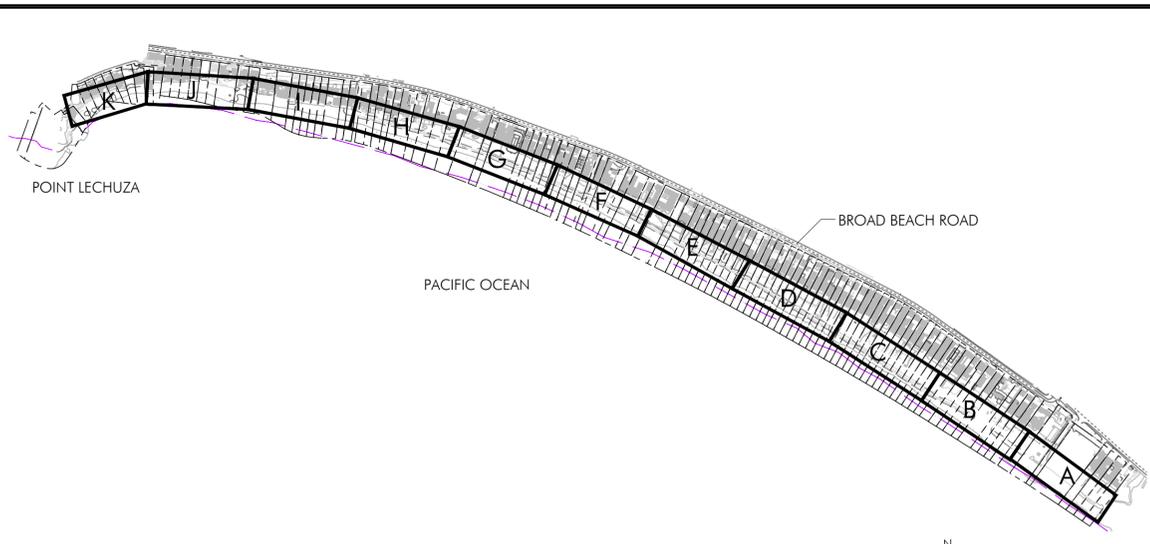


1 DUNE HUMMOCK PROTOTYPES
SCALE: 1" = 10'-0"



2 DUNE RESTORATION KEYPLAN FOR ZONES A-K
SCALE: 1" = 500'

PLANT LEGEND: SEAWARD SIDE OF DUNES*

BOTANICAL NAME	COMMON NAME	LIFE FORM	SIZE	ON CENTER SPACING (FT)	QUANTITY
ABRONIA MARITIMA	RED SAND VERBENA	PERENNIAL HERB	TBD	TBD	TBD
ABRONIA UMBELLATA	PINK SAND VERBENA	PERENNIAL HERB	TBD	TBD	TBD
AMBROSIA CHAMISSONIS	BEACH BUR	PERENNIAL HERB	TBD	TBD	TBD
ATRIPLEX LEUCOPHYLLA	BEACH SALTBUSH	PERENNIAL HERB	TBD	TBD	TBD
CALYSTEGIA SOLDANELLA	BEACH MORNING GLORY	PERENNIAL HERB	TBD	TBD	TBD
CAMISSONIOPSIS CHEIRANTHIFOLIA	BEACH MORNING GLORY	PERENNIAL HERB	TBD	TBD	TBD
DITHYREA CALIFORNICA	CALIFORNIA SPECTACLEPOD	ANNUAL HERB	TBD	TBD	TBD
HELIOTROPIUM CURASSAVICUM	SEASIDE HELIOTROPE	PERENNIAL HERB	TBD	TBD	TBD

PLANT LEGEND: LANDWARD SIDE OF DUNES*

BOTANICAL NAME	COMMON NAME	LIFE FORM	SIZE	ON CENTER SPACING (FT)	QUANTITY
ABRONIA MARITIMA	RED SAND VERBENA	PERENNIAL HERB	TBD	TBD	TBD
AMBROSIA CHAMISSONIS	BEACH BUR	PERENNIAL HERB	TBD	TBD	TBD
ARTEMISIA CALIFORNICA	CALIFORNIA SAGEBRUSH	SUB-SHRUB	TBD	TBD	TBD
ATRIPLEX LEUCOPHYLLA	BEACH SALTBUSH	PERENNIAL HERB	TBD	TBD	TBD
ATRIPLEX PARISHII	PARISH'S SALTBUSH	ANNUAL HERB	TBD	TBD	TBD
CALYSTEGIA SOLDANELLA	BEACH MORNING GLORY	PERENNIAL HERB	TBD	TBD	TBD
CAMISSONIOPSIS CHEIRANTHIFOLIA	BEACH EVENING PRIMROSE	PERENNIAL HERB	TBD	TBD	TBD
CROTON CALIFORNICA	CALIFORNIA CROTON	PERENNIAL HERB	TBD	TBD	TBD
DITHYREA CALIFORNICA	CALIFORNIA SPECTACLEPOD	ANNUAL HERB	TBD	TBD	TBD
ERICAMERIA ERICOIDES	CALIFORNIA GOLDENBUSH	SUB-SHRUB	TBD	TBD	TBD
ERIOGONUM PARVIFOLIUM	COAST BUCKWHEAT	PERENNIAL HERB	TBD	TBD	TBD
HELIOTROPIUM CURASSAVICUM	SEASIDE HELIOTROPE	PERENNIAL HERB	TBD	TBD	TBD
LUPINUS CHAMISSONIS	CHAMISSO BUSH LUPINE	SUB-SHRUB	TBD	TBD	TBD
PERITOMA ARBOREA	BLADDERPOD	SHRUB	TBD	TBD	TBD
RHUS INTEGRIFOLIA	LEMONADE BERRY	SHRUB	TBD	TBD	TBD

*NOTE: PLANT LEGENDS ARE PRELIMINARY, AND SUBJECT TO CHANGE DEPENDING ON AVAILABILITY OF PLANT MATERIAL

3 PLANT LEGEND

DUNE RESTORATION NOTES:

- SEE SHEETS L-2 TO L-4 FOR TYPICAL DUNE RESTORATION SECTIONS AND SHEETS L-5 TO L-10 FOR THE ENTIRE BEACH.
- ALL PROPOSED PLANTING WILL BE IRRIGATED WITH A TEMPORARY IRRIGATION SYSTEM. THE IRRIGATION SYSTEM WILL PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH DURING THE PLANT ESTABLISHMENT PERIOD, AND IS EXPECTED TO BE DISCONTINUED APPROXIMATELY 2-3 YEARS AFTER INSTALLATION.
- THE EXISTING ROCK REVETMENT DEPICTED ON THE DUNE PROTOTYPE SECTIONS ON SHEETS L-2 AND L-3 IS NOT PRESENT IN ALL LOCATIONS ALONG THE BEACH. SEE ENGINEERING PLANS FOR THE LIMITS OF THE EXISTING ROCK REVETMENT.
- THE DUNE PROTOTYPE SECTIONS ON SHEETS L-1 ARE INTENDED TO DEPICT THE APPROXIMATE RELATIONSHIPS BETWEEN THE PROPOSED DUNE HUMMOCKS AND THE EXISTING ROCK REVETMENT, AND THE ACTUAL ELEVATIONS AND EXTENT OF ROCK MAY VARY. AS SHOWN, A 2' MINIMUM BASE LAYER OF SAND WILL BE PLACED OVER THE REVETMENT WHERE IT EXISTS, AND 2-3' HIGH DUNE HUMMOCKS WILL BE CREATED OVER THIS BASE LAYER OF SAND.

SHEET INDEX

- L-1: NOTES & LEGENDS
- L-2: TYPICAL SECTIONS
- L-3: TYPICAL SECTIONS
- L-4: TYPICAL SECTIONS
- L-5: GRADING & PLANTING ZONES A-B
- L-6: GRADING & PLANTING ZONES C-D
- L-7: GRADING & PLANTING ZONES E-F
- L-8: GRADING & PLANTING ZONES G-H
- L-9: GRADING & PLANTING ZONES I-J
- L-10: GRADING & PLANTING ZONES K

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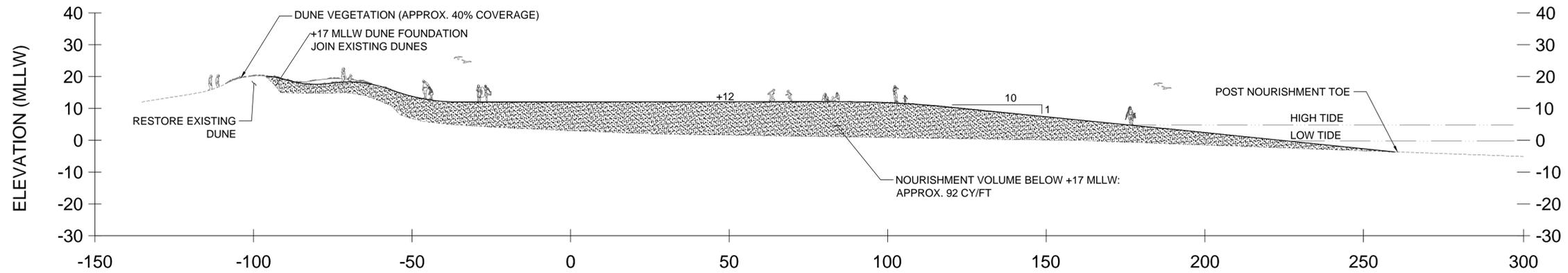
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DESIGNED BY: George Salvaggio
DRAWN BY: Mark Brandi
CHECKED BY: George Salvaggio
IN CHARGE: George Salvaggio

wra
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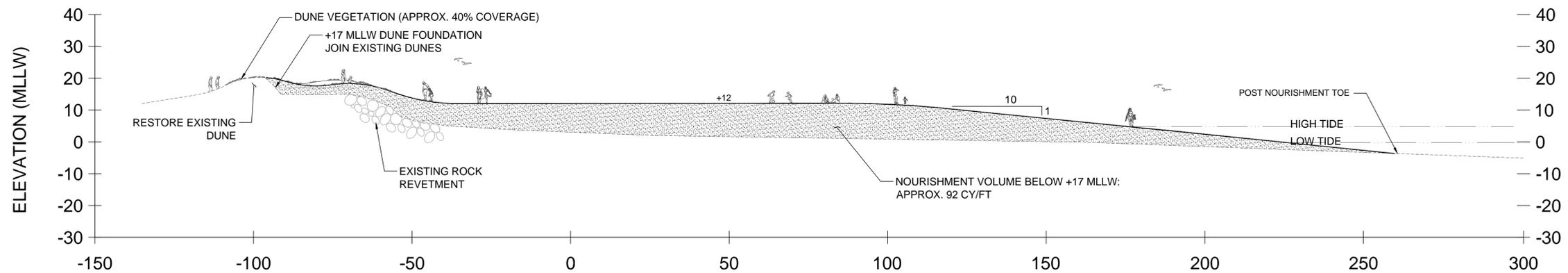
BROAD BEACH RESTORATION PROJECT
California State Lands Commission
**DUNE RESTORATION
PLANT LEGEND & DUNE PROTOTYPES**

SCALE: AS SHOWN
DATE: 11/7/12
JOB NO.: 6935-02
SHEET: 20 of 42
L-1

LOT 30708 TO LOT 30756 (DOUBLE ROW, WITHOUT REVETMENT)
RESTORE EXISTING DUNE HUMMOCKS, CREATE SECOND SEAWARD ROW



LOT 30760 TO LOT 31016 (DOUBLE ROW, WITH REVETMENT)
RESTORE EXISTING DUNE HUMMOCKS, CREATE SECOND SEAWARD ROW



NOTE: SEE SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS. SEE SHEETS L-5 TO L-7 FOR TYPICAL DUNE HUMMOCK GRADING AND PLANTING PLANS.

0 20
SCALE: 1" = 20'

LEGEND

- EXISTING GRADE
- PROPOSED GRADE (FOREGROUND)
- PROPOSED GRADE (BACKGROUND)

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California State Lands Commission

DUNE RESTORATION:
TYPICAL SECTIONS

SCALE 1" = 20' DATE 11/7/12

JOB NO. 6935-02

SHEET 21 of 42

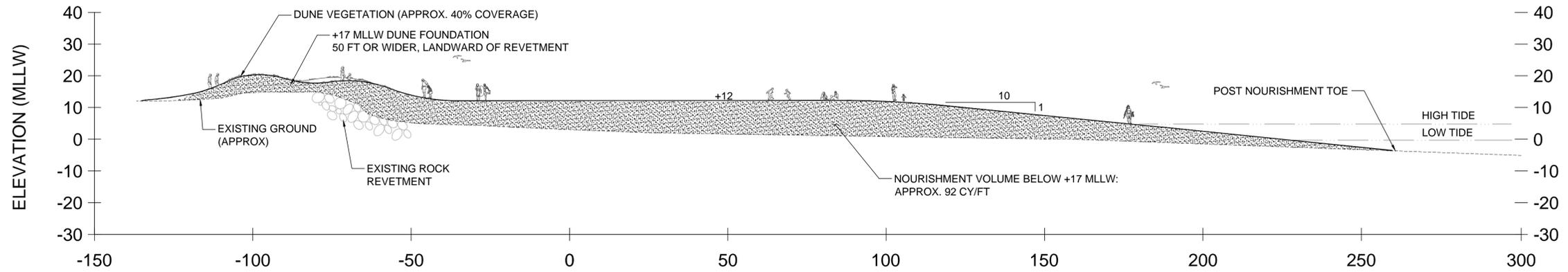
L-2



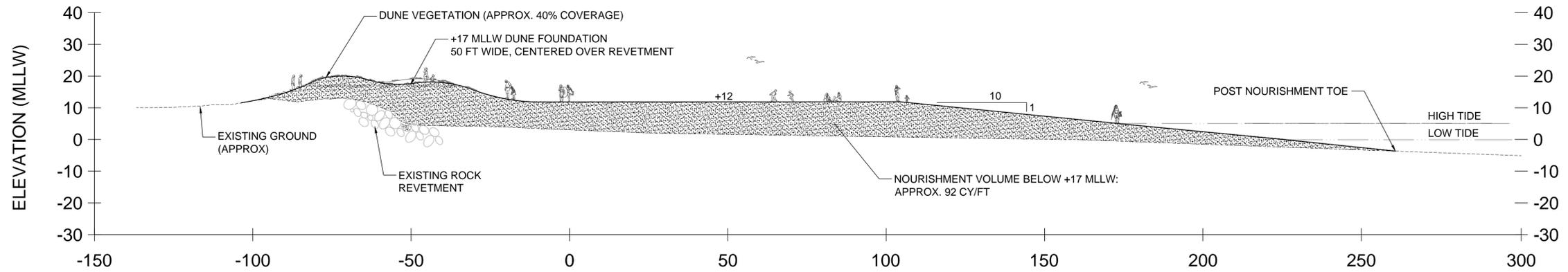
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FINAL
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CONCEPT
STATUS

LOT 31020 TO LOT 31220 (DOUBLE ROW)
 CREATE TWO ROWS OF DUNE HUMMOCKS (NO REMNANT DUNE EXISTS)



LOT 31224 TO LOT 31346 (DOUBLE ROW)
 CREATE ONE ROW OF DUNE HUMMOCKS LANDWARD OF REVETMENT AND ONE ROW SEAWARD OF THE REVETMENT.



NOTE: SEE SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS. SEE SHEETS L-5 TO L-7 FOR TYPICAL DUNE HUMMOCK GRADING AND PLANTING PLANS.

SCALE: 1" = 20'

LEGEND

- EXISTING GRADE
- PROPOSED GRADE (FOREGROUND)
- PROPOSED GRADE (BACKGROUND)

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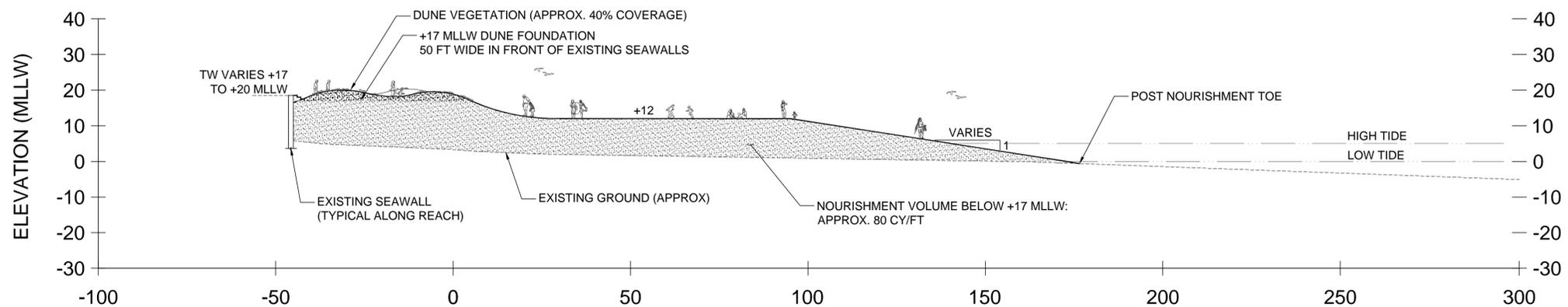
DUNE RESTORATION:
 TYPICAL SECTIONS

SCALE	DATE
1" = 20'	11/7/12
JOB NO.	6935-02
SHEET	22 of 42
L-3	

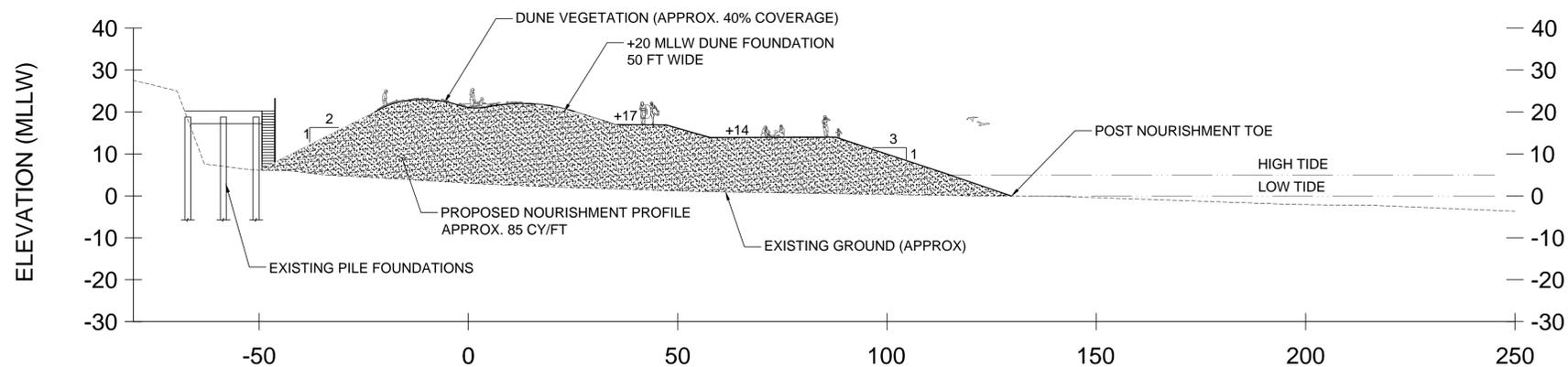


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CONCEPT
STATUS

LOT 31350 TO 31412 (UNPROTECTED DUNES)
 CREATE TWO ROWS OF DUNE HUMMOCKS ADJACENT TO EXISTING SEAWALL AND/OR FACE OF BLUFF.



LOT 31418 TO POINT LECHUZA (UNPROTECTED DUNES)
 CREATE TWO OR THREE ROWS OF DUNE HUMMOCKS ADJACENT TO EXISTING PILE FOUNDATIONS.



NOTE: SEE SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS. SEE SHEETS L-5 TO L-7 FOR TYPICAL DUNE HUMMOCK GRADING AND PLANTING PLANS.

0 20
 SCALE: 1" = 20'

LEGEND

- EXISTING GRADE
- PROPOSED GRADE (FOREGROUND)
- PROPOSED GRADE (BACKGROUND)

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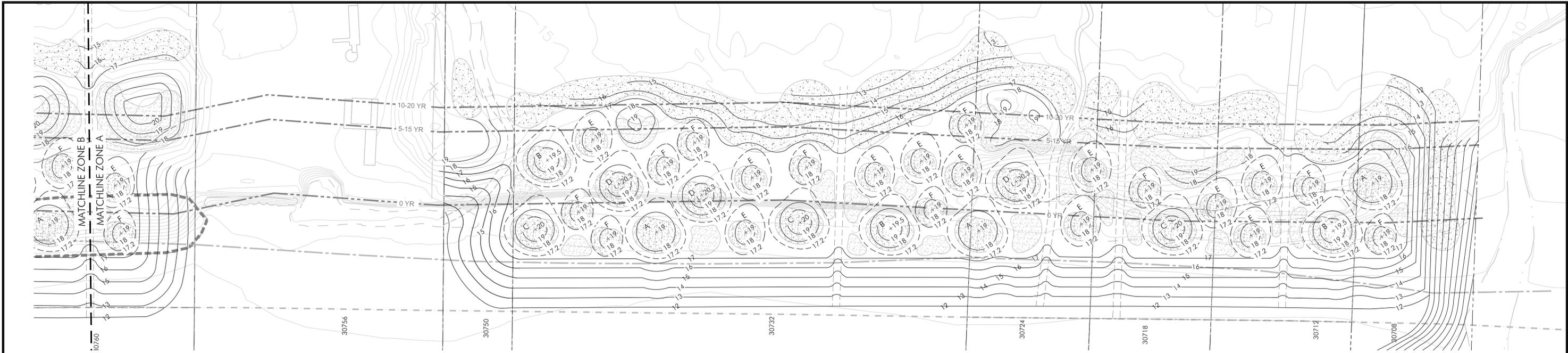
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 TYPICAL SECTIONS

SCALE	DATE
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JOB NO.	6935-02
SHEET	23 of 42
L-4	

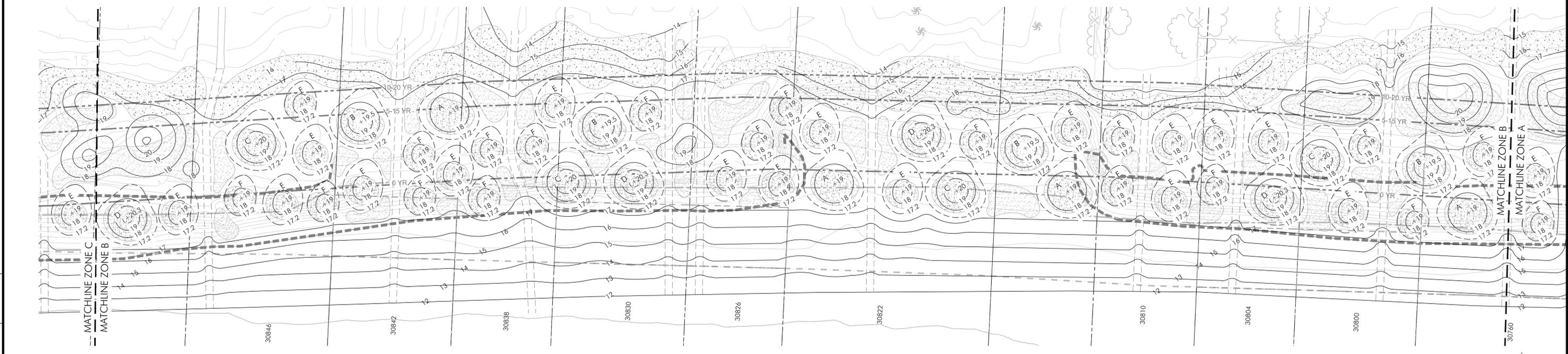
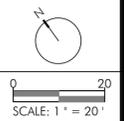


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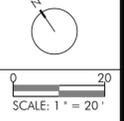
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STATUS



1 ZONE A



2 ZONE B



GRADING LEGEND

-17	EXISTING CONTOUR
17.0 X	EXISTING SPOT ELEVATION
-17	EXISTING REVETMENT
+17.0	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	PROPOSED PATH
	PROPERTY LINE
	LIMIT OF GRADING
0 YR	UPRUSH 0 YEARS POST PROJECT
5-15 YR	UPRUSH 5-15 YEARS POST PROJECT
10-20 YR	UPRUSH 10-20 YEARS POST PROJECT
	LATERAL ACCESS EASEMENTS
	PUBLIC ACCESS LIMIT LINE
	MHTL 2009
	MHTL 2010

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NOTE: SEE SHEET L-1 TO L-3 FOR TYPICAL DUNE RESTORATION SECTIONS, AND SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS.

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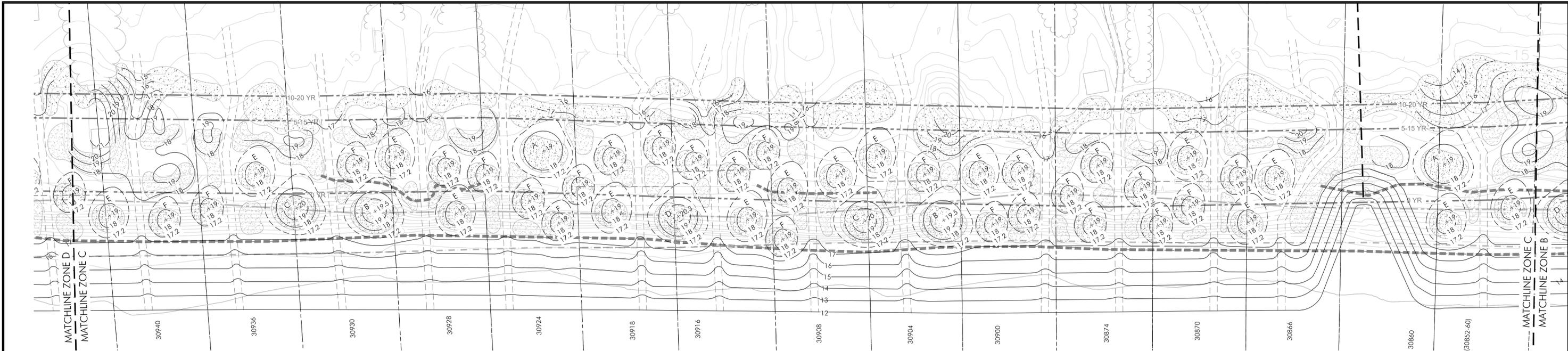
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California State Lands Commission
DUNE RESTORATION:
TYPICAL DUNE HUMMOCK GRADING
& PLANTING PLAN

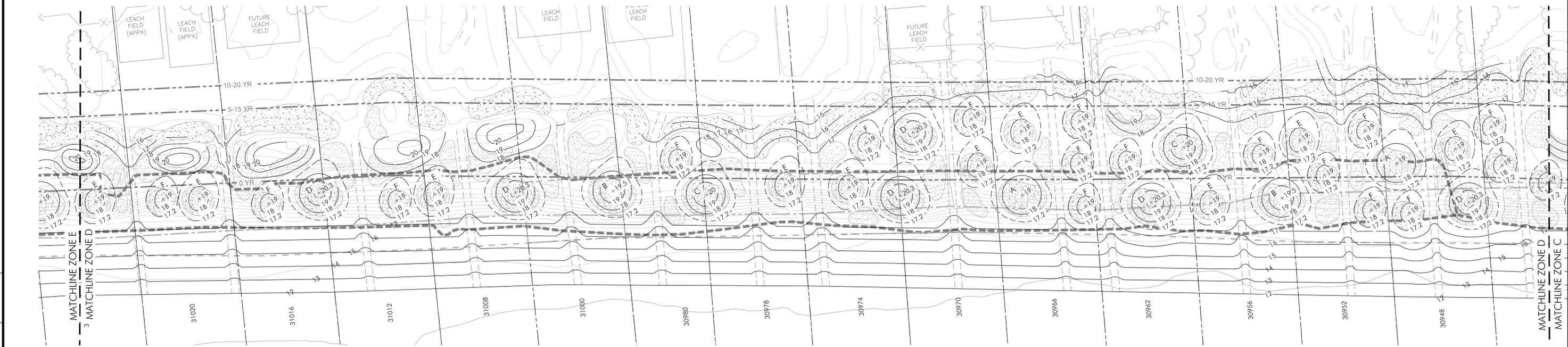
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JOB NO.	6935-02
SHEET	24 of 42
L-5	

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3 ZONE C

SCALE: 1" = 20'



4 ZONE D

SCALE: 1" = 20'

GRADING LEGEND

- 17 - EXISTING CONTOUR
- 17.0 X - EXISTING SPOT ELEVATION
- 17 - EXISTING REVETMENT
- 17 - PROPOSED CONTOUR
- + 17.0 - PROPOSED SPOT ELEVATION
- - - - - PROPOSED PATH
- - - - - PROPERTY LINE
- - - - - LIMIT OF GRADING
- - - - - 0 YR - UPRUSH 0 YEARS POST PROJECT
- - - - - 5-15 YR - UPRUSH 5-15 YEARS POST PROJECT
- - - - - 10-20 YR - UPRUSH 10-20 YEARS POST PROJECT
- - - - - LATERAL ACCESS EASEMENTS
- - - - - PUBLIC ACCESS LIMIT LINE
- - - - - MHTL 2009
- - - - - MHTL 2010

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NOTE: SEE SHEET L-1 TO L-3 FOR TYPICAL DUNE RESTORATION SECTIONS, AND SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS.

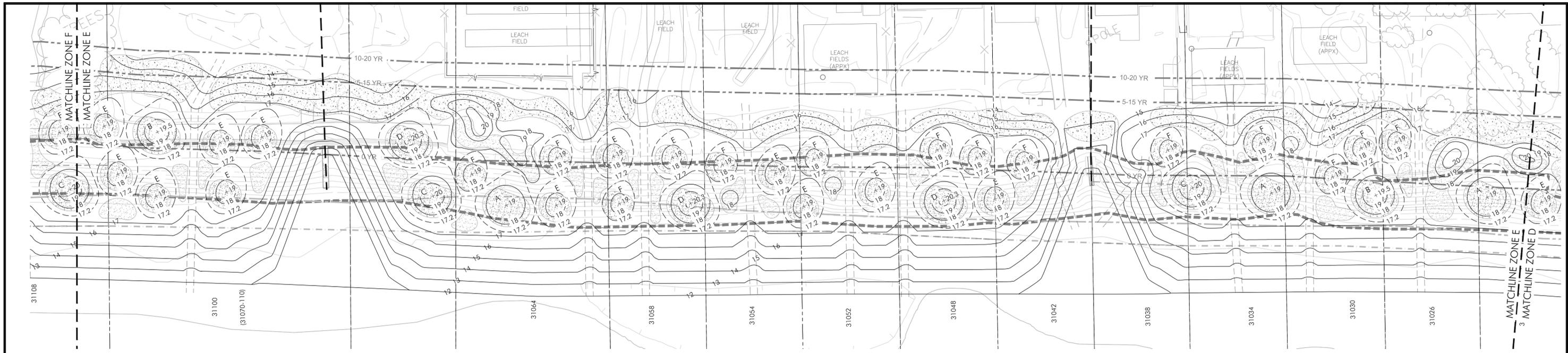


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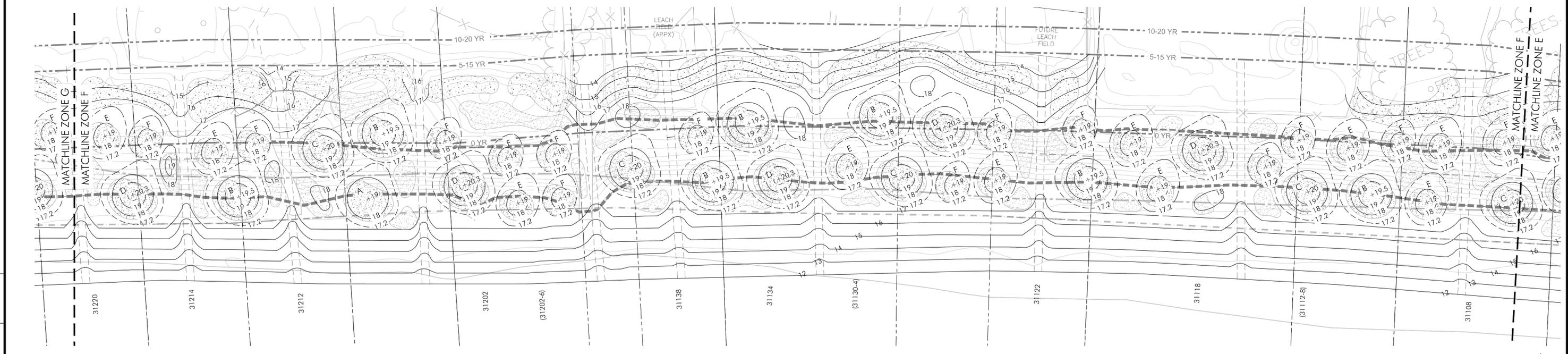
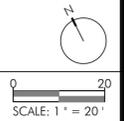
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 DUNE RESTORATION:
 TYPICAL DUNE HUMMOCK GRADING
 & PLANTING PLAN

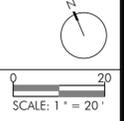
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1" = 20'	11/7/12
JOB NO.	6935-02
SHEET	25 of 42
L-6	



5 ZONE E



6 ZONE F



GRADING LEGEND

— 17	EXISTING CONTOUR
17.0 X	EXISTING SPOT ELEVATION
---	EXISTING REVEMENT
-17	PROPOSED CONTOUR
+ 17.0	PROPOSED SPOT ELEVATION
---	PROPOSED PATH
---	PROPERTY LINE
---	LIMIT OF GRADING
---	UPRUSH 0 YEARS POST PROJECT
---	UPRUSH 5-15 YEARS POST PROJECT
---	UPRUSH 10-20 YEARS POST PROJECT
---	LATERAL ACCESS EASEMENTS
---	PUBLIC ACCESS LIMIT LINE
---	MHTL 2009
---	MHTL 2010

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NOTE: SEE SHEET L-1 TO L-3 FOR TYPICAL DUNE RESTORATION SECTIONS, AND SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS.

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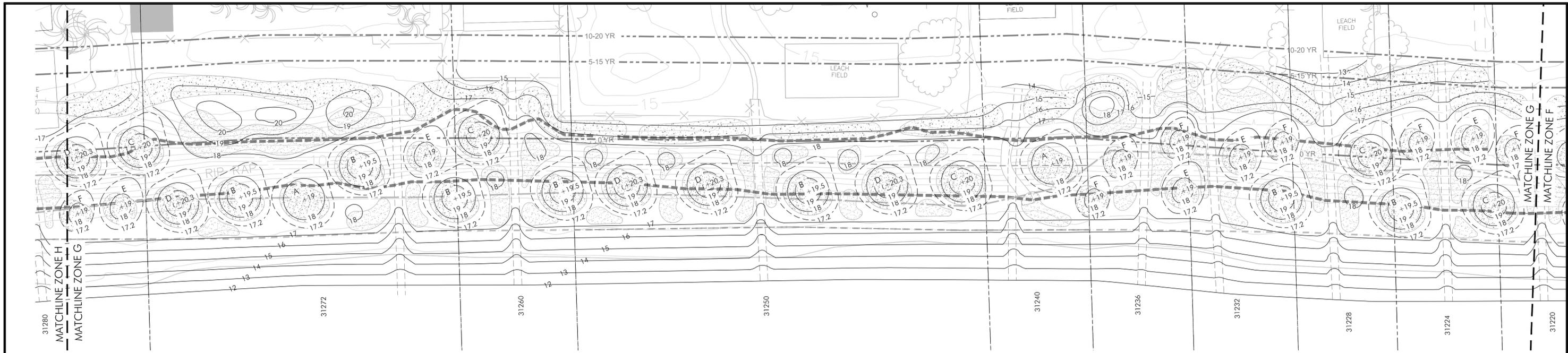
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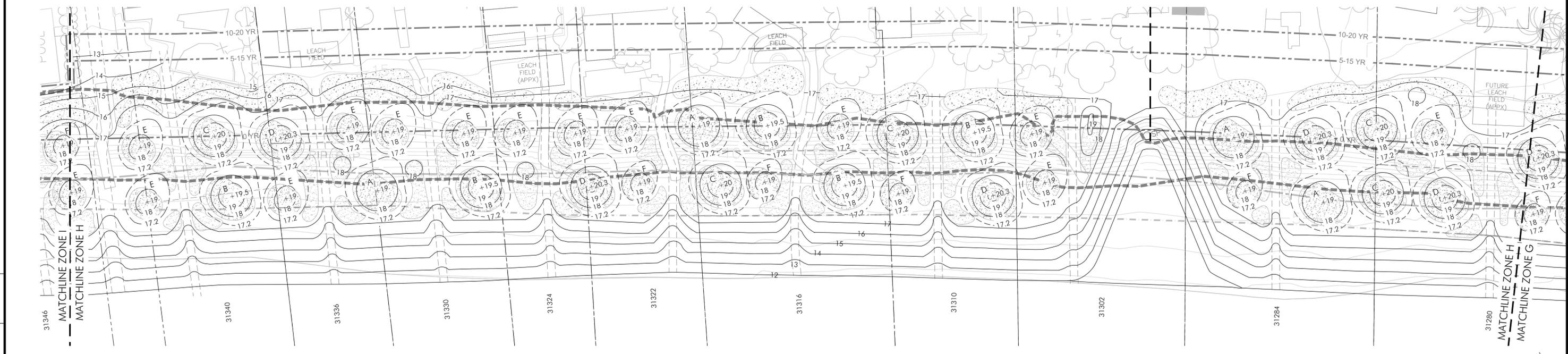
**DUNE RESTORATION:
 TYPICAL DUNE HUMMOCK GRADING
 & PLANTING PLAN**

SCALE 1" = 20'	DATE 11/7/12
JOB NO. 6935-02	
SHEET 26 of 42	
L-7	

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7 ZONE G



8 ZONE H

GRADING LEGEND

-17	EXISTING CONTOUR
17.0 X	EXISTING SPOT ELEVATION
---	EXISTING REVETMENT
-17	PROPOSED CONTOUR
+17.0	PROPOSED SPOT ELEVATION
---	PROPOSED PATH
---	PROPERTY LINE
---	LIMIT OF GRADING
---	UPRUSH 0 YEARS POST PROJECT
---	UPRUSH 5-15 YEARS POST PROJECT
---	UPRUSH 10-20 YEARS POST PROJECT
---	LATERAL ACCESS EASEMENTS
---	PUBLIC ACCESS LIMIT LINE
---	MHTL 2009
---	MHTL 2010

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NOTE: SEE SHEET L-1 TO L-3 FOR TYPICAL DUNE RESTORATION SECTIONS, AND SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS.

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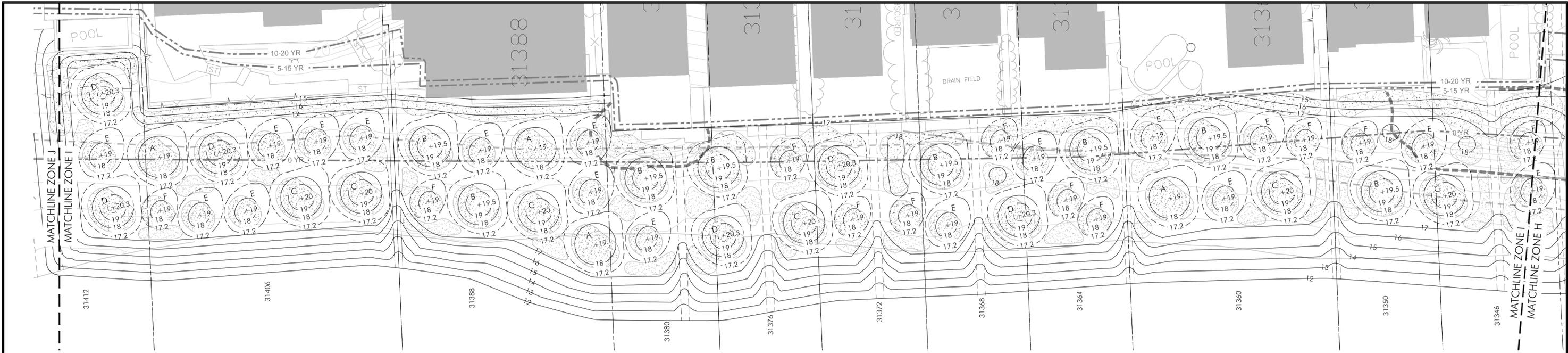
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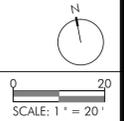
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 California State Lands Commission

**DUNE RESTORATION:
 TYPICAL DUNE HUMMOCK GRADING
 & PLANTING PLAN**

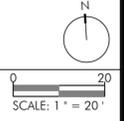
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 DATE 11/7/12
 JOB NO. 6935-02
 SHEET 27 of 42
L-8



9 ZONE I



10 ZONE J



GRADING LEGEND

— 17	EXISTING CONTOUR
17.0 X	EXISTING SPOT ELEVATION
---	EXISTING REVEMENT
— 17	PROPOSED CONTOUR
+ 17.0	PROPOSED SPOT ELEVATION
---	PROPOSED PATH
---	PROPERTY LINE
---	LIMIT OF GRADING
---	UPRUSH 0 YEARS POST PROJECT
---	UPRUSH 5-15 YEARS POST PROJECT
---	UPRUSH 10-20 YEARS POST PROJECT
---	LATERAL ACCESS EASEMENTS
---	PUBLIC ACCESS LIMIT LINE
---	MHTL 2009
---	MHTL 2010

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NOTE: SEE SHEET L-1 TO L-3 FOR TYPICAL DUNE RESTORATION SECTIONS, AND SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS.

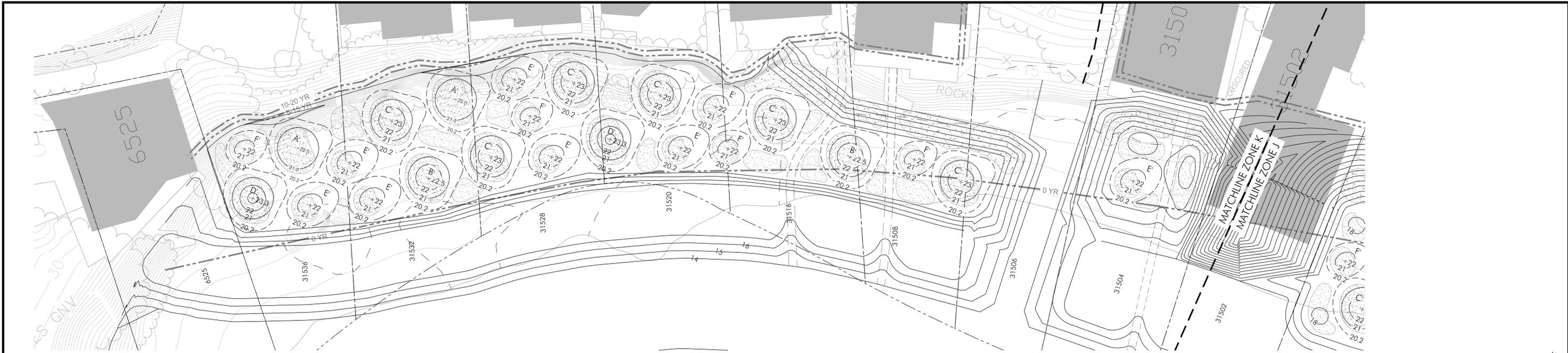
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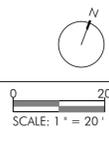
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California State Lands Commission		1" = 20'	11/7/12
DUNE RESTORATION: TYPICAL DUNE HUMMOCK GRADING & PLANTING PLAN		JOB NO.	6935-02
		SHEET	28 of 42
		L-9	



11 ZONE K



GRADING LEGEND

— 17 —	EXISTING CONTOUR
17.0 X	EXISTING SPOT ELEVATION
— 17 —	EXISTING REVETMENT
— 17 —	PROPOSED CONTOUR
+ 17.0	PROPOSED SPOT ELEVATION
---	PROPOSED PATH
---	PROPERTY LINE
---	LIMIT OF GRADING
---	UPRUSH 0 YEARS POST PROJECT
---	UPRUSH 5-15 YEARS POST PROJECT
---	UPRUSH 10-20 YEARS POST PROJECT
---	LATERAL ACCESS EASEMENTS
---	PUBLIC ACCESS LIMIT LINE
---	MHTL 2009
---	MHTL 2010

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NOTE: SEE SHEET L-1 TO L-3 FOR TYPICAL DUNE RESTORATION SECTIONS, AND SHEET L-4 FOR DUNE RESTORATION KEY MAP AND NOTES, DUNE HUMMOCK PROTOTYPES, AND PLANT LEGENDS.

FINAL
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CONCEPT
STATUS

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California State Lands Commission
DUNE RESTORATION:
TYPICAL DUNE HUMMOCK GRADING
& PLANTING PLAN

SCALE	DATE
1" = 20'	11/7/12
JOB NO.	6935-02
SHEET	29 of 42
L-10	

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