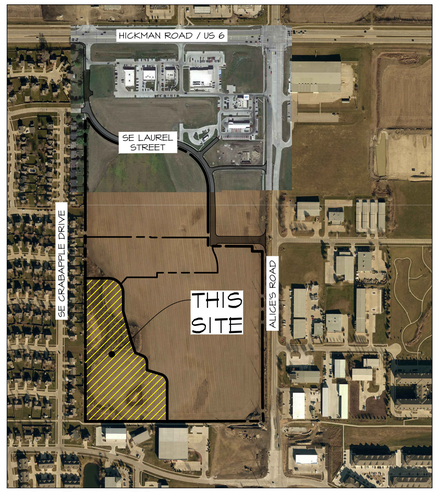
SITE PLAN OF WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

WAUKEE, IOWA

WAUKEE TOWNE CENTER LLC, 611 MONTICELLO DRIVE, BURLINGTON, IA 52601



VICINITY SKETCH

LEGAL DESCRIPTION

LOT 1, WAUKEE TOWNE CENTER PLAT 2, AN OFFICIAL PLAT, CITY OF WAUKEE, DALLAS COUNTY, IOWA.

ZONING/LAND USE

PD C-1 (BOOK: 2022; PAGE: 20201)

OWNER/DEVELOPER:

MIKE PIERSON
WAUKEE TOWNE CENTER, LLC
611 MONTICELLO DRIVE
BURLINGTON, IOWA 52601
(319) 572-0125
MIKE.PIERSON@PIERSONCORP.COM

BENCHMARK

CUT 'X' ON TOP OF WEST CURB LINE OF LAUREL STREET IN FRONT OF FIRE HYDRANT AND LYING APPROXIMATELY 30 FEET SOUTH OF THE NW CORNER OF LOT 5, WAUKEE TOWNE CETER PLAT 1.

ELEVATION----------1040.75

PROJECT MANAGER:

ED ARP
CIVIL ENGINEERING CONSULTANTS
2400 86TH STREET, #12
DES MOINES, IOWA 50322
(515) 276-4884
ARP@CECLAC.COM

IMPERVIOUS AREA

PROPOSED IMPERVIOUS AREA	=	4,014 S.Y.
EXISTING TRAIL REMOVAL AREA	=	681 S.Y.
NET IMPERVIOUS AREA	=	3,333 S.Y.

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GENERAL NOTES:

1. CONTRACTOR SHALL ARRANGE FOR TESTING AND INSPECTION AND NOTIFY THE FOLLOWING AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION:
   a. CITY OF WAUKEE ENGINEERING DEPARTMENT
   b. WAUKEE TOWNE CENTER, LLC
   c. CIVIL ENGINEERING CONSULTANTS, INC. PHONE: 515.276.4884
   d. IOWA ONE-CALL
2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LEASES NEEDED TO CONSTRUCT PROJECT.
3. CONTRACTOR SHALL SCHEDULE PRE-CONSTRUCTION MEETING WITH DEVELOPMENT SERVICES ONE WEEK PRIOR TO COMMENCING CONSTRUCTION.
4. ALL ELEVATIONS ARE PROPOSED FINISHED GRADE AT CENTERLINE UNLESS OTHERWISE NOTED.
5. LOCATION OF EXISTING FACILITIES AND APPURTENANCES SHOWN ON PLAN ARE BASED ON AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING TO DETERMINE EXACT FACILITIES LOCATIONS. CIVIL ENGINEERING CONSULTANTS, INC. DOES NOT GUARANTEE LOCATION OF EXISTING FACILITIES AS SHOWN, OR THAT ALL EXISTING FACILITIES ARE SHOWN. IT IS CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL PUBLIC AND PRIVATE UTILITY PROVIDERS SERVING AREA, AND IOWA ONE CALL, TO DETERMINE EXTENT AND PRECISE LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION BEGINS.
6. CONTRACTOR SHALL PROTECT EXISTING ON-SITE FACILITIES FROM DAMAGE RESULTING FROM CONTRACTOR'S WORK. IF DAMAGE, BREAKAGE, INTERRUPTION OF SERVICE, ETC. OF EXISTING FACILITIES DOES OCCUR CONTRACTOR SHALL IMMEDIATELY CONTACT UTILITY'S OWNER.
7. CONTRACTOR SHALL RECONNECT ALL FIELD TILE INTERCEPTED DURING CONSTRUCTION AND RECORD LOCATION FOR AS-BUILT PLANS.
8. CIVIL ENGINEERING CONSULTANTS, INC. IS NOT A GEOTECHNICAL ENGINEER.
9. IF THERE IS ANY DISCREPANCY BETWEEN DETAILED PLANS AND QUANTITIES SUMMARY PLEASE CONTACT CIVIL ENGINEERING CONSULTANTS, INC.
10. ALL TRENCH BACKFILL SHALL BE 95% STANDARD PROCTOR DENSITY.
11. IT IS RESPONSIBILITY OF CONTRACTOR TO ARRANGE FOR INSPECTIONS AS NEEDED.
12. ANY PROPOSED CHANGES TO PLAN SET DURING CONSTRUCTION ARE TO RECEIVE WRITTEN APPROVAL FROM CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES MADE DURING CONSTRUCTION THAT HAVE NOT RECEIVED WRITTEN PERMISSION FROM CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT.
13. ANY EXISTING FARM FENCE ON PROPERTY SHALL BE REMOVED AS PART OF PROJECT.
14. ALL FIRE HYDRANTS ARE TO HAVE 5" STORZ FITTINGS INCLUDING ANY RELOCATED HYDRANTS.
15. ANY TIE-INS TO EXISTING CITY UTILITIES SHOULD BE COORDINATED WITH CITY OF WAUKEE ENGINEERING DEPARTMENT.
16. ALL UTILITIES ARE TO BE TESTED TO CITY OF WAUKEE STANDARDS AND TO BE WITNESSED BY WAUKEE ENGINEERING DEPARTMENT STAFF.
17. DEBRIS SPILLED IN RIGHT-OF-WAY AND STREETS SHALL BE CLEANED UP AT END OF EACH WORKING DAY AND PRIOR TO RAIN EVENT.
18. CONSTRUCTION STAKING SHALL BE UNDER DIRECTION OF LICENSED ENGINEER OR LAND SURVEYOR.
19. PEDESTRIAN FACILITIES STAKING SHALL BE UNDER DIRECTION OF LICENSED ENGINEER OR LAND SURVEYOR.
20. CONTRACTOR SHALL PROVIDE CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT 48 HOUR NOTICE PRIOR TO WEEKEND AND HOLIDAY WORK.
21. PERMIT SHALL BE OBTAINED FROM WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT FOR ANY PROPOSED SIGNAGE.
22. CITY IS NOT LIABLE TO REPLACE ANY PAVEMENT WITHIN SANITARY SEWER EASEMENT OR WATER MAIN EASEMENT ON REAR OF LOT IF PAVEMENT NEEDS TO BE REMOVED TO MAINTAIN EITHER OF THOSE UTILITIES.
23. ALL WORK SHALL BE IN ACCORDANCE WITH 2023 CITY OF WAUKEE STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND 2023 SUDAS.
24. SAWCUTTING OR CONCRETE GRINDING WILL BE PERFORMED ON SITE. STORM SEWER AND DRAINAGE WAYS SHALL BE PROTECTED FROM SLURRY DUE TO CONCRETE OPERATION IN ORDER TO ALLOW OFFSITE DISCHARGE.
25. RETAINING WALL SHALL BE DESIGNED BY AN ENGINEER CERTIFIED IN THE STATE OF IOWA. THIS ENGINEER SHALL SUBMIT THE DESIGN OF THE RETAINING WALL TO THE CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT PRIOR TO CONSTRUCTION.
26. THE DETENTION BASIN WITHIN OUTLOT 'Y' SHALL BE MAINTAINED BY THE OWNER OF OUTLOT 'Y'. THE DETENTION BASIN WITHIN THE EASEMENT IN LOT 1 SHALL BE OWNED AND MAINTED BY THE ASSOCIATION.

GRADING NOTES

1. ONE WEEK PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY:
   a. CITY OF WAUKEE - ENGINEERING DEPARTMENT
   b. WAUKEE CROSSING, LLC
   c. CIVIL ENGINEERING CONSULTANTS, INC. PHONE: 515.276.4884
   d. IOWA ONE-CALL
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WAUKEE STANDARD SPECIFICATIONS, CODES, AND POLICIES, S.U.D.A.S., AND IN ACCORDANCE WITH GEOTECHNICAL REPORT PREPARED BY ALLENDER BUTZKE ENGINEERS FN:211373.
3. ALL SPOT ELEVATIONS ARE AT GUTTER U.N.O.
4. WAUKEE EROSION AND SEDIMENT CONTROL ORDINANCE IS APPLICABLE TO SITE.
5. LOCATIONS AND DIMENSIONS SHOWN ON PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. ENGINEER DOES NOT GUARANTEE ACCURACY OF INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. IT IS RESPONSIBILITY OF CONTRACTOR TO CONTACT ALL PUBLIC AND/OR PRIVATE UTILITIES SERVING AREA TO DETERMINE PRESENT EXTENT AND EXACT LOCATION OF FACILITIES BEFORE BEGINNING WORK.
6. CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT UTILITIES OR STRUCTURES AT SITE. IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO NOTIFY OWNERS OF UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. CONTRACTOR SHALL NOTIFY PROPER UTILITY IMMEDIATELY UPON BREAKING OR DAMAGE TO ANY UTILITY LINE OF APPURTENANCE, OR INTERRUPTION OF SERVICE. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, CONTRACTOR SHALL NOTIFY ENGINEER SO THAT CONFLICT MAY BE RESOLVED.
7. STRIP TOPSOIL FROM ALL AREAS WHICH ARE TO RECEIVE STRUCTURAL FILL.
8. AREAS TO RECEIVE FILL TO BE BENCHED.
9. PREPARE BOTTOM OF BENCH FOR FILL BY DISCING TO DEPTH OF 6-INCHES AND COMPACT. ANY LOCALIZED AREAS WHICH CANNOT BE SATISFACTORILY COMPACTED OR WHICH SHOW EVIDENCE OF PUMPING ACTION SHALL BE UNDERCUT AND RECOMPACTED WITH ON-SITE FILL.
10. ALL SITE GRADING FILL SHALL BE COMPACTED TO DENSITY NOT LESS THAN 95% STANDARD PROCTOR.
11. ALL AREAS WHICH ARE TO RECEIVE PAVING SHALL HAVE TOP 12-INCHES DISCED AND RECOMPACTED TO 95% STANDARD PROCTOR DENSITY.
12. MOISTURE CONTENT OF FILL MATERIAL SHALL MATCH URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, BETWEEN 0% AND 4% OVER OPTIMUM MOISTURE.
13. MAINTAIN ALL CUT AND FILL AREAS FOR SURFACE DRAINAGE AT ALL TIMES.
14. ALL FINAL GRADES SHALL BE WITHIN 0.1' OF PLAN GRADE.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL TOPSOIL REQUIREMENTS OF GENERAL PERMIT #2 ARE MET.
16. BACKFILL TO TOP OF ALL CURBS.
17. ANY CONFLICTS BETWEEN THESE DRAWINGS AND GEOTECHNICAL REPORT, FOLLOW GEOTECHNICAL REPORT.

STORM NOTES

1. PROVIDE A 3' WIDE CLAY WATER STOP, APRON GUARDS & CONCRETE FOOTINGS ON ALL FLARED END SECTIONS. CONTRACTOR SHALL TIE LAST THREE PIPE JOINTS AT FLARED END SECTION.
2. ALL STORM SEWER ARE TO BE CLEANED AND TELEVISED UPON COMPLETION.
3. PAVEMENT REINFORCEMENT IS REQUIRED WHERE EARTH COVER OVER STORM SEWERS IS LESS THAN 2 FEET.

PAVING NOTES

1. ALL PUBLIC TRAILS TO BE 6-INCH (MIN.) REINFORCED P.C.C. OVER 12" PREPARED SUBGRADE.
2. PREPARED SUBGRADE TO BE COMPACTED TO 95% STANDARD PROCTOR, OR AS PRESCRIBED IN GEOTECHNICAL REPORT, WHICHEVER IS MORE STRINGENT.
3. ALL PAVED AREAS TO CONDUCT PROOF-ROLL TEST IN PRESENCE OF GEOTECHNICAL ENGINEER, AS PRESCRIBED BY GEOTECHNICAL ENGINEER.

GENERAL LEGEND

EXISTING

- LOT LINE
- SANITARY/STORM MANHOLE
- WATER VALVE
- FIRE HYDRANT
- STORM SEWER SINGLE INTAKE
- STORM SEWER DOUBLE INTAKE
- STORM SEWER ROUND INTAKE
- FLARED END SECTION
- DECIDUOUS TREE
- CONIFEROUS TREE
- SHRUB
- POWER POLE
- STREET LIGHT
- GUY ANCHOR
- ELECTRIC TRANSFORMER
- GAS METER
- TELEPHONE RISER
- SIGN
- CATV — UNDERGROUND TELEVISION
- UGE — UNDERGROUND ELECTRIC
- G — UNDERGROUND GAS
- UGFO — UNDERGROUND FIBER OPTIC
- UGT — UNDERGROUND TELEPHONE
- OHW — OVERHEAD ELECTRIC
- SAN 8" — SANITARY SEWER WITH SIZE
- ST 12" — STORM SEWER WITH SIZE
- W 8" — WATER MAIN WITH SIZE
- 926 — EXISTING CONTOUR
- TREELINE
- B.S.L. — BUILDING SETBACK LINE
- P.U.E. — PUBLIC UTILITY EASEMENT
- M.O.E. — MINIMUM OPENING ELEVATION
- U.N.O. — UNLESS NOTED OTHERWISE

PROPOSED

- PLAT BOUNDARY
- SECTION LINE
- LOT LINE
- CENTERLINE
- EASEMENT LINE
- TYPE SW-301 SANITARY MANHOLE
- FLARED END SECTION
- TYPE SW-401 STORM MANHOLE
- TYPE SW-402/403 STORM MANHOLE
- TYPE SW-501 STORM INTAKE
- TYPE SW-502 STORM INTAKE
- TYPE SW-504 STORM INTAKE
- TYPE SW-505 STORM INTAKE
- TYPE SW-512 STORM INTAKE
- WATER VALVE
- FIRE HYDRANT ASSEMBLY
- BLOW-OFF HYDRANT
- TURF REINFORCEMENT MAT
- SAN 8" — SANITARY SEWER WITH SIZE
- ST 15" — STORM SEWER WITH SIZE
- W 8" — WATER / SEWER WITH SIZE
- 926 — PROPOSED CONTOUR
- SILT FENCE
- RIPRAP / TEMP. GRAVEL / TURNAROUND
- GUARDRAIL
- 100-YEAR ELEVATION
- LOT CORNER

CERTIFICATION

STATE OF IOWA — EDWARD H. ARP — LANDSCAPE ARCHITECT — PROFESSIONAL SEAL

PRELIMINARY

I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

EDWARD H. ARP, IOWA REG. NO. 250 DATE:
MY LICENSE RENEWAL DATE IS: JUNE 30, 2024
PAGES OR SHEETS COVERED BY THIS SEAL:
ALL DRAWINGS

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

PRELIMINARY

CODY T. WEAVER, IOWA LIC. NO. 25085 DATE
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2024
PAGES OR SHEETS COVERED BY THIS SEAL:

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com

Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12 . Des Moines, Iowa 50322
515.276.4884 . mail@ceclac.com
CEC

PRELIMINARY - NOT FOR CONSTRUCTION

DATE:	2023-06-05 - SIXTH SUBMITTAL
	2023-05-14 - FIFTH SUBMITTAL
	2023-05-05 - FOURTH SUBMITTAL
	2023-04-24 - THIRD SUBMITTAL
DATE OF SURVEY:	2019-04-20
DESIGNED BY:	EHA
DRAWN BY:	MM

WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS
WAUKEE, IOWA

COVER

SHEET 1 OF 15

A-2157

10' TRAIL REINFORCEMENT DETAILS

NO SCALE

15' TRAIL REINFORCEMENT DETAILS

NO SCALE

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WAUKEE, IOWA

DETAILS

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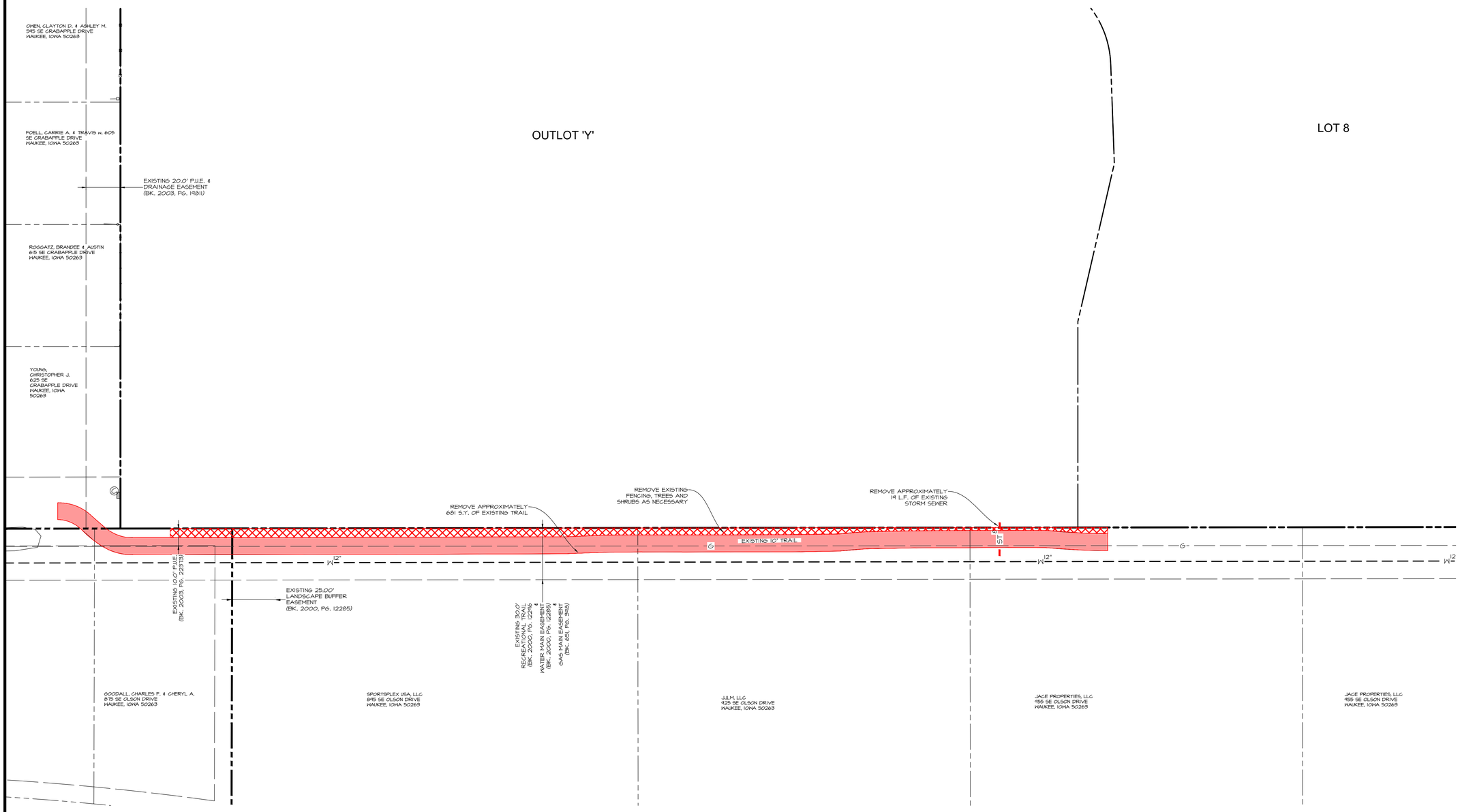

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NORTH

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WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

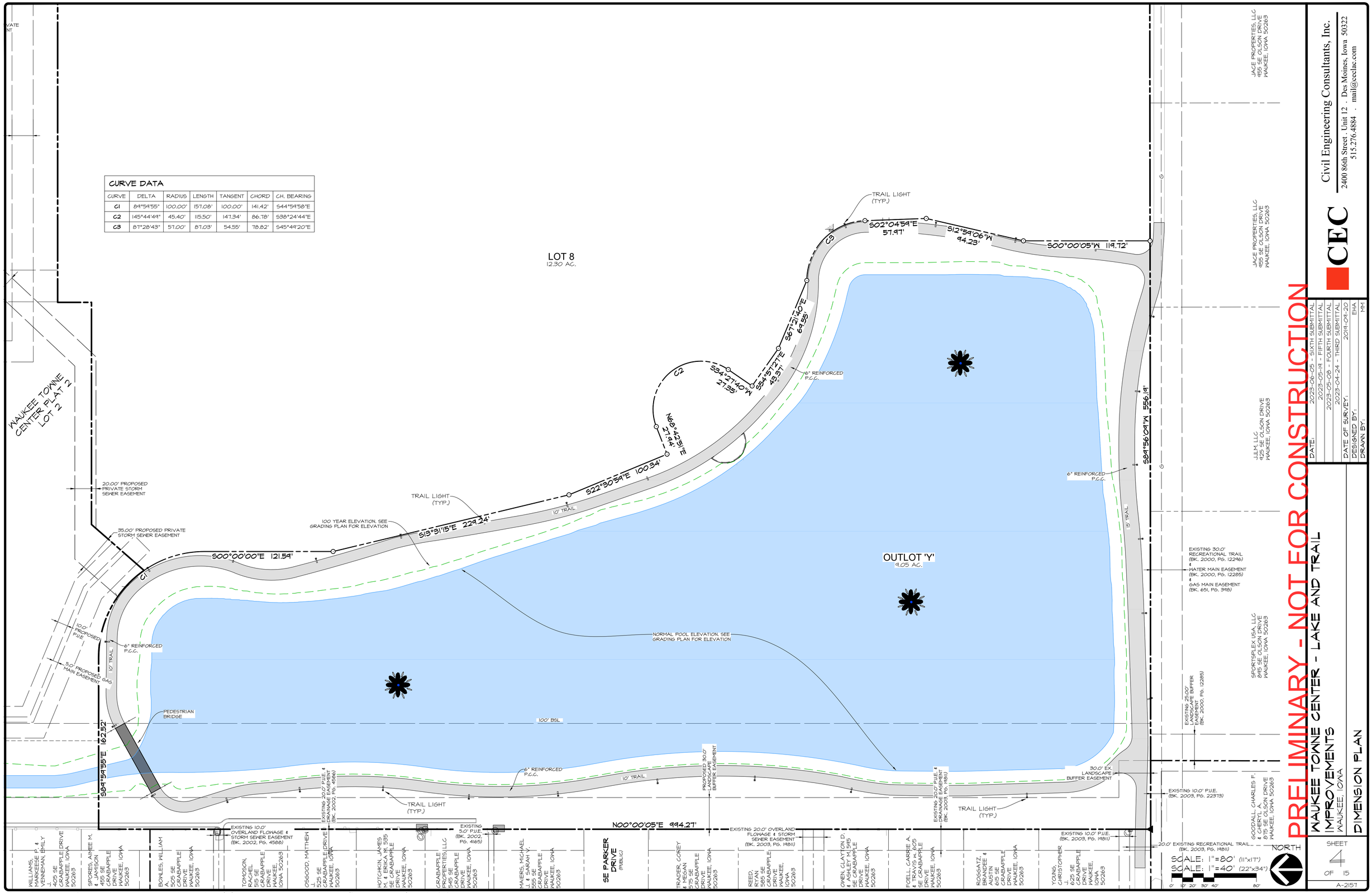
WAUKEE, IOWA

DEMOLITION PLAN

SHEET 3 OF 15

A-2157

CURVE DATA						
CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CH. BEARING
C1	84°54'55"	100.00'	157.08'	100.00'	141.42'	S44°54'58"E
C2	145°44'49"	45.40'	115.50'	147.34'	86.78'	S38°24'44"E
C3	87°28'43"	57.00'	87.03'	54.55'	78.82'	S45°44'20"E



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WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

WAUKEE, IOWA

DIMENSION PLAN

SHEET 4 OF 15

A-2157

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WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

WAUKEE, IOWA

GRADING & UTILITY PLAN

SHEET 5 OF 15

A-2157

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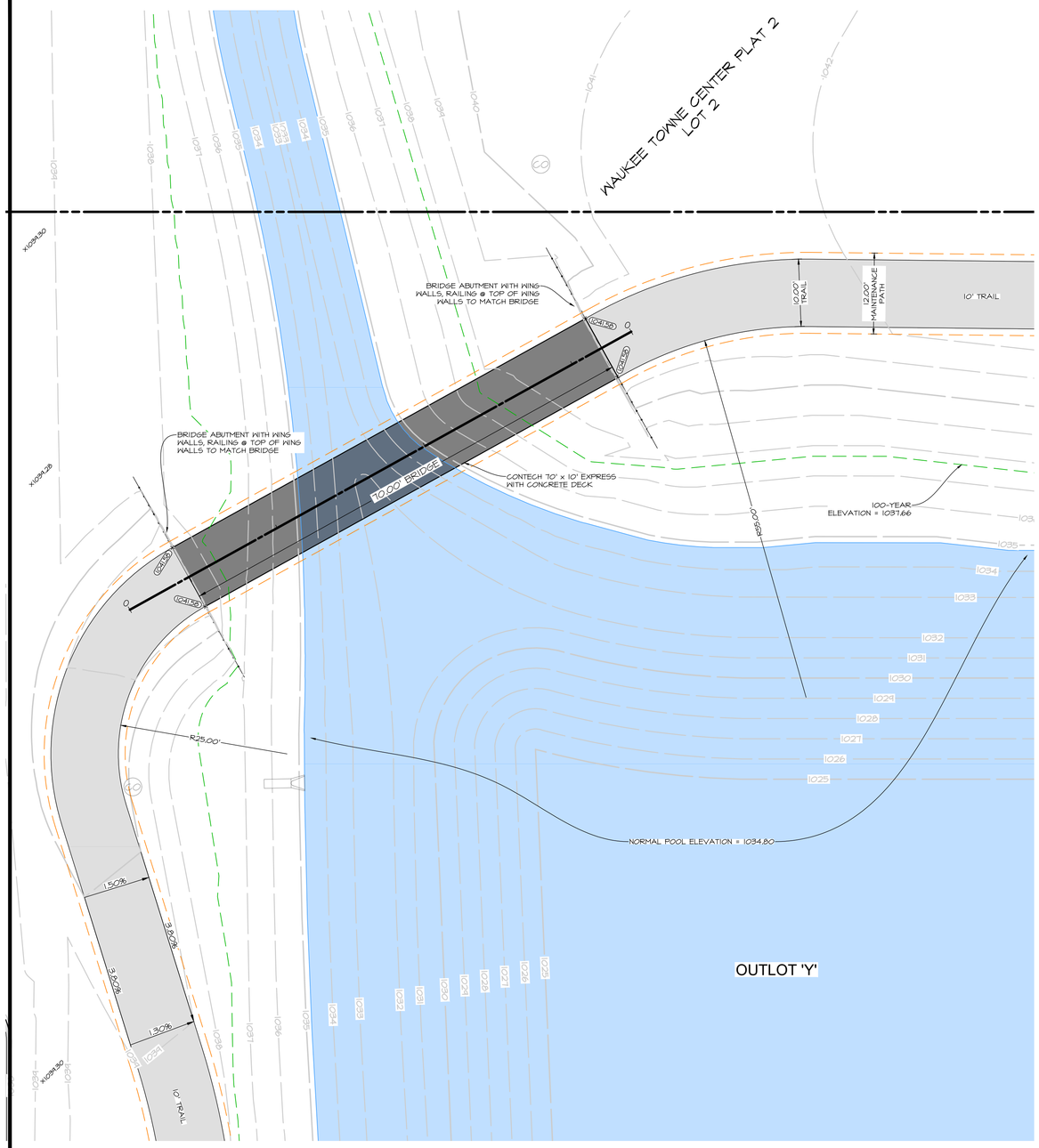

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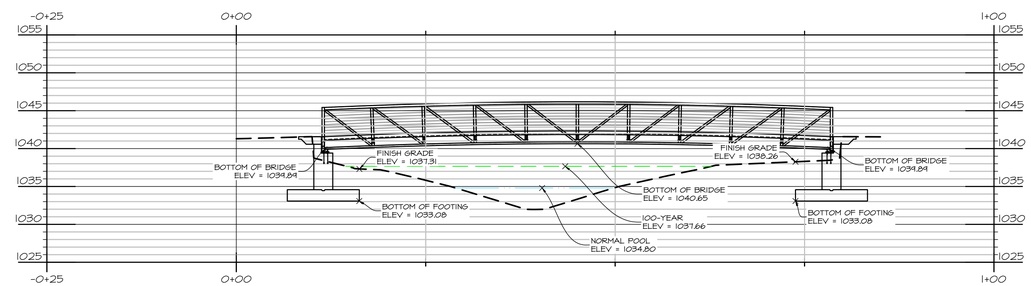

BRIDGE

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WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS
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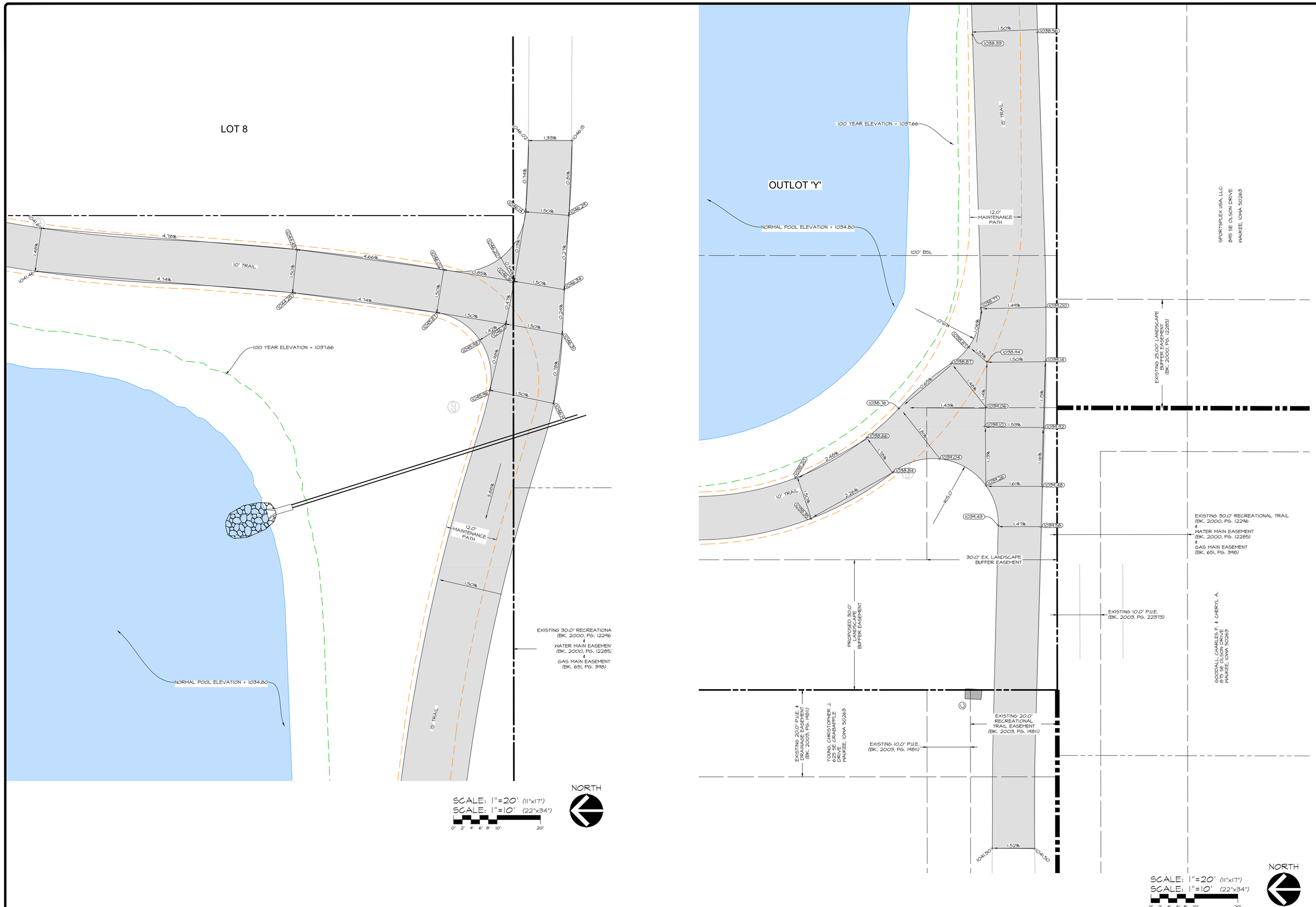
BRIDGE DETAIL

SHEET 6 OF 15

A-2157



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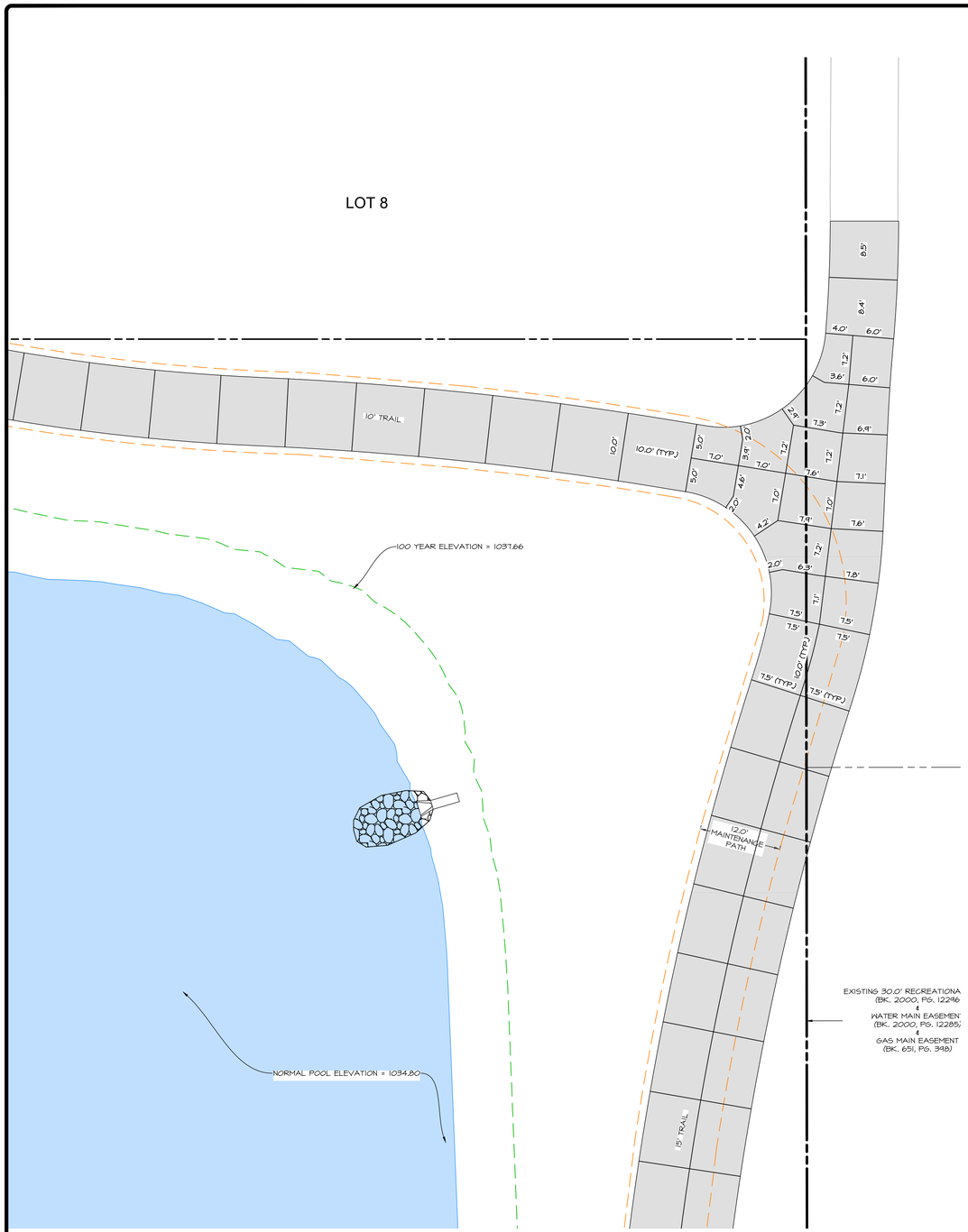
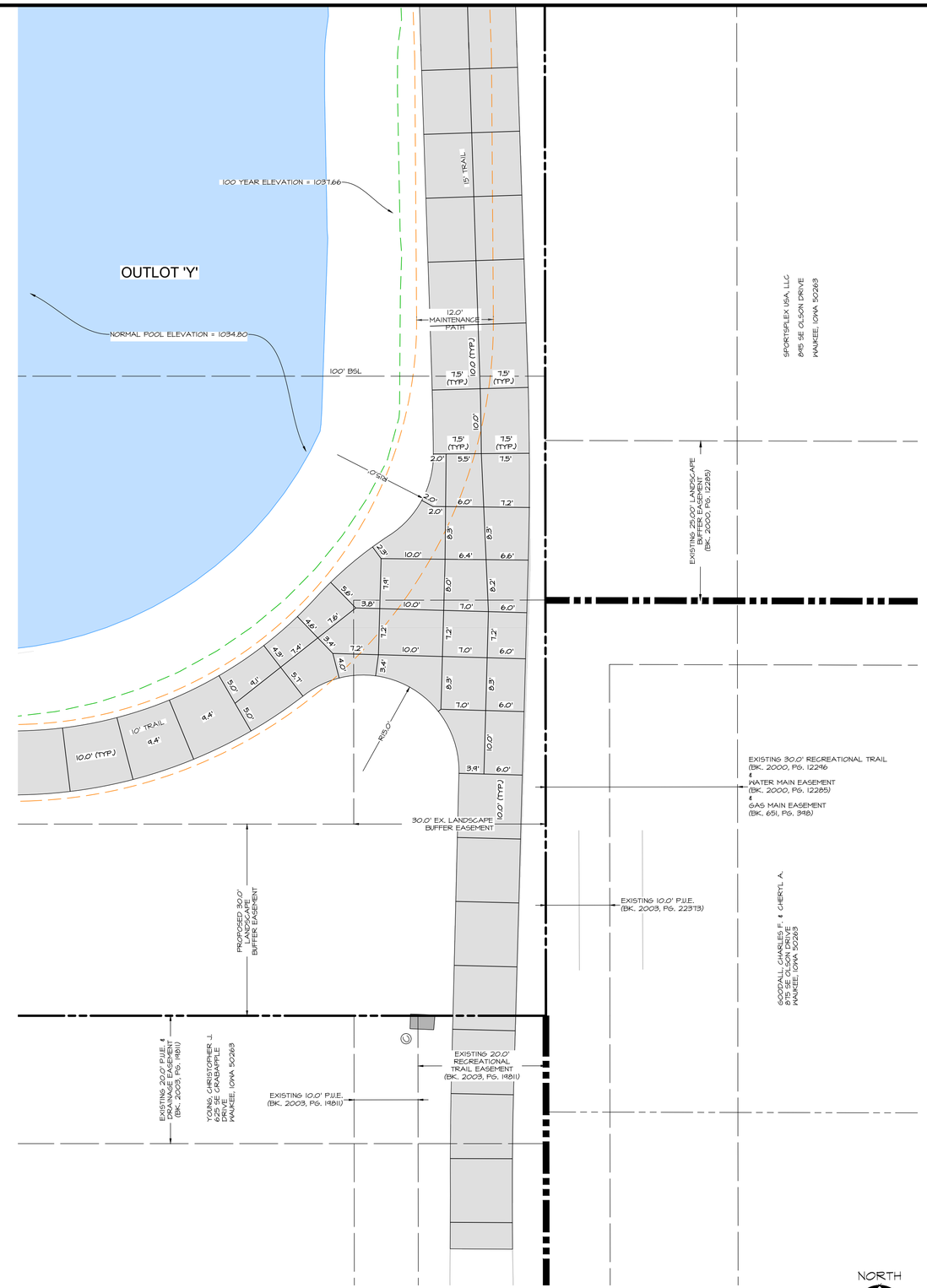
TRAIL DETAIL

SHEET 7 OF 15

A-2157





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NORTH

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WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

WAUKEE, IOWA

TRAIL JOINTING

SHEET 8 OF 15

A-2157

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POND PLANT SCHEDULE (SEE THIS FONT ON PLAN)

MARK	*Botanical name*	QUAN.	SIZE	ROOT	REMARKS
	COMMON NAME			**TYPE**	
CC	*Cornus sanguinea 'Cato'*	22	24" HT.	CONT.	MATCHED, SPECIMEN, MULCH BED
	ARCTIC SUN DOGWOOD				3' FROM TRAIL, 3' O.C.
CF	*Cornus serica 'Farrow'*	34	24" HT.	CONT.	MATCHED, SPECIMEN, MULCH BED
	ARCTIC FIRE DOGWOOD				3' FROM TRAIL, 3' O.C.
EP	*Echinacea purpurea*	35	1 GAL.	CONT.	MATCHED, SPECIMEN, MULCH BED
	PURPLE CONEFLOWER				1.5' FROM TRAIL, 2' O.C.
LS	*Liquidambar styraciflua 'Rotundiloba'*	5	1.5" CAL.	B&B	MATCHED, SPECIMEN
	ROUND-LOBED SWEET GUM				
LT	*Liriodendron tulipfera 'JFS-Oz'*	5	1.5" CAL.	B&B	MATCHED, SPECIMEN
	EMERALD CITY TULIP TREE				
NS	*Nyssa slyvatica 'David Odom'*	5	1" CAL.	CONT.	MATCHED, SPECIMEN
	AFTERBURNER BLACK GUM				16' o.c.
PC	*Panicum virgatum 'Cheyenne Sky'*	48	6" POT	CONT.	MATCHED, SPECIMEN, MULCH BED
	CHEYENNE SKY SWITCH GRASS				3' FROM WATER, 2' O.C.
PH	*Panicum virgatum 'Heavy Metal'*	173	6" POT	CONT.	MATCHED, SPECIMEN, MULCH BED
	HEAVY METAL SWICH GRASS				3' FROM TRAIL, 2' O.C.
PS	*Prunus serotina*	2	1" CAL.	CONT.	MATCHED, SPECIMEN
	BLACK CHERRY				
QA	*Quercus alba*	2	2" CAL.	B&B	MATCHED, SPECIMEN
	WHITE OAK				
QM	*Quercus macrocarpa 'JFS-KW3'*	9	2" CAL.	B&B	MATCHED, SPECIMEN
	URBAN PINNACLE OAK				20' O.C.
RF	*Rudbeckia fulgida*	50	1 GAL.	CONT.	MATCHED, SPECIMEN, MULCH BED
	BLACK-EYED SUSAN				1.5' FROM TRAIL, 2' O.C.
SO	*Symphoticarpos orbiculatus*	9	15" HT.	CONT.	MATCHED, SPECIMEN, MULCH BED
	INDIANCURRENT CORALBERRY				5' O.C.

BUFFER PLANT SCHEDULE (SEE THIS FONT ON PLAN)

MARK	*Botanical name*	QUAN.	SIZE	ROOT	REMARKS
	COMMON NAME			**TYPE**	
AC	*Amelanchier arborea*	5	1.5" CAL.	CONT.	MATCHED, SPECIMEN, 3 STEM MIN.
	SERVICEBERRY				
CC	*Cercis canadensis*	6	1 GAL.	CONT.	MATCHED, SPECIMEN, TREE FORM
	EASTERN REDBUD				
CR	*Crataegus crus-galli 'Cruzam'*	2	12' HT.	CONT.	MATCHED, SPECIMEN, TREE FORM
	CRUSADER HAWTHORN				
LS	*Liquidambar styraciflua 'Rotundiloba'*	9	1.5" CAL.	B&B	MATCHED, SPECIMEN
	ROUND-LOBED SWEET GUM				
LT	*Liriodendron tulipfera 'JFS-Oz'*	12	2" CAL.	B&B	MATCHED, SPECIMEN
	EMERALD CITY TULIP TREE				
PH	*Picea omorika*	22	7' HT.	B&B	MATCHED, SPECIMEN
	SERBIAN SPRUCE				
PI	*Picea pungens*	27	7' HT.	B&B	MATCHED, SPECIMEN
	COLORADO SPRUCE				10' o.c.
PL	*Pinus flexilis 'Vanderwolf's Pyramid'*	25	7' HT.	B&B	MATCHED, SPECIMEN
	VANDERWOLF'S PYRAMID LIMBER PINE				10' o.c.
PM	*Pseudotsuga menziesii glauca*	28	7' HT.	B&B	MATCHED, SPECIMEN
	DOUGLAS FIR				10' o.c.
QM	*Quercus macrocarpa 'JFS-KW3'*	2	2" CAL.	B&B	MATCHED, SPECIMEN
	URBAN PINNACLE OAK				

30' BUFFER REQUIREMENTS

REQUIRED PLANTINGS PER 50 LF.
1029 LF / 50 = 20.58 PLANT UNITS
- 2 OVERSTORY TREE * 20.58= 41 OVERSTORY TREES
- 3 EVERGREEN TREES * 20.58= 62 OVERSTORY TREES
- 2 ORNAMENTAL TREES * 20.58= 41 ORNAMENTAL TREES

PROPOSED BUFFER PLANTINGS:
- 23 OVERSTORY
- 102 EVERGREEN
- 21 ORNAMENTAL

SEED MIX 1: S.U.D.A.S. SEED MIX #1. FIRST 2' POND SIDE OF TRAIL + 8' OUTSIDE OF TRAIL, OR TO PROPERTY LINE WHICHEVER IS GREATER, + AS SHOWN AT SOUTH SIDE OF SOUTH TRAIL.
AREA: 34,770 S.F. VERIFY.

SEED MIX #2: S.U.D.A.S. SEED MIX #2.
AREA: 34,530 S.F. VERIFY.

SEED MIX #3: PRAIRIE BIRTH MIX BY ION EXCHANGE AT 13#/AC. SEEDBED PREP AND SEEDING PER SUPPLIER'S RECOMMENDATIONS.
AREA: 50,100 S.F. VERIFY.

ANY SUBSTITUTIONS TO PLANT SCHEDULE ARE TO BE APPROVED IN WRITING FROM LANDSCAPE ARCHITECT AND CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT.

REGULATORY PLANT MINIMUM SIZES:
DECIDUOUS OVERSTORY TREE: 8 FEET TALL
EVERGREEN TREE: 6 FEET TALL
DECIDUOUS UNDERSTORY TREE: 6 FEET TALL
ACTUAL REQUIRED SIZE PER SCHEDULE, EVEN IF LARGER THAN REGULATORY MINIMUMS.

ALL MULCH BEDS TO BE 3" THICK, SHREDDED HARDWOOD, NATURAL COLOR UNLESS NOTED OTHERWISE. SPADE CUT EDGE AT ALL MULCH AREAS.

SIZES NOTED IN PLANT SCHEDULE ARE STRICT MINIMUM SIZES AND WILL BE VERIFIED DURING INITIAL ACCEPTANCE INSPECTION.

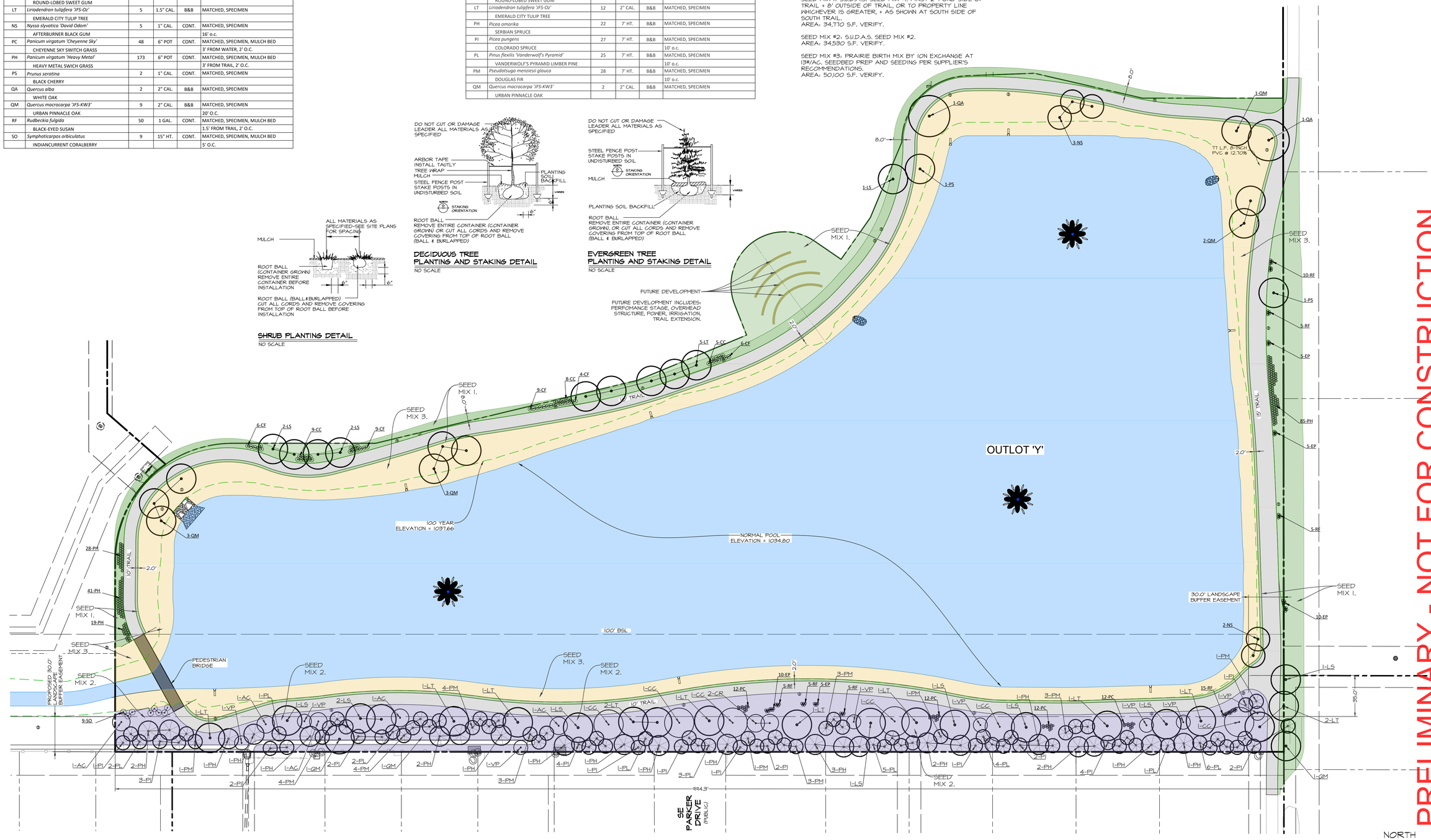
MINIMUM OF 10% OF EACH SPECIES SPECIFIED ARE TO HAVE PLANT IDENTIFICATION TAGS ATTACHED DURING INITIAL ACCEPTANCE. TAGS SHALL BE REMOVED AFTER PLANT MATERIAL HAS BEEN ACCEPTED.

ALL DECIDUOUS TREES ARE TO BE WRAPPED WITH TREE WRAP AND SHALL BE ATTACHED WITH COTTON STRING. TAPES AND PLASTIC FASTENERS ARE NOT ACCEPTABLE.

DECIDUOUS TREE PLANTING AND STAKING DETAIL
NO SCALE

EVERGREEN TREE PLANTING AND STAKING DETAIL
NO SCALE

SHRUB PLANTING DETAIL
NO SCALE



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2400 86th Street, Unit 12 . Des Moines, Iowa 50322
515.276.4884 . mail@ceclac.com

DATE:	2023-06-05 - SIXTH SUBMITTAL
	2023-05-14 - FIFTH SUBMITTAL
	2023-05-08 - FOURTH SUBMITTAL
	2023-04-24 - THIRD SUBMITTAL
DATE OF SURVEY:	2019-04-20
DESIGNED BY:	EHA
DRAWN BY:	MM

PRELIMINARY - NOT FOR CONSTRUCTION

WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS
WAUKEE, IOWA

LANDSCAPE PLAN

SHEET 9 OF 15

A-2157

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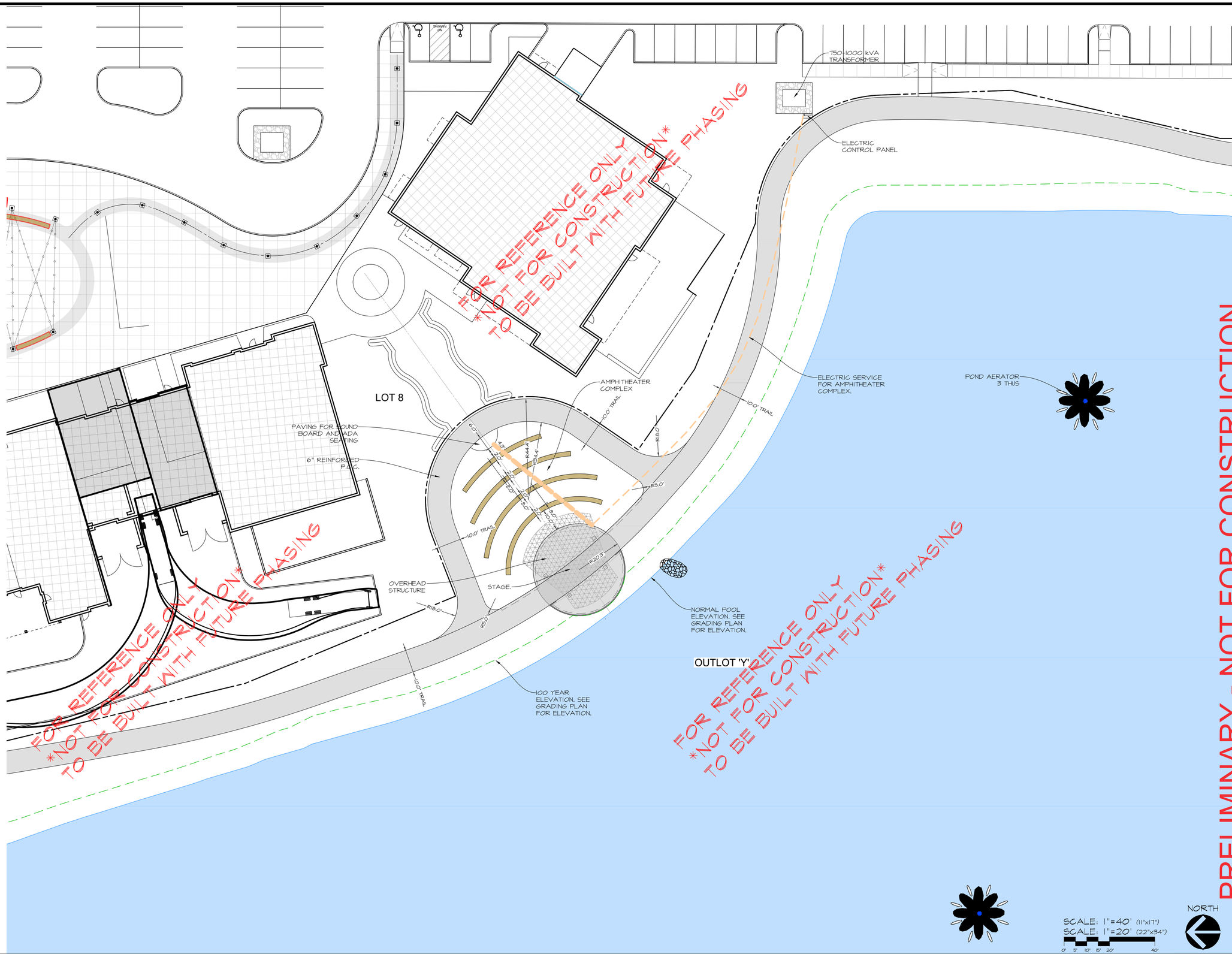

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PRELIMINARY - NOT FOR CONSTRUCTION

DATE:	
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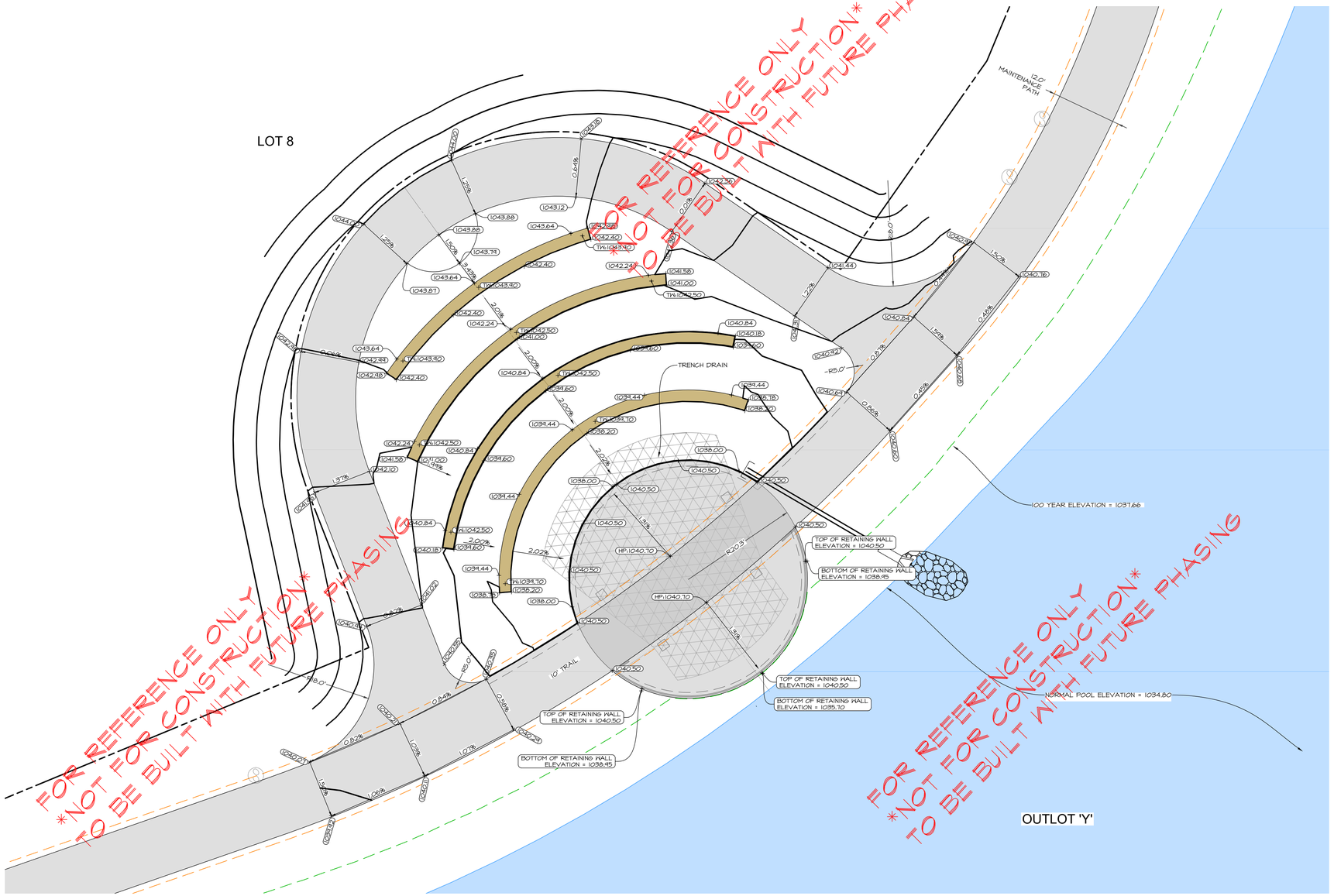
DATE OF SURVEY:	2019-04-20
DESIGNED BY:	EHA
DRAWN BY:	MM

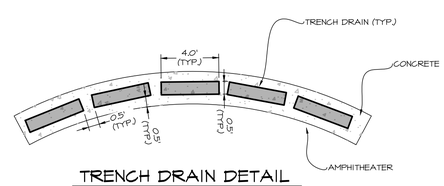
WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS
WAUKEE, IOWA

FUTURE AMPHITHEATER DIMENSION PLAN

SHEET 6 OF 15

A-2157





TRENCH DRAIN DETAIL

NO SCALE

SCALE: 1"=20' (11"x17")
SCALE: 1"=10' (22"x34")

0' 2' 4' 6' 8' 10' 20'

NORTH

PRELIMINARY - NOT FOR CONSTRUCTION

WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

WAUKEE, IOWA

FUTURE AMPHITHEATER GRADING PLAN

CEC
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DATE:	2023-06-05 - SIXTH SUBMITTAL
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	2023-04-24 - THIRD SUBMITTAL
DATE OF SURVEY:	2019-04-20
DESIGNED BY:	EHA
DRAWN BY:	MM

SHEET 1 OF 15

A-2157

STRUCTURAL DRAWINGS FOR 70' PEDESTRIAN BRIDGE ABUTMENTS

WAUKEE, IOWA

GENERAL NOTES

1. CIVIL ENGINEERING CONSULTANTS, INC. IS NOT A GEOTECHNICAL ENGINEER.
2. THIS PLAN SET IS NOT INTENDED TO BE A SITE PLAN.
3. ALL ASTM DESIGNATIONS SHALL BE THE LATEST UNLESS NOTED OTHERWISE.
4. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ACI FIELD FIRST CRSI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES AND SHALL BE CLEAN AND FREE OF GREASE AND SCALING RUST.
5. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY OWNER AND ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
6. ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED PER LOCAL CODES AND IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN.
7. CONTRACTOR SHALL OBTAIN ALL PERMITS PRIOR TO CONSTRUCTION.
8. PROVIDE FOR DESIGNS, SHOP DRAWINGS, AND MATERIAL DATA FOR APPROVAL PRIOR TO CONSTRUCTION OR FABRICATION.
9. CONTRACTOR SHALL REVIEW THE SITE PLAN FOR ADDITIONAL SITE RELATED ITEMS.
10. CONTRACTOR SHALL VERIFY SITE CONFLICTS PRIOR REINFORCEMENT FABRICATION, CONTACT ENGINEER IMMEDIATELY.
11. SEE SITE PLAN FOR ADDITIONAL DETAILS.
12. BACKFILLING OPERATIONS SHALL NOT COMMENCE UNTIL CONCRETE HAS REACHED REQUIRED COMPRESSIVE STRENGTH.

FOUNDATION NOTES

1. ALL BEARING MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER AS PART OF THE SPECIAL INSPECTION PROGRAM PRIOR TO CONCRETE PLACEMENT. THE GEOTECHNICAL ENGINEER SHALL BE THE SOLE JUDGE AS TO SUITABILITY OF THE MATERIAL ON THE BASIS OF FIELD INSPECTION OF THE MATERIAL THEY ARE ENCOUNTERED.
2. DESIGN BASED ON ALLENDER BUTZKE ENGINEERS INC. REPORT # 1360.
3. DESIGN FROST DEPTH IS 3'-6" BELOW FINAL GRADE, BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE BELOW THE DESIGN FROST DEPTH.
4. PROVIDE SLEEVES FOR ALL PIPES, UTILITY LINES, AND OTHER PENETRATIONS THROUGH TRENCH FOOTINGS AND/OR FOUNDATION WALLS. CORE DRILLING IS NOT ALLOWED.
5. SHORING MAY BE REQUIRED DURING FOUNDATION CONSTRUCTION. PROVIDE AS NECESSARY.
6. DEWATERING IS ANTICIPATED ON THIS SITE AND SHALL BE PROVIDED AS NECESSARY.
7. PROVIDE CONTROL JOINTS IN FOOTINGS AT THE SAME SIZE AND SPACING AS VERTICAL REINFORCEMENT.
8. PROVIDE ANTIFR STOP AT ALL CONSTRUCTION JOINTS.
9. FOUNDATIONS ELEVATIONS MAY REQUIRE ADJUSTMENTS BASED ON FIELD CONDITIONS. CONTACT ENGINEER IF ADJUSTMENTS ARE NECESSARY.

SPECIAL INSPECTION

1. A SPECIAL INSPECTION PROGRAM SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.
2. INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT AGENCY HIRED BY THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE FOR INFORMING THE SPECIAL INSPECTION AGENCY IN ADVANCE OF PERFORMING WORK.
4. THE FOLLOWING ITEMS SHALL BE INCLUDED IN THE SPECIAL INSPECTION PROGRAM:
   A. FOUNDATION BEARING FILLING
      1. SUBGRADE PREPARATION
      2. VERIFY COMPACTION OF FILL MATERIAL
      3. VERIFY BEARING MATERIAL
      4. EXPANSIVE SOIL CHARACTERISTICS
   B. STEEL REINFORCEMENT
      1. REINFORCEMENT INSPECTION
   C. CONCRETE
      1. AIR TESTS
      2. SLUMP TESTS
      3. CONCRETE TEMPERATURES
      4. COMPRESSIVE TESTS
   D. ANCHOR BOLTS
      1. PLACEMENT
      2. EMBEDMENT DEPTH

ANCHOR BOLT VERIFICATION

1. ANCHOR BOLT LOCATIONS ARE TO BE VERIFIED BY A LICENSED SURVEYOR, HIRED BY THE OWNER, AND APPROVED IN WRITING BY ENGINEER PRIOR TO ANY CONCRETE BEING PLACED. SECURE ANCHOR BOLTS AS NECESSARY TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT AND CONSOLIDATION.
2. CONTRACTOR SHALL USE A RIGID TEMPLATE TO INSTALL ANCHOR BOLTS.
3. ANCHOR BOLT LOCATION AND ROTATION CRITICAL. INSTALL ALL ANCHOR BOLTS ACCURATELY.

WATER STOP

1. INSTALL WATER STOP PER MANUFACTURES INSTRUCTIONS.
2. WATER STOP SHALL BE CONTINUOUS. ALL JOINTS WELDED.
3. ANY DAMAGED SECTION SHALL BE REMOVED AND REPLACED.

SUBMITTALS

1. SHOP DRAWINGS, MIX DESIGNS, PRODUCT DATA AND CALCULATIONS SHALL BE SUBMITTED FOR APPROVAL FOR ALL STRUCTURAL COMPONENTS AND SYSTEMS PRIOR TO CONSTRUCTION.
   - CONCRETE
   - CONCRETE MIX DESIGN
   - REINFORCING STEEL DRAWINGS
2. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW OR RECORD SHALL BEAR THE STAMP AND SIGNATURE OF THE REGISTERED PROFESSIONAL ENGINEER.
3. CONTRACTOR SHALL CHECK ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, QUANTITIES, AND COORDINATION WITH OTHER TRADES.
4. ALL SHOP DRAWINGS SHALL BE STAMPED.
5. ORNAMENTAL METAL RAILING SHOP DRAWINGS AND DETAILS, INCLUDING POST LAYOUT AND HDG CONCRETE ANCHOR SELECTION.

REINFORCED CONCRETE

1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)" AND "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)" UNLESS NOTED OTHERWISE.
2. CONCRETE MIXTURES SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH AS FOLLOWS:
   - FOOTINGS 4,000 PSI
   - WALLS 4,000 PSI
3. CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO AS FOLLOWS:
   - 0.49
4. CONCRETE SHALL CONSIST OF THE FOLLOWING:
   - PORTLAND CEMENT ASTM C150, TYPE I/II
   - NORMAL WEIGHT AGGREGATES ASTM C33
   - WATER ASTM C94
5. REINFORCING STEEL
   - REFORMED BARS ASTM A615 GRADE 60
6. REPLACEMENT OF PORTLAND CEMENT WITH FLY ASH SHALL NOT EXCEED 15% OF ALL CEMENTITOUS MATERIALS.
7. MAXIMUM AGGREGATE SIZE SHALL BE 1".
8. ALL CONCRETE EXPOSED TO EARTH OR WEATHER SHALL HAVE AN AIR CONTENT AT POINT OF PLACEMENT OF 4.5% TO 7.5%
9. CONCRETE SHALL BE PROTECTED FROM FREEZING FOR A MINIMUM OF 24 HOURS AFTER PLACEMENT AND HARDENING.
10. NO MATERIAL CONTAINING CALCIUM CHLORIDE, SALT OR ANTIFREEZE AGENTS IS PERMITTED TO BE USED IN ANY CONCRETE.
11. SLUMP SHALL BE 3" TO 5" AT PLACEMENT FOR CONCRETE MIXES WITHOUT WATER REDUCING ADMIXTURES AND 6" AND 8" AT PLACEMENT MAXIMUM WHEN WATER REDUCING ADMIXTURES ARE INCLUDED IN THE MIX DESIGN.
12. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED, IN ACCORDANCE WITH ACI DETAILING MANUAL LATEST EDITION.
13. ALL REINFORCING SHALL BE SECURELY TIED AND SUPPORTED IN ACCORDANCE WITH CRSI RECOMMENDED PRACTICE, AND SHALL BE SECURELY WIRED TOGETHER IN ACCORDANCE WITH CRSI "REINFORCING BAR DETAILING" LATEST EDITION.
14. LAP ALL REINFORCING SPLICES THE GREATER OF 60 BAR DIAMETERS OR 5'-0" UNLESS NOTED OTHERWISE. REINFORCING SPLICES AT CORNERS SHALL BE LAPPED WITH 90 DEGREE HOOKS AT THE END OF THE LAP.
15. PROVIDE CORNER BARS AT ALL INTERSECTIONS OF WALLS AND FOOTINGS MATCHING BAR SIZE AND SPACING.
16. CONTRACTOR SHALL COMPARE STRUCTURAL PLANS AND DETAILS WITH MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS.
17. CONTRACTOR SHALL SUBMIT ALL CONCRETE MIX DESIGNS TO ENGINEER FOR APPROVAL.
18. CONTRACTOR SHALL SUBMIT ALL CONCRETE MIX DESIGN TO ENGINEER FOR APPROVAL.
19. PROVIDE MINIMUM CONCRETE COVER OVER REINFORCEMENT AS FOLLOWS, UNO:
   - CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   - PERMANENTLY EXPOSED TO EARTH OR WEATHER: #5 OR SMALLER: 2"
   - #6 OR LARGER: 2"
20. HOT WEATHER CONCRETE OPERATIONS SHALL BE IN ACCORDANCE WITH ACI 305.
21. COLD WEATHER CONCRETE OPERATIONS SHALL BE IN ACCORDANCE WITH ACI 306.
22. ALL JOINTS NOT MONOLITHICALLY CAST SHALL BE MECHANICALLY ROUGHENED TO A MINIMUM OF ¼ INCH UNO.

ORNAMENTAL METAL RAILING

1. SUBMIT SHOP DRAWINGS WITH MANUFACTURE PROVIDED BASE PLATES. RAILING SHALL MATCH BRIDGE RAILING.
2. PROVIDE GALVANIZED SHIMS BENEATH BASE PLATED TO ACHIEVE PLUMBNESS TO WITHIN ⅛" OF PLUMB.

Sheet List Table	
Sheet Number	Sheet Title
1	COVER
2	PLAN & DETAILS

NOTE: VERIFY ALL EXISTING CONDITIONS

Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12 Des Moines, Iowa 50322
515.276.4884 mail@ceclac.com
CEC

DATE: 2023-04-21
DATE OF SURVEY:
DESIGNED BY: CEC
DRAWN BY: CEC
CHECKED BY:

THIS SITE

VICINITY SKETCH
NO SCALE

NORTH

CERTIFICATION

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

PRELIMINARY

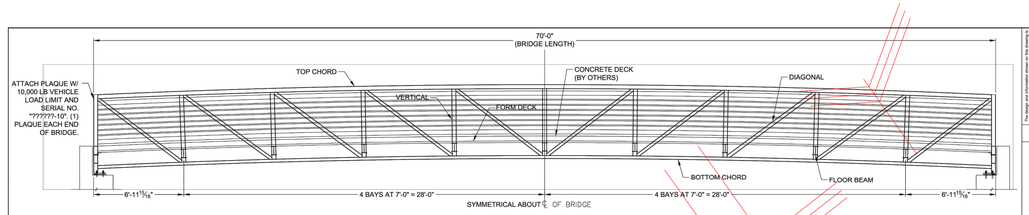
JOSEPH T. BEAVER, IOWA LIC. NO. 20080 DATE
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2024
PAGES OR SHEETS COVERED BY THIS SEAL:

IOWA ONE CALL 1-800-292-8989

PRELIMINARY

WAUKEE TOWNE CENTER
WAUKEE, IOWA
COVER

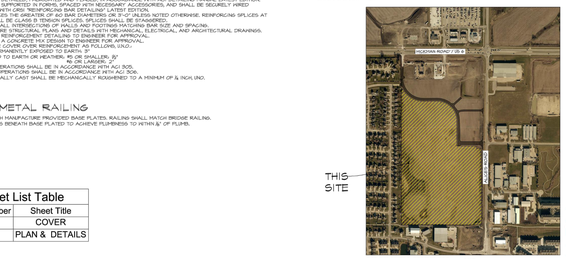
SHEET 1 OF 2
A2S1



BRIDGE ELEVATION

GENERAL NOTES

1. DESIGN STRESSES ARE IN ACCORDANCE WITH "STANDARD SPECIFICATION FOR HIGHWAY BRIDGES" & "GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES" BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), 2009.
2. BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A547 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A242 PLATE AND STRUCTURAL SHAPES (Fy=50,000 PSI).
3. CONCRETE DECK: GALVANIZED FORM DECK SUPPLIED BY CONTECH. CONCRETE, REINFORCING, AND EXPANSION MATERIAL SUPPLIED BY OTHERS. SEE CONCRETE DECK SHEET.
4. THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL BE USED. WELDING TO BE IN ACCORDANCE WITH AWS D1.1.
5. ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE AS DETAILED.
6. UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:
   A. BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
   B. BRACE DIAGONALS WILL BE WELDED ALL AROUND.
   C. MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS.
7. BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.
   A. 90 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 10,000 LB VEHICLE LOAD. THE LOAD SHALL BE DISTRIBUTED AS A FOUR-WHEEL VEHICLE WITH 50% OF THE LOAD ON THE REAR WHEELS. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 6'-0" AND THE WHEEL BASE SHALL BE 10'-0". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESSES IN EACH MEMBER, INCLUDING DECKING.
   B. 35 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.
   C. 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANVERSE BRIDGE WIDTH (AASHTO 3.15.3).
8. CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO. 7 BRUSH-OFF BLAST CLEANING. SSPC-SP7-LATEST EDITION.
9. MINIMUM MATERIAL THICKNESS OF 1/4" ON ALL STRUCTURAL MEMBERS.



2 TYP SLAB REINFORCEMENT DETAIL
1 f'c = 4,000 PSI (MINIMUM 28 DAY STRENGTH) GRADE 60 REINFORCING (fy = 60,000 PSI)

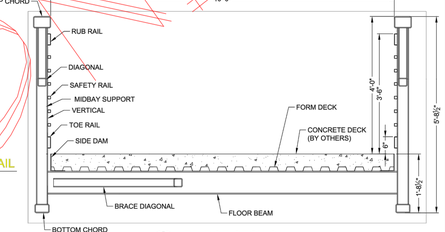
COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS

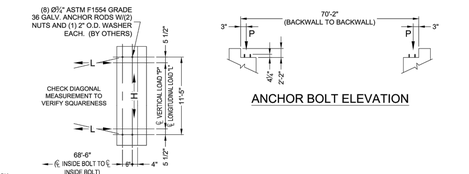
		P (LBS)	H (LBS)	L (LBS)
			+DOWNWIND LOAD / UPWIND LOAD	
DEAD LOAD	2	14,750		
UNIFORM LIVE LOAD		15,750		
VEHICLE LOAD		5,000		
WIND UPLIFT 20 PSF	WINDWARD / LEEWARD	-5,950 / -1,895		
WIND		±2,565	7,405	
THERMAL	2			2,215

"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)
"H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)
"L" - LONGITUDINAL LOAD EACH BASE PLATE (4 PER BRIDGE)

1. BRIDGE LIFTING WEIGHT: 16,300 LBS
2. BRIDGE FINAL WEIGHT: 59,000 LBS
   1. DOES NOT INCLUDE WEIGHT OF CONCRETE DECK
   2. INCLUDES WEIGHT OF CONCRETE DECK



1 BRIDGE SECTION
1



PLAN

ANCHOR BOLT ELEVATION

CONTECH
PROPOSAL
DRAWING

AISC CERTIFIED FABRICATOR

REV#/MM/DD/YEAR	REVISIONDESCRIPTION
REV#/MM/DD/YEAR	REVISIONDESCRIPTION
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MARK	DATE	REVISION DESCRIPTION	BY

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CONTECH ENGINEERED SOLUTIONS LLC
9025 Centre Pointe Drive, Suite 400, West Chester, OH 45069
www.ContechES.com
513-645-7000 513-645-7993 FAX
800-338-1122 513-645-7040 TECH FAX

prexpress-logo.jpg

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DESIGNED: XXX DRAWN: XXX
CHECKED: XXX APPROVED: XXX
PROJECT No.: XXX SEQUENCE No.: XXX
SHEET: SHEET_NO: 1

Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12 . Des Moines, Iowa 50322
515.276.4884 . mail@ceclac.com
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PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 2023-06-05 - SIXTH SUBMITTAL
2023-05-19 - FIFTH SUBMITTAL
2023-05-08 - FOURTH SUBMITTAL
2023-04-24 - THIRD SUBMITTAL
DATE OF SURVEY:
DESIGNED BY: EHA
DRAWN BY: MM

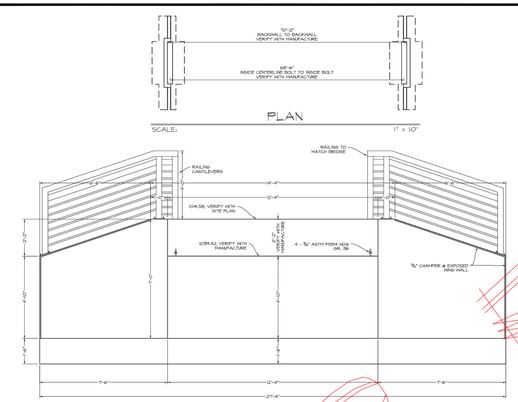
WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS
WAUKEE, IOWA

BRIDGE NOTES (FOR REFERENCE ONLY)

SHEET 12 OF 15

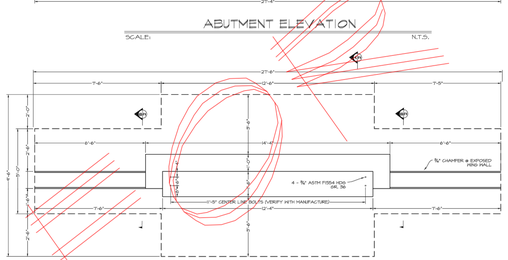
A-2151

G:\A-FILES\A-2100\A2151_C3D DRAWINGS\CONSTRUCTION DOCUMENTS\SITE PLAN\A2151 (08) BRIDGE NOTES LAKE SP.DWG, GREAVER, ANSI EXPAND D (34.00 X 22.00 INCHES), 1:1, 6/5/2023 1:34:18 PM



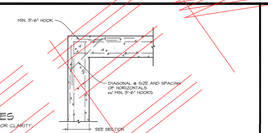
PLAN
SCALE: 1" = 10'

ABUTMENT ELEVATION
SCALE: N.T.S.

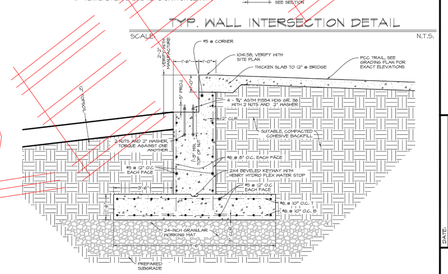


ABUTMENT PLAN DETAIL (2 THUS)
SCALE: N.T.S.

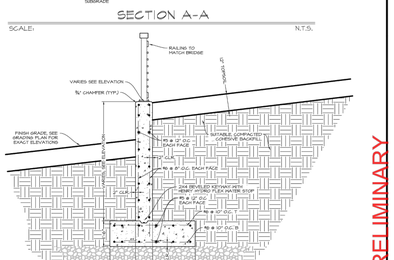
INTERSECTION NOTES
1. VERTICAL REINFORCING NOT SHOWN FOR CLARITY



TYP. WALL INTERSECTION DETAIL
SCALE: N.T.S.



SECTION A-A
SCALE: N.T.S.



SECTION B-B
SCALE: N.T.S.

Civil Engineering Consultants, Inc.
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515.276.4884 mail@ceclac.com
CEC

DATE: 2023-04-21
DATE OF SURVEY:
DESIGNED BY: CEC
DRAWN BY: CEC
CHECKED BY:

PRELIMINARY

WAUKEE TOWNE CENTER
WAUKEE, IOWA
PLAN & DETAILS

SHEET 2 OF 2
A2S1

STORM WATER POLLUTION PREVENTION PLAN

1. SITE DESCRIPTION/APPLICANT/SCHEDULE

   - OWNER/APPLICANT: WAUKEE TOWNE CENTER, LLC
     611 MONTICELLO DR, BURLINGTON, IA 52601
   - CONTACT: MIKE PIERSON, PHONE: (319) 512-0125
   - LOCATION: OUTLOT Y, WAUKEE TOWNE CENTER PLAT 2, AN OFFICIAL PLAT, CITY OF WAUKEE, DALLAS COUNTY, IOWA.
   - NATURE OF CONSTRUCTION ACTIVITY: GRADING AND CONSTRUCTION FOR COMMERCIAL DEVELOPMENT
   - AREAS: TOTAL SITE AREA = 47.99 ACRES
     SITE AREA AFFECTED = 0.7 ACRES
   - RUNOFF COEFFICIENT = 0.85 (RATIONAL METHOD)
   - APPROXIMATE SLOPES ANTICIPATED: 3:1 OR FLATTER
   - 100 YEAR RUNOFF: APPROX. 4.5 CFS
   - RUNOFF FROM THIS PROJECT WILL FLOW INTO STORM SEWER TO LITTLE WALNUT CREEK TO WALNUT CREEK AND TO RACCOON RIVER
   - SOILS:
     - CANISTEO CLAY LOAM, BEMIS MORAINE WITH SLOPES BETWEEN 0% TO 2%
     - NICOLLET LOAM WITH SLOPES BETWEEN 1% TO 3%
     - CLARION LOAM, BEMIS MORAINE WITH SLOPES BETWEEN 2% TO 6%
   - ESTIMATED DATE WORK IS TO COMMENCE: JUNE 2023
   - ESTIMATED DATE WORK IS TO BE COMPLETED: NOVEMBER 2023

2. CONTROLS (ALL SEDIMENT AND EROSION CONTROLS TO BE INSTALLED, MAINTAINED AND REPLACED PER SUDAS SECTION 9040)
   - EROSION AND SEDIMENT CONTROLS
   - STABILIZATION PRACTICES
   - EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND STABILIZE DISTURBED AREAS.
   - PERMANENT SEEDING AND/OR SODDING AFTER CONSTRUCTION.
   - VEGETATIVE BUFFER STRIPS THROUGHOUT PROJECT.
   - PROTECTION OF TREES AND PRESERVATION OF MATURE VEGETATION WHEREVER POSSIBLE.
   - STRUCTURAL PRACTICES
   - SILT FENCES - TEMPORARY DEVICE TO REMOVE SEDIMENT FROM RUNOFF
   - TEMPORARY SEDIMENTATION BASIN - TEMPORARY STRUCTURE TO DETAIN RUNOFF AND ALLOW SEDIMENTATION TO SETTLE OUT
   - RIP RAP - PLACED AT OUTLET OF STORM SEWER TO PREVENT DOWNSTREAM EROSION
   - DRAINAGE SWALES - STABILIZES SURFACE FROM EROSION WHILE CARRYING SURFACE RUNOFF
   - INLET PROTECTION - FILTERS SEDIMENT FROM RUNOFF PRIOR TO ENTERING STORM SEWER SYSTEM
   - STORM WATER MANAGEMENT
   - FLOW ATTENUATION BY USE OF OPEN VEGETATED SWALES AND NATURAL DEPRESSIONS.
   - INFILTRATION OF RUNOFF ON SITE
   - VELOCITY DISSIPATION DEVICES AT DISCHARGE LOCATIONS TO PROVIDE NON-EROSIVE VELOCITY FLOWS.
   - WASTE DISPOSAL
   - ALL MATERIAL WASTES MUST BE REMOVED FROM SITE.
   - OFFF-SITE VEHICLE TRACKING OF SEDIMENTS SHALL BE MINIMIZED.
   - STABILIZE ENTRANCE WITH 8-INCHES OF LIMESTONE IN ORDER TO PREVENT MUD FROM TRACKING OUT ONTO ROADWAY
   - TOTAL COMPLIANCE WITH APPLICABLE STATE/LOCAL WASTE DISPOSAL REGULATIONS.
   - CONTROLS MUST BE IN GOOD OPERATING CONDITION UNTIL CONSTRUCTION ACTIVITY IS COMPLETE AND FINAL STABILIZATION HAS BEEN REACHED.

3. CONTRACTORS
   GENERAL CONTRACTOR SHALL HAVE PRIMARY RESPONSIBILITY OF IMPLEMENTING MEASURES CONTAINED IN PLAN.
   - ALL CONTRACTORS AND SUBCONTRACTORS SHALL SIGN A CERTIFICATION STATEMENT BEFORE CONDUCTING ANY PROFESSIONAL SERVICE AT SITE RELATING TO NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. SEE CERTIFICATION THIS SHEET.
   - PERSONS ACCOMPLISHING WORK UNDER THIS PERMIT:

     NAME: _____
     ADDRESS: _____
     _____
     PHONE: _____

     NAME: _____
     ADDRESS: _____
     _____
     PHONE: _____

     NAME: _____
     ADDRESS: _____
     _____
     PHONE: _____

4. IMPLEMENTATION / MAINTENANCE
   MAINTAIN EFFECTIVE OPERATING CONDITIONS OF ALL PROTECTIVE MEASURES IDENTIFIED IN PLAN.
   - CURB CUT SHALL BE ONE OF THE FIRST ITEMS OF CONSTRUCTION IN ORDER TO ACCESS SITE. "JUMPING THE CURB" IS NOT ALLOWED.
   - PRIOR TO INITIAL GRADING, INSTALL PERIMETER SILT FENCE TO PROTECT UNDISTURBED AREAS.
   - DO NOT DISTURB AN AREA UNTIL IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.
   - AFTER INITIAL GRADING PRIOR TO UTILITY CONSTRUCTION, ALL DISTURBED AREAS OUTSIDE PROPOSED RIGHT-OF-WAYS ARE TO HAVE TEMPORARY SEEDING AND MULCHING. CONTRACTORS AND SUBS ARE TO MINIMIZE DISTURBANCE TO THESE SEEDED AREAS THROUGH USE OF SPECIFIC ACCESS ROUTES WITHIN SITE.
   - INSTALL ADDITIONAL CONTROLS AS CONSTRUCTION COMMENCES. PROVIDE SILT FENCE, INTAKE BASKETS, ETC. AS SOON AS POSSIBLE DURING CONSTRUCTION.
   - TEMPORARY EARTH PILES SHALL HAVE DOWNSLOPE SILT FENCE PROTECTION.
   - ALL INTAKES AND MANHOLES TO HAVE SILT FENCE AROUND THEM PRIOR TO PAVING AND INLET FILTERS AFTER PAVING. INLET FILTERS SHALL REMAIN IN PLACE UNTIL SITE HAS PERENNIAL GROUND COVER.
   - ALL INTAKES SHALL BE COVERED DURING CONSTRUCTION TO PREVENT SEDIMENTATION DEPOSITS WITHIN STORM SEWER. INTAKE BASKETS SHALL BE PLACED IN STRUCTURE ONCE CASTINGS ARE IN PLACE.
   - ANY SOIL OR SPILL WASHED, TRACKED OR DROPPED ON TO ADJOINING RIGHT-OF-WAYS AND PROPERTY SHALL BE CLEANED UP BY CONTRACTOR IMMEDIATELY. EARTH RAMPS SHALL NOT BE CONSTRUCTED IN STREET GUTTER.
   - MATERIAL OR EQUIPMENT STORAGE AREAS MUST BE WITHIN LIMITS OF SOIL DISTURBING ACTIVITY. THESE AREAS SHALL BE INSPECTED FOR POTENTIAL POLLUTANTS ENTERING SYSTEM.
   - DURING CONSTRUCTION IF IT BECOMES EVIDENT THAT DISTURBED AREA WILL NOT BE DISTURBED FOR PERIOD EXCEEDING 14 DAYS, STABILIZATION OF THE DISTURBED AREAS SHALL INITIATE IMMEDIATELY.
   - PERMANENT SEEDING AND MULCHING TO BE DONE IMMEDIATELY AFTER FINAL GRADING.
   - ANY FAILED AREA OF SEEDING SHALL BE RESEEDED - IN THE EVENT THAT SEEDING/MULCHING DOES NOT OCCUR PRIOR TO WINTER, ALL DISTURBED AREAS SHALL BE MULCHED.
   - SILT FENCING SHALL BE CLEANED WHEN THEY HAVE LOST 50% OF THEIR CAPACITY.
   - DRAINAGE SWALES REMAIN UNDISTURBED.
   - ROCK OUTLET PROTECTION SHALL REMAIN INTACT.
   - PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED IMMEDIATELY AFTER FINAL GRADING IS COMPLETED. REPLANTING MAY BE REQUIRED TO ENSURE ADEQUATE VEGETATIVE COVER IS ESTABLISHED. ADEQUATE VEGETATIVE COVER IS CONSIDERED TO BE 70% MIN. COVERAGE OF SOIL SURFACE BY INTENDED SPECIES. IF NATIVE LANDSCAPE IS USED, THEN 70% COVERAGE BY COVER CROP IS REQUIRED.
   - SOIL SHALL BE WATERED DURING DRY, WINDY CONDITIONS TO MINIMIZE EROSION.
   - WORK REQUIRING ENTERING AND LEAVING SITE OVER COUNTY ROADWAYS INCLUDING MATERIAL DELIVERY AND MOVEMENT OF EQUIPMENT SHALL NOT BE PERMITTED DURING PERIODS WHEN GROUND IS EXCEPTIONALLY SOFT AND WET AND EROSION BY VEHICLE IS CERTAIN.
   - SOIL STOCKPILES SHALL BE STABILIZED WITH VEGETATION OR COVERED. MOWING MAY BE REQUIRED IF VEGETATION BECOMES A NUISANCE.
   - EROSION CONTROL CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE SITE HAS BEEN PERMANANTLEY ESTABLISHED WITH GROUND COVER.
   - CONCRETE WASHOUT AREA SHALL BE DESIGNED AND CONSTRUCTED PER SUDAS SECTION 11.050 AND SHALL HAVE AN IMPERMEABLE LINER TO CONTAIN ALL WASTE CONCRETE MATERIALS. WHEN CONTAINER IS ¾ FULL (AVOID SPILLOVER) PCC WASTE SHALL BE DISPOSED OF PROPERLY (SENT TO AN APPROPRIATE RECYCLING FACILITY). PCC WASTE SHALL NOT BE BURIED ON SITE.
   - TRASH SHALL BE CLEANED UP DAILY OR PUT INTO COVERED DUMPSTER.

5. INSPECTIONS
   - CONTRACTOR SHALL KEEP A COPY OF SWPPP ONSITE
   - QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
   - INSPECT SITE FOR EVIDENCE OF, OR POTENTIAL OF, POLLUTANTS ENTERING DRAINAGE SYSTEM FROM STORED MATERIALS.
   - OBSERVE EROSION AND SEDIMENT CONTROL MEASURES TO ENSURE THAT THEY ARE OPERATING CORRECTLY, REPAIR AND REPLACE AS NECESSARY.
   - LOCATIONS WHERE VEHICLES ENTER OR EXIT SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
   - INSPECT DISCHARGE LOCATIONS TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.
   - ANY MODIFICATIONS TO PLAN AS RESULT OF AN INSPECTION SHALL BE IMPLEMENTED WITHIN 7 CALENDAR DAYS OF INSPECTION. IF IT IS DETERMINED TO BE IMPRACTICABLE TO MAKE THESE CHANGES WITHIN 72 HOURS OF INSPECTION, REASONING AND AN ESTIMATED DATE OF WHEN CHANGES WILL BE MADE SHALL BE DOCUMENTED IN PLANS.
   - AN INSPECTION REPORT SHALL BE PREPARED AND RETAINED AS PART OF PREVENTION PLAN UNTIL PROJECT TERMINATION, THIS REPORT WILL CONTAIN FOLLOWING:
     - SUMMARY OF SCOPE OF INSPECTION.
     - QUALIFICATIONS OF PERSONNEL MAKING INSPECTION.
     - MAJOR OBSERVATIONS RELATING TO IMPLEMENTATION OF PREVENTION PLAN.
     - ANY ACTIONS TAKEN
     - SIGNATURE
   - REPORTS SHALL CONFORM TO STANDARDS SET BY IOWA DNR. COPIES OF THESE REPORTS SHALL BE FORWARDED TO OWNER.
   - CONTRACTOR IS TO TAKE NECESSARY ACTIONS TO CORRECT DEFICIENCIES FOUND DURING INSPECTIONS AS SOON AS PRACTICABLE BUT IN NO CASE LATER THAN SEVEN (7) DAYS AFTER INSPECTION. IF IT IS DETERMINED THAT IT IS IMPRACTICABLE TO MAKE THESE CHANGES WITHIN 72 HOURS OF INSPECTION, REASONING AND AN ESTIMATED DATE OF WHEN CHANGES WILL BE MADE SHALL BE DOCUMENTED IN PLANS.
   - SWPPP RECORDS SHALL BE RETAINED FOR AT LEAST THREE YEARS AFTER NOTICE OF DISCONTINUATION HAS BEEN FILED.

6. NON-STORM WATER DISCHARGES
   WATER MAIN FLUSHING
   - FLUSHED WATER WILL BE DISCHARGED INTO THE STORM SEWER SYSTEM WHERE, WHEN DISCHARGED, IT WILL UNDERGO EROSION AND SEDIMENT CONTROLS CONSISTING OF:
     - SILTATION BASIN
     - ROCK OUTLET PROTECTION (RIPRAP)
     - SILT FENCING
     - EXISTING VEGETATION
   - FLUSHED WATER CONTAINING CHEMICALS (I.E. CHLORINE AND/OR DETERGENTS) NEED TO BE NEUTRALIZED PRIOR TO DISCHARGE TO THE CONTROLS LISTED.
   - PETROLEUM STORAGE INCLUDING BUT NOT LIMITED TO FUEL, GEAR OIL, ENGINE OIL, HYDRAULIC OIL, WASTE OIL SHALL NOT BE STORED ON SITE.
   - CONCRETE WASHOUT AREAS SHALL BE DESIGNED IN COMPLIANCE WITH SUDAS SPECIFICATION 11.050.
   - PORTABLE TOILETS SHALL BE SECURED FROM OVERTURNING AND SHALL HAVE DOWNSLOPE SILT FENCE PROTECTION. HOLDING TANK WILL BE PUMPED OUT AS NEEDED AND DISPOSED OF OFF-SITE.
   - CONTRACTOR SHALL CONTAIN AND PROPERLY DISPOSE OF ALL CONCRETE SAWCUTTING AND GRINDING.
   - DISCHARGES FROM DEWATERING ACTIVITIES, INCLUDING DISCHARGES FROM DEWATERING OF TRENCHES AND EXCAVATIONS, ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS SUCH AS DEWATERING BAGS OR EQUAL.
   - FOLLOWING DISCHARGES ARE PROHIBITED:
     - WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO
     - PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS
     - FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE
     - SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING
   - DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING. WHEEL WASH WATER AND OTHER WASH WATERS SHALL BE MINIMIZED. WASH WATERS SHALL BE TREATED IN SEDIMENT BASIN OR EQUAL CONTROL.
   - EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER PRESENT MATERIALS TO PRECIPITATION AND STORM WATER SHALL BE MINIMIZED.
   - DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS SHALL BE MINIMIZED.

7. REPORT ANY HAZARDOUS CONDITIONS CONDITION AND UPDATE PLAN
   - IOWA LAW REQUIRES THAT HAZARDOUS CONDITION OR SPILL IS REPORTED NOT MORE THAN SIX HOURS AFTER ONSET OF SAID CONDITION OR SPILL. IDNR AND LOCAL OR COUNTY SHERIFF'S OFFICE SHALL BE NOTIFIED.
   - MODIFY SWPPP WITHIN 5 CALENDAR DAYS OF HAZARDOUS CONDITION. PLAN UPDATE SHALL INCLUDE REALEASE AND CIRCUMSTANCES OF RELEASE AND PLANS TO PREVENT FUTURE REOCCURANCE OF SUCH RELEASES.

8. NOTICE OF DISCONTINUATION (NOD)
   - WITHIN 30 DAYS OF FINAL SITE STABALIZATION OWNER OR GENERAL CONTRACTOR MUST SUBMIT NOTICE OF DISCONTINUATION TO IDNR. NOD SHALL INCLUDE:
     - NAME OF THE OWNER OR OPERATOR TO WHICH COVERAGE UNDER GENERAL PERMIT WAS ISSUED
     - GENERAL PERMIT NUMBER AND PERMIT AUTHORIZATION NUMBER
     - DATE CONSTRUCTION SITE REACHED FINAL STABALIZATION
     - SIGNED CERTIFICATION
   - NOD SHALL BE MAILED TO:
     STORM WATER COORDINATOR
     IOWA DEPARTMENT OF NATURAL RESOURCES
     502 E. 9TH STREET
     DES MOINES, IOWA 50319-0034

SEQUENCE OF MAJOR ACTIVITIES

1. **PRE-CONSTRUCTION:** SOIL STABILIZATION AND EROSION CONTROL MEASURES WILL BE PLACED BY CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION OPERATIONS. VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION SHALL BE PRESERVED. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ACHIEVED.
2. INSTALL UPSTREAM DIVERSIONS, DOWN SLOPE AND SIDE SLOPE PERIMETER CONTROLS BEFORE COMMENCING LAND DISTURBING ACTIVITIES.
3. DO NOT DISTURB AN AREA UNLESS IT IS NECESSARY FOR CONSTRUCTION TO PROCEED.
4. COVER OR STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE.
5. TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT ON SEASONAL WEATHER CHANGES.
6. IF INFILTRATION METHODS ARE USED, INSTALL THEM AFTER UPSTREAM IS STABILIZED.
7. DO NOT REMOVE PERIMETER CONTROLS UNTIL UPSTREAM AREAS ARE STABILIZED.
8. DISTURBED AREAS SHALL BE SEEDED, FERTILIZED AND MULCHED AS SOON AS POSSIBLE.
9. NOTICE OF DISCONTINUATION WILL BE FILED ONCE SITE IS STABILIZED.

THIS SITE: TRAIL INSTALLATION ONLY.

VICINITY SKETCH

OWNER'S CERTIFICATION

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE AS PART OF THIS CERTIFICATION. FURTHER, BY MY SIGNATURE, I UNDERSTAND THAT I AM BECOMING A CO-PERMITTEE, ALONG WITH THE CONTRACTOR AND SUBCONTRACTORS SIGNING SUCH CERTIFICATIONS, TO THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2 FOR "STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES" AT THE IDENTIFIED SITE. AS A CO-PERMITTEE, I UNDERSTAND THAT I, AND MY ORGANIZATION, ARE LEGALLY REQUIRED UNDER THE CLEAN WATER ACT AND THE CODE OF IOWA, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN DEVELOPED UNDER THIS NPDES PERMIT AND THE TERMS OF THIS NPDES PERMIT.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

NAME / TITLE: _____

COMPANY: _____

TELEPHONE NUMBER: _____

CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE AS PART OF THIS CERTIFICATION. FURTHER, BY MY SIGNATURE, I UNDERSTAND THAT I AM BECOMING A CO-PERMITTEE, ALONG WITH THE OWNER(S) AND OTHER CONTRACTORS AND SUBCONTRACTORS SIGNING SUCH CERTIFICATIONS, TO THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2 FOR "STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES" AT THE IDENTIFIED SITE. AS A CO-PERMITTEE, I UNDERSTAND THAT I AND MY COMPANY ARE LEGALLY REQUIRED UNDER THE CLEAN WATER ACT AND THE CODE OF IOWA, TO ENSURE COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN DEVELOPED UNDER THIS NPDES PERMIT AND THE TERMS OF THIS NPDES PERMIT.

GENERAL CONTRACTOR

NAME / TITLE: _____

COMPANY: _____

TELEPHONE NUMBER: _____

SUBCONTRACTOR

NAME / TITLE: _____

COMPANY: _____

SUBCONTRACTOR

NAME / TITLE: _____

COMPANY: _____

SUBCONTRACTOR

NAME / TITLE: _____

COMPANY: _____

QUANTITIES

2,775 LF	SILT FENCE
0.8 ACRE	HYDROSEEDING SEEDING - S.U.D.A.S. TYPE 1 SEED MIX (PERMANENT)
0.8 ACRE	HYDROSEEDING SEEDING - S.U.D.A.S. TYPE 2 SEED MIX (PERMANENT)
1.2 ACRE	HYDROSEEDING SEEDING - PRAIRIE BIRTH MIX (PERMANENT) SEE LANDSCAPE PLAN FOR SEED MIX DETAILS.

AREA OF DISTURBANCE

CONSTRUCTION ENTRANCE UNDER COSESCO PERMIT: SW22-1101
0.7 ACRES

PRELIMINARY - NOT FOR CONSTRUCTION

CEC
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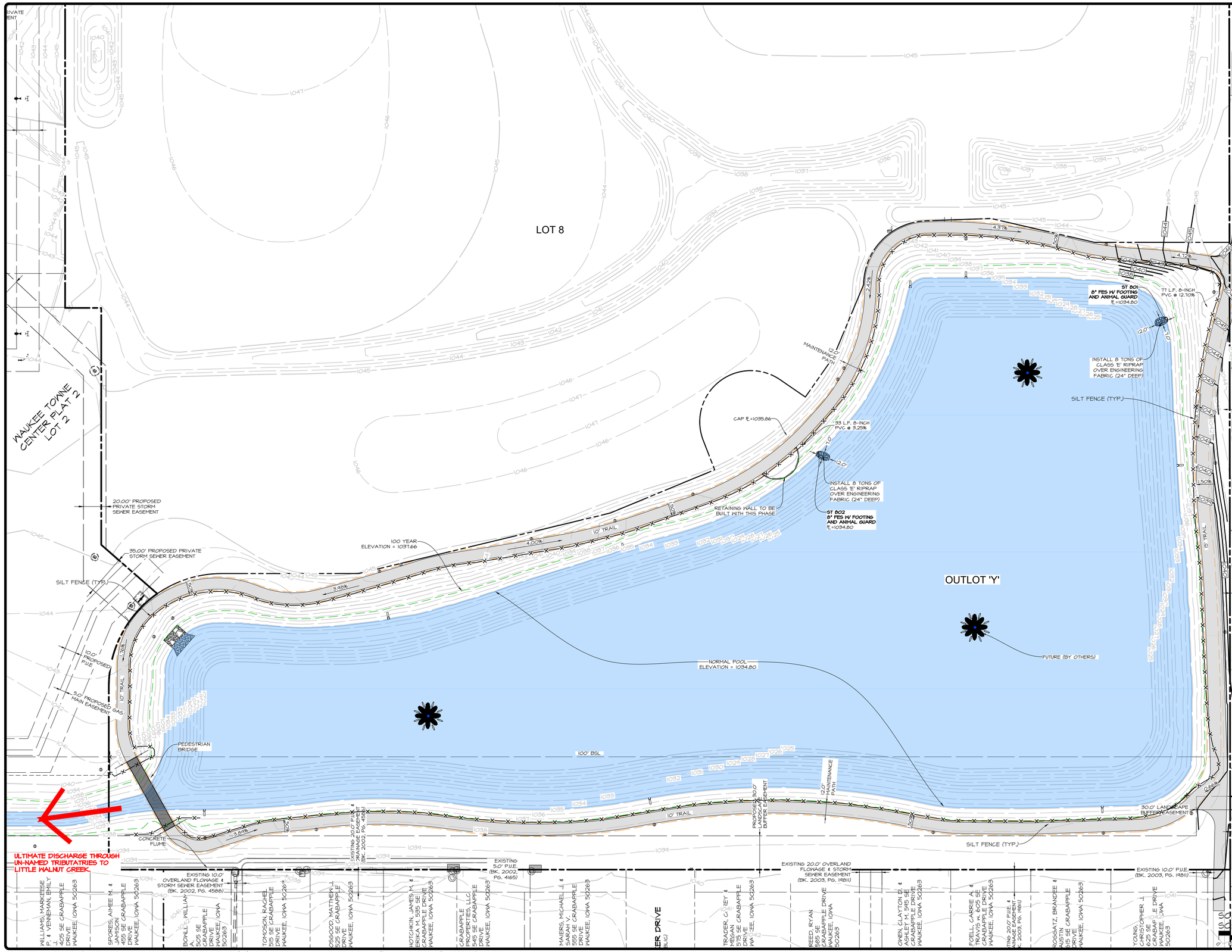
DRAWN BY:	MM

WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS
WAUKEE, WAUKEE, IOWA

EROSION CONTROL NOTES

SHEET 3 OF 15

A-2157



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WAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

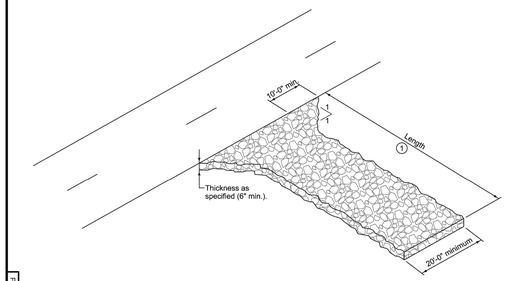
WAUKEE, IOWA

EROSION & SEDIMENTATION CONTROL PLAN

SHEET 4 OF 15

A-2157

G:\A-FILES\A-2100\A2157_C3D DRAWINGS\CONSTRUCTION DOCUMENTS\SITE PLAN\A2157 (06) SWPPP LAKE SP.DWG, GREAVER, ANSI EXPAND D (34.00 X 22.00 INCHES), 1:1, 6/5/2023 1:42:16 PM



1 Entrance length: 50 foot minimum (30 foot for single family residential), or as specified in the contract documents. Length of entrance may be increased if sediment track-out occurs.

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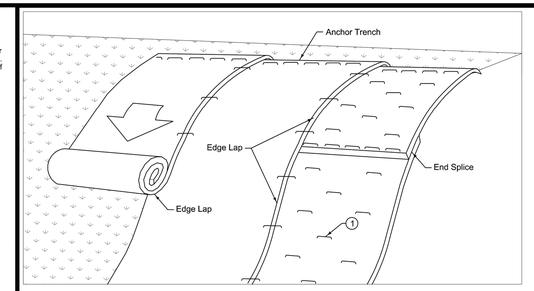
SUDAS Standard Specifications

STABILIZED CONSTRUCTION ENTRANCE

FIGURE 9040.120 | SHEET 1 OF 1



1 Secure blanket to ground according to manufacturer's recommended anchoring pattern and minimum shown in Table 1.

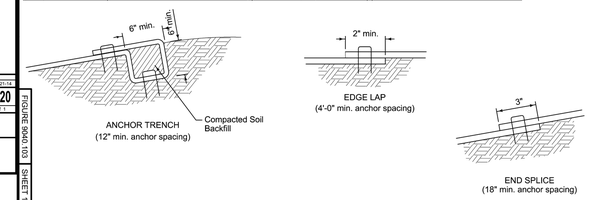


TABLE 1

Max. slope	Min. anchors
≤ 3:1	1.5/yd²
2:1	2/yd²
1:1	2.5/yd²

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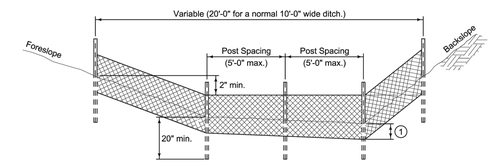
SUDAS Standard Specifications

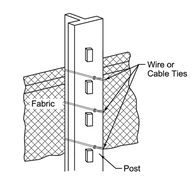
ROLLED EROSION CONTROL PRODUCT (RECP) INSTALLATION ON SLOPES

FIGURE 9040.103 | SHEET 1 OF 1



TYPICAL SILT FENCE DITCH CHECK

1 Insert 12 inches of fabric a minimum of 6 inches deep (fabric may be folded below the ground line).



ATTACHMENT TO POST

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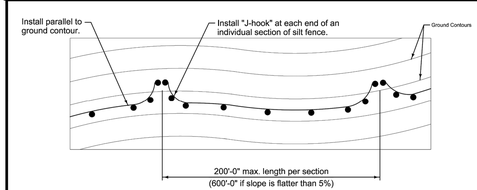
SUDAS Standard Specifications

SILT FENCE

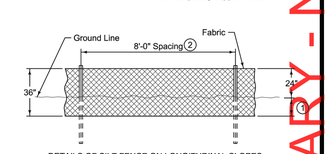
FIGURE 9040.119 | SHEET 1 OF 2



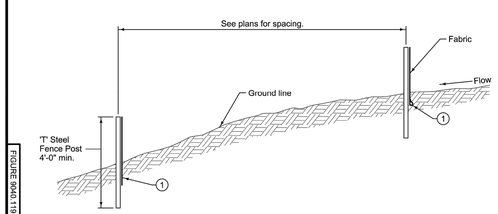
TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES
(Plan View)

1 Insert 12 inches of fabric a minimum of 6 inches deep (fabric may be folded below the ground line).

2 Reduce post spacing to 5'-0" at water concentration areas, or as required to adequately support fence.



DETAILS OF SILT FENCE ON LONGITUDINAL SLOPES



TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES
(Profile View)

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SUDAS Standard Specifications

SILT FENCE

FIGURE 9040.119 | SHEET 2 OF 2

CEC
Civil Engineering Consultants, Inc.
2400 86th Street, Unit 12 . Des Moines, Iowa 50322
515.276.4884 . mail@ceclac.com

DATE:	
	2023-03-21 - 4TH SUBMITTAL
	2023-03-06 - 3RD SUBMITTAL
	2023-02-21 - 7TH SUBMITTAL
	2022-12-08 - 6TH SUBMITTAL
DATE OF SURVEY:	2019-04-20
DESIGNED BY:	EHA
DRAWN BY:	MM

KAUKEE TOWNE CENTER - LAKE AND TRAIL IMPROVEMENTS

KAUKEE, KAUKEE, IOWA

EROSION & SEDIMENTATION CONTROL DETAILS

PRELIMINARY - NOT FOR CONSTRUCTION

A-2157