

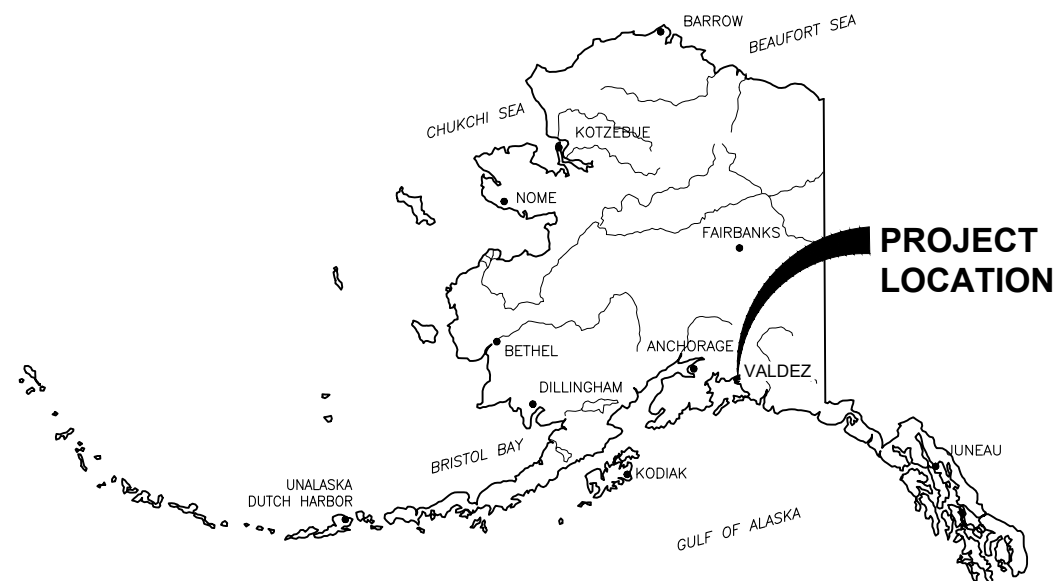
# CITY OF VALDEZ

## VCT CAUSEWAY REPAIRS

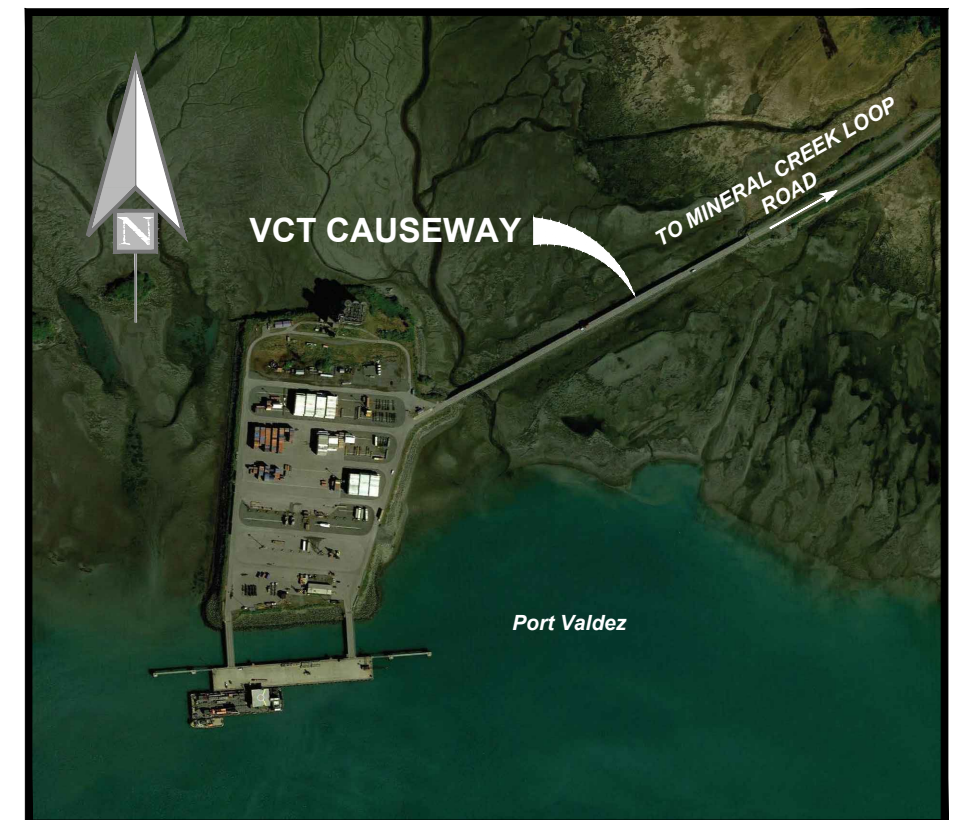
VALDEZ, ALASKA  
FEBRUARY 2021

### DRAWING INDEX

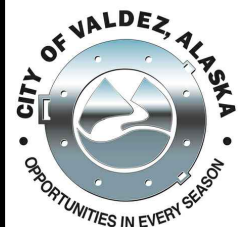
SHEET TITLE	SHEET NO.
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STATE OF ALASKA



VICINITY MAP



**100% DESIGN**  
2/18/2021

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DATE: 2/18/21

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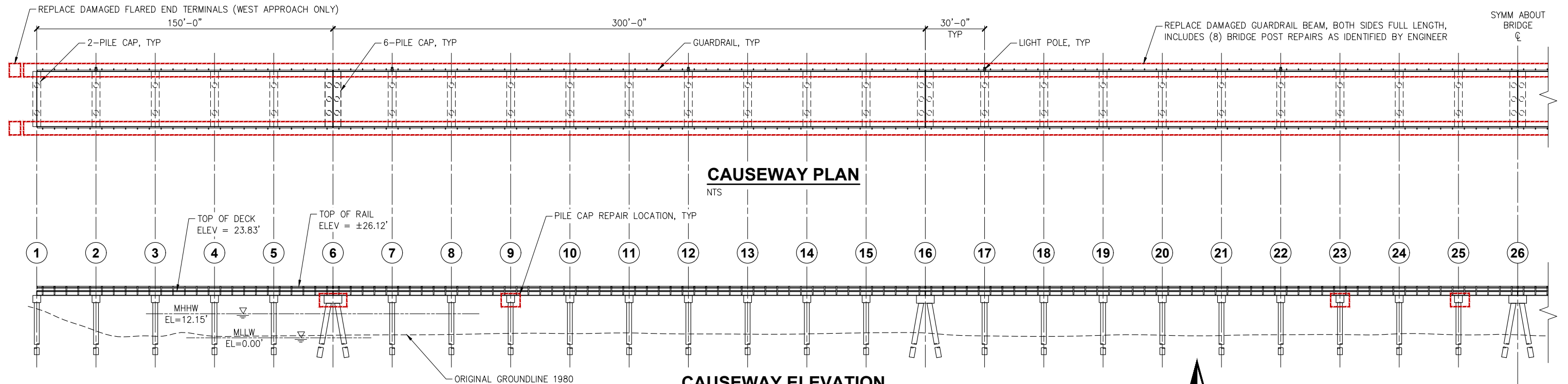


CITY OF VALDEZ  
VCT CAUSEWAY REPAIRS

COVER SHEET & DRAWING INDEX

DESIGNED BY: MAB DATE: 2/18/2021  
CHECKED BY: CC PROJECT NO: 201125

SHEET NO: 1 OF 11



### CAUSEWAY PLAN

NTS

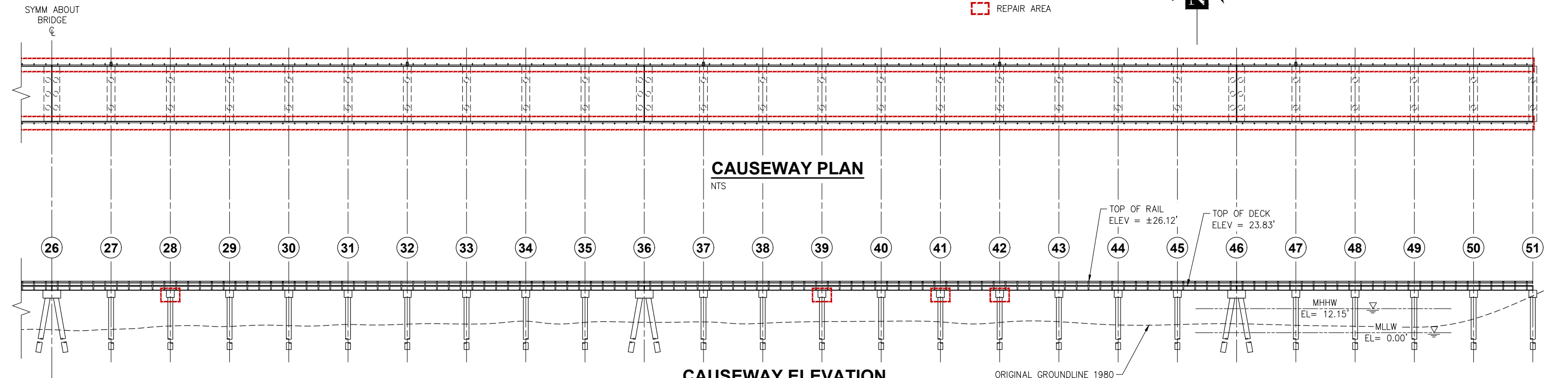
### CAUSEWAY ELEVATION

NTS

### LEGEND

# PILE CAP BENT NUMBER

REPAIR AREA

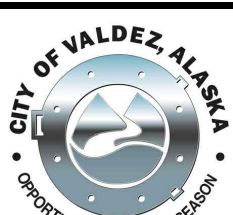


### CAUSEWAY PLAN

NTS

### CAUSEWAY ELEVATION

NTS



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**CITY OF VALDEZ**  
**VCT CAUSEWAY REPAIRS**

**CAUSEWAY PLAN & ELEVATION**

DESIGNED BY: MAB DATE: 2/18/2021  
CHECKED BY: CC PROJECT NO: 201125

SHEET NO: **2** OF 11





TYPICAL BOTTOM CORNER - CLOSED CORROSION SPALL



TYPICAL BOTTOM CORNER - OPEN CORROSION SPALL



TYPICAL BOTTOM SURFACE - CORROSION SPALL

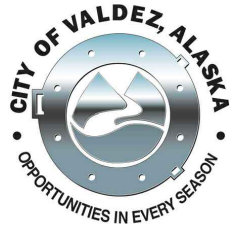


TYPICAL BOTTOM SURFACE - CONCRETE HONEYCOMB

APPROXIMATE  
REPAIR LIMITS,  
TYP

PILE CAP DEFICIENCY TABLE				
PILE CAP BENT #	# OF DEFICIENT CORNERS	TOTAL CORNER DEFECT LENGTH (FT)	OTHER DEFECTS	OTHER DEFECT SIZE (SF)
6	2	8	(2) SPALL AREAS OF VARIOUS SIZES	0.9
9	1	4	(1) SPALL AREA	4.3
23	2	11	(2) SPALL AREAS OF VARIOUS SIZES & HONEYCOMBING	22.5
25	1	2		0
28	1	6		0
39	0	0	(8) SMALL LOCALIZED OPEN SPALLS	2.7
41	1	4	(1) SPALL AREA	0.2
42	0	0	(2) SPALL AREAS OF VARIOUS SIZES	2.8

- NOTE:
1. DEFICIENCY QUANTITIES SHOWN ARE APPROXIMATED FROM FIELD MEASUREMENTS.
  2. TOTAL ESTIMATED REPAIR QUANTITY TO BE USED FOR BASE BID = 40 CF.
  3. DETAILS FOR EACH CAP DEFICIENCY ARE IDENTIFIED ON SHEETS 4-7.
  4. BENT #6 IS A 6-PILE BENT, ALL OTHERS ARE 2-PILE BENTS.



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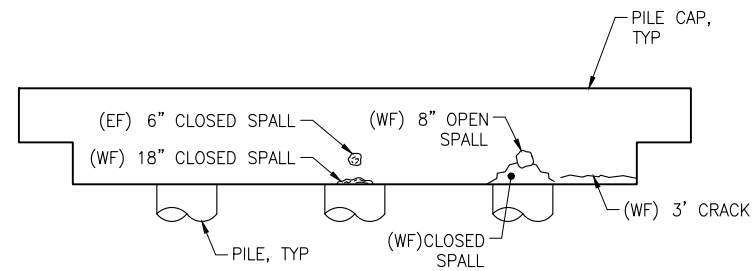
CITY OF VALDEZ  
VCT CAUSEWAY REPAIRS

CAUSEWAY DEFICIENCY SUMMARY

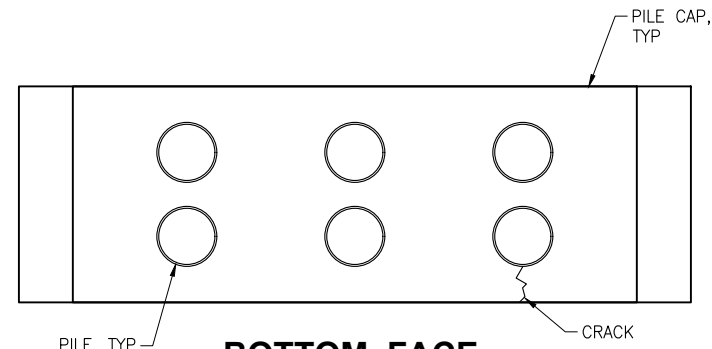
DESIGNED BY: MAB DATE: 2/18/2021  
CHECKED BY: CC PROJECT NO: 201125

SHEET NO: 3 OF 11





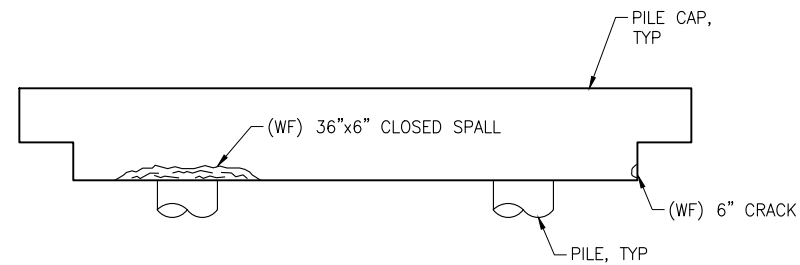
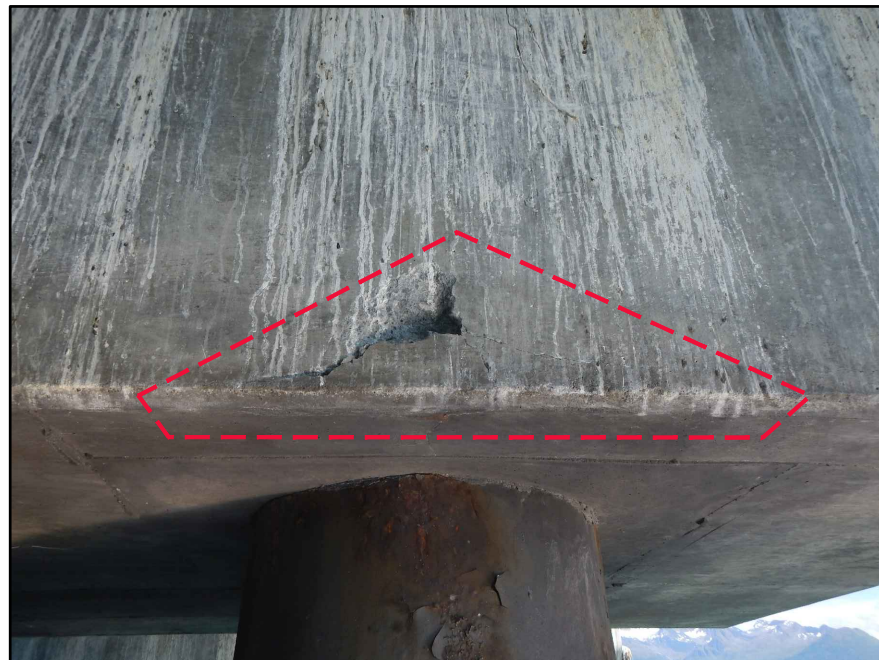
**ELEVATION**



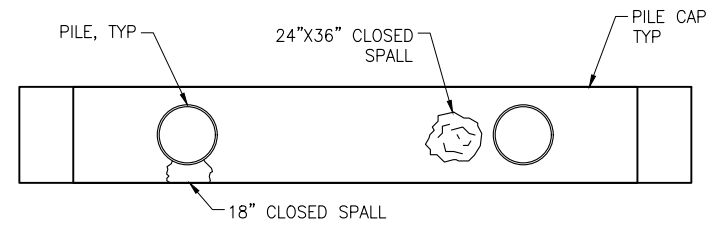
**BOTTOM FACE**

**PILE CAP BENT # 6**  
**EXISTING CONDITION**

NTS



**ELEVATION**



**BOTTOM FACE**

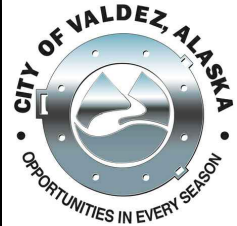
**PILE CAP BENT # 9**  
**EXISTING CONDITION**

NTS



**NOTE:**

1. ITEMS NOTED (EF) REFER TO DEFICIENCIES FOUND ON THE EAST FACE OF THE PILE CAP, (WF) REFERS TO DEFICIENCIES FOUND ON THE WEST FACE.
2. ALL DEFICIENCIES NOTED SHALL BE REPAIRED ACCORDING TO THE STANDARD DETAILS ON SHEET 8, UNLESS OTHERWISE APPROVED.
3. DEFICIENCY EXTENTS SHOWN ARE APPROXIMATE FIELD MEASUREMENTS. ACTUAL DEMOLITION AND REPAIR DEPTHS AND WIDTHS SHALL BE FIELD DETERMINED USING THE BASIS DEFINED IN THE CONCRETE REMOVAL SPECIFICATIONS.



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**2/18/2021**

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REV	DATE	DESCRIPTION

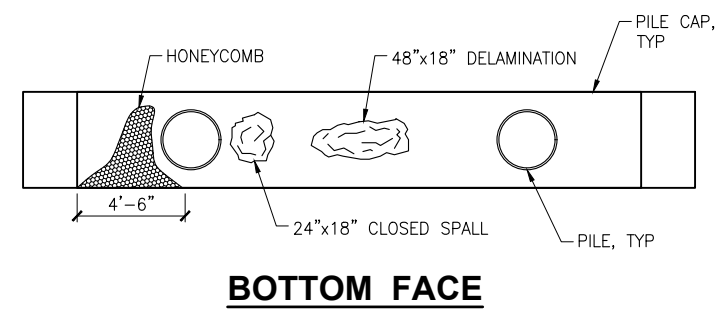
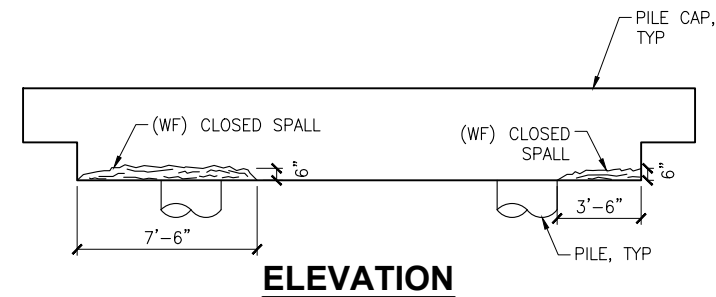


DATE: 2/18/21

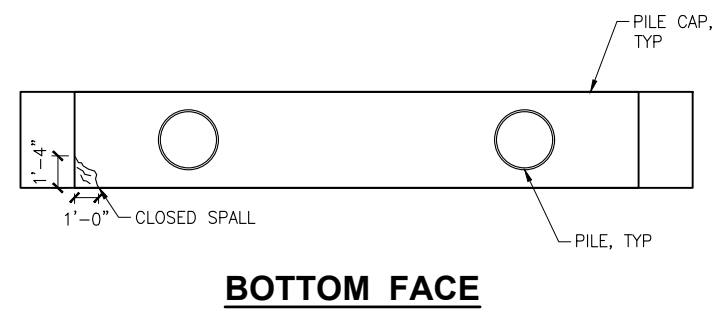
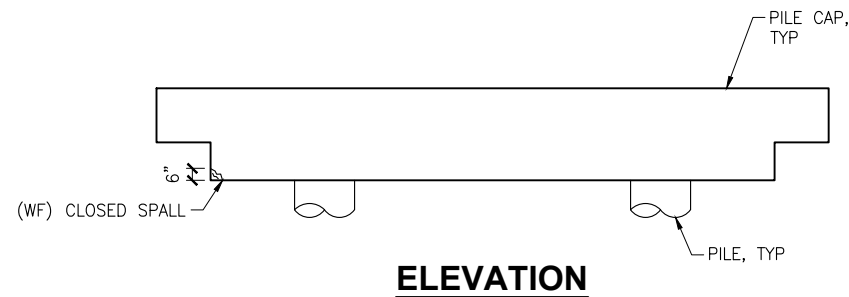
1506 West 36th Avenue  
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Fax: 907.563.4220  
www.pndengineers.com



PROJECT: <b>CITY OF VALDEZ</b>		
<b>VCT CAUSEWAY REPAIRS</b>		
TITLE: <b>CAUSEWAY PILE CAP DEFICIENCIES (1 OF 4)</b>		
DESIGNED BY: MAB	DATE: 2/18/2021	SHEET NO: <b>4</b> OF 11
CHECKED BY: CC	PROJECT NO: 201125	



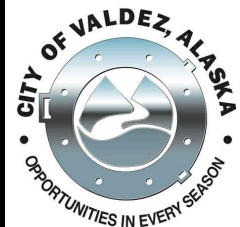
**PILE CAP BENT # 23**  
**EXISTING CONDITION**  
NTS



**PILE CAP BENT # 25**  
**EXISTING CONDITION**  
NTS



- NOTE:**
1. ITEMS NOTED (EF) REFER TO DEFICIENCIES FOUND ON THE EAST FACE OF THE PILE CAP, (WF) REFERS TO DEFICIENCIES FOUND ON THE WEST FACE.
  2. ALL DEFICIENCIES NOTED SHALL BE REPAIRED ACCORDING TO THE STANDARD DETAILS ON SHEET 8, UNLESS OTHERWISE APPROVED.
  3. DEFICIENCY EXTENTS SHOWN ARE APPROXIMATE FIELD MEASUREMENTS. ACTUAL DEMOLITION AND REPAIR DEPTHS AND WIDTHS SHALL BE FIELD DETERMINED USING THE BASIS DEFINED IN THE CONCRETE REMOVAL SPECIFICATIONS.



**100% DESIGN**  
2/18/2021

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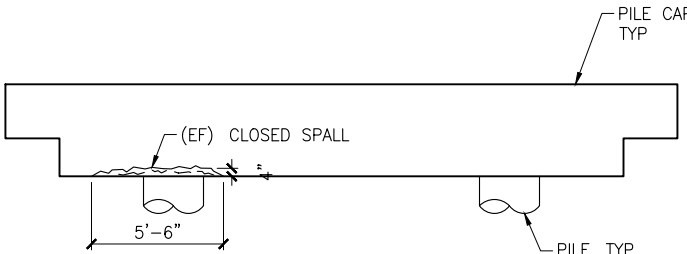


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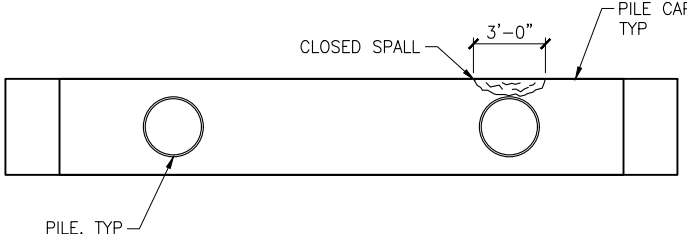


PROJECT: <b>CITY OF VALDEZ</b>			
VCT CAUSEWAY REPAIRS			
TITLE: <b>CAUSEWAY PILE CAP DEFICIENCIES (2 OF 4)</b>			
DESIGNED BY: MAB	DATE: 2/18/2021	SHEET NO: <b>5</b> OF 11	
CHECKED BY: CC	PROJECT NO: 201125		





ELEVATION



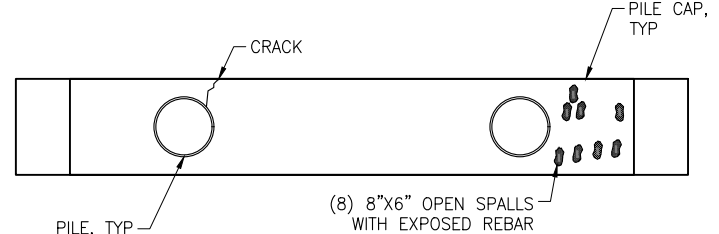
BOTTOM FACE

PILE CAP BENT # 28  
EXISTING CONDITION

NTS



ELEVATION

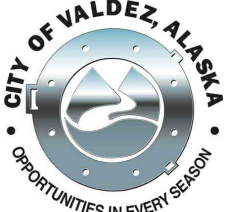
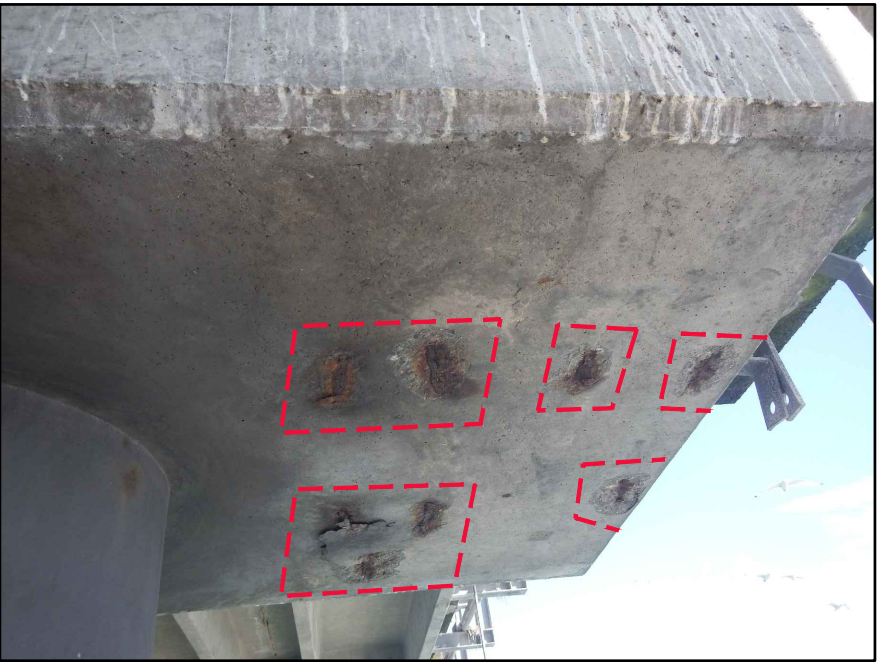


BOTTOM FACE

PILE CAP BENT # 39  
EXISTING CONDITION

NTS

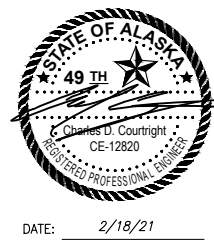
- NOTE:**
1. ITEMS NOTED (EF) REFER TO DEFICIENCIES FOUND ON THE EAST FACE OF THE PILE CAP, (WF) REFERS TO DEFICIENCIES FOUND ON THE WEST FACE.
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  3. DEFICIENCY EXTENTS SHOWN ARE APPROXIMATE FIELD MEASUREMENTS. ACTUAL DEMOLITION AND REPAIR DEPTHS AND WIDTHS SHALL BE FIELD DETERMINED USING THE BASIS DEFINED IN THE CONCRETE REMOVAL SPECIFICATIONS.



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2/18/2021

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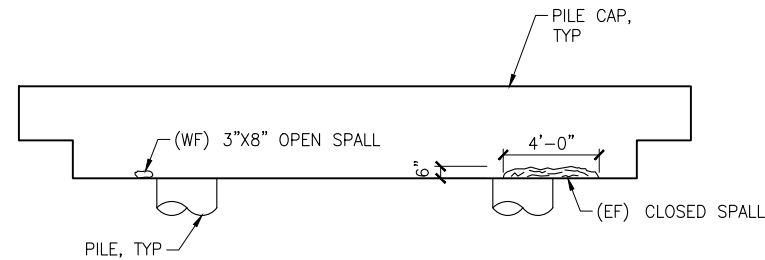
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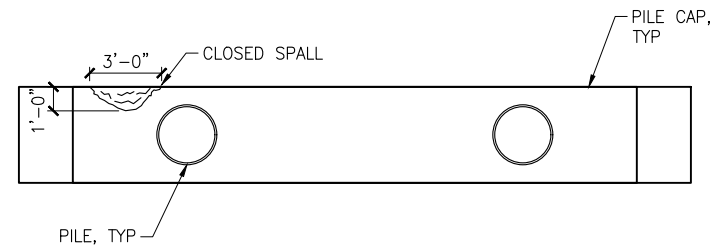
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Fax: 907.563.4220  
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PROJECT: CITY OF VALDEZ VCT CAUSEWAY REPAIRS		
TITLE: CAUSEWAY PILE CAP DEFICIENCIES (3 OF 4)		
DESIGNED BY: MAB	DATE: 2/18/2021	SHEET NO: <b>6</b> OF 11
CHECKED BY: CC	PROJECT NO: 201125	



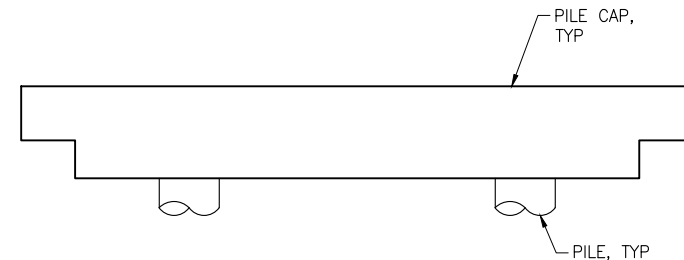
**ELEVATION**



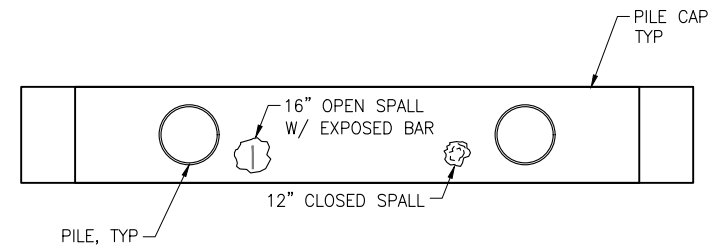
**BOTTOM FACE**

**PILE CAP BENT # 41  
EXISTING CONDITION**

NTS



**ELEVATION**



**BOTTOM FACE**

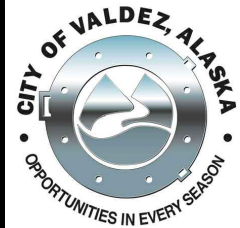
**PILE CAP BENT # 42  
EXISTING CONDITION**

NTS



**NOTE:**

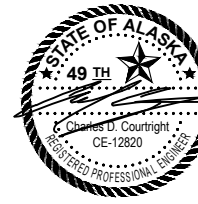
1. ITEMS NOTED (EF) REFER TO DEFICIENCIES FOUND ON THE EAST FACE OF THE PILE CAP, (WF) REFERS TO DEFICIENCIES FOUND ON THE WEST FACE.
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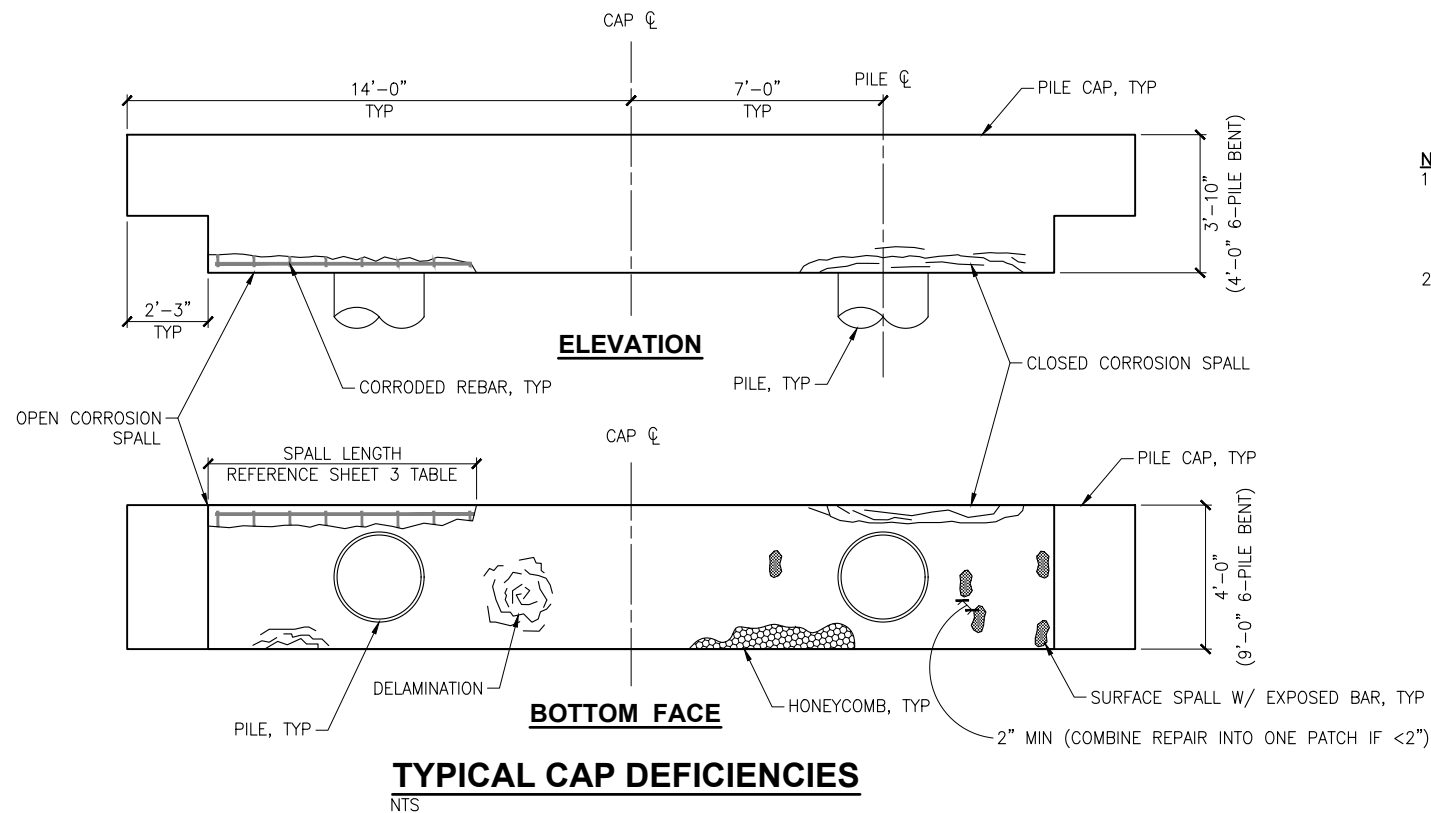


**CITY OF VALDEZ  
VCT CAUSEWAY REPAIRS**

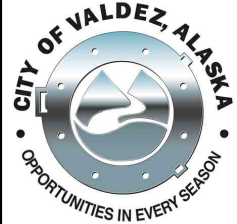
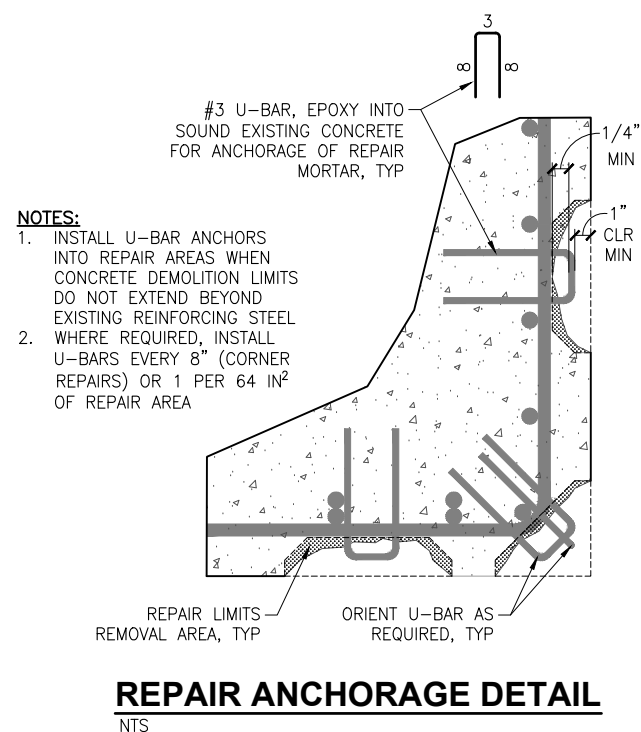
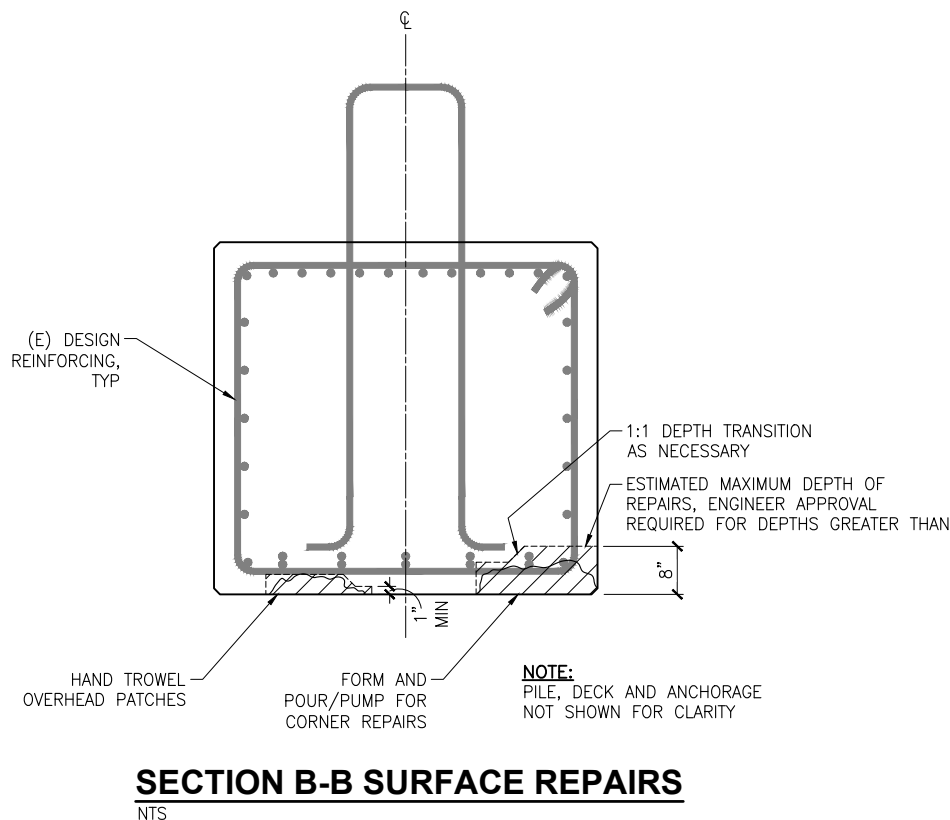
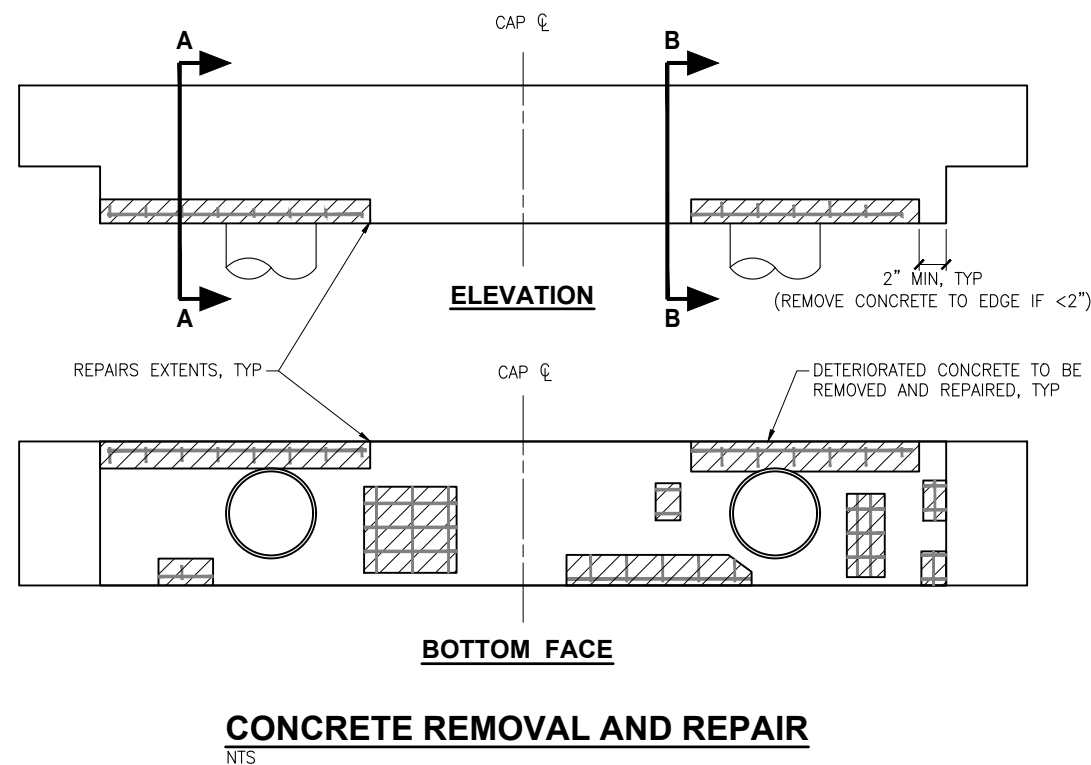
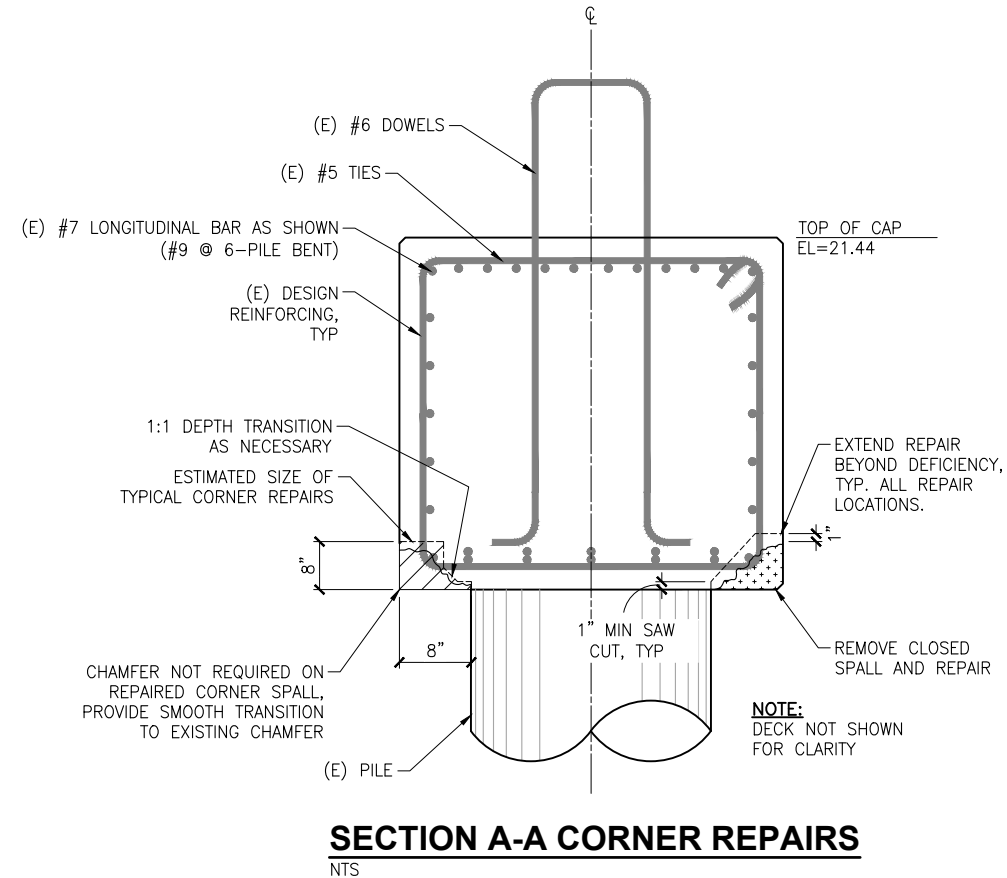
**CAUSEWAY PILE CAP DEFICIENCIES (4 OF 4)**

DESIGNED BY: MAB	DATE: 2/18/2021	SHEET NO: 7
CHECKED BY: CC	PROJECT NO: 201125	OF 11





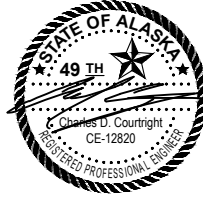
**NOTE:**  
1. DEFICIENCY EXTENTS SHOWN ARE APPROXIMATE FIELD MEASUREMENTS. ACTUAL DEMOLITION AND REPAIR DEPTHS AND WIDTHS SHALL BE FIELD DETERMINED USING THE BASIS DEFINED IN THE CONCRETE REMOVAL SPECIFICATIONS.  
2. TYPICAL CAP SHOWN IS PROVIDED TO REPRESENT ALL ANTICIPATED DEFECTS REQUIRING REPAIR.



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2/18/2021

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REV	DATE	DESCRIPTION

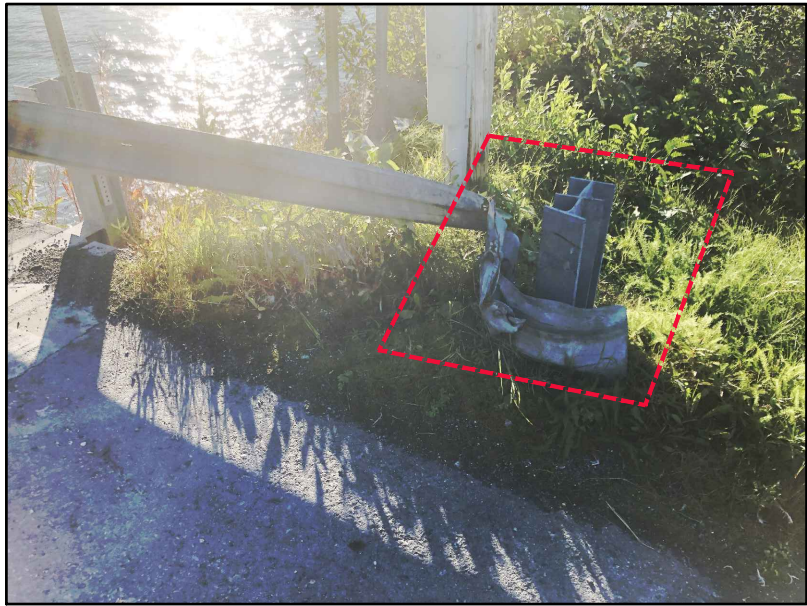


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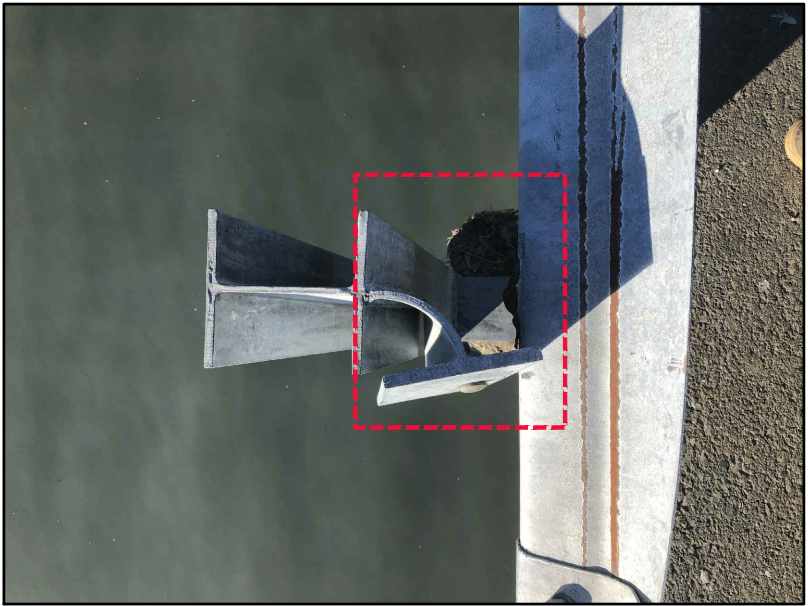


**CITY OF VALDEZ**  
**VCT CAUSEWAY REPAIRS**  
**CAUSEWAY PILE CAP**  
**CONCRETE REPAIR DETAILS**  
DESIGNED BY: MAB DATE: 2/18/2021  
CHECKED BY: CC PROJECT NO: 201125

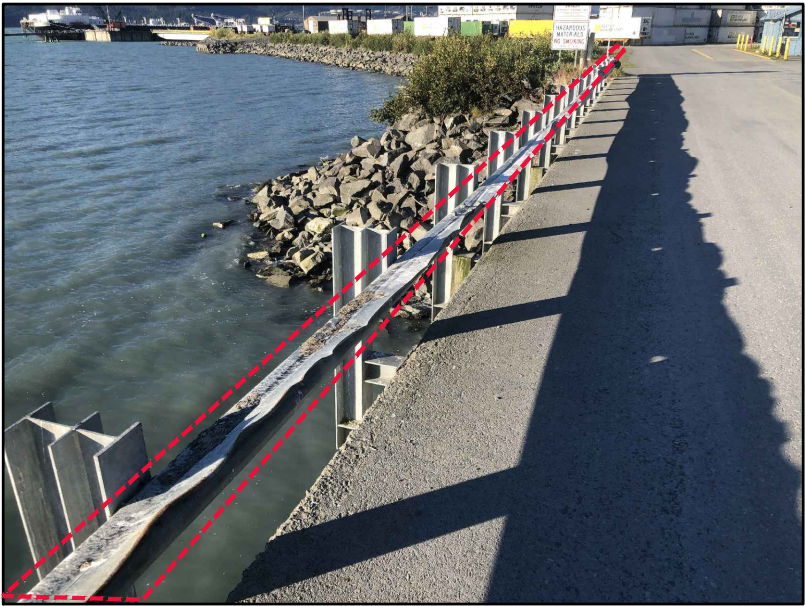




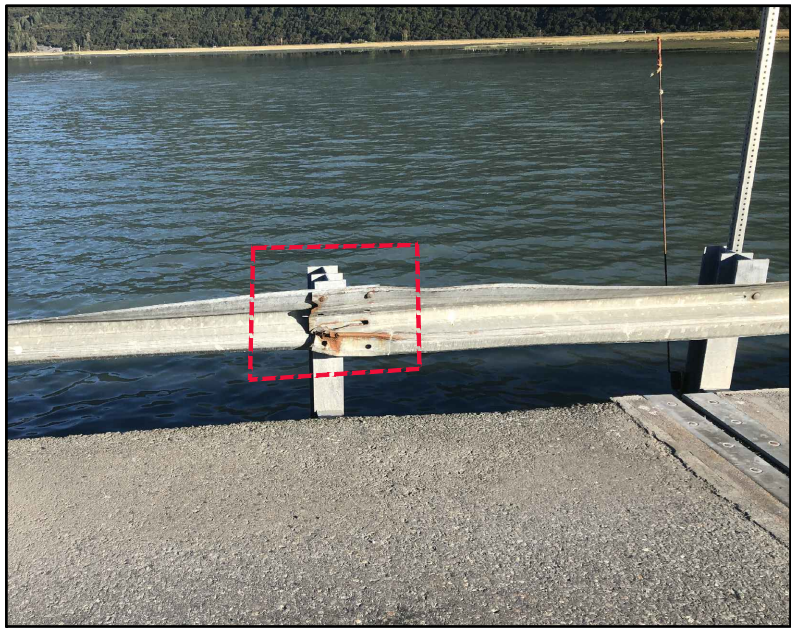
**FLARED END TERMINAL DAMAGE  
ON WEST APPROACH**



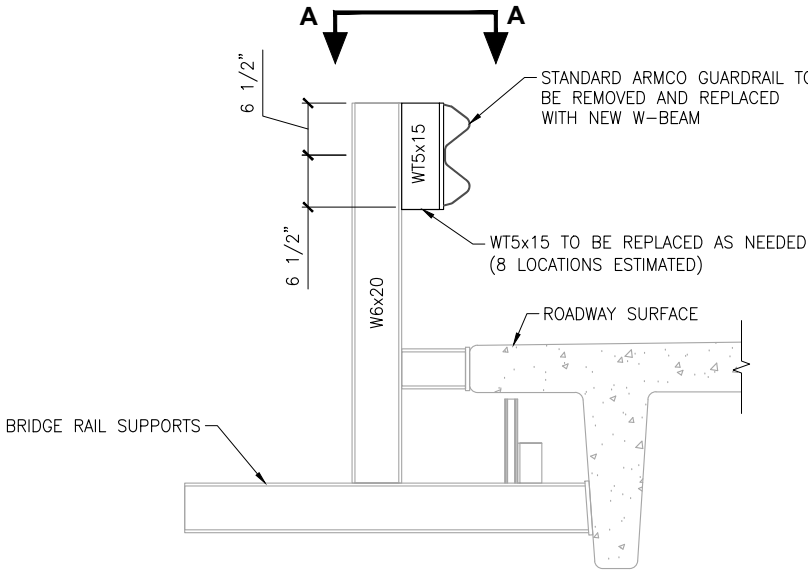
**TYPICAL WT DAMAGE ON POST**



**TYPICAL RAIL DAMAGE**

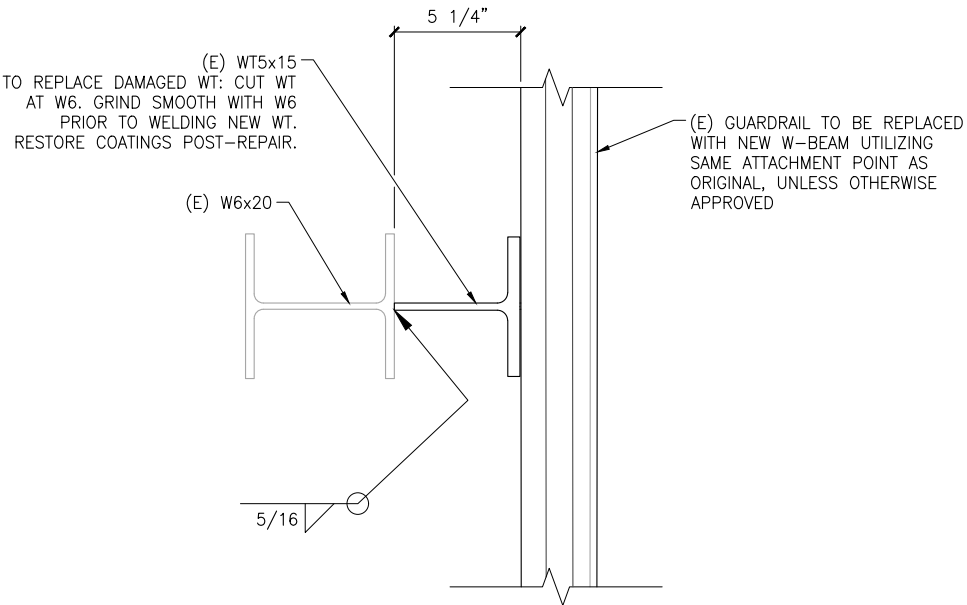


**SPLICE DAMAGE AT EXPANSION JOINT**

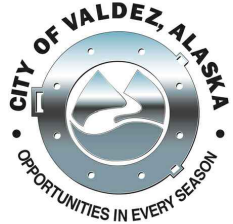


**SIDE VIEW**

**EXISTING GUARDRAIL - REPAIR DETAILS**  
NTS



**SECTION A-A**  
NTS



**100% DESIGN**  
2/18/2021

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PROJECT: <b>CITY OF VALDEZ VCT CAUSEWAY REPAIRS</b>			
TITLE: <b>GUARDRAIL REPAIR DETAILS (1 OF 2)</b>			
DESIGNED BY: MAB	DATE: 2/18/2021	SHEET NO: <b>9</b> OF 11	
CHECKED BY: CC	PROJECT NO: 201125		

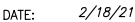




- ## EXPANSION JOINT SPLICE DETAIL



REV	DATE	DESCRIPTION



**P | N | D**  
**ENGINEERS, INC.**

SHEET NO: **10** OF 11



GENERAL NOTES:

OWNER: CITY OF VALDEZ

ENGINEER: PND ENGINEERS, INC.

NOTICE TO CONTRACTOR:

THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL BE POSTED PROMINENTLY AT THE CONTRACTOR'S ONSITE PROJECT OFFICE. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, SPECIFICATIONS, SITE CONDITIONS, AND THESE GENERAL NOTES SHALL BE REPORTED TO THE OWNER/ENGINEER AT ONCE. ANY FURTHER WORK PERFORMED BY THE CONTRACTOR AFTER FINDING SUCH DISCREPANCIES SHALL BE DONE AT THEIR OWN RISK.

THE CONTRACTOR IS ADVISED TO INSPECT THE SITE TO DETERMINE SCOPE OF DEMOLITION WORK AND ACCESSIBILITY PRIOR TO BIDDING.

DESCRIPTION OF WORK

THE WORK INCLUDES REPAIR OF NOTED CAUSEWAY AREAS. ALL LABOR, ACCESS, MATERIALS, TRANSPORTATION AND EQUIPMENT NECESSARY TO COMPLETE WORK SHALL BE FURNISHED BY THE CONTRACTOR. CONCRETE REPAIRS WILL REQUIRE REMOVAL OF DETERIORATED MATERIAL, AS DETAILED ON THE DRAWINGS. SHOULD ADDITIONAL DETERIORATION OR DEFICIENCIES NOT REPRESENTED IN THE PLANS BE IDENTIFIED, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

ANY DAMAGE CAUSED BY THE CONTRACTOR OR SUBCONTRACTORS TO THE EXISTING STRUCTURE (OUTSIDE OF THE DETAILED SCOPE OF WORK) OR ADJOINING PROPERTY SHALL BE REPAIRED IMMEDIATELY AT THE EXPENSE OF THE CONTRACTOR.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, AND PERMITS.

APPLICABLE CODES AND STANDARDS

ALL LOCAL CODES PLUS THE FOLLOWING SPECIFICATIONS, STANDARDS AND CODES ARE PART OF THESE GENERAL NOTES:

- 1. CVSS, CURRENT EDITION
- 2. ACI 201.1R-08, E706, 318-14 SPECIFICATIONS
- 3. ICRI/ACI CONCRETE REPAIR MANUAL, FOURTH EDITION
- 4. ASTM SPECIFICATIONS, CURRENT EDITION
- 5. AWS D1.1 STRUCTURAL WELDING CODE, CURRENT EDITION
- 6. AISC MANUAL OF STEEL CONSTRUCTION, 14TH EDITION
- 7. ADOT&PF STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION
- 8. IBC, CURRENT EDITION

IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE ABOVE REFERENCES AND THESE GENERAL NOTES THE FOLLOWING PRIORITY WILL BE FOLLOWED:

- 1. ALL PROJECT PERMIT REQUIREMENTS
- 2. THESE GENERAL NOTES AND PLANS
- 3. LOCAL CODES
- 4. THE SPECIFICATIONS, STANDARDS AND CODES LISTED ABOVE IN ORDER OF PRECEDENCE

VERTICAL DATUM

VERTICAL DATUM IS MEAN LOWER LOW WATER (MLLW).

TIDAL DATUMS

NOAA TIDAL DATUMS FOR 1983-2001 EPOCH AT VALDEZ, PRINCE WILLIAM SOUND (STATION #9454240):

EST. EXTREME HIGH WATER (EHW)	EL. +17.1 FT
MEAN HIGHER HIGH WATER (MHHW)	EL. +12.2
MEAN HIGH WATER (MHW)	EL. +11.2
MEAN SEA LEVEL (MSL)	EL. +6.5
MEAN TIDE LEVEL (MTL)	EL. +6.4
MEAN LOW WATER (MLW)	EL. +1.5
MEAN LOWER LOW WATER (MLLW)	EL. +0.0
EST. EXTREME LOW WATER (ELW)	EL. -5.4

PERFORMANCE CRITERIA

REPAIRS IDENTIFIED WITHIN THE PLANS ARE INTENDED TO RESTORE THE STRUCTURAL COMPONENTS TO THE ORIGINALLY DESIGNED SERVICEABILITY. REPAIRS ARE NOT INTENDED TO STRENGTHEN OR IMPROVE THE FUNCTIONALITY OF THE COMPONENTS.

STRUCTURAL CONCRETE REPAIRS ARE PROPOSED TO MITIGATE FUTURE DETERIORATION BY REPLACING WEAKENED AND FAILED CONCRETE WITH SOUND, COMPETENT MATERIAL. CORRODED REINFORCEMENT WILL BE CLEANED AND TREATED TO MINIMIZE AND SLOW FUTURE DETERIORATION. THE LONGEVITY OF REPAIRS IS DEPENDENT UPON EXISTING CONCRETE CONDITIONS, PROPER SURFACE PREPARATION AND CURING CONDITIONS FOR THE REPAIR MATERIAL. CONCRETE CORES WERE NOT TAKEN FOR THIS PROJECT, THEREFORE THE CHEMICAL COMPOSITION OF CONCRETE CANNOT BE VERIFIED. THE CONCENTRATION OF CHLORIDE INTRUSION AND CARBONATION WILL HAVE A SIGNIFICANT IMPACT ON THE RATE AND SEVERITY OF REINFORCEMENT CORROSION. THE PROPOSED REPAIR PLANS DO NOT ADDRESS SUCH DEFICIENCIES. BEST CONSTRUCTION PRACTICES WHEN REMOVING, CLEANING, AND PATCHING ARE CRITICAL TO PROVIDING A DURABLE REPAIR.

PROJECT PERMIT REQUIREMENTS

CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF ALL PROJECT PERMITS. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS.

THIS PROJECT HAS SOME REQUIREMENTS TO FULFILL STATE AND FEDERAL PERMIT STIPULATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR KNOWING, UNDERSTANDING, AND IMPLEMENTING ALL OF THE THESE REQUIREMENTS DURING ALL STAGES OF PROJECT CONSTRUCTION. THE CONTRACTOR MUST UNDERSTAND THAT SOME OF THESE REQUIREMENTS WILL ADD TIME AND/OR COST TO THE EXECUTION OF VARIOUS TASKS ASSOCIATED WITH PROJECT COMPLETION.

SUBMITTAL REQUIREMENTS

SHOP DRAWINGS FOR ALL FABRICATED MATERIALS SHALL BE SUBMITTED TO THE ENGINEER FOR WRITTEN APPROVAL PRIOR TO FABRICATION OR SHIPPING OF ANY ITEM. CERTIFICATIONS, MANUFACTURER'S DATA, AND OTHER INFORMATION FOR ALL MATERIALS, INCLUDING THOSE NOT SPECIFICALLY NOTED IN THE GENERAL NOTES OR SHOWN ON INDIVIDUAL DRAWINGS, SHALL BE SUBMITTED TO THE ENGINEER FOR WRITTEN APPROVAL. ALL METHODS AND MATERIALS SHALL CONFORM TO THE CONTRACT DOCUMENTS, GENERAL NOTES, THE PLANS, GOOD WORKMANSHIP, GENERALLY ACCEPTED INDUSTRY STANDARDS, AND MANUFACTURER'S RECOMMENDATIONS.

ELECTRONIC SUBMITTALS ARE PREFERRED. FOR HARD COPY SUBMITTALS, A MINIMUM OF THREE (3) SETS SHALL BE PROVIDED WITH EACH SUBMITTAL. REVIEWED COPIES WILL BE RETURNED TO THE CONTRACTOR AND MARKED AS REQUIRED FOR ACCEPTANCE OR NON-ACCEPTANCE. THE ENGINEER'S REVIEW OF SUBMITTALS WILL BE FOR GENERAL CONFORMANCE ONLY, AND IT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. ANY INTENDED DEVIATION FROM THE PLANS AND SPECIFICATIONS MUST BE SPECIFICALLY IDENTIFIED BY THE CONTRACTOR AND SPECIFICALLY APPROVED BY THE ENGINEER TO BE ACCEPTABLE. WORK PERFORMED BY THE CONTRACTOR PRIOR TO RECEIVING ENGINEER'S OR OWNER'S WRITTEN APPROVAL SHALL BE AT THE CONTRACTOR'S OWN RISK. ANY SUCH WORK REQUIRED BY THE ENGINEER OR OWNER TO BE REMOVED AND/OR REPLACED SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

LIST OF SUBMITTALS

THE FOLLOWING IS A LIST OF REQUIRED SUBMITTALS FOR THIS PROJECT (ADDITIONAL SUBMITTALS MAY BE REQUIRED AS INDICATED IN THE PROJECT SPECIFICATIONS):

- 1. CONSTRUCTION SCHEDULE
- 2. TRAFFIC CONTROL PLAN
- 3. DEMOLITION AND REPAIR PLANS
- 4. MORTAR REPAIR MATERIAL CERTIFICATIONS
- 5. CERTIFICATIONS FOR ALL STEEL USED INCLUDING CHEMISTRY, YIELD, AND MILL NUMBERS.
- 6. SHOP DRAWINGS
- 7. AWS WELDER QUALIFICATIONS/CERTIFICATIONS
- 8. RED-LINED AS-BUILT DRAWINGS

AS-BUILT PLANS

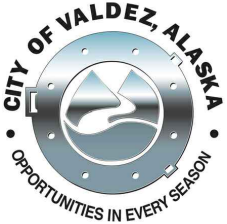
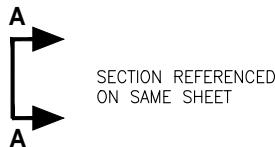
THE CONTRACTOR SHALL MAINTAIN A SET OF AS-BUILT PLANS IN THE ON-SITE PROJECT OFFICE. THE AS-BUILT PLANS SHALL BE KEPT UP TO DATE THROUGHOUT THE PROJECT WITH THE LATEST AS-BUILT DIMENSIONS AND DETAILS AS APPROVED BY THE ENGINEER AND SHALL BE SUBMITTED TO THE OWNER WITHIN 30 DAYS AFTER THE END OF THE PROJECT.

ABBREVIATIONS

ACI – AMERICAN CONCRETE INSTITUTE  
ADOT&PF – ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES  
AISC – AMERICAN INSTITUTE OF STEEL CONSTRUCTION  
ALT – ALTERNATE  
APPROX – APPROXIMATELY  
ASTM – AMERICAN SOCIETY OF TESTING AND MATERIALS  
AWS – AMERICAN WELDING SOCIETY  
BO – BOTTOM OF  
BTM – BOTTOM  
C – CHANNEL  
CVSS – CITY OF VALDEZ STANDARD SPECIFICATIONS AND STANDARD DETAILS  
CIP – CAST IN PLACE  
CLR – CLEAR  
℄ – CENTERLINE  
CL – CLASS  
CONC – CONCRETE  
CONT – CONTINUOUS  
CY – CUBIC YARD  
EA – EACH  
EL/ELEV – ELEVATION  
EOP – END OF PROJECT  
EW – EACH WAY  
E/EXIST – EXISTING  
FT/SEC – FEET PER SECOND  
GALV – GALVANIZED  
HDG – HOT-DIP GALVANIZED  
HORZ – HORIZONTAL  
HP – H-PILE SECTION  
HSS – HOLLOW STRUCTURAL SECTION  
HTL – HIGH TIDE LINE  
ID – INSIDE DIAMETER  
K/KIP – ONE THOUSAND POUNDS  
L – STEEL ANGLE  
LB – POUND  
LF – LINEAR FEET  
MAX – MAXIMUM  
ME – MATCH EXISTING  
MH – MANHOLE  
MHW – MEAN HIGH WATER  
MIN – MINIMUM  
MLLW – MEAN LOWER LOW WATER  
NA – NOT APPLICABLE  
NO – NUMBER  
NTS – NOT TO SCALE  
OC – ON CENTER  
OD – OUTSIDE DIAMETER  
OVS – OVERSIZED  
PL – PLATE  
PSF – POUNDS PER SQUARE FOOT  
PSI – POUNDS PER SQUARE INCH  
QTY – QUANTITY  
R – RADIUS  
REF – REFERENCE  
SS – STAINLESS STEEL  
SF – SQUARE FEET  
SHT – SHEET  
SIM – SIMILAR  
ST – SHORT TON  
STA – STATION  
STD – STANDARD  
SYMM – SYMMETRIC  
t – THICKNESS  
T&B – TOP AND BOTTOM  
TBD – TO BE DETERMINED  
TO – TOP OF  
TYP – TYPICAL  
UNO – UNLESS NOTED OTHERWISE  
UT – ULTRASONIC TESTING  
VCT – VALDEZ CONTAINER TERMINAL  
VERT – VERTICAL  
VT – VISUAL INSPECTION  
W/ – WITH  
W – WIDE FLANGE BEAM  
XX – DOUBLE EXTRA STRONG PIPE

LEGEND

	CONCRETE SPALL/DEFECT
	REPAIR AREA/MORTAR
	CONCRETE SURFACING
	MUDLINE
	EARTH/FILL



100% DESIGN  
2/18/2021

PND Engineers, Inc. (PND) is not responsible for safety programs, methods or procedures of operation, or the construction of the design shown on these drawings. Where specifications are general or not called out, the specifications shall conform to standards of industry. Drawings are for use on this project only and are not intended for reuse without written approval from PND. Drawings are also not to be used in any manner that would constitute a detriment directly or indirectly to PND.

REV	DATE	DESCRIPTION



DATE: 2/18/21

1506 West 36th Avenue  
Anchorage, Alaska 99503

Phone: 907.561.1011

Fax: 907.563.4220

www.pndengineers.com



PROJECT: CITY OF VALDEZ  
VCT CAUSEWAY REPAIRS

TITLE: GENERAL NOTES

DESIGNED BY:	MAB	DATE:	2/18/2021
CHECKED BY:	CC	PROJECT NO:	201125

SHEET NO: 11 OF 11