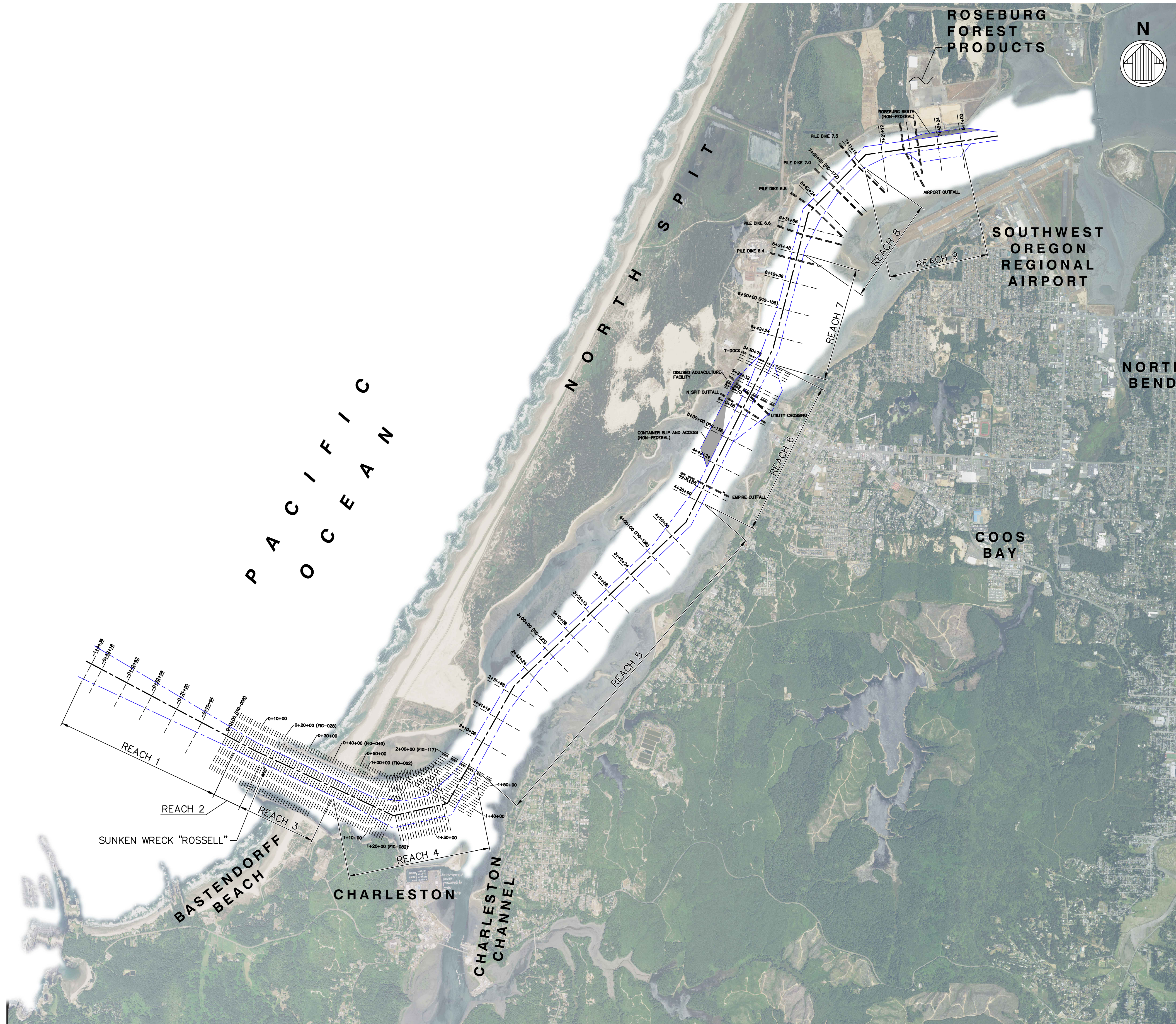


D
C
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1 2 3 4 5



MARK	DESCRIPTION	DATE	APPR.

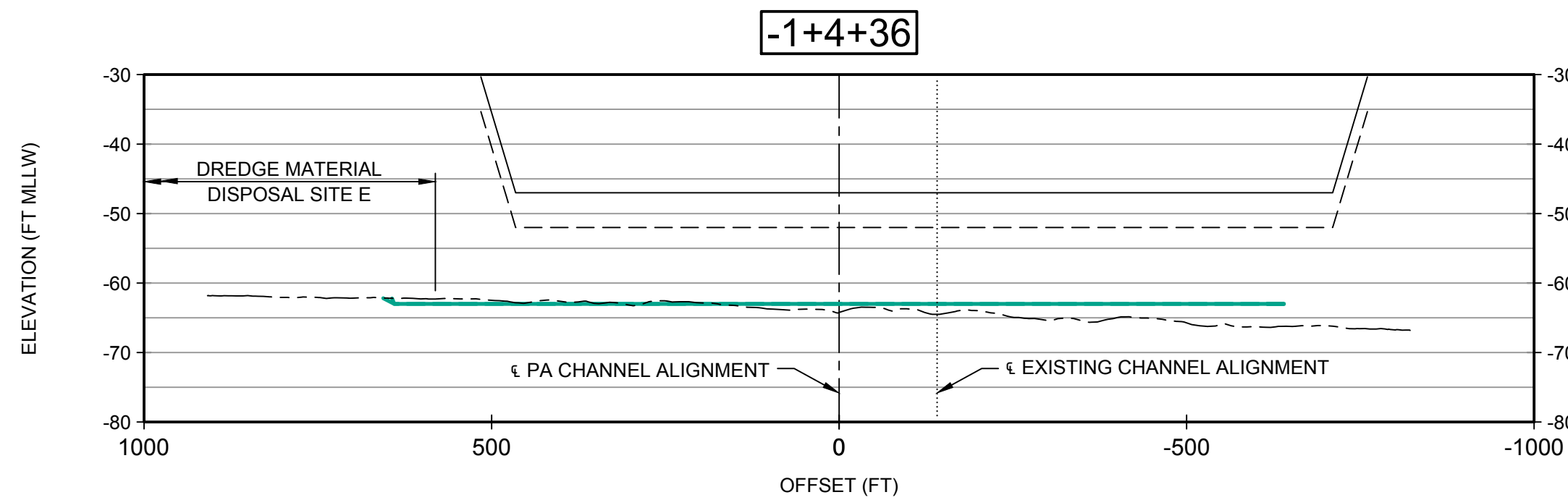
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 DRAWN BY: H.P.
 CHECKED BY: E.C.
 DATE: 2/16/07/05

SUBMITTED BY:
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 CONTRACT NO.:
 PLOT SCALE:
 PLOT DATE:
 DRAWING NUMBER:
 FILE NAME:
 SIZE:

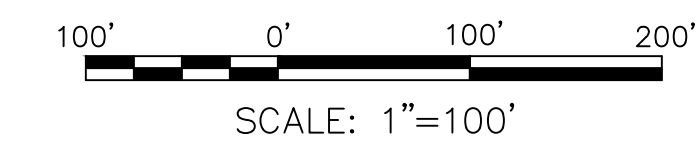
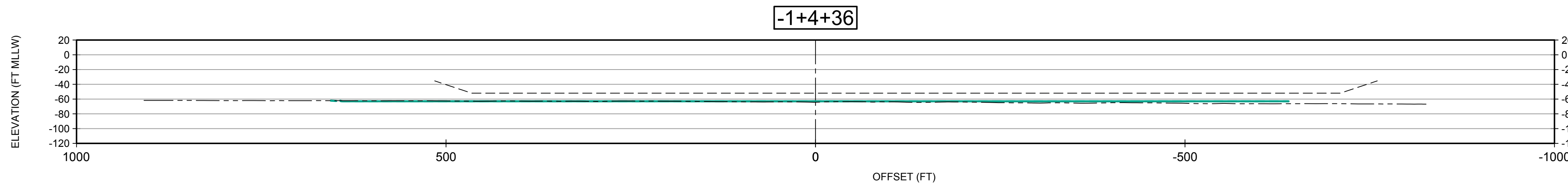
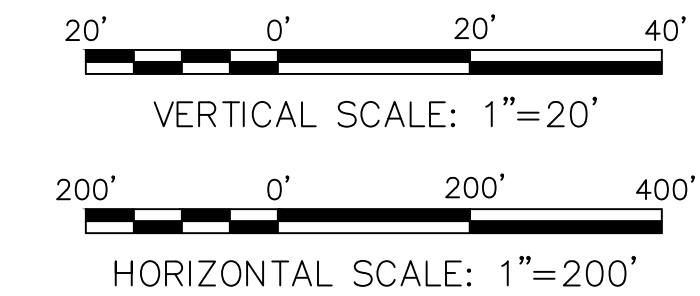
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
 #####

SHEET IDENTIFICATION PLAN
 INDEX 1 OF 188



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (DEA, 2019: SEE: SUB-APPENDIX 2, ATT. B)
- ROCK APRON

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

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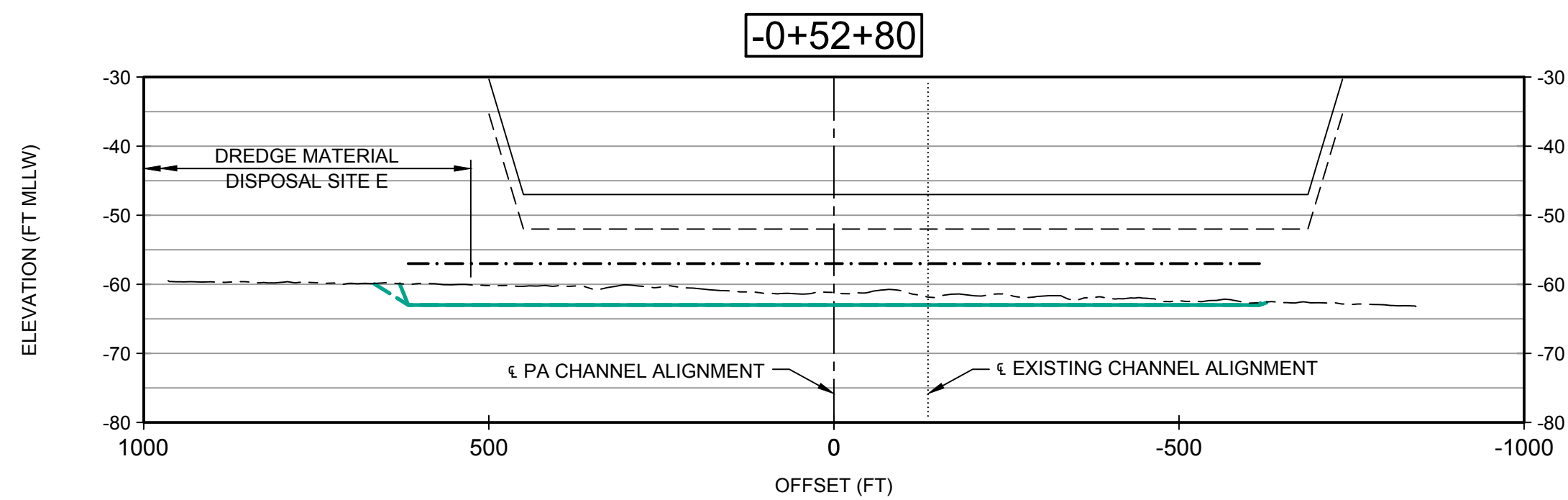
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 CHECKED BY: EC
 DATE: 2016/07/11

SUBMITTED BY: HJP
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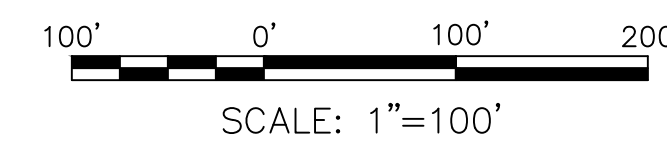
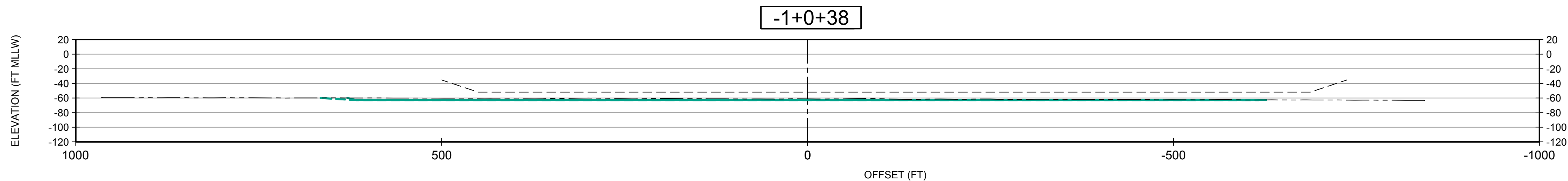
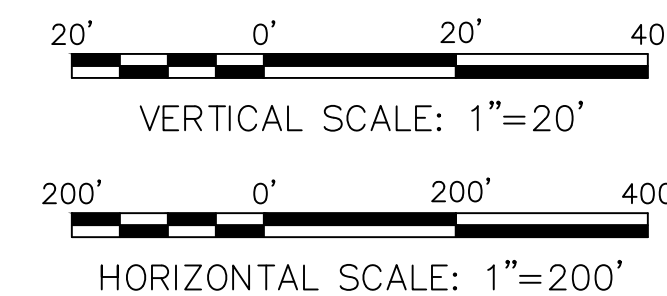
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 CONTRACT NO.:
 DRAWING NUMBER:
 SIZE:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (1 OF 185)

SHEET IDENTIFICATION
FIG-002
 INDEX 2 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (DEA, 2019: SEE: SUB-APPENDIX 2, ATT. B)
- ROCK APRON

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

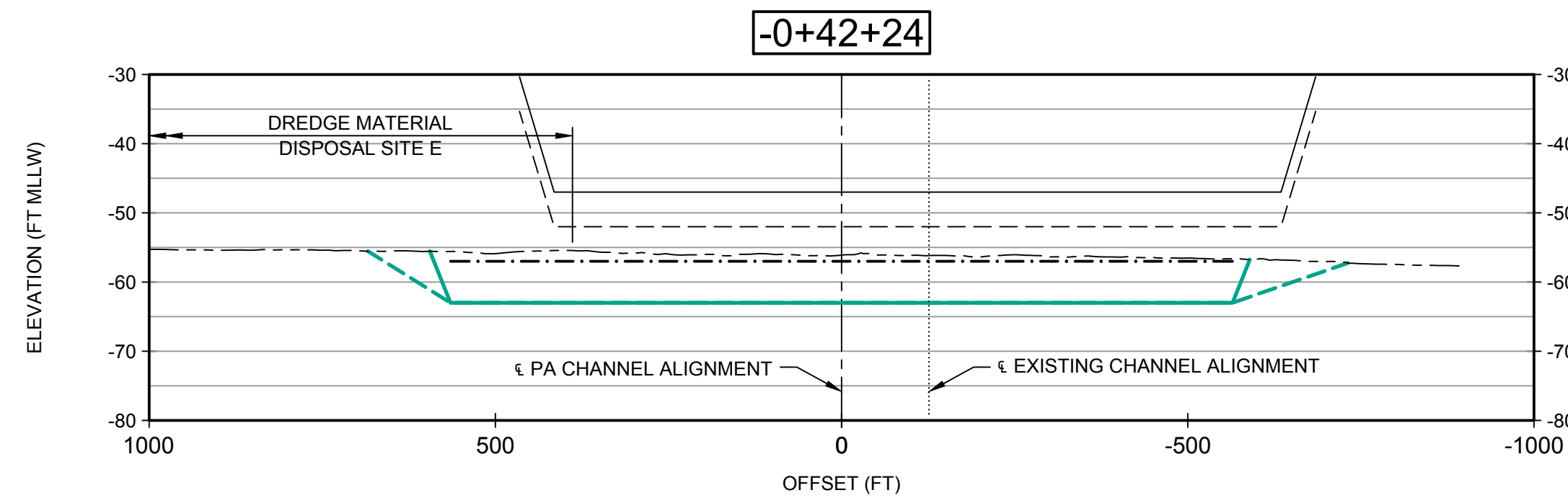
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DRAWN BY: EC
CHECKED BY: EC
DATE: 2016/07/11

SUBMITTED BY: HJP
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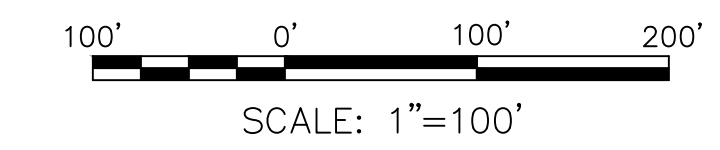
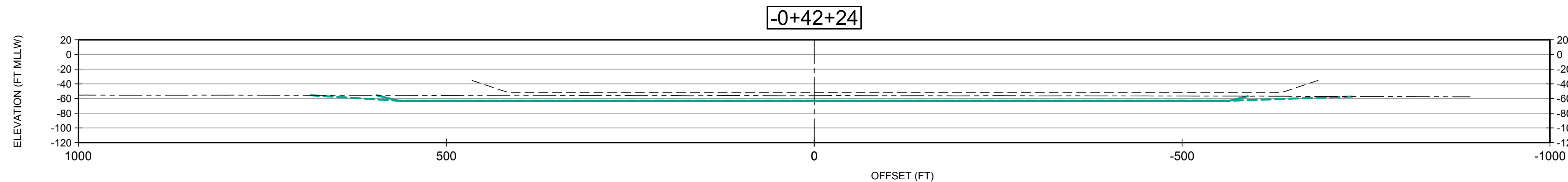
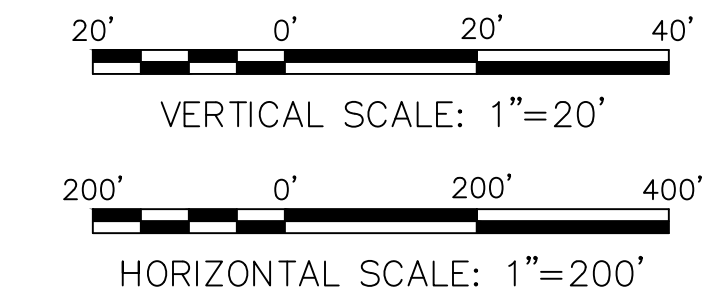
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (2 OF 185)

SHEET IDENTIFICATION
FIG-003
 INDEX 3 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (DEA, 2019: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	—	ROCK APRON

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



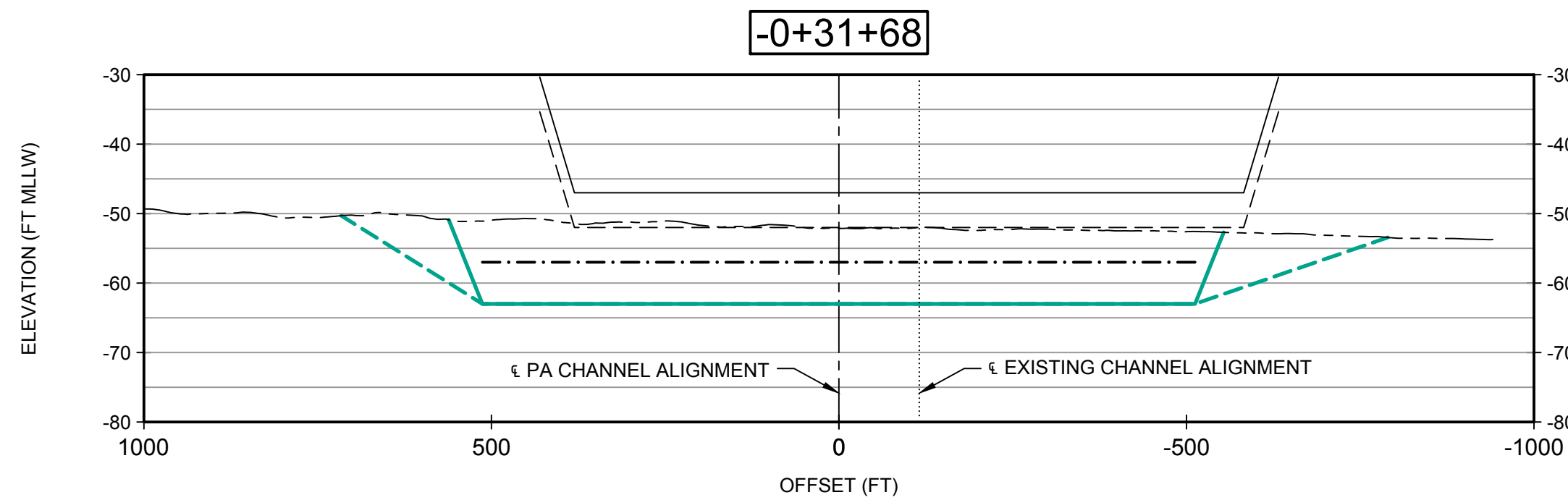
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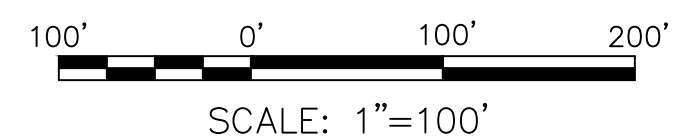
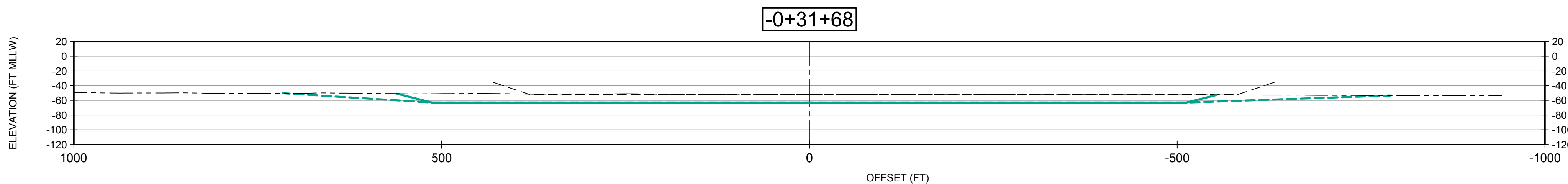
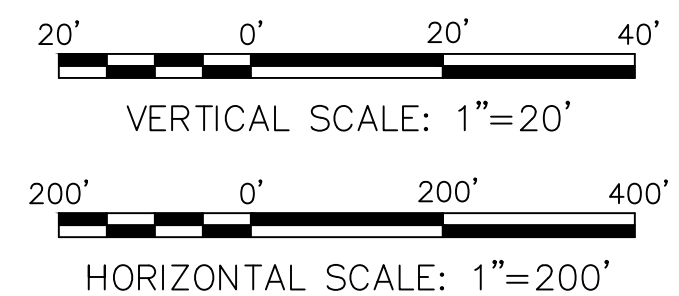
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (3 OF 185)

SHEET IDENTIFICATION
FIG-004
 INDEX 4 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- | | | | |
|-----------|--|-------|--|
| — | EXISTING AUTHORIZED CHANNEL LIMITS | ----- | PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES |
| ----- | EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE | ----- | EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A) |
| - - - - - | PA CHANNEL LIMITS | ----- | ESTIMATED TOP OF ROCK (DEA, 2019: SEE: SUB-APPENDIX 2, ATT. B) |
| — | PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE | ----- | ROCK APRON |

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



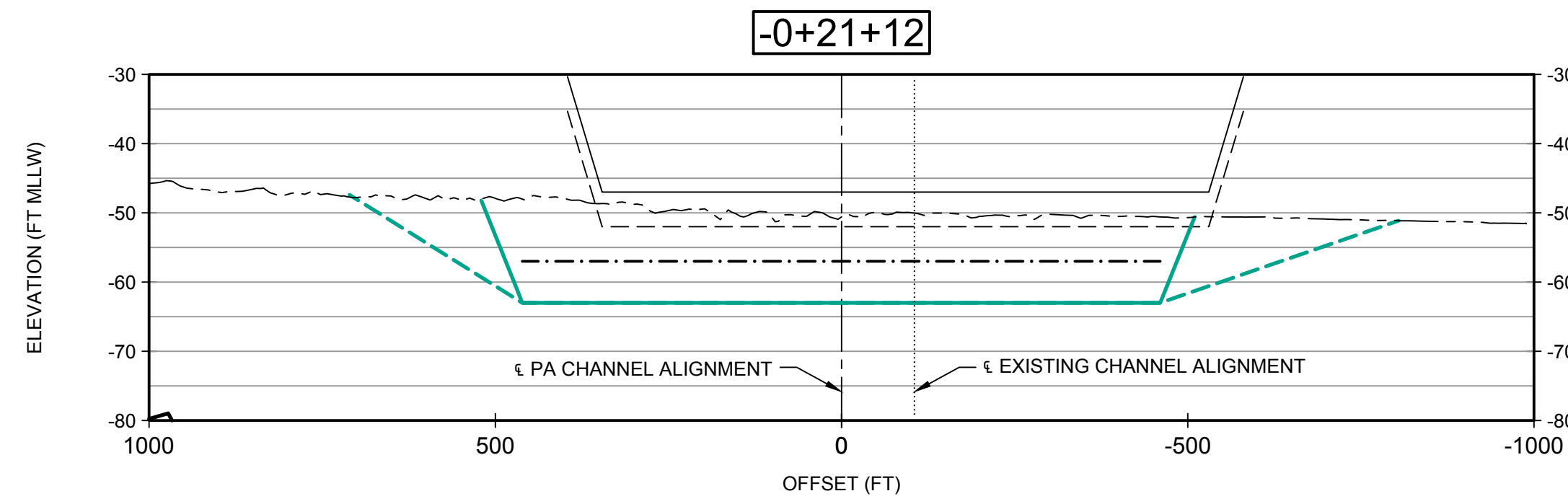
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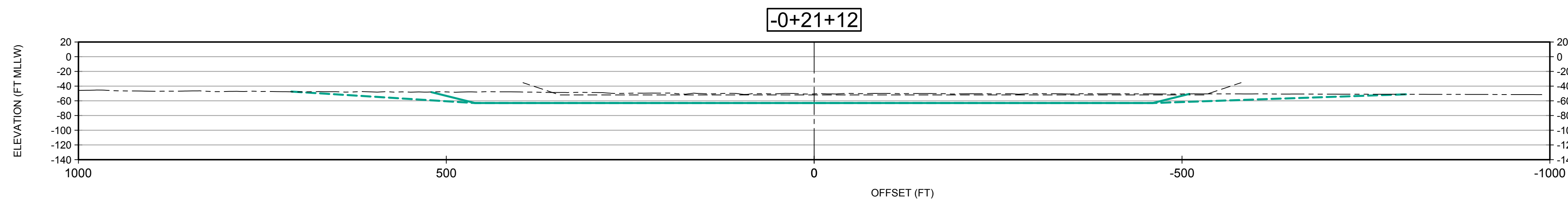
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (4 OF 185)

SHEET IDENTIFICATION
FIG-005
 INDEX 5 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

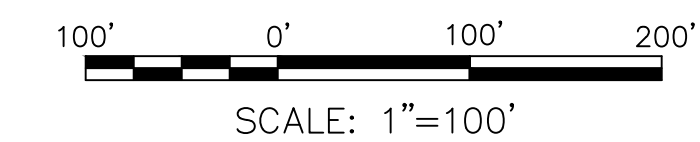
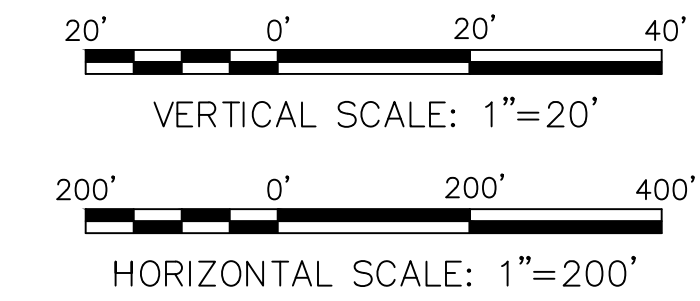
—	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (DEA, 2019: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	—	ROCK APRON

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

DESIGNED BY:	DATE:
AWARDED BY:	2016/07/11
EC	CHECKED BY:
HP	EC
SUBMITTED BY:	SOLICITATION NO.:
	CONTRACT NO.:
PLOT SCALE:	PLOT DATE:
SIZE:	DRAWING NUMBER:
	FILE NAME:

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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (5 OF 185)

SHEET IDENTIFICATION
FIG-006
 INDEX 6 OF 186



MARK	DESCRIPTION	DATE	APPR.

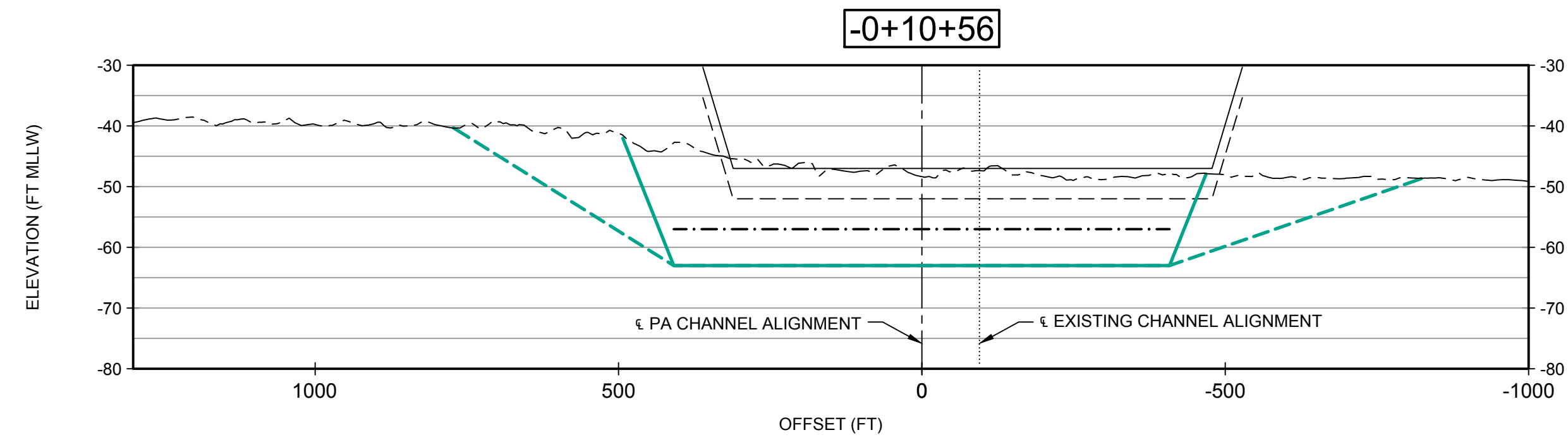
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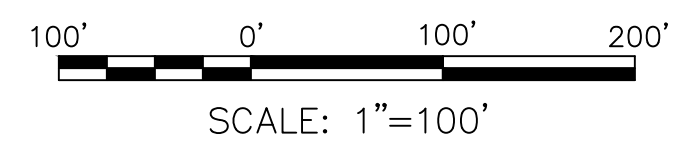
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (6 OF 185)

SHEET IDENTIFICATION
FIG-007
 INDEX 7 OF 186

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EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

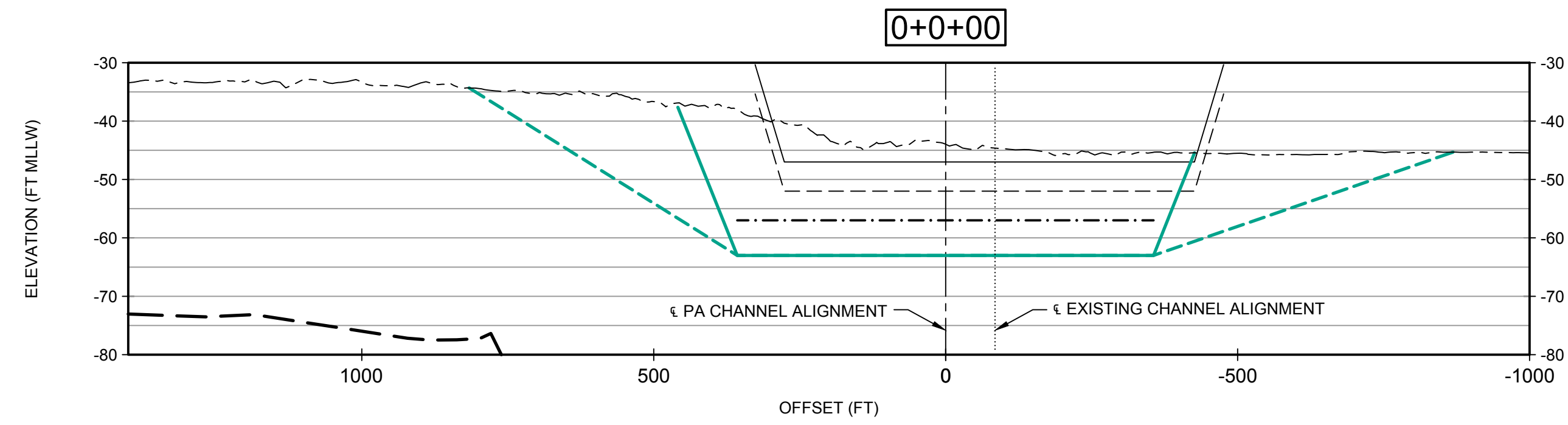
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- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (DEA, 2019: SEE: SUB-APPENDIX 2, ATT. B)
- ROCK APRON

NOTES:

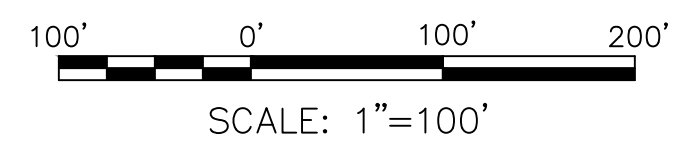
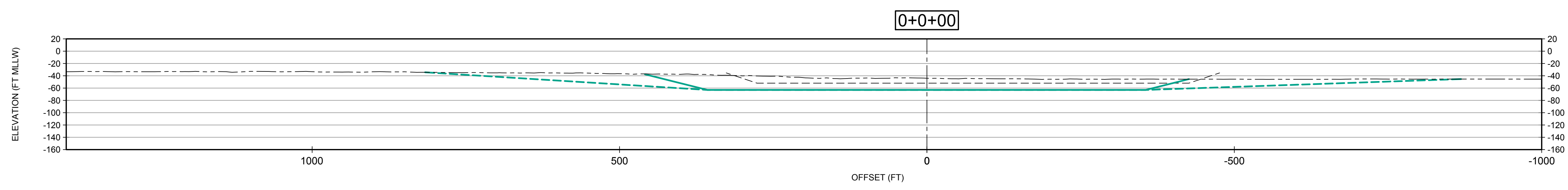
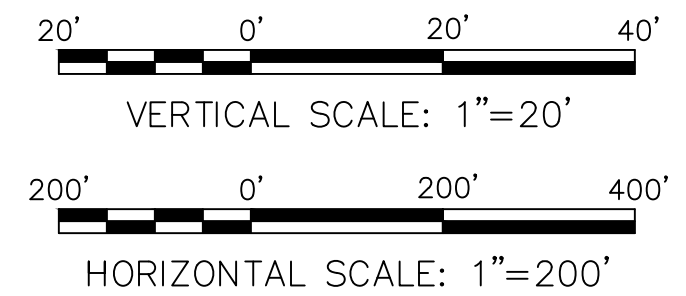
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2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (DEA, 2019: SEE: SUB-APPENDIX 2, ATT. B)
- ROCK APRON

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DESIGNED BY: **HP** DATE: 2016/07/11
 DRAWN BY: **EC** CHECKED BY: **EC** SOLICITATION NO.:
 SUBMITTED BY: **HP** CONTRACT NO.:
 PLOT SCALE: FILE DATE: DRAWING NUMBER:
 SIZE: FILE NAME:

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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (7 OF 185)

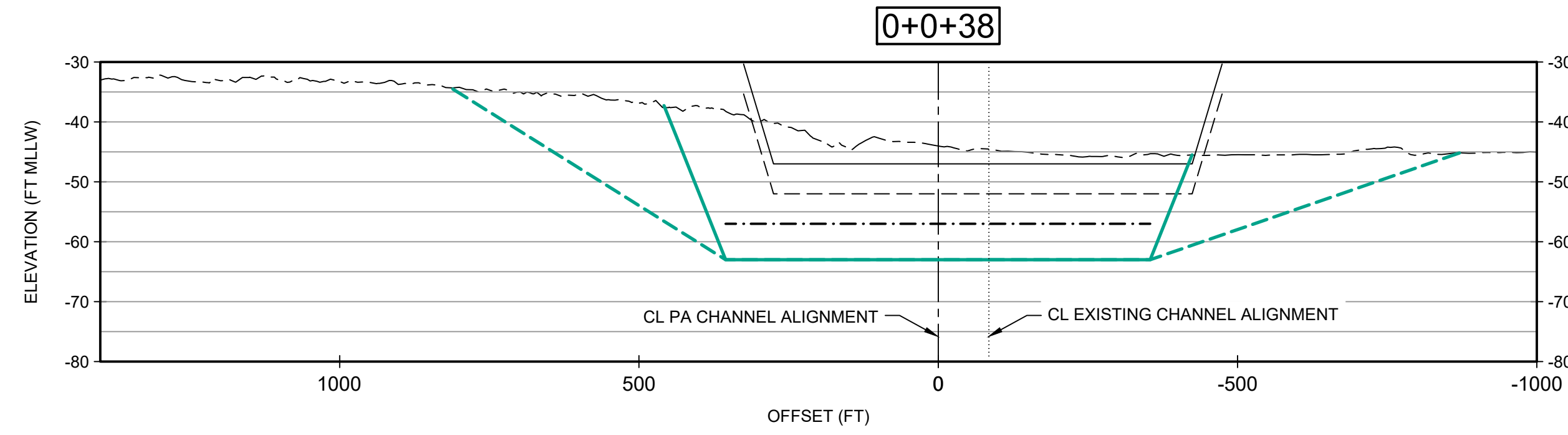
SHEET IDENTIFICATION
FIG-008
 INDEX 8 OF 186

D

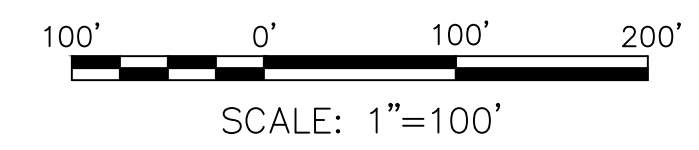
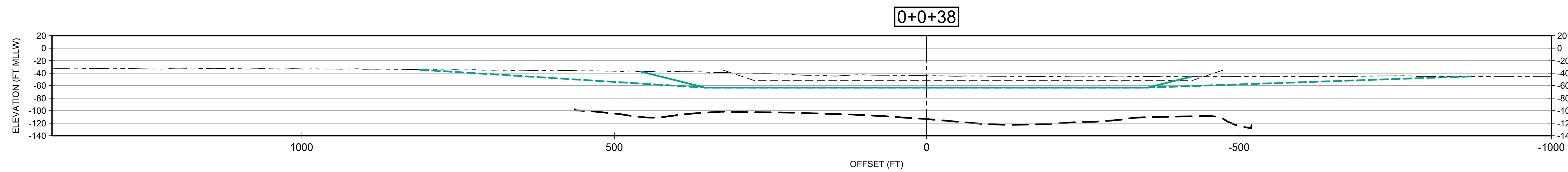
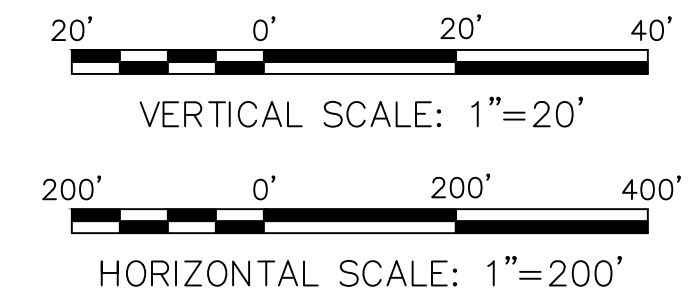
C

B

A



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

———	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
-----	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
-.-.-.-.-	PA CHANNEL LIMITS	———	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



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COOS BAY OREGON

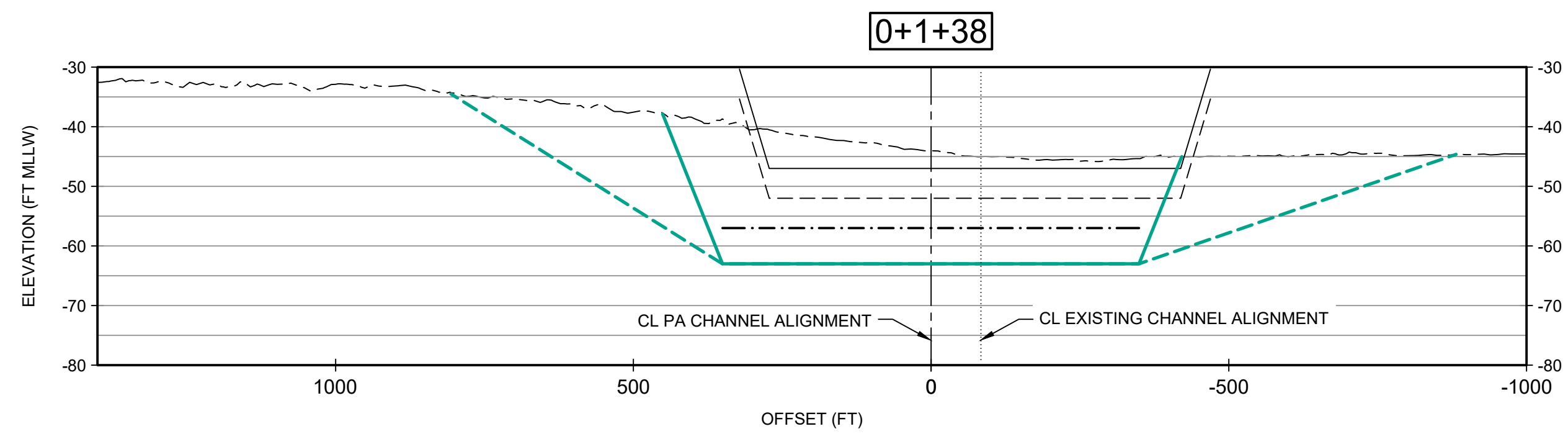
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (8 OF 185)

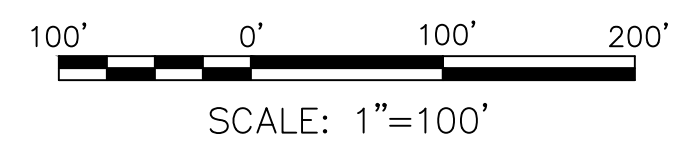
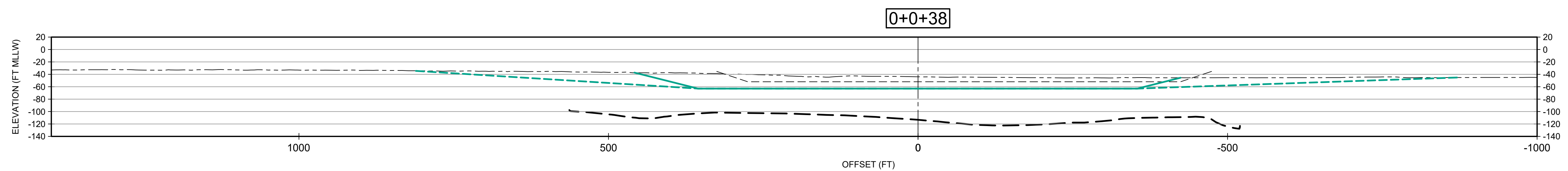
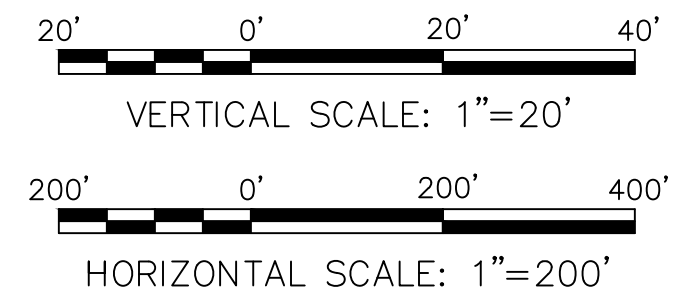
SHEET IDENTIFICATION

FIG-009

INDEX 9 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	— — — — —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

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FILE NAME:	FILE NUMBER:	CONTRACT NO.:
SIZE:	DRAWING NUMBER:	

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (9 OF 185)

SHEET IDENTIFICATION
FIG-010
 INDEX 10 OF 186



NO.	DATE	DESCRIPTION	MARK

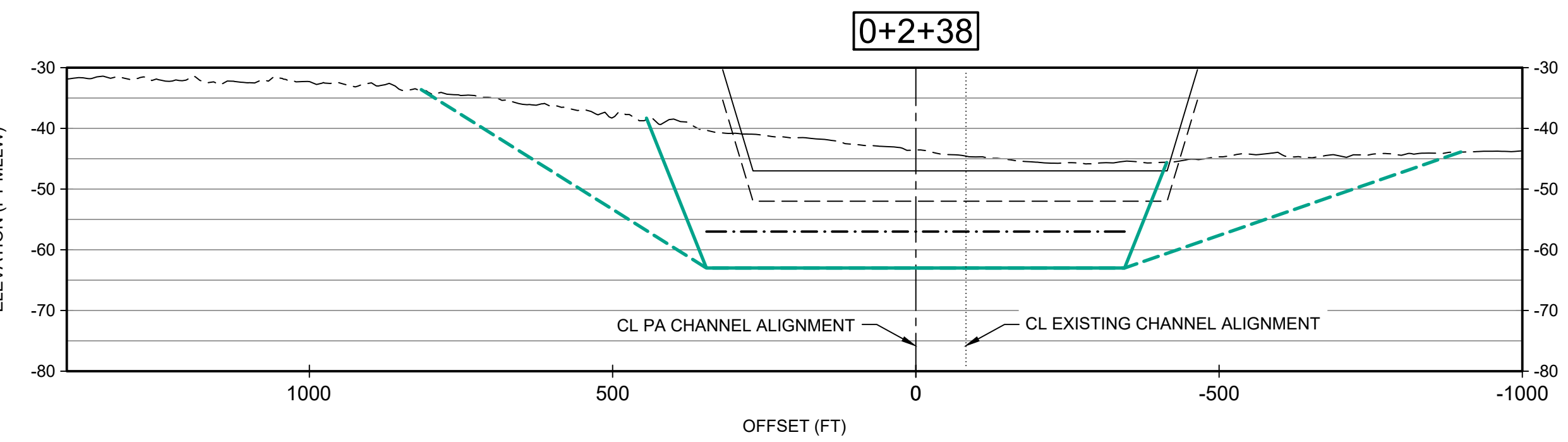
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PROJECT NO.:	CONTRACT NO.:	DRAWING NUMBER:

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**COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (10 OF 185)**

SHEET
IDENTIFICATION
FIG-011
INDEX 11 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active_LXS_SubAppendix\FIG-011-CROSS SECTIONS; Plotted: 5/20/2024 3:29 PM by LANDON, KYLE; Saved: 5/14/2024 12:43 PM by JGROTH



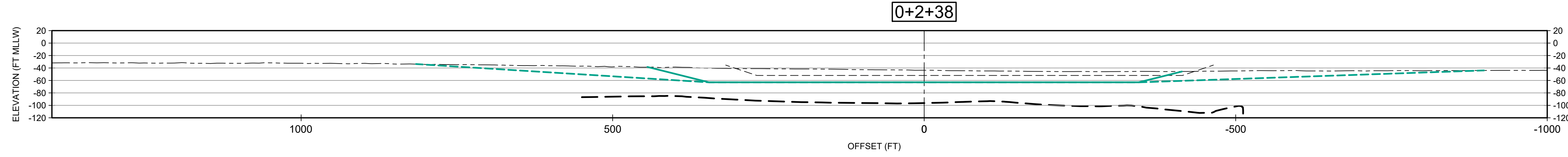
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EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

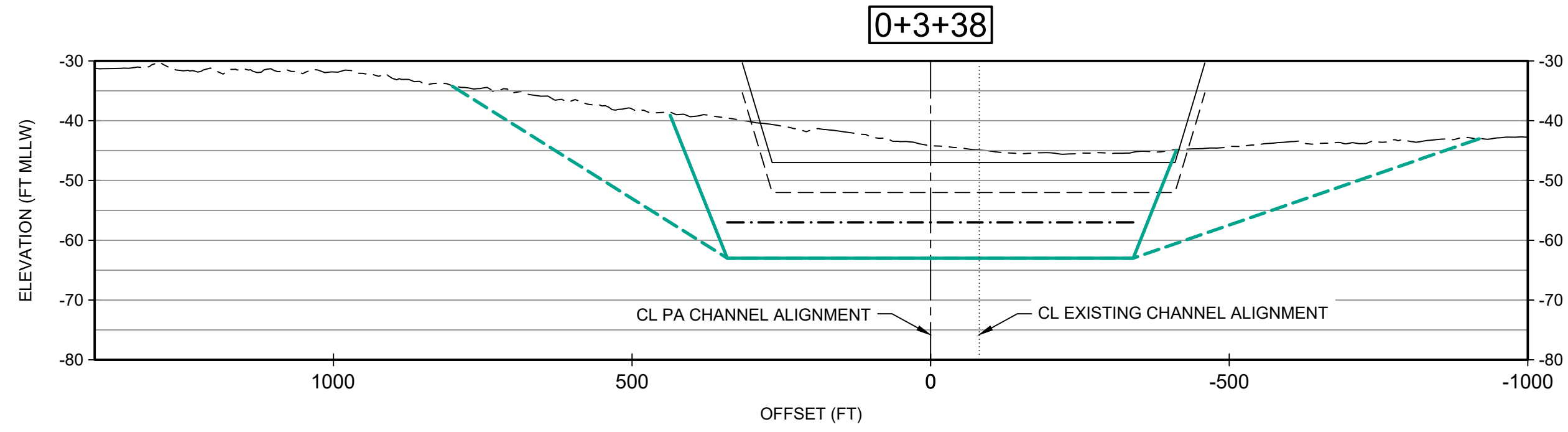
NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

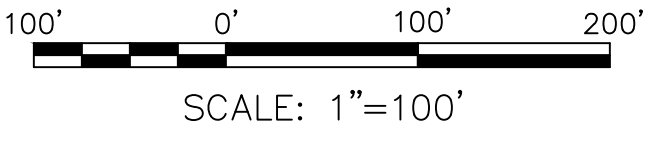
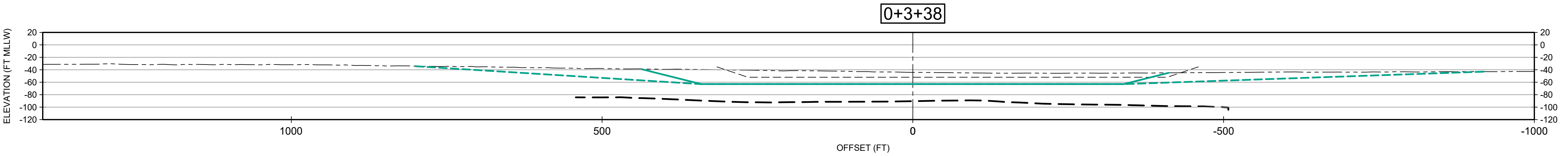
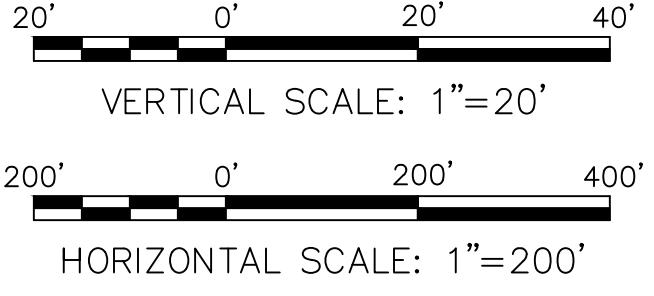
**FUTURE EQUILIBRIUM SIDE SLOPES
WITHIN EACH REACH**

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	DESCRIPTION	MARK	APPR.



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- . - . PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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 COOS BAY CHANNEL MODIFICATION
 CROSS SECTION (11 OF 185)

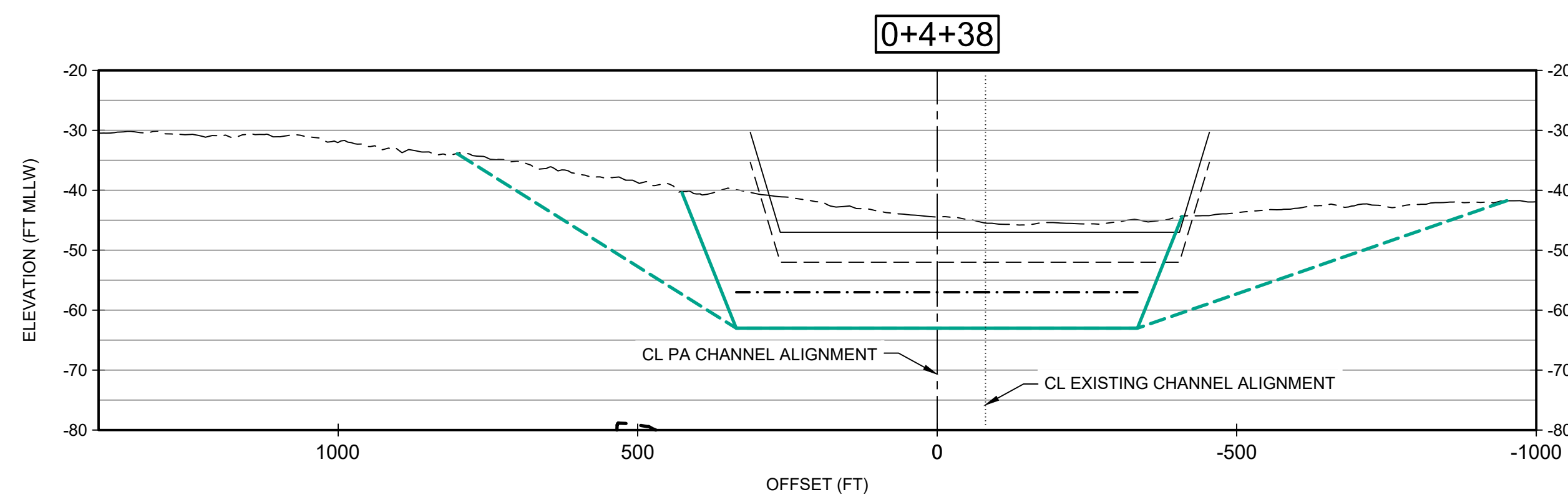
SHEET IDENTIFICATION
FIG-012
 INDEX 12 OF 186

D

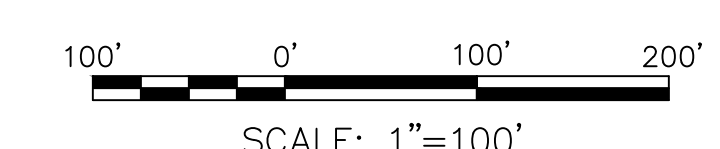
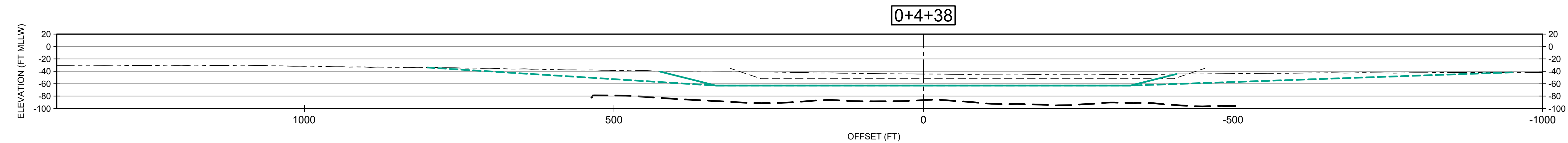
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B

A



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- . - . - . -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- . - . - . -	PA CHANNEL LIMITS	— — — — —	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

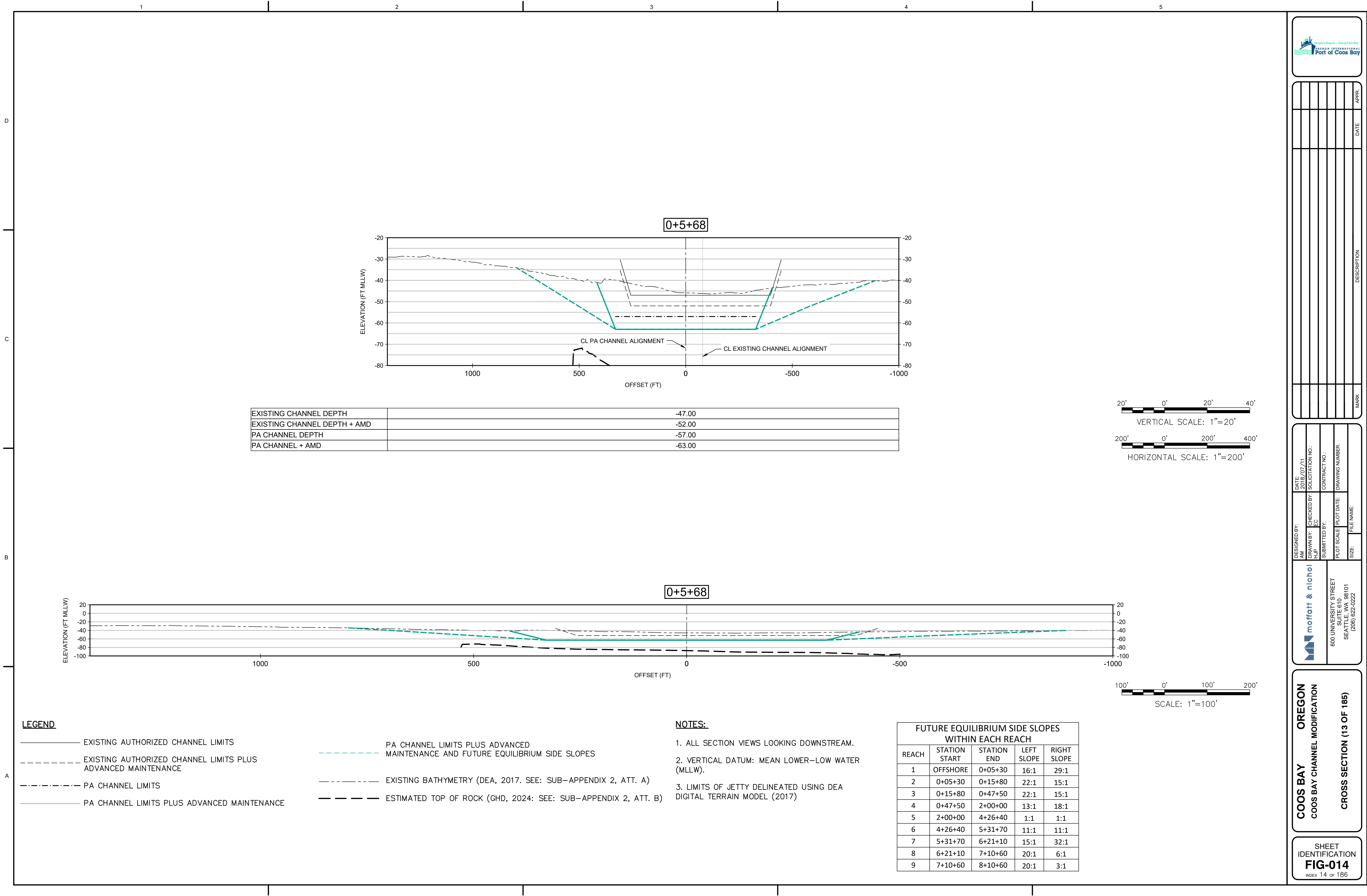
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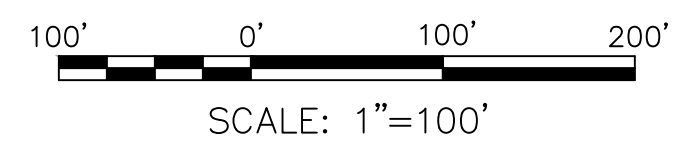
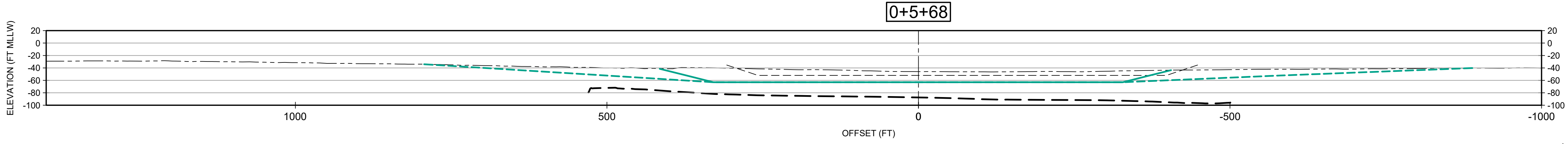
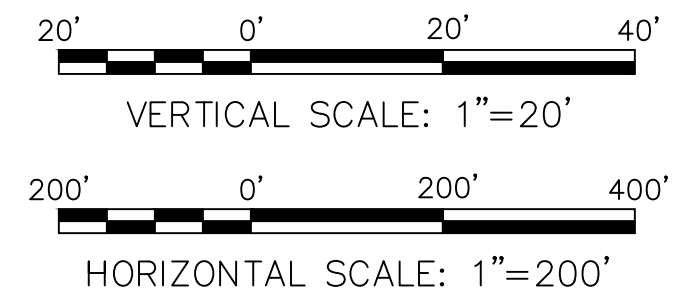
COOS BAY OREGON
 COOS BAY CHANNEL MODIFICATION
 CROSS SECTION (12 OF 185)

SHEET IDENTIFICATION
FIG-013
 INDEX 13 OF 186

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EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



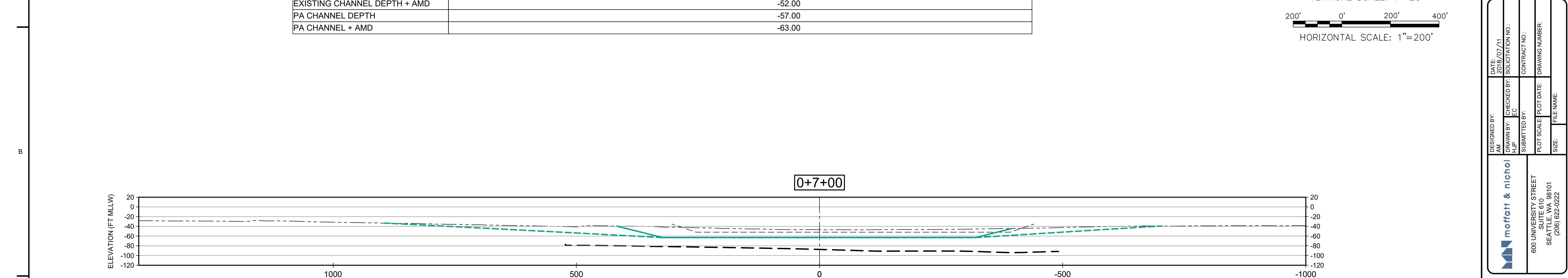
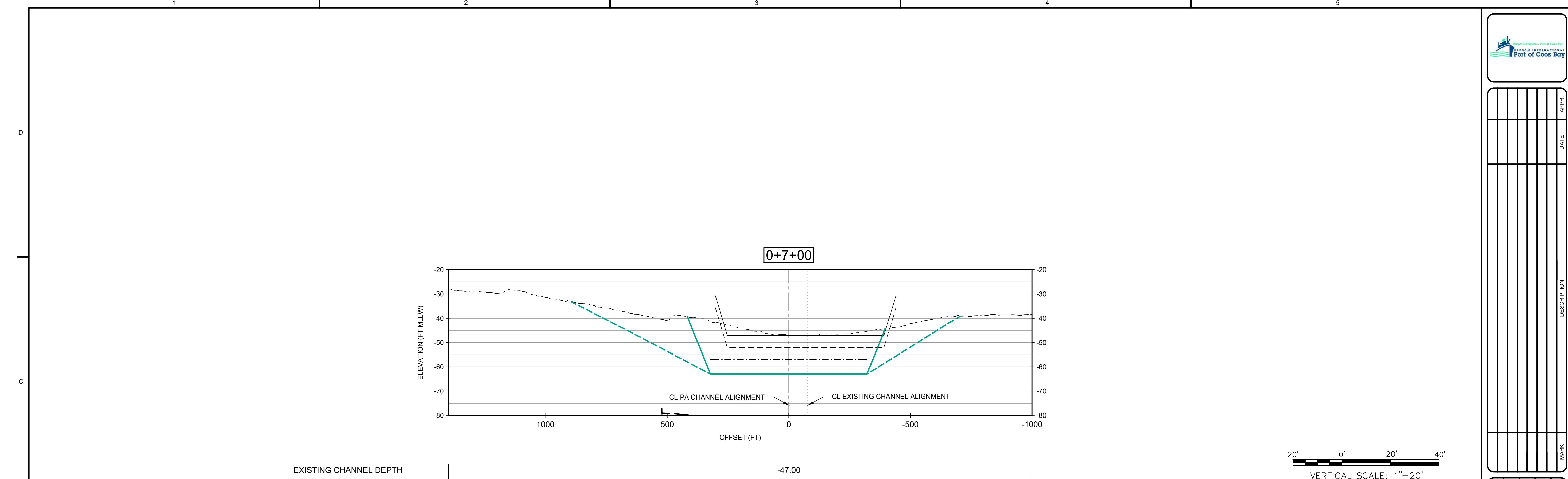
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 DATE: 2016/07/11
 SOLICITATION NO.: []
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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (13 OF 185)

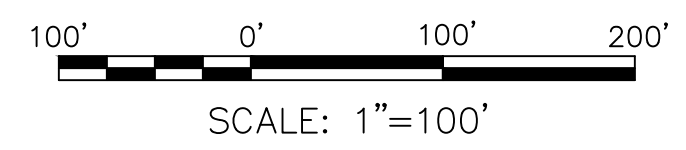
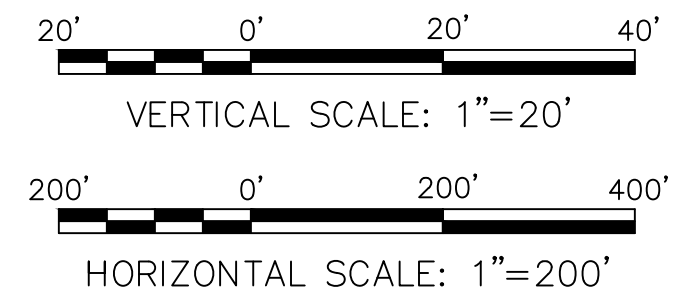
SHEET IDENTIFICATION
FIG-014
 INDEX 14 OF 186



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

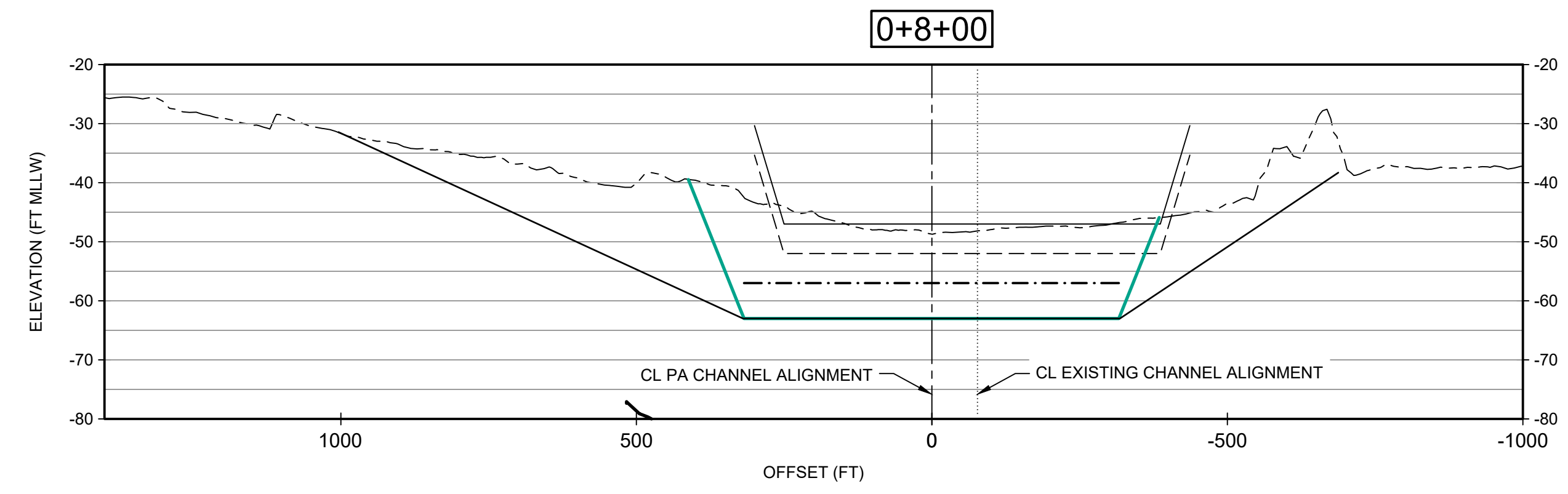
- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

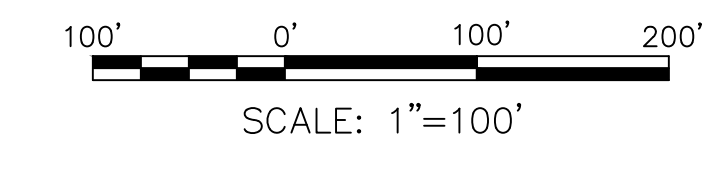
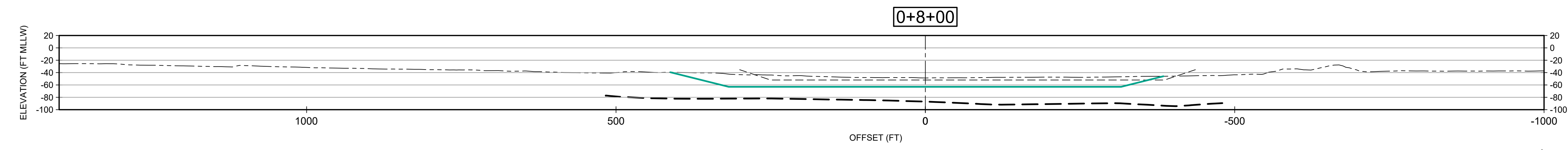
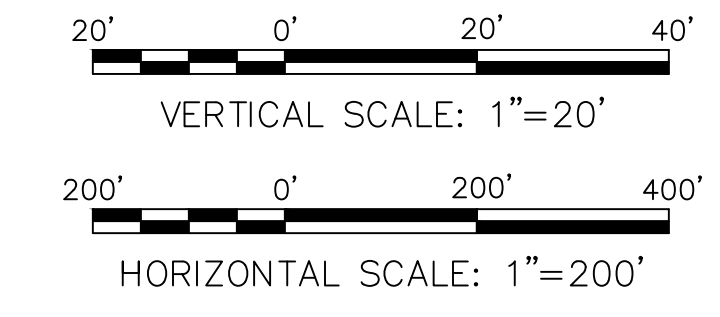


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	SEATTLE, WA 98101		
	(206) 622-0222		
COOS BAY OREGON			
COOS BAY CHANNEL MODIFICATION			
CROSS SECTION (14 OF 185)			
SHEET IDENTIFICATION			
FIG-015			
INDEX 15 OF 186			

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-015-CROSS SECTIONS; Plotted: 5/20/2024 3:33 PM by LANDON, KYLE; Saved: 5/14/2024 12:53 PM by JGROTH



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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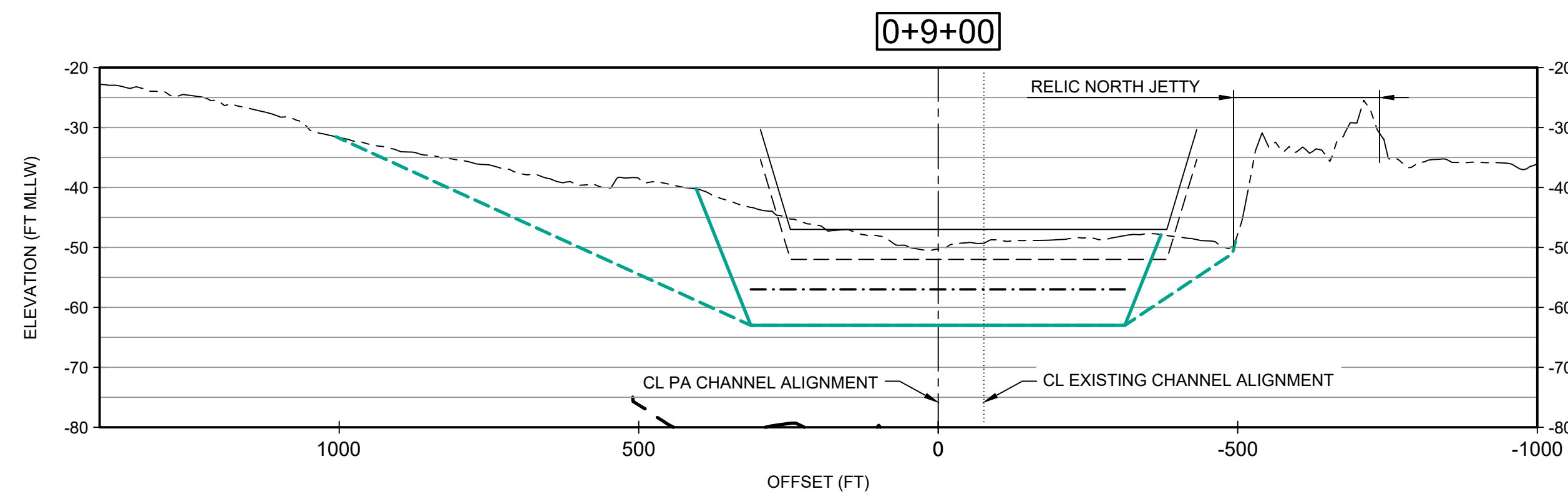
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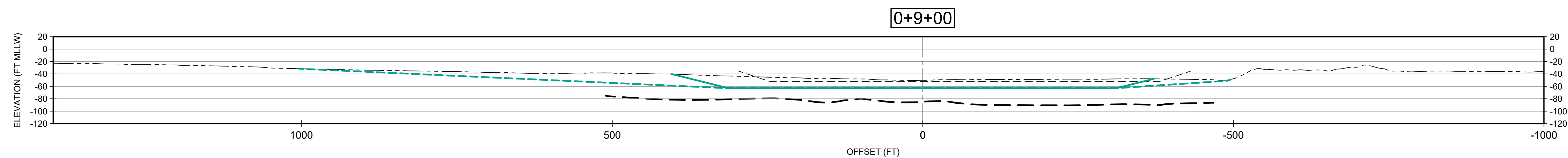
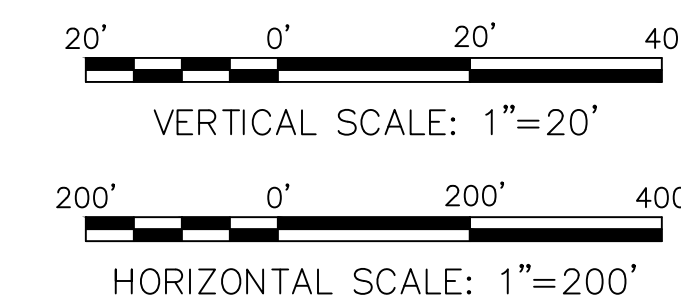
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (15 OF 185)

SHEET IDENTIFICATION
FIG-016
 INDEX 16 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · · PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



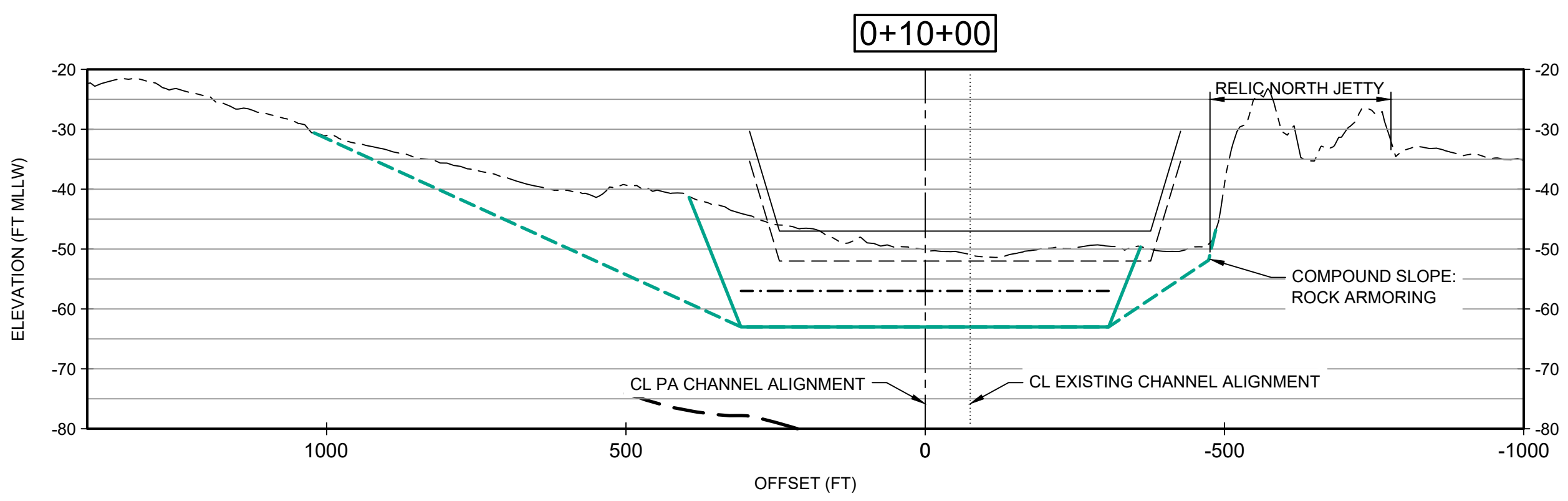
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 CHECKED BY: **EC**
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 CONTRACT NO.:
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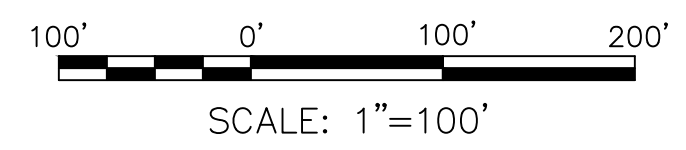
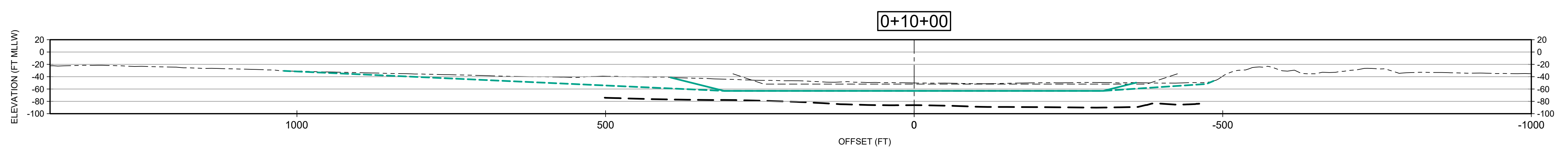
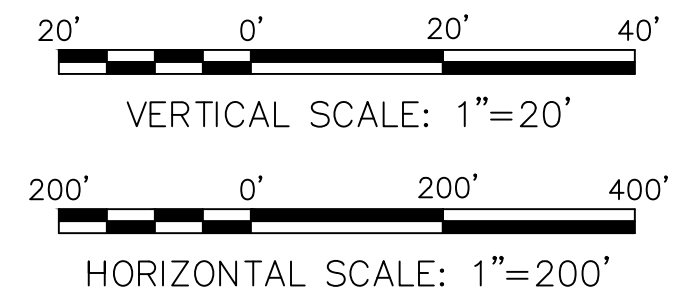
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (16 OF 185)

SHEET IDENTIFICATION
FIG-017
 INDEX 17 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: H.P.
DRAWN BY: E.C.
CHECKED BY: E.C.
DATE: 2016/07/11

CONTRACT NO.:
DRAWING NUMBER:
FILE NAME:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (17 OF 185)

SHEET IDENTIFICATION
FIG-018
 INDEX 18 OF 186



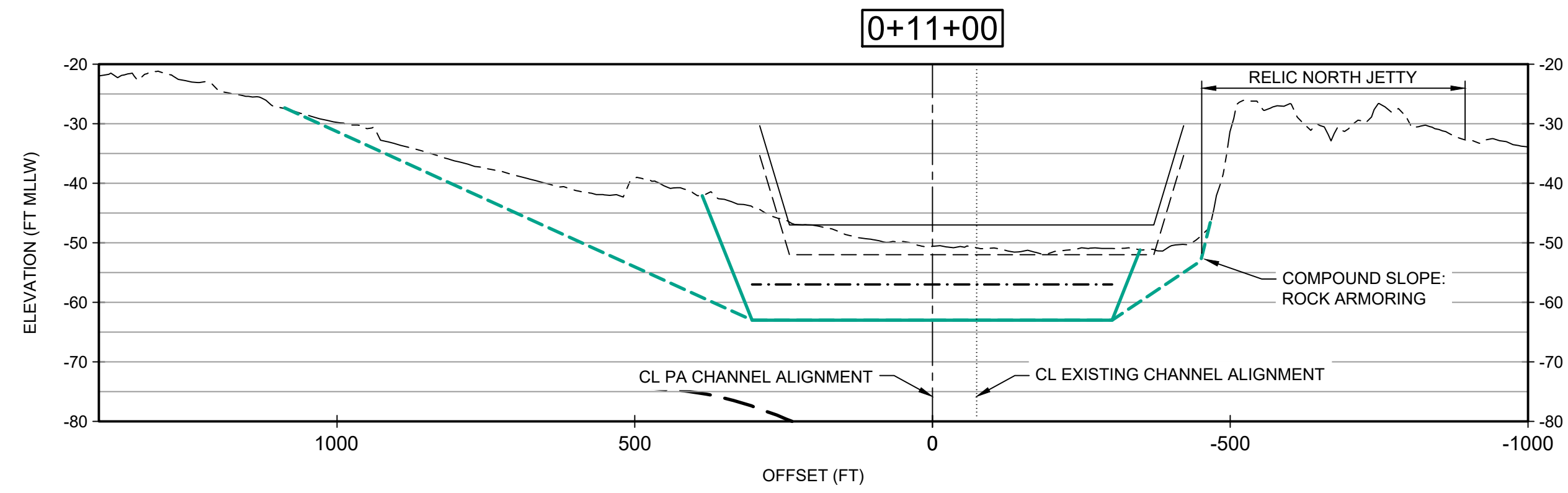
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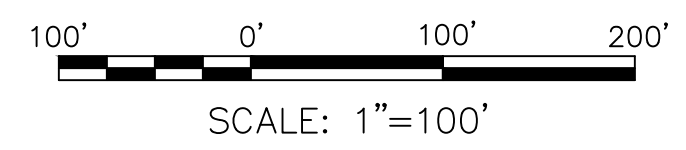
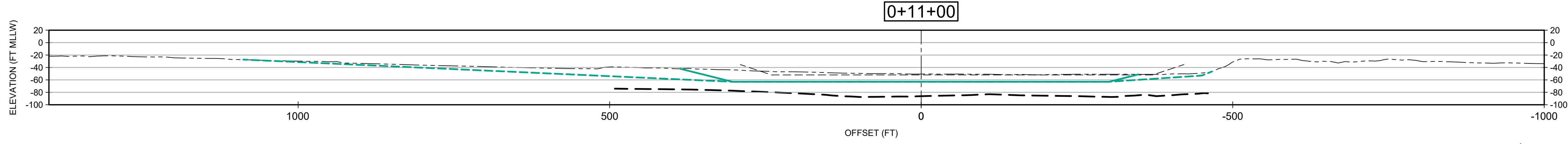
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (18 OF 185)

SHEET IDENTIFICATION
FIG-019
 INDEX 19 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	— — — — —	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	— — — — —	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
— — — — —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

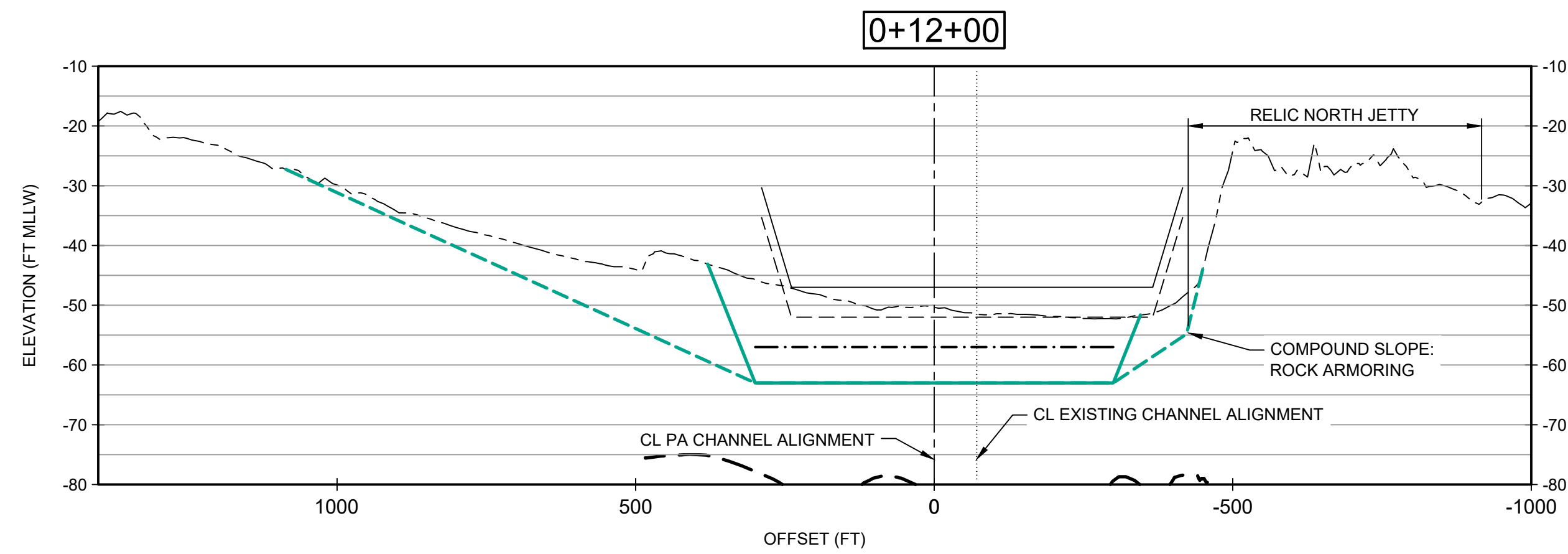
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

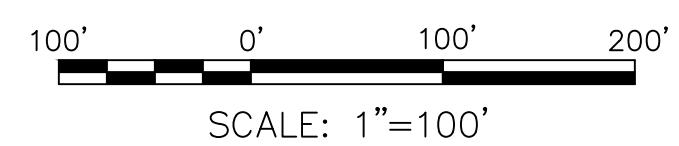
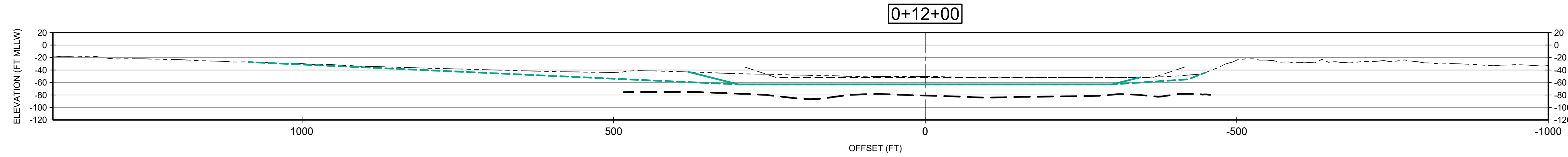
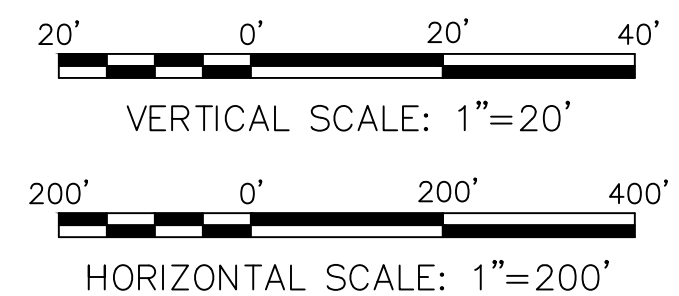
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DATE	DESCRIPTION	MARK	APPR.



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

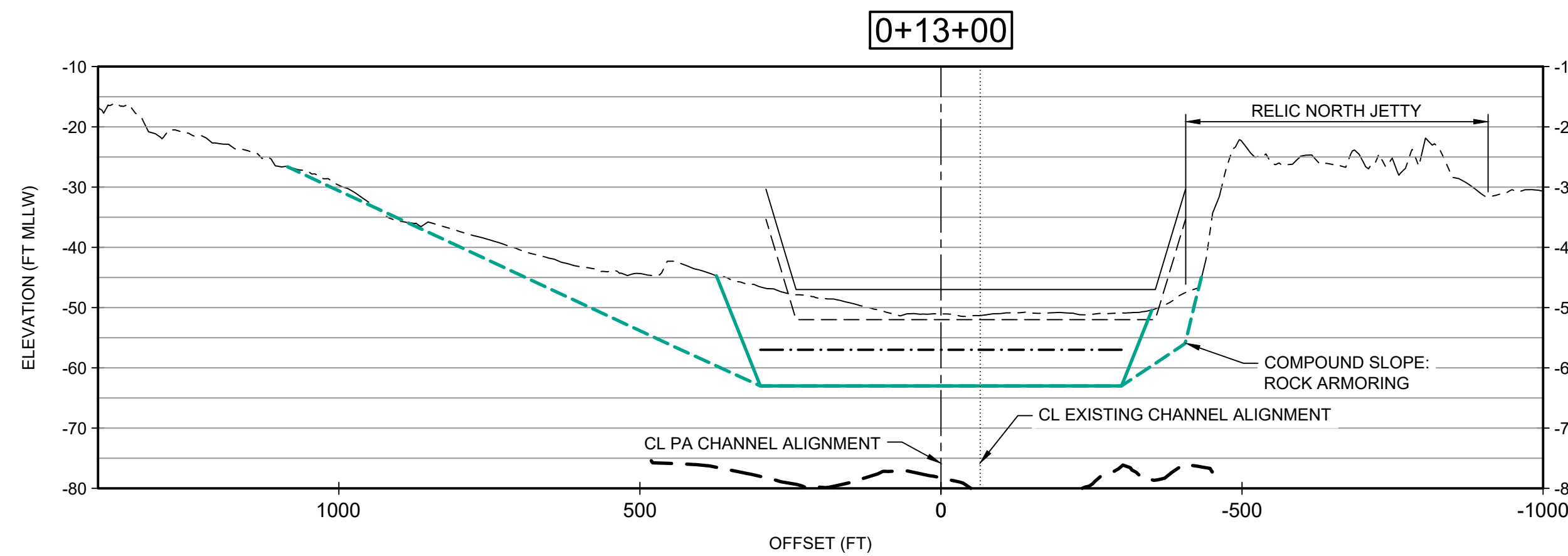
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DRAWN BY: H.P.
CHECKED BY: E.C.
DATE: 2018/07/11

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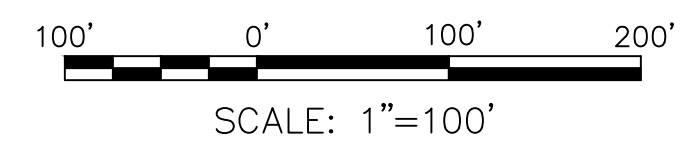
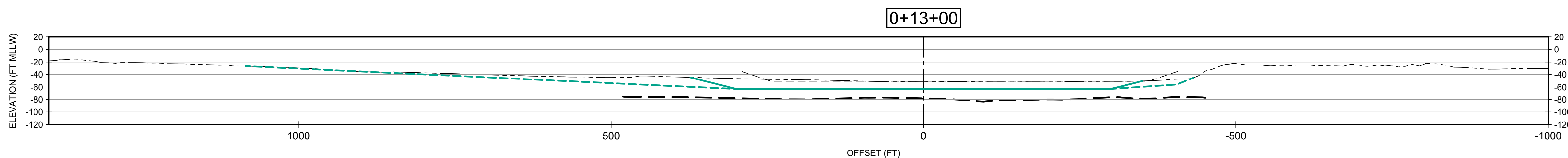
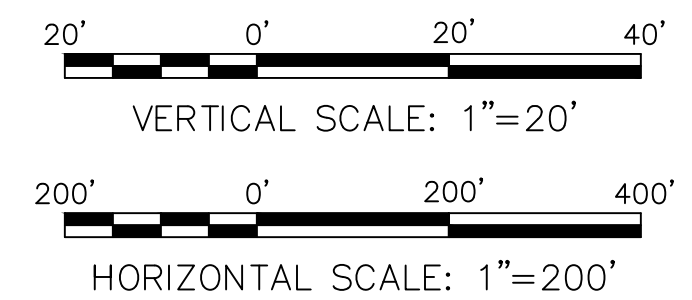
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (19 OF 185)

SHEET IDENTIFICATION
FIG-020
 INDEX 20 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - - - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

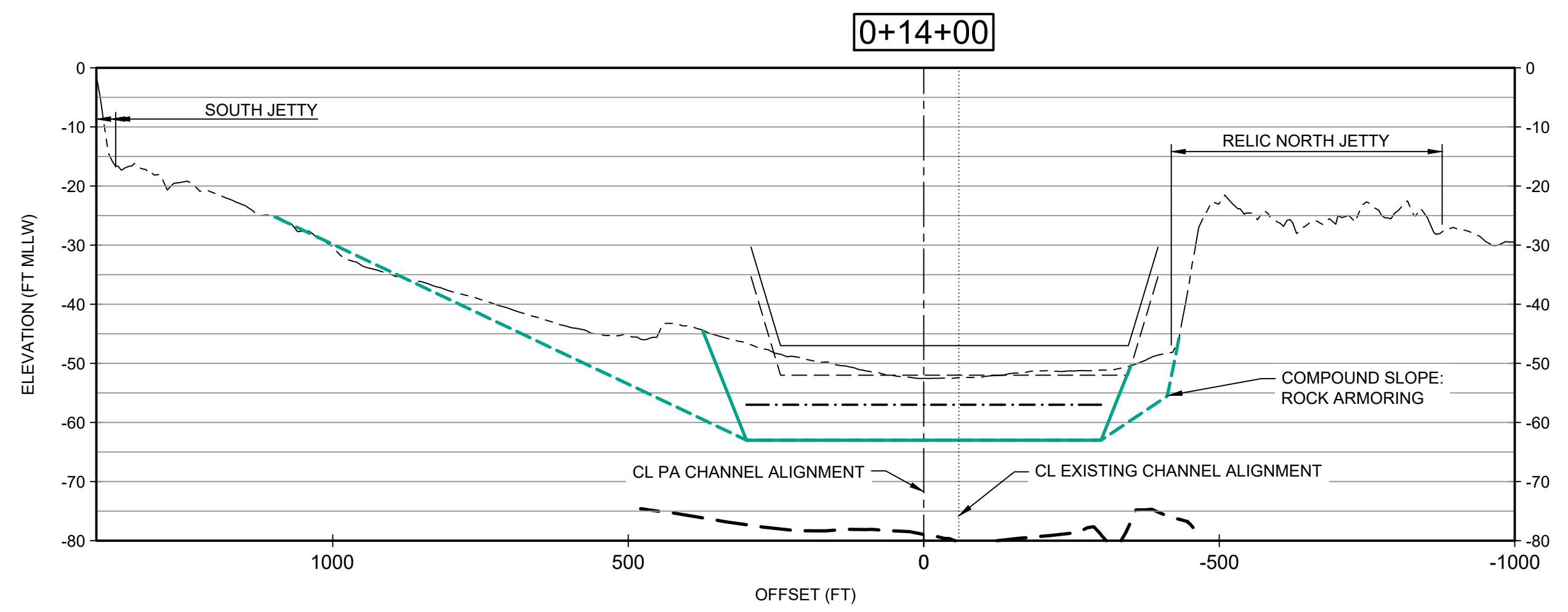


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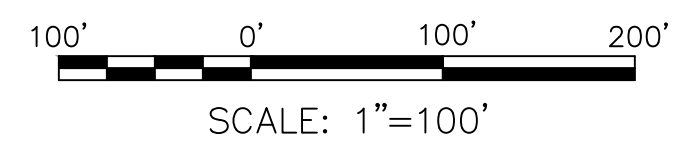
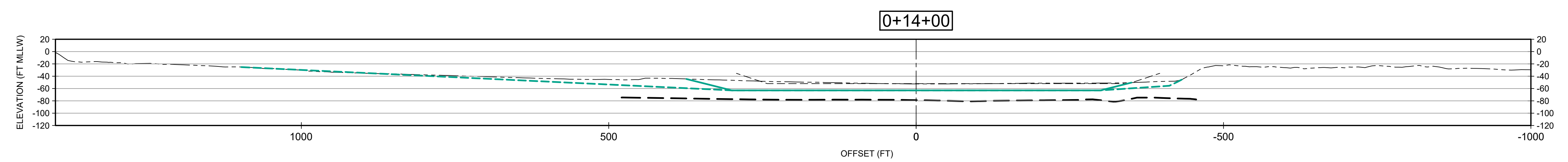
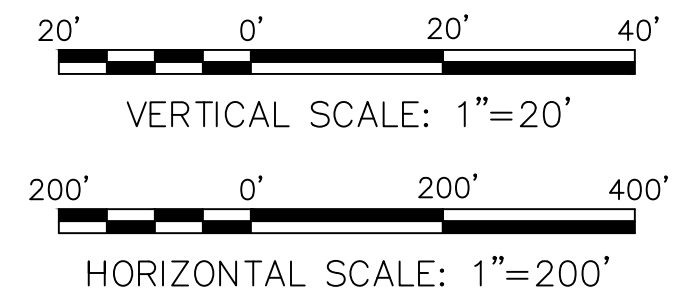
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (20 OF 185)

SHEET IDENTIFICATION
FIG-021
INDEX 21 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

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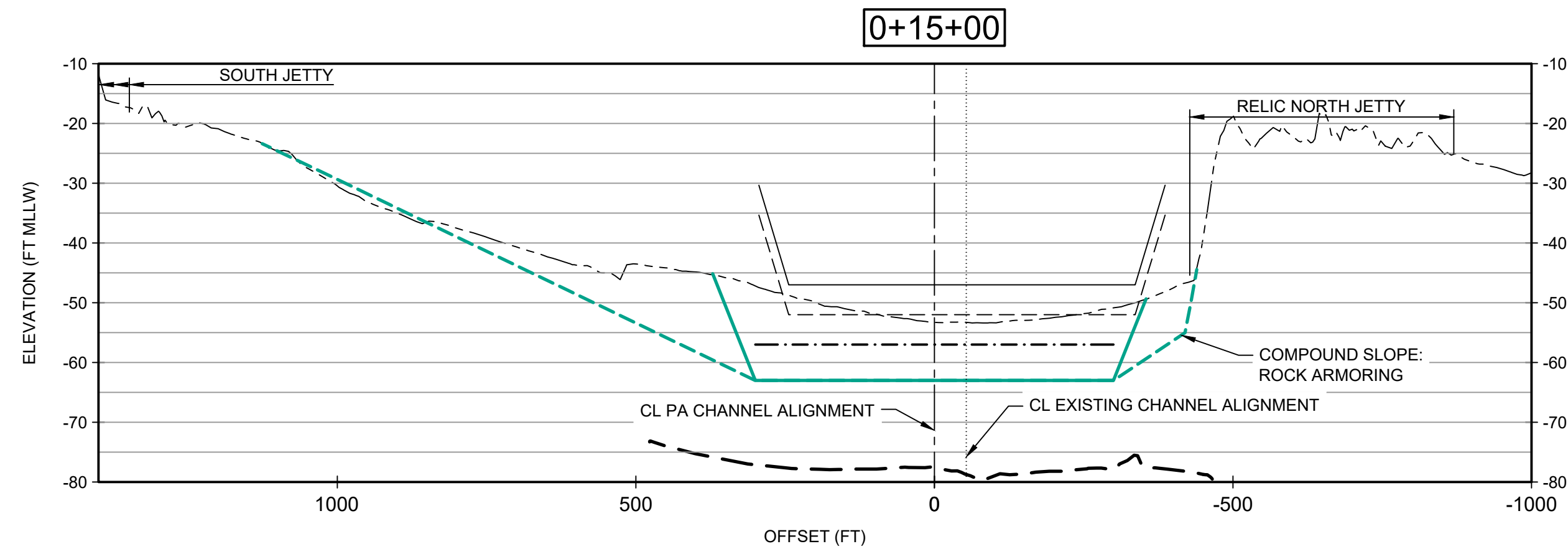
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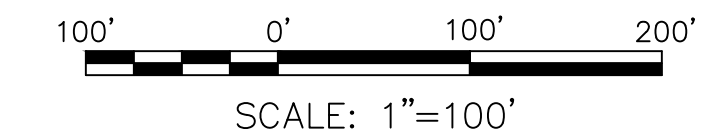
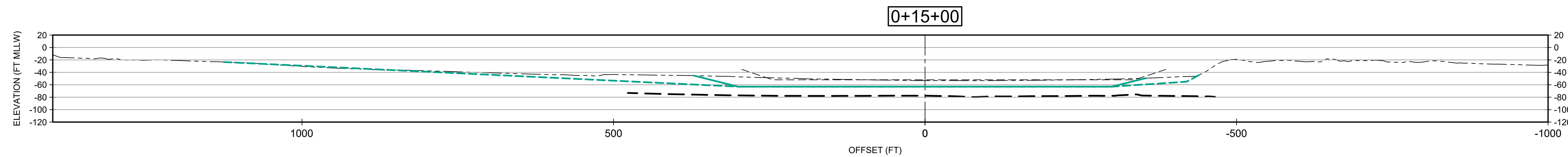
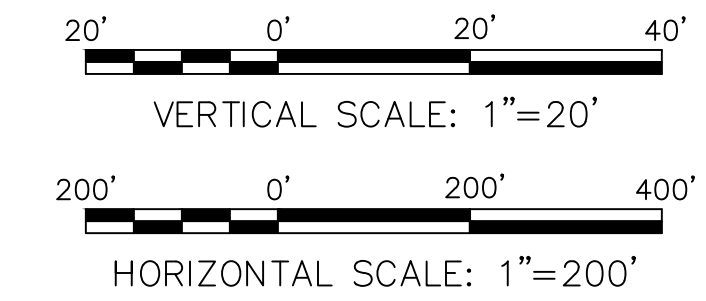
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (21 OF 185)

SHEET IDENTIFICATION
FIG-022
 INDEX 22 OF 186

D
C
B
A



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

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DATE: 2016/07/11

CHECKED BY: **EC**

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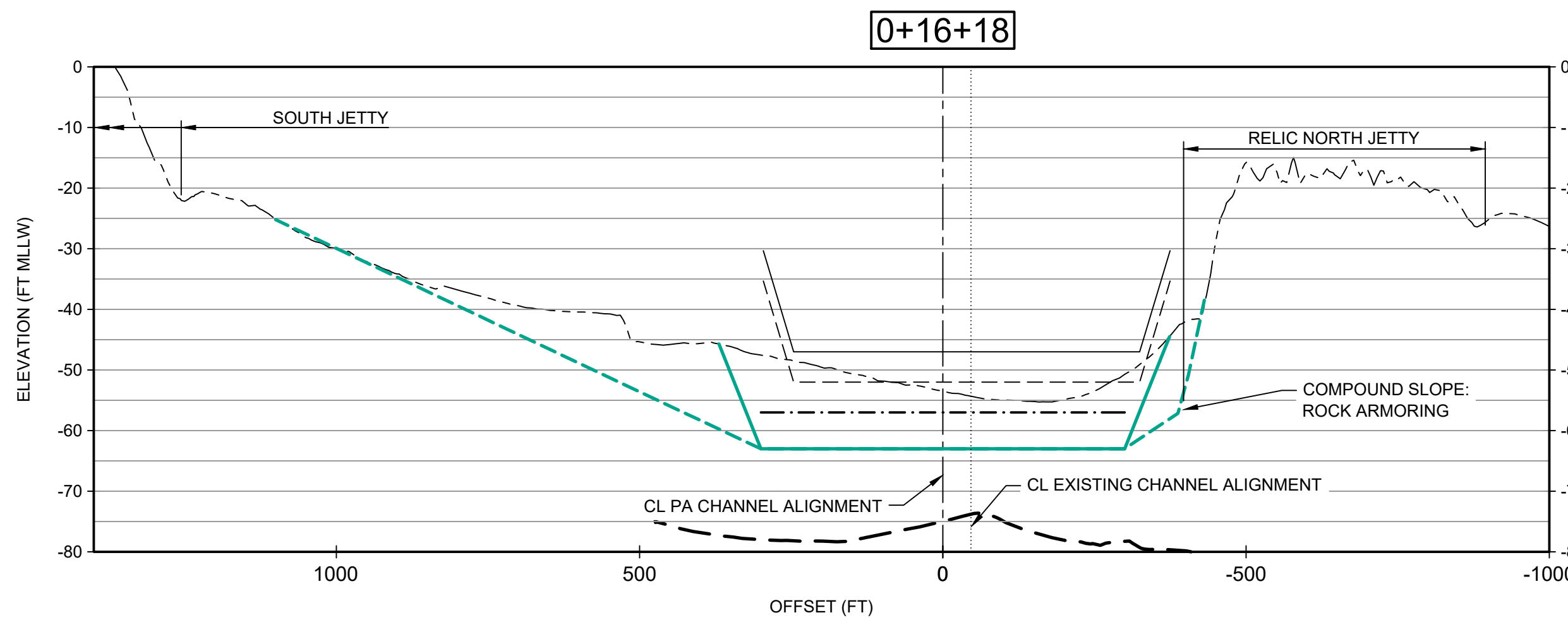
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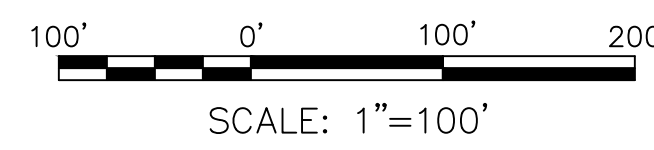
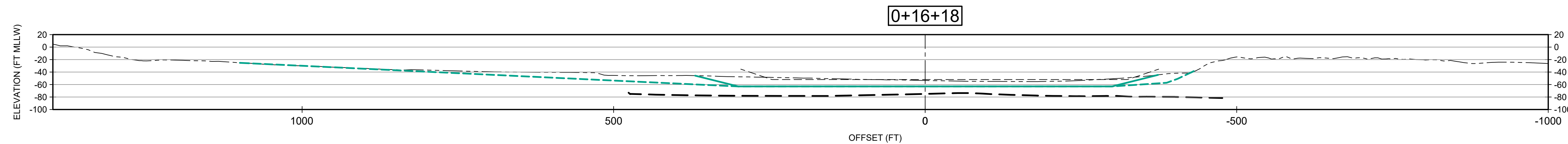
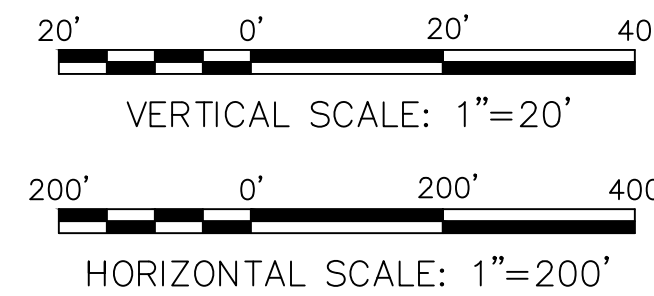
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (22 OF 185)

SHEET IDENTIFICATION
FIG-023
INDEX 23 OF 186

MARK	DESCRIPTION	DATE	APPR.



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-57.00
PA CHANNEL + AMD	-63.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
- - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

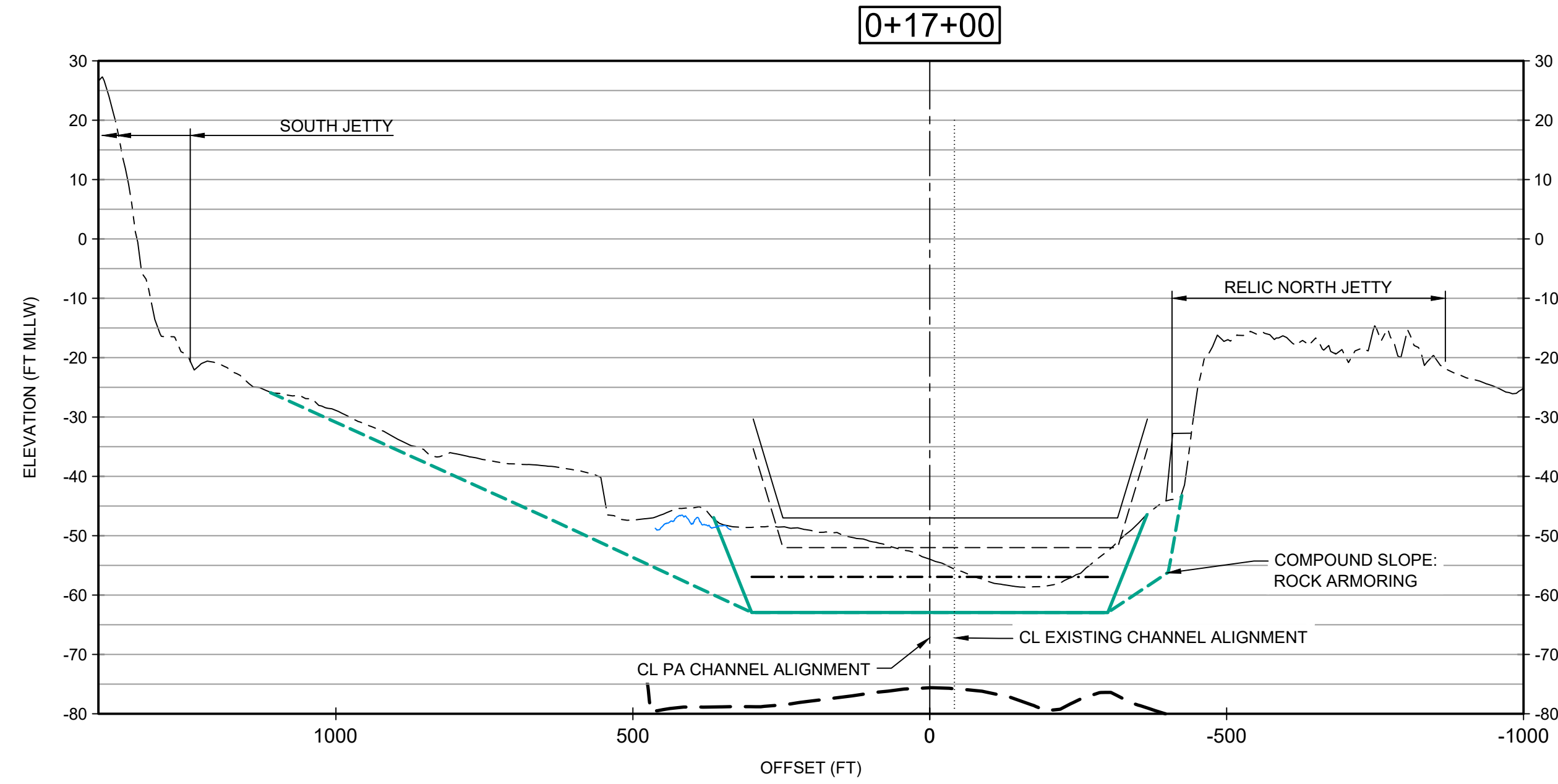
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

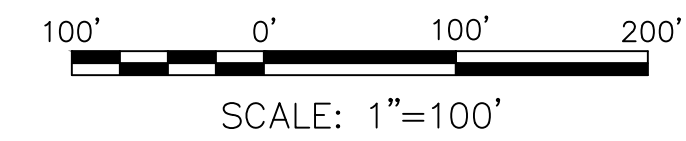
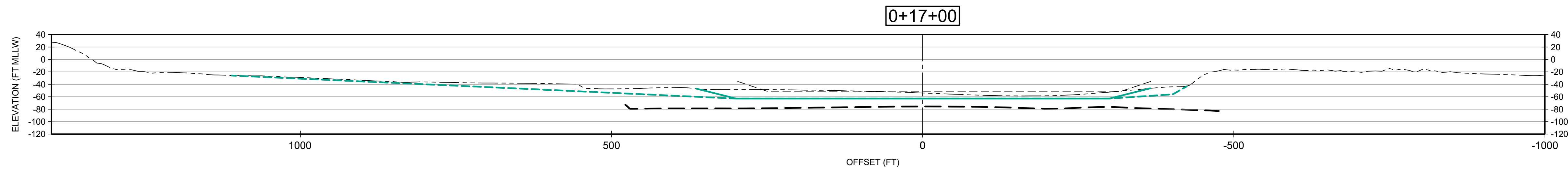
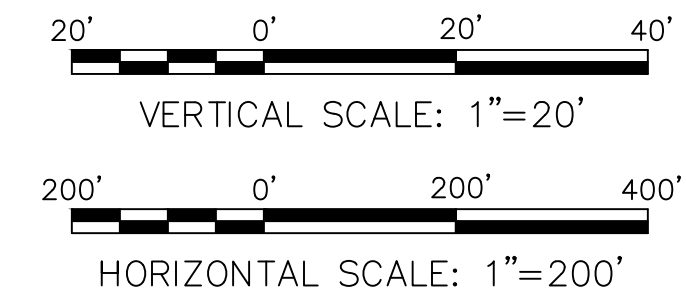
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (23 OF 185)

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-024-CROSS SECTIONS; Plotted: 5/20/2024 3:41 PM by LANDON, KYLE; Saved: 5/14/2024 1:18 PM by JGROTH



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-56.94
PA CHANNEL + AMD	-62.93



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK

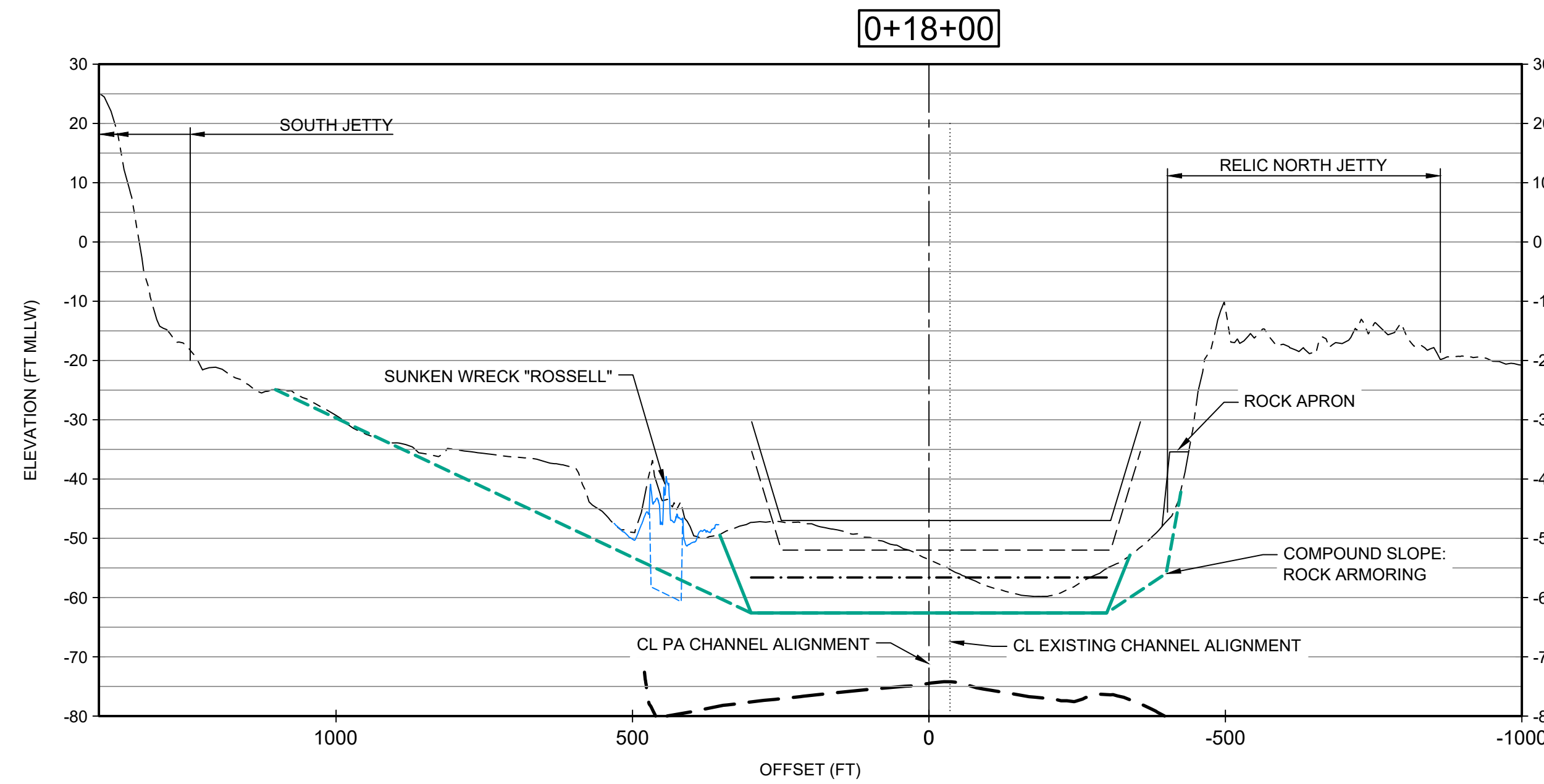
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SUBMITTED BY:	PLOT SCALE:	SOLICITATION NO.:
FILE NAME:	DRAWING NUMBER:	CONTRACT NO.:

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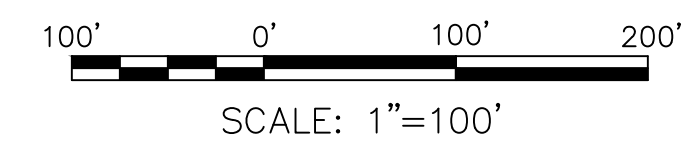
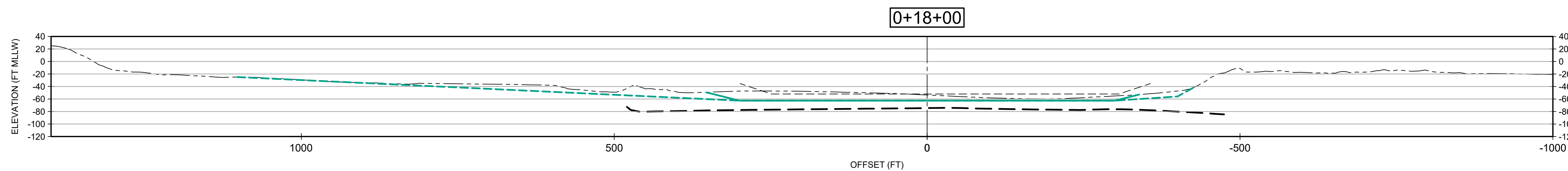
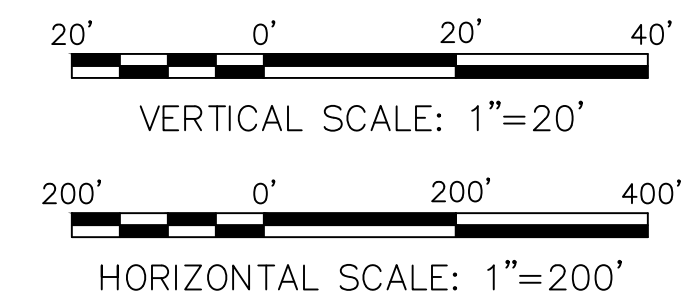
COOS BAY OREGON
 COOS BAY CHANNEL MODIFICATION
 CROSS SECTION (24 OF 185)

SHEET IDENTIFICATION
FIG-025
 INDEX 25 OF 186

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EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-56.61
PA CHANNEL + AMD	-62.60



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- ROSSEL SURVEY (DEA, 2016— SEE: SUB-APPENDIX 2, ATT. D)
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
- · - · - APPROXIMATE LIMITS OF THE ROSSEL HULL (DEA, 2016)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

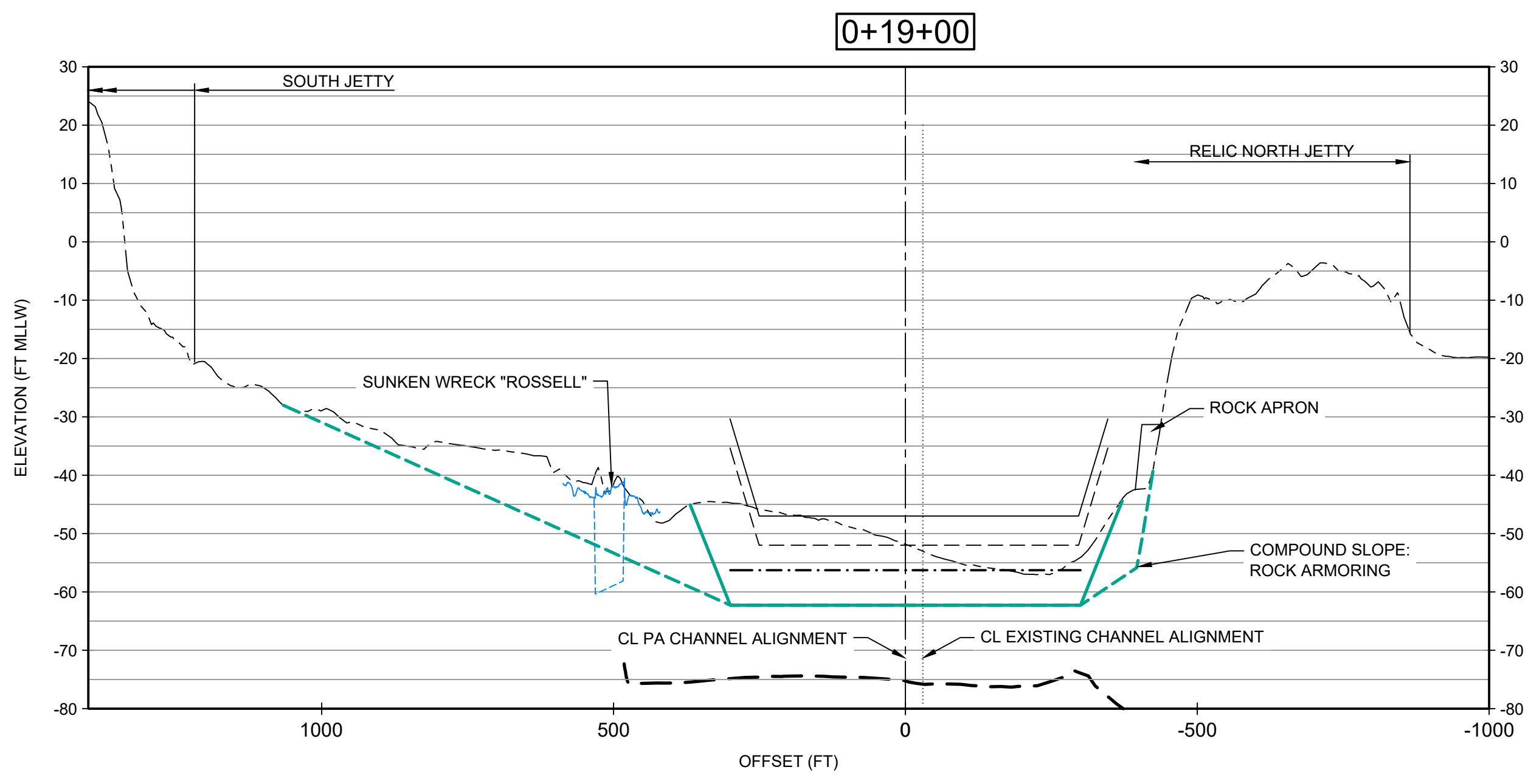
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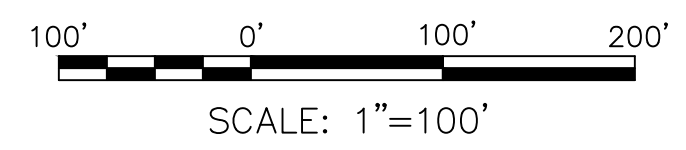
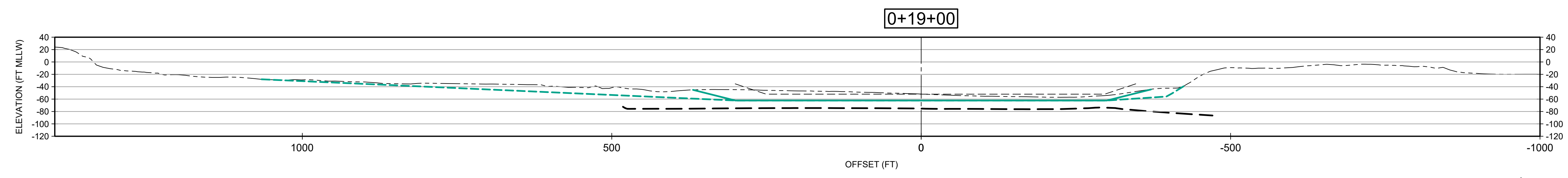
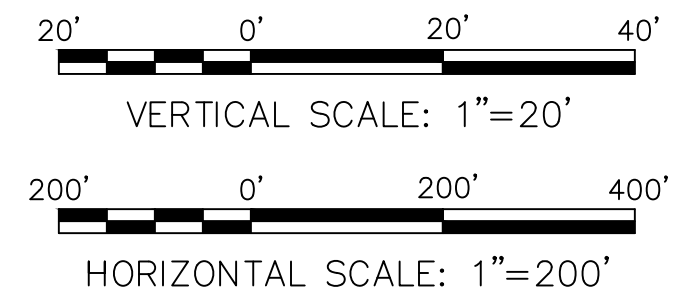
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (25 OF 185)

SHEET IDENTIFICATION
FIG-026
INDEX 26 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-56.28
PA CHANNEL + AMD	-62.27



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	APPROXIMATE LIMITS OF THE ROSSEL HULL (DEA, 2016)
—	ROSSEL SURVEY (DEA, 2016- SEE: SUB-APPENDIX 2, ATT. D)		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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DRAWN BY: HP	SUBMITTED BY:	CONTRACT NO.:	
PLOT SCALE:	PLOT DATE:	DRAWING NUMBER:	
SIZE:	FILE NAME:		

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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (26 OF 185)

SHEET IDENTIFICATION
FIG-027
 INDEX 27 OF 186



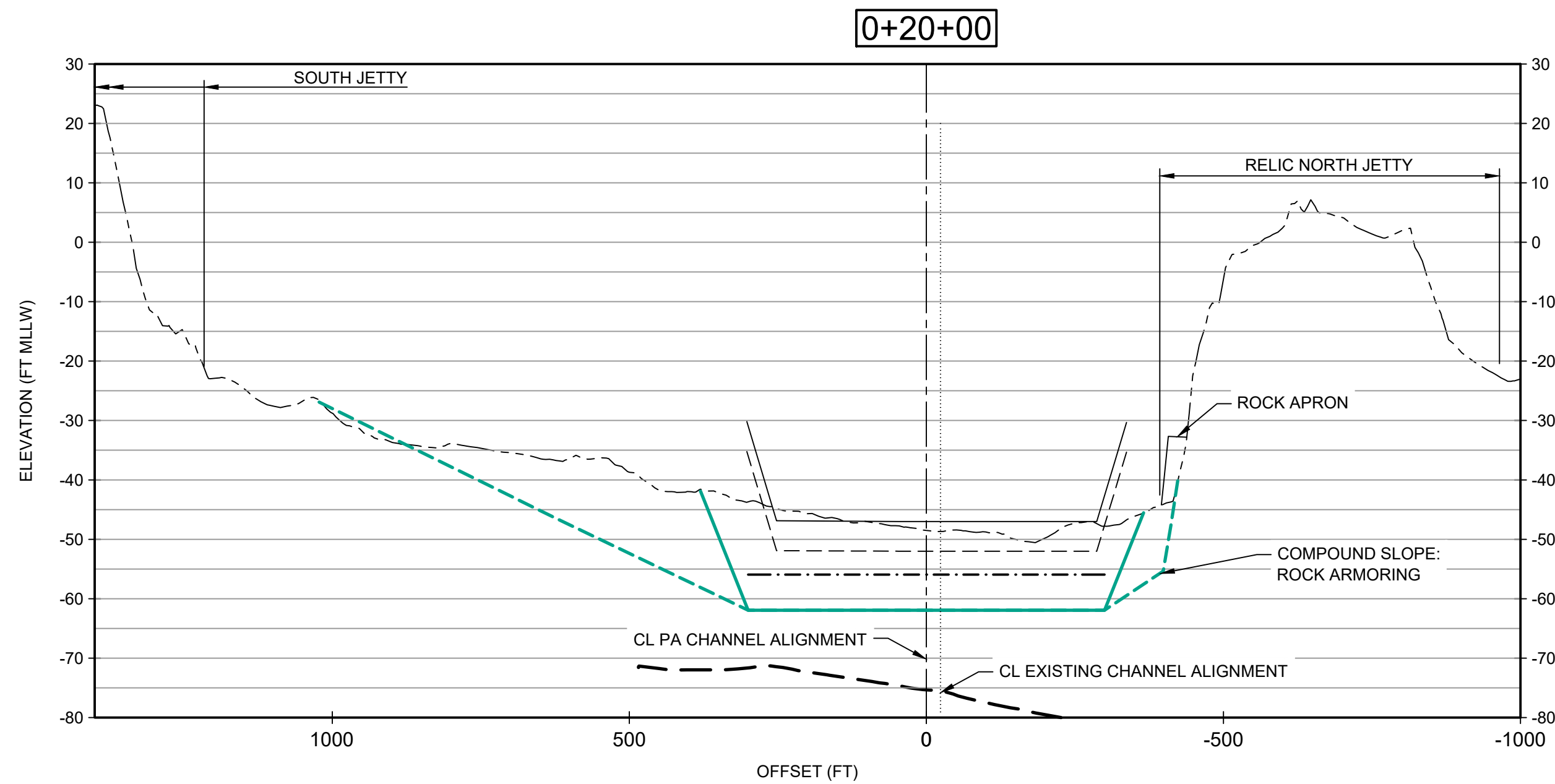
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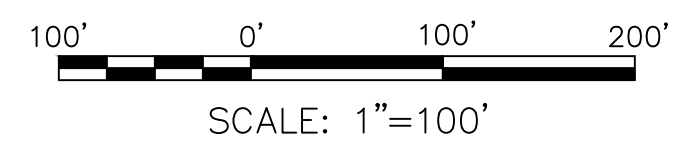
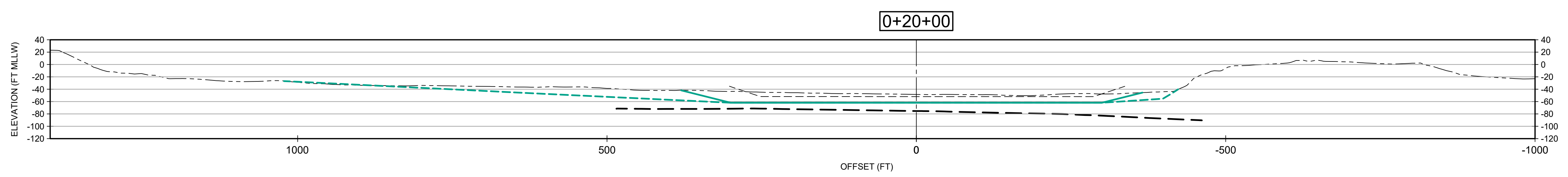
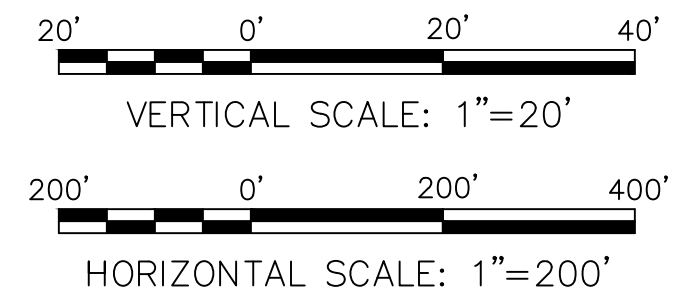
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (27 OF 185)

SHEET IDENTIFICATION
FIG-028
 INDEX 28 OF 186



EXISTING CHANNEL DEPTH	-47.00
EXISTING CHANNEL DEPTH + AMD	-52.00
PA CHANNEL DEPTH	-55.95
PA CHANNEL + AMD	-61.94



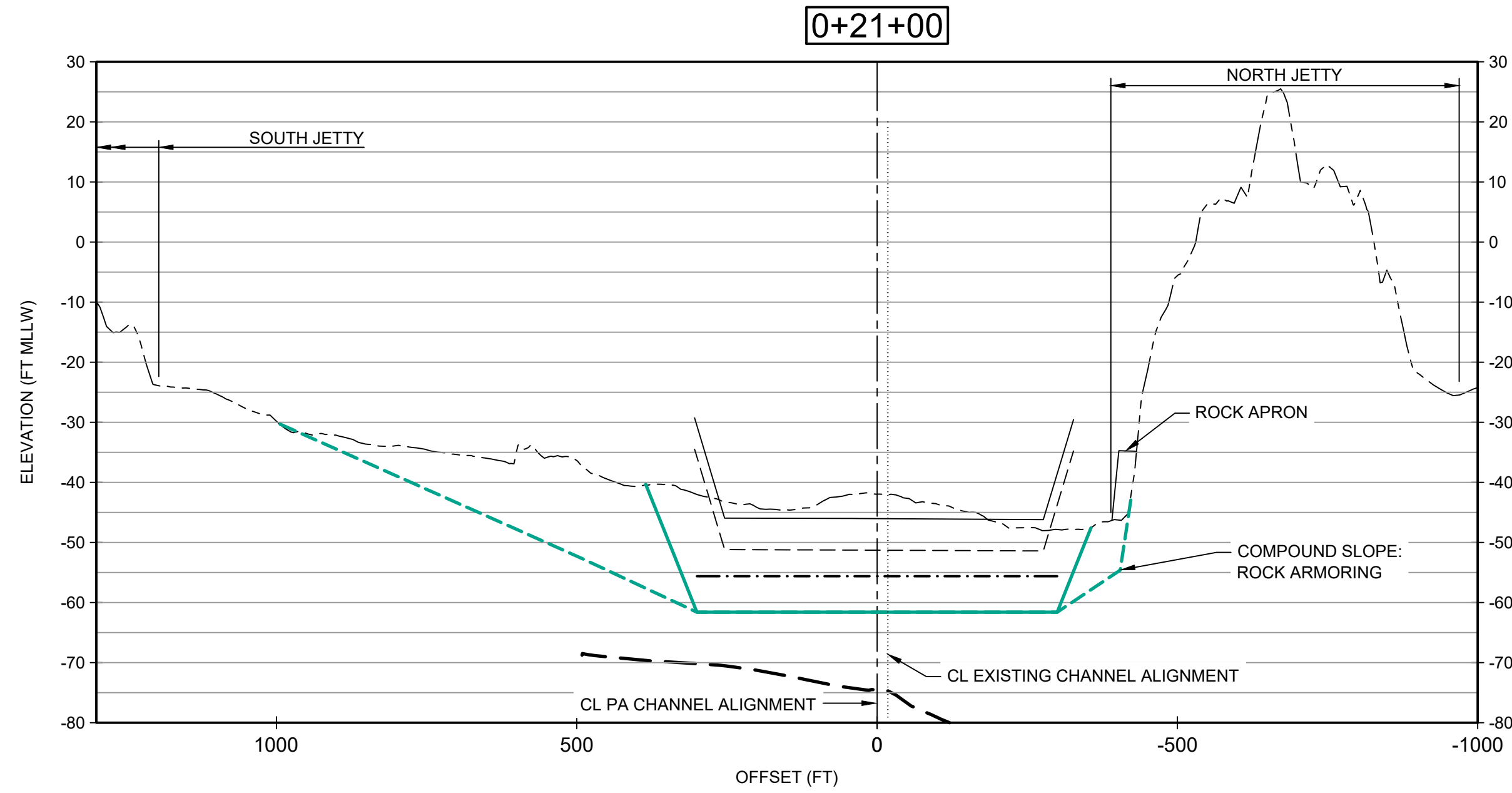
LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		APPROXIMATE LIMITS OF THE ROSSEL HULL (DEA, 2016)
	ROSSEL SURVEY (DEA, 2016- SEE: SUB-APPENDIX 2, ATT. D)		

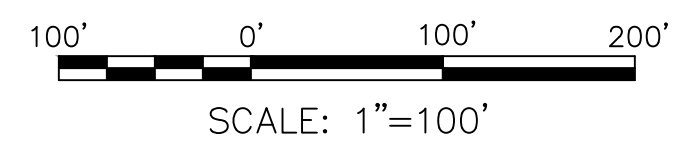
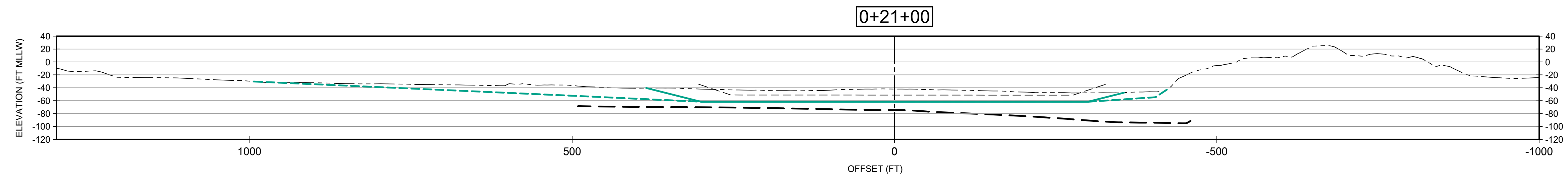
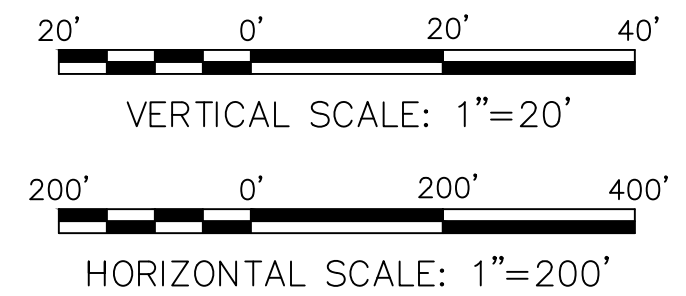
NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-46.03
EXISTING CHANNEL DEPTH + AMD	-51.28
PA CHANNEL DEPTH	-55.62
PA CHANNEL + AMD	-61.60



LEGEND

—————	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
-----	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
-----	PA CHANNEL LIMITS	-----	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

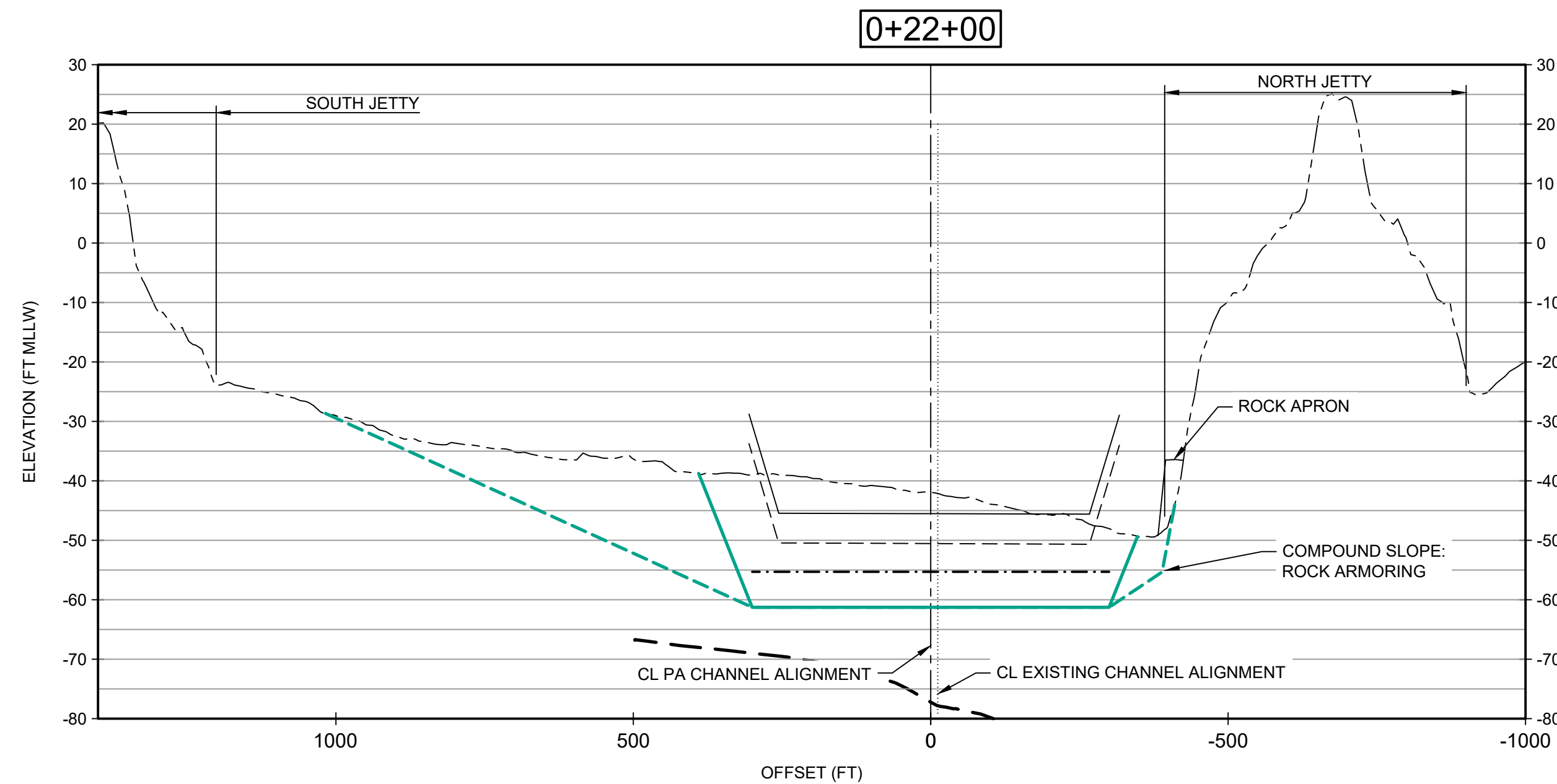
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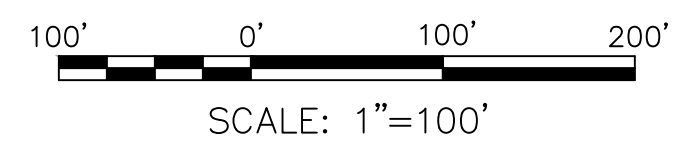
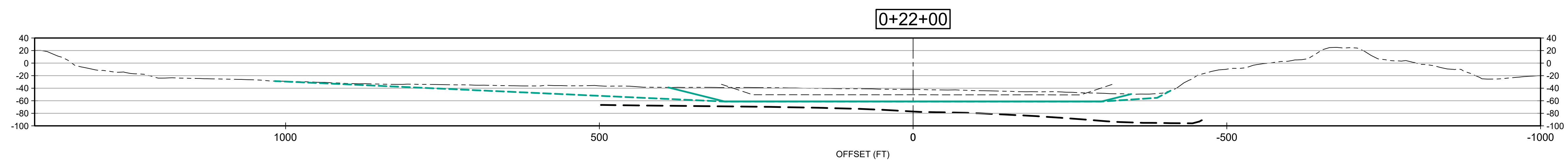
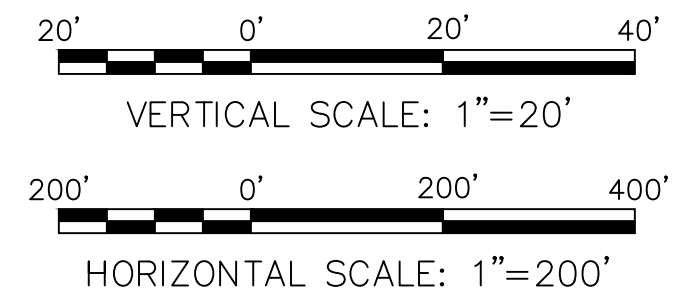
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (28 OF 185)

SHEET IDENTIFICATION
FIG-029
 INDEX 29 OF 186



EXISTING CHANNEL DEPTH	-45.52
EXISTING CHANNEL DEPTH + AMD	-50.55
PA CHANNEL DEPTH	-55.29
PA CHANNEL + AMD	-61.27



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



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DATE: 2016/07/11

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SIZE:

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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (29 OF 185)

SHEET IDENTIFICATION
FIG-030
 INDEX 30 OF 186

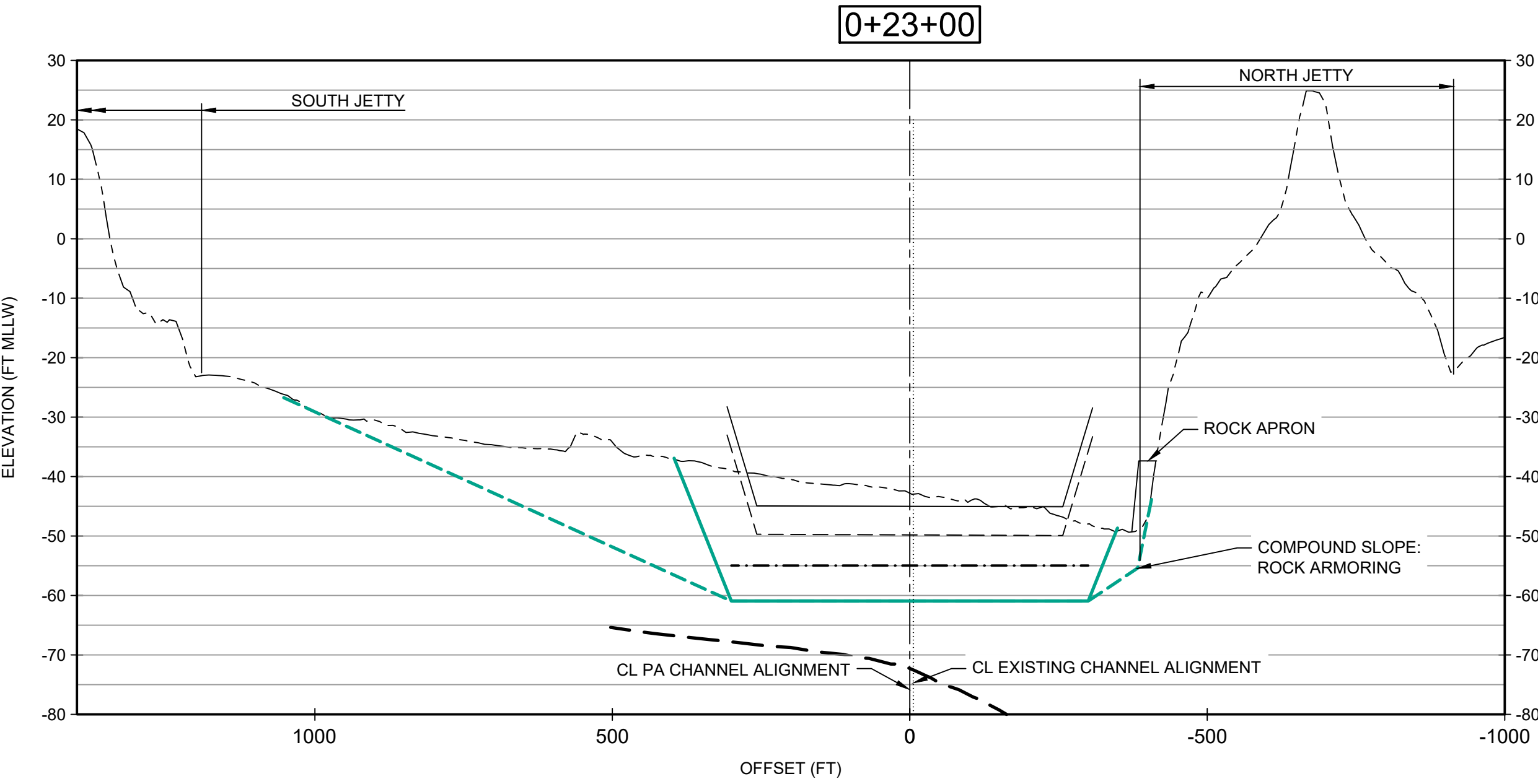


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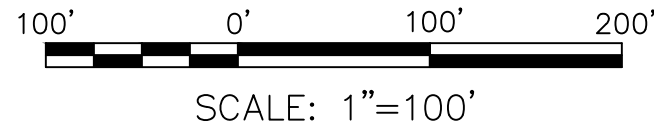
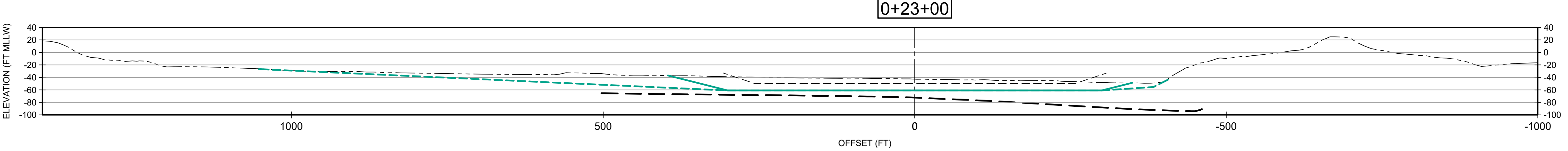
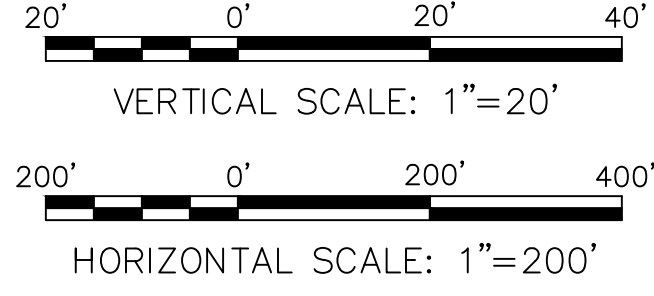
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B

A



EXISTING CHANNEL DEPTH	-45.02
EXISTING CHANNEL DEPTH + AMD	-49.81
PA CHANNEL DEPTH	-54.96
PA CHANNEL + AMD	-60.94



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

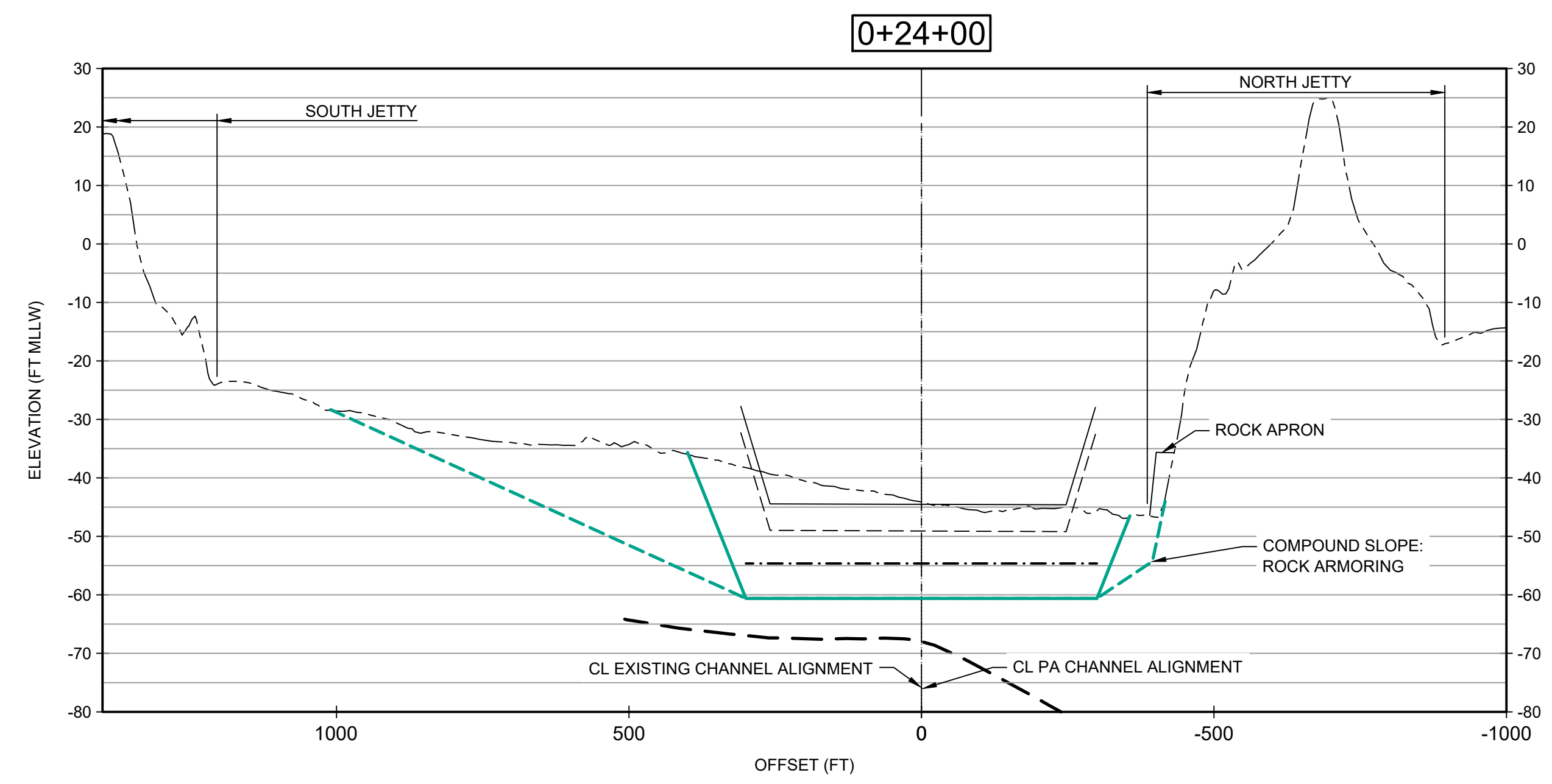
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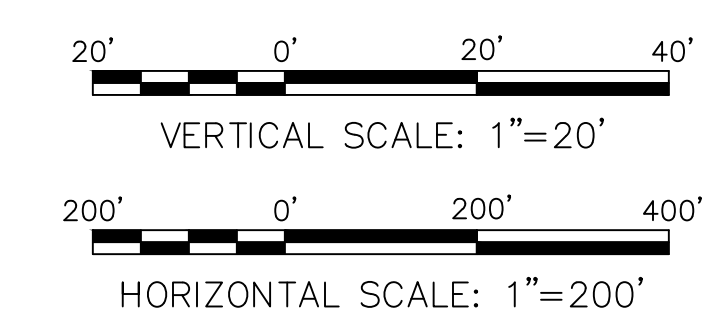
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (30 OF 185)

SHEET IDENTIFICATION
FIG-031
 INDEX 31 OF 186



EXISTING CHANNEL DEPTH	-44.52
EXISTING CHANNEL DEPTH + AMD	-49.08
PA CHANNEL DEPTH	-54.63
PA CHANNEL + AMD	-60.60



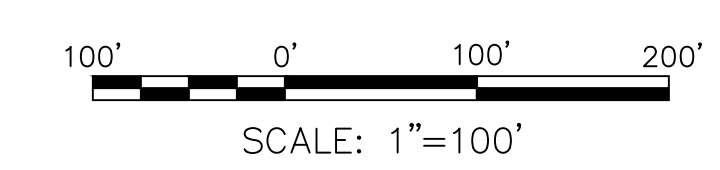
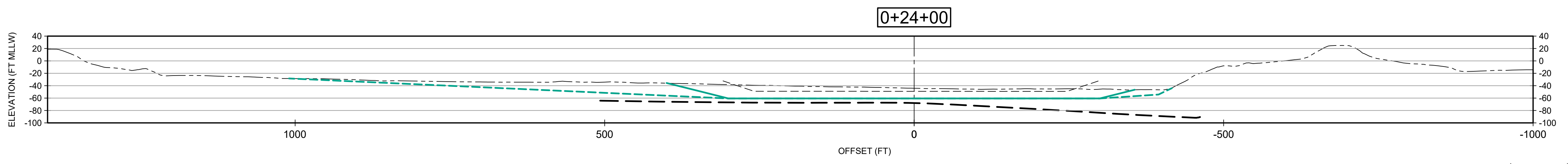
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (31 OF 185)

SHEET IDENTIFICATION
FIG-032
 INDEX 32 OF 186

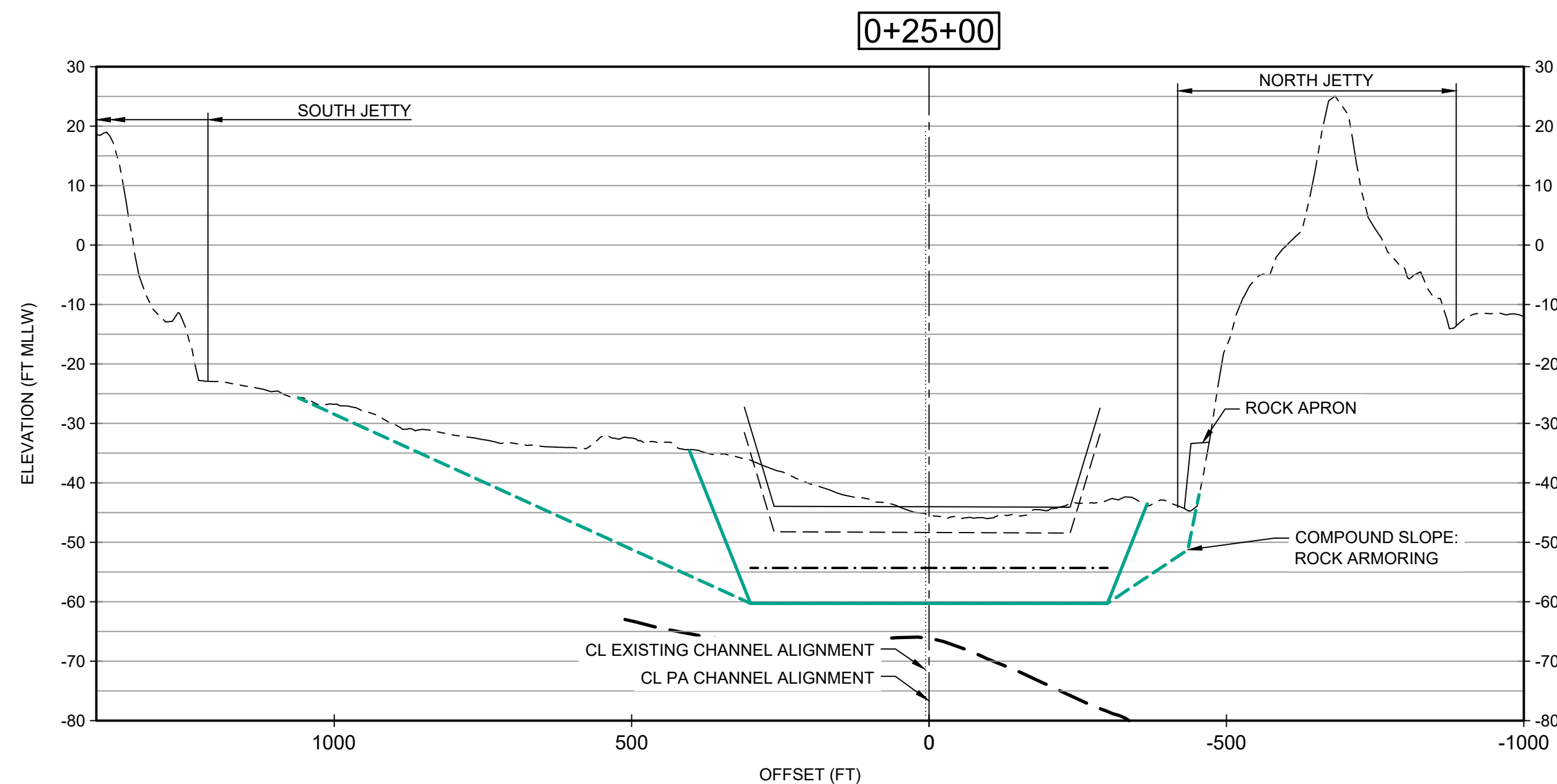


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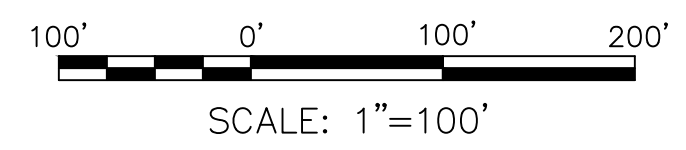
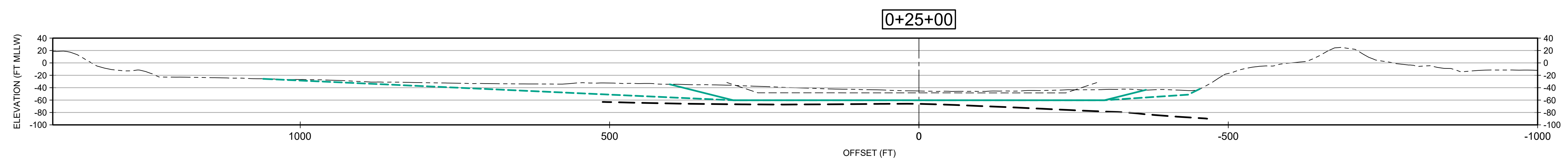
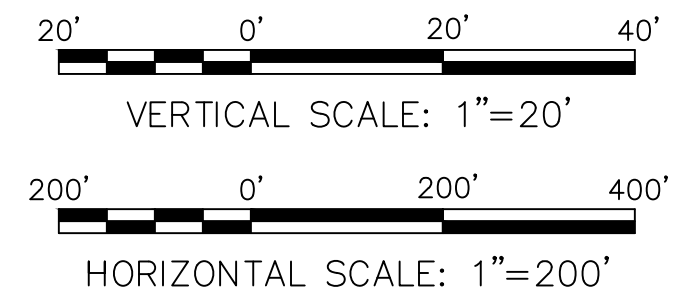
—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-44.02
EXISTING CHANNEL DEPTH + AMD	-48.34
PA CHANNEL DEPTH	-54.30
PA CHANNEL + AMD	-60.27



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

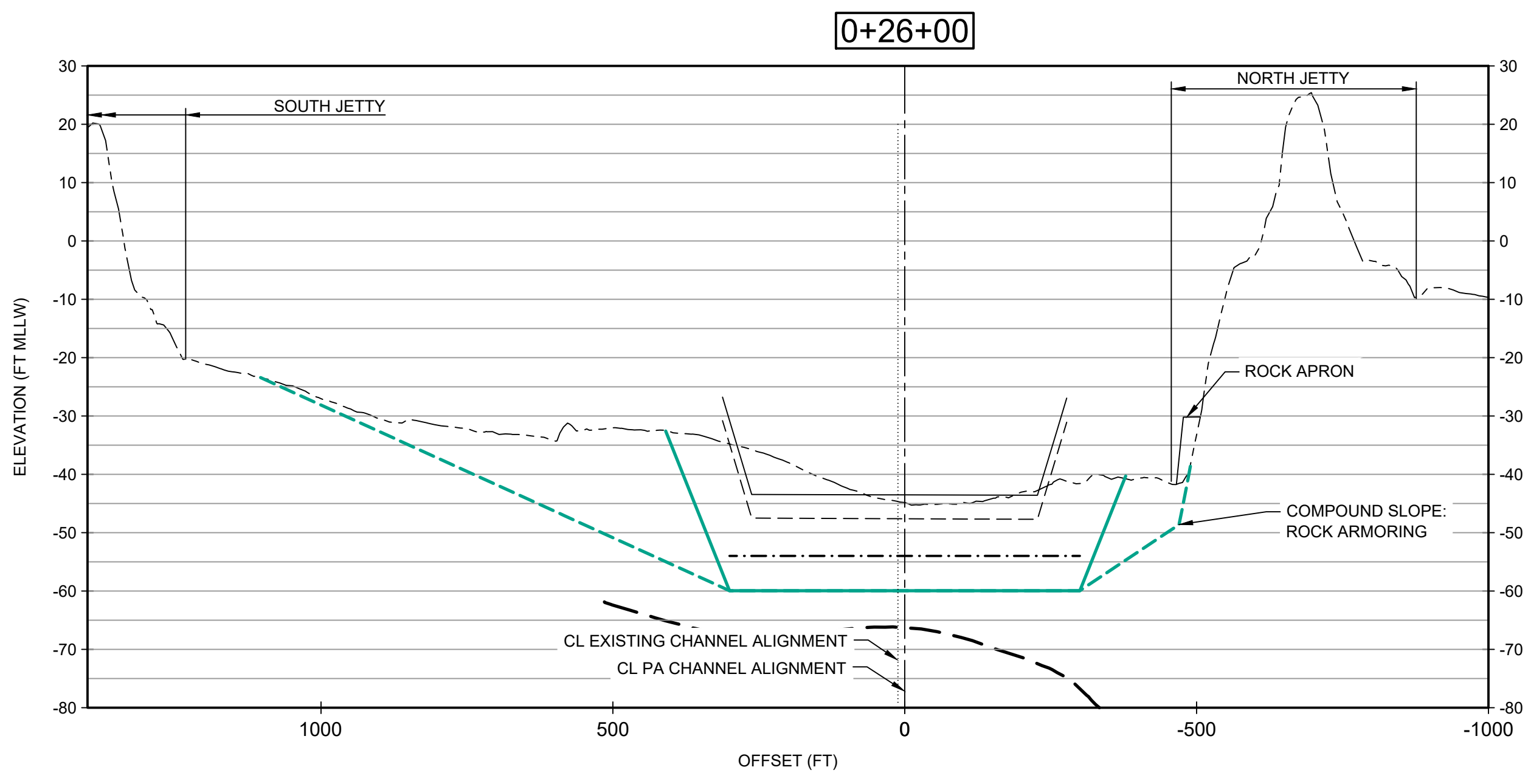
- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

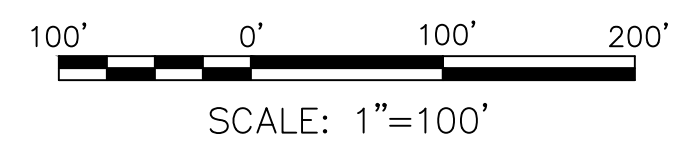
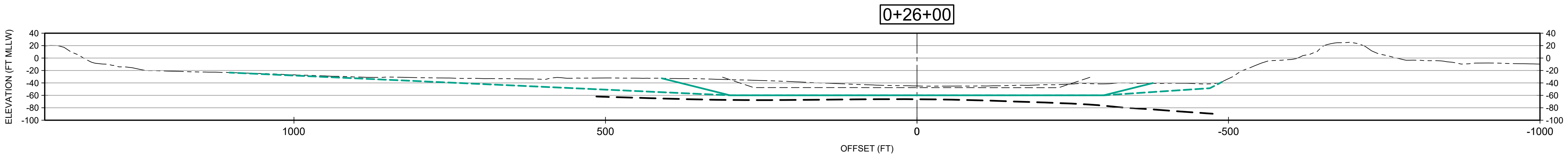
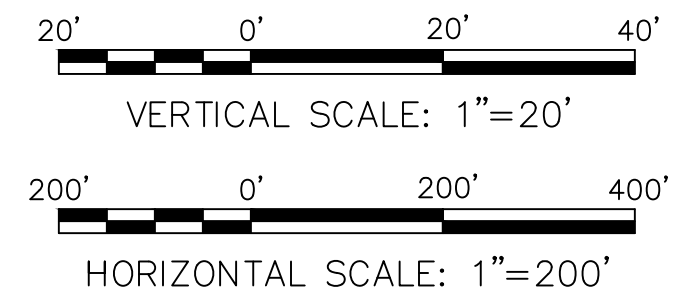
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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		600 UNIVERSITY STREET SEATTLE, WA 98101 (206) 622-0222			
COOS BAY OREGON COOS BAY CHANNEL MODIFICATION CROSS SECTION (32 OF 185)					
SHEET IDENTIFICATION FIG-033 <small>INDEX 33 OF 186</small>					

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-033-CROSS SECTIONS; Plotted: 5/20/2024 3:50 PM by LANDON, KYLE; Saved: 5/14/2024 1:50 PM by JGROTH



EXISTING CHANNEL DEPTH	-43.52
EXISTING CHANNEL DEPTH + AMD	-47.61
PA CHANNEL DEPTH	-53.97
PA CHANNEL + AMD	-59.94



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

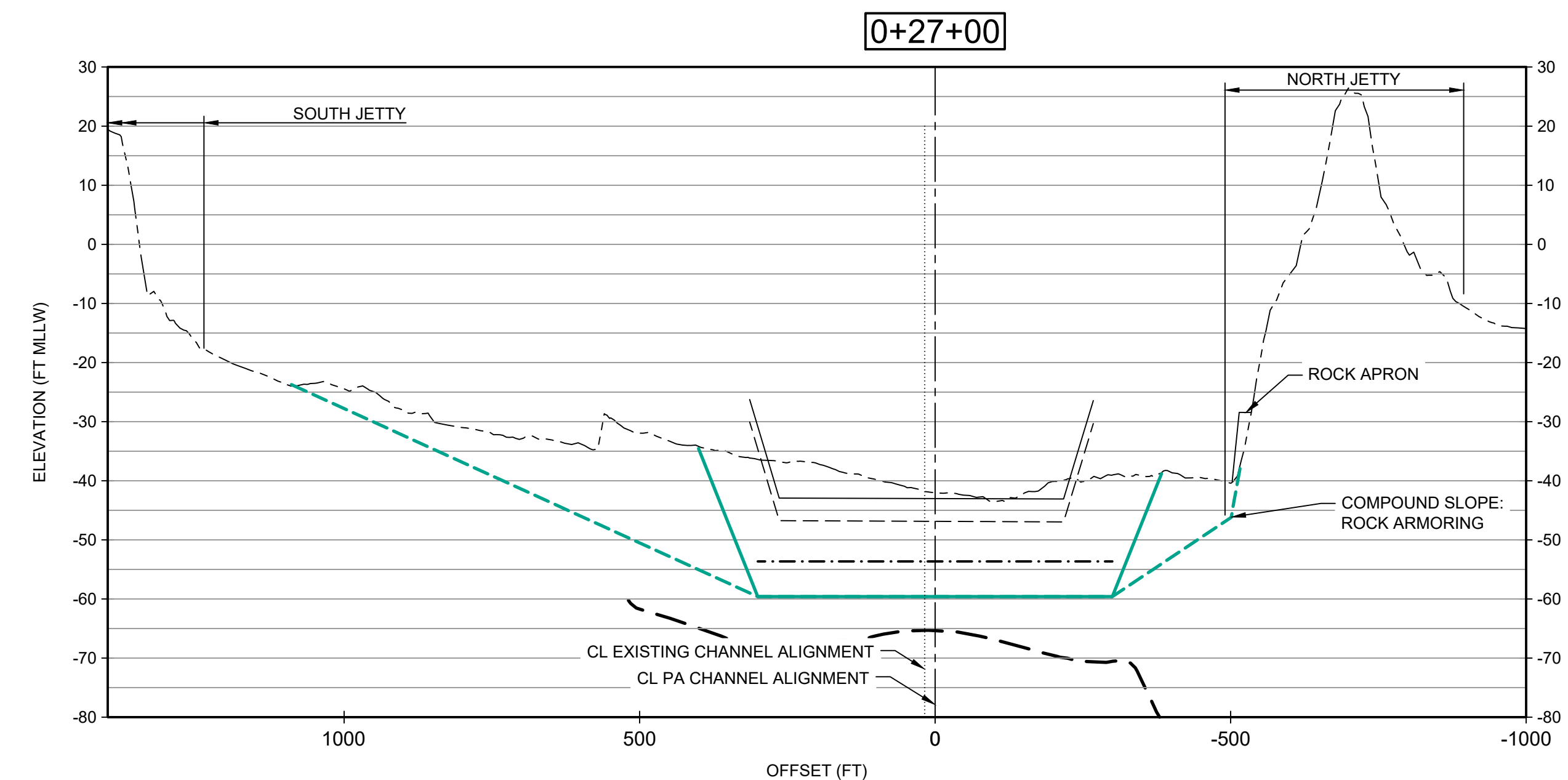


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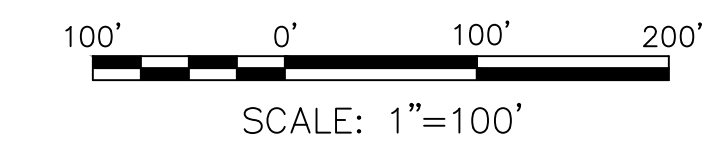
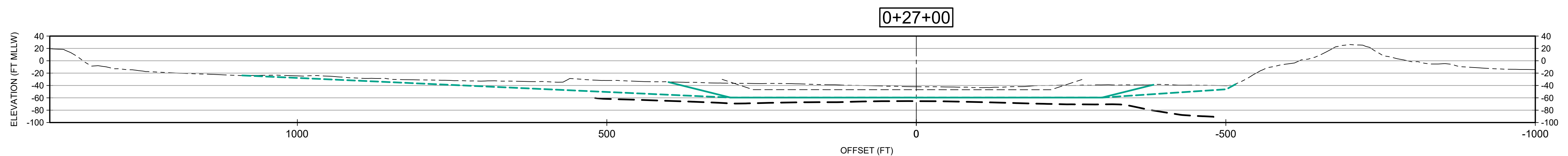
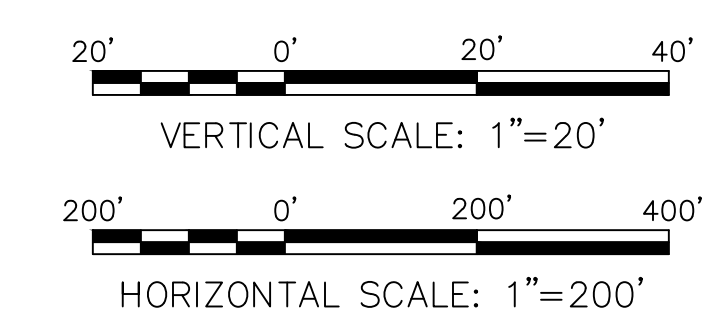
DESIGNED BY: H.P.
DRAWN BY: H.P.
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DATE: 2016/07/11
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (33 OF 185)

SHEET IDENTIFICATION
FIG-034
 INDEX 34 OF 186



EXISTING CHANNEL DEPTH	-43.02
EXISTING CHANNEL DEPTH + AMD	-46.87
PA CHANNEL DEPTH	-53.64
PA CHANNEL + AMD	-59.60



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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DATE: 2016/07/11

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FILE NAME:

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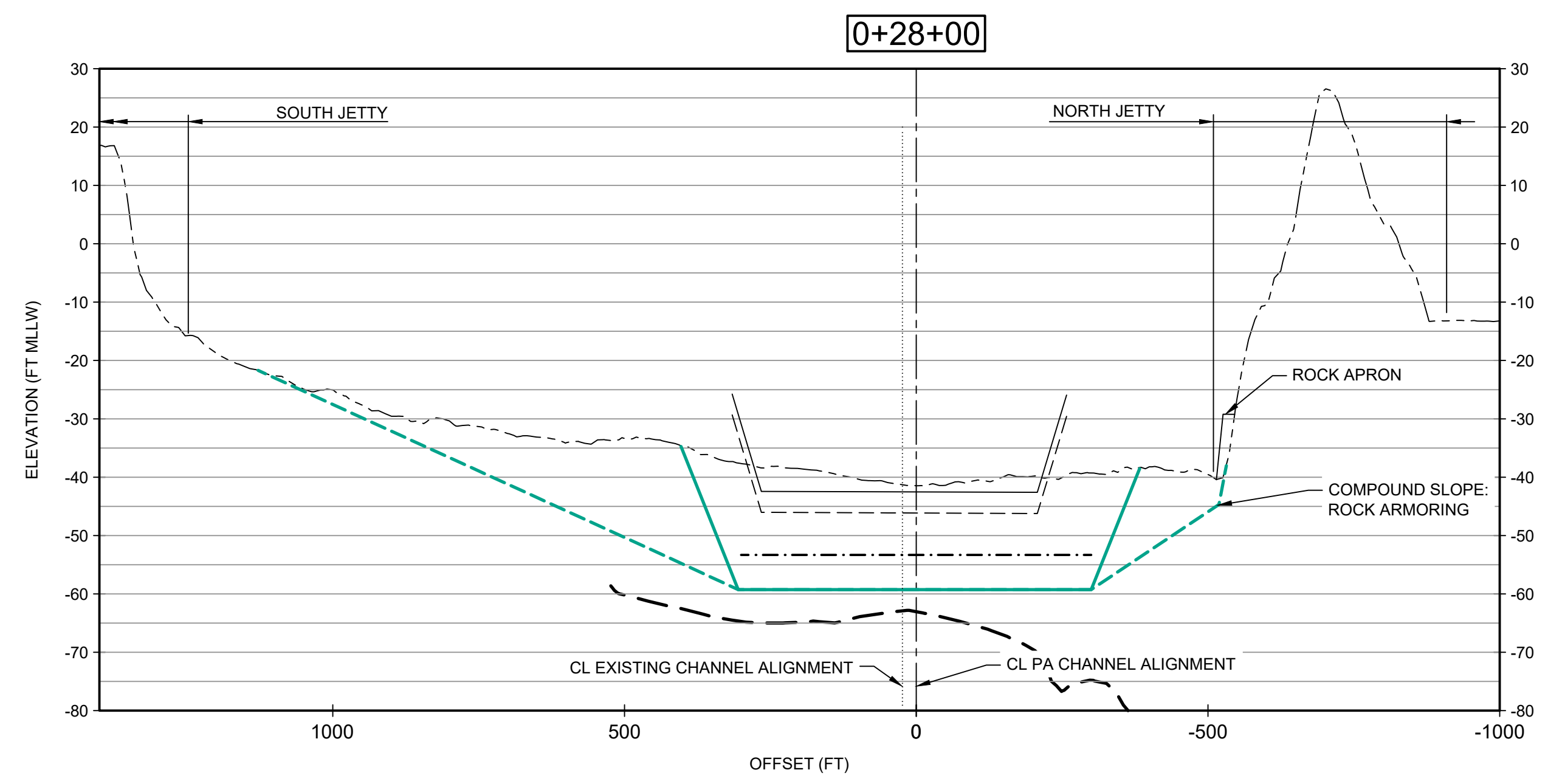
**COOS BAY OREGON
 COOS BAY CHANNEL MODIFICATION
 CROSS SECTION (34 OF 185)**

**SHEET IDENTIFICATION
 FIG-035
 INDEX 35 OF 186**

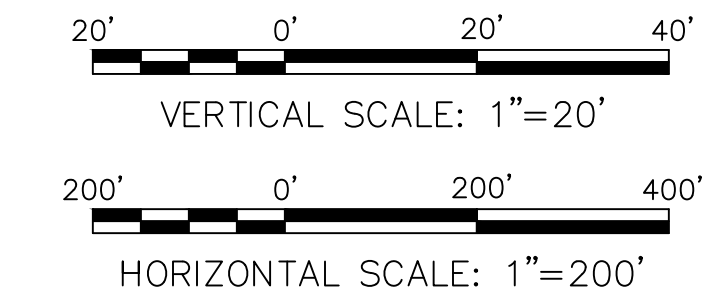


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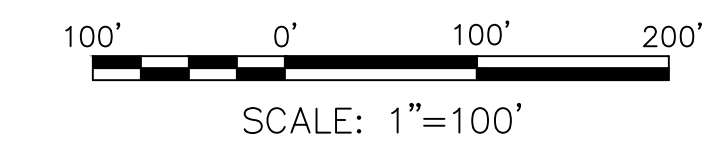
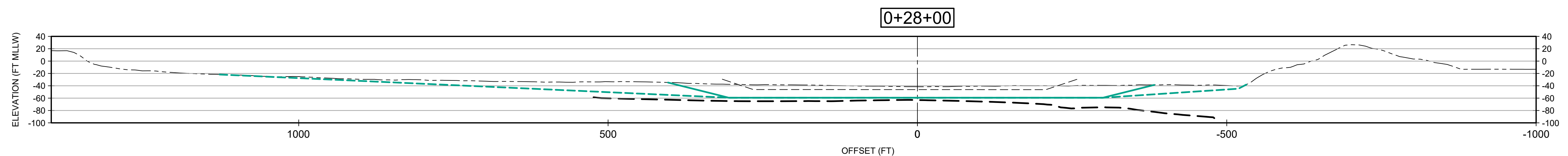
C



EXISTING CHANNEL DEPTH	-42.52
EXISTING CHANNEL DEPTH + AMD	-46.14
PA CHANNEL DEPTH	-53.32
PA CHANNEL + AMD	-59.27



B



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

A

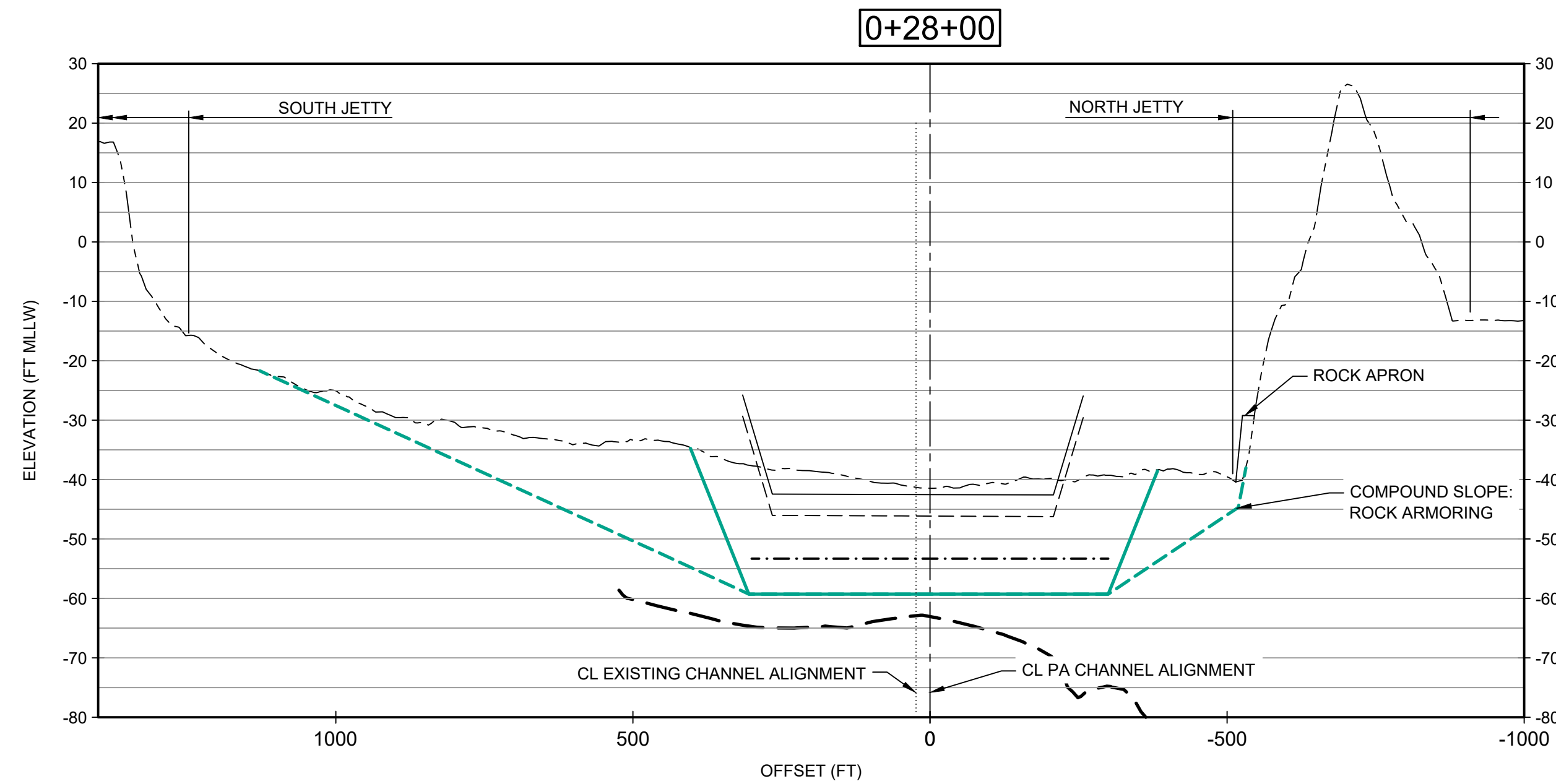
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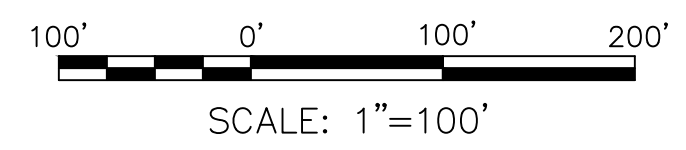
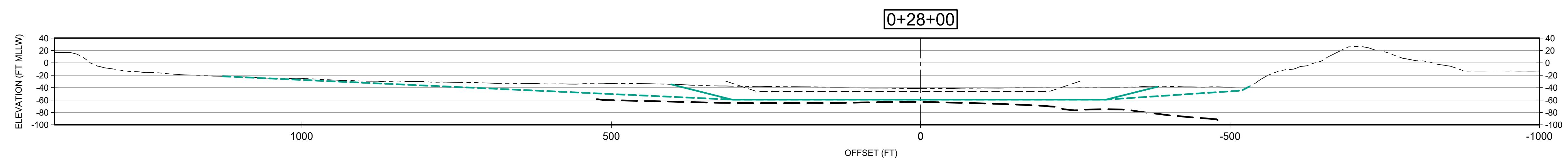
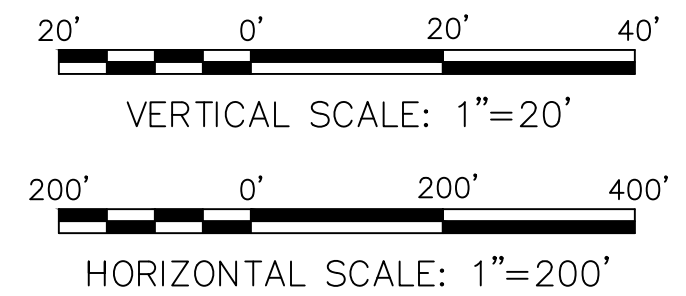
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (35 OF 185)

SHEET IDENTIFICATION
FIG-036
 INDEX 36 of 186

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EXISTING CHANNEL DEPTH	-42.52
EXISTING CHANNEL DEPTH + AMD	-46.14
PA CHANNEL DEPTH	-53.32
PA CHANNEL + AMD	-59.27



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



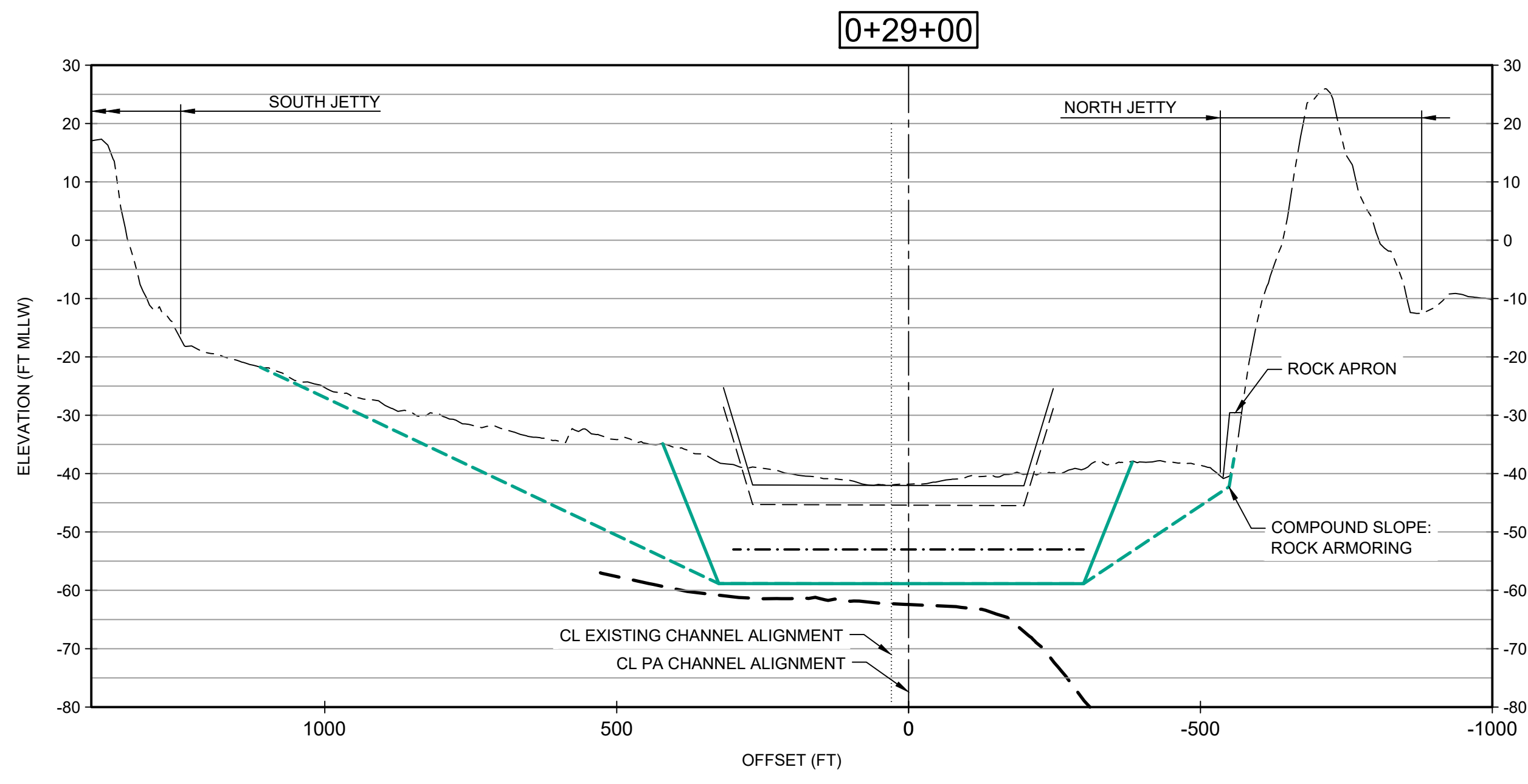
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CHECKED BY: E.C.
DATE: 2016/07/11
SUBMITTED BY: H.P.
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CONTRACT NO.:
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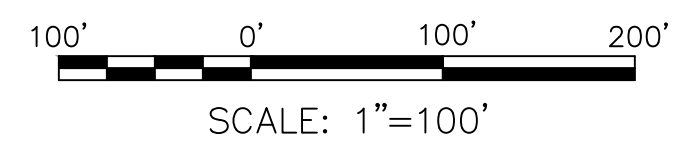
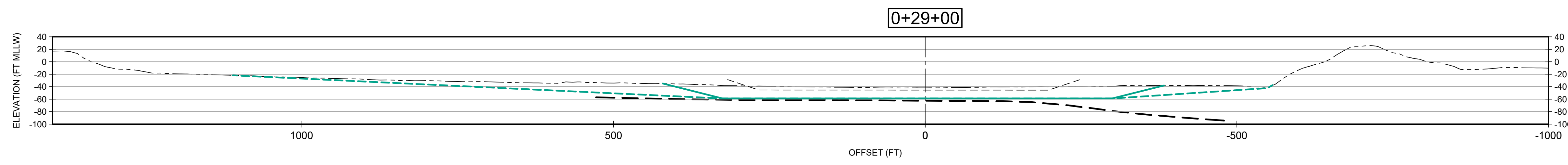
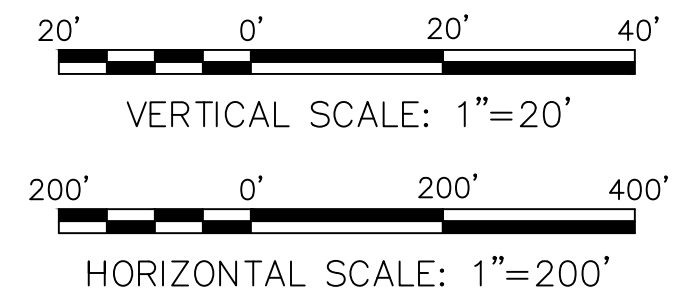
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (36 OF 185)

SHEET IDENTIFICATION
FIG-037
 INDEX 37 OF 186



EXISTING CHANNEL DEPTH	-42.02
EXISTING CHANNEL DEPTH + AMD	-45.40
PA CHANNEL DEPTH	-52.99
PA CHANNEL + AMD	-58.85



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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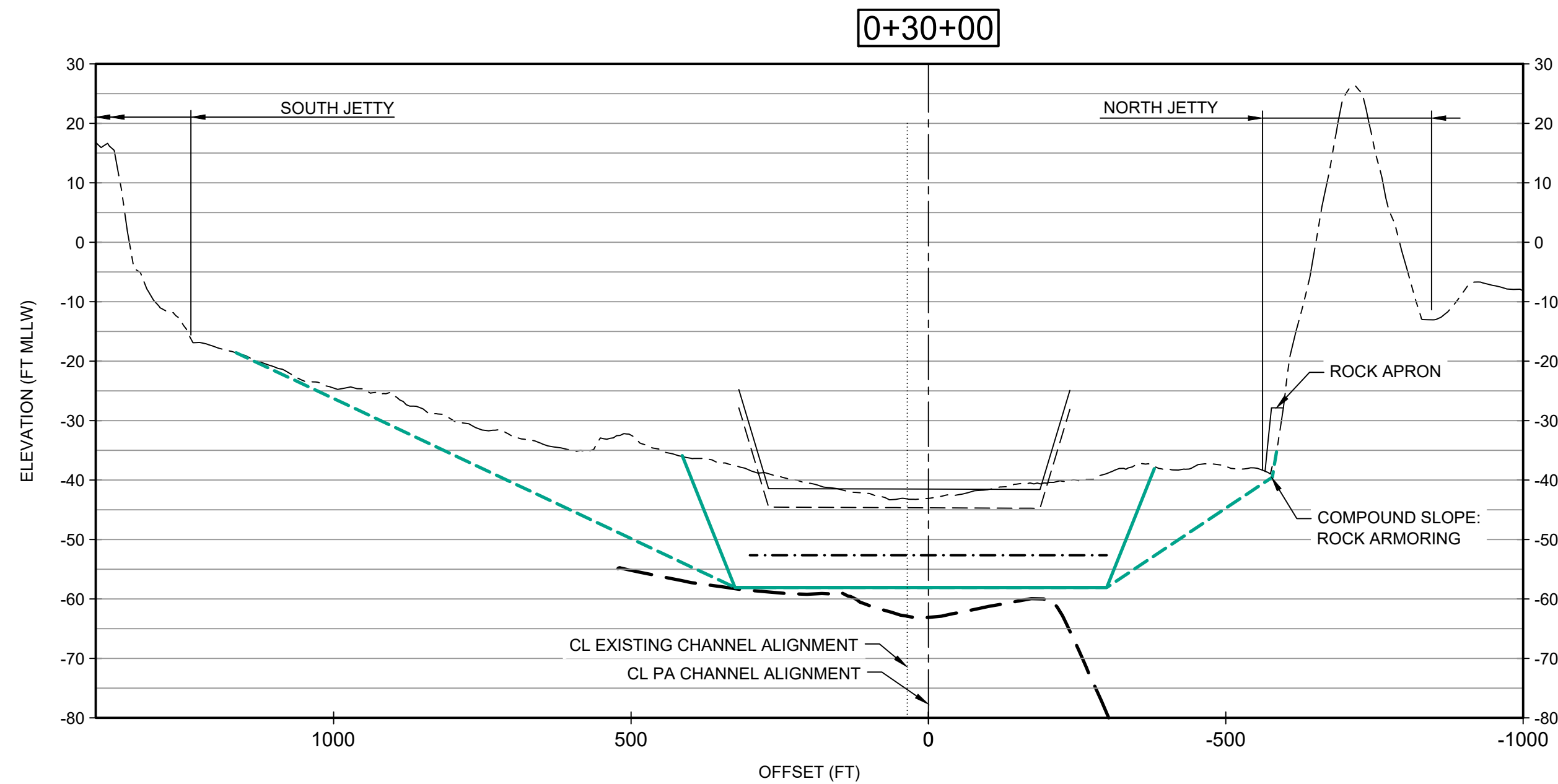
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DATE: 2016/07/11

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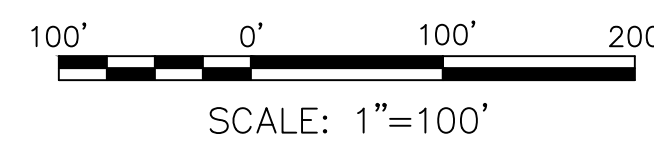
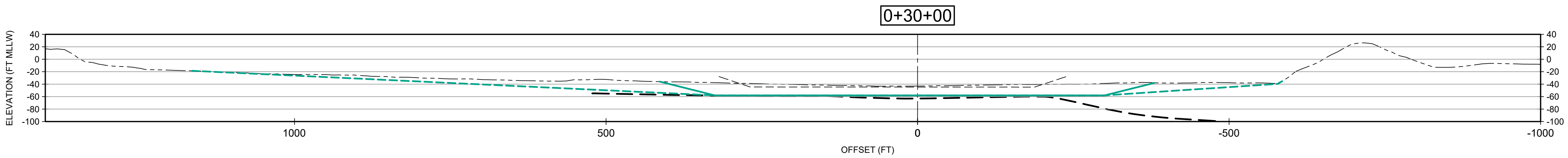
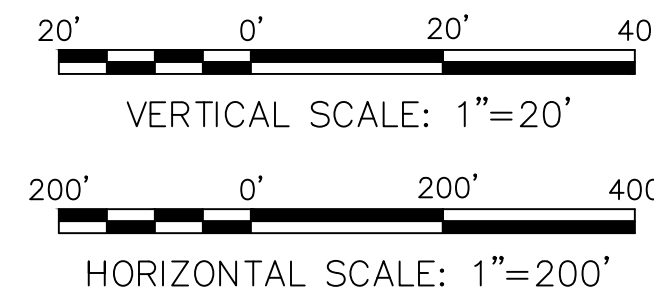
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (37 OF 185)

SHEET IDENTIFICATION
FIG-038
 INDEX 38 OF 186



EXISTING CHANNEL DEPTH	-41.52
EXISTING CHANNEL DEPTH + AMD	-44.66
PA CHANNEL DEPTH	-52.66
PA CHANNEL + AMD	-58.07



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

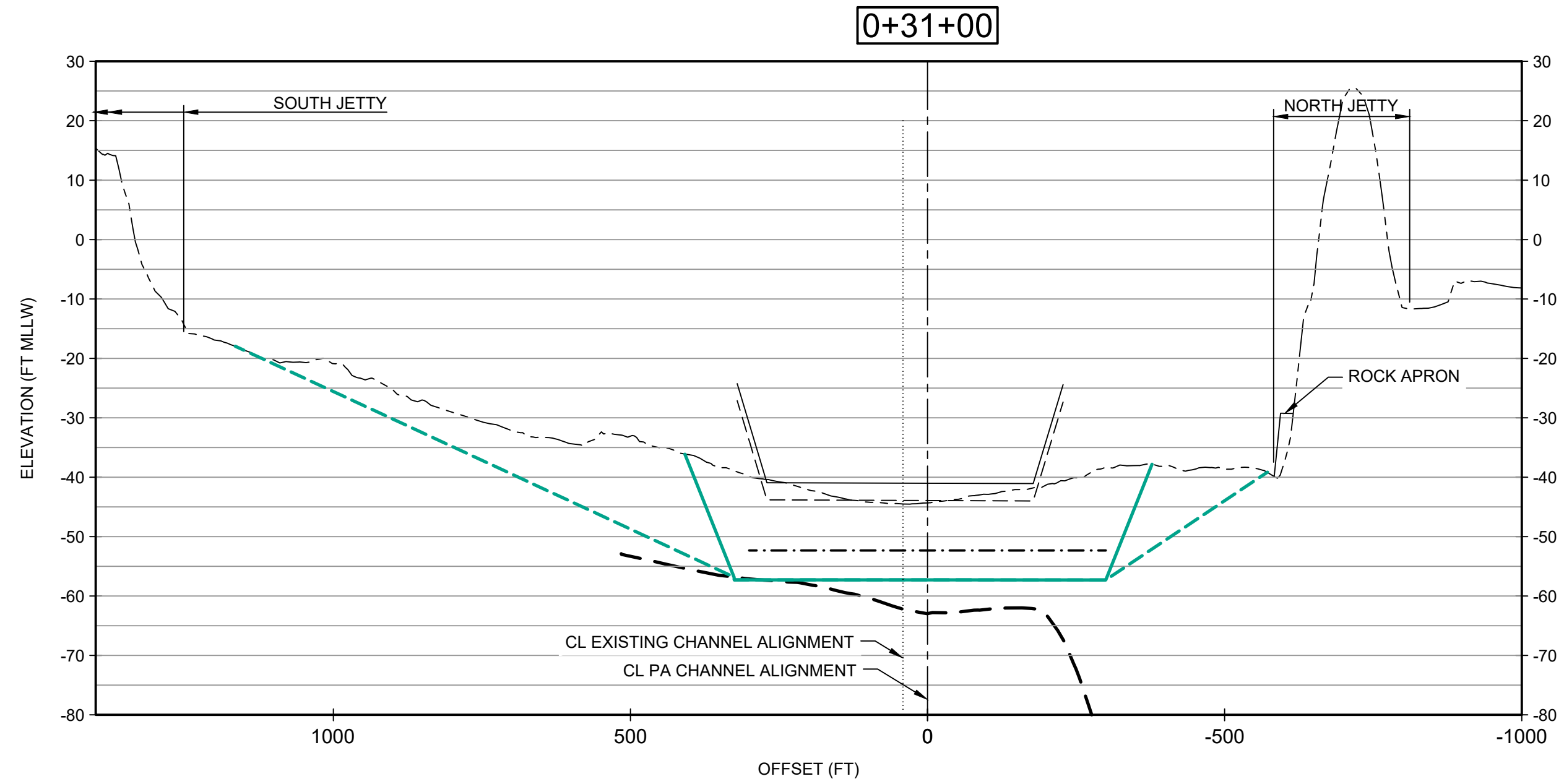
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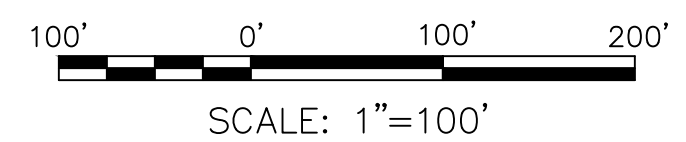
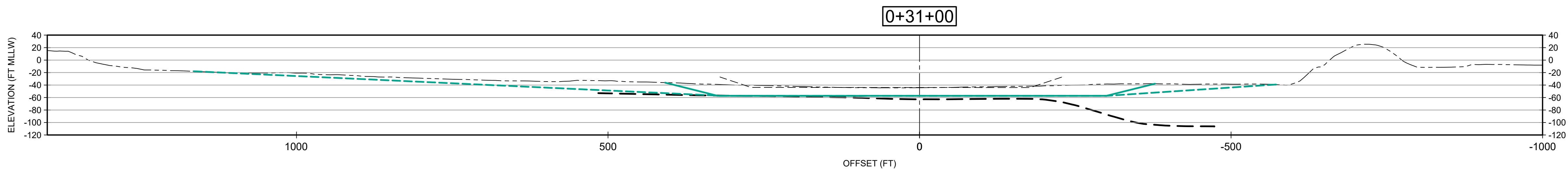
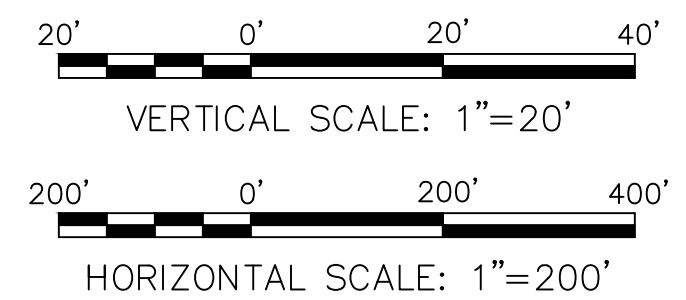
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (38 OF 185)

SHEET IDENTIFICATION
FIG-039
INDEX 39 of 186



EXISTING CHANNEL DEPTH	-41.02
EXISTING CHANNEL DEPTH + AMD	-43.93
PA CHANNEL DEPTH	-52.33
PA CH + AMD + ROCK BUFFER	-57.29



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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											DATE
											DESCRIPTION
											MARK

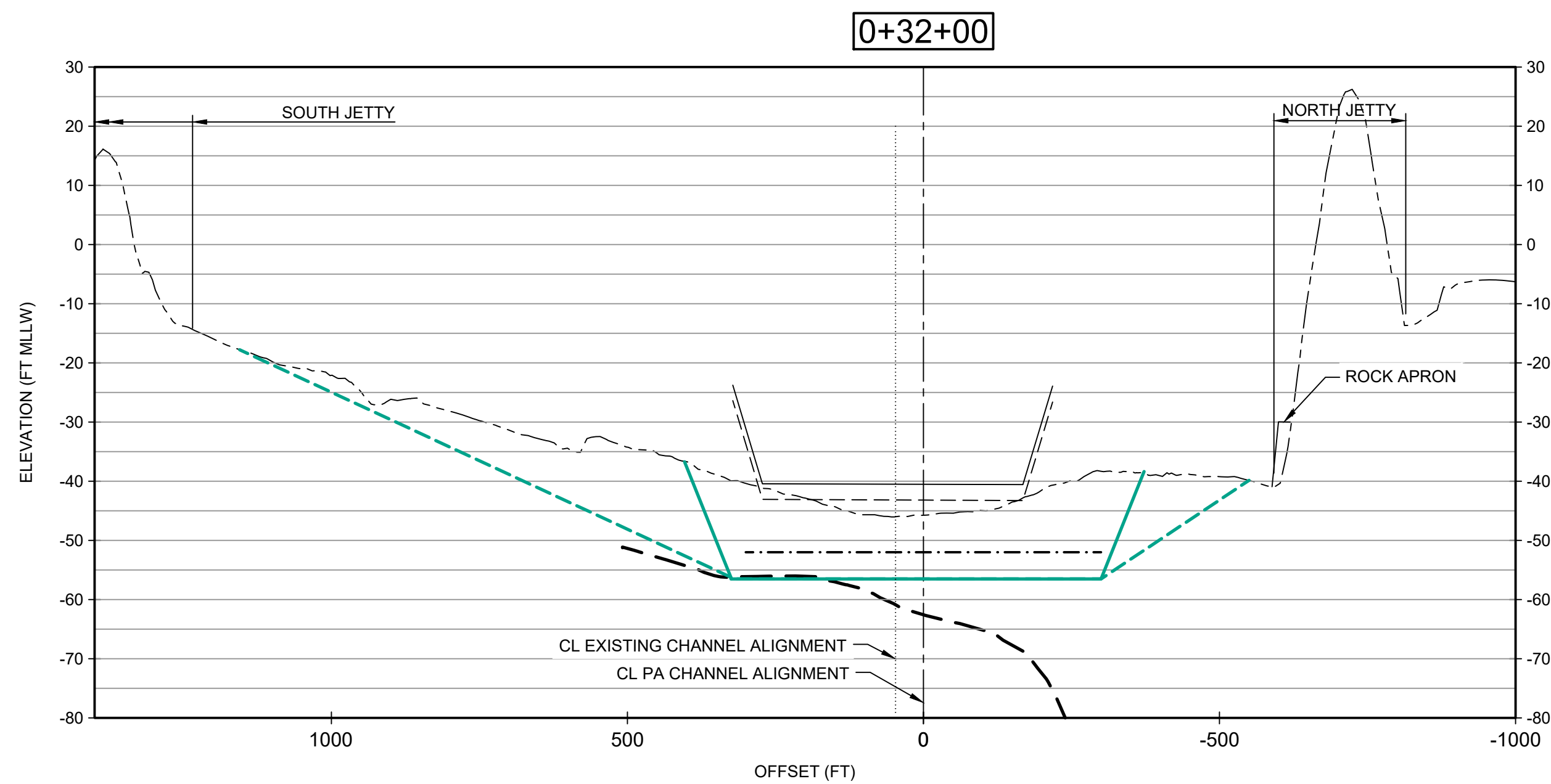
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		600 UNIVERSITY STREET SEATTLE, WA 98101 (206) 622-0222		

COOS BAY OREGON

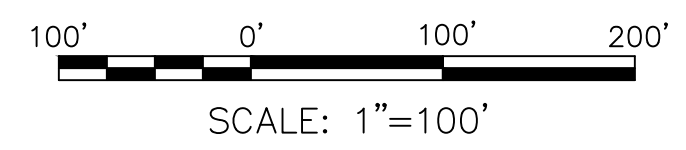
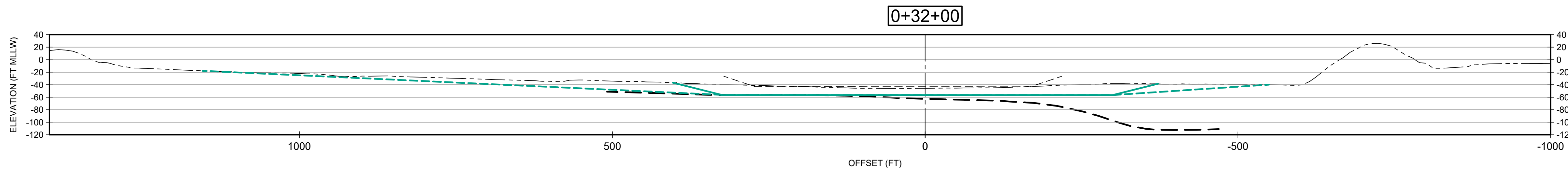
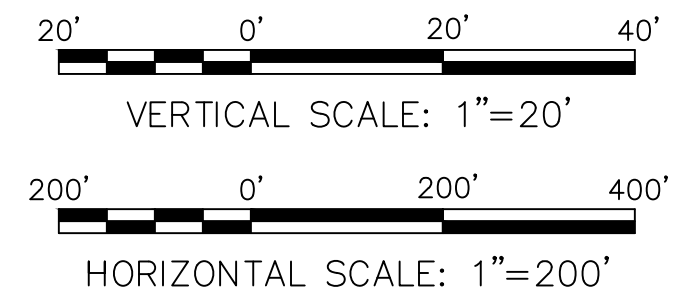
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (39 OF 185)

SHEET IDENTIFICATION
FIG-040
INDEX 40 OF 186



EXISTING CHANNEL DEPTH	-40.52
EXISTING CHANNEL DEPTH + AMD	-43.19
PA CHANNEL DEPTH	-52.00
PA CH + AMD + ROCK BUFFER	-56.52



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

									APPR.
									DATE
									DESCRIPTION
									MARK

DESIGNED BY: [blank]

DRAWN BY: H.P.

CHECKED BY: EC

DATE: 2016/07/11

CONTRACT NO.: [blank]

DRAWING NUMBER: [blank]

FILE NAME: [blank]

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COOS BAY OREGON

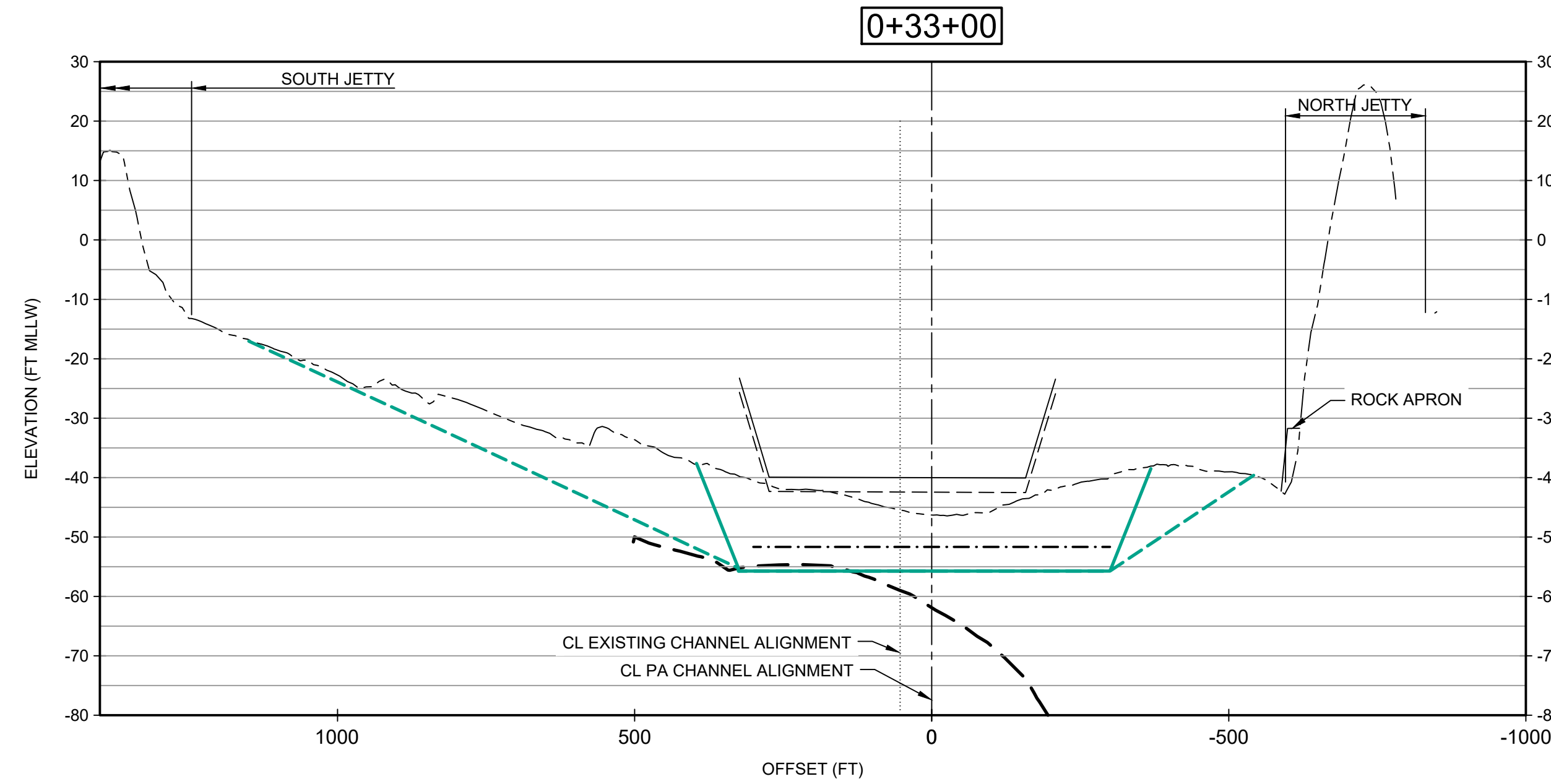
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (40 OF 185)

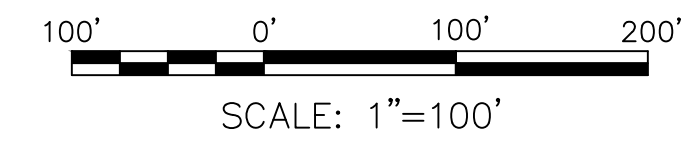
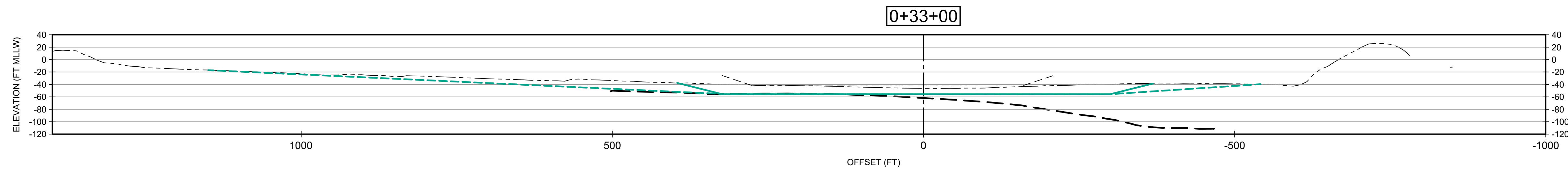
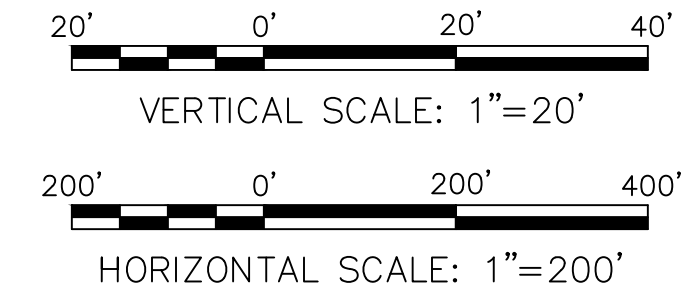
SHEET IDENTIFICATION

FIG-041

INDEX 41 OF 186



EXISTING CHANNEL DEPTH			25' ROCK O.W.	-40.03
EXISTING CHANNEL DEPTH + AMD				-42.46
PA CHANNEL DEPTH				-51.67
PA CH + AMD + ROCK BUFFER				-55.74



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

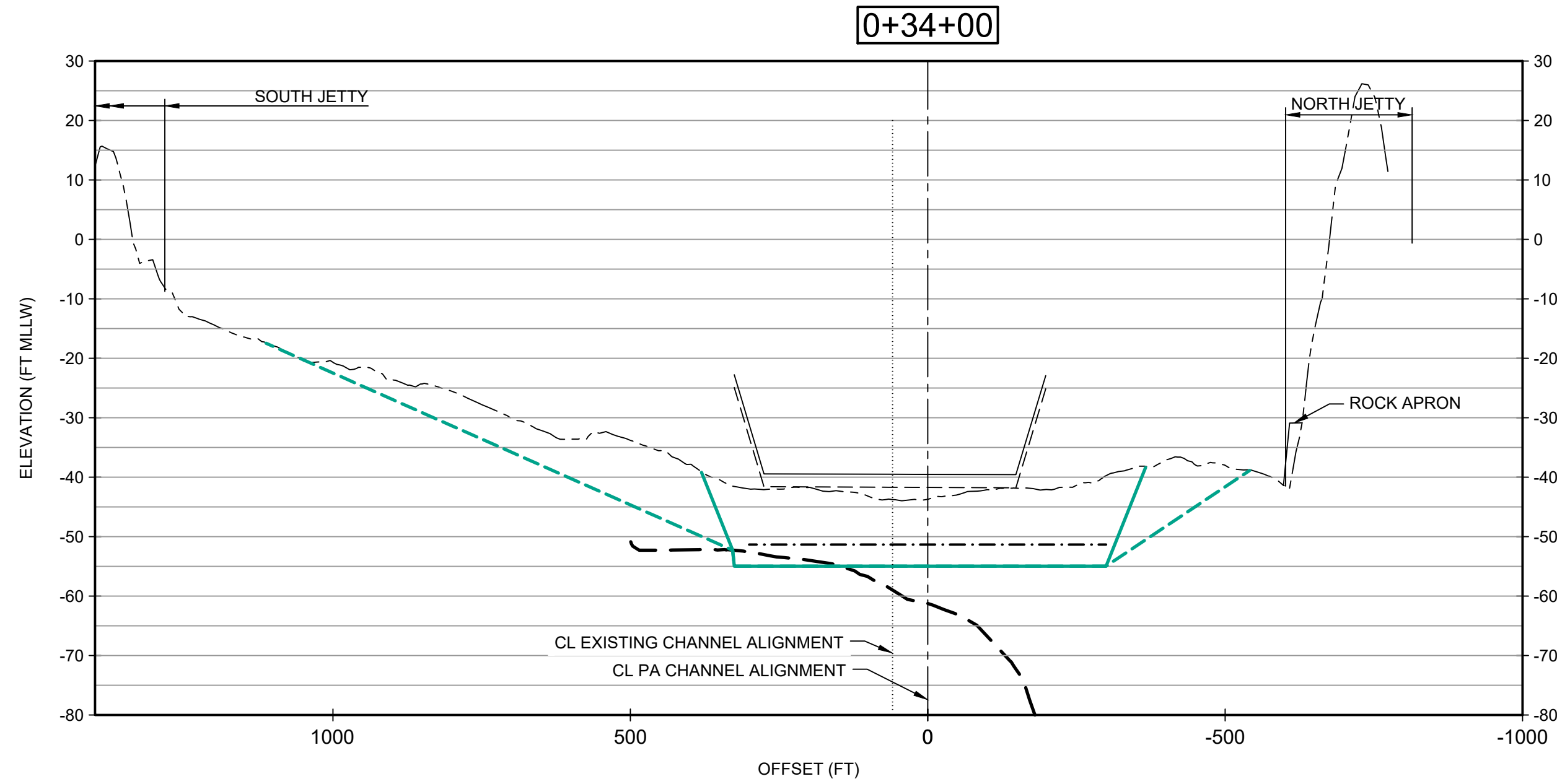
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DESIGNED BY: HP
 DRAWN BY: EC
 CHECKED BY: EC
 DATE: 2016/07/11

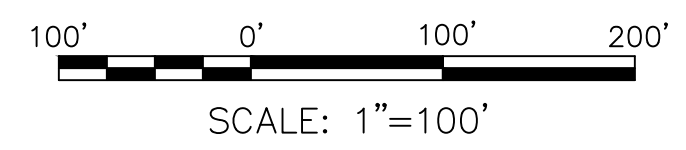
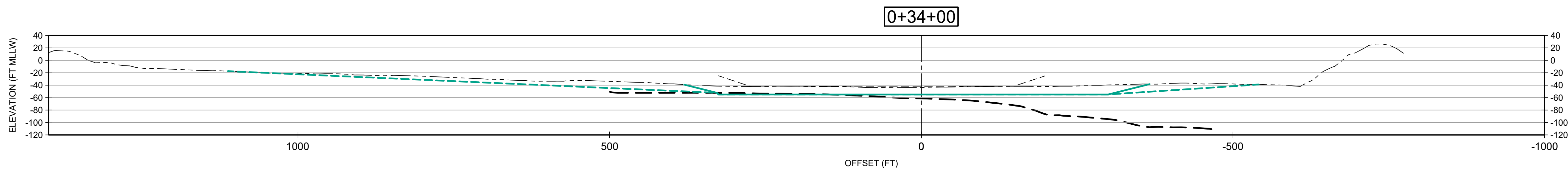
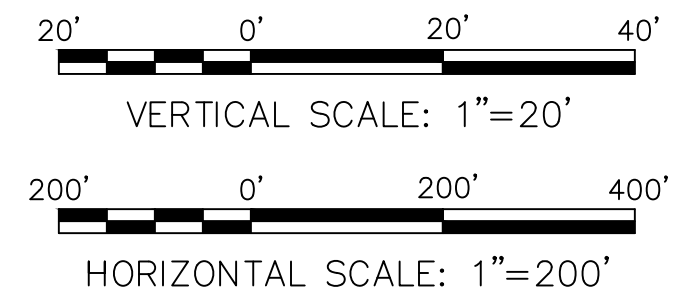
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (41 OF 185)

SHEET IDENTIFICATION
FIG-042
 INDEX 42 OF 186



EXISTING CHANNEL DEPTH	-39.53
EXISTING CHANNEL DEPTH + AMD	-41.72
PA CHANNEL DEPTH	-51.34
PA CH + AMD + ROCK BUFFER	-54.96



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

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DRAWN BY: H.P.
CHECKED BY: EC
DATE: 2016/07/11

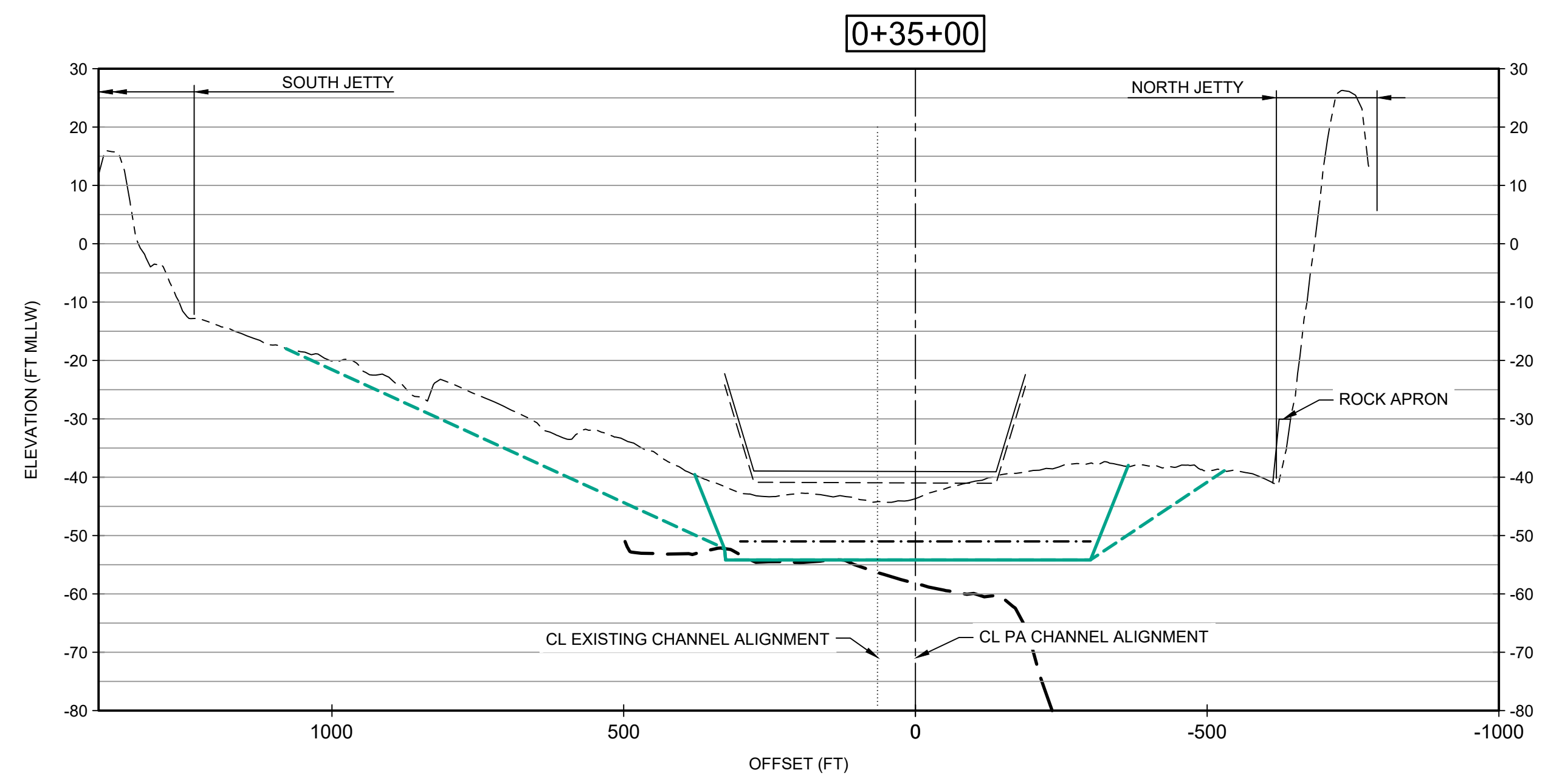
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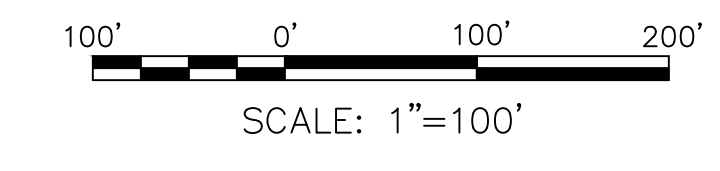
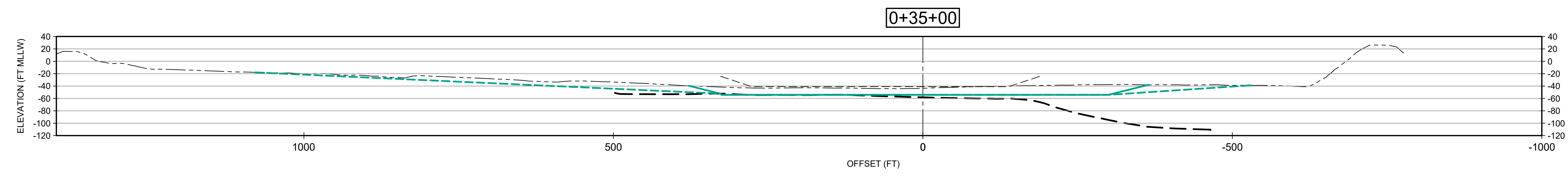
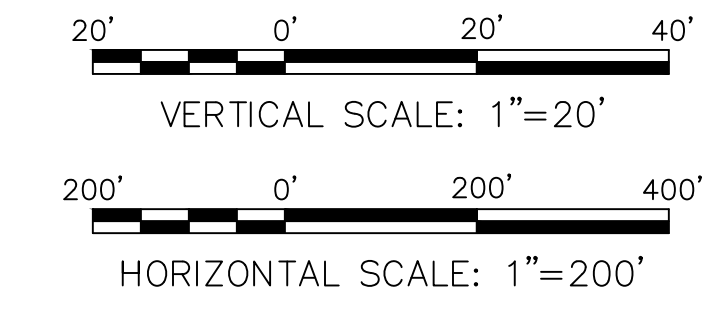
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (42 OF 185)

SHEET IDENTIFICATION
FIG-043
 INDEX 43 OF 186



EXISTING CHANNEL DEPTH	-39.03
EXISTING CHANNEL DEPTH + AMD	-40.99
PA CHANNEL DEPTH	-51.01
PA CH + AMD + ROCK BUFFER	-54.18



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- · - · EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

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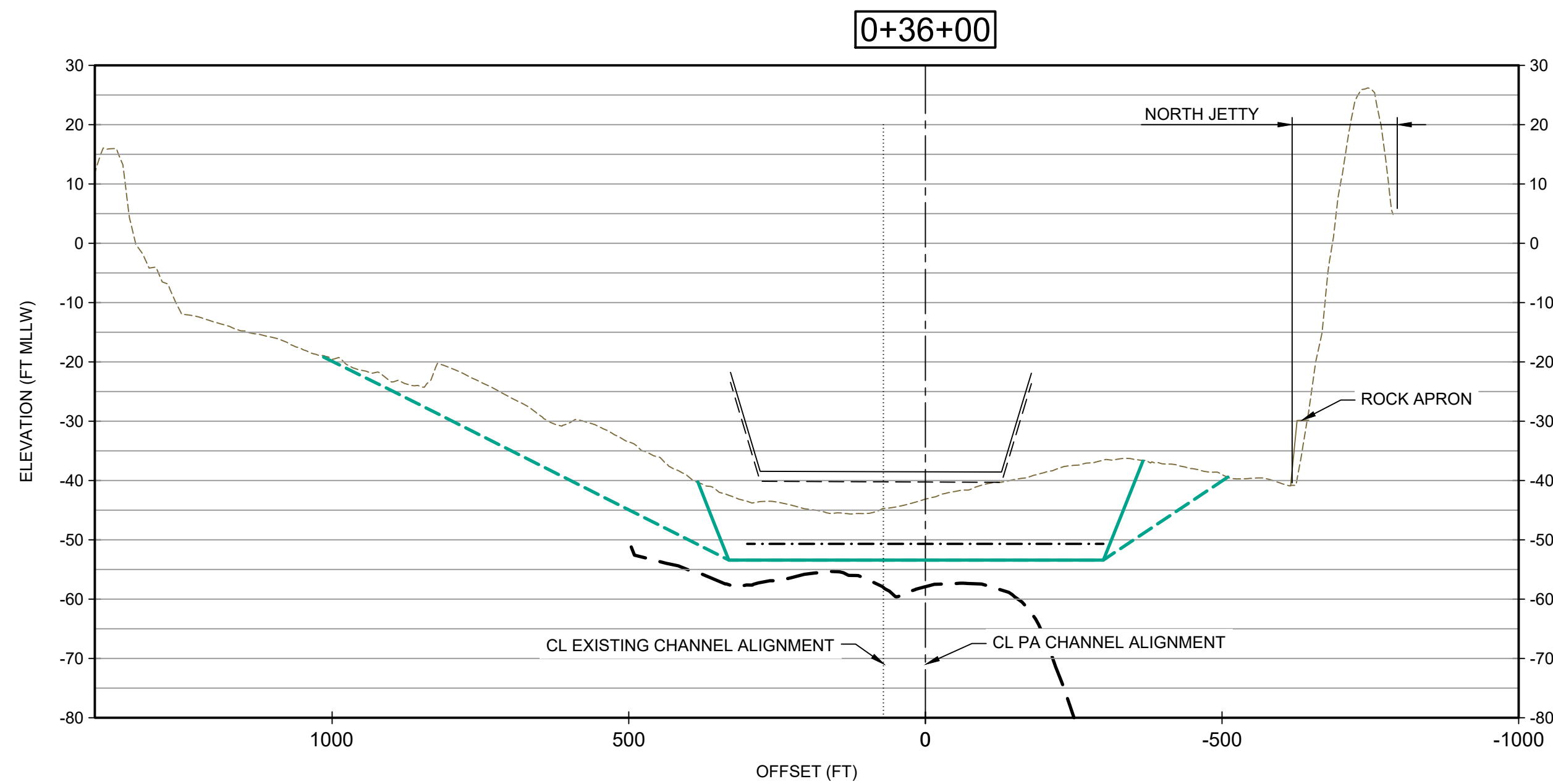
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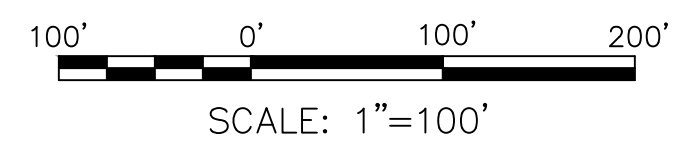
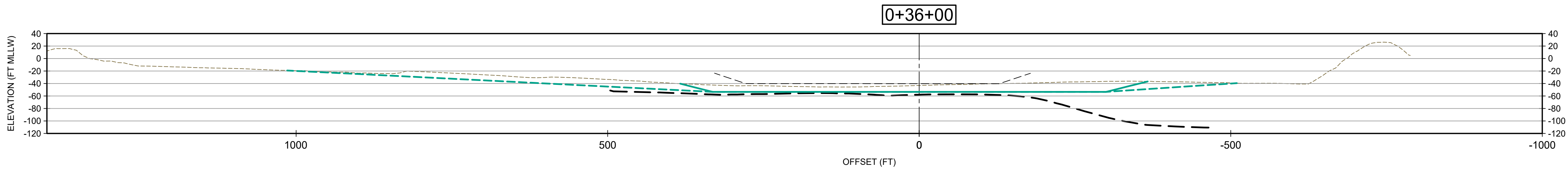
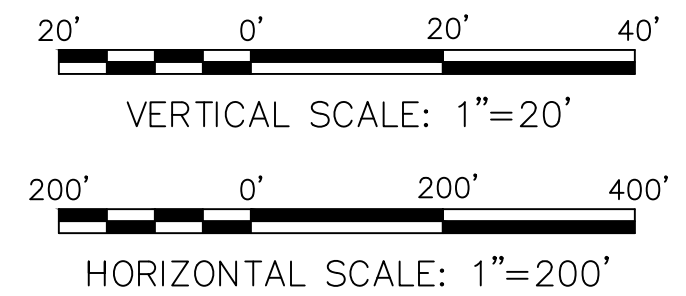
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (43 OF 185)

SHEET IDENTIFICATION
FIG-044
 INDEX 44 OF 186



EXISTING CHANNEL DEPTH	-38.53
EXISTING CHANNEL DEPTH + AMD	-40.25
PA CHANNEL DEPTH	-50.68
PA CH + AMD + ROCK BUFFER	-53.40



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

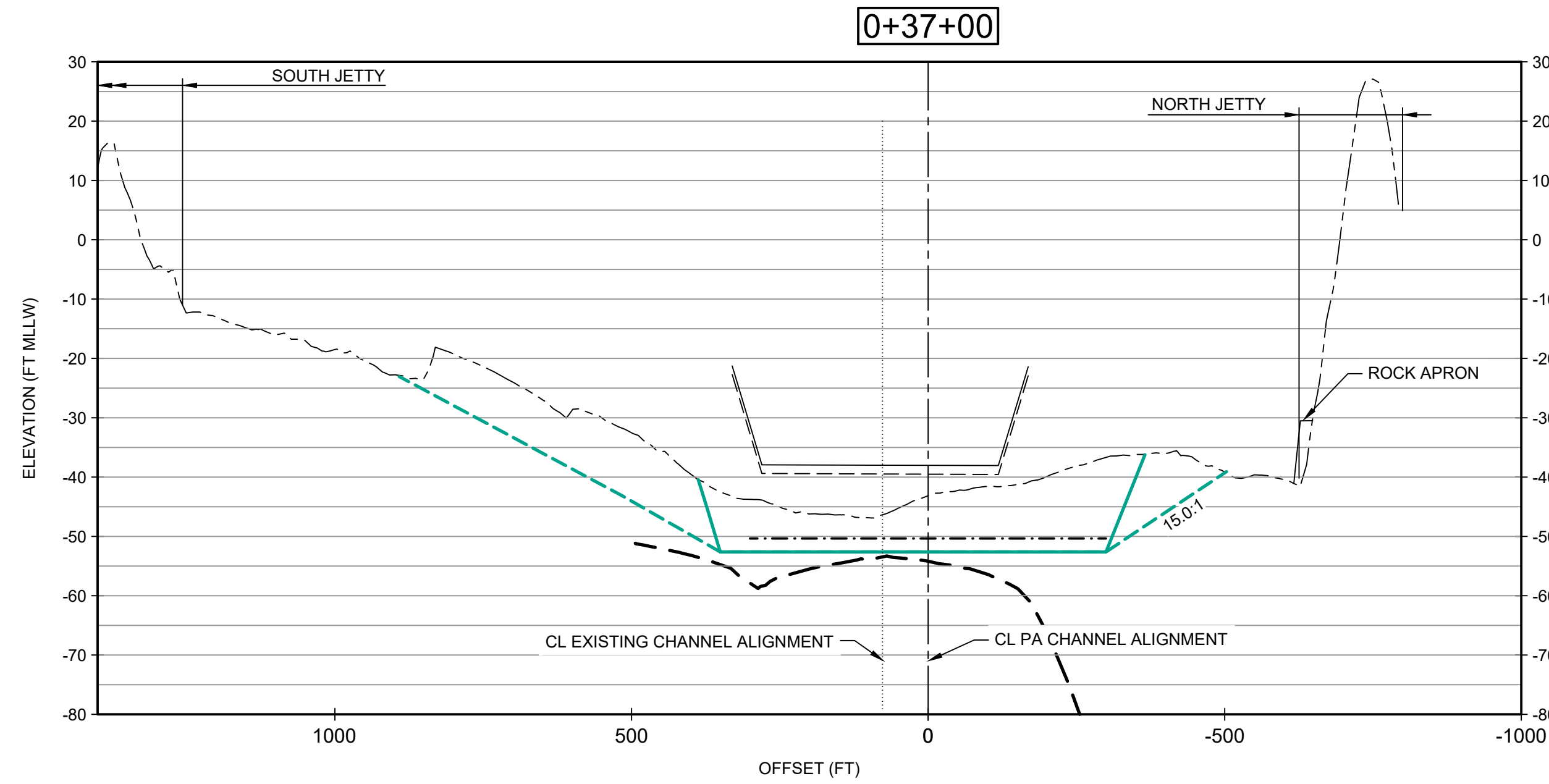
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2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	DESCRIPTION	MARK	APPR.

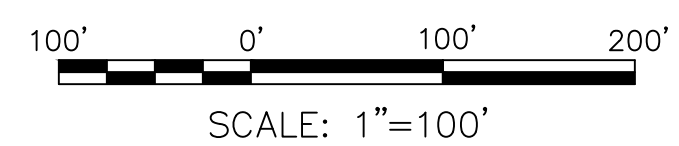
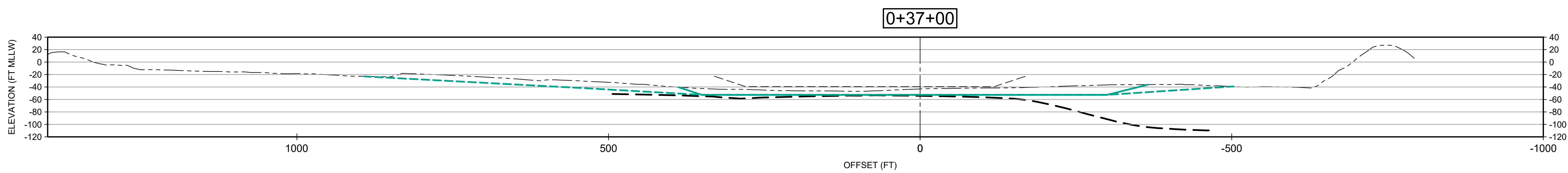
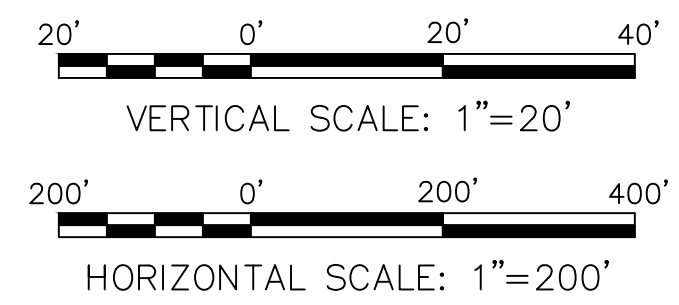
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 CHECKED BY: E.C.
 SUBMITTED BY: **moffatt & nichol**
 PLOT DATE: 2024/07/11
 PLOT SCALE: 1"=200'
 FILE NAME: **COOS BAY CHANNEL MODIFICATION**
 SIZE: **FIG-045**

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (44 OF 185)

SHEET IDENTIFICATION
FIG-045
 INDEX 45 OF 186



EXISTING CHANNEL DEPTH	-38.03
EXISTING CHANNEL DEPTH + AMD	-39.52
PA CHANNEL DEPTH	-50.35
PA CH + AMD + ROCK BUFFER	-52.63



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



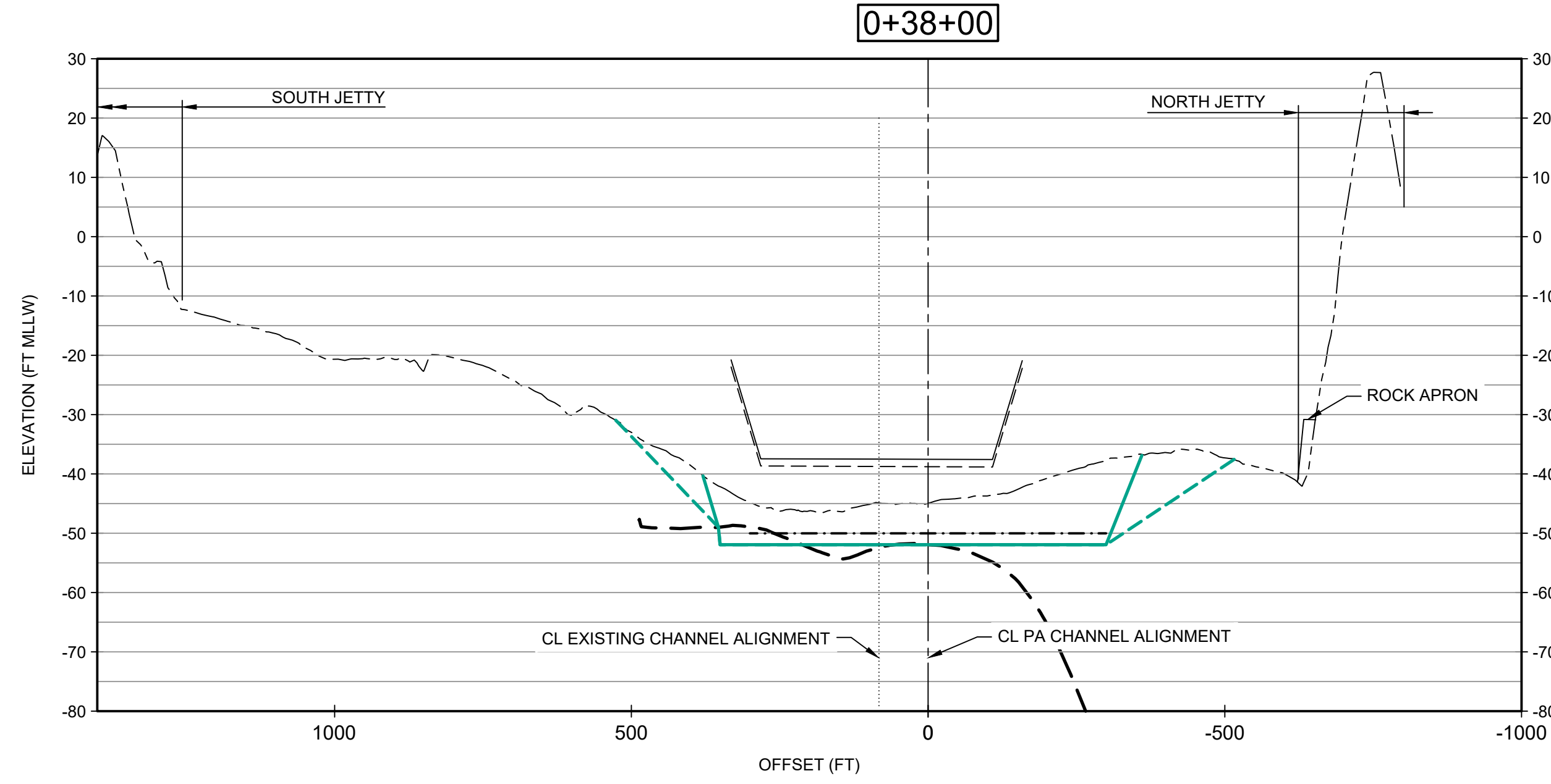
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 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT SCALE: **1"=200'**
 PLOT DATE:
 FILE NAME:
 DRAWING NUMBER:
 SIZE:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (45 OF 185)

SHEET IDENTIFICATION
FIG-046
 INDEX 46 OF 186



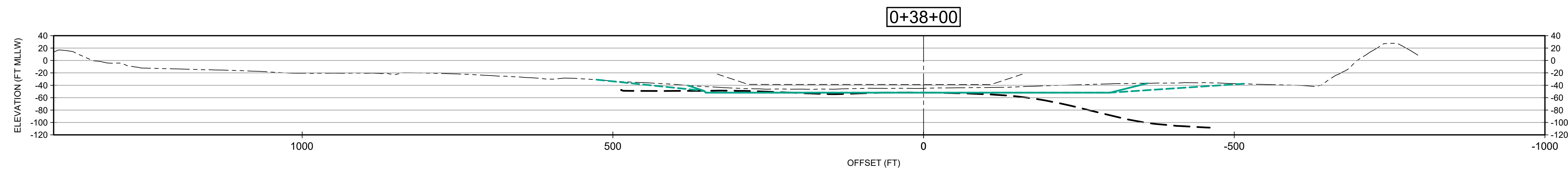
EXISTING CHANNEL DEPTH	-37.53
EXISTING CHANNEL DEPTH + AMD	-38.78
PA CHANNEL DEPTH	-50.02
PA CH + AMD + ROCK BUFFER	-51.94



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

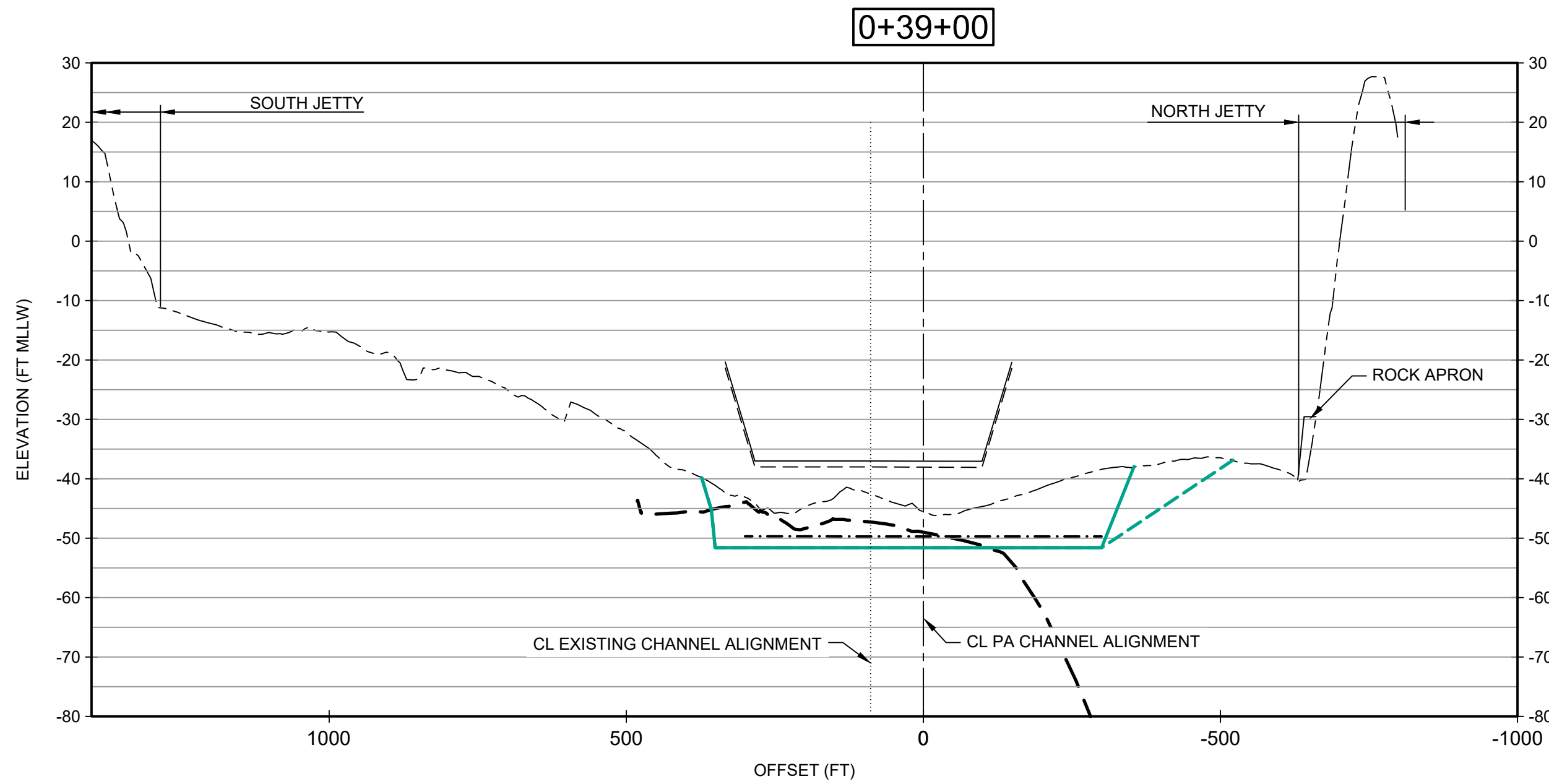


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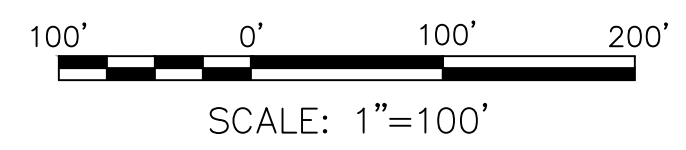
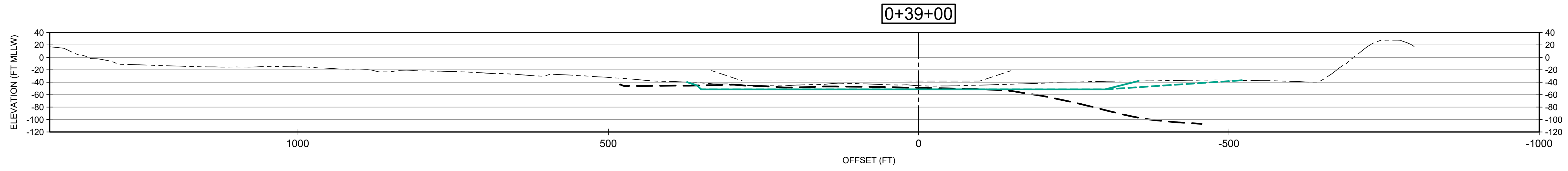
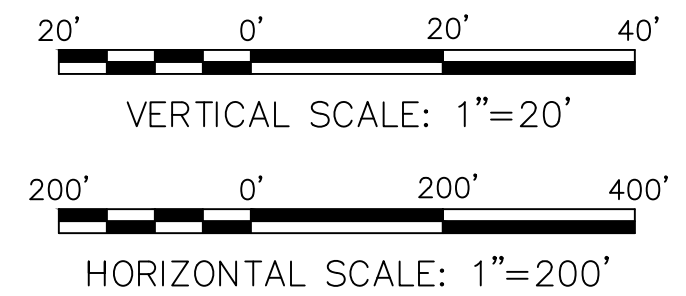
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DRAWN BY:	2016/07/11	EC	
CONTRACT NO.:			

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (46 OF 185)

SHEET IDENTIFICATION
FIG-047
INDEX 47 OF 186



EXISTING CHANNEL DEPTH	-37.03
EXISTING CHANNEL DEPTH + AMD	-38.04
PA CHANNEL DEPTH	-49.70
PA CH + AMD + ROCK BUFFER	-51.61



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

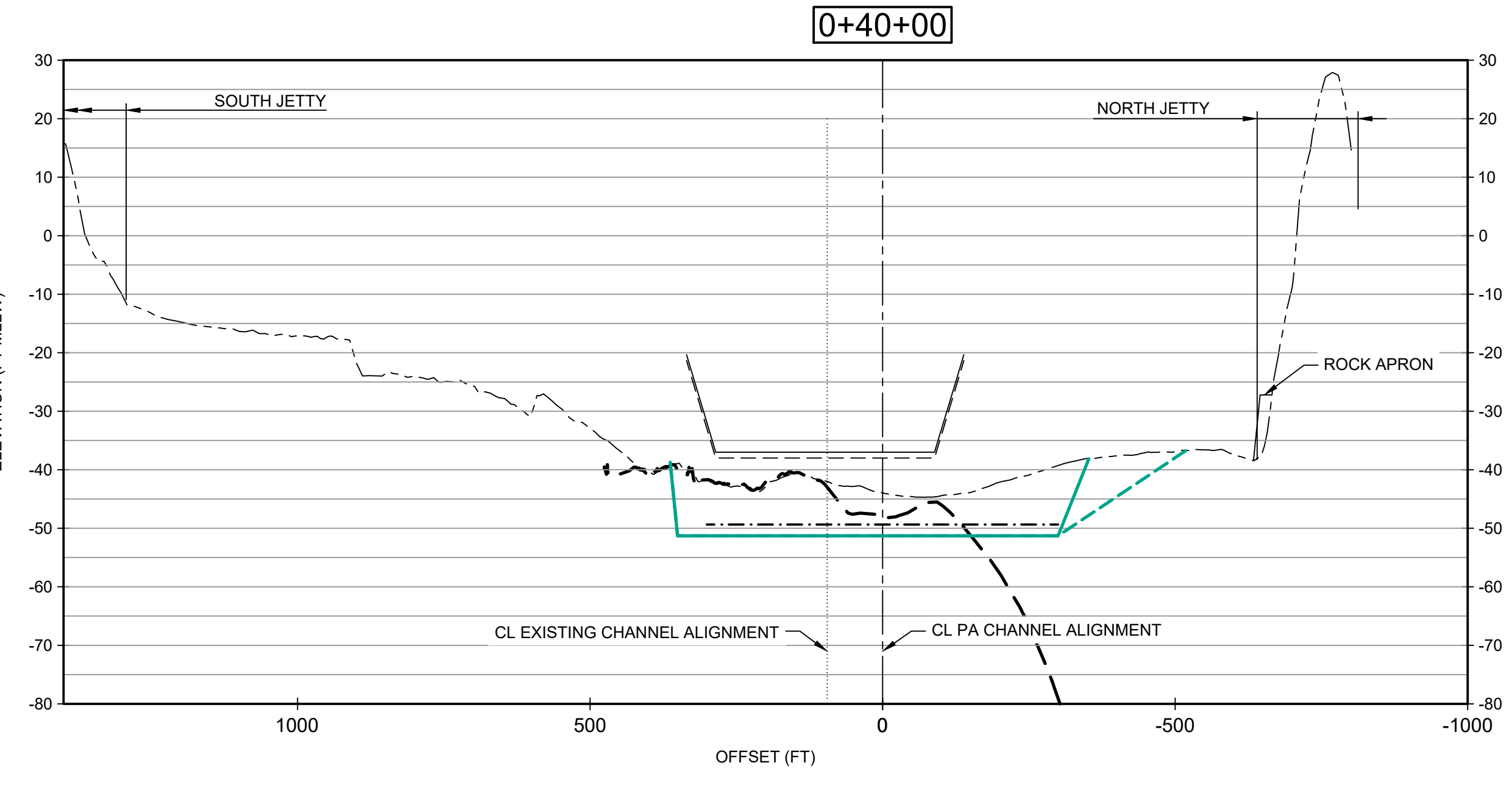
MARK	DESCRIPTION	DATE	APPR.

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DESIGNED BY: []
 DRAWN BY: []
 CHECKED BY: []
 SUBMITTED BY: []
 DATE: 2016/07/11
 SOLICITATION NO.: []
 CONTRACT NO.: []
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (47 OF 185)

SHEET IDENTIFICATION
FIG-048
 INDEX 48 OF 186



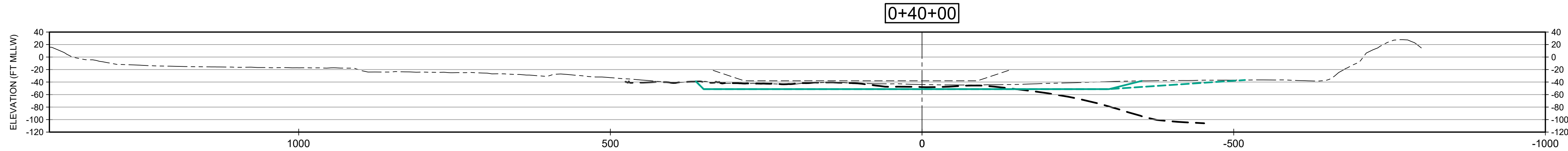
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-49.37
PA CH + AMD + ROCK BUFFER	-51.28



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

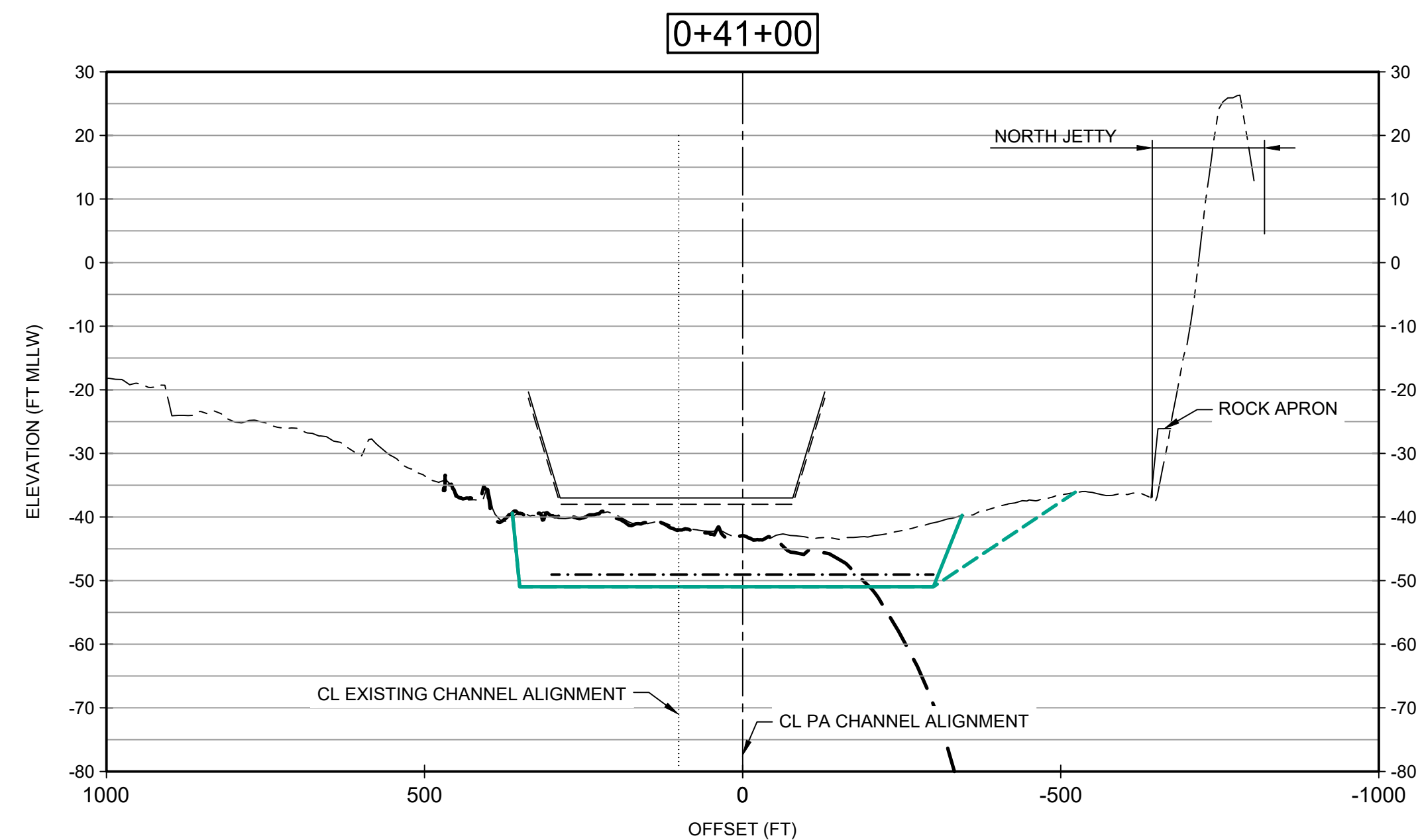
**FUTURE EQUILIBRIUM SIDE SLOPES
WITHIN EACH REACH**

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

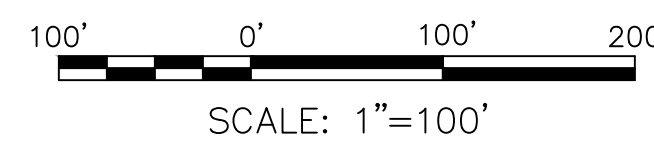
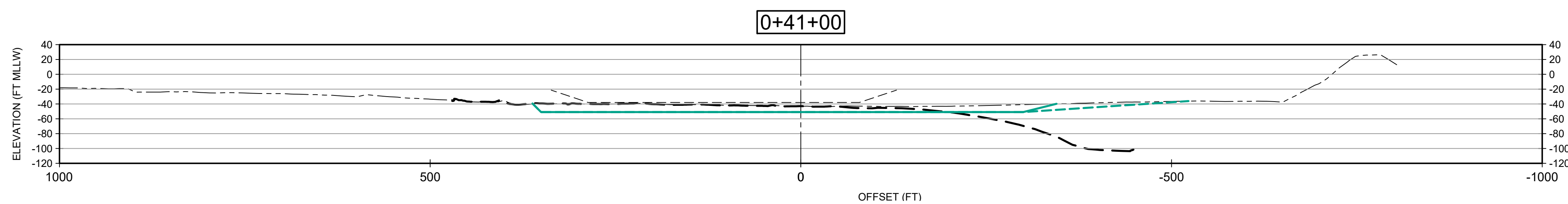
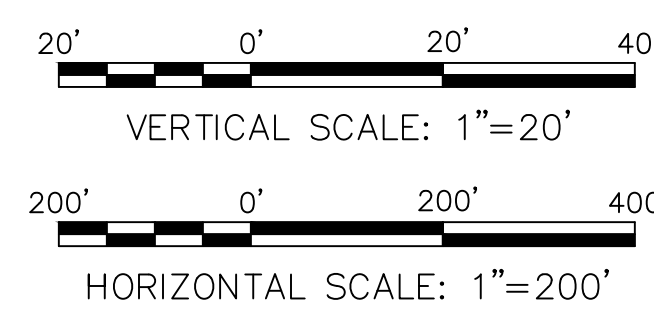
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (48 OF 185)

SHEET
IDENTIFICATION
FIG-049
INDEX 49 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-49.04
PA CH + AMD + ROCK BUFFER	-50.96



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

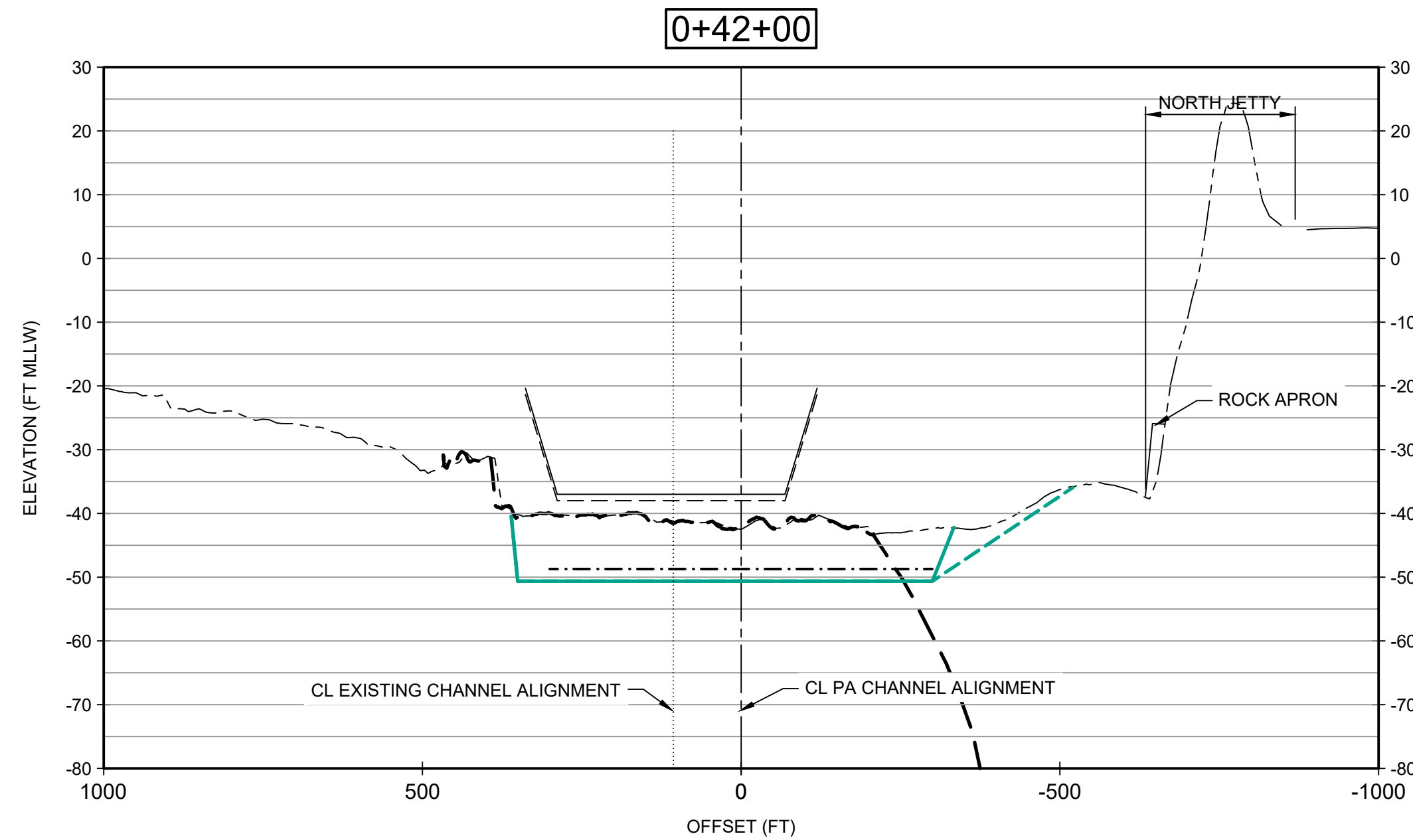
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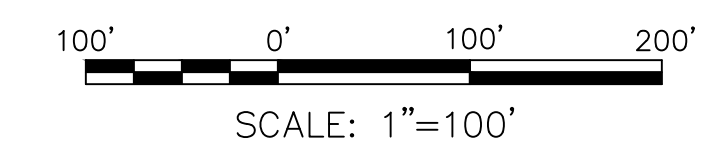
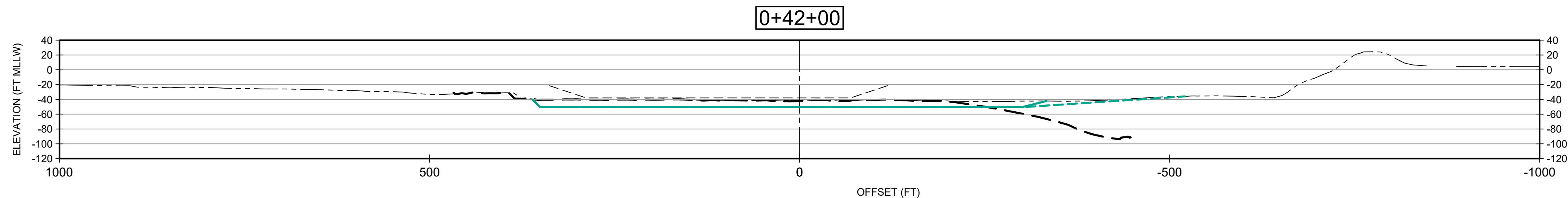
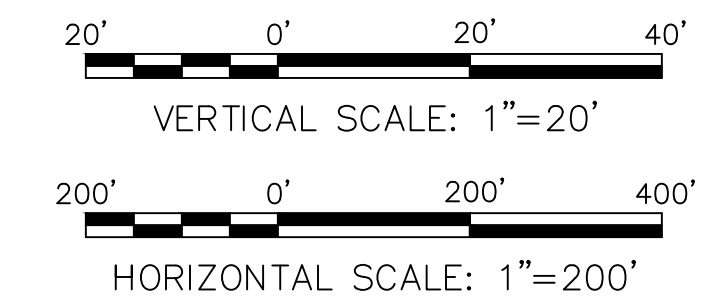
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (49 OF 185)

SHEET IDENTIFICATION
FIG-050
 INDEX 50 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-48.71
PA CH + AMD + ROCK BUFFER	-50.63



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - . - . - . PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

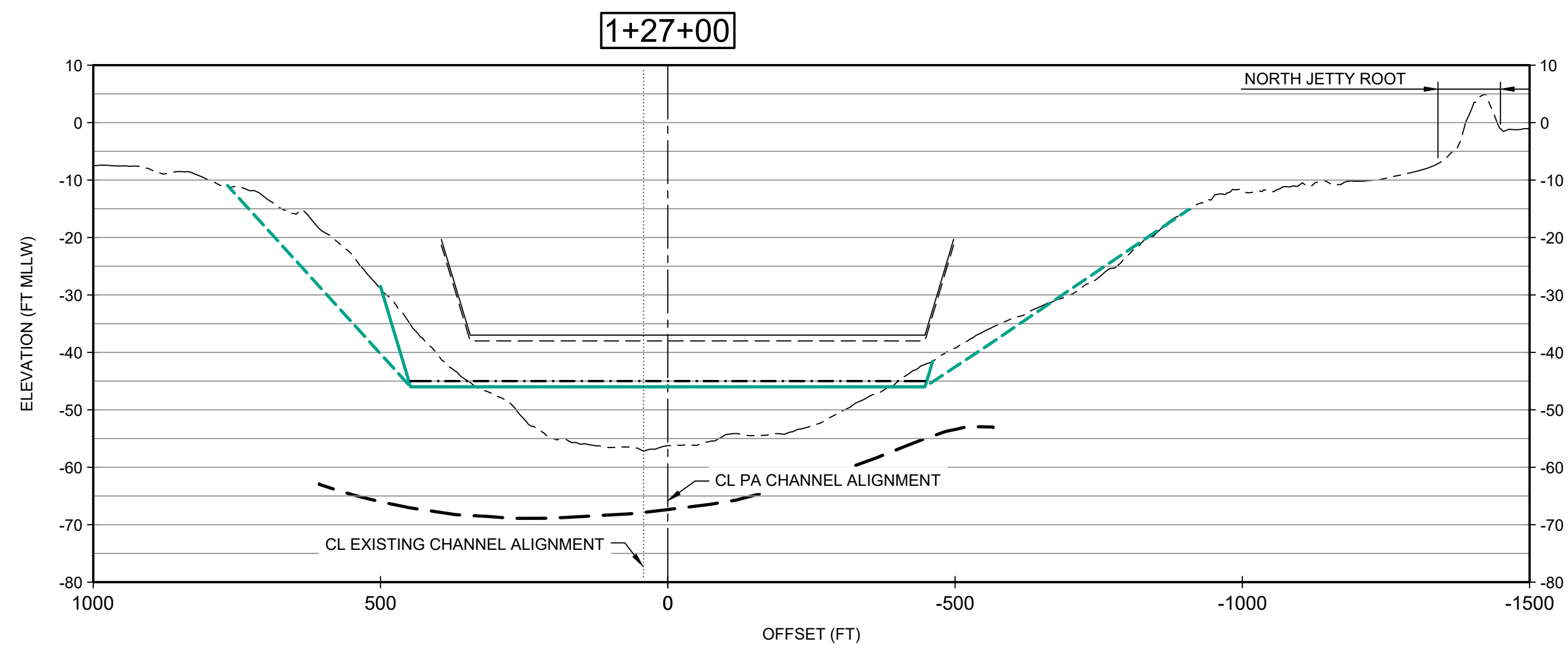
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H.P.	EC	CONTRACT NO.:
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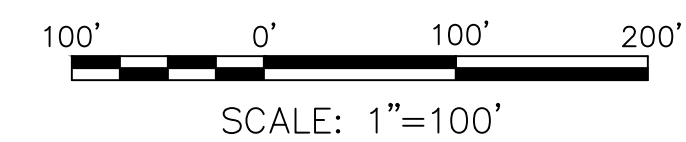
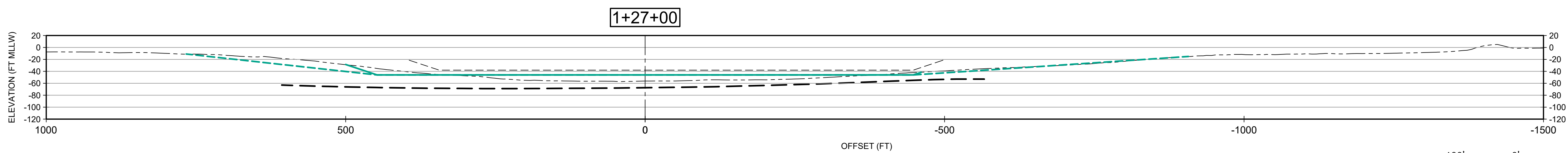
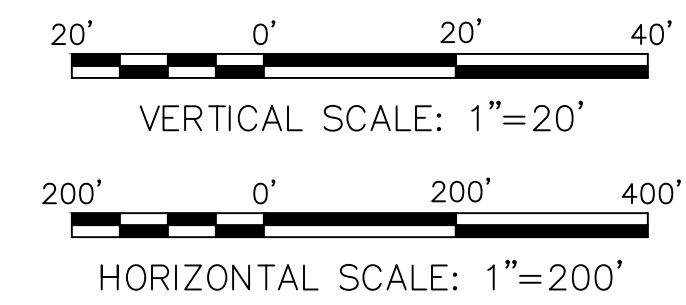
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (50 OF 185)

SHEET IDENTIFICATION
FIG-051
 INDEX 51 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



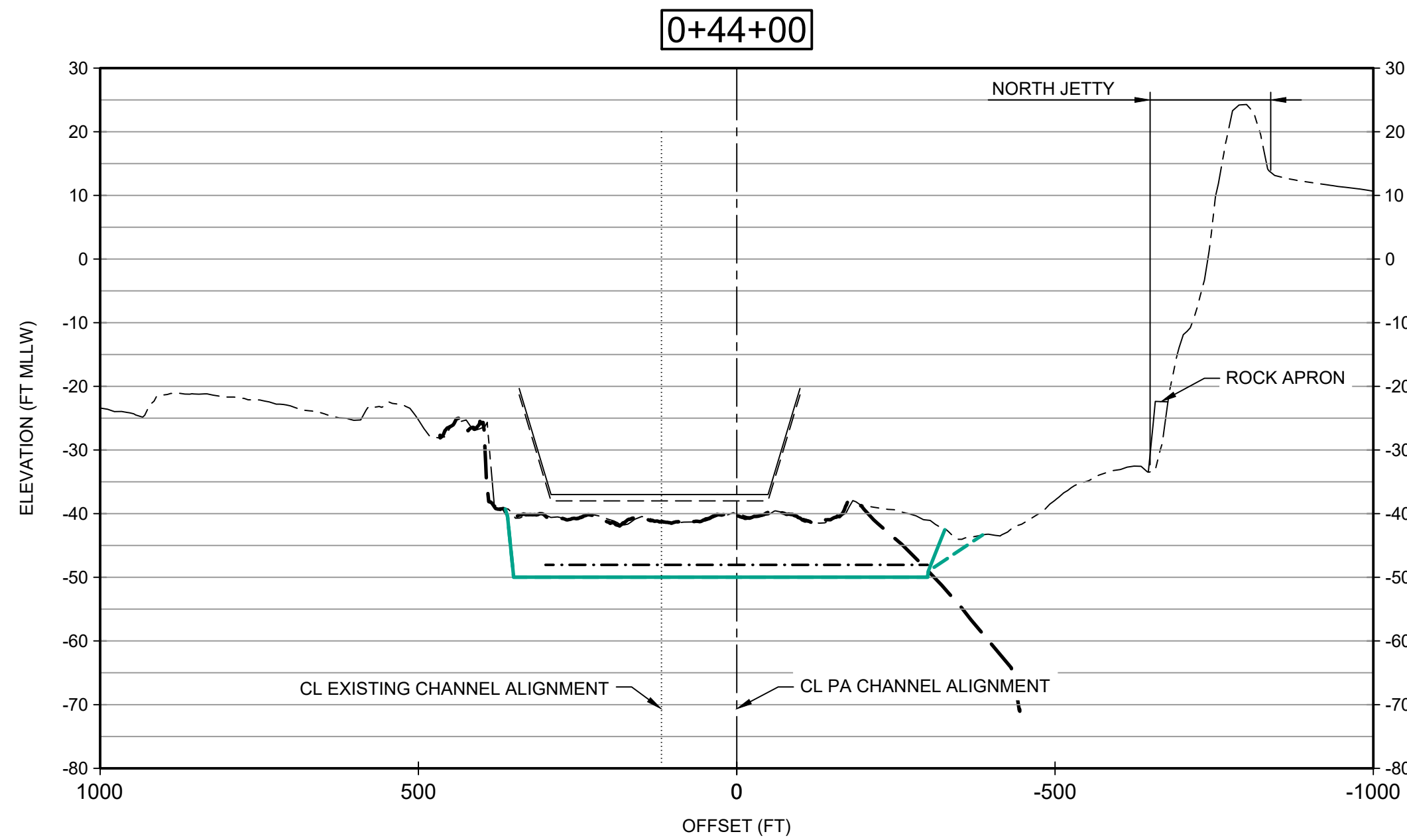
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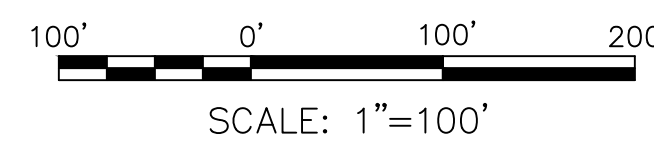
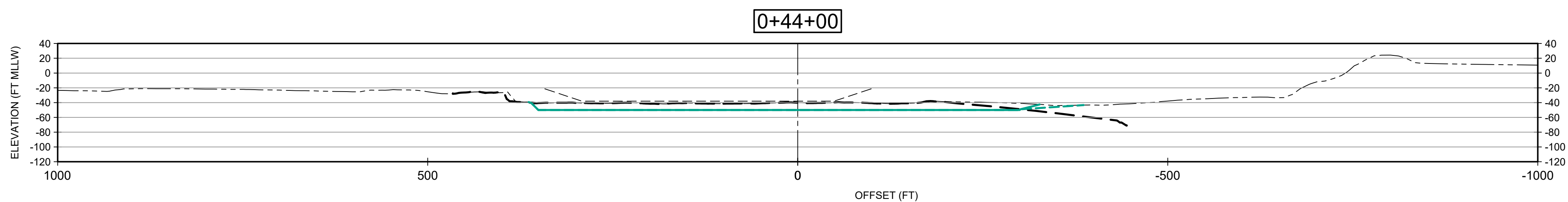
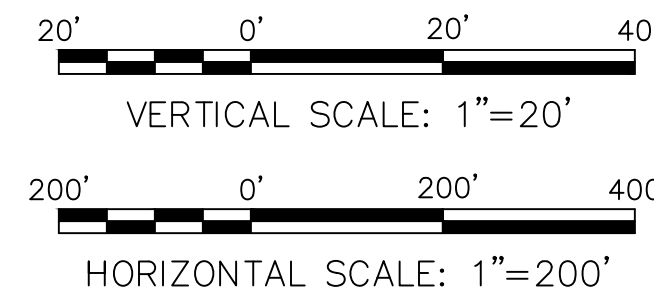
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (51 OF 185)

SHEET IDENTIFICATION
FIG-052
 INDEX 52 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-48.05
PA CH + AMD + ROCK BUFFER	-49.98



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



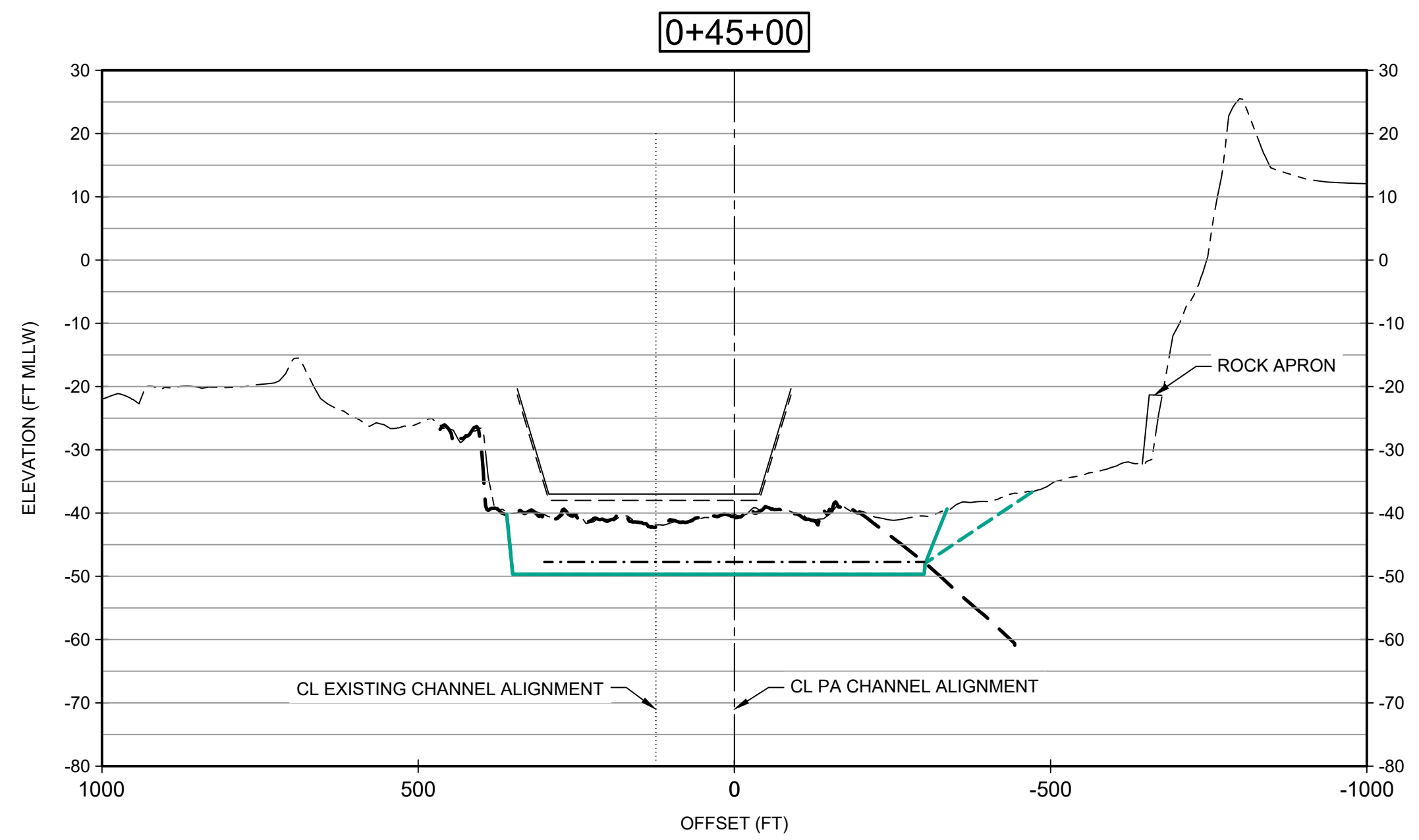
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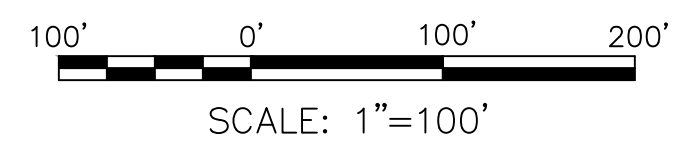
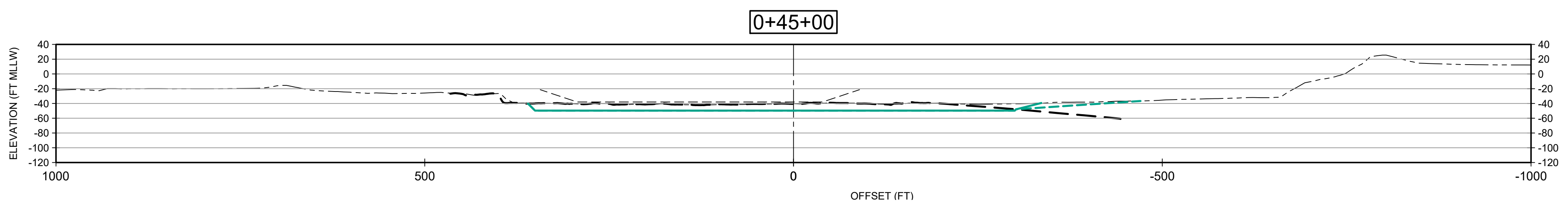
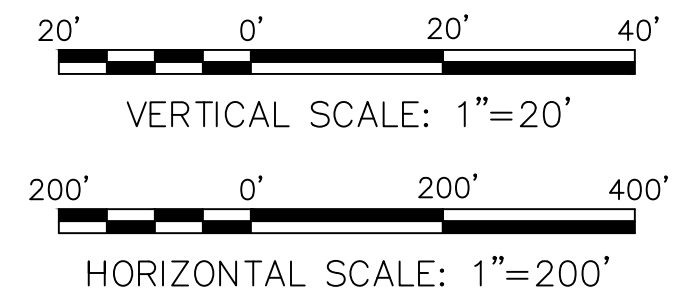
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (52 OF 185)

SHEET IDENTIFICATION
FIG-053
 INDEX 53 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-47.72
PA CH + AMD + ROCK BUFFER	-49.66



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

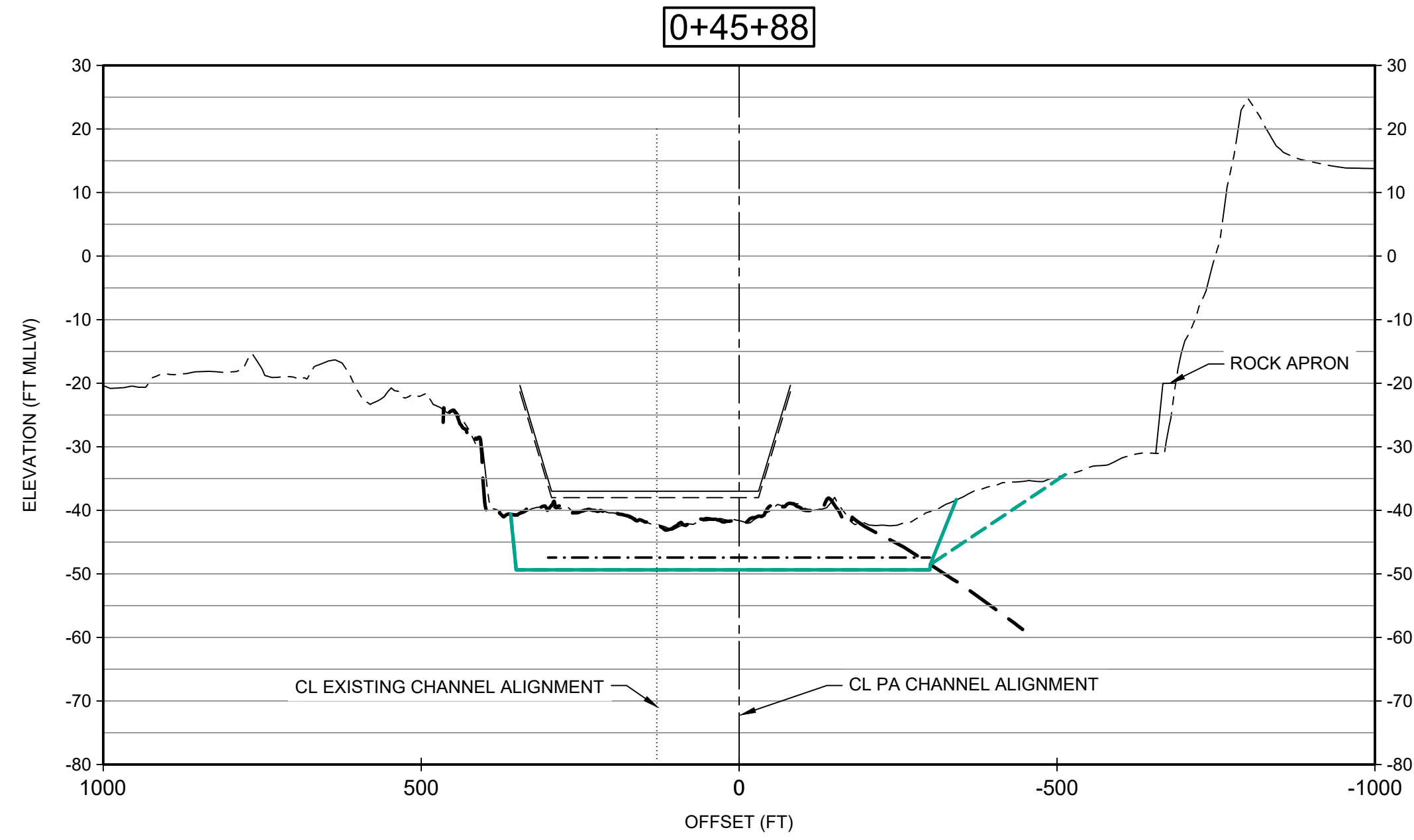
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drawn by: EC
checked by: EC
submitted by: EC
plot scale: PLOT DATE: FILE NAME:
size:

DATE: 2016/07/11
SOLICITATION NO.:
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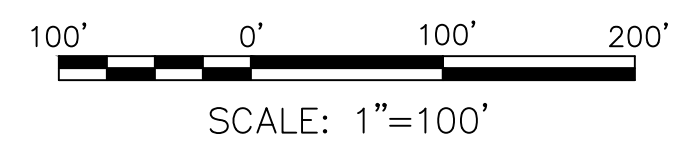
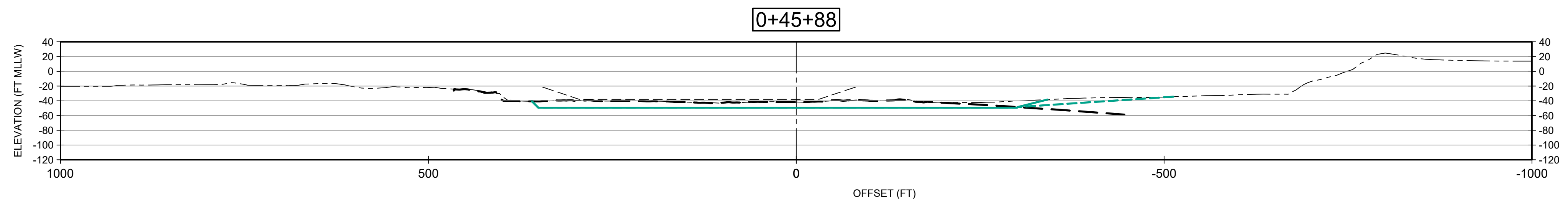
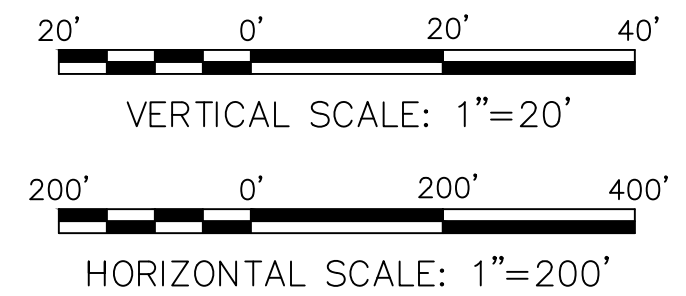
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (53 OF 185)

SHEET IDENTIFICATION
FIG-054
 INDEX 54 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-47.43
PA CH + AMD + ROCK BUFFER	-49.37



LEGEND

—————	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
-----	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
-----	PA CHANNEL LIMITS	-----	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

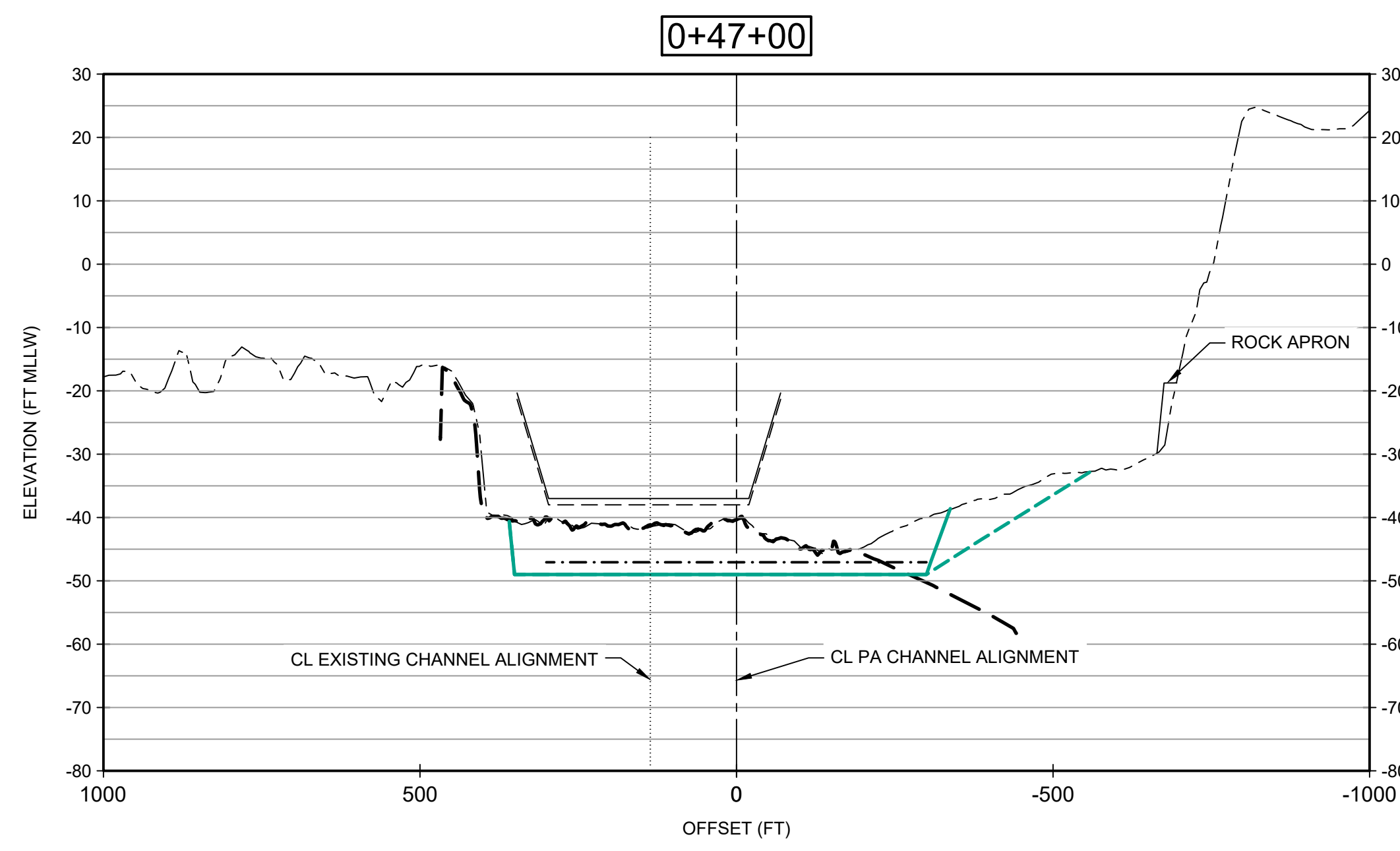
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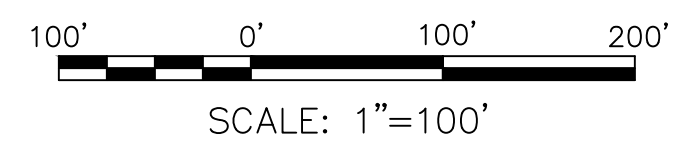
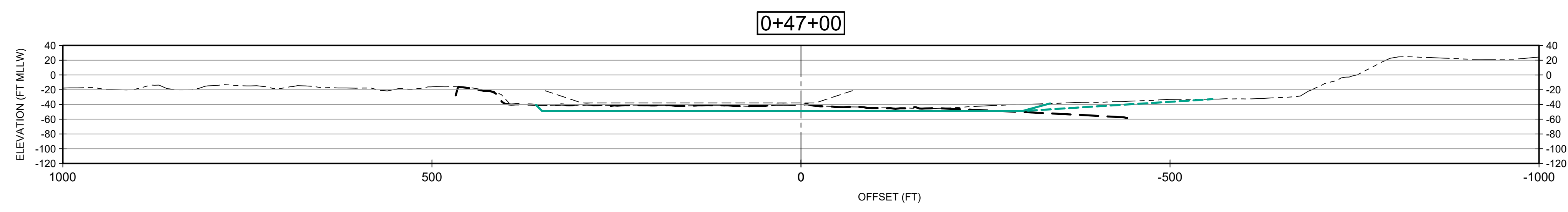
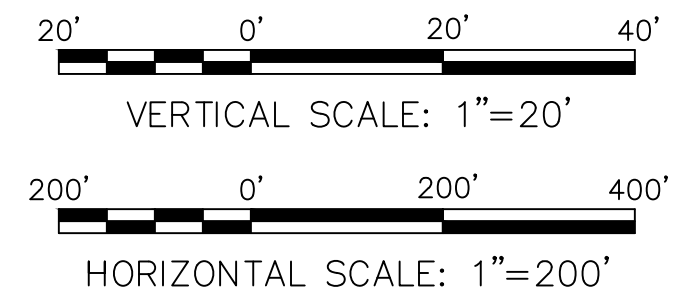
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (54 OF 185)

SHEET IDENTIFICATION
FIG-055
 INDEX 55 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-055-CROSS SECTIONS; Plotted: 5/20/2024 4:09 PM by LANDON, KYLE; Saved: 5/14/2024 2:53 PM by JGROTH



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-47.06
PA CH + AMD + ROCK BUFFER	-49.01



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



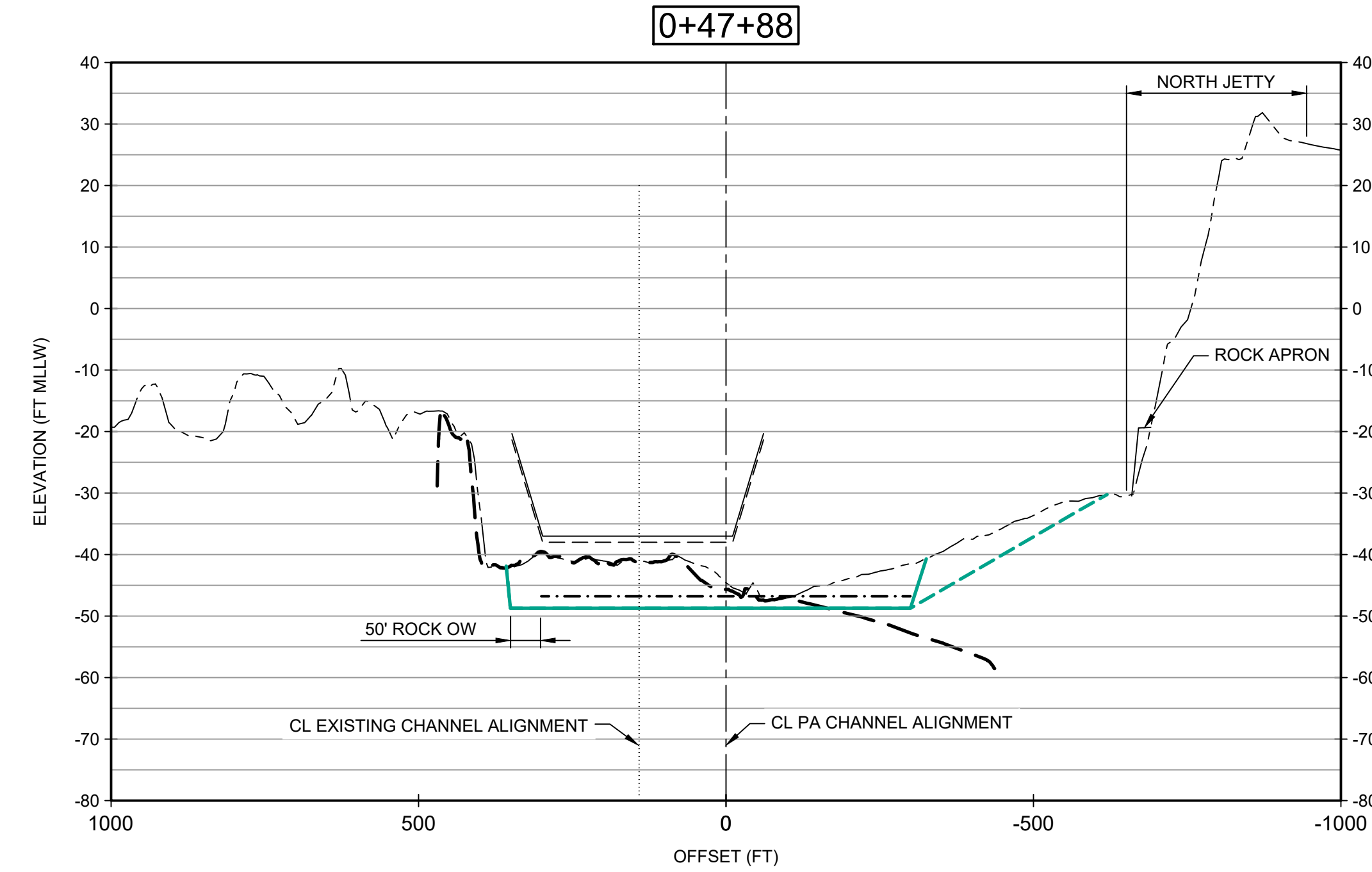
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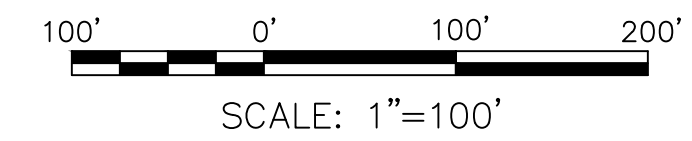
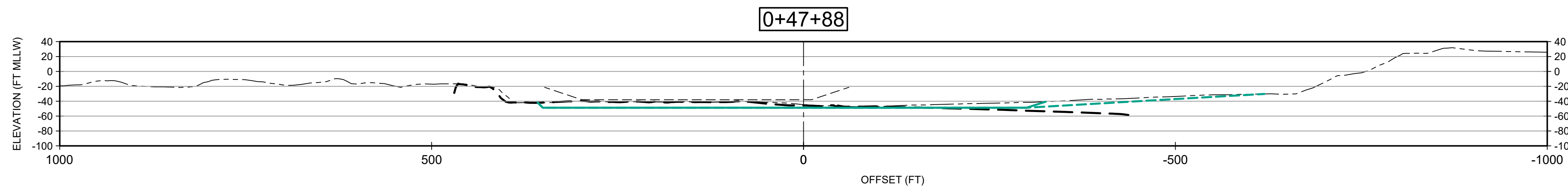
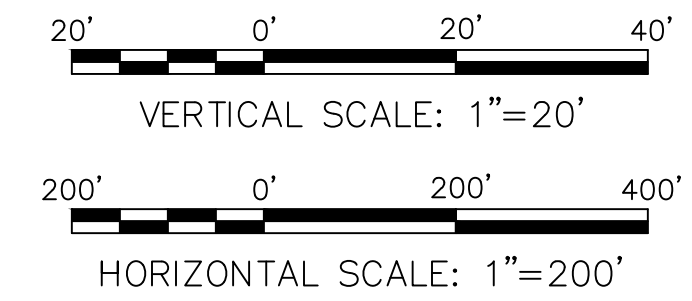
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (55 OF 185)

SHEET IDENTIFICATION
FIG-056
 INDEX 56 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-46.77
PA CH + AMD + ROCK BUFFER	-48.72



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

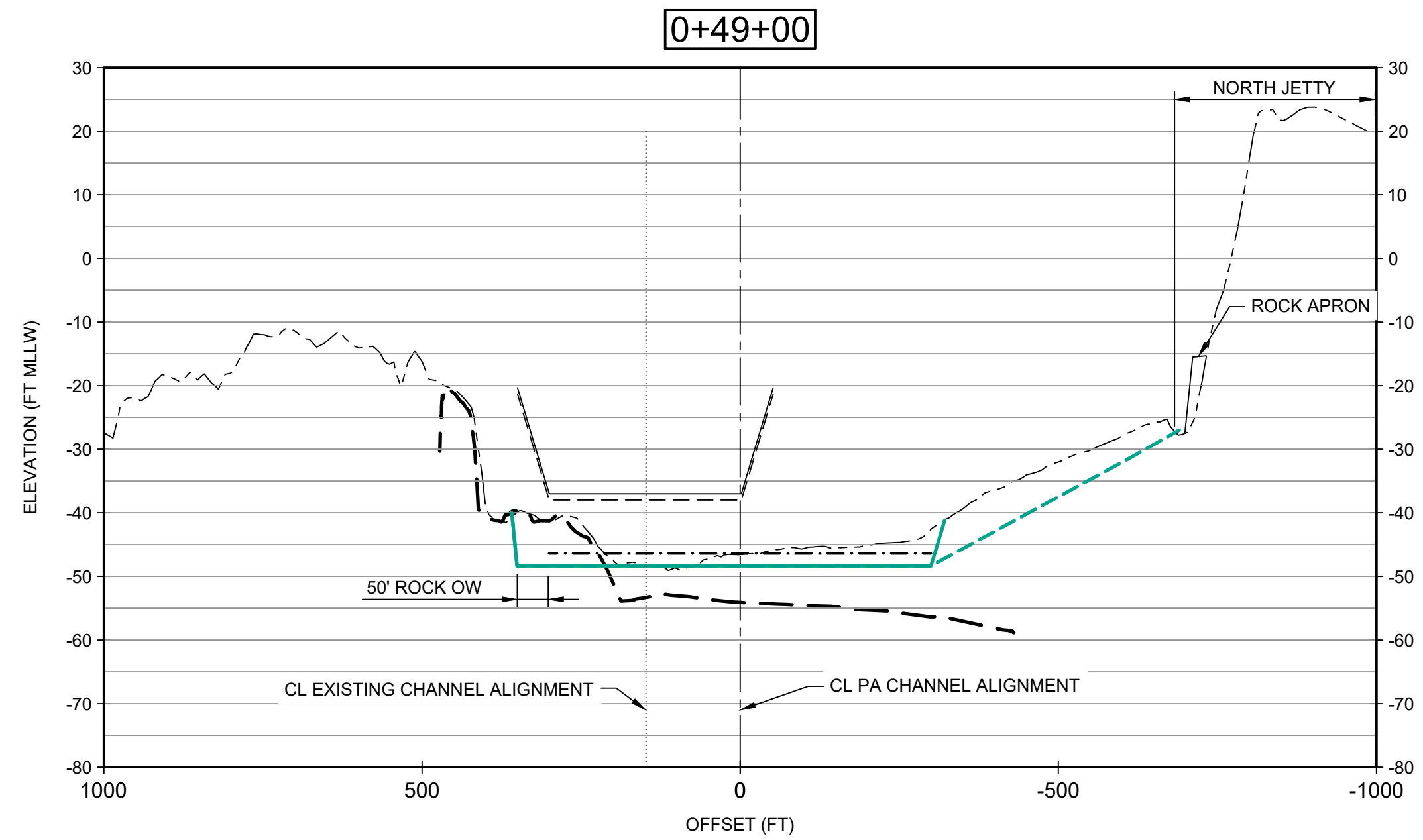
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drawn by: H.P.
checked by: EC
submitted by: H.P.

DATE: 2016/07/11
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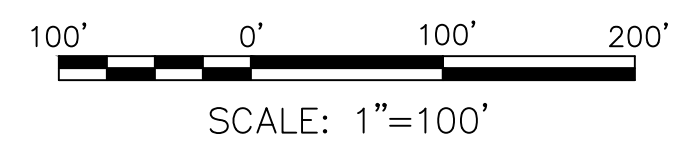
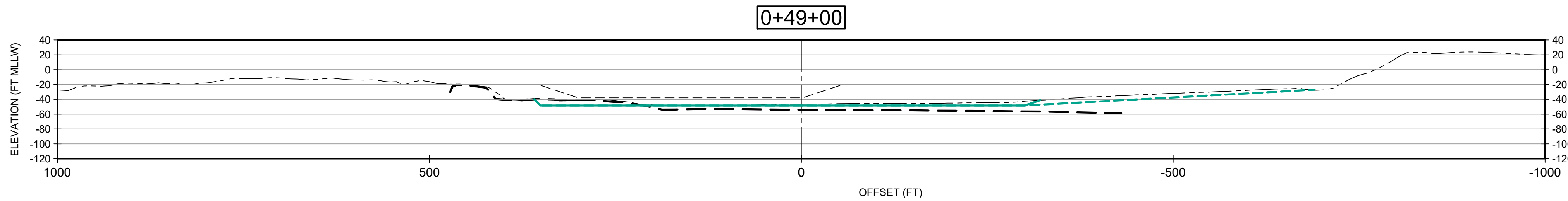
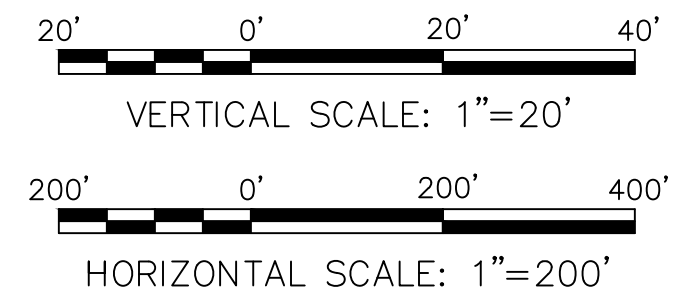
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (56 OF 185)

SHEET IDENTIFICATION
FIG-057
 INDEX 57 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-46.40
PA CH + AMD + ROCK BUFFER	-48.36




LEGEND


—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



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COOS BAY CHANNEL MODIFICATION

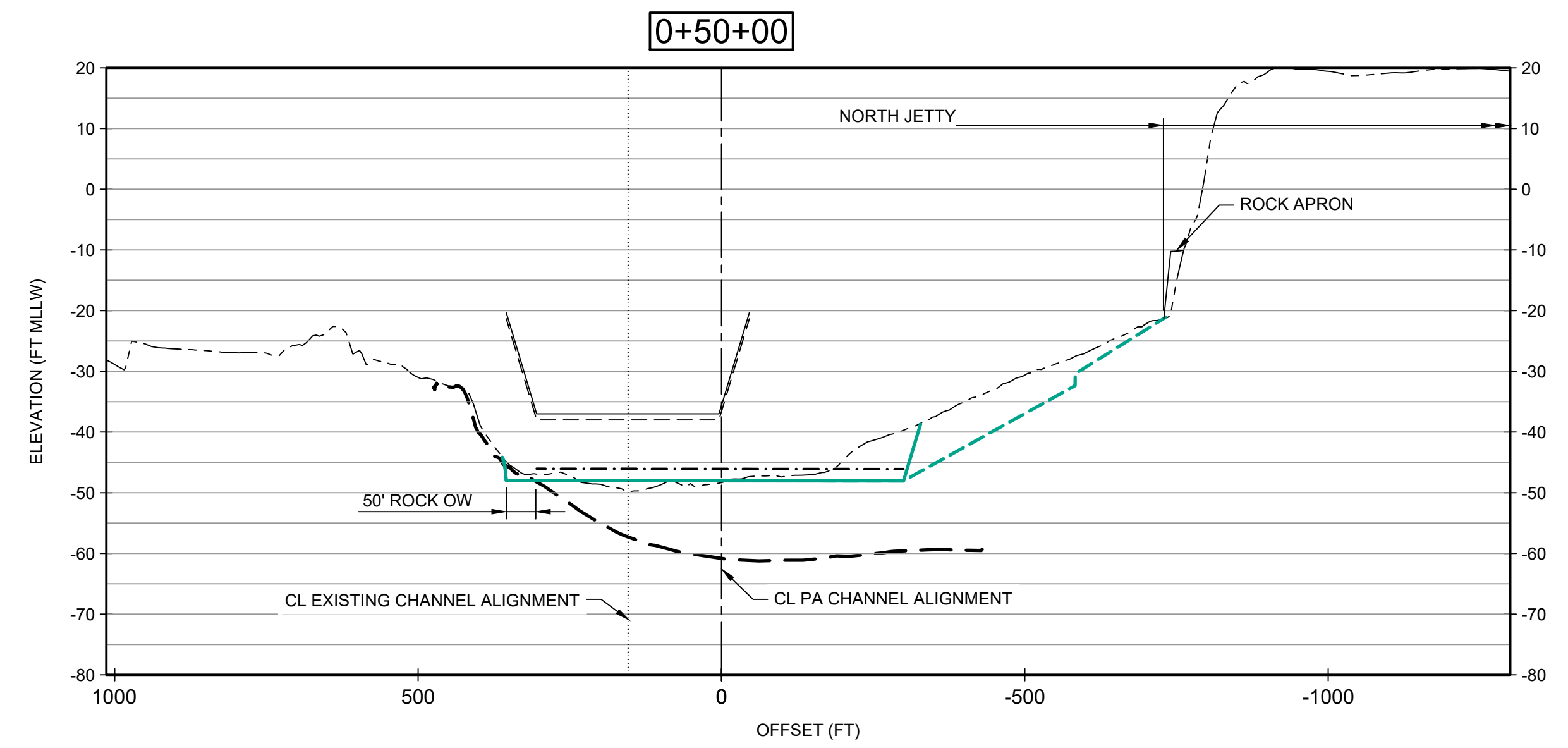
CROSS SECTION (57 OF 185)

SHEET IDENTIFICATION

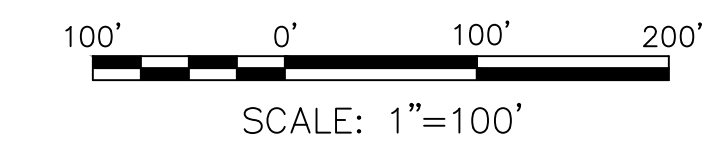
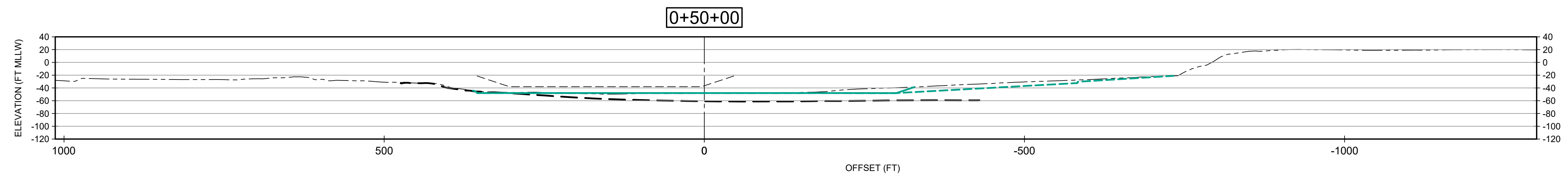
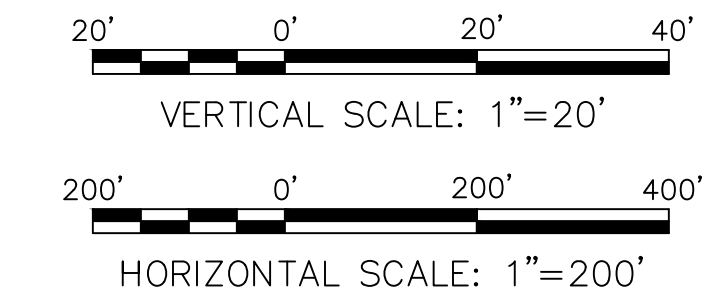
FIG-058

INDEX 58 OF 186

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EXISTING CHANNEL DEPTH	-35.63
EXISTING CHANNEL DEPTH + AMD	-36.63
PA CHANNEL DEPTH	-46.08
PA CH + AMD + ROCK BUFFER	-48.03



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

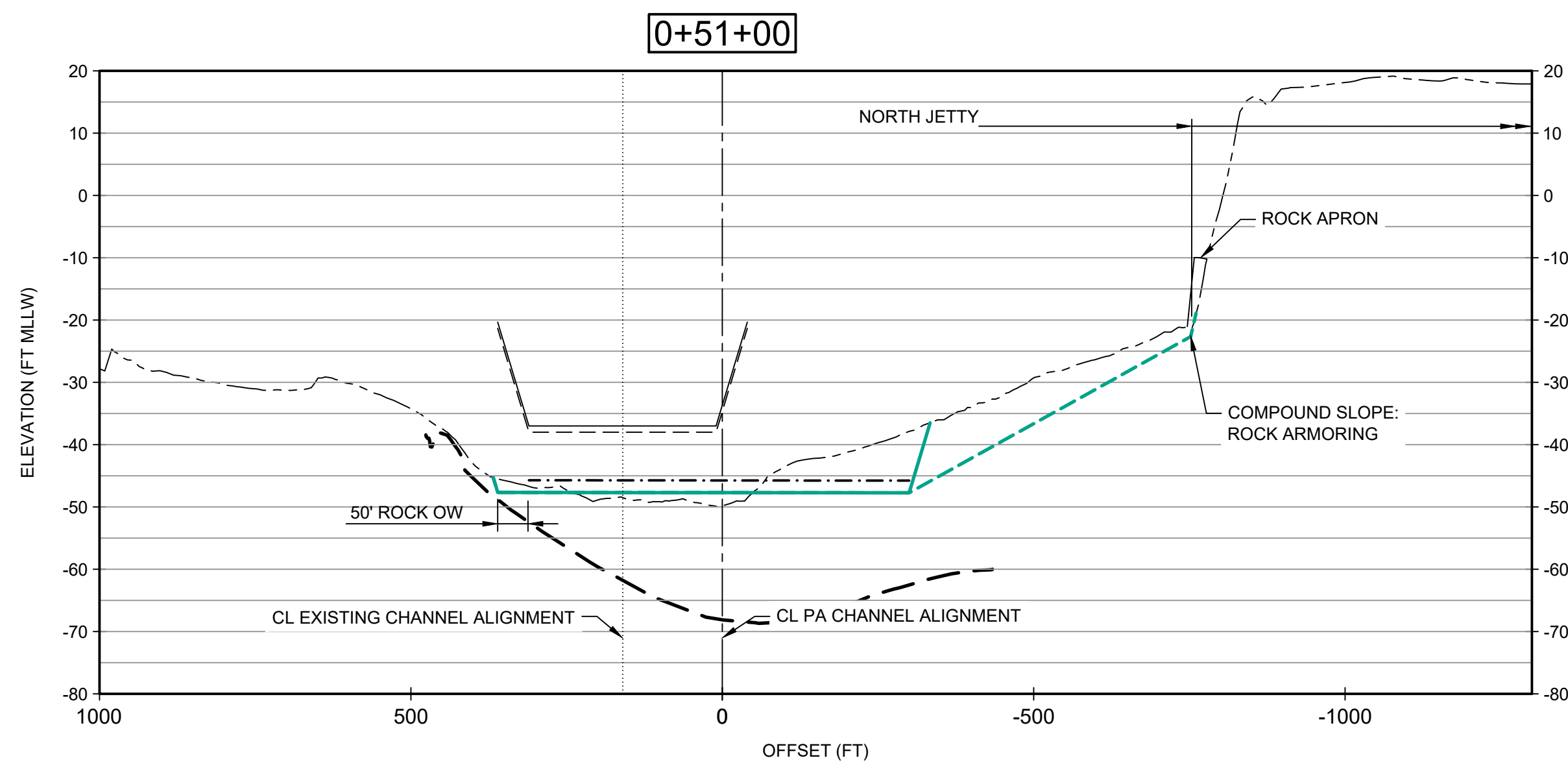
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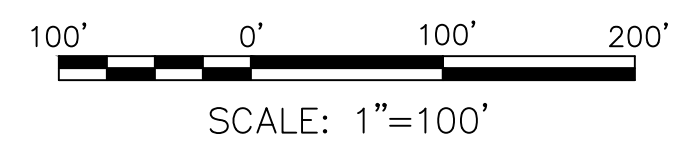
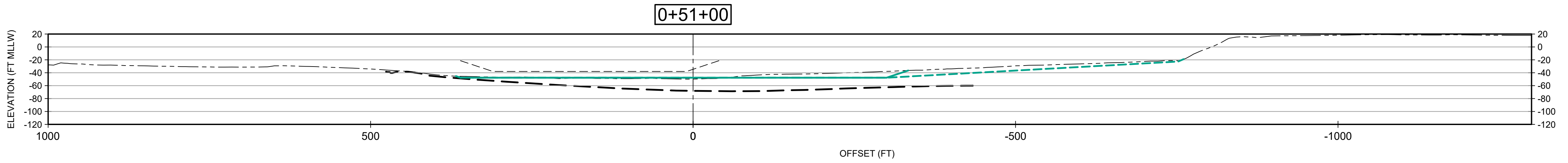
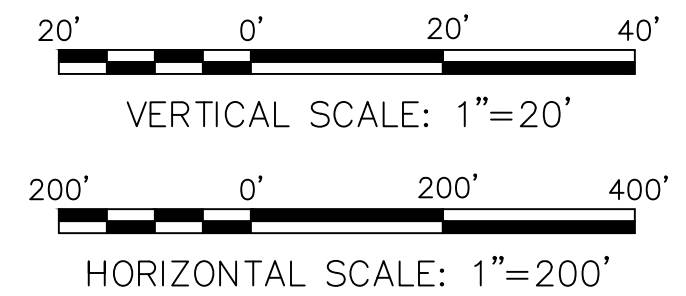
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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (58 OF 185)

SHEET IDENTIFICATION
FIG-059
 INDEX 59 OF 186



EXISTING CHANNEL DEPTH	-33.66
EXISTING CHANNEL DEPTH + AMD	-34.66
PA CHANNEL DEPTH	-45.75
PA CH + AMD + ROCK BUFFER	-47.70



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



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SIZE: [Blank]

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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (59 OF 185)

SHEET IDENTIFICATION
FIG-060
 INDEX 60 OF 186

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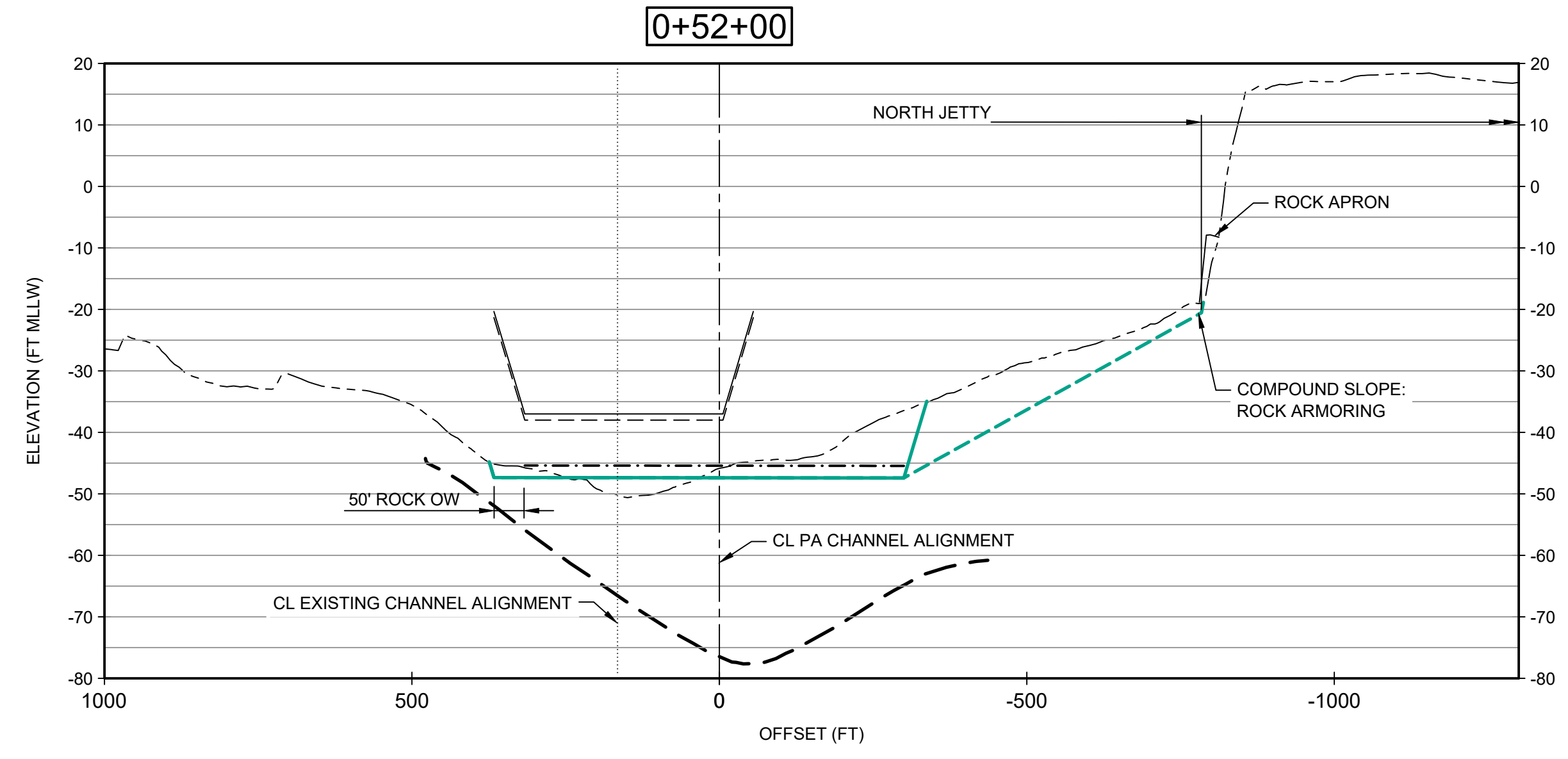
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FILE NAME:	PLOT DATE:	DRAWING NUMBER:
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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (60 OF 185)

SHEET IDENTIFICATION
FIG-061
 INDEX 61 OF 186



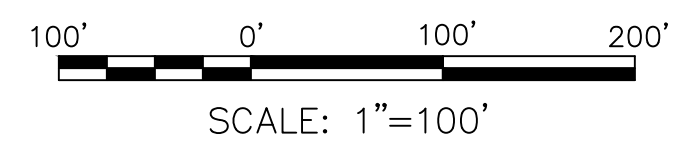
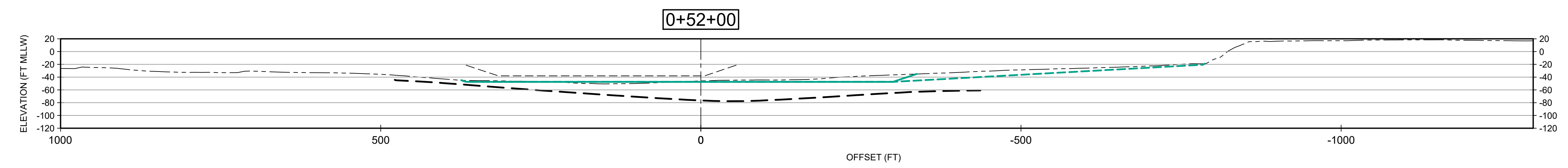
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.42
PA CHANNEL + AMD	-47.38



VERTICAL SCALE: 1"=20'

200' 0' 200' 400'

HORIZONTAL SCALE: 1"=200'



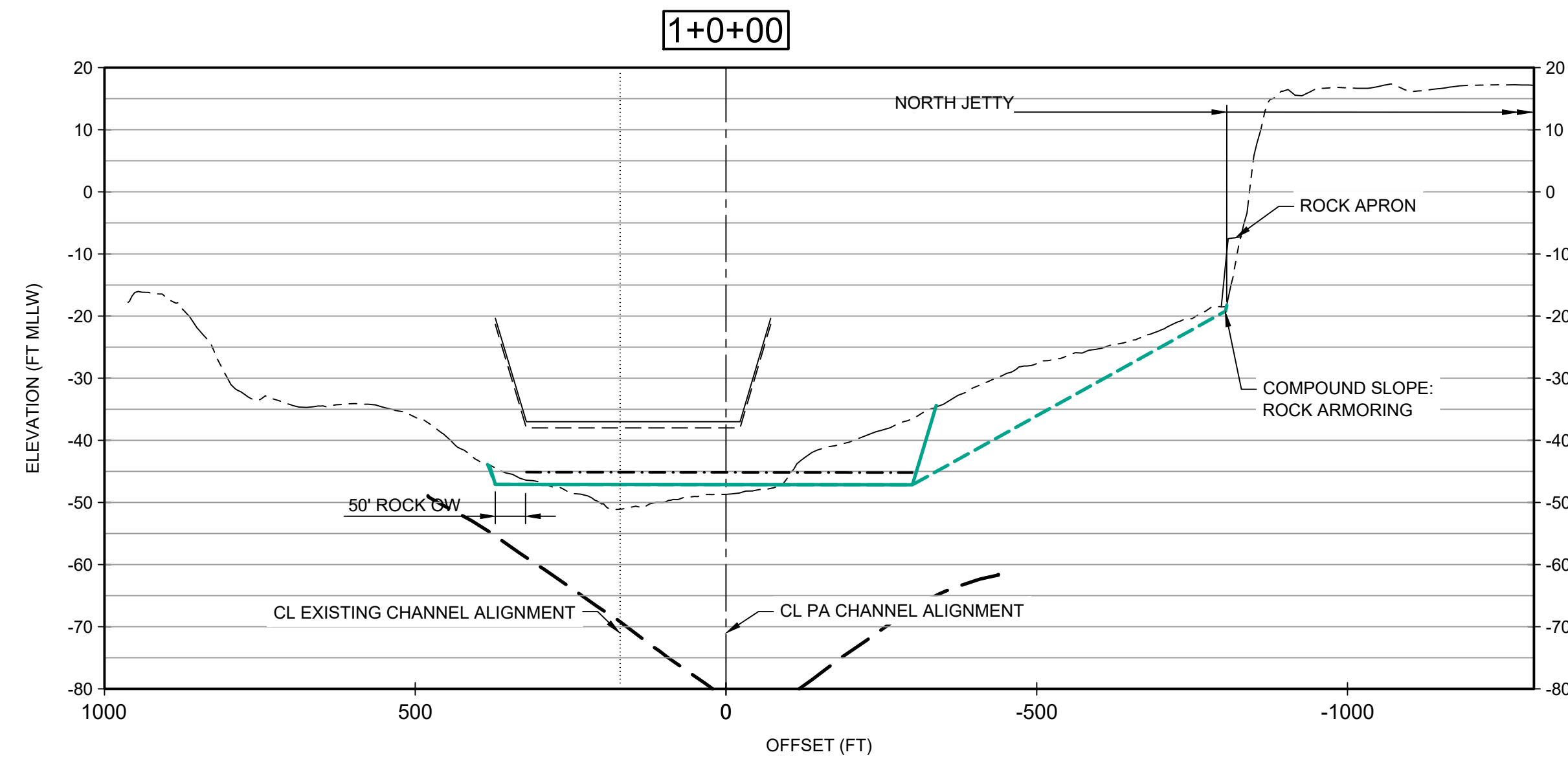
LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

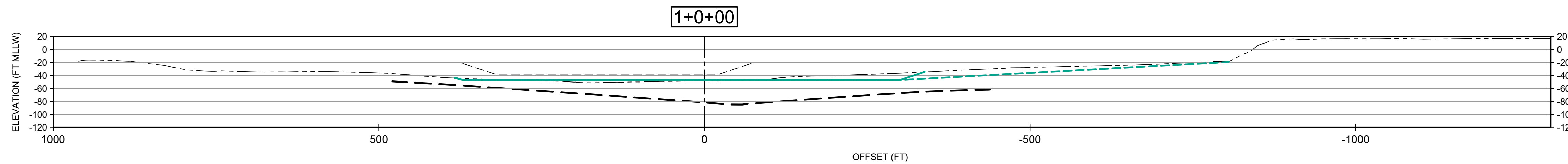
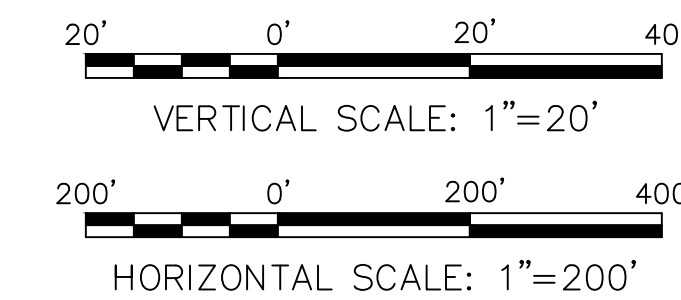
- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.15
PA CHANNEL + AMD	-47.12



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

									APPR.
									DATE
									MARK
									DESCRIPTION

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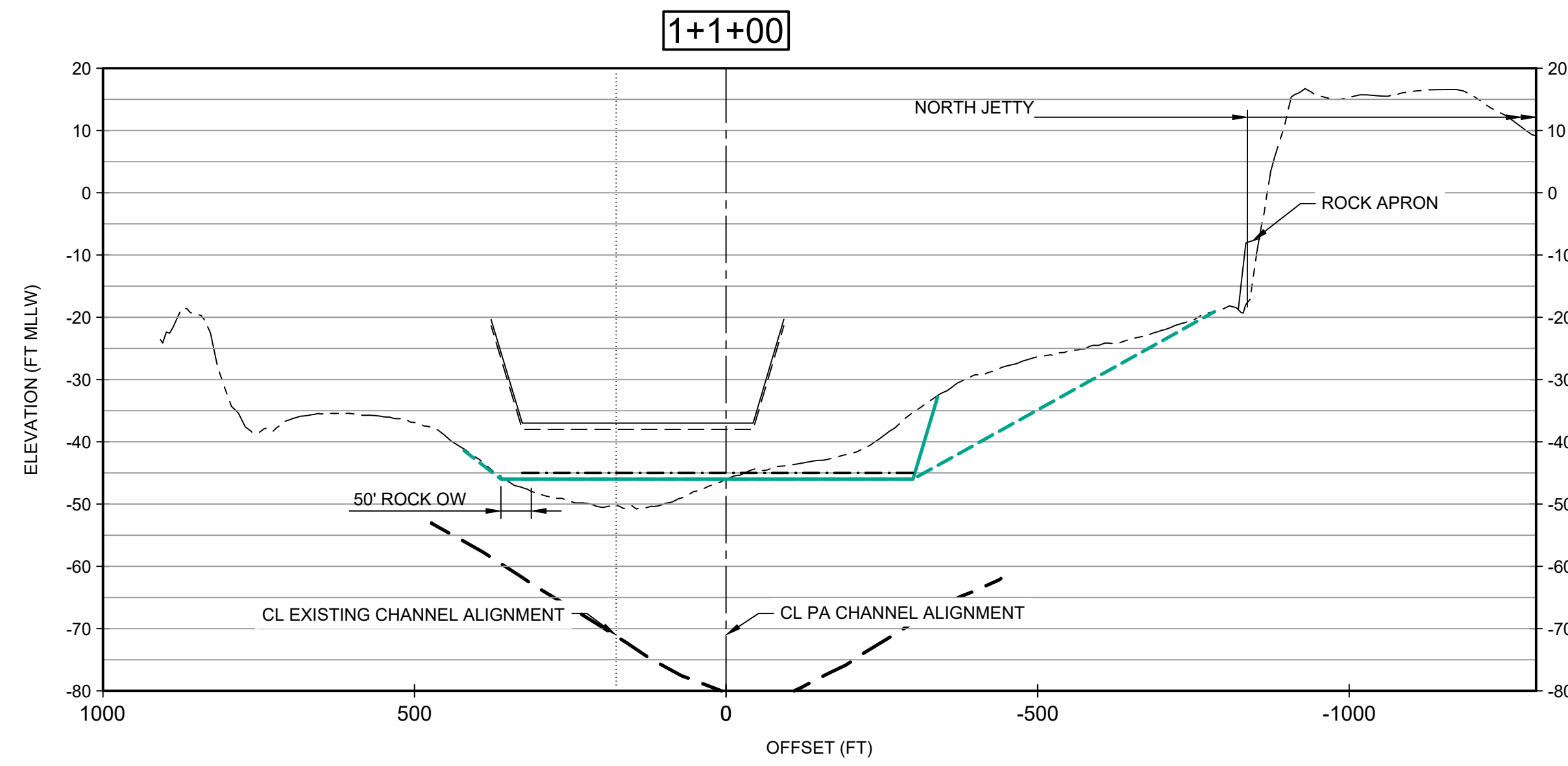
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (61 OF 185)

SHEET IDENTIFICATION

FIG-062

INDEX 62 OF 186



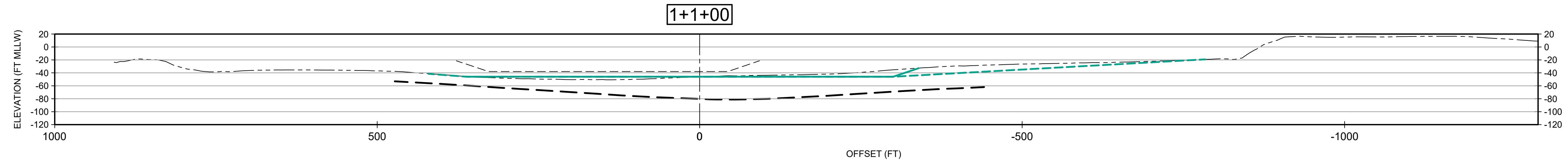
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- .-.- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE

- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- .-.- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- .-.- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	DESCRIPTION	MARK	APPR.

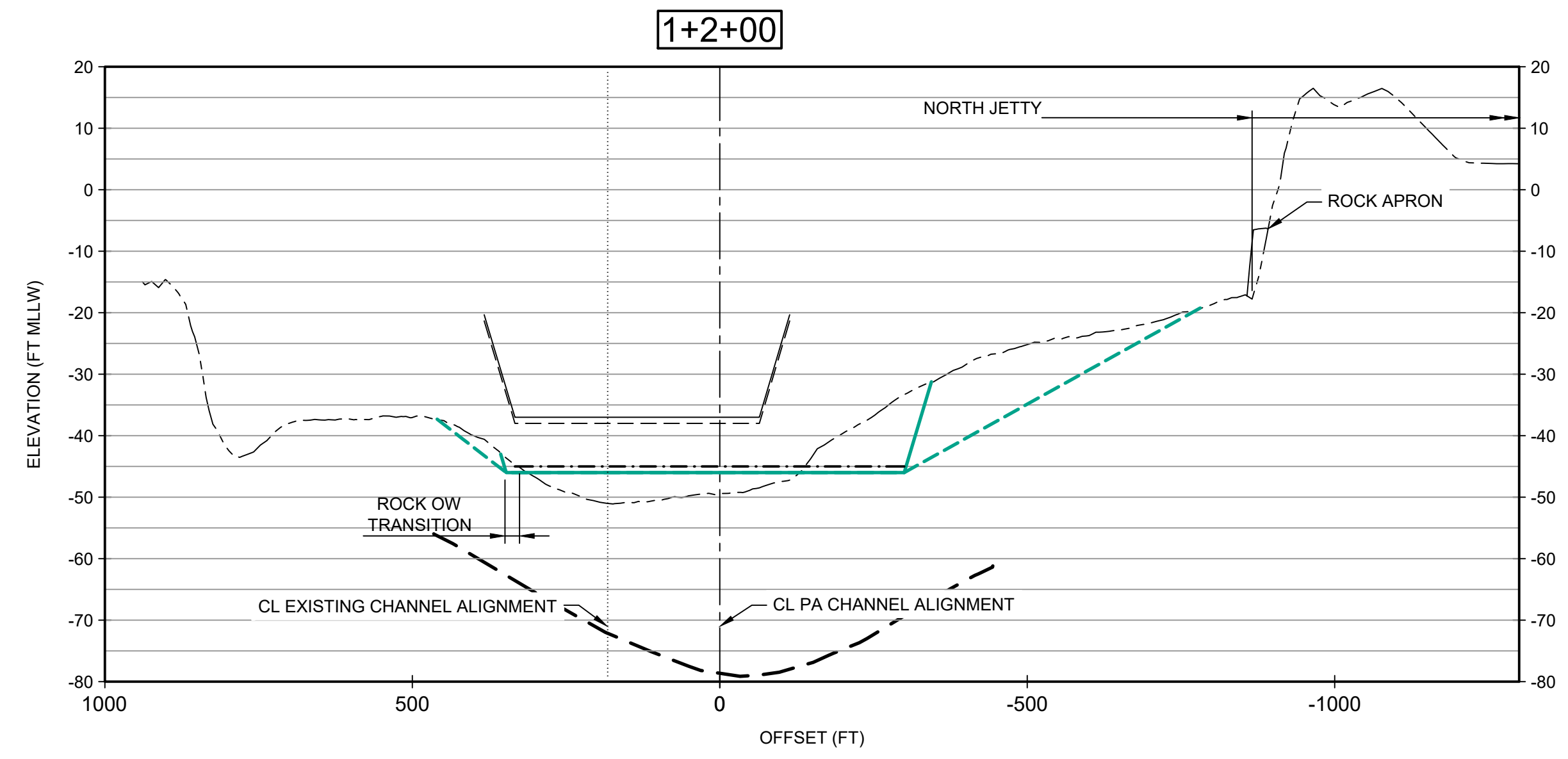
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SUBMITTED BY: 		SOLICITATION NO.:
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		PLOT DATE:
		DRAWING NUMBER:
		FILE NAME:
		SIZE:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (62 OF 185)

SHEET IDENTIFICATION
FIG-063
 INDEX 63 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-063-CROSS SECTIONS; Plotted: 5/20/2024 4:16 PM by LANDON, KYLE; Saved: 5/14/2024 11:30 PM by JGROTH



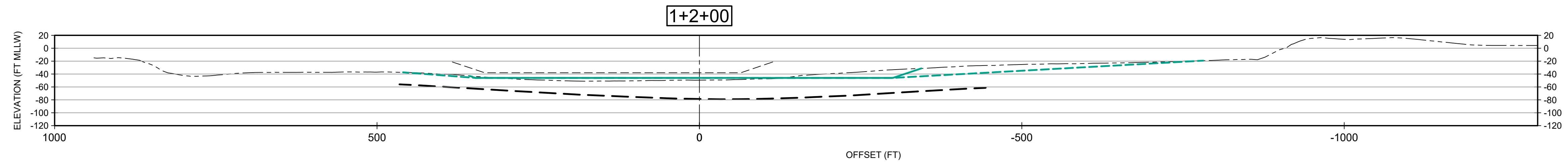
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

<p>600 UNIVERSITY STREET SEATTLE, WA 98101 (206) 622-0222</p>	DESIGNED BY:	DATE:
	DRAWN BY:	2025/07/11
	CHECKED BY:	HP
	EC	SOLICITATION NO.:
	FILE NAME:	CONTRACT NO.:
	SIZE:	DRAWING NUMBER:
		PLOT DATE:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (63 OF 185)

SHEET IDENTIFICATION
FIG-064
 INDEX 64 OF 186

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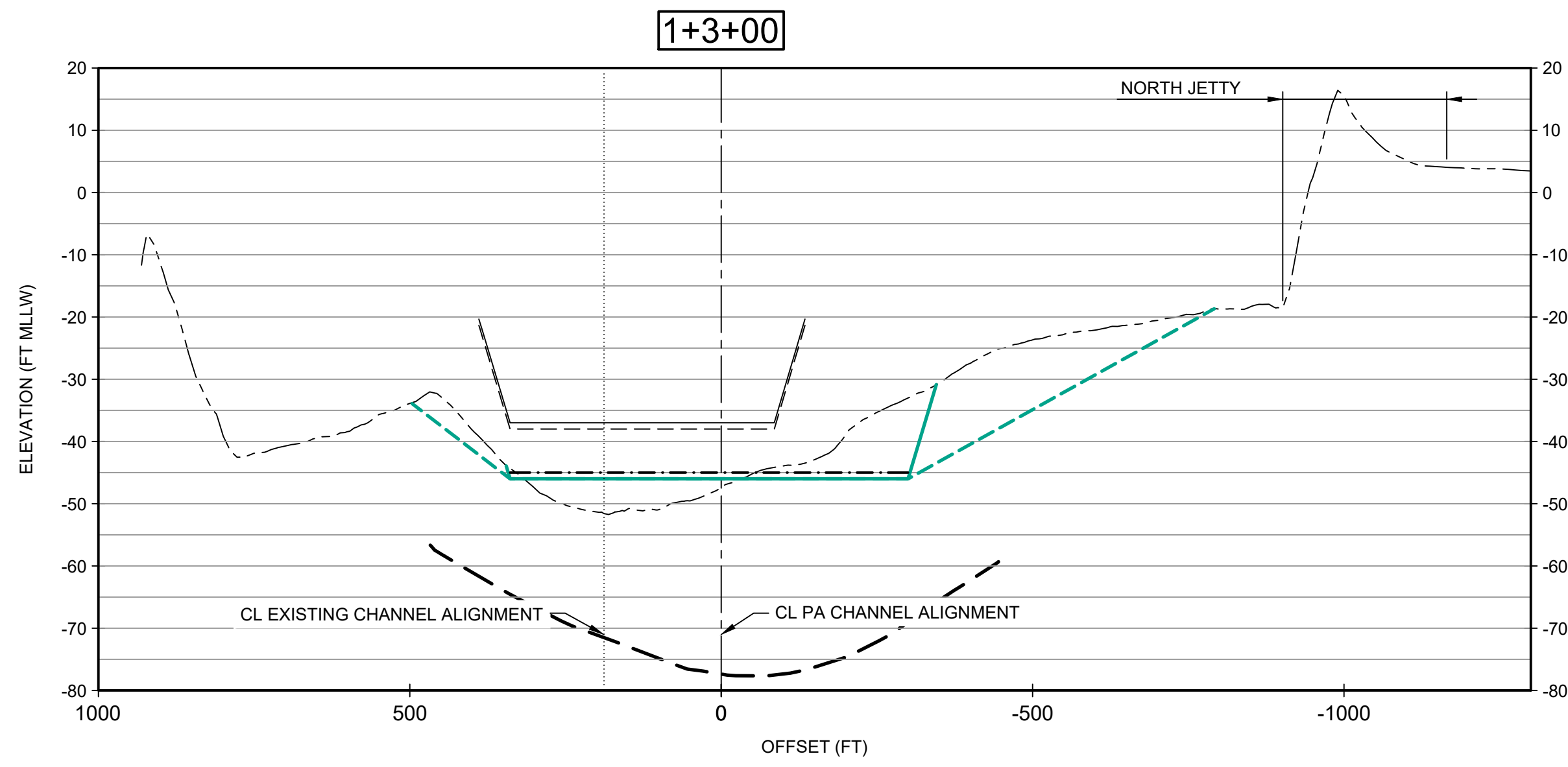
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SUBMITTED BY:	PLOT SCALE:	CONTRACT NO.:
FILE NAME:	FILE NUMBER:	DRAWING NUMBER:
SIZE:	FILE NAME:	DRAWING NUMBER:

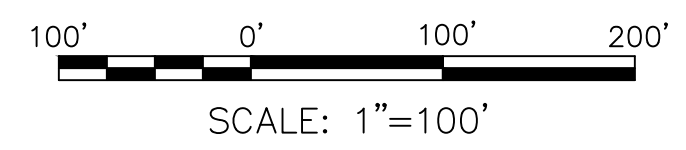
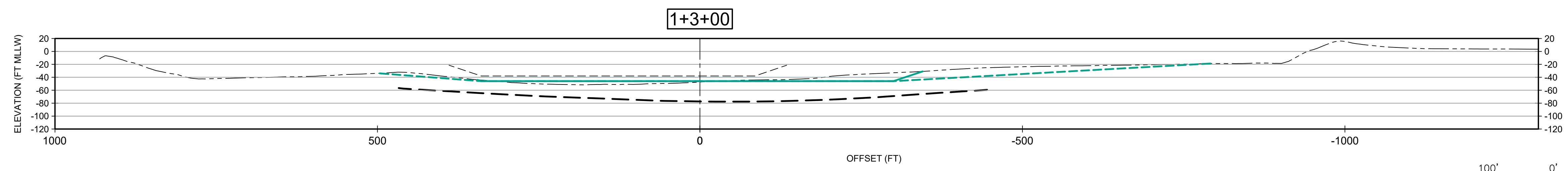
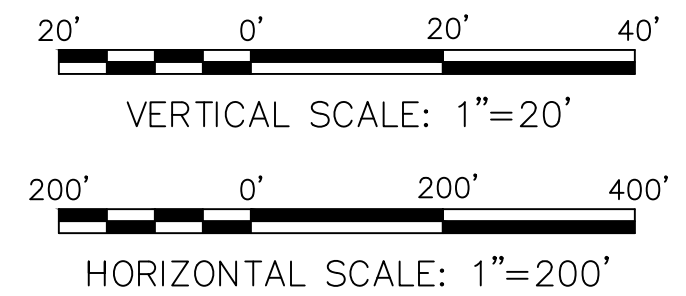
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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (64 OF 185)

SHEET IDENTIFICATION
FIG-065
 INDEX 65 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



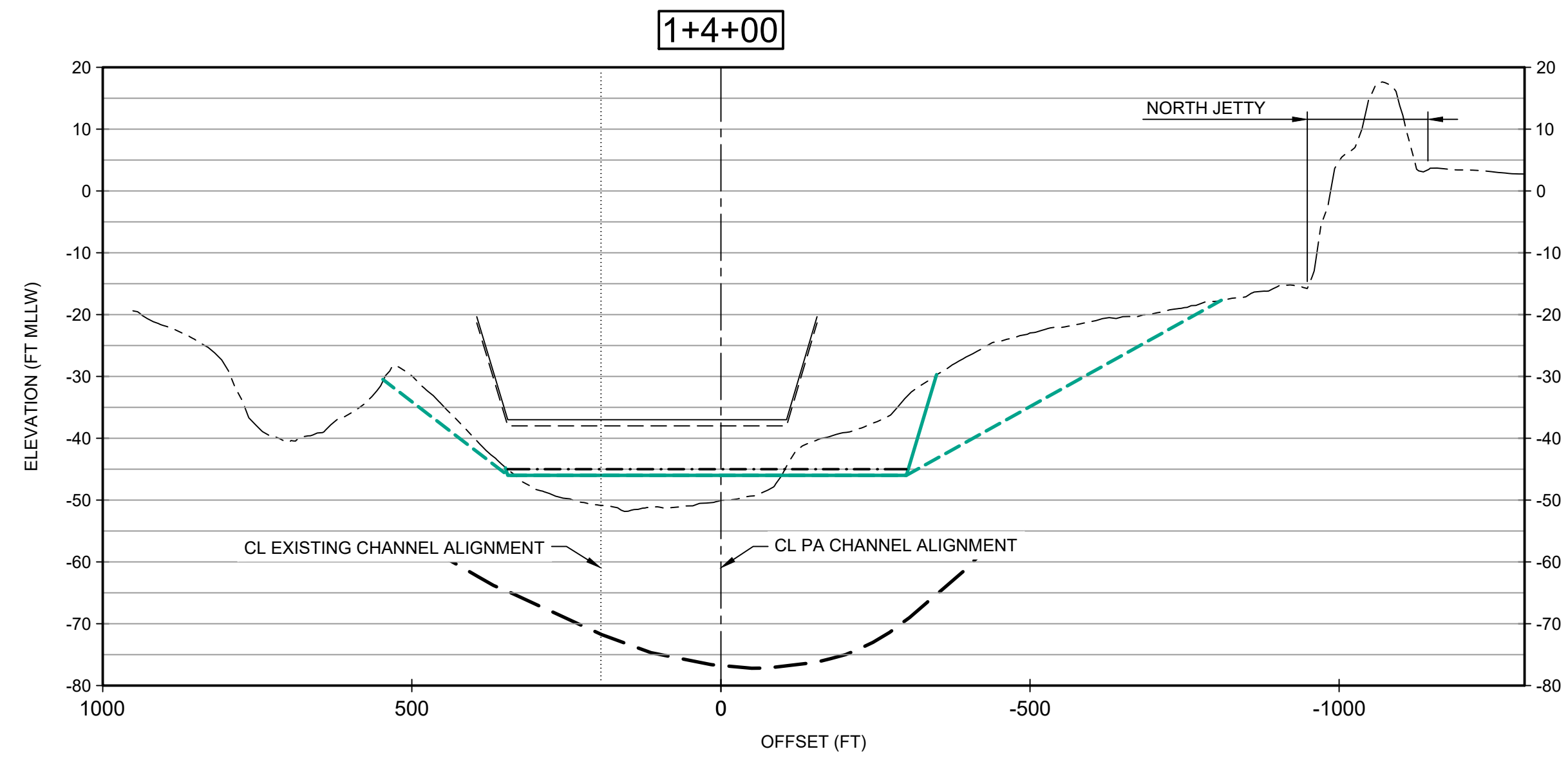
LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
	PA CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

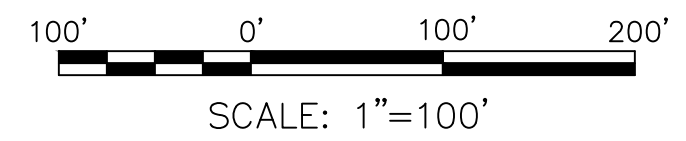
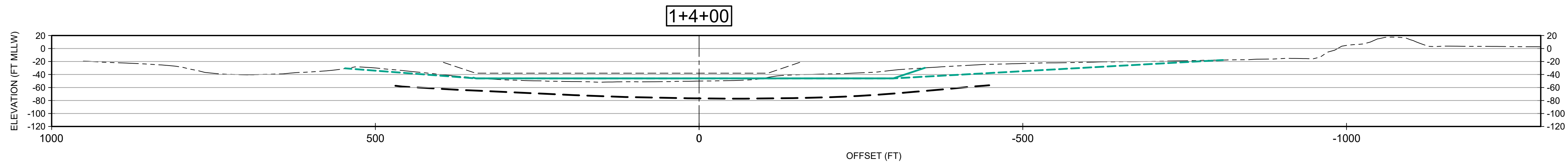
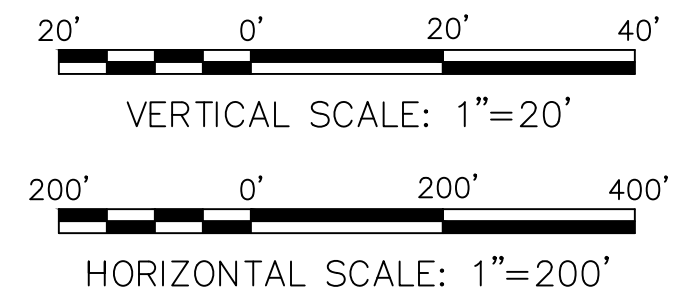
- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- . - . - . PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



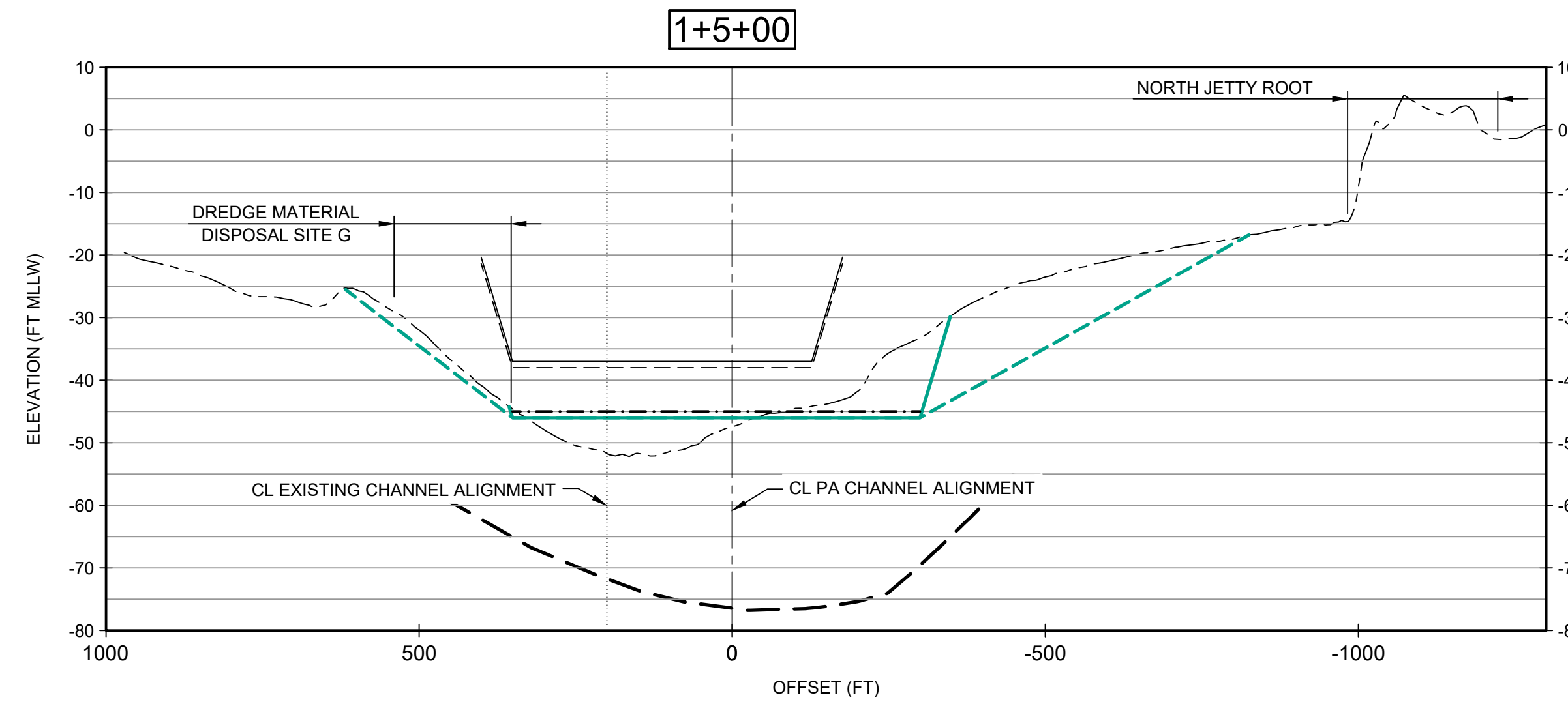
DATE	DESCRIPTION	MARK

DESIGNED BY: HP	CHECKED BY: EC	DATE: 2016/07/11
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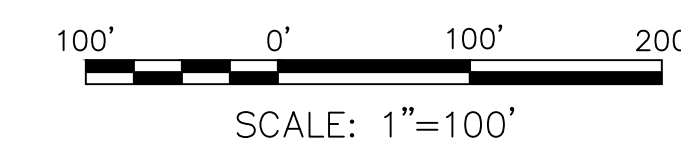
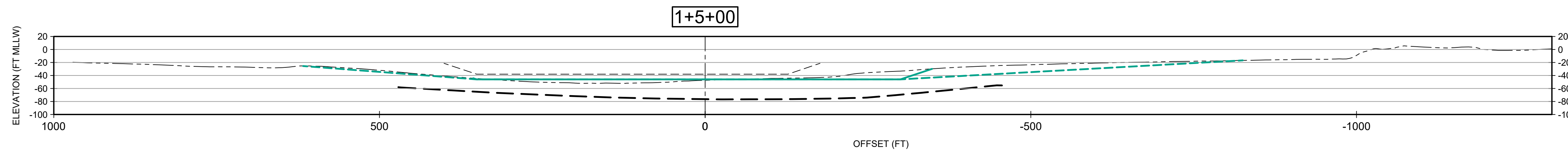
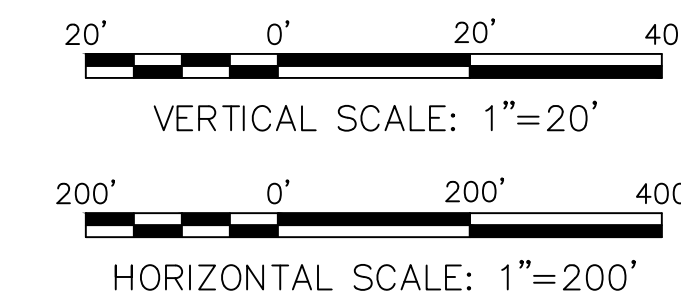
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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (65 OF 185)

SHEET IDENTIFICATION
FIG-066
 INDEX 66 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



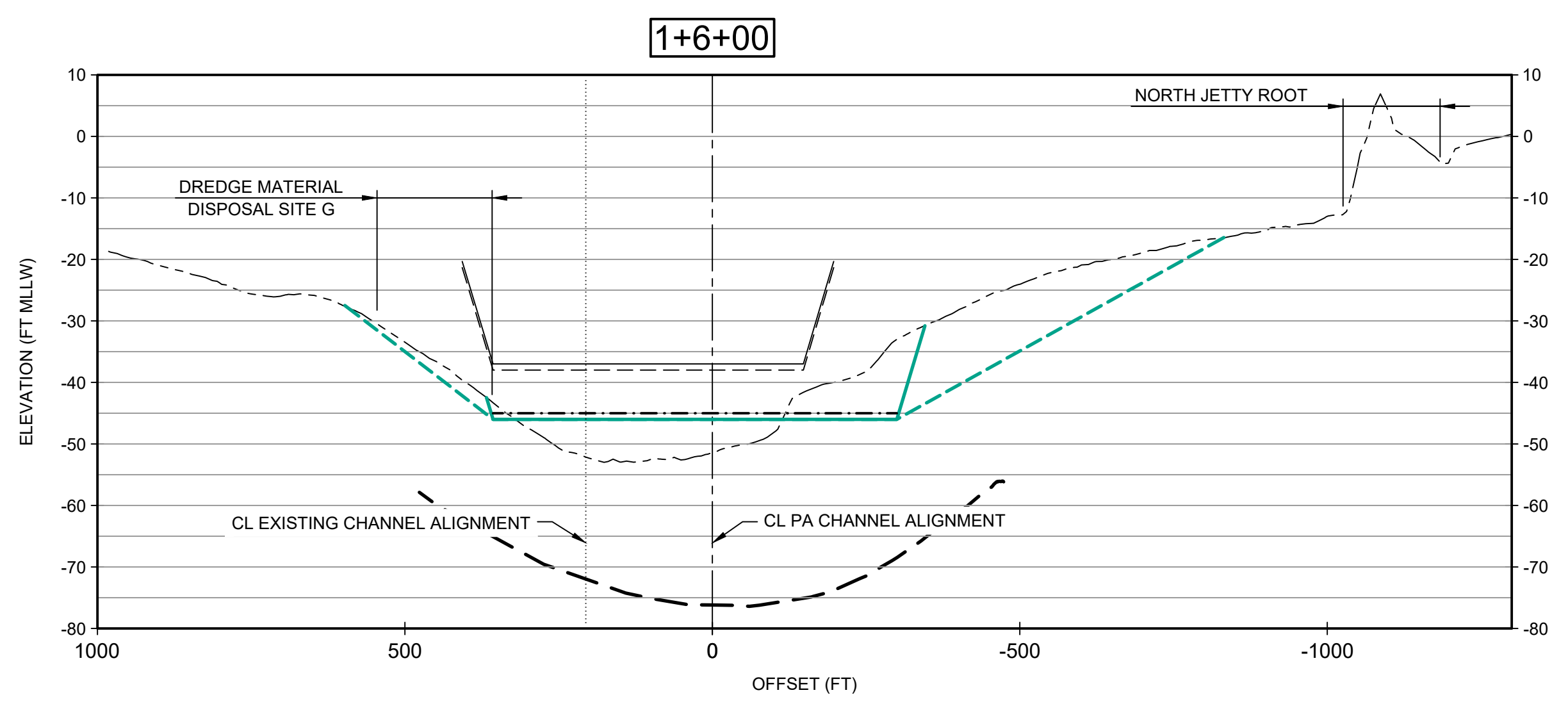
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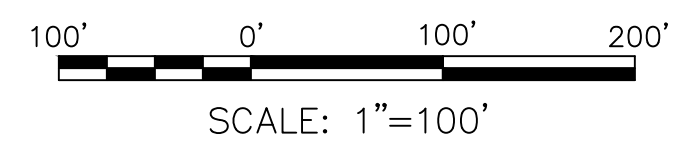
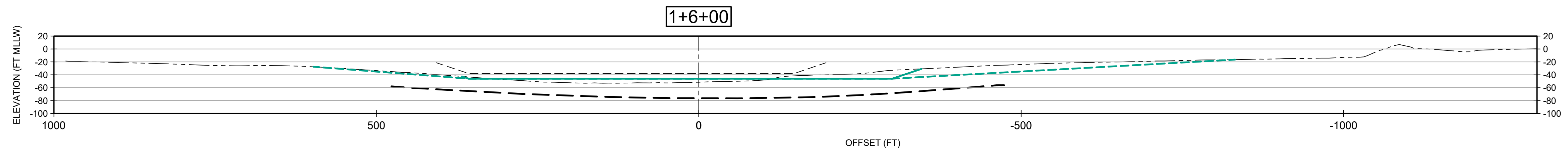
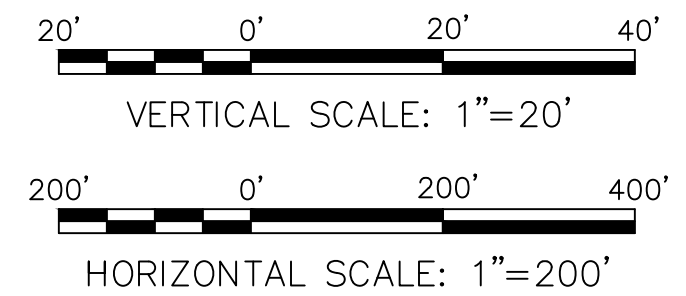
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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (66 OF 185)

SHEET IDENTIFICATION
FIG-067
 INDEX 67 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—————	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
-----	PA CHANNEL LIMITS	-----	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

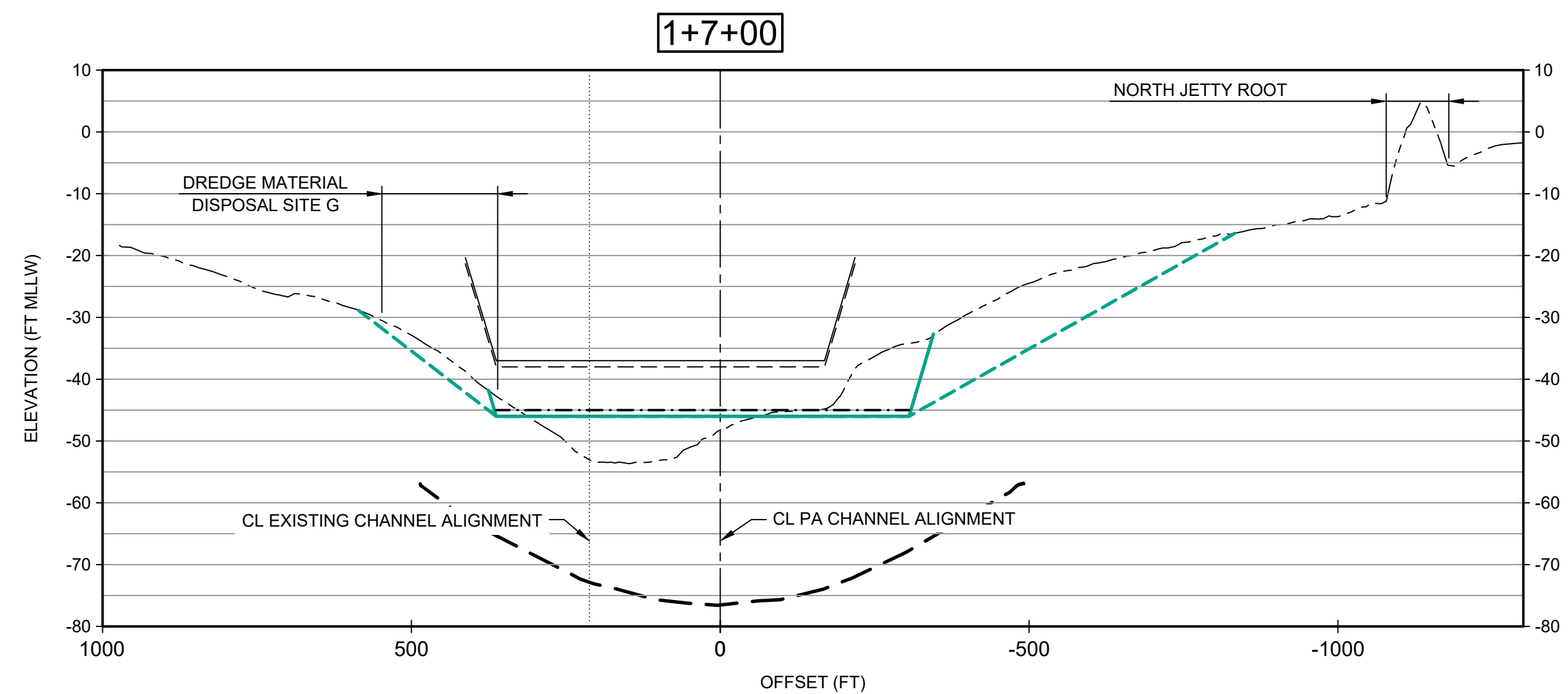
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DATE: 2016/07/11
SUBMITTED BY: HJP
CONTRACT NO.:
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FILE NAME: FILE NUMBER:
SIZE: SIZE

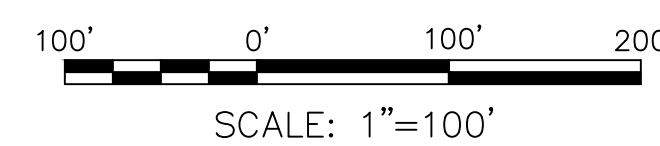
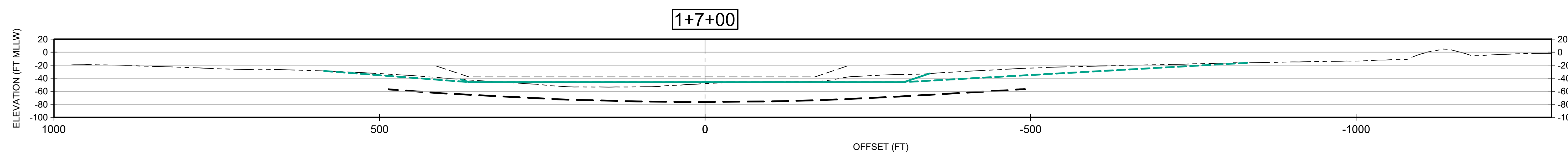
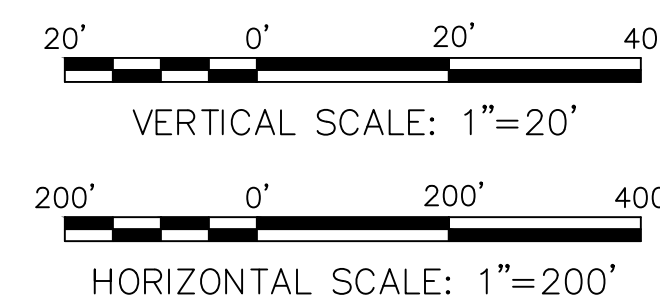
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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (67 OF 185)

SHEET IDENTIFICATION
FIG-068
 INDEX 68 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024; SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

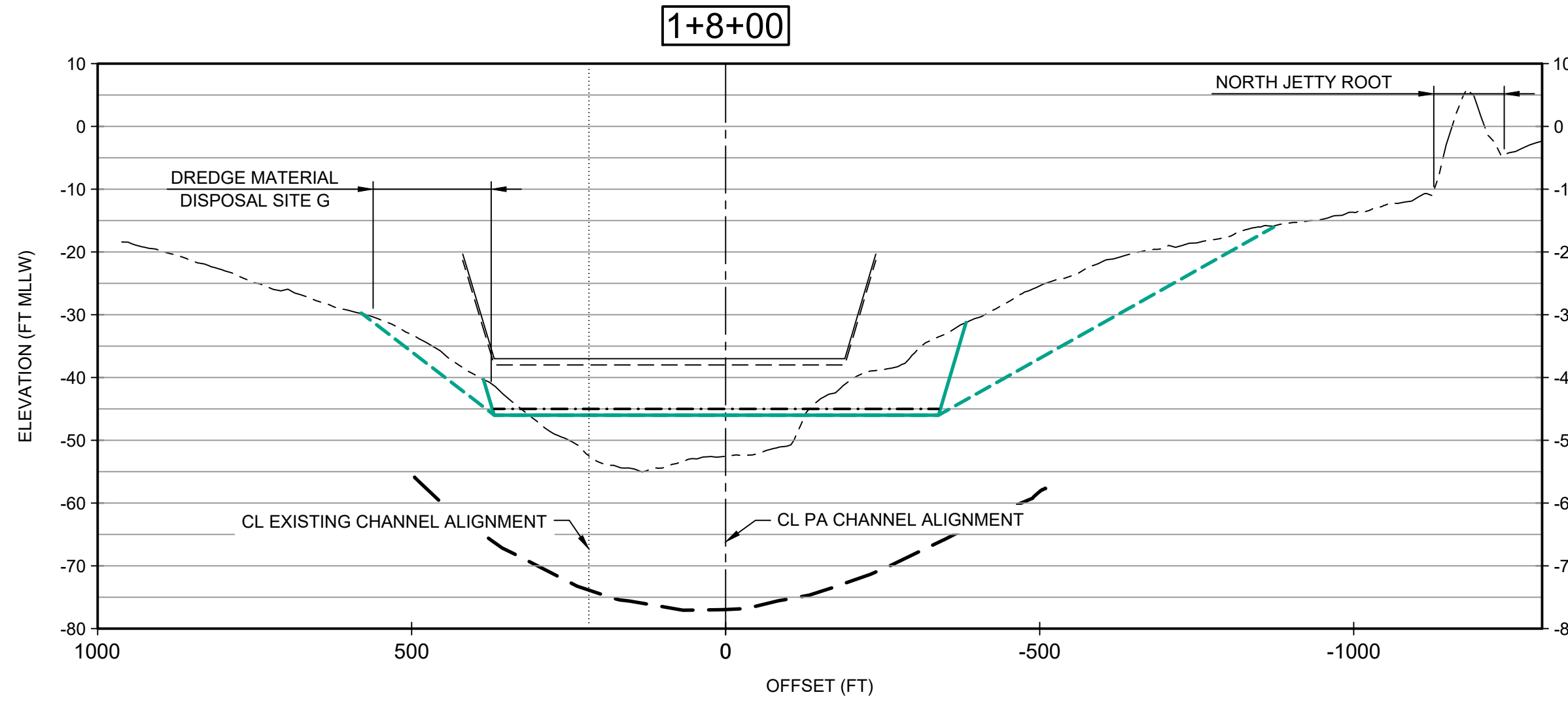
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PLOT NUMBER:		DRAWING NUMBER:	

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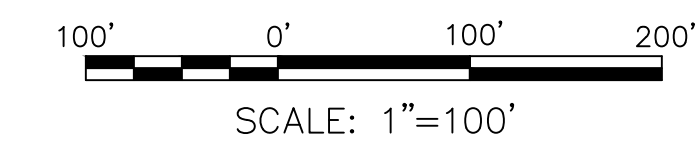
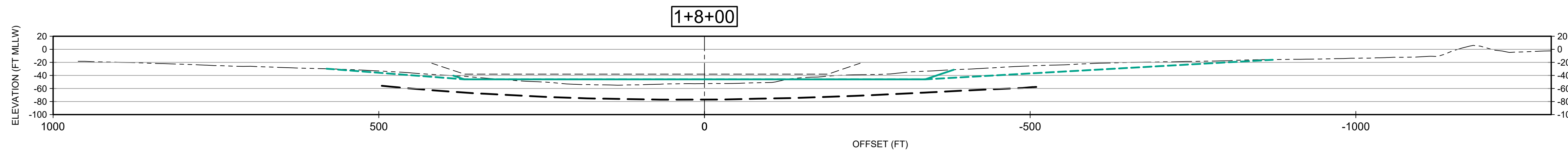
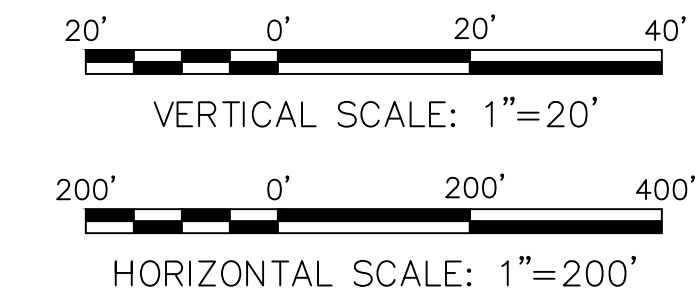
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (68 OF 185)

DATE	DESCRIPTION	MARK



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

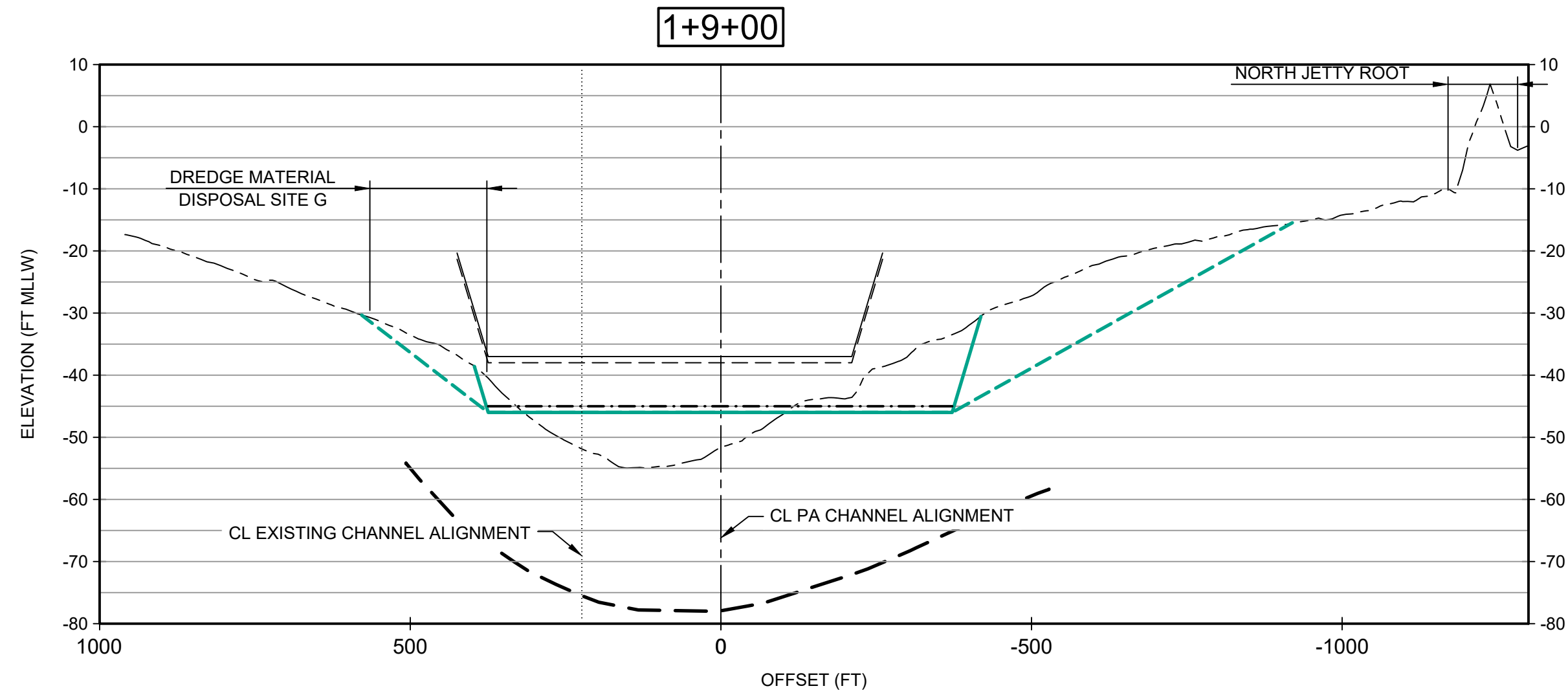
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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H.P.	EC	CONTRACT NO.:
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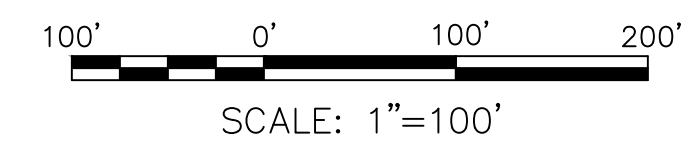
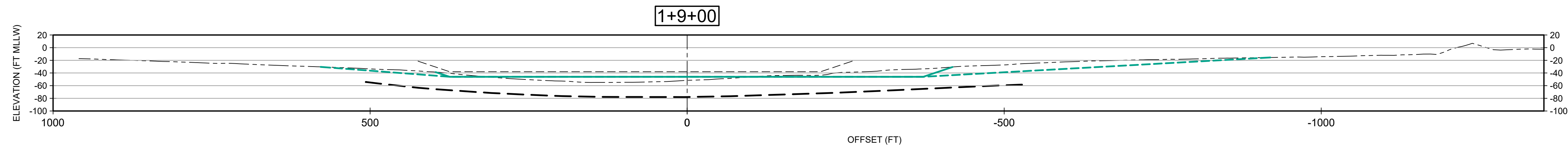
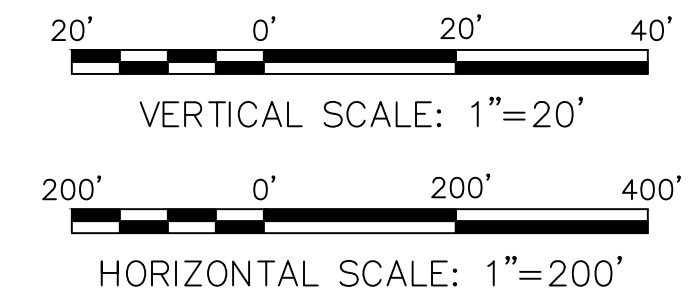
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (69 OF 185)

SHEET IDENTIFICATION
FIG-070
 INDEX 70 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

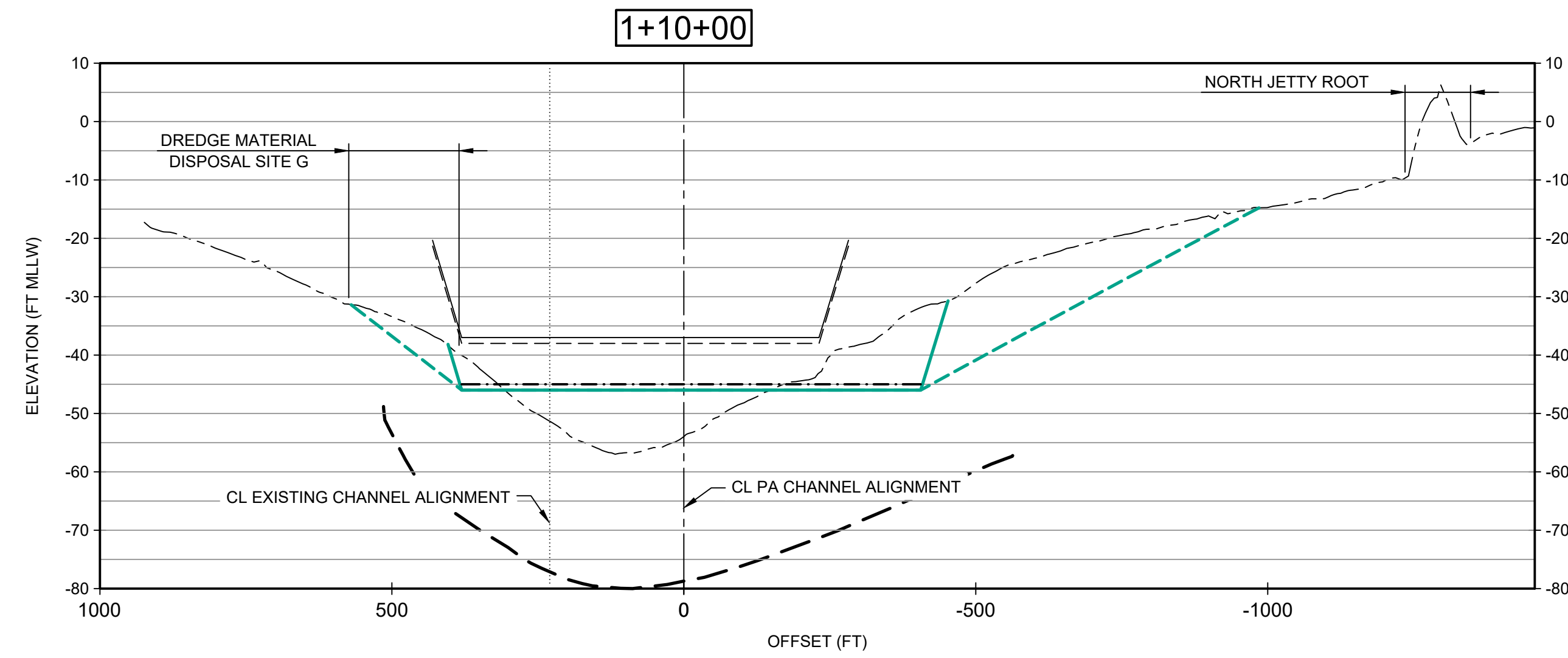
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 DRAWN BY: []
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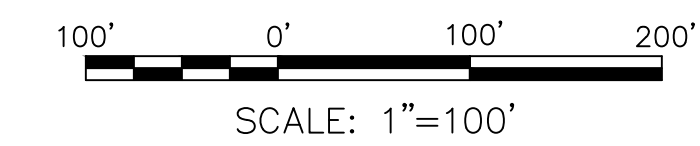
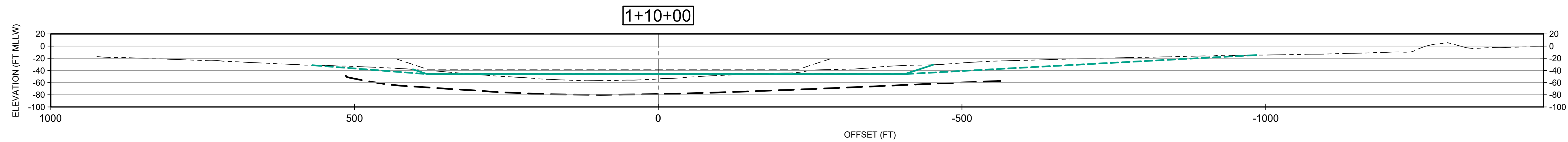
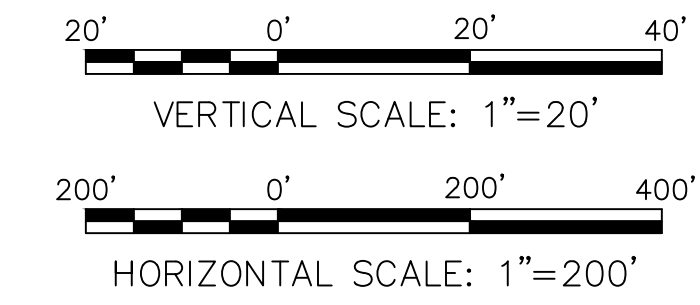
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (70 OF 185)

SHEET IDENTIFICATION
FIG-071
 INDEX 71 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20_CADD\Active\XS_SubAppendix\FIG-071-CROSS SECTIONS; Plotted: 5/20/2024 4:23 PM by LANDON, KYLE; Saved: 5/14/2024 11:45 PM by JGROTH



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



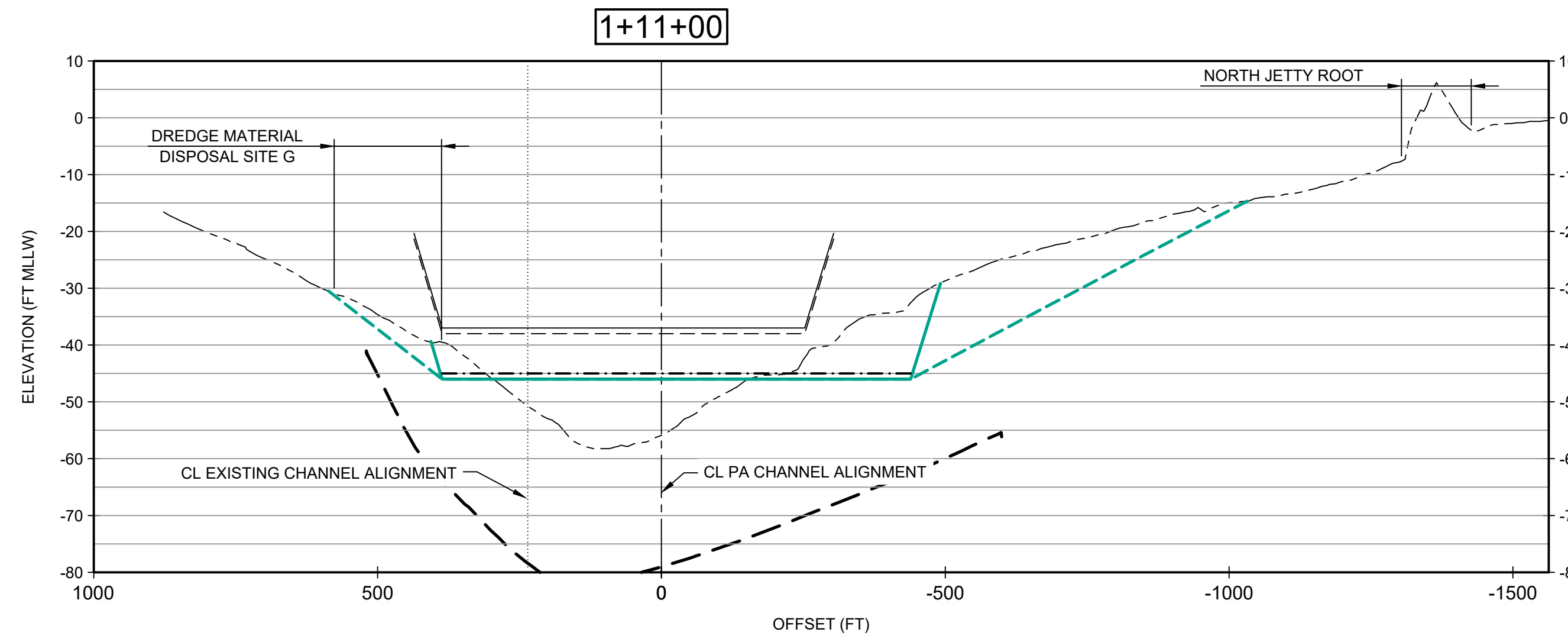
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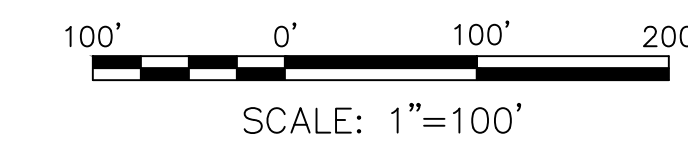
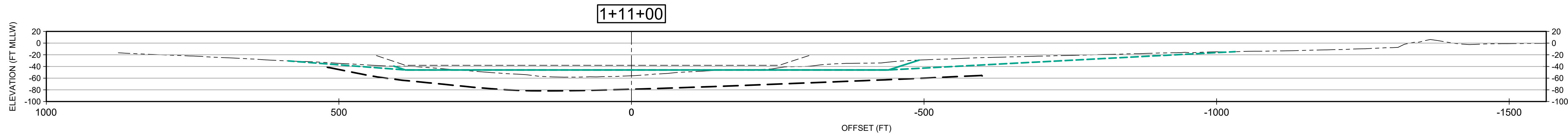
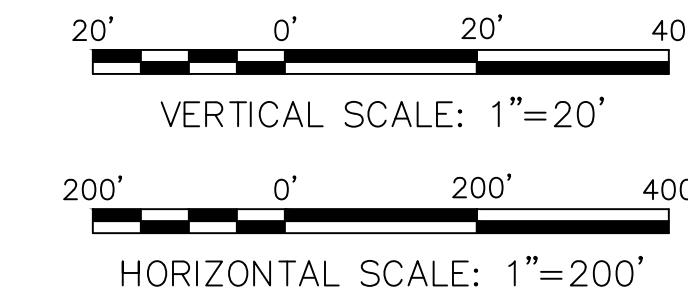
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 (206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (71 OF 185)

SHEET IDENTIFICATION
FIG-072
 INDEX 72 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

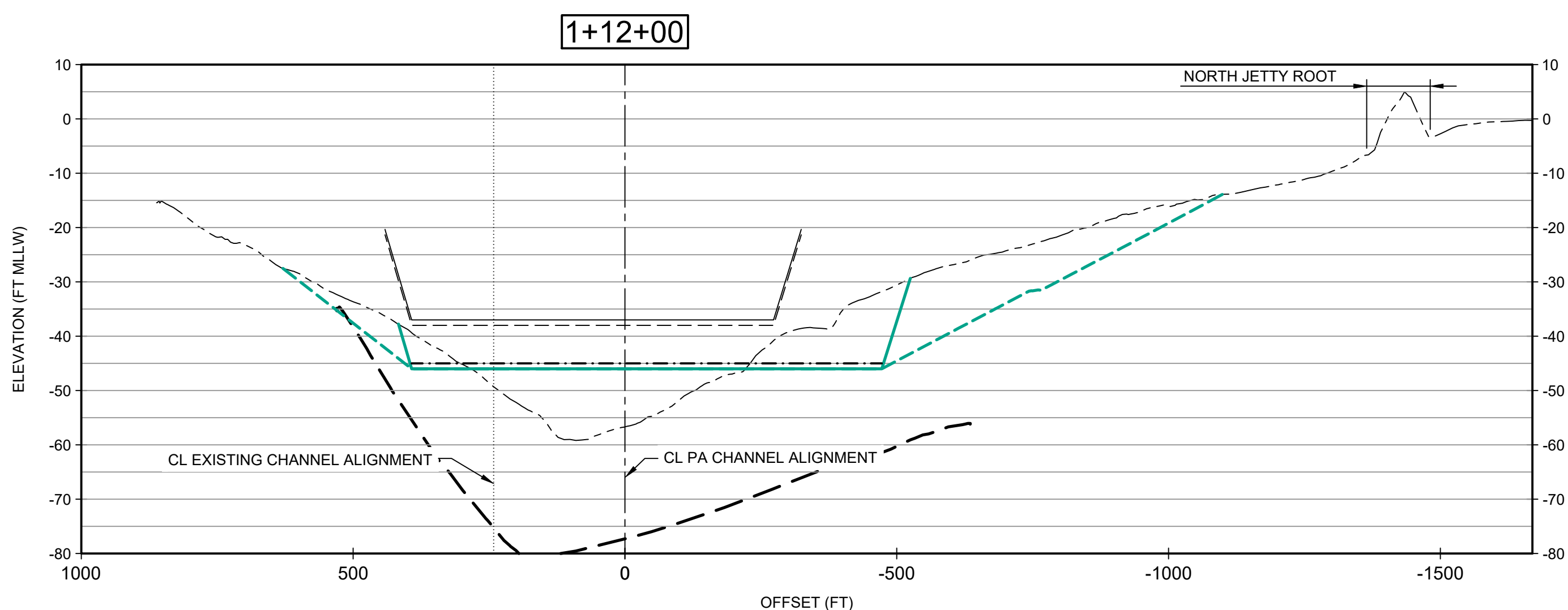
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	2016/07/11	DESIGNED BY	H.P.	CHECKED BY	E.C.	CONTRACT NO.	DRAWING NUMBER
MARK	DESCRIPTION	DATE	APPR.				

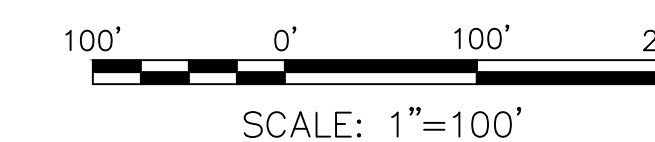
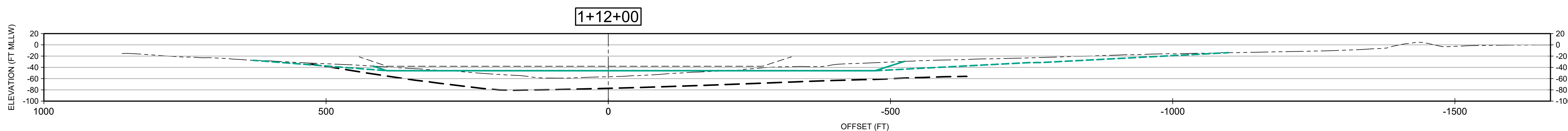
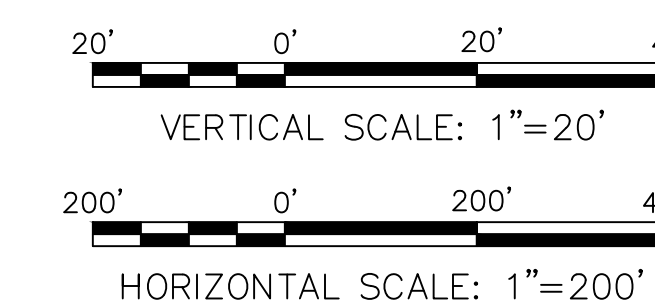
600 UNIVERSITY STREET
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(206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (72 OF 185)

SHEET IDENTIFICATION
FIG-073
INDEX 73 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



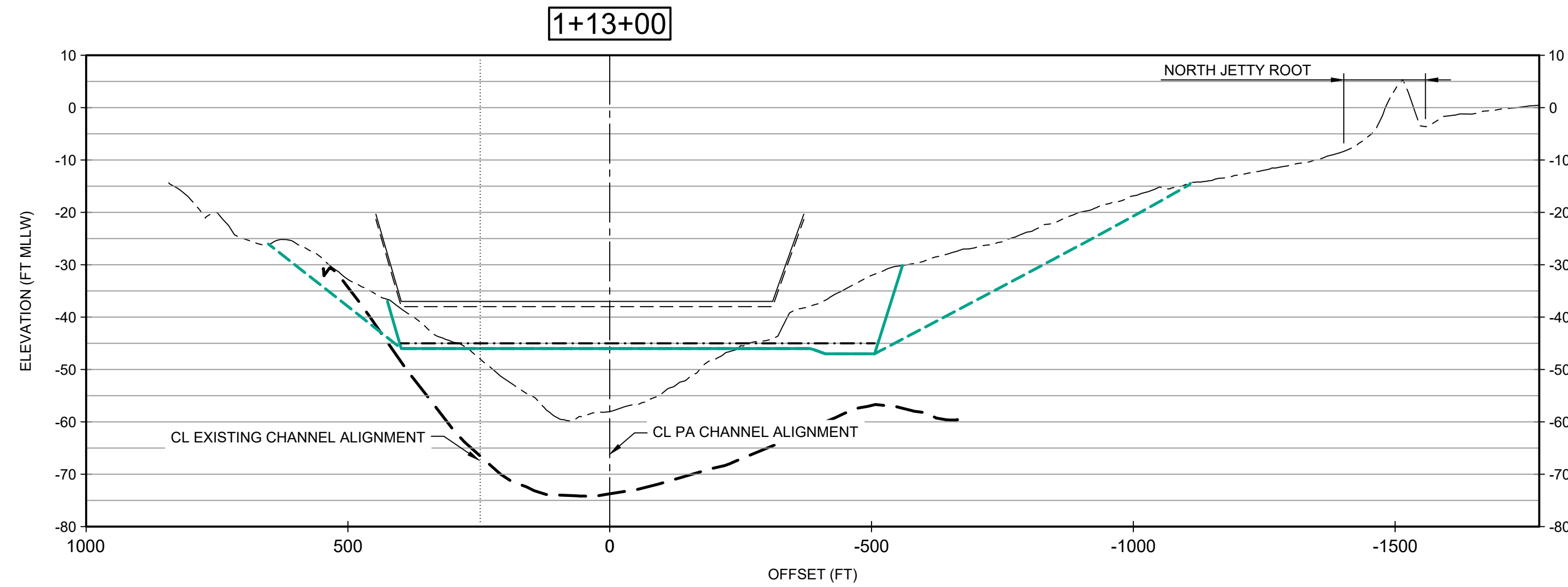
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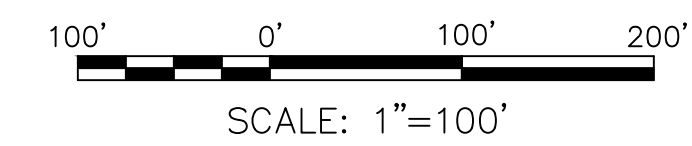
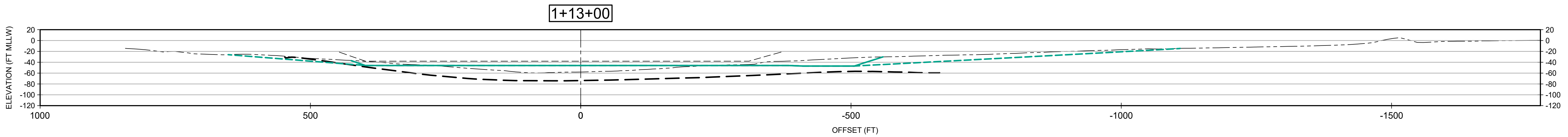
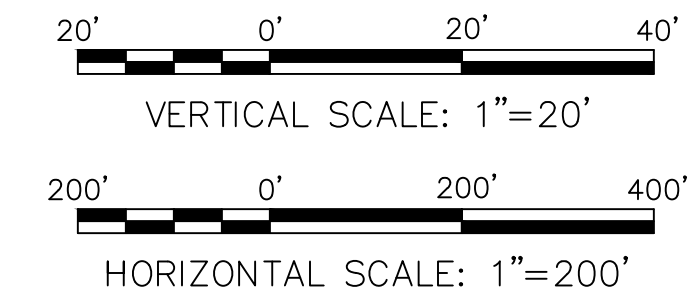
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (73 OF 185)

SHEET IDENTIFICATION
FIG-074
 INDEX 74 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	DESCRIPTION	MARK

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 (206) 622-0222

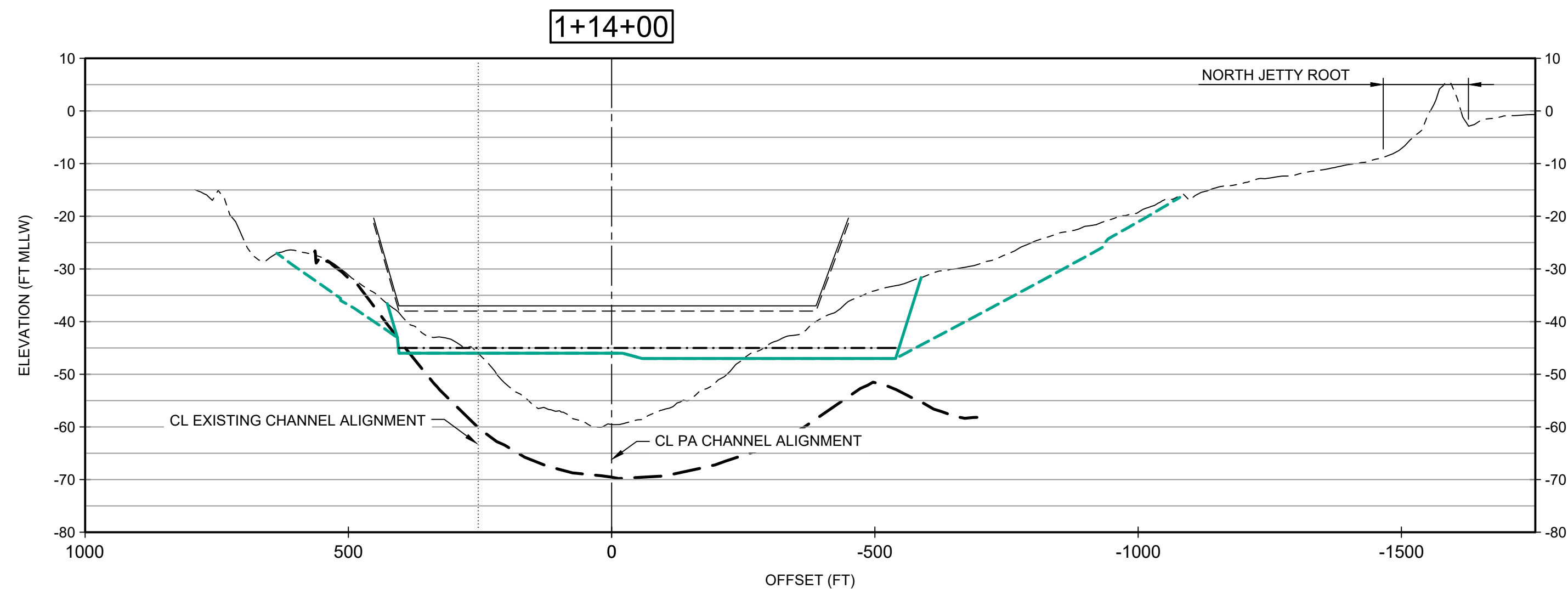
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 DATE: 2016/07/11

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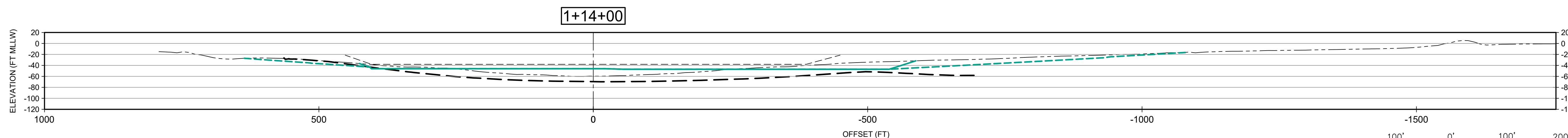
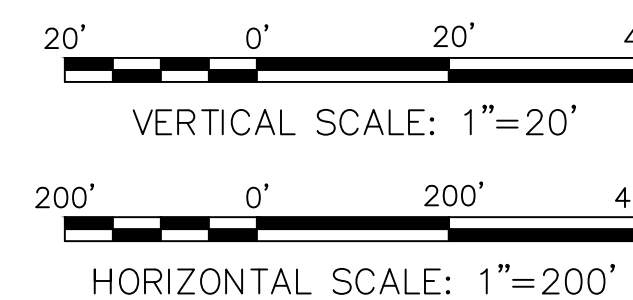
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 DATE: APPR.

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (74 OF 185)

SHEET IDENTIFICATION
FIG-075
 INDEX 75 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- . - . - . PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK

DESIGNED BY:
 DRAWN BY:
 CHECKED BY:
 H.P.
 EC
 SUBMITTED BY:
 PLOT SCALE:
 FILE NAME:
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT DATE:
 DRAWING NUMBER:
 SIZE:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (75 OF 185)

SHEET IDENTIFICATION
FIG-076
 INDEX 76 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-076-CROSS SECTIONS; Plotted: 5/20/2024 4:27 PM by LANDON, KYLE; Saved: 5/14/2024 11:58 PM by JGROTH

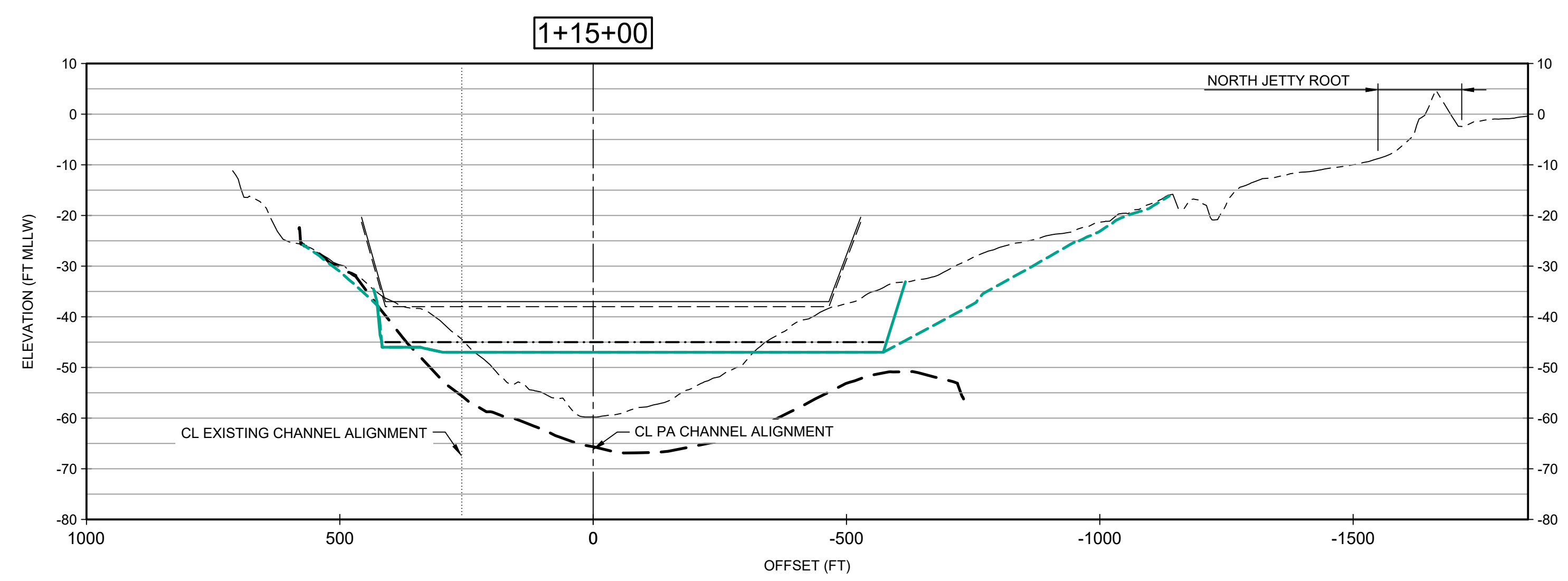
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 CHECKED BY: **EC**
 SUBMITTED BY: **HP**
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 SOLICITATION NO.:
 CONTRACT NO.:
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 PLOT DATE: **SEATTLE, WA 98101**
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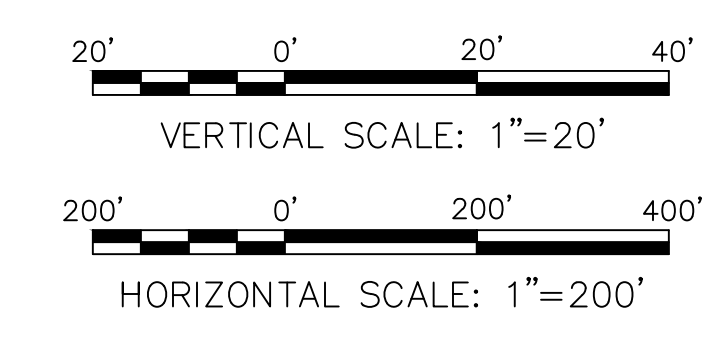
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (76 OF 185)

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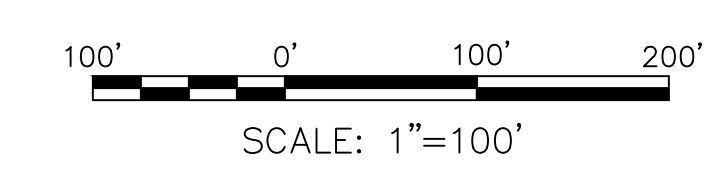
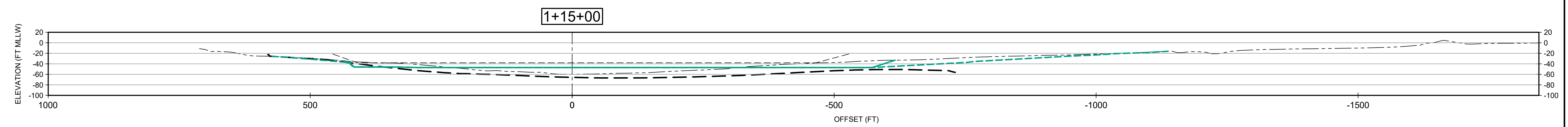
D



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-47.00



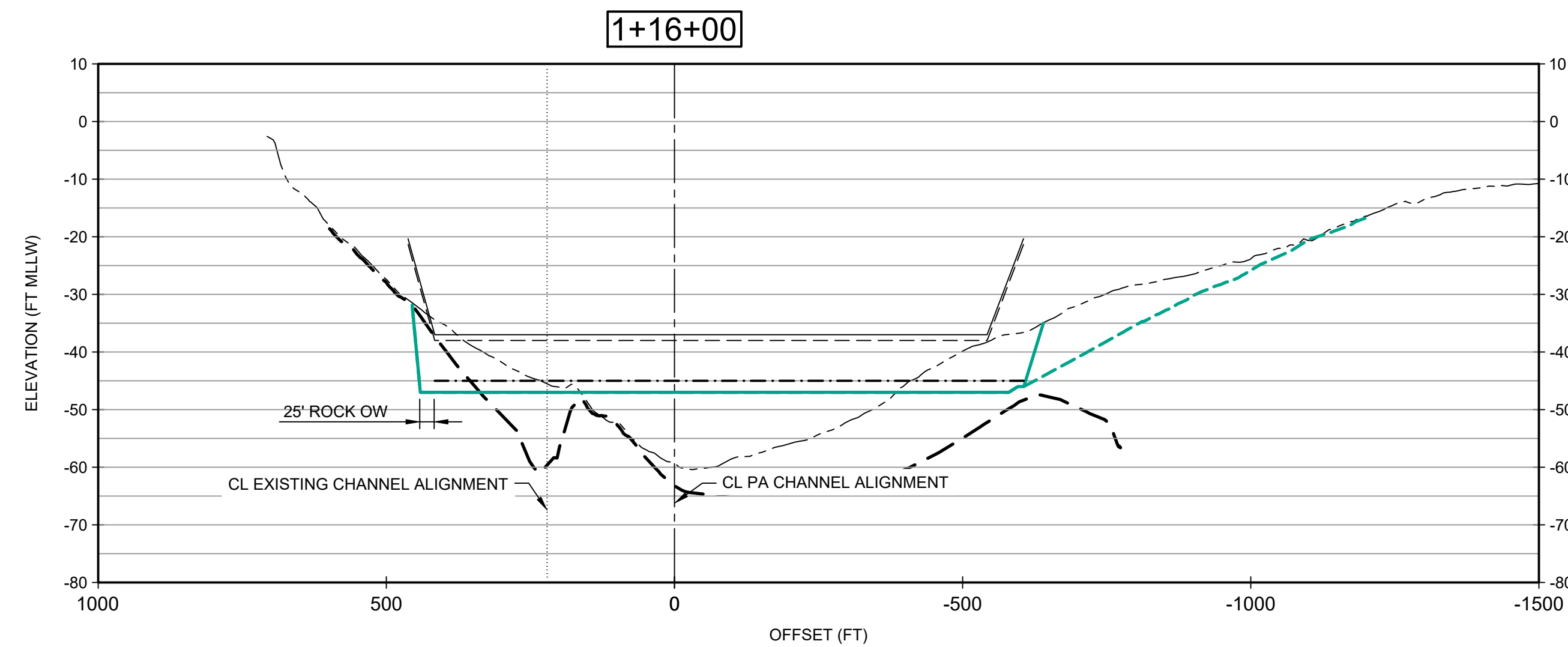
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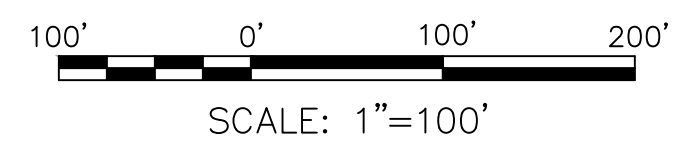
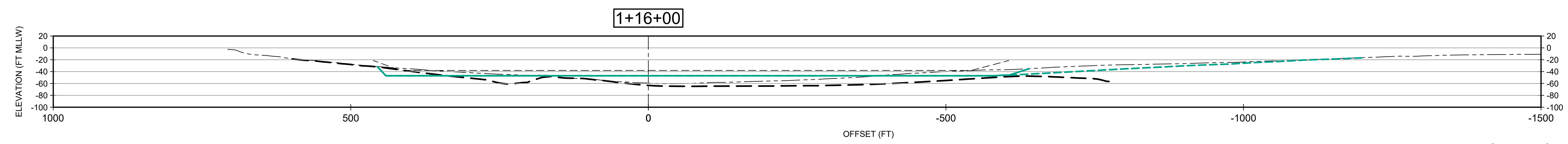
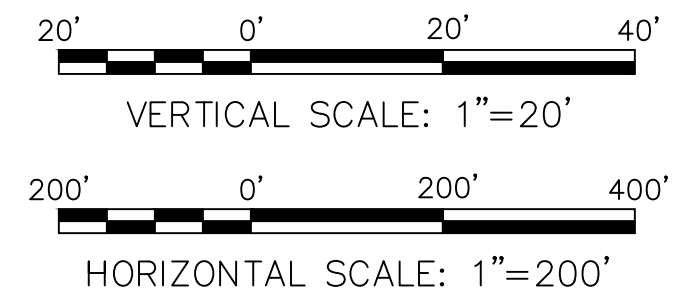
- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - · - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



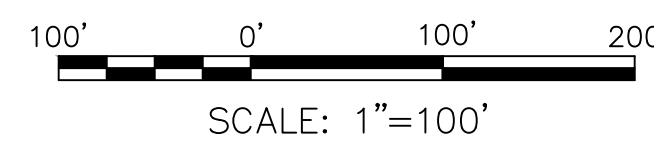
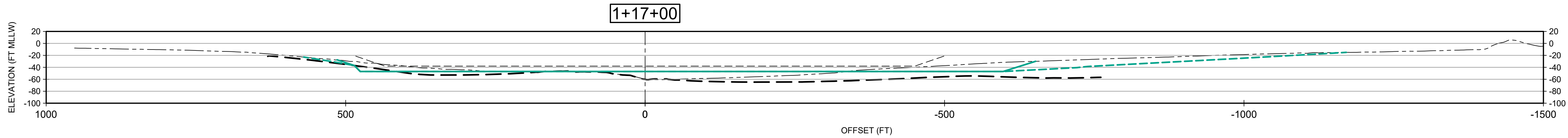
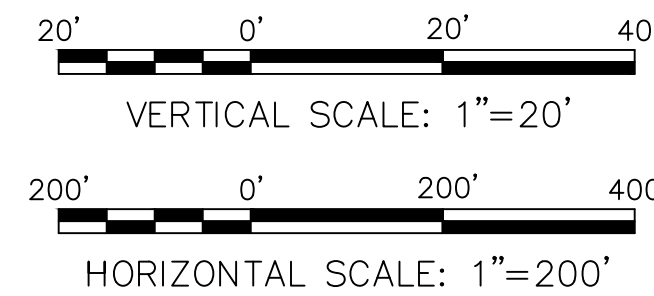
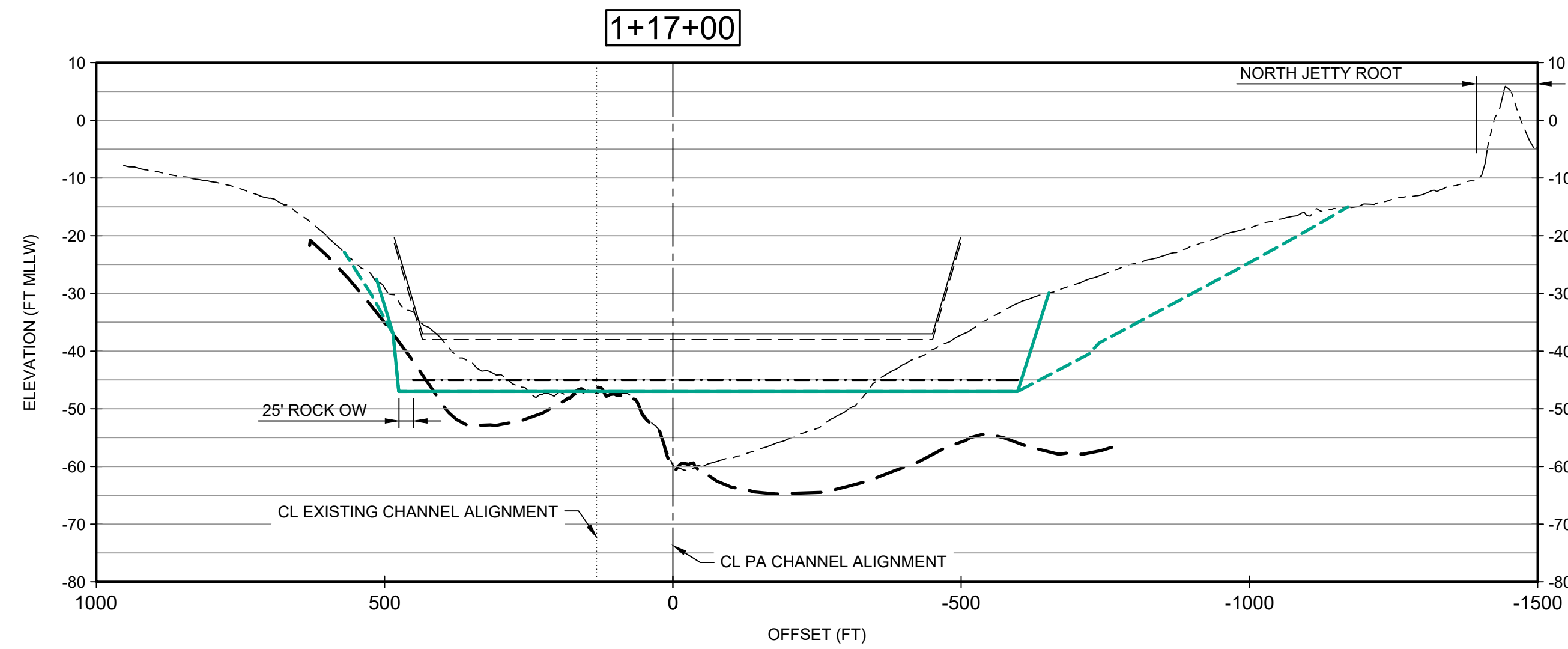
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DRAWN BY: EC
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FILE NAME:
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (77 OF 185)

SHEET IDENTIFICATION
FIG-078
 INDEX 78 of 186



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - · - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - · - · - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

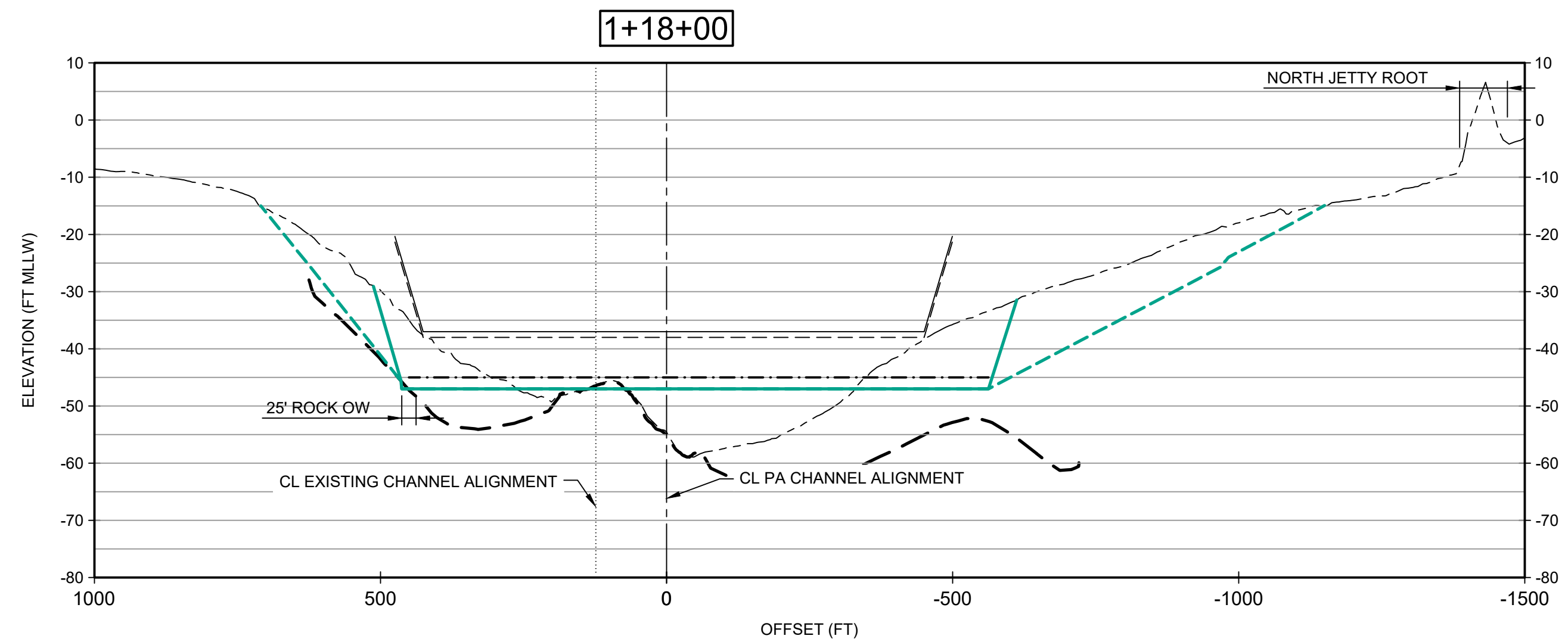
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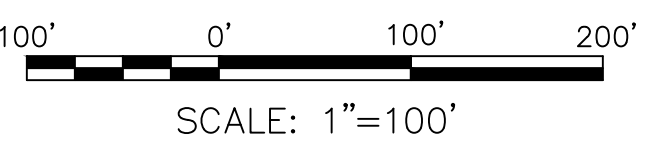
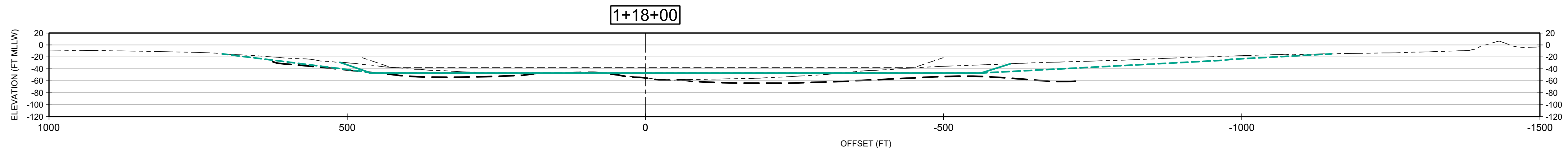
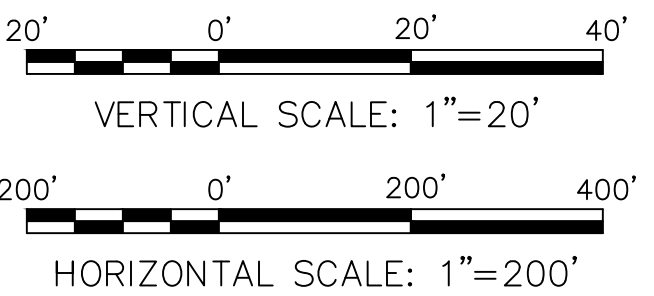
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (78 OF 185)

SHEET IDENTIFICATION
FIG-079
INDEX 79 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	DESCRIPTION	MARK

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 DRAWN BY: **HP** SUBMITTED BY: **HP** SOLICITATION NO.:
 PLOT SCALE: **1"=200'** PLOT DATE: CONTRACT NO.:
 FILE NAME: DRAWING NUMBER:
 SIZE: FILE NAME:

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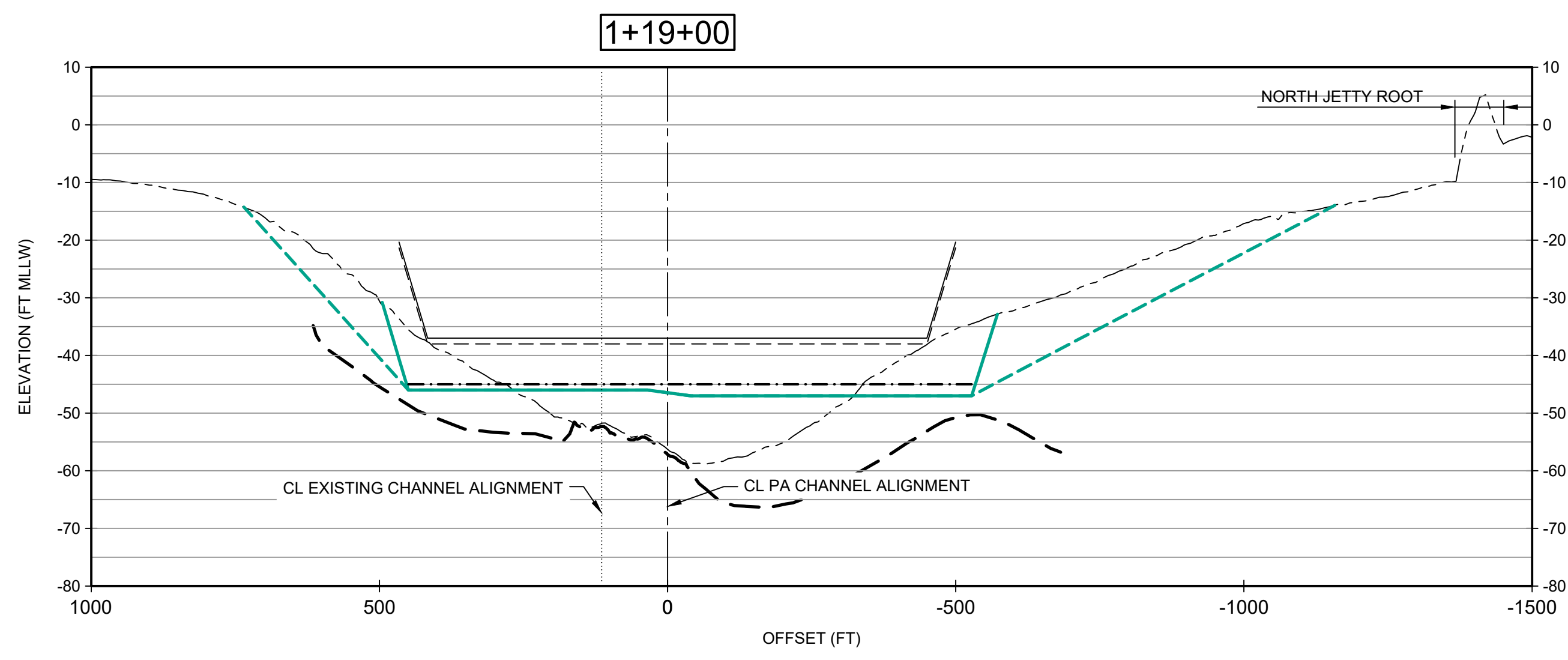
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (79 OF 185)

SHEET IDENTIFICATION
FIG-080
 INDEX 80 OF 186

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MARK	DESCRIPTION	DATE	APPR.



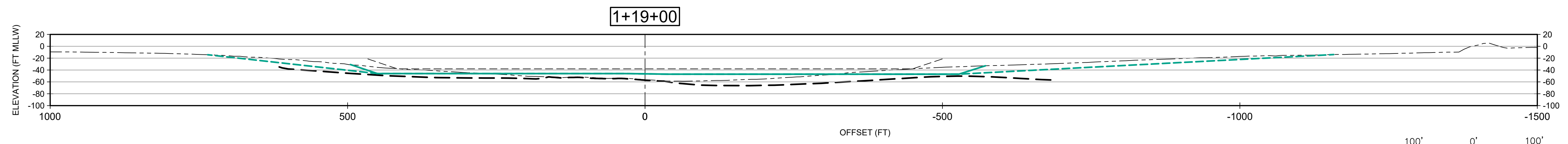
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.46



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

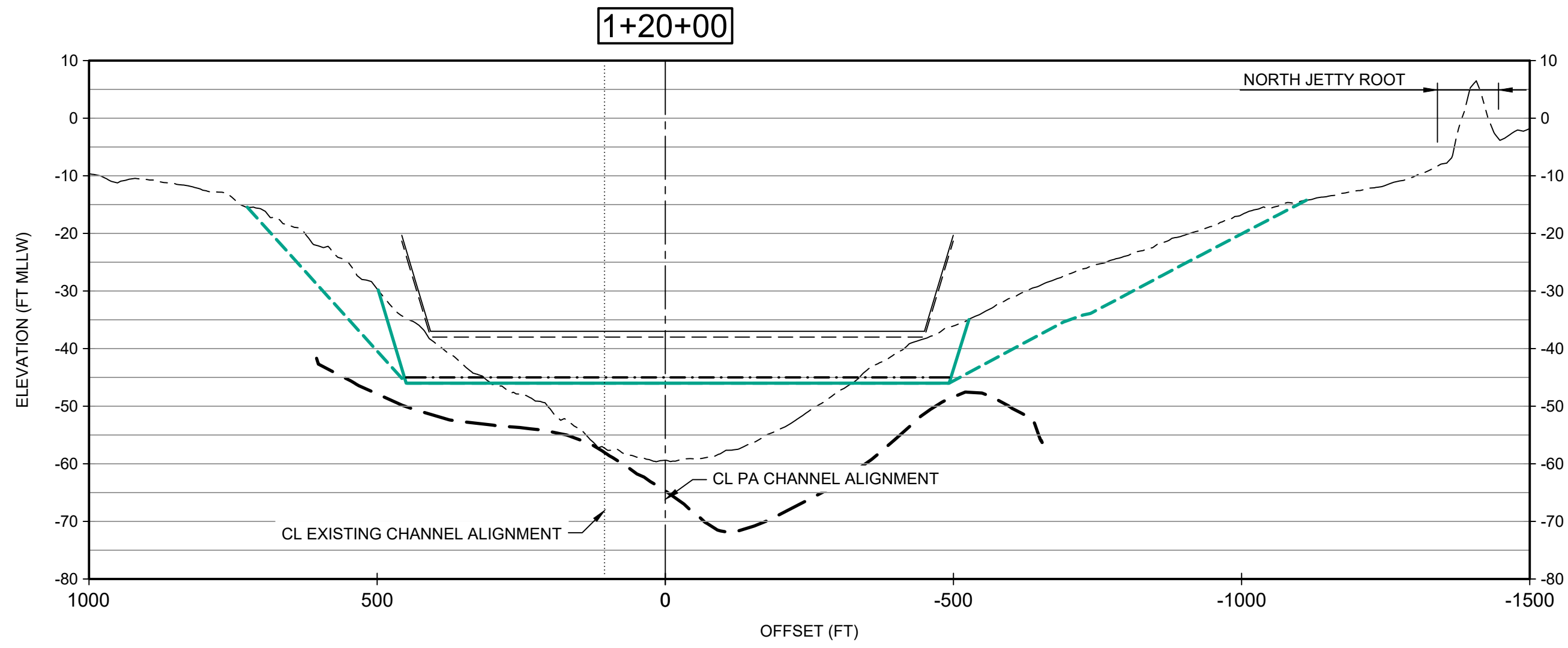
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

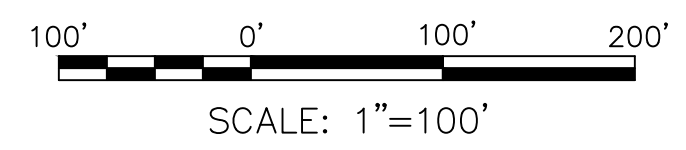
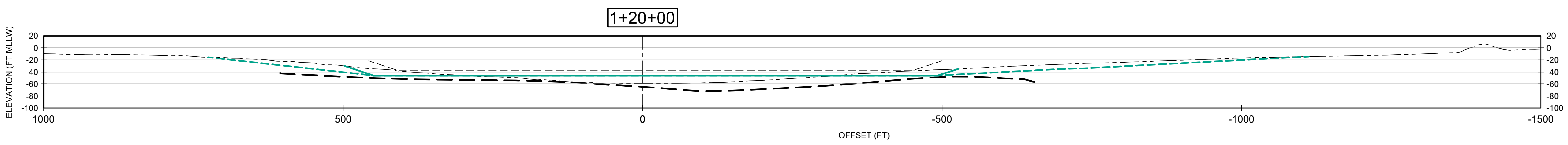
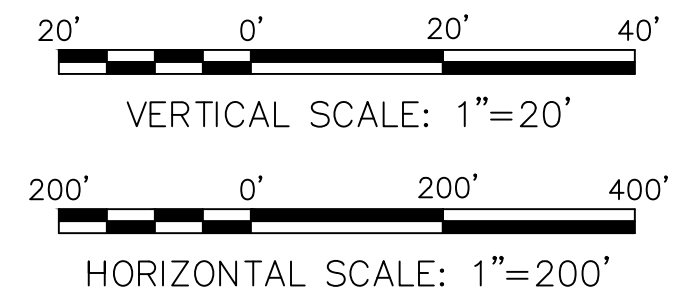
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (80 OF 185)

SHEET IDENTIFICATION
FIG-081
 INDEX 81 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	DESCRIPTION	MARK

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CHECKED BY: EC
DATE: 2016/07/11
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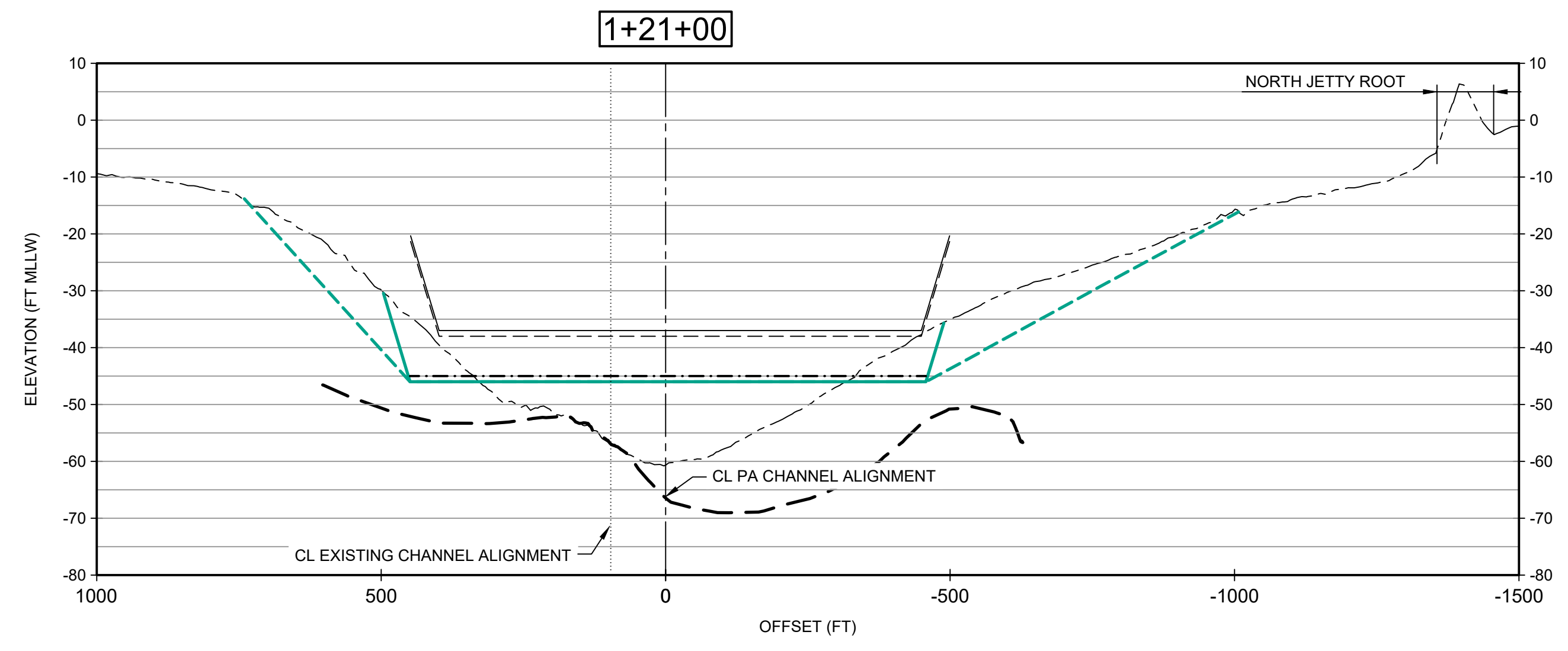
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (81 OF 185)

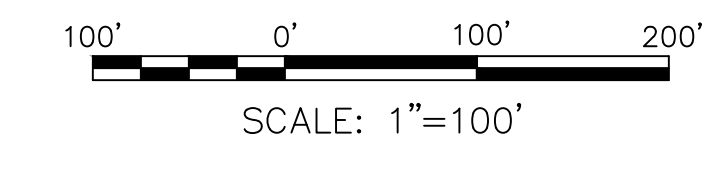
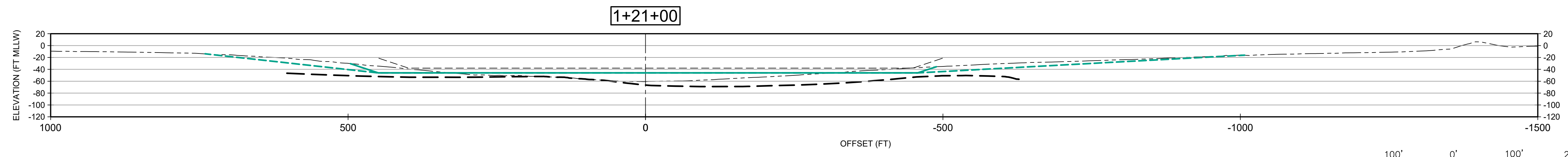
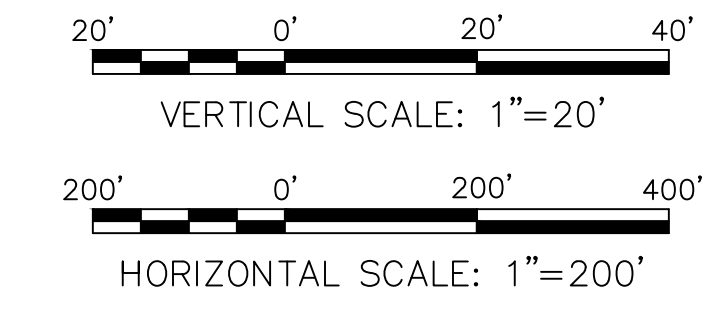
SHEET IDENTIFICATION
FIG-082
 INDEX 82 OF 186



DATE	DESCRIPTION	MARK	APPR.



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	---	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

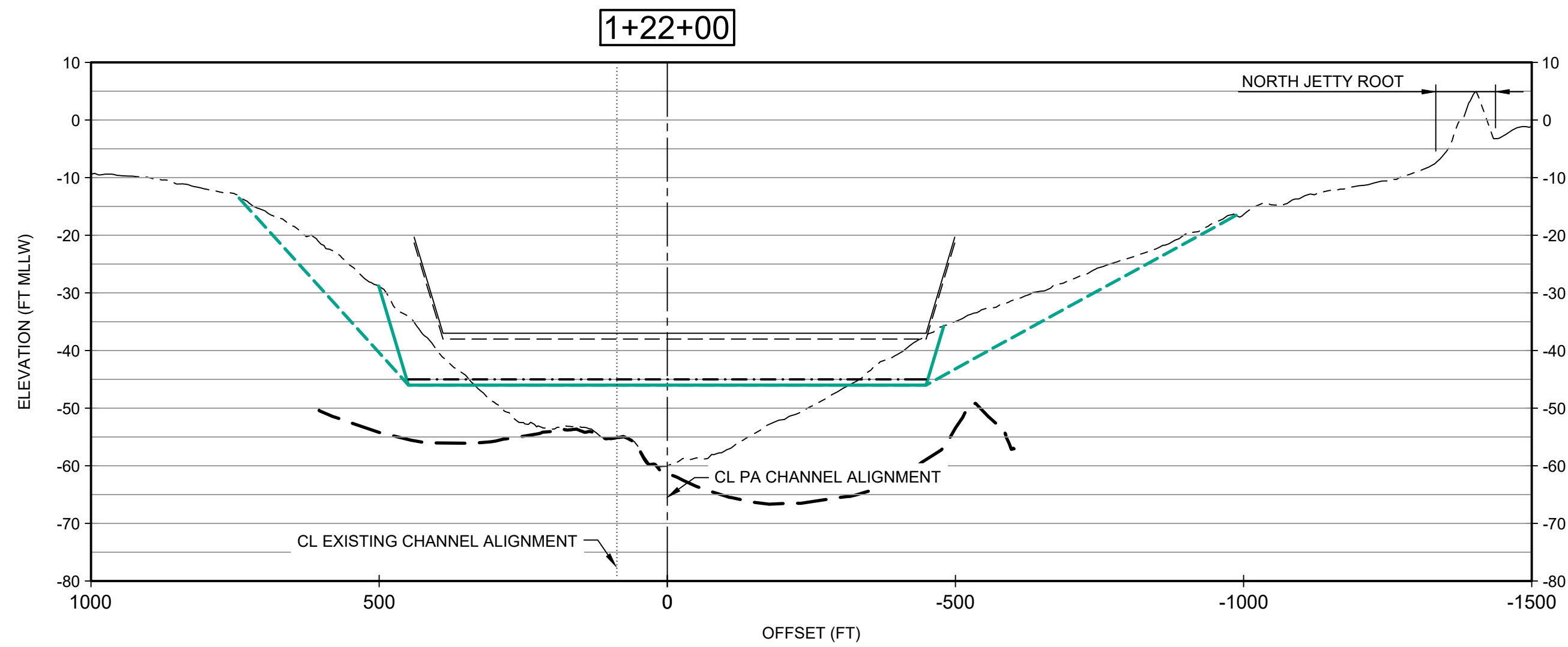
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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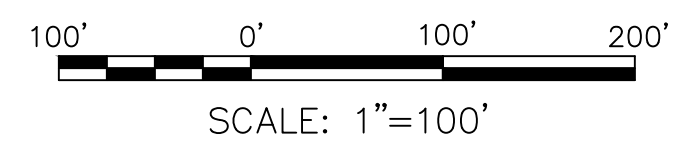
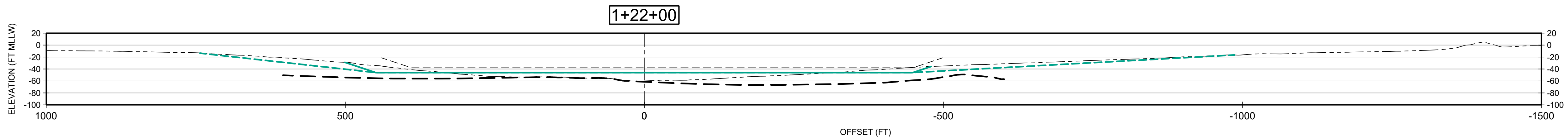
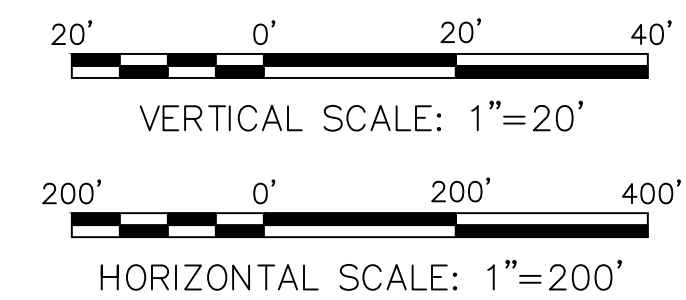
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (82 OF 185)

SHEET IDENTIFICATION
FIG-083
 INDEX 83 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



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 DRAWN BY: EC
 CHECKED BY: EC
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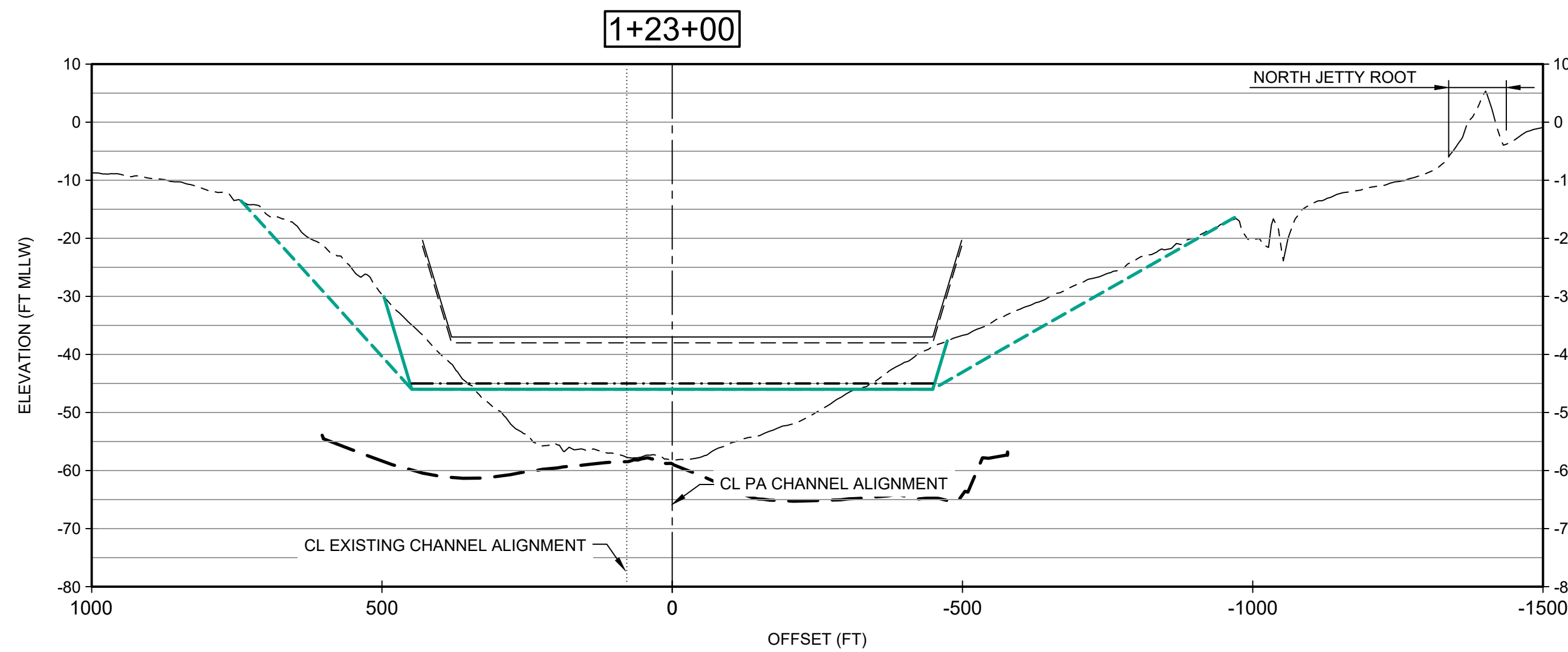
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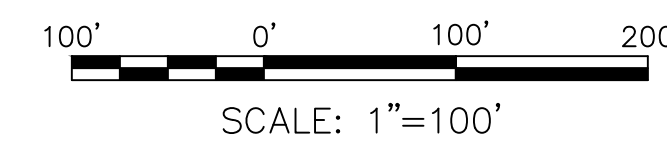
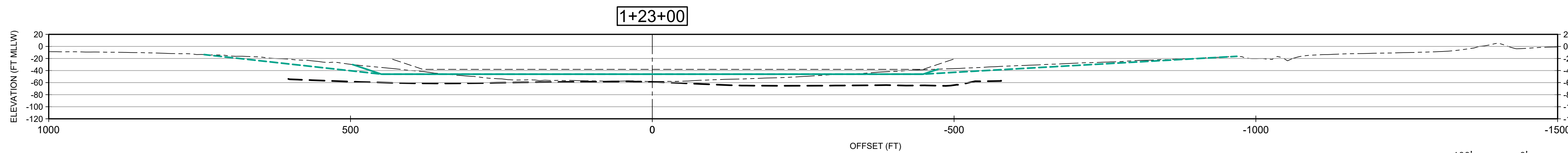
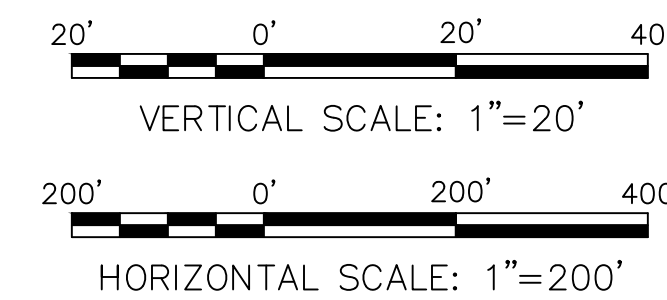
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (83 OF 185)

SHEET IDENTIFICATION
FIG-084
 INDEX 84 OF 186

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EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



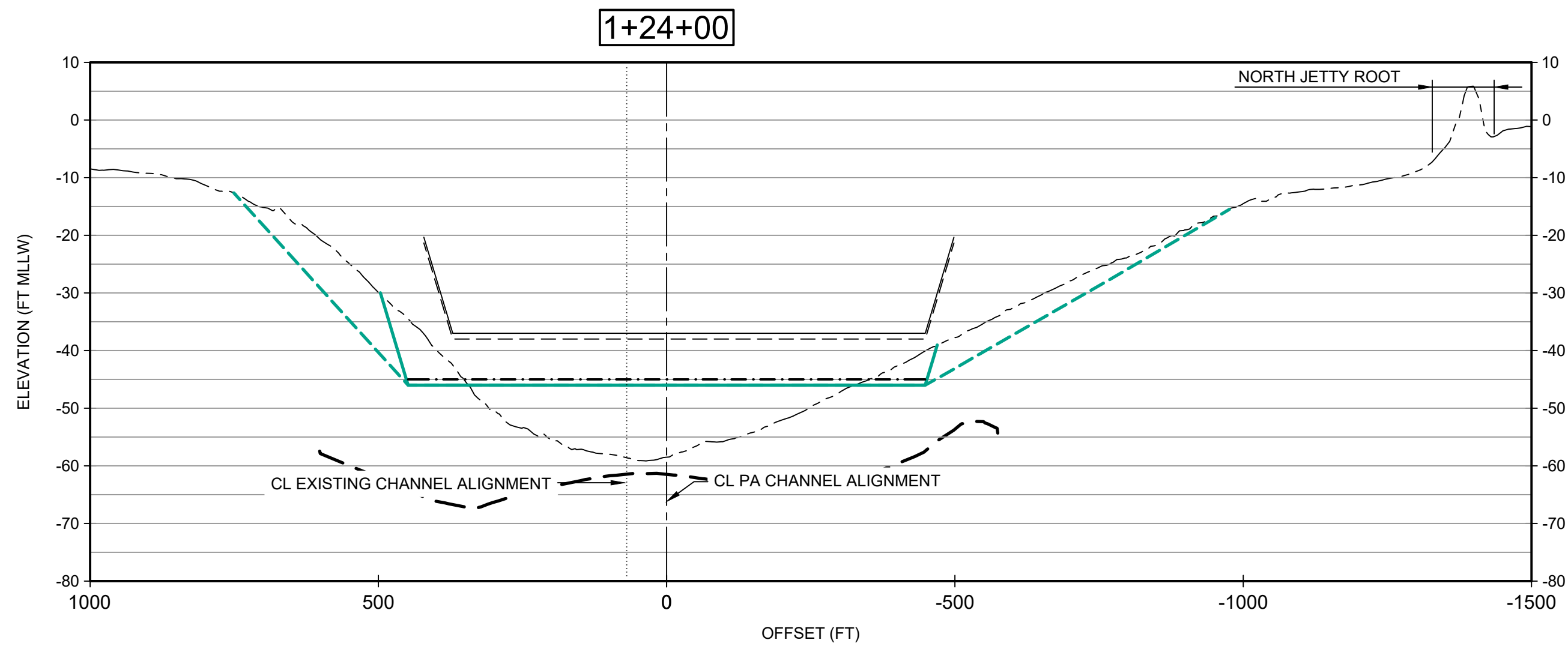
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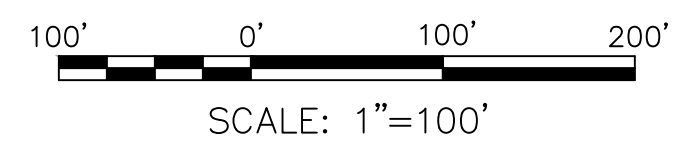
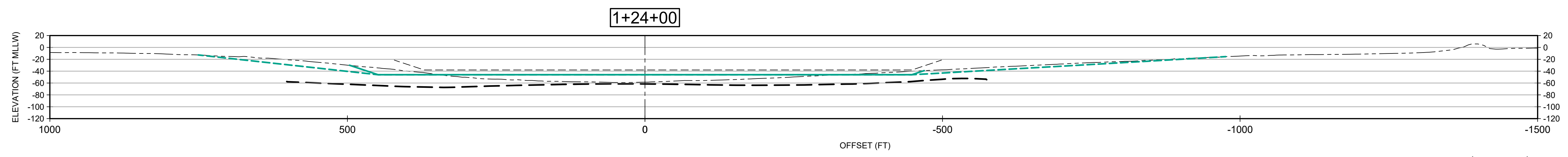
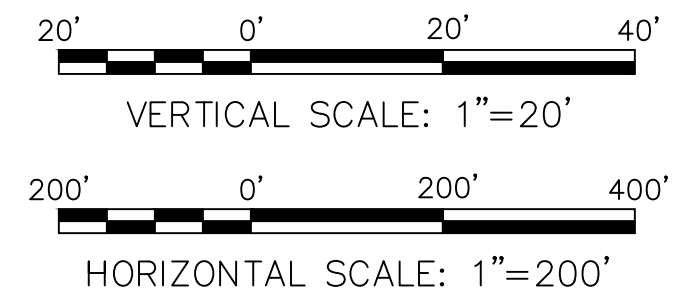
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 DRAWN BY: EC
 CHECKED BY: EC
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 PLOT SCALE: FILE NAME:
 PLOT DATE: FILE NAME:
 DRAWING NUMBER:
 SIZE:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (84 OF 185)

SHEET IDENTIFICATION
FIG-085
 INDEX 85 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	— · — · —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK

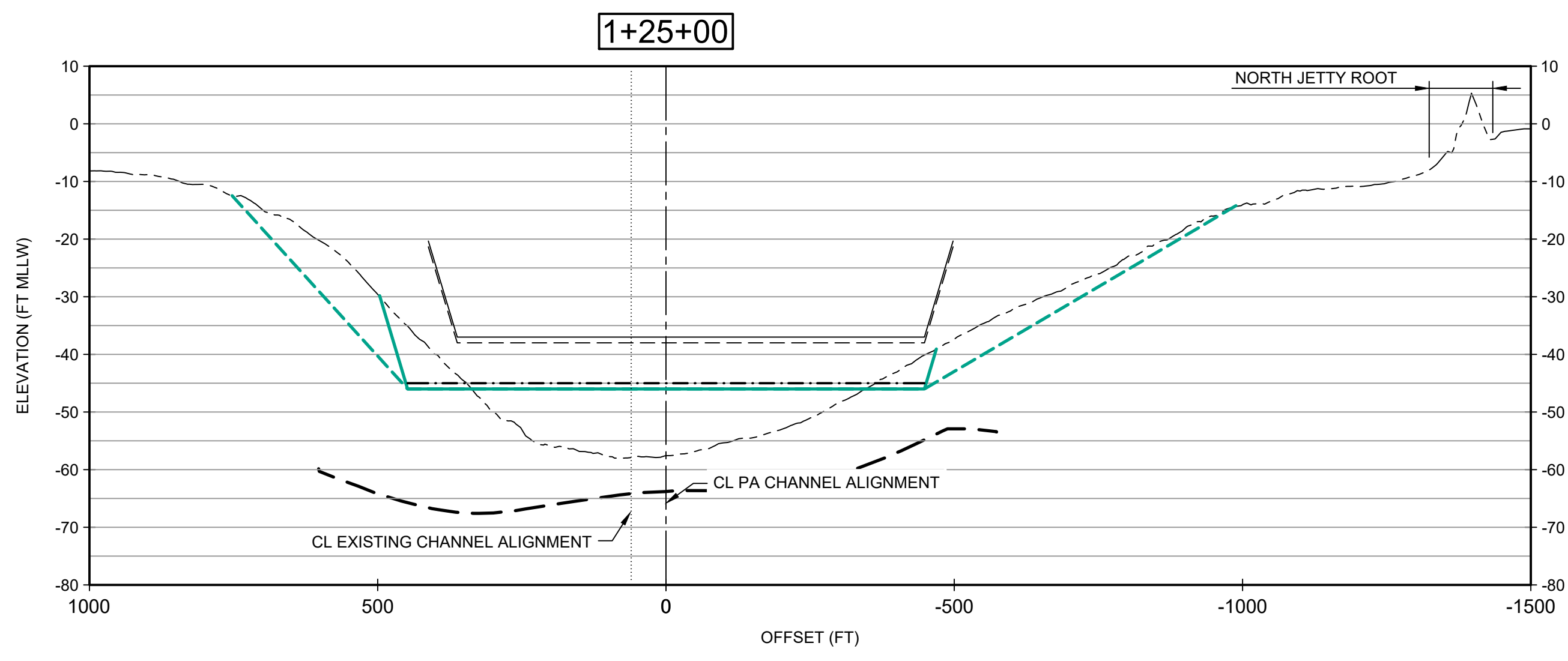
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DESIGNED BY: HJP
 DRAWN BY: EC
 CHECKED BY: EC
 DATE: 2016/07/11

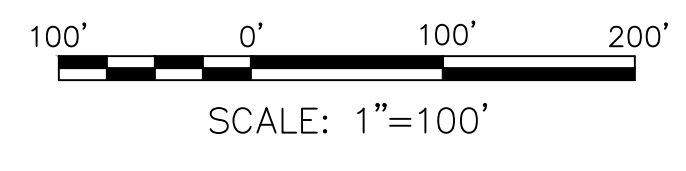
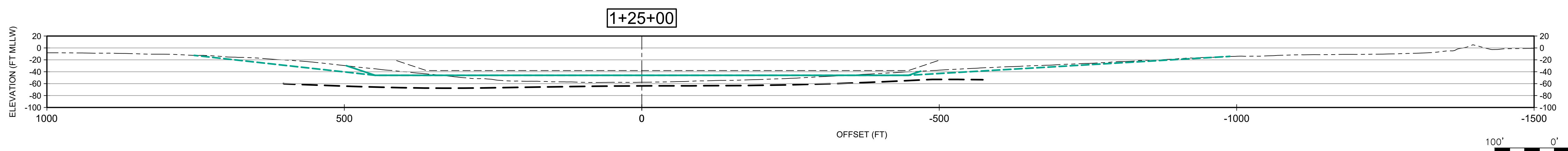
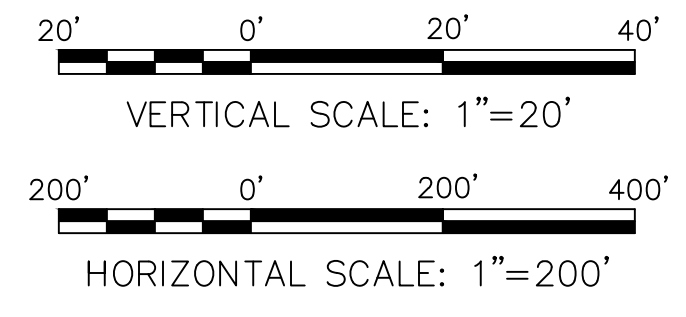
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 DRAWING NUMBER:
 SIZE:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (85 OF 185)

SHEET IDENTIFICATION
FIG-086
 INDEX 86 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - · - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

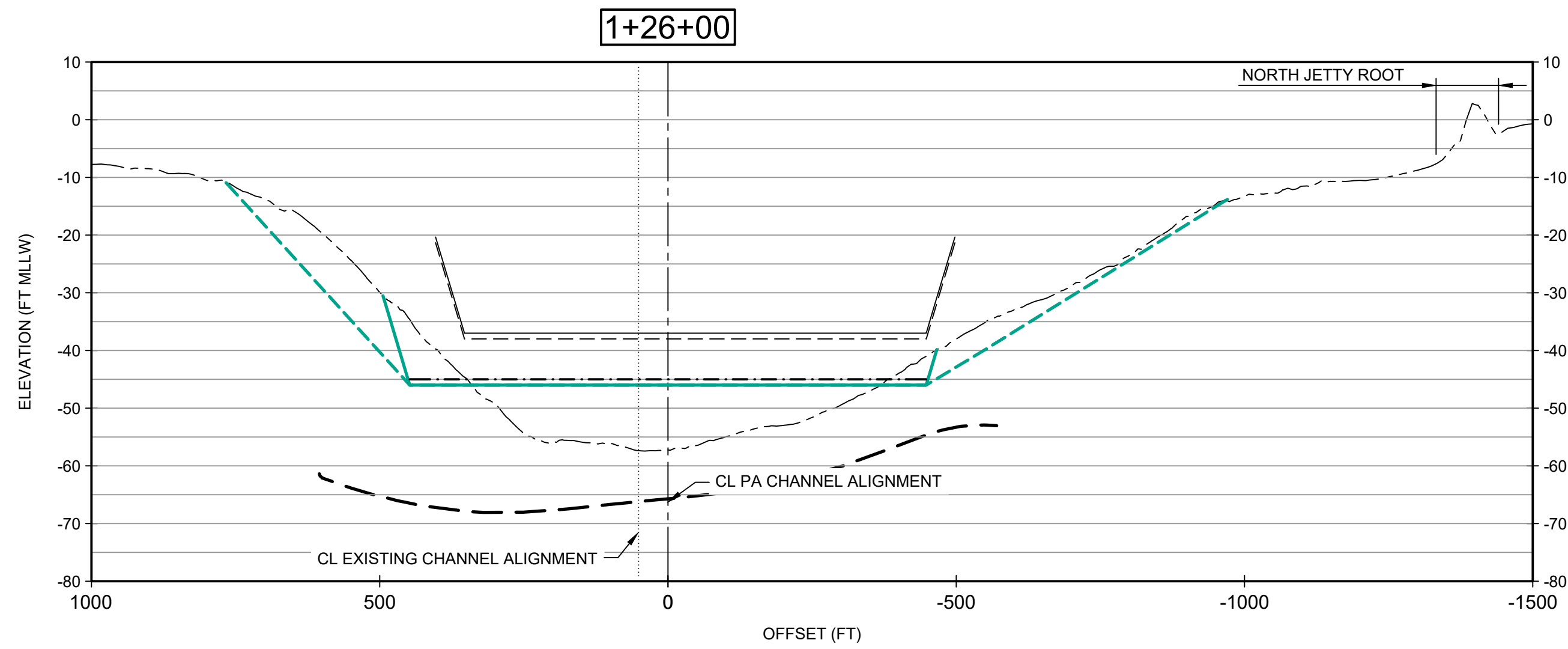
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 SEATTLE, WA 98101
 (206) 622-0222

DATE: 2016/07/11
 DESIGNED BY: H.P.
 DRAWN BY: E.C.
 CHECKED BY: E.C.
 SUBMITTED BY: H.P.
 PLOT SCALE: 1"=200'
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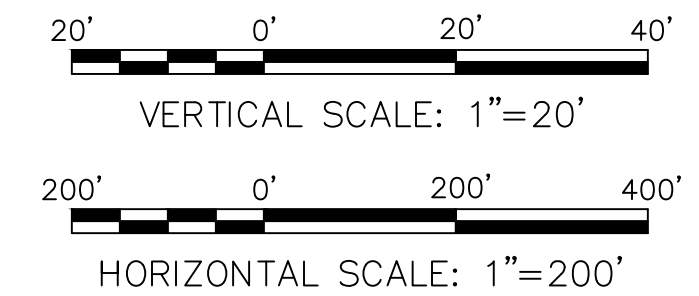
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (86 OF 185)

SHEET IDENTIFICATION
FIG-087
 INDEX 87 OF 186

D

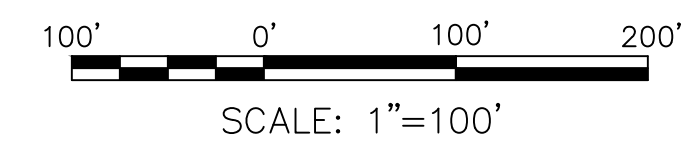
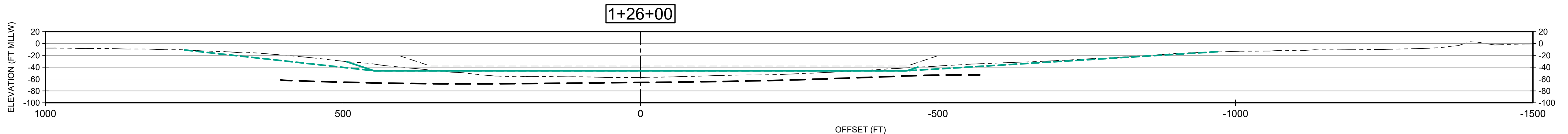


EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



C

B



LEGEND

- | | | | |
|-------|--|-------|--|
| ————— | EXISTING AUTHORIZED CHANNEL LIMITS | ----- | PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES |
| ----- | EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE | ----- | EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A) |
| ----- | PA CHANNEL LIMITS | ----- | ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B) |
| ----- | PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE | | |

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

A



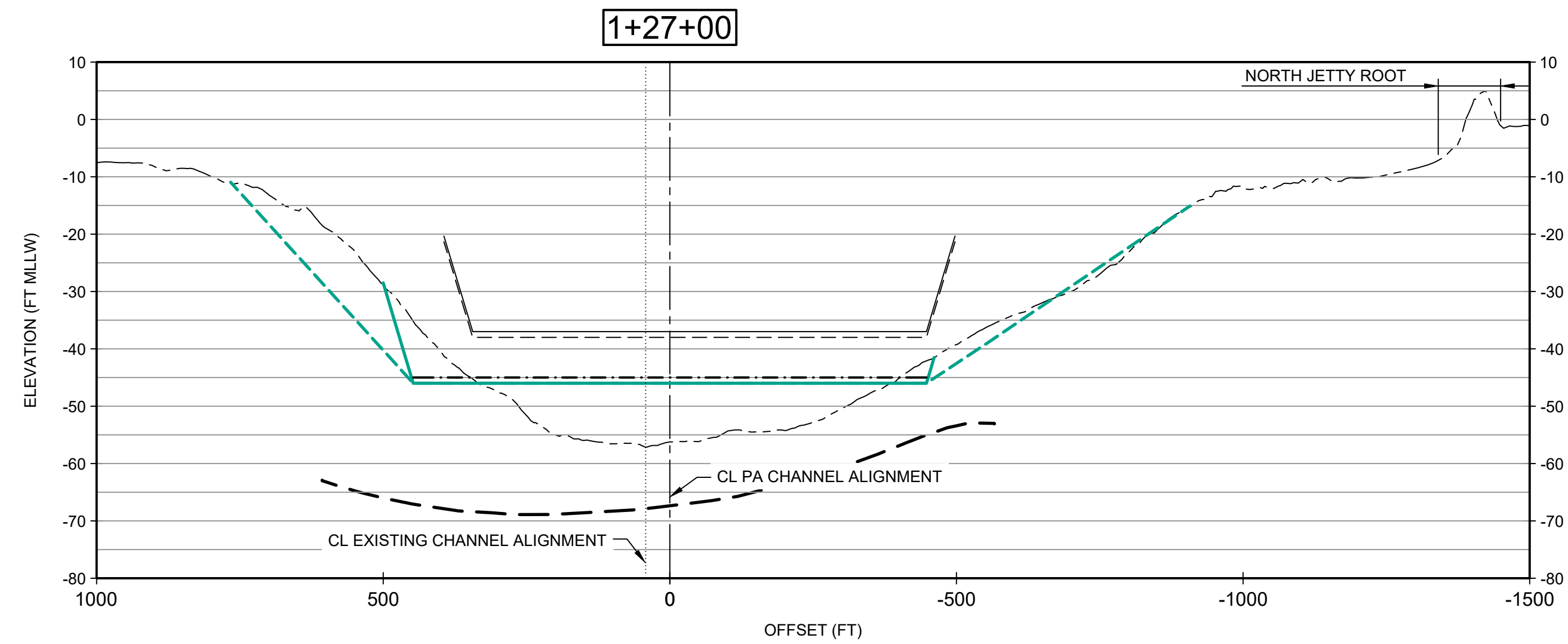
DATE	DESCRIPTION	MARK

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DRAWN BY: EC
CHECKED BY: EC
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CONTRACT NO.:
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SIZE:
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PLOT SCALE:
DRAWING NUMBER:

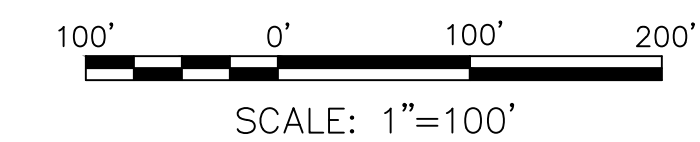
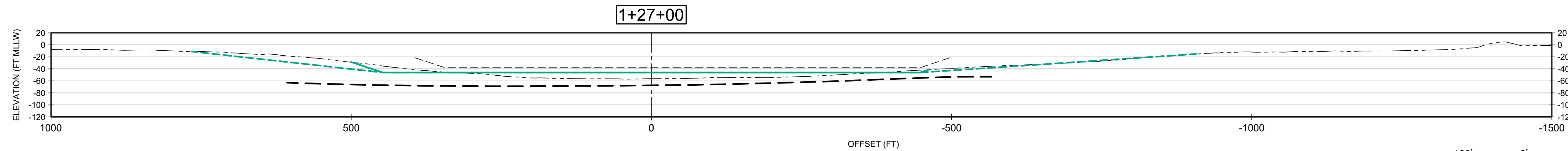
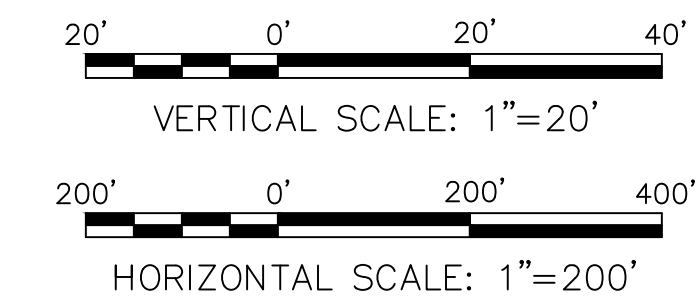
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (87 OF 185)

SHEET IDENTIFICATION
FIG-088
 INDEX 88 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

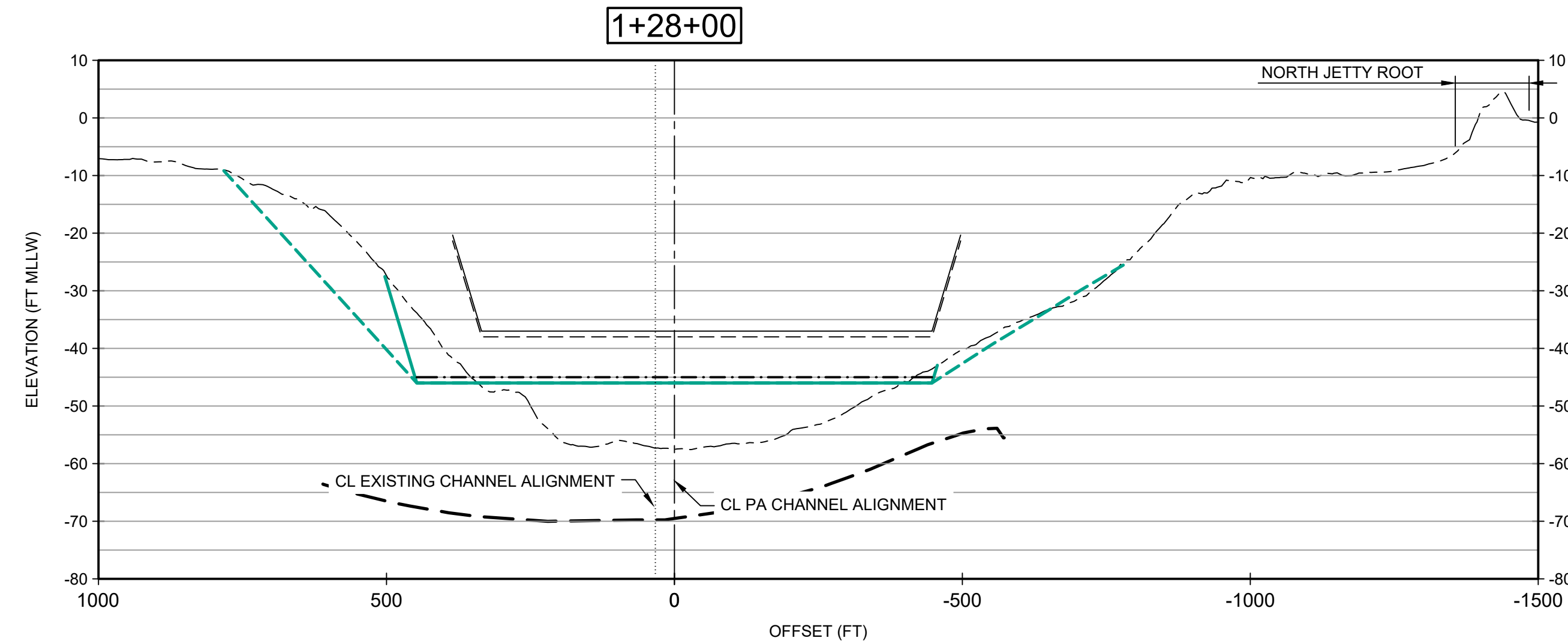


DATE	DESCRIPTION	MARK

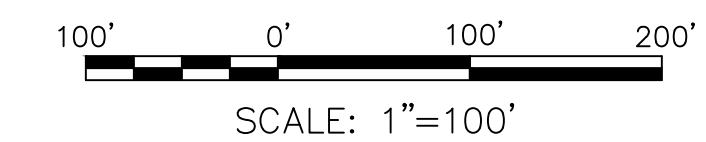
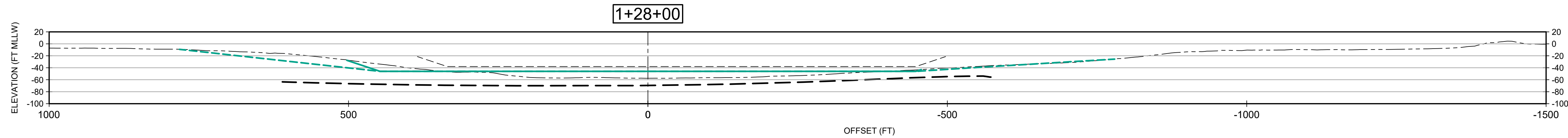
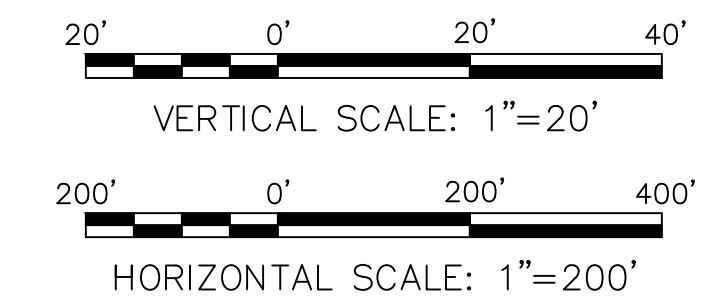
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DRAWN BY:	2016/07/11	EC	

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (51 OF 185)

SHEET IDENTIFICATION
FIG-052
 INDEX 52 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY:	DATE:	CHECKED BY:	SOLICITATION NO.:
AWAYN BY:	2016/07/11	EC	
HP		EC	
SUBMITTED BY:	PLOT SCALE:	FILE NAME:	CONTRACT NO.:
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (89 OF 185)

SHEET IDENTIFICATION
FIG-090
 INDEX 90 OF 186

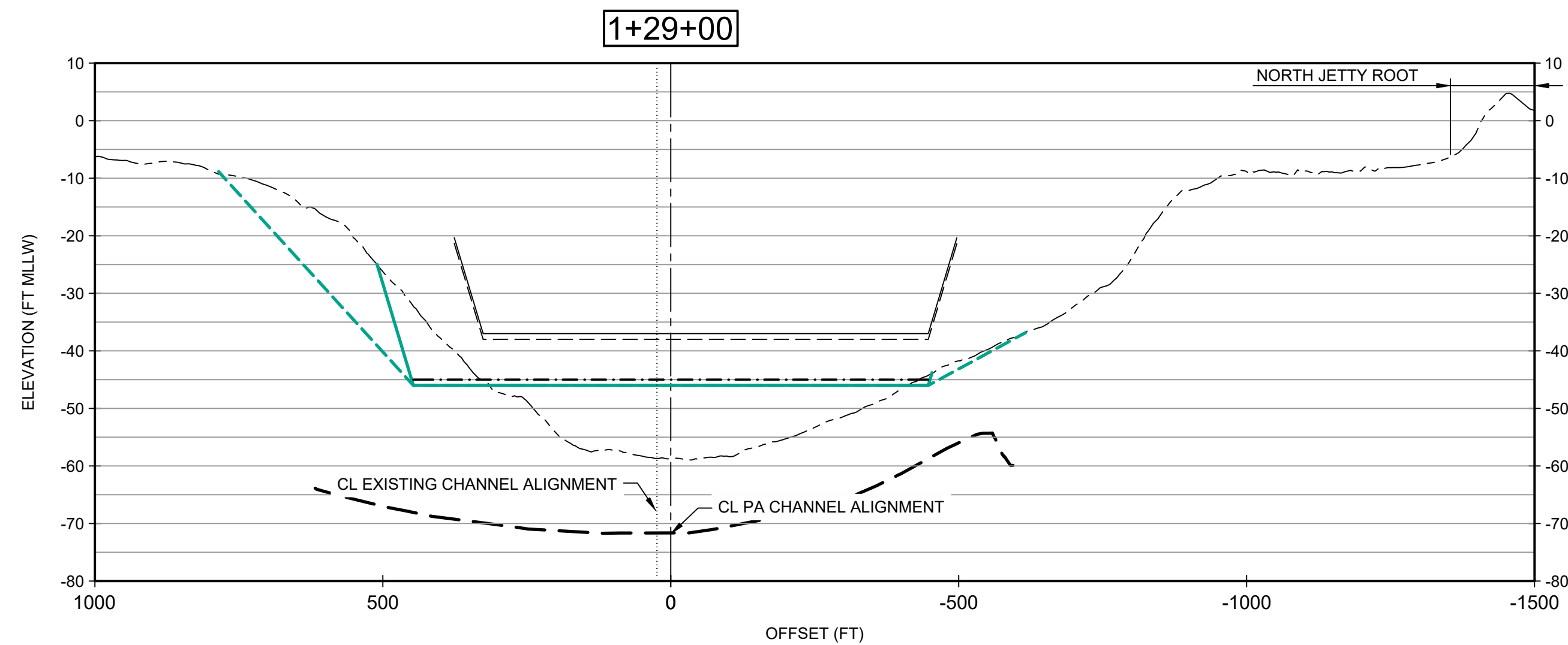
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D

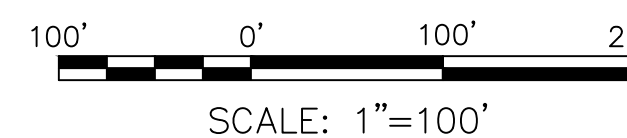
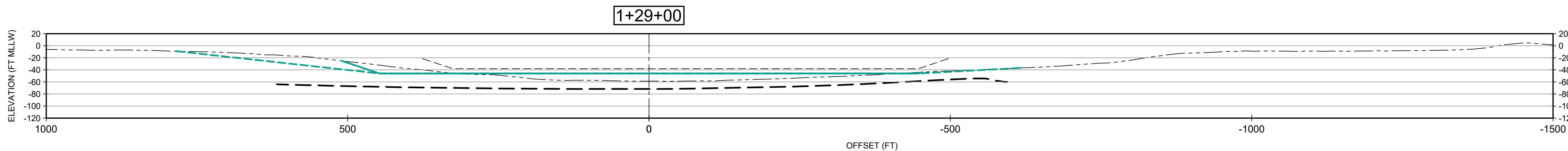
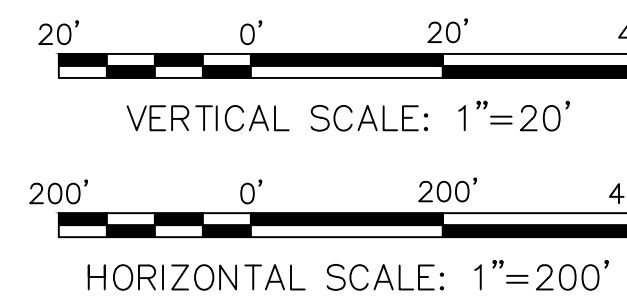
C

B

A



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- · - · - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY:	DATE:	2016/07/11
DRAWN BY:	CHECKED BY:	SOLICITATION NO.:
H.P.	E.C.	CONTRACT NO.:
SUBMITTED BY:	PLOT SCALE:	PLOT DATE:
FILE NAME:	SIZE:	DRAWING NUMBER:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (90 OF 185)

SHEET IDENTIFICATION
FIG-091
 INDEX 91 OF 186



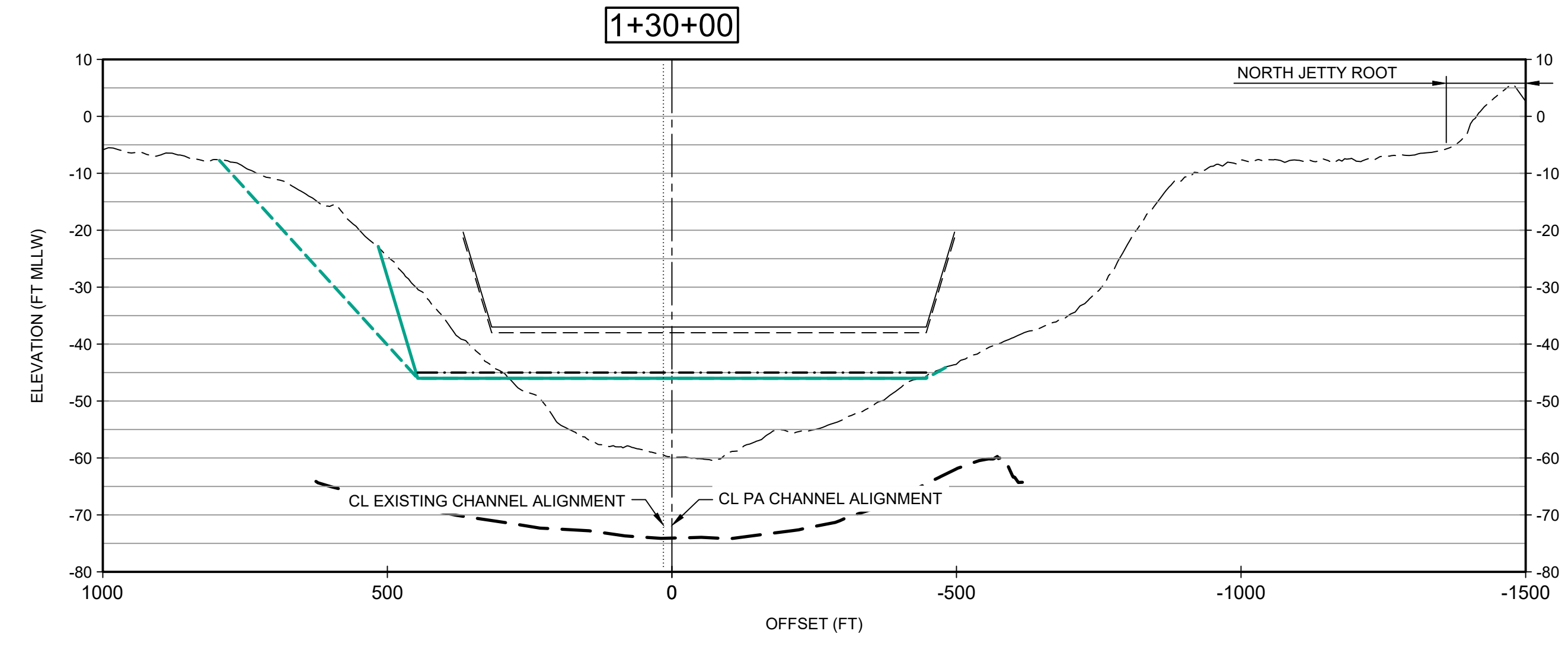
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DESIGNED BY: H.P.	CHECKED BY: E.C.	DATE: 2016/07/11	SOLICITATION NO.:
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FILE NAME:	SIZE:	DRAWING NUMBER:	

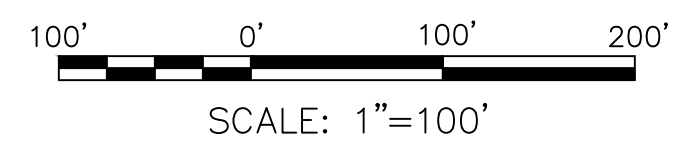
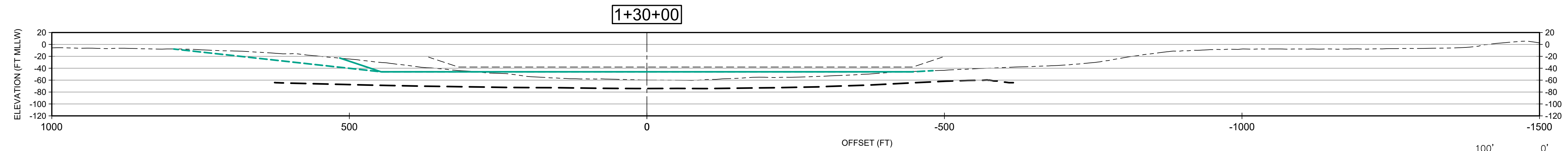
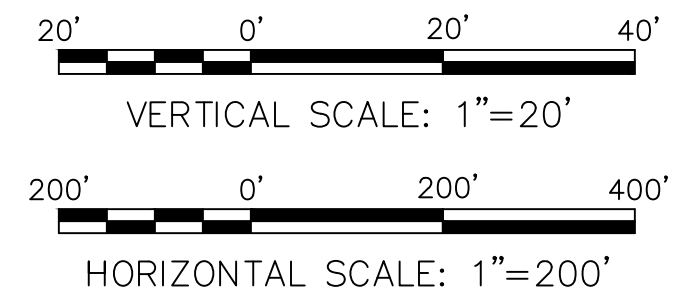
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (91 OF 185)

SHEET IDENTIFICATION
FIG-092
 INDEX 92 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



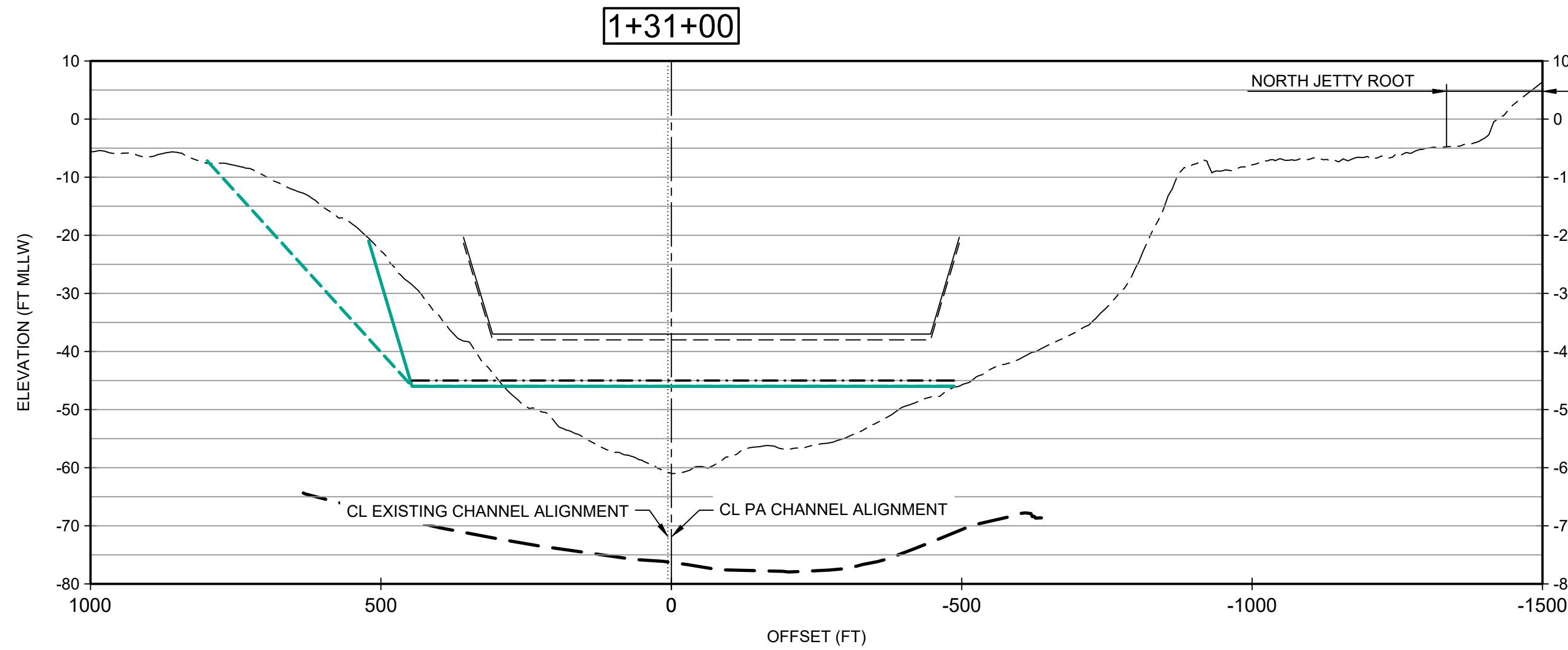
LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

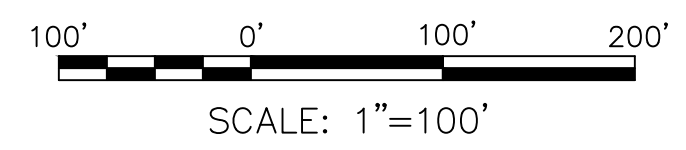
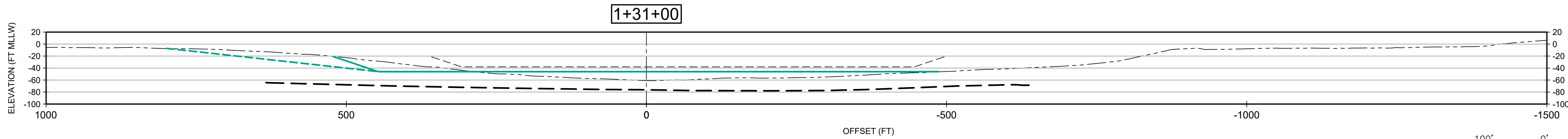
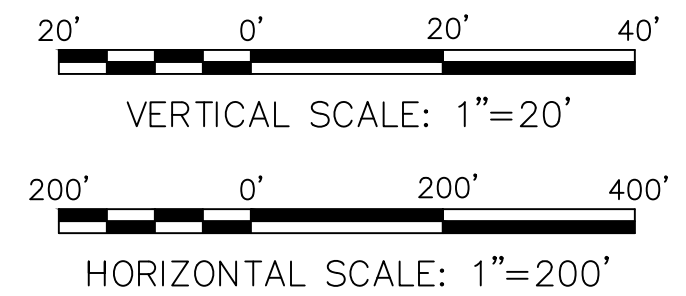
- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

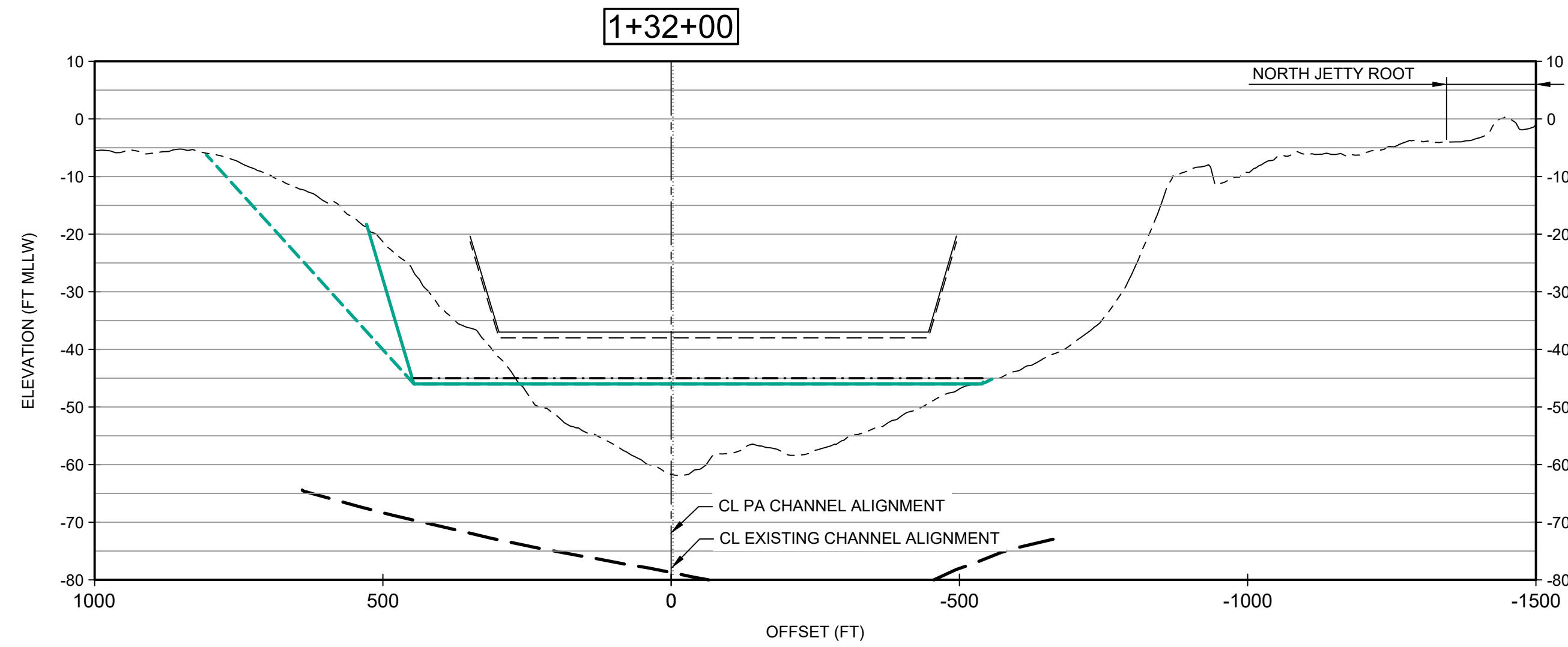
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 600 UNIVERSITY STREET
 SEATTLE, WA 98101
 (206) 622-0222

DESIGNED BY: HJP
 DRAWN BY: EC
 CHECKED BY: EC
 DATE: 2016/07/11

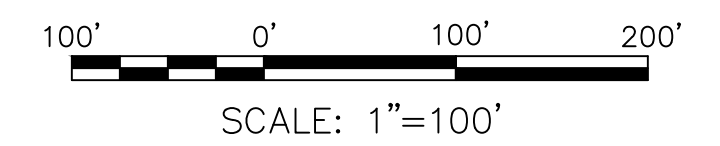
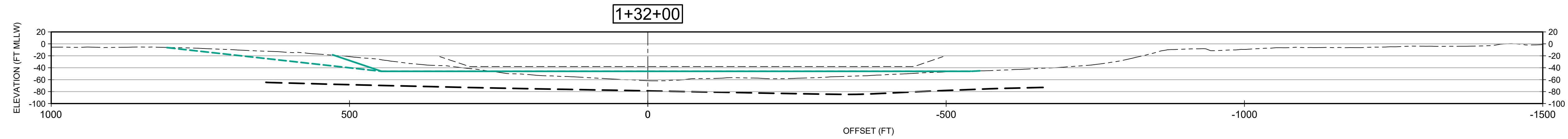
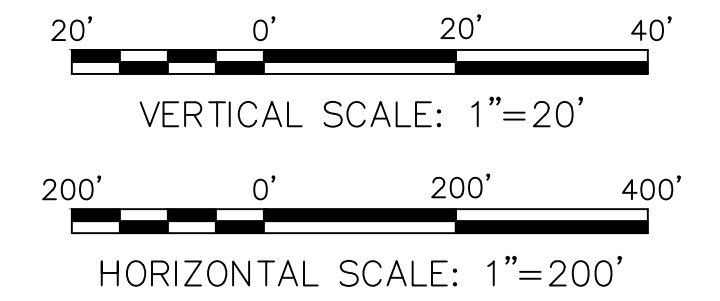
CONTRACT NO.:
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 PLOT SCALE: DRAWING NUMBER:
 SIZE:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (92 OF 185)

SHEET IDENTIFICATION
FIG-093
 INDEX 93 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

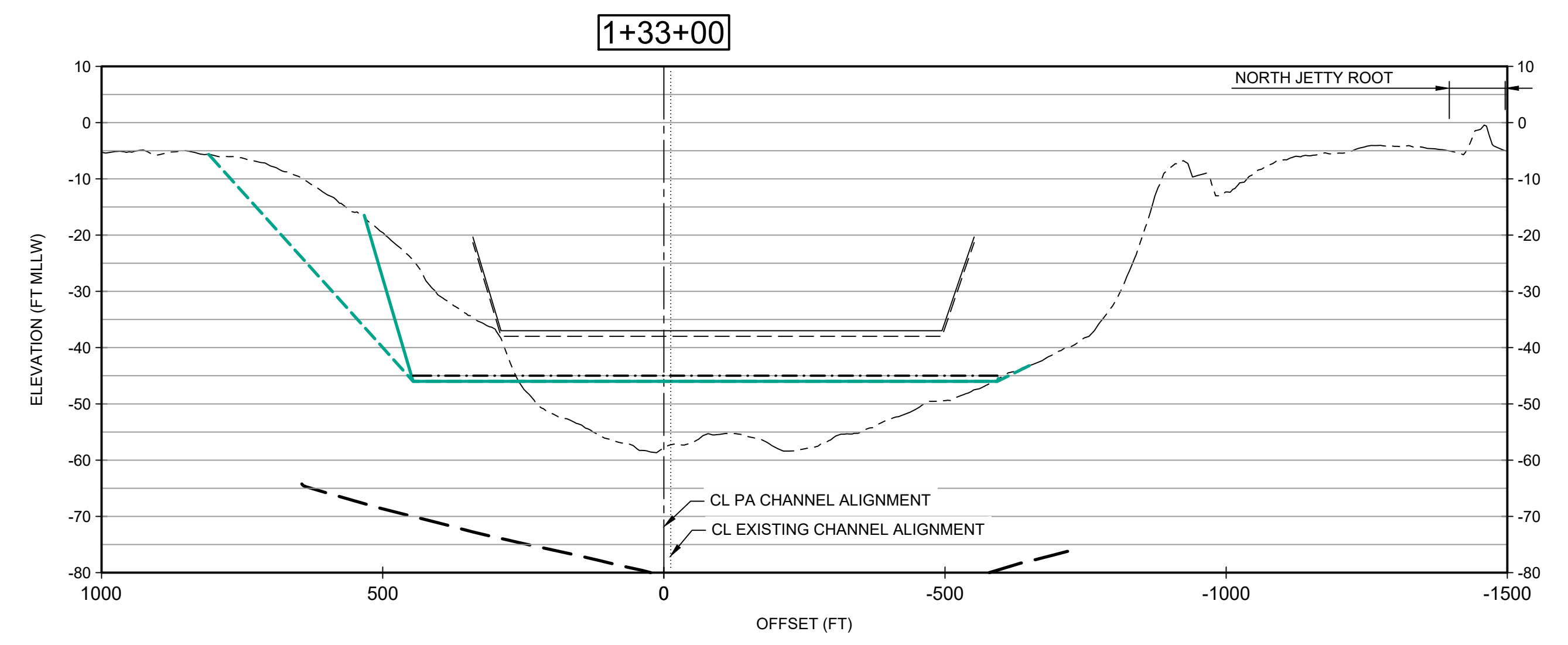


DATE	DESCRIPTION	MARK	APPR.

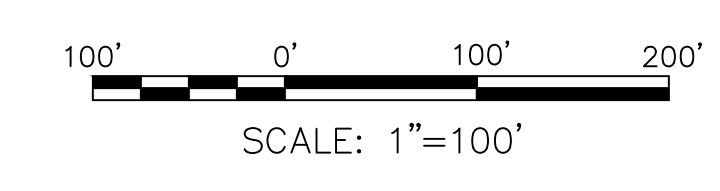
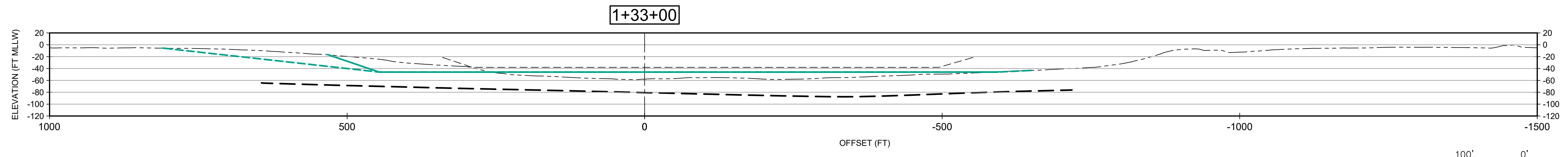
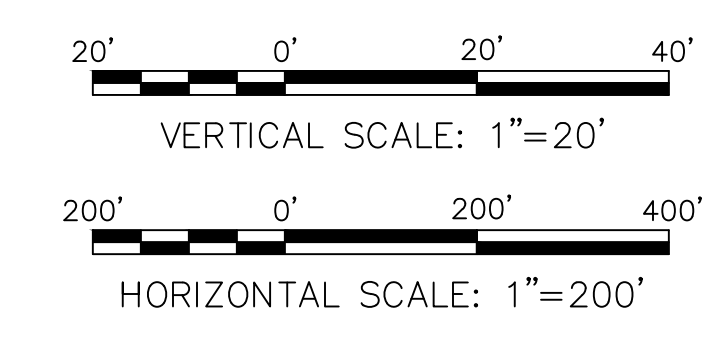
DESIGNED BY: H.P.
DRAWN BY: EC
CHECKED BY: EC
DATE: 2016/07/11
SUBMITTED BY: H.P.
FILE NAME:
PLOT SCALE:
SIZE:
CONTRACT NO.:
DRAWING NUMBER:
600 UNIVERSITY STREET
SEATTLE, WA 98101
(206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (93 OF 185)

SHEET IDENTIFICATION
FIG-094
INDEX 94 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

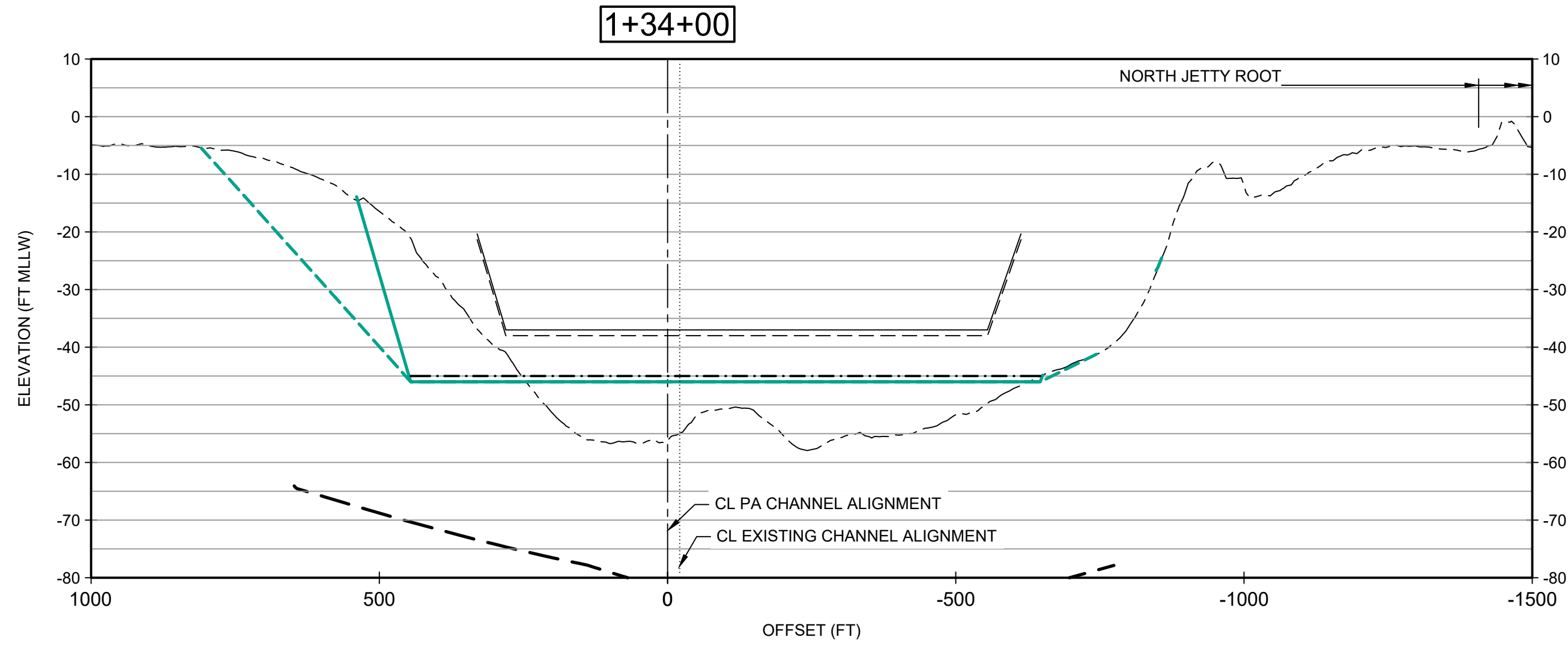
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

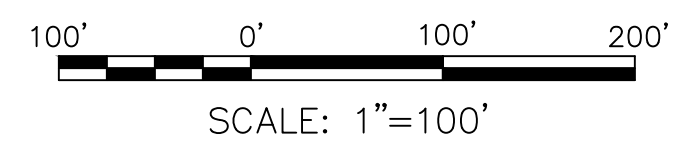
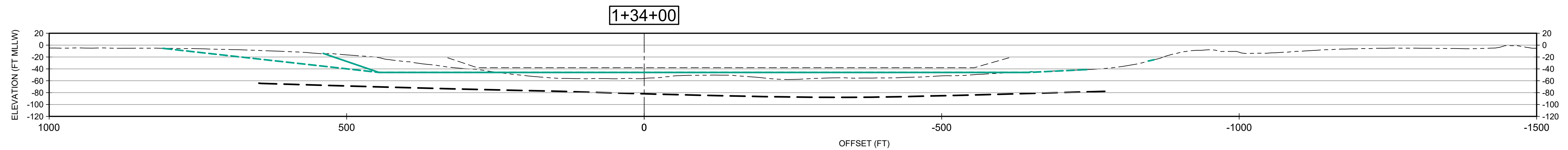
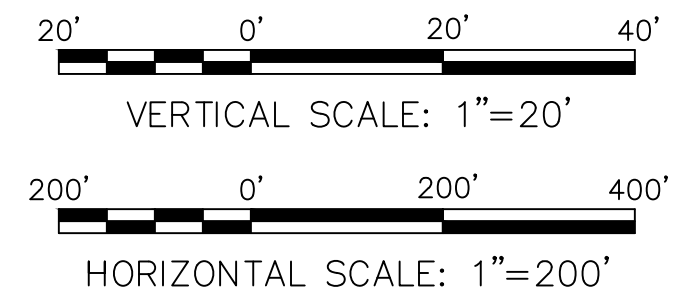
DESIGNED BY: HJP
DRAWN BY: EC
CHECKED BY: EC
DATE: 2016/07/11
SUBMITTED BY: EC
CONTRACT NO.:
PLOT SCALE:
FILE NAME:
SIZE:
PLOT DATE:
DRAWING NUMBER:
600 UNIVERSITY STREET
SEATTLE, WA 98101
(206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (94 OF 185)

SHEET IDENTIFICATION
FIG-095
INDEX 95 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

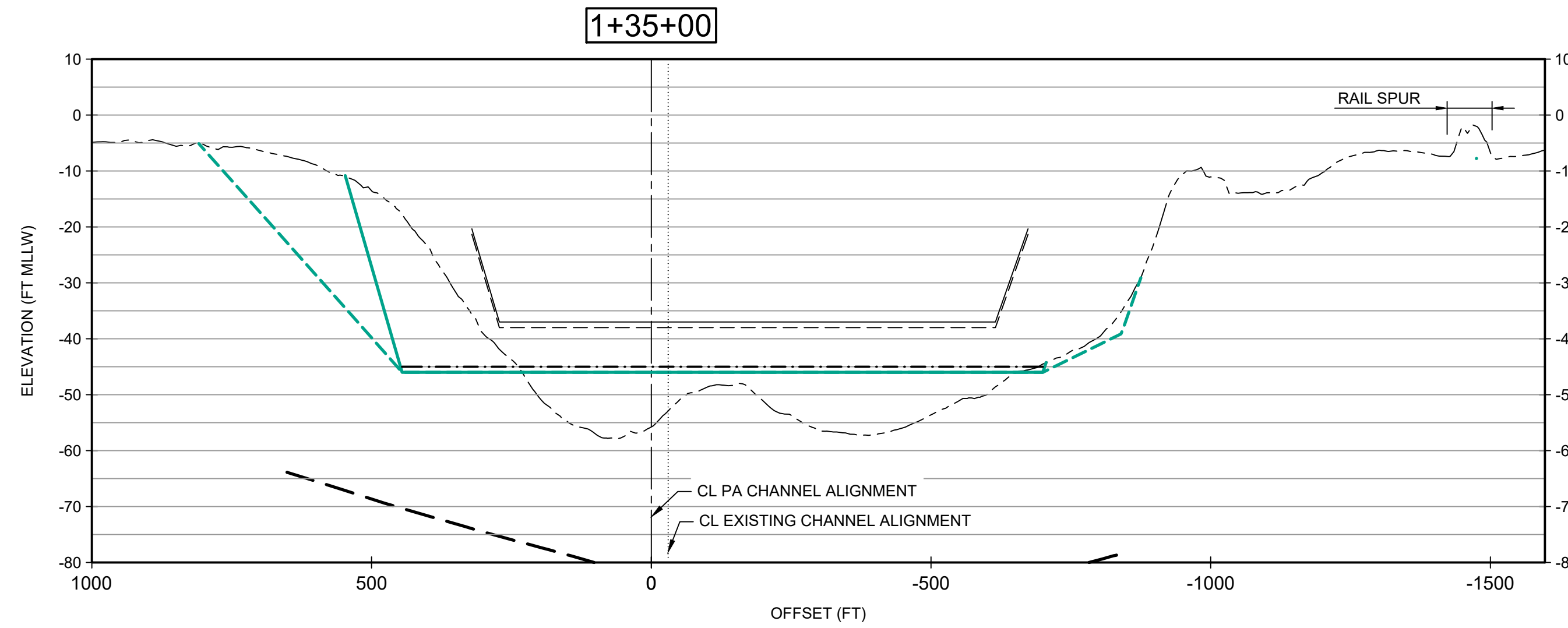
DESIGNED BY: H.P.
DRAWN BY: E.C.
CHECKED BY: E.C.
DATE: 2016/07/11

CONTRACT NO.:
DRAWING NUMBER:
FILE NAME:

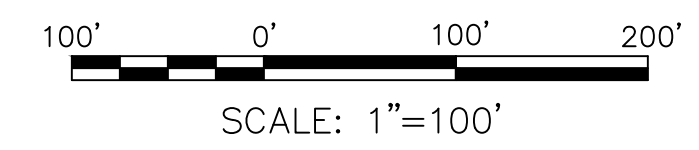
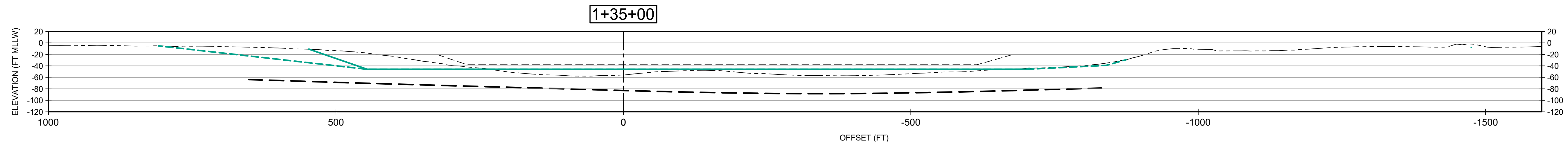
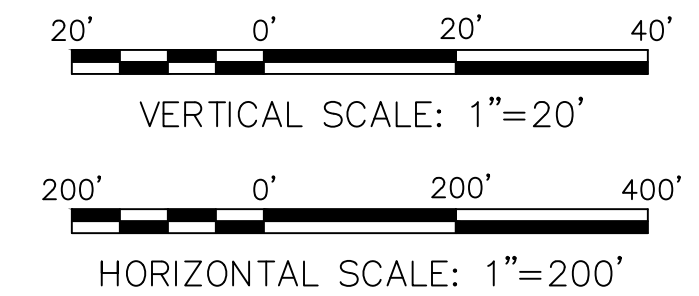
**600 UNIVERSITY STREET
 SEASIDE, WA 98101
 (206) 622-0222**

**COOS BAY OREGON
 COOS BAY CHANNEL MODIFICATION
 CROSS SECTION (95 OF 185)**

**SHEET IDENTIFICATION
 FIG-096
 INDEX 96 OF 186**



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

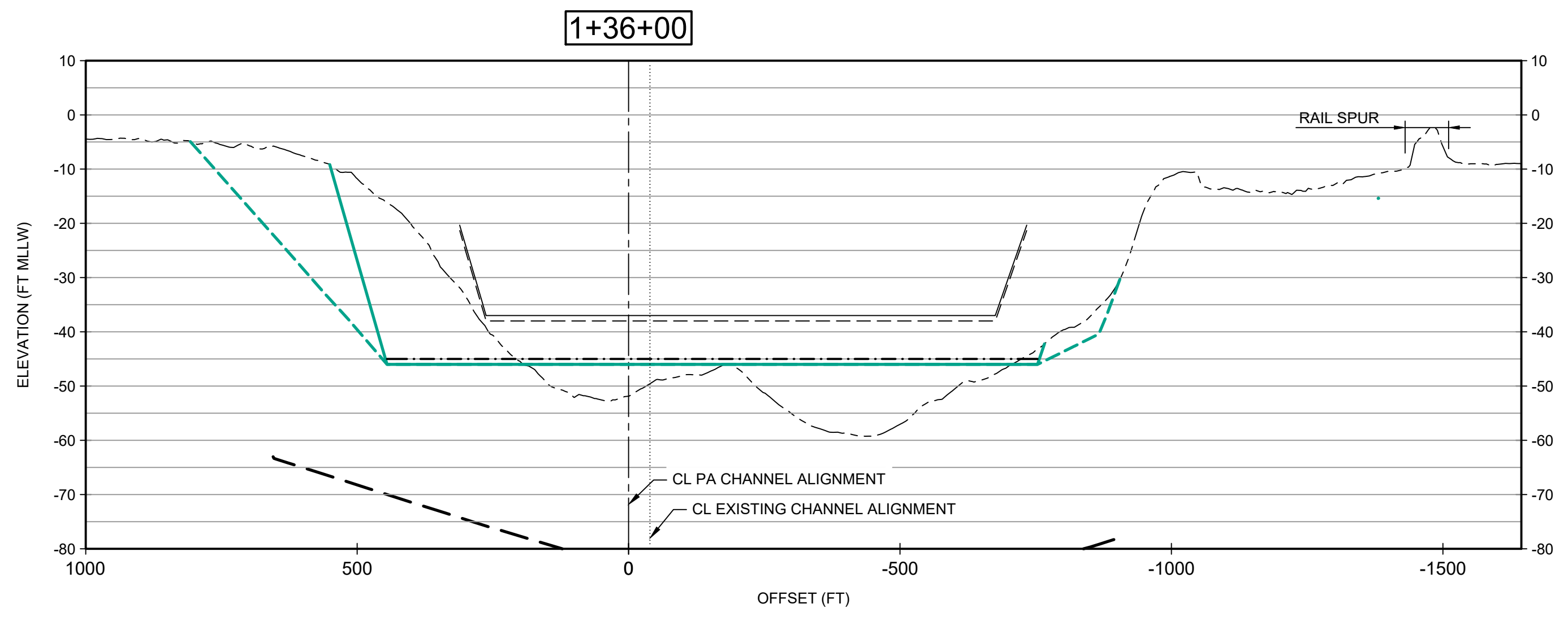


MARK	DESCRIPTION	DATE	APPR.

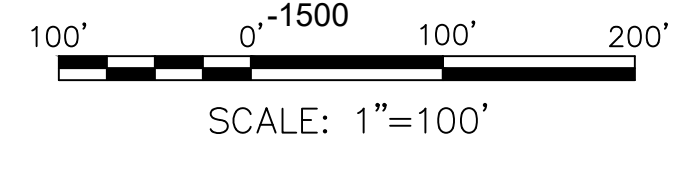
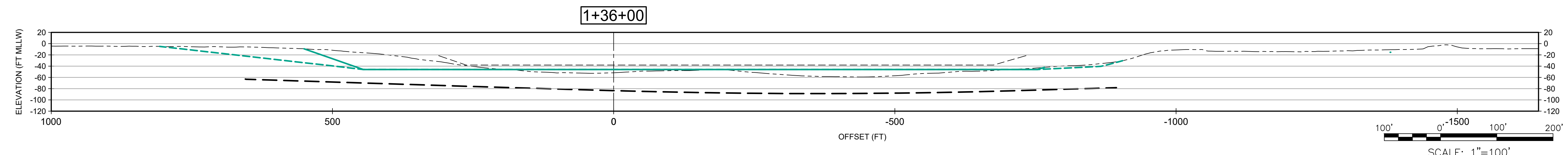
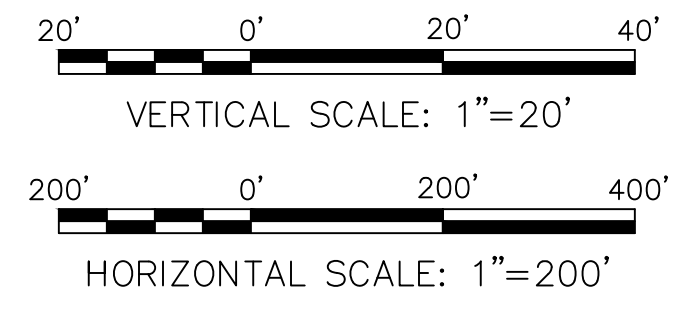
DESIGNED BY: HJP
DRAWN BY: EC
CHECKED BY: EC
DATE: 2016/07/11
SUBMITTED BY: HJP
CONTRACT NO.:
FILE NAME:
PLOT SCALE:
FILE SIZE:
PLOT DATE:
DRAWING NUMBER:
600 UNIVERSITY STREET
SEATTLE, WA 98101
(206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (96 OF 185)

SHEET IDENTIFICATION
FIG-097
 INDEX 97 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



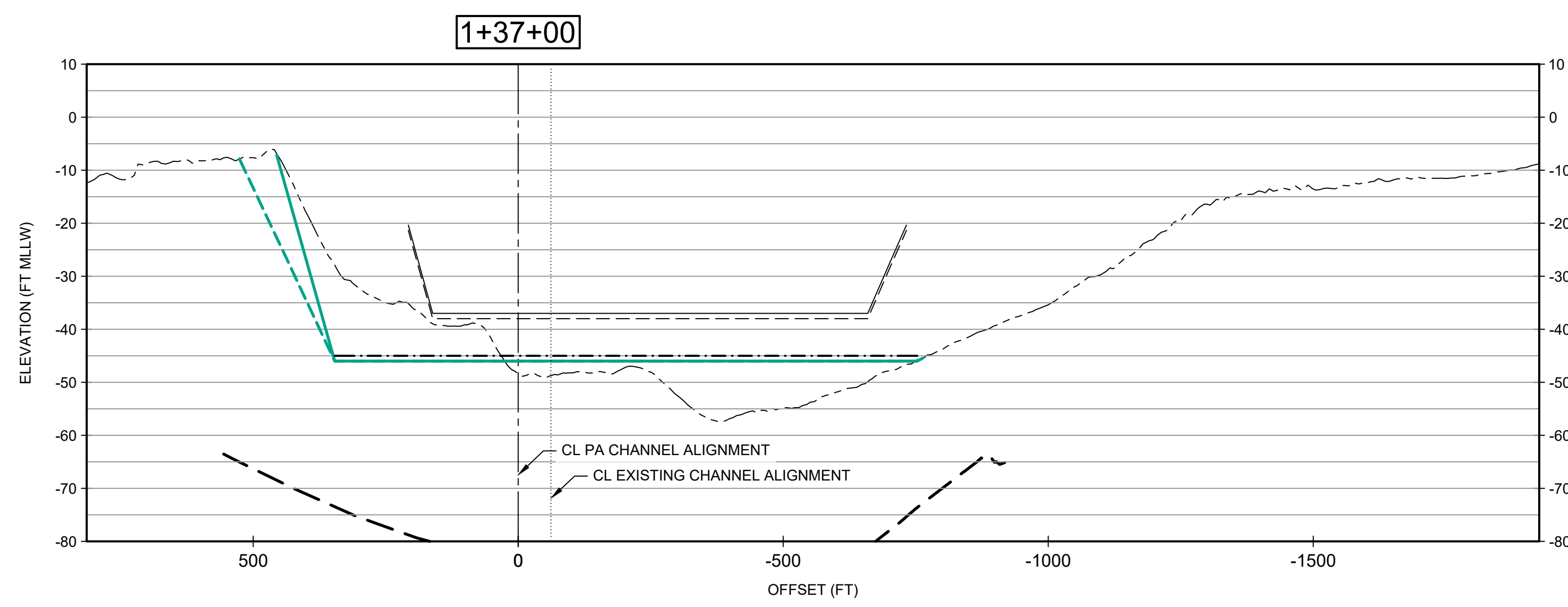
DATE	DESCRIPTION	MARK	APPR.

DESIGNED BY: **moffatt & nichol**
 DRAWN BY: H.P.
 CHECKED BY: E.C.
 SUBMITTED BY:
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT SCALE: FILE NAME:
 PLOT DATE: DRAWING NUMBER:
 SIZE:

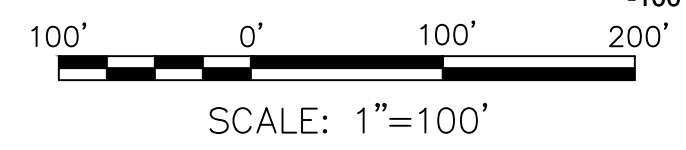
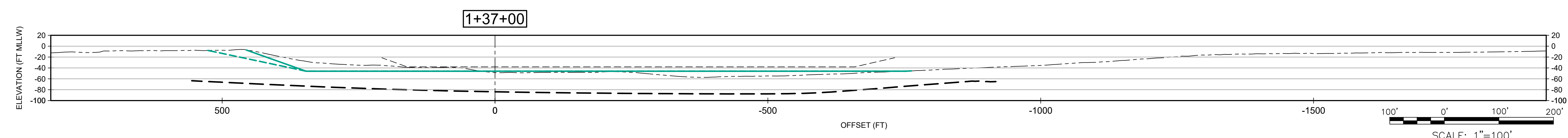
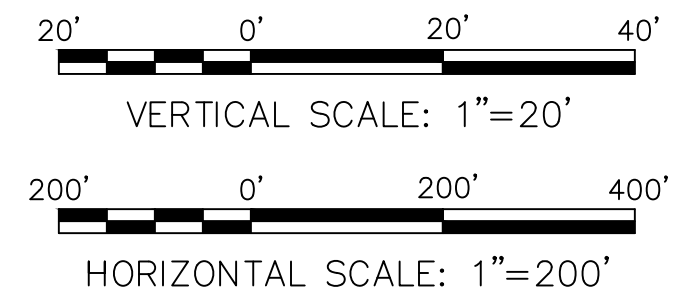
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 SEATTLE, WA 98101
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (97 OF 185)

SHEET IDENTIFICATION
FIG-098
 INDEX 98 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- · - · -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

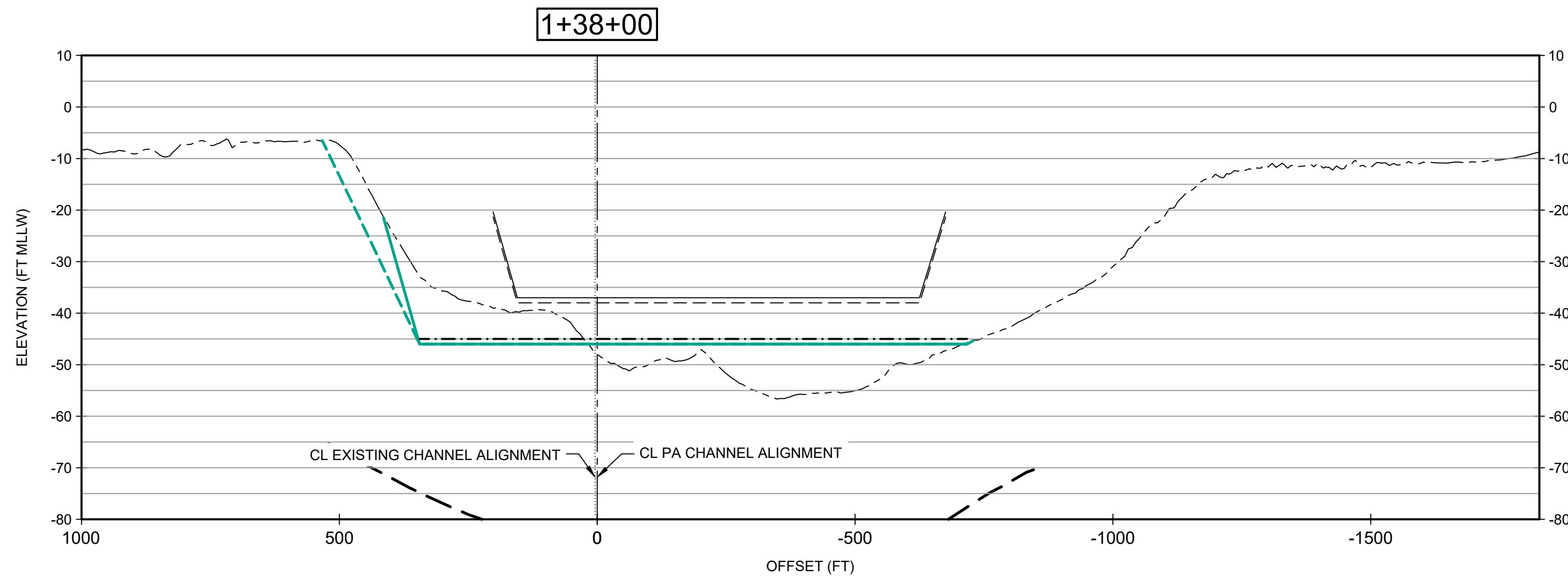
moffatt & nichol
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 SEATTLE, WA 98101
 (206) 622-0222

DESIGNED BY: HJP
 DRAWN BY: EC
 CHECKED BY: EC
 DATE: 2016/07/11

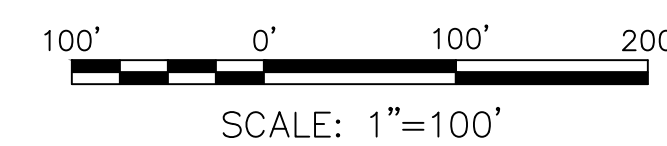
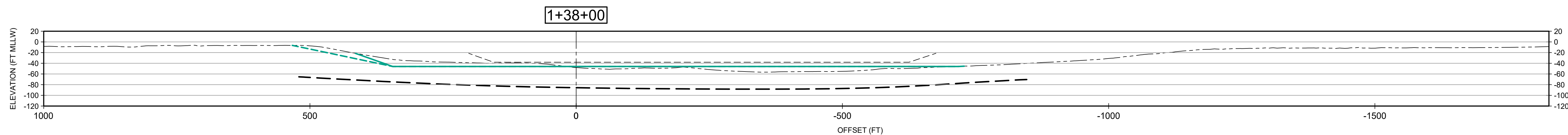
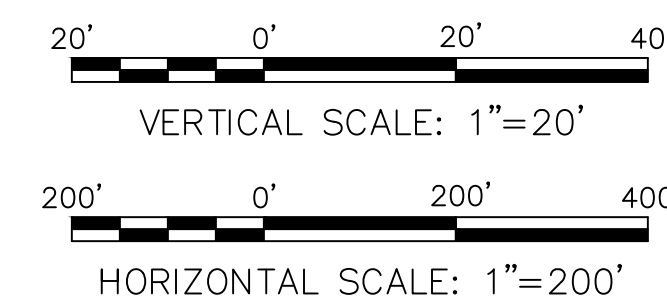
SUBMITTED BY: []
 CONTRACT NO.: []
 PLOT SCALE: []
 PLOT DATE: []
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 SIZE: []

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (98 OF 185)

SHEET IDENTIFICATION
FIG-099
 INDEX 99 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

DESIGNED BY: **HP**
 DRAWN BY: **EC**
 CHECKED BY: **EC**
 SUBMITTED BY: **HP**
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT SCALE: **1"=200'**
 PLOT DATE:
 DRAWING NUMBER:
 FILE NAME:
 SIZE:

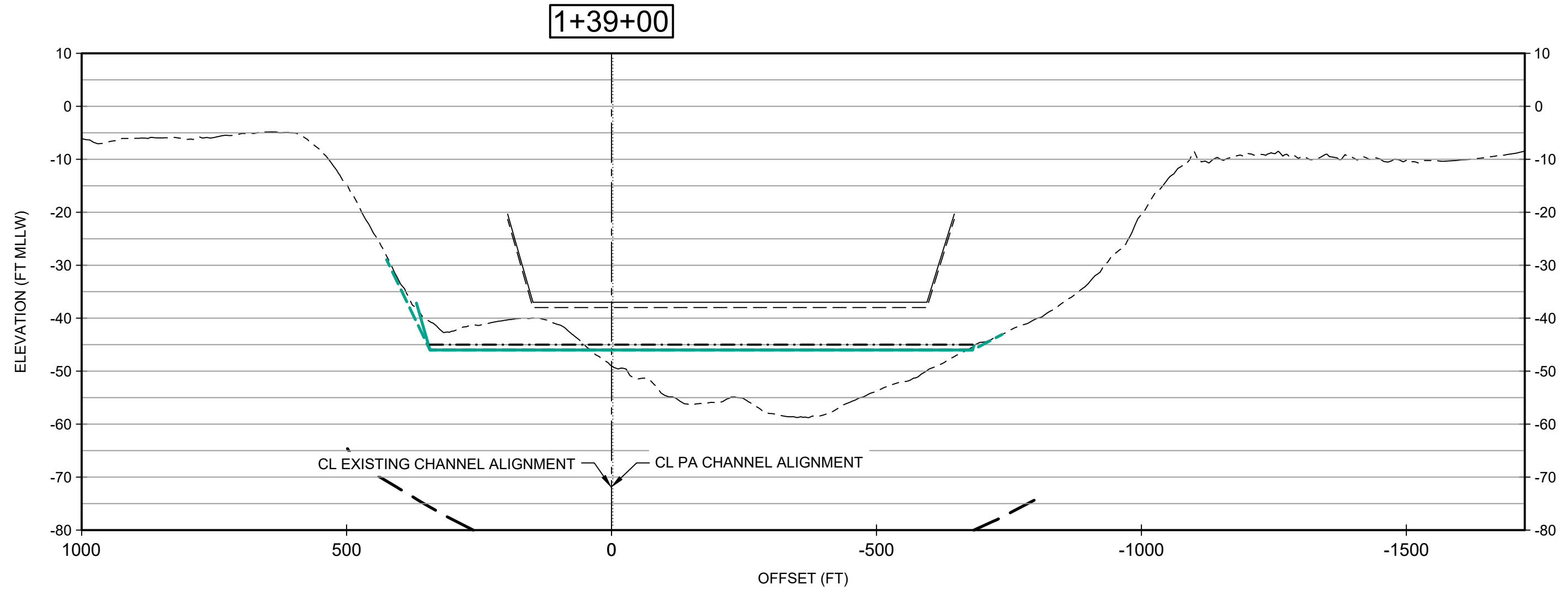
moffatt & nichol
 600 UNIVERSITY STREET
 SEASIDE, WA 98101
 (206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (99 OF 185)

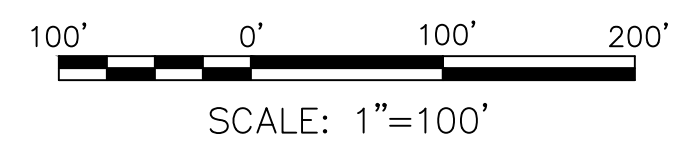
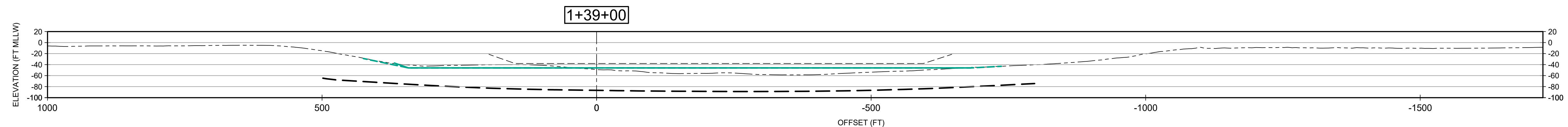
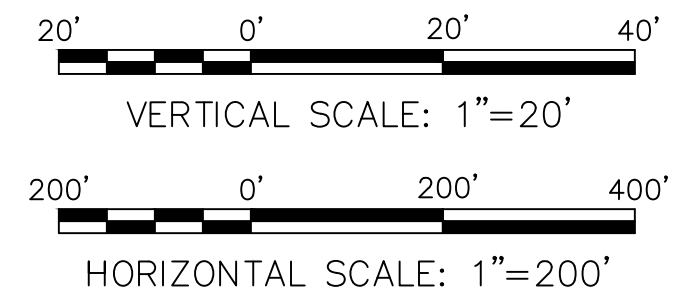
SHEET IDENTIFICATION
FIG-100
 INDEX 100 OF 186



MARK	DESCRIPTION	DATE	APPR.



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (100 OF 185)

SHEET IDENTIFICATION
FIG-101
 INDEX 101 of 186

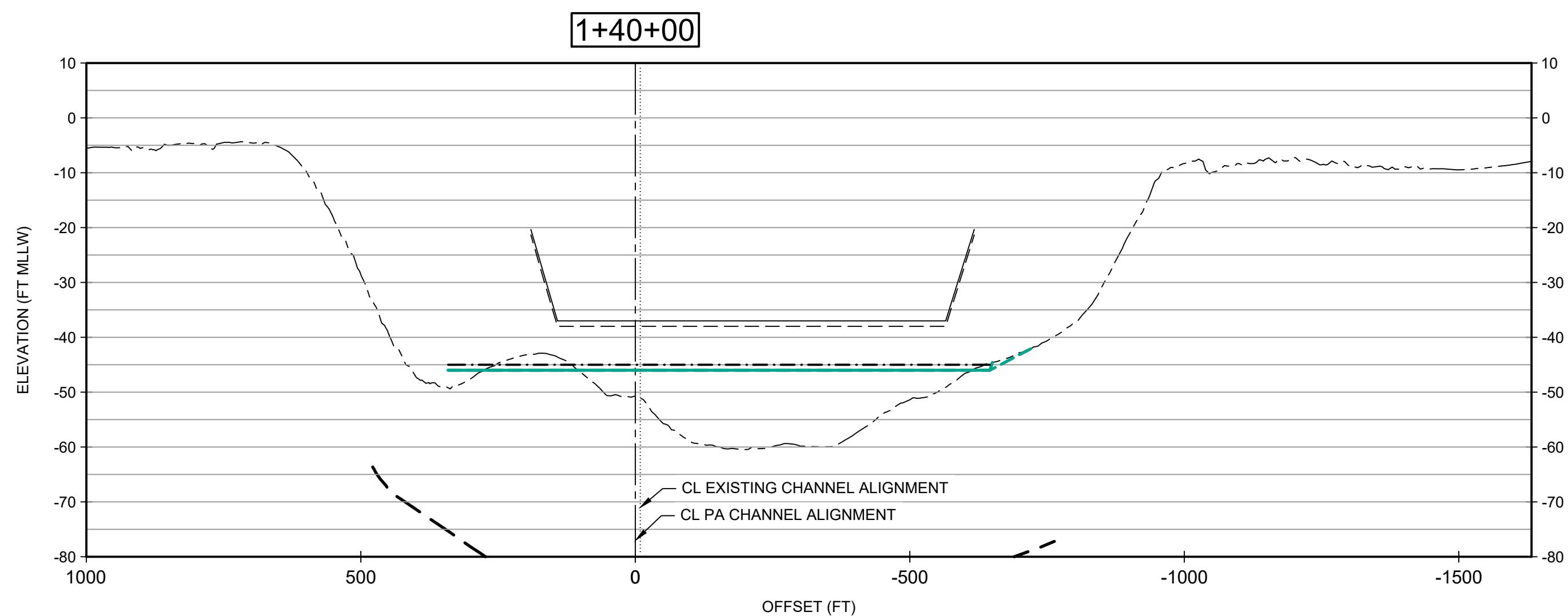
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SUBMITTED BY:	CONTRACT NO.:	SOLICITATION NO.:
PLOT SCALE: SIZE:	PLOT DATE:	DRAWING NUMBER:
FILE NAME:		

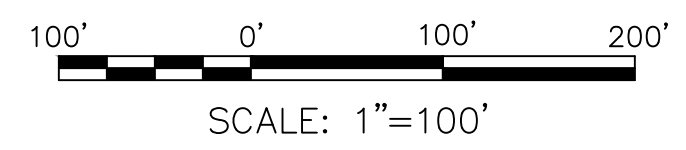
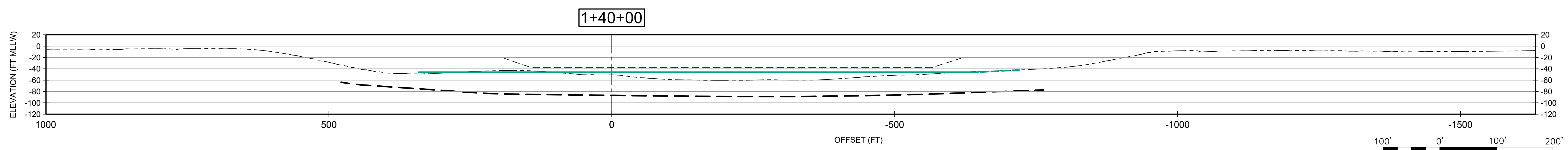
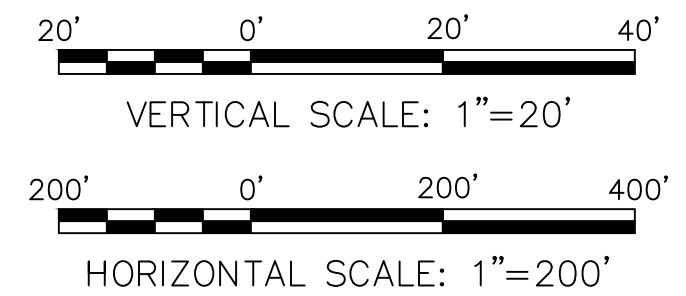
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (101 OF 185)

SHEET IDENTIFICATION
FIG-102
 INDEX 102 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

———	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	-----	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—————	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

D

C

B

A

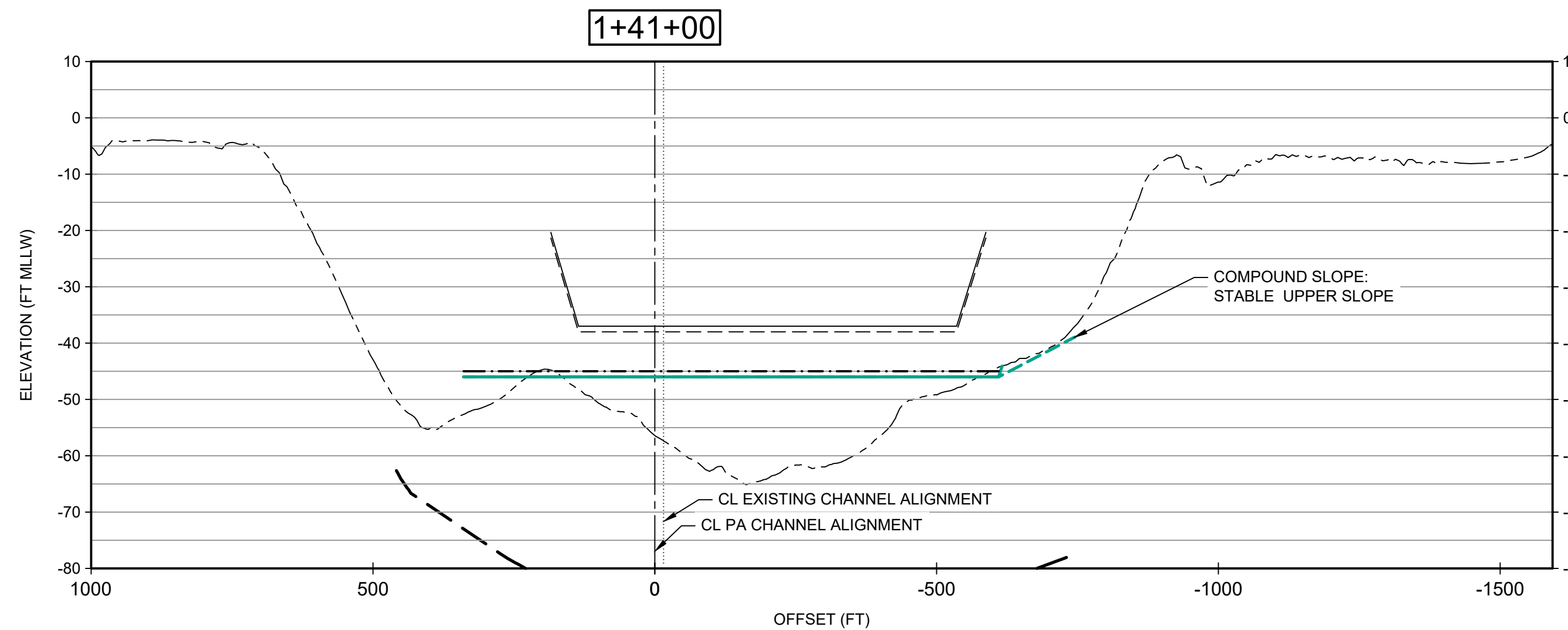
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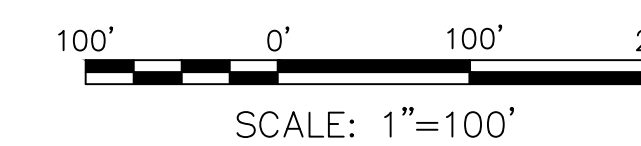
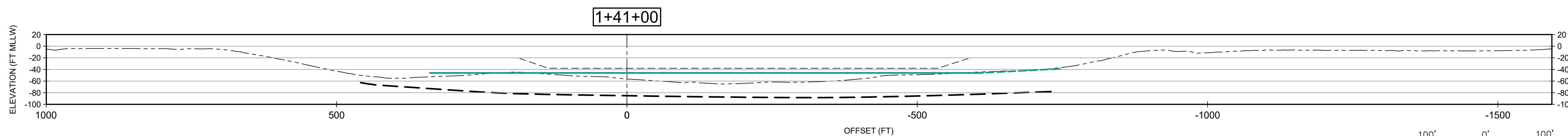
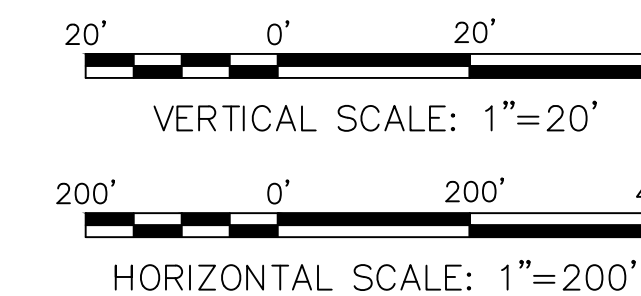
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4

5



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - . - . - . - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - — — — — EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - — — — — ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

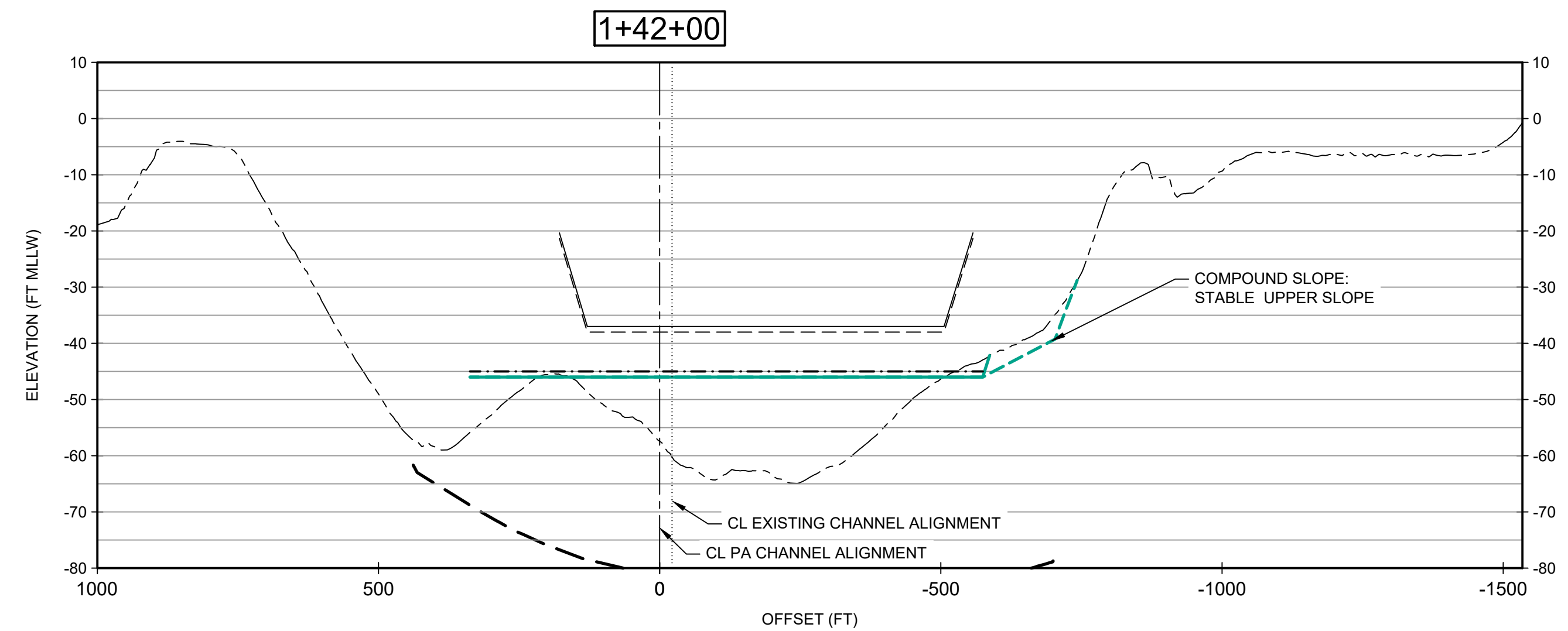
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

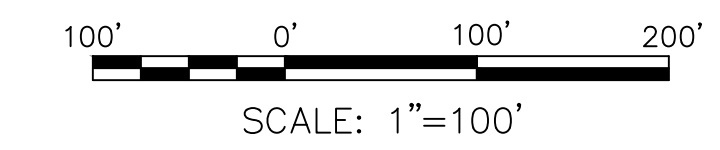
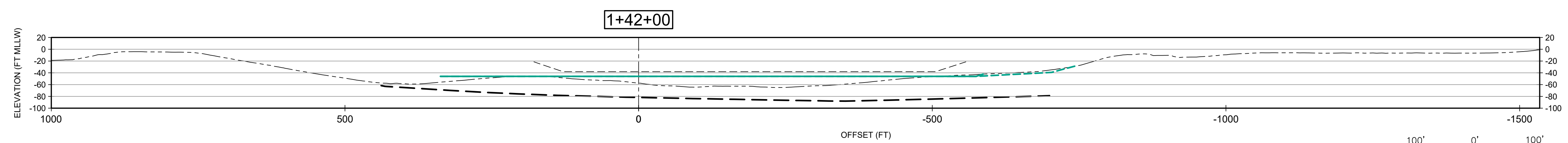
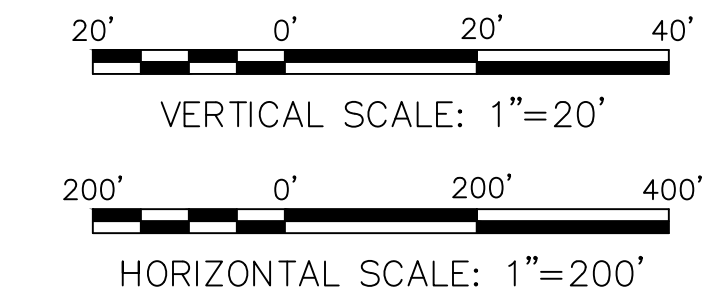
DATE	DESCRIPTION	MARK	APPR.

 600 UNIVERSITY STREET SEATTLE, WA 98101 (206) 622-0222	DATE: 2015/07/11
	DESIGNED BY: H.P. / CHECKED BY: E.C.
CONTRACT NO.:	FILE NAME:
SUBMITTED BY:	SIZE:
PLOT SCALE:	DRAWING NUMBER:
FILE DATE:	

**COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (102 OF 185)**



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

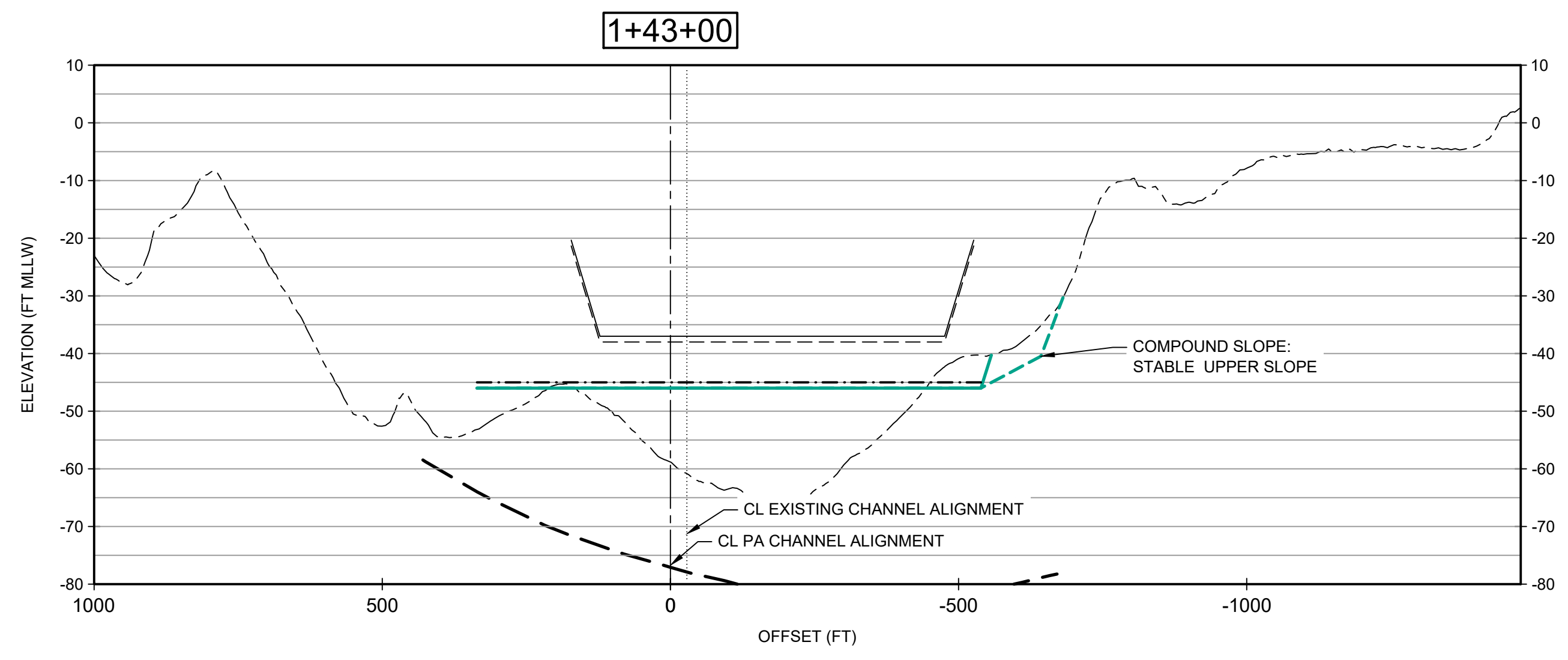
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SIZE: [unclear]

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (103 OF 185)

SHEET IDENTIFICATION
FIG-104
 INDEX 104 OF 186



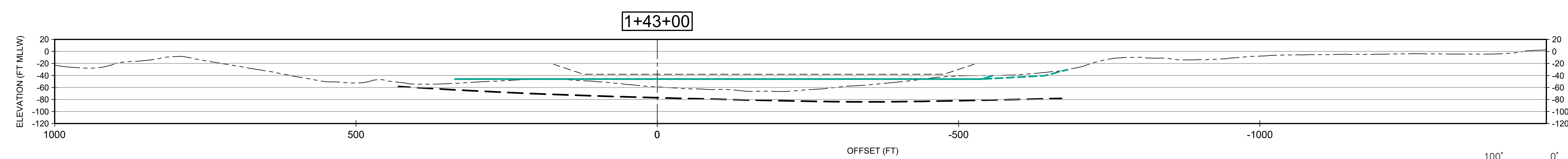
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: HP
CHECKED BY: EC
DATE: 2016/07/11

SUBMITTED BY: HP
FILE NAME:
SIZE:

CONTRACT NO.:
PLOT SCALE:
DRAWING NUMBER:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (104 OF 185)

SHEET IDENTIFICATION
FIG-105
 INDEX 105 of 186

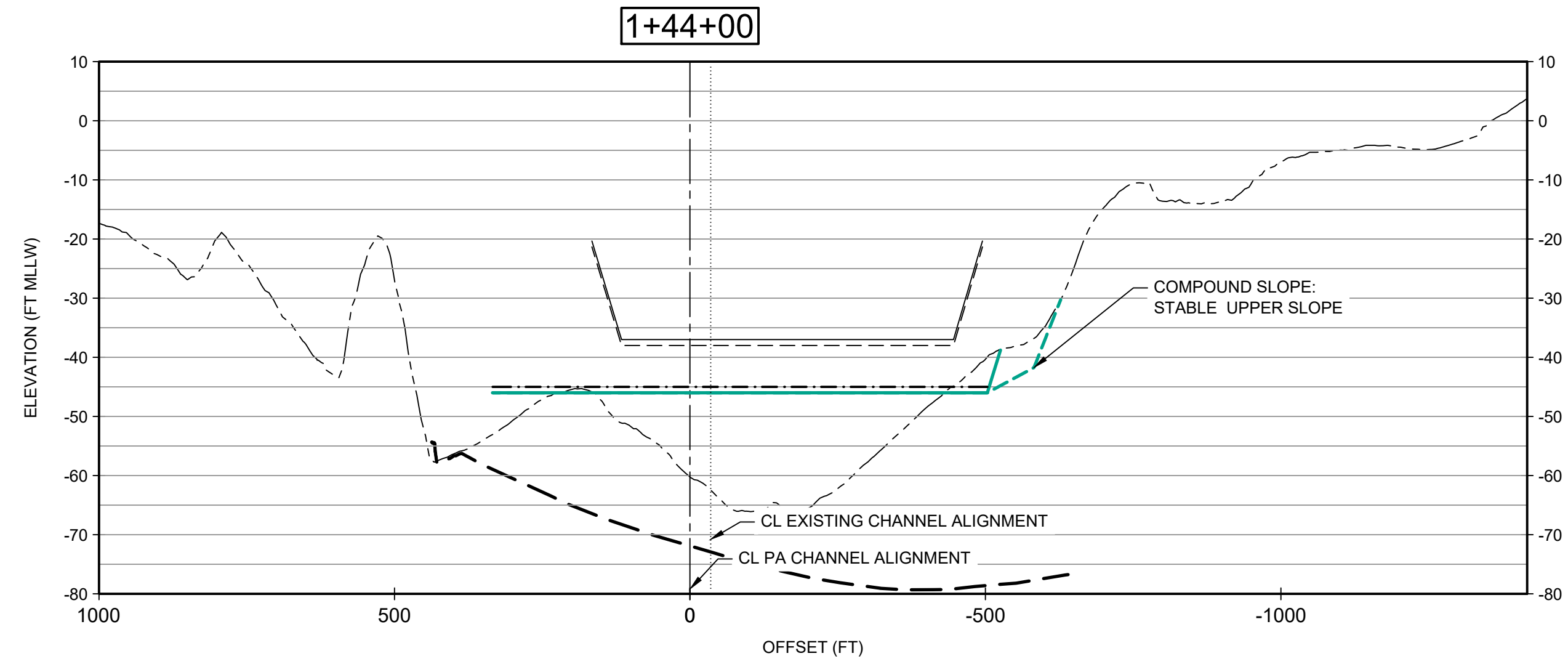


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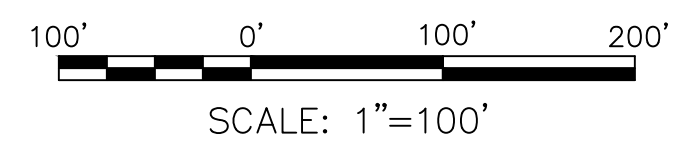
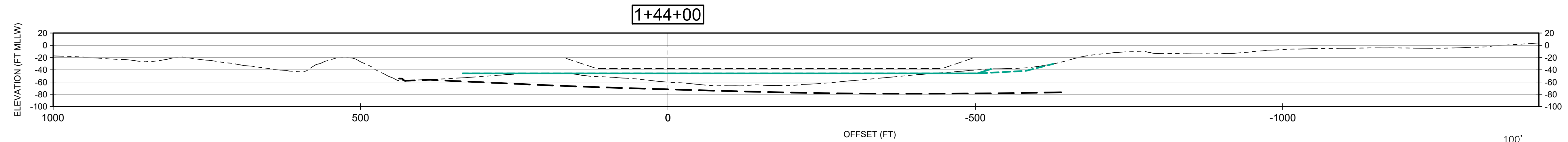
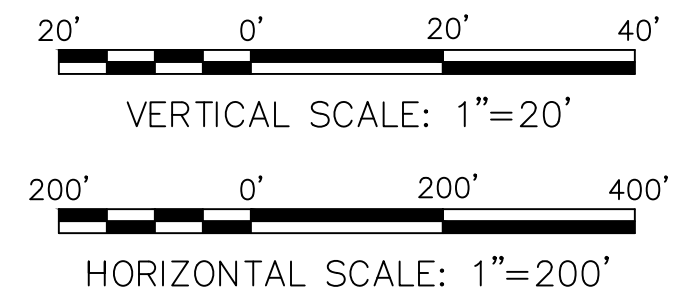
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PLotted: 5/20/2024 4:50 PM by LANDON, KYLE		

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (105 OF 185)

SHEET IDENTIFICATION
FIG-106
INDEX 106 of 186



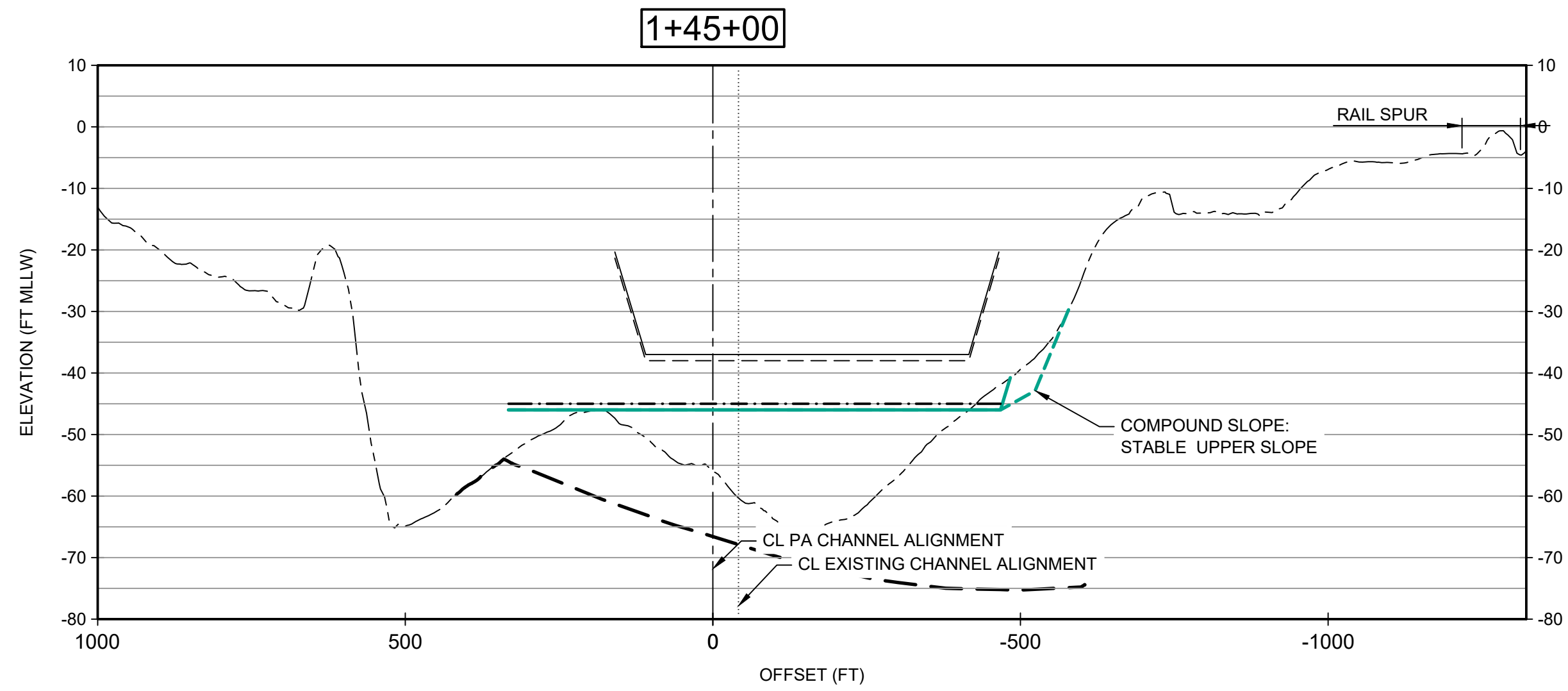
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EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



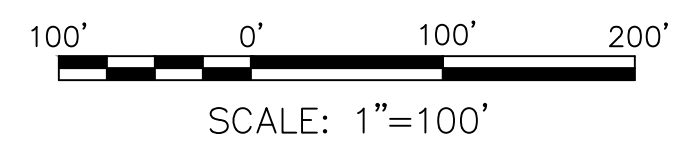
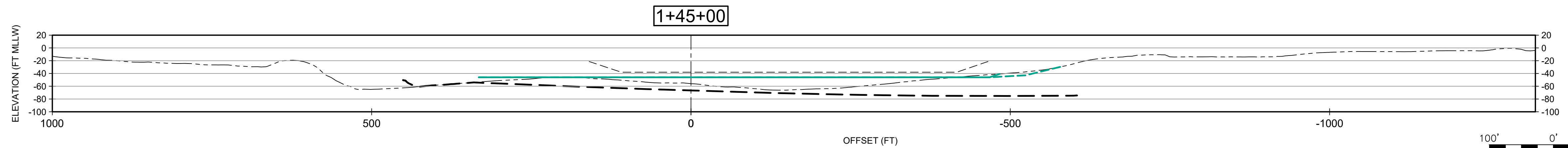
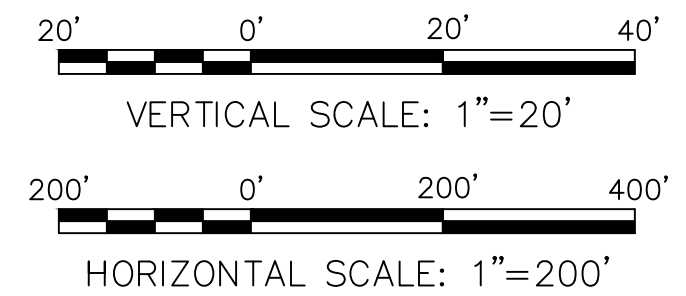
- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- 1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



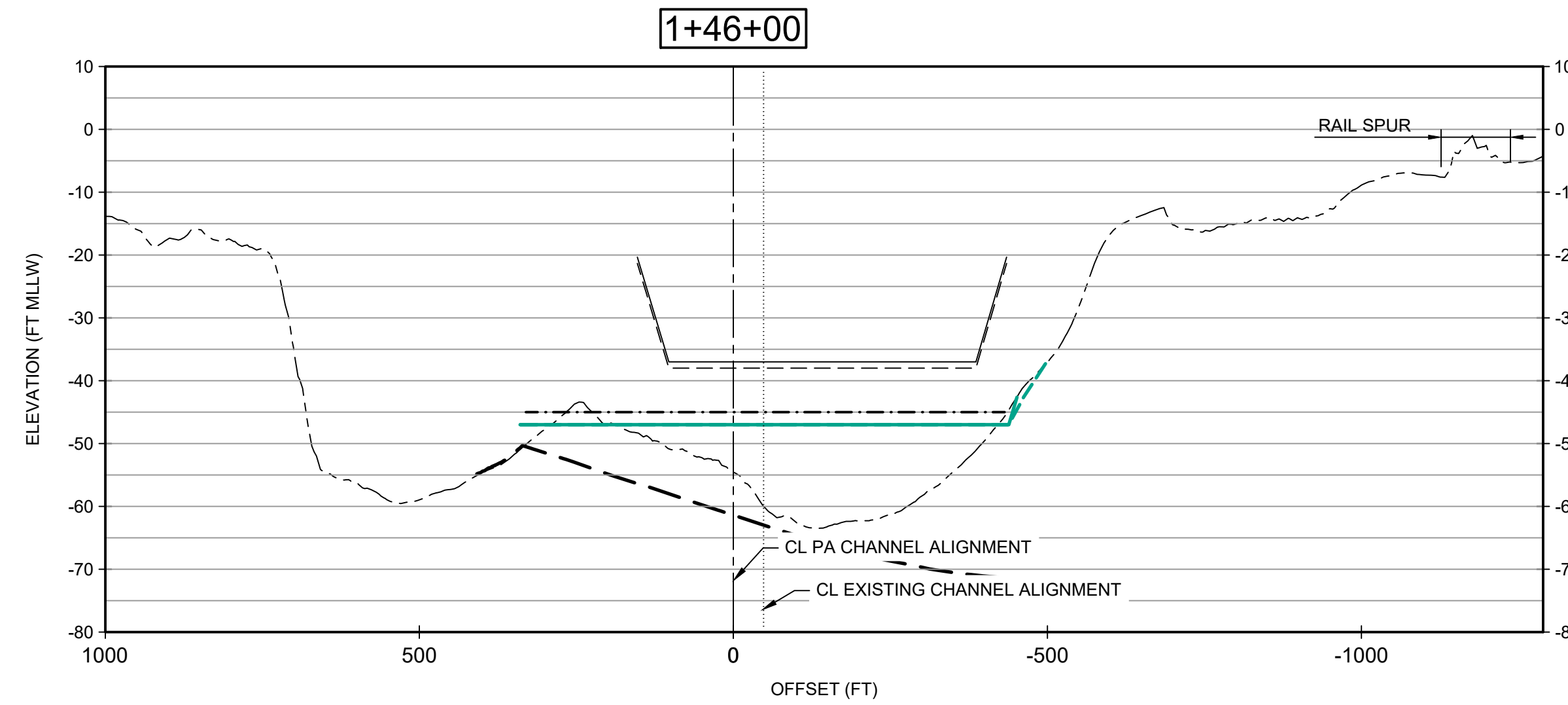
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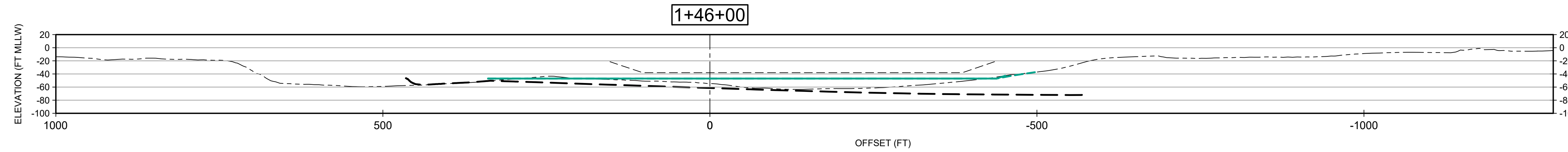
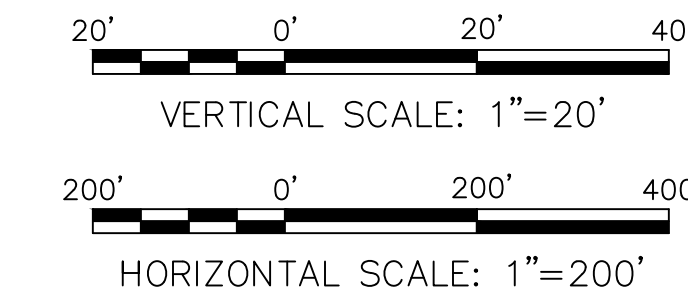
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 SEATTLE, WA 98101
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (106 OF 185)

SHEET IDENTIFICATION
FIG-107
 INDEX 107 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



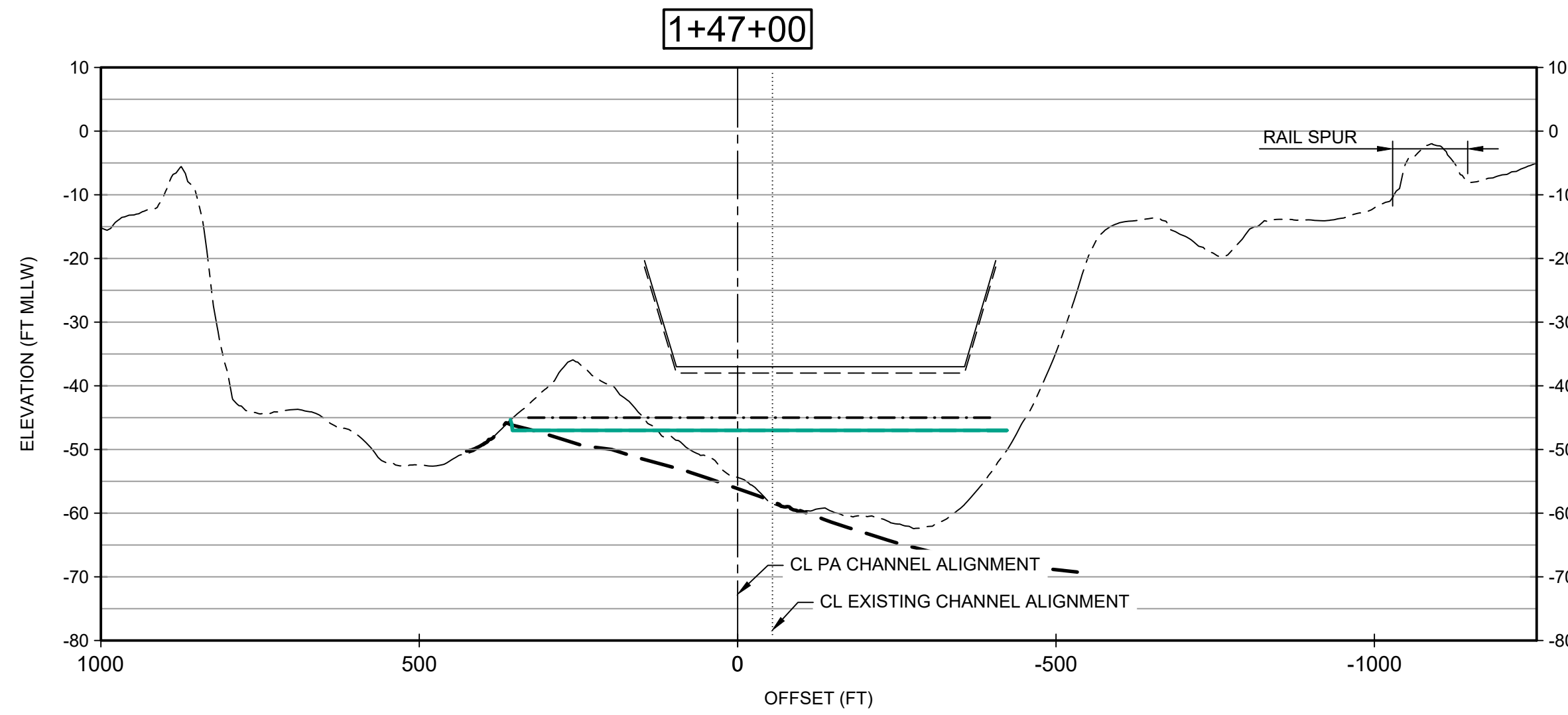
DATE	DESCRIPTION	MARK	APPR.

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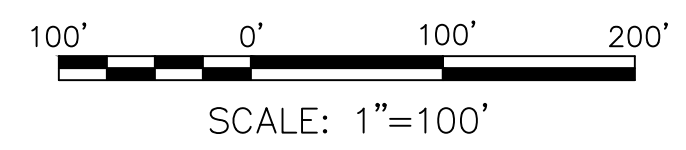
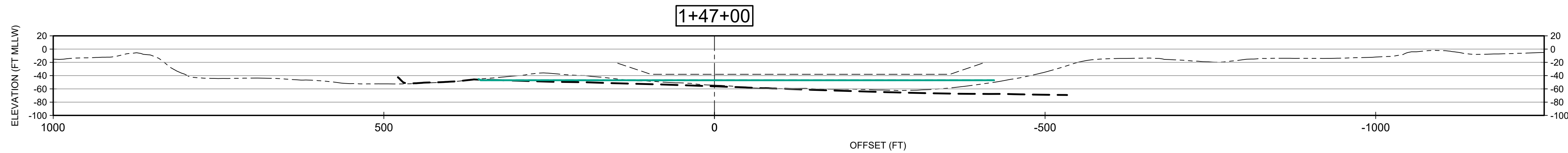
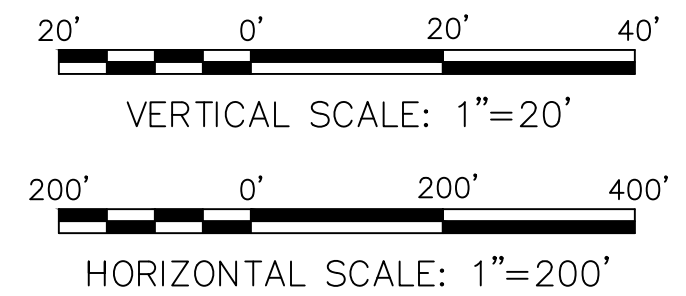
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (107 OF 185)

SHEET IDENTIFICATION
FIG-108
 INDEX 108 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- . - . - . PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

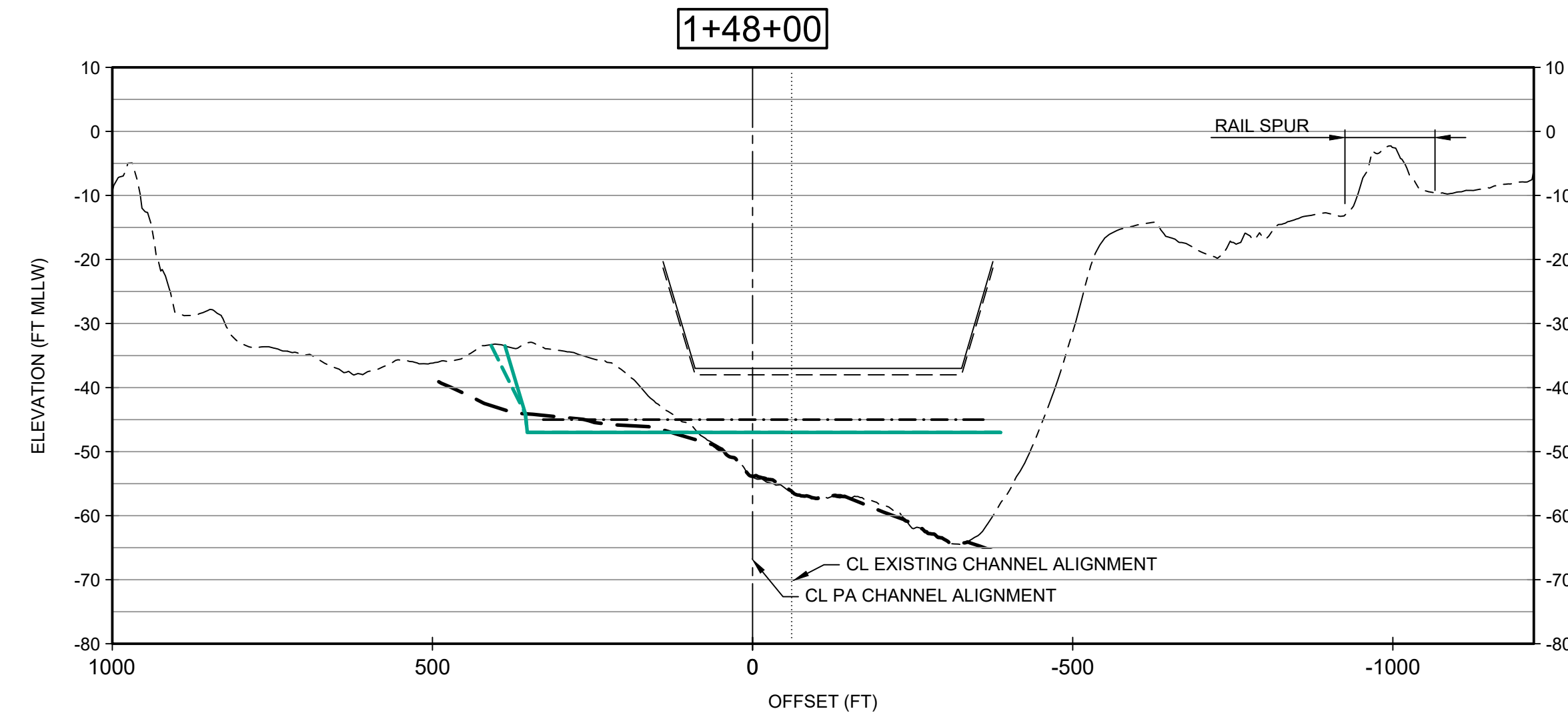
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SIZE:						

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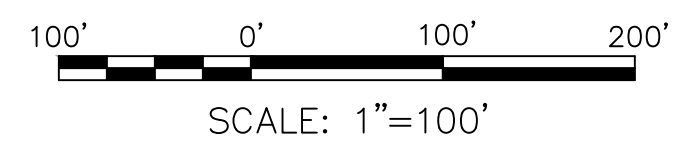
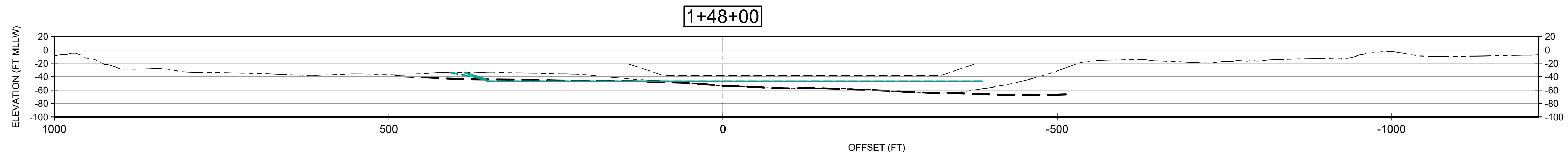
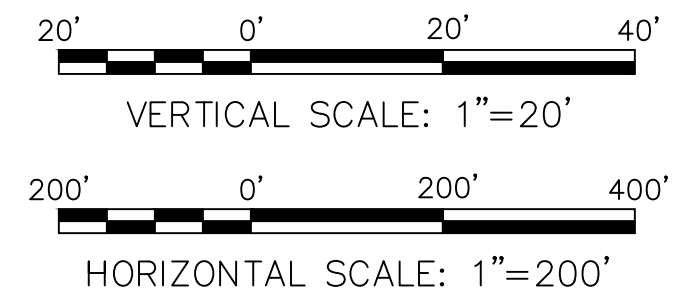
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (108 OF 185)

SHEET IDENTIFICATION
FIG-109
INDEX 109 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: H.P.
DRAWN BY: E.C.
CHECKED BY: E.C.
DATE: 2016/07/11

CONTRACT NO.:
DRAWING NUMBER:
FILE NAME:
SIZE:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (109 OF 185)

SHEET IDENTIFICATION
FIG-110
 INDEX 110 OF 186



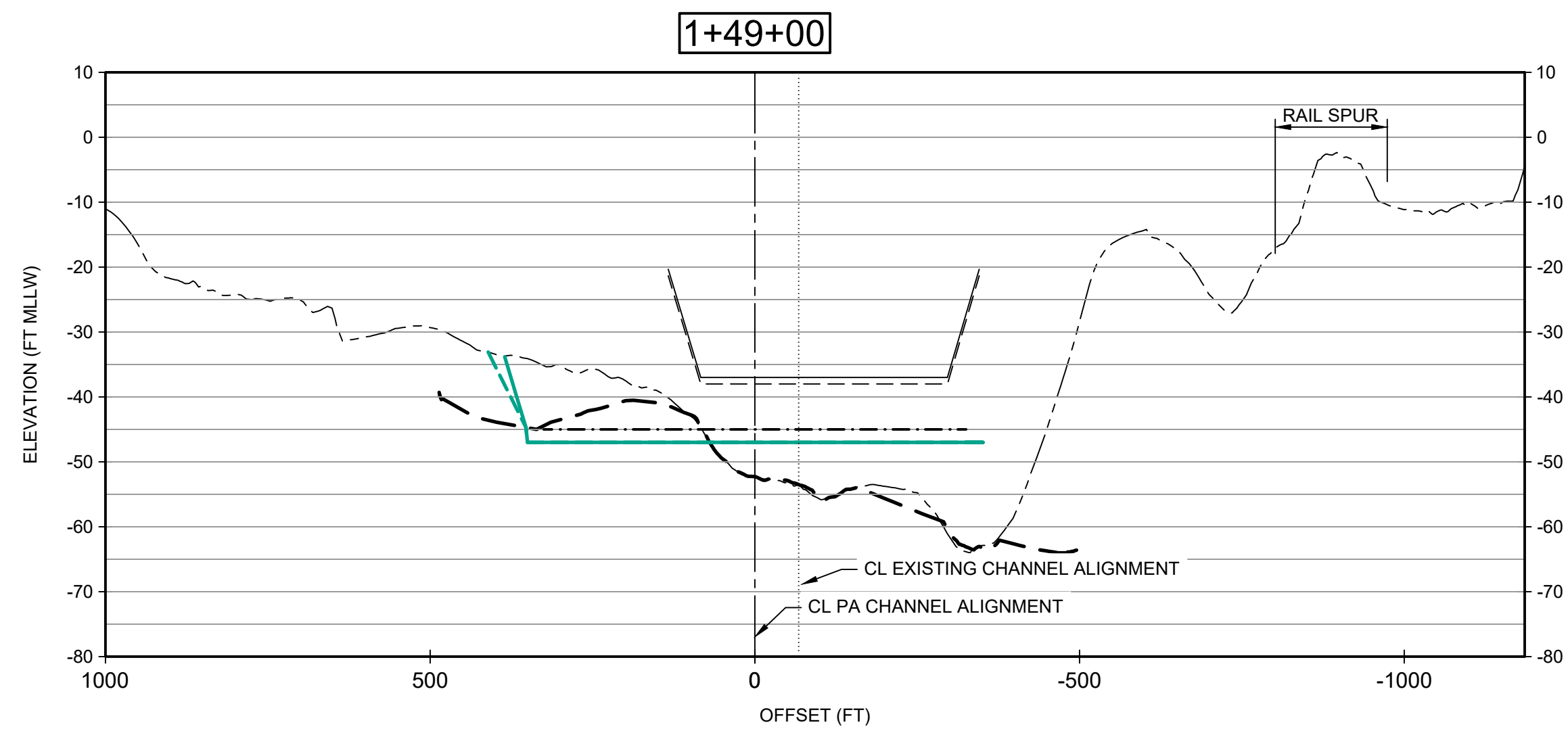
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PLOT SCALE:	PLOT DATE:	DRAWING NUMBER:
SIZE:	FILE NAME:	

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (110 OF 185)

SHEET IDENTIFICATION
FIG-111
 INDEX 111 of 186



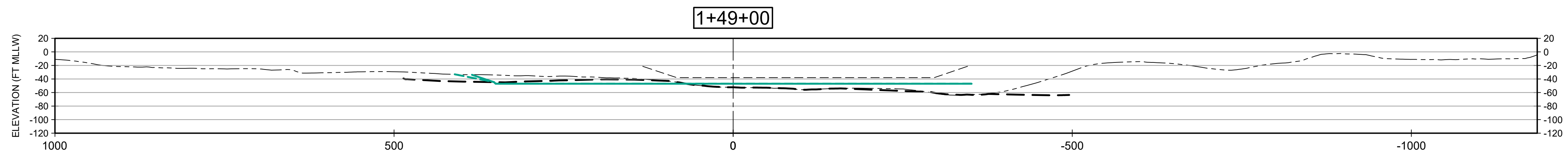
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-47.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

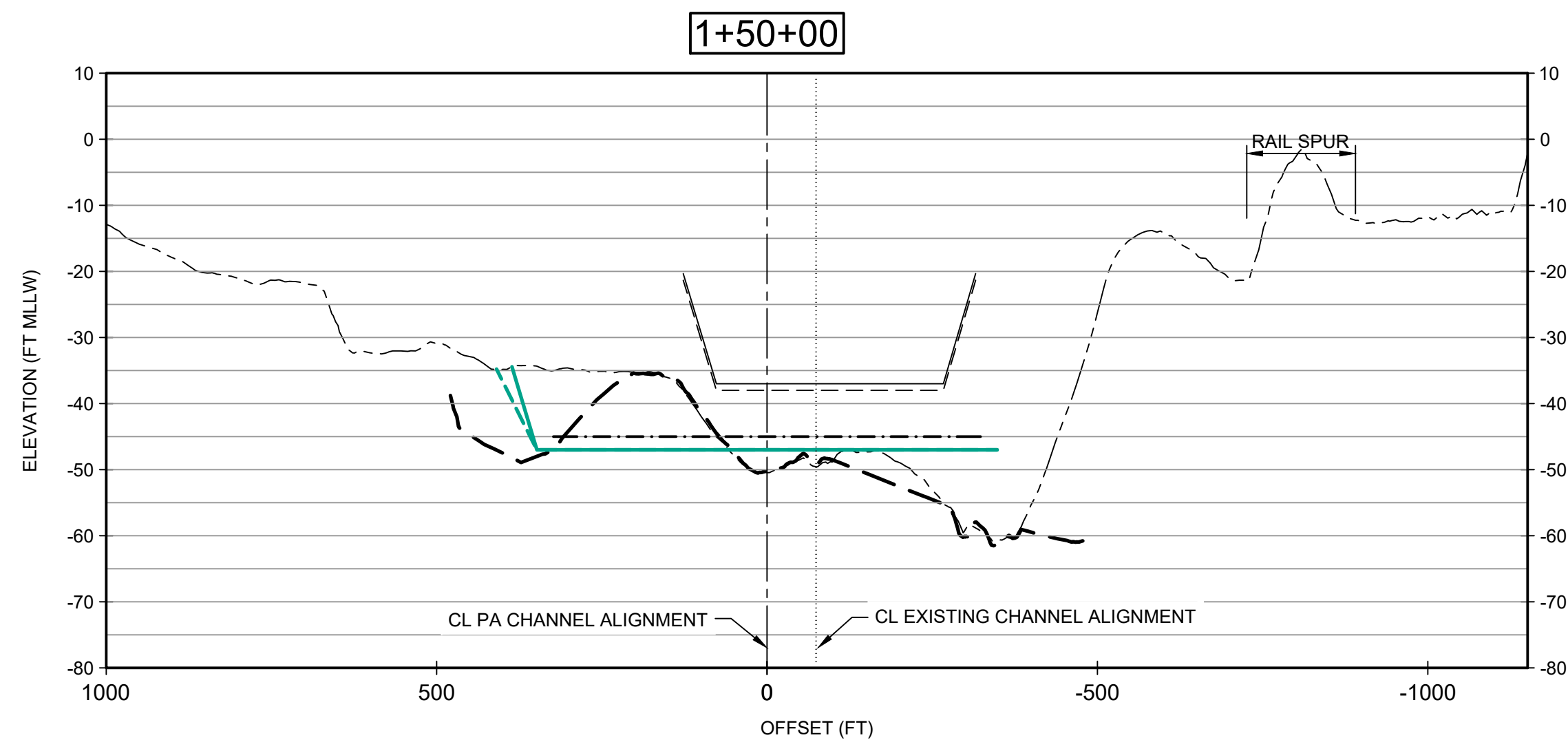
LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- . - . - .	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- . - . - .	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

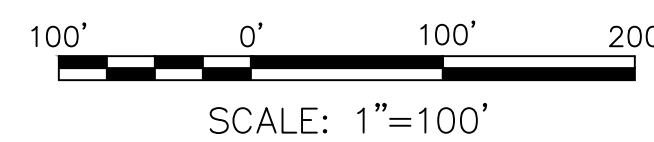
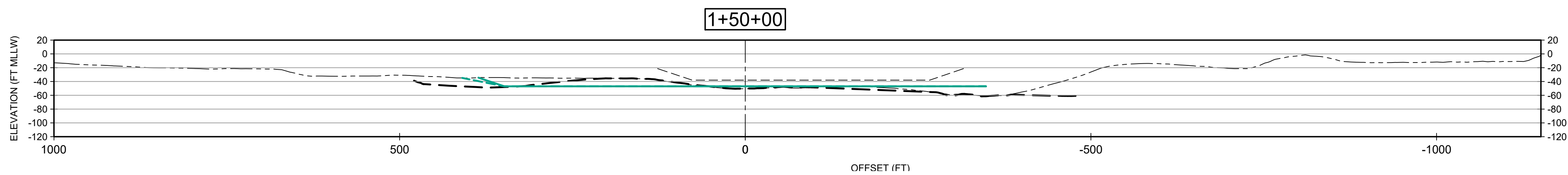
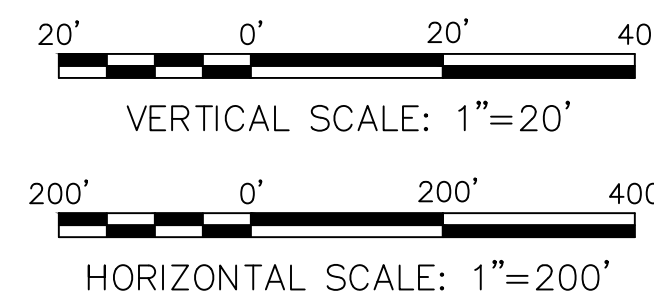
- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



NO.	DESCRIPTION	DATE	APPR.

DESIGNED BY: DATE: 2016/07/11

DRAWN BY: H.P. CHECKED BY: EC SOLICITATION NO.:

SUBMITTED BY: CONTRACT NO.:

PLOT SCALE: PLOT DATE: DRAWING NUMBER:

SIZE: FILE NAME:

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COOS BAY CHANNEL MODIFICATION

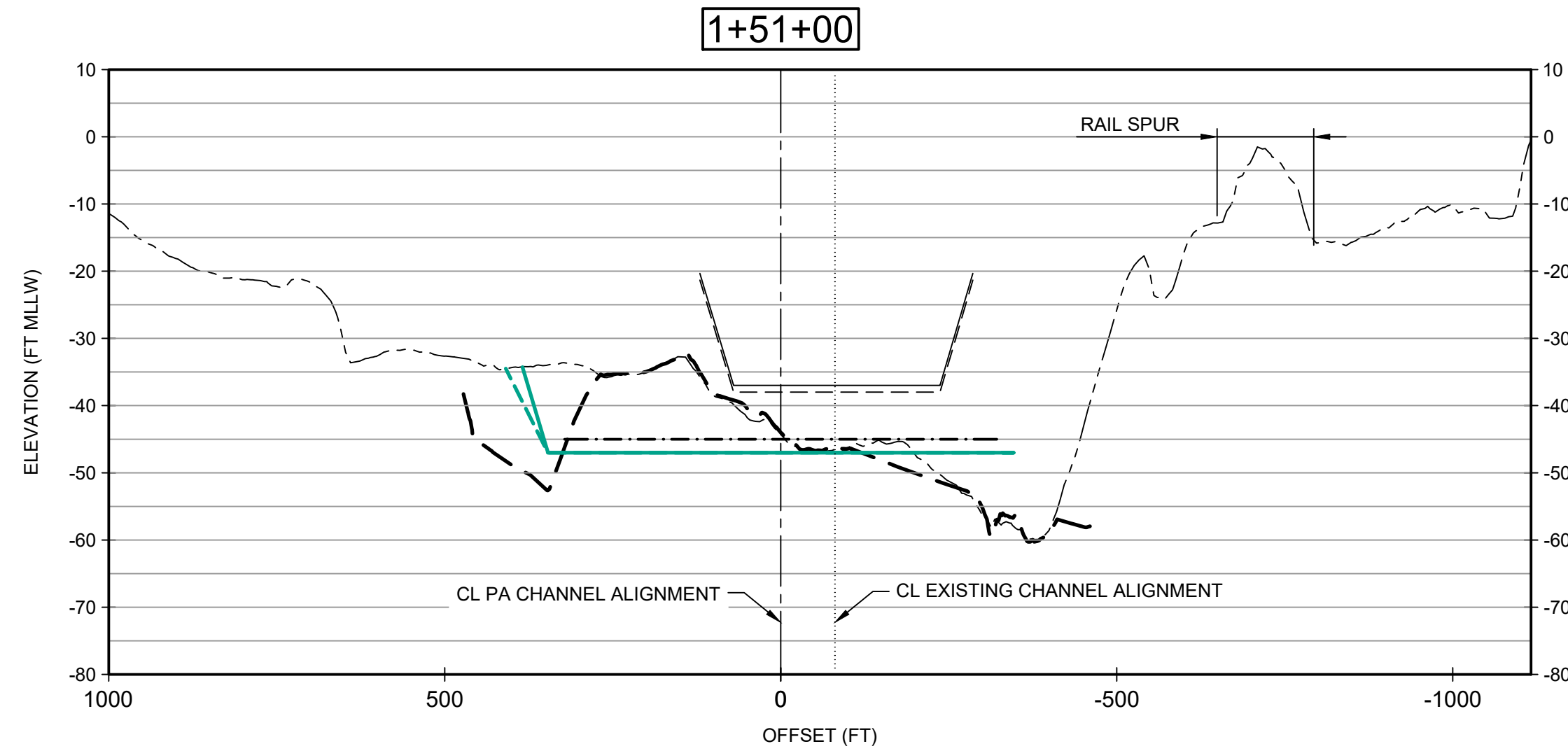
CROSS SECTION (111 OF 185)

SHEET IDENTIFICATION

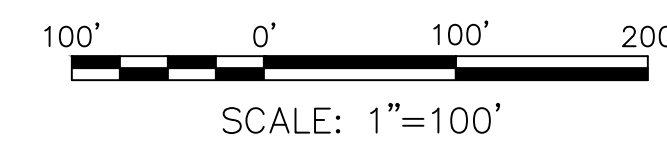
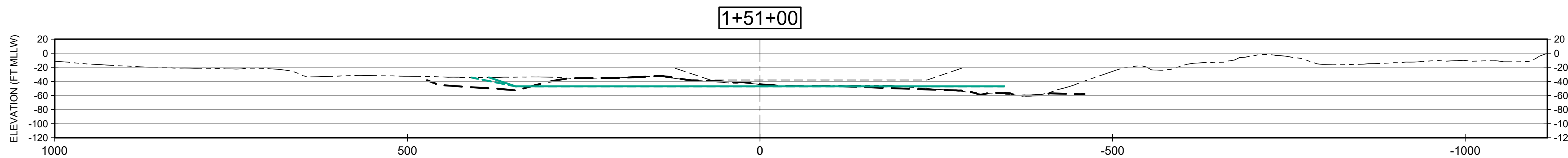
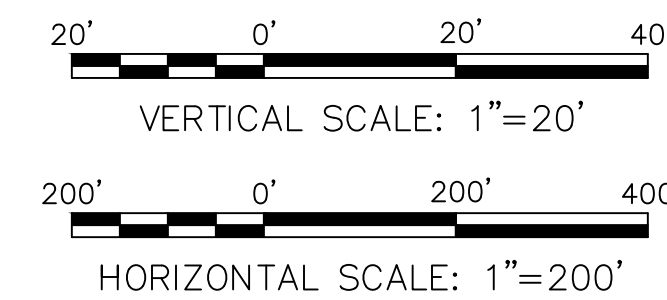
FIG-112

INDEX 112 of 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20_CADD\Active_XS_SubAppendix\FIG-112-CROSS SECTIONS; Plotted: 5/20/2024 4:55 PM by LANDON, KYLE; Saved: 5/15/2024 1:05 AM by JGROTH



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

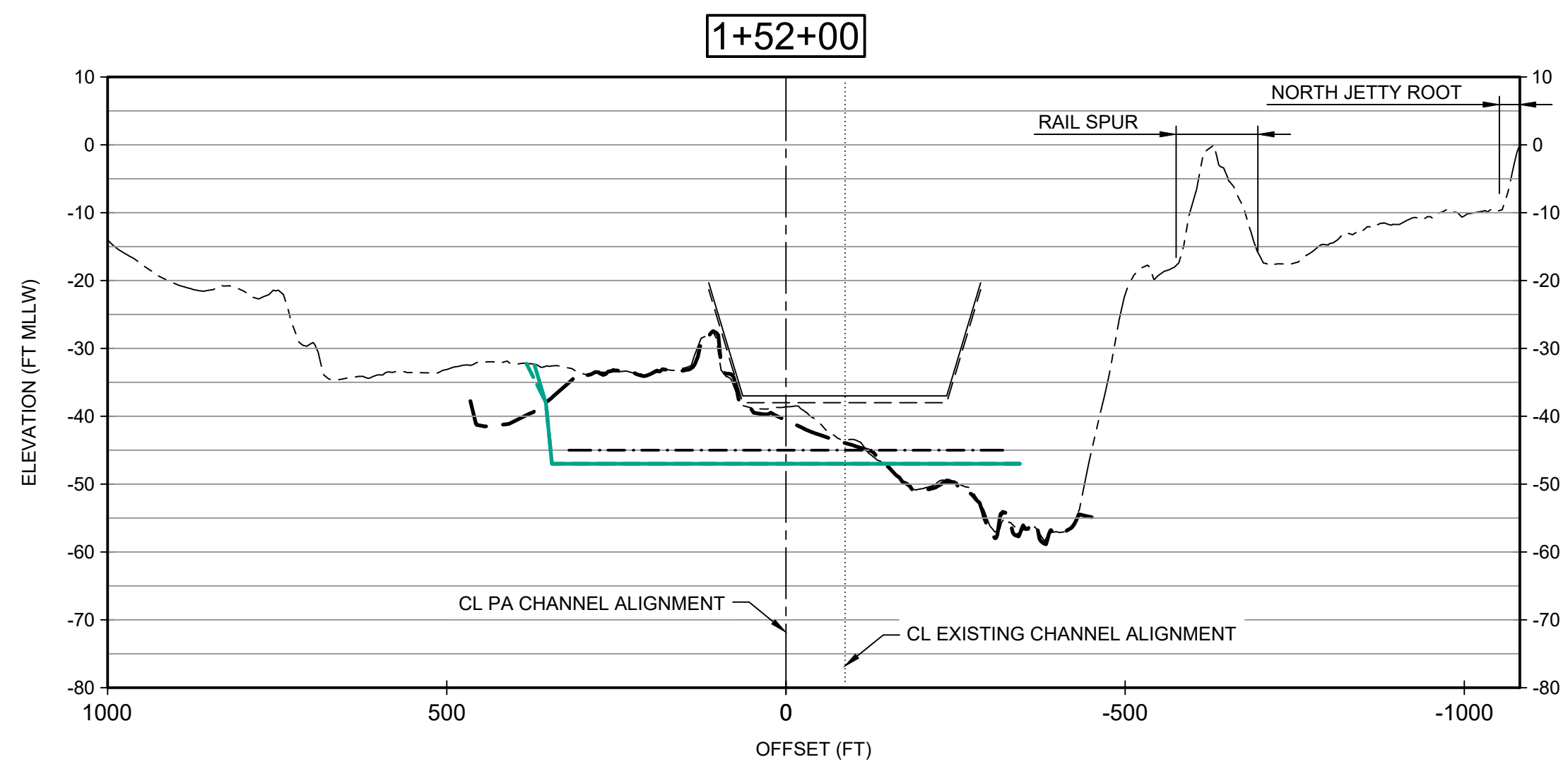


MARK	DESCRIPTION	DATE	APPR.

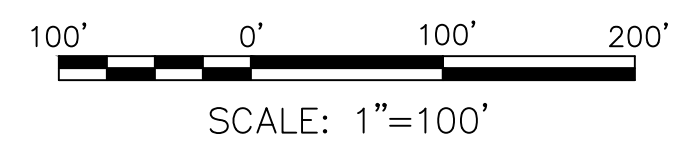
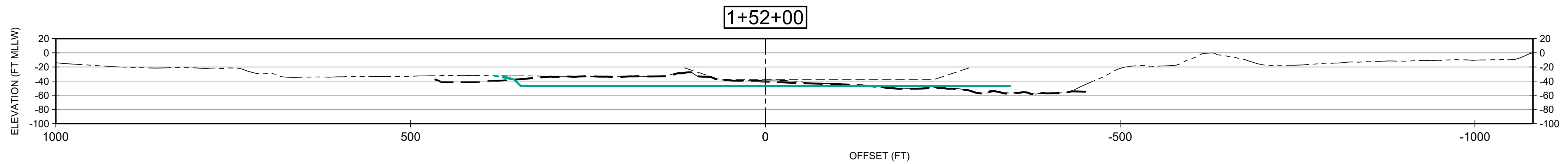
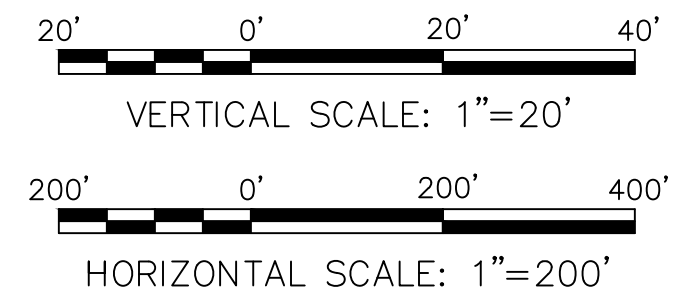
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (112 OF 185)

SHEET IDENTIFICATION
FIG-113
 INDEX 113 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



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SUBMITTED BY: HJP
CONTRACT NO.:
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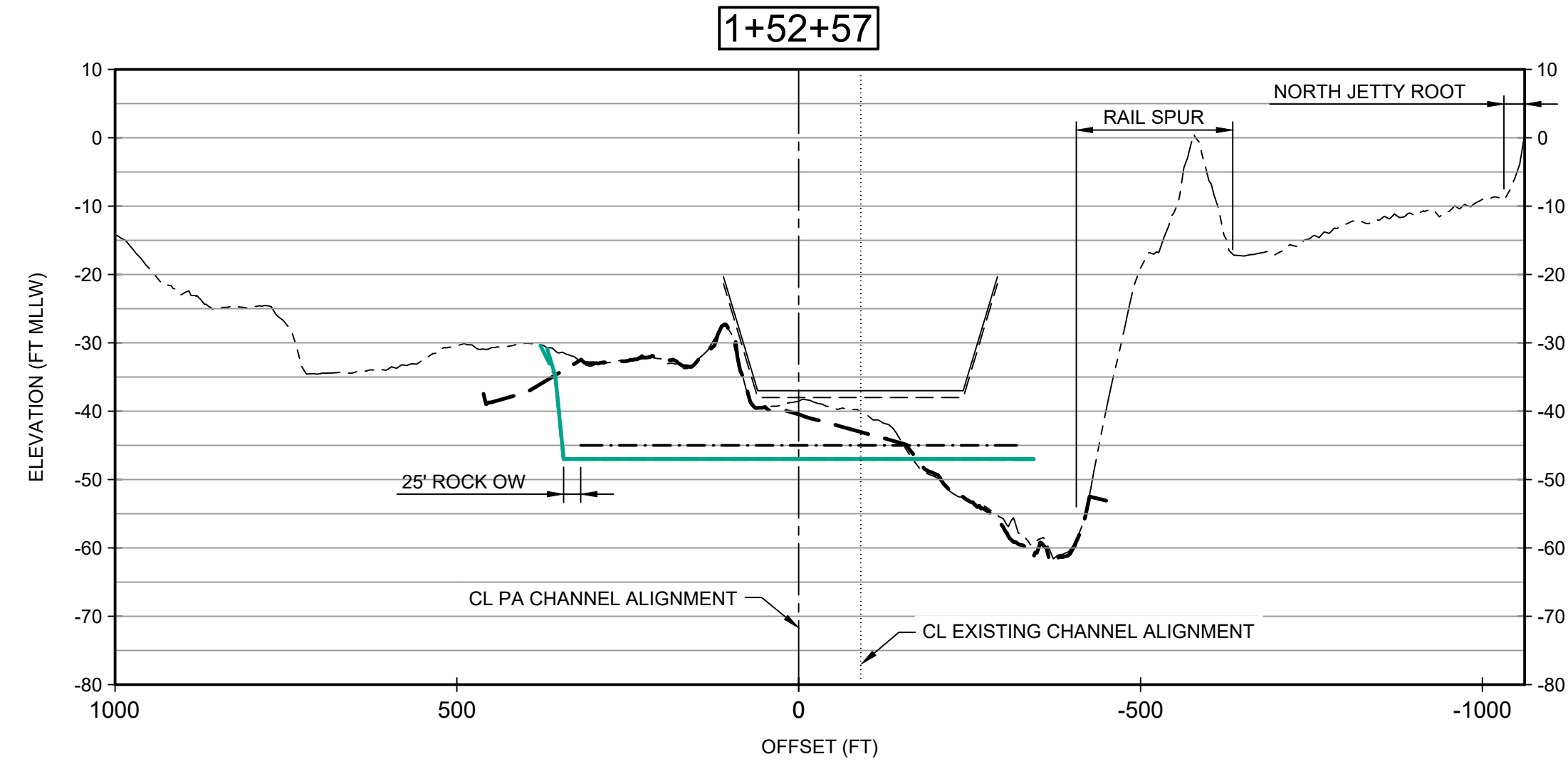
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SIZE:

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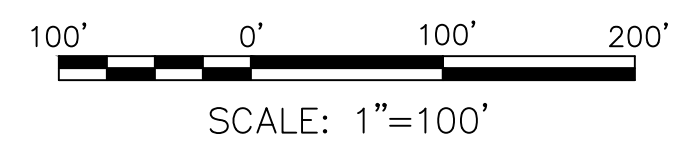
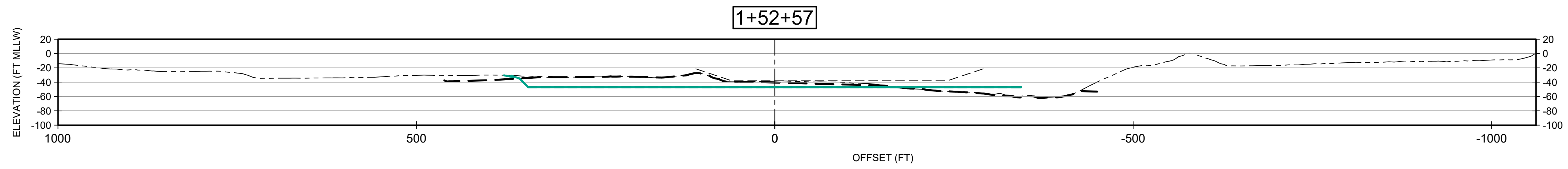
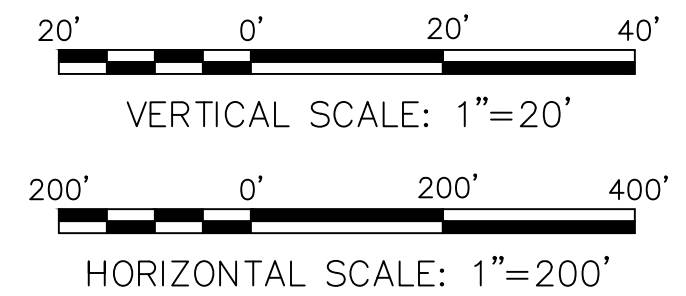
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (113 OF 185)

SHEET IDENTIFICATION
FIG-114
 INDEX 114 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-114-CROSS SECTIONS; Plotted: 5/20/2024 4:57 PM by LANDON, KYLE; Saved: 5/15/2024 1:09 AM by JGROTH



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



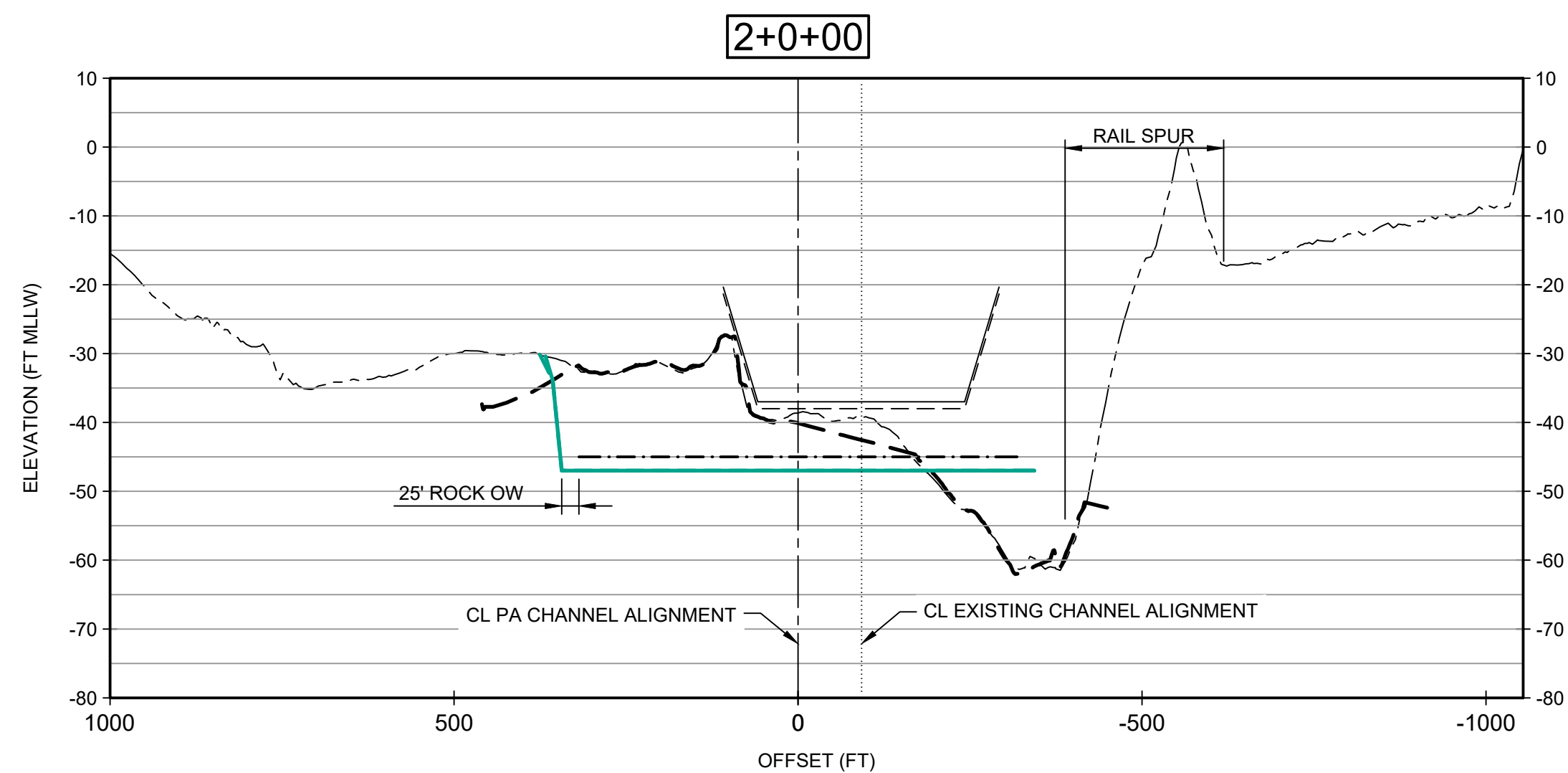
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 SUBMITTED BY: **HP** CONTRACT NO.:
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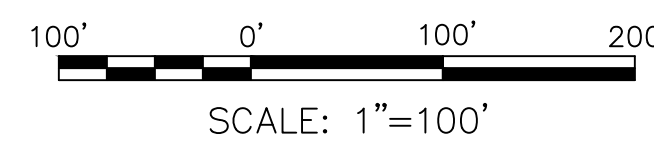
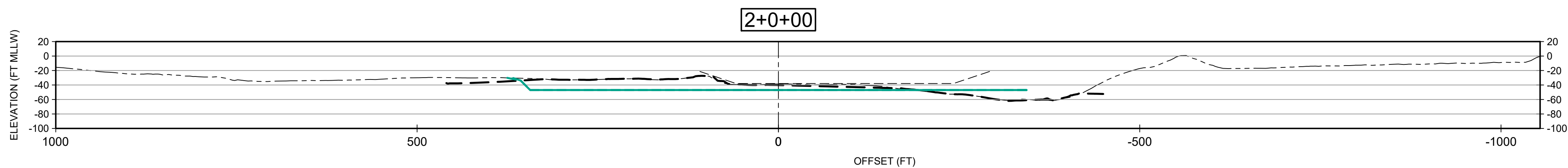
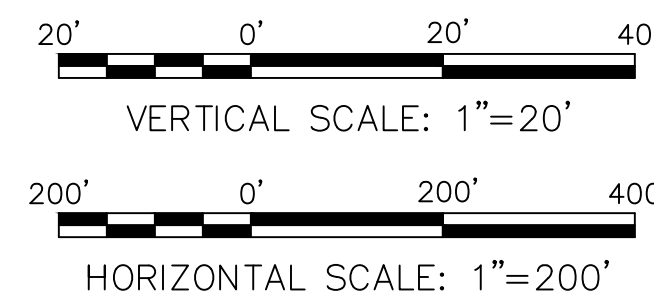
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (115 OF 185)

SHEET IDENTIFICATION
FIG-116
 INDEX 116 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

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DESIGNED BY:	DATE:
DRAWN BY:	2016/07/11
CHECKED BY:	EC
APPROVED BY:	HP
SUBMITTED BY:	EC
FILE NAME:	
PLOT SCALE:	
SIZE:	
PLOT DATE:	
DRAWING NUMBER:	
CONTRACT NO.:	

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (116 OF 185)

SHEET IDENTIFICATION
FIG-117
INDEX 117 of 186

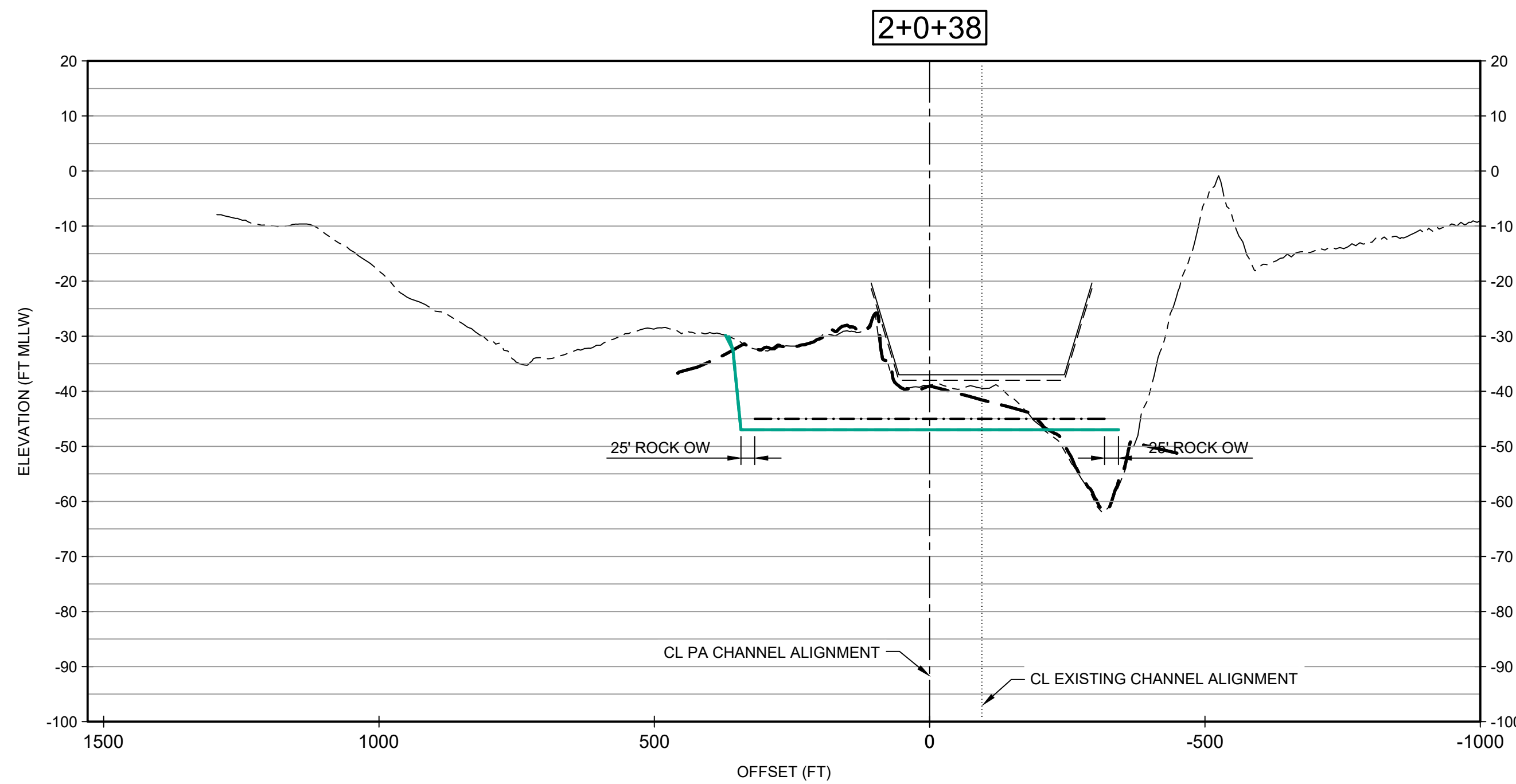


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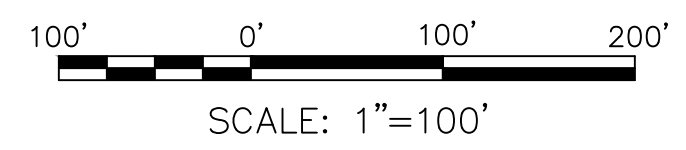
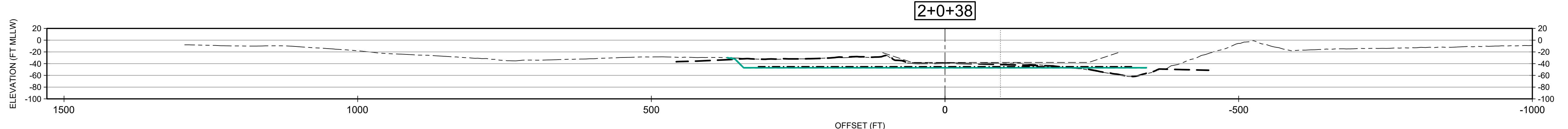
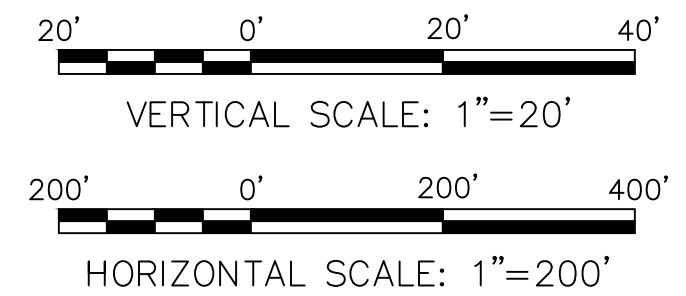
C

B

A



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

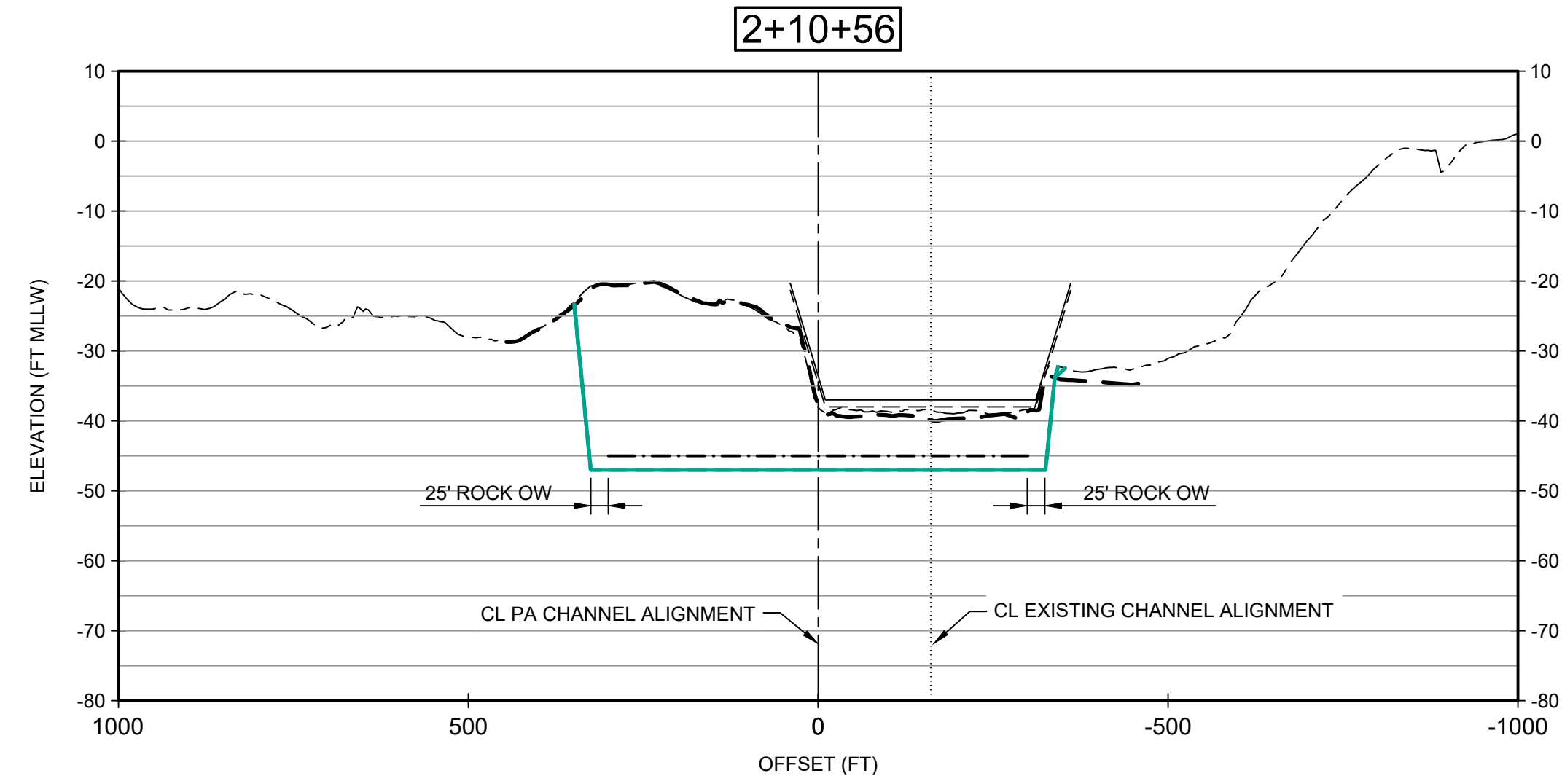
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DRAWN BY: _____ CHECKED BY: _____ SOLICITATION NO.: _____
SUBMITTED BY: _____ PLOT SCALE: _____ CONTRACT NO.: _____
PLOT DATE: _____ DRAWING NUMBER: _____
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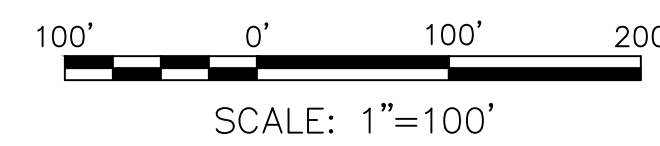
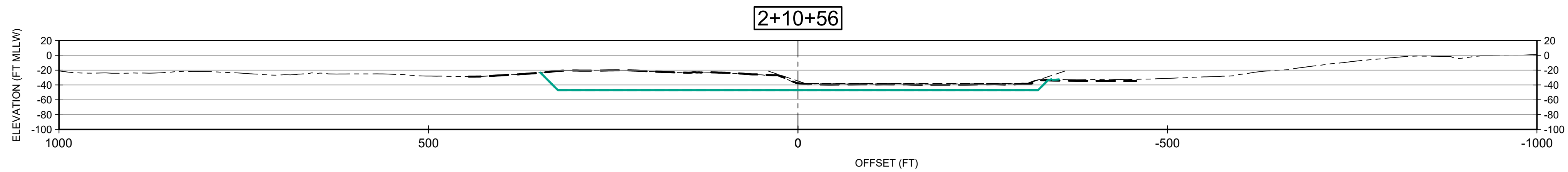
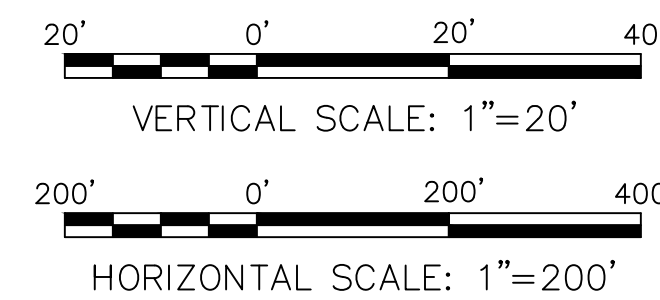
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (117 OF 185)

SHEET IDENTIFICATION
FIG-118
INDEX 118 of 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-118-CROSS SECTIONS; Plotted: 5/20/2024 5:00 PM by LANDON, KYLE; Saved: 5/15/2024 1:16 AM by JGROTH



EXISTING CHANNEL DEPTH	-33.60
EXISTING CHANNEL DEPTH + AMD	-34.60
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - . - . - . PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



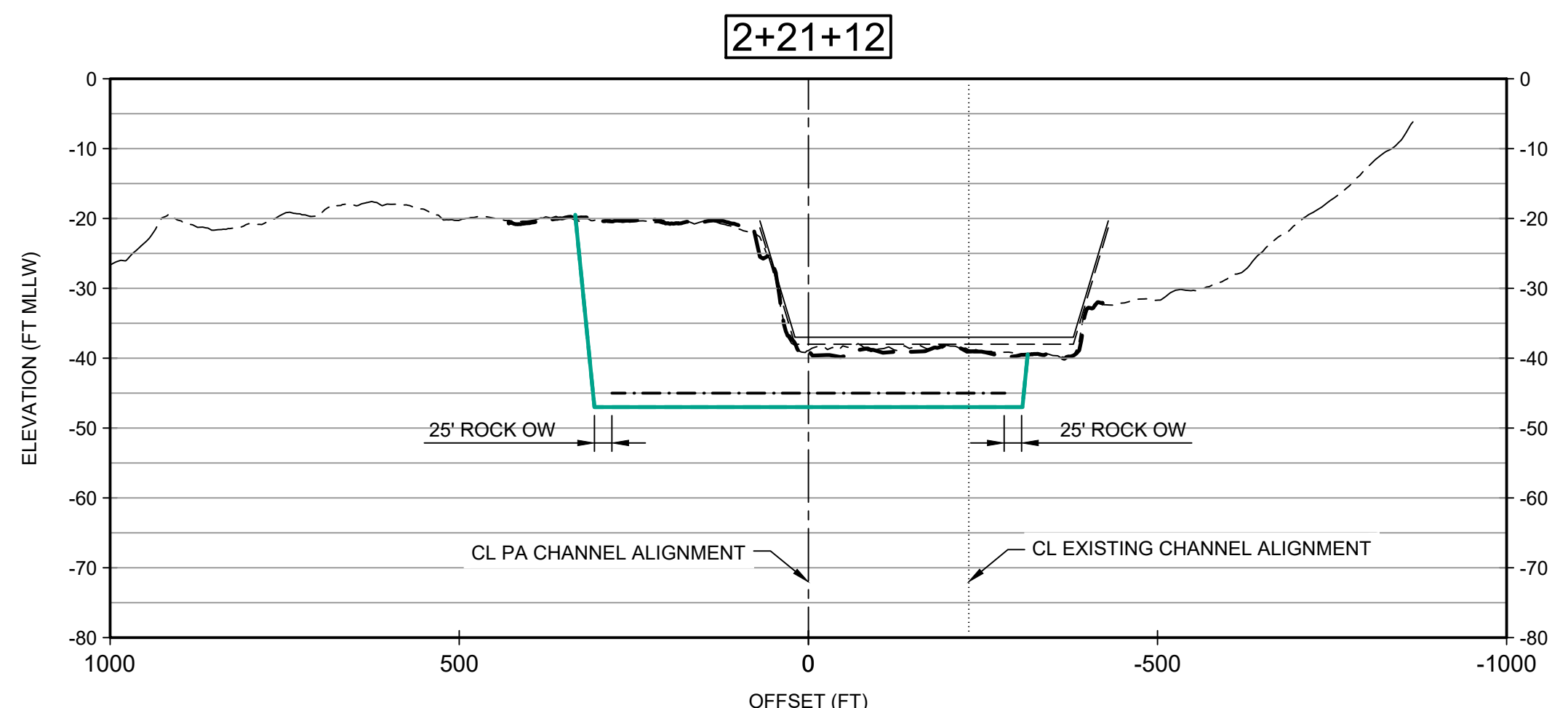
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submitted by: **CONTRACT NO.:**
plot scale: **plot date:** **drawing number:**
size: **file name:**

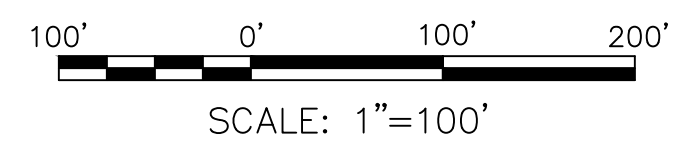
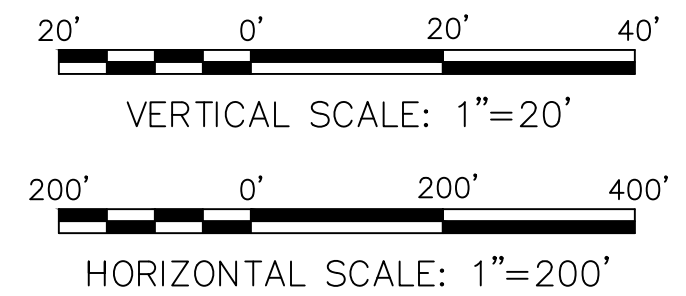
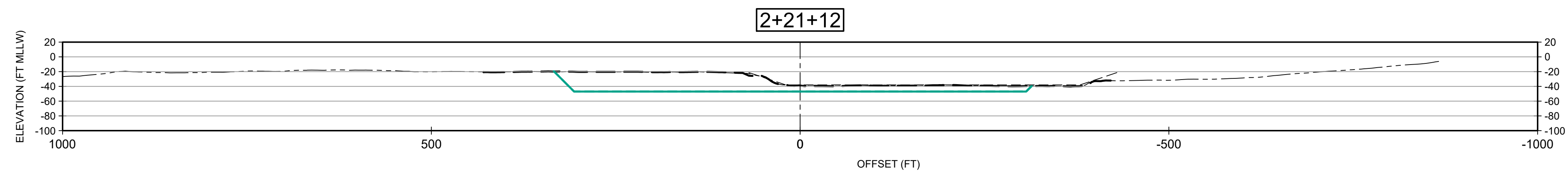
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (118 OF 185)

SHEET IDENTIFICATION
FIG-119
 INDEX 119 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



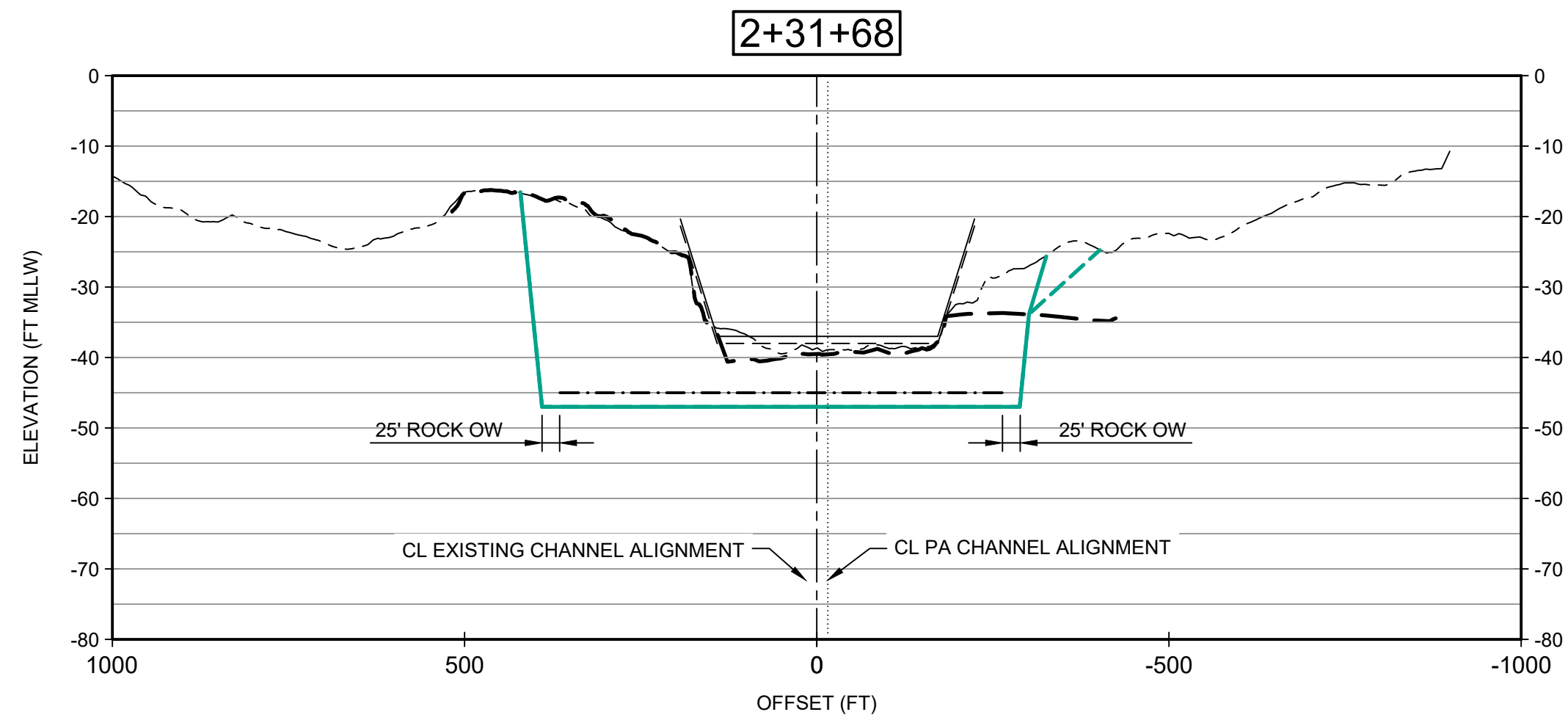
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DESIGNED BY: HP	CHECKED BY: EC	DATE: 2016/07/11
SUBMITTED BY:	CONTRACT NO.:	
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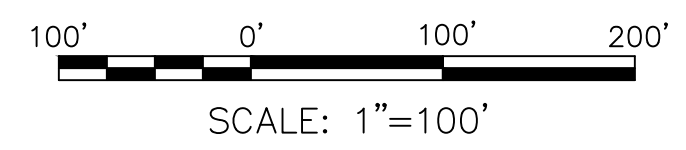
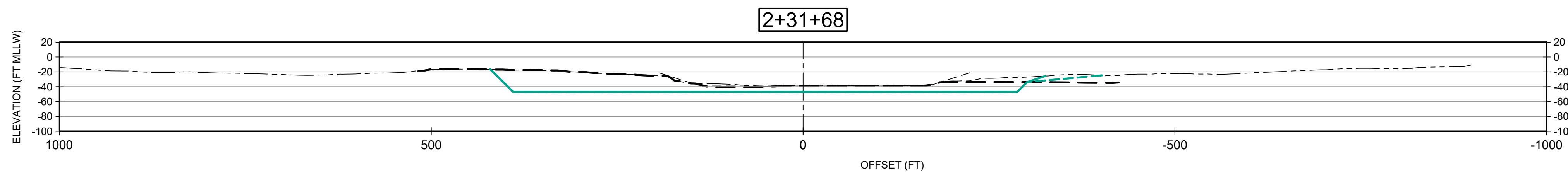
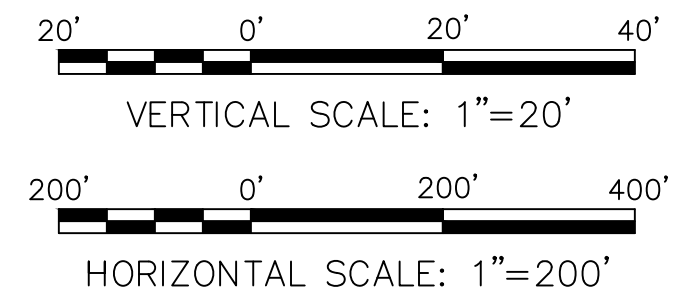
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (119 OF 185)

SHEET IDENTIFICATION
FIG-120
INDEX 120 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00




LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



									APPR.
									DATE
									DESCRIPTION
									MARK

DESIGNED BY: H.P.

DRAWN BY: H.P.


CHECKED BY: E.C.

DATE: 2016/07/11

CONTRACT NO.:

DRAWING NUMBER:

FILE NAME:



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COOS BAY OREGON

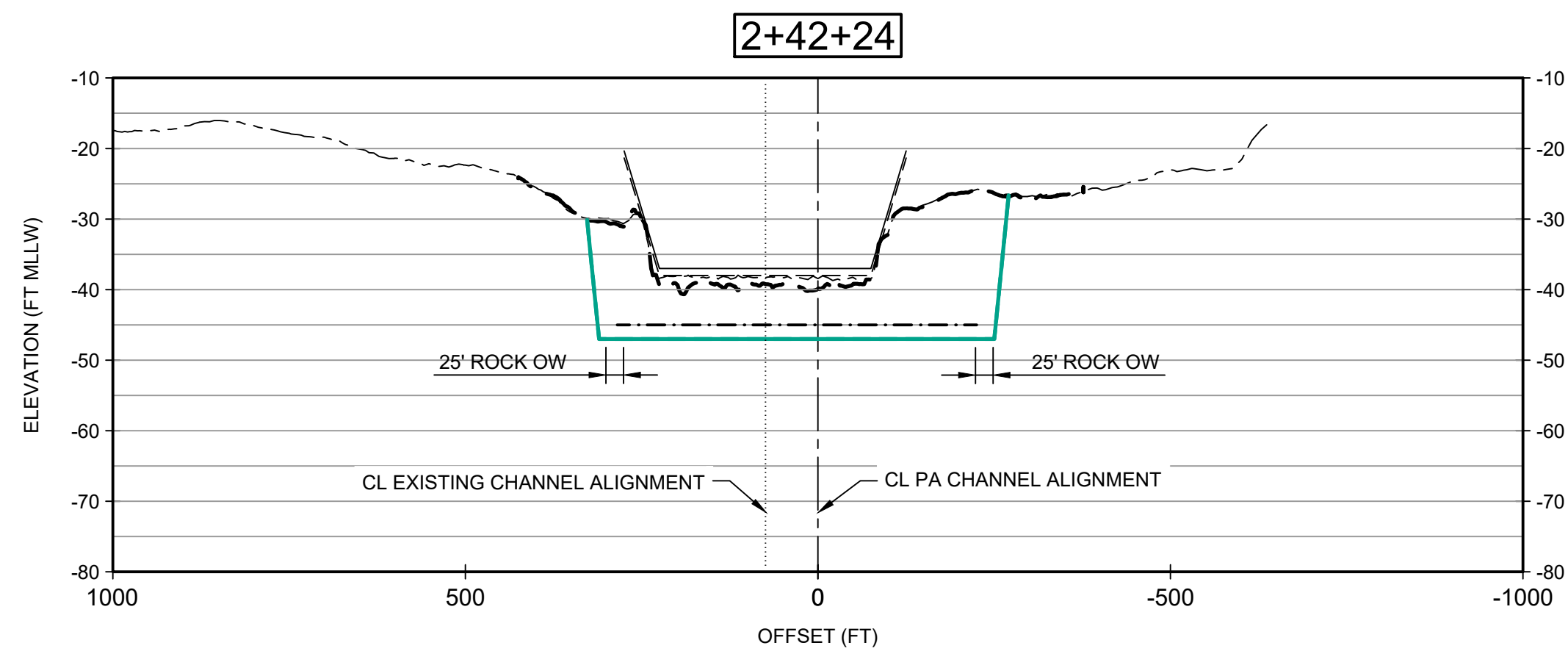
COOS BAY CHANNEL MODIFICATION

CROSS SECTION (120 OF 185)

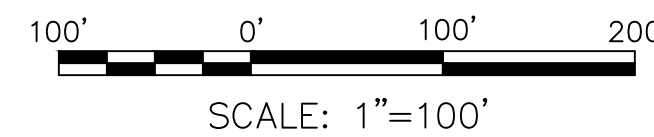
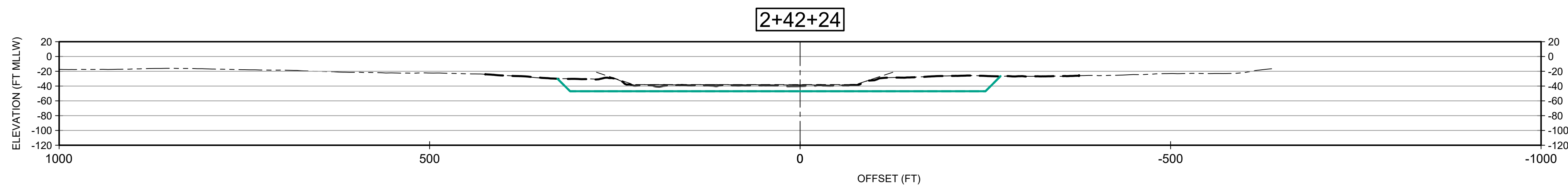
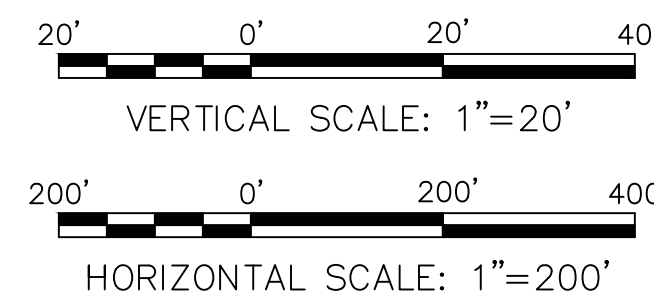
SHEET IDENTIFICATION

FIG-121

INDEX 121 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



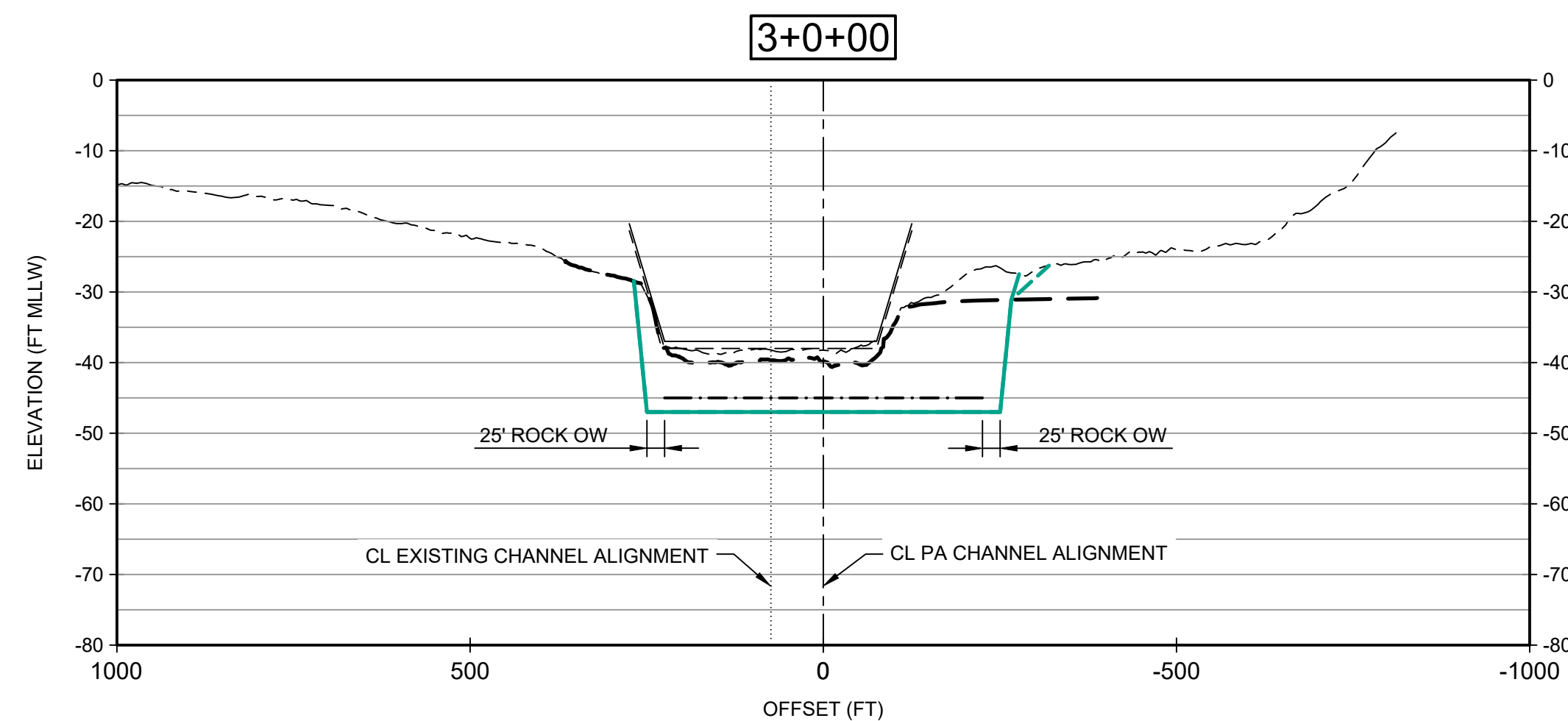
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 DRAWN BY: **HP** SUBMITTED BY: **HP** CONTRACT NO.:
 PLOT SCALE: **1"=200'** PLOT DATE: DRAWING NUMBER:
 SIZE: FILE NAME:

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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (121 OF 185)

SHEET IDENTIFICATION
FIG-122
 INDEX 122 of 186



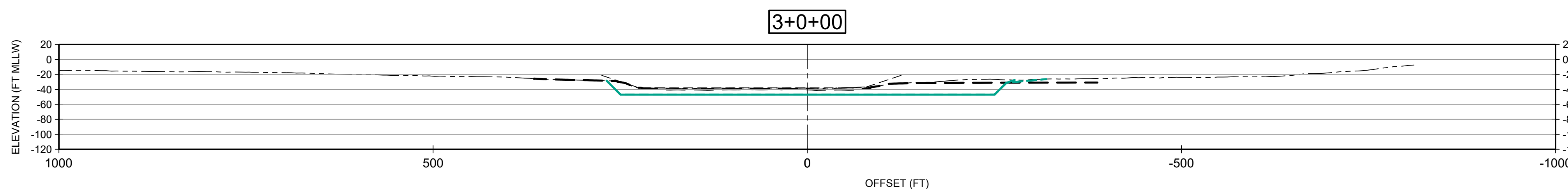
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EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

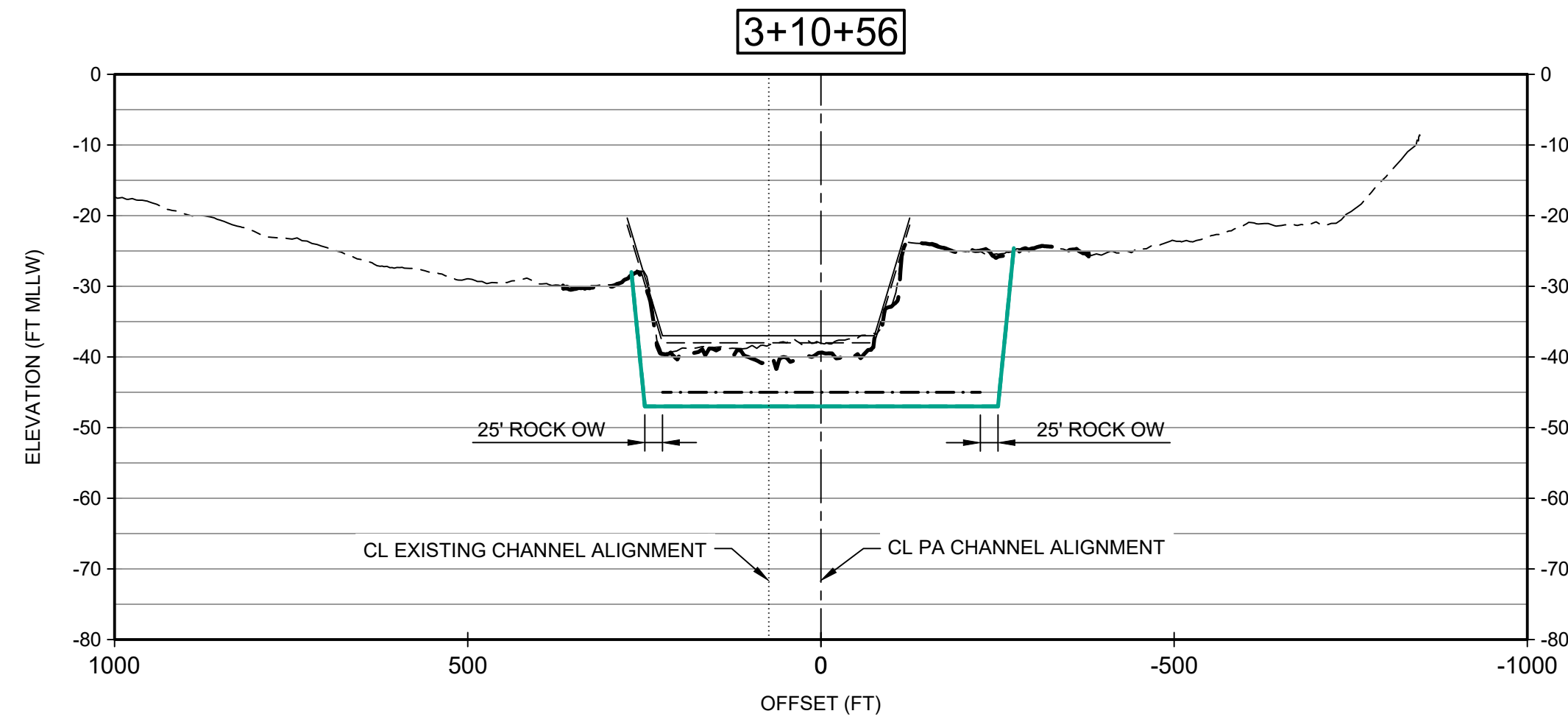
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 DRAWN BY: E.C.
 CHECKED BY: H.P.
 DATE: 2016/07/11

CONTRACT NO.:
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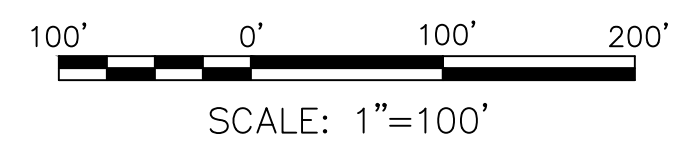
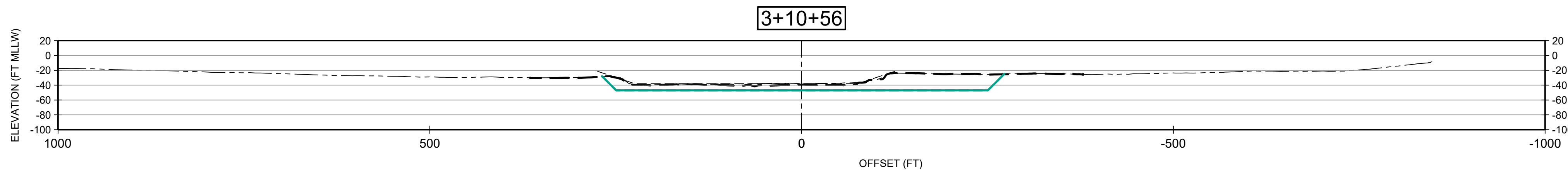
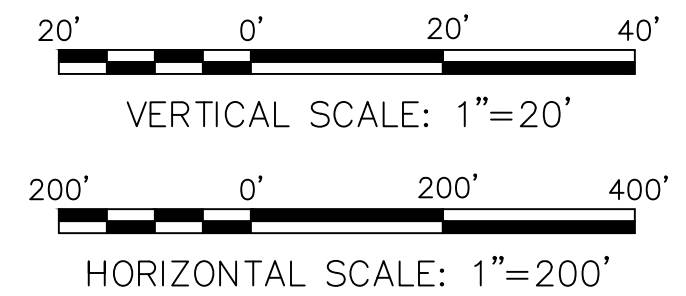
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (122 OF 185)

SHEET IDENTIFICATION
FIG-123
 INDEX 123 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · · PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

DESIGNED BY: [] DATE: 2016/07/11
 DRAWN BY: H.P. CHECKED BY: EC SOLICITATION NO.:
 SUBMITTED BY: [] CONTRACT NO.:
 PLOT SCALE: [] PLOT DATE: [] DRAWING NUMBER:
 SIZE: [] FILE NAME: []

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (123 OF 185)

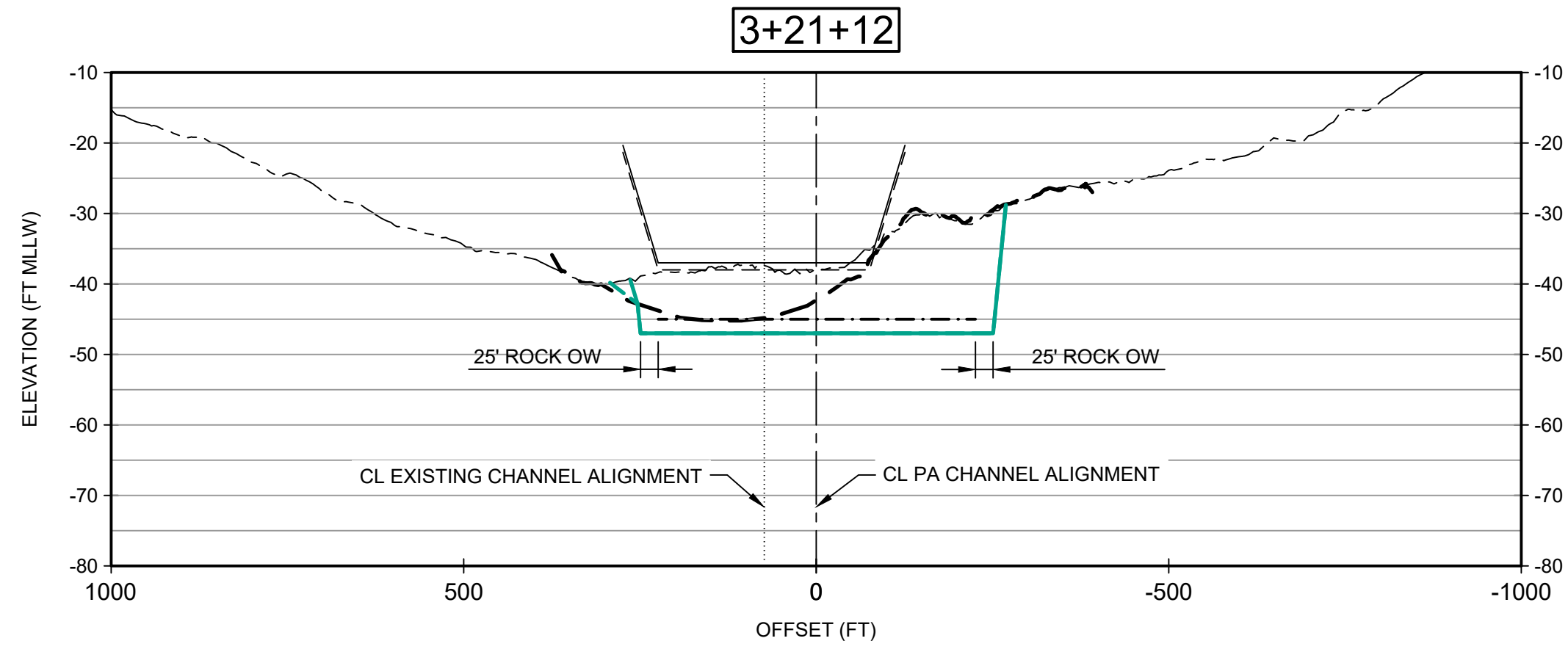
SHEET IDENTIFICATION
FIG-124
 INDEX 124 of 186

MARK	DESCRIPTION	DATE	APPR.

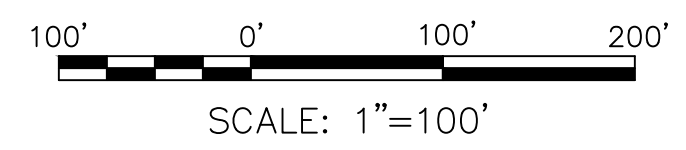
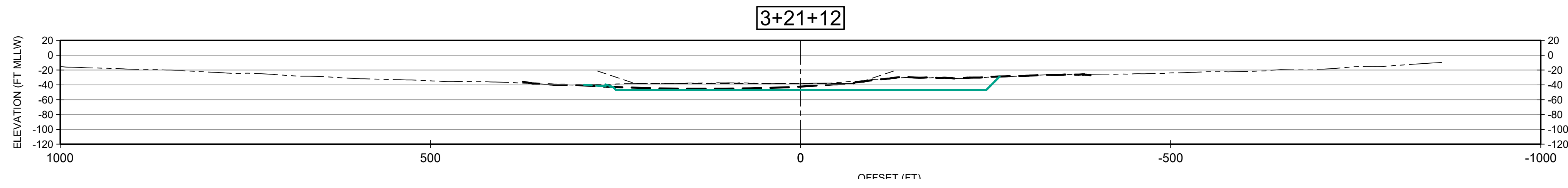
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SUBMITTED BY:	CONTRACT NO.:	
PLOT SCALE:	PLOT DATE:	
SIZE:	FILE NAME:	
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (124 OF 185)

SHEET IDENTIFICATION
FIG-125
 INDEX 125 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

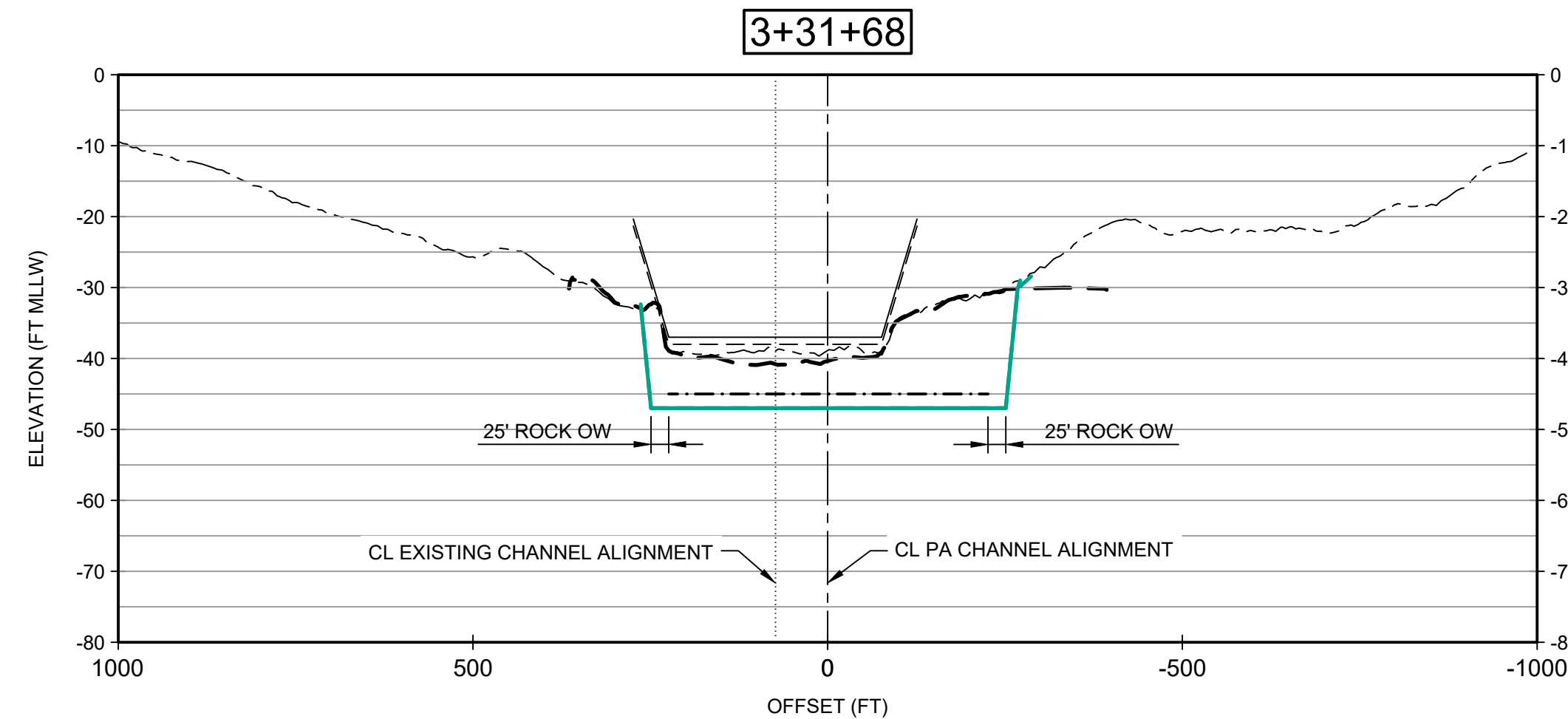
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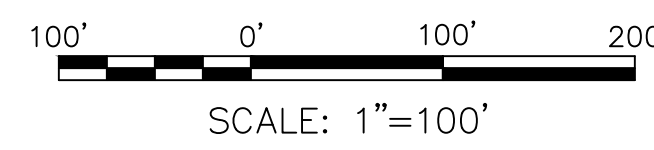
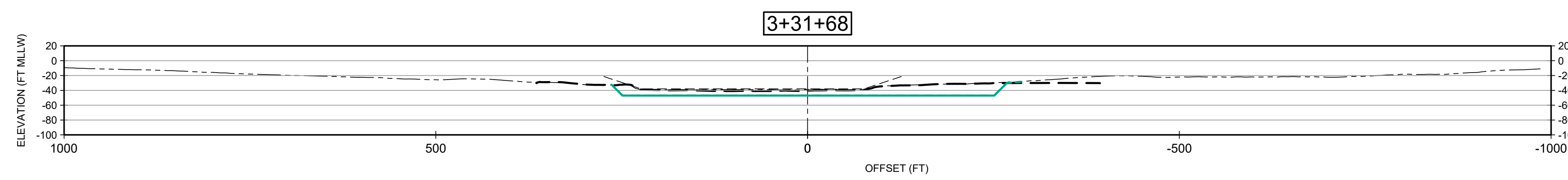
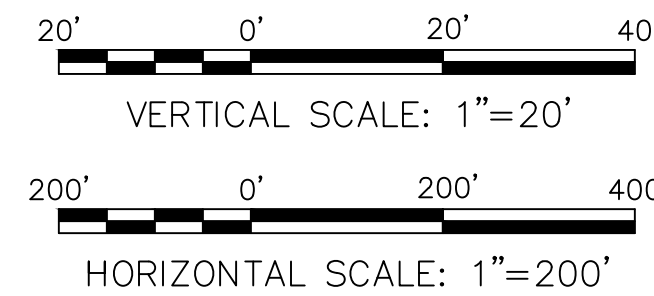
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (125 OF 185)

SHEET IDENTIFICATION
FIG-126
 INDEX 126 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

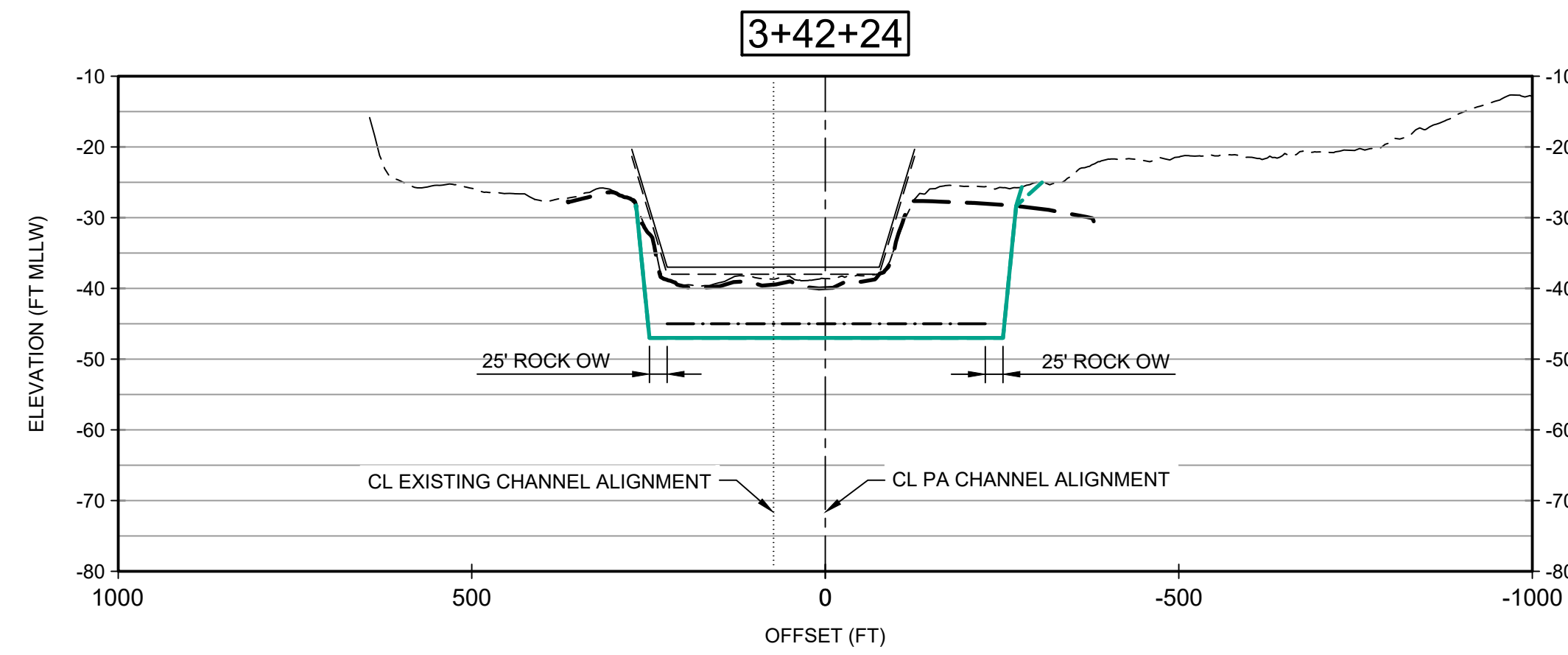
	EXISTING AUTHORIZED CHANNEL LIMITS
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
	PA CHANNEL LIMITS
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

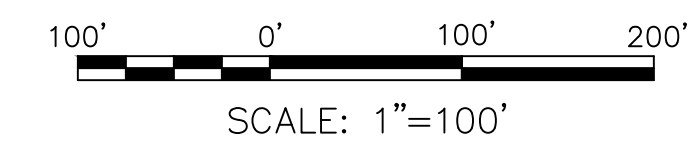
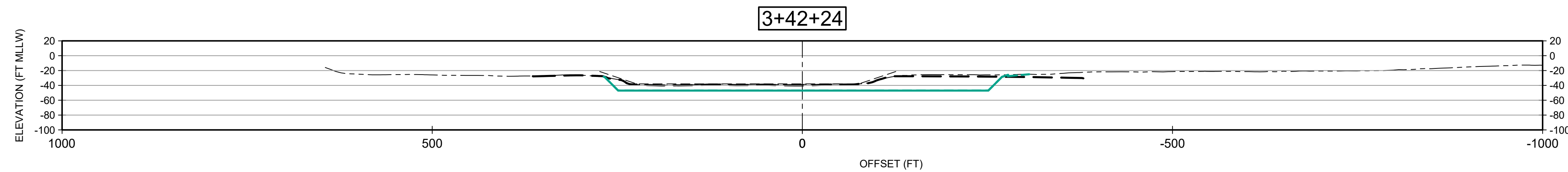
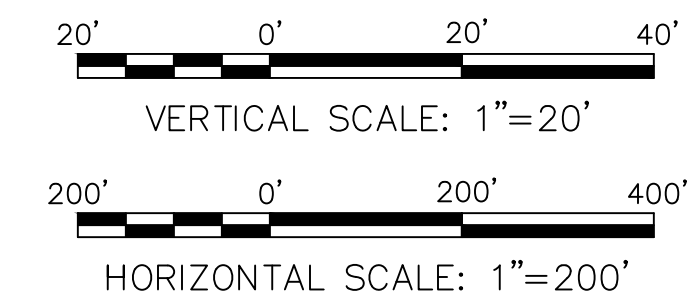
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-126-CROSS SECTIONS; Plotted: 5/20/2024 5:06 PM by LANDON, KYLE; Saved: 5/15/2024 1:31 AM by JGROTH



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	— — — —	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
— (thick)	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



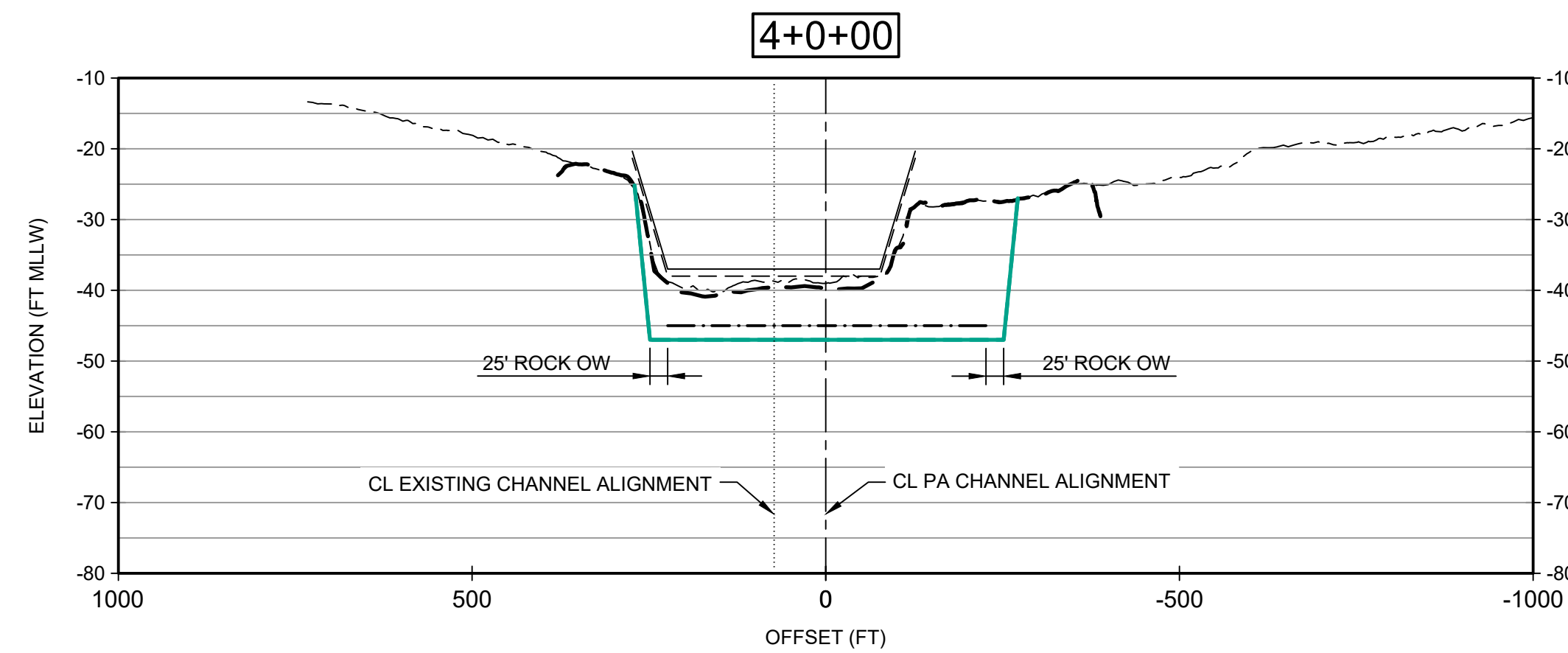
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 DRAWN BY: E.C.
 CHECKED BY: E.C.
 SUBMITTED BY: E.C.
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT SCALE: PLOT DATE: DRAWING NUMBER:
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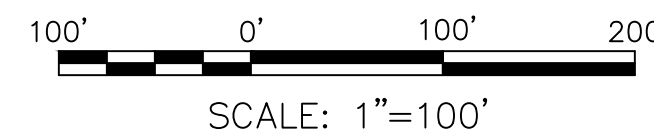
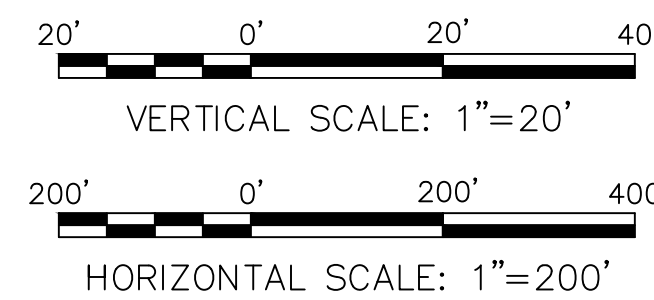
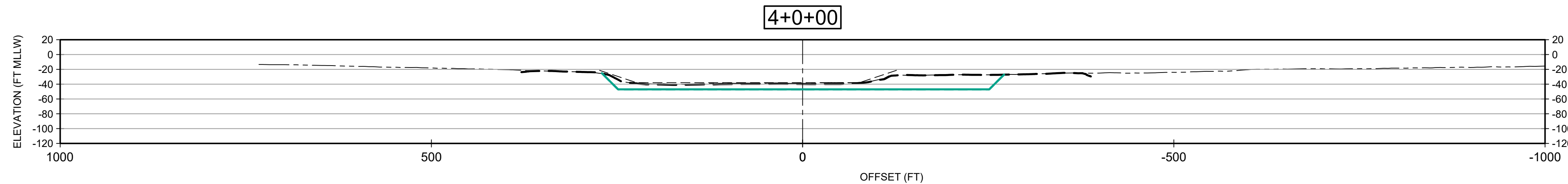
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (126 OF 185)

SHEET IDENTIFICATION
FIG-127
 INDEX 127 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



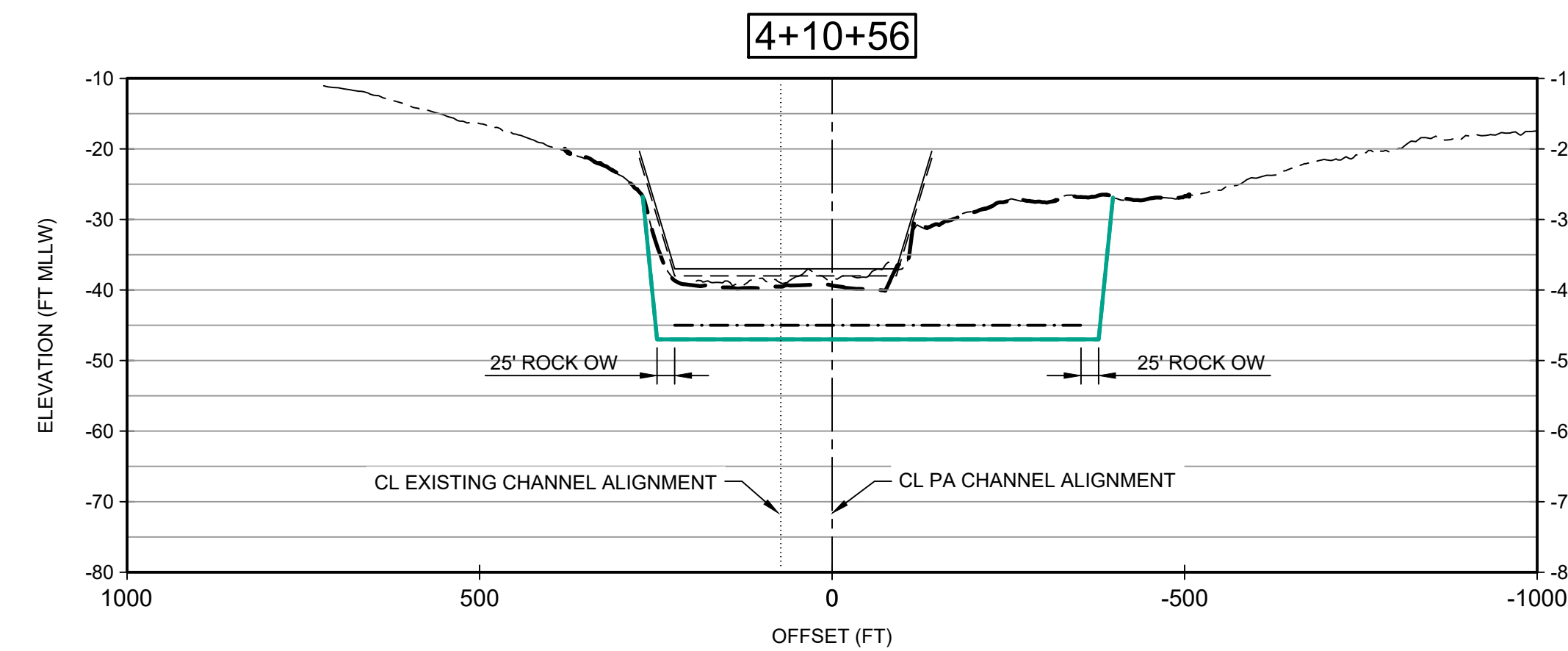
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 CHECKED BY: **EC**
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 CONTRACT NO.:
 PLOT SCALE: **1"=200'**
 PLOT DATE:
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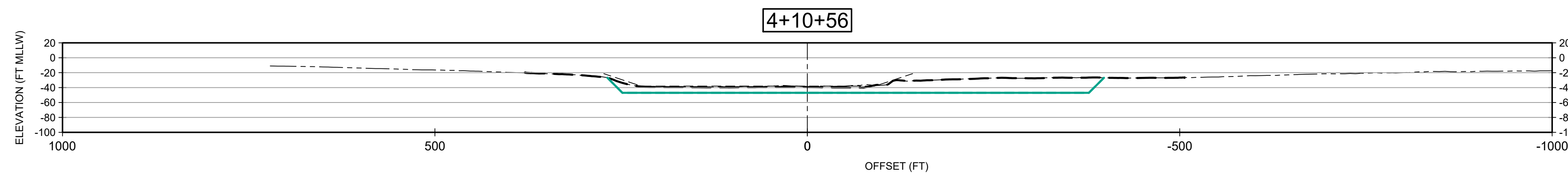
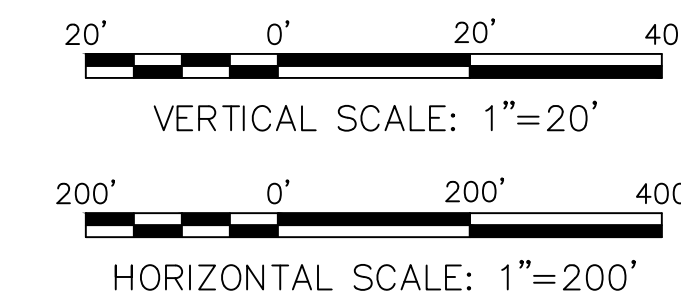
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (127 OF 185)

SHEET IDENTIFICATION
FIG-128
 INDEX 128 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

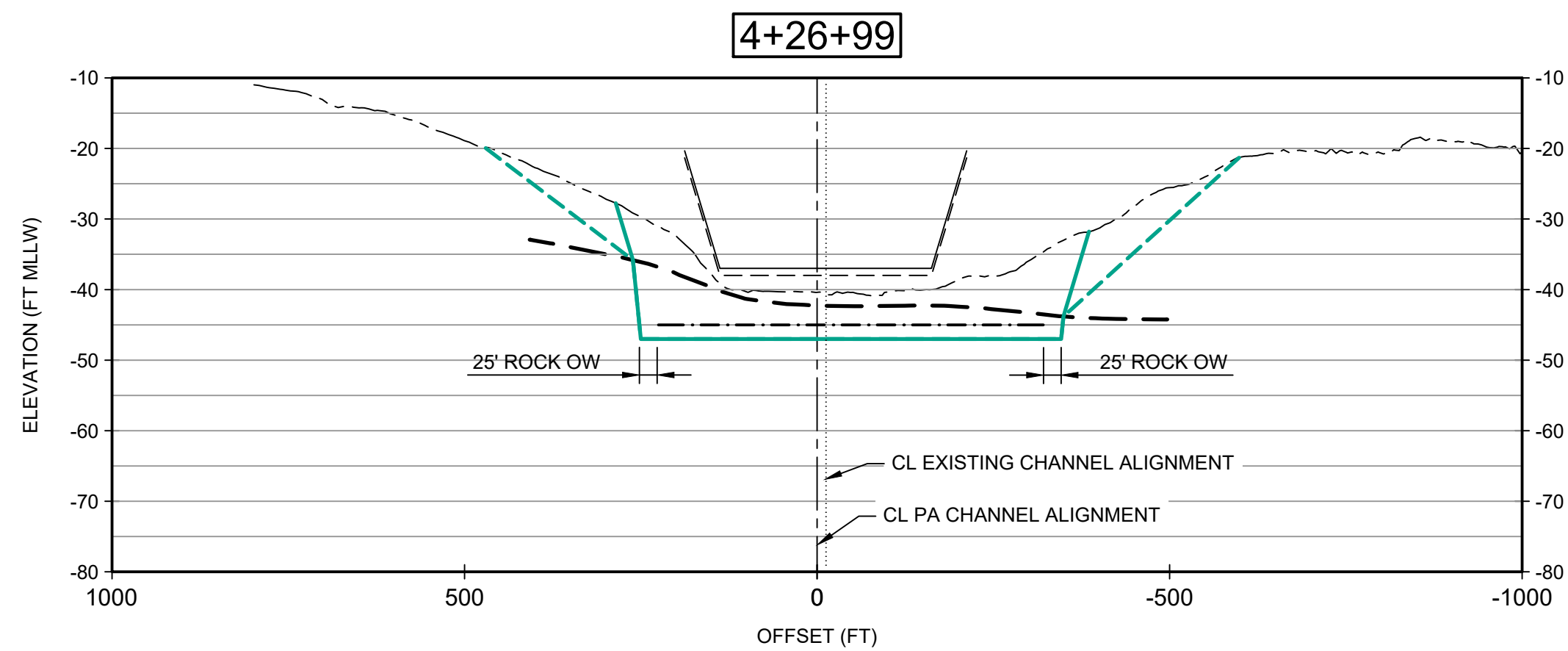


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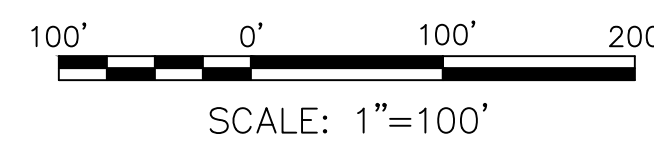
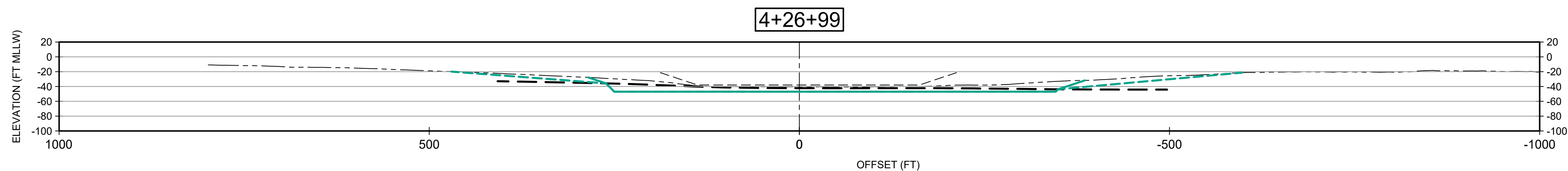
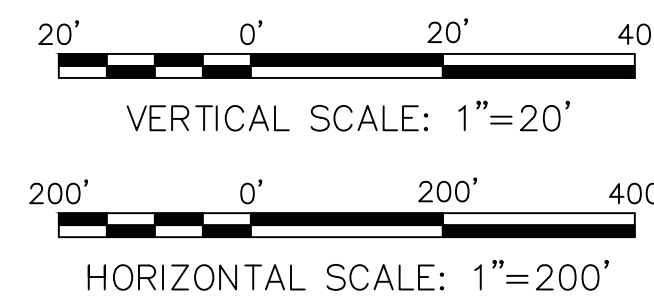
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contract no.:
solicitation no.:
drawing number:
description:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (128 OF 185)

SHEET IDENTIFICATION
FIG-129
 INDEX 129 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



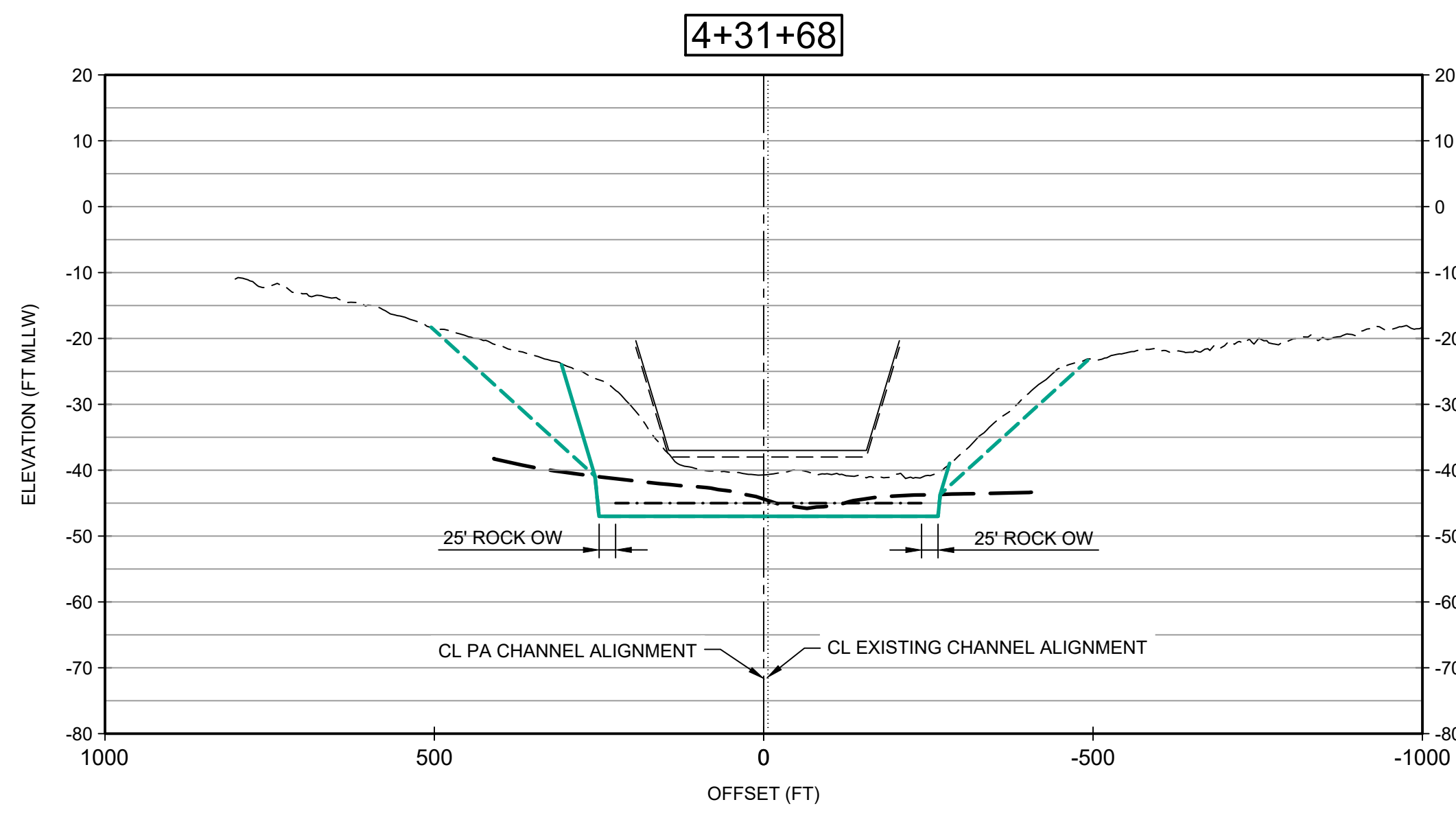
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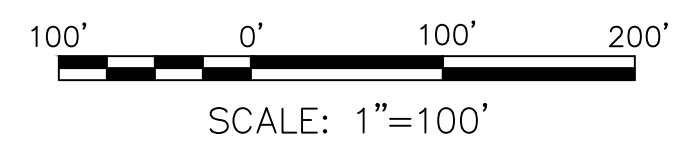
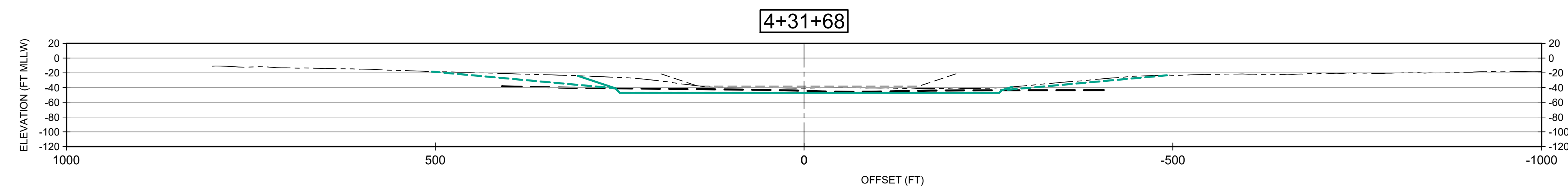
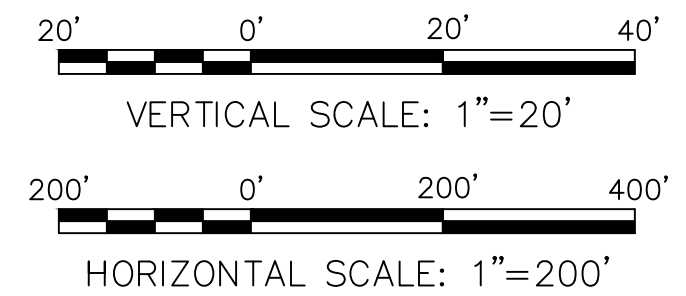
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (129 OF 185)

SHEET IDENTIFICATION
FIG-130
 INDEX 130 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	— — — —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
— — — —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

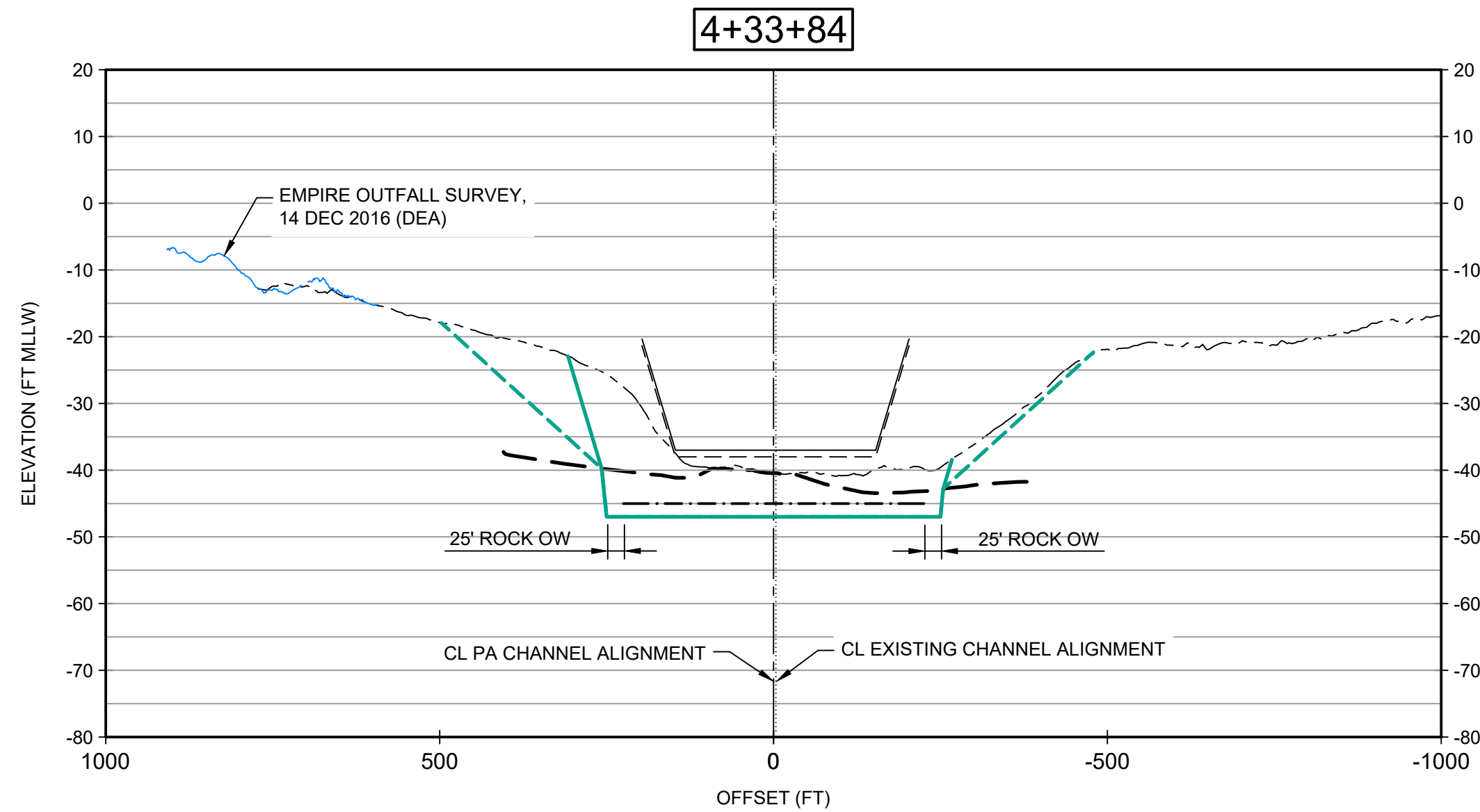


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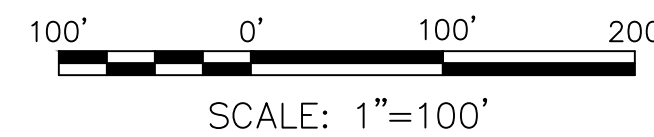
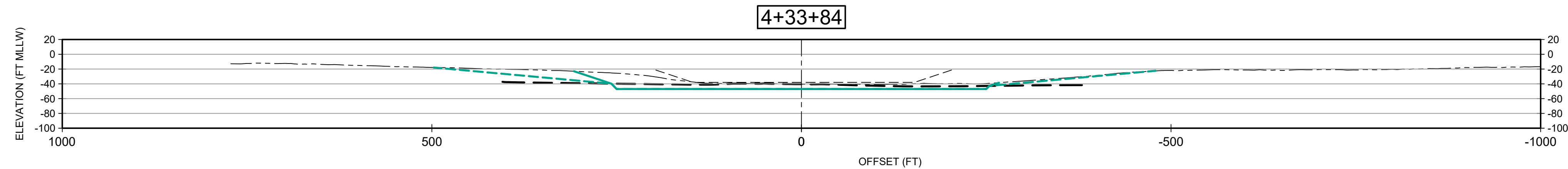
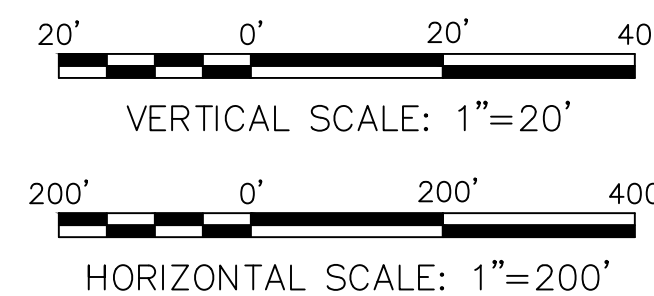
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PLOT DATE:
DRAWING NUMBER:
SIZE:
600 UNIVERSITY STREET
SEATTLE, WA 98101
(206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (130 OF 185)

SHEET IDENTIFICATION
FIG-131
INDEX 131 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



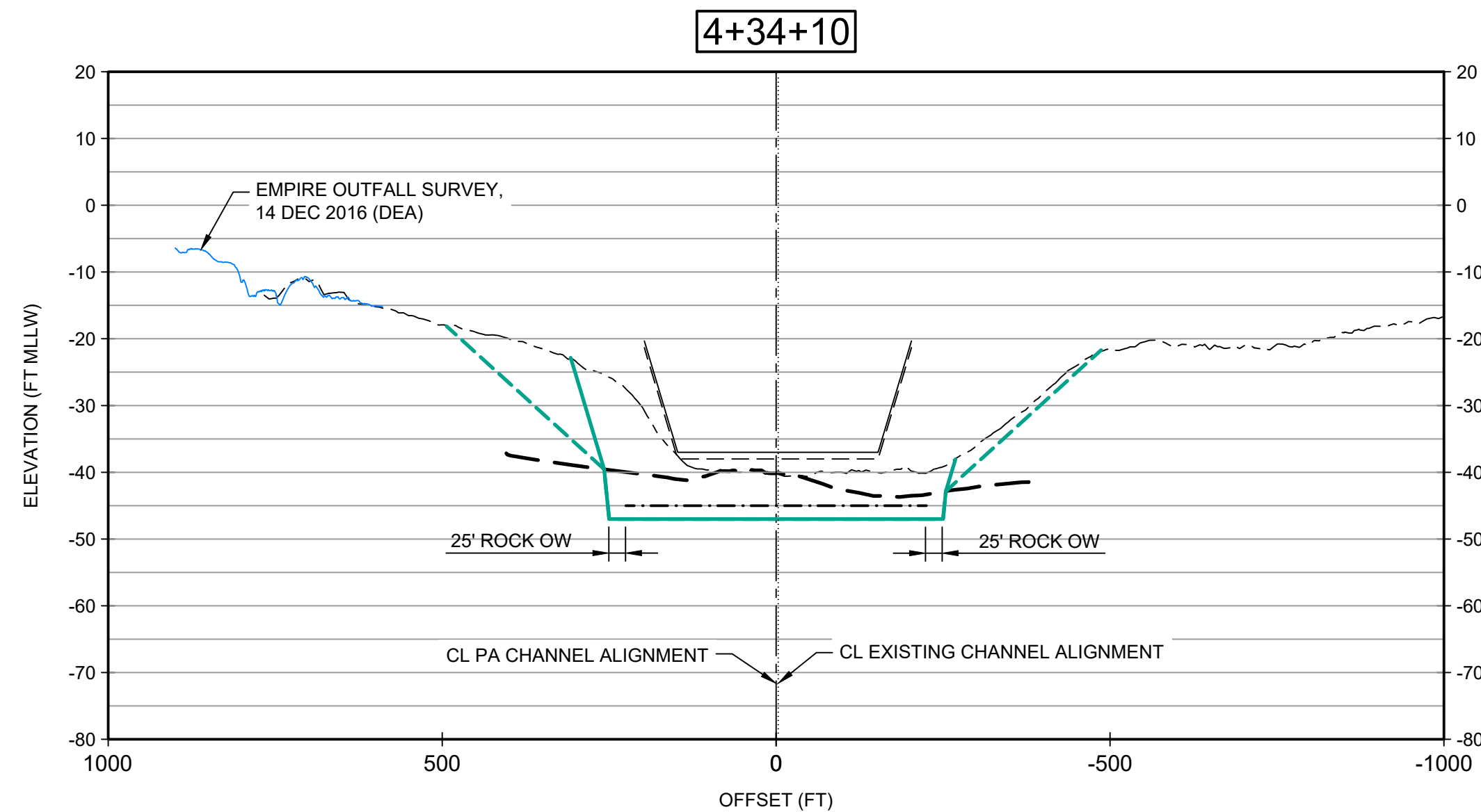
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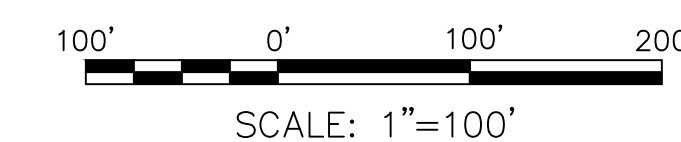
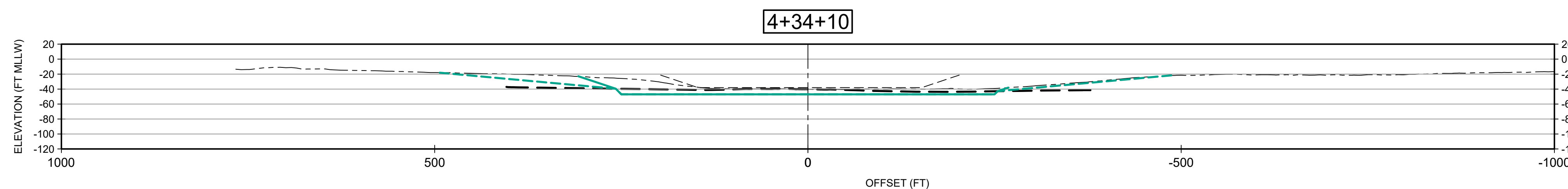
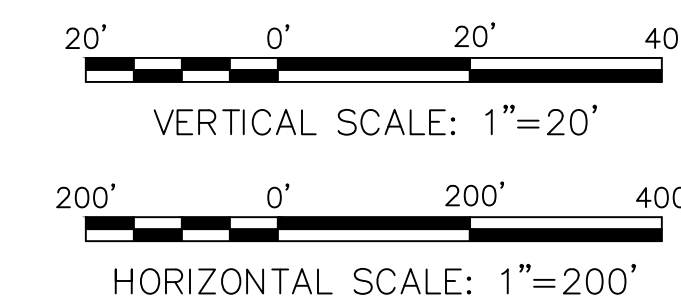
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (131 OF 185)

SHEET IDENTIFICATION
FIG-132
 INDEX 132 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- EMPIRE OUTFALL SURVEY
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

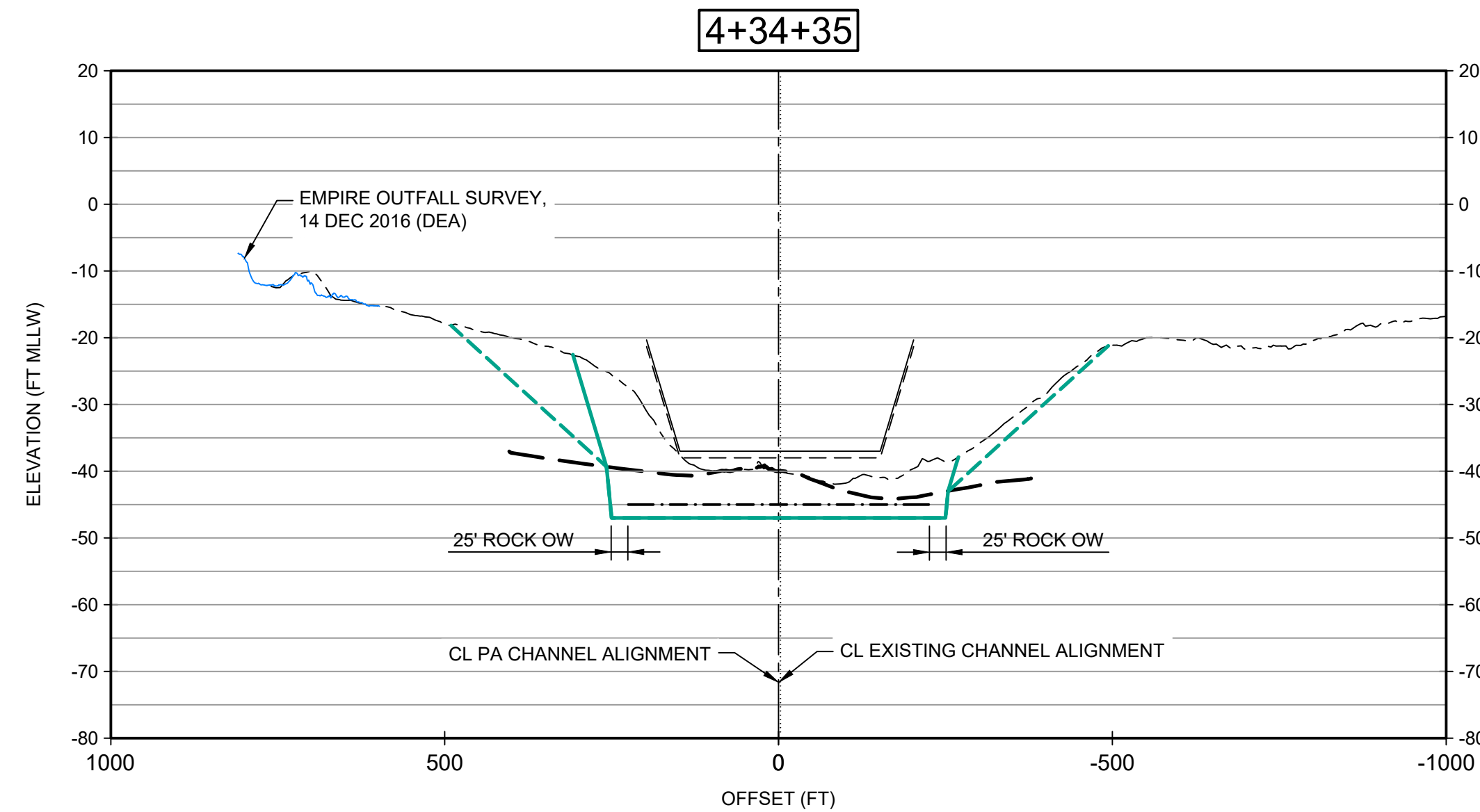


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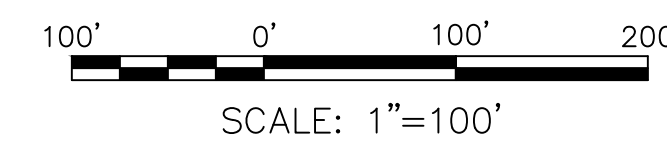
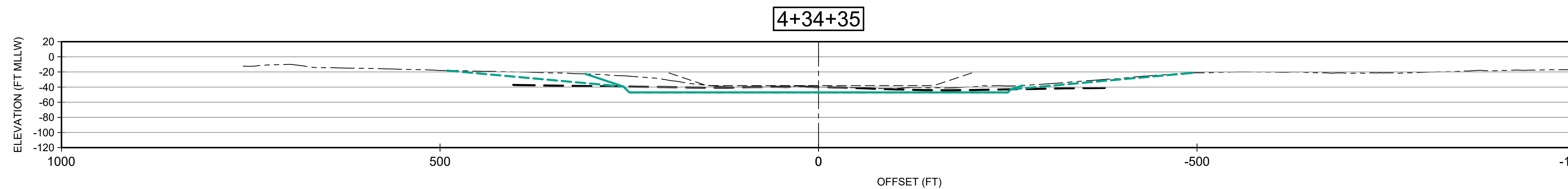
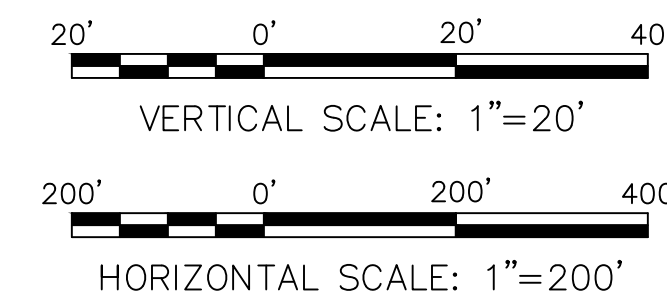
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 DRAWN BY: H.P.
 CHECKED BY: E.C.
 SUBMITTED BY: **moffatt & nichol**
 PLOT SCALE: 1"=200'
 PLOT DATE: 2016/07/11
 FILE NAME: 600 UNIVERSITY STREET, SEATTLE, WA 98101, (206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (132 OF 185)

SHEET IDENTIFICATION
FIG-133
 INDEX 133 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- EMPIRE OUTFALL SURVEY
- - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



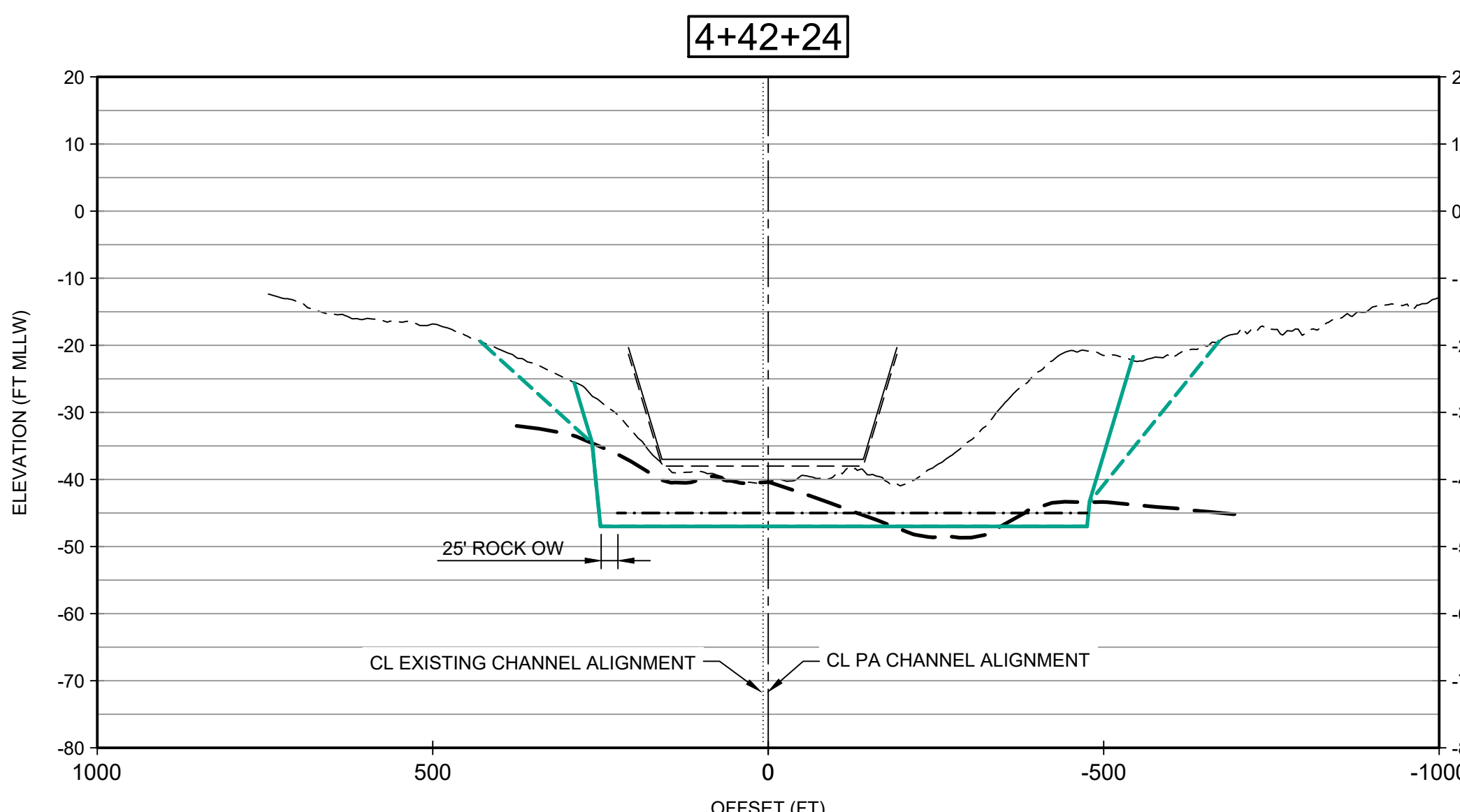
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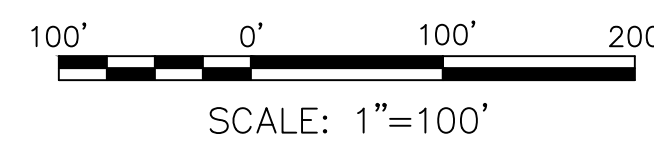
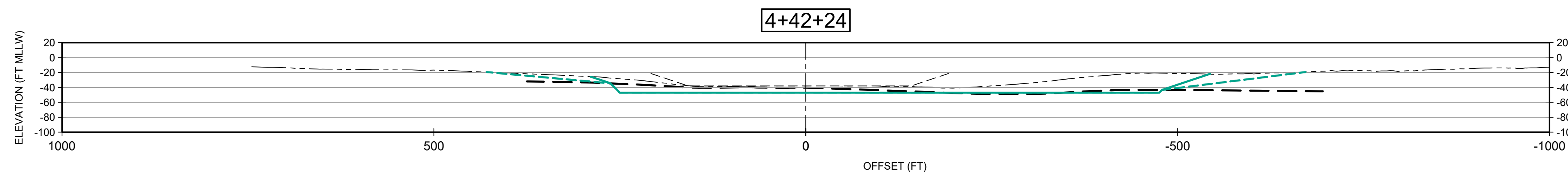
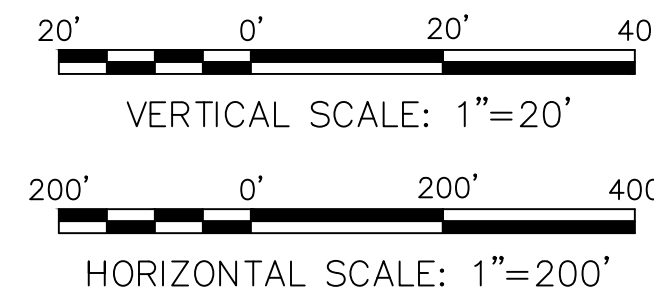
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 DRAWING NUMBER: []

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (133 OF 185)

SHEET IDENTIFICATION
FIG-134
 INDEX 134 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - · - PA CHANNEL LIMITS
- (green) PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

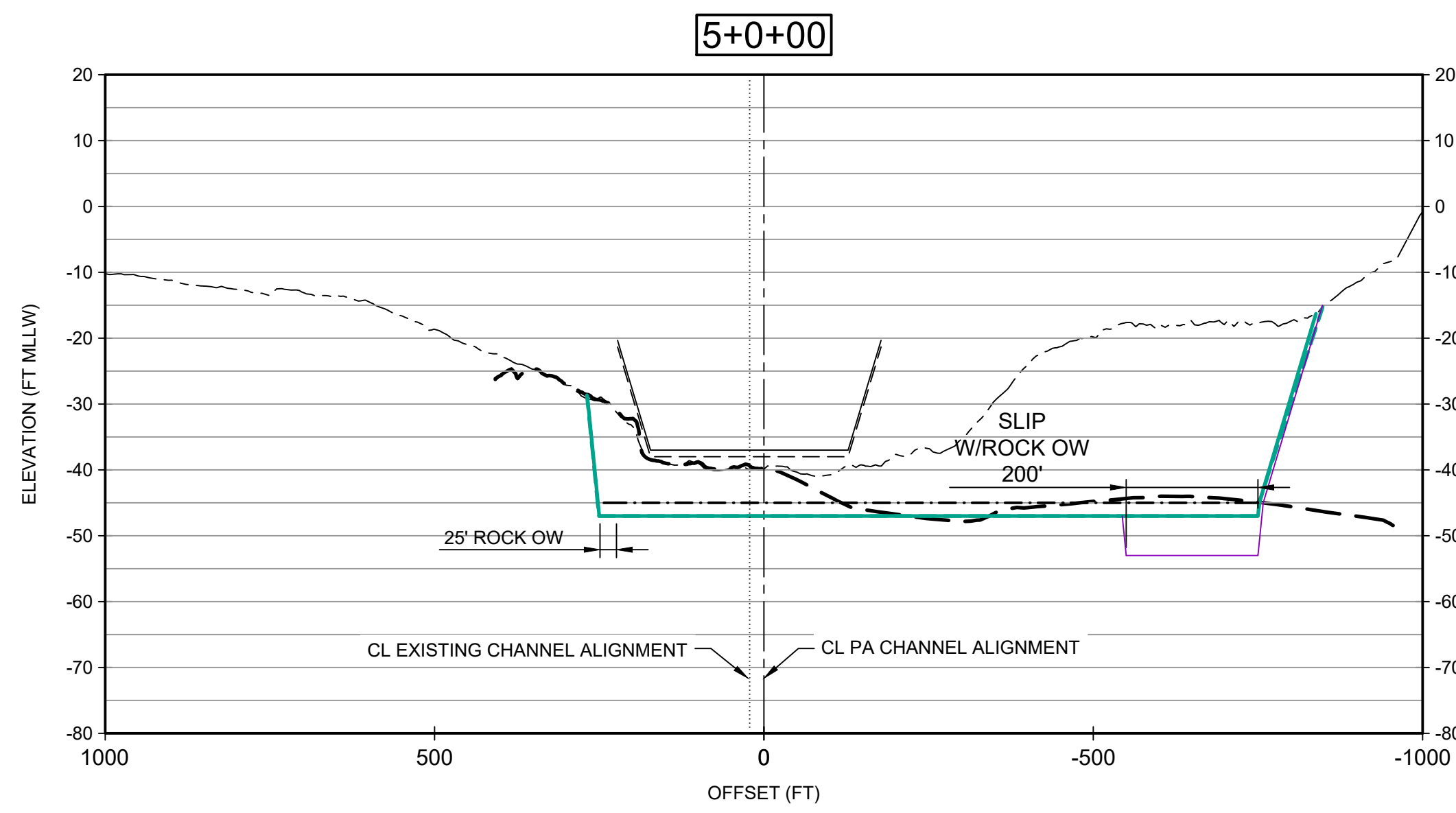
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HP	EC	
SUBMITTED BY:	CONTRACT NO.:	
PLOT SCALE:	FILE NAME:	
1" = 200'		
	SIZE:	

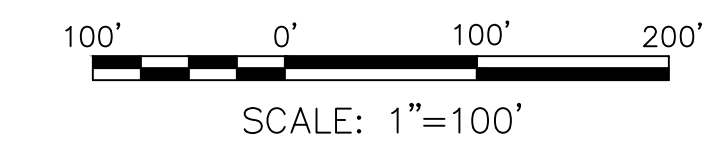
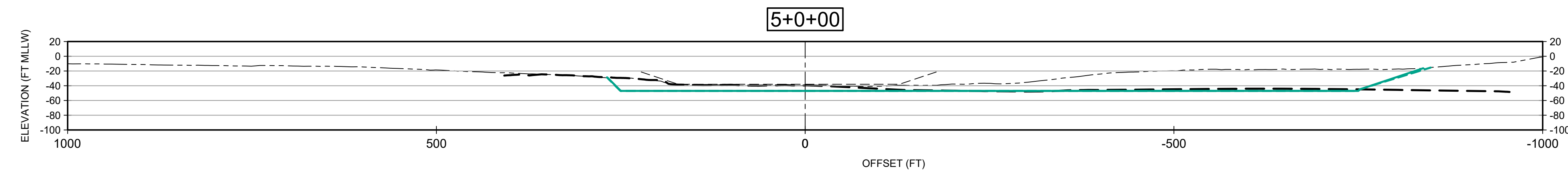
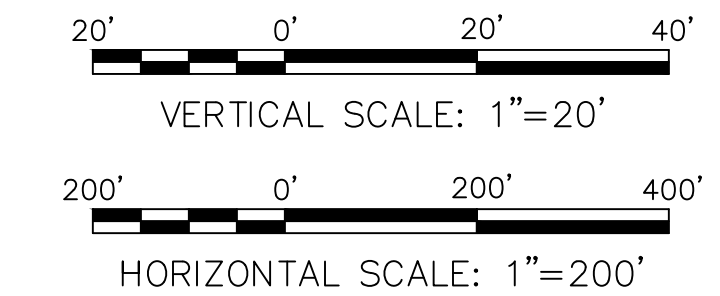
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (134 OF 185)

SHEET IDENTIFICATION
FIG-135
INDEX 135 of 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-135-CROSS SECTIONS; Plotted: 5/20/2024 5:13 PM by LANDON, KYLE; Saved: 5/20/2024 1:44 PM by JDURAN



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

—————	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
-----	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
-----	PA CHANNEL LIMITS	-----	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



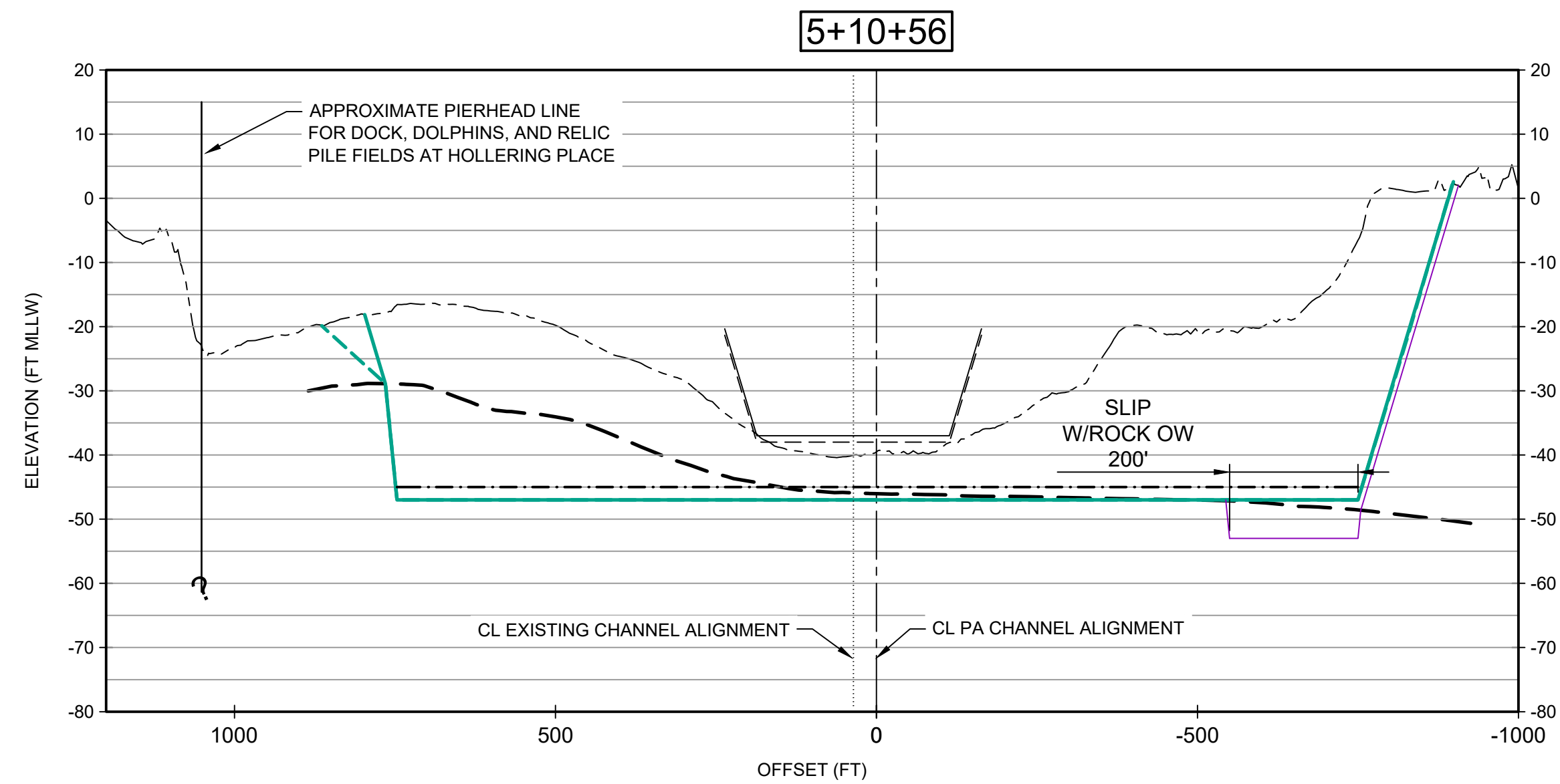
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 PLOT SCALE: []
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 CONTRACT NO.: []
 PLOT DATE: []
 DRAWING NUMBER: []
 SIZE: []

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (135 OF 185)

SHEET IDENTIFICATION
FIG-136
 INDEX 136 OF 186



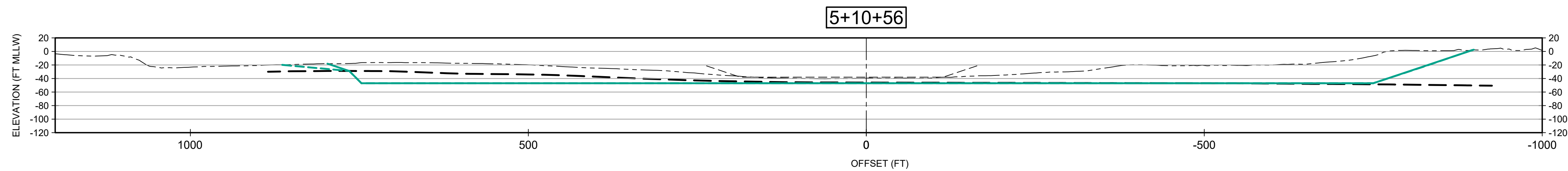
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

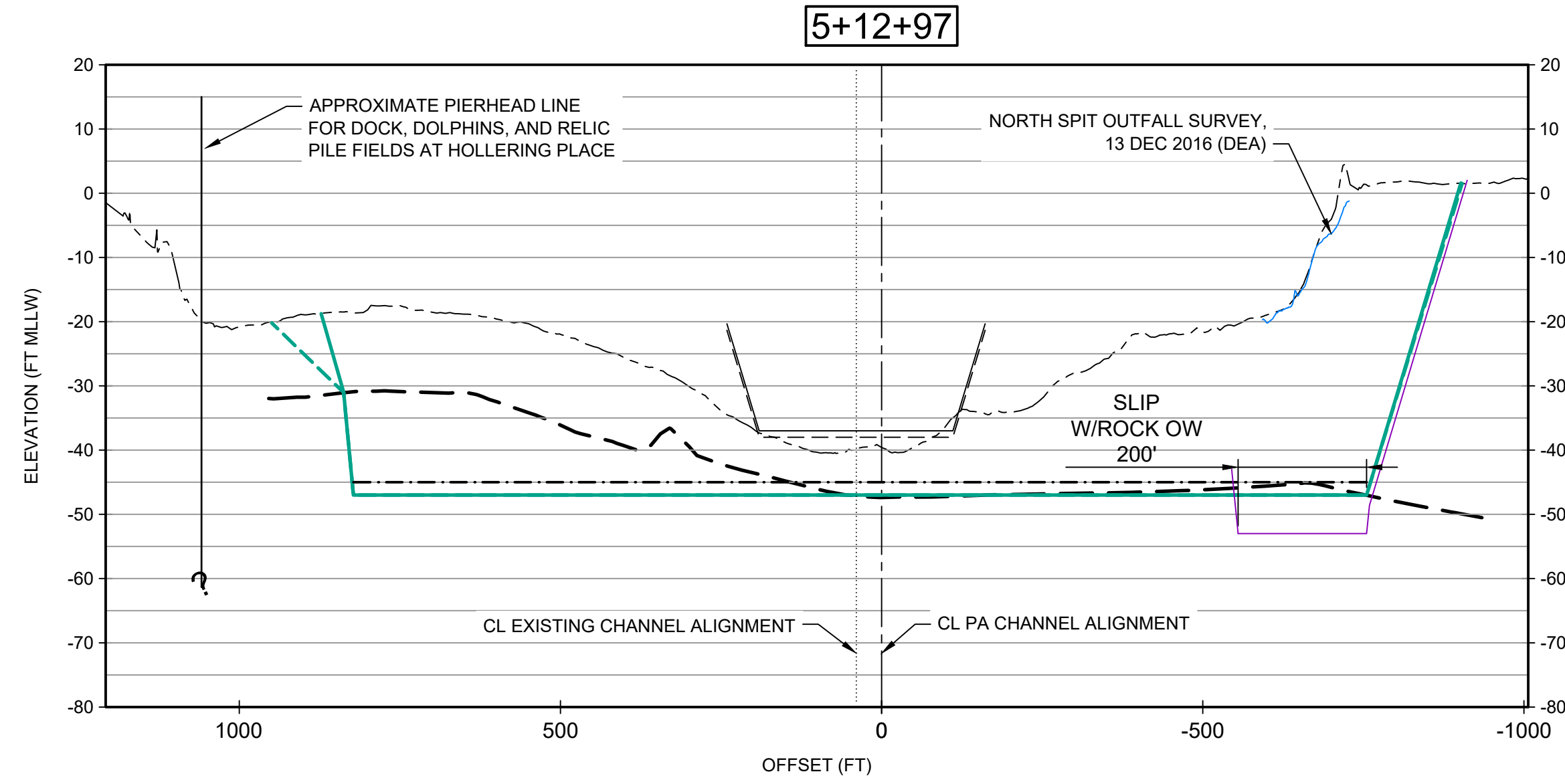
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DRAWN BY: H.P.
CHECKED BY: E.C.
DATE: 2016/07/11

CONTRACT NO.:
DRAWING NUMBER:
PLOT SCALE:
FILE NAME:

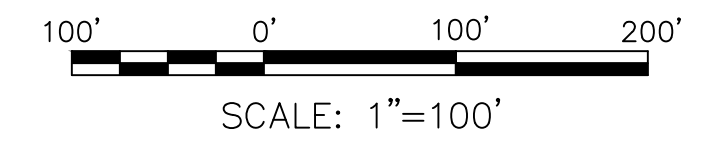
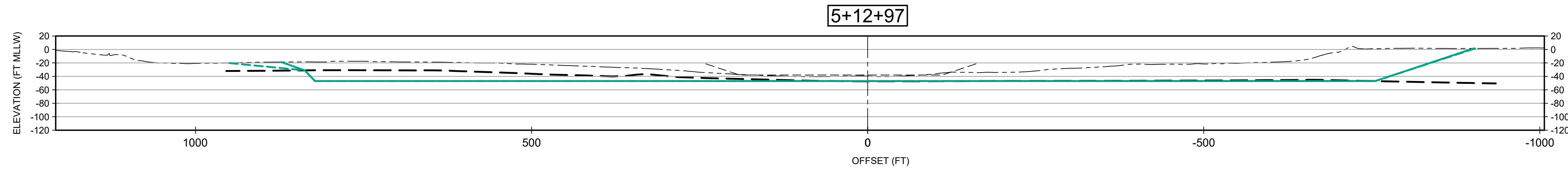
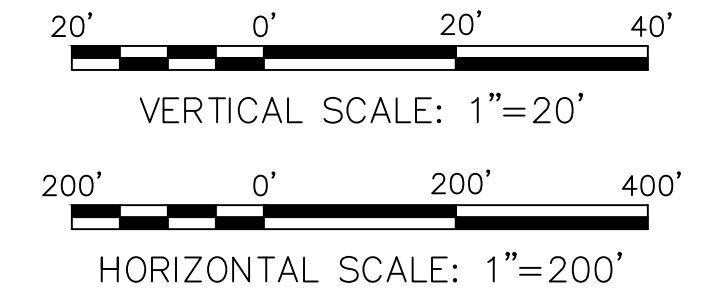
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (136 OF 185)

SHEET IDENTIFICATION
FIG-137
 INDEX 137 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

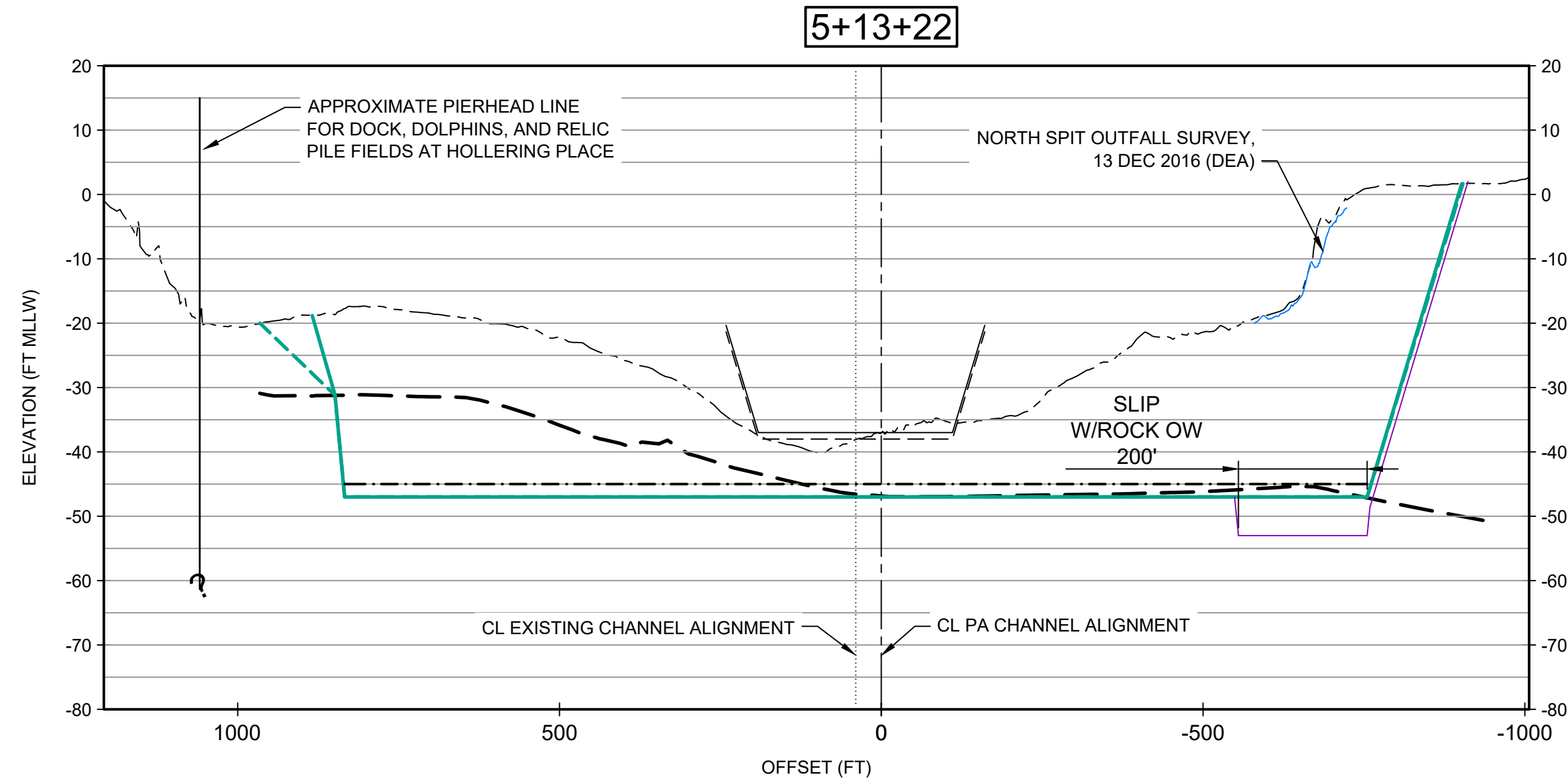


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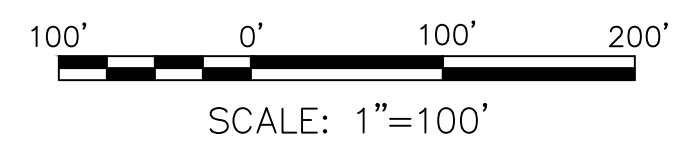
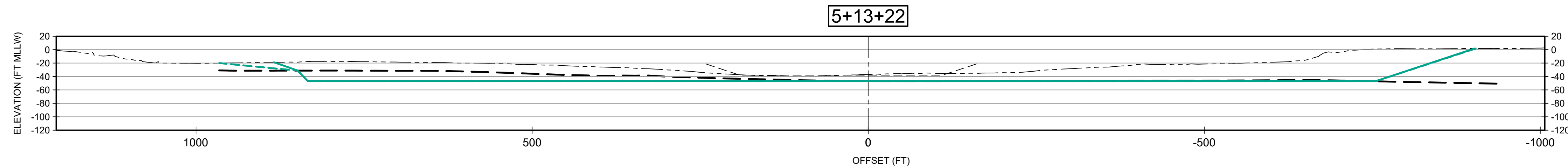
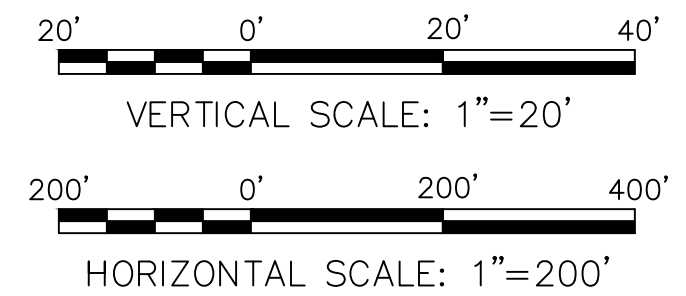
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 PLOT SCALE: 600 UNIVERSITY STREET
 FILE NAME: SEATTLE, WA 98101
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 DRAWING NUMBER:
 SIZE: (206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (137 OF 185)

SHEET IDENTIFICATION
FIG-138
 INDEX 138 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - · - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

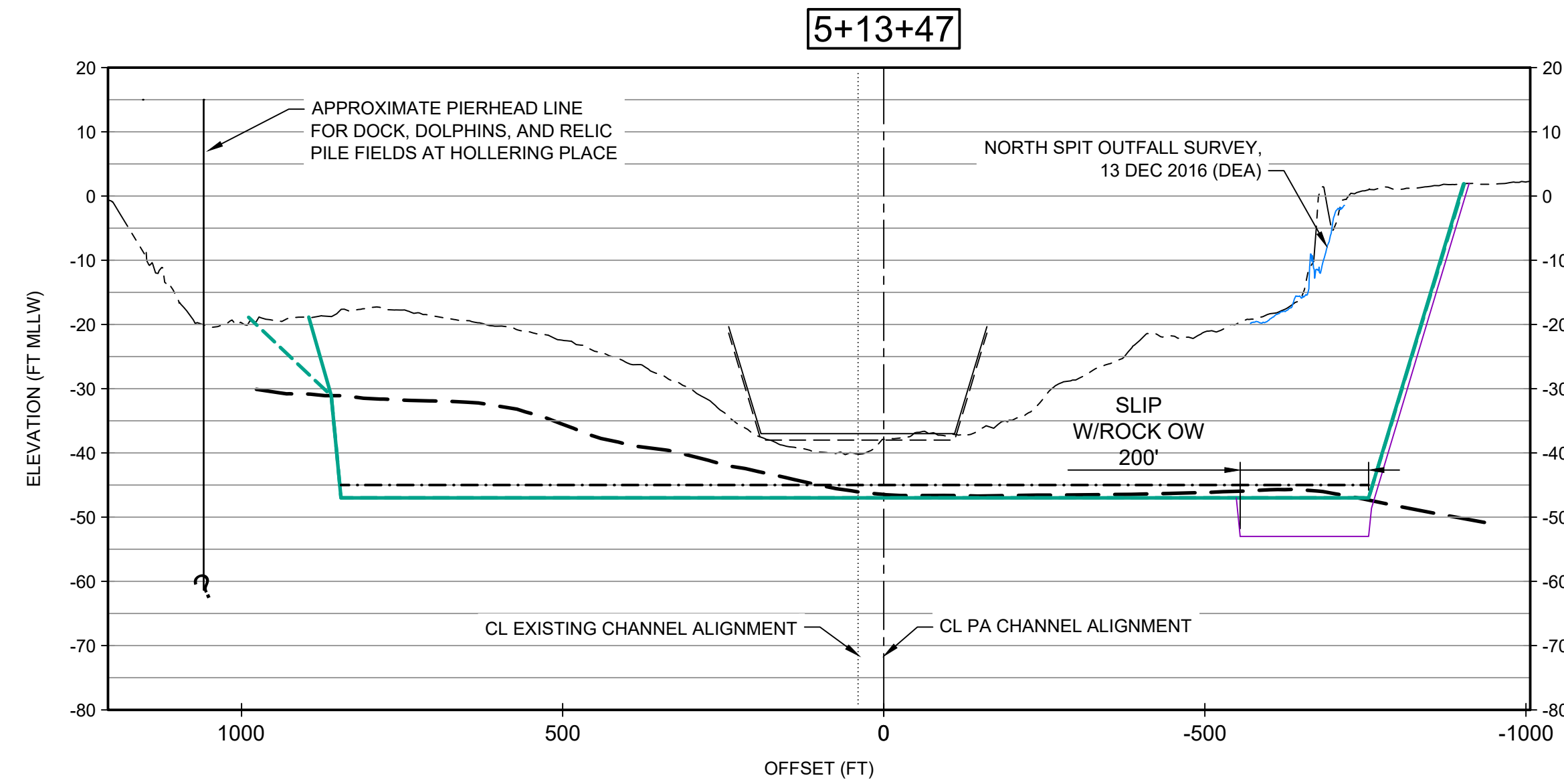


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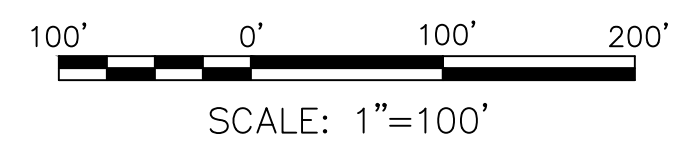
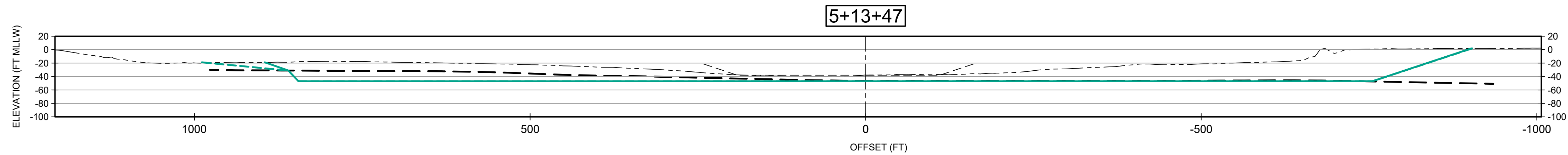
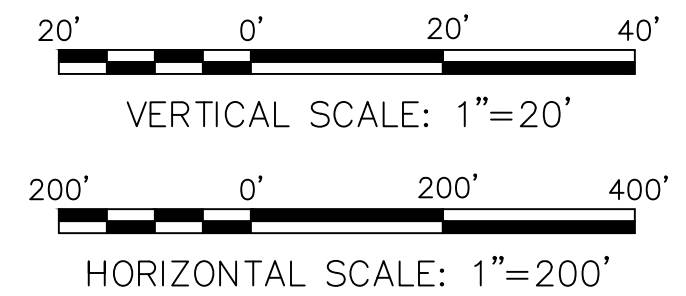
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 DRAWN BY: H.P.
 CHECKED BY: E.C.
 SUBMITTED BY: **moffatt & nichol**
 PLOT SCALE: 600 UNIVERSITY STREET
 FILE NAME: SEATTLE, WA 98101
 SIZE: (206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (138 OF 185)

SHEET IDENTIFICATION
FIG-139
 INDEX 139 of 186



TING CHANNEL DEPTH	-37.00
TING CHANNEL DEPTH + AMD	-38.00
HANNEL DEPTH	-45.00
H + AMD + ROCK BUFFER	-47.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



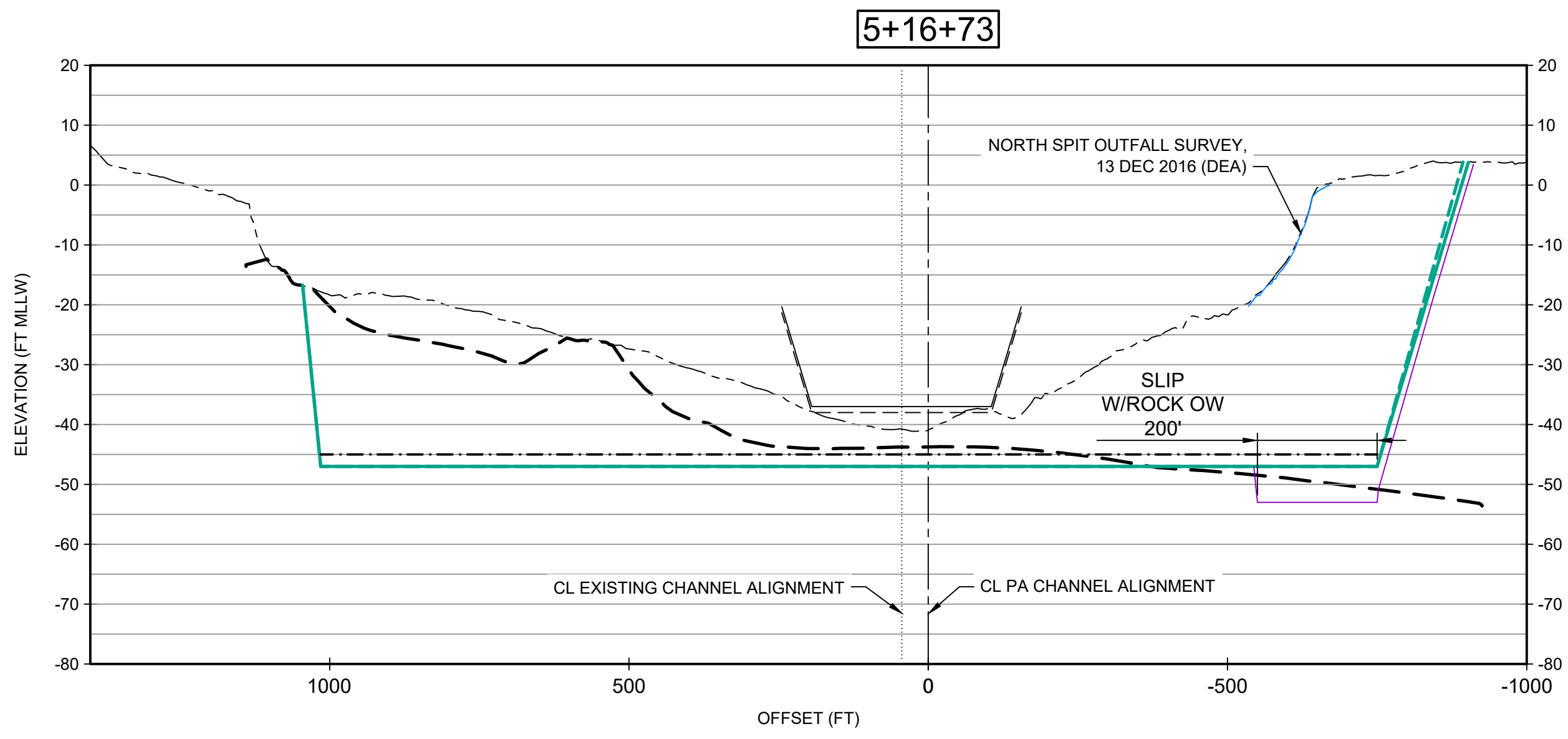
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 SUBMITTED BY: **HP** CONTRACT NO.:
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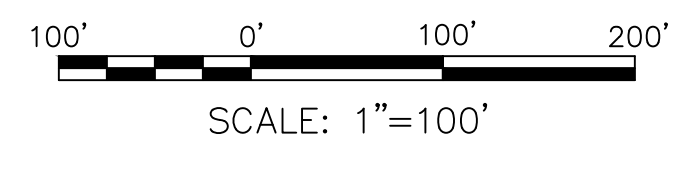
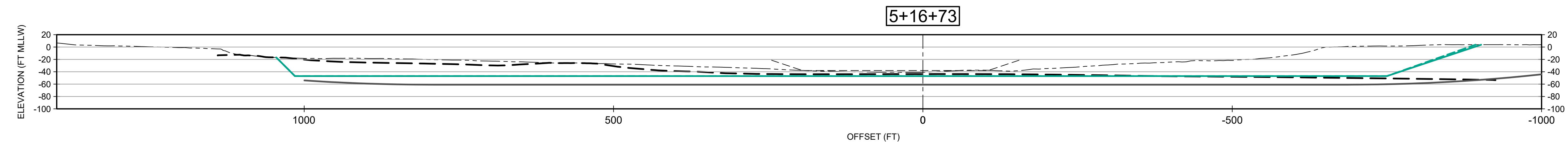
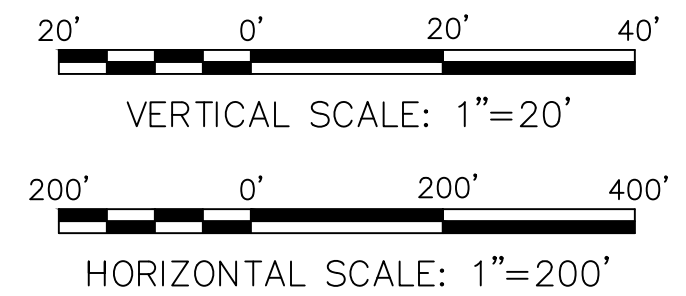
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (139 OF 185)

SHEET IDENTIFICATION
FIG-140
 INDEX 140 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00




LEGEND

——	EXISTING AUTHORIZED CHANNEL LIMITS	----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- . - . - .	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
— (blue)	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: HJP

DRAWN BY: HJP


CHECKED BY: EC

DATE: 2016/07/11

CONTRACT NO.:

DRAWING NUMBER:

FILE NAME:



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COOS BAY OREGON

COOS BAY CHANNEL MODIFICATION

CROSS SECTION (140 OF 185)

SHEET IDENTIFICATION

FIG-141

INDEX 141 of 186

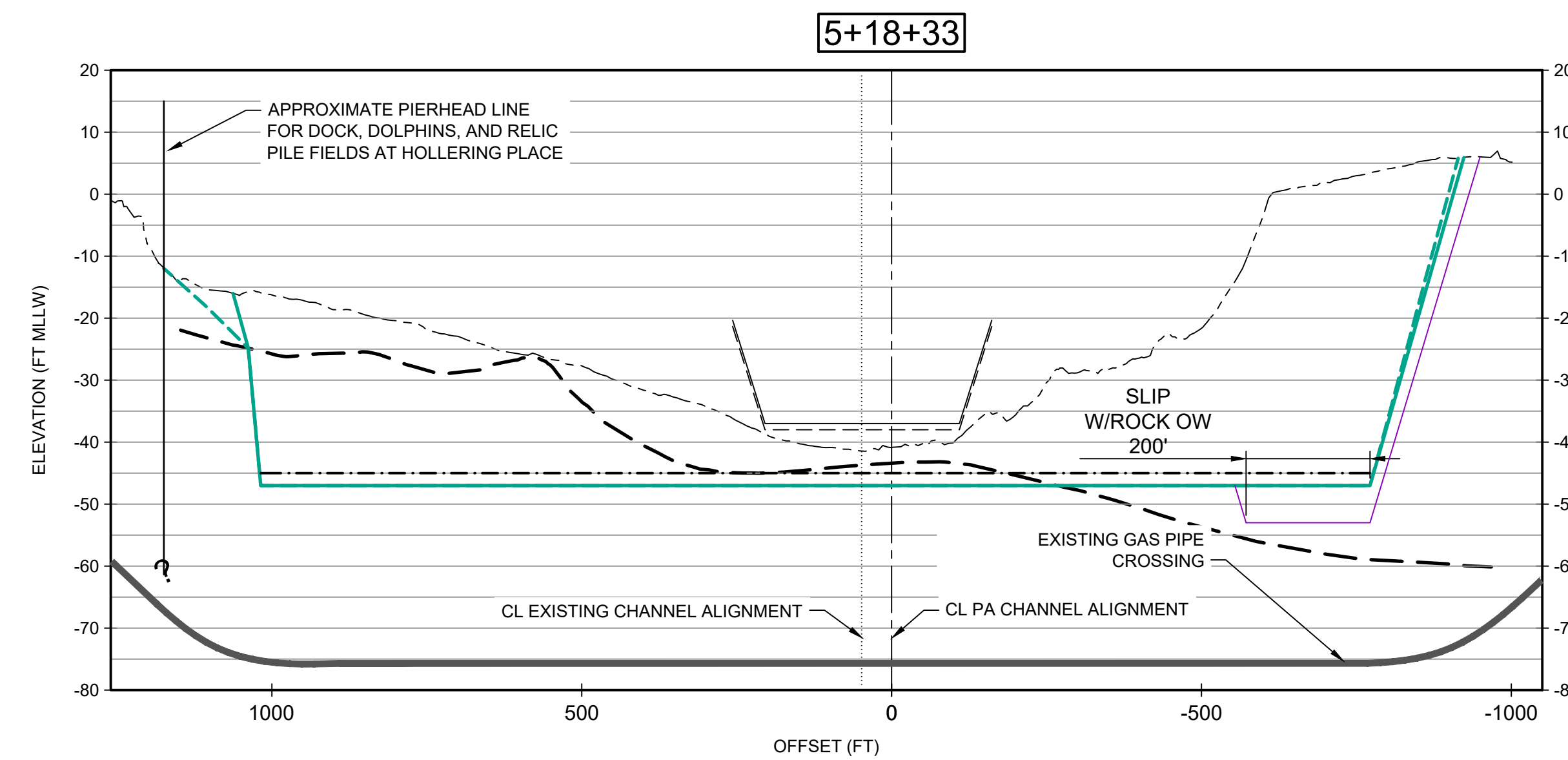
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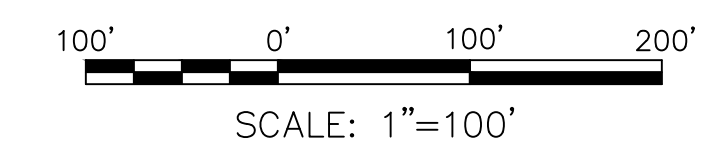
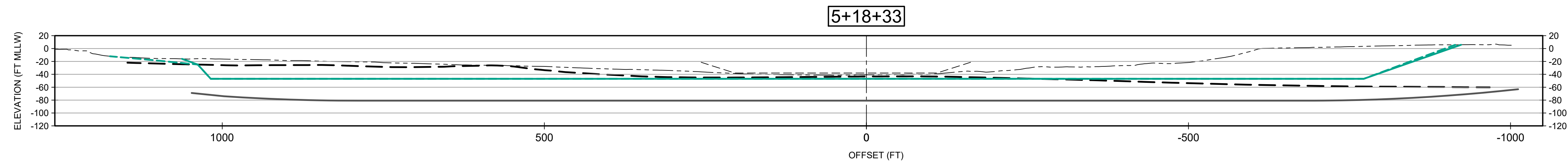
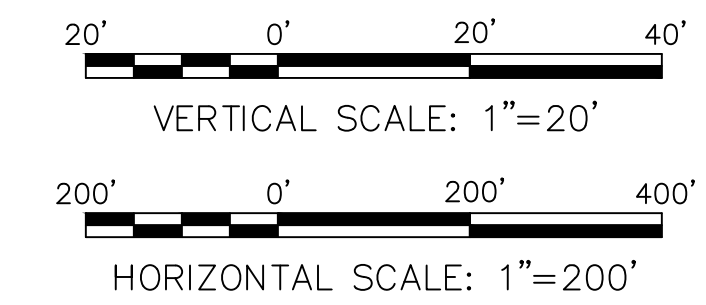
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (141 OF 185)

SHEET IDENTIFICATION
FIG-142
INDEX 142 of 186



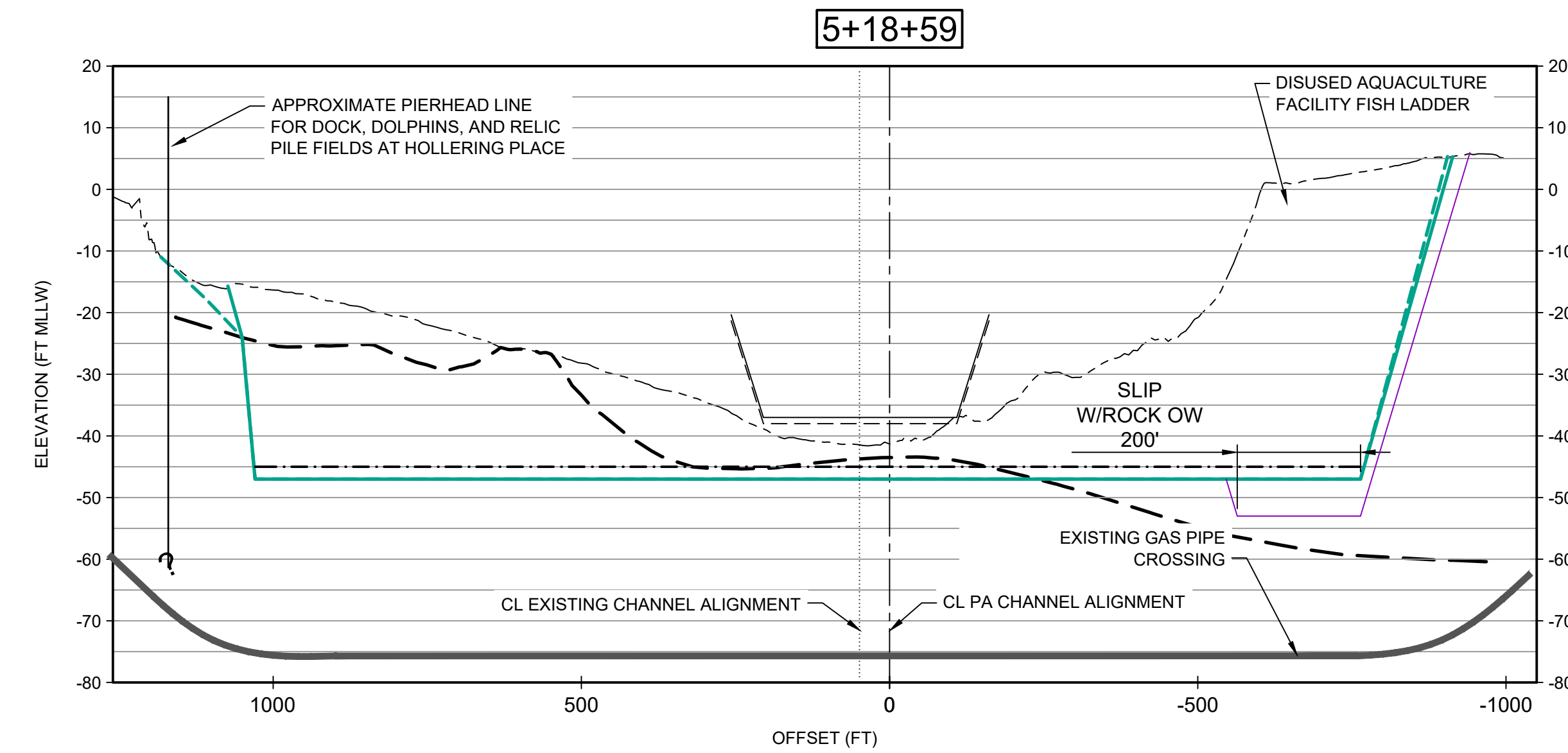
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EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



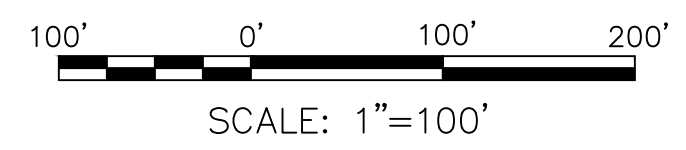
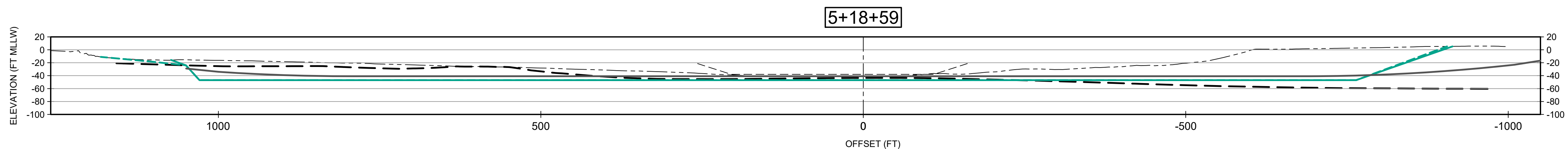
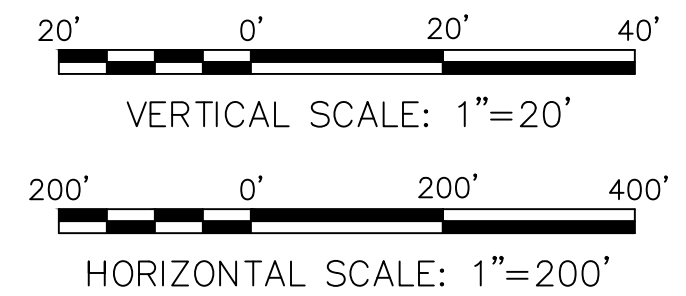
- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - - - - - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - . - . - . PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

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DRAWN BY: H.P.
CHECKED BY: E.C.
DATE: 2016/07/11

SUBMITTED BY: [blank]
CONTRACT NO.: [blank]
DATE: [blank]

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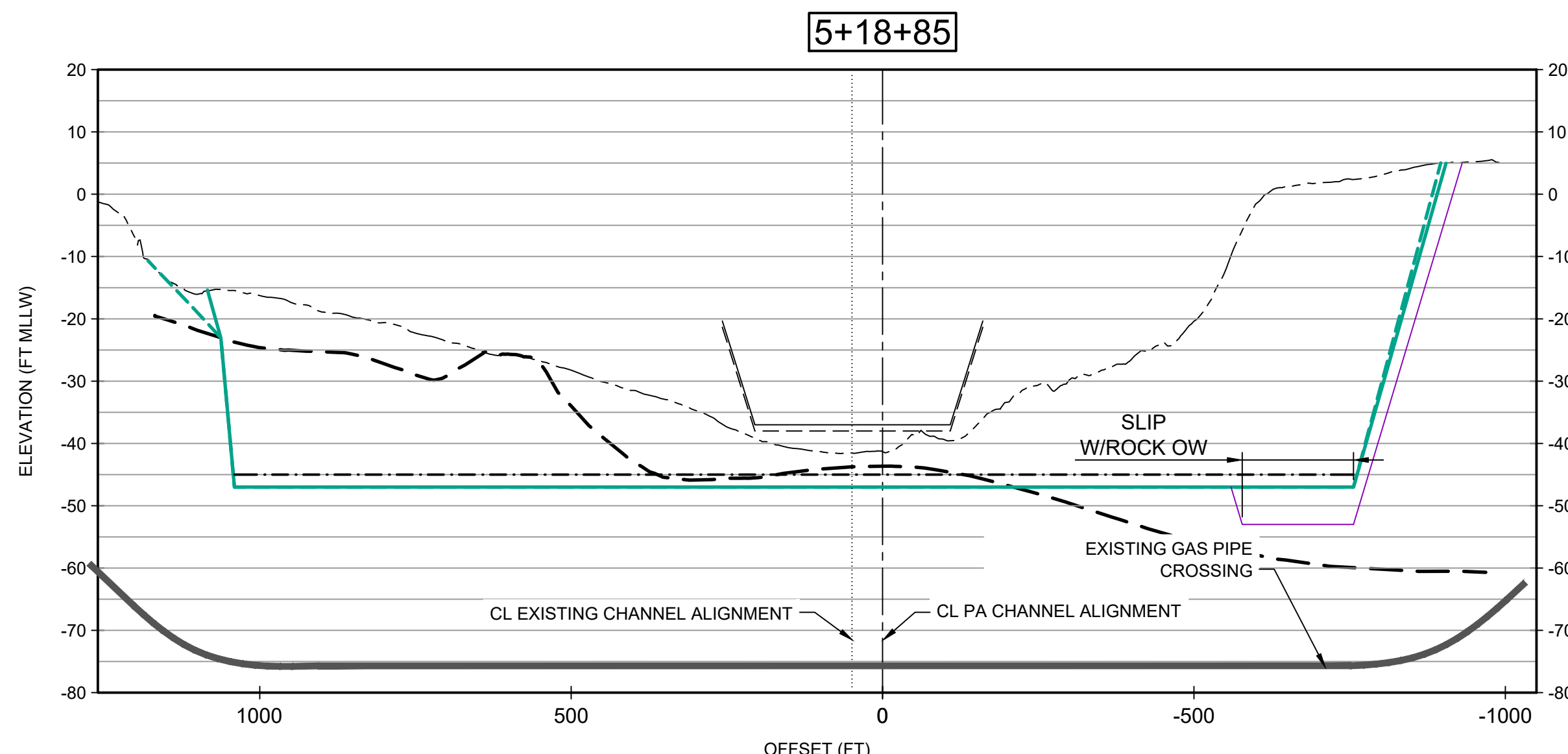
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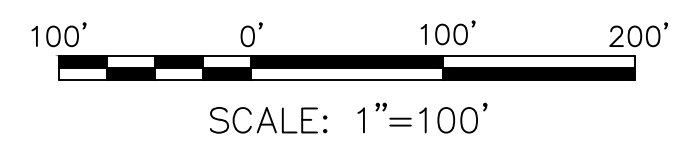
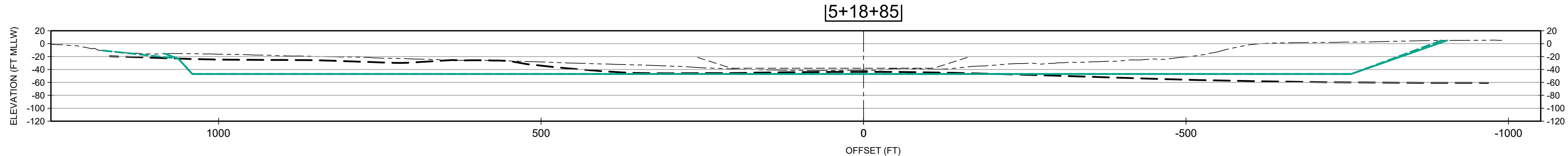
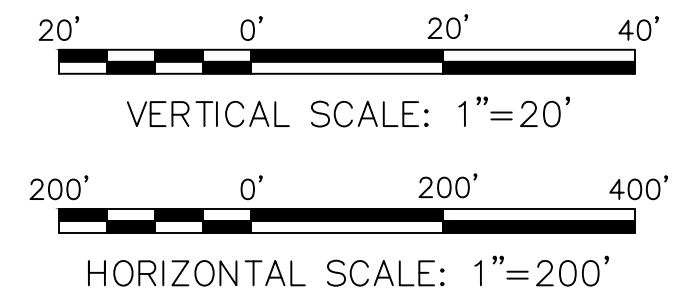
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (142 OF 185)

SHEET IDENTIFICATION
FIG-143
 INDEX 143 of 186

D
C
B
A



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

———	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
-----	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	-----	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
-----	PA CHANNEL LIMITS	-----	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



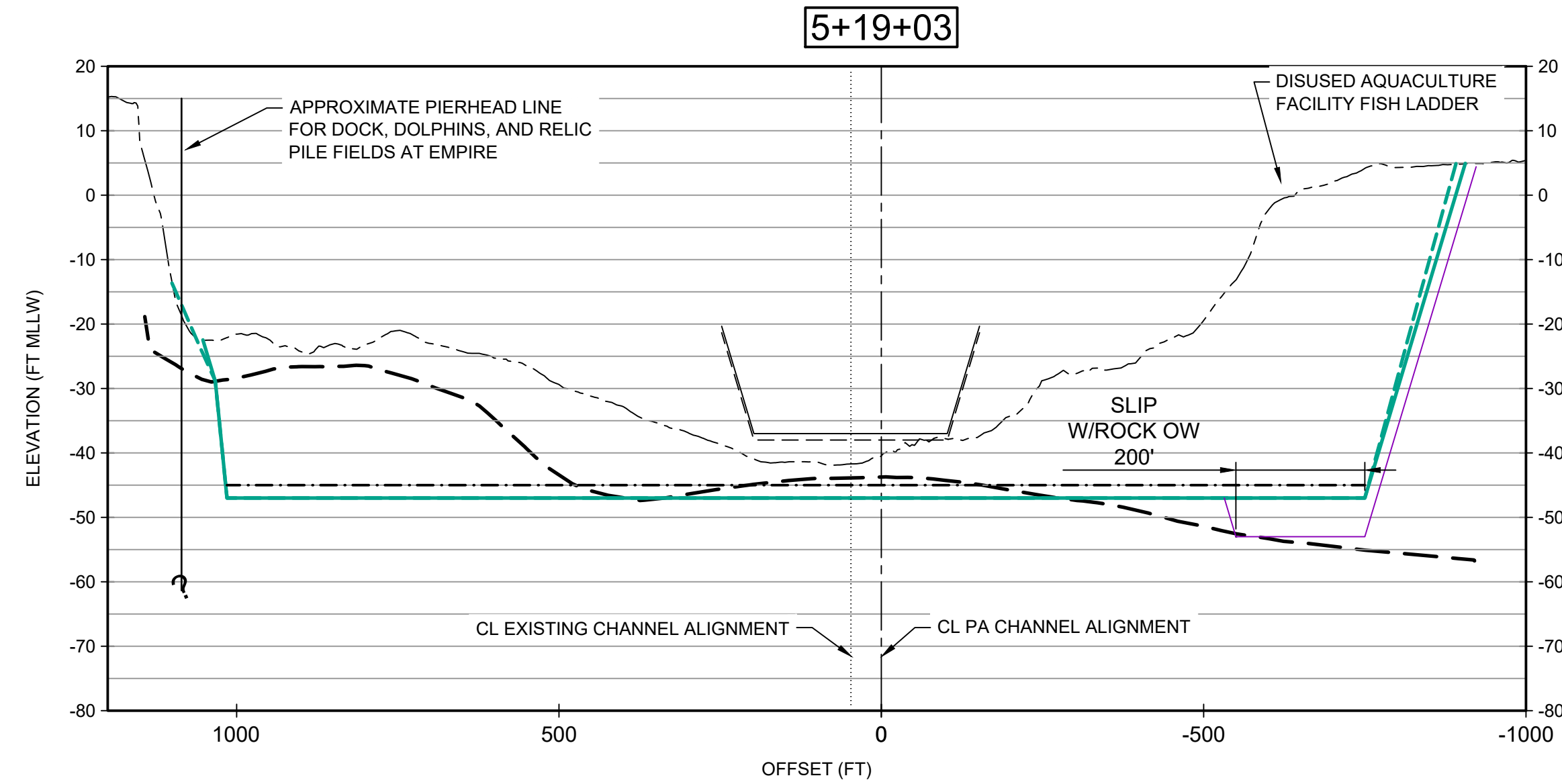
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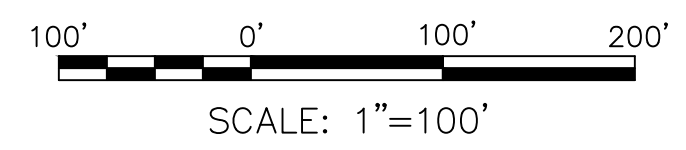
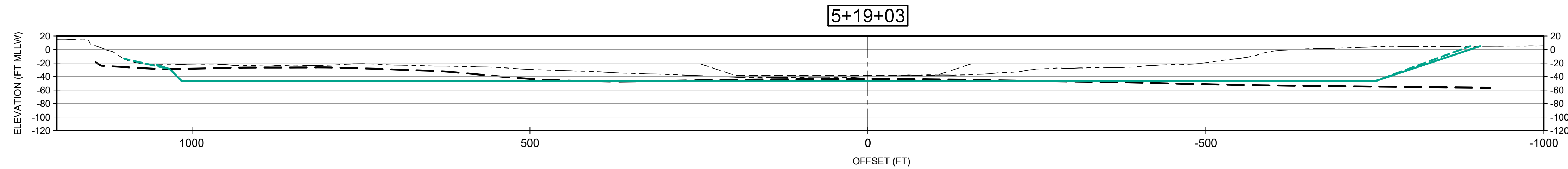
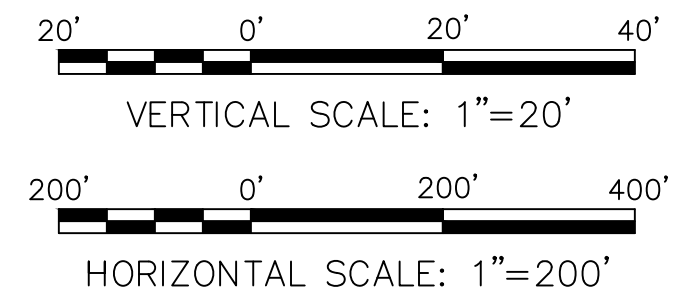
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 H.P. E.C.
 SUBMITTED BY: CONTRACT NO.:
 PLOT SCALE: PLOT DATE: DRAWING NUMBER:
 SIZE: FILE NAME:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (143 OF 185)

SHEET IDENTIFICATION
FIG-144
 INDEX 144 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



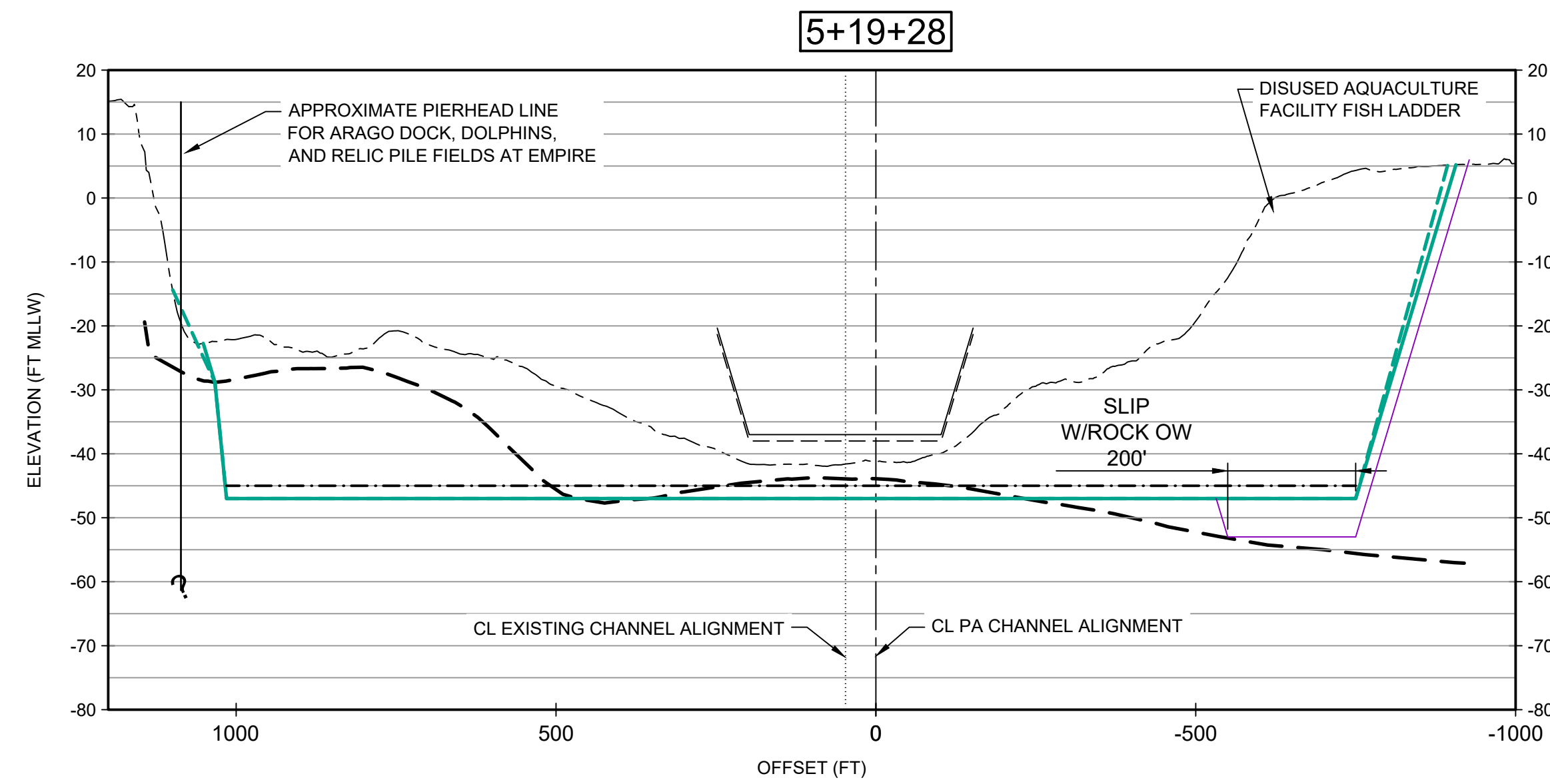
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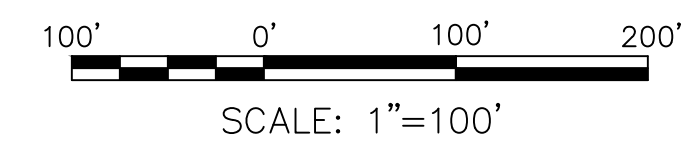
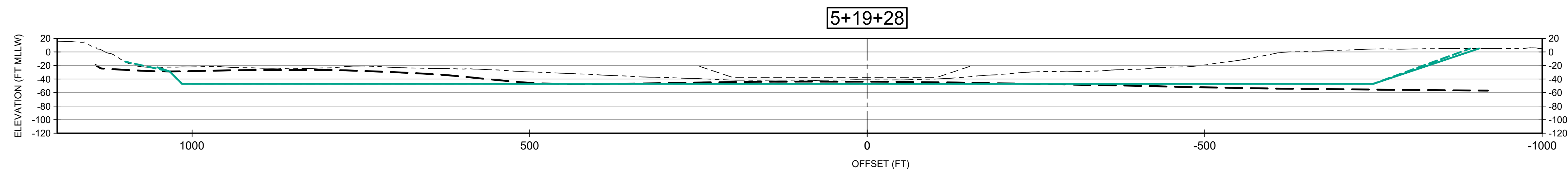
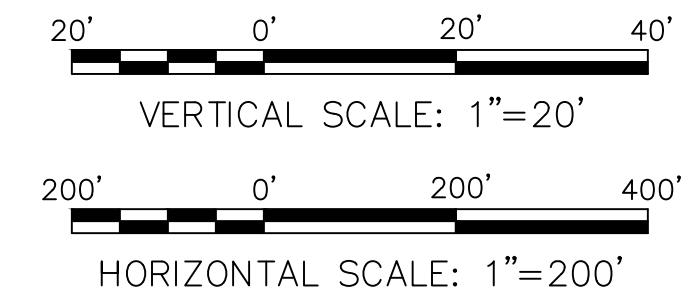
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (144 OF 185)

SHEET IDENTIFICATION
FIG-145
 INDEX 145 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



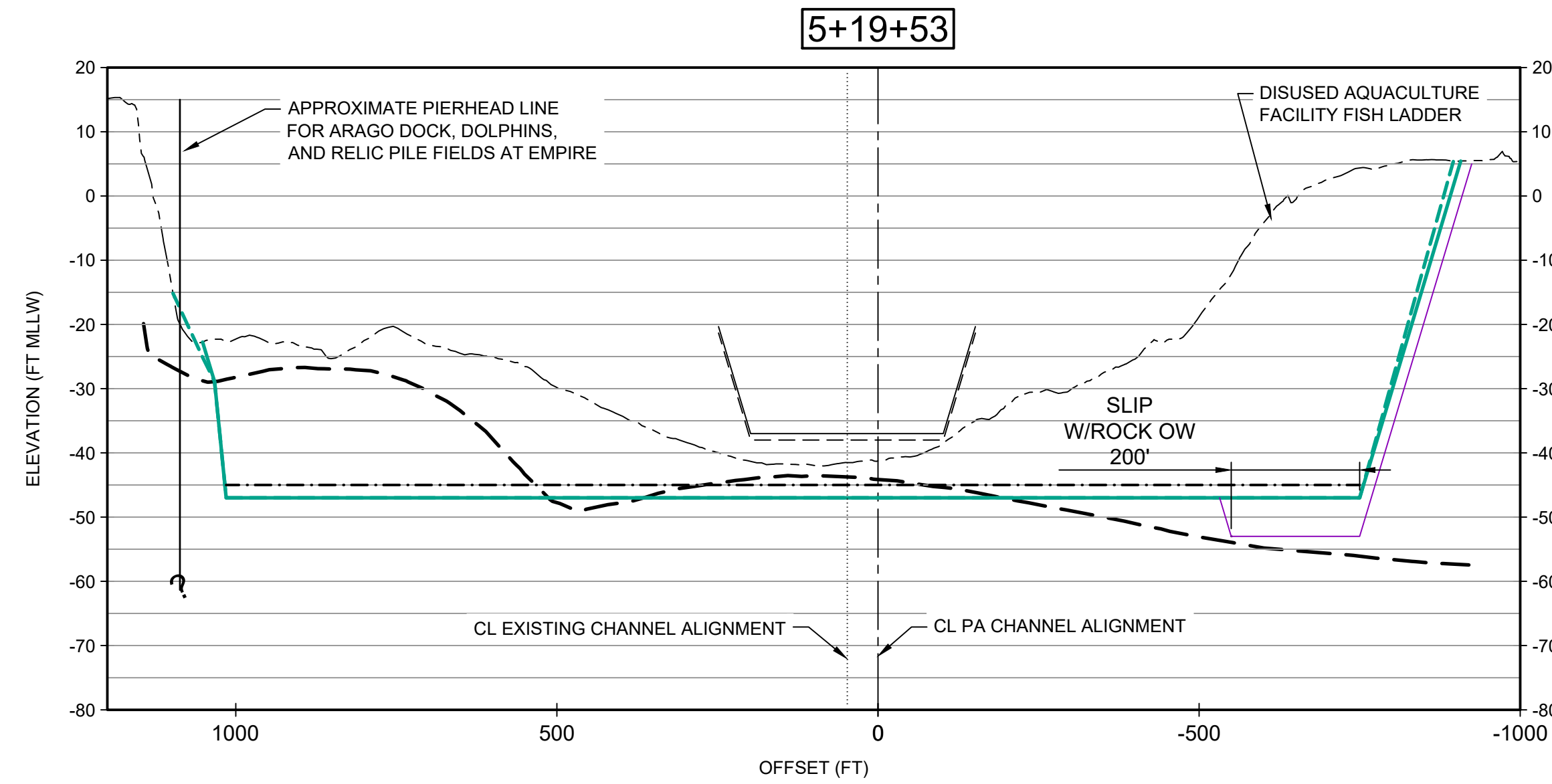
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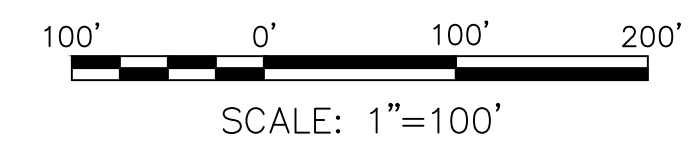
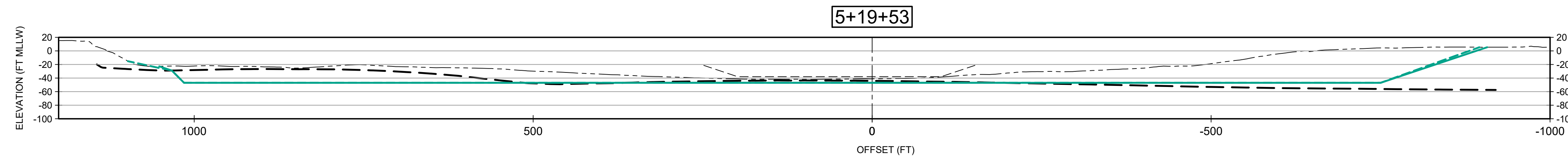
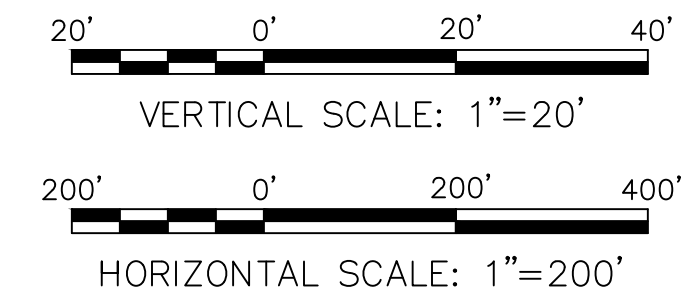
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (145 OF 185)

SHEET IDENTIFICATION
FIG-146
 INDEX 146 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



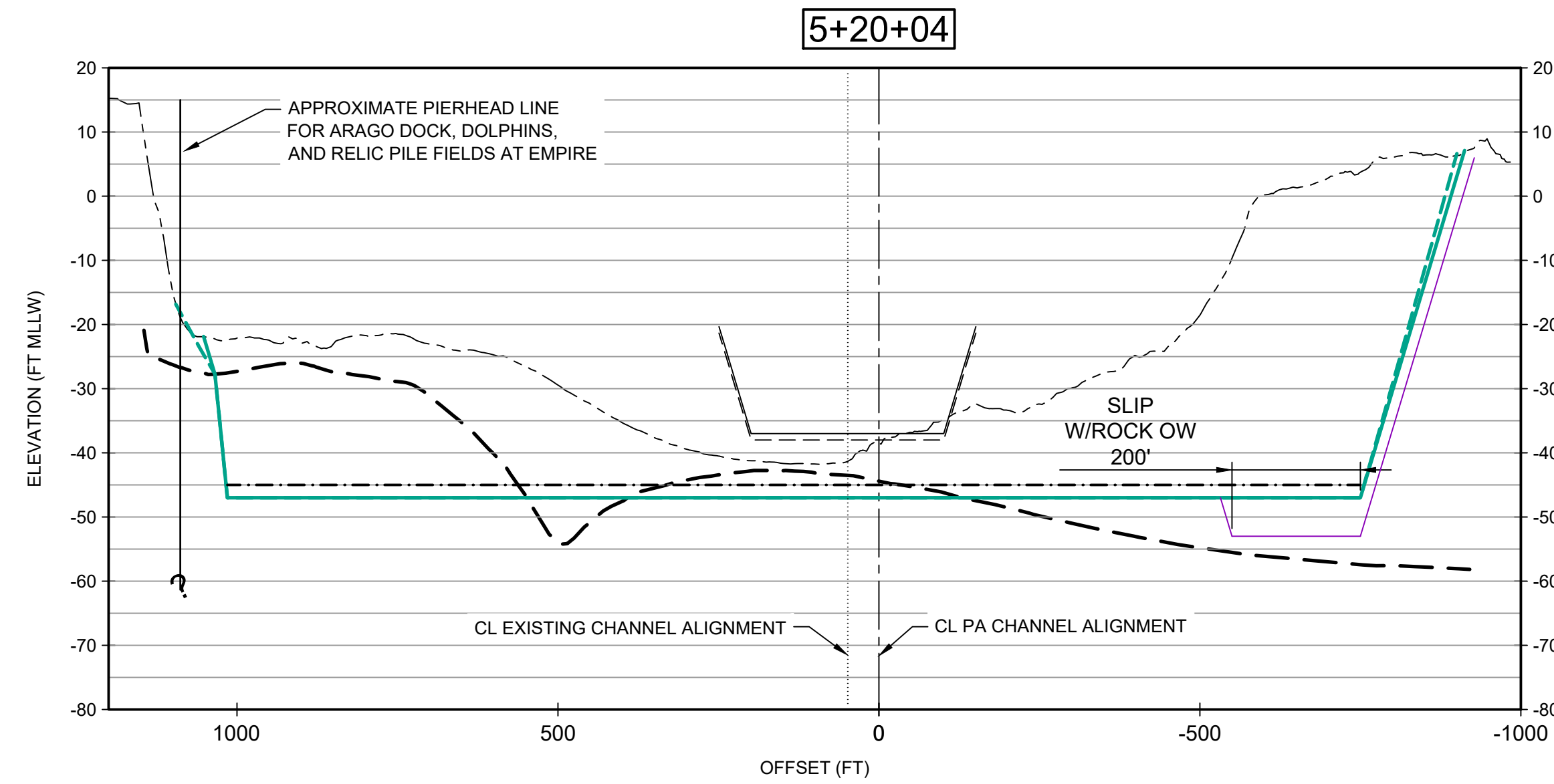
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drawn by: E.C.
checked by: E.C.
submitted by: H.P.
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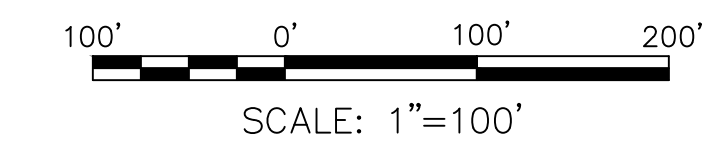
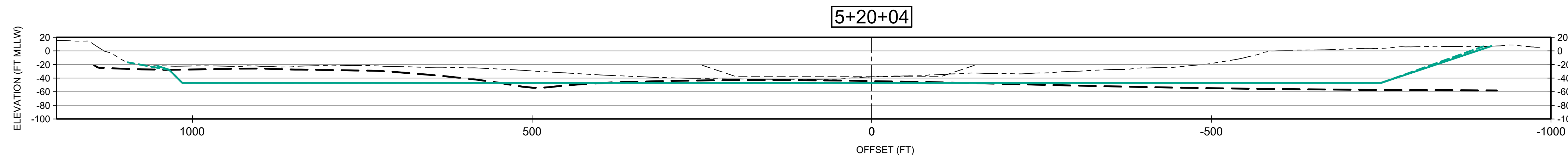
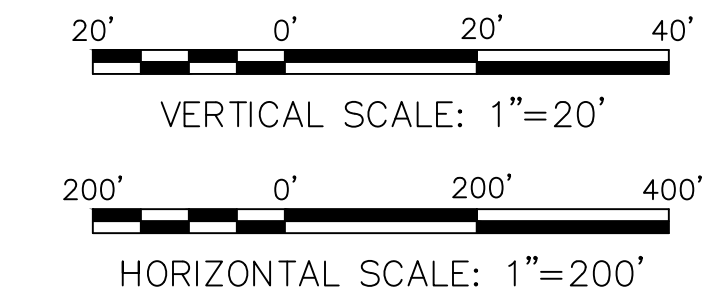
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (146 OF 185)

SHEET IDENTIFICATION
FIG-147
 INDEX 147 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

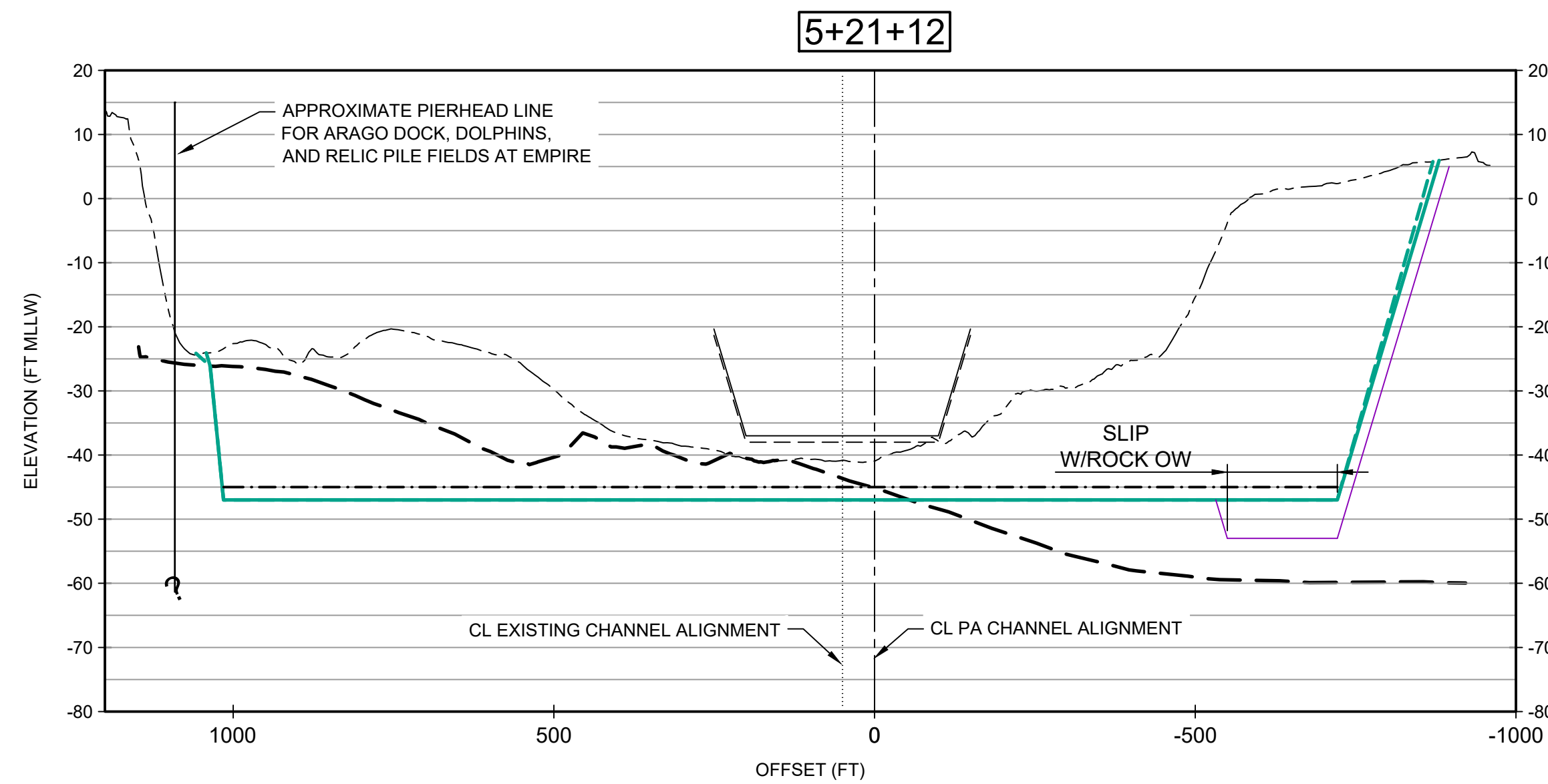
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	DESCRIPTION	MARK	APPR.

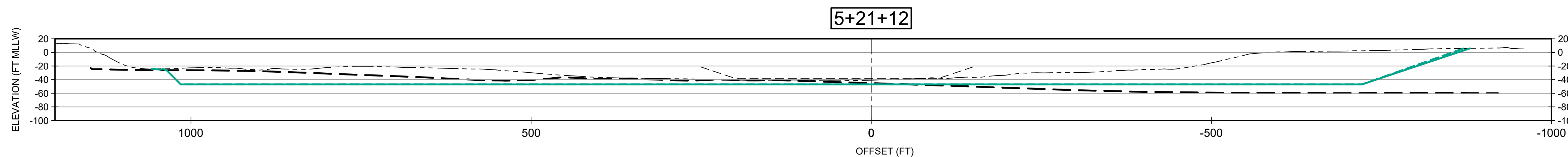
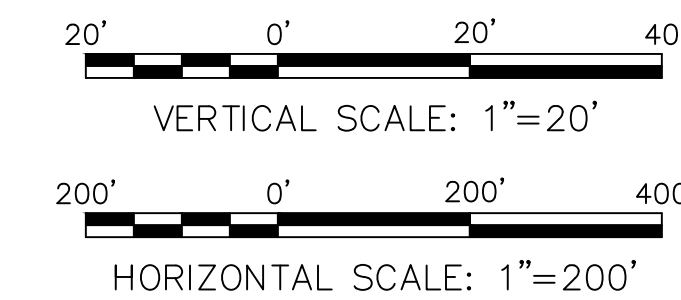
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 CHECKED BY: **EC**
 SUBMITTED BY: **HP**
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 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT SCALE: **1"=200'**
 PLOT DATE:
 DRAWING NUMBER:
 FILE NAME:
 SIZE:
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (147 OF 185)

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-148-CROSS SECTION\ Plotted: 5/20/2024 5:23 PM by LANDON, KYLE; Saved: 5/3/2024 6:15 AM by OAPONIE



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

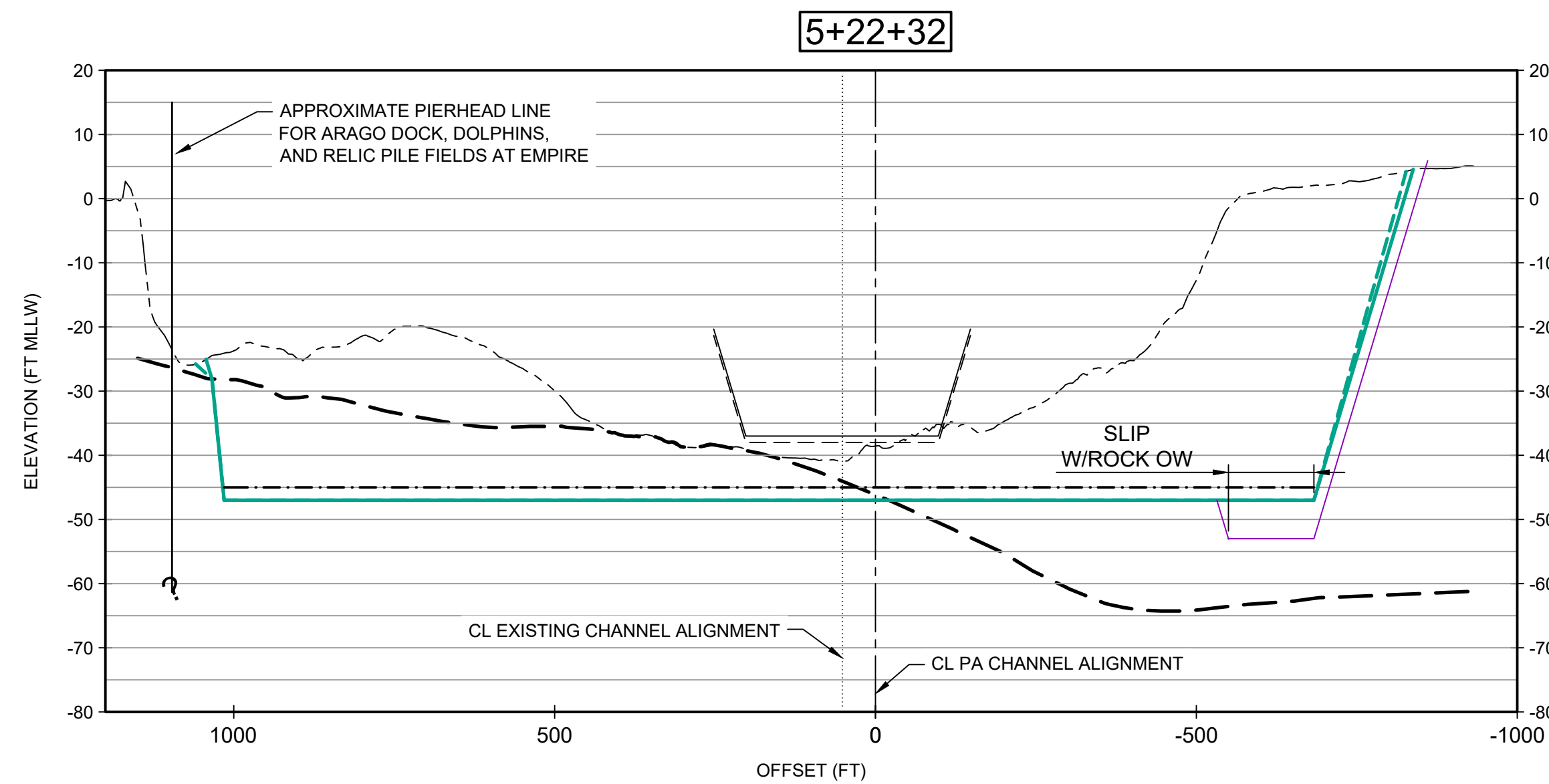


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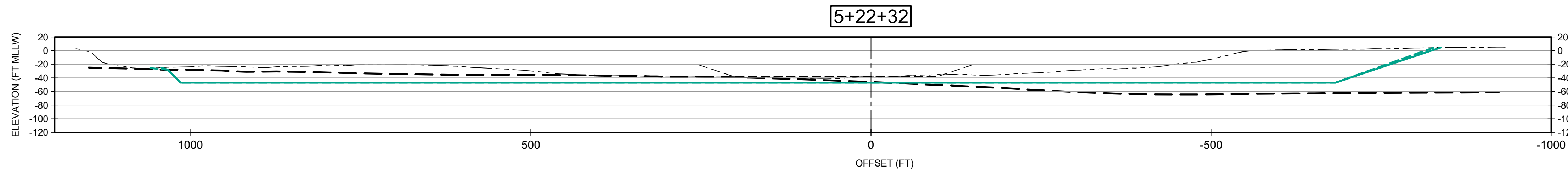
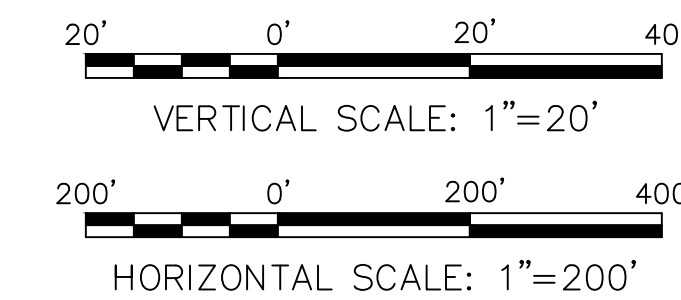
designed by: **moffatt & nichol**
drawn by: HJP
checked by: EC
submitted by: EC
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plot date: FILE NAME:
plot size: FILE NAME:
date: 2016/07/11
solicitation no.:
contract no.:
drawing number:
file name:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (148 OF 185)

SHEET IDENTIFICATION
FIG-149
 INDEX 149 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



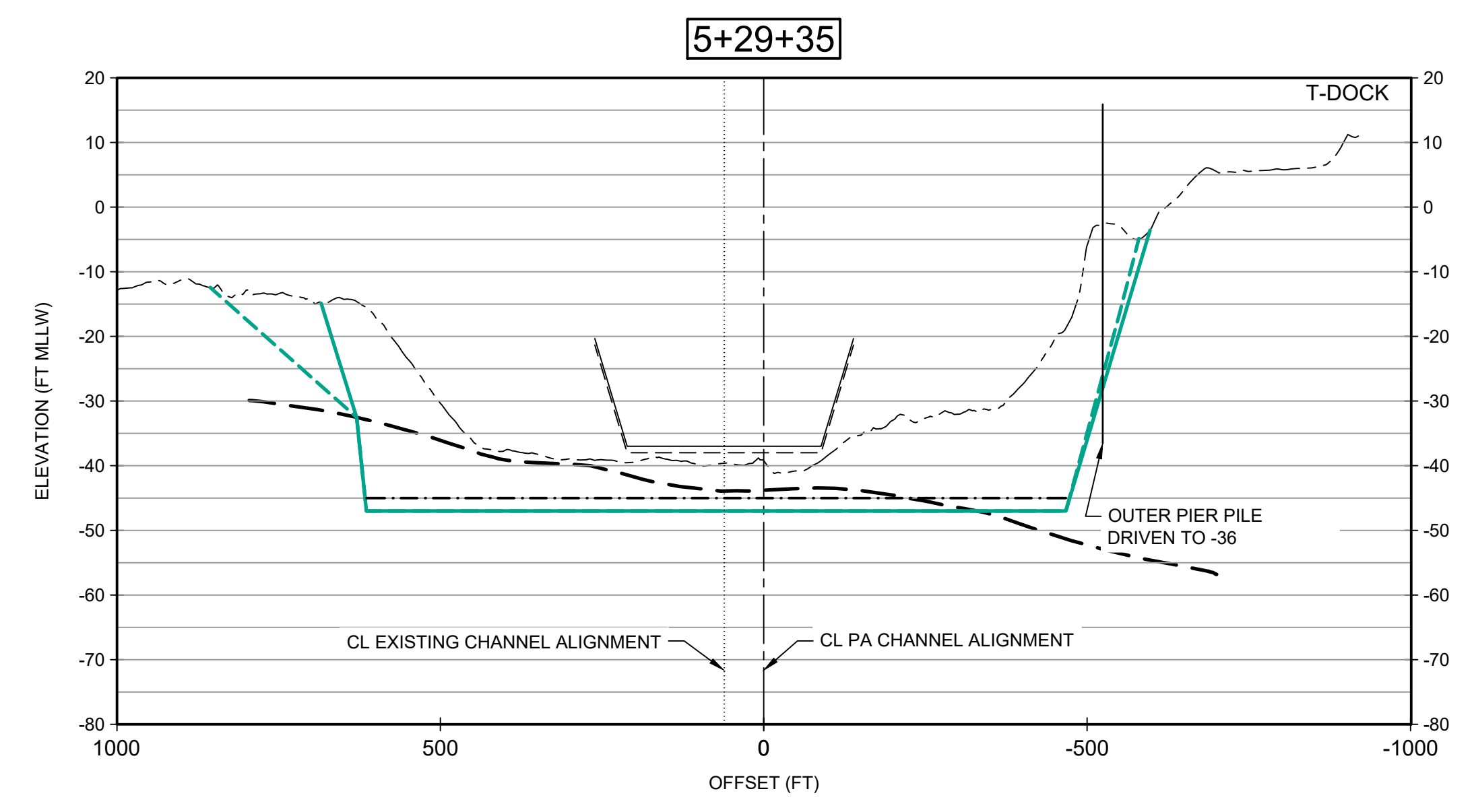
DATE	DESCRIPTION	MARK	APPR.

DESIGNED BY: **moffatt & nichol**
 DRAWN BY: H.P.
 CHECKED BY: E.C.
 SUBMITTED BY:
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT SCALE:
 PLOT DATE:
 DRAWING NUMBER:
 FILE NAME:
 SIZE:

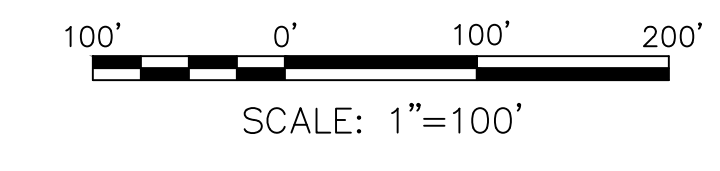
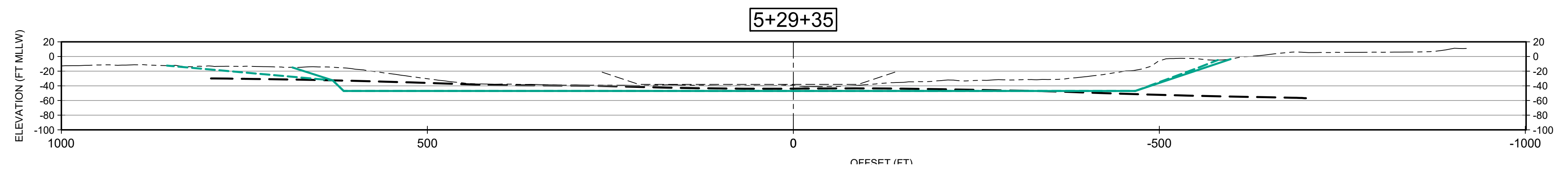
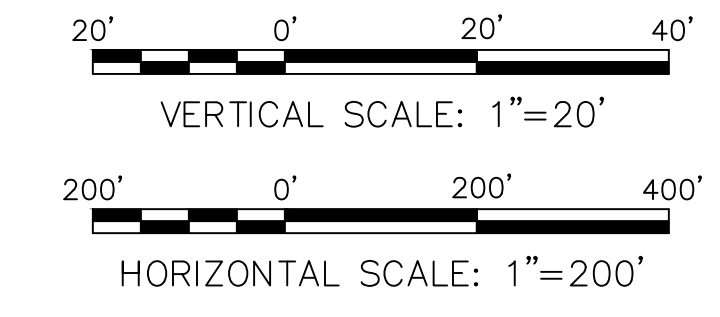
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (149 OF 185)

SHEET IDENTIFICATION
FIG-150
 INDEX 150 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

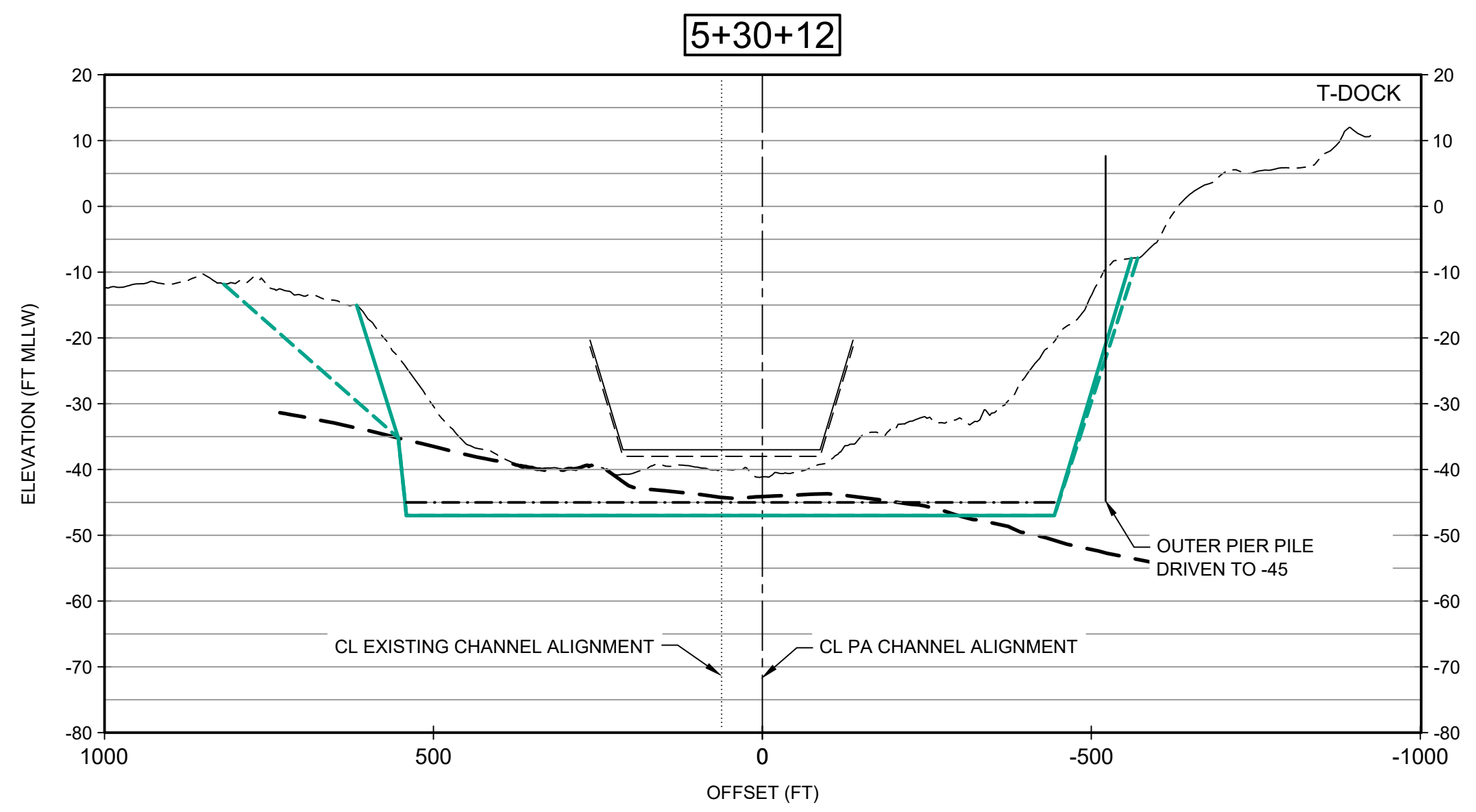
MARK	DESCRIPTION	DATE	APPR.

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drawn by: E.C.
checked by: E.C.
submitted by: E.C.
date: 2016/07/11
solicitation no.:
contract no.:
plot scale:
plot date:
drawing number:
file name:
size:

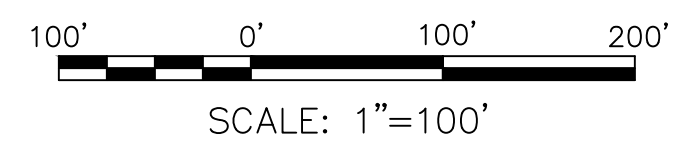
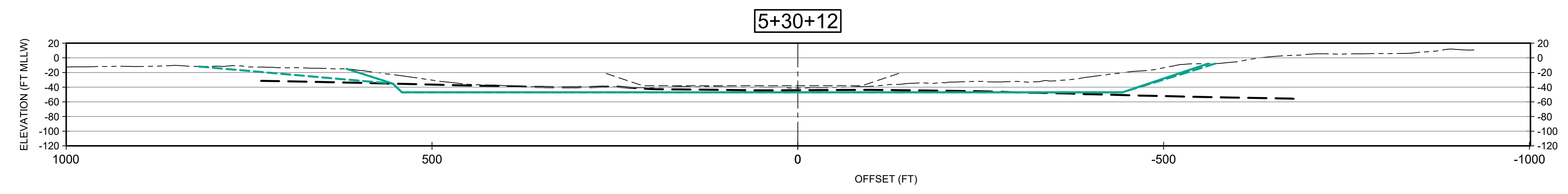
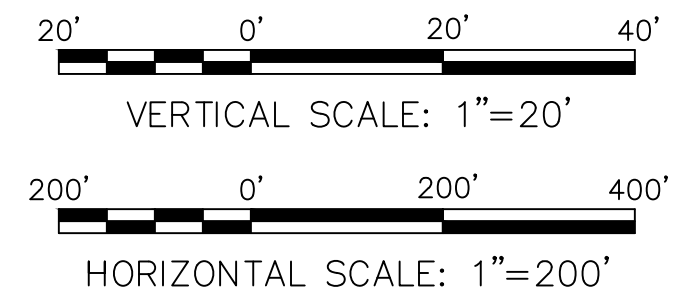
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (150 OF 185)

SHEET IDENTIFICATION
FIG-151
 INDEX 151 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

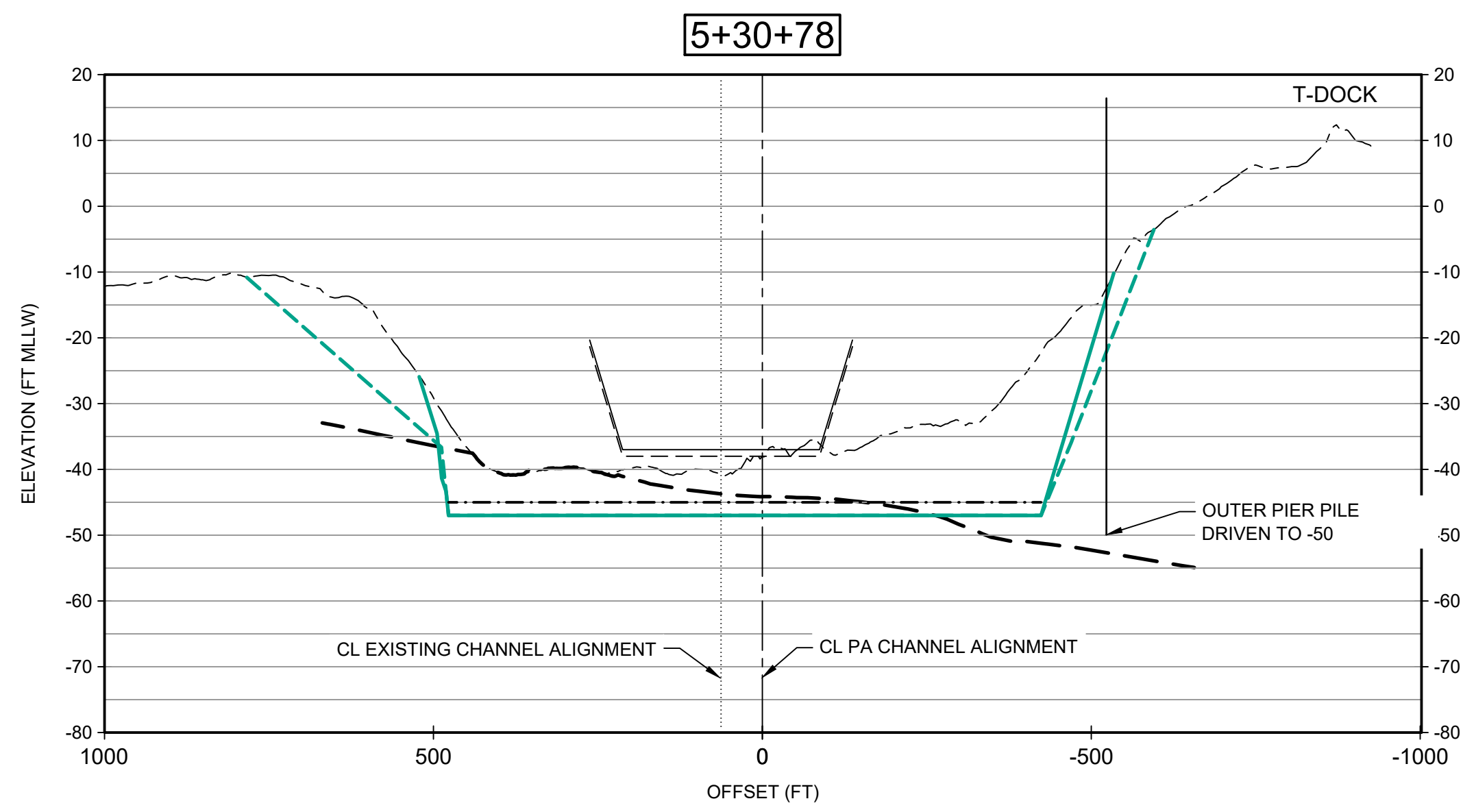
designed by: H.P.
checked by: E.C.
submitted by: E.C.
plot scale: PLOT DATE: FILE NAME:
size:

DATE: 2016/07/11
SOLICITATION NO.:
CONTRACT NO.:
DRAWING NUMBER:

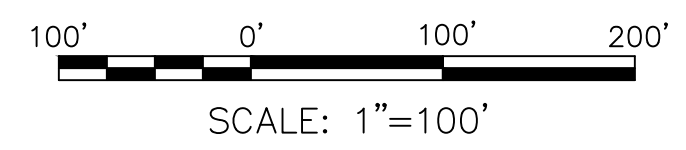
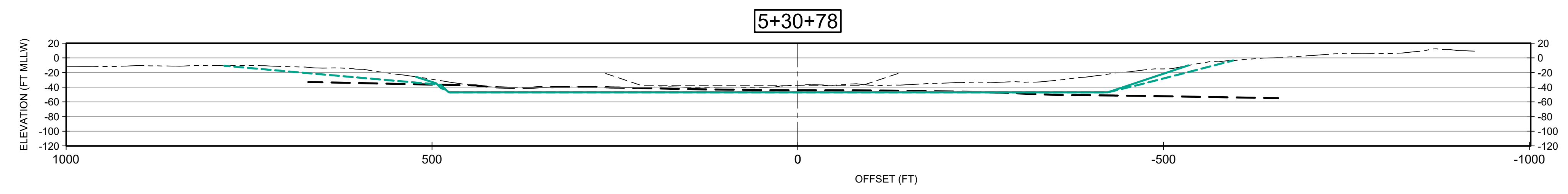
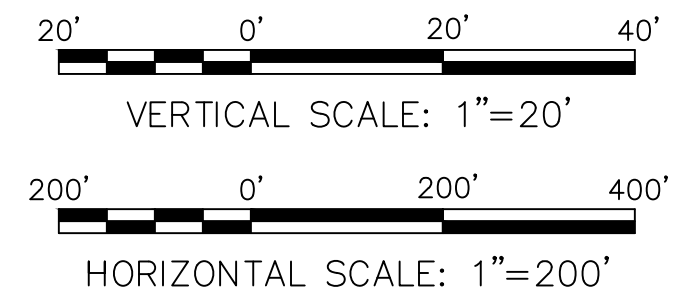
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (151 OF 185)

SHEET IDENTIFICATION
FIG-152
 INDEX 152 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



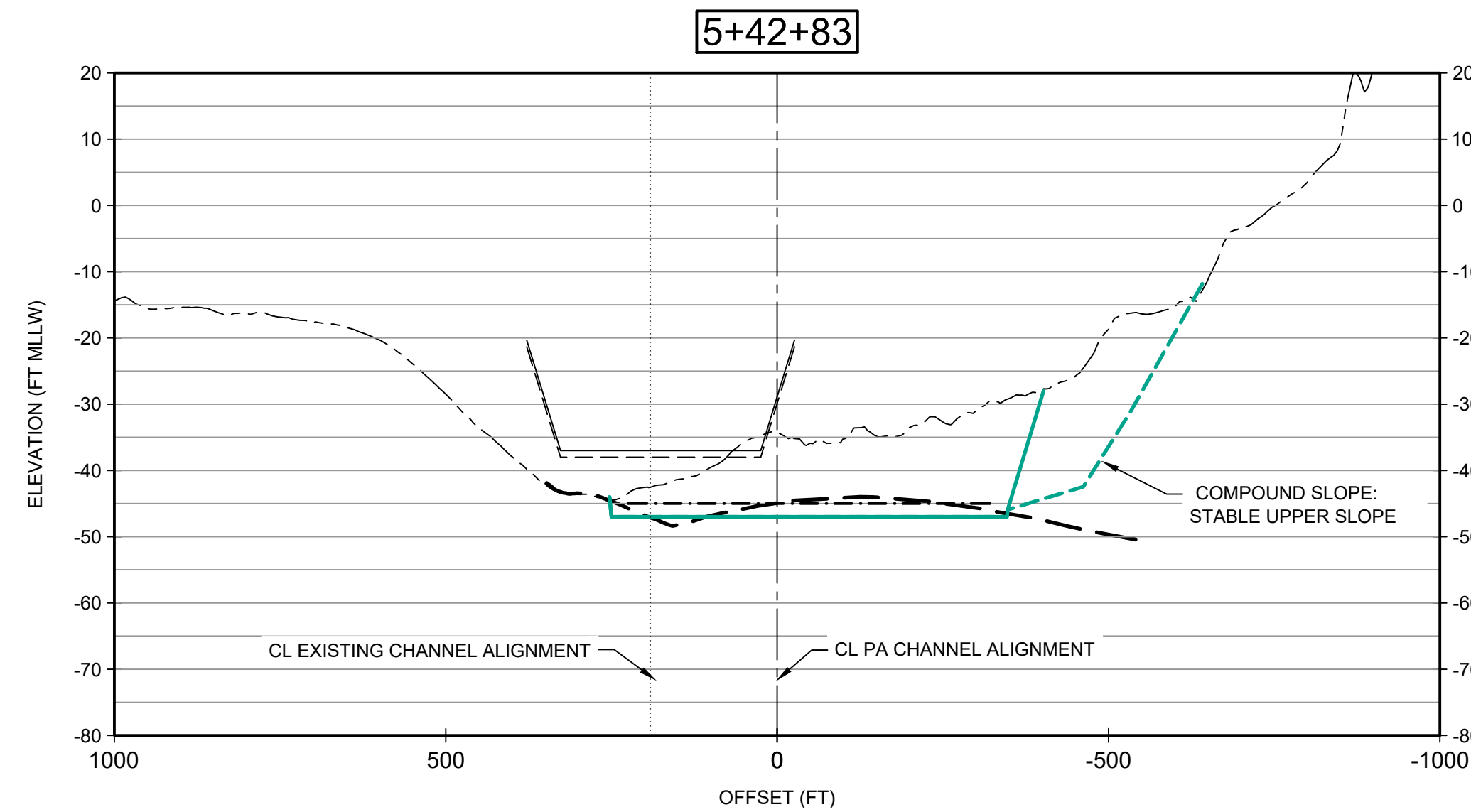
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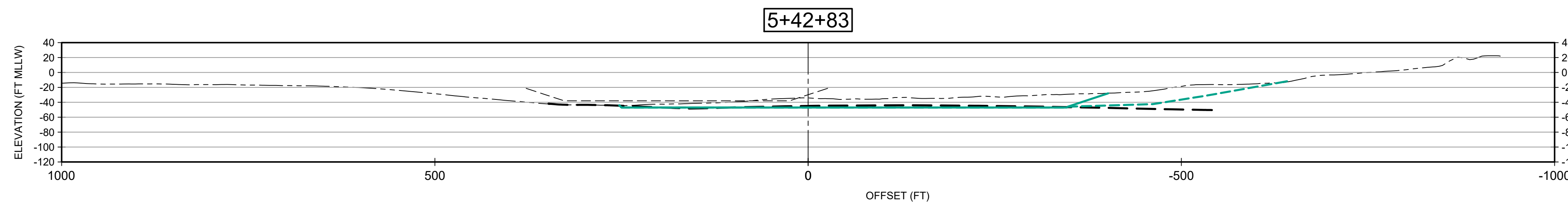
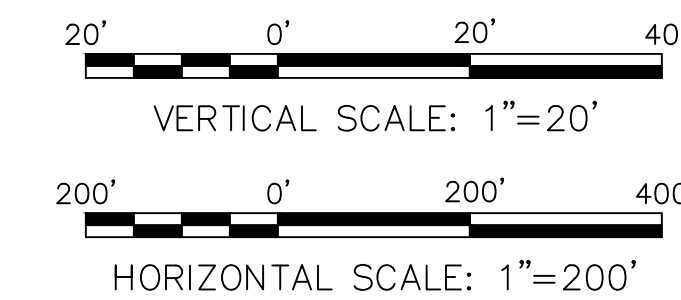
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (152 OF 185)

SHEET IDENTIFICATION
FIG-153
 INDEX 153 of 186



EXISTING CHANNEL DEPTH	-28.89
EXISTING CHANNEL DEPTH + AMD	-29.88
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK

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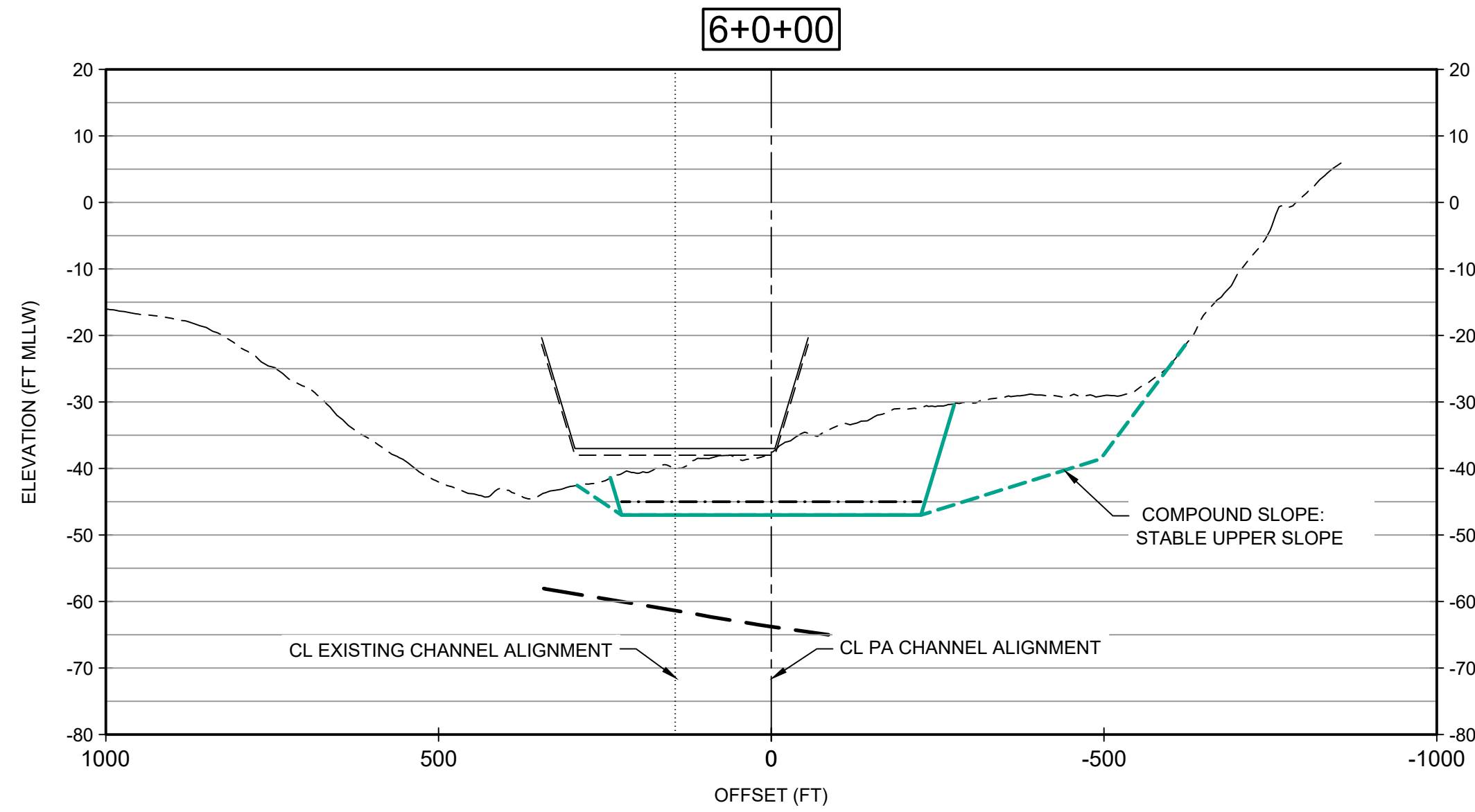
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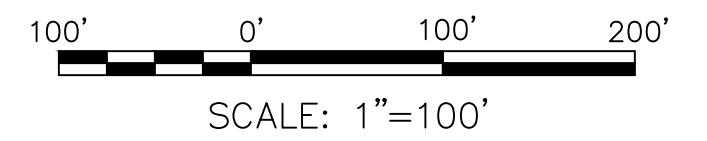
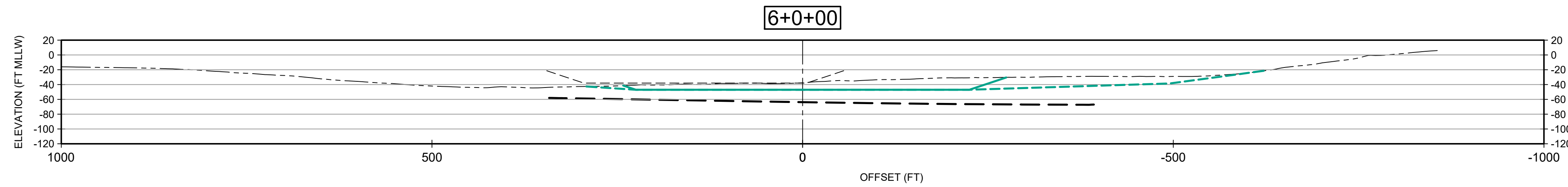
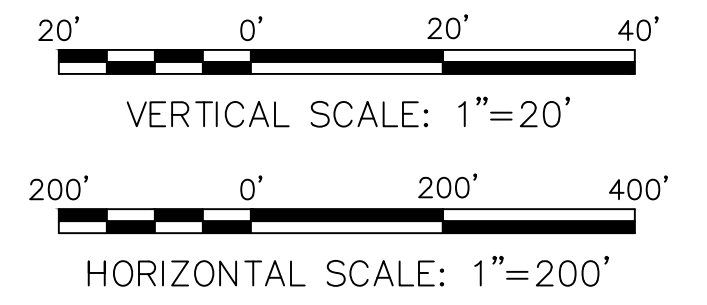
CONTRACT NO.: HJP
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 SIZE: HJP

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (153 OF 185)

SHEET IDENTIFICATION
FIG-154
 INDEX 154 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- . - . - . PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

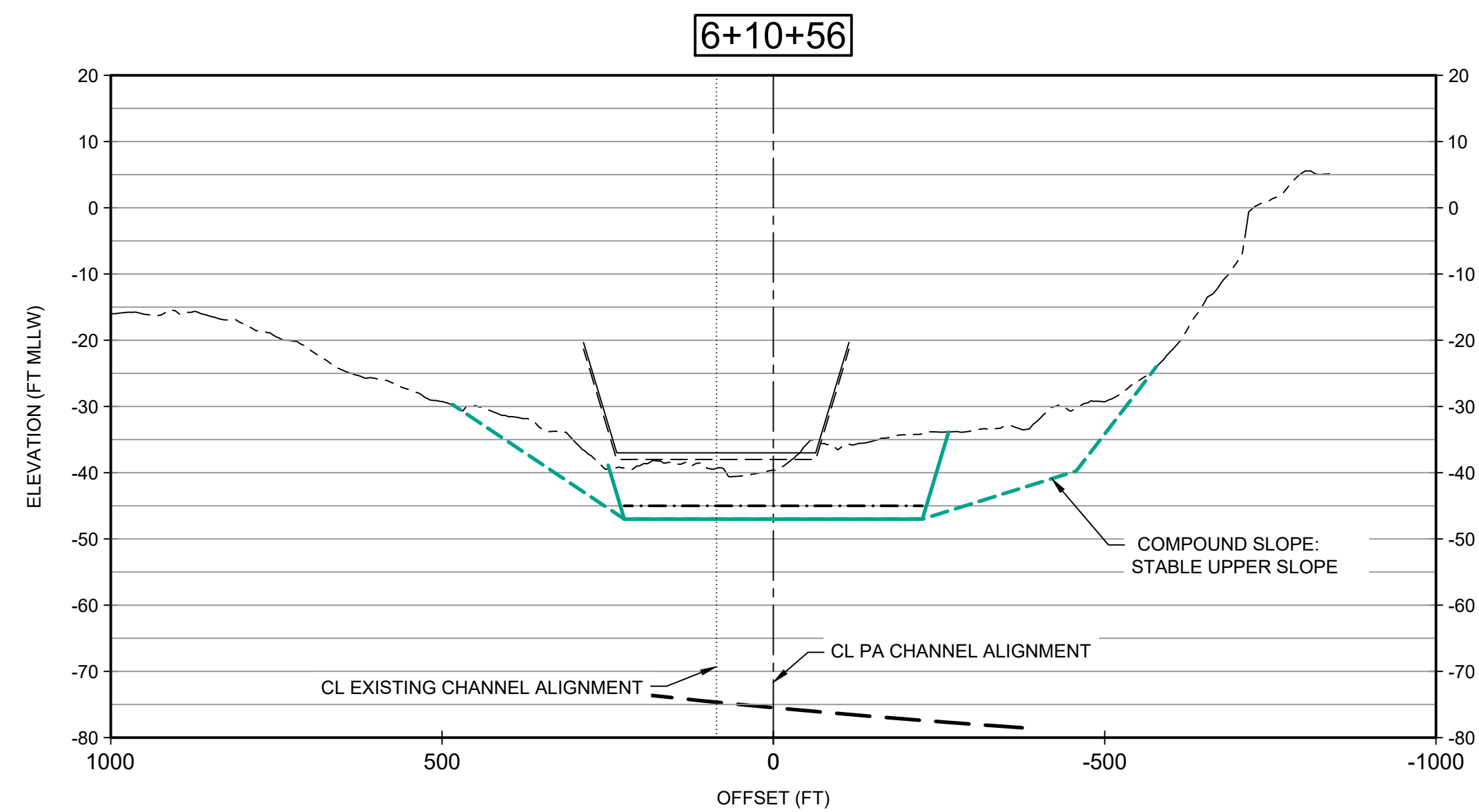
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DATE	2016/07/11
DESIGNED BY	HJP
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CHECKED BY	EC
CONTRACT NO.	
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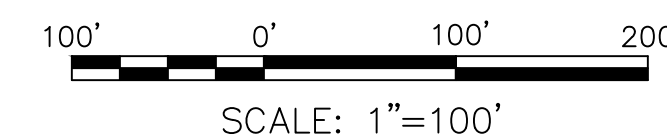
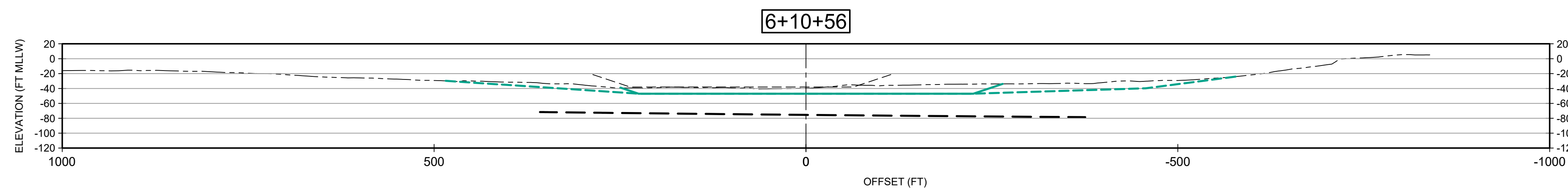
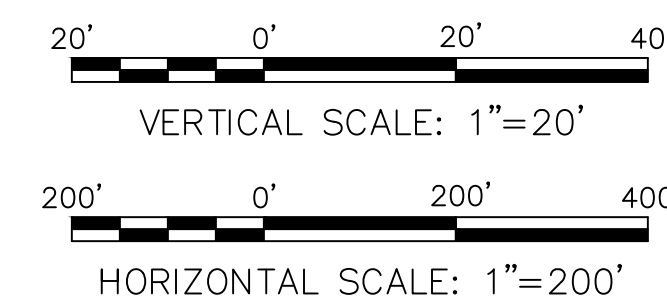
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OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (154 OF 185)

SHEET IDENTIFICATION
FIG-155
 INDEX 155 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CH + AMD + ROCK BUFFER	-47.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



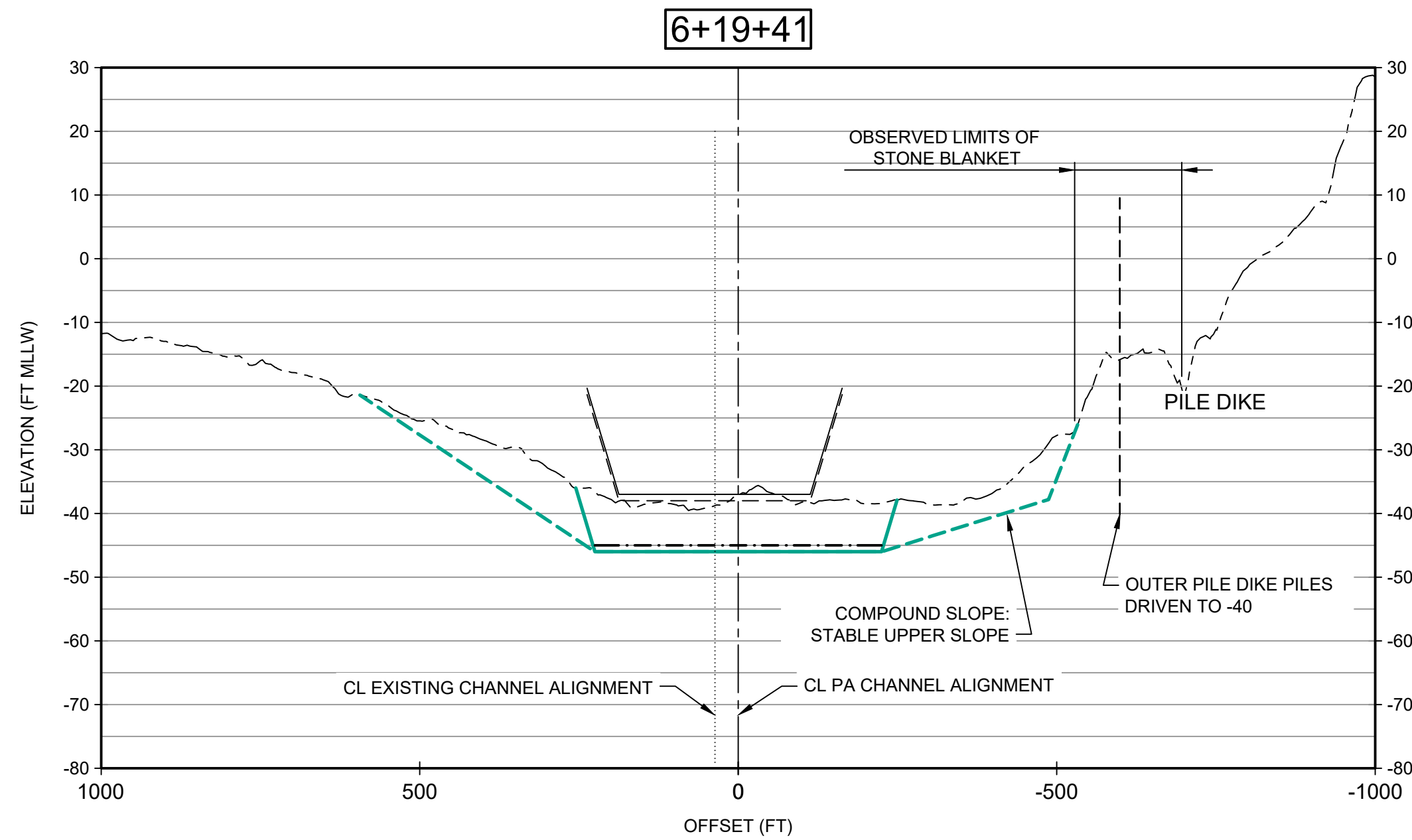
DATE	DESCRIPTION	MARK	APPR.

DESIGNED BY: **HP**
 DRAWN BY: **EC**
 CHECKED BY: **HP**
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 SUBMITTED BY:
 PLOT SCALE: **1"=200'**
 PLOT DATE:
 DRAWING NUMBER:
 FILE NAME:
 SIZE:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (156 OF 185)

SHEET IDENTIFICATION
FIG-156
 INDEX 156 of 186



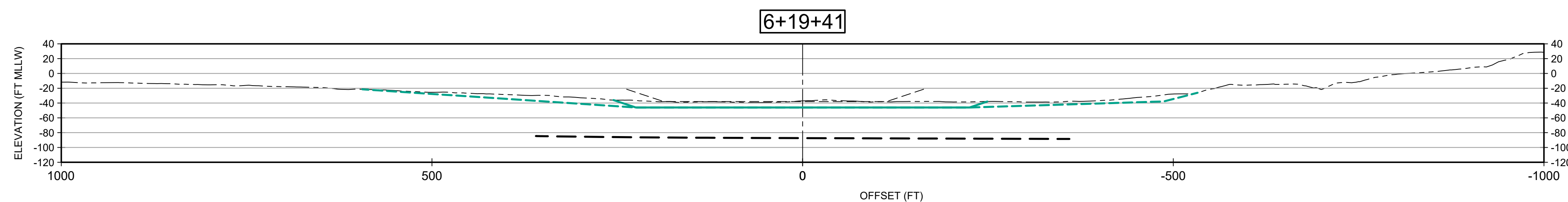
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

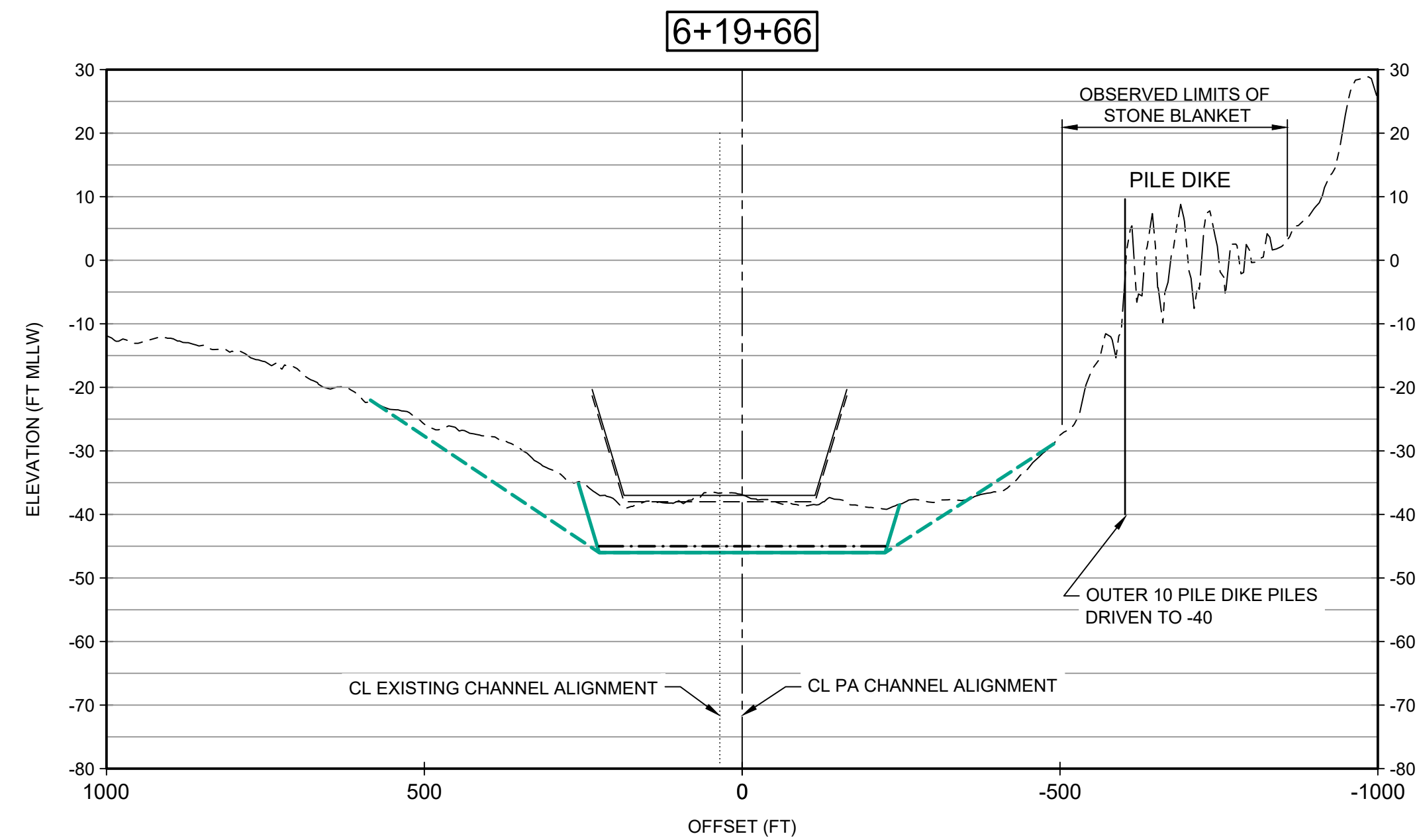
MARK	DESCRIPTION	DATE	APPR.

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DRAWN BY: E.C.
CHECKED BY: E.C.
DATE: 2016/07/11
SUBMITTED BY: H.P.
PLOT SCALE: 1"=200'
FILE NAME: [blank]
CONTRACT NO.: [blank]
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SIZE: [blank]

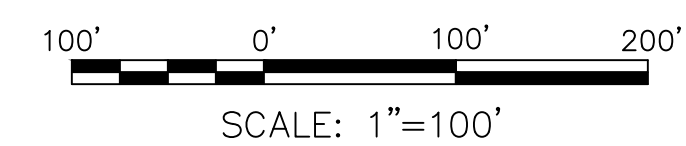
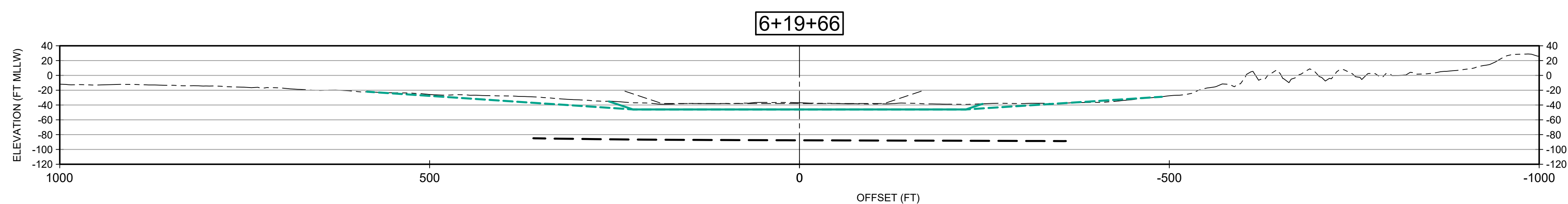
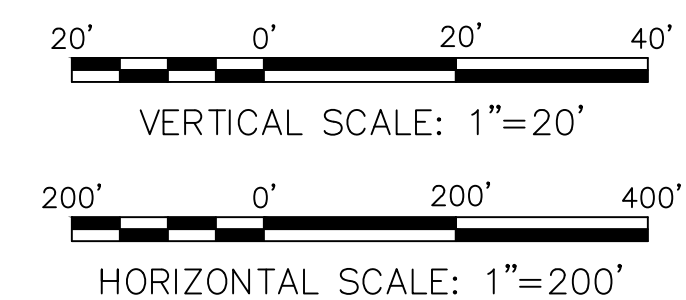
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (156 OF 185)

SHEET IDENTIFICATION
FIG-157
 INDEX 157 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

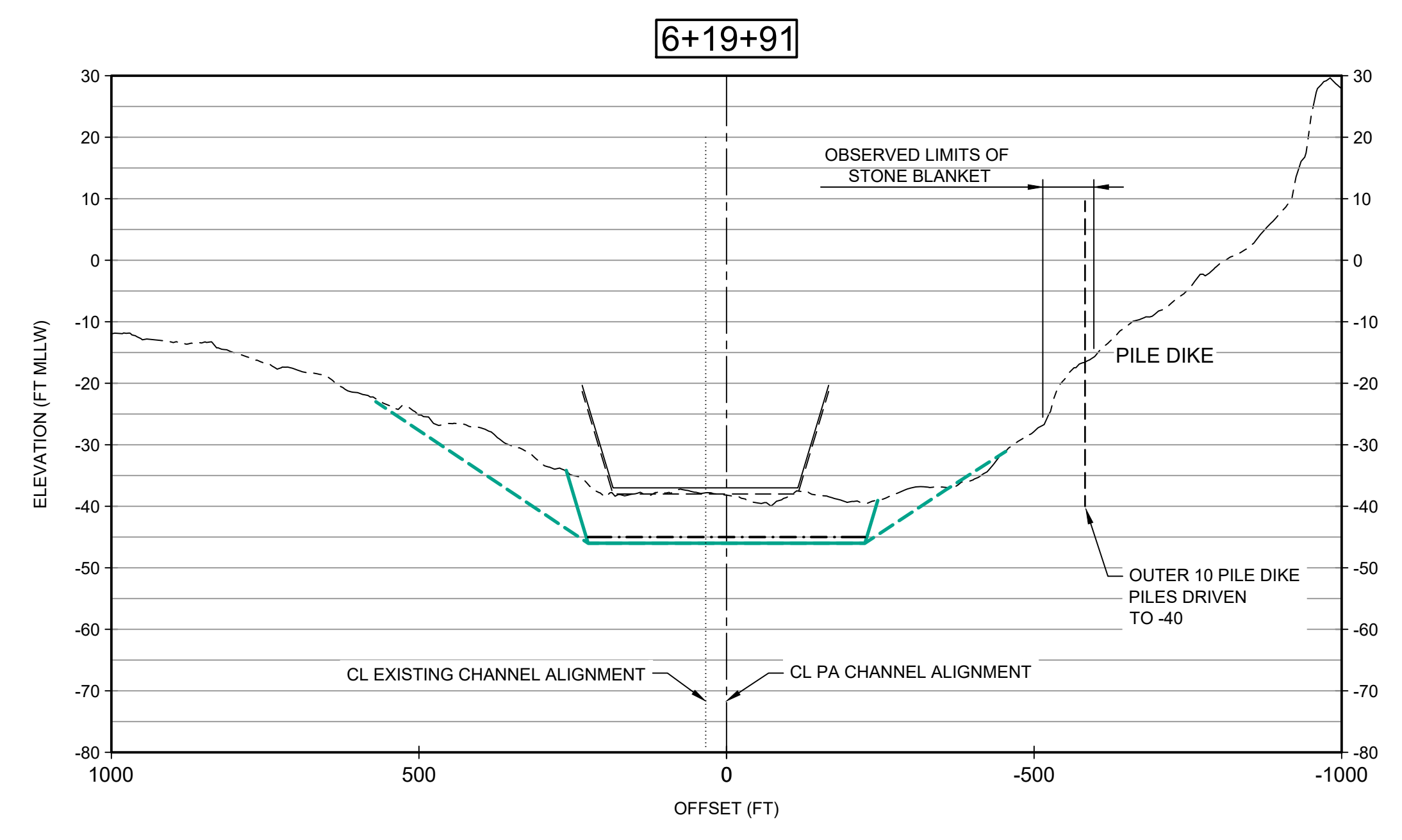
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 DRAWN BY: **EC**
 CHECKED BY: **EC**
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 CONTRACT NO.:
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 SIZE:

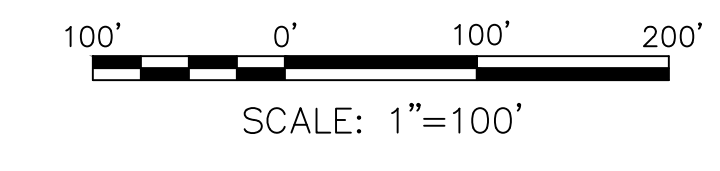
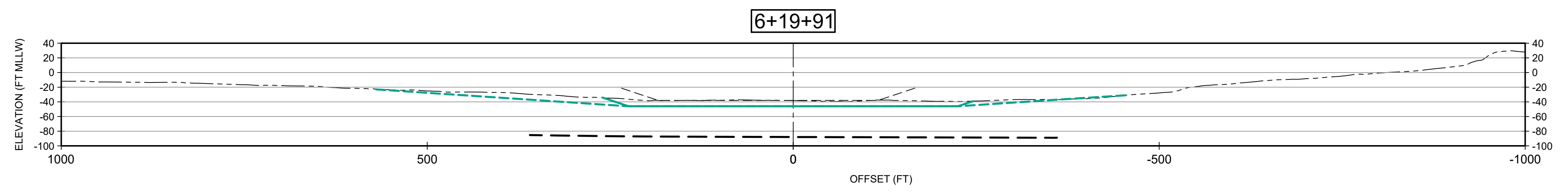
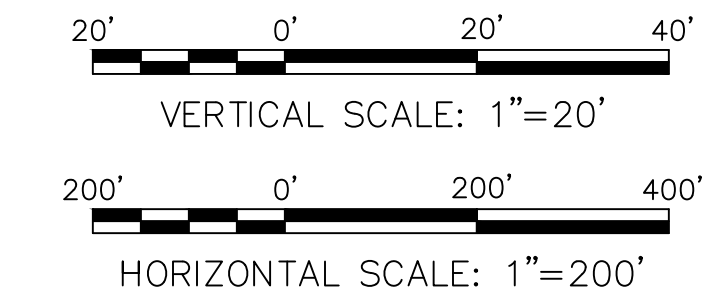
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (157 OF 185)

SHEET IDENTIFICATION
FIG-158
 INDEX 158 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

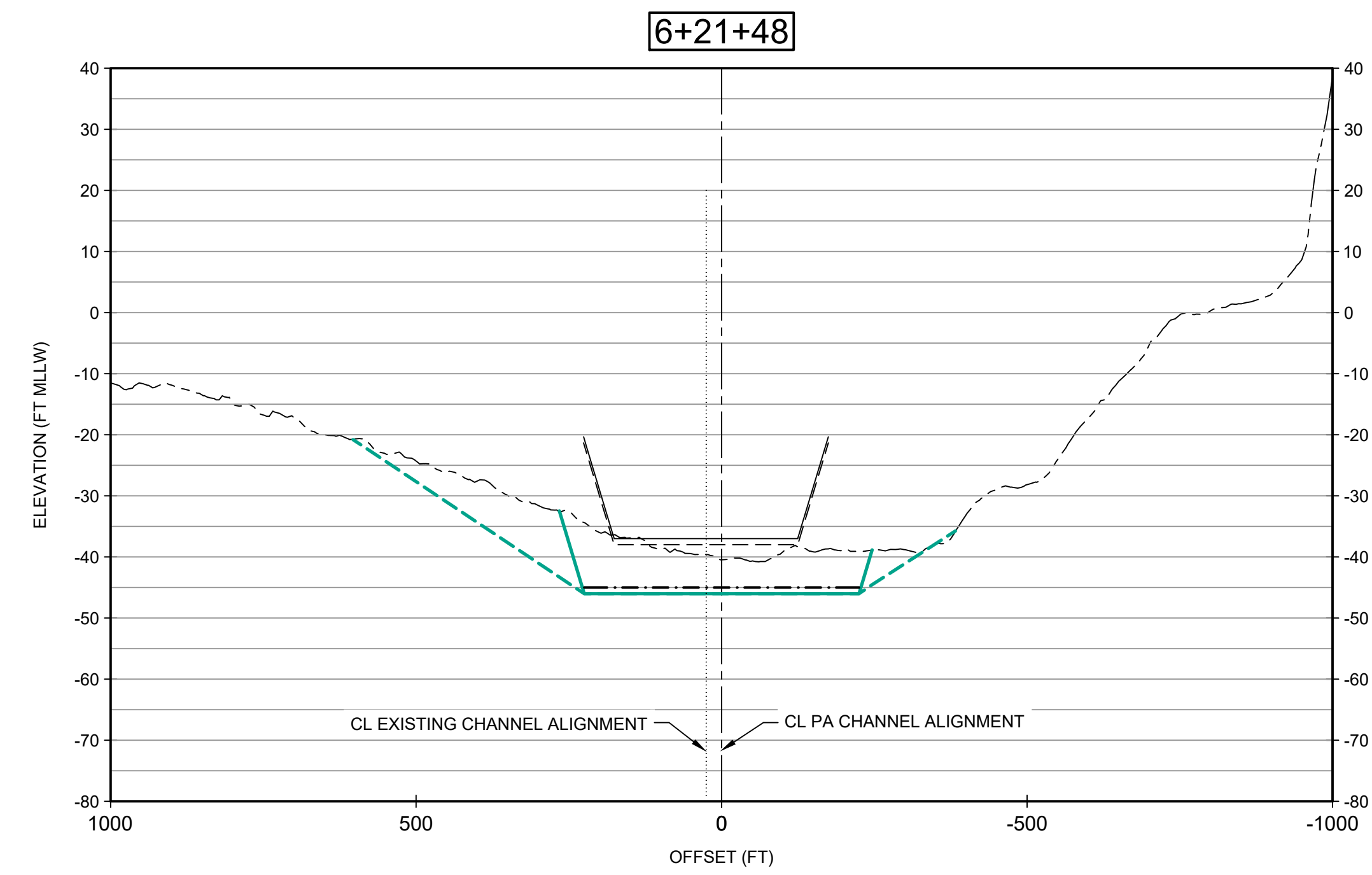
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DRAWN BY: E.C.
CHECKED BY: E.C.
DATE: 2016/07/11

SUBMITTED BY: H.P.
CONTRACT NO.:
FILE NAME:
SIZE:
PLOT SCALE:
PLOT DATE:
DRAWING NUMBER:
MARK:

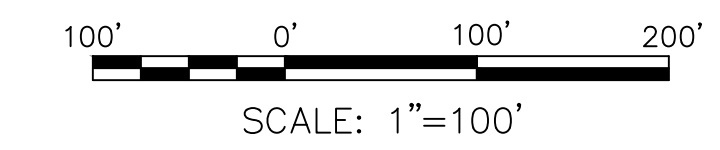
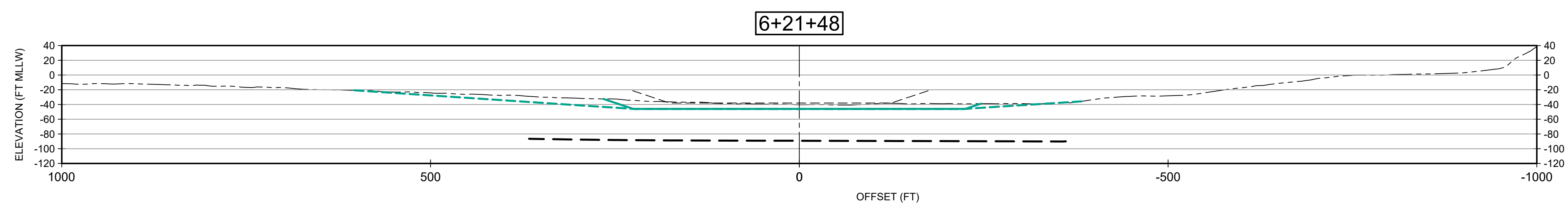
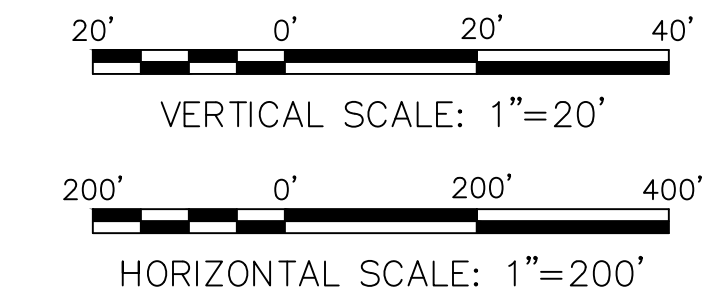
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (158 OF 185)

SHEET IDENTIFICATION
FIG-159
 INDEX 159 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: H.P.
DRAWN BY: E.C.
CHECKED BY: E.C.
DATE: 2016/07/11

CONTRACT NO.:
DRAWING NUMBER:
FILE NAME:

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COOS BAY CHANNEL MODIFICATION
CROSS SECTION (159 OF 185)

SHEET IDENTIFICATION
FIG-160
 INDEX 160 OF 186

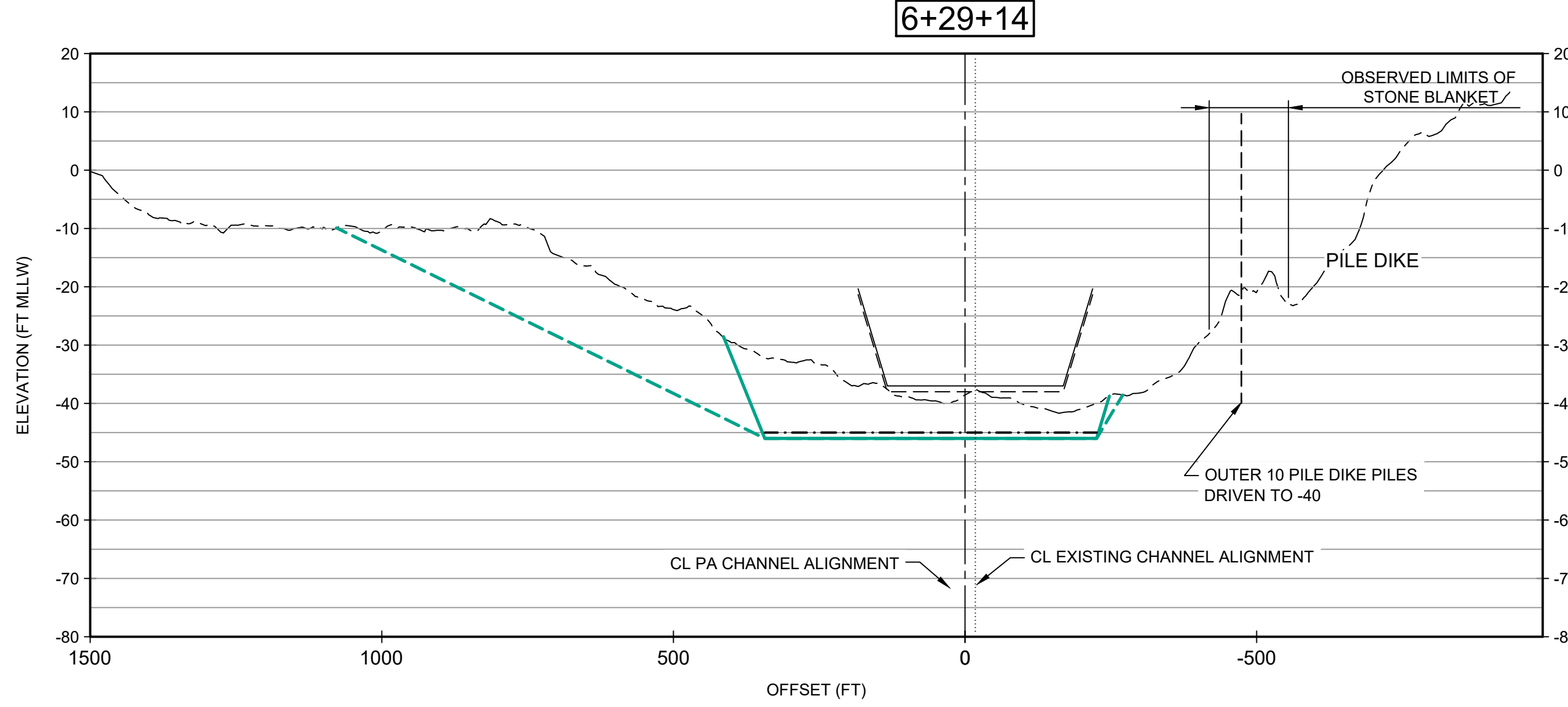
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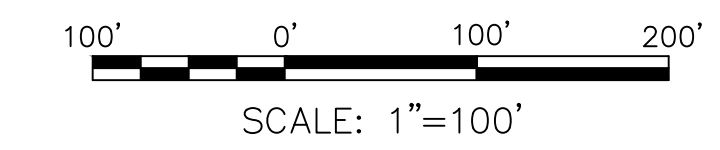
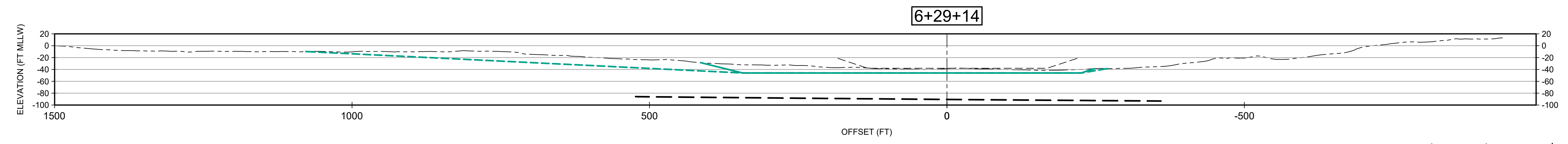
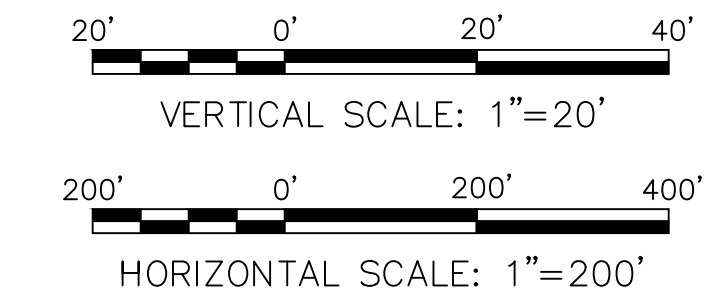
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (160 OF 185)

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SHEET IDENTIFICATION
FIG-161
INDEX 161 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



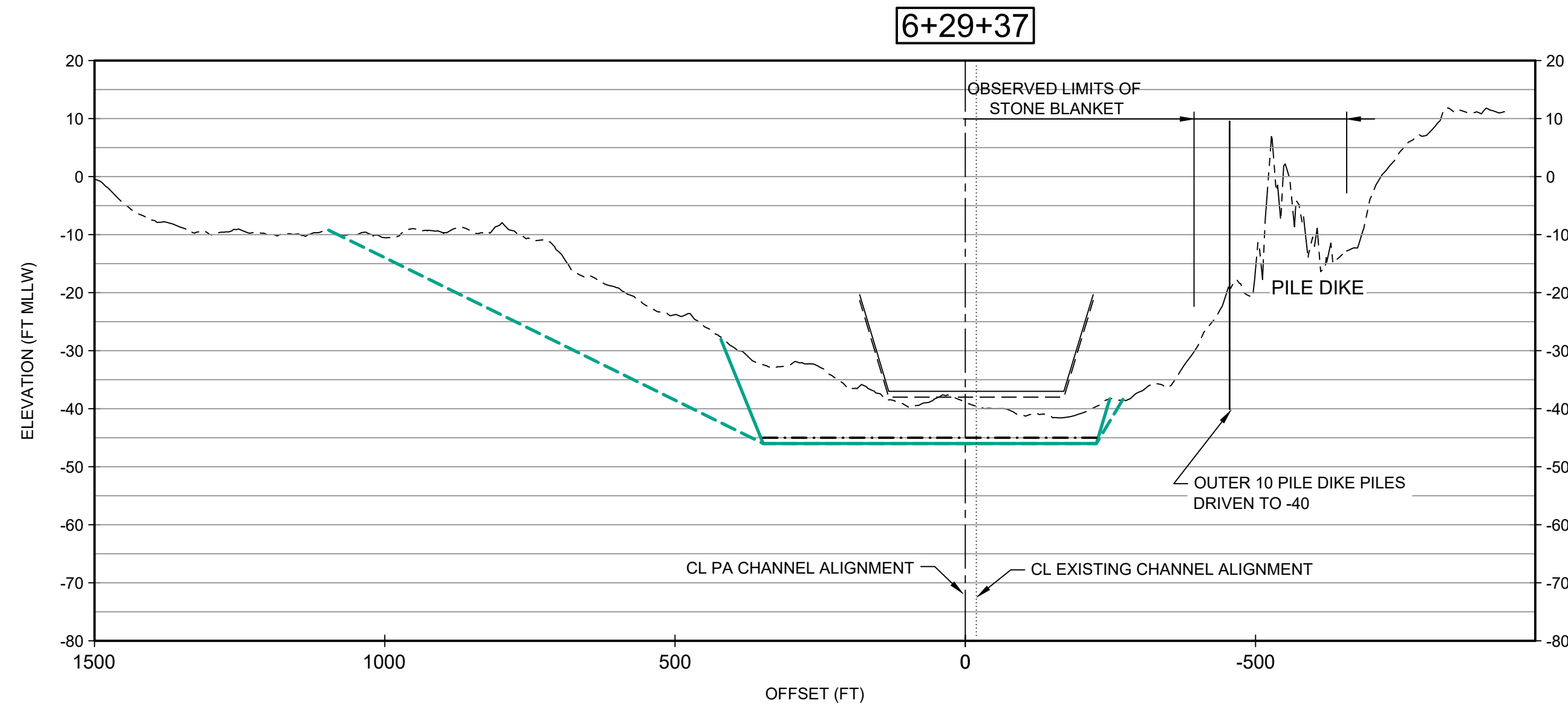
LEGEND

—————	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
.....	PA CHANNEL LIMITS	—————	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—————	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

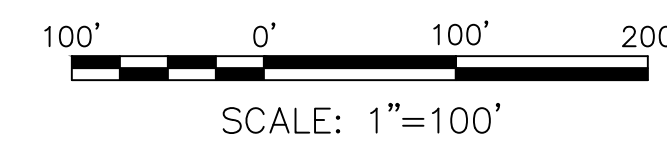
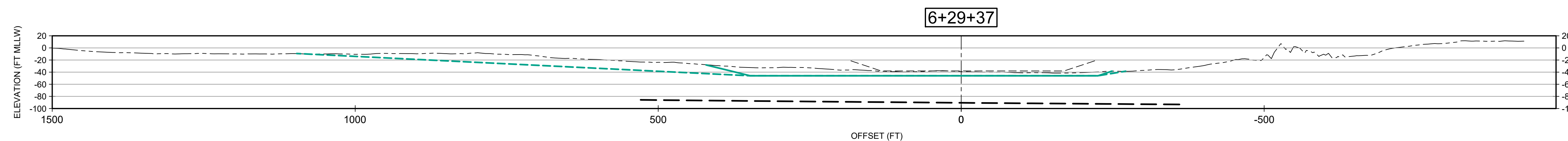
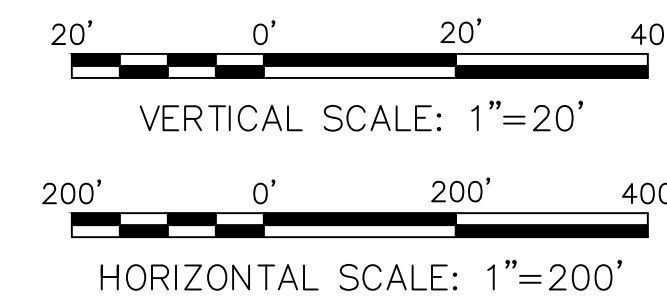
- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- . - . - . PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: **ANALYSED BY:** **CHECKED BY:** **DATE:** 2016/07/11

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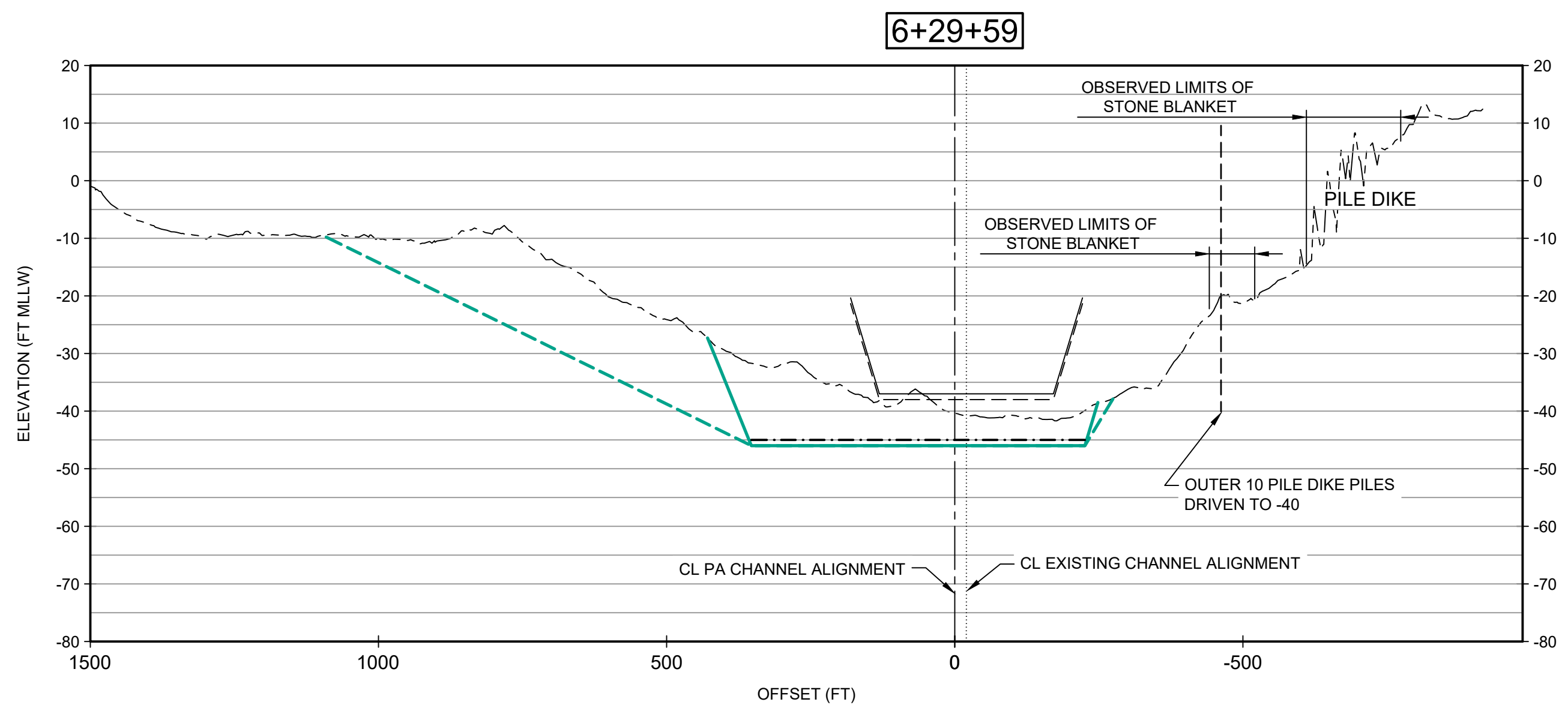
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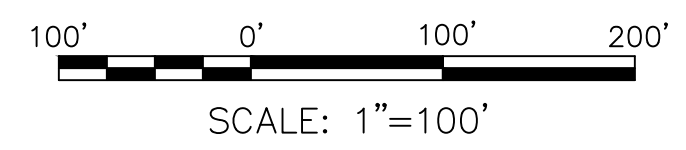
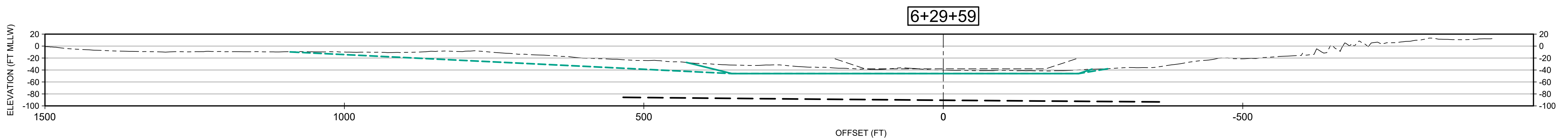
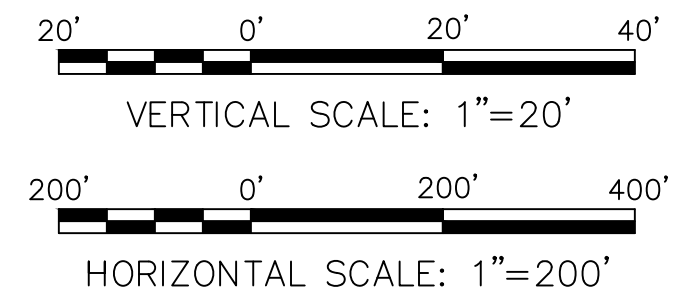
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (161 OF 185)

SHEET IDENTIFICATION
FIG-162
INDEX 162 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

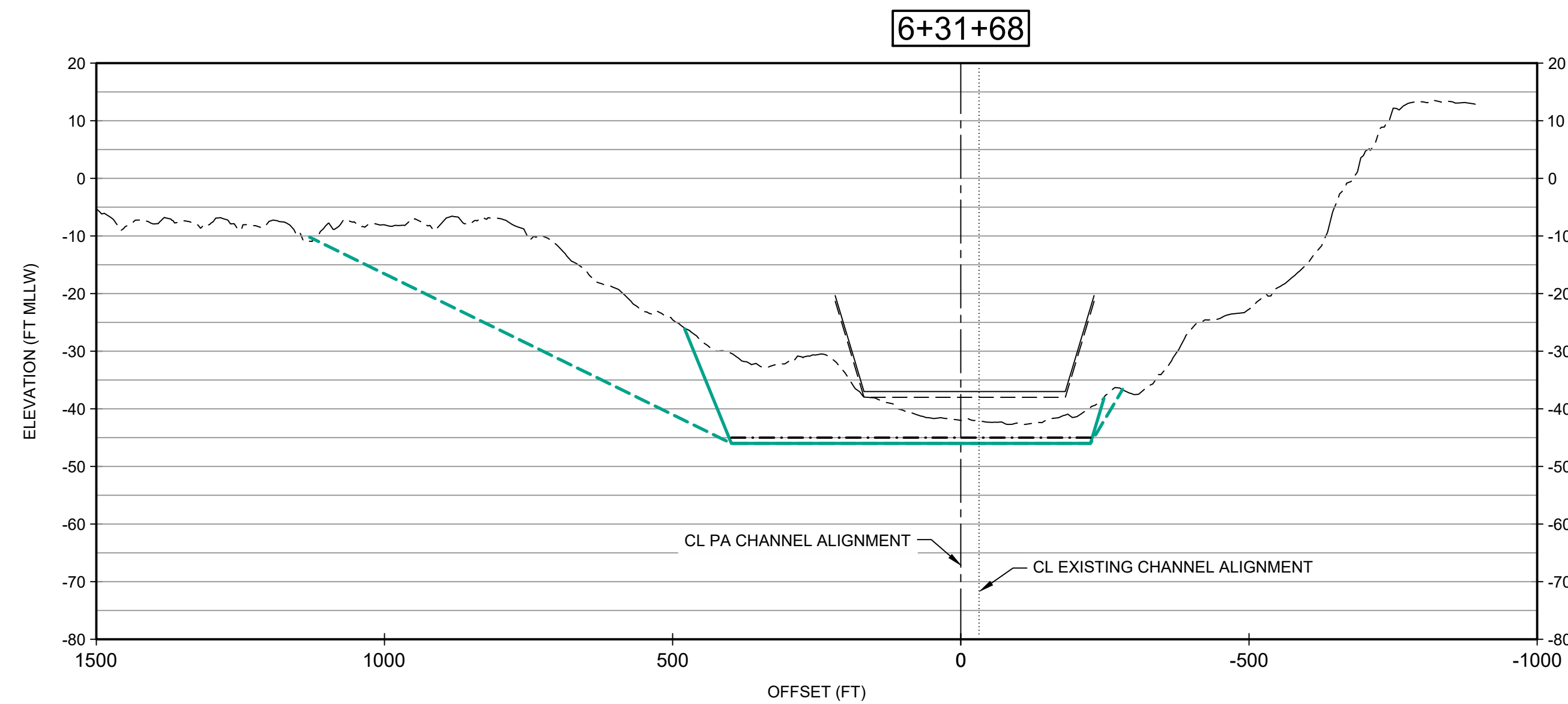
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DESIGNED BY: **HP** DATE: 2016/07/11
 DRAWN BY: **EC** CHECKED BY: **EC** SOLICITATION NO.:
 SUBMITTED BY: **HP** CONTRACT NO.:
 PLOT SCALE: **1"=200'** PLOT DATE: DRAWING NUMBER:
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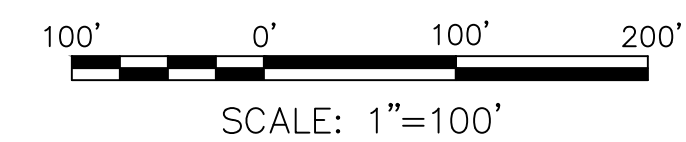
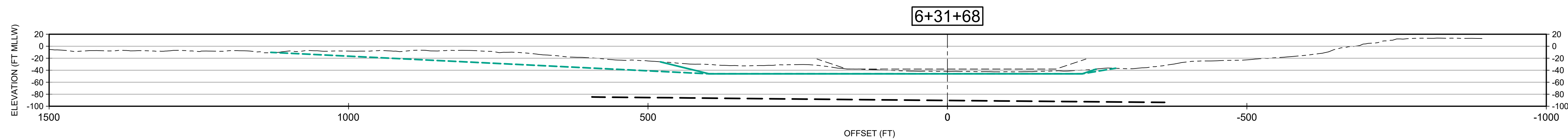
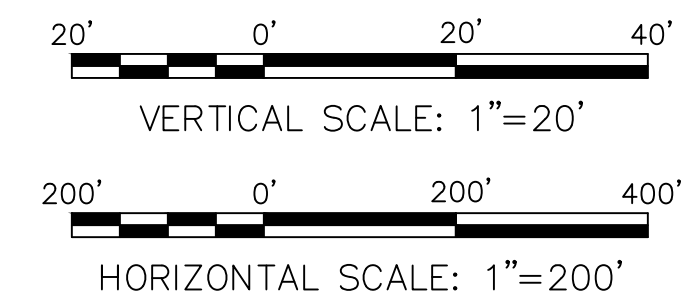
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (162 OF 185)

SHEET IDENTIFICATION
FIG-163
 INDEX 163 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- . - . - . PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

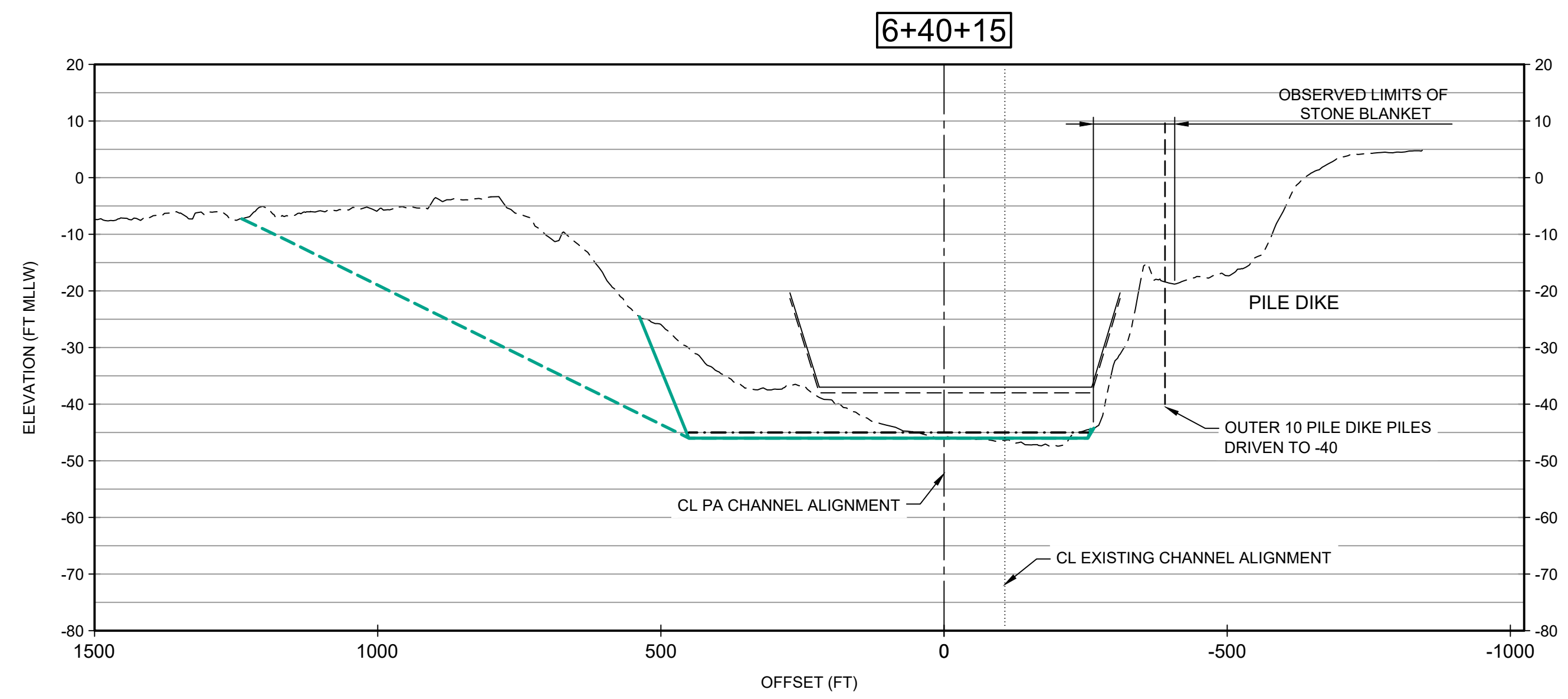
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

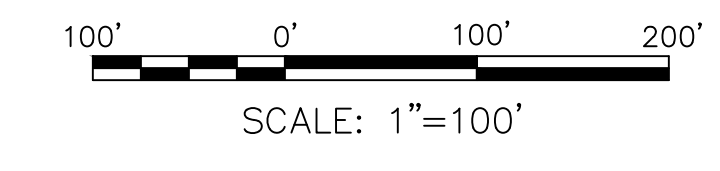
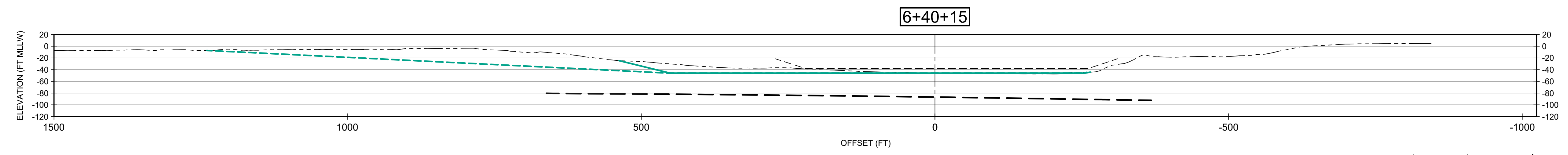
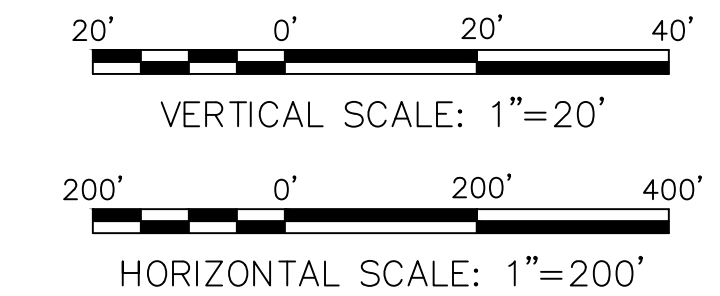
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DRAWN BY: EC
CHECKED BY: EC
DATE: 2016/07/11
SUBMITTED BY: HJP
CONTRACT NO.:
FILE NAME:
PLOT SCALE:
FILE NAME:
SIZE:
PLOT DATE:
DRAWING NUMBER:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (163 OF 185)
SHEET IDENTIFICATION
FIG-164
 INDEX 164 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—————	EXISTING AUTHORIZED CHANNEL LIMITS	-----	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - ·	PA CHANNEL LIMITS	— — — —	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—————	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

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DESIGNED BY: DATE: 2016/07/11
 DRAWN BY: H.P. CHECKED BY: EC SOLICITATION NO.:
 SUBMITTED BY: PLOT SCALE: PLOT DATE: CONTRACT NO.:
 SIZE: FILE NAME: DRAWING NUMBER:

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (164 OF 185)

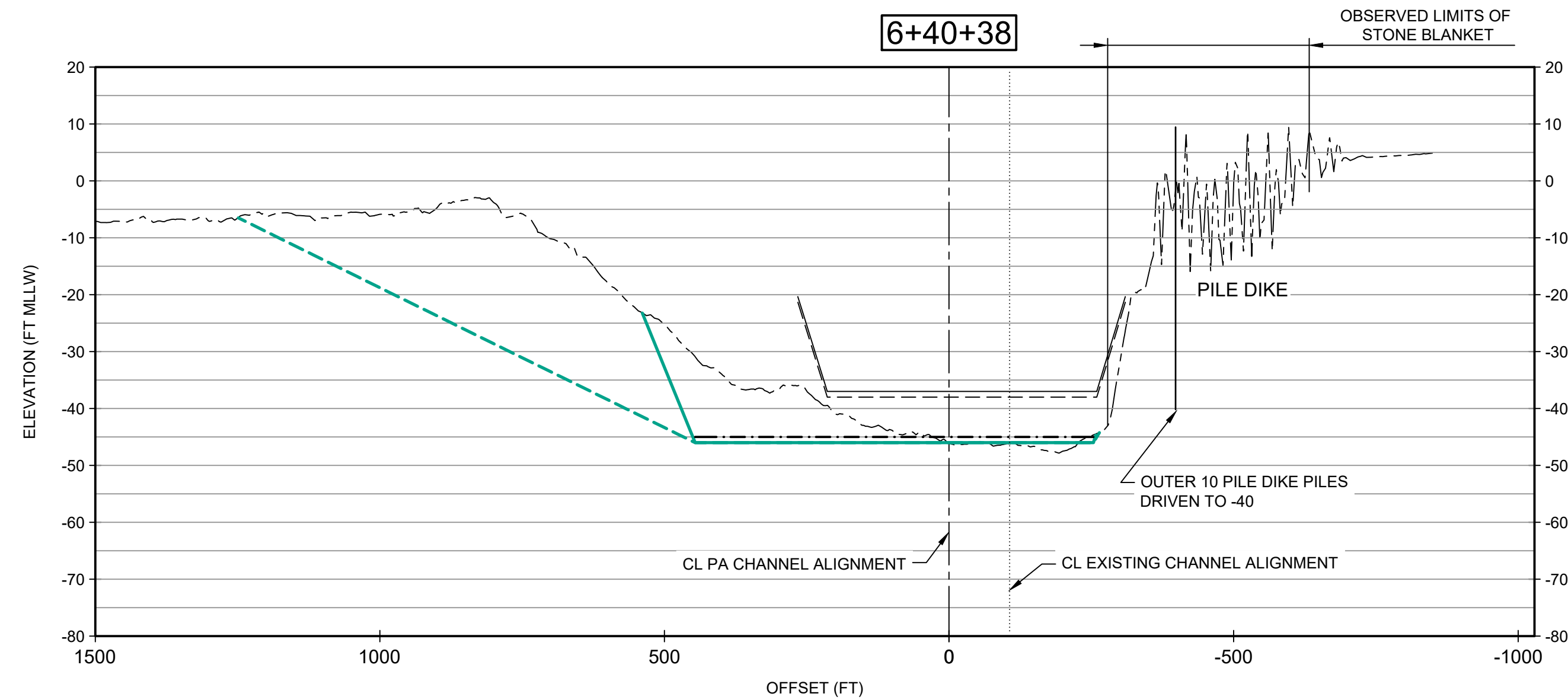
SHEET IDENTIFICATION
FIG-165
 INDEX 165 of 186

D

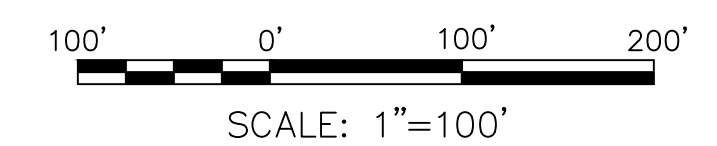
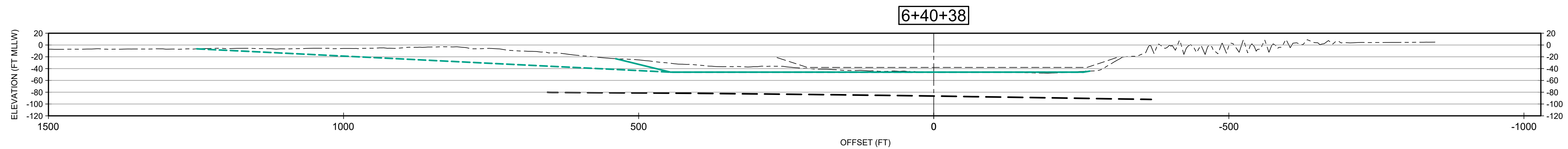
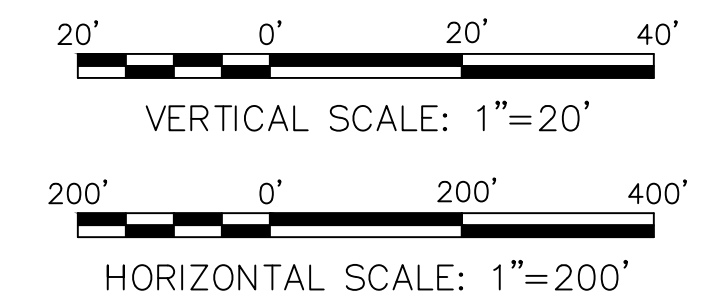
C

B

A



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

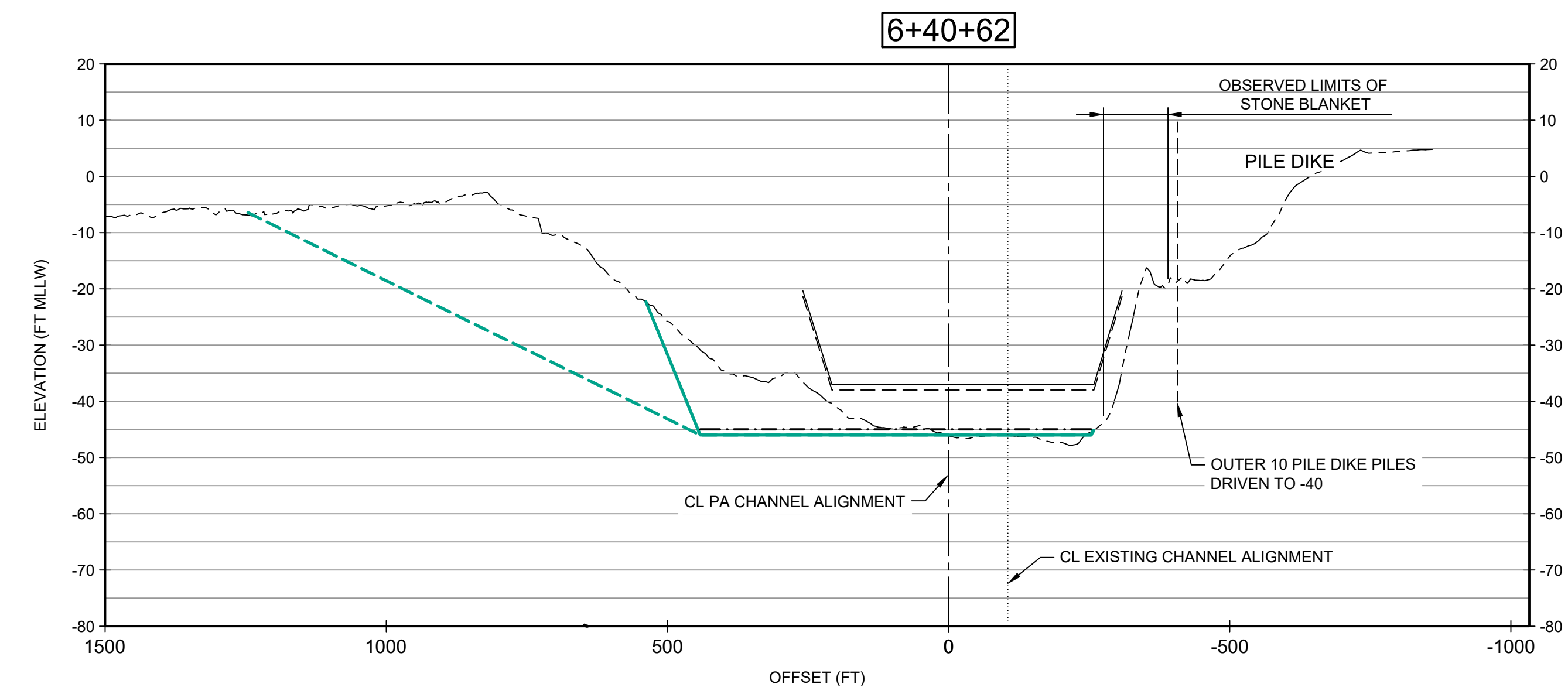
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 DRAWN BY: H.P. CHECKED BY: E.C. SOLICITATION NO.:
 SUBMITTED BY: CONTRACT NO.:
 PLOT SCALE: PLOT DATE: DRAWING NUMBER:
 SIZE: FILE NAME:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (165 OF 185)

SHEET IDENTIFICATION
FIG-166
 INDEX 166 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active\XS_SubAppendix\FIG-166-CROSS SECTIONS; Plotted: 5/20/2024 5:36 PM by LANDON, KYLE; Saved: 5/23/2024 9:04 AM by OAPONTE



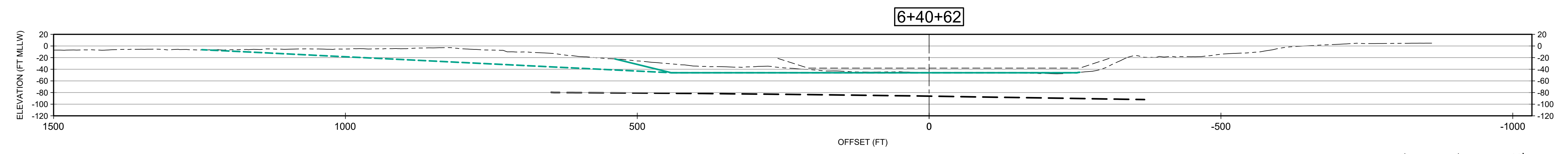
EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

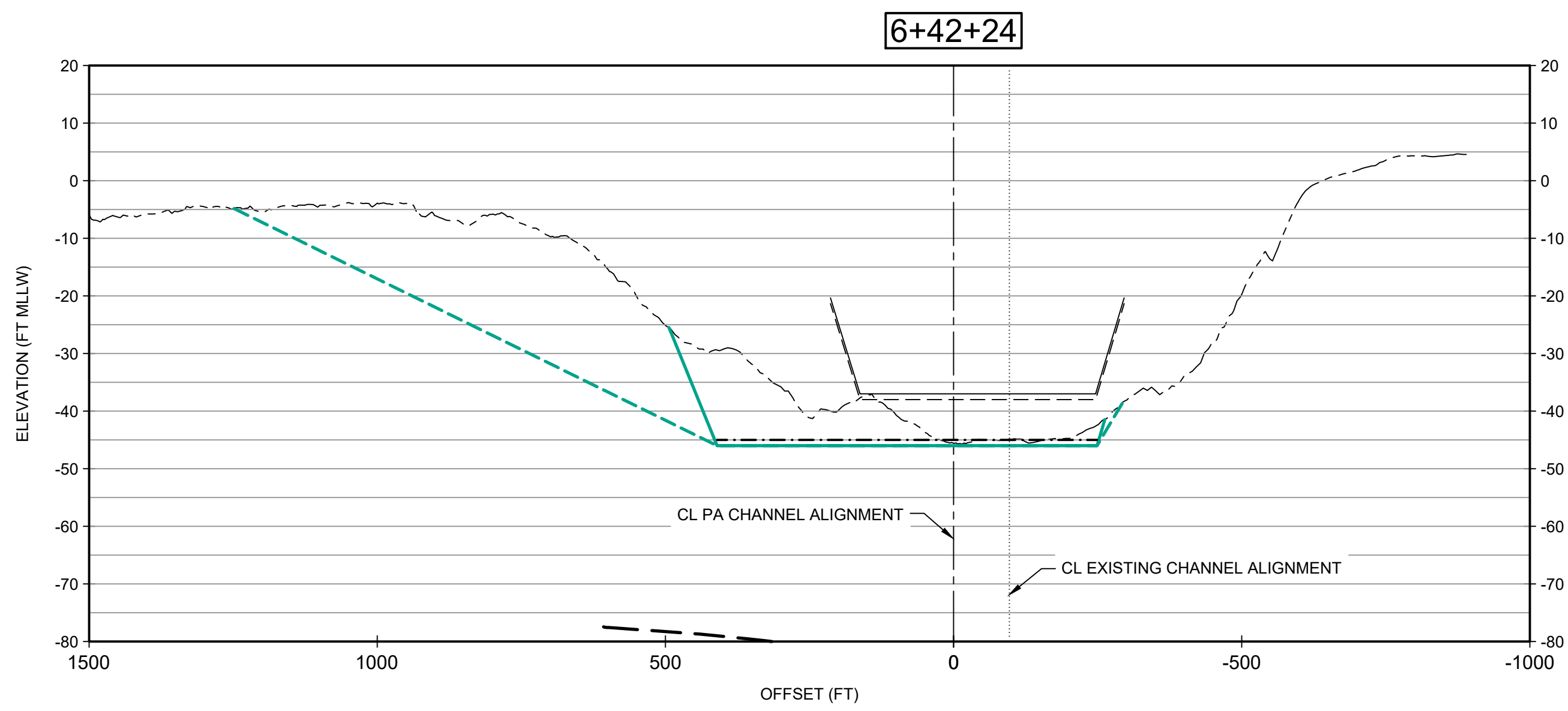
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 DRAWN BY: []
 CHECKED BY: []
 SUBMITTED BY: []

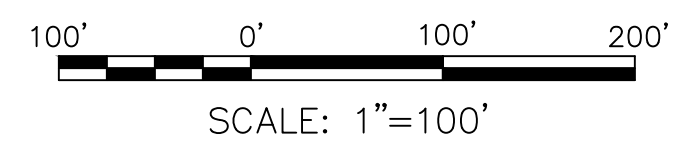
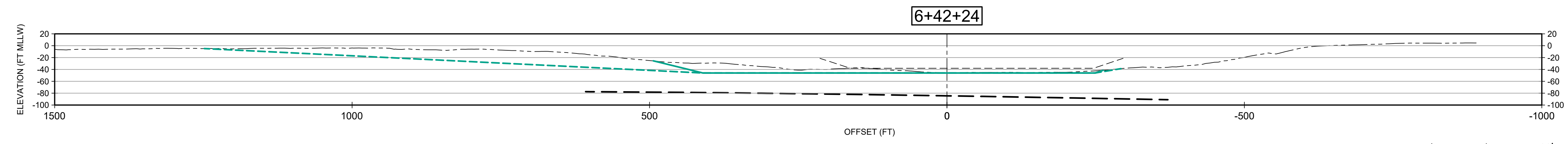
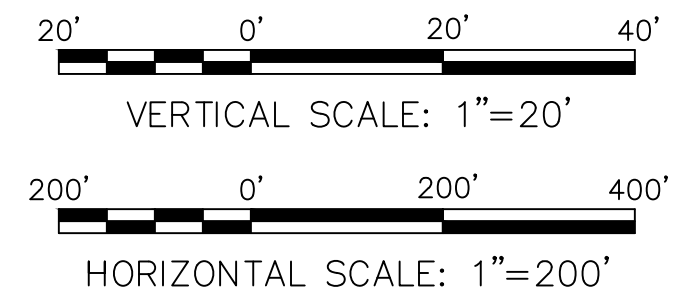
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 DRAWING NUMBER: []

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (166 OF 185)

SHEET IDENTIFICATION
FIG-167
 INDEX 167 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00




LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)


FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	DATE	APPR.

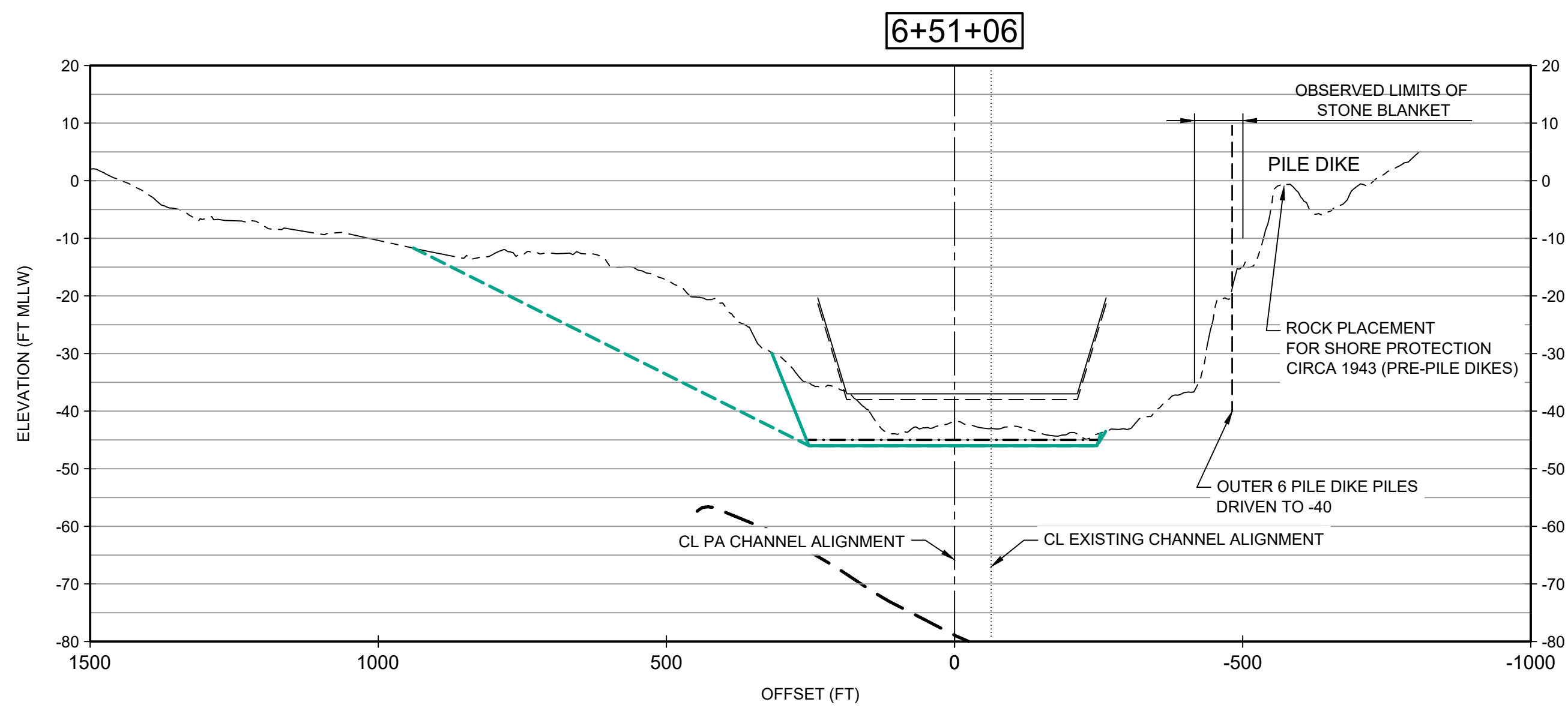
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SUBMITTED BY:	PLOT SCALE:	PLOT DATE:	CONTRACT NO.:
FILE NAME:	SIZE:	DRAWING NUMBER:	



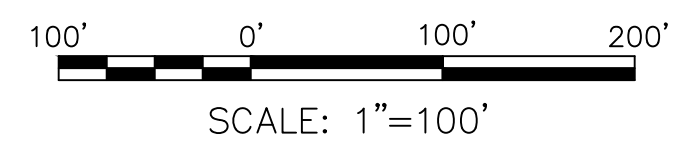
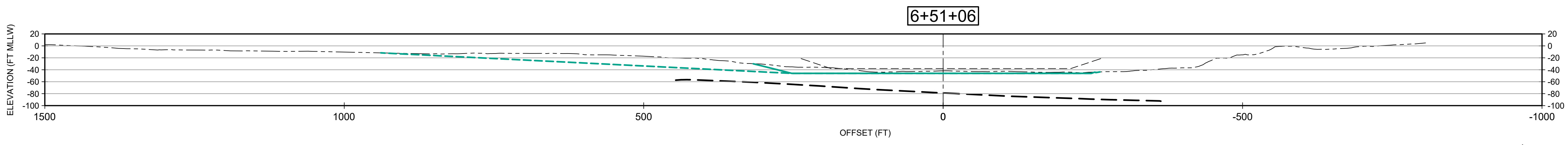
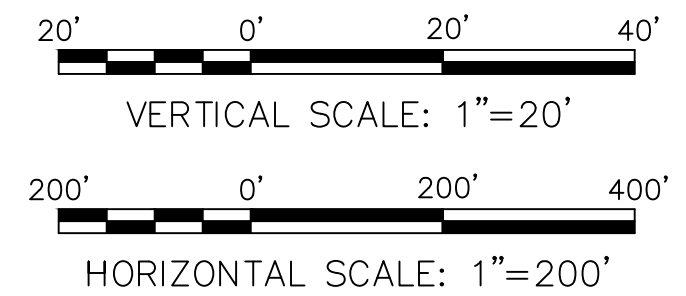
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (167 OF 185)

SHEET IDENTIFICATION
FIG-168
INDEX 168 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: HJP
DRAWN BY: EC
CHECKED BY: EC
DATE: 2016/07/11
SUBMITTED BY: EC
CONTRACT NO.:
PLOT SCALE:
FILE NAME:
FILE SIZE:
PLOT DATE:
DRAWING NUMBER:

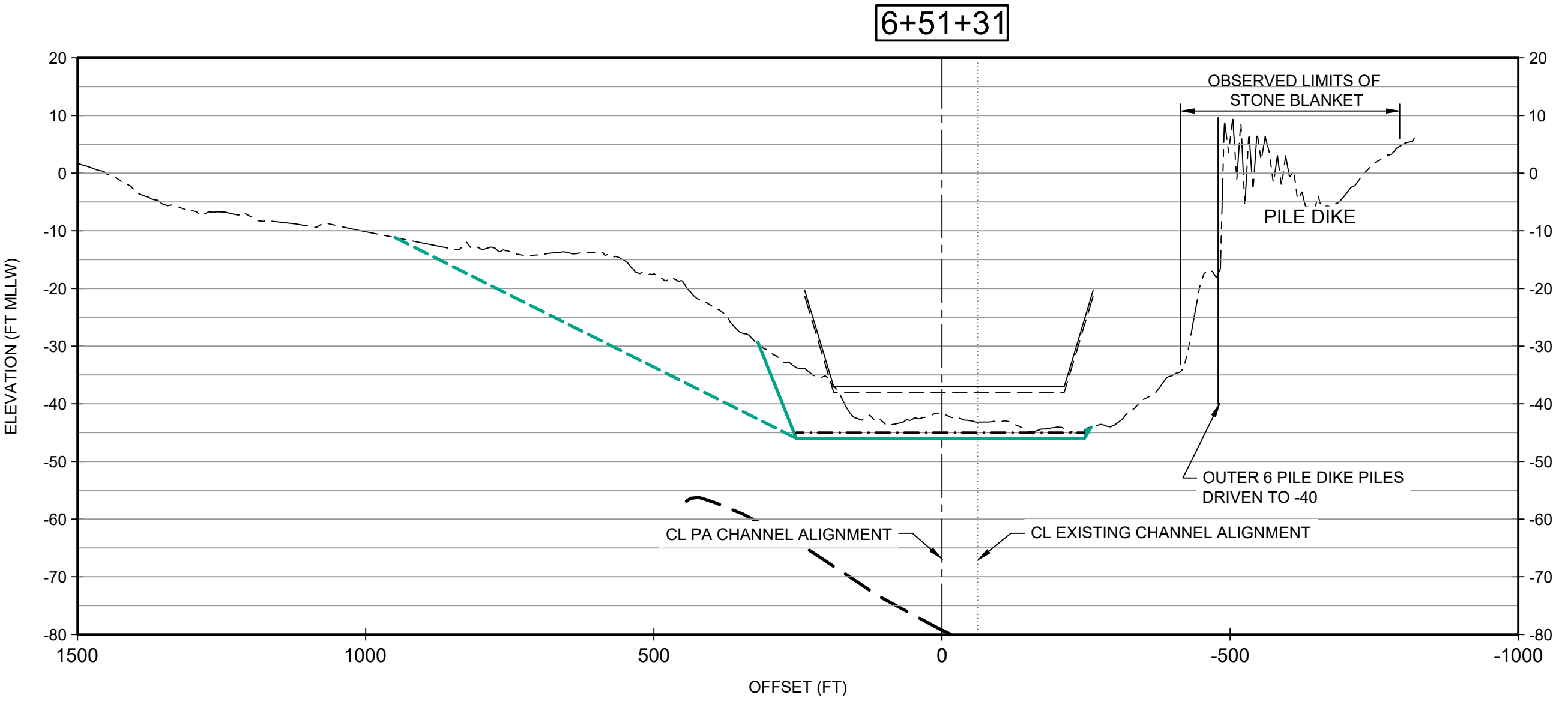
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (168 OF 185)

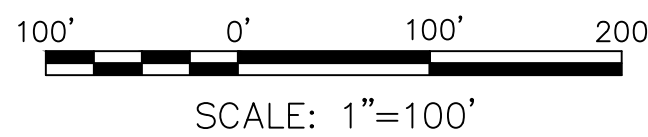
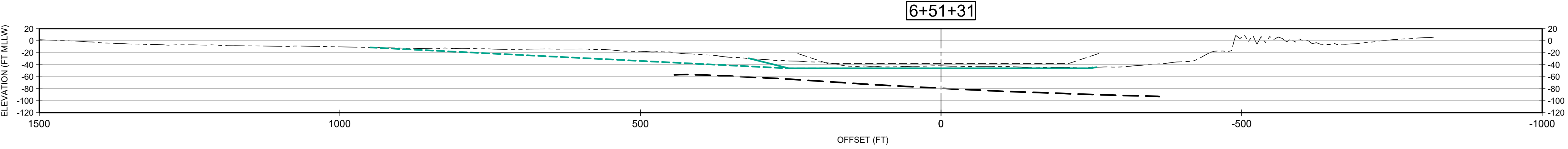
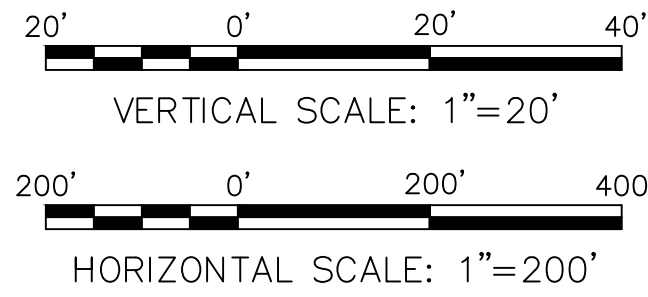
SHEET IDENTIFICATION
FIG-169
 INDEX 169 of 186



MARK	DESCRIPTION	DATE	APPR.



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

———	EXISTING AUTHORIZED CHANNEL LIMITS	— · — · —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	— · — · —	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
— — — —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- 1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DESIGNED BY: _____ DATE: 2016/07/11

DRAWN BY: HJP CHECKED BY: EC SOLICITATION NO.: _____

SUBMITTED BY: _____ PLOT SCALE: _____ CONTRACT NO.: _____

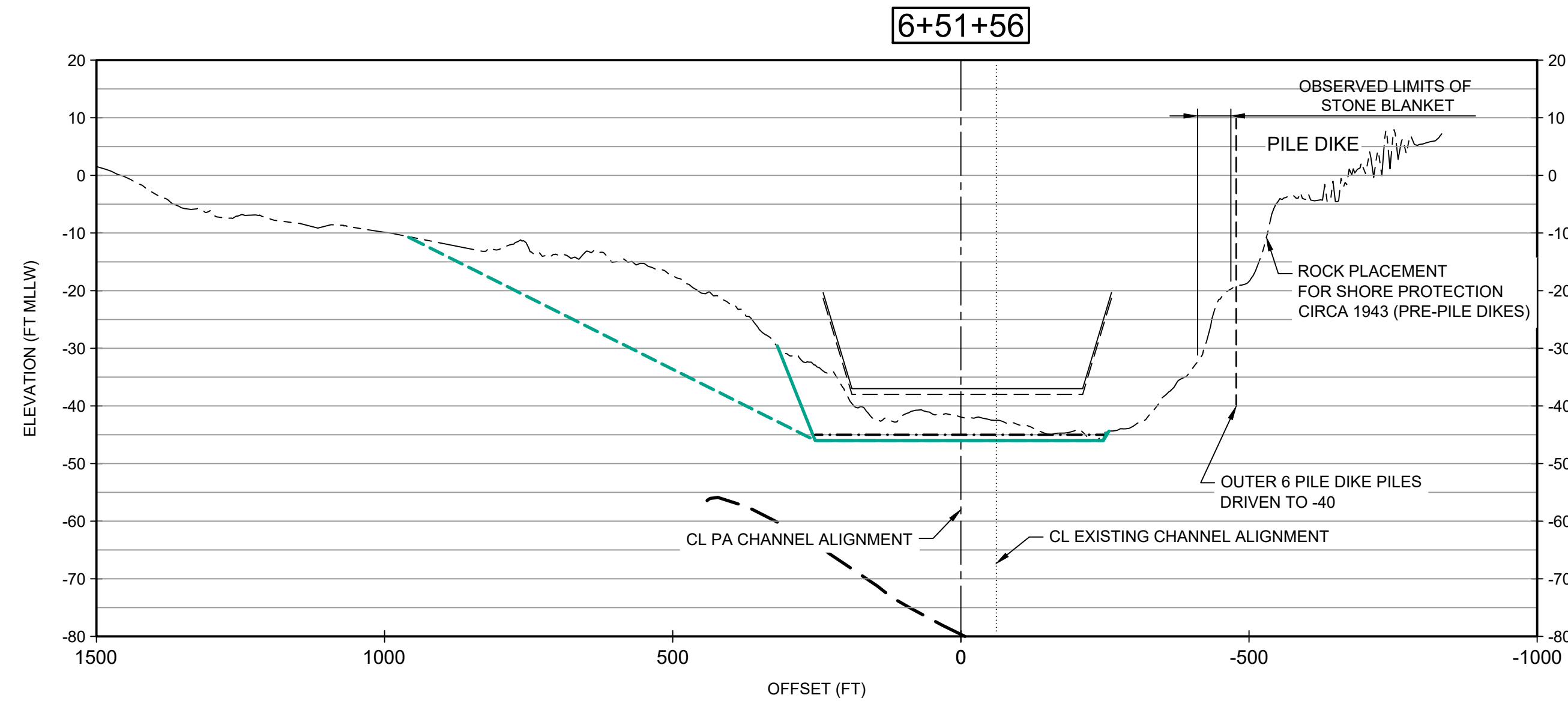
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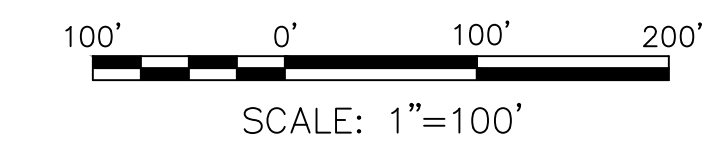
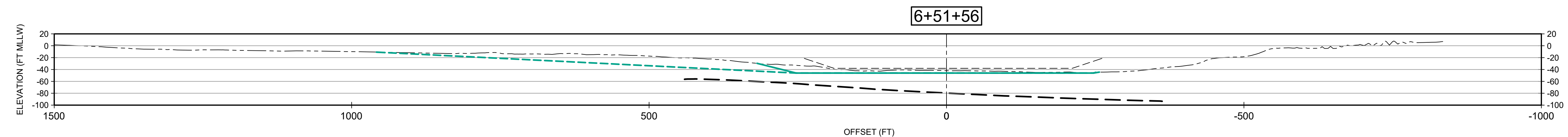
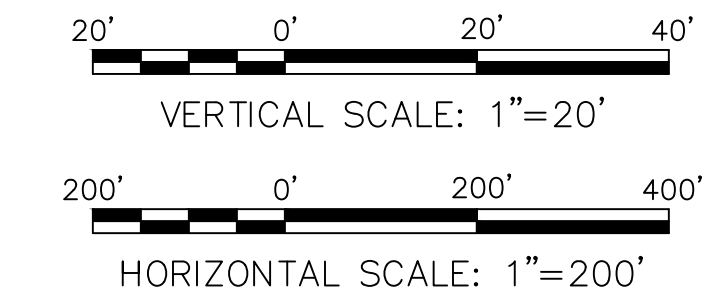
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (169 OF 185)

SHEET IDENTIFICATION
FIG-170
 INDEX 170 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

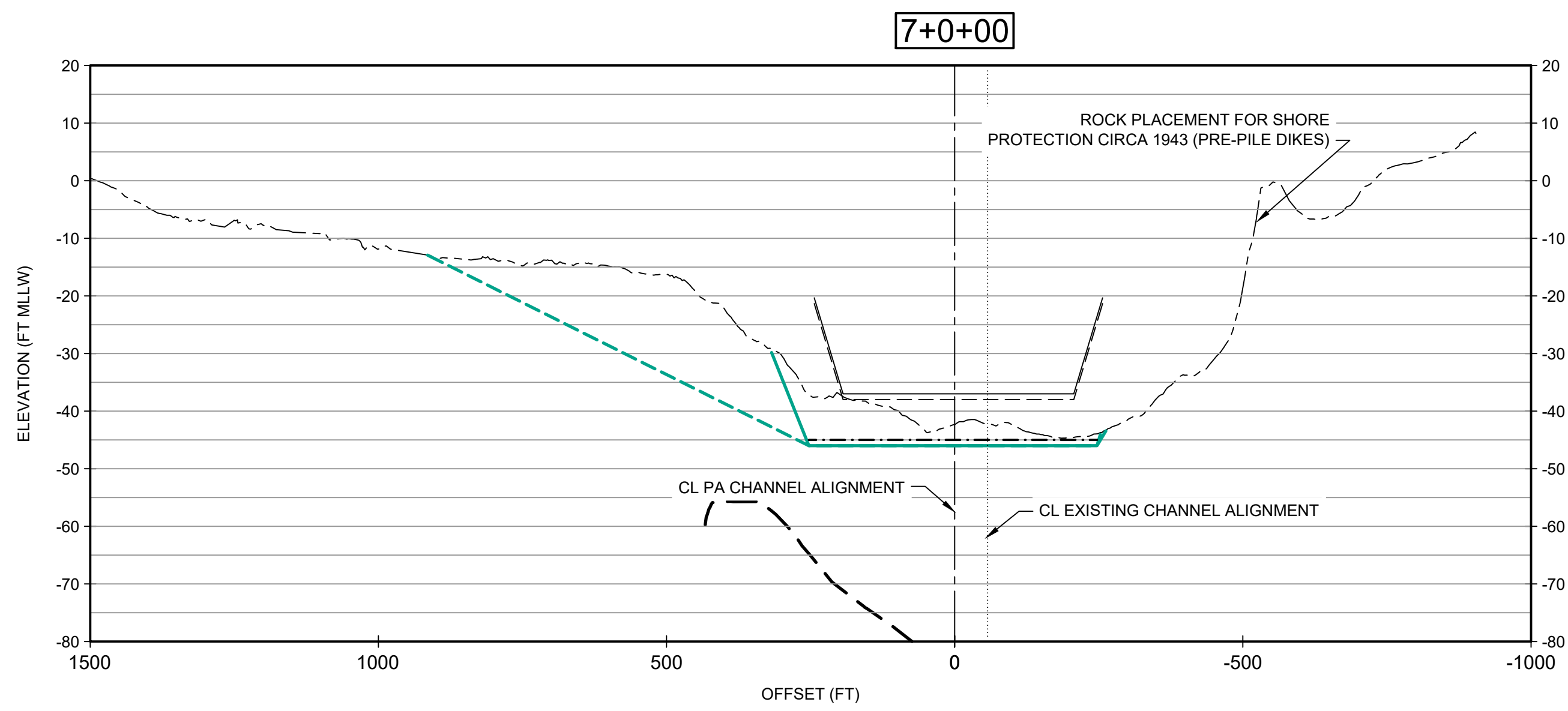
DATE	DESCRIPTION	MARK	APPR.

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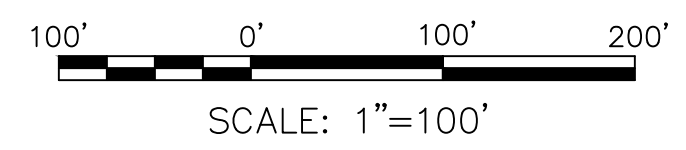
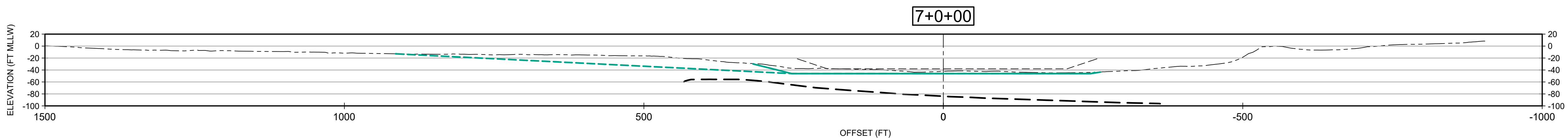
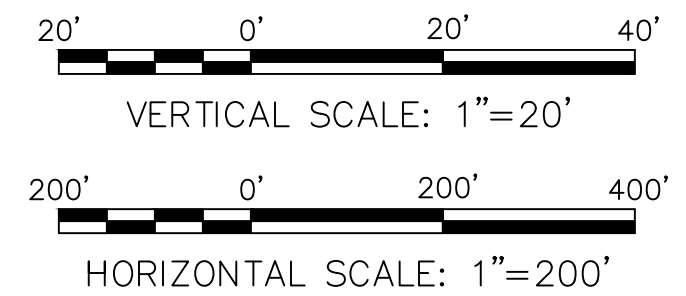
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 DRAWN BY: []
 CHECKED BY: []
 SUBMITTED BY: []
 DATE: 2016/07/11
 SOLICITATION NO.: []
 CONTRACT NO.: []
 PLOT DATE: []
 PLOT SCALE: []
 FILE NAME: []
 SIZE: []
 DRAWING NUMBER: []

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (170 OF 185)

SHEET IDENTIFICATION
FIG-171
 INDEX 171 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	— — — — —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
— — — — —	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

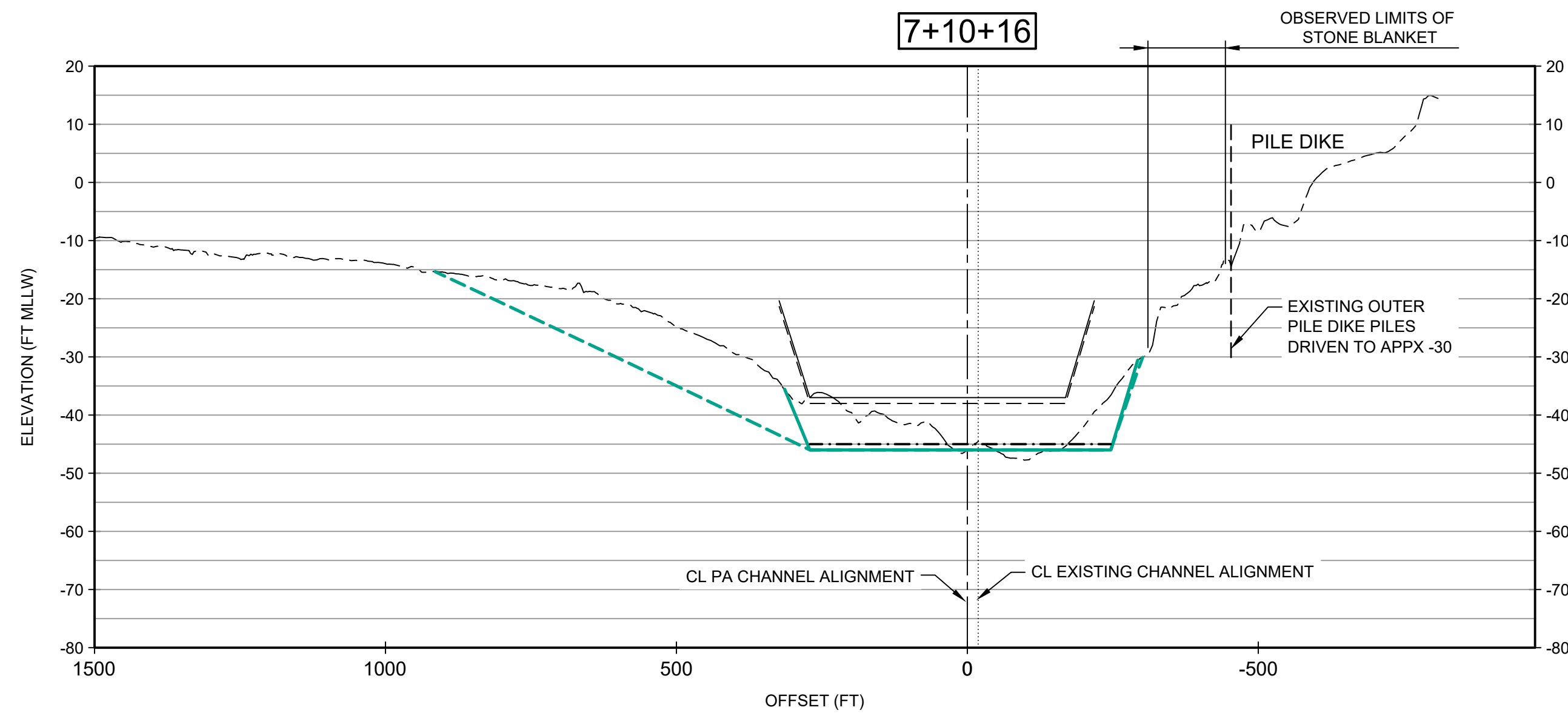
MARK	DESCRIPTION	DATE	APPR.

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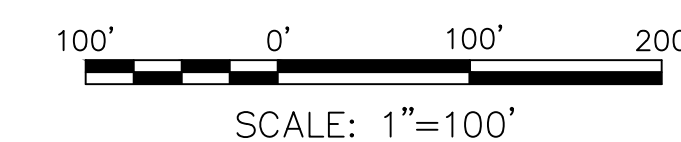
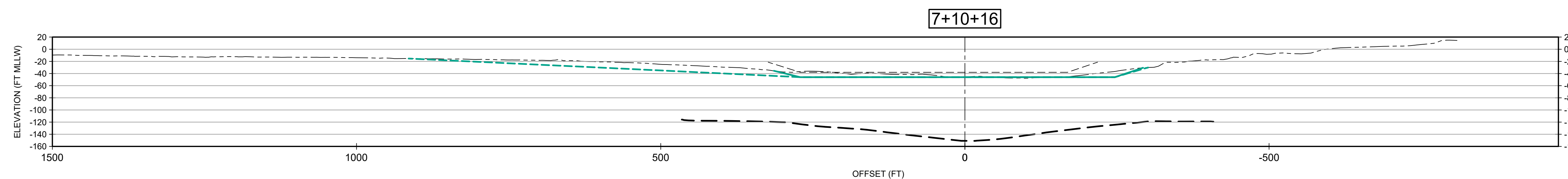
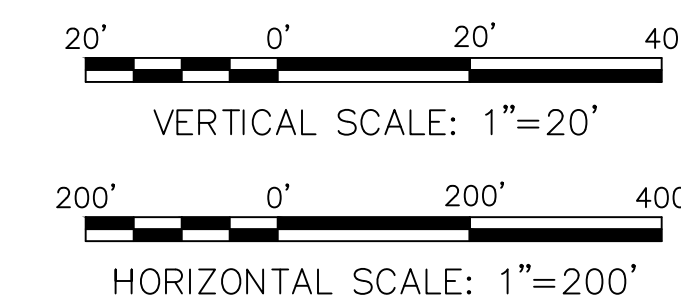
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 CHECKED BY: []
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 CONTRACT NO.: []
 PLOT SCALE: []
 PLOT DATE: []
 DRAWING NUMBER: []
 FILE NAME: []
 SIZE: []

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (171 OF 185)

SHEET IDENTIFICATION
FIG-172
 INDEX 172 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

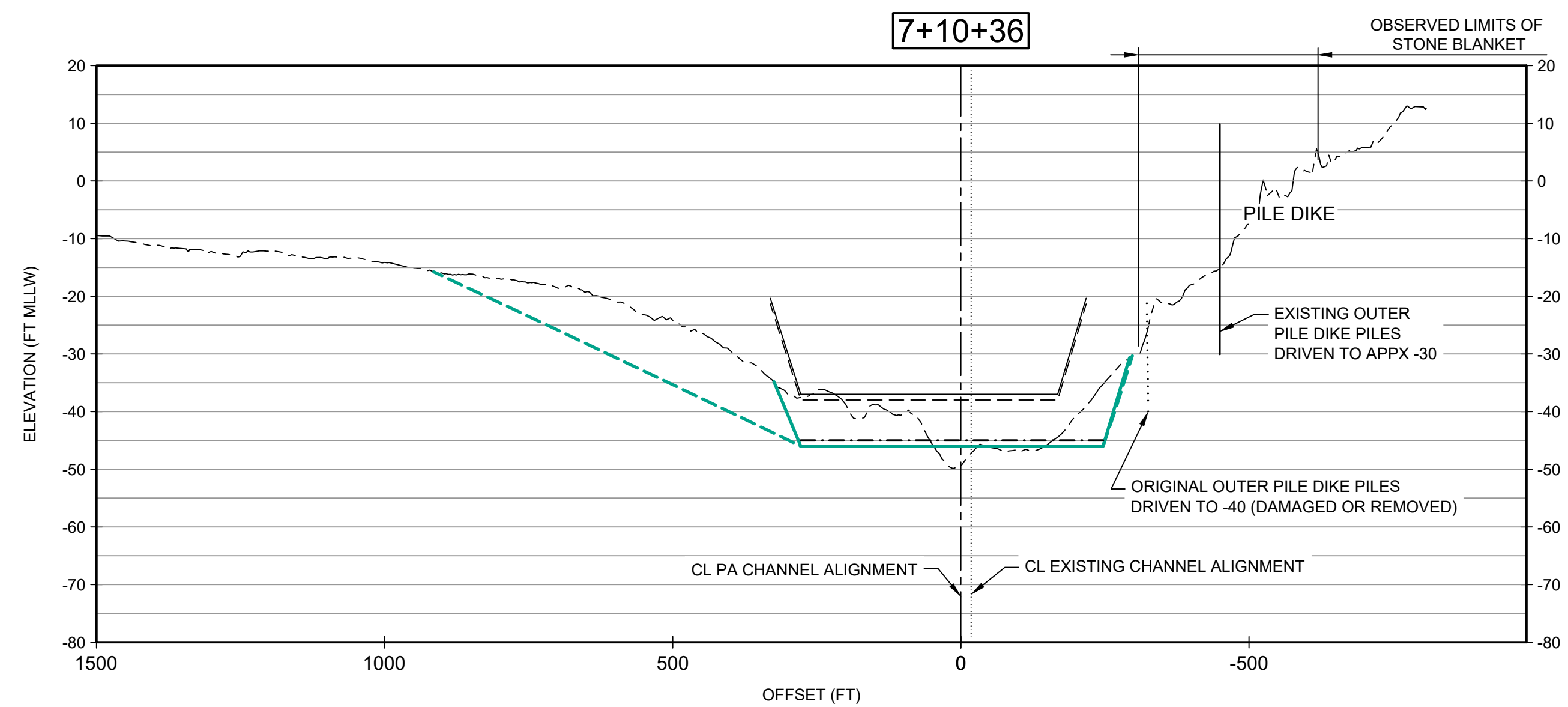


MARK	DESCRIPTION	DATE	APPR.

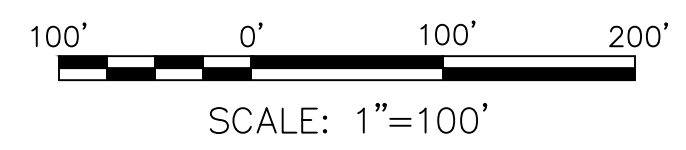
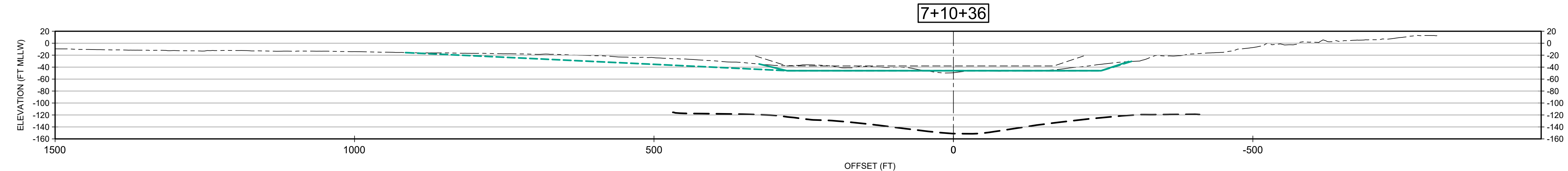
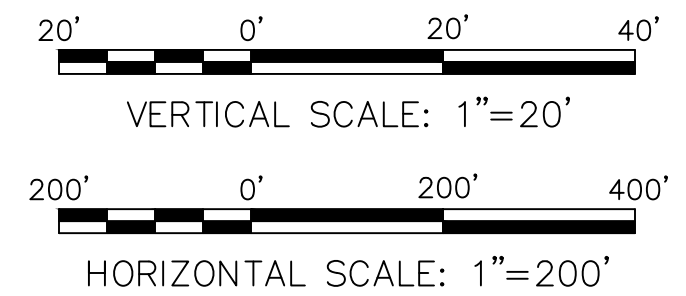
DESIGNED BY: **moffatt & nichol**
 DRAWN BY: H.P.
 CHECKED BY: E.C.
 SUBMITTED BY: **moffatt & nichol**
 PLOT SCALE: 600 UNIVERSITY STREET
 FILE NAME: SEATTLE, WA 98101
 SIZE: (206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (172 OF 185)

SHEET IDENTIFICATION
FIG-173
 INDEX 173 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- · - · - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

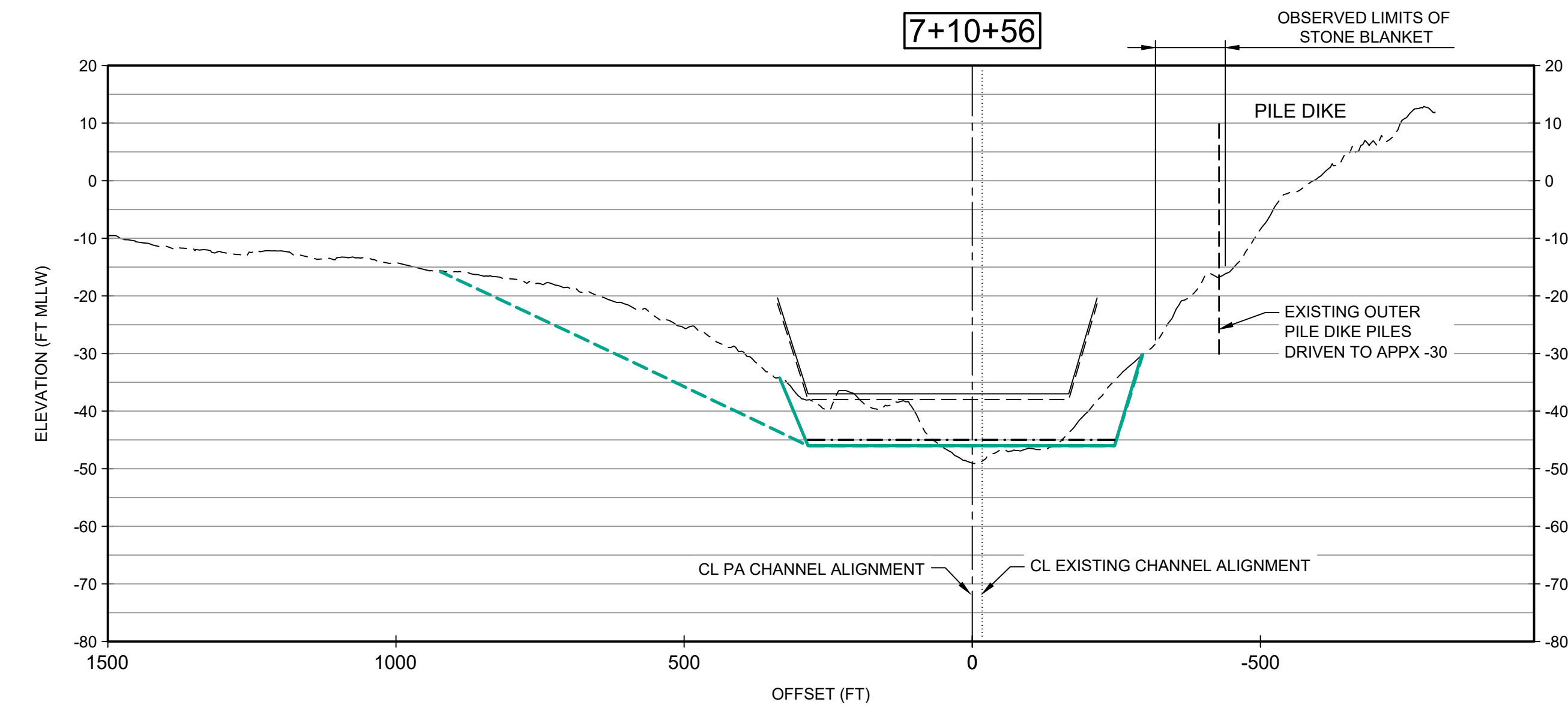
FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

DESIGNED BY:	DATE:	2018/07/11
DRAWN BY:	CHECKED BY:	SOLICITATION NO.:
HP	EC	CONTRACT NO.:
SUBMITTED BY:	PLOT SCALE:	PLOT DATE:
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SIZE:	SIZE:	MARK:

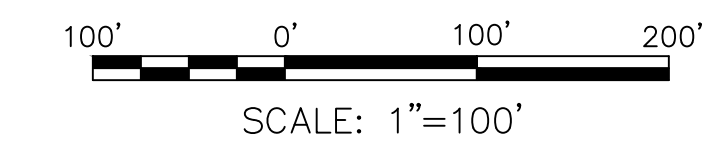
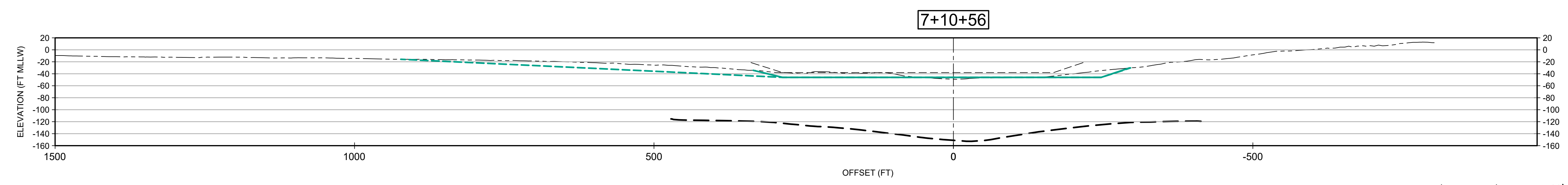
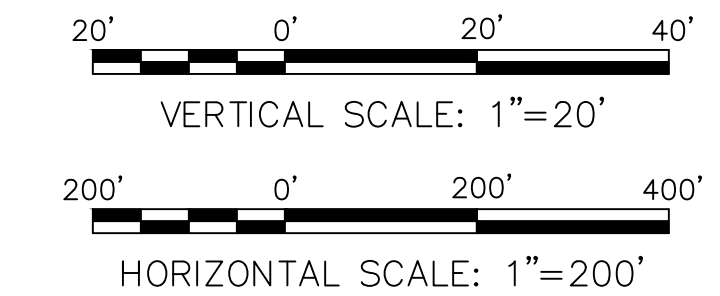
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COOS BAY OREGON
 COOS BAY CHANNEL MODIFICATION
 CROSS SECTION (173 OF 185)

SHEET IDENTIFICATION
FIG-174
 INDEX 174 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	- - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

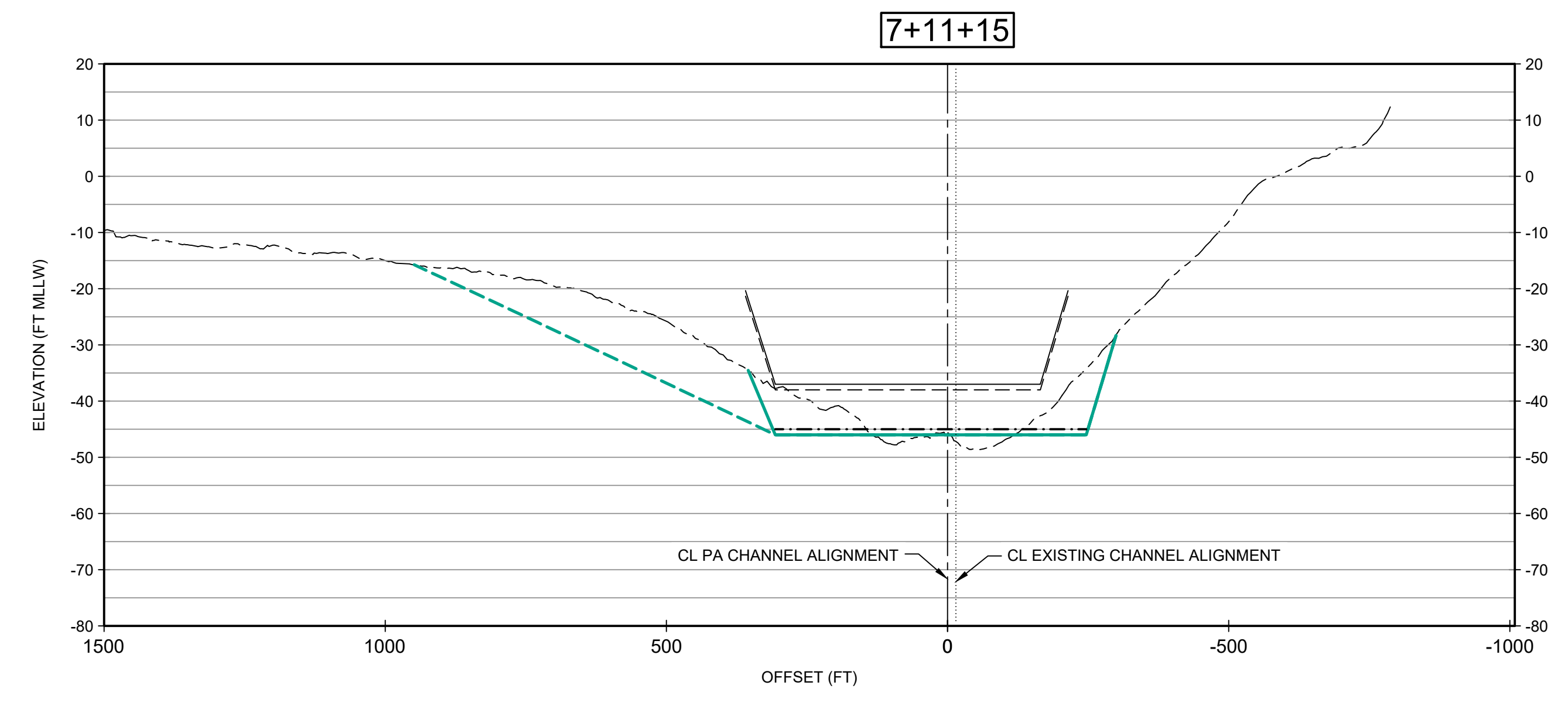
DATE	DESCRIPTION	MARK	APPR.

DESIGNED BY: **HP**
 DRAWN BY: **EC**
 CHECKED BY: **EC**
 SUBMITTED BY: **HP**
 DATE: 2016/07/11
 SOLICITATION NO.:
 CONTRACT NO.:
 PLOT SCALE: **1"=200'**
 PLOT DATE:
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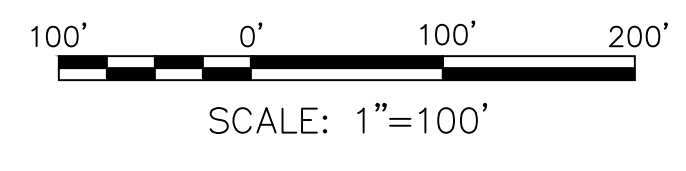
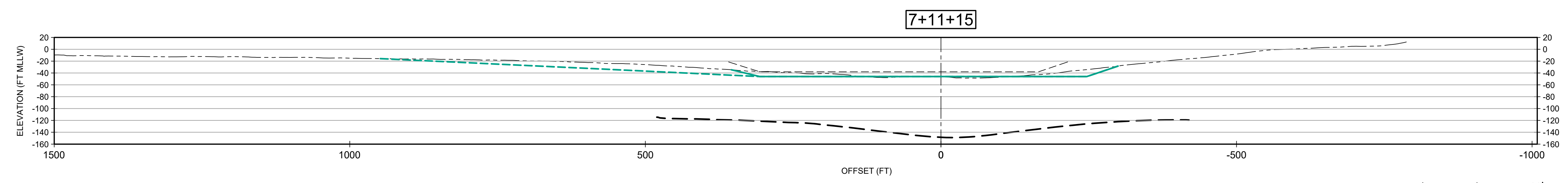
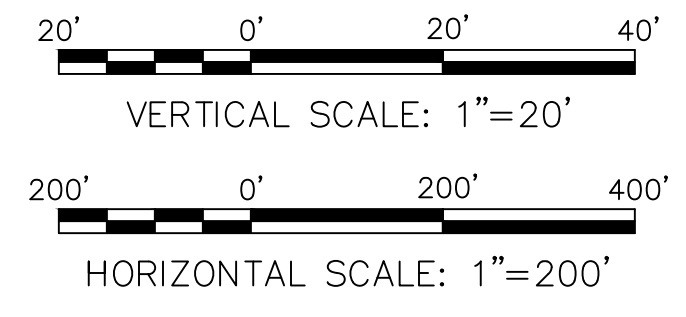
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (174 OF 185)

SHEET IDENTIFICATION
FIG-175
 INDEX 175 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - · - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - - - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - - - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: HJP
DRAWN BY: EC
CHECKED BY: EC
DATE: 2016/07/11
SUBMITTED BY: HJP
CONTRACT NO.:
PLOT SCALE:
FILE NAME:
FILE SIZE:
PLLOT DATE:
DRAWING NUMBER:

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (175 OF 185)

SHEET IDENTIFICATION
FIG-176
 INDEX 176 OF 186



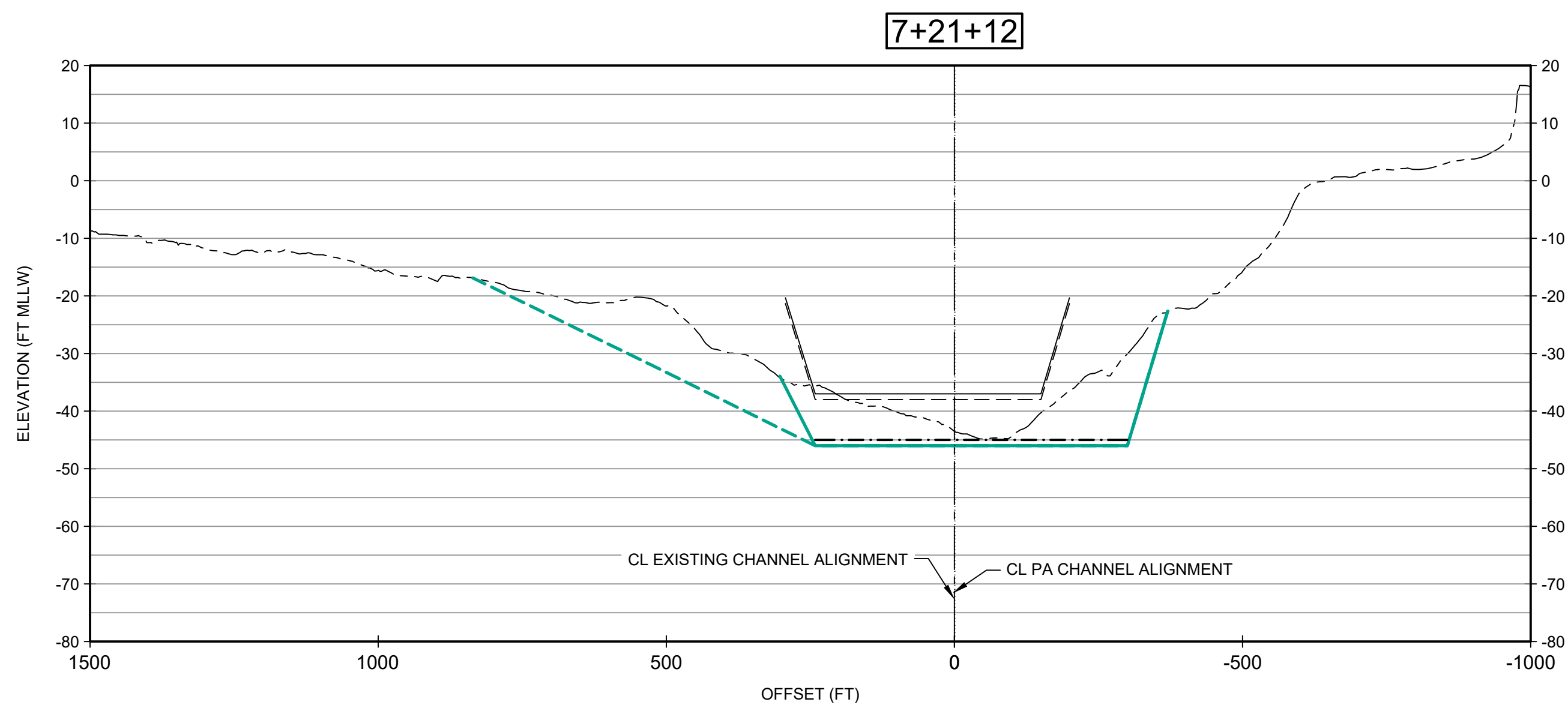
MARK	DESCRIPTION	DATE	APPR.

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SUBMITTED BY:	CONTRACT NO.:	SOLICITATION NO.:
PLOT SCALE: SIZE:	PLOT DATE:	DRAWING NUMBER:
FILE NAME:		

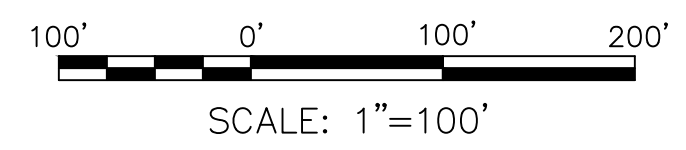
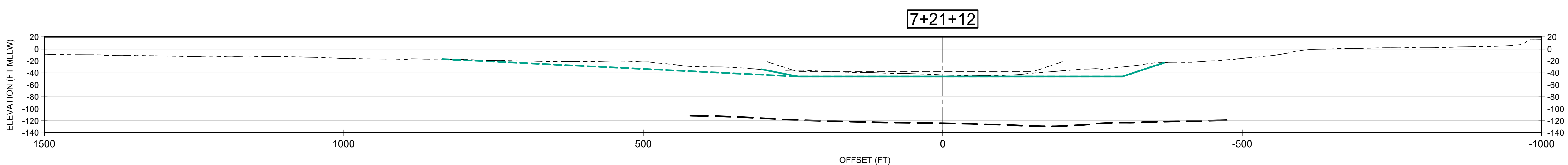
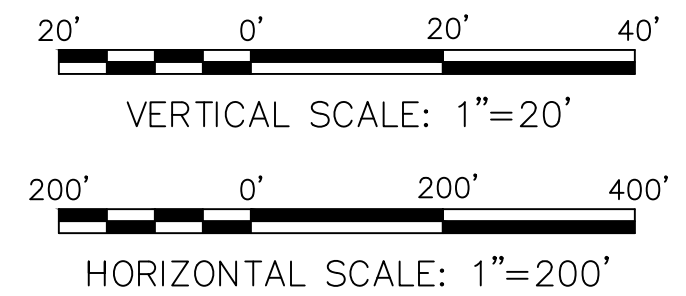
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 (206) 622-0222

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (176 OF 185)

SHEET IDENTIFICATION
FIG-177
 INDEX 177 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

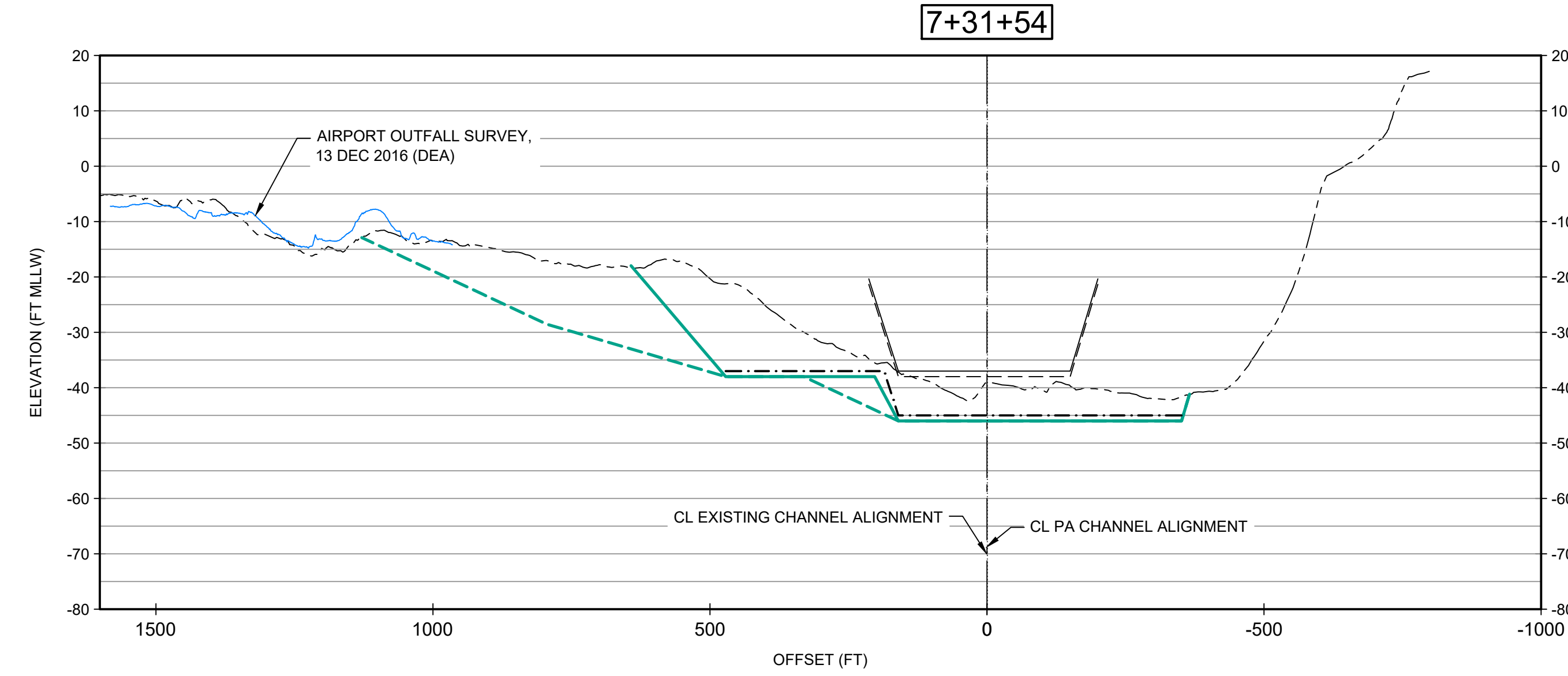
	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

NOTES:

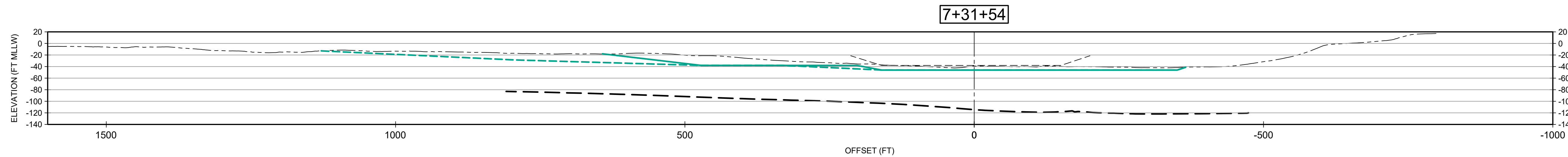
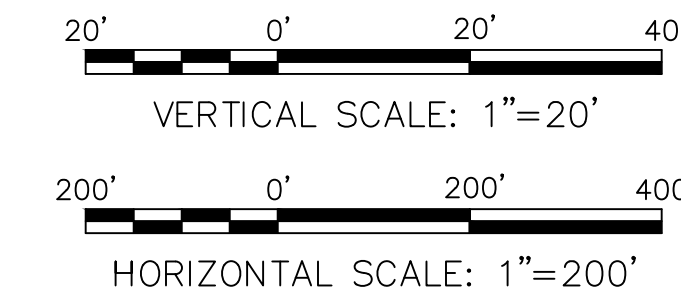
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



- LEGEND**
- EXISTING AUTHORIZED CHANNEL LIMITS
 - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - - PA CHANNEL LIMITS
 - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
 - · - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
 - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
 - ESTIMATED TOP OF ROCK (GHD, 2024. SEE: SUB-APPENDIX 2, ATT. B)

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: H.P.
DRAWN BY: EC
CHECKED BY: EC
DATE: 2015/07/11

SUBMITTED BY: H.P.
PLOT DATE: H.P.
FILE NAME: H.P.
SIZE: H.P.

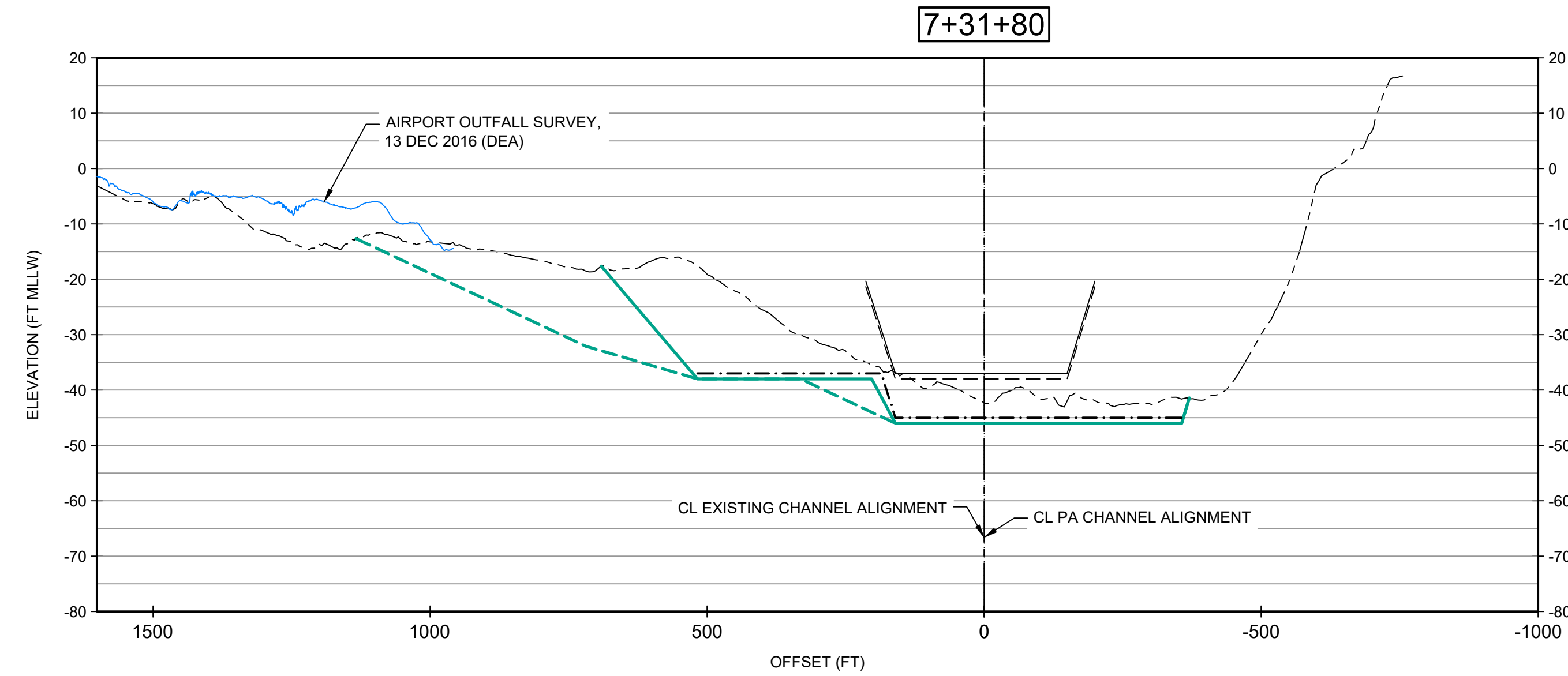
CONTRACT NO.:
DRAWING NUMBER:

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 600 UNIVERSITY STREET
 SEATTLE, WA 98101
 (206) 622-0222

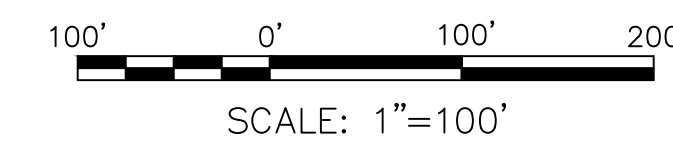
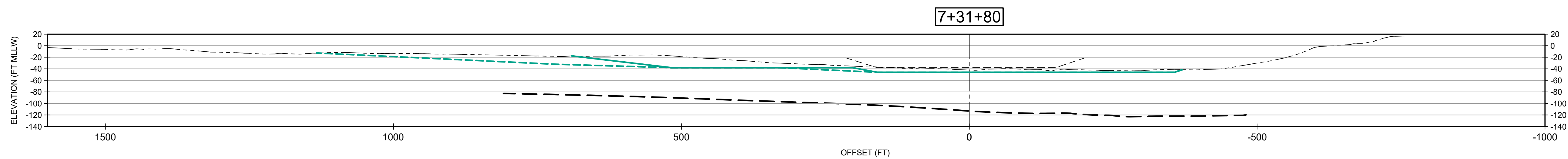
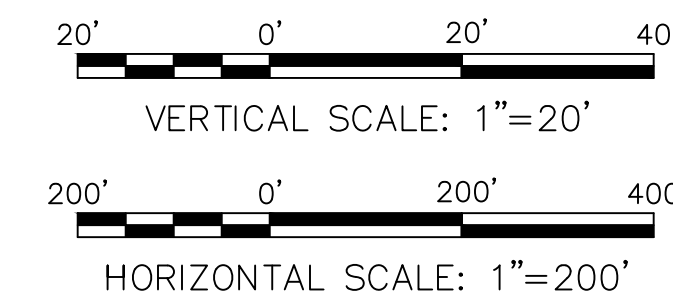
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (177 OF 185)

SHEET IDENTIFICATION
FIG-178
 INDEX 178 OF 186

File: G:\SEA\7163-14\Navigation Channel Project Resumption - all new files\20 CADD\Active_XS_SubAppendix\FIG-178-CROSS SECTIONS; Plotted: 5/20/2024 5:45 PM by LANDON, KYLE; Saved: 5/23/2024 11:36 AM by OAFONTE



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- AIRPORT OUTFALL SURVEY
- - - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

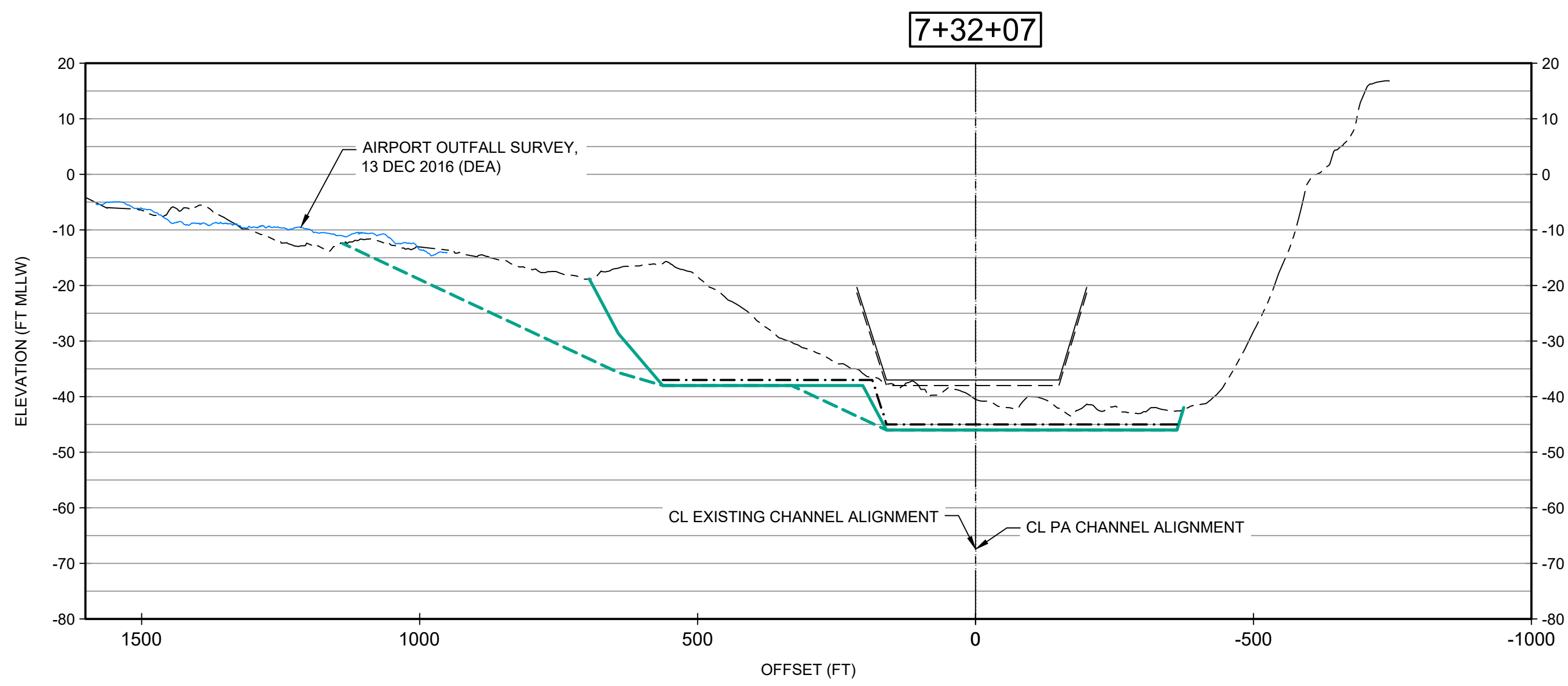
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drawn by: EC
checked by: EC
submitted by: EC
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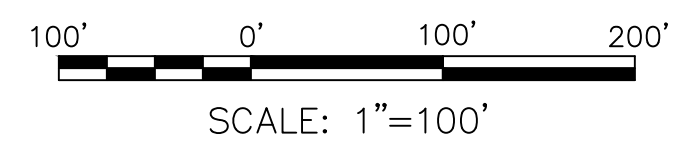
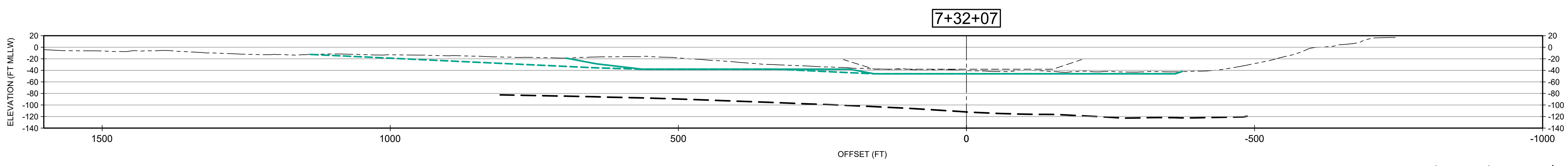
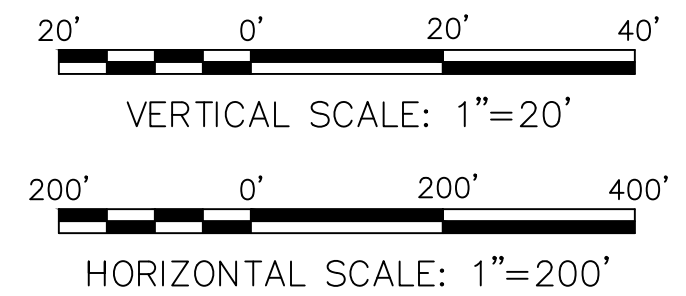
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (178 OF 185)

SHEET IDENTIFICATION
FIG-179
 INDEX 179 of 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	---	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · -	PA CHANNEL LIMITS	---	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		
—	AIRPORT OUTFALL SURVEY		

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

MARK	DESCRIPTION	DATE	APPR.

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DRAWN BY: H.P.
CHECKED BY: H.P.
DATE: 2016/07/11

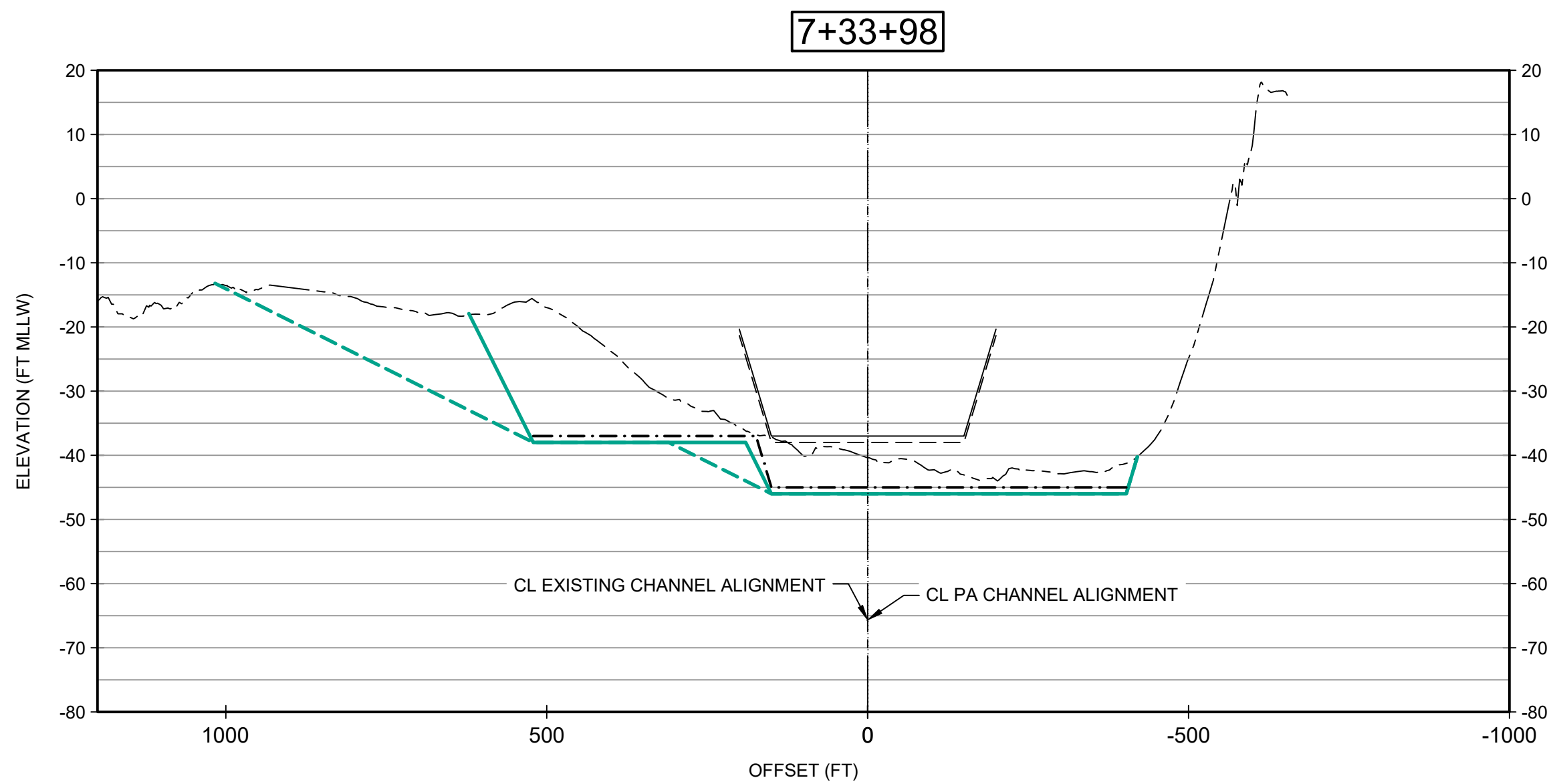
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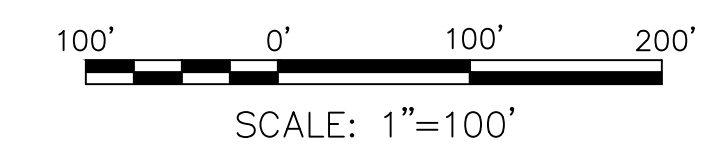
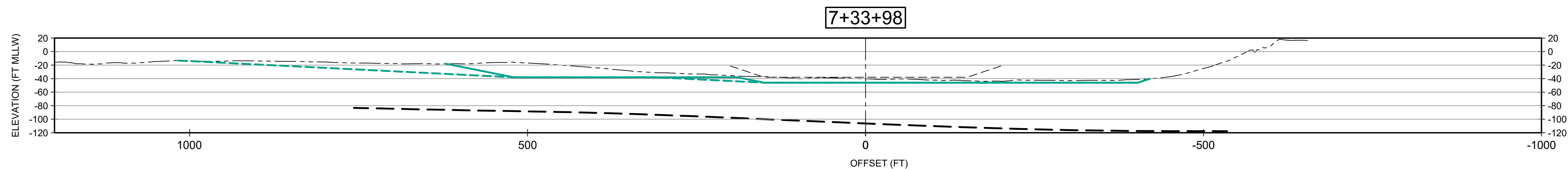
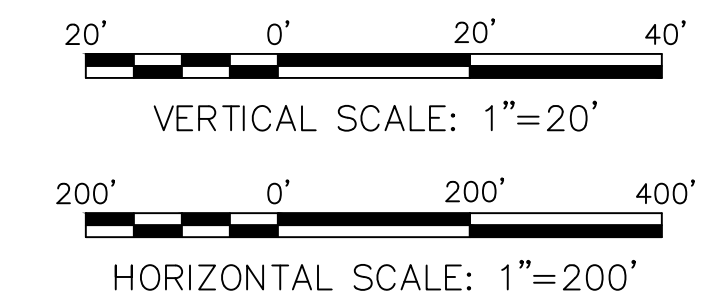
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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (179 OF 185)

SHEET IDENTIFICATION
FIG-180
 INDEX 180 OF 186



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- - - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

- ALL SECTION VIEWS LOOKING DOWNSTREAM.
- VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
- LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (180 OF 185)

SHEET IDENTIFICATION
FIG-181
INDEX 181 of 186

1

2

3

4

5

D

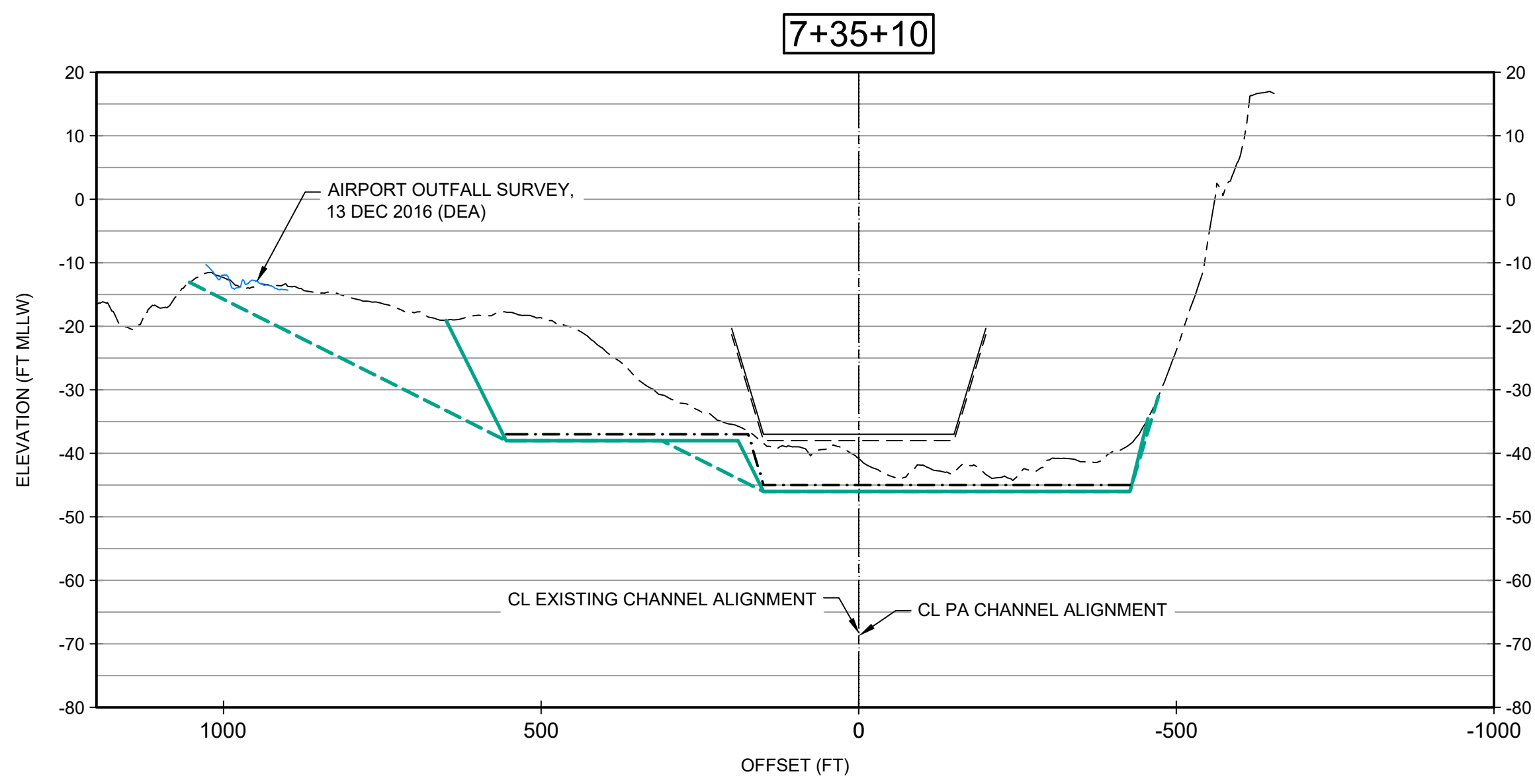
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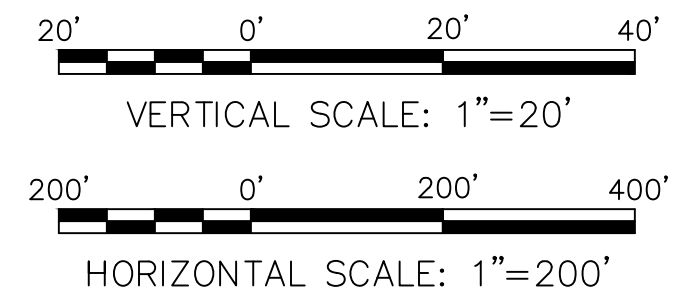
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DATE	DESCRIPTION	MARK

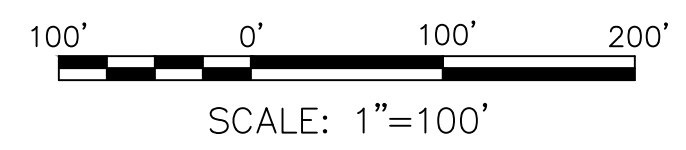
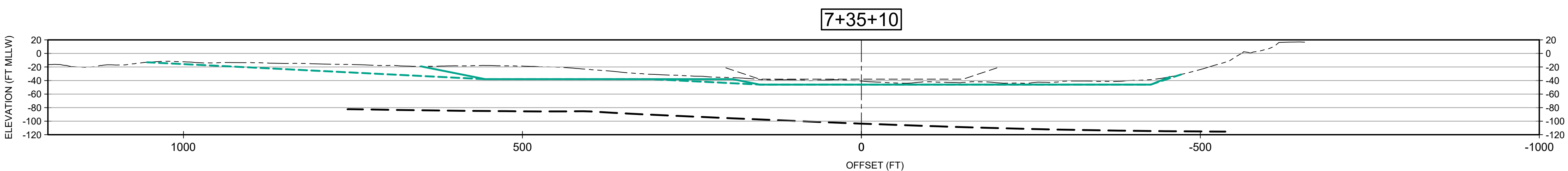


EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



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LEGEND

— — — — —	EXISTING AUTHORIZED CHANNEL LIMITS	- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- - - - -	PA CHANNEL LIMITS	- - - - -	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
- - - - -	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (181 OF 185)

SHEET IDENTIFICATION
FIG-182
 INDEX 182 of 186

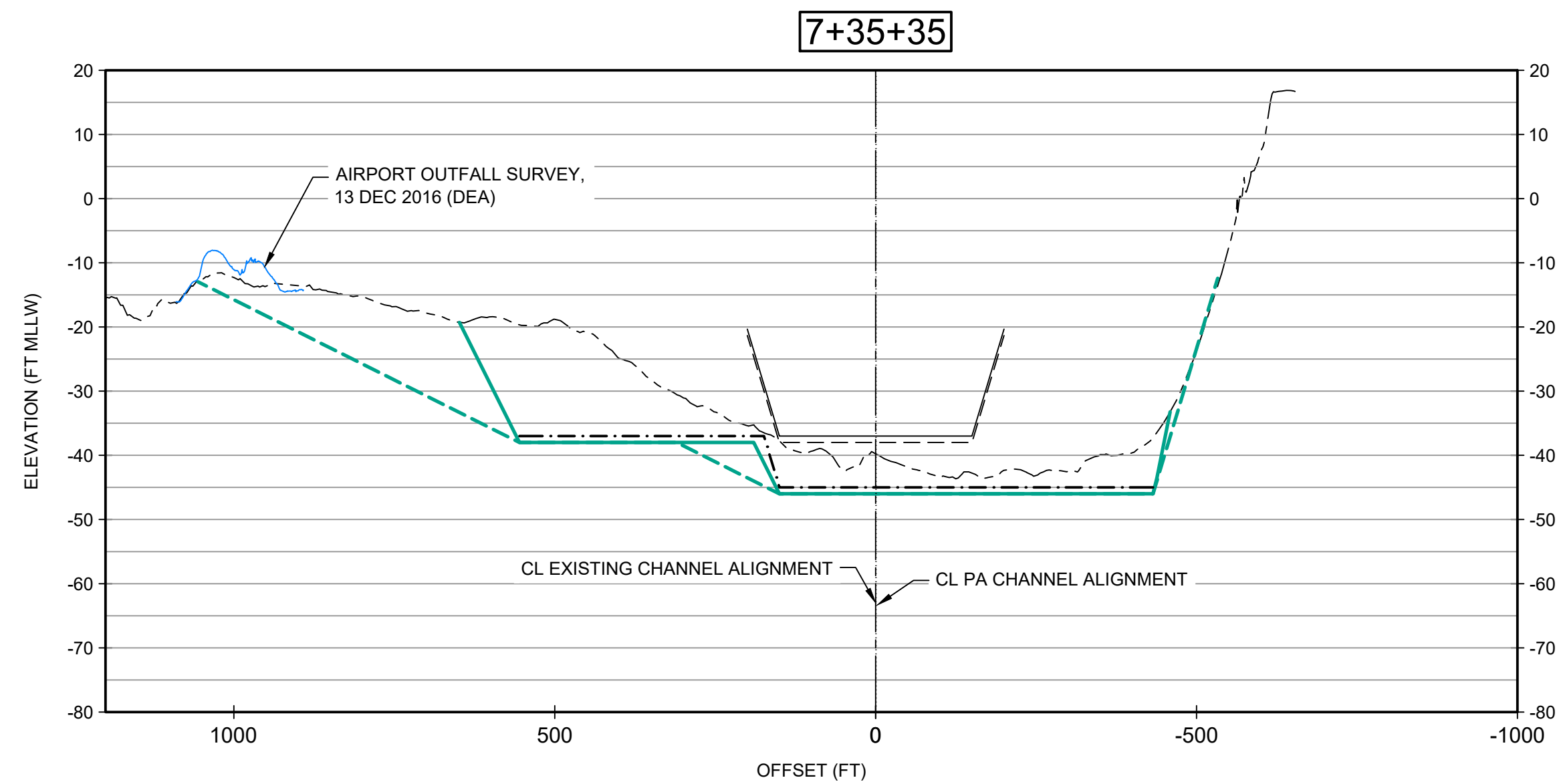
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D

C

B

A



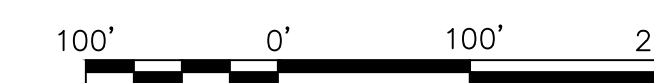
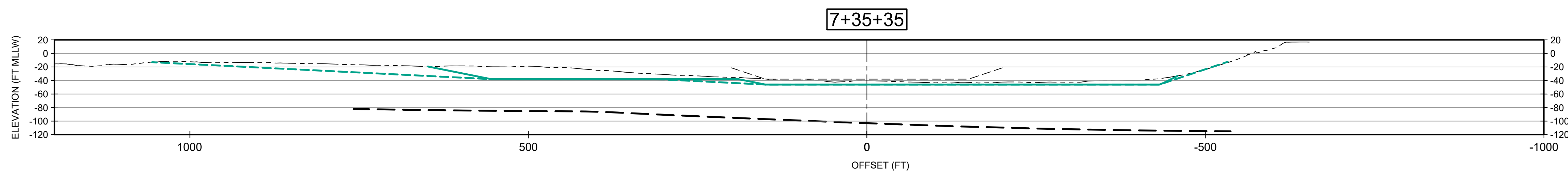
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EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



VERTICAL SCALE: 1"=20'



HORIZONTAL SCALE: 1"=200'



SCALE: 1"=100'

LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- - - - - EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- · - · - PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- AIRPORT OUTFALL SURVEY
- · - · - PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - - EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



DATE	DESCRIPTION	MARK	APPR.

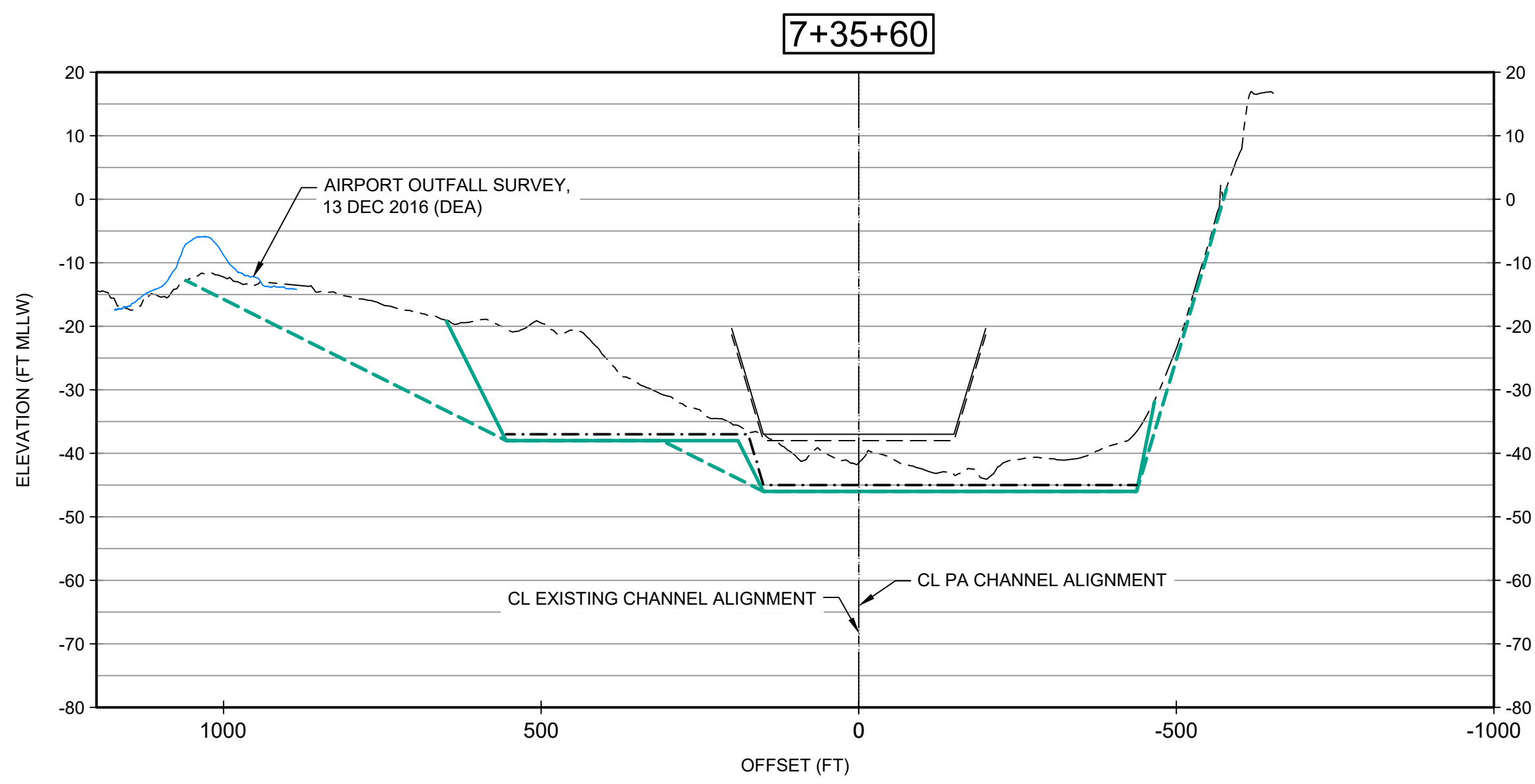
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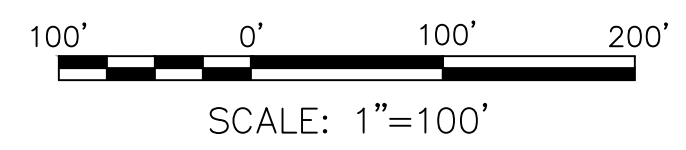
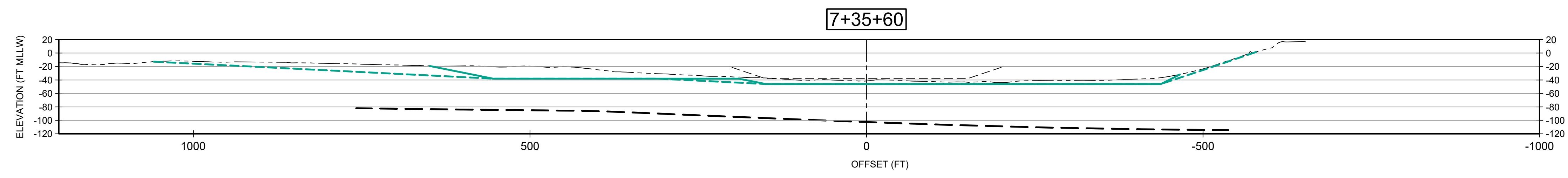
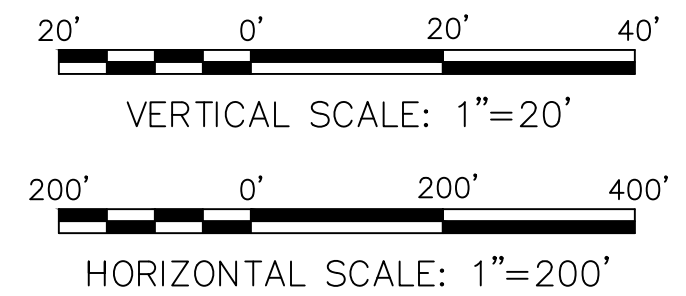
COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (182 OF 185)

SHEET IDENTIFICATION
FIG-183
 INDEX 183 of 186

D
C
B
A



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

	EXISTING AUTHORIZED CHANNEL LIMITS		PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
	PA CHANNEL LIMITS		ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		
	AIRPORT OUTFALL SURVEY		

- NOTES:**
- ALL SECTION VIEWS LOOKING DOWNSTREAM.
 - VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 - LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1

									APPR.
									DATE
									MARK
									DESCRIPTION

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DRAWN BY: H.P.

CHECKED BY: E.C.

SUBMITTED BY: H.P.

DATE: 2016/07/11

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DRAWING NUMBER:

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COOS BAY OREGON

COOS BAY CHANNEL MODIFICATION

CROSS SECTION (183 OF 185)

SHEET IDENTIFICATION

FIG-184

INDEX 184 of 186

1

2

3

4

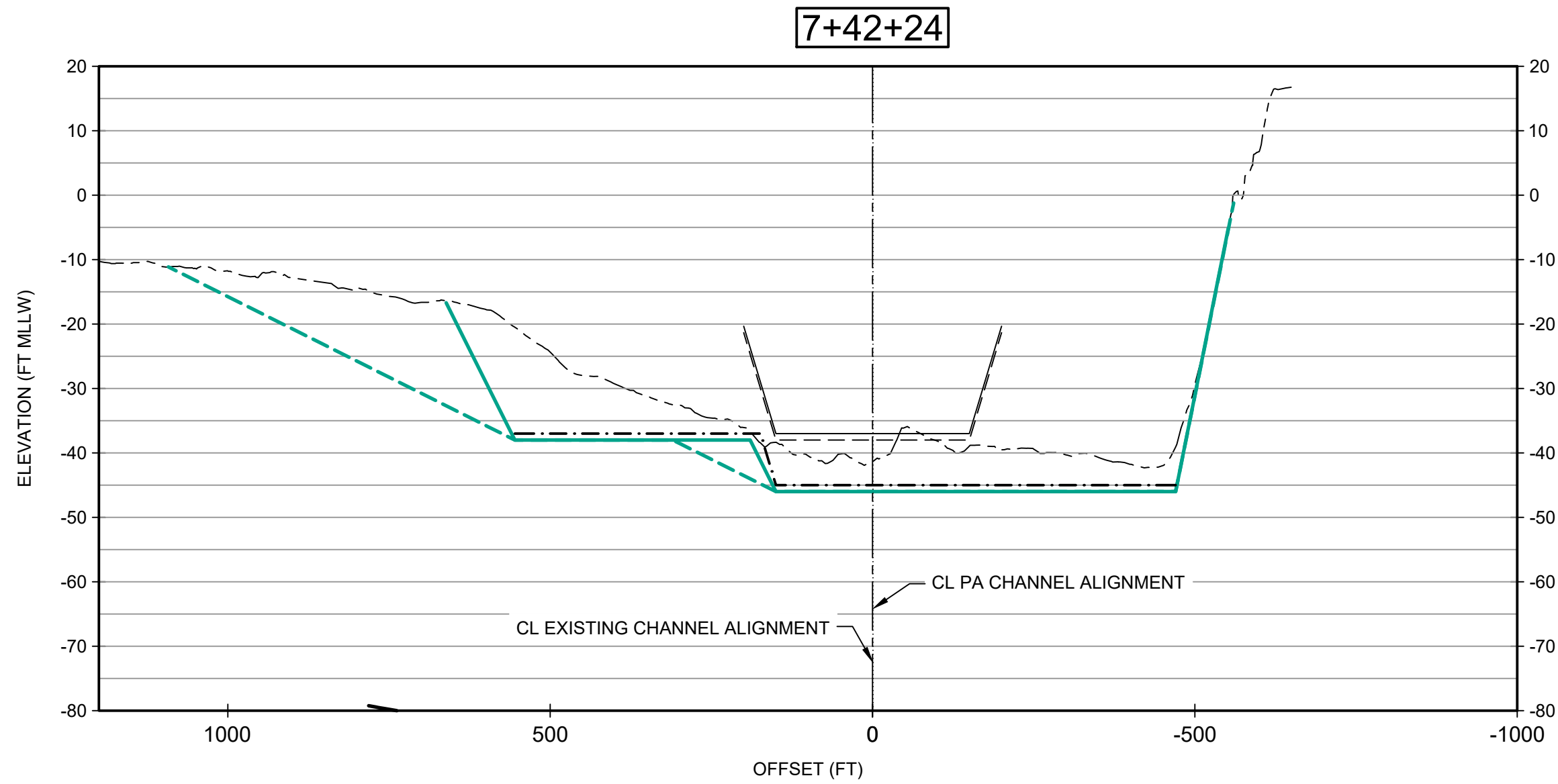
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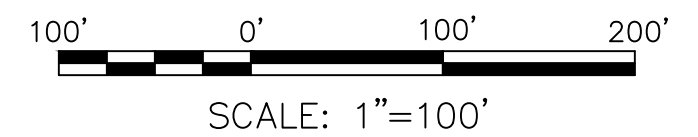
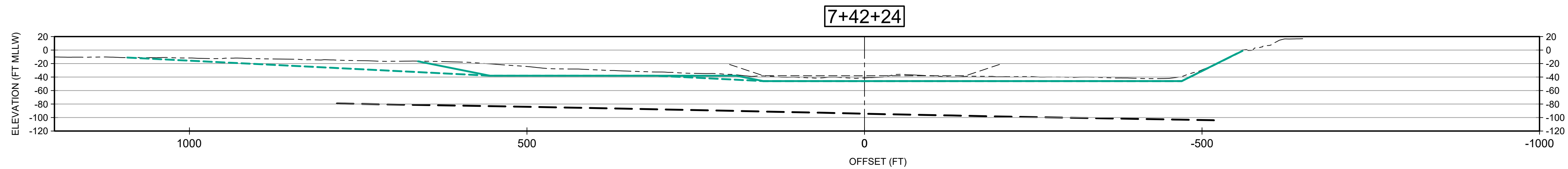
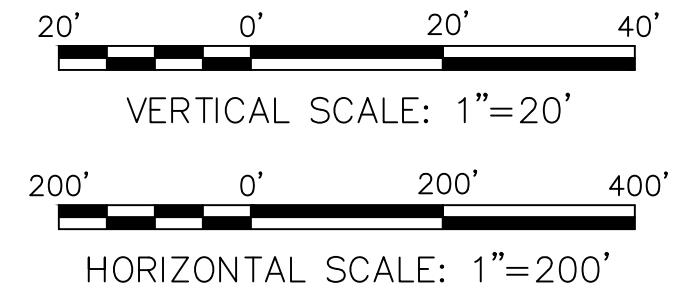
C

B

A



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

- EXISTING AUTHORIZED CHANNEL LIMITS
- EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE
- PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)

NOTES:

1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

FUTURE EQUILIBRIUM SIDE SLOPES WITHIN EACH REACH				
REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



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COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (184 OF 185)

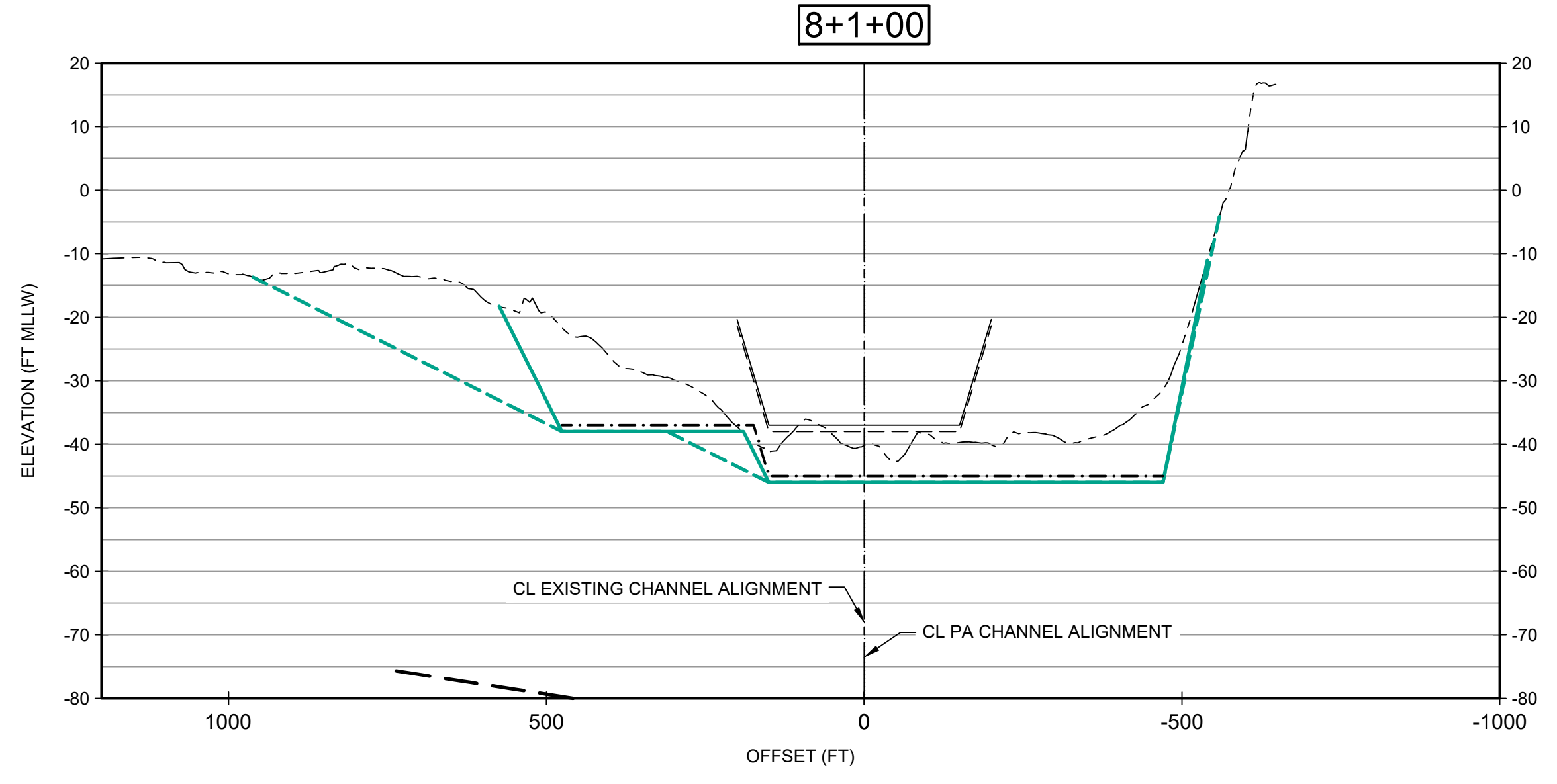
SHEET IDENTIFICATION
FIG-185
INDEX 185 of 186

D

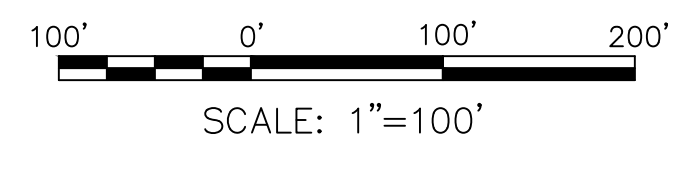
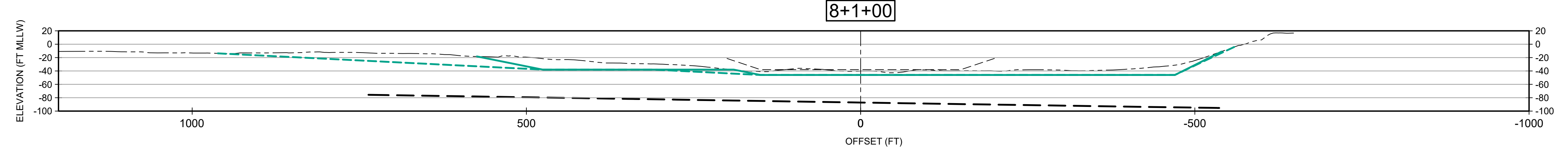
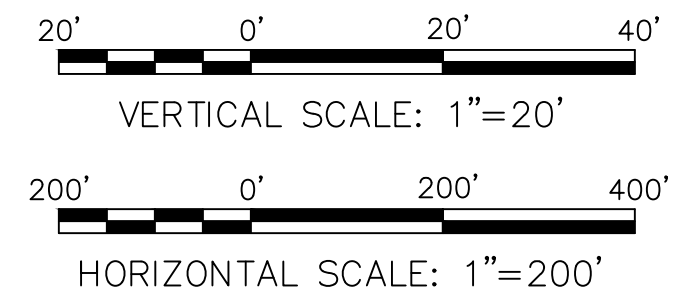
C

B

A



EXISTING CHANNEL DEPTH	-37.00
EXISTING CHANNEL DEPTH + AMD	-38.00
PA CHANNEL DEPTH	-45.00
PA CHANNEL + AMD	-46.00



LEGEND

—	EXISTING AUTHORIZED CHANNEL LIMITS	---	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE AND FUTURE EQUILIBRIUM SIDE SLOPES
- - - - -	EXISTING AUTHORIZED CHANNEL LIMITS PLUS ADVANCED MAINTENANCE	- - - - -	EXISTING BATHYMETRY (DEA, 2017. SEE: SUB-APPENDIX 2, ATT. A)
- · - · - · -	PA CHANNEL LIMITS	—	ESTIMATED TOP OF ROCK (GHD, 2024: SEE: SUB-APPENDIX 2, ATT. B)
—	PA CHANNEL LIMITS PLUS ADVANCED MAINTENANCE		

- NOTES:**
1. ALL SECTION VIEWS LOOKING DOWNSTREAM.
 2. VERTICAL DATUM: MEAN LOWER-LOW WATER (MLLW).
 3. LIMITS OF JETTY DELINEATED USING DEA DIGITAL TERRAIN MODEL (2017)

REACH	STATION START	STATION END	LEFT SLOPE	RIGHT SLOPE
1	OFFSHORE	0+05+30	16:1	29:1
2	0+05+30	0+15+80	22:1	15:1
3	0+15+80	0+47+50	22:1	15:1
4	0+47+50	2+00+00	13:1	18:1
5	2+00+00	4+26+40	1:1	1:1
6	4+26+40	5+31+70	11:1	11:1
7	5+31+70	6+21+10	15:1	32:1
8	6+21+10	7+10+60	20:1	6:1
9	7+10+60	8+10+60	20:1	3:1



MARK	DESCRIPTION	DATE	APPR.

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 SEATTLE, WA 98101
 (206) 622-0222

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 CHECKED BY: E.C.
 SUBMITTED BY: [blank]
 PLOT SCALE: [blank]
 FILE NAME: [blank]

DATE: 2016/07/11
 SOLICITATION NO.: [blank]
 CONTRACT NO.: [blank]
 PLOT DATE: [blank]
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 SIZE: [blank]

COOS BAY OREGON
COOS BAY CHANNEL MODIFICATION
CROSS SECTION (185 OF 185)

SHEET IDENTIFICATION
FIG-186
 INDEX 186 OF 186