

DOCK REPLACEMENT WOODS BAY FISHING ACCESS WOODS BAY, MONTANA



PROJECT INFORMATION:

OWNER / DEVELOPER

MONTANA FISH, WILDLIFE AND PARKS
1522 NINTH AVE.
PO BOX 200701
HELENA, MT 59620
ATTN: JAMIE MONGOVEN
EMAIL: JMONGOVEN@MT.GOV
TEL: (406) 841-4011

STRUCTURAL

JACKOLA ENGINEER & ARCHITECTURE, P.C.
2250 US HIGHWAY 93 S
KALISPELL, MT 59901
ATTN: KARL HENSHAW, PE
EMAIL: KHENSHAW@JACKOLA.COM
TEL: (406) 755-3208

CIVIL

JACKOLA ENGINEER & ARCHITECTURE, P.C.
2250 US HIGHWAY 93 S
KALISPELL, MT 59901
ATTN: TOBY MCINTOSH, PE
EMAIL: TMCINTOSH@JACKOLA.COM
TEL: (406) 755-3208

BID ADDITIVES	
NAME	DESCRIPTION
A.1	PROVIDE CONCRETE INFILL TO WIDEN (E) RAMP, IN PLACE OF BALLAST ROCK

SHEET LIST	
SHEET #	SHEET TITLE
TO.0	TITLE SHEET
C1.0	SITE PLAN
S0.0	STRUCTURAL NOTES
S0.1	STRUCTURAL NOTES
S1.0	DOCK PLAN
S1.1	ELEVATIONS
S1.2	DETAILS

GENERAL NOTES

- CONTRACTOR TO REVIEW AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY CONDITIONS NOT INDICATED ON CONTRACT DOCUMENTS ARE TO BE REPORTED TO THE ENGINEER PRIOR TO BEGINNING WORK.
- CONTRACTOR TO CONTACT LOCAL UTILITIES, IF NECESSARY, SUBMIT ALL APPLICABLE PERMIT DOCUMENTS, QUALIFICATIONS, ETC., AND BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH PERMITS, UTILITY EXTENSIONS, TAP-INS, ETC.
- THE CONTRACTOR SHALL REMOVE ALL DEBRIS AS A RESULT OF THIS PROJECT. THE CONTRACTOR WILL REMOVE EXISTING EQUIPMENT, FIXTURES, ETC. IN THE SPACE PRIOR TO CONSTRUCTION AND RELOCATE PER OWNER.
- THE CONTRACTOR SHALL SCHEDULE HIS WORK AND MATERIAL AND EQUIPMENT DELIVERIES SO AS NOT TO INTERFERE WITH THE DAILY OPERATIONS OF THE REMAINDER OF THE FACILITY.
- THE CONTRACTOR SHALL PROTECT EXISTING FACILITIES, EQUIPMENT, FIXTURES, ETC. FROM DAMAGE DURING THE COURSE OF CONSTRUCTION.
- ALL SURFACES AND/OR FINISHES DAMAGED AS A RESULT OF AND ADJACENT TO THE WORK SHALL BE REPAIRED AND FINISHED TO THEIR ORIGINAL CONDITION.
- EACH SUBCONTRACTOR IS RESPONSIBLE TO COORDINATE AND SCHEDULE HIS WORK WITH THE GENERAL CONTRACTOR AND ALL OTHER SUBCONTRACTORS WHOSE WORK WILL BE AFFECTED.

- USE DETAILS MARKED 'TYPICAL' (TYP) WHEREVER APPLICABLE.
- ALL ITEMS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS SHALL BE PERFORMED IN A WORKMANLIKE MANNER BY PERSONS SKILLED IN THEIR RESPECTIVE TRADE AND WHO NORMALLY PARTICIPATE IN THE WORK OF THAT TRADE.
- WORDS WHICH HAVE WELL KNOWN TECHNICAL OR TRADE MEANINGS ARE USED IN THE DRAWINGS AND SPECIFICATIONS IN ACCORDANCE WITH SUCH RECOGNIZED MEANINGS.
- WITHIN THE DRAWINGS AND RELATED SPECIFICATIONS THERE SHALL BE THE FOLLOWING PRECEDENCE:
A) ADDENDA OR MODIFICATIONS TO THE DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE OVER THE ORIGINAL, WHEN ISSUED BY THE ENGINEER.
B) SPECIFICATIONS SHALL TAKE PRECEDENCE OVER DRAWINGS.
C) WITHIN THE DRAWINGS THE LARGER SCALE TAKES PRECEDENCE OVER THE SMALLER, FIGURED DIMENSIONS OVER SCALED AND NOTED MATERIALS OVER GRAPHIC INDICATIONS.
- THE ENGINEER SHALL BE IN THE FIRST INSTANCE THE SOLE INTERPRETER OF THE DRAWINGS AND SPECIFICATIONS WITH REGARD TO THEIR MEANING OR INTENT.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES AND PROCEDURES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY DURING BUILDING CONSTRUCTION.

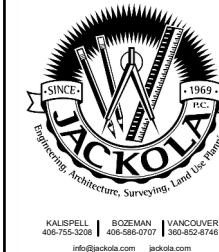
GENERAL CONDITIONS

THE GENERAL CONTRACTOR IS TO GUARANTEE ALL WORK INCLUDING WORK DONE BY SUBCONTRACTORS FOR A MINIMUM PERIOD OF ONE (1) YEAR COMMENCING WITH THE SUBSTANTIAL COMPLETION OF THE CONTRACT UNLESS A DIFFERENT TIME PERIOD IS INDICATED IN THE CONTRACT.

ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH ALL GOVERNING CODES, ORDINANCES AND AUTHORITIES HAVING JURISDICTION. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL REQUIRED BUILDING PERMITS.

THE GENERAL CONTRACTOR IS TO HAVE A FULL TIME QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED.

ALL MATERIAL SPECIFIED IS TO BE NEW & INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. GENERAL CONTRACTOR IS TO CONSTRUCT PROJECT IN ACCORDANCE WITH THE DOCUMENTS. ANY DEVIATION FROM THE INTENT OF THE DOCUMENTS, WITHOUT ARCHITECT OR ENGINEER'S APPROVAL, ARE AT THE CONTRACTOR'S OWN RISK AND MAY RESULT IN THE WORK BEING DONE OVER AT CONTRACTOR'S EXPENSE (MATERIALS AND LABOR).



FOR PERMIT

THE INFORMATION CONTAINED
HEREIN IS PROPRIETARY. THIS
DOCUMENT MAY NOT BE USED
OR REPRODUCED WITHOUT THE
WRITTEN CONSENT OF JACKOLA
ENGR. & ARCH. P.C.

WOODS BAY DOCK

WOODS BAY, MONTANA

DRAWN: AMH CHECKED: TAR

DATE: 11/24/2021

REVISIONS:

NO.	DATE	DESCRIPTION

TITLE SHEET

T0.0

Z:\ClientFiles\2021\Fish Wildlife and Parks\210406 Woods Bay FAS Dock\6 Drawings\1 Autocad\FWP_Woods Bay_C1.10.dwg

PROJECT #: 210406

BASIS OF SURVEY

BASIS OF BEARINGS IS MAGNETIC NORTH.

VERTICAL DATUM IS NAVD88. PROJECT ELEVATIONS ARE BASED ON AN NGS OPUS REPORT OBTAINED FROM A STATIC GPS OBSERVATION AT CONTROL POINT CP-3.

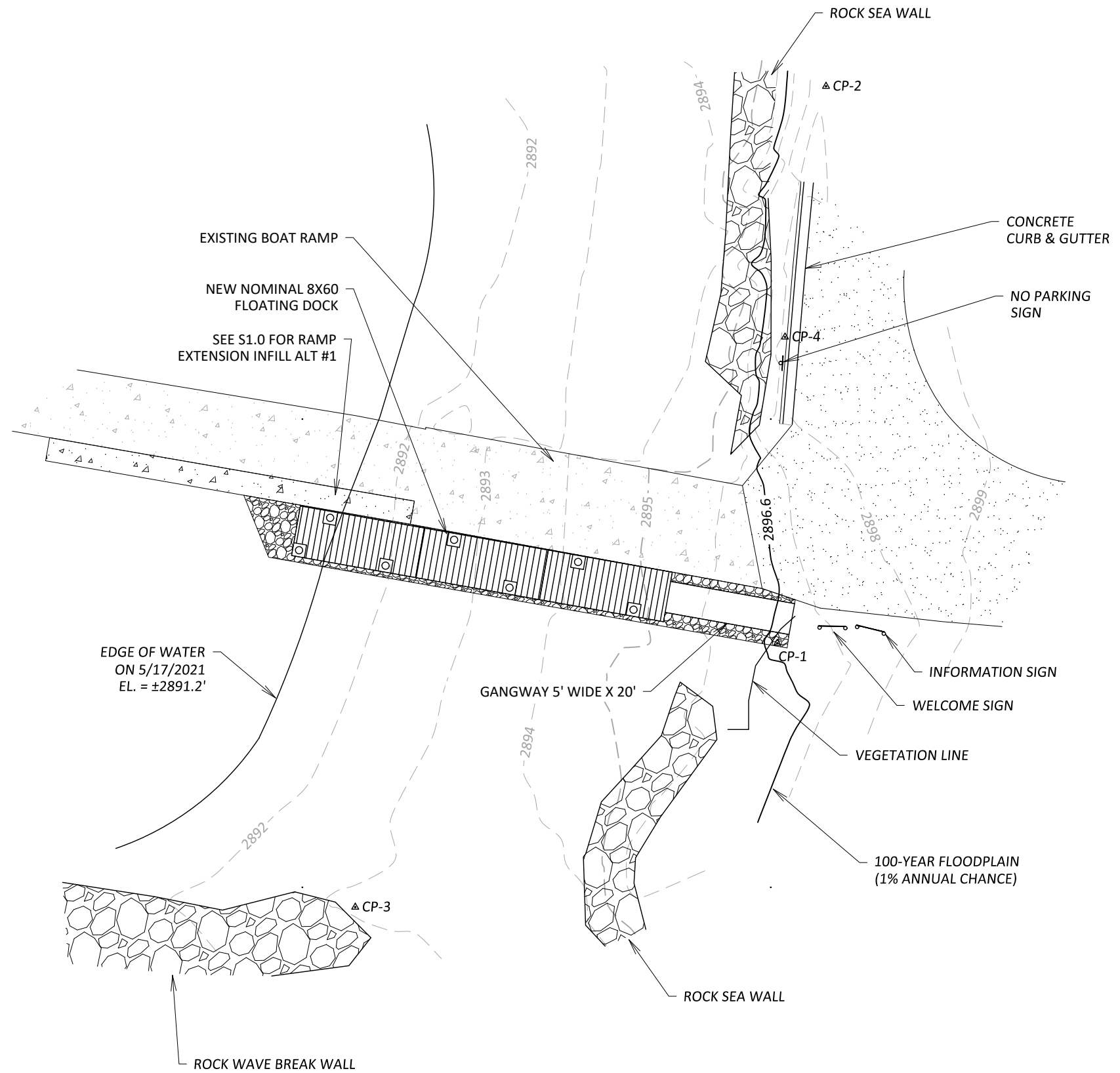
PROJECT BENCHMARK: POINT CP-4

FLATHEAD LAKE FLOODPLAIN ELEVATION:

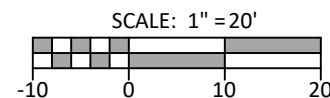
FLATHEAD LAKE ANNUAL MAXIMUM LEVEL OF 1% ANNUAL CHANCE = 2896.60' (NAVD88) PER FEMA FLOOD INSURANCE STUDY No. 30029CV001C DATED NOVEMBER 4, 2015.

POINT COORDINATE TABLE

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1399826.31	851909.36	2896.72	SPIKE
2	1399914.77	851917.10	2898.96	SPIKE
3	1399784.40	851842.37	2893.10	SPIKE
4	1399874.95	851910.60	2898.26	5/8 YPC



1 SITE LAYOUT
1" = 20'



FOR PERMIT
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY. THIS DOCUMENT MAY NOT BE USED OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF JACKOLA ENGR. & ARCH., P.C.

WOODS BAY DOCK

WOODS BAY, MONTANA

DRAWN: JFS CHECKED: KBH

DATE: 11/24/2021

REVISIONS:

NO.	DATE	DESCRIPTION

SITE PLAN

C1.10

NOTES

- A. SPECIAL INSPECTIONS/TESTING SHALL BE COMPLETED BY AN APPROVED INDEPENDENT AGENCY EMPLOYED BY THE CONTRACTOR. THE STRUCTURAL OBSERVATIONS SHALL BE COMPLETED BY THE ENGINEER OF RECORD (EOR) OR A REGISTERED DESIGN PROFESSIONAL AS OUTLINED BELOW.
- B. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE SITE & MANLIFTS &/OR SAFETY EQUIPMENT REQUIRED FOR ACCESS TO THE PARTICULAR INSPECTION LOCATION. THE CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE IN ADVANCE FOR THE INSPECTIONS AND OBSERVATIONS TO BE COMPLETED.
- C. SPECIAL INSPECTIONS SHALL BE COMPLETED TO SECTION 1705 CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE.
- D. SPECIAL INSPECTORS SHALL SUBMIT A STATEMENT OF THEIR ACCREDITATION TO THE ENGINEER AND THE BUILDING OFFICIAL.
- E. THE APPROVED SPECIAL INSPECTORS AND STRUCTURAL OBSERVERS SHALL COMPLETE A STATEMENT OF SPECIAL INSPECTORS FOR THEIR SCOPE OF WORK.
- F. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION A MEETING WITH THE BUILDING OFFICIAL, OWNER, EOR, CONTRACTOR AND SPECIAL INSPECTOR AGENCY(IES) SHALL BE COMPLETED TO REVIEW THE SCOPE AND THE STATEMENT(S) OF SPECIAL INSPECTIONS.
- G. SPECIAL INSPECTOR DUTIES
 - 1. OBSERVE AND/OR TEST THE WORK FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
 - 2. NOTIFY THE CONTRACTOR OF ALL DISCREPANCIES AND NOTED IN THE INSPECTION REPORTS
 - 3. INSPECTION AND OBSERVATION REPORTS SHALL BE COMPLETED & SUBMITTED TO THE EOR/OWNER AND CONTRACTOR. INSPECTION AGENCY SHALL SUBMIT A REPORT THAT ALL WORK REQUIRING SPECIAL INSPECTIONS WAS INSPECTED AND IS IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND ALL DISCREPANCIES NOTED IN THE INSPECTION REPORTS HAVE BEEN CORRECTED.
- H. SPECIAL INSPECTIONS OF POST INSTALLED ANCHORS SHALL MEET THE REQUIREMENT OF THE APPROVED ICC-ES REPORT FOR THE PRODUCT

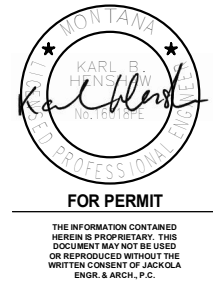
TABLE 1 - REQUIRED GEOTECHNICAL INSPECTIONS				
	ITEM	FREQUENCY	BY	NOTES
1	DURING DILLING OF SHAFTS	CONTINUOUS	GEOTECHNICAL ENGINEER	
2	INSTALLATION OF PILES (STEEL & CONCRETE)	CONTINUOUS	GEOTECHNICAL ENGINEER	
3	INSTALLATION OF THE 3" ROCK	CONTINUOUS	GEOTECHNICAL ENGINEER	

TABLE 2 - REQUIRED VERIFICATION & INSPECTIONS OF CONCRETE CONSTRUCTION				
	ITEM	FREQUENCY	BY	NOTES
1	VERIFY USE OF REQUIRED MIX DESIGN	PERIODIC	SPECIAL INSPECTOR	
2	AT THE TIME CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS PERFORM SLUMP AND AIR TEST AND DETERMINE THE TEMPERATURE THE CONCRETE		SPECIAL INSPECTOR	
3	NOT LESS THAN ONE STRENGTH TEST FOR EACH 150 YDS OF CONCRETE PLACED EACH DAY.		SPECIAL INSPECTOR	
4	INSPECTION OF CONCRETE INSTALLATION	PERIODIC	SPECIAL INSPECTOR	
5	INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	PERIODIC	SPECIAL INSPECTOR	
6	INSPECTION FORMWORK FOR SHAPE, LOCATIONS AND DIMENSIONS	PERIODIC	SPECIAL INSPECTOR	

TABLE 3 - STRUCTURAL (EOR) OBSERVATIONS		
	ITEM	NOTES
1	PILE INSTALLATION PERIODIC	BY EOR
2	DOCK INSTALLATION PERIODIC	BY EOR

PROJECT #:210406

1 STATEMENT OF SPECIAL INSPECTIONS



WOODS BAY DOCK
WOODS BAY, MONTANA

DRAWN: AMH	CHECKED: TAR
DATE: 11/24/2021	
REVISIONS:	

STRUCTURAL NOTES

S0.1

PILE SCHEDULE

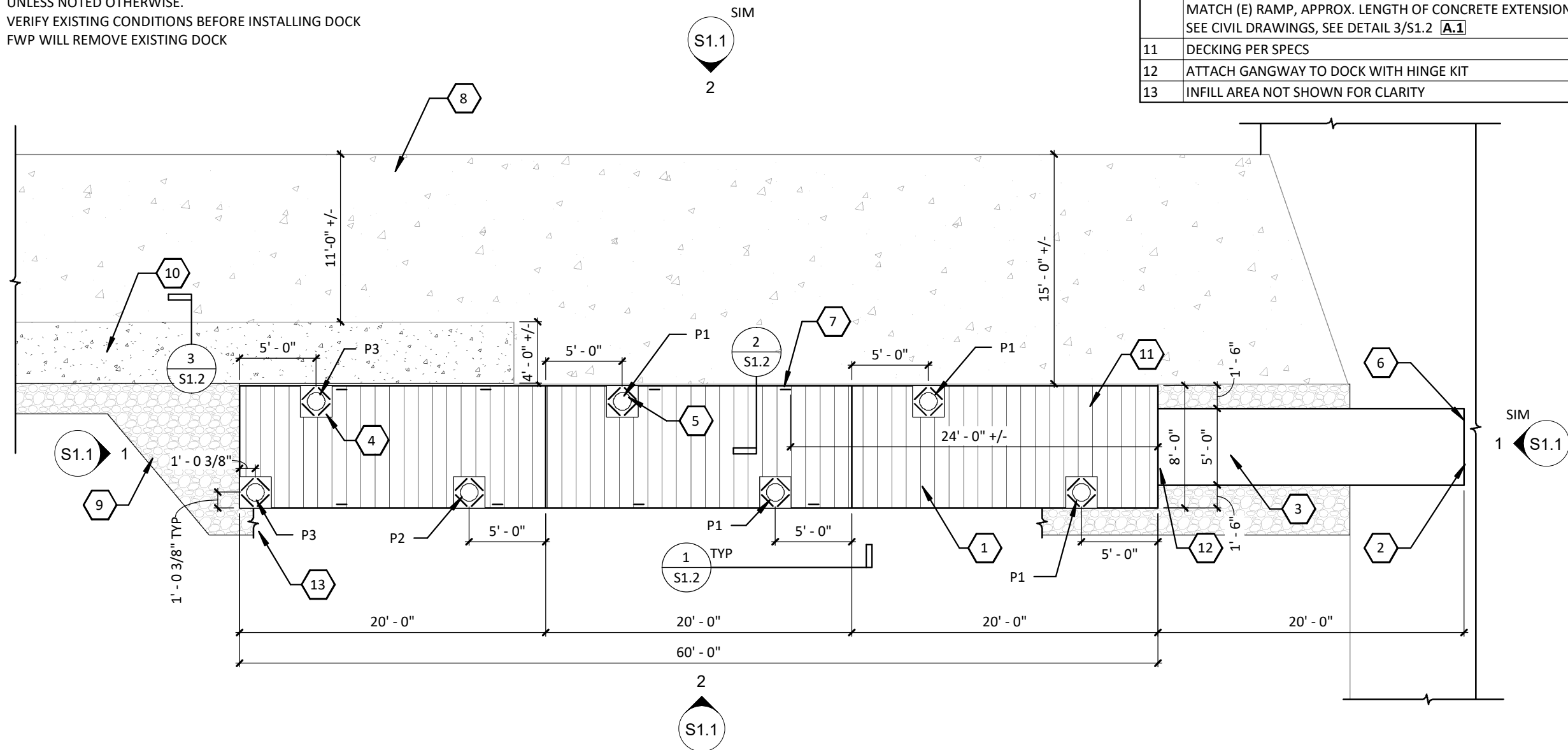
TAG	SIZE	MATERIAL	LOADING	NOTES
P1	HSS14.000X0.625	STEEL	10.0 KIPS APPLIED LATERALLY ANYWHERE FROM (-) 4'-0" FROM T.O. PILE TO LAKE BED, ANY DIRECTION	FILL W/ CONCRETE PER CONCRETE NOTES, S0.0
P2	HSS14.000X0.625	STEEL	66.9 KIPS APPLIED LATERALLY ANYWHERE FROM (-) 4'-0" FROM T.O. PILE TO LAKE BED, ANY DIRECTION	FILL W/ CONCRETE PER CONCRETE NOTES, S0.0
P3	HSS14.000X0.625	STEEL	40.0 KIPS APPLIED LATERALLY ANYWHERE FROM (-) 4'-0" FROM T.O. PILE TO LAKE BED, ANY DIRECTION	FILL W/ CONCRETE PER CONCRETE NOTES, S0.0

PLAN KEYNOTES

1	NOMINAL 8'x20' FLOATING DOCK SECTION, CONNECT PER MFR RECOMMENDATIONS, TYP OF (3) SEE SPEC
2	ALUMINUM TRANSITION PLATE/ROLLER @ END OF GANGWAY
3	ALUMINUM 60" X 20'-0" GANGWAY W/ HANDRAILS, TO GRADE, CENTER ON DOCK
4	PIILING BRACKET, ATTACH TO DOCK PER MFR RECOMMENDATIONS, TYP OF (7) FOR LOAD INDICATED
5	STEEL PILES W/ EMBEDMENT PER GEOTECH, TYP OF (7), SEE SCHEDULE FOR PILE LOADING
6	ALUMINUM GANGWAY ROLLER @ END OF GANGWAY
7	ALUMINUM CLEATS @ 8'-0" O.C. MAX EA SIDE, START SPACING AT 24'-0" FROM EAST END OF DOCK, ATTACH TO DOCK PER MFR RECOMMENDATIONS, ADJUST SPACING AS NECESSARY FOR PILES MINIMUM (8)
8	(E) CONCRETE BOAT RAMP
9	INFILL AREA UNDER INSTALLED DOCK AND (E) BOAT RAMP W/ 3" BALLAST ROCK, ROCK TO EXTEND UNDER DOCK, GRADE TO MATCH (E) RAMP, APPROX. LENGTH OF ROCK INFILL=110'
10	INFILL AREA BTW ROCK AND (E) BOAT RAMP W/ CONCRETE, GRADE TO MATCH (E) RAMP, APPROX. LENGTH OF CONCRETE EXTENSION=58'-8", SEE CIVIL DRAWINGS, SEE DETAIL 3/S1.2 A.1
11	DECKING PER SPECS
12	ATTACH GANGWAY TO DOCK WITH HINGE KIT
13	INFILL AREA NOT SHOWN FOR CLARITY

DOCK GENERAL NOTES:

- SEE S0.0 FOR DESIGN CRITERIA AND GENERAL STRUCTURAL NOTES.
- SEE S1.2 FOR PILE DETAILS.
- DIMENSIONS ARE AS SHOWN FOR INFORMATION ONLY. LAYOUT SHOULD BE COORDINATED WITH CIVIL PLANS.
- DIMENSIONS ARE SHOWN TO OUTSIDE OF DOCK UNITS UNLESS NOTED OTHERWISE.
- VERIFY EXISTING CONDITIONS BEFORE INSTALLING DOCK
- FWP WILL REMOVE EXISTING DOCK



WOODS BAY DOCK
WOODS BAY, MONTANA

DRAWN: AMH	CHECKED: TAR
DATE: 11/24/2021	
REVISIONS:	

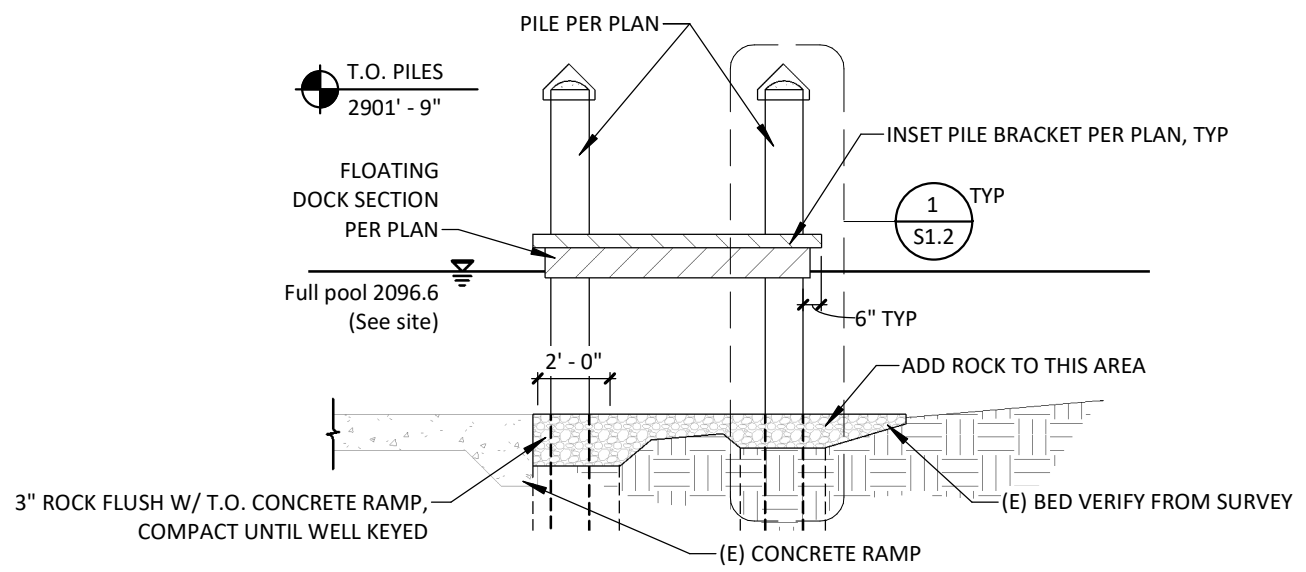
DOCK PLAN

S1.0

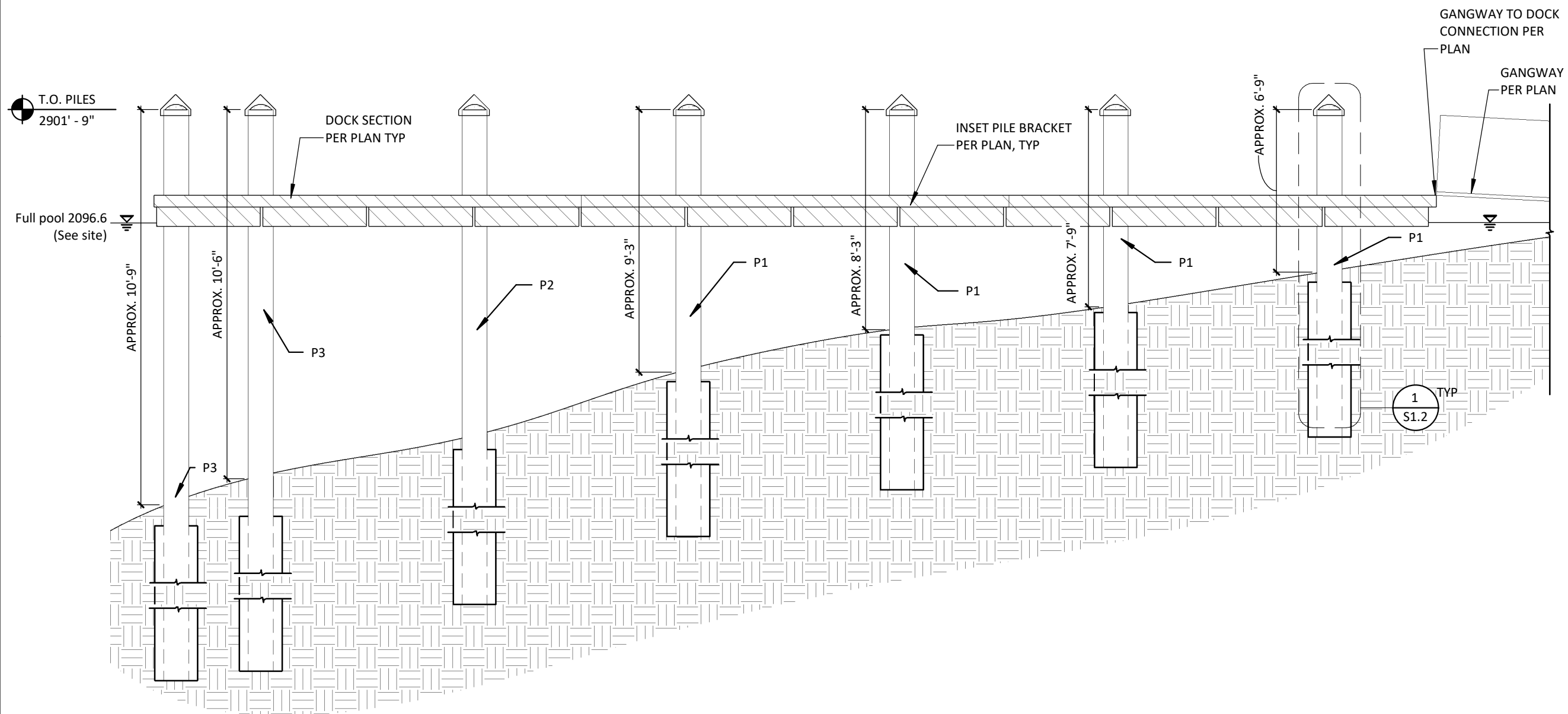
PROJECT #: 210406

1 DOCK PLAN
1/8" = 1'-0"





1 FRONT ELEVATION
 3/16" = 1'-0"



2 SIDE ELEVATION
 3/16" = 1'-0"

WOODS BAY DOCK

WOODS BAY, MONTANA

DRAWN: AMH	CHECKED: TAR
DATE: 11/24/2021	
REVISIONS:	

ELEVATIONS

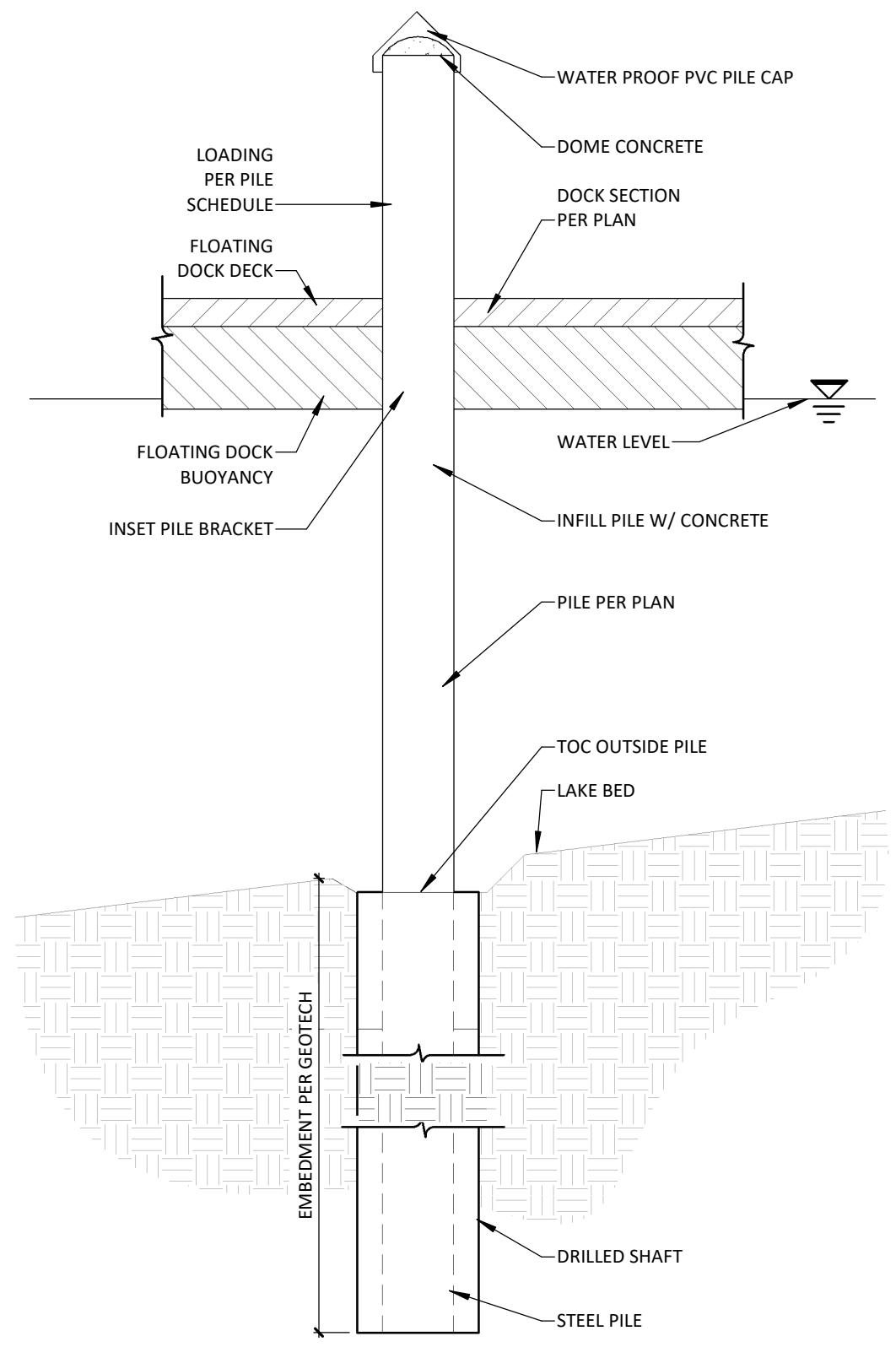
S1.1

PROJECT #: 210406

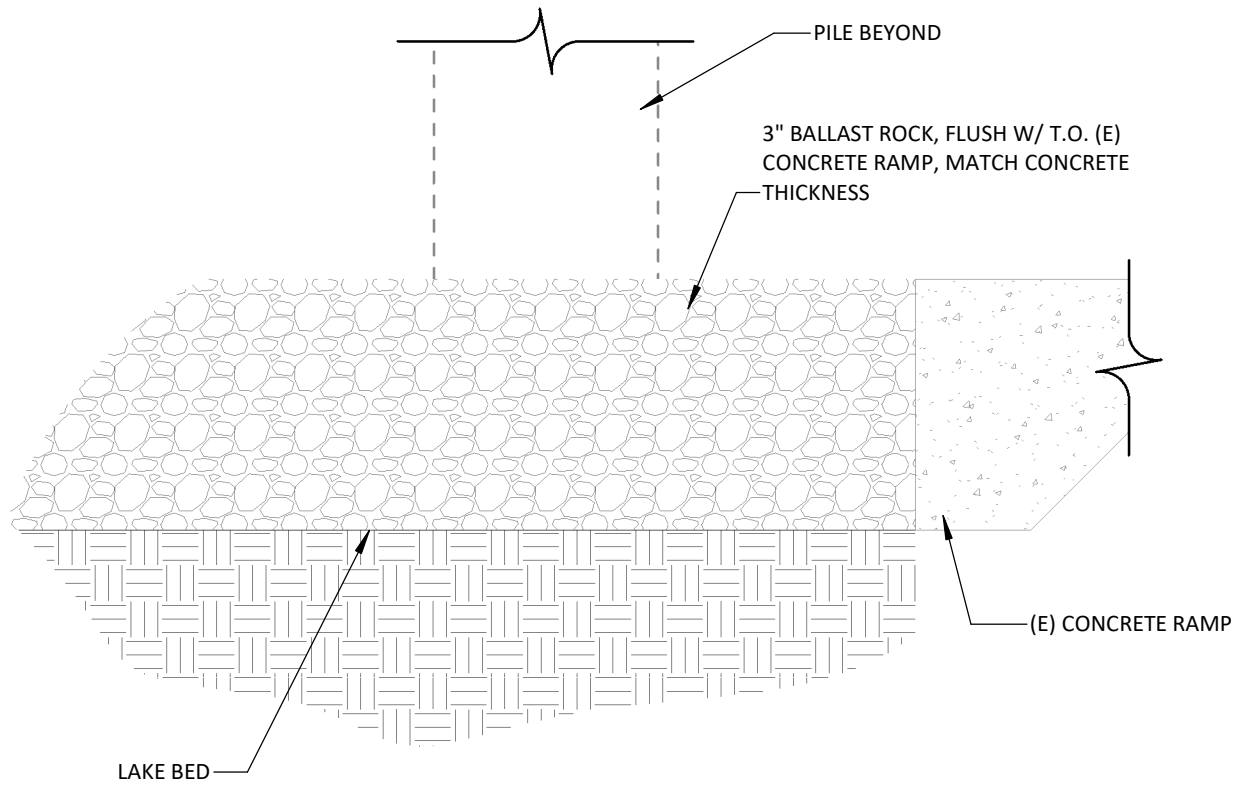
DRAWN: AMH	CHECKED: TAR
DATE: 11/24/2021	
REVISIONS:	

DETAILS

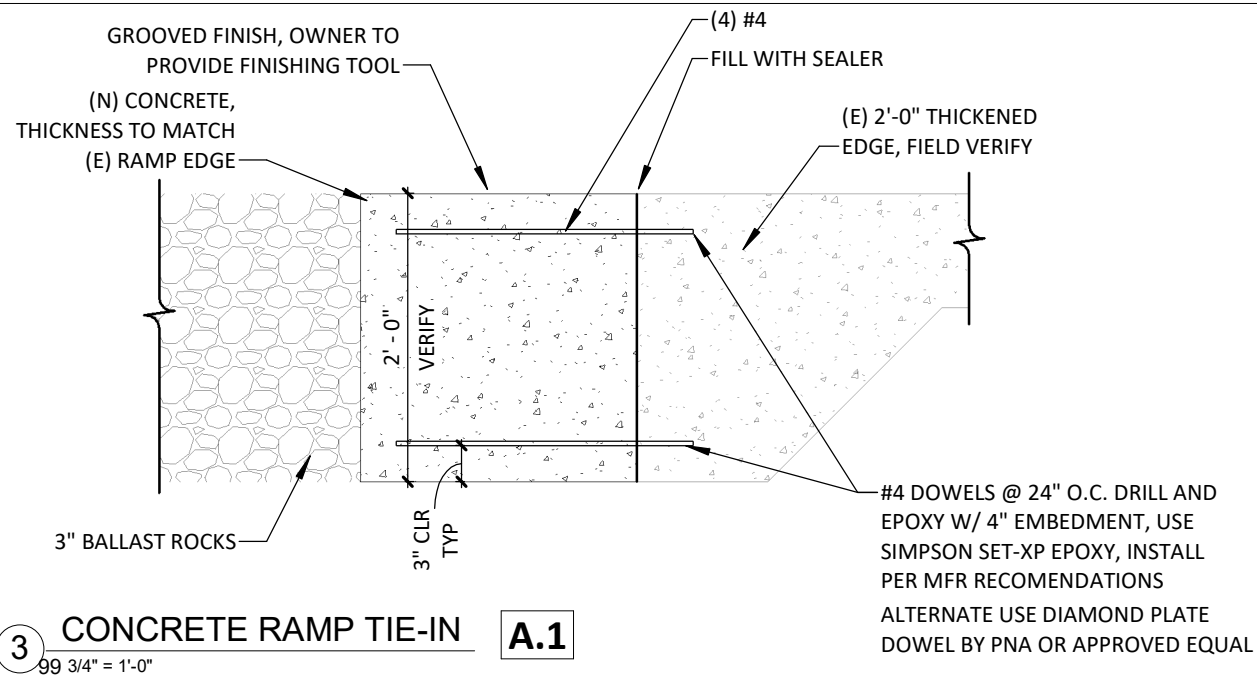
S1.2



1 PILE DETAIL
3/8" = 1'-0"



2 GRAVEL SECTION
1" = 1'-0"



3 CONCRETE RAMP TIE-IN **A.1**
99 3/4" = 1'-0"

PROJECT #: 210406