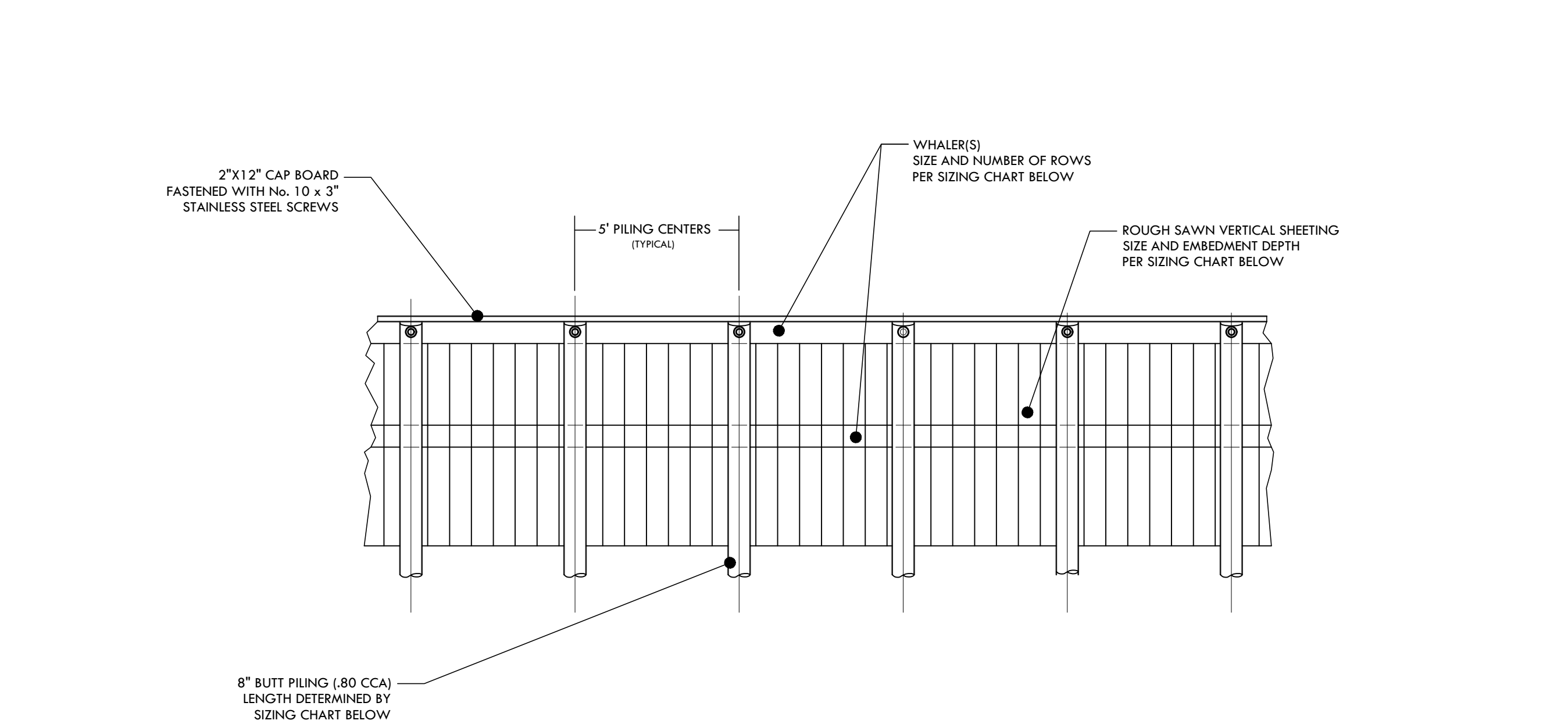
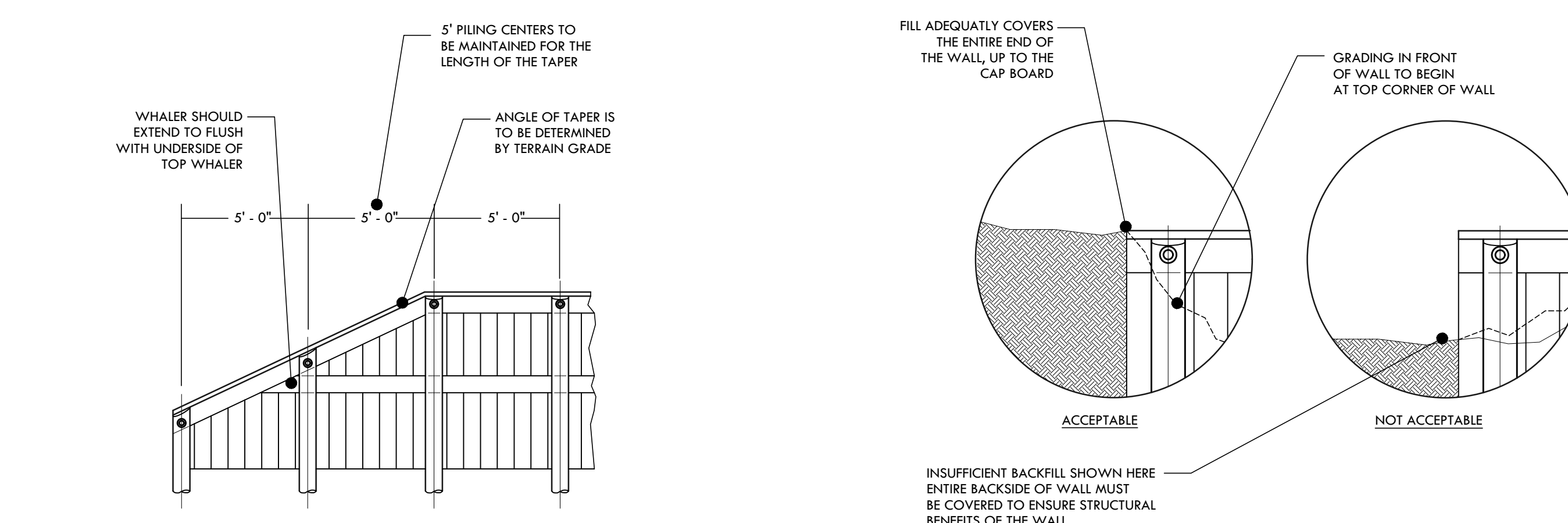


TYPICAL BULK HEAD RETAINING WALL
NO SCALE
SECTION VIEW



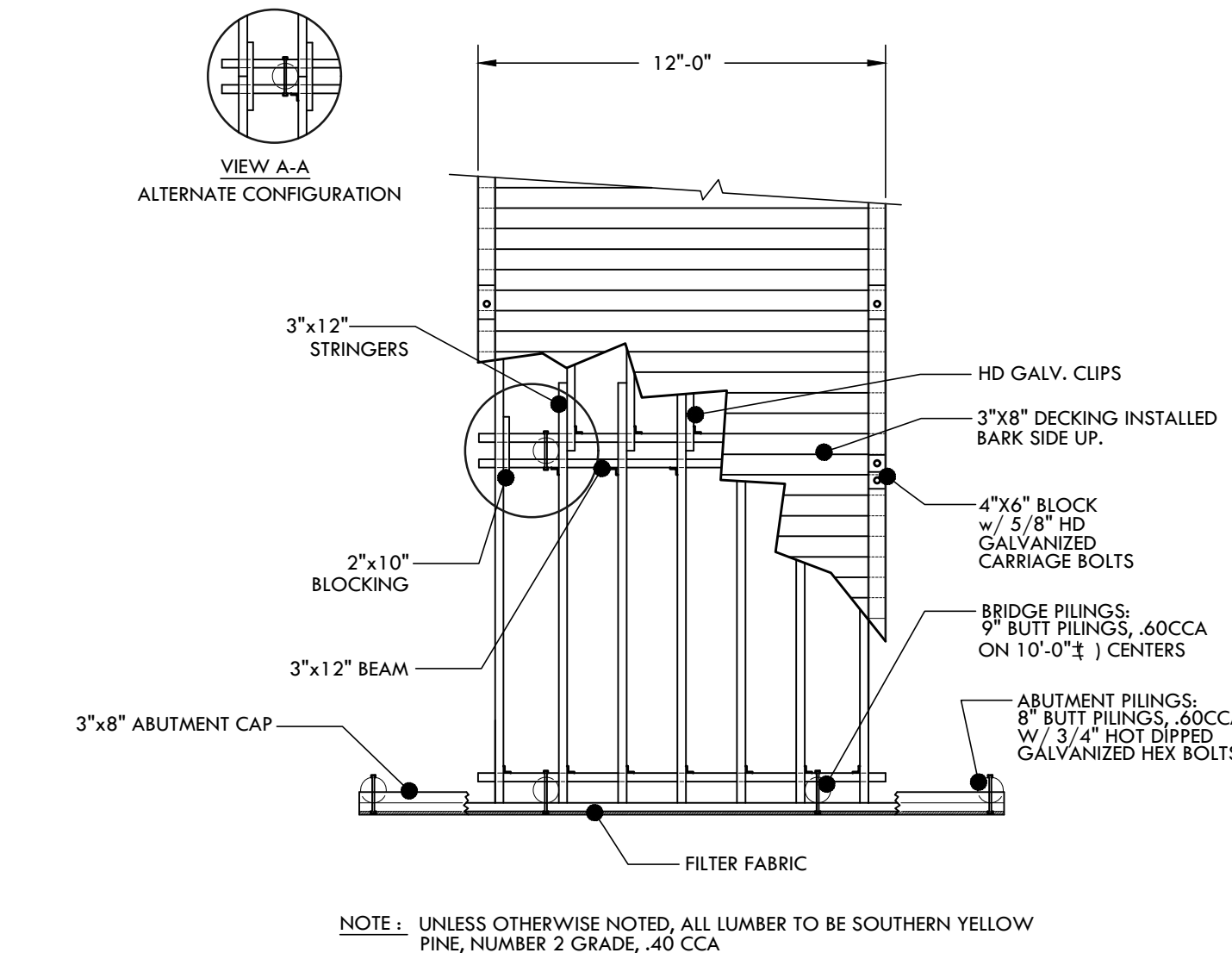
TYPICAL BULK HEAD RETAINING WALL
NO SCALE
SECTION VIEW



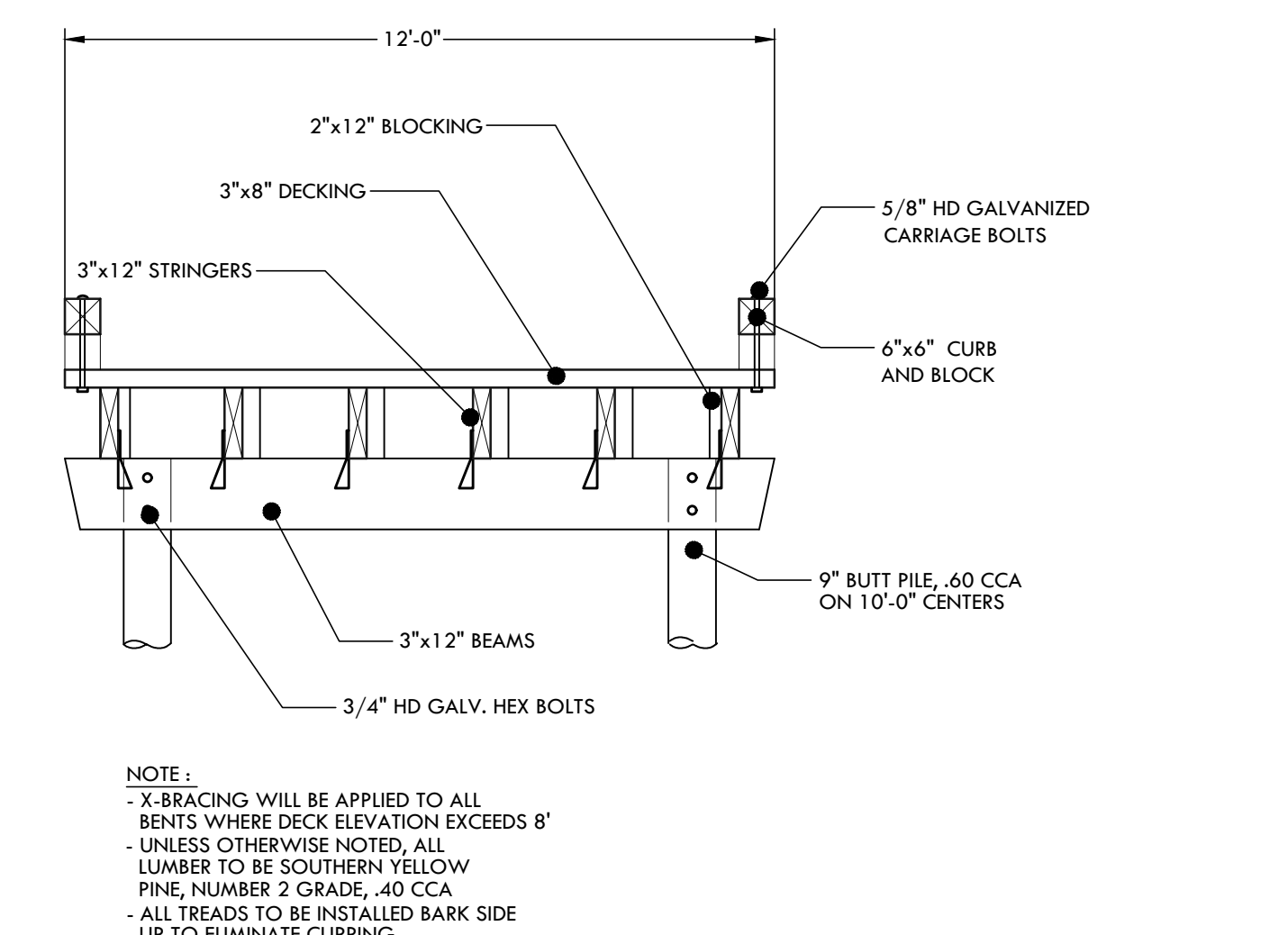
BULK HEAD RETAINING WALL TAPER
NO SCALE
PLAN VIEW

BULK HEAD BACKFILL TECHNIQUE
NO SCALE
SECTION VIEW

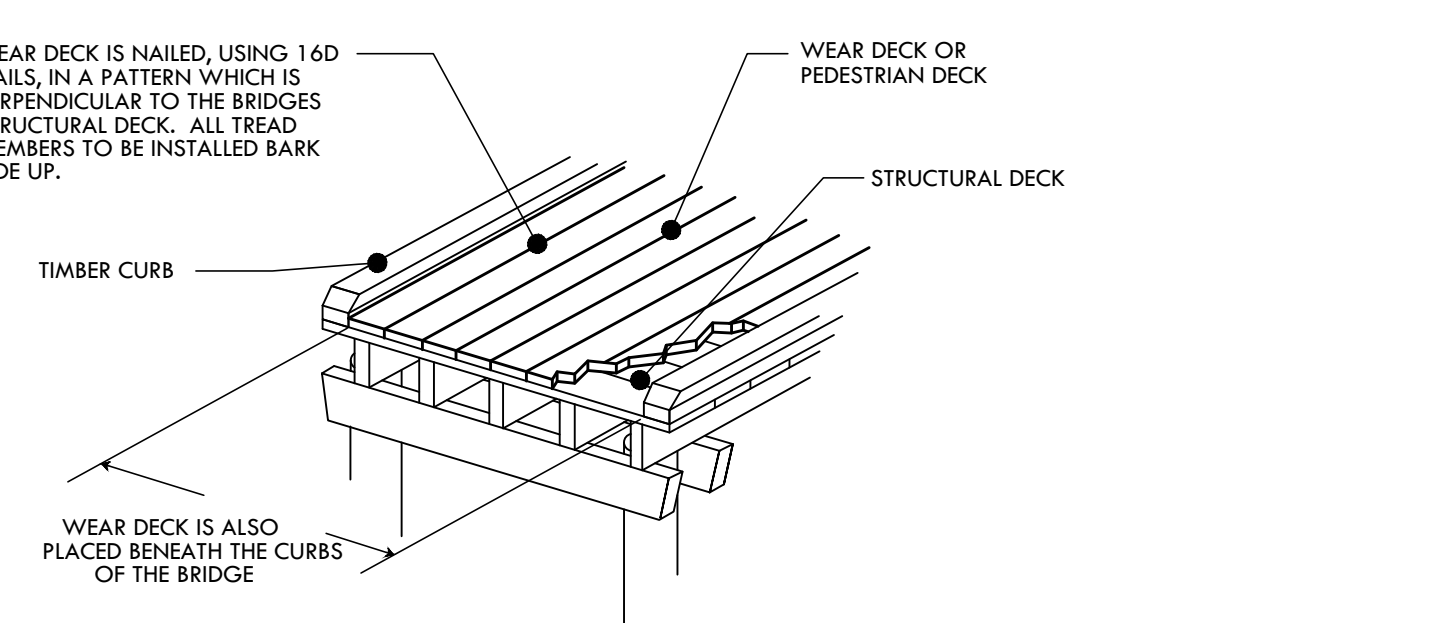
RETAINING WALL COMPONENT SIZING CHART							
EXPOSED WALL HEIGHT	WHALEIR SIZE	NO. OF ROWS OF WHALEIRS	VERTICAL SHEETING EMBEDMENT DEPTH	PLING LENGTH	TEE BACK REQUIRED	DEADMAN LENGTH	TEREO DIA. & LENGTH
5'-0"	3" x 8"	TWO ROWS	UP TO 2'-0"	10'-0"	YES	2'-6"	3/4" x 10'-0"
6'-0"	3" x 8"	TWO ROWS	UP TO 2'-0"	12'-0"	YES	3'-0"	3/4" x 12'-0"
7'-0"	3" x 8"	THREE ROWS	UP TO 2'-0"	14'-0"	YES	3'-6"	3/4" x 12'-0"



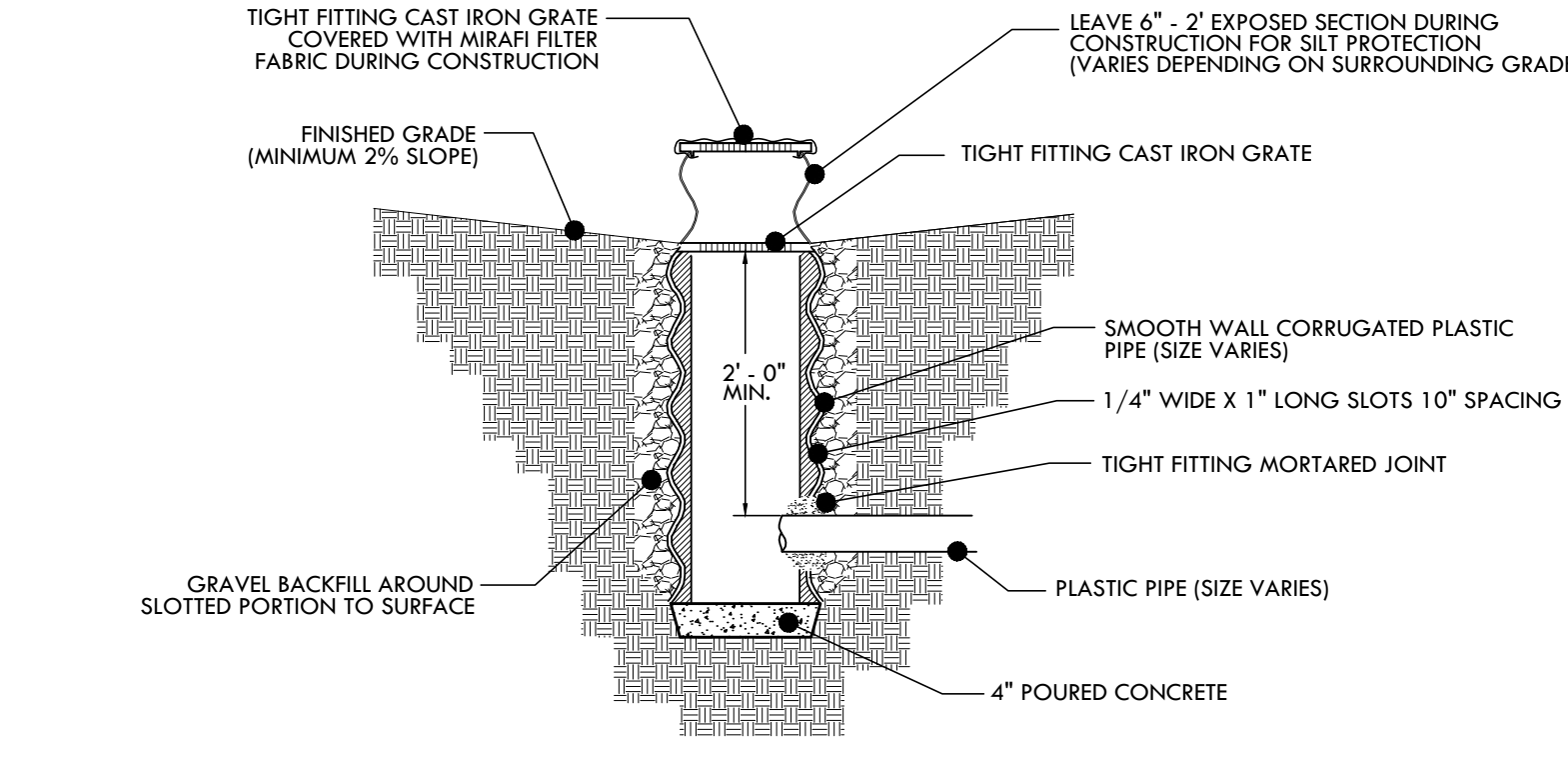
TIMBER BRIDGE DETAIL
NO SCALE
PLAN VIEW



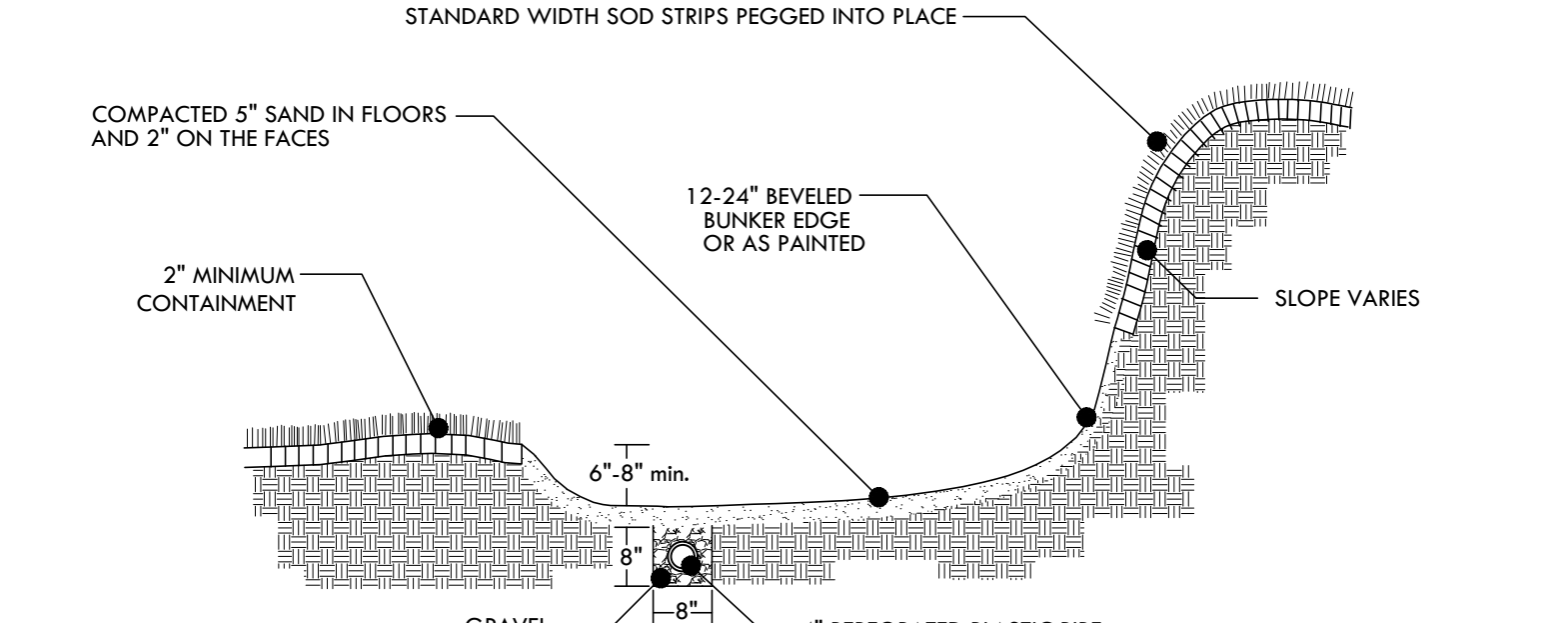
TIMBER BRIDGE DETAIL
NO SCALE
SECTION VIEW



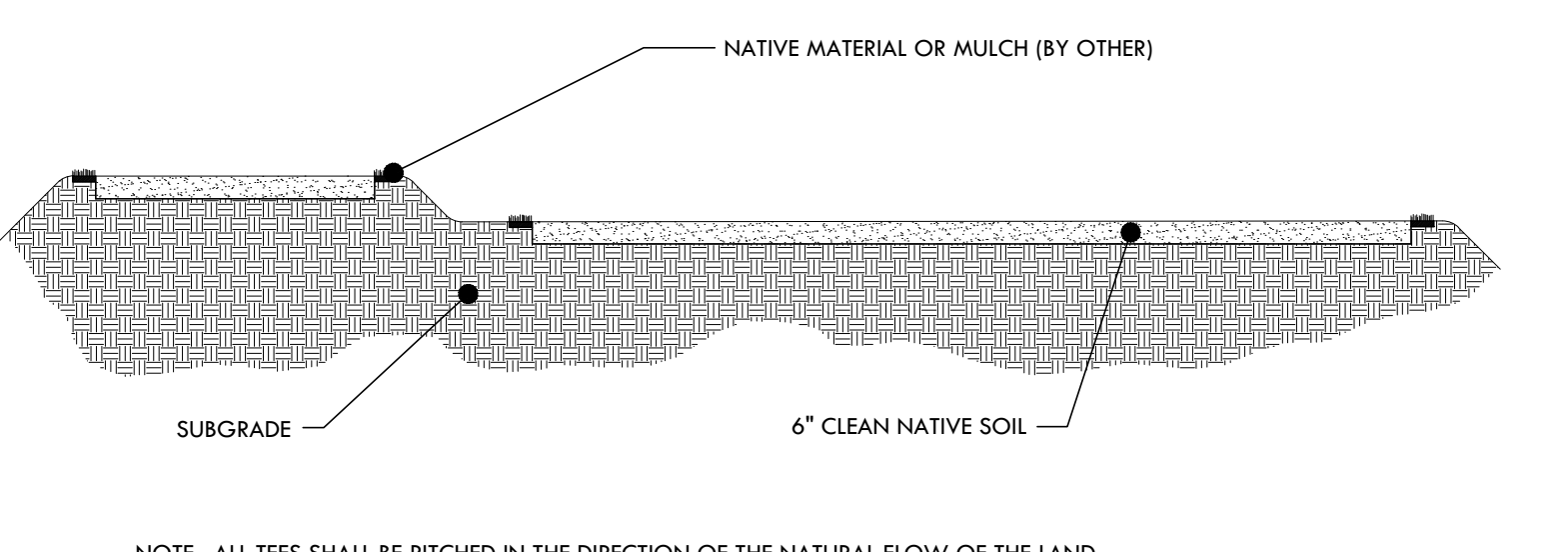
TIMBER BRIDGE WEAR DECK
NO SCALE
PERSPECTIVE VIEW



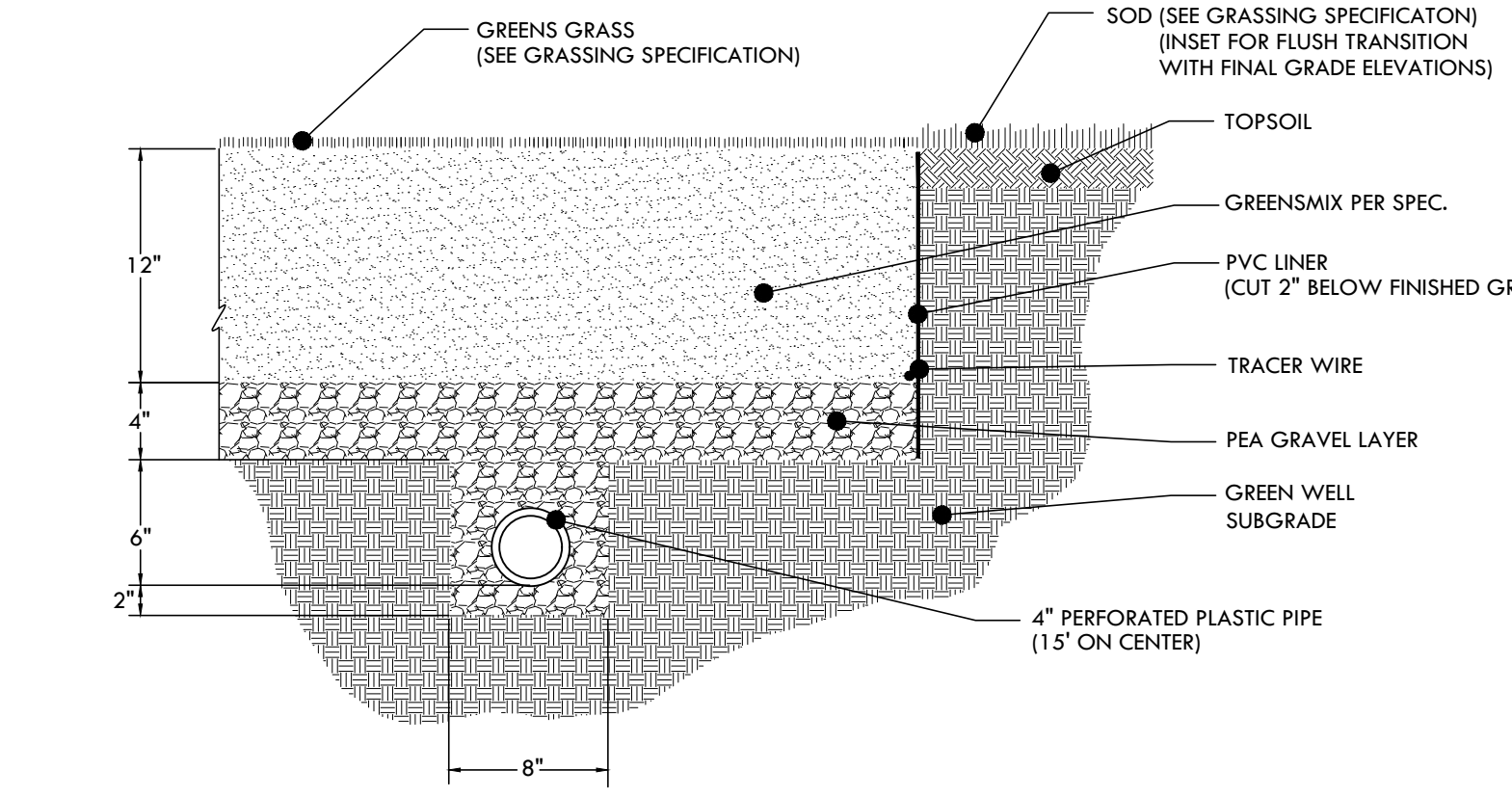
DRAIN INLET DETAIL (TYPICAL)
NO SCALE
SECTION VIEW



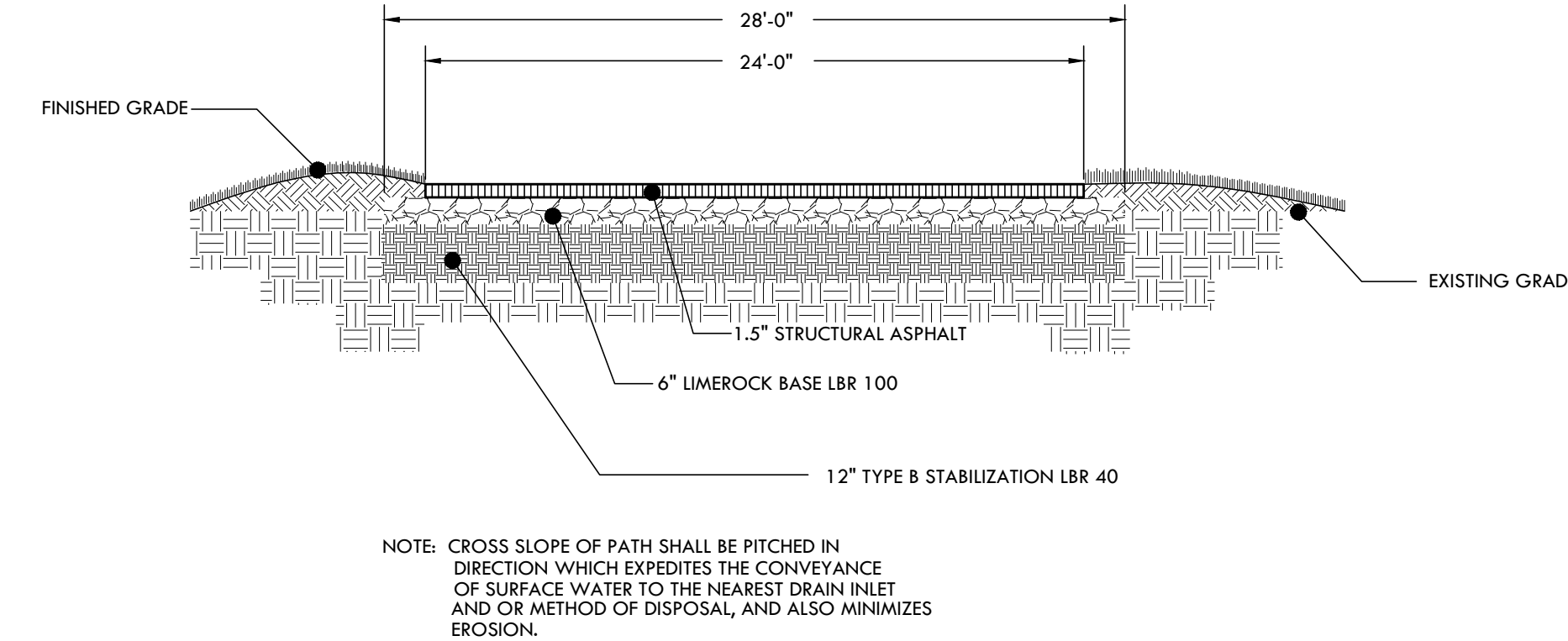
TYPICAL BUNKER DETAIL w/ SOD
NO SCALE
SECTION VIEW



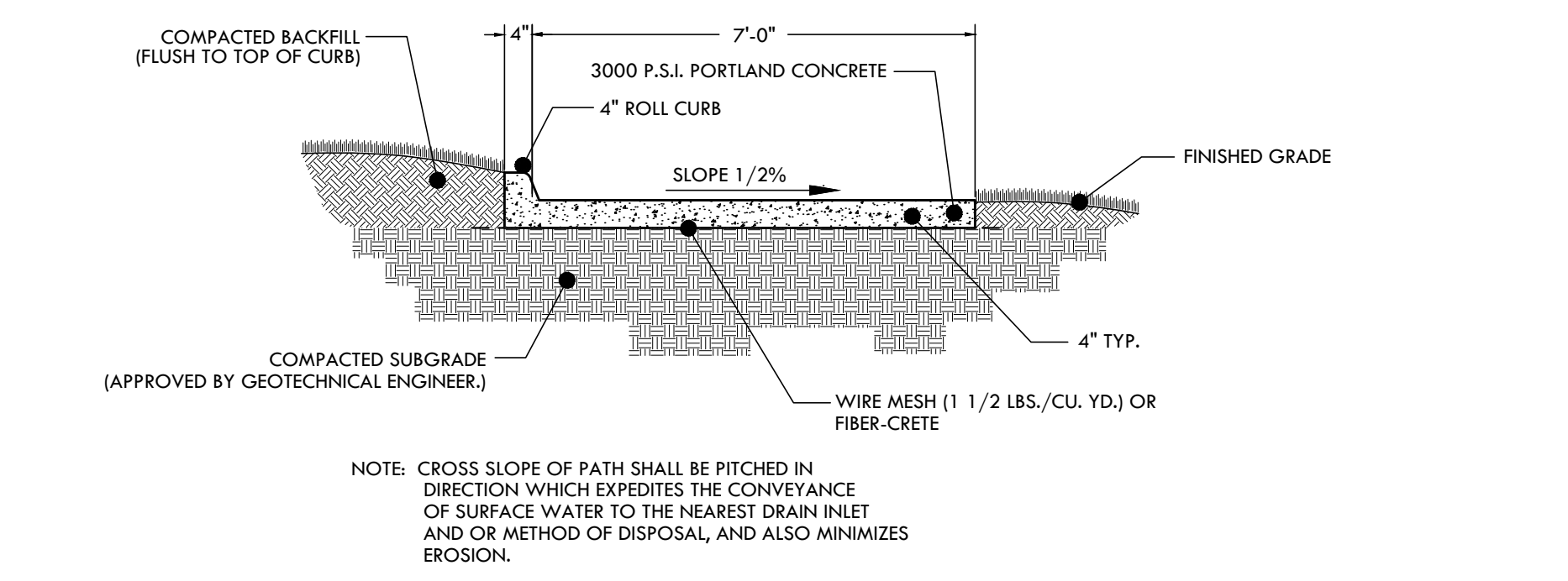
TYPICAL CURVILINEAR TEE DETAIL
NO SCALE
SECTION VIEW



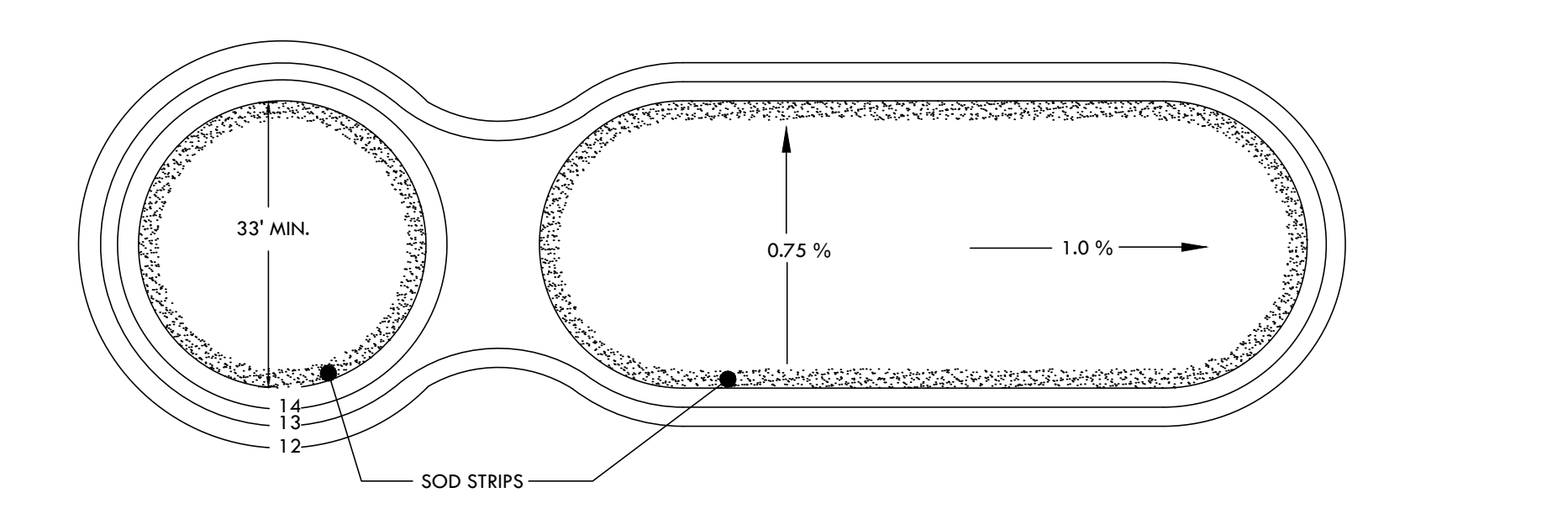
TYPICAL GREEN DETAIL
NO SCALE
SECTION VIEW



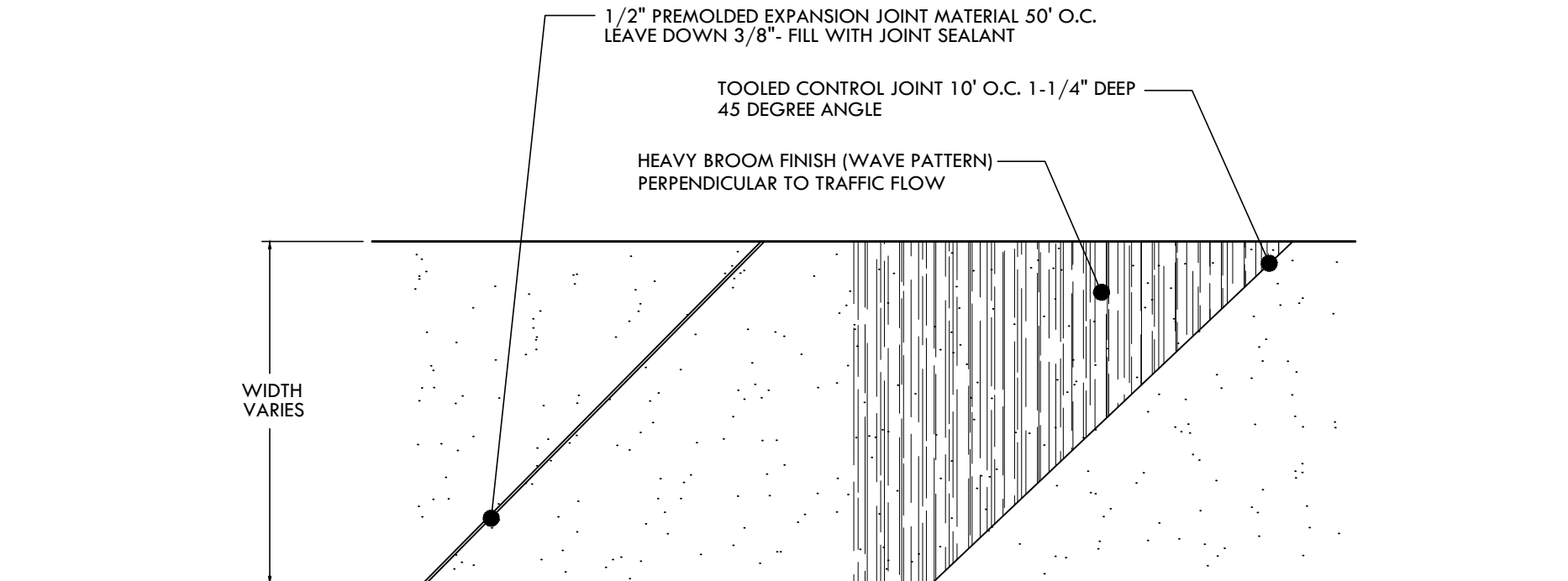
ASPHALT MAINTENANCE ROAD DETAIL
NO SCALE
SECTION VIEW



CONCRETE CART PATH w/ ROLL CURB DETAIL
NO SCALE
SECTION VIEW



TYPICAL CURVILINEAR TEE DETAIL
NO SCALE
PLAN VIEW



CONCRETE CART PATH DETAIL
NO SCALE
PLAN VIEW

LEGEND

BUNKER DRAINAGE

PROPOSED CONTOUR

DRAIN PIPE

EXISTING CART PATH

HARVEST/RELAY SOD FOLLOWING DRAINAGE IMPROVEMENTS

EDGE OF TURF

GREEN

GREEN DRAINAGE

DRAIN INLET

FAIRWAY/ROUGH GRASSING

BUNKER

FAIRWAY

LIMITS OF DISTURBANCE

CENTERLINE

NATURAL AREA

EXISTING LAKE EDGE

TEE ELEVATION

NORTH

SCALE 1"=100'

NOTES:

- ALL GOLF COURSE DRAINAGE IS TO BE REPLACED AND WILL BE UPSIZED PER THE PLANS. ALL DRAINAGE IS SUBJECT TO CHANGE IN THE FIELD TO ACHIEVE THE DESIGN OBJECTIVE.
- THE EXISTING TURF IS TO BE HARVESTED AND RELAYED IN THE AREAS WHERE ONLY THE DRAINAGE IS ONLY REPLACED.
- ALL GRADES ARE SUBJECT TO CHANGE IN THE FIELD TO ACHIEVE THE DESIGN OBJECTIVE.
- ALL ORGANIC MATERIAL AND EXISTING GREENS MIX IS TO BE REMOVED AND DISPOSED OF ON-SITE.
- ALL TURF, ORGANIC MATERIAL, PLUS AN ADDITIONAL 6" OF SUBSOIL IS TO BE REMOVED FROM ALL TEES AND DISPOSED OF IN A BURY PIT WITH A MINIMUM 2' CAP. CLEAN SOIL IS TO BE BROUGHT BACK IN TO CREATE THE NEW BASE FOR THE TEES.

COLLIER'S RESERVE COUNTRY CLUB

NAPLES, FLORIDA

HILLS • FORREST • SMITH

golf course architects

Sheet Title: GRADE & DRAIN

Sheet Number: 2b

Scale: 1" = 100'

Revisions: 8/19/19 10/14/19

Sub-Consultant:

Project No.: 08/19

Date: 08/19



LEGEND

DISPOSE OF GREENSMIX AND ORGANIC LAYER ONSITE

STRIP AND REPLACE TURF TO REPLACE THE DRAINAGE IN THE NON-GRADED AREAS

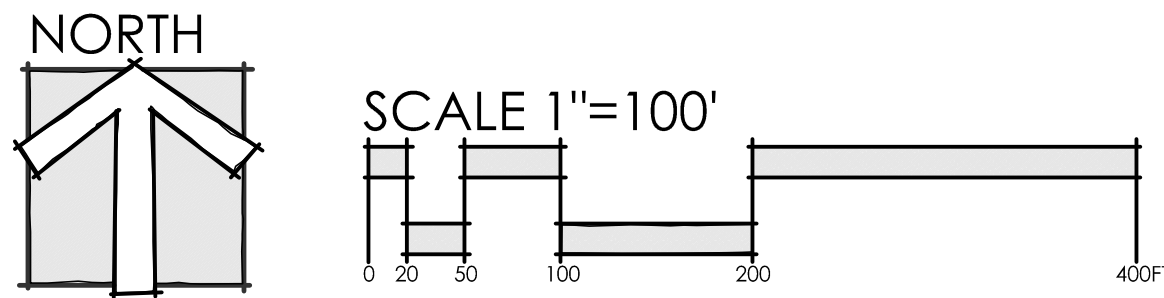
DISPOSE OF BUNKER SAND ONSITE

REMOVE TURF, ORGANIC LAYER PLUS 6" OF SUBSOIL OF ALL TEES AND DISPOSE OF IN A BURY PIT WITH A MINIMUM 2" CAP

ROTOTILL TURF OUTSIDE THE LIMITS OF GRADING DISTURBANCE

LIMITS OF DISTURBANCE

CENTERLINE

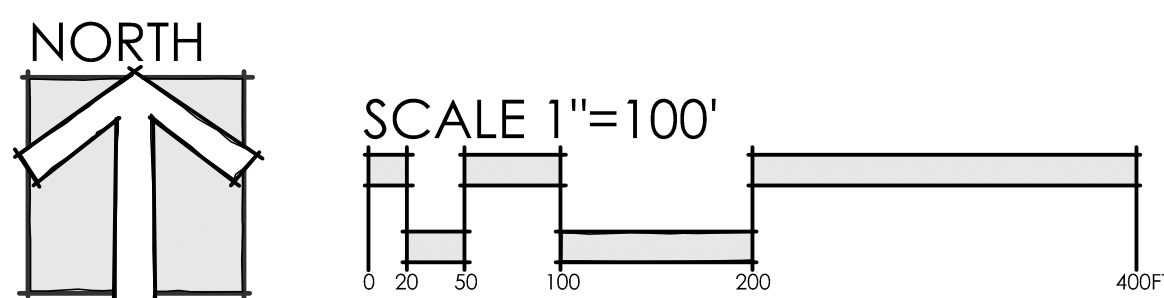


- NOTES:
- ALL GOLF COURSE DRAINAGE IS TO BE REPLACED AND WILL BE UPSIZED PER THE PLANS. ALL EXISTING DRAINAGE REMOVED FROM THE GROUND IS TO BE DISPOSED OF OFFSITE.
 - ALL ORGANIC MATERIAL AND EXISTING GREENS MIX IS TO BE REMOVED AND DISPOSED OF ONSITE.
 - ALL TURF, ORGANIC MATERIAL, PLUS AN ADDITIONAL 6" OF SUBSOIL IS TO BE REMOVED FROM ALL TEES AND DISPOSED OF IN A BURY PIT WITH A MINIMUM 2" CAP. CLEAN SOIL IS TO BE BROUGHT BACK IN TO CREATE THE NEW BASE FOR THE TEES.



NOTES:

- ALL GOLF COURSE DRAINAGE IS TO BE REPLACED AND WILL BE UPSIZED PER THE PLANS. ALL DRAINAGE IS SUBJECT TO CHANGE IN THE FIELD TO ACHIEVE THE DESIGN OBJECTIVE.
- THE EXISTING TURF IS TO BE HARVESTED AND RELAYED IN THE AREAS WHERE ONLY THE DRAINAGE IS ONLY REPLACED.
- ALL GRADES ARE SUBJECT TO CHANGE IN THE FIELD TO ACHIEVE THE DESIGN OBJECTIVE.
- ALL ORGANIC MATERIAL AND EXISTING GREENS MIX IS TO BE REMOVED AND DISPOSED OF ON SITE.
- ALL TURF, ORGANIC MATERIAL, PLUS AN ADDITIONAL 6" OF SUBSOIL IS TO BE REMOVED FROM ALL TEES AND DISPOSED OF IN A BURY PIT WITH A MINIMUM 2" CAP. CLEAN SOIL IS TO BE BROUGHT BACK IN TO CREATE THE NEW BASE FOR THE TEES.



LEGEND

BUNKER DRAINAGE

PROPOSED CONTOUR

DRAIN PIPE

EXISTING CART PATH

HARVEST/RELAY SOD FOLLOWING DRAINAGE IMPROVEMENTS

EDGE OF TURF

GREEN

GREEN DRAINAGE

DRAIN INLET

FAIRWAY/ROUGH GRASSING

BUNKER

FAIRWAY

LIMITS OF DISTURBANCE

CENTERLINE

NATURAL AREA

EXISTING LAKE EDGE

TEE ELEVATION

NORTH

SCALE 1"=100'

NOTES:

- ALL GOLF COURSE DRAINAGE IS TO BE REPLACED AND WILL BE UPSIZED PER THE PLANS. ALL DRAINAGE IS SUBJECT TO CHANGE IN THE FIELD TO ACHIEVE THE DESIGN OBJECTIVE.
- THE EXISTING TURF IS TO BE HARVESTED AND RELAYED IN THE AREAS WHERE ONLY THE DRAINAGE IS ONLY REPLACED.
- ALL GRADES ARE SUBJECT TO CHANGE IN THE FIELD TO ACHIEVE THE DESIGN OBJECTIVE.
- ALL ORGANIC MATERIAL AND EXISTING GREENS MIX IS TO BE REMOVED AND DISPOSED OF ON-SITE.
- ALL TURF, ORGANIC MATERIAL, PLUS AN ADDITIONAL 6" OF SUBSOIL IS TO BE REMOVED FROM ALL TEES AND DISPOSED OF IN A BURY PIT WITH A MINIMUM 2' CAP. CLEAN SOIL IS TO BE BROUGHT BACK IN TO CREATE THE NEW BASE FOR THE TEES.

COLLIER'S RESERVE COUNTRY CLUB

NAPLES, FLORIDA

HILLS • FORREST • SMITH
golf course architects

Sheet Title: GRADE & DRAIN

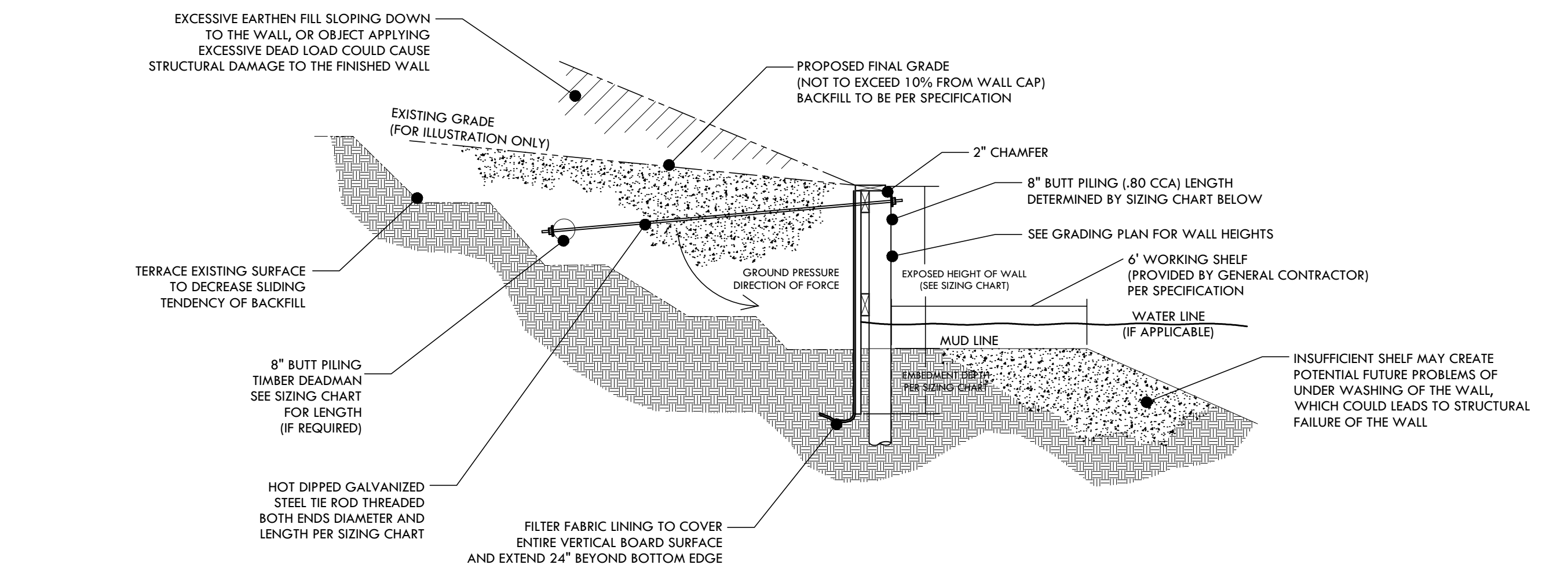
Sheet Number: 2b

Scale: 1" = 100'

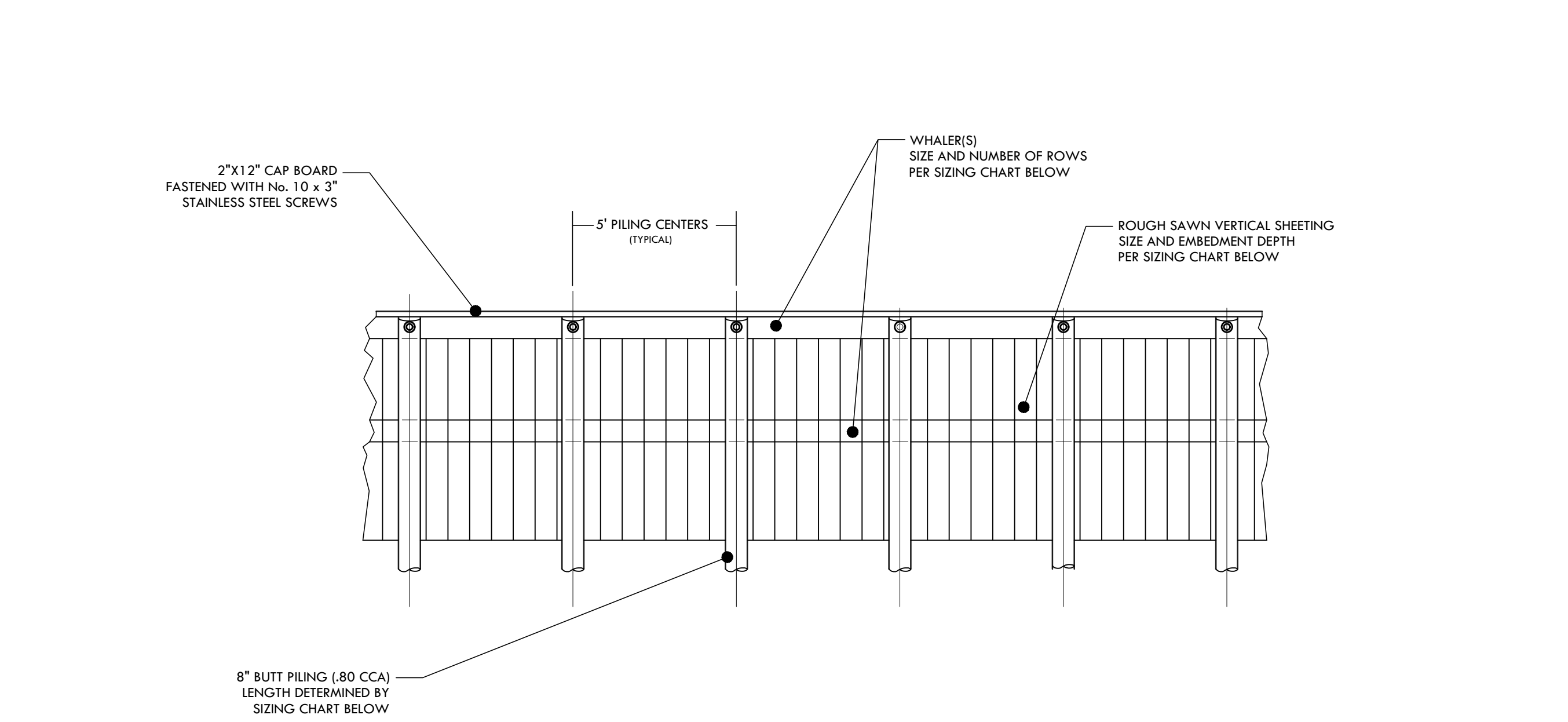
Revisions:
8/19/19
10/14/19

Sub-Consultant:

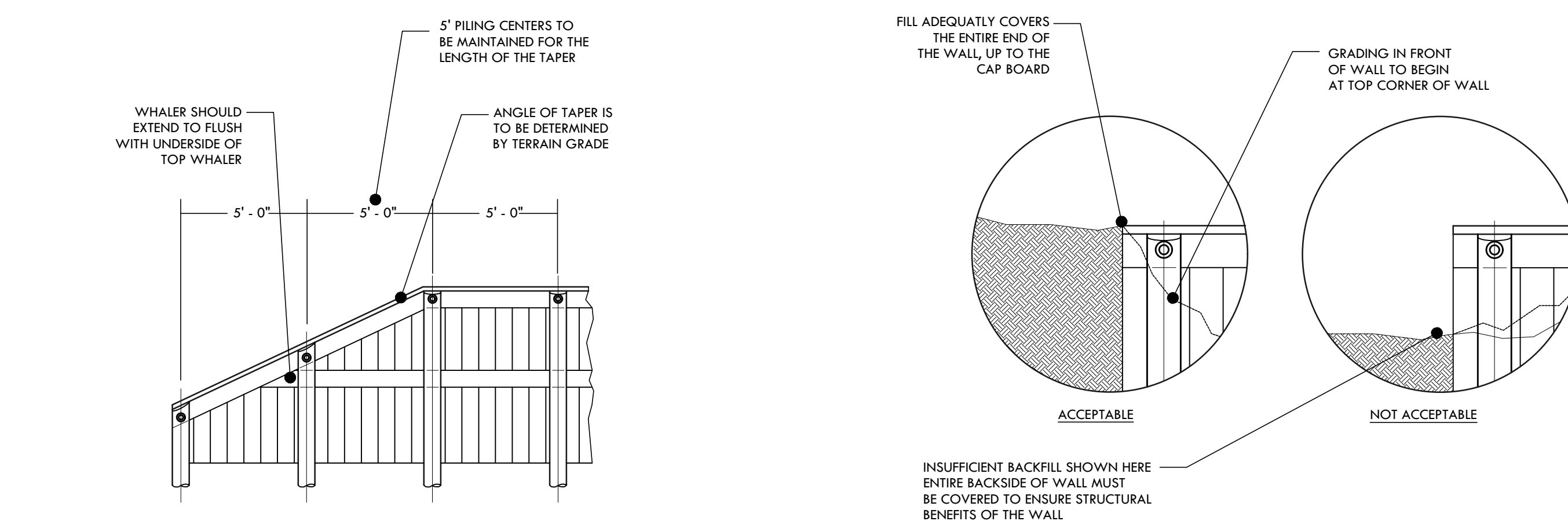
Project No.:
Date: 08/19



TYPICAL BULK HEAD RETAINING WALL
NO SCALE
SECTION VIEW



TYPICAL BULK HEAD RETAINING WALL
NO SCALE
SECTION VIEW

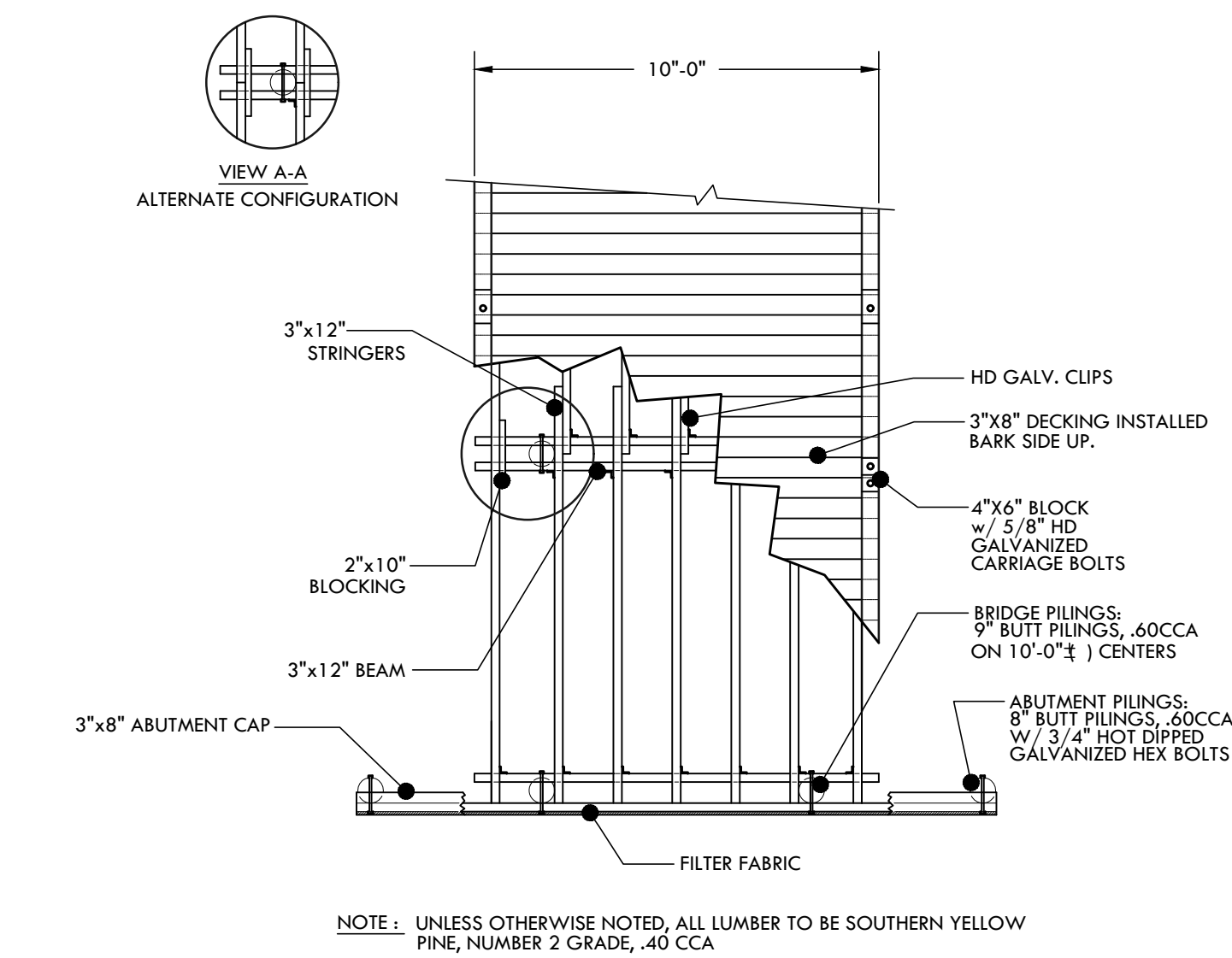


BULK HEAD RETAINING WALL TAPER
NO SCALE
PLAN VIEW

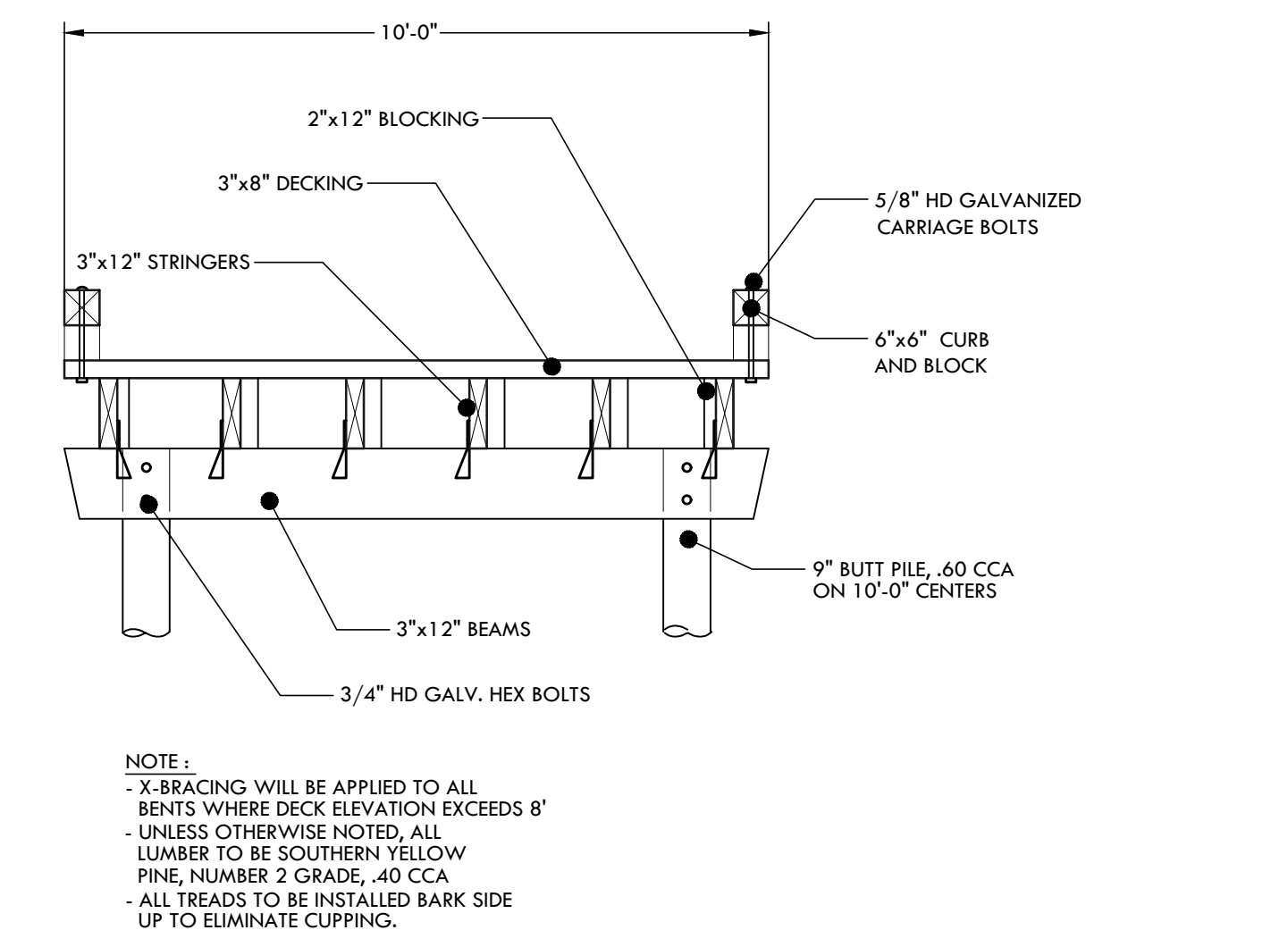


BULK HEAD BACKFILL TECHNIQUE
NO SCALE
SECTION VIEW

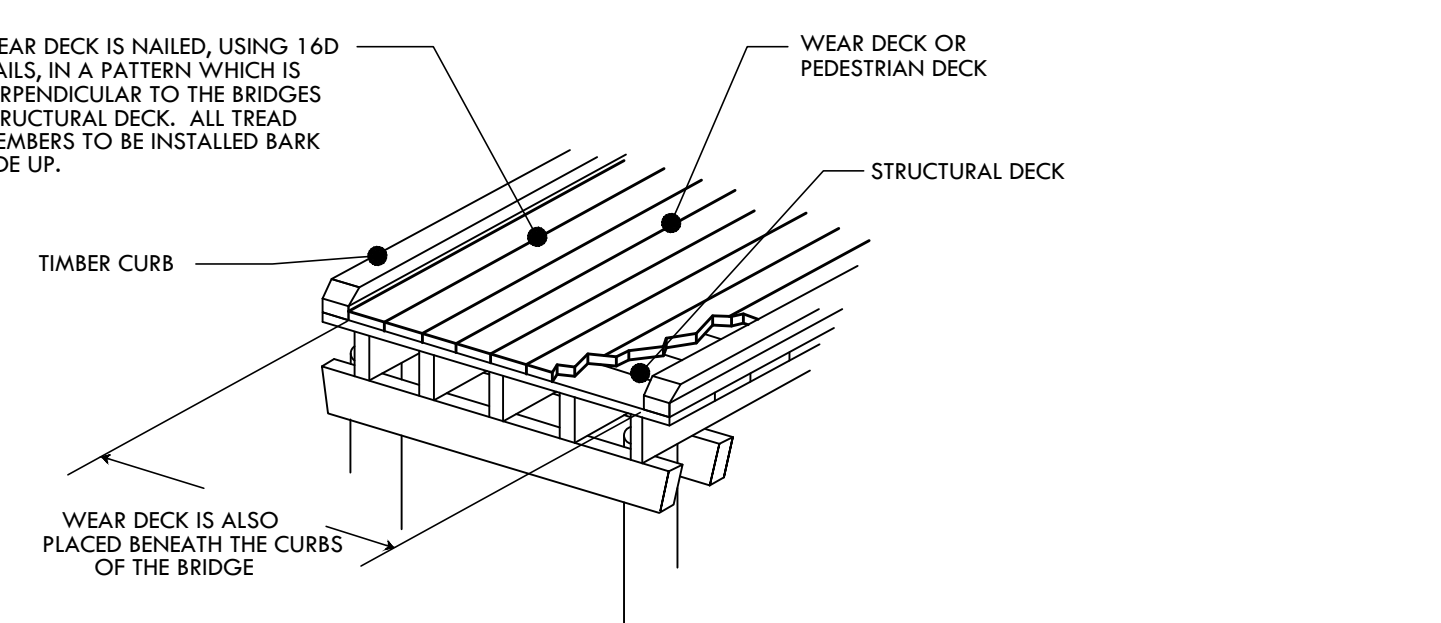
RETAINING WALL COMPONENT SIZING CHART							
EXPOSED WALL HEIGHT	WHALEIR SIZE	NO. OF ROWS OF WHALEIRS	VERTICAL SHEETING EMBEDMENT DEPTH	PILING LENGTH	TEE BACK REQUIRED	DEADMAN LENGTH	TEREO DIA. & LENGTH
5'-0"	3" x 8"	TWO ROWS	UP TO 2'-0"	10'-0"	YES	2'-6"	3/4" x 10'-0"
6'-0"	3" x 8"	TWO ROWS	UP TO 2'-0"	12'-0"	YES	3'-0"	3/4" x 12'-0"
7'-0"	3" x 8"	THREE ROWS	UP TO 2'-0"	14'-0"	YES	3'-6"	3/4" x 12'-0"



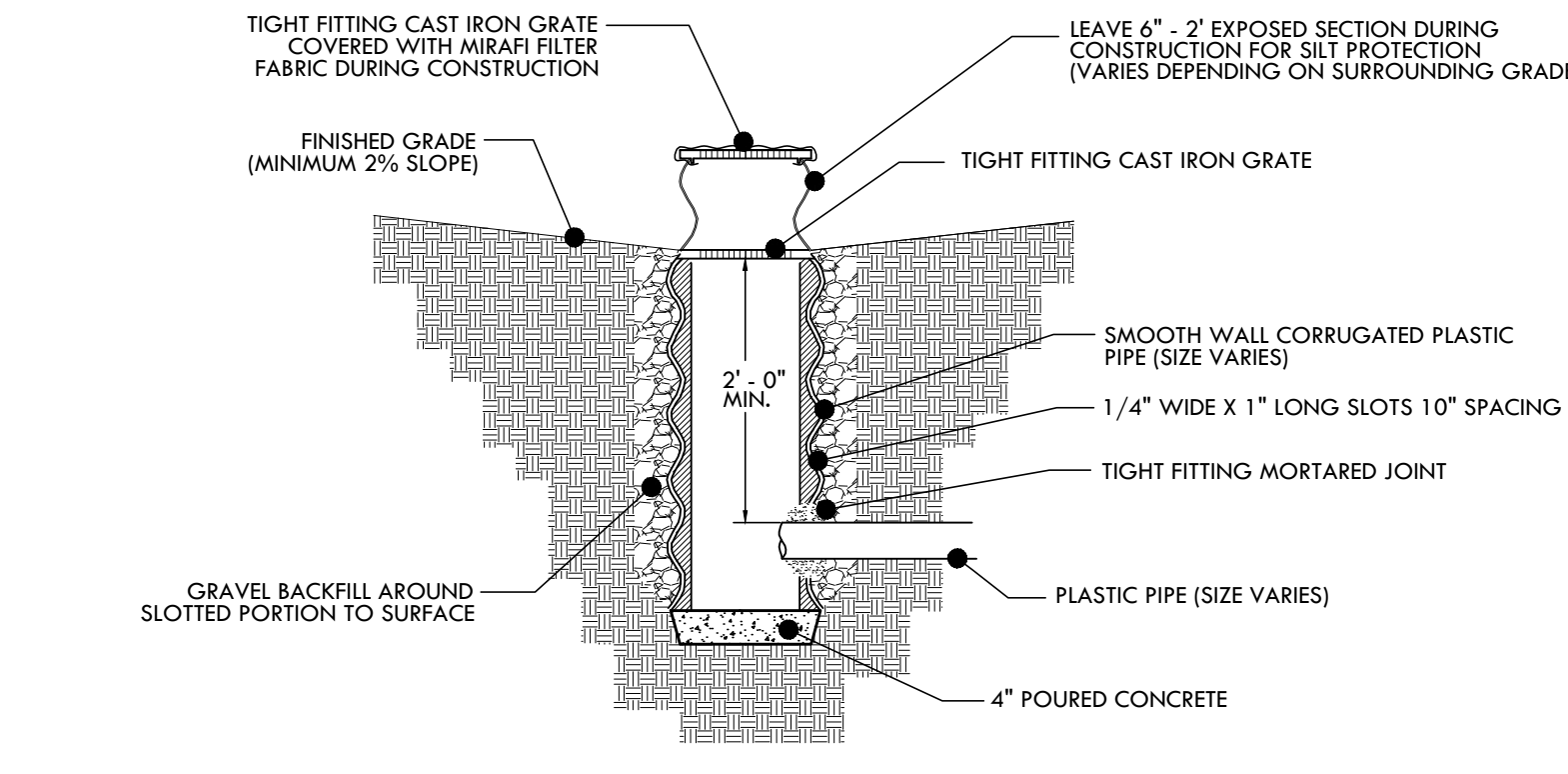
TIMBER BRIDGE DETAIL
NO SCALE
PLAN VIEW



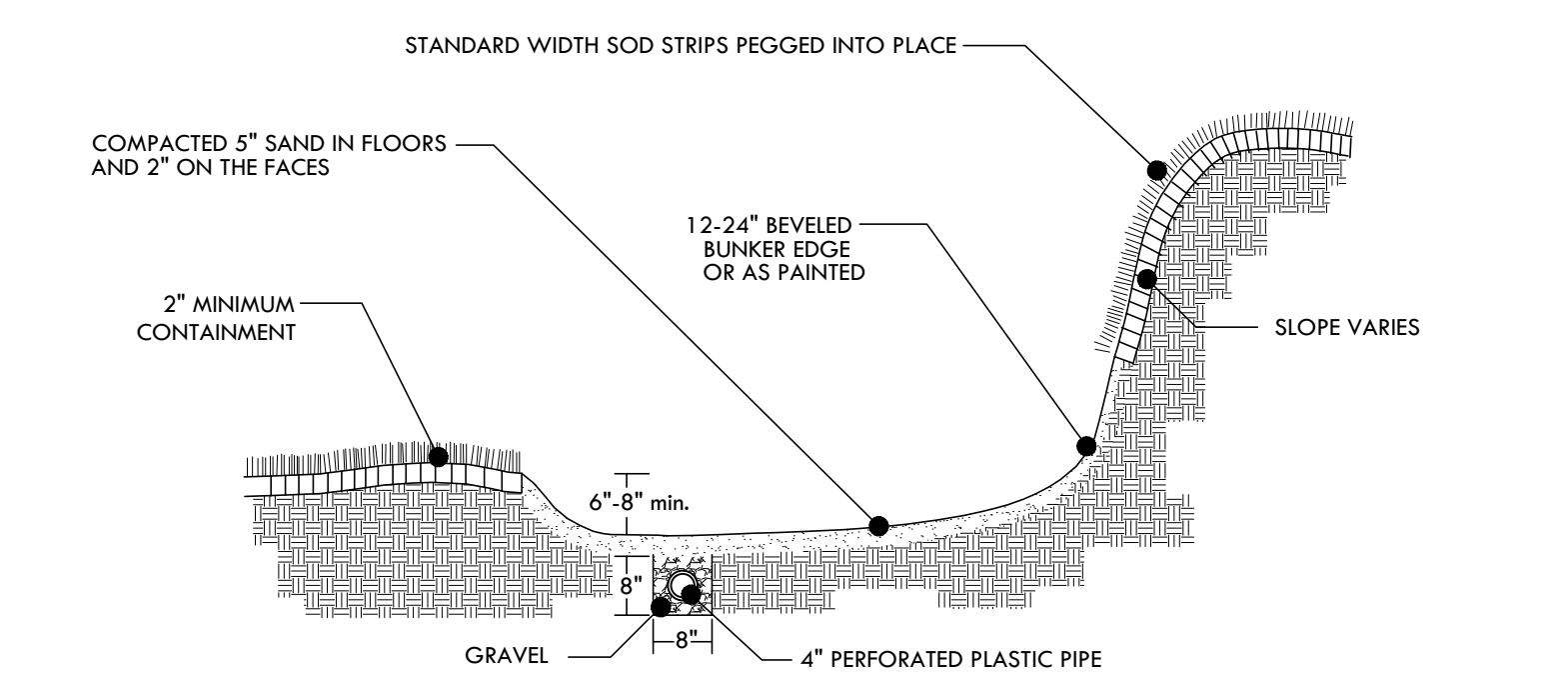
TIMBER BRIDGE DETAIL
NO SCALE
SECTION VIEW



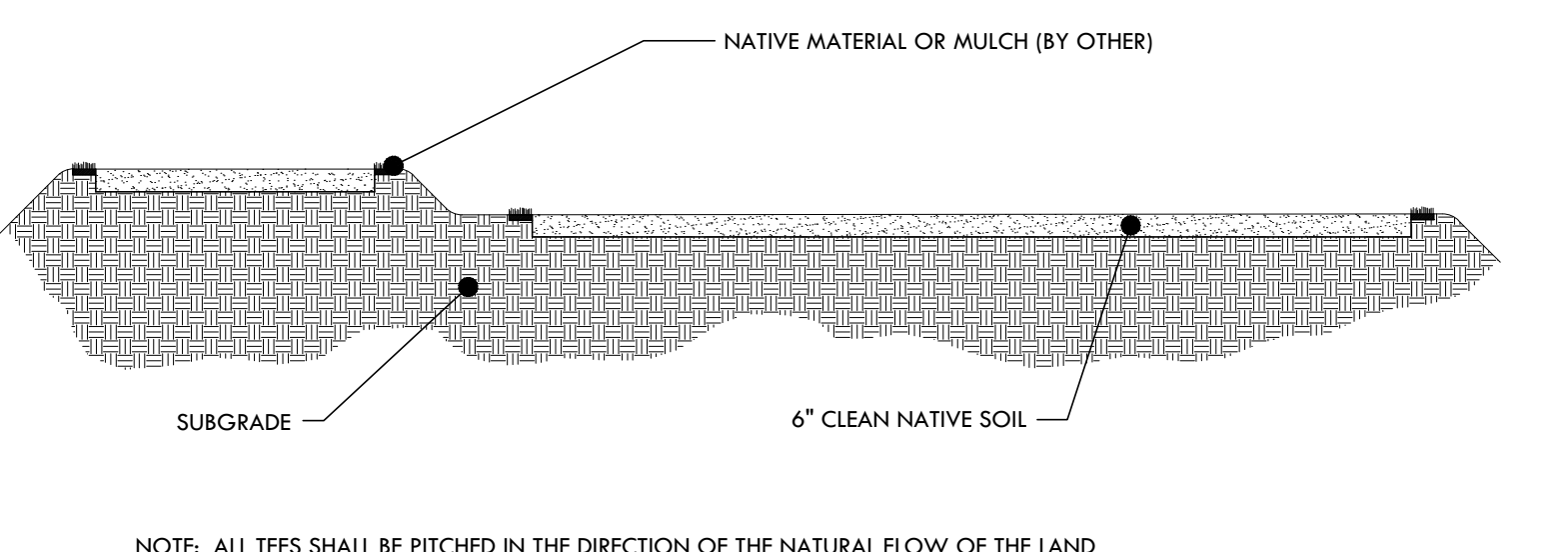
TIMBER BRIDGE WEAR DECK
NO SCALE
PERSPECTIVE VIEW



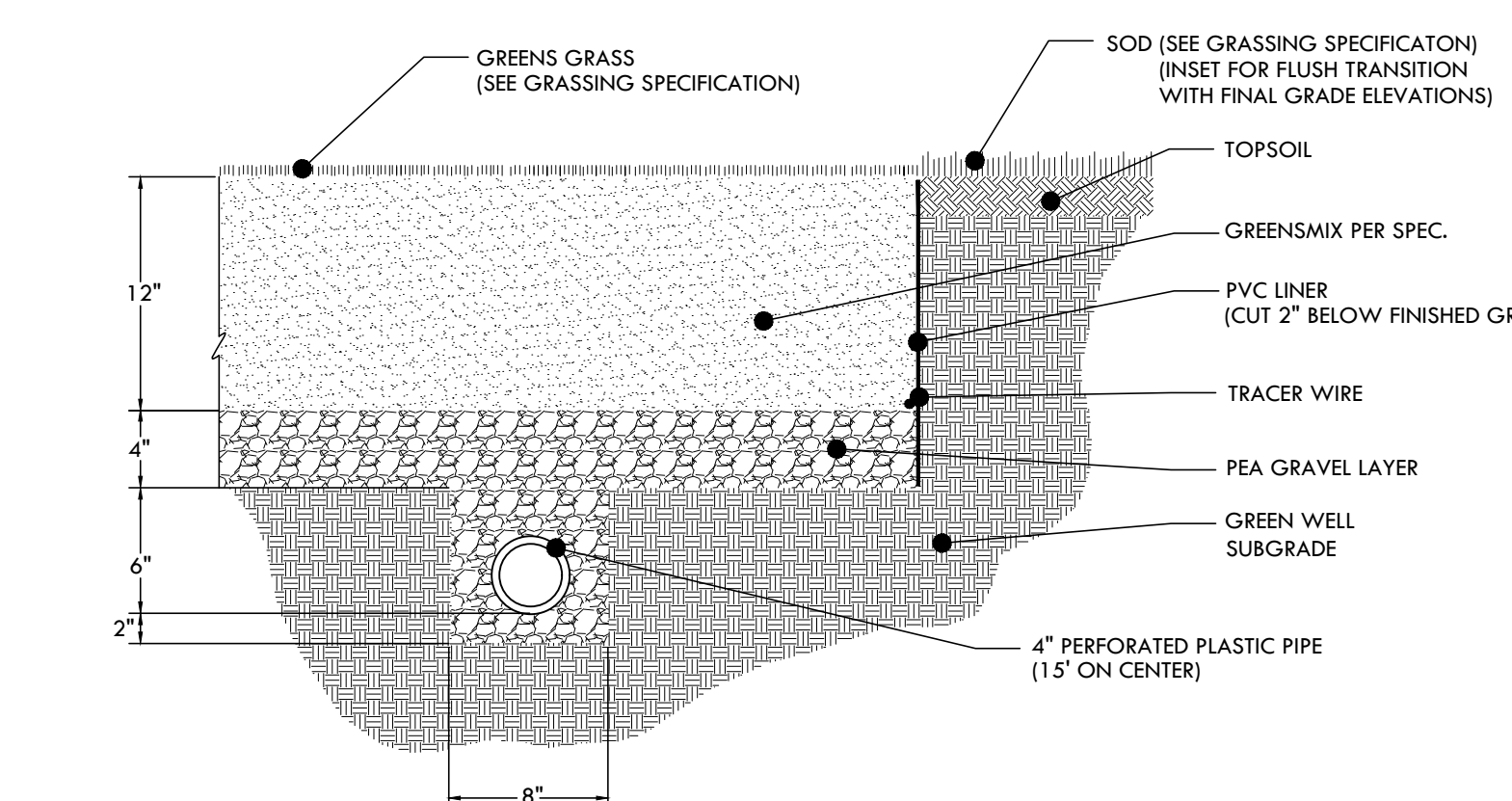
DRAIN INLET DETAIL (TYPICAL)
NO SCALE
SECTION VIEW



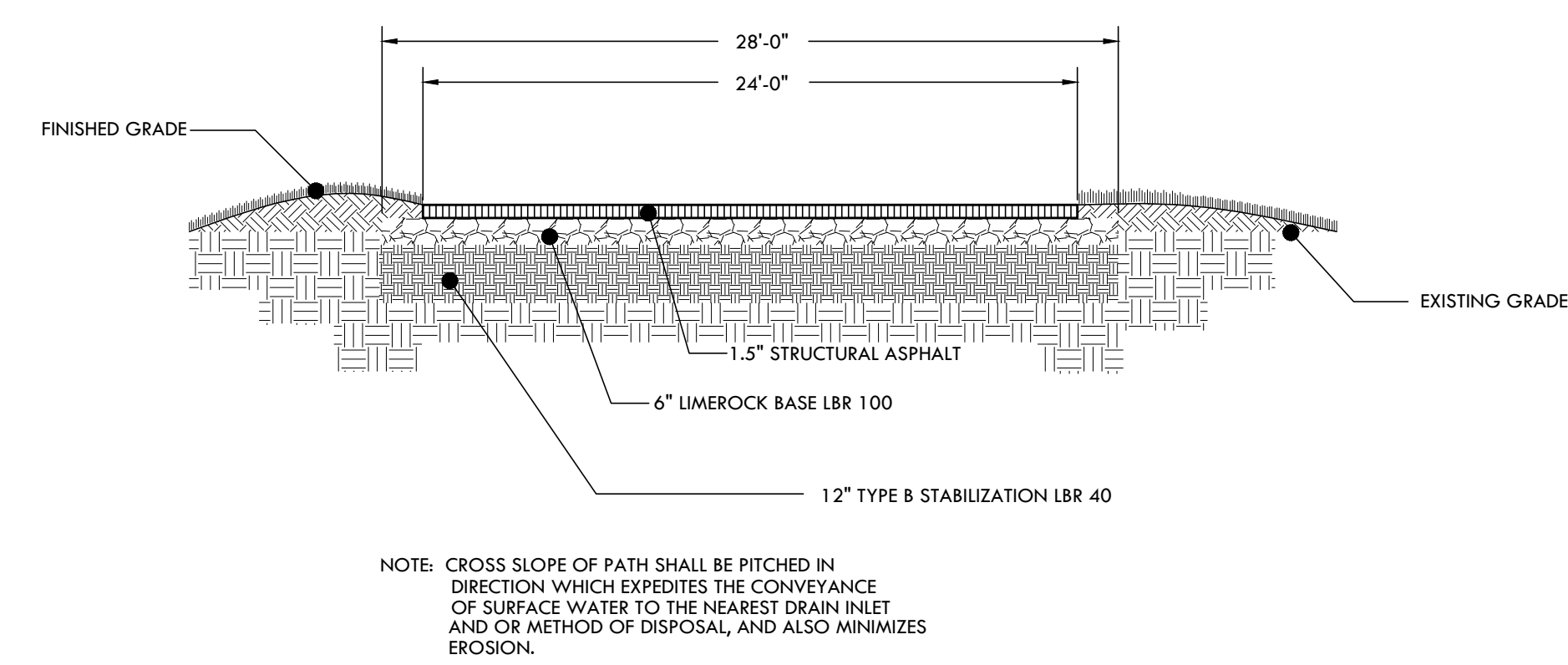
TYPICAL BUNKER DETAIL w/ SOD
NO SCALE
SECTION VIEW



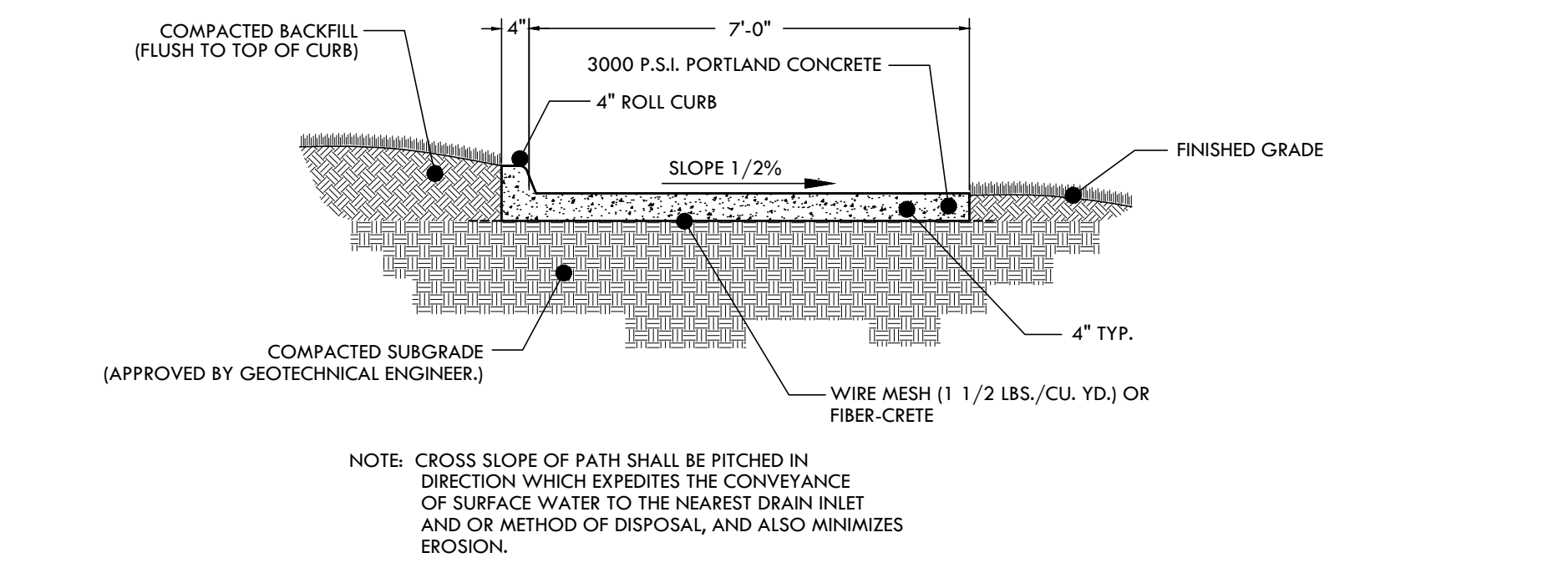
TYPICAL CURVILINEAR TEE DETAIL
NO SCALE
SECTION VIEW



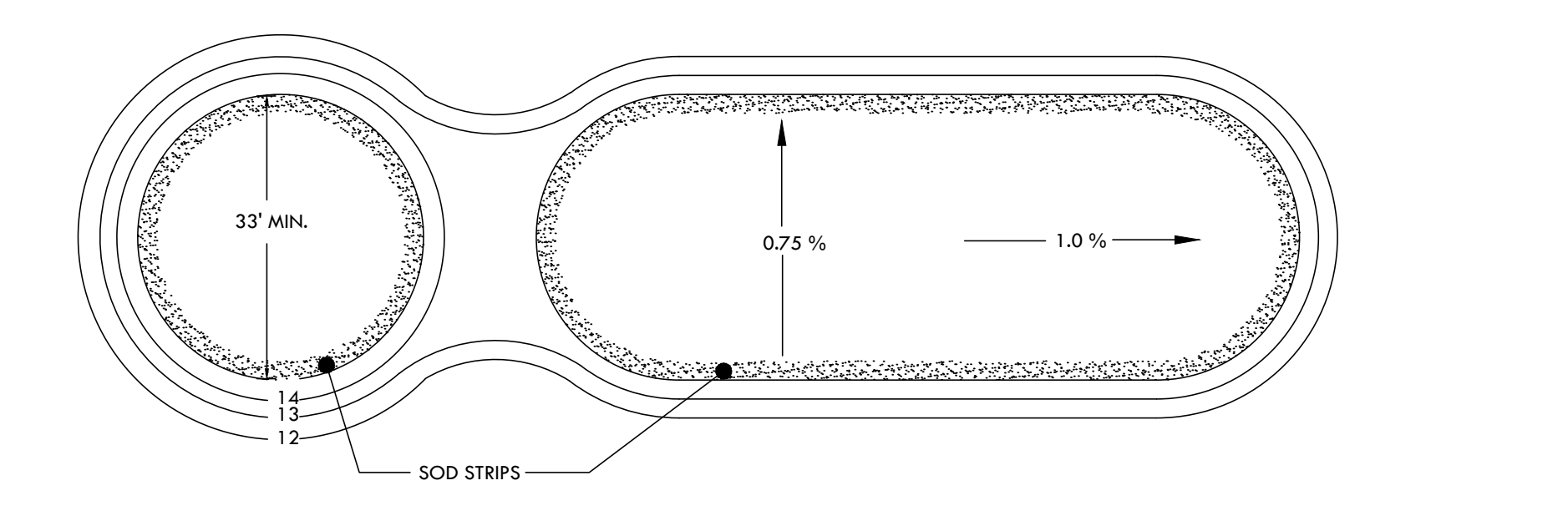
TYPICAL GREEN DETAIL
NO SCALE
SECTION VIEW



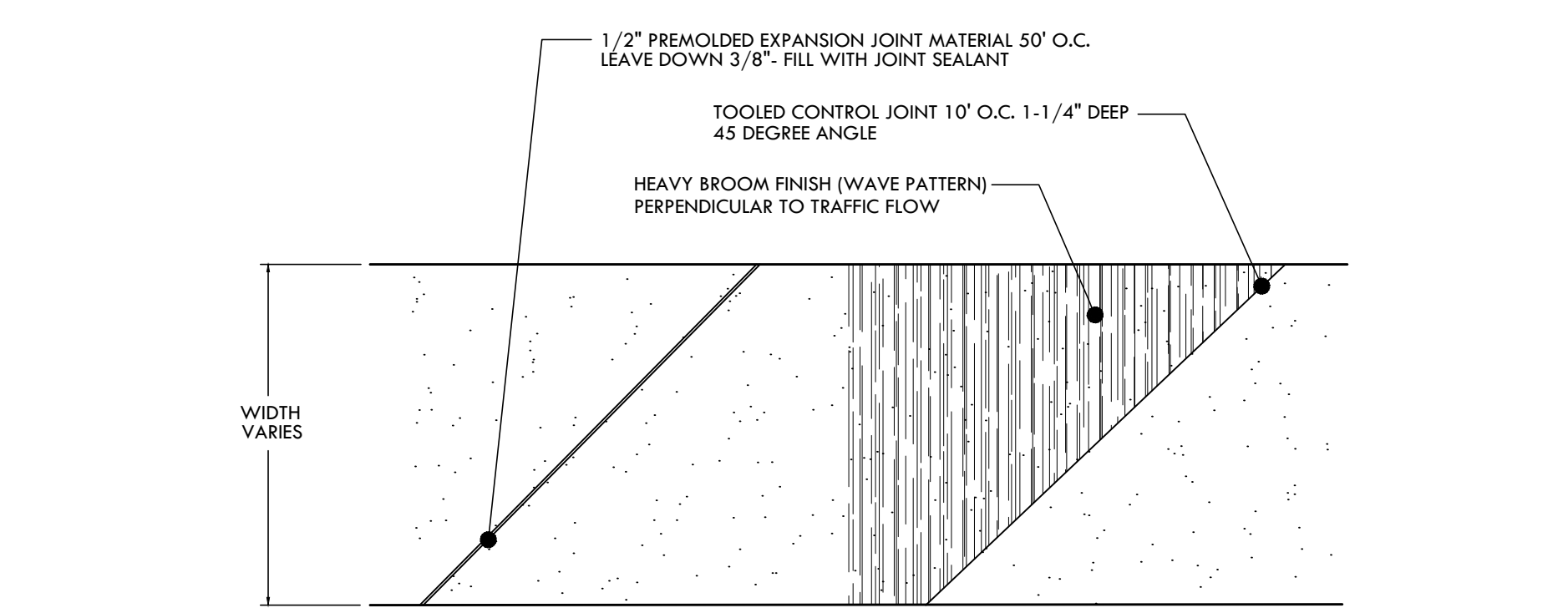
ASPHALT MAINTENANCE ROAD DETAIL
NO SCALE
SECTION VIEW



CONCRETE CART PATH w/ ROLL CURB DETAIL
NO SCALE
SECTION VIEW



TYPICAL CURVILINEAR TEE DETAIL
NO SCALE
PLAN VIEW



CONCRETE CART PATH DETAIL
NO SCALE
PLAN VIEW