

RKS - LOCKS AND DAMS RENOVATION IRS AND UPGRADES

LOCATION MAPS

PROJECT NO 312001

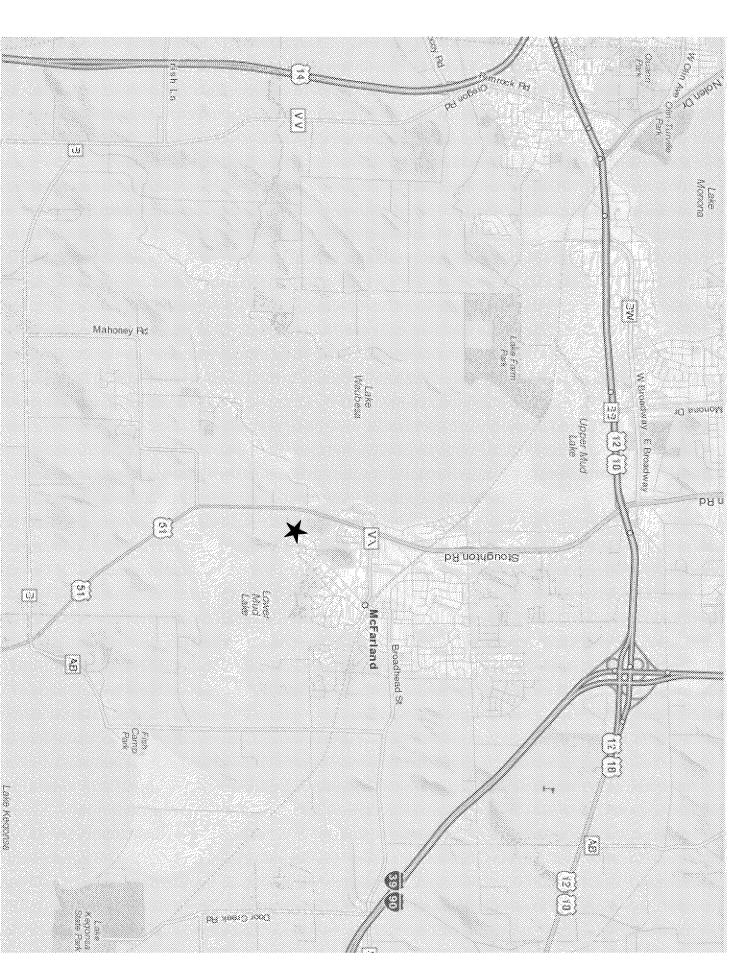
One Honey Creek Corporate Center 125 South 84th Street, Suite 401 Milwaukee, WI 53214-1470 414 / 259 1500 414 / 259 0037 fax

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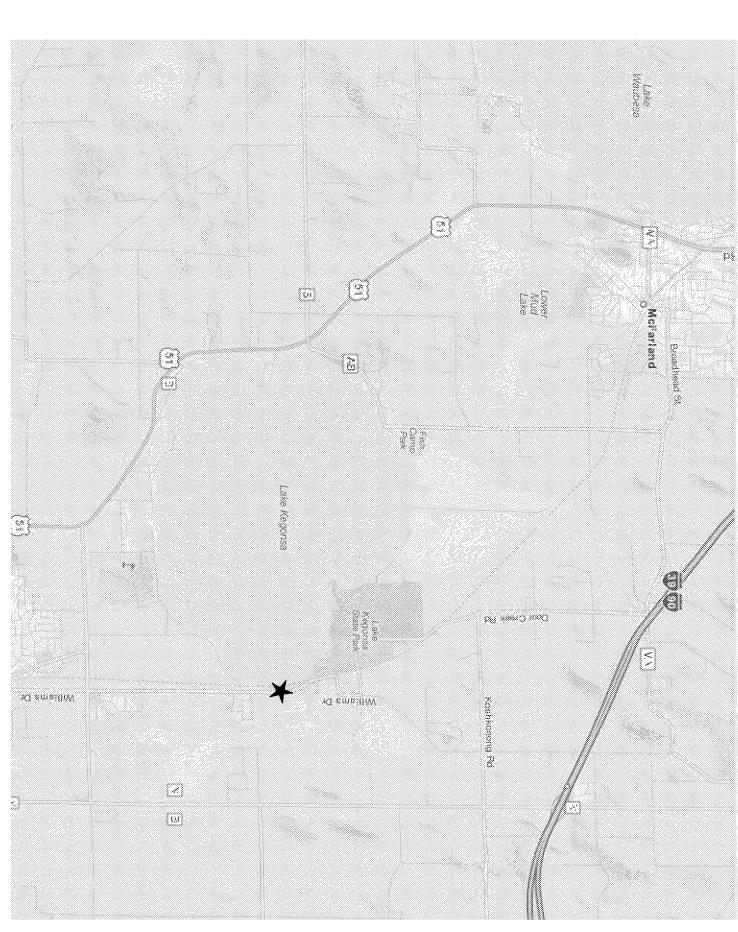
Dane County
Department of Public Works
Highway and Transportation
1919 Alliant Energy Center Way
Madison, Wisconsin 53173
(608)-266-4018



COMBINED LOCATION PLAN



BABCOCK LOCK AND DAM LOCATION PLAN



LAFOLLETTE LOCK AND DAM LOCATION PLAN

DRAWING INDEX

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collaborate

innovate

formulate

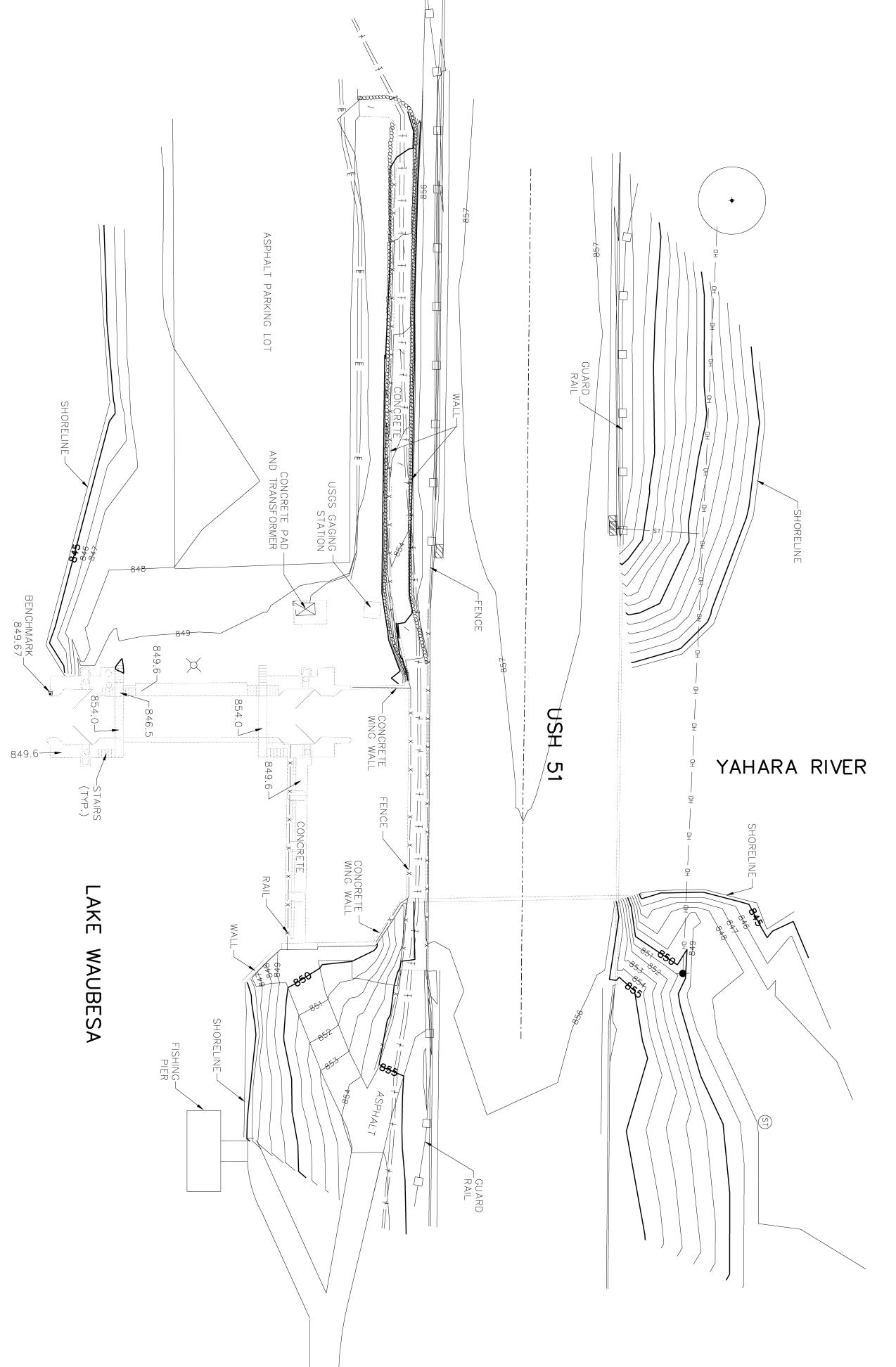
1) SITE SURVEY DATA PROVIDED BY ARNOLD AND O'SHERIDAN INC. FIELD VERIFY EXISTING STRUCTURE CONFIGURATION AND CONDITIONS PRIOR TO START OF CONSTRUCTION. IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, "DAMAGE TO TRANSMISSION FACILITIES", EXCAVATOR SHALL BE SOLEY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED IN THIS PROJECT, AND FURTHER, EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATORS WORK. CONTRACTOR, PRIOR TO ANY EXCAVATION WORK, SHALL NOTIFY (1) A DESIGNATED LOCATING SERVICE; (2) ALL UTILITIES, GOVERNMENTAL AGENCIES, ENTITIES, KNOWN TO, OR WHICH CAN REASONABLY BE ASSUMED TO, HAVE ABOVE OR BELOW GROUND PIPE, CONDUIT CABLES, STRUCTURES, OR SIMILAR ITEMS WITHIN LIMITS OF THE PROJECT; TO LOCATE AND MARK LOCATION OF SUCH ITEMS.

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CONSULTANTS:





DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:



EXISTING

SITE

PLAN

BABCOCK

LOCK

AND

10° 20°

TYPICAL WINTER WATER ELEVATIONS RANGE FROM 843.5 TO 844.25
TYPICAL WINTER WATER FLOW RATES RANGE FROM 300 TO 500 CFS
EXPECTED WATER ELEVATION FROM STORM EVENTS ARE 846.80
EXPECTED WATER FLOW RATES FROM STORM EVENTS ARE 1075 CFS

DATE: SCALE: CHECKED BY: DRAWN BY: PROJECT NUMBER: 2011-5012 APPROVED BY: PROJECT INFORMATION: \leq $\stackrel{\sf M}{=}$ AMZ 02-02-2012 AS SHOWN

EXISTING SITE PLAN -BABCOCK LOCK AND DAM

SHEET TITLE:

SHEET NUMBER:

2/1/2012 2:34:43 PM

I:\Jobs2011\20115012\CAD\Site\dgn\00\PHASE 2\C_00_5012_C-1.dgn

SANITARY MANHOLE
YARD CLEANOUT
STORM MANHOLE
STORM INLET
STORM CATCH BASIN
STORM CATCH BASIN
STORM CLEAN OUT
APRON ENDWALL
WATER MANHOLE
HYDRANT
WATER VALVE
SIAMESE CONNECT
POST INDICATOR VALVE
GAS METER
GAS VALVE
TRAFFIC SIGNAL
TRAFFIC SIGNAL

SIGN
MONITORING WELL
HANDICAP RAMP
HANDICAP STALL
STONE WALL
FENCE LINE
PROPERTY LINE
CENTER LINE

CAUTION

BENCH MARK
PROPERTY LINE
UTILITY EASEMENT
SETBACK LINE
EDGE OF WATER
WETLAND BOUNDARY
100 YEAR FLOOD BOUNDAR

SECTION CORNER FOUND
IRON STAKE FOUND
REBAR PLACED
CHISELED CROSS
DRILL HOLE
SURVEY NAIL
WOOD STAKE
RECORDED AS DATA
MEASURED DATA

LIGHT POLE

ELECTRICAL OUTLET

UTILITY POLE

GUY WIRE / DEAD MAN

TRAFFIC SIGNAL

TRAFFIC CONTROL BOX

ELECTRIC PEDESTAL

ELECTRIC METER

ELECTRIC MANHOLE

TELEPHONE PEDESTAL

TELEPHONE MANHOLE

CABLE PEDESTAL

SPRINKLER HEAD

BOLLARD

LEGEND

--BURIED WATER MAIN
--SANITARY SEWER
--STORM SEWER
--ROOF DRAIN
--OVERHEAD WIRES
--BURIED CABLE TV LINE
--BURIED ELECTRIC
--BURIED TELEPHONE
--FIBER OPTIC
--BURIED GAS MAIN
-CONTOUR
SPOT ELEVATION

ROPOSED SITE

NIC = NOT IN CONTRACT

PLAN

BABCOCK

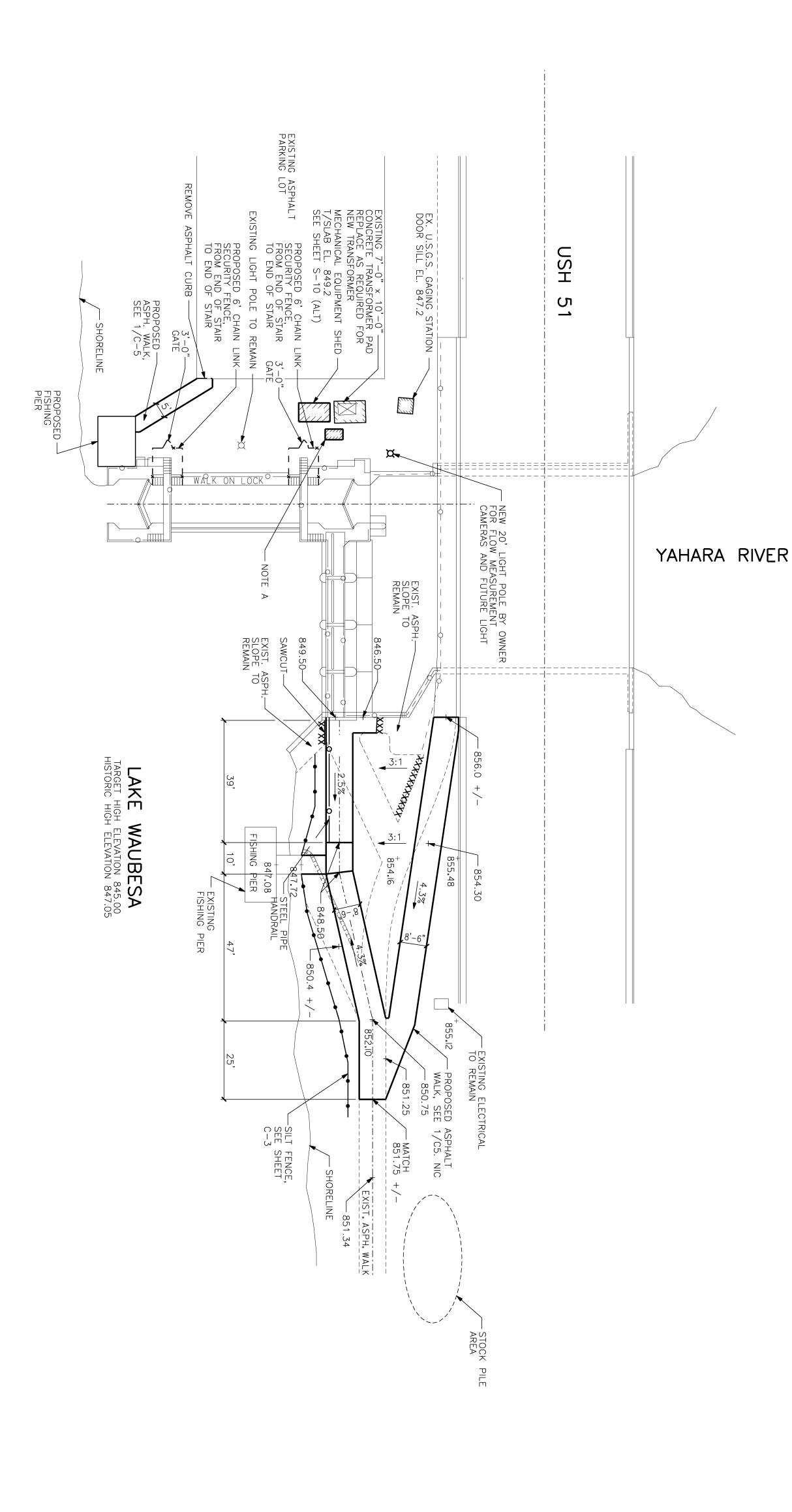
LOCK

AND

DAM

PLAN NOTES NOTE A = P

PROVIDE 36"x48"x10" ELECTRICAL CABINET ON (2) 4x4 POSTS FOR BASE BID. PROVIDE 72"x60"x30" ELECTRICAL CABINET ON 6" CONCRETE PAD OF ALTERNATE BID No. PROVIDE MECHANICAL SHED FOR ALTERNATE BID No. 7



DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:

One Honey Creek Corporate Center 125 South 84th Street, Suite 401 Milwaukee, WI 53214-1470 414 / 259 1500 414 / 259 0037 fax

CONSULTANTS:

www.graef-usa.com

PROPOSED SITE PLAN -BABCOCK LOCK AND DAM SHEET TITLE: SCALE:

AS SHOWN

CHECKED BY:

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APPROVED BY:

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DRAWN BY:

AMZ

DATE:

02-02-2012

PROJECT NUMBER: 2011-5012

PROJECT INFORMATION:

1) SITE SURVEY DATA PROVIDED BY ARNOLD AND O'SHERIDAN INC. FIELD VERIFY EXISTING STRUCTURE CONFIGURATION AND CONDITIONS PRIOR TO START OF CONSTRUCTION.

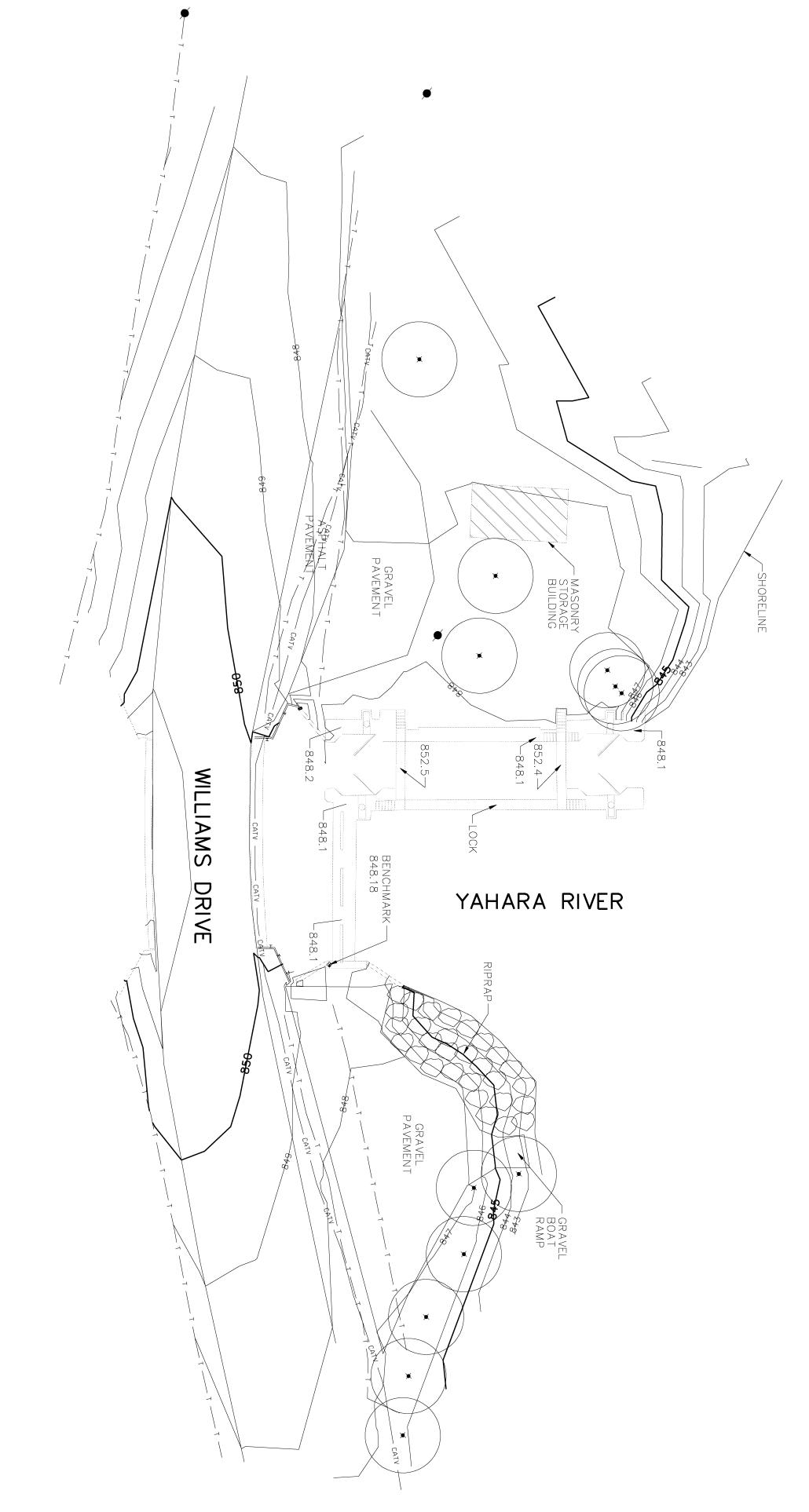
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DEPARTMENT OF PUBLIC WORKS
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PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:

AKE KEGONSA

EXISTING LOCK DAM

TYPICAL WINTER WATER FLOW RATES RANGE FROM 300 TO 500 CFS EXPECTED WATER FLOW RATES FROM STORM EVENTS ARE 978 CFS EXPECTED WATER ELEVATION FROM STORM EVENTS ARE 845.00 TYPICAL WINTER WATER ELEVATIONS RANGE FROM 842.5 TO 843.00

SCALE: DATE: CHECKED BY: DRAWN BY: PROJECT NUMBER: 2011-5012 APPROVED BY: PROJECT INFORMATION: ĭ \leq AMZ 02-02-2012 AS SHOWN

EXISTING SITE PLAN -LAFOLLETTE LOCK AND DAM SHEET TITLE:

SHEET NUMBER:

2/1/2012 2:35:09 PM

SANITARY MANHOLE
YARD CLEANOUT
STORM MANHOLE
STORM CATCH BASIN
STORM CATCH BASIN
STORM CATCH BASIN
STORM CLEAN OUT
APRON ENDWALL
WATER MANHOLE
HYDRANT
WATER VALVE
SIAMESE CONNECT
POST INDICATOR VALVE
GAS METER
GAS VALVE
TRAFFIC SIGNAL
TRAFFIC CONTROL BOX

SIGN
MONITORING WELL
HANDICAP RAMP
HANDICAP STALL
STONE WALL
—FENCE LINE
EDGE OF TREES
PROPERTY LINE
CENTER LINE

EXISTING BUILDING EXISTING CONCRETE EXISTING GRAVEL EXISTING ASPHALT

SECTION CORNER FOLIRON STAKE FOUND
REBAR PLACED
CHISELED CROSS
DRILL HOLE
SURVEY NAIL
WOOD STAKE
RECORDED AS DATA
MEASURED DATA

-BURIED WATER MAIN
-SANITARY SEWER
-STORM SEWER
-ROOF DRAIN
-OVERHEAD WIRES
-BURIED CABLE TV LINE
-BURIED TELEPHONE
-FIBER OPTIC
-BURIED GAS MAIN
-CONTOUR
SPOT ELEVATION

LIGHT POLE

ELECTRICAL OUTLET

UTILITY POLE

GUY WIRE / DEAD MAN

TRAFFIC SIGNAL

TRAFFIC CONTROL BOX

ELECTRIC PEDESTAL

ELECTRIC MANHOLE

TELEPHONE PEDESTAL

TELEPHONE MANHOLE

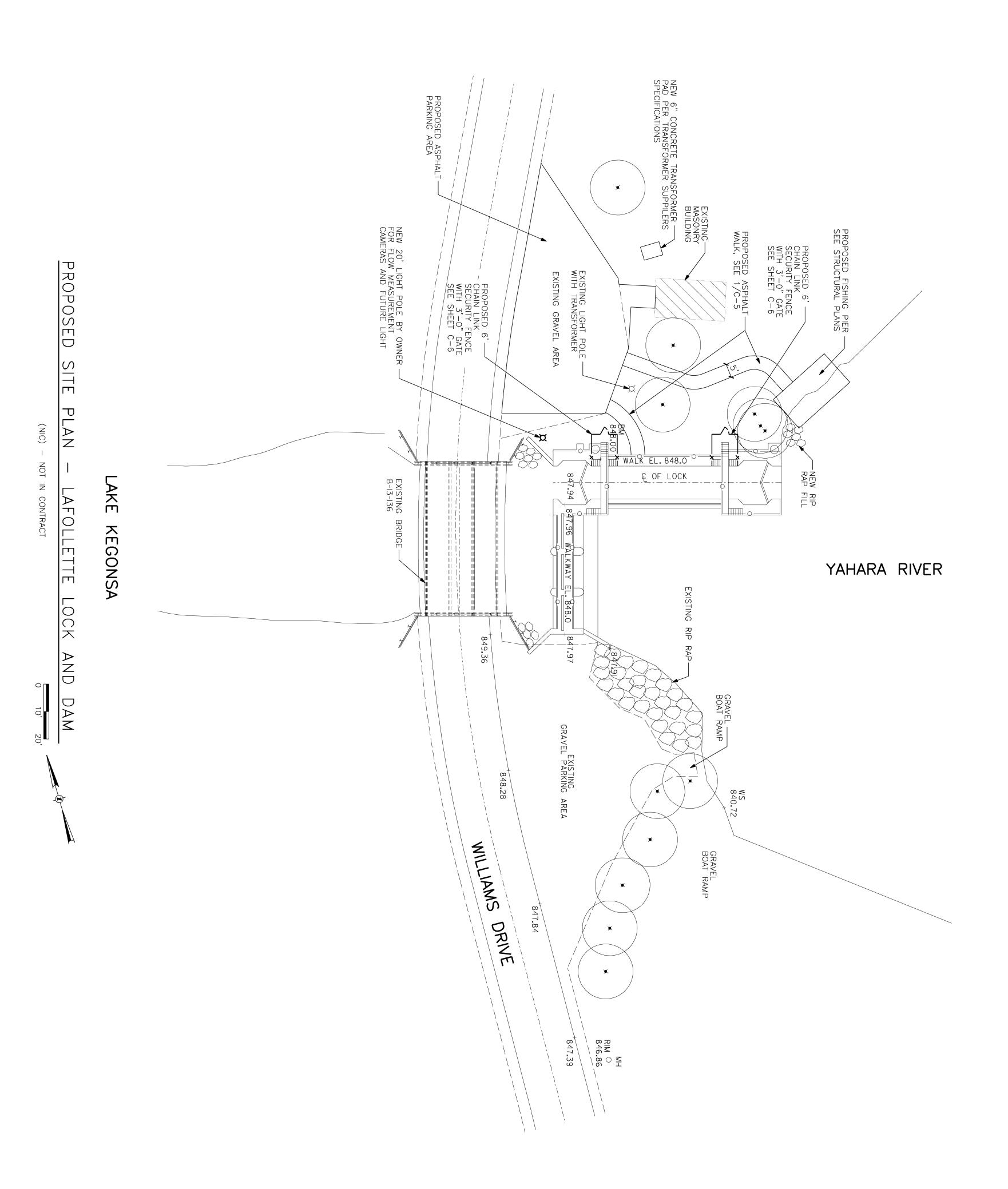
CABLE PEDESTAL

SPRINKLER HEAD

BOLLARD

LEGEND

(+)



DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:

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CONSULTANTS:

SHEET NUMBER:

PROPOSED SITE PLAN -LAFOLLETTE LOCK AND DAM

SHEET TITLE:

SCALE:

AS SHOWN

CHECKED BY:

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APPROVED BY:

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DRAWN BY:

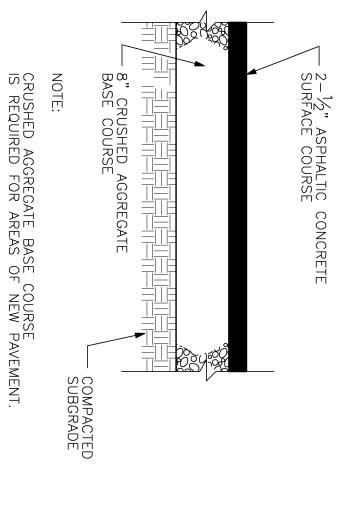
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DATE:

02-02-2012

PROJECT NUMBER: 2011-5012

PROJECT INFORMATION:





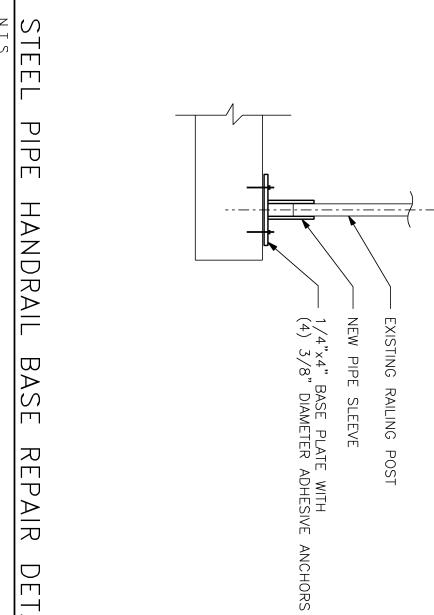
TYPICAL

<u>ASPHALT</u>

PAVING

CORD-

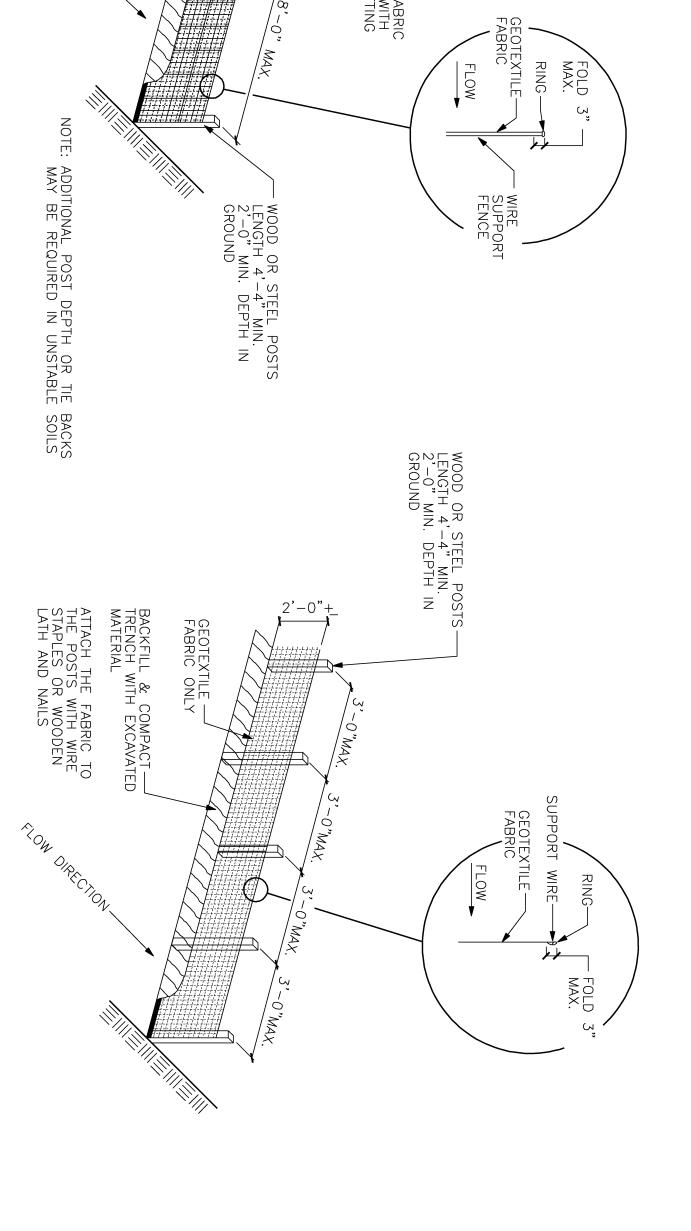
- SUPPORT NETTING



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- GEOTEXTILE FABRIC REINFORCED WITH SUPPORT NETTING

BACKFILL & COMPACT— TRENCH WITH EXCAVATED MATERIAL

GEOTEXTILE FABRIC——/ WITH ALTERNATE SUPPORT COMPONENTS

Con Olatorion

<u>ALTERNATE</u>

FENCE

DETAILS

<u>ALTERNATE</u>

| |B

PROJECT TITLE:

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT NUMBER: 2011-5012 PROJECT INFORMATION:

DATE: DRAWN BY: AMZ 02-02-2012

SCALE: CHECKED BY: APPROVED BY: \leq \leq AS SHOWN

SHEET TITLE:

SITE AND EROSION CONTROL DETAILS



- CONCRETE FOOTING

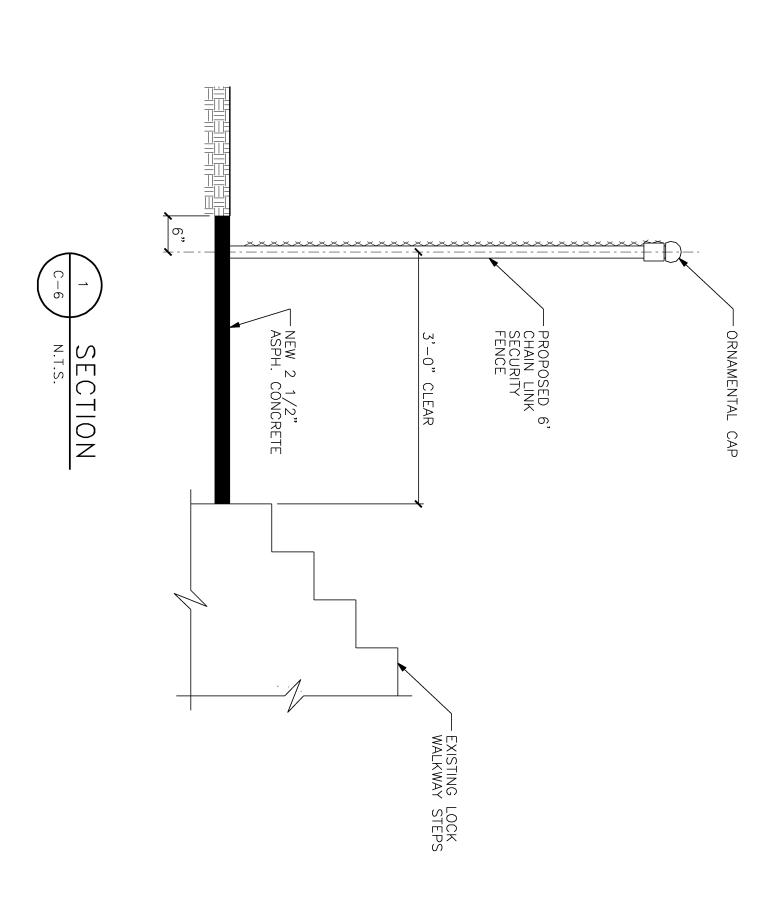
12" MIN.

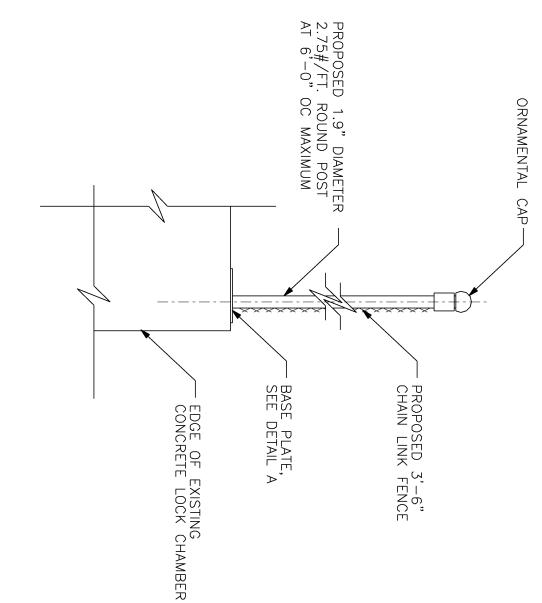
FILL WITH EXIST. SOIL (TYP.)

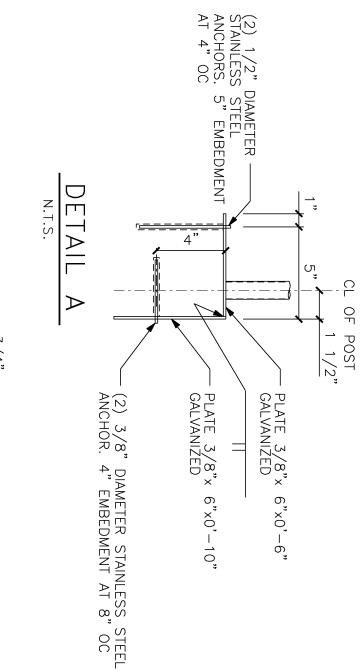
TENSION WIRE ——
END CLAMP (TYP.)

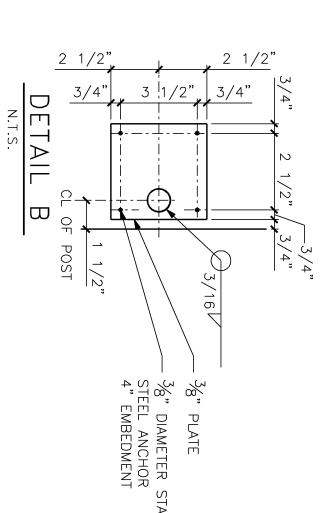
2'-8" MIN...

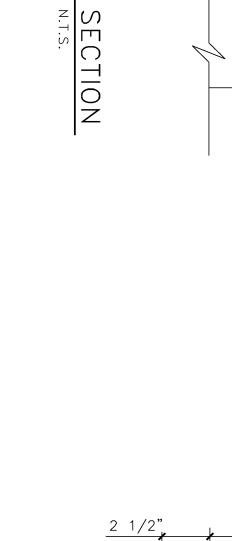
GATE HEIGHT

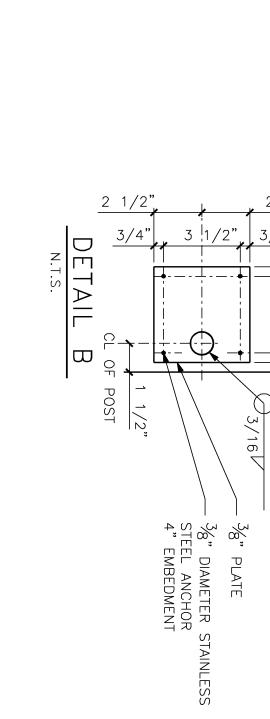












<u>NOTES</u>

OPENING (BETWEEN 3'-0"

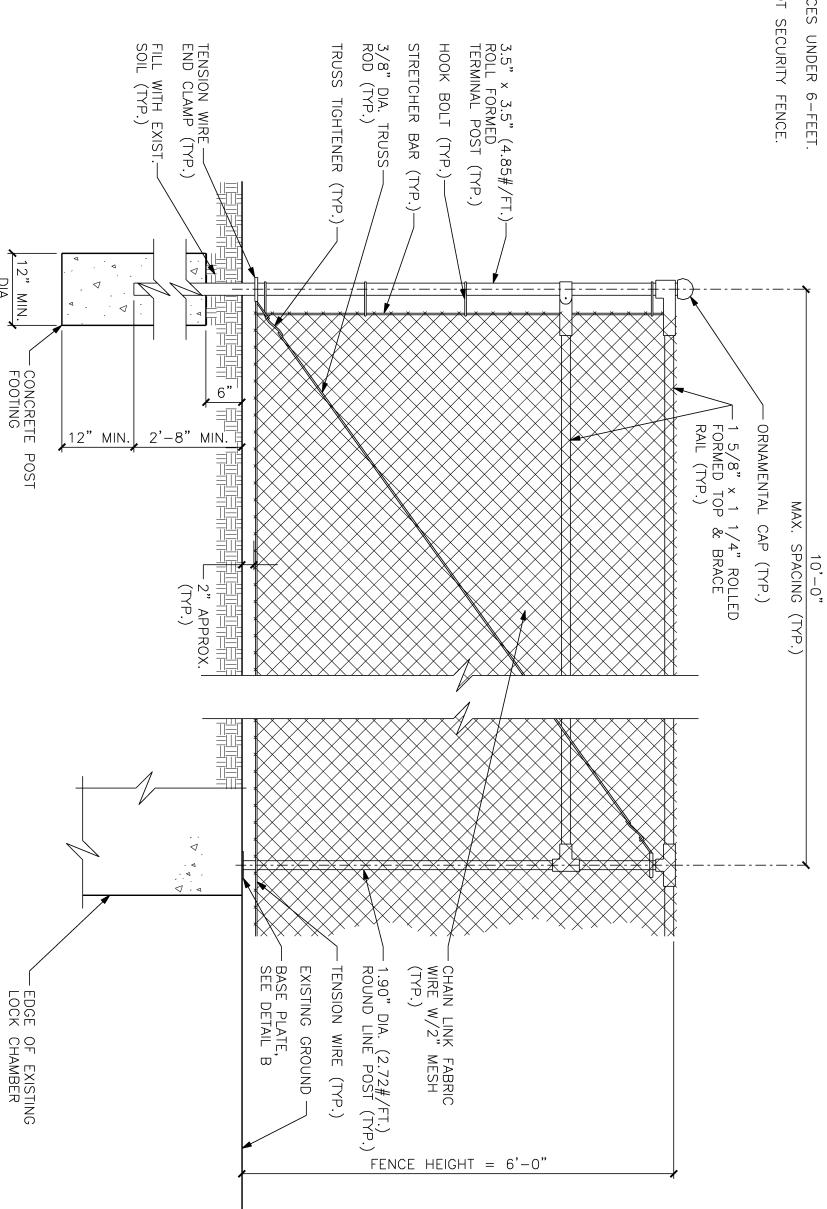
USE BOTTOM RAIL FOR ALL OTHER FENCES. USE BOTTOM TENSION WIRE FOR 6-FOOT SECURITY FENCE.

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:

- KNUCKLED SELVAGE FOR FENCES UNDER 6-FEET.
- USE TWISTED SELVAGE FOR 6-FOOT SECURITY FENCE.



TYPICAL TERMINAL POST

TYPICAL POST

OOTING

SCALE:

AS SHOWN

FENCE DETAILS

SHEET TITLE:

CHECKED BY:

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APPROVED BY:

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DRAWN BY:

AMZ

DATE:

02-02-2012

PROJECT NUMBER: 2011-5012

PROJECT INFORMATION:

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CONSULTANTS:

SCOUR VARIES FROM 2'-0" DEEP AT WEST END TO 3'-0" DEEP AT EAST END LENGTH OF LOCK = 74 FEET

N.T.S.

RAP

RESTORATION

SECTION

<u>ب</u>

?

1. SEE LAFOLLETTE SITE PLAN SHEET C-

-4 FOR LOCATIONS.

REMOVE EXISTING SAND AND GRAVEL AS REQUIRED FOR RIP RAP PLACEMENT.

PLACE RIPRAP BY ANY MECHANICAL MEANS THAT PRODUCE A COMPLETED JOB WITHIN REASONABLE TOLERANCES OF THIS SECTION. LIMIT HANDWORK TO THE AMOUNT NECESSARY TO FILL LARGE VOIDS OR TO CORRECT SEGREAGATED AREAS.

Ο.

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Q.

NOTES:

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2.0' THICKNESS
DEPTH FOR SCOUR
PROTECTION

DATE:

02-02-2012

PROJECT NUMBER: 2011-5012

0

SECTION N.T.S.

AGGREGATE

FIL

836.75

-TOP OF RIP SLOPE 2:1

- EXISTING STREAM BED

 $\frac{1}{2}$

OF HEAVY RIPRAP

EXISTING CONCRETE OR WOOD RETAINING WALL

IYPICAL WATER SURFACE VARIES SEE SHEET C-3

TOP OF RIP RAP OR FABRI MAT APPROXIMATELY 6" BE TOP OF APRON

- LOCK CHAMBER

EXISTING CONCRETE LOCK WALL

S SEE SHEET C-3

NOTE: SCOUR VARIES FROM 6" DEEP AT SOUTH END TO 1'-0" DEEP AT NORTH END FROM TOP OF SLAB LENGTH OF APRON = 42 FEET

SECTION N.T.S.

HYDRAULIC GROUT FILL OR BREAKER RUN FILL

FABRIFORM®—— CONCRETE BAG SEAL OR D50 = 24" RIP RAP

EDGE OF LIGHT
NON-WOVEN
GEOTEXTILE FABRIC
- EXISTING STEEL SHEETING

- EXISTING STREAM BED

0

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EXISTING

EXISTING AGGREGATE FILL

-RIP RAP FILL D₅₀ = 24" OR FABRIFOR

WAT VAR

ICAL ER SURFACE IES SEE SHEET C-3

DAM

-RIP RAP FILL D50 = 24" OR FABRIFOR

- TOP OF SCOUR REPA 6" BELOW TOP OF SI

TYPICAL WATER SURFACE VARIES SEE SHEET C-3

RIP RAP 2:1

EXISTING STEEL SHEETING

- FILTER FABRIC - EXISTING SAND OVER OLD RIP

- EXISTING STREAM BED

EXISTING AGGREGATE FILL

EXISTING STEEL SHEETING

EXISTING SAND OVER OLD RIP

- EXISTING STREAM BED

CONSULTANTS:

PROJECT TITLE:

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

NOTE: SCOUR VARIES FROM 3'-0" DEEP AT SOUTH END TO 1'-0" DEEP AT NORTH END WIDTH OF LOCK = 16 FEET

SECTION N.T.S.

ISSUE:

PROJECT INFORMATION:

USE BREAKER RUN ROCK OR 3"-4" OF EXISTING STONE TO ARMOR STREAM BOTTOM

SHEET TITLE:

SCALE:

AS SHOWN

CHECKED BY:

 $\stackrel{ extsf{S}}{=}$

APPROVED BY:

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DRAWN BY:

AMZ

SCOUR REPAIR DETAILS

SHEET NUMBER:

 $\frac{Z}{C}$

NOT

 \overline{Z}

CONTRACT

DESIGN IS IN ACCORDANCE WITH THE STATE OF WISCONSIN BUILDING CODE. REINFORCING STEEL SHALL DRILLED PIERS FOOTINGS SLABS ON GROUND DAY CONCRETE CYLINDER STRENGTH SHALL
ILLED PIERS
OTINGS
ABS ON GROUND
3500 PSI
3500 PSI
3500 PSI CONFORM TO ASTM A615 GRADE

CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 TYPE II CONCRETE MASONRY BRICK SHALL CONFORM TO ASTM C55 GRADE MORTAR SHALL CONFORM TO ASTM C270 TYPE N. =

MASONRY GROUT SHALL CONFORM TO ASTM C476. MINIMUM COMPRESSIVE STRENGTH SHALL BE f $_{\text{c}}=3000\,$ PSI.

MINIMUM COMPRESSIVE STRENGTH OF REINFORCED CONCRETE MASONRY SHALL BE $f^{\dagger}m \; = \; 2500 \; \text{PSI}.$ MINIMUM COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE MASONR CONSTRUCTION SHALL BE $f^{\dagger}m = 1500 \; \text{PSI}.$ CONSTRUCTION

STRUCTURAL STEEL PLATES, ANGLES, CHANNELS, AND OTHER ROLLED CONFORM TO ASTM A36. STRUCTURAL STEEL W-SHAPES SHALL CONFORM TO ASTM A992 GRADE embers shall

RECTANGULAR OR SQUARE HSS MEMBERS SHALL CONFORM TO AS ROUND HSS MEMBERS SHALL CONFORM TO ASTM A500 GRADE B. CONFORM TO ASTM A50 OO GRADE B.

STRUCTURAL WOOD FRAMING SHALL CONFORM TO NFPA NATIONAL SPECIFICATIONS (OR MEET ALL THE MINIMUM PUBLISHED VALUES) CAPS AND SILLS: SPECIES DF GRADE 2
JOISTS: SPECIES DF GRADE 2 LLOWS:

ASSUMED BEARING CAPACITY FOR SPREAD FOOTINGS IS 2000 PSF. CON-RETAIN GEOTECHNICAL ENGINEER TO VERIFY AT TIME OF CONSTRUCTION. REQUIRED BEARING CAPACITY FOR DRILLED PIERS IS 2000 TRACTOR SHALL

PIERS MECHANICAL LOADS: _OADS (IBC WALKWAYS 50 50

ROOF SNOW LOAD (ASCE 7-05)
OCCUPANCY CATEGORY (I
IMPORTANCE FACTOR Is = 1.0
GROUND SNOW LOAD Pg = 30 PSF
FLAT ROOF SNOW LOAD Pf = 25.2 PSF
EXPOSURE FACTOR Ce = 1.0
THERMAL FACTOR Ct = 1.2 30

LOAD (ASCE 7-05)
OCCUPANCY CATEGORY II
IMPORTANCE FACTOR IW = 1.0
BASIC WIND SPEED V = 90 MPH
EXPOSURE C
INTERNAL PRESSURE COEFFICIENT GCpi = +/- 0.18

RESISTANCE TO LATERAL LOADS ON STRUCTURE IS PROVIDED BY FLOOR, ROOF DIAPHRAGMS. CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY UNTIL ALL LATERAL SUPPORT SYSTEMS ARE IN PLACE AND FUNCTIONAL. AND BRACING

CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS JOB SITE SAFETY. WHILE THE DESIGN DOCUMENTS MAY REFERENCE OSHA, THEY ARE NOT INTENDED TO SPECIFICALLY IDENTIFY ALL APPLICABLE OSHA REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND COMPLY WITH ALL APPLICABLE OSHA REQUIREMENTS. ALL STRUCTURAL FRAMING AND CONNECTIONS HAVE BEEN DESIGNED FOR COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. ANY INVESTIGENCOUNTERED DURING STEEL ERECTIONS FOR ADEQUACY DURING THE STEED STRUCTURAL FRAMING AND CONNECTIONS FOR ADEQUACY DURING THE STEED AND CONSTRUCTION PROCESS IS THE SOLE RESPONSIBILITY OF THE CONTINUE OF THE CONTINUE OF THE SOLE RESPONSIBILITY OF THE CONTINUE OF THE CONTINUE OF THE SOLE RESPONSIBILITY OF THE SOLE RESPONSIBILITY. OF CONST THE FINAL AL LOADINGS IGATION OF THE TEEL ERECTION TRACTOR. RUCTION AND ALL

GENERAL NOTES

FOOTINGS SHALL BE CAST ON UNDISTURBED SUBSOIL. IF DESIGN CAPACITY IS NOT ENCOUNTERED AT THE ELEVATIONS SHOWN, FOOTINGS MUST BE LOWERED. CONSULT ENGINEER BEFORE PROCEEDING.

NO HOLES, TRENCHES OR DISTURBANCES OF THE SOIL SHALL BE ALLOWED WITHIN THE VOLUME DESCRIBED BY 45 DEGREE LINES SLOPING FROM THE BOTTOM EDGE OF THE FOOTING. IF SUCH ARE REQUIRED, FOOTINGS MUST BE LOWERED. BACKFILL EVENLY ON EACH SIDE OF RETAINING WALLS

TOPSOIL AND FILL BELOW SLABS ON GROUND SHALL BE REMOVED. AGGREGATE BASE COURSE UNDER SLABS ON GROUND SHALL BE 8—INCH CRUSHED GRAVEL COMPACTED TO 4—INCH LAYERS. BACKFILL AGAINST INTERIOR FOUNDATION WALLS SHALL BE SPOIL BACTO MAXIMUM 6—INCH LAYERS. CKFILL COMPACTED

BACKFILL AGAINST EXTERIOR FOUNDATION WALLS SHALL TO MAXIMUM 6—INCH LAYERS. BE SPOIL BACKFILL COMPACTED

FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION. REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE "MANUAL OF CONCRETE PRACTICE", LATEST EDITION, UNLESS OTHERWI E WITH THE ACI

CONCRETE PROTECTION FOR REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318-05 OR AS NOTED LAP ALL WALL BARS 30 DIAMETERS UNLESS OTHERWISE DETAILED. LAP WELDED WIRE MESH 6 INCHES.

CONTRACTOR SHALL CONCRETE. DO NOT PLACE OR CUT HOLES IN CONCRETE SLABS OR WALLS WITHOUT PRIOR APPROVAL OF THE ENGINEER. NOTIFY ENGINEER AT LEAST 48 HOURS PRIOR TO PLACING

AIR CONTENT SHALL BE

EXTERIOR EXPOSED CONCRETE SHALL BE AIR-ENTRAINED. 6 PERCENT $(+/-1\ 1/2\ PERCENT)$.

PIPES AND CONDUITS SHALL NOT BE EMBEDDED IN CONCRETE. ELECTRICAL CONDUIT OR PIPES PASSING THROUGH SLABS OR WALLS AND PLACED SO THAT: SHALL BE LOCATED

1. THEY ARE NOT CLOSER THAN THREE DIAMETERS ON CENTER. 2. THEY RUN BETWEEN REINFORCING AND DO NOT DISPLACE IT IN

2. THEY KUN LL NOT BE PLACED ALUMINUM CONDUITS SHALL NOT BE PLACED CONCRETE CORNERS PLACED IN CONCRETE. MANNER.

CONCRETE SHALL BE TESTED BY THE CONTRACTOR'S TESTING FOR REQUIREMENTS. REFER TO SPECIFICATIONS

CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE MIXES

PROPER CURING PROCEDURES SHALL BE USED FOR ALL SLAB ON GR/ ADE $\ \, \neg$ PREVENT CURLING.

CONCRETE MASONRY

900

INTERNATIONAL

PRODUCTION AND CONSTRUCTION OF CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES", ACI 530-05, AND THE NCMA "TEK MANUAL FOR CONCRETE MASONRY DESIGN AND CONSTRUCTION", LATEST EDITION.

COLD WEATHER CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE IMIAC "RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR COLD WEATHER MASONRY AND CONSTRUCTION" LATEST EDITION.

MASONRY WALLS SHALL BE ADEQUATELY BRACED TO RESIST WIND FORCES UNTIL PERMANENT DESIGN SUPPORTS ARE IN PLACE AND FUNCTIONAL. BRACING SHALL BE DESIGNED BY THE CONTRACTOR. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.

PROVIDE DOWELS INTO FOUNDATION THE SAME SIZE AND NUMBER AS WALL REINFORCING LAP REINFORCING BARS 48 DIAMETERS.

CONCRETE MASONRY WALLS SHALL BE REINFORCED AT EVERY OTHER BED JOINT WITH 9 GAGE TRUSS TYPE JOINT REINFORCEMENT.

ALL DOOR AND WINDOW JAMBS SHALL BE GROUTED SOLID 8 INCHES WIDE UNLESS SHOWN OTHERWISE. ALL BOND BEAMS SHALL BE REINFORCED AS SHOWN ON THE DESIGN DRAWINGS AND FILLED WITH GROUT. VERTICAL BARS SHOWN ON THE DESIGN DRAWINGS SHALL BE PLACED IN A CONTINUOUS UNOBSTRUCTED CELL OF NOT LESS THAN 3 INCHES BY 4 INCHES.

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WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW LINTEL REACTIONS SHALL BE 16 INCHES DEEP BY 16 INCHES LONG.

STRU -

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC ISTEEL CONSTRUCTION MANUAL", THIRTEENTH ADDITION, AND THE AISC ICODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGESI, MARCH 18, 2005 EDITION.

ALL STRUCTURAL AND MISCELLANEOUS STEEL WHICH SHALL REMAIN EXPOSED TO VIEW SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL", LATEST EDITION, WITHOUT GAPS OR OPEN JOINTS.

ALL WELDING SHALL COMPLY WITH AWS D1.1 USING E70XX ELECTRODES. ALL WELDING TO BE DONE BY AWS PREQUALIFIED WELDERS, CERTIFIED FOR WELDS MADE. PROVIDE CONTINUOUS MINIMUM SIZED WELDS PER AISC REQUIREMENTS, UNLESS NOTED OTHERWISE.

THE MINIMUM SIZE OF FILLET WELDS SHALL BE AS SPECIFIED IN TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL".

BOLTED CONNECTIONS SHALL BE MADE WITH ASTM A325 HIGH STRENGTH BOLTS MINIMUM 3/4—INCH DIAMETER). CONNECTIONS SHALL SUPPORT, AT A MINIMUM, ONE—YALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN IN THE AISC TABLES OF UNIFORM LOAD CONSTANTS FOR THE GIVEN BEAM, SPAN, AND STEEL SPECIFIED, UNLESS OTHERWISE DETAILED. BEAM—TO—BEAM AND BEAM—TO—COLUMN FRAMING CONNECTIONS SHALL BE MADE WITH DOUBLE ANGLES UNLESS OTHERWISE DETAILED.

ALL STRUTS, HANGERS, AND BRACES SHALL HAVE CONNECTIONS DESIGNED TO DEVELOP THE FULL ALLOWABLE TENSILE STRENGTH OF THE MEMBER UNLESS THE DESIGN FORCE S INDICATED ON THE DRAWINGS, IN WHICH CASE THE CONNECTIONS SHALL BE DESIGNED FOR THE FORCE INDICATED.

COLUMN BASE PLATES SHALL HAVE OVERSIZED HOLES WITH PLATE WASHERS (MINIMUM $3/8-\mathrm{INCH}$ THICK) PROVIDED WITH ANCHOR RODS.

GROUT UNDER BASE PLATES IN ACCORDANCE WITH THE "AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", MARCH 18, 2005 EDITION.

CLEAN, PREPARE, AND SHOP PRIME INTERIOR EXPOSED STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH SSPC STANDARDS SP-1 AND SP-3.

ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER SHALL BE HOT—DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS OTHERWISE NOTED.

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:

WOOD - E

ERECTION OF ALL WOOD FRAMING SHALL CONFORM TO THE NATIONAL FOREST PRODUCTS ASSOCIATION DESIGN SPECIFICATIONS, AMERICAN PLYWOOD ASSOCIATION, AND THE STATE OF WISCONSIN IBC BUILDING CODE, LATEST EDITIONS.

DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER. ROOF DECK SHALL BE 5/8-INCH APA RATED SHEATHING, EXPOSURE 1. SEE SHEATHNG LAYOUT AND FASTENING SCHEDULE.

SOFFIT SHEATHING SHALL BE 1/2—INCH APA RATED SHEATHING, EXPOSURE 2. NAILING OF ROOF SOFFIT SHEATHING SHALL BE:

8d at 6 inches on center at panel edges

INSTALL ALL SHEATHING WITH THE LONG DIMENSIONS OF THE PANEL ACROSS SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS. STAGGER PANEL END JOINTS. ALLOW 1/8—INCH SPACING AT PANEL ENDS AND EDGES UNLESS OTHERWISE RECOMMENDED BY THE SHEATHING MANUFACTURER. 8d AT 6 INCHES ON CENTER AT PANEL EUGES

8d AT 12 INCHES ON CENTER AT INTERMEDIATE FRAMING MEMBERS

ALL NAILING SHALL BE CAREFULLY DRIVEN AND NOT OVERDRIVEN. PROHIBITED. SHEATHING NAILS SHALL BE HOT-DIPPED GALVANIZED. THE USE OF STAPLES IS

WOOD

TRUSSES

WOOD PLATE CONNECTED TRUSSES SHALL BE DESIGNED, MANUFACTURED, AND ERECTED IN ACCORDANCE WITH THE STATE OF WISCONSIN BUILDING CODE AND THE TRUSS PLATE INSTITUTE.

SHOP DRAWINGS AND OTHER ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL TO THE ENGINEERS. THE ENGINEERIS REVIEW WILL BE BASED ON THE CONTRACT DOCUMENTS. THE ENGINEERIS REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLEY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSIONS, ETC. TRUSS MANUFACTURER SHALL PROVIDE ALL TRUSS-TO-TRUSS CONNECTIONS

ALL ROOF TRUSSES SHALL BE SECURED TO THE TOP PLATES WITH SIMPSON TYPE UPLIFT CONNECTORS PROVIDED BY THE TRUSS SUPPLIER WITH MINIMUM G60 GALVANIZED COATING OF TRUSSES UNTIL

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING PERMANENT BRACING IS IN PLACE.

DOUBLE 2 X 4 CONTINUOUS BLOCKING SHALL BE PROVIDED AT THE PEAK OF THE RIDGE. WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE FOLLOWING LOADS:

WIND LOADING SHALL BE LIVE LOAD - 30 PSF (ON THE HORIZOTAL PROJECTION)
DEAD LOAD - 8 PSF (ON THE SURFACE AREA) \bar{z} ACCORDANCE WITH ASCE 7-08

TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL OF THE TRUSS MANUFACTURER. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT BRACING AND BLOCKING AS REQUIRED FOR SAFE ERECTION AND PERFORMANCE OF THE TRUSSES, THE GUIDELINES SET FORTH BY THE TRUSS PLACE INSTITUTE PUBLICATION DHIB—91 COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSESD SHALL BE A MINIMUM REQUIREMENT.

DIMENSIONS OF EXISTING CONSTRUCTION OR CONSTRUCTION IN PROGRESS SHALL BEVERNING OF STRUCTURAL COMPONENTS. VERIFY AND COORDINATE, WITH ALL CONTRACTORS, THE LOCATION APPURTENANCES AND OPENINGS. 9F ALL MECHANICAL

EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT TZ.

ADHESIVE ANCHORS SHALL NO CONSTRUCTION DEBRIS DEBRIS SHALL BE ALLOWED TO REMAIN ON RIVER

> DATE: DRAWN BY: PROJECT NUMBER: 2011-5012 PROJECT INFORMATION: AMZ 02-02-2012

SHEET TITLE:

GENERAL NOTES

SCALE:

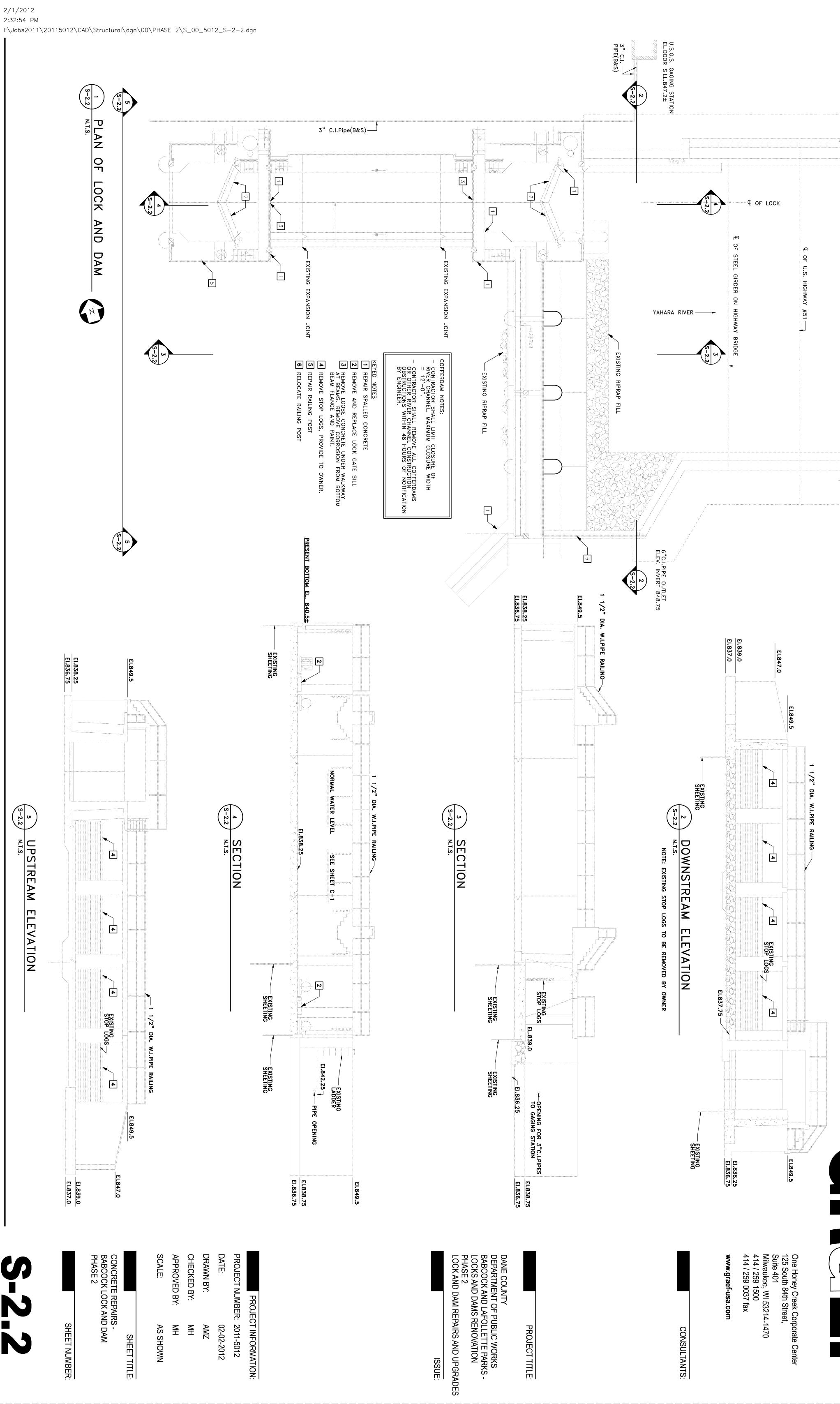
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SHEET NUMBER:

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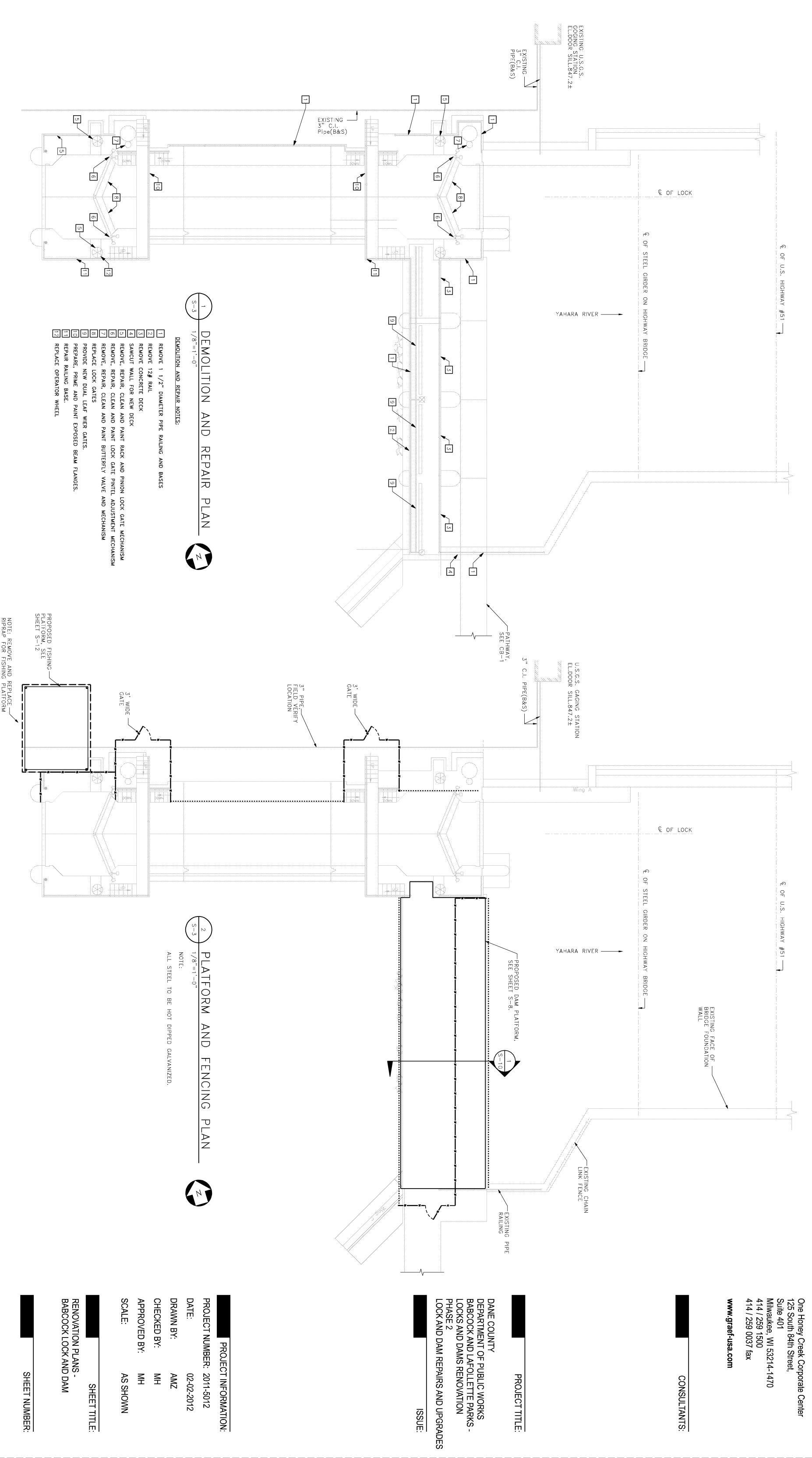
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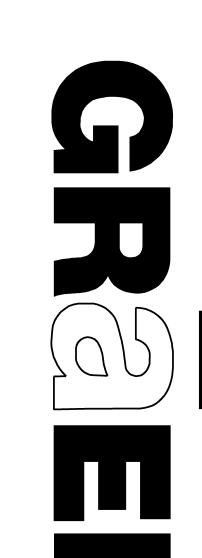
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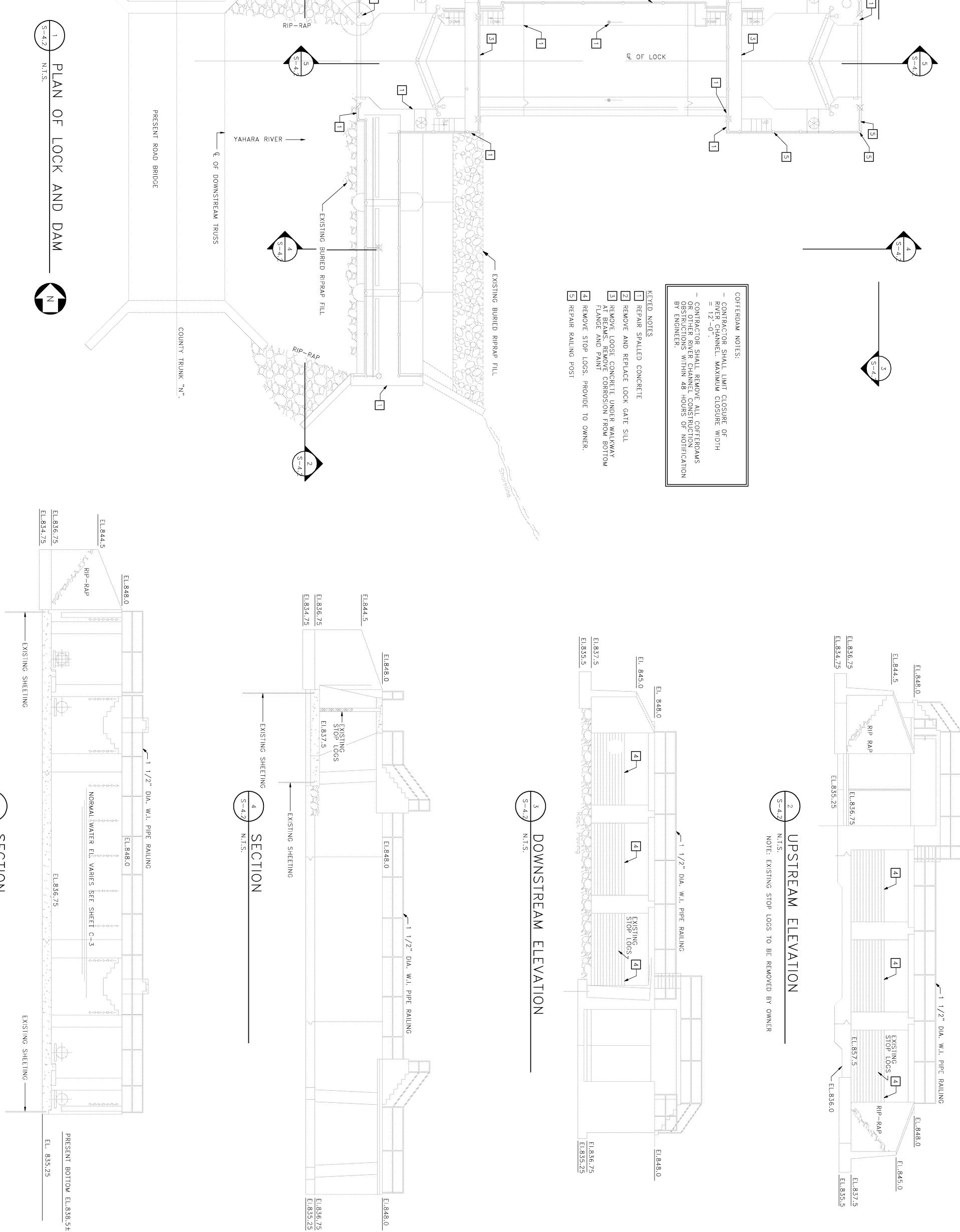
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DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:

1 1/2" DIA. W.I. PIPE RAILING -

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CONCRETE REPAIRS -LA FOLLETTE LOCK AND DAM PHASE 2

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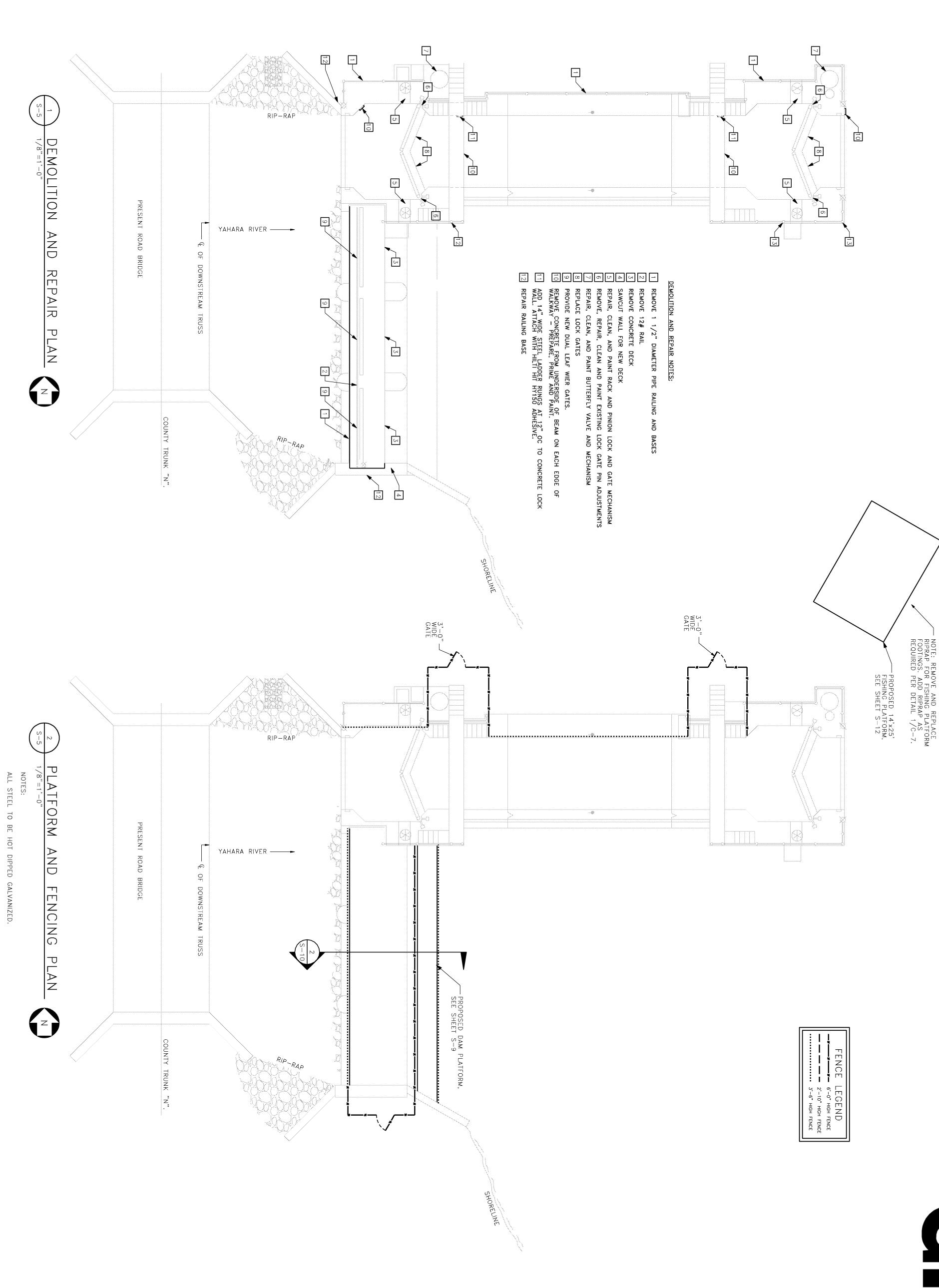
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PROJECT NUMBER: 2011-5012

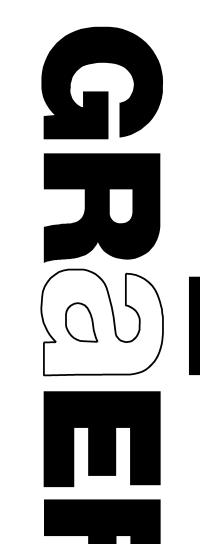
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DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
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RENOVATION PLANS -LA FOLLETTE LOCK AND DAM

SHEET TITLE:

DATE:

02-02-2012

PROJECT NUMBER: 2011-5012

PROJECT INFORMATION:

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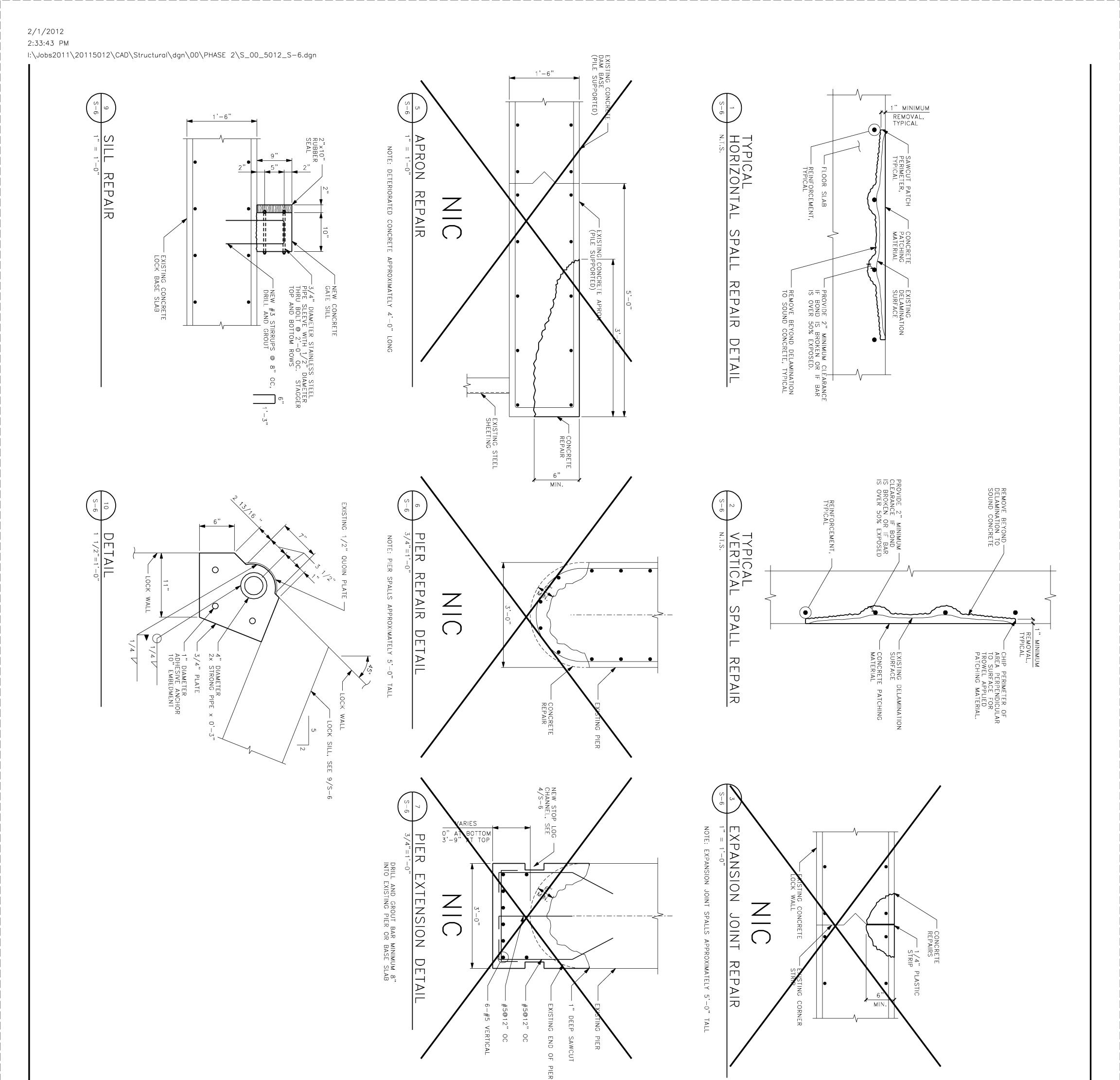
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3/8"

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BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

PROJECT TITLE:

FACE OF WINGW OR LOCKWALL

PLATE 3/8"x13"

0 P

LOG

CHANNEL

DETAIL

ISSUE:

PLATE 3/8"x3" FULL HEIGHT OF PLATE

DIAMETER STAINLESS STEEL SION ANCHORS @ 10" OC BEDMENT

NOTES:

STOP LOG ASSEMBLY TO BE HOT DIPPED GALVANIZED WITH 2.0 OZ/SF COATING.

4 STOP LOG CHANNELS REQUIRED.

"=1'-0"

STOP LOG CHANNEL AT

PROJECT NUMBER: 2011-5012 PROJECT INFORMATION: 02-02-2012

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CONCRETE REPAIR DETAILS SHEET TITLE:

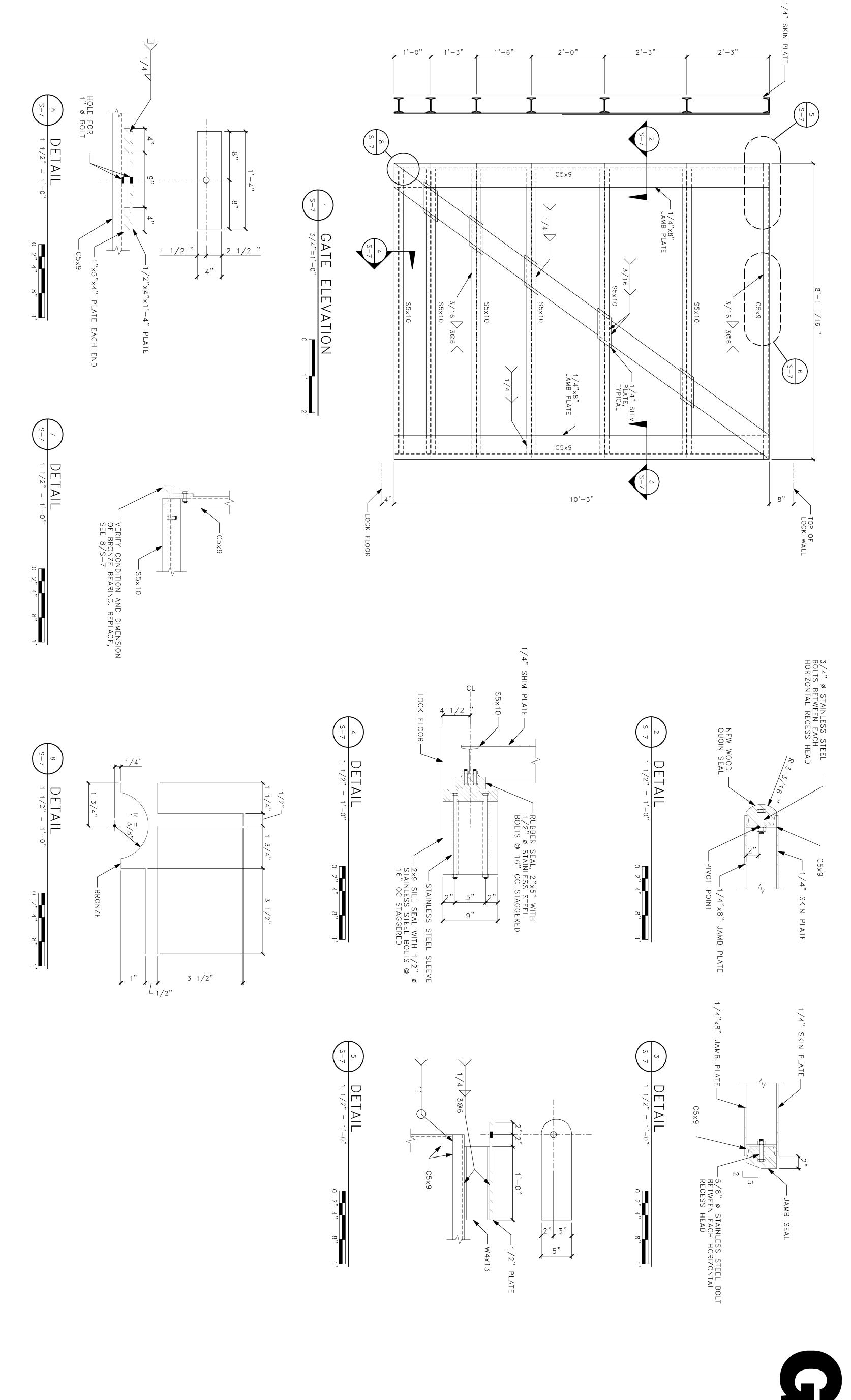
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CONTRACT



DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

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LOCK GATES ELEVATION AND DETAILS SHEET TITLE: SCALE:

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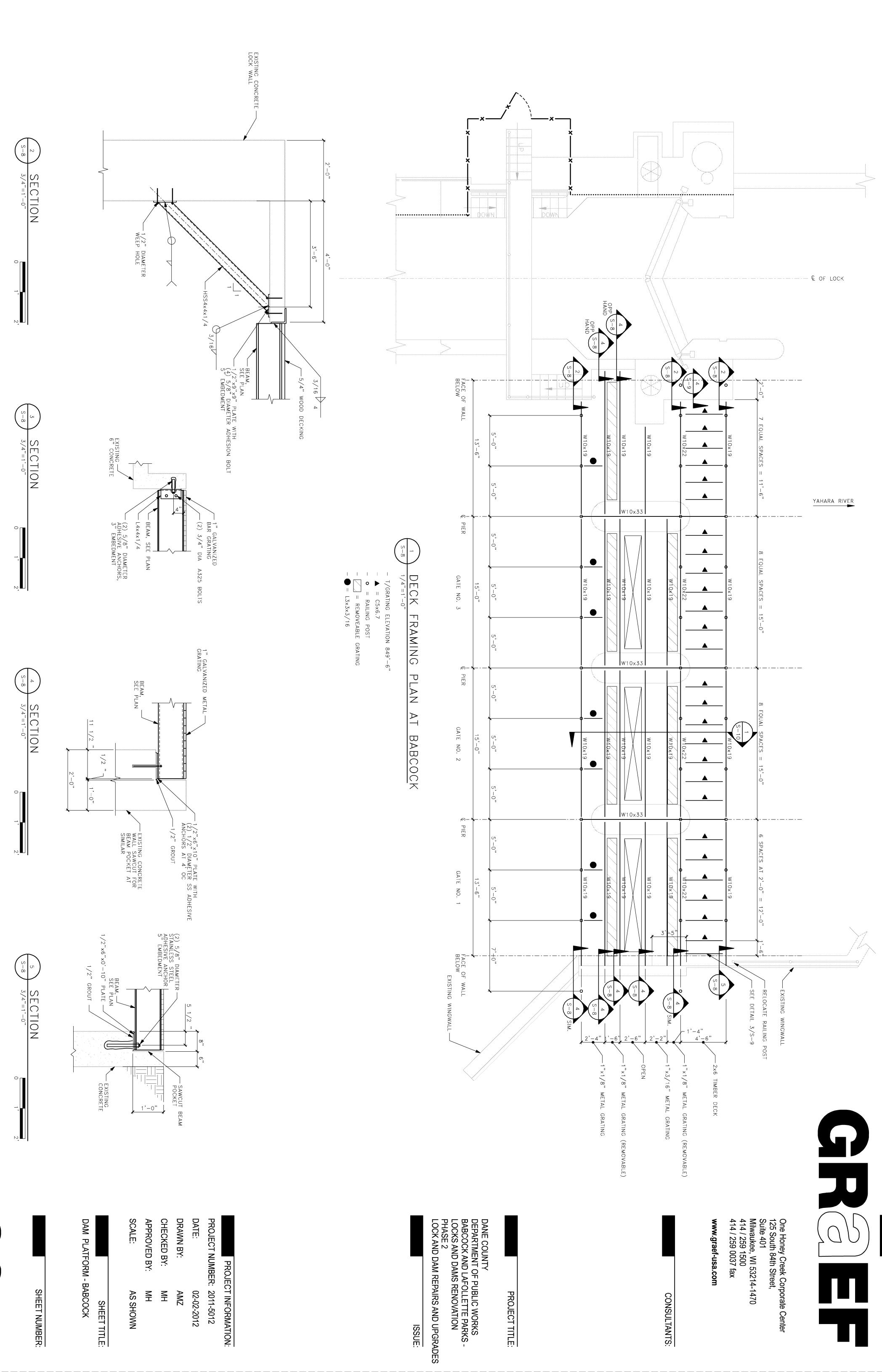
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PROJECT NUMBER: 2011-5012

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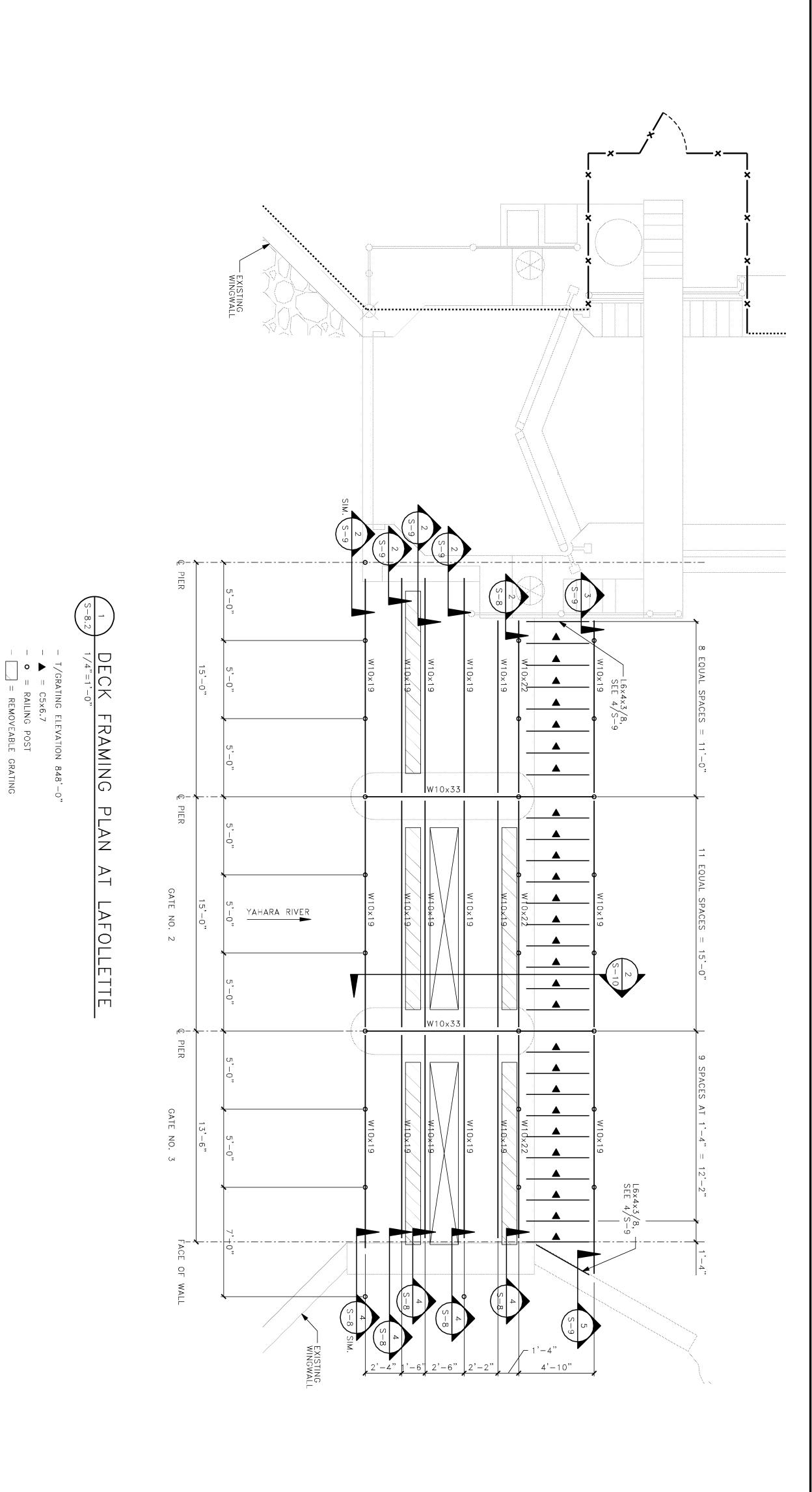
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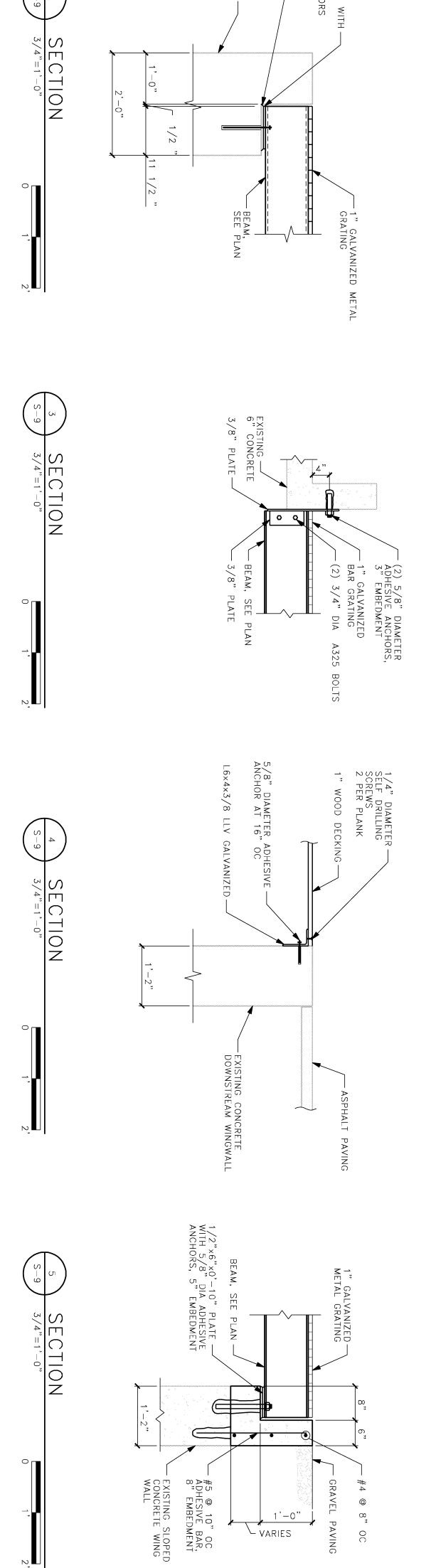
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PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

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PROJECT NUMBER: 2011-5012

DAM PLATFORM - LAFOLLETTE SHEET TITLE: SCALE:

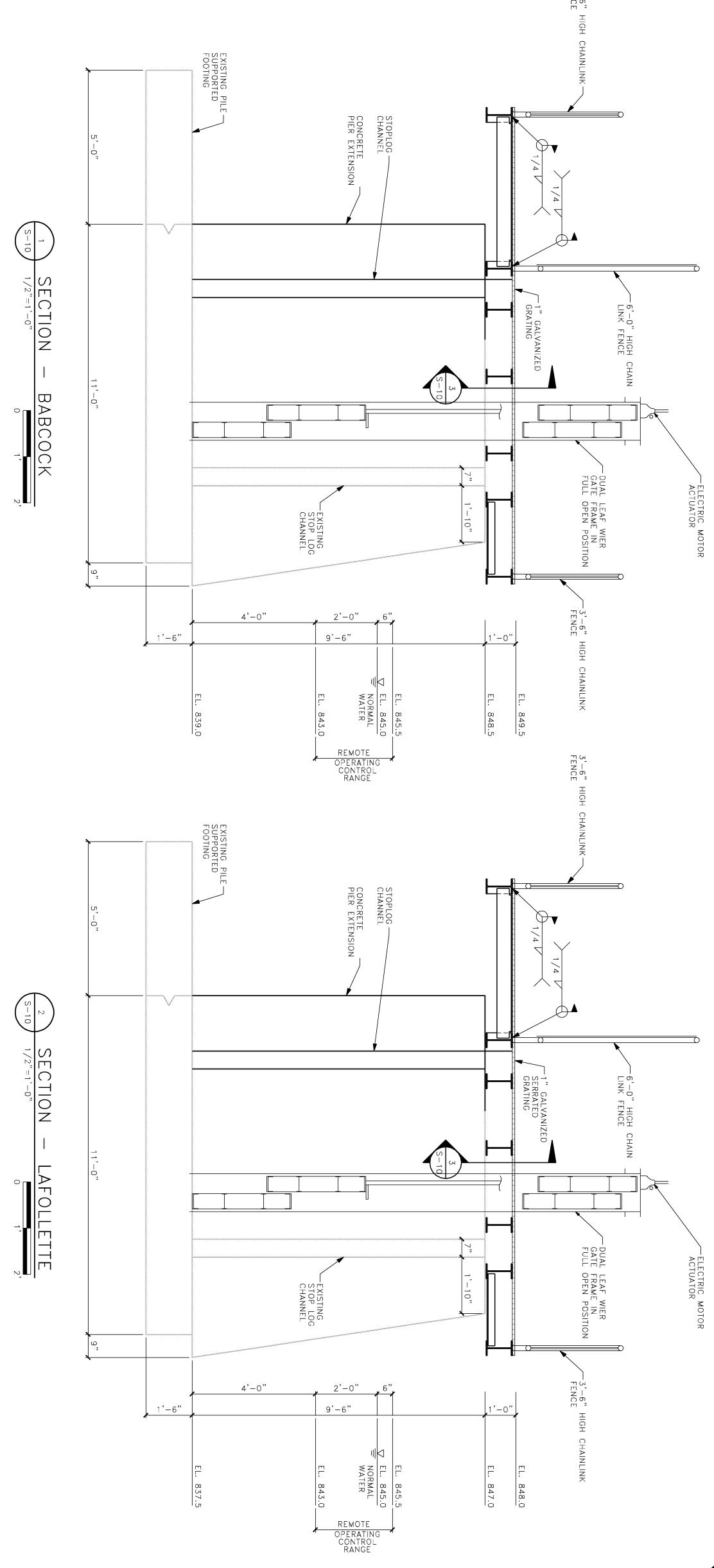
AS SHOWN

(4) 3/4" DIAMETER - ADHESIVE ANCHOR, 10" EMBEDMENT

-EXISTING CONCRETE PIER

- 1" GALVANIZED BAR GRATING

SECTION 3/4"=1'-0"



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DAM GATE SECTIONS AND DETAILS

SHEET TITLE:

DATE:

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PROJECT NUMBER: 2011-5012

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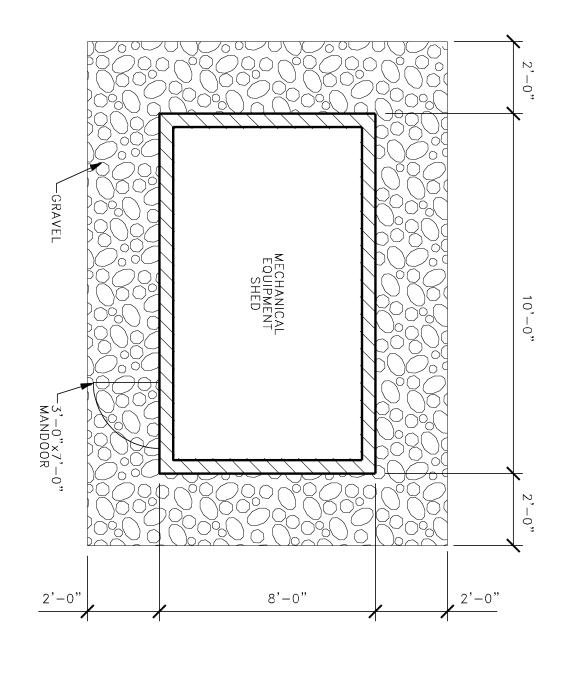
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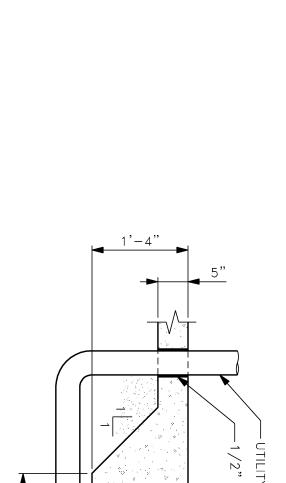
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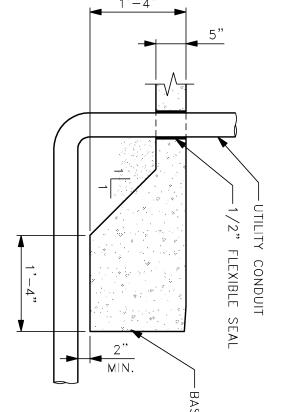
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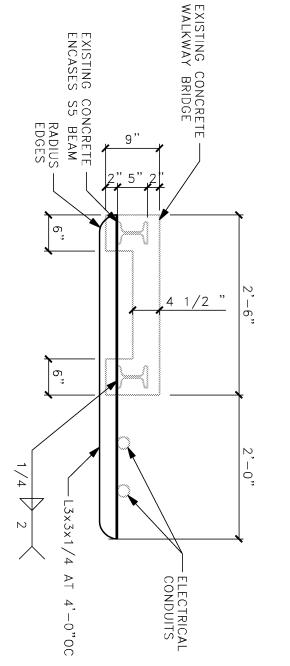
SLOPE EDGE OF FOUNDATION 1/4

-(3) #4 TOP AND BOTTOM

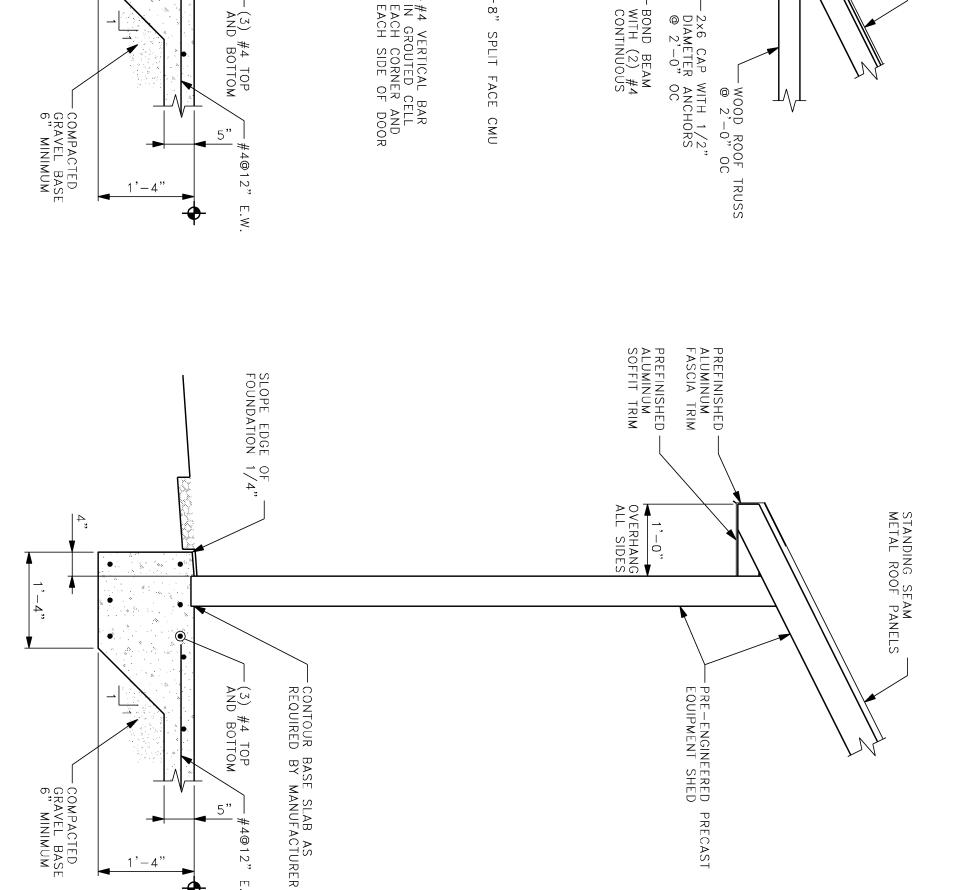












PREFINISHED -ALUMINUM SOFFIT TRIM

- BOND BEAM WITH (2) #4 CONTINUOUS

PREFINISHED -ALUMINUM FASCIA TRIM

CONTINUOUS -2× FASCIA

5/8" RATED SHEATHING

SIMPSON OR EQUAL

STANDING SEAM METAL ROOF PANELS

BUILDING M.T.S.

PAD

SECTION 3/4"=1'-0

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

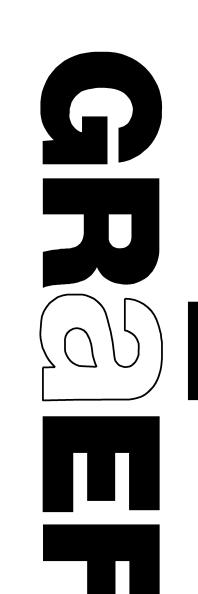
PROJECT NUMBER: 2011-5012 PROJECT INFORMATION:

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EQUIPMENT SHED SECTIONS AND DETAILS SHEET TITLE: SCALE:

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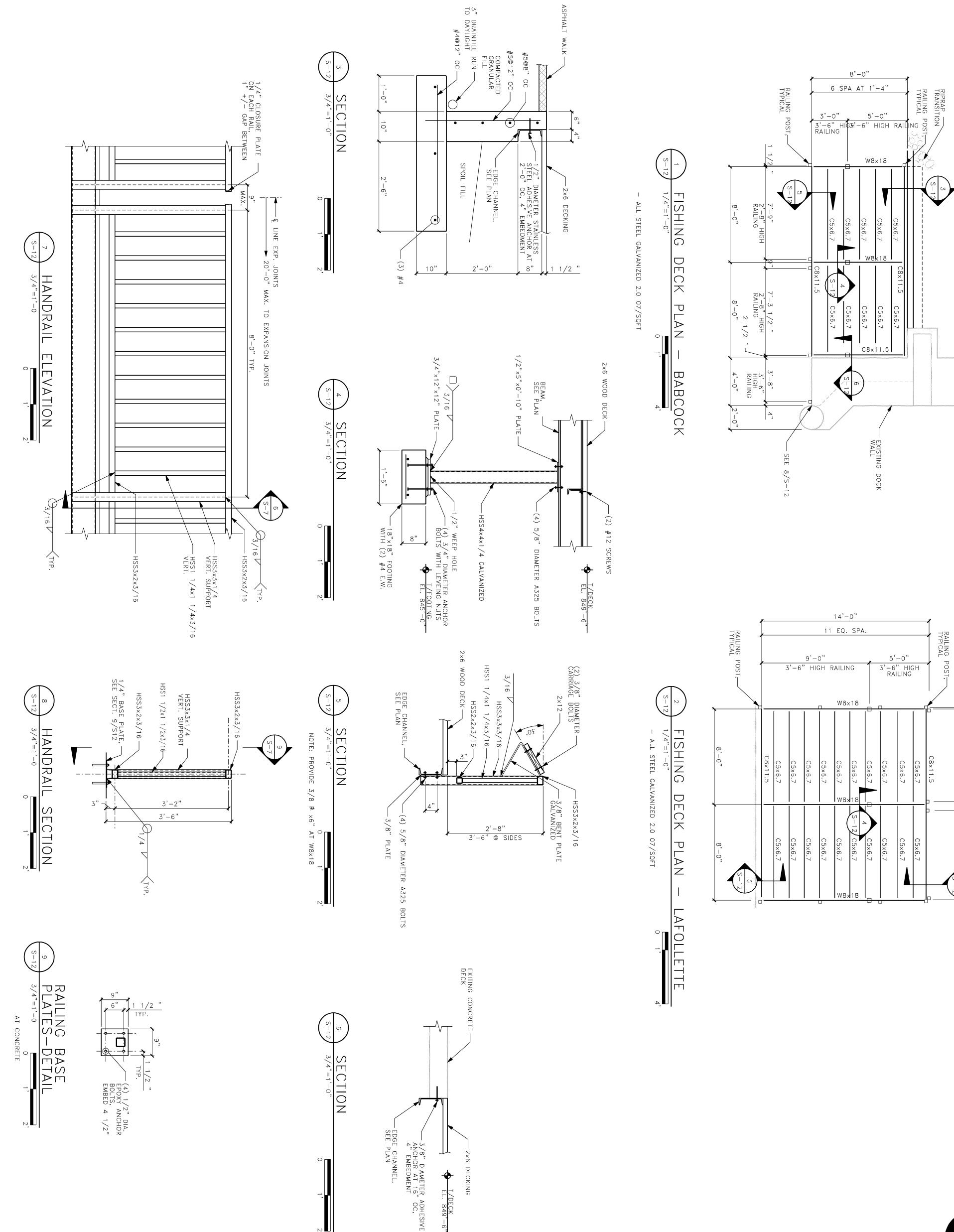
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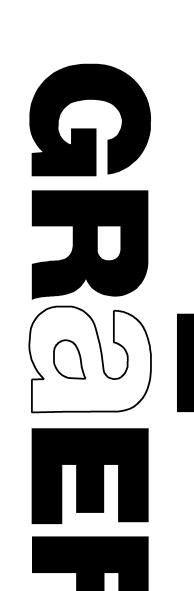
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PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

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FISHING PLATFORM SECTIONS AND DETAILS SHEET TITLE: SCALE:

AS SHOWN

O РС POWER SYMBOLS RC/1 DESIGNATION CONTACTOR - SEE SCHEDULE ON SHEET# LOW VOLTAGE RELAY CABINET (SEE SCHEDULE) PHOTO CELL TIME CLOCK - SEE SCHEDULE ON SHEET# **«**О Ю 0 \times 3 DUPLEX RECEPTACLE - MOUNTED 18" AFF UNLESS OTHERWISE NOTED — CIRCUIT NUMBER (SEE PLAN FOR PANEL BOUNDARIES) - TYPICAL — RECEPTACLE TYPE (GCFI) DEDICATED CIRCUIT GROUND FAULT CIRCUIT (IG) INTERRUPTING (WP) ISOLATED GROUND WEATHERPROOF SINGLE POLE SWITCH MOUNT 44" AFF UNLESS OTHERWISE NOTED — SWITCH DESIGNATION SWITCH TYPE (2) DOUBLE POLE (3) 3 WAY (4) 4 WAY (K) KEY OPERATED (P) WITH PILOT LIGHT INDICATION (DLS) DUAL LEVEL SWITCH TRANSFORMER - PAD MOUNTED PANELBOARD -SURFACE MOUNTED (SEE SCHEDULE) MOTOR CONNECTION - (SEE SCHEDULE) (2) MOTOR IDENTIFICATION POLE MOUNTED LIGHT FIXTURES WITH ARM SPECIAL PURPOSE OUTLET -(SEE SCHEDULE) (1) DEVICE IDENTIFICATION WALL MOUNTED LIGHT FIXTURES

ALVANIZED RIGID CONDUIT

PREPOWER

EATING, VENTILATING AND AIR CONDITIONING

ERTZ (cycle) PER SECOND

INCTION BOX

CU771



LIGHTING SYMBOLS

ABBREVIATIONS

ONE POLE
TWO POLE
THREE POLE
THREE POLE, ONE WIRE
ONE POLE, ONE WIRE
ONE POLE, TWO WIRE
TWO POLE, TWO WIRE
THREE POLE, THREE WIRE
THREE POLE, THREE WIRE
THREE POLE, FOUR WIRE
THREE POLE, FOUR WIRE
AMPERE
ALTERNATING CURRENT
AMP FRAME
ABOVE FINISHED FLOOR
ABOVE FINISHED GRADE
AMPERE INTERRUPTING CAPACITY
ALUMINUM
AMP SWITCH
AND TRIP
ARCHITECT
AUTOMATIC TRANSFER SWITCH
AUDIO VISUAL
PEDESTAL MOUNTED ON BENCH TOP
BELOW FLOOR
BUILDING CONDUIT
CATALOG
CATALOG
CABLE TELEVISION
CIRCUIT BREAKER
CIRCUIT
CEILING MOUNTED
CURRENT TRANSFORMER
COPPER
COPPER
CENTERLINE
DEDICATED DEVICE
DIRECT CURRENT
DEI TA

PROJECT		PHASE 2 LOCK AND DAM REPAIRS AND UPGRADES	BABCOCK AND LAFOLLETTE PARKS - LOCKS AND DAMS RENOVATION
PROJECT INFORMATION:	ISSUE:	IRS AND UPGRADES	LETTE PARKS - NOVATION

CUZZI
COUZZI
COVOLT AMPERE
LOVOLT AMPERE REACTIVE
LOWATT
GHTING PANELBOARD
MIT SWITCH
GHTING
OTOR CONTROL CENTER
JOUNTED
OUNTED
OUNTED
OUNTED
OUNTED
OUNTING
ANNUAL TRANSFER SWITCH
JOT APPLICABLE
JORMALLY CLOSED
JATIONAL ELECTRIC CODE
JOT IN CONTRACT
JORMALLY OPEN
NUMBER
NOT TO SCALE
POLE
POLE
POLE
BUILL BOX

JLL BOX LUMBING SYSTEM CONTRACTOR HASE ANEL(BOARD) DWER PANEL

RIMARY
DLYVINYL CHLORIDE CONDUIT
ECESSED
GID STEEL CONDUIT
ECONDARY
DLID NEUTRAL
PARE

DATE:

02-02-2012

PROJECT NUMBER: 2011-5012

DISCONNECT SWITCH INDICATES MOTOR DISCONNECT SWITCH FEEDS

LOCK AND DAM REPAIRS AND UPGRADES	GALVANIZED RIGID CONDUIT
PHASE 2	GROUND FAULT PROTECTION EQUIPMENT GROUND
LOCKS AND DAMS RENOVATION	FULL LOAD AMPS GENERAL CONTRACTOR GROUND FAULT CIRCUIT INTERRUPTER
DEPARTMENT OF PUBLIC WORKS	ELECTRIC WATER COOLER EXISTING
DANE COUNTY	ELECTRICAL CONTRACTOR ELECTRIC METALLIC TUBING
	EMERGENCY
PROJECT TITLE:	DISCONNECT
	DIRECT CURRENT
	CEILING MOUNTED CURRENT TRANSFORMER
	CABLE TELEVISION CIRCUIT BREAKER CIRCUIT
	CONDUIT
	BELOW FLOOR BUILDING
	PEDESTAL MOUNTED ON BENCH TOP
	AUTOMATIC TRANSFER SWITCH
	AMP TRIP ARCHITECT
	ALUMINUM AMP SWITCH
	AMPERE INTERRUPTING CAPACITY
	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE
CONSI II TANTS.	ALTERNATING CURRENT AMP FRAME
	FOUR POLE, FOUR WIRE
	THREE POLE, THREE WIRE
	THREE POLE, TOO WIRE
www.graef-usa.com	TWO POLE, TWO WIRE
414 / 259 UU3 / Tax	ONE POLE, ONE WIRE ONE POLE, TWO WIRE
414 / 259 1500	FOUR POLE
Milwaukee, WI 53214-1470	THREE BOLE ONE FOLE
Suite 401	
125 South 84th Street,	EVIATIONS
One Honey Creek Corporate Center	

WYE
WATT
WEATHERPROOF
TRANSFORMER
ZONE ADAPTER MODULE
MOUNTING UNITS TO CENTERLINE
ABOVE FINISHED FLOOR OR GRADE

ELECTRICAL SYMBOLS AND ABBREVIATIONS

SHEET TITLE:

SHEET NUMBER:

STAINLESS STEEL
SHUNT TRIP
SHIELDED TWISTED PAIR
SUSPENDED
SWITCH
SWITCHBOARD
TAMPER RESISTANT SAFETY RECEPTACLE
TELEPHONE CABINET
TELECOMMUNICATIONS CABLING INSTALLER
TELEPHONE
TYPICAL
UNDERGROUND
UNSHIELDED TWISTED PAIR
VOLT

SCALE:

AS SHOWN

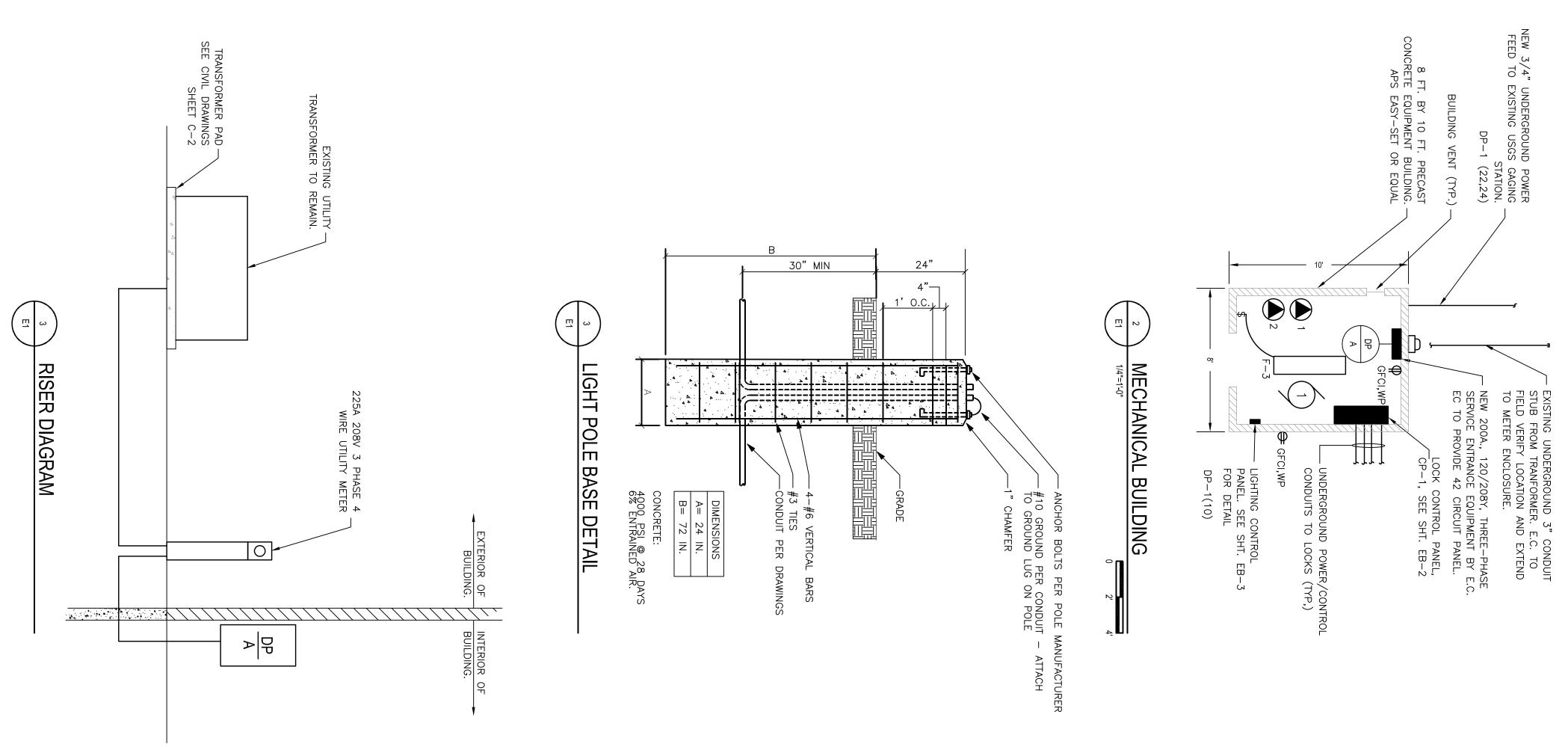
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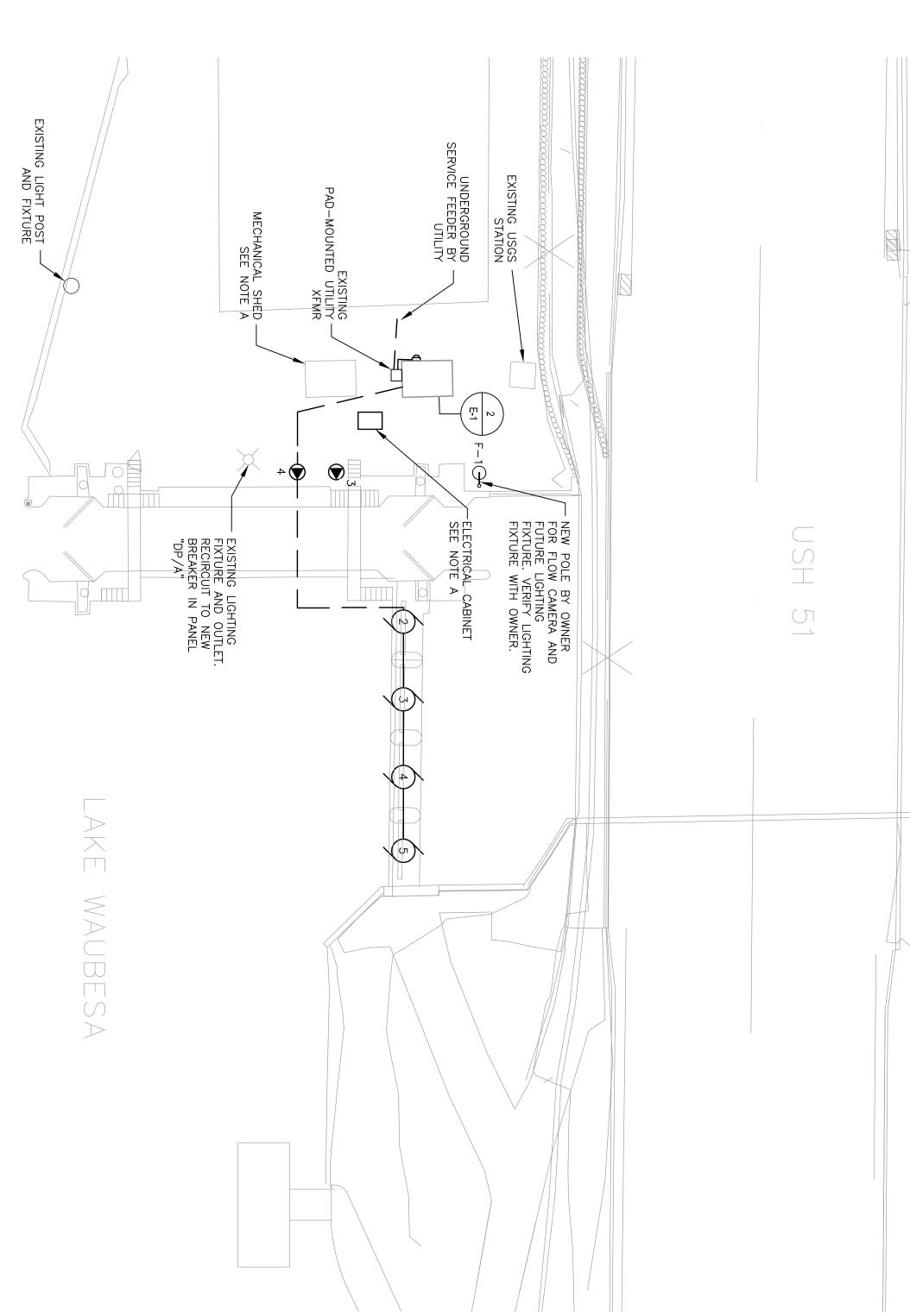
ASS

APPROVED BY:

DRAWN BY:

AAS/JAH







NOTE A. PROVIDE: 36"x48"x10" NEMA 4X CABINET ON (2) 4x4 WOOD POST FOR BASE BID. GENERAL NOTES: PROVIDE MECHANICAL SHED FOR ALTERNATE BID #7. PROVIDE 72"x60"x30" NEMA4X CABINET ON 6" CONCRETE CONCRETE SLAB FOR ALTERNATE BID #1.

SITE ELECTRICAL PLAN -BABCOCK LOCK AND DAM SCALE: APPROVED BY: SHEET NUMBER: ASS AAS/JAH ASS 02-02-2012 AS SHOWN SHEET TITLE:

PROJECT INFORMATION:

DATE: DRAWN BY: PROJECT NUMBER: 2011-5012

CHECKED BY:

ISSUE:

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

PROJECT TITLE:

CONSULTANTS:

One Honey Creek Corporate Center 125 South 84th Street, Suite 401 Milwaukee, WI 53214-1470 414 / 259 1500 414 / 259 0037 fax www.graef-usa.com

POLE AND FIXTURE PROVIDED BY OWNER, INSTALLED BY EC. EC TO COORDINATE AND VERBY EXACT REQUIREMENTS WOWNER.

MOTOR STARTER/WIRING SCHEDULE NOTES:

1. GENERAL CONTRACTOR SHALL PROVIDE ELECTRICAL REQUIREMENTS FOR SELECTED DAM GATE ACTUATORS AND LOCK GATE HYDRAULIC SYSTEM TO ENGINEER.

² 1 Sp		4	ω	2		4	±	
PROVIDE A DEDICATED 20A 1-POLE CIRCUIT.					1	‡	#	
SPECIAL PURPOSE OUTLET SCHEDULE NOTES:		HYDRAULIC CONTROLLER PANEL (ALTERNATE BID)	LOCK CONTROL PANEL (ALTERNATE BID)	REMOTE GATE CONTROL PANEL	GATE CONTROL PANEL	GENERAL	CEDVINIC	
DULE		SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	5		
NOTES:		DP/A	DP/A	DP/A	DP/A	PANEL	FEED FROM	SPECIAL
		15	13	37	35	CIRCUIT	FROM	SPECIAL PURPOSE OUTLET SCHEDULE
		20	20	20	20	SIZE	BREAKER	OUTLE:
		1	1	1	1	POLE	\KER	SCHE
		ω	ၓ	4	4	#		DULE
		12	12	12	12	SIZE	WIRING	
		3/4"	3/4"	3/4"	3/4"	COND		
		120	120	120	120	< C -	VOI T	
			1	1	1	7	 D C > > O I I	
	_					5		
		2	2	1,2	1,2	NOTE	SEE	

	208 3 SEE DAM GATE (ALTERNATE BID)	208 3 SEE DAM GATE (ALTERNATE BID)	208 3 SEE DAM GATE	208 3 SEE DAM GATE	208 3 SEE HYDRAULIC COMPRESSOR (ALTERNATE BID)	(RM)	LOC DEIVING	2. PROVIDE A DISCONNECT SWITCH FOR ALL MOTORS LOCATED IN SIGHT OF MOTOR.	I. ALL COMBINATION STARTERS SHALL BE CIRCUIT BREAKER TYPE UNLESS OTHERWISE NOTED.	NOTES:			
	DP/A	DP/A	DP/A	DP/A	DP/A	PANEL	FEED	IN SIGHT OF M	PE UNLESS OT				
	26,28,30	20,22,24	14,16,18	8,10,12	2,4,6	СКТ	FEED FROM	OTOR.	HERWISE N				
	0 20	4 20	3 20	20	40	SIZE	 界		OTED.				
	3	ယ	ω	ယ	ယ	POLE	BREAKER						
	3	3	ယ	3	သ	#							
	12	12	12	12	8	SIZE	BRANCH						
	12	12	12	12	10	GND	BRANCH WIRING						
	1"	1"	1"	1"	1"	COND							
						INT	EGR	AL TO UNIT					
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						MA RE'	GNE [*] VERS	FIC, FULL VO	OLTA	GE	TYPE		
						VFI	D						MC
								SE SOLID REDUCED					MOTOR STARTER / WIRIN
						TW	O SF	EED, 1 WIN	DING				STAR
							O SF	EED, 2 WINI	DING			STARTER	ΓER / \
						MA ME	NUF/ CHAI	ACTURER 			FURNISH	H	MIRIN
						СО	NTRA	ACTOR ICAL CONTI	RACT	OR	HED BY		G SC
								, PUSHBUTT					SCHEDULE
						ON	-OFF	, SWITCH			ACC		E
						НА	ND-C	FF-AUTO			ACCESSORIES ON STARTER		
						PIL	OT L	GHT			S ON STAI		
						PH	ASE I	OSS PROT	ECTIO	DN	RTER		
						NE	MA S	TARTER SIZ	ĽE				
								AL TO UNIT					
						NO	N-FU	QUIRED SED SWITC	H				
						FU		OTOR SWITCH NI	EAR		TYPE	MOT	
						CIF		BREAKER	NEAR			MOTOR DISCONNECT	
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								, PUSHBUTT	ΓON			ACCESSORIES NEAR EQUIPMENT WIRED	
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 					×	7	*						

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CONSULTANTS:

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SHEET NUMBER:

SCHEDULES -BABCOCK LOCK AND DAM

SCALE:

AS SHOWN

SHEET TITLE:

CHECKED BY:

ASS

APPROVED BY:

ASS

DRAWN BY:

AAS/JAH

DATE:

02-02-2012

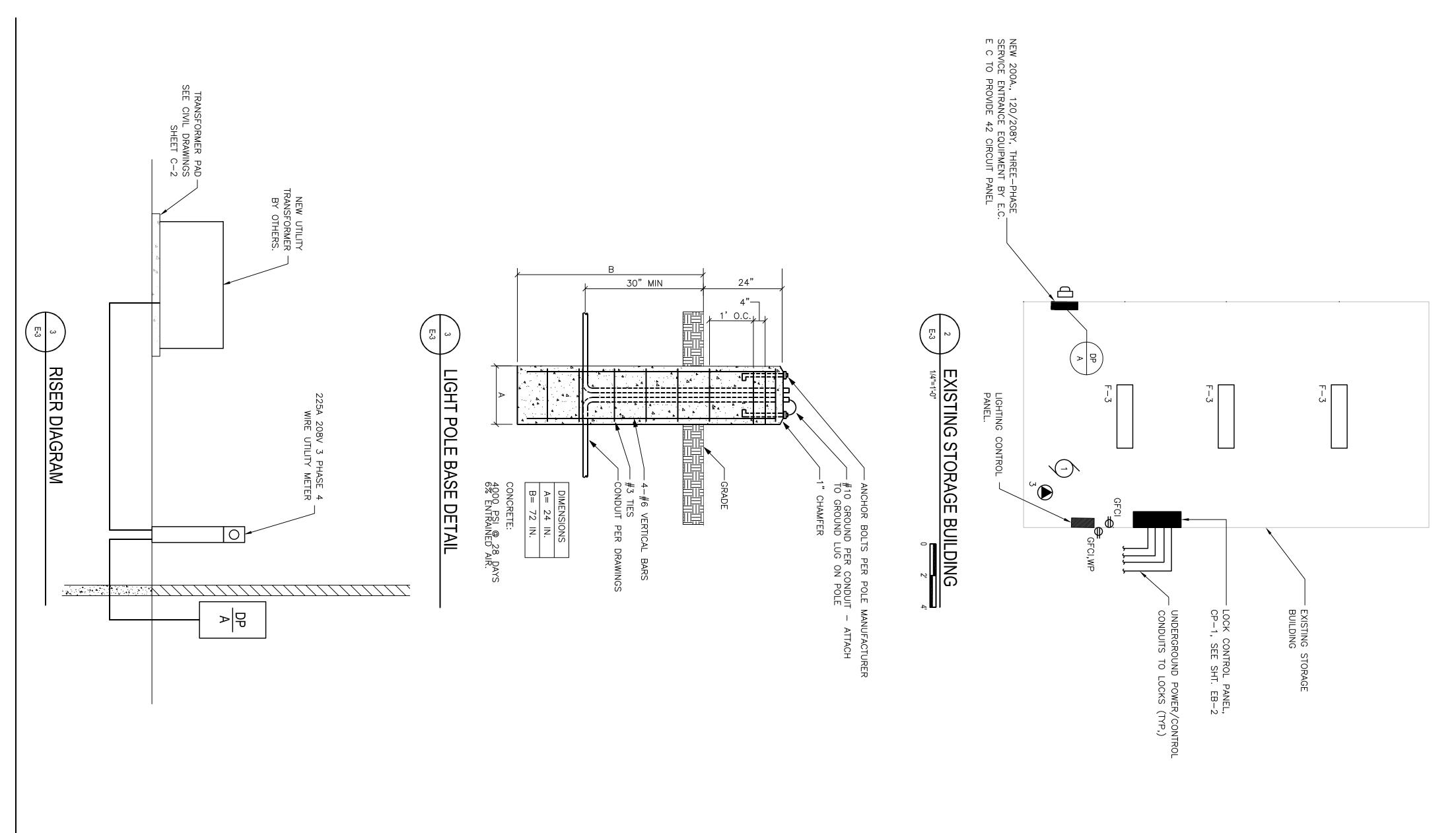
PROJECT NUMBER: 2011-5012

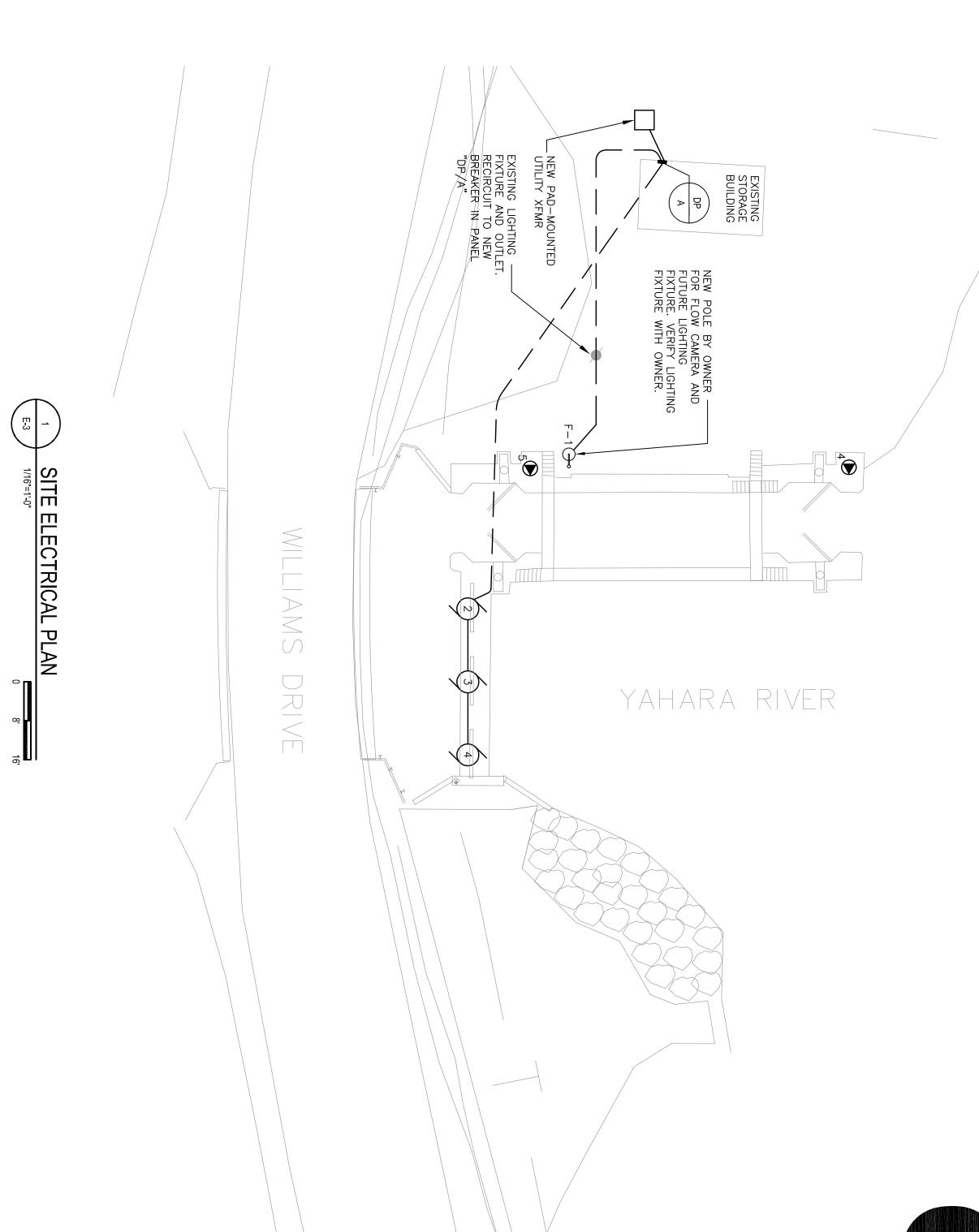
PROJECT INFORMATION:

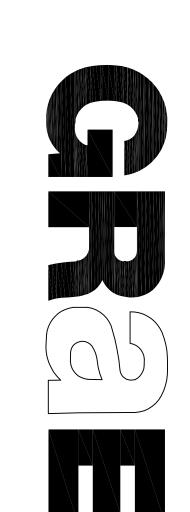
DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

PROJECT TITLE:

ISSUE:







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DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT TITLE:

PROJECT INFORMATION:

DATE: CHECKED BY: DRAWN BY: PROJECT NUMBER: 2011-5012 APPROVED BY: ASS AAS/JAH ASS 02-02-2012

SITE ELECTRICAL PLAN AND DETAILS LAFOLLETTE LOCK AND DAM SHEET TITLE:

SCALE:

AS SHOWN

175 POLE AND FIXTURE
PROVIDED BY OWNER,
INSTALLED BY EC. EC TO
COORDINATE AND VERIFY
EXACT REQUIREMENTS WITH
OWNER

POUNTEMPORARY SITE
FIXTURES. TWIN TUBE SURFACE
MOUNT FLUORESCENT
WITH ELECTRONIC
BALLAST

# SERVING LOC PANEL LOC PANEL SEE POHEL CIRCUIT SIZE POLE 1 GATE CONTROL PANEL SEE DP/A 35 20 1 2 REMOTE GATE CONTROL PANEL SEE DP/A 39 20 1 3 EXISTING GARAGE FEED PLANS DP/A 31,33 20 2 4 LOCK CONTROL PANEL (ALTERNATE BID) PLANS DP/A 13 20 1 5 HYDRAULIC CONTROLLER PANEL PLANS DP/A 15 20 1				SPECIAI	SPECIAL PURPOSE OUTLET	OUTLE	T SCHEDULE) JULE	1				
REMOTE GATE CONTROL PANEL EXISTING GARAGE FEED LOCK CONTROL PANEL (ALTERNATE BID) HYDRAULIC CONTROLLER PANEL PLANS PANEL SEE DP/A PLANS DP/A SEE DP/A SEE DP/A SEE DP/A 13 20 HYDRAULIC CONTROLLER PANEL PLANS PLANS DP/A PLANS DP/A 15 20	#		- - -	FEED	FROM	BRE,	AKER		WIRING			101	VOI T
GATE CONTROL PANEL SEE PLANS DP/A 35 20 REMOTE GATE CONTROL PANEL SEE PLANS DP/A 39 20 EXISTING GARAGE FEED SEE PLANS DP/A 31,33 20 LOCK CONTROL PANEL (ALTERNATE BID) SEE PLANS DP/A 13 20 HYDRAULIC CONTROLLER PANEL PLANS DP/A 15 20	*		5	PANEL	CIRCUIT	SIZE	POLE	#	SIZE	COND		O C	Š C
REMOTE GATE CONTROL PANEL EXISTING GARAGE FEED LOCK CONTROL PANEL (ALTERNATE BID) HYDRAULIC CONTROLLER PANEL PLANS SEE DP/A SEE DP/A 13 20 HYDRAULIC CONTROLLER PANEL PLANS DP/A 15 20	_	GATE CONTROL PANEL	SEE PLANS	DP/A	35	20	_	ω	12	3/4"	-	" 120	
EXISTING GARAGE FEED LOCK CONTROL PANEL (ALTERNATE BID) HYDRAULIC CONTROLLER PANEL HYDRAULIC CONTROLLER PANEL PLANS SEE PLANS DP/A 13 20 20 31,33 20 PLANS DP/A 15 20	2		SEE PLANS	DP/A	39	20	1	3	12	3/4"	`=	." 120	
HYDRAULIC CONTROLLER PANEL HYDRAULIC CONTROLLER PANEL HYDRAULIC CONTROLLER PANEL SEE PLANS PLANS DP/A 15	3		SEE PLANS	DP/A	31,33	20	2	4	12	3/4"	-	" 208	
HYDRAULIC CONTROLLER PANEL SEE DP/A 15	4		SEE PLANS	DP/A	13	20	1	3	12	3/4"	+	‡" 120	
	5		SEE PLANS	DP/A	15	20	1	3	12	ω	3/4"	/4" 120	

1,2

SPECIAL PURPOSE OUTLET SCHEDULE NOTES:

1. PROVIDE A DEDICATED 20A 1-POLE CIRCUIT.

2. COORDINATE EXACT REQUIREMENTS AND LOCATIONS WITH MANUFACTURE

3. EXISTING 100 A. LOAD CENTER. PROVIDE 20A., 2-POLE BREAKER FOR LIGHTING AND POWER REQUIREMENTS.

MOTOR STARTER/WIRING SCHEDULE NOTES:

1. GENERAL CONTRACTOR SHALL PROVIDE ELECTRICAL REQUIREMENTS FOR SELECTED DAM GATE ACTUATORS AND LOCK GATE HYDRAULIC SYSTEM TO ENGINEER.

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NOTES:

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	SEE	SEE PLAN	SEE PLAN	SEE PLAN	(RM)	LOC	ATION ST			
	DAM GATE (ALTERNATE BID)	DAM GATE (ALTERNATE BID)	DAM GATE	(ALTENATE BID)	O NING		: ALL COMBINATION STARTERS SHALL BE CIRCUIT BREAKER TYPE UNLESS OTHERWISE NOTED. PROVIDE A DISCONNECT SWITCH FOR ALL MOTORS LOCATED IN SIGHT OF MOTOR.			
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					INT	EGR	AL		T	
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SCHEDULES -LAFOLLETTE LOCK AND DAM SCALE: APPROVED BY: ASS AAS/JAH SHEET NUMBER: 02-02-2012 ASS AS SHOWN SHEET TITLE:

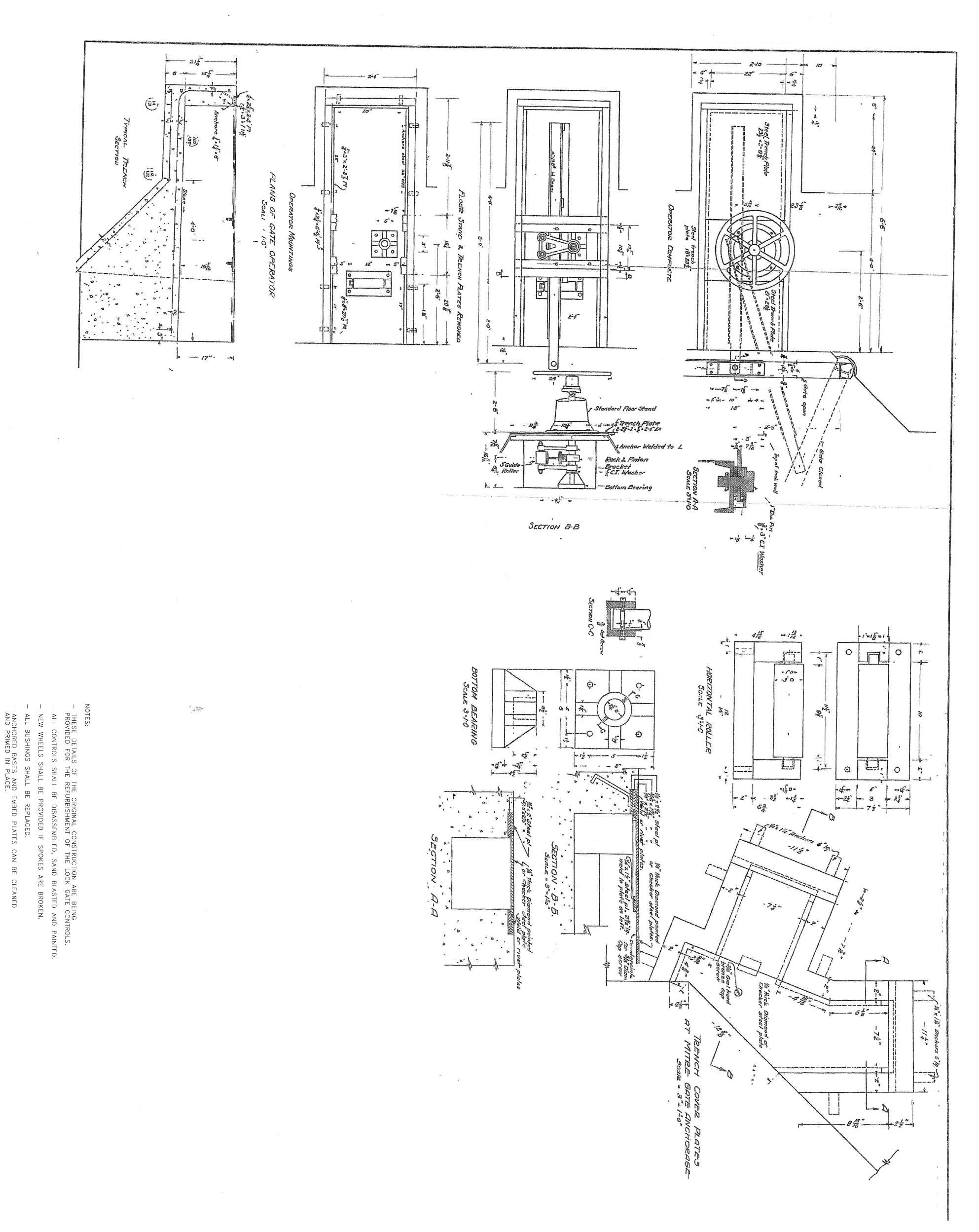
DATE: CHECKED BY: DRAWN BY: PROJECT NUMBER: 2011-5012 PROJECT INFORMATION:

DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BABCOCK AND LAFOLLETTE PARKS LOCKS AND DAMS RENOVATION
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PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

PROJECT TITLE:

ISSUE:

SCALE:

AS SHOWN

LOCK CONTROLS SECTIONS AND DETAILS

SHEET TITLE:

SHEET NUMBER:

CHECKED BY:

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APPROVED BY:

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DRAWN BY:

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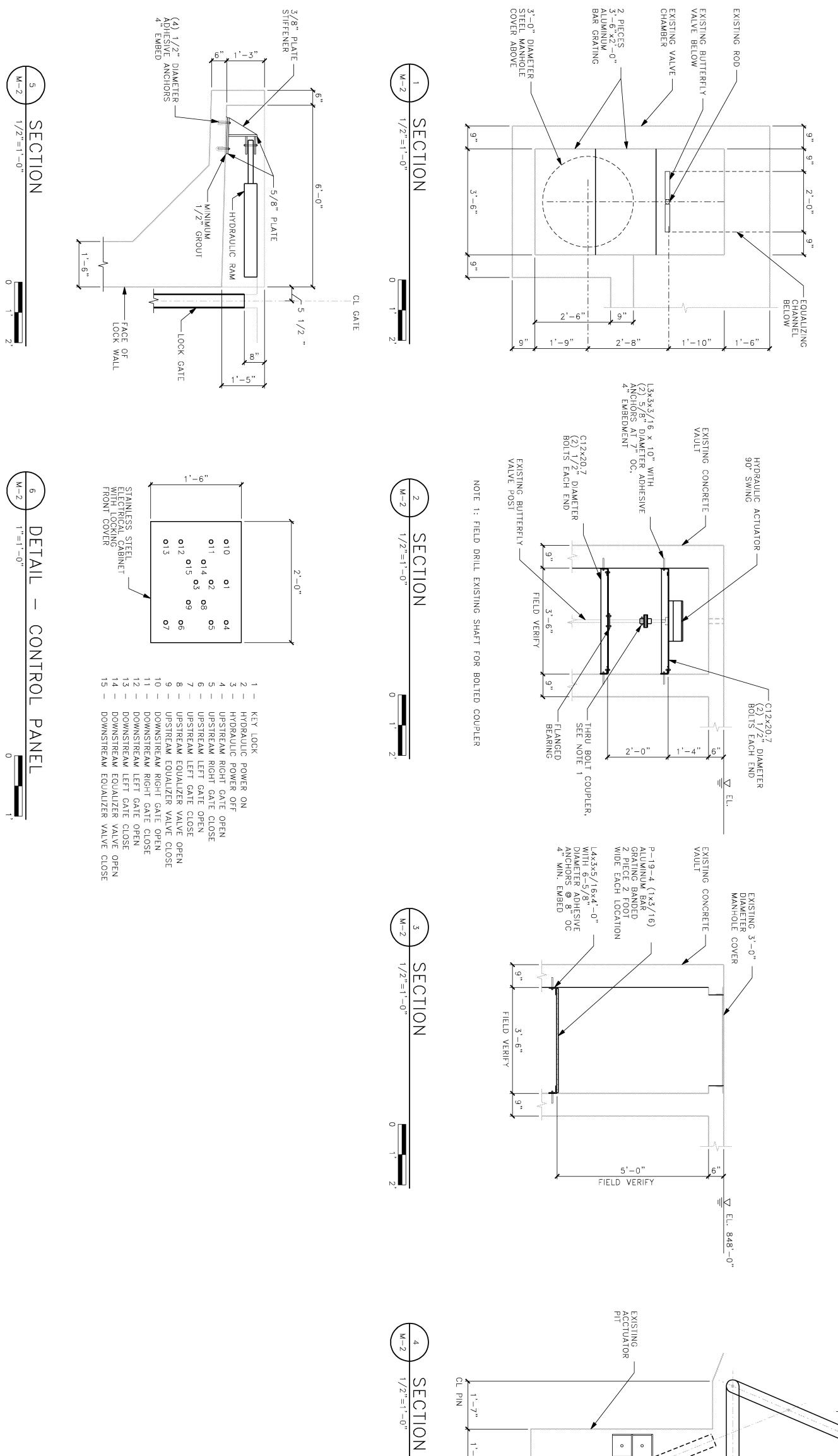
DATE:

02-02-2012

PROJECT NUMBER: 2011-5012

PROJECT INFORMATION:

ALL BOLTS SHALL BE REPLACED WITH STAINLESS STEEL BOLTS.ALL COVER PLATES SHALL BE SANDBLASTED, PRIMED AND PAINTED.



HYDRAULIC RAM CL GATE 6'-0" -FACE OF EXISTING WALL

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CONSULTANTS:

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PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

DATE: CHECKED BY: DRAWN BY: PROJECT NUMBER: 2011-5012 PROJECT INFORMATION: 02-02-2012 \leq AMZ

HYDRAULIC LOCK CONTROLS SHEET TITLE: SCALE:

AS SHOWN

APPROVED BY:

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