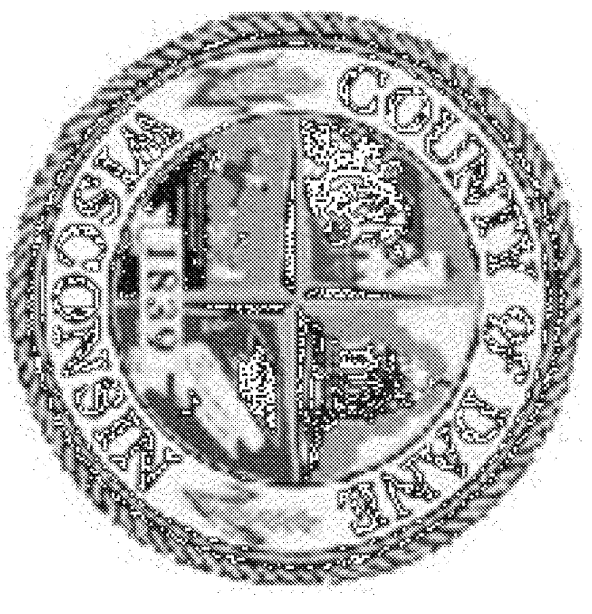


DANE COUNTY DEPARTMENT OF PUBLIC WORKS

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

LOCATION MAPS

PROJECT NO 312001



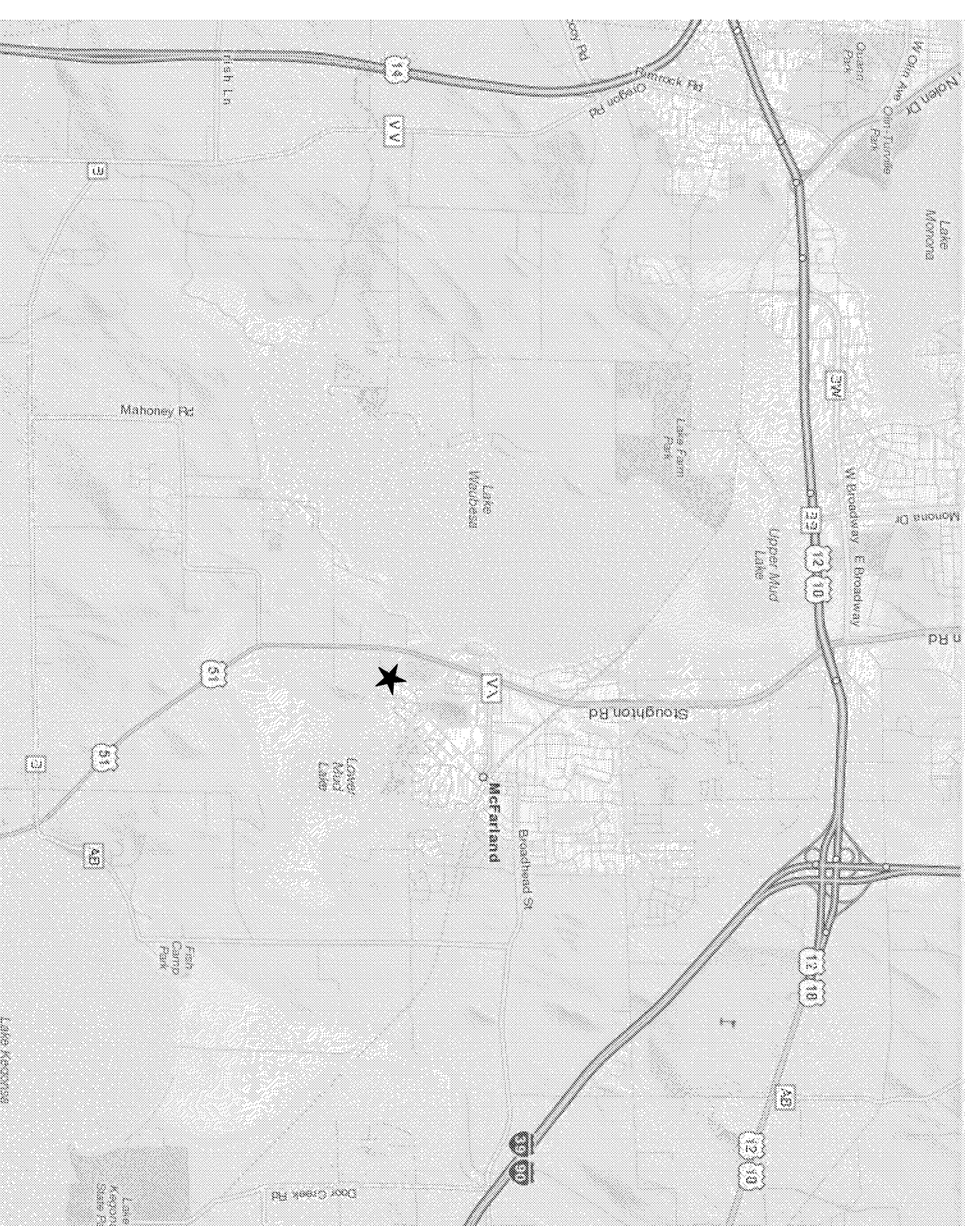
Dane County
Department of Public Works
Highway and Transportation
1919 Alliant Energy Center Way
Madison, Wisconsin 53713
(608)-266-4018

GRAEF

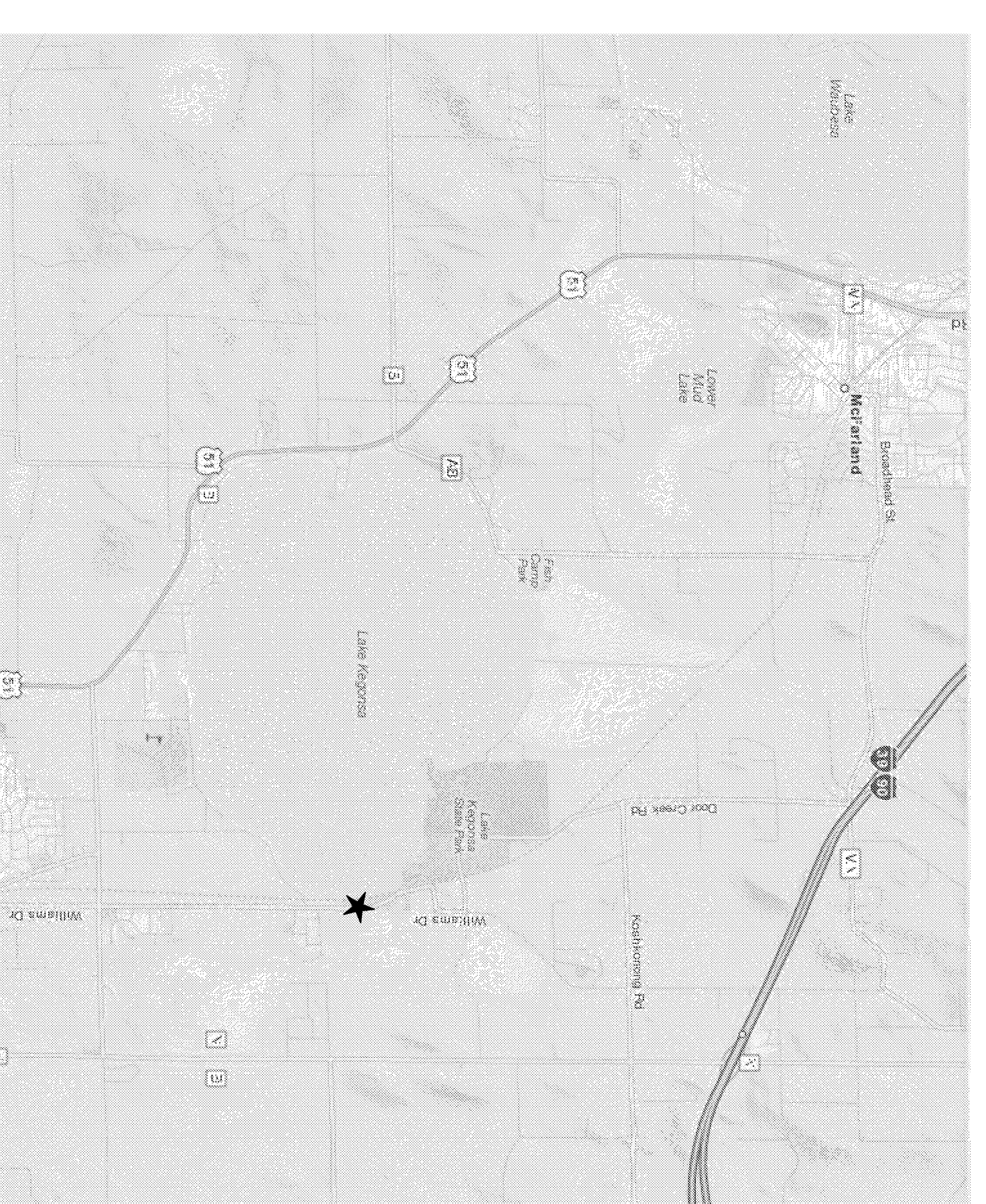
One Honey Creek Corporate Center
125 South 84th Street,
Suite 401
Milwaukee, WI 53214-1470
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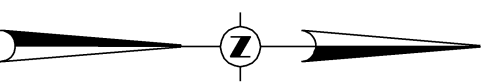
COMBINED LOCATION PLAN



BABCOCK LOCK AND DAM LOCATION PLAN



LAFOLLETTE LOCK AND DAM LOCATION PLAN



DRAWING INDEX

COVER SHEET

C-1	EXISTING SITE PLAN - BABCOCK LOCK AND DAM
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C-6	FENCE DETAILS
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MECHANICAL	
M-1	MANUAL LOCK CONTROLS SECTIONS AND DETAILS
M-2	HYDRAULIC LOCK CONTROLS SECTIONS AND DETAILS

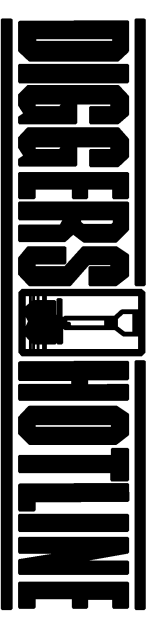
collaborate

formulate

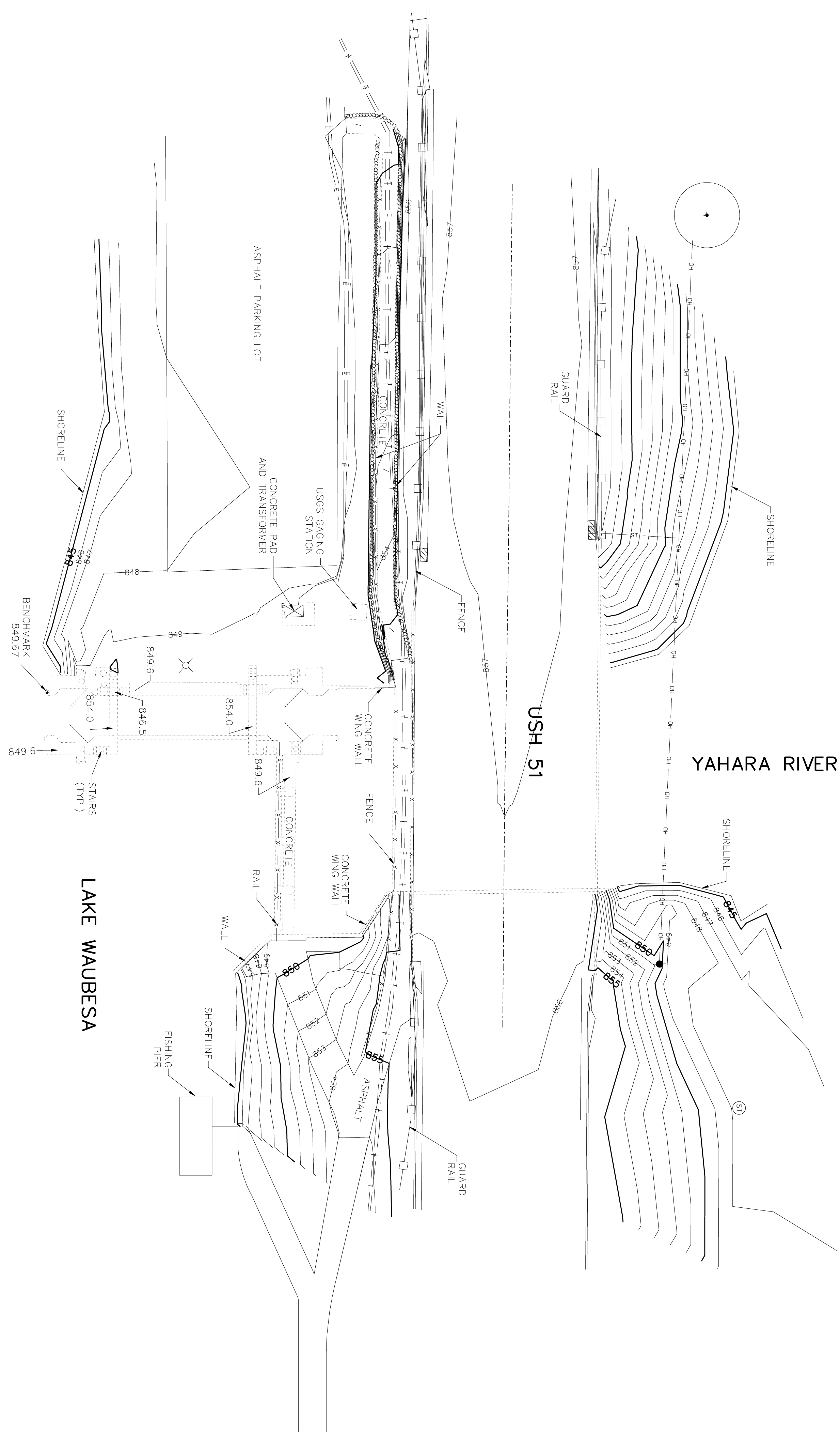
innovate

GENERAL NOTES

- 1) SITE SURVEY DATA PROVIDED BY ARNOLD AND O'SHERIDAN INC. FIELD VERIFY EXISTING STRUCTURE CONFIGURATION AND CONDITIONS PRIOR TO START OF CONSTRUCTION.
- 2) IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, "DAMAGE TO TRANSMISSION FACILITIES". EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FURTHER EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATORS WORK.
- 3) CONTRACTOR, PRIOR TO ANY EXCAVATION WORK, SHALL NOTIFY (1) DESIGNATED ONE CALL SERVICE; (2) ALL UTILITIES, OVERHEAD AND UNDERGROUND, AND (3) ALL OTHERS, 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.

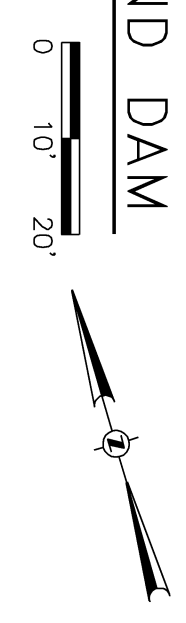


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EXISTING SITE PLAN - BABCOCK LOCK AND DAM

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



LEGEND	
	SECTION CORNER FOUND
	IRON STAKE FOUND
	REPAIR IN PLACE
	CHISELED BRASS
	DRILL HOLE
	SPRAY NAIL
	WOOD STAKE
	RECORDED AS DATA 263.56
	MEASURED DATA 263.57
	SANITARY MANHOLE
	YARD CLEANOUT
	STORM MANHOLE
	STORM CATCH BASIN
	STORM CLEAN OUT
	STORM SEWAL
	WATER MANHOLE
	HYDRANT
	WATER VALVE
	STORMER CONNECT
	GAS VALVE
	GAS METER
	TRAFFIC SIGNAL
	TRAFFIC CONTROL BOX
	LIGHT POLE
	ELECTRICAL OUTLET
	UTILITY POLE
	GUY WIRE / DEAD MAN
	TRAFFIC SIGNAL
	ELECTRIC CONTROL BOX
	ELECTRIC METER
	ELECTRIC MANHOLE
	TELEPHONE PEDESTAL
	TELEPHONE MANHOLE
	CABLE PEDESTAL
	SPRINKLER HEAD
	BOLLARD
	MONITORING WELL
	HANDICAP RAMP
	STONE WALL
	FENCE LINE
	EDGE OF TREES
	PROPERTY LINE
	CENTER LINE
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING GRAVEL
	EXISTING ASPHALT
	CANOPY/SHADE TREE
	SHRUB
	CONIFEROUS TREE
	BARBED WATER MAIN
	SANITARY SEWER
	STORM SEWER
	ROOF DRAIN
	OVERHEAD WIRES
	BARBED CABLE TV LINE
	BARBED ELECTRIC
	BARBED TELEPHONE
	BARBED GAS MAIN
	CONDUIT
	SPOT ELEVATION
	CAUTION
	BENCH MARK
	UTILITY EASEMENT
	SETBACK LINE
	EDGE OF WATER
	WETLAND BOUNDARY
	100 YEAR FLOOD BOUNDARY



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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

ISSUE:

PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN

SHEET TITLE:

EXISTING SITE PLAN -
 BABCOCK LOCK AND DAM

SHEET NUMBER:

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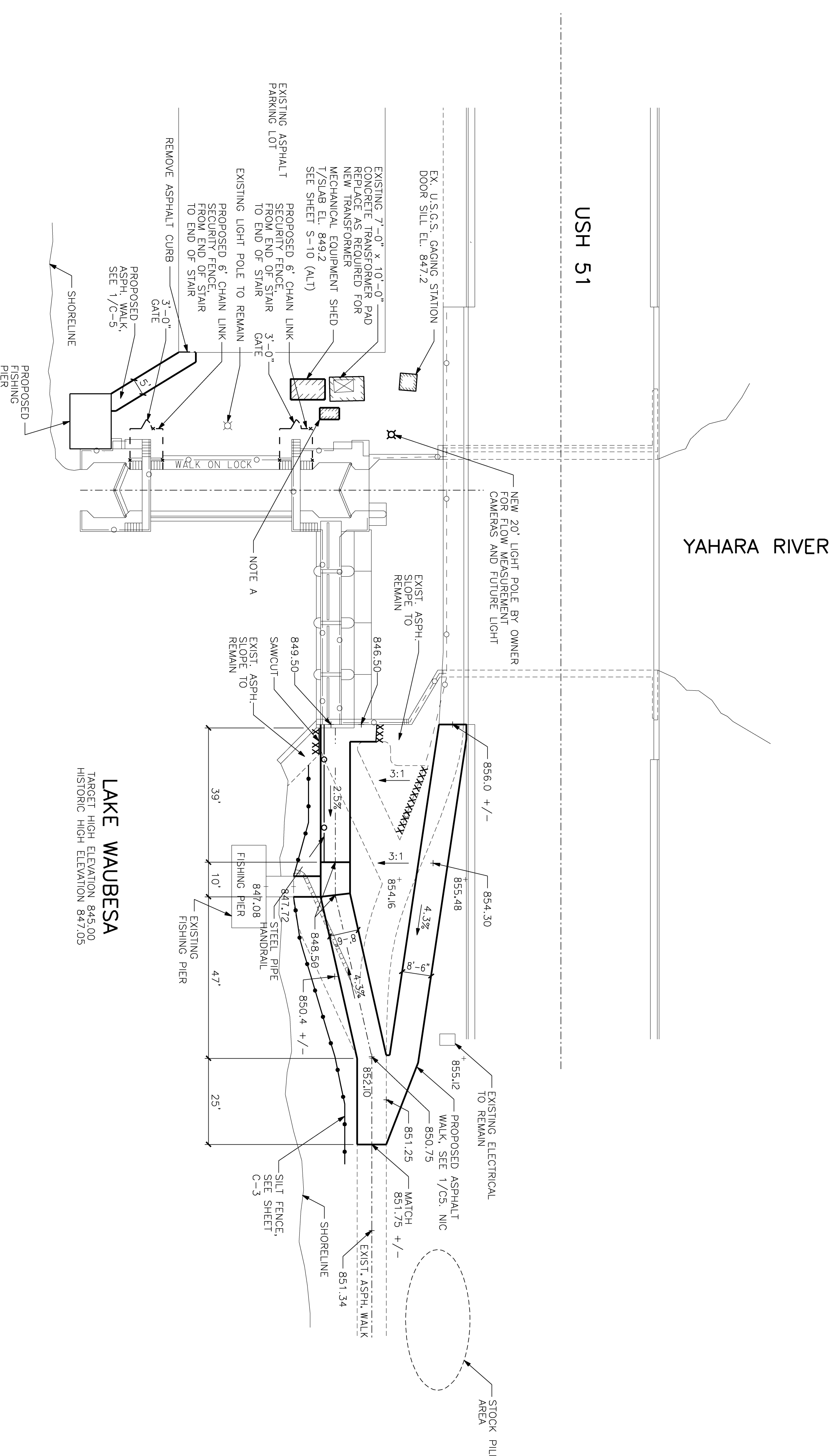
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PROPOSED SITE PLAN -
 BABCOCK LOCK AND DAM

SHEET NUMBER:

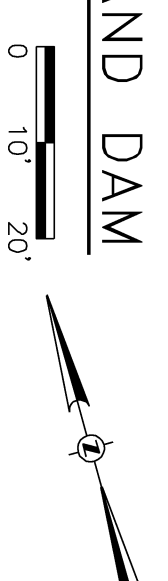


PROPOSED SITE PLAN - BABCOCK LOCK AND DAM

NIC = NOT IN CONTRACT

PLAN NOTES

NOTE A = 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. 1
 PROVIDE MECHANICAL SHED FOR ALTERNATE BID No. 7



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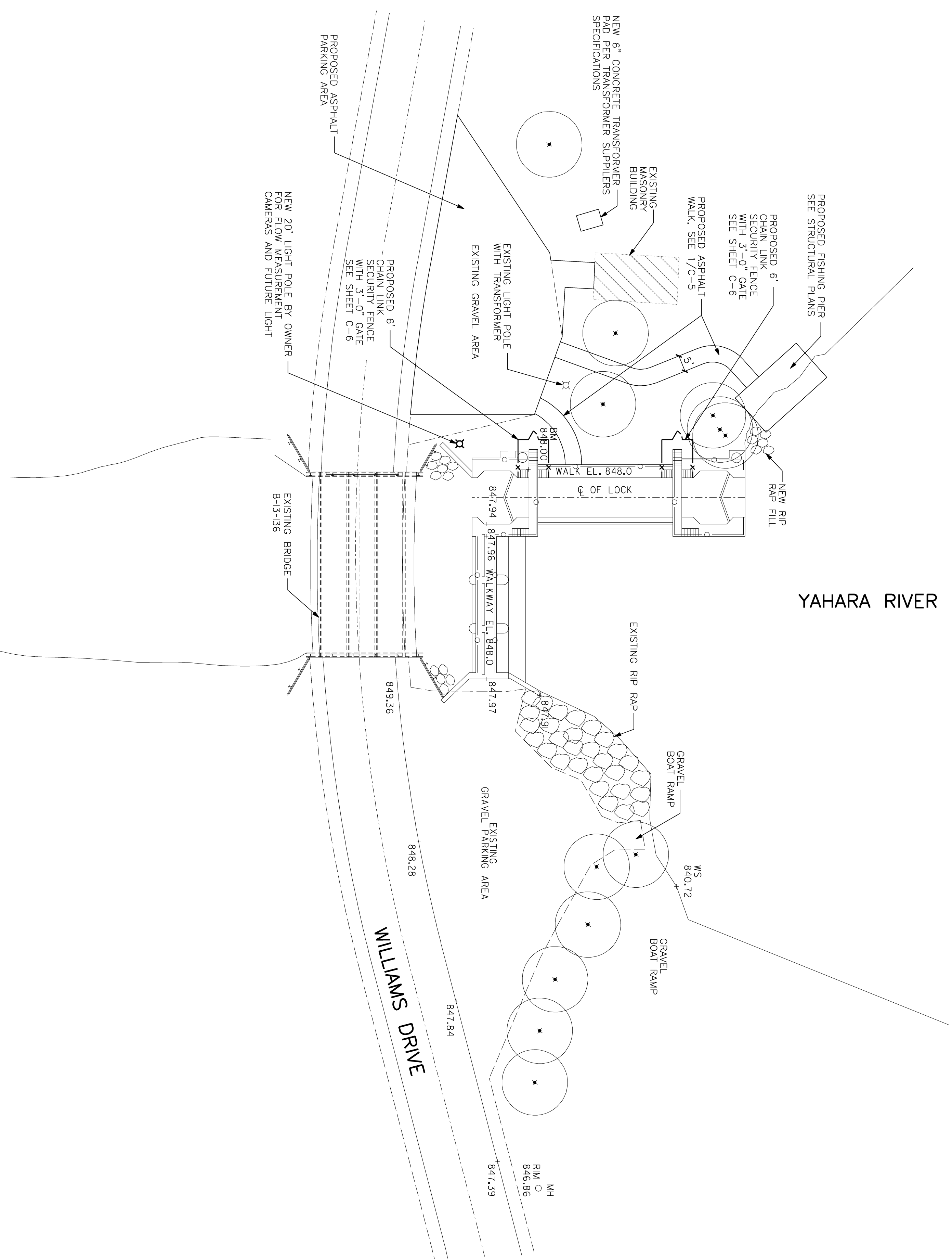
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PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
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PROPOSED SITE PLAN -
 LAFOLLETTE LOCK AND DAM

SHEET NUMBER:

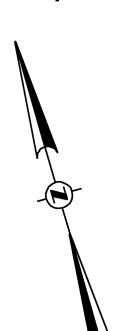


LAKE KEGONSA

PROPOSED SITE PLAN - LAFOLLETTE LOCK AND DAM

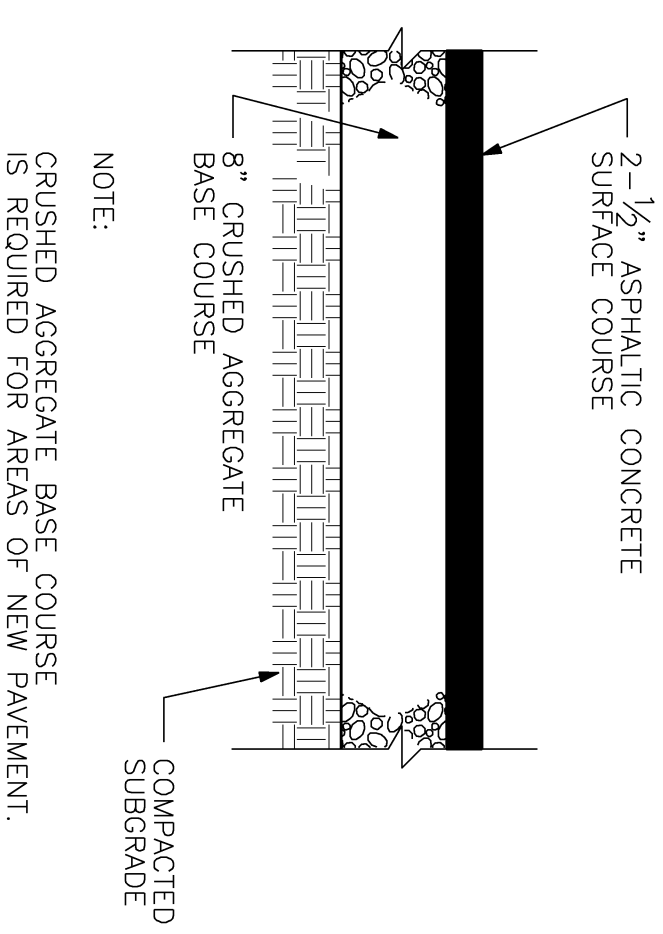
(N/C) - NOT IN CONTRACT

0 10' 20'

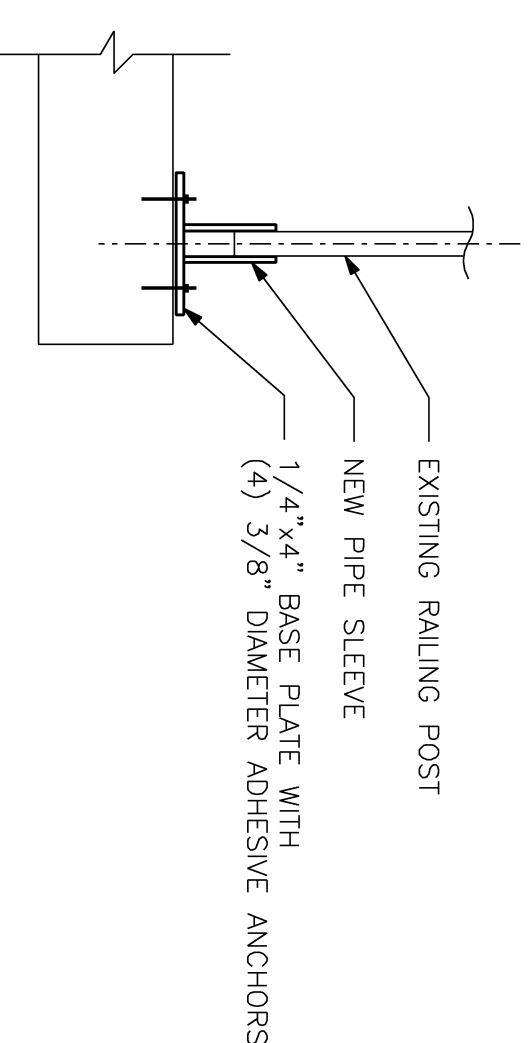


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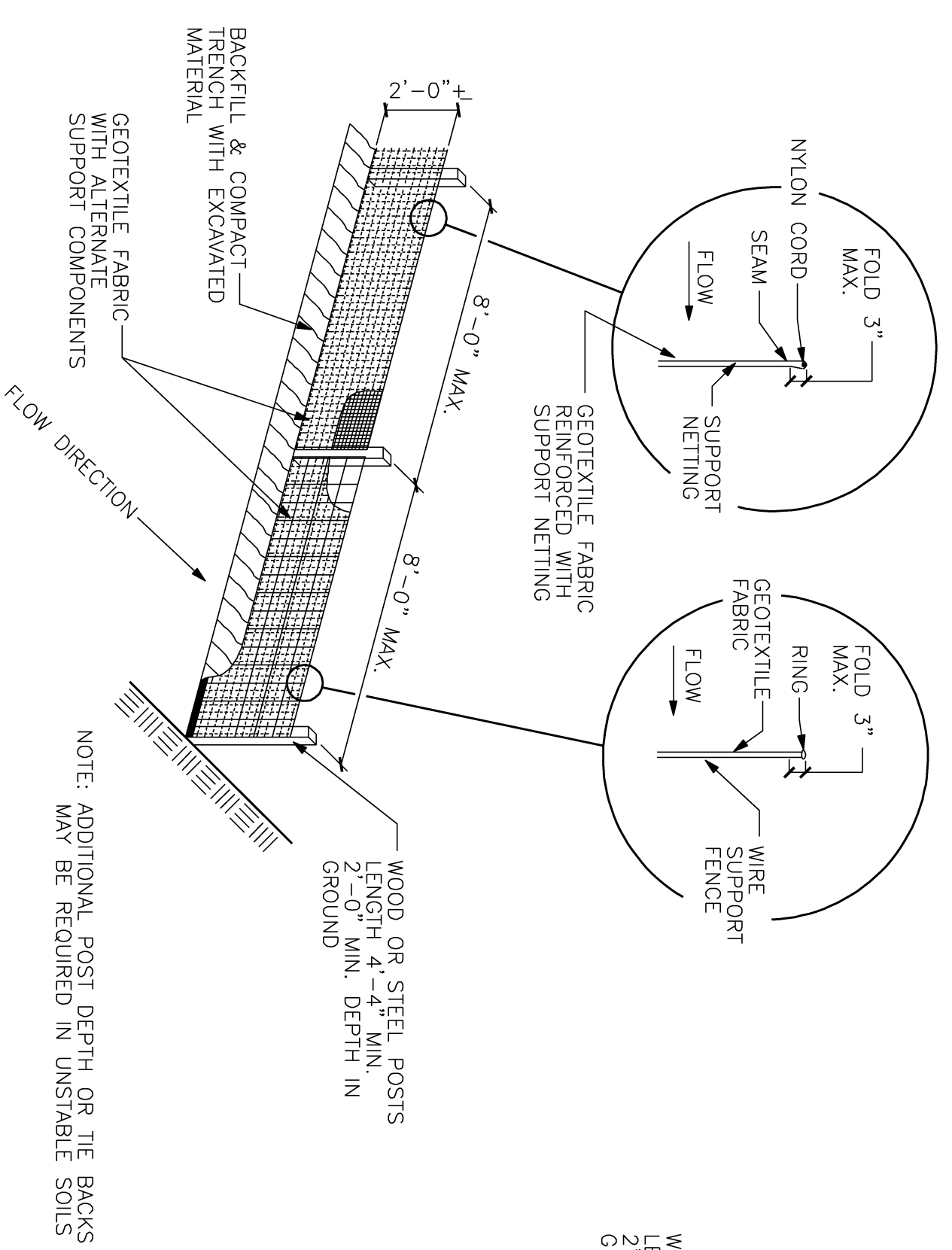
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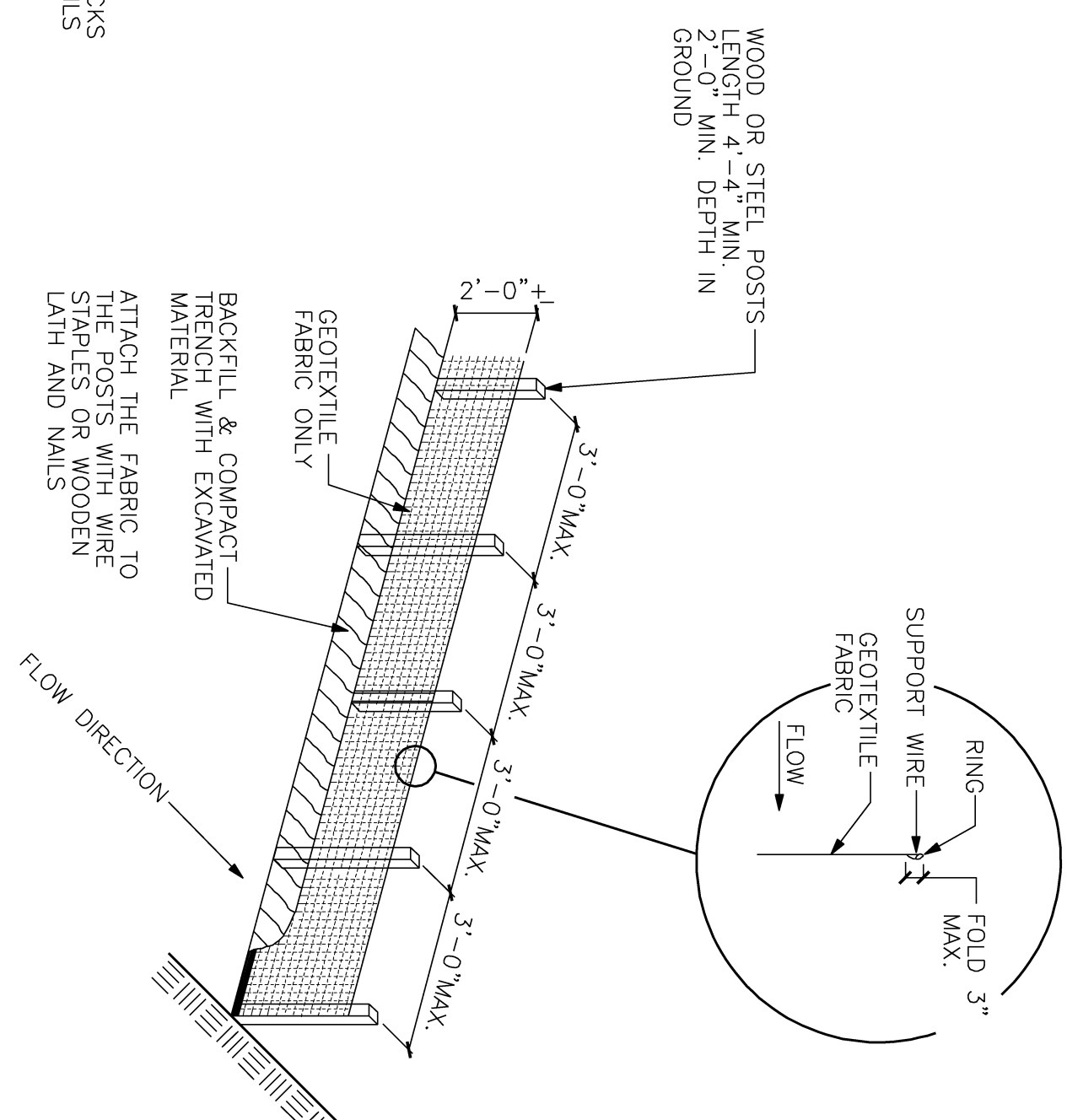
1 TYPICAL ASPHALT PAVING SECTION
 C-5 N.T.S.



2 STEEL PIPE HANDRAIL BASE REPAIR DETAIL
 C-5 N.T.S.



ALTERNATE "A"



ALTERNATE "B"

3 SILT FENCE DETAILS
 C-5 N.T.S.

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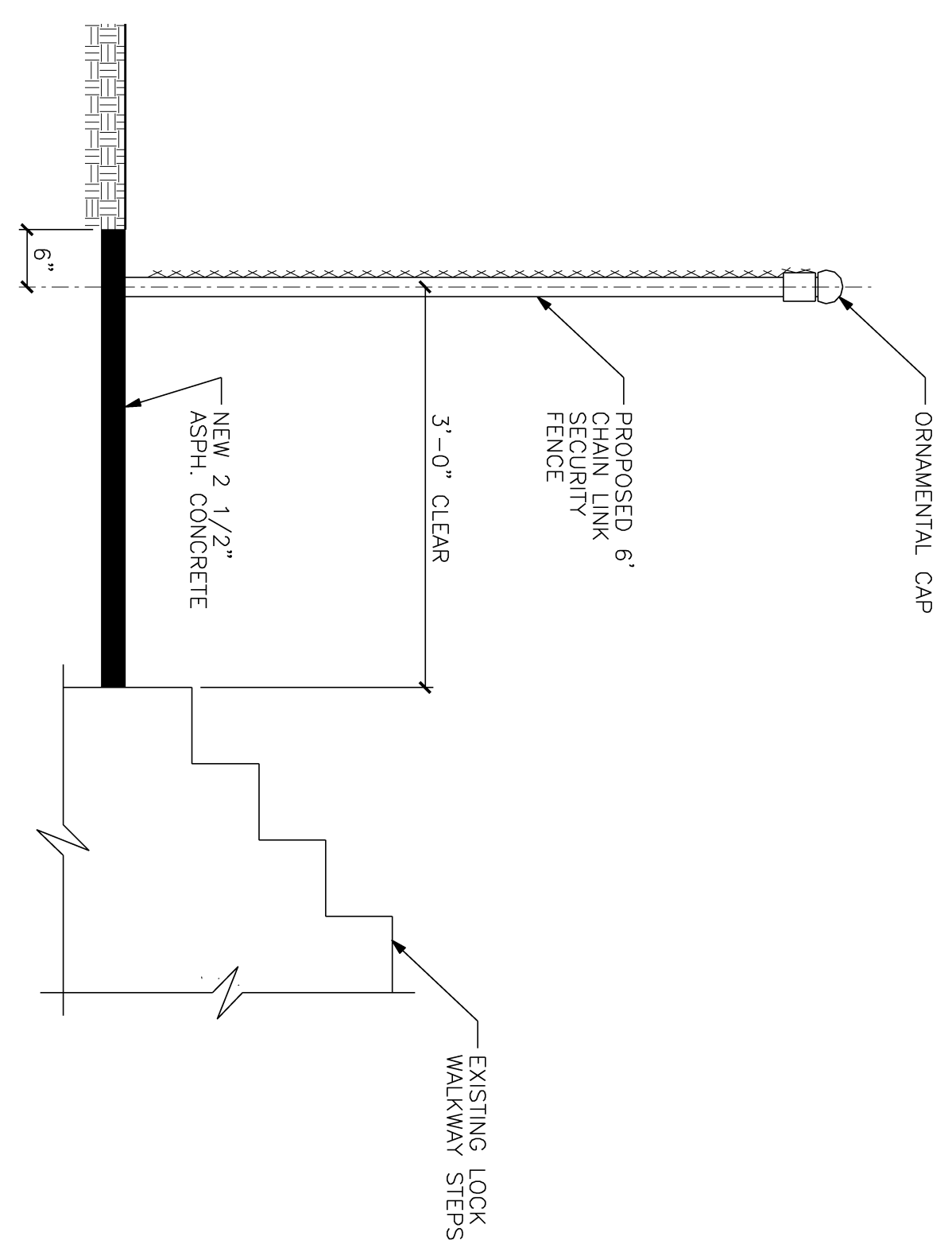
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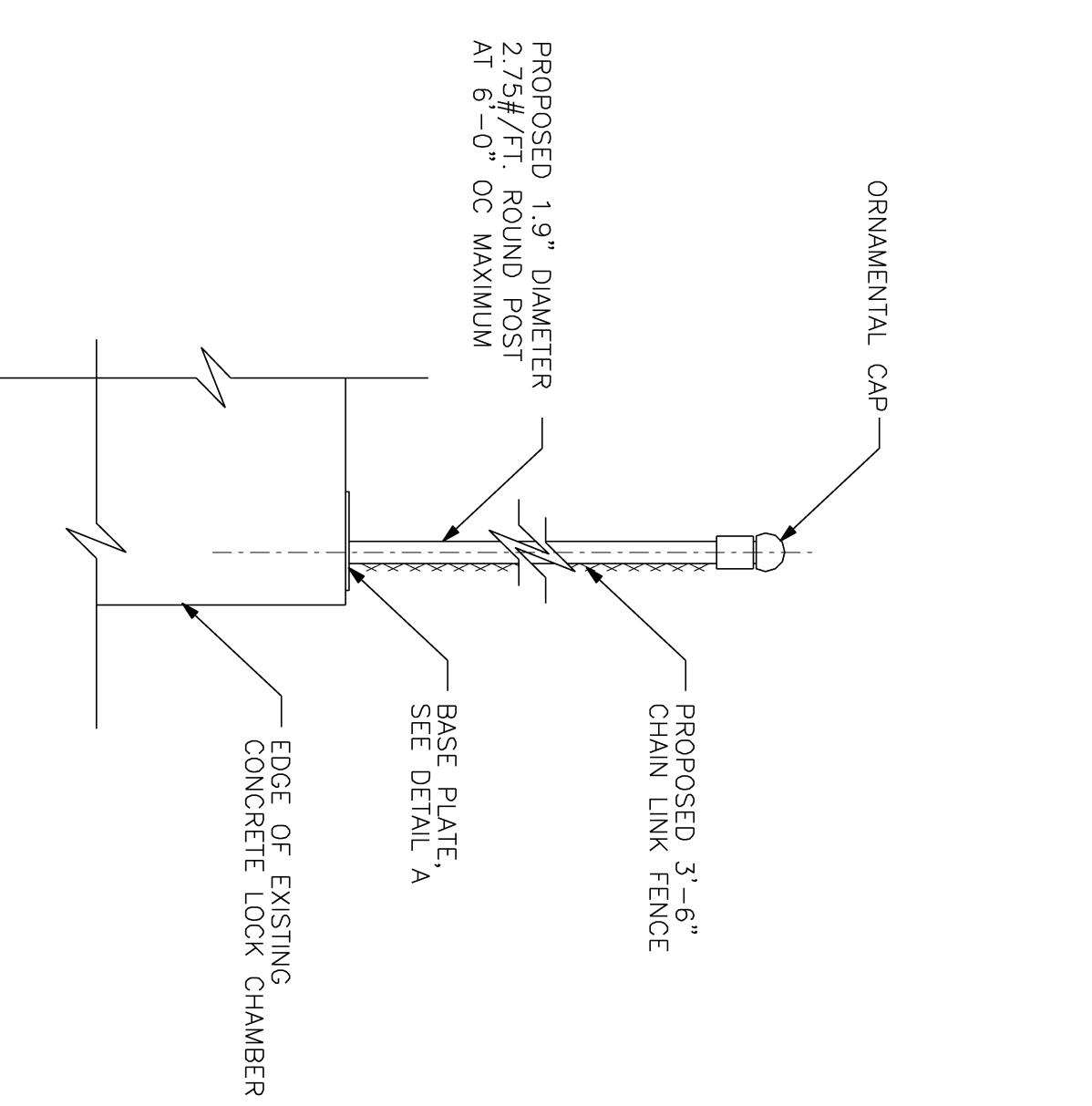
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SITE AND EROSION CONTROL DETAILS

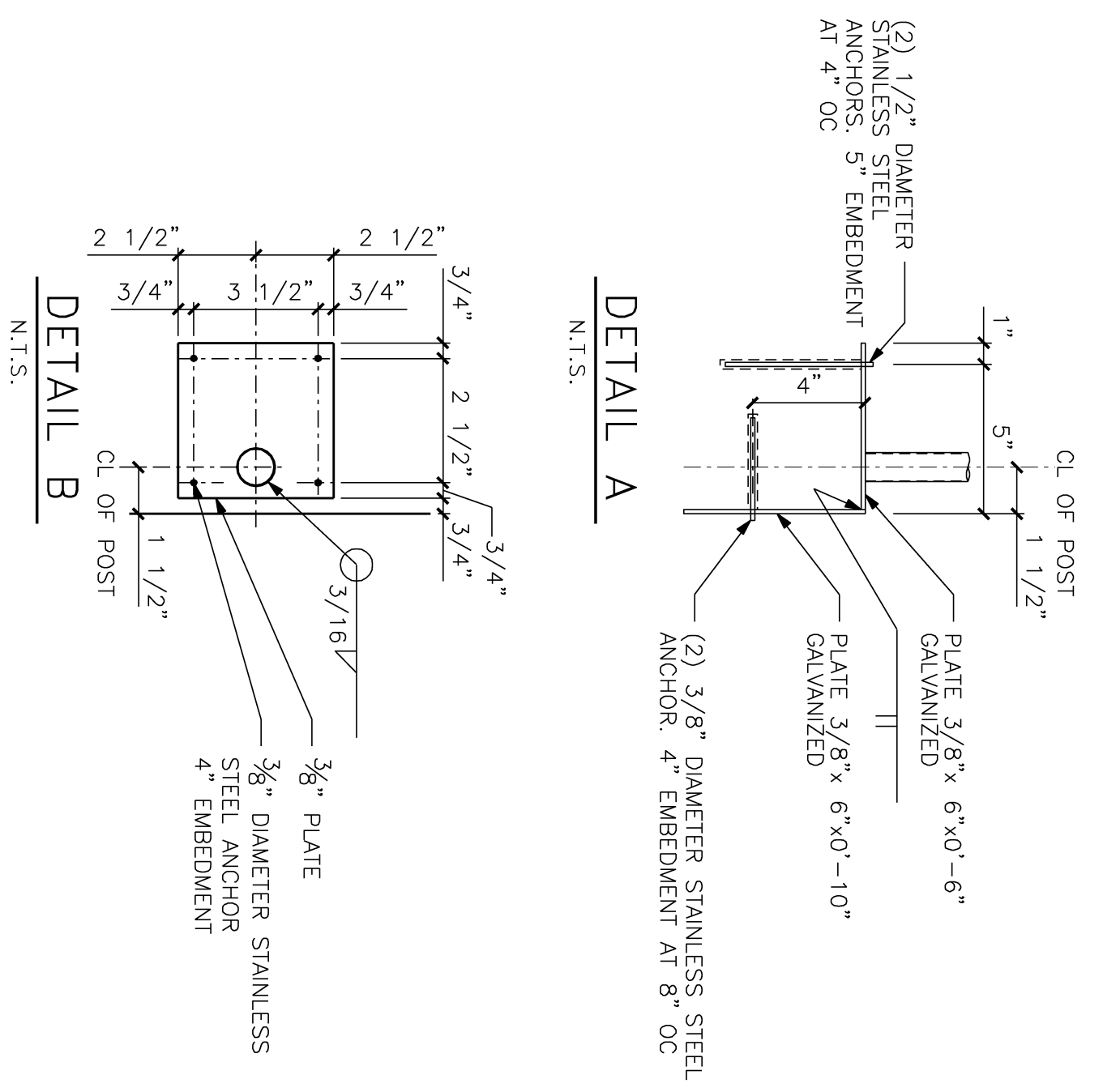
SHEET NUMBER:



1 SECTION
 C-6 N.T.S.

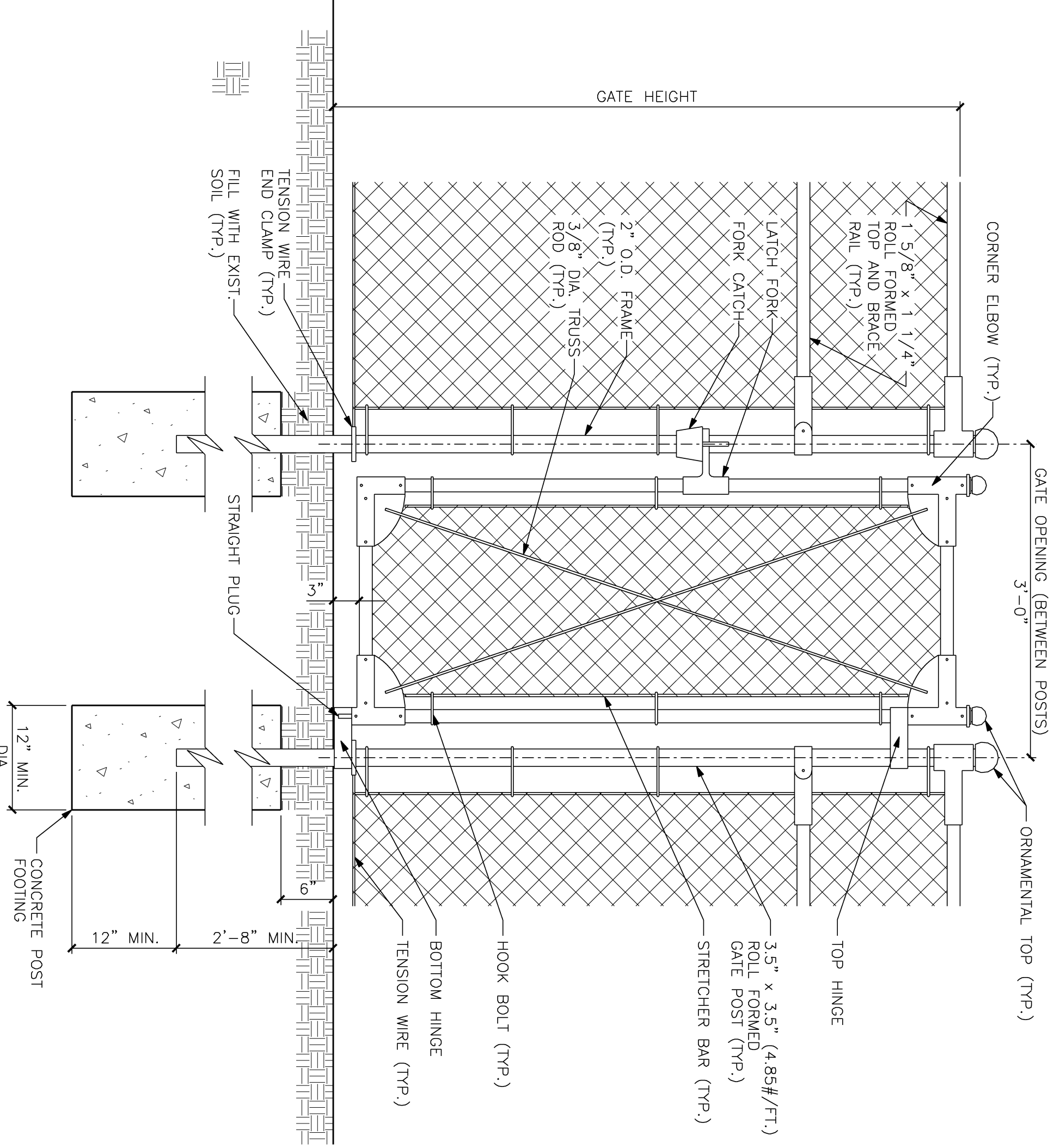


2 SECTION
 C-6 N.T.S.

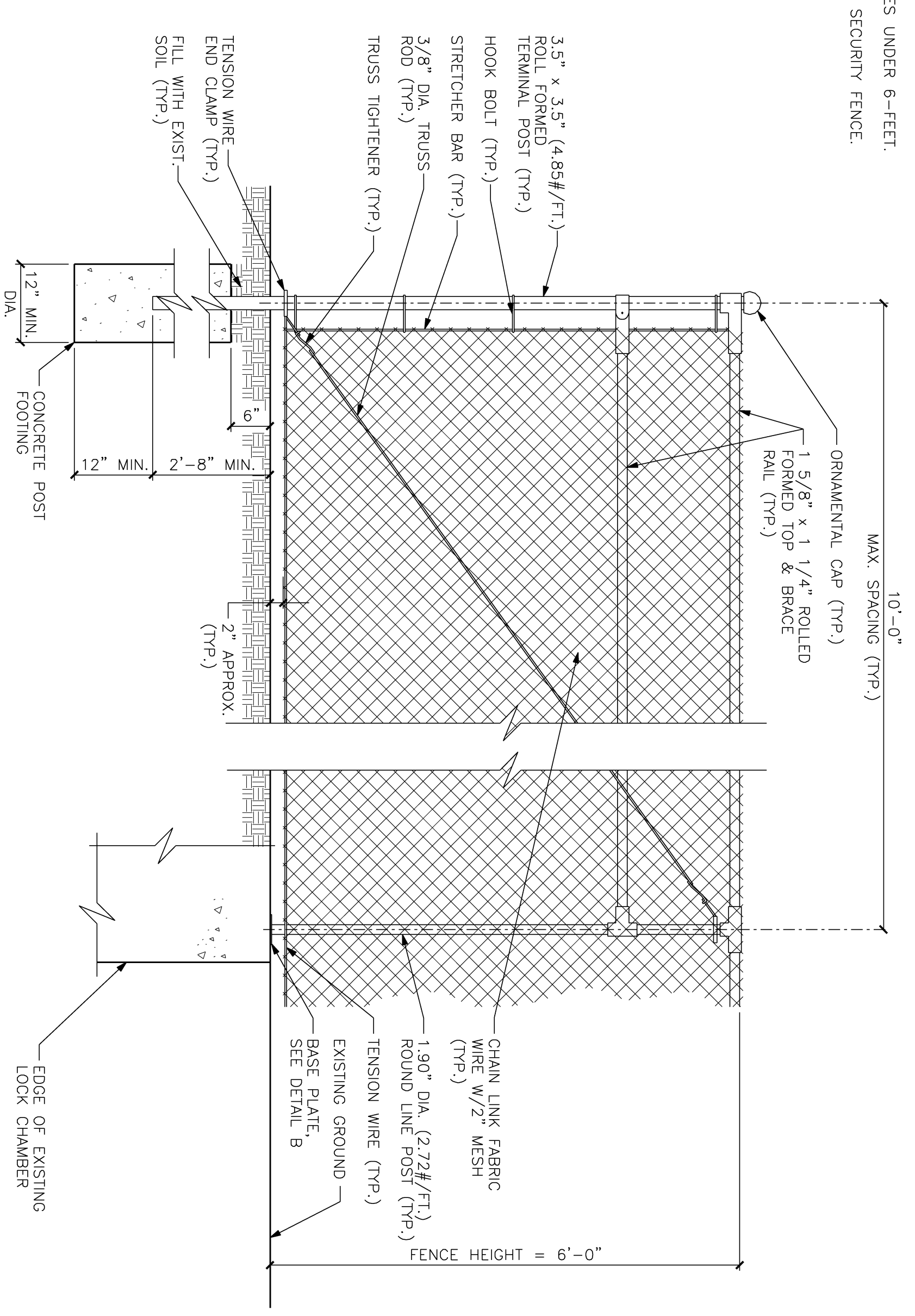


NOTES

1. USE BOTTOM TENSION WIRE FOR 6-FOOT SECURITY FENCE.
2. USE BOTTOM RAIL FOR ALL OTHER FENCES.
3. USE KNUCKLED SELVAGE FOR FENCES UNDER 6-FOOT.
4. USE TWISTED SELVAGE FOR 6-FOOT SECURITY FENCE.

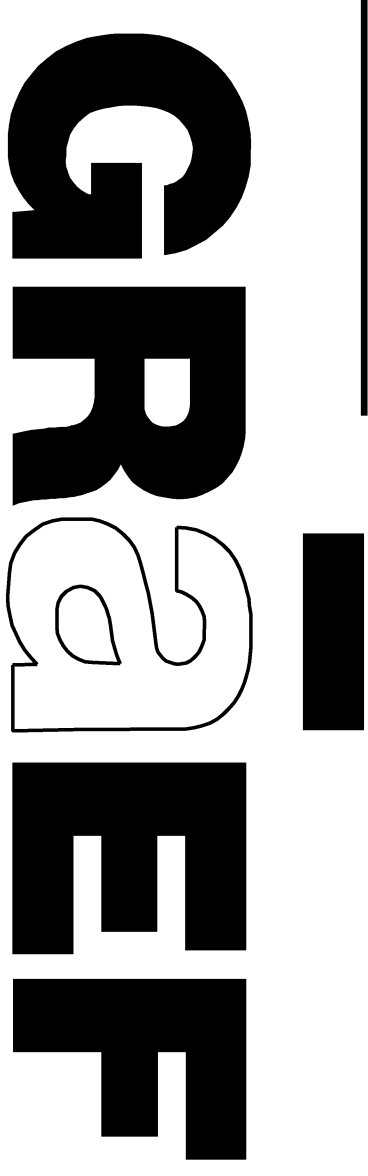


3 GATE DETAIL
 C-6 N.T.S.



4 TYPICAL TERMINAL POST FOOTING
 C-6 N.T.S.

5 TYPICAL LINE POST FOOTING
 C-6 N.T.S.



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 SHEET TITLE:
 FENCE DETAILS

SHEET NUMBER:

C-6

CONSULTANTS:

PROJECT TITLE:

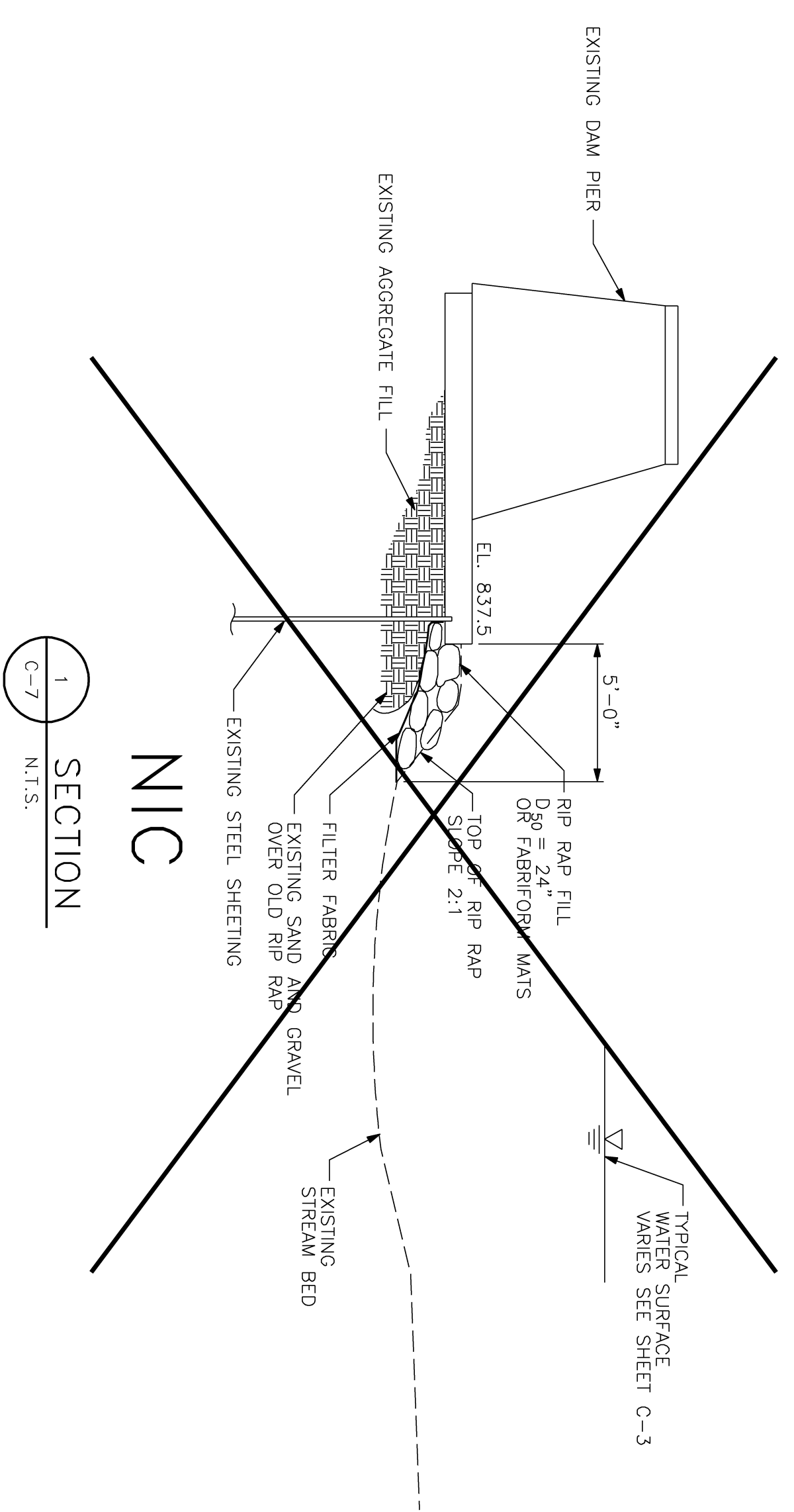
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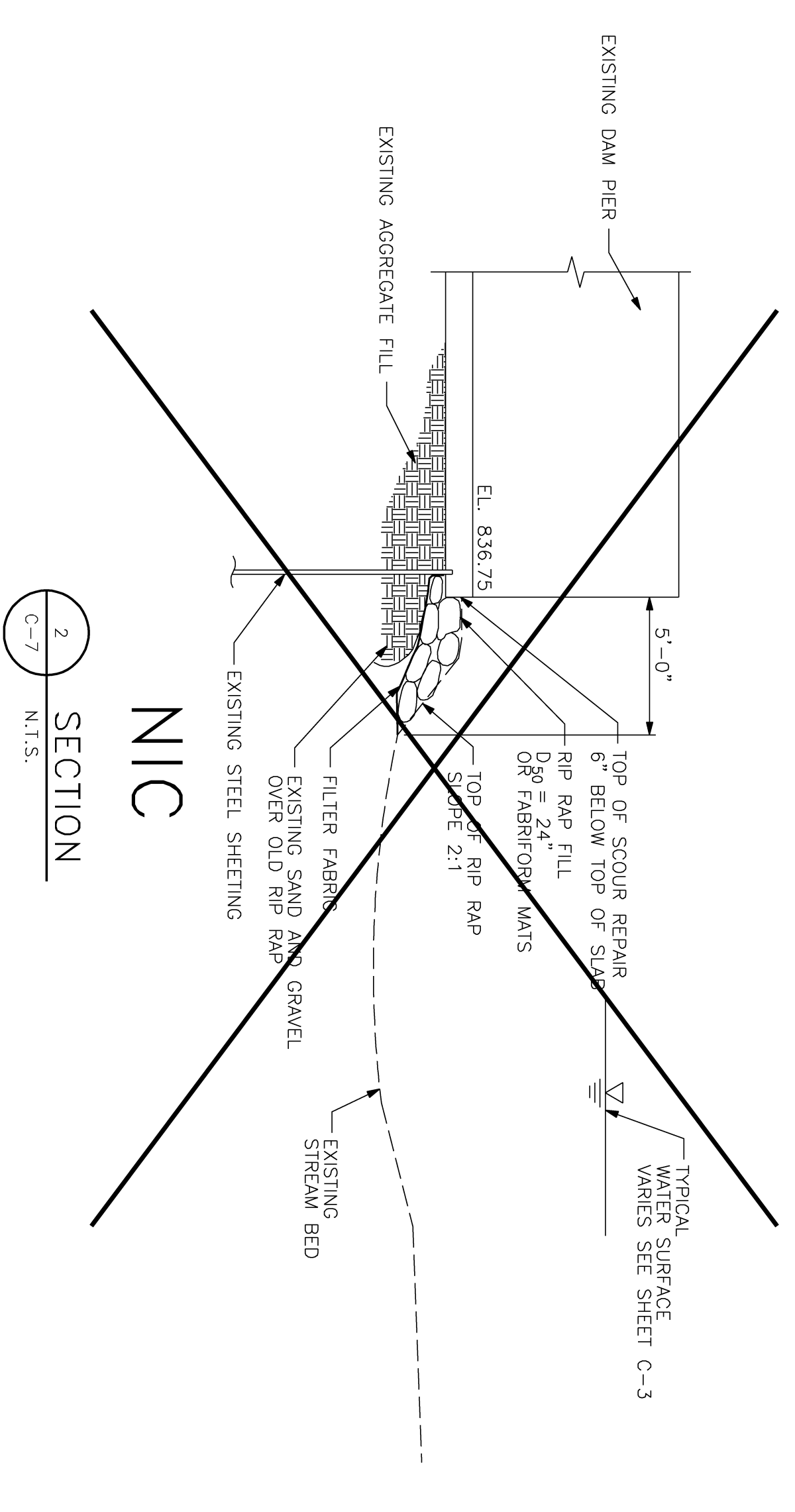
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 SCOUR REPAIR DETAILS

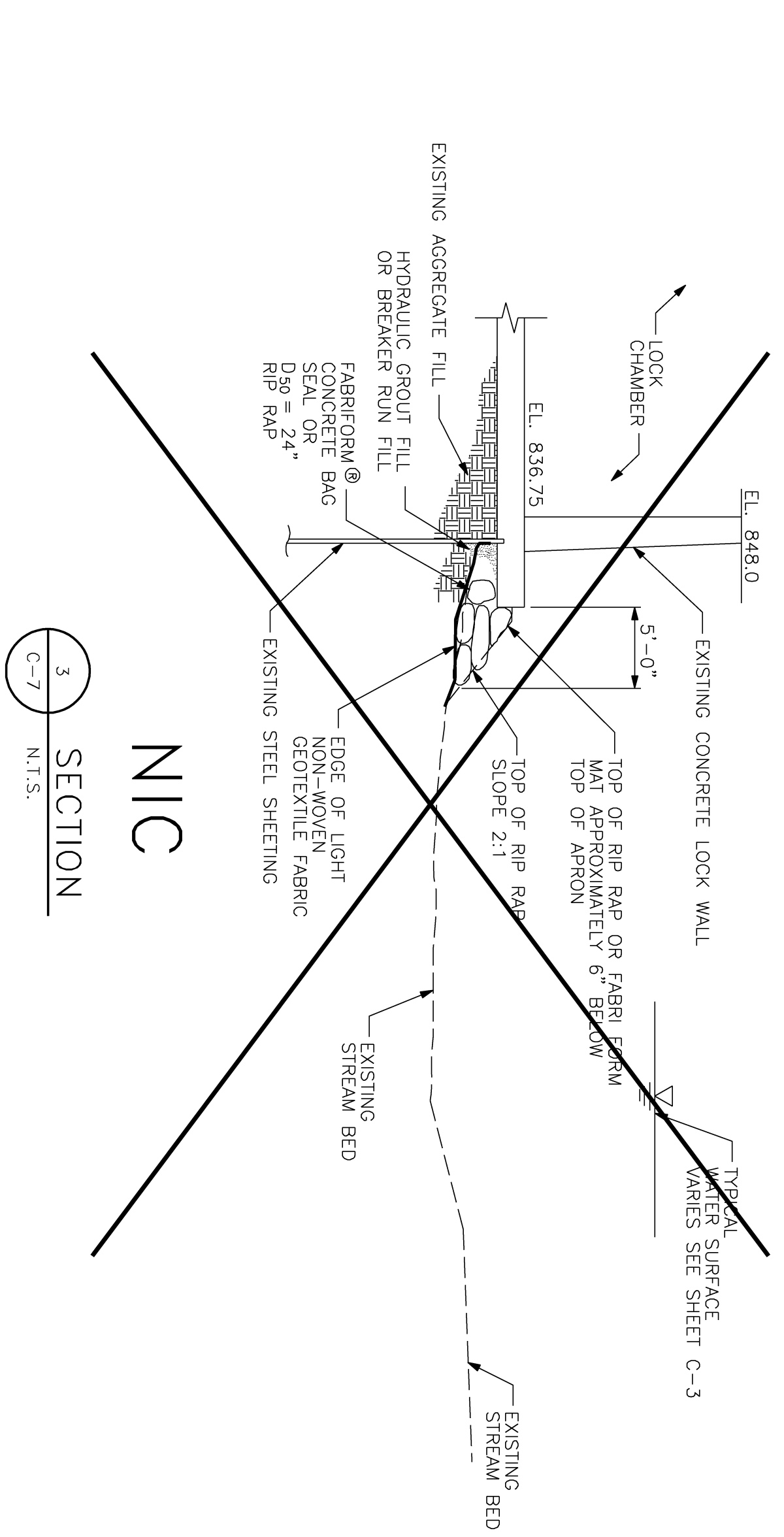
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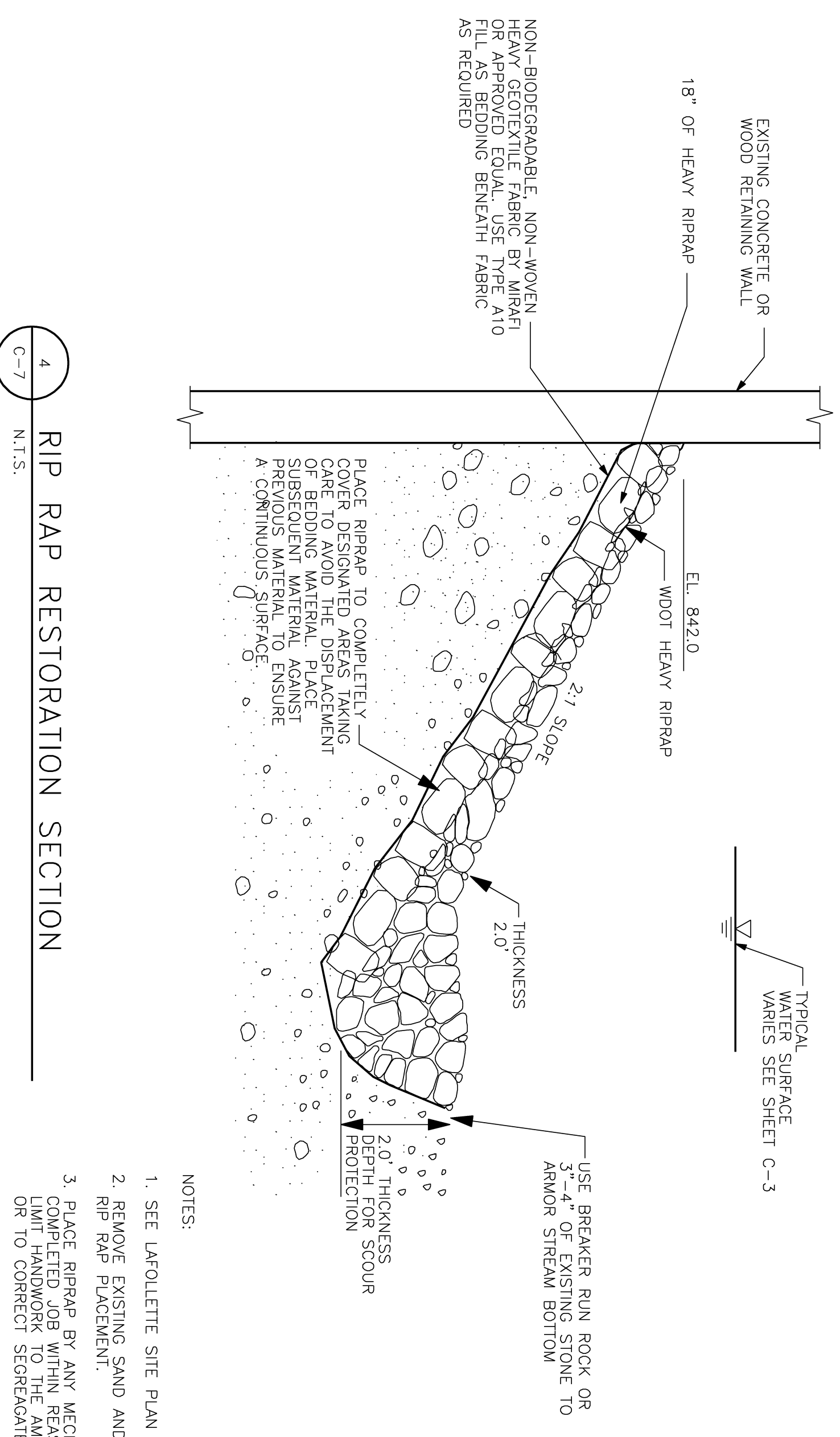
NOTE: SCOUR VARIES FROM 6" DEEP AT SOUTH END TO 1'-0" DEEP AT NORTH END FROM TOP OF SLAB LENGTH OF APRON = 42 FEET



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



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



- NOTES:
1. SEE LAFOLLETTE SITE PLAN SHEET C-4 FOR LOCATIONS.
 2. REMOVE EXISTING SAND AND GRAVEL AS REQUIRED FOR RIP RAP PLACEMENT.
 3. 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 SEGREGATED AREAS.

NIC = NOT IN CONTRACT

CONCRETE MASONRY

- PRODUCTION AND CONSTRUCTION OF CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES ACI 530-05, AND THE NEMA TEK MANUAL FOR CONCRETE MASONRY DESIGN AND CONSTRUCTION, LATEST EDITION.
- COLD WEATHER CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE IMAC "RECOMMENDED PRACTICE" FOR CONCRETE MASONRY, LATEST EDITION.
- CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
- MASONRY WALLS SHALL BE ADOPTATELY BRACED TO RESIST WIND FORCES UNTIL DESIGNED BY THE CONTRACTOR.
- 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.
- VERTICAL BARS SHOWN ON THE DESIGN DRAWINGS SHALL BE PLACED IN A CONTINUOUS UNBROUDED CELL OF NOT LESS THAN 3 INCHES BY 4 INCHES.
- ALL BOND BEAMS SHALL BE REINFORCED AS SHOWN ON THE DESIGN DRAWINGS AND FILLED WITH GROUT.
- ALL DOOR AND WINDOW JAMBS SHALL BE GROUTED SOLID 8 INCHES WIDE UNLESS SHOWN OTHERWISE.
- WHERE NOT SHOWN OTHERWISE, MINIMUM SOLID GROUTED MASONRY BELOW UNTEL REACTIONS SHALL BE 16 INCHES DEEP BY 16 INCHES LONG.

STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC STEEL CONSTRUCTION MANUAL, THIRTEENTH EDITION, AND THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, MARCH 18, 2005 EDITION.
- ALL STRUCTURAL AND MISCELLANEOUS STEEL WHICH SHALL REMAIN EXPOSED TO VIEW FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL, LATEST EDITION, WITHOUT CAPS 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 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-HALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN IN THE AISC TABLES OF UNIFORM DESIGN STEEL DESIGN. FOR BEAM-TO-BEAM AND BEAM-TO-COLUMN FRAMING CONNECTIONS SHALL BE MADE WITH DOUBLE ANGLES UNLESS OTHERWISE DETAILED.
- ALL TRUSS, HANGERS, AND BRACES SHALL HAVE CONNECTIONS DESIGNED TO DEVELOP THE FULL ALLOWABLE TENSILE STRENGTH OF THE MEMBER UNLESS THE DESIGN FORCE IS OTHERWISE SPECIFIED, WHICH CASE THE CONNECTIONS SHALL BE DESIGNED FOR THE FORCE INDICATED.
- COLUMN BASE PLATES SHALL HAVE OVERSIZED HOLES WITH PLATE WASHERS (MINIMUM 3/8-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 SHIP PRIME INTERIOR EXPOSED STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH SSPC STANDARDS SP-11 AND SP-13.
- ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS OTHERWISE NOTED.

WOOD FRAMING

- ERECTION OF ALL WOOD FRAMING SHALL CONFORM TO THE NATIONAL FOREST PRODUCTS ASSOCIATION (NFA) SPECIFICATIONS, LATEST EDITION.
- DRAWINGS INDICATING GENERAL AND TRUSS DETAILS OF CONSTRUCTION, WHERE CONNECTIONS, JOINTS AND SPECIAL DETAILS OF CONNECTION SHALL BE USED, SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.
- ROOF DECK SHALL BE 5/8-INCH APA RATED SHEATHING, EXPOSURE 1. SEE SHEATHING 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
 - 8d AT 12 INCHES ON CENTER AT INTERMEDIATE FRAMING MEMBERS
- INSTALL ALL SHEATHING WITH THE LONG DIMENSIONS OF THE PANEL A CROSS SUPPORTS AND WITH PANEL JOINTS OVER TWO OR MORE SPANS.
- ALLOW 7/8-INCH SPACING AT PANEL ENDS AND EDGES UNLESS OTHERWISE RECOMMENDED BY THE SHEATHING MANUFACTURER.
- ALL NAILING SHALL BE CAREFULLY DRIVEN AND NOT OVERDRIVEN. THE USE OF STARTLES IS PROHIBITED.
- SHEATHING NAILS SHALL BE HOT-DIPPED GALVANIZED.

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 INSTIUTE.
- 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 ENGINEER. THE ENGINEER'S REVIEW AND STAMPING SHALL BE THE ENGINEER'S REVIEW AND STAMPING. THE CONTRACTOR SHALL NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK AND NOT CORRECT THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE TRUSS SYSTEMS, INCLUDING 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 SWAMPON TYPE UPLIFT CONNECTIONS PROVIDED BY THE TRUSS SUPPLIER WITH MINIMUM 600 GALVANIZED COATING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING OF TRUSSES UNTIL PERMANENT BRACING IS IN PLACE.
- DOUBLE 2 X 4 CONTINUOUS BRACING SHALL BE PROVIDED AT THE PEAK OF THE RIDGE.
- WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE FOLLOWING LOADS:
 1. TOP CHORD LOADING
 - LIVE LOAD - 30 PSF (ON THE HORIZONTAL PROJECTION)
 - DEAD LOAD - 8 PSF (ON THE SURFACE AREA)
 2. WIND LOADING SHALL BE IN ACCORDANCE WITH ASCE 7-08
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY AND PERMANENT BRACING AND BLOCKING TO MAINTAIN THE TRUSS SYSTEMS IN PLACE UNTIL THE TRUSS MANUFACTURER'S RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES SHALL BE A MINIMUM REQUIREMENT.
- TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED OR MANIPULATED IN ANY WAY WITHOUT THE WRITTEN APPROVAL OF THE TRUSS MANUFACTURER.

MISCELLANEOUS

- DIMENSIONS OF EXISTING CONSTRUCTION OR CONSTRUCTION IN PROGRESS SHALL BE VERIFIED AND CORRECTED PRIOR TO FABRICATION OF STRUCTURAL COMPONENTS.
- VERIFY AND CORRELATE WITH ALL CONTRACTORS, THE LOCATION OF ALL MECHANICAL VENTILATIONS AND OPENINGS.
- EXPANSION ANCHORS SHALL BE HILT KWK BOLT 1Z.
- ADHESIVE ANCHORS SHALL BE HILT HIT HY150.
- NO CONSTRUCTION DEBRIS SHALL BE ALLOWED TO REMAIN ON RIVER BOTTOM.

DESIGN SPECIFICATIONS

- DESIGN IS IN ACCORDANCE WITH THE STATE OF WISCONSIN AND THE 2008 INTERNATIONAL BUILDING CODE.
- MINIMUM 28 DAY CONCRETE CYLINDER STRENGTH SHALL BE:
 - DRILLED PIERS 3500 PSI
 - FOOTINGS 3500 PSI
 - SLABS ON GROUND 3500 PSI
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60.
- CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 TYPE II NORMAL WEIGHT UNITS.
- CONCRETE MASONRY BRICK SHALL CONFORM TO ASTM C55 GRADE SW.
- MORTAR SHALL CONFORM TO ASTM C270 TYPE N.
- MASONRY GROUT SHALL CONFORM TO ASTM C476. MINIMUM COMPRESSIVE STRENGTH SHALL BE f'c = 3000 PSI.
- MINIMUM COMPRESSIVE STRENGTH OF UNREINFORCED CONCRETE MASONRY CONSTRUCTION SHALL BE f'm = 1500 PSF.
- MINIMUM COMPRESSIVE STRENGTH OF REINFORCED CONCRETE MASONRY CONSTRUCTION SHALL BE f'm = 2500 PSF.
- STRUCTURAL STEEL W-SHAPE'S SHALL CONFORM TO ASTM A992 GRADE 50.
- STRUCTURAL STEEL PLATES, CHANNELS, AND OTHER ROLLED MEMBERS SHALL CONFORM TO ASTM A36.
- RECTANGULAR OR SQUARE HSS MEMBERS SHALL CONFORM TO ASTM A500 GRADE B.
- ROUND HSS MEMBERS SHALL CONFORM TO ASTM A500 GRADE B.
- STEEL PIPE RAILINGS SHALL CONFORM TO ASTM A53 GRADE B.
- STRUCTURAL WOOD FRAMING SHALL CONFORM TO NFPA NATIONAL DESIGN CODES AND SPS SPECIES OF GRADE 2.
- JOISTS: SPECIES OF GRADE 2.
- ASSUMED BEARING CAPACITY FOR SPREAD FOOTINGS IS 2000 PSF. CONTRACTOR SHALL RETAIN GEOTECHNICAL ENGINEER TO VERIFY AT TIME OF CONSTRUCTION.
- REQUIRED BEARING CAPACITY FOR DRILLED PIERS IS 2000 PSF.
- DESIGN LOADS:
 - FLOOR LIVE LOADS (IBC 2008) 50 PSF
 - MECHANICAL WALKWAYS 50 PSF
 - ROOF LIVE LOAD 30 PSF
 - ROOF SNOW LOAD (ASCE 7-05)
 - OCCUPANCY CATEGORY II
 - IMPORTANCE FACTOR I_s = 1.0
 - FLAT ROOF SNOW LOAD Ft = 25.2 PSF
 - EXPOSURE FACTOR Ce = 1.0
 - INTERNAL FACTOR Ci = 1.2
 - WIND LOAD (ASCE 7-05) CATEGORY II
 - IMPORTANCE FACTOR I_w = 1.0
 - BASE WIND SPEED V = 90 MPH
 - INTERNAL PRESSURE COEFFICIENT gcpi = +/- 0.18
- RESISTANCE TO LATERAL LOADS ON STRUCTURE IS PROVIDED BY FLOOR AND UNTIL ALL LATERAL SUPPORT SYSTEMS ARE IN PLACE AND FUNCTIONAL BRACING.
- ALL STRUCTURAL FRAMING AND CONNECTIONS HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. ANY INVESTIGATION OF THE AND CONSTRUCTION PROCESS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 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.
- CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION AND ALL JOB SITE SAFETY.

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 DISBURPANCES 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 REMAINING 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 BACKFILL COMPACTED TO MAXIMUM 6-INCH LAYERS.
- BACKFILL AGAINST EXTERIOR FOUNDATION WALLS SHALL BE SPOIL BACKFILL COMPACTED TO MAXIMUM 6-INCH LAYERS.
- FORMWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION.
- REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH THE ACI "MANUAL OF CONCRETE PRACTICE", LATEST EDITION, UNLESS OTHERWISE NOTED.
- LAP ALL WALL BARS 30 DIAMETERS UNLESS OTHERWISE DETAILED. LAP WELDED WIRE MESH 6 INCHES.
- CONCRETE PROTECTION FOR REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE. ACI 318-05 OR AS NOTED.
- CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO PLACING CONCRETE.
- DO NOT PLACE OR CUT HOLES IN CONCRETE SLABS OR WALLS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- EXTERIOR EXPOSED CONCRETE SHALL BE AIR-ENRICHED. AIR CONTENT SHALL BE 6 PERCENT (+/- 1 1/2 PERCENT).
- PIPES AND CONDUITS SHALL NOT BE EMBEDDED IN CONCRETE.
- ELECTRICAL CONDUIT OR PIPES PASSING THROUGH SLABS OR WALLS SHALL BE LOCATED 2. THEY RUN BETWEEN REINFORCING AND DO NOT DISPLACE IT IN ANY MANNER.
- ALUMINIUM CONDUITS SHALL NOT BE PLACED IN CONCRETE.
- CHAMFER ALL EXPOSED CONCRETE CORNERS 1/2 INCH.
- CONCRETE SHALL BE TESTED BY THE CONTRACTOR'S TESTING LAB. REFER TO SPECIFICATIONS FOR REQUIREMENTS.
- PROPER CURING PROCEDURES SHALL BE USED FOR ALL SLAB ON GRADE TO PREVENT CURLING.
- CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE MIXES.

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 125 South 84th Street,
 Suite 401
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www.graef-usa.com

CONSULTANTS:

PROJECT TITLE:

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

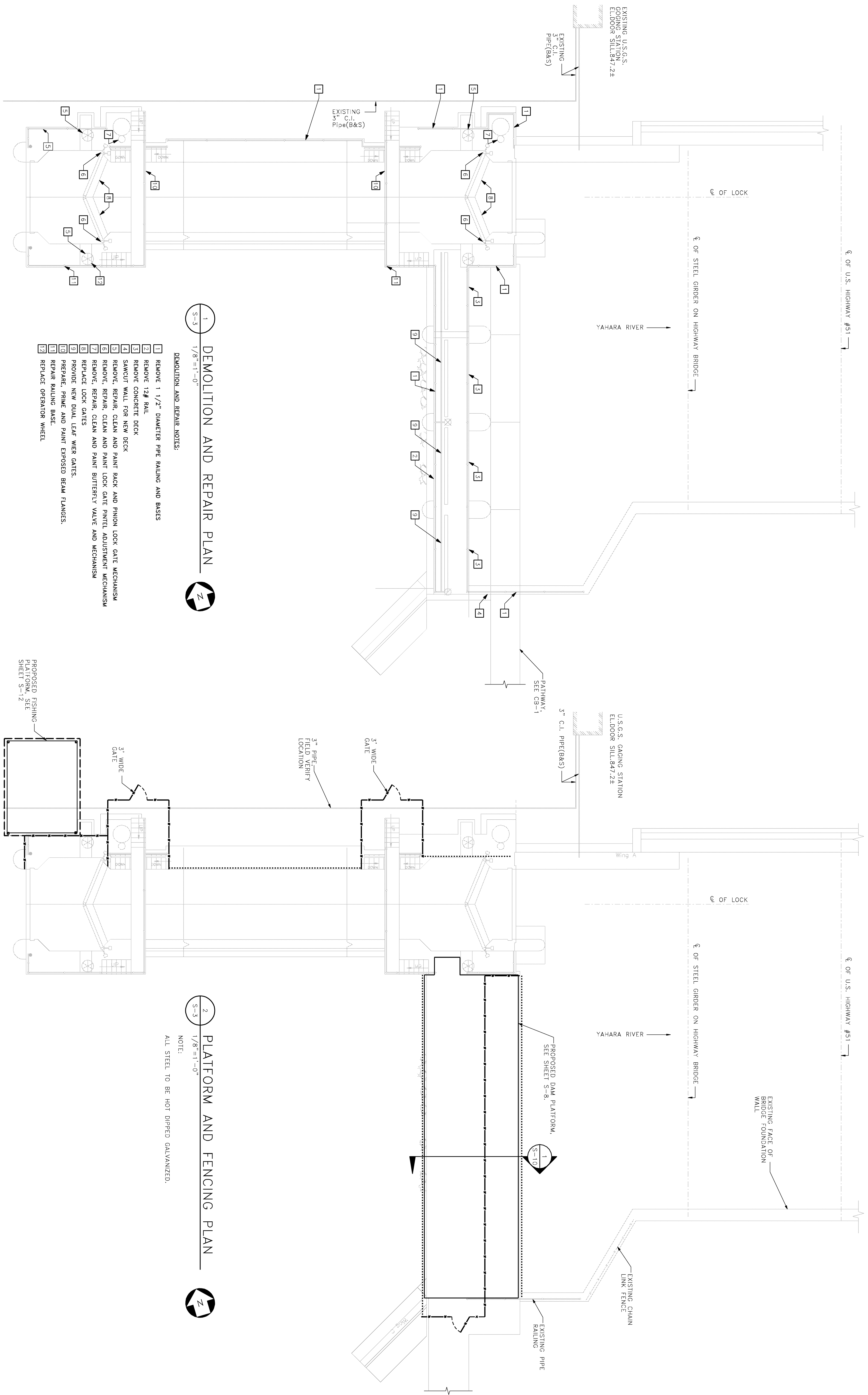
ISSUE:

PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN
 SHEET TITLE:
 RENOVATION PLANS -
 BARBOCK LOCK AND DAM

SHEET NUMBER:

FENCE LEGEND	
	6'-0" HIGH FENCE
	2'-10" HIGH FENCE
	3'-6" HIGH FENCE

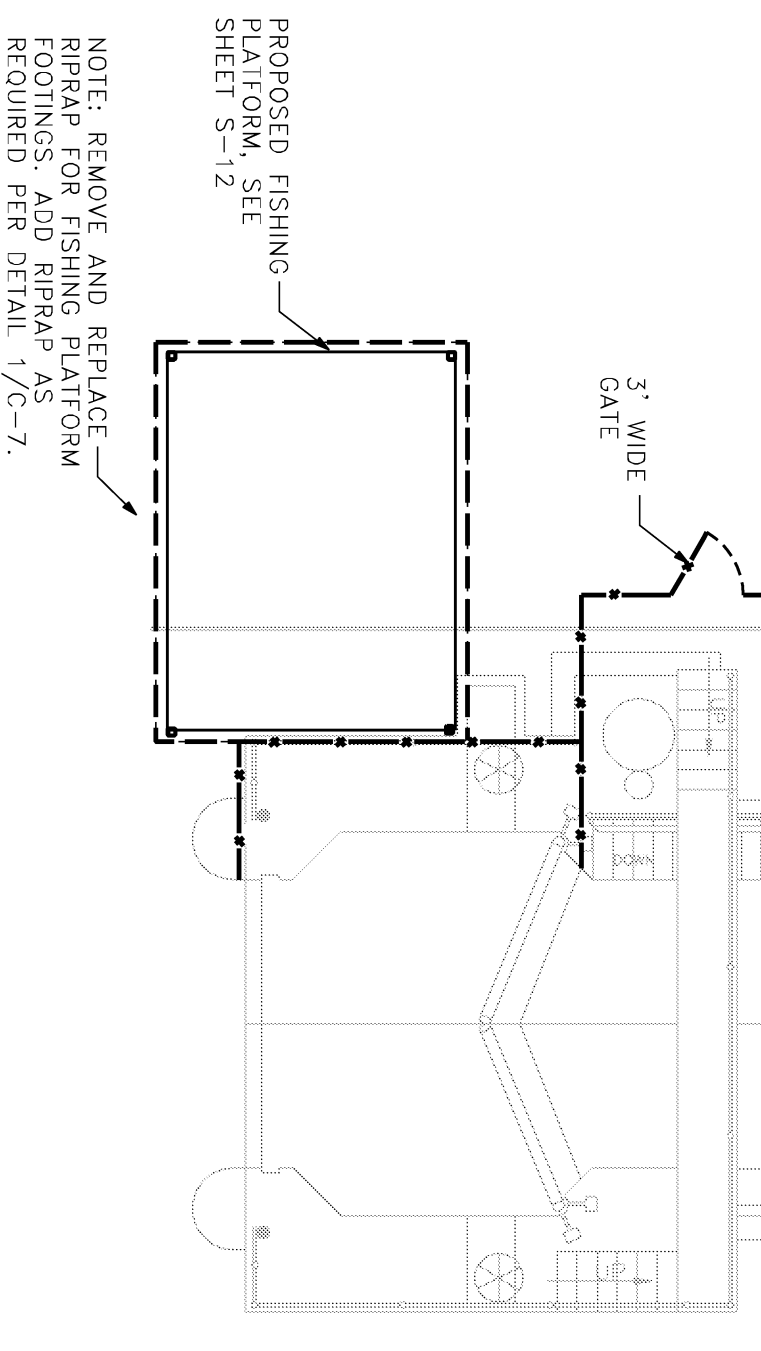


1
 S-3 1/8"=1'-0"
DEMOLITION AND REPAIR PLAN

- DEMOLITION AND REPAIR NOTES:
- 1 REMOVE 1 1/2" DIAMETER PIPE RAILING AND BASES
 - 2 REMOVE 12# RAIL
 - 3 REMOVE CONCRETE DECK
 - 4 SAWCUT WALL FOR NEW DECK
 - 5 REMOVE, REPAIR, CLEAN AND PAINT LOCK GATE MECHANISM
 - 6 REMOVE, REPAIR, CLEAN AND PAINT PINION LOCK GATE MECHANISM
 - 7 REMOVE, REPAIR, CLEAN AND PAINT BUTTERFLY VALVE AND MECHANISM
 - 8 REPLACE LOCK GATES
 - 9 PROVIDE NEW DUAL LEAF WIER GATES.
 - 10 PREPARE, PRIME AND PAINT EXPOSED BEAM FLANGES.
 - 11 REPAIR RAILING BASE.
 - 12 REPLACE OPERATOR WHEEL.

2
 S-3 1/8"=1'-0"
PLATFORM AND FENCING PLAN

NOTE:
 ALL STEEL TO BE HOT DIPRED GALVANIZED.



NOTE: REMOVE AND REPLACE
 AND REPAIR AS SHOWN
 FOOTINGS AND REPAIRS
 REQUIRED PER DETAIL 1/C-7.

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 LOCKS AND DAMS RENOVATION
 PHASE 2
 LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

PROJECT INFORMATION:

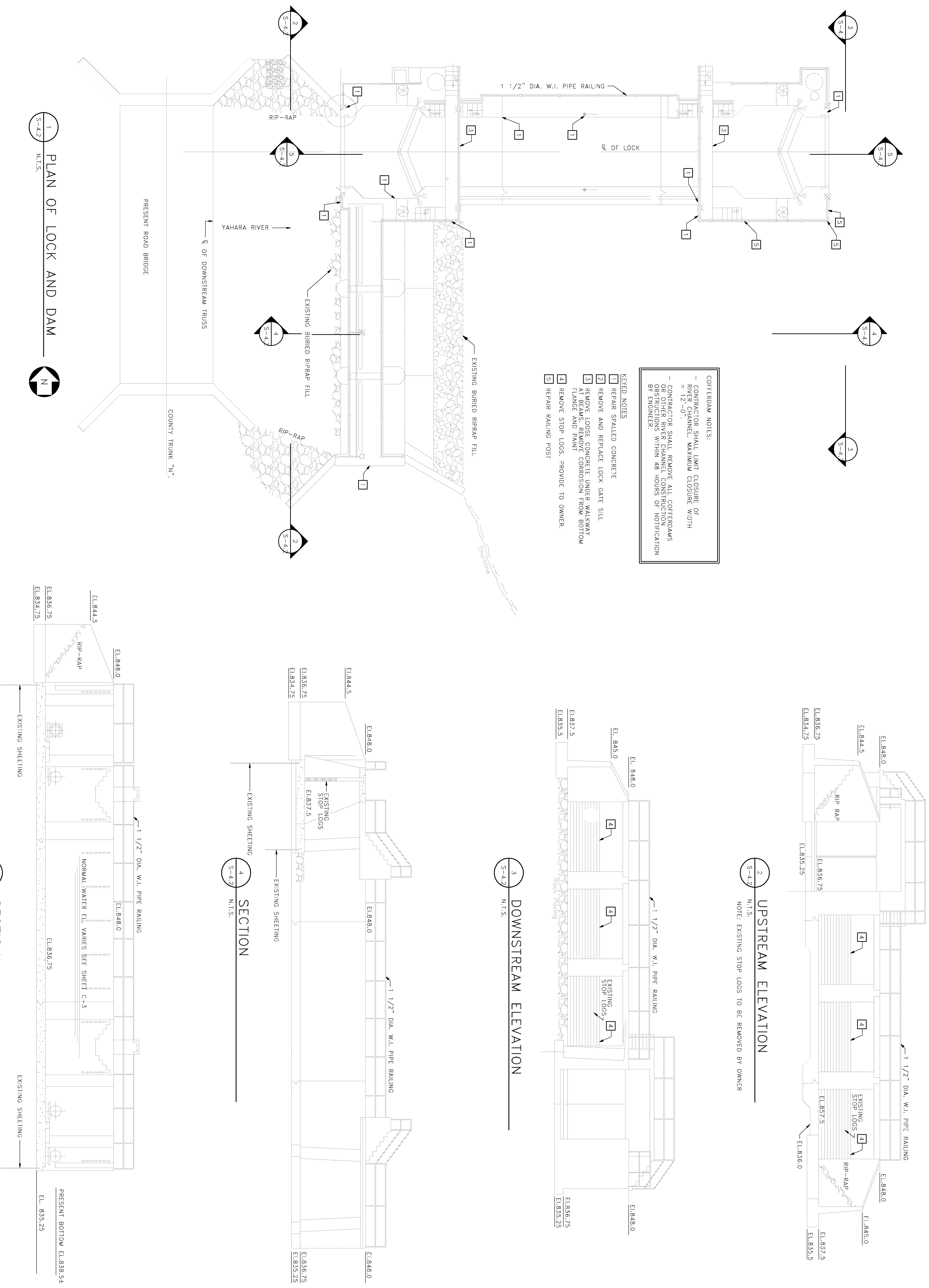
PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN

SHEET TITLE:

CONCRETE REPAIRS -
 LA FOLLETTE LOCK AND DAM
 PHASE 2

SHEET NUMBER:

S-4.2



CONSULTANTS:

PROJECT TITLE:

DANE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 BABCOCK AND LAFOLLETTE PARKS -
 LOCKS AND DAMS RENOVATION
 PHASE 2
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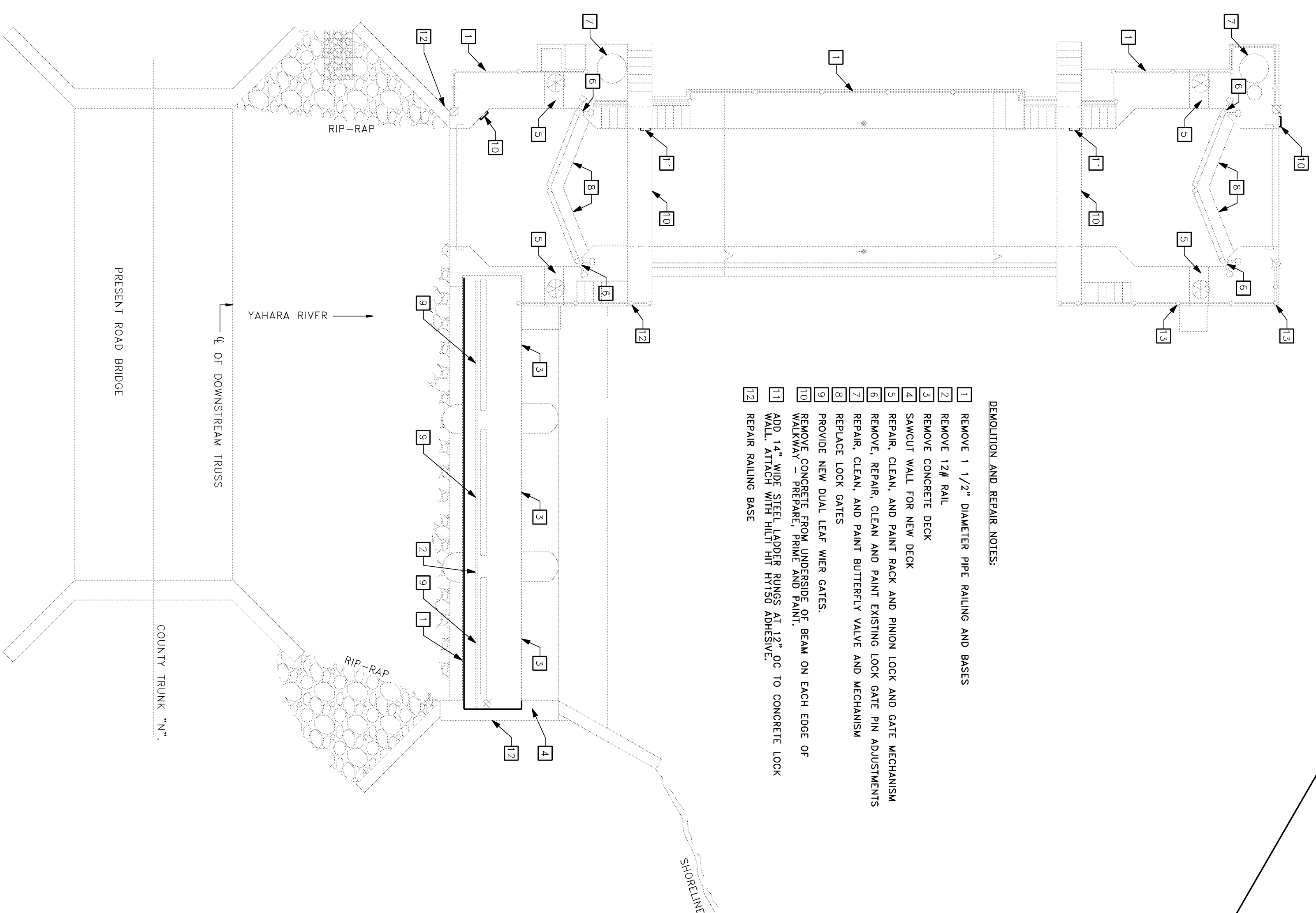
ISSUE:

SHEET TITLE:

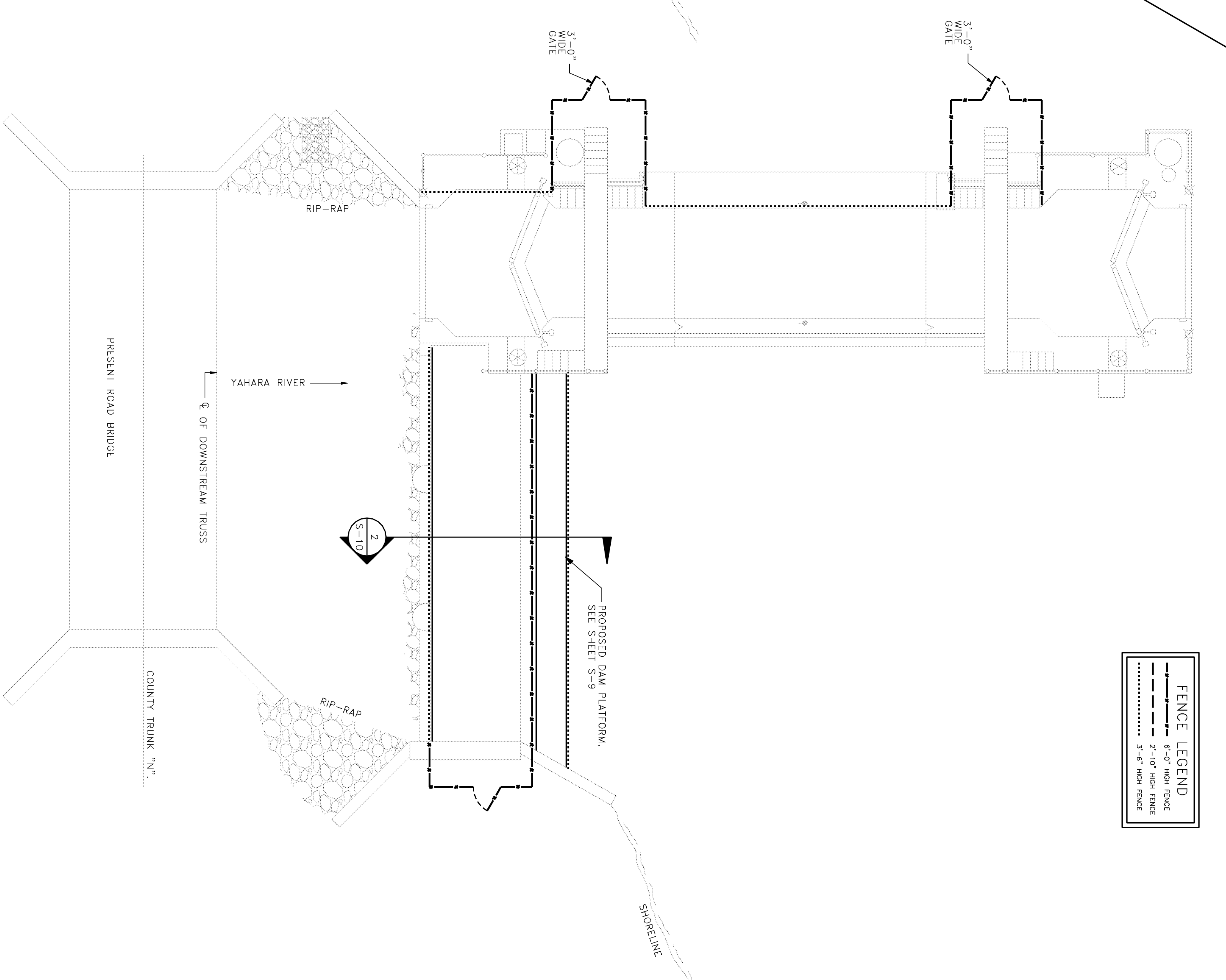
RENOVATION PLANS -
 LA FOLLETTE LOCK AND DAM

SHEET NUMBER:

S-5



1
 S-5
 1/8"=1'-0"
 DEMOLITION AND REPAIR PLAN



2
 S-5
 1/8"=1'-0"
 PLATFORM AND FENCING PLAN

NOTES:
 ALL STEEL TO BE HOT DIPPED GALVANIZED.

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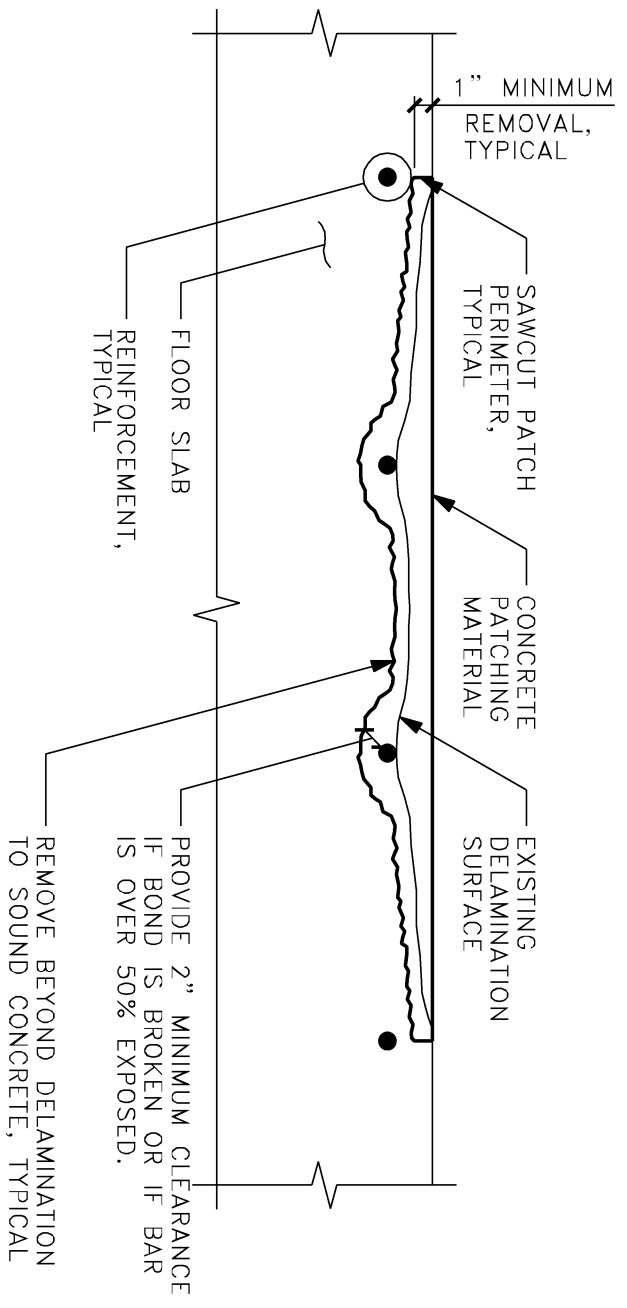
PROJECT TITLE:

DANE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 BABCOCK AND LAFOLLETTE PARKS -
 LOCKS AND DAMS RENOVATION
 PHASE 2
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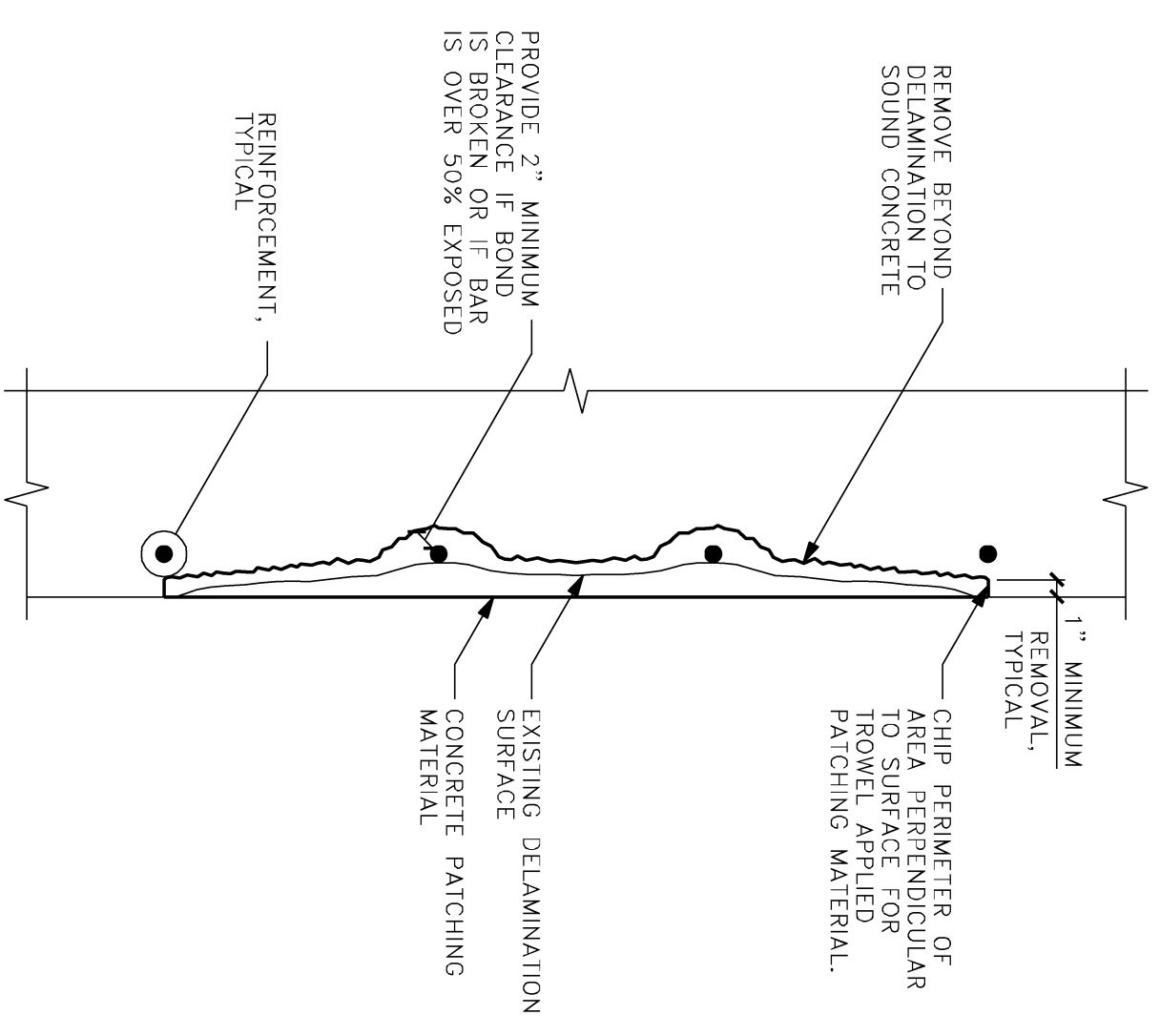
ISSUE:

PROJECT INFORMATION:
 PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN
 SHEET TITLE:
 CONCRETE REPAIR DETAILS

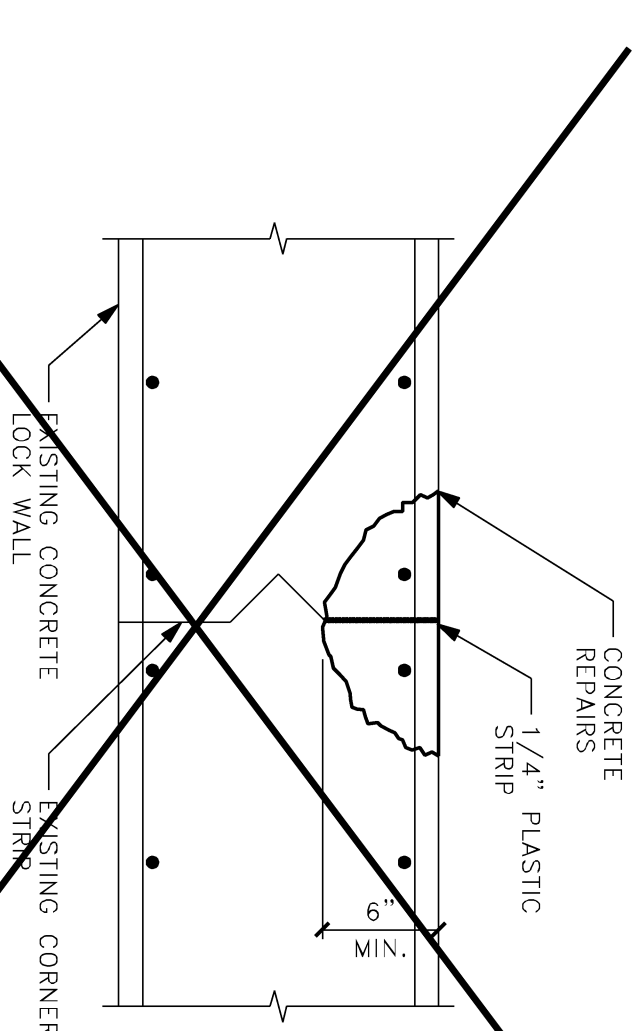
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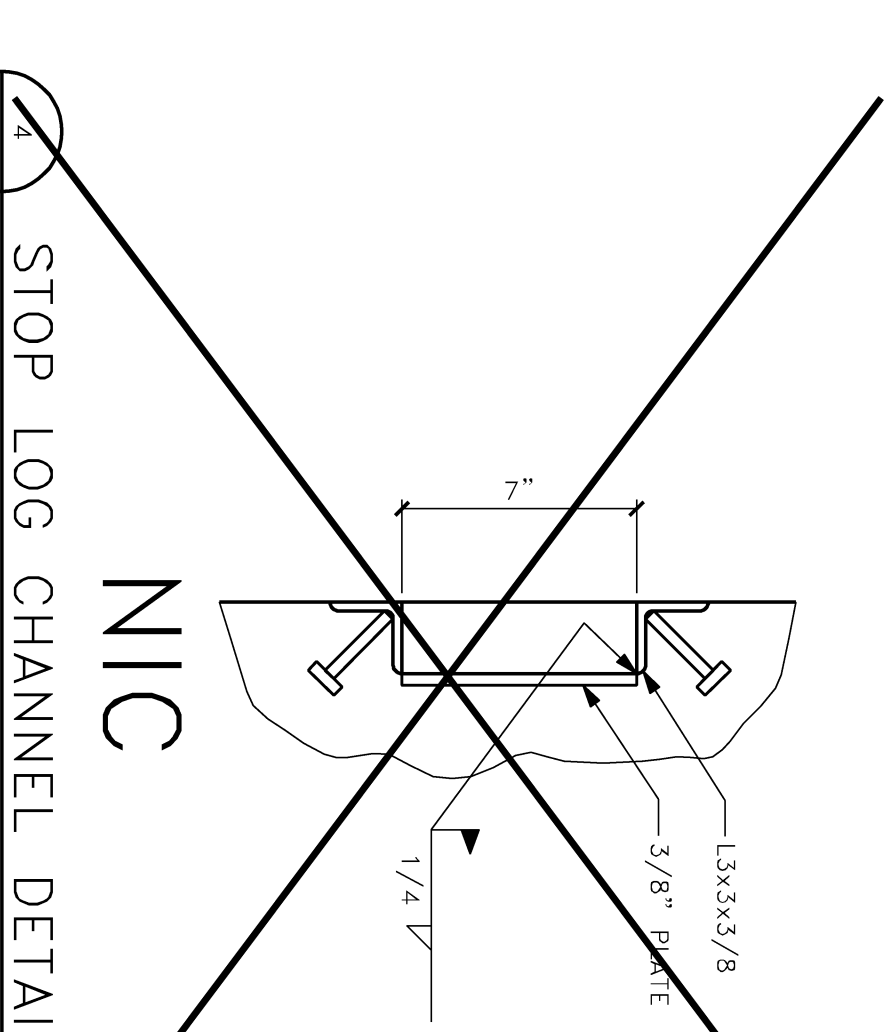
1 TYPICAL HORIZONTAL SPALL REPAIR DETAIL
 S-6 N.T.S.



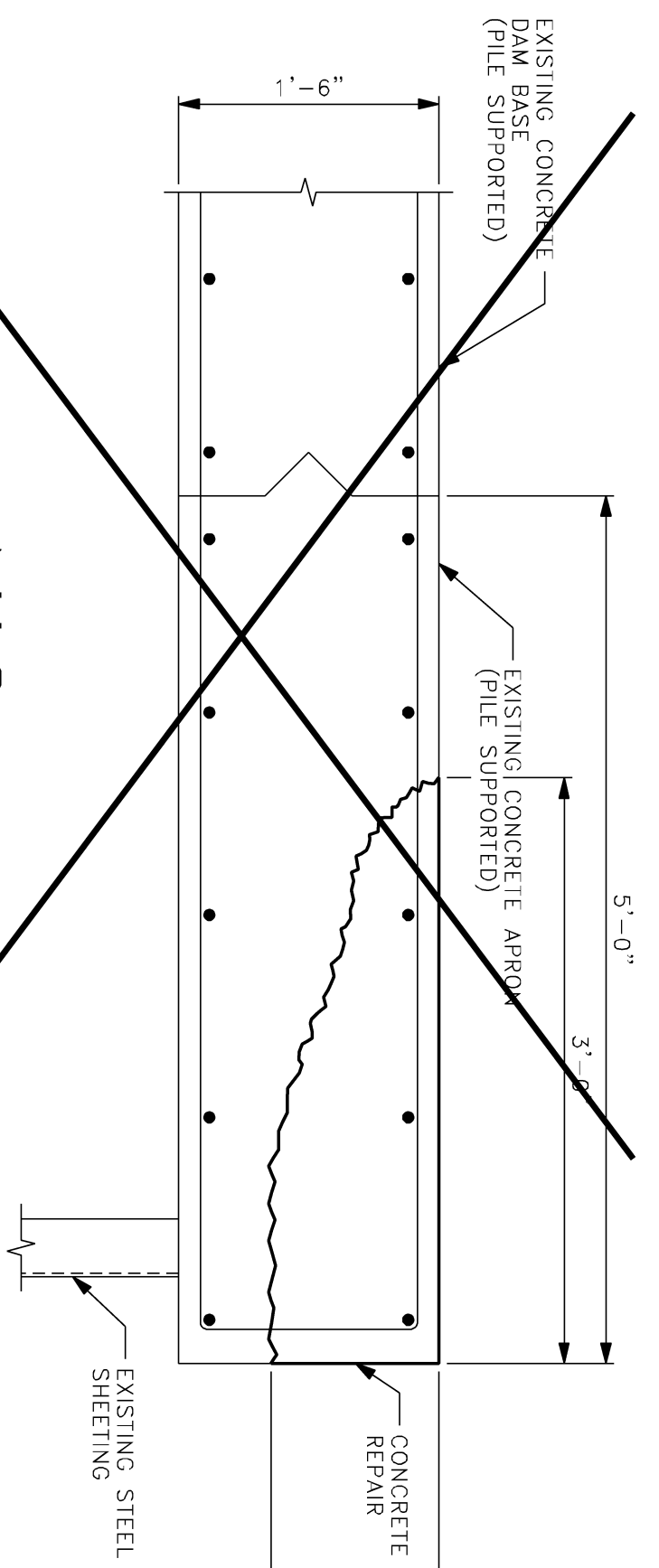
2 TYPICAL VERTICAL SPALL REPAIR
 S-6 N.T.S.



3 EXPANSION JOINT REPAIR
 S-6 N.T.S.



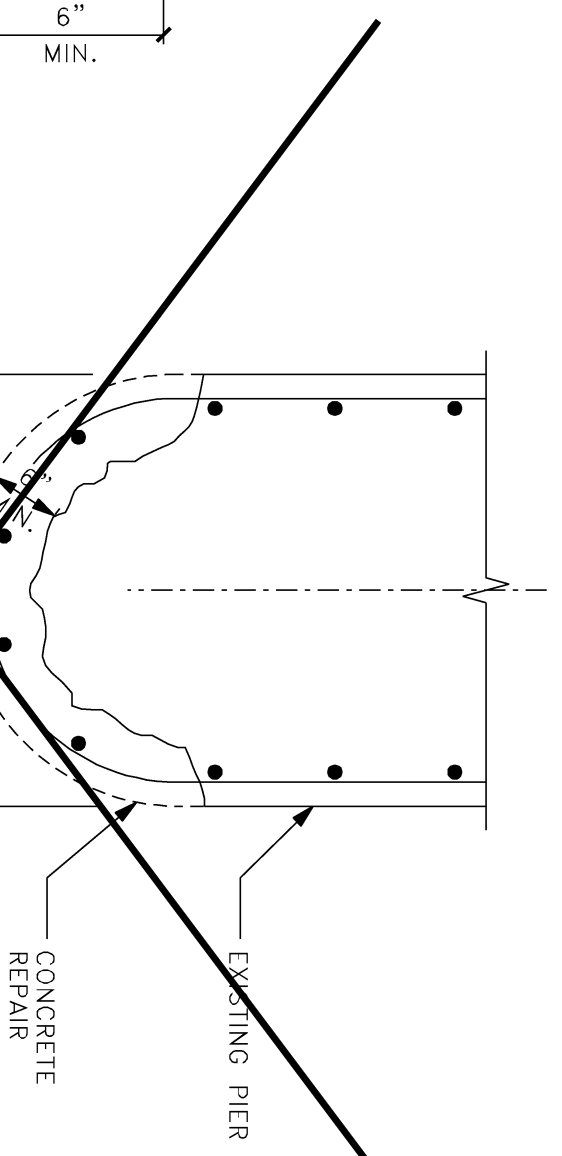
4 STOP LOG CHANNEL DETAIL
 S-6 3" = 1'-0"



5 APRON REPAIR
 S-6 1" = 1'-0"

NIC

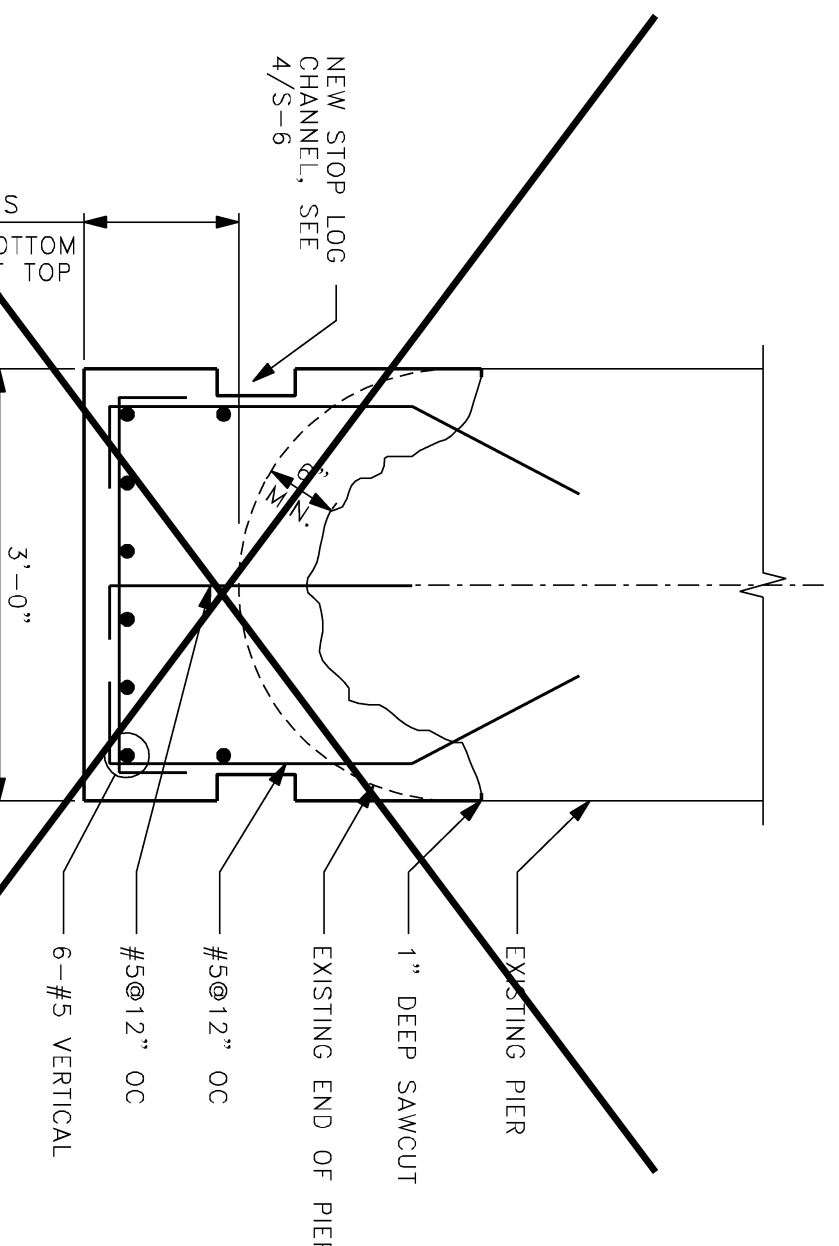
NOTE: DETERIORATED CONCRETE APPROXIMATELY 4'-0" LONG



6 PIER REPAIR DETAIL
 S-6 3/4"=1'-0"

NIC

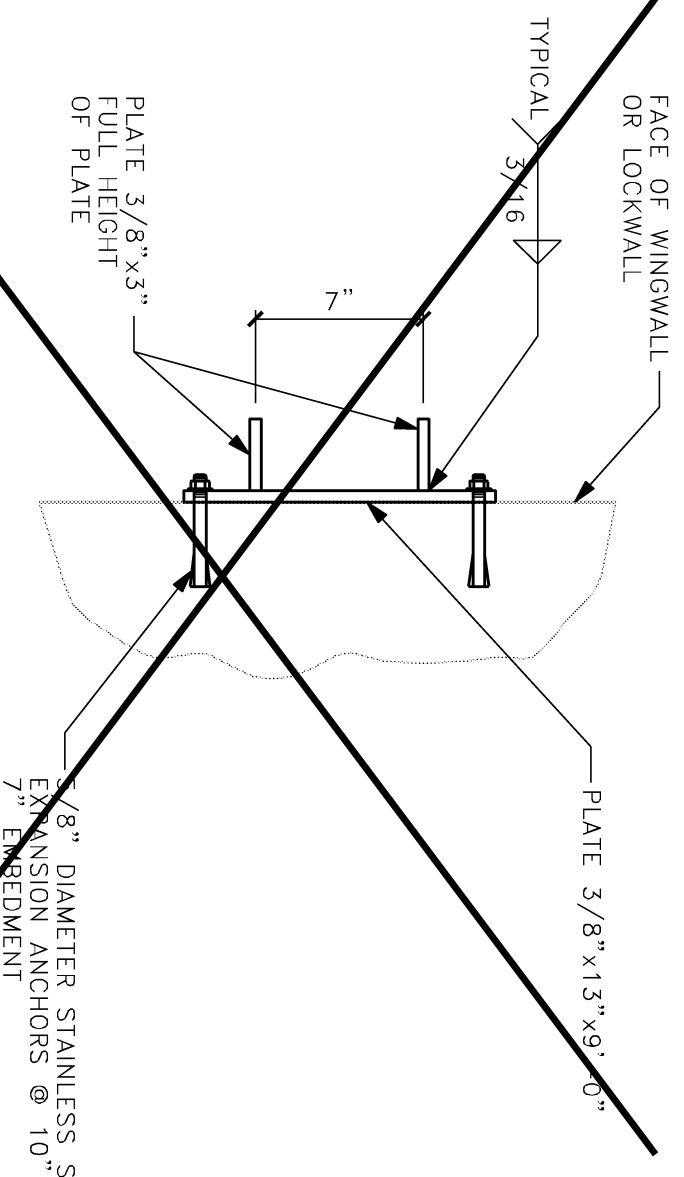
NOTE: PIER SPALLS APPROXIMATELY 5'-0" TALL



7 PIER EXTENSION DETAIL
 S-6 3/4"=1'-0"

NIC

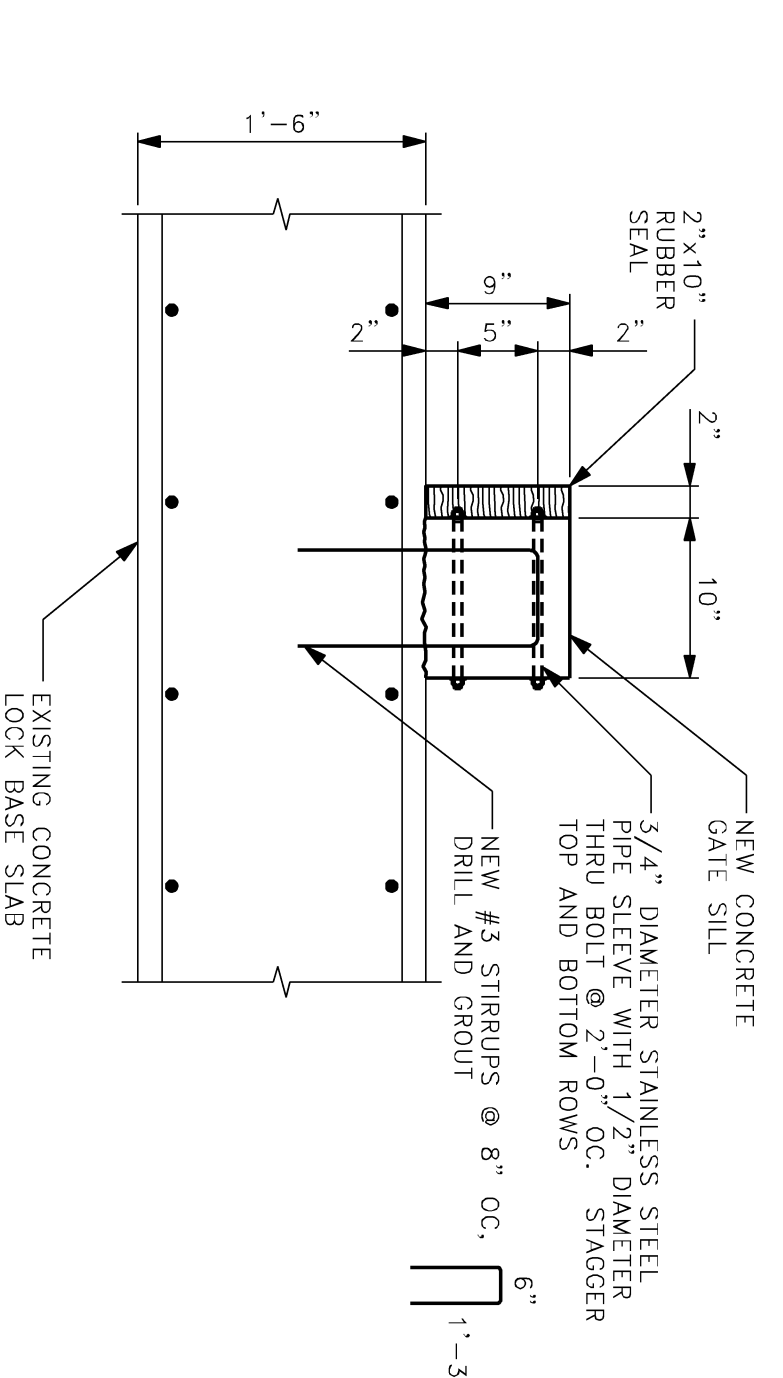
DRILL AND GROUT BAR MINIMUM 6" INTO EXISTING PIER OR BASE SLAB



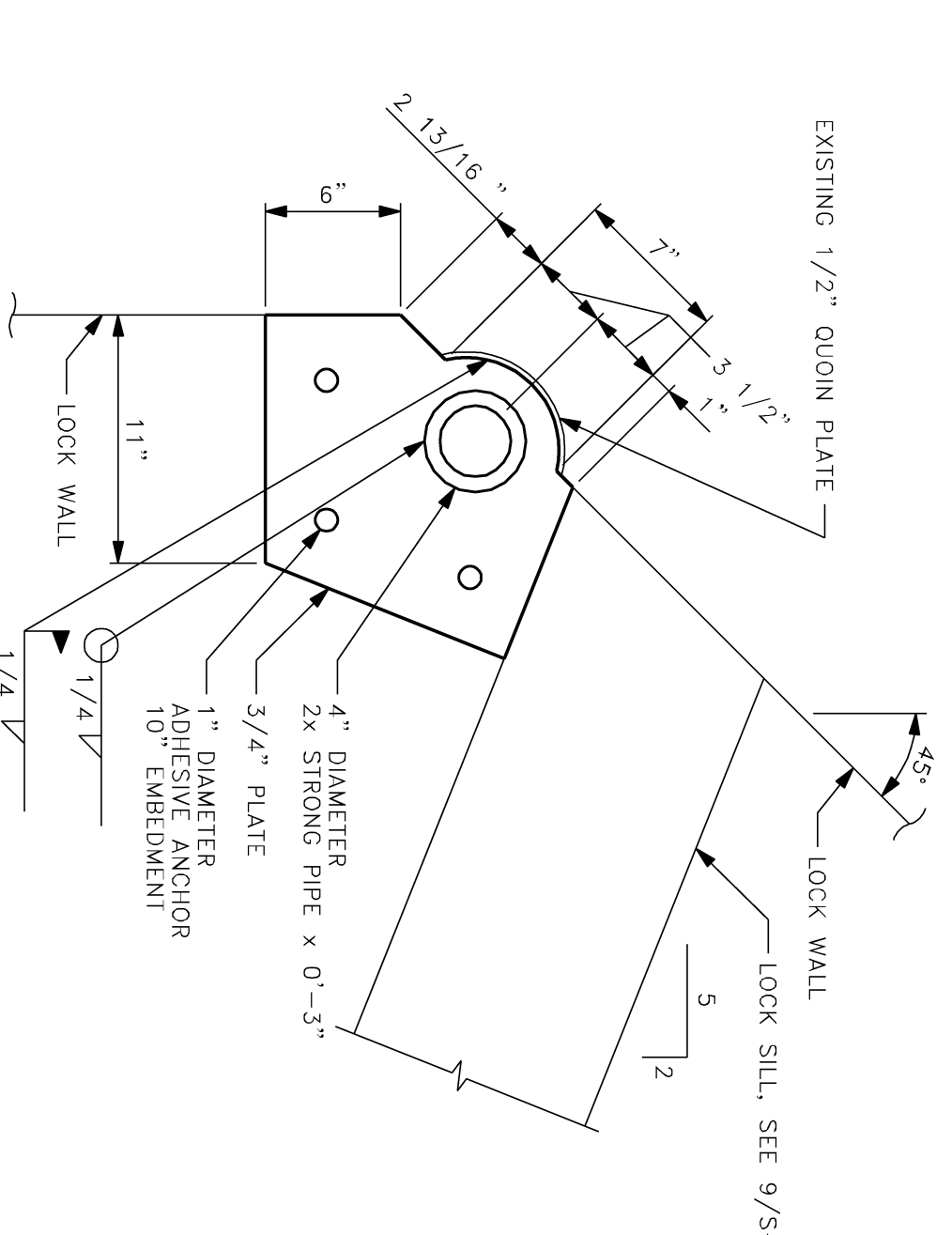
8 SECTION
 S-6 3/4"=1'-0"

NIC

NOTES:
 - 4 STOP LOG CHANNELS REQUIRED.
 - STOP LOG ASSEMBLY TO BE HOT DIPPED GALVANIZED WITH 2.0 OZ/SF COATING.

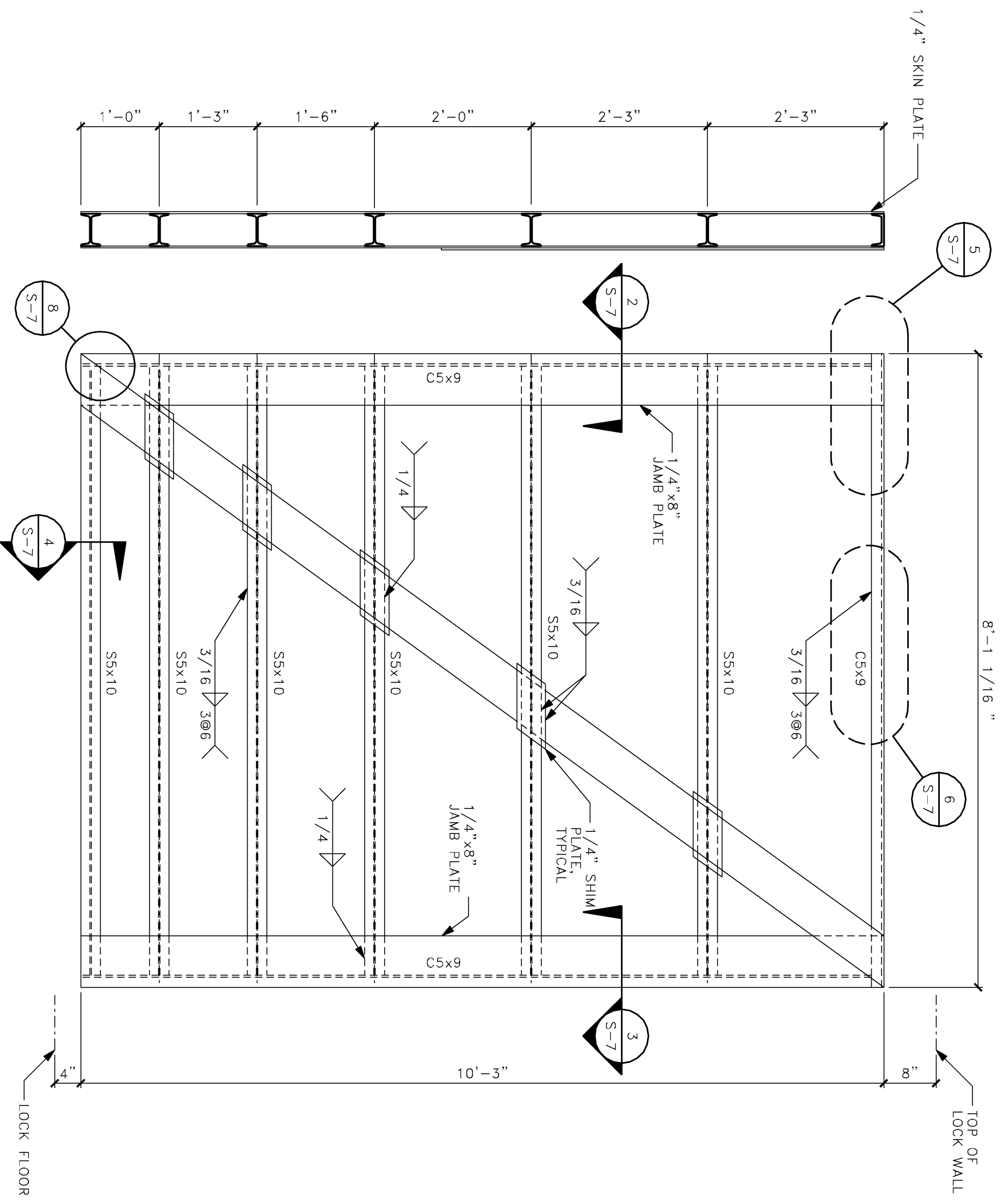


9 SILL REPAIR
 S-6 1" = 1'-0"

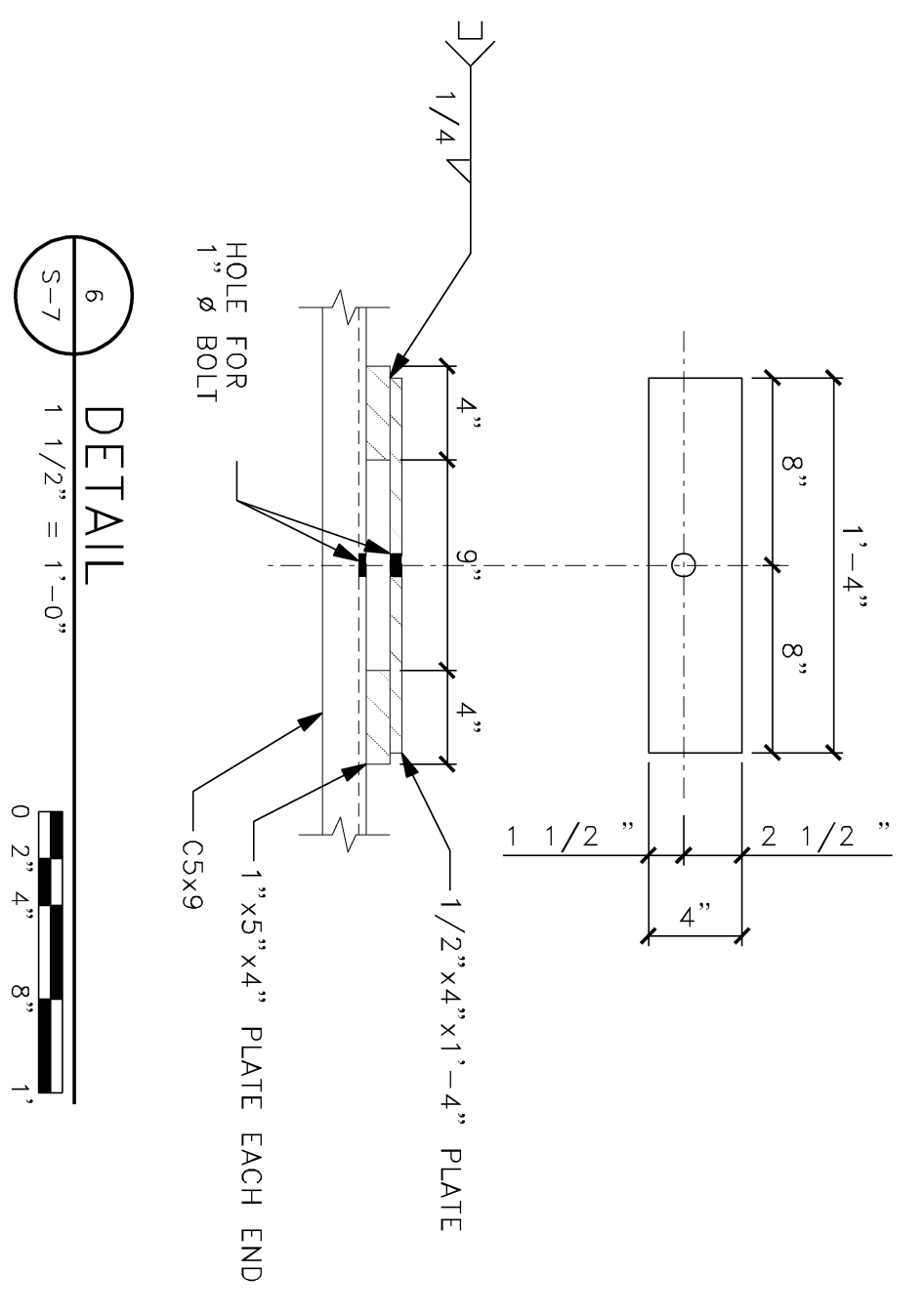


10 DETAIL
 S-6 1 1/2" = 1'-0"

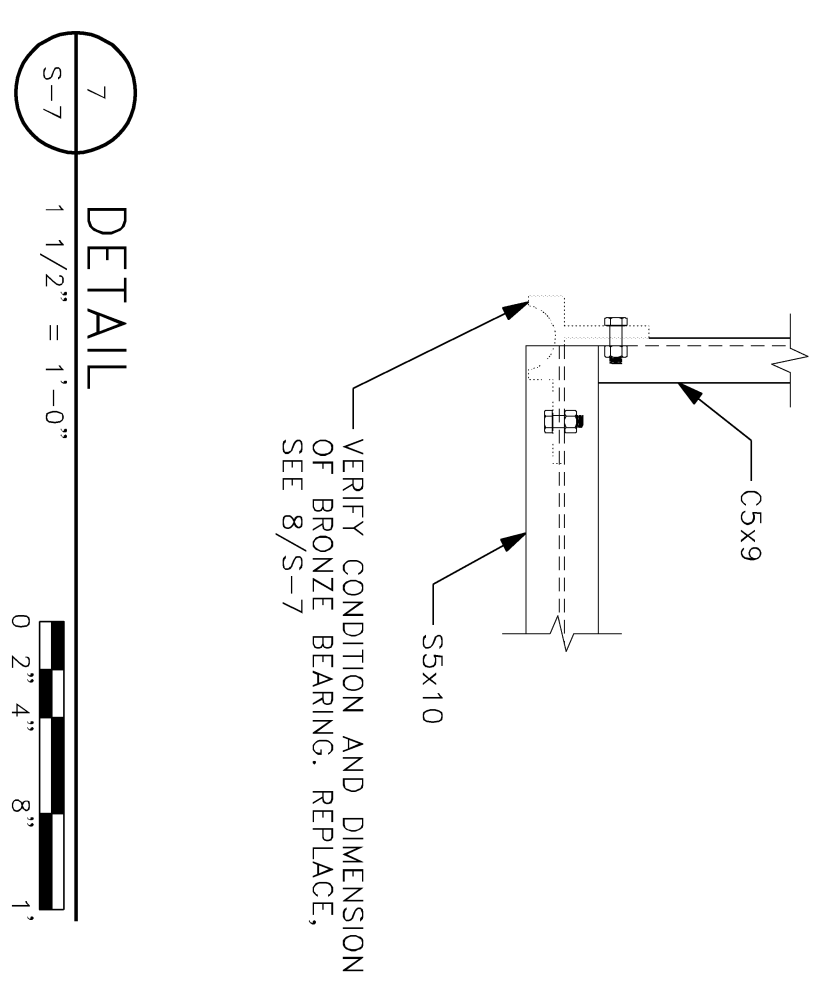
NIC = NOT IN CONTRACT



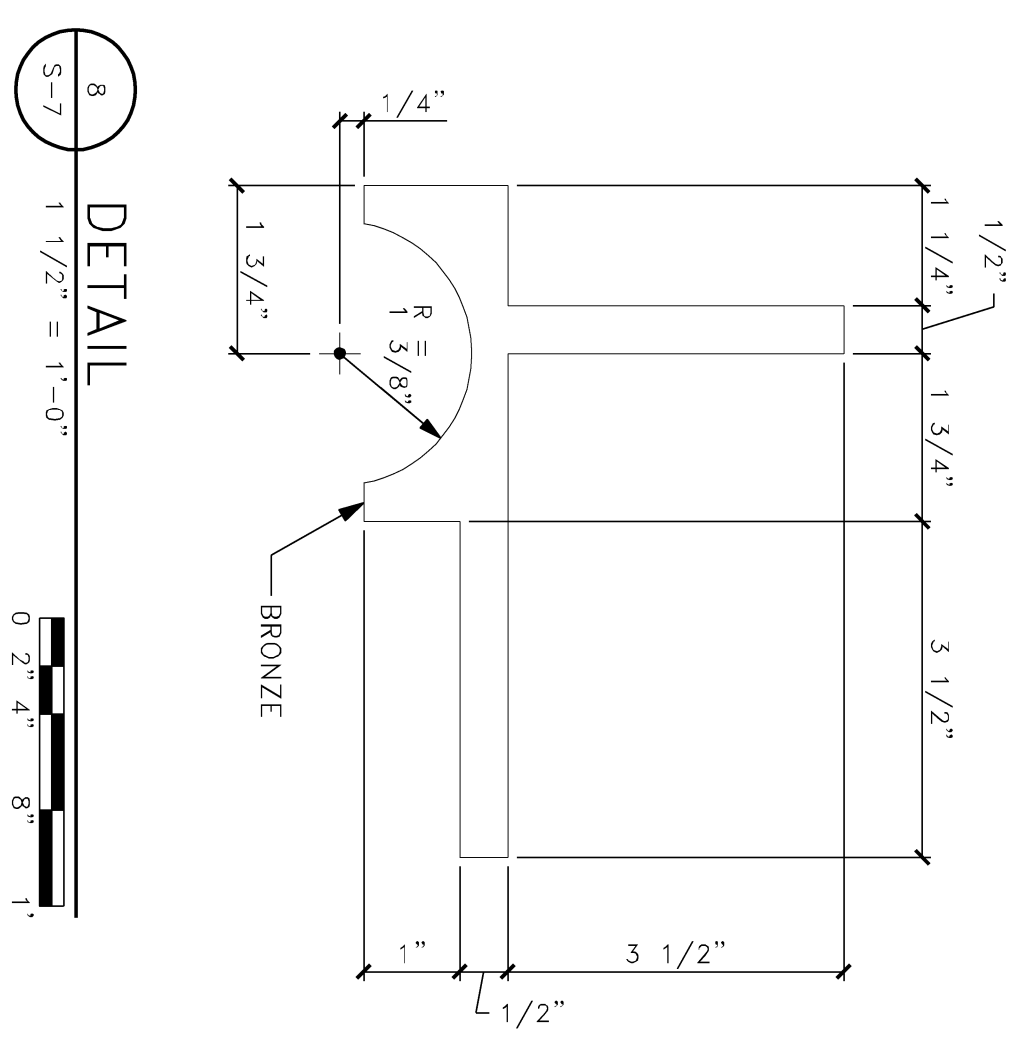
1 GATE ELEVATION
 3/4"=1'-0"
 0 2' 4" 8" 1'



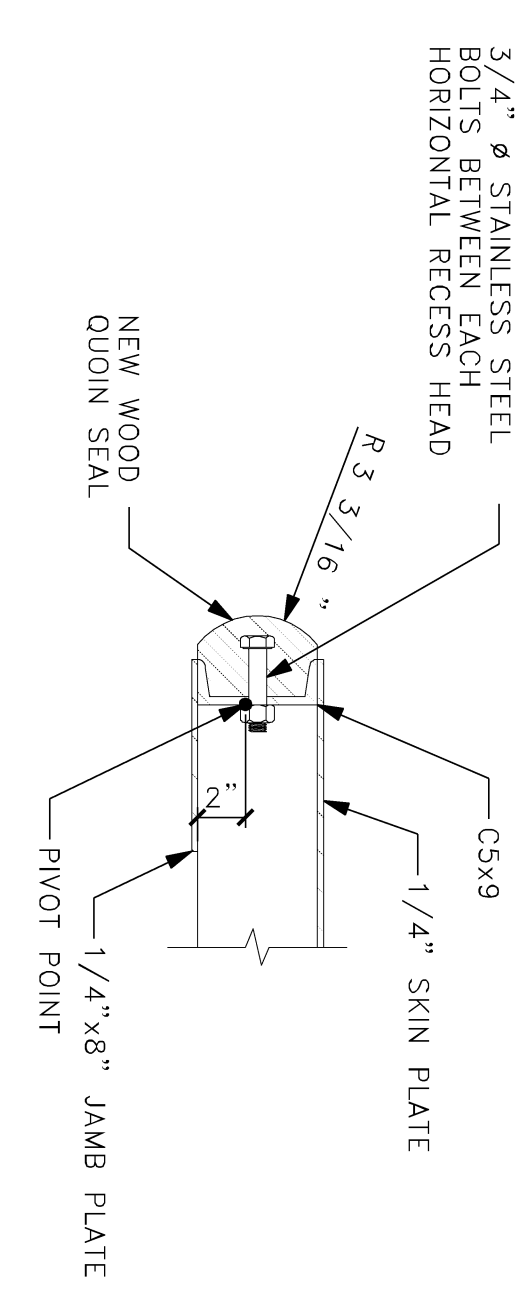
6 DETAIL
 1 1/2"=1'-0"
 0 2' 4" 8" 1'



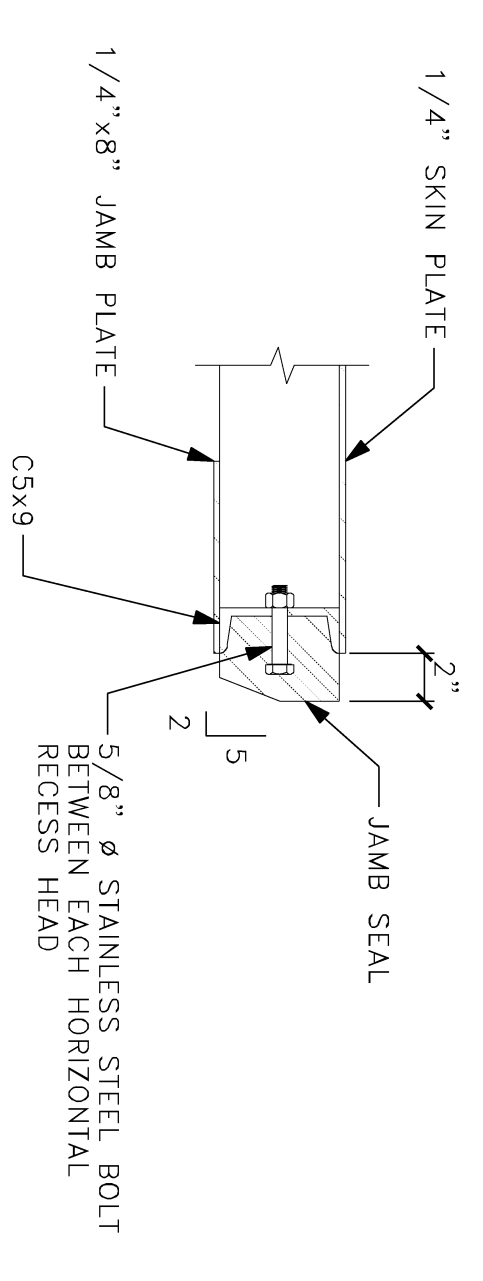
7 DETAIL
 1 1/2"=1'-0"
 0 2' 4" 8" 1'



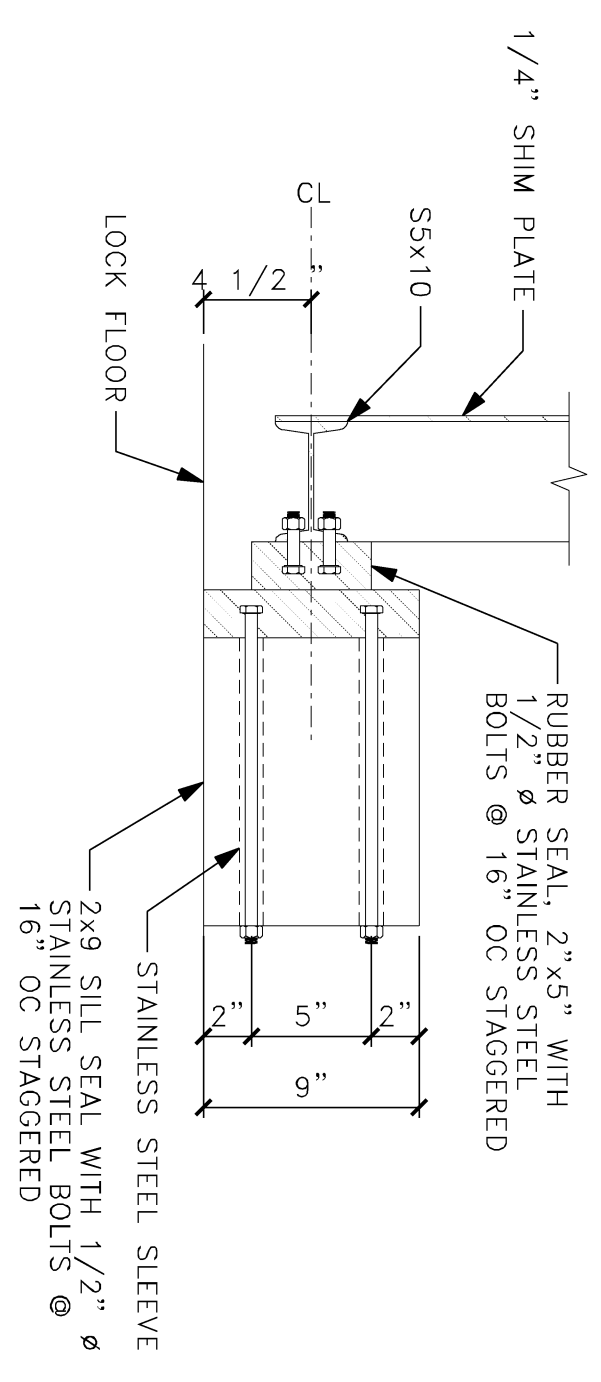
8 DETAIL
 1 1/2"=1'-0"
 0 2' 4" 8" 1'



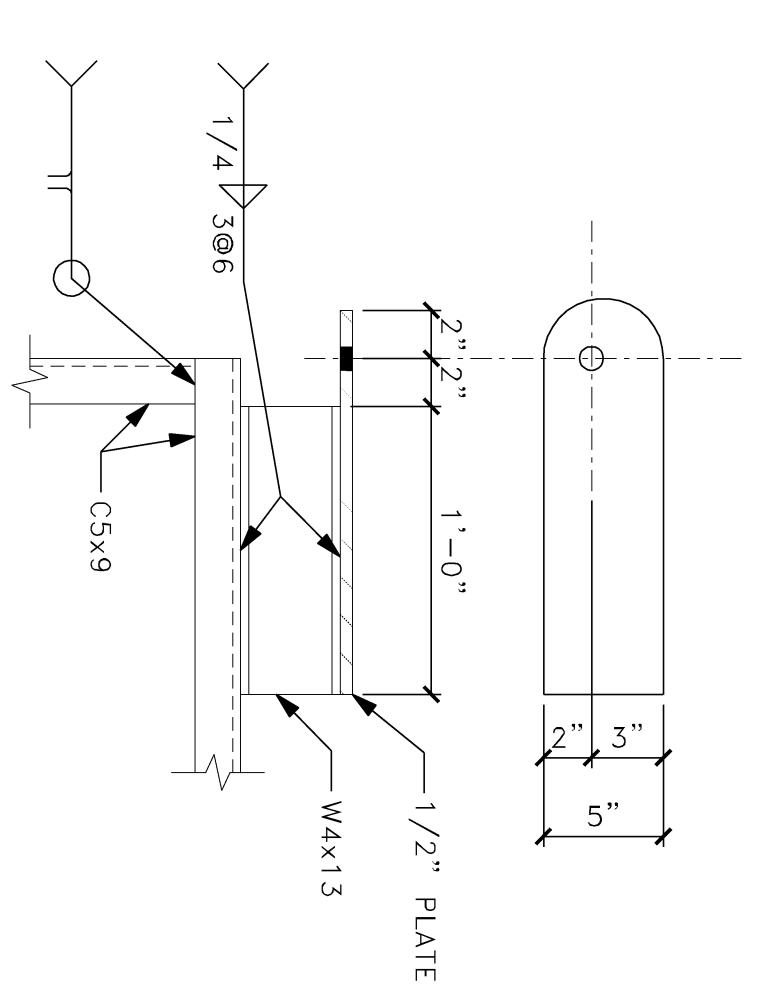
2 DETAIL
 1 1/2"=1'-0"
 0 2' 4" 8" 1'



3 DETAIL
 1 1/2"=1'-0"
 0 2' 4" 8" 1'



4 DETAIL
 1 1/2"=1'-0"
 0 2' 4" 8" 1'



5 DETAIL
 1 1/2"=1'-0"
 0 2' 4" 8" 1'

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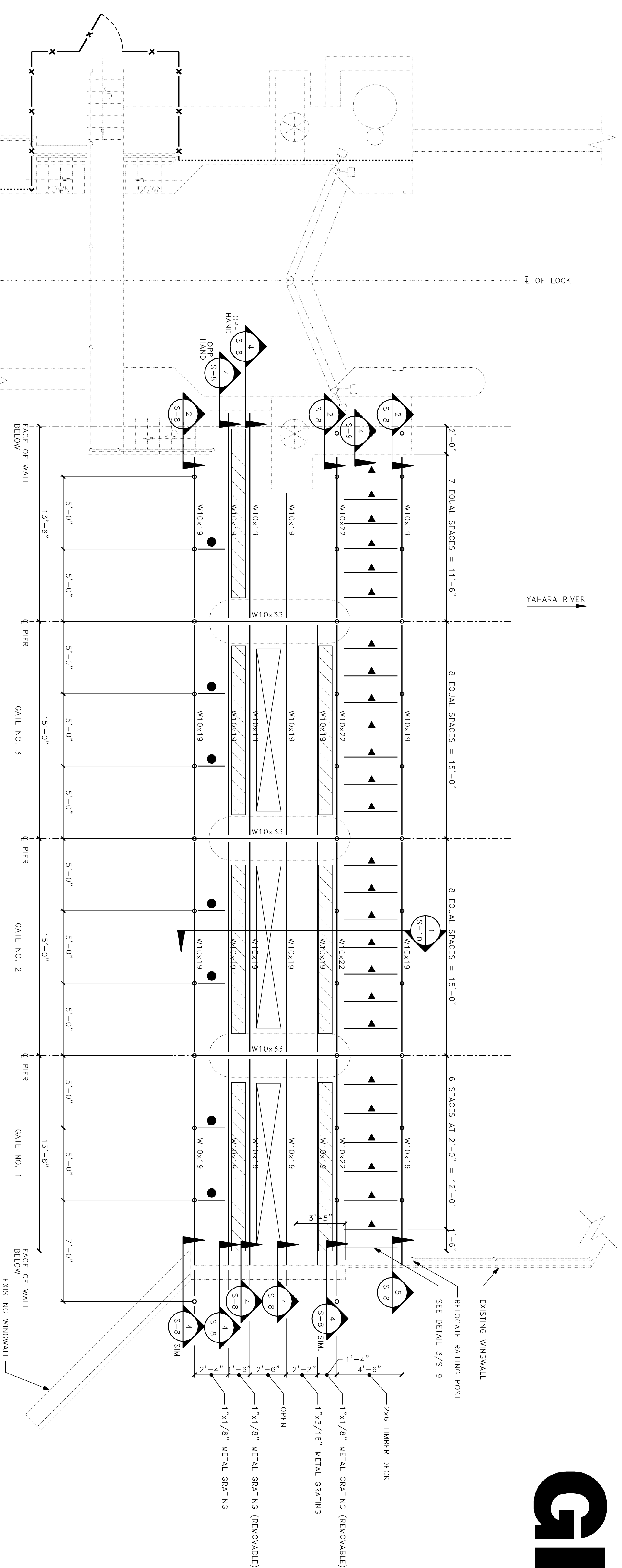
CONSULTANTS:

PROJECT TITLE:

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

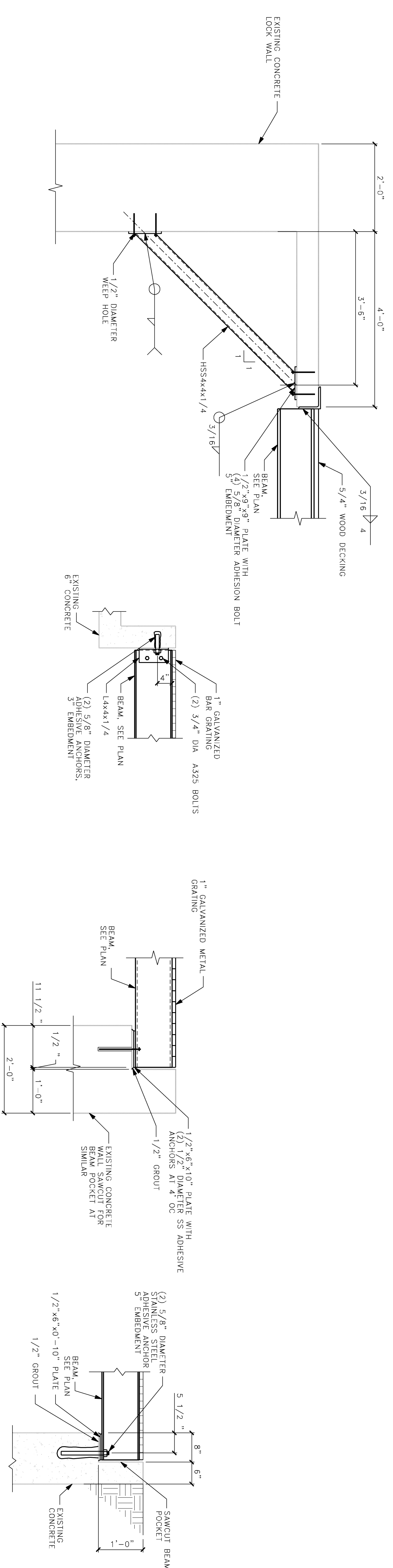
PROJECT INFORMATION:
 PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN
 SHEET TITLE:
 LOCK GATES
 ELEVATION AND DETAILS

SHEET NUMBER:



1 DECK FRAMING PLAN AT BABCOCK
 S-8 1/4" = 1'-0"

- 1" GRATING ELEVATION 849'-6"
- ▲ = CSx6.7
- ○ = RAILING POST
- □ = REMOVABLE GRATING
- ● = L3x3x5/16



2 SECTION
 S-8 3/4" = 1'-0"

3 SECTION
 S-8 3/4" = 1'-0"

4 SECTION
 S-8 3/4" = 1'-0"

5 SECTION
 S-8 3/4" = 1'-0"

PROJECT INFORMATION:
 PROJECT NUMBER: 2011-5012
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 DRAWN BY: AMZ
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 APPROVED BY: MH
 SCALE: AS SHOWN

SHEET TITLE:
 DAM PLATFORM - BABCOCK

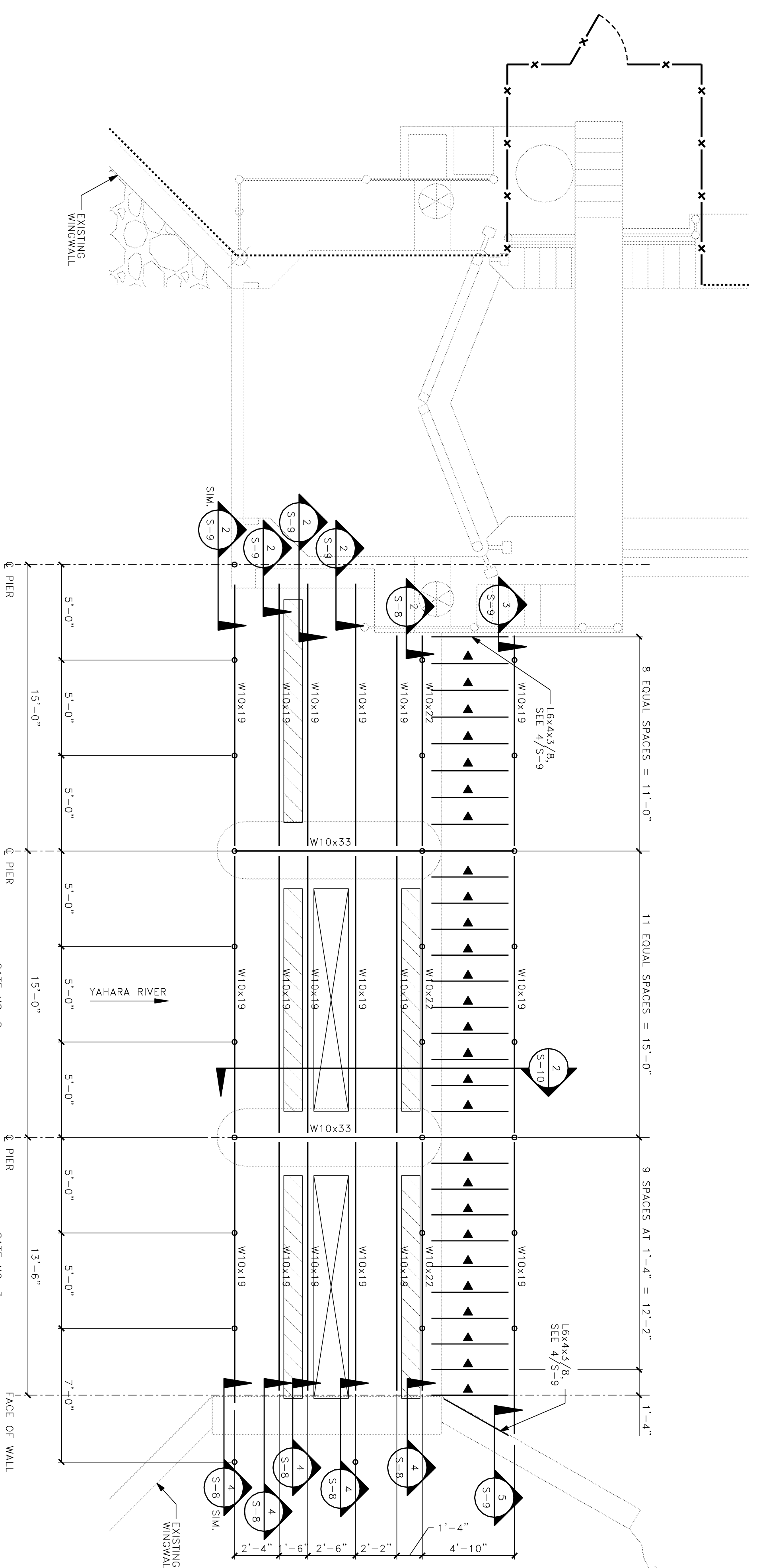
SHEET NUMBER:

CONSULTANTS:

PROJECT TITLE:

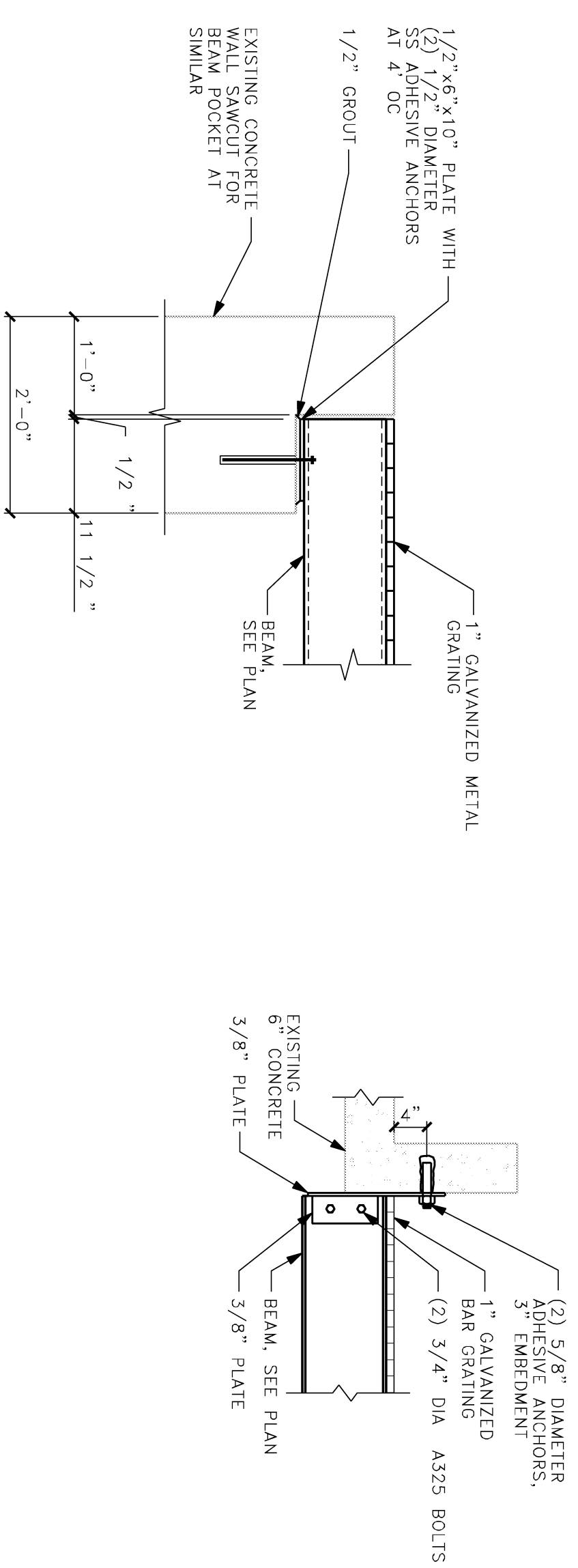
DANE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 BABCOCK AND LAFOLLETTE PARKS -
 LOCKS AND DAMS RENOVATION
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ISSUE:



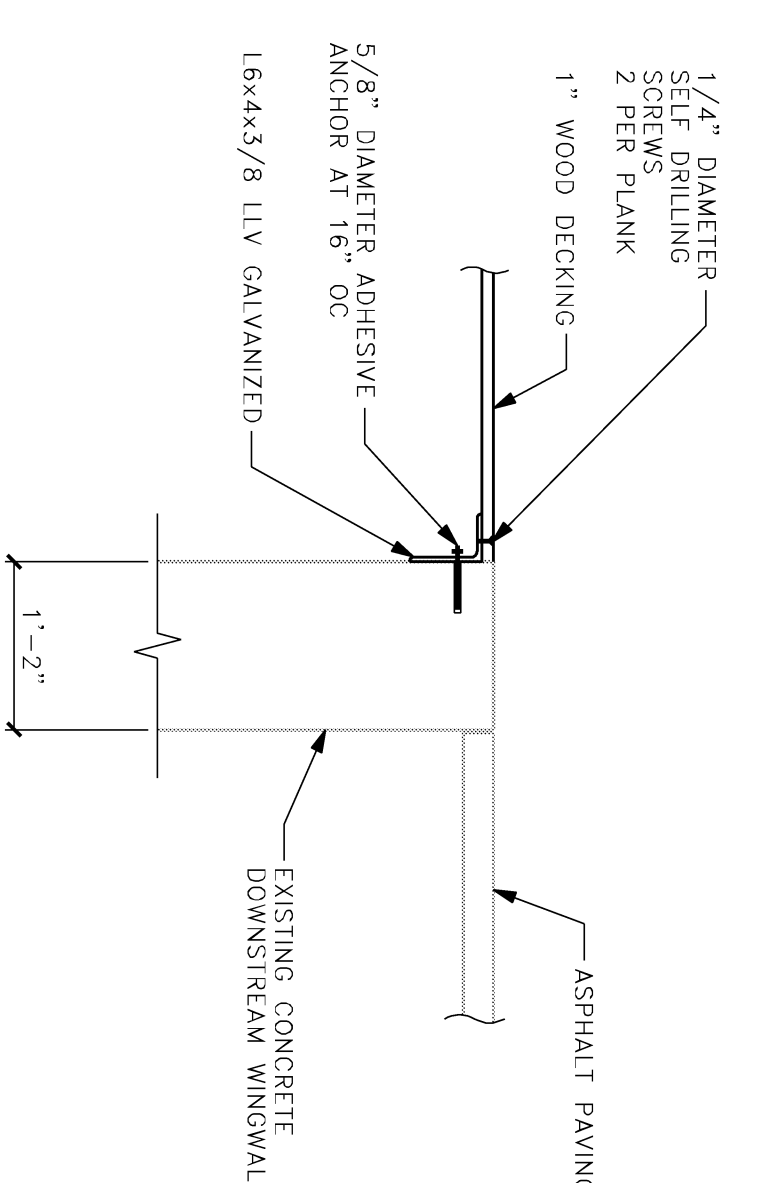
1 DECK FRAMING PLAN AT LAFOLLETTE
 S-8,2 1/4"=1'-0"

- 1/ GRATING ELEVATION 848'-0"
- ▲ = CS#6,7
- ○ = RAILING POST
- □ = REMOVEABLE GRATING

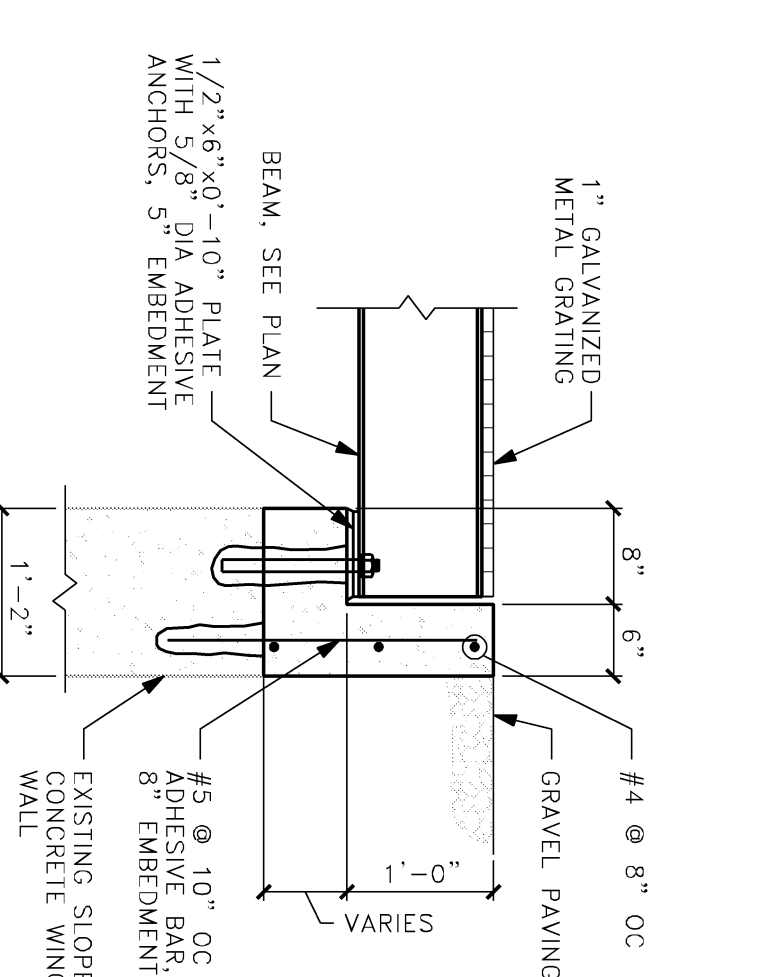


2 SECTION
 3/4"=1'-0" 0 1 2'

3 SECTION
 3/4"=1'-0" 0 1 2'



4 SECTION
 3/4"=1'-0" 0 1 2'



5 SECTION
 3/4"=1'-0" 0 1 2'

PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN

SHEET TITLE:

DAM PLATFORM - LAFOLLETTE

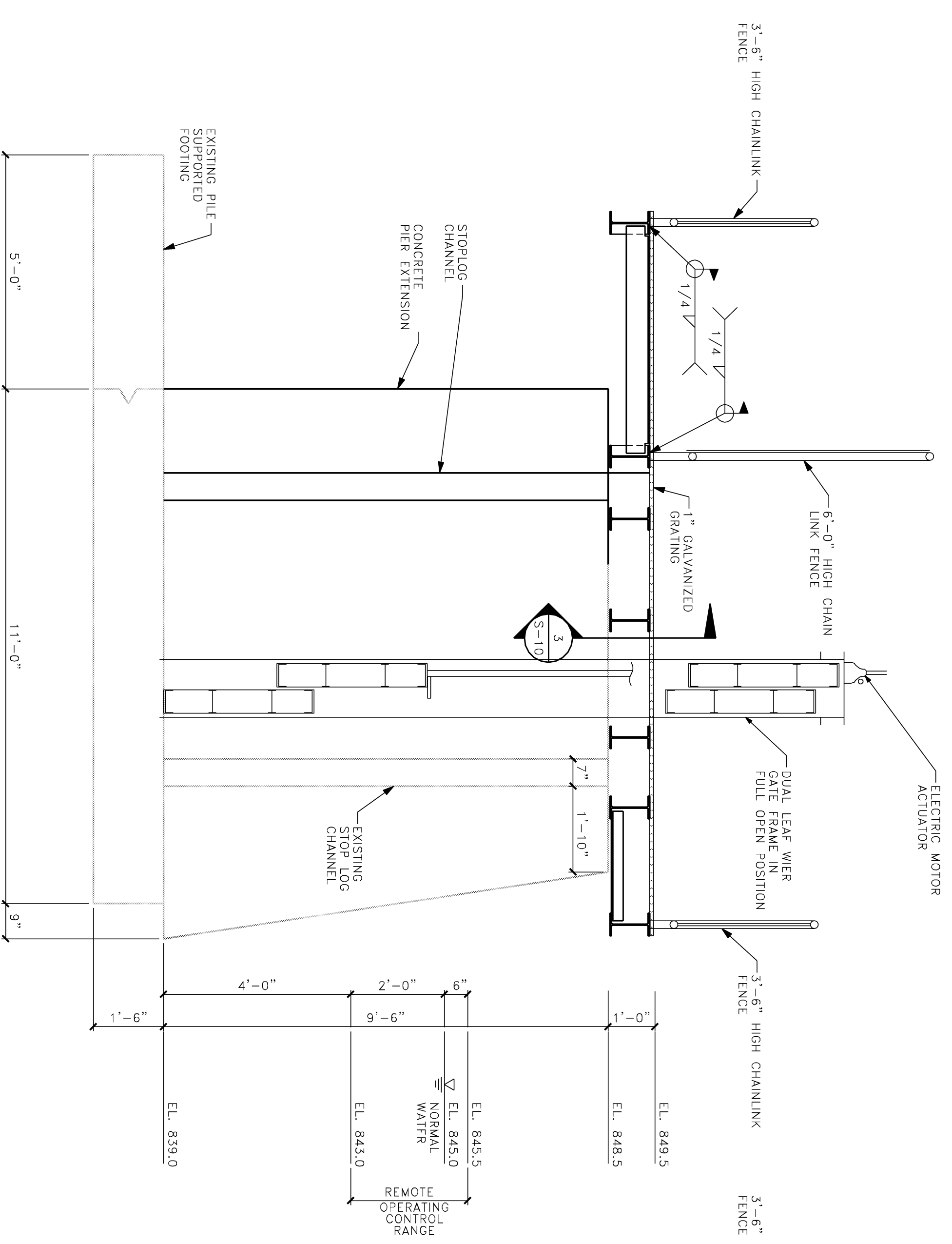
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CONSULTANTS:

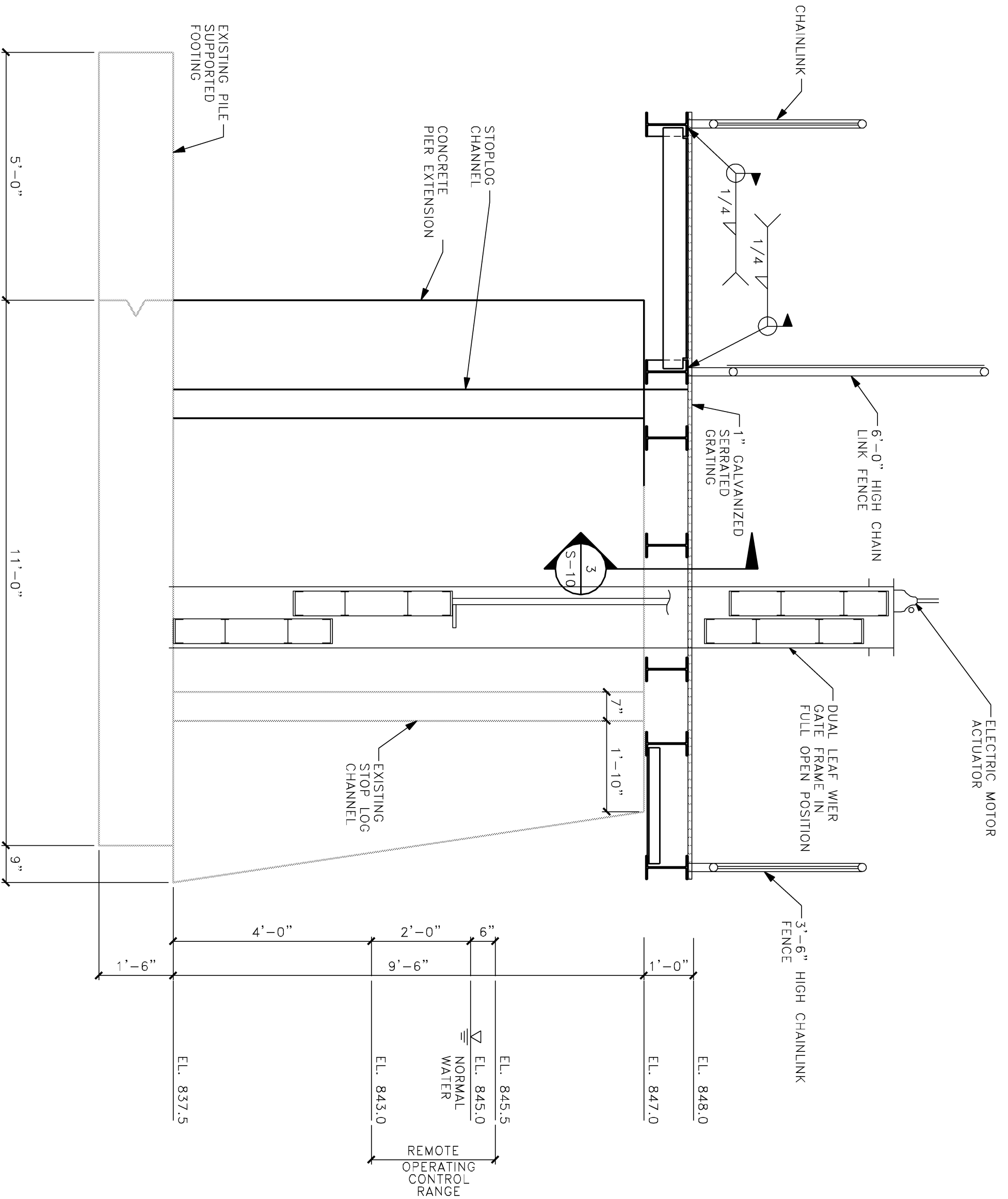
PROJECT TITLE:

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

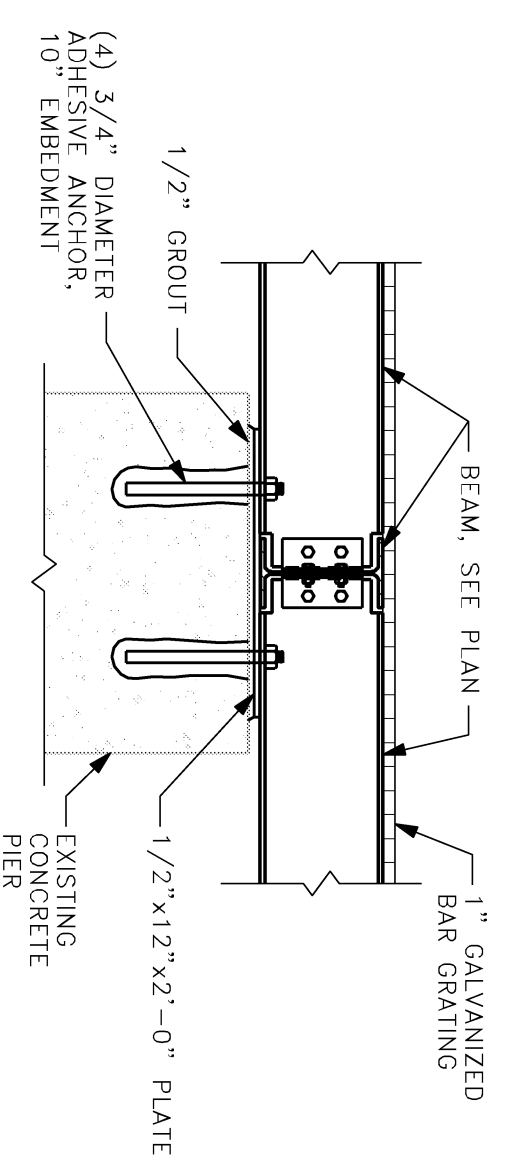
ISSUE:



SECTION 1 — BABCOCK
 1/2"=1'-0"
 0 1 2



SECTION 2 — LAFOLLETTE
 1/2"=1'-0"
 0 1 2



SECTION 3
 3/4"=1'-0"
 0 1 2

PROJECT INFORMATION:

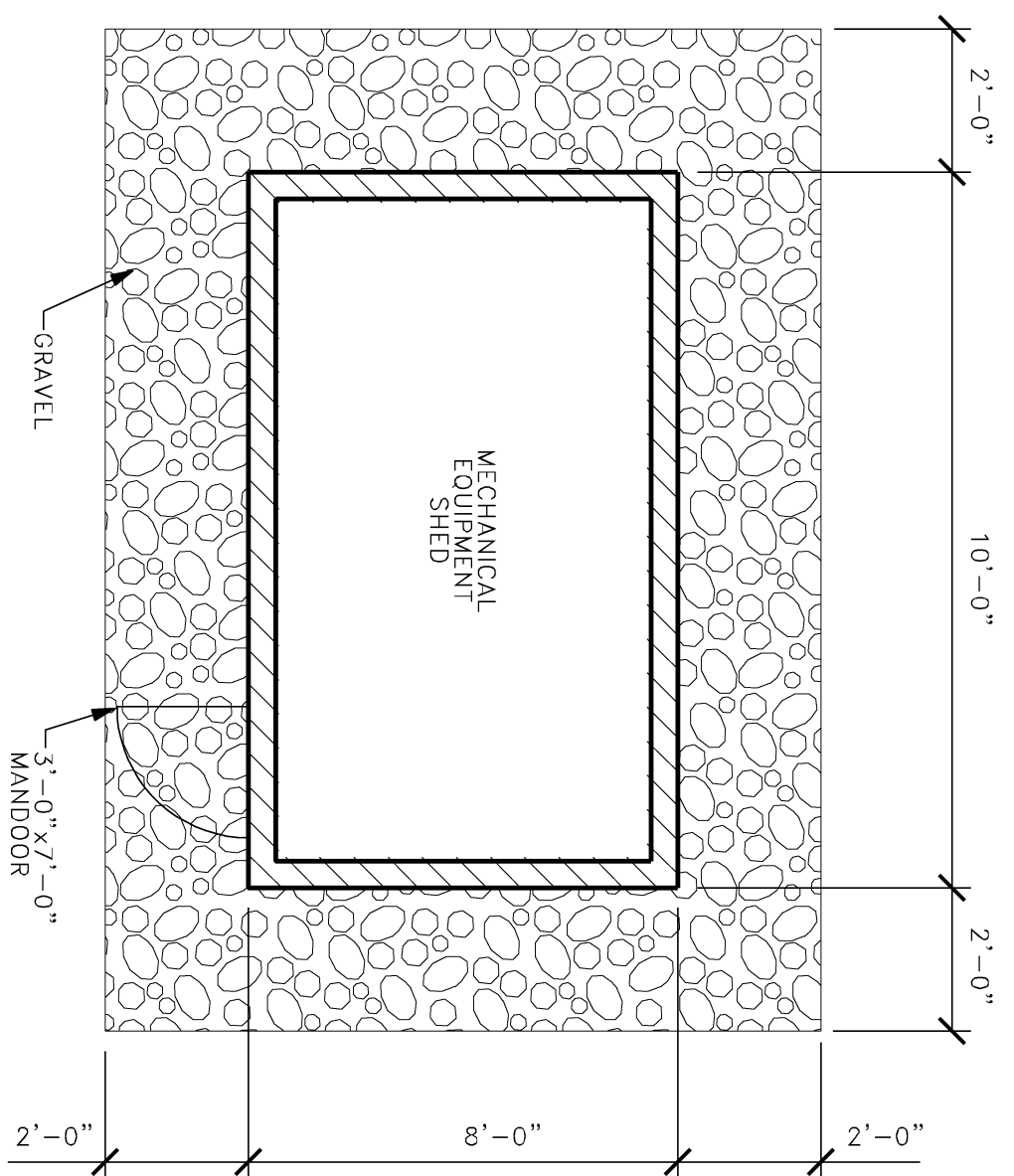
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SHEET TITLE:

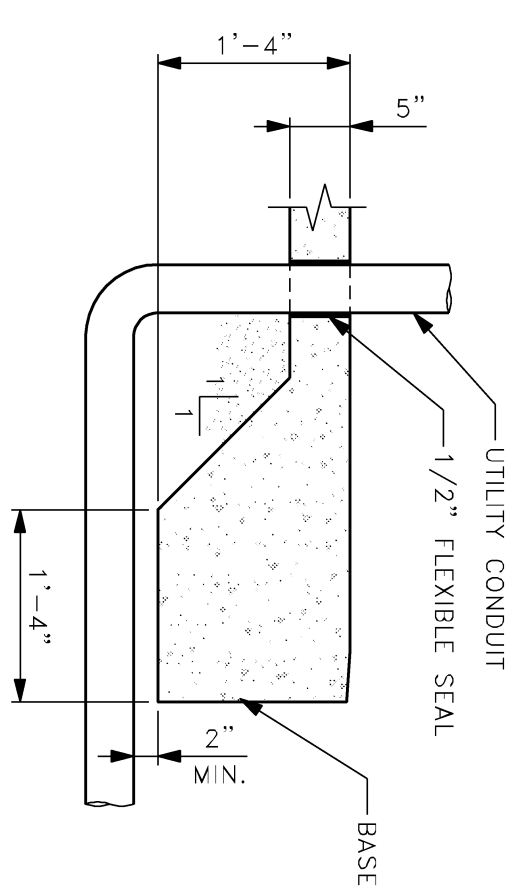
DAM GATE
 SECTIONS AND DETAILS

SHEET NUMBER:

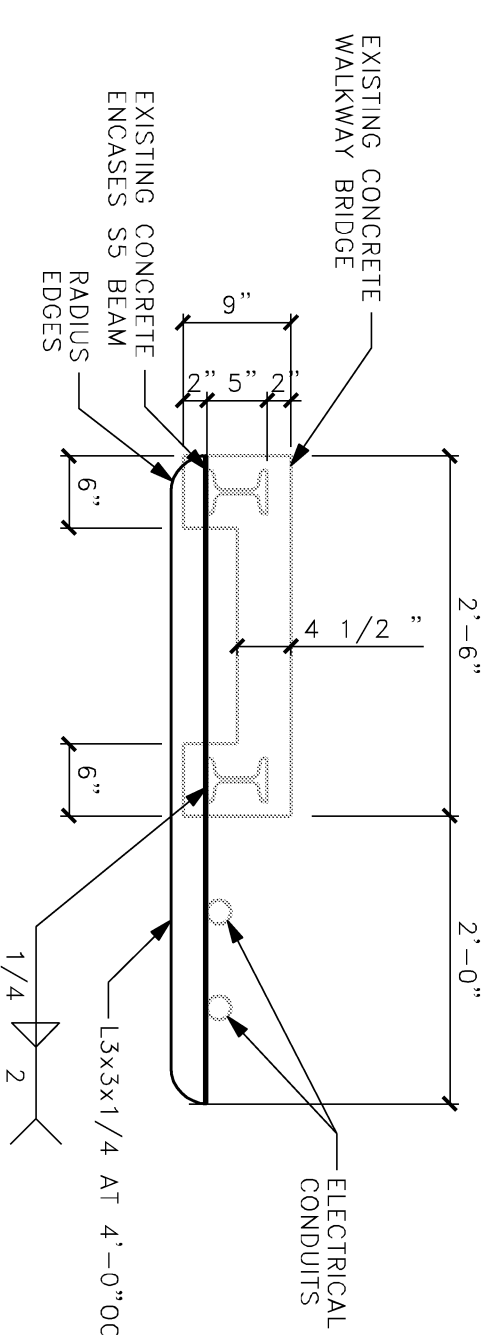
S-10



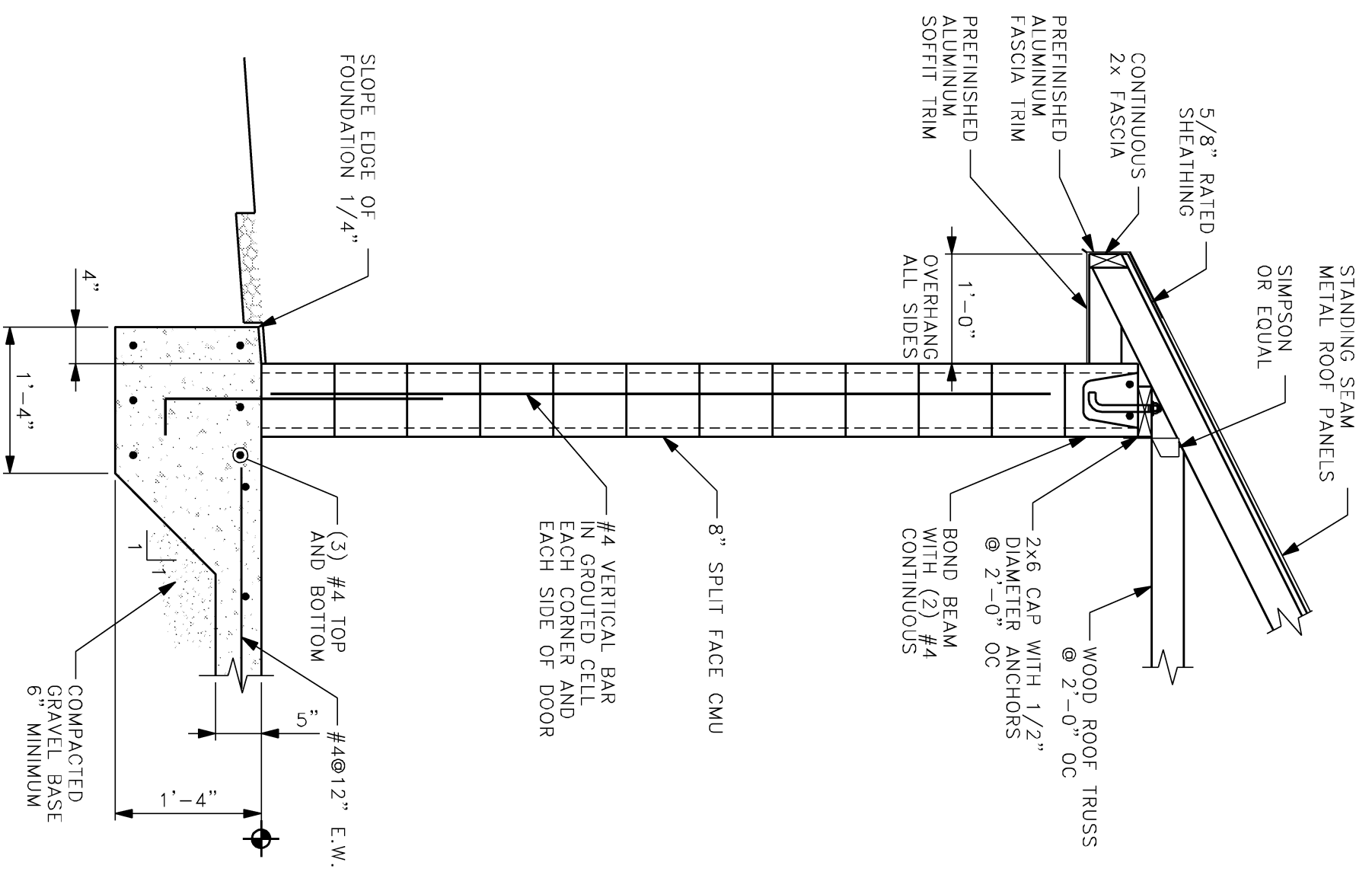
1 BUILDING PAD
 S-11 M.T.S.



4 SECTION
 S-11 3/4"=1'-0"

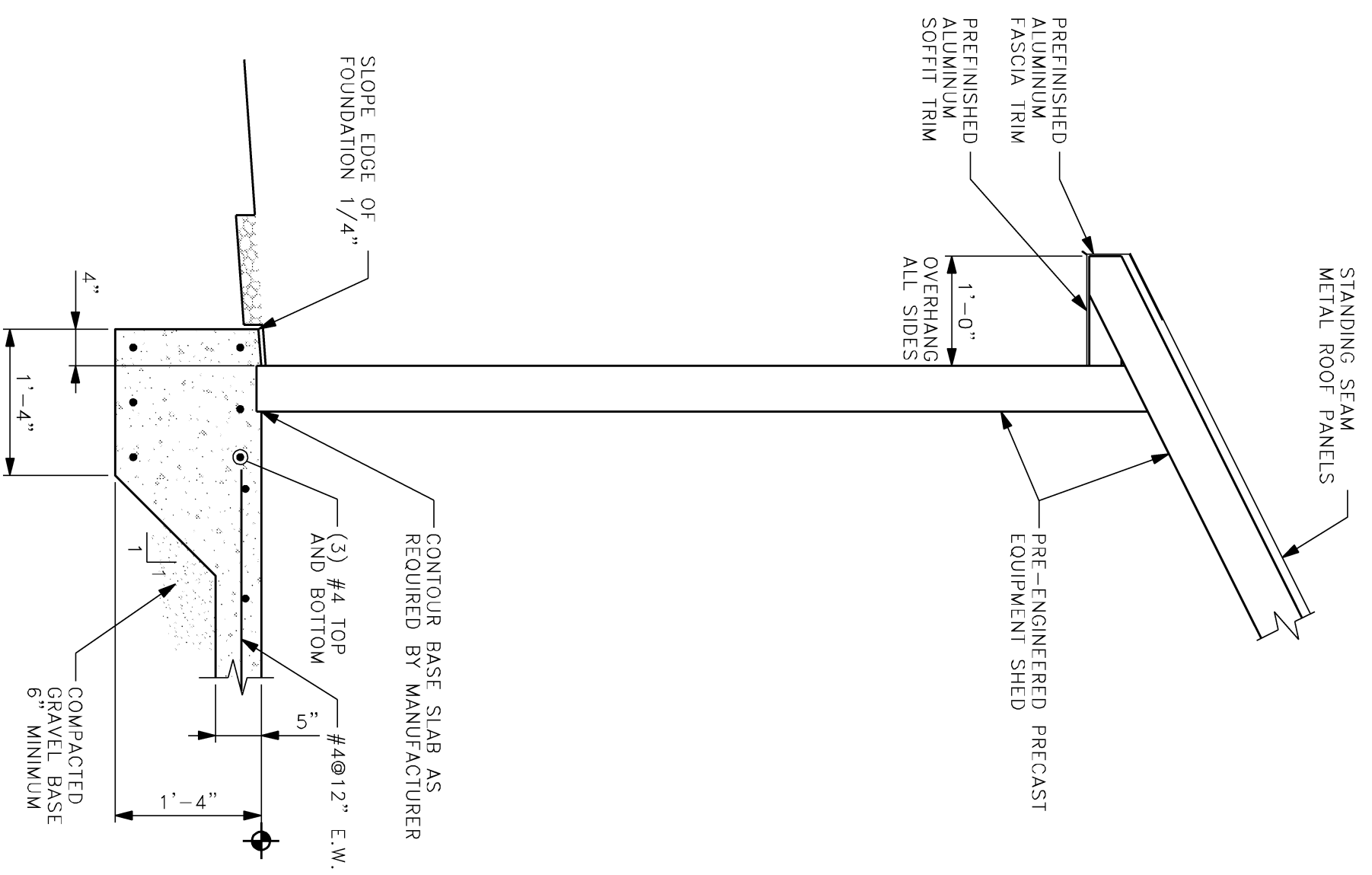


5 SECTION
 S-11 3/4"=1'-0"



2A WALL SECTION
 S-11 3/4"=1'-0"

MASONRY OPTION



2B WALL SECTION
 S-11 3/4"=1'-0"

PRECAST OPTION

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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

ISSUE:

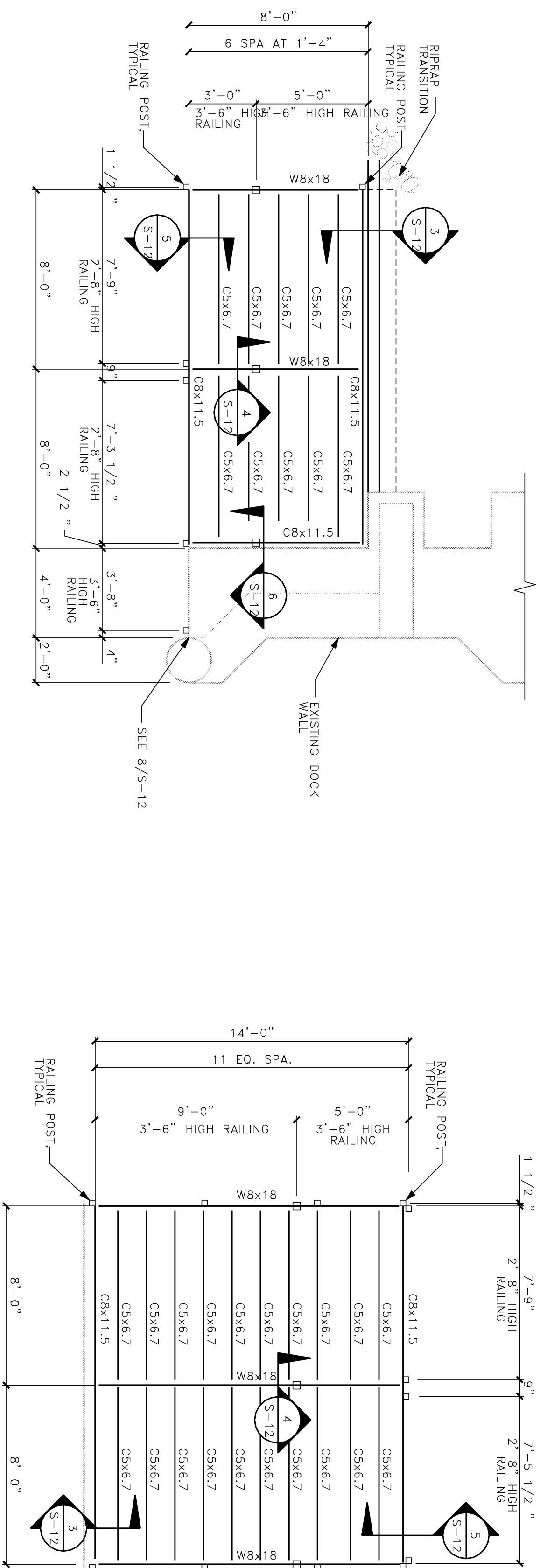
PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AMZ
 CHECKED BY: MH
 APPROVED BY: MH
 SCALE: AS SHOWN

SHEET TITLE:

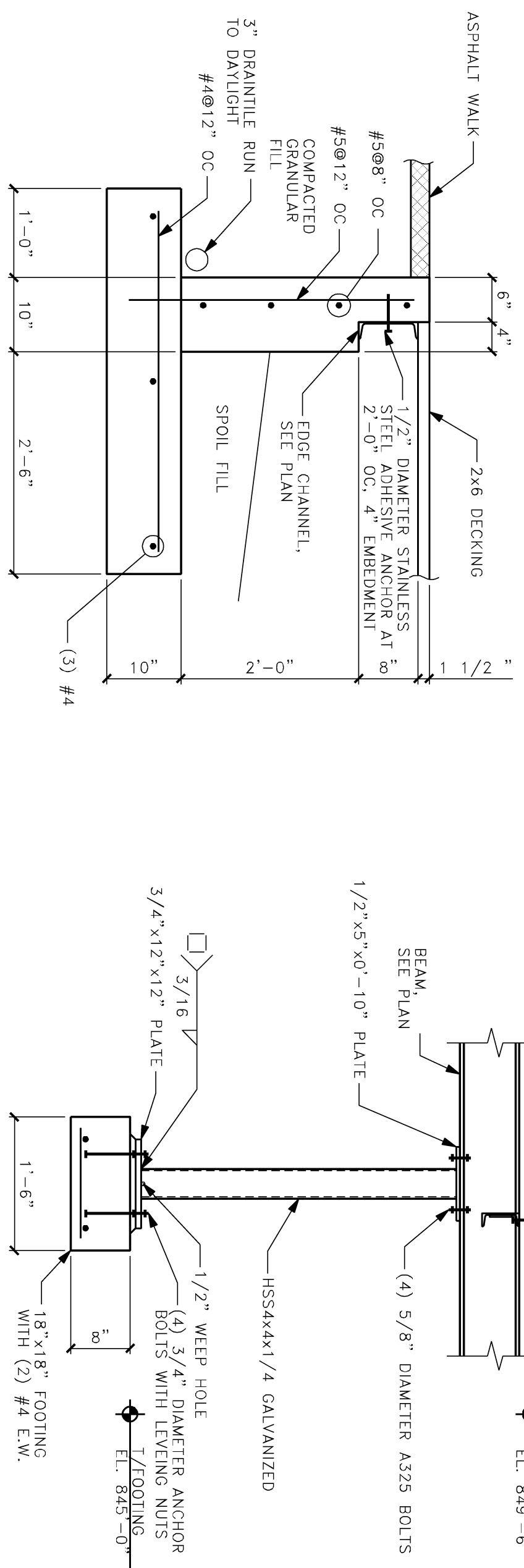
EQUIPMENT SHED
 SECTIONS AND DETAILS

SHEET NUMBER:



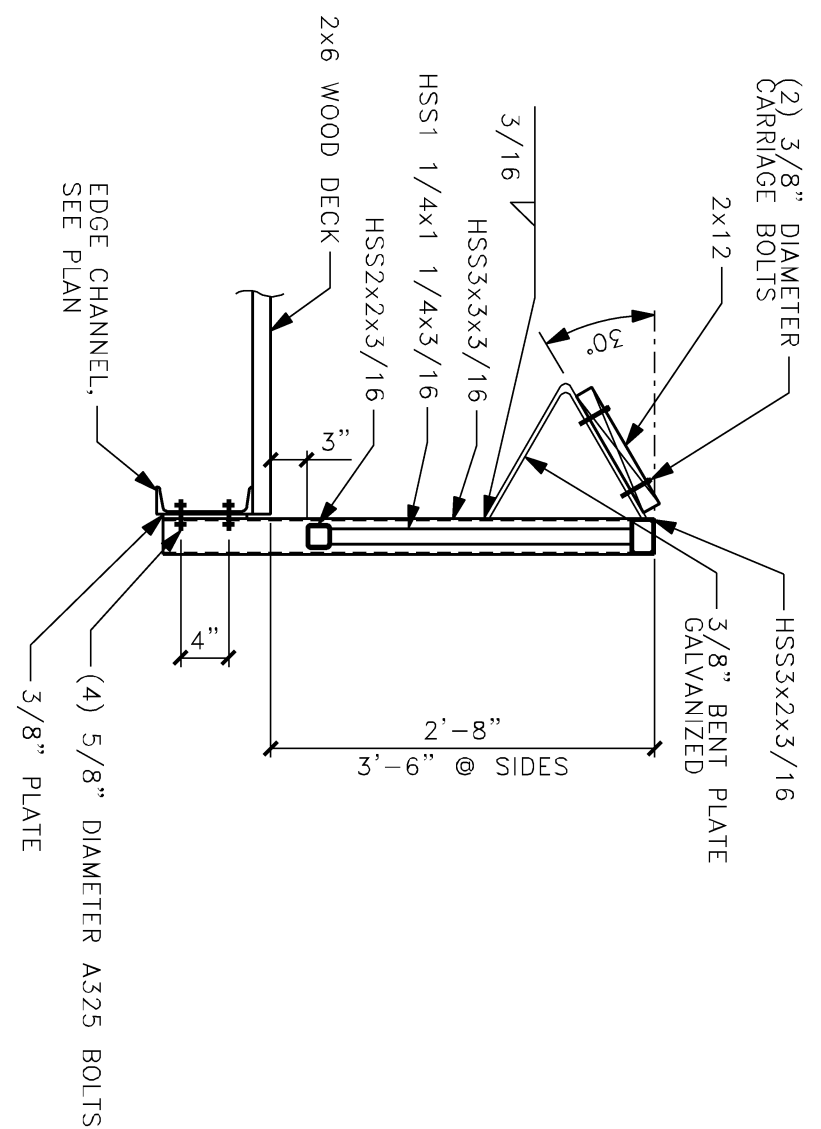
1 FISHING DECK PLAN - BABCOCK
 S-12 3/4"=1'-0"
 ALL STEEL GALVANIZED 2.0 07/SOFT

2 FISHING DECK PLAN - LAFOLLETTE
 S-12 3/4"=1'-0"
 ALL STEEL GALVANIZED 2.0 07/SOFT



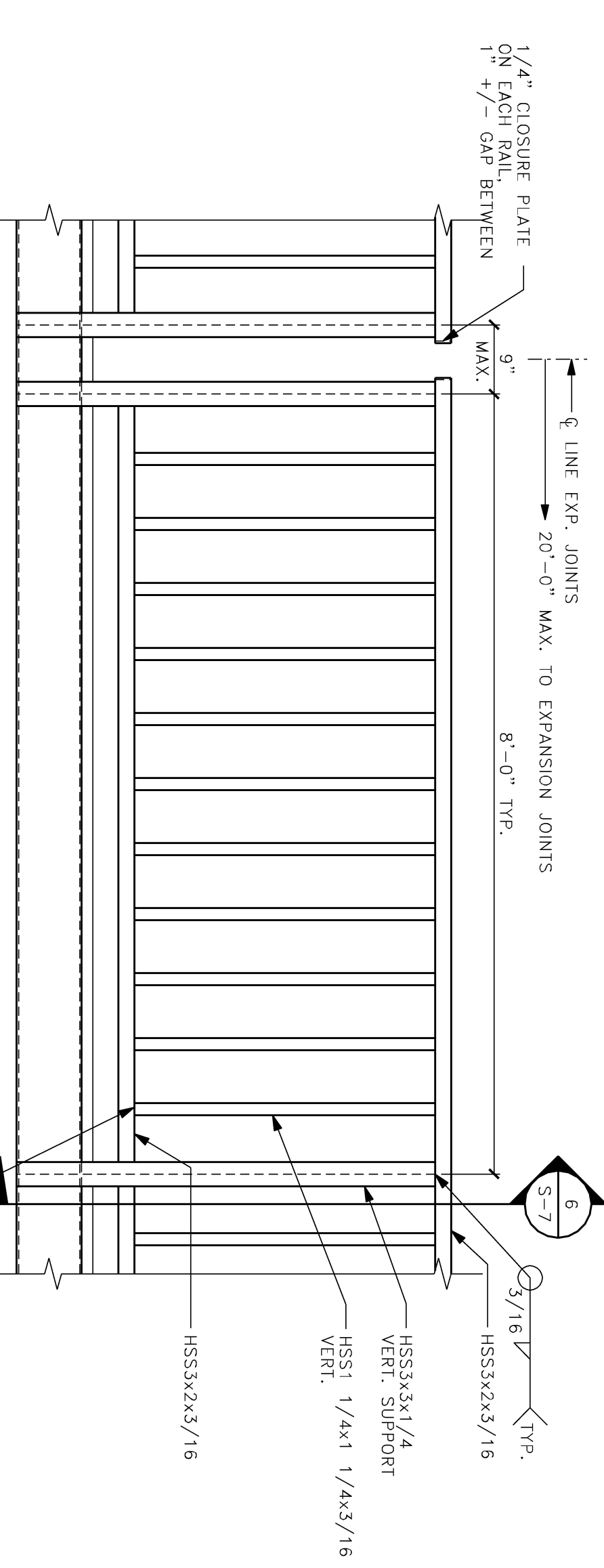
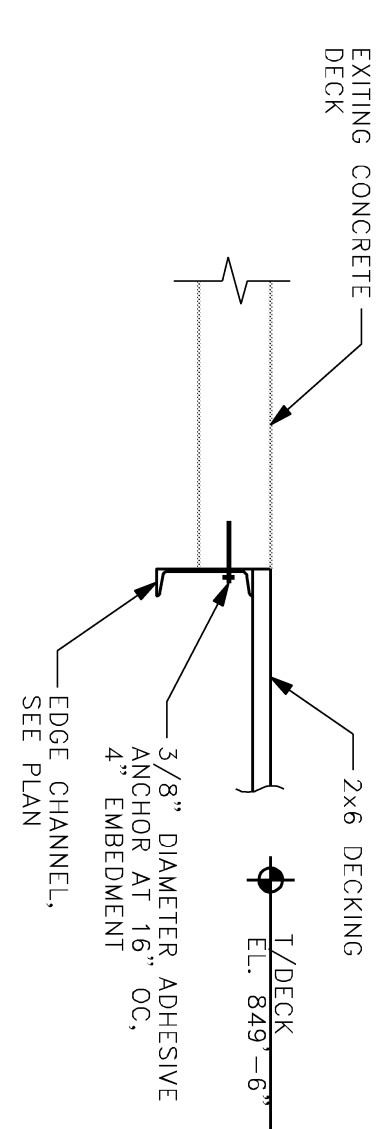
3 SECTION
 S-12 3/4"=1'-0"

4 SECTION
 S-12 3/4"=1'-0"



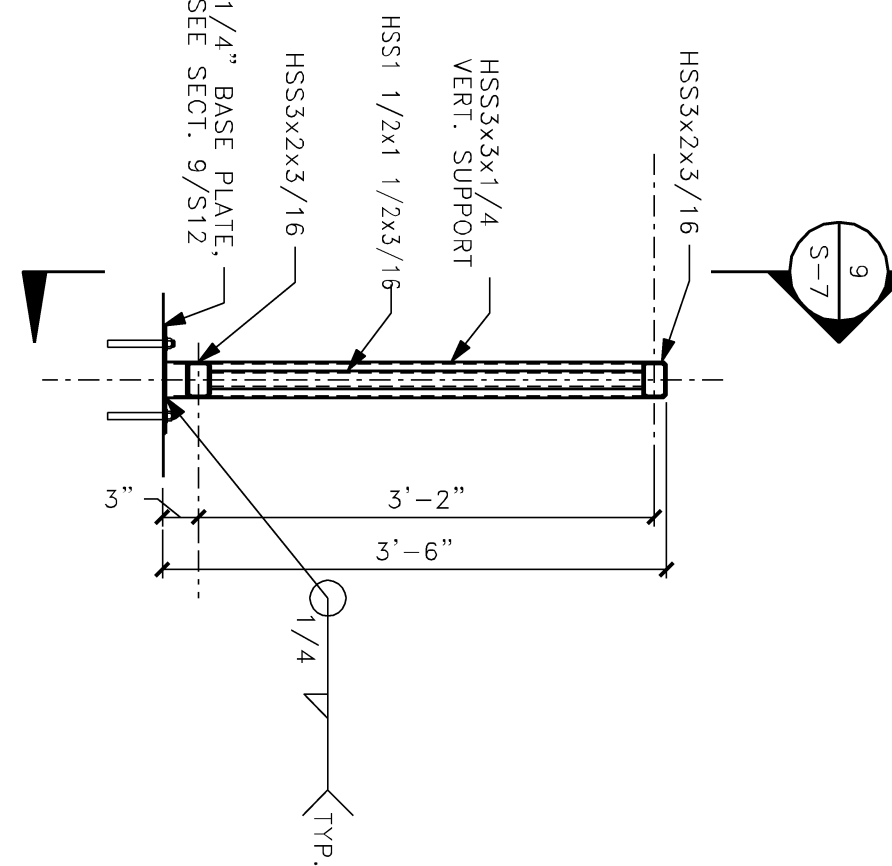
5 SECTION
 S-12 3/4"=1'-0"
 NOTE: PROVIDE 3/8 B. ANCHOR AT W8x18

6 SECTION
 S-12 3/4"=1'-0"



7 HANDRAIL ELEVATION
 S-12 3/4"=1'-0"

8 HANDRAIL SECTION
 S-12 3/4"=1'-0"



9 RAILING BASE
 PLATES - DETAIL
 S-12 3/4"=1'-0"
 AT CONCRETE

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125 South 84th Street,
Suite 401
Milwaukee, WI 53214-1470
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414 / 259 0037 fax

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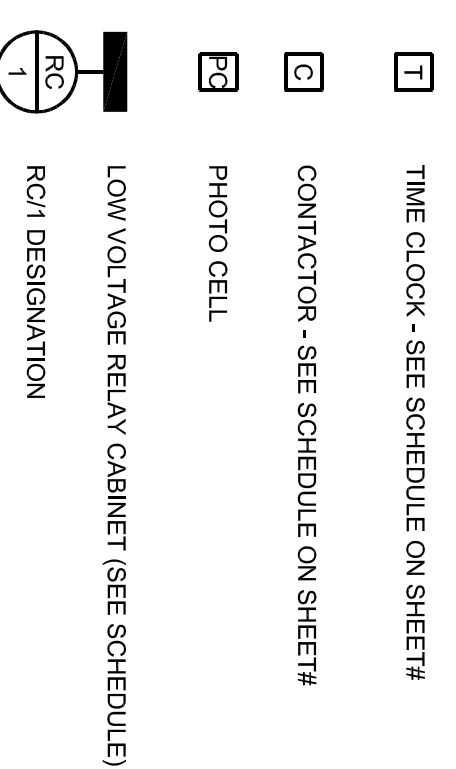
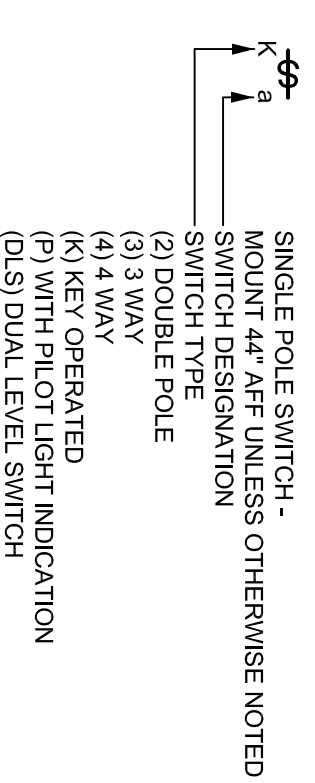
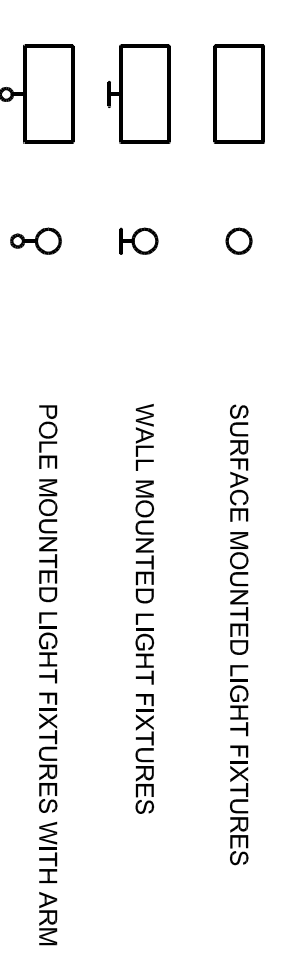
CONSULTANTS:

PROJECT TITLE:

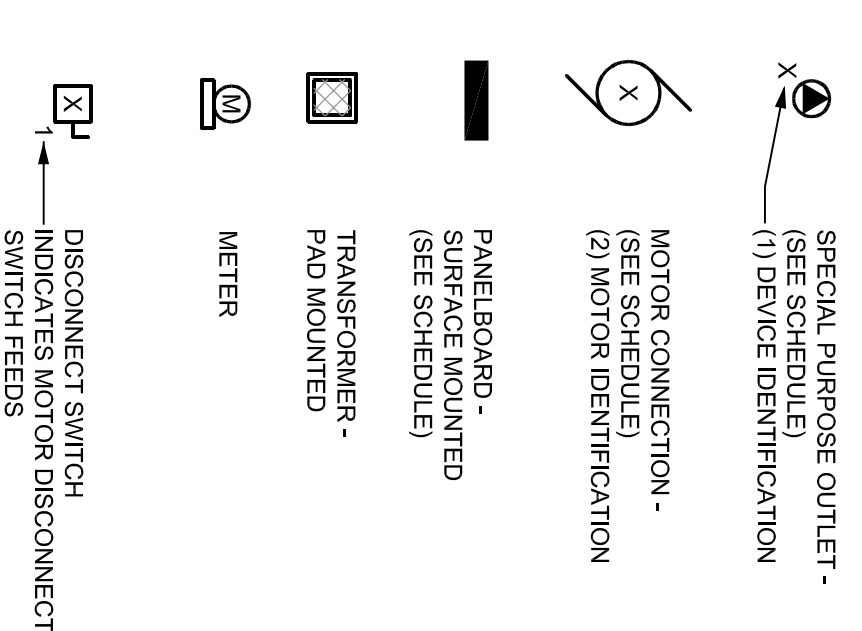
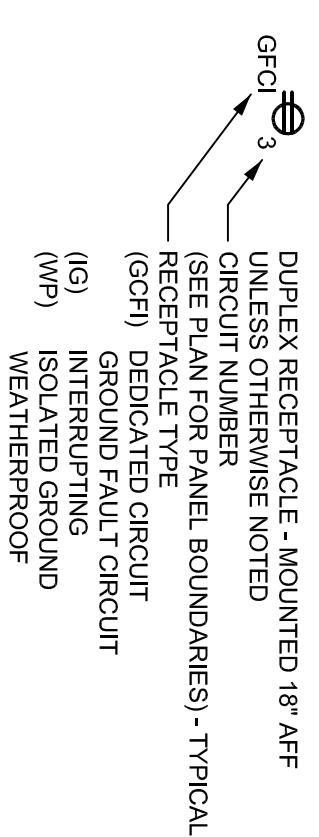
DANE COUNTY
DEPARTMENT OF PUBLIC WORKS
BARCOCK AND LAFOLLETTE PARKS -
LOCKS AND DAMS RENOVATION
PHASE 2
LOCK AND DAM REPAIRS AND UPGRADES

ISSUE:

LIGHTING SYMBOLS



POWER SYMBOLS



ABBREVIATIONS

1P ONE POLE
2P TWO POLE
3P THREE POLE
4P FOUR POLE
1P1W ONE POLE ONE WIRE
1P2W ONE POLE TWO WIRE
2P2W TWO POLE TWO WIRE
2P3W TWO POLE THREE WIRE
3P3W THREE POLE THREE WIRE
3P4W THREE POLE FOUR WIRE
4P4W FOUR POLE FOUR WIRE

A AMPERE
A ALTERNATING CURRENT
AC AMPERE
AFG ABOVE FINISHED FLOOR
AFG ABOVE FINISHED GRADE
AIC AMPERE INTERRUPTING CAPACITY
AL ALUMINUM
AS AMP SWITCH
ARCH ARCHITECT
ATS AUTOMATIC TRANSFER SWITCH
AV AUDIO VISUAL
B PEDESTAL MOUNTED ON BENCH TOP
BF BELOW FLOOR
BLDG CONDUIT
CAT CATALOG
CATV CABLE TELEVISION
CB CIRCUIT BREAKER
CCT CIRCUIT MOUNTED
CT CURRENT TRANSFORMER
CU COPPER
CL CENTERLINE
D DEDICATED DEVICE
DC DIRECT CURRENT
DISC DISCONNECT
DWG DRAWING
E EMERGENCY
E ELECTRICAL CONTRACTOR
EC ELECTRIC METAL TUBING
EMT ELECTRIC METAL TUBING EXISTING
EX EXISTING
FLA FULL LOAD AMPS
GFCI GENERAL CONTRACTOR
GFCI GROUND FAULT CIRCUIT INTERRUPTER
GFCI GROUND FAULT PROTECTION EQUIPMENT
GRC GALVANIZED RIGID CONDUIT
HP HORSEPOWER
HVAC HEATING, VENTILATING AND AIR CONDITIONING
Hz HERTZ (cycles PER SECOND)
J JUNCTION BOX
KVA KILOVOLT AMPERE
KVAR KILOVOLT AMPERE REACTIVE
KW KILOWATT
L LIGHTING PANELBOARD
LP LIGHT SWITCH
LS LOW VOLTAGE
LV LOW VOLTAGE
MCC MOTOR CONTROL CENTER
MDP MAIN DISTRIBUTION PANEL
MISC MISCELLANEOUS
MISC MAIN LISTS ONLY
MNTS MOUNTING
MTS MANUAL TRANSFER SWITCH
NA NOT APPLICABLE
NC NORMALLY CLOSED
NEC NATIONAL ELECTRIC CODE
NO NORMALLY OPEN
NUMBER
NTS NOT TO SCALE
P POLE
PB PULL BOX
PPL PLUMBING SYSTEM CONTRACTOR
PH PHASE
PIL PANEL(BOARD)
PP POWER PANEL
PR PAIR
PRL PRIMARY
PRL PRIMARY CHLORIDE CONDUIT
REC RECESSED
RSC RIGID STEEL CONDUIT
SEC SECONDARY
SN SOLID NEUTRAL
SP SPARE ESS STEEL
ST SHUNT TRIP
STP SHIELDED TWISTED PAIR
SUSP SUSPENDED
SW SWITCH
SWBD SWITCHBOARD
TS TRANSFER SWITCH
TC TELEPHONE CABINET
TCI TELECOMMUNICATIONS CABLING INSTALLER
TEL TELEPHONE
TELDATA TELEPHONE/DATA
TEL TEL
TYP TYPICAL
UTP UNSHIELDED TWISTED PAIR
V VOLT
VOLT UNSHIELDED TWISTED PAIR
V UNLESS OTHERWISE INDICATED
W WIRE
W WATT
WP WEATHERPROOF
XFR TRANSFORMER
ZM ZONE ADAPTER MODULE
+ZZ MOUNTING UNITS TO CENTERLINE ABOVE FINISHED FLOOR OR GRADE

PROJECT INFORMATION:

PROJECT NUMBER: 2011-5012
DATE: 02-02-2012
DRAWN BY: AAS/UJAH
CHECKED BY: ASS
APPROVED BY: ASS
SCALE: AS SHOWN

SHEET TITLE:

ELECTRICAL SYMBOLS AND ABBREVIATIONS

SHEET NUMBER:

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CONSULTANTS:

PROJECT TITLE:

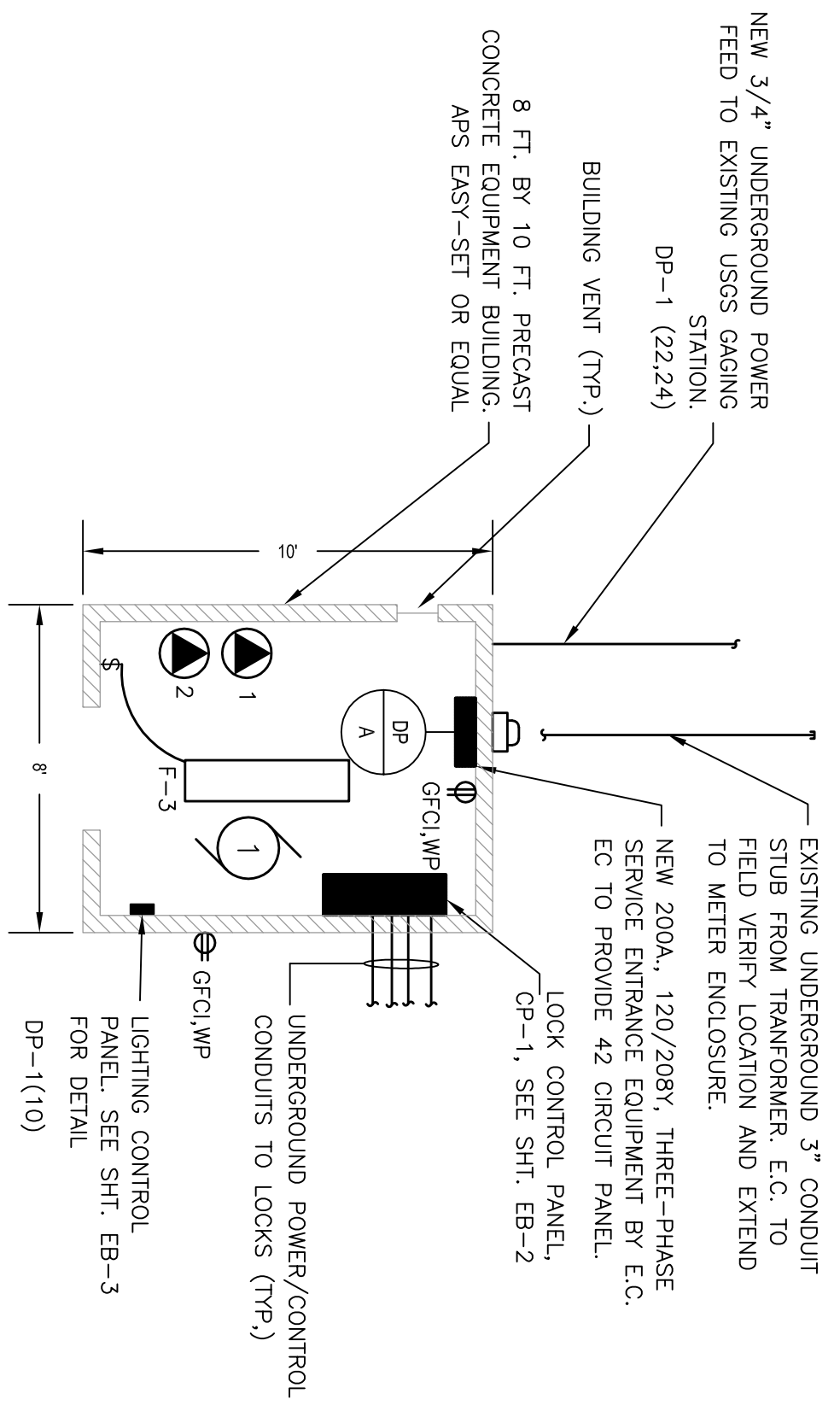
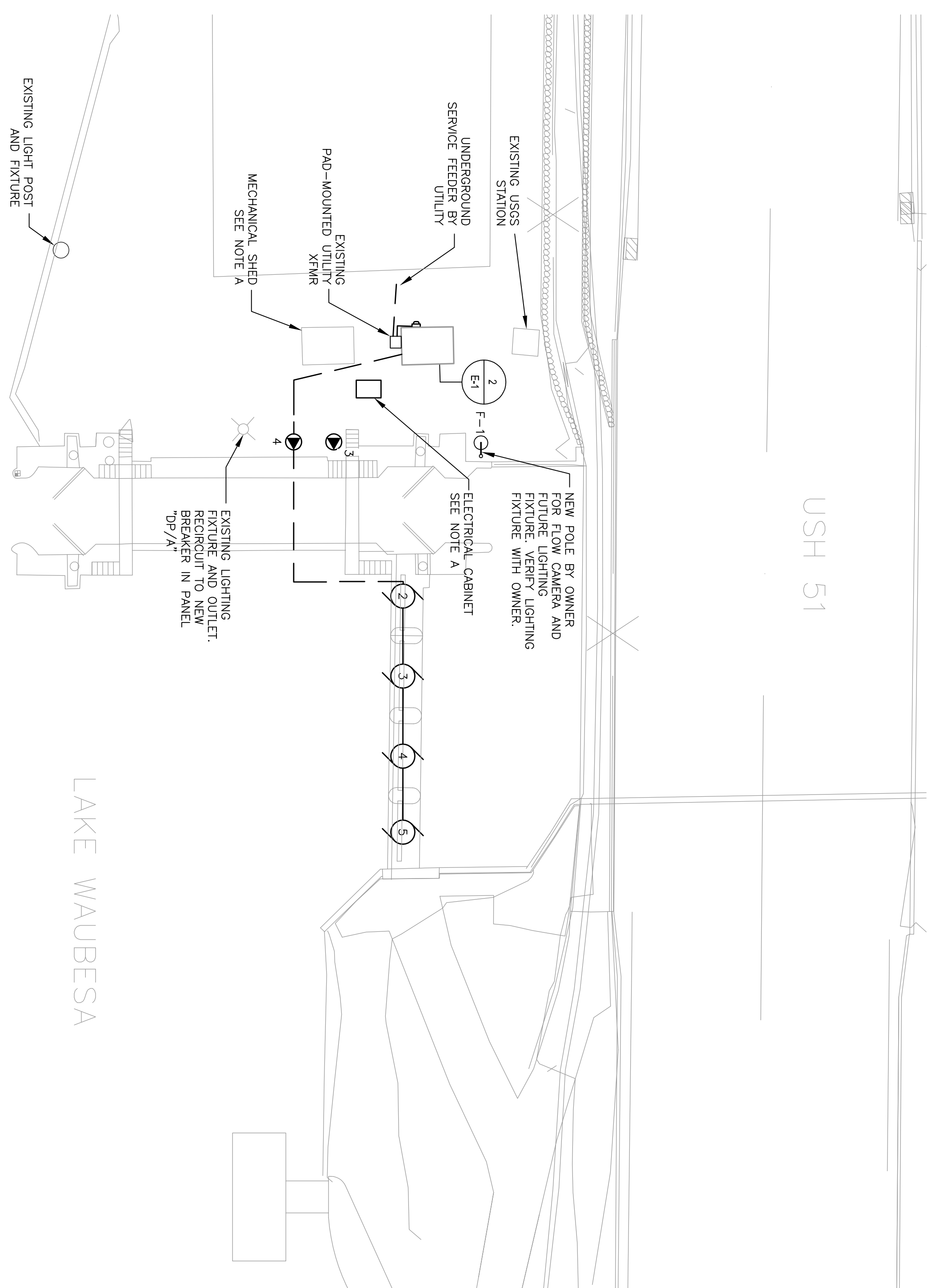
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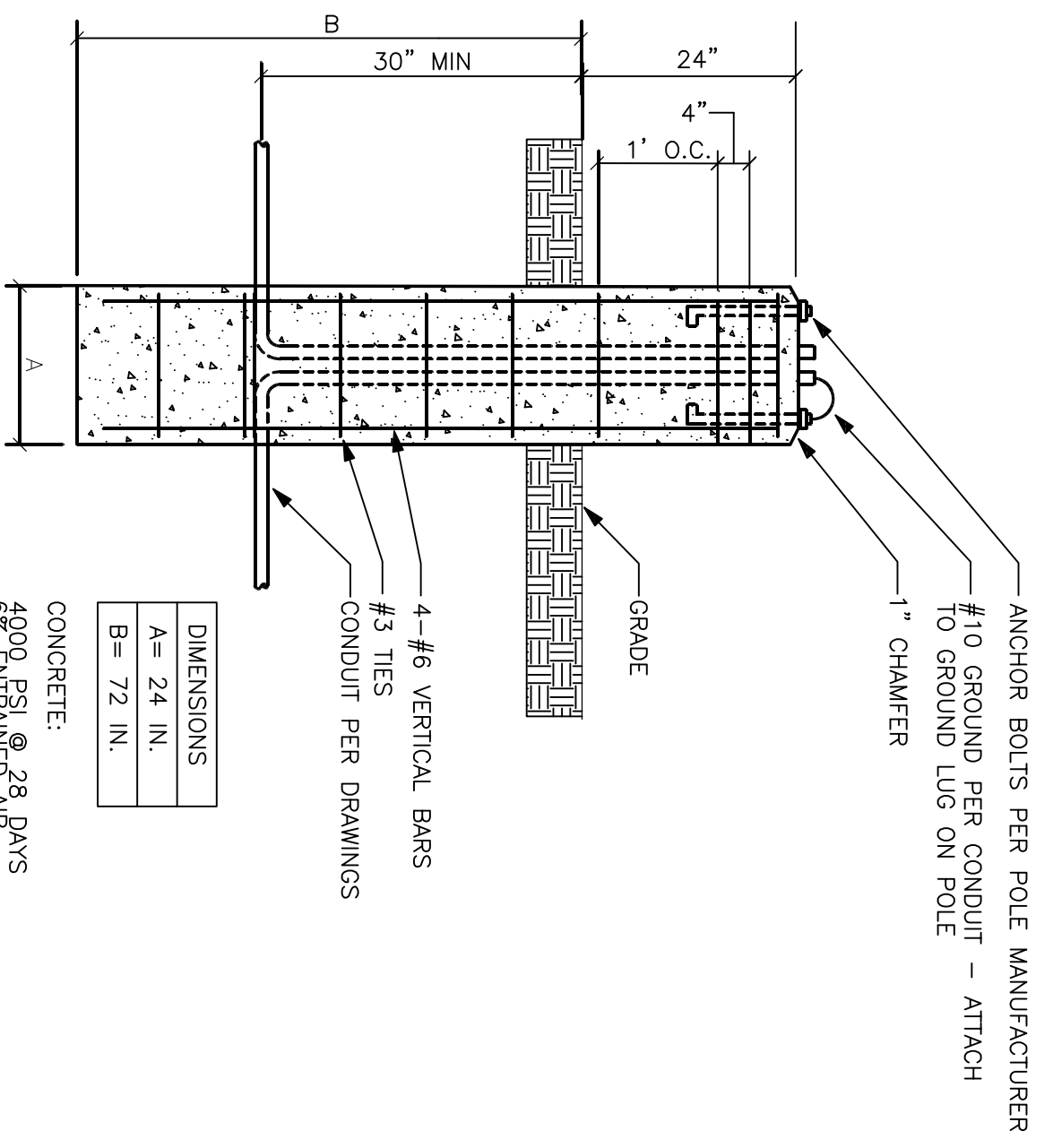
PROJECT INFORMATION:
 PROJECT NUMBER: 2011-5012
 DATE: 02-02-2012
 DRAWN BY: AAS/JAH
 CHECKED BY: ASS
 APPROVED BY: ASS
 SCALE: AS SHOWN

SHEET TITLE:
 SITE ELECTRICAL PLAN -
 BARCOCK LOCK AND DAM

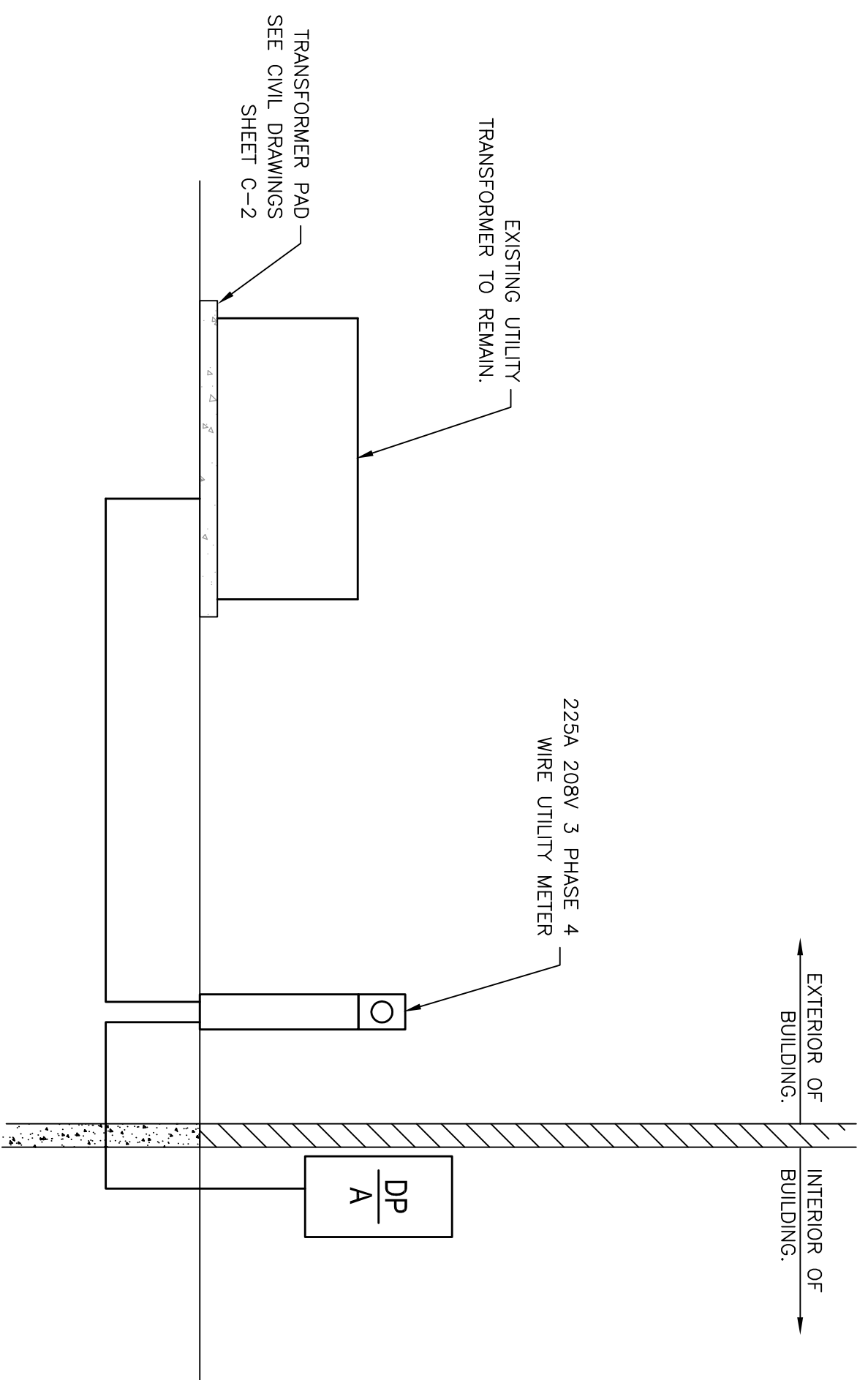
SHEET NUMBER:



2 MECHANICAL BUILDING
 1/4"=1'-0"
 0 2 4



3 LIGHT POLE BASE DETAIL
 E1



3 RISER DIAGRAM
 E1

1 SITE ELECTRICAL PLAN
 1/8"=1'-0"
 0 8 16

GENERAL NOTES:

- NOTE A. PROVIDE: 36"x48"x10" NEMA 4X CABINET ON (2) 4x4 WOOD POST FOR BASE BID.
- PROVIDE 27"x60"x30" NEMA4X CABINET ON 6" CONCRETE CONCRETE SLAB FOR ALTERNATE BID #1.
- PROVIDE MECHANICAL SHED FOR ALTERNATE BID #7.

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 PHASE 2
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ISSUE:

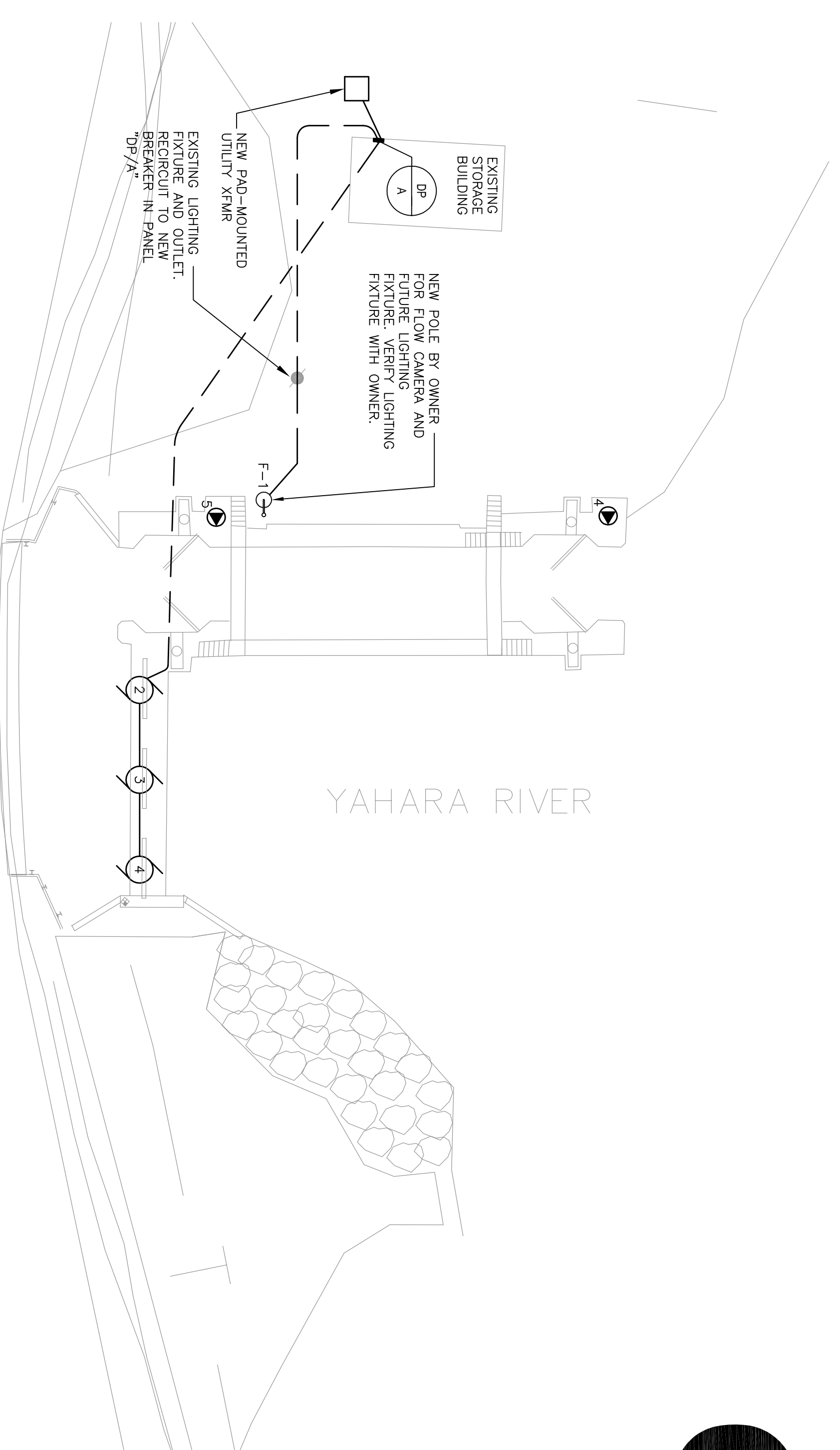
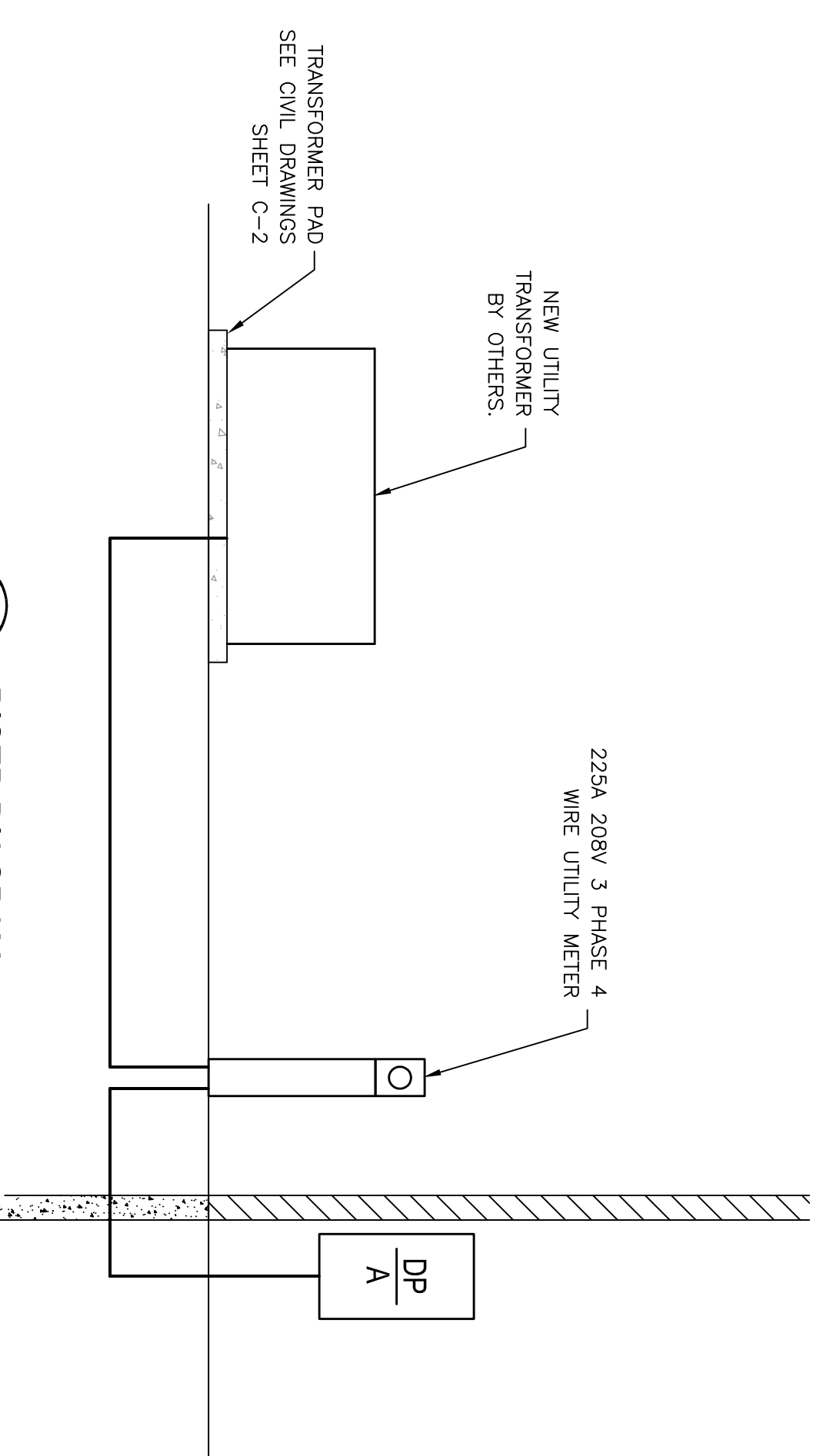
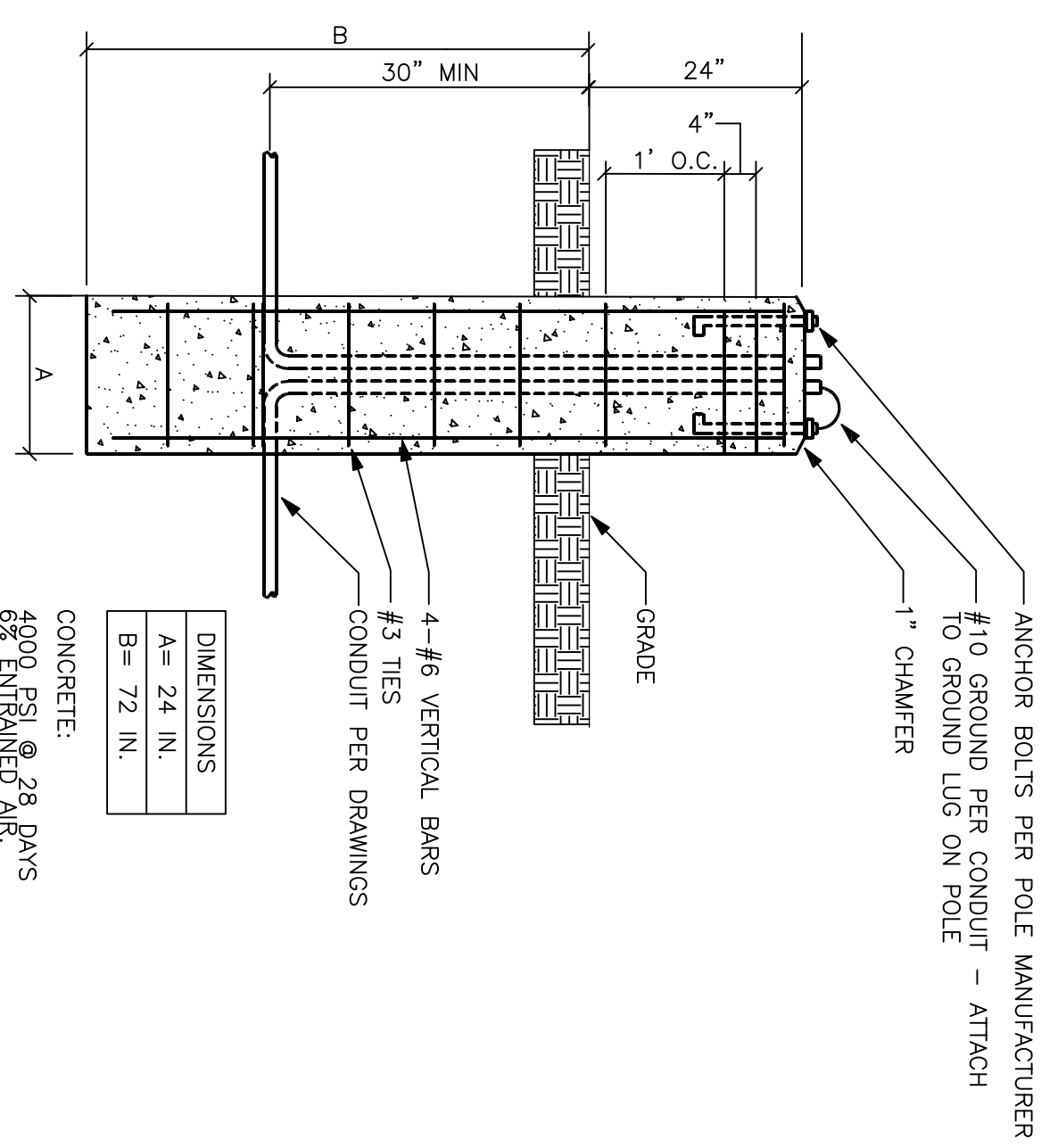
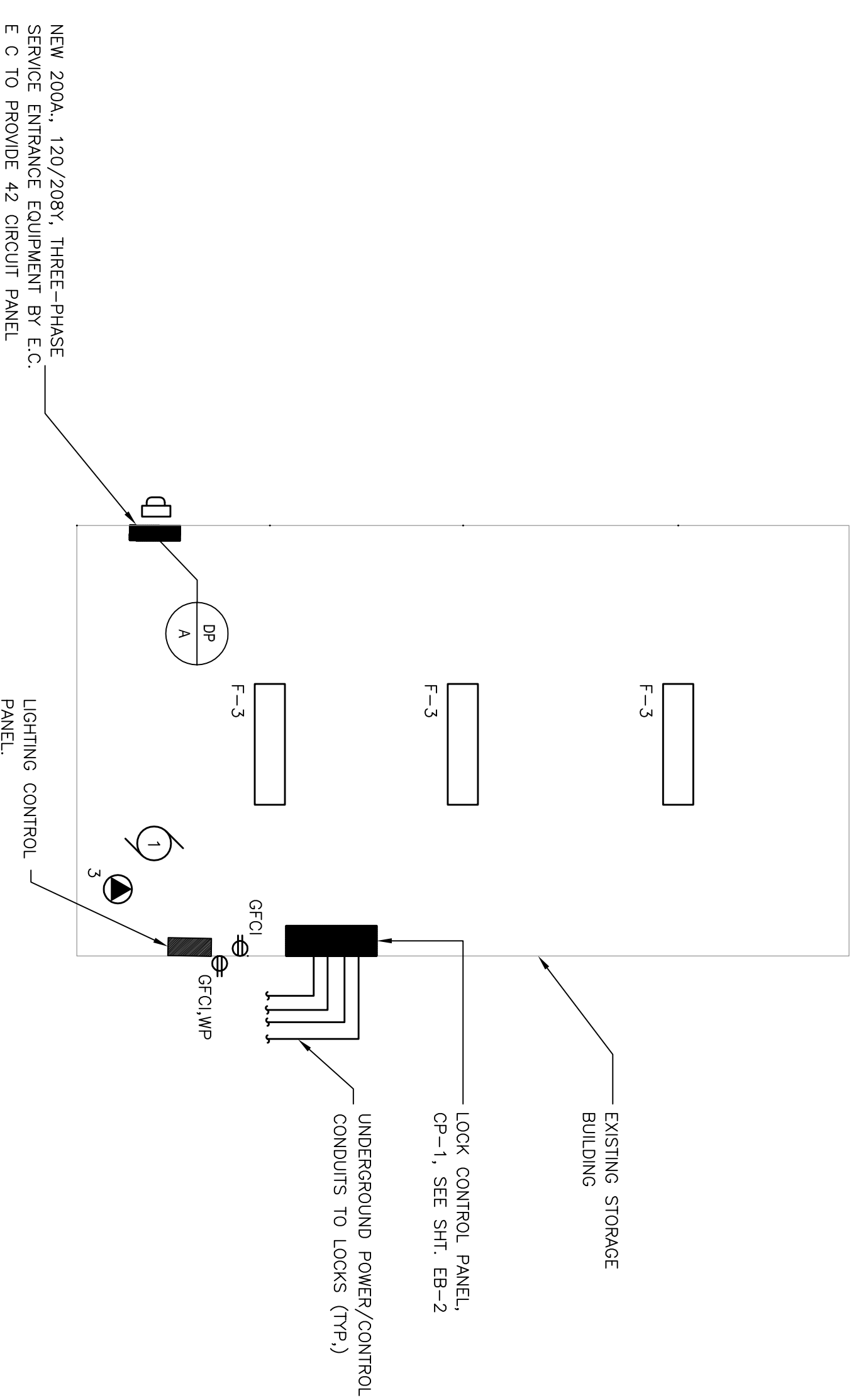
PROJECT INFORMATION:

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

SHEET TITLE:

SITE ELECTRICAL PLAN AND DETAILS
 LAFOLLETTE LOCK AND DAM

SHEET NUMBER:



1 SITE ELECTRICAL PLAN

3 LIGHT POLE BASE DETAIL

3 RISER DIAGRAM

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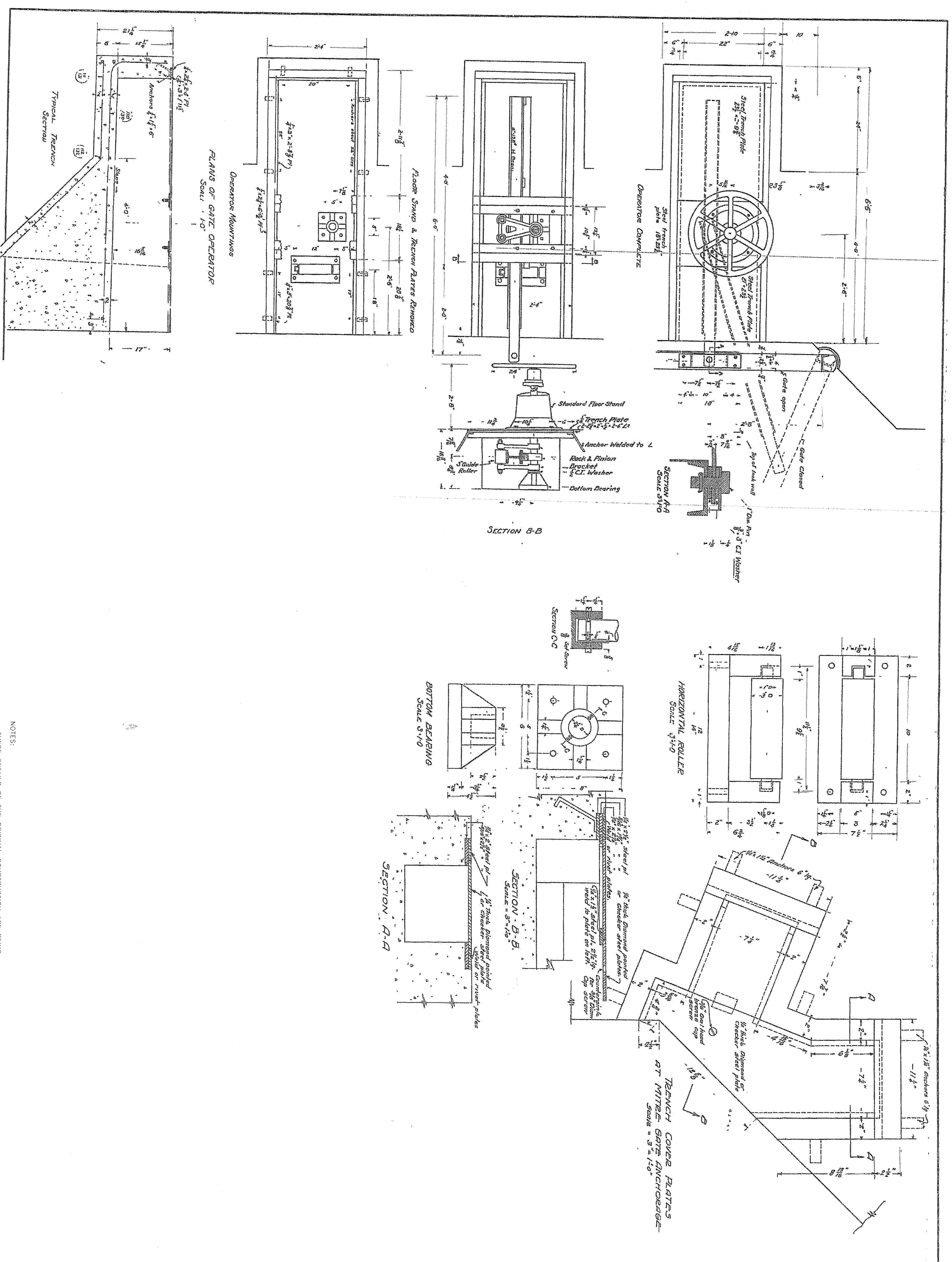
ISSUE:

SHEET TITLE:

LOCK CONTROLS
 SECTIONS AND DETAILS

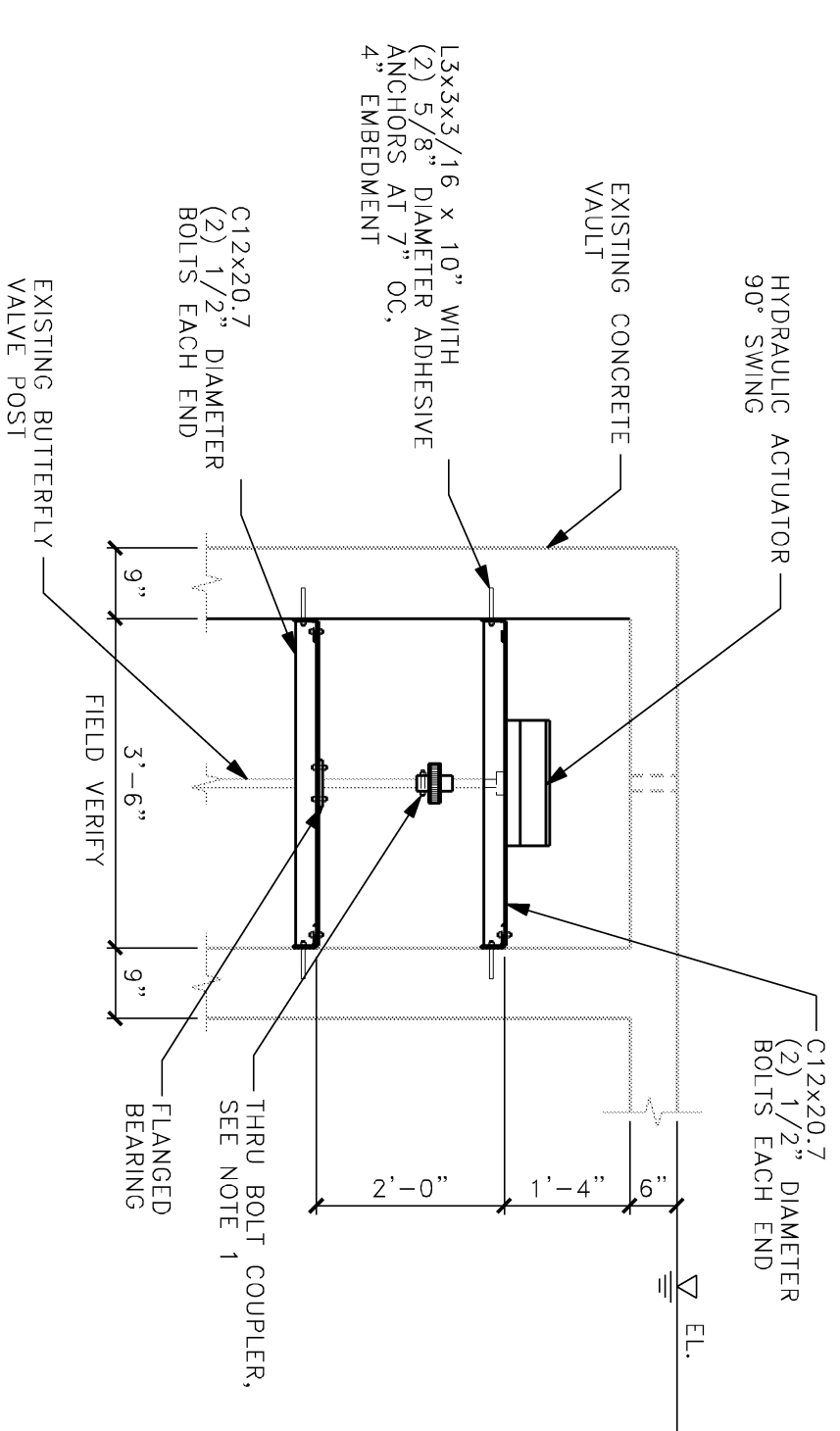
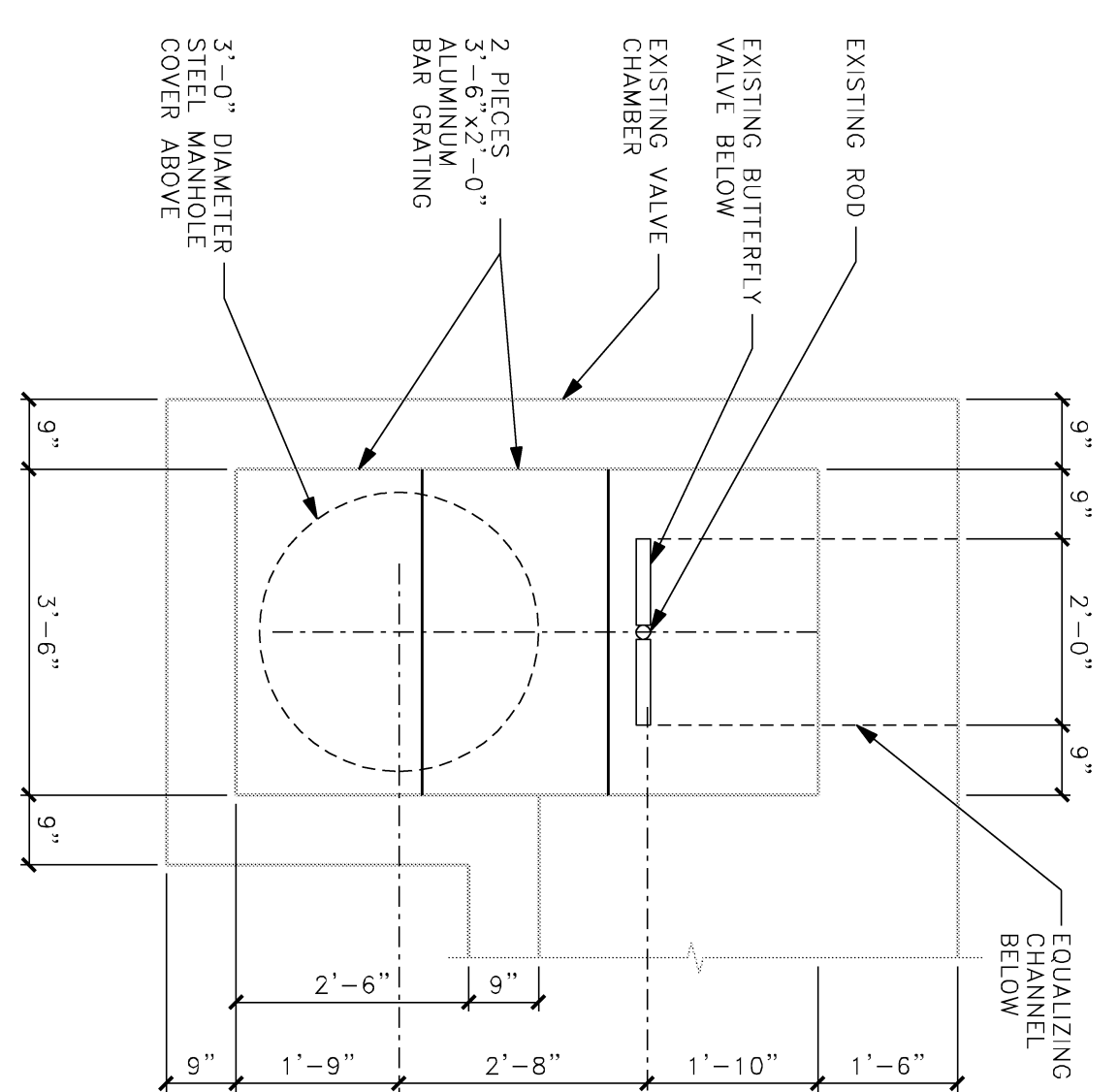
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M-1

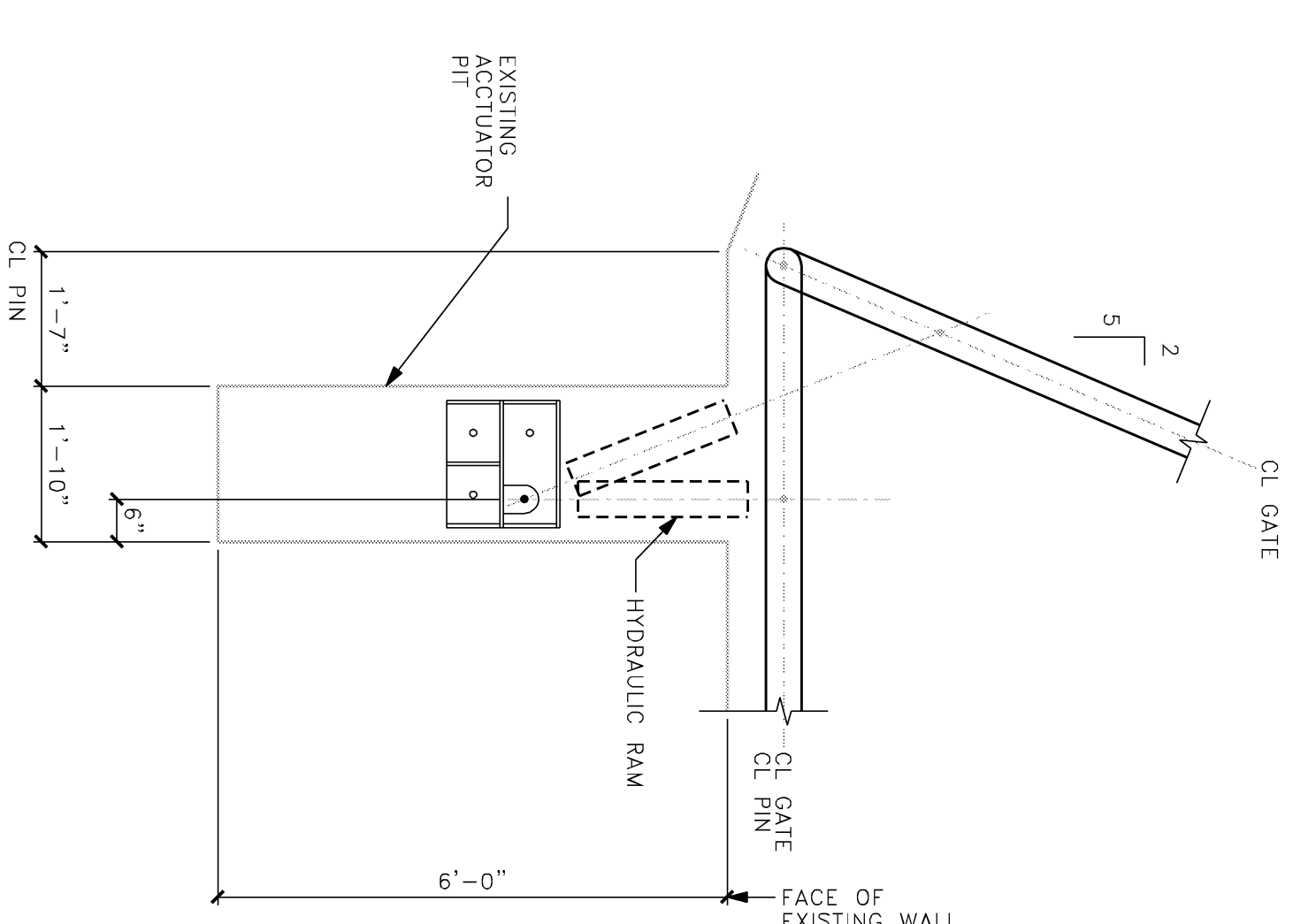
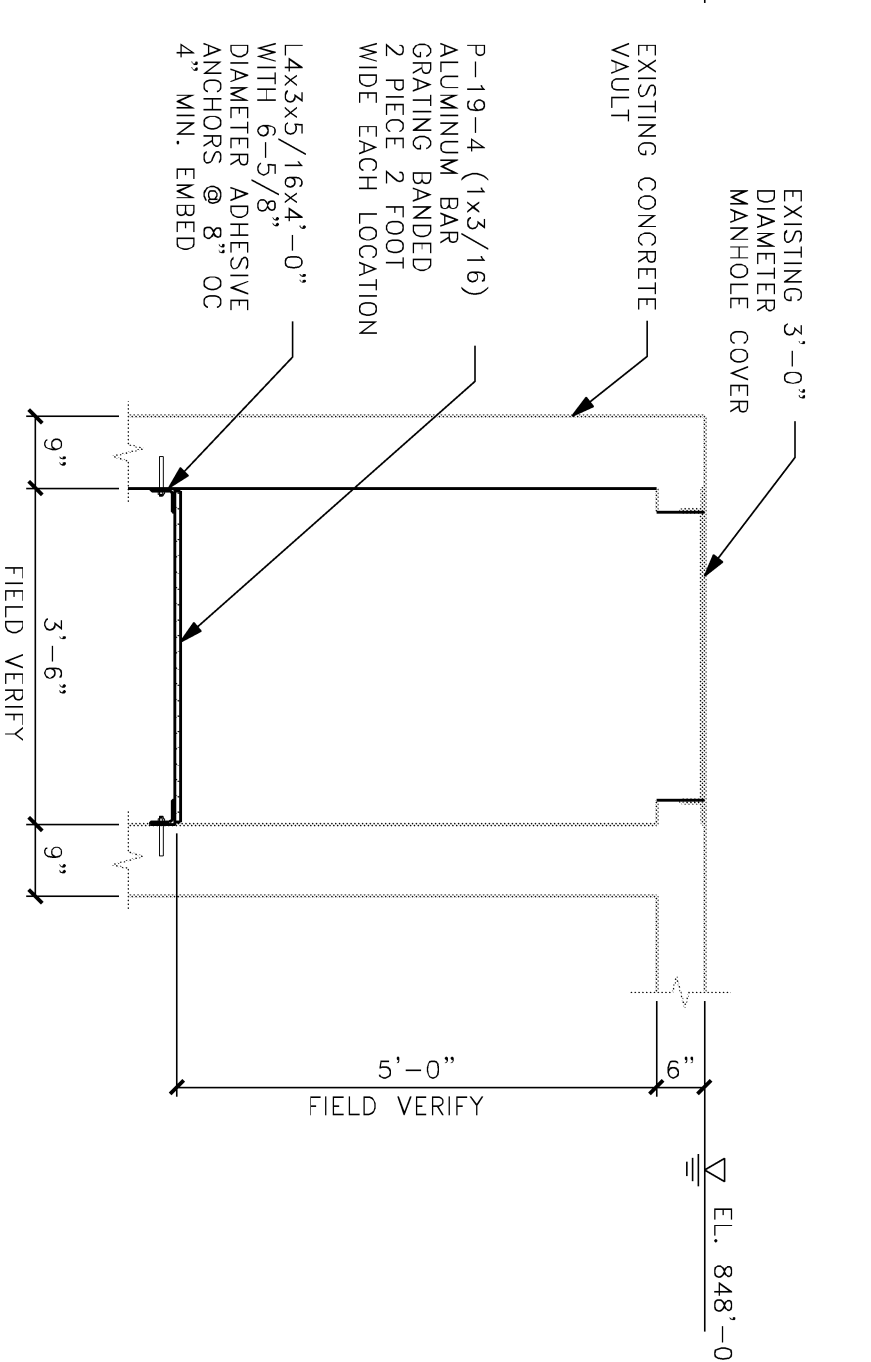


NOTES:

- THESE DETAILS OF THE ORIGINAL CONSTRUCTION ARE BEING PROVIDED FOR THE REFURISHMENT OF THE LOCK GATE CONTROLS.
- ALL CONTROLS SHALL BE DISASSEMBLED, SAND BLASTED AND PAINTED.
- NEW WHEELS SHALL BE PROVIDED IF SPOKES ARE BROKEN.
- ALL BUSHINGS SHALL BE REPLACED.
- ANCHORED BASES AND EMBED PLATES CAN BE CLEANED AND FRAMED IN PLACE.
- ALL BOLTS SHALL BE REPLACED WITH STAINLESS STEEL BOLTS.
- ALL COVER PLATES SHALL BE SANDBLASTED, PRIMED AND PAINTED.



NOTE 1: FIELD DRILL EXISTING SHAFT FOR BOLTED COUPLER

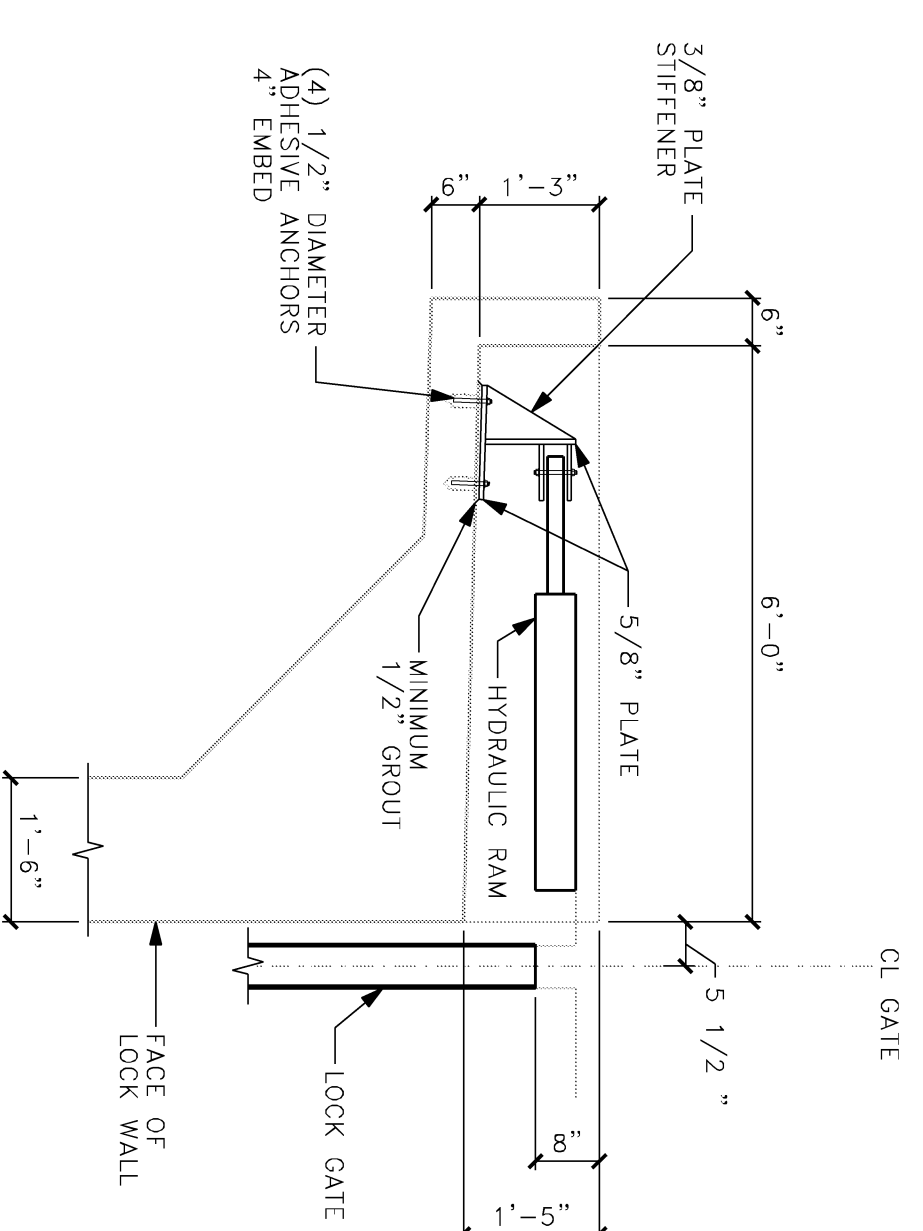


SECTION 1
 1/2"=1'-0"

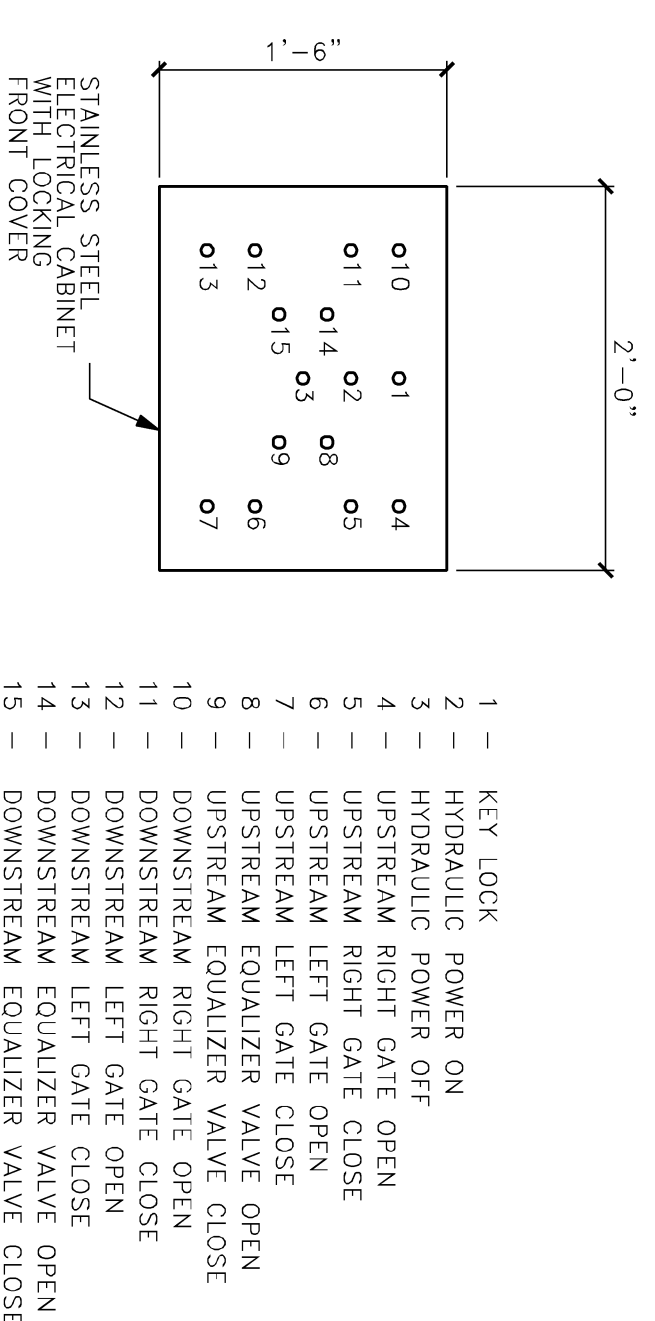
SECTION 2
 1/2"=1'-0"

SECTION 3
 1/2"=1'-0"

SECTION 4
 1/2"=1'-0"



SECTION 5
 1/2"=1'-0"



DETAIL - CONTROL PANEL
 1"=1'-0"

- 1 - KEY LOCK
- 2 - HYDRAULIC POWER ON
- 3 - HYDRAULIC POWER OFF
- 4 - UPSTREAM RIGHT GATE OPEN
- 5 - UPSTREAM RIGHT GATE CLOSE
- 6 - UPSTREAM LEFT GATE OPEN
- 7 - UPSTREAM LEFT GATE CLOSE
- 8 - UPSTREAM EQUALIZER VALVE OPEN
- 9 - UPSTREAM EQUALIZER VALVE CLOSE
- 10 - DOWNSTREAM RIGHT GATE OPEN
- 11 - DOWNSTREAM RIGHT GATE CLOSE
- 12 - DOWNSTREAM LEFT GATE OPEN
- 13 - DOWNSTREAM LEFT GATE CLOSE
- 14 - DOWNSTREAM EQUALIZER VALVE OPEN
- 15 - DOWNSTREAM EQUALIZER VALVE CLOSE