

File on eDOCs Yes No

Site Name Sinclair Refining

Site No. 902003

County Allegheny

Town Wellsville

Foitable Yes

File Name Documents / Reports

Scanned & eDOC

Report. HW902003. 1991-12. RA-Gonese-

Partial. Pannelization - Vol 6.

ARCO

**Remedial Action Report
Genesee River Partial Channelization
Sinclair Refinery Site
Wellsville, New York**

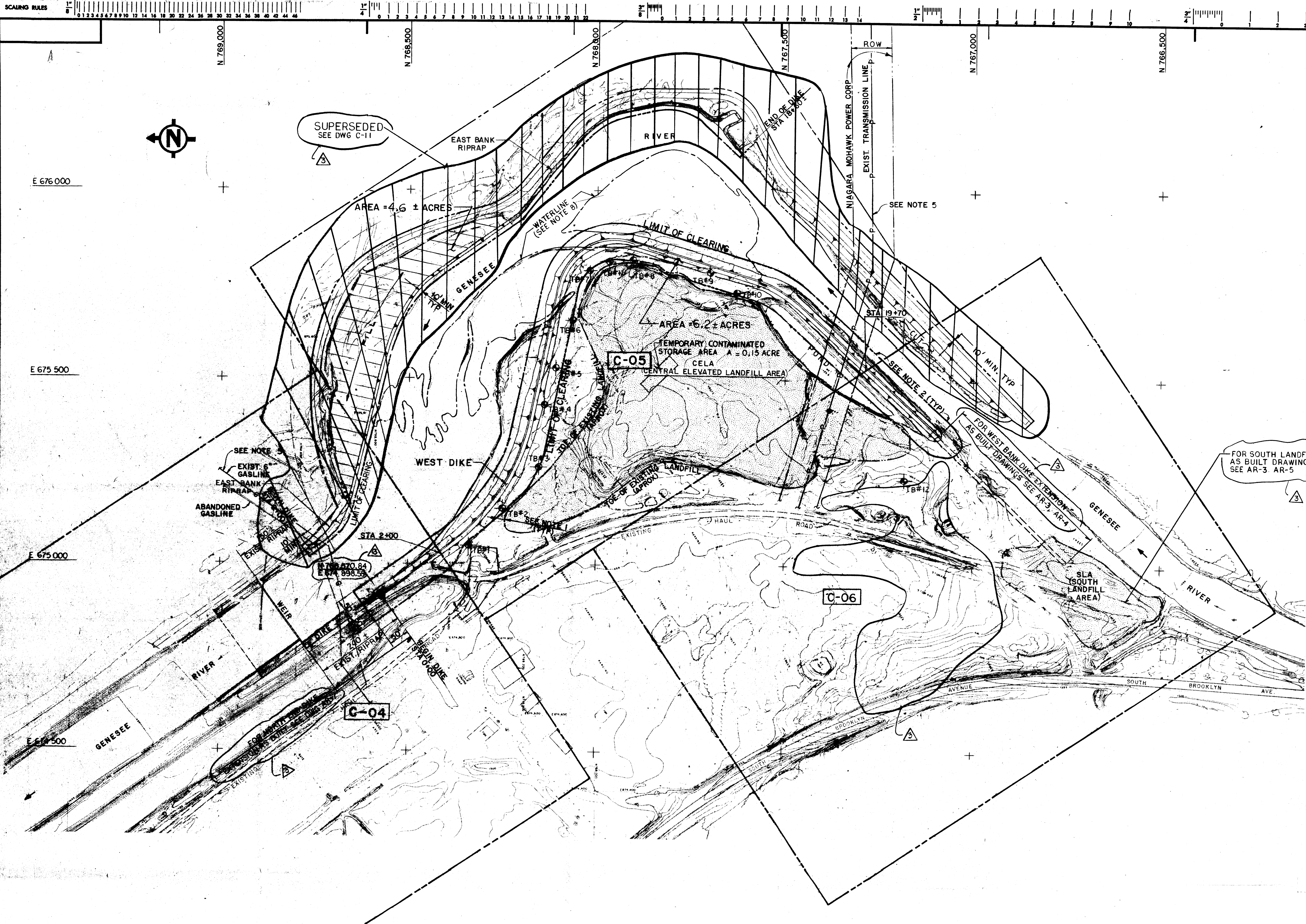
December 1991

Prepared by

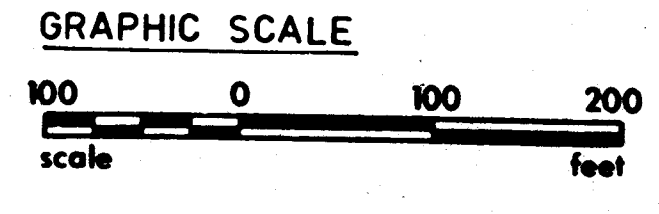
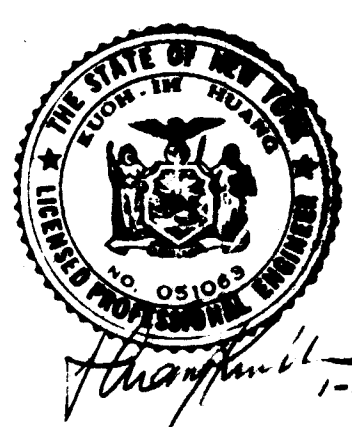
EBASCO

An ENSERCH® Engineering and Construction Company

VOLUME 6 OF 7

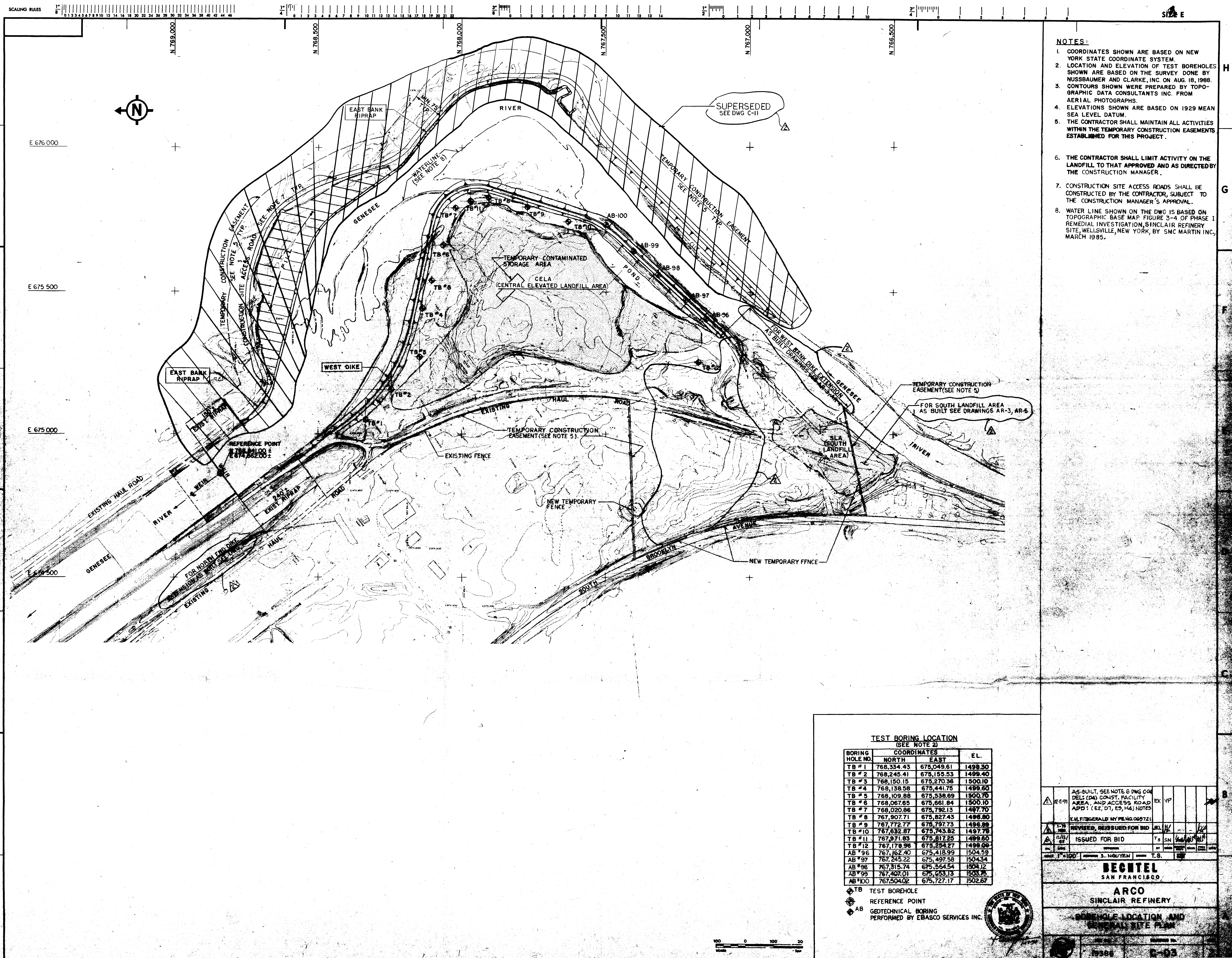


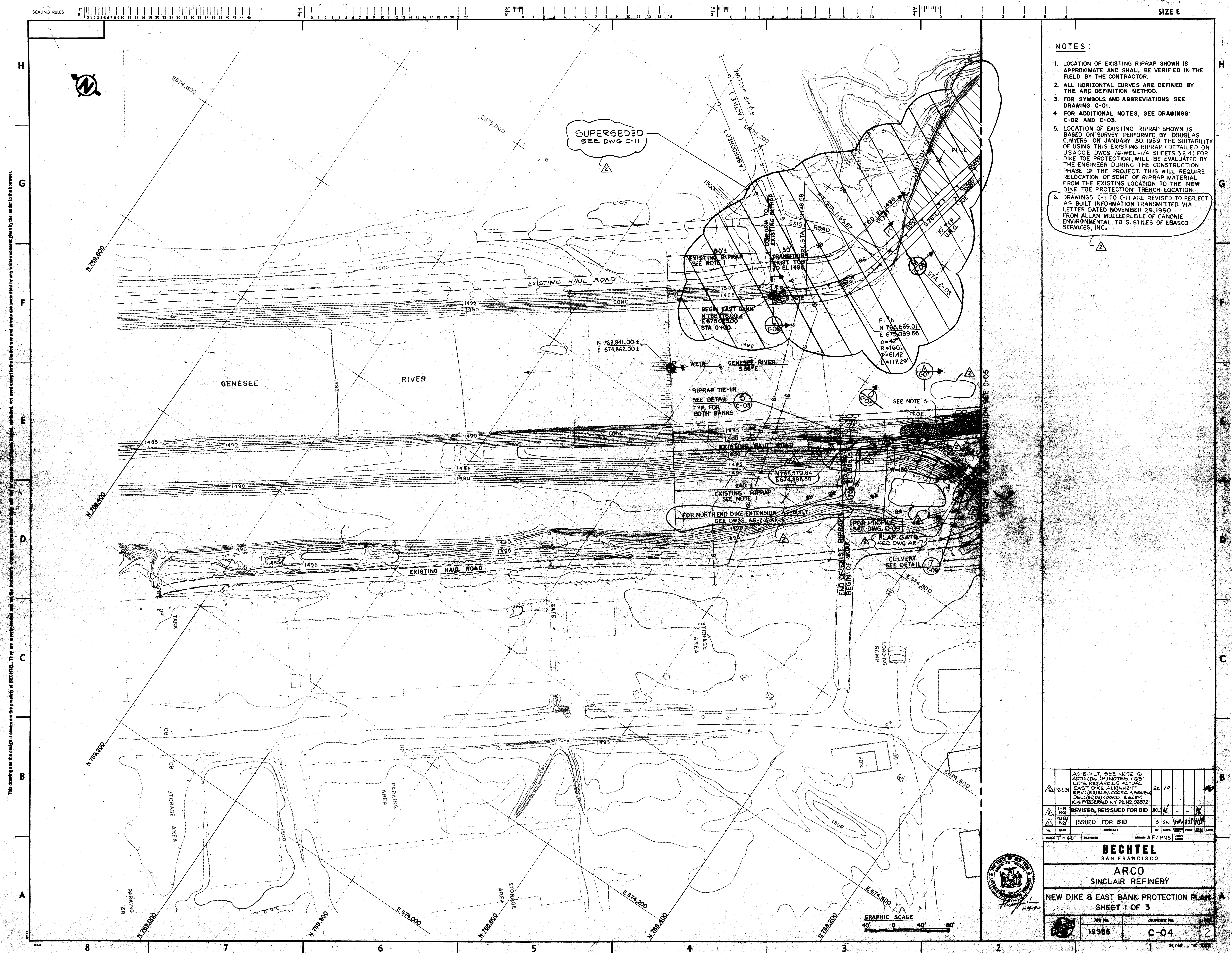
- NOTES:**
1. A MINIMUM OF 3.0 FT. CLEARANCE SHALL BE PROVIDED BETWEEN TOE OF LANDFILL AND LIMIT OF CLEARING AND GRUBBING, TYPICAL.
 2. SEDIMENT CONTROL SHALL BE PROVIDED ALONG THE RIVER SIDE BY CONTRACTOR DURING CLEARING AND GRUBBING AS PER SPECIFICATIONS.
 3. FOR DETAILS OF DIKE ALIGNMENT AND EAST BANK PROTECTION SEE DRAWINGS C-04, C-05 AND C-06.
 4. STRIP 6 INCHES OF TOPSOIL UNDER THE WEST DIKE FOUNDATION ONLY.
 5. INFORMATION AS TO LOCATION AND TYPE OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL SUCH INFORMATION IN THE FIELD AND ALSO BY CONTACTING THE FOLLOWING COMPANIES:
 - NIAGARA MOHAWK POWER CORPORATION
535 WASHINGTON STREET
BUFFALO, NEW YORK (716) 857-4238
 - MARY STOUT
WELLSVILLE UTILITY COORDINATOR
(716) 593-1780
 - BOB ALLIARD
NATIONAL FUEL COMPANY
ENGINEERING DEPARTMENT
10 LAFAYETTE SQUARE
BUFFALO, NEW YORK (716) 857-7060
 6. THE CONTRACTOR SHALL CONTACT THE UNDERGROUND UTILITY LOCATION SERVICE PRIOR TO START OF CONSTRUCTION - THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR DAMAGE TO UNDERGROUND UTILITIES.
 7. EMPTY DRUMS OR WASTE MATERIAL ENCOUNTERED WITHIN THE LIMITS OF CLEARING AND GRUBBING SHALL BE DISPOSED AT TEMPORARY CONTAMINATED STORAGE AREA.
 8. GRUB AREA UNDER DIKE FOUNDATION ONLY.
 9. WATERLINE SHOWN ON THE DWG IS BASED ON TOPOGRAPHIC BASE MAP FIGURE 3-4 OF PHASE I REMEDIAL INVESTIGATION, SINCLAIR REFINERY SITE, WELLSVILLE NEW YORK BY SMC MARTIN INC., MARCH 1985.

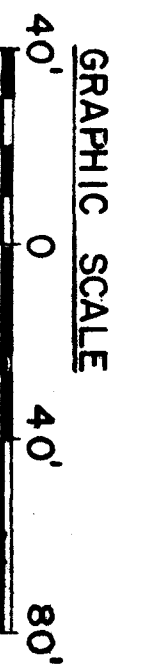


	12/2/91	AS-BUILT, SEE NOTE G DWG C-04 DELT (E4) ACCESS ROAD & CONST. FACILITY AREA. ADD: (E2, E3, H8, D7) NOTE. REV: (E7) COORDINATES K.M. FITZGERALD NY PE NO. 065721				EK	VP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				</
---	---------	---	--	--	--	----	----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

This drawing and the design it carries are the property of BECHTEL. They are loaned to you and are not to be used for any other project without the written consent of BECHTEL. They are not to be reproduced or used in any way without the written consent of BECHTEL.

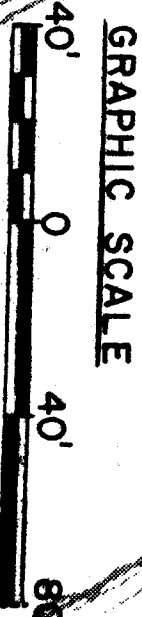






FOR NOTES SEE DRAWING C-04

DRAWING No.	REV.
C-05	3



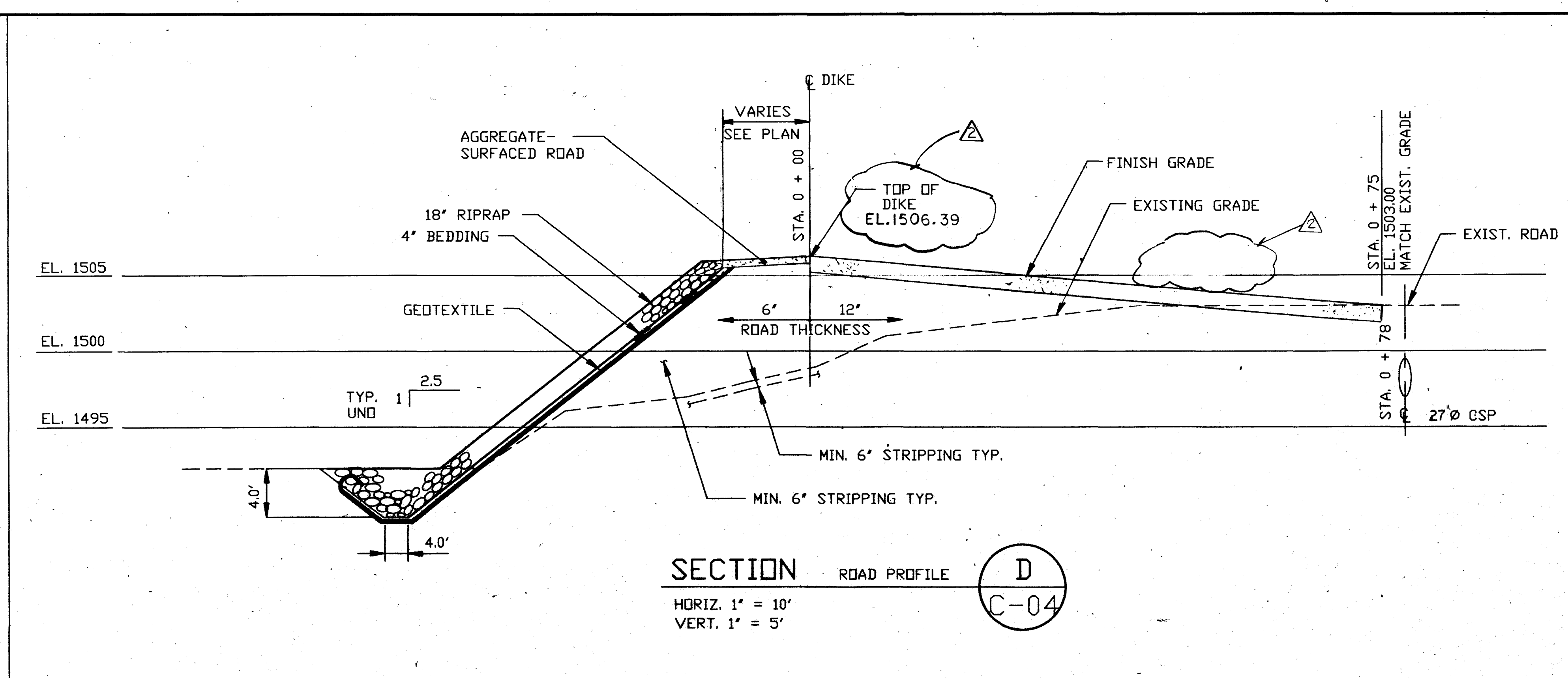
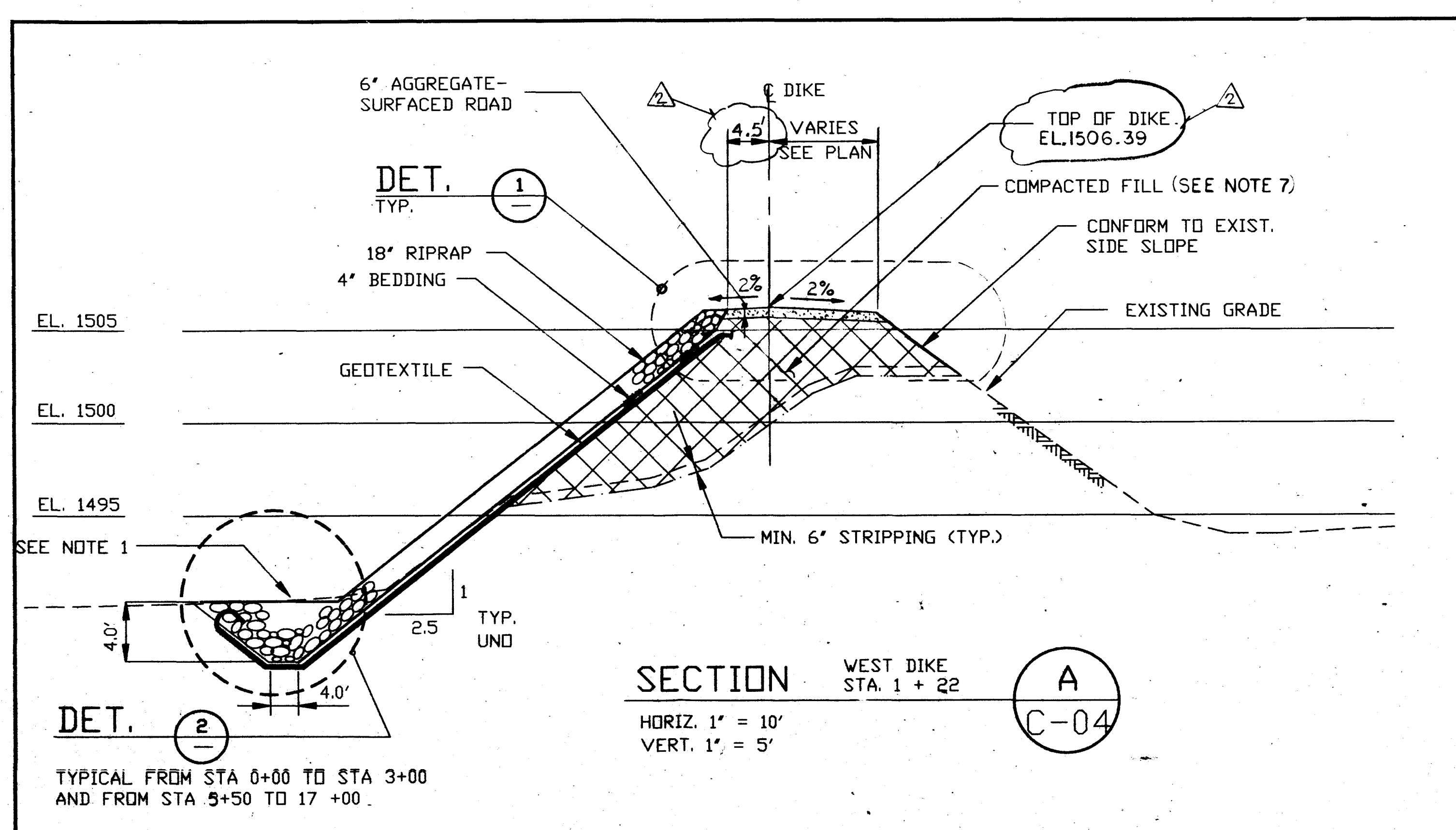
DEONIEL
SAN FRANCISCO

ARCO
SINCLAIR REFINERY

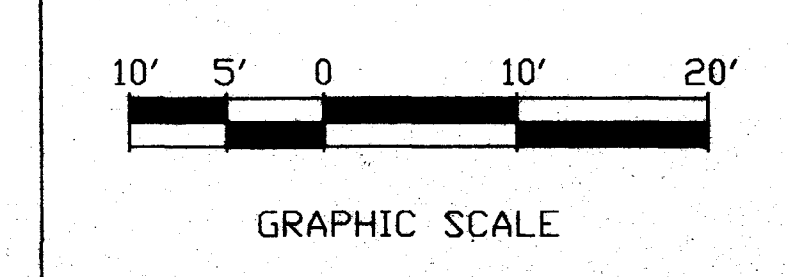
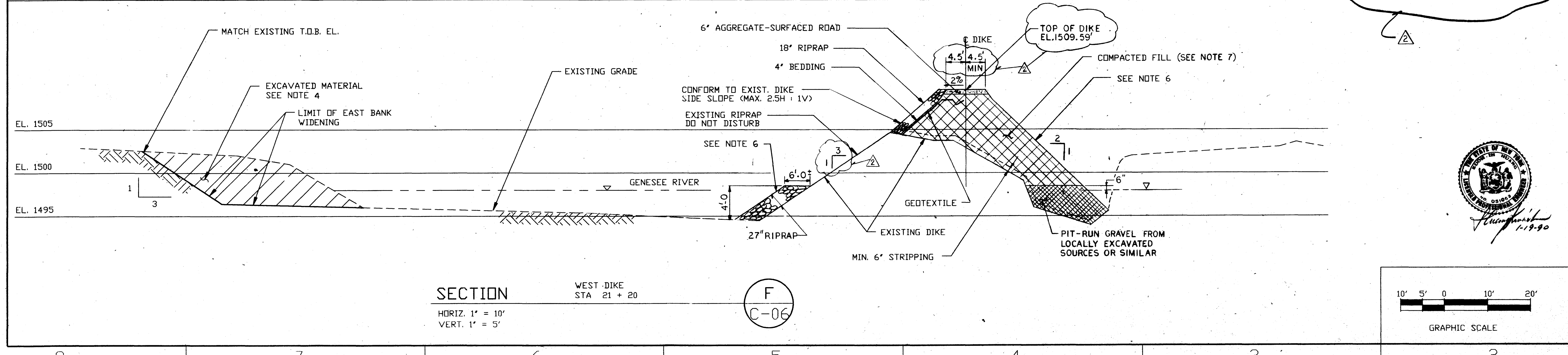
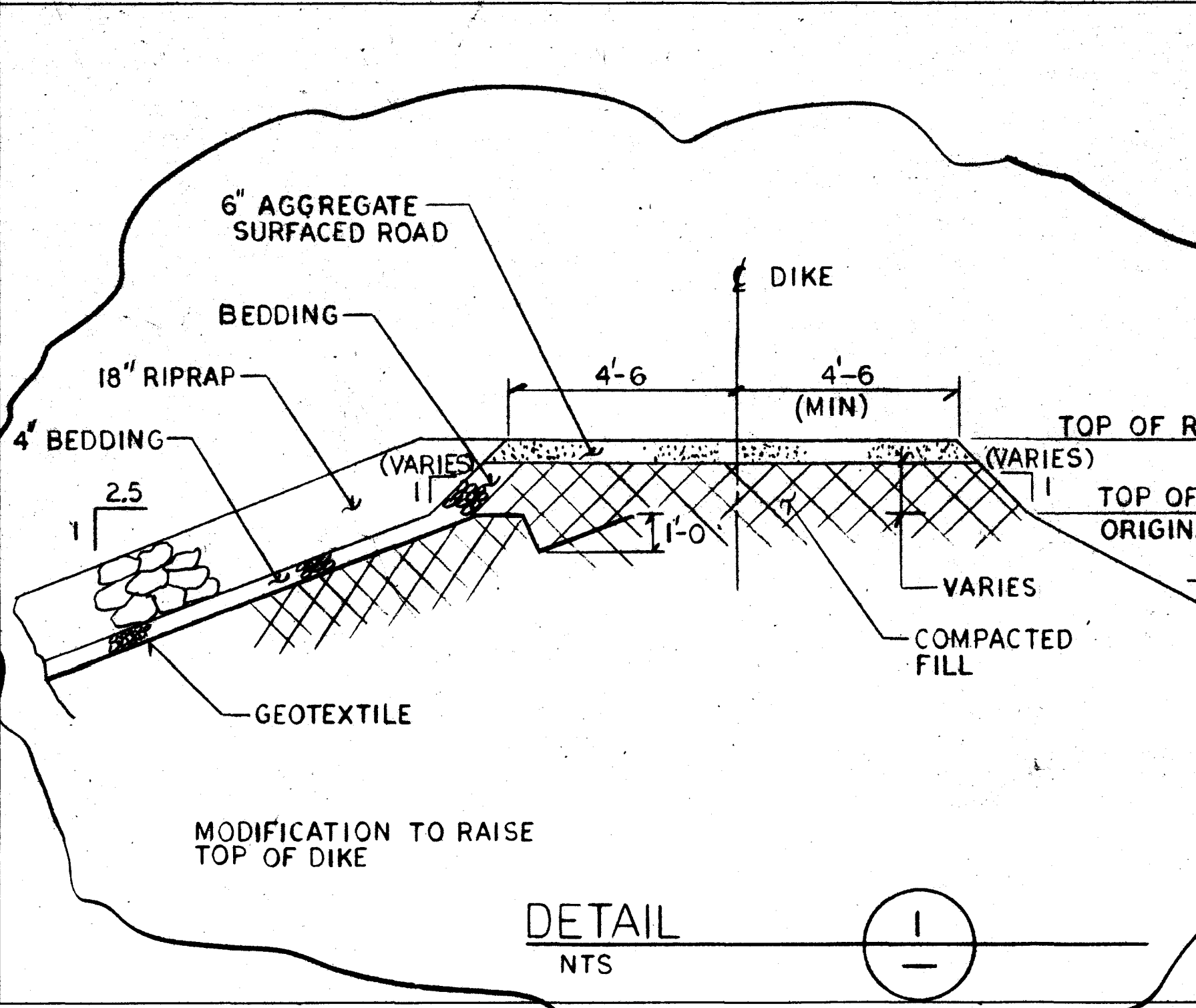
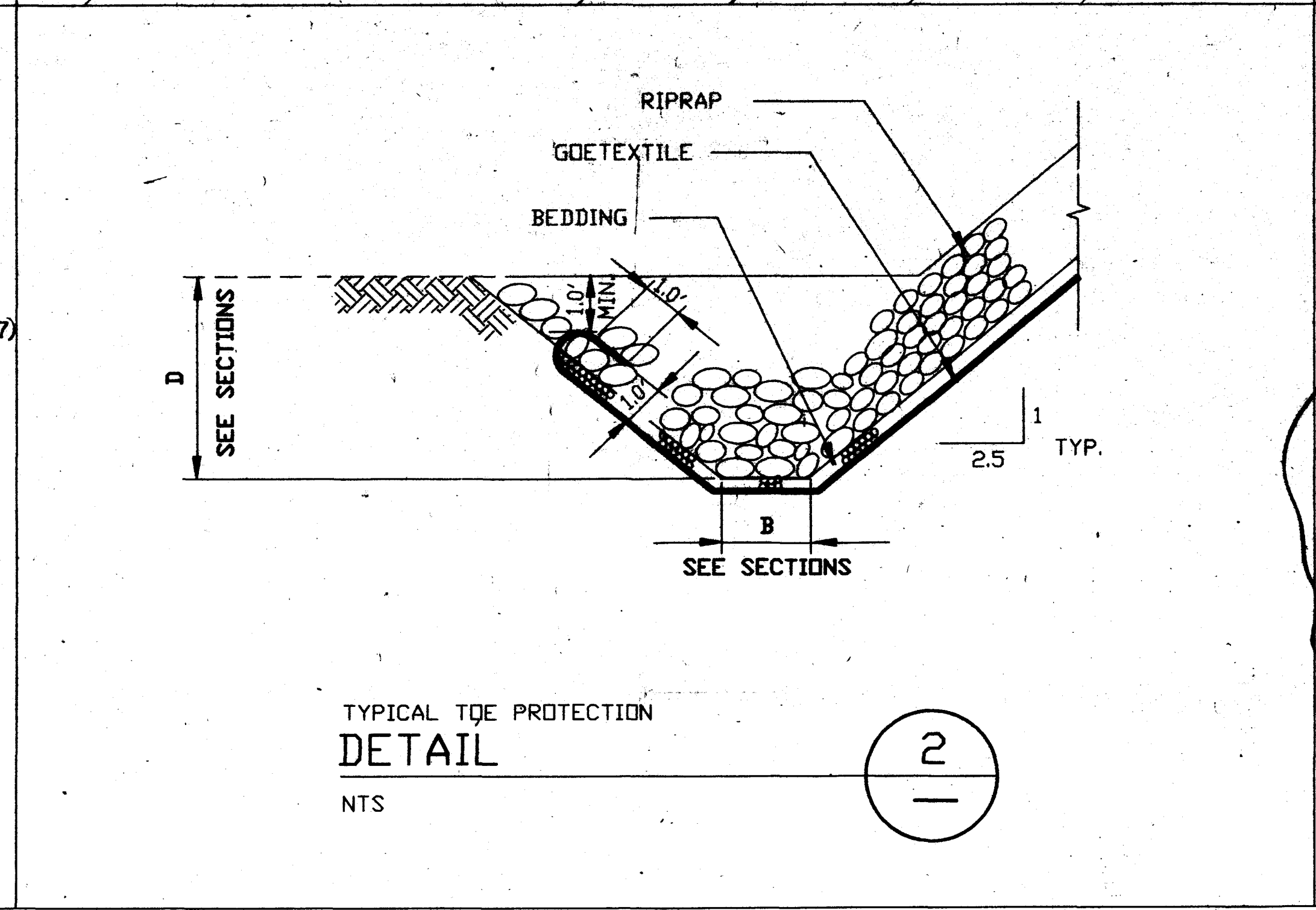
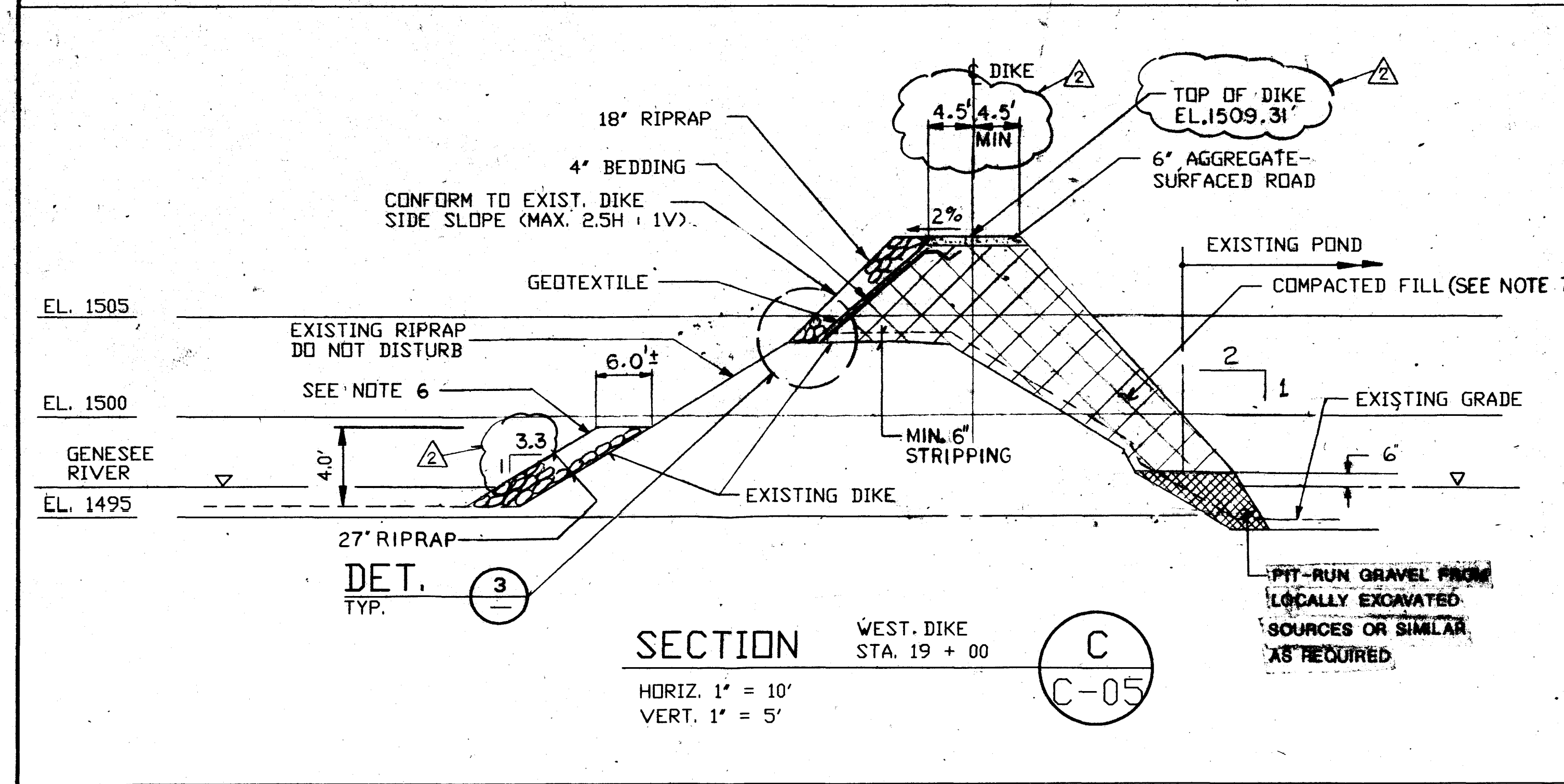
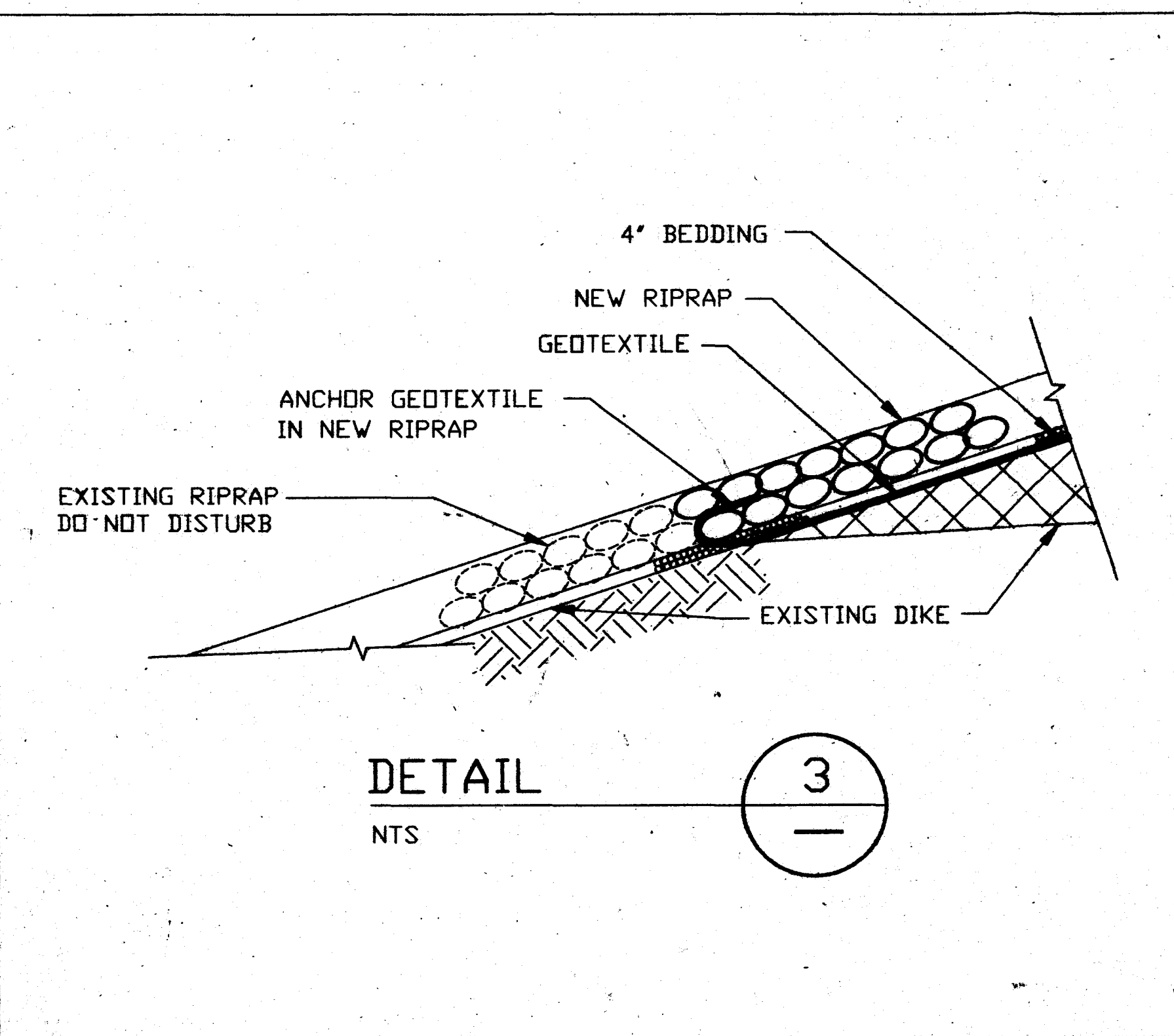
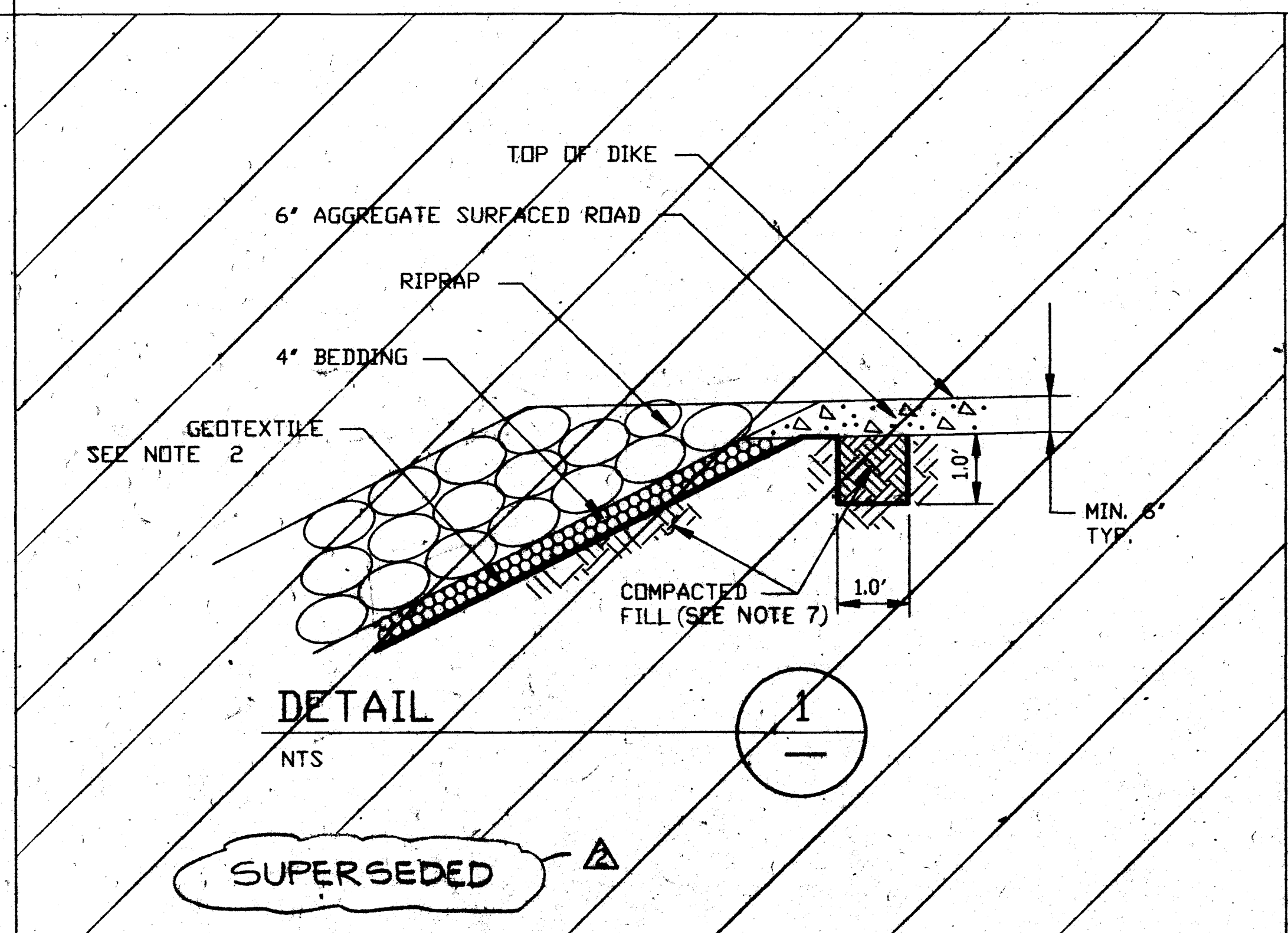
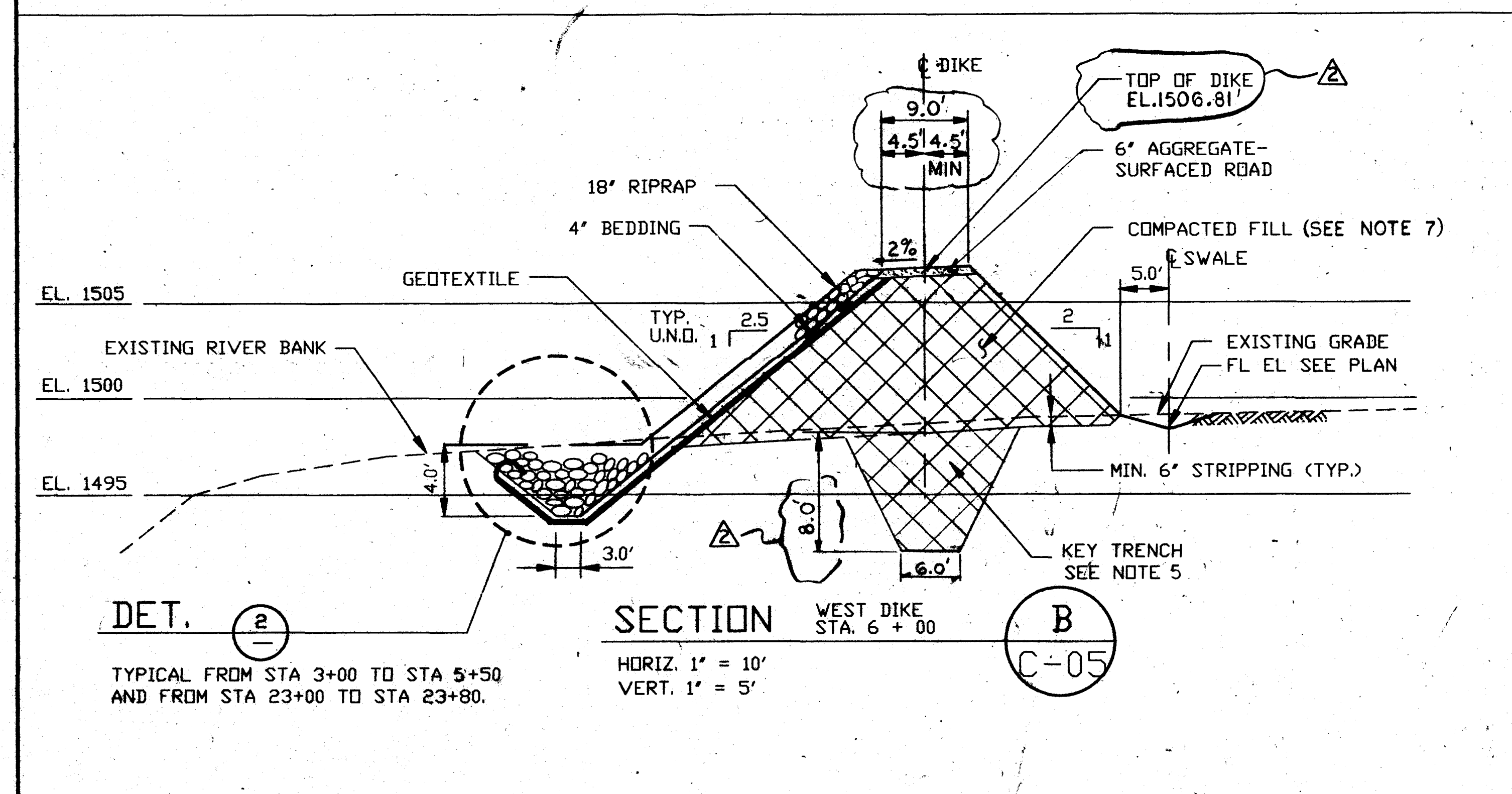
NEW DIKE & EAST BANK PROTECTION PLAN
SHEET 2 OF 2

19386	C-
-------	----

This drawing and the design it covers are property of BECHTEL. They are hereby loaned and on the borrower's express agreement that they will not be reproduced, copied, loaned, exhibited, nor used except in the limited way and private use permitted by any written consent given by the lender to the borrower.



- NOTES:
1. BOTTOM ELEVATION OF THE RIVER SHOWN IS APPROXIMATE AND SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR.
 2. WHERE ANCHOR DETAILS ARE NOT SHOWN ON THE DRAWINGS, GEOTEXTILE SHALL BE ANCHORED AS RECOMMENDED BY MANUFACTURER.
 3. KEY TRENCH SHALL BE REQUIRED FROM STA 1+30 TO STA 16+50.
 4. MATERIAL EXCAVATED DURING EAST BANK WIDENING SHALL BE USED FOR COMMON FILL MATERIAL BEHIND THE EAST BANK DIKE.
 5. FOR IDENTIFICATION AND DISPOSAL OF CONTAMINATED OR WASTE MATERIALS WHICH HAVE BEEN EXCAVATED SEE SECTION 02260 OF THE TECHNICAL SPECIFICATIONS.
 6. ADDITIONAL RIPRAP TOE PROTECTION SHALL BE PROVIDED AS SHOWN ALONG TOE OF EXISTING DIKE FROM STA 17+00 TO 22+31.59
 7. COMPACTED FILL MATERIAL SHALL HAVE A PERMEABILITY, AS DETERMINED IN THE LABORATORY, OF EQUAL TO OR LESS THAN 1×10^{-5} CM/SEC.
 8. FOR ADDITIONAL NOTES SEE DRAWING C-04



1-18	1998	REVISED, REISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5
1-18	1998	ISSUED FOR BID	JKL	VP	5

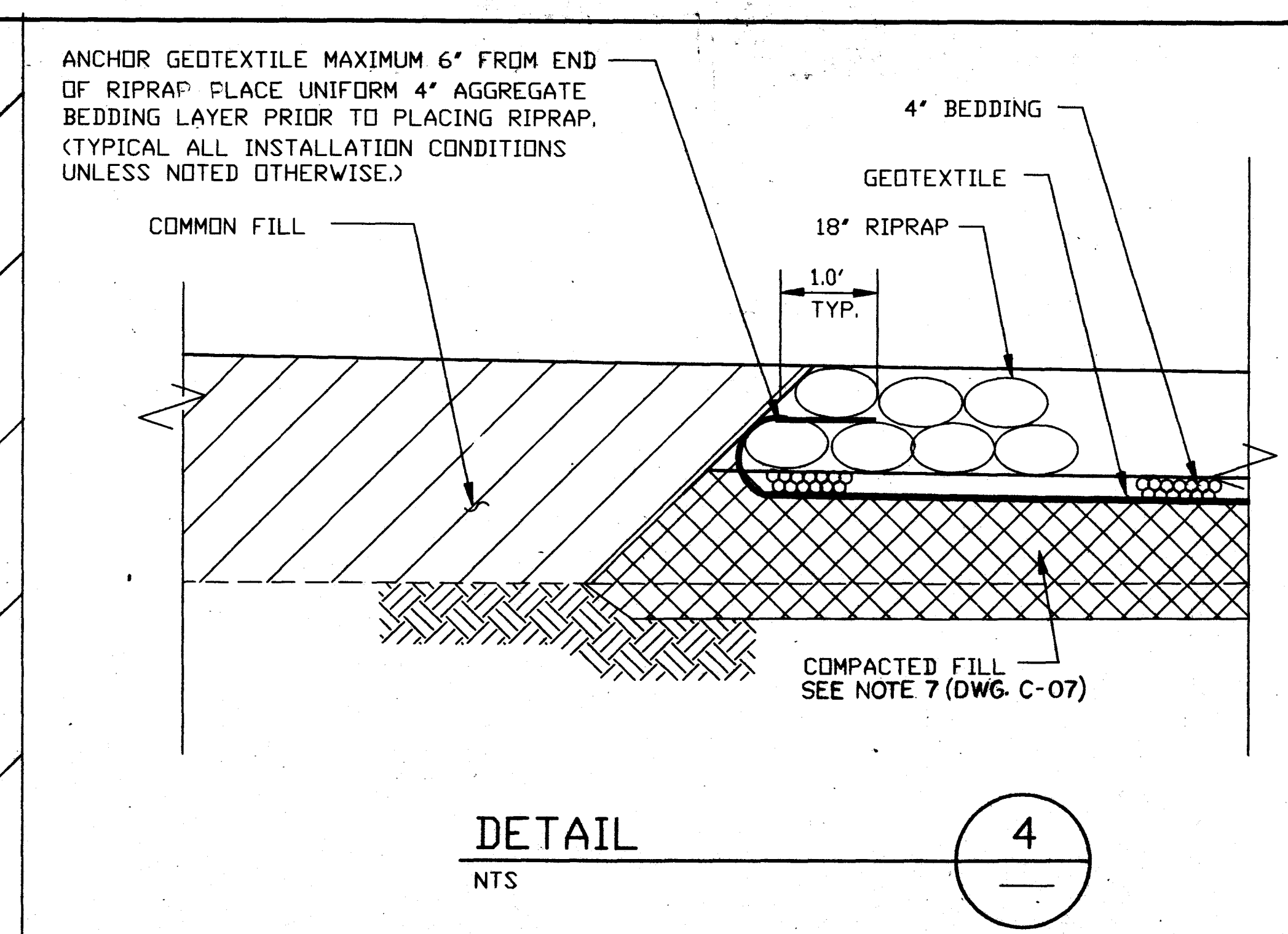
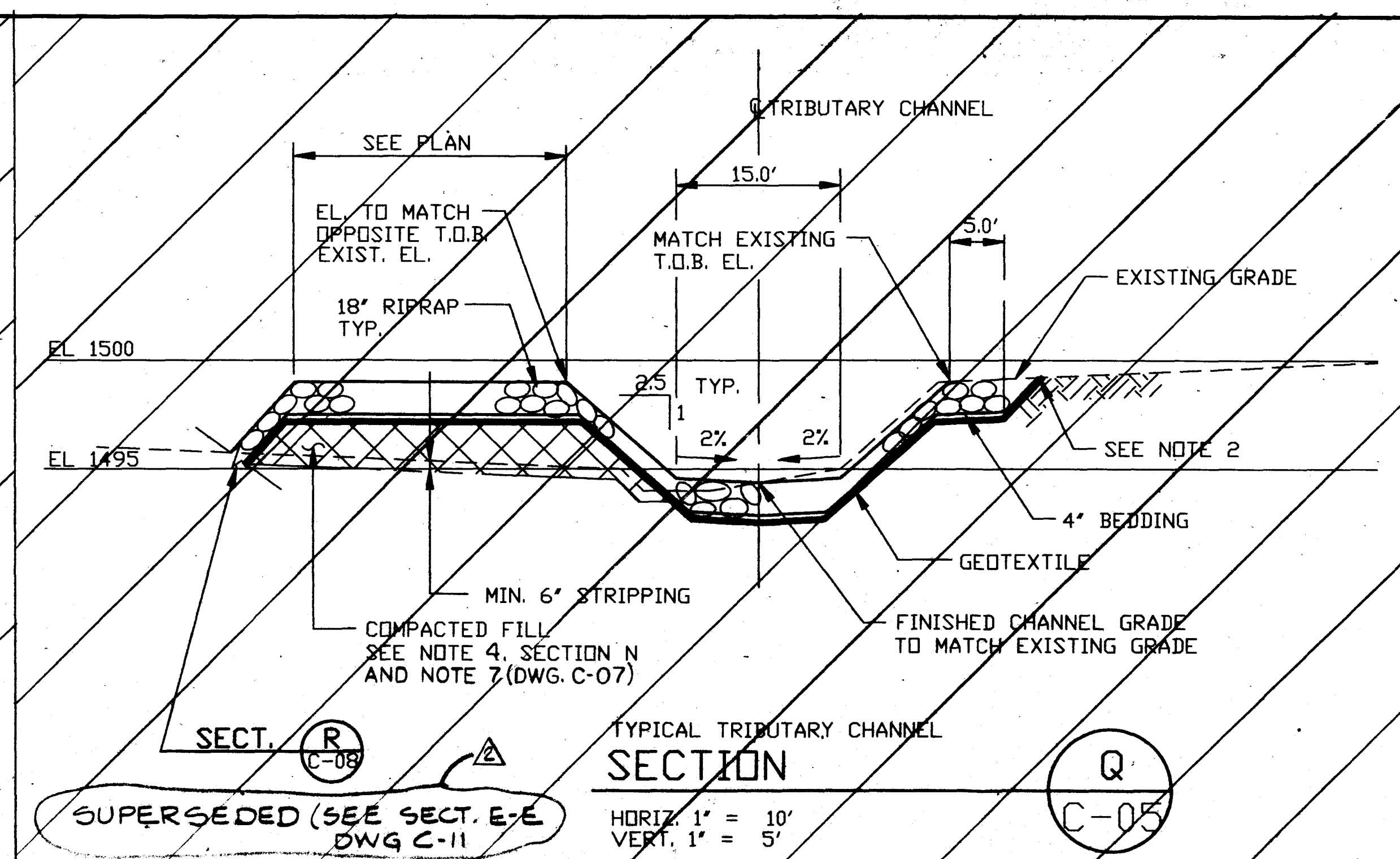
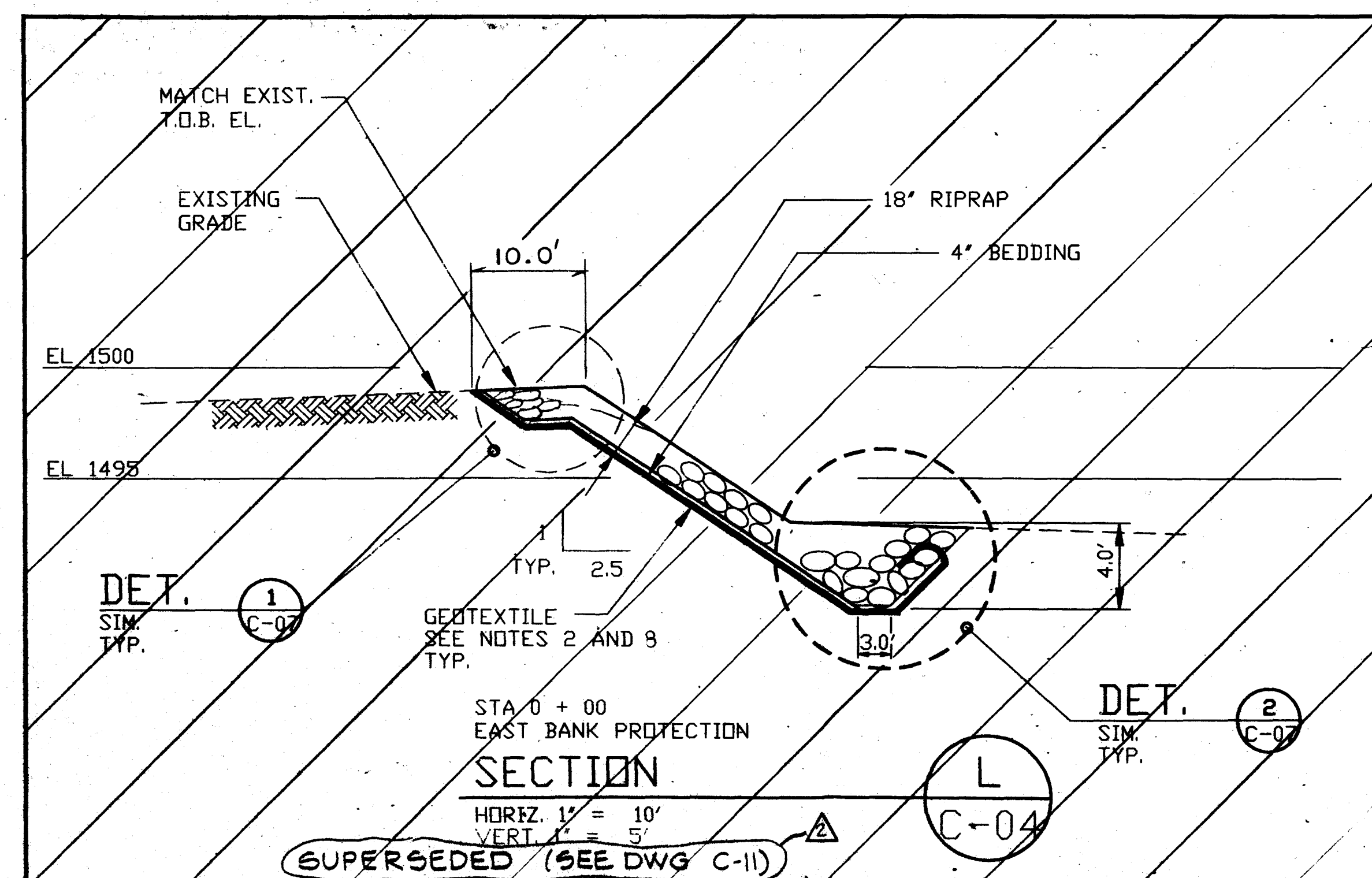
BECHTEL
SAN FRANCISCO

ARCO
SINCLAIR REFINERY

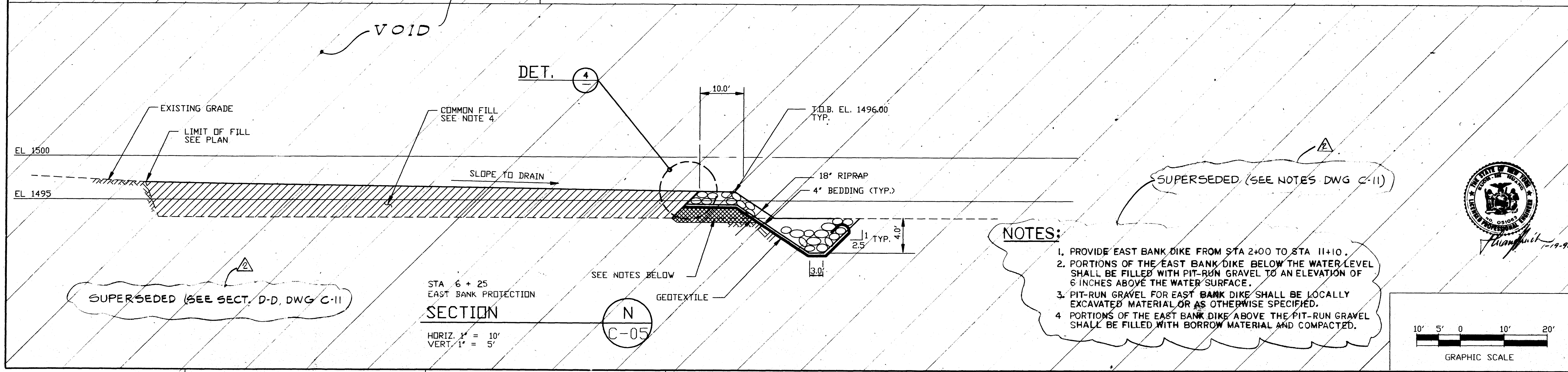
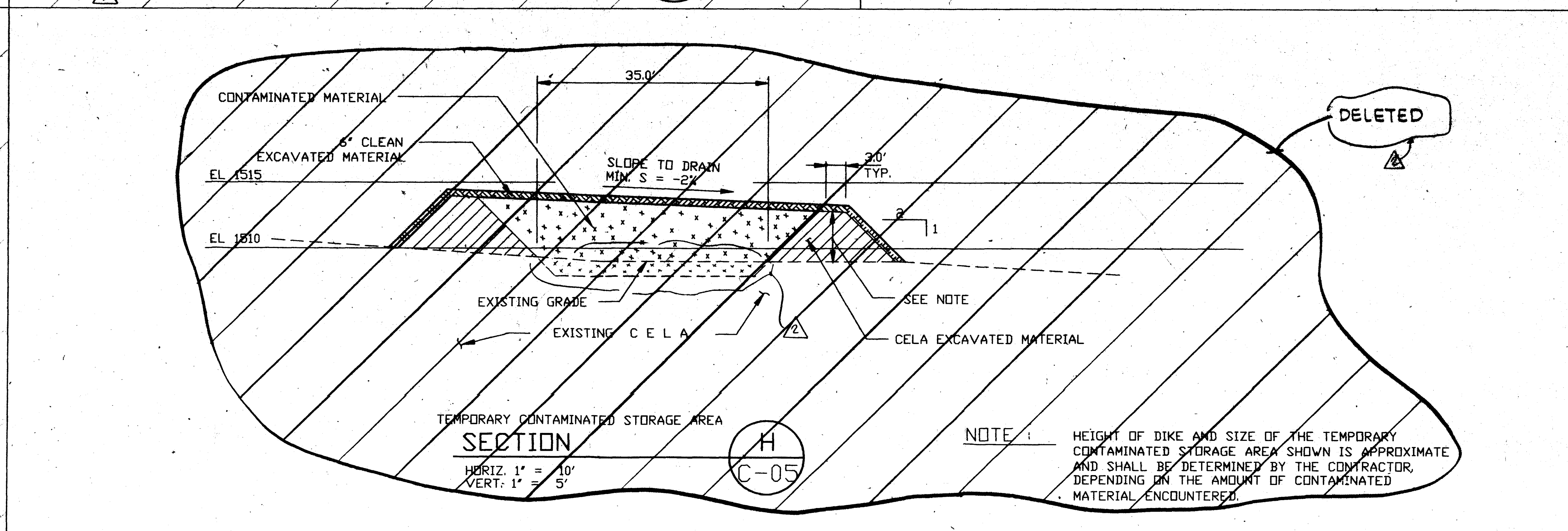
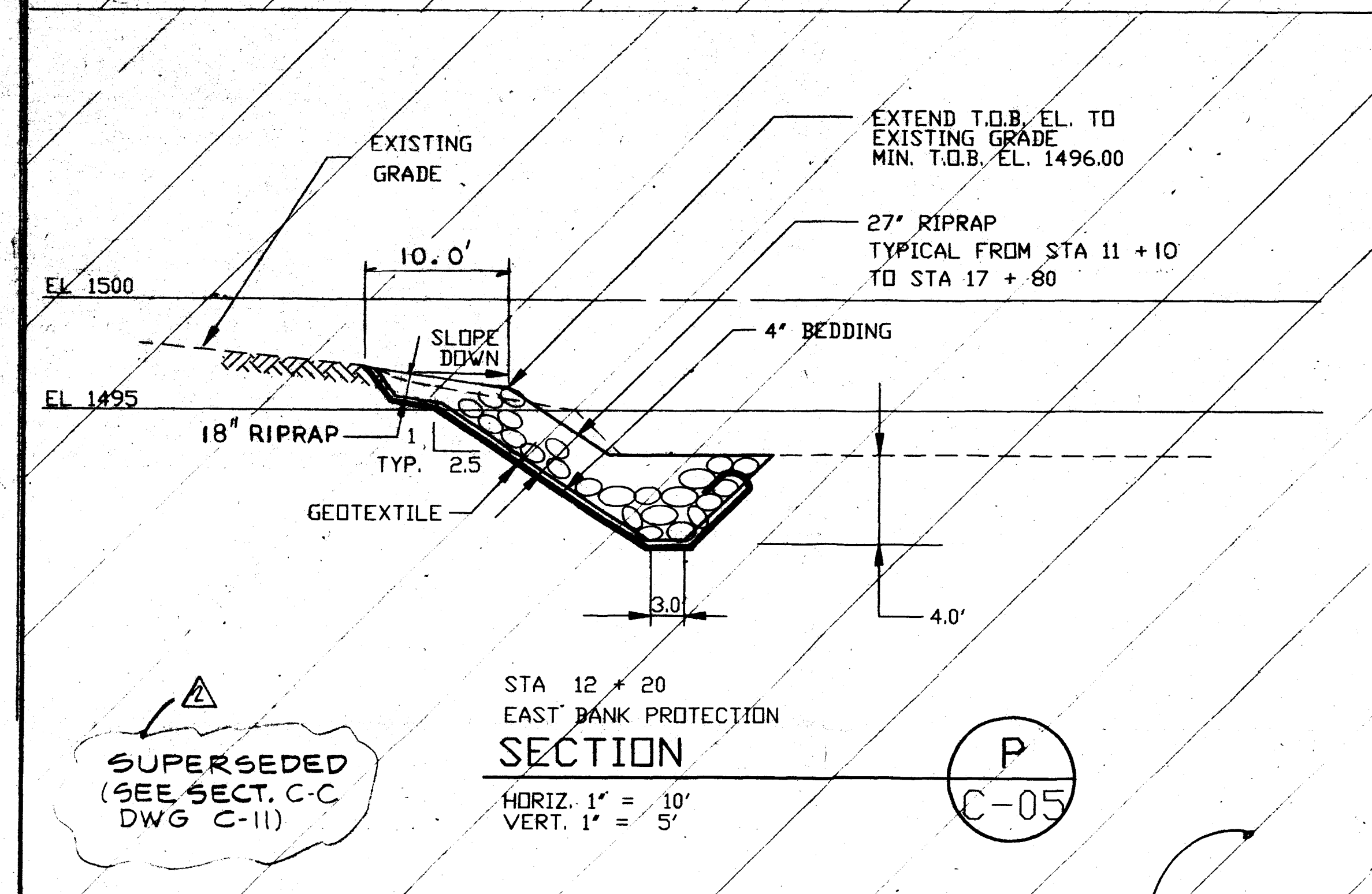
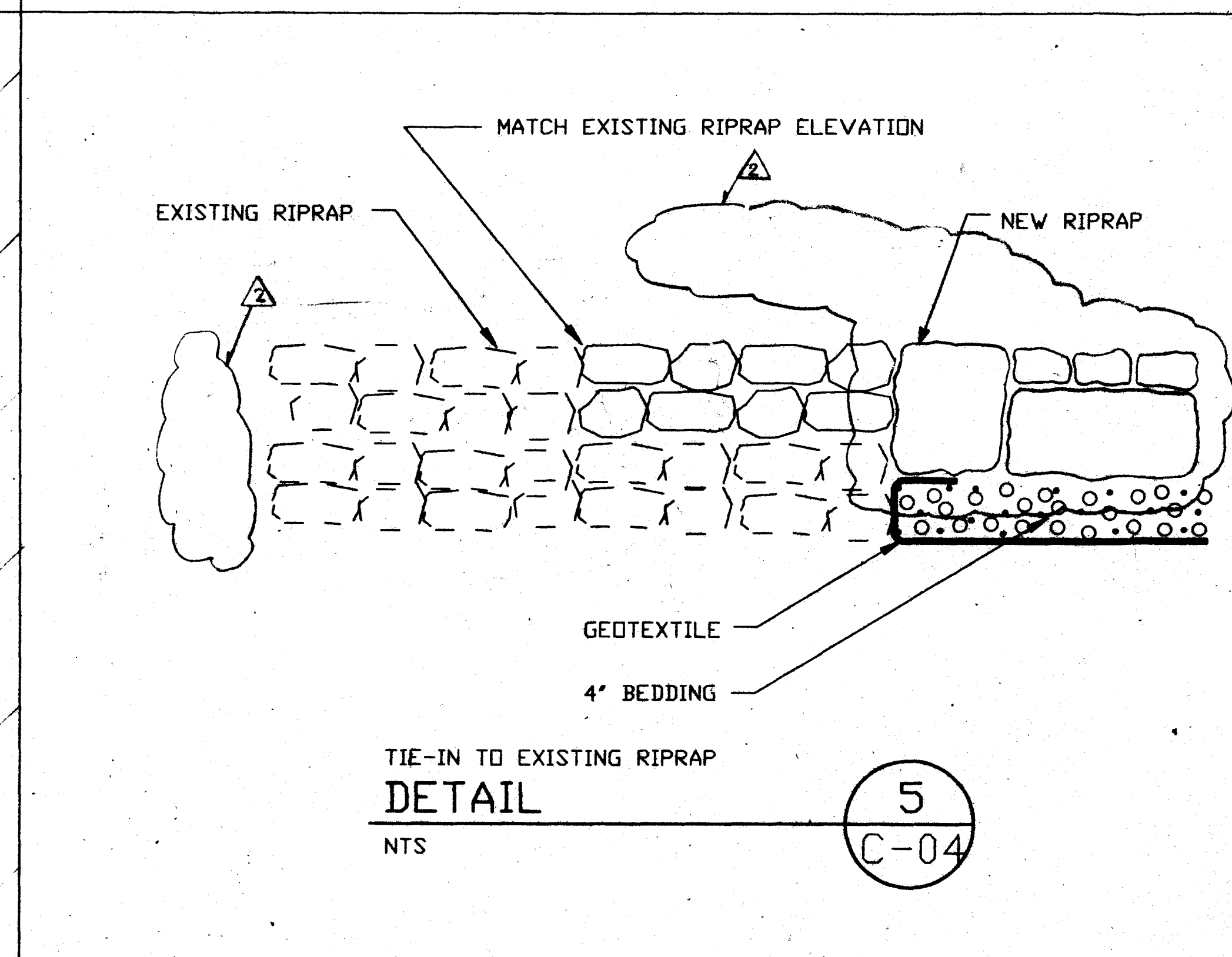
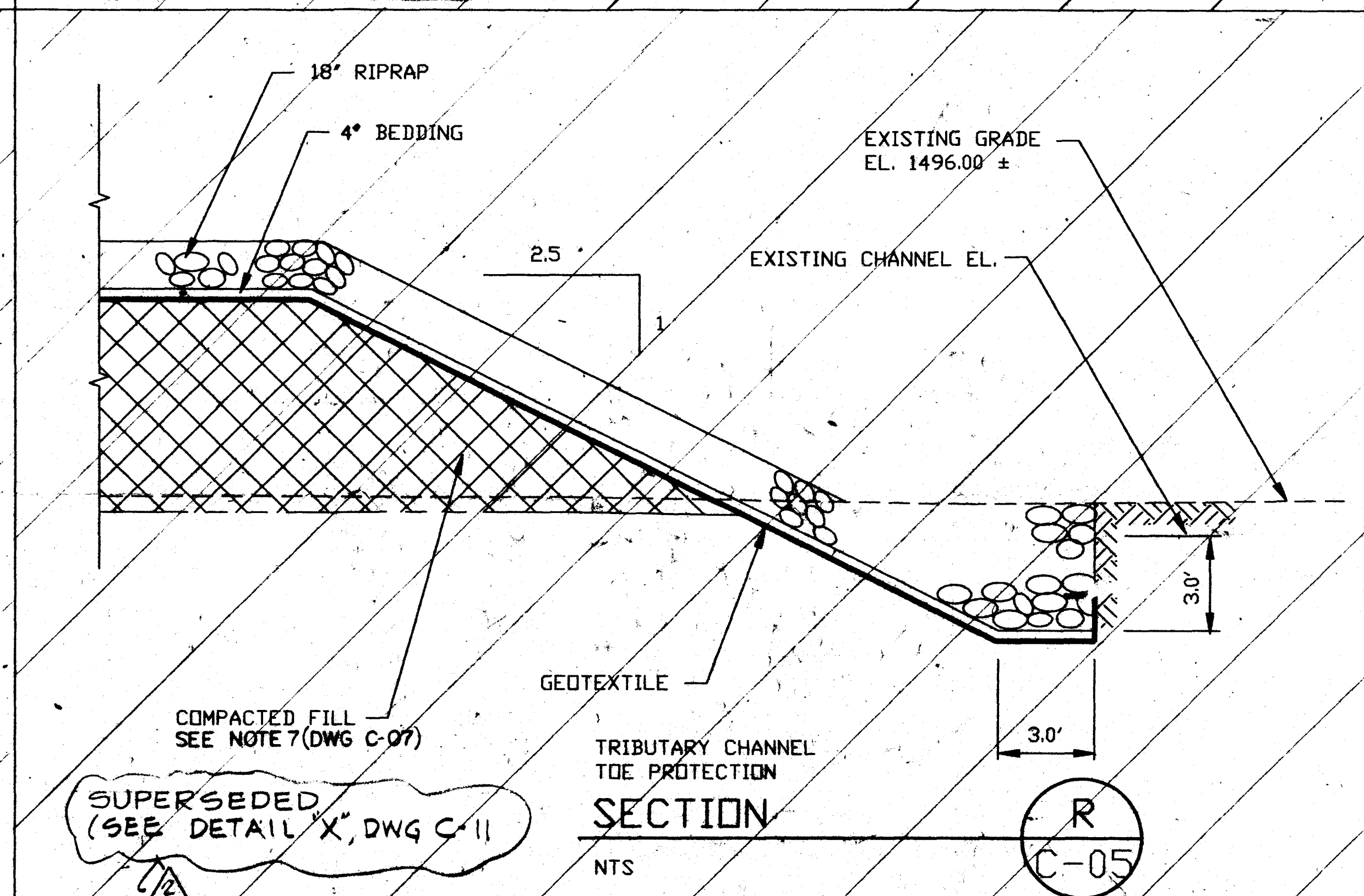
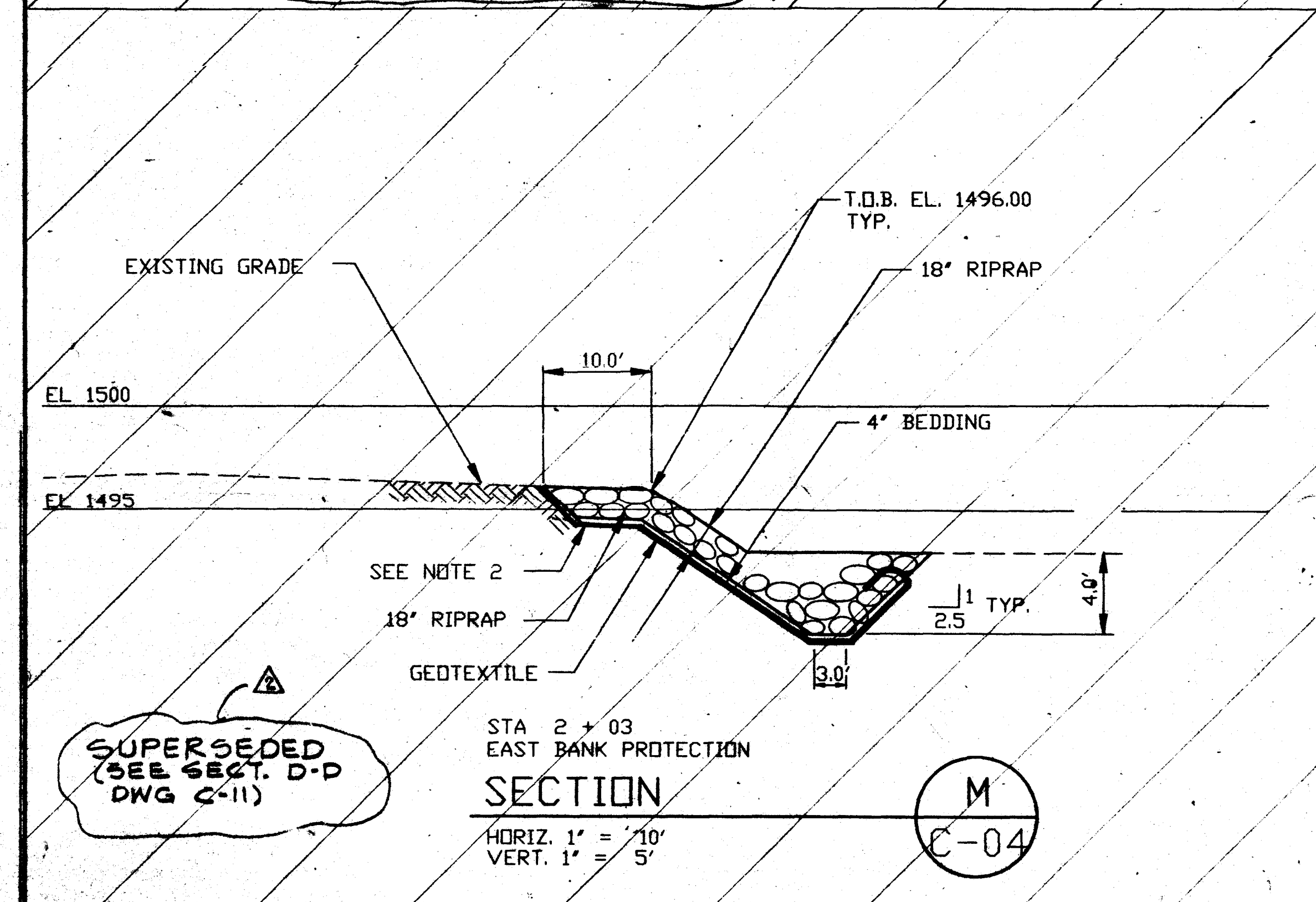
DIKE SECTIONS AND DETAILS
SH. 1 OF 2

JOB NO. 19386
DRAWING NO. C-07
REV. 2

This drawing and the design it covers are property of BECHTEL. They are hereby loaned and on the borrower's express agreement that they will not be reproduced, copied, loaned, exhibited, nor used except in the limited way and private use permitted by any written consent given by the lender to the borrower.

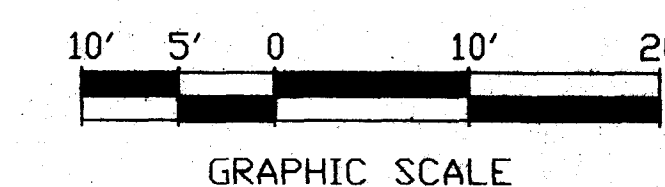


NOTES:
FOR NOTES SEE DRAWING C-07.



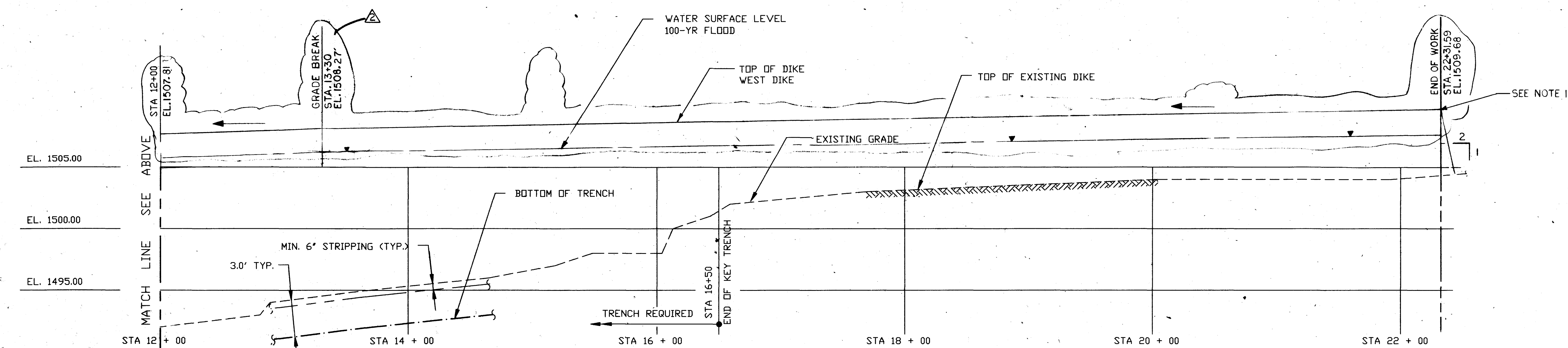
NOTES:

1. PROVIDE EAST BANK DIKE FROM STA 2+00 TO STA 11+10.
2. PORTIONS OF THE EAST BANK DIKE BELOW THE WATER LEVEL SHALL BE FILLED WITH PIT-RUN GRAVEL TO AN ELEVATION OF 6 INCHES ABOVE THE WATER SURFACE.
3. PIT-RUN GRAVEL FOR EAST BANK DIKE SHALL BE LOCALLY EXCAVATED MATERIAL OR AS OTHERWISE SPECIFIED.
4. PORTIONS OF THE EAST BANK DIKE ABOVE THE PIT-RUN GRAVEL SHALL BE FILLED WITH BORROW MATERIAL AND COMPACTED.

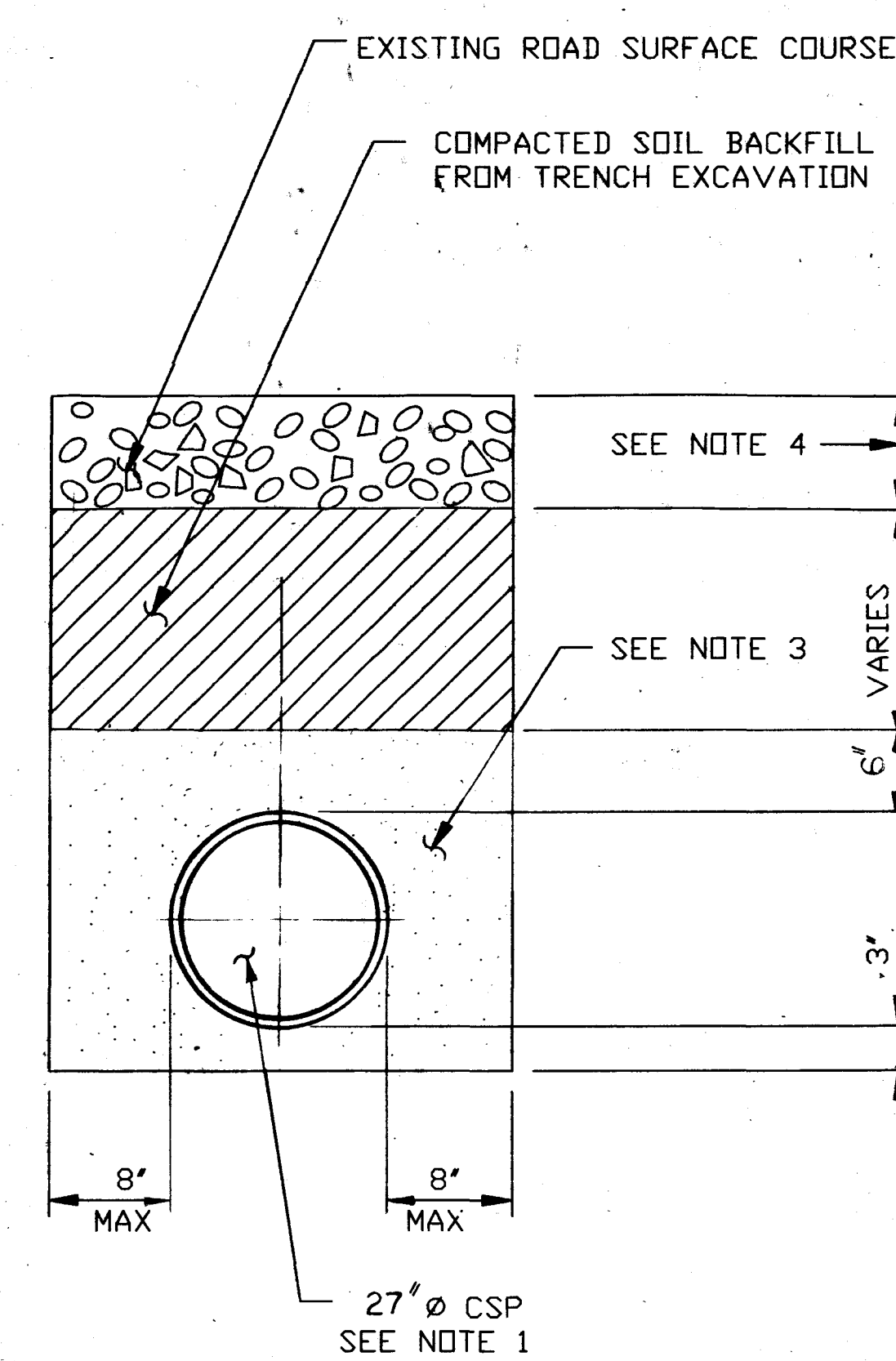
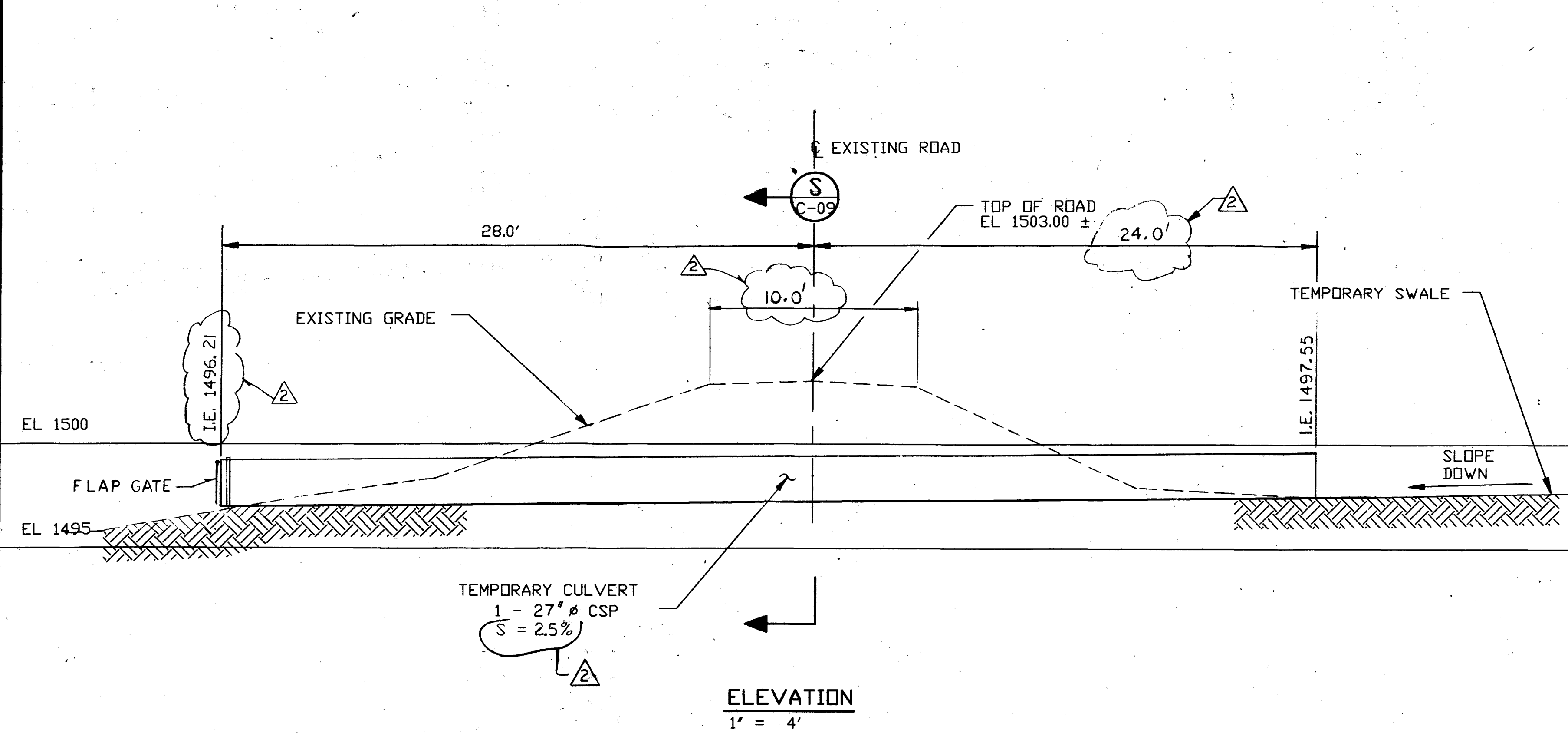


12-2-91	AS BUILT SEE NOTE 6 DWG C-04	EK	VP		
1-19	REV. (3) RIPRAP DETAIL AT EXISTING RIPRAP DEL. (CO) TEMP STORAGE AREA (AT 11+10.5 TO 15+10.5) EAST DIKE				
12/17/98	REVISED, REISSUED FOR BID	JKL			
98	ISSUED FOR BID				
DATE	AS NOTED	REVISION	STEVE NGUYEN	DATE	SARAH FONG
BECHTEL SAN FRANCISCO					
ARCO SINCLAIR REFINERY					
DIKE SECTIONS AND DETAILS SH. 2 OF 2					
JOB NO.	DRAWING NO.	REV.			
19386	C - 08	2			

HORIZ. 1" = 40' FOR PLAN SEE DRAWINGS C-04, C-05 AND C-06
VERT. 1" = 4'



HORIZ. 1" = 40' FOR PLAN SEE DRAWINGS C-04, C-05 AND C-06
VERT. 1" = 4'



SECTION
NTS

DETAIL
AS NOTED

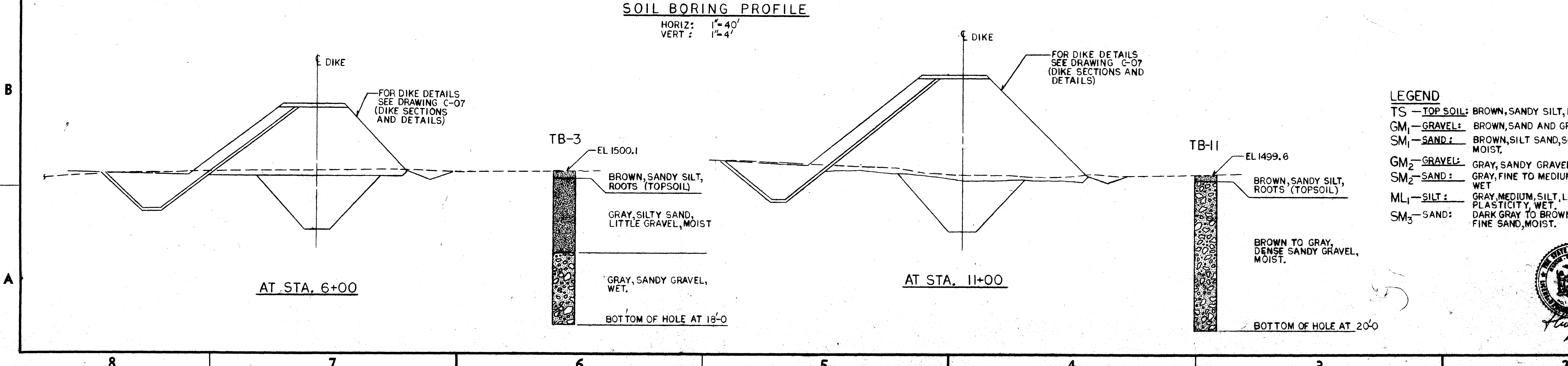
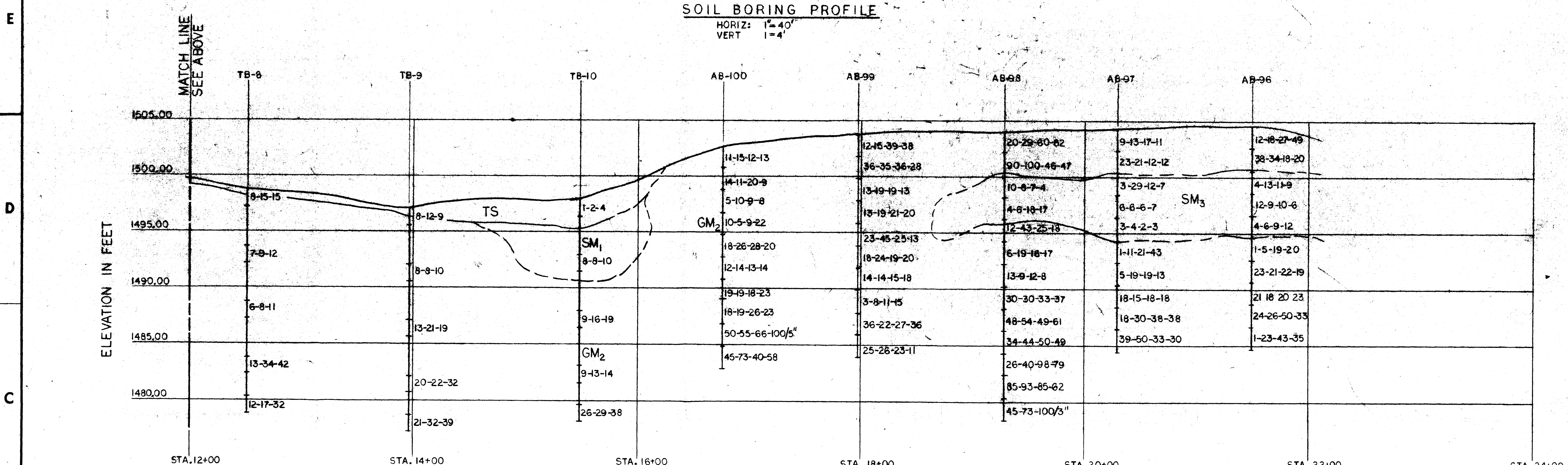
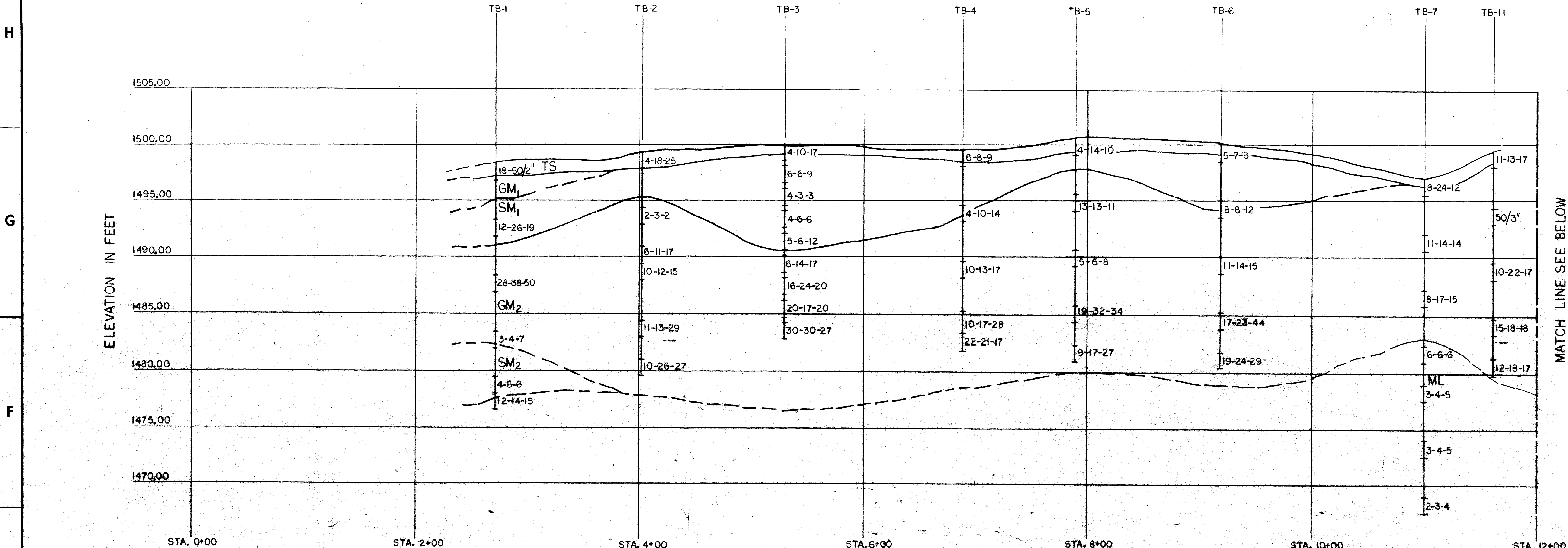
1. CULVERT SHALL BE CORRUGATED STEEL PIPE, MEETING ASTM A-444 OR AASHTO M-218.
2. PIPE SHALL BE PLACED FIRMLY ON PREPARED BED AND LAID TO LINE AND GRADE SHOWN.
3. BACKFILL MATERIAL SHOWN SHALL BE CLEAN CRUSHED ROCK, GRAVEL OR SAND.
4. DEPTH OF EXISTING ROAD SURFACE COURSE SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR. RESTORE FINISHED GRADE TO ITS ORIGINAL ELEVATION.

[illegible]

4 X 44 'E' SIZE

NOTES:

- ELEVATIONS SHOWN ARE BASED ON 1929 MEAN SEA LEVEL DATUM.
- DATA FOR TEST BORE HOLES TBI THROUGH TB11 WAS OBTAINED FROM THE DIKE INVESTIGATION REPORT FOR THE SINCLAIR LANDFILL, WELLSVILLE, ALLEGANY COUNTY, NEW YORK, DATED SEPTEMBER 1, 1988.
- DATA FOR TEST BORE HOLES AB96-AB100 WAS OBTAINED FROM THE LANDFILL FIELD INVESTIGATION REPORT, SINCLAIR REFINERY SITE, WELLSVILLE, NEW YORK, PREPARED BY EBASCO SERVICES INC., DATED JULY 1989.
- DIKE STATIONS SHOWN ON THE SOIL BORING PROFILE ARE APPROXIMATELY LOCATED TO SHOW RELATIVE LOCATIONS OF BORINGS.
- THE SOIL BORING PROFILE IS TO PROVIDE CONTRACTOR WITH ADDITIONAL INFORMATION THAT MAY BE USEFUL DURING CONSTRUCTION.
- FOR DIKE SECTIONS ELEVATIONS AND DETAILS SEE DRAWING C-07.
- FOR BOREHOLE LOCATIONS SEE DRAWING C-05.



- LEGEND
- TS - TOP SOIL: BROWN, SANDY SILT, ROOTS
 - GM₁ - GRAVEL: BROWN, SAND AND GRAVEL, MOIST
 - SM₁ - SAND: BROWN, SILT SAND, SOME GRAVEL, MOIST
 - GM₂ - GRAVEL: GRAY, SANDY GRAVEL, WET
 - SM₂ - SAND: GRAY, FINE TO MEDIUM, SILTY SAND, WET
 - ML₁ - SILT: GRAY, MEDIUM SILT, LOW PLASTICITY, WET
 - SM₃ - SAND: DARK GRAY TO BROWN, SILTY FINE SAND, MOIST

1-17	1-18	1-19	1-20	1-21	1-22	1-23	1-24	1-25	1-26	1-27	1-28	1-29	1-30	1-31	1-32	1-33	1-34	1-35	1-36	1-37	1-38	1-39	1-40	1-41	1-42	1-43	1-44	1-45	1-46	1-47	1-48	1-49	1-50	1-51	1-52	1-53	1-54	1-55	1-56	1-57	1-58	1-59	1-60	1-61	1-62	1-63	1-64	1-65	1-66	1-67	1-68	1-69	1-70	1-71	1-72	1-73	1-74	1-75	1-76	1-77	1-78	1-79	1-80	1-81	1-82	1-83	1-84	1-85	1-86	1-87	1-88	1-89	1-90	1-91	1-92	1-93	1-94	1-95	1-96	1-97	1-98	1-99	1-100																
1-1	1-2	1-3	1-4	1-5	1-6	1-7	1-8	1-9	1-10	1-11	1-12	1-13	1-14	1-15	1-16	1-17	1-18	1-19	1-20	1-21	1-22	1-23	1-24	1-25	1-26	1-27	1-28	1-29	1-30	1-31	1-32	1-33	1-34	1-35	1-36	1-37	1-38	1-39	1-40	1-41	1-42	1-43	1-44	1-45	1-46	1-47	1-48	1-49	1-50	1-51	1-52	1-53	1-54	1-55	1-56	1-57	1-58	1-59	1-60	1-61	1-62	1-63	1-64	1-65	1-66	1-67	1-68	1-69	1-70	1-71	1-72	1-73	1-74	1-75	1-76	1-77	1-78	1-79	1-80	1-81	1-82	1-83	1-84	1-85	1-86	1-87	1-88	1-89	1-90	1-91	1-92	1-93	1-94	1-95	1-96	1-97	1-98	1-99	1-100

DECHTEL
SAN FRANCISCO

ARCO
SINCLAIR REFINERY

SOIL STRATIGRAPHY
ALONG WEST DIKE

19386

C-10

34x44 "E" SIZE

