

Sister Bay Beach Expansion

Village of Sister Bay, Wisconsin

October 1, 2013
100% Bid Documents

Sheet Number	Sheet Title
G 001	Cover Sheet
G 101	General Site Development Plan
V 101	Existing Conditions Plan
C 101	Site Demolition and Erosion Control Plan
C 102	Site Erosion Control Details
C 201	Site Grading Plan
C 202	Beach Sand Placement Plan
C 301	Site Layout and Materials Plan
C 401	Site Utilities Plan
C 701	Site Landscape Plan
C 702	Site Landscape Details
C 901	Site Utility Details
C 902	Storm Sewer Junction Box Details
C 903	Site Details
C 904	Breakwater Sections
C 905	Site Sections

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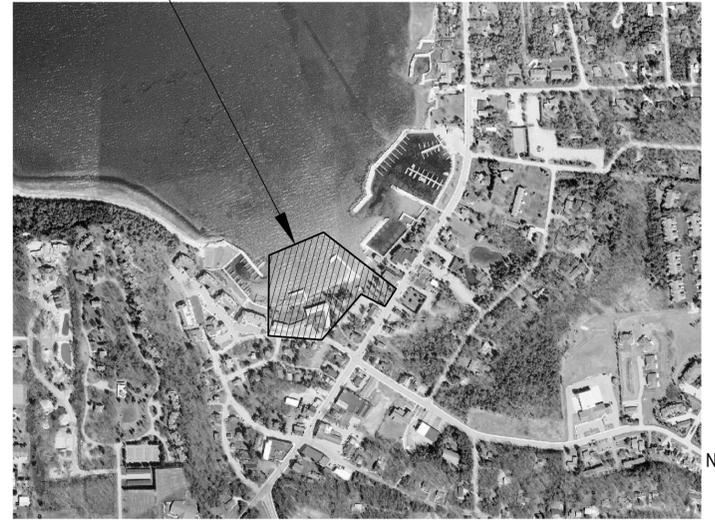


Project Area



PROJECT VICINITY MAP

Project Location



PROJECT LOCATION MAP

SISTER BAY BEACH EXPANSION

SISTER BAY, WISCONSIN

Owner:
VILLAGE OF
SISTER BAY

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SEALS AND SIGNATURES

KEY PLAN

DRAWING TITLE
Site Erosion Control Details

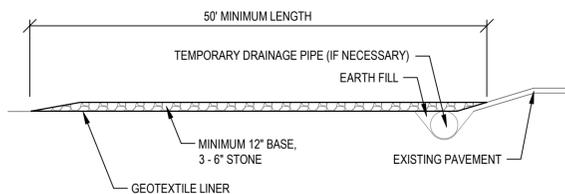
0 1/4" 1/2" 1"
SCALE IN FEET

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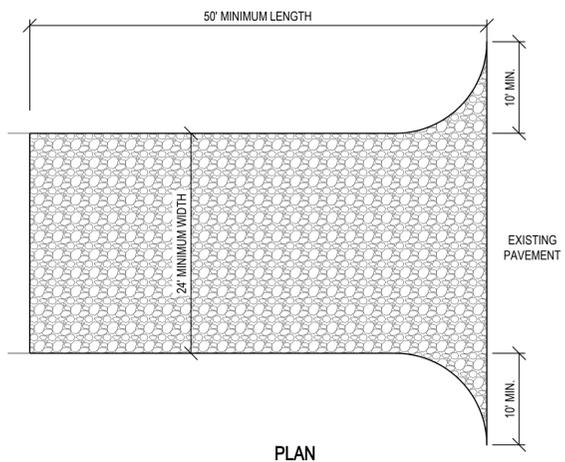
PROJECT NUMBER

DRAWING NUMBER

C 102



PROFILE



PLAN

1 CONSTRUCTION EXIT
SECTION/ELEVATION

1" = 10'-0"

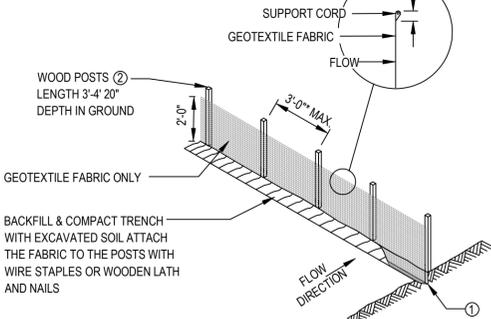
2 SILT FENCE
SECTION/ELEVATION

NOT TO SCALE

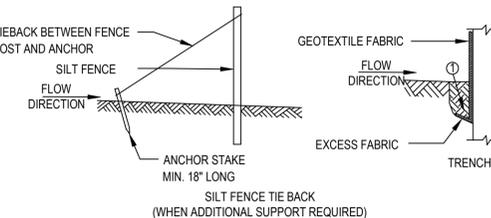
3 INLET PROTECTION
SECTION/ELEVATION

NOT TO SCALE

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

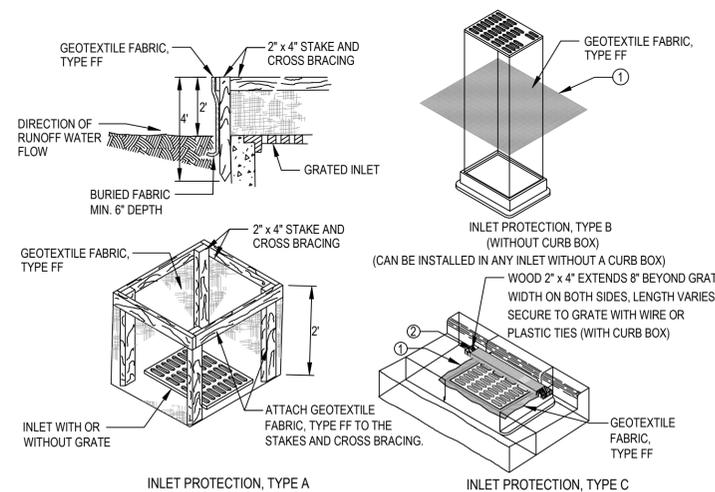


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



GENERAL NOTES:

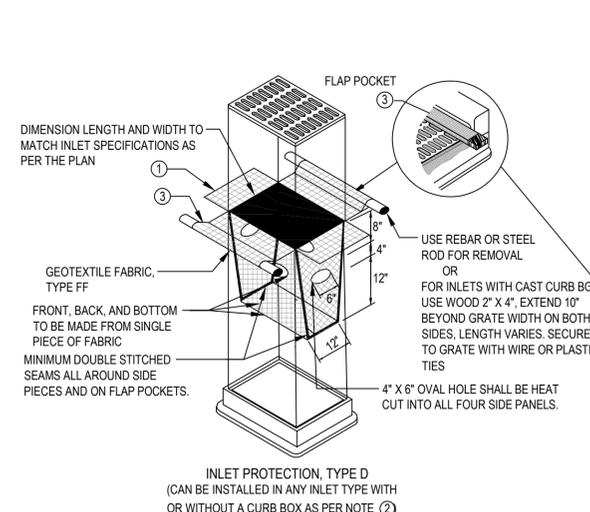
- FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
- WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/2" x 1 1/2" OF OAK OR HICKORY.



GENERAL NOTES:

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2x4.



INSTALLATION NOTES:

TYPE B & C
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

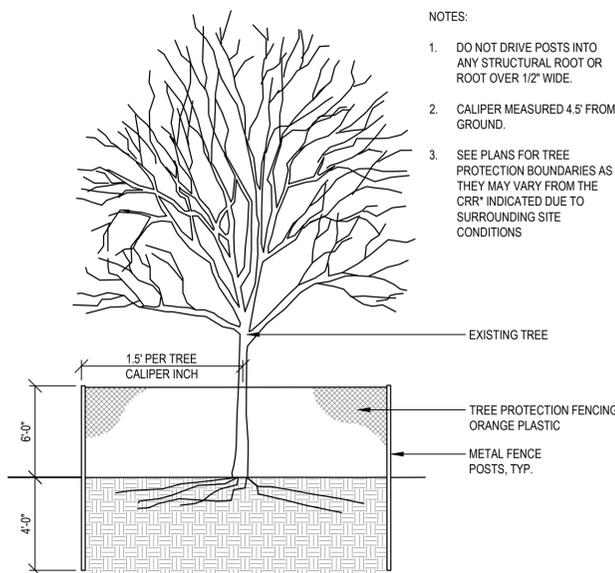
GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD AND THE APPLICABLE SPECIAL PROVISIONS

- 2' SHALL BE MAINTAINED DURING CONSTRUCTION PERIOD
- USE AS DIRECTED BY COAST GUARD OR WDNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS

CONSTRUCTION SEQUENCE:

- INSTALL EROSION CONTROL MEASURES, INCLUDING TURBIDITY BARRIER.
- DEMOLISH EXISTING PIERS (FORMER HELMS PIERS AND BOATHOUSE PIER). STOCKPILE STEEL SHEET PILE AND OTHER MATERIALS TO BE SALVAGED.
- CONSTRUCT BREAKWATER AND MARINA/BOATHOUSE PIER REVETMENT.
- CONSTRUCT NEW STORM SEWER JUNCTION BOX. (3) 30-INCH CONCRETE STORM SEWERS FROM OUTFALL TO STORM SEWER JUNCTION BOX.
- CONSTRUCT 6-FOOT DIAMETER MANHOLE SOUTH OF BEACH AND 30-INCH STORM SEWER WESTERLY FROM STORM SEWER JUNCTION BOX TO 6-FOOT MANHOLE. COORDINATE CONSTRUCTION OF THE 54" RCP SOUTHERLY TO STH 42 WITH UTILITY WORK BY OTHERS (SEE NOTE 6, SHEET C 401 - SITE UTILITIES PLAN).
- DIVERT FLOW FROM EXISTING 30-INCH STORM SEWER TO NEW MANHOLE AND 30-INCH STORM SEWER TO THE EAST. REMOVE EXISTING OUTFALLS AND STORM SEWERS FROM BEACH AREA.
- CONSTRUCT BEACH AREA IN GENERAL CONFORMANCE WITH THE FOLLOWING:
 - STRIP AND STOCKPILE TOPSOIL.
 - PERFORM EARTH MOVING OPERATIONS TO BRING ABOVE-WATER AREAS TO SUBGRADE ELEVATION. USE EXCAVATED MATERIALS FOR BEACH AREA FILL WHERE IN CONFORMANCE WITH SPECIFICATIONS.
 - UNIFORMLY SPREAD BEACH SAND OVER SUBGRADE IN ABOVE-WATER AND BELOW-WATER AREAS. AFTER PLACING SAND IN ABOVE-WATER CONTRACTOR MAY DELAY PLACING SAND ALONG THE SOUTH BORDER OF THE BEACH UNTIL AFTER CONSTRUCTION OF THE SALVAGED STONE WALL TO PREVENT CONTAMINATION OF NEW SAND WITH SOIL AND CONSTRUCTION DEBRIS DURING WALL CONSTRUCTION.
 - PLACE BEACH SAND IN BELOW-WATER AREAS BY PLACING IN UNIFORM ROWS ALONG THE WATER LINE AND PUSHING INTO BELOW-WATER AREAS PER DRAWINGS AND SPECIFICATIONS.
 - IN PERFORMING EARTH MOVING OPERATIONS FOR BEACH CONSTRUCTION, CONTRACTOR MAY ROUGH GRADE RAIN GARDENS AND CONSTRUCT SALVAGED STONE WALL CONCURRENTLY WITH BEACH GRADING OR MAY ROUGH GRADE RAIN GARDENS AND CONSTRUCT WALL AFTER BEACH CONSTRUCTION IS COMPLETE. IF CONTRACTOR DOES NOT CONSTRUCT SALVAGED STONE WALL DURING BEACH CONSTRUCTION, ANY SLOPE WITH EXPOSED SOIL SOUTH OF THE BEACH AREA SHALL BE PROTECTED WITH EITHER TEMPORARY EROSION MAT, SILT FENCE, OR EQUAL MEASURE TO PREVENT MIGRATION OF SOIL TO BEACH AREA. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REMOVAL AND REPLACEMENT OF ANY BEACH SAND CONTAMINATED BY SOIL ERODED FROM OFF-BEACH AREAS.
- PLACE SILT FENCE AND OTHER EROSION CONTROL MEASURES NECESSARY TO PROTECT BEACH FROM SEDIMENT CAUSED BY REMAINING UPLAND CONSTRUCTION.
- CONSTRUCT REMAINING UPLAND IMPROVEMENTS INCLUDING UTILITIES AND WALKS. RESPREAD TOPSOIL, SEED, PLANT AND MULCH.



NOTES:

- DO NOT DRIVE POSTS INTO ANY STRUCTURAL ROOT OR ROOT OVER 1/2" WIDE.
- CALIPER MEASURED 4.5' FROM GROUND.
- SEE PLANS FOR TREE PROTECTION BOUNDARIES AS THEY MAY VARY FROM THE CRR* INDICATED DUE TO SURROUNDING SITE CONDITIONS

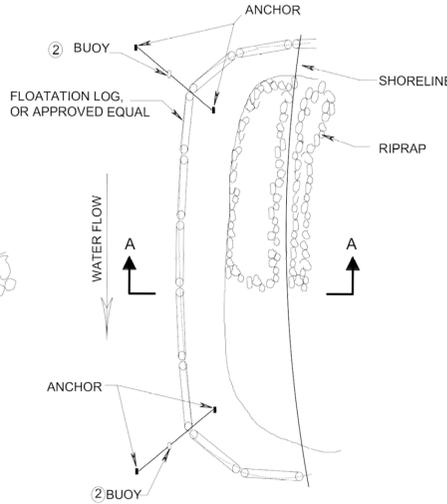
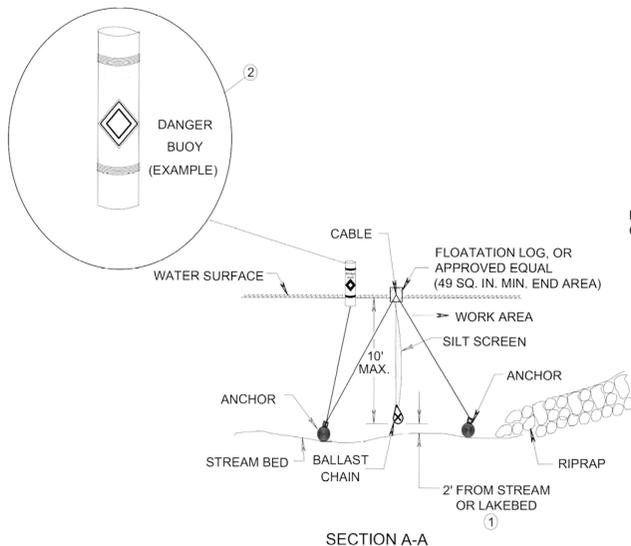
*CRR - CRITICAL ROOT RADIUS IS DEFINED AS TREE DIA. (AT LEAST 4.5' FROM GROUND) X 1.5 = CRR VALUE EXPRESSED IN FEET

4 TREE PROTECTION FENCE
SECTION/ELEVATION

1" = 10'-0"

5 TURBIDITY BARRIER
SECTION/ELEVATION

NOT TO SCALE



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SISTER BAY BEACH EXPANSION

SISTER BAY, WISCONSIN

Owner:

VILLAGE OF
SISTER BAY

SMITHGROUP JJR

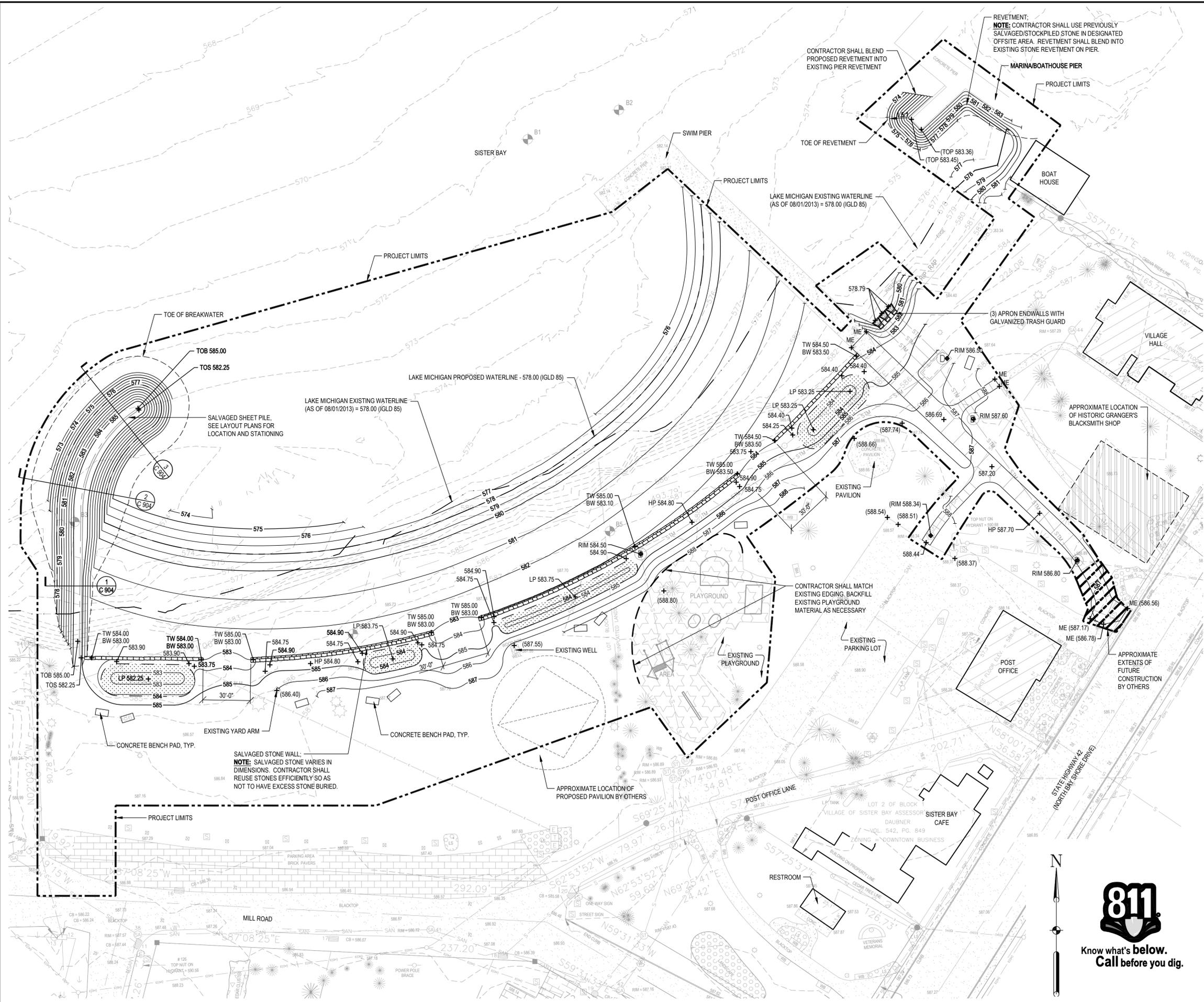
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- LEGEND**
- PROJECT LIMITS
 - - - - - EXISTING MAJOR CONTOUR
 - - - - - EXISTING MINOR CONTOUR
 - - - - - PROPOSED MAJOR CONTOUR
 - - - - - PROPOSED MINOR CONTOUR
 - 588.88 + SPOT ELEVATION
 - (588.88) + EXISTING SPOT ELEVATION
 - RIM 588.88 + RIM ELEVATION
 - (RIM 588.88) + EXISTING RIM ELEVATION
 - HP 588.88 + HIGH POINT SPOT ELEVATION
 - LP 588.88 + LOW POINT SPOT ELEVATION
 - (TOP 588.88) + EXISTING TOP OF PIER
 - ME + MATCH EXISTING
 - TW 588.88 + TOP OF WALL ELEVATION
 - BW 588.88 + BOTTOM OF WALL ELEVATION
 - TOB 588.88 + TOP OF BREAKWATER ELEVATION
 - TOS 588.88 + TOP OF SHEET PILE ELEVATION

- [Pattern] ENGINEERED SOIL
- (D) STORM SEWER

NOTES

1. SEE EXISTING CONDITIONS PLAN V 101 FOR LEGEND OF EXISTING FEATURES, PROJECT CONTROL BENCHMARKS AND CONTROL MONUMENTS.
2. CONTRACTOR SHALL CONTACT 811 AND APPROPRIATE UTILITY COMPANIES TO FIELD VERIFY UTILITIES PRIOR TO ANY CONSTRUCTION.
3. COORDINATE SYSTEM IS WISCONSIN STATE PLANE, CENTRAL ZONE.
4. VERTICAL DATUM IS INTERNATIONAL GREAT LAKES DATUM 85 (IGLD85).



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SEALS AND SIGNATURES

KEY PLAN

DRAWING TITLE
Site Grading Plan



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PROJECT NUMBER

C 201

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SISTER BAY BEACH EXPANSION

SISTER BAY, WISCONSIN

Owner:
VILLAGE OF SISTER BAY

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- LEGEND**
- PROJECT LIMITS
 - SAND BEACH
 - CONCRETE WALK
 - SALVAGED STONE WALL
 - SALVAGED SHEET PILE
 - RIPRAP
 - ALIGN

NOTES

1. SEE EXISTING CONDITIONS PLAN V 101 FOR LEGEND OF EXISTING FEATURES, PROJECT CONTROL BENCHMARKS AND CONTROL MONUMENTS.
2. CONTRACTOR SHALL CONTACT 811 AND APPROPRIATE UTILITY COMPANIES TO FIELD VERIFY UTILITIES PRIOR TO ANY CONSTRUCTION.
3. HORIZONTAL DATUM IS WISCONSIN STATE PLANE, CENTRAL ZONE.
4. VERTICAL DATUM IS INTERNATIONAL GREAT LAKES DATUM 85 (IGLD85).
5. LAYOUT INFORMATION WILL BE PROVIDED TO CONTRACTOR IN ELECTRONIC FORMAT FOR CONSTRUCTION LAYOUT AND STAKING. ALL DIMENSIONS SHOWN ARE FOR INFORMATION PURPOSES ONLY. ANY DISCREPANCIES BETWEEN INFORMATION SHOWN AND CAD FILES SHALL BE BROUGHT TO ENGINEER / LANDSCAPE ARCHITECT'S ATTENTION PRIOR TO CONSTRUCTION.
6. IN ADDITION TO THOSE NOTED ON PLAN, EXPANSION JOINT SHALL BE LOCATED WHERE CONCRETE PAVEMENT ADJOINS BUILDINGS OR ANY OTHER FIXED ELEMENT (I.E. FOOTINGS, FROST SLABS AND ETC.)
7. CONTRACTOR SHALL COORDINATE AND FIELD LOCATE PROPOSED BENCH PADS WITH OWNER PRIOR TO INSTALLATION.

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SEALS AND SIGNATURES

KEY PLAN

DRAWING TITLE
Site Layout and Materials Plan

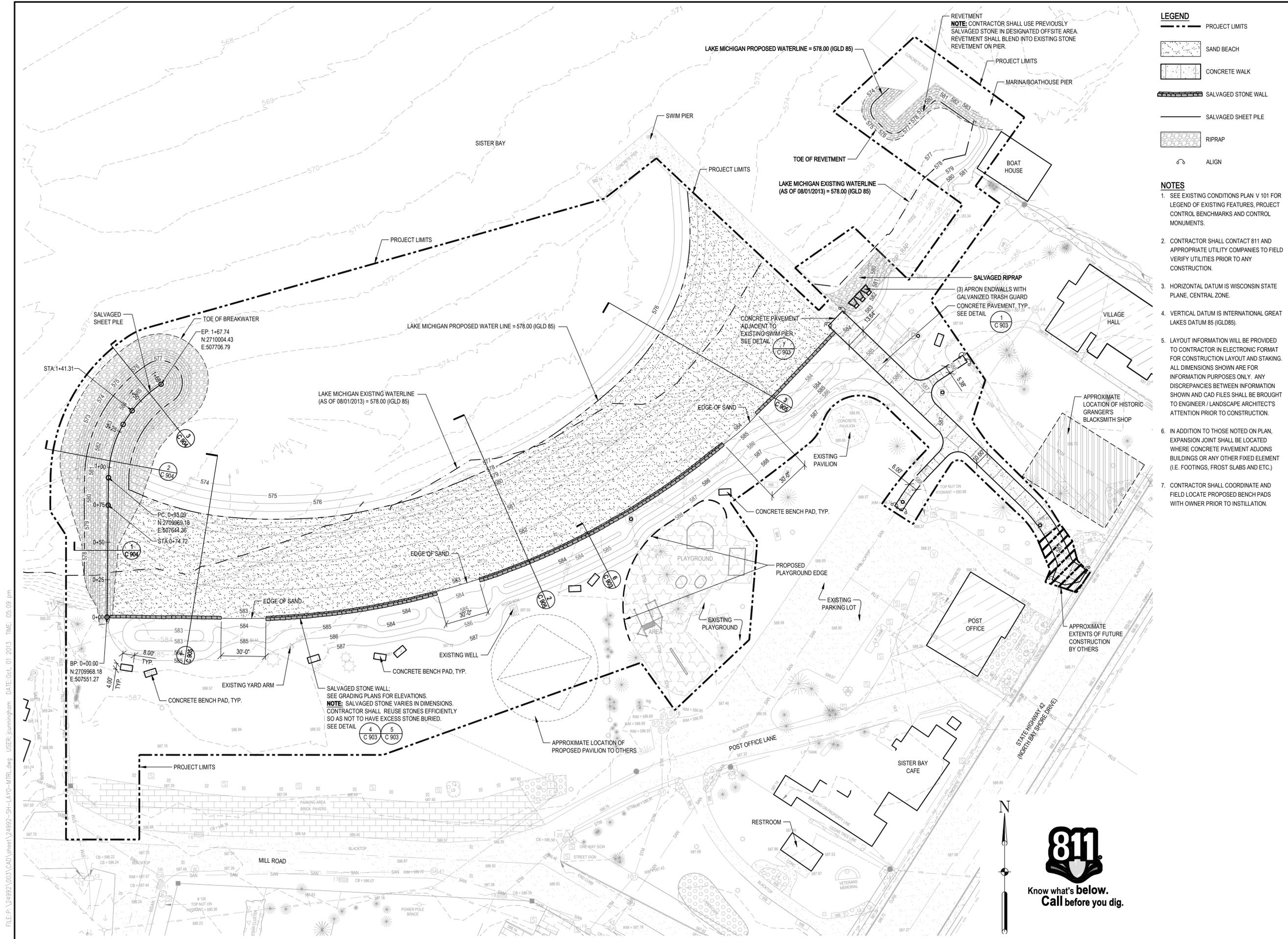


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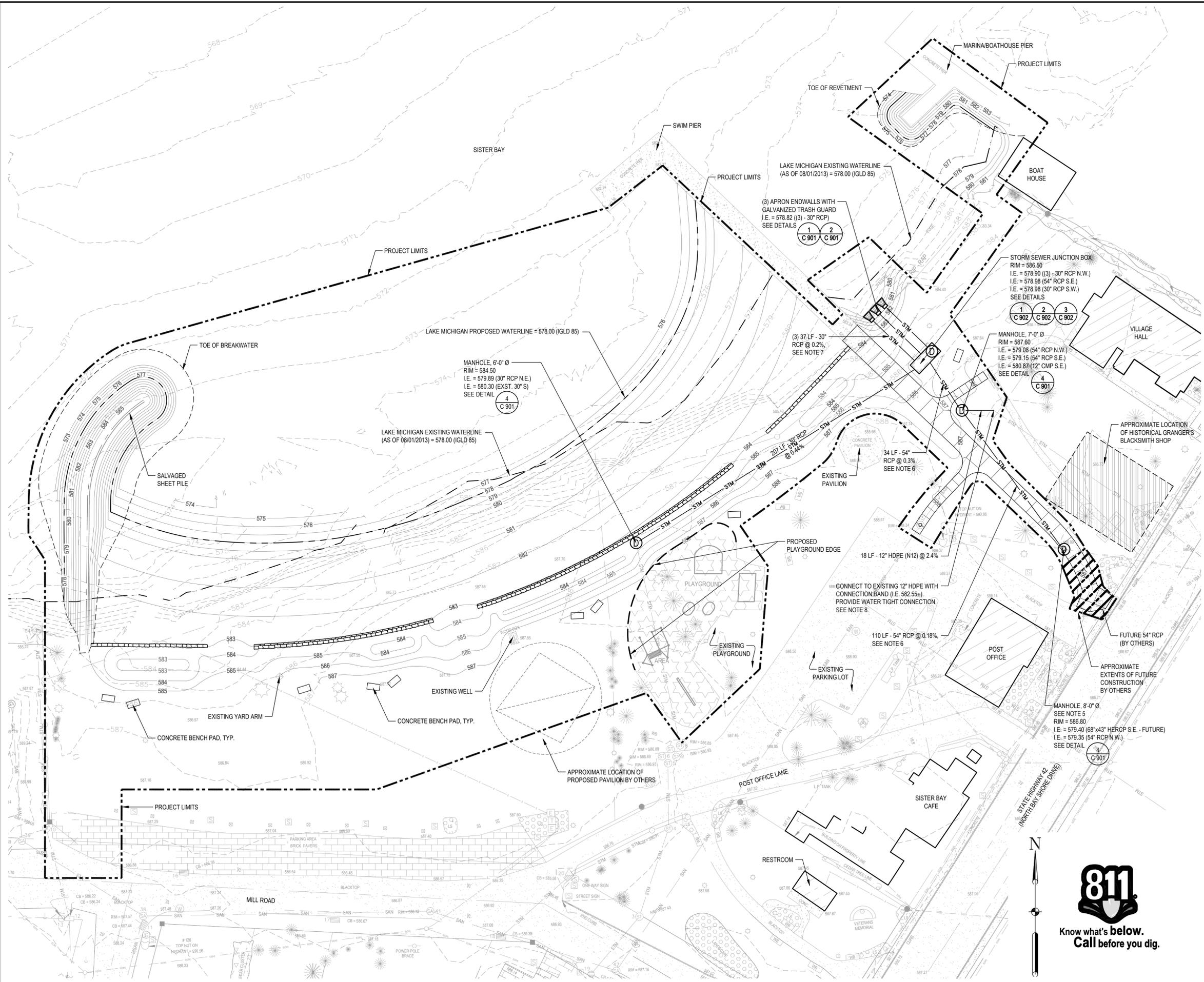
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LEGEND

---	PROJECT LIMITS
---	STORM SEWER PIPE
⊙	STORM SEWER MANHOLE
□	STORM SEWER JUNCTION BOX

- NOTES**
- SEE EXISTING CONDITIONS PLAN V 101 FOR LEGEND OF EXISTING FEATURES, PROJECT CONTROL BENCHMARKS AND CONTROL MONUMENTS.
 - CONTRACTOR SHALL CONTACT 811 AND APPROPRIATE UTILITY COMPANIES TO FIELD VERIFY UTILITIES PRIOR TO ANY CONSTRUCTION.
 - HORIZONTAL DATUM IS WISCONSIN STATE PLANE, CENTRAL ZONE.
 - VERTICAL DATUM IS INTERNATIONAL GREAT LAKES DATUM 85 (IGLD85).
 - ROTATE CONE SECTION SO THAT CASTING IS ENTIRELY IN SIDEWALK WITH EDGE OF CASTING AT LEAST 3" FROM EDGE OF CONCRETE.
 - THE PROPOSED 54" RCP CONFLICTS WITH THE LOCATION OF THE EXISTING SANITARY SEWER SERVICE TO THE VILLAGE HALL. A NEW SERVICE LINE FROM STH 42 TO THE VILLAGE HALL WILL BE CONSTRUCTED BY OTHERS IN SPRING, 2014. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THE 54" STORM SEWER SOUTH OF THE JUNCTION BOX SO THAT THE EXISTING SEWER LINE REMAINS IN SERVICE UNTIL THE NEW SERVICE LINE TO STH 42 IS COMPLETE.
 - CONNECT LAST 2 JOINTS AND APRON ENDWALLS WITH JOINT TIES. WRAP JOINTS WITH 9" EXTERNAL JOINT SEAL FOR CONCRETE PIPE (MAC WRAP BY MAR MAC CONSTRUCTION PRODUCTS COMPANY OR APPROVED EQUAL).
 - FIELD VERIFY HORIZONTAL AND VERTICAL CONNECTION POINT AND NOTIFY OWNER'S REPRESENTATIVE OF ANY REQUIRED DESIGN MODIFICATIONS.

SISTER BAY BEACH EXPANSION

SISTER BAY, WISCONSIN

Owner:
VILLAGE OF SISTER BAY

SMITHGROUP JJR

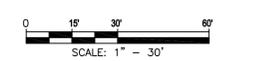
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SEALS AND SIGNATURES

KEY PLAN

DRAWING TITLE
Site Utilities Plan



SCALE
 24992.011

PROJECT NUMBER

DRAWING NUMBER
C 401



SISTER BAY BEACH EXPANSION

SISTER BAY, WISCONSIN

Owner:

VILLAGE OF
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- LEGEND**
- PROJECT LIMITS
 - DECIDUOUS SHRUB
 - NATIVE PLUGS, SEE NOTE 6
 - RAIN GARDEN PLUGS, SEE NOTE 6
 - TURF SEEDING
 - BEACH GRASS CULMS, SEE NOTE 7
 - GOOSE GRID
 - SHOVEL CUT BED EDGE

NOTES

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6. INSTALL NATIVE PLANTS AND RAIN GARDEN PLUGS IN MASS GROUPINGS OF 12-20 PLANTS OF THE SAME SPECIES AT 18" O.C. GROUPINGS SHALL BE IRREGULARLY LOCATED THROUGHOUT PLANTING BED IN A NATURALISTIC LAYOUT.
7. TWO BEACH GRASS CULMS REQUIRED PER HOLE. REFER TO PLANT SPECIFICATION.
8. SALVAGED/TRANSPLANTED TREES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL CONSULT OWNER ON EXACT LOCATION PRIOR TO PLANTING.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY LANDSCAPE/LAWN DISTURBED DURING PLANTING OF LANDSCAPE MATERIAL OUTSIDE OF PROJECT LIMITS.

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<i>Bid Documents</i>		10/01/2013

SEALS AND SIGNATURES

KEY PLAN

DRAWING TITLE

Site Landscape Plan



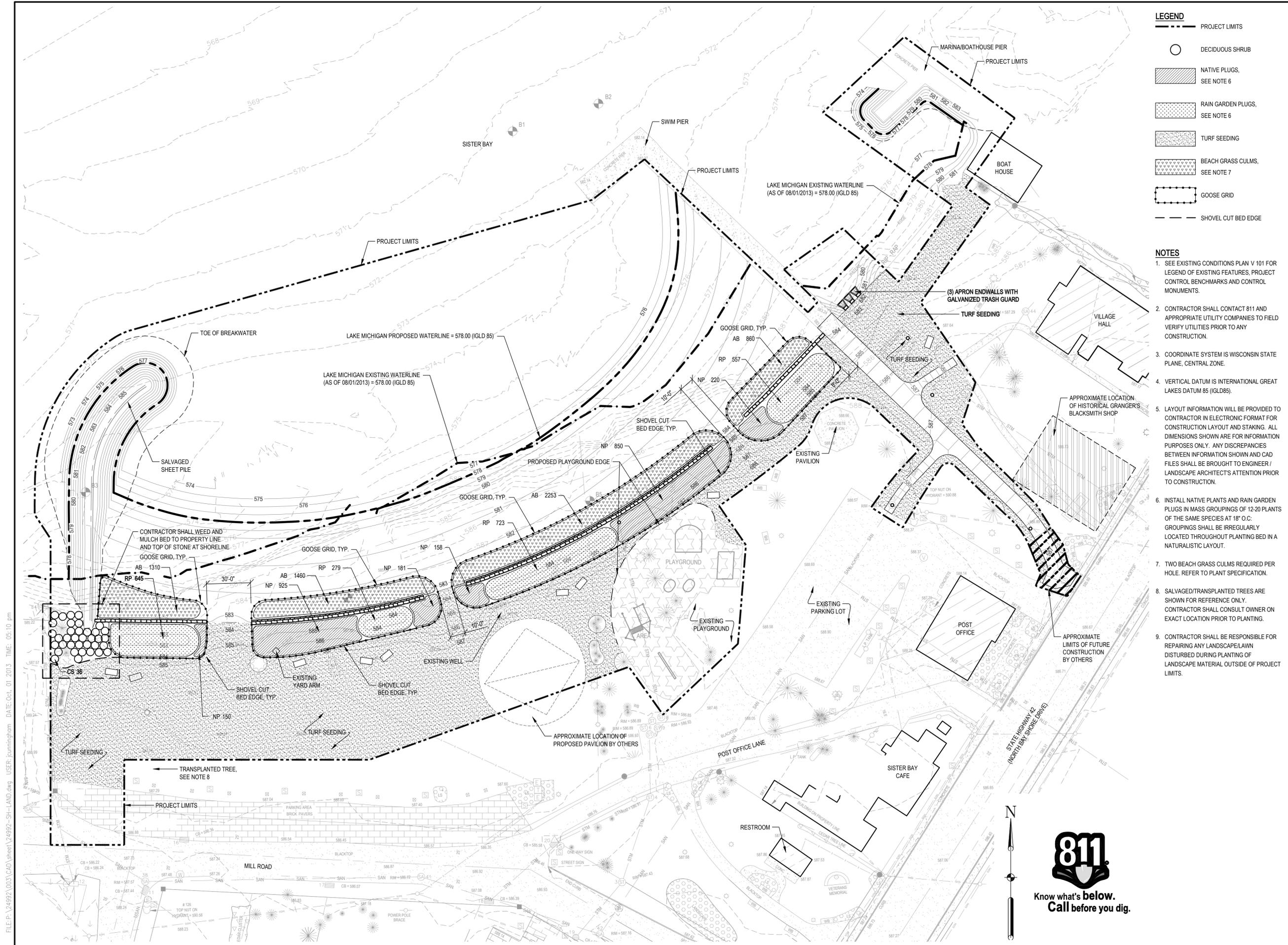
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PROJECT NUMBER

C 701

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