

Note:

- Source: Washington State Department of Transportation (WSDOT) Highway Runoff Manual, Figure 5-71.

This drawing is only a template that needs to be adjusted and revised for each project.

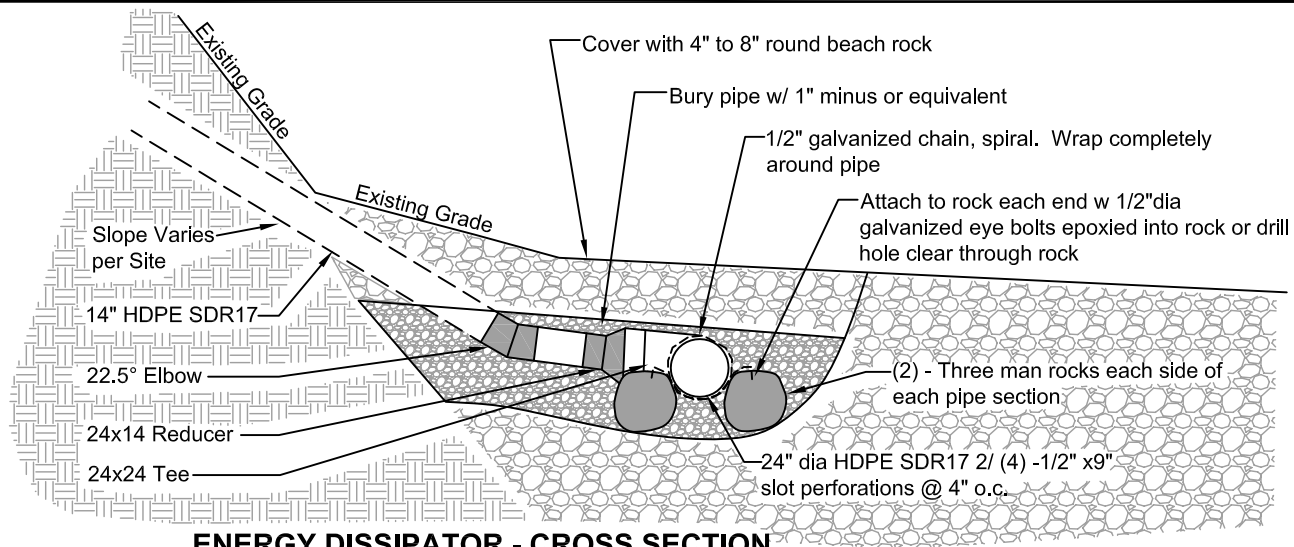


Engineer:
 Drawn by: K. Corwin
 Reviewed by:
 Approved by:

Example Drawing M - 1
Diffuser Tee - WSDOT HRM Figure. 5-71
Softshore Detail

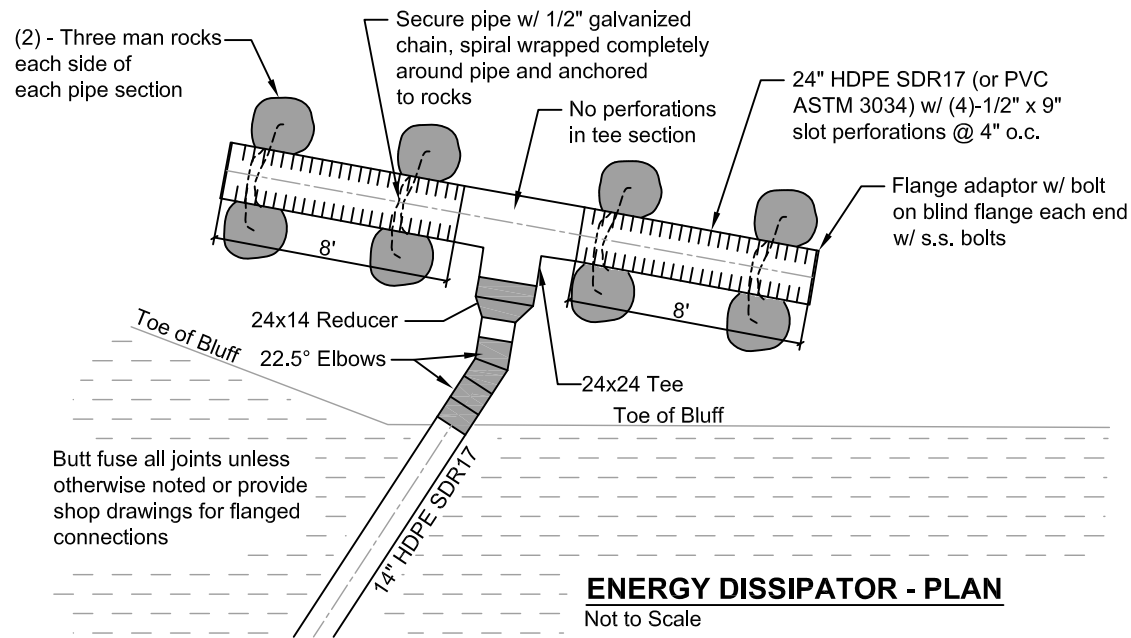
Date:
12 - 1 - 14

Sheet:
1 of 1



ENERGY DISSIPATOR - CROSS SECTION

Not to Scale



ENERGY DISSIPATOR - PLAN

Not to Scale

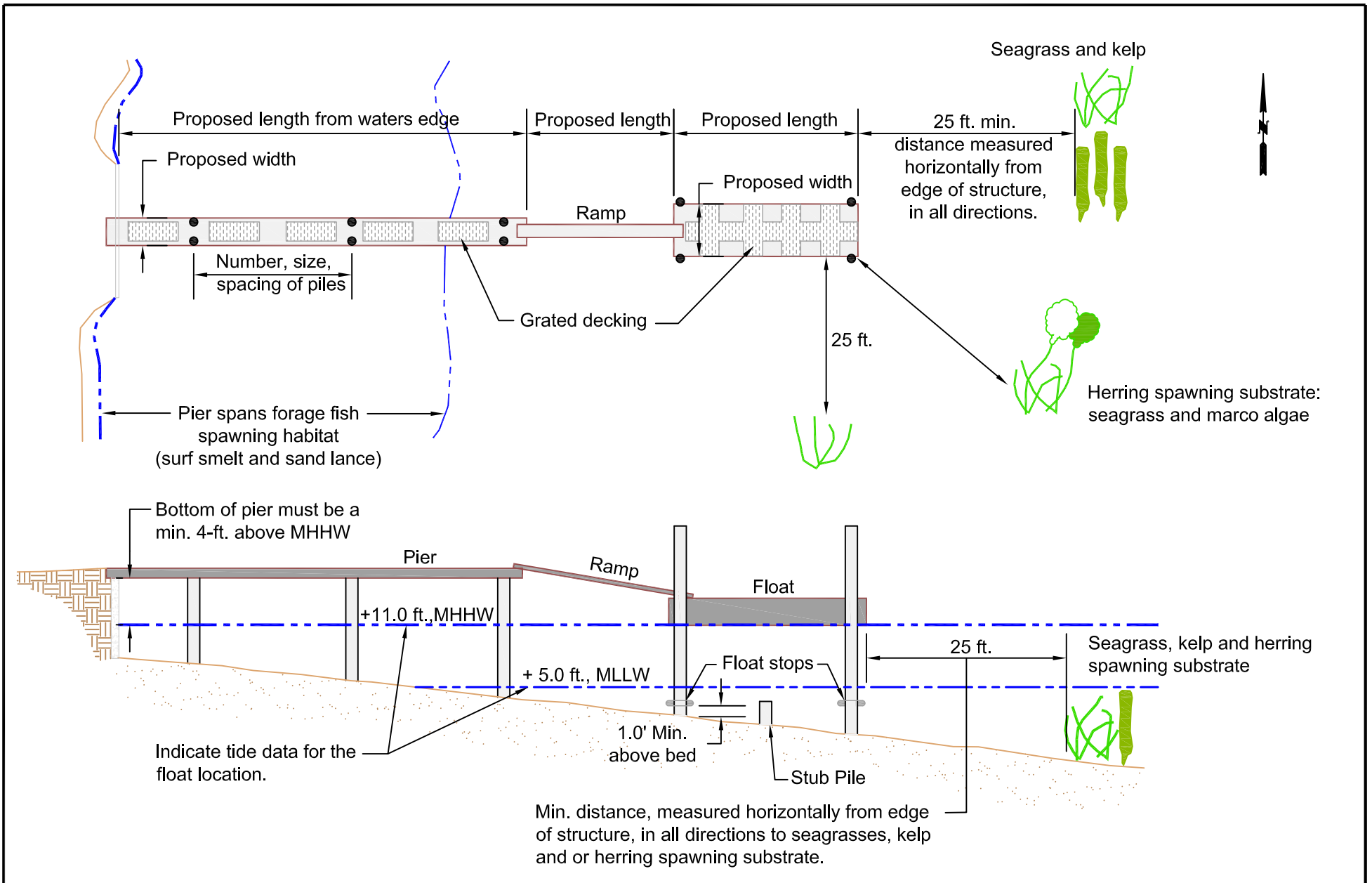


Engineer:
 Drawn by: K. Corwin
 Reviewed by:
 Approved by:

Example Drawing M -1a
Diffuser Tee-Buried (on High Energy Beach)
Softshore Detail

Date:
 12 - 1 - 14

Sheet:
 1 of 1



Engineer:
 Drawn by: K. Corwin
 Reviewed by:
 Approved by:

Example Drawing M - 2

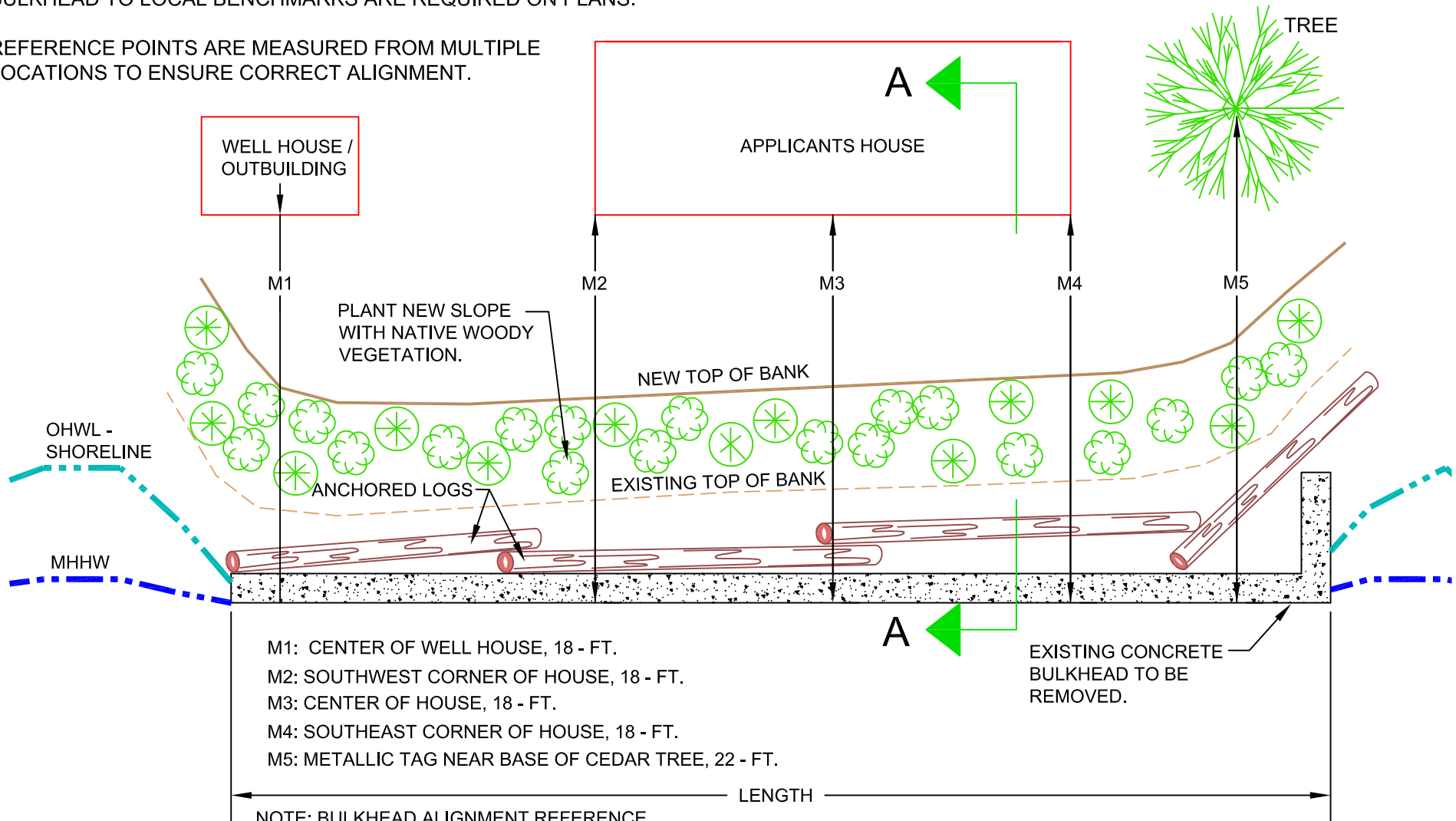
PIER TO RAMP TO FLOAT DETAIL

Date:
 12 - 1 - 14

Sheet:
 1 of 1

HORIZONTAL DISTANCES AND COMPASS HEADINGS FROM EACH REFERENCE POINT ON THE WATERWARD FACE OF THE BULKHEAD TO LOCAL BENCHMARKS ARE REQUIRED ON PLANS.

REFERENCE POINTS ARE MEASURED FROM MULTIPLE LOCATIONS TO ENSURE CORRECT ALIGNMENT.



PLAN VIEW

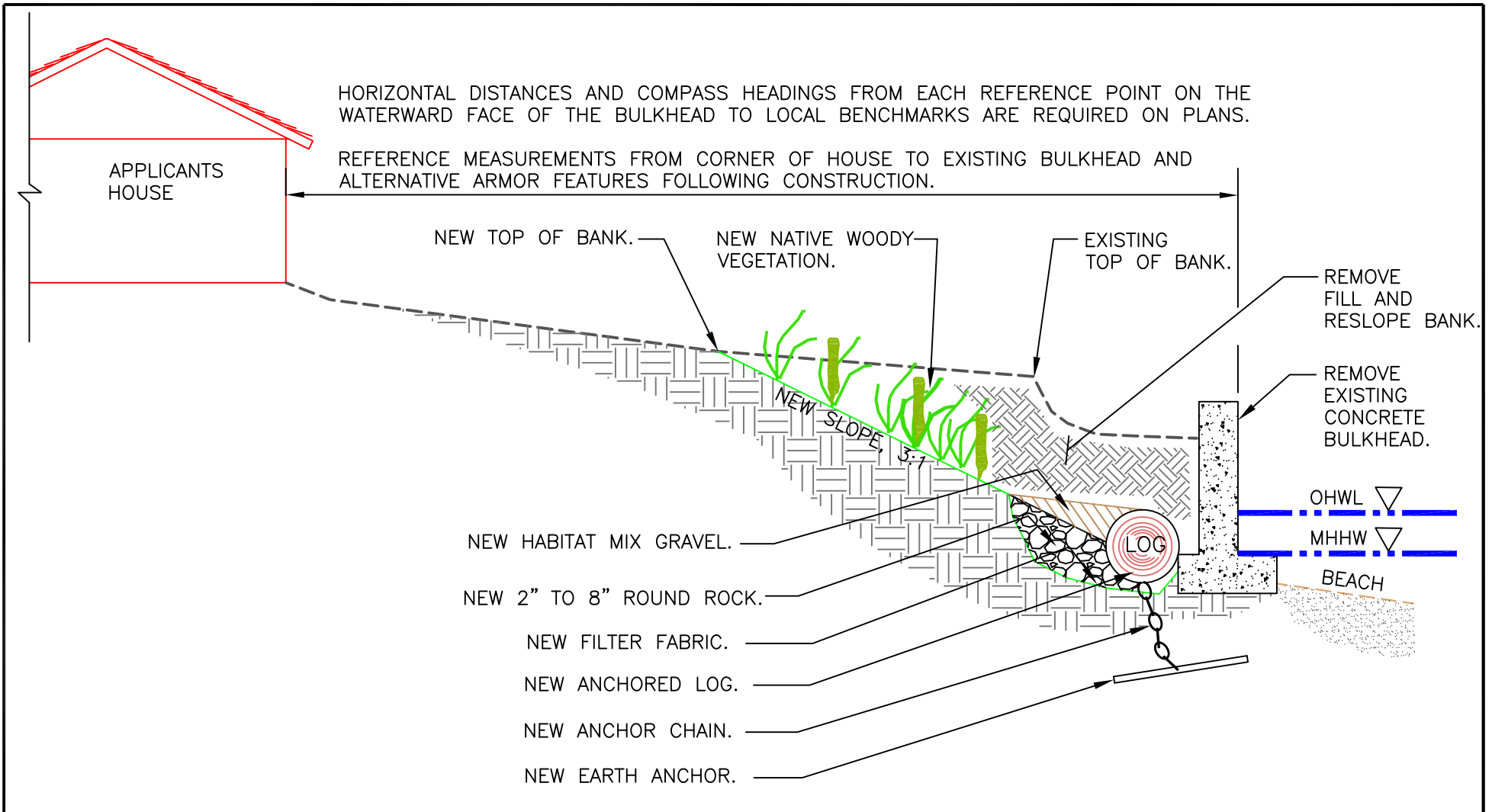


Engineer: D.PONDER
 Drawn by: K.CORWIN
 Reviewed by: C.MORSS
 Approved by:

EXAMPLE DRAWING M-3A
BULKHEAD REMOVAL PLAN VIEW DETAIL

DATE:
7-27-20

SHEET:
1 OF 2



SECTION A - A

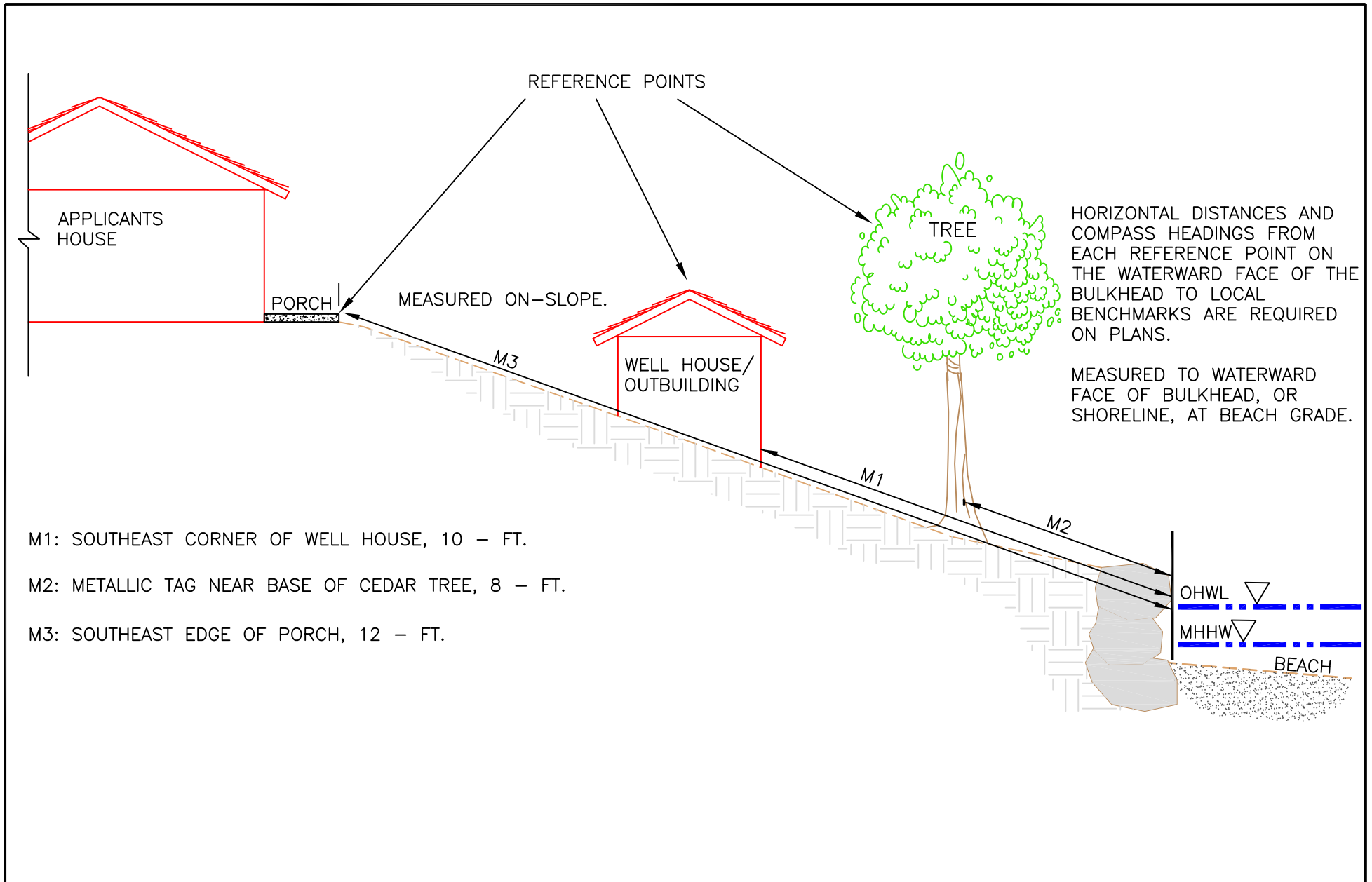


Engineer: D.PONDER
 Drawn by: K.CORWIN
 Reviewed by: C.MORSS
 Approved by:

EXAMPLE DRAWING M - 3B
SOFTSHORE DETAIL BULKHEAD REMOVAL SECTION

DATE:
7-27-20

SHEET:
2 OF 2



M1: SOUTHEAST CORNER OF WELL HOUSE, 10 – FT.

M2: METALLIC TAG NEAR BASE OF CEDAR TREE, 8 – FT.

M3: SOUTHEAST EDGE OF PORCH, 12 – FT.



Engineer: D.PONDER
 Drawn by: K.CORWIN
 Reviewed by: C.MORSS
 Approved by:

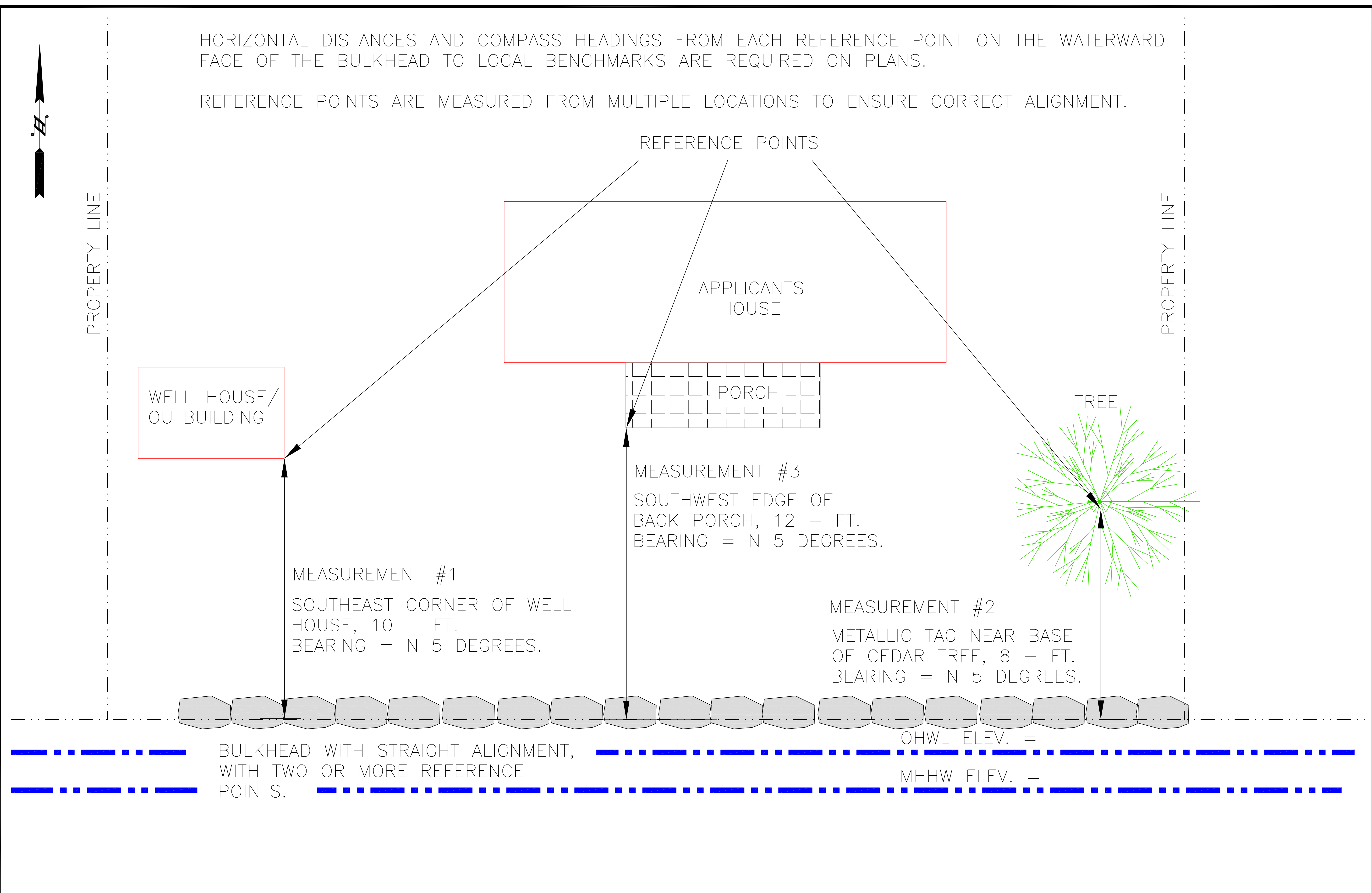
EXAMPLE DRAWING M-4
BULKHEAD FIELD MEASUREMENT DIAGRAM #1

DATE:
7-27-20

SHEET:
1 OF 1

HORIZONTAL DISTANCES AND COMPASS HEADINGS FROM EACH REFERENCE POINT ON THE WATERWARD FACE OF THE BULKHEAD TO LOCAL BENCHMARKS ARE REQUIRED ON PLANS.

REFERENCE POINTS ARE MEASURED FROM MULTIPLE LOCATIONS TO ENSURE CORRECT ALIGNMENT.

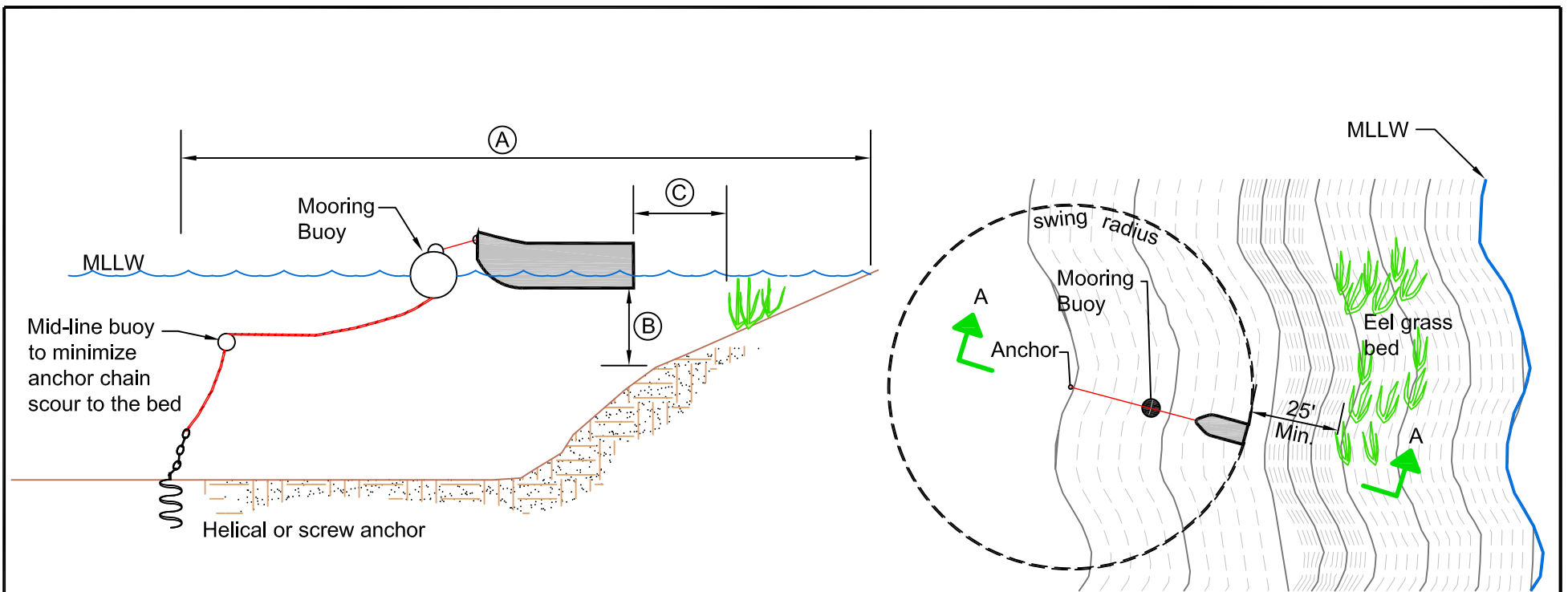


Engineer: D.PONDER
 Drawn by: K.CORWIN
 Reviewed by: C.MORSS
 Approved by:

EXAMPLE DRAWING M-5
BULKHEAD FIELD MEASUREMENT DIAGRAM #2

DATE:
4-4-24

SHEET:
1 OF 1



Anchor distance (A) from shoreline to anchor shall be sufficient to:

- 1.) Prevent boat / float grounding at all tides by providing a minimum depth (B) of 1.0 - ft., and
- 2.) Prevent shading of eel grass by providing 25 - ft. separation (C) between boat / floats and eel grass beds.

Cross Section A-A

Plan View

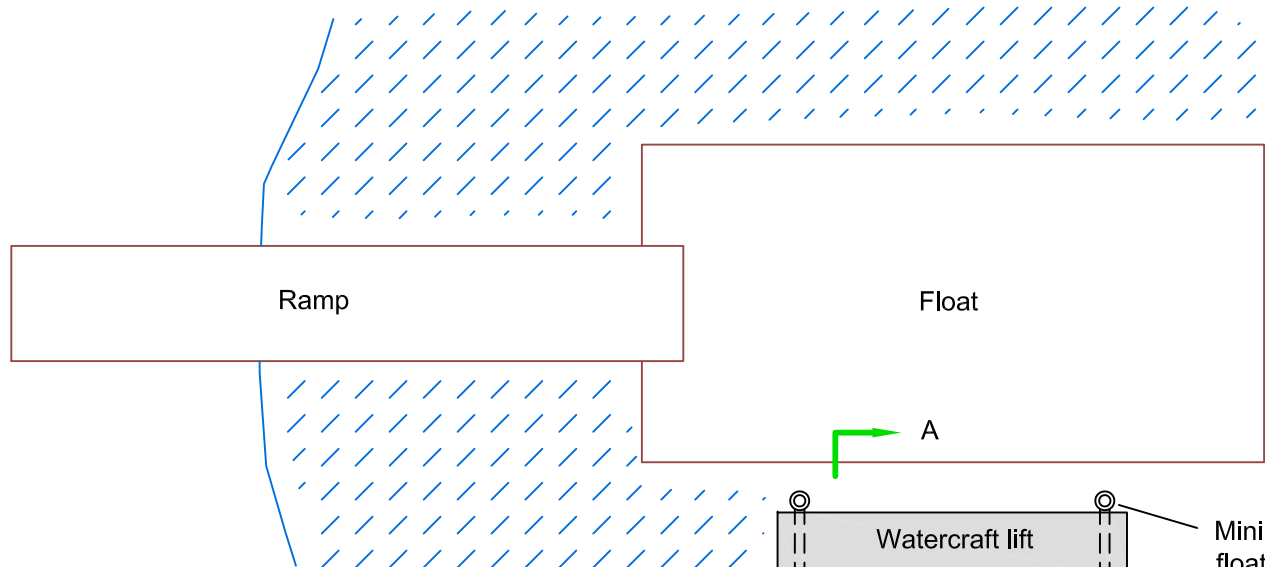


Engineer:
 Drawn by: K. Corwin
 Reviewed by:
 Approved by:

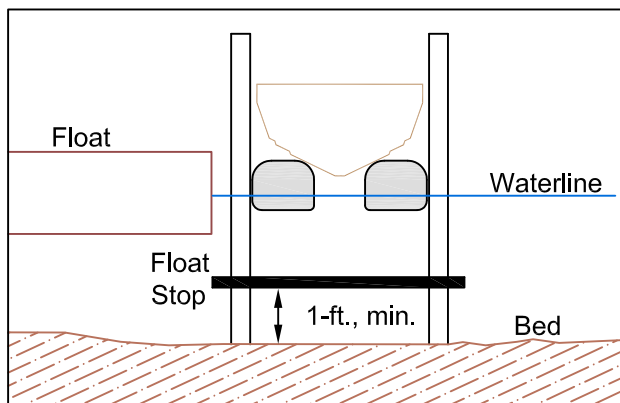
**Example Drawing M-6
 Marine Buoy Placement**

Date:
 12 - 1 - 14

Sheet:
 1 of 1



Minimum number of float stops, or stub piles to keep the watercraft lift a minimum 1-foot off the bed.



Section A-A



Engineer:
 Drawn by: K. Corwin
 Reviewed by:
 Approved by:

Example Drawing M-7
EXAMPLE WATERCRAFT LIFT

Date:
 12 - 1 - 14

Sheet:
 1 of 1