

SPIRIT LAKE FISH HATCHERY INTAKE IMPROVEMENTS IOWA DEPARTMENT OF NATURAL RESOURCES IDNR PROJECT NO. 19-01-30-08-REBID SPIRIT LAKE, IOWA 2021

LOCATION MAP



SHEET INDEX

GENERAL	
G.01	COVER SHEET
G.02	SITE LOCATION MAP
CIVIL	
C.01	LAKE INTAKE DETAILS

CERTIFICATION

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.	
		1/06/21 DATE
	MARK ALAN HARDIE, P.E. License Number: 14057 My license renewal date is December 31, 2022. Pages or sheets covered by this seal: ALL SHEETS.	

AUTHORIZATION TO BID

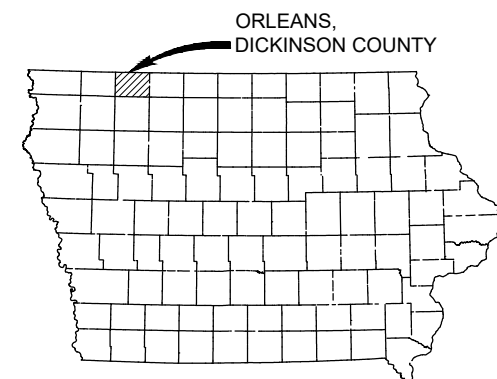
AUTHORIZATION - PARKS WILDLIFE FISHERIES LAW ENFORCEMENT FORESTRY
ENGINEERING BUREAU CHIEF _____ DATE _____



THE MOST CURRENT EDITION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) SHALL APPLY WHERE NOTED ON THIS PROJECT.



VICINITY MAP



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Phone: 605.334.4499 | Toll Free: 800.728.7805 | Fax: 605.338.6124 | HRGreen.com

DRAWN BY: JV	JOB DATE: 2017	BAR IS ONE INCH ON OFFICIAL DRAWINGS. IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY.
APPROVED: MAH	JOB NUMBER: 170075	
CAD DATE: 1/14/2021 4:05:56 PM		
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NO.	DATE	BY	REVISION DESCRIPTION



SPIRIT LAKE FISH HATCHERY
IOWA DEPARTMENT OF NATURAL RESOURCES
ORLEANS, IOWA

GENERAL
COVER SHEET

SHEET NO.
G.01



KEY NOTES:

- 1 PERFORM CLEARING AND GRUBBING AS NECESSARY TO PERFORM WORK. RESTORE AREA BACK TO ORIGINAL CONDITION. THE CONTRACTOR WILL BE ALLOWED TO INSTALL GRANULAR FILL (RIP-RAP) OUT FROM THE SHORELINE FOR TEMPORARY BARGE LOADING. ANY INSTALLED FILL SHALL BE REMOVED FOLLOWING CONSTRUCTION.

GENERAL NOTES:

- 1. PROTECT THE CONCRETE TRAIL AROUND MARBLE BEACH ACCESS POINT.

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SPIRIT LAKE FISH HATCHERY
 IOWA DEPARTMENT OF NATURAL RESOURCES
 ORLEANS, IOWA

GENERAL
 SITE LOCATION MAP

SHEET NO.
G.02

KEY NOTES:

- 1 EXISTING IN-LAKE INLET FOR DEMOLITION AND NEW INTAKE SCREEN.
- 2 EXISTING FILTER POND WILL BE IN DRAWDOWN WITH LEVELS BELOW THE INTAKE PIPE ELEVATION TO FACILITATE TV INSPECTION.
- 3 PERFORM CLEARING AND GRUBBING AS NECESSARY TO PERFORM WORK. RESTORE AREA BACK TO ORIGINAL CONDITION. THE CONTRACTOR WILL BE ALLOWED TO INSTALL GRANULAR FILL (RIP-RAP) OUT FROM THE SHORELINE FOR TEMPORARY BARGE LOADING. ANY INSTALLED FILL SHALL BE REMOVED FOLLOWING CONSTRUCTION.

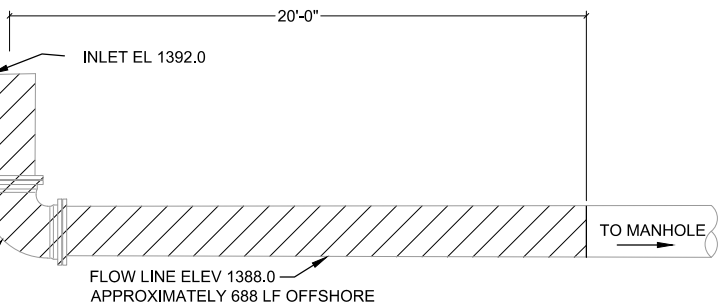
GENERAL NOTES:

- 1. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING INTAKE LINE. LOCATION SHOWN BASED ON AVAILABLE RECORD DRAWINGS.
- 2. ALL PIPING SHALL BE COMPLETELY RESTRAINED. NEW INTAKE PIPING SHALL BE FLANGED DUCTILE IRON PIPE WITH 316 STAINLESS STEEL BOLTS AND NUTS.
- 3. FIELD VERIFY DEPTH OF EXISTING 20" INTAKE PIPING PRIOR TO INSTALLATION OF NEW 20" INTAKE. EXISTING DRAWINGS INDICATE THE DEPTH OF WATER OVER THE PIPE WILL RANGE FROM 12.5 FT TO 14.5 FT DEPENDING OF SEASONAL VARIATIONS. CREST ELEVATION OF SPIRIT LAKE IS 1401.07.
- 4. GPS COORDINATES OF INTAKE
LONG: -95.09793
LAT: 43.44809



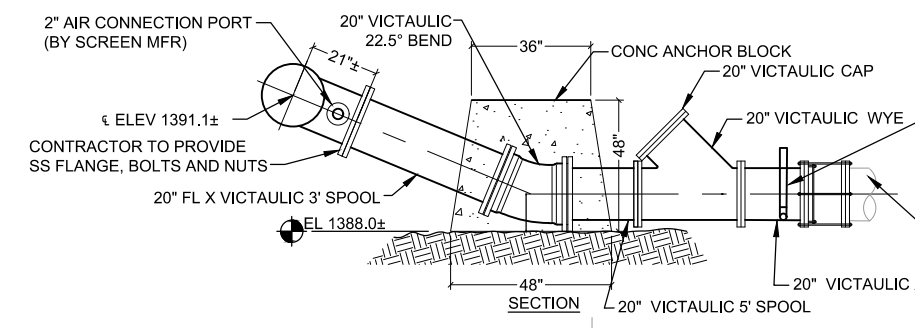
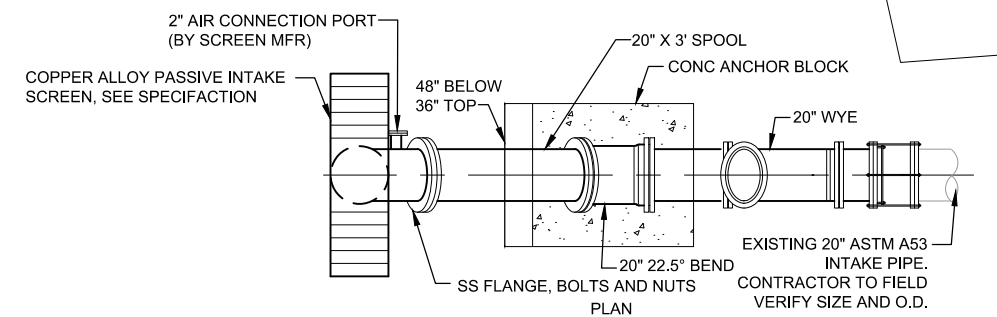
1 IN-LAKE INTAKE PIPE PLAN

SCALE: 1"=40'



2 IN-LAKE INTAKE DEMOLITION SECTION

SCALE: NONE



3 NEW INTAKE PLAN AND SECTION

SCALE: NONE

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SPIRIT LAKE FISH HATCHERY
IOWA DEPARTMENT OF NATURAL RESOURCES
ORLEANS, IOWA

CIVIL
LAKE INTAKE DETAILS

SHEET NO.
C.01