JOINT PERMIT APPLICATION SAMPLE DRAWINGS

The following drawings are examples of common projects applied for under the Joint Permit Application. Since each project is unique, these drawings should be used as guides and are not intended to include all information necessary for every project scenario. Site plans, cross sections, and profiles are required showing existing and proposed conditions as follows:

Overall Project Site Plan: Many projects involve multiple activities requiring detailed information that cannot be captured in one drawing or illustration. As such, an overall project site plan should be submitted that shows the entire property and the location of all proposed activities. Separate plan view drawings should also be submitted for individual activities referenced in the application. The individual plan view drawing(s) should include all the required dimensions (length, width, area, cubic yardage, etc., as appropriate) for each activity, property lines, and all regulated features (wetlands, inland lakes and streams, Great Lakes, etc.). Include Soil Erosion and Sedimentation Control measures, as appropriate.

Cross Sectional and Profile Drawings of all proposed impact areas with dimensions.

<u>The following items are required on all site plans, cross sections, and profiles, as applicable:</u>

1. Scale and/or Dimensions, Compass North, and Property Lines.
2. All wetlands on the property and their delineated boundaries associated with proposed impacts. This includes wetlands that may not be regulated.
    - Wetland delineations determine where the regulated line between upland and regulated wetland lie. This is determined by a wetland professional through consideration of existing vegetation, hydrology, and soils. See How Are Wetlands Identified. EGLE makes the final determinations on wetland regulatory status.
3. Any rivers, lakes, or ponds on the property and Ordinary High Water Mark (OHWM) elevation associated with the proposed impact locations. The OHWM is unique to each individual waterbody and is defined differently in inland lakes, streams, and each Great Lake. An OHWM can be determined by either land survey information or through simple vertical measurements taken in reference to a benchmark such as an observed water level or base of tree, etc. The following information indicates how to determine the OHWM in different situations:
    - <u>PART 325</u>: The OHWM for each Great Lake is an elevation set by Part 325 and is referenced upon the baseline datum set called International Great Lakes Datum 1985 (IGLD 85). See the EGLE Great Lakes OHWM website for information on Part 325 OHWM elevations. In addition, the US Army Corps of Engineers (USACE) has jurisdiction over these areas and also has OHWM elevations; see USACE website for more accurate daily information on Great Lakes Water Level Data. When looking up daily data, use the Daily Lakewide Average Water Levels tables to select the closest date elevation. If you are using the IGLD 85 datum as the OHWM reference, this is the elevation you enter on the Joint Permit Application for Great Lakes Observed Water Elevation. You may also use a relative reference that is based on measurements in relation to a benchmark or point location identified in the field (such as a water level or base of a tree). The OHWM elevation can be converted based on this onsite observed data. See example drawings.

- Part 301: OHWM for inland lakes is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels. This line is identified in the field based on observed physical characteristics and may be reported by referencing either land survey elevation information or a relative benchmark such as observed water level or the base of a tree. A surveyed elevation is typically referenced to the National Geodetic Vertical Datum (NGVD 29 or NAVD 88). If the actual land elevation is not known (i.e., no land survey is done), then use a relative reference elevation such as 0 for an observed water level or a static benchmark. The OHWM elevation to report on the JPA will be the vertical distance from that benchmark to the physical line observed in the field. If using a water level as the benchmark, report the date of observation. The OHWM is used for calculating impacts from the proposed activities so the actual surveyed elevation itself is not necessary in many cases. The necessary information is where the OHWM lies vertically and horizontally in relation to the existing and proposed features on site (e.g., water levels, bottom of stream, dock dimensions, etc.). See EGLE's YouTube Series for OHWM video tutorials, and the sample OHWM drawings below for more information. Some inland lakes have a legally established OHWM elevation (Legal Lake Level). For information, see EGLE's YouTube video describing Legal Lake Levels. Contact your County Drain Commissioner for established Legal Lake Levels in your area.

4. Any floodplain 100-year boundaries identified on the property with dimensions in reference to proposed impacts. See Floodplain Management Program.
5. Each impact location should be called out on plans with a label that corresponds to reported impacts on the JPA. Identify fill and excavation dimensions and areas (in Square Feet or Acres) with associated volumes (in cubic yards) and locations of structures or other impact areas (including temporary impacts) associated with the proposed project.
6. Distance to other structures and lot lines associated with the project as appropriate.
7. Topographic contour lines from licensed surveyor or engineer when applicable; this is typically for larger developments or more complex projects.

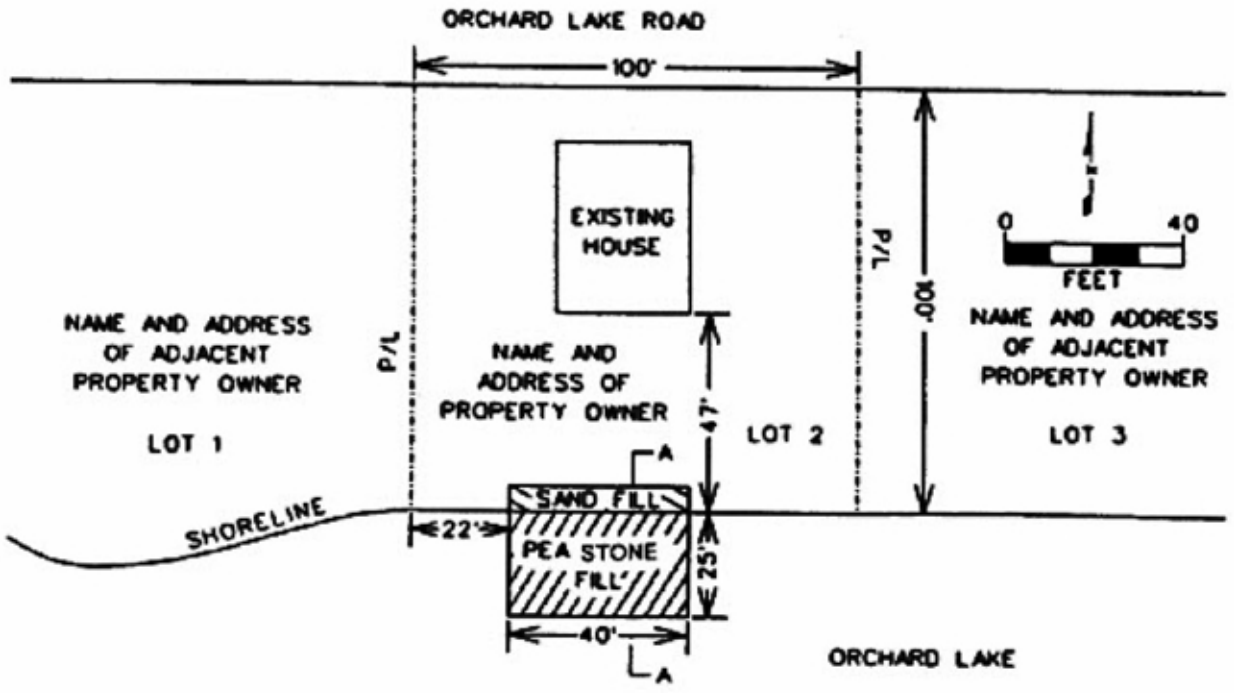
List of sample drawings:

Beach Sanding
Boardwalk
Boat Hoist
Boat Ramp
Boat Well
Bridges
Critical Dune Area
Cross Sectional Area of a Stream
Culverts
Dams
Docks
Dredging
Driveway
Floodplains – Cut and Fill
Floodplains – Demarcation
Groin
High Risk Erosion Area
Intake
Marina
Mooring Buoy
Ordinary High Water Mark
Outlet
Pond Construction
Shore Protection - Measurements
Shore Protection – Seawall
Shore Protection – Great Lakes
Temporary Crossing – Logging road
Utility Boring
Utility Trenching
Wetland Fill

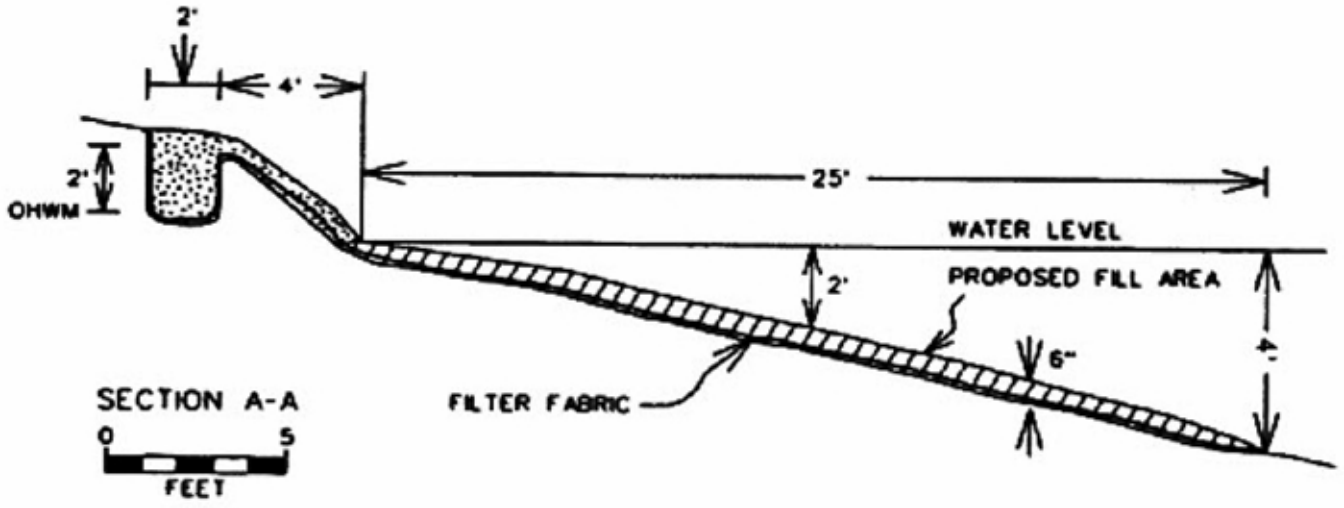
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

BEACH SANDING

Plan View

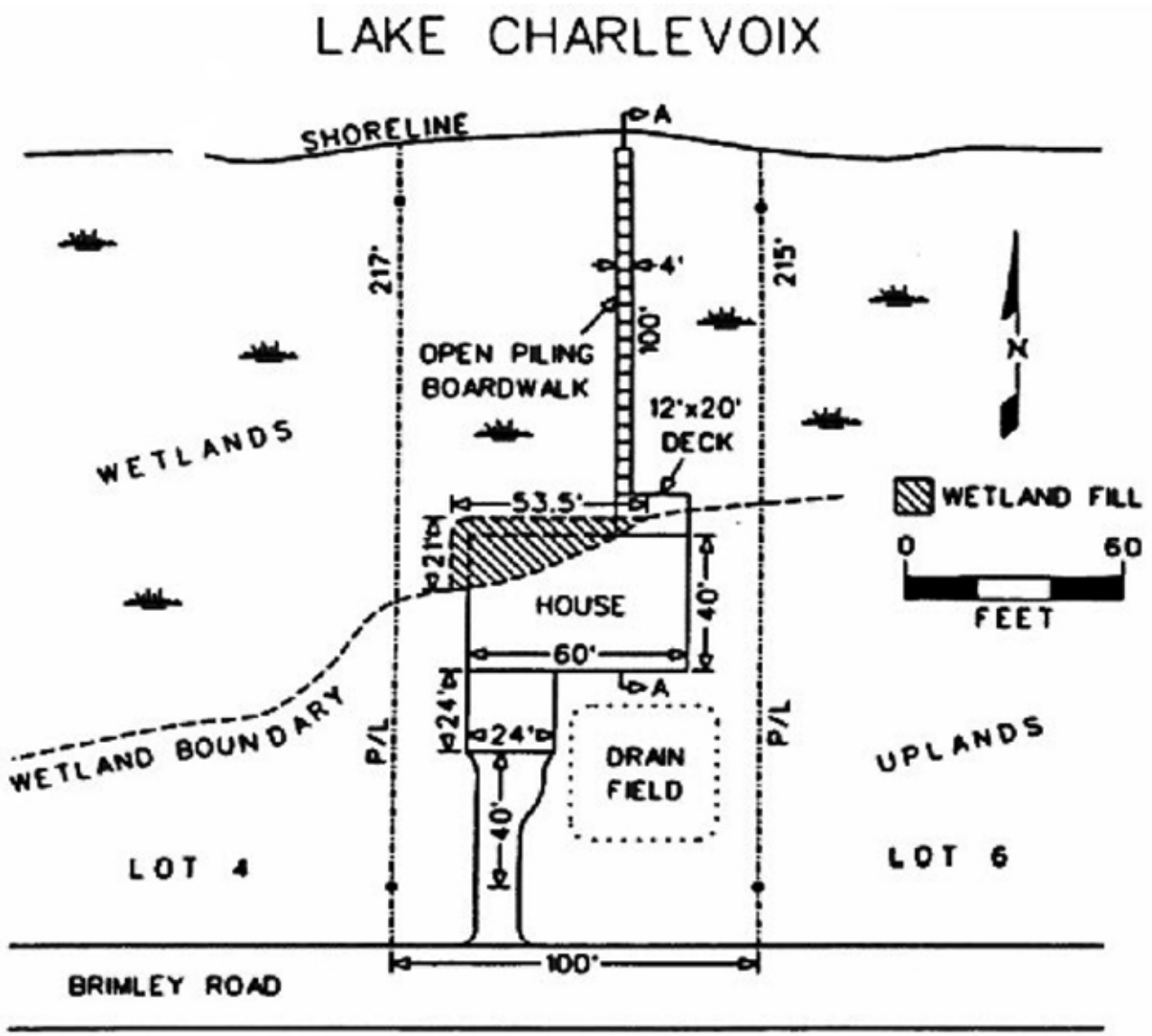


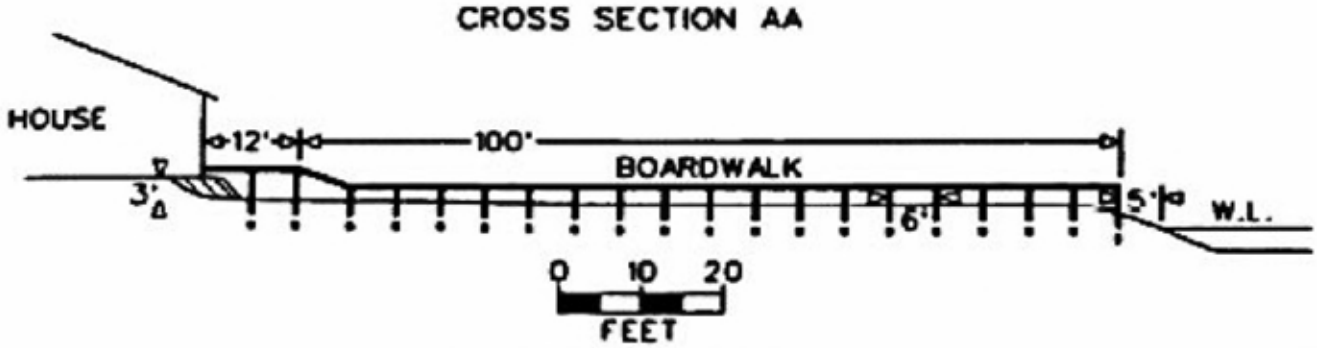
Cross Section



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

BOARDWALK

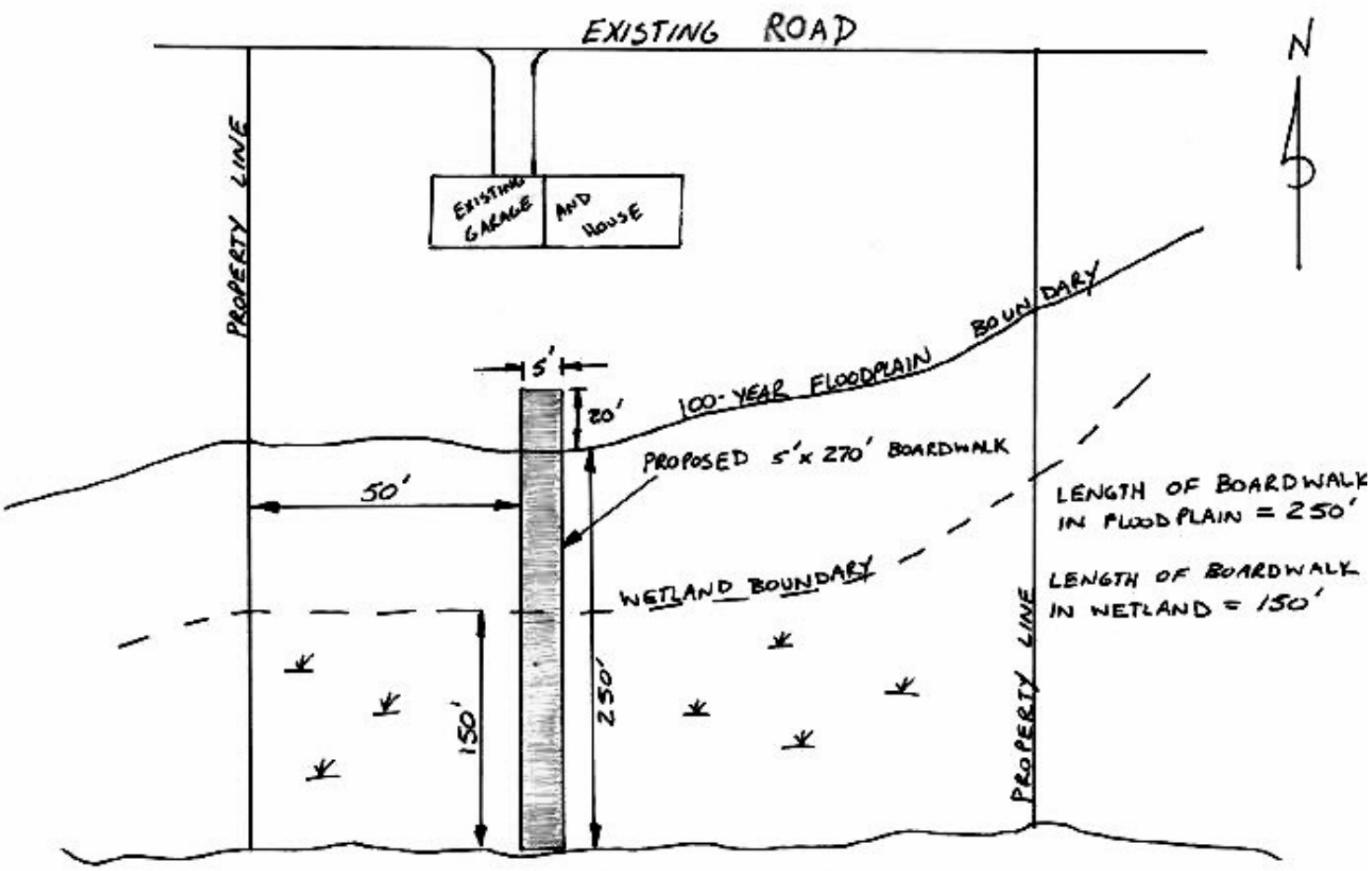




JOINT PERMIT APPLICATION SAMPLE DRAWINGS

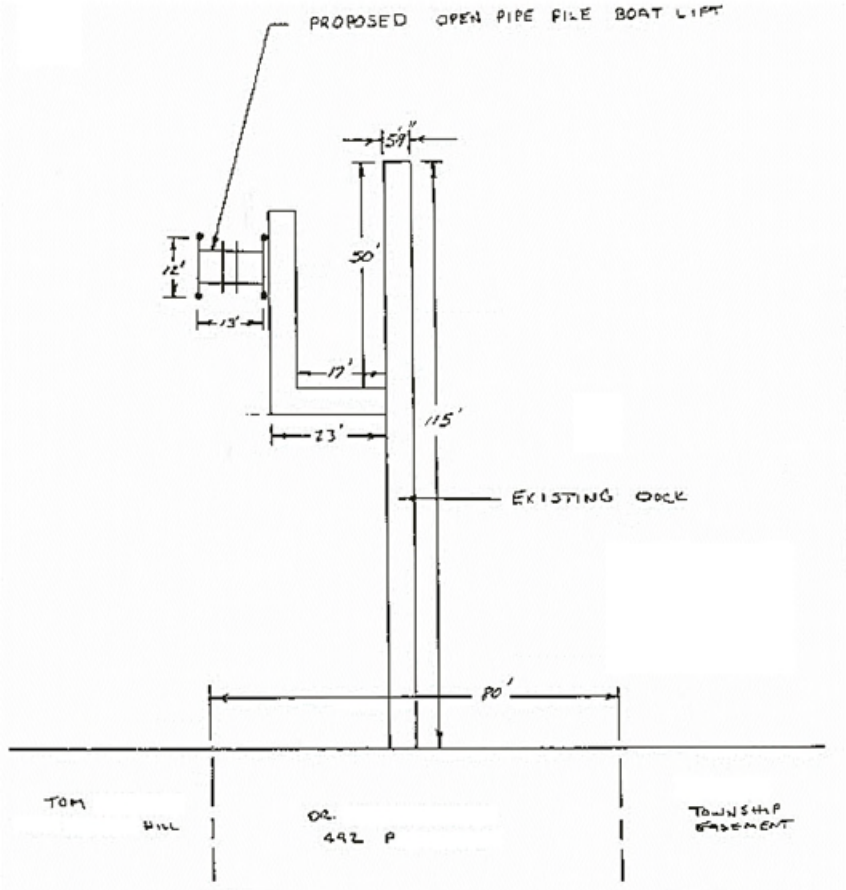
BOARDWALK

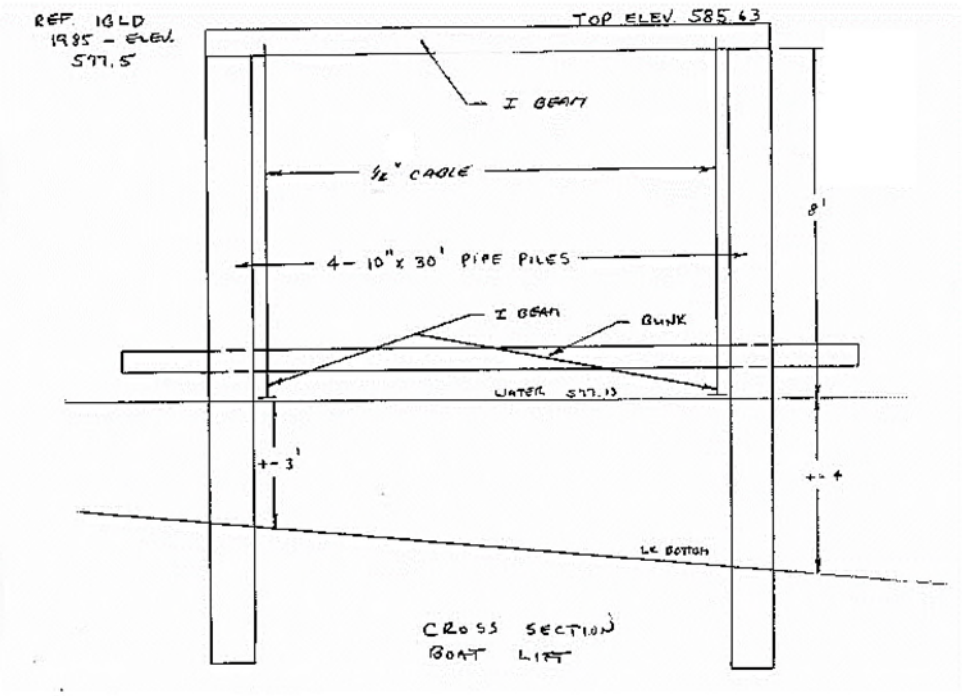
Crossing wetlands and floodplains



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

BOAT HOIST/LIFT

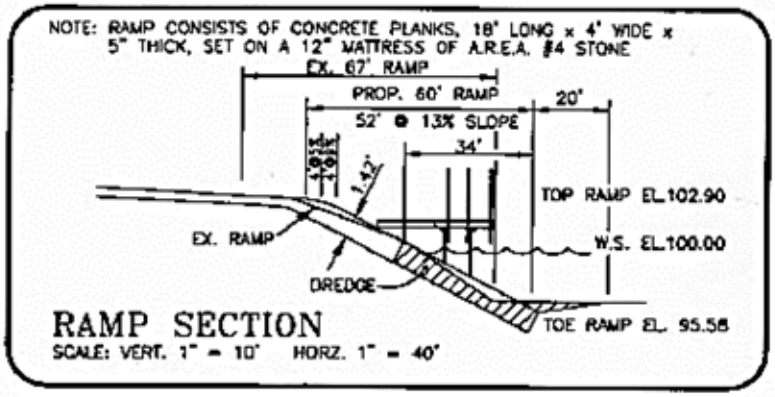




JOINT PERMIT APPLICATION SAMPLE DRAWINGS

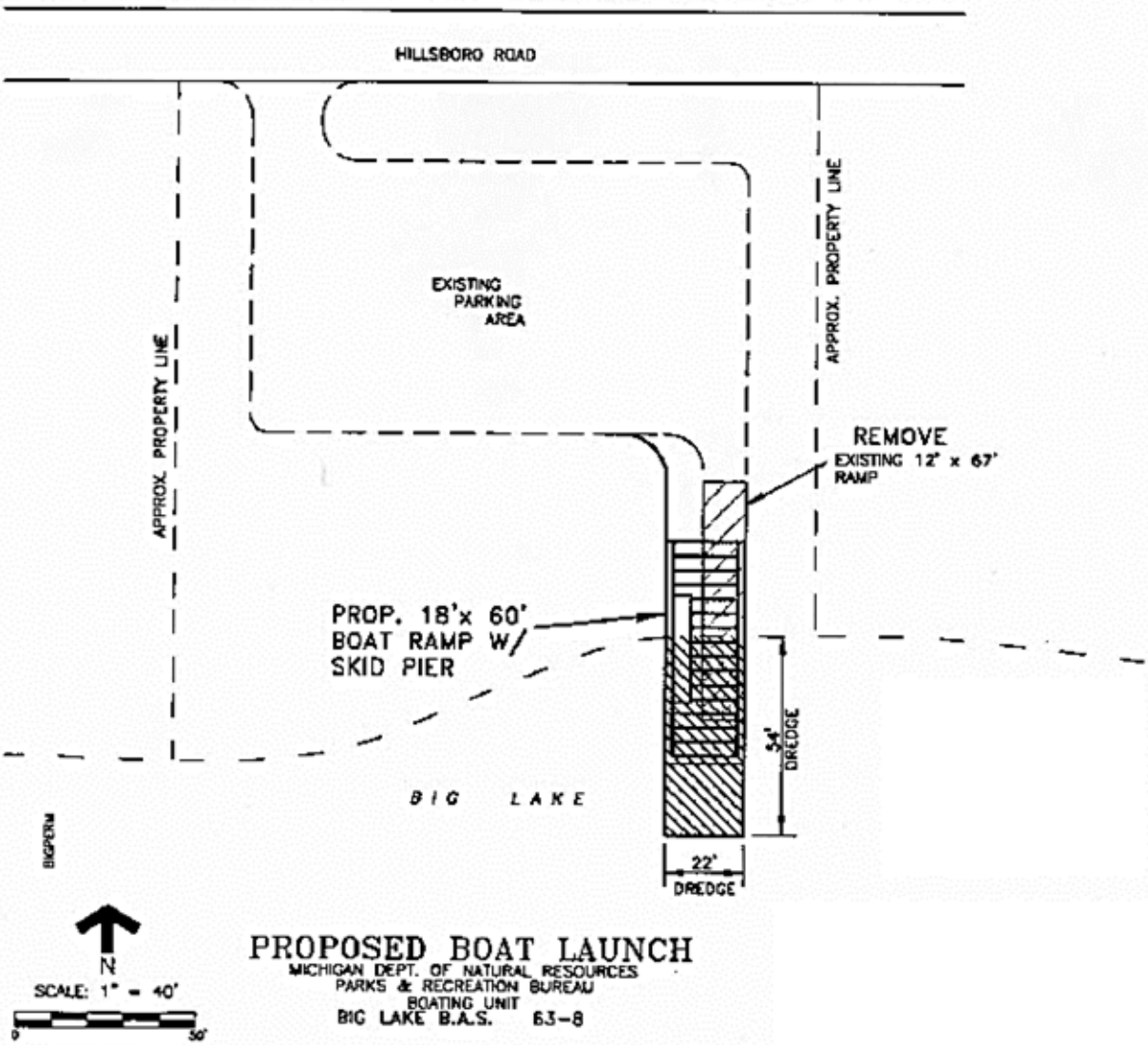
BOAT RAMP

Replacement



EST. 40 CY DREDGING–ALL DREDGED MATERIAL TO BE PLACED AT PONTIAC LAKE RECREATION AREA.

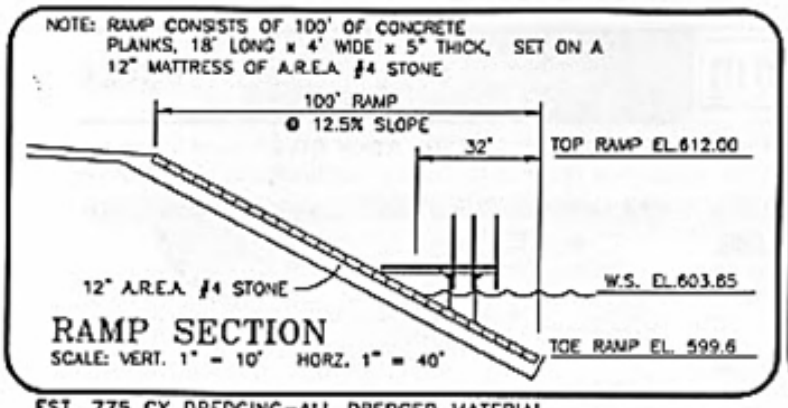
GEOTEXTILE BARRIER REQUIRED IF WORK IS NOT COMPLETED IN THE DRY.



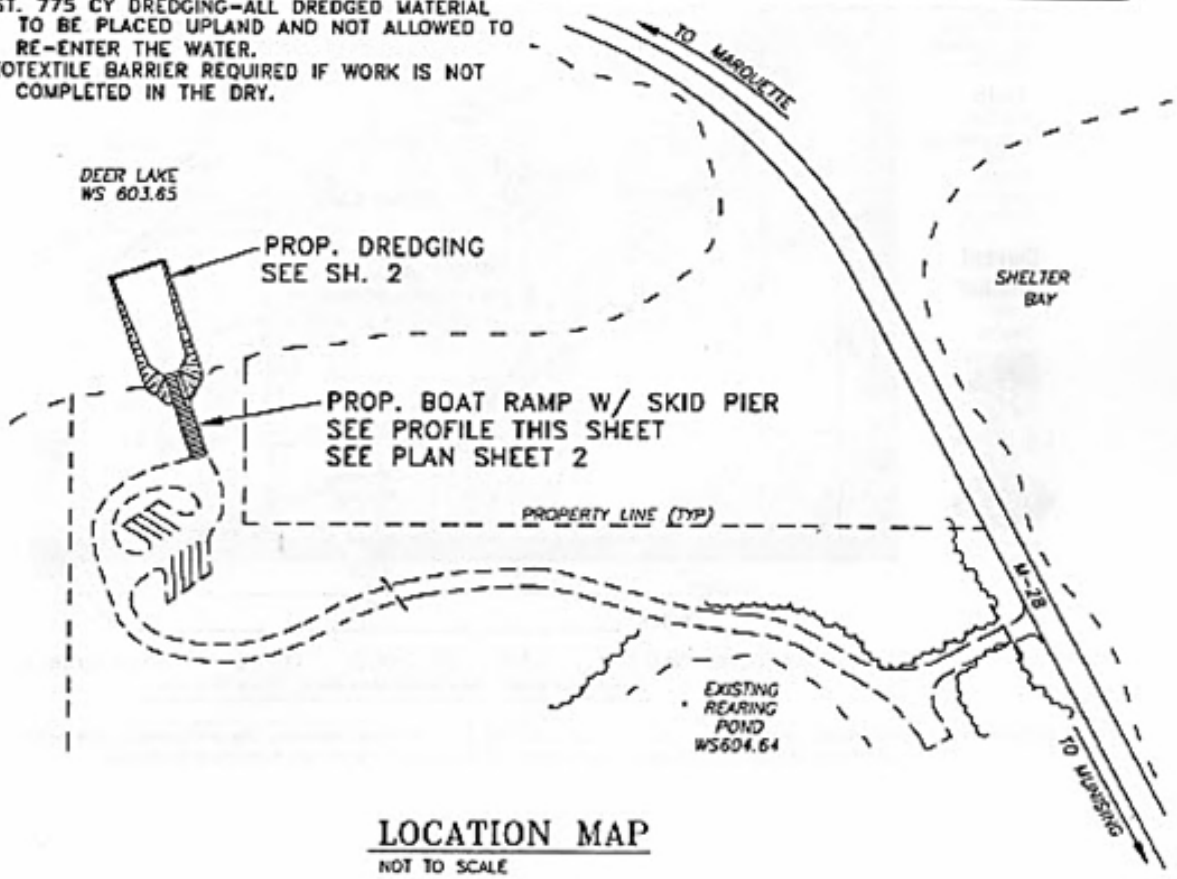
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

BOAT RAMP

New



EST. 775 CY DREDGING-ALL DREDGED MATERIAL TO BE PLACED UPLAND AND NOT ALLOWED TO RE-ENTER THE WATER.
GEOTEXTILE BARRIER REQUIRED IF WORK IS NOT COMPLETED IN THE DRY.

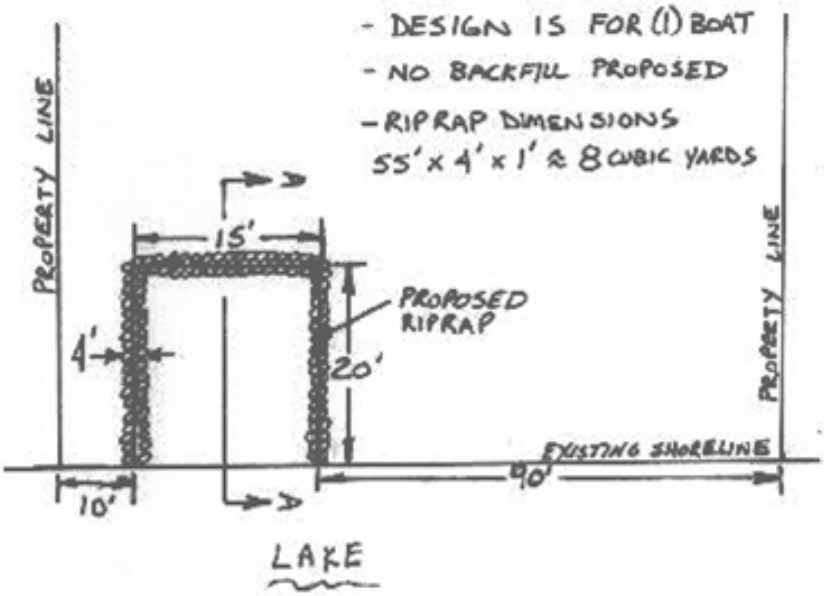


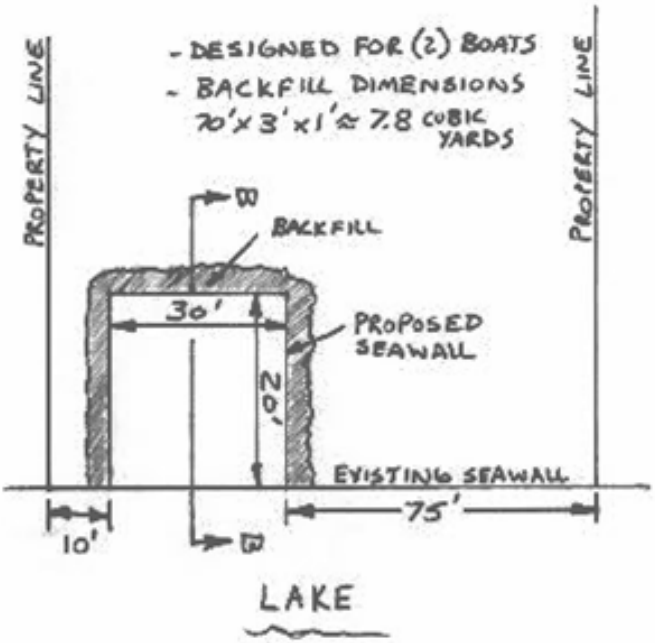
LOCATION MAP
NOT TO SCALE

JOINT PERMIT APPLICATION SAMPLE DRAWINGS

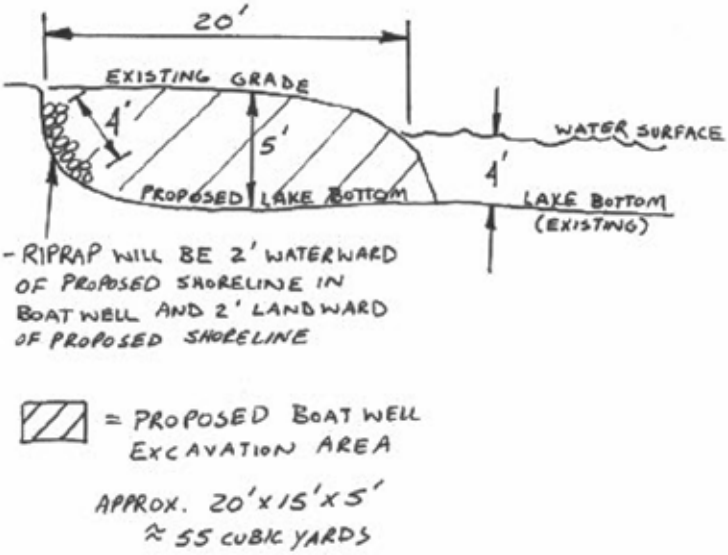
BOAT WELL

New

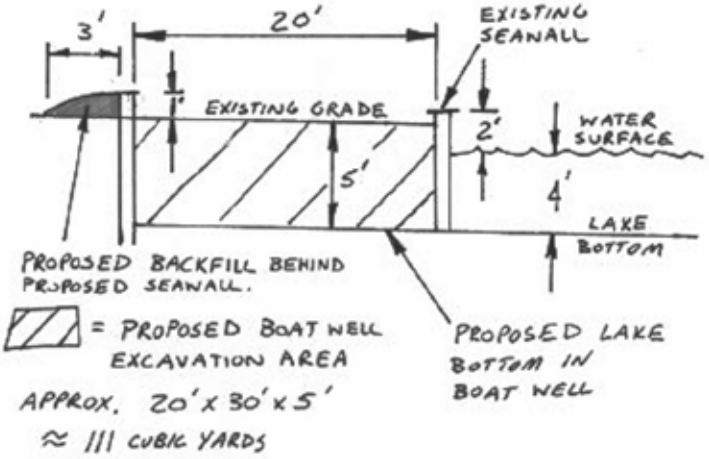




SECTION A-A

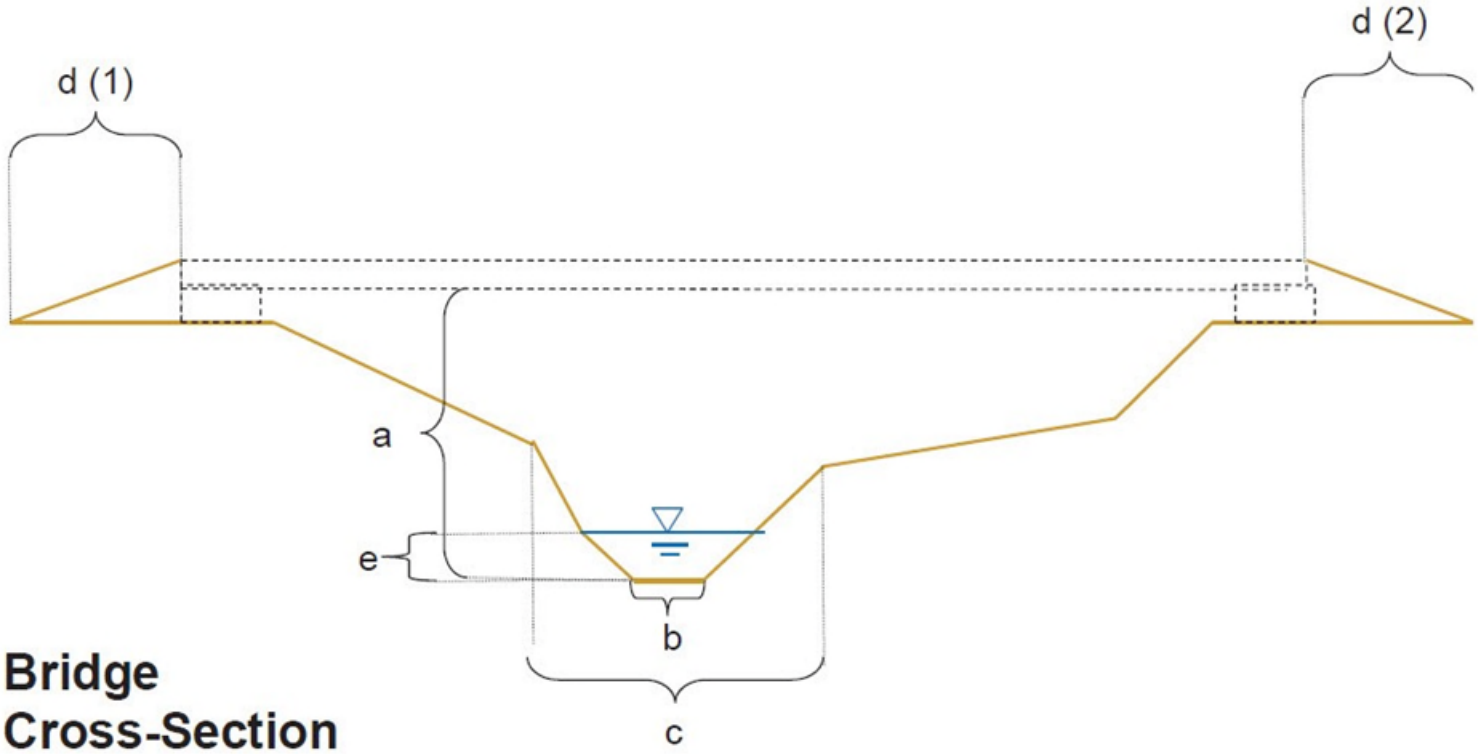


SECTION B-B



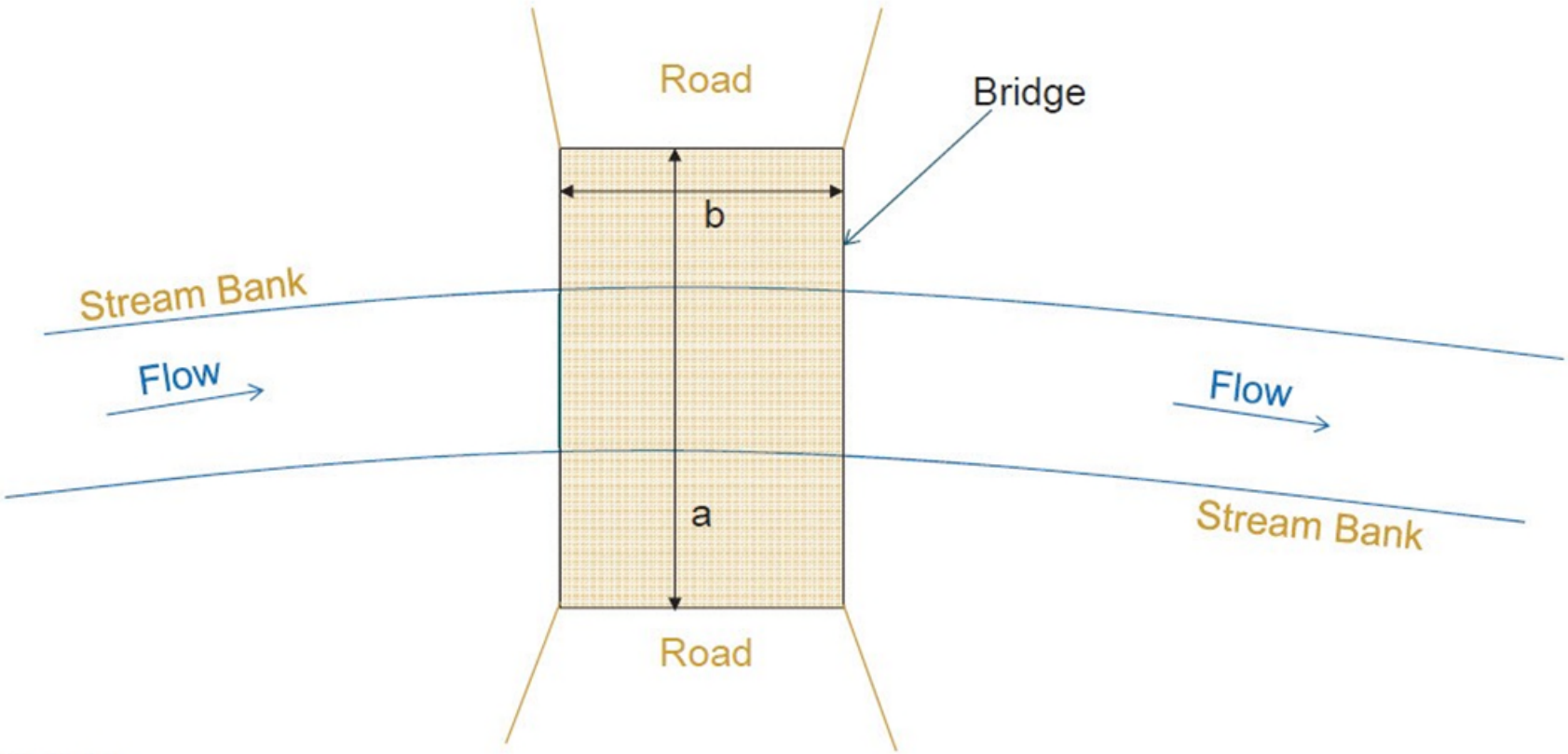
BRIDGES

a. _____ Bridge rise from stream bottom to bottom beam
b. _____ Width of Stream Bottom
c. _____ Width between stream banks (Bankfull Width)
d. (1)_____ (2)_____ Length of fill from edge of bridge to existing ground surf.
e. _____ Depth of water and Date _____



Bridge Cross-Section

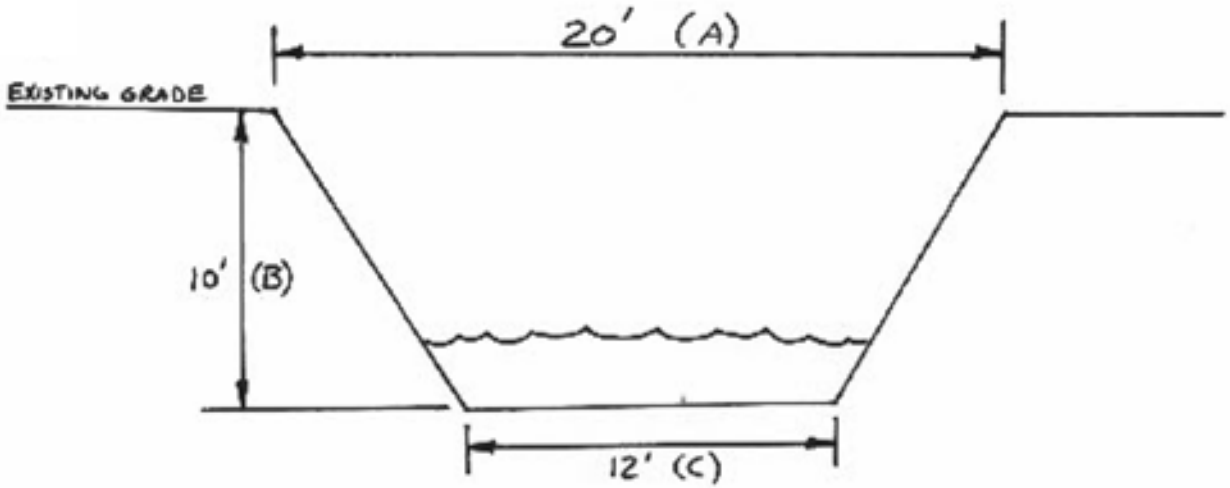
a. _____ Bridge span
b. _____ Bridge width



Bridge
Plan View

CHANNEL CROSS SECTIONAL AREA

- PRIMARY CHANNEL WIDTH FROM TOP OF BANK TO TOP OF BANK = 20'
- BANK HEIGHT = 10'
- BOTTOM OF CHANNEL WIDTH = 12'



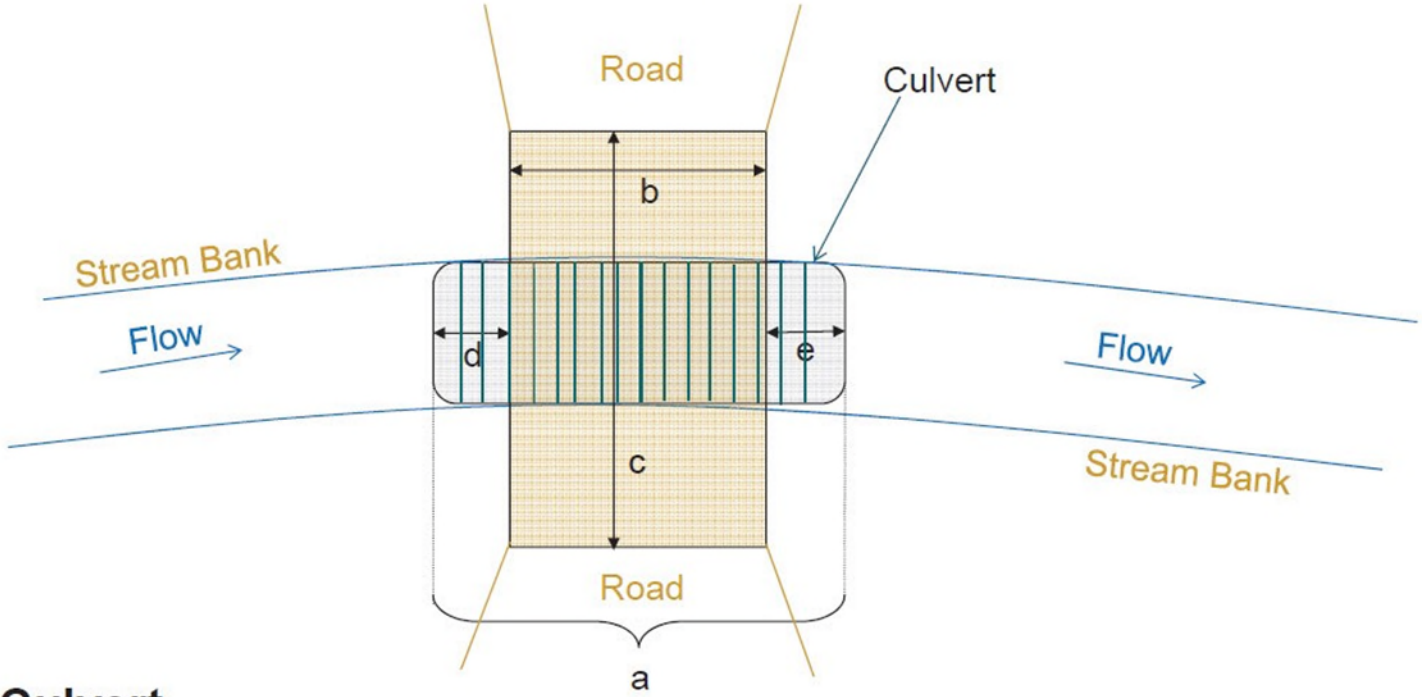
$$\text{CROSS SECTIONAL AREA} = \left(\frac{A+C}{2}\right) \times B$$

$$\text{CROSS SECTIONAL AREA} = \left(\frac{20'+12'}{2}\right) \times 10' = 160 \text{ SQUARE FEET}$$

CULVERTS

Plan View

a. _____ Length of culvert
b. _____ Width of fill (distance parallel to stream)
c. _____ Length of fill (distance perpendicular to stream)
d. _____ Distance between edge of fill and end of culvert
e. _____ Distance between edge of fill and other end of culvert



Culvert

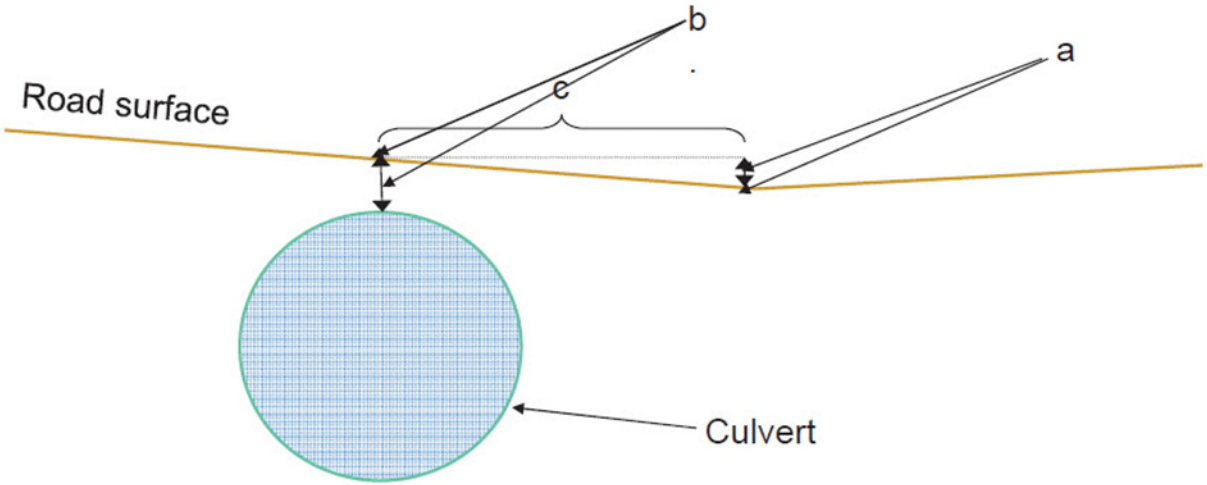
CULVERTS

Distance from Low Point in Road

a. _____ Elevation at low point in road –OR- difference in height from road surface at that location, and above culvert

b. _____ Elevation at road grade –OR- height

c. _____ Distance from low point in road to center of crossing

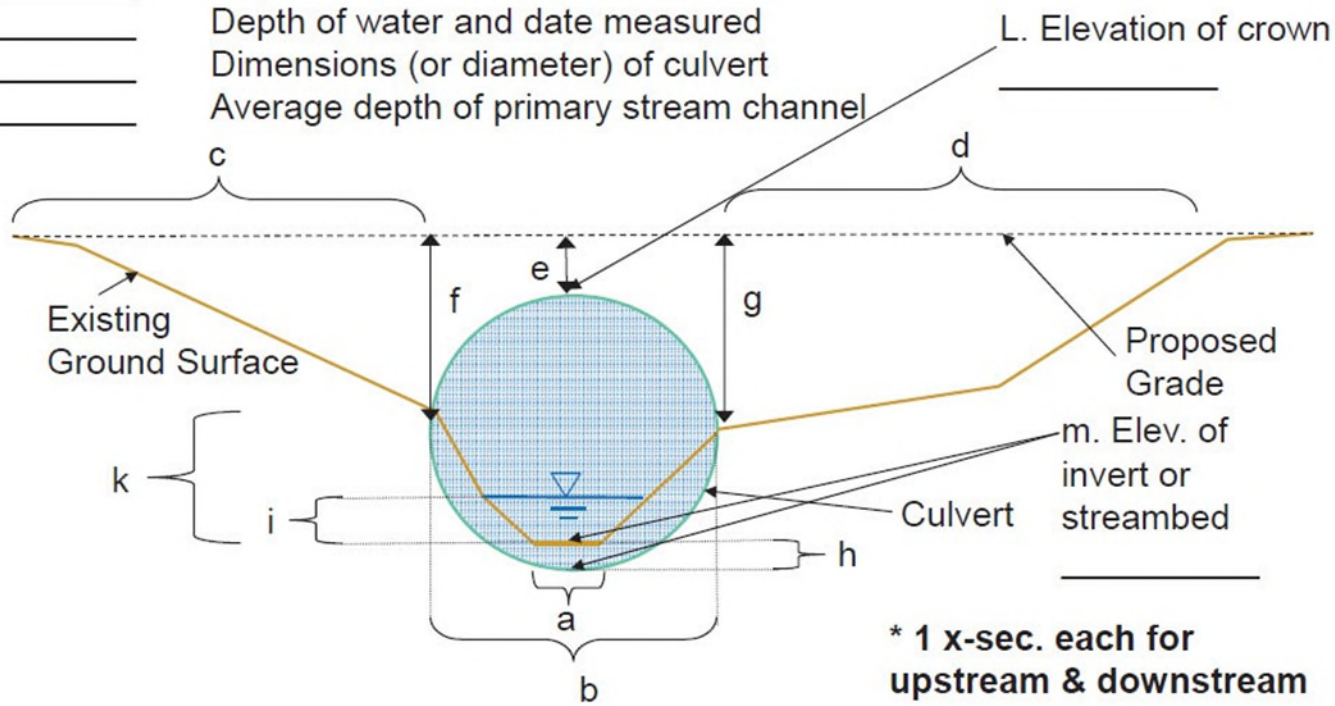


ROAD
(Cross-Section) View

CULVERTS

Cross Section

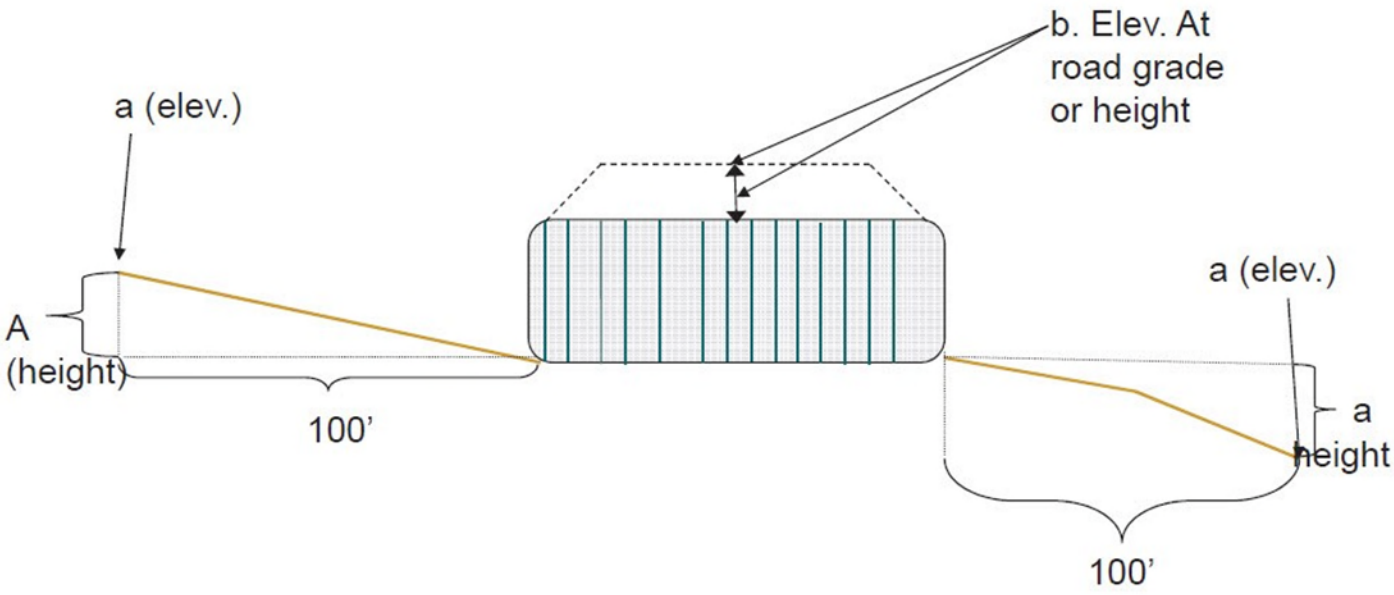
a. _____ Width of stream bottom
b. _____ Width between stream banks (Bankfull Width)
c. _____ Length of fill area from existing ground to edge of culvert
d. _____ Length of fill area from existing ground to edge of culvert
e. _____ Depth of fill above center of culvert
f. _____ Depth of fill from top of proposed grade to bank
g. _____ Depth of fill from top of proposed grade to bank on other side
h. _____ Depth culvert will be recessed
i. _____ Depth of water and date measured
j. _____ Dimensions (or diameter) of culvert
k. _____ Average depth of primary stream channel



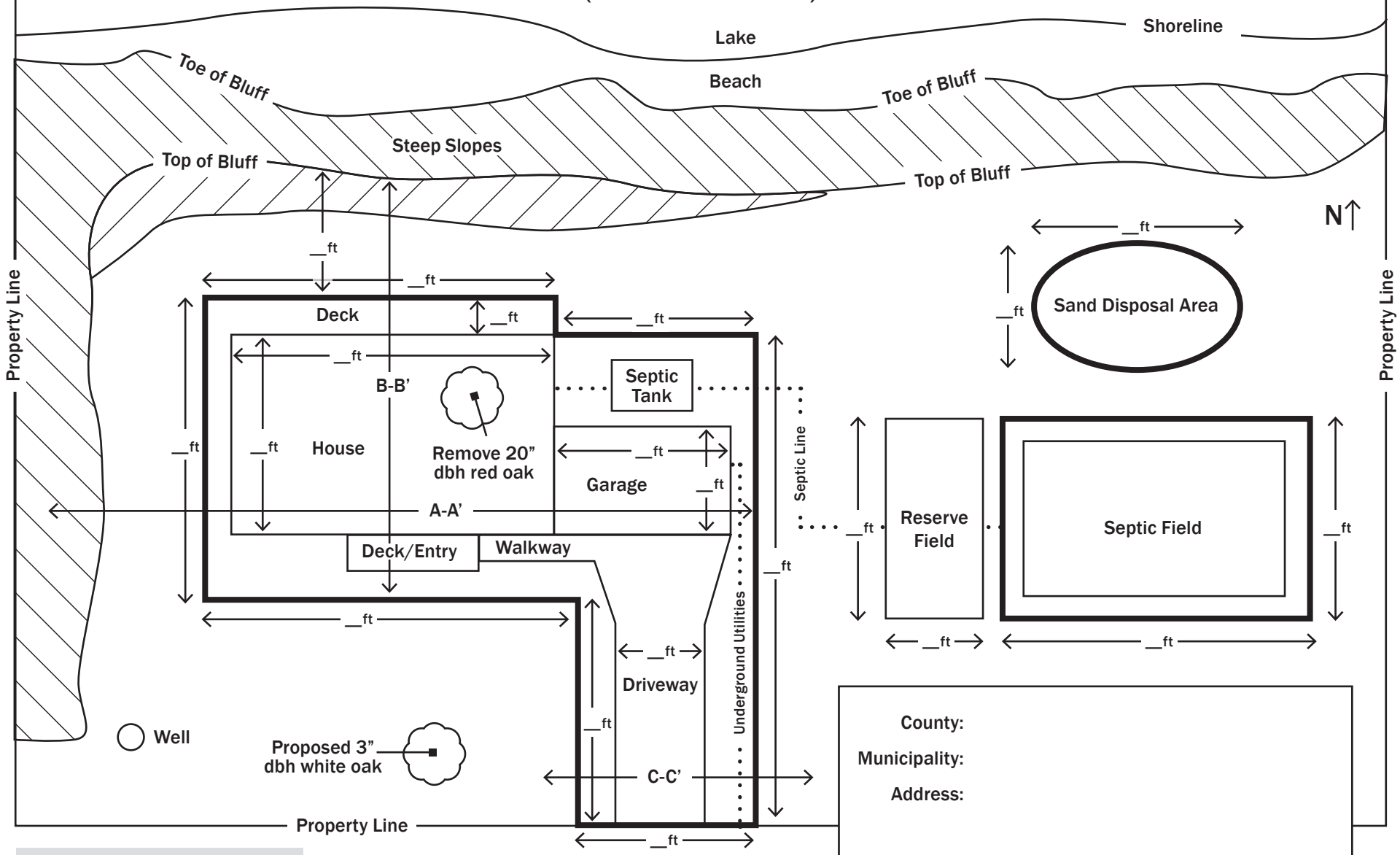
CULVERTS

a. _____ Invert (Elev.) of stream 100' from structure **–OR-** height difference between culvert inlet/outlet and 100' from it

b. _____ Elevation at road grade –OR- road height above structure



Sample Drawing: Construction in a Critical Dune Area - Steep Slopes
(Overhead Site Plan)



County:

Municipality:

Address:

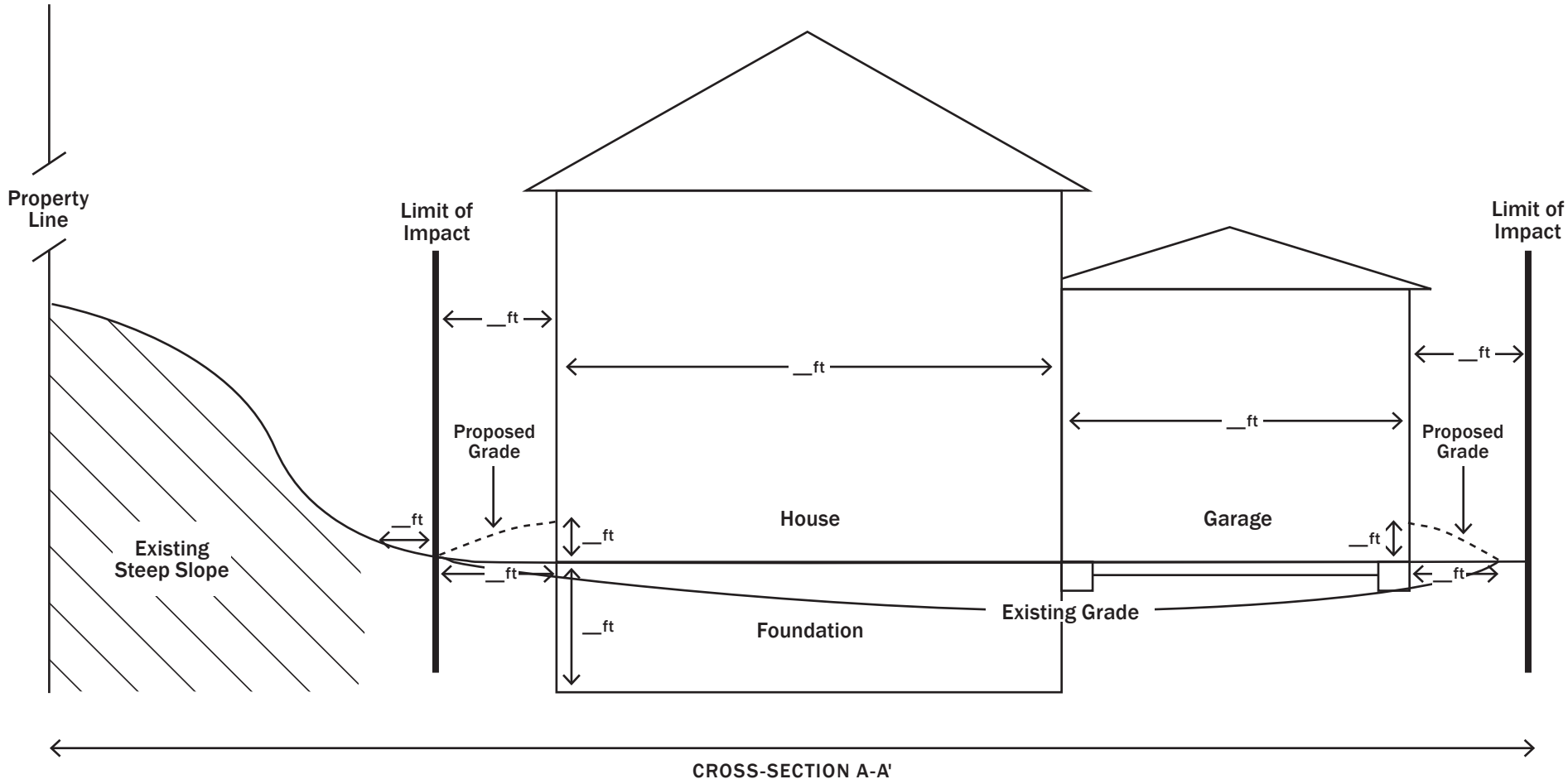
Date:

Drawn by:

SHOW LIMITS OF IMPACT, GRADE CHANGES, VEGETATION REMOVAL AND LANDSCAPING

= Limits of impact

Sample Drawing: Construction in a Critical Dune Area - Steep Slopes
(Cross-section A-A')



SHOW DIMENSIONS, GRADE CHANGES, AND DEPTH OF EXCAVATION

0 _

County:

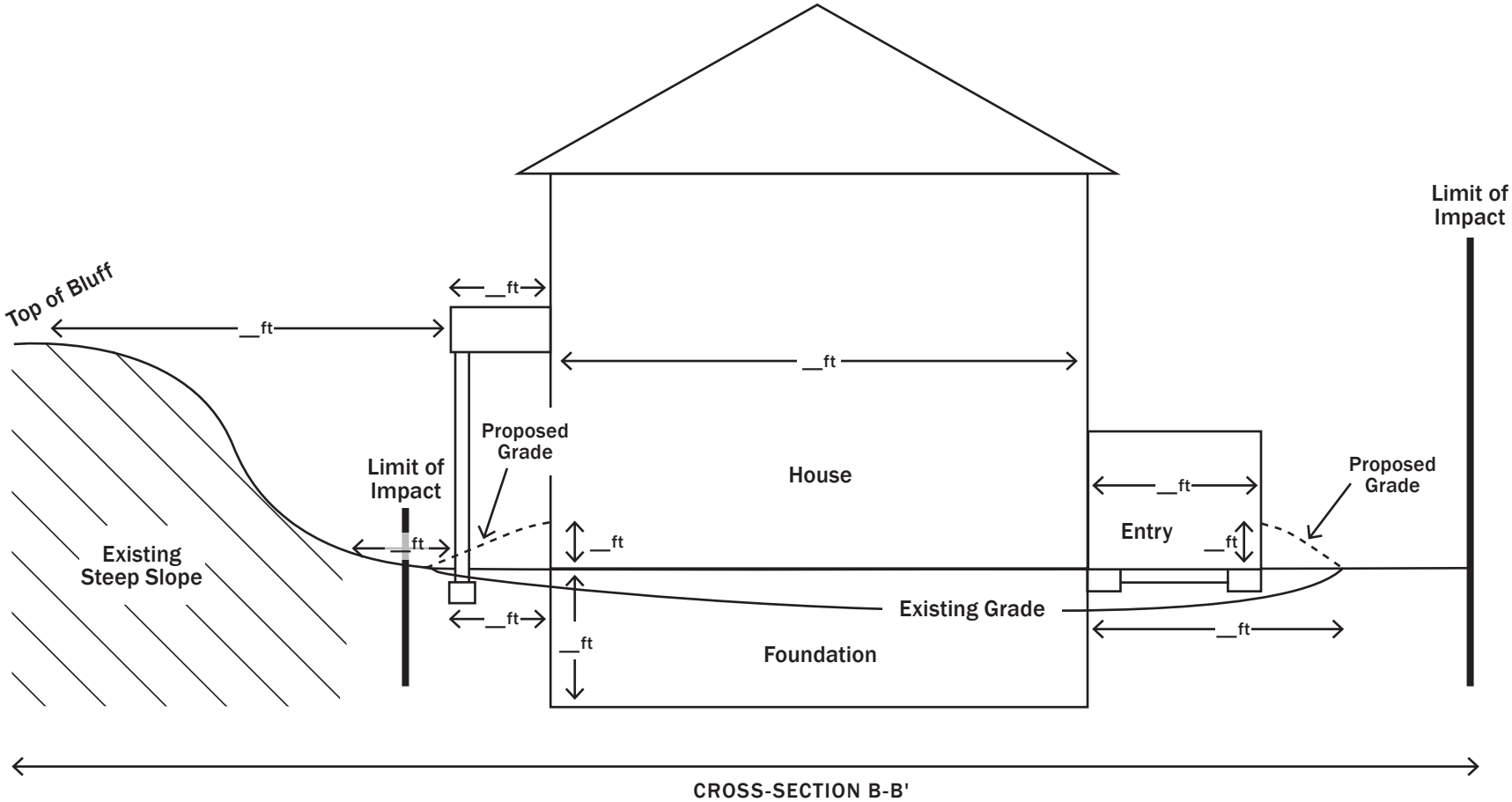
Municipality:

Address:

Date:

Drawn by:

Sample Drawing: Construction in a Critical Dune Area - Steep Slopes
(Cross-section B-B')



SHOW DIMENSIONS, GRADE CHANGES, AND DEPTH OF EXCAVATION

0 _

County:

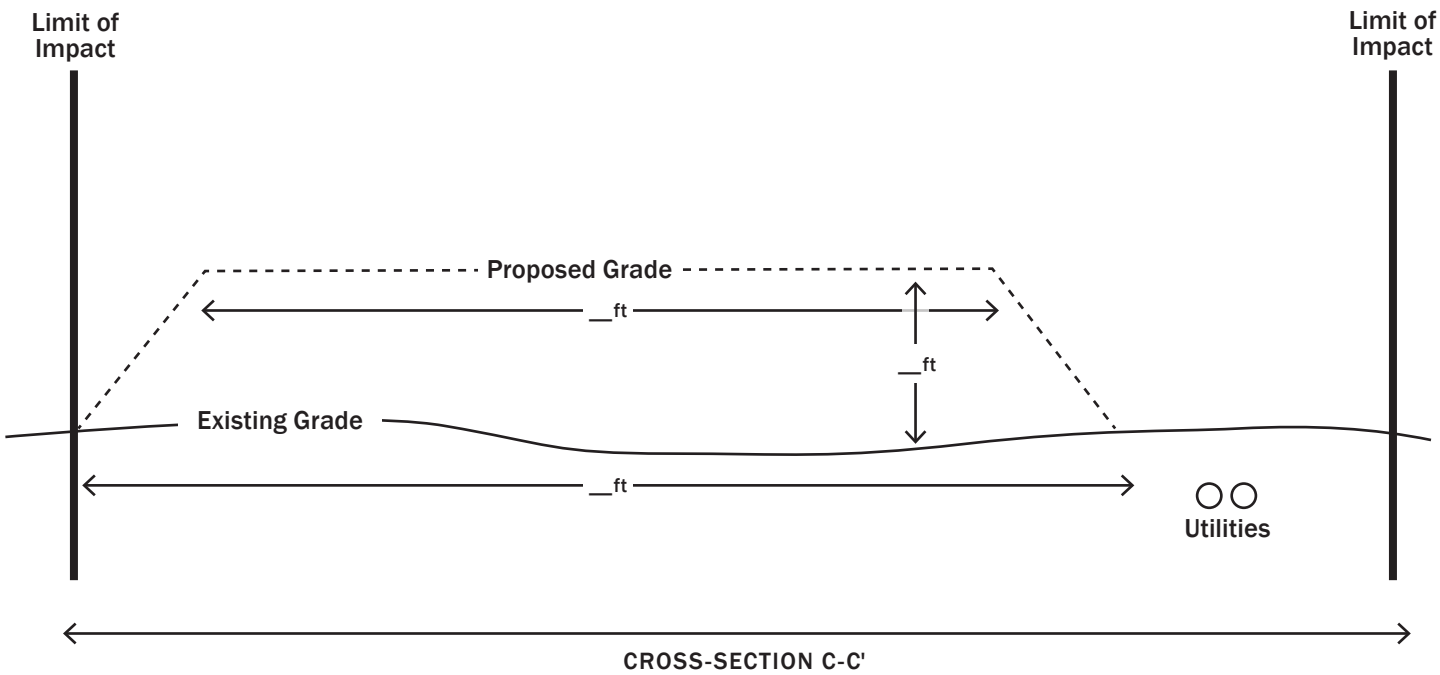
Municipality:

Address:

Date:

Drawn by:

Sample Drawing: Construction in a Critical Dune Area - Driveway
(Cross-section C-C')



SHOW DIMENSIONS, GRADE CHANGES, AND DEPTH OF EXCAVATION

County:

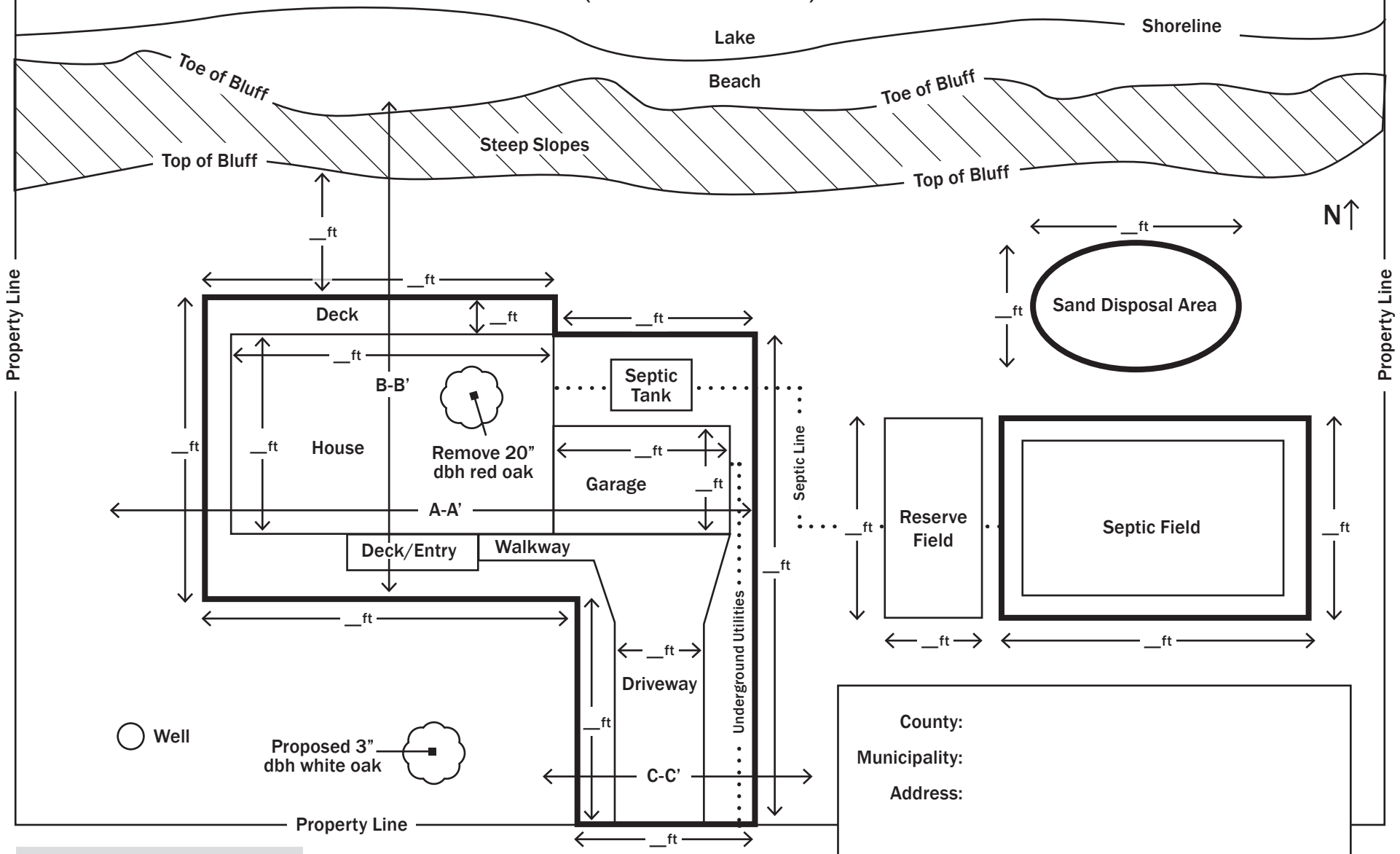
Municipality:

Address:

Date:

Drawn by:

Sample Drawing: Construction in a Critical Dune Area - Top of Bluff
(Overhead Site Plan)



County:

Municipality:

Address:

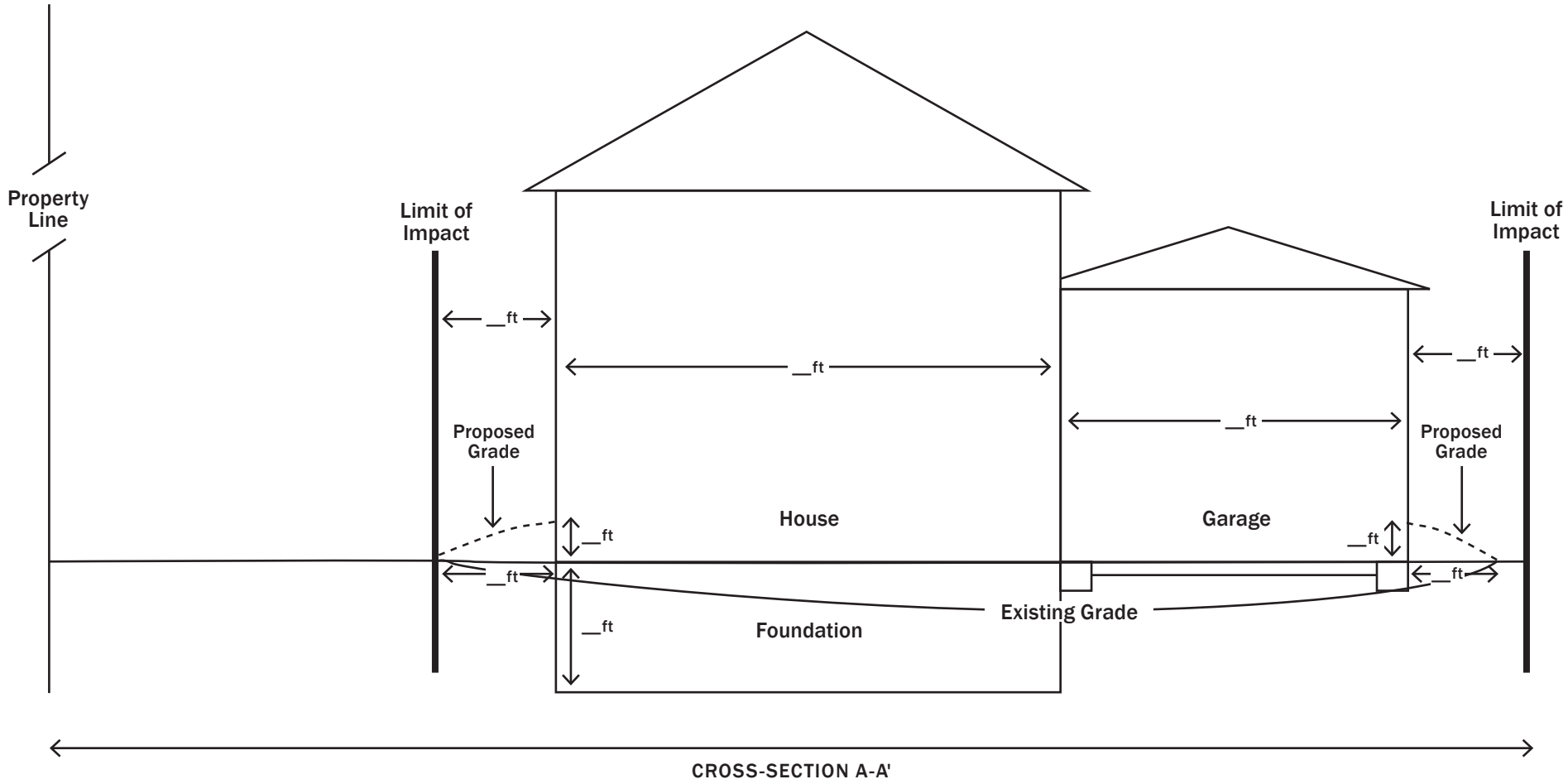
Date:

Drawn by:

SHOW LIMITS OF IMPACT, GRADE CHANGES, VEGETATION REMOVAL AND LANDSCAPING

= Limits of impact

Sample Drawing: Construction in a Critical Dune Area - Top of Bluff
(Cross-section A-A')



SHOW DIMENSIONS, GRADE CHANGES, AND DEPTH OF EXCAVATION

0 _

County:

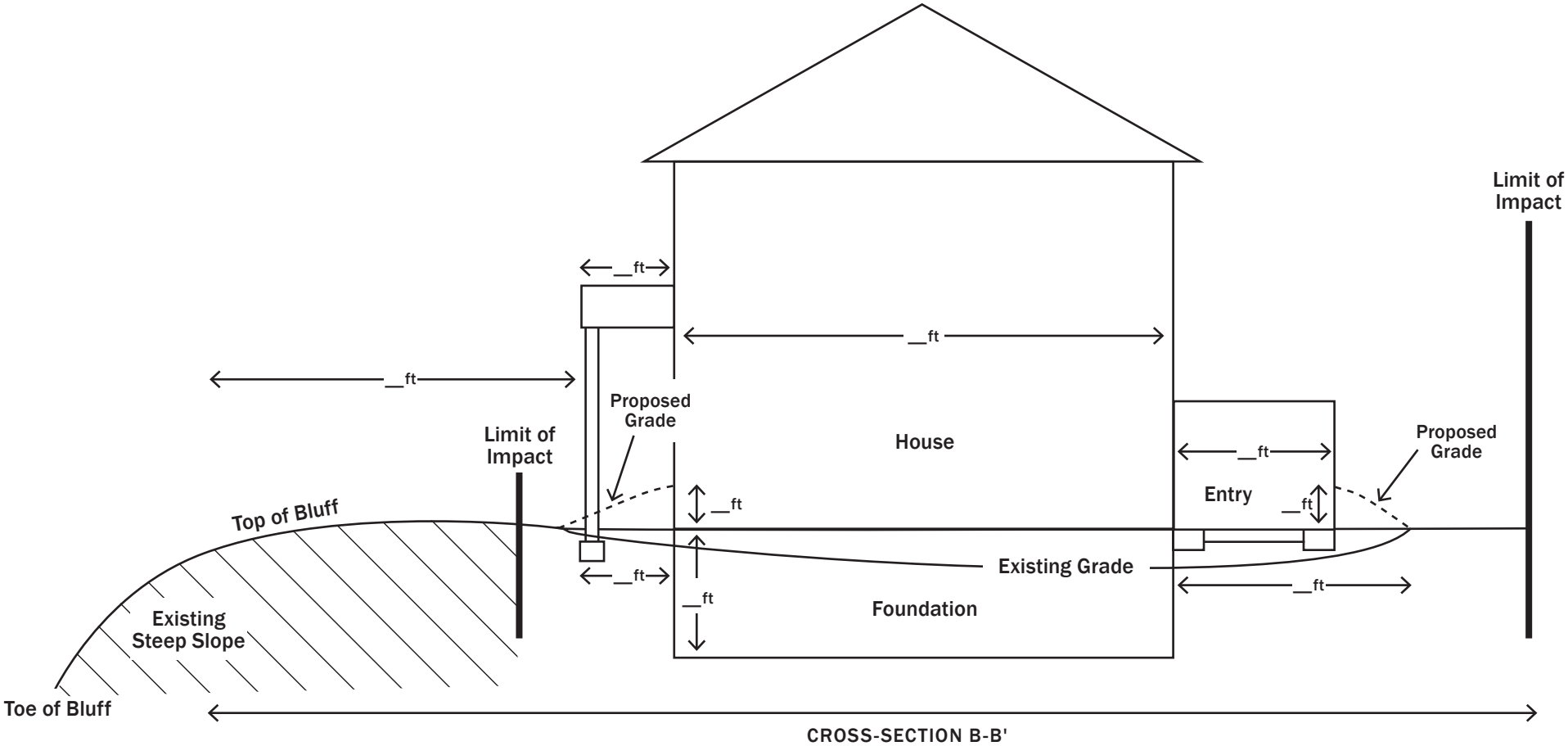
Municipality:

Address:

Date:

Drawn by:

Sample Drawing: Construction in a Critical Dune Area - Top of Bluff
(Cross-section B-B')



SHOW DIMENSIONS, GRADE CHANGES, AND DEPTH OF EXCAVATION

0 _

County:

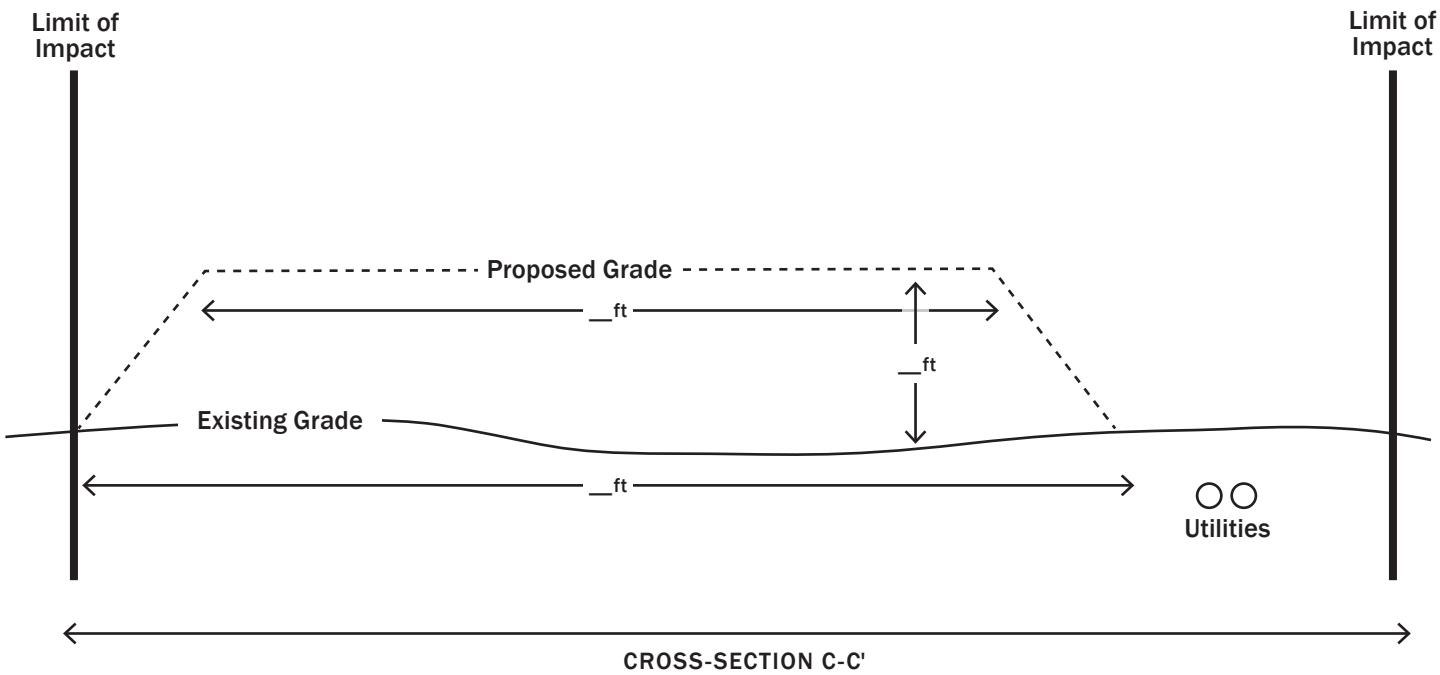
Municipality:

Address:

Date:

Drawn by:

Sample Drawing: Construction in a Critical Dune Area - Driveway
(Cross-section C-C')



SHOW DIMENSIONS, GRADE CHANGES, AND DEPTH OF EXCAVATION

County:

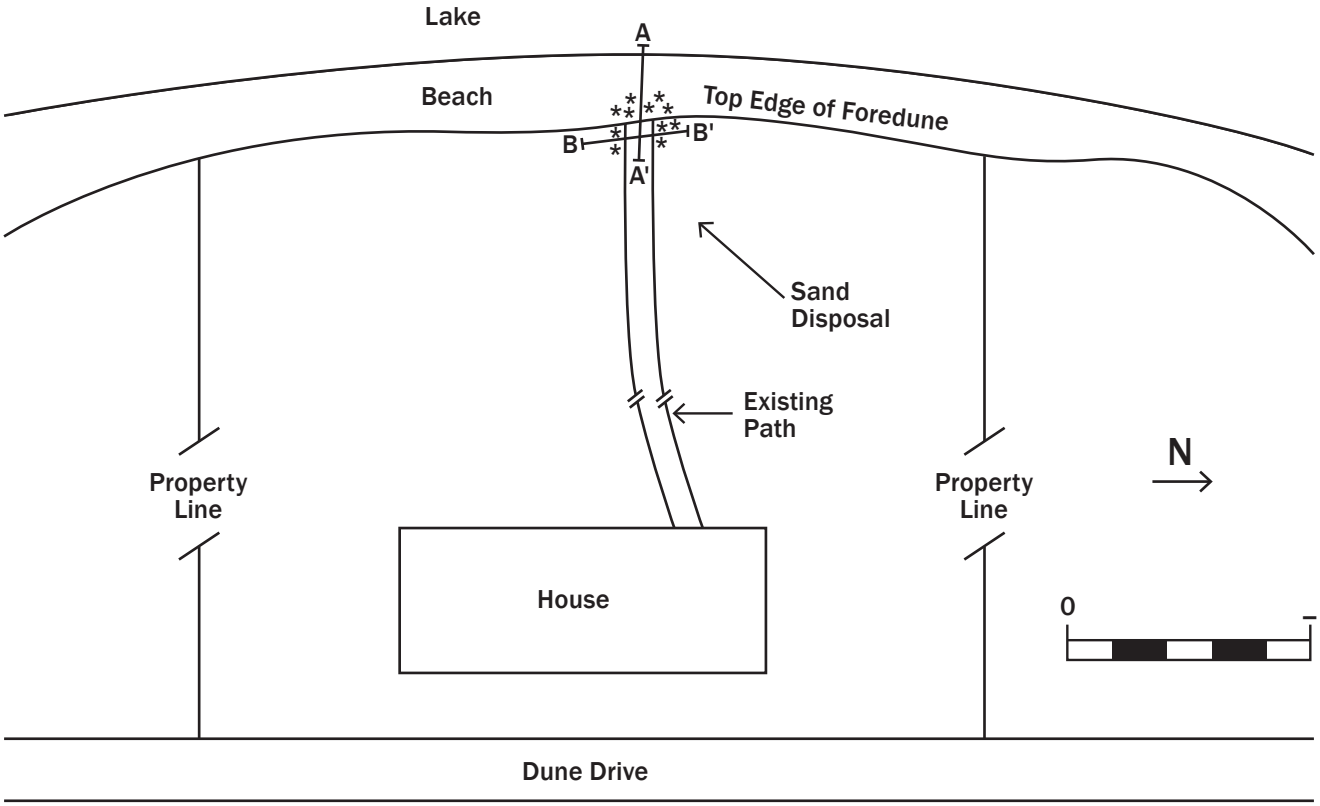
Municipality:

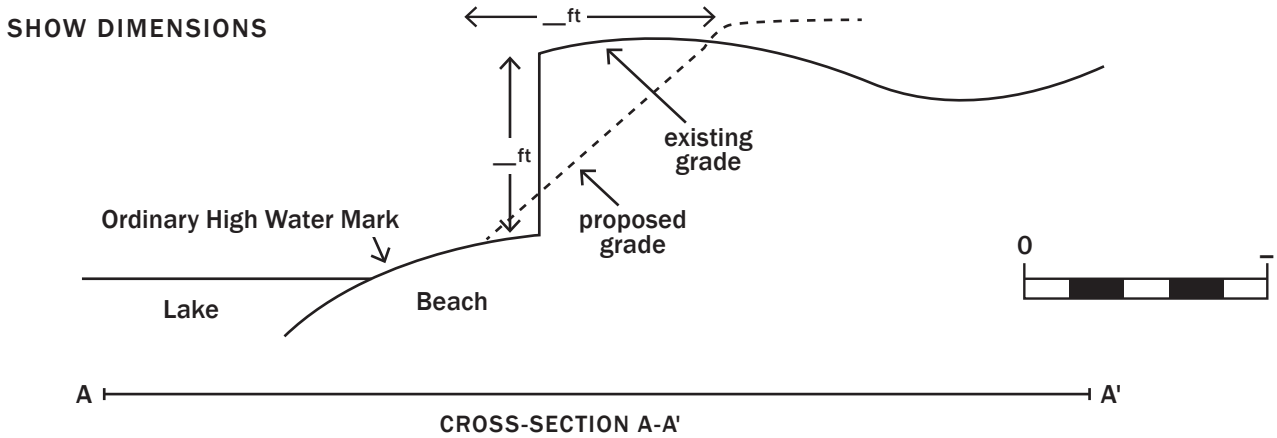
Address:

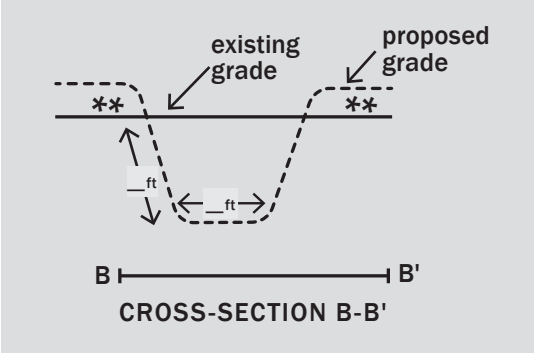
Date:

Drawn by:

Sample Drawing: Path Maintenance Near the Water's Edge in a Critical Dune Area







** Sand Disposal
Sand will be spread out to less than 12 inches thick adjacent to the cut in an area 10 feet wide or less. Sand will not be placed in the water.

County:

Municipality:

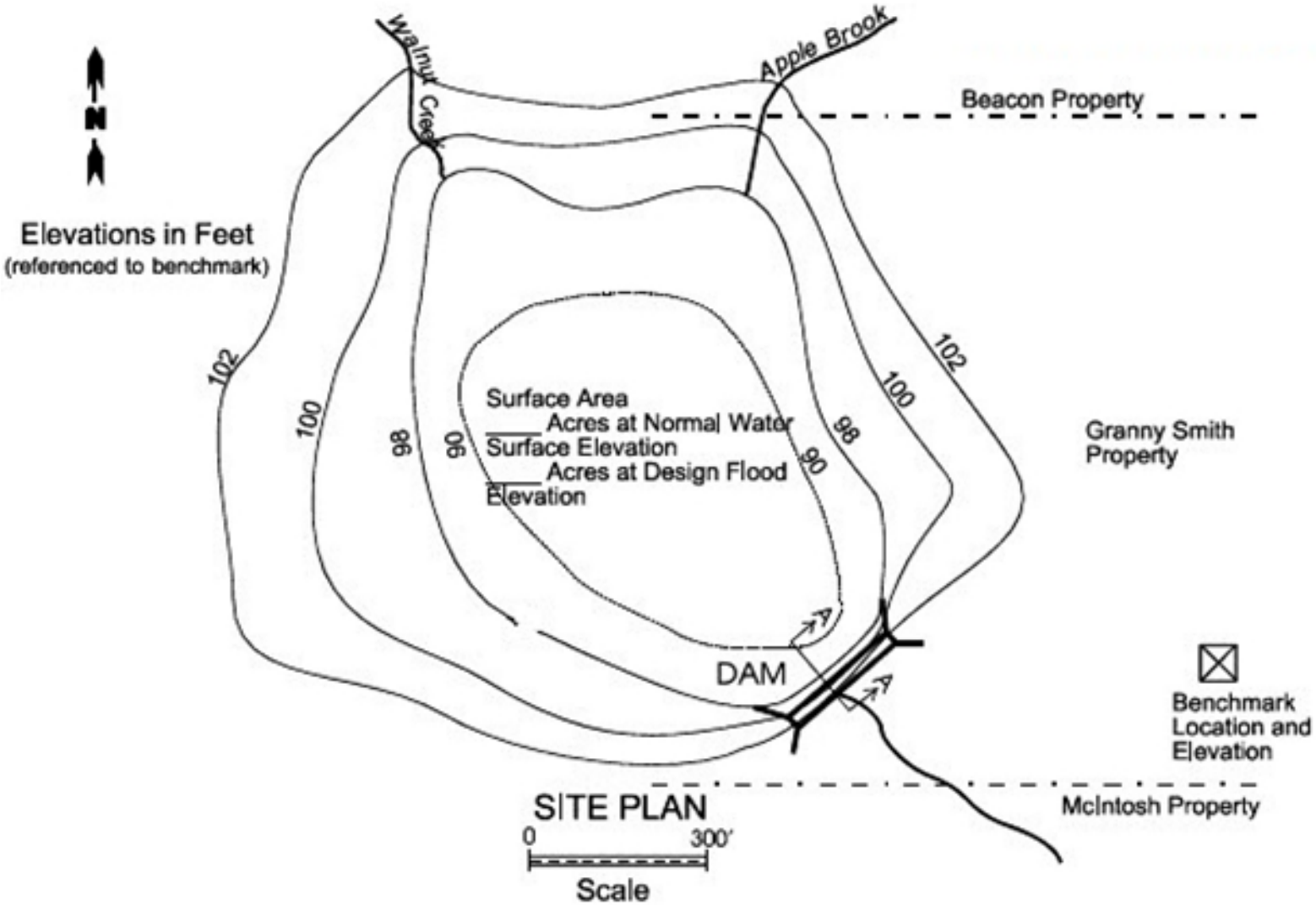
Address:

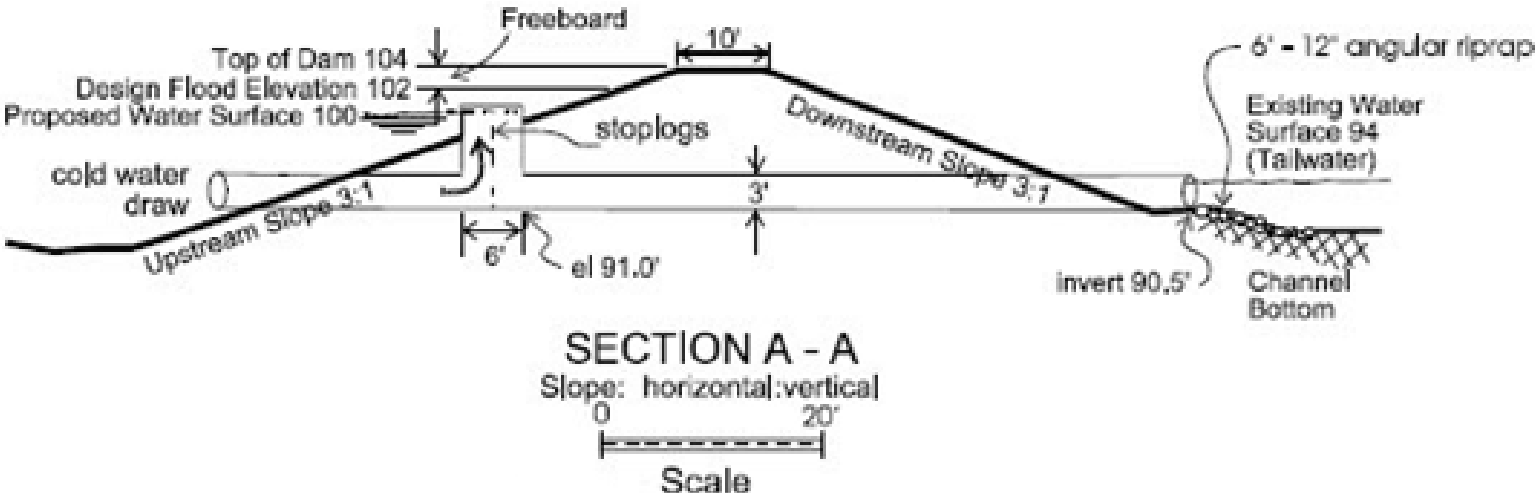
Date:

Drawn by:

JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DAM



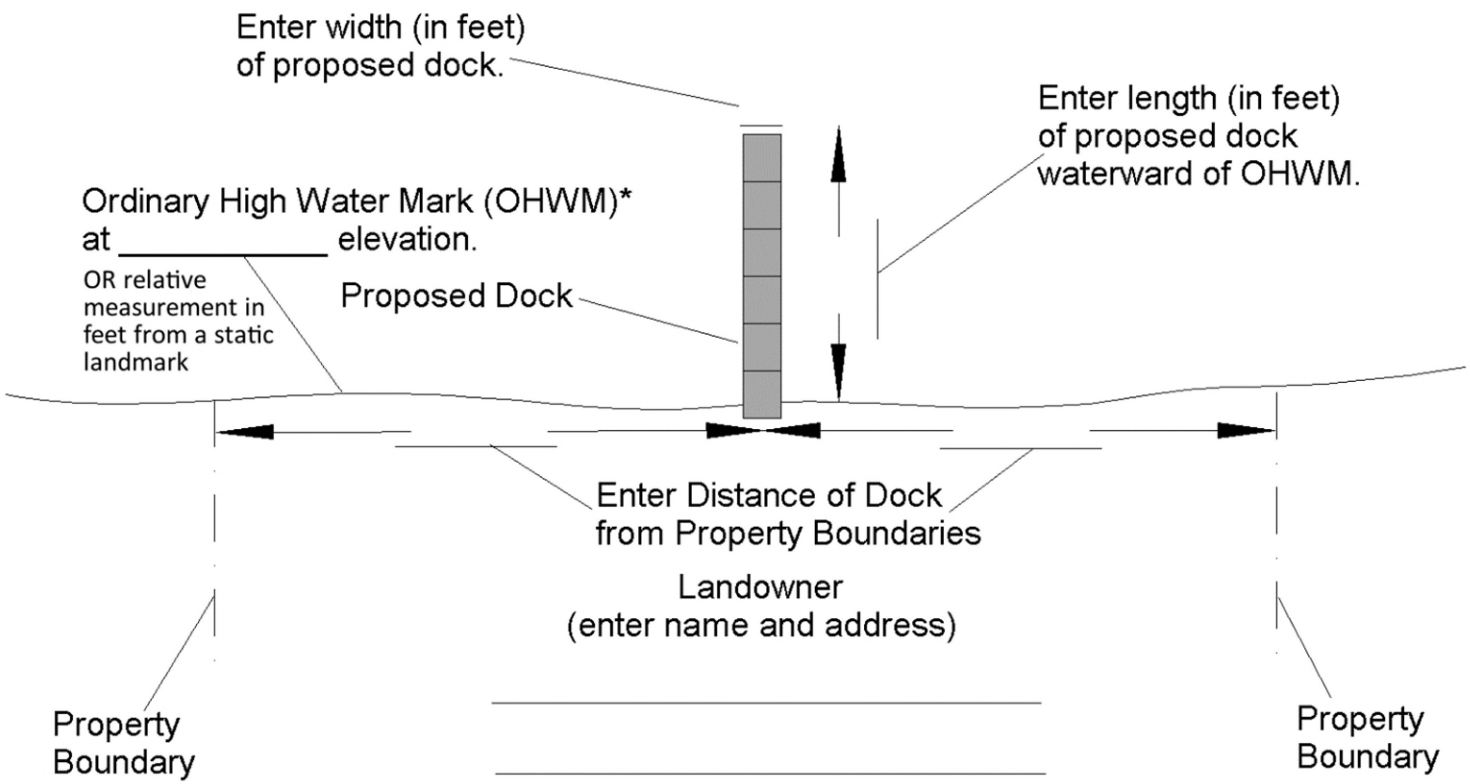


JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DOCK

Plan

LAKE



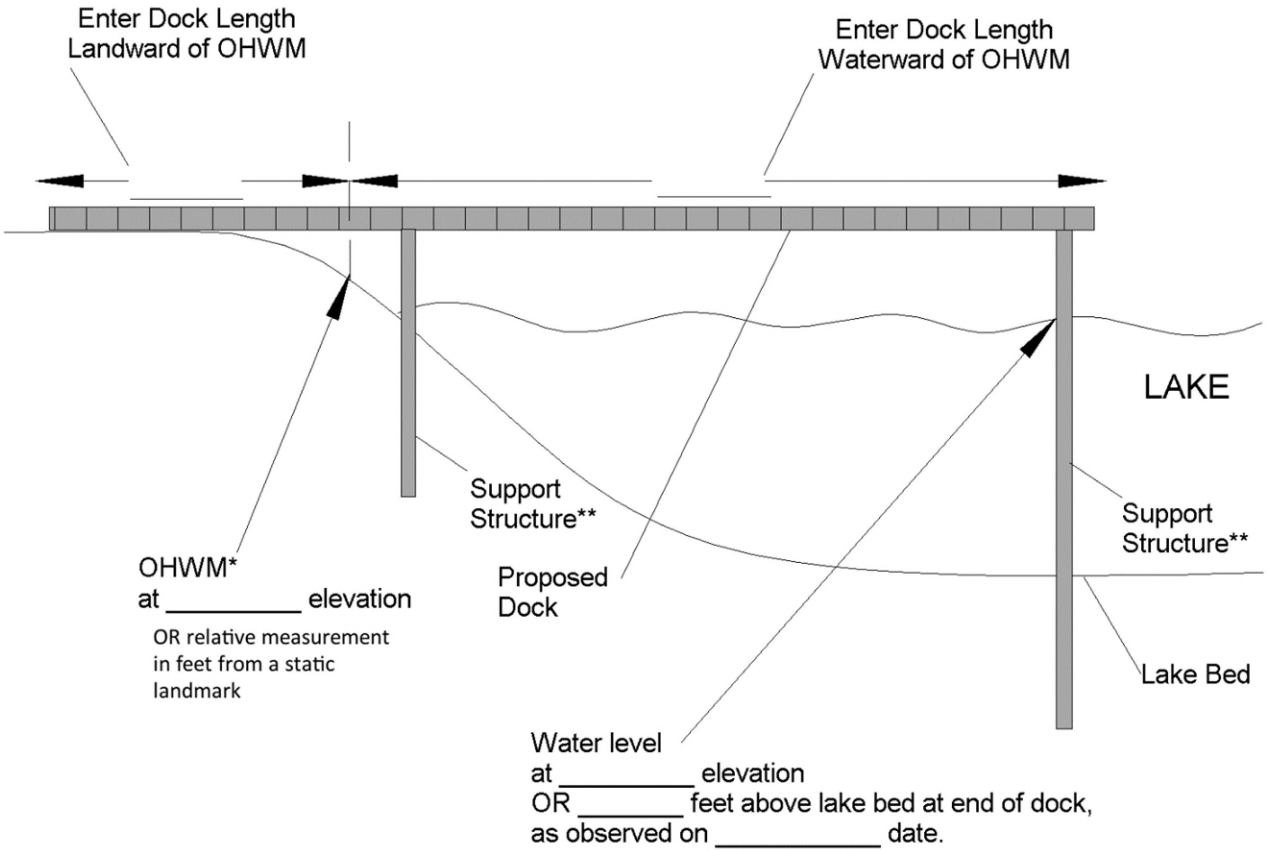
Add additional drawing information, including:
- North arrow
- Edge of Water if different from OHWM*
- Note any existing docks (on or off site) including dimensions and distances from proposed dock.
- Note buildings or other structures, including distances from proposed dock.

*Ordinary High Water Mark (OHWM)
- For Great Lakes (Part 325) is an elevation set by the act, and are referenced upon the baseline datum set called International Great Lakes Datum 1955)
  See LINK for further information on Great Lakes OHWM
- For Inland Lakes (Part 301) is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels. This may be measured by surveyed elevation or by using a relative elevation such as 0.
  Some lakes have a legally established OHWM elevation.

JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DOCK

Cross Section



Add additional drawing information, including:
- Different types and or numbers of support structures
- If fill is involved, show area, type, and volume.

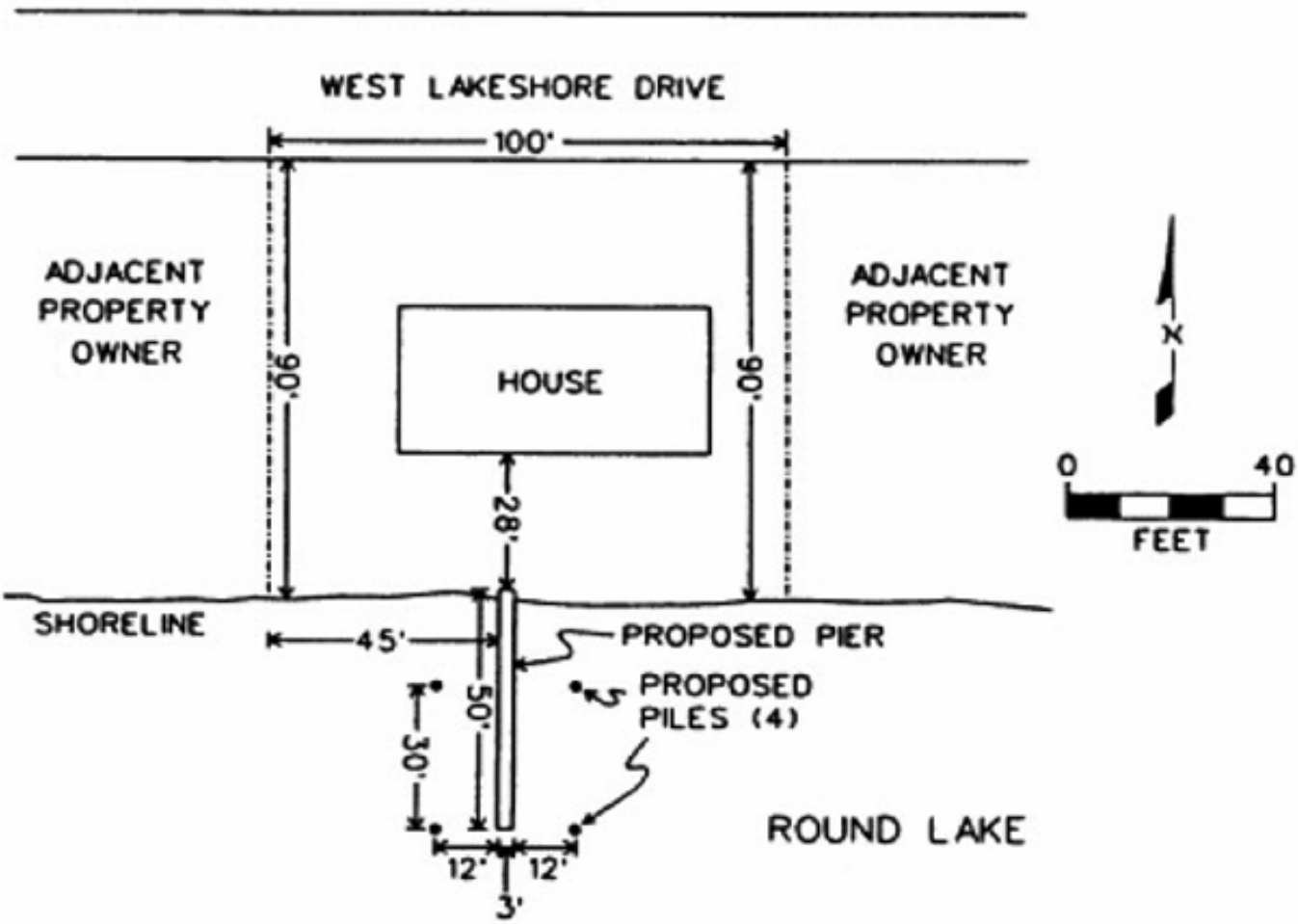
*Ordinary High Water Mark (OHWM)
- For Great Lakes (Part 325) is an elevation set by the act, and are referenced upon the baseline datum set called International Great Lakes Datum 1955)
  See LINK for further information on Great Lakes OHWM
- For Inland Lakes (Part 301) is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels. This may be measured by surveyed elevation or by using a relative elevation such as 0.
  Some lakes have a legally established OHWM elevation.

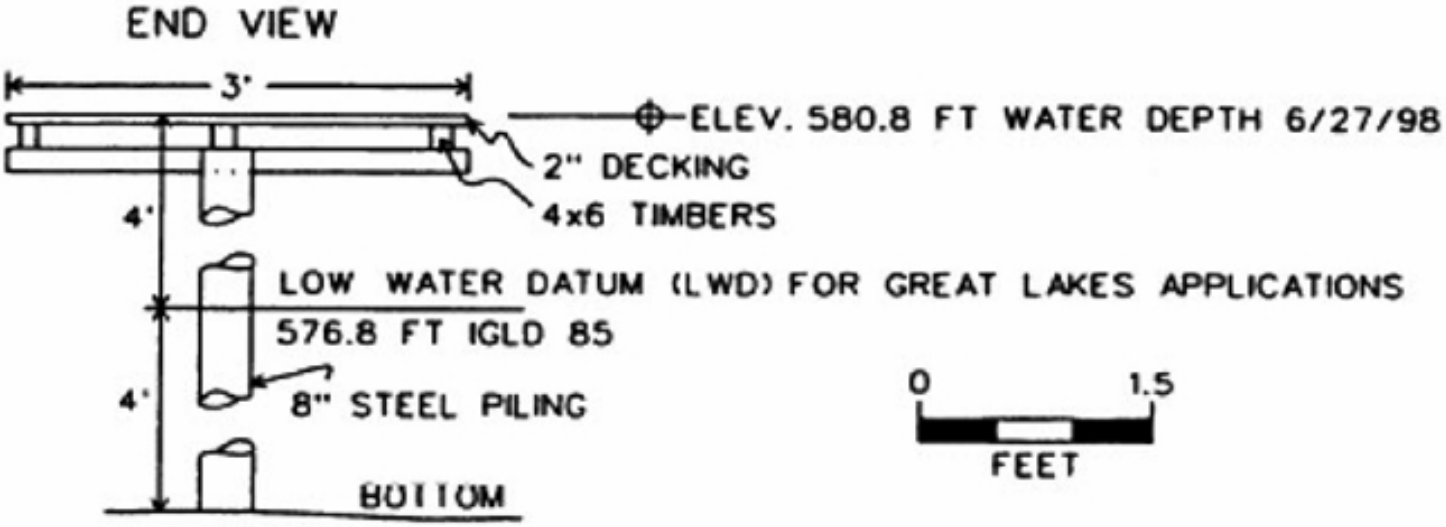
**Support structure examples are open pile, filled, crib, floating, cantilevered, spring piles, or piling clusters
- On the plan above, draw in the correct representation of the proposed support structures.

JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DOCK

Piles/Pier

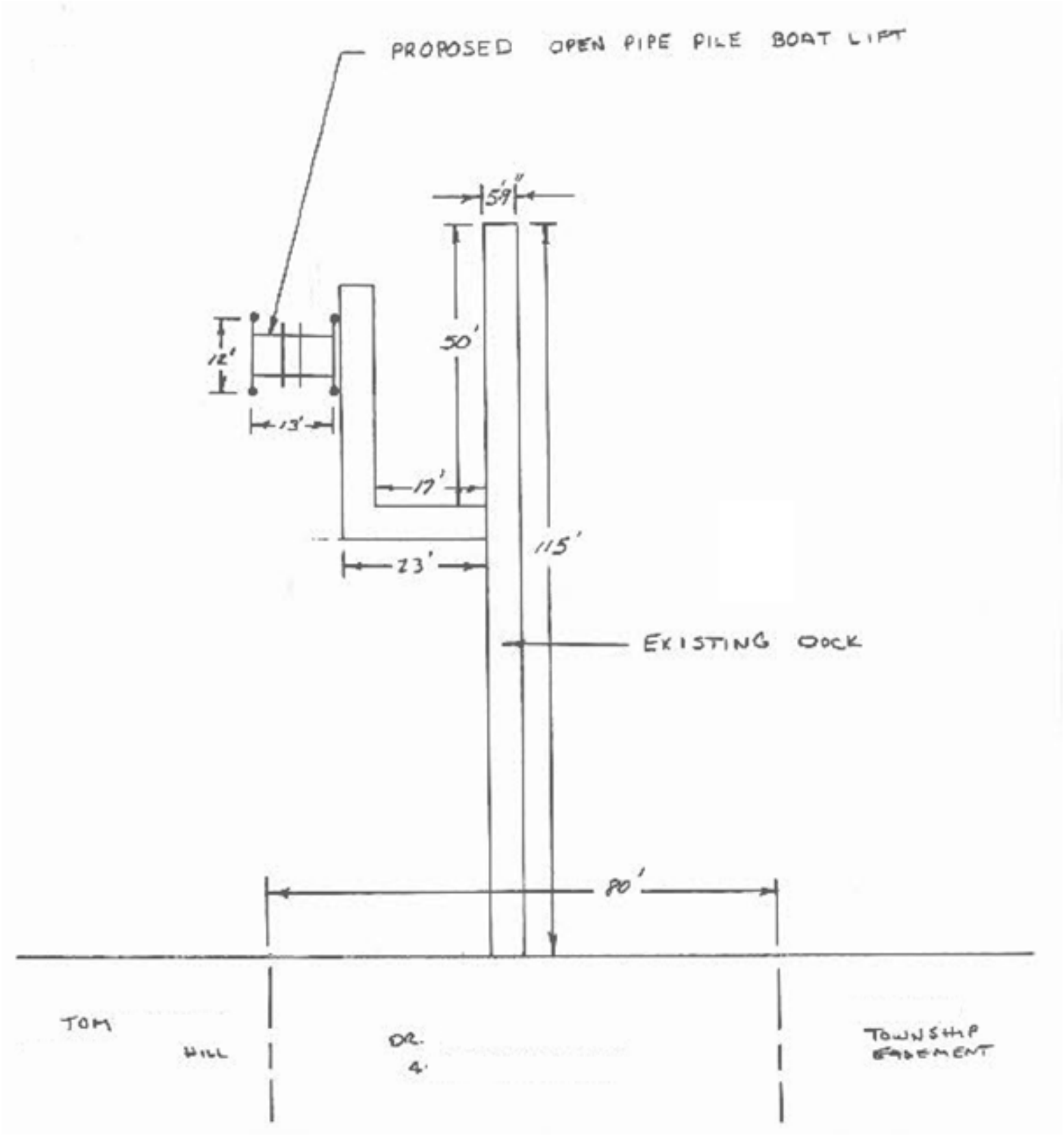




JOINT PERMIT APPLICATION SAMPLE DRAWINGS

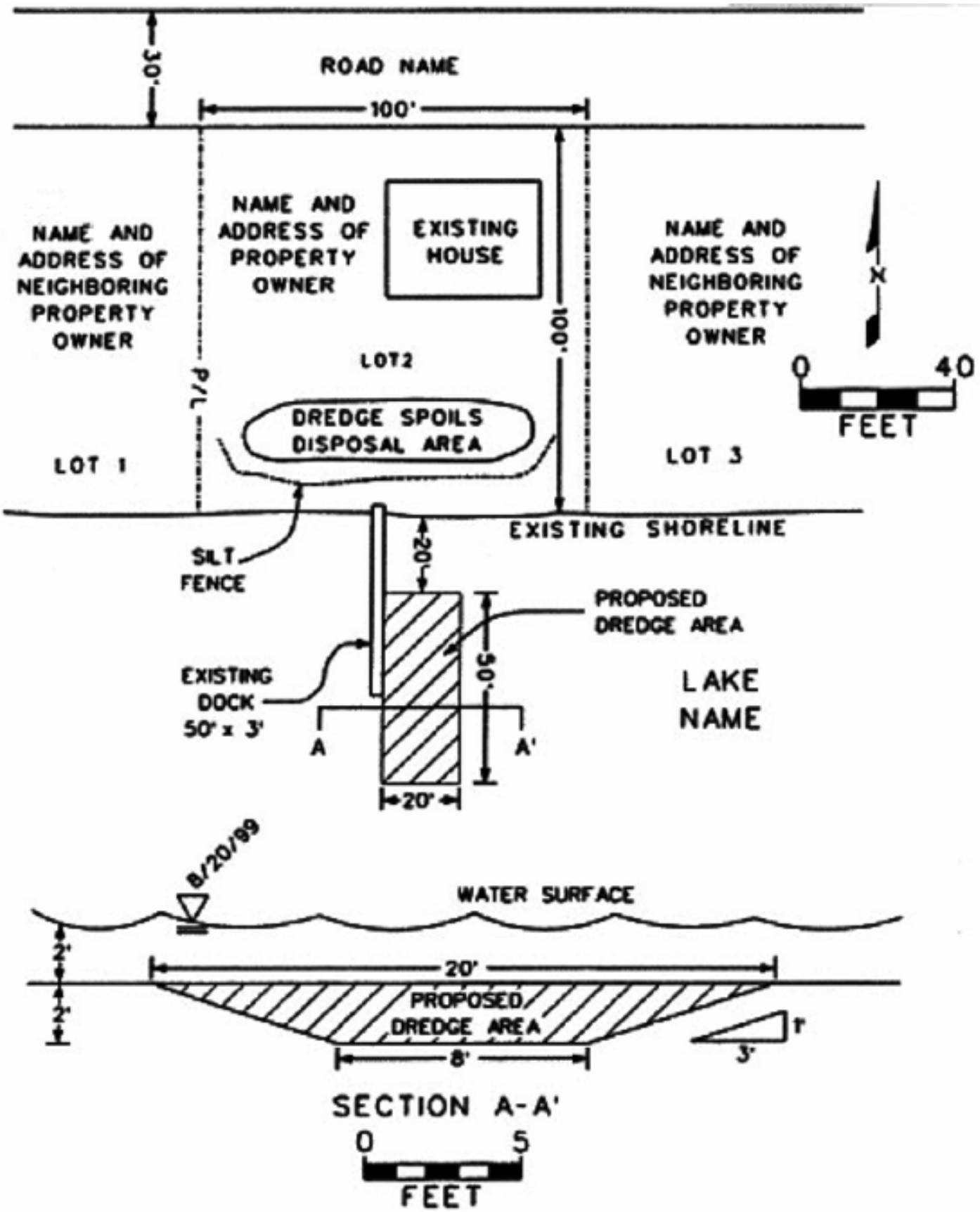
DOCK

“H-shape”



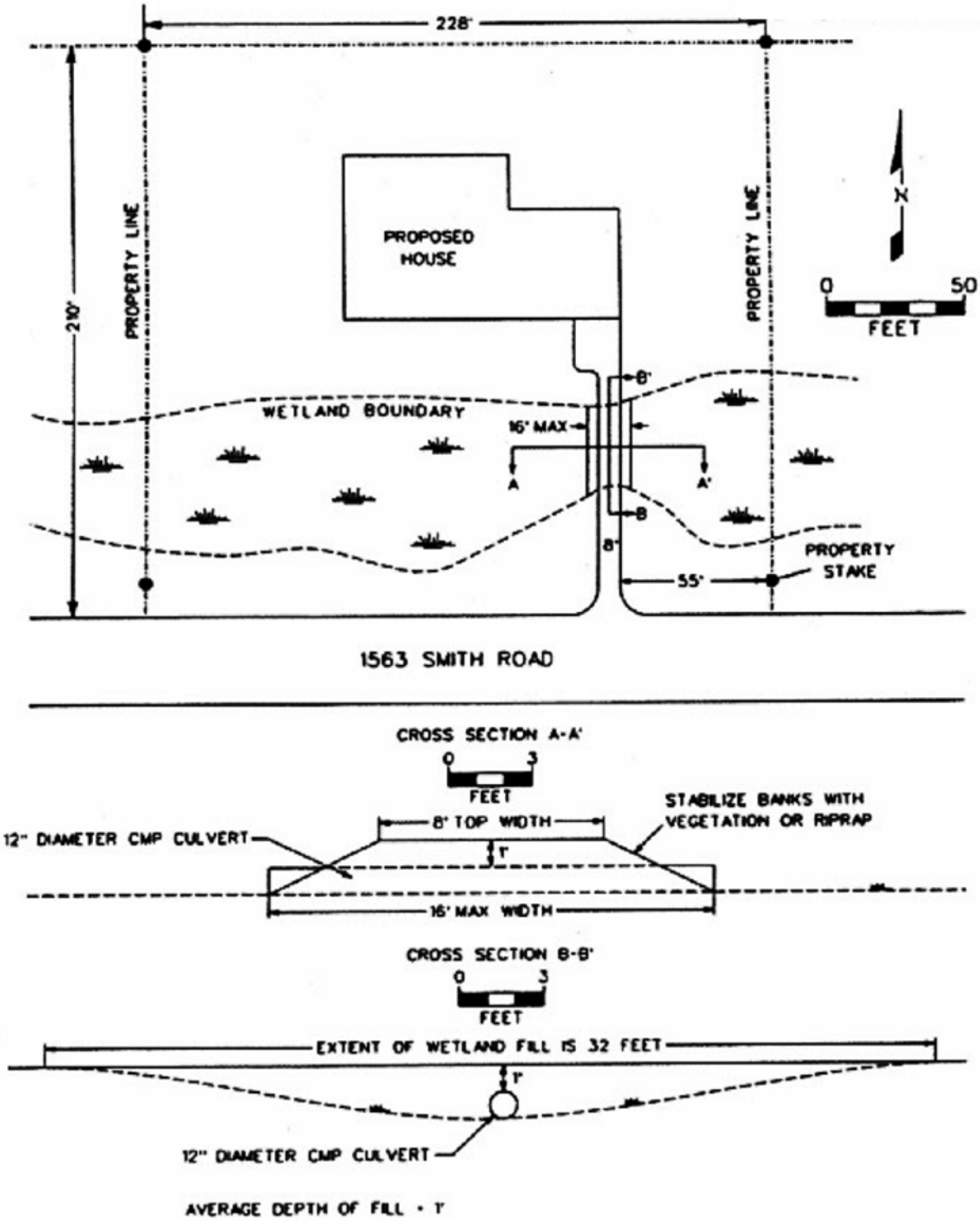
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DREDGING



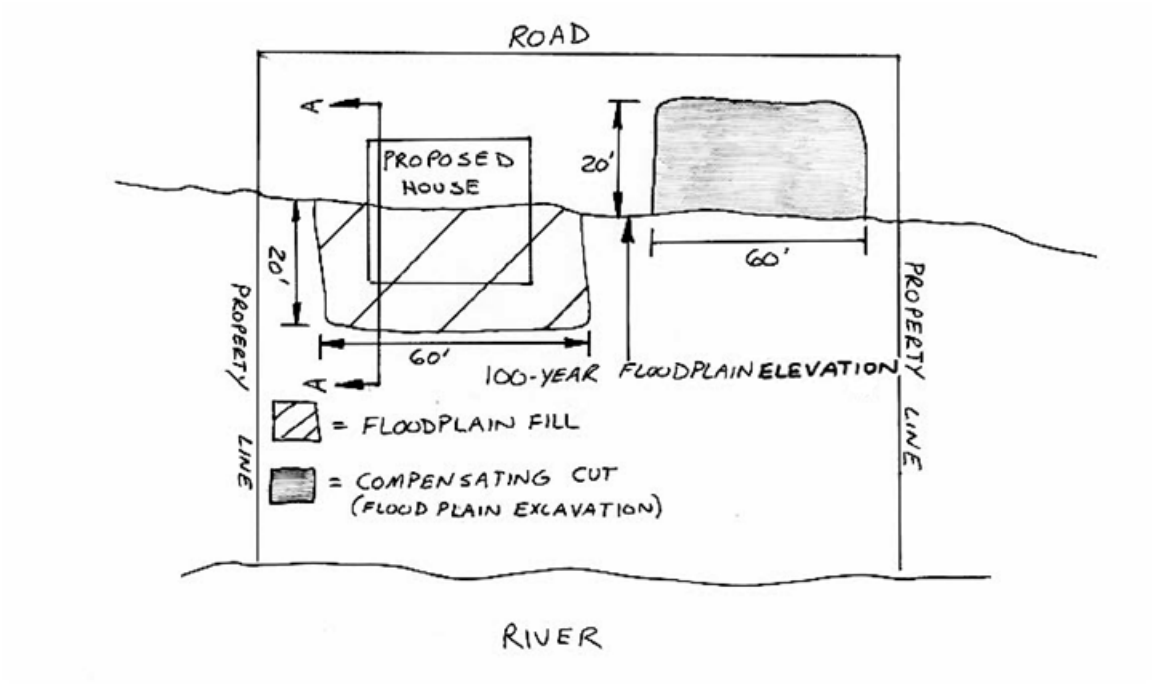
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

DRIVEWAY



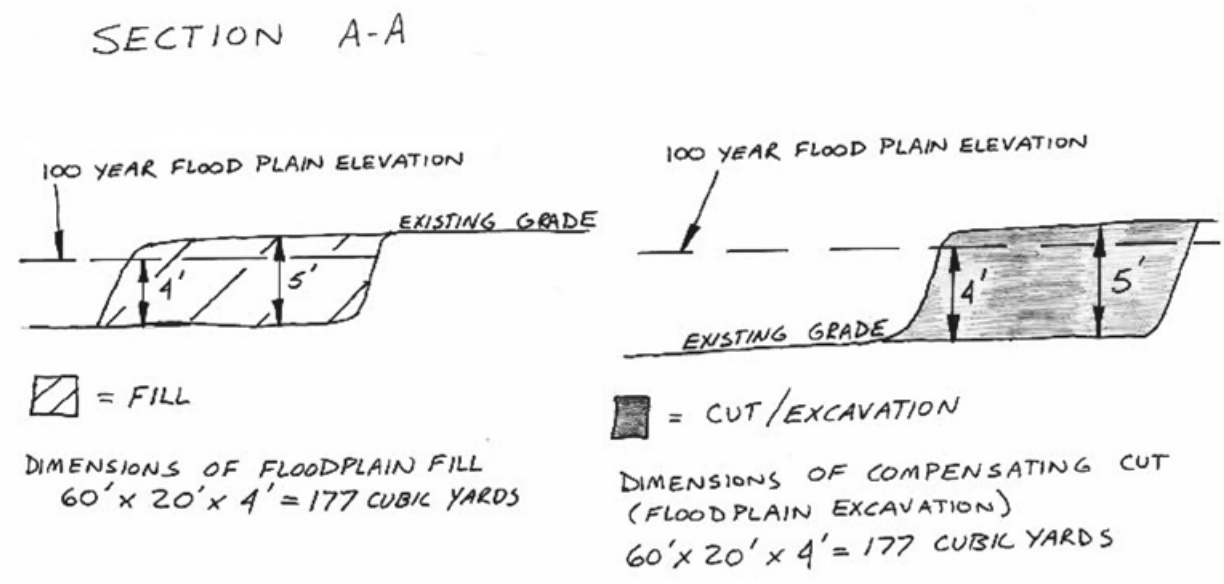
FLOODPLAIN CUT AND FILL

Plan View



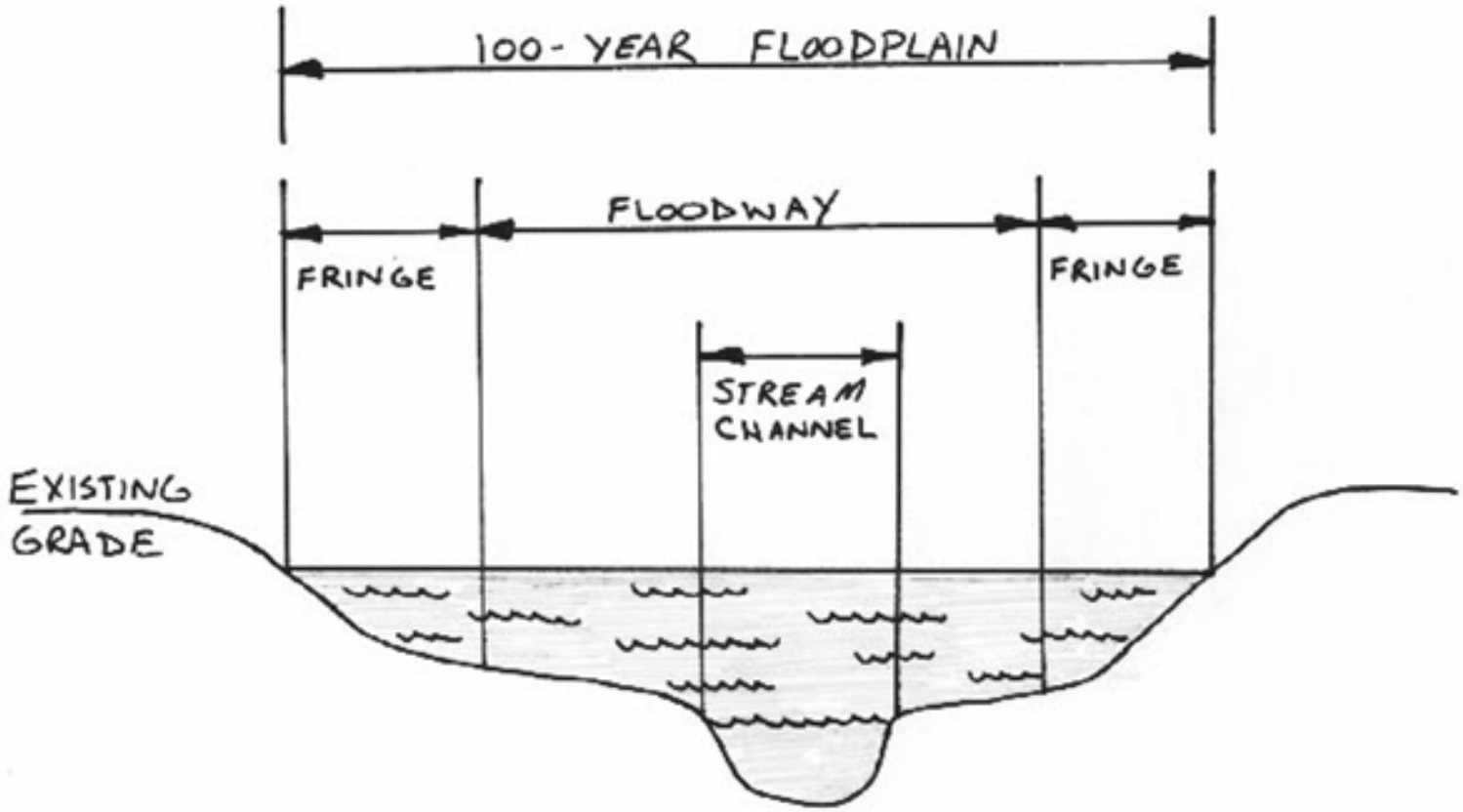
FLOODPLAIN CUT AND FILL

Cross Section

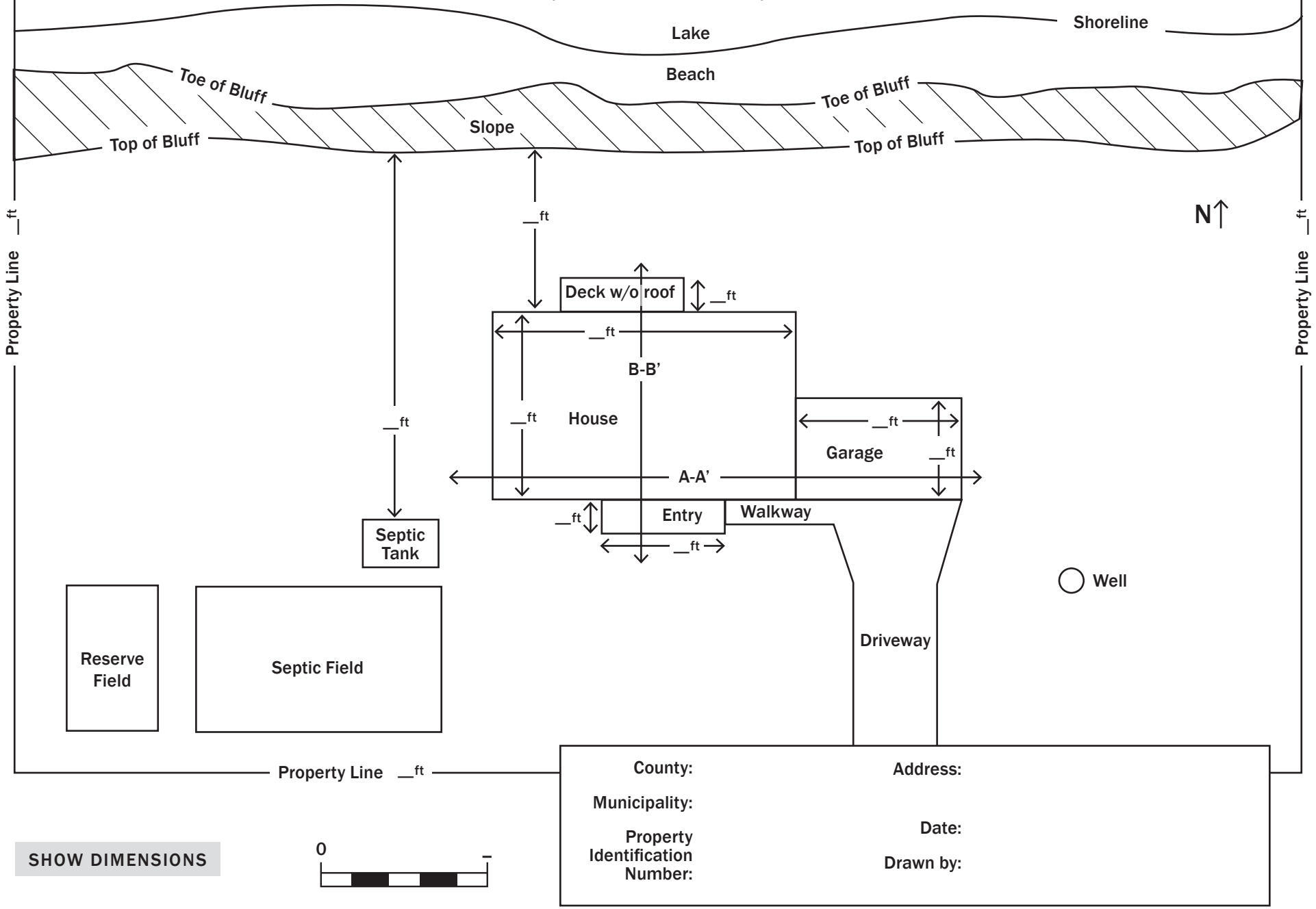


JOINT PERMIT APPLICATION SAMPLE DRAWINGS

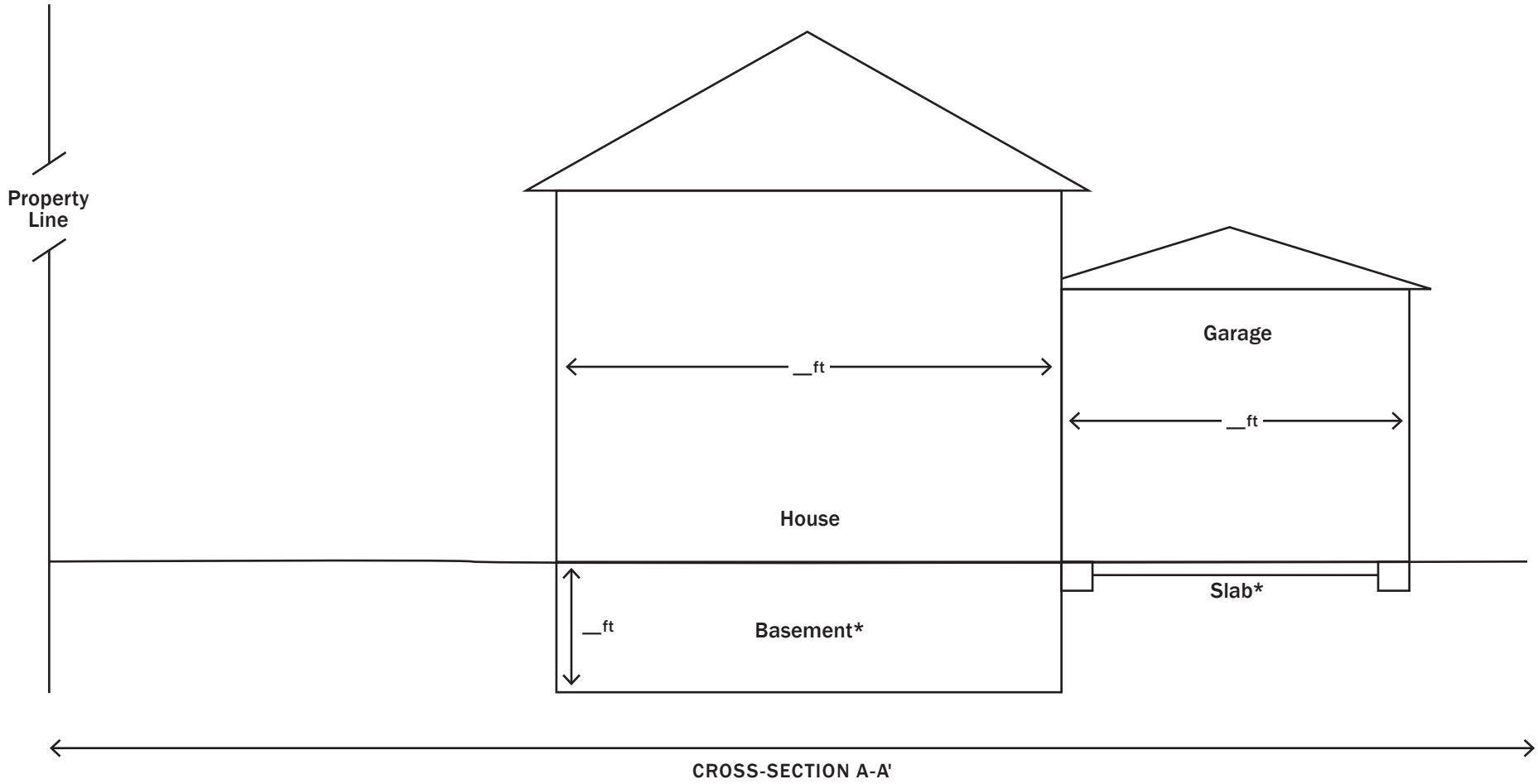
FLOODPLAIN DEMARCATION



Sample Drawing: Construction in a High Risk Erosion Area
(Overhead Site Plan)



Sample Drawing: Construction in a High Risk Erosion Area
(Cross-section A-A')



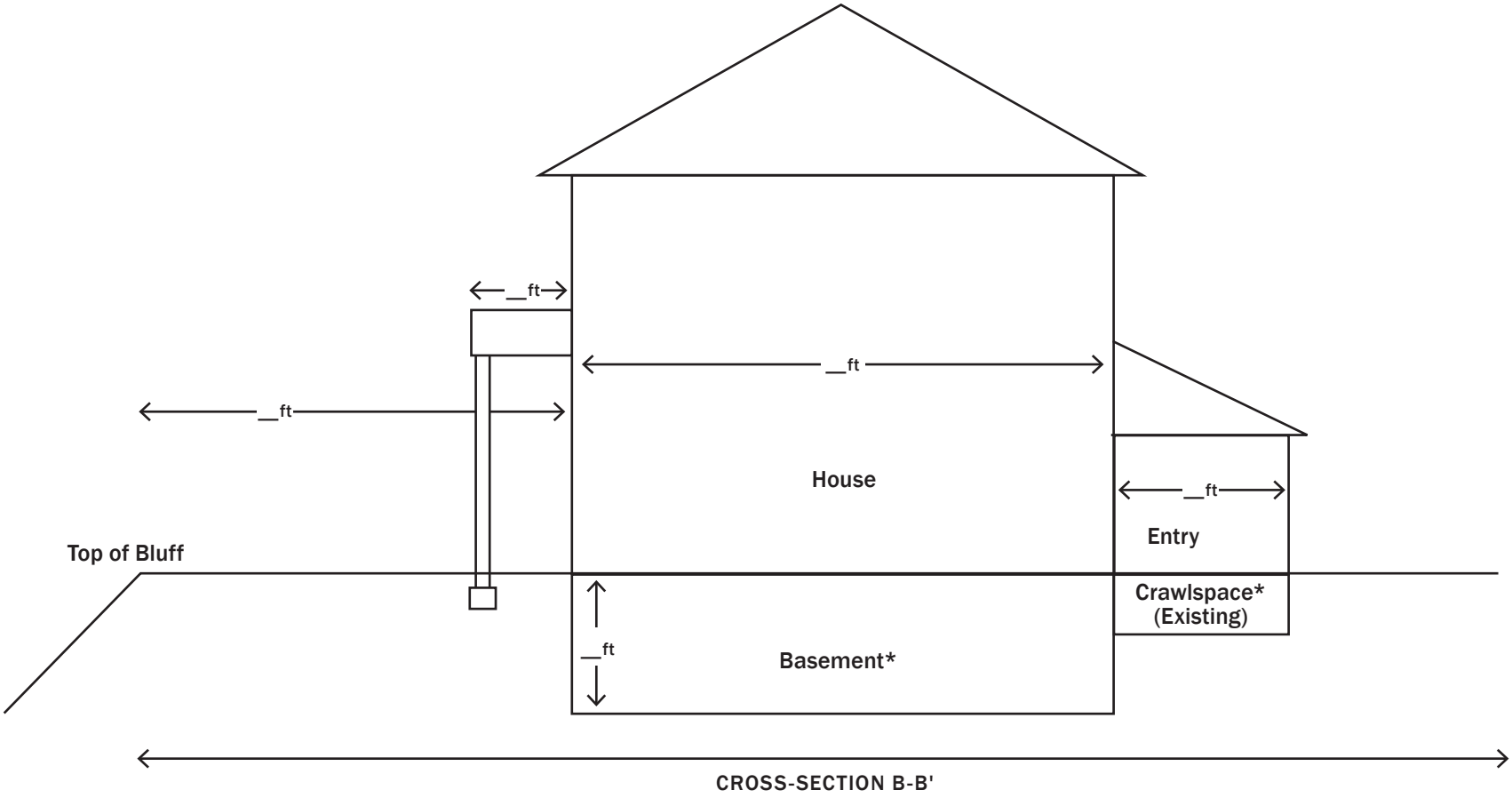
SHOW DIMENSIONS

*LABEL FOUNDATIONS: BASEMENT, CRAWLSPACE, PILINGS, SLAB

0 _

County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

Sample Drawing: Construction in a High Risk Erosion Area
(Cross-section B-B')

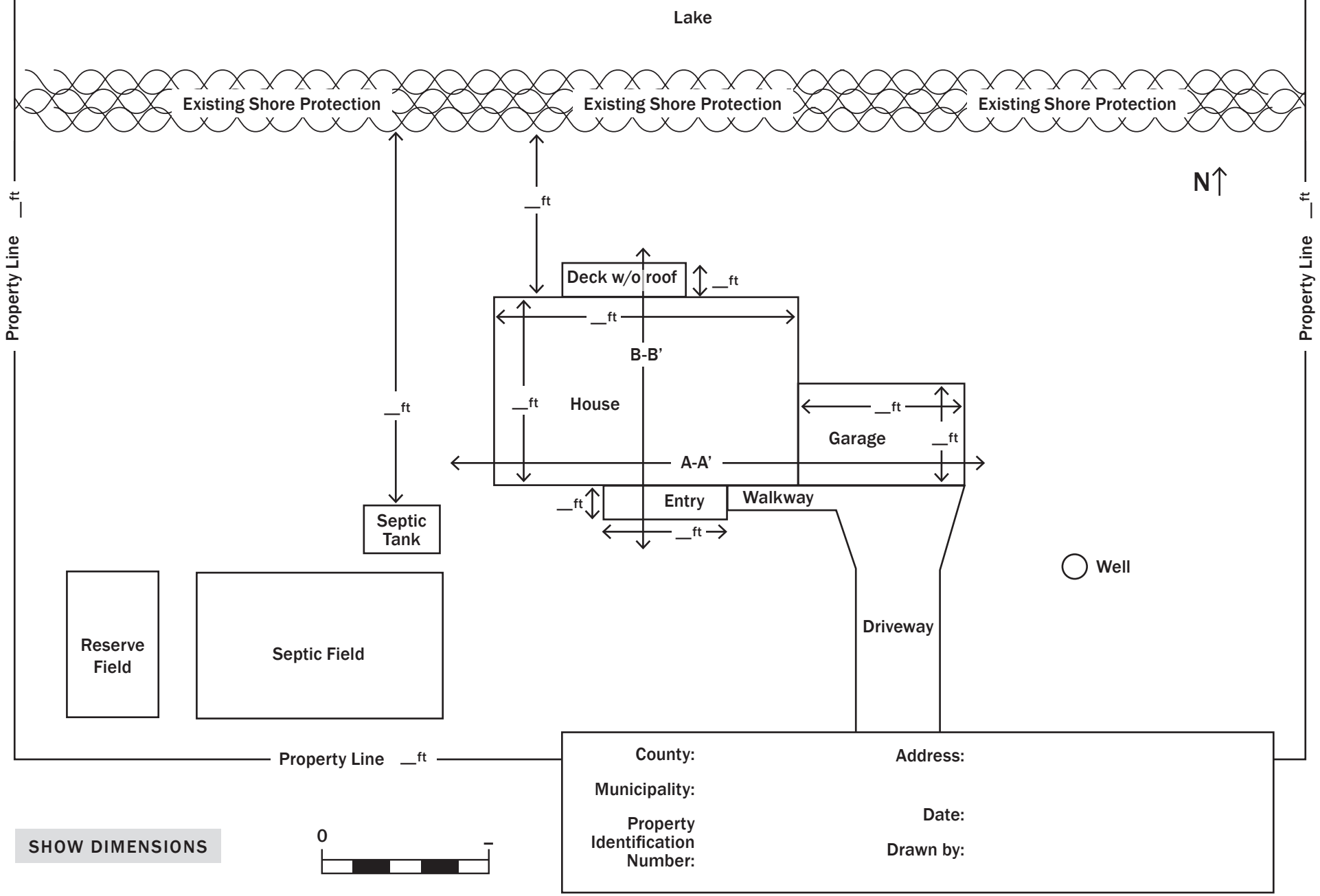


SHOW DIMENSIONS

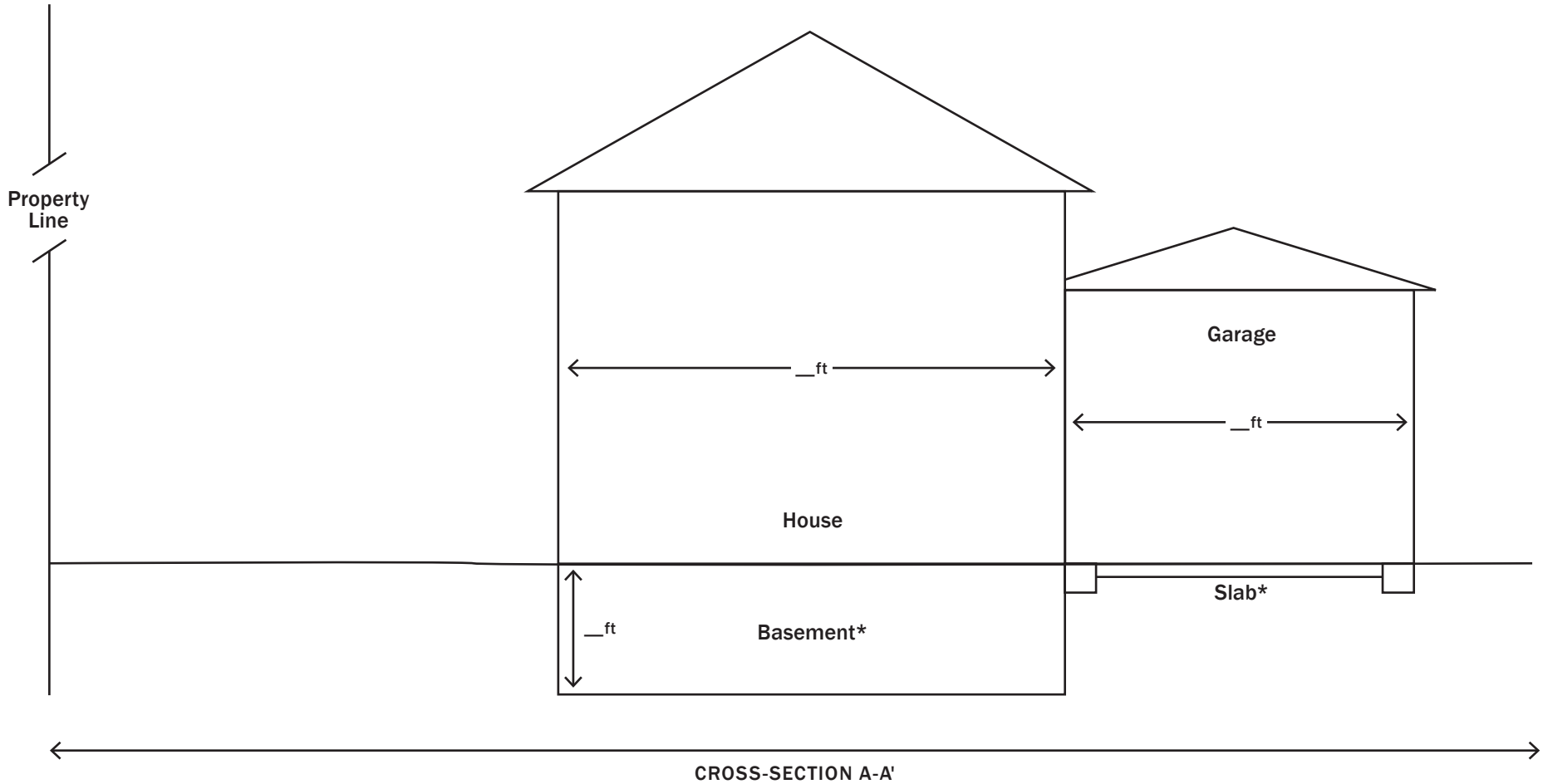
*LABEL FOUNDATIONS: BASEMENT, CRAWLSPACE, PILINGS, SLAB

County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

Sample Drawing: Construction in a High Risk Erosion Area with Existing Shore Protection (Overhead Site Plan)



Sample Drawing: Construction in a High Risk Erosion Area with Existing Shore Protection (Cross-section A-A')



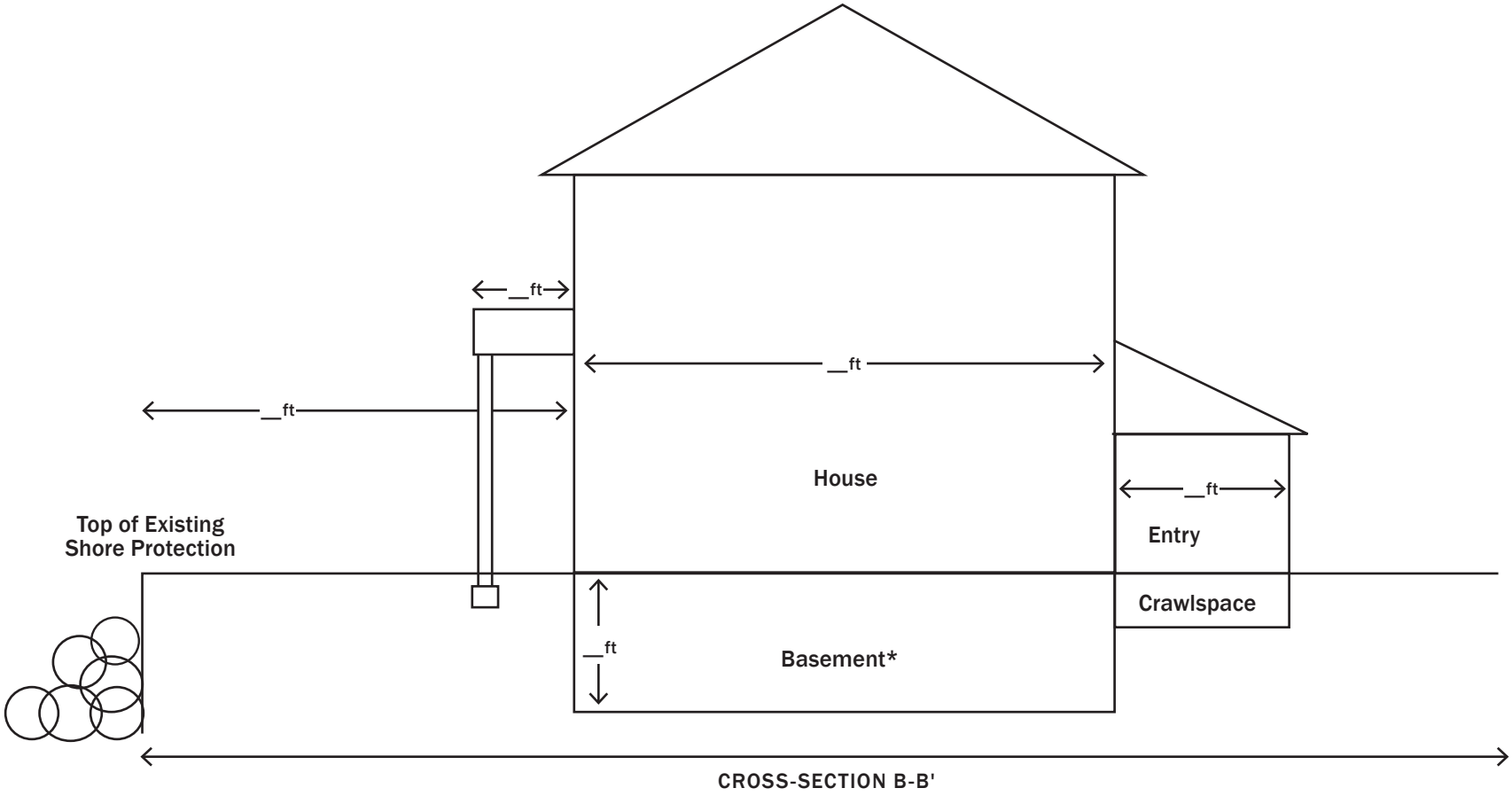
SHOW DIMENSIONS

*LABEL FOUNDATIONS: BASEMENT, CRAWLSPACE, PILINGS, SLAB

0 _

County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

Sample Drawing: Construction in a High Risk Erosion Area with Existing Shore Protection (Cross-section B-B')



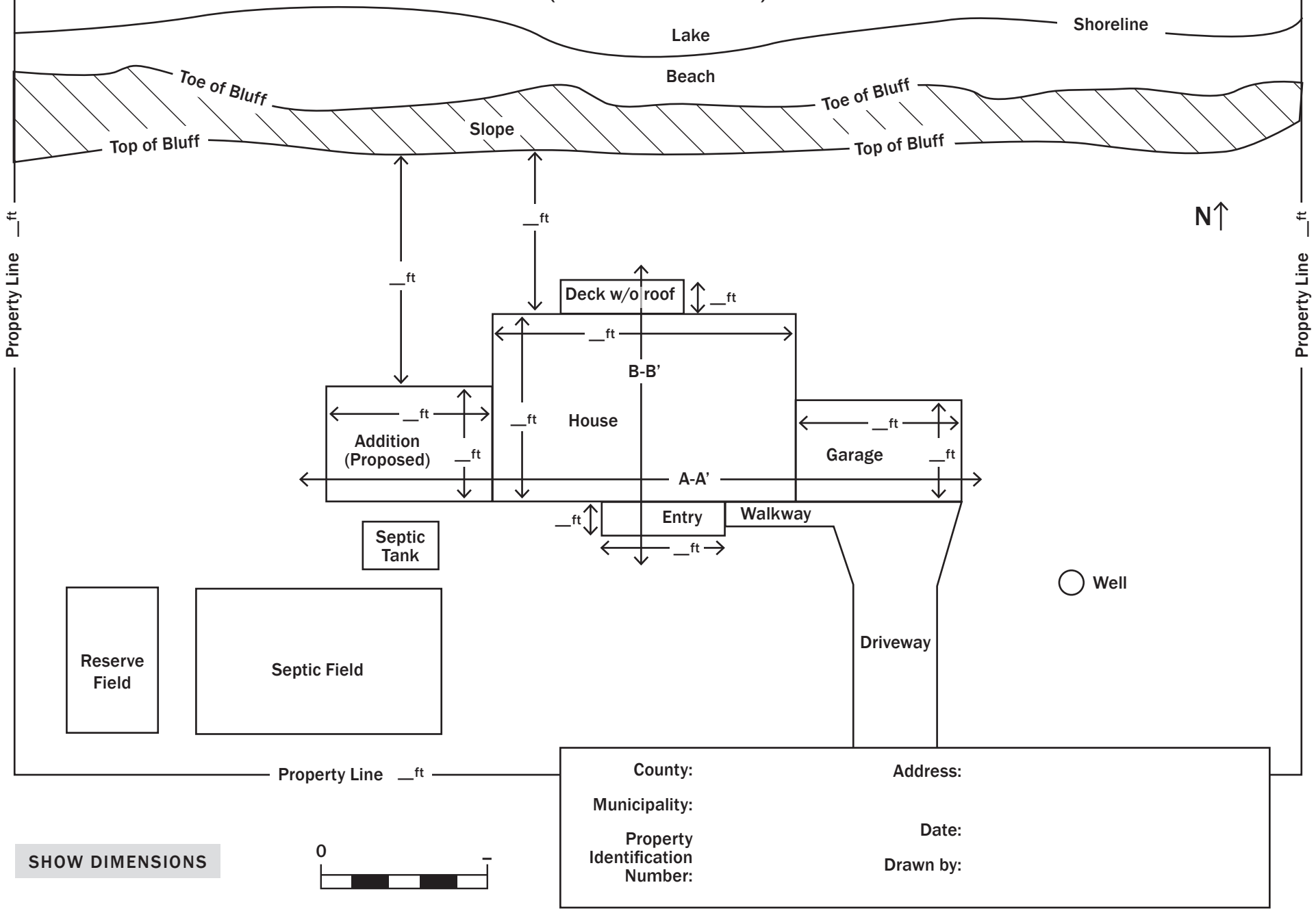
SHOW DIMENSIONS

*LABEL FOUNDATIONS: BASEMENT, CRAWLSPACE, PILINGS, SLAB

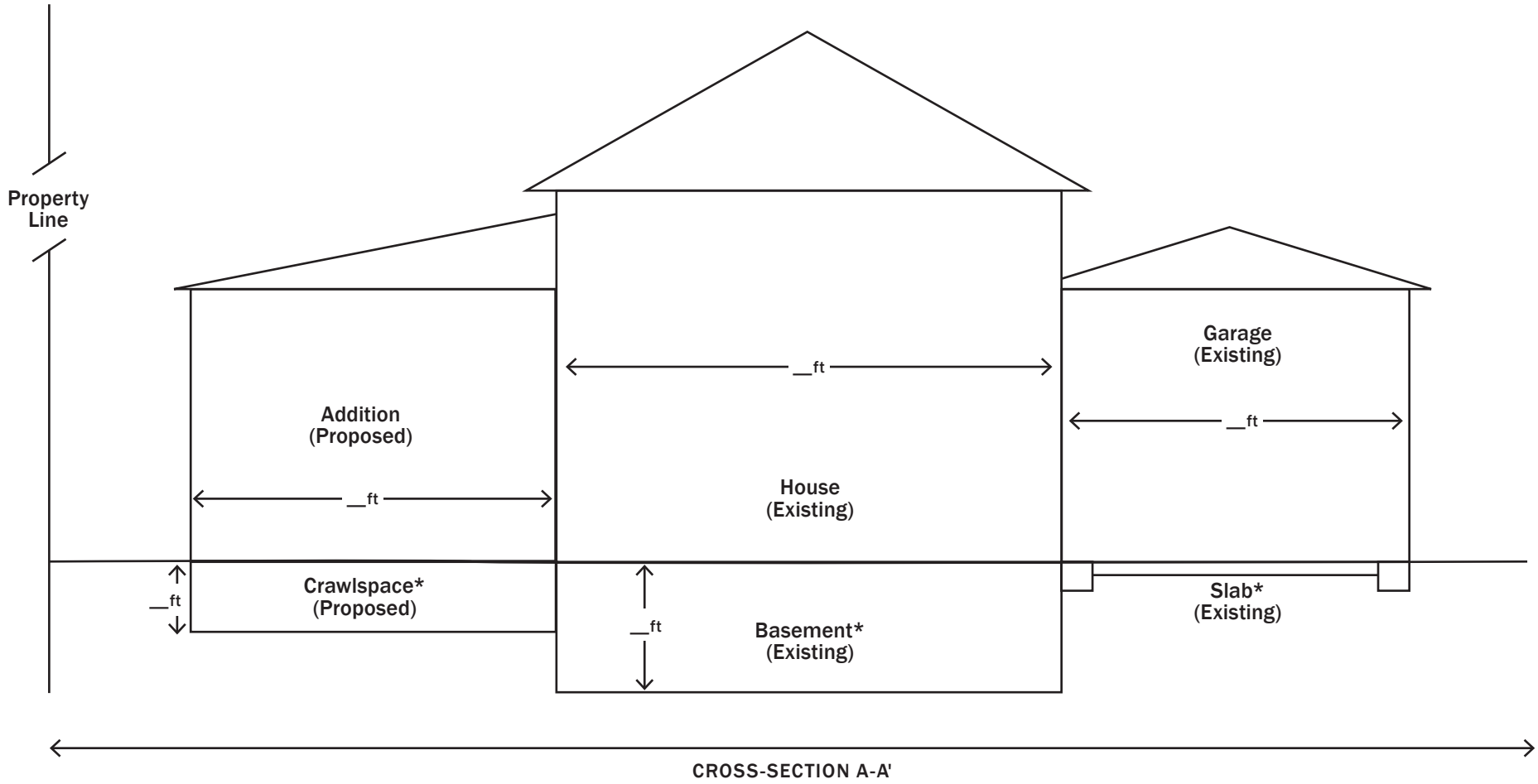
0 _

County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

Sample Drawing: Addition in a High Risk Erosion Area
(Overhead Site Plan)



Sample Drawing: Addition in a High Risk Erosion Area
(Cross-section A-A')



SHOW DIMENSIONS

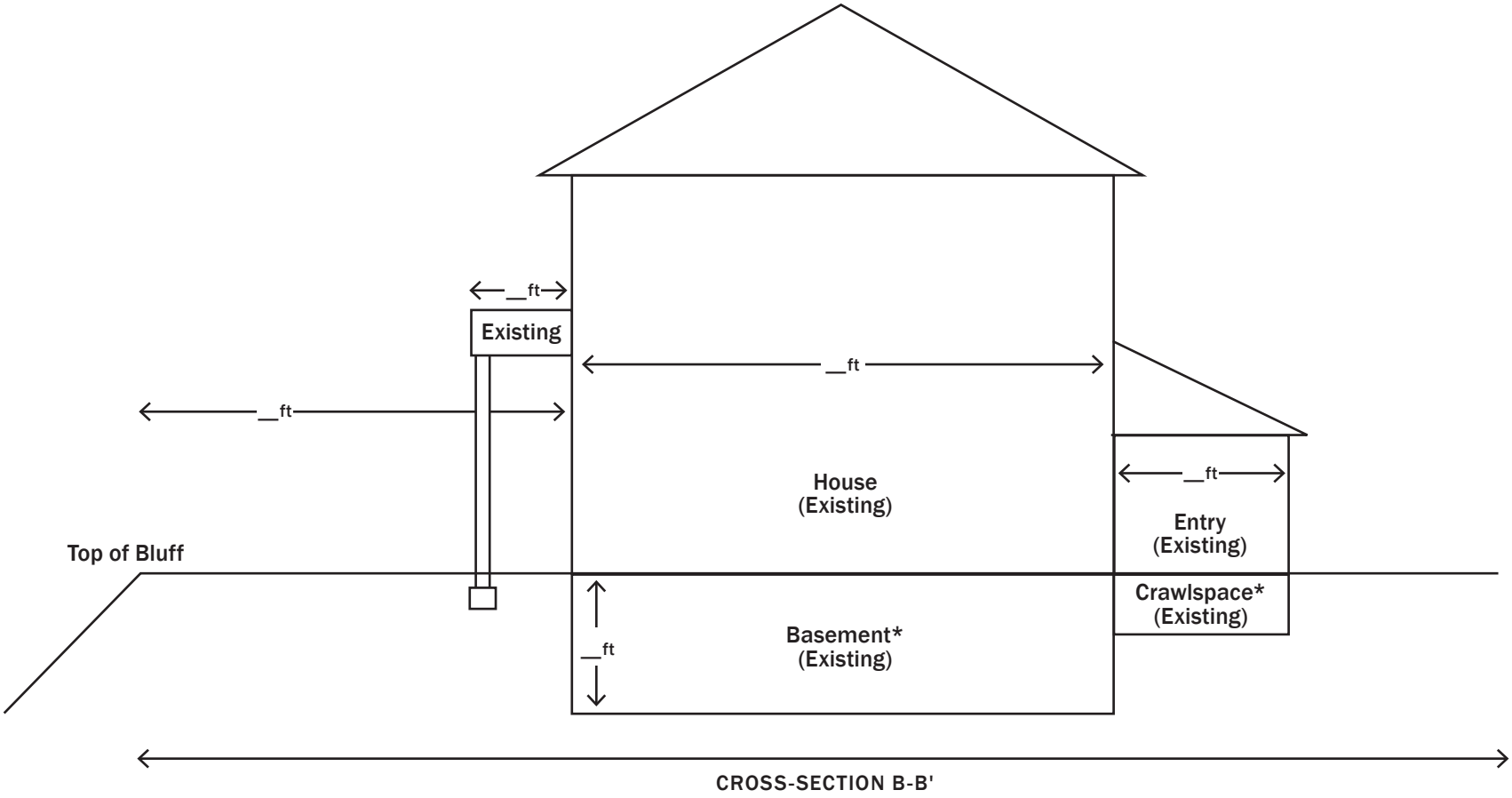
*LABEL FOUNDATIONS: BASEMENT, CRAWLSPACE, PILINGS, SLAB

LABEL STRUCTURES, EXISTING OR PROPOSED

0 _

County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

Sample Drawing: Addition in a High Risk Erosion Area
(Cross-section B-B')



SHOW DIMENSIONS

*LABEL FOUNDATIONS: BASEMENT, CRAWLSPACE, PILINGS, SLAB

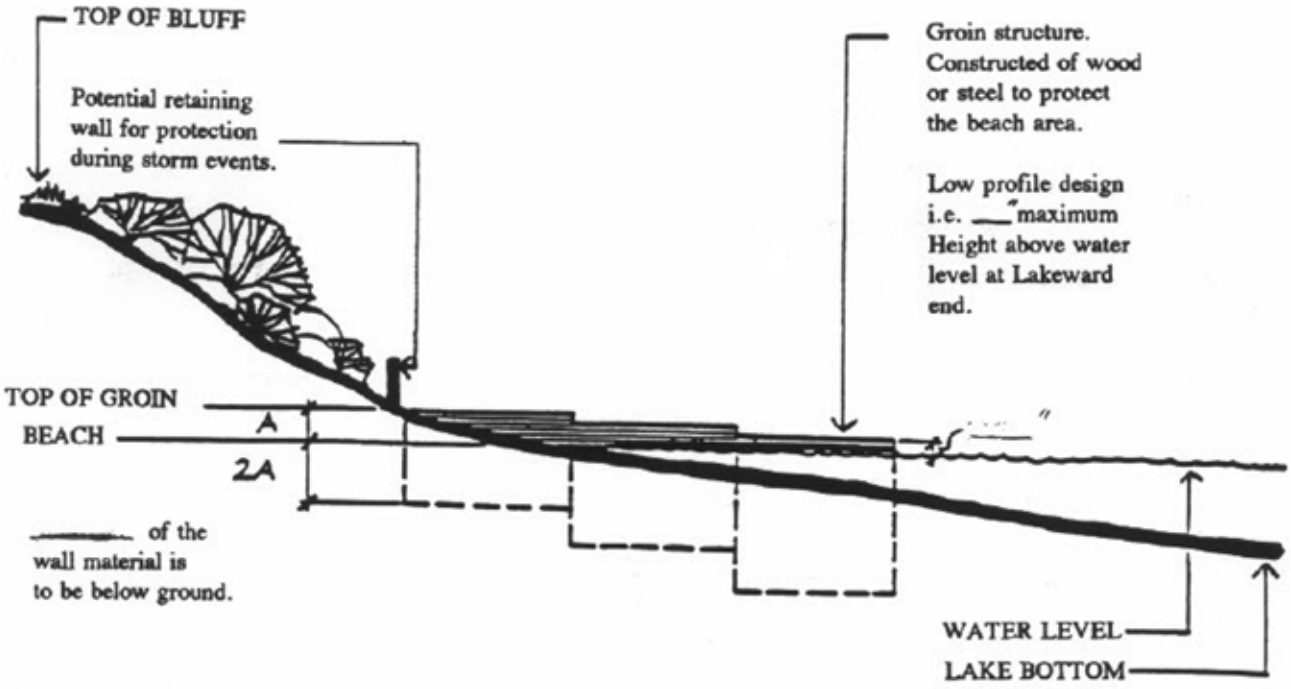
LABEL STRUCTURES, EXISTING OR PROPOSED

0 _

County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

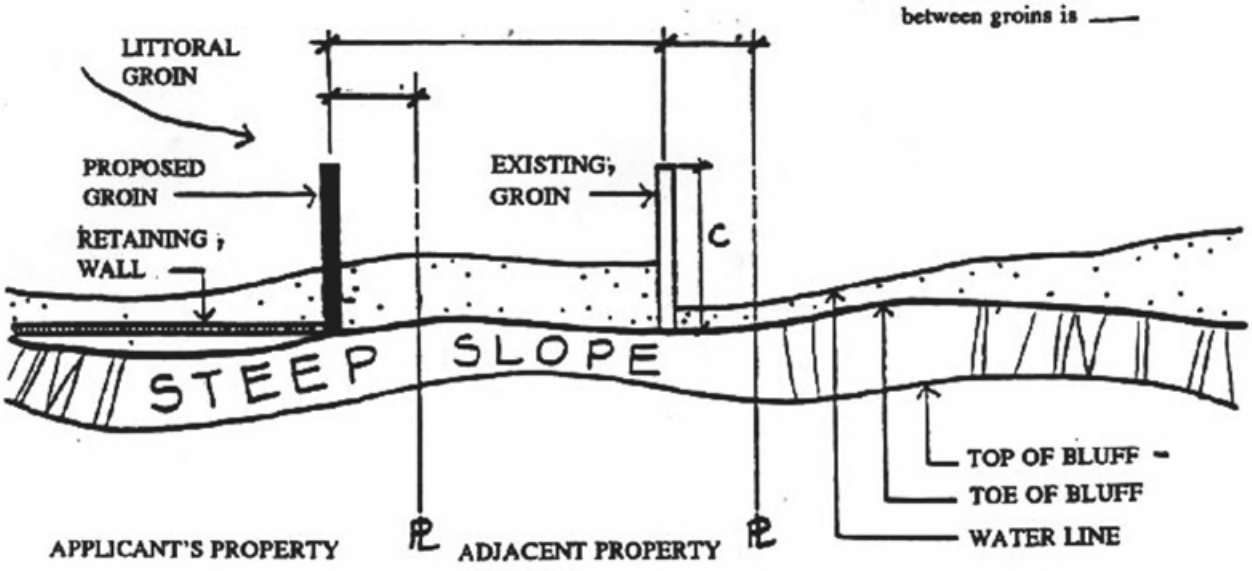
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

GROIN



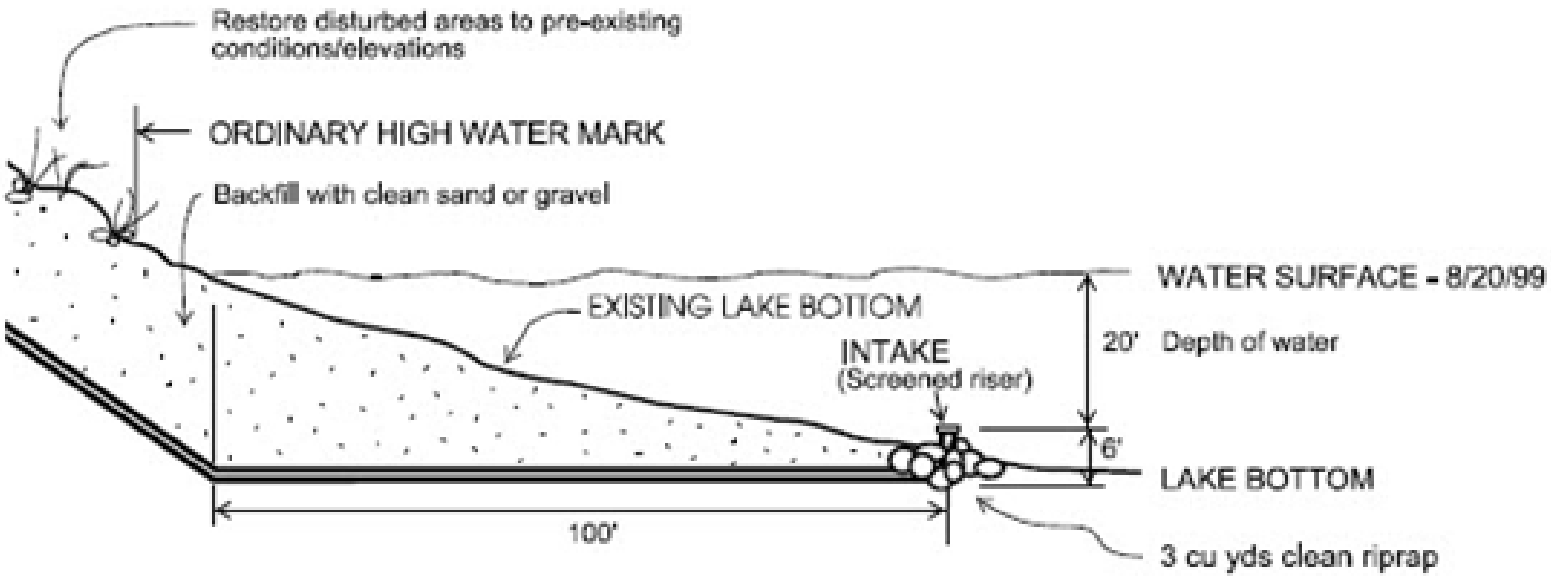
A proposed groin may be no longer than other groins in the vicinity (C). Unless authorized by adjacent landowners, minimum distances between groins and property lines (℄) are ___ .

Minimum distance between groins is ___

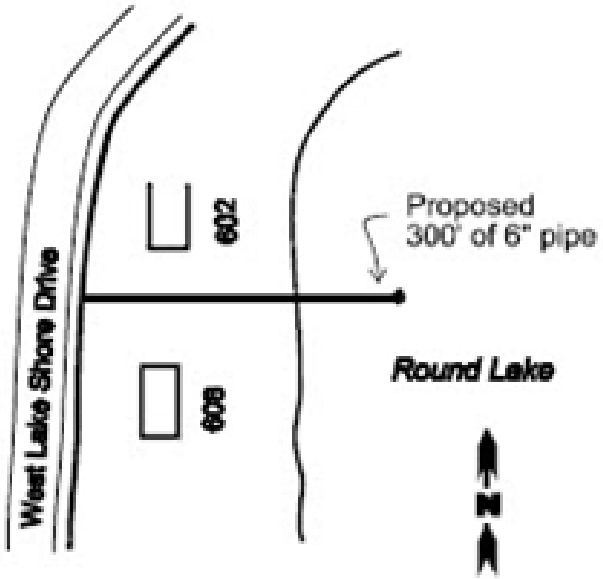


JOINT PERMIT APPLICATION SAMPLE DRAWINGS

INTAKE PIPE



PROFILE DRAWING

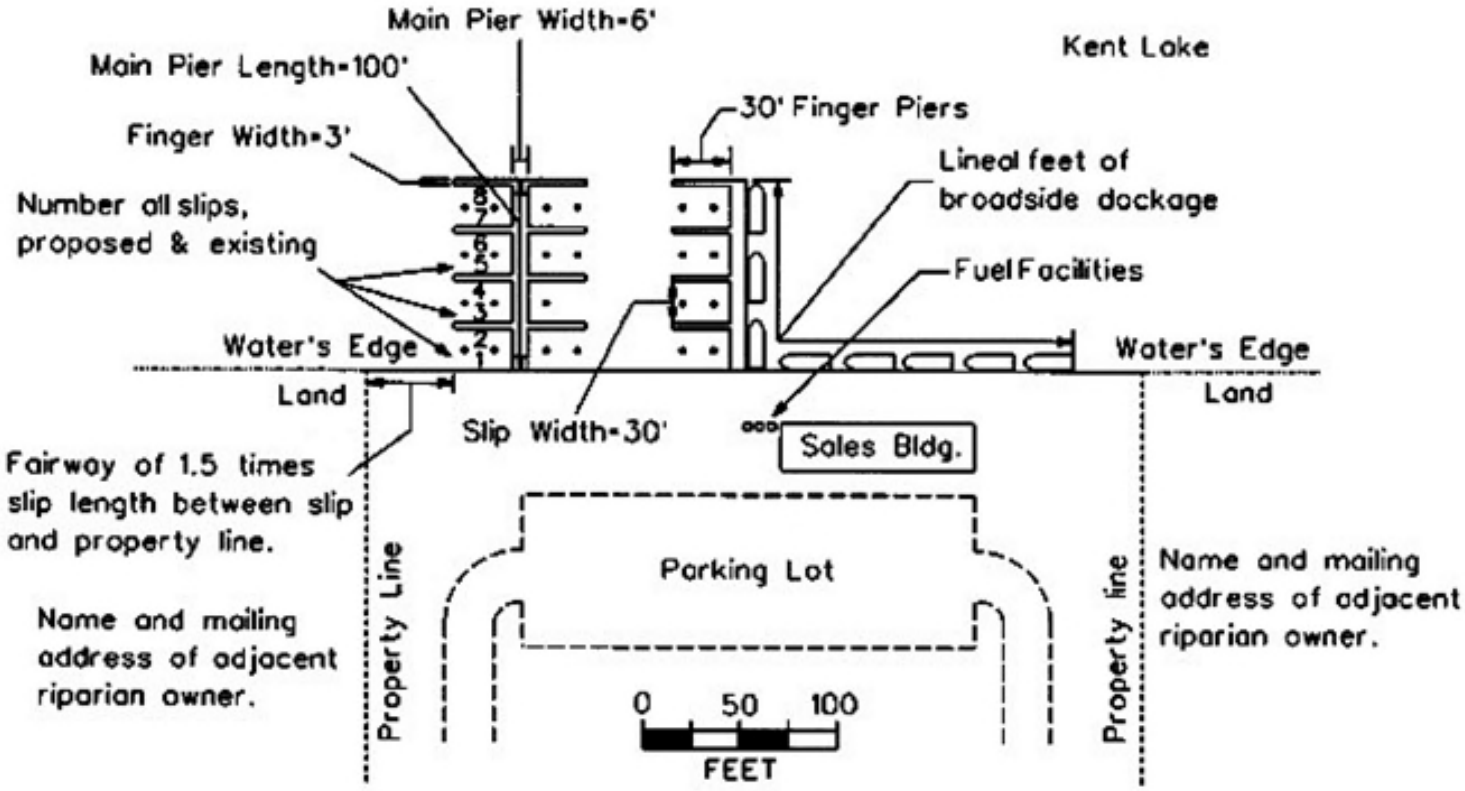


PLAN DRAWING

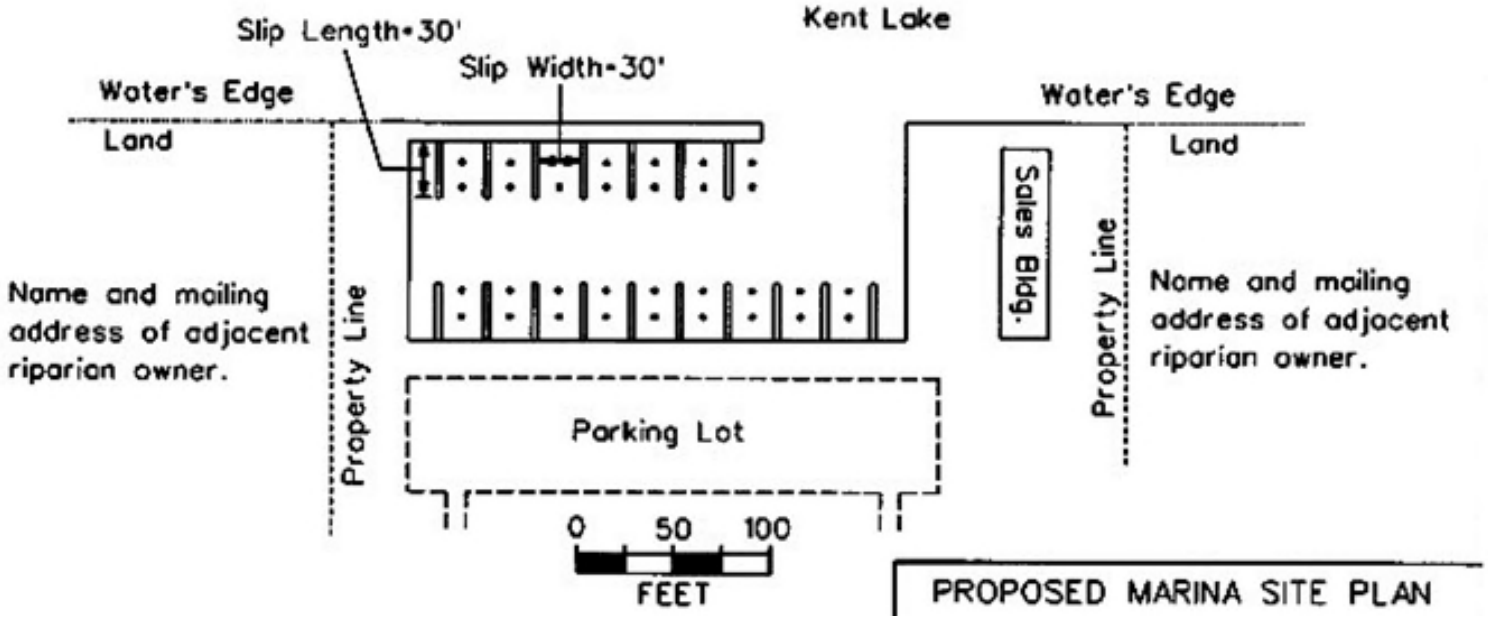
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

MARINA

MARINA SITE PLAN #1

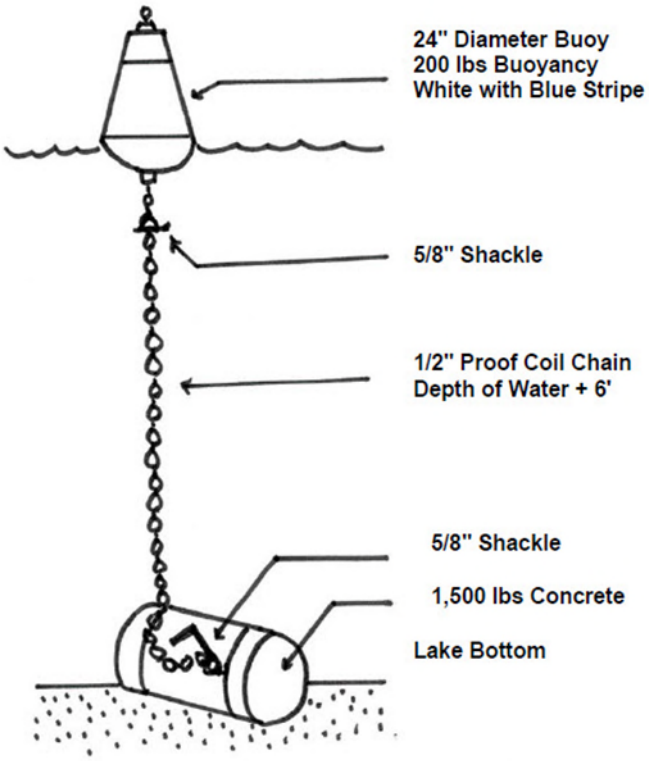


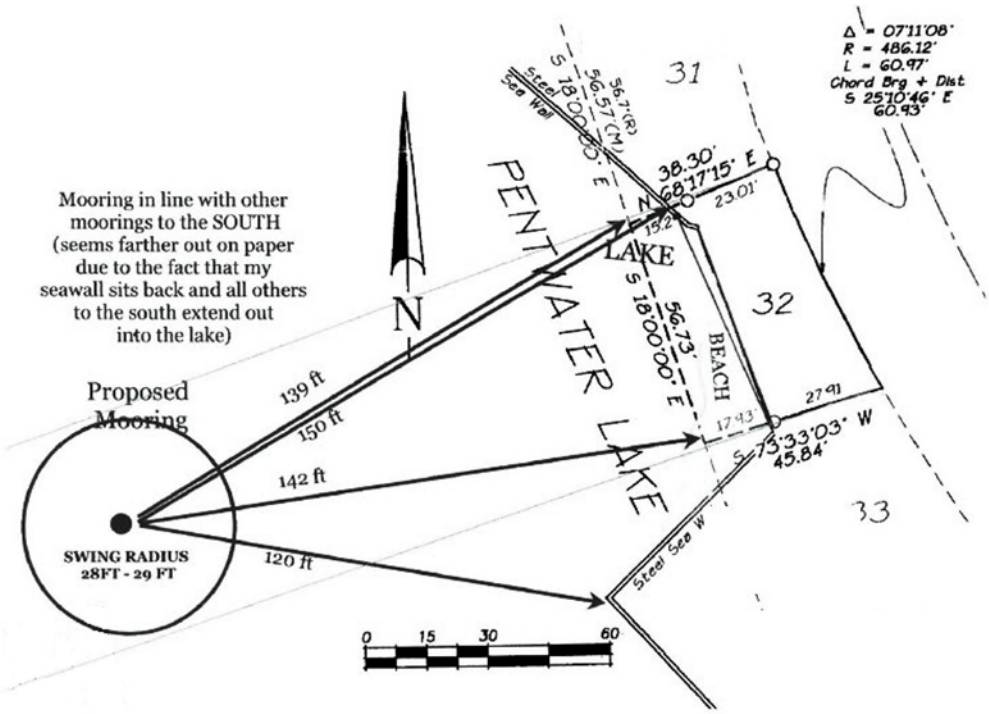
MARINA SITE PLAN #2



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

MOORING BUOYS

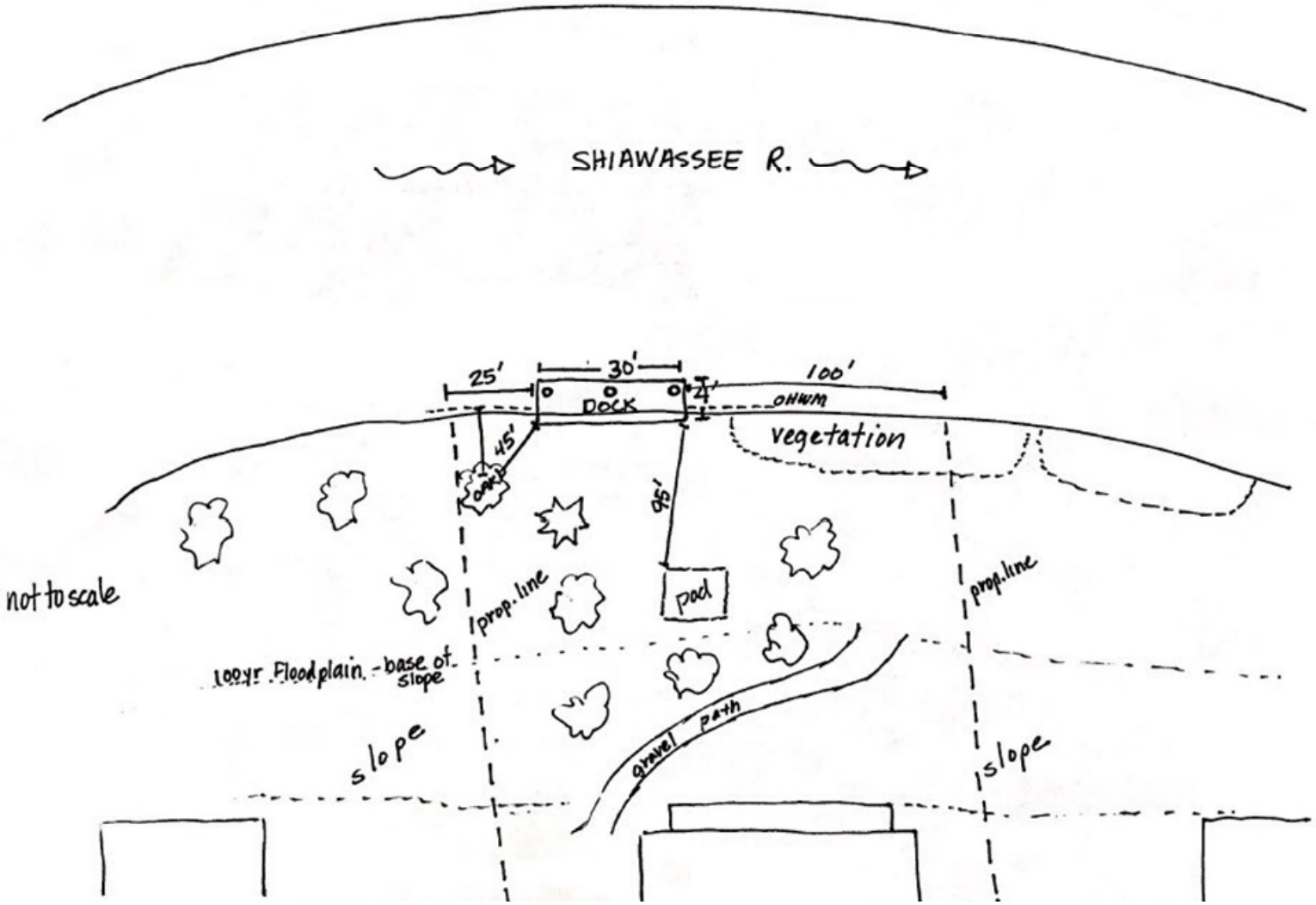




JOINT PERMIT APPLICATION SAMPLE DRAWINGS

ORDINARY HIGH WATER MARK

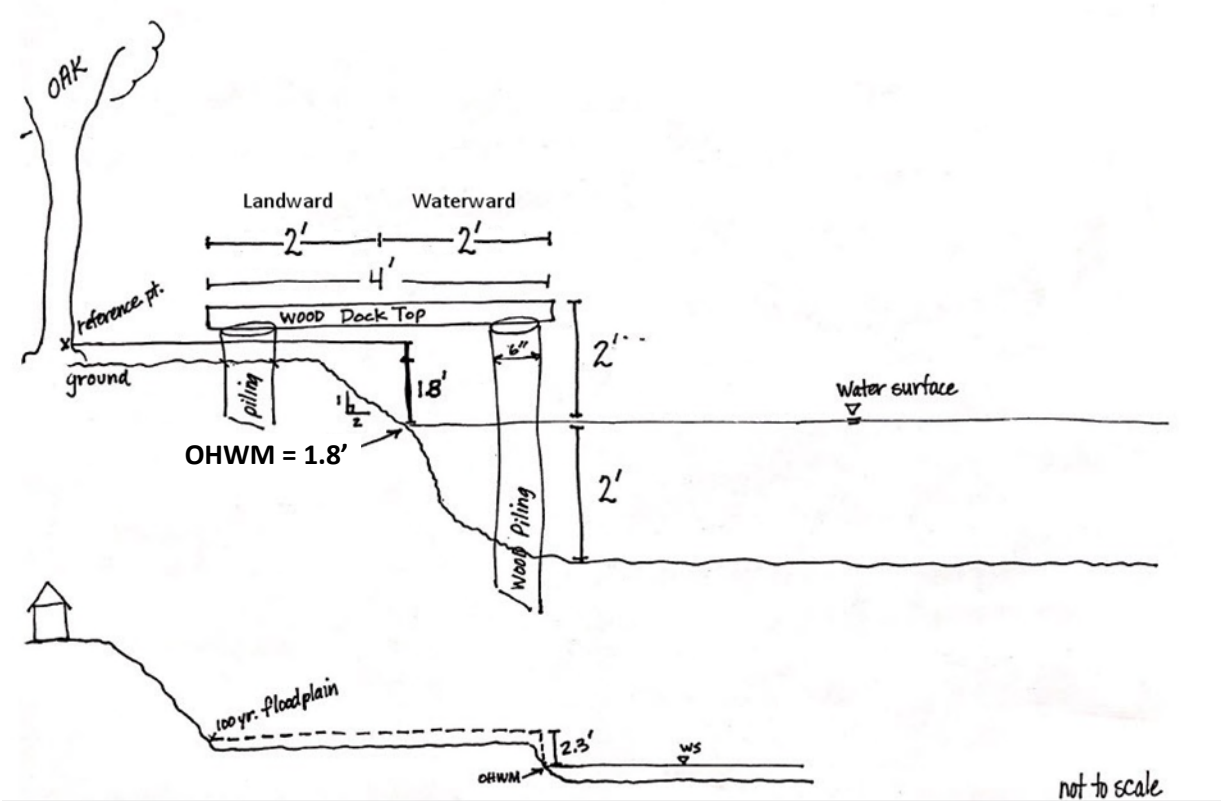
Plan View



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

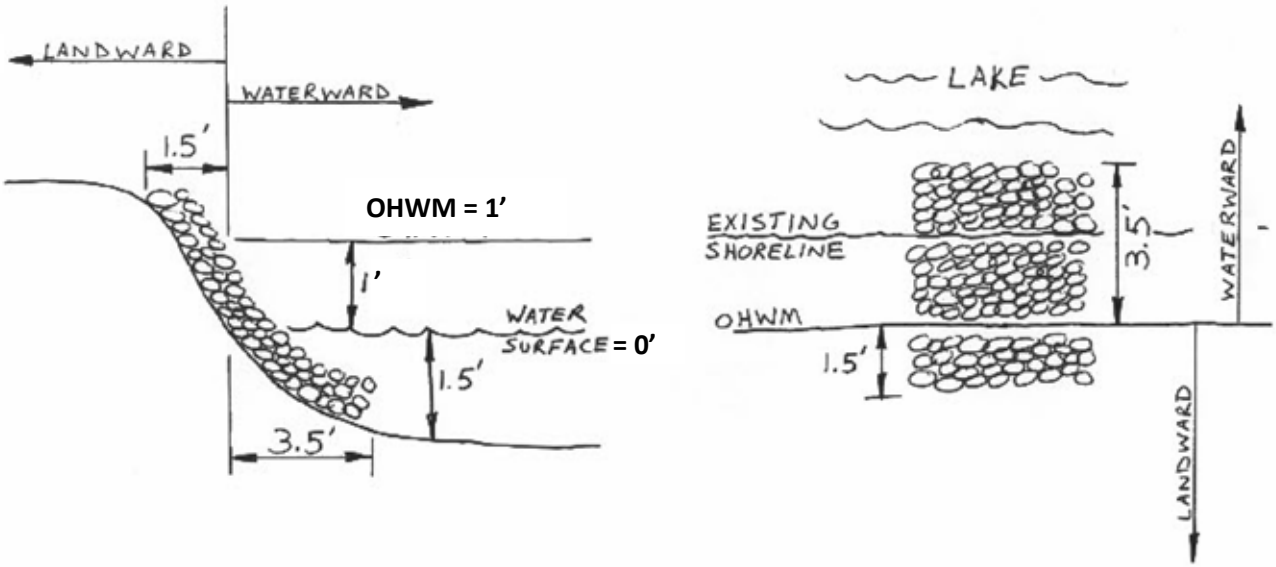
ORDINARY HIGH WATER MARK

Measured Relative to a Benchmark



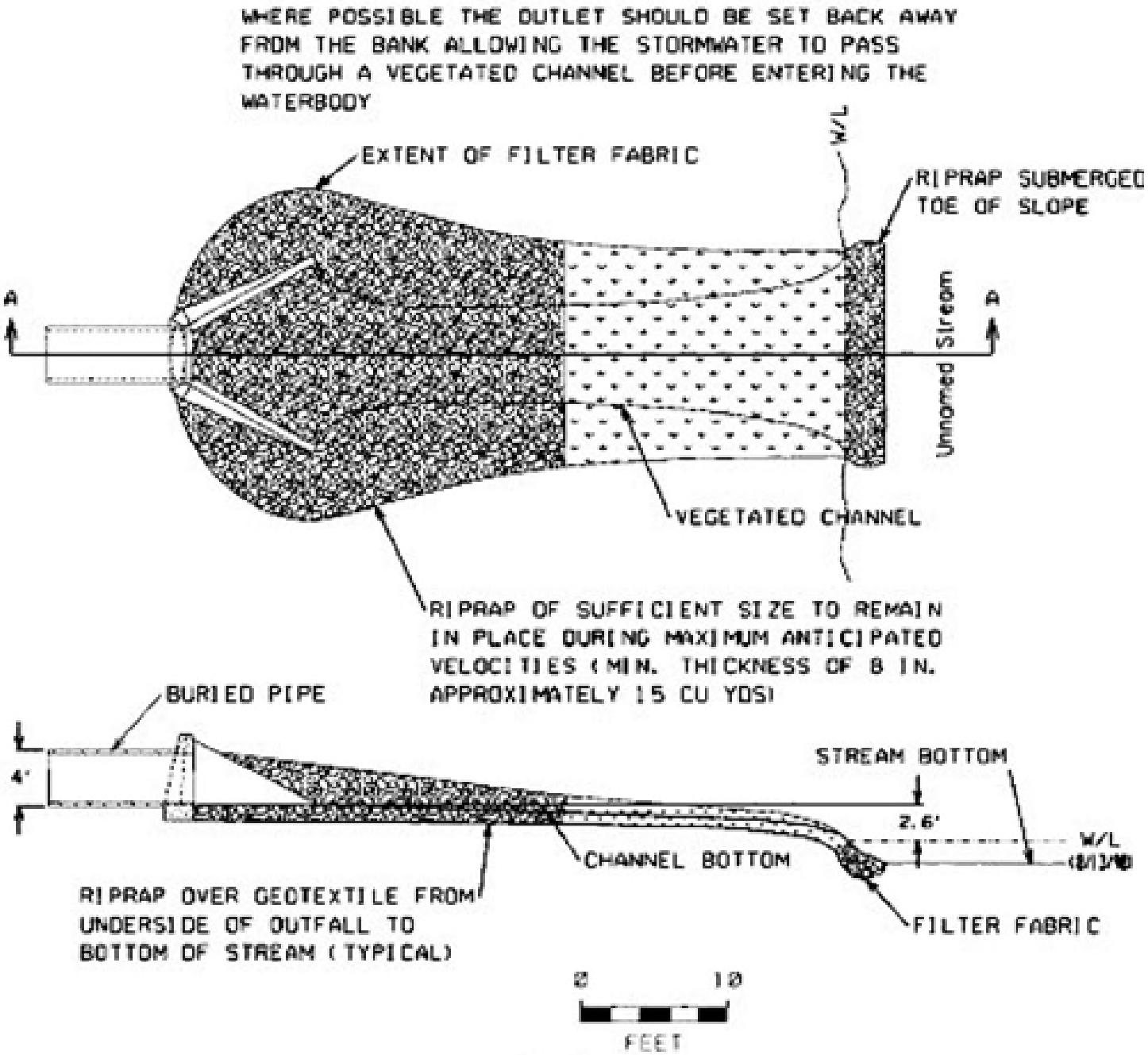
ORDINARY HIGH WATER MARK

Measured Relative to Standing Water



JOINT PERMIT APPLICATION SAMPLE DRAWINGS

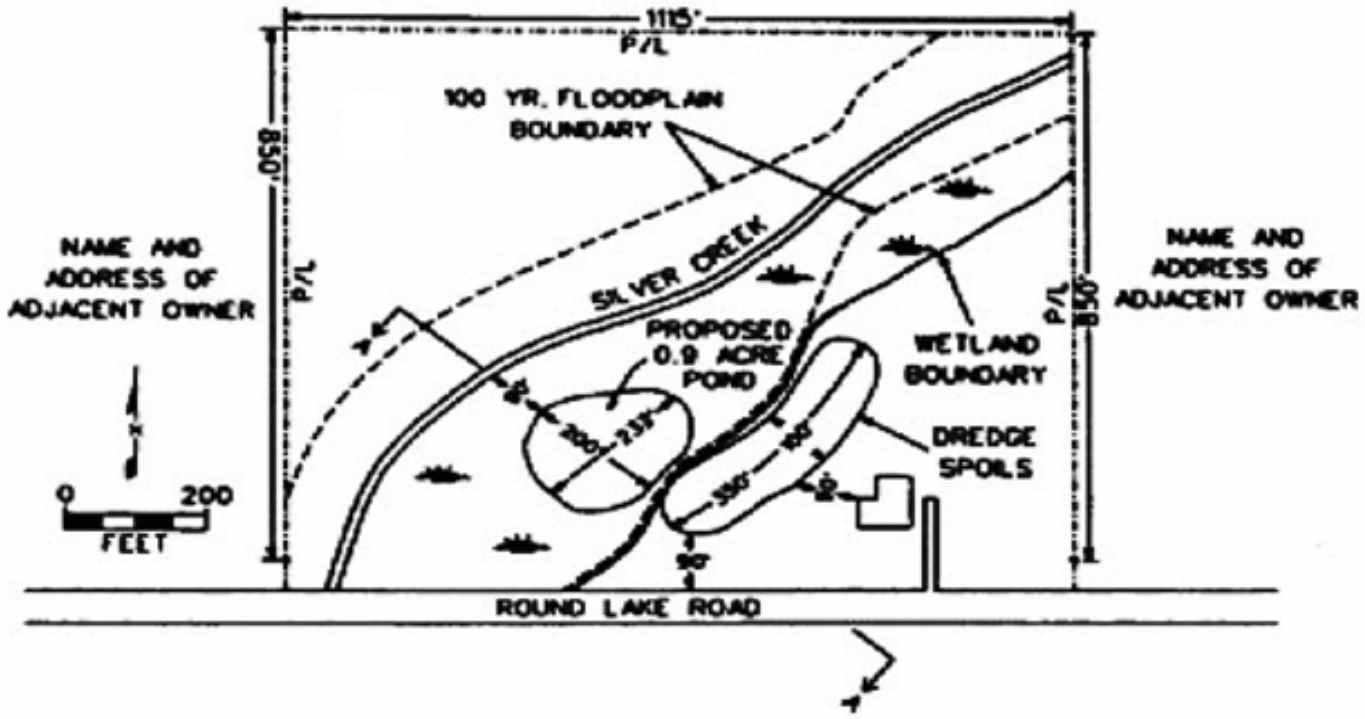
OUTLET



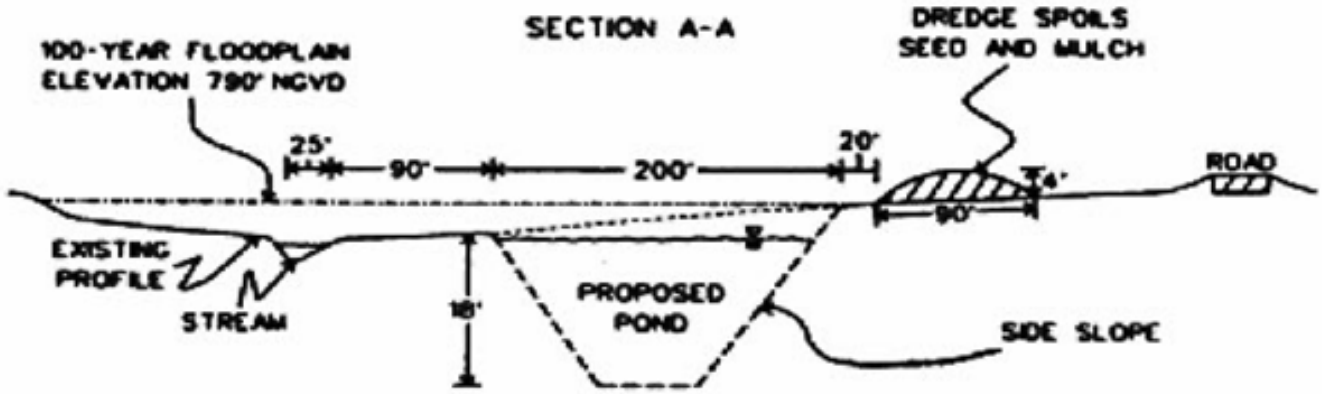
CROSS-SECTION A - A

JOINT PERMIT APPLICATION SAMPLE DRAWINGS

POND CONSTRUCTION

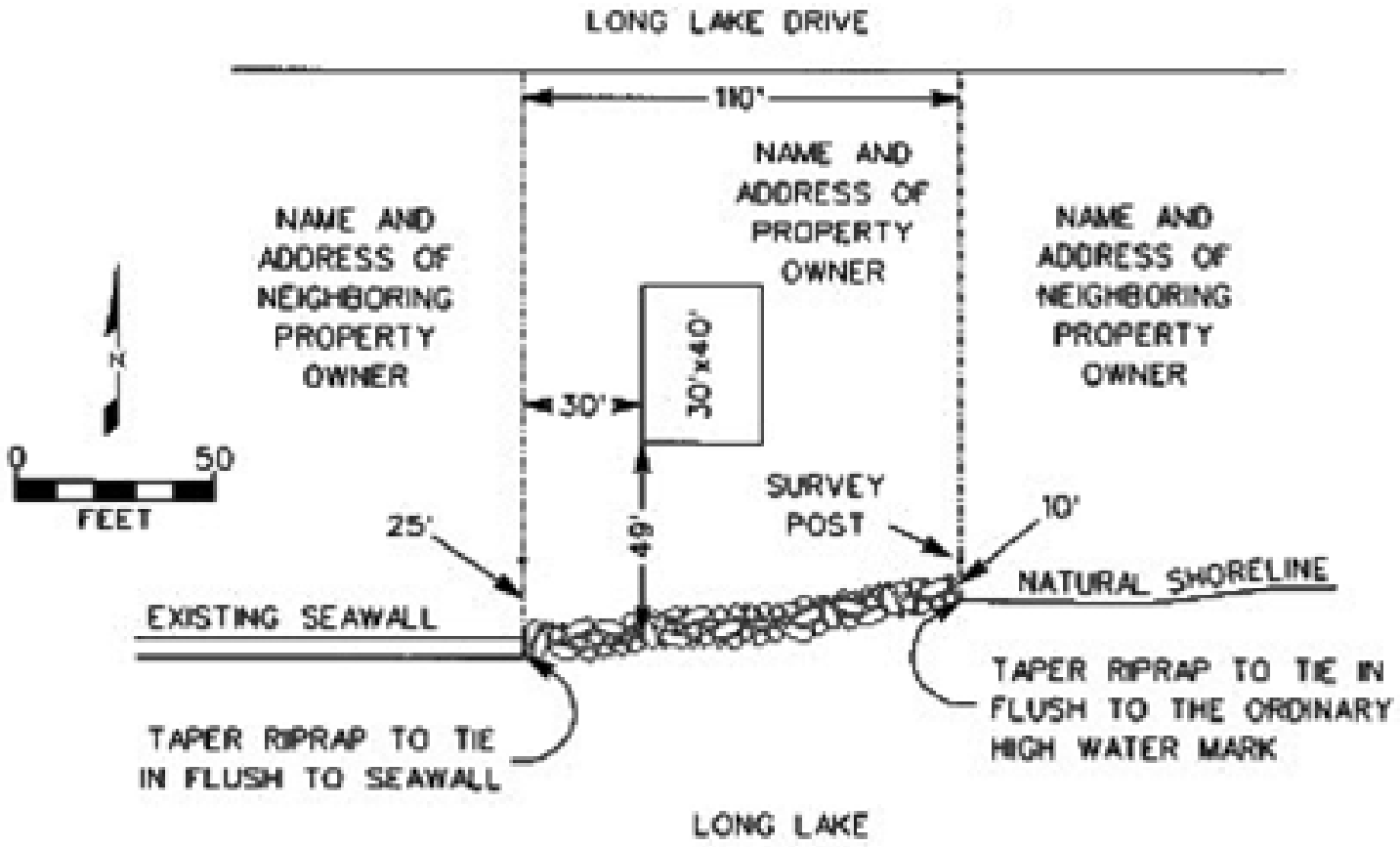


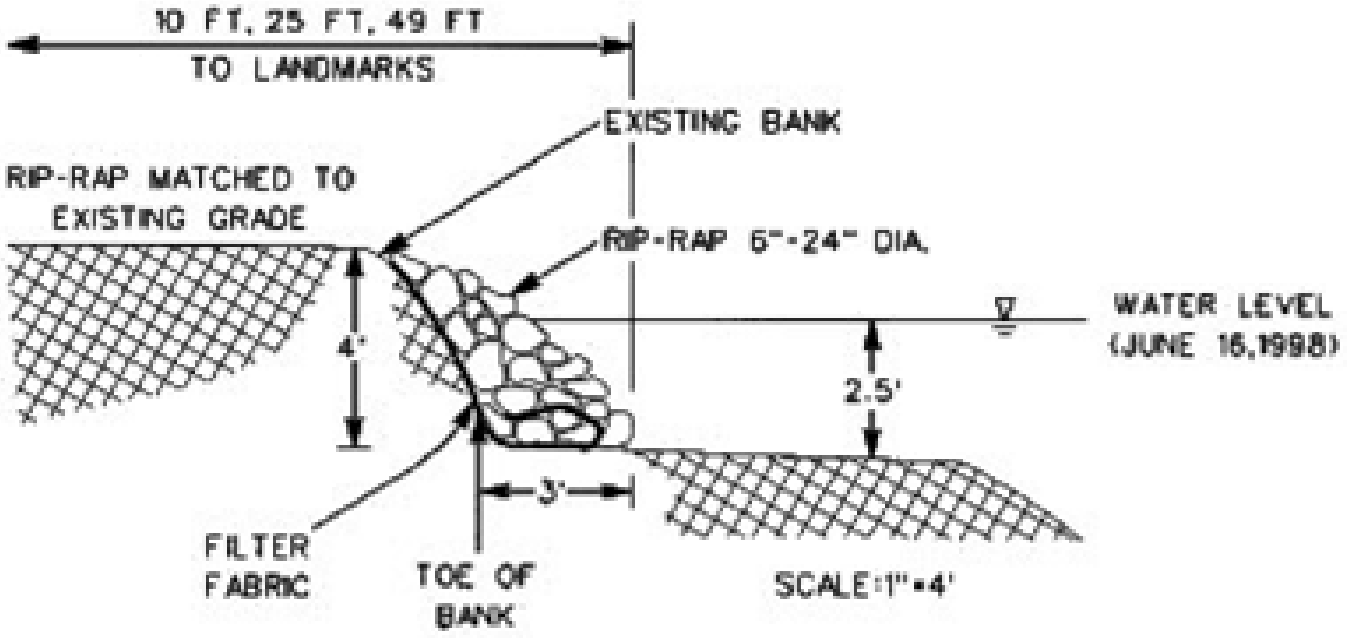
APPROXIMATELY 5000 CU. YD. WILL BE EXCAVATED AND THE DREDGE SPOILS WIL BE PLACED ON-SITE ABOVE THE 100 YR. FLOODPLAIN ELEVATION AND UPLAND OF REGULATED WETLANDS.



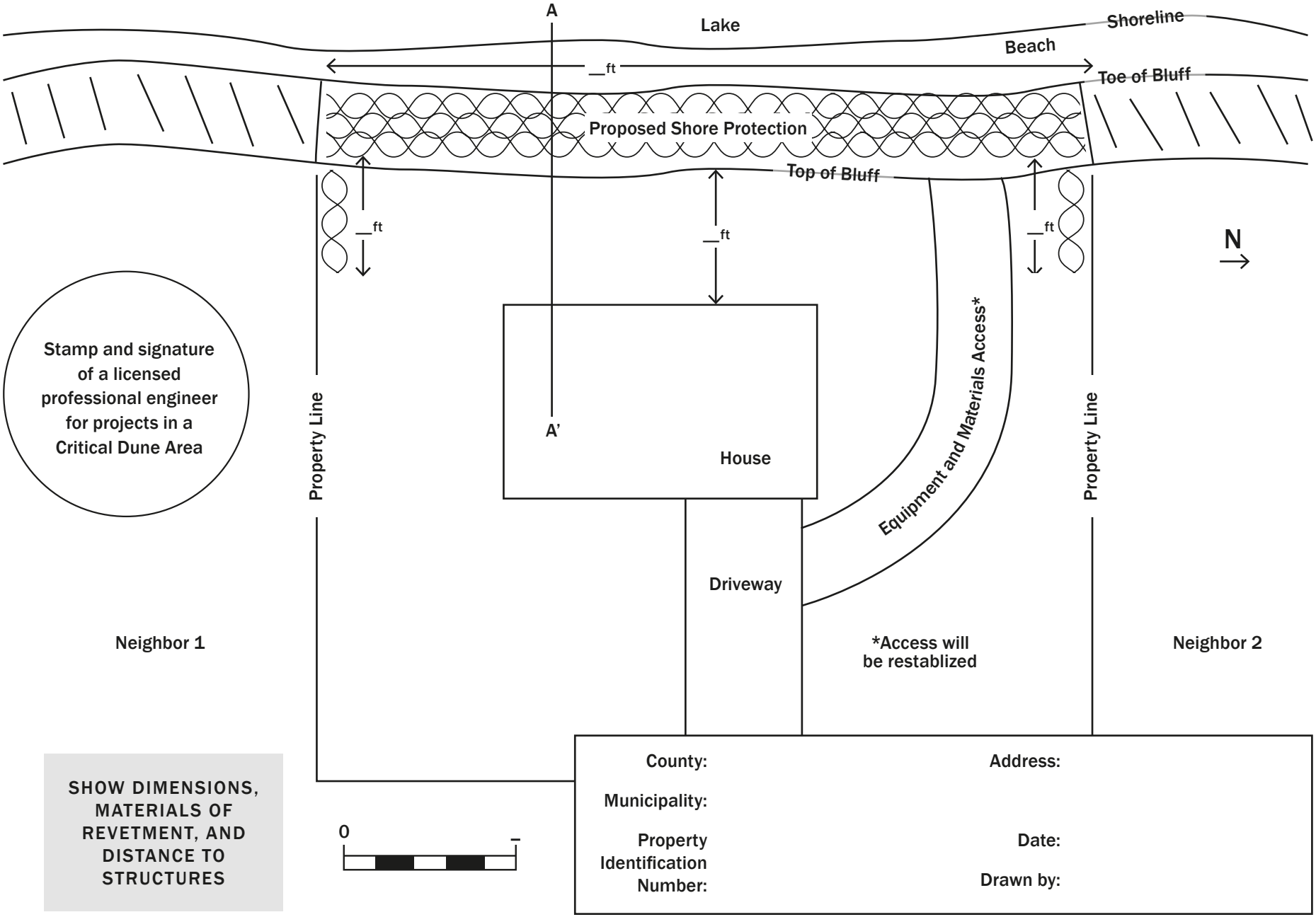
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

RIPRAP





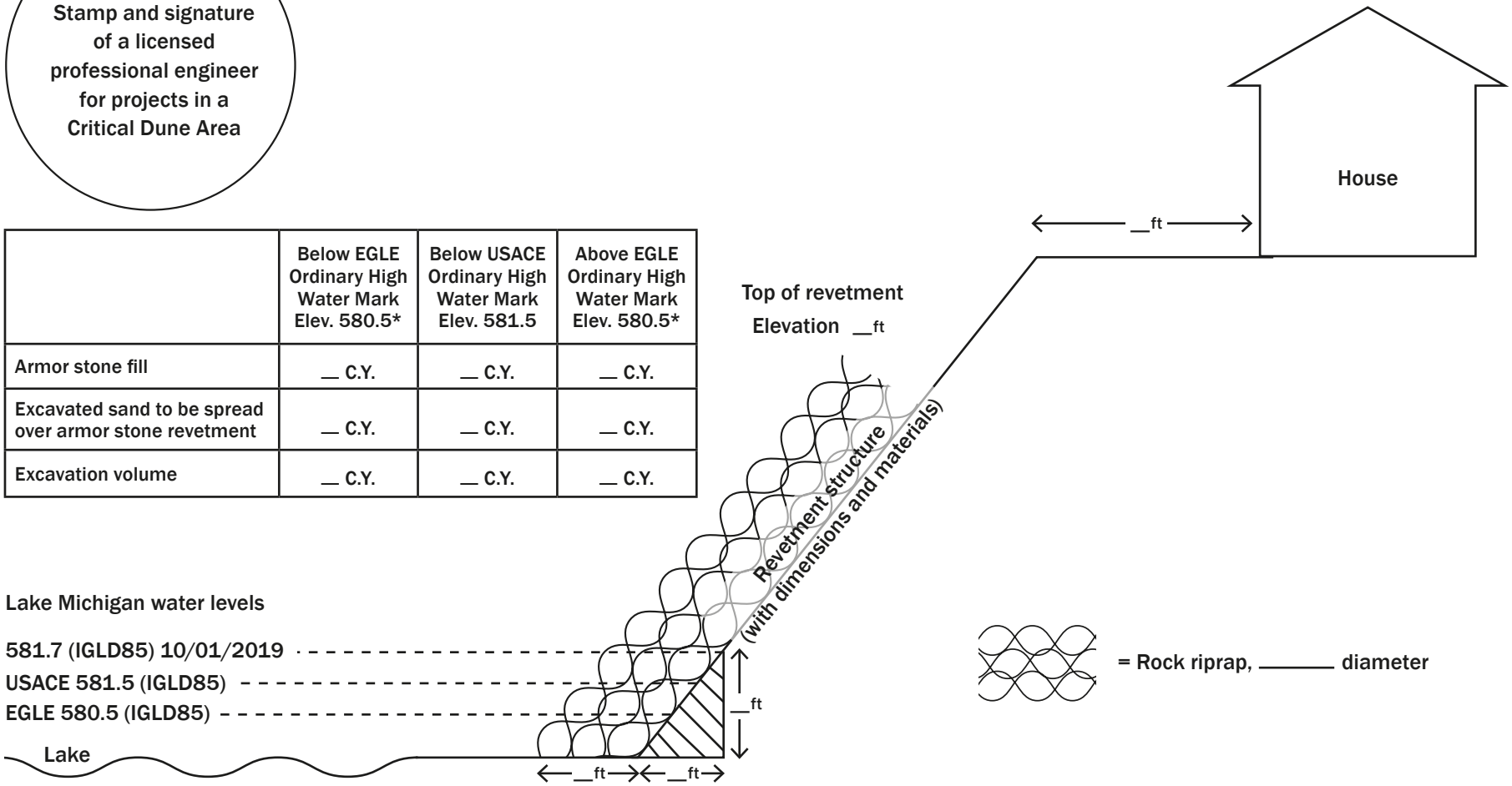
Sample Drawing: Great Lakes Shore Protection During High Water
(Overhead Site Plan)



Sample Drawing: Great Lakes Shore Protection During High Water
(Cross-section A-A')

Stamp and signature of a licensed professional engineer for projects in a Critical Dune Area

	Below EGLE Ordinary High Water Mark Elev. 580.5*	Below USACE Ordinary High Water Mark Elev. 581.5	Above EGLE Ordinary High Water Mark Elev. 580.5*
Armor stone fill	__ C.Y.	__ C.Y.	__ C.Y.
Excavated sand to be spread over armor stone revetment	__ C.Y.	__ C.Y.	__ C.Y.
Excavation volume	__ C.Y.	__ C.Y.	__ C.Y.

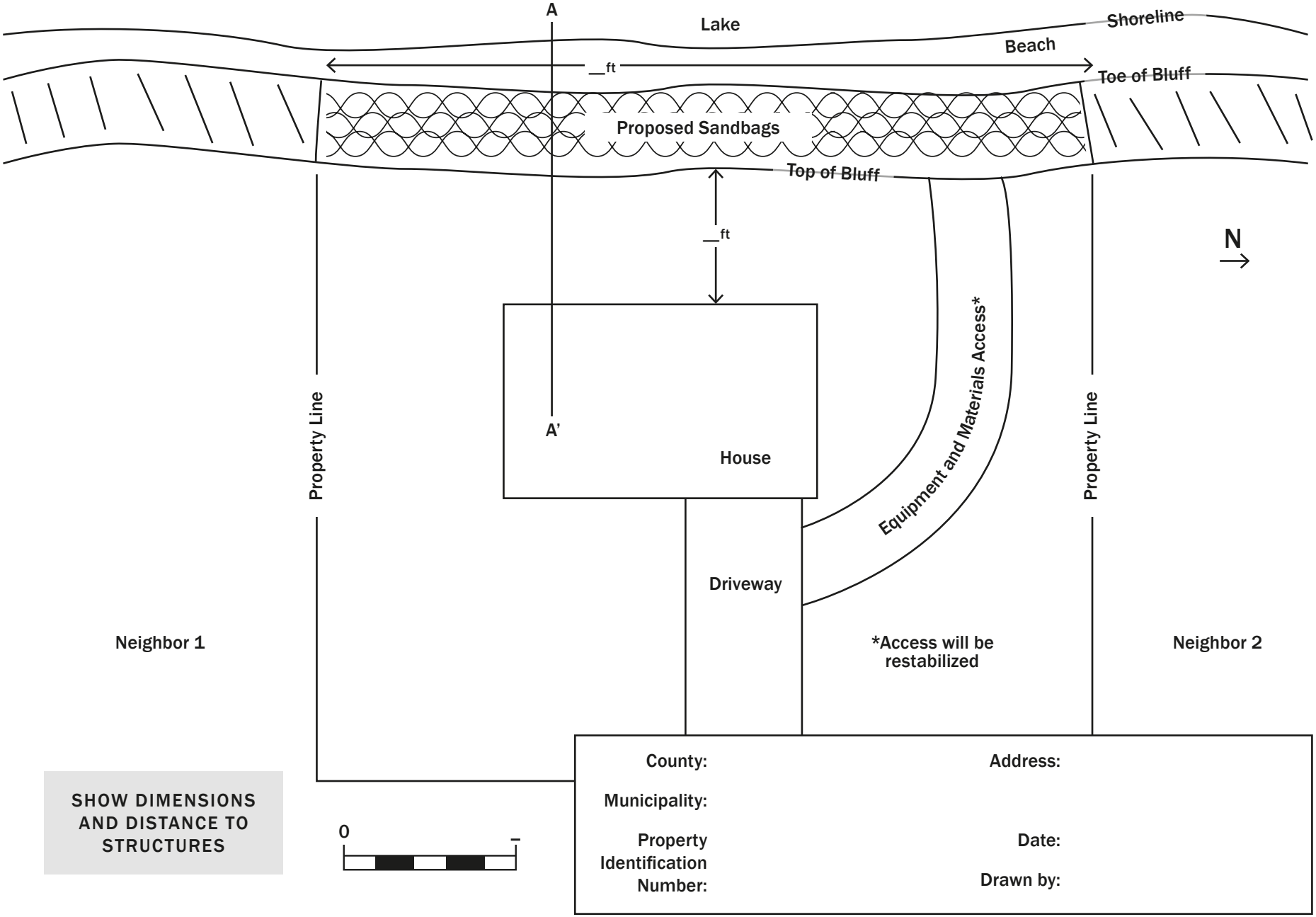


SHOW DIMENSIONS, MATERIALS OF REVETMENT, AND DISTANCE TO STRUCTURES

0 _

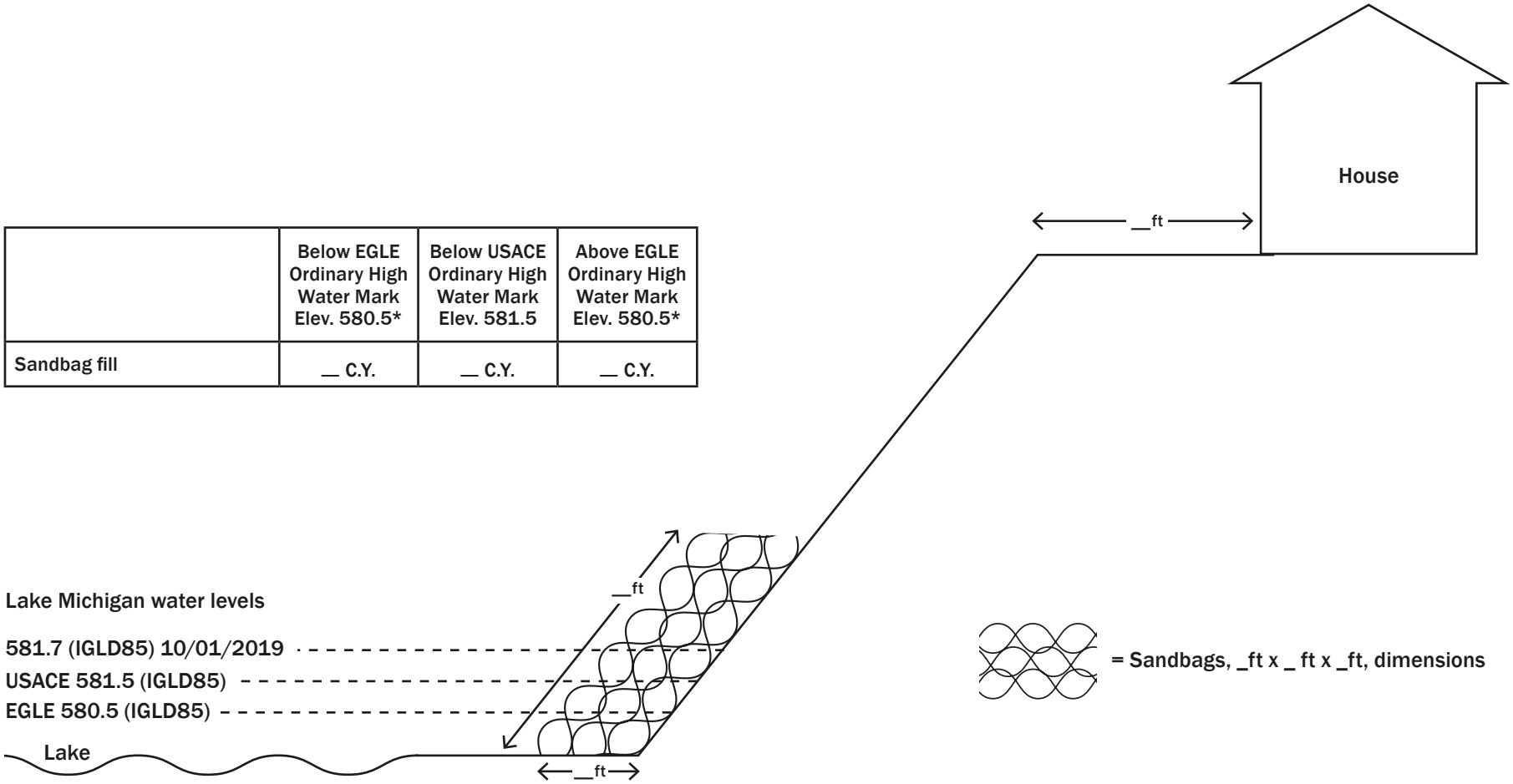
County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

Sample Drawing: Sandbags for Temporary Great Lakes Shore Protection During High Water (Overhead Site Plan)



Sample Drawing: Sandbags for Temporary Great Lakes Shore Protection During High Water (Cross-section A-A')

	Below EGLE Ordinary High Water Mark Elev. 580.5*	Below USACE Ordinary High Water Mark Elev. 581.5	Above EGLE Ordinary High Water Mark Elev. 580.5*
Sandbag fill	__ C.Y.	__ C.Y.	__ C.Y.



SHOW DIMENSIONS AND DISTANCE TO STRUCTURES

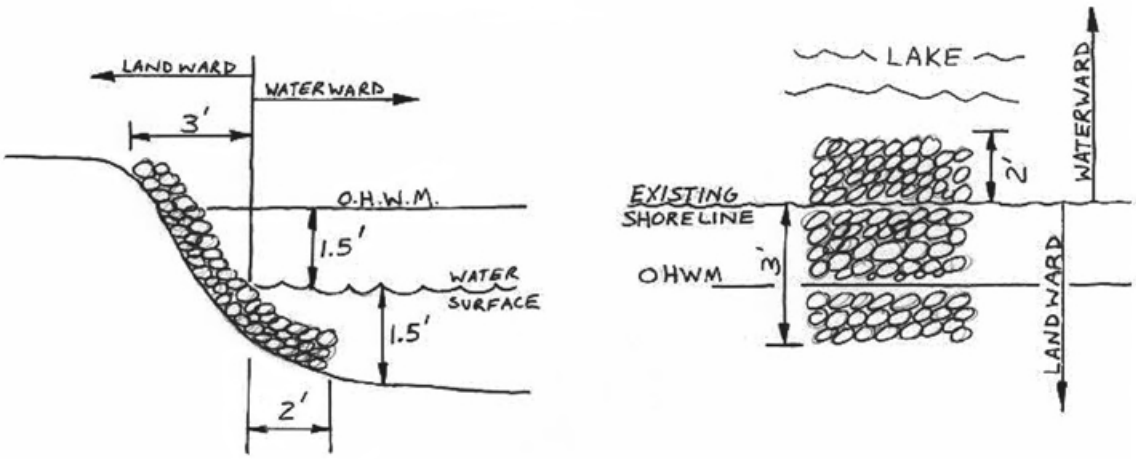
0 _

County:	Address:
Municipality:	
Property Identification Number:	Date:
	Drawn by:

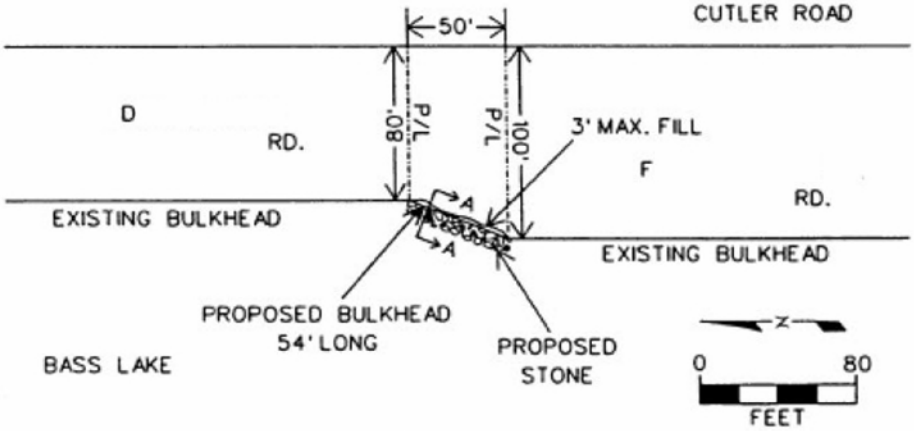
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

SHORE PROTECTION – MEASUREMENTS

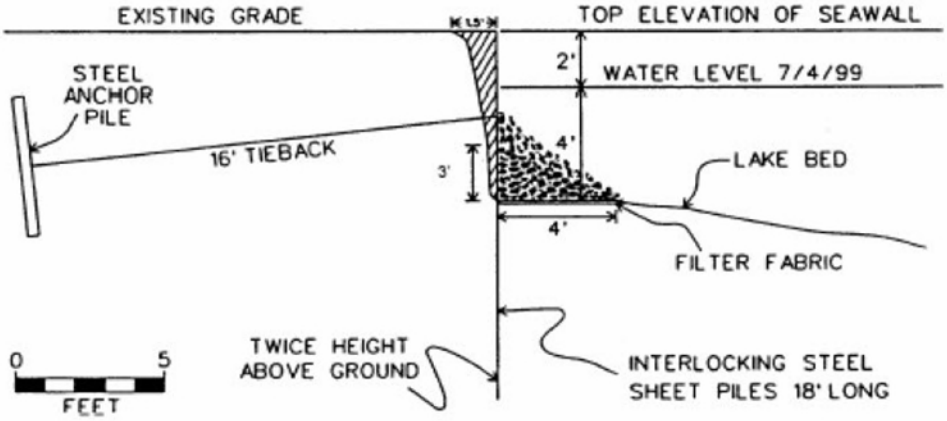
Landward – Waterward



SHORE PROTECTION - SEAWALLS



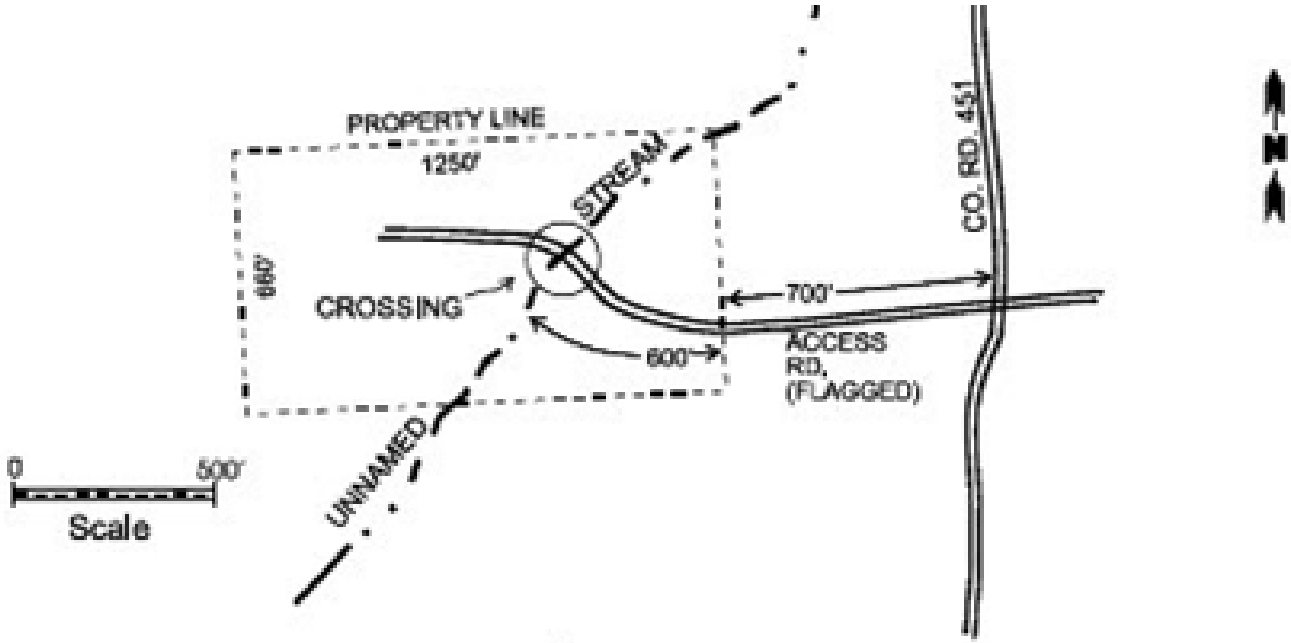
SECTION A-A

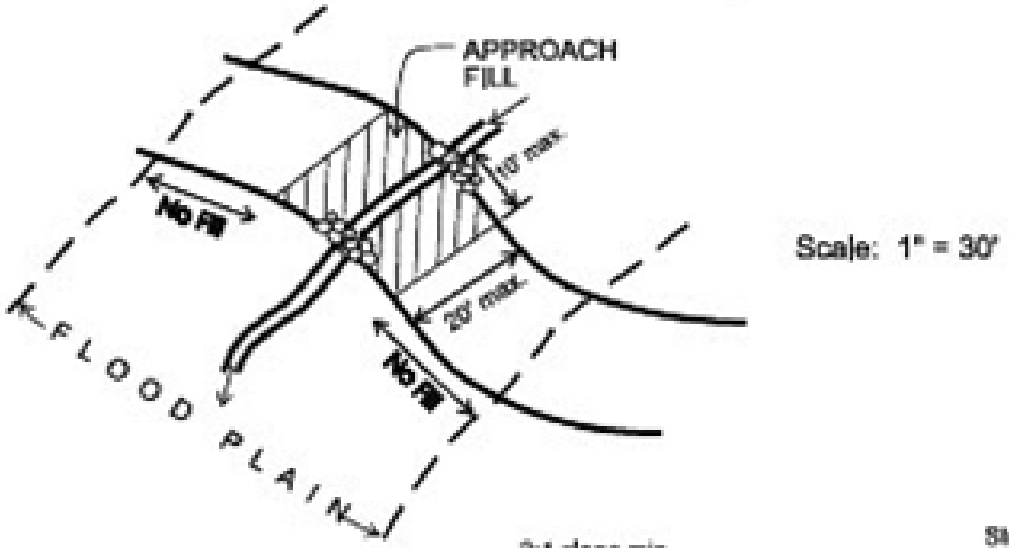


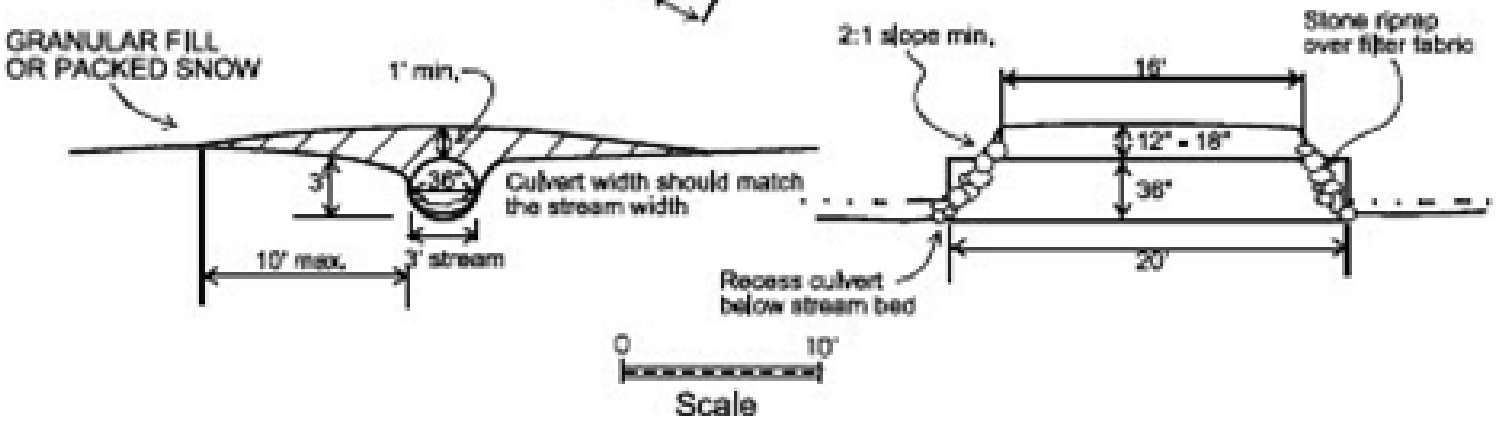
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

TEMPORARY CROSSING

Logging

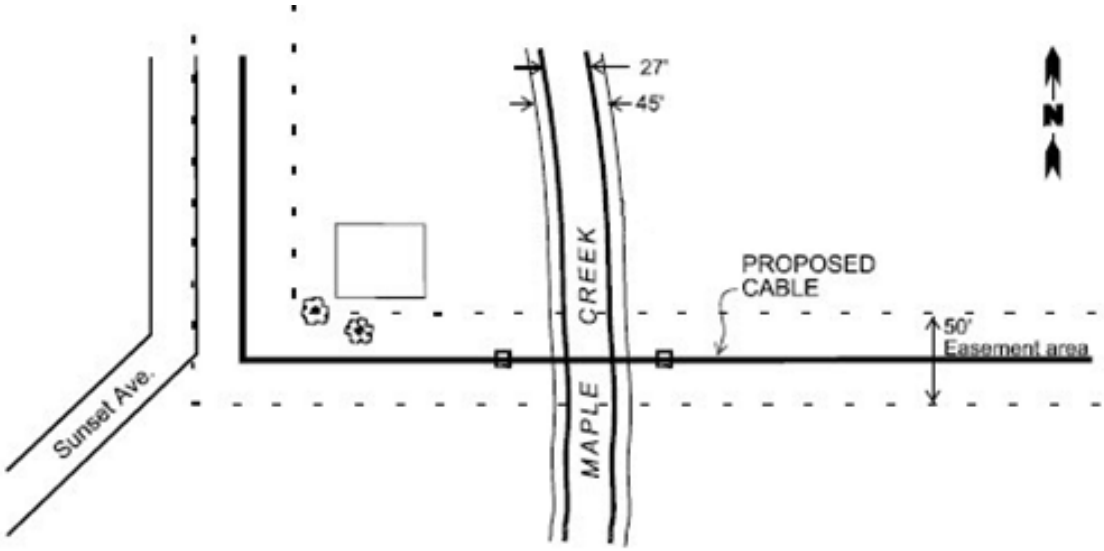




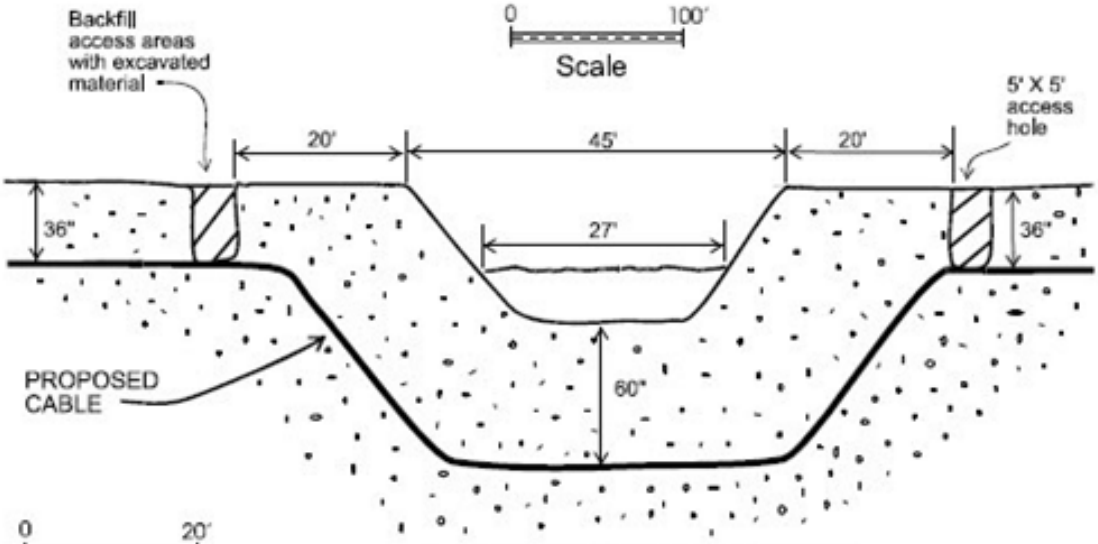


UTILITIES

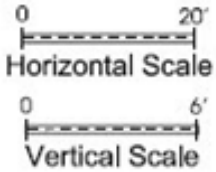
Boring



PLAN VIEW



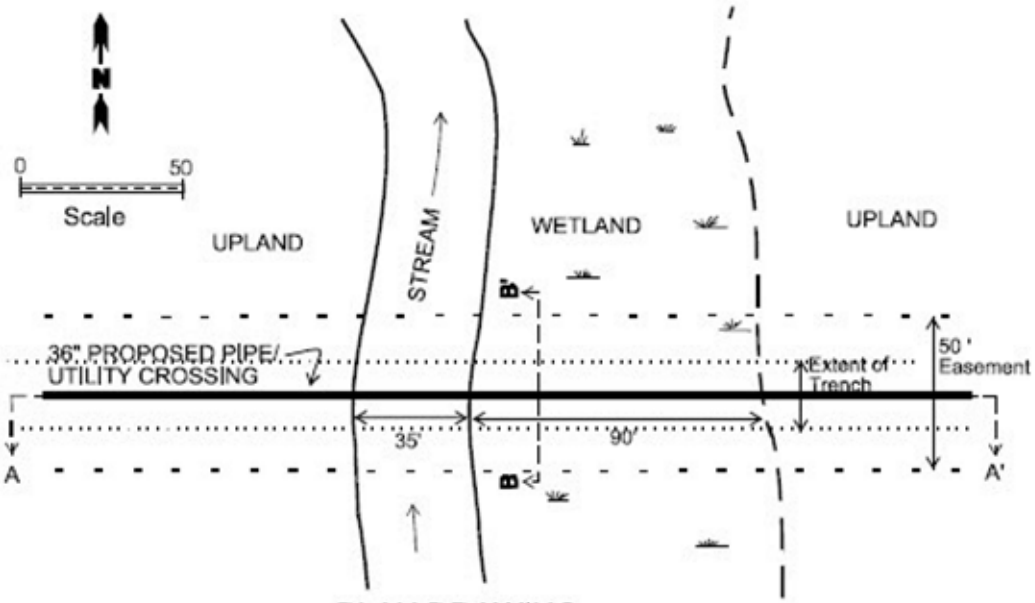
TYPICAL CROSS SECTION



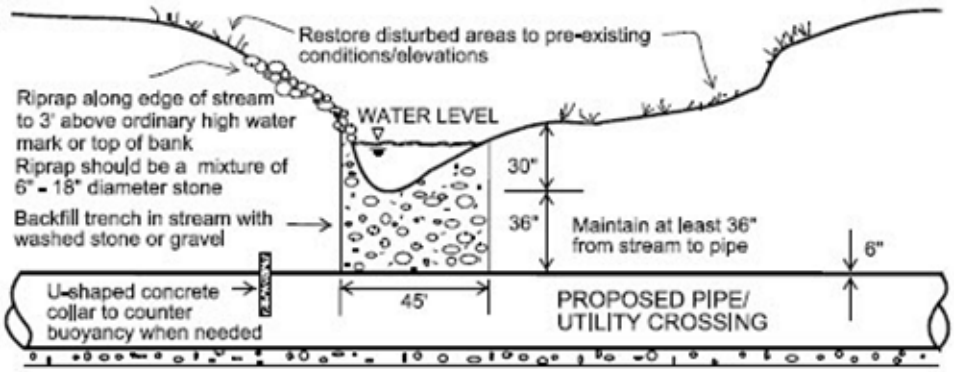
JOINT PERMIT APPLICATION SAMPLE DRAWINGS

UTILITIES

Trenching



PLAN DRAWING



CROSS SECTION A-A'

6" Bed of sand or gravel

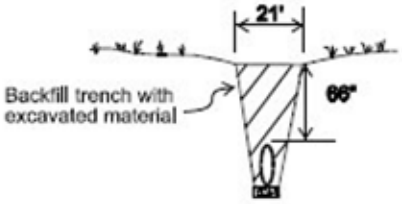
Cross Section Scale

0 50'

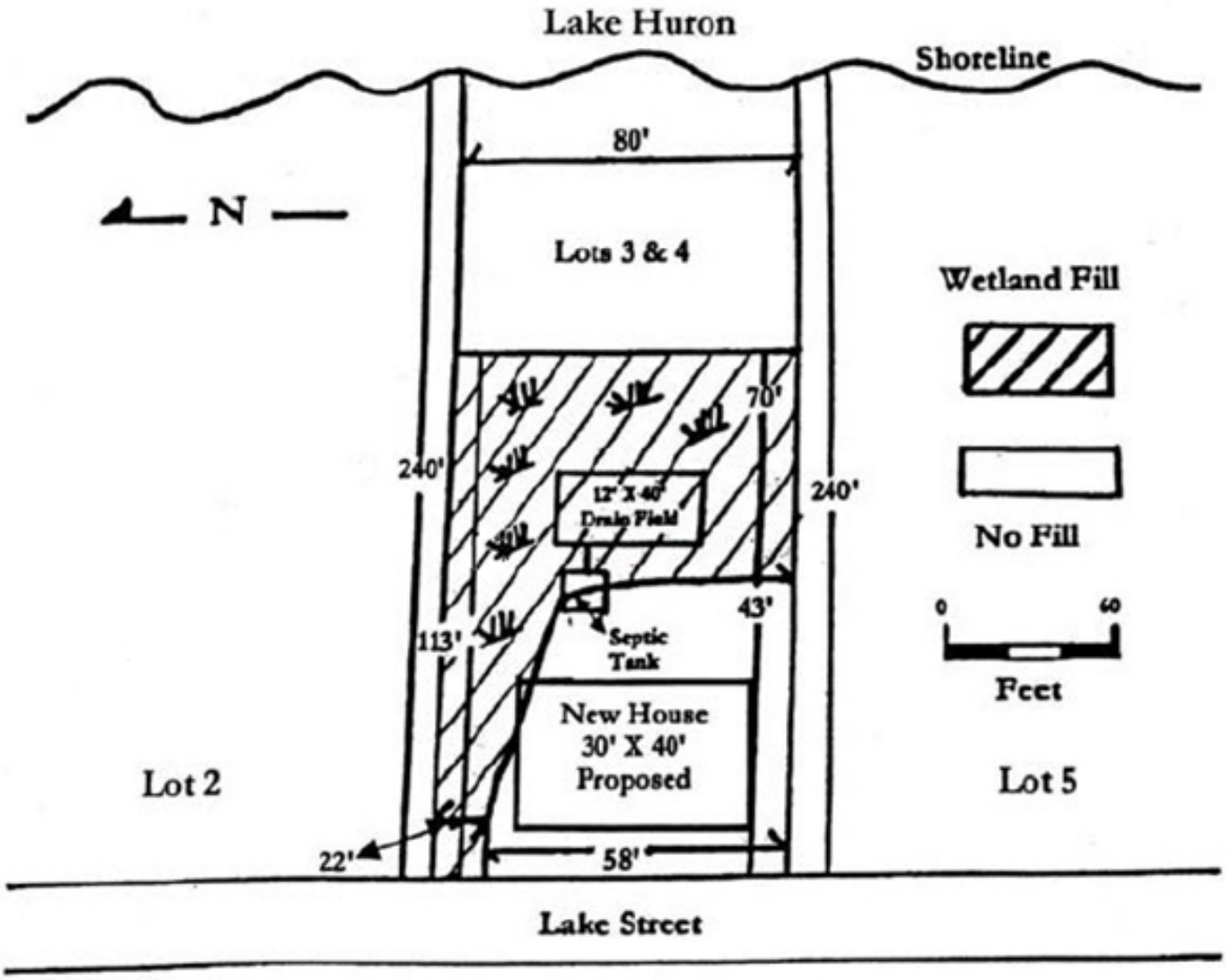
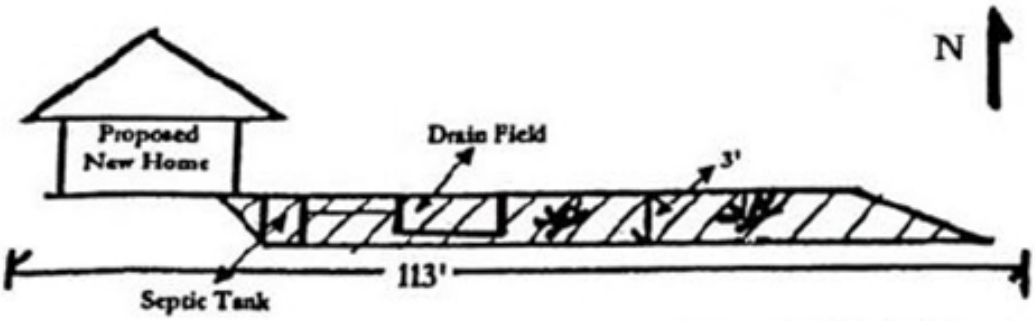
Horizontal

0 6'

Vertical



CROSS SECTION B-B'

JOINT PERMIT APPLICATION SAMPLE DRAWINGS

WETLAND FILL