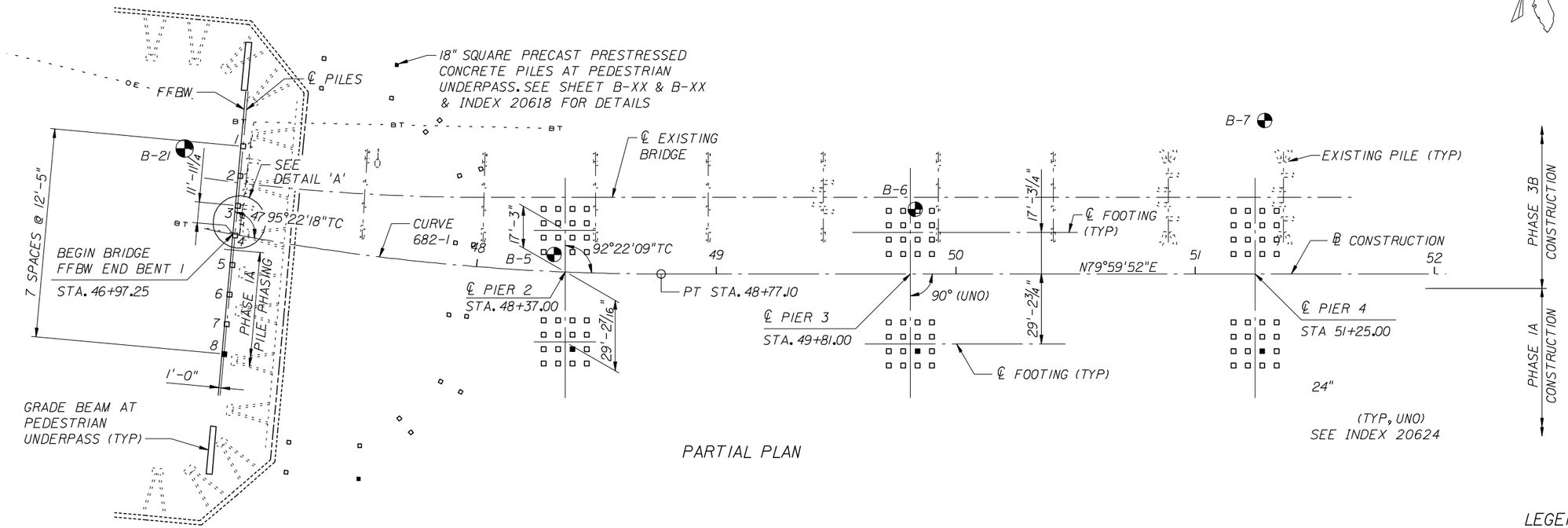
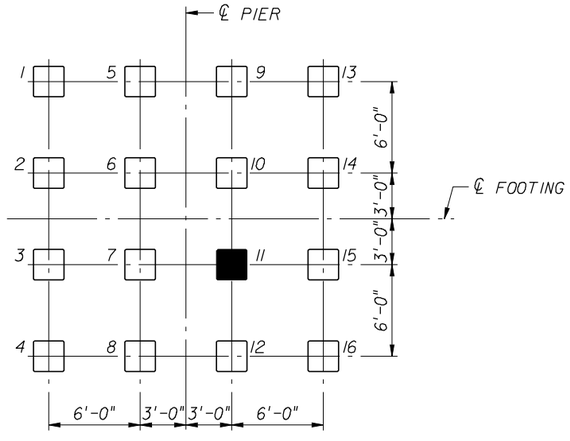


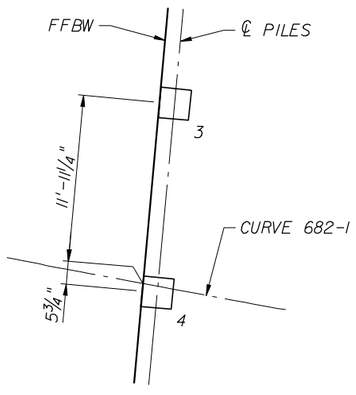
PARTIAL PLAN

NOTE:
EXISTING PILES NOT COMPLETELY REMOVED SHALL BE CUT OFF IN ACCORDANCE WITH SPECIFICATION 110.

SEE SHEET 5 OF 5 FOR PILE DATA TABLE AND INSTALLATION NOTES



PLAN - PIERS 2 THRU 12 & 15 THRU 18



DETAIL 'A'

LEGEND

- ● EXISTING PILE TO BE COMPLETELY REMOVED
- ◒ APPOXIMATE LOCATION OF SOIL BORING
- □ DENOTES PLUMB PILE
- ■ DENOTES TEST PILE
- DENOTES EXISTING PLUMB PILE
- DENOTES EXISTING BATTERED PILE

BRIDGE NO. XXXXXX

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Tallahassee, Florida 32399-0450

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CHECKED BY: XXX MM-YY	
DESIGNED BY: XXX MM-YY	
CHECKED BY: XXX MM-YY	

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

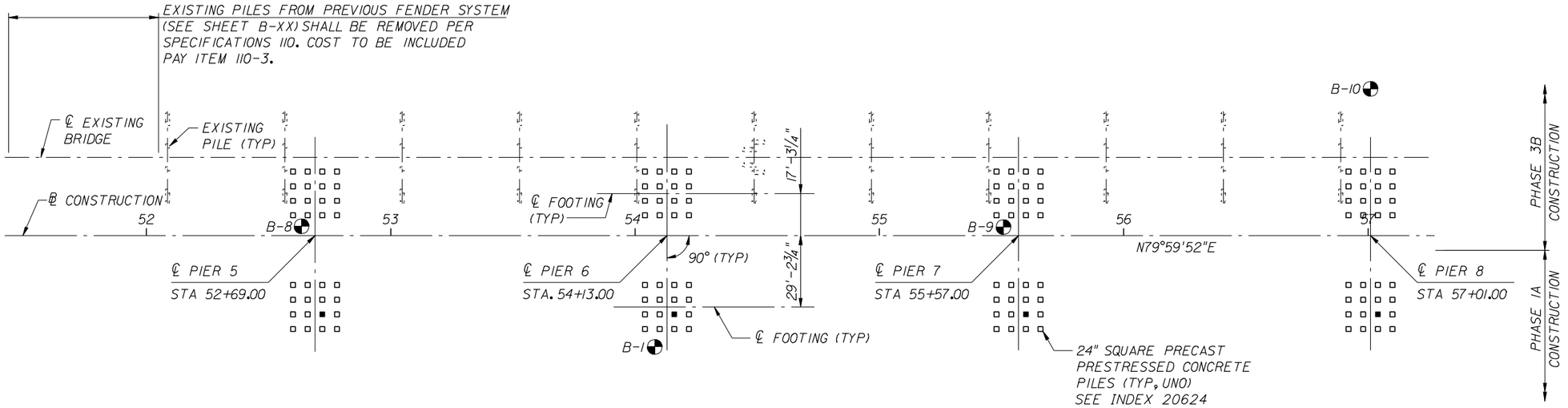
ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: FOUNDATION LAYOUT (SHEET 1 OF 5)

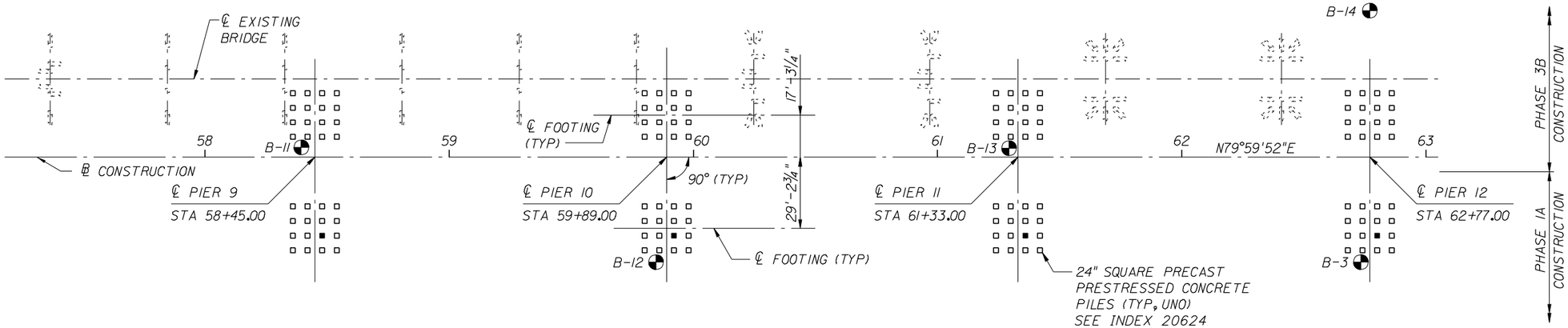
REF. DWG. NO.:

PROJECT NAME: FOUNDATION LAYOUT EXAMPLE 2 SHOWING EXISTING PILE REMOVAL

SHEET NO.:



PARTIAL PLAN



PARTIAL PLAN

LEGEND

- ● EXISTING PILE TO BE COMPLETELY REMOVED
- ◓ APPOXIMATE LOCATION OF SOIL BORING
- □ DENOTES PLUMB PILE
- ■ DENOTES TEST PILE
- DENOTES EXISTING PLUMB PILE
- DENOTES EXISTING BATTERED PILE

NOTE:
EXISTING PILES NOT COMPLETELY REMOVED SHALL BE CUT OFF IN ACCORDANCE WITH SPECIFICATION 110.

SEE SHEET 5 OF 5 FOR PILE DATA TABLE AND INSTALLATION NOTES

BRIDGE NO. XXXXXX

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DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

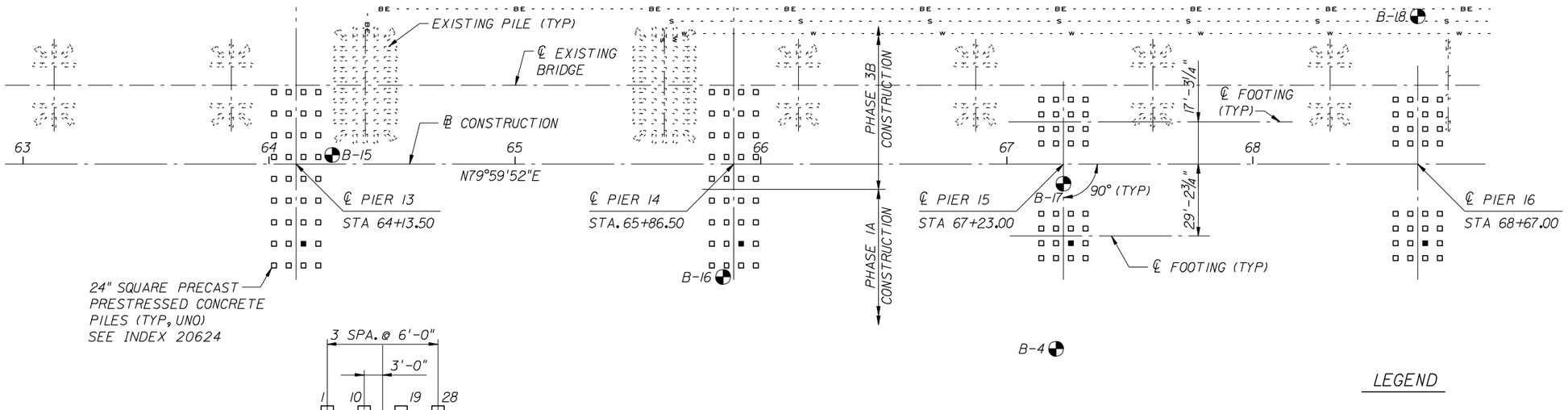
SHEET TITLE: FOUNDATION LAYOUT (SHEET 2 OF 5)

REF. DWG. NO.

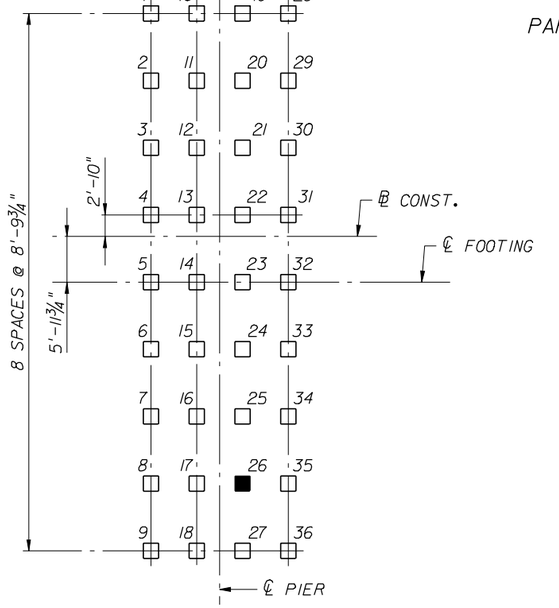
PROJECT NAME: FOUNDATION LAYOUT EXAMPLE 2 SHOWING EXISTING PILE REMOVAL

SHEET NO.

NOTE:
FENDER SYSTEM PILES NOT SHOWN.
SEE SHEET BX-XX FOR DETAILS.



PARTIAL PLAN



PLAN - PIERS 13 & 14

LEGEND

- ● EXISTING PILE TO BE COMPLETELY REMOVED
- ◓ APPOXIMATE LOCATION OF SOIL BORING
- □ DENOTES PLUMB PILE
- ■ DENOTES TEST PILE
- ⁚ DENOTES EXISTING PLUMB PILE
- ⁝ DENOTES EXISTING BATTERED PILE

NOTE:
EXISTING PILES NOT COMPLETELY REMOVED SHALL BE CUT OFF IN ACCORDANCE WITH SPECIFICATION 110.

SEE SHEET 5 OF 5 FOR PILE DATA TABLE AND INSTALLATION NOTES

BRIDGE NO. XXXXXX

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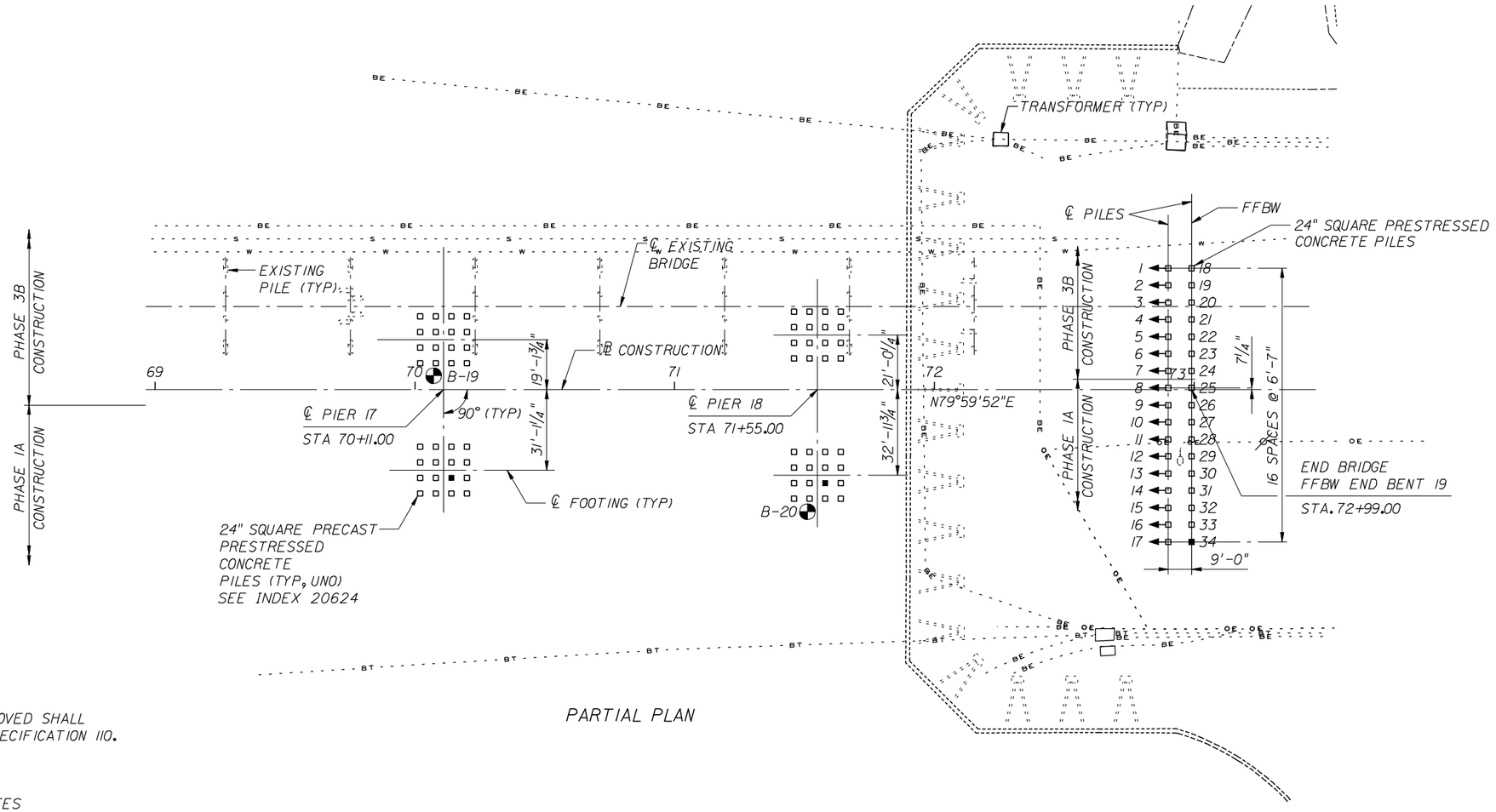
ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: FOUNDATION LAYOUT (SHEET 3 OF 5)

REF. DWG. NO.:

PROJECT NAME: FOUNDATION LAYOUT EXAMPLE 2 SHOWING EXISTING PILE REMOVAL

SHEET NO.:



PARTIAL PLAN

NOTE:
EXISTING PILES NOT COMPLETELY REMOVED SHALL BE CUT OFF IN ACCORDANCE WITH SPECIFICATION 110.

SEE SHEET 5 OF 5 FOR PILE DATA TABLE AND INSTALLATION NOTES

LEGEND

- ● EXISTING PILE TO BE COMPLETELY REMOVED
- APPOXIMATE LOCATION OF SOIL BORING
- □ DENOTES PLUMB PILE
- ■ DENOTES TEST PILE
- DENOTES EXISTING PLUMB PILE
- DENOTES EXISTING BATTERED PILE
- ◄□ DENOTES BATTERED PILE 2:12

BRIDGE NO. XXXXXX

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DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: FOUNDATION LAYOUT (SHEET 4 OF 5)

REF. DWG. NO.:

PROJECT NAME: FOUNDATION LAYOUT EXAMPLE 2 SHOWING EXISTING PILE REMOVAL

SHEET NO.:

$$\frac{\text{FACTORED DESIGN LOAD} + \text{NET SCOUR RESISTANCE} + \text{DOWN DRAG}}{\phi} \leq \text{NOMINAL BEARING RESISTANCE}$$

TENSION RESISTANCE - THE ULTIMATE SIDE FRICTION CAPACITY THAT MUST BE OBTAINED BELOW THE 100 YEAR SCOUR ELEVATION TO RESIST PULLOUT OF THE PILE (SPECIFY ONLY WHEN DESIGN REQUIRES TENSION CAPACITY).

TOTAL SCOUR RESISTANCE - AN ESTIMATE OF THE ULTIMATE STATIC SIDE FRICTION RESISTANCE PROVIDED BY THE SCOURABLE SOIL.

NET SCOUR RESISTANCE - AN ESTIMATE OF THE ULTIMATE STATIC SIDE FRICTION RESISTANCE PROVIDED BY THE SOIL FROM THE REQUIRED PREFORMED OR JETTING ELEVATION TO THE SCOUR ELEVATION.

100-YEAR SCOUR ELEVATION - ESTIMATED ELEVATION OF SCOUR DUE TO THE 100 YEAR STORM EVENT.

LONG TERM SCOUR ELEVATION - ESTIMATED ELEVATION OF SCOUR USED IN DESIGN FOR EXTREME EVENT LOADING.

PILE INSTALLATION NOTES:

THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY ALL INVOLVED UTILITY COMAPNIES PRIOR TO EXCAVATION, PILE DRIVING OR CONSTRUCTION AND SHALL BE RESPONSIBLE FOR MAKING ITS OWN DETERMINATION TO AVOID DAMAGE. THE CONTRACTOR SHALL ASSURE THAT ACTIVE UTILITIES ARE PROPERLY MAINTAINED DURING CONSTRUCTION.

PILE SPACINGS ARE MEASURED HORIZONTALLY ALONG FRONT FACE BACK WALL AT BOTTOM OF THE END BENT CAP AND ALONG ℄ PIER AT BOTTOM OF PILE CAP.

MINIMUM TIP ELEVATION IS REQUIRED FOR LATERAL STABILITY OR TENSION CAPACITY AT ALL LOCATIONS AND SHALL MEET THE REQUIREMENTS OF SECTION 455 OF THE SPECIFICATIONS.

END BENT PILES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF THE WALLS. BEFORE PREFORMING OR DRIVING PILES AT END BENT 1, CONTRACTOR SHALL EXPOSE BULKHEAD WALL TIE-BACKS. CONTACT THE ENGINEER IF TIE-BACKS CONFLICT WITH PROPOSED PILE LOCATIONS.

WHEN A REQUIRED JETTING ELEVATION IS SHOWN, THE JET SHALL BE LOWERED TO THE ELEVATION AND CONTINUE TO OPERATE AT THIS ELEVATION UNTIL THE PILE DRIVING IS COMPLETED. IF JETTING OR PREFORMING ELEVATIONS DIFFER FROM THOSE SHOWN ON THE TABLE, THE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINATION OF THE REQUIRED DRIVING RESISTANCE.

THE CONTRACTOR SHOULD NOT ANTICIPATE BEING ALLOWED TO JET PILES BELOW THE 100 YEAR SCOUR ELEVATION.

AT EACH BENT, PILE DRIVING IS TO COMMENCE AT THE CENTER OF THE BENT AND PROCEED OUTWARD.

PILE DATA TABLE

INSTALLATION CRITERIA								DESIGN CRITERIA							PILE CUT-OFF ELEVATIONS	
PIER OR BENT NUMBER	PILE SIZE (in.)	NOMINAL BEARING RESISTANCE (tons)	TENSION RESISTANCE (tons)	MINIMUM TIP ELEVATION (ft.)	TEST PILE LENGTH (ft.)	REQUIRED JET ELEVATION (ft.)	REQUIRED PREFORM ELEVATION (ft.)	FACTORED DESIGN LOAD (tons)	DOWN DRAG (tons)	TOTAL SCOUR RESISTANCE (tons)	NET SCOUR RESISTANCE (tons)	100-YEAR SCOUR ELEVATION (ft.)	LONG TERM SCOUR ELEVATION (ft.)	RESISTANCE FACTOR-ϕ*	PILE NUMBERS	ELEVATION
END BENT 1	24	369	0	-40	80	N/A	-30	240	0	N/A	N/A	N/A	N/A		SEE SEPARATE TABLE	
PIER 2	24	388		-55	85	-17		240		17	12	-17.1	-1.5		1-16 L & R	-5.0
PIER 3	24	383		-60	85	-20		240		13	9	-20.0	-5.6		1-16 L & R	1.9
PIER 4	24	426		-55	120	-22		250		39	27	-22.2	-9.5		1-16 L & R	1.9
PIER 5	24	414		-55	85	-22		250		26	19	-22.8	-9.6		1-16 L & R	1.9
PIER 6	24	398		-56	120	-24		250		12	9	-24.7	-13.0		1-16 L & R	1.9
PIER 7	24	434		-55	115	-28		250		45	32	-28.4	-15.0		1-16 L & R	1.9
PIER 8	24	443		-75	115	-28		261		38	27	-28.0	-14.7		1-16 L & R	1.9
PIER 9	24	422		-75	115	-26		261		19	13	-26.9	-13.0		1-16 L & R	1.9
PIER 10	24	409	56	-75	120	-28	N/A	261	N/A	7	5	-28.0	-13.0	0.75	1-16 L & R	1.9
PIER 11	24	415		-75	115	-26		261		13	9	-26.6	-13.0		1-16 L & R	1.9
PIER 12	24	442		-70	120	-28		277		14	10	-28.0	-12.5		1-16 L & R	1.9
PIER 13	24	431		-70	130	-28		277		4	3	-28.5	-14.5		1-36	0.9
PIER 14	24	434		-70	125	-28		277		7	5	-28.7	-13.8		1-36	0.9
PIER 15	24	429		-70	130	-29		277		3	2	-29.0	-14.4		1-16 L & R	1.9
PIER 16	24	383		-55	90	-27		242		10	7	-27.1	-12.5		1-16 L & R	1.9
PIER 17	24	394		-55	115	-27		242		20	14	-27.2	-11.0		1-16 L & R	1.9
PIER 18	24	398		-55	75	-22		242		25	17	-22.4	-3.5		1-16 L & R	1.9
END BENT 19	24	409	0	-62	80	N/A	-52	266	0	N/A	N/A	N/A	N/A		1-34	1.0

* ϕ IS BASED ON THE USE OF DYNAMIC LOAD TEST.

END BENT 1
PILE CUT-OFF ELEVATIONS

PILE NO.	ELEVATION
1	6.2
2	7.2
3	8.2
4	9.3
5	10.3
6	11.3
7	12.4
8	13.4

BRIDGE NO. XXXXXX

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SHEET TITLE: FOUNDATION LAYOUT (SHEET 5 OF 5)

REF. DWG. NO.

PROJECT NAME: FOUNDATION LAYOUT EXAMPLE 2
SHOWING EXISTING PILE REMOVAL

SHEET NO.