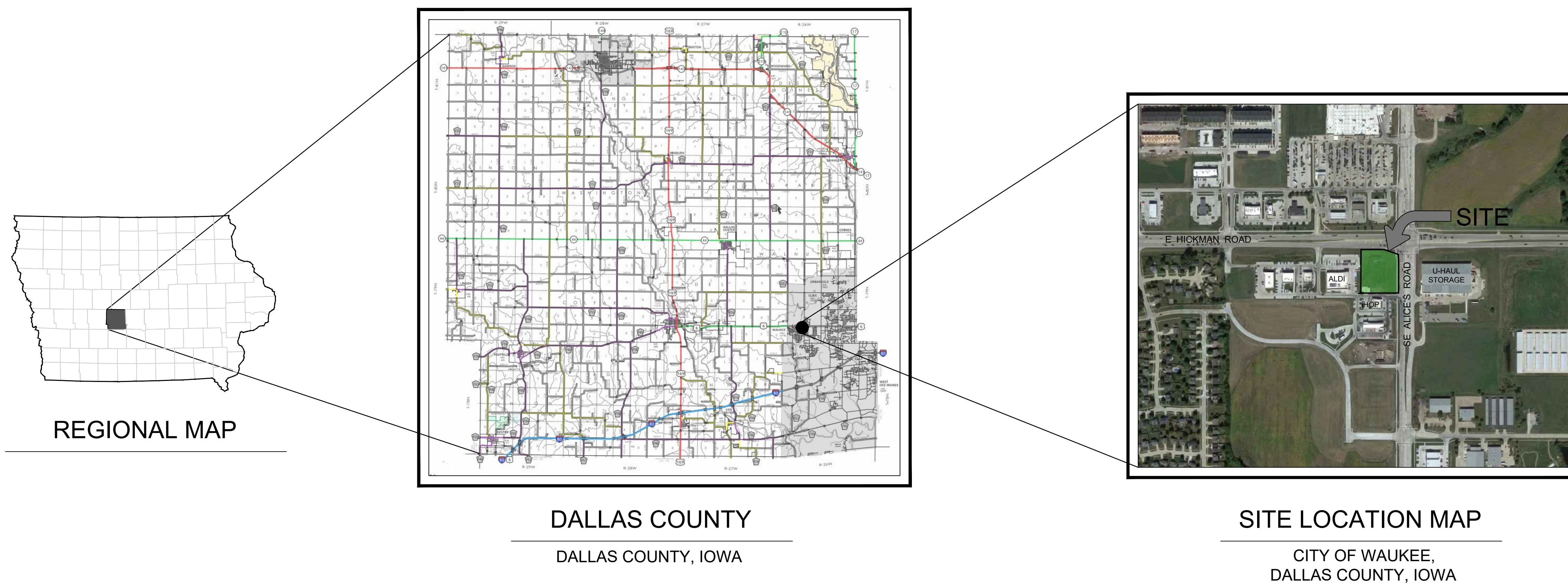
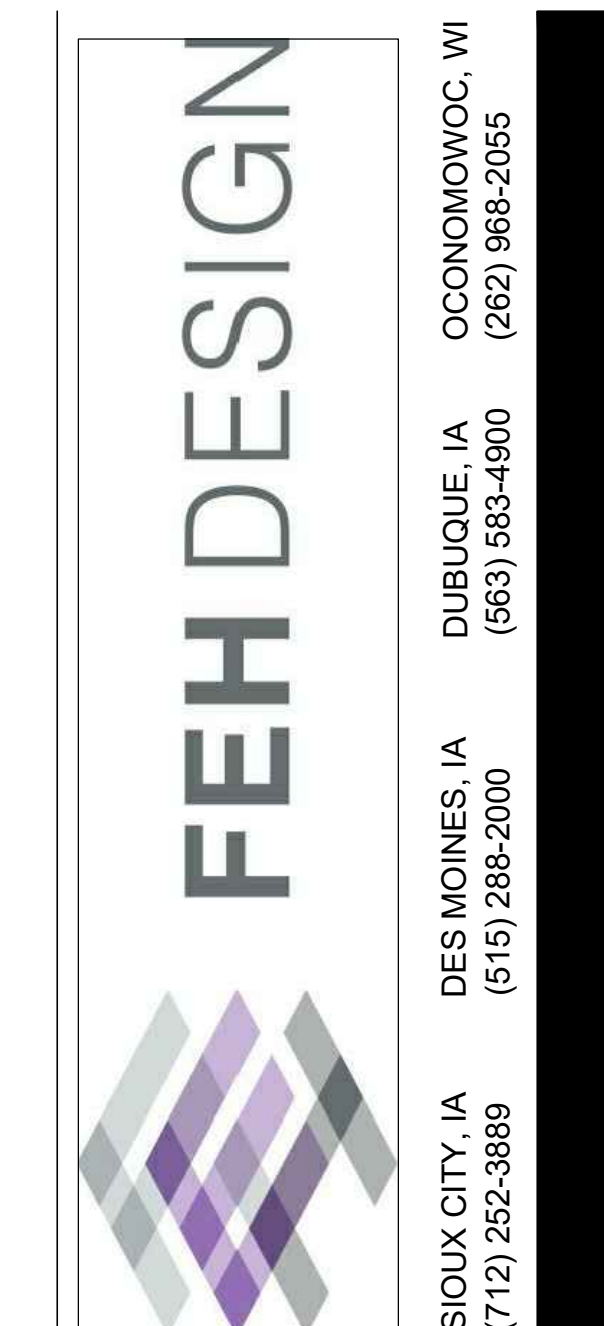
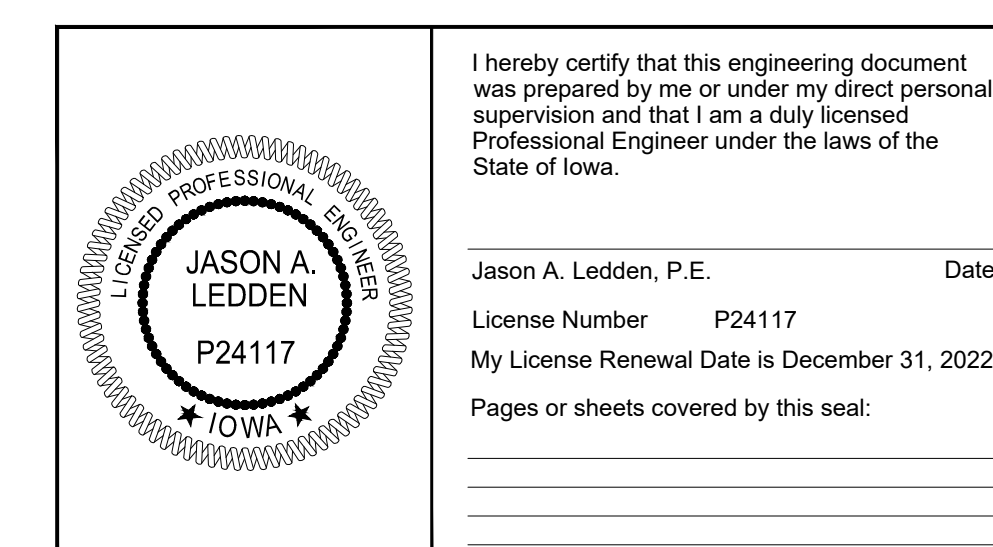


DUPACO COMMUNITY CREDIT UNION SITE PLAN

1090 EAST HICKMAN ROAD, WAUKEE, IOWA
SECTION 34, TOWNSHIP 79N, RANGE 26E



CAUTION:
CERTAIN UNDERGROUND UTILITIES HAVE BEEN LOCATED ON THE PLANS. THESE LOCATIONS SHALL NOT BE TAKEN AS CONCLUSIVE. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER SHOWN ON THE DRAWING OR NOT, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. FOR EXACT LOCATION CONTACT DIGGERS HOTLINE 1-800-242-8511



SHEET TITLE
TITLE SHEET

PROJECT TITLE
DUPACO COMMUNITY CREDIT UNION
Project Name: DUPACO
1090 EAST HICKMAN ROAD
WAUKEE, IOWA

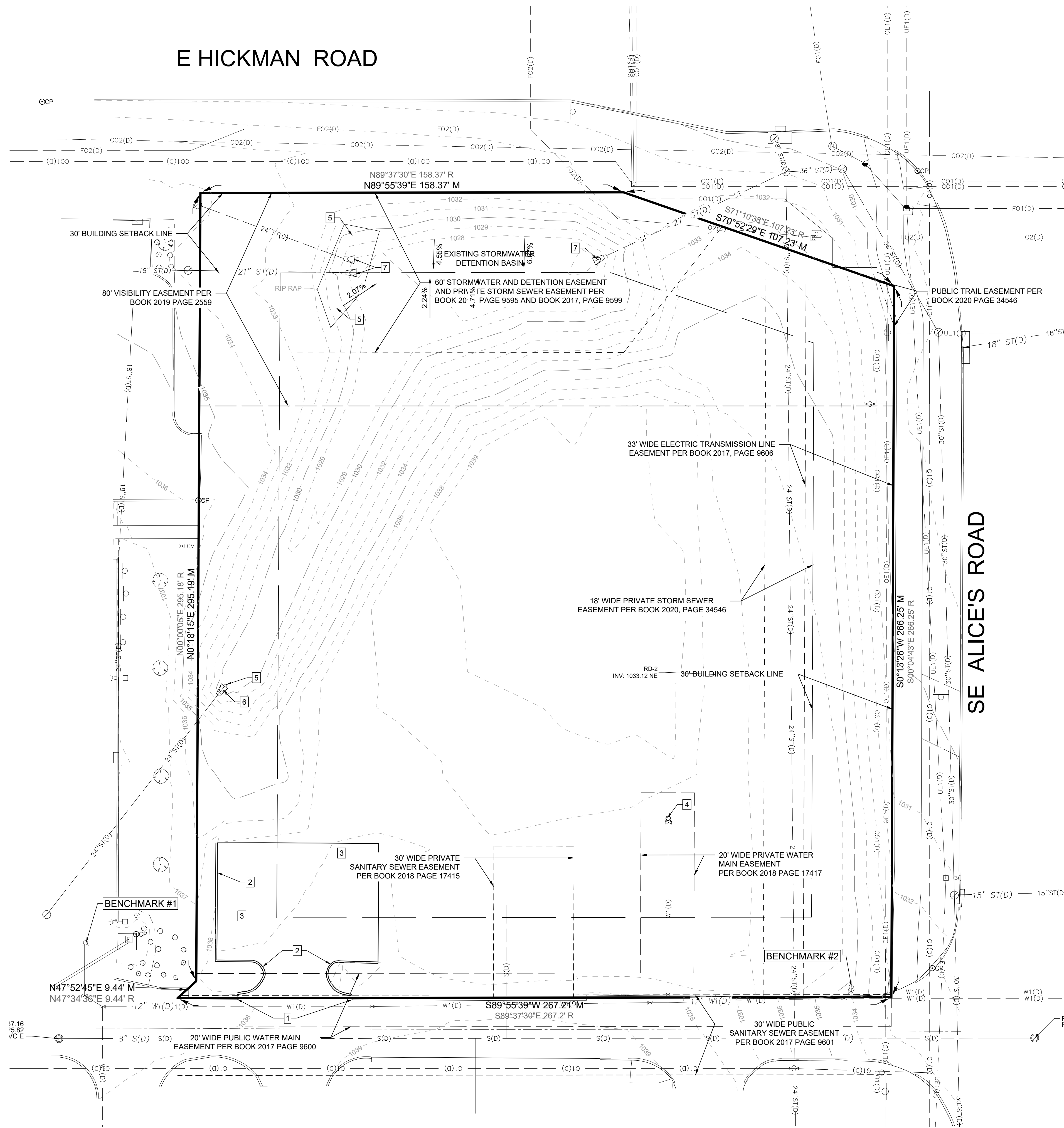
DATE ISSUED: MARCH 16, 2022

REV. NO.	DATE
1	MARCH 22, 2022
2	APRIL 5, 2022
3	APRIL 19, 2022
4	MAY 3, 2022
5	MAY 17, 2022

PROJECT NUMBER
121.1153.30

SHEET
C 100

E HICKMAN ROAD



NOTE:

ALL WORK DONE ON THIS PROJECT SHALL BE IN CONFORMANCE WITH THE 2020 CITY OF WAUKEE STANDARD SPECIFICATIONS AND THE 2022 EDITION OF SUDAS.

ANY PROPOSED CHANGES TO THESE PLANS SHALL BE APPROVED IN WRITING BY THE CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT.

CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES TO THESE PLANS MADE DURING CONSTRUCTION THAT HAVE NOT BEEN GRANTED APPROVAL IN WRITING BY THE CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT.

ALL SIGNAGE SHALL REQUIRE A SEPARATE REVIEW AND PERMIT FROM THE CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT.

NOTIFY OWNER, ENGINEER, AND CITY OF WAUKEE AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.

CONTRACTOR SHALL NOTIFY THE CITY OF WAUKEE ENGINEERING DEPARTMENT AT LEAST 48 HOURS PRIOR TO ANY PLANNED WEEKEND OR HOLIDAY WORK.

CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM NEIGHBORING STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.

A PRECONSTRUCTION MEETING WITH THE CITY OF WAUKEE IS REQUIRED A MINIMUM OF ONE WEEK PRIOR TO CONSTRUCTION ACTIVITIES BEGINNING.

CONTRACTOR SHALL COORDINATE ALL TIE-INS TO UTILITIES WITH THE CITY OF WAUKEE PUBLIC WORKS DEPARTMENT AND THE CITY OF WAUKEE PUBLIC WORKS SHALL WITNESS ALL TIE-INS.

CONTRACTOR TO PROTECT STORM SEWER AND DRAINAGE WAYS BY PREVENTING SLURRY FROM CONCRETE OPERATIONS TO DISCHARGE OFFSITE.

BENCHMARK #1

NORTHEAST BOLT ON HYDRANT, EAST SIDE OF SOUTHEAST ALDI ENTRANCE ±15' WEST OF TRANSFORMER
ELEVATION = 1039.45

BENCHMARK PROVIDED IN A SITE SURVEY
DATED: DECEMBER 9, 2021
BY: SNYDER & ASSOCIATES

BENCHMARK #2

BURY BOLT ON HYDRANT, NORTH SIDE OF NORTH ENTRANCE TO I-HOP
ELEVATION = 1038.14

BENCHMARK PROVIDED IN A SITE SURVEY
DATED: DECEMBER 9, 2021
BY: SNYDER & ASSOCIATES

LEGAL DESCRIPTION

LOT 1 IN WAUKEE MARKET PLACE PLAT 3, AN OFFICIAL PLAT, NOW INCLUDED IN AND FORMING A PART OF THE CITY OF WAUKEE, DALLAS COUNTY, IOWA.

PLAN NOTES

CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS PRIOR TO COMMENCING WORK ON SITE

CONTRACTOR SHALL CALL FOR UTILITY LOCATIONS PRIOR TO COMMENCING WORK ON SITE

EXISTING SITE CONDITIONS BASED ON AN SURVEY BY:

SNYDER AND ASSOCIATES
515-964-2020
DATED DECEMBER 9, 2021

CONTRACTOR SHALL PROVIDE ALL NECESSARY EROSION CONTROL MEASURES PER CITY, COUNTY AND STATE SPECIFICATIONS. ALL MEASURES ARE TO BE IN PLACE PRIOR TO COMMENCING WORK ON SITE. ALL MEASURES SHALL BE MAINTAINED UNTIL SITE SOILS ARE STABILIZED. SEE SHEET SWP1-SWP4 FOR MORE INFORMATION

CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS FOR DEMOLITION AND CONSTRUCTION PRIOR TO COMMENCING ANY WORK ON SITE.

ALL DAMAGED PAVEMENT NOT NOTED TO BE REMOVED SHALL BE PATCHED TO THE SATISFACTION OF THE CITY OF WAUKEE.

SITE PLAN KEYNOTES

- 1 SAW-CUT EXISTING GUTTER PAN AT JOINT AT THE BACK OF THE GUTTER PAN. PROTECT EXISTING GUTTER PAN.
- 2 REMOVE EXISTING CURB AND GUTTER
- 3 REMOVE EXISTING CONCRETE
- 4 REMOVE EXISTING FIRE HYDRANT
- 5 REMOVE EXISTING RIPRAP
- 6 REMOVE AND RELOCATE EXISTING 24" RCP FES
- 7 PROTECT EXISTING STORMWATER FES

LEGAL DESCRIPTION OF PROPERTY

LOT 1, WAUKEE MARKET PLACE PLAT 3, AN OFFICIAL PLAT IN THE CITY OF WAUKEE, DALLAS COUNTY, IOWA AS RECORDED IN BOOK 2020, PAGE 34704, AND CONTAINING 1.76 ACRES (76,666 SQUARE FEET MORE OR LESS).

OWNER OF PROPERTY

DUPACO COMMUNITY CREDIT UNION
399 PENNSYLVANIA AVENUE
DUBUQUE, IA 52001

EXISTING ZONING

C-1, COMMUNITY AND HIGHWAY SERVICE COMMERCIAL DISTRICT

FIRE SAFETY

APPROVED FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED AS SOON AS CONSTRUCTION COMMENCES. IF PAVING IS NOT INSTALLED PRIOR TO BUILDING CONSTRUCTION COMMENCING AFTER FOOTING INSTALLED, AN APPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING TO EXTEND WITHIN 100 FEET OF ALL PORTIONS OF THE EXTERIOR WALLS SHALL BE PROVIDED AND COMPLY WITH THE REQUIREMENTS OF SECTION 503.2 OF THE IFC.

LEGEND

FEATURES	EXISTING	PROPOSED
Spot Elevation	X 1225.25	X 1225.25
Contour Elevation	X 1225.25	X 1225.25
Fence (Barbed, Field, Hog)	X	X
Fence (Chain Link)	X	X
Fence (Wood)	X	X
Fence (Slit)	X	X
Tree Line	X	X
Tree Stump	X	X
Deciduous Tree \ Shrub	(Symbol)	(Symbol)
Coniferous Tree \ Shrub	(Symbol)	(Symbol)
Communication	(Symbol)	(Symbol)
Overhead Communication	(Symbol)	(Symbol)
Fiber Optic	(Symbol)	(Symbol)
Underground Electric	(Symbol)	(Symbol)
Overhead Electric	(Symbol)	(Symbol)
Gas Main with Size	(Symbol)	(Symbol)
High Pressure Gas Main with Size	(Symbol)	(Symbol)
Water Main with Size	(Symbol)	(Symbol)
Sanitary Sewer with Size	(Symbol)	(Symbol)
Duct Bank	(Symbol)	(Symbol)
Test Hole Location for SUE w/ID	(Symbol)	(Symbol)
Sanitary Manhole	(Symbol)	(Symbol)
Storm Sewer with Size	(Symbol)	(Symbol)
Storm Manhole	(Symbol)	(Symbol)
Single Storm Sewer Intake	(Symbol)	(Symbol)
Double Storm Sewer Intake	(Symbol)	(Symbol)
Fire Hydrant	(Symbol)	(Symbol)
Fire Hydrant on Building	(Symbol)	(Symbol)
Water Main Valve	(Symbol)	(Symbol)
Water Service Valve	(Symbol)	(Symbol)
Well	(Symbol)	(Symbol)
Utility Pole	(Symbol)	(Symbol)
Guy Anchor	(Symbol)	(Symbol)
Utility Pole with Light	(Symbol)	(Symbol)
Utility Pole with Transformer	(Symbol)	(Symbol)
Street Light	(Symbol)	(Symbol)
Yard Light	(Symbol)	(Symbol)
Electric Box	(Symbol)	(Symbol)
Electric Transformer	(Symbol)	(Symbol)
Traffic Sign	(Symbol)	(Symbol)
Communication Pedestal	(Symbol)	(Symbol)
Communication Manhole	(Symbol)	(Symbol)
Fiber Optic Manhole	(Symbol)	(Symbol)
Fiber Optic Handhole	(Symbol)	(Symbol)
Gas Valve	(Symbol)	(Symbol)
Gas Apparatus	(Symbol)	(Symbol)
Fence Post or Guard Post	(Symbol)	(Symbol)
Underground Storage Tank	(Symbol)	(Symbol)
Above Ground Storage Tank	(Symbol)	(Symbol)
Sign	(Symbol)	(Symbol)
Satellite Dish	(Symbol)	(Symbol)
Mailbox	(Symbol)	(Symbol)
Sprinkler Head	(Symbol)	(Symbol)
Irrigation Control Valve	(Symbol)	(Symbol)

UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN COMPRISE ALL SUCH ITEMS IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN ARE IN THE EXACT LOCATION INDICATED EXCEPT WHERE NOTED AS QUALITY LEVEL A.

UTILITY QUALITY SERVICE LEVELS

QUALITY LEVELS OF UTILITIES ARE SHOWN IN THE PARENTHESES WITH THE UTILITY TYPE AND WHEN APPLICABLE, SIZE. THE QUALITY LEVELS ARE BASED ON THE CI / ASCE 38-02 STANDARD.

QUALITY LEVEL (D)

INFORMATION IS DERIVED FROM EXISTING UTILITY RECORDS OR ORAL RECOLLECTIONS.

QUALITY LEVEL (C)

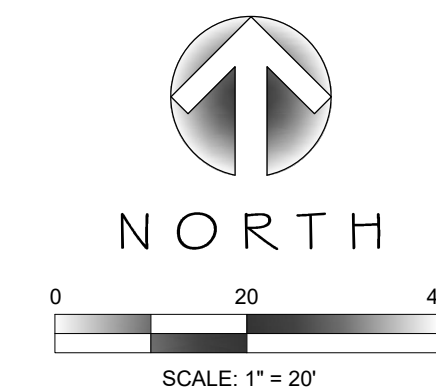
INFORMATION IS OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION WITH QUALITY D INFORMATION.

QUALITY LEVEL (B)

INFORMATION IS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.

QUALITY LEVEL (A)

IS HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES OBTAINED BY ACTUAL EXPOSURE OR VERIFICATION OF PREVIOUSLY EXPOSED SUBSURFACE UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL, AND OTHER CHARACTERISTICS.



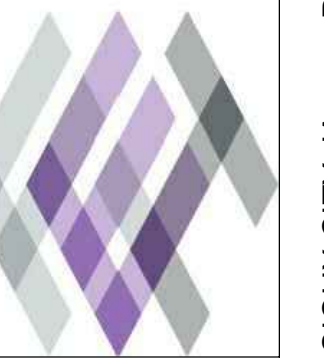
IOWA ONE CALL
1-800-292-8989
TOLL FREE

WWW.IOWAONECALL.COM
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE

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.

Jason A. Ledden, P.E. Date
License Number P24117
My License Renewal Date is December 31, 2022
Pages or sheets covered by this seal:

FEH DESIGN



SNYDER & ASSOCIATES
5010 VOGES ROAD, MADISON WI 53718
WWW.SNYDER-ASSOCIATES.COM

IN ASSOCIATION WITH
EXISTING SITE & DEMOLITION PLAN

PROJECT TITLE
DUPACO COMMUNITY CREDIT UNION

Project Name: **DUPACO**

1090 EAST HICKMAN ROAD
WAUKEE, IOWA

DATE ISSUED: MARCH 16, 2022
REV. NO. DATE
1 MARCH 22, 2022
2 APRIL 5, 2022
3 APRIL 19, 2022
4 MAY 3, 2022
5 MAY 17, 2022

PROJECT NUMBER
121.1153.30

SHEET
C 200

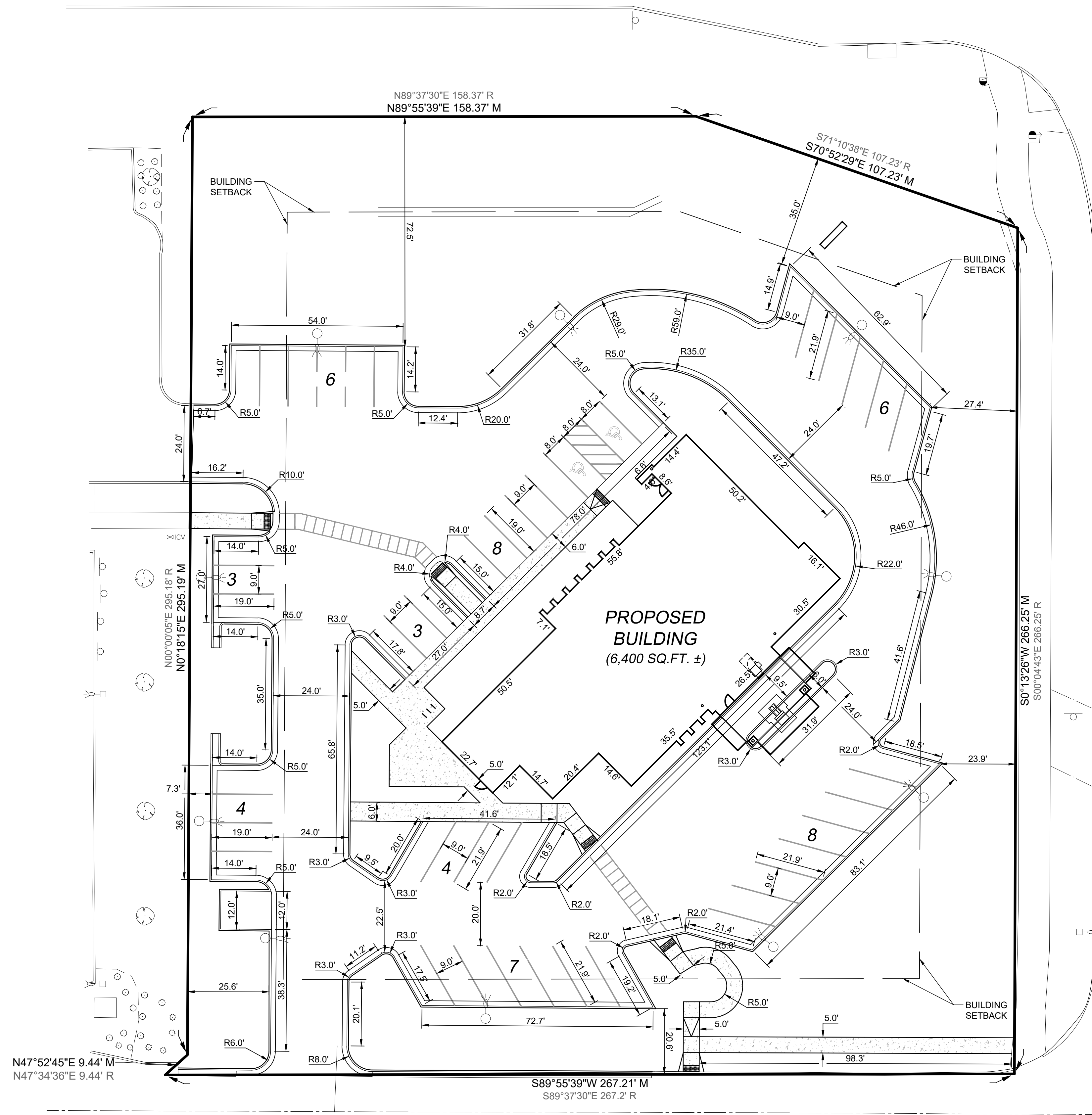
OCCONOMOC, WI
(262) 968-2055

DUBUQUE, IA
(563) 583-4900

DES MOINES, IA
(515) 268-2000

SIOUX CITY, IA
(712) 252-3889

E HICKMAN ROAD



SE ALICE'S ROAD

SITE INFORMATION

ZONING DISTRICT: C-1 - COMMUNITY AND HIGHWAY SERVICE COMMERCIAL DISTRICT
 PD-1 - PLANNED DEVELOPMENT DISTRICT (OVERLAY)
 TOTAL SITE AREA: 76,634 SF / 1.76 ACRES
 TOTAL DISTURBED AREA: 55,436 SF / 1.27 ACRES
 PRO. IMPERVIOUS: 36,880 SF (48.1%) (LOT COVERAGE)
 PAVED AREA: 28,658 SF (37.7% IMPERVIOUS AREA)
 SIDEWALK AREA: 2,016 SF (2.6% IMPERVIOUS AREA)
 BUILDING AREA: 6,400 SF (8.3% IMPERVIOUS AREA)
 PROPOSED PERVIOUS (OPEN SPACE): 39,754 SF (51.9%) (LOT COVERAGE)

PARKING STALL COUNT
 USING THE CITY OF WAUKEE CHAPTER 168 AS A GUIDE
 THE PARKING CALCULATIONS ARE THE FOLLOWING PARKING
 ORDINANCE REQUIRES 3 STALLS PER 1000 SQ.FT.
 OF GROSS FLOOR AREA - 0006/1000 X 3 = 18 STALLS REQUIRED

STANDARD PARKING: 48 STALLS
 IHOP PARKING: 10 STALLS
 ADA PARKING: 2 STALLS WITH LOADING ZONES
 PER CODE, FOR 26-50 TOTAL PARKING STALLS, 2
 HANDICAP PARKING STALLS MUST BE PROVIDED.

2 HANDICAP PARKING STALLS ARE SHOWN ON THE PLANS.

BUILDING HEIGHTS - 40' MAX
 TALLEST POINT ON PROPOSED BUILDING: ± 31'-4"

BUILDING SETBACKS
 FRONT: 30'
 REAR: 30'
 SIDE: 0'

NOTE:

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES ON AND ADJACENT
 TO THE SITE PRIOR TO THE START OF THE PROJECT.

RADI ARE FROM FACE OF CURB

DIMENSIONS ARE FROM FACE OF CURB

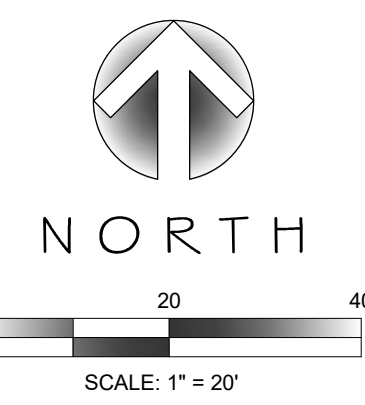
SPOT ELEVATIONS ARE FROM THE FLOW LINE / FACE OF CURB

SPACE BOLLARDS 4' ON CENTER IN FRONT OF LP SALES AREA

UTILITY CONTACT INFORMATION

UTILITY CONTACT FOR MAPPING INFORMATION SHOWN AS RECEIVED FROM THE IOWA ONE
 CALL DESIGN REQUEST SYSTEM. TICKET NUMBER 552107913.

G1-GAS MAIN FO1-FIBER OPTIC W1-WATER MAIN ST-STORM SEWER S-SANITARY SEWER	WAUKEE, CITY OF TIM ROYER 515-978-7920 918-547-2147 TROYER@WAUKEE.ORG
CO1-COMMUNICATION	CENTURYLINK SADIE HULL 918-547-2147 SADIE.HULL@LUMEN.COM
OE1-OVERHEAD ELECTRIC UE1-UNDERGROUND ELECTRIC	MIDAMER-ELEC JAMIE NEER 515-252-8972 MECDSDDESIGNLOCATES@MIDAMERICAN.COM
FO2-FIBER OPTIC	VERIZON JOHN BACHELDER 972-729-7000 ASG.INVESTIGATIONTEAM@ASGINC.US
CLEAR	AUREON NETWORK SERVICES JEFF KLOCKO 515-830-0445 JEFF.KLOCKO@AUREON.COM
CLEAR	XENIA RURAL WATER DISTRICT LAIRD VAN DEE 515-676-2117 LVANDEE@XENIAWATER.ORG
CLEAR	UNITE PRIVATE NETWORKS, LLC JOE KILZER 816-425-3556 UPNGIS@UPNFIBER.COM
CLEAR	MI-FIBER JACK JONES 515-897-9192 JACK@GRM.NET
NO RESPONSE	CONSOLIDATED COMMUNICATIONS JUSTIN GREV 507-386-3606 JUSTIN.GREV@CONSOLIDATED.COM
OVERHEAD COMMUNICATION	MEDIACOM KEVIN COLLINS 515-246-6668 KCOLLINS1@MEDIACOMCC.COM
NO RESPONSE	COMMUNICATION EXPERTS, INC KRISTY MCDERMOTT 515-850-1208 KMCDERMOTT@MYRIADAS.COM
CO-2 COMMUNICATION	ADB COMPANIES ANGIE BACH 638-584-9702 ABACH@ADB-US.COM



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN IOWA

IOWA ONE CALL
 1-800-292-8989
 TOLL FREE

WWW.IOWAONECALL.COM
 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

FEH DESIGN

IN ASSOCIATION WITH

Snyder & Associates

5010 VOGES ROAD, MADISON, WI 53718
 WWW.SNYDER-ASSOCIATES.COM

OCONOMOWOC, WI (262) 968-2055
 DUBUQUE, IA (563) 583-4900
 DES MOINES, IA (515) 268-2000
 SIOUX CITY, IA (712) 252-3889

SHEET TITLE
SITE PLAN

PROJECT TITLE **DUPACO COMMUNITY CREDIT UNION**
 Project Name: **DUPACO**
 1090 EAST HICKMAN ROAD
 WAUKEE, IOWA

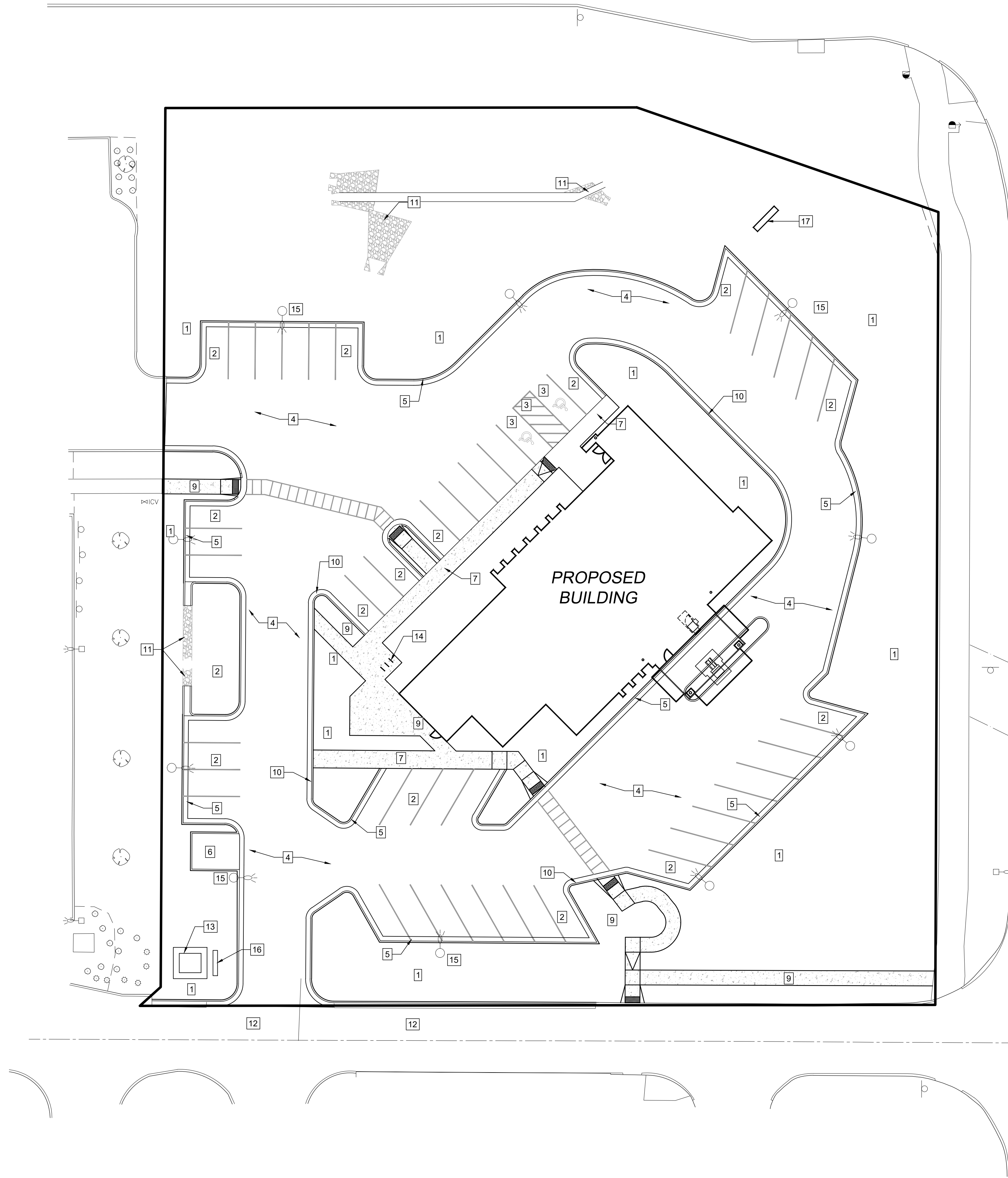
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SHEET
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E HICKMAN ROAD

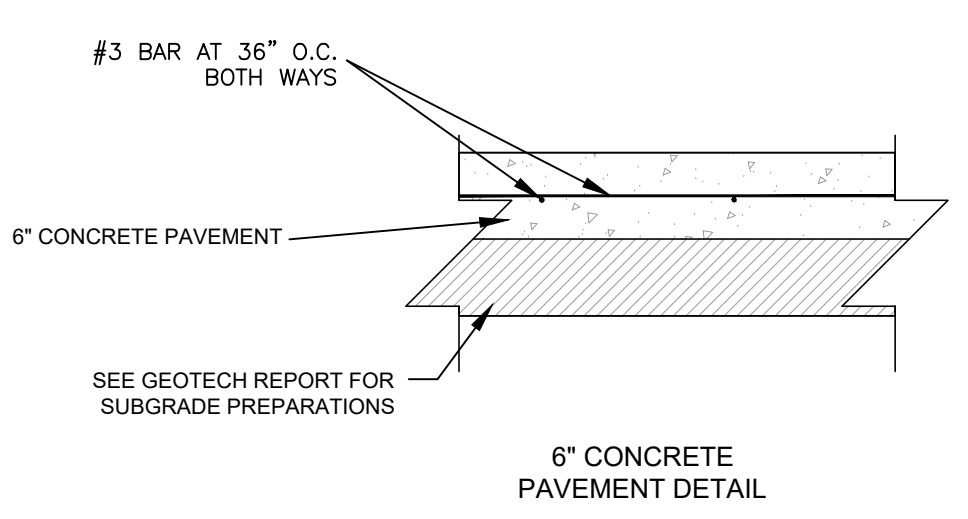
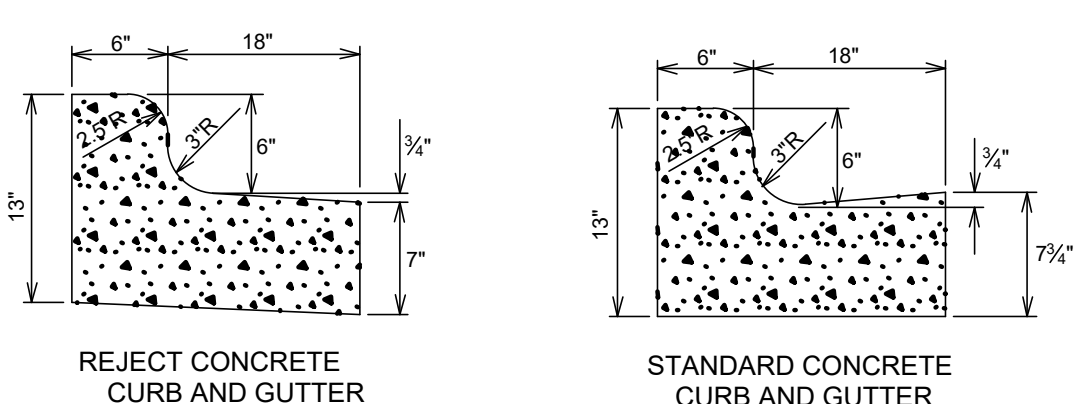
SE ALICE'S ROAD



- SITE PLAN KEYNOTES**
- LANDSCAPE AREA, SEE SHEET L1. ALL GREEN SPACE THAT DOES NOT RECEIVE EROSION MAT SHALL HAVE SOD APPLIED. **-9,508 SQ.FT.**
 - OFF-STREET PARKING STALLS STRIPING - 4' WIDE STALL LINES, USE HIGH VISIBILITY YELLOW PAINT.

SPACES PROVIDED
(53) 8'-0" x 19'-0" GENERAL PARKING
(3) 8'-0" x 19'-0" ACCESSIBLE PARKING
(1) 8'-0" x 19'-0" LOADING ZONE
(1) 5'-0" x 19'-0" LOADING ZONE
 - A.D.A. ACCESSIBLE PARKING SPACE WITH LOADING ZONE. PROVIDE APPROPRIATE STRIPING AND PAVEMENT MARKINGS.
 - 6" DEPTH (MIN.) CONCRETE SLAB-ON-GRADE WITH #3 REBAR 3' O.C. CONCRETE SEALER: TK-26UV **-28,888 SQ.FT.**
 - CONCRETE CURB PER DETAIL.
 - TRASH ENCLOSURE, SEE ARCHITECTURAL PLANS FOR DETAILS.
 - 6" INTEGRAL CONCRETE CURB/ WALK. SEE DETAILS. CONCRETE SEALER: TK-26UV **-1,822 SQ.FT.**
 - 4" CONCRETE SIDEWALK 6' WIDE **-330 SQ.FT.**
 - 4" CONCRETE SIDEWALK 5' WIDE **-830 SQ.FT.**
 - REJECT CURB & GUTTER
 - RIP-RAP AT PIPE DISCHARGE
 - PROTECT EXISTING CONCRETE
 - ELECTRICAL TRANSFORMER, FINAL LOCATION TO BE VERIFIED DURING CONSTRUCTION
 - 3 DUPACO LOGO BIKE RACKS, SUPPLIED BY OWNER
 - PROPOSED 19' HIGH LIGHT POLE WITH 36" DIAMETER CONCRETE BASE LSI INDUSTRIES, MRM-LED-09L-SIL-FIT-50-70CRI-IL
 - TRANSFORMER DISCONNECT PANEL
 - MONUMENT SIGN

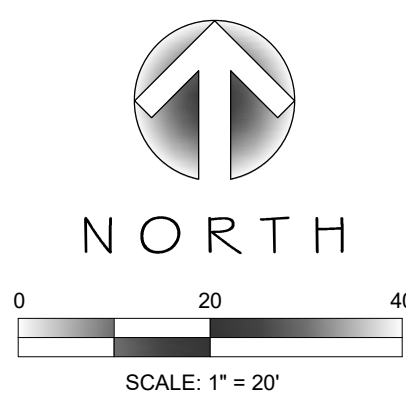
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ALL SIGNAGE SHALL REQUIRE A SEPARATE REVIEW AND PERMIT FROM THE CITY OF WAUKEE COMMUNITY DEVELOPMENT DEPARTMENT.
CONTRACTOR IS RESPONSIBLE FOR CLEANING DIRT AND DEBRIS FROM NEIGHBORING STREETS, DRIVEWAYS, AND SIDEWALKS CAUSED BY CONSTRUCTION ACTIVITIES AT THE END OF EACH WORK DAY AND PRIOR TO A RAIN EVENT.
ANY DAMAGE TO THE PAVEMENT, CURB AND GUTTER, SIDEWALK OR GUTTER PAN ON SE ALICE'S ROAD SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE CITY OF WAUKEE ENGINEERING DEPARTMENT.
ALL DISTURBED AREA SHALL BE SODDED.



NOTES:
LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER.
THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.

CONCRETE CURB AND GUTTER
NOT TO SCALE

CONCRETE PAVEMENT SECTIONS
NOT TO SCALE



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN IOWA

IOWA ONE CALL
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TOLL FREE

WWW.IOWAONECALL.COM
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE

FEH DESIGN

SIOUX CITY, IA (712) 252-3889
DES MOINES, IA (515) 268-2000
DUBUQUE, IA (563) 983-4900
OCOMOYOC, WI (262) 968-2055

IN ASSOCIATION WITH

Snyder & Associates

5010 VOGES ROAD, MADISON, WI 53718
WWW.SNYDER-ASSOCIATES.COM

SHEET TITLE
KEYNOTE SITE PLAN

PROJECT TITLE
DUPACO COMMUNITY CREDIT UNION

Project Name: DUPACO

1090 EAST HICKMAN ROAD
WAUKEE, IOWA

DATE ISSUED: MARCH 16, 2022

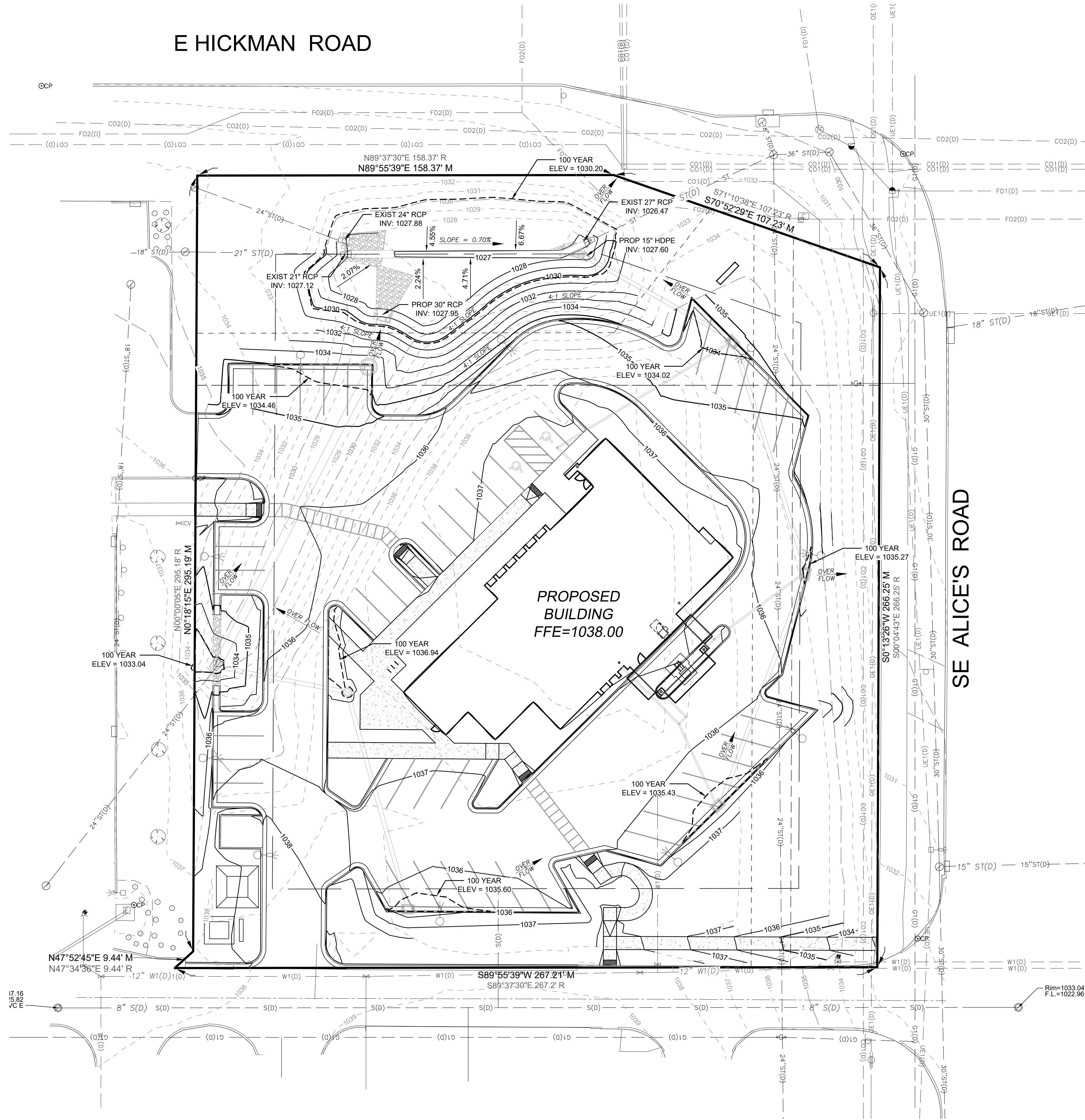
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SHEET
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E HICKMAN ROAD

SE ALICE'S ROAD

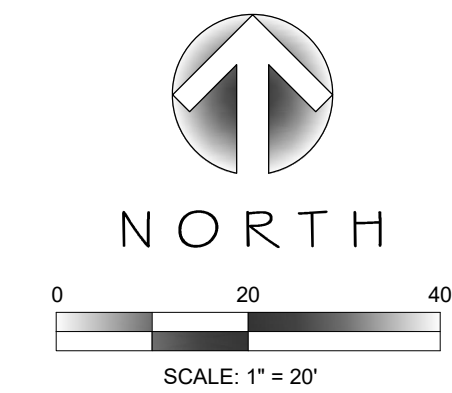


- NOTES**
- ALL SILT FENCE MUST BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE CITY PRIOR TO ANY SITE WORK.
 - SITE EROSION CONTROL MEASURES MUST BE IN PLACE AT ALL TIMES. SHOULD DEVICES BE REMOVED FOR WORK ACCESS, THEY SHALL BE REINSTALLED AT THE END OF EACH WORK DAY UNTIL PAVEMENTS HAVE BEEN INSTALLED AND ALL LANDSCAPE AREAS HAVE BEEN MULCHED AND SODDED. SEEDED AREAS MUST EXHIBIT MINIMUM OF 70% SOIL COVERAGE.
 - REFER TO THE EROSION CONTROL PLAN NOTES AND DETAIL SHEETS FOR MORE INFORMATION.

- CONSTRUCTION SEQUENCE**
- *INSTALL EROSION/SEDIMENT CONTROL MEASURES
 - *INSTALL STORMWATER MANAGEMENT SEDIMENT BASINS
 - *INSTALL STORM SEWER
 - *INSTALL STRUCTURES
 - *TELEVISION AND CLEAN STORM SEWER
 - *INSTALL PAVEMENTS
 - *INSTALL LAWN/ LANDSCAPE
 - *REMOVE EROSION CONTROL MEASURES ONLY AFTER ALL PAVEMENTS HAVE BEEN INSTALLED AND ALL SOILS HAVE BEEN STABILIZED

- NOTES**
- CONTRACTOR TO OBTAIN RIGHT-OF-WAY EXCAVATION PERMIT PRIOR TO BEGINNING SITE WORK.
 - CONSTRUCTION FENCING TO BE INSTALLED AROUND ENTIRE CONSTRUCTION SITE. COORDINATE WITH OWNER FOR FENCING AND GATE LOCATION AND APPROPRIATE SIGNAGE LOCATION.
 - PLAN PREPARED FROM ALTA LAND TITLE SURVEY BY:
MICHAEL BROONER
CIVIL DESIGN ADVANTAGE
515-369-4400
DATED AUGUST 17, 2018
 - CONTRACTOR SHALL LOCATE ALL UTILITIES WHICH MAY AFFECT THIS WORK NOTIFY THE OWNER OF ANY POTENTIAL CONFLICTS.
 - CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED ELEVATIONS PRIOR TO START OF CONSTRUCTION. VERIFY CRITICAL ELEVATIONS TO ENSURE CONFORMANCE WITH GRADING PLAN, PARTICULARLY WITH WALK AND/OR PAVEMENTS TO REMAIN. MEET EXISTING GRADES ALONG STREETS, PROPERTY LINES, AND DRIVEWAY ENTRANCES. RESTORE ALL EXISTING PAVEMENTS THAT REMAIN TO THEIR ORIGINAL, IF NOT BETTER CONDITION. NOTIFY OWNER OF ANY CONFLICTS.
 - UNPAVED AREAS TO BE LANDSCAPED SHALL RECEIVE MINIMUM OF 8" DEPTH TOPSOIL.
 - CONTRACTOR SHALL COORDINATE GRADING AND INSTALLATION OF DRIVES IN R.O.W. WITH APPROPRIATE GOVERNMENT AGENCIES. OBTAIN APPROPRIATE PERMITS FOR GRADING AND DRAINAGE IN ALL R.O.W.
 - REFER TO OWNERS SPECIFICATIONS FOR CURB, APPROACH, AND CONCRETE PROFILES AS WELL AS ADDITIONAL SITE STANDARDS RELATED TO THIS PROJECT.
 - EXCAVATOR IS RESPONSIBLE FOR ALL EROSION CONTROL INSPECTIONS

NOTE FOR GRADING CONTRACTOR
ANY PROPERTY IRONS THAT ARE DISTURBED IN THE GRADING PROCESS SHALL BE RESET BY A LICENSED LAND SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.



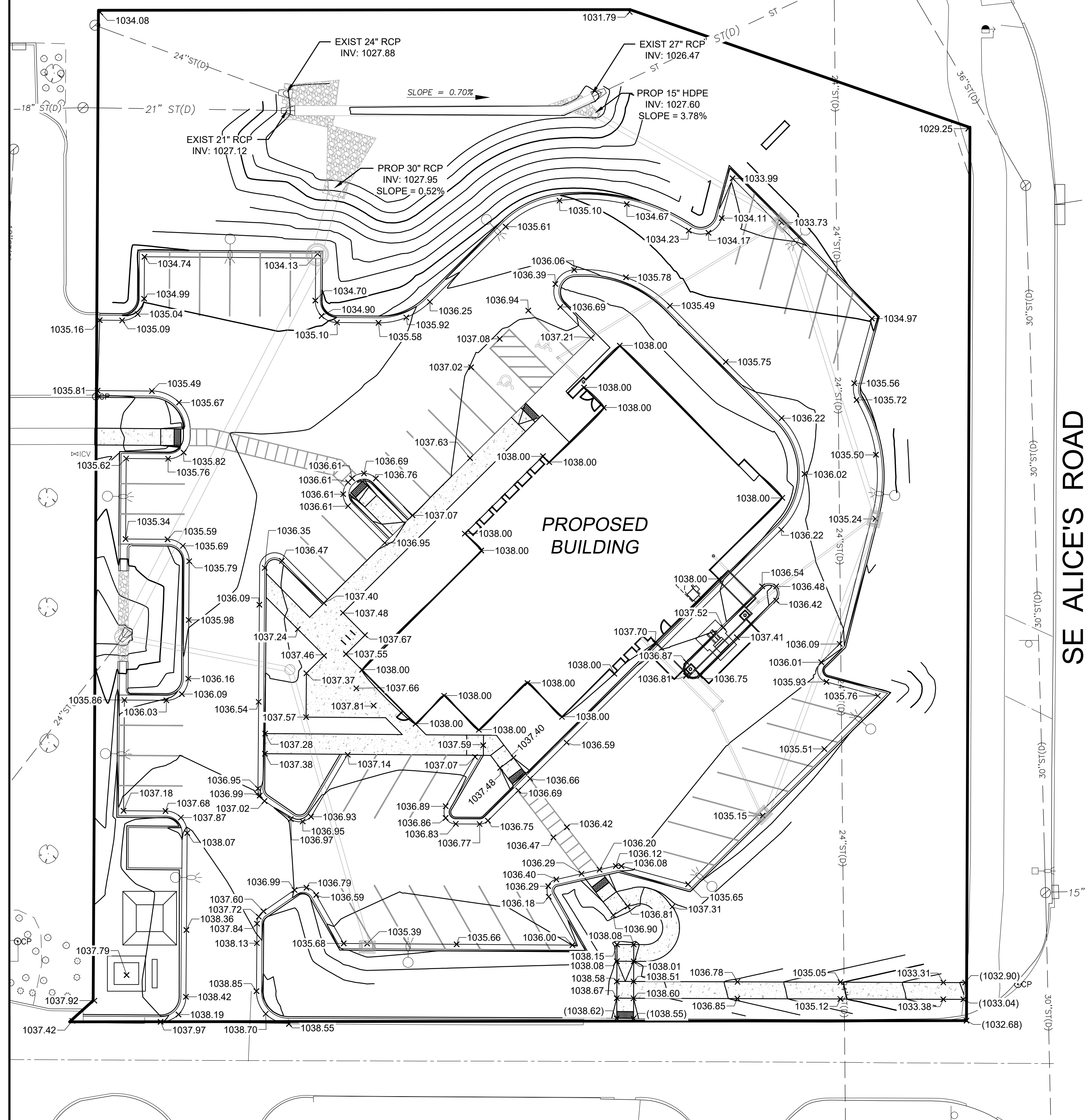
TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN IOWA

IOWA ONE CALL
1-800-292-8989
TOLL FREE

WWW.IOWAONECALL.COM
REQUIRES MIN. OF 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE

E HICKMAN ROAD

NORTH



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN IOWA

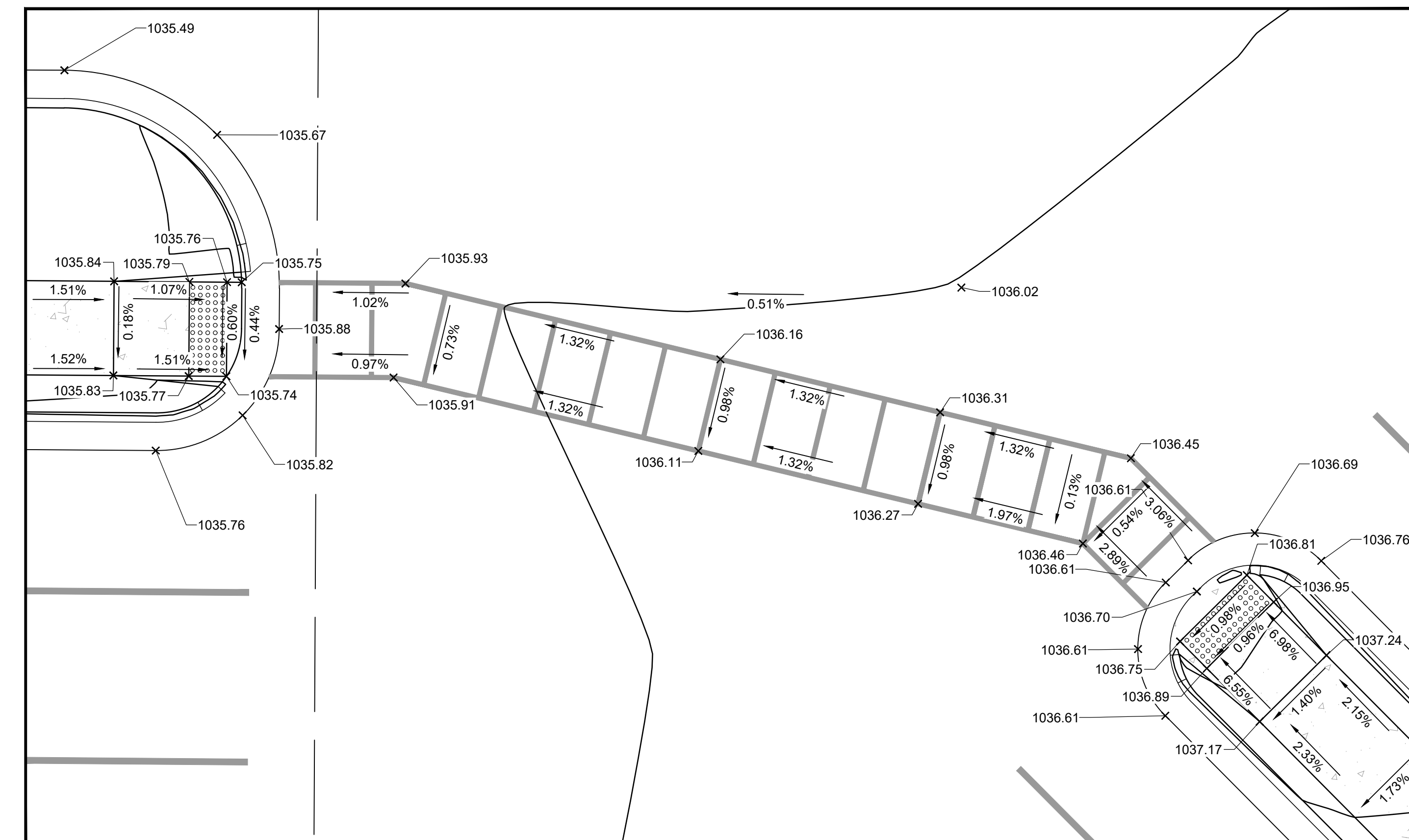
IOWA ONE CALL
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NOTES

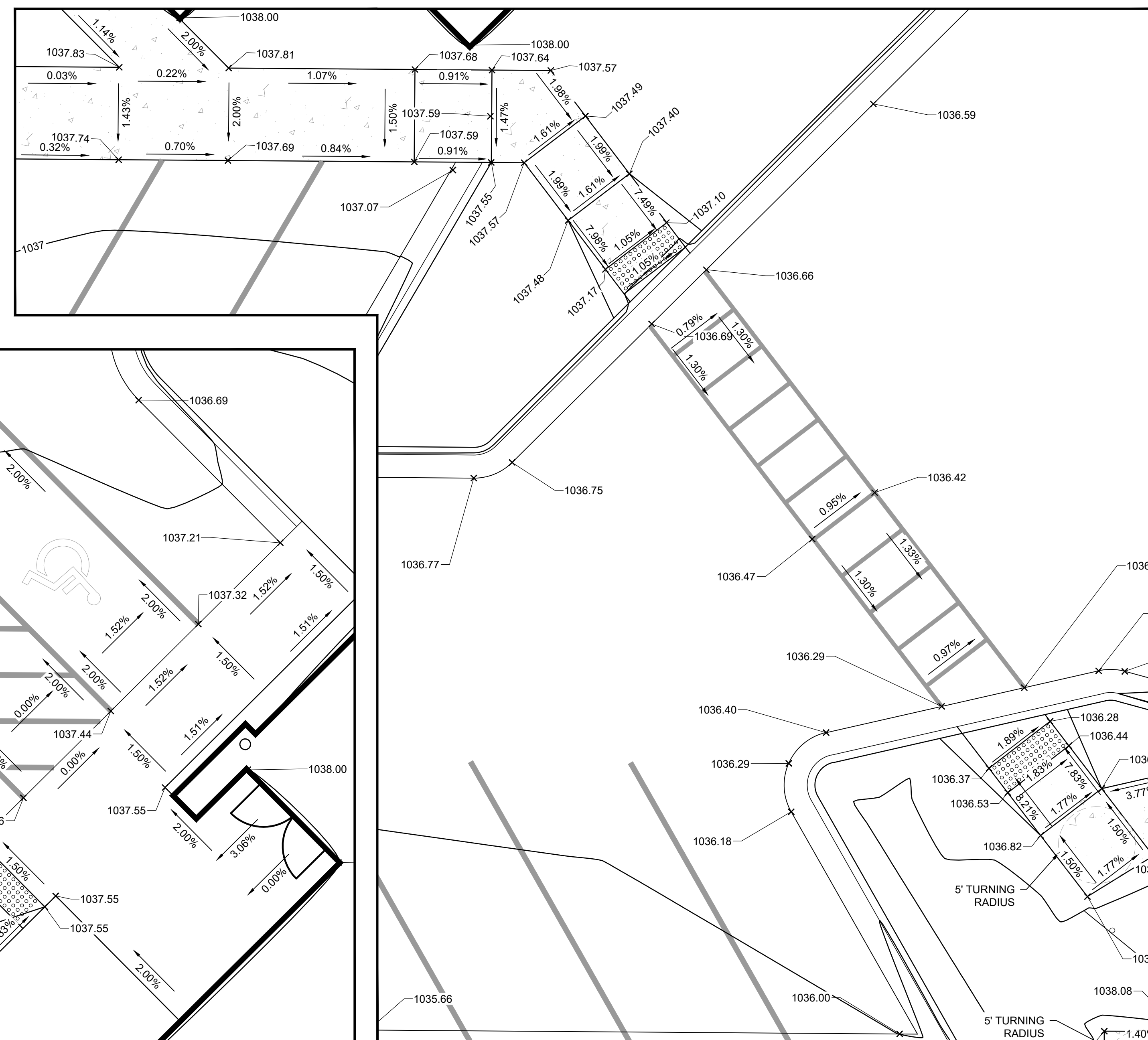
- H.P. = HIGH POINT FOR DRAINAGE
- L.P. = LOW POINT FOR DRAINAGE
- ALL SPOT ELEVATIONS ARE AT THE EDGE OF PAVEMENT (FLAG OF CURB)
- ALL LANDSCAPE AND SOD AREAS SHALL HAVE POSITIVE DRAINAGE
- CONTRACTOR SHALL PROVIDE CONTROL JOINTS, CONSTRUCTION JOINTS AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS AND DRIVEWAYS.
- CONTROL JOINT MAXIMUM DISTANCE: SIDEWALKS - 8' O.C., ALL OTHERS 10' O.C.
- SAW CUT CONTROL JOINTS SHALL BE A MINIMUM OF 1/4 OF THE CONCRETE THICKNESS.
- EXPANSION JOINT MINIMUM DISTANCE: SIDEWALKS - 24' O.C., ALL OTHERS 40' O.C.
- DOWEL ALL EXPANSION JOINTS - 24' O.C.

= REJECT CURB LOCATIONS

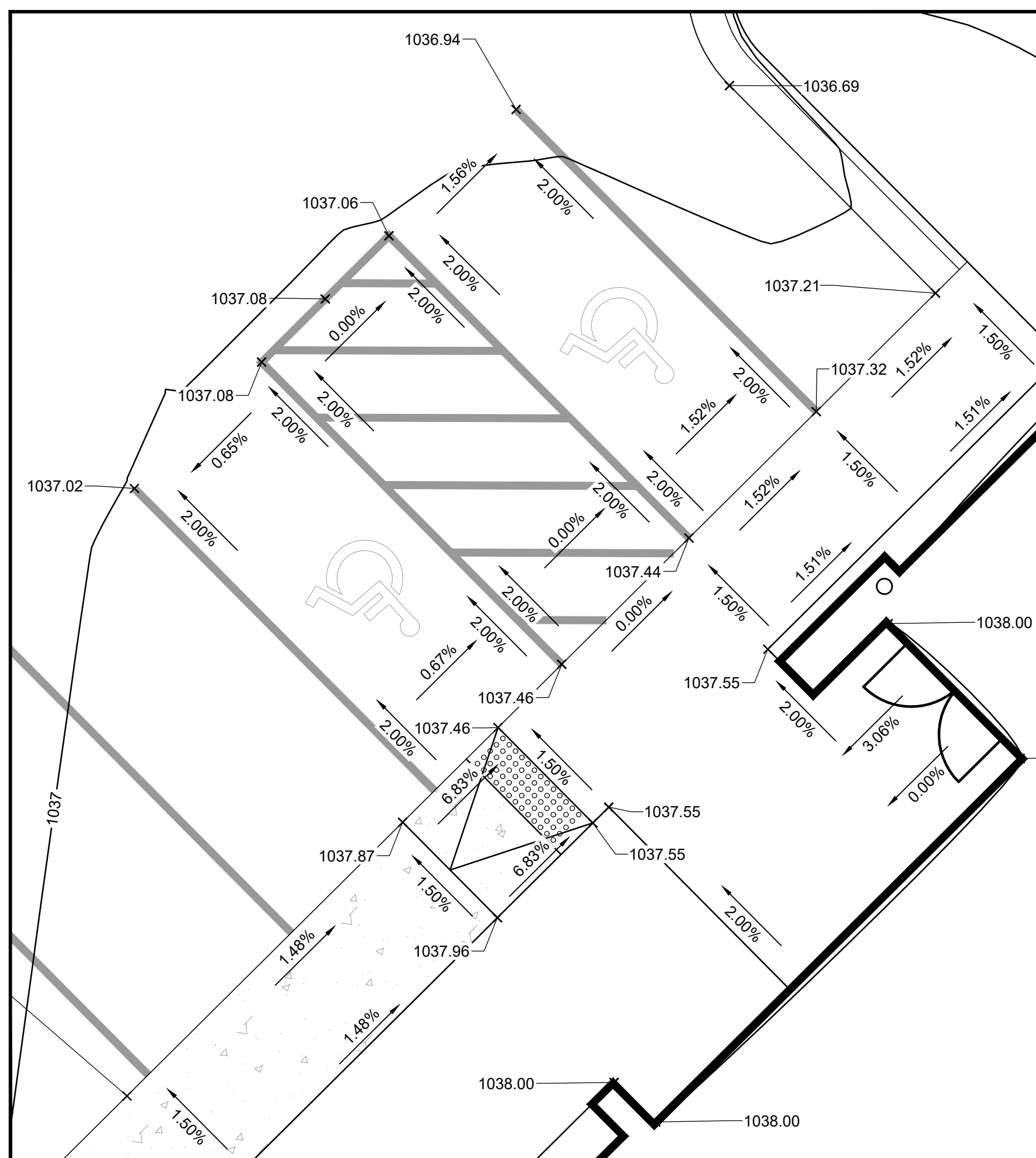


PEDESTRIAN WALKWAY DETAIL
SCALE 1" = 5'

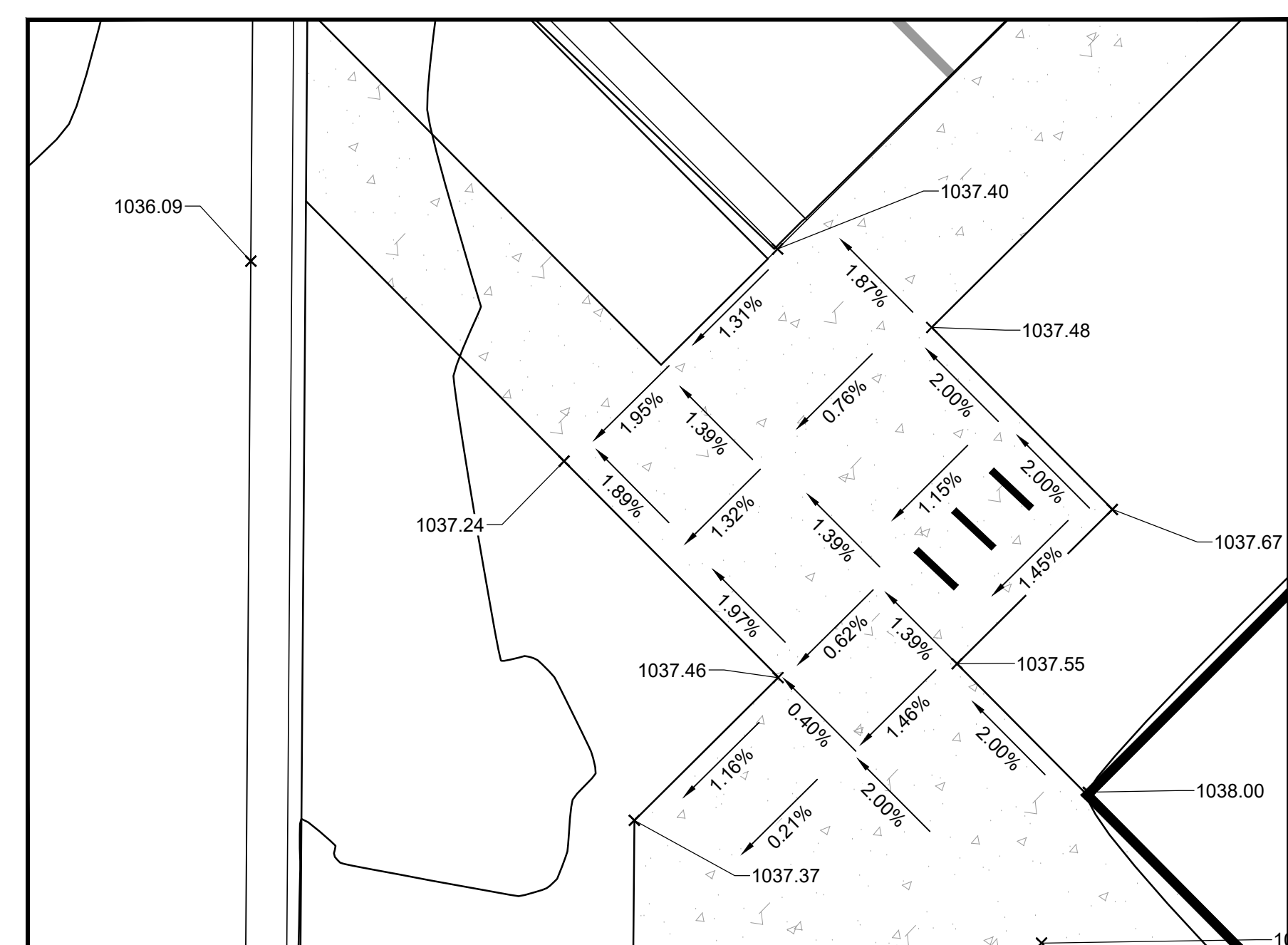
SE ALICES ROAD



SOUTH ACCESS / RAMP DETAIL
SCALE 1" = 5'



ADA PARKING / RAMP DETAIL
SCALE 1" = 5'



ADA PARKING / RAMP DETAIL
SCALE 1" = 5'

FEH DESIGN

SIOUX CITY, IA (712) 252-3689
DES MOINES, IA (515) 268-2000
DUBUQUE, IA (563) 583-4900
OCOMOYOC, WI (262) 968-2055

SNYDER & ASSOCIATES

5010 VOGES ROAD MADISON WI 53718
WWW.SNYDER-ASSOCIATES.COM

SHEET TITLE
SPOT ELEVATION PLAN

PROJECT TITLE
DUPACO COMMUNITY CREDIT UNION
Project Name: DUPACO

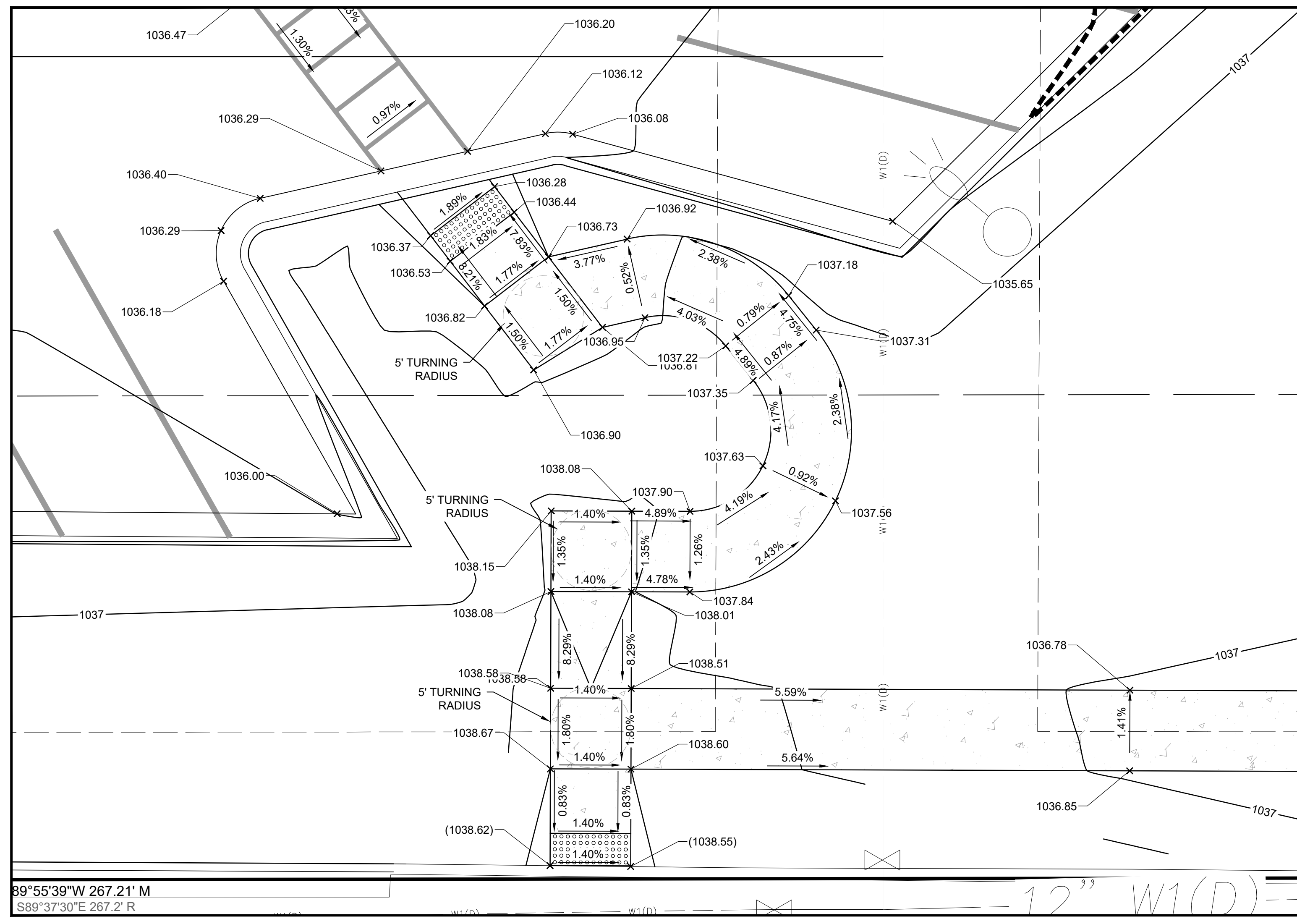
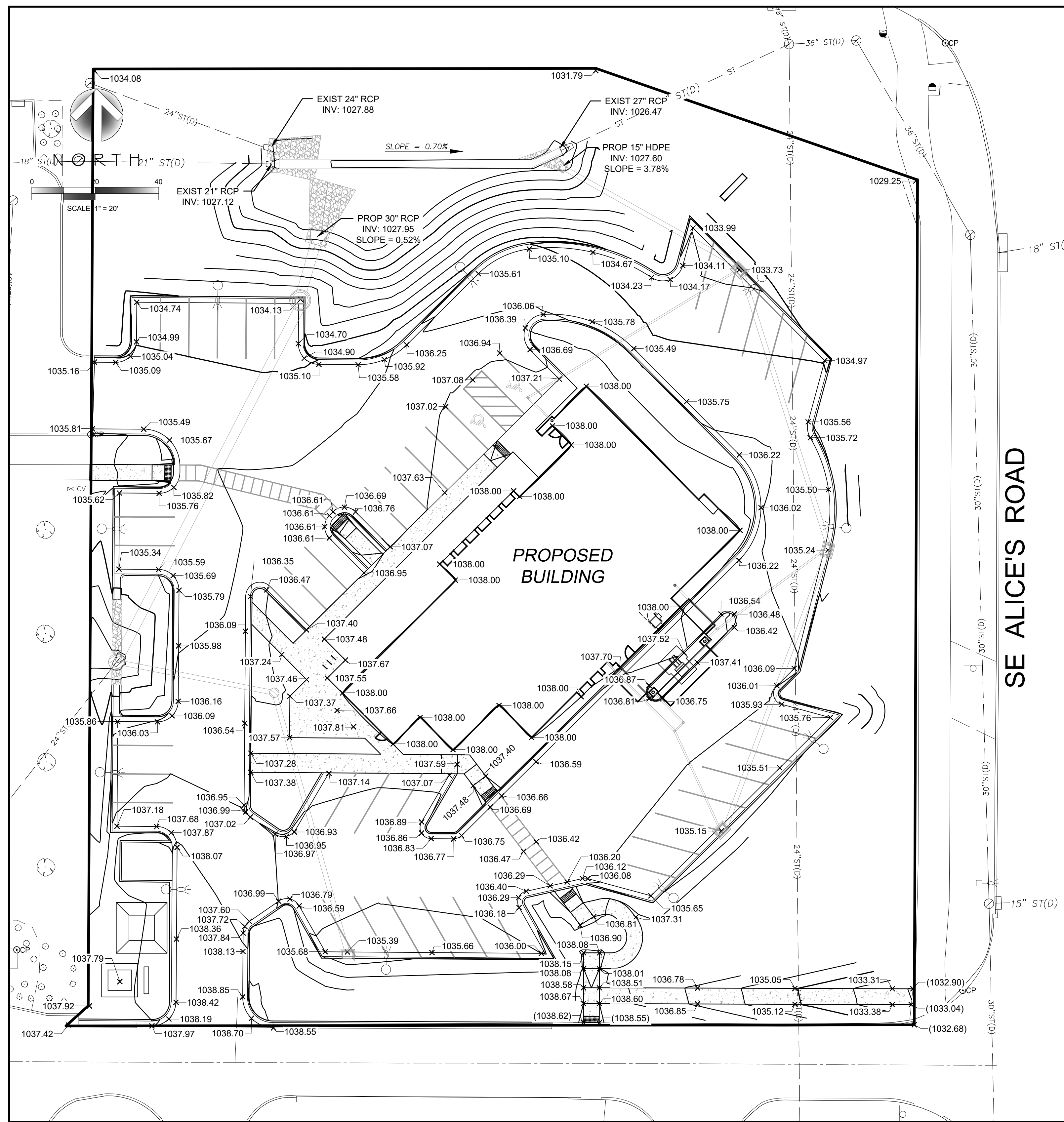
1090 EAST HICKMAN ROAD
WAUKEE, IOWA

DATE ISSUED: MARCH 16, 2022

REV. NO.	DATE
1	MARCH 22, 2022
2	APRIL 5, 2022
3	APRIL 19, 2022
4	MAY 3, 2022
5	MAY 17, 2022

PROJECT NUMBER
121.1153.30

SHEET
C 401



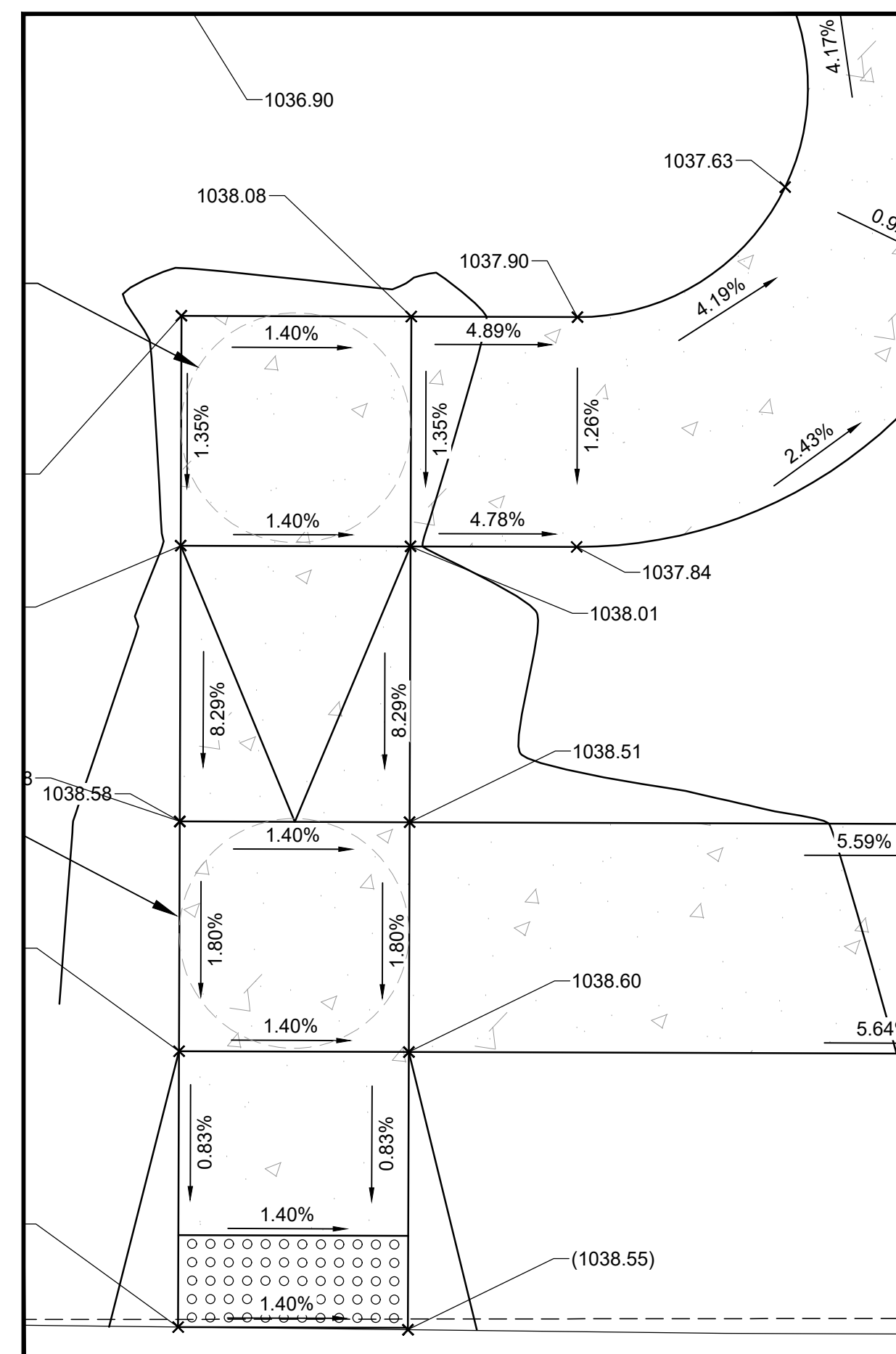
SOUTH ACCESS / RAMP DETAIL
SCALE 1" = 5'

89°55'39"W 267.21' M
S89°37'30"E 267.2' R

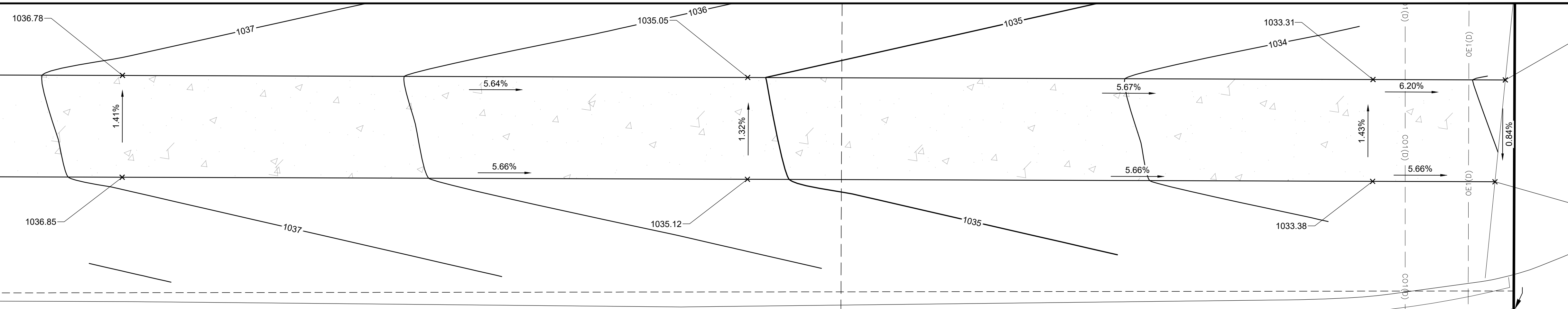
IOWA ONE CALL
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REQUIRES MIN. OF 3 WORK DAYS
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- NOTES**
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 - SAW CUT CONTROL JOINTS SHALL BE A MINIMUM OF 1/4" OF THE CONCRETE THICKNESS.
 - EXPANSION JOINT MINIMUM DISTANCE: SIDEWALKS - 24' O.C., ALL OTHERS 40' O.C.
 - DOWEL ALL EXPANSION JOINTS - 24" O.C.
 - REJECT CURB LOCATIONS



CONNECTION TO TRAIL DETAIL
SCALE 1" = 3'



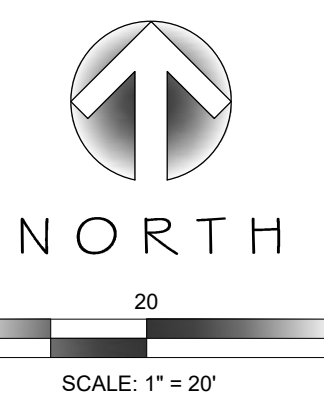
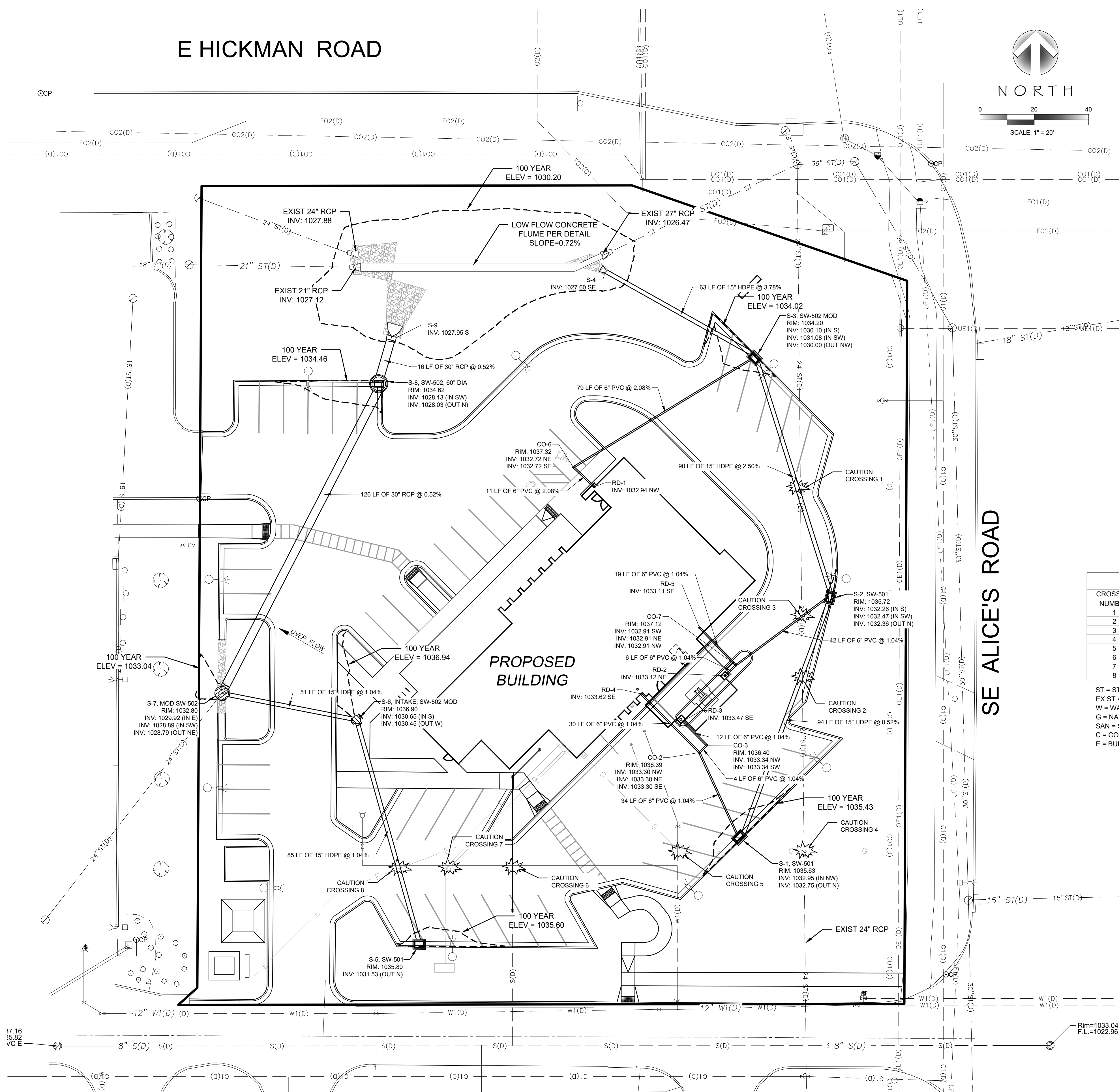
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SHEET
C 402

E HICKMAN ROAD



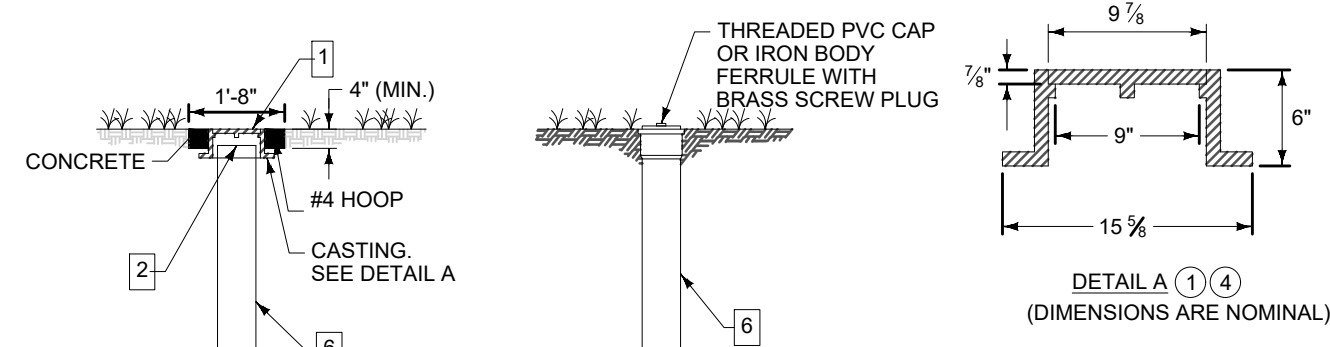
STORM DRAINAGE NOTES

- UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES AND CATCHBASINS CONFORMING TO ASTM C478. FURNISHED WITH WATER STOP RUBBER GASKETS AND PRECAST BASES. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONTINUED, RUBBER "O"-RING GASKETS IN ACCORDANCE WITH ASTM C923. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.
- ALL JOINTS AND CONNECTIONS TO CATCHBASINS OR MANHOLES SHALL BE WATERTIGHT. USE RESILIENT RUBBER SEALS, WATERSTOP GASKETS, OR APPROVED EQUAL. CEMENT MORTAR JOINTS ARE NOT ALLOWED.
- INSTALL CATCHBASIN CASTINGS WITH SPECIFIED TOP ELEVATION AT THE FRONT RIM.
- PVC PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 4 TO 18-INCHES IN DIAMETER. USE SOLID-CORE, SDR-35, ASTM F479 POLYVINYL CHLORIDE (PVC) PIPE FOR DESIGNATED PVC STORM SEWER SERVICES 18 TO 27-INCHES IN DIAMETER. JOINTS FOR ALL STORM SEWERS SHALL HAVE PUSH-ON JOINTS WITH ELECTROMETRIC GASKETS. USE OF SOLVENT CEMENT JOINTS IS ALLOWED FOR BUILDING SERVICES. SOLVENT CEMENT JOINTS IN PVC PIPE MUST INCLUDE USE OF A PRIMER WHICH IS OF CONTRASTING COLOR TO THE PIPE AND CEMENT. PIPE WITH SOLVENT CEMENT JOINTS SHALL BE JOINED WITH PVC CEMENT CONFORMING TO ASTM D2554. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D3231.
- HDPE PIPE: USE SMOOTH INTERIOR, CORRUGATED EXTERIOR HIGH DENSITY POLYETHYLENE PIPE (HDPE) CONFORMING TO THE REQUIREMENTS OF N-12 PIPING (ASTM D3350).
- TESTING: TEST ALL PORTIONS OF STORM SEWER THAT ARE WITHIN 10 FEET OF BUILDINGS, WITHIN 10 FEET OF BURIED WATER LINES, WITHIN 50 FEET OF WATER TABLES, OR THAT PASS THROUGH SOIL OR WATER IDENTIFIED AS BEING CONTAMINATED. TEST ALL FLEXIBLE STORM SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.
- INSTALL DETECTABLE UNDERGROUND MARKING TAPE DIRECTLY ABOVE ALL PVC, POLYETHYLENE, AND OTHER NONCONDUCTIVE UNDERGROUND UTILITIES AT A DEPTH OF 457 MM (18 INCHES) BELOW FINISHED GRADE, UNLESS OTHERWISE INDICATED. BRING THE TAPE TO THE SURFACE AT VARIOUS LOCATIONS IN ORDER TO PROVIDE CONNECTION POINTS FOR LOCATING UNDERGROUND UTILITIES. INSTALL BLUE RHINO TRIVIEW FLEX TEST STATIONS, OR APPROVED EQUAL, WITH BLACK CAPS AT EACH SURFACE LOCATION.
- TRACER WIRE: LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS/MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED IN ACCORD WITH THE PROVISIONS OF THESE CODE SECTIONS AS PER 182.0715(2)(R) OF THE STATUTES.
- THE MINIMUM DEPTH OF COVER FOR BUILDING AND CANOPY ROOF DRAIN LEADERS WITHOUT INSULATION IS 4 FEET. INSULATE ROOF DRAIN LEADERS AT LOCATIONS WHERE THE DEPTH OF COVER IS LESS THAN 4 FEET. PROVIDE A MINIMUM INSULATION THICKNESS OF 2 INCHES. THE INSULATION MUST BE AT LEAST 4 FEET WIDE AND CENTERED ON THE PIPE. INSTALL THE INSULATION BOARD 6 INCHES ABOVE THE TOPS OF THE PIPES ON MECHANICALLY COMPACTED AND LEVELED PIPE BEDDING MATERIAL. USE HIGH DENSITY, CLOSED CELL, RIGID BOARD MATERIAL EQUIVALENT TO DOW STYROFOAM HI-40 PLASTIC FOAM INSULATION.
- CLEANOUTS: INSTALL CLEANOUTS ON ALL ROOF DRAINS IN ACCORDANCE WITH S.P.S. 382.35 (3)(C)(1). THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 10-INCHES AND UNDER IN SIZE. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1981-4, OR APPROVED EQUAL) OVER ALL CLEANOUTS.
- INSTALL ALL PIPE WITH THE ASTM IDENTIFICATION NUMBERS ON THE TOP FOR INSPECTION. COMMENCE PIPE LAYING AT THE LOWEST POINT IN THE PROPOSED SEWER LINE. LAY THE PIPE WITH THE BELL END OF THE PIPE POINTING UPGRADE. WHEN THE POINTING UPGRADE, WHEN CONNECTING TO AN EXISTING PIPE, UNCOVER THE EXISTING PIPE IN ORDER TO ALLOW ANY ADJUSTMENTS IN THE PROPOSED LINE AND GRADE BEFORE LAYING ANY PIPE. DO NOT LAY PIPES IN WATER OR WHEN THE TRENCH CONDITIONS ARE UNSUITABLE FOR SUCH WORK.

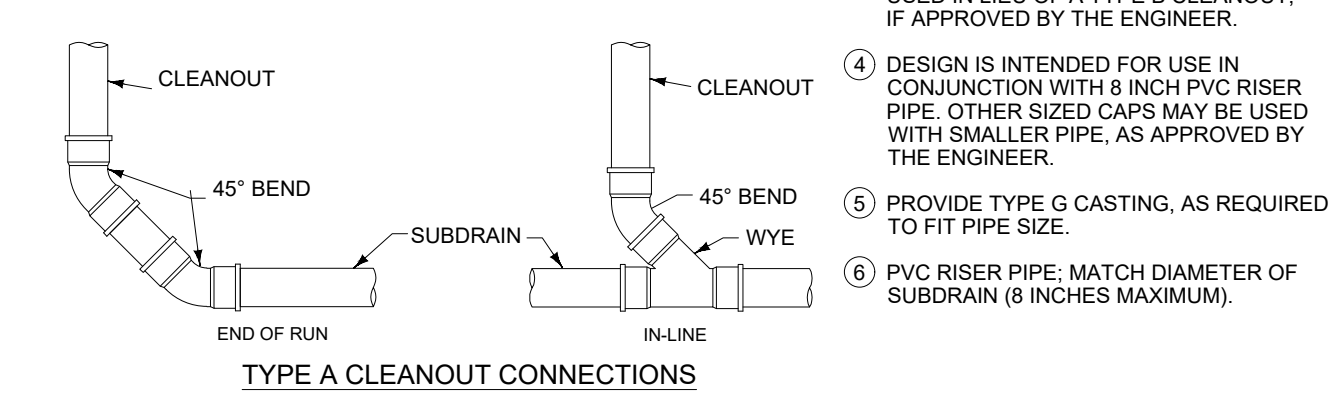
STRUCTURE NUMBER	STRUCTURE TYPE	STRUCTURE CASTING
S-1	---	SW-501 SW-603 TYPE R
S-2	---	SW-501 SW-603 TYPE R
S-3	48"	SW-502 MOD SW-603 TYPE R
S-4	---	12" FES SW-501 SW-603 TYPE R
S-5	---	12" FES SW-501 SW-603 TYPE R
S-6	48"	SW-502 MOD SW-604 TYPE 3B
S-7	---	SW-501 SW-603 TYPE R
S-8	60"	SW-502 MOD SW-604 TYPE 3B
S-9	---	30" FES

CROSSING NUMBER	TOP OF TOP PIPE	INVERT OF TOP PIPE	TOP OF BOTTOM PIPE	INVERT OF BOTTOM PIPE	CLEARANCE
1	ST = 1031.86 ±	ST = 1030.61 ±	EX ST = 1029.10 ±	EX ST = 1027.10 ±	1.51'
2	ST = 1033.65 ±	ST = 1032.40 ±	EX ST = 1030.88 ±	EX ST = 1028.88 ±	1.52'
3	ST = 1033.08 ±	ST = 1032.58 ±	EX ST = 1030.30 ±	EX ST = 1028.30 ±	2.28'
4	G = 1034.61 ±	G = 1033.86 ±	EX ST = 1031.79 ±	EX ST = 1029.79 ±	2.07'
5	G = 1032.95 ±	G = 1033.70 ±	W = 1030.20 ±	W = 1029.70 ±	3.50'
6	W = 1031.59 ±	W = 1031.09 ±	SAN = 1030.65 ±	SAN = 1029.52 ±	0.24' (DIP 1.5' BELOW SAN)
7	C = 1034.63 ±	C = 1034.36 ±	W = 1031.13 ±	W = 1030.63 ±	3.25'
8	E = 1034.73 ±	E = 1034.48 ±	W = 1031.23 ±	W = 1030.73 ±	3.25'

ST = STORM
EX ST = EXISTING STORM
W = WATER
G = NATURAL GAS
SAN = SANITARY
C = COMMUNICATION
E = BURIED ELECTRIC

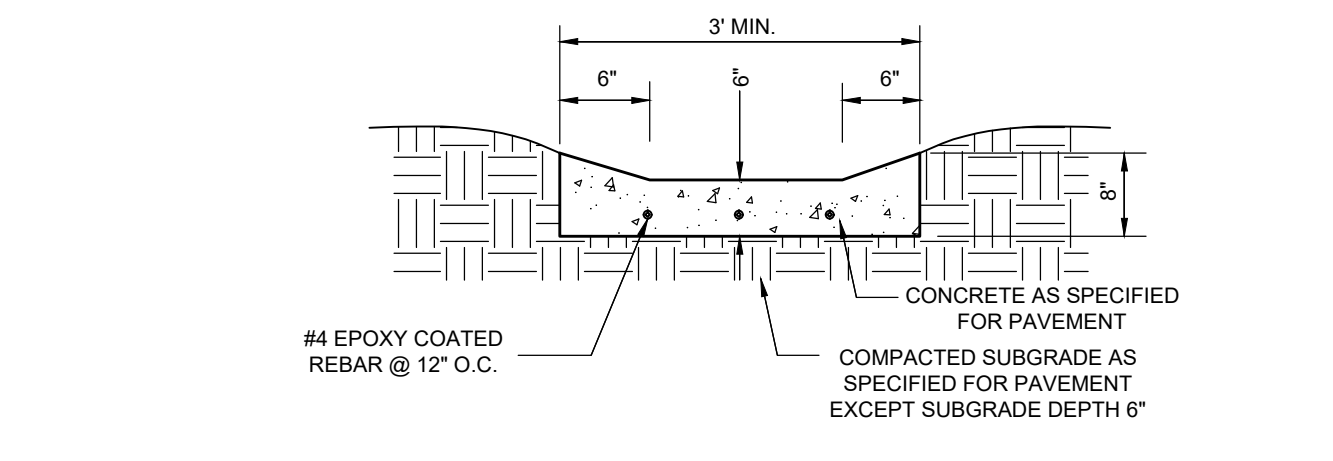


- USE IN NON-TRAFFIC AREAS.
- LIGHT DUTY CASTING, LABEL LID WITH "STORM" OR "STORM C.O."
 - DO NOT ALLOW CASTING TO BEAR ON TOP OF RISER PIPE. PROVIDE 2 INCH CLEARANCE, MINIMUM.
 - A MANUFACTURED CLEANOUT MAY BE USED IN LIEU OF A TYPE B CLEANOUT, IF APPROVED BY THE ENGINEER.
 - DESIGN IS INTENDED FOR USE IN CONJUNCTION WITH 4 INCH PVC RISER PIPE. OTHER SIZES CAPS MAY BE USED WITH SMALLER PIPE, AS APPROVED BY THE ENGINEER.
 - PROVIDE TYPE G CASTING, AS REQUIRED TO FIT PIPE SIZE.
 - PVC RISER PIPE: MATCH DIAMETER OF SUBDRAIN (8 INCHES MAXIMUM).

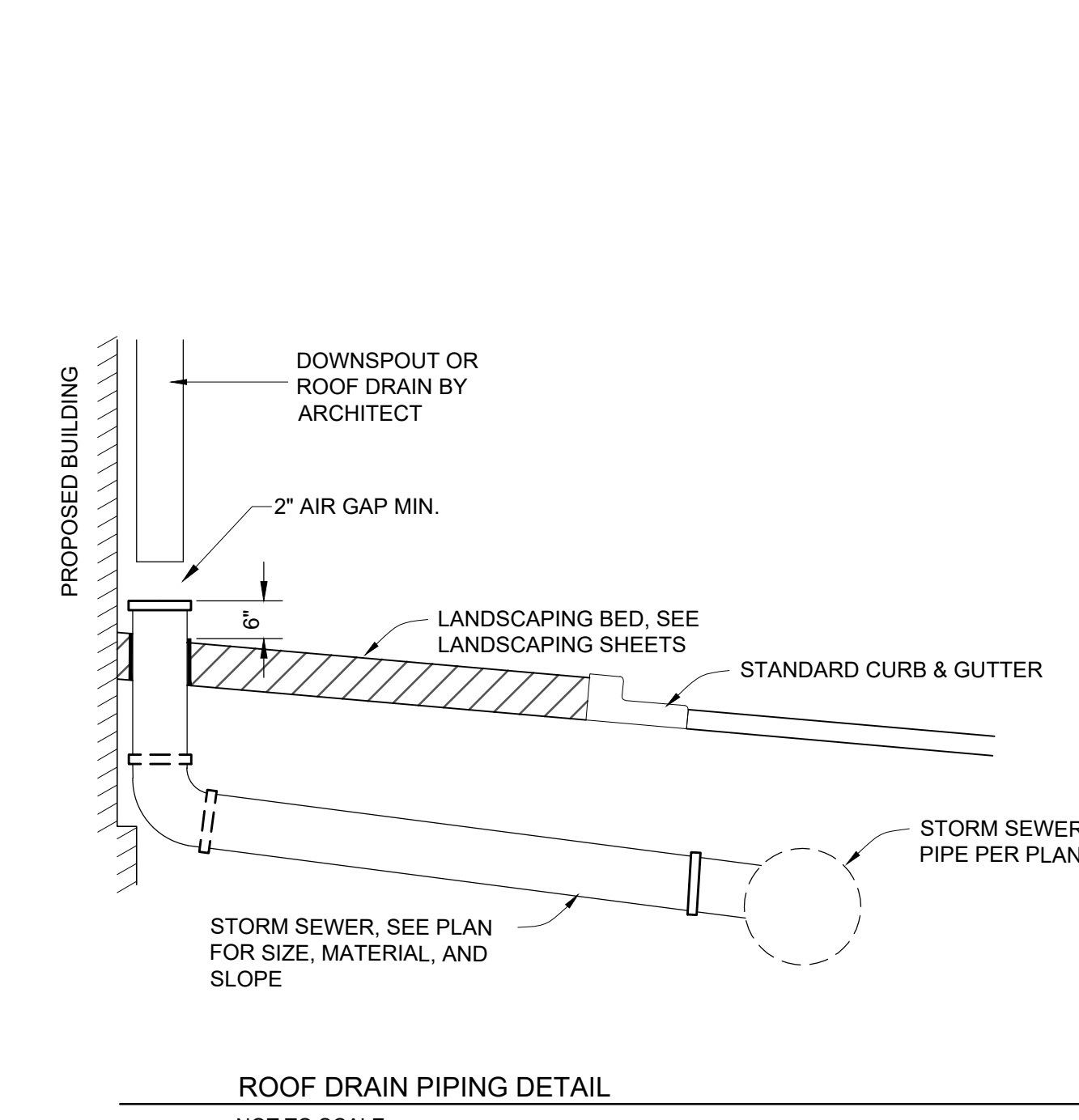


STORM SEWER CLEANOUT
NOT TO SCALE

STRUCTURE NUMBER	PIPE DIAMETER (INCHES)	RIP-RAP SIZE	LENGTH (L) FEET (MIN.)	WIDTH (W) FEET (MIN.)	THICKNESS (T) FEET (MIN.)
S-4	12" HDPE	EROSION STONE	6'	6'	1.20'
S-9	30" RCP	EROSION STONE	20'	15'	1.20'

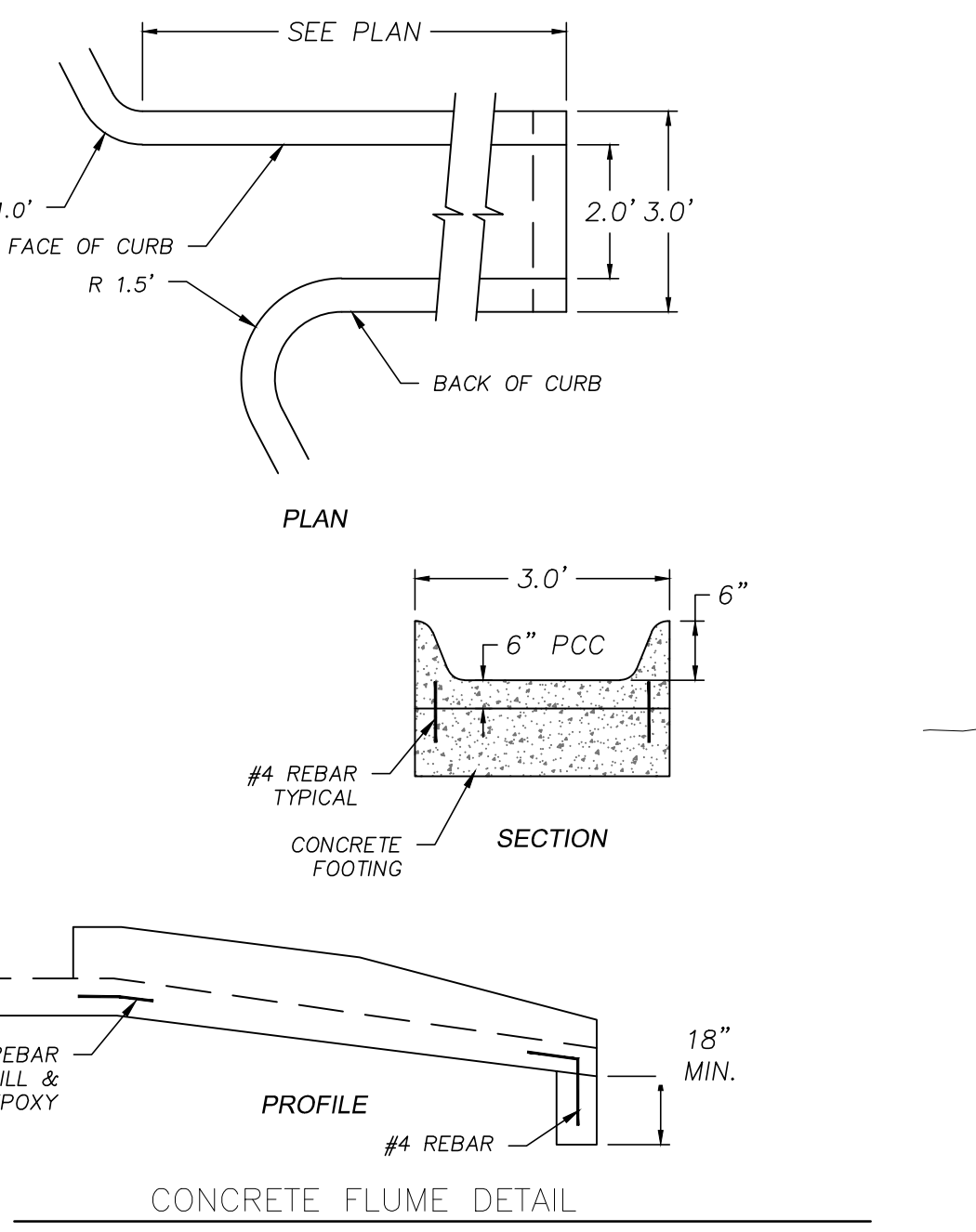


LOW FLOW BASIN FLUME
NOT TO SCALE

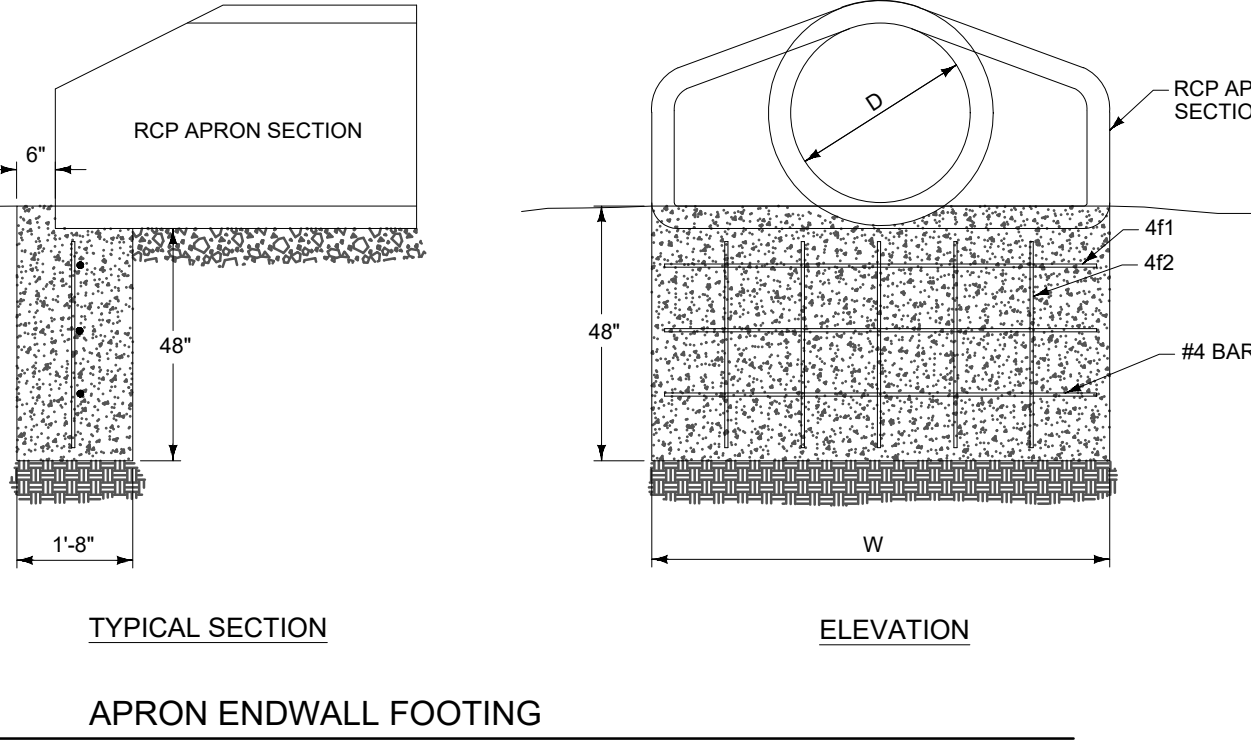


ROOF DRAIN PIPING DETAIL
NOT TO SCALE

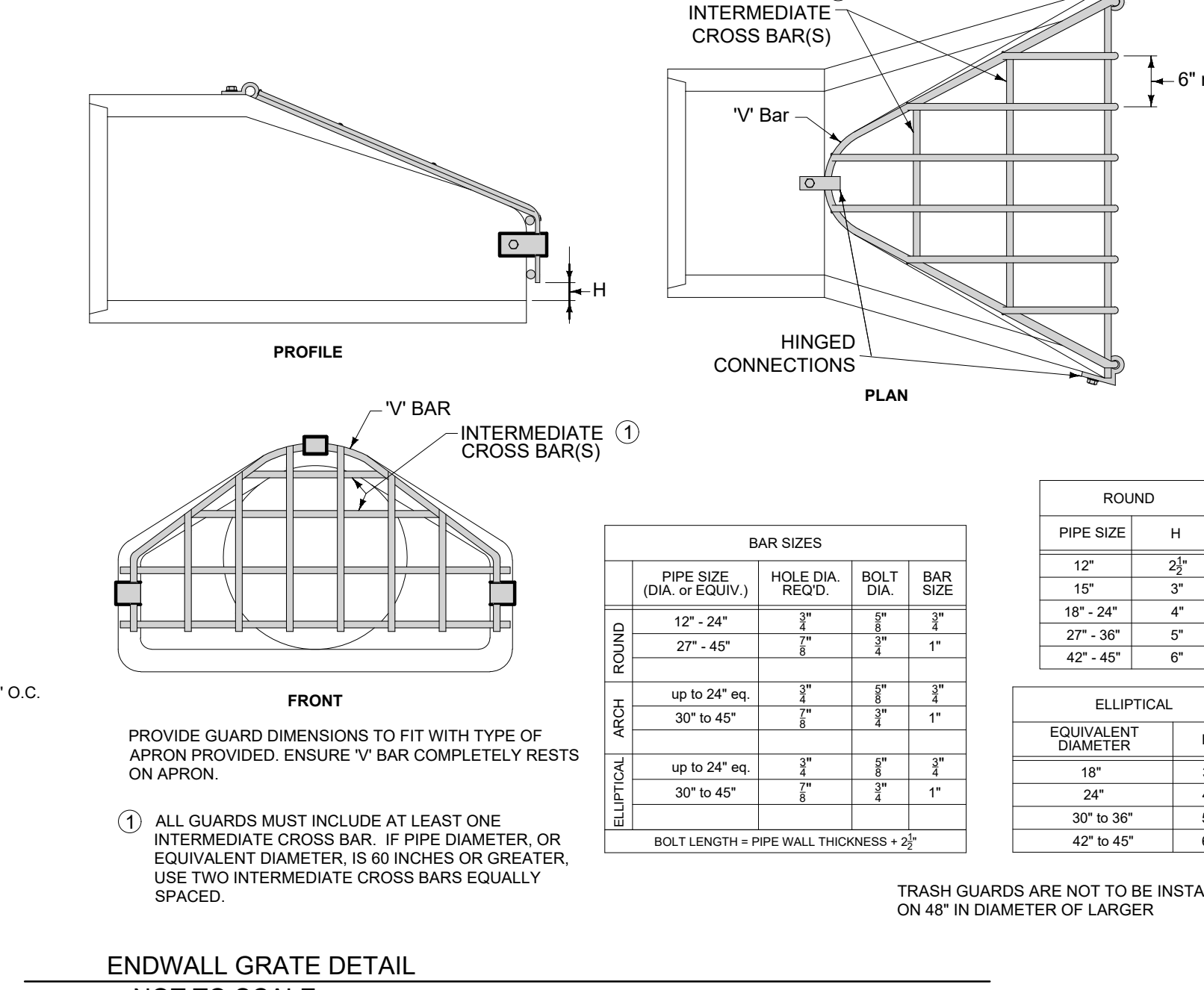
D	W	Mark	Size	Length	Count	D	W	Mark	Size	Length	Count
12"	2'-4"	411	4	2'-0"	3	48"	7'-10"	411	4	7'-6"	3
12"	2'-4"	412	4	3'-6"	2	48"	7'-10"	412	4	3'-6"	6
15"	2'-10 1/2"	411	4	2'-6 1/2"	3	54"	8'-5"	411	4	8'-1"	3
15"	2'-10 1/2"	412	4	3'-8"	2	54"	8'-5"	412	4	3'-8"	6
18"	3'-5"	411	4	3'-1"	3	60"	8'-11"	411	4	8'-7"	3
18"	3'-5"	412	4	3'-8"	3	60"	8'-11"	412	4	3'-8"	6
24"	4'-4"	411	4	4'-2"	3	66"	8'-11"	411	4	8'-7"	3
24"	4'-4"	412	4	3'-8"	3	66"	8'-11"	412	4	3'-8"	6
30"	5'-7"	411	4	5'-3"	3	72"	10'-4"	411	4	9'-8"	3
30"	5'-7"	412	4	3'-8"	4	72"	10'-4"	412	4	3'-8"	7
36"	6'-5"	411	4	6'-4"	3	78"	10'-7"	411	4	10'-3"	3
36"	6'-5"	412	4	3'-8"	5	78"	10'-7"	412	4	3'-8"	7
42"	7'-3"	411	4	6'-11"	3	84"	11'-1"	411	4	10'-9"	3
42"	7'-3"	412	4	3'-8"	5	84"	11'-1"	412	4	3'-8"	8



CONCRETE FLUME DETAIL
NOT TO SCALE



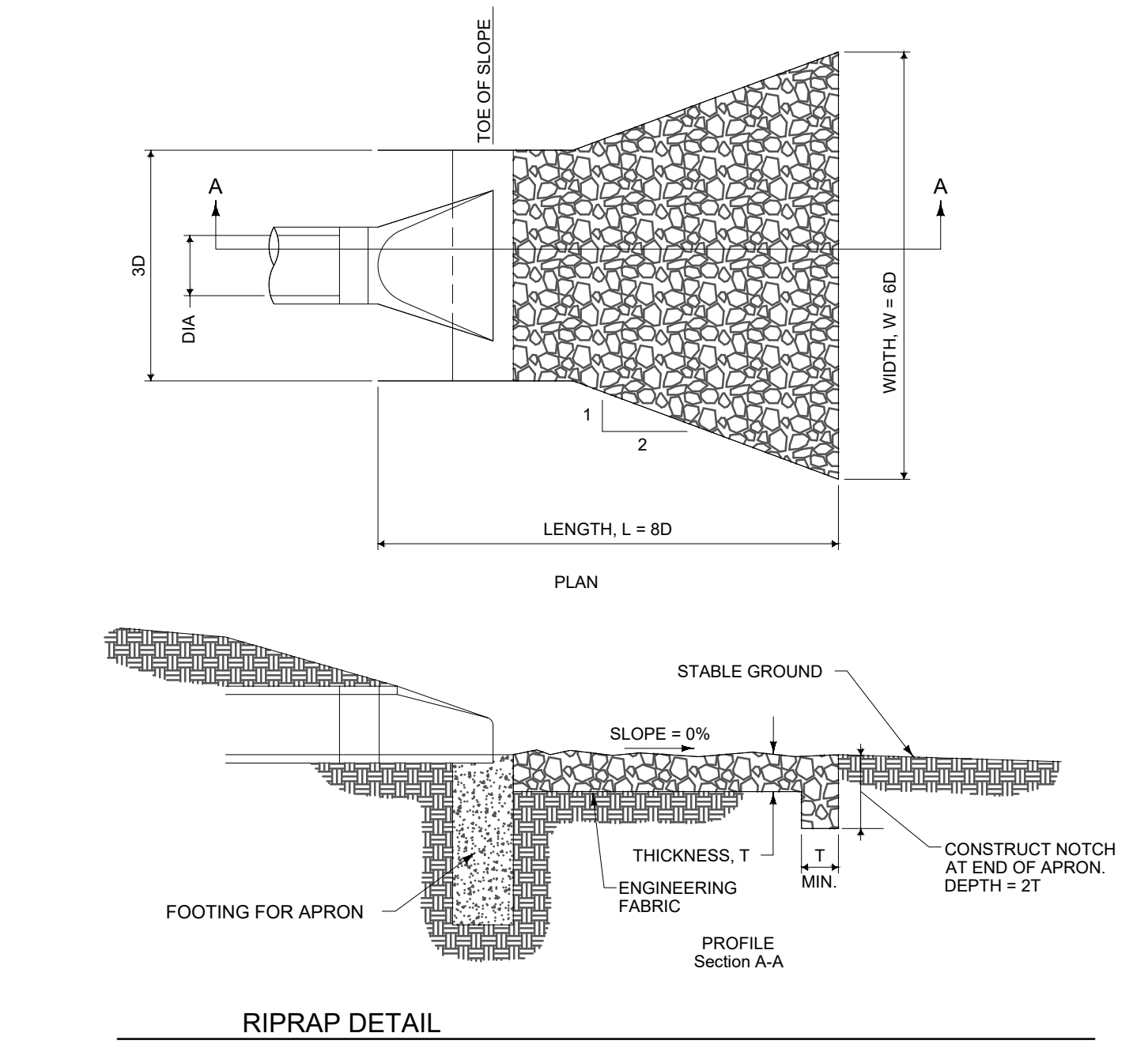
APRON ENDWALL FOOTING
NOT TO SCALE



ENDWALL GRATE DETAIL
NOT TO SCALE

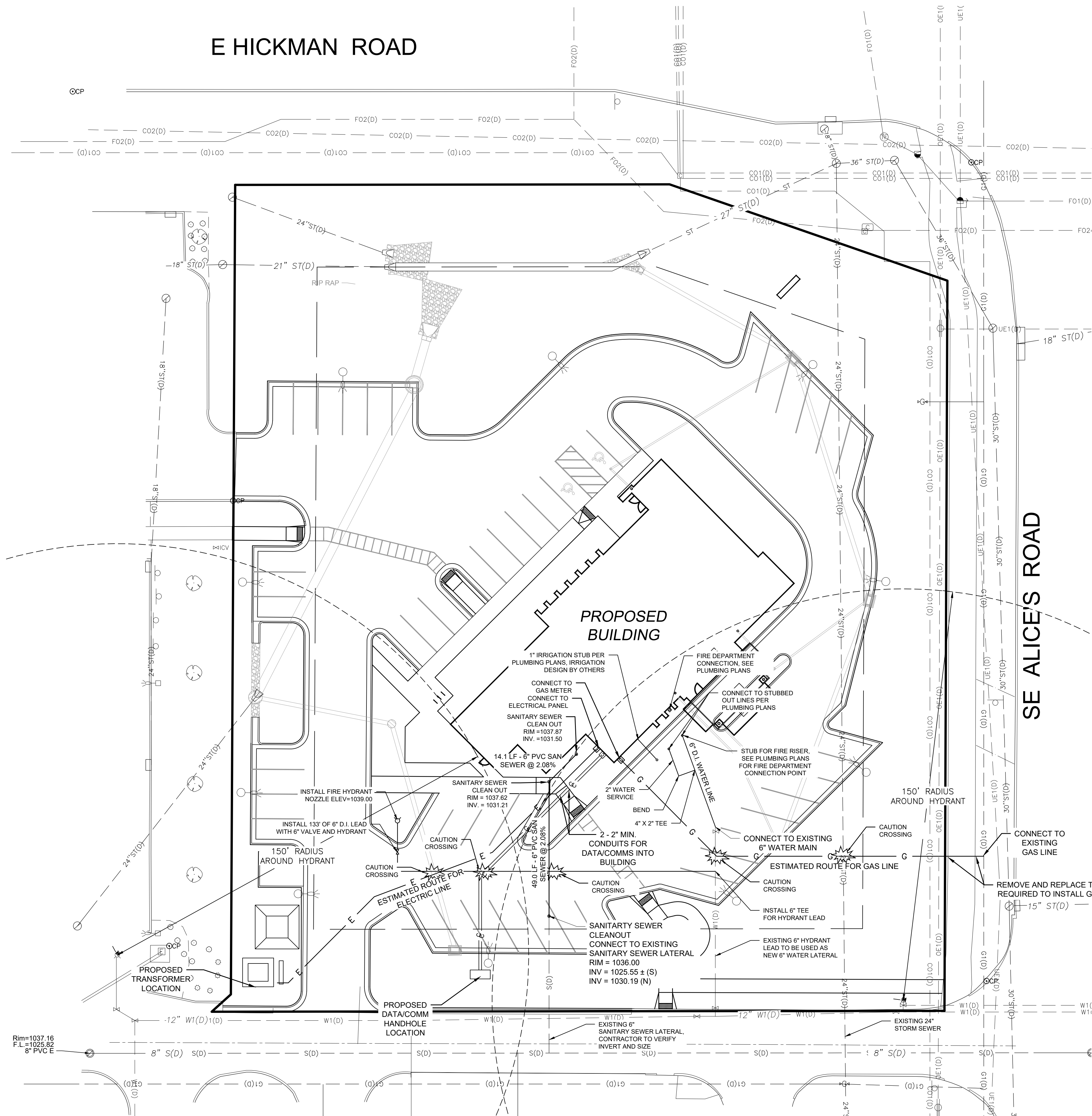
PIPE SIZE (DIA. OF EQUIV.)	HOLE DIA. (REQ'D.)	BOLT DIA.	BAR SIZE
12"	12"	1/2"	#4
18"	18"	3/4"	#5
24"	24"	1"	#6
30"	30"	1 1/4"	#8
36"	36"	1 1/2"	#9
42"	42"	1 3/4"	#10

PROVIDE GUARD DIMENSIONS TO FIT WITH TYPE OF APRON PROVIDED. ENSURE V BAR COMPLETELY RESTS ON APRON.
 1. ALL GUARDS MUST INCLUDE AT LEAST ONE INTERMEDIATE CROSS BAR, IF PIPE DIAMETER, OR EQUIVALENT DIAMETER, IS 60 INCHES OR GREATER. USE TWO INTERMEDIATE CROSS BARS EQUALLY SPACED.
 TRASH GUARDS ARE NOT TO BE INSTALLED ON 48" IN DIAMETER OF LARGER

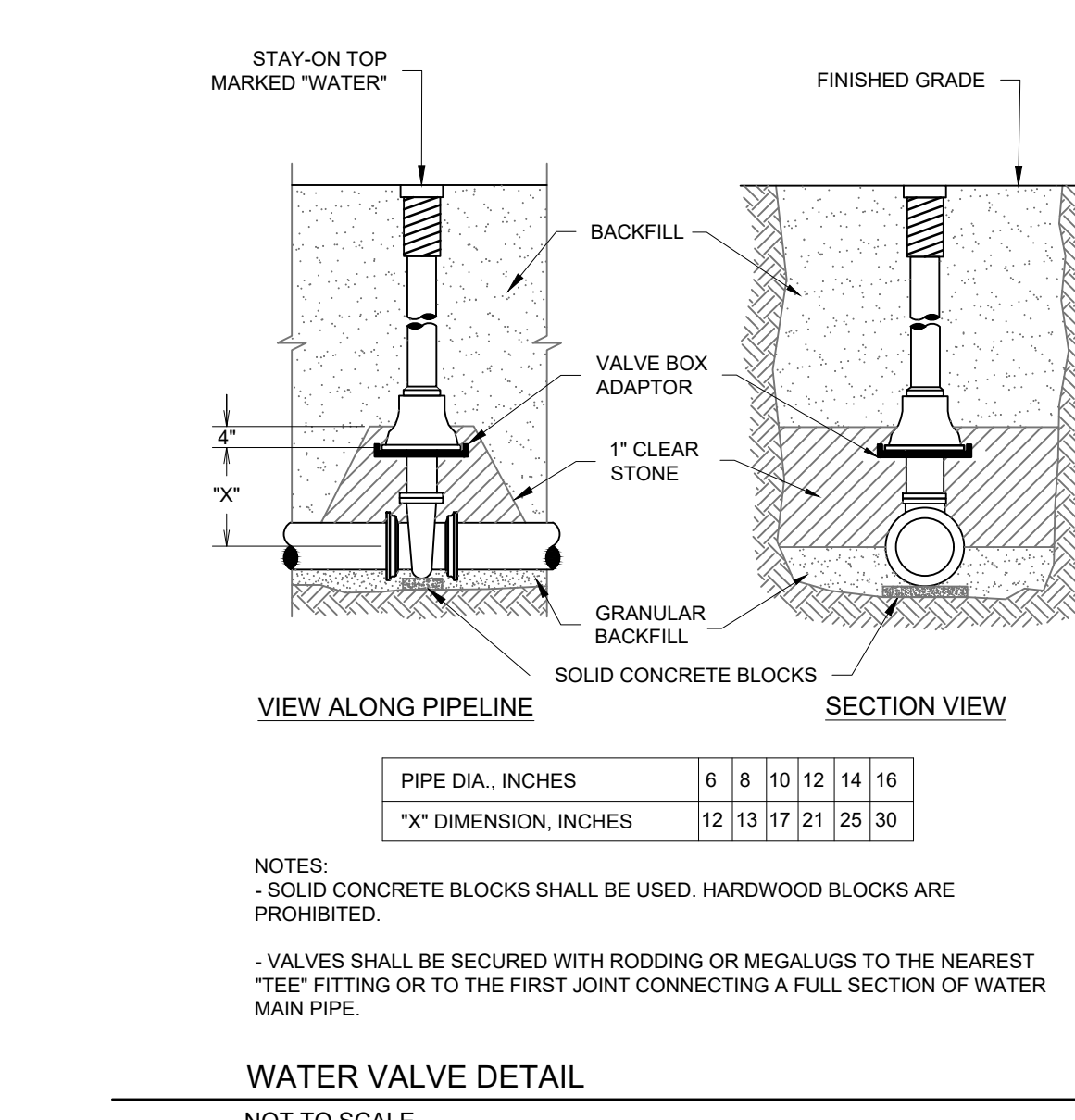
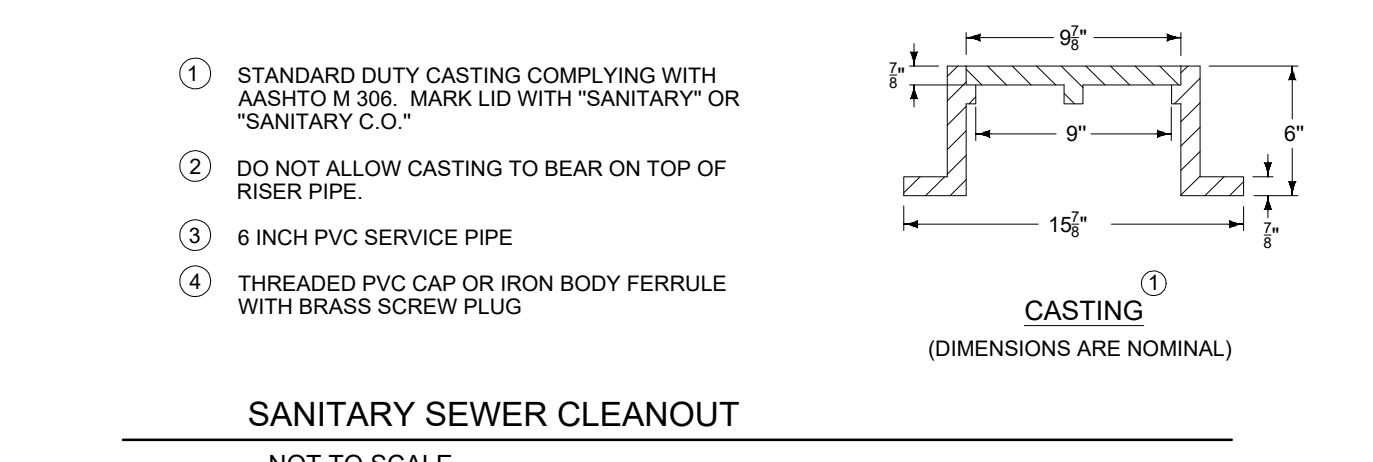
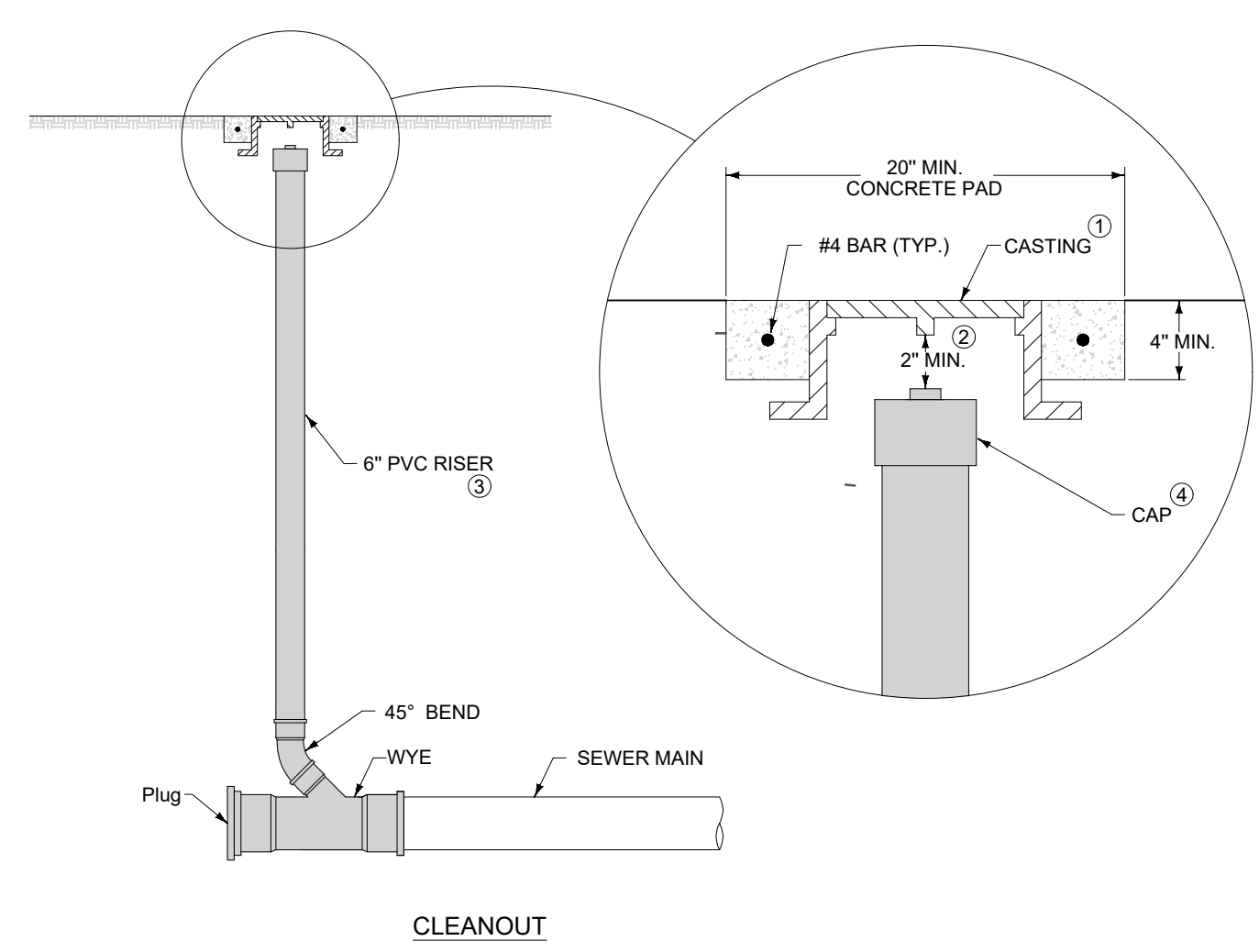
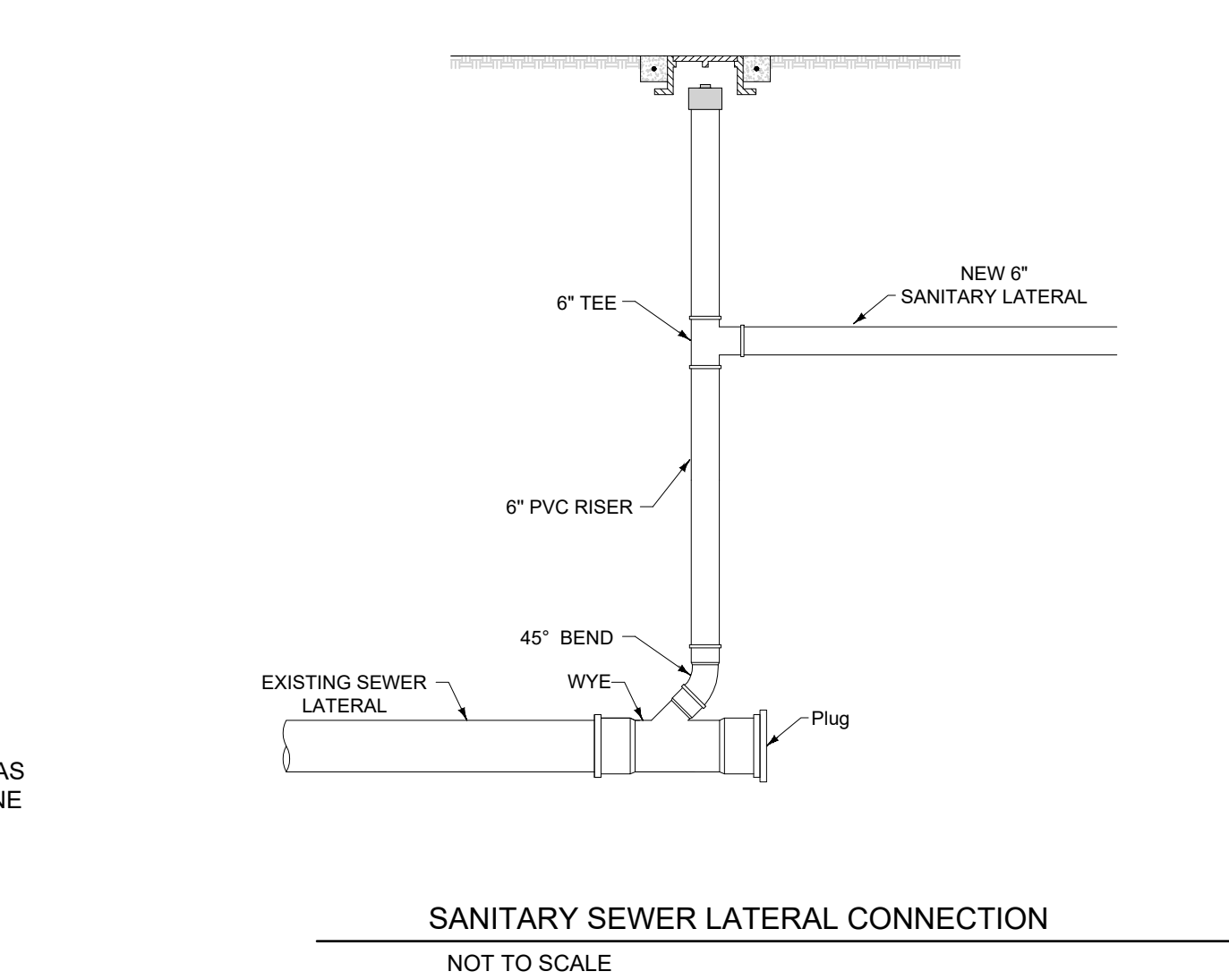


RIPRAP DETAIL
NOT TO SCALE

E HICKMAN ROAD



SE ALICES ROAD



1. PLACE REMAINDER OF BEDDING AND BACKFILL MATERIALS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
2. MINIMUM DEPTH OF BURY 12 INCHES OR AS SPECIFIED BY THE MANUFACTURER.

PIPE DIAMETER (IN)	CLASS F-1 BEDDING	CLASS F-2 BEDDING	CLASS F-3 BEDDING
4	4"	4"	4"
6	4"	4"	4"
8	4"	4"	4"
10	4"	4"	4"
12	4"	4"	4"
15	4"	4"	4"

ALLOWABLE BEDDING CLASSES

PIPE MATERIAL	STORM SEWER	SANITARY SEWER
DUCTILE IRON	F-1, F-2, F-3	F-1, F-2, F-3
HDPE	F-2, F-3	NOT ALLOWED
POLYPROPYLENE	F-2, F-3	F-3
PVC	F-2, F-3	F-3

PVC PIPE

PIPE DIAMETER (IN)	ASTM D 3034	SDR 25	SDR 35
8	30"	28"	24"
10	30"	28"	24"
12	30"	28"	24"
15	30"	28"	24"

DUCTILE IRON, AWWA C151, CLASS 52

PIPE DIAMETER (IN)	CLASS F-1 BEDDING	CLASS F-2 BEDDING	CLASS F-3 BEDDING
4	4"	4"	4"
6	4"	4"	4"
8	4"	4"	4"
10	4"	4"	4"
12	4"	4"	4"

ALLOWABLE BURY DEPTH

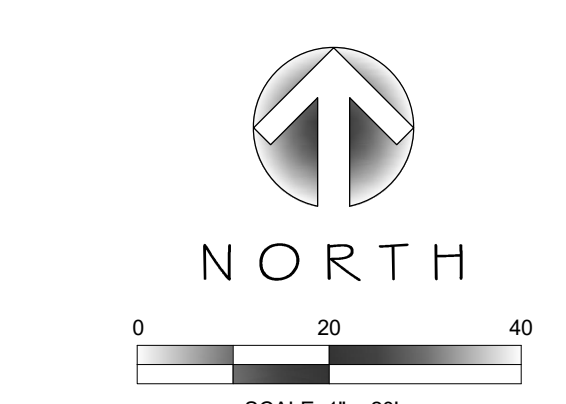
PIPE DIAMETER (IN)	MINIMUM DEPTH (IN)
4	12"
6	12"
8	12"
10	12"
12	12"
15	12"

WATER DISTRIBUTION SYSTEM

- BRING ALL SITE UTILITIES TO 5' OUTSIDE OF THE BUILDING LINE WITH THE EXCEPTION OF THE WATER SERVICE. EXTEND WATER SERVICE INTO THE BUILDING AND UP TO THE FLANGE FOR THE WATER METER.
- SEPARATION OF WATER AND SEWER: PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET BETWEEN ALL WATER AND SEWER LINES. PROVIDE A MINIMUM SEPARATION OF 18 INCHES AT ALL WATER LINE AND SEWER LINE CROSSINGS.
- WATERMAIN DEPTH: MAINTAIN 5.5 FEET OF COVER OVER THE TOP OF THE WATER LINES TO THE FINISHED GRADE. VERIFY ELEVATION OF PROPOSED AND EXISTING WATER LINES AT ALL UTILITY CROSSINGS. INSTALL THE WATER LINES AT GREATER DEPTHS IN ORDER TO CLEAR STORM SEWERS, SANITARY SEWERS, OR OTHER UTILITIES AS REQUIRED. INCLUDE COSTS TO LOWER WATER LINES IN THE BASE BID.
- TESTING: PRESSURE TEST AND PERFORM BACTERIOLOGICAL TESTS ON ALL WATER LINES UNDER THE SUPERVISION OF THE CITY OF WAUKEE. NOTIFY THE CITY AT LEAST 24 WORKING HOURS PRIOR TO ANY TESTING. PRESSURIZE THE WATERLINE TO 1034-KPA (150-PSI) GAUGE PRESSURE (MEASURED AT THE POINT OF LOWEST ELEVATION) BY MEANS OF A PUMP CONNECTED TO THE PIPE IN A SATISFACTORY MANNER. MAINTAIN THE TEST PRESSURE FOR A MINIMUM OF 2 HOURS. DO NOT ADD WATER TO THE WATERMAIN IN ORDER TO MAINTAIN THE REQUIRED PRESSURE DURING THE WATER MAIN PRESSURE TESTING. THE TEST SECTION OF PIPE IS ACCEPTABLE WITH A PRESSURE DROP OF 34 KPA (5 PSI) OR LESS.
- USE MECHANICAL JOINT RESTRAINT DEVICES FOR JOINT RESTRAINT ON ALL WATERMAIN BENDS HAVING A VERTICAL OR HORIZONTAL DEFLECTION OF 22-1/2 DEGREES OR GREATER. ALL VALVES, STUBS, EXTENSIONS, TEES, CROSSES, PLUGS, ALL HYDRANT VALVES, AND ALL HYDRANTS IN ACCORDANCE WITH VILLAGE REQUIREMENTS. USE SERIES 1100 MEGALUC[®] MANUFACTURED BY EBAK IRON INC., EASTLAND, TEXAS, OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS FOR RESTRAINT ON DUCTILE IRON PIPE.
- AT ALL VALVE LOCATIONS WHICH REQUIRE A 12" OR SMALLER VALVE, INSTALL GATE VALVES WHICH ARE OF THE COMPRESSION RESILIENT SEATED (CRS) TYPE. USE AMERICAN FLOW CONTROL'S SERIES 2500 DUCTILE IRON RESILIENT WEDGE GATE VALVE, OR APPROVED EQUAL. GATE VALVES SHALL CONFORM TO AWWA C509. INSTALL CAST IRON VALVE BOXES CONFORMING TO ASTM A88 AT EACH VALVE LOCATION. VALVE BOXES SHALL BE THE THREE-PIECE TYPE WITH 5-1/4" SHAFTS. USE TYLER 680-G WITH NO. 6 BASE, OR EQUIVALENT. VALVE BOXES SHALL HAVE AT LEAST 6" OF ADJUSTMENT ABOVE AND BELOW FINISHED GRADE. DRAIN COVERS ON VALVE BOXES SHALL BE ROUND AND BEAR THE WORD "WATER" CAST ON THE TOP. USE TYLER 680-G "STAYPUT" COVERS WITH EXTENDED SKIRT, OR EQUIVALENT.
- USE MUELLER H 10300 OR FORD EM 2 7057, OR APPROVED EQUAL, AT ALL CURB STOP LOCATIONS. STATIONARY ROD IS REQUIRED ON ALL CURB STOPS.
- ALL PRIVATE WATERMAIN AND LATERALS 4" OR LARGER FOR THE SITE SHALL BE CLASS 52 DUCTILE IRON THAT CONFORMS TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST, FOR WATER (ANSI/AWWA C151/A21.51 - LATEST REVISION). PIPE SHALL BE CEMENT LINED, PUSH-ON JOINT, AND BONDING STRIPS TO PROVIDE ELECTRICAL CONDUCTIVITY WITHOUT FIELD WELDING. ALL PUBLIC WATER MAIN SHALL BE PVC C-900 AND ALL COMPONENTS SHALL CONFORM WITH CITY OF WAUKEE STANDARD SPECIFICATIONS.
- TRACER WIRE LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED.
- WHERE EXISTING GAS, ELECTRIC, CABLE, OR TELEPHONE UTILITIES CONFLICT WITH THE WORK, COORDINATE THE ABANDONMENT, RELOCATION OFFSET, OR SUPPORT OF THE EXISTING UTILITIES WITH THE APPROPRIATE LOCAL UTILITY COMPANIES. COORDINATE NEW GAS METER AND GAS LINE INSTALLATION, ELECTRIC METER AND ELECTRIC SERVICE INSTALLATION, CABLE SERVICE, AND TELEPHONE SERVICE INSTALLATION WITH THE LOCAL UTILITY COMPANIES.
- COORDINATE BUILDING UTILITY CONNECTION LOCATIONS AT 5 FT. OUT FROM THE PROPOSED BUILDING WITH THE INTERIOR PLUMBING CONTRACTOR PRIOR TO CONSTRUCTION. VERIFY WATER AND SEWER SERVICE LOCATIONS AND ELEVATIONS WITH THE MECHANICAL ENGINEER PRIOR TO CONSTRUCTION.
- THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE FROM RECORD INFORMATION. THE ENGINEER DOES NOT GUARANTEE THAT ALL EXISTING UTILITIES ARE SHOWN OR, IF SHOWN, EXIST IN THE LOCATIONS INDICATED ON THE PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE FINAL VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES (INCLUDING WATER AND SEWER LINES AND APPURTENANCES). NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

SANITARY SEWER SYSTEM

- PIPE: USE SOLID-CORE, SDR-35, ASTM D3034 (OR APPROVED EQUAL) POLYVINYL CHLORIDE (PVC) PLASTIC PIPE FOR ALL DESIGNATED PVC SANITARY SEWER SERVICES. JOINTS FOR ALL SANITARY SEWER SHALL HAVE PUSH-ON JOINTS WITH ELASTOMERIC GASKETS. USE OF SOLVENT CEMENT JOINTS IS ALLOWED FOR BUILDING SERVICES. SOLVENT CEMENT JOINTS IN PVC PIPE MUST INCLUDE USE OF A PRIMER WHICH IS OF CONTRASTING COLOR TO THE PIPE AND CEMENT. PIPE WITH SOLVENT CEMENT JOINTS SHALL BE JOINED WITH PVC CEMENT CONFORMING TO ASTM D2954. LAY ALL PVC PIPE ON A CONTINUOUS GRANULAR BED. INSTALLATION MUST COMPLY WITH ASTM D2321.
- CLEANOUTS: INSTALL CLEANOUTS ON ALL SANITARY SEWER SERVICES. THE DISTANCE BETWEEN CLEANOUTS IN HORIZONTAL PIPING SHALL NOT EXCEED 100 FEET FOR PIPES 4-INCH AND OVER IN SIZE. CLEANOUTS SHALL BE OF THE SAME NOMINAL SIZE AS THE PIPES THEY SERVE. INCLUDE FROST SLEEVES AND CONCRETE FRAME AND PIPE SUPPORT. INSTALL A METER BOX FRAME AND SOLID LID (NEENAH R-1914-A, OR APPROVED EQUAL) OVER ALL CLEANOUTS.
- TESTING: PRESSURE TEST ALL SANITARY SEWER LINES. TEST ALL FLEXIBLE SANITARY SEWER LINES FOR DEFLECTION AFTER THE SEWER LINE HAS BEEN INSTALLED AND BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE TEST FAILS, MAKE NECESSARY REPAIRS AND RETEST.
- UNLESS OTHERWISE INDICATED, USE REINFORCED, PRECAST, CONCRETE MAINTENANCE HOLES CONFORMING TO ASTM C478, FURNISHED WITH PRECAST BASES. SANITARY SEWER MAINTENANCE HOLES SHALL BE SUPPLIED WITH PRE-FORMED INVERTS AND FLEXIBLE NEOPRENE SLEEVE CONNECTIONS FOR ALL METRAL LINES 375 MM (15 INCHES) IN DIAMETER OR LESS, UNLESS OTHERWISE INDICATED. JOINTS FOR ALL PRECAST MAINTENANCE HOLE SECTIONS SHALL HAVE CONFINED, RUBBER O-RING GASKETS IN ACCORDANCE WITH ASTM C293. THE INSIDE BARREL DIAMETER SHALL NOT BE LESS THAN 48 INCHES.
- INSTALL FLEXIBLE WATERTIGHT FRAME/CHIMNEY SEALS ON ALL SANITARY SEWER MAINTENANCE HOLES. USE EITHER MANUFACTURED MAINTENANCE HOLE FRAME/CHIMNEY SEALS OR ELASTOMERIC WATERPROOFING FRAME/CHIMNEY SEALS.
- USE NEENAH FOUNDRY CO. R-1642 CASTING WITH SELF-SEALING, SOLID, TYPE B LID, OR APPROVED EQUAL, ON ALL SANITARY SEWER MAINTENANCE HOLES. COVERS SHALL BEAR THE "SANITARY SEWER" LABEL.
- THE MINIMUM DEPTH OF COVER FOR SANITARY SEWER WITHOUT INSULATION IS 5 FEET. INSULATE SANITARY SEWER SERVICES AT LOCATIONS WHERE THE DEPTH OF COVER IS LESS THAN 5 FEET. PROVIDE A MINIMUM INSULATION THICKNESS OF 2 INCHES. THE INSULATION MUST BE AT LEAST 4 FEET WIDE AND CENTERED ON THE PIPE. INSTALL THE INSULATION BOARDS 6 INCHES ABOVE THE TOPS OF THE PIPES ON MECHANICALLY COMPACTED AND LEVELED PIPE BEDDING MATERIAL. USE HIGH DENSITY, CLOSED CELL, RIGID BOARD MATERIAL EQUIVALENT TO DOW STYROFOAM HI-40 PLASTIC FOAM INSULATION.
- TRACER WIRE LOCATING REQUIREMENTS - A MEANS TO LOCATE BURIED UNDERGROUND EXTERIOR NON METALLIC SEWERS MAINS MUST BE PROVIDED WITH TRACER WIRE OR OTHER METHODS IN ORDER TO BE LOCATED.



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WWW.SNYDER-ASSOCIATES.COM

UTILITY PLAN

PROJECT TITLE: DUPACO COMMUNITY CREDIT UNION
Project Name: DUPACO
1090 EAST HICKMAN ROAD
WAUKEE, IOWA

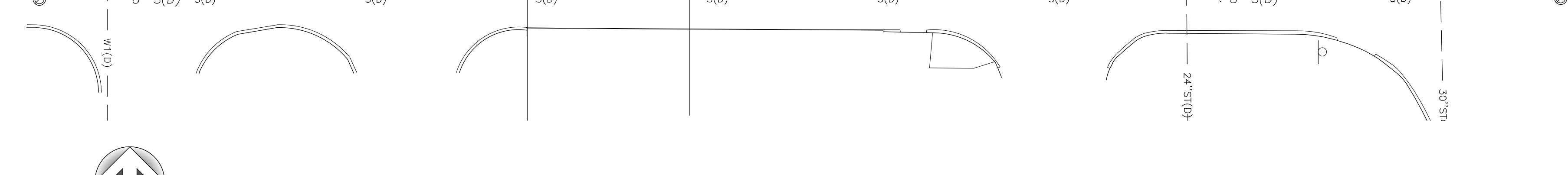
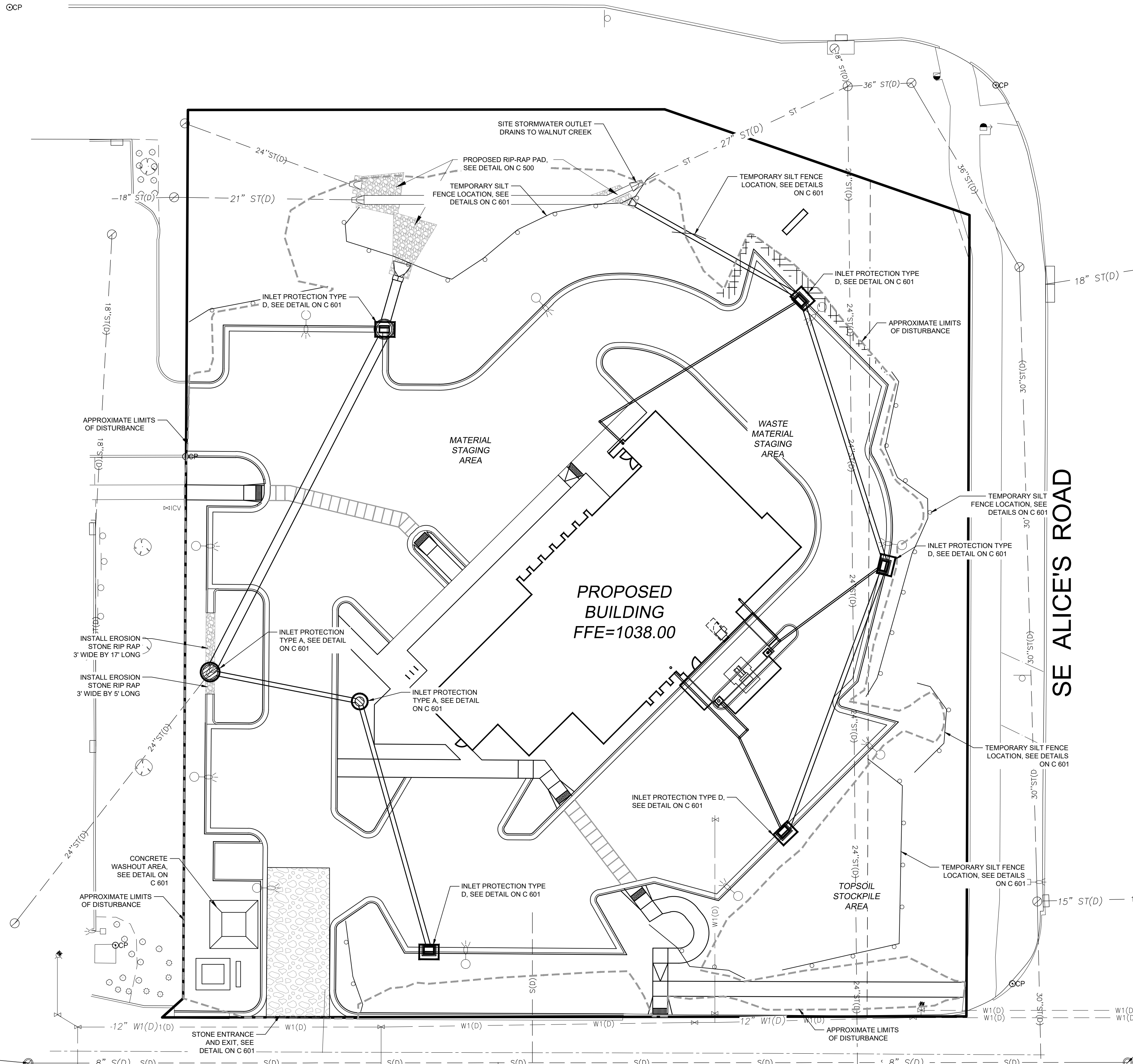
DATE ISSUED: MARCH 16, 2022
REV. NO. DATE
1 MARCH 22, 2022
2 APRIL 5, 2022
3 APRIL 19, 2022
4 MAY 3, 2022
5 MAY 17, 2022

PROJECT NUMBER
121.1153.30

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ESTIMATED PRELIMINARY EROSION CONTROL QUANTITIES (ACTUAL QUANTITIES SUBJECT TO CHANGE)	
ITEM	QUANTITY
ROCK CONSTRUCTION ENTRANCE - TEMP	1 EA.
SILT FENCE - TEMP	420 LF.
INLET PROTECTION TYPE A - TEMP	2 EA.
INLET PROTECTION TYPE D - TEMP	4 EA.
EROSION STONE RIP-RAP - PERMANENT	40 CY.
CONCRETE WASHOUT - TEMP	1 EA.
SOD - PERMANENT	14,466 SF.

NOTE: FOR MAINTENANCE PURPOSES CONTRACTOR SHALL SUPPLY ALL SUFFICIENT QUANTITIES FOR REPAIR AND REPLACEMENT OF EROSION CONTROL DEVICES THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.

GENERAL STORMWATER POLLUTION PREVENTION :

APPLY FOR AND OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION ACTIVITY.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP): THE SWPPP INCLUDES THIS NARRATIVE, PLAN SHEETS SWP 1.0, SWP 1.1, SWP 1.2 AND SWP 1.3, AND THE STORMWATER MANAGEMENT CALCULATIONS. KEEP A COPY OF THE SWPPP, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS AT THE SITE DURING THE CONSTRUCTION. DURING THE CONSTRUCTION PROCESS THE SWPPP WILL HAVE TO BE AMENDED FOR ALL CHANGES PERFORMED BY THE CONTRACTOR. THE OWNER SHALL BE AWARE OF THE AMENDMENTS PRIOR TO CHANGES MADE TO THE SWPPP PLAN. ALL NOTES, PHOTOGRAPHS, RECORDED DATES, SKETCHES, REFERENCES, AND DIAGRAMS WILL HAVE TO BE RECORDED AND MADE AVAILABLE AS PART OF THE SWPPP PERMIT.

INDIVIDUAL(S) PREPARING THE SWPPP FOR THE PROJECT, OVERSEEING IMPLEMENTATION OF THE SWPPP, REVISING AND AMENDING THE SWPPP, AND AT LEAST ONE INDIVIDUAL ON THE PROJECT PERFORMING INSTALLATION, INSPECTION, MAINTENANCE, AND REPAIRS OF BMP'S MUST BE TRAINED. THE TRAINING MUST BE DONE BY A LOCAL, STATE, FEDERAL, AGENCIES, PROFESSIONAL ORGANIZATION, OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, OR PERMANENT STORMWATER MANAGEMENT.

RESPONSIBLE PARTIES: THE CONTRACTOR MUST DESIGNATE A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMP'S WHO WILL OVERSEE THE IMPLEMENTATION OF THE SWPPP, AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S BEFORE AND DURING CONSTRUCTION.

THE OWNER IS RESPONSIBLE FOR IDENTIFYING WHO WILL HAVE RESPONSIBILITY FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEMS.

OWNER CONTACT:

NAME: _____

COMPANY: DUPACO COMMUNITY CREDIT UNION

ADDRESS: DUPACO COMMUNITY CREDIT UNION
3999 PENNSYLVANIA AVENUE, P.O. BOX 179
DUBUQUE, IA 52004

TELEPHONE: (800) 373-7600 (OFFICE)

SITE INVESTIGATION, INSTALLATION, IMPLEMENTATION :

PRIOR TO ANY WORK, CONTRACTOR SHALL VISIT THE SITE, DOCUMENT EXISTING CONDITIONS AS NECESSARY (PHOTOS, NOTES, ETC) AND NOTE EXISTING DRAINAGE PATTERNS ON AND OFF SITE THAT ARE RELATED TO THE PROJECT. THESE NOTES SHALL BE PART OF THE SWPPP.

INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INCLUDING SILT FENCE, ROCK CONSTRUCTION ENTRANCE(S), EROSION CONTROL BERM, ROCK FILTERS, SILT SACKS, ROCK ZEPHIR BERM, AND SEDIMENTATION BASINS. PROTECT ALL RECEIVING WATERS, CATCH BASINS, DITCHES, INLETS, ETC. IN AND AROUND THE SITE. ALL PROTECTIVE AND PREVENTATIVE MEASURES MUST BE IN PLACE AND INSPECTED PRIOR TO BEGINNING SITE CLEARING, GRADING, OR OTHER LAND-DISTURBING ACTIVITY.

PRIOR TO BEGINNING SITE CLEARING AND GRADING, PROTECT ALL STORM SEWER INLETS THAT RECEIVE RUNOFF FROM DISTURBED AREAS. IN ORDER TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING THE DOWNSTREAM STORM SEWER SYSTEM, SEAL ALL STORM SEWER INLETS THAT ARE NOT NEEDED FOR SITE DRAINAGE. PROTECT ALL OTHER STORM SEWER INLETS BY INSTALLING SEDIMENT CONTROL DEVICES, SUCH AS SILT SACKS, OR ROCKED FILTRATION LOGS/WEIRS. STRAW BALES OR FABRIC UNDER THE GRATES ARE NOT ACCEPTABLE FORMS OF INLET PROTECTION. PROTECT NEW STORM SEWER INLETS AS THEY ARE COMPLETED. MAINTAIN STORM SEWER INLET PROTECTION IN PLACE UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLETS ARE STABILIZED.

BEFORE BEGINNING CONSTRUCTION, INSTALL A TEMPORARY ROCK CONSTRUCTION ENTRANCE AT EACH POINT WHERE VEHICLES EXIT THE CONSTRUCTION SITE. WHEN AT ALL POSSIBLE CONTRACTOR SHALL DESIGNATE ONLY ONE ACCESS POINT FOR VEHICLES ENTERING AND EXITING THE SITE. THE ROCK ON THE ENTRANCE WILL HAVE TO BE INSPECTED DAILY AND REPLACED OR ROCK SUPPLEMENTED BY THE CONTRACTOR WHEN OVER 50% OF THE Voids IN THE ROCK ARE FILLED. A CLEANING STATION SHOULD BE MADE AVAILABLE TO DRIVERS AND VISIBLY SIGNED AS SUCH. PROVIDE SHOVELS, BROOMS AND/OR HOSE WITH A WASH OUT AREA SO SOILS CAN BE REMOVED FROM VEHICLES ON SITE.

AVOID ENTIRE REMOVAL OF TREES AND SURFACE VEGETATION ALL AT ONCE WHENEVER POSSIBLE AS THIS LIMITS THE AMOUNT OF SITE SUSCEPTIBLE TO EROSION. SCHEDULE CONSTRUCTION ZONES AND NOTE THIS ON THE SWPPP PLAN IN ORDER TO EXPOSE THE SMALLEST PRACTICAL AREA OF SOIL AT ANY GIVEN TIME. UTILIZE VEGETATION REMOVED BY ON SITE GRINDING AND MULCHING AND USING THIS MATERIAL TO PROTECT THE SOIL FROM EROSION.

STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. THIS REQUIREMENT DOES NOT APPLY TO THOSE AREAS THAT ARE CURRENTLY BEING USED FOR MATERIAL STORAGE ON A DAILY BASIS OR FOR STOCKPILING SOILS ON WHICH GRADING, SITE BUILDING, OR OTHER CONSTRUCTION ACTIVITIES ARE ACTIVELY UNDERWAY. PROVIDE TEMPORARY COVER ON ALL STACKED TOPSOIL PILES, AND OTHER AREAS OF STOCKPILED EXCESS MATERIAL IN ORDER TO PREVENT SOIL EROSION AND RAPID RUNOFF. DURING CONSTRUCTION PERIOD, STOCKPILES CAN BE MULCHED, COVERED WITH POLY OR FABRIC, AND OR SEEDED DURING PROLONGED EXPOSURE. IF AREAS OF THE SITE ARE TO BE IDLE FOR 14 DAYS OR LONGER CONTRACTOR SHALL IMMEDIATELY BRING INTO COMPLIANCE WITH IMMEDIATE STABILIZATION. PROLONGED PERIODS OF OPEN, BARE EARTH WITHOUT GRASS COVER WILL NOT BE PERMITTED. STABILIZE ALL DISTURBED GREENSPACE AREAS WITH A MINIMUM OF 8" TOPSOIL IMMEDIATELY AFTER FINAL SURFACE COMPLETION. SEED AND MULCH, OR SOD AND PROTECT THESE AREAS IMMEDIATELY AFTER COMPLETION OF FINISH GRADING WORK (WEATHER PERMITTING). STABILIZE ALL DISTURBED AREAS TO BE PAVED USING EARLY APPLICATION OF GRAVEL BASE. STABILIZE THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT CONVEYS WATER FROM THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE CONSTRUCTION SITE. WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR WITHIN 200 FEET FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER, STABILIZE TEMPORARY OR PERMANENT DRAINAGE DITCHES IMMEDIATELY BY CONNECTING TO A SURFACE WATER. PROTECT OUTFALLS WITHIN 200 FEET DOWN STREAM OF THE DISCHARGE POINT. ADDITIONAL SETTING "POTS" ACHIEVED BY FILTER LOGS OR FILTERED STOCK BALES STAKED IN THE CHANNEL WILL DISSIPATE THE WATER ENERGY. PROVIDE PIPE OUTLETS WITH TEMPORARY OR PERMANENT EROSION DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

RECEIVING WATERS - IT IS THE CONTRACTORS RESPONSIBILITY TO INSPECT THE SITE DISCHARGE POINT AS WELL AS DOWNSTREAM TO THE RECEIVING BODY OF WATER (POND, LAKE, RIVER, ETC) INCLUDING AFTER EACH STORM EVENT. THE CONTRACTOR SHALL DOCUMENT ANY DIFFERENCES OR CHANGES IN NORMAL IN DISCHARGE AND IF MATERIAL IS LEAVING THE CONSTRUCTION SITE. IF SO IT SHALL BE DOCUMENTED AND REMOVED IMMEDIATELY.

NOTE: ALL EROSION AND SEDIMENT CONTROL DEVICES WILL BE CHECKED BY THE CONTRACTOR AFTER EACH STORM EVENT AND BE MAINTAINED, OR IMPROVED UPON AFTER EVERY STORM EVENT TO ENSURE ADEQUATE PERFORMANCE.

POLLUTION CONTROL :

DESIGNATE A CONCRETE WASH-OUT AND TRUCK WASH AREA. MAKE IT VISIBLE IN THE FIELD TO VEHICLE OPERATORS AND NOTE THIS ON THE SWPPP PLAN.

WHEN WASHOUTS OCCUR ON THE SITE, CONCRETE WASHOUT WATER MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. LIQUID AND SOLID WASTES MAY NOT TOUCH THE GROUND AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS.

ON SITES WHERE CONCRETE WASHOUT AREAS ARE NOT FEASIBLE AS SHOWN ON THE DETAIL SHEET, ABOVE GROUND METHODS AND/OR OFF-SITE METHODS CAN BE UTILIZED AS APPROVED BY OWNER.

CONCRETE WASHOUT MAY BE PROVIDED OFF-SITE BY CONTRACTOR OR CONCRETE SUPPLIER, AT AN APPROVED WASHOUT DISPOSAL AREA. CONCRETE SUPPLIER MAY PROVIDE CONCRETE WASHOUT AREAS ON-BOARD THEIR TRANSPORTS FOR DISPOSAL OFF-SITE. CONCRETE CONTRACTOR SHALL VERIFY WITH SUPPLIER REGARDING THE CONCRETE WASHOUT AREAS ON AND OFF-SITE, AS NECESSARY.

LIMIT EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES TO A DEFINED AREA PREFERABLY BEFORE THE CONSTRUCTION ACCESS/EXIT POINT. WASH VEHICLES ONLY ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. CONTAIN RUNOFF AND PROPERLY DISPOSE OF WASTE. ENGINE DEGRASSING IS PROHIBITED.

SLURRY FROM CONCRETE WET SAW CUTTING IS A PROHIBITED DISCHARGE AND WILL BE CAPTURED AND CONTAINED BEFORE IT CAN MAKE ITS WAY INTO ANY DRAINAGE WAY.

SOLID WASTE: PROPERLY DISPOSE OF COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION WASTES IN COMPLIANCE WITH STATE REQUIREMENTS.

HAZARDOUS MATERIALS: PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARAGE DEBRIS, CLEANING WASTES, GASOLINE, PAINT, WASTEWATER, TOXIC MATERIALS, AND HAZARDOUS MATERIALS) OFF-SITE. DO NOT ALLOW WASTE AND UNUSED BUILDING MATERIALS TO BE CARRIED BY RUNOFF INTO A RECEIVING CHANNEL OR STORM SEWER SYSTEM. PROPERLY STORE OIL, GASOLINE, PAINT, AND OTHER HAZARDOUS MATERIALS IN ORDER TO PREVENT SPILLS, LEAKS, OR OTHER DISCHARGES. PROVIDE SECONDARY CONTAINMENT. RESTRICT ACCESS TO STORAGE AREAS IN ORDER TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH REGULATIONS.

HAZARDOUS SUBSTANCE SPILL PREVENTION AND RESPONSE

A. THE CONTRACTOR IS RESPONSIBLE FOR TRAINING ALL PERSONNEL IN THE PROPER HANDLING AND CLEANUP OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR WASTES WILL BE ALLOWED TO COME INTO CONTACT WITH STORM WATER.

B. IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES SHALL BE DONE TO MINIMIZE THE POTENTIAL FOR HAZARDOUS MATERIAL SPILLS AND TO REDUCE THE RISK OF THE SPILL COMING IN CONTACT WITH STORM WATER.

- MANUFACTURERS RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE TRAINED REGARDING THESE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CONTROL, CONTAINMENT AND CLEANUP WILL BE PROVIDED ONSITE IN A MATERIAL STORAGE AREA. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SANDUST, AND PLASTIC AND METAL TRASH CONTAINERS.

C. IN THE EVENT OF A SPILL, THE FOLLOWING PROCEDURES WILL BE FOLLOWED:

- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY FOLLOWING DISCOVERY.
- THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH THE HAZARDOUS SUBSTANCE.
- SPILL OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENTAL AGENCY AND TO THE PROJECT MANAGER AND ENGINEER, REGARDLESS OF THE SIZE OF THE SPILL.

D. IN THE EVENT THE CONSTRUCTION SITE HAS A RELEASE OF A HAZARDOUS SUBSTANCE OR OIL IN AN AMOUNT WHICH EXCEEDS A REPORTABLE QUANTITY (RQ) AS DEFINED AT 40 CFR PART 110, 40 CFR PART 117, OR 40 CFR PART 302 THEN THE PERMITTEE SHALL:

- PERSON IN CHARGE OF THE SITE AT THE TIME OF THE SPILL SHALL CALL THE EPA NATIONAL RESPONSE CENTER TO REPORT THE SPILL (800-424-8802, OR 202-426-2675). ADDITIONALLY THE IOWA DEPARTMENT OF NATURAL RESOURCES (515-275-8694) AND THE COUNTY SHERIFFS OFFICE (515-993-4711) MUST BE NOTIFIED OF THE SPILL NO LATER THAN 6 HOURS AFTER THE INCIDENT OCCURRED.
- ADDITIONAL POLLUTION PREVENTION PLAN ACCORDINGLY WITHIN 5 DAYS OF THE SPILL INCLUDING THE ITEMS MENTIONED BELOW.
- WITHIN 14 DAYS OF THE RELEASE, SUBMIT A WRITTEN DESCRIPTION OF THE RELEASE INCLUDING: A DESCRIPTION OF THE RELEASE, TYPE OF MATERIAL, ESTIMATED AMOUNT OF SPILL, DATE OF RELEASE, EXPLANATION OF WHY THE SPILL HAPPENED, AND A DESCRIPTION OF THE STEPS TAKEN TO PREVENT AND CONTROL FUTURE RELEASES.

MACHINERY, AND MECHANIZED EQUIPMENT THAT LEAKS WASTE SHALL HAVE A PROTECTIVE BARRIER OR CONTAINMENT UNDER THE DEVICE

ACCURATE TO CONTAIN THE WASTE. PROPERLY DISPOSE OF THE WASTE.

EMERGENCY SPILL STATION: CONTRACTOR SHALL LOCATE AND SIGN AN EMERGENCY SPILL STATION THAT HAS NECESSARY CONTAINMENT OR CLEANUP DEVICES FOR ALL WORKERS TO ACCESS.

EROSION CONTROL :

APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.

CONTRACTOR SHALL UTILIZE COARSELY GROUND WOOD AND TREE MULCHES TO COVER EXPOSED SOILS. MULCHES SHALL BE SPREAD ON SITE TO SUPPLEMENT AND USE IN PROBLEM AREAS DURING CONSTRUCTION PROJECT.

CONTRACTOR SHALL USE STAR TACK OR OTHER ORGANIC SUBSTANCES IN SITUATIONS TO PREVENT SOIL FROM ERODING AWAY BY WIND OR RAIN.

WHENEVER POSSIBLE CONTRACTOR SHALL GRADE AREAS OF SOIL TO LIMIT POTENTIAL OF EROSION, TO INCLUDE TRACKING PERPENDICULAR TO FALL LINE OF GRADES AS WELL AS DIVERTING WATER FLOWS FROM PROBLEMATIC AREAS ON THE SITE.

SEEDING, FIBER BLANKETS, POLY/TARPS OR COVER MULCHES, DISKED MULCHES AND COMPOST CAN BE USED TO COVER TEMPORARILY EXPOSED AREAS FROM WIND AND RAIN. OTHER METHODS BY THE CONTRACTOR SHALL BE DOCUMENTED IN THE SWPPP.

SEDIMENT CONTROL :

ALL INLET PROTECTION SHALL BE TYPE PER DETAIL 1 OR DETAIL 2.

SILT FENCE:
INSTALL AND MAINTAIN PER IDOT STANDARD ROAD PLAN EC-201.

INSTALL SILT FENCE ALONG THE CONTOUR (ON A LEVEL HORIZONTAL PLANE) WITH THE ENDS TURNED UP (J-HOOKS) IN ORDER TO HELP POND WATER BEHIND THE FENCE. INSTALL THE SILT FENCE ON THE UPHILL SIDE OF THE SUPPORT POSTS. PROVIDE A POST SPACING OF 4 FEET INTO THE GROUND. DRIVE POSTS AT LEAST 2 FEET INTO THE GROUND. ANCHOR THE SILT FENCE FABRIC IN A TRENCH AT LEAST 12 INCHES DEEP AND 6 INCHES WIDE DUG ON THE UPSLOPE SIDE OF THE SUPPORT POSTS. LAY THE FABRIC IN THE TRENCH AND THEN BACKFILL AND COMPACT WITH A VIBRATORY PLATE COMPACTOR. MAKE ANY SPICES IN THE FABRIC AT A FENCE POST. AT SPICES, OVERLAP THE FABRIC AT LEAST 6 INCHES, FOLD IT OVER, AND SECURELY FASTEN IT TO THE FENCE POST. SILT FENCE SUPPORT POSTS SHALL BE 4 INCH SQUARE OR LARGER HARDWOOD PINE OR STANDARD 2X4 SPACED TIES. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF IDOT STANDARD SPECIFICATION SECTION 4196.01 FOR SILT FENCING, FURNISHED IN A CONTINUOUS ROLL IN ORDER TO AVOID SPICES. GEOTEXTILE FABRIC SHALL BE UNIFORM IN TEXTURE AND APPEARANCE AND HAVE NO DEFECTS, FLAWS, OR TEARS. THE FABRIC SHALL CONTAIN SUFFICIENT ULTRAVIOLET (UV) RAY INHIBITOR AND STABILIZERS TO PROVIDE A MINIMUM TWO-YEAR SERVICE LIFE OUTDOORS. FABRIC COLOR SHALL BE INTERNATIONAL ORANGE. IN HIGH TRAFFIC AREAS CONTRACTOR SHALL REINFORCE SILT FENCE WITH WIRE FENCING AND METAL POSTS. EXTREME CIRCUMSTANCES WILL REQUIRE TEMPORARY CONCRETE MEDIAN SECTIONS TO SUPPORT MATERIAL BACKING OF STOCK PILED SOIL OR FILLED EARTH.

INSTALL SILT FENCE, OR OTHER EFFECTIVE SEDIMENT CONTROLS, AROUND ALL TEMPORARY SOIL STOCKPILES. LOCATE SOIL OR DIRT STOCKPILES CONTAINING MORE THAN 10 CUBIC YARDS OF MATERIAL SUCH THAT THE DOWNSLOPE DRAINAGE LENGTH IS NO LESS THAN 25 FEET FROM THE TOE OF THE PILE TO A ROADWAY OR DRAINAGE CHANNEL. IF REMAINING FOR MORE THAN SEVEN DAYS STABILIZE THE STOCKPILES BY MULCHING, VEGETATIVE COVER, OR OTHER MEANS. CONTROL EROSION FROM ALL STOCKPILES BY PLACING SILT FENCE BARRIERS AROUND THE PILES. DURING STREET REPAIR, COVER CONSTRUCTION SOIL OR DIRT STOCKPILES LOCATED CLOSER THAN 25 FEET TO A ROADWAY OR DRAINAGE CHANNEL WITH BARRIS, AND PROTECT STORM SEWER INLETS WITH SILT SACKS OR STAKED SILT FENCE. DO NOT STOCK PILE SOIL OR MATERIAL NEAR CATCH BASINS OR DRAINAGE WAYS.

STONE TRACKING PAD (TEMPORARY ROCK CONSTRUCTION ENTRANCE):
INSTALL AND MAINTAIN PER IOWA DOT DESIGN DETAIL 501-10. USE AGGREGATE MEETING GRADATION NO. 13 PER THE STANDARD SPECIFICATIONS. PLACE THE AGGREGATE IN A LAYER AT LEAST 6-12 INCHES THICK ACROSS THE ENTIRE WIDTH OF THE ENTRANCE. EXTEND THE ROCK ENTRANCE AT LEAST 75 FEET INTO THE CONSTRUCTION ZONE. USE ENGINEERING FABRIC MEETING THE REQUIREMENTS OF EMBANKMENT EROSION CONTROL #196 OF THE STANDARD SPECIFICATIONS BENEATH THE AGGREGATE IN ORDER TO PREVENT MIGRATION OF SOIL INTO THE ROCK FROM BELOW. MAINTAIN THE ENTRANCE IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PAVED ROADWAYS. TOP DRESSING WITH ADDITIONAL STONE AS REQUIRED. CLOSE ENTRANCES NOT PROTECTED BY TEMPORARY ROCK CONSTRUCTION ENTRANCES TO ALL CONSTRUCTION TRAFFIC.

TEMPORARY SEDIMENT BASINS:
IN THE CONSTRUCTION PROCESS OR IF NOTED ON THE PLAN THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASIN(S) AS PER GENERAL RULE THE SEDIMENT BASIN SHALL BE SIZED APPROPRIATELY TO A CAPACITY RELATED TO THE DRAINAGE AREA ON A RATIO OF 3,600 CUBIC FEET PER ACRE OF DRAINAGE ZONE ENTERING THE BASIN. BASINS SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT. MATERIAL REMOVED AND STABILIZED, IF CHANGES TO THE BASIN ARE MADE, DOCUMENT AND AMEND THE SWPPP PLAN.

DEWATERING:
IF DEWATERING IS REQUIRED AND SUMP PUMPS ARE USED, ALL PUMPED WATER MUST BE DISCHARGED THROUGH AN EROSION CONTROL FACILITY (TEMPORARY SEDIMENTATION BASIN, DIRT CHAMBER, SAND FILTER, FLOW CHAMBER, HYDRO-CYCLONE, SWIRL CONCENTRATOR, DEWATERING BASIN OR OTHER APPROPRIATE FACILITY) LEADING TO THE CONSTRUCTION SITE. PROPER ENERGY DISSIPATION MUST BE PROVIDED AT THE OUTLET OF THE PUMP SYSTEM. DISCHARGE CLEAR WATER ONLY. TO ACHIEVE BETTER SEPARATIONS OF THE MATERIAL SUSPENDED IN THE WATER A BIODEGRADABLE NOT TOXIC FLOCCULANT AGENT MAY BE REQUIRED.

PUMPING OF WATER FROM FOUNDATION AREA DURING CONSTRUCTION SHALL NOT EXCEED A RATE OF 70 GALLONS PER MINUTE. SUMP PUMP SHALL BE PLACED ON A CLEAR STONE BEDDING AND A CLOTH/MESH SOD SHALL BE PLACED ON THE OUTLET END OF THE PIPE TO CONTROL SEDIMENT LOSS.

INSPECTIONS-MAINTENANCE-DAILY RECORD-AMEND THE SWPPP PLAN :

CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES, STABILIZED AREAS, ON A WEEKLY BASIS UNTIL LAND-DISTURBING ACTIVITY HAS CEASED. THEREAFTER, INSPECT EVERY SEVEN (7) DAYS UNTIL VEGETATIVE COVER IS ESTABLISHED. REMOVE ACCUMULATED SEDIMENT DEPOSITS FROM BEHIND EROSION AND SEDIMENT CONTROL DEVICES AS NEEDED. DO NOT ALLOW COVER TO DEEPEN TO A DEPTH OF MORE THAN ONE-THIRD OF THE HEIGHT OF THE EROSION AND SEDIMENT CONTROL DEVICES. IMMEDIATELY REPLACE DETERIORATED, DAMAGED, ROTTED, OR MISSING EROSION CONTROL DEVICES. DOCUMENT INSPECTIONS AND DATES OF RAINFALL EVENTS. MAINTAIN A WRITTEN LOG OF ALL INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES RELATED TO EROSION AND SEDIMENT CONTROL FACILITIES. ALL NONFUNCTIONAL BMP'S MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMP'S IMMEDIATELY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW.

INSPECTIONS AND MAINTENANCE ACTIVITIES MUST BE RECORDED IN WRITING DAILY IN A DETAILED RECORD (NOTES, PHOTOGRAPHS, SKETCHES, ETC. AND KEPT WITH THE SWPPP BY THE CONTRACTOR.

CONTRACTOR SHALL REMOVE ALL SOILS AND SEDIMENTS TRACKED OR OTHERWISE DEPOSITED INTO ADJACENT PROPERTY, PAVEMENT AREAS, SIDEWALKS, STREETS, AND ALLEYS. REMOVAL SHALL BE ON A DAILY BASIS THROUGHOUT THE DURATION OF THE CONSTRUCTION AND/OR AS DIRECTED BY THE CITY. CLEAN PAVED ROADWAYS BY SHOVELING OR WET-SWEEPING. DO NOT DRY SWEEP. IF NECESSARY, SCURVE PAVED SURFACES IN ORDER TO LOOSEN COMPACTED SEDIMENT MATERIAL. PRIOR TO SWEEPING, HALL SEDIMENT MATERIAL TO A SUITABLE DISPOSAL AREA. STREET WASHING IS ALLOWED ONLY AFTER SEDIMENT HAS BEEN REMOVED BY SHOVELING OR SWEEPING.

ALL SOIL HAULED FROM THE SITE SHALL BE ACCOUNTED FOR AND DOCUMENTED IN THE SWPPP BY THE CONTRACTOR. ITS FINAL DESTINATION AND HOW THE SOIL HAS BEEN STORED AND STABILIZED.

CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES IN PLACE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED (HARD-SURFACED AREAS PAVED AND VEGETATION ESTABLISHED IN GREEN SPACE). REPAIR ANY RUTTING, GULLY FORMATION, OR WASHOUTS. IMMEDIATELY REPAIR AND STABILIZE. REMOVE ALL TEMPORARY SYNTHETIC, STRUCTURAL, AND NON-BIODEGRADABLE EROSION AND SEDIMENT CONTROL DEVICES AND ANY ACCUMULATED SEDIMENTS. DISPOSE-OF OFF SITE.

CONTRACTOR SHALL CLEAN STORM SEWER CATCH BASINS, DITCHES, AND OTHER DRAINAGE FACILITIES AS REQUIRED IN ORDER TO MAINTAIN THEIR EFFECTIVENESS. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 OF THE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

CONTRACTOR SHALL INSPECT INFILTRATION AREAS TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITIES IS ACCUMULATING. REMOVE SEDIMENT IMMEDIATELY ENSURING SUBSOILS ARE NOT COMPACTED BY MACHINERY.

EVERY VEHICLE SHALL NOT TRACK MATERIAL OFF-SITE. CLEAN THE WHEELS OF CONSTRUCTION VEHICLES IN ORDER TO REMOVE SOILS BEFORE THE VEHICLES LEAVE THE CONSTRUCTION SITE. WASH VEHICLES ONLY ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CONTRACTOR SHALL REINFORCE EROSION CONTROL FACILITIES IN AREAS WHERE CONCENTRATED FLOWS OCCUR (SUCH AS SWALES, DITCHES, AND AREAS IN FRONT OF CULVERTS AND CATCH BASINS) BY BACKING THEM WITH SNOW FENCE, WIRE MESH, OR STIFF PLASTIC MESH REINFORCEMENT UNTIL PAVING AND TURF ESTABLISHMENT OPERATIONS HAVE BEEN COMPLETED. POSTS FOR THE REINFORCING FENCE SHALL BE STANDARD STEEL FENCE POSTS WEIGHING NOT LESS THAN 1.3 LBS PER LINEAL FOOT, WITH A MINIMUM LENGTH OF 30 INCHES PLUS BURIAL DEPTH. SPACE POSTS FOR THE REINFORCING FENCE AT INTERVALS OF 10 FEET OR LESS. DRIVE POSTS FOR THE REINFORCING FENCE AT LEAST 2 FEET INTO THE GROUND.

GENERAL SOIL STABILIZATION :

ESTABLISHMENT OF LAWN, PRAIRIE/WILDLOWER AND/OR PLANT BED AREAS WILL BE NOTED ON THE LANDSCAPE PLAN

TO ENSURE STABILIZATION OF SOILS, RESTAKING OF SOD WHERE APPLICABLE, PROPER WATERING AND MULCH MAINTENANCE WILL BE REQUIRED. INSPECT SEEDED OR SODDED AREAS ON A TIMELY DAY-TO-DAY BASIS. IN THE EVENT OF A SEEDING FAILURE, RESEED AND RE MULCH THE AREAS WHERE THE ORIGINAL SEED HAS FAILED TO GROW AND PERFORM ADDITIONAL WATERING AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER. SPECIAL MAINTENANCE PROVISIONS FOR WILD AND PRAIRIE GRASS SEEDING AREAS AS NOTED IN THE LANDSCAPE PLAN. PROMPTLY REPLACE ALL SOD THAT DRIES OUT TO THE POINT WHERE IT IS PRESUMED DEAD AND ALL SOD THAT HAS BEEN DAMAGED, DISPLACED, WEAKENED, OR HEAVILY INFESTED WITH WEEDS AT NO ADDITIONAL COST TO THE OWNER.

IN AREAS TO BE TEMPORARILY SEEDDED, USE INTRODUCED SEED MIXTURE EQUIVALENT TO SUDAS STANDARD. APPLY SEED MIXTURE PER SUDAS STANDARD. INCORPORATE A FERTILIZER (SLOW RELEASE TYPE WITH 10 WEEK RESIDUAL) CONSISTING OF 23-0-35 (N-P-K) INTO THE SOIL AT AN APPLICATION RATE OF 224 LB PER ACRE (600 LBS PER ACRE) BY DISKING. PRIOR TO SEEDING, IN PROBLEMATIC AREAS IT MAY BE NECESSARY TO USE A LOW PHOSPHORUS ORGANIC FERTILIZER IN CASES WHERE SEEDS MAY NOT GERMINATE IN THE CASE. SEED AND FERTILIZER SHALL BE DISKED INTO THE SURFACE AND MULCHED PROPERLY TO ENSURE GERMINATION AND UPTAKE OF THE PHOSPHORUS BY THE SEED.

TO ENSURE ADEQUATE GERMINATION OF THE SEED THE WORK WILL BE PERFORMED AS FOLLOWS:
SPRING - FROM MARCH 1 THROUGH MAY 31.
FALL - FROM AUGUST 1 TO SEPTEMBER 30.
AFTER SEPTEMBER 30, WAIT UNTIL OCTOBER 30 TO PERFORM DORMANT SEEDING. DORMANT SEEDING WILL ONLY BE ALLOWED IF THE MAXIMUM SOIL TEMPERATURE AT A DEPTH OF 25 MM (1 INCH) DOES NOT EXCEED 4.4 DEGREES C (40 DEGREES F) IN ORDER TO PREVENT GERMINATION.

IN SEEDED AREAS WITH SLOPES STEEPER THAN 3:1 AND LENGTHS LESS THAN 15 METERS (50 FEET), INSTALL BIODEGRADABLE EROSION CONTROL BLANKETS UNIFORMLY OVER THE SOIL SURFACE BY HAND WITHIN 24 HOURS AFTER SEEDING IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. USE COMPOST BLANKET OR OWNER APPROVED EQUAL.

IN AREAS WHERE IRRIGATION IS TO BE INSTALLED, CONTRACTOR SHALL WORK IN ZONES TO FINISH GRADE AND INSTALL THE SYSTEM IN ZONES. NOTE: EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL SOILS HAVE BEEN STABILIZED WITH SOD OR SEEDED AREAS THAT EXHIBIT MINIMUM OF 70% LAWN VEGETATIVE COVERAGE. IF SILT FENCE HAS TO BE REMOVED TO INSTALL THE IRRIGATION SYSTEM, IT SHALL BE REINSTALLED AT THE END OF EACH WORK DAY OR USE BIO ROLLS TO PROVIDE PROTECTION DURING THE INSTALLATION PROCESS UNTIL LAWN AREAS HAVE SOD AND/OR PLANT BEDS ARE MULCHED.

IN AREAS TO BE SODDED, SILT FENCE CAN BE REMOVED SHORT TERM FOR WORKING, BUT EXPOSED SOIL AREAS SHALL BE SODDED OR EROSION CONTROL MEASURES SHALL BE REINSTALLED AT THE END OF EACH WORK DAY.

ALL TOPSOIL THAT HAS BEEN STRIPPED FROM THE GRADED AREAS SHALL BE STOCKPILED AS SHOWN ON THE PLAN. ONE SITE GRADING HAS BEEN COMPLETED THE STOCKPILED TOP SOIL WILL BE PLACED ON ALL AREAS TO RECEIVE SOD OR LANDSCAPING.

NOTE: THE PROJECT'S LANDSCAPE PLAN IS PART OF THE SWPPP FOR SOIL STABILIZATION. REFERENCES SHALL BE MADE TO THE APPROVED LANDSCAPE PLAN. AMENDMENTS TO THE LANDSCAPE PLAN SHALL BE APPROVED BY THE OWNER AND DOCUMENTED AS PART OF THE SWPPP.

FEH DESIGN

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EROSION AND SEDIMENT CONTROL PLAN AND NOTES

SHEET TITLE

PROJECT TITLE: DUPACO COMMUNITY CREDIT UNION

Project Name: DUPACO

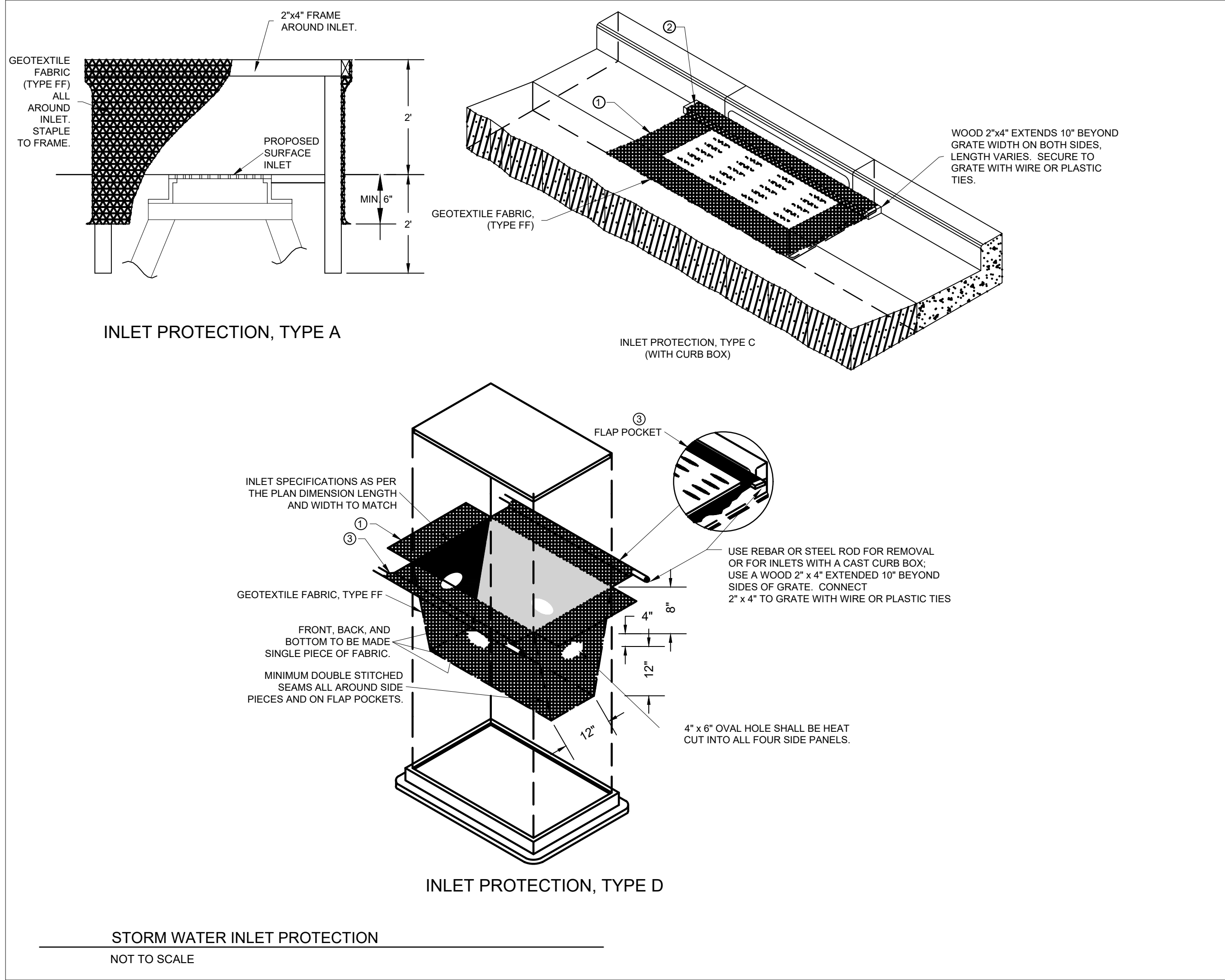
1090 EAST HICKMAN ROAD
WAUKEE, IOWA

DATE ISSUED: MARCH 16, 2022

REV. NO.	DATE
1	MARCH 22, 2022
2	APRIL 5, 2022
3	APRIL 19, 2022
4	MAY 3, 2022
5	MAY 17, 2022

PROJECT NUMBER
121.1153.30

SHEET
C 600



ALL EROSION CONTROL MEASURES TO BE INSTALLED AND MAINTAINED PER IOWA SUDAS STANDARDS

INSTALLATION NOTES:

TYPE C

- TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
- THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

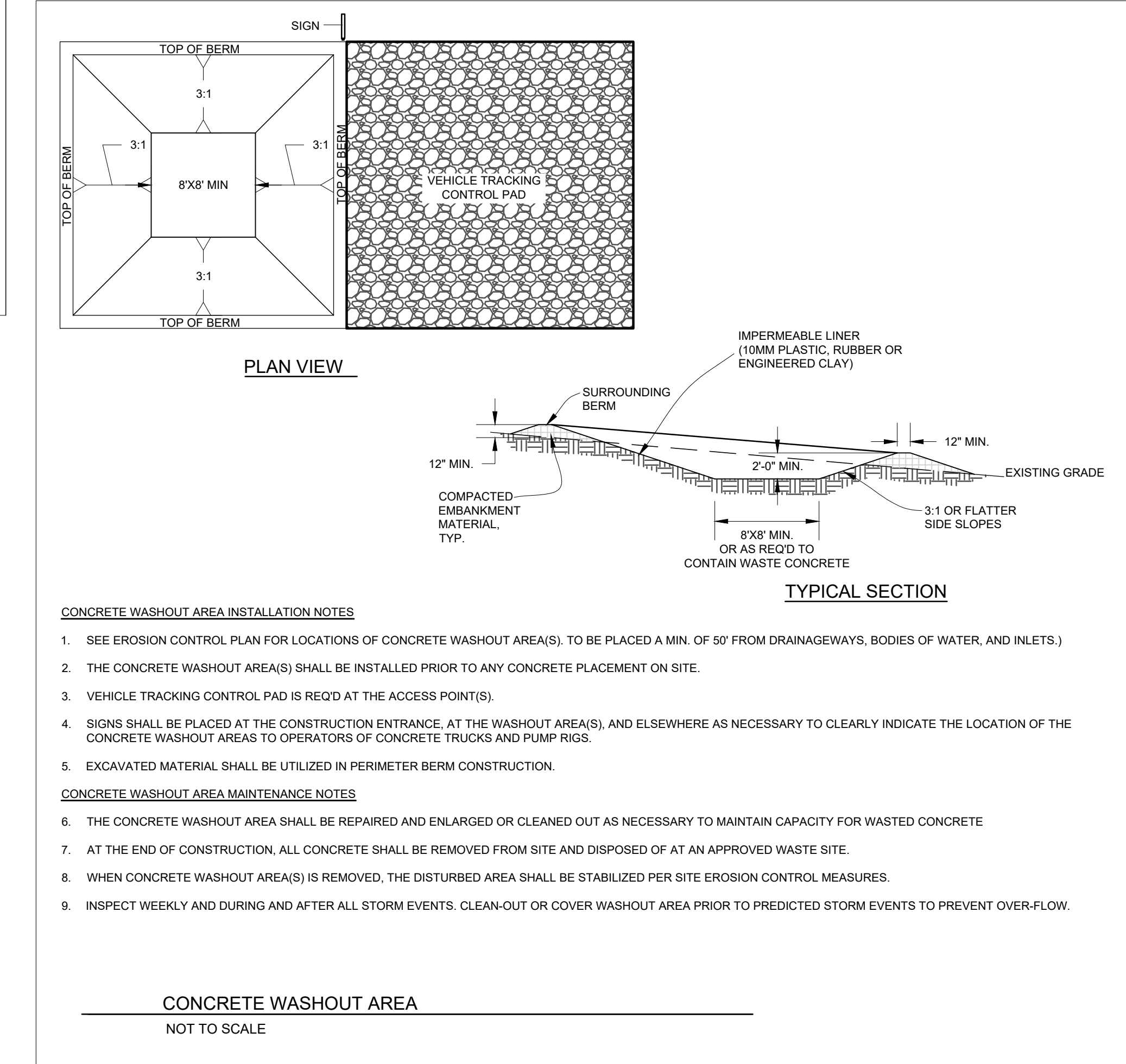
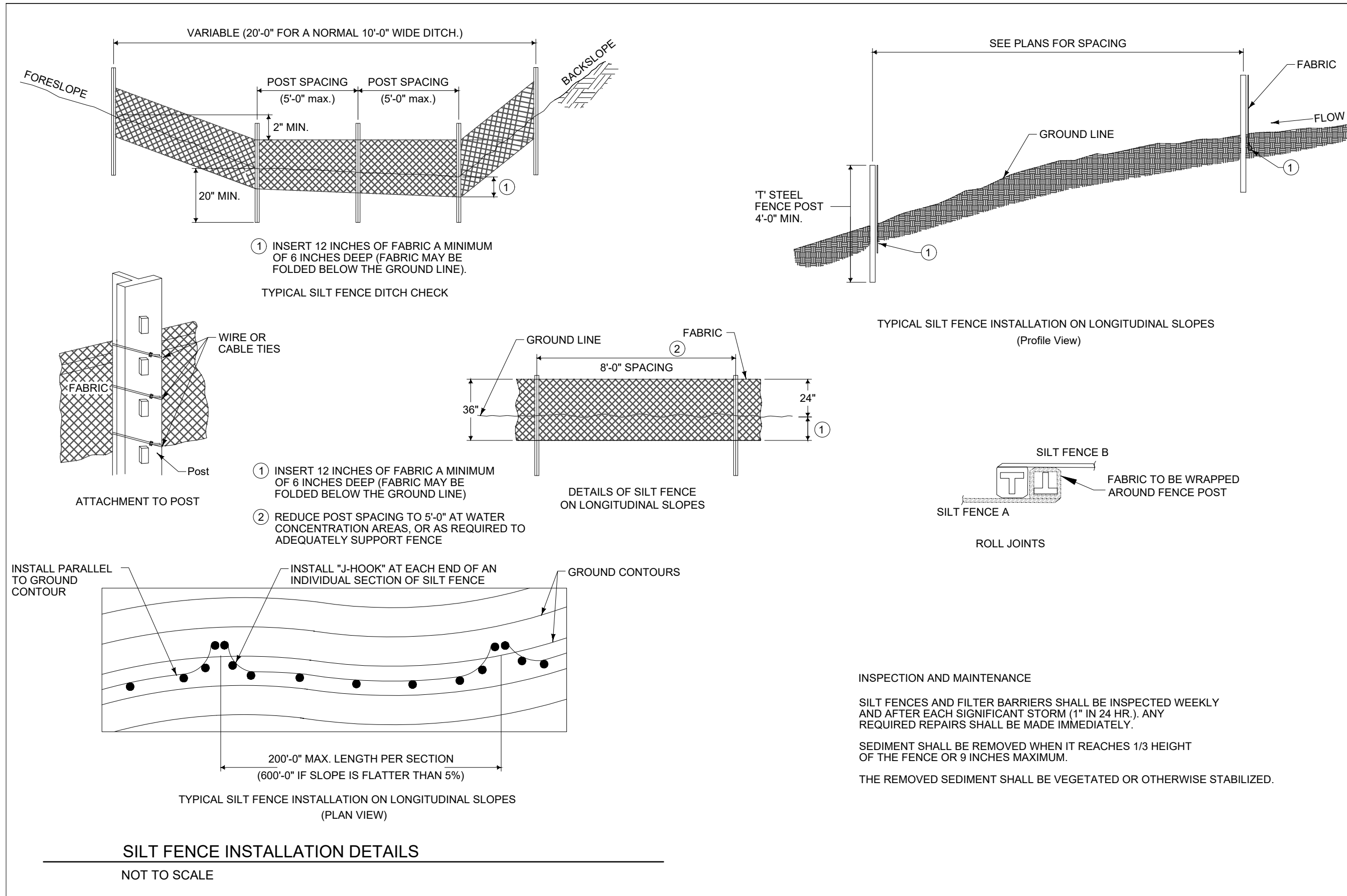
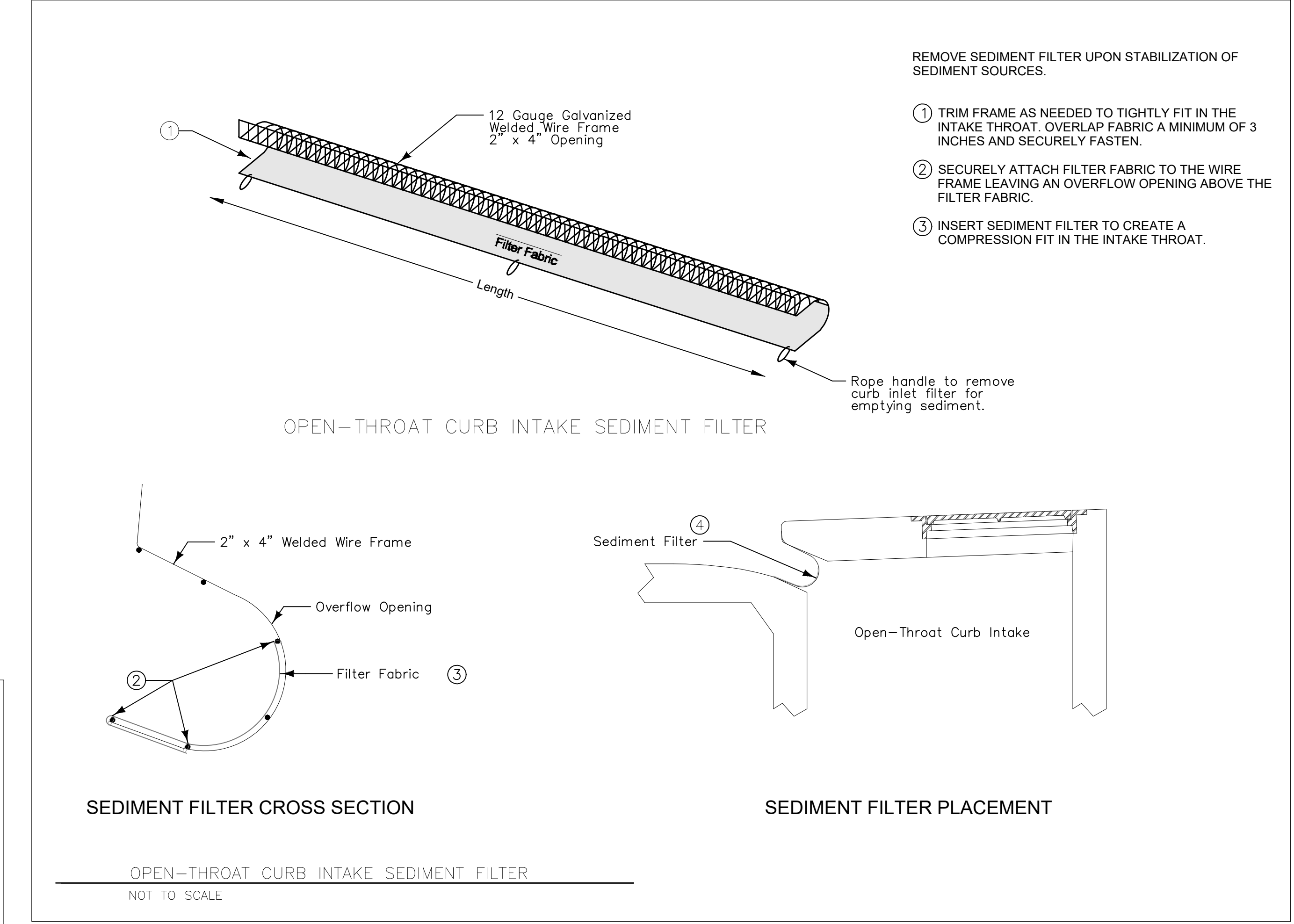
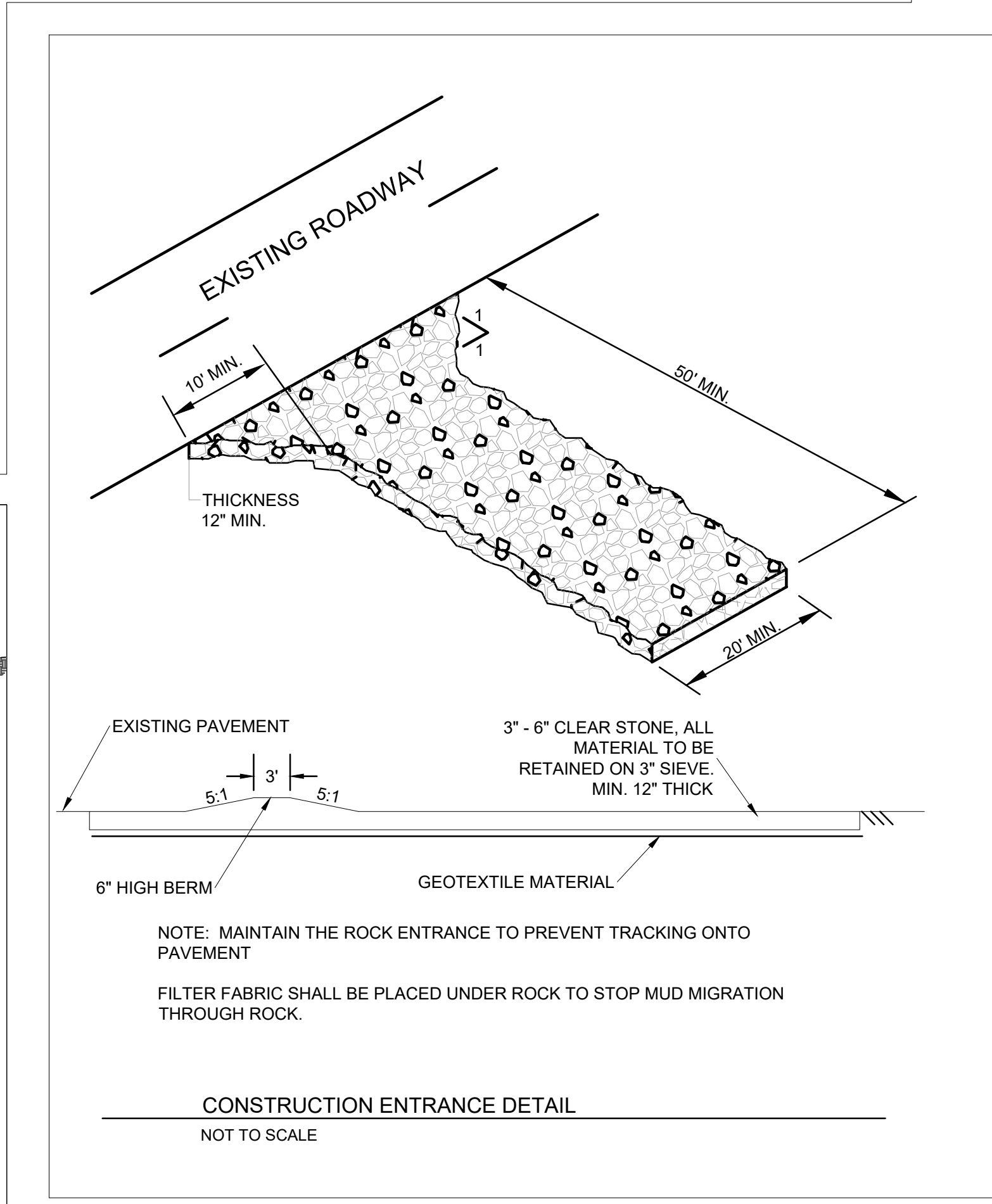
TYPE D

- DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
- THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHEN NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

GENERAL NOTES:

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- FLAP POCKET SHALL BE LARGE ENOUGH TO ACCEPT A WOOD 2" x 4".



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GENERAL NOTES

- DRAWINGS ARE INTENDED TO BE PRINTED ON 30 X 42 PAPER. PRINTING THESE DRAWINGS AT A DIFFERENT SIZE WILL IMPACT THE SCALE. VERIFY THE GRAPHIC SCALE BEFORE REFERENCING ANY MEASUREMENTS ON THESE SHEETS. THE RECIPIENT OF THESE DRAWINGS SHALL BE RESPONSIBLE FOR ANY ERRORS RESULTING FROM INCORRECT PRINTING, COPYING, OR ANY OTHER CHANGES THAT ALTER THE SCALE OF THE DRAWINGS.
- VERIFY ALL PLAN DIMENSIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE TO ADDRESS ANY QUESTIONS OR CLARIFY ANY DISCREPANCIES.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- GEOTECHNICAL SOILS REPORT RECOMMENDATIONS SHALL BE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL USE THESE CONTRACT DOCUMENTS AS A BASIS FOR THE BID.
- CONTRACTOR SHALL CONFIRM THAT SITE CONDITIONS ARE SIMILAR TO THE PLANS, WITHIN TOLERANCES STATED IN THE CONTRACT DOCUMENTS, AND SATISFACTORY TO THE CONTRACTOR PRIOR TO START OF WORK. SHOULD SITE CONDITIONS BE DIFFERENT THAN REPRESENTED ON THE PLANS OR UNSATISFACTORY TO THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND FURTHER DIRECTION.
- THE CONTRACTOR IS RESPONSIBLE TO PAY FOR, AND OBTAIN, ANY REQUIRED APPLICATIONS, PERMITTING, LICENSES, INSPECTIONS AND METERS ASSOCIATED WITH WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO ANY VIOLATIONS OR NON-COMFORMANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, JURISDICTIONAL CODES, AND REGULATORY AGENCIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UTILITY LOCATES PRIOR TO ANY EXCAVATION. REFER TO ENGINEERING UTILITY PLANS FOR ALL PROPOSED UTILITY LOCATIONS AND DETAILS. NOTIFY OWNER'S REPRESENTATIVE IF EXISTING OR PROPOSED UTILITIES INTERFERE WITH THE ABILITY TO PERFORM WORK.
- UNLESS IDENTIFIED ON THE PLANS FOR DEMOLITION OR REMOVAL, THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT OR EXISTING LANDSCAPE, ADJACENT OR EXISTING PAVING, OR ANY PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION, ESTABLISHMENT OR DURING THE SPECIFIED MAINTENANCE PERIOD. ALL DAMAGES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOGGING ANY DAMAGES PRIOR TO START OF CONSTRUCTION AND DURING THE CONTRACT PERIOD.
- ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUESTS A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE JURISDICTIONAL AGENCIES AND THE OWNER'S REPRESENTATIVE IF THEIR WORK AND OPERATIONS AFFECT OR IMPACT THE PUBLIC RIGHTS-OF-WAY. OBTAIN APPROVAL PRIOR TO ANY WORK WHICH AFFECTS OR IMPACTS THE PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THIS REQUIREMENT DURING THE CONTRACT PERIOD.
- SIGHT TRIANGLES AND SIGHT LINES SHALL REMAIN UNOBSTRUCTED BY EQUIPMENT, CONSTRUCTION MATERIALS, PLANT MATERIAL OR ANY OTHER VISUAL OBSTACLE DURING THE CONTRACT PERIOD AND AT MATURITY OF PLANTS PER LOCAL JURISDICTIONAL REQUIREMENTS.
- NO PLANT MATERIAL OTHER THAN GROUND COVER IS ALLOWED TO BE PLANTED ADJACENT TO FIRE HYDRANTS AS STIPULATED BY JURISDICTIONAL REQUIREMENTS.
- COORDINATE SITE ACCESS, STAGING, STORAGE AND CLEANOUT AREAS WITH OWNER'S REPRESENTATIVE.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SAFETY FENCING AND BARRIERS AROUND ALL IMPROVEMENTS SUCH AS WALLS, PLAY STRUCTURES, EXCAVATIONS, ETC. ASSOCIATED WITH THEIR WORK UNTIL SUCH FACILITIES ARE COMPLETELY INSTALLED PER THE PLANS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THEIR MATERIAL STOCK PILES AND WORK FROM VANDALISM, EROSION OR UNINTENDED DISTURBANCE DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE IS ISSUED.
- THE CONTRACTOR SHALL KNOW, UNDERSTAND AND ABIDE BY ANY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ASSOCIATED WITH THE SITE. IF A STORM WATER POLLUTION PREVENTION PLAN IS NOT PROVIDED BY THE OWNER'S REPRESENTATIVE, REQUEST A COPY BEFORE PERFORMANCE OF ANY SITE WORK.
- MAINTAIN ANY STORM WATER MANAGEMENT FACILITIES THAT EXIST ON SITE FOR FULL FUNCTIONALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ANY NEW STORM WATER MANAGEMENT FACILITIES THAT ARE IDENTIFIED IN THE SCOPE OF WORK TO FULL FUNCTIONALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER FOR FAILURE TO MAINTAIN STORM WATER MANAGEMENT FACILITIES DURING THE CONTRACT PERIOD.
- THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE SITE OR ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THE LANDSCAPE INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS DURING THEIR CONTRACTED COURSE OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT ANY IMPACTS TO ADJACENT WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS RESULTING FROM WORK DONE AS PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE STANDARDS DURING THEIR CONTRACTED COURSE OF WORK.
- THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CONSTRUCTION MATERIAL IMPORTED TO OR EXPORTED FROM THE PROJECT SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT. TRANSPORTATION METHODS ON PUBLIC RIGHT-OF-WAYS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS.
- THE CLEANING OF EQUIPMENT IS PROHIBITED AT THE JOB SITE UNLESS AUTHORIZED BY THE OWNER'S REPRESENTATIVE IN A DESIGNATED AREA. THE DISCHARGE OF WATER, WASTE CONCRETE, POLLUTANTS, OR OTHER MATERIALS SHALL ONLY OCCUR IN AREAS DESIGNED FOR SUCH USE AND APPROVED BY THE OWNER'S REPRESENTATIVE.
- THE CLEANING OF CONCRETE EQUIPMENT IS PROHIBITED AT THE JOB SITE EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IN THE STORM SEWER IS PROHIBITED.
- LOCAL, STATE AND FEDERAL JURISDICTIONAL REQUIREMENTS, RESTRICTIONS OR PROCEDURES SHALL SUPERSEDE THESE PLANS, NOTES AND SPECIFICATIONS WHEN MORE STRINGENT. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS OCCUR.

GENERAL LANDSCAPE NOTES

- UTILITY WARNING: THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EMBEDDED AND/OR ABANDONED UTILITIES ARE NOT GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ERRORS NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
- NOTIFY UTILITY OWNERS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXISTENCE, EXACT LOCATION AND DEPTH OF ALL UTILITIES. AVOID DAMAGE TO UTILITIES AND SERVICES DURING CONSTRUCTION. ANY DAMAGE DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE. COORDINATE AND COOPERATE WITH UTILITY COMPANIES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AND SPECIFICATIONS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.
- ALL PLANT MATERIAL SHALL AT LEAST MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION).
- MULCH SHALL NOT BE PLACED AROUND THE COLLAR OF SHRUB OR TREE. PROVIDE A MINIMUM OF 2" BETWEEN MULCH AND COLLAR OF SHRUB OR TREE.
- ALL PLANT MATERIAL SHALL BE GROWN IN ZONE CAPABLE OF WITHSTANDING LOCAL CLIMATE AND GROWING CONDITIONS.
- TREE OR SHRUB SHALL STAND PLUMB. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACK FILLING.
- LIVE PLANTS CAN BE PLANTED IN THE FIELD DURING THE GROWING SEASON FROM MAY 1 THROUGH OCTOBER 1. ANY SUGGESTED PLANTING TIMES NOT IN THIS WINDOW SHALL BE APPROVED BY LANDSCAPE ARCHITECT. IF PLANTING OCCURS OUTSIDE OF THIS WINDOW, ADDITIONAL MEASURES MAY NEED TO BE TAKEN (I.E. MULCH) TO ENSURE PLANT SURVIVAL. IN THESE INSTANCES, THE CONTRACT PRICE MAY NEED TO BE ADJUSTED ACCORDINGLY.
- PLANTS SHOULD BE WATERED IN AFTER INSTALLATION TO ENSURE THEIR SURVIVAL. THIS TYPICALLY INVOLVES WATERING AT TIME OF INSTALLATION AND 2 TIMES WEEKLY FOR A ONE MONTH PERIOD OR UNTIL GROUND FREEZE UP IF NATURAL RAINFALLS ARE INSUFFICIENT. A SINGLE WATERING EVENT INVOLVES WATERING THE SOIL IN THE PLANTED AREAS TO THE POINT OF SATURATION BUT STOPPING SHORT OF SOIL DISPLACEMENT. SHOULD VERY DRY CONDITIONS DEVELOP WITHIN ONE YEAR OF PLANTING, ADDITIONAL WATERINGS MAY BE NECESSARY. CONSULTANT OR LANDSCAPE ARCHITECT WILL DETERMINE THIS AND CONTRACT PRICES MAY BE ADJUSTED TO ACCOMMODATE THIS ACTION.
- ALL PLANT MATERIAL SHALL BE SPECIMEN QUALITY, HEALTHY, FREE OF DISEASE AND INSECTS AND SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS. PLANTS SHALL ALSO BE FREE FROM PHYSICAL DAMAGE OR OTHER CONDITIONS THAT WOULD PREVENT VIGOROUS GROWTH.
- ALL PROPOSED PLANTS SHALL BE LOCATED AS SHOWN ON PLANS. ALL TREES TO BE PLANTED AT A MINIMUM DISTANCE OF 5 FEET FROM PAVEMENTS AND 6 FEET FROM ALL HYDRANTS.
- CONTRACTOR IS RESPONSIBLE FOR PLANTS AWAITING INSTALLATION AND SHALL PROTECT THEM FROM INJURY AND THEFT.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKES PRECEDENCE OVER WRITTEN QUANTITIES.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
- THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING, SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
- THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
- LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%, MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENEED TO A DEPTH OF 8" - 12" AND AMENDED PER SPECIFICATIONS.
- ALL LANDSCAPED AREAS ARE TO RECEIVE ORGANIC SOIL PREPARATION PER RATE IDENTIFIED BY A SOIL TEST OR AS NOTED IN THE TECHNICAL SPECIFICATIONS.
- TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
- THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 6' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.
- ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
- ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 1 YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 1 YEAR FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
- ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO DOING WORK.
- ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE MULCH RINGS. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.
- EXISTING TURF AREAS THAT ARE DISTURBED DURING CONSTRUCTION, ESTABLISHMENT AND THE MAINTENANCE PERIOD SHALL BE RESTORED WITH NEW SOIL TO MATCH EXISTING TURF SPECIES. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.
- WHEN COMPLETE, ALL GRADES SHALL BE WITHIN +/- 1/8" OF FINISHED GRADES AS SHOWN ON THE PLANS.

- WHEN PLANTER POTS ARE SHOWN ON PLANS, CONTRACTOR SHALL INCLUDE THE FOLLOWING: PLANTER MIX, ANNUAL FLOWER PLANTING PROGRAM (INCLUDES 2 PLANTINGS FOR THE 1ST YEAR (SPRING AND FALL) AND WINTER HAND-WATERING AS NEEDED). UNLESS OTHERWISE SPECIFIED, CONTRACTOR TO PROVIDE ANNUAL PLANTING SELECTION FOR REVIEW BY OWNER. IRRIGATION FOR PLANTERS TO BE ON SEPARATE ZONE(S). CONTRACTOR TO COORDINATE PLACEMENT OF NECESSARY SLEEVEING PRIOR TO PLACEMENT OF PAVEMENT.
- PRIOR TO THE PLACEMENT OF MULCH AND WEED FABRIC, A GRANULAR, PRE-EMERGENT, WEED CONTROL AGENT SHALL BE ADDED TO ALL PLANTING BEDS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION, EXCEPT AROUND ORNAMENTAL GRASSES.
- THE CONTRACTOR IS EXPECTED TO KNOW AND UNDERSTAND THE CITY AND COUNTY SPECIFICATIONS FOR LANDSCAPE AND IRRIGATION. IN CASES OF DISCREPANCIES THE HIGHER OF THE TWO STANDARDS SHALL HAVE PRECEDENCE.
- ALL TREES PLANTED WITHIN RIGHT-OF-WAY WILL INCLUDE CITY APPROVED ROOT BARRIERS.
- REFER TO SHEET IR101-IR104 FOR THE IRRIGATION PLAN AND POINT OF CONNECTION INFORMATION.

PLANT SCHEDULE

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
CANOPY TREES					
1	SO	Quercus bicolor	SWAMP WHITE OAK	8' HT.	B&B
1	HB	Celtis occidentalis	COMMON HACKBERRY	8' HT.	B&B
4	SH	Gleditsia triacanthos 'shademaster'	SHADEMASTER HONEYLOCUST	8' HT.	
2	BG	Nyssa sylvatica	BLACK GUM TREE	8' HT.	B&B
EVERGREEN TREES					
8	TJ	Juniperus virginiana 'Taylor'	TAYLOR JUNIPER	6' HT.	B&B
ORNAMENTAL TREES					
2	EB	Cercis Canadensis	EASTERN REDBUD	6' HT.	B&B (MULTISTEM)
1	WB	Betula populifolia 'Whitespire'	WHITE SPIRE BIRCH	6' HT.	B&B (MULTISTEM)
2	WH	Crataegus viridis 'Winter King'	WINTER KING HAWTHORN	6' HT	B&B
DECIDUOUS SHRUBS					
5'-7' SPREAD					
16	AM	Aronia melanocarpa 'Iroquois Beauty'	IROQUOIS BEAUTY ARONIA	3'h x 5'w	#5 CONT.
19	GP	Dasiphora fruticosa 'Goldfinger'	CINQUEFOIL	4'h x 5'w	#5 CONT.
32	RC	Coloneaster horizontalis	ROCK COTONEASTER	3'h x 5'w	#5 CONT.
27	NB	Physocarpus opulifolius 'Jeflam'	AMBER JUBILEE NINEBARK	4'hx5'w	#5 CONT.
7' + SPREAD					
12	GO	Rhus aromatica 'Gro-Low'	GRO-LOW SUMAC	3'hx7'w	#5 CONT.
27	VS	Spiraea x vanhouttei	VANHOUTTE SPIREA	5'h x 8'w	#5 CONT.
EVERGREEN SHRUBS					
2'-4' SPREAD					
13	BS	Juniperus squamata 'blue star'	BLUE STAR JUNIPER	1'h x 3'w	#5 CONT.
5'-7' SPREAD					
28	JK	Juniperus chinensis 'Kallays Compact'	KALLAY'S COMPACT JUNIPER	2'h x 6'w	#5 CONT.
ORNAMENTAL GRASSES					
47	SS	Panicum virgatum 'Shenandoah'	SHENANDOAH SWITCH GRASS	48" Ht.	#1 CONT.
38	LB	Schizachyrium scoparium	LITTLE BLUESTEM	36" Ht.	#1 CONT.
62	PD	Sporobolus heterolepis	PRAIRIE DROPSSEED	36" Ht.	#1 CONT.

AMENITY SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	CONTACT	PRODUCT NAME	COLOR / FINISH	NOTES	QUANTITY
A	BIKE RACK	BY OWNER	BY OWNER	BY OWNER	BY OWNER	N/A	2
B	PICNIC TABLE	LANDSCAPE FORMS	CONTACT: 816.444.4378 STACY ERNST	HARVEST TABLE & BENCHES	METAL COMPONENTS: POWDERCOAT METAL (LOW SHEEN) SUNSET ORANGE	STYLE: DINING HEIGHT TABLE FREESTANDING BENCHES: DINING HEIGHT BENCH (MATCHING COLORS AND MATERIALS FREESTANDING)	1 TABLE 2 BENCHES

OPEN SPACE REQUIREMENT

ZONING DISTRICT: C-1
REQUIRED OPEN SPACE: 20% OF TOTAL LOT AREA: 76,634 SF / 1.76 ACRES
REQUIRED: 15,327 SF
PROVIDED: 23,342 SF

OPEN SPACE PLANTING REQUIREMENT

REQUIRED:
1 TREE PER 1,000 SF OF REQUIRED OPEN SPACE
1 SHRUB PER 1,000 SF OF REQUIRED OPEN SPACE

15,327 SF /1000 = 15.327 TREES
15,327 SF/1000 = 15.327 SHRUBS

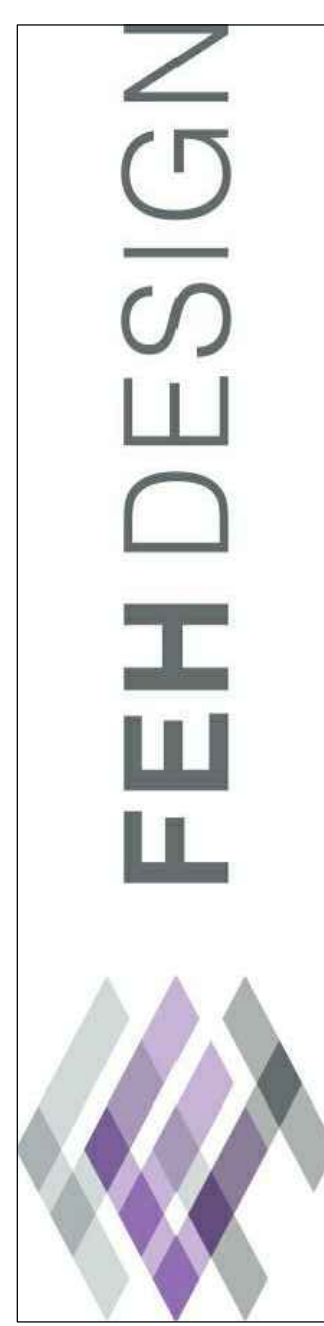
PROVIDED:
21 TREES TOTAL
8 CANOPY
5 ORNAMENTAL
8 EVERGREEN
174 SHRUBS

PARKING AREA LANDSCAPING

REQUIRED:
1 TREE PER EVERY 40 LF OF FRONTAGE

SE ALICE'S ROAD: 288 LF / 40 = 6.7 TREES
E HICKMAN ROAD: 278 LF / 40 = 6.95 TREES

PROVIDED:
SE ALICE'S ROAD: 7
HICKMAN ROAD: 7



OCONOMOWOC, WI (262) 988-2955
DURBOULE, IA (563) 383-4900
DES MOINES, IA (515) 288-2000
SIQUOX CITY, IA (712) 252-3889

SNYDER & ASSOCIATES
5010 VOGES ROAD, MADISON WI 53718
608-368-3444
WWW.SNYDER-ASSOCIATES.COM

LANDSCAPING NOTES

PROJECT TITLE: DUPACO COMMUNITY CREDIT UNION

Project Name: DUPACO

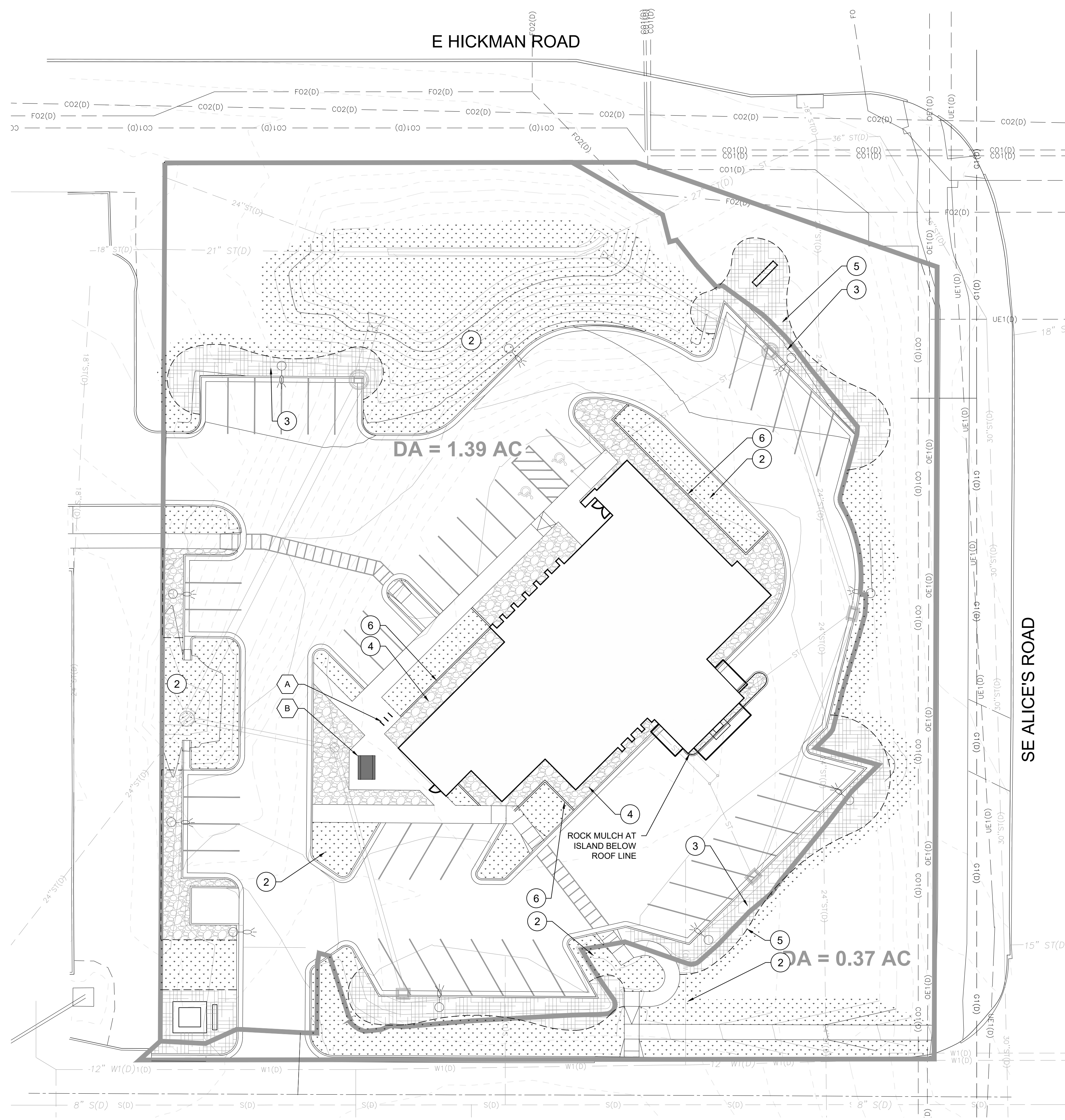
1090 EAST HICKMAN ROAD
WAUKEE, IOWA

DATE ISSUED: MARCH 16, 2022

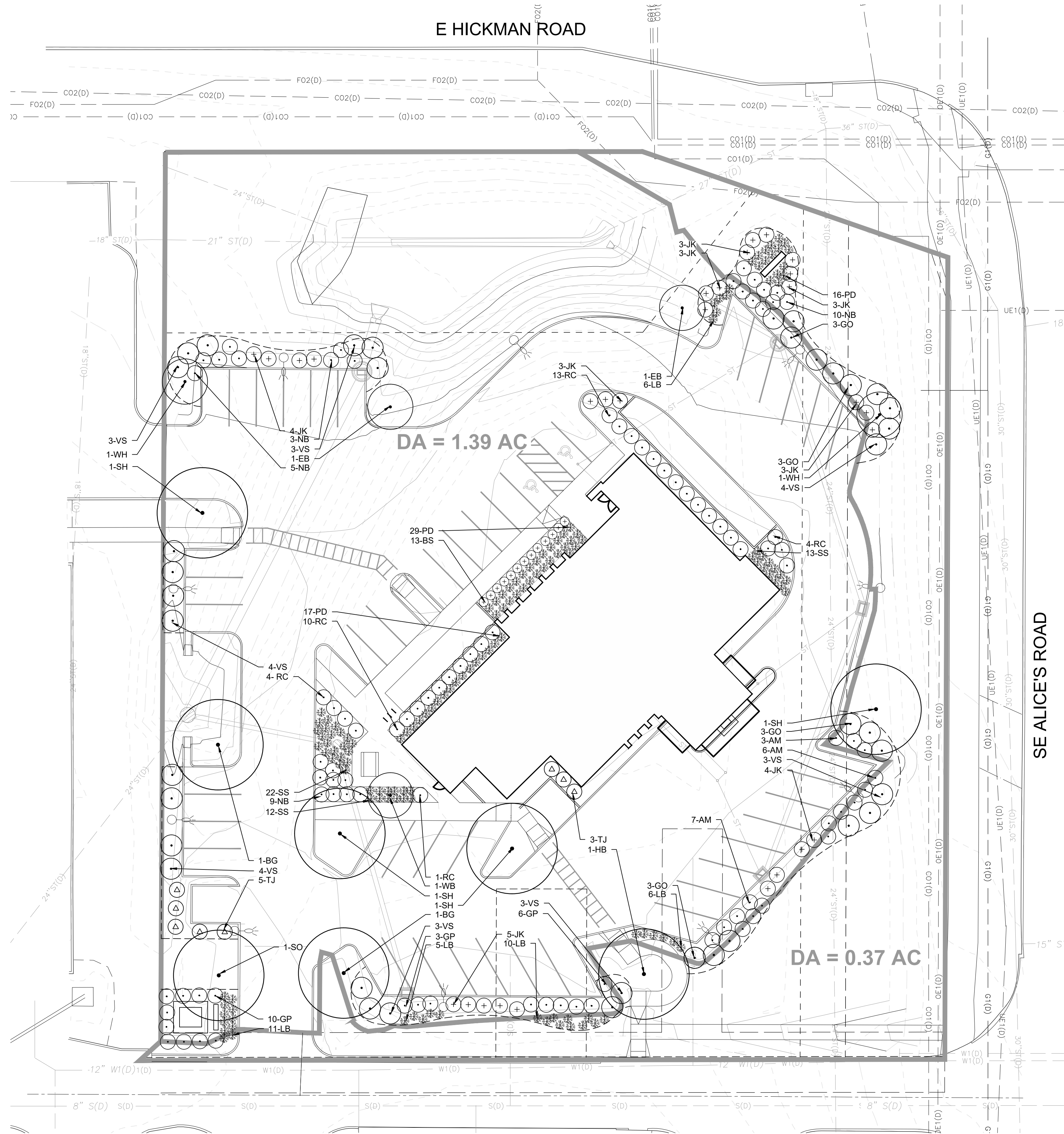
REV. NO.	DATE
1	MARCH 22, 2022
2	APRIL 5, 2022
3	APRIL 19, 2022
4	MAY 3, 2022
5	MAY 17, 2022

PROJECT NUMBER
121.1153.30

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MULCHING, SEEDING, AND SOD PLAN



PLANTING PLAN

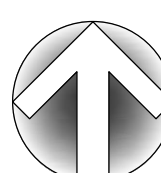
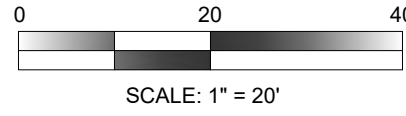

- LANDSCAPE LEGEND**
- TURE SEED, KENTUCKY BLUEGRASS - BARON PROVIDED BY IOWA LANDSCAPE SUPPLY (515.262.2367) OR APPROVED EQUAL. REFER TO CONSTRUCTION NOTES FOR TYPE.
 - SOD (14,950 SF). REFER TO CONSTRUCTION NOTES FOR TYPE.
 - SHRUB BED WITH HARDWOOD MULCH (DOES NOT INCLUDE STAND-ALONE TREES OUTSIDE SHRUB BED AREAS). REFER TO CONSTRUCTION NOTES FOR TYPE.
 - SHRUB BED WITH ROCK MULCH. REFER TO CONSTRUCTION NOTES FOR TYPE.
 - DECIDUOUS CANOPY TREE
 - ORNAMENTAL TREE
 - UPRIGHT EVERGREEN TREE
 - DECIDUOUS SHRUBS
 - EVERGREEN SHRUBS
 - ORNAMENTAL GRASSES
 - SPADE CUT EDGER AT 4" DEPTH
 - LIMIT OF WORK

- LANDSCAPE CONSTRUCTION NOTES**
1. TURE SEED, KENTUCKY BLUEGRASS - BARON PROVIDED BY IOWA LANDSCAPE SUPPLY (515.262.2367) OR APPROVED EQUAL. REFER TO CONSTRUCTION NOTES FOR TYPE.
 2. SOD, KENTUCKY BLUEGRASS PROVIDED BY SHATTUCK TURF FARMS (515.331.4900) OR APPROVED EQUAL.
 3. PROVIDE 3" DEPTH, DOUBLE SHREDDED PREMIUM OAK BAR MULCH AROUND ALL STAND-ALONE TREES TO A MIN. 3-FOOT PERIMETER, AND IN ALL AREAS NOTED ON PLANS OVER GEOTEXILE WEED FABRIC PROVIDED BY IOWA LANDSCAPE SUPPLY (515.262.2367) OR APPROVED EQUAL.
 4. ROCK MULCH: 3" TRAP ROCK AT 3" DEPTH OVER GEOTEXILE WEED FABRIC PROVIDED BY IOWA LANDSCAPE SUPPLY (515.262.2367) OR APPROVED EQUAL.
 5. SPADE CUT EDGER, REFER TO DETAIL 31.3.0
 6. CONCRETE PLANTER CURB, REFER TO DETAIL 41.3.0

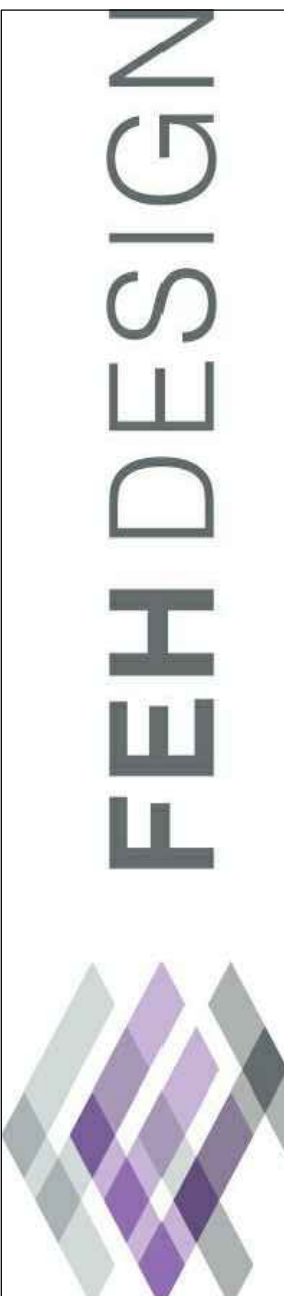

- AMENITY SCHEDULE**
- A. BIKE RACK
 - B. TABLE AND BENCH SEATS
- SEE AMENITY SCHEDULE ON L1.0 FOR FULL DETAILS

PLANT SCHEDULE

KEY	COMMON NAME
CANOPY TREES	
SO	SWAMP WHITE OAK
HB	COMMON HACKBERRY
SH	SHADEMASTER HONEYLOCUST
BG	BLACK GUM TREE
EVERGREEN TREES	
TJ	TAYLOR JUNIPER
ORNAMENTAL TREES	
EB	EASTERN REDBUD
WB	WHITE SPIRE BIRCH
WH	WINTER KING HAWTHORN
DECIDUOUS SHRUBS	
5-7' SPREAD	
AM	IROQUOIS BEAUTY ARONIA
GP	CINQUEFOIL
RC	ROCK COTONEASTER
NB	AMBER JUBILEE NINEBARK
7+ SPREAD	
GO	GRO-LOW SUMAC
VS	VANHOUTTE SPIREA
EVERGREEN SHRUBS	
2-4' SPREAD	
BS	BLUE STAR JUNIPER
5-7' SPREAD	
JK	KALLAY'S COMPACT JUNIPER
ORNAMENTAL GRASSES	
SS	SHENANDOAH SWITCH GRASS
LB	LITTLE BLUESTEM
PD	PRAIRIE DROPSEED


 NORTH

 SCALE: 1" = 20'


TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN IOWA
IOWA ONE CALL
 1-800-292-8989
 TOLL FREE
 WWW.IOWAONECALL.COM
 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

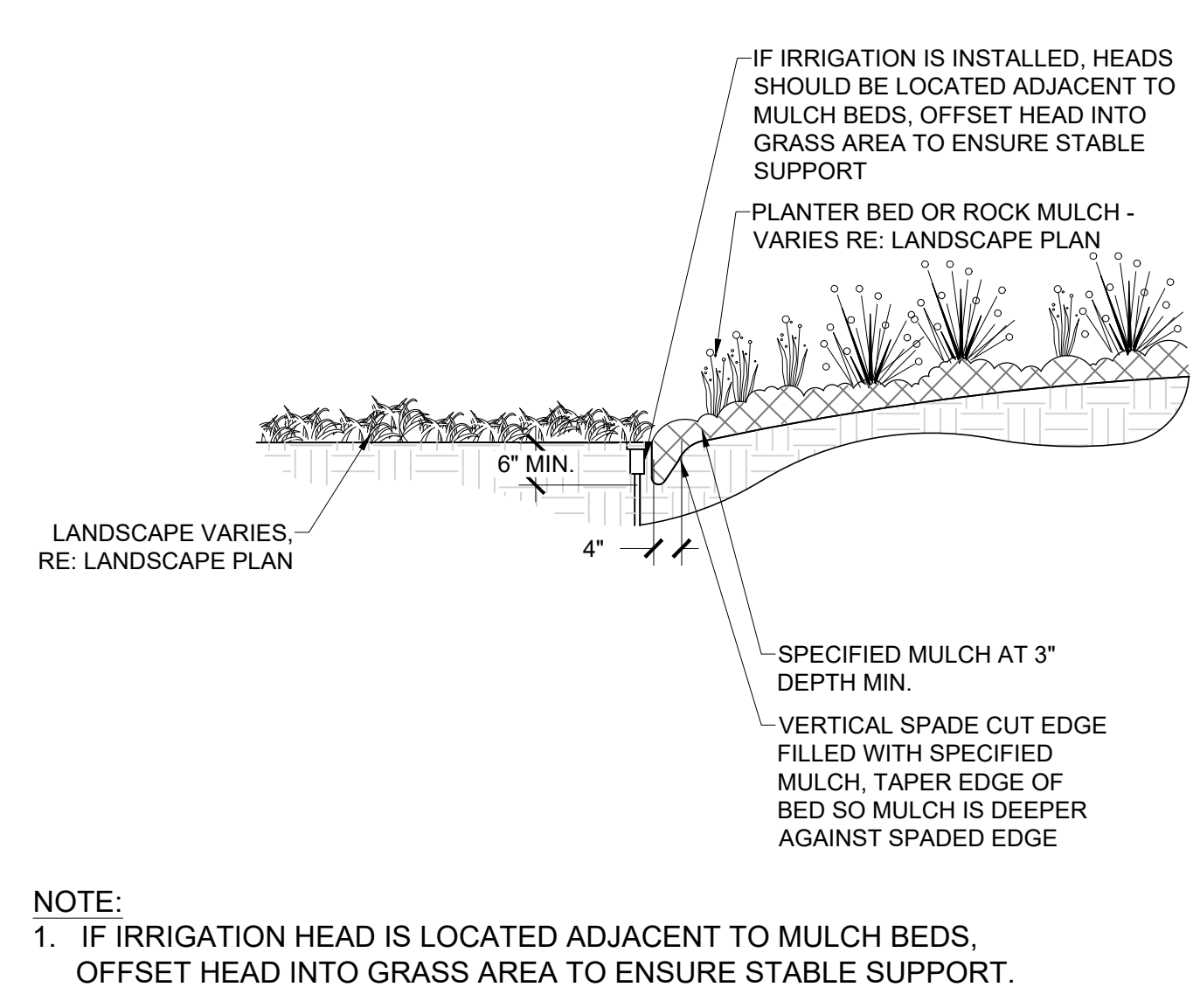
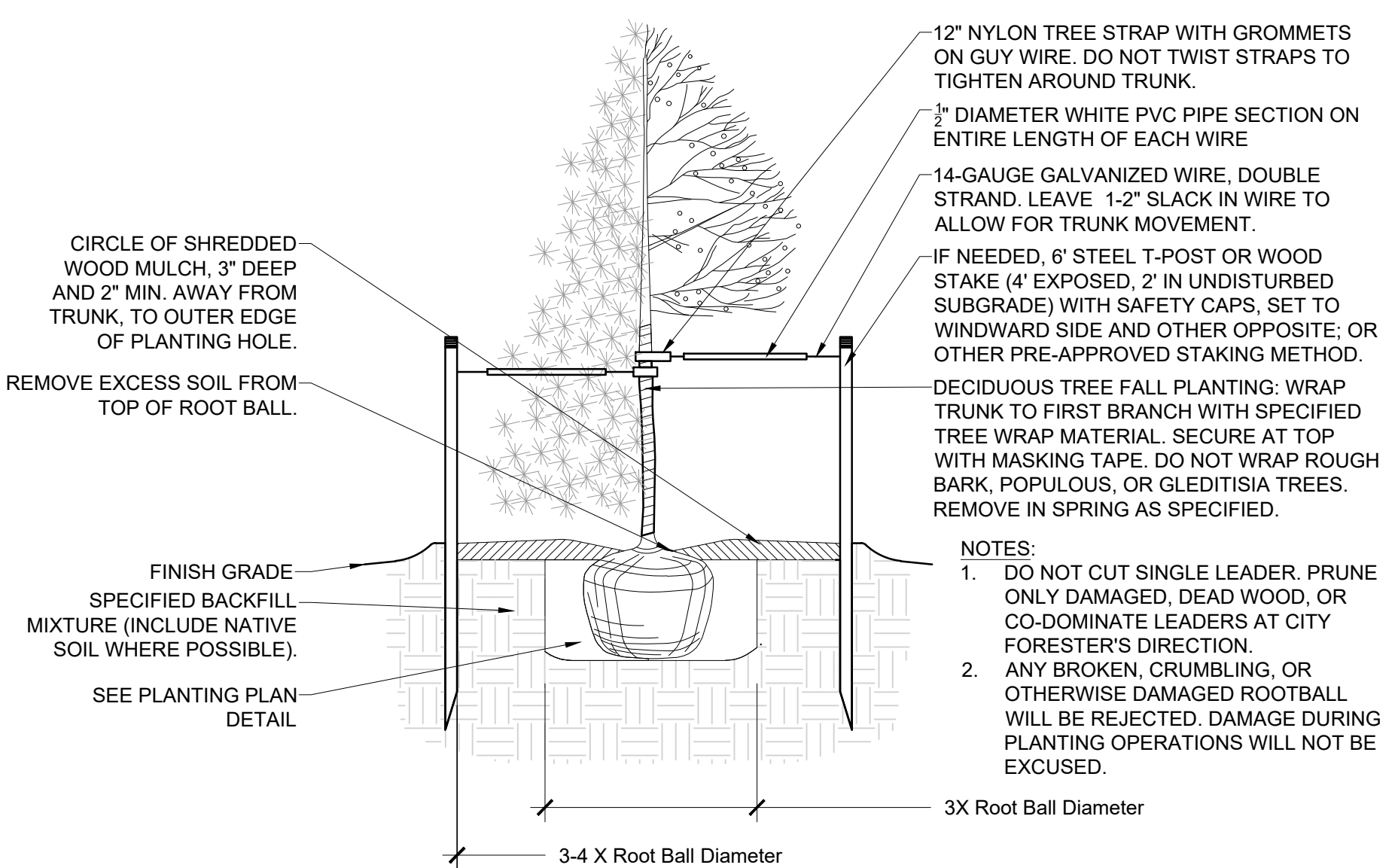
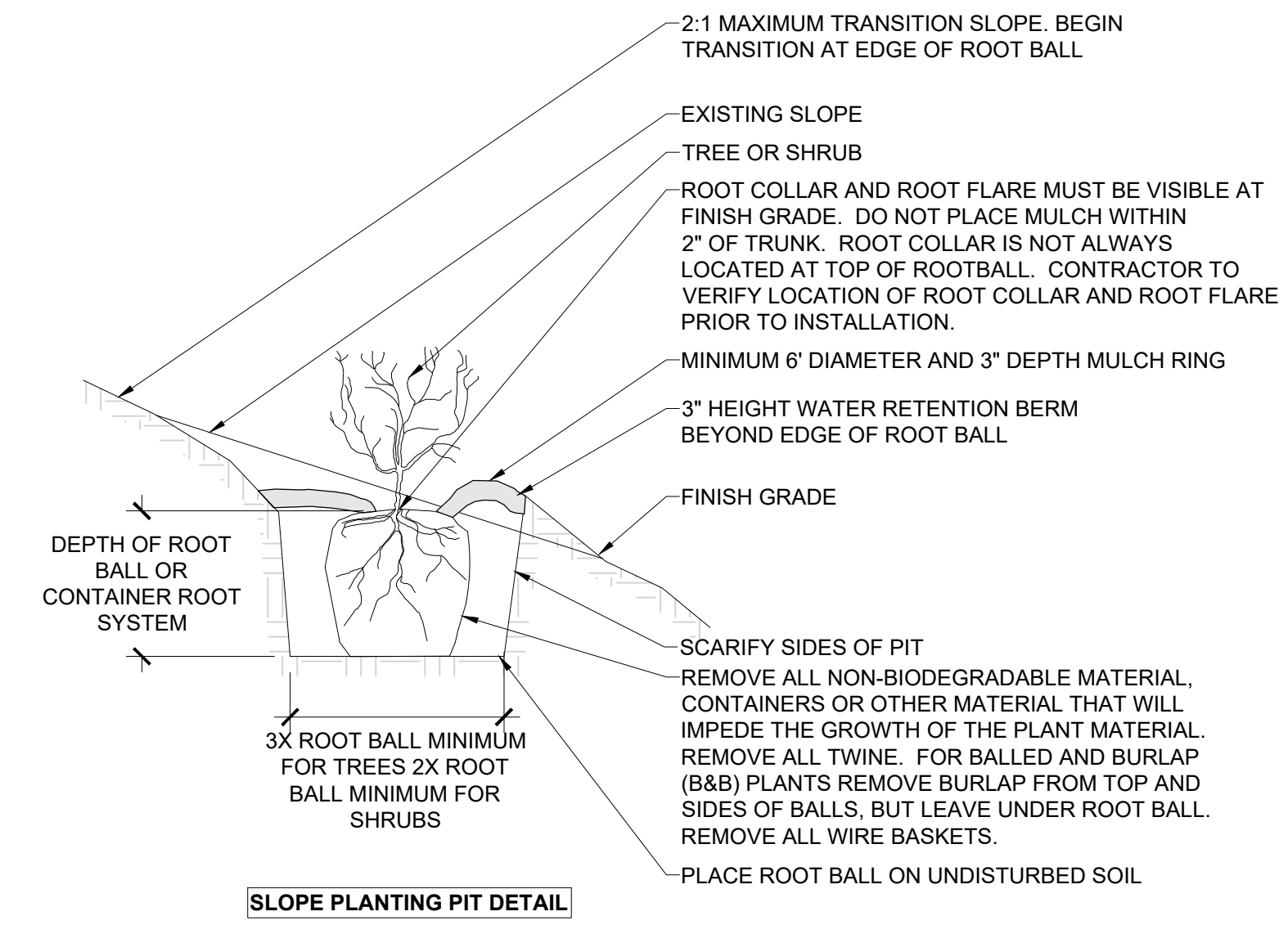
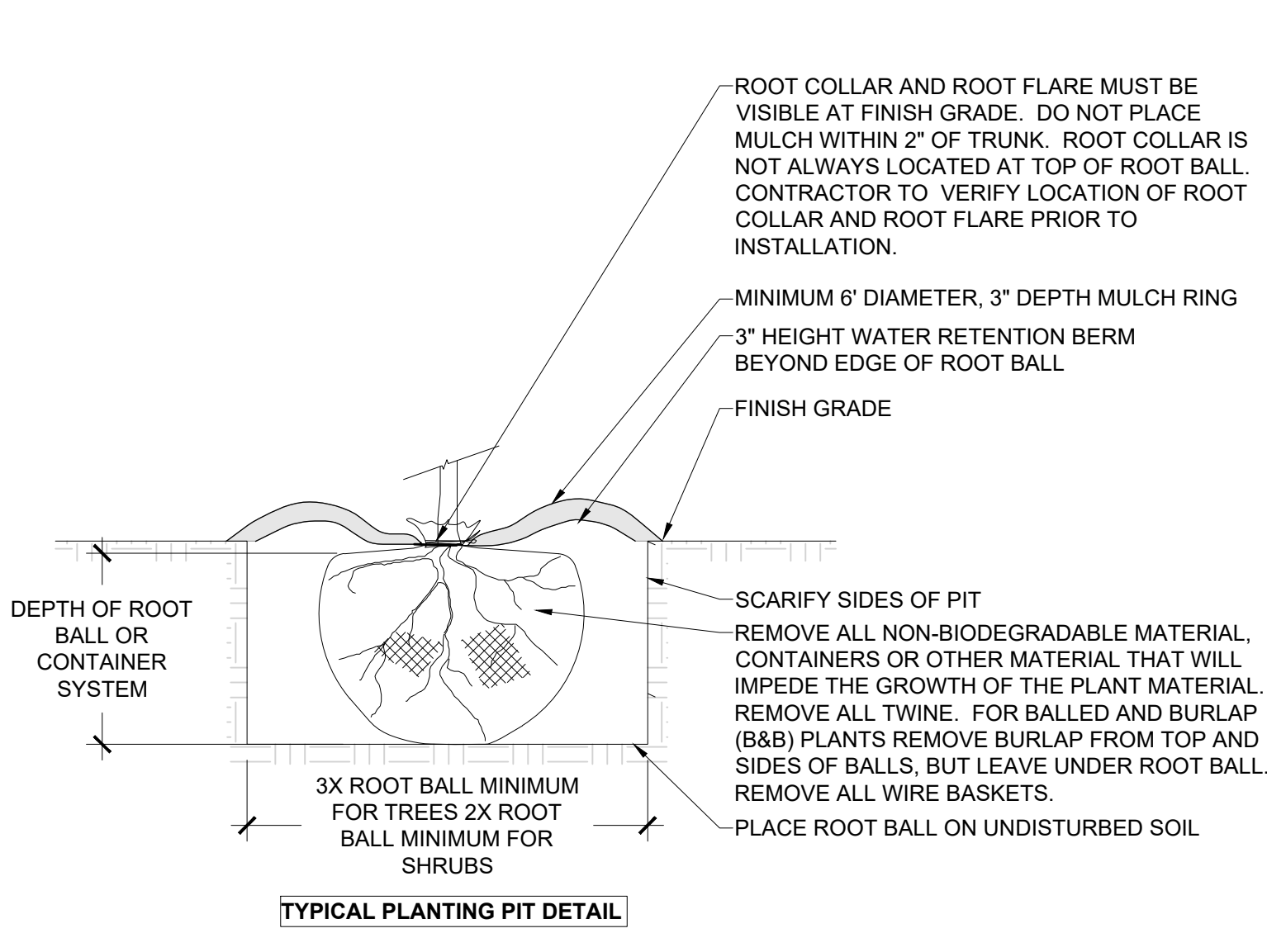

 IN ASSOCIATION WITH

 SNYDER & ASSOCIATES
 5010 VOGES ROAD, MADISON WI 53718
 608-838-0444
 WWW.SNYDER-ASSOCIATES.COM
 DES MOINES, IA (515) 288-2000
 DUBUQUE, IA (563) 883-4900
 OCCOMOWOC, WI (262) 968-2055
 SIOUX CITY, IA (712) 252-3689

MULCHING AND PLANTING PLANS
 SHEET TITLE

PROJECT TITLE: DUPACO COMMUNITY CREDIT UNION
Project Name: DUPACO
 1090 EAST HICKMAN ROAD
 WAUKEE, IOWA

DATE ISSUED: MARCH 16, 2022
 REV. NO. DATE
 1 MARCH 22, 2022
 2 APRIL 5, 2022
 3 APRIL 19, 2022
 4 MAY 3, 2022
 5 MAY 17, 2022

PROJECT NUMBER
121.1153.30
 SHEET
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1 PLANTING PIT

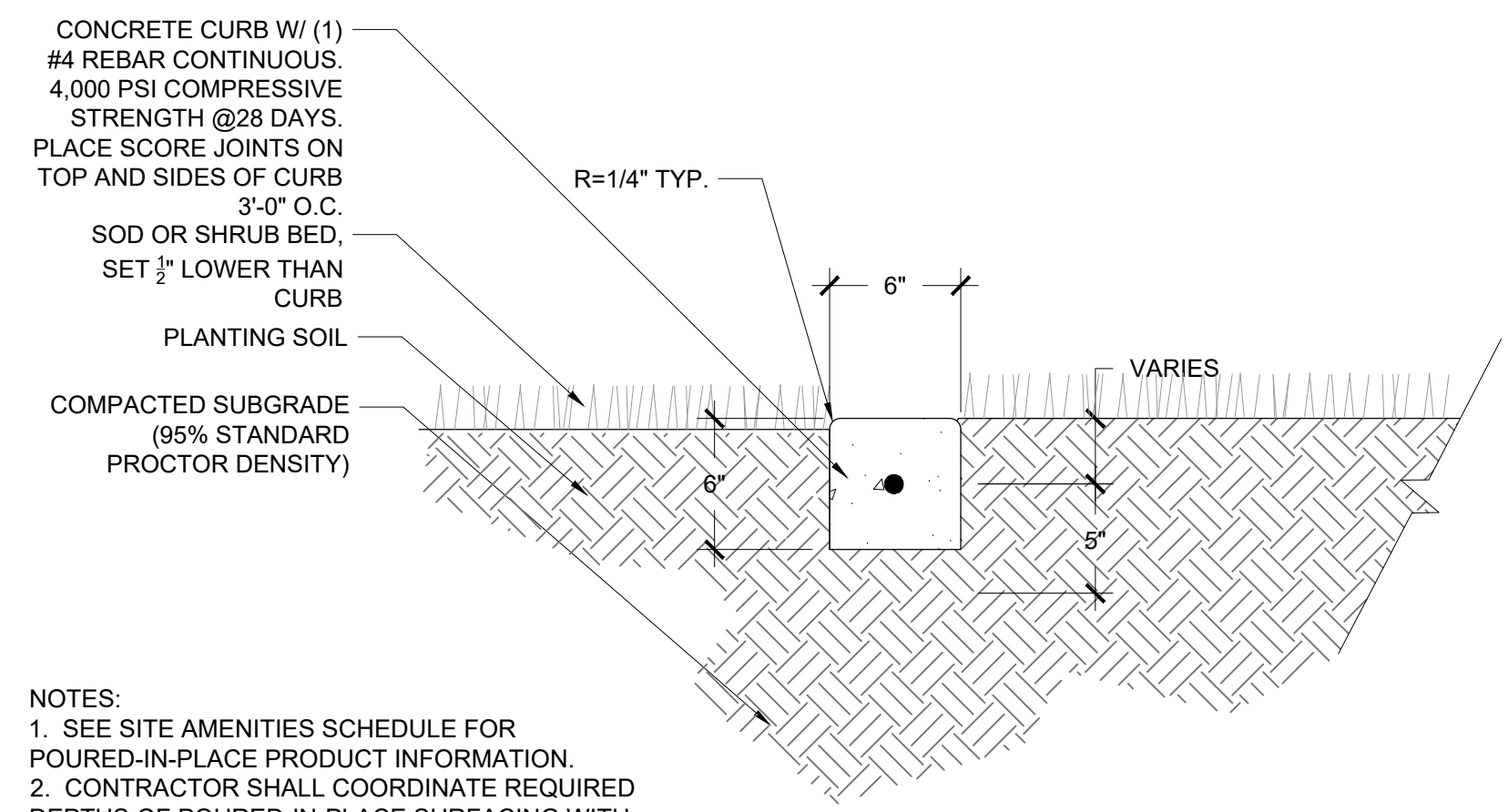
NO SCALE

2 TREE PLANTING

SCALE: 1/2" = 1'-0"

3 SPADE CUT EDGE

SCALE: 1/2" = 1'-0"



- NOTES:
1. SEE SITE AMENITIES SCHEDULE FOR POURED-IN-PLACE PRODUCT INFORMATION.
 2. CONTRACTOR SHALL COORDINATE REQUIRED DEPTHS OF POURED-IN-PLACE SURFACING WITH PLAYGROUND EQUIPMENT REPRESENTATIVE.
 3. CONTRACTOR SHALL ABIDE BY POURED-IN-PLACE SPECIFICATIONS.
 4. THE FULL WARRANTY MUST BE VALID.

4 CONCRETE PLANTER CURB

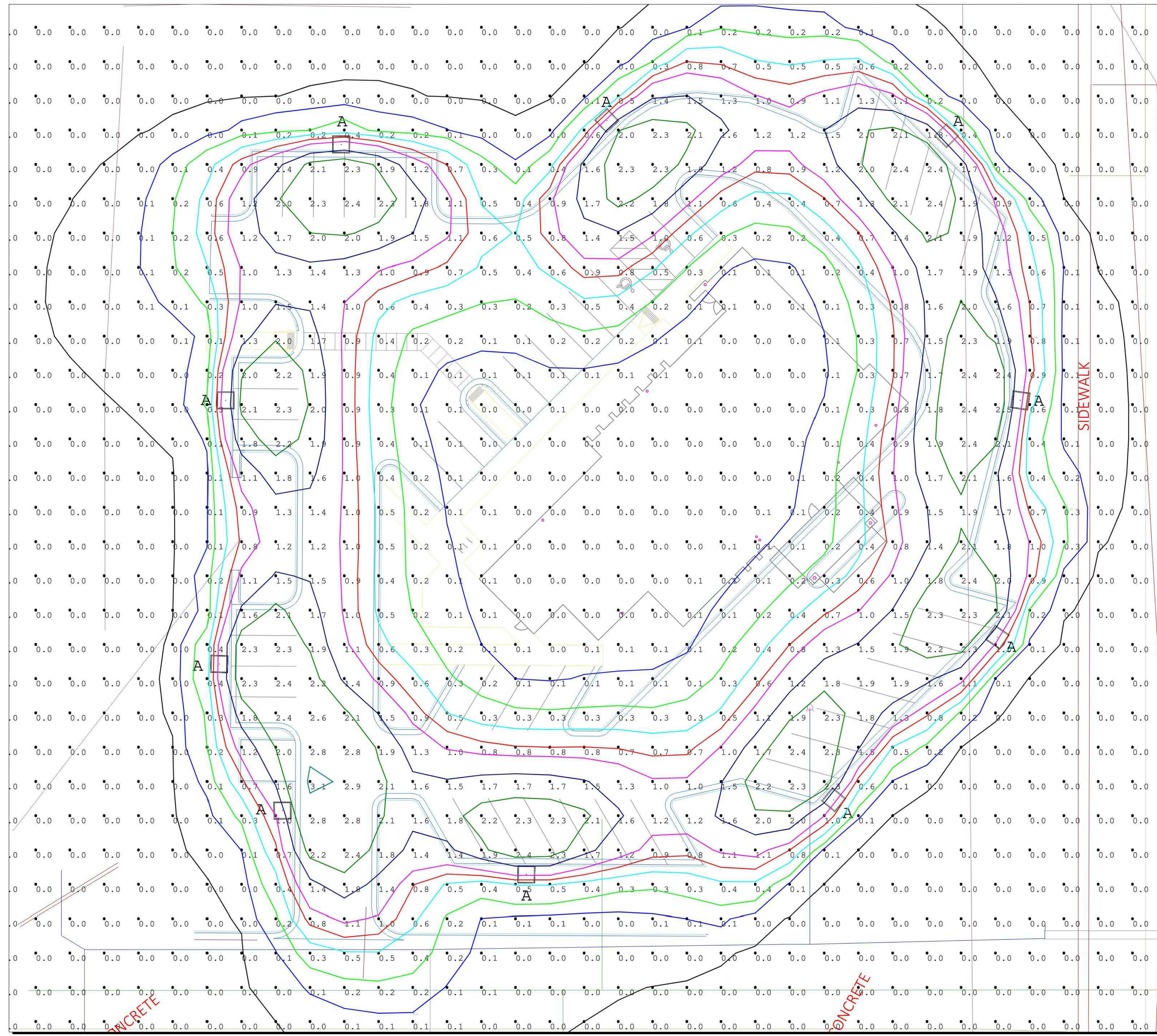
SCALE: 1 1/2" = 1'-0"

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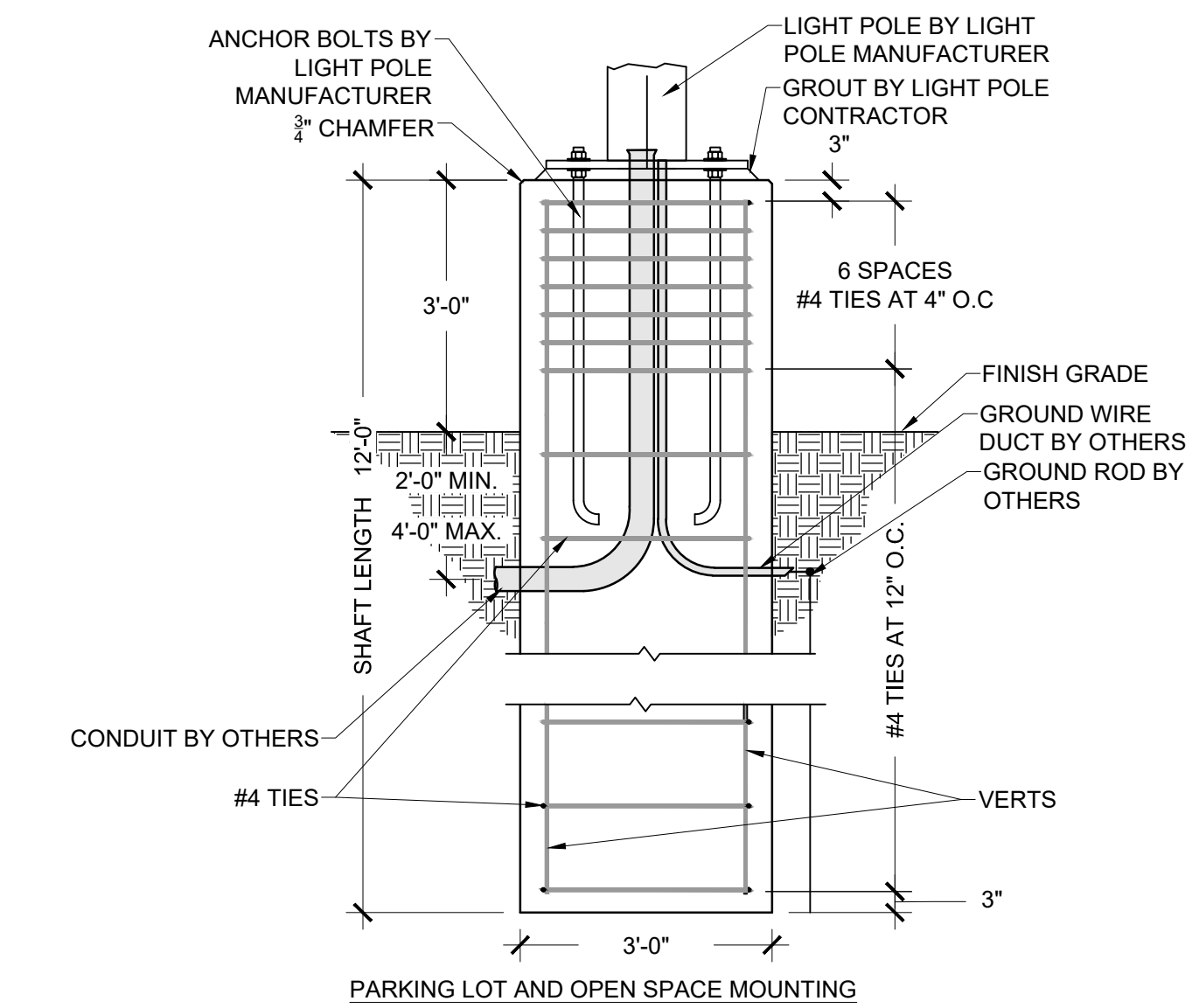
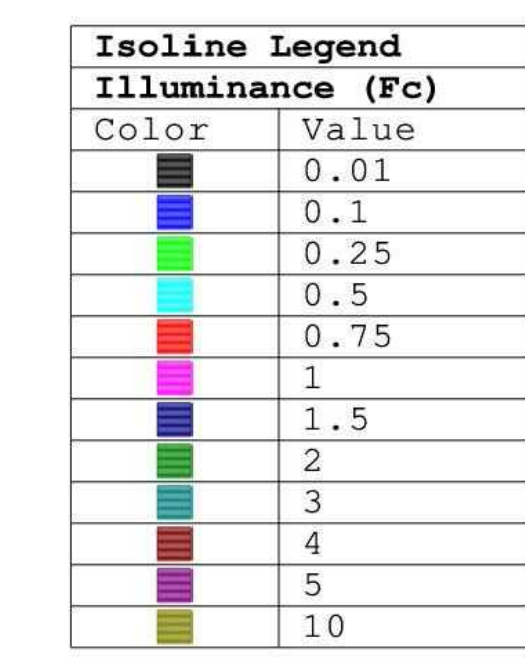
PROJECT NUMBER
 121.1153.30

SHEET
L 3.0



Luminaire Schedule							
Symbol	Qty	Label	Lum. Watts	LLF	Model	[MANUFAC]	Mounting Ht.
□	10	A	62	0.810	MRM-LED-09L-SIL-FT-50-70CRI-IL	LSI INDUSTRIES, INC.	19

Calculation Summary							
Project: Project_1							
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	Max/Avg
Full Site	Fc	0.26	3.1	0.0	N.A.	N.A.	N.A.
Parking Lot	Fc	1.33	3.1	0.0	N.A.	N.A.	2.33



1 LIGHT POLE MOUNTING DETAIL
NO SCALE