RICHARDS MARSH DIKE RENOVATION WARREN COUNTY, IOWA Department of Natural Resources SHEET INDEX

APPROVED PLANS

GENERAL INFORMATION



(92)

69

(35)

165

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C0.00 COVER SHEET C0.01 **OVERALL SITE PLAN** C1.01 WATER CONTROL STRUCTURE PLAN AND PROFILE C1.02 **OVERFLOW SECTION PLAN AND PROFILE** C2.01 WATER CONTROL STRUCTURE DETAILS C2.02 **OVERFLOW STRUCTURE DETAILS** C3.01

SPECIFICATIONS

BID QUANTITIES

| ERNATE #1: WATER CONTROL STRUCTURE | | | | ALTERNATE #2: OVERFLOW STRUCTURE | | | |
|------------------------------------|-------------------------------|----------|-------|----------------------------------|---------------------------------|----------|-------|
| # | ITEM DESCRIPTION | QUANTITY | UNITS | # | ITEM DESCRIPTION | QUANTITY | UNITS |
| 1 | MOBILIZATION | 1 | LS | 1 | MOBILIZATION | 1 | LS |
| 2 | EXCAVATION, CLASS 10 | 2,100 | CY | 2 | EXCAVATION, CLASS 10 | 2,500 | CY |
| 3 | CLASS 'D' REVETMENT | 395 | TON | 3 | CLASS 'D' REVETMENT | 675 | TON |
| 4 | 66" SMP CULVERT | 60 | LF | 4 | EROSION STONE | 515 | TON |
| 6 | 36" SMP CULVERT | 60 | LF | 5 | AGGREGATE FILLED CELLULAR | 3,400 | SF |
| 7 | 9' X 6' RISER STRUCTURE | 1 | LS | | | | _ |
| 8 | 6' X 4' HEAVY DUTY SHUCE GATE | 1 | FA | 6 | CONCRETE EDGE BEAM, 2' DEPTH | 160 | LF |
| | | - | | 7 | CONCRETE EDGE BEAM, 4' DEPTH | 160 | LF |
| 9 | NDES PERMIT / EROSION CONTROL | 1 | LS | 0 | NIDDES PERMIT / EROSION CONTROL | 1 | 15 |
| 10 | CONSTRUCTION SURVEY | 1 | LS | 0 | NPDES FERMINY EROSION CONTROL | | |
| | | | | 9 | CONSTRUCTION SURVEY | 1 | |

GENERAL NOTES

- THE LOCATIONS OF UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS PLOTTED ON THE DRAWING ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO SHIVE-HATTERY INC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS NOT KNOWN TO SHIVE-HATTERY, INC. AND NOT SHOWN ON THIS DRAWING. THE UTILITY MAINS, STRUCTURES AND SERVICE CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR
- 2. CONTRACTOR SHALL COORDINATE ALL PRIVATE UTILITY LOCATES WITH OWNER.
- PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT CRITICAL LOCATIONS TO VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION
- IOWA CODE 480, UNDERGROUND FACILITIES INFORMATION, REQUIRES VERBAL NOTICE TO IOWA ONE-CALL 1-800-292-8989, NOT LESS THAN 48 HOURS REFORE EXCAVATING, EXCLUDING WEEKENDS AND HOUDAYS.
- 5. THE MEANS OF THE WORK AND THE SAFETY OF THE CONTRACTOR'S EMPLOYEES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR
- 6. NO WORK SHALL BE PERFORMED BEYOND THE PROJECT LIMITS WITHOUT PRIOR AUTHORIZATION FROM THE OWNER'S REPRESENTATIVE.
- 7. PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
- 8. MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION
- 9. ALL OPEN EXCAVATIONS SHALL BE PROTECTED.

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- THE COMPLETION OF THIS WORK
- REPAIR OR REPLACE DAMAGE TO EXISTING FACILITIES (DRIVES
- AUTHORITY WILL NOT BE PAID FOR
- LOCAL STATE AND FEDERAL REQUIREMENTS.
- 15. ALL SEEDING FOR THE PROJECT WILL BE COMPLETED BY OWNER COORDINATE WITH OWNER.



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10. ANY WORK REQUIRED TO COMPLETE THE SCOPE OF THIS PROJECT BUT NOT SPECIFICALLY CALLED OUT, SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR

ADDITIONAL EXPENSE TO THE OWNER.

WORK WHICH DOES NOT CONFORM TO THE REQUIREMENTS OF THE CONTRACT WILL BE CONSIDERED UNACCEPTABLE. UNACCEPTABLE WORK, WHETHER THE RESULT OF POOR WORKMANSHIP. USE OF DEFECTIVE MATERIALS, DAMAGE THROUGH CARELESSNESS OR ANY OTHER CAUSE, FOUND TO EXIST PRIOR TO THE FINAL ACCEPTANCE OF THE WORK, SHALL BE REMOVED AND REPLACED IN AN ACCEPTABLE MANNER, AS REQUIRED BY THE OWNER'S REPRESENTATIVE, AT THE CONTRACTOR'S EXPENSE. WORK DONE CONTRACTOR'S EXPENSE INSTRUCTIONS OF THE OWNER'S REPRESENTATIVE, WORK DONE BEYOND THE LINES SHOWN ON THE PLANS OR ANY EXTRA WORK DONE WITHOUT

13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEPARTMENT OF NATURAL RESOURCES (DNR) NPDES PERMIT AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS AND REQUIRED CONTAINMENT STRUCTURES. THE CONTRACTOR SHALL OBTAIN THE IOWA DNR GENERAL PERMIT #2 AND DEVELOP A SWPPP FOR THE PROJECT. THE CONTRACTOR SHALL IMPLEMENT, MAINTAIN, COMPLETE REQUIRED INSPECTIONS, AND UPDATE THE SWPPP AS REQUIRED TO MEET ALL

14. THIS PROJECT IS LOCATED WITHIN LAKE RED ROCK FLOOD POOL . LAKE RED ROCK NORMAL WATER LEVEL = 740'. FLOOD POOL = 780

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SHIVEHATTERY ARCHITECTURE + ENGINEER

1601 48th Street Suite 200 | West Des Moines, Jowa 50266 515.223.8104 | fax: 515.223.0622 | shive-hattery.com Iowa i Illinois i Indiana i Missour

RICHARDS MARSH DIKE RENOVATION

IOWA DEPARTMENT OF NATURAL RESOURCES

WARREN COUNTY, IOWA DAS PROJECT # 8733.00

KEY PLAN

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| DRAWN | JRM | |
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| APPROVED | LTM | |
| ISSUED FOR | REVIEW | |
| DATE | 8-6-2015 | |
| FIELD BOOK | | |
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4135420 PROJECT NO .:

COVER SHEET

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2 -12 Tuesday 20 V All the the there and 5+00 RED ROCK WMA BOAT RAMPS AND PARKING AREA C1.01

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OVERALL SITE PLAN

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PROJECT NO.: 4135420

WATER CONTROL STRUCTURE PLAN AND PROFILE

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| 19 10 <t< td=""></t<> |
| SMOOTH BREAK POINTS WITH 5' VERTICAL CURVES IN SURFACING/ CONFINEMENT SYSTEM. (TYP) |
| SMQOTH BREAK POINTS WITH 5' VERTICAL CURVES IN SURFACING/ CONFINEMENT SYSTEM. (TYP) |
| POINTS CURVES IN FINEMENT |
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RICHARDS MARSH DIKE RENOVATION

IOWA DEPARTMENT OF NATURAL RESOURCES

WARREN COUNTY, IOWA DAS PROJECT # 8733.00

EACH DIRECTION

- WORKING SLAB

KEY PLAN

JRM DRAWN APPROVED LTM ISSUED FOR CONSTRUCTION 8-6-2015 DATE FIELD BOOK

PROJECT NO.: 4135420

WATER CONTROL STRUCTURE DETAILS

C2.01



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KEY PLAN

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| DATE | 8-6-2015 |
| FIELD BOOK | |
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PROJECT NO.: 4135420

OVERFLOW STRUCTURE DETAILS

C2.02

| | 1 2 | | |
|---|---|------------|----------------------|
| | SPECIFICATIONS: | | |
| | SITE PREPARATION | | |
| | 1.1 SCOPE | C. | THE N PLAC |
| | A. SITE PREPARATION WORK SHALL CONSIST OF CLEARING, GRUBBING, STRIPPING, REFUSE REMOVAL, BANK SLOPING AND STRUCTURE REMOVAL ON THE SITE AS NECESSARY TO RID THE SITE OF ALL UNDESIRABLE | D. | IF TH SUCC |
| E | MATERIALS ON OR NEAR THE SURFACE AND PREPARE THE SITE FOR THE STRUCTURE. ALL WOODY GROWTH WITHIN THE CONSTRUCTION AREA SHALL BE CLEARED AND ALL STUMPED AND ROOTS ONE INCH IN DIAMETER OR LARGER SHALL BE GRUBBED FROM THE SITE. THE WORK SHALL ALSO CONSIST OF THE | E. | |
| | OTHER ITEMS OF WORK. | 3.3 | CONT |
| | PART 2 PRODUCTS NOT USED | A. | THE N |
| | 3.1 FOUNDATION PREPARATION | | COM MATE |
| | A. THE CONSTRUCTION AREAS SHALL BE STRIPPED OF ALL UNSUITABLE MATERIALS SUCH AS ORGANIC | В. | THE N HAND |
| | MATTER, GRASSES, WEEDS, SOD, DEBRIS, AND STONES LARGER THAN 6 INCHES IN DIAMETER. B. IN AN EARTH EMBANKMENT FOUNDATION AREA, ALL CHANNEL BANKS AND SHARP BREAKS SHALL BE | C | RIBB(|
| | SLOPED TO NO STEEPER THAN 1.5 HORIZONTAL TO 1 VERTICAL. | 0. | FROM |
| | SURFACE SHALL HAVE MOISTURE ADDED OR SHALL BE COMPACTED IF NECESSARY SO THAT THE FIRST LAYER OF FILL MATERIAL CAN BE COMPACTED AND BONDED TO THE FOUNDATION. | D. | THE A |
| | 3.2 STRIPPED MATERIAL DISPOSAL | 3.4 | COMP |
| D | A. SUITABLE SOIL MATERIAL SHALL BE STOCKPILED FOR USE AS TOPSOIL. THE OTHER STRIPPED MATERIALS SHALL BE BURIED, REMOVED FROM THE SITE, OR DISPOSED OF AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. | A. | EART OF A DRAV |
| | B. STOCKPILED MATERIALS AROUND A CONSTRUCTION SITE SHOULD BE PLACED SO AS NOT TO HINDER SUBSEQUENT CONSTRUCTION OPERATIONS | B. | FILL A |
| | | | INCHI HAND |
| | END OF SECTION - SHE FREFARATION | | TAKE RESU |
| | | | WITH |
| | PART 1 GENERAL | C. | COM CON |
| | 1.1 SCOPE | END | OF SEC |
| | A. THE WORK SHALL CONSIST OF THE EXCAVATION REQUIRED BY THE DRAWINGS AND SPECIFICATIONS AND DISPOSAL OF THE EXCAVATED MATERIALS. | | |
| | PART 2 PRODUCTS | | |
| | NOT USED | | |
| С | PART 3 EXECUTION | PART | 「1 |
| | A. SUITABLE MATERIALS | 1.1 A | SCOP |
| | CONSTRUCTION OF REQUIRED PERMANENT EARTH FILL. THE SUITABILITY OF MATERIALS FOR SPECIFIC PURPOSES SHALL BE DETERMINED BY THE OWNER. | | ON TI |
| | 3.2 DISPOSAL OF WASTE MATERIAL | в. PAR1 | 50ВК Г2 |
| | A. ALL SURPLUS OR WASTE MATERIAL SHALL BE DISPOSED OF IN AREAS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE OWNER'S ENGINEER. THE WASTE MATERIAL SHALL BE SMOOTHED AND SLOPED TO PROVIDE DRAINAGE. | 2.1 A. | MATEI SMO |
| | 3.3 STRUCTURE AND TRENCH EXCAVATION | PART | ACCE |
| | A. STRUCTURE OR TRENCH EXCAVATIONS WILL CONFORM TO ALL SAFETY REQUIREMENTS OF OSHA | 3.1 | HANDI |
| | | A. | PIPE |
| | END OF SECTION - EXCAVATION | | HAND |
| В | FARTHFILL | 3.2 | TREN |
| | PART 1 GENERAL | A. | PIPE |
| | 1.1 SCOPE A THE WORK SHALL CONSIST OF THE CONSTRUCTION OF FARTH FILLS REQUIRED BY THE DRAWINGS AND | | SHAL |
| | SPECIFICATIONS. | 3.3 | LAYIN |
| | 2.1 MATERIALS | A. | PIPE HERE |
| | A. ALL FILL MATERIALS SHALL BE OBTAINED FROM REQUIRED EXCAVATIONS. | | UNLE |
| | PART 3 EXECUTION | | 2. <u>E</u> A |
| | 3.1 FOUNDATION PREPARATION | | BE FC |
| | A. FOUNDATIONS FOR EARTHFILL SHALL DE STRIPPED TO REMOVE VEGETATION AND OTHER UNSUITABLE MATERIALS. FOUNDATION SURFACES SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 2 INCHES. | | W TF |
| | B. FOUNDATION AND ABUTMENT SURFACES SHALL NOT BE SLOPED STEEPER THAN 1.5 HORIZONTAL TO 1 VERTICAL UNLESS OTHERWISE SHOWN ON THE DRAWINGS. | 3.4 | |
| А | 3.2 PLACEMENT | A. | |
| | A. FILL SHALL NOT BE PLACED UNTIL THE REQUIRED EXCAVATION AND FOUNDATION PREPARATION HAVE BEEN COMPLETED AND THE FOUNDATION HAS BEEN INSPECTED AND APPROVED BY THE OWNER. FILL SHALL NOT BE PLACED UPON A FROZEN SURFACE, NOR SHALL SNOW, ICE, OR FROZEN MATERIAL BE INCORPORATED IN THE FILL. | | COMI PIPE SPEC |
| | B. ADJACENT TO STRUCTURES OR PIPES, FILL SHALL BE PLACED IN A MANNER WHICH WILL PREVENT DAMAGE. THE HEIGHT OF THE FILL ADJACENT TO STRUCTURES OR PIPES SHALL BE INCREASED AT APPROXIMATELY THE SAME RATE ON ALL SIDES. | END | OF SEC |
| | | | |
| | 1 2 | | |

MATERIALS USED THROUGHOUT THE EARTH FILL SHALL BE ESSENTIALLY UNIFORM. SELECTIVE EMENT SHALL BE AS SHOWN ON THE DRAWINGS OR APPROVED BY THE OWNER'S ENGINEER.

IE SURFACE OF ANY LAYER BECOMES TOO HARD AND SMOOTH FOR PROPER BOND WITH THE CEEDING LAYER, IT SHALL BE SCARIFIED TO A DEPTH OF NOT LESS THAN 2 INCHES BEFORE THE LAYER IS PLACED.

TOP SURFACES OF EMBANKMENTS SHALL BE MAINTAINED APPROXIMATELY LEVEL DURING STRUCTION. EXCEPT THAT A CROSS-SLOPE OF APPROXIMATELY 2% SHALL BE MAINTAINED TO JRE EFFECTIVE DRAINAGE.

ROL OF MOISTURE CONTENT

MOISTURE CONTENT OF THE FILL MATERIAL SHALL BE ADEQUATE FOR OBTAINING THE REQUIRED PACTION. MATERIAL THAT IS TOO WET SHALL BE DRIED TO MEET THIS REQUIREMENT, AND ERIAL THAT IS TOO DRY SHALL HAVE WATER ADDED AND MIXED UNTIL THE REQUIREMENT IS MET.

MOISTURE CONTENT OF THE FILL MATERIAL SHALL BE SUCH THAT A BALL FORMED WITH THE DS DOES NOT CRACK OR SEPARATE WHEN STRUCK SHARPLY WITH A PENCIL AND WILL EASILY ON OUT BETWEEN THE THUMB AND FINGER.

TH FOUNDATIONS UNDER AND ADJACENT TO CONCRETE STRUCTURES SHALL BE PREVENTED M DRYING AND CRACKLING BEFORE CONCRETE AND BACKFILL ARE PLACED.

APPLICATION OF WATER TO THE FILL MATERIALS SHALL BE ACCOMPLISHED AT THE BORROW AS INSOFAR AS POSSIBLE.

PACTION

TH FILL SHALL BE PLACED AND SPREAD IN HORIZONTAL, LOOSE LIFTS. THE MAXIMUM THICKNESS LIFT OF FILL BEFORE COMPACTION SHALL BE 9 INCHES. UNLESS OTHERWISE INDICATED ON THE WINGS. COMPACTION SHALL BE ACCOMPLISHED WITH A SHEEP'S FOOT ROLLER MEETING IDOT TION 2001.05A, TAMPING-TYPE ROLLERS.

ADJACENT TO STRUCTURE AND PIPE CONDUITS SHALL BE PLACED IN LAYERS NOT MORE THAN 4 ES THICK AND COMPACTED TO A DENSITY EQUIVALENT TO THAT OF A SURROUNDING FILL BY D TAMPING, MANUALLY DIRECTED POWER TAMPERS, OR PLATE VIBRATORS. CARE SHOULD BE EN SO THAT COMPACTION AROUND THE SPILLWAY PIPE DOES NOT CAUSE UPLIFT OF THE PIPE JLTING IN A VOID BENEATH THE PIPE. HAND TAMPING ONLY SHALL BE USED TO COMPACT THE THFILL UNDER THE BOTTOM HALF OF CIRCULAR PIPES. EQUIPMENT SHALL NOT BE OPERATED HIN 2 FEET OF ANY STRUCTURE OR PIPE.

PACTING OF FILL ADJACENT TO CONCRETE STRUCTURES SHALL NOT BE STARTED UNTIL THE CRETE IS 7 DAYS OLD.

CTION - EARTHFILL

GENERAL

WORK SHALL CONSIST OF FURNISHING AND INSTALLING SMOOTH METAL PIPE (SMP) AS SHOWN HE DRAWINGS.

PIPE

MIT PRODUCT DATA TO OWNER FOR REVIEW.

PRODUCTS

RIALS

OTH METAL PIPE, SIZE AND WALL THICKNESS AS INDICATED ON DRAWINGS. USED PIPE IS EPTABLE.

EXECUTION

LING AND STORAGE

SHALL BE DELIVERED TO THE JOB SITE AND HANDLED BY MEANS WHICH PROVIDE ADEQUATE PORT TO THE PIPE AND DOES NOT SUBJECT IT TO UNDUE STRESSES OR DAMAGE. WHEN DLING AND PLACING PIPE, CARE SHALL BE TAKEN TO PREVENT IMPACT BLOWS,

CHING

CONDUITS SHALL BE INSTALLED IN TRENCHES IN ACCORDANCE TO THE FOLLOWING METHOD:

(HOE CONSTRUCTED TRENCH - MATERIAL AND EXECUTION OF TRENCHED BACKFILL AROUND PIPE LL BE IN ACCORDANCE WITH EARTHFILL SPECIFICATIONS.

NG AND BEDDING THE PIPE

CONDUITS AND FITTINGS SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS AND SPECIFIED EIN. THE PIPE SHALL BE LAID SO THAT THERE IS NO REVERSAL OF GRADE BETWEEN JOINTS, ESS OTHERWISE SHOWN THE DRAWINGS.

PE SHALL BE FIRMLY AND UNIFORMLY SUPPORTED THROUGHOUT THE ENTIRE LENGTH.

ARTH BEDDING. WHEN BEDDING IS SPECIFIED, THE PIPE SHALL BE FIRMLY AND UNIFORMLY EDDED IN A SHAPED BEDDING GROOVE THAT CLOSELY CONFORMS TO THE BOTTOM OF THE PIPE DR A DEPTH OF EQUAL TO A MINIMUM OF 1 INCH OR 5 PERCENT OF THE DIAMETER OF THE PIPE, HICHEVER IS GREATER. THE BEDDING MATERIAL SHALL BE FREE OF ROCKS OR STONES GREATER HAN 0.5 INCH DIAMETER AND EARTH CLODS GREATER THAN 2 INCH DIAMETER.

FILL

IN 2 FEET OF THE PIPE, BACKFILL SHALL BE CAREFULLY PLACED AND COMPACTED BY MEANS OF D TAMPING OR MANUALLY DIRECTED POWER TAMPERS OR PLATE VIBRATORS TO FORM A TINUOUS UNIFORM SUPPORT AROUND THE PIPE. MAXIMUM THICKNESS OF LAYERS BEFORE PACTION WITHIN 2 FEET OF THE PIPE SHALL BE 4 INCHES AND AT MORE THAN 2 FEET FROM THE A MAXIMUM THICKNESS BEFORE COMPACTION SHALL BE 9 INCHES. UNLESS OTHERWISE CIFIED, THE INITIAL BACKFILL SHALL BE COMPACTED TO A DENSITY EQUIVALENT TO THAT OF THE ACENT FILL OR FOUNDATION MATERIALS.

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CTION - PIPE

PART 1 GENERAL

- 1.1 SCOPE
 - DRAWINGS.
- B. SUBMIT PRODUCT DATA TO OWNER FOR REVIEW.

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- PART 2 PRODUCTS
- 2.1 MATERIALS
 - ARTICLE 4191.01B
- BROKEN CONCRETE OR RUBBLE IS NOT ACCEPTABLE B.B. PART 3 EXECUTION
- 3.1 INSTALLATION
- A. PREPARE SUBGRADE TO CROSS-SECTION AND GRADES AS SHOWN ON PLANS.
- B. PLACE RIPRAP ON FILTER FABRIC OVERLAPPED A MINIMUM OF 6 INCHES.

END OF SECTION - RIPRAP

GENERAL PART 1

1.1 SCOPE

THIS SECTION INCLUDES THE REQUIREMENTS FOR THE CONCRETE USED IN CONCRETE EDGE BEAMS AND ANY CONCRETE WORK ASSOCIATED WITH THE WATER CONTROL STRUCTURE. MATERIALS, MIXING, AND EQUIPMENT FOR ALL CONCRETE WORK, UNLESS OTHERWISE SPECIFIED, SHALL CONFORM TO IOWA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR AIR-ENTRAINED TYPE C-4 MIX WITH TYPE I CEMENT.

PART 2 PRODUCTS

A. CONCRETE

- A.A. COMPRESSIVE STRENGTH: 2800 PSI @ 7 DAYS AND 4000 PSI @ 28 DAYS IOWA DOT SECTION 4115
- A.C. SLUMP: 0.5" TO 4"
- A.D. AIR CONTENT: 8.0% ± 2.0% A.E. REINFORCING STEEL: SHALL BE ASTM A615 GRADE 60, AND SHALL HAVE A ACCORDANCE WITH THE REQUIREMENTS OF ASTM A775. FOR APPROVAL.
- PART 3 EXECUTION NOT USED

END OF SECTION - CONCRETE

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RIPRAP

A. THE WORK SHALL CONSIST OF FURNISHING AND INSTALLING RIPRAP AS SHOWN ON THE

A. FILTER FABRIC: COMPOSED OF A NON-WOVEN MATERIAL, CONFORMING TO IOWA DOT

B. RIP RAP: CONFORM TO IOWA DOT SECTION 4130 CLASS D REVETMENT GRADATION. B.A. CONSIST OF SOUND AND DURABLE LIMESTONE, DOLOMITE, OR QUARTZITE

CONCRETE

A.B. COARSE AGGREGATE DURABILITY SHALL BE CLASS II DURABILITY COMPLYING WITH

PROTECTIVE COATING OF EPOXY APPLIED BY ELECTROSTATIC SPRAY METHOD IN A.F. PROVIDE OWNERS REPRESENTATIVE WITH CONCRETE MIX DESIGN AND SUPPLIER

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KEY PLAN

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SPECIFICATIONS

C3.01