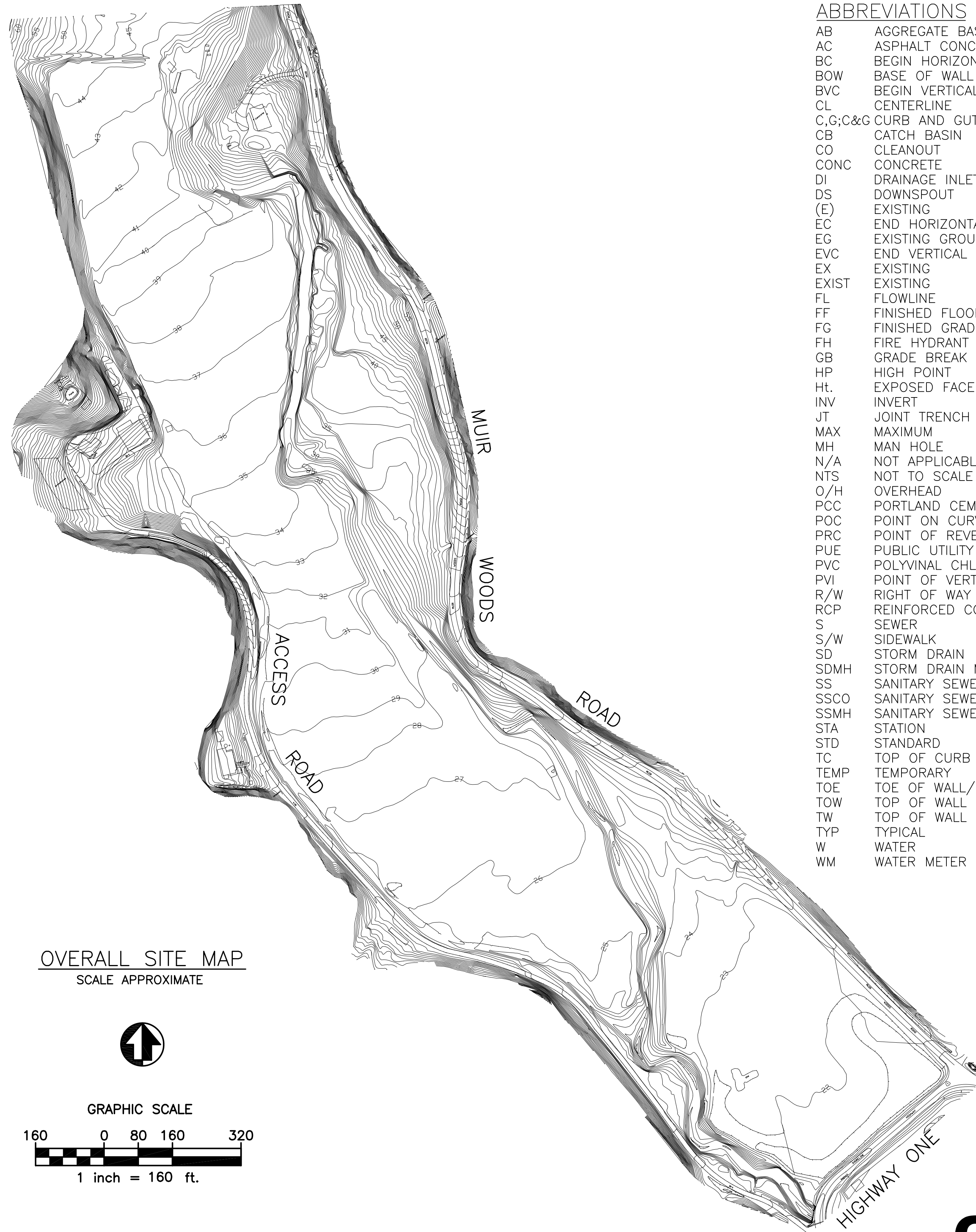
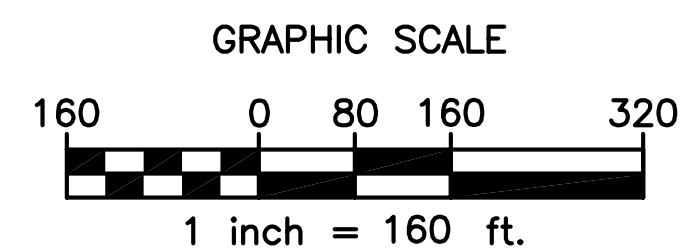


Appendix A. Draft Construction Drawings



OVERALL SITE MAP
SCALE APPROXIMATE

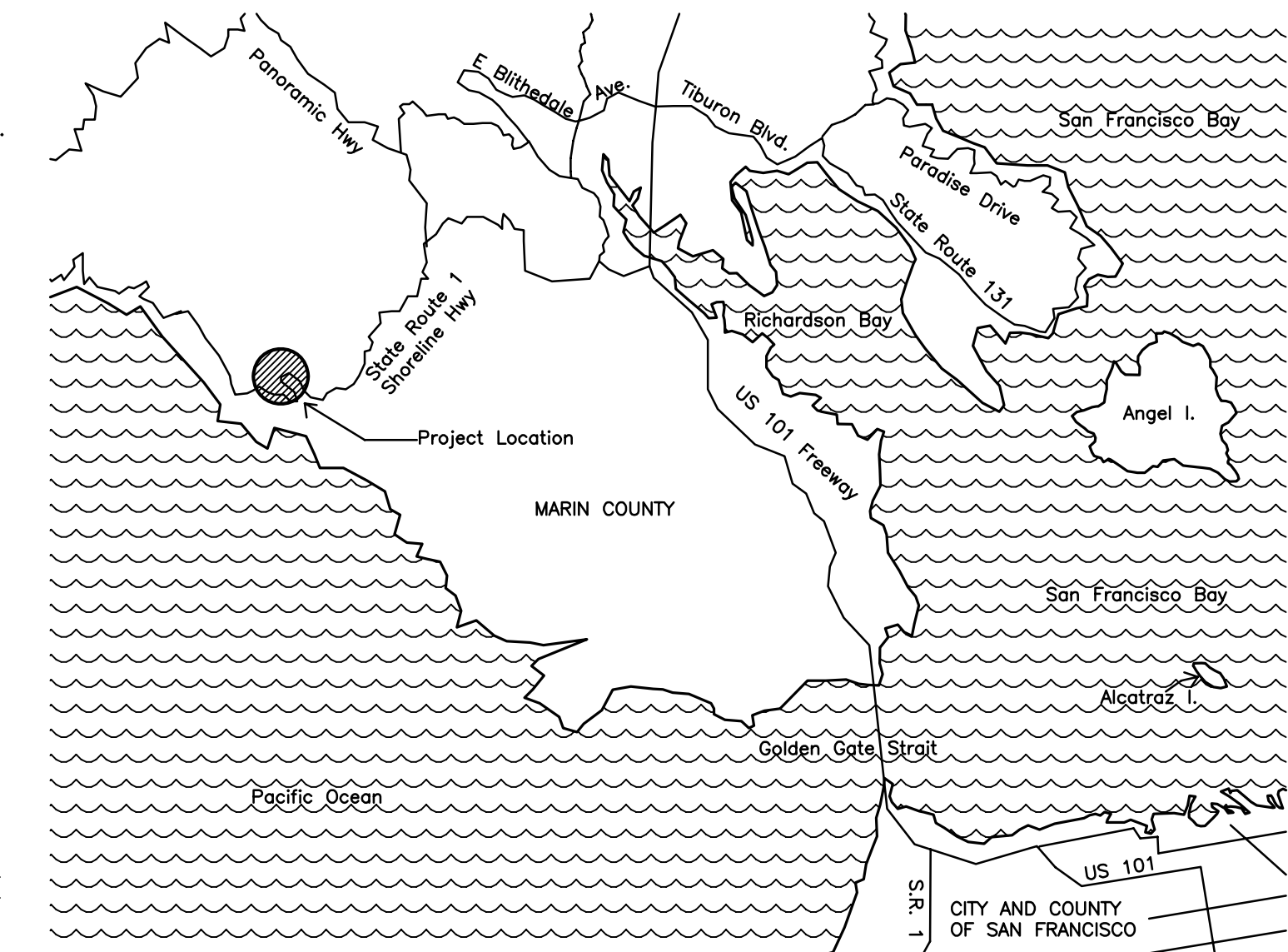


ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
BC	BEGIN HORIZONTAL CURVE
BOW	BASE OF WALL
BVC	BEGIN VERTICAL CURVE
CL	CENTERLINE
C,G;C&G	CURB AND GUTTER
CB	CATCH BASIN
CO	CLEANOUT
CONC	CONCRETE
DI	DRAINAGE INLET
DS	DOWNSPOUT
(E)	EXISTING
EC	END HORIZONTAL CURVE
EG	EXISTING GROUND
EVC	END VERTICAL CURVE
EX	EXISTING
EXIST	EXISTING
FL	FLOWLINE
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
GB	GRADE BREAK
HP	HIGH POINT
Ht.	EXPOSED FACE HEIGHT OF WALL
INV	INVERT
JT	JOINT TRENCH
MAX	MAXIMUM
MH	MAN HOLE
N/A	NOT APPLICABLE
NTS	NOT TO SCALE
O/H	OVERHEAD
PCC	PORTLAND CEMENT CONCRETE
POC	POINT ON CURVE
PRC	POINT OF REVERSE CURVATURE
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R/W	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
S	SEWER
S/W	SIDEWALK
SD	STORM DRAIN
SDMH	STORM DRAIN MAN HOLE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN OUT
SSMH	SANITARY SEWER MAN HOLE
STA	STATION
STD	STANDARD
TC	TOP OF CURB
TEMP	TEMPORARY
TOE	TOE OF WALL/SLOPE
TOW	TOP OF WALL
TW	TOP OF WALL
TYP	TYPICAL
W	WATER
WM	WATER METER

GENERAL NOTES

1. THESE DRAWINGS ARE TO BE IMPLEMENTED IN COMBINATION WITH ADDITIONAL CONTRACT DOCUMENTATION AND SPECIFICATIONS (CONTRACT) APPROVED BY NPS. REQUIRED SUBMITTALS, CERTIFICATIONS AND MEASUREMENT AND PAYMENT PROVISIONS ARE DEFINED IN THE CONTRACT.
2. THE CONTRACTOR IS ADVISED THAT THE PROJECT SITE IS A SENSITIVE AND HIGHLY VALUED ENVIRONMENT, AND SHALL ENDEAVOR TO MINIMIZE ADVERSE EFFECTS TO SITE ECOLOGY, WHICH COULD BE CAUSED BY THE OPERATION OF EQUIPMENT AND OTHER CONSTRUCTION ACTIVITIES. THE INTENT OF THE WORK SHOWN ON THESE DRAWINGS IS TO ACHIEVE THE RESTORATION GOALS IN A MANNER THAT RESULTS IN A MINIMUM IMPACT TO SITE RESOURCES.
3. TOPOGRAPHIC MAPPING PREPARED BY TOWILL, INC. USING PHOTOGRAMMETRIC COMPUTER DRAFTING TECHNIQUES BASED ON AERIAL PHOTO TAKEN IN NOVEMBER 1999. IN OPEN UNOBSTRUCTED AREAS THIS MAP COMPLIES WITH NATIONAL STANDARDS FOR MAP ACCURACY. PROJECT BENCHMARK IS TOWILL #4, LOCATED ON THE NORTH SHOULDER OF HIGHWAY ONE, APPROX. 75 FEET EAST OF THE HIGHWAY ONE BRIDGE OVER REDWOOD CREEK.
- COORDINATES ARE: N 2144574.15
E 5961762.22
Z 25.86
- IN AREAS OF DENSE VEGETATION WHERE THE GROUND IS OBSCURED FROM VIEW, CONTOURS MAY DEVIATE FROM THE CORRECT ELEVATION. SUPPLEMENTAL TOPOGRAPHIC INFORMATION PROVIDED BY KAMMAN HYDROLOGY.
- TOPOGRAPHY SHOWN IS KNOWN TO DEVIATE FROM EXISTING CONDITIONS. CONTRACTOR IS ADVISED TO VERIFY ACTUAL GRADES AS APPROPRIATE.
4. ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM (NAVD 88).
5. COORDINATE GRID IS CALIFORNIA SYSTEM, ZONE 3, NAD 83 IN FEET (APPROXIMATE).
6. ACCESS IS LIMITED TO WITHIN THE PROJECT LIMITS OR AS APPROVED IN ADVANCE BY NPS. PROJECT LIMITS INCLUDE DESIGNATED ACCESS AND HAUL ROUTES, WORK LOCATIONS, DISPOSAL AREA AND STAGING AREA ONLY.
7. INSTALL CONSTRUCTION FENCING ON THE CREEK SIDE OF ALL AREAS TO BE GRADED. DO NOT DISTURB SENSITIVE AREAS OUTSIDE THE LIMITS OF WORK. FENCING SHALL BE INSTALLED AND MAINTAINED THROUGHOUT CONSTRUCTION IN SUCH A MANNER THAT DOES NOT IMPEDE EFFICIENT EXECUTION OF THE WORK.
8. THE LOCATIONS OF EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY IN FIELD AND PROTECT IN PLACE ALL UTILITIES POTENTIALLY AFFECTED BY CONSTRUCTION OR MOVEMENT OF PERSONNEL AND EQUIPMENT. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT AT (800) 642-2444 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF EXCAVATION.
9. THE CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS. COPIES OF PERMITS WILL BE MADE AVAILABLE BY THE NPS. PERMITS INCLUDE, BUT ARE NOT LIMITED TO, RESTRICTIONS ON CONSTRUCTION METHODS, TIMING, AND DURATION OF WORK.
10. THE CONTRACTOR SHALL PREVENT TURBIDITY IN THE CREEK THROUGHOUT CONSTRUCTION AND MAINTAIN ENVIRONMENTAL PROTECTIONS AS REQUIRED IN THE PERMITS AND BY NPS.
11. DESIGN, INSTALLATION AND MAINTENANCE OF DEWATERING AND WATER DIVERSION MEASURES REQUIRED TO COMPLETE THE WORK AND COMPLY WITH PERMITS AND REGULATORY AGENCY COMMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. LOCATIONS AND METHODS FOR DEWATERING AND DIVERSION MEASURES SHALL BE APPROVED BY NPS PRIOR TO IMPLEMENTATION. KEEP EXCAVATIONS FREE OF STANDING WATER AS NEEDED FOR PERFORMANCE OF THE WORK.



VICINITY MAP
NOT TO SCALE

Lower Redwood Creek Restoration The Banducci Site Golden Gate National Recreation Area

A/E FIRM - A/E CONTRACT	Mark	Sheet	REVISION	Date	Initial
PRIME: CIVIL:					
KAMMAN HYDROLOGY & ENGINEERING, INC					
SAN RAFAEL, CA					

RECOMMENDED: _____ Date _____
Project Manager

APPROVED: _____ Date _____
Superintendent



100% DESIGN DRAWINGS

UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
SERVICE CENTER

TITLE OF PROJECT
LOWER REDWOOD CREEK

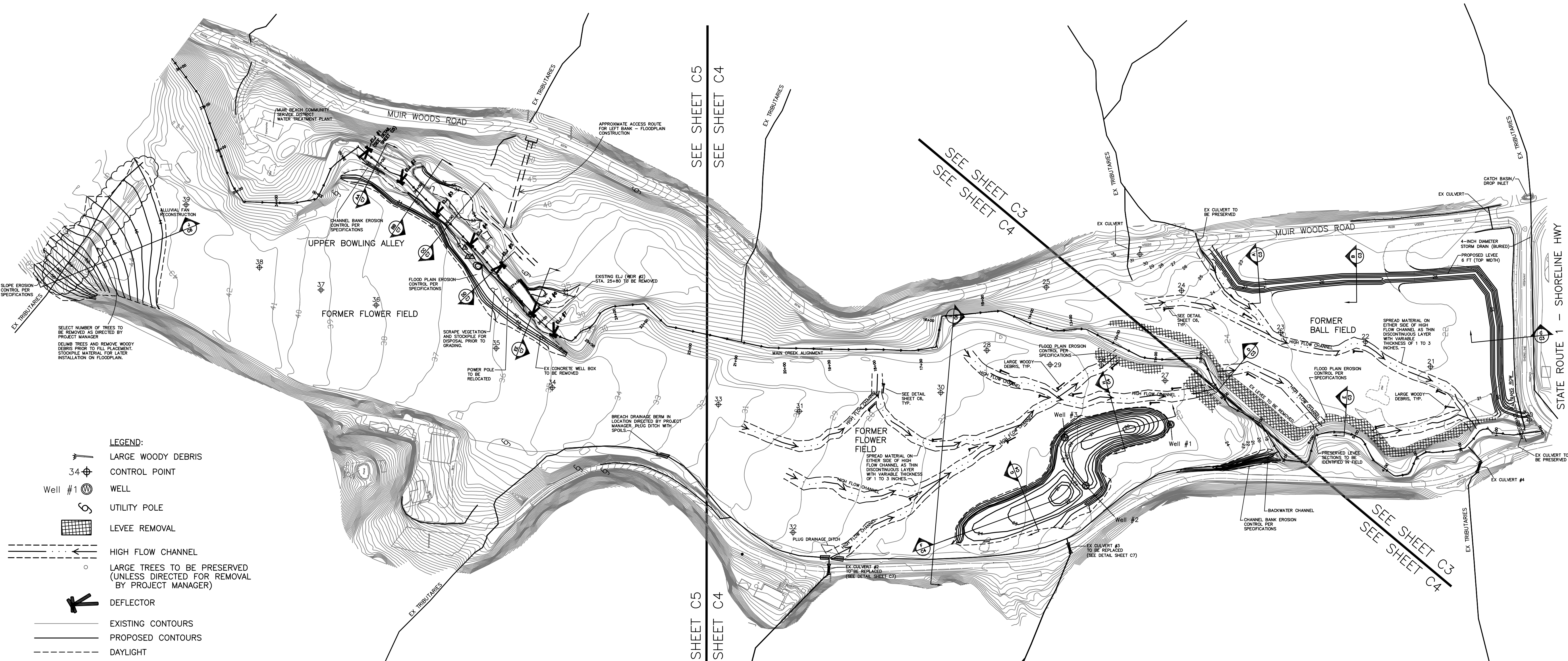
LOCATION WITHIN PARK
BANDUCCI SITE

NAME OF PARK
GOLDEN GATE NATIONAL RECREATION AREA

REGION: PACIFIC WEST COUNTY: MARIN STATE: CALIFORNIA

DRAWING NO.	_____
PKG. NO.	1
SHEET NO.	1
OF	7

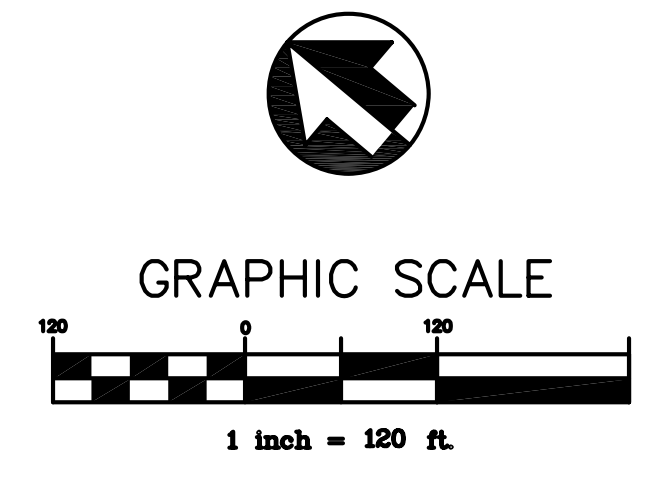
2/28/07 13:10 HP_ADMINISTRATOR R16 C:\DOCUMENTS AND SETTINGS\HP_ADMINISTRATOR\MY_DOCUMENTS\DRIVE\REALIMAGES\KAMMAN\BANDUCCI\C2-7.DWG
 XREFS: c:\Documents and Settings\HP_Administrator\My Documents\Drive\realimages\Kamman\Banducci\100%_allowal-fon.dwg[100%_allowal-fon.dwg] 100%_daylight.dwg[2-28-07-_project_ejls.dwg] 2000ACAD-AVS Design 11.08.06.dwg[ACAD-deflector_detail.02.19.07.dwg] ACAD-eg_rc_topo_10_20_06_civil3d_v2.dwg[back...



- LEGEND:**
- LARGE WOODY DEBRIS
 - CONTROL POINT
 - WELL
 - UTILITY POLE
 - LEVEE REMOVAL
 - HIGH FLOW CHANNEL
 - LARGE TREES TO BE PRESERVED (UNLESS DIRECTED FOR REMOVAL BY PROJECT MANAGER)
 - DEFLECTOR
 - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - DAYLIGHT

SURVEY CONTROL POINTS			
POINT	ELEVATION	NORTHING	EASTING
7	32.151	2145424.568	5961463.249
20	25.535	2144534.464	5961734.501
21	21.971	2144775.883	5961684.585
22	22.014	2144920.835	5961634.656
23	22.861	2145077.107	5961530.148
24	24.736	2145302.982	5961460.804
25	28.035	2145535.830	5961275.217
26	25.817	2145333.151	5961222.184
27	25.256	2145203.714	5961285.987
28	27.378	2145546.617	5961085.130
29	26.333	2145419.815	5961150.039
30	27.447	2145564.560	5960948.670
31	30.055	2145776.437	5960717.269
32	28.854	2145616.052	5960504.337
33	30.971	2145922.449	5960614.136
34	34.952	2146225.953	5960407.915
35	35.716	2146376.245	5960394.859
36	38.913	2146639.514	5960297.907
37	39.147	2146753.814	5960245.476
38	40.940	2146889.343	5960196.450
39	42.276	2147101.385	5960198.130

SITE PLAN



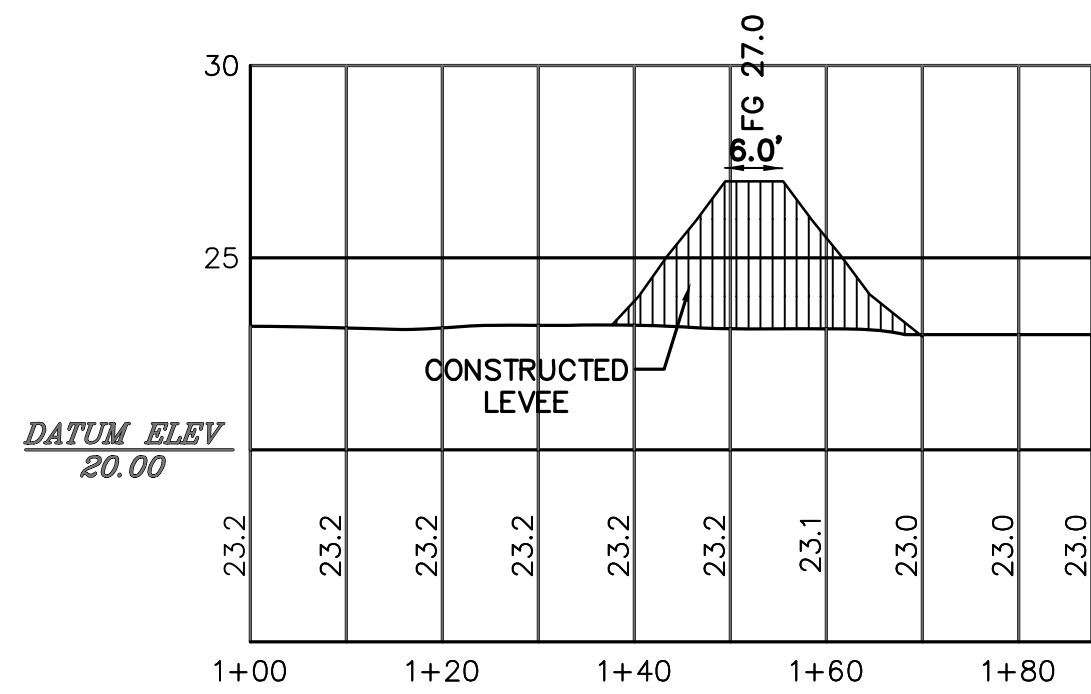
SEE SHEET C5
SEE SHEET C4

SEE SHEET C3
SEE SHEET C4

SEE SHEET C3
SEE SHEET C4

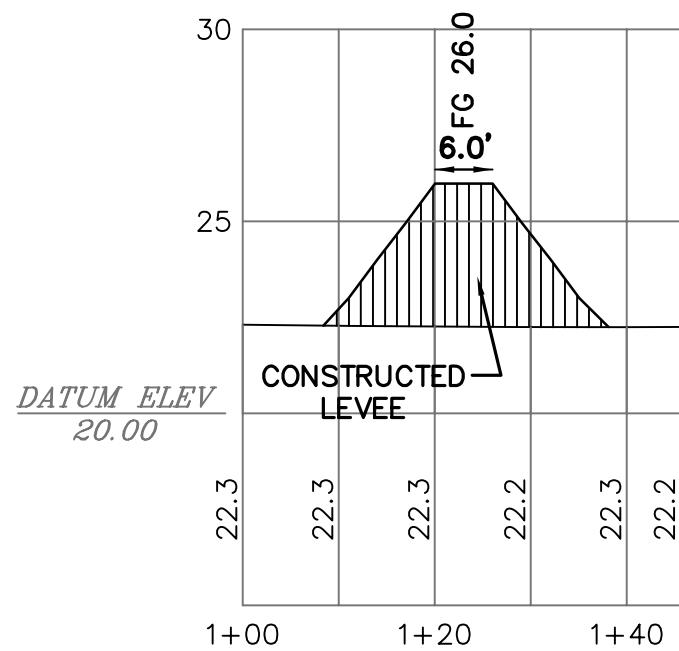
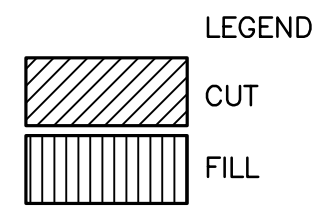
DESIGNED: GADD	SUB SHEET NO. C2	TITLE OF SHEET SITE PLAN LOWER REDWOOD CREEK RESTORATION	DRAWING NO. _____
TECH. REVIEW:		GOLDEN GATE NATIONAL RECREATION AREA	PMIS/PKG NO. _____
DATE: 02/28/07			SHEET 2 OF 7

2/28/07 12:45 HP_ADMINISTRATOR R16 C:\DOCUMENTS AND SETTINGS\HP_ADMINISTRATOR\MY_DOCUMENTS\DRIVE_REALIMAGES\KAMMAN\BANDUCCI\C2-7.DWG
 XREFS: c:\Documents and Settings\HP_Administrator\My Documents\Drive\realimages\Kamman\Banducci\100%_all\00%_daylight.dwg; 28-07_project_ejls.dwg; 2000ACAD-AVS_Design_11.08.06.dwg; ACAD-deflector_detail.02.19.07.dwg; ACAD-eg_rc_topo_10_20_06_civil3d_v2.dwg; back...



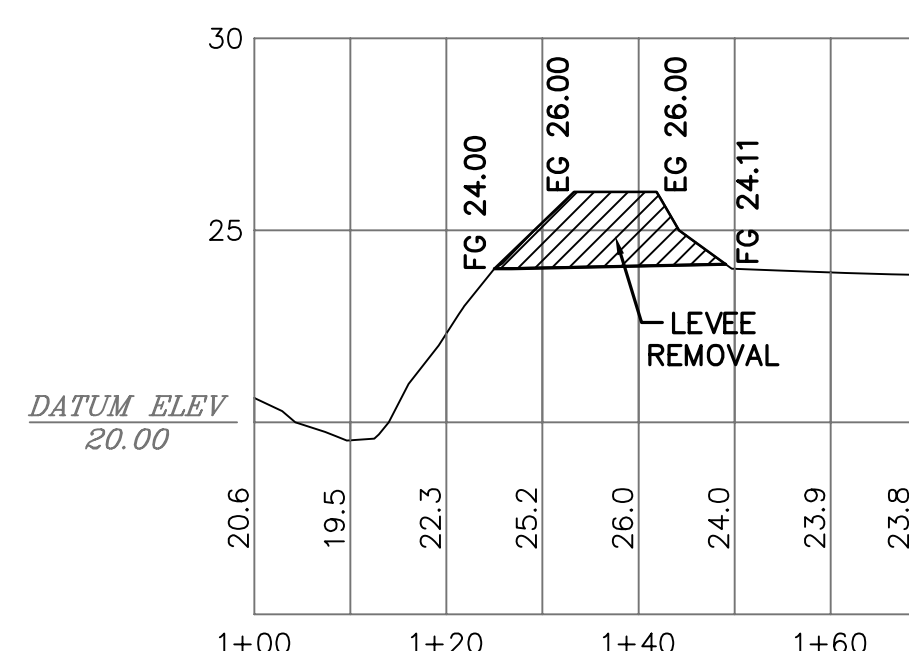
SECTION A - SETBACK LEVEL

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



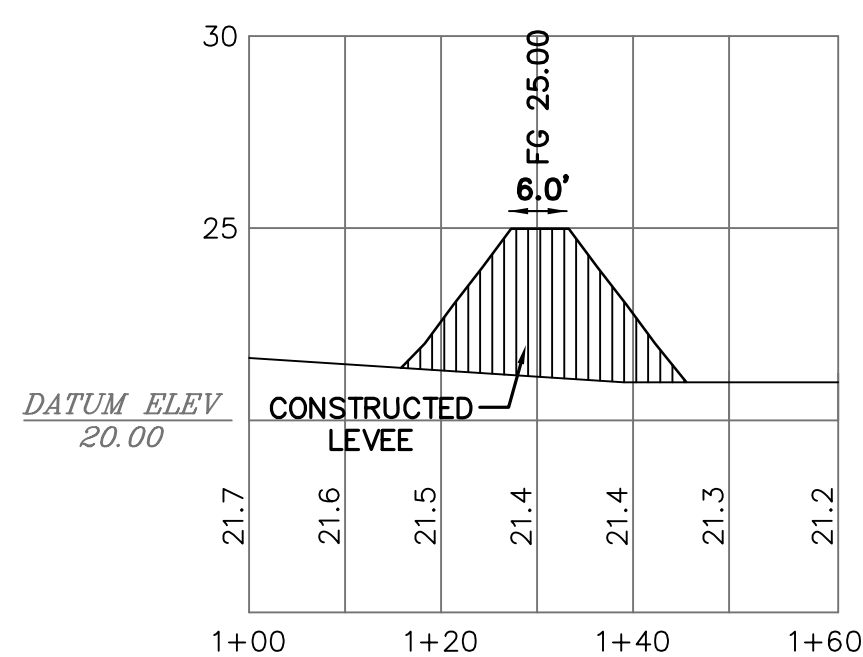
SECTION B - SETBACK LEVEL

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



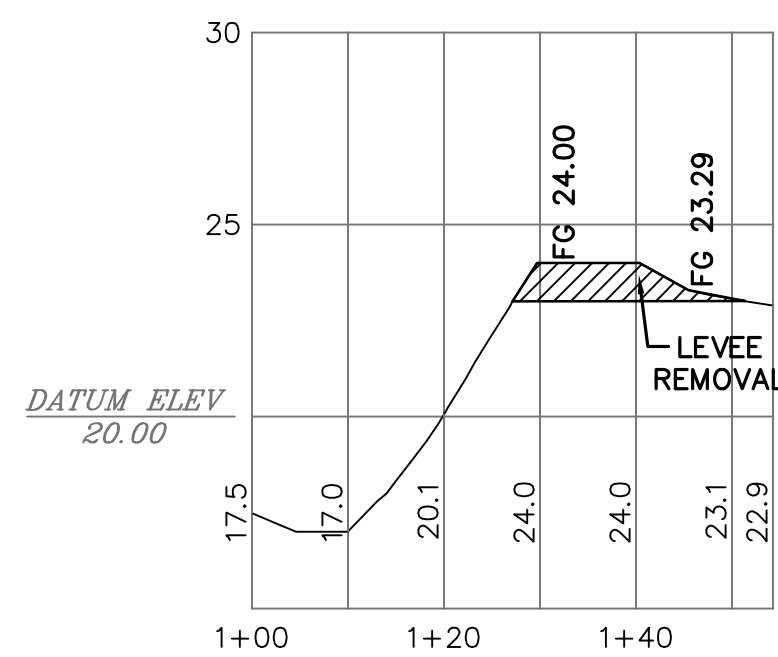
SECTION D - LEVEE REMOVAL

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



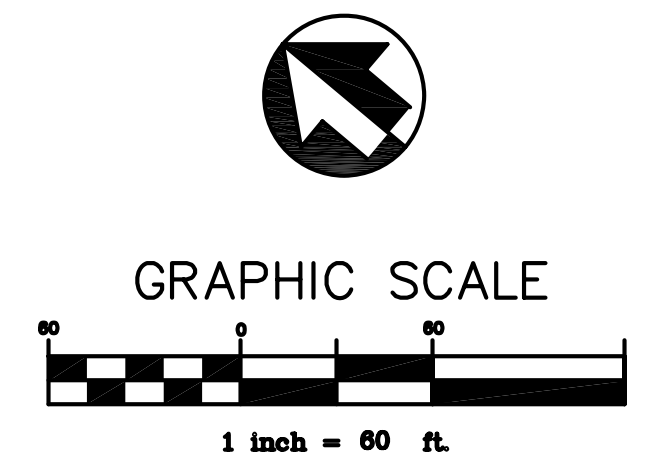
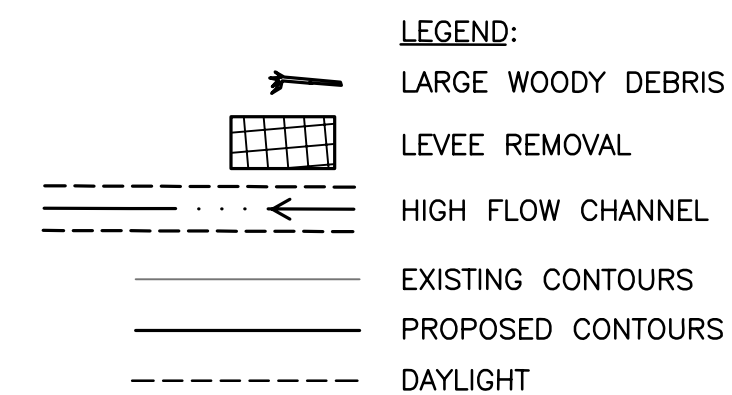
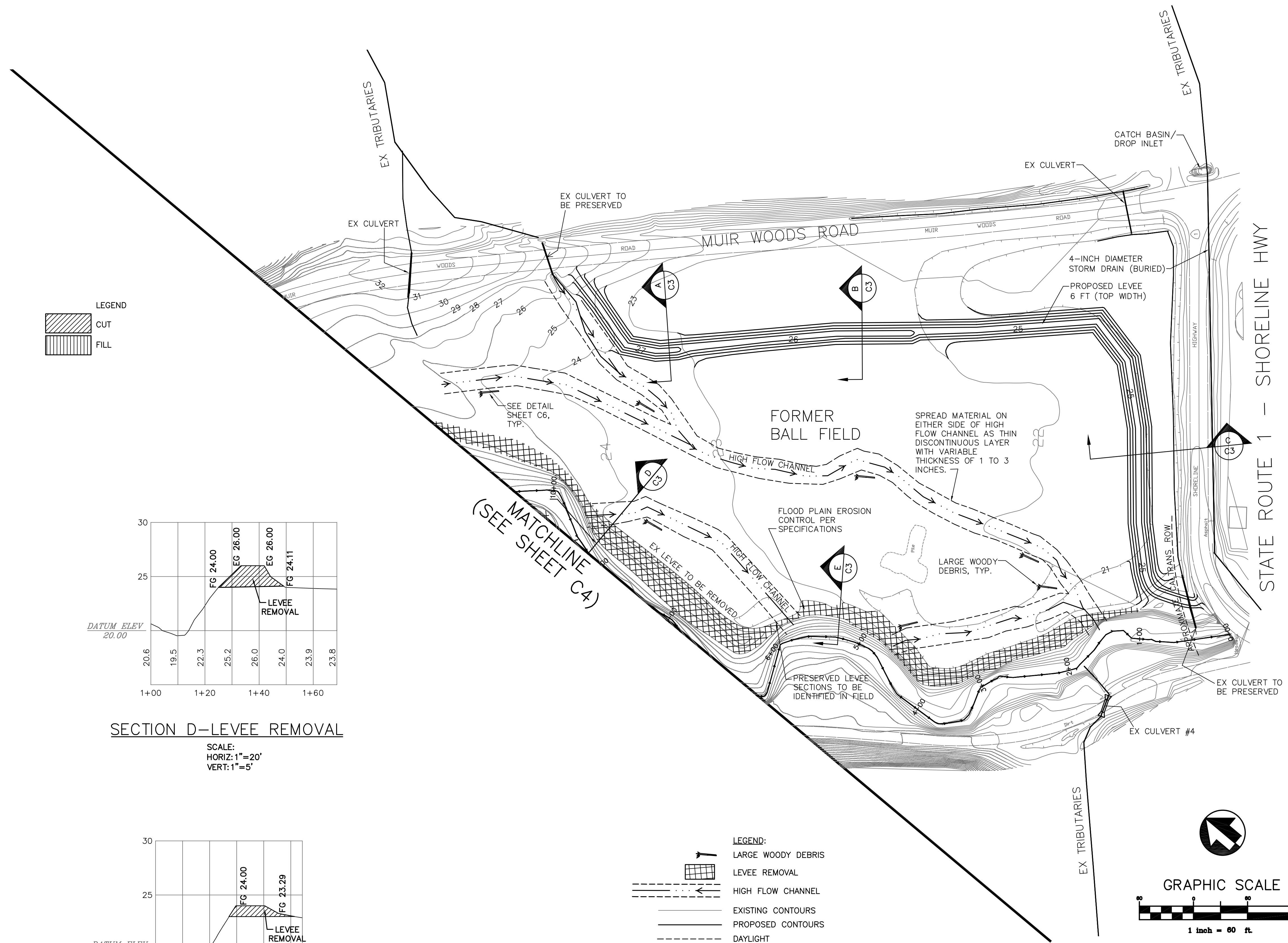
SECTION C - SETBACK LEVEL

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



SECTION E - LEVEE REMOVAL

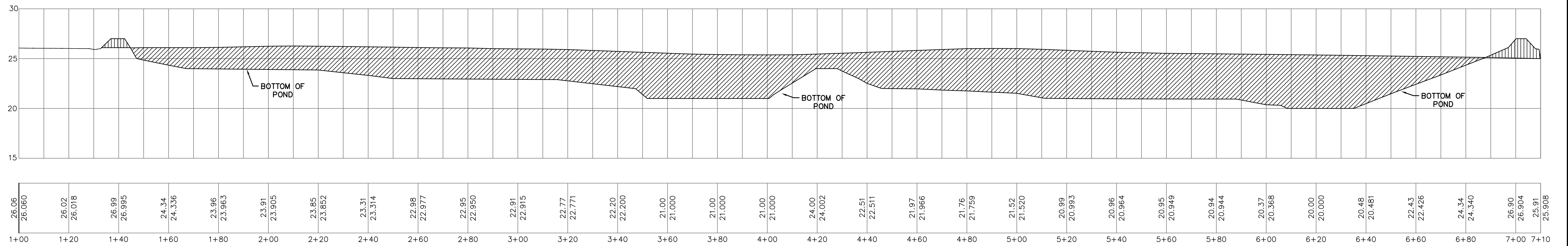
SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



DESIGNED: GAJD	SUB SHEET NO. C3	TITLE OF SHEET FORMER BALL FIELD LOWER REDWOOD CREEK RESTORATION	DRAWING NO. _____
TECH. REVIEW:		GOLDEN GATE NATIONAL RECREATION AREA	PMIS/PKG NO. _____
DATE: 02/28/07			SHEET 3 OF 7

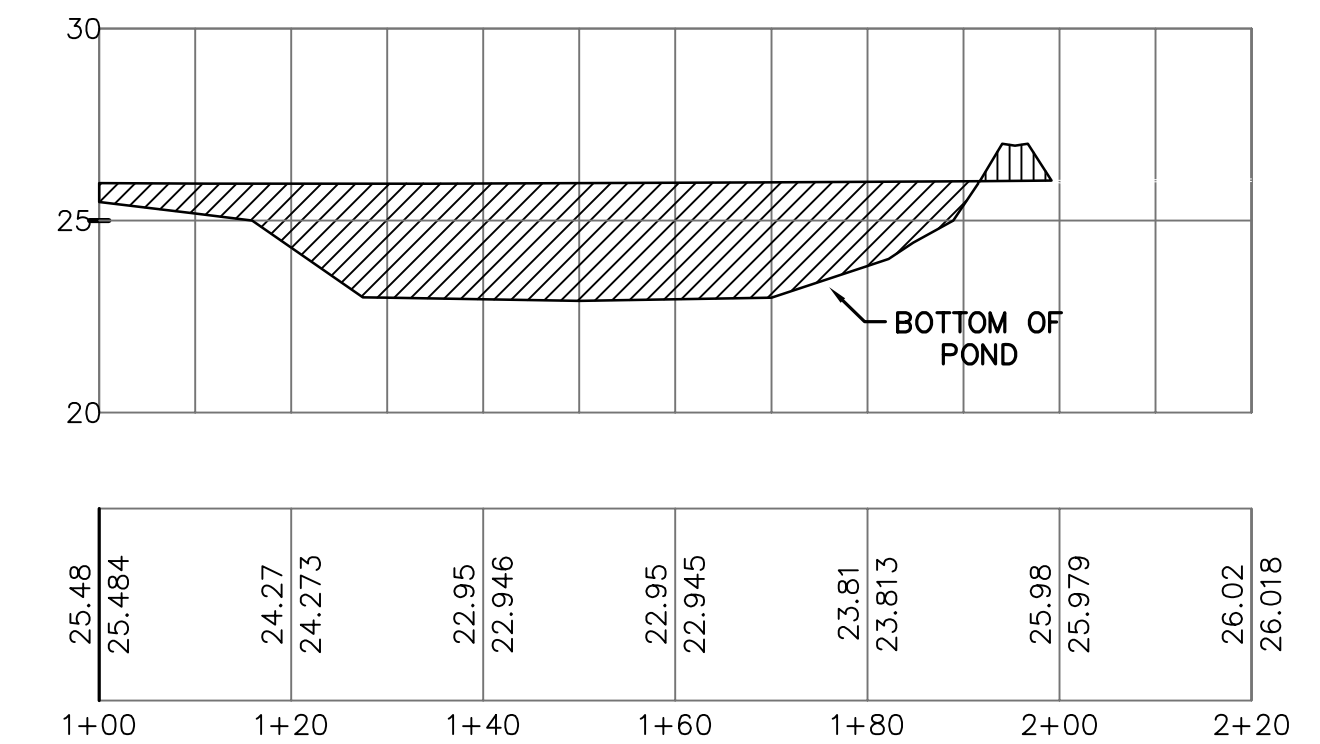
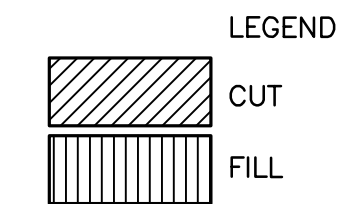
2/28/07 13:10 HP ADMINISTRATOR R16 C:\DOCUMENTS AND SETTINGS\HP ADMINISTRATOR\MY DOCUMENTS\DRIVE REALIMAGES\KAMMAN\BANDUCCI\C2-7.DWG
 XREFS: c:\Documents and Settings\HP Administrator\My Documents\Drive Realimages\Kamman\Banducci\100%_allowal-fon.dwg\100%_daylight.dwg\2-28-07_project_ejls.dwg\2000ACAD-ANS_Design_11.08.06.dwg\ACAD-deflector_detail.02.19.07.dwg\ACAD-eg_rc_topo_10_20_06_civil3d_v2.dwg\back...

(SEE SHEET C5)
MATCHLINE



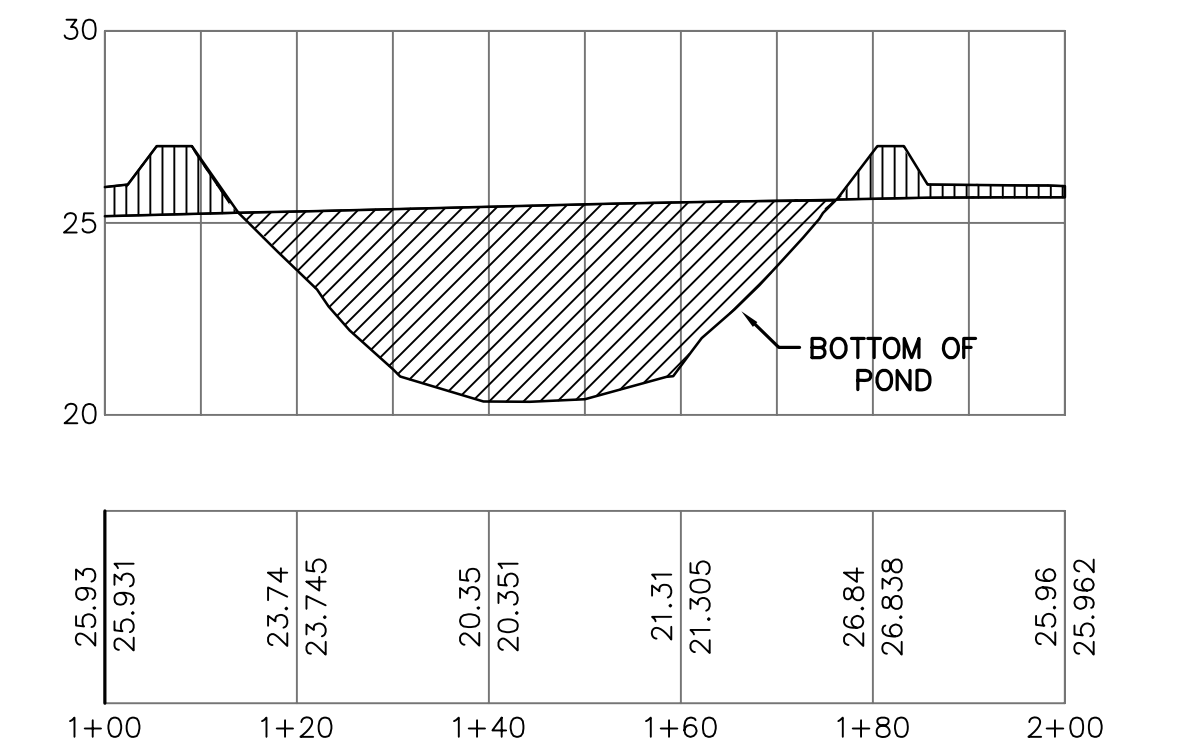
SECTION F-POND

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



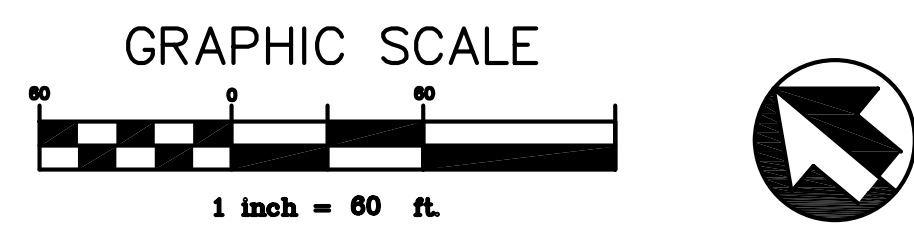
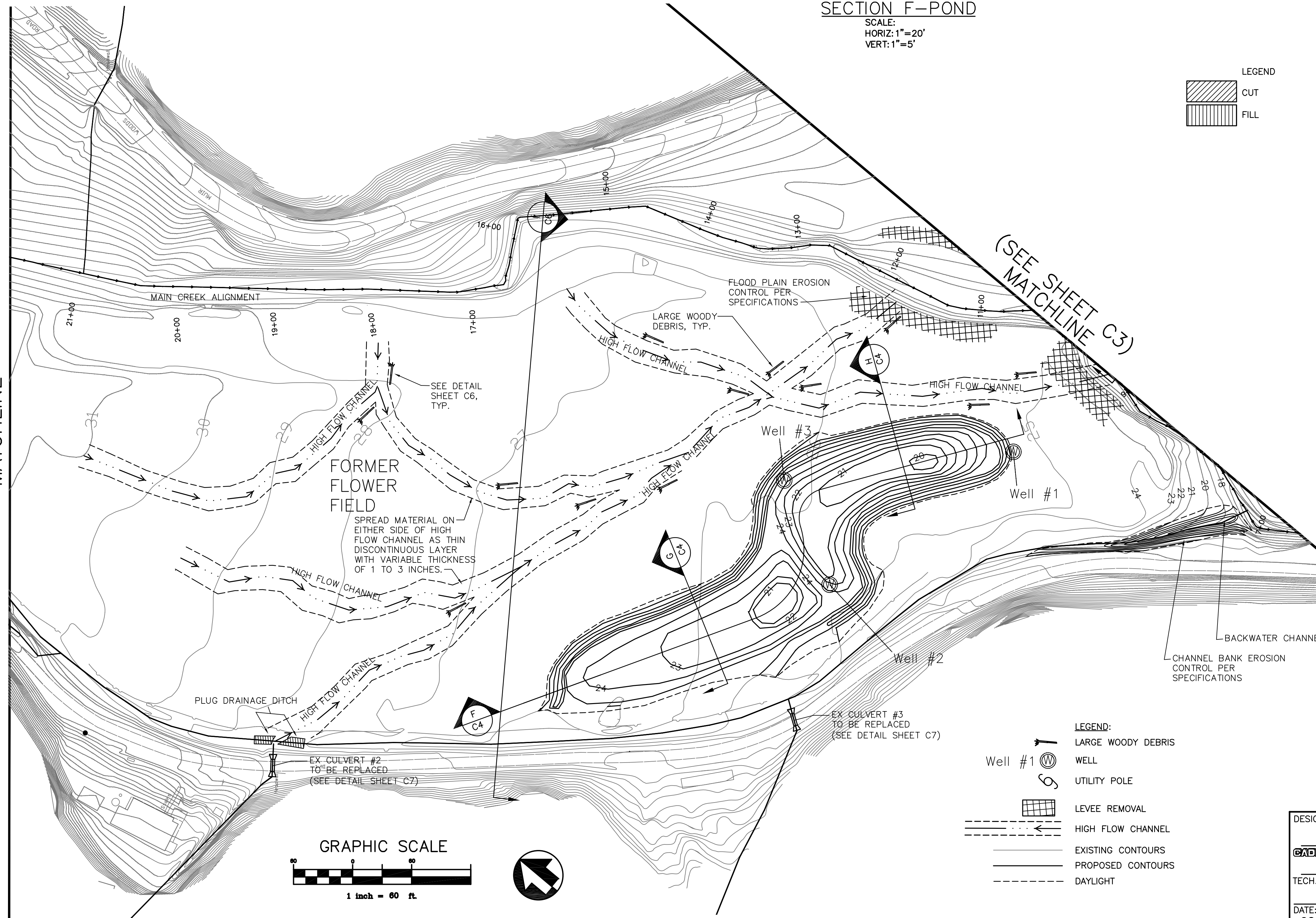
SECTION G-POND

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



SECTION H-POND

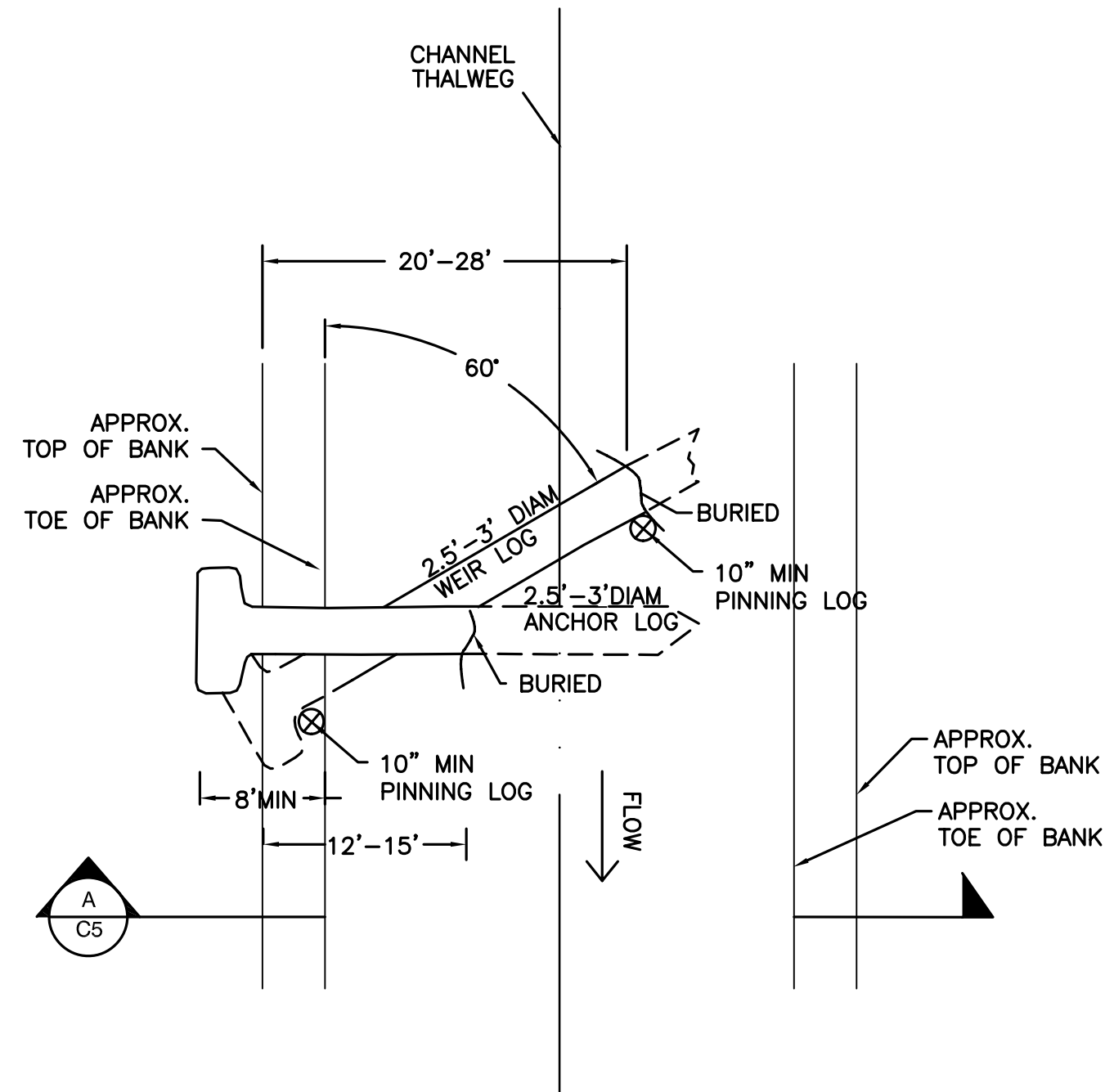
SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



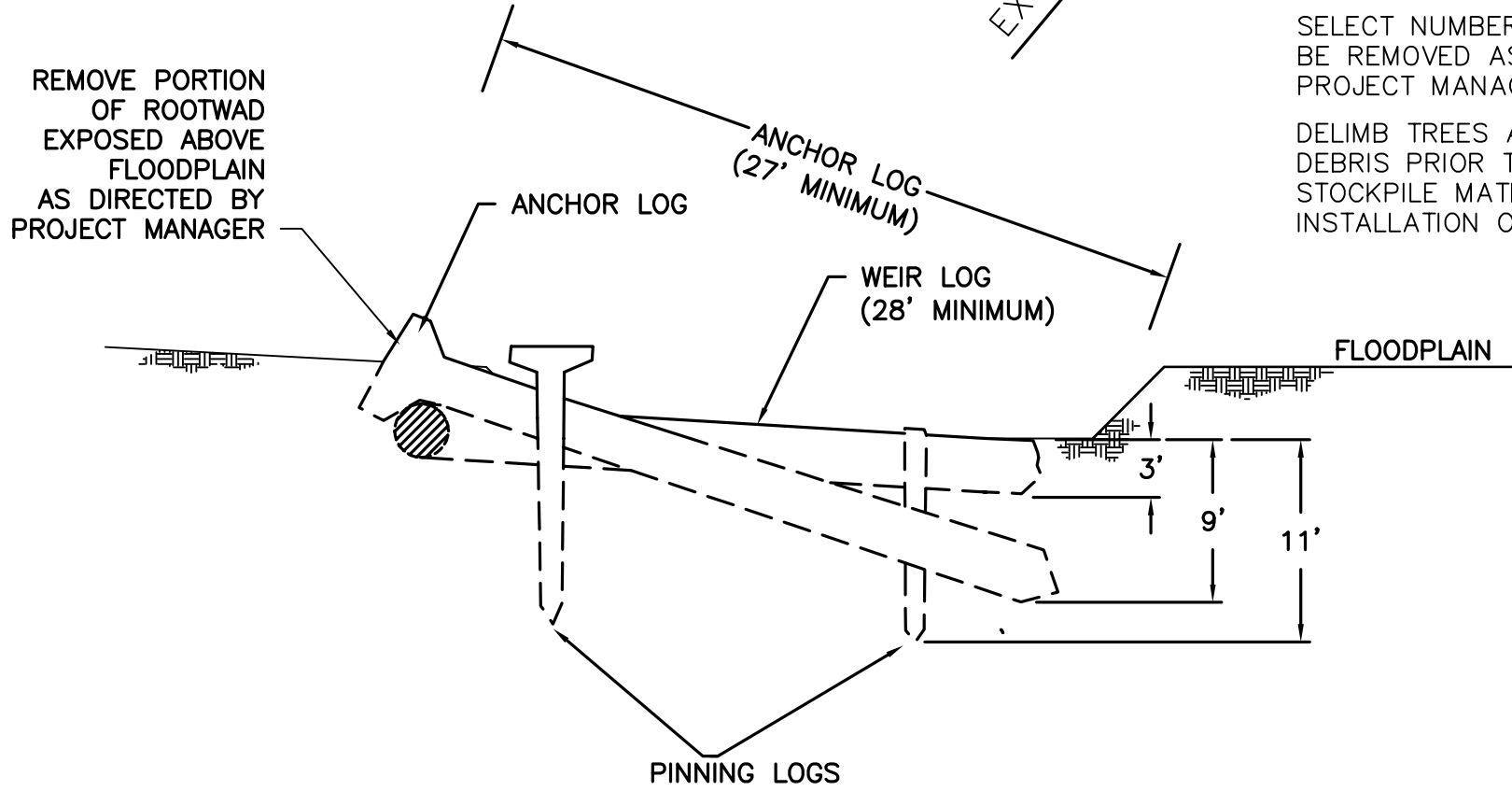
- LEGEND:
- LARGE WOODY DEBRIS
 - WELL
 - UTILITY POLE
 - LEVEE REMOVAL
 - HIGH FLOW CHANNEL
 - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - DAYLIGHT

DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
TECH. REVIEW:	C4	FORMER FLOWER FIELD LOWER REDWOOD CREEK RESTORATION	PMIS/PKG NO.
DATE: 02/28/07			SHEET 4 OF 7
		GOLDEN GATE NATIONAL RECREATION AREA	

2/28/07 13:10 HP_ADMINISTRATOR R16 C:\DOCUMENTS AND SETTINGS\HP_ADMINISTRATOR\MY_DOCUMENTS\DRIVE_REALIMAGES\KAMMAN\BANDUCCI\C2-7.DWG
 XREFS: c:\Documents and Settings\HP_Administrator\My Documents\Drive\realimages\Kamman\Banducci\100%_alluvial-fan.dwg; 100%_daylight.dwg; 2-28-07_-_project_ejls.dwg; 2000ACAD-AVS Design 11.08.06.dwg; 2000ACAD-eg-rc_topo_10_20_06_civil3d_v2.dwg; back...

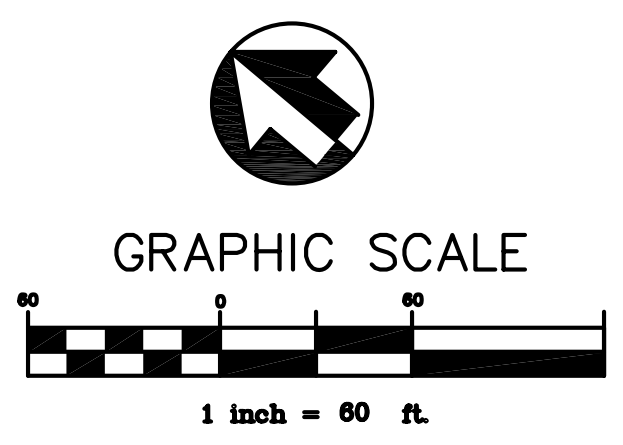


TYPICAL DEFLECTOR DETAIL
NTS

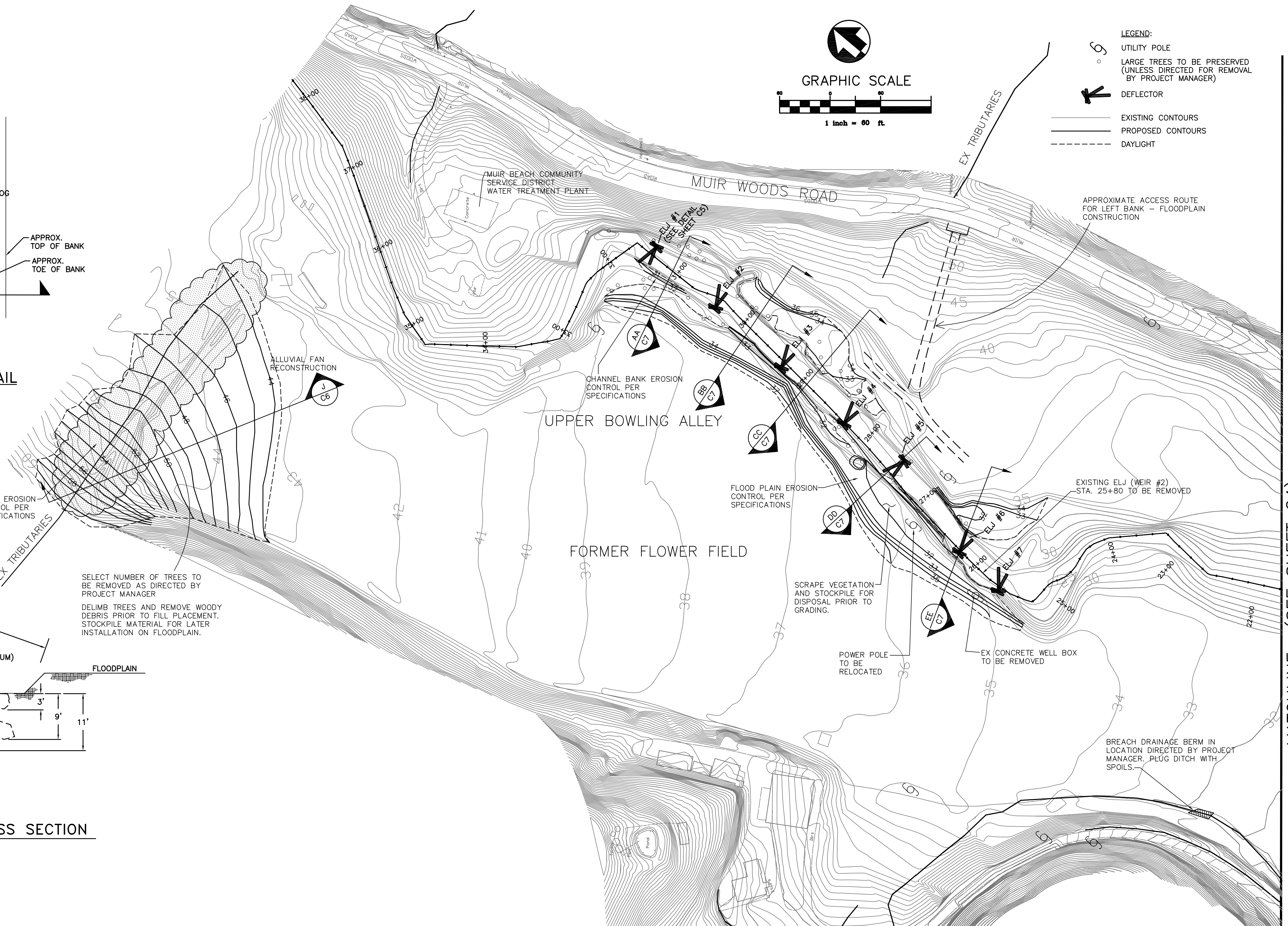


DEFLECTOR CROSS SECTION
NTS

SELECT NUMBER OF TREES TO BE REMOVED AS DIRECTED BY PROJECT MANAGER
 DELIMB TREES AND REMOVE WOODY DEBRIS PRIOR TO FILL PLACEMENT. STOCKPILE MATERIAL FOR LATER INSTALLATION ON FLOODPLAIN.



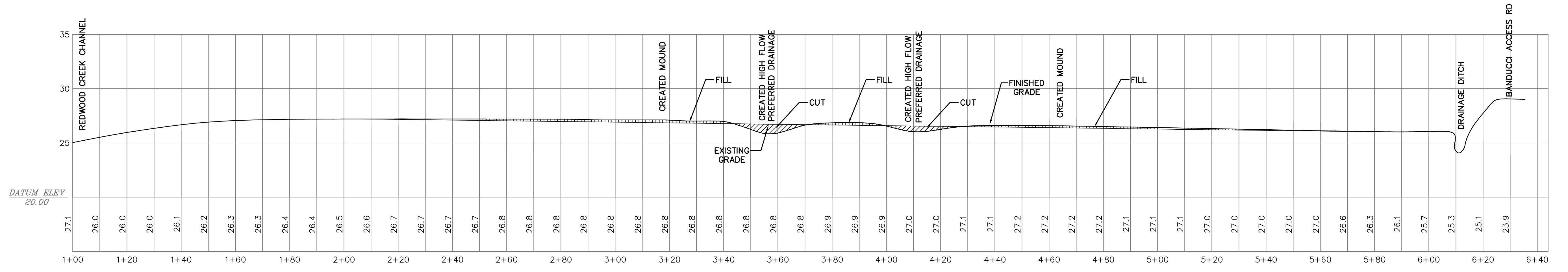
- LEGEND:
- UTILITY POLE
 - LARGE TREES TO BE PRESERVED (UNLESS DIRECTED FOR REMOVAL BY PROJECT MANAGER)
 - DEFLECTOR
 - EXISTING CONTOURS
 - PROPOSED CONTOURS
 - DAYLIGHT



MATCHLINE (SEE SHEET C4)

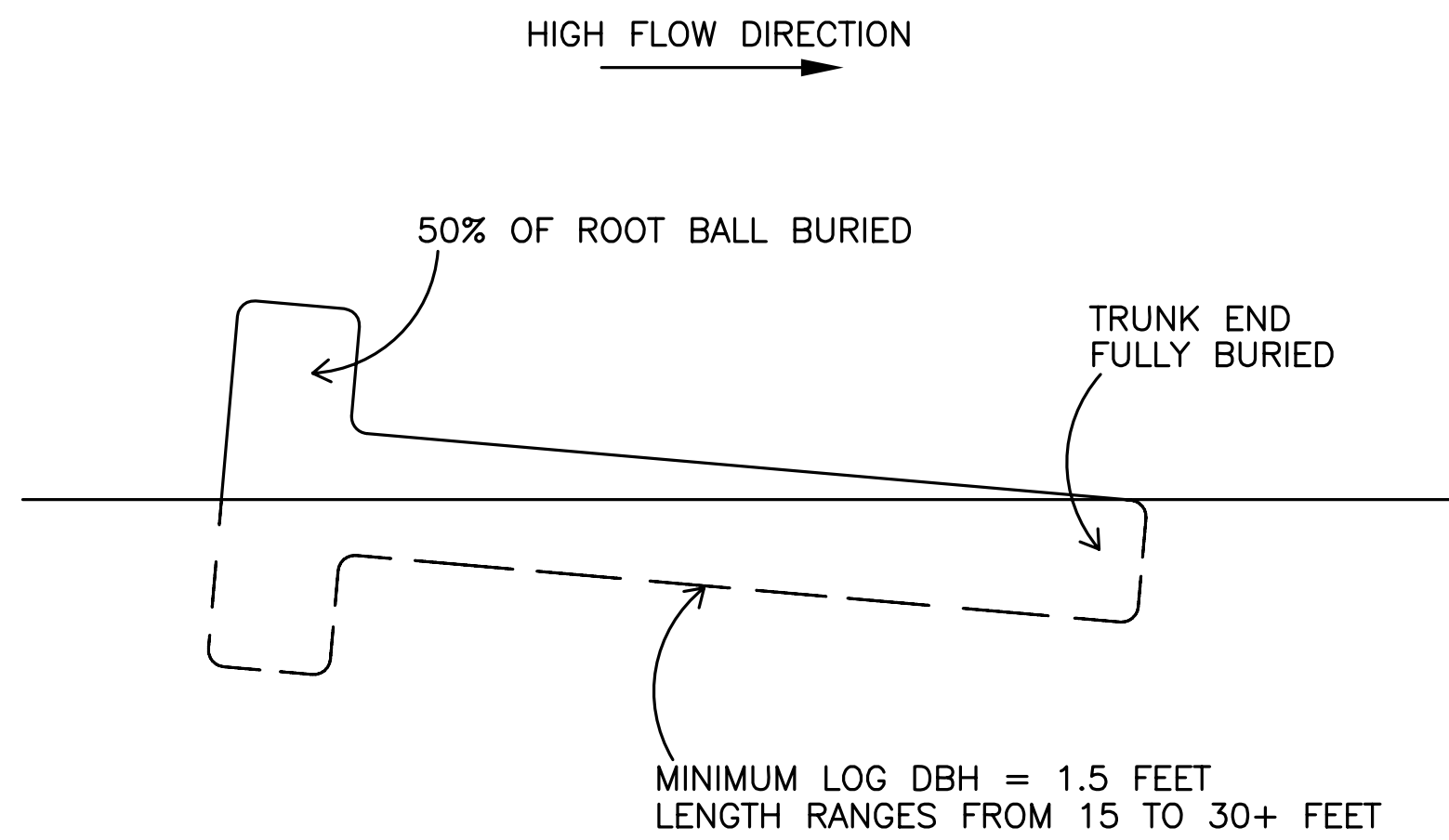
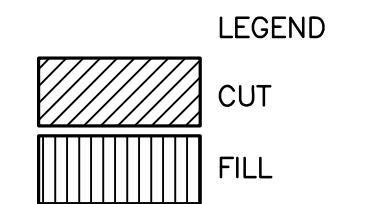
DESIGNED: 	SUB SHEET NO. C5	TITLE OF SHEET UPPER BOWLING ALLEY LOWER REDWOOD CREEK RESTORATION	DRAWING NO. _____
TECH. REVIEW:		GOLDEN GATE NATIONAL RECREATION AREA	PMIS/PKG NO. _____
DATE: 02/28/07			SHEET 5 OF 7

2/28/07 08:05 HP_ADMINISTRATOR R16 C:\DOCUMENTS AND SETTINGS\HP_Administrator\My Documents\100%_alluvial-fan.dwg]100%_daylight.dwg]2-28-07-_project_ejls.dwg]2000ACAD-AYS Design 11.08.06.dwg]ACAD-deflector_detail.02.19.07.dwg]ACAD-eg_rc_topo_10_20_06_civil3d_v2.dwg]back...

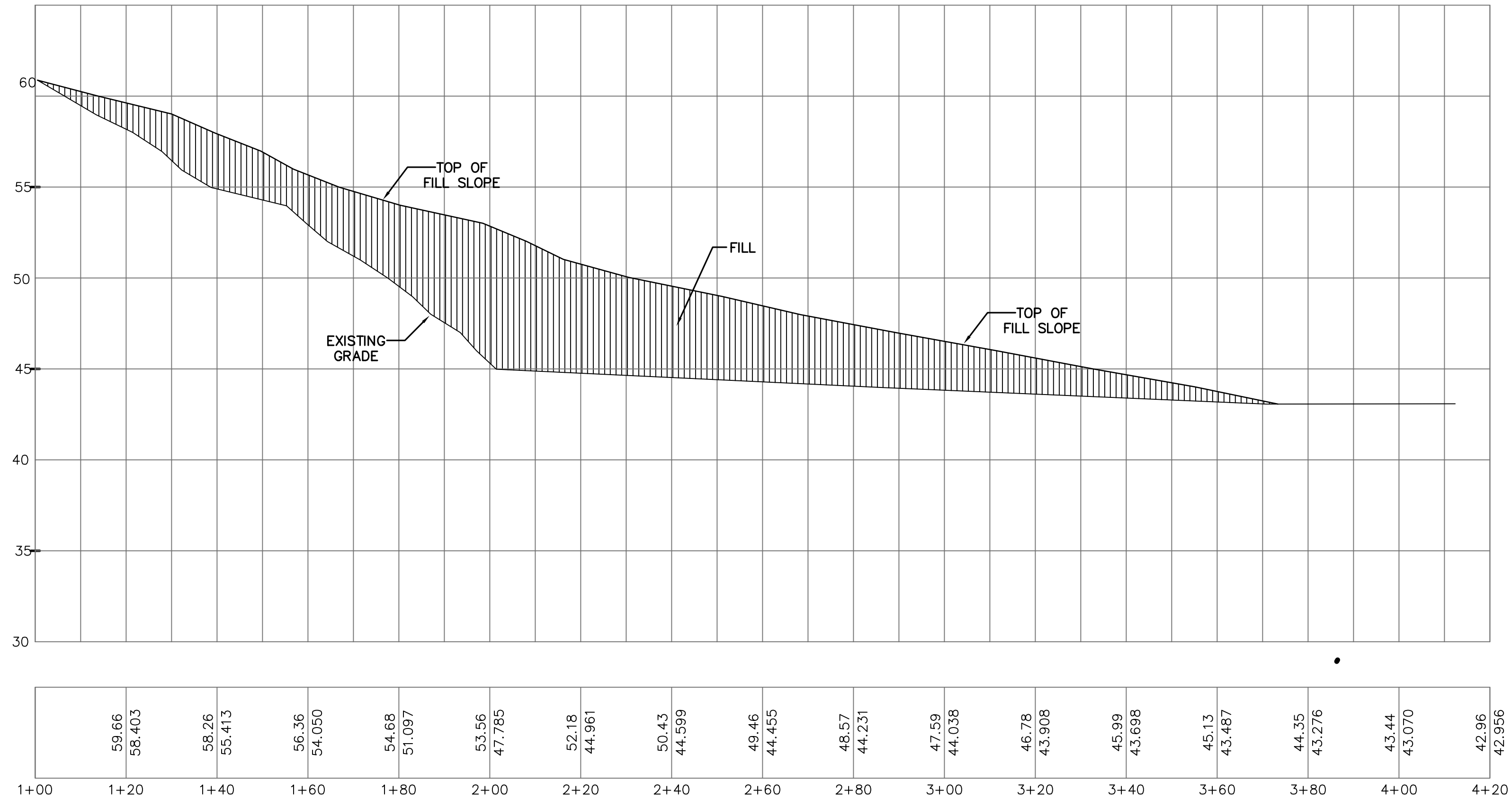


SECTION I - FLOWER FIELD

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'



FLOOD PLAIN LARGE WOODY DEBRIS
PLACEMENT/ANCHORING DETAIL
(CROSS-SECTION)
NOT TO SCALE

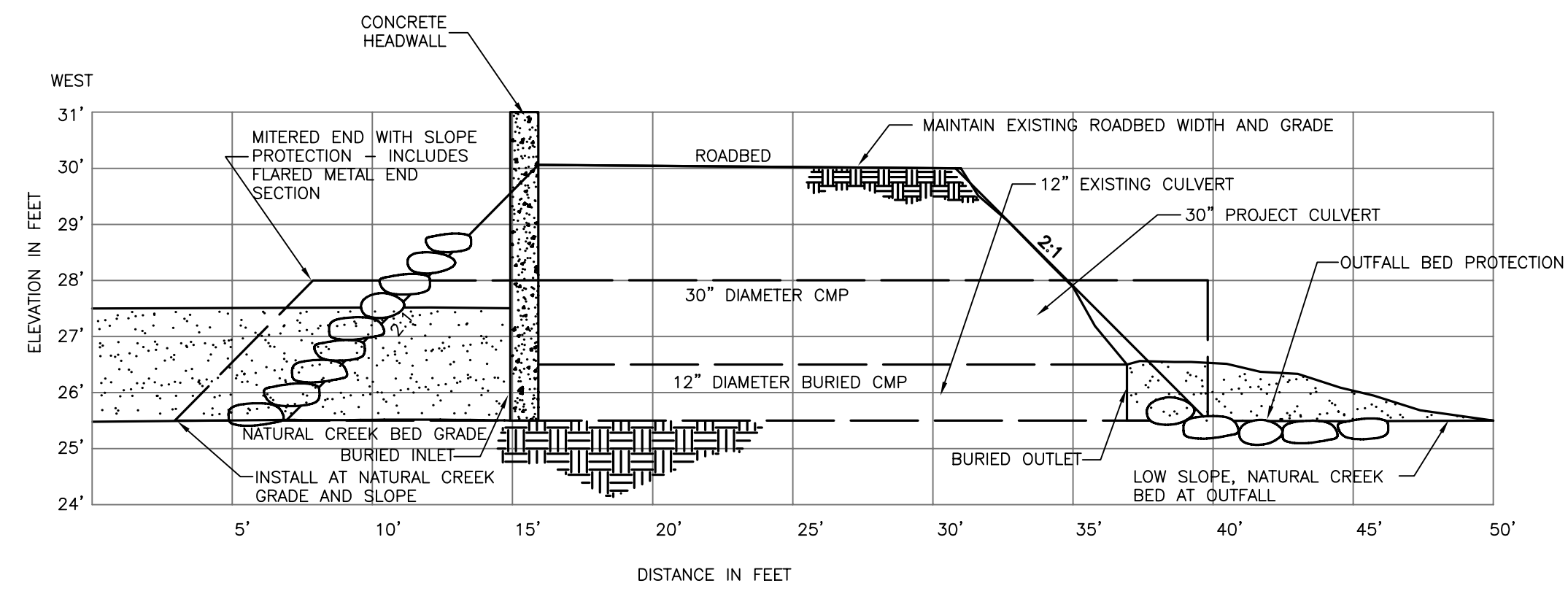


SECTION J - ALLUVIAL FAN
RECONSTRUCTION

SCALE:
HORIZ: 1"=20'
VERT: 1"=5'

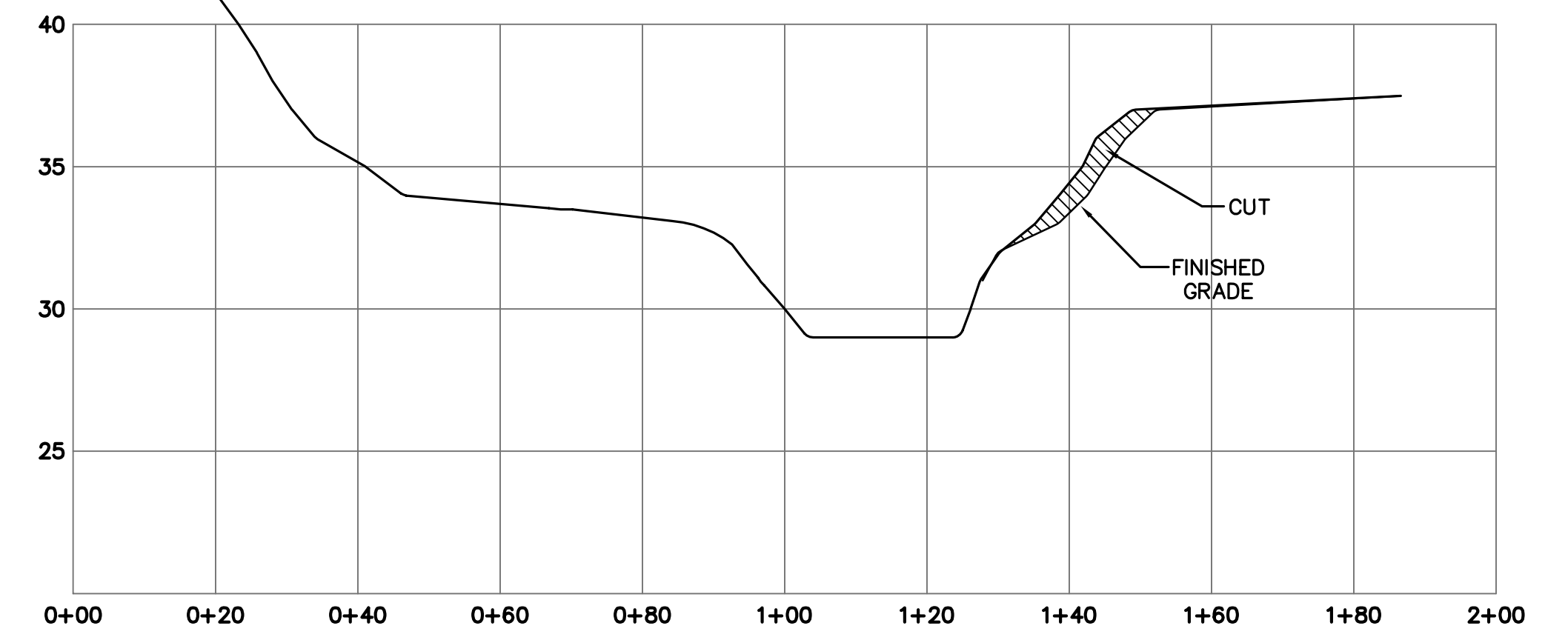
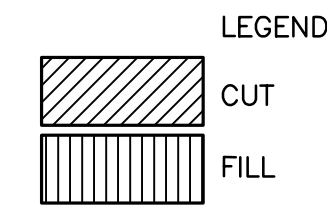
DESIGNED: GADD	SUB SHEET NO. C6	TITLE OF SHEET SECTIONS LOWER REDWOOD CREEK RESTORATION	DRAWING NO. _____
TECH. REVIEW:		GOLDEN GATE NATIONAL RECREATION AREA	PMIS/PKG NO. _____
DATE: 02/28/07			SHEET 6 OF 7

2/28/07 14:11 HP ADMINISTRATOR R16 C:\DOCUMENTS AND SETTINGS\HP ADMINISTRATOR\My Documents\REALIMAGES\KAMMAN\BANDUCCI\C2-7.DWG
 XREFS: c:\Documents and Settings\HP Administrator\My Documents\REALIMAGES\Kamman\Banducci\100%_caloval-fon.dwg|100%_daylight.dwg|28-07-_project_ejls.dwg|2000ACAD-AVS Design 11.08.06.dwg|ACAD-deflector_detail.02.19.07.dwg|ACAD-eg_rc_topo_10_20_06_civil3d_v2.dwg|back...



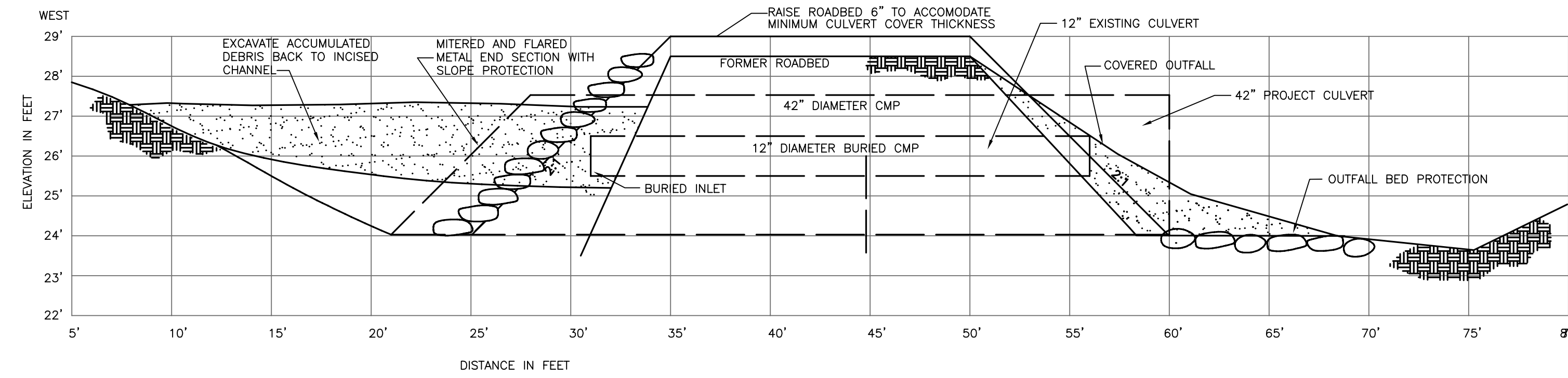
SECTION 1 - CULVERT #2 REPLACEMENT

SCALE:
 HORIZ: 1"=5'
 VERT: 1"=2.5'



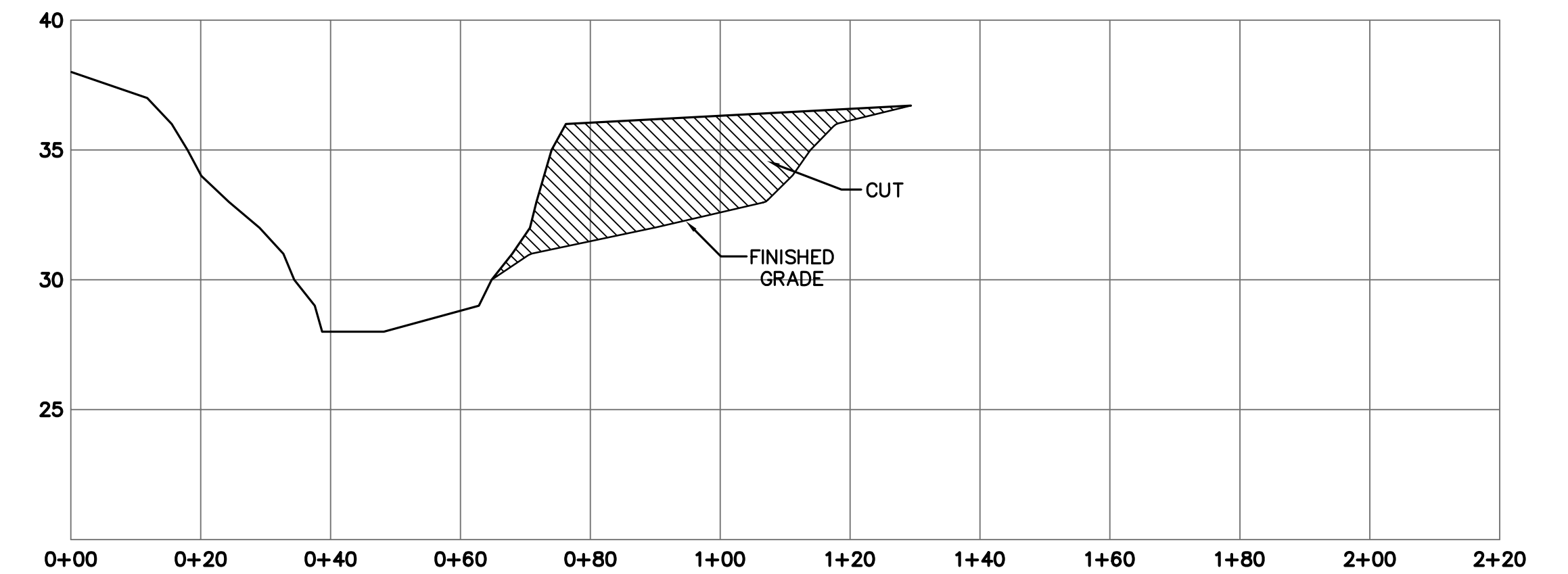
SECTION CC

SCALE:
 HORIZ: 1"=20'
 VERT: 1"=5'



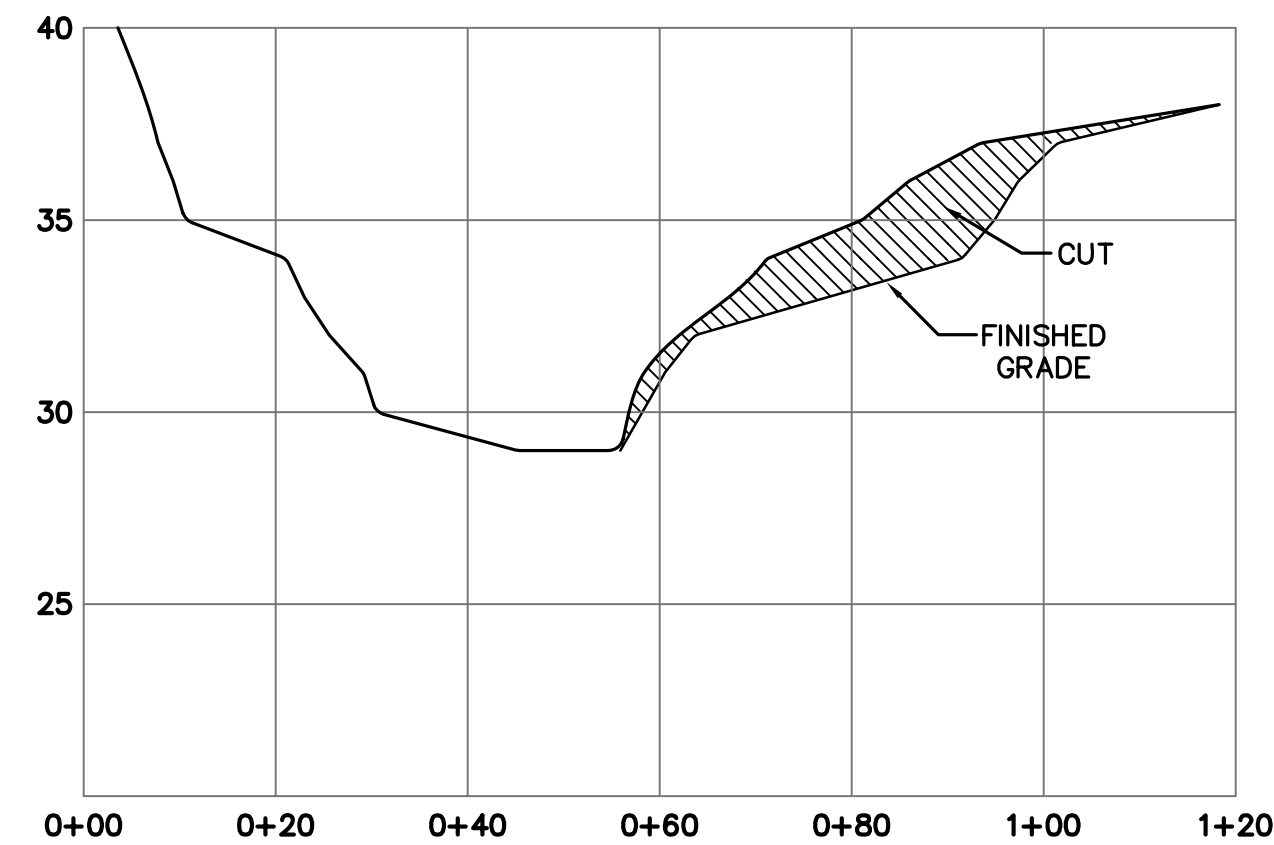
SECTION 2 - CULVERT #3 REPLACEMENT

SCALE:
 HORIZ: 1"=5'
 VERT: 1"=2.5'



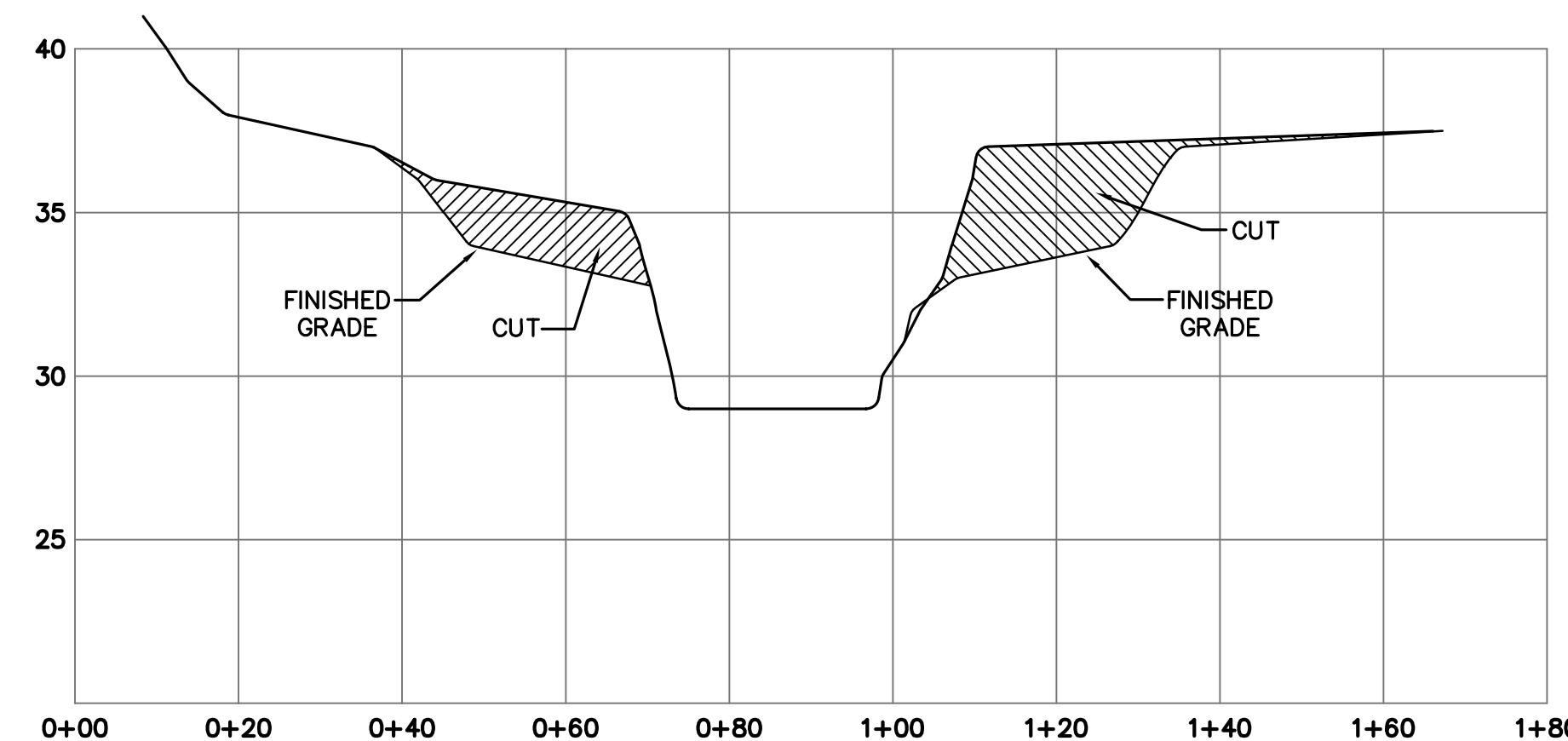
SECTION DD

SCALE:
 HORIZ: 1"=20'
 VERT: 1"=5'



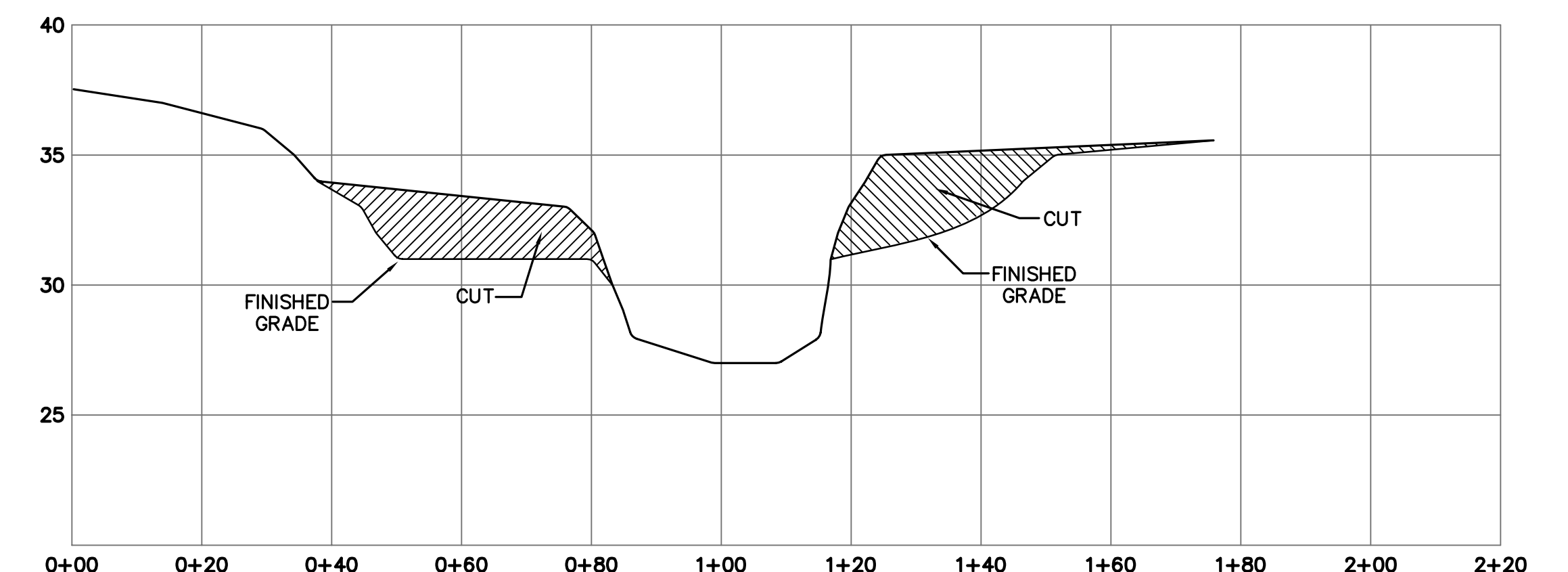
SECTION AA

SCALE:
 HORIZ: 1"=20'
 VERT: 1"=5'



SECTION BB

SCALE:
 HORIZ: 1"=20'
 VERT: 1"=5'



SECTION EE

SCALE:
 HORIZ: 1"=20'
 VERT: 1"=5'

DESIGNED: GADE	SUB SHEET NO. C7	TITLE OF SHEET DETAILS LOWER REDWOOD CREEK RESTORATION	DRAWING NO. _____
TECH. REVIEW:		GOLDEN GATE NATIONAL RECREATION AREA	PMIS/PKG NO. _____
DATE: 02/28/07			SHEET 7 OF 7