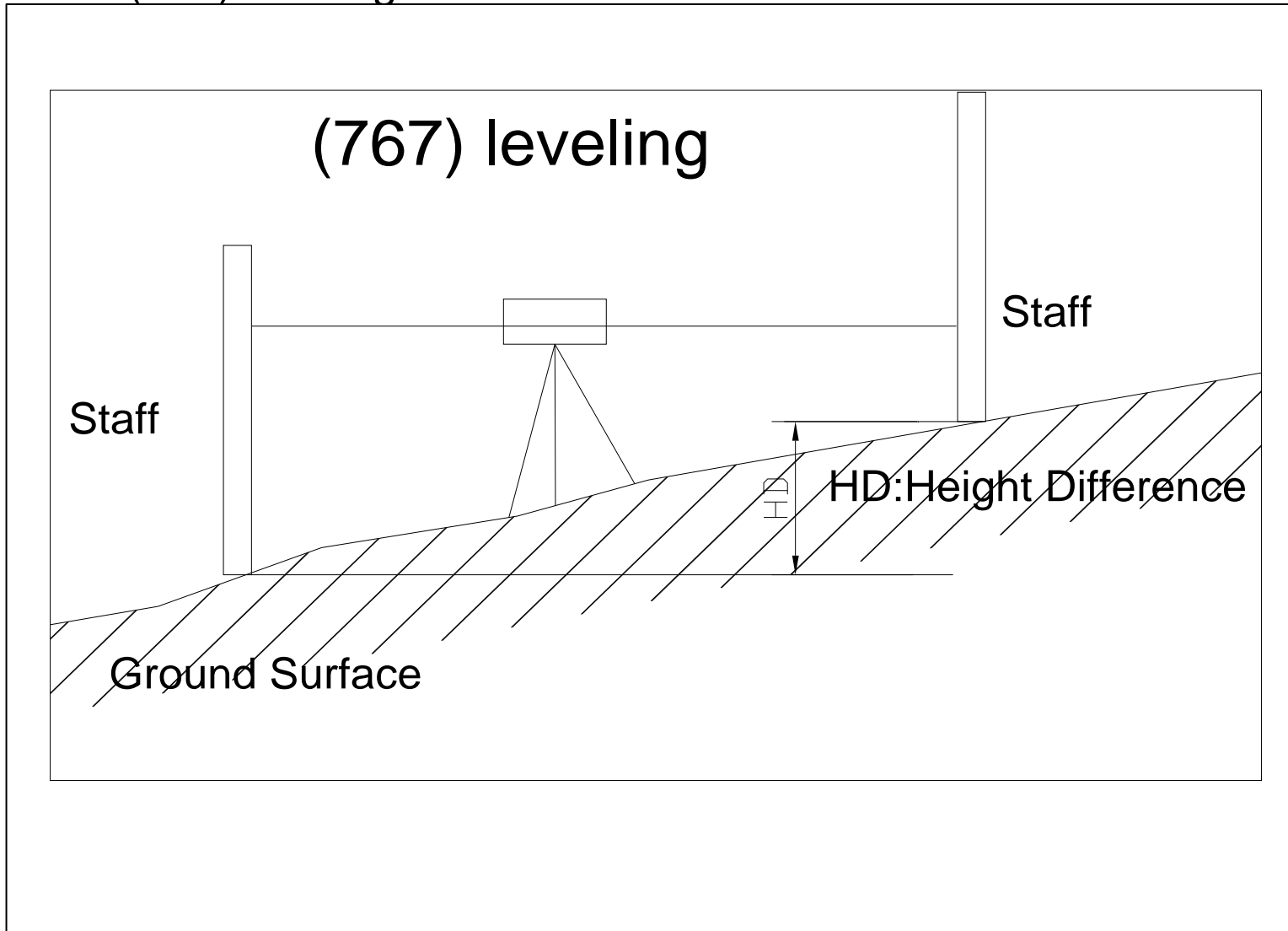
(765)Water pollution



(766) hydraulic turbine

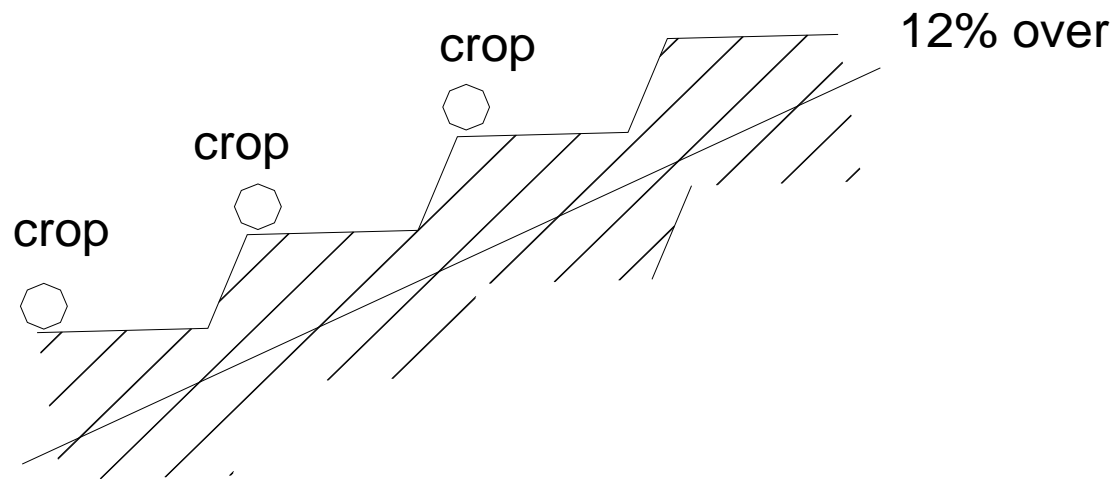


(767) leveling

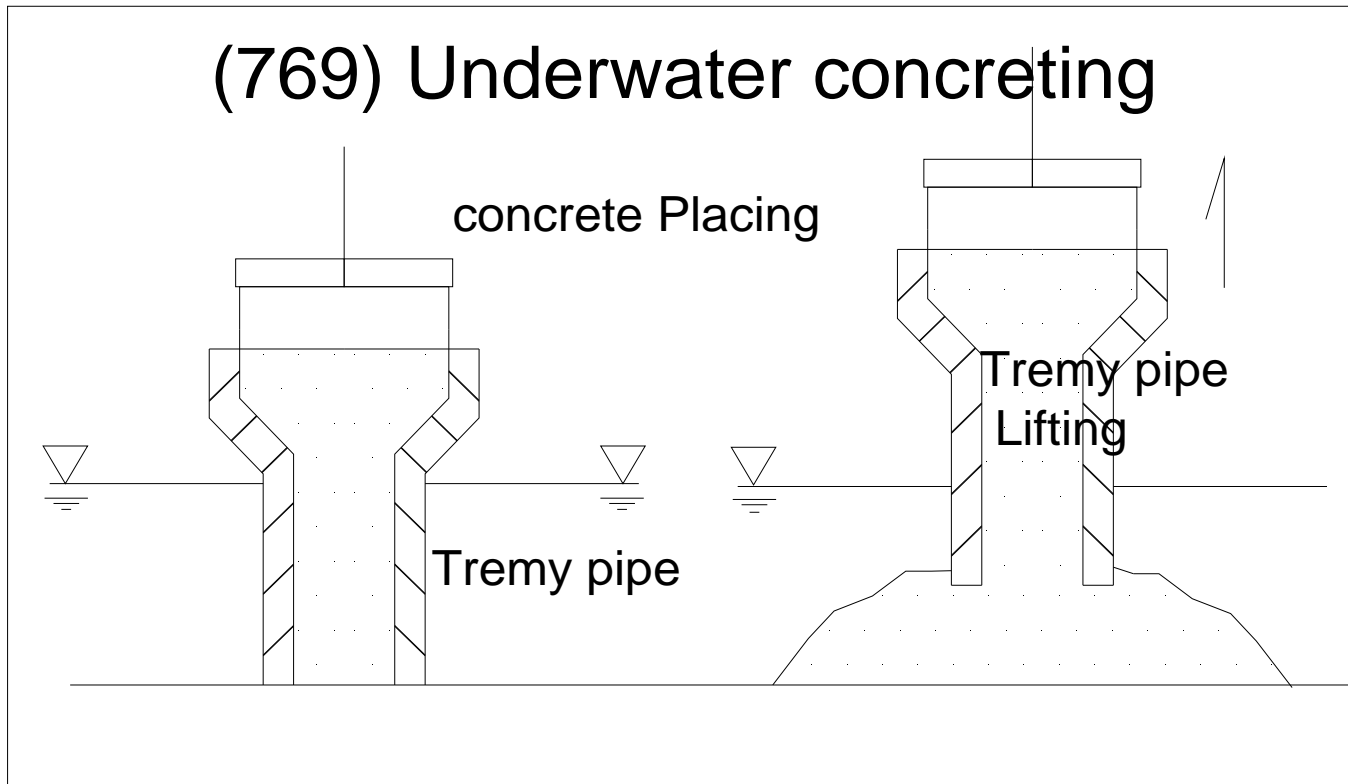


(768) water erosion control

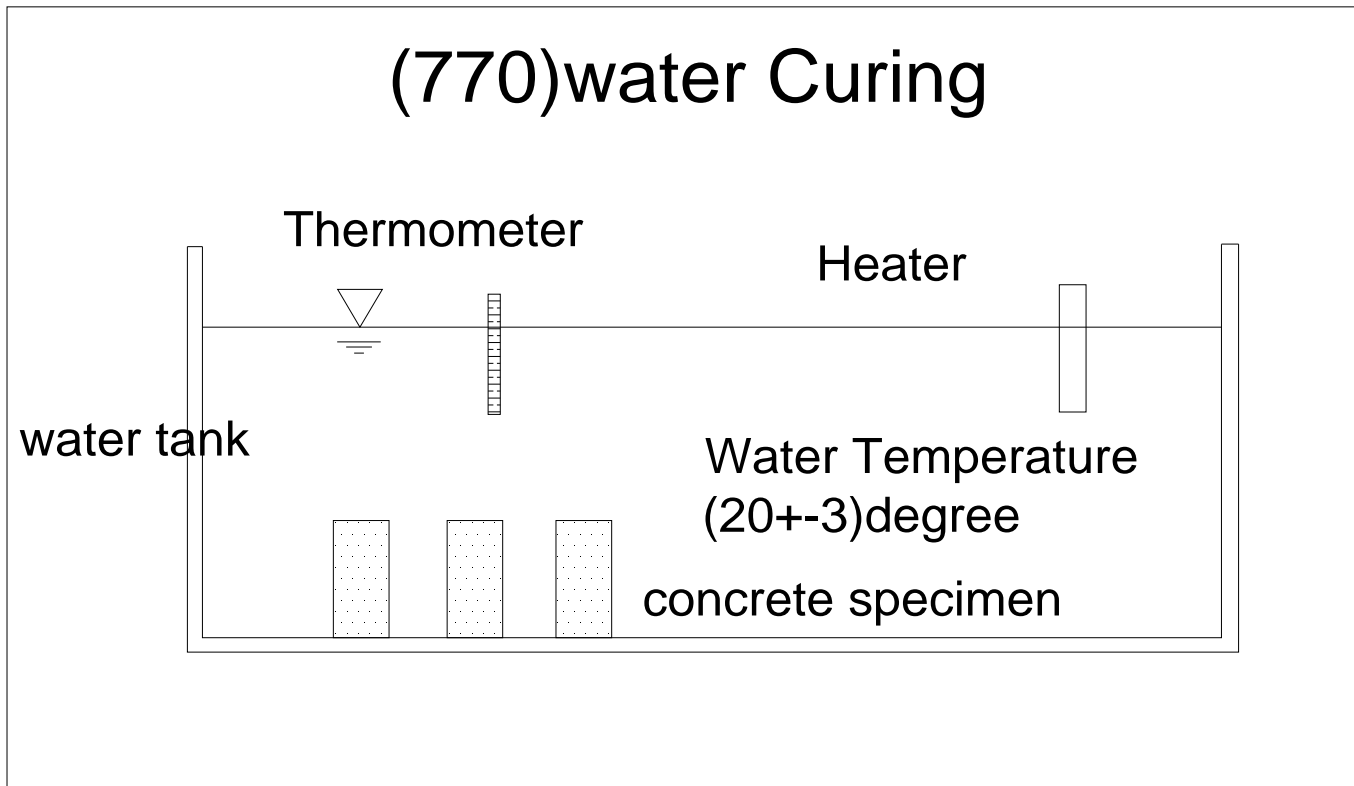
(768) water erosion control



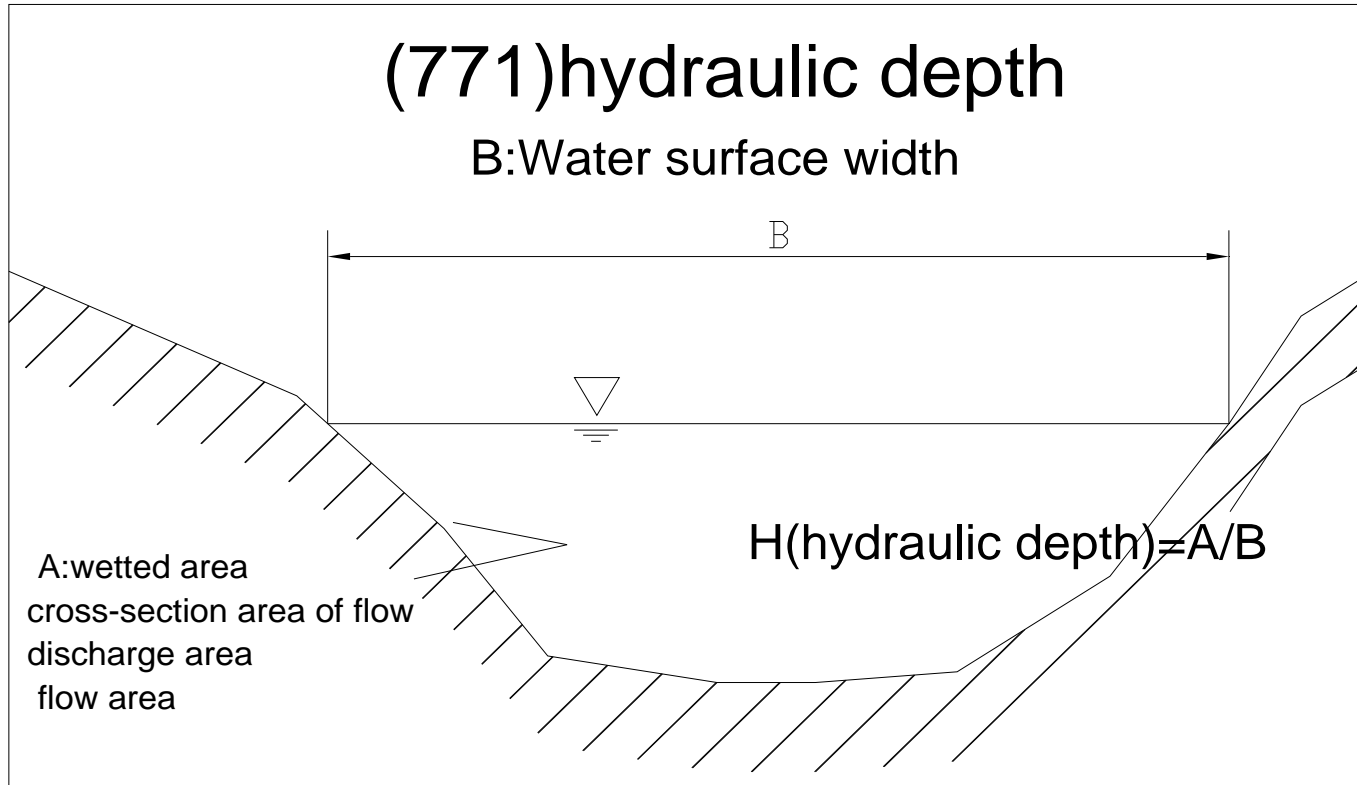
(769) Underwater concreting



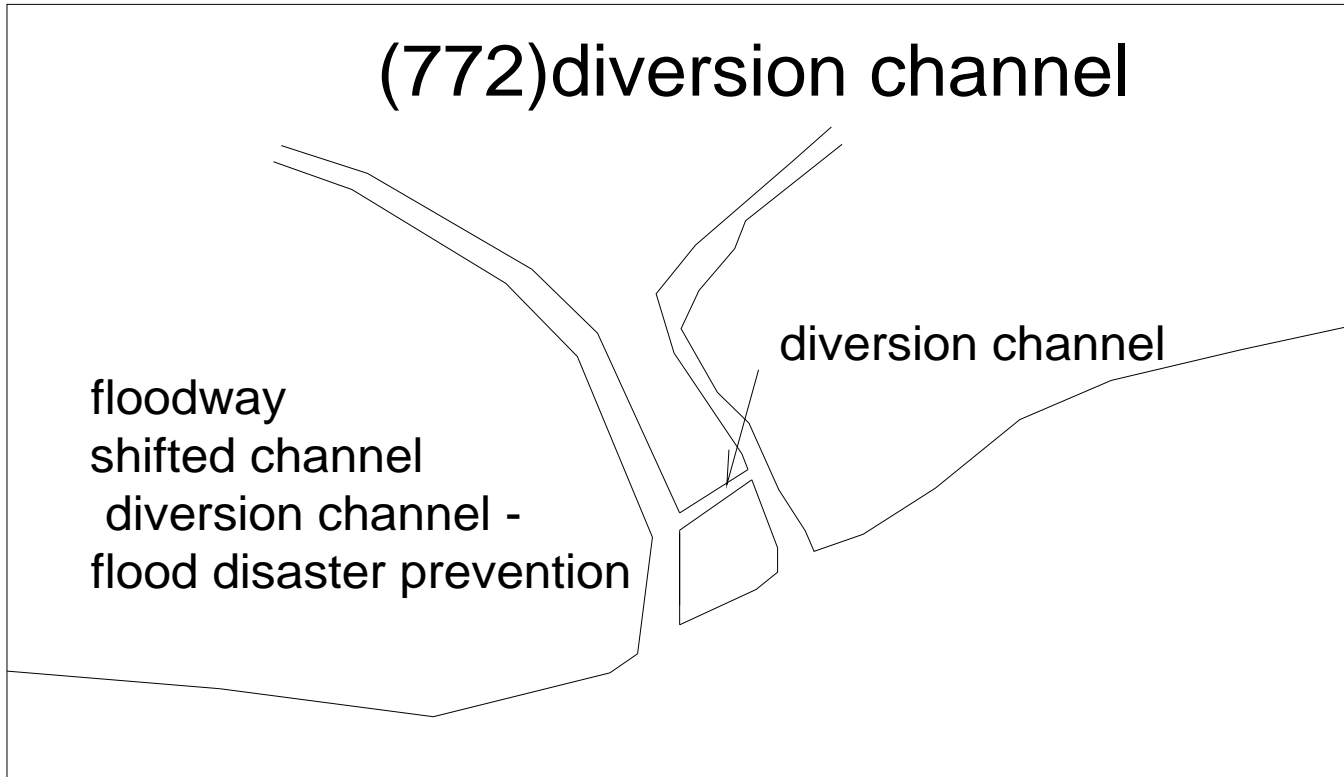
(770)water Curing



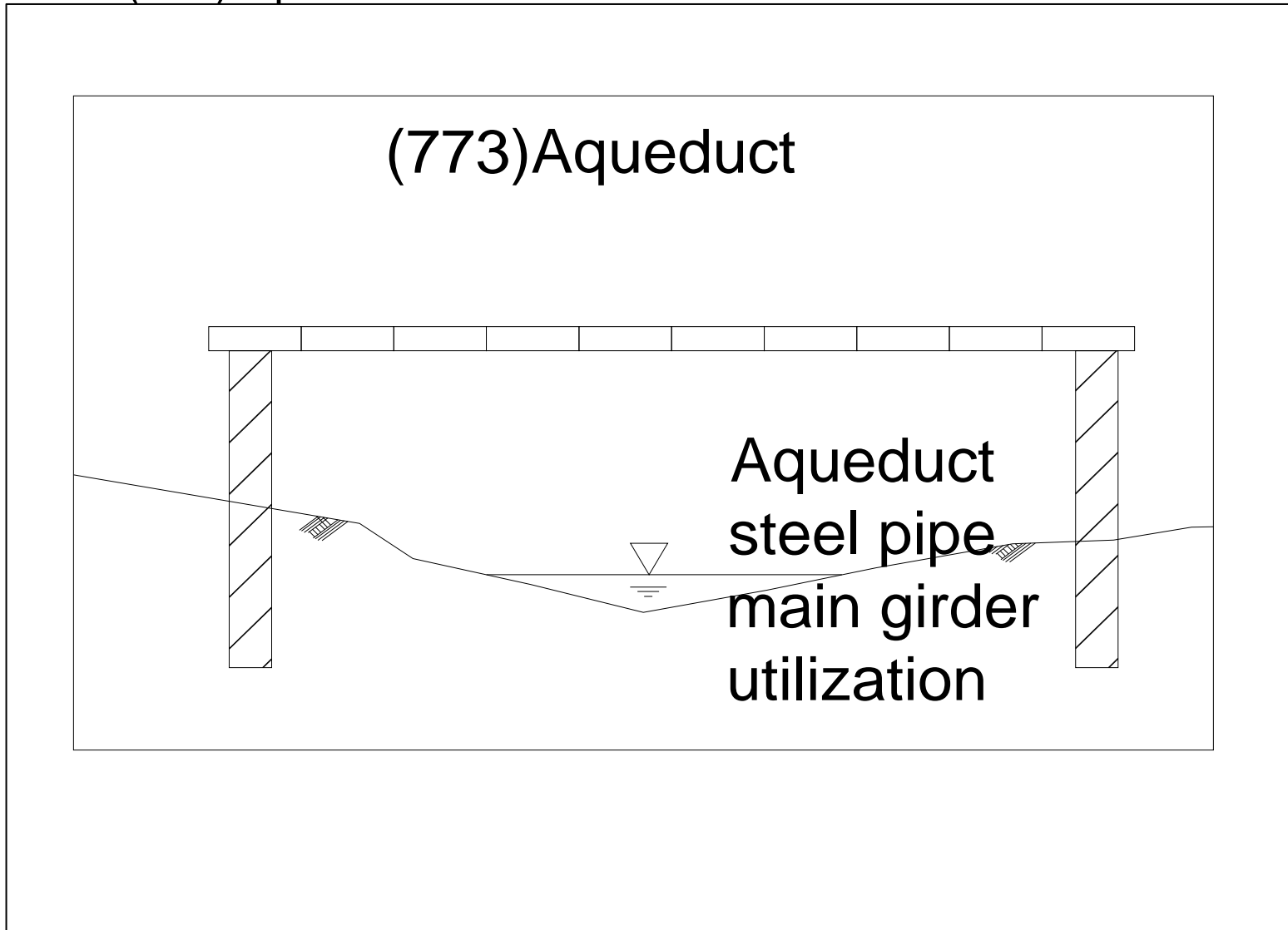
(771)hydraulic depth



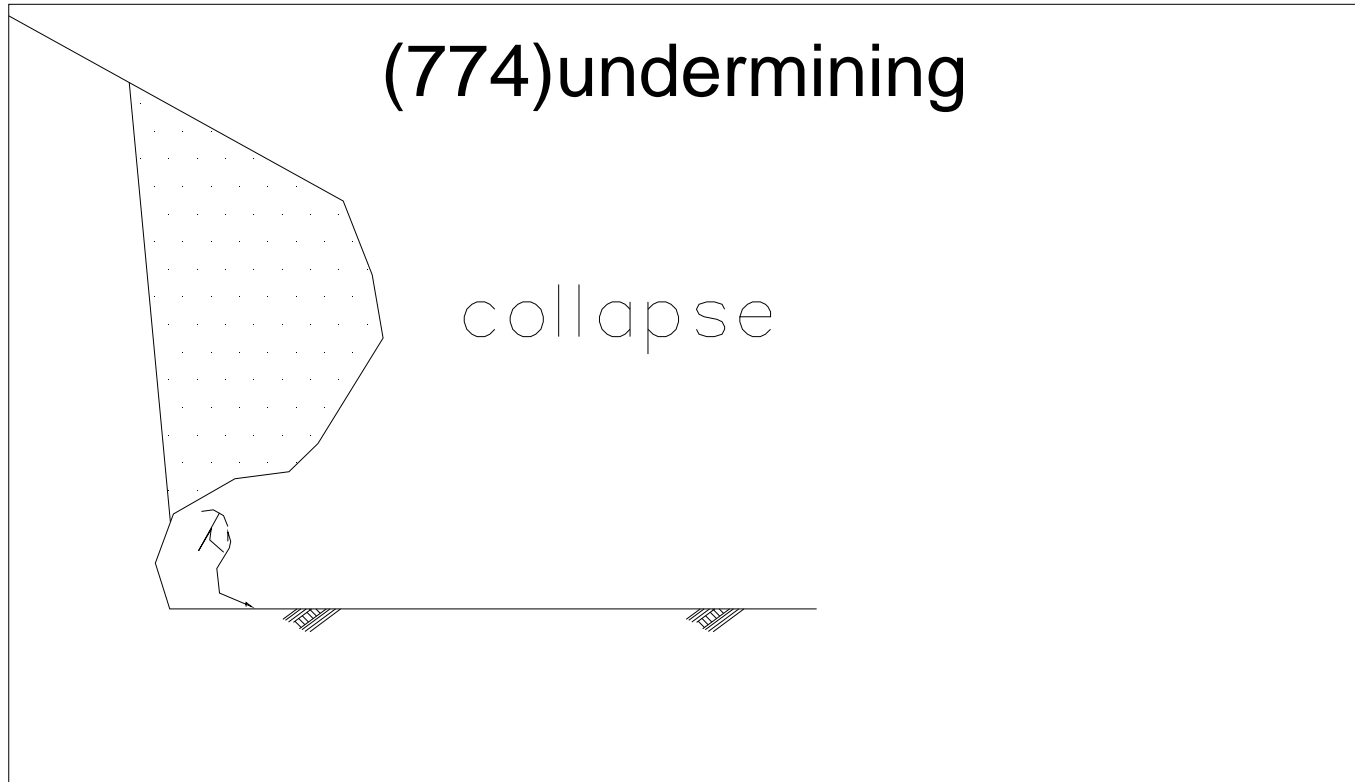
(772)diversion channel



(773)Aqueduct

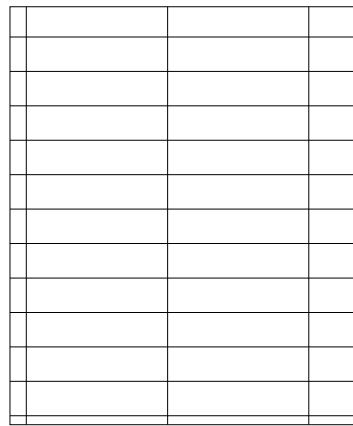


(774)undermining



(775)screen

(775)screen

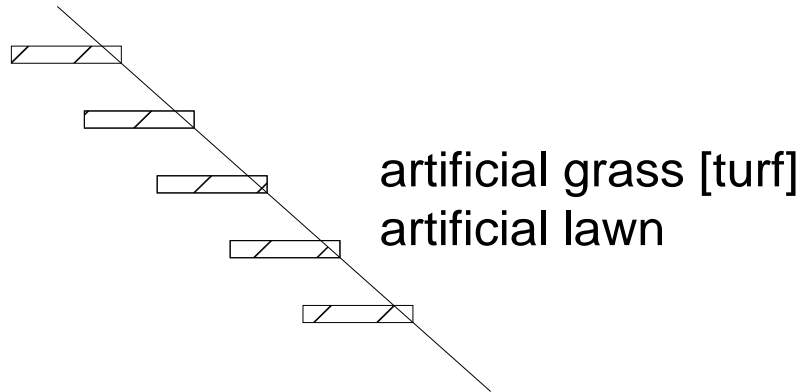


floating debris
floating waste -
chip of wood
Exclusion

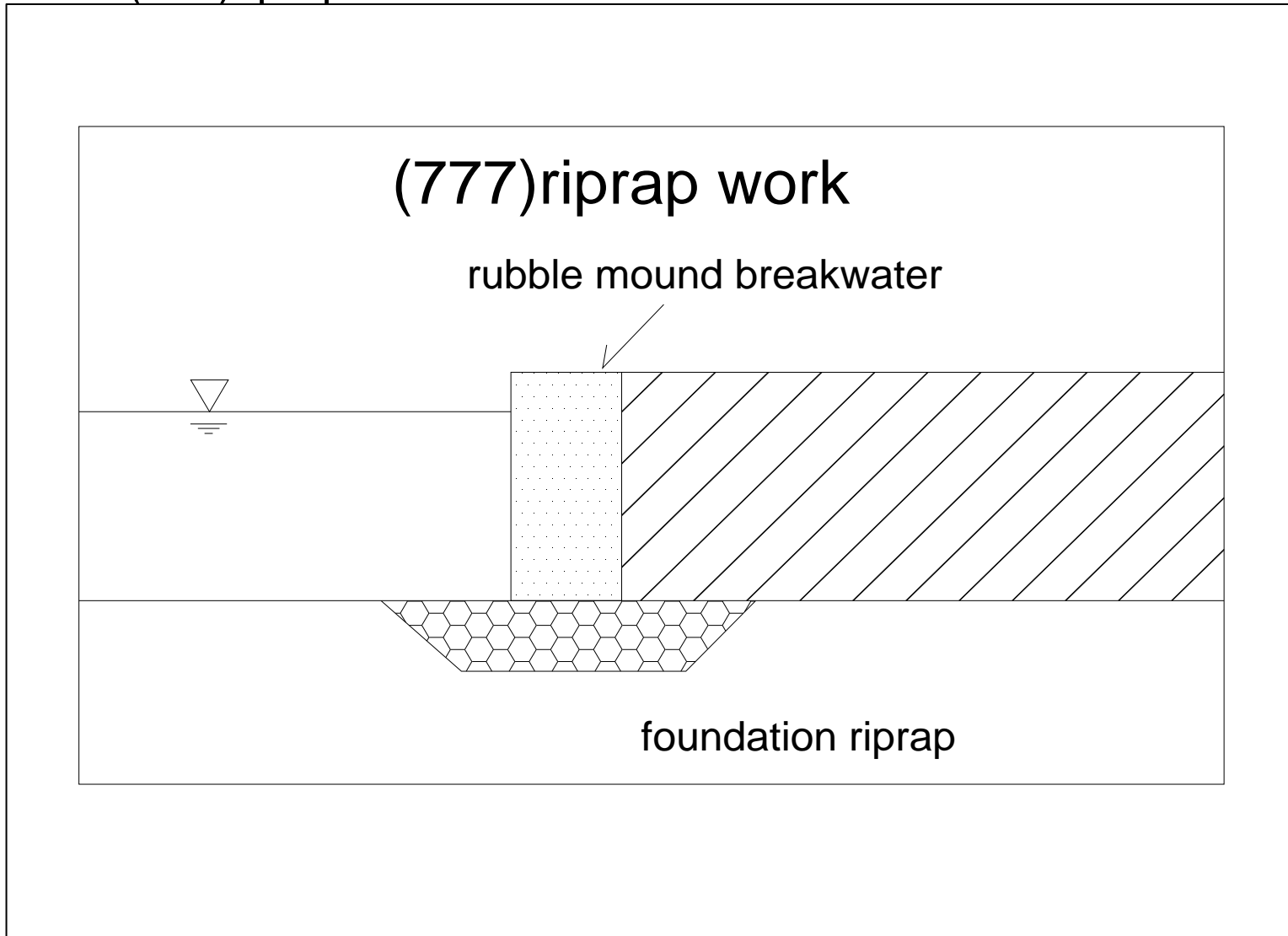
(776)sodding

(776)sodding

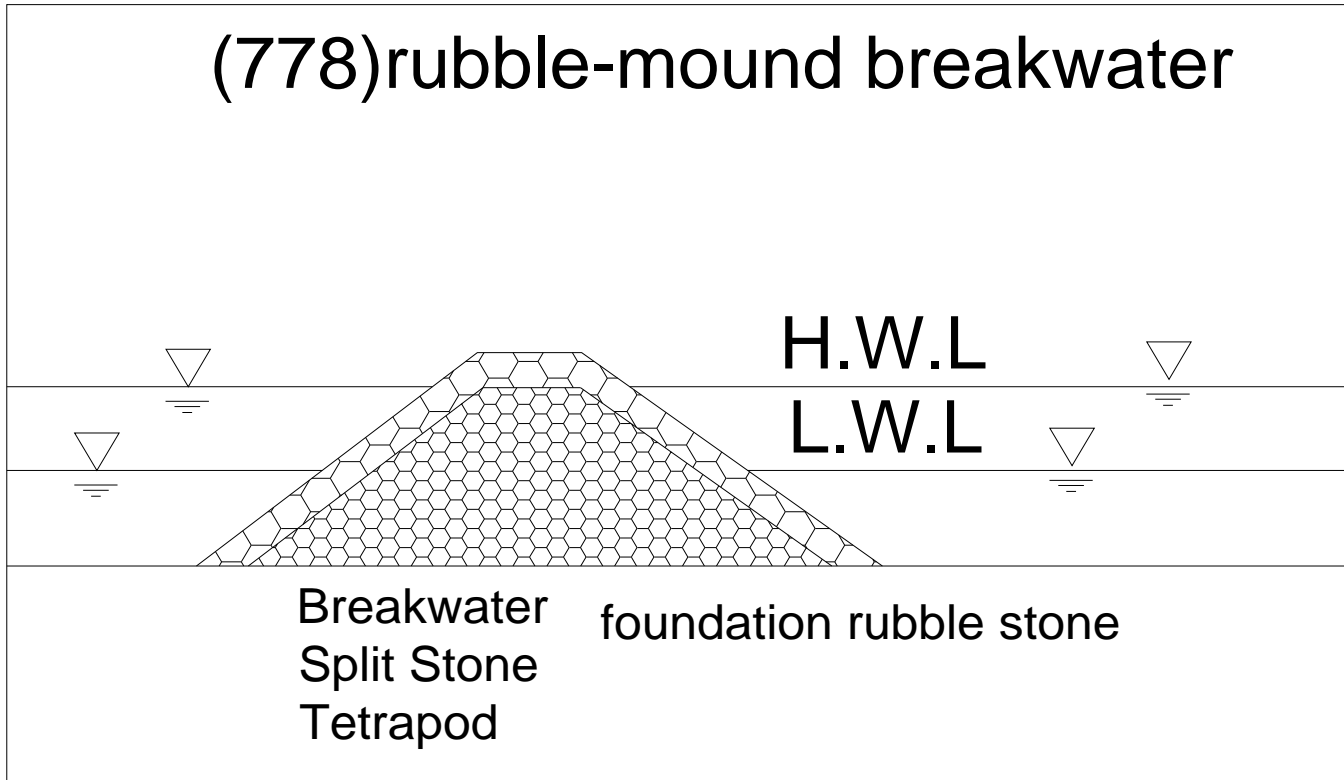
slope stability



(777)riprap work

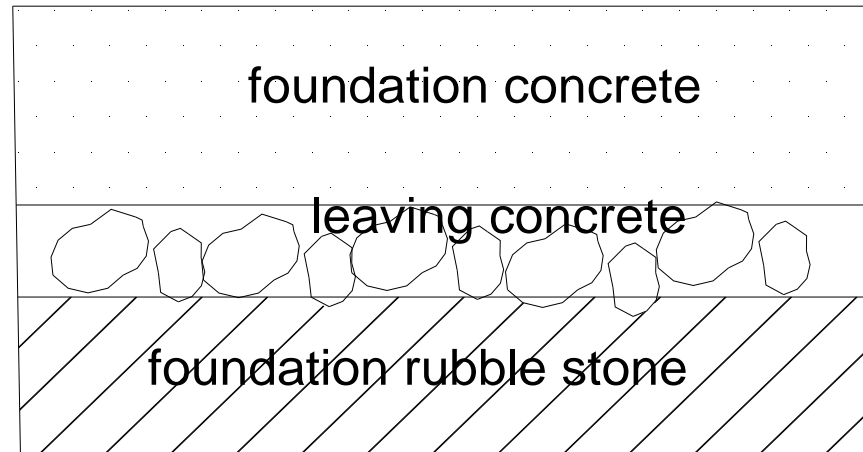


(778)rubble-mound breakwater



(779)leaving concrete

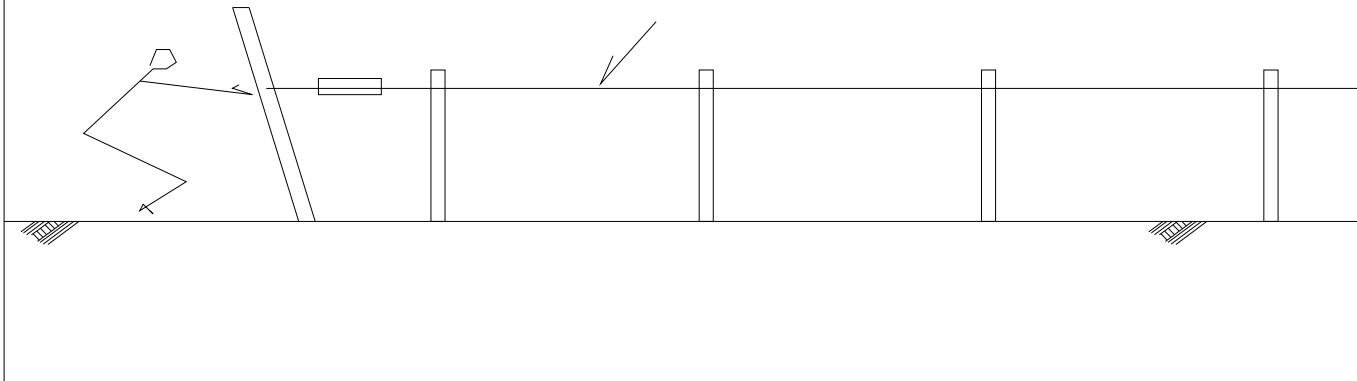
(779)leaving concrete



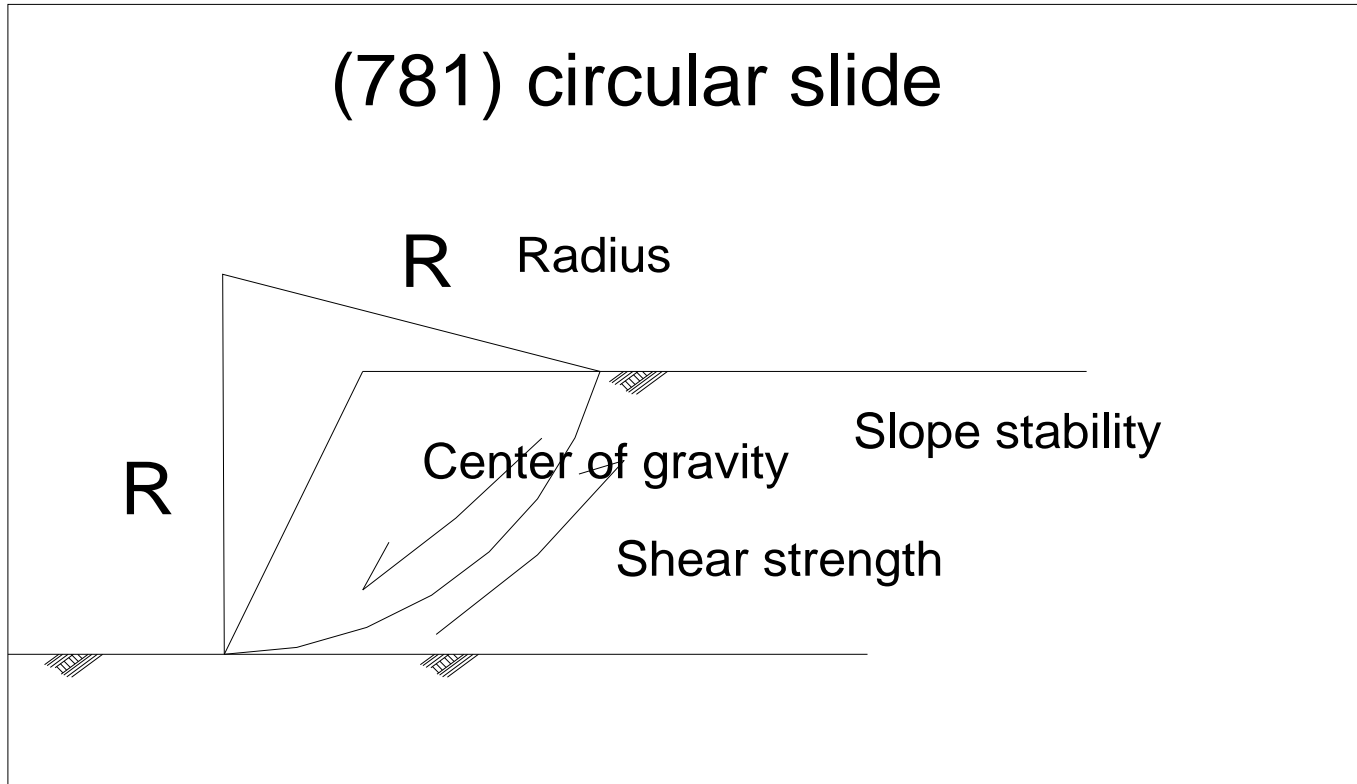
(780)Spring Balance

(780)Spring Balance

Steel Tape Measure



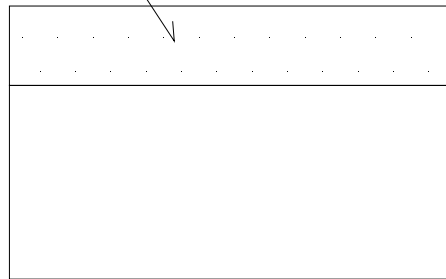
(781) circular slide



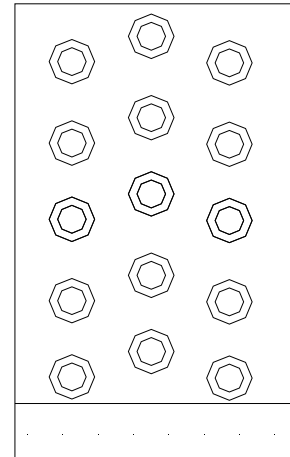
(782) Anti-slip treatment

(782) Anti-slip treatment

Coarse sand asphalt

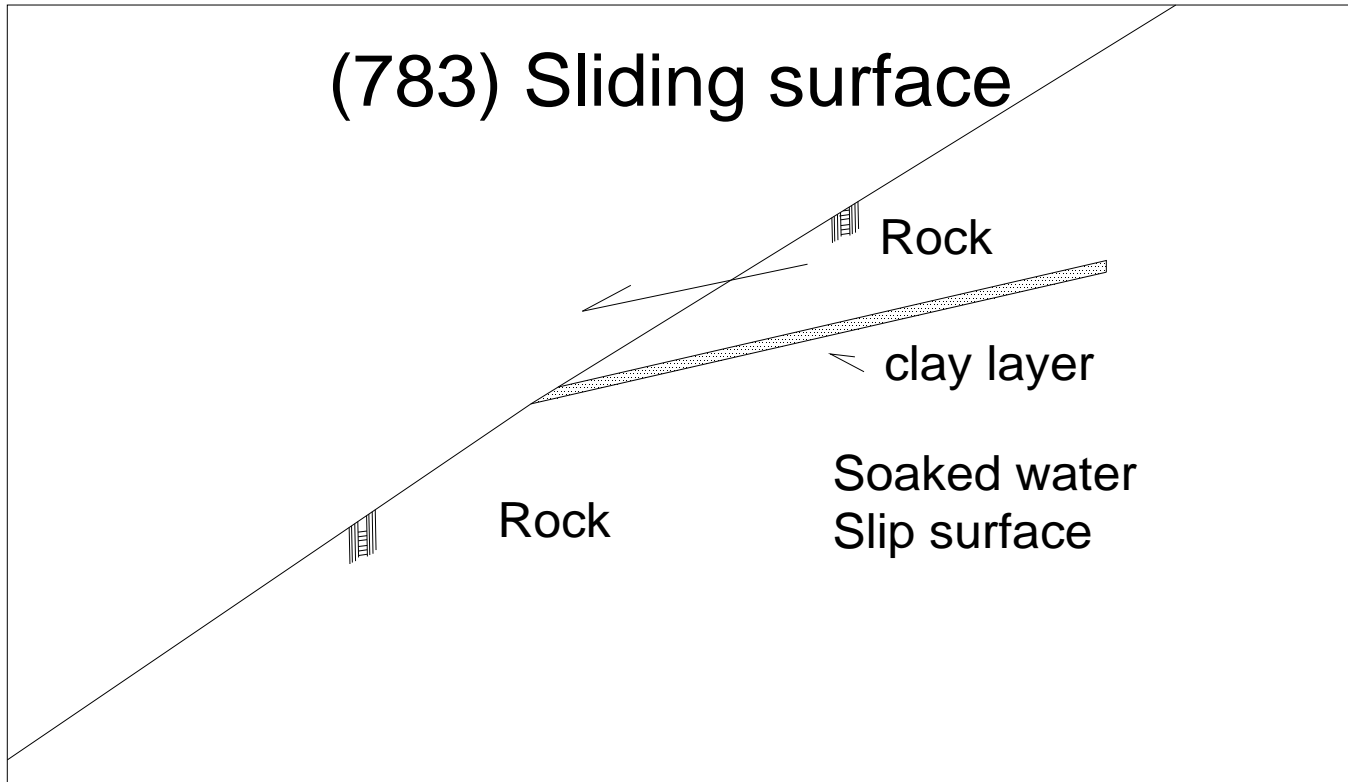


asphalt pavement



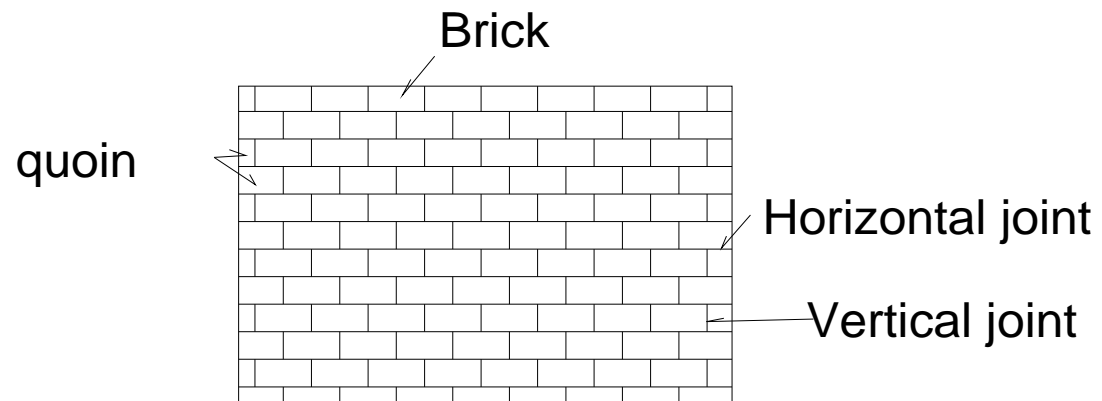
concrete pavement

(783) Sliding surface



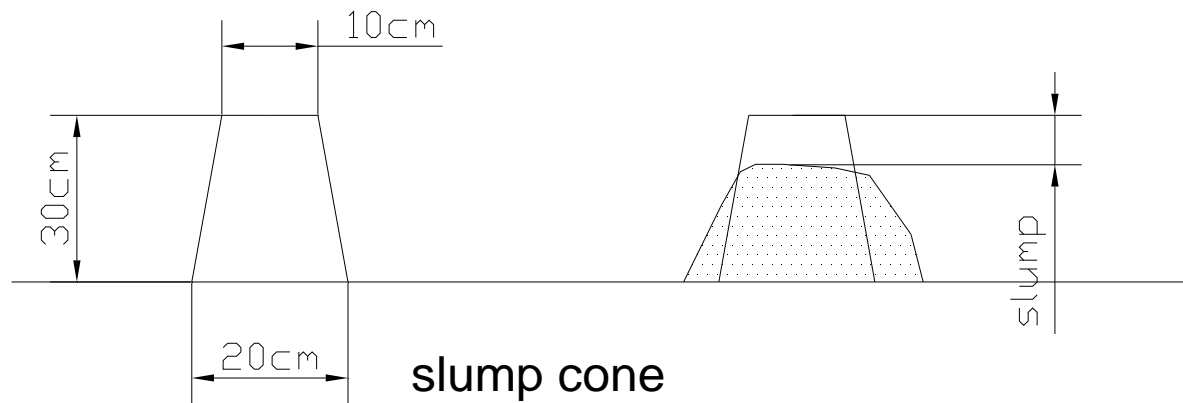
(784) quoin

(784) quoin



(785) slump

(785) slump

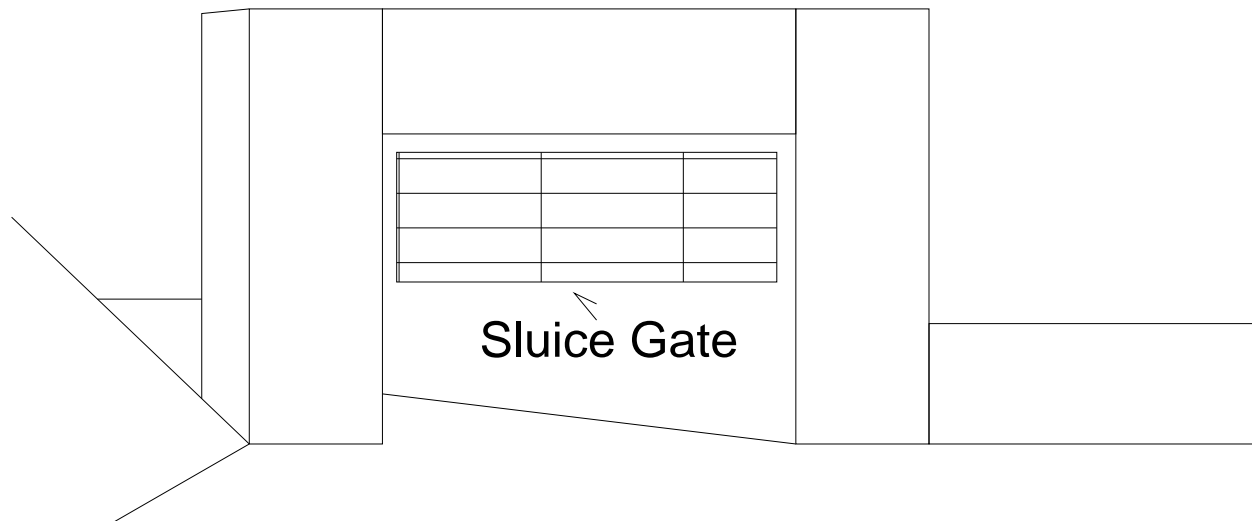


slump cone

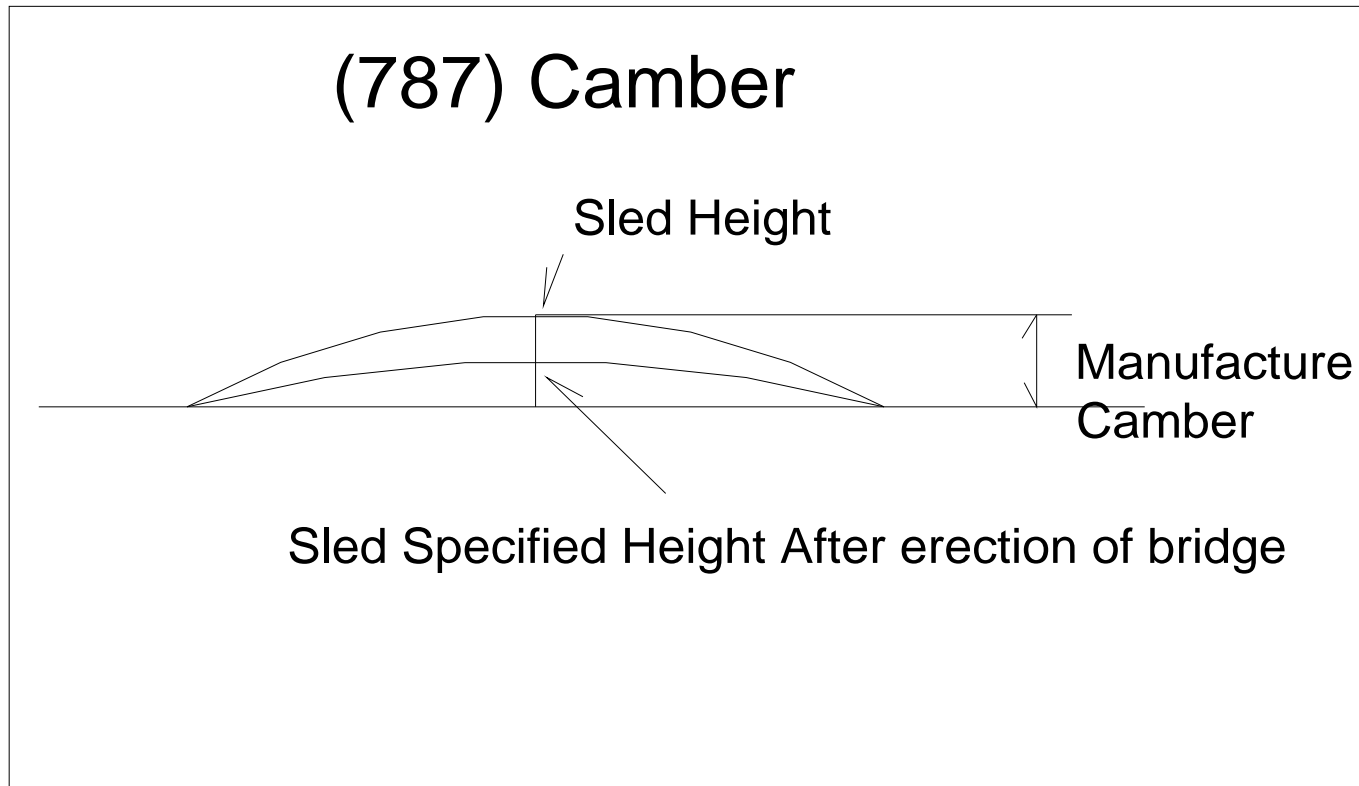
Workability Hardness Judgment

(786) Sluice Gate

(786) Sluice Gate

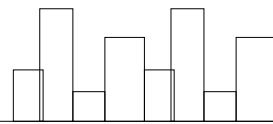


(787) Camber

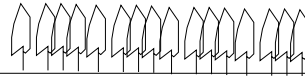


(788) Productive green tract of land

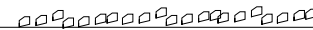
(788) Productive green tract of land



Urban



Urban forest

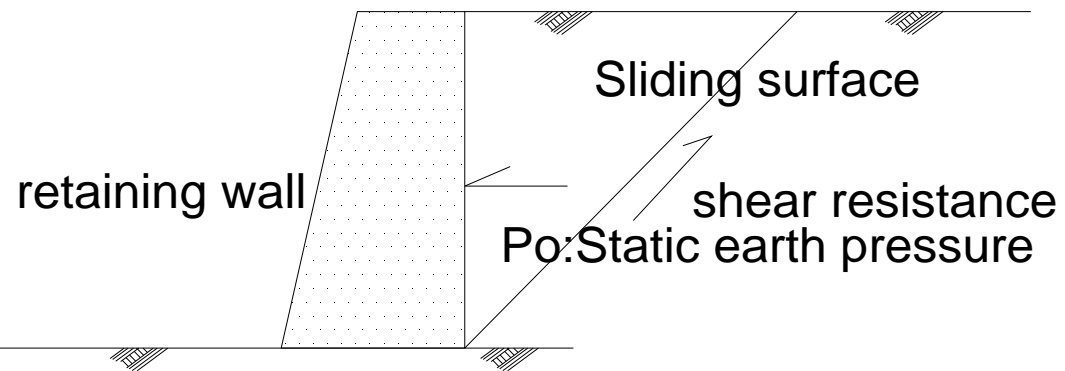


Agricultural land

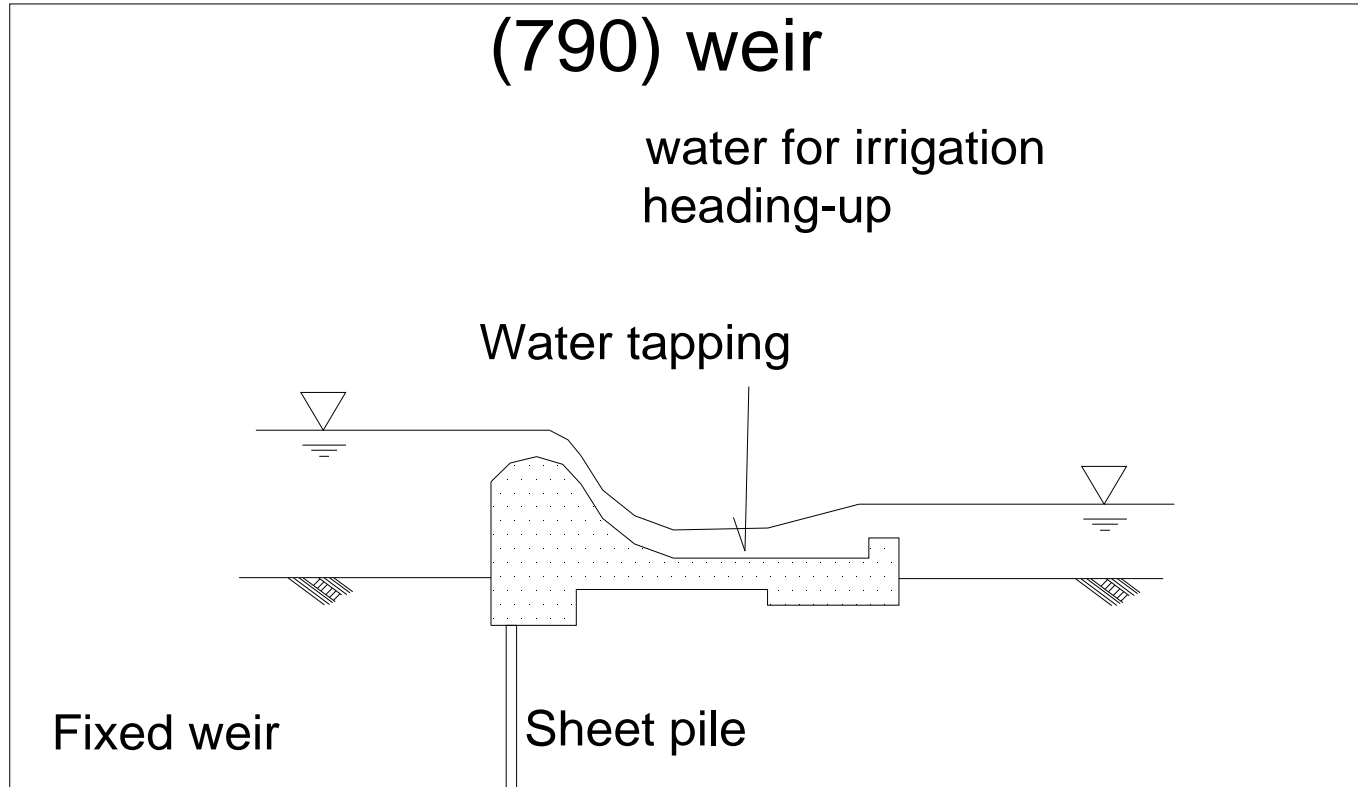
Productive green tract of land

(789) Static earth pressure

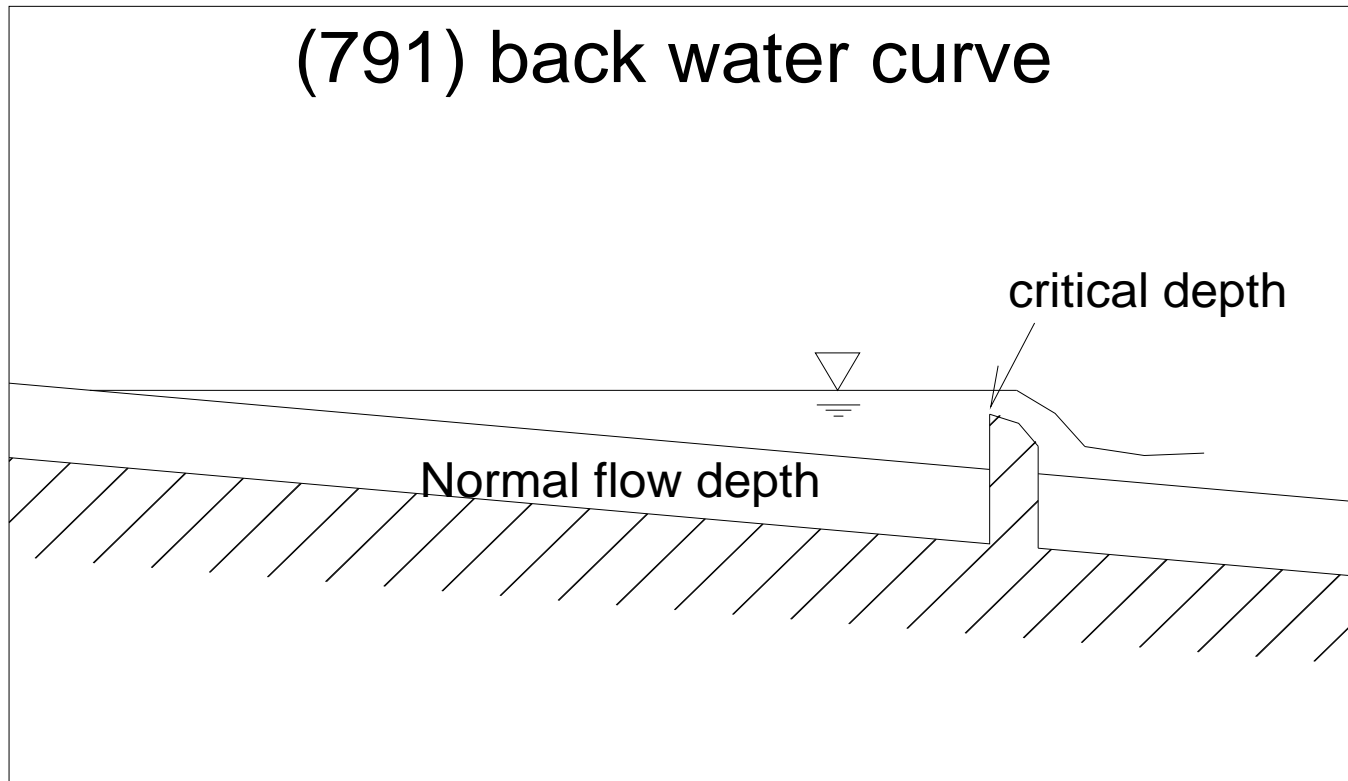
(789) Static earth pressure



(790) weir

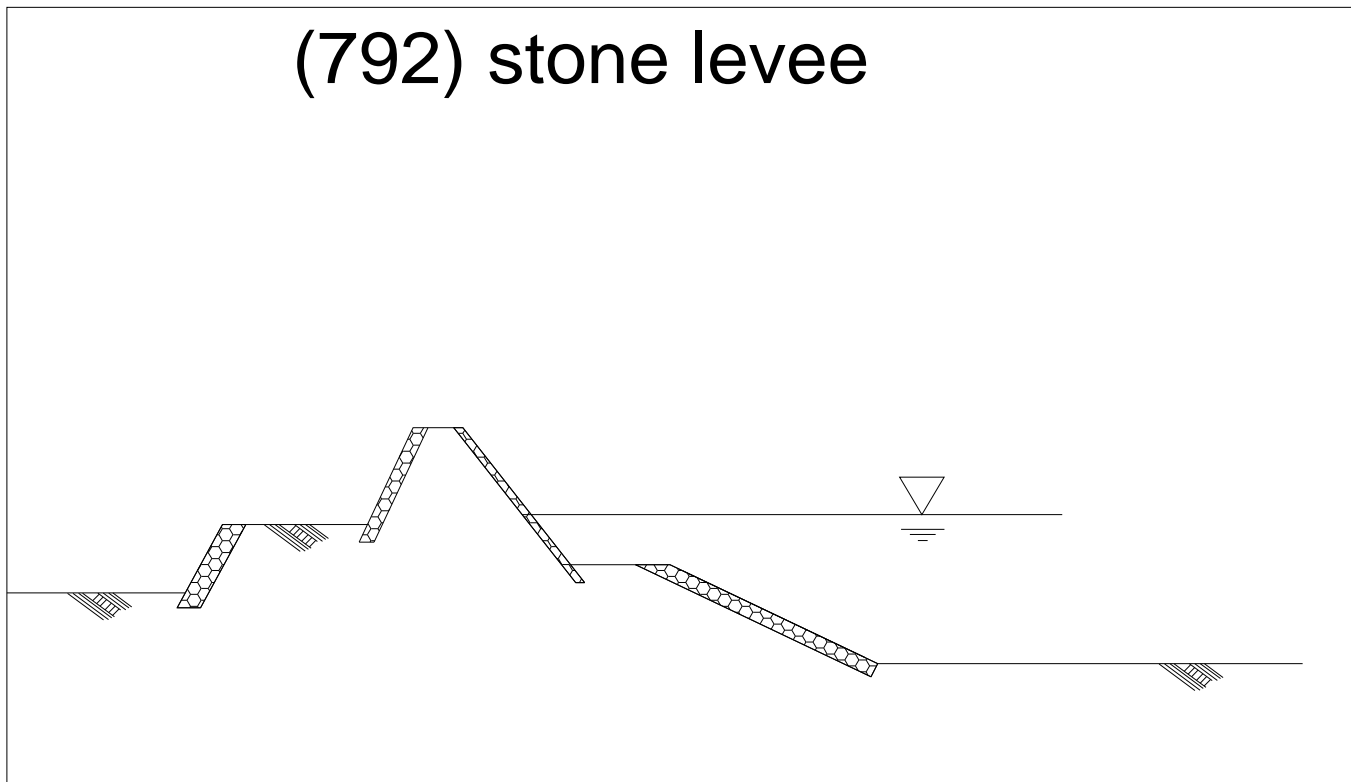


(791) back water curve

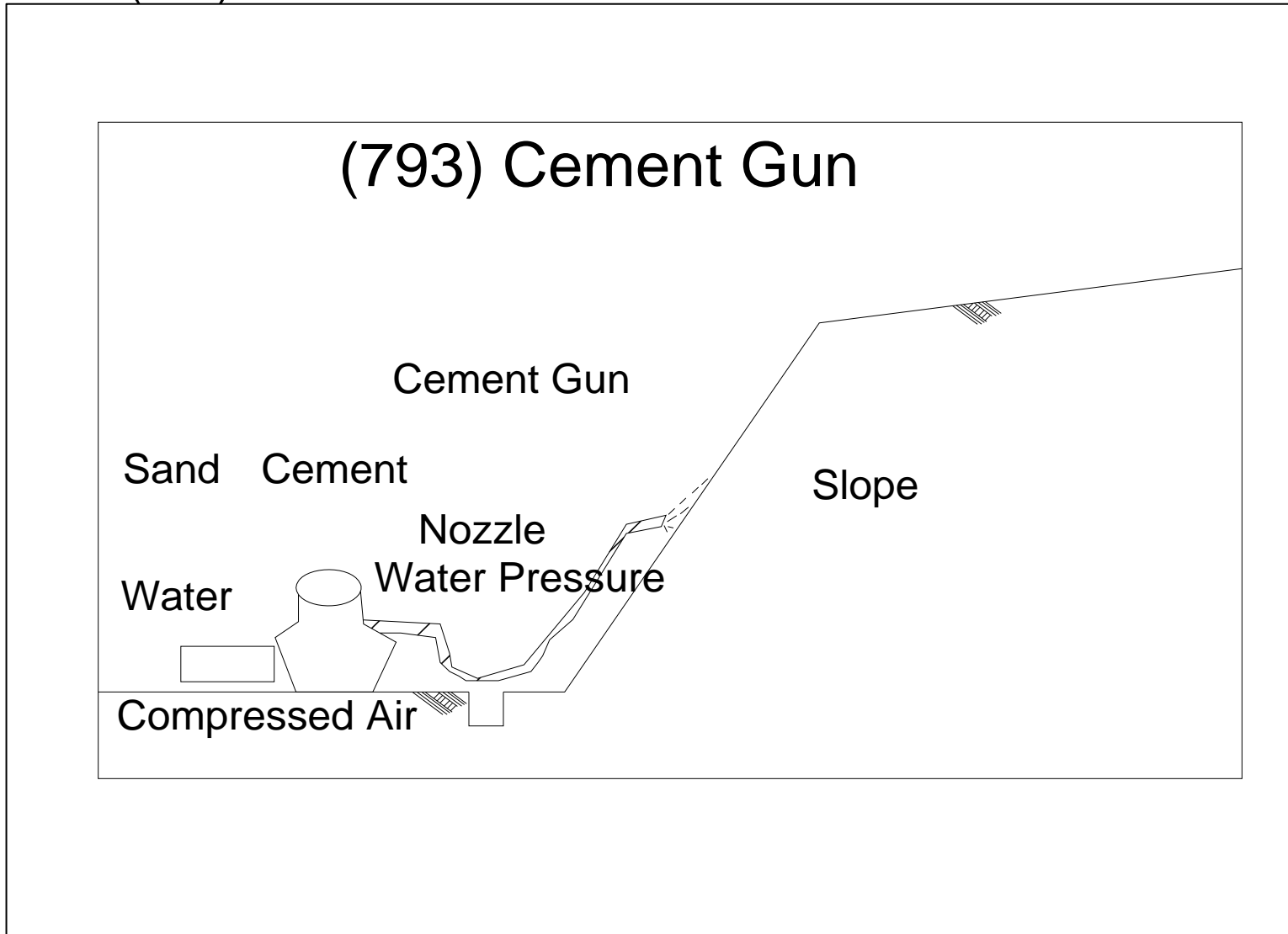


(792) stone levee

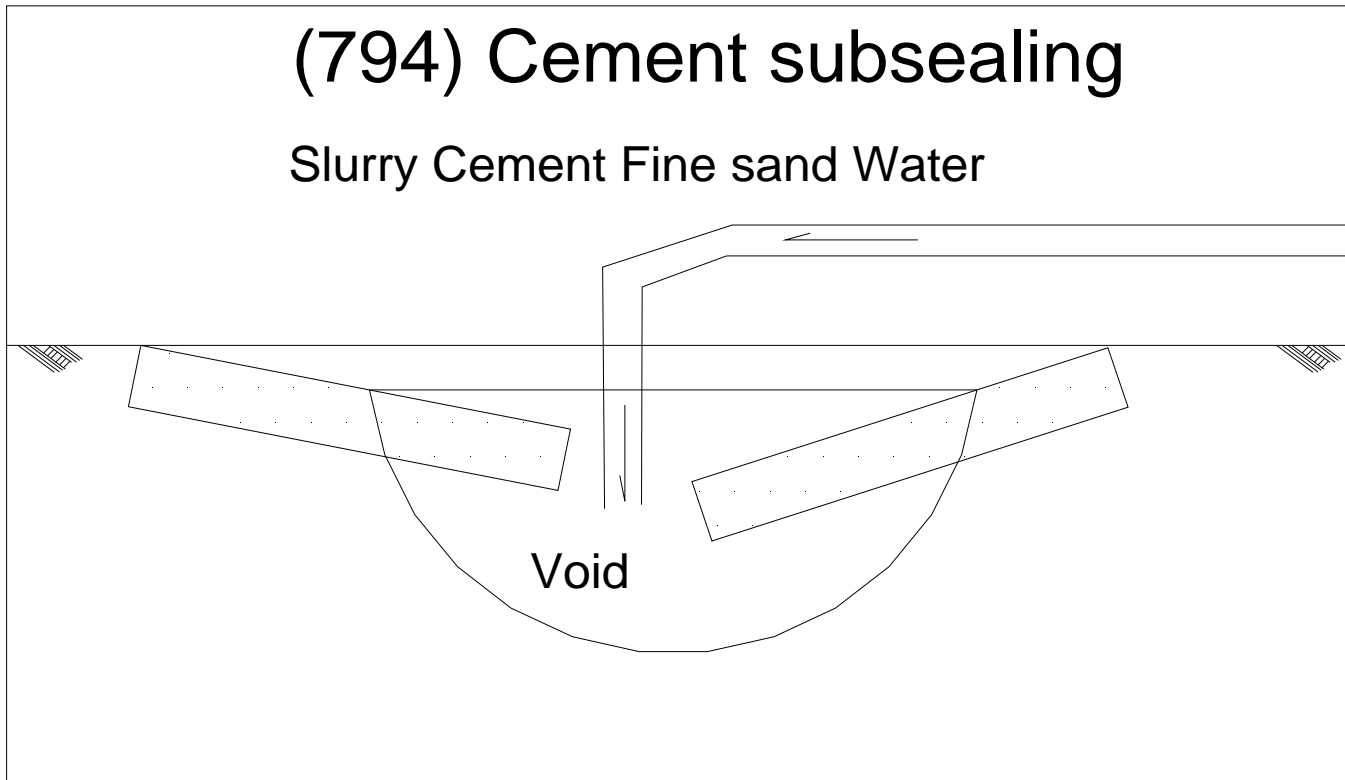
(792) stone levee



(793) Cement Gun



(794) Cement subsealing



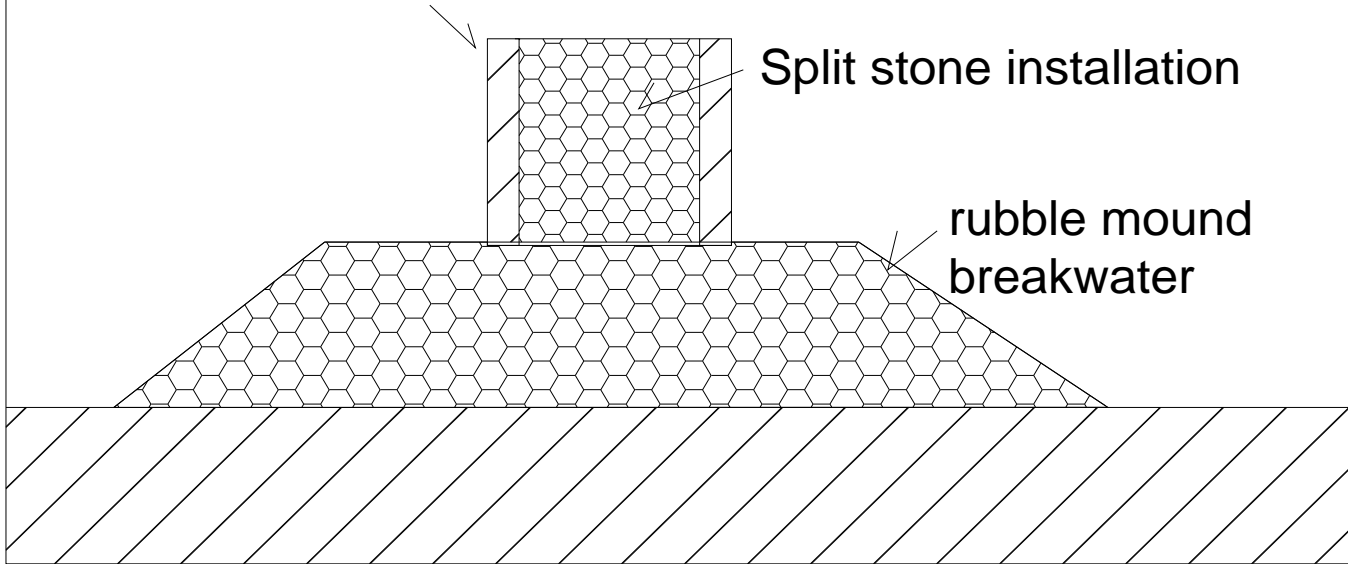
(795) Cellular block breakwater

(795) Cellular block breakwater

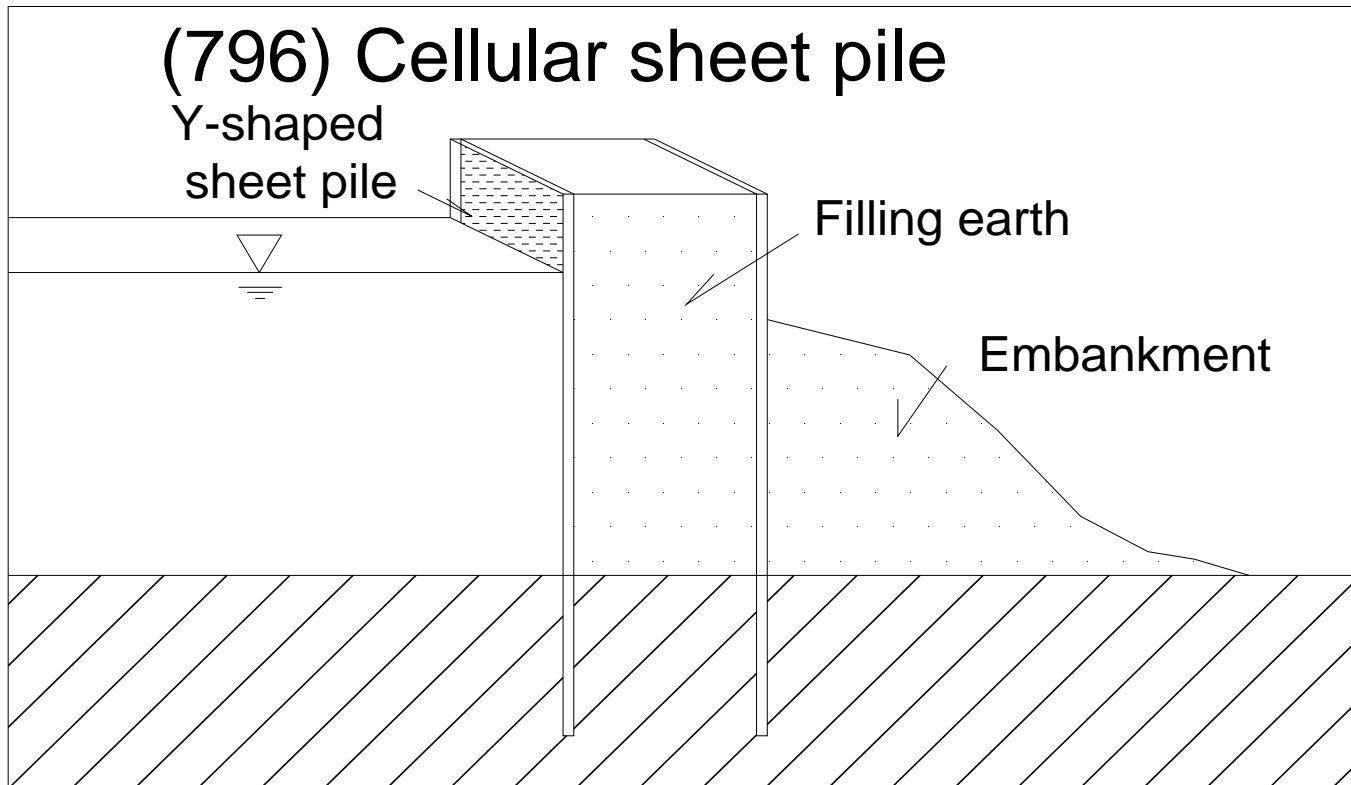
Cellular block breakwater upright

Split stone installation

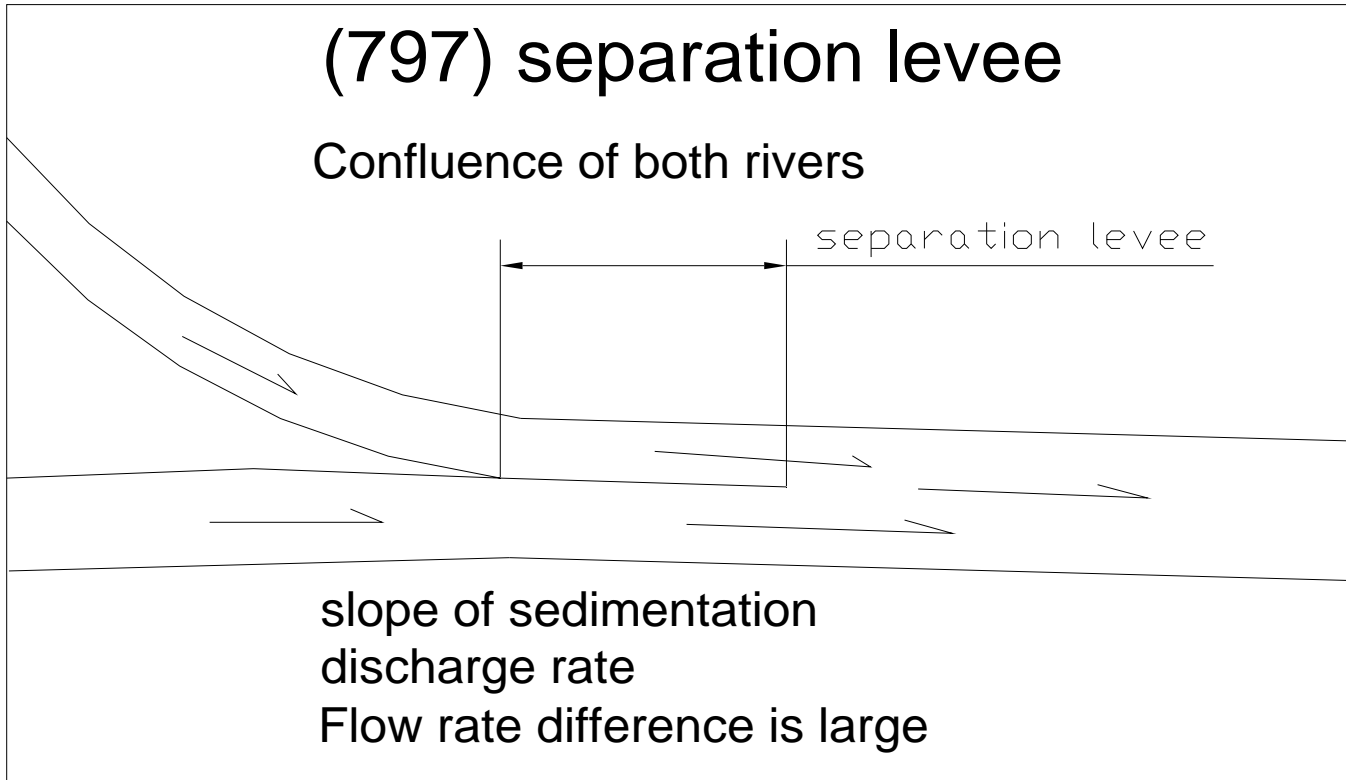
rubble mound
breakwater



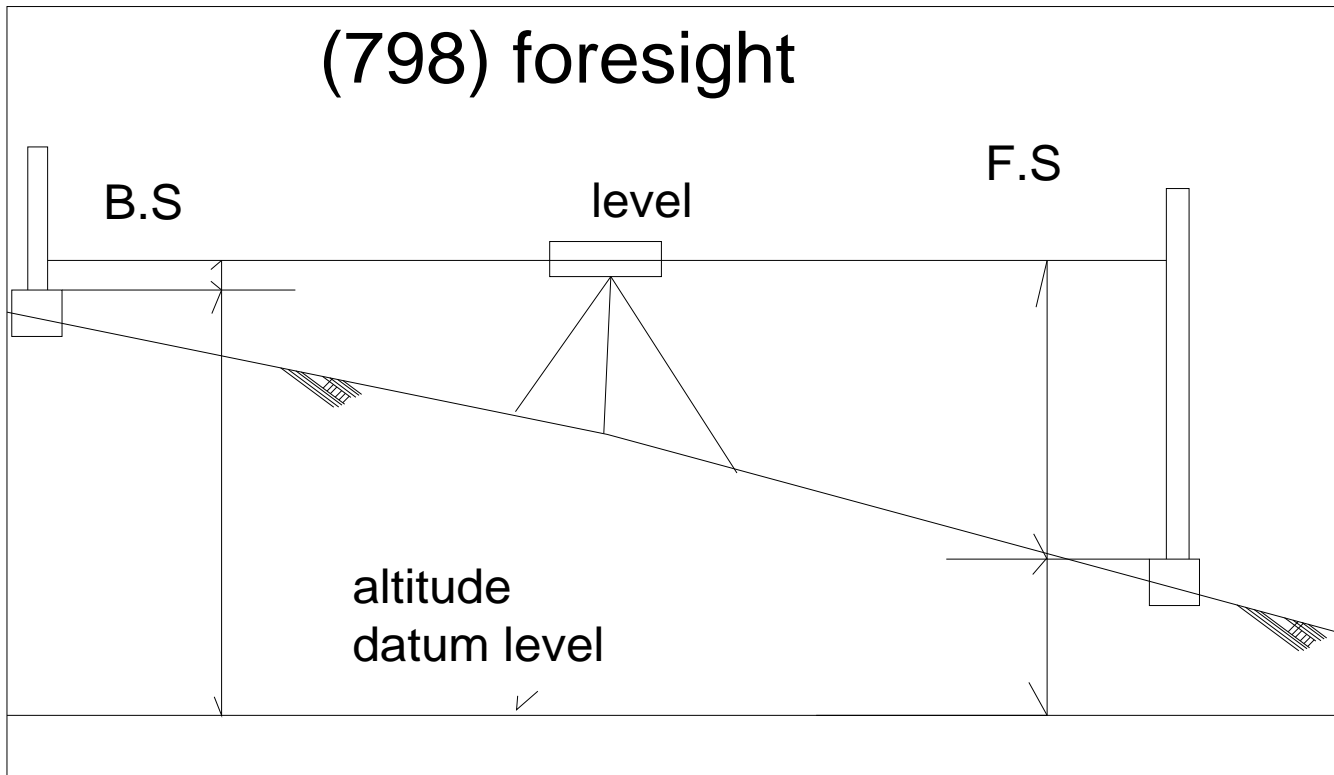
(796) Cellular sheet pile



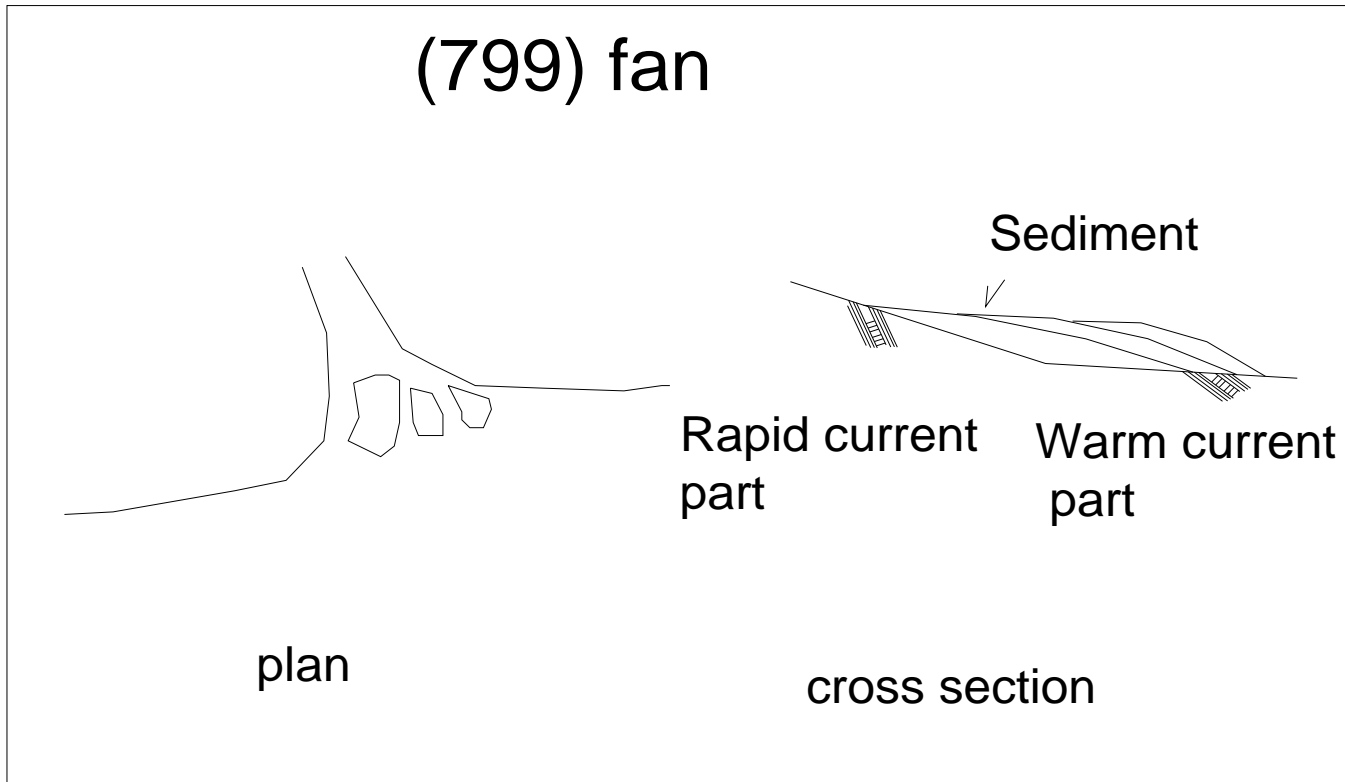
(797) separation levee



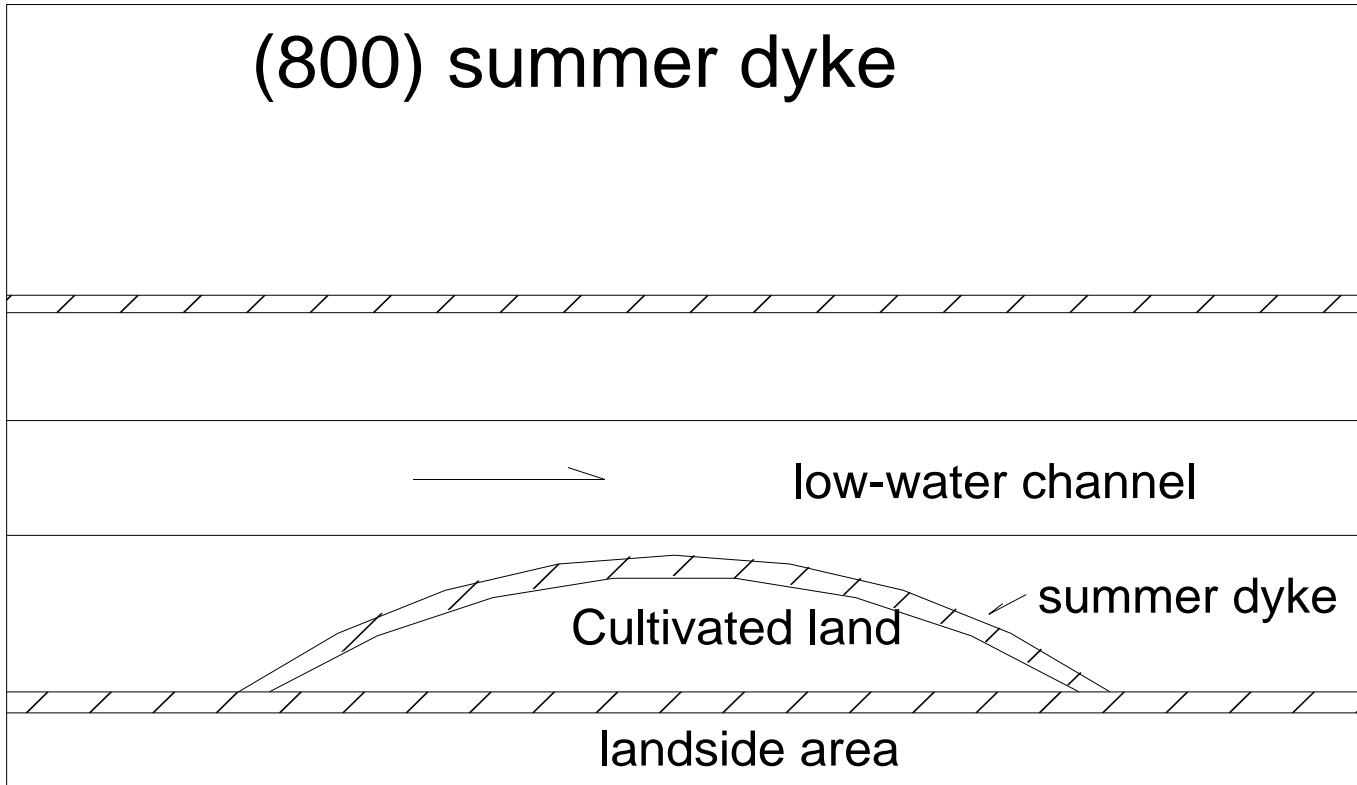
(798) foresight



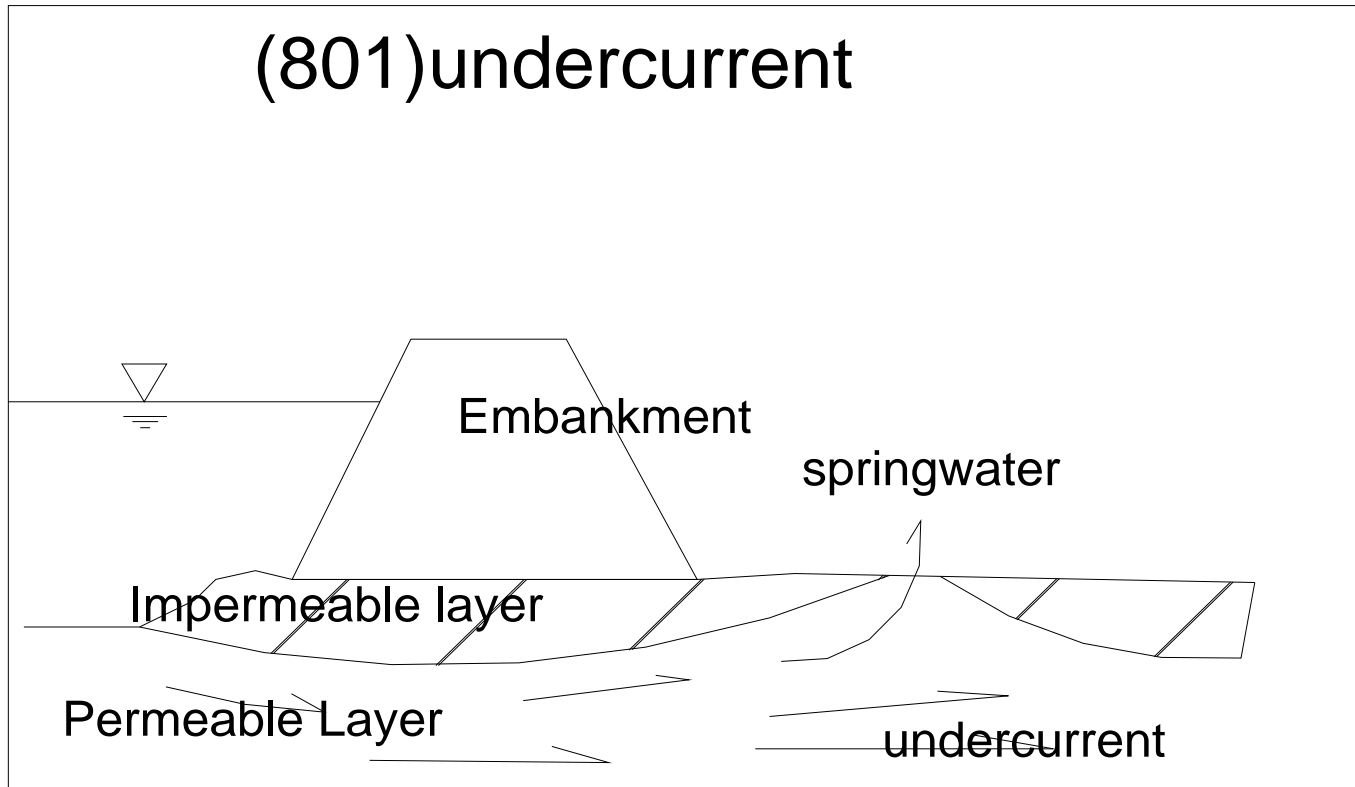
(799) fan



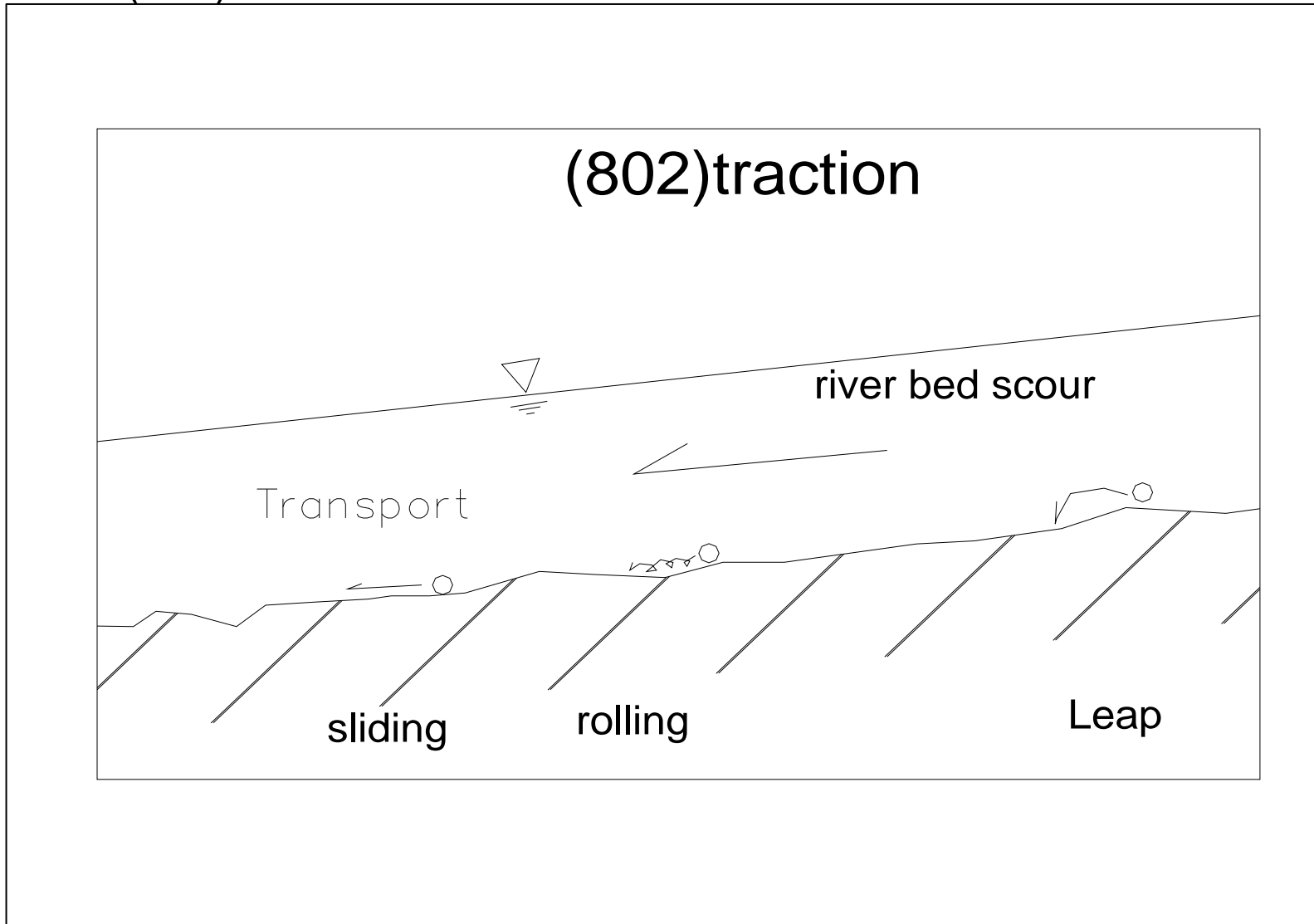
(800) summer dyke



(801)undercurrent



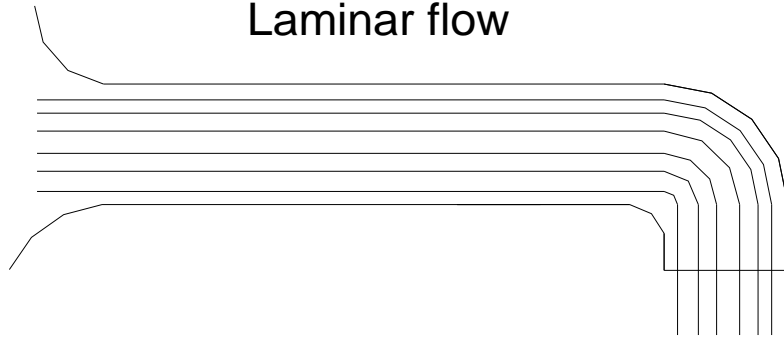
(802)traction



(803)Laminar flow

(803)Laminar flow

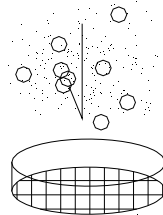
Laminar flow



(804) Coarse Aggregate

(804) Coarse Aggregate

Sieve 5mm

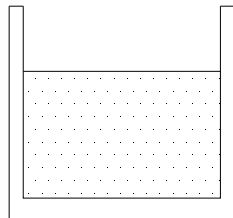


Sieve 85% or more Stays

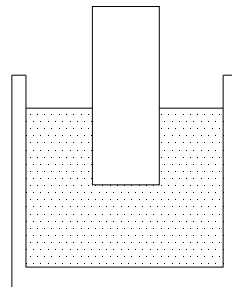
Passing less than 15%

(805)Plasticity

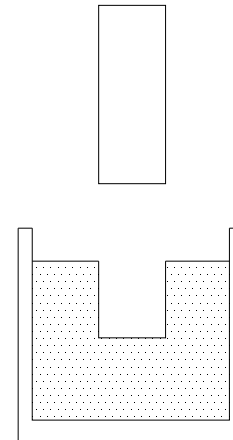
(805)Plasticity



before loading



rod



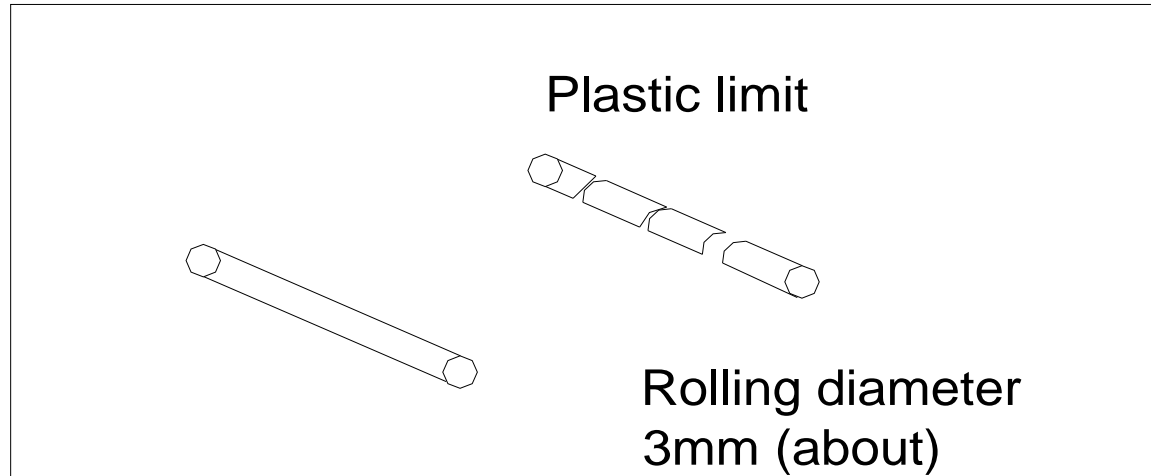
after unloading

Deformation after loading

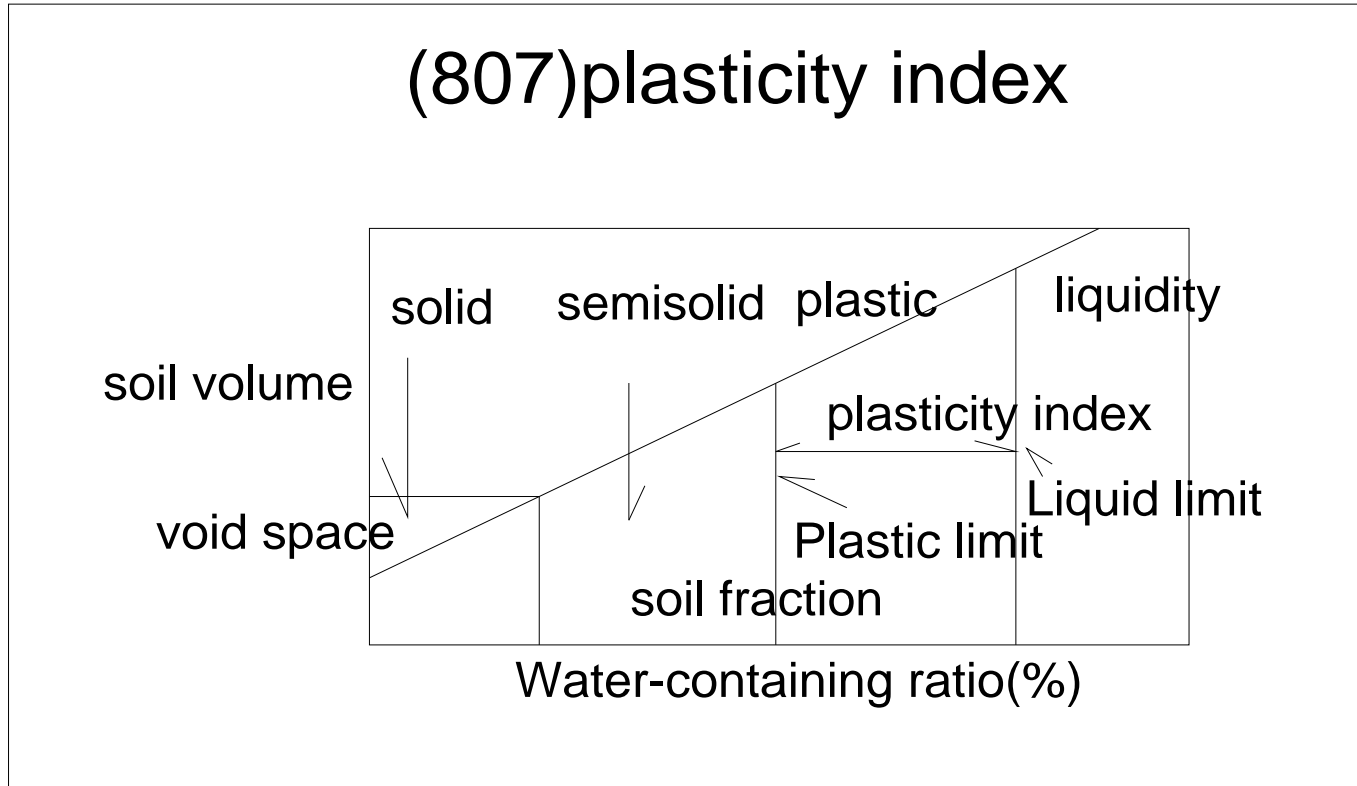
(806)Plastic limit

(806)Plastic limit

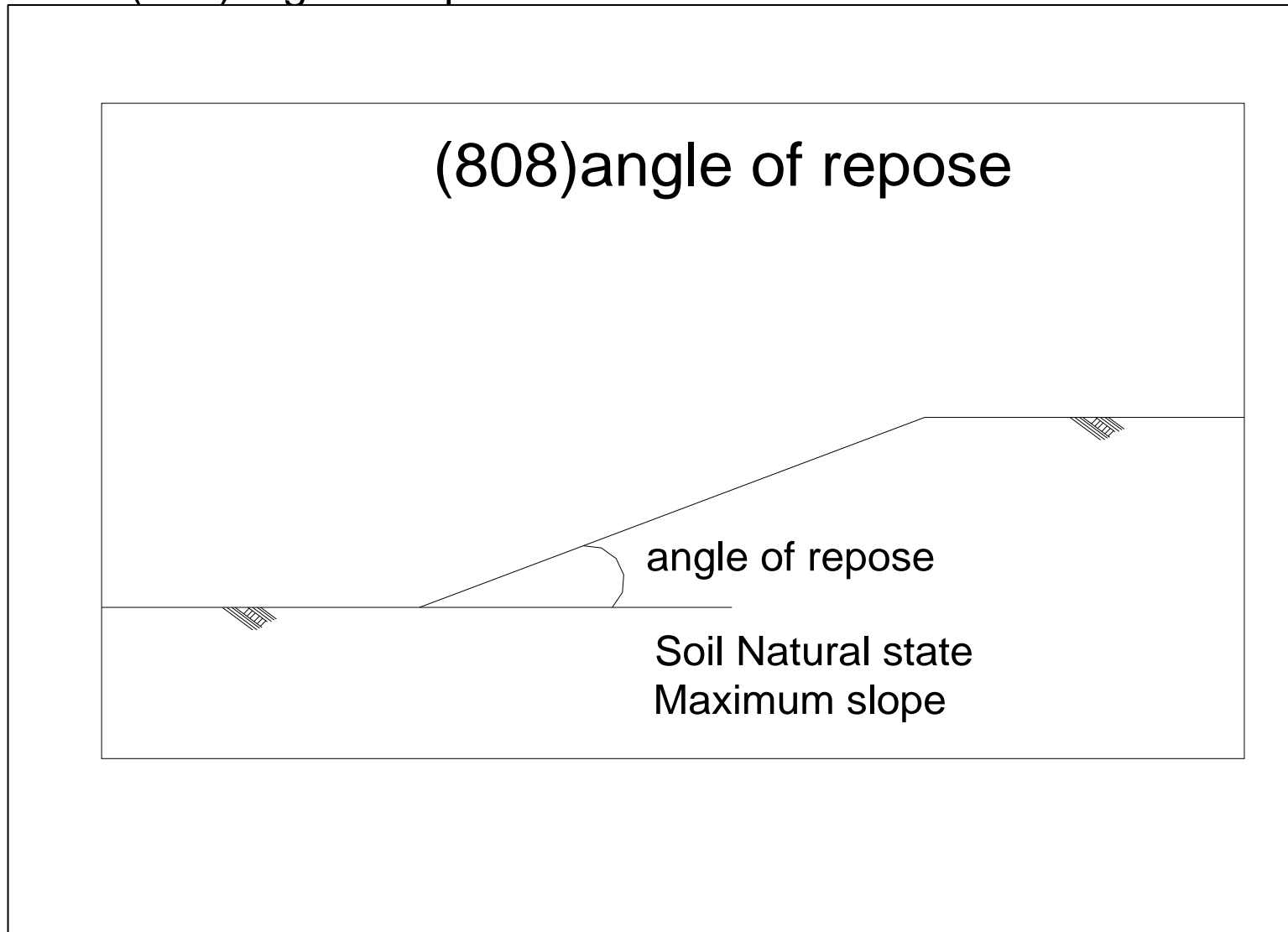
frosted glass



(807)plasticity index



(808)angle of repose



(809) Roughness test

(809) Roughness test

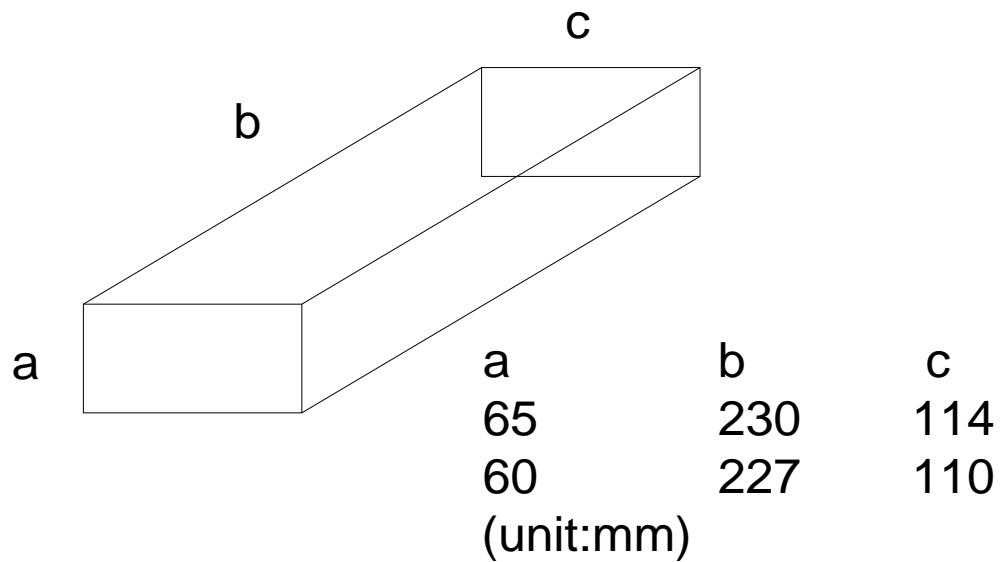


Waterway wall
surface roughness

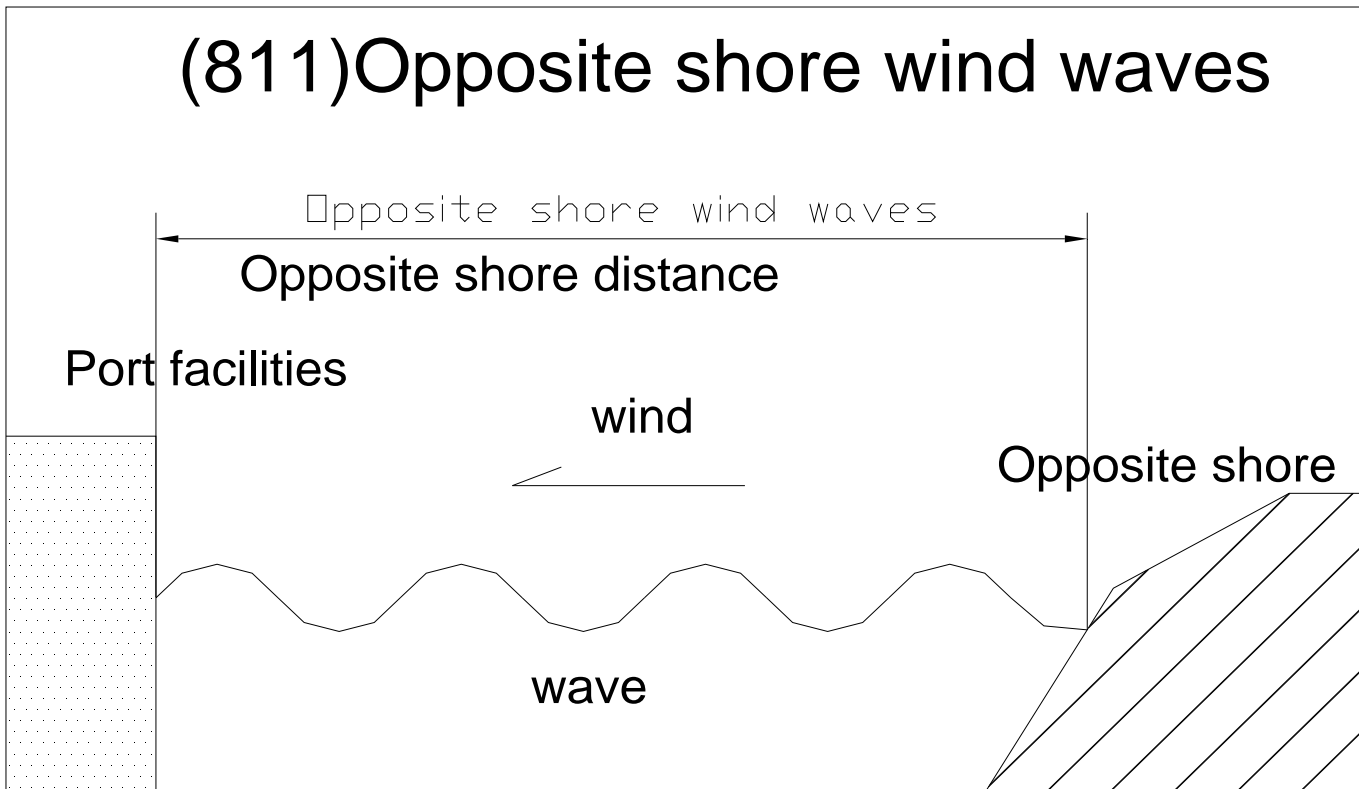
	Roughness coefficient
wood	0.010-0.018
Concrete smooth	0.011-0.014
Concrete rough	0.012-0.018

(810)firebrick

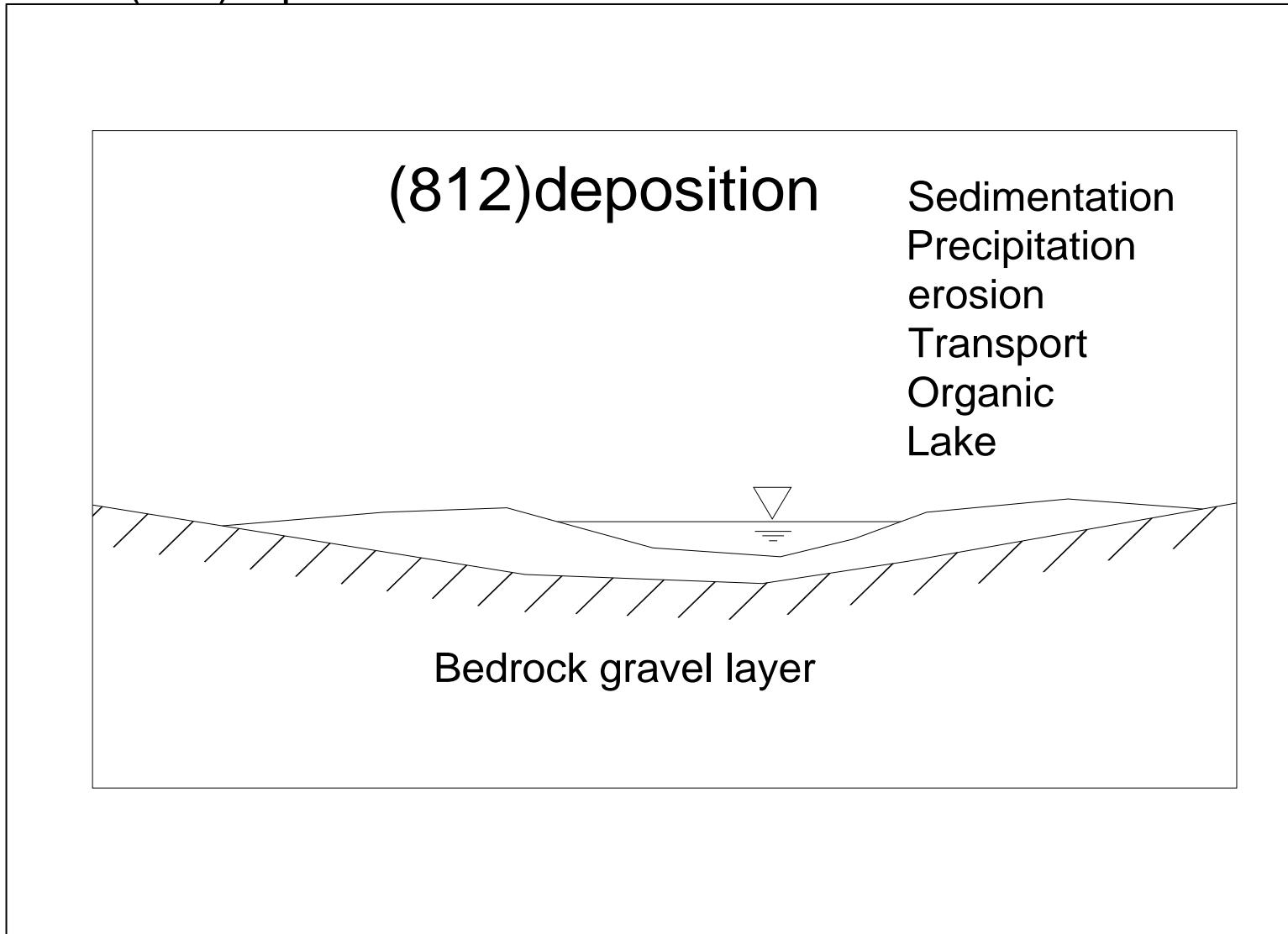
(810)firebrick



(811)Opposite shore wind waves

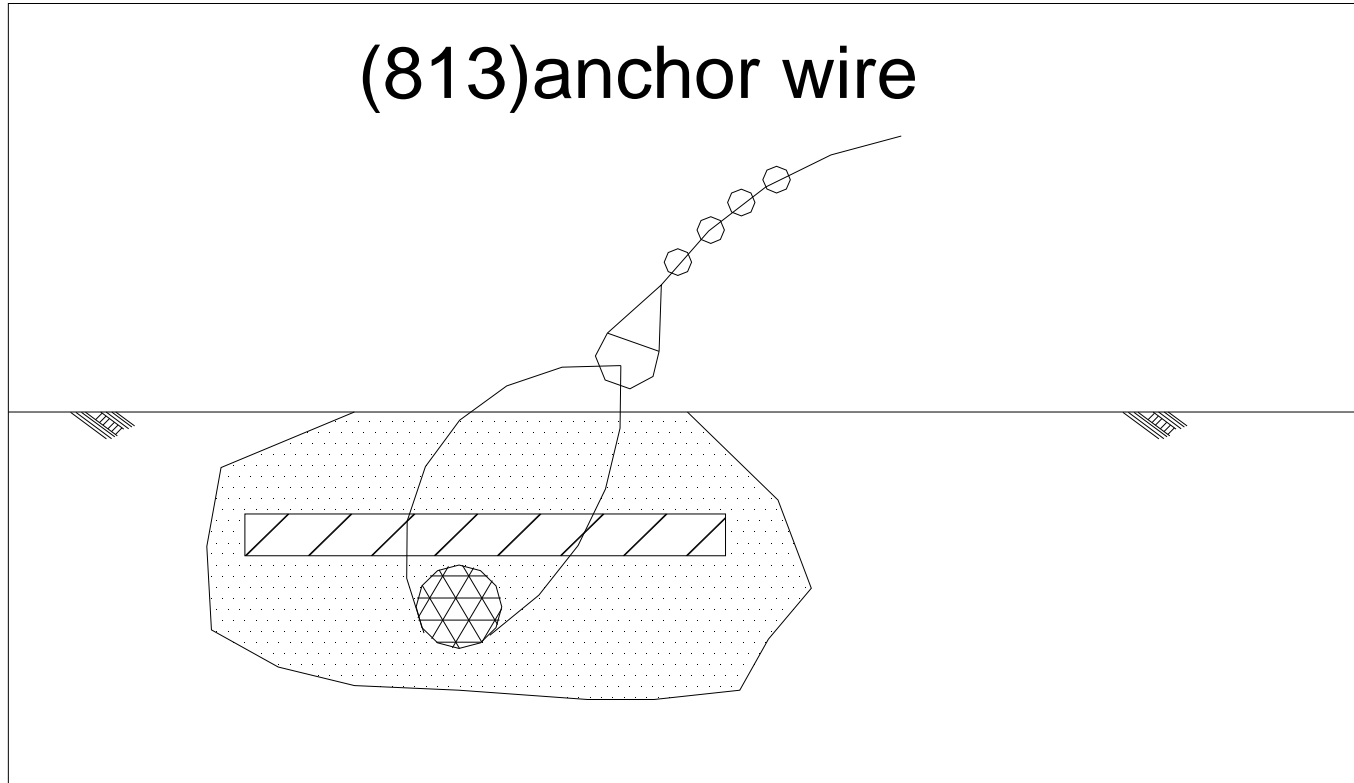


(812)deposition



(813)anchor wire

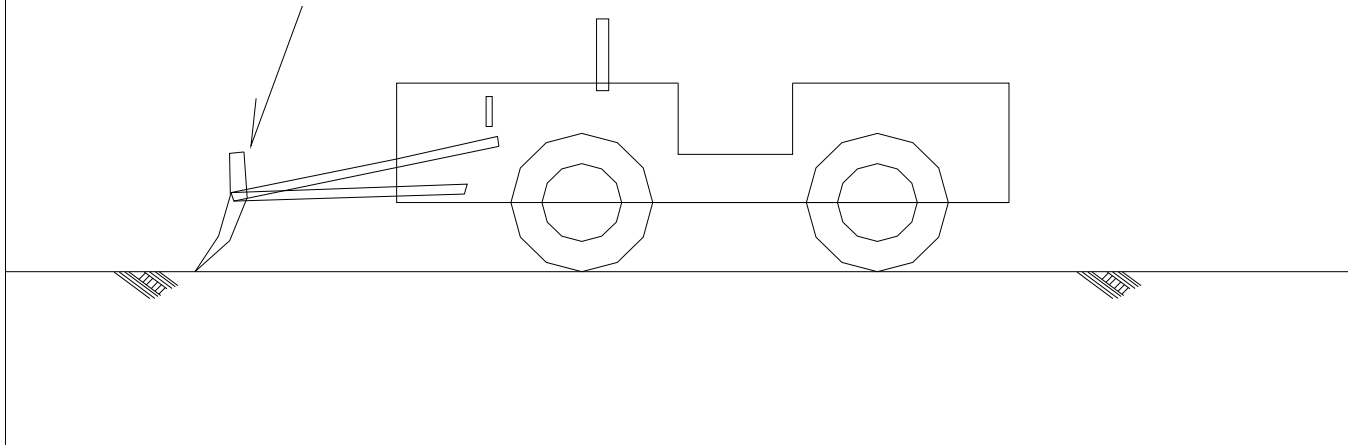
(813)anchor wire



(814)Tire dozer

(814)Tire dozer

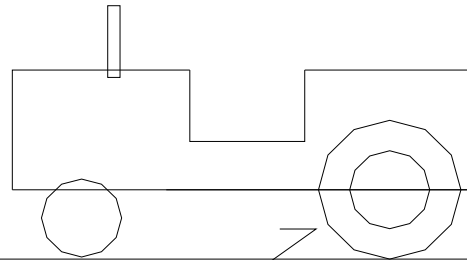
tractor loader
bulldozing blade



(815)Tire roller

(815)Tire roller

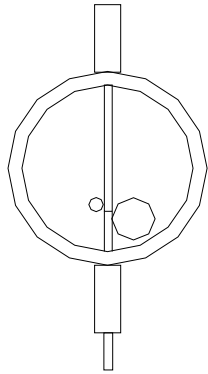
front wheel compaction



Large low pressure rubber tire

(816)Dial gauge

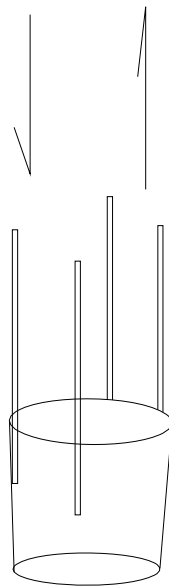
(816)Dial gauge



length change amount
deflection
measurement

(817)rammer

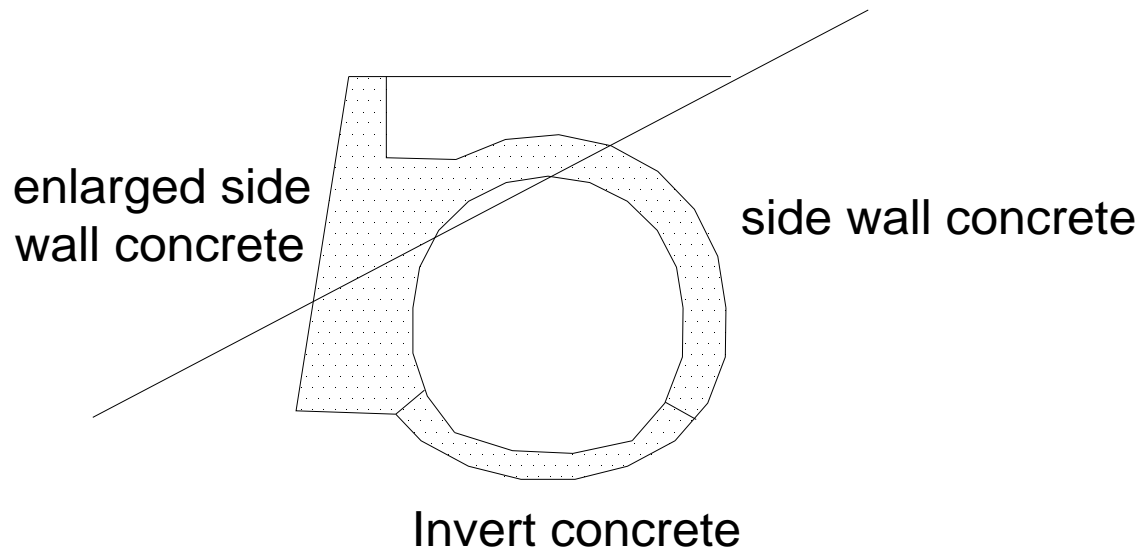
(817)rammer



Round log

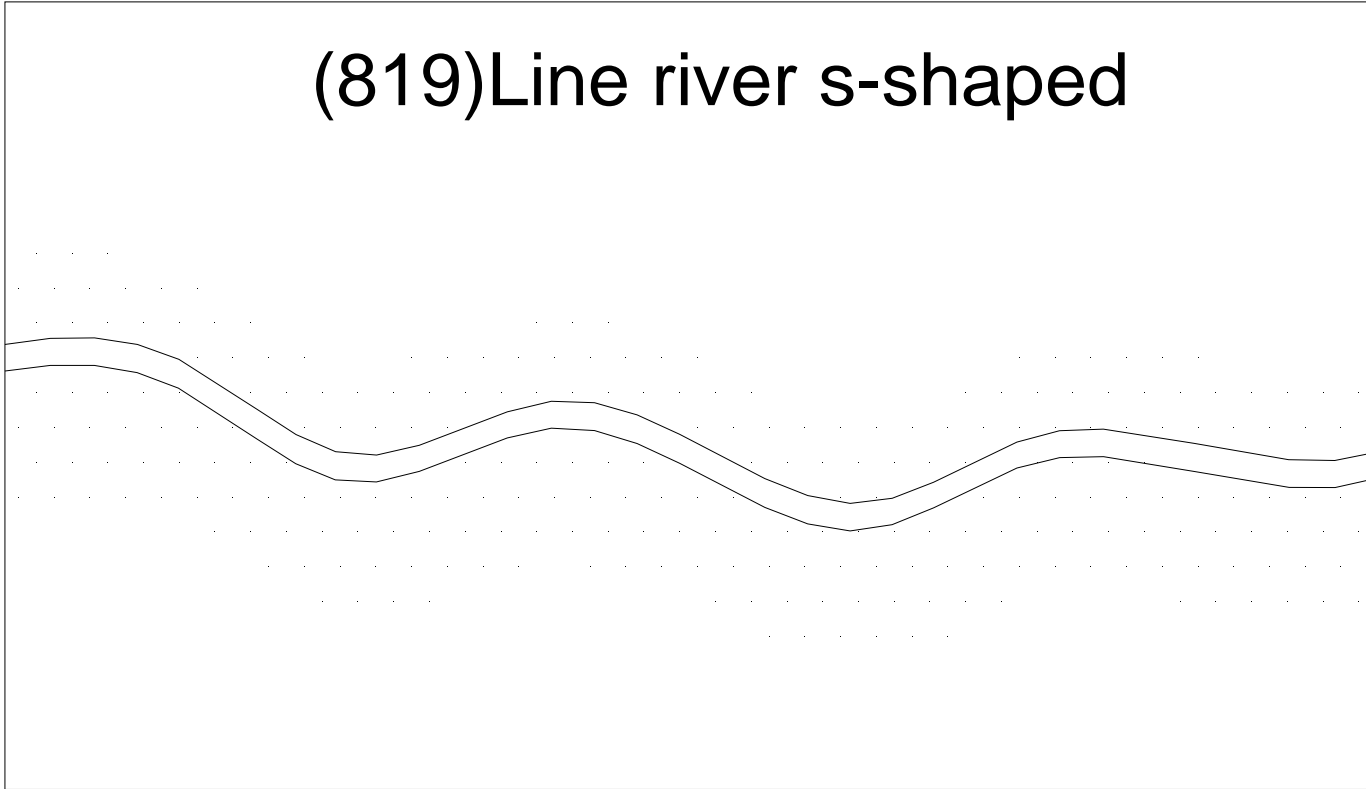
(818)enlarged side wall concrete

(818)enlarged side wall concrete

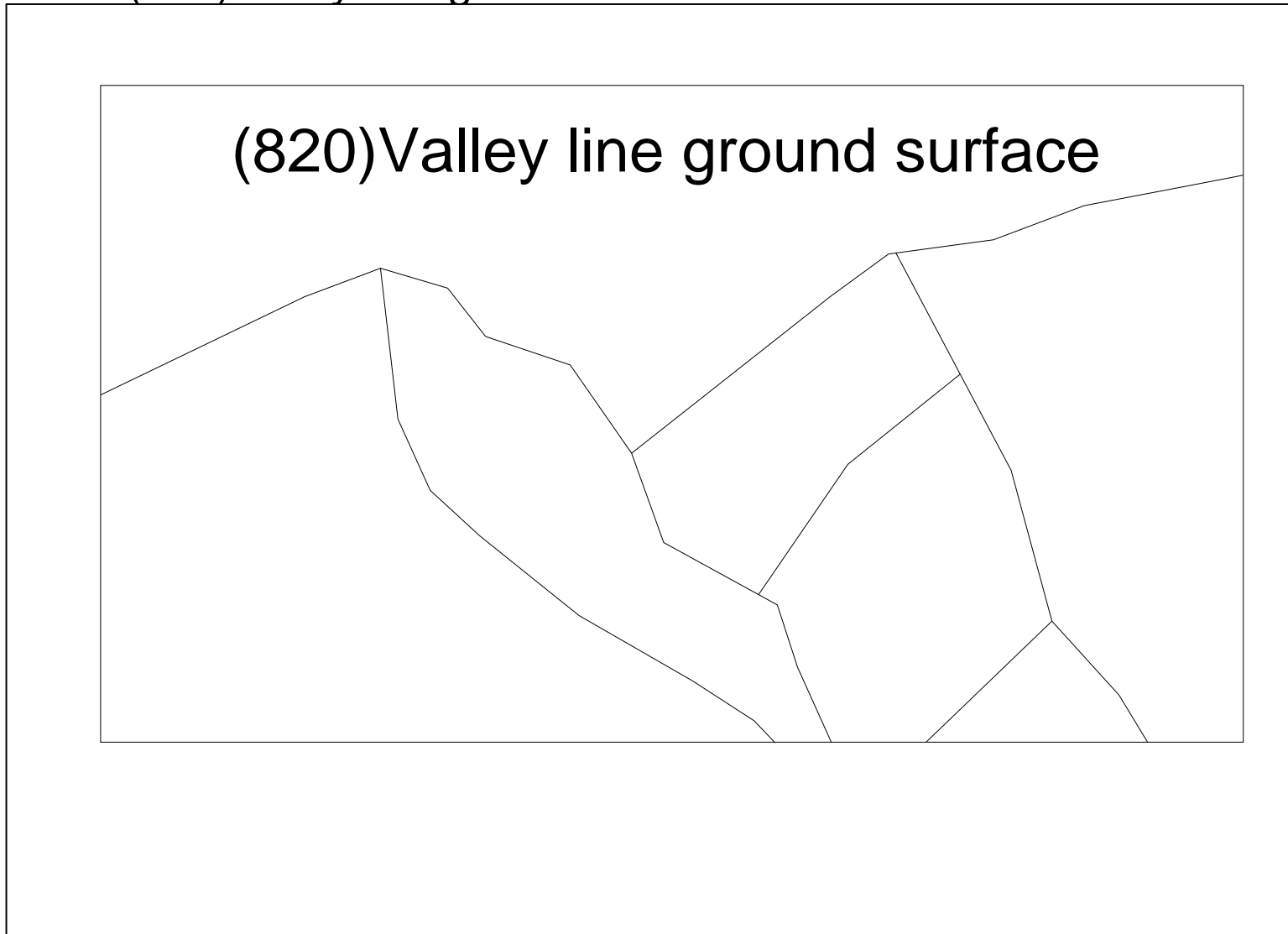


(819)Line river s-shaped

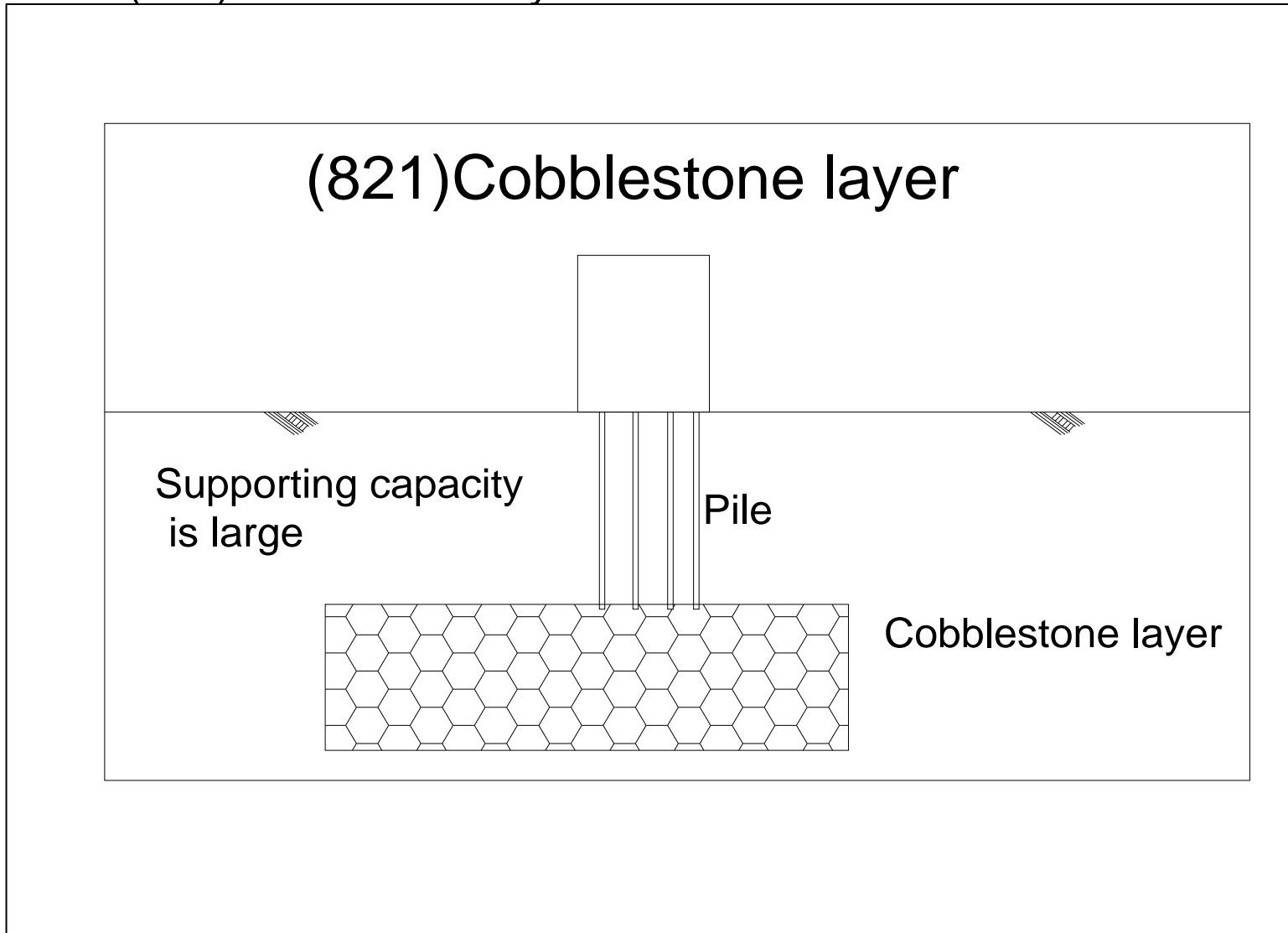
(819)Line river s-shaped



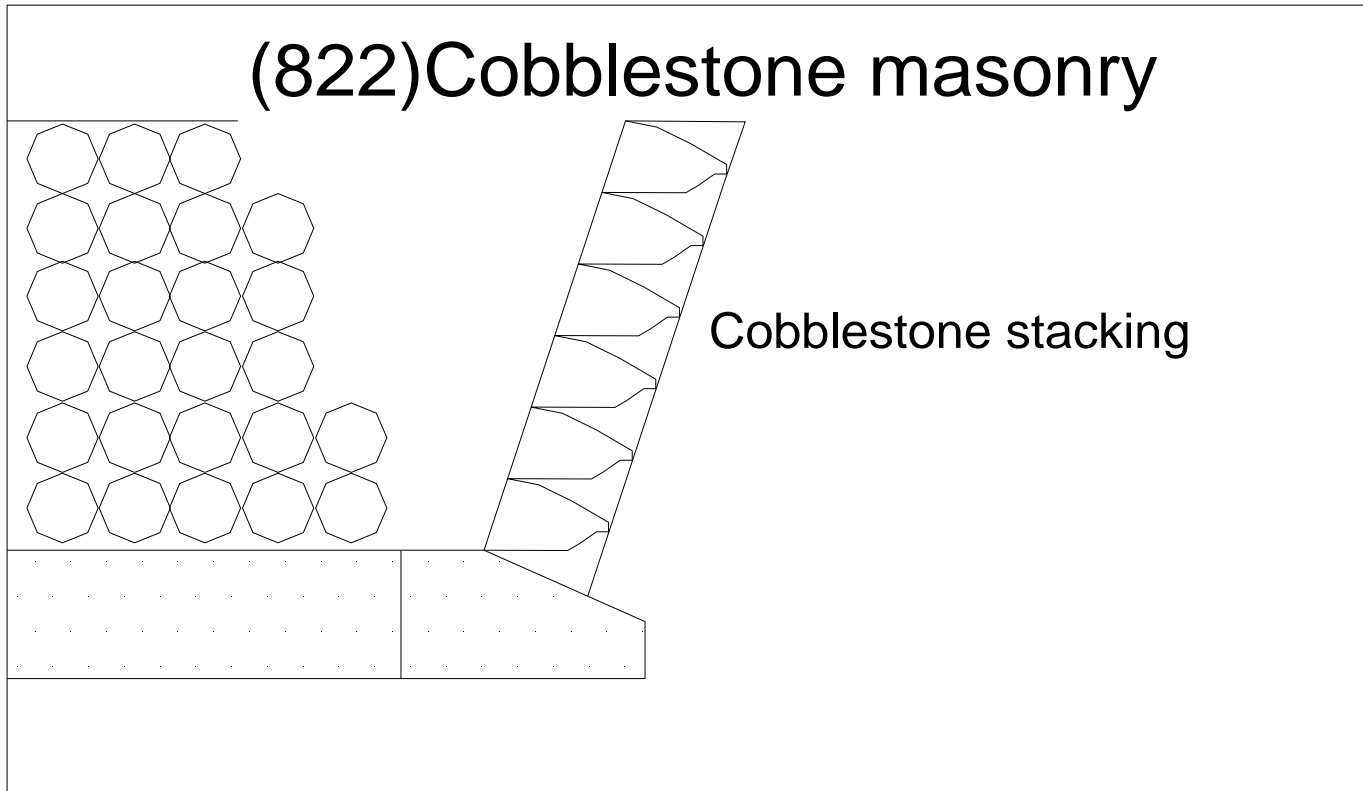
(820)Valley line ground surface



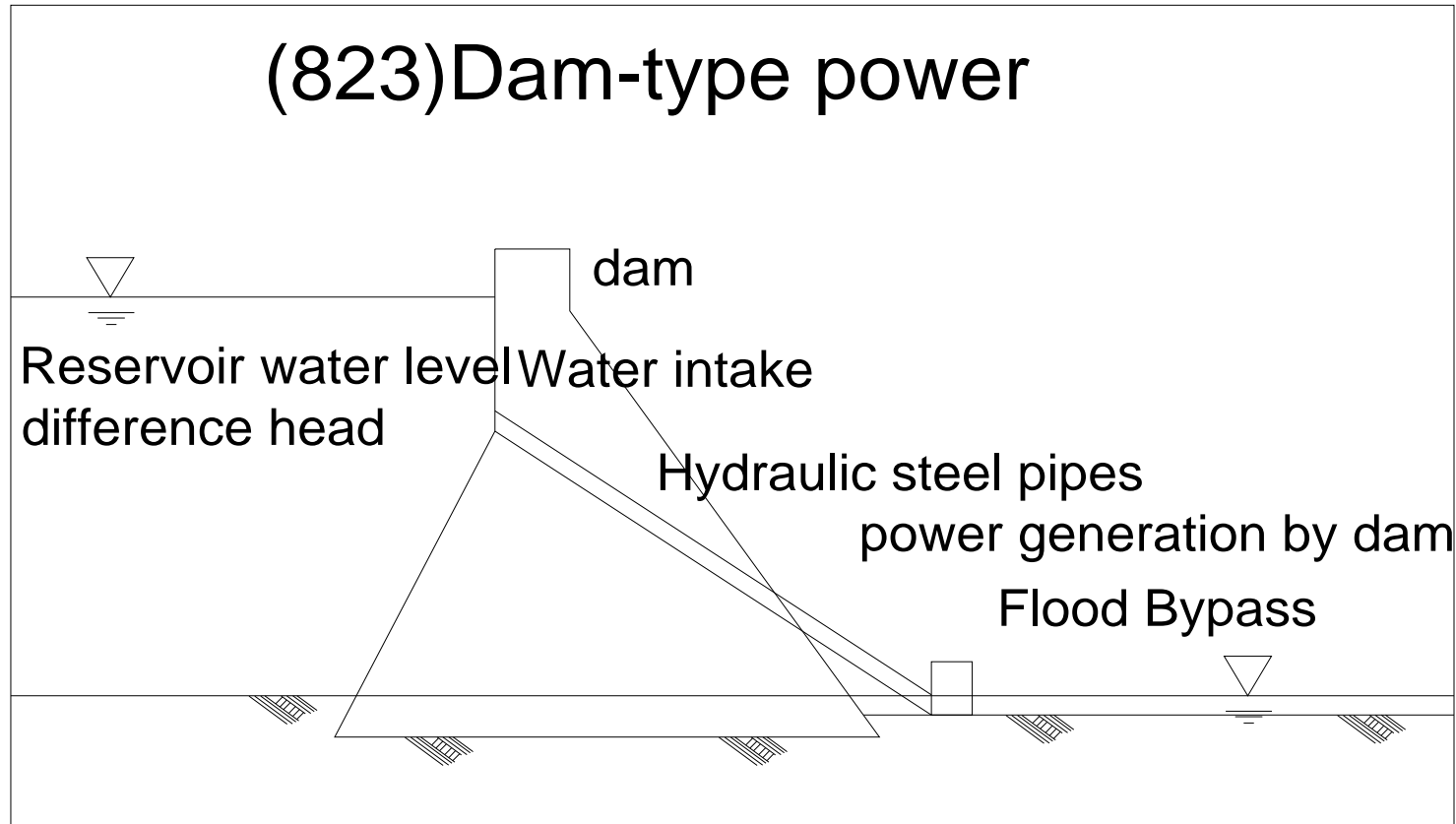
(821)Cobblestone layer



(822)Cobblestone masonry

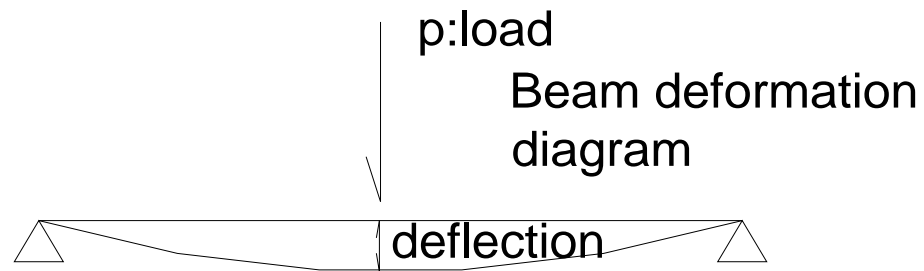


(823) Dam-type power

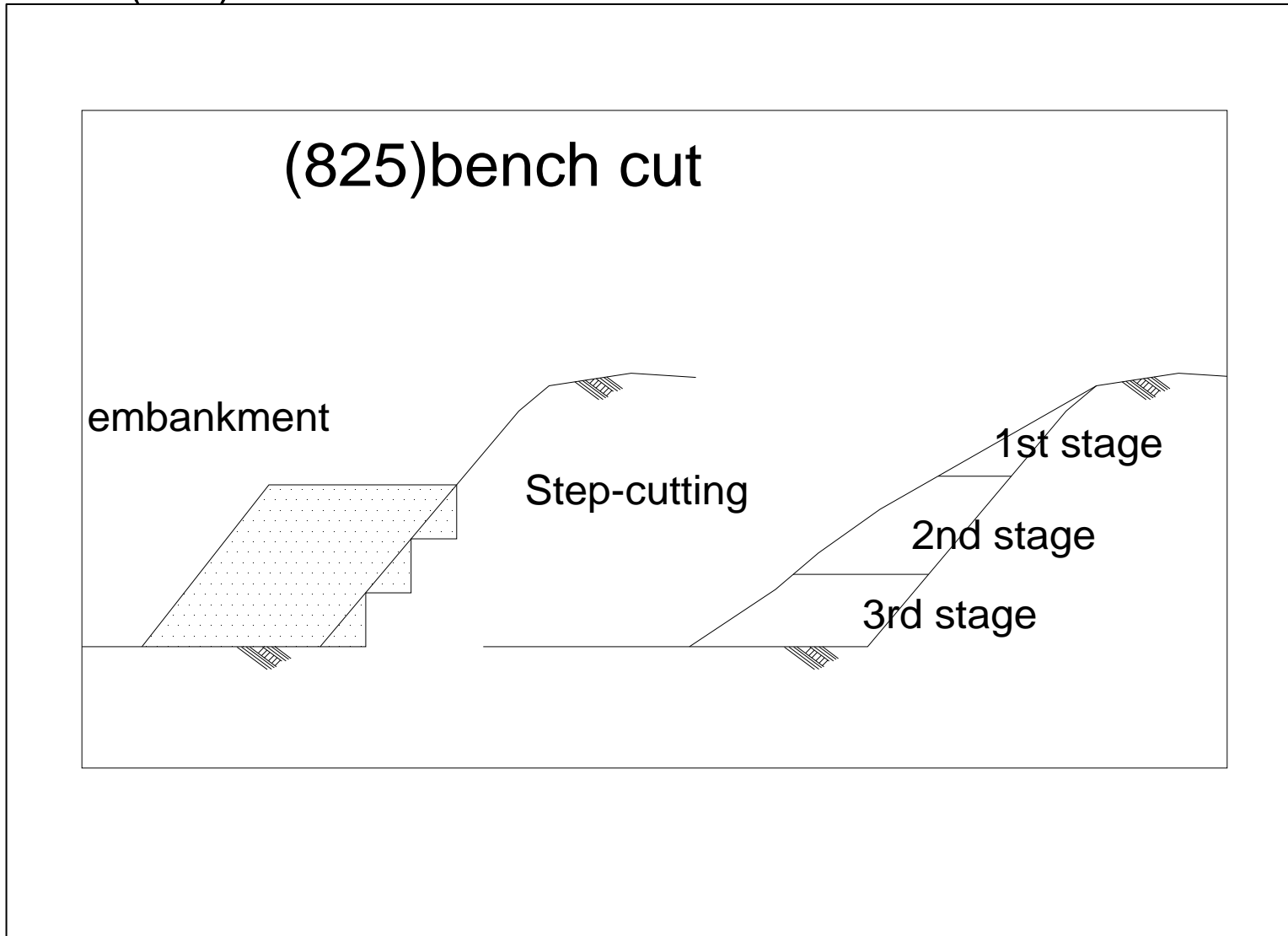


(824)deflection

(824)deflection

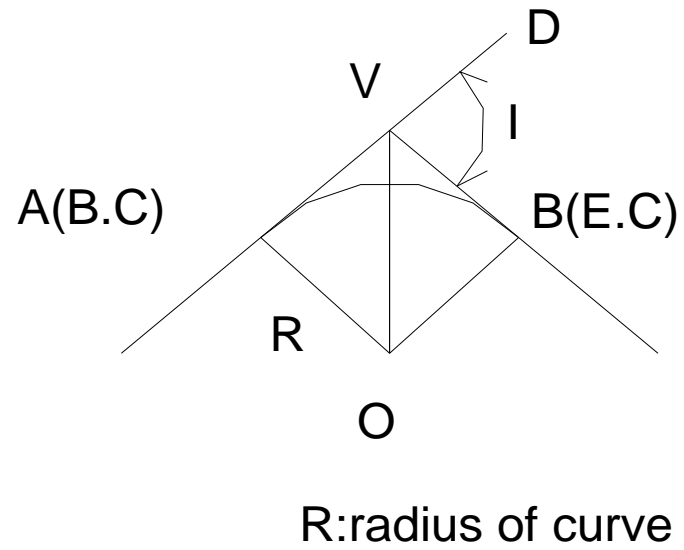


(825)bench cut

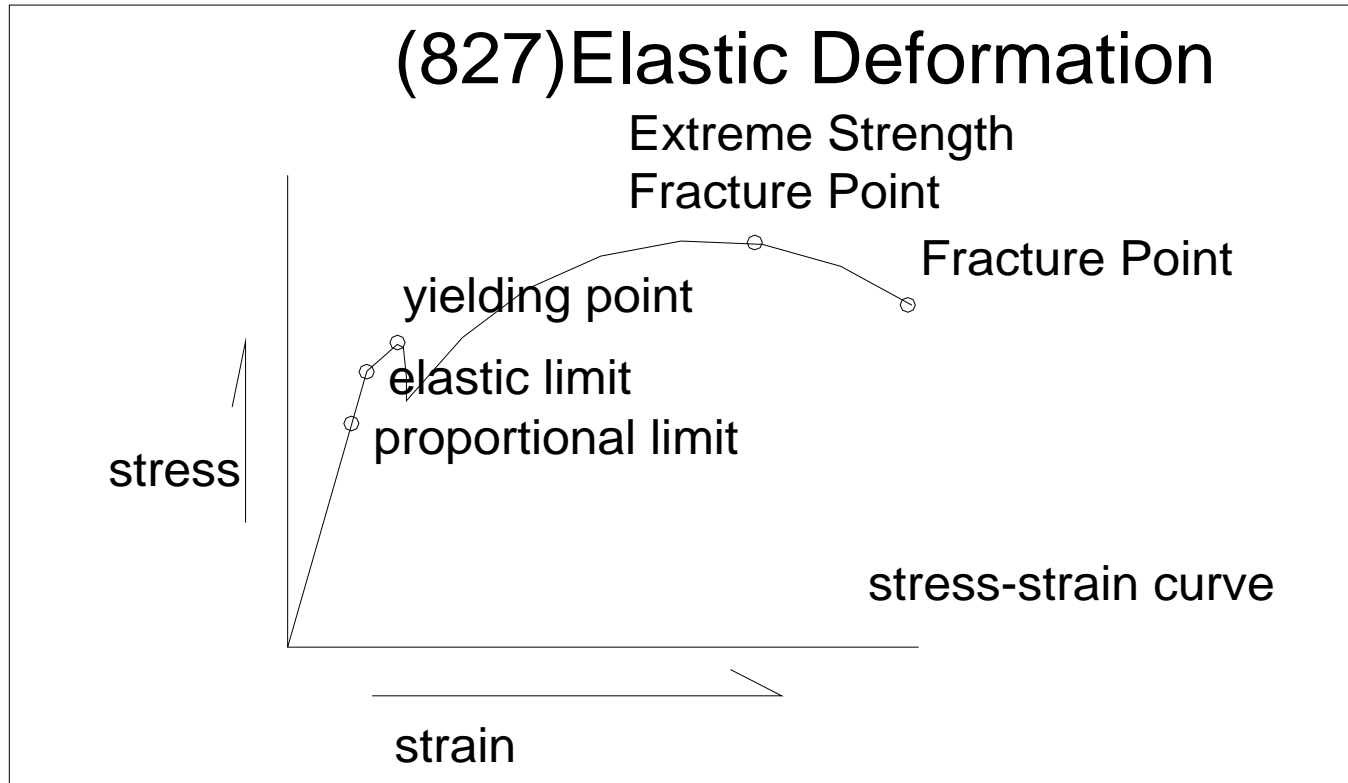


(826)simple curve

(826)simple curve

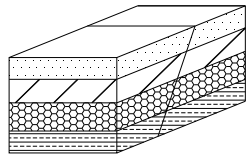


(827)Elastic Deformation

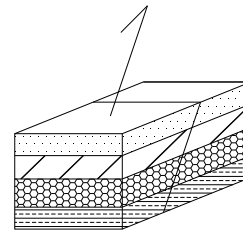
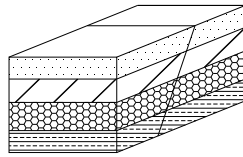


(828)fault

(828)fault



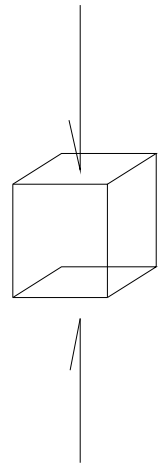
normal fault



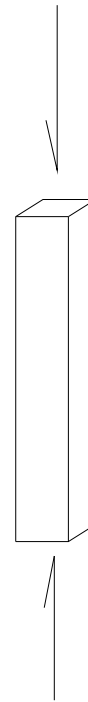
reverse fault

(829)short column

(829)short column

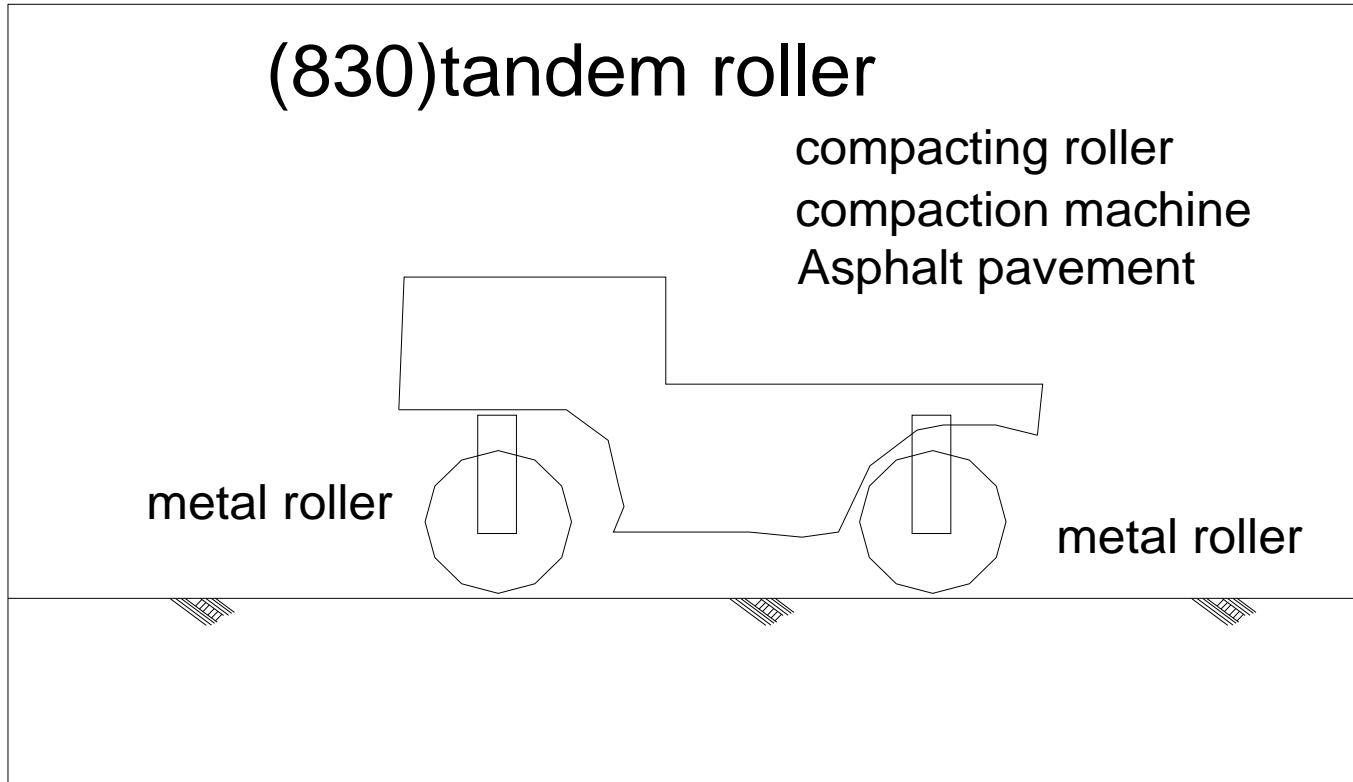


compression tests



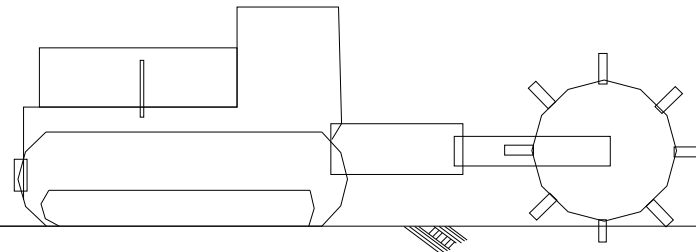
short column

(830)tandem roller



(831)tamping roller

(831)tamping roller

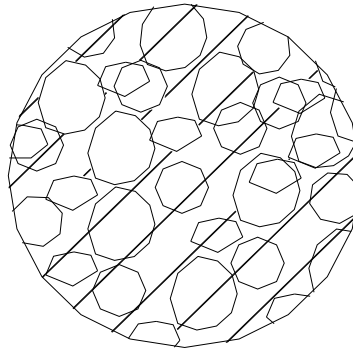


Hard clay layer

(832)Single grain structure

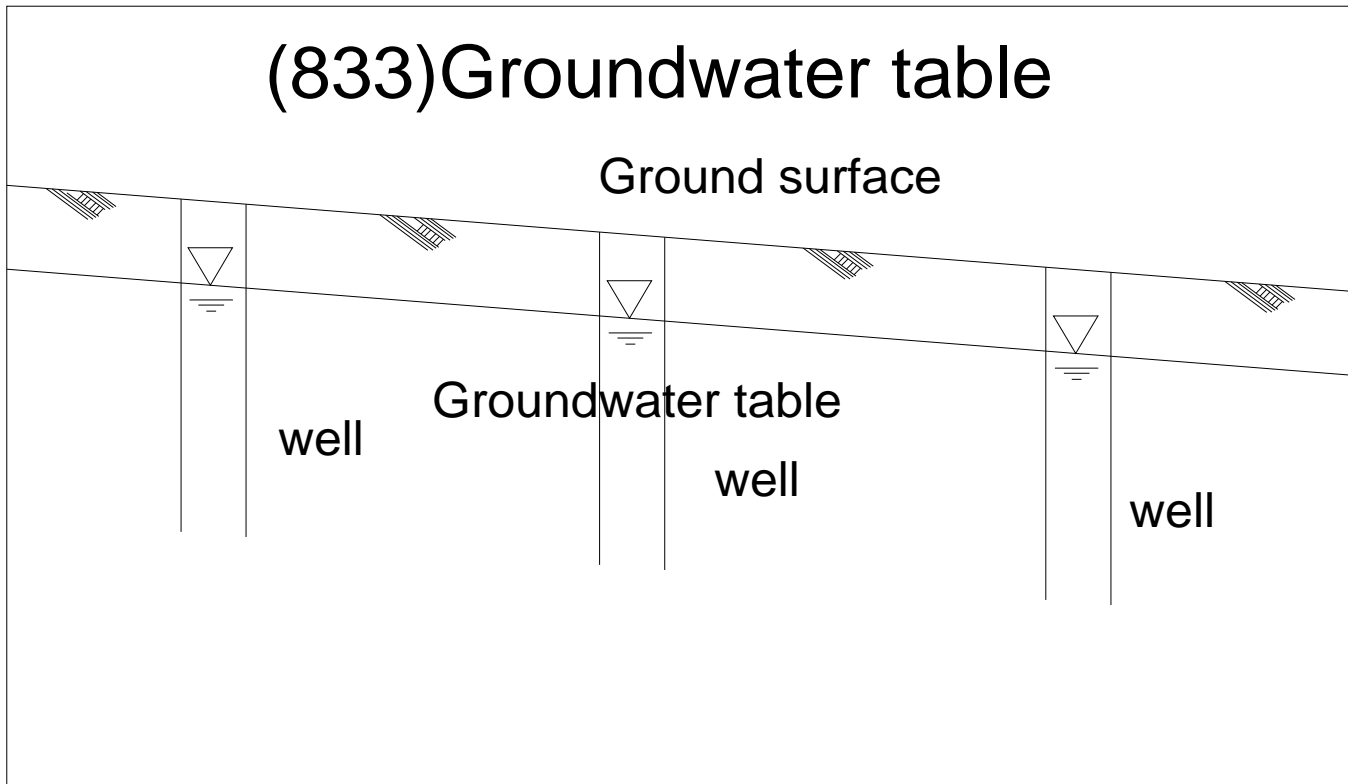
(832)Single grain structure

Single grain structure



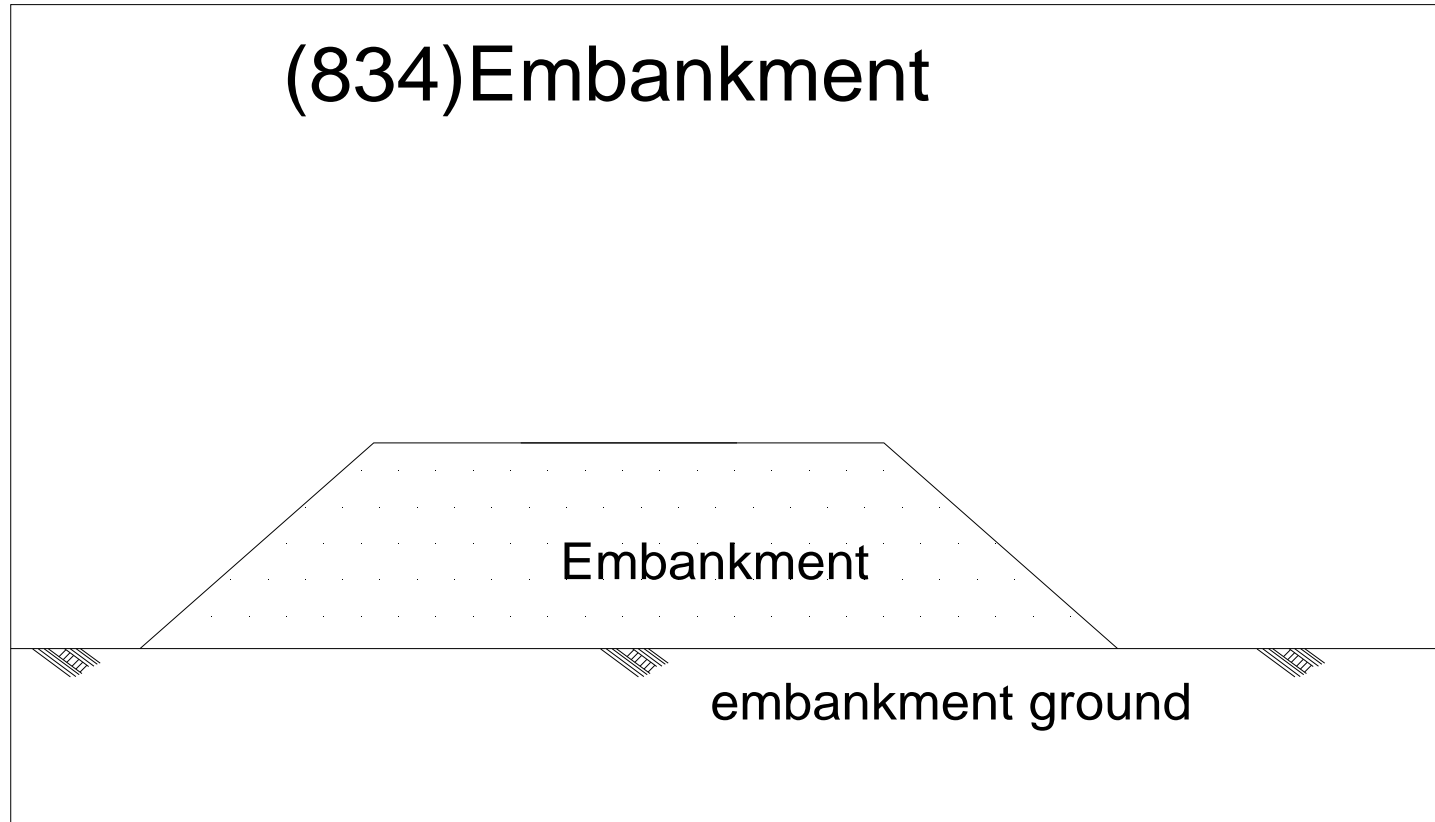
Soil particles

(833)Groundwater table



(834)Embankment

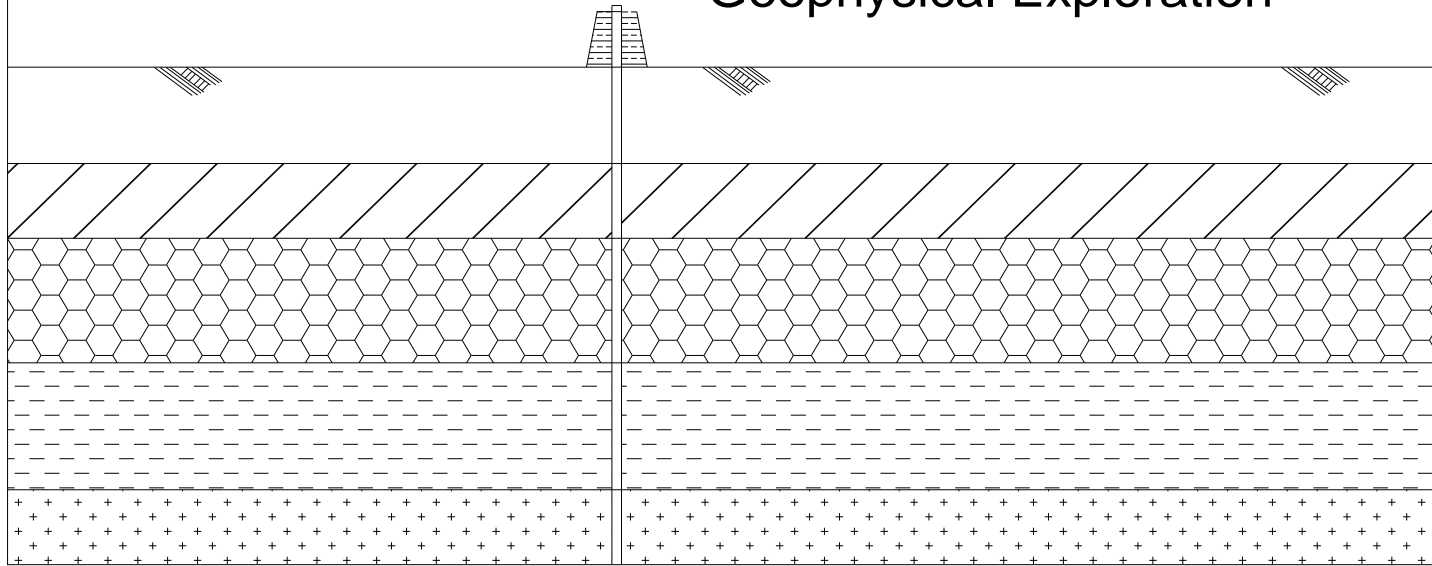
(834)Embankment



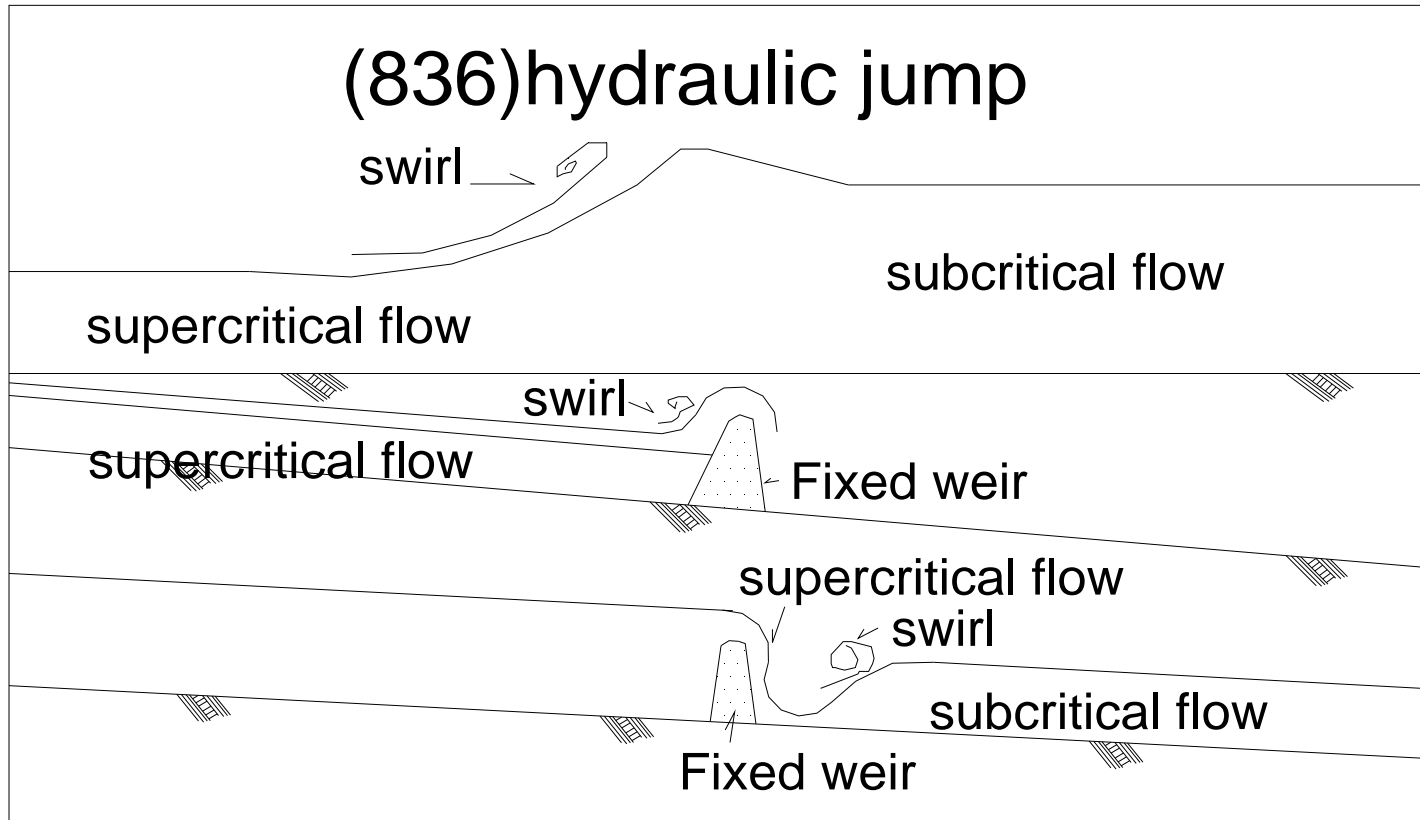
(835) Geological Survey

(835) Geological Survey

Sampling Boring
Geophysical Exploration



(836)hydraulic jump



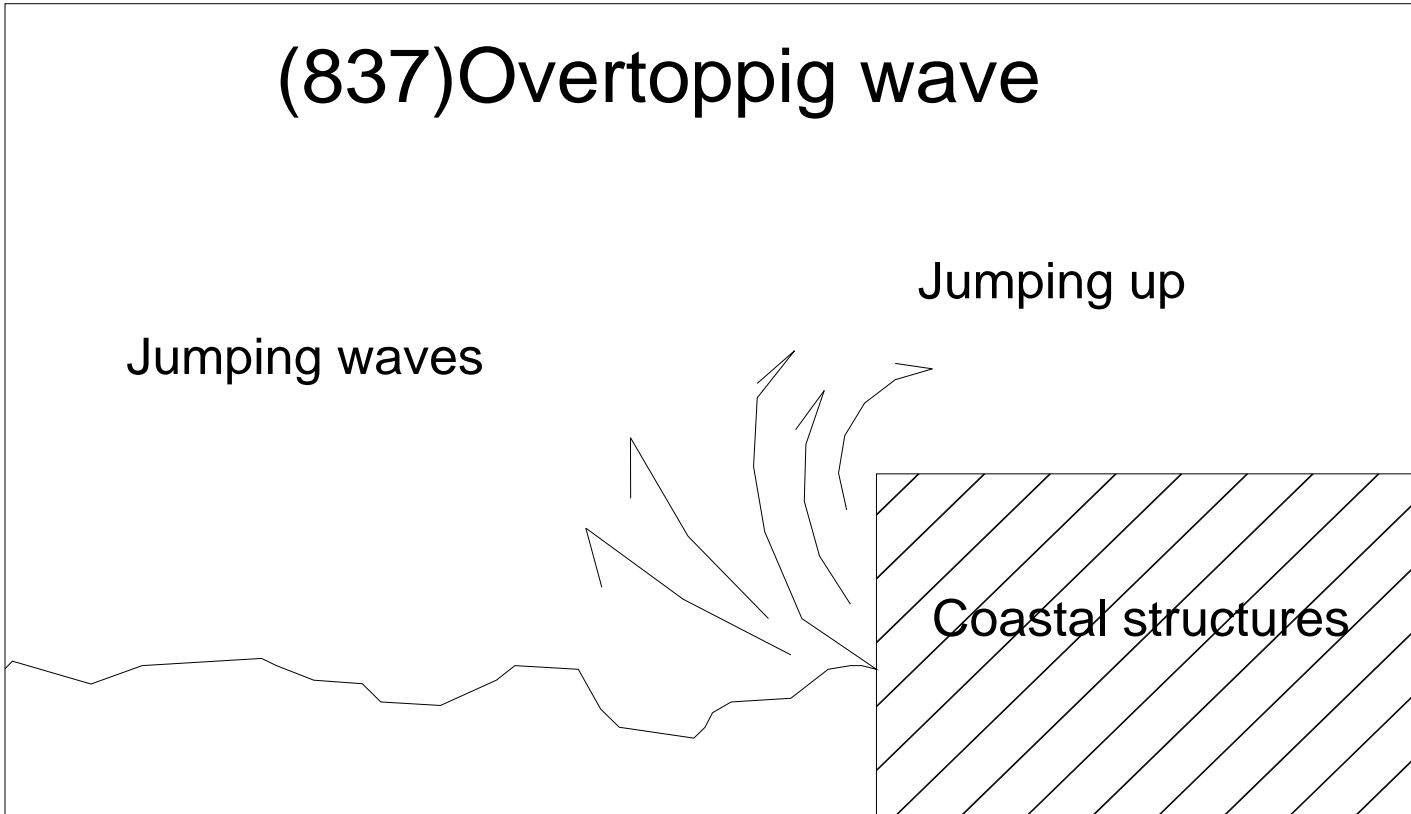
(837)Overtoppig wave

(837)Overtoppig wave

Jumping waves

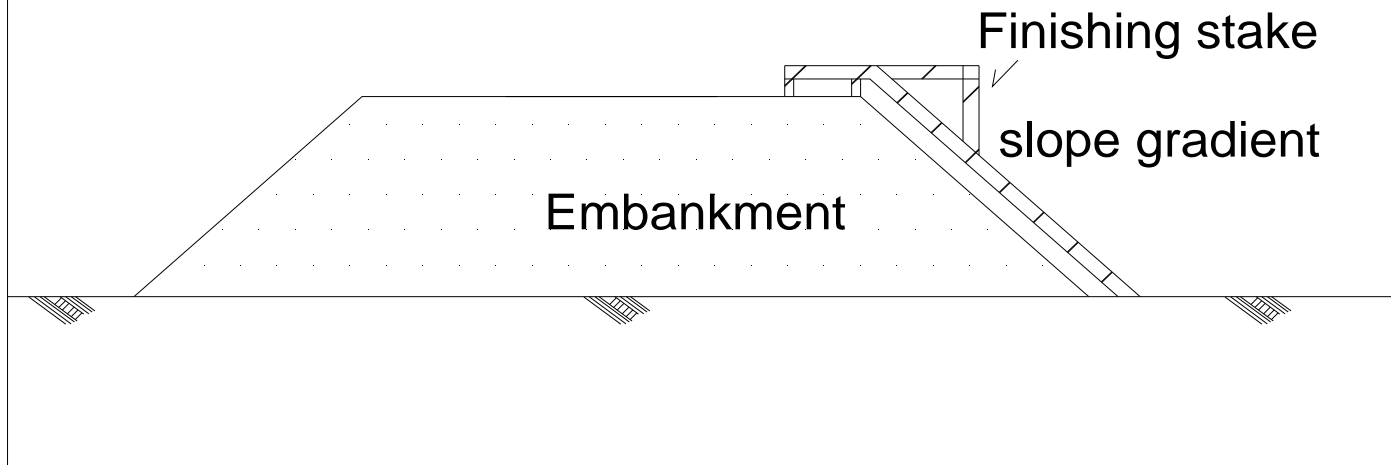
Jumping up

Coastal structures



(838) Finishing stake

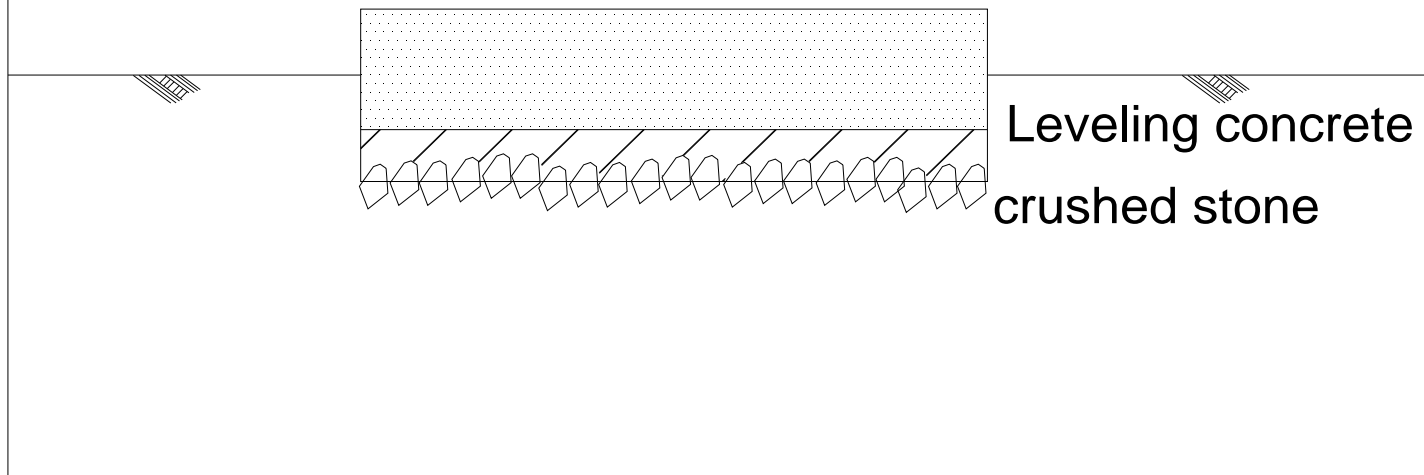
(838) Finishing stake



(839)spread foundation

(839)spread foundation

spread foundation structure

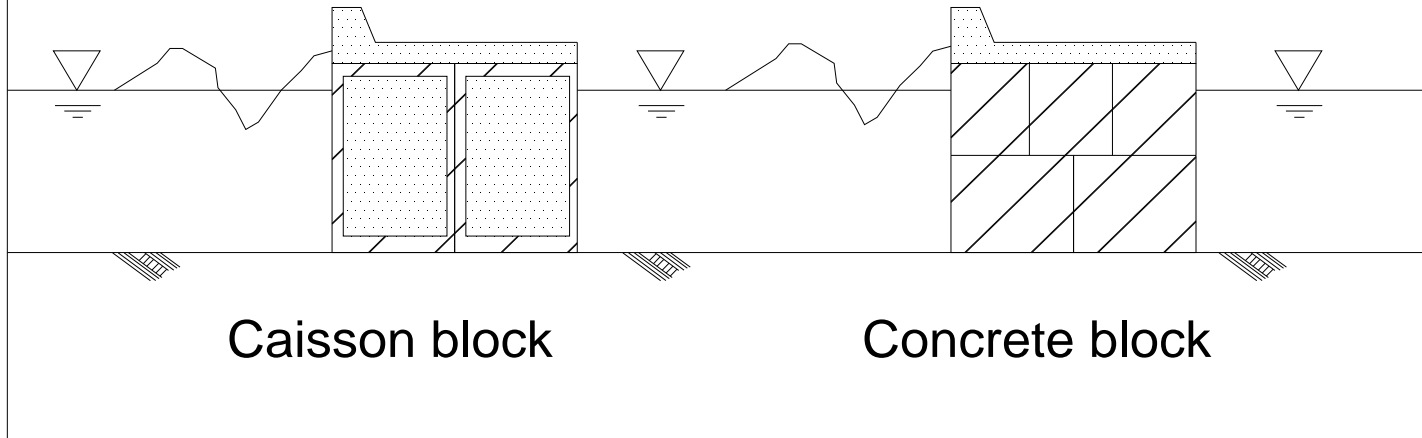


Leveling concrete
crushed stone

(840) Upright breakwater

(840) Upright breakwater

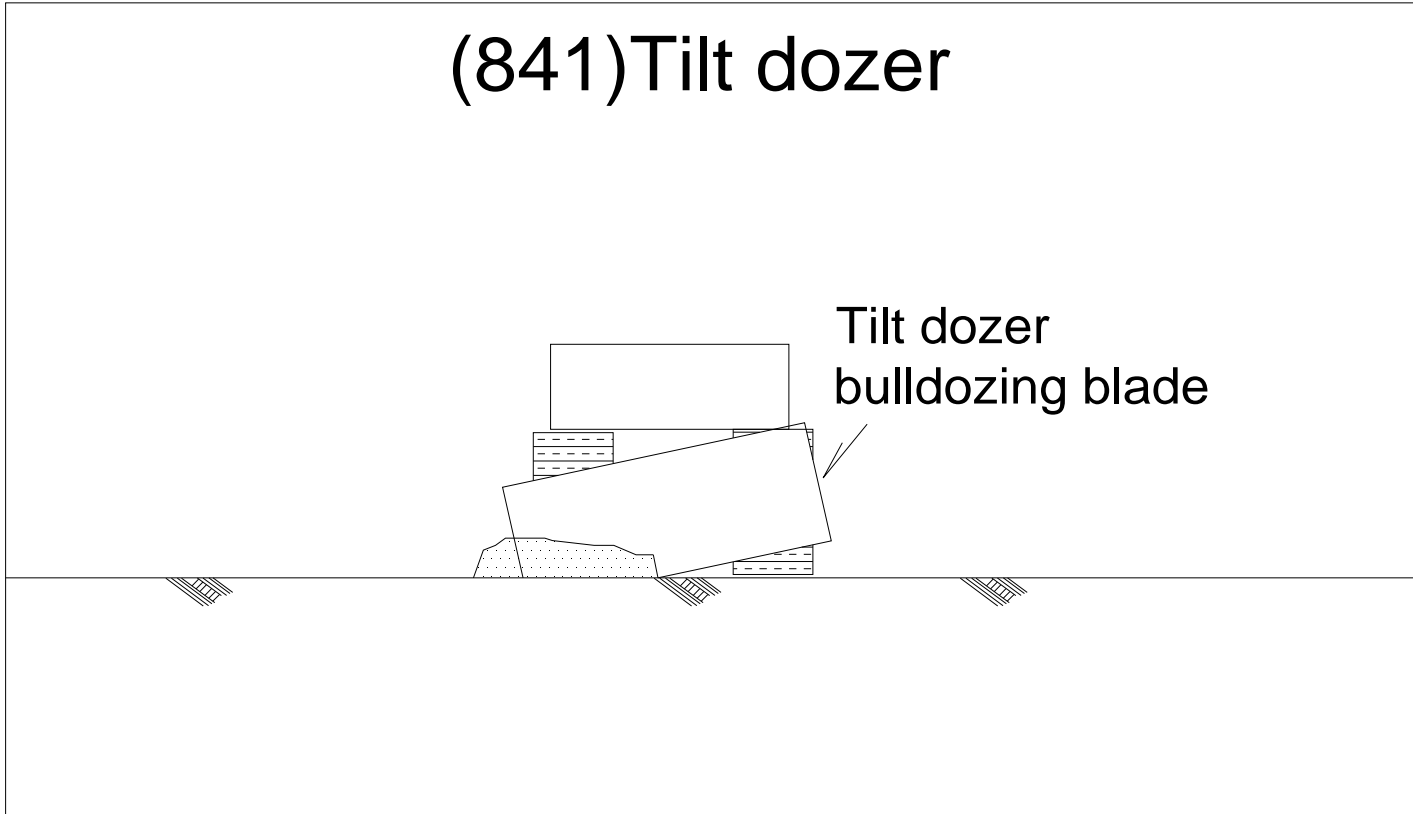
inside and outside the harbor



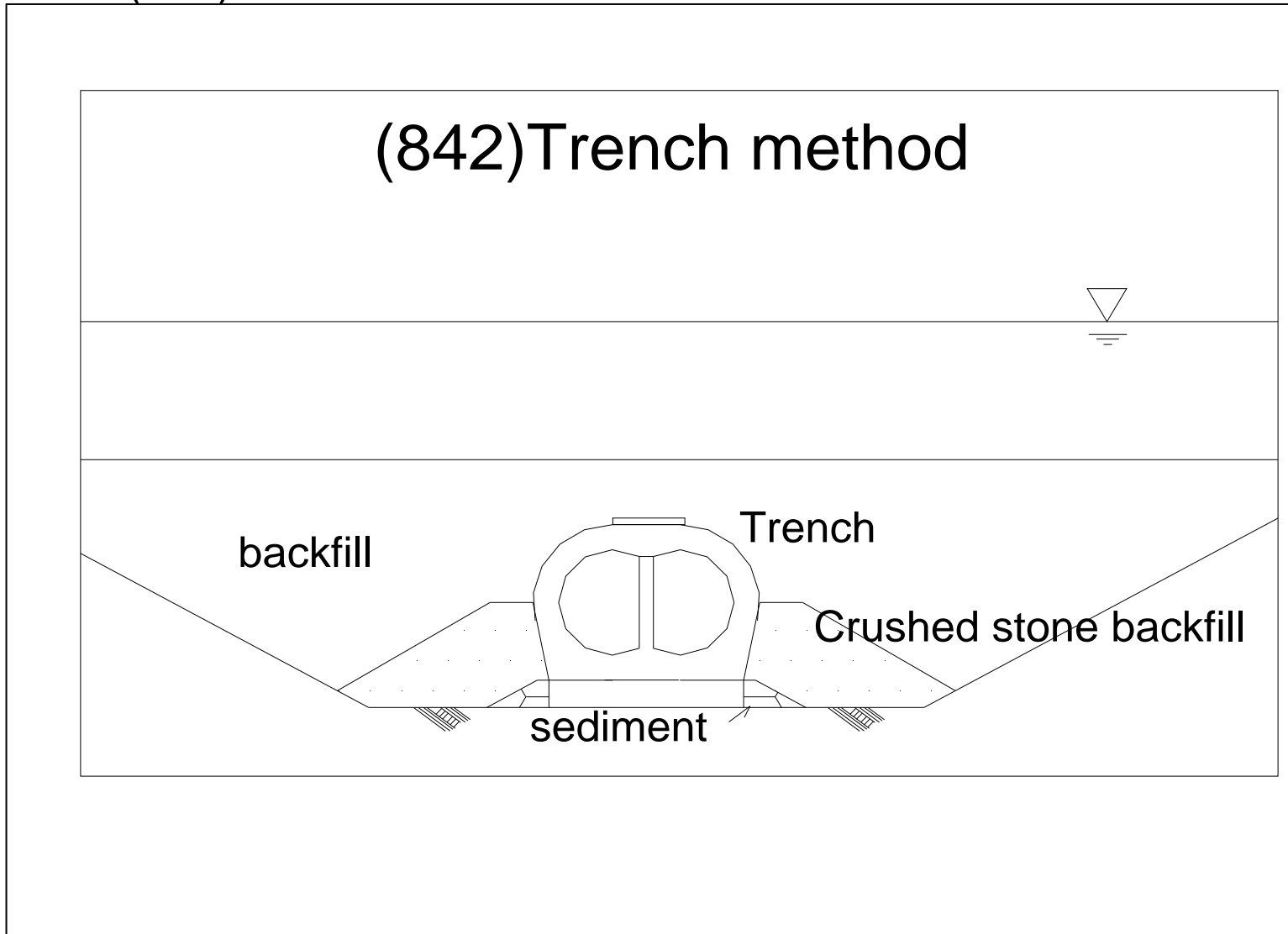
(841)Tilt dozer

(841)Tilt dozer

Tilt dozer
bulldozing blade



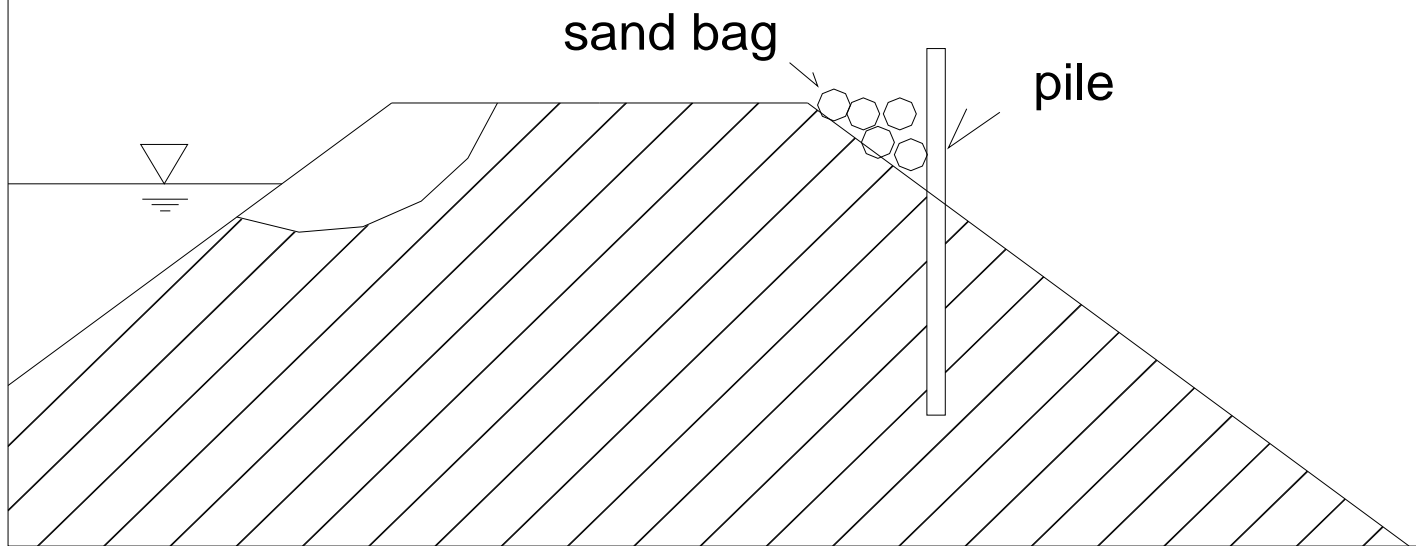
(842)Trench method



(843)Back slope protection

(843)Back slope protection

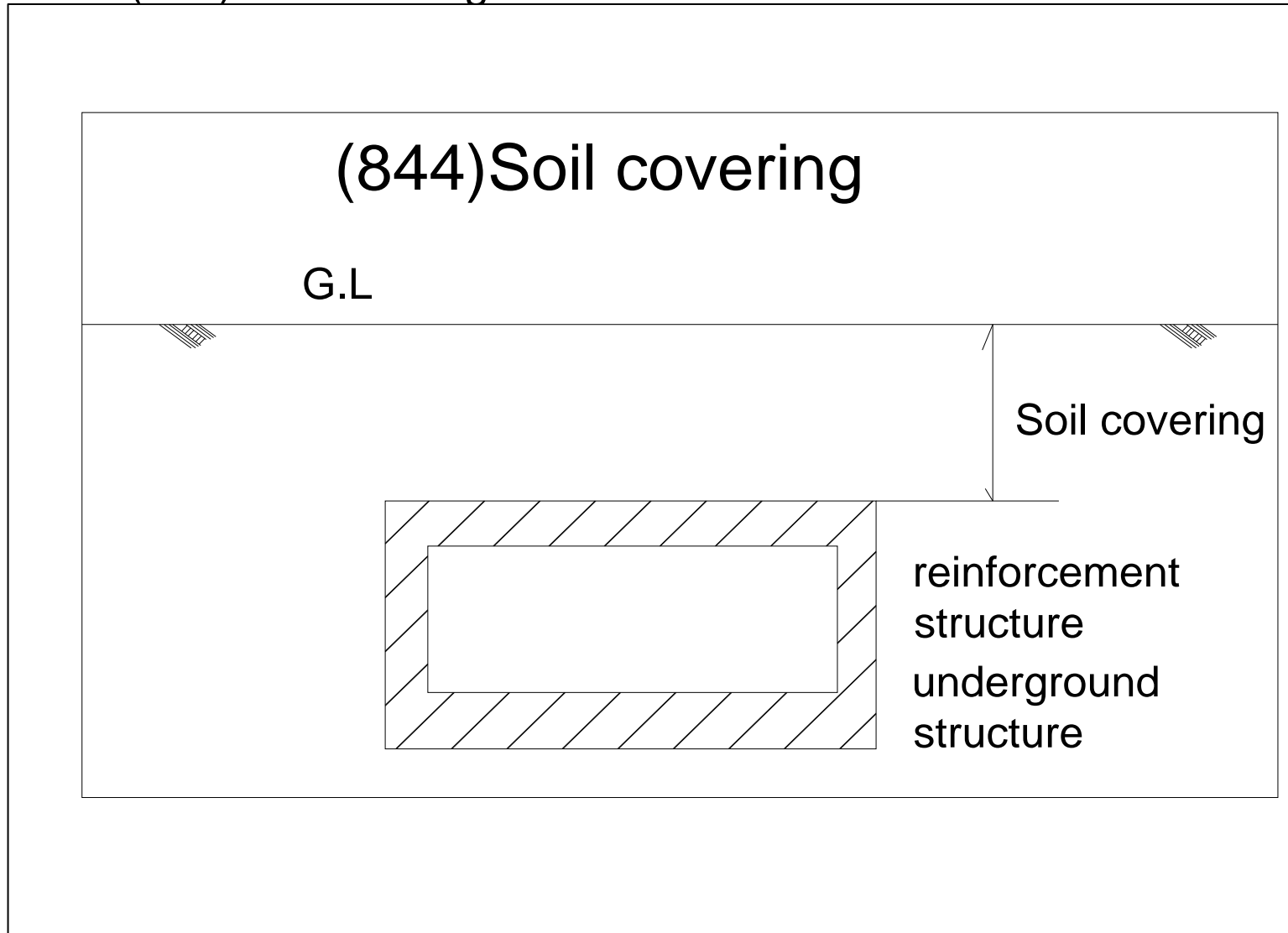
Flood Protection



sand bag

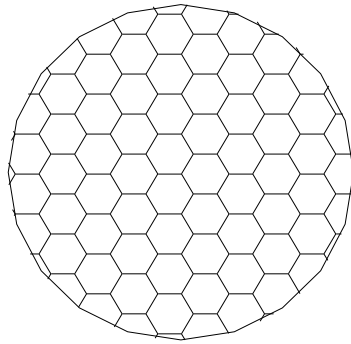
pile

(844)Soil covering

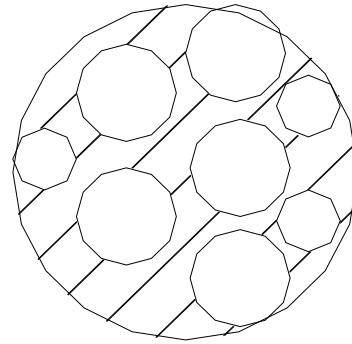


(845) Soil structure

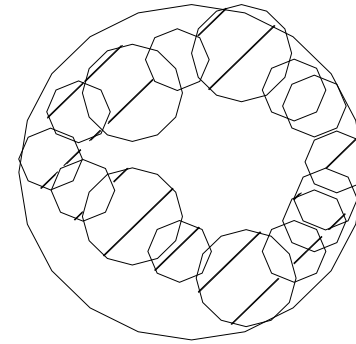
(845) Soil structure



Soil structure



honeycomb
structure



Ciliary
structure

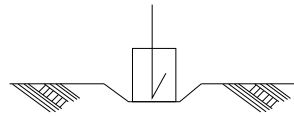
(846)Plastic deformation of soil

(846)Plastic deformation of soil

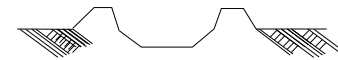
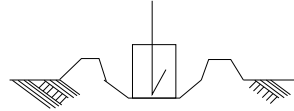
before loading

loading

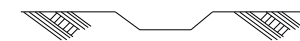
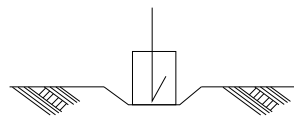
after loading



Elastic deformation



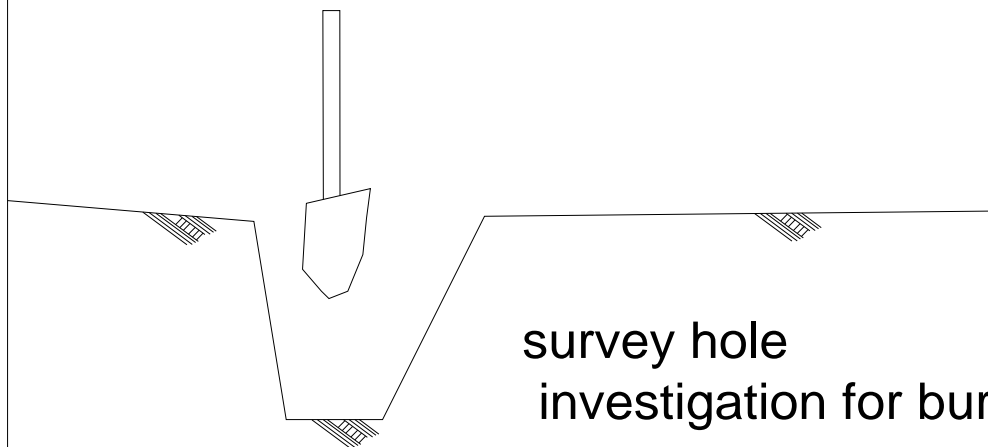
Plastic deformation



Compressive deformation

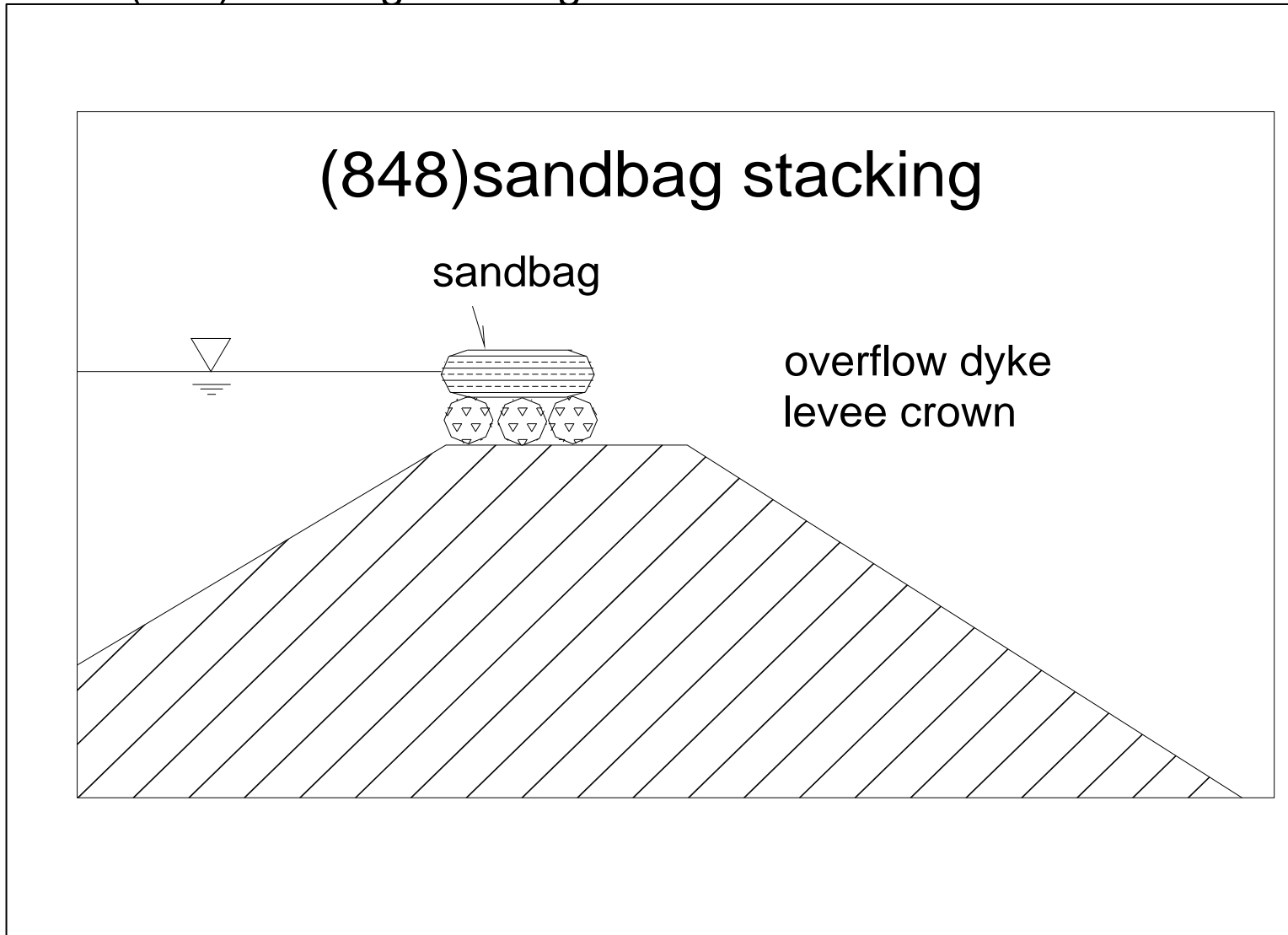
(847)shaft sinking

(847)shaft sinking



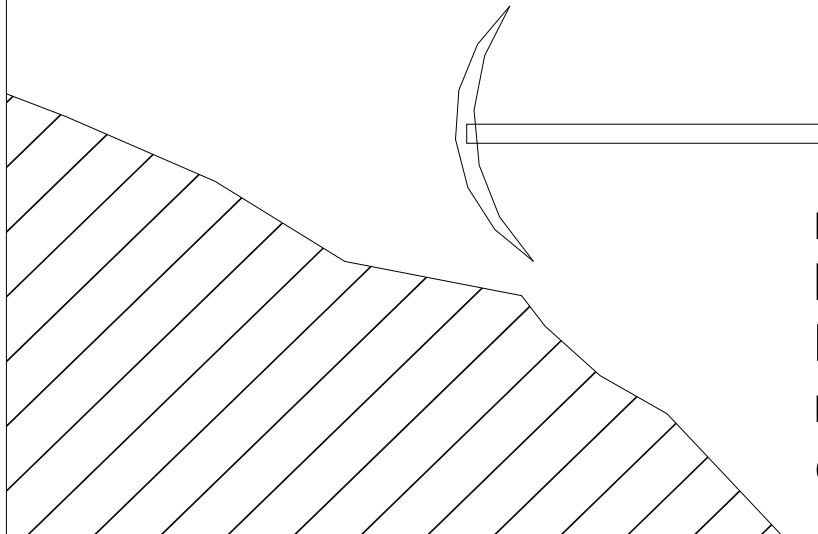
survey hole
investigation for buried structure

(848)sandbag stacking



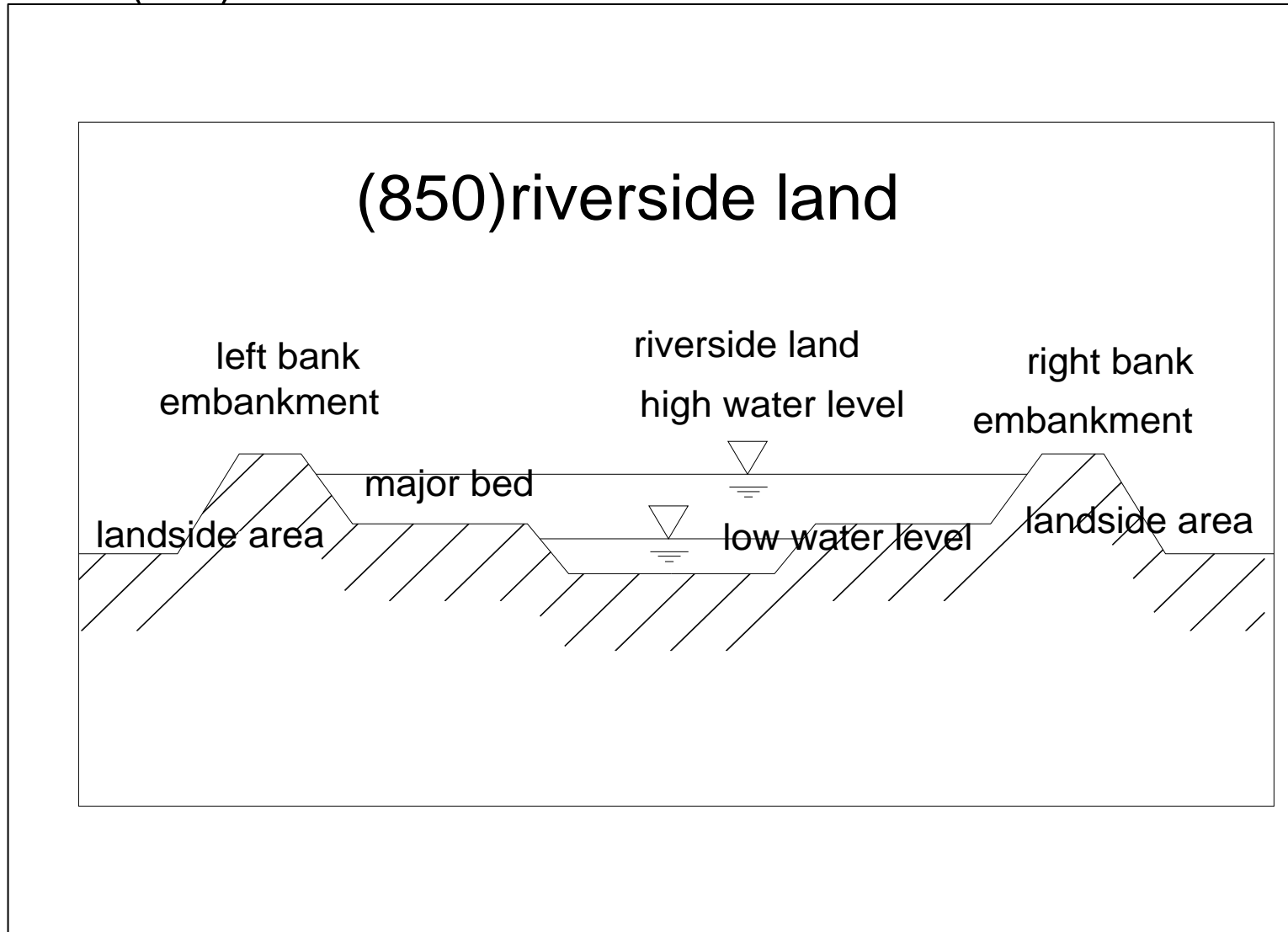
(849)Pick

(849)Pick



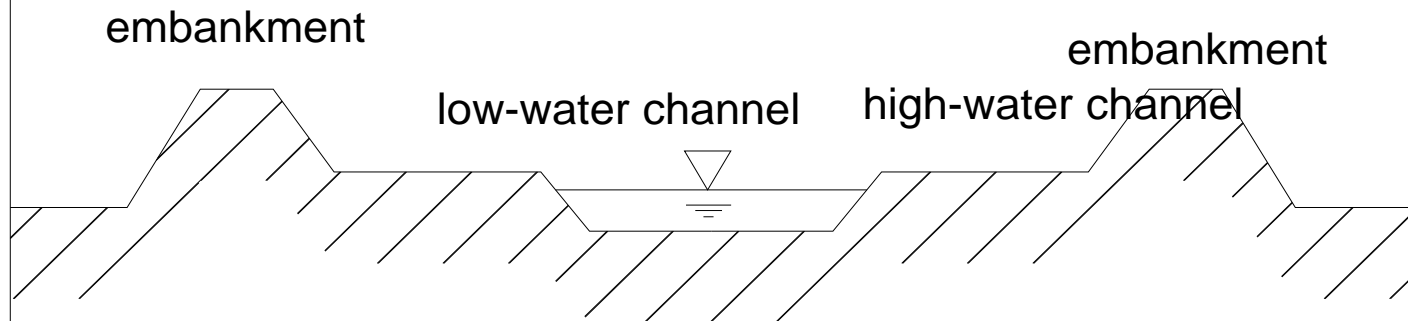
manual excavation
hand excavation
Pick
manpower excavation
digging up

(850)riverside land

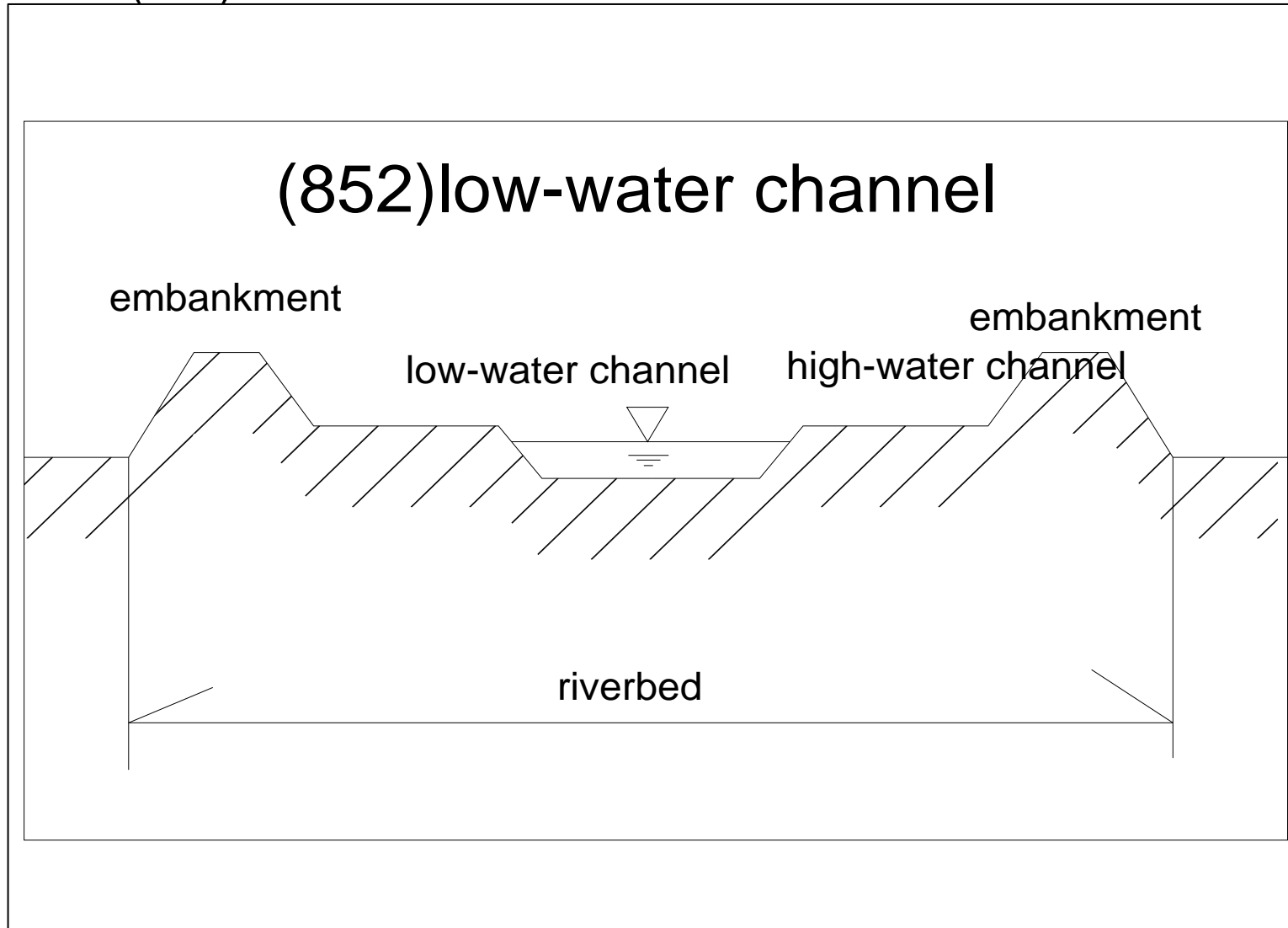


(851)low-water channel work

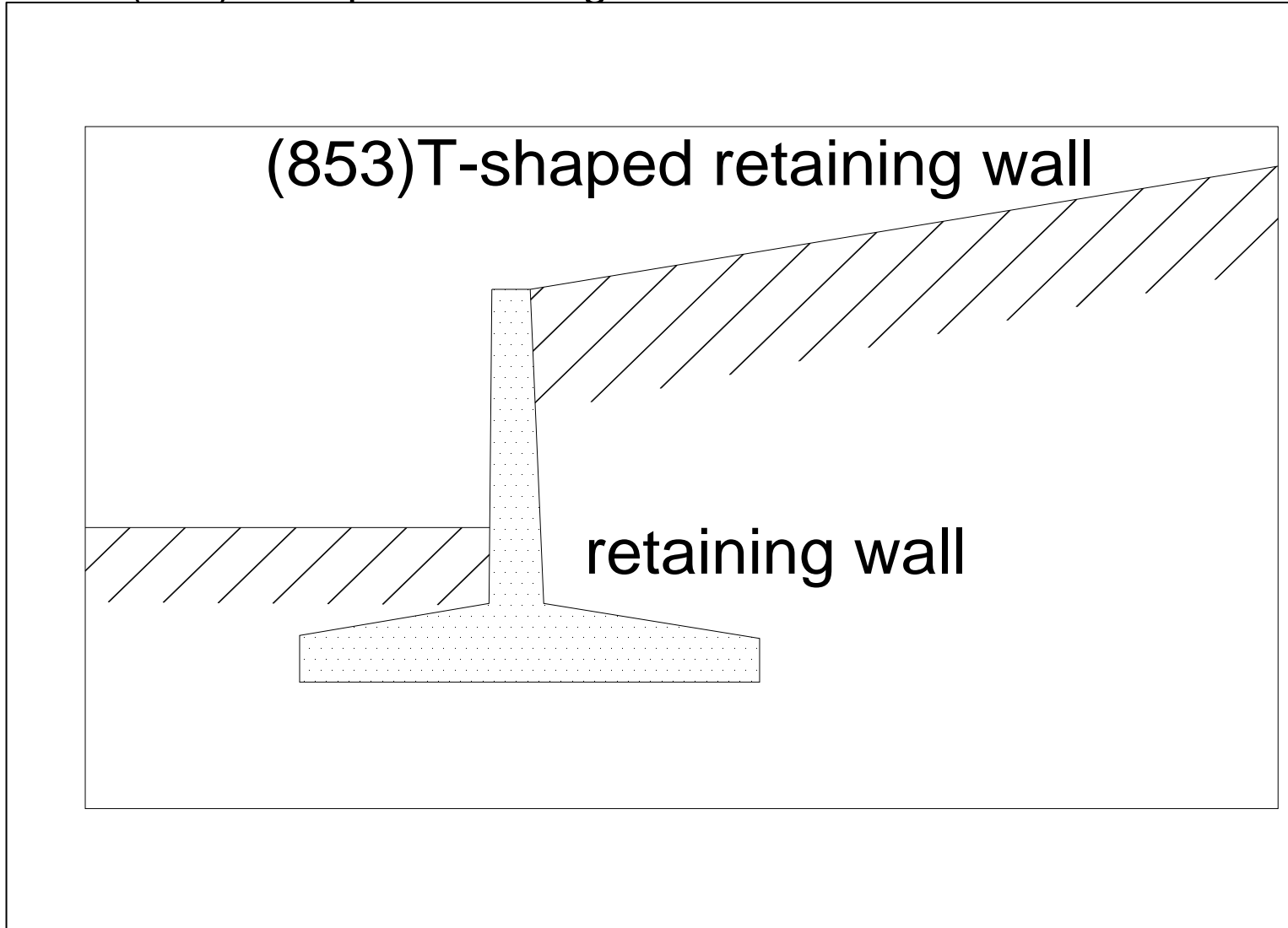
(851)low-water channel work



(852)low-water channel

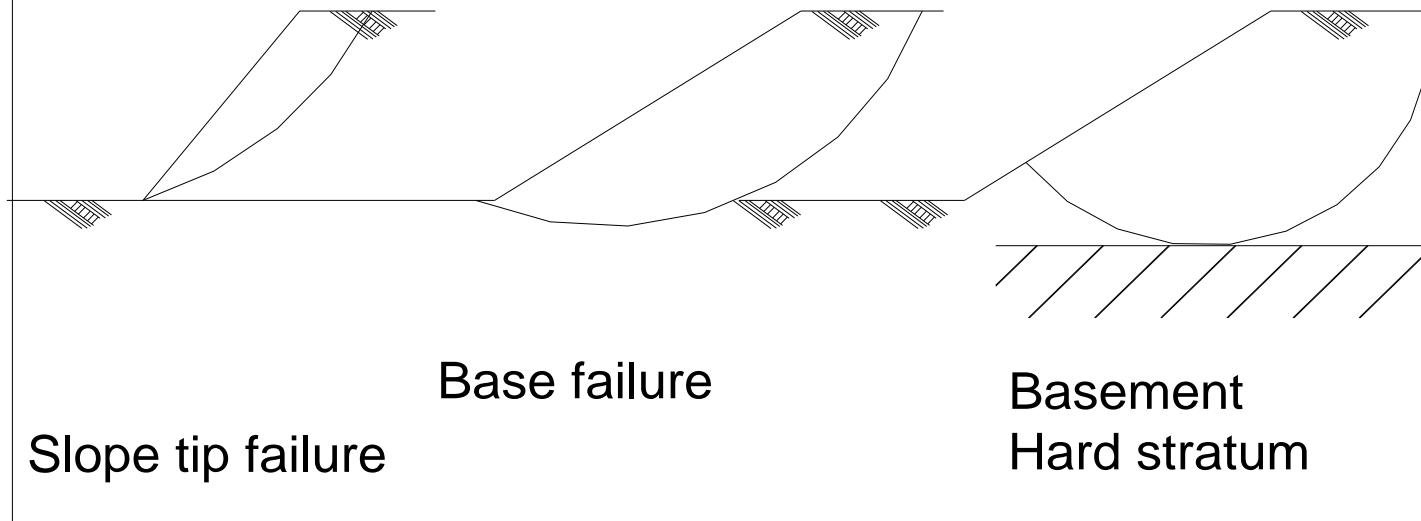


(853)T-shaped retaining wall



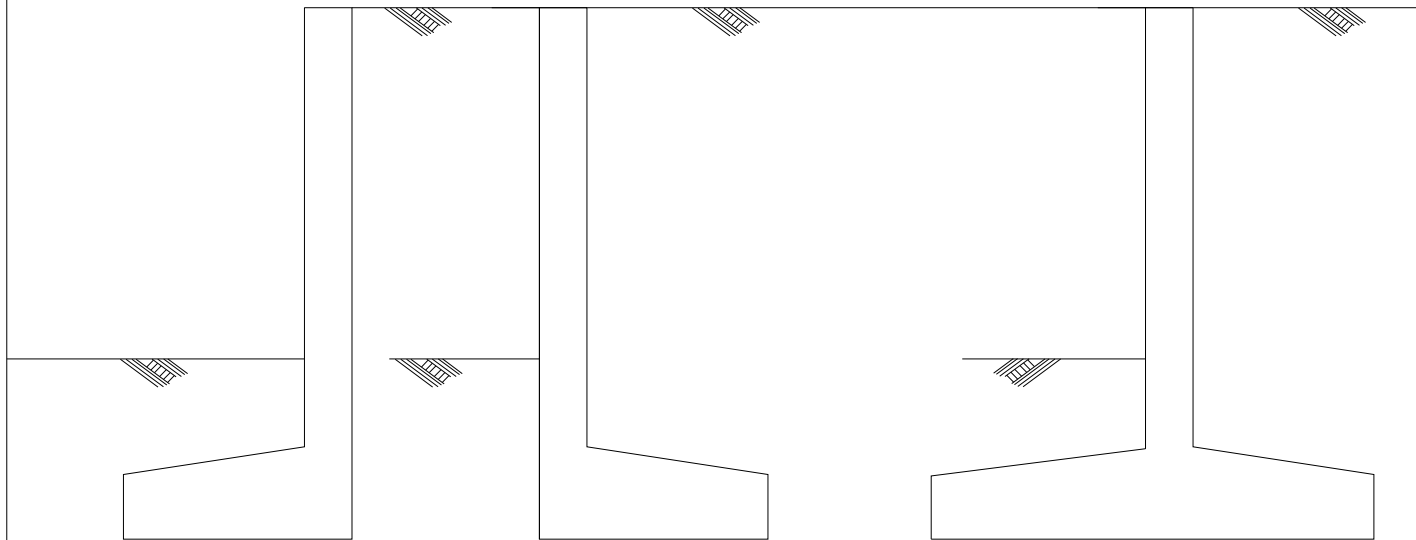
(854) Base failure

(854) Base failure



(855) Reinforced concrete retaining wall

(855) Reinforced concrete retaining wall

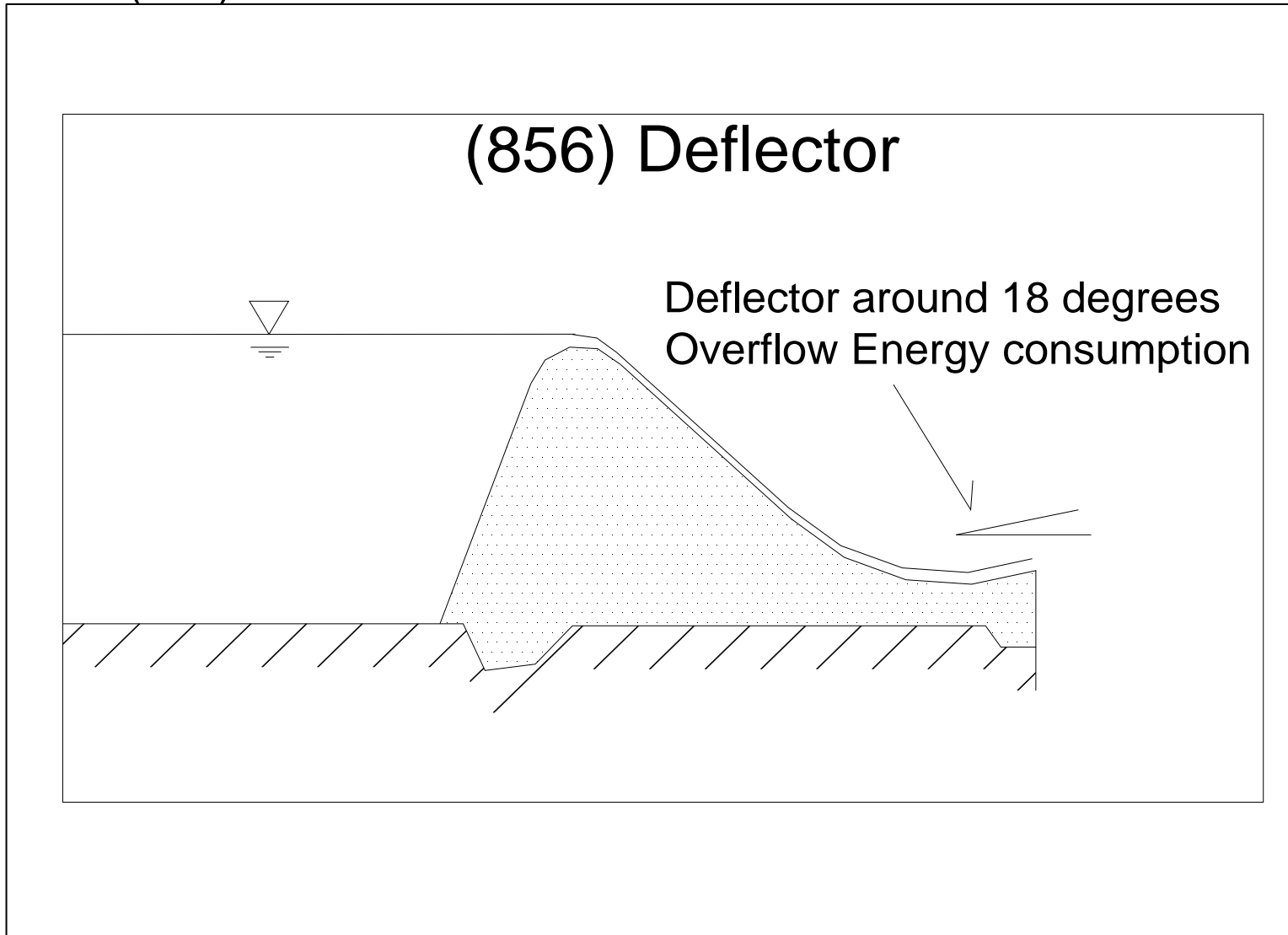


Inverted L-shaped retaining wall

L-shaped retaining wall

Inverted T-shaped retaining wall

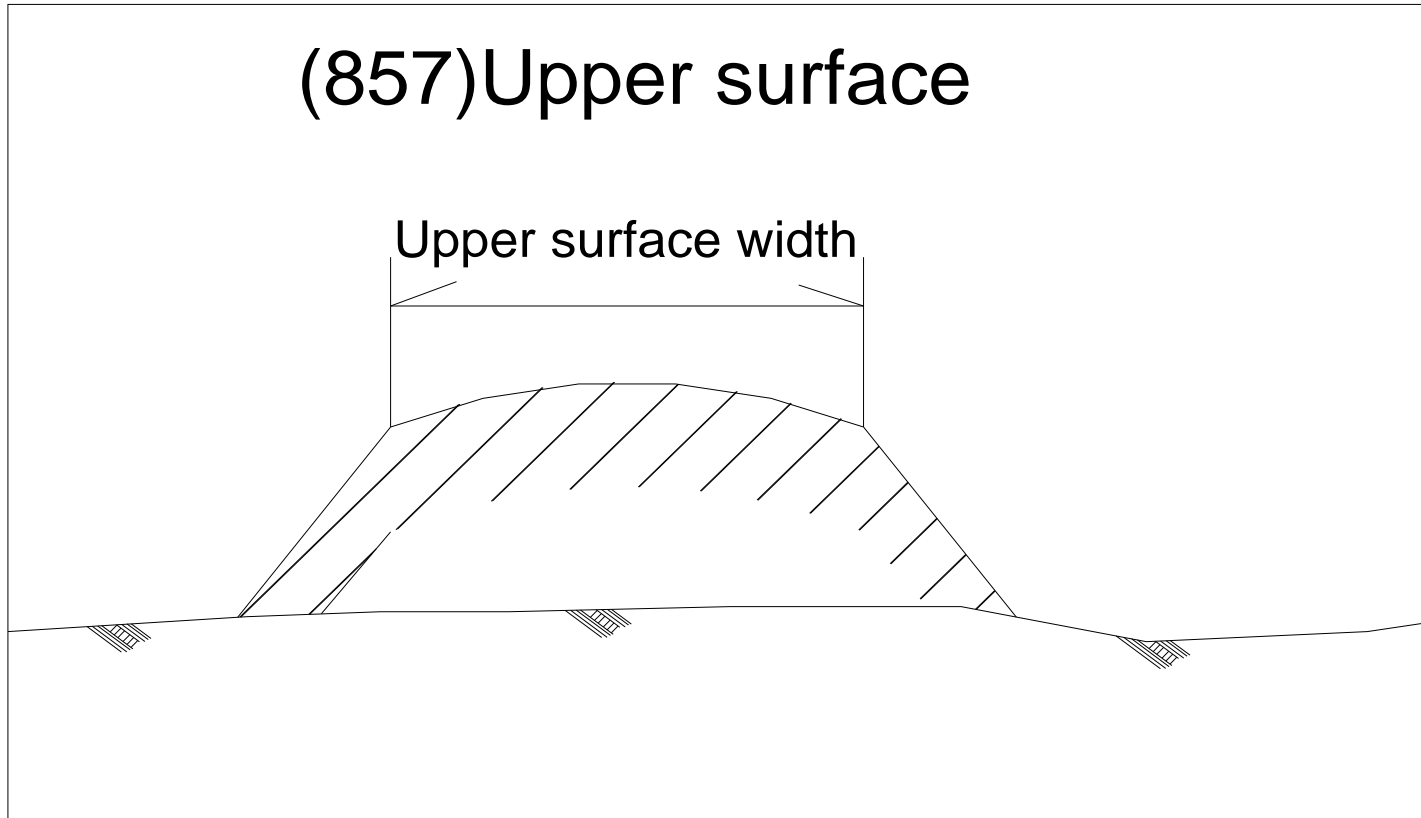
(856) Deflector



(857)Upper surface

(857)Upper surface

Upper surface width

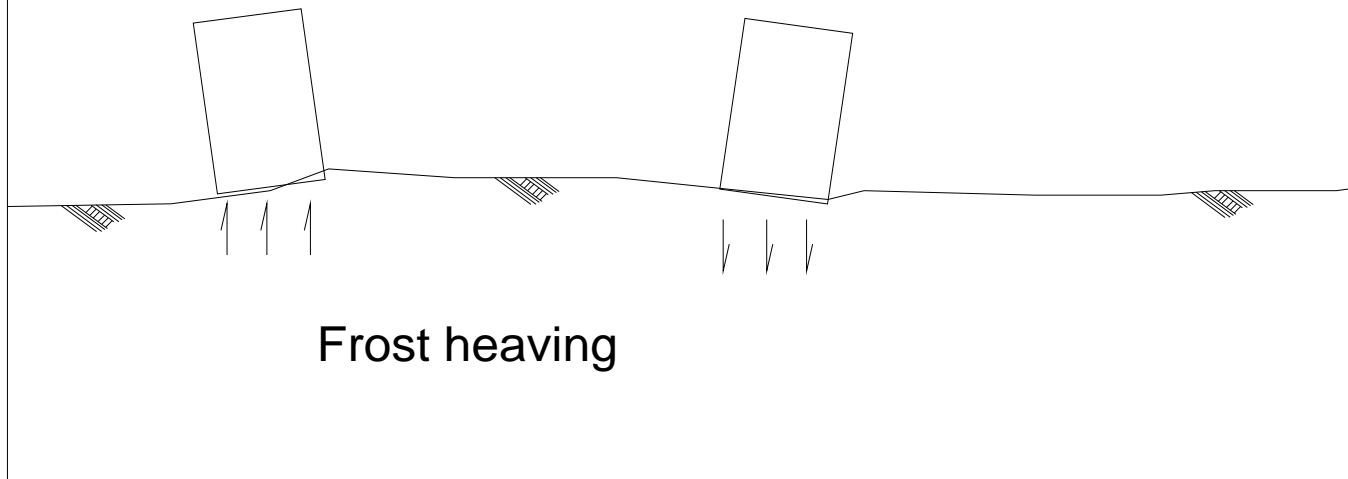


(858)Frost heaving and soil

(858)Frost heaving and soil

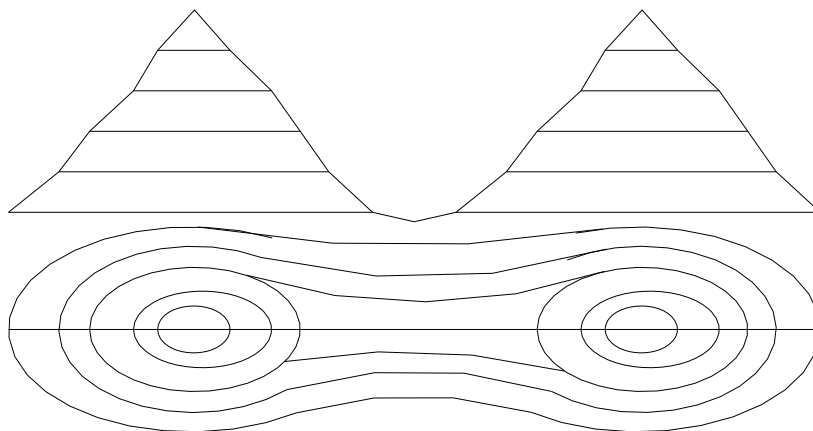
Winter

Spring

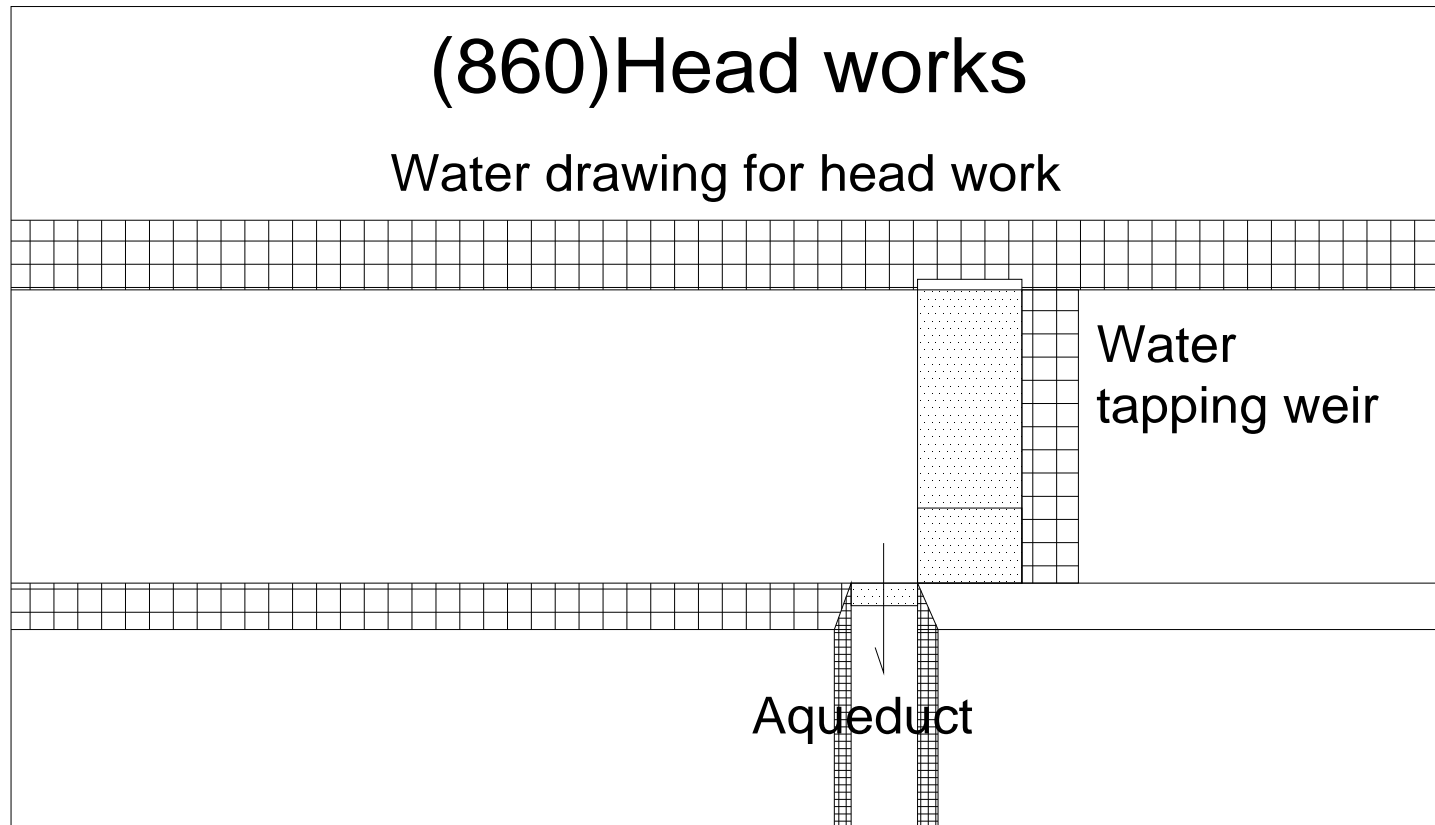


(859)Contour line

(859)Contour line



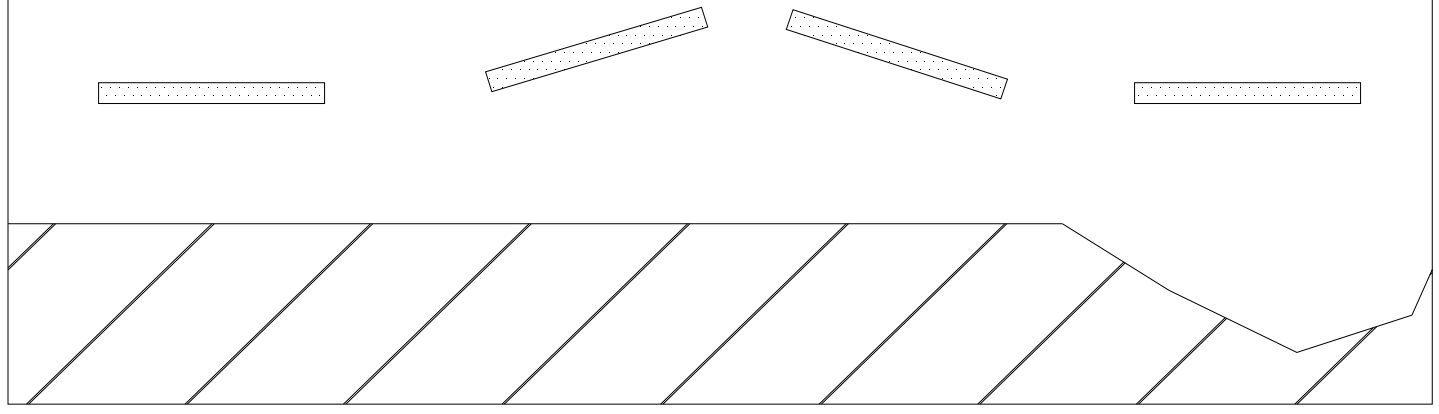
(860) Head works



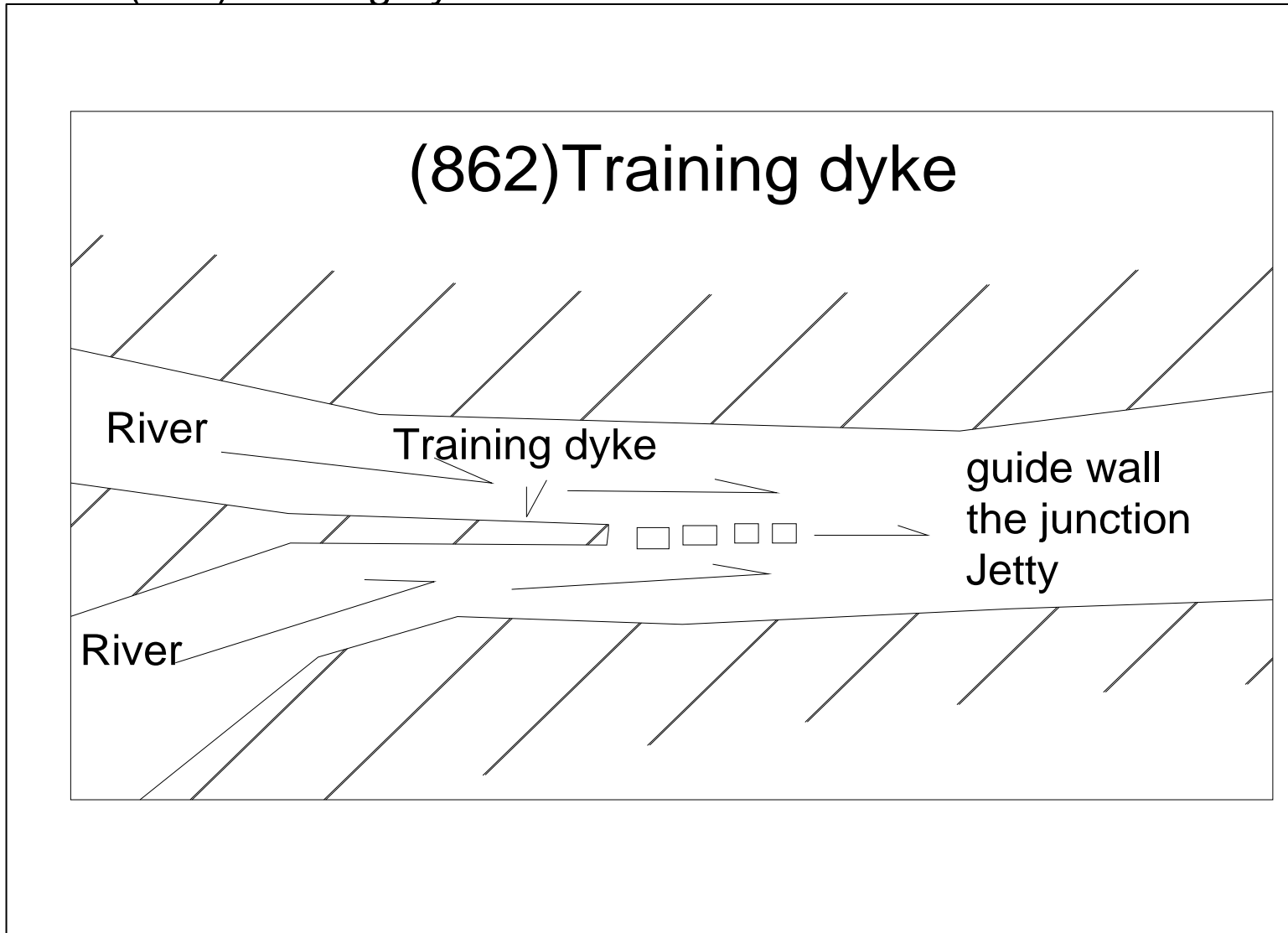
(861) Detached break water

(861) Detached break water

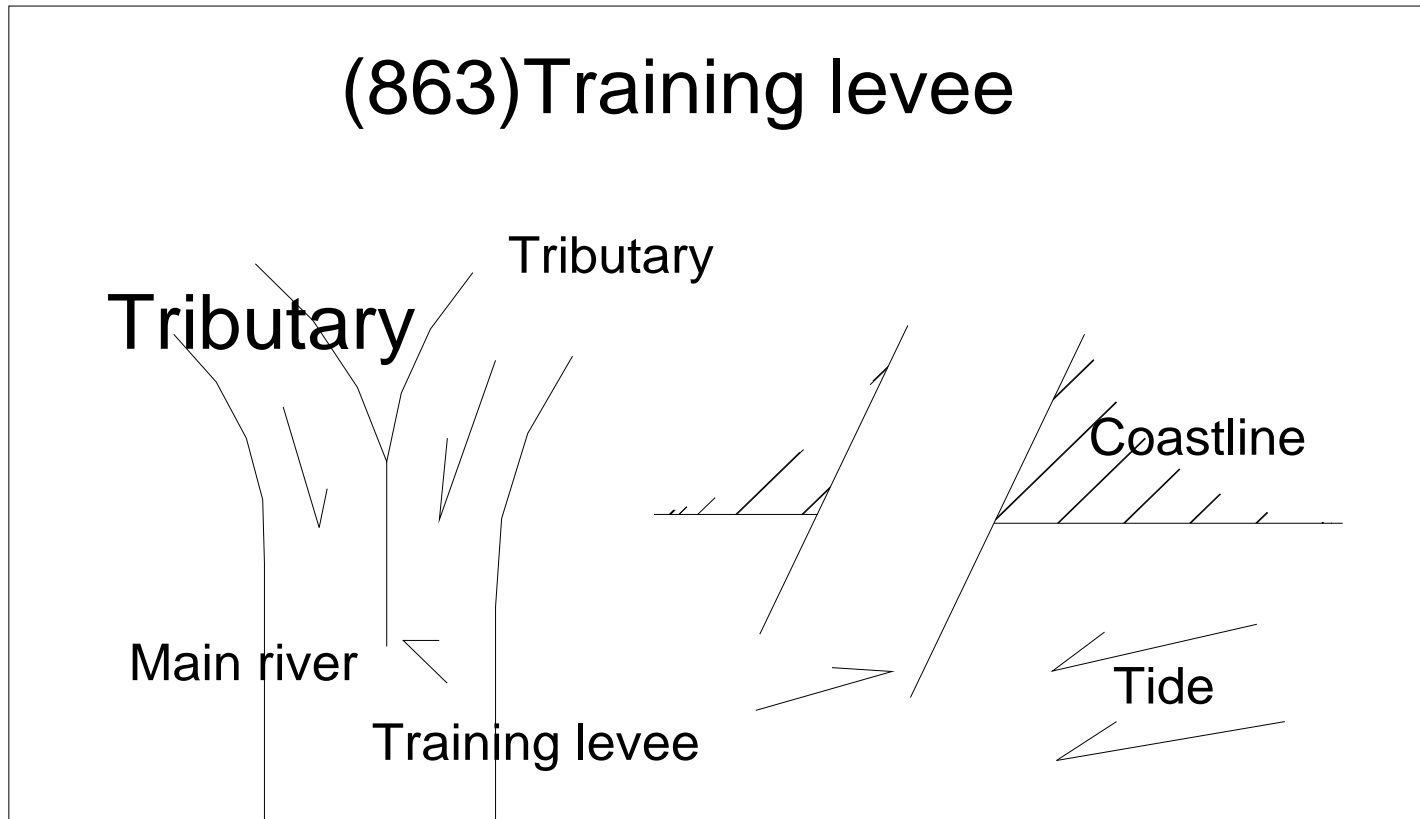
Detached break water



(862) Training dyke

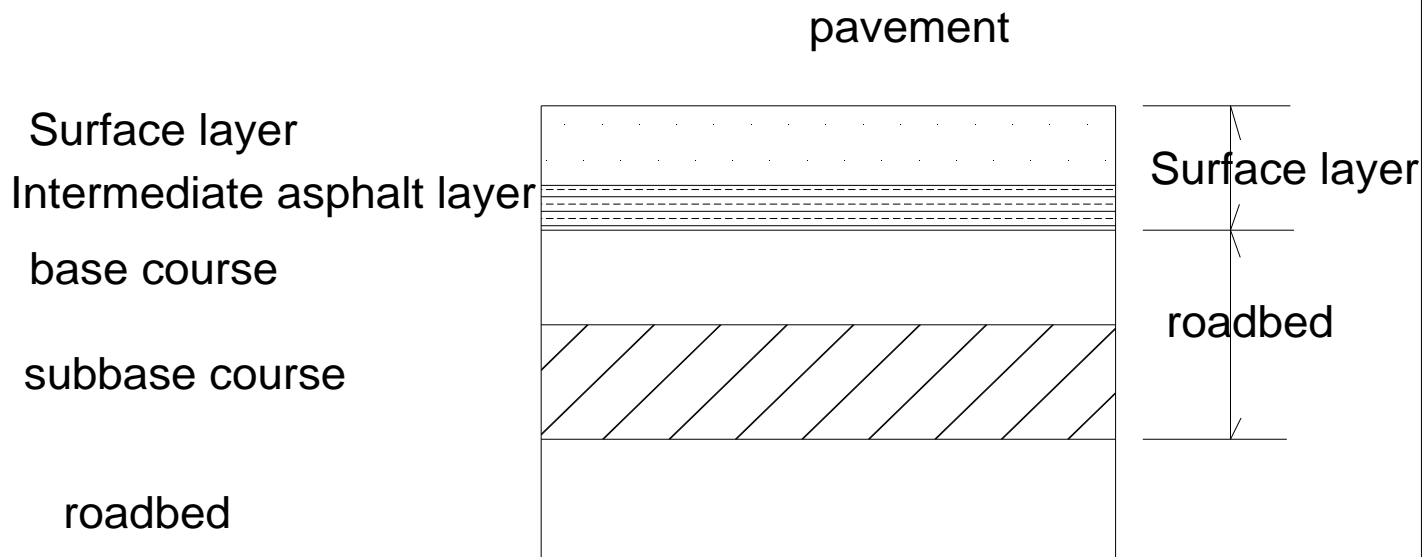


(863) Training levee



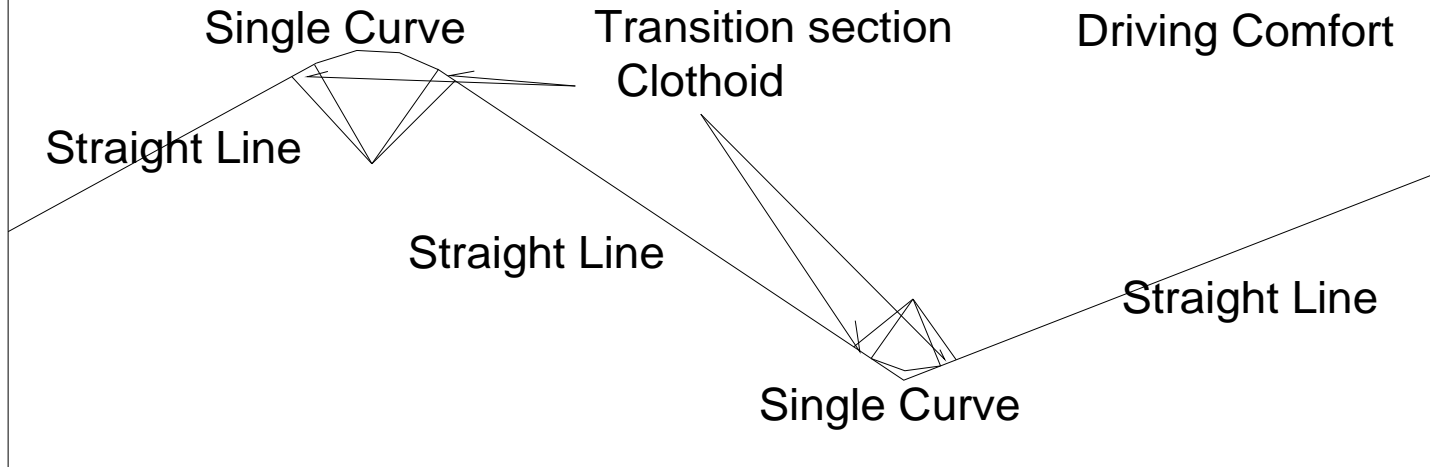
(864)Road work

(864)Road work

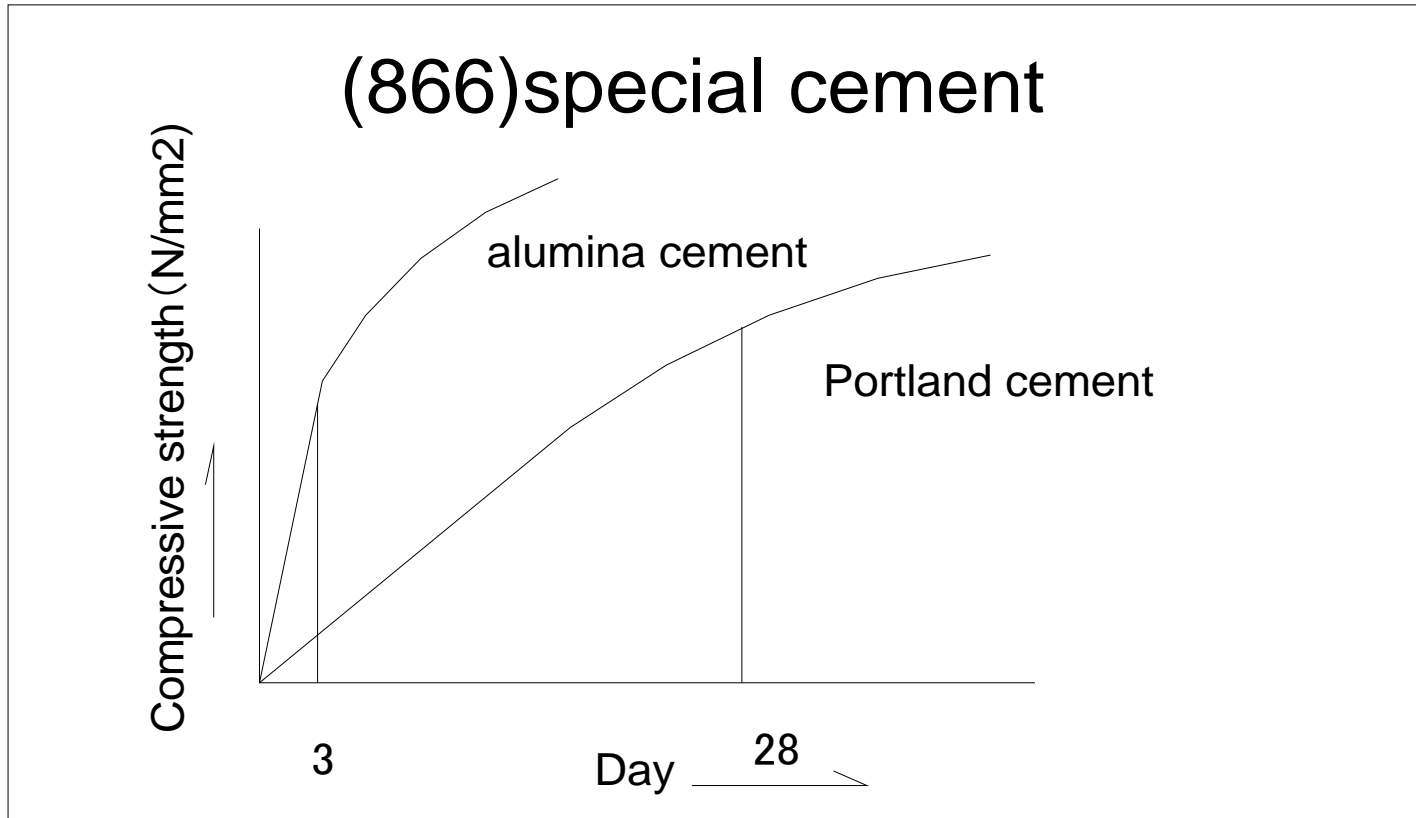


(865)Road Alignment

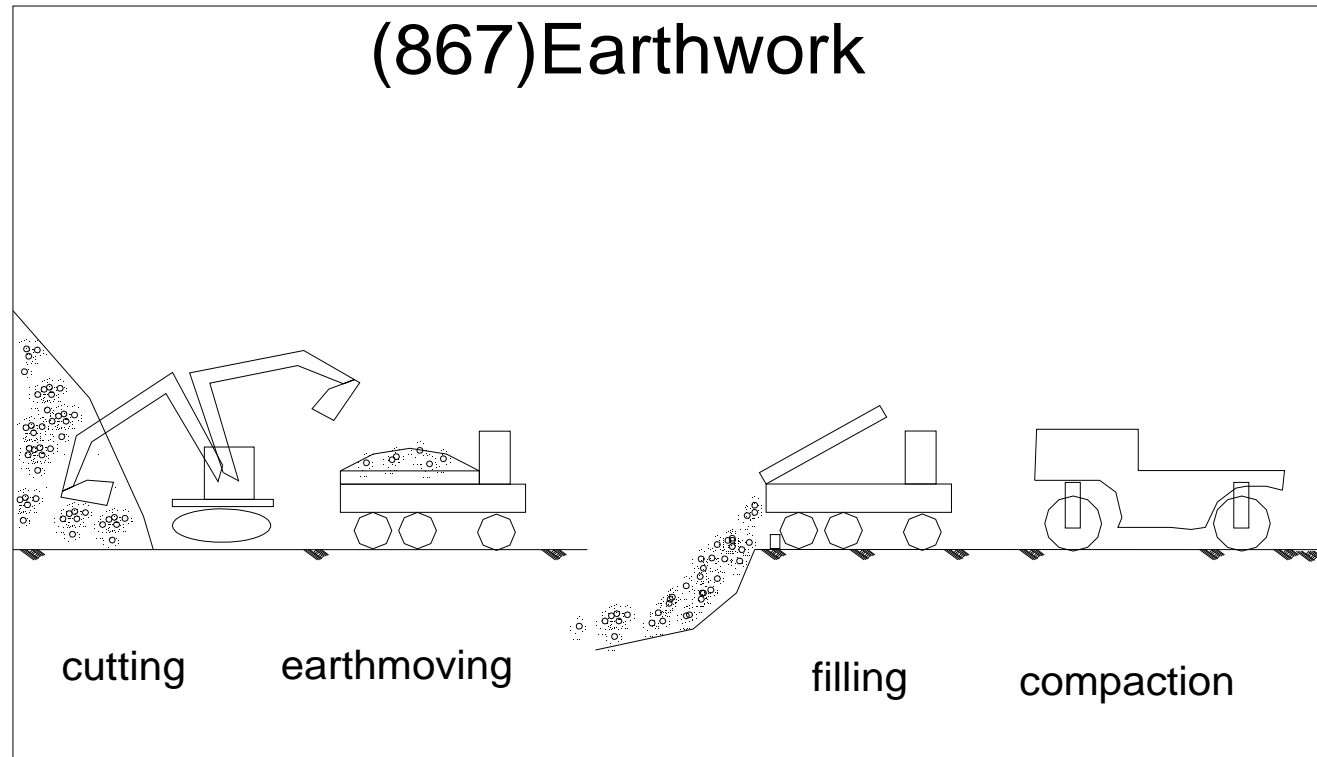
(865)Road Alignment



(866)special cement



(867)Earthwork



(868)blade

(868)blade

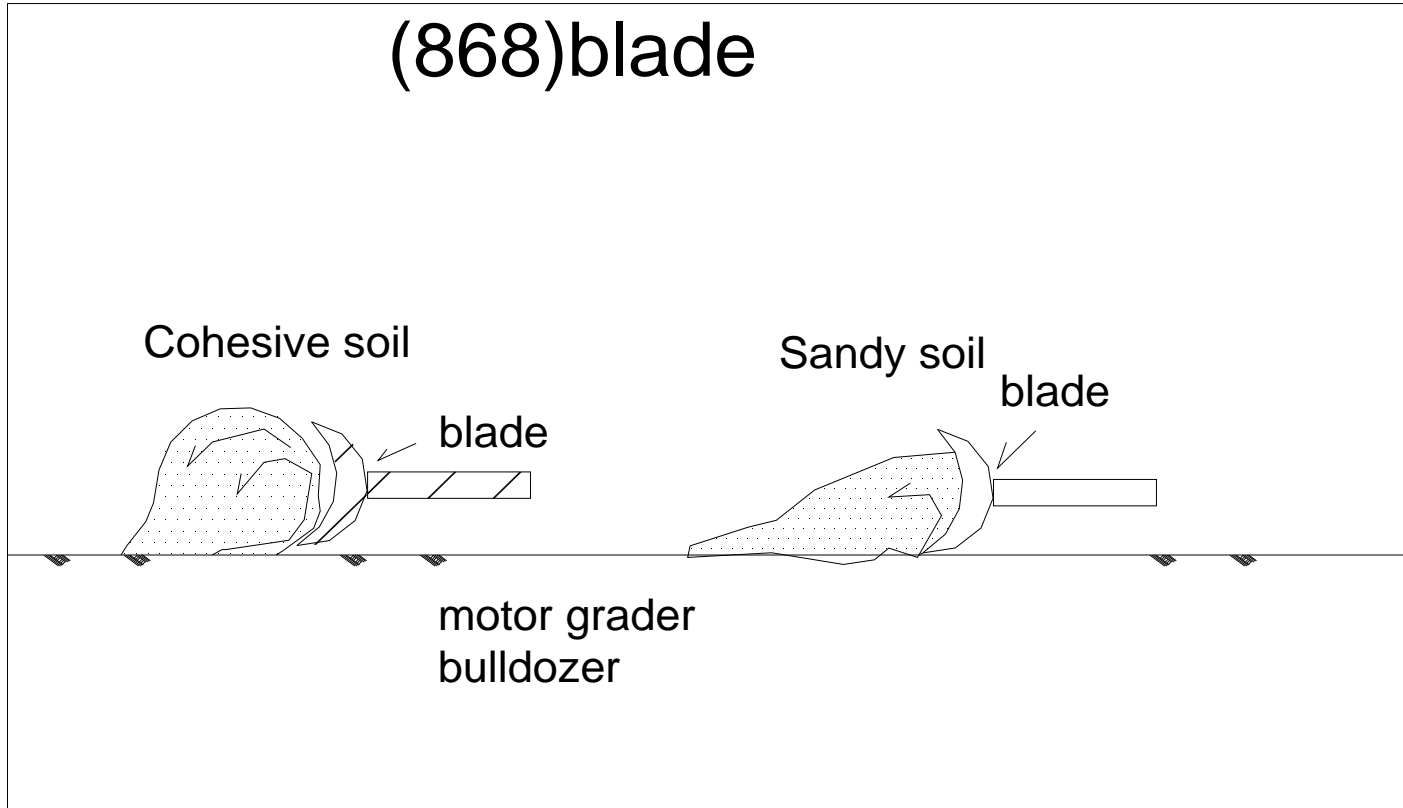
Cohesive soil

Sandy soil

blade

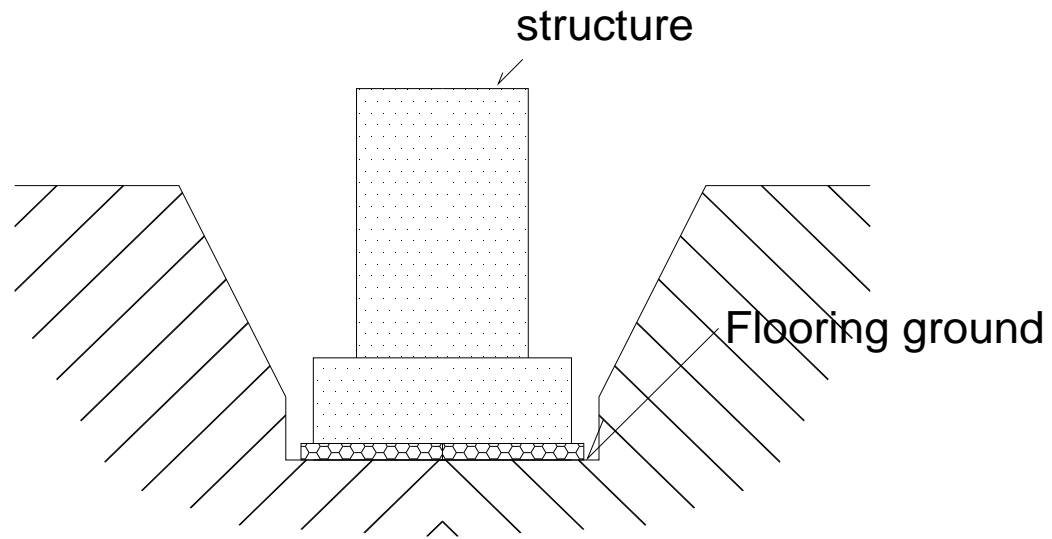
blade

motor grader
bulldozer



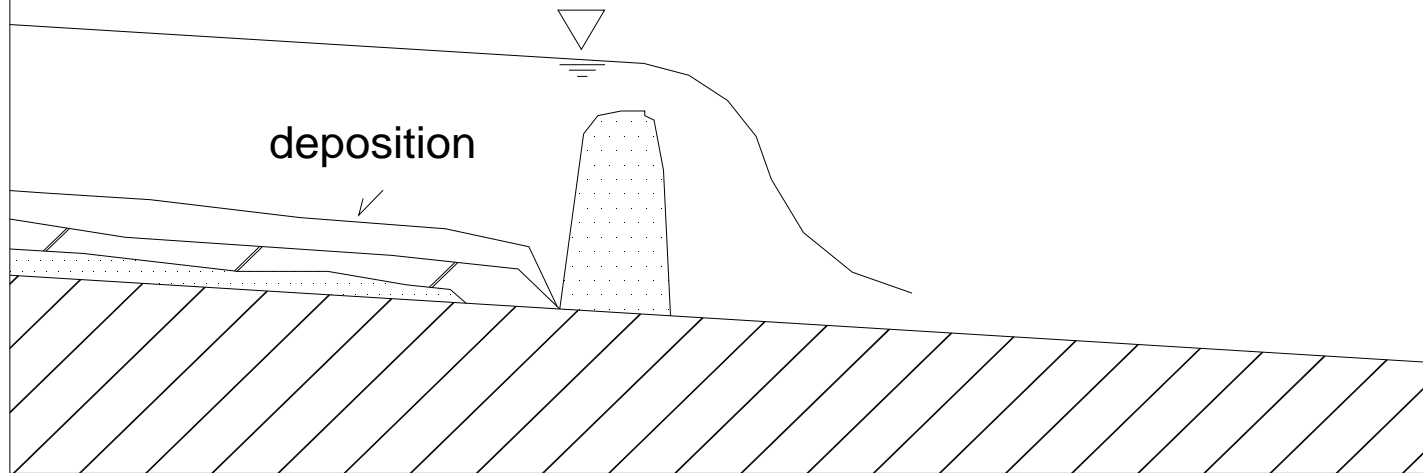
(869) excavation for foundation

(869) excavation for foundation

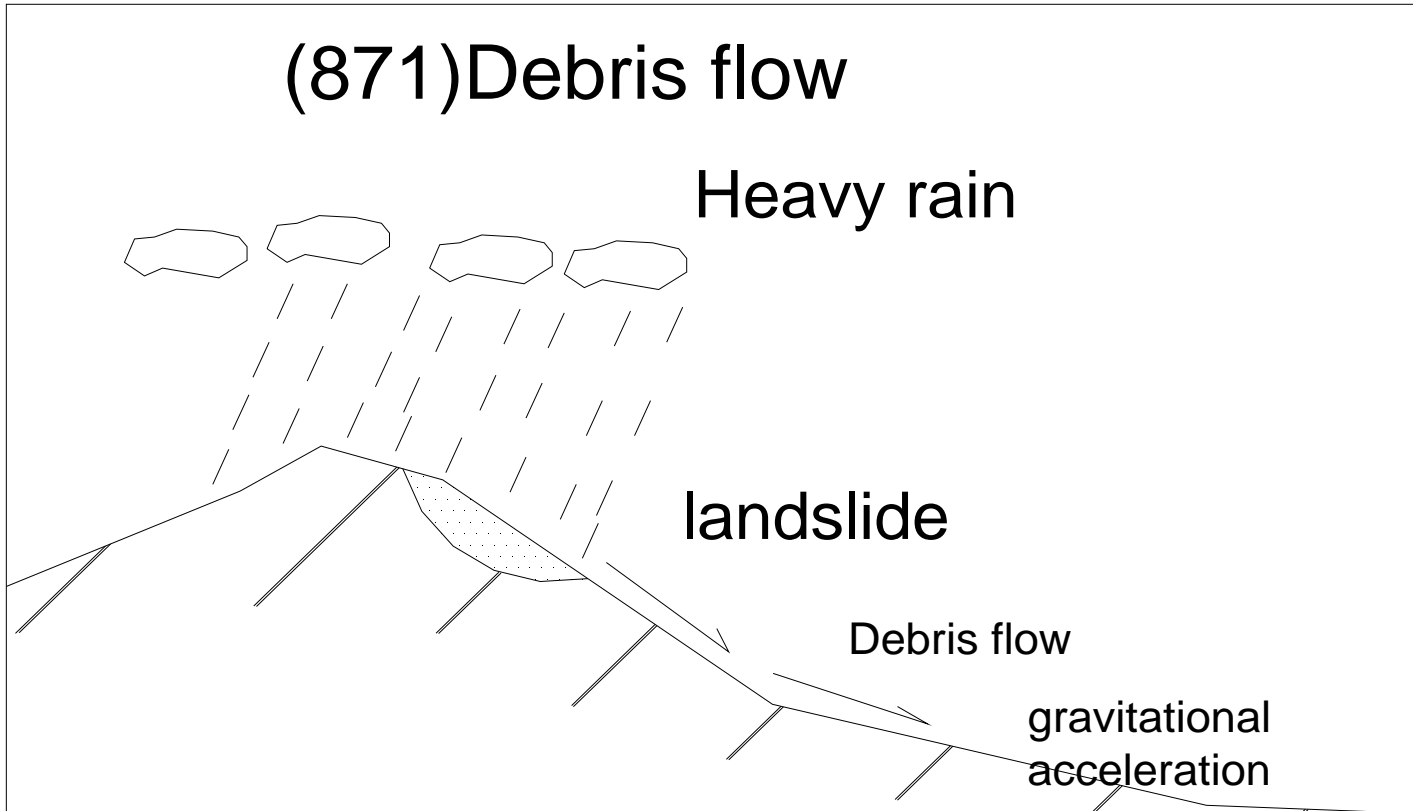


(870)sedimentation setting

(870)sedimentation setting

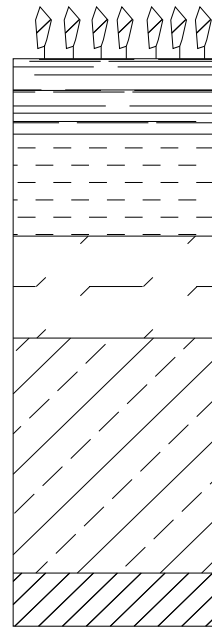


(871)Debris flow



(872)soil profile

(872)soil profile



Soil horizon

Layer A

Layer B

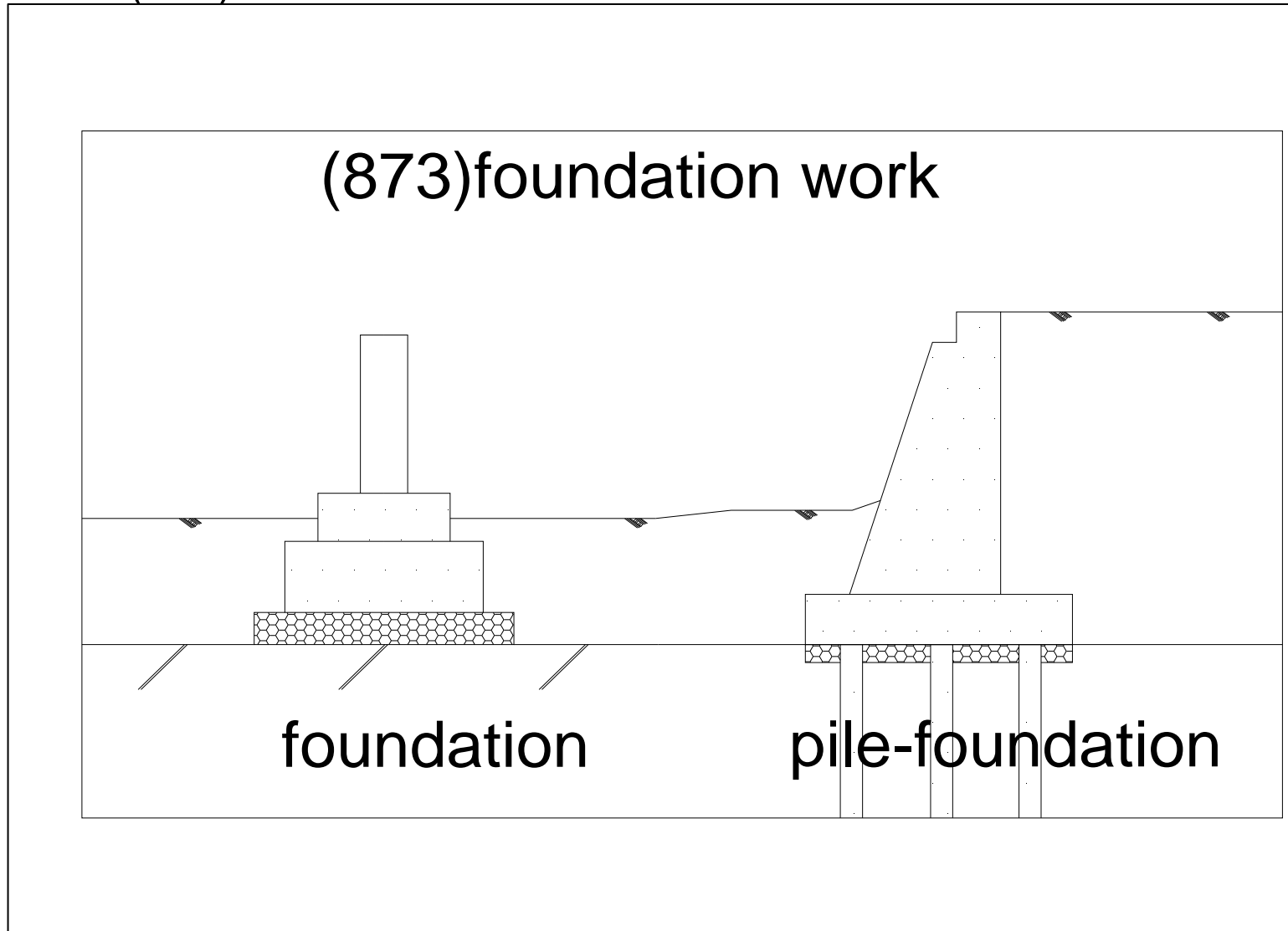
Layer C

Soil base material

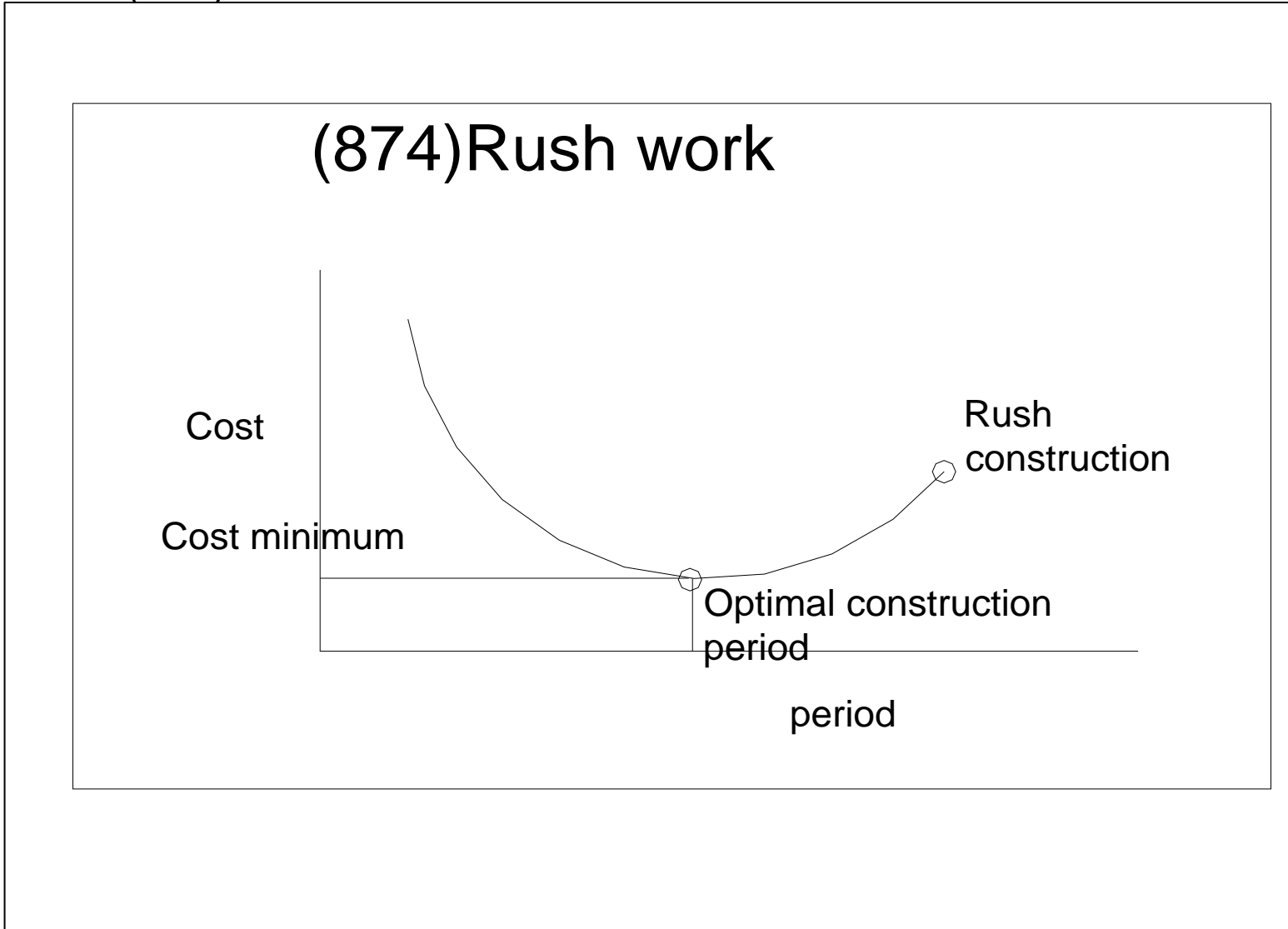
Host rock

Soil

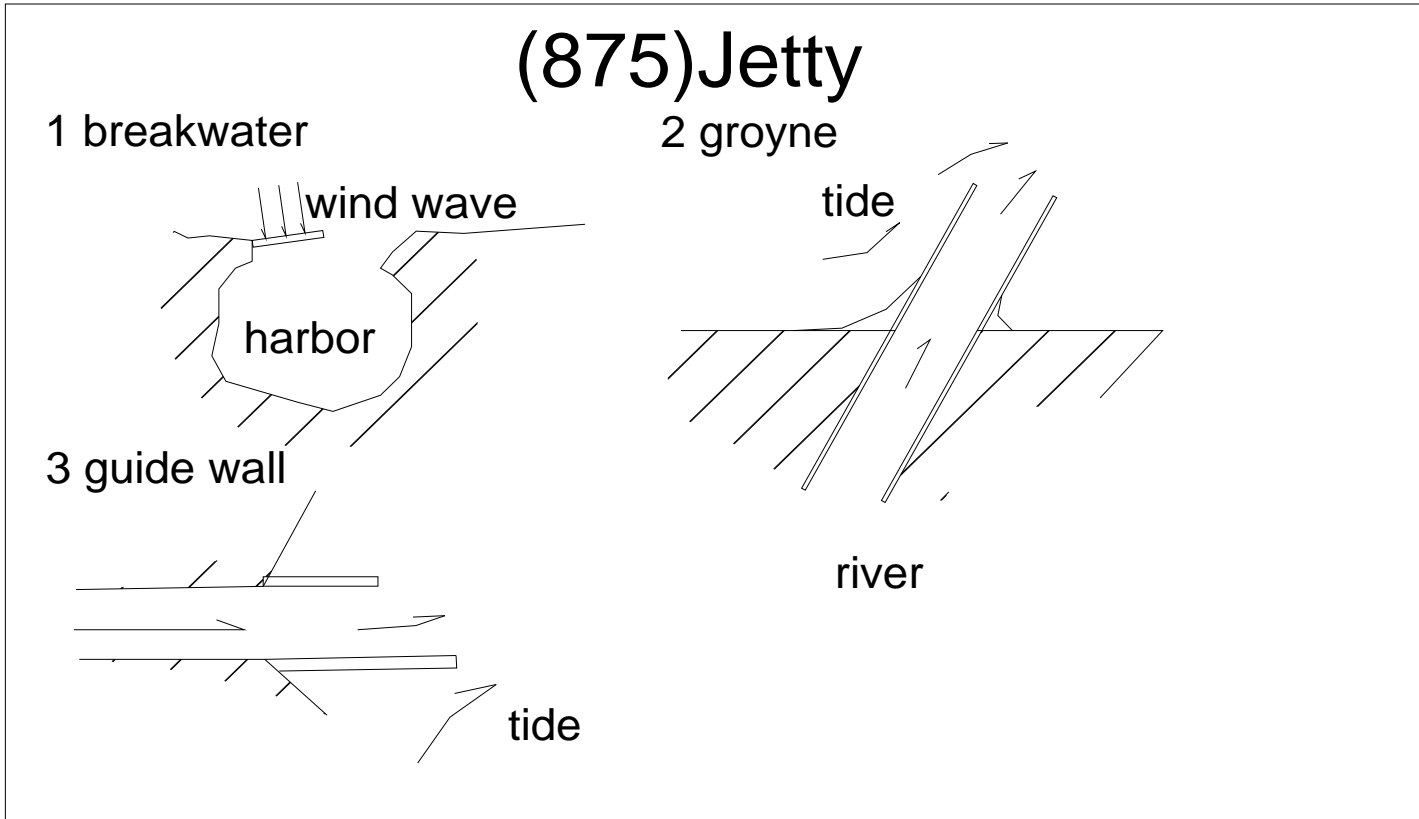
(873)foundation work



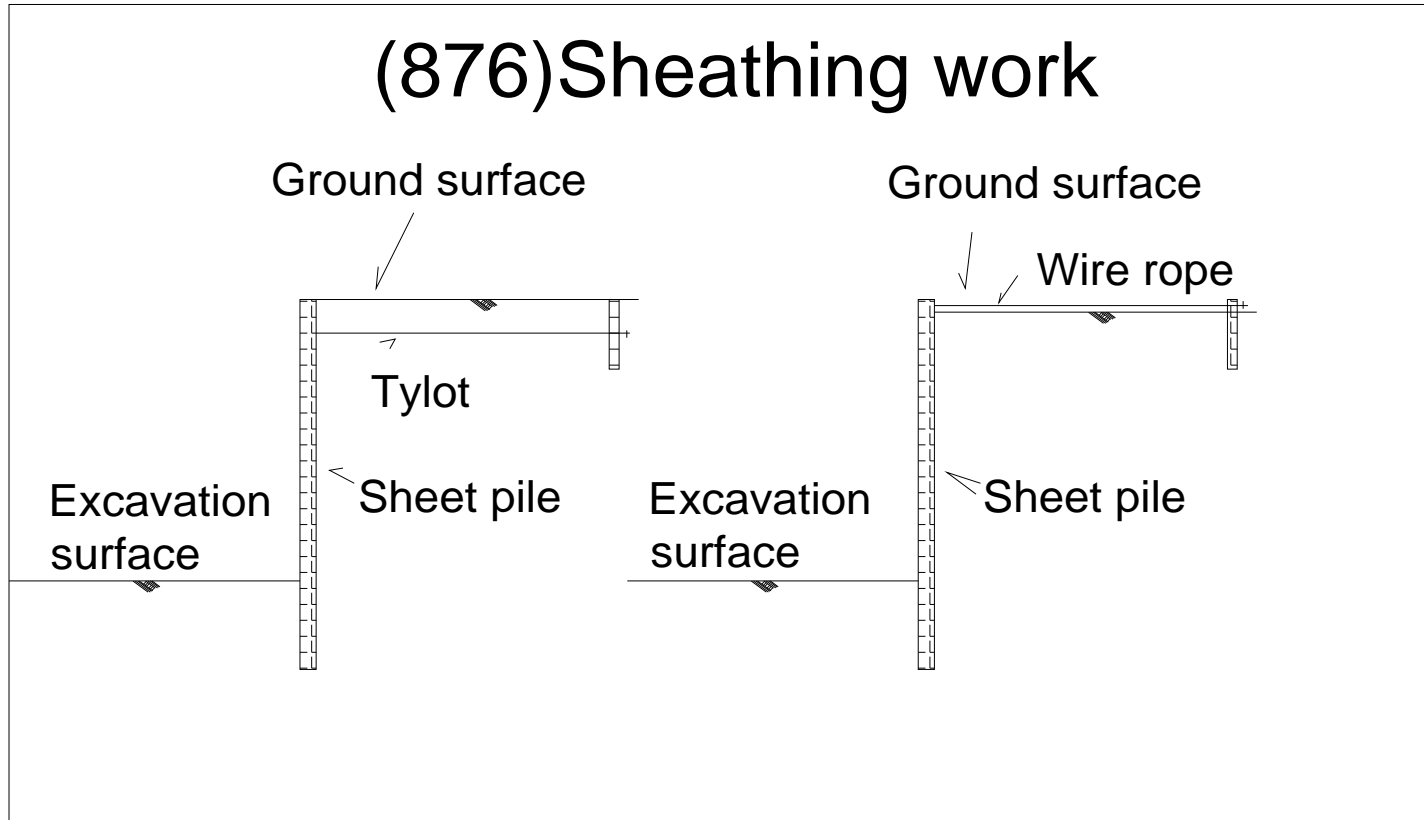
(874)Rush work



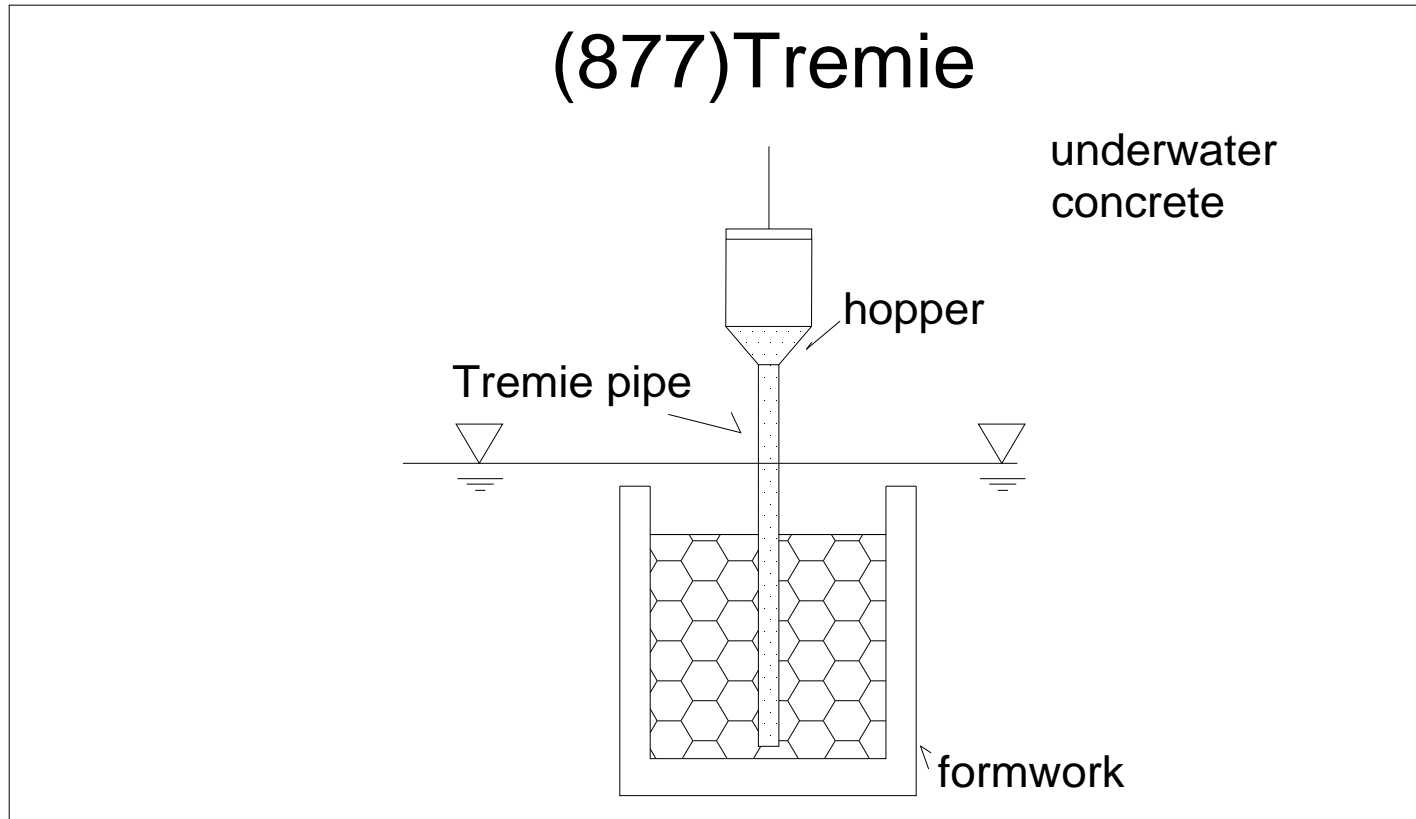
(875)Jetty



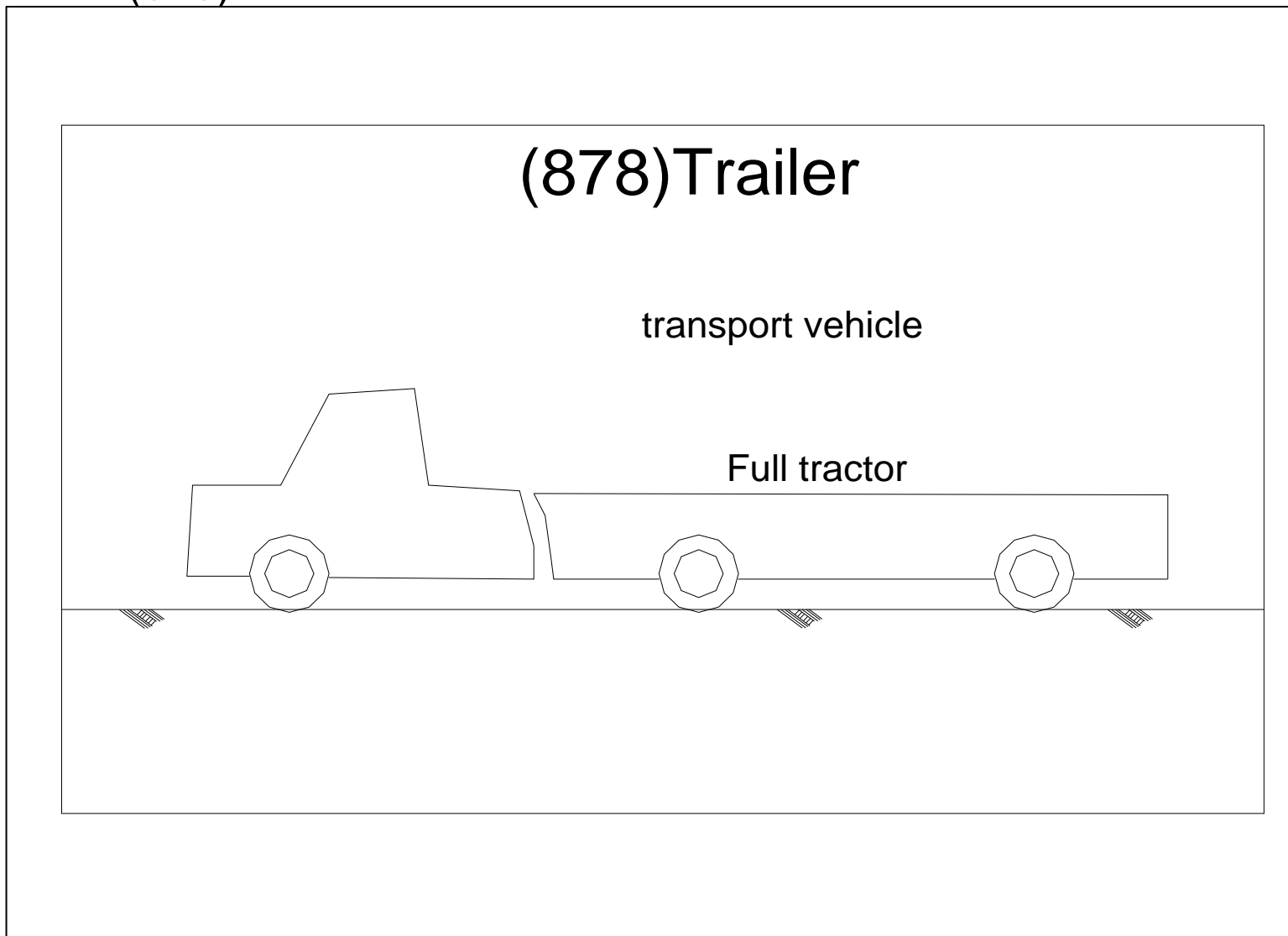
(876) Sheathing work



(877)Tremie

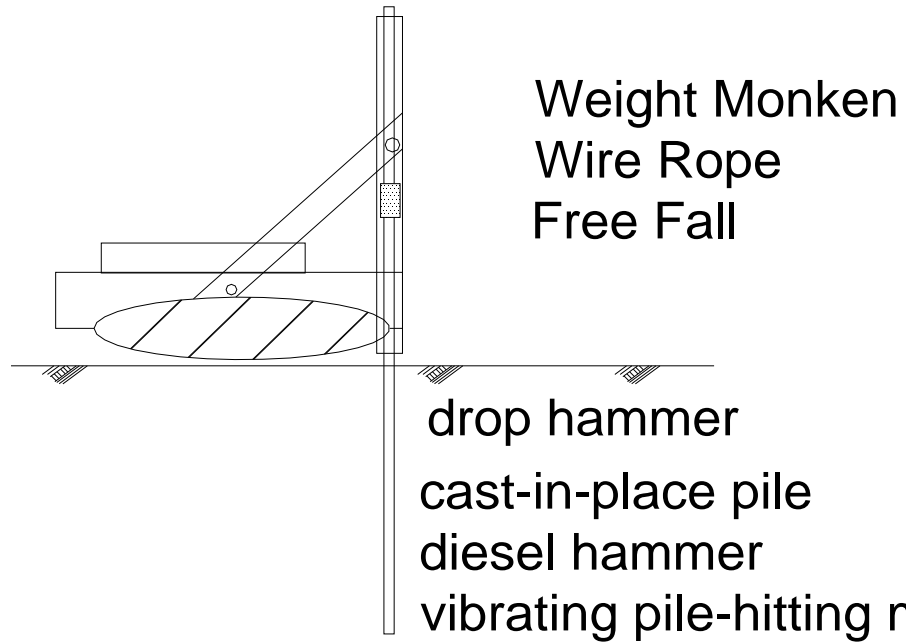


(878)Trailer



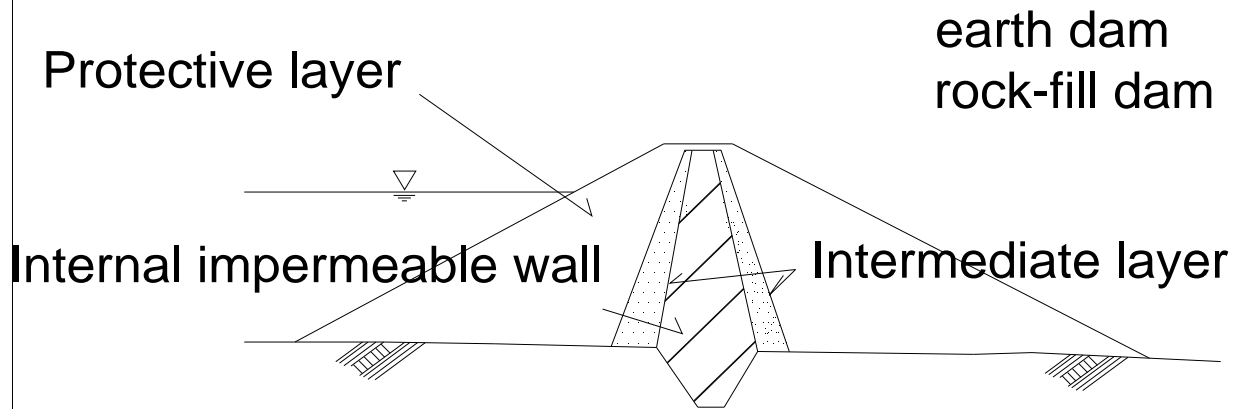
(879)Drop Hammer

(879)Drop Hammer

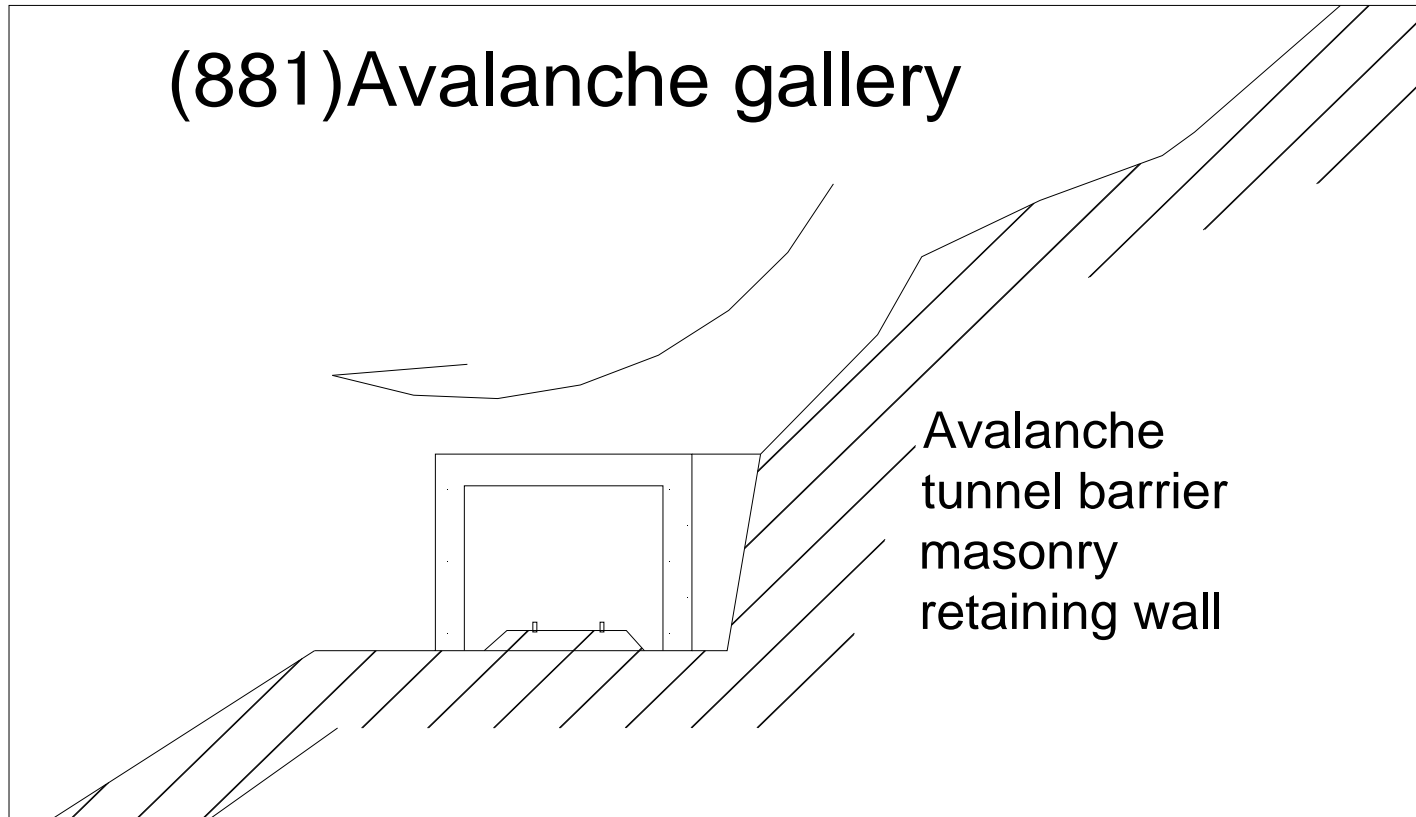


(880)Internal impermeable wall

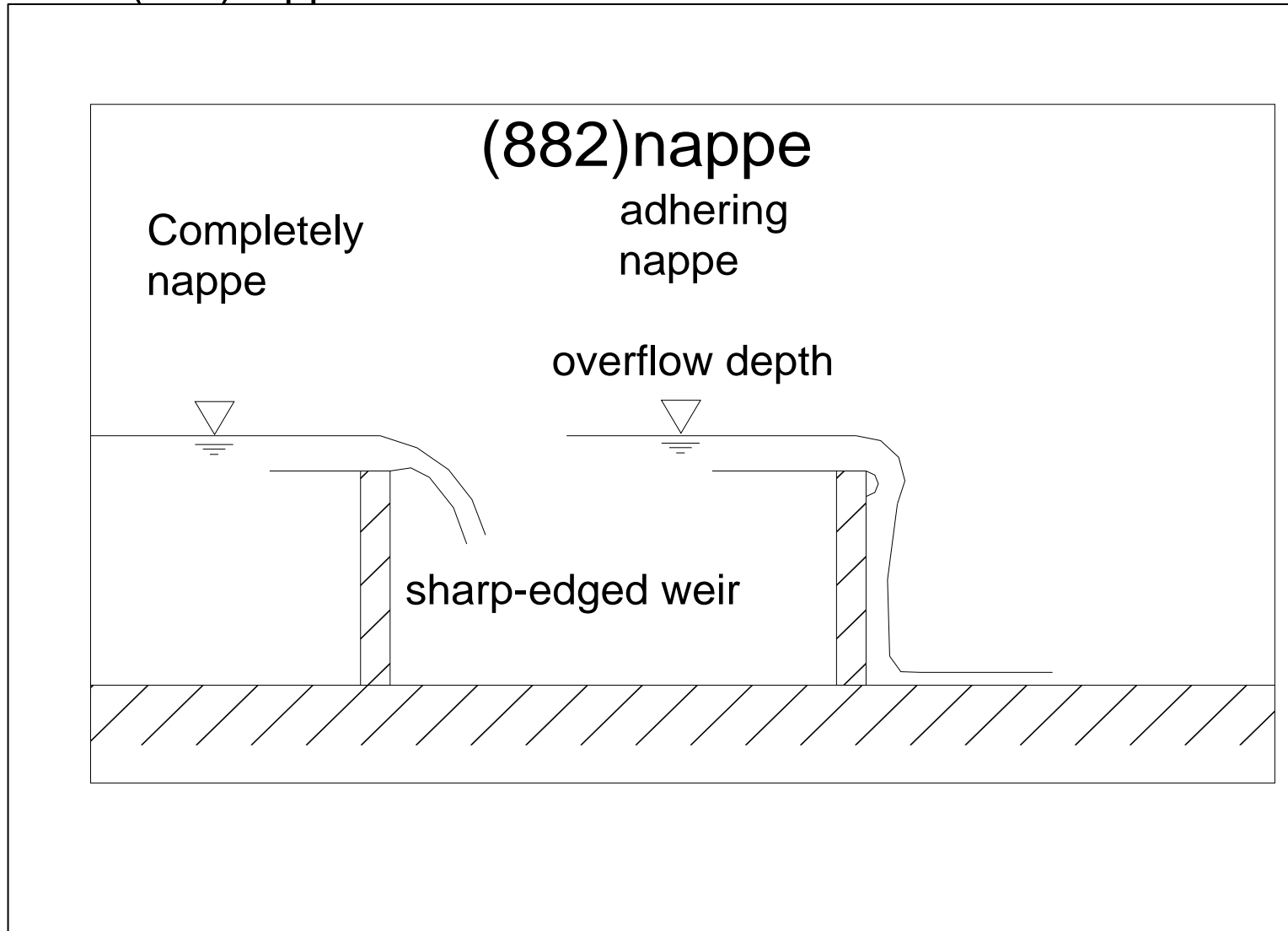
(880)Internal impermeable wall



(881)Avalanche gallery



(882)nappe



(882)nappe

Completely
nappe

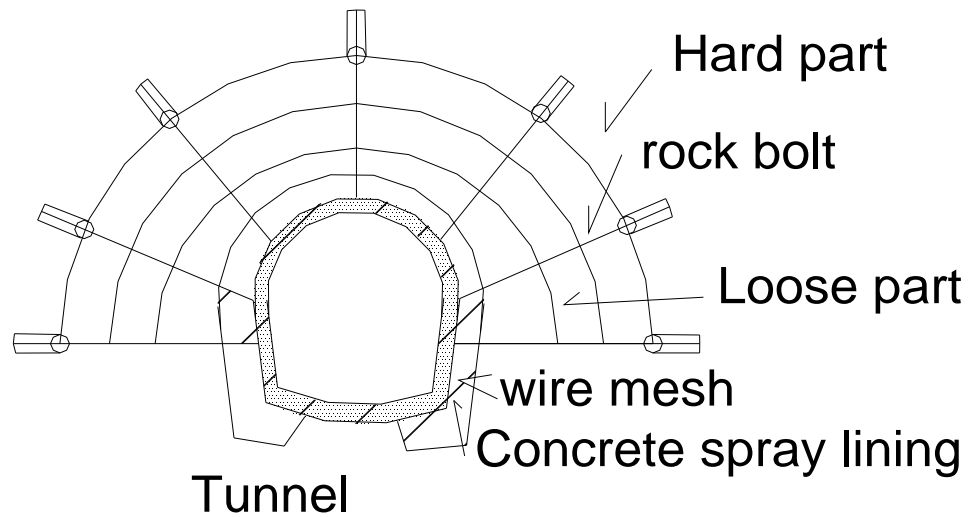
adhering
nappe

overflow depth

sharp-edged weir

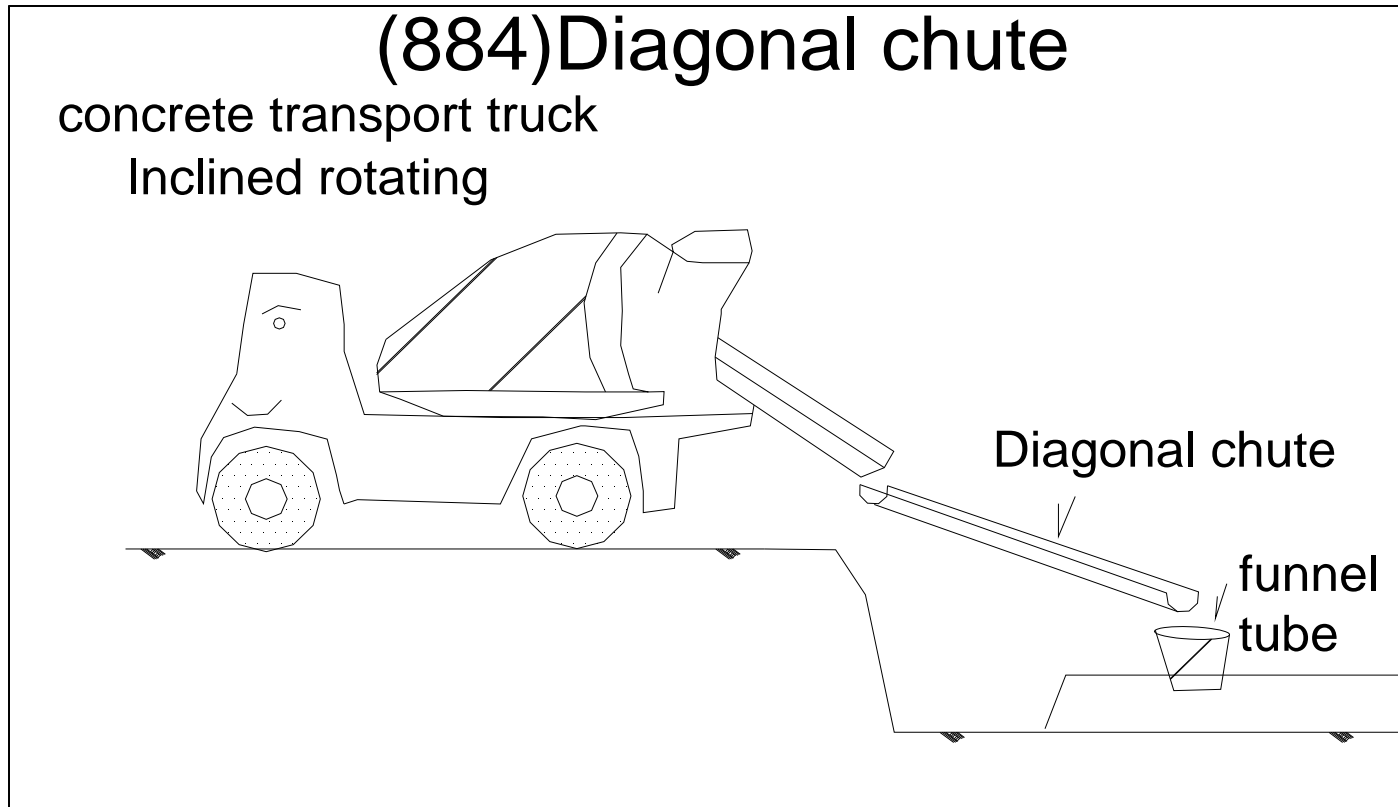
(883)NATM

(883)NATM

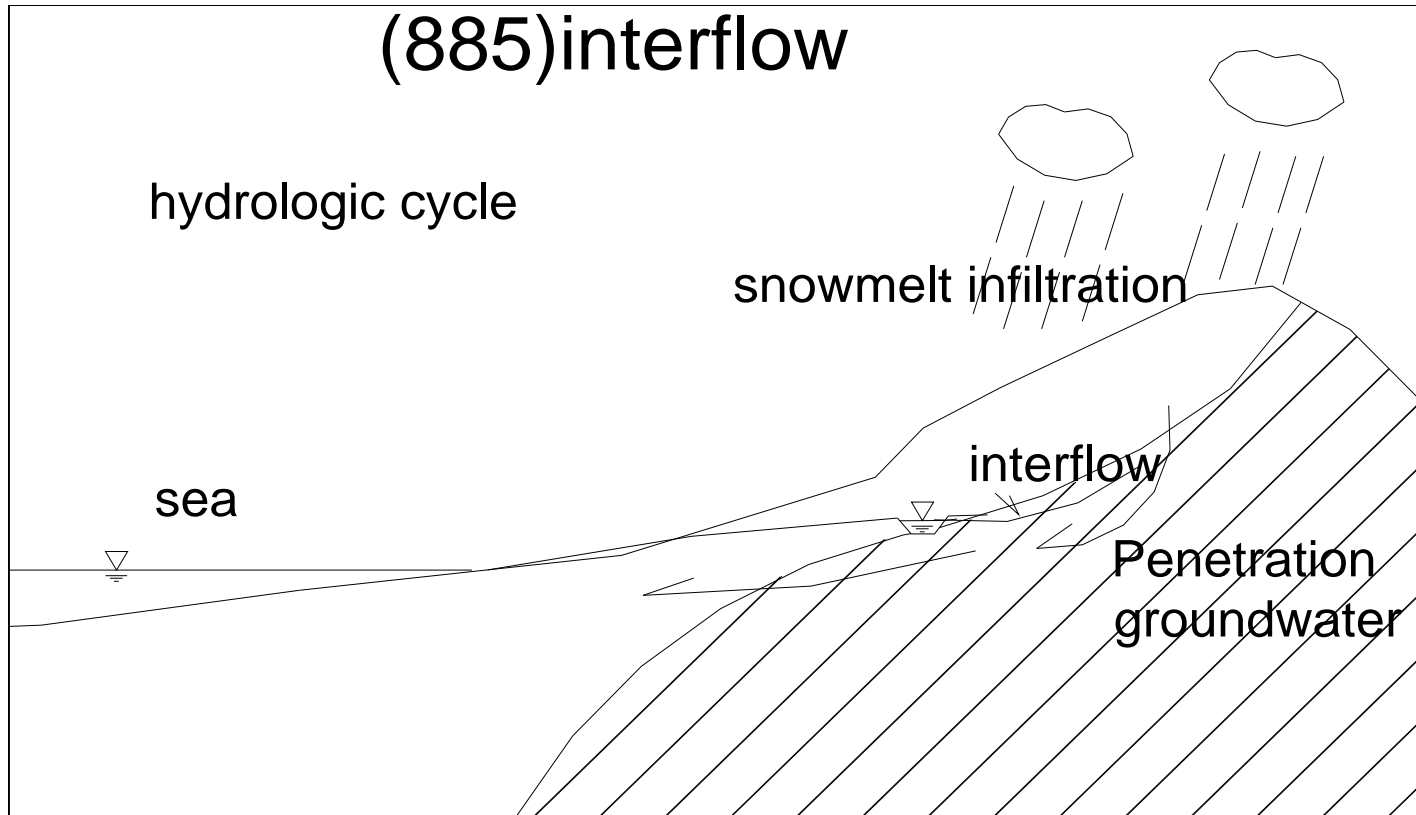


Prevention of collapse

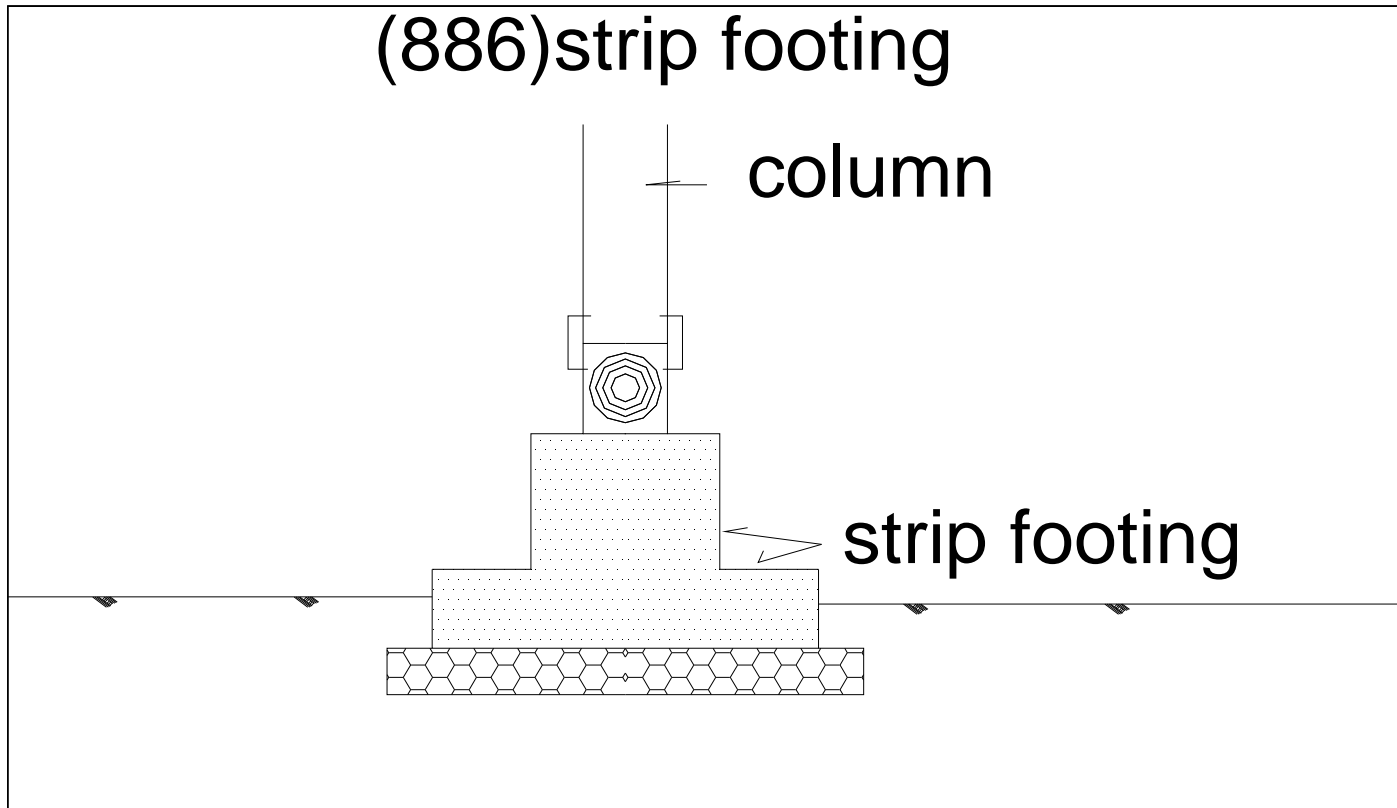
(884)Diagonal chute



(885)interflow

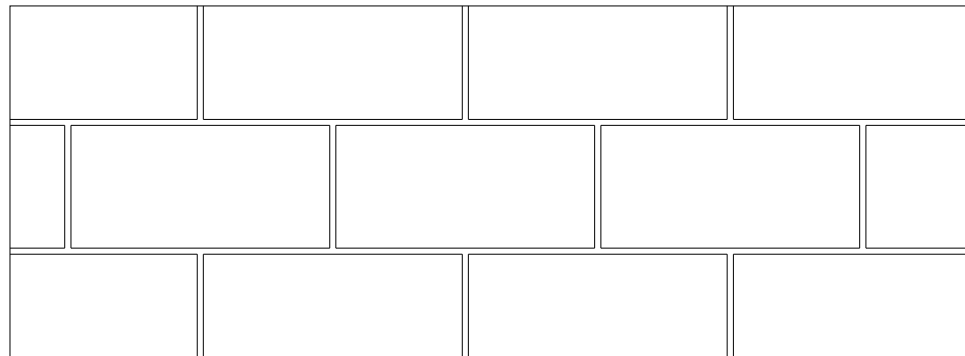


(886)strip footing



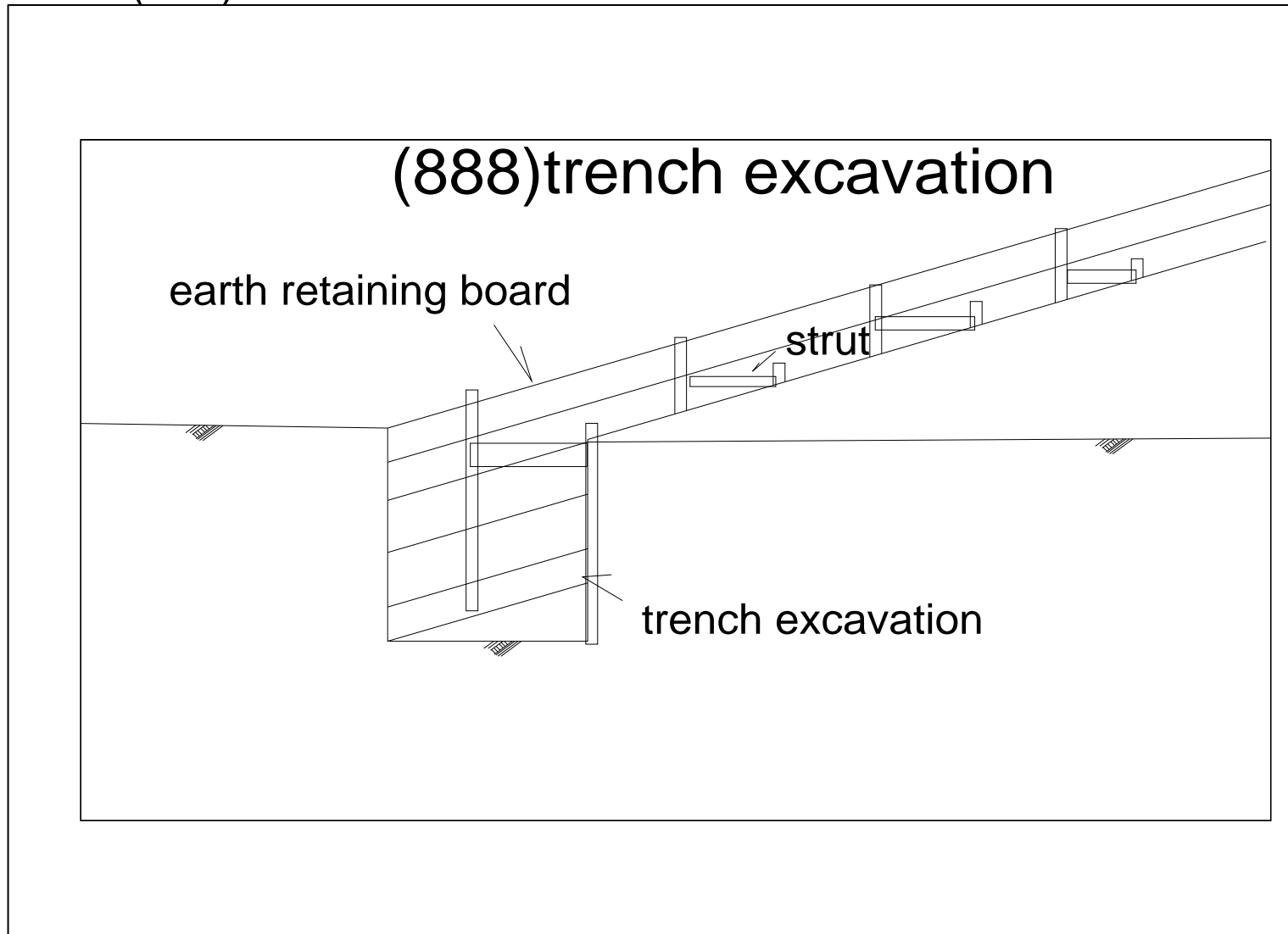
(887) coursed masonry

(887) coursed masonry

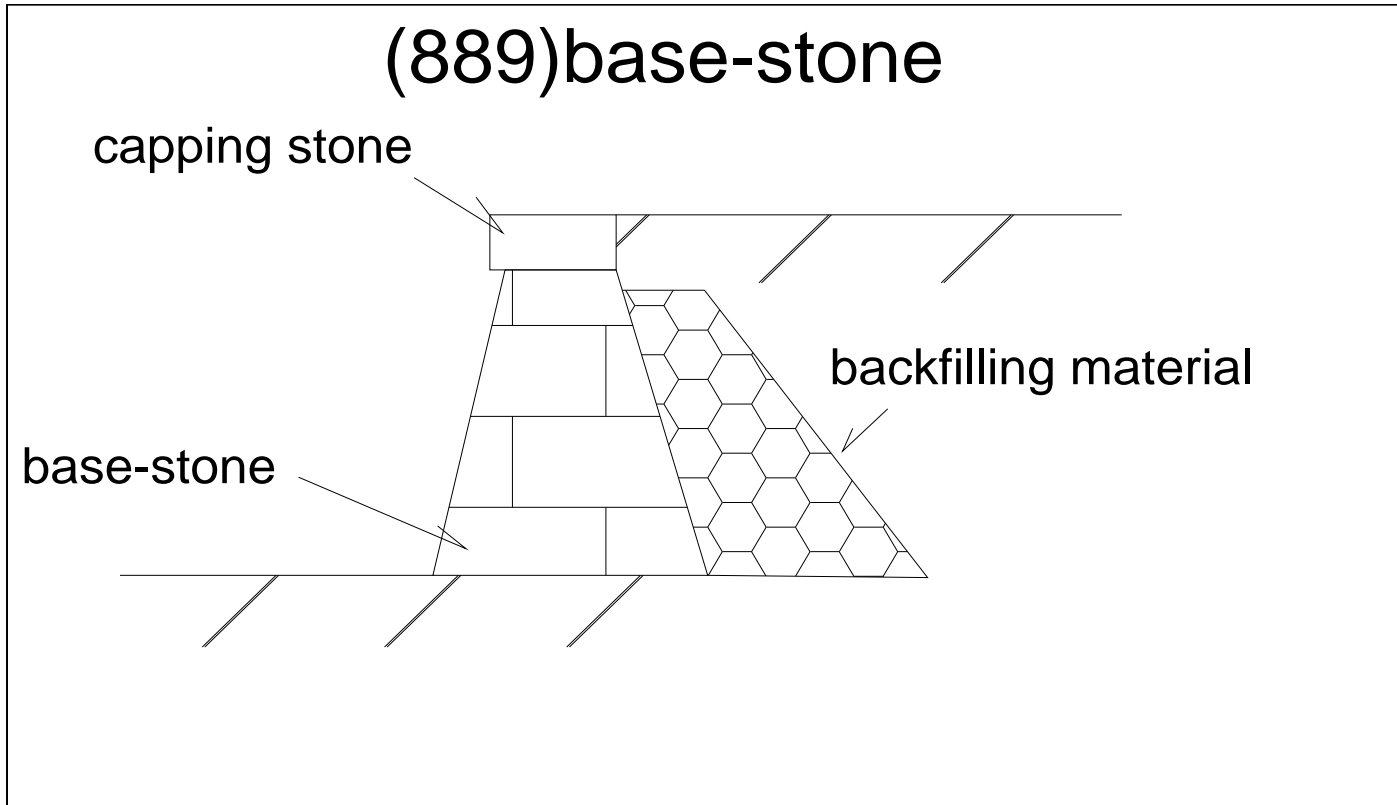


masonry retaining wall

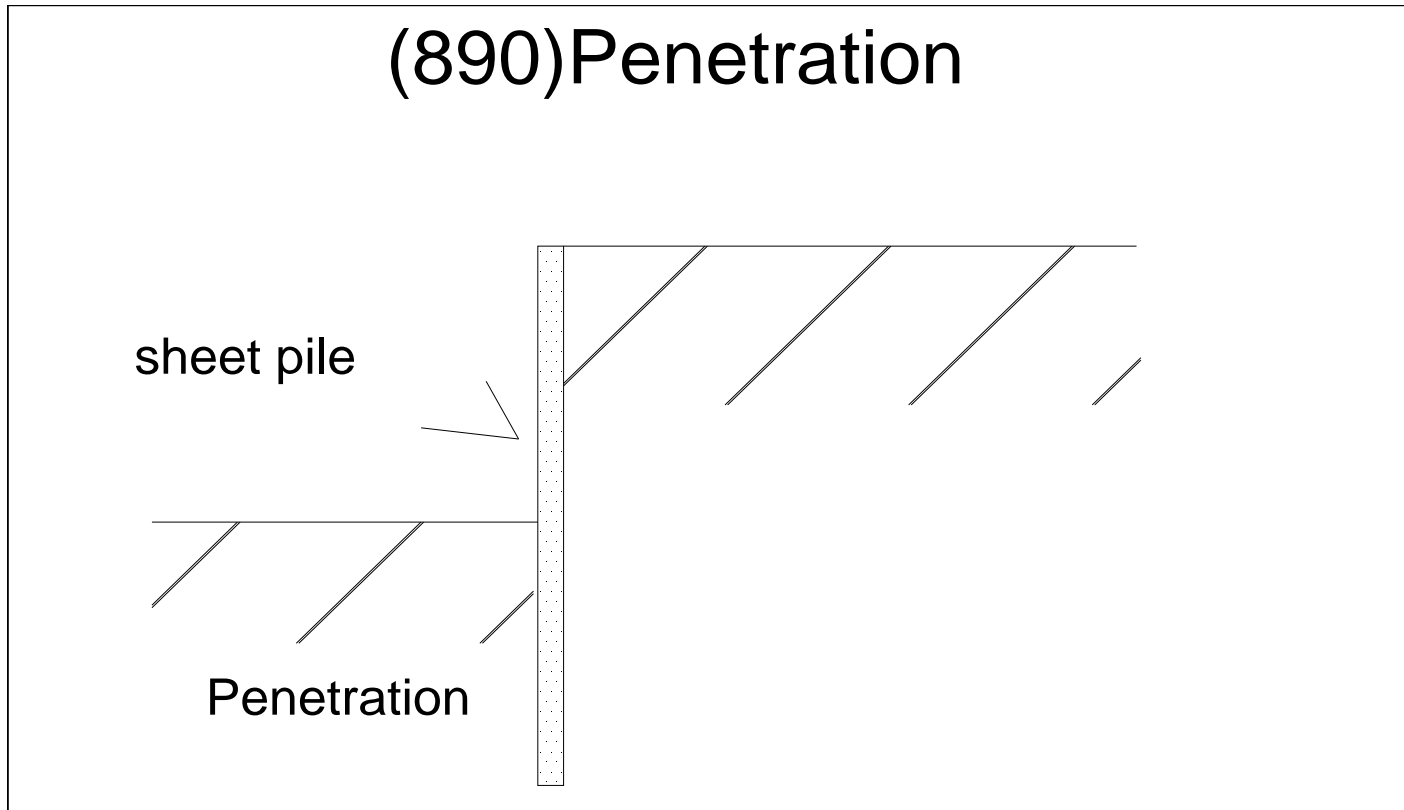
(888)trench excavation



(889)base-stone

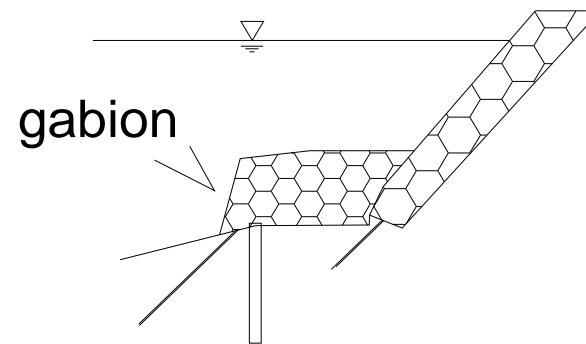
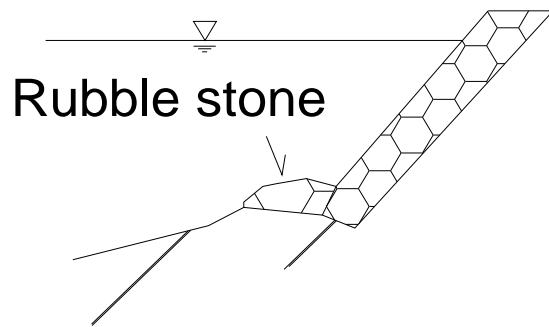


(890)Penetration

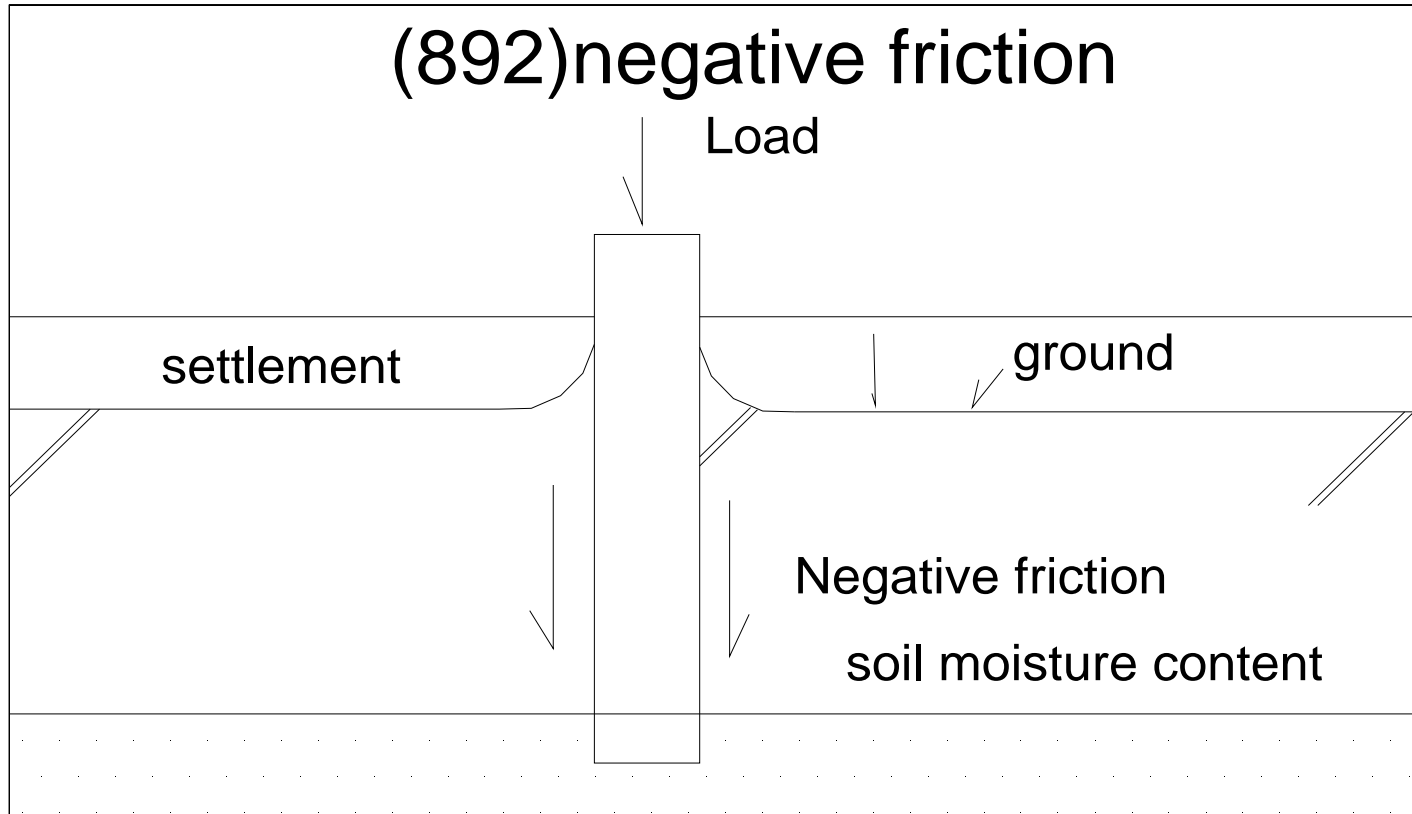


(891) foot protection

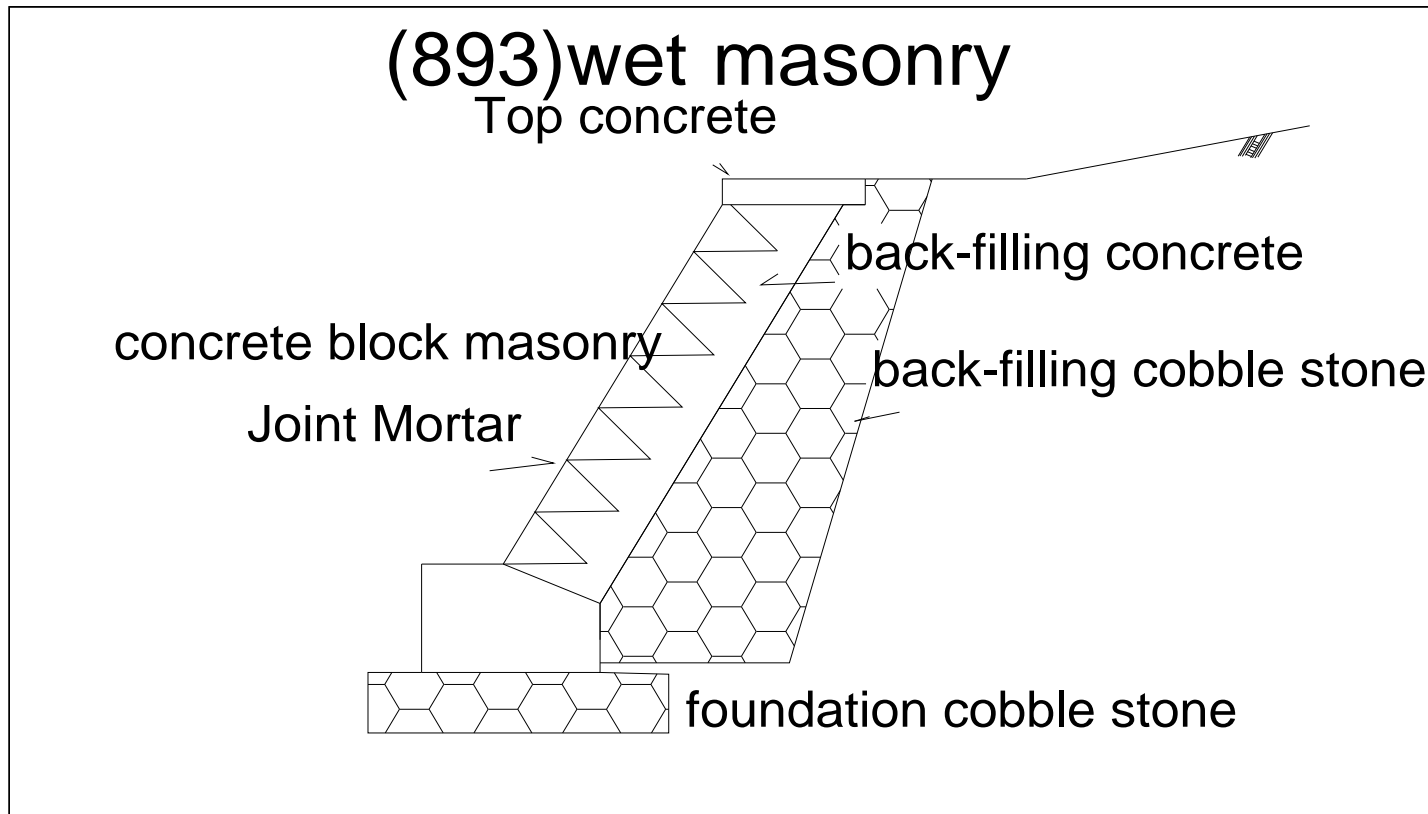
(891)foot protection



(892)negative friction



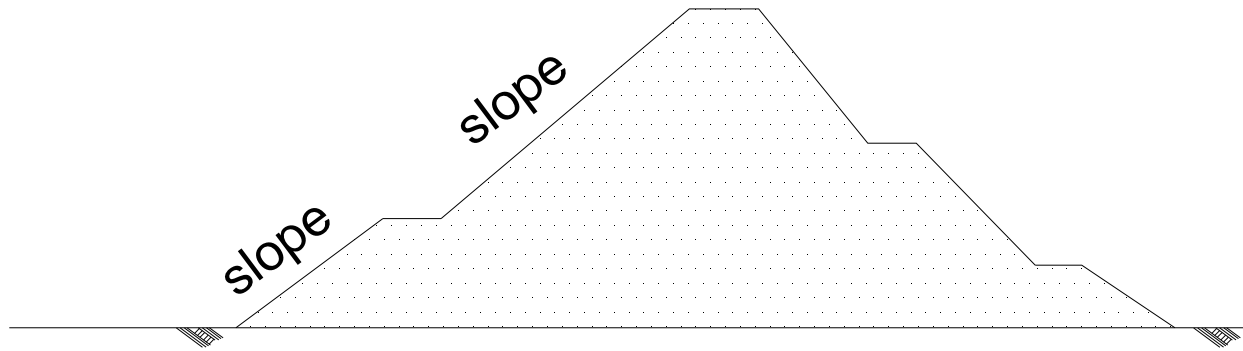
(893)wet masonry



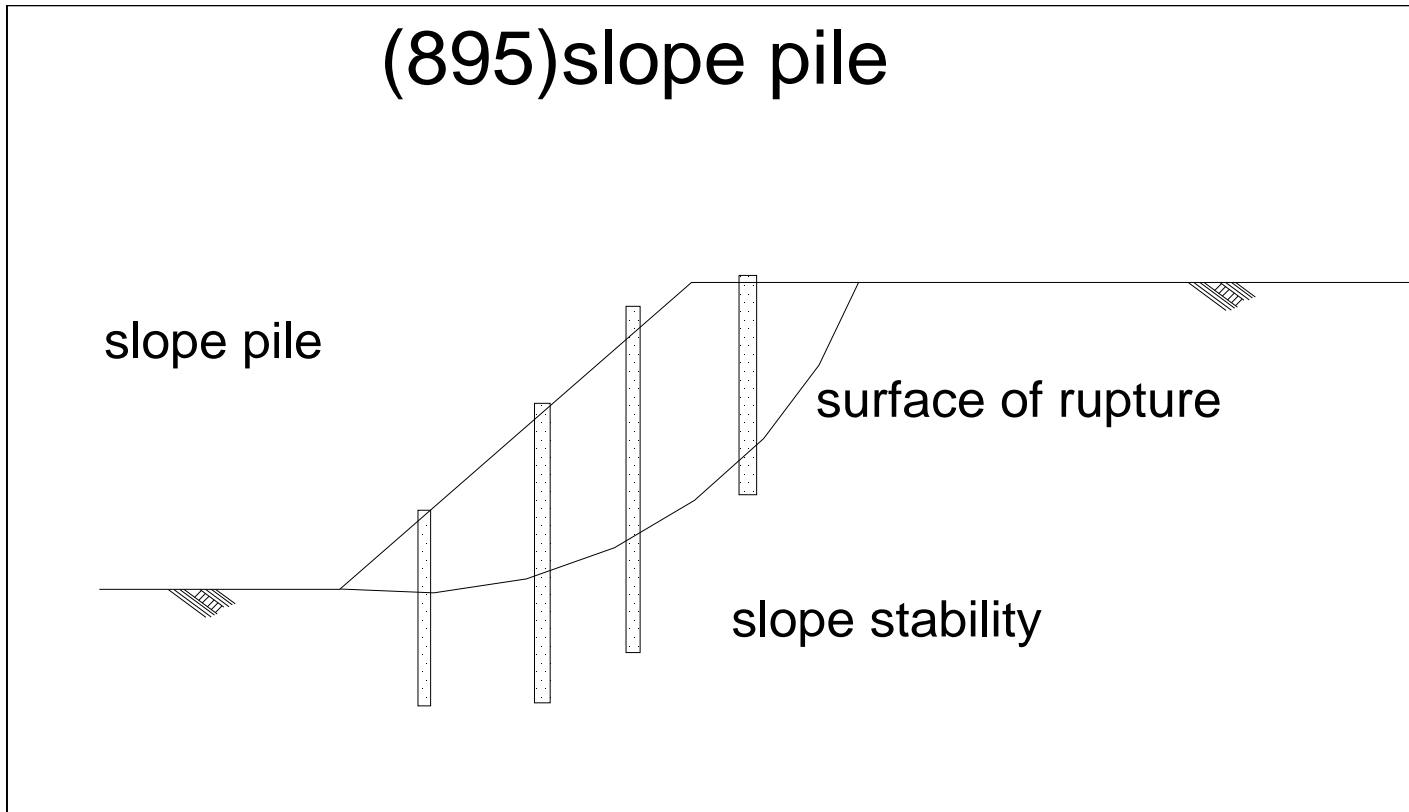
(894)slope

(894)slope

slope (embankment or cutting)

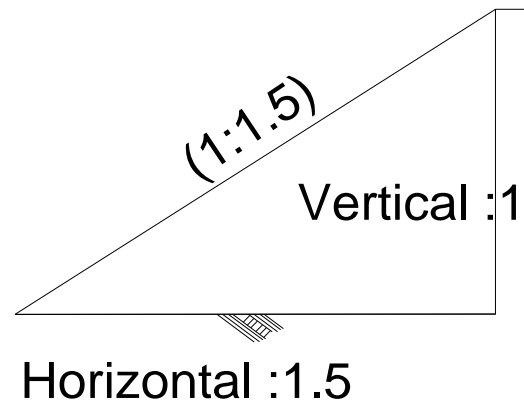
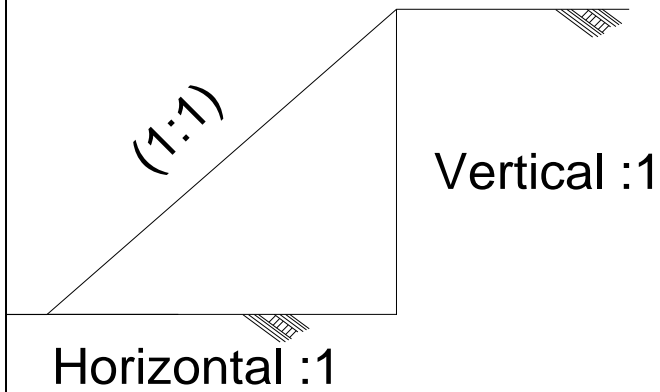


(895)slope pile

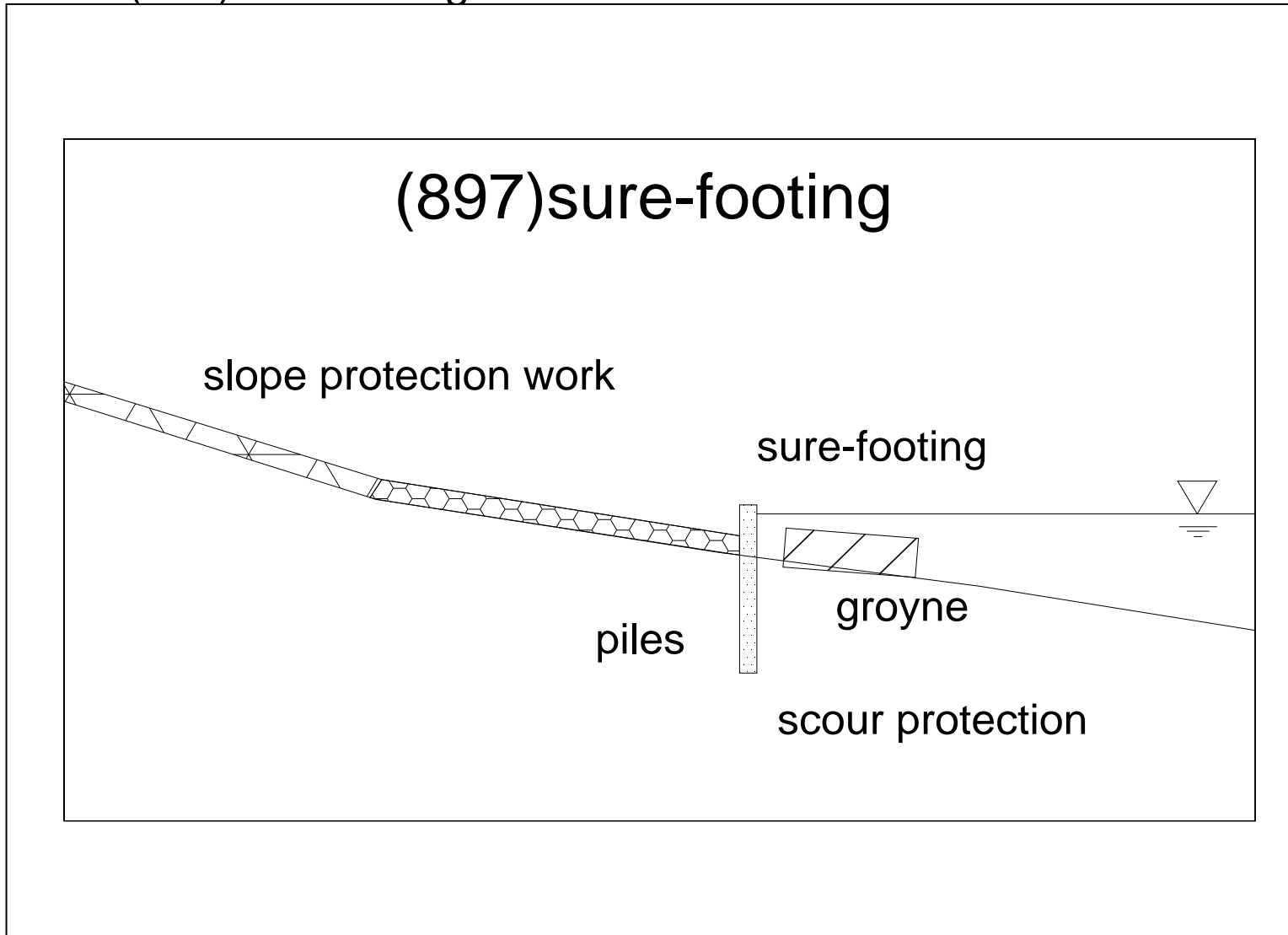


(896)slope gradient

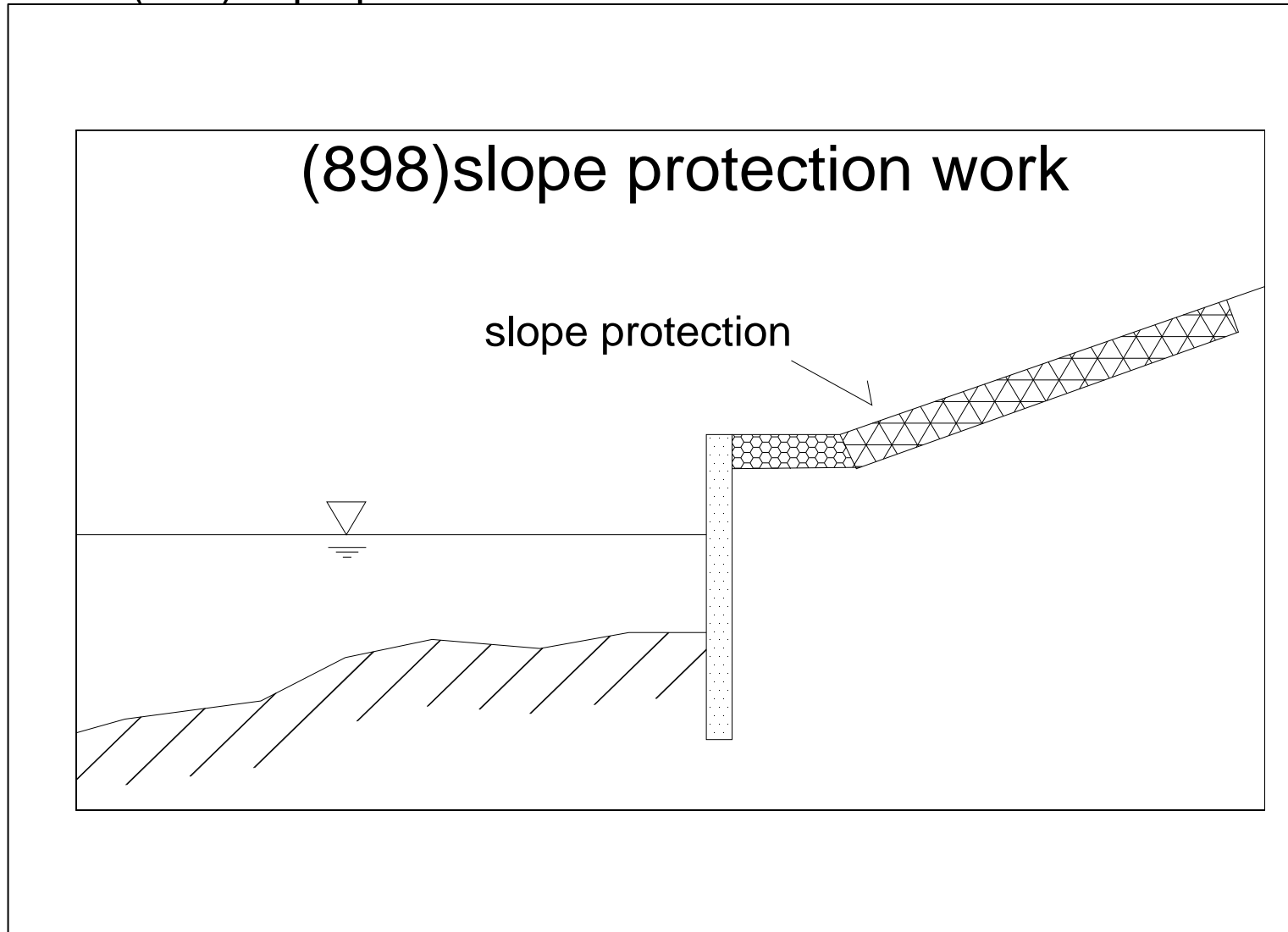
(896)slope gradient



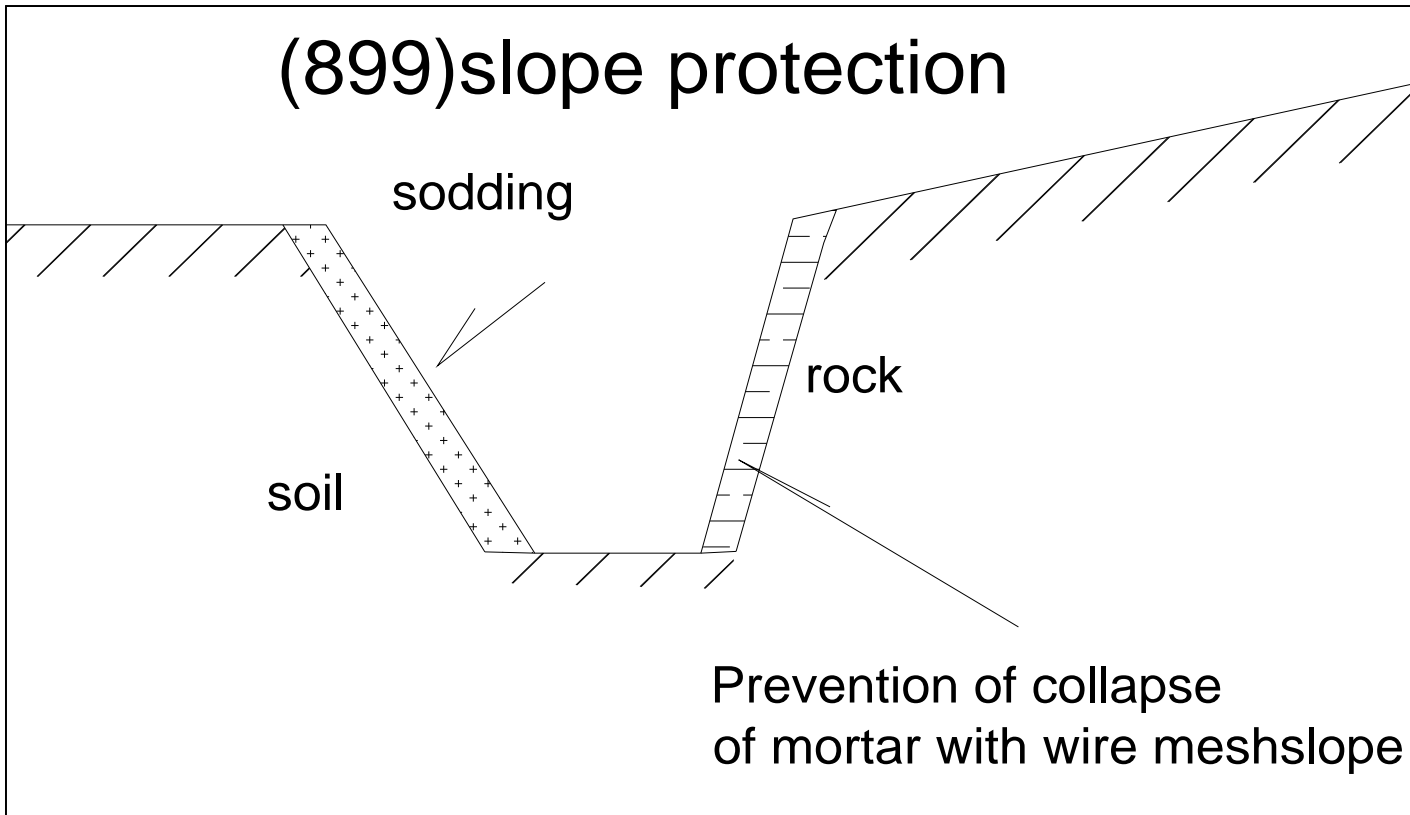
(897)sure-footing



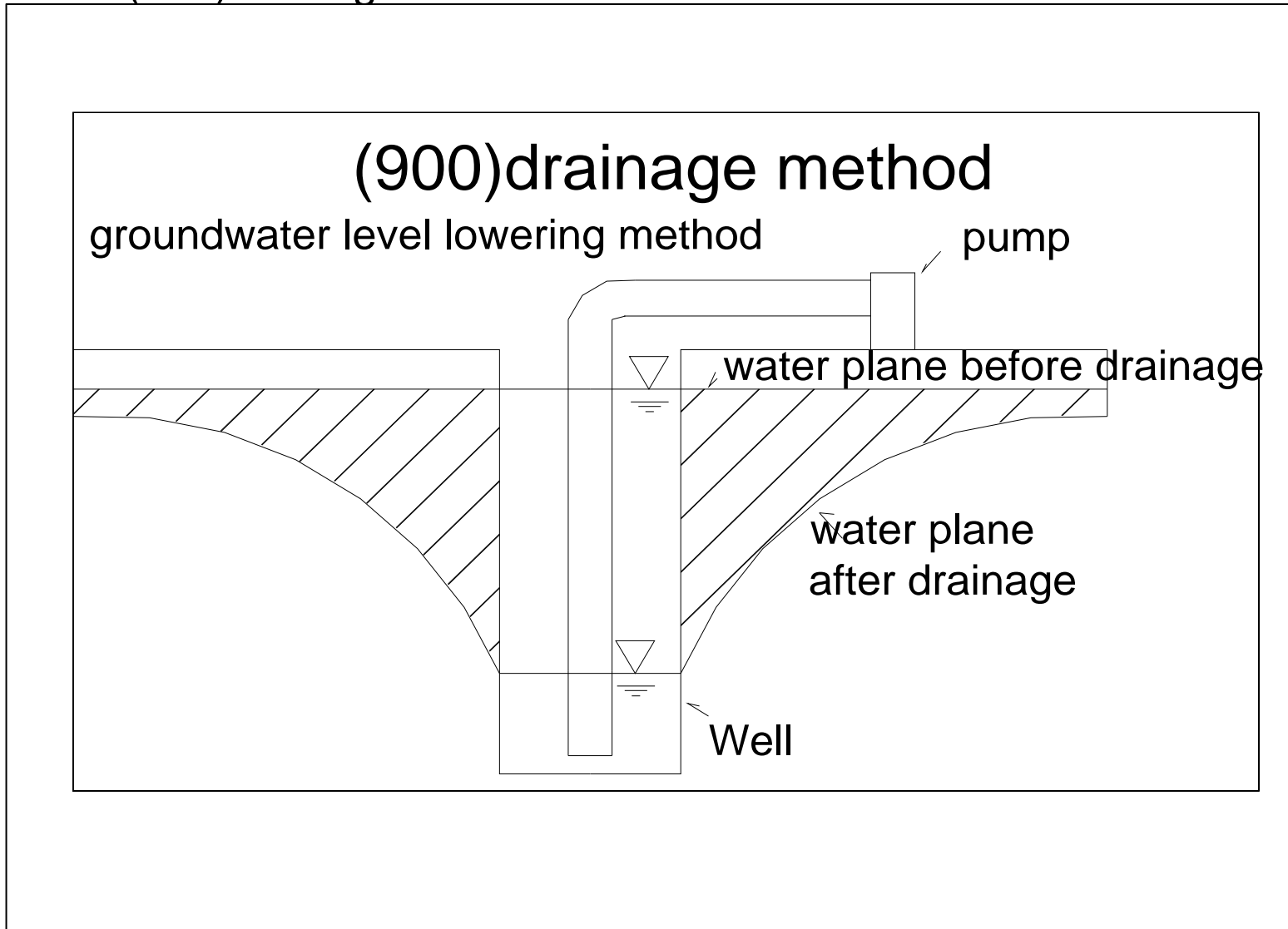
(898)slope protection work



(899)slope protection

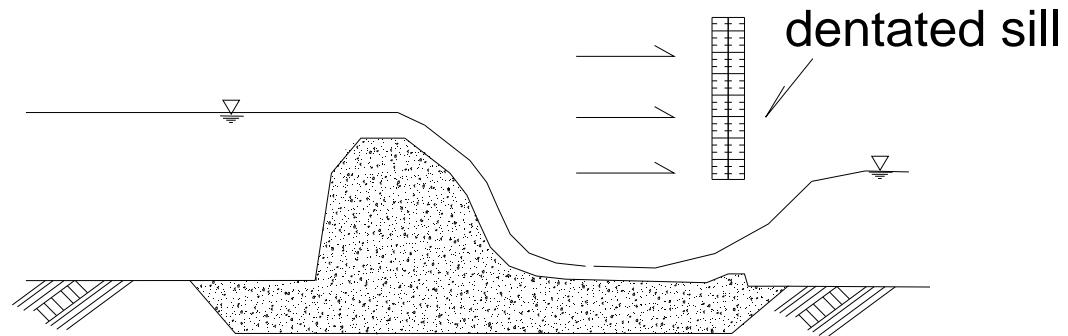


(900)drainage method



(901) dentated sill

(901) dentated sill
plan view



overflow dam
spillway dam
tooth profile

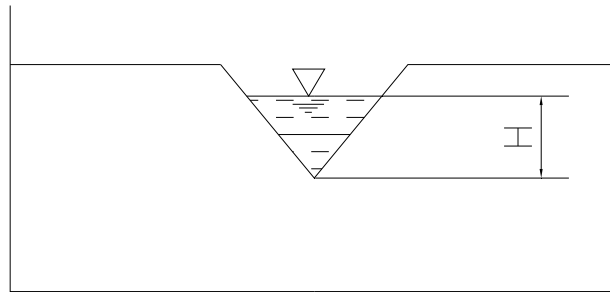
Fixed Weir

energy dissipator with apron
and counter-front apron

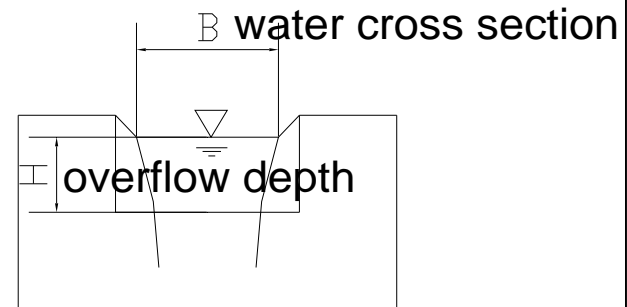
(902)sharp-edged weir

(902)sharp-edged weir

Triangular weir



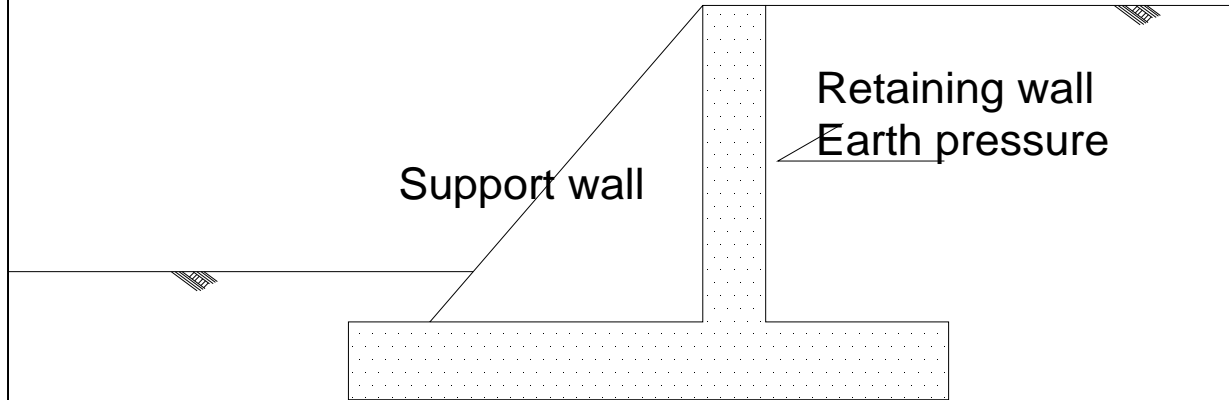
Square weir



triangular weir
rectangular notch
contracted rectangular weir
sharp-edged weir

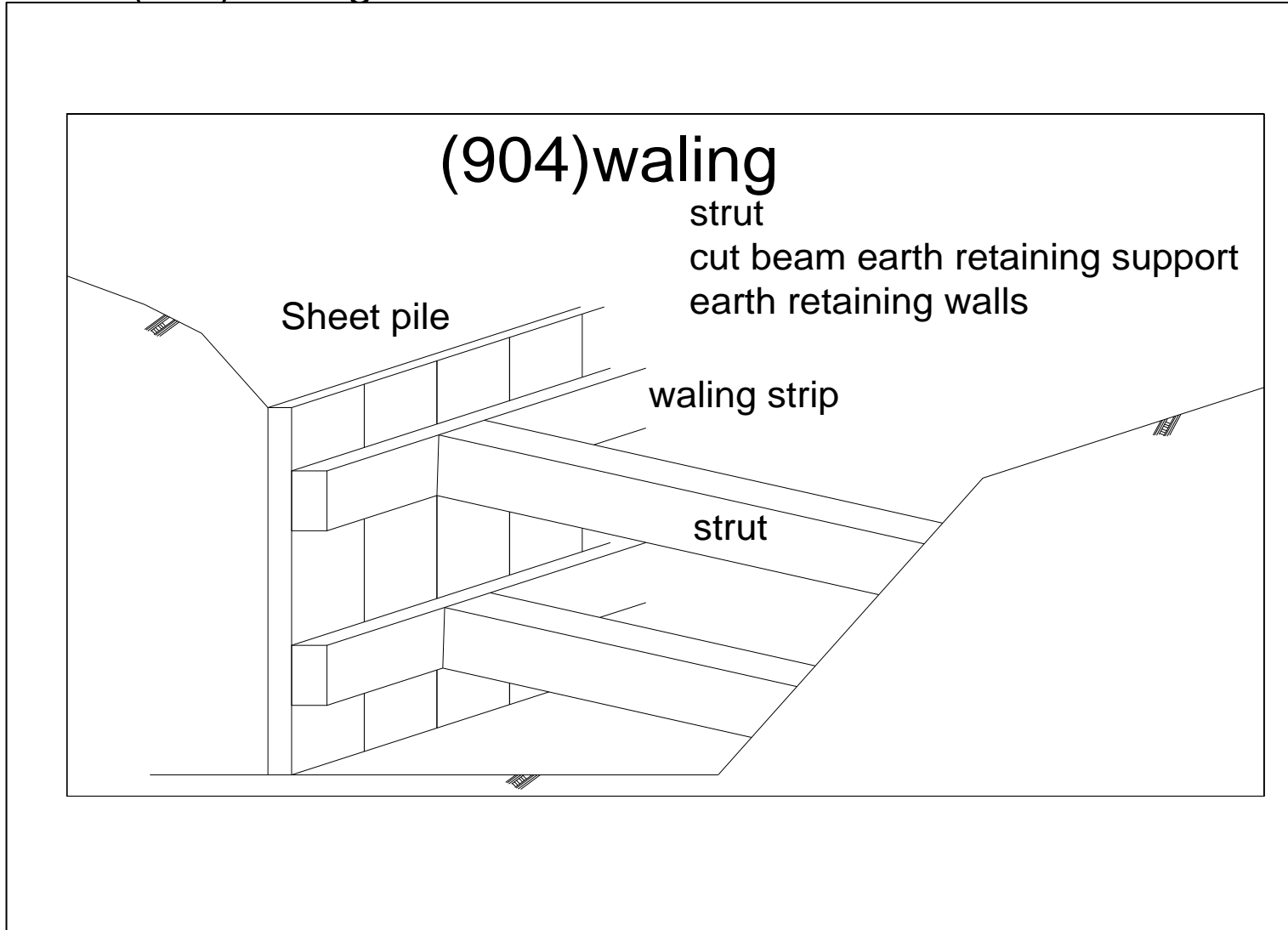
(903)buttressed retaining wall

(903)buttressed retaining wall

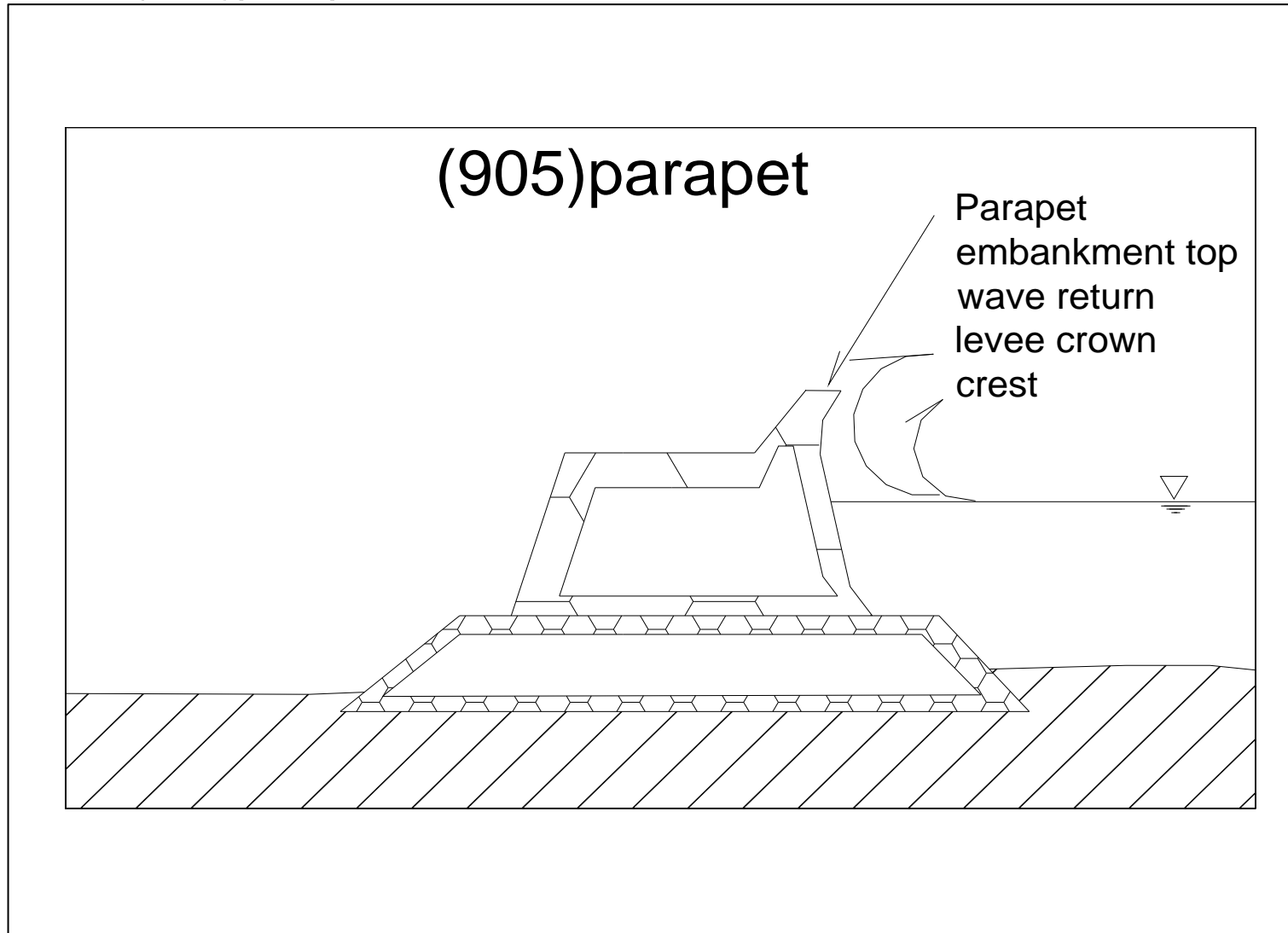


counterforted retaining wall

(904)walling

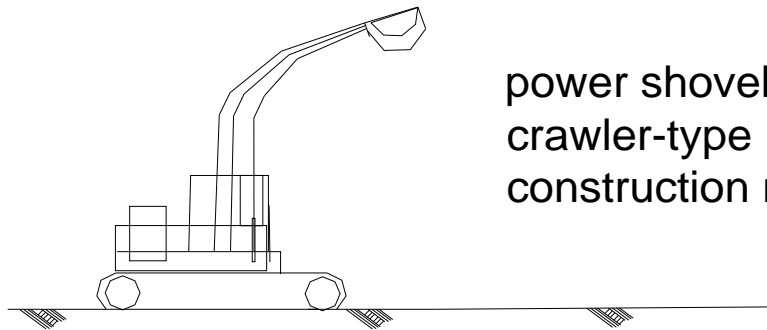


(905)parapet



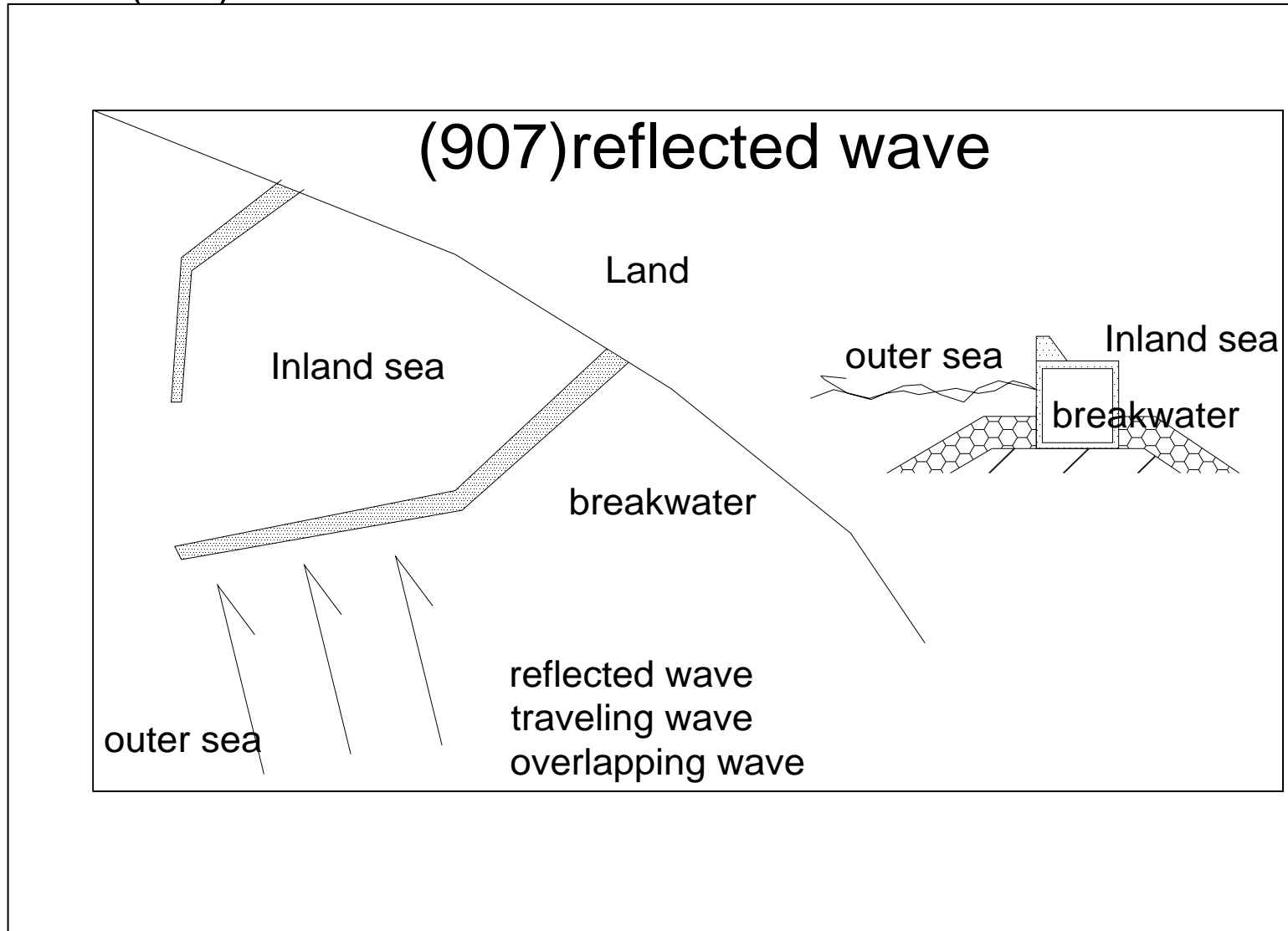
(906)power shovel

(906)power shovel

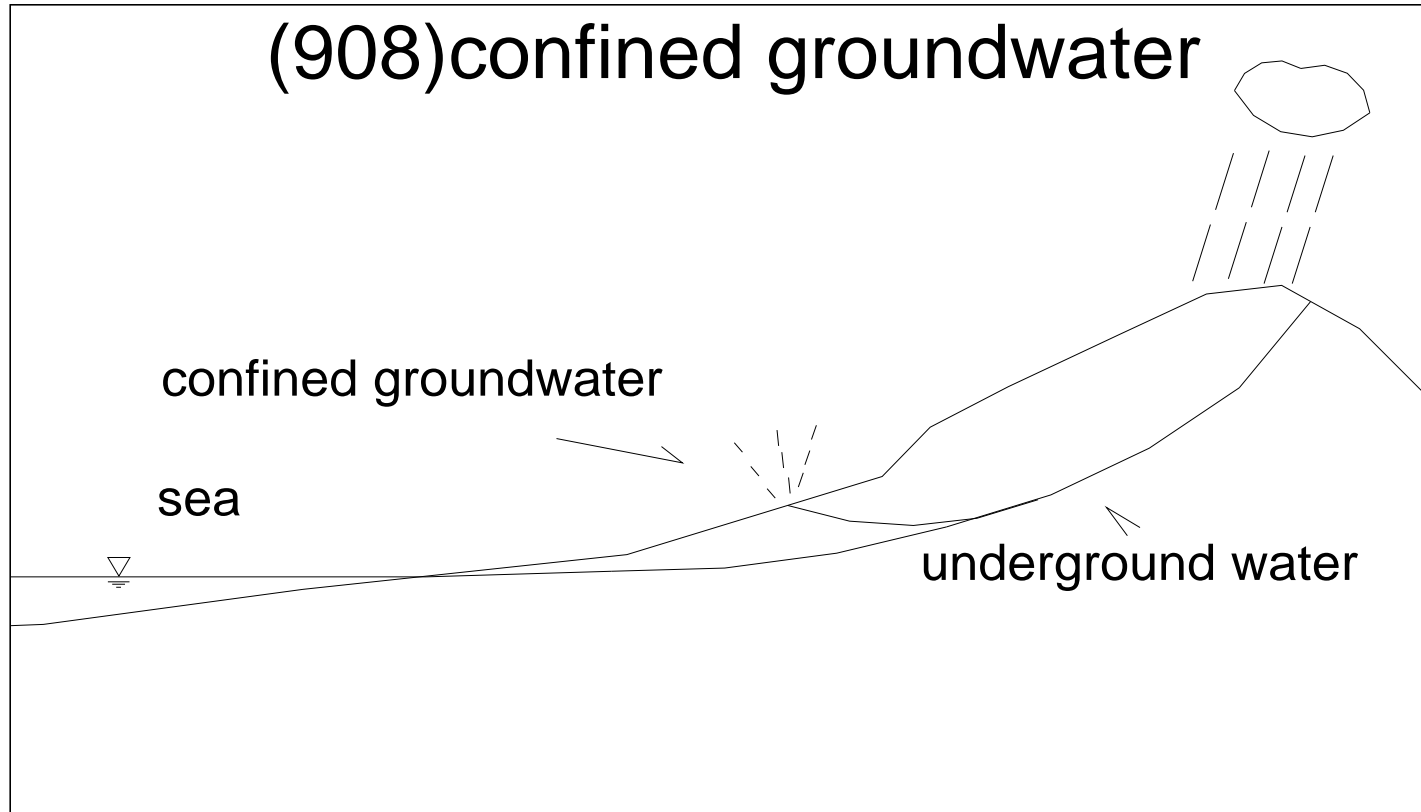


power shovel
crawler-type
construction machine

(907)reflected wave

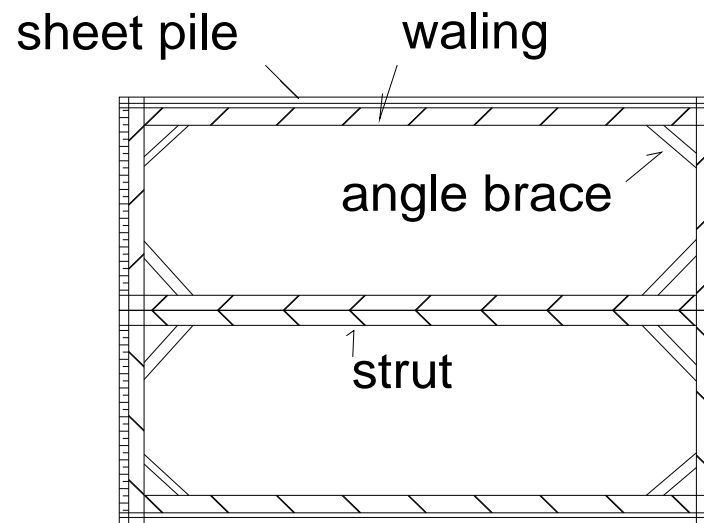


(908)confined groundwater

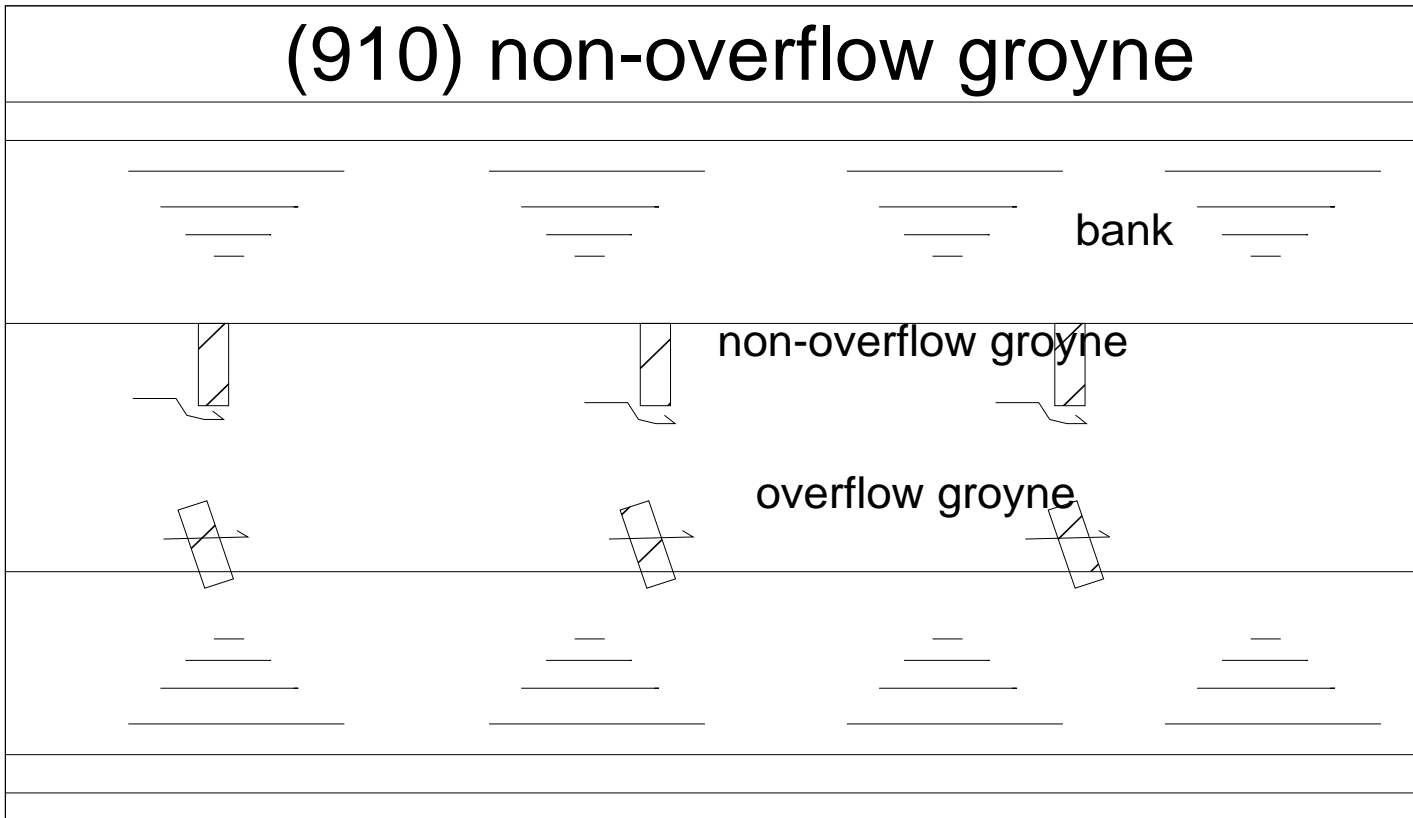


(909) angle brace

(909) angle brace

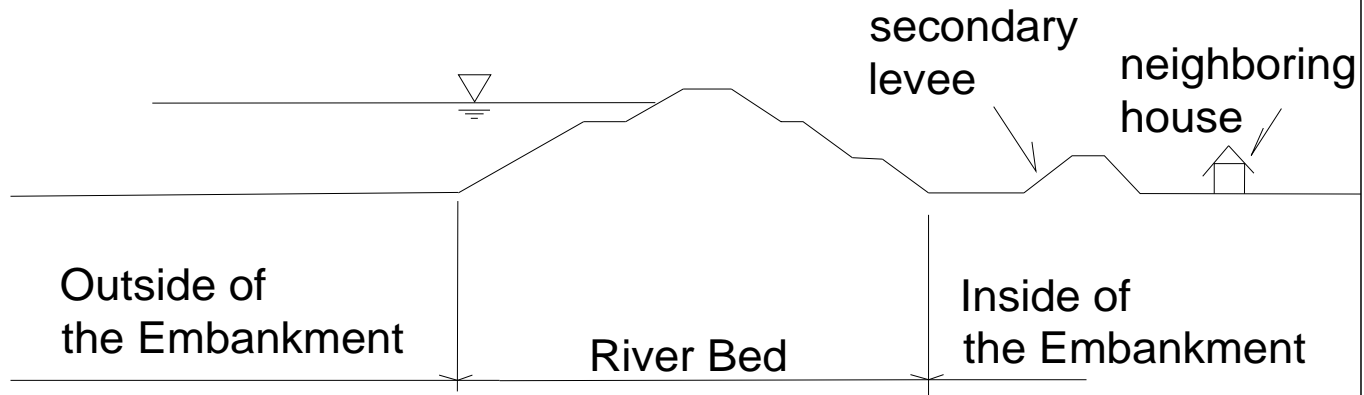


(910) non-overflow groyne



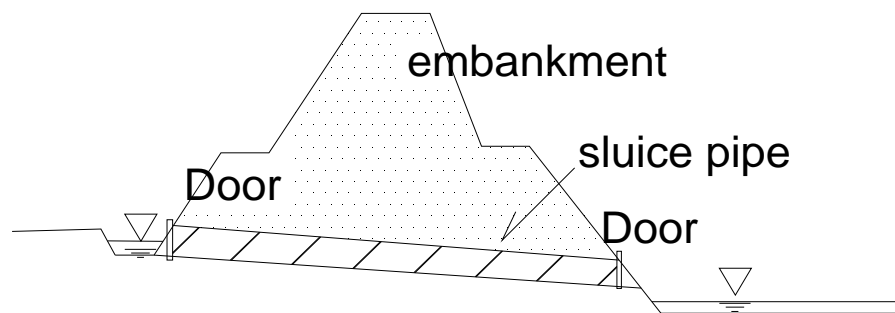
(911) secondary levee

(911) secondary levee



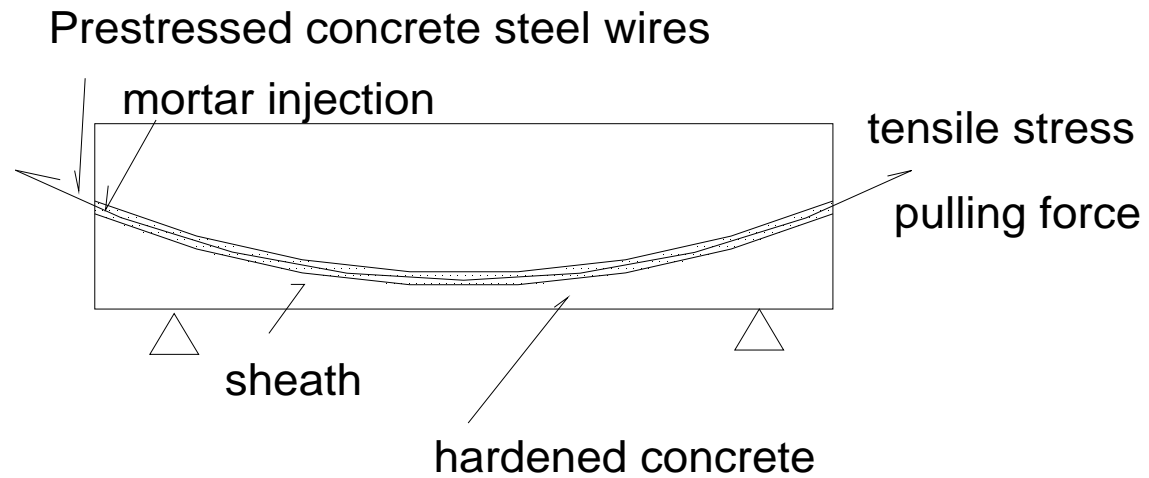
(912) sluice

(912) sluice



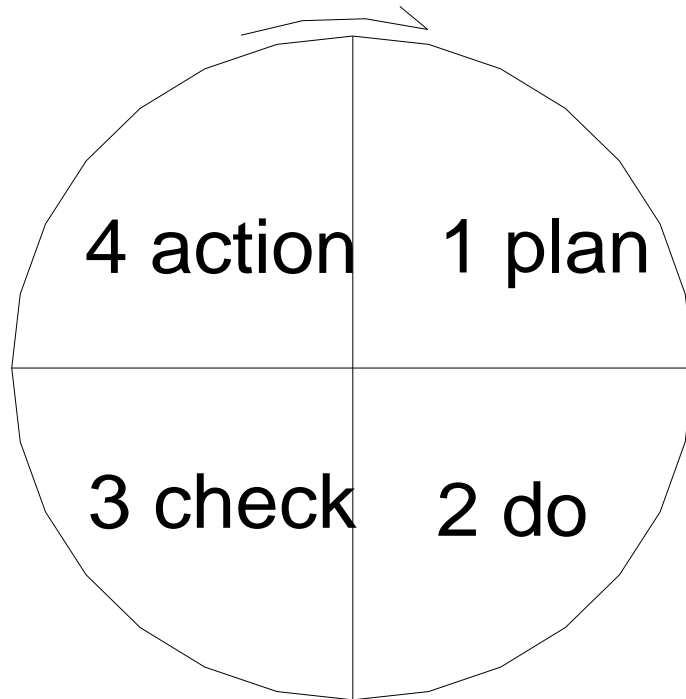
(913)prestressed concrete beam

(913) prestressed concrete beam



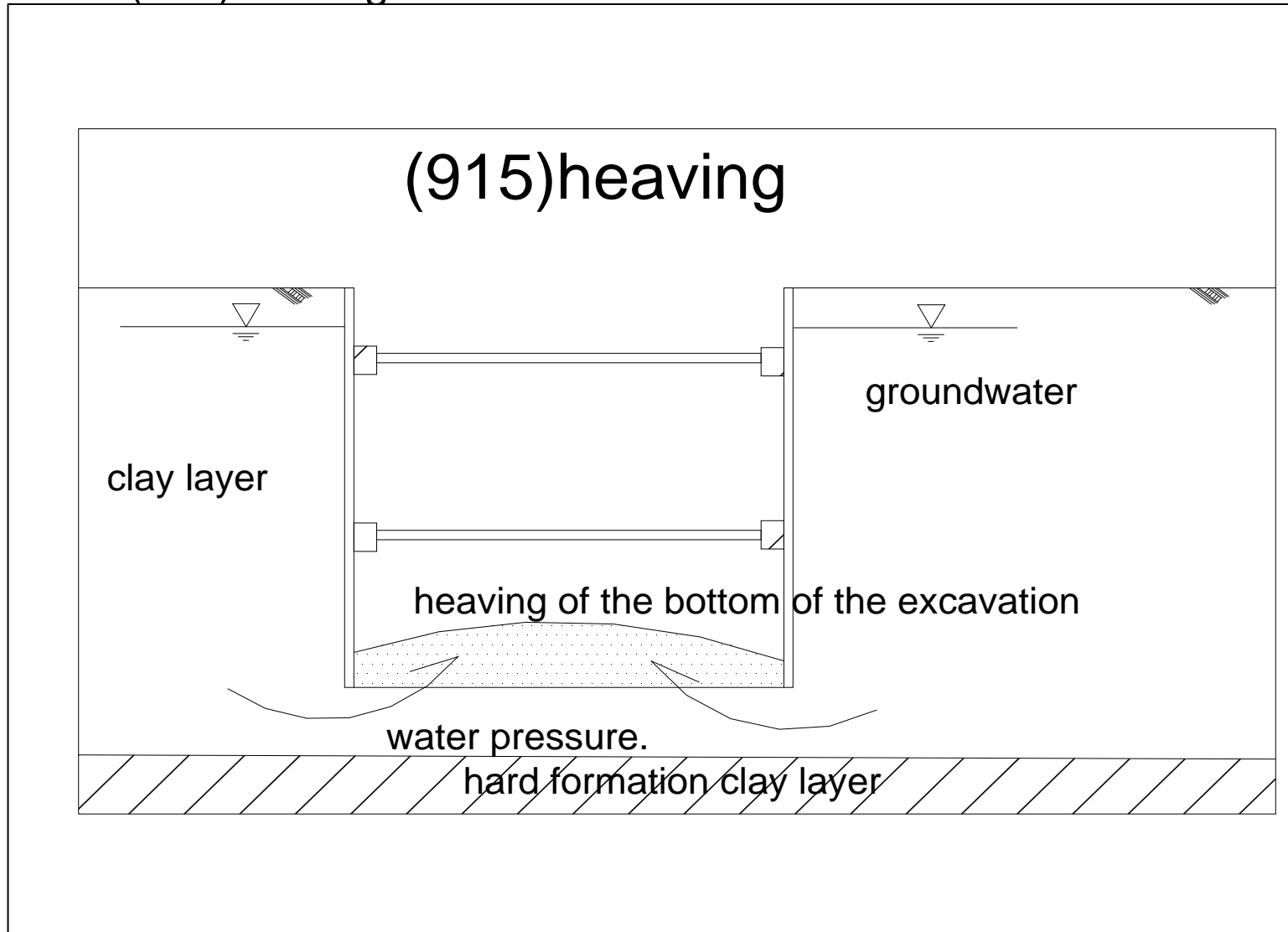
(914)PDCA(plan-do-check-action)

(914)PDCA(plan-do-check-action)

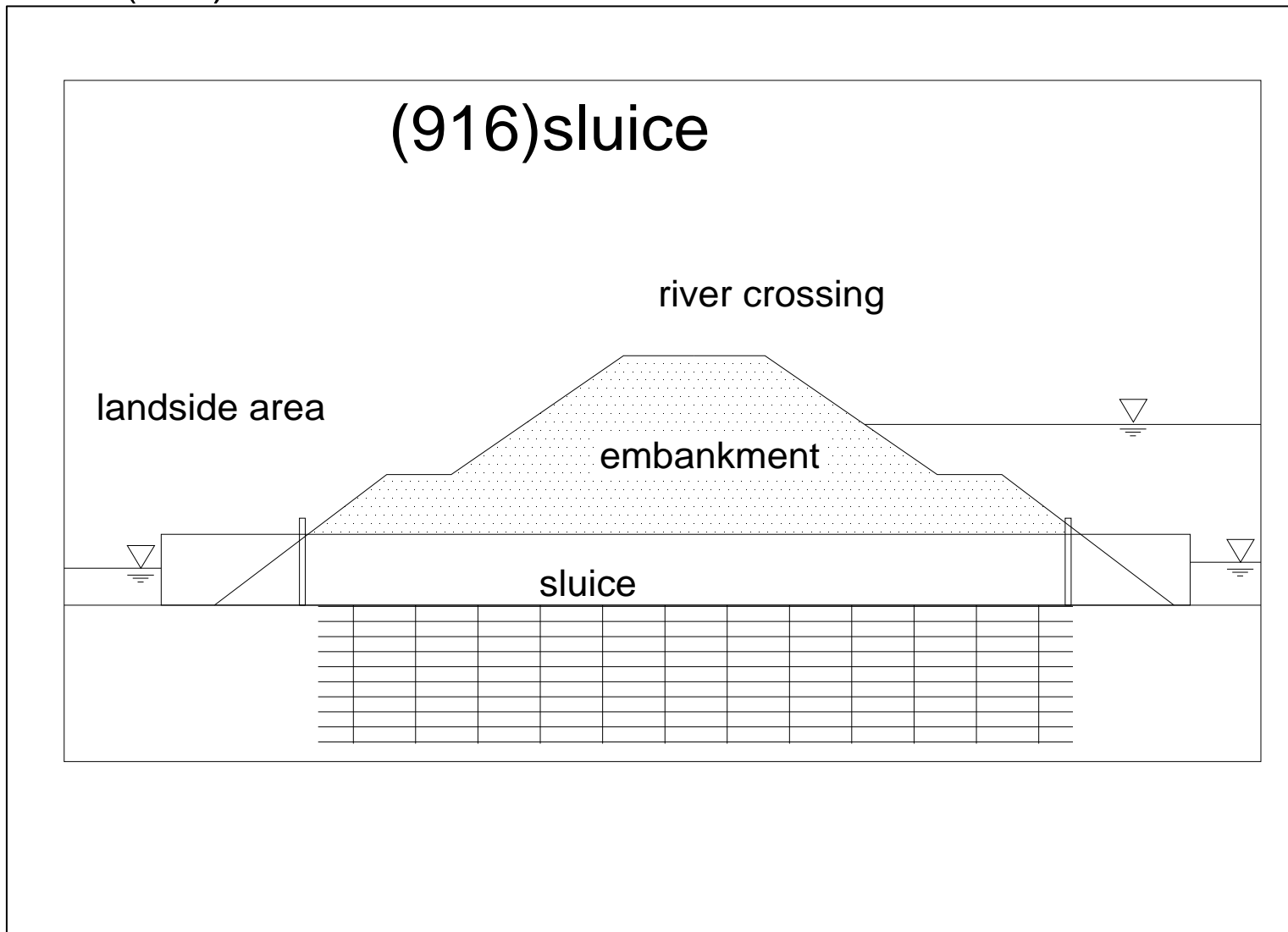


construction schedule
plan-do-check-action
Follow up with suppliers

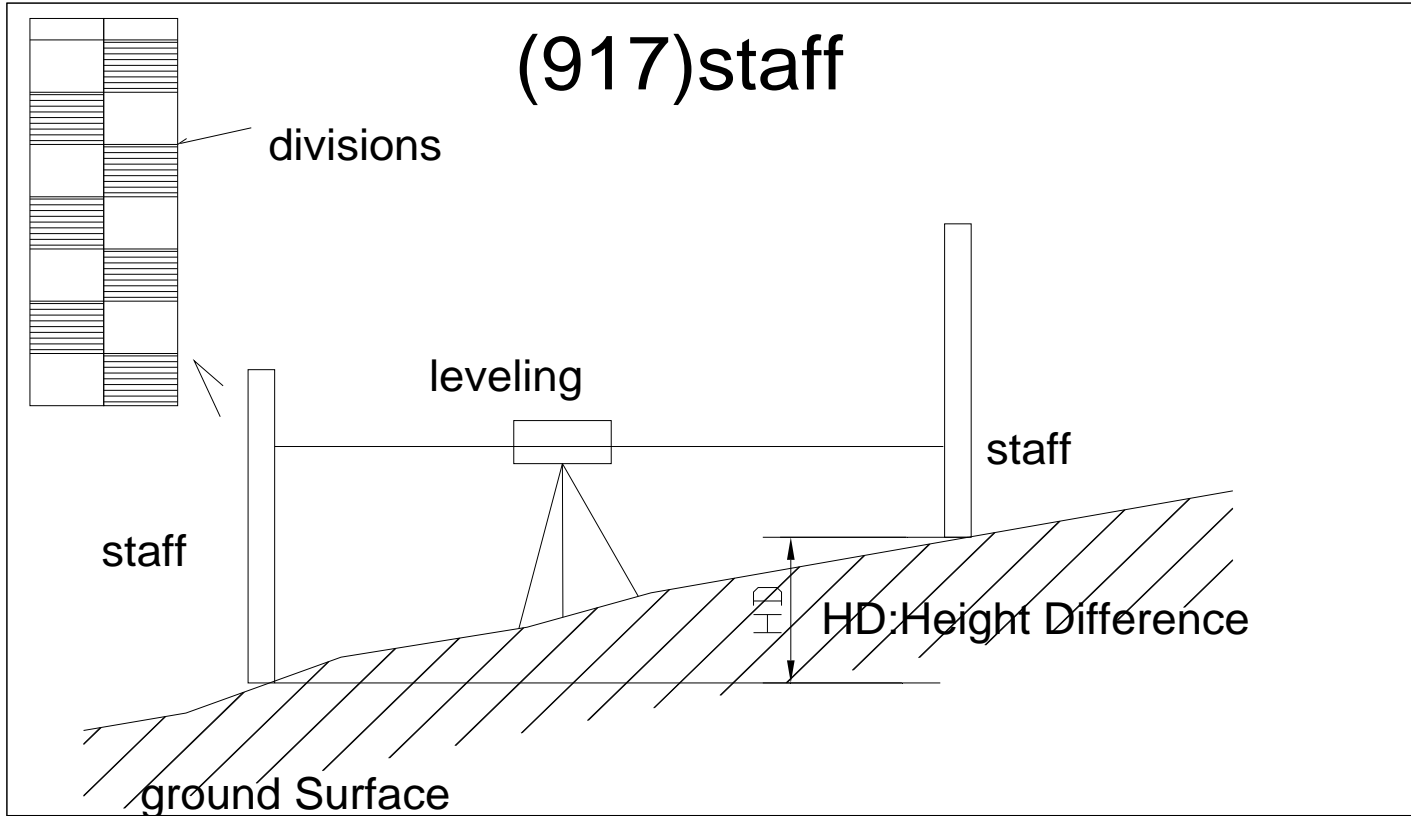
(915)heaving



(916)sluice



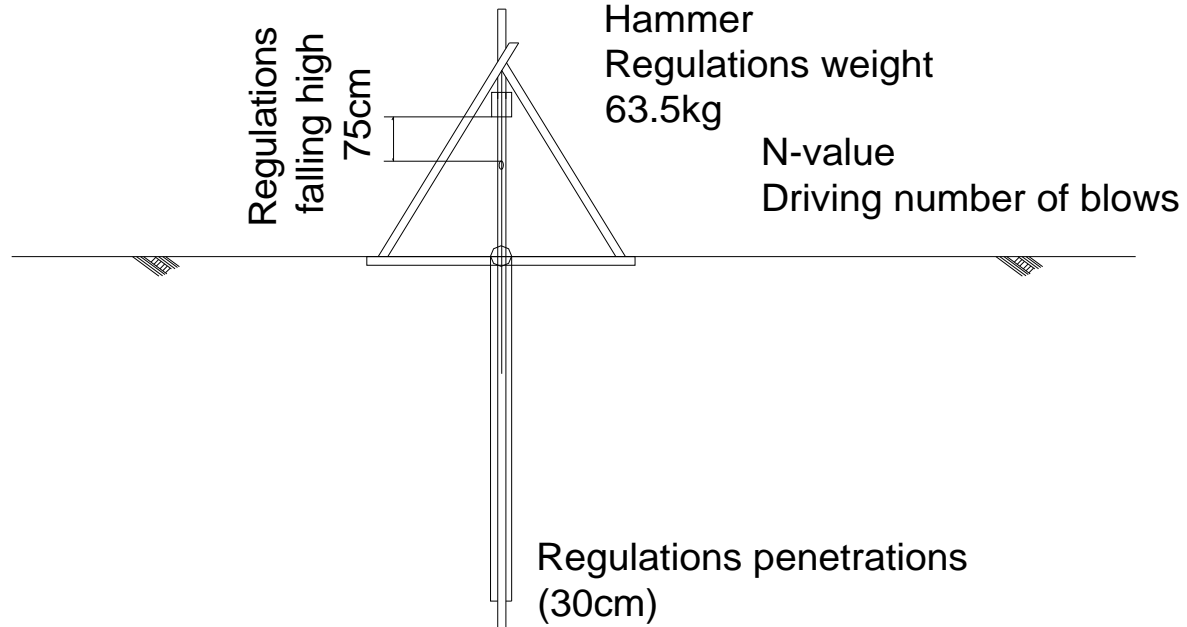
(917)staff



(918)standard penetration test

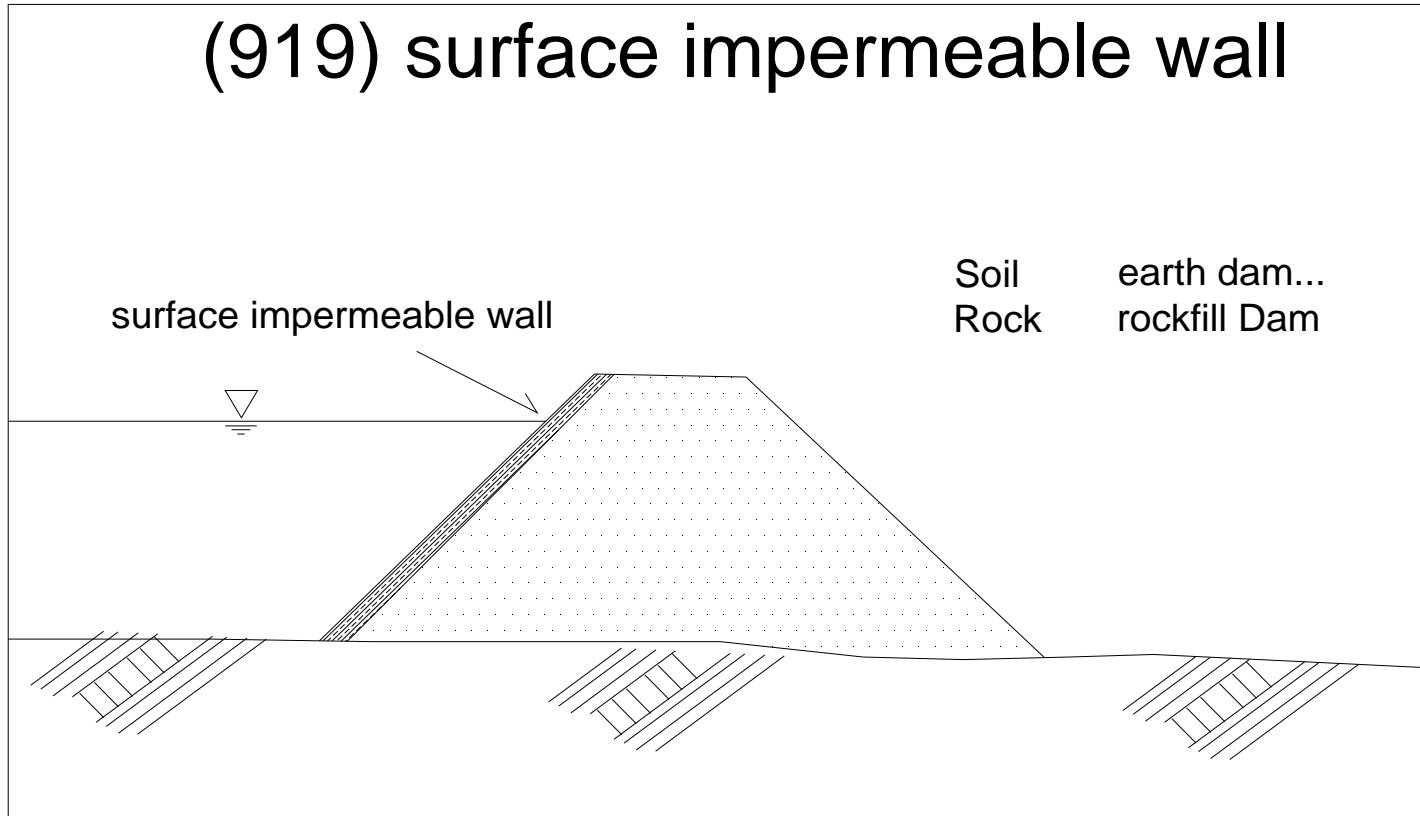
(918)standard penetration test

Standard penetration test



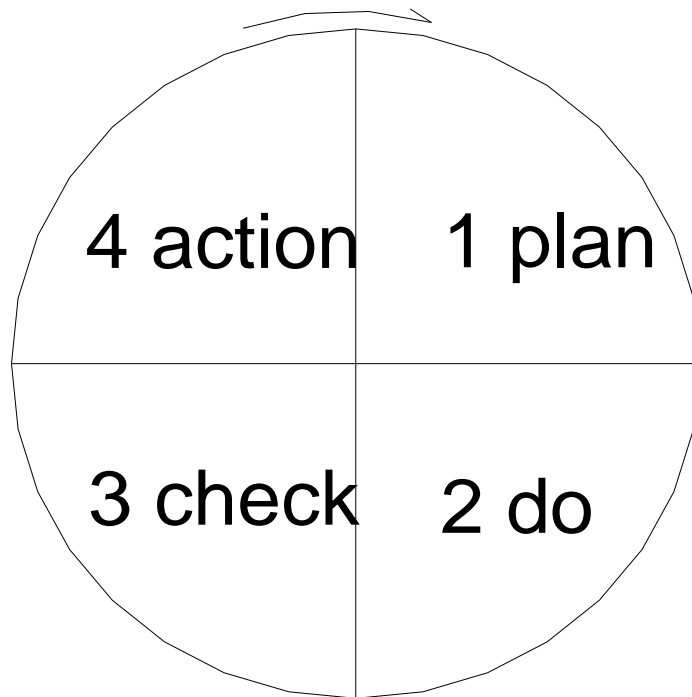
(919) surface impermeable wall

(919) surface impermeable wall



(920)quality control

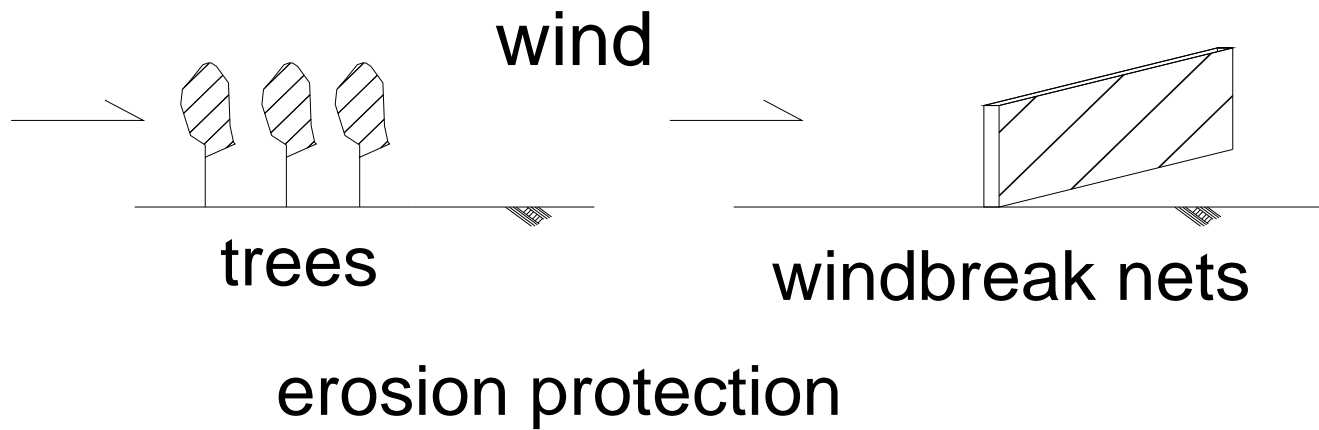
(920)quality control



construction schedule
plan-do-check-action
Follow up with suppliers
quality assurance programme
quality planning

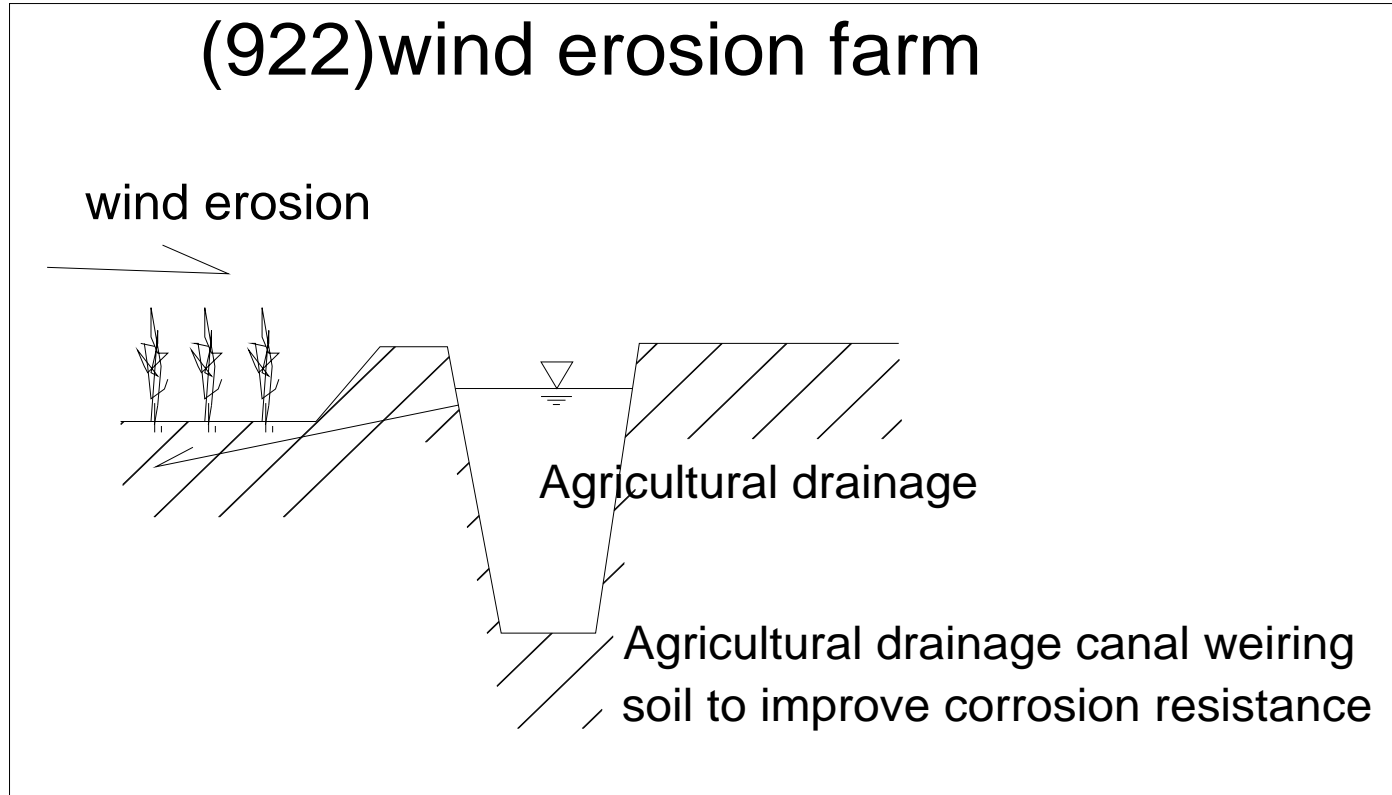
(921)wind erosion control

(921)wind erosion control

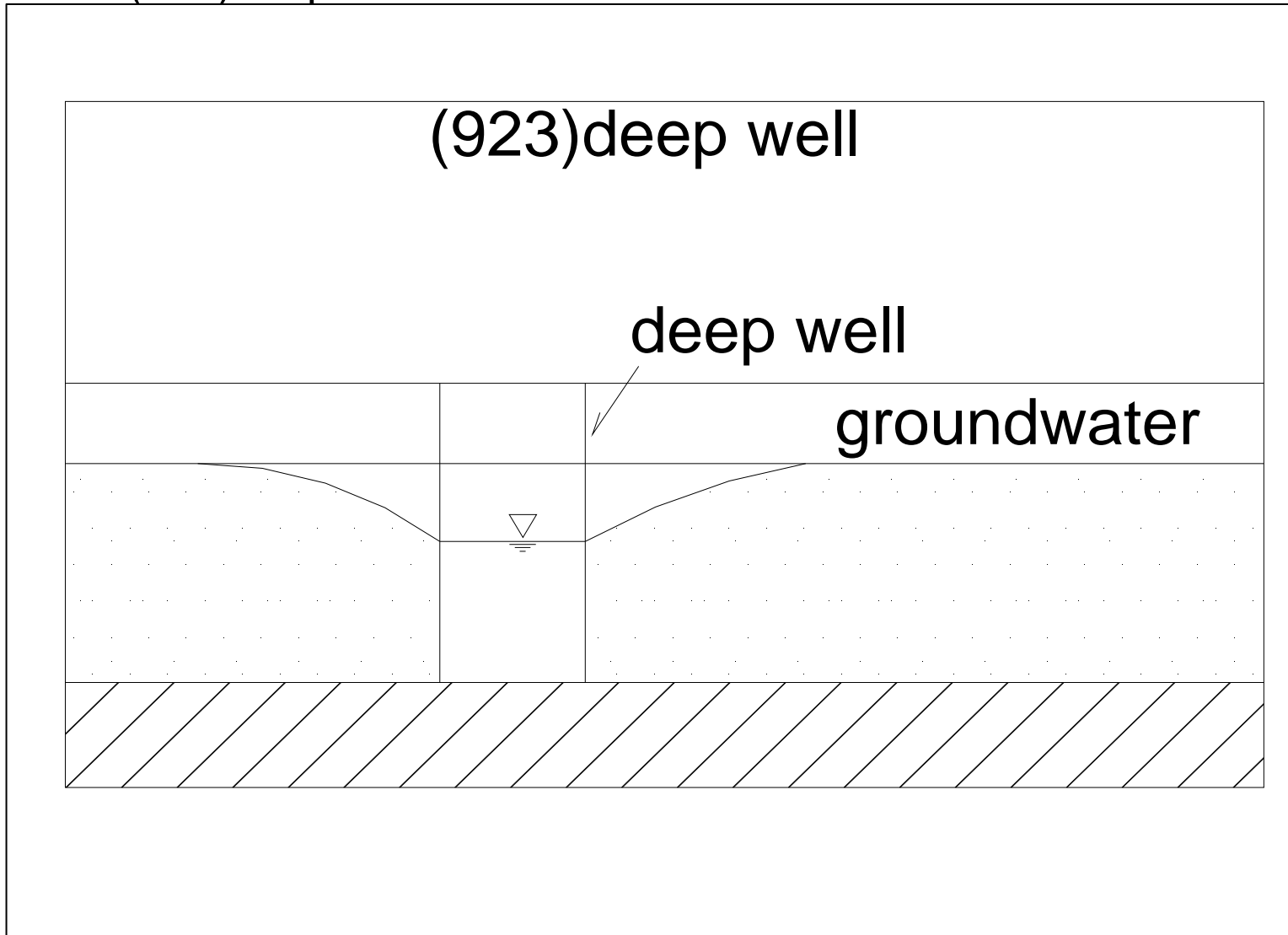


(922)wind erosion farm

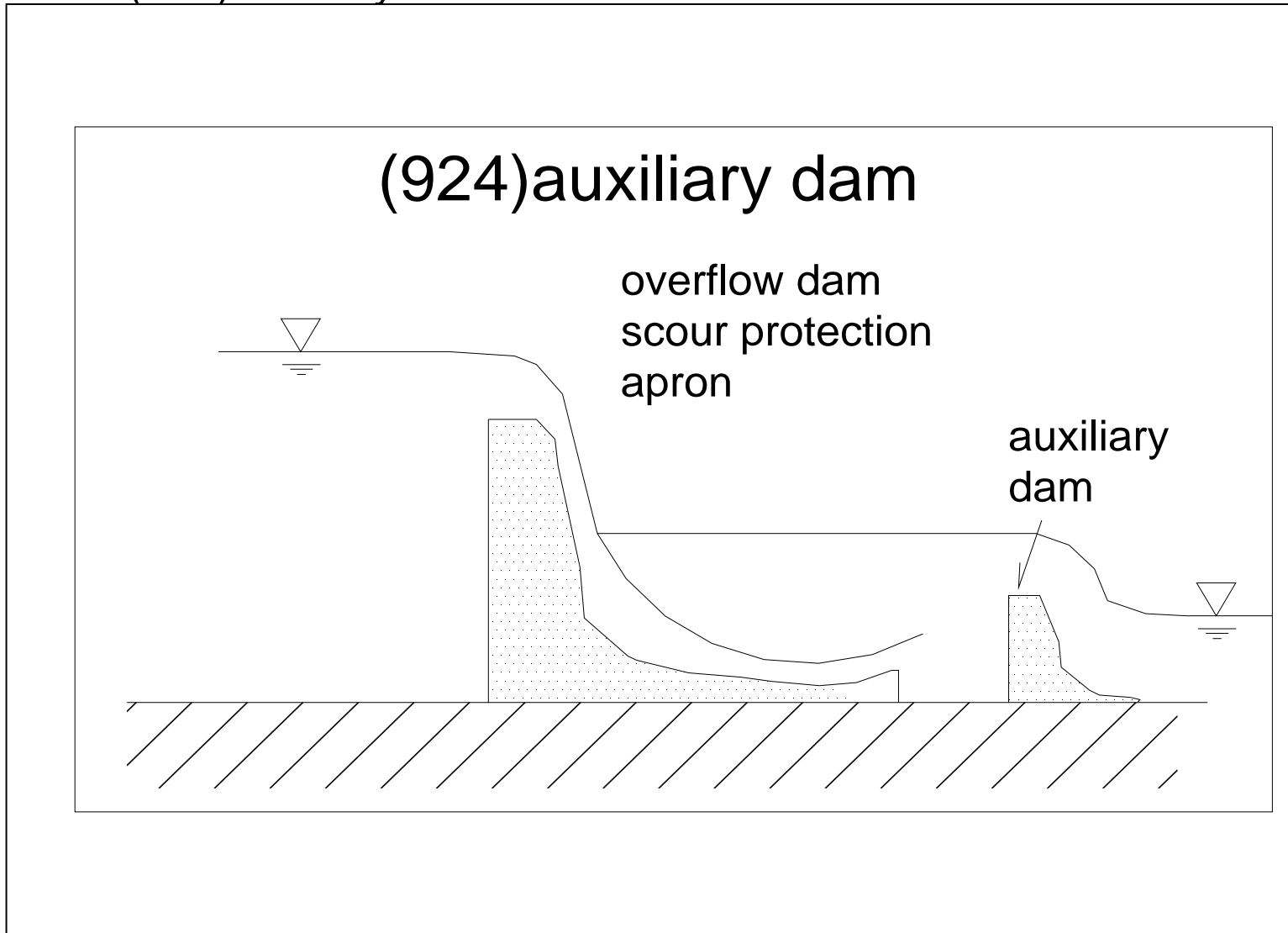
(922)wind erosion farm



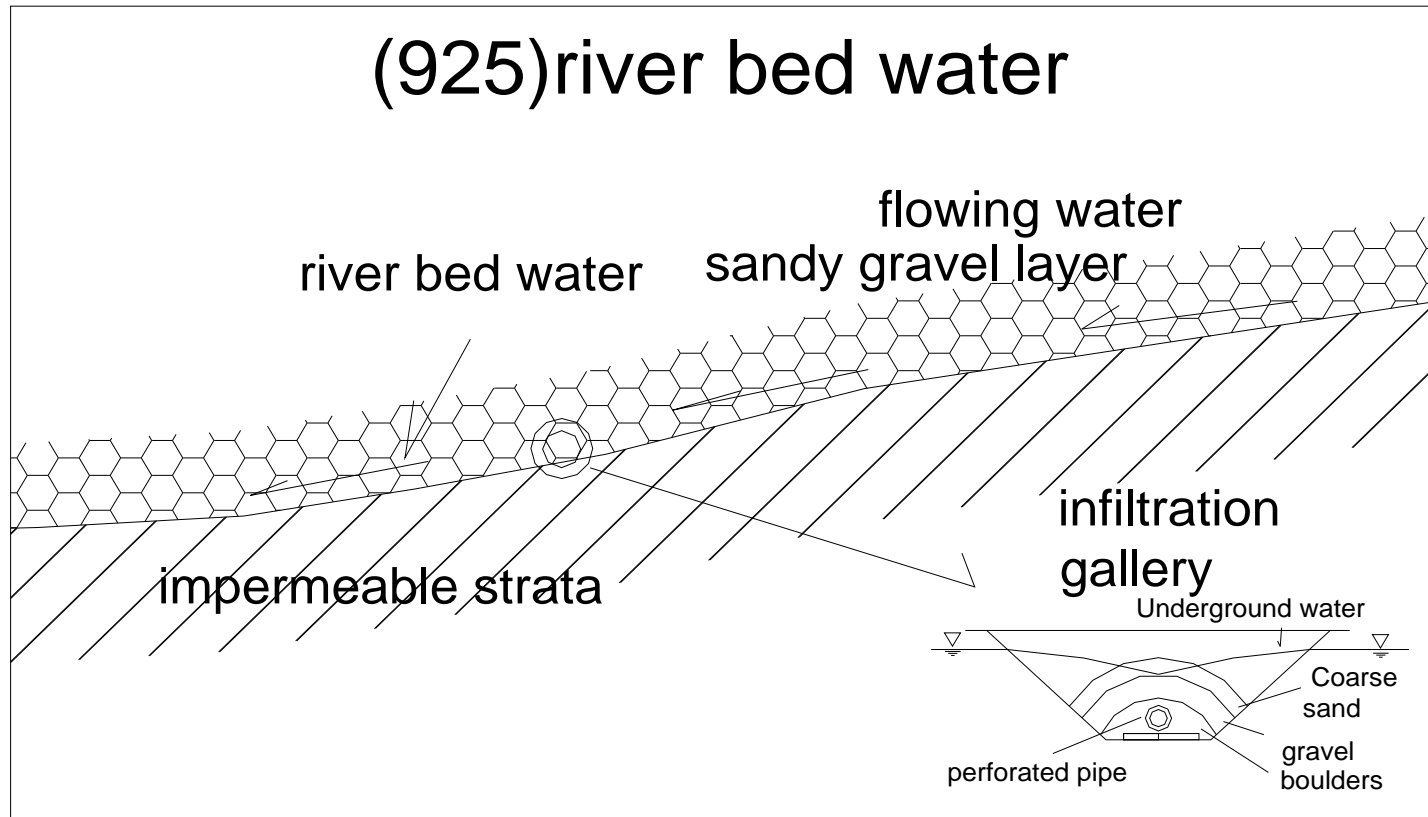
(923)deep well



(924)auxiliary dam



(925)river bed water



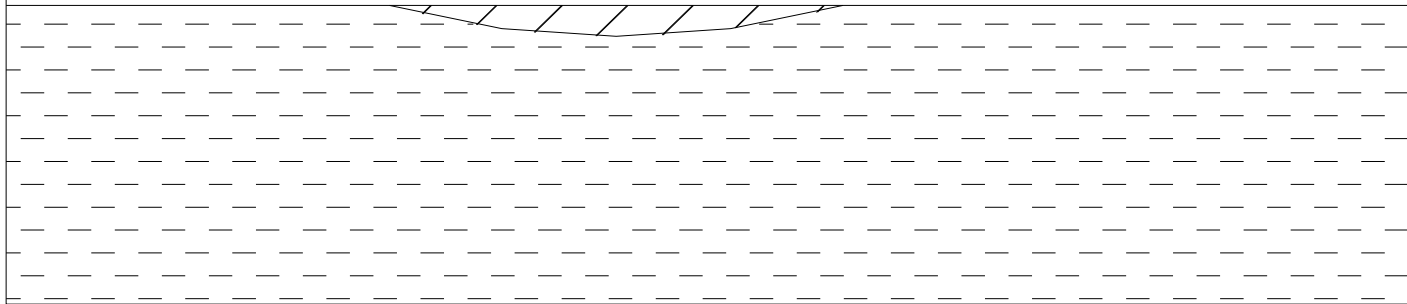
(926) rust corrosion

(926) rust corrosion

reactive surface

rust corrosion

metal-surface



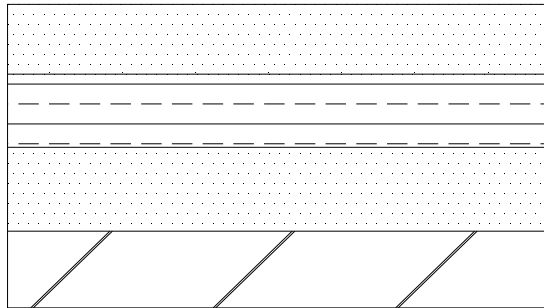
(927) unconformity

(927) unconformity

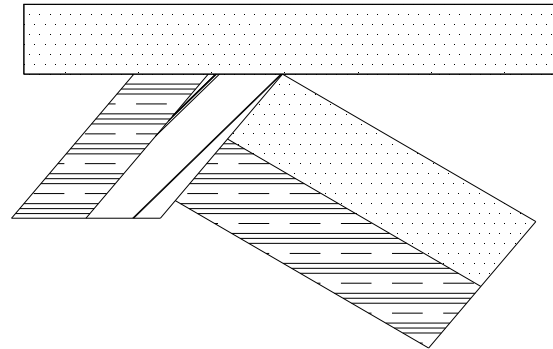
sedimentary layer

crustal alteration

geological fault



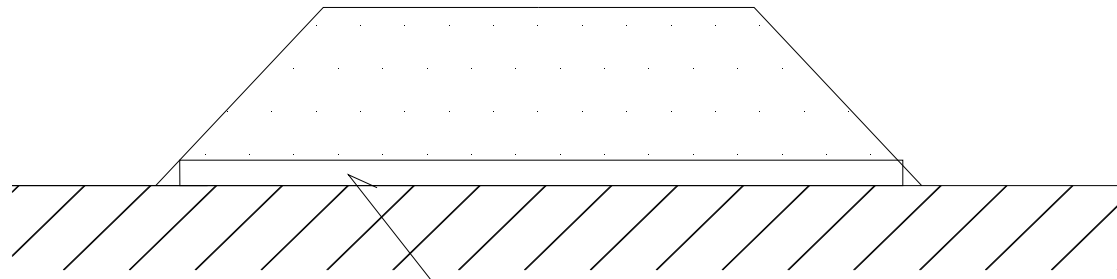
conformity



unconformity

(928) cross drain

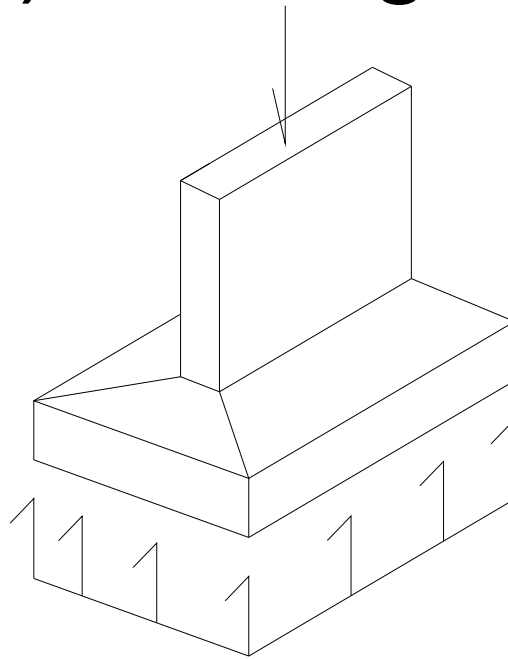
(928) cross drain



pipe, culvert
river crossing

(929) Footing foundation

(929) Footing foundation

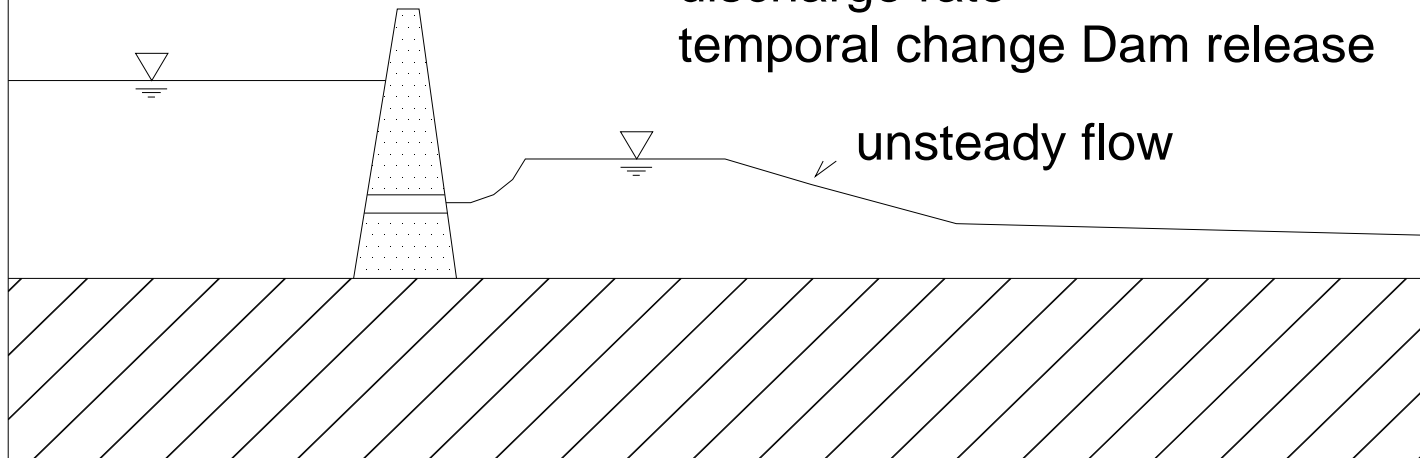


individual footing
independent footing

(930) unsteady flow

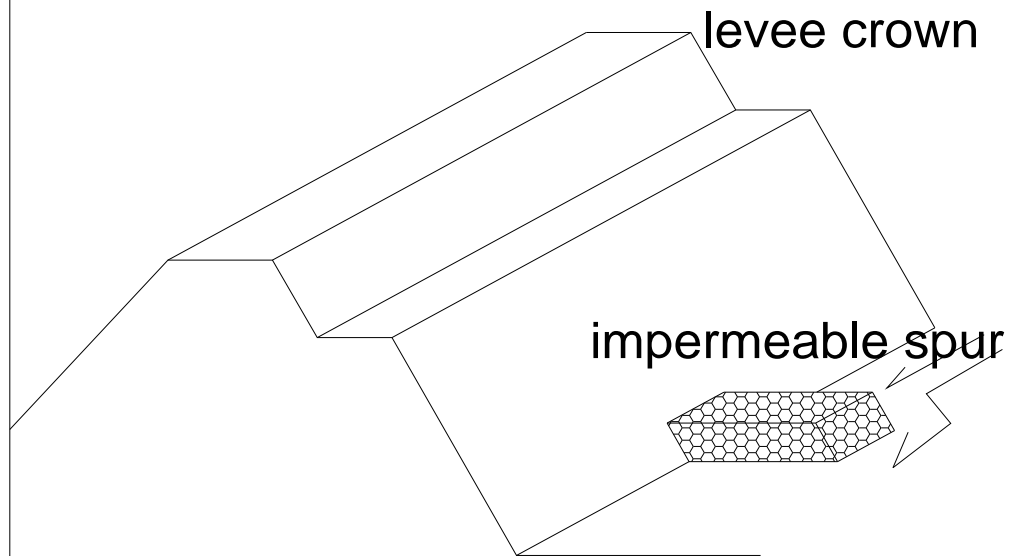
(930) unsteady flow

unsteady flow
discharge area
amount of flowing water
discharge rate
temporal change Dam release



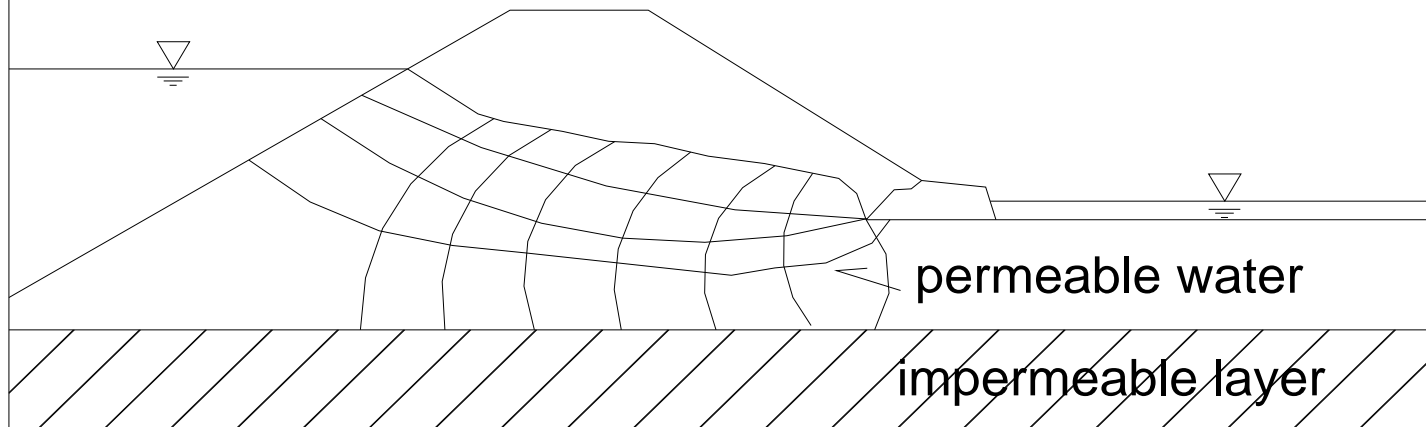
(931) impermeable spur

(931) impermeable spur



(932) impermeable layer

(932) impermeable layer



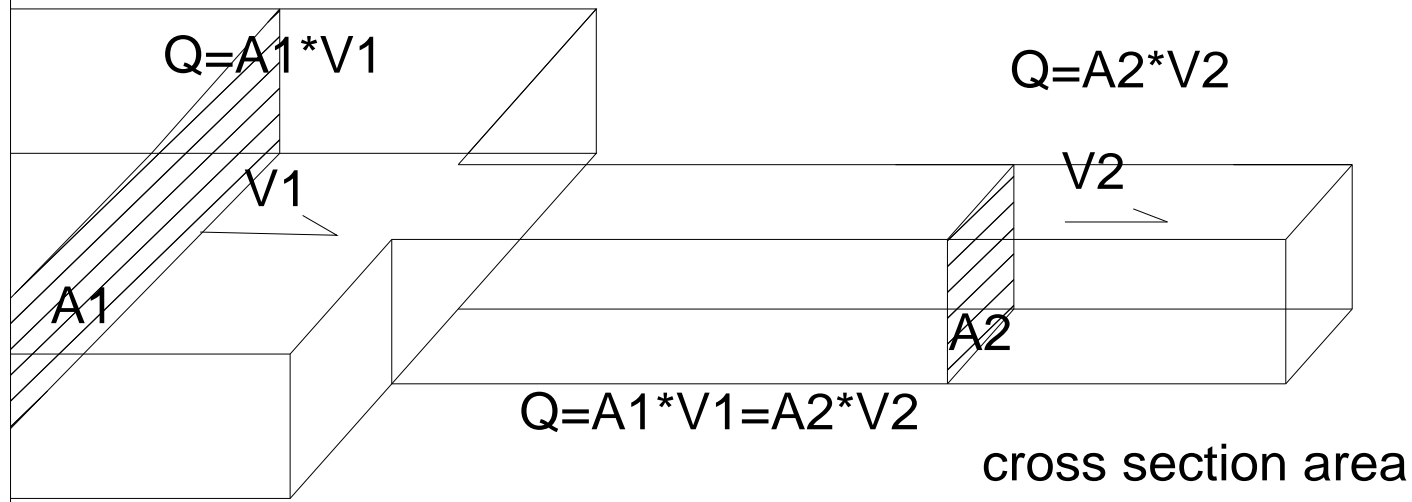
(933)non-uniform flow

(933)non-uniform flow

uniform flow

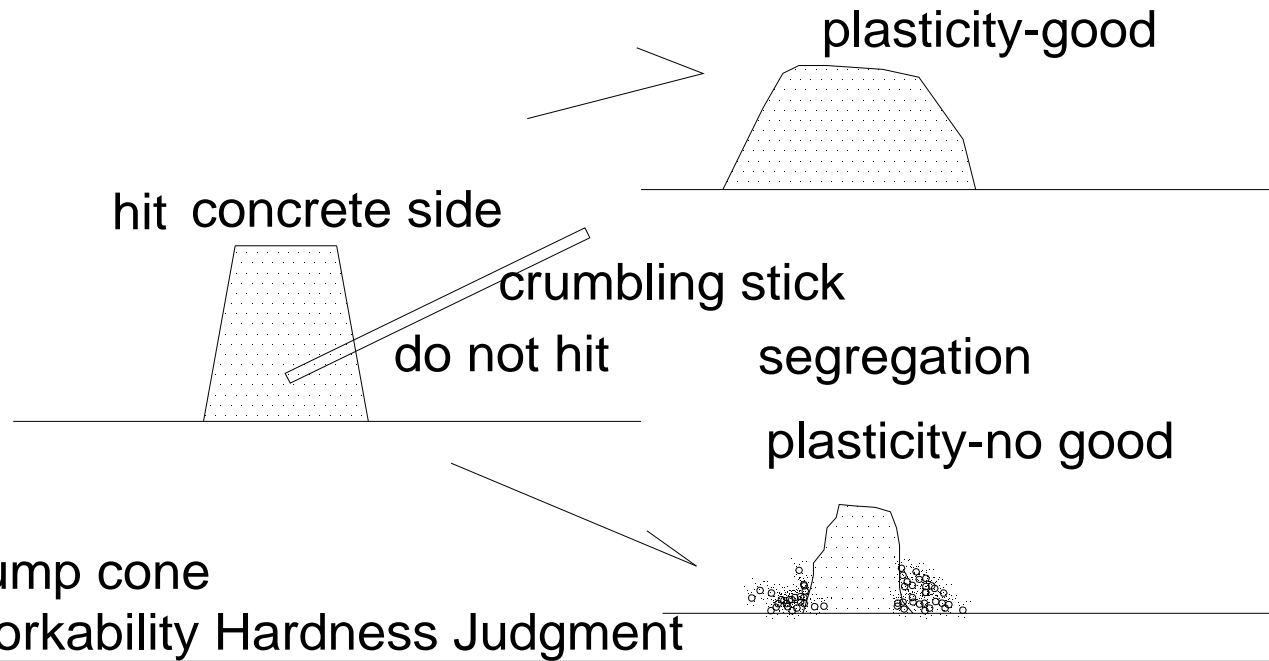
discharge rate

cross sectional average flow velocity



(934)plasticity

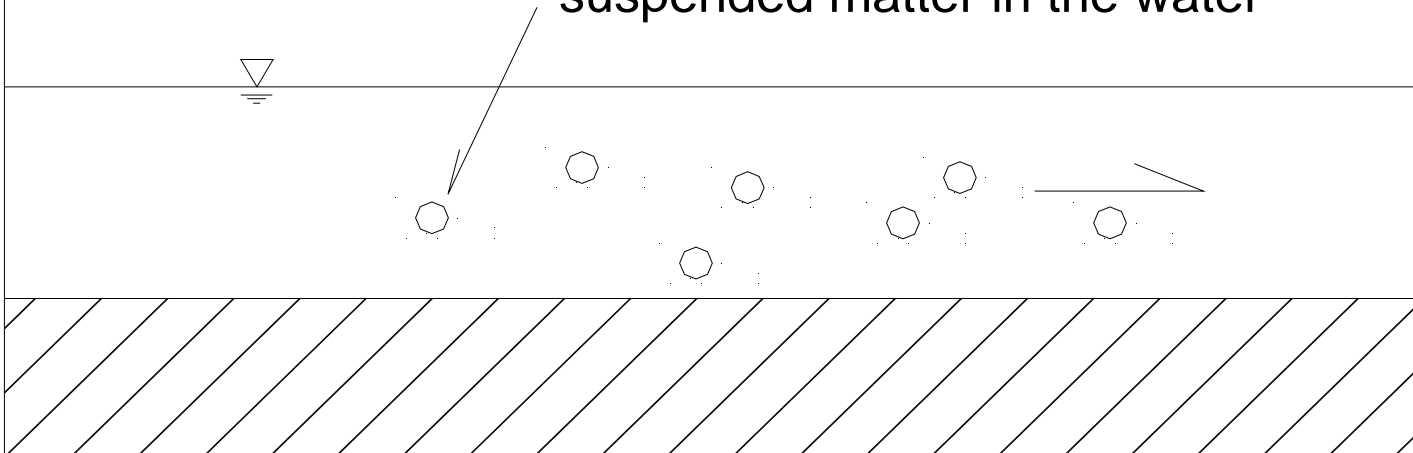
(934)plasticity



(935)suspended load

(935)suspended load

specific gravity of soil particle
floating flow
thin underwater floating flow down
suspended matter in the water

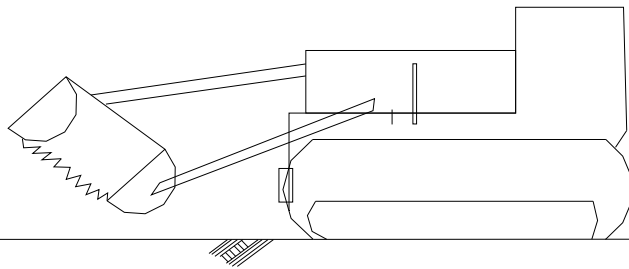


(936)Bulldozer

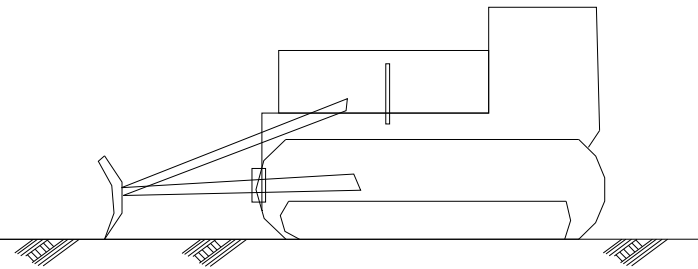
(936)Bulldozer

bowl

bulldozing blade



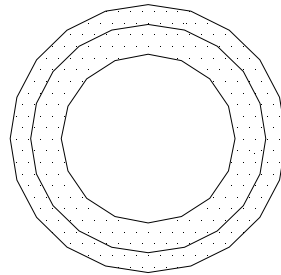
Bucket Dozer



Straight Dozer

(937)precast concrete

(937)precast concrete



precast reinforced
concrete pile

concrete factory
shortening of construction period
reduction of construction
cost quality
control durability

(938)pre-cooling

(938)pre-cooling

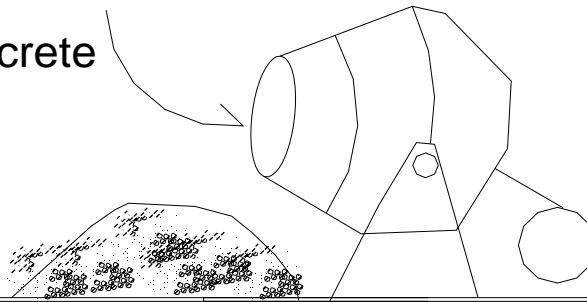
Cement+Water+Fine Aggregate+Coarse Aggregate+air+Admixture
mixed



pre-cooling

crack prevention concrete

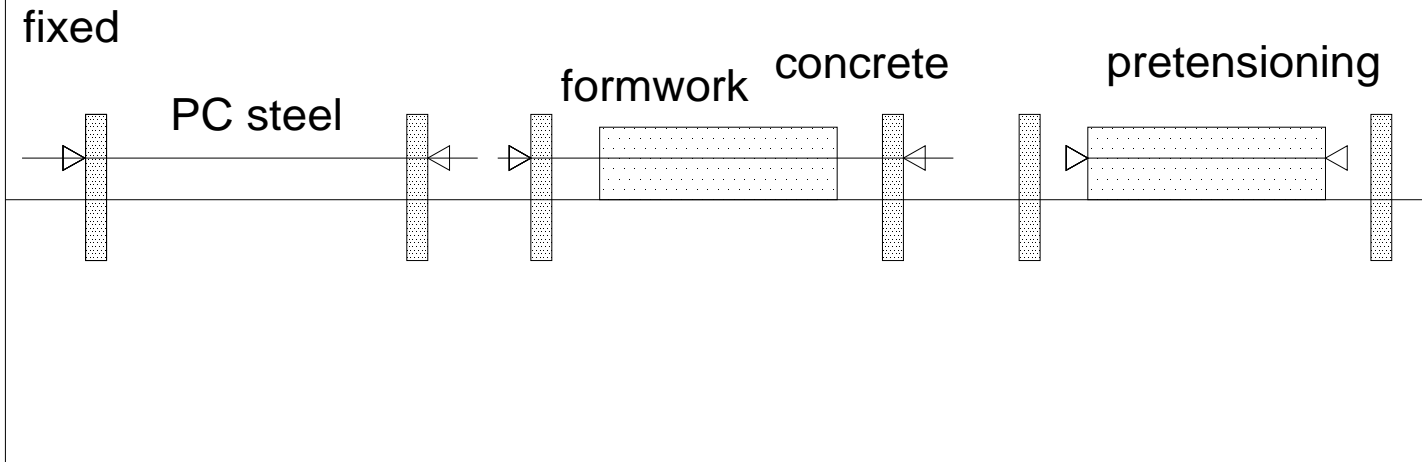
material cooling
control temperature



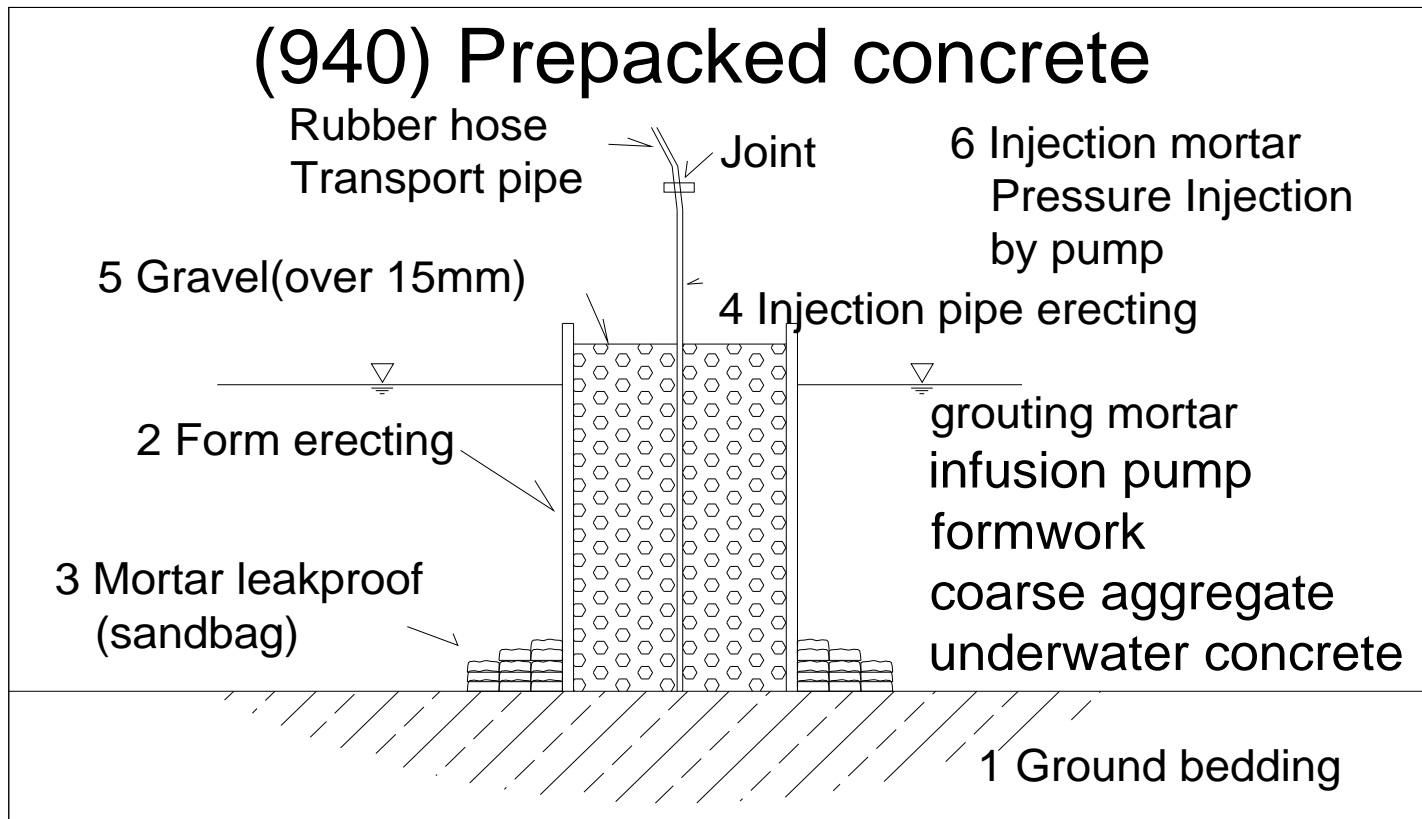
concrete
agitator

(939)pretensioning system

(939)pretensioning system

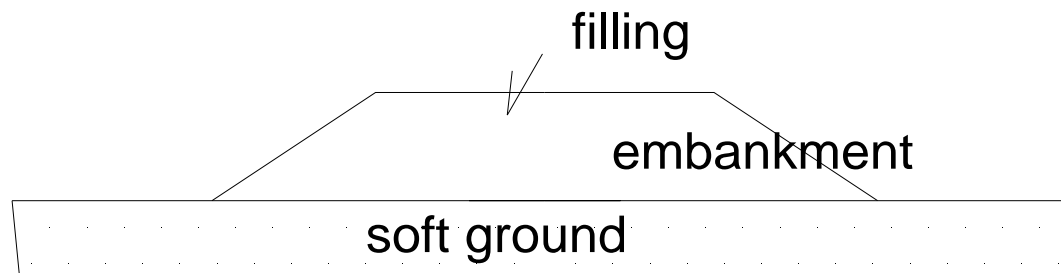


(940) Prepacked concrete



(941)pre-loading method

(941)pre-loading method

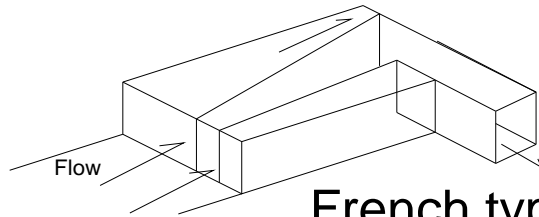


embankment surcharge
settlement due to
consolidation
compression promotion process

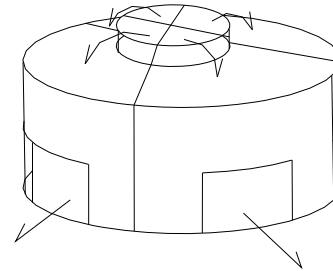
(942)diversion works

(942)diversion works

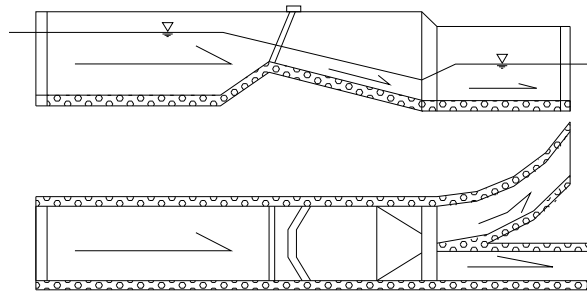
American type



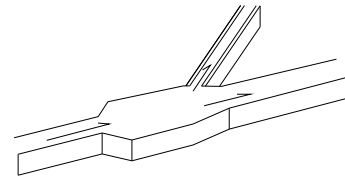
Cylindrical type



French type



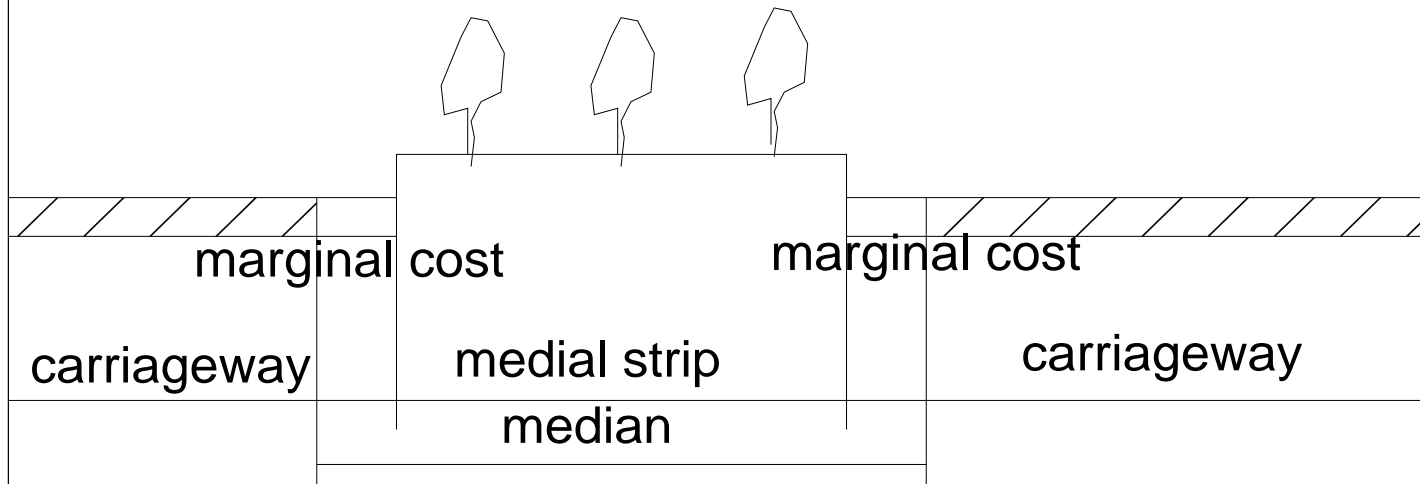
Turn out



(943)separator

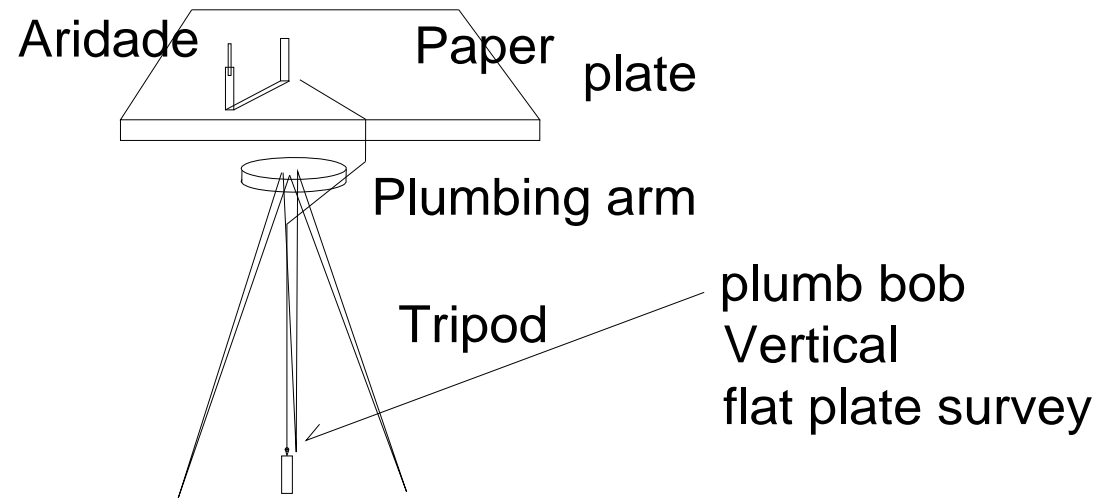
(943)separator

tree planting

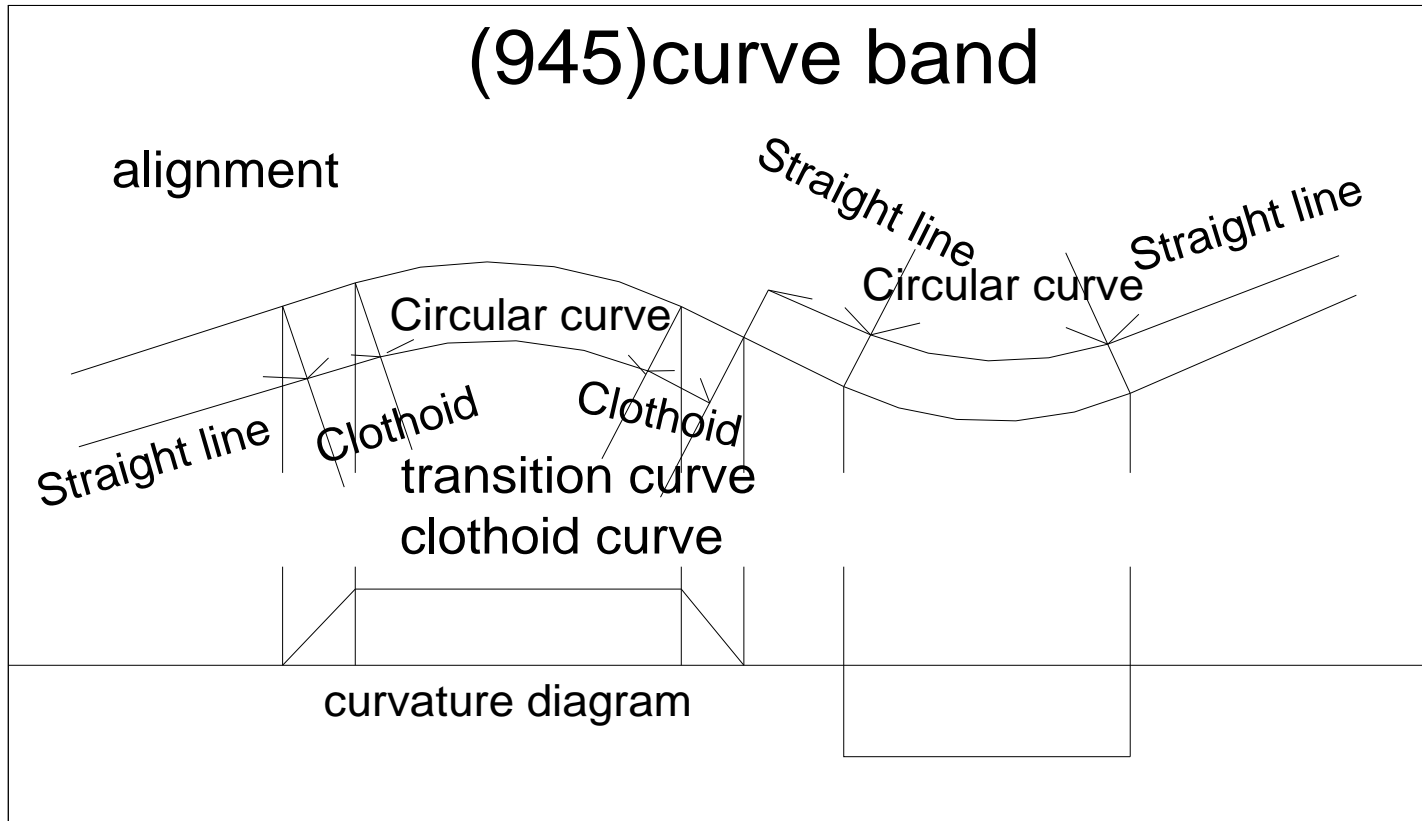


(944)Plane table surveying

(944)Plane table surveying



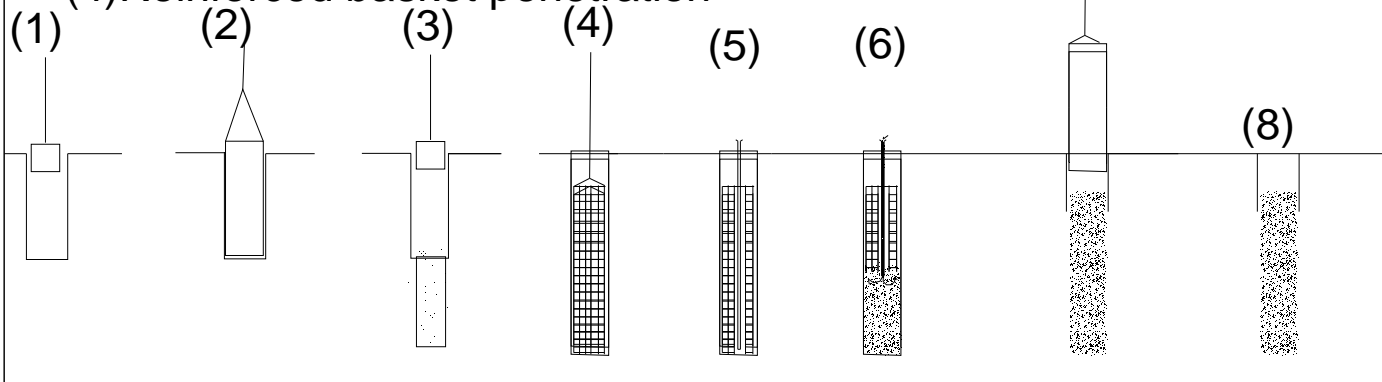
(945)curve band



(946) Benoto method

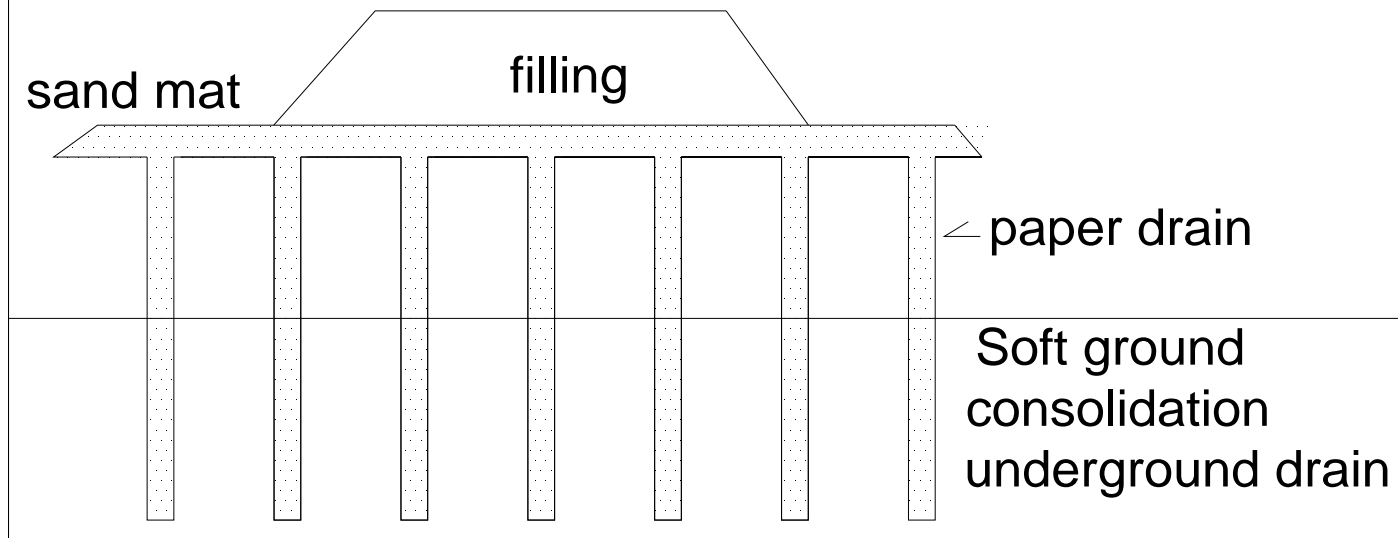
(946) Benoto method

- (1) Casing tube penetration
 - (2) Casing tube extension
 - (3) Excavation completed
 - (4) Reinforced basket penetration
 - (5) Tremie tube penetration
 - (6) Concrete placement
 - (7) Casing tube withdraw
 - (8) Complete
- Excavation with hammer grab
Mud pump



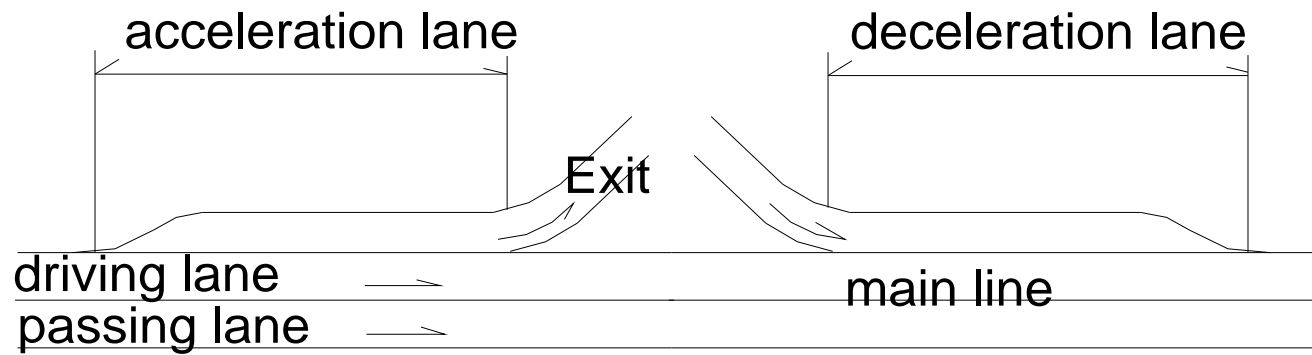
(947)paper drain method

(947)paper drain method

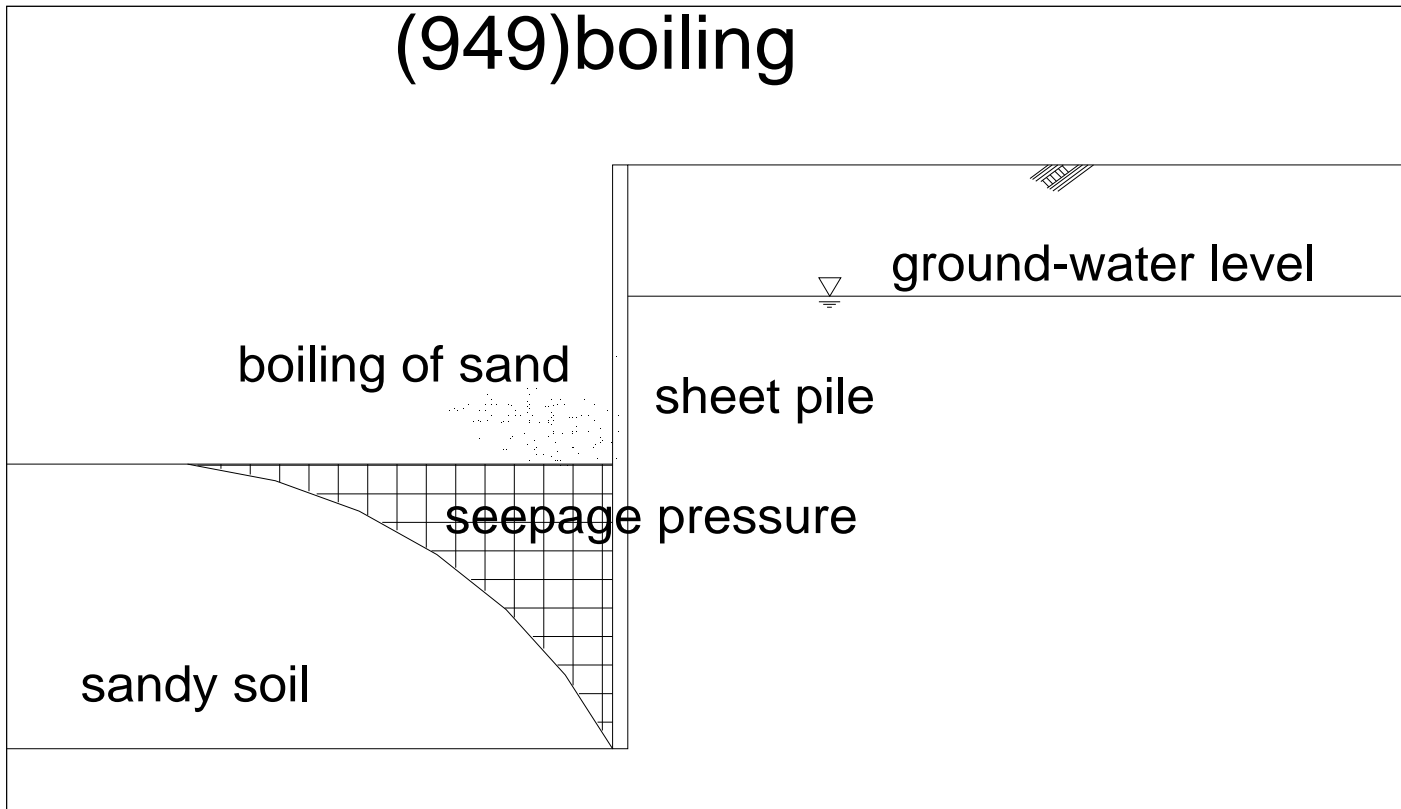


(948)deceleration ▪ acceleration lane

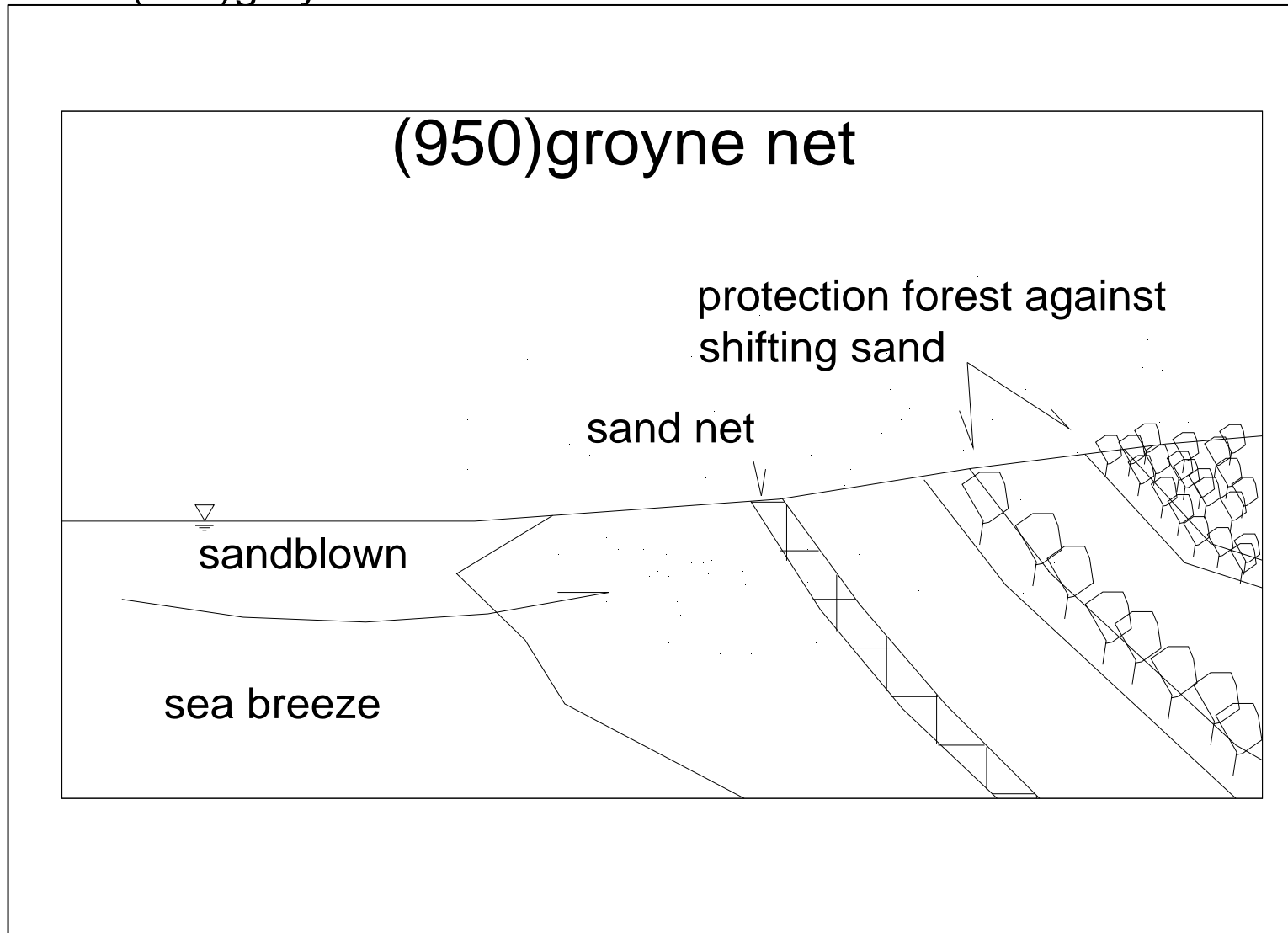
(948)deceleration ▪ acceleration lane



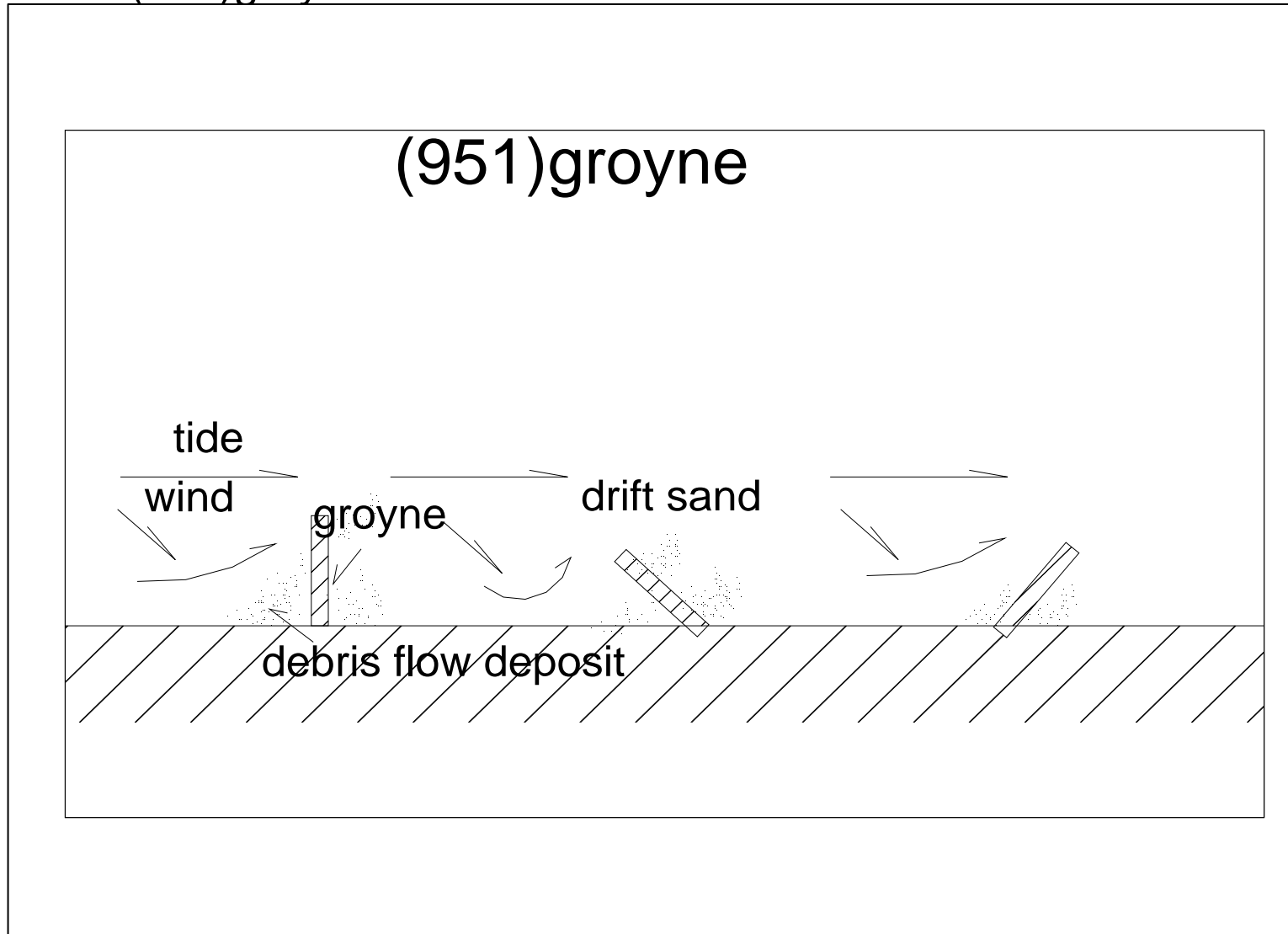
(949)boiling



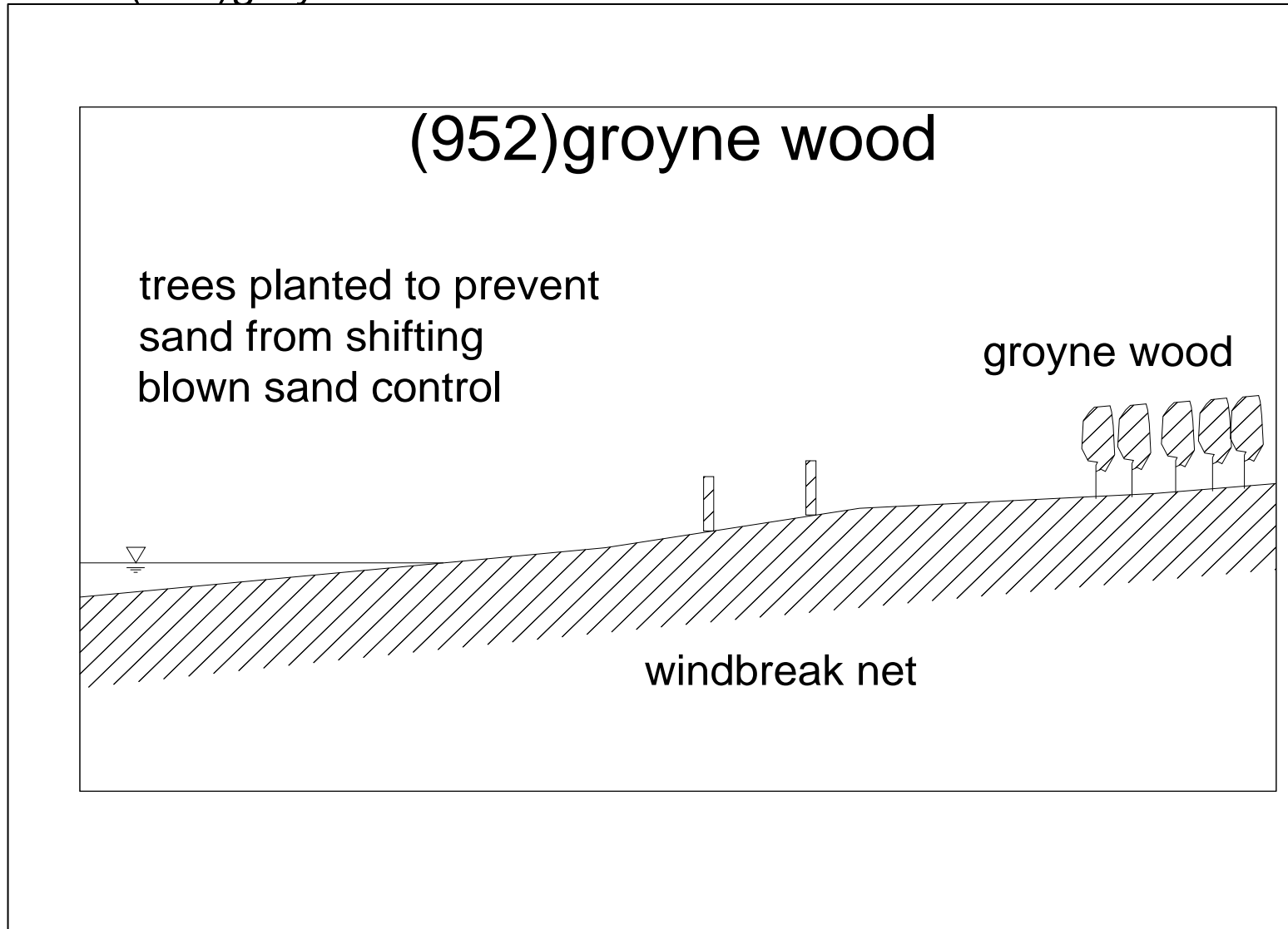
(950)groyne net



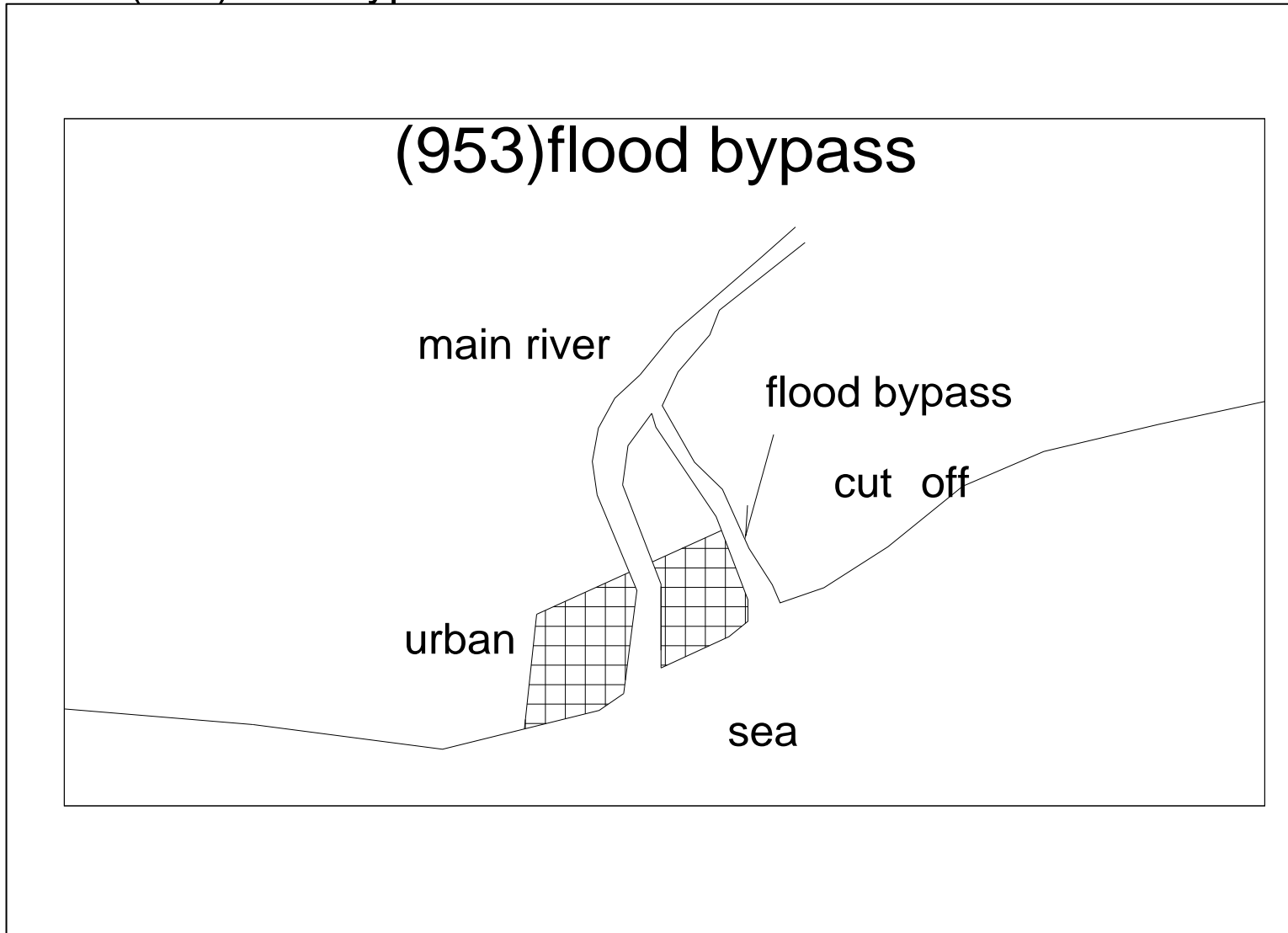
(951)groyne



(952)groyne wood

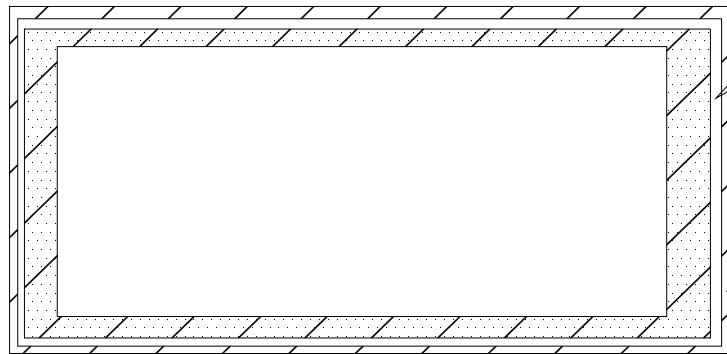


(953)flood bypass



(954)polymer-modified cement waterproofing

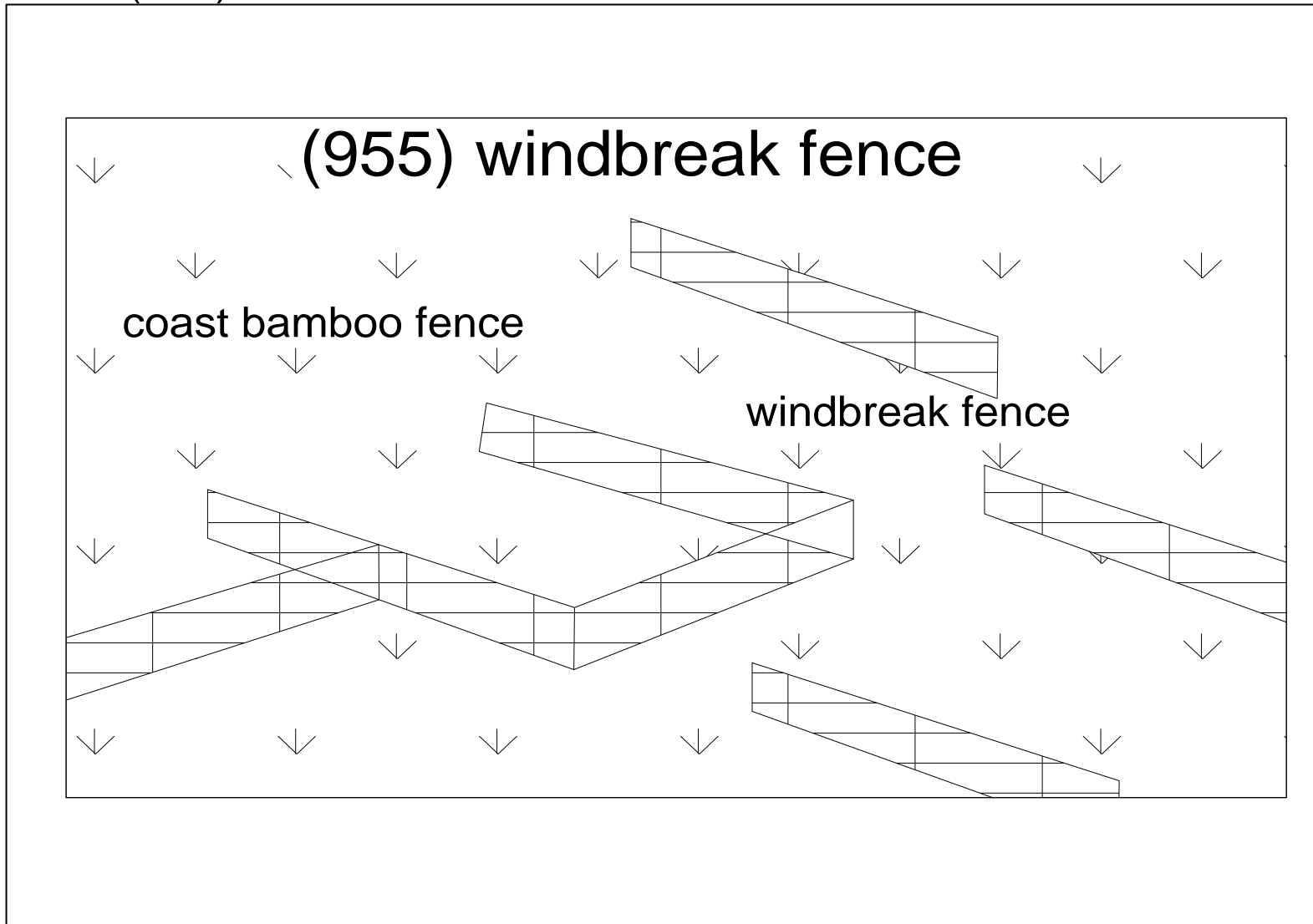
(954)polymer-modified
cement waterproofing



fluid-applied
polyurethane membrane

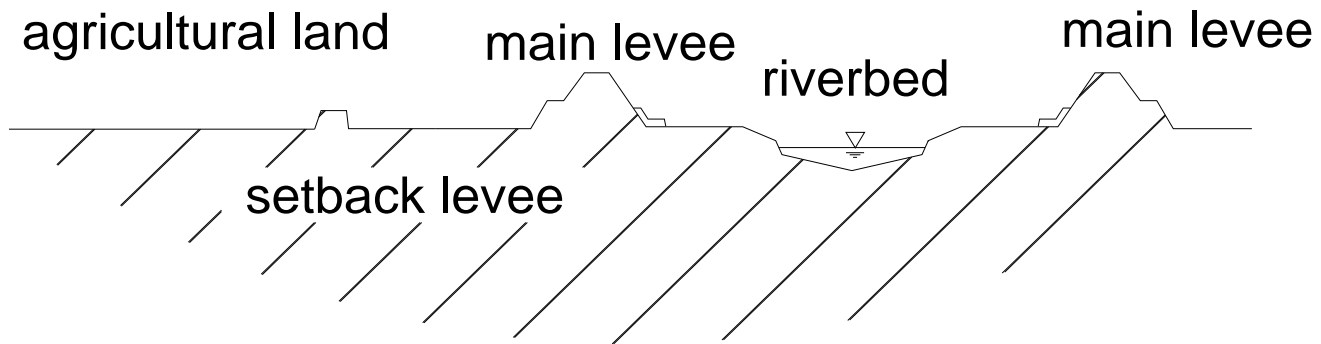
polymer-modified
cement waterproofing

(955) windbreak fence



(956)main levee

(956)main levee

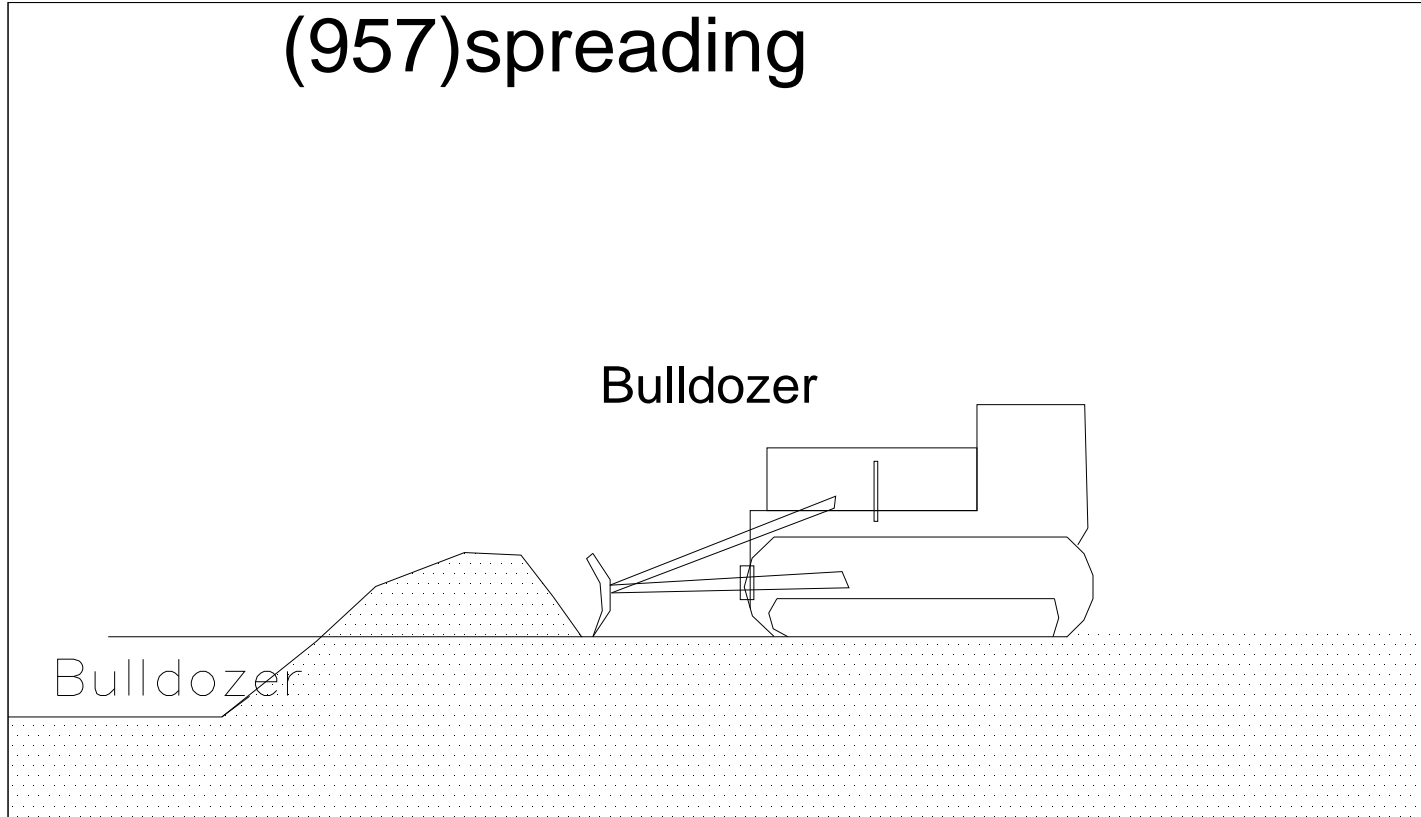


(957)spreading

(957)spreading

Bulldozer

Bulldozer

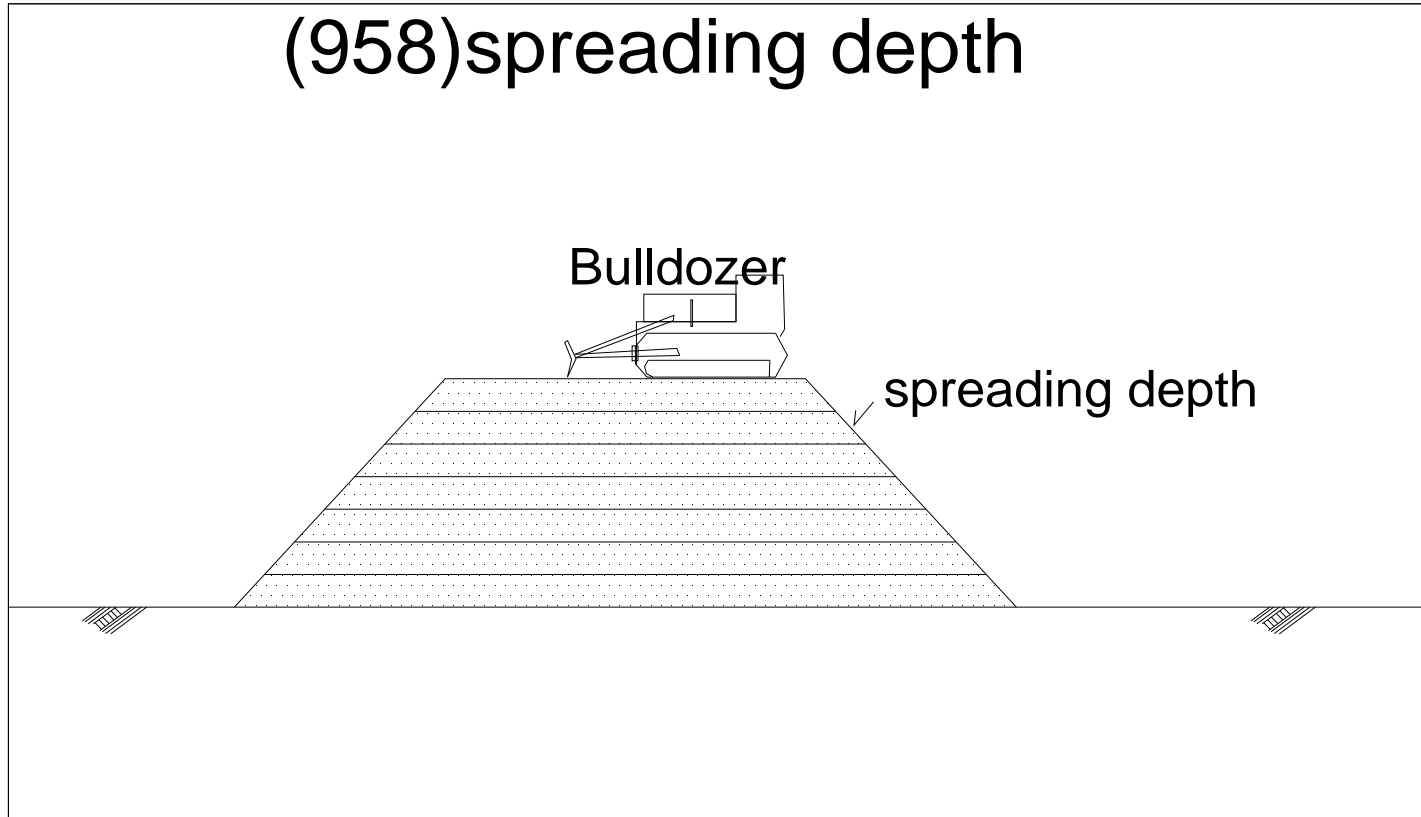


(958)spreading depth

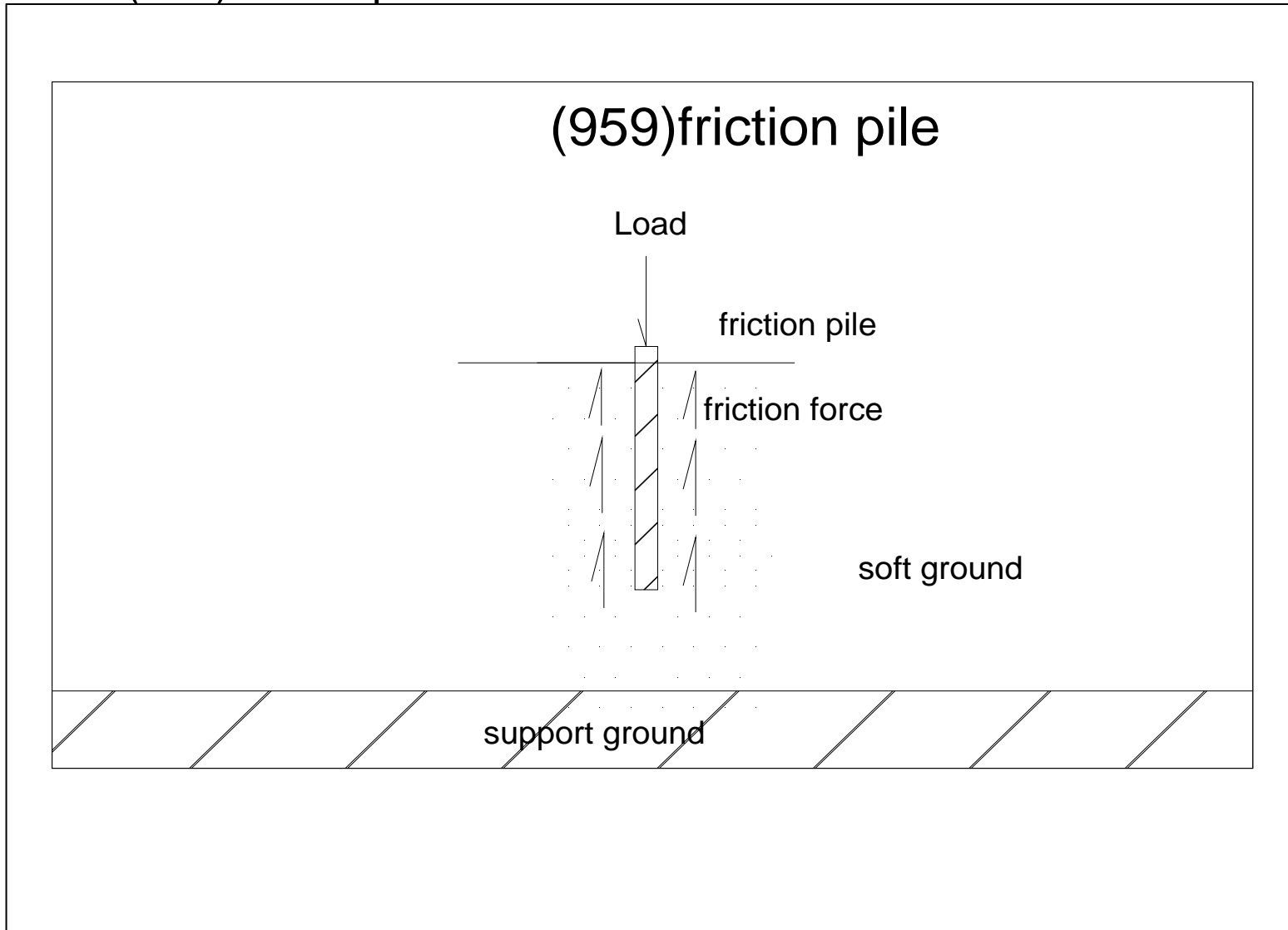
(958)spreading depth

Bulldozer

spreading depth



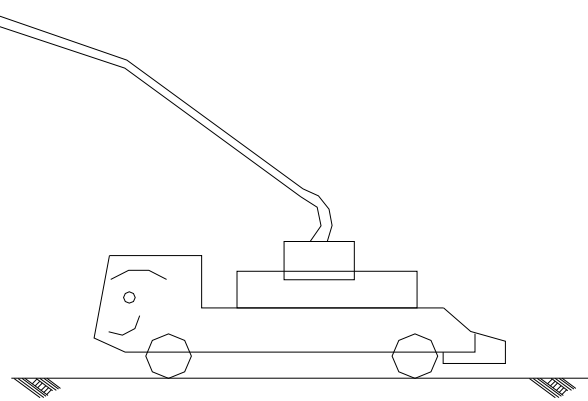
(959)friction pile



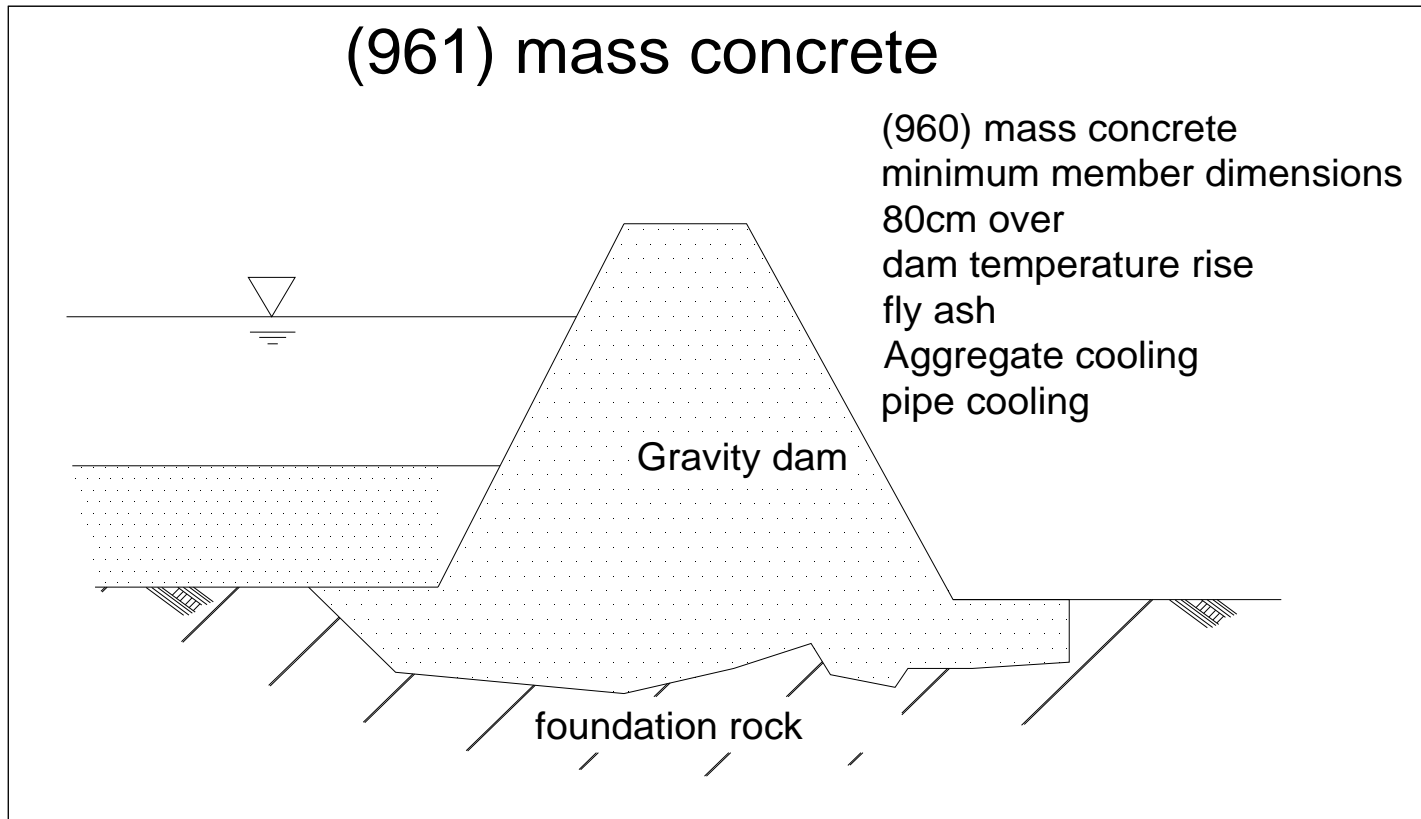
(960) staggered placing

(960) staggered placing

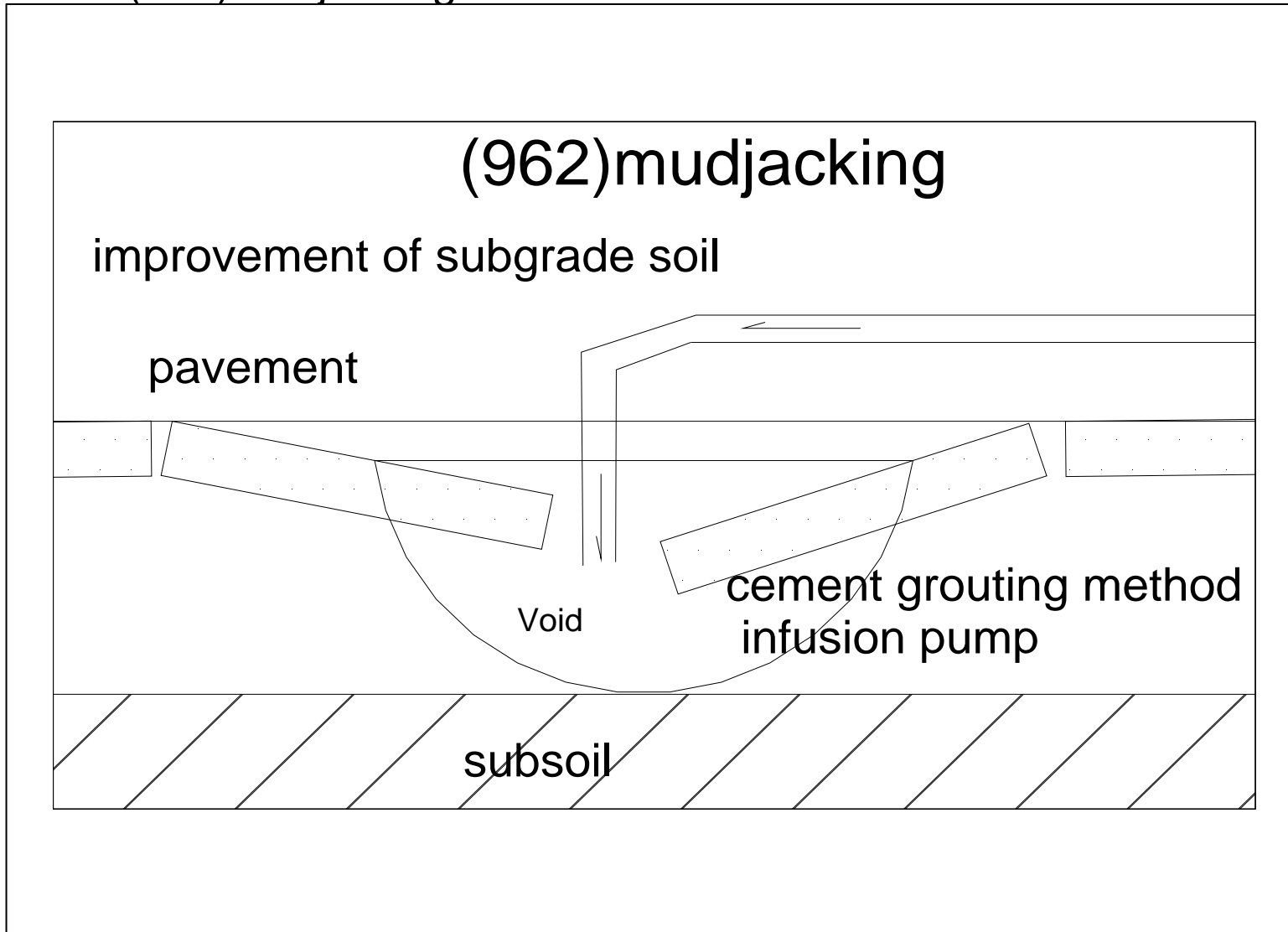
1	6	3
7	2	8
4	9	5



(961) mass concrete



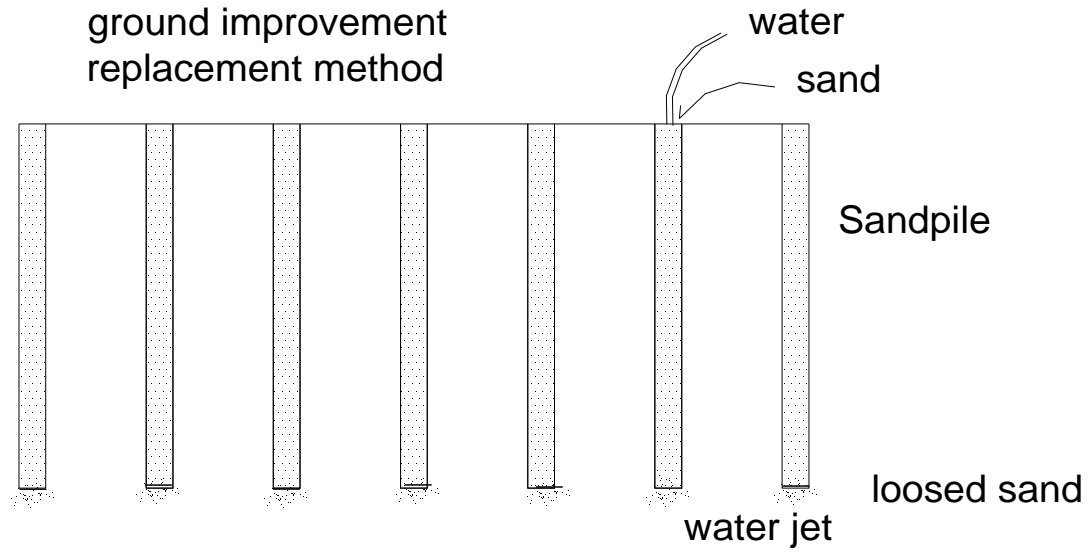
(962)mudjacking



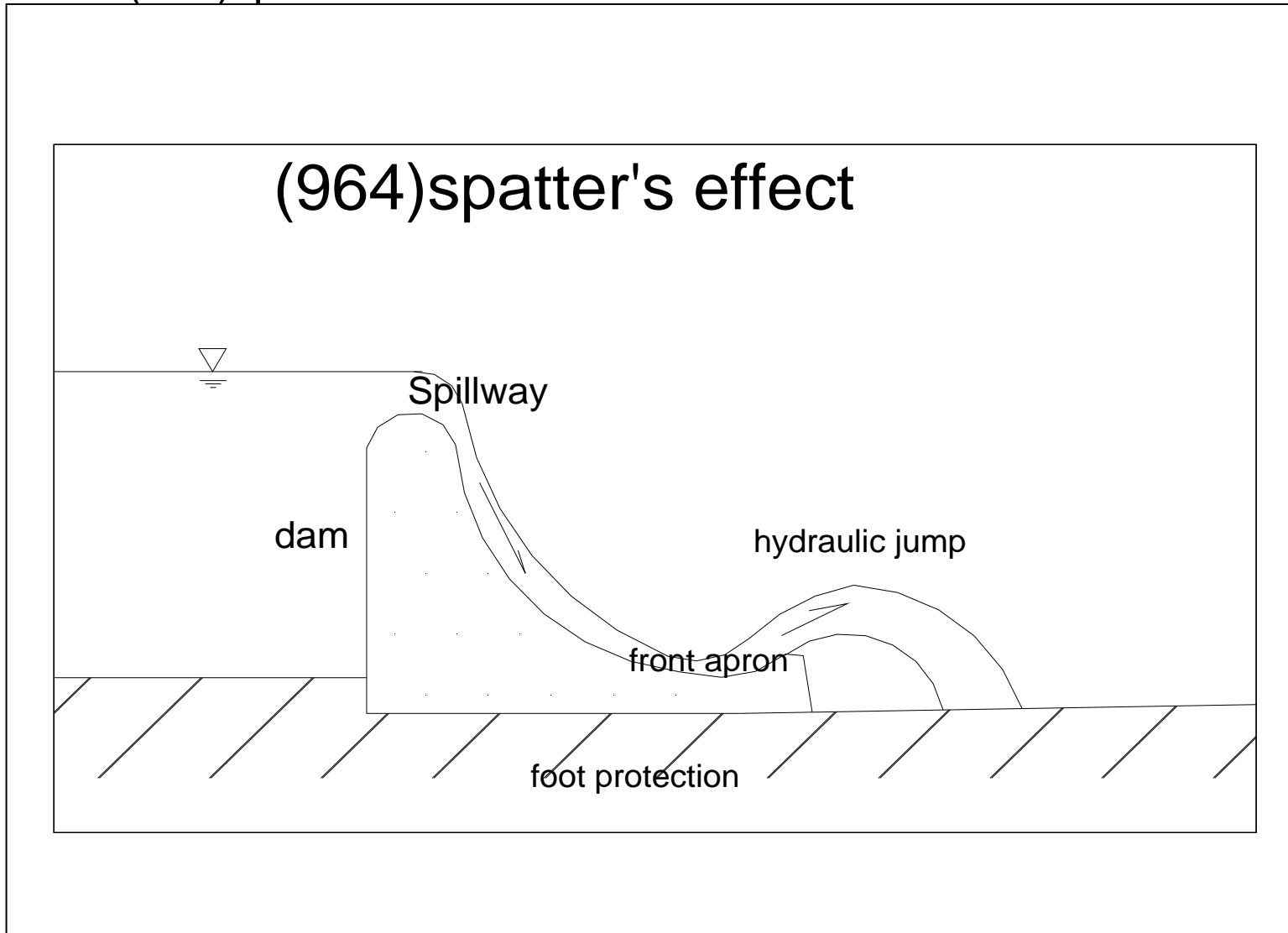
(963)hydraulic filling method

(963)hydraulic filling method

sand compaction pile
ground improvement
replacement method

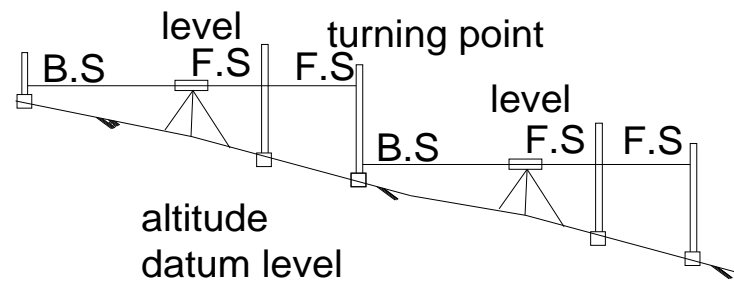


(964)spatter's effect



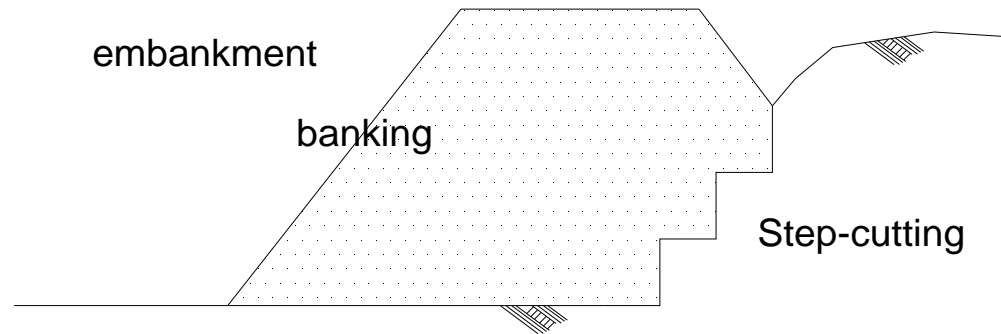
(965)turning point

(965)turning point

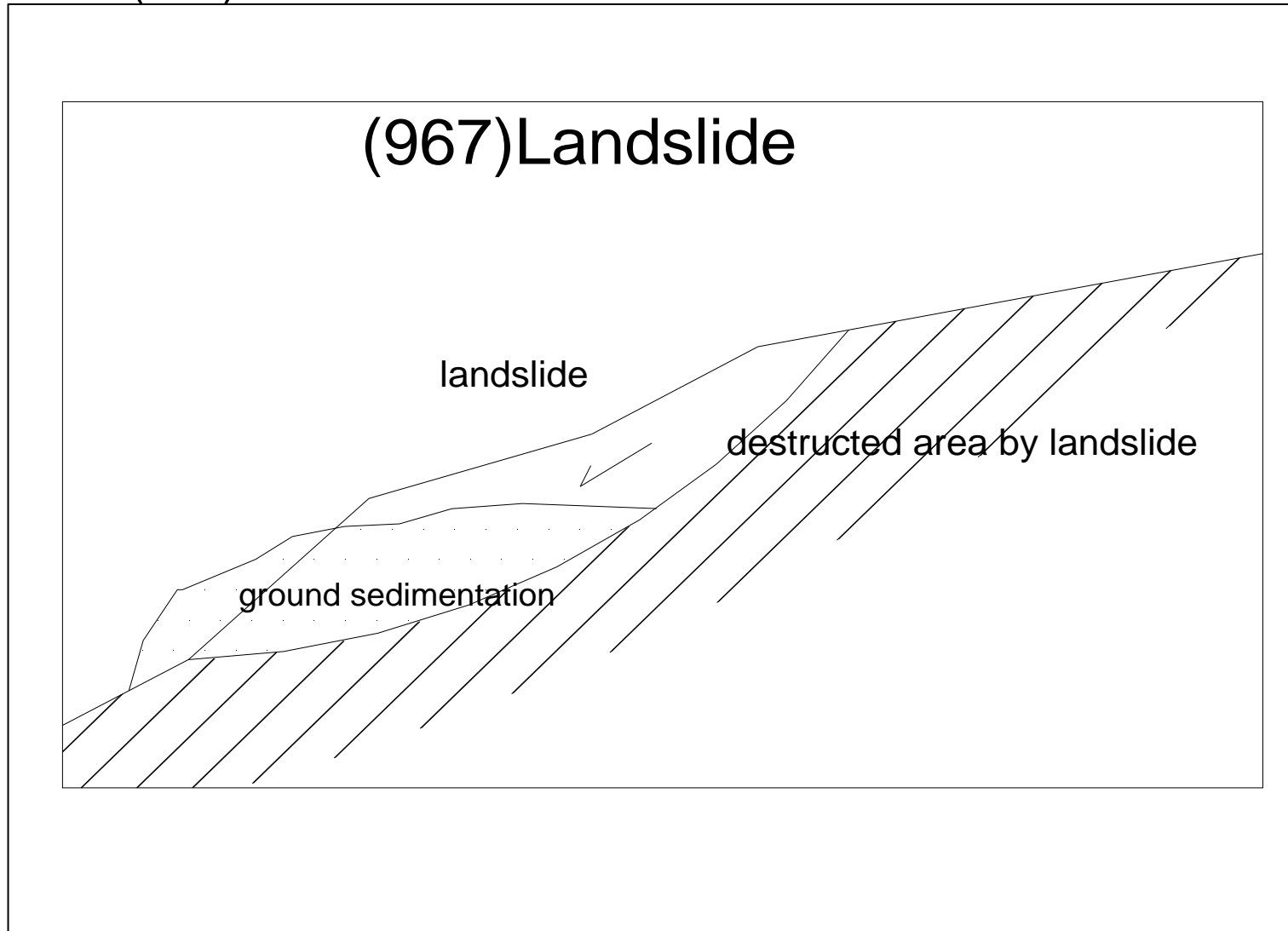


(966)banking

(966)banking

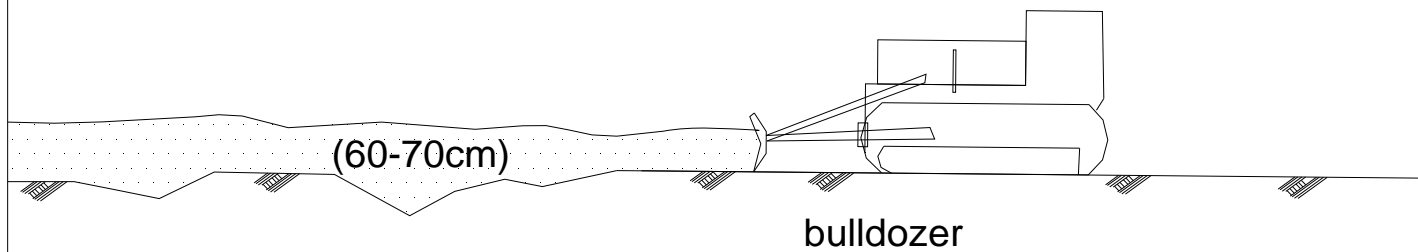


(967)Landslide



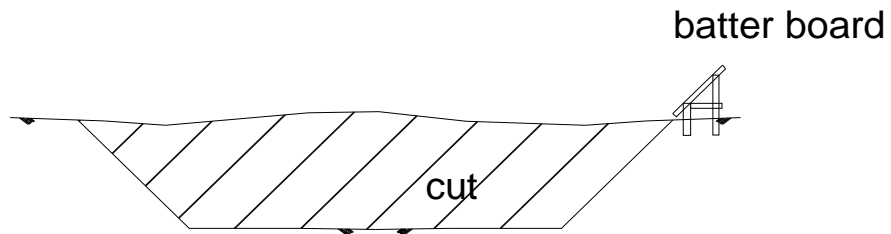
(968)land reclamation in natural slope

(968)land reclamation in natural slope

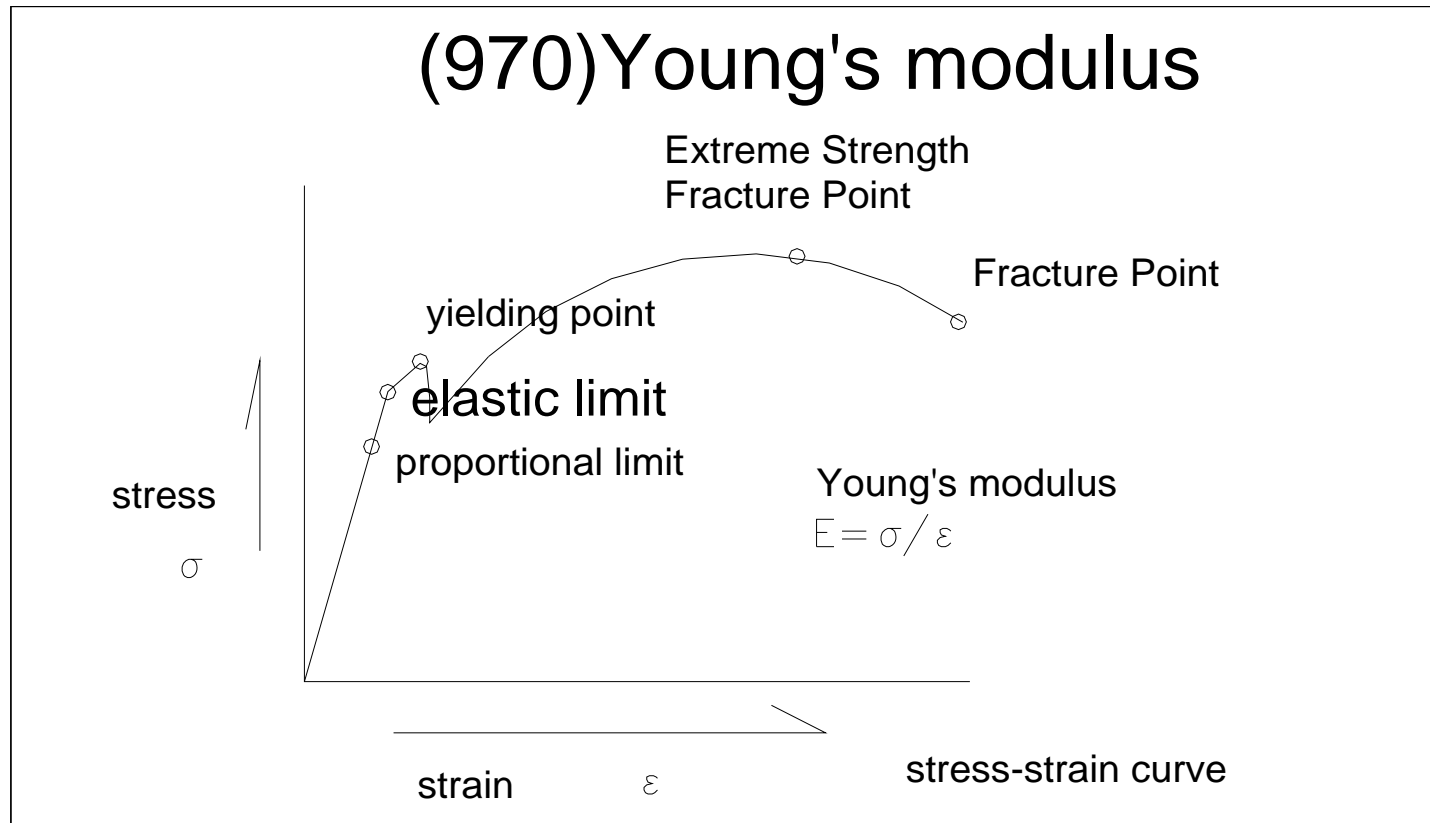


(969)batter board

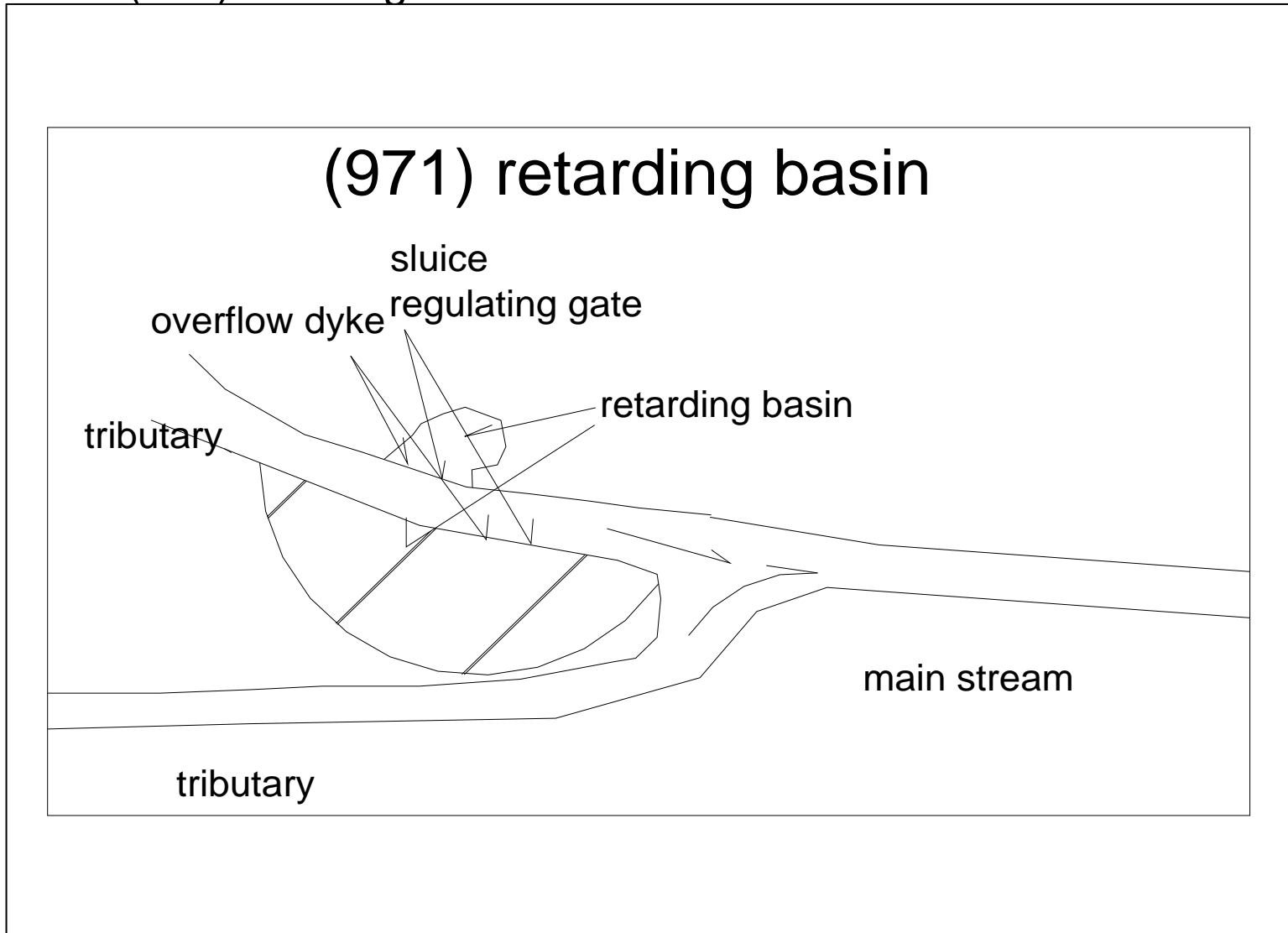
(969)batter board



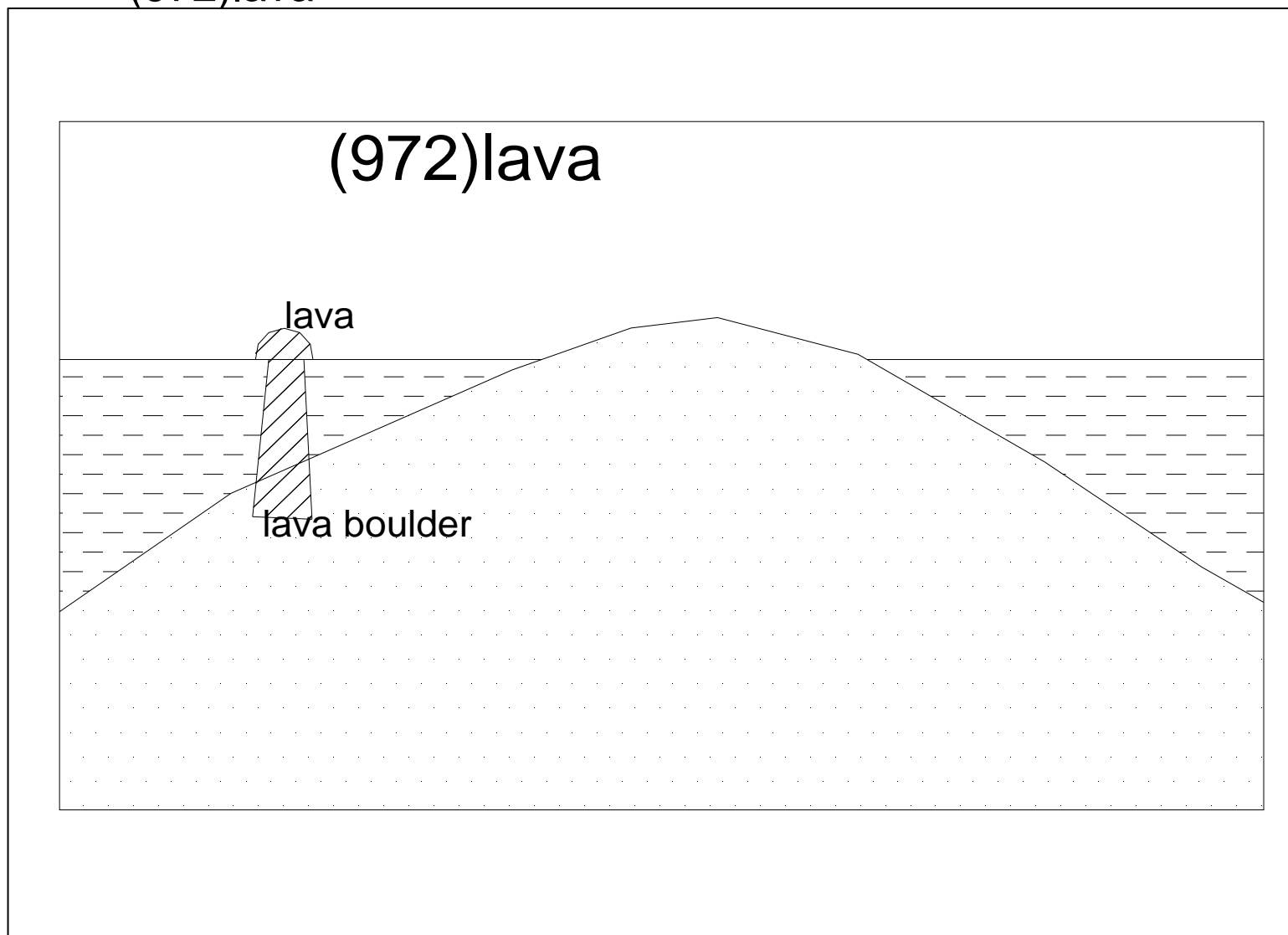
(970) Young's modulus



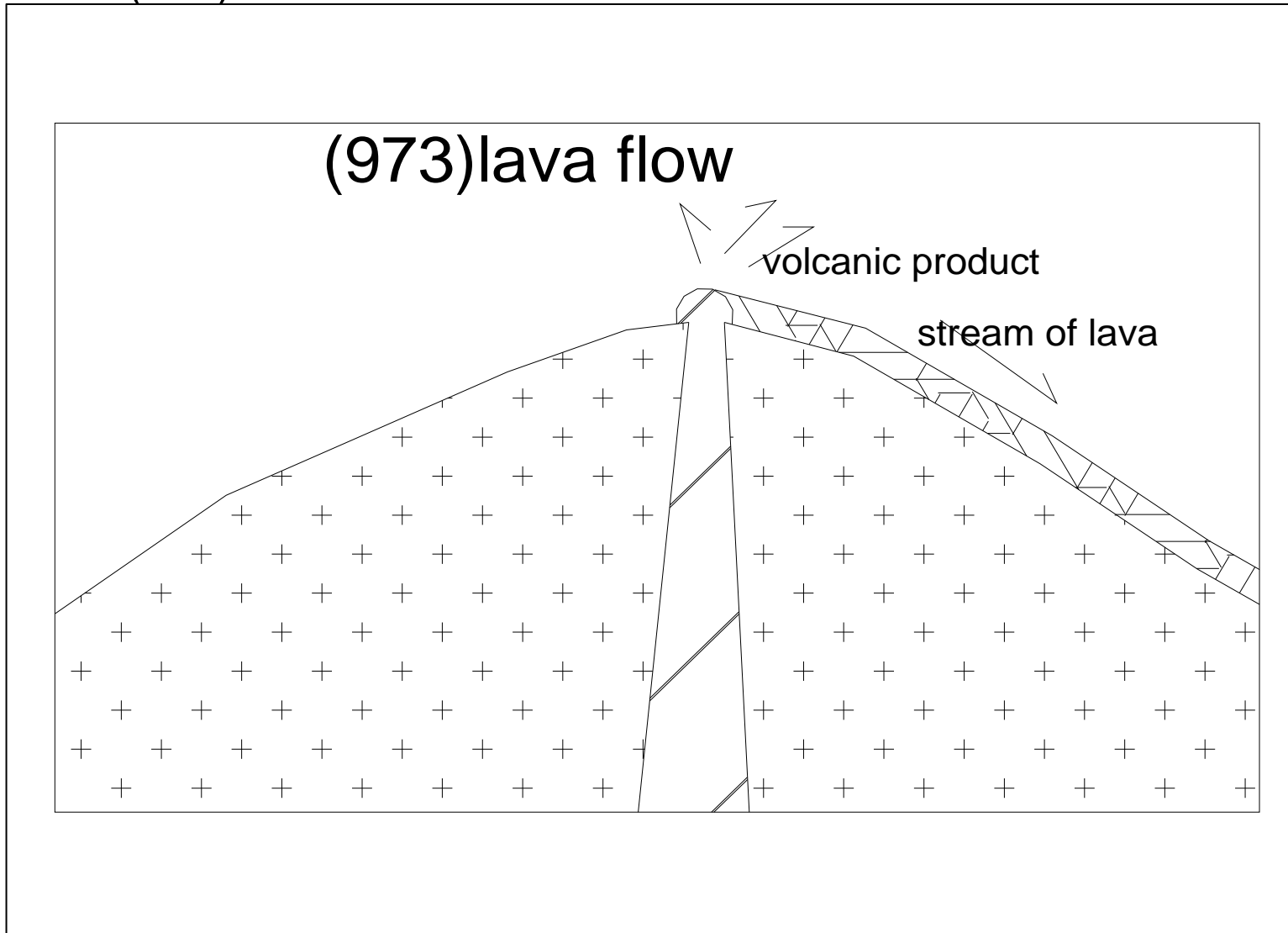
(971)retarding basin



(972)lava

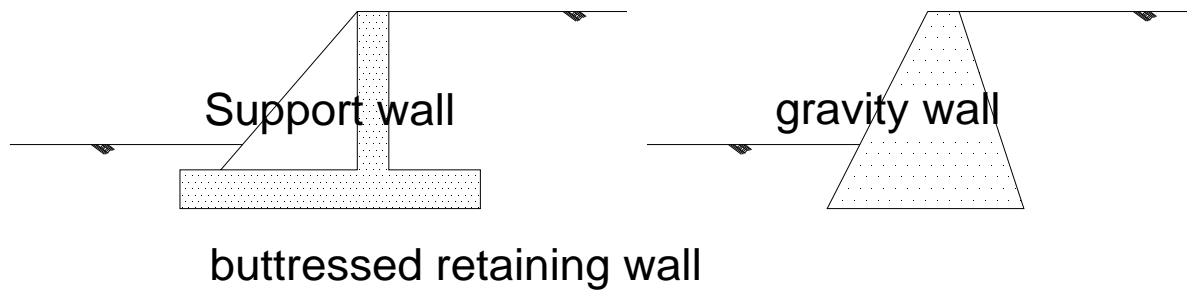


(973)lava flow



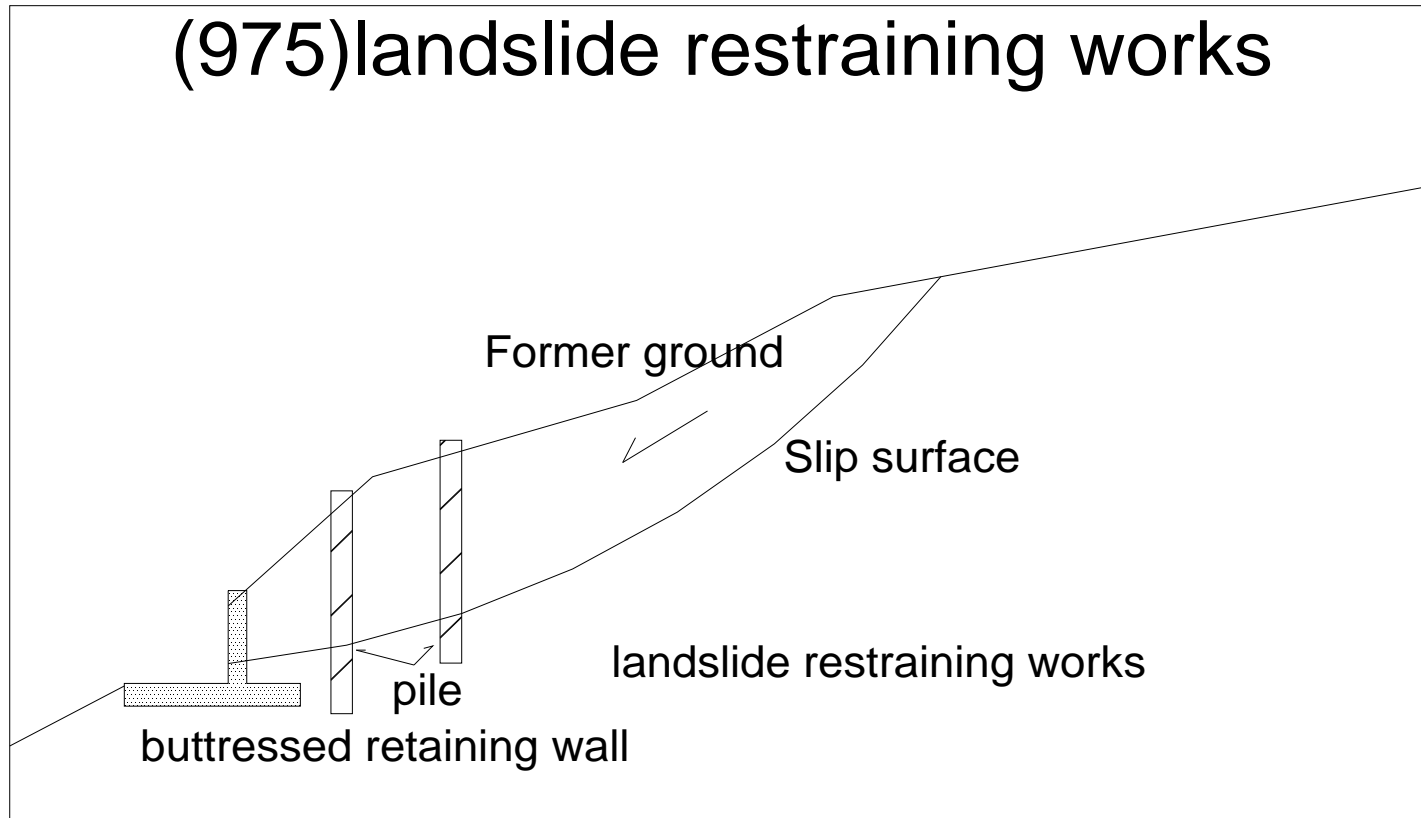
(974)retaining wall

(974)retaining wall



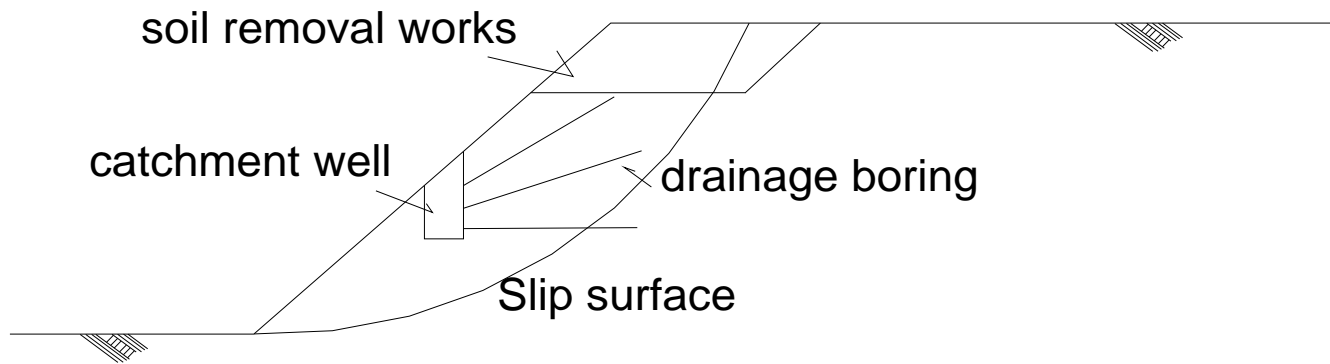
(975) landslide restraining works

(975) landslide restraining works

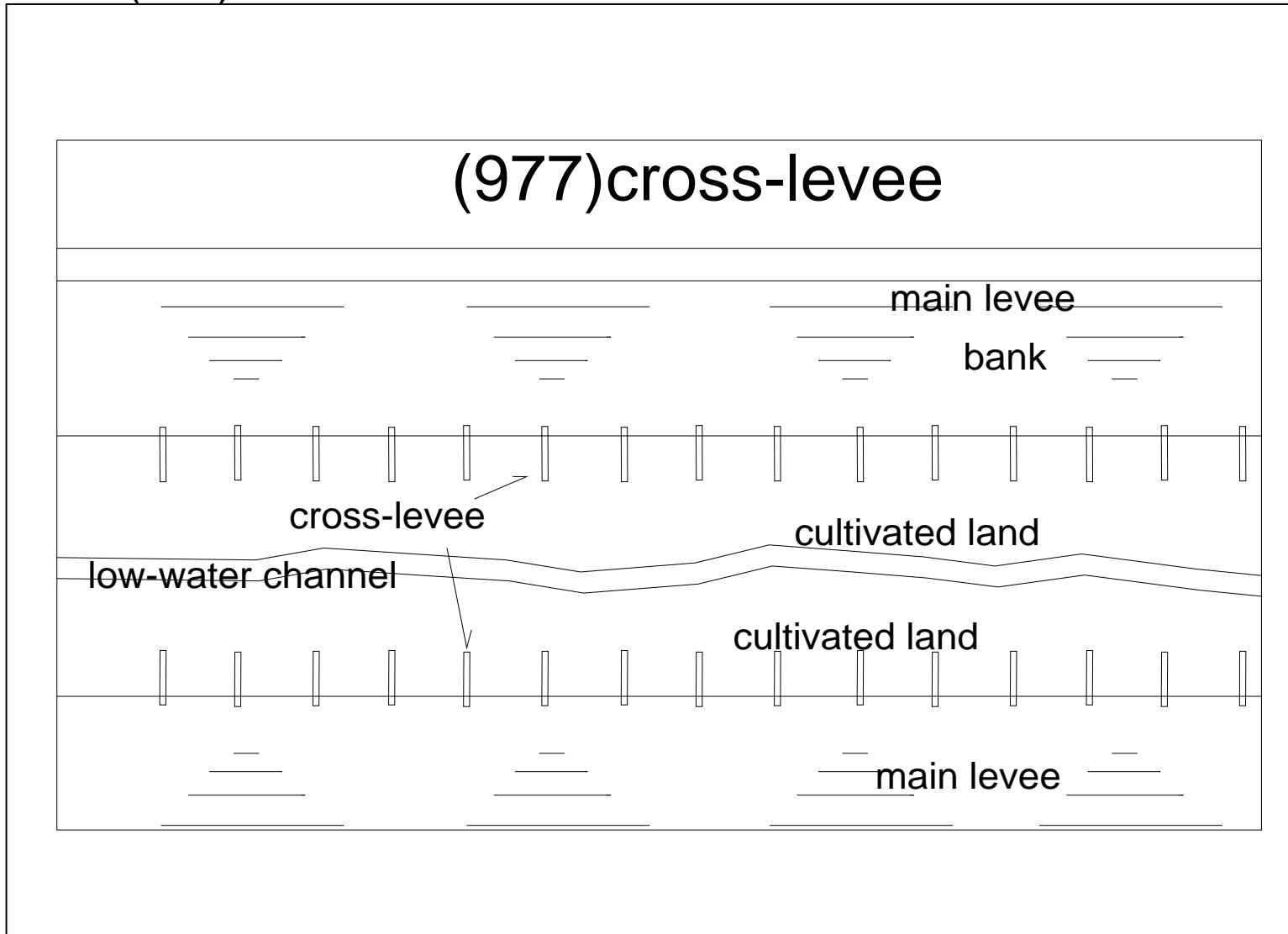


(976)landslide control works

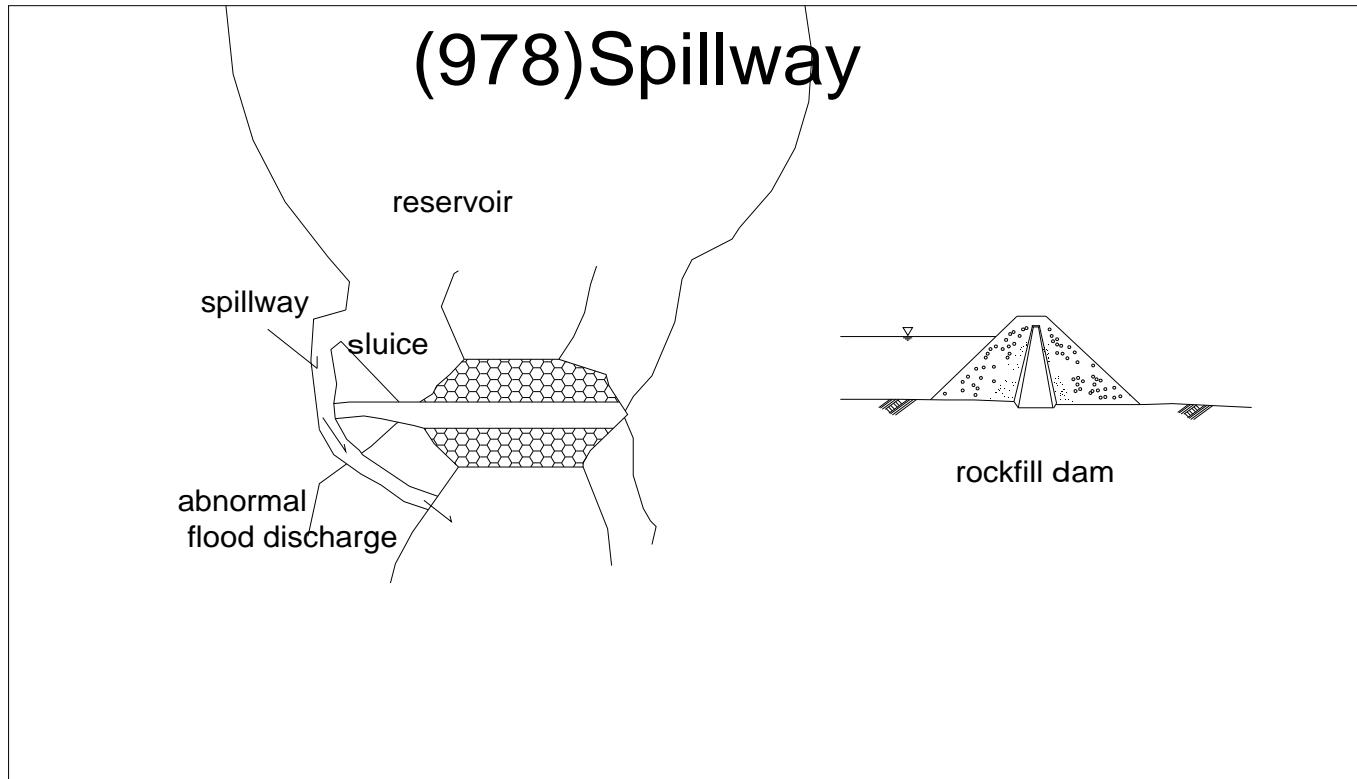
(976)landslide control works



(977)cross-leeve

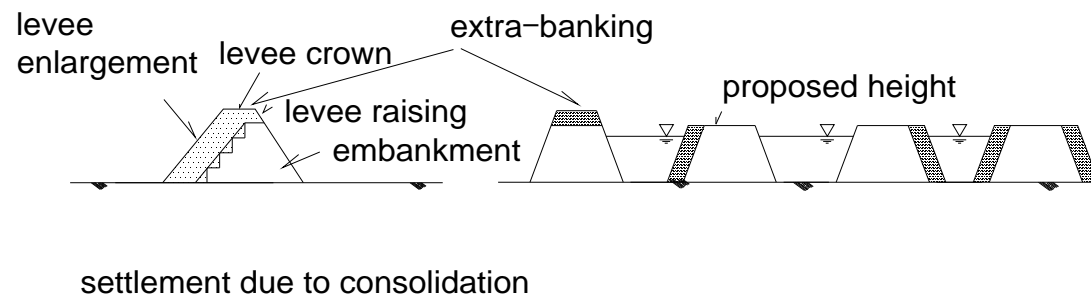


(978)Spillway



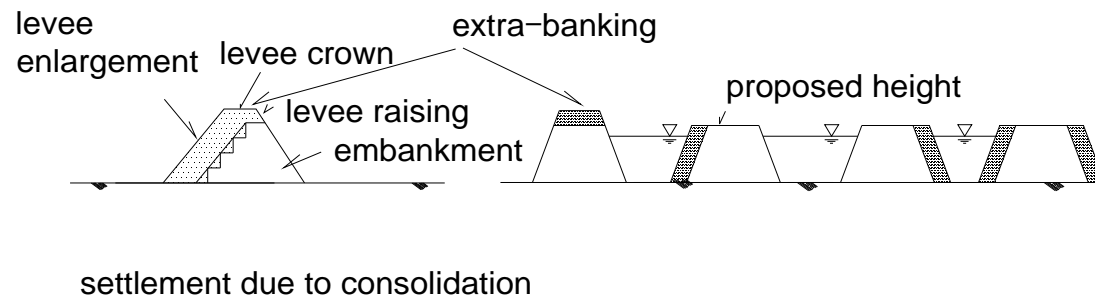
(979)extra-banking

(979)extra-banking

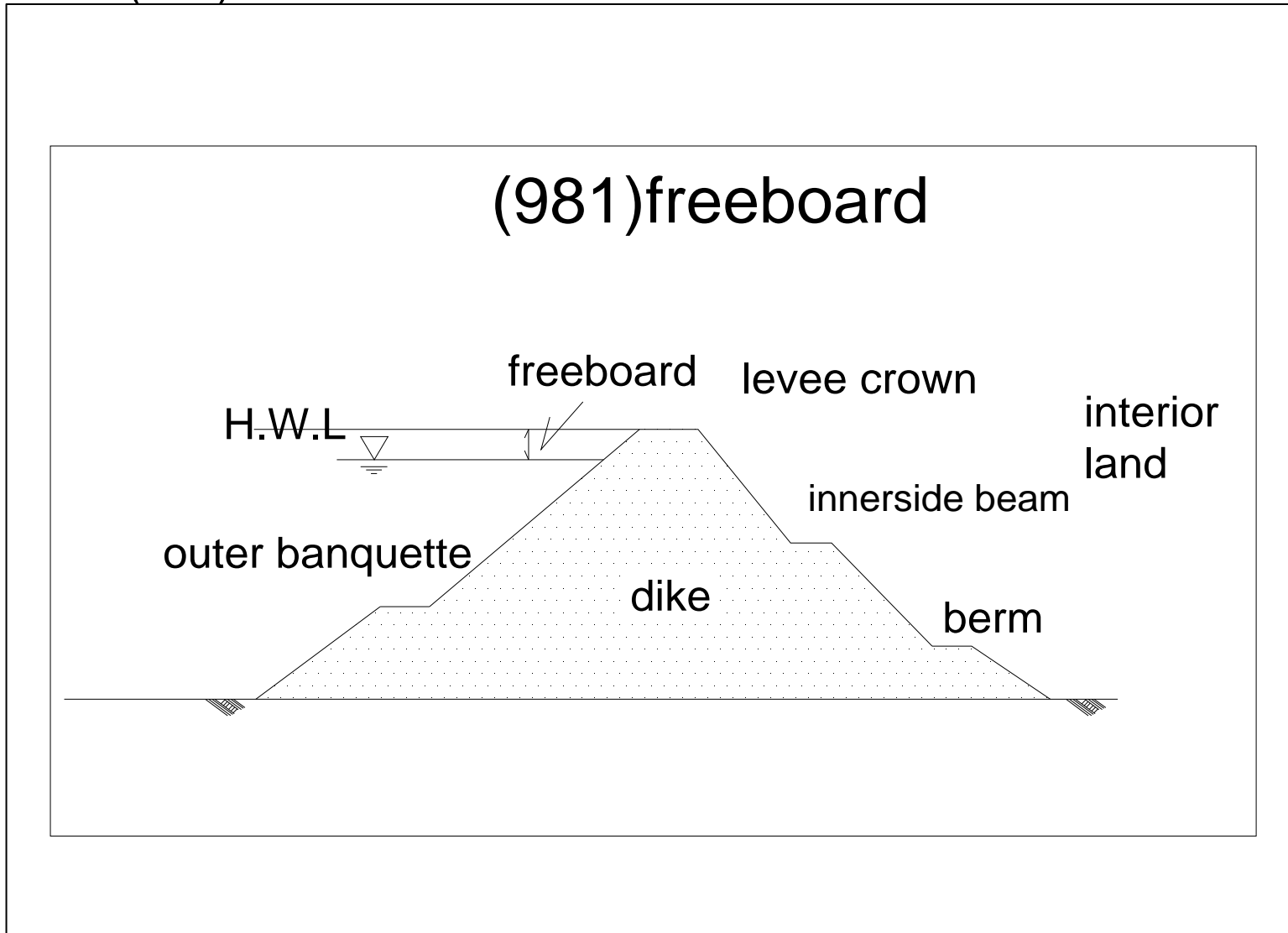


(980)extra-banking

(980)extra-banking

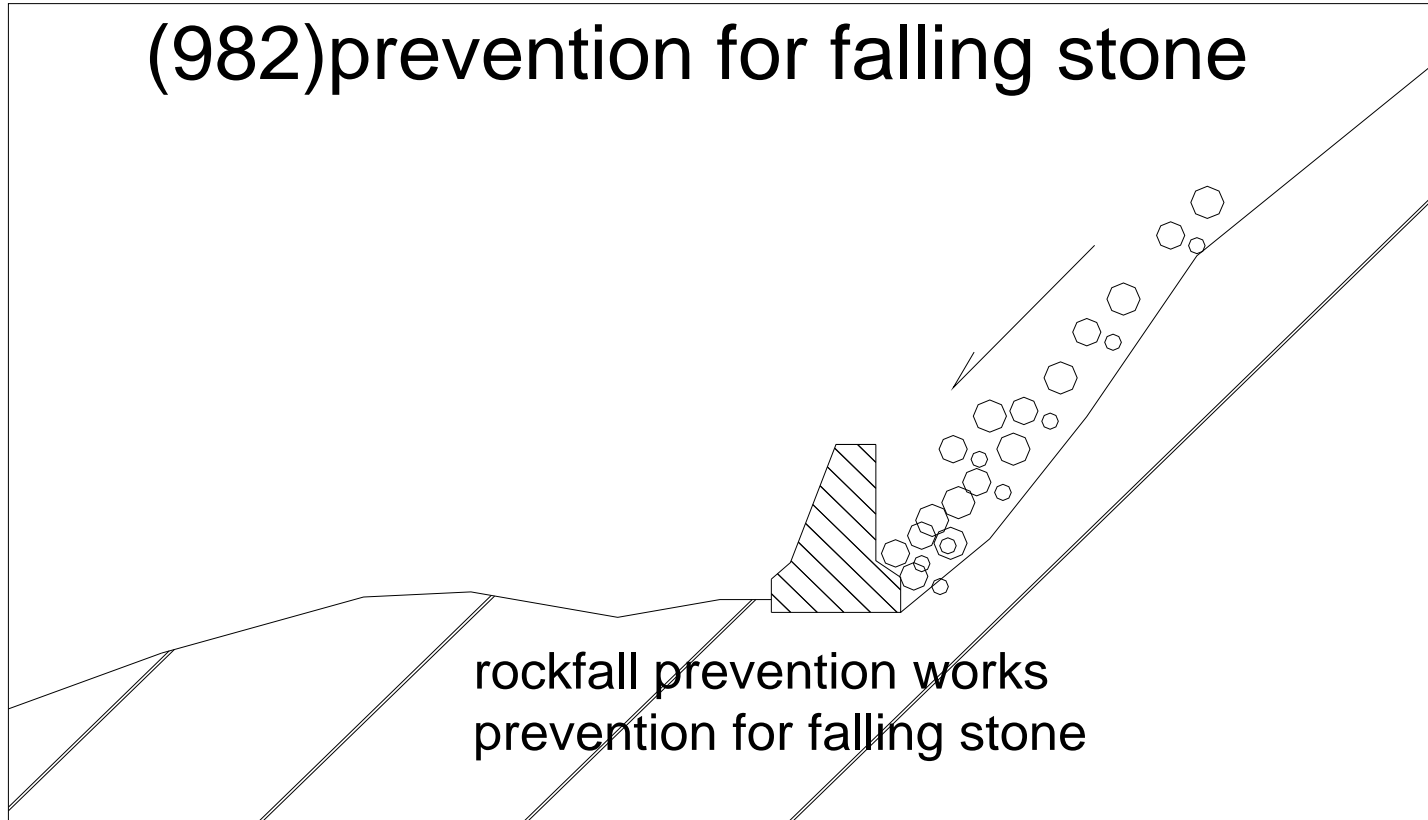


(981)freeboard



(982)prevention for falling stone

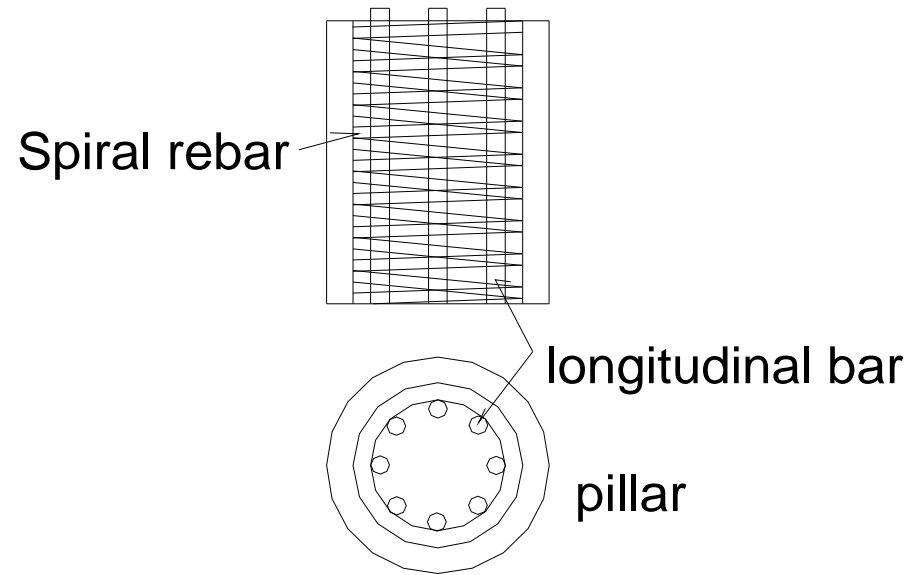
(982)prevention for falling stone



rockfall prevention works
prevention for falling stone

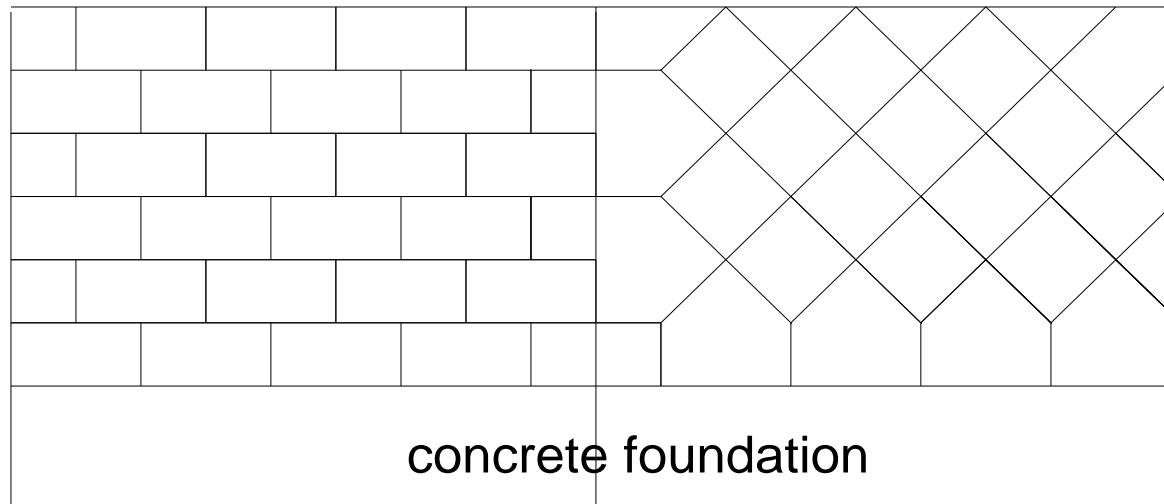
(983)spiral rebar axial rebar column

(983)spiral rebar axial rebar column



(984)random masonry

(984)random masonry

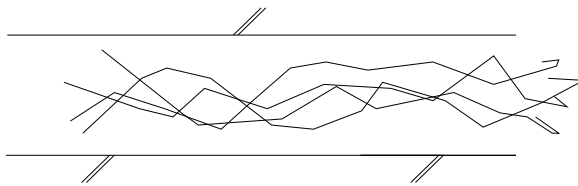


coursed masonry

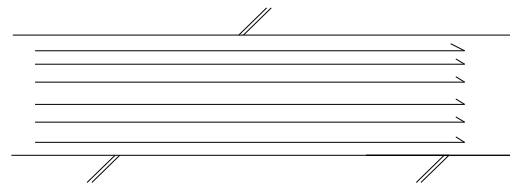
random masonry

(985)Laminar flow

(985)Laminar flow



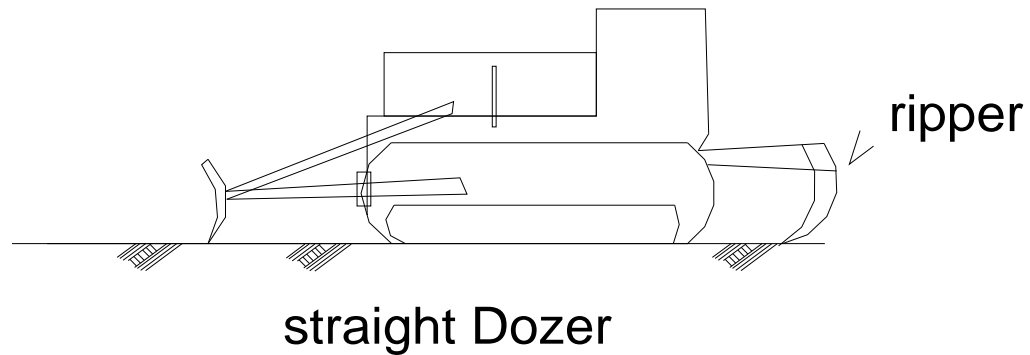
turbulent flow



Laminar flow

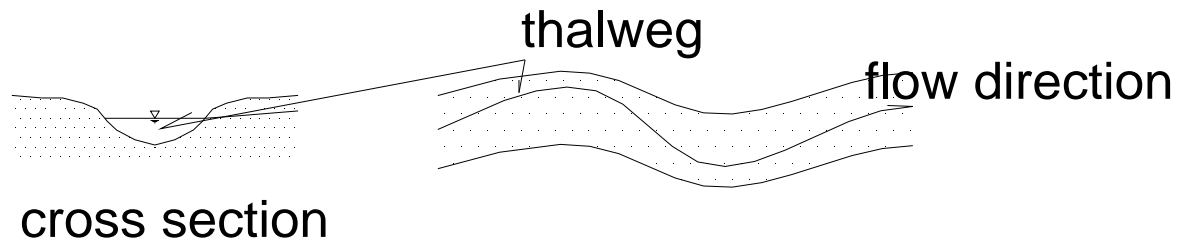
(986)ripper (bulldozer)(crawler type+ripper)

(986)ripper (bulldozer)
(crawler type+ripper)



(987)thalweg

(987)thalweg



cross section

the deepest part of the river

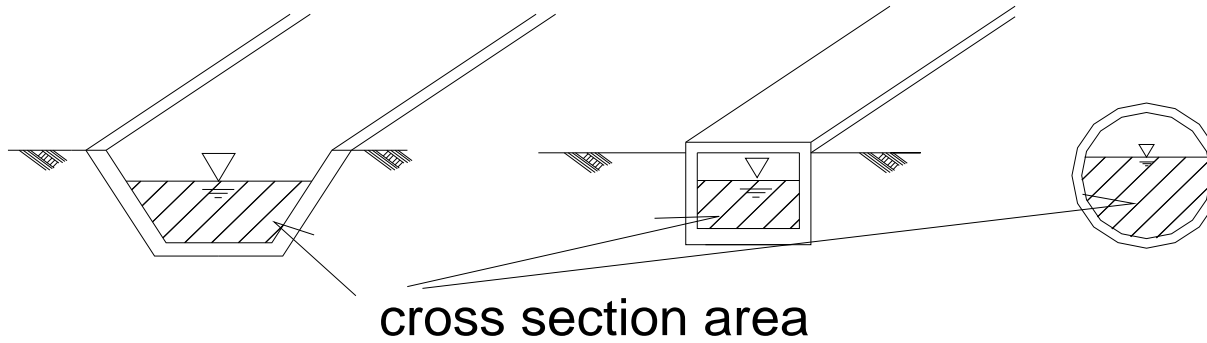
(988) cross section area

(988) cross section area

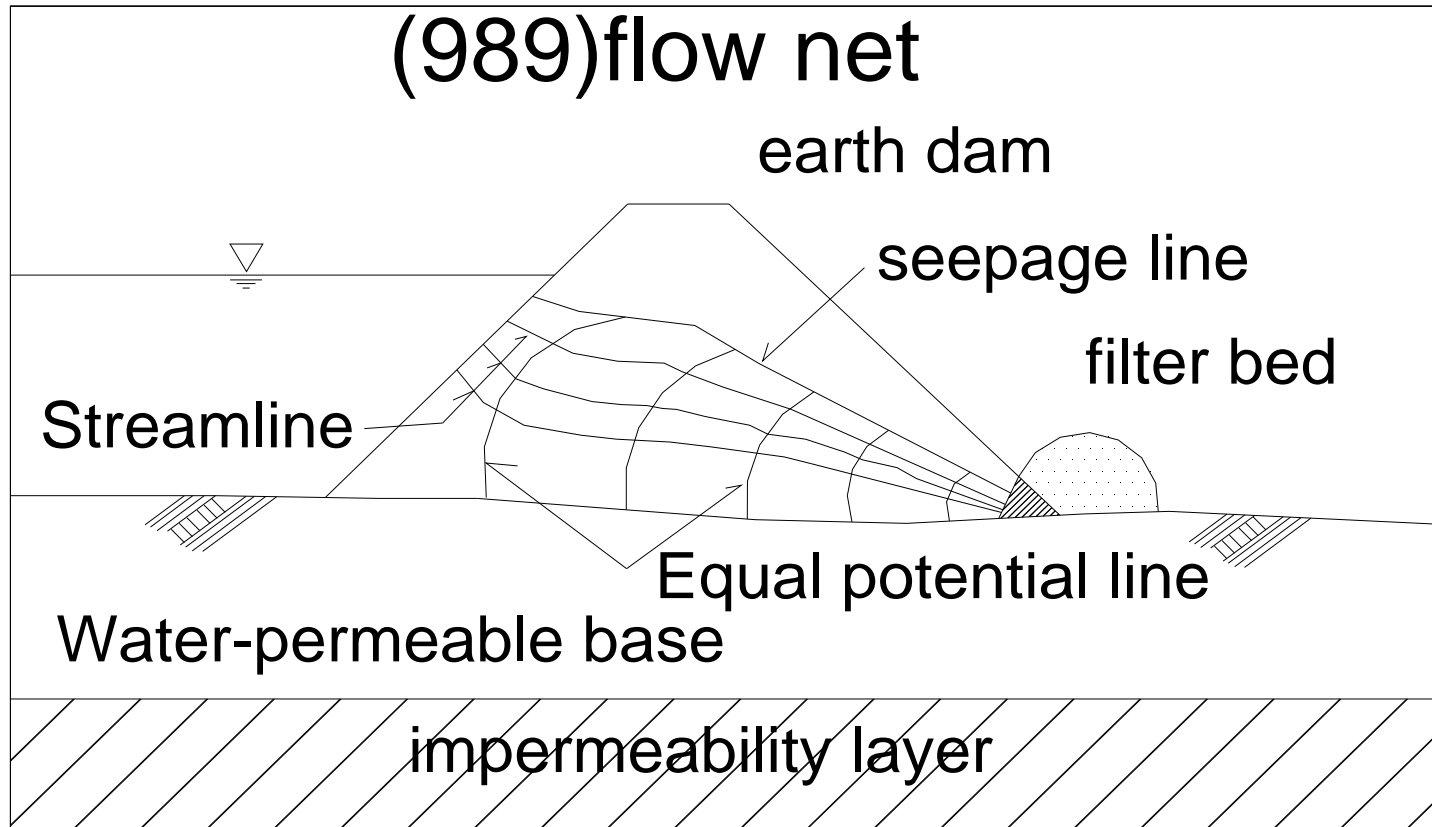
open channel

culvert

pipeline

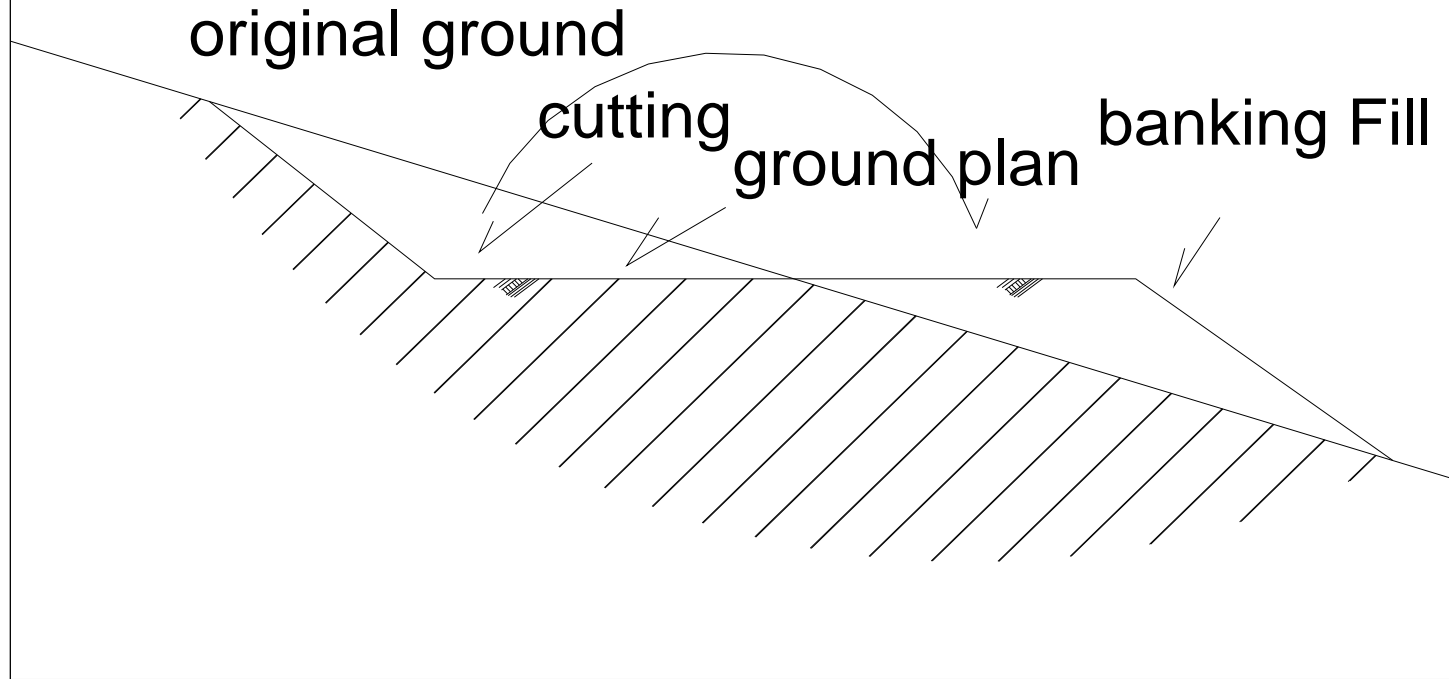


(989)flow net



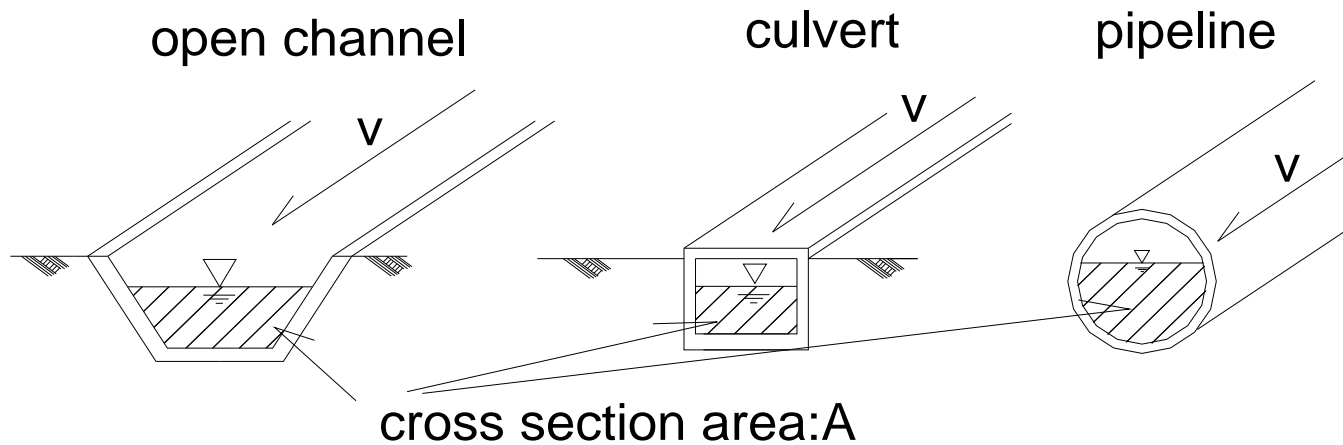
(990)diversion filling

(990)diversion filling



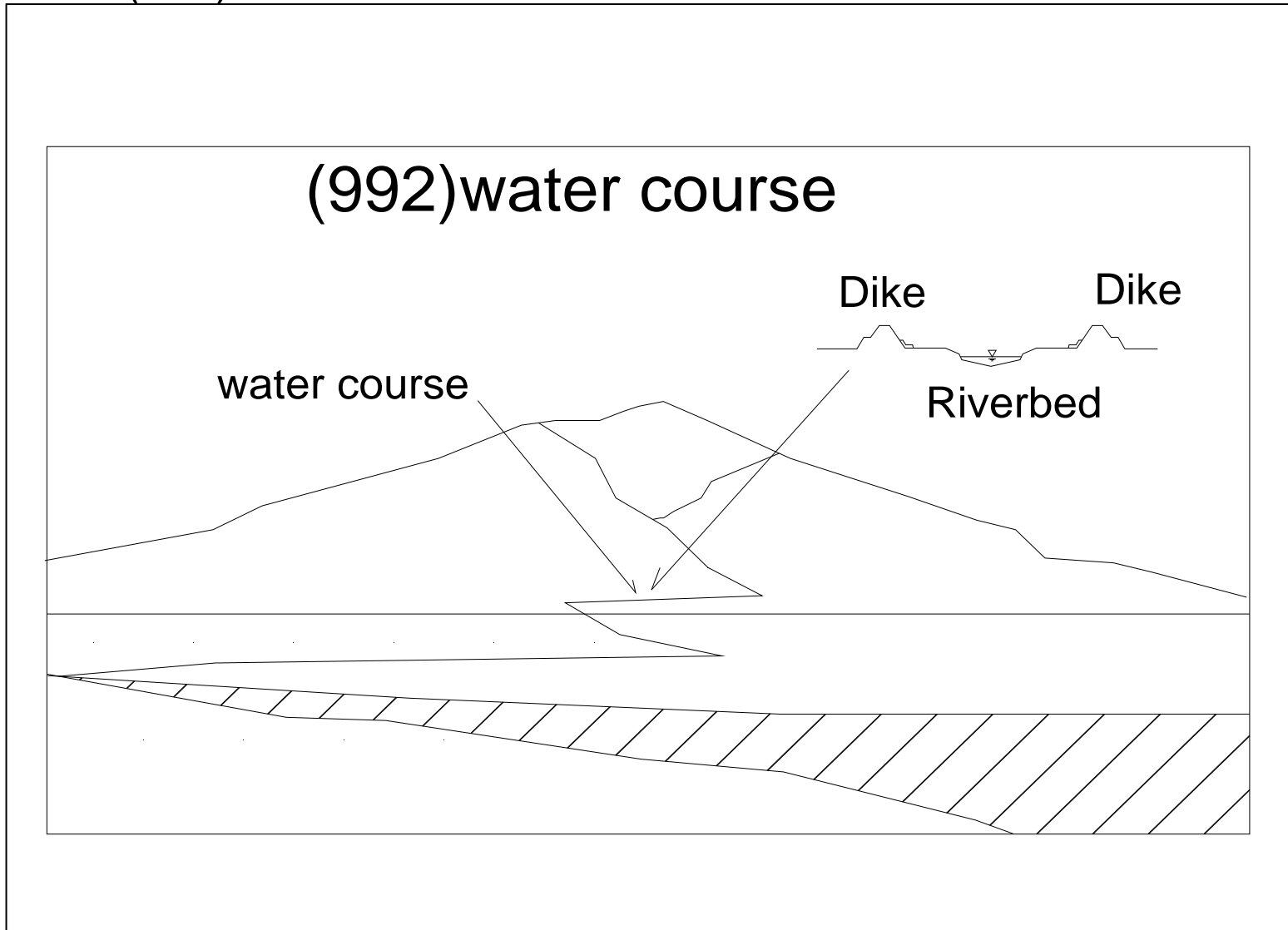
(991) discharge

(991) discharge



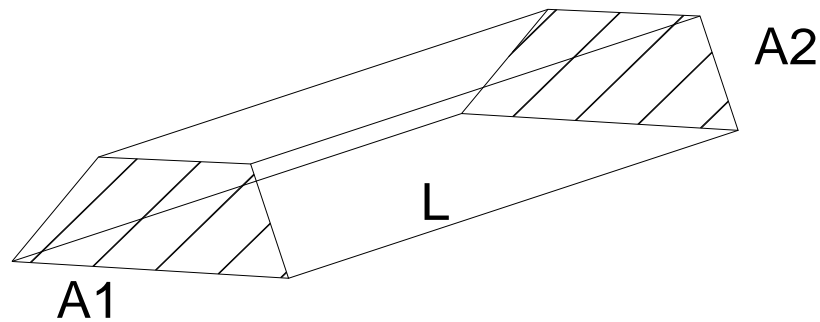
v :velocity A :cross section area Q :discharge
 $Q=v*A$

(992)water course



(993)cross section calculation area-average method

(993)cross section calculation
area-average method



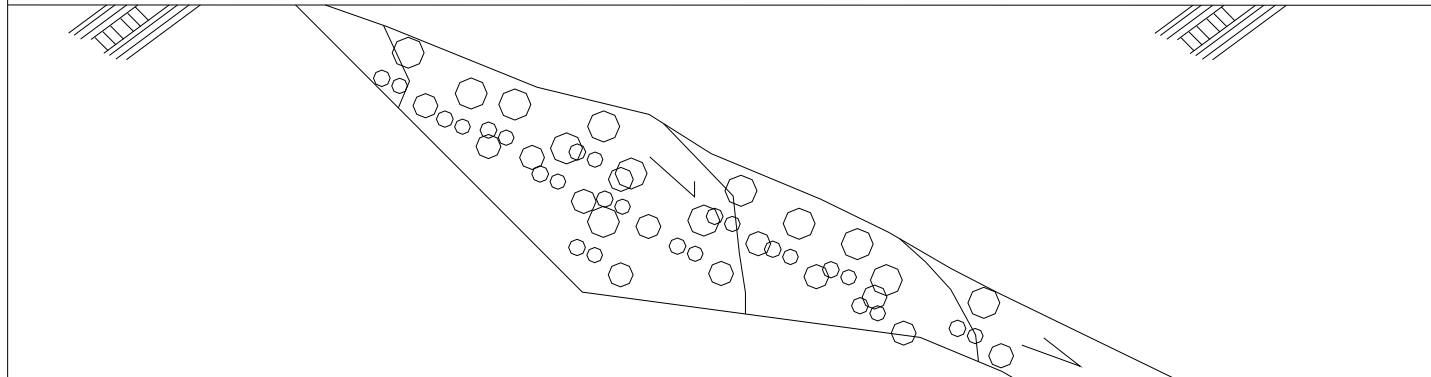
earth mass calculation

$$V = \frac{1}{2}(A1 + A2)L$$

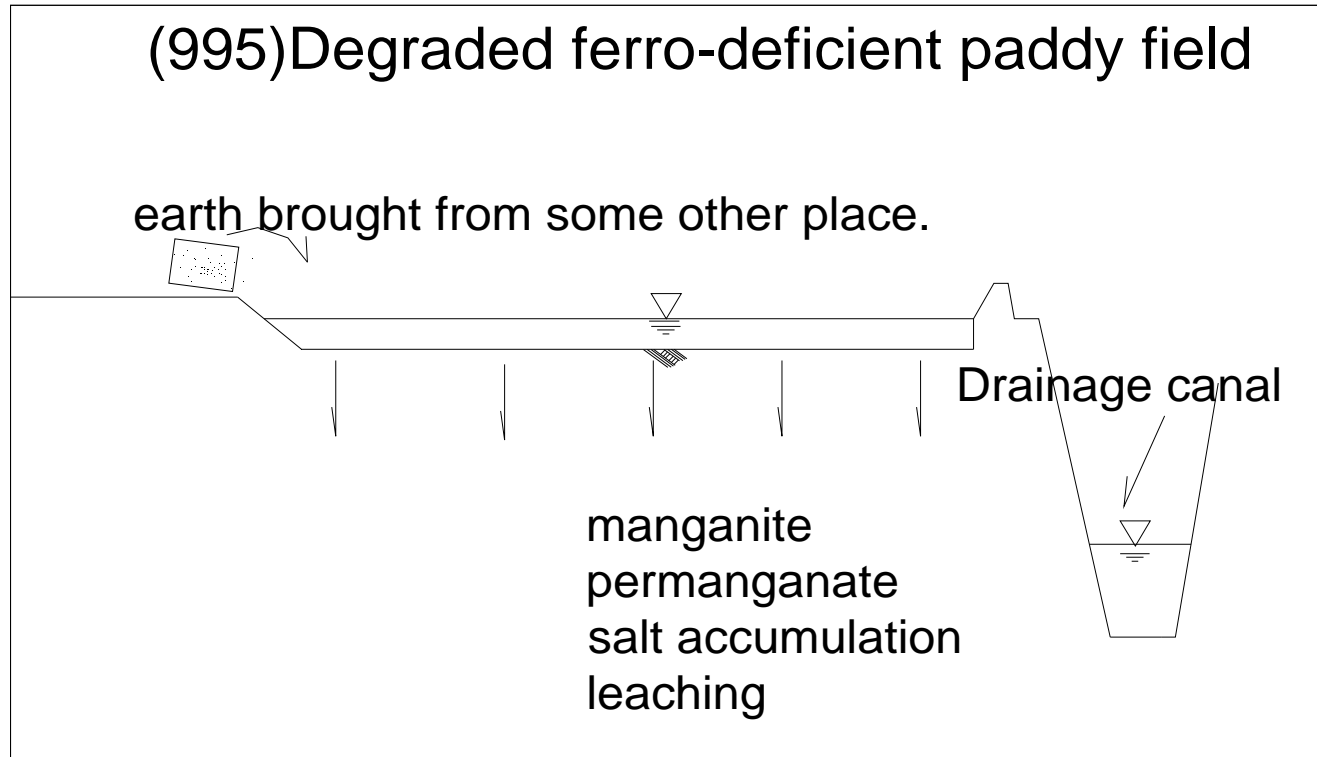
(994)rill erosion

(994)rill erosion

gully erosion
rill erosion
narrow depression
sheet erosion
valley
U-shaped valley

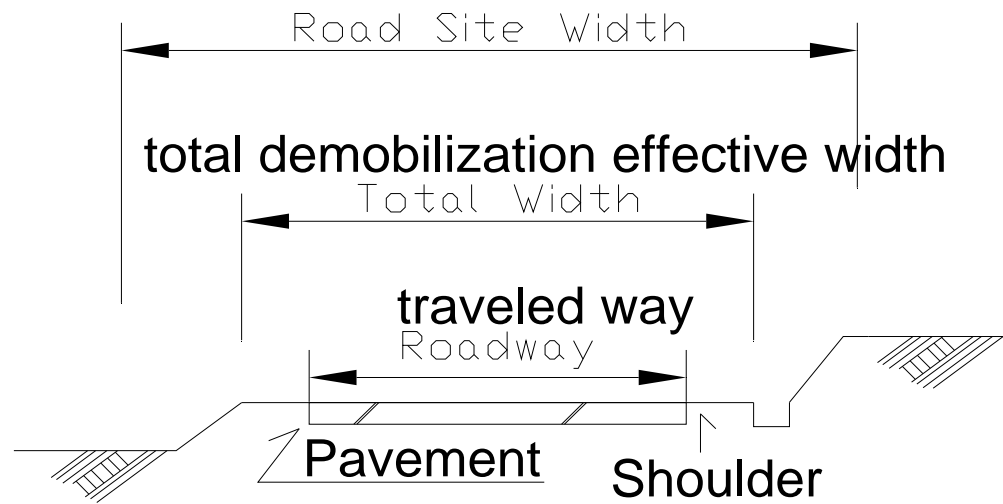


(995) Degraded ferro-deficient paddy field



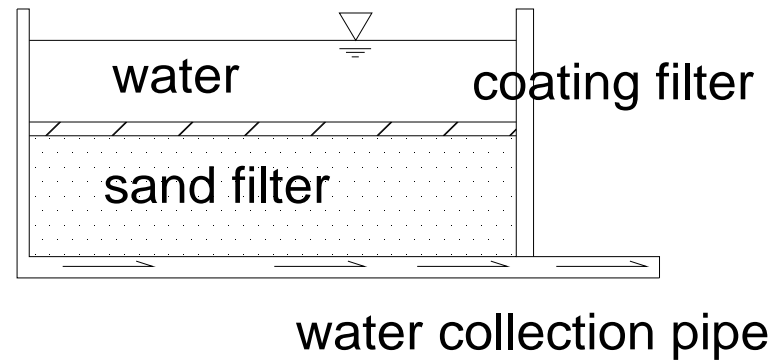
(996)road shoulder

(996)road shoulder



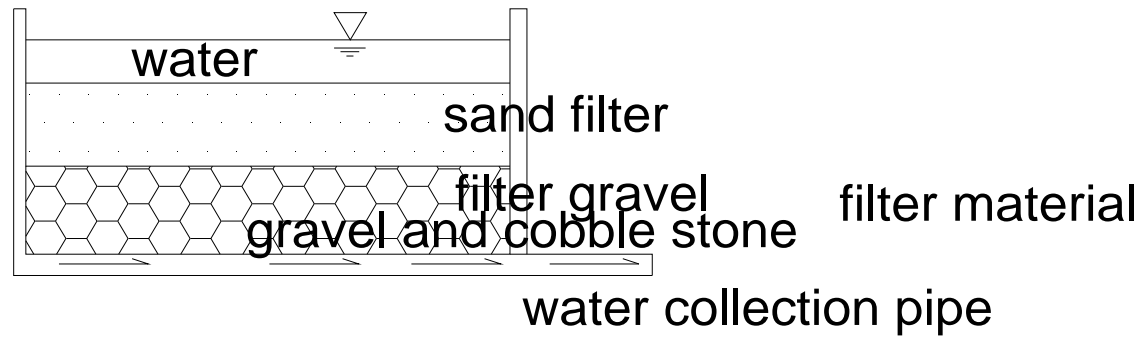
(997)filter film

(997)filter film

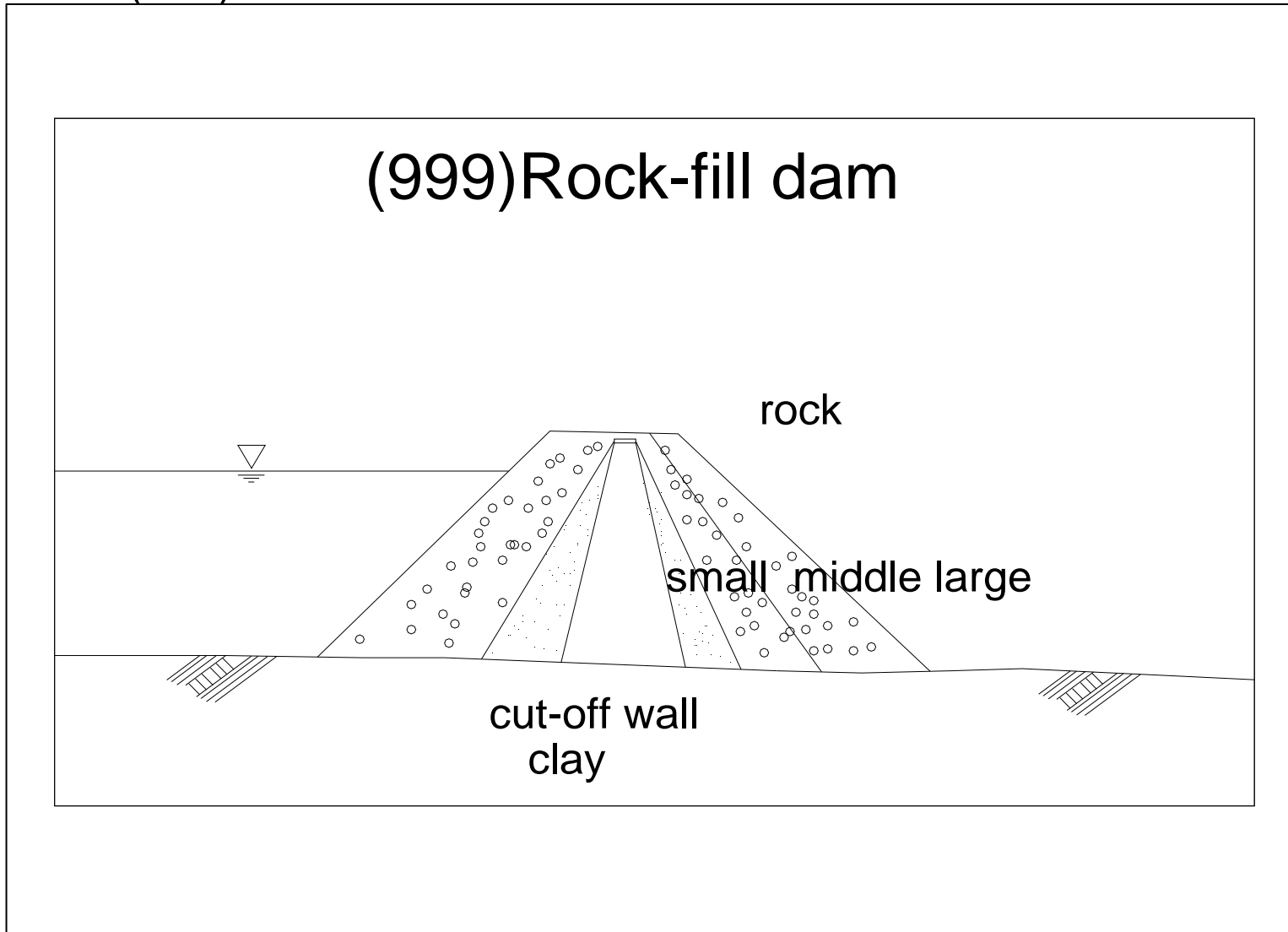


(998)filter material

(998)filter material



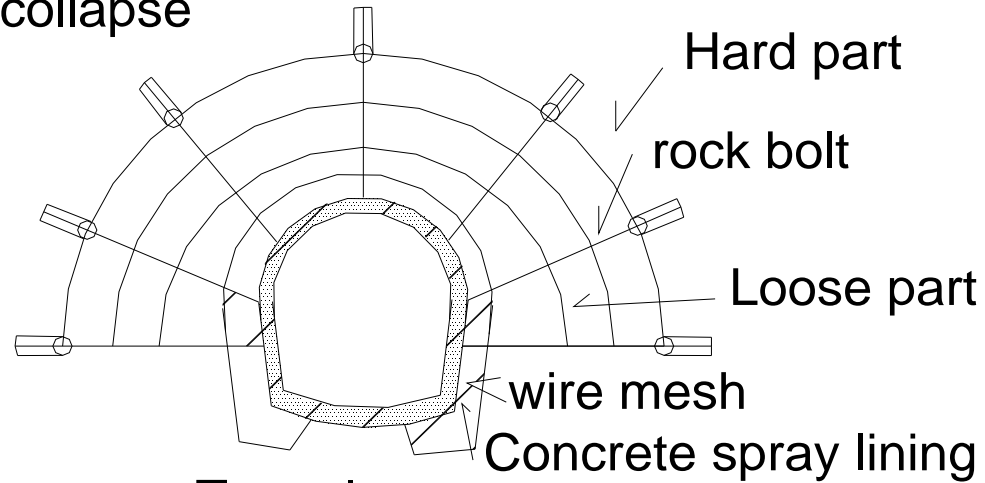
(999)Rock-fill dam



(1000)rock bolt

(1000)rock bolt

Prevention of collapse



Tunnel

New Austrian Tunneling Method
NATM

(1)	(1) Agricultural Civil Engineering Words (Illustration) in Afri Title	
(2)	(2) cut trees	Forest
(3)	(3) water→dirty	Environment
(4)	(4) no drinking water	Environment
(5)	(5) water→pollution	Environment
(6)	(6) water→pollution	Environment
(7)	(7) cut tree	Forest
(8)	(8) cut tree	Forest
(9)	(9) cut tree	Forest
(10)	(10) cut tree	Forest
(11)	(11) cut tree	Forest
(12)	(12) cut tree	Forest
(13)	(13) plant tree	Forest
(14)	(14) plant tree	Forest
(15)	(15) desertification !	Forest
(16)	(16) desertification	Forest
(17)	(17) cut tree	Forest
(18)	(18) damage from salt	Agriculture
(19)	(19) water shortage	Agriculture
(20)	(20) soil erosion	Soil
(21)	(21) want of food	Agriculture
(22)	(22) temperature rising	Agriculture
(23)	(23) river reclamation	River
(24)	(24) soil outflow	Irrigation
(25)	(25) pasturage prohibition	Environment
(26)	(26) compost	Agriculture
(27)	(27) organic fertilizer	Agriculture
(28)	(28) chemistry fertilizer	Agriculture
(29)	(29) natural forest	Forest
(30)	(30) artificial forest	Forest
(31)	(31) satoyama	Forest
(32)	(32) forest	Forest
(33)	(33) no trees	Forest
(34)	(34) green dam	Forest
(35)	(35) reservoir	Irrigation
(36)	(36) rotate crops	Irrigation
(37)	(37) slash-and-burn agriculture	Agriculture
(38)	(38) weak the earth	Environment
(39)	(39) creature in the earth	Environment
(40)	(40) Forest	Forest
(41)	(41) Forest	Forest
(42)	(42) Forest and River	Forest
(43)	(43) Well	Well
(44)	(44) Channel	Irrigation
(45)	(45) Reservoir	Irrigation
(46)	(46) Well	Well
(47)	(47) Fishpass	River
(48)	(48) Fishpass	River
(49)	(49) Forest and Fish	Forest
(50)	(50) Forest and People	Forest
(51)	(51) Underground Water	Hydraulic
(52)	(52) Weed-Fertilizer	Agriculture
(53)	(53) Straw-Compost	Agriculture
(54)	(54) Leaf Mold	Agriculture

(55)	(55) Leaf Mold	Agriculture
(56)	(56) Garbage Compost	Agriculture
(57)	(57) Garbage Compost	Agriculture
(58)	(58) Garbage, Weed -Compost	Agriculture
(59)	(59) Garbage Liquid Fertilizer	Agriculture
(60)	(60) Vegetation Ash	Agriculture
(61)	(61) Graft	Forest
(62)	(62) Organic Fertilizer(1) Natural	Agriculture
(63)	(63) Organic Fertilizer(2) Natural	Agriculture
(64)	(64) Organic Fertilizer(3) Natural	Agriculture
(65)	(65) Organic Fertilizer(4) Natural	Agriculture
(66)	(66) Organic Fertilizer(5) Natural	Agriculture
(67)	(67) Fertilizer Ingredient	Agriculture
(68)	(68) Fertilizer Ingredient	Agriculture
(69)	(69) Organic Farming Compost	Agriculture
(70)	(70) River Irrigation(Egypt)1	Irrigation
(71)	(71) River Irrigation(Egypt)2	Irrigation
(72)	(72) Terraced Field	Agriculture
(73)	(73) Reservoir	Irrigation
(74)	(74) Underground Dam	Dam
(75)	(75) Peat Bog	Topography
(76)	(76) Hoe	Agriculture
(77)	(77) Plow	Agriculture
(78)	(78) Sickle	Agriculture
(79)	(79) Threshing 1	Agriculture
(80)	(80) Threshing 2	Agriculture
(81)	(81) Plow	Agriculture
(82)	(82) Waterwheel	Agriculture
(83)	(83) Irrigation Canal and Channel	Irrigation
(84)	(84) Qanat (Iran)	Irrigation
(85)	(85) River Irrigation(Mesopotamia)1	Irrigation
(86)	(86) River Irrigation(Mesopotamia)2	Irrigation
(87)	(87) Water Level Meter(Nile Meter)	Irrigation
(88)	(88) Terrace Agriculture (Indus)	Irrigation
(89)	(89) Reservoir(Africa)	Irrigation
(90)	(90) Satoyama(Japan)	Forest
(91)	(91) Satoyama(Japan)	Forest
(92)	(92) Many Trees	Forest
(93)	(93) No Tree	Forest
(94)	(94) Earth Auger	Construction machinery
(95)	(95) Earth Dam:Fill-type Dam	Dam
(96)	(96) Earth Drill	Earth work
(97)	(97) Arch	Bridge
(98)	(98) Arch Dam	Dam
(99)	(99) Shallow Foundation	Foundation
(100)	(100) Cutoff Wall 1	Irrigation
(101)	(101) Cutoff Wall 2	Irrigation
(102)	(102) Cutoff Wall 3	Irrigation
(103)	(103) Water Stop 1	Hydraulic
(104)	(104) Land Slide	Topography
(105)	(105) Compaction Curve	Soil
(106)	(106) Sodding	Earth work
(107)	(107) Shielding Zone	Dam
(108)	(108) Impermeable Flexible Sheet	Earth work

(109)	(109) Collecting Channel 1	Earth work
(110)	(110) Collecting Channel 2	Irrigation
(111)	(111) Collecting Drain 1	Irrigation
(112)	(112) Collecting Drain2	Irrigation
(113)	(113) Intercepting Drain :Catch Drain	Irrigation
(114)	(114) Surface Soil Paddling	Earth work
(115)	(115) Expansion Joint 1	Structure
(116)	(116) Expansion Joint 2	Structure
(117)	(117) Passable Ditch	Irrigation
(118)	(118) Water Level Gage	River
(119)	(119) Groin	River
(120)	(120) Drift Current	Coast
(121)	(121) Hydrologic Cycle	Environment
(122)	(122) Reinforced Concrete L Type Flume	Irrigation
(123)	(123) Farm Road with The Capacity of Water Way	Irrigation
(124)	(124) Riprap	Foundation
(125)	(125) Sliding Surface	Soil
(126)	(126) Corner Cutting	Road
(127)	(127) Slump Test	Concrete
(128)	(128) Slide Type Gate	Irrigation
(129)	(129) Sand Control Hedge	Environment
(130)	(130) Weir 1	Irrigation
(131)	(131) Weir 2	Irrigation
(132)	(132) Weir 3	Irrigation
(133)	(133) Weir 4	Irrigation
(134)	(134) Weir 5	Irrigation
(135)	(135) Shear Test	Soil
(136)	(136) Shear Test	Soil
(137)	(137) Triaxial Shear Test	Soil
(138)	(138) Vane Test	Soil
(139)	(139) Plane Alignment	Road
(140)	(140) Laminar Flow	Hydraulic
(141)	(141) Zoned Fill-type Dam	Dam
(142)	(142) Marginal Strip	Road
(143)	(143) Sounding Machine	Coast
(144)	(144) Foundation Earth Drilling Equipment	Foundation
(145)	(145) Manure Spreader	Agriculture
(146)	(146) Turnout	Earth work
(147)	(147) Plot-to-Plot Irrigation	Irrigation
(148)	(148) Shaft	Tunnel
(149)	(149) Stepping	Earth work
(150)	(150) Mole Drain	Irrigation
(151)	(151) Bench Terrace	Irrigation
(152)	(152) Groundwater Table	Hydraulic
(153)	(153) Underdrainage System	Irrigation
(154)	(154) Surface Irrigation(1)	Irrigation
(155)	(155) Surface Irrigation(2)	Irrigation
(156)	(156) Surface Irrigation(3)	Irrigation
(157)	(157) Surface Irrigation(4)	Irrigation
(158)	(158) Hollow Gravity Dam	Dam
(159)	(159) Replacement Method(1)	Irrigation
(160)	(160) Shinking Method:Trench Method	Tunnel
(161)	(161) Height of Dam 1	Dam
(162)	(162) Height of Dam 2	Dam

(163)	(163) Peat	Soil
(164)	(164) Sea (Levee:Dike:Embankment)	Coast
(165)	(165) River (Levee:Dike:Embankment)	River
(166)	(166) Alignment of Dike	River
(167)	(167) Reinforced Concrete Flume	Irrigation
(168)	(168) Reinforced Concrete Bench Flume	Irrigation
(169)	(169) Reinforced Concrete Built up Canal	Irrigation
(170)	(170) Terrace Channel	Irrigation
(171)	(171) Terrace Outlet Channel	Irrigation
(172)	(172) Earth Pressure	Soil
(173)	(173) Unified Soil Classification	Soil
(174)	(174) Isohyetal Method	Topography
(175)	(175) Heading:Drift	Tunnel
(176)	(176) Frost Heave	Soil
(177)	(177) Contour Farming	Topography
(178)	(178) Head Works	Irrigation
(179)	(179) Traversing Method	Survey
(180)	(180) Tamping by Wooden Rammer	Earth work
(181)	(181) Training Jetty	River
(182)	(182) Soil Stabilize Sheet	Earth work
(183)	(183) Right of Way	Road
(184)	(184) Road Width	Road
(185)	(185) Guide Wall:Training Wall	River
(186)	(186) Clay Pipe:Earthen Pipe	Irrigation
(187)	(187) Ground Sill	Earth work
(188)	(188) Sedimentation Tank	Irrigation
(189)	(189) Soil Structure	Soil
(190)	(190) Soil Horizon	Soil
(191)	(191) Soil Moisture Extraction Pattern	Soil
(192)	(192) Three Phases of Soil	Soil
(193)	(193) Soil Texture	Soil
(194)	(194) Tractor Shovel Attachment	Construction machinery
(195)	(195) Tractor Shovel	Construction machinery
(196)	(196) Tractor	Construction machinery
(197)	(197) Traverse Surveying	Survey
(198)	(198) Truss	Bridge
(199)	(199) Dragline	Construction machinery
(200)	(200) Tremie	Concrete
(201)	(201) Trailer	Construction machinery
(202)	(202) Agricultural Trailer	Agriculture
(203)	(203) Channel Transition	Irrigation
(204)	(204) Trencher	Agricultural machinery
(205)	(205) Drain	Dam
(206)	(206) Tombolo	Coast
(207)	(207) Track Crane	Construction machinery
(208)	(208) Bulk Factor of Soil	Soil
(209)	(209) Diffraction of Wave:Reference of Wave	Coast
(210)	(210) Nursery Bed	Road
(211)	(211) Pneumatic Caisson	Foundation
(212)	(212) Foot Protection 1	Coast
(213)	(213) Foot Protection 2	Coast
(214)	(214) Wheel Barrow:Hand Cart	Tool
(215)	(215) Wet Masonry	Revetment
(216)	(216) Cohesion	Soil

(217)	(217) Farm Road	Agriculture
(218)	(218) Average strength required	Concrete
(219)	(219) Backwater	Hydraulic
(220)	(220) Drainage pump station	Irrigation
(221)	(221) Hydrograph separation	Hydraulic
(222)	(222) Hyetograph	Hydraulic
(223)	(223) Drainage canal	Irrigation
(224)	(224) Pipe line	Irrigation
(225)	(225) Hydrograph	Hydraulic
(226)	(226) Pipe stand	Irrigation
(227)	(227) Crushing and compaction method	Road
(228)	(228) Wave height	Coast
(229)	(229) Ladder type wooden foundation	Foundation
(230)	(230) Aeration	Irrigation
(231)	(231) Batching Plant	Concrete
(232)	(232) Back hoe	Construction machinery
(233)	(233) Beam	Structure
(234)	(234) Stress and deformation of simple beam	Structure
(235)	(235) Heaving	Soil
(236)	(236) Checking peg	Survey
(237)	(237) Stay	Revetment
(238)	(238) Strain	Structure
(239)	(239) Paddy field with underlying plastic sheet	Irrigation
(240)	(240) Non-destructive testing	Concrete
(241)	(241) Ice pressure	Hydraulic
(242)	(242) Staff Leveling rod	Survey
(243)	(243) Standard penetration test	Soil
(244)	(244) Saturated surface-dry condition	Concrete
(245)	(245) Facing type dam	Dam
(246)	(246) Surface runoff	Hydraulic
(247)	(247) Miter gate	Irrigation
(248)	(248) Radial gate	Irrigation
(249)	(249) Hinge type gate	Irrigation
(250)	(250) High pressure radial gate	Irrigation
(251)	(251) Fill dam	Dam
(252)	(252) Wind erosion	Environment
(253)	(253) Footing foundation	Foundation
(254)	(254) Forage harvester	Agriculture
(255)	(255) Reclamation by double dike system	Coast
(256)	(256) Plow	Irrigation
(257)	(257) Plastic house	Agriculture
(258)	(258) Quay of landing	Coast
(259)	(259) Ship way	River
(260)	(260) Blanket	Dam
(261)	(261) Flume (U flume)	Irrigation
(262)	(262) Prepacked concrete	Concrete
(263)	(263) Dozer (Drained board)	Construction machinery
(264)	(264) Bulldozer	Construction machinery
(265)	(265) Front loader	Construction machinery
(266)	(266) Prestressed concrete	Structure
(267)	(267) Diversion works Turn out	Irrigation
(268)	(268) Cylindrical water diversion	Irrigation
(269)	(269) French type proportional diversion	Irrigation
(270)	(270) American type proportional diversion	Irrigation

(271)	(271) Manure spreader	Agriculture
(272)	(272) Power sprayer	Agriculture
(273)	(273) Closing difference	Survey
(274)	(274) Plane table survey	Survey
(275)	(275) Plate bearing test	Soil
(276)	(276) Plate bearing test :Load strength-Settlement curve	Soil
(277)	(277) Vane shear apparatus:Vane test	Soil
(278)	(278) Benoto method	Foundation
(279)	(279) Bench cut	Earth work
(280)	(280) Direction angle	Survey
(281)	(281) Windbreak	Forest
(282)	(282) Radiation method	Survey
(283)	(283) Flood control dam	Dam
(284)	(284) Snowslip control fence	Road
(285)	(285) Catch drain	Irrigation
(286)	(286) Pavement	Road
(287)	(287) Boring machine	Soil
(288)	(288) Main underdrain(Culvert)	Irrigation
(289)	(289) Pump dredger	Coast
(290)	(290) Detour waterway	Irrigation
(291)	(291) Mulching	Agriculture
(292)	(292) Mulch layer	Agriculture
(293)	(293) Water route	River
(294)	(294) Water cement ratio	Concrete
(295)	(295) Inlet for irrigation water	Irrigation
(296)	(296) Milker	Agriculture
(297)	(297) Mole drain	Irrigation
(298)	(298) Joint filler	Structure
(299)	(299) Sheet erosion	Environment
(300)	(300) Mower	Agriculture
(301)	(301) Grass side rake	Agriculture
(302)	(302) Motor grader	Construction machinery
(303)	(303) Mole drain	Irrigation
(304)	(304) Simple chaff:Rice husk culvert	Irrigation
(305)	(305) Timbering	Tunnel
(306)	(306) Land-slide protection wall 1	Foundation
(307)	(307) Land-slide protection wall 2	Foundation
(308)	(308) Irrigation channel	Irrigation
(309)	(309) Retarding basin:Flood storage basin	River
(310)	(310) Retarding basin:Flood storage basin 2	Coast
(311)	(311) Uplift pressure	Dam
(312)	(312) Cure and compressive strength	Concrete
(313)	(313) Extra banking	Embankment
(314)	(314) Reinforcement of weld	Structure
(315)	(315) Dual-purpose canal	Irrigation
(316)	(316) Spillway	Irrigation
(317)	(317) Rigid frame:Rahmen	Structure
(318)	(318) Spiral hoop reinforcement	Structure
(319)	(319) Lift	Hydraulic
(320)	(320) Drainage basin	River
(321)	(321) Poorly-graded	Soil
(322)	(322) Sediment load	Hydraulic
(323)	(323) velocity distribution	Hydraulic
(324)	(324) flow net	Hydraulic

(325)	(325) particle size analysis	Soil
(326)	(326) Grading curve	Soil
(327)	(327) particle size distribution curve	Soil
(328)	(328) distribution graph	Hydraulic
(329)	(329) Rake dozer	Construction machinery
(330)	(330) Level	Survey
(331)	(331) Rotary	Agricultural machinery
(332)	(332) Tire roller	Construction machinery
(333)	(333) Vibrating road roller	Construction machinery
(334)	(334) Roller type gate	River
(335)	(335) Rolled reinforced concrete pipe	Structure
(336)	(336) Road bed(subgrade)	Road
(337)	(337) Rock bolt 1	Earth work
(338)	(338) Rock bolt 2	Tunnel
(339)	(339) Ring levee	River
(340)	(340) Shallow foundation	Foundation
(341)	(341) Pipe scaffolding	Construction
(342)	(342) Asphalt sprayer (Distributor)	Road
(343)	(343) Asphalt finisher	Road
(344)	(344) Asphalt plant	Road
(345)	(345) Coefficient of Compressibility	Structure
(346)	(346) Consolidation test	Soil
(347)	(347) Consolidation	Soil
(348)	(348) Pressure bulb	Soil
(349)	(349) Culvert1	Irrigation
(350)	(350) Culvert2	Irrigation
(351)	(351) Culvert3	Irrigation
(352)	(352) Asphalt lining	Irrigation
(353)	(353) Latitude Departure	Survey
(354)	(354) Deformed bar	Structure
(355)	(355) fish preserve	Fishery
(356)	(356) Masonry	Revetment
(357)	(357) Primary consolidation	Soil
(358)	(358) Unconfined compression test	Soil
(359)	(359) Shallow well	Irrigation
(360)	(360) Deep well	Irrigation
(361)	(361) Impact box	Irrigation
(362)	(362) Well point method	Hydraulic
(363)	(363) Spiral pump	Hydraulic
(364)	(364) Raindrops erosion	Environment
(365)	(365) Ridger	Agricultural machinery
(366)	(366) back-filling	Revetment
(367)	(367) Simple beam-influence line	Structure
(368)	(368) sensitivity ratio(St)	Structure
(369)	(369) liquid limit	Hydraulic
(370)	(370) wave overtopping	Revetment
(371)	(371) S-curve	Hydraulic
(372)	(372) overflow	Hydraulic
(373)	(373) N-Value	Soil
(374)	(374) geologic columnar section	Soil
(375)	(375) Apron	Hydraulic
(376)	(376) Centrifugal reinforced concrete	Structure
(377)	(377) Salt wedge	River
(378)	(378) cross drainage	Irrigation

(379)	(379) cross culvert	Irrigation
(380)	(380) stress	Structure
(381)	(381) cross slope	Road
(382)	(382) auger	Soil
(383)	(383) overshoot	Irrigation
(384)	(384) open caisson	Foundation
(385)	(385) loading berm; counterweight fill	Embankment
(386)	(386) Open flow meter	Hydraulic
(387)	(387) lateral tie hoop	Structure
(388)	(388) Offset survey	Survey
(389)	(389) Greenhouse	Agriculture
(390)	(390) water warming facilities1	Agriculture
(391)	(391) water warming facilities2	Irrigation
(392)	(392) The middle forest of the sea	Coast
(393)	(393) sliding timber weir	Irrigation
(394)	(394) The mountains reclamation-cultivation	Irrigation
(395)	(395) Improved mountain reclamation	Irrigation
(396)	(396) Stair field work	Earth work
(397)	(397) All cross-sectional cutting	Earth work
(398)	(398) Slope fieldwork	Earth work
(399)	(399) riverbed	Embankment
(400)	(400) shuttering for concrete	Structure
(401)	(401) watercourse	River
(402)	(402) cusp	Coast
(403)	(403) gully Erosion	Environment
(404)	(404) steel sheet double temporary coffering	Revetment
(405)	(405) water coffer dam	Dam
(406)	(406) gully stability works	Environment
(407)	(407) simple drain1	Irrigation
(408)	(408) simple drain2	Irrigation
(409)	(409) Main Road	Irrigation
(410)	(410) Complete nappe and Incomplete nappe	Hydraulic
(411)	(411) reclamation dike(erect type breakwater)	Coast
(412)	(412) reclamation dike (composite-type breakwater)	Coast
(413)	(413) reclamation dike(mound-type breakwater)	Coast
(414)	(414) influent stream and effluent stream	Hydraulic
(415)	(415) transition section	Road
(416)	(416) transition curve	Road
(417)	(417) field machinery passage	Road
(418)	(418) substratum	Road
(419)	(419) balancing reservoir	Hydraulic
(420)	(420) reverse siphon	Hydraulic
(421)	(421) lateral drain1	Irrigation
(422)	(422) lateral drain2	Irrigation
(423)	(423) conjugate depth	Hydraulic
(424)	(424) Reinforced plastic composite	Agriculture
(425)	(425) Fishing reefs	Fishery
(426)	(426) Fish finder	Fishery
(427)	(427) fishway	Fishery
(428)	(428) pile	Foundation
(429)	(429) cutting banking Fill	Earth work
(430)	(430) pile driver	Construction machinery
(431)	(431) pile foundation	Foundation
(432)	(432) quick sand phenomena	Soil

(433)	(433) grouting	Dam
(434)	(434) Clamshell	Construction machinery
(435)	(435) group pile	Foundation
(436)	(436) ridge between rice fields,border ditch irrigation	Irrigation
(437)	(437) Decompression wells	Hydraulic
(438)	(438) energy dissipator	Hydraulic
(439)	(439) Core-type fill dam	Dam
(440)	(440) arched timbering	Tunnel
(441)	(441) intersection	Survey
(442)	(442) plowing	Irrigation
(443)	(443) field lot	Irrigation
(444)	(444) steel sheet pile	Structure
(445)	(445) Construction schedule	Construction
(446)	(446) Revetment	Revetment
(447)	(447) cone index	Soil
(448)	(448) banquette; berm	Embankment
(449)	(449) crushing plant	Concrete
(450)	(450) Colgate Pipes	Irrigation
(451)	(451) concrete gravity dam	Dam
(452)	(452) Concrete Pump	Concrete
(453)	(453) concrete block lining	Irrigation
(454)	(454) concrete sheet pile	Foundation
(455)	(455) blended cement	Concrete
(456)	(456) Moisture content and consistency limit	Soil
(457)	(457) surge tank	Hydraulic
(458)	(458) loading test	Soil
(459)	(459) jackhammer	Construction machinery
(460)	(460) Triangular diagram	Soil
(461)	(461) Triangulation	Survey
(462)	(462) triaxial compression test	Soil
(463)	(463) sprinkle with water	Irrigation
(464)	(464) Sand Pits	River
(465)	(465) sand drain method	Foundation
(466)	(466) Shielding	Tunnel
(467)	(467) opening for final closing1	Irrigation
(468)	(468) opening for final closing2	Irrigation
(469)	(469) discharge hydro-graph	Hydraulic
(470)	(470) rebated joint	Structure
(471)	(471) I beam Bridge	Bridge
(472)	(472) I steel	Structure
(473)	(473) ITRF94	Survey
(474)	(474) island cut method	Foundation
(475)	(475) heart wood	Forest
(476)	(476) shallow well	Foundation
(477)	(477) agitator	Concrete
(478)	(478) earth drill	Construction machinery
(479)	(479) asphalt concrete	Road
(480)	(480) Asphalt sub-sealing	Road
(481)	(481) border lot	Irrigation
(482)	(482) attachment	Construction machinery
(483)	(483) arch dam(1)	Dam
(484)	(484) arch dam(2)	Dam
(485)	(485) squashing	Concrete
(486)	(486) honey comb	Concrete

(487)	(487) stirrup	Structure
(488)	(488) amenities	Environment
(489)	(489) Alkaline aggregate reaction	Concrete
(490)	(490) arrow	Construction
(491)	(491) Anchor Block	Bridge
(492)	(492) anchor bolt	Foundation
(493)	(493) underdrainage	Irrigation
(494)	(495) safety control 1	Construction machinery
(495)	(495) safety control 1	Construction
(496)	(496) safety control 2	Construction
(497)	(497) underpinning method	Foundation
(498)	(498) stabilization	Earth work
(499)	(499) col	Topography
(500)	(500) mat foundation	Foundation
(501)	(501) Latitude	Survey
(502)	(502) ICOS method	Foundation
(503)	(503) stone dyke	River
(504)	(504) stone masonry	Revetment
(505)	(505) slope-crib works	Revetment
(506)	(506) stone pitching	Revetment
(507)	(507) stone pitching breakwater	Coast
(508)	(508) rock filled breakwater	Coast
(509)	(509) potential head	Hydraulic
(510)	(510) one-way slab	Bridge
(511)	(511) simple friction joint	Structure
(512)	(512) caisson	Foundation
(513)	(513) moving load	Structure
(514)	(514) berm	Embankment
(515)	(515) dead straight joint	Structure
(516)	(516) straight joint	Structure
(517)	(517) interchange	Road
(518)	(518) Interlocking	Road
(519)	(519) invert	Tunnel
(520)	(520) wing	Structure
(521)	(521) Well point construction method	Foundation
(522)	(522) pumice stone	Earth work
(523)	(523) stock	Construction
(524)	(524) Fill in	Earth work
(525)	(525) back-filling	Revetment
(526)	(526)vertical frame	Irrigation
(527)	(527) inclined groin	River
(528)	(528) air lock	Foundation
(529)	(529) AE concrete	Concrete
(530)	(530) AE agents(air entraining agents)	Concrete
(531)	(531) circle of influence	Hydraulic
(532)	(532) sensitivity ratio	Soil
(533)	(533) liquefaction	Soil
(534)	(534) liquid limit	Soil
(535)	(535) overflow pipe	Hydraulic
(536)	(536) overflow irrigation	Irrigation
(537)	(537) groin overflow	River
(538)	(538) deversoir	Hydraulic
(539)	(539) apron 1	Coast
(540)	(540) apron 2	Dam

(541)	(541) election truss	Bridge
(542)	(542) connection cut	Revetment
(543)	(543) centrifugal reinforcement concrete pipe	Structure
(544)	(544) Soil	Soil
(545)	(545) entrapped air	Concrete
(546)	(546) entrained air	Concrete
(547)	(547) adit	Tunnel
(548)	(548) cross-sectional drawings	Structure
(549)	(549) rooftop greening	Environment
(550)	(550) counter weight banking	Embankment
(551)	(551) counterweight fill method	Earth work
(552)	(552) stripped joint	Structure
(553)	(553) sewage inlet	Sewage
(554)	(554) fang bolt	Structure
(555)	(555) overlay	Road
(556)	(556) hoop	Structure
(557)	(557) offset	Survey
(558)	(558) open cut method	Earth work
(559)	(559) outer banquette	Embankment
(560)	(560) orifice	Hydraulic
(561)	(561) brad	Tool
(562)	(562) stopper stone	Revetment
(563)	(563) open cut method	Tunnel
(564)	(564) guy rope	Construction machinery
(565)	(565) open channel	Irrigation
(566)	(566) revolutionary landslide	Soil
(567)	(567) revolving screen	Concrete
(568)	(568) packing	Tool
(569)	(569) key-type steel sheet pile	Structure
(570)	(570) aerial cableway	Construction
(571)	(571) stop-log	Irrigation
(572)	(572) truss structure 1	Structure
(573)	(573) truss structure 2	Structure
(574)	(574) Widening	Road
(575)	(575) tilting mixer	Concrete
(576)	(576) wooden maul	Tool
(577)	(577) truss structure 3 lower chord member	Structure
(578)	(578) protective stake	Survey
(579)	(579) estuary improvement	River
(580)	(580) lower yield point	Structure
(581)	(581) levee raising	Embankment
(582)	(582) capping stone	Coast
(583)	(583) raising of embankment	Embankment
(584)	(584) center of stream	River
(585)	(585) open levee	River
(586)	(586) acceleration lane	Road
(587)	(587) template	Tool
(588)	(588) cant:super-elevation	Road
(589)	(589) hardness test	Concrete
(590)	(590) cantilever	Structure
(591)	(591) cantilever slab	Bridge
(592)	(592) form	Structure
(593)	(593) activation of carbon	Hydraulic
(594)	(594) activation of carbon	Hydraulic

(595)	(595) over-compaction	Earth work
(596)	(596) river channel	River
(597)	(597) over bridge	Bridge
(598)	(598) movable weir 1	Hydraulic
(599)	(599) movable weir 2	Hydraulic
(600)	(600) movable weir 3	Hydraulic
(601)	(601) guard cable	Road
(602)	(602) covering	Tunnel
(603)	(603) shallow sump	Foundation
(604)	(604) dry masonry	Revetment
(605)	(605) gully erosion	Environment
(606)	(606) hooping	Hydraulic
(607)	(607) culvert	Tunnel
(608)	(608) pipeline	Irrigation
(609)	(609) Dry shrinkage	Concrete
(610)	(610) cold weather concreting	Concrete
(611)	(611) cant	Railway
(612)	(612) Quaywall	Coast
(613)	(613) transition curve	Road
(614)	(614) air-dried state	Concrete
(615)	(615) precast concrete pile	Foundation
(616)	(616) foundation	Foundation
(617)	(617) draft	Coast
(618)	(618) Pier	Bridge
(619)	(619) test piece	Concrete
(620)	(620) Forced mixer	Concrete
(621)	(621) Bridge length	Bridge
(622)	(622) abutment	Bridge
(623)	(623) bridge seat	Bridge
(624)	(624) Span	Bridge
(625)	(625) parapet wall	Revetment
(626)	(626) ultimate strength	Structure
(627)	(627) Polar coordinates	Survey
(628)	(628) curvature diagram	Road
(629)	(629) Fishladder	Fishery
(630)	(630) distance survey	Survey
(631)	(631) ashlar masonry	Revetment
(632)	(632) Notch	Hydraulic
(633)	(633) unscreened gravel	Concrete
(634)	(634) cutting	Earth work
(635)	(635) strut	Earth work
(636)	(636) quick sand phenomena	Soil
(637)	(637) air entraining agent	Concrete
(638)	(638) Grouting	Construction
(639)	(639) grout	Earth work
(640)	(640) Grab dredger	Coast
(641)	(641) broken stone	Revetment
(642)	(642) foundation broken stone	Foundation
(643)	(643) design flood discharge	Hydraulic
(644)	(644) hydraulic radius	Hydraulic
(645)	(645) border	Irrigation
(646)	(646) Mooring facility	Coast
(647)	(647) caisson foundation	Foundation
(648)	(648) concrete-caisson breakwater	Coast

(649)	(649) cable crane	Construction
(650)	(650) Deceleration lane	Road
(651)	(651) in-situ permeability test	Hydraulic
(652)	(652) aggregate moisture content	Concrete
(653)	(653) major bed	Embankment
(654)	(654) Flood control	River
(655)	(655) rigid pavement	Road
(656)	(656) Hard stone	Concrete
(657)	(657) composite column	Foundation
(658)	(658) broad-crested weir	Hydraulic
(659)	(659) pit	Tunnel
(660)	(660) ditch-side border	Irrigation
(661)	(661) portal	Tunnel
(662)	(662) steel sheet pile	Structure
(663)	(663) bank protection	Embankment
(664)	(664) Blast furnace cement	Concrete
(665)	(665) Suppression Road bridge	Bridge
(666)	(666) Berm	Embankment
(667)	(667) aggregate	Concrete
(668)	(668) fixed weir	Hydraulic
(669)	(669) Roller	Tool
(670)	(670) Concrete	Concrete
(671)	(671) Compressive strength	Concrete
(672)	(672) Concrete spraying work	Concrete
(673)	(673) Concrete block breakwater	Coast
(674)	(674) Consistency	Soil
(675)	(675) composite breakwater	Coast
(676)	(676) Admixture	Concrete
(677)	(677) Loading test	Soil
(678)	(678) Fine Aggregate	Concrete
(679)	(679) breaking wave levee	Coast
(680)	(680) Left bank Right bank	Embankment
(681)	(681) plumb bob	Survey
(682)	(682) buttressed type retaining wall	Revetment
(683)	(683) rabbet joint	Structure
(684)	(684) Sub-sealing	Road
(685)	(685) soil erosion control works	Environment
(686)	(686) uniformly varying load	Hydraulic
(687)	(687) Delta	River
(688)	(688) Triangular weir	Hydraulic
(689)	(689) sprinkler irrigation	Irrigation
(690)	(690) sprinkler curing	Irrigation
(691)	(691) sand drain method	Foundation
(692)	(692) Sand pile	Foundation
(693)	(693) soil erosion control works	Environment
(694)	(694) erosion control works	Environment
(695)	(695) Square weir	Hydraulic
(696)	(696) soil cover	Earth work
(697)	(697) Tributary	Topography
(698)	(698) Span	Bridge
(699)	(699) housing foundation concrete	Foundation
(700)	(700) test-pit digging	Soil
(701)	(701) Axial stress	Concrete
(702)	(702) Axial Reinforcing Bars	Structure

(703)	(703) Flexible curve ruler	Tool
(704)	(704) bearing pile	Foundation
(705)	(705) Water stop	Structure
(706)	(706) Landslide	Soil
(707)	(707) Natural head	Hydraulic
(708)	(708) Downward groin	River
(709)	(709) Ground injection method	Earth work
(710)	(710) allowable bearing capacity	Foundation
(711)	(711) felloe guard	Bridge
(712)	(712) Shift	Road
(713)	(713) Compaction test	Soil
(714)	(714) cofferdam	Embankment
(715)	(715) closing dyke	Construction
(716)	(716) wire cylinder	Construction
(717)	(717) wire cylinder masonry	Construction
(718)	(718) slope distance	Survey
(719)	(719) Shackle	Tool
(720)	(720) natural ground	Embankment
(721)	(721) toe failure	Soil
(722)	(722) slope failure	Soil
(723)	(723) Slope failure	Soil
(724)	(724) supercritical flow	Hydraulic
(725)	(725) honey comb	Concrete
(726)	(726) boat way	River
(727)	(727) infiltration gallery	Hydraulic
(728)	(728) Vertical curve	Road
(729)	(729) Free outflow	Hydraulic
(730)	(730) Gravity-retaining wall	Structure
(731)	(731) Gravity water	Hydraulic
(732)	(732) Gravity dam	Dam
(733)	(733) Water Intake	Irrigation
(734)	(734) Intake	Irrigation
(735)	(735) Intake Dam	Dam
(736)	(736) Intake tower e	Irrigation
(737)	(737) Main Rebar	Structure
(738)	(738) chute	Concrete
(739)	(739) active earth pressure	Soil
(740)	(740) Passive earth pressure	Soil
(741)	(741) Circulating water	Environment
(742)	(742) Dredging	Coast
(743)	(743) wetted perimeter®	Irrigation
(744)	(744) intercepting drain	Irrigation
(745)	(745) ordinary flow	Hydraulic
(746)	(746) Salt Desalination	Irrigation
(747)	(747) vegetation works(slope protection)	Agriculture
(748)	(748) Shortcut	River
(749)	(749) hotweather concreting	Concrete
(750)	(750) Silt layer	Geology
(751)	(751) water seasoning	Forest
(752)	(752) expansion device	Structure
(753)	(753) expansion joint	Structure
(754)	(754) seepage line	Hydraulic
(755)	(755) Cycle of erosion	Environment
(756)	(756) Deep foundation method	Foundation

(757)	(757) Vibration compaction	Concrete
(758)	(758) Vibration Roller	Construction machinery
(759)	(759) approach wave	Coast
(760)	(760) axle of drop hammer	Foundation
(761)	(761) Water pressure	Hydraulic
(762)	(762) Water level recorder	River
(763)	(763) Water gauge	River
(764)	(764) Water hammer	Hydraulic
(765)	(765) Water pollution	Environment
(766)	(766) hydraulic turbine	Hydraulic
(767)	(767) leveling	Survey
(768)	(768) water erosion control	Irrigation
(769)	(769) Underwater concreting	Concrete
(770)	(770) water Curing	Concrete
(771)	(771) hydraulic depth	Hydraulic
(772)	(772) diversion channel	River
(773)	(773) Aqueduct	River
(774)	(774) undermining	Construction
(775)	(775) screen	Structure
(776)	(776) sodding	Earth work
(777)	(777) riprap work	Foundation
(778)	(778) rubble-mound breakwater	Coast
(779)	(779) leaving concrete	Foundation
(780)	(780) Spring Balance	Survey
(781)	(781) circular slide	Soil
(782)	(782) Anti-slip treatment	Road
(783)	(783) Sliding surface	Earth work
(784)	(784) quoin	Structure
(785)	(785) slump	Concrete
(786)	(786) Sluice Gate	River
(787)	(787) Camber	Bridge
(788)	(788) Productive green tract of land	Environment
(789)	(789) Static earth pressure	Soil
(790)	(790) weir	Irrigation
(791)	(791) back water curve	Hydraulic
(792)	(792) stone levee	Embankment
(793)	(793) Cement Gun	Concrete
(794)	(794) Cement subsealing	Road
(795)	(795) Cellular block breakwater	Coast
(796)	(796) Cellular sheet pile	Embankment
(797)	(797) separation levee	River
(798)	(798) foresight	Survey
(799)	(799) fan	River
(800)	(800) summer dyke	River
(801)	(801) undercurrent	Hydraulic
(802)	(802) traction	Hydraulic
(803)	(803) Laminar flow	Hydraulic
(804)	(804) Coarse Aggregate	Concrete
(805)	(805) Plasticity	Soil
(806)	(806) Plastic limit	Soil
(807)	(807) plasticity index	Soil
(808)	(808) angle of repose	Soil
(809)	(809) Roughness test	Structure
(810)	(810) firebrick	Structure

(811)	(811) Opposite shore wind waves	Coast
(812)	(812) deposition	Topography
(813)	(813) anchor wire	Tool
(814)	(814) Tire dozer	Construction machinery
(815)	(815) Tire roller	Construction machinery
(816)	(816) Dial gauge	Soil
(817)	(817) rammer	Tool
(818)	(818) enlarged side wall concrete	Tunnel
(819)	(819) Line river s-shaped	River
(820)	(820) Valley line ground surface	Topography
(821)	(821) Cobblestone layer	Foundation
(822)	(822) Cobblestone masonry	Revetment
(823)	(823) Dam-type power	Hydraulic
(824)	(824) deflection	Structure
(825)	(825) bench cut	Earth work
(826)	(826) simple curve	Road
(827)	(827) Elastic Deformation	Structure
(828)	(828) fault	Geology
(829)	(829) short column	Structure
(830)	(830) tandem roller	Construction machinery
(831)	(831) tamping roller	Construction machinery
(832)	(832) Single grain structure	Soil
(833)	(833) Groundwater table	Hydraulic
(834)	(834) Embankment	Embankment
(835)	(835) Geological Survey	Geology
(836)	(836) hydraulic jump	Hydraulic
(837)	(837) Overtoppig wave	Coast
(838)	(838) Finishing stake	Earth work
(839)	(839) spread foundation	Foundation
(840)	(840) Upright breakwater	Coast
(841)	(841) Tilt dozer	Construction machinery
(842)	(842) Trench method	Tunnel
(843)	(843) Back slope protection	Embankment
(844)	(844) Soil covering	Tunnel
(845)	(845) Soil structure	Soil
(846)	(846) Plastic deformation of soil	Soil
(847)	(847) shaft sinking	Soil
(848)	(848) sandbag stacking	Embankment
(849)	(849) Pick	Tool
(850)	(850) riverside land	River
(851)	(851) low-water channel work	River
(852)	(852) low-water channel	River
(853)	(853) T-shaped retaining wall	Retaining wall
(854)	(854) Base failure	Soil
(855)	(855) Reinforced concrete retaining wall	Revetment
(856)	(856) Deflector	Hydraulic
(857)	(857) Upper surface	Embankment
(858)	(858) Frost heaving and soil	Soil
(859)	(859) Contour line	Topography
(860)	(860) Head works	Irrigation
(861)	(861) Detached break water	Coast
(862)	(862) Training dyke	River
(863)	(863) Training levee	River
(864)	(864) Road work	Road

(865)	(865) Road Alignment	Road
(866)	(866) special cement	Concrete
(867)	(867) Earthwork	Earth work
(868)	(868) blade	Construction machinery
(869)	(869) excavation for foundation	Foundation
(870)	(870) sedimentation setting	Hydraulic
(871)	(871) Debris flow	Topography
(872)	(872) soil profile	Soil
(873)	(873) foundation work	Foundation
(874)	(874) Rush work	Construction
(875)	(875) Jetty	Coast
(876)	(876) Sheathing work	Earth work
(877)	(877) Tremie	Concrete
(878)	(878) Trailer	Construction machinery
(879)	(879) Drop Hammer	Construction machinery
(880)	(880) Internal impermeable wall	Dam
(881)	(881) Avalanche gallery	Road
(882)	(882) nappe	Hydraulic
(883)	(883) NATM	Tunnel
(884)	(884) Diagonal chute	Concrete
(885)	(885) interflow	Environment
(886)	(886) strip footing	Foundation
(887)	(887) coursed masonry	Retaining wall
(888)	(888) trench excavation	Construction
(889)	(889) base-stone	Coast
(890)	(890) Penetration	Earth work
(891)	(891) foot protection	Revetment
(892)	(892) negative friction	Foundation
(893)	(893) wet masonry	Revetment
(894)	(894) slope	Embankment
(895)	(895) slope pile	Foundation
(896)	(896) slope gradient	Earth work
(897)	(897) sure-footing	Revetment
(898)	(898) slope protection work	Revetment
(899)	(899) slope protection	Irrigation
(900)	(900) drainage method	Hydraulic
(901)	(901) dentated sill	Hydraulic
(902)	(902) sharp-edged weir	Hydraulic
(903)	(903) buttressed retaining wall	Retaining wall
(904)	(904) waling	Retaining wall
(905)	(905) parapet	Coast
(906)	(906) power shovel	Construction machinery
(907)	(907) reflected wave	Coast
(908)	(908) confined groundwater	Hydraulic
(909)	(909) angle brace	Construction
(910)	(910) non-overflow groyne	River
(911)	(911) secondary levee	Embankment
(912)	(912) sluice	Embankment
(913)	(913) prestressed concrete beam	Structure
(914)	(914) PDCA(plan-do-check-action)	Construction
(915)	(915) heaving	Soil
(916)	(916) sluice	Embankment
(917)	(917) staff	Survey
(918)	(918) standard penetration test	Soil

(919)	(919) surface impermeable wall	Dam
(920)	(920) quality control	Construction
(921)	(921) wind erosion control	Environment
(922)	(922) wind erosion farm	Irrigation
(923)	(923) deep well	Hydraulic
(924)	(924) auxiliary dam	Hydraulic
(925)	(925) river bed water	Irrigation
(926)	(926) rust corrosion	Structure
(927)	(927) unconformity	Geology
(928)	(928) cross drain	Irrigation
(929)	(929) Footing foundation	Foundation
(930)	(930) unsteady flow	Hydraulic
(931)	(931) impermeable spur	River
(932)	(932) impermeable layer	Hydraulic
(933)	(933) non-uniform flow	Hydraulic
(934)	(934) plasticity	Concrete
(935)	(935) suspended load	Hydraulic
(936)	(936) Bulldozer	Construction machinery
(937)	(937) precast concrete	Concrete
(938)	(938) pre-cooling	Concrete
(939)	(939) pretensioning system	Structure
(940)	(940) Prepacked concrete	Concrete
(941)	(941) pre-loading method	Earth work
(942)	(942) diversion works	Irrigation
(943)	(943) separator	Road
(944)	(944) Plane table surveying	Survey
(945)	(945) curve band	Road
(946)	(946) Benoto method	Foundation
(947)	(947) paper drain method	Foundation
(948)	(948) deceleration • acceleration lane	Road
(949)	(949) boiling	Soil
(950)	(950) groyne net	Topography
(951)	(951) groyne	Coast
(952)	(952) groyne wood	Topography
(953)	(953) flood bypass	River
(954)	(954) polymer-modified cement waterproofing	Structure
(955)	(955) windbreak fence	Environment
(956)	(956) main levee	Irrigation
(957)	(957) spreading	Earth work
(958)	(958) spreading depth	Earth work
(959)	(959) friction pile	Earth work
(960)	(960) staggered placing	Concrete
(961)	(961) mass concrete	Dam
(962)	(962) mudjacking	Road
(963)	(963) hydraulic filling method	Foundation
(964)	(964) spatter's effect	Hydraulic
(965)	(965) turning point	Survey
(966)	(966) banking	Earth work
(967)	(967) Landslide	Soil
(968)	(968) land reclamation in natural slope	Earth work
(969)	(969) batter board	Earth work
(970)	(970) Young's modulus	Structure
(971)	(971) retarding basin	River
(972)	(972) lava	Geology

(973)	(973) lava flow	Geology
(974)	(974) retaining wall	Retaining wall
(975)	(975) landslide restraining works	Retaining wall
(976)	(976) landslide control works	Earth work
(977)	(977) cross-levee	River
(978)	(978) Spillway	Dam
(979)	(979) extra-banking	Embankment
(980)	(980) extra-banking	Embankment
(981)	(981) freeboard	Embankment
(982)	(982) prevention for falling stone	Earth work
(983)	(983) spiral rebar axial rebar column	Structure
(984)	(984) random masonry	Retaining wall
(985)	(985) Laminar flow	Hydraulic
(986)	(986) ripper (bulldozer)(crawler type+ripper)	Construction machinery
(987)	(987) thalweg	River
(988)	(988) cross section area	Irrigation
(989)	(989) flow net	Hydraulic
(990)	(990) diversion filling	Earth work
(991)	(991) discharge	Irrigation
(992)	(992) water course	Topography
(993)	(993) cross section calculation area-average method	Earth work
(994)	(994) rill erosion	Environment
(995)	(995) Degraded ferro-deficient paddy field	Irrigation
(996)	(996) road shoulder	Road
(997)	(997) filter film	Hydraulic
(998)	(998) filter material	Hydraulic
(999)	(999) Rock-fill dam	Dam
(1000)	(1000) Rock bolt	Tunnel

(1)	(1) Agricultural Civil Engineering Words (Illustration) in Africa	
(204)	(204) Trencher	Agricultural machinery
(331)	(331) Rotary	Agricultural machinery
(365)	(365) Ridger	Agricultural machinery
(18)	(18) damage from salt	Agriculture
(19)	(19) water shortage	Agriculture
(21)	(21) want of food	Agriculture
(22)	(22) temperature rising	Agriculture
(26)	(26) compost	Agriculture
(27)	(27) organic fertilizer	Agriculture
(28)	(28) chemistry fertilizer	Agriculture
(37)	(37) slash-and-burn agriculture	Agriculture
(52)	(52) Weed-Fertilizer	Agriculture
(53)	(53) Straw-Compost	Agriculture
(54)	(54) Leaf Mold	Agriculture
(55)	(55) Leaf Mold	Agriculture
(56)	(56) Garbage Compost	Agriculture
(57)	(57) Garbage Compost	Agriculture
(58)	(58) Garbage,Weed -Compost	Agriculture
(59)	(59) Garbage Liquid Fertilizer	Agriculture
(60)	(60) Vegetation Ash	Agriculture
(62)	(62) Organic Fertilizer(1)Natural	Agriculture
(63)	(63) Organic Fertilizer(2) Natural	Agriculture
(64)	(64) Organic Fertilizer(3) Natural	Agriculture
(65)	(65) Organic Fertilizer(4) Natural	Agriculture
(66)	(66) Organic Fertilizer(5) Natural	Agriculture
(67)	(67) Fertilizer Ingredient	Agriculture
(68)	(68) Fertilizer Ingredient	Agriculture
(69)	(69) Organic Farming Compost	Agriculture
(72)	(72) Terraced Field	Agriculture
(76)	(76) Hoe	Agriculture
(77)	(77) Plow	Agriculture
(78)	(78) Sickle	Agriculture
(79)	(79) Threshing 1	Agriculture
(80)	(80) Threshing 2	Agriculture
(81)	(81) Plow	Agriculture
(82)	(82) Waterwheel	Agriculture
(145)	(145) Manure Spreader	Agriculture
(202)	(202) Agricultural Trailer	Agriculture
(217)	(217) Farm Road	Agriculture
(254)	(254) Forage harvester	Agriculture
(257)	(257) Plastic house	Agriculture
(271)	(271) Manure spreader	Agriculture
(272)	(272) Power sprayer	Agriculture
(291)	(291) Mulching	Agriculture
(292)	(292) Mulch layer	Agriculture
(296)	(296) Milker	Agriculture
(300)	(300) Mower	Agriculture
(301)	(301) Grass side rake	Agriculture
(389)	(389) Greenhouse	Agriculture
(390)	(390) water warming facilities1	Agriculture
(424)	(424) Reinforced plastic composite	Agriculture
(747)	(747) vegetation works(slope protection)	Agriculture
(97)	(97) Arch	Bridge

(198)	(198) Truss	Bridge
(471)	(471) I beam Bridge	Bridge
(491)	(491) Anchor Block	Bridge
(510)	(510) one-way slab	Bridge
(541)	(541) election truss	Bridge
(591)	(591) cantilever slab	Bridge
(597)	(597) over bridge	Bridge
(618)	(618) Pier	Bridge
(621)	(621) Bridge length	Bridge
(622)	(622) abutment	Bridge
(623)	(623) bridge seat	Bridge
(624)	(624) Span	Bridge
(665)	(665) Suppression Road bridge	Bridge
(698)	(698) Span	Bridge
(711)	(711) felloe guard	Bridge
(787)	(787) Camber	Bridge
(120)	(120) Drift Current	Coast
(143)	(143) Sounding Machine	Coast
(164)	(164) Sea (Levee:Dike:Embankment)	Coast
(206)	(206) Tombolo	Coast
(209)	(209) Diffraction of Wave:Reference of Wave	Coast
(212)	(212) Foot Protection 1	Coast
(213)	(213) Foot Protection 2	Coast
(228)	(228) Wave height	Coast
(255)	(255) Reclamation by double dike system	Coast
(258)	(258) Quay of landing	Coast
(289)	(289) Pump dredger	Coast
(310)	(310) Retarding basin:Flood storage basin 2	Coast
(392)	(392) The middle forest of the sea	Coast
(402)	(402) cusp	Coast
(411)	(411) reclamation dike(erect type breakwater)	Coast
(412)	(412) reclamation dike (composite-type breakwater)	Coast
(413)	(413) reclamation dike(mound-type breakwater)	Coast
(507)	(507) stone pitching breakwater	Coast
(508)	(508) rock filled breakwater	Coast
(539)	(539) apron 1	Coast
(582)	(582) capping stone	Coast
(612)	(612) Quaywall	Coast
(617)	(617)draft	Coast
(640)	(640) Grab dredger	Coast
(646)	(646) Mooring facility	Coast
(648)	(648) concrete-caisson breakwater	Coast
(673)	(673) Concrete block breakwater	Coast
(675)	(675) composite breakwater	Coast
(679)	(679) breaking wave levee	Coast
(742)	(742) Dredging	Coast
(759)	(759) approach wave	Coast
(778)	(778) rubble-mound breakwater	Coast
(795)	(795) Cellular block breakwater	Coast
(811)	(811) Opposite shore wind waves	Coast
(837)	(837) Overtoppig wave	Coast
(840)	(840) Upright breakwater	Coast
(861)	(861) Detached break water	Coast
(875)	(875) Jetty	Coast

(889)	(889) base-stone	Coast
(905)	(905) parapet	Coast
(907)	(907) reflected wave	Coast
(951)	(951) groyne	Coast
(262)	(262) Prepacked concrete	Concrete
(127)	(127) Slump Test	Concrete
(200)	(200) Tremie	Concrete
(218)	(218) Average strength required	Concrete
(231)	(231) Batching Plant	Concrete
(240)	(240) Non-destructive testing	Concrete
(244)	(244) Saturated surface-dry condition	Concrete
(294)	(294) Water cement ratio	Concrete
(312)	(312) Cure and compressive strength	Concrete
(449)	(449) crushing plant	Concrete
(452)	(452) Concrete Pump	Concrete
(455)	(455) blended cement	Concrete
(477)	(477) agitator	Concrete
(485)	(485) squashing	Concrete
(486)	(486) honey comb	Concrete
(489)	(489) Alkaline aggregate reaction	Concrete
(529)	(529) AE concrete	Concrete
(530)	(530) AE agents(air entraining agents)	Concrete
(545)	(545) entrapped air	Concrete
(546)	(546) entrained air	Concrete
(567)	(567) revolving screen	Concrete
(575)	(575) tilting mixer	Concrete
(589)	(589) hardness test	Concrete
(609)	(609) Dry shrinkage	Concrete
(610)	(610) cold weather concreting	Concrete
(614)	(614) air-dried state	Concrete
(619)	(619) test piece	Concrete
(620)	(620) Forced mixer	Concrete
(633)	(633) unscreened gravel	Concrete
(637)	(637) air entraining agent	Concrete
(652)	(652) aggregate moisture content	Concrete
(656)	(656) Hard stone	Concrete
(664)	(664) Blast furnace cement	Concrete
(667)	(667) aggregate	Concrete
(670)	(670) Concrete	Concrete
(671)	(671) Compressive strength	Concrete
(672)	(672) Concrete spraying work	Concrete
(676)	(676) Admixture	Concrete
(678)	(678) Fine Aggregate	Concrete
(701)	(701) Axial stress	Concrete
(725)	(725) honey comb	Concrete
(738)	(738) chute	Concrete
(749)	(749) hotweather concreting	Concrete
(757)	(757) Vibration compaction	Concrete
(769)	(769) Underwater concreting	Concrete
(770)	(770) water Curing	Concrete
(785)	(785) slump	Concrete
(793)	(793) Cement Gun	Concrete
(804)	(804) Coarse Aggregate	Concrete
(866)	(866) special cement	Concrete

(877)	(877) Tremie	Concrete
(884)	(884) Diagonal chute	Concrete
(934)	(934) plasticity	Concrete
(937)	(937) precast concrete	Concrete
(938)	(938) pre-cooling	Concrete
(940)	(940) Prepacked concrete	Concrete
(960)	(960) staggered placing	Concrete
(341)	(341) Pipe scaffolding	Construction
(490)	(490) arrow	Construction
(495)	(495) safety control 1	Construction
(496)	(496) safety control 2	Construction
(523)	(523) stock	Construction
(570)	(570) aerial cableway	Construction
(638)	(638) Grouting	Construction
(649)	(649) cable crane	Construction
(715)	(715) closing dyke	Construction
(716)	(716) wire cylinder	Construction
(717)	(717) wire cylinder masonry	Construction
(774)	(774) undermining	Construction
(874)	(874) Rush work	Construction
(888)	(888) trench excavation	Construction
(909)	(909) angle brace	Construction
(914)	(914) PDCA(plan-do-check-action)	Construction
(920)	(920) quality control	Construction
(445)	(445) Construction schedule	Construction
(94)	(94) Earth Auger	Construction machinery
(194)	(194) Tractor Shovel Attachment	Construction machinery
(195)	(195) Tractor Shovel	Construction machinery
(196)	(196) Tractor	Construction machinery
(199)	(199) Dragline	Construction machinery
(201)	(201) Trailer	Construction machinery
(207)	(207) Track Crane	Construction machinery
(232)	(232) Back hoe	Construction machinery
(263)	(263) Dozer (Drained board)	Construction machinery
(264)	(264) Bulldozer	Construction machinery
(265)	(265) Front loader	Construction machinery
(302)	(302) Motor grader	Construction machinery
(329)	(329) Rake dozer	Construction machinery
(332)	(332) Tire roller	Construction machinery
(333)	(333) Vibrating road roller	Construction machinery
(430)	(430) pile driver	Construction machinery
(434)	(434) Clamshell	Construction machinery
(459)	(459) jackhammer	Construction machinery
(478)	(478) earth drill	Construction machinery
(482)	(482) attachment	Construction machinery
(494)	(495) safety control 1	Construction machinery
(564)	(564) guy rope	Construction machinery
(758)	(758) Vibration Roller	Construction machinery
(814)	(814) Tire dozer	Construction machinery
(815)	(815) Tire roller	Construction machinery
(830)	(830) tandem roller	Construction machinery
(831)	(831) tamping roller	Construction machinery
(841)	(841) Tilt dozer	Construction machinery
(868)	(868) blade	Construction machinery

(878)	(878) Trailer	Construction machinery
(879)	(879) Drop Hammer	Construction machinery
(906)	(906) power shovel	Construction machinery
(936)	(936) Bulldozer	Construction machinery
(986)	(986) ripper (bulldozer)(crawler type+ripper)	Construction machinery
(74)	(74) Underground Dam	Dam
(95)	(95) Earth Dam:Fill-type Dam	Dam
(98)	(98) Arch Dam	Dam
(107)	(107) Shielding Zone	Dam
(141)	(141) Zoned Fill-type Dam	Dam
(158)	(158) Hollow Gravity Dam	Dam
(161)	(161) Height of Dam 1	Dam
(162)	(162) Height of Dam 2	Dam
(205)	(205) Drain	Dam
(245)	(245) Facing type dam	Dam
(251)	(251) Fill dam	Dam
(260)	(260) Blanket	Dam
(283)	(283) Flood control dam	Dam
(311)	(311) Uplift pressure	Dam
(405)	(405) water coffer dam	Dam
(433)	(433) grouting	Dam
(439)	(439) Core-type fill dam	Dam
(451)	(451) concrete gravity dam	Dam
(483)	(483) arch dam(1)	Dam
(484)	(484) arch dam(2)	Dam
(540)	(540) apron 2	Dam
(732)	(732) Gravity dam	Dam
(735)	(735) Intake Dam	Dam
(880)	(880) Internal impermeable wall	Dam
(919)	(919) surface impermeable wall	Dam
(961)	(961) mass concrete	Dam
(978)	(978) Spillway	Dam
(999)	(999) Rock-fill dam	Dam
(96)	(96) Earth Drill	Earth work
(106)	(106) Sodding	Earth work
(108)	(108) Impermeable Flexible Sheet	Earth work
(109)	(109) Collecting Channel 1	Earth work
(114)	(114) Surface Soil Paddling	Earth work
(146)	(146) Turnout	Earth work
(149)	(149) Stepping	Earth work
(180)	(180) Tamping by Wooden Rammer	Earth work
(182)	(182) Soil Stabilize Sheet	Earth work
(187)	(187) Ground Sill	Earth work
(279)	(279) Bench cut	Earth work
(337)	(337) Rock bolt 1	Earth work
(396)	(396) Stair field work	Earth work
(397)	(397) All cross-sectional cutting	Earth work
(398)	(398) Slope fieldwork	Earth work
(429)	(429) cutting banking Fill	Earth work
(498)	(498) stabilization	Earth work
(522)	(522) pumice stone	Earth work
(524)	(524) Fill in	Earth work
(551)	(551) counterweight fill method	Earth work
(558)	(558) open cut method	Earth work

(595)	(595) over-compaction	Earth work
(634)	(634) cutting	Earth work
(635)	(635) strut	Earth work
(639)	(639) grout	Earth work
(696)	(696) soil cover	Earth work
(709)	(709) Ground injection method	Earth work
(776)	(776) sodding	Earth work
(783)	(783) Sliding surface	Earth work
(825)	(825) bench cut	Earth work
(838)	(838) Finishing stake	Earth work
(867)	(867) Earthwork	Earth work
(876)	(876) Sheathing work	Earth work
(890)	(890) Penetration	Earth work
(896)	(896) slope gradient	Earth work
(941)	(941) pre-loading method	Earth work
(957)	(957) spreading	Earth work
(958)	(958) spreading depth	Earth work
(959)	(959) friction pile	Earth work
(966)	(966) banking	Earth work
(968)	(968) land reclamation in natural slope	Earth work
(969)	(969) batter board	Earth work
(976)	(976) landslide control works	Earth work
(982)	(982) prevention for falling stone	Earth work
(990)	(990) diversion filling	Earth work
(993)	(993) cross section calculation area-average method	Earth work
(313)	(313) Extra banking	Embankment
(385)	(385) loading berm; counterweight fill	Embankment
(399)	(399) riverbed	Embankment
(448)	(448) banquette; berm	Embankment
(514)	(514) berm	Embankment
(550)	(550) counter weight banking	Embankment
(559)	(559) outer banquette	Embankment
(581)	(581) levee raising	Embankment
(583)	(583) raising of embankment	Embankment
(653)	(653) major bed	Embankment
(663)	(663) bank protection	Embankment
(666)	(666) Berm	Embankment
(680)	(680) Left bank Right bank	Embankment
(714)	(714) cofferdam	Embankment
(720)	(720) natural ground	Embankment
(792)	(792) stone levee	Embankment
(796)	(796) Cellular sheet pile	Embankment
(834)	(834) Embankment	Embankment
(843)	(843) Back slope protection	Embankment
(848)	(848) sandbag stacking	Embankment
(857)	(857) Upper surface	Embankment
(894)	(894) slope	Embankment
(911)	(911) secondary levee	Embankment
(912)	(912) sluice	Embankment
(916)	(916) sluice	Embankment
(979)	(979) extra-banking	Embankment
(980)	(980) extra-banking	Embankment
(981)	(981) freeboard	Embankment
(3)	(3) water→dirty	Environment

(4)	(4) no drinking water	Environment
(5)	(5) water→pollution	Environment
(6)	(6) water→pollution	Environment
(25)	(25) pasturage prohibition	Environment
(38)	(38) weak the earth	Environment
(39)	(39) creature in the earth	Environment
(121)	(121) Hydrologic Cycle	Environment
(129)	(129) Sand Control Hedge	Environment
(252)	(252) Wind erosion	Environment
(299)	(299) Sheet erosion	Environment
(364)	(364) Raindrops erosion	Environment
(403)	(403) gully Erosion	Environment
(406)	(406) gully stability works	Environment
(488)	(488) amenities	Environment
(549)	(549) rooftop greening	Environment
(605)	(605) gully erosion	Environment
(685)	(685) soil erosion control works	Environment
(693)	(693) soil erosion control works	Environment
(694)	(694) erosion control works	Environment
(741)	(741) Circulating water	Environment
(755)	(755) Cycle of erosion	Environment
(765)	(765) Water pollution	Environment
(788)	(788) Productive green tract of land	Environment
(885)	(885) interflow	Environment
(921)	(921) wind erosion control	Environment
(955)	(955) windbreak fence	Environment
(994)	(994) rill erosion	Environment
(355)	(355) fish preserve	Fishery
(425)	(425) Fishing reefs	Fishery
(426)	(426) Fish finder	Fishery
(427)	(427) fishway	Fishery
(629)	(629) Fishladder	Fishery
(2)	(2) cut trees	Forest
(7)	(7) cut tree	Forest
(8)	(8) cut tree	Forest
(9)	(9) cut tree	Forest
(10)	(10) cut tree	Forest
(11)	(11) cut tree	Forest
(12)	(12) cut tree	Forest
(13)	(13) plant tree	Forest
(14)	(14) plant tree	Forest
(15)	(15) desertification !	Forest
(16)	(16) desertification	Forest
(17)	(17) cut tree	Forest
(29)	(29) natural forest	Forest
(30)	(30) artificial forest	Forest
(31)	(31) satoyama	Forest
(32)	(32) forest	Forest
(33)	(33) no trees	Forest
(34)	(34) green dam	Forest
(40)	(40) Forest	Forest
(41)	(41) Forest	Forest
(42)	(42) Forest and River	Forest
(49)	(49) Forest and Fish	Forest

(50)	(50) Forest and People	Forest
(61)	(61) Graft	Forest
(90)	(90) Satoyama(Japan)	Forest
(91)	(91) Satoyama(Japan)	Forest
(92)	(92) Many Trees	Forest
(93)	(93) No Tree	Forest
(281)	(281) Windbreak	Forest
(475)	(475) heart wood	Forest
(751)	(751) water seasoning	Forest
(99)	(99) Shallow Foundation	Foundation
(124)	(124) Riprap	Foundation
(144)	(144) Foundation Earth Drilling Equipment	Foundation
(211)	(211) Pneumatic Caisson	Foundation
(229)	(229) Ladder type wooden foundation	Foundation
(253)	(253) Footing foundation	Foundation
(278)	(278) Benoto method	Foundation
(306)	(306) Land-slide protection wall 1	Foundation
(307)	(307) Land-slide protection wall 2	Foundation
(340)	(340) Shallow foundation	Foundation
(384)	(384) open caisson	Foundation
(428)	(428) pile	Foundation
(431)	(431) pile foundation	Foundation
(435)	(435) group pile	Foundation
(454)	(454) concrete sheet pile	Foundation
(465)	(465) sand drain method	Foundation
(474)	(474) island cut method	Foundation
(476)	(476) shallow well	Foundation
(492)	(492) anchor bolt	Foundation
(497)	(497) underpinning method	Foundation
(500)	(500) mat foundation	Foundation
(502)	(502) ICOS method	Foundation
(512)	(512) caisson	Foundation
(521)	(521) Well point construction method	Foundation
(528)	(528) air lock	Foundation
(603)	(603) shallow sump	Foundation
(615)	(615) precast concrete pile	Foundation
(616)	(616) foundation	Foundation
(642)	(642) foundation broken stone	Foundation
(647)	(647) caisson foundation	Foundation
(657)	(657) composite column	Foundation
(691)	(691) sand drain method	Foundation
(692)	(692) Sand pile	Foundation
(699)	(699) housing foundation concrete	Foundation
(704)	(704) bearing pile	Foundation
(710)	(710) allowable bearing capacity	Foundation
(756)	(756) Deep foundation method	Foundation
(760)	(760) axle of drop hammer	Foundation
(777)	(777) riprap work	Foundation
(779)	(779) leaving concrete	Foundation
(821)	(821) Cobblestone layer	Foundation
(839)	(839) spread foundation	Foundation
(869)	(869) excavation for foundation	Foundation
(873)	(873) foundation work	Foundation
(886)	(886) strip footing	Foundation

(892)	(892) negative friction	Foundation
(895)	(895) slope pile	Foundation
(929)	(929) Footing foundation	Foundation
(946)	(946) Benoto method	Foundation
(947)	(947) paper drain method	Foundation
(963)	(963) hydraulic filling method	Foundation
(750)	(750) Silt layer	Geology
(828)	(828) fault	Geology
(835)	(835) Geological Survey	Geology
(927)	(927) unconformity	Geology
(972)	(972) lava	Geology
(973)	(973) lava flow	Geology
(51)	(51) Underground Water	Hydraulic
(103)	(103) Water Stop 1	Hydraulic
(140)	(140) Laminar Flow	Hydraulic
(152)	(152) Groundwater Table	Hydraulic
(219)	(219) Backwater	Hydraulic
(221)	(221) Hydrograph separation	Hydraulic
(222)	(222) Hyetograph	Hydraulic
(225)	(225) Hydrograph	Hydraulic
(241)	(241) Ice pressure	Hydraulic
(246)	(246) Surface runoff	Hydraulic
(319)	(319) Lift	Hydraulic
(322)	(322) Sediment load	Hydraulic
(323)	(323) velocity distribution	Hydraulic
(324)	(324) flow net	Hydraulic
(328)	(328) distribution graph	Hydraulic
(362)	(362) Well point method	Hydraulic
(363)	(363) Spiral pump	Hydraulic
(369)	(369) liquid limit	Hydraulic
(371)	(371) S-curve	Hydraulic
(372)	(372) overflow	Hydraulic
(375)	(375) Apron	Hydraulic
(386)	(386) Open flow meter	Hydraulic
(410)	(410) Complete nappe and Incomplete nappe	Hydraulic
(414)	(414) influent stream and effluent stream	Hydraulic
(419)	(419) balancing reservoir	Hydraulic
(420)	(420) reverse siphon	Hydraulic
(423)	(423) conjugate depth	Hydraulic
(437)	(437) Decompression wells	Hydraulic
(438)	(438) energy dissipator	Hydraulic
(457)	(457) surge tank	Hydraulic
(469)	(469) discharge hydro-graph	Hydraulic
(509)	(509) potential head	Hydraulic
(531)	(531) circle of influence	Hydraulic
(535)	(535) overflow pipe	Hydraulic
(538)	(538) deversoir	Hydraulic
(560)	(560) orifice	Hydraulic
(593)	(593) activation of carbon	Hydraulic
(594)	(594) activation of carbon	Hydraulic
(598)	(598) movable weir 1	Hydraulic
(599)	(599) movable weir 2	Hydraulic
(600)	(600) movable weir 3	Hydraulic
(606)	(606) hooping	Hydraulic

(632)	(632) Notch	Hydraulic
(643)	(643) design flood discharge	Hydraulic
(644)	(644) hydraulic radius	Hydraulic
(651)	(651) in-situ permeability test	Hydraulic
(658)	(658) broad-crested weir	Hydraulic
(668)	(668) fixed weir	Hydraulic
(686)	(686) uniformly varying load	Hydraulic
(688)	(688) Triangular weir	Hydraulic
(695)	(695) Square weir	Hydraulic
(707)	(707) Natural head	Hydraulic
(724)	(724) supercritical flow	Hydraulic
(727)	(727) infiltration gallery	Hydraulic
(729)	(729) Free outflow	Hydraulic
(731)	(731) Gravity water	Hydraulic
(745)	(745) ordinary flow	Hydraulic
(754)	(754) seepage line	Hydraulic
(761)	(761) Water pressure	Hydraulic
(764)	(764) Water hammer	Hydraulic
(766)	(766) hydraulic turbine	Hydraulic
(771)	(771) hydraulic depth	Hydraulic
(791)	(791) back water curve	Hydraulic
(801)	(801) undercurrent	Hydraulic
(802)	(802) traction	Hydraulic
(803)	(803) Laminar flow	Hydraulic
(823)	(823) Dam-type power	Hydraulic
(833)	(833) Groundwater table	Hydraulic
(836)	(836) hydraulic jump	Hydraulic
(856)	(856) Deflector	Hydraulic
(870)	(870) sedimentation setting	Hydraulic
(882)	(882) nappe	Hydraulic
(900)	(900) drainage method	Hydraulic
(901)	(901) dentated sill	Hydraulic
(902)	(902) sharp-edged weir	Hydraulic
(908)	(908) confined groundwater	Hydraulic
(923)	(923) deep well	Hydraulic
(924)	(924) auxiliary dam	Hydraulic
(930)	(930) unsteady flow	Hydraulic
(932)	(932) impermeable layer	Hydraulic
(933)	(933) non-uniform flow	Hydraulic
(935)	(935) suspended load	Hydraulic
(964)	(964) spatter's effect	Hydraulic
(985)	(985) Laminar flow	Hydraulic
(989)	(989) flow net	Hydraulic
(997)	(997) filter film	Hydraulic
(998)	(998) filter material	Hydraulic
(24)	(24) soil outflow	Irrigation
(35)	(35) reservoir	Irrigation
(36)	(36) rotate crops	Irrigation
(44)	(44) Channel	Irrigation
(45)	(45) Reservoir	Irrigation
(70)	(70) River Irrigation(Egypt)1	Irrigation
(71)	(71) River Irrigation(Egypt)2	Irrigation
(73)	(73) Reservoir	Irrigation
(83)	(83) Irrigation Canal and Channel	Irrigation

(84)	(84) Qanat (Iran)	Irrigation
(85)	(85) River Irrigation(Mesopotamia)1	Irrigation
(86)	(86) River Irrigation(Mesopotamia)2	Irrigation
(87)	(87) Water Level Meter(Nile Meter)	Irrigation
(88)	(88) Terrace Agriculture (Indus)	Irrigation
(89)	(89) Reservoir(Africa)	Irrigation
(100)	(100) Cutoff Wall 1	Irrigation
(101)	(101) Cutoff Wall 2	Irrigation
(102)	(102) Cutoff Wall 3	Irrigation
(110)	(110) Collecting Channel 2	Irrigation
(111)	(111) Collecting Drain 1	Irrigation
(112)	(112) Collecting Drain2	Irrigation
(113)	(113) Intercepting Drain :Catch Drain	Irrigation
(117)	(117) Passable Ditch	Irrigation
(122)	(122) Reinforced Concrete L Type Flume	Irrigation
(123)	(123) Farm Road with The Capacity of Water Way	Irrigation
(128)	(128) Slide Type Gate	Irrigation
(130)	(130) Weir 1	Irrigation
(131)	(131) Weir 2	Irrigation
(132)	(132) Weir 3	Irrigation
(133)	(133) Weir 4	Irrigation
(134)	(134) Weir 5	Irrigation
(147)	(147) Plot-to-Plot Irrigation	Irrigation
(150)	(150) Mole Drain	Irrigation
(151)	(151) Bench Terrace	Irrigation
(153)	(153) Underdrainage System	Irrigation
(154)	(154) Surface Irrigation(1)	Irrigation
(155)	(155) Surface Irrigation(2)	Irrigation
(156)	(156) Surface Irrigation(3)	Irrigation
(157)	(157) Surface Irrigation(4)	Irrigation
(159)	(159) Replacement Method(1)	Irrigation
(167)	(167) Reinforced Concrete Flume	Irrigation
(168)	(168) Reinforced Concrete Bench Flume	Irrigation
(169)	(169) Reinforced Concrete Built up Canal	Irrigation
(170)	(170) Terrace Channel	Irrigation
(171)	(171) Terrace Outlet Channel	Irrigation
(178)	(178) Head Works	Irrigation
(186)	(186) Clay Pipe:Earthen Pipe	Irrigation
(188)	(188) Sedimentation Tank	Irrigation
(203)	(203) Channel Transition	Irrigation
(220)	(220) Drainage pump station	Irrigation
(223)	(223) Drainage canal	Irrigation
(224)	(224) Pipe line	Irrigation
(226)	(226) Pipe stand	Irrigation
(230)	(230) Aeration	Irrigation
(239)	(239) Paddy field with underlying plastic sheet	Irrigation
(247)	(247) Miter gate	Irrigation
(248)	(248) Radial gate	Irrigation
(249)	(249) Hinge type gate	Irrigation
(250)	(250) High pressure radial gate	Irrigation
(256)	(256) Plow	Irrigation
(261)	(261) Flume (U flume)	Irrigation
(267)	(267) Diversion works Turn out	Irrigation
(268)	(268) Cylindrical water diversion	Irrigation

(269)	(269) French type proportional diversion	Irrigation
(270)	(270) American type proportional diversion	Irrigation
(285)	(285) Catch drain	Irrigation
(288)	(288) Main underdrain(Culvert)	Irrigation
(290)	(290) Detour waterway	Irrigation
(295)	(295) Inlet for irrigation water	Irrigation
(297)	(297) Mole drain	Irrigation
(303)	(303) Mole drain	Irrigation
(304)	(304) Simple chaff:Rice husk culvert	Irrigation
(308)	(308) Irrigation channel	Irrigation
(315)	(315) Dual-purpose canal	Irrigation
(316)	(316) Spillway	Irrigation
(349)	(349) Culvert1	Irrigation
(350)	(350) Culvert2	Irrigation
(351)	(351) Culvert3	Irrigation
(352)	(352) Asphalt lining	Irrigation
(359)	(359) Shallow well	Irrigation
(360)	(360) Deep well	Irrigation
(361)	(361) Impact box	Irrigation
(378)	(378) cross drainage	Irrigation
(379)	(379) cross culvert	Irrigation
(383)	(383) overshoot	Irrigation
(391)	(391) water warming facilities2	Irrigation
(393)	(393) sliding timber weir	Irrigation
(394)	(394) The mountains reclamation-cultivation	Irrigation
(395)	(395) Improved mountain reclamation	Irrigation
(407)	(407) simple drain1	Irrigation
(408)	(408) simple drain2	Irrigation
(409)	(409) Main Road	Irrigation
(421)	(421) lateral drain1	Irrigation
(422)	(422) lateral drain2	Irrigation
(436)	(436) ridge between rice fields,border ditch irrigation	Irrigation
(442)	(442) plowing	Irrigation
(443)	(443) field lot	Irrigation
(450)	(450) Colgate Pipes	Irrigation
(453)	(453) concrete block lining	Irrigation
(463)	(463) sprinkle with water	Irrigation
(467)	(467) opening for final closing1	Irrigation
(468)	(468) opening for final closing2	Irrigation
(481)	(481) border lot	Irrigation
(493)	(493) underdrainage	Irrigation
(526)	(526)vertical frame	Irrigation
(536)	(536) overflow irrigation	Irrigation
(565)	(565) open channel	Irrigation
(571)	(571) stop-log	Irrigation
(608)	(608) pipeline	Irrigation
(645)	(645) border	Irrigation
(660)	(660) ditch-side border	Irrigation
(689)	(689) sprinkler irrigation	Irrigation
(690)	(690) sprinkler curing	Irrigation
(733)	(733) Water Intake	Irrigation
(734)	(734) Intake	Irrigation
(736)	(736) Intake tower e	Irrigation
(743)	(743) wetted perimeter®	Irrigation

(744)	(744) intercepting drain	Irrigation
(746)	(746) Salt Desalination	Irrigation
(768)	(768) water erosion control	Irrigation
(790)	(790) weir	Irrigation
(860)	(860) Head works	Irrigation
(899)	(899) slope protection	Irrigation
(922)	(922) wind erosion farm	Irrigation
(925)	(925) river bed water	Irrigation
(928)	(928) cross drain	Irrigation
(942)	(942) diversion works	Irrigation
(956)	(956) main levee	Irrigation
(988)	(988) cross section area	Irrigation
(991)	(991) discharge	Irrigation
(995)	(995) Degraded ferro-deficient paddy field	Irrigation
(611)	(611) cant	Railway
(853)	(853) T-shaped retaining wall	Retaining wall
(887)	(887) coursed masonry	Retaining wall
(903)	(903) buttressed retaining wall	Retaining wall
(904)	(904) waling	Retaining wall
(974)	(974) retaining wall	Retaining wall
(975)	(975) landslide restraining works	Retaining wall
(984)	(984) random masonry	Retaining wall
(215)	(215) Wet Masonry	Revetment
(237)	(237) Stay	Revetment
(356)	(356) Masonry	Revetment
(366)	(366) back-filling	Revetment
(370)	(370) wave overtopping	Revetment
(404)	(404) steel sheet double temporary coffering	Revetment
(446)	(446) Revetment	Revetment
(504)	(504) stone masonry	Revetment
(505)	(505) slope-crib works	Revetment
(506)	(506) stone pitching	Revetment
(525)	(525) back-filling	Revetment
(542)	(542) connection cut	Revetment
(562)	(562) stopper stone	Revetment
(604)	(604) dry masonry	Revetment
(625)	(625) parapet wall	Revetment
(631)	(631) ashlar masonry	Revetment
(641)	(641) broken stone	Revetment
(682)	(682) buttressed type retaining wall	Revetment
(822)	(822) Cobblestone masonry	Revetment
(855)	(855) Reinforced concrete retaining wall	Revetment
(891)	(891) foot protection	Revetment
(893)	(893) wet masonry	Revetment
(897)	(897) sure-footing	Revetment
(898)	(898) slope protection work	Revetment
(23)	(23) river reclamation	River
(47)	(47) Fishpass	River
(48)	(48) Fishpass	River
(118)	(118) Water Level Gage	River
(119)	(119) Groin	River
(165)	(165) River (Levee:Dike:Embankment)	River
(166)	(166) Alignment of Dike	River
(181)	(181) Training Jetty	River

(185)	(185) Guide Wall:Training Wall	River
(259)	(259) Ship way	River
(293)	(293) Water route	River
(309)	(309) Retarding basin:Flood storage basin	River
(320)	(320) Drainage basin	River
(334)	(334) Roller type gate	River
(339)	(339) Ring levee	River
(377)	(377) Salt wedge	River
(401)	(401) watercourse	River
(464)	(464) Sand Pits	River
(503)	(503) stone dyke	River
(527)	(527) inclined groin	River
(537)	(537) groin overflow	River
(579)	(579) estuary improvement	River
(584)	(584) center of stream	River
(585)	(585) open levee	River
(596)	(596) river channel	River
(654)	(654) Flood control	River
(687)	(687) Delta	River
(708)	(708) Downward groin	River
(726)	(726) boat way	River
(748)	(748) Shortcut	River
(762)	(762) Water level recorder	River
(763)	(763) Water gauge	River
(772)	(772) diversion channel	River
(773)	(773) Aqueduct	River
(786)	(786) Sluice Gate	River
(797)	(797) separation levee	River
(799)	(799) fan	River
(800)	(800) summer dyke	River
(819)	(819) Line river s-shaped	River
(850)	(850) riverside land	River
(851)	(851) low-water channel work	River
(852)	(852) low-water channel	River
(862)	(862) Training dyke	River
(863)	(863) Training levee	River
(910)	(910) non-overflow groyne	River
(931)	(931) impermeable spur	River
(953)	(953) flood bypass	River
(971)	(971) retarding basin	River
(977)	(977) cross-levee	River
(987)	(987) thalweg	River
(126)	(126) Corner Cutting	Road
(139)	(139) Plane Alignment	Road
(142)	(142) Marginal Strip	Road
(183)	(183) Right of Way	Road
(184)	(184) Road Width	Road
(210)	(210) Nursery Bed	Road
(227)	(227) Crushing and compaction method	Road
(284)	(284) Snowslip control fence	Road
(286)	(286) Pavement	Road
(336)	(336) Road bed(subgrade)	Road
(342)	(342) Asphalt sprayer (Distributor)	Road
(343)	(343) Asphalt finisher	Road

(344)	(344) Asphalt plant	Road
(381)	(381) cross slope	Road
(415)	(415) transition section	Road
(416)	(416) transition curve	Road
(417)	(417) field machinery passage	Road
(418)	(418) substratum	Road
(479)	(479) asphalt concrete	Road
(480)	(480) Asphalt sub-sealing	Road
(517)	(517) interchange	Road
(518)	(518) Interlocking	Road
(555)	(555) overlay	Road
(574)	(574) Widening	Road
(586)	(586) acceleration lane	Road
(588)	(588) cant:super-elevation	Road
(601)	(601) guard cable	Road
(613)	(613) transition curve	Road
(628)	(628) curvature diagram	Road
(650)	(650) Deceleration lane	Road
(655)	(655) rigid pavement	Road
(684)	(684) Sub-sealing	Road
(712)	(712) Shift	Road
(728)	(728) Vertical curve	Road
(782)	(782) Anti-slip treatment	Road
(794)	(794) Cement subsealing	Road
(826)	(826) simple curve	Road
(864)	(864) Road work	Road
(865)	(865) Road Alignment	Road
(881)	(881) Avalanche gallery	Road
(943)	(943) separator	Road
(945)	(945) curve band	Road
(948)	(948) deceleration • acceleration lane	Road
(962)	(962) mudjacking	Road
(996)	(996) road shoulder	Road
(553)	(553) sewage inlet	Sewage
(20)	(20) soil erosion	Soil
(105)	(105) Compaction Curve	Soil
(125)	(125) Sliding Surface	Soil
(135)	(135) Shear Test	Soil
(136)	(136) Shear Test	Soil
(137)	(137) Triaxial Shear Test	Soil
(138)	(138) Vane Test	Soil
(163)	(163) Peat	Soil
(172)	(172) Earth Pressure	Soil
(173)	(173) Unified Soil Classification	Soil
(176)	(176) Frost Heave	Soil
(189)	(189) Soil Structure	Soil
(190)	(190) Soil Horizon	Soil
(191)	(191) Soil Moisture Extraction Pattern	Soil
(192)	(192) Three Phases of Soil	Soil
(193)	(193) Soil Texture	Soil
(208)	(208) Bulk Factor of Soil	Soil
(216)	(216) Cohesion	Soil
(235)	(235) Heaving	Soil
(243)	(243) Standard penetration test	Soil

(275)	(275) Plate bearing test	Soil
(276)	(276) Plate bearing test :Load strength-Settlement curve	Soil
(277)	(277) Vane shear apparatus:Vane test	Soil
(287)	(287) Boring machine	Soil
(321)	(321) Poorly-graded	Soil
(325)	(325) particle size analysis	Soil
(326)	(326) Grading curve	Soil
(327)	(327) particle size distribution curve	Soil
(346)	(346) Consolidation test	Soil
(347)	(347) Consolidation	Soil
(348)	(348) Pressure bulb	Soil
(357)	(357) Primary consolidation	Soil
(358)	(358) Unconfined compression test	Soil
(373)	(373) N-Value	Soil
(374)	(374) geologic columnar section	Soil
(382)	(382) auger	Soil
(432)	(432) quick sand phenomena	Soil
(447)	(447) cone index	Soil
(456)	(456) Moisture content and consistency limit	Soil
(458)	(458) loading test	Soil
(460)	(460) Triangular diagram	Soil
(462)	(462) triaxial compression test	Soil
(532)	(532) sensitivity ratio	Soil
(533)	(533) liquefaction	Soil
(534)	(534) liquid limit	Soil
(544)	(544) Soil	Soil
(566)	(566) revolutionary landslide	Soil
(636)	(636) quick sand phenomena	Soil
(674)	(674) Consistency	Soil
(677)	(677) Loading test	Soil
(700)	(700) test-pit digging	Soil
(706)	(706) Landslide	Soil
(713)	(713) Compaction test	Soil
(721)	(721) toe failure	Soil
(722)	(722) slope failure	Soil
(723)	(723) Slope failure	Soil
(739)	(739) active earth pressure	Soil
(740)	(740) Passive earth pressure	Soil
(781)	(781) circular slide	Soil
(789)	(789) Static earth pressure	Soil
(805)	(805) Plasticity	Soil
(806)	(806) Plastic limit	Soil
(807)	(807) plasticity index	Soil
(808)	(808) angle of repose	Soil
(816)	(816) Dial gauge	Soil
(832)	(832) Single grain structure	Soil
(845)	(845) Soil structure	Soil
(846)	(846) Plastic deformation of soil	Soil
(847)	(847) shaft sinking	Soil
(854)	(854) Base failure	Soil
(858)	(858) Frost heaving and soil	Soil
(872)	(872) soil profile	Soil
(915)	(915) heaving	Soil
(918)	(918) standard penetration test	Soil

(949)	(949) boiling	Soil
(967)	(967) Landslide	Soil
(115)	(115) Expansion Joint 1	Structure
(116)	(116) Expansion Joint 2	Structure
(233)	(233) Beam	Structure
(234)	(234) Stress and deformation of simple beam	Structure
(238)	(238) Strain	Structure
(266)	(266) Prestressed concrete	Structure
(298)	(298) Joint filler	Structure
(314)	(314) Reinforcement of weld	Structure
(317)	(317) Rigid frame:Rahmen	Structure
(318)	(318) Spiral hoop reinforcement	Structure
(335)	(335) Rolled reinforced concrete pipe	Structure
(345)	(345) Coefficient of Compressibility	Structure
(354)	(354) Deformed bar	Structure
(367)	(367) Simple beam-influence line	Structure
(368)	(368) sensitivity ratio(St)	Structure
(376)	(376) Centrifugal reinforced concrete	Structure
(380)	(380) stress	Structure
(387)	(387) lateral tie hoop	Structure
(400)	(400) shuttering for concrete	Structure
(444)	(444) steel sheet pile	Structure
(470)	(470) rebated joint	Structure
(472)	(472) I steel	Structure
(487)	(487) stirrup	Structure
(511)	(511) simple friction joint	Structure
(513)	(513) moving load	Structure
(515)	(515) dead straight joint	Structure
(516)	(516) straight joint	Structure
(520)	(520) wing	Structure
(543)	(543) centrifugal reinforcement concrete pipe	Structure
(548)	(548) cross-sectional drawings	Structure
(552)	(552) stripped joint	Structure
(554)	(554) fang bolt	Structure
(556)	(556) hoop	Structure
(569)	(569) key-type steel sheet pile	Structure
(572)	(572) truss structure 1	Structure
(573)	(573) truss structure 2	Structure
(577)	(577) truss structure 3 lower chord member	Structure
(580)	(580) lower yield point	Structure
(590)	(590) cantilever	Structure
(592)	(592) form	Structure
(626)	(626) ultimate strength	Structure
(662)	(662) steel sheet pile	Structure
(683)	(683) rabbet joint	Structure
(702)	(702) Axial Reinforcing Bars	Structure
(705)	(705) Water stop	Structure
(730)	(730) Gravity-retaining wall	Structure
(737)	(737) Main Rebar	Structure
(752)	(752) expansion device	Structure
(753)	(753) expansion joint	Structure
(775)	(775) screen	Structure
(784)	(784) quoin	Structure
(809)	(809) Roughness test	Structure

(810)	(810) firebrick	Structure
(824)	(824) deflection	Structure
(827)	(827) Elastic Deformation	Structure
(829)	(829) short column	Structure
(913)	(913) prestressed concrete beam	Structure
(926)	(926) rust corrosion	Structure
(939)	(939) pretensioning system	Structure
(954)	(954) polymer-modified cement waterproofing	Structure
(970)	(970) Young's modulus	Structure
(983)	(983) spiral rebar axial rebar column	Structure
(179)	(179) Traversing Method	Survey
(197)	(197) Traverse Surveying	Survey
(236)	(236) Checking peg	Survey
(242)	(242) Staff Leveling rod	Survey
(273)	(273) Closing difference	Survey
(274)	(274) Plane table survey	Survey
(280)	(280) Direction angle	Survey
(282)	(282) Radiation method	Survey
(330)	(330) Level	Survey
(353)	(353) Latitude Departure	Survey
(388)	(388) Offset survey	Survey
(441)	(441) intersection	Survey
(461)	(461) Triangulation	Survey
(473)	(473) ITRF94	Survey
(501)	(501) Latitude	Survey
(557)	(557) offset	Survey
(578)	(578) protective stake	Survey
(627)	(627) Polar coordinates	Survey
(630)	(630) distance survey	Survey
(681)	(681) plumb bob	Survey
(718)	(718) slope distance	Survey
(767)	(767) leveling	Survey
(780)	(780) Spring Balance	Survey
(798)	(798) foresight	Survey
(917)	(917) staff	Survey
(944)	(944) Plane table surveying	Survey
(965)	(965) turning point	Survey
(214)	(214) Wheel Barrow:Hand Cart	Tool
(561)	(561) brad	Tool
(568)	(568) packing	Tool
(576)	(576) wooden maul	Tool
(587)	(587) template	Tool
(669)	(669) Roller	Tool
(703)	(703) Flexible curve ruler	Tool
(719)	(719) Shackle	Tool
(813)	(813) anchor wire	Tool
(817)	(817) rammer	Tool
(849)	(849) Pick	Tool
(75)	(75) Peat Bog	Topography
(104)	(104) Land Slide	Topography
(174)	(174) Isohyetal Method	Topography
(177)	(177) Contour Farming	Topography
(499)	(499) col	Topography
(697)	(697) Tributary	Topography

(812)	(812) deposition	Topography
(820)	(820) Valley line ground surface	Topography
(859)	(859) Contour line	Topography
(871)	(871) Debris flow	Topography
(950)	(950) groyne net	Topography
(952)	(952) groyne wood	Topography
(992)	(992) water course	Topography
(148)	(148) Shaft	Tunnel
(160)	(160) Shinking Method:Trench Method	Tunnel
(175)	(175) Heading:Drift	Tunnel
(305)	(305) Timbering	Tunnel
(338)	(338) Rock bolt 2	Tunnel
(440)	(440) arched timbering	Tunnel
(466)	(466) Shielding	Tunnel
(519)	(519) invert	Tunnel
(547)	(547) adit	Tunnel
(563)	(563) open cut method	Tunnel
(602)	(602) covering	Tunnel
(607)	(607) culvert	Tunnel
(659)	(659) pit	Tunnel
(661)	(661) portal	Tunnel
(818)	(818) enlarged side wall concrete	Tunnel
(842)	(842) Trench method	Tunnel
(844)	(844) Soil covering	Tunnel
(883)	(883) NATM	Tunnel
(1000)	(1000) Rock bolt	Tunnel
(43)	(43) Well	Well
(46)	(46) Well	Well

Classification

Agricultural machinery
Agriculture
Breakwater
Bridge
Coast
Concrete
Construction
Construction machinery
Dam
Earth work
Embankment
Environment
Fishery
Forest
Foundation
Geology
Hydraulic
Irrigation
Railway
Retaining wall
Revetment
River
Road
Sewage
Soil
Structure
Survey
Tool
Topography
Tunnel