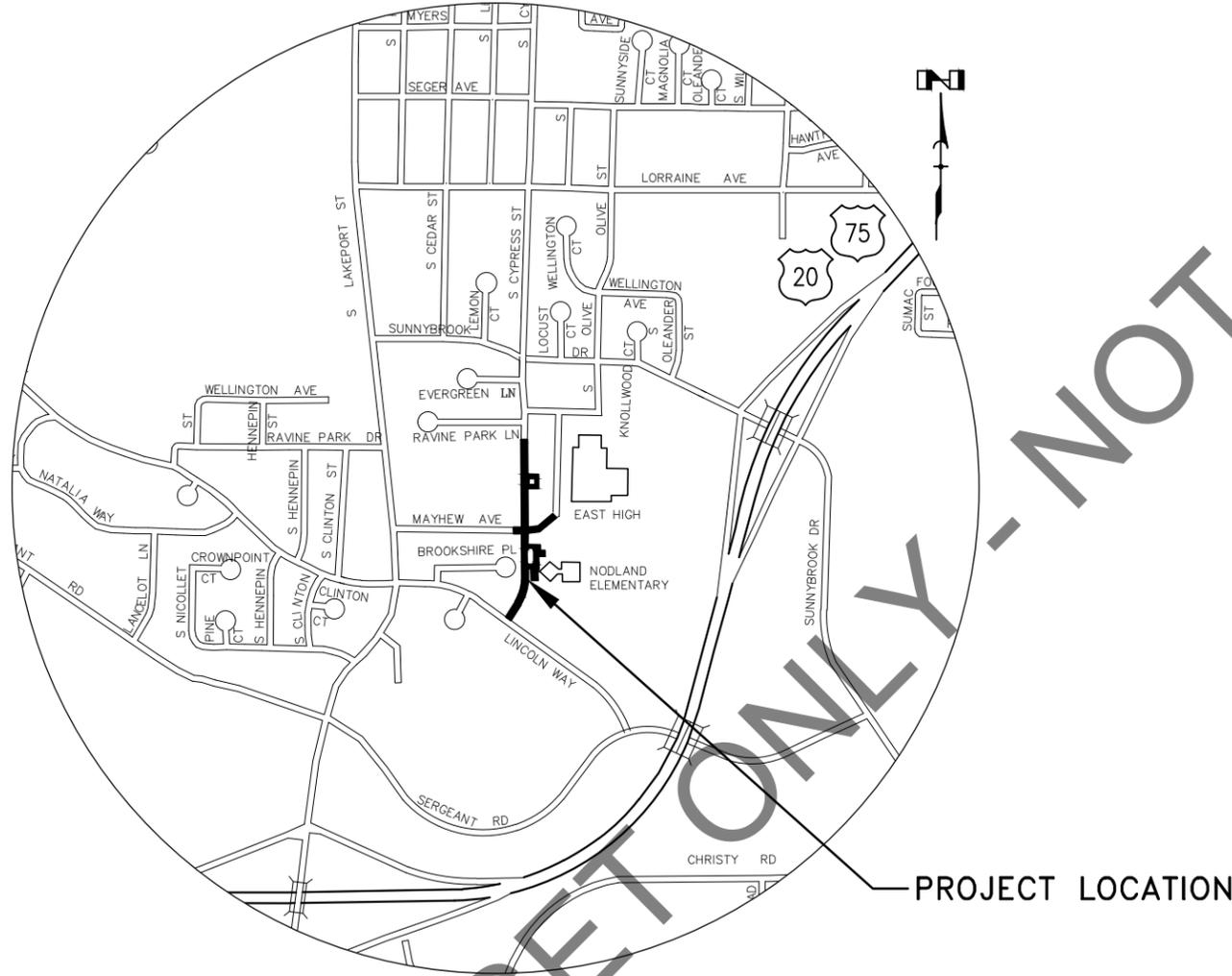


SOUTH CYPRESS STREET EXTENSION, RAVINE PARK LANE TO LINCOLN WAY

SIoux CITY, IA
CITY PROJECT NO. 6841-719-207



LOCATION MAP
NO SCALE

GENERAL NOTES:

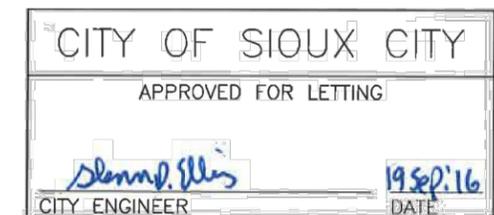
- ALL CONSTRUCTION SHALL BE PERFORMED ACCORDING TO THE 2016 VERSION OF THE SUDAS STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2015 SIOUX CITY SUPPLEMENT UNLESS OTHERWISE MODIFIED.
- BENCHMARKS (ELEVATIONS REFERENCE TOP OPERATING NUT OF FIRE HYDRANTS)
 TOP OF HYDRANT AT THE NORTHWEST CORNER OF S. CYPRESS STREET & RAVINE PARK LANE - 1204.88
 TOP OF HYDRANT MIDWAY BETWEEN MAYHEW AVE AND RAVINE PARK LANE - 1241.36
 TOP OF HYDRANT 200' NORTHWEST OF LINCOLN WAY AND S. CYPRESS STREET - 1244.88
 TOP OF HYDRANT AT THE NORTH CORNER OF LINCOLN WAY & S. CYPRESS STREET - 1238.94
 TOP OF HYDRANT SOUTH OF EAST HIGH DRIVEWAY - 1247.54
- ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WITH OWNER OF UTILITIES.

SHEET INDEX

SHEET NO.	DESCRIPTION
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A.02	LEGEND SHEET
B.01	TYPICAL PCC PAVING SECTIONS
B.02	UTILITY DETAILS
C.01-C.02	ESTIMATED PROJECT QUANTITIES
C.03-C.09	ESTIMATE REFERENCE INFORMATION & GENERAL NOTES
R.01	REMOVAL PLAN - SOUTH
R.02	REMOVAL PLAN - NORTH
D.01	PLAN & PROFILE - S. CYPRESS ST. - 0+00 - 5+00
D.02	PLAN - NODLAND PARKING LOT
D.03	PLAN & PROFILE - S. CYPRESS ST. - 5+00 - 10+00
D.04	PLAN & PROFILE - S. CYPRESS ST. - 10+00 - 14+00
D.05	PLAN & PROFILE - MAYHEW AVE. - EAST HIGH DRIVEWAY ST. 0+00 - 5+00
E.01	LIGHTING PLAN - S. CYPRESS ST. - 0+00 - 10+00
E.02	LIGHTING PLAN - S. CYPRESS ST. - 10+00 - 14+00
ER.01	EROSION CONTROL PLAN - DETAILS AND NOTES
ER.02	EROSION CONTROL PLAN - SOUTH
ER.03	EROSION CONTROL PLAN - NORTH
H.01	TEMPORARY EASEMENT PLAN
J.01	TRAFFIC CONTROL & STAGING PLAN
J.02	PAVEMENT MARKING PLAN
J.03	PAVEMENT MARKING DETAILS
L.01	PAVING DETAILS - BOP & EOP TIE-IN LOCATIONS
L.02	DRIVEWAY & PARKING LOT DETAILS - S. CYPRESS ST. - NODLAND
L.03	DRIVEWAY & PARKING LOT DETAILS - S. CYPRESS ST. - NODLAND
L.04	INTERSECTION & DRIVEWAY DETAILS - S. CYPRESS ST. & MAYHEW AVE.
L.05	DRIVEWAY DETAILS - S. CYPRESS ST.
X.01-X.07	CROSS SECTIONS

IDNR PERMIT #'S

STORM WATER DISCHARGE-	IA 29592 - 29324
WASTEWATER-	2017-0074S
WATER SUPPLY-	2016-0585W



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BRYAN N. WELLS, P.E. 9/21/2016
(date)

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Pages or sheets covered by the referenced certification:
ALL SHEETS

SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIoux CITY, IA

TITLE SHEET

Project Manager: BNV
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554



Sheet
A.01

STANDARD SYMBOLS

	INTERSTATE HIGHWAY SYMBOL
	U.S. HIGHWAY SYMBOL
	IOWA HIGHWAY SYMBOL
	COUNTY ROAD HIGHWAY SYMBOL
	TIMBER
	HEDGE
	STUMP
	SWAMP
	ROCK OUTCROP
	BROKEN CONCRETE
	REVTMENT (RIP RAP)
	CEMETERY
	GRAVE
	CAVE
	SINK HOLE
	WOOD FENCE
	CHAIN LINK FENCE
	WIRE FENCE
	RETAINING WALL
	APPROX. SECTION LINE
	EARTH DAM OR DIKE (EXISTING)
	EARTH DAM OR DIKE (PROPOSED)
	TILE OUTLET
	EDGE OF WATER
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	CONCRETE MONUMENT
	WELL
	WINDMILL
	INTAKE
	TELEPHONE MANHOLE
	INTAKE
	EXISTING HAND HOLE
	GP GUARD POST
	GM GAS MAIN VALVE
	FOUND IRON PIN
	E ELECTRICAL MANHOLE
	GRATED INTAKE
	EXISTING CURB STOP
	PROPOSED CURB STOP
	EVERGREEN TREE
	DECIDUOUS TREE (ACTUAL SIZE NOTED ON PLAN)
	SHRUB (BUSHES)

	FIRE HYDRANT
	WH WATER HYDRANT (RURAL)
	ST SEPTIC TANK
	C CISTERN
	LP L.P. GAS TANK (NO FOOTING)
	UST UNDERGROUND STORAGE TANK
	LATRINE
	TELEPHONE PEDESTAL
	TV TELEVISION PEDESTAL
	TELEPHONE POLE
	TELEPHONE POLE (SECOND COMPANY)
	TELEPHONE POLE (THIRD COMPANY)
	TELEPHONE POLE (FOURTH COMPANY)
	TELEPHONE POLE (FIFTH COMPANY)
	POWER POLE
	POWER POLE (SECOND COMPANY)
	POWER POLE (THIRD COMPANY)
	POWER POLE (FOURTH COMPANY)
	POWER POLE (FIFTH COMPANY)
	TELEPHONE RISER POLE
	POWER RISER POLE
	SATELLITE TV DISH
	SOIL BORING
	LUMINAIRE
	UTILITY POLE
	PARKING METER
	EXISTING SANITARY MANHOLE
	EXISTING STORM MANHOLE
	EXISTING DW-12 INTAKE
	EXISTING SW8 INTAKE
	EXISTING 508 INTAKE
	EXISTING 510 INTAKE
	EXISTING TYPE "A" INTAKE
	PROPOSED SANITARY MANHOLE
	PROPOSED FIRE HYDRANT
	PROPOSED STORM MANHOLE
	PROPOSED DW12 INTAKE
	PROPOSED SW8 INTAKE
	PROPOSED TYPE "SW-501" INTAKE
	PROPOSED GRATED ALLEY DROP
	PROPOSED TYPE "SW-502" INTAKE

	GUARDRAIL (BEAM OR CABLE)
	GP GUARD POST (ONE OR TWO)
	GAURD POST (MORE THAN TWO)
	FP FILLER PIPE
	NEW WATER GATE VALVE
	NEW CHECK VALVE
	GV GAS VALVE
	WV WATER VALVE
	SL SPEED LIMIT SIGN
	MM MILE MARKER POST
	SIGN
	WHU WATER HOOK UP
	RT RADIO TOWER
	TA TOWER ANCHOR
	UB UTILITY BOX
	EB ELECTRIC BOX
	TCB TRAFFIC SIGNAL CONTROL BOX
	RRB RAIL ROAD SIGNAL CONTROL BOX
	TSB TELEPHONE SWITCH BOX
	Flg FLAG POLE
	TB TELEPHONE BOOTH
	PROPERTY LINE
	SIDEWALK
	OHE OVERHEAD ELECTRIC
	UGE UNDERGROUND ELECTRIC
	GAS
	HPCAS HIGH PRESSURE GAS
	TELE UNDERGROUND TELEPHONE
	OHT OVERHEAD TELEPHONE
	FO UNDERGROUND FIBEROPTIC
	TV UNDERGROUND TELEVISION
	OHCATV OVERHEAD TELEVISION
	REMOVE PAVEMENT
	W WATER
	W(AB) ABANDON WATER
	ST STORM SEWER
	SAN SANITARY SEWER
	W REMOVE WATER
	ST REMOVE STORM SEWER
	SAN REMOVE SANITARY SEWER
	PROPOSED WATER
	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	PROPOSED IRRIGATION CONDUIT
	PROPOSED PAVEMENT

SPOT ELEVATION LEGEND

	1200.00 PROPOSED TOP OF PAVING ELEV.
	1200.00 PROPOSED TOP OF PAVING ELEV. TO MATCH EX.
	1200.00 PROPOSED FINISHED GRADE ELEV.
	1200.00 PROPOSED GUTTER ELEV.
	1200.00 PROPOSED GUTTER ELEV. TO MATCH EX.
	1200.00 PROPOSED TOP OF CURB ELEV.
	1200.00 PROPOSED TOP OF CURB/GUTTER ELEV.
	1200.00 PROPOSED TOP OF CURB ELEV. TO MATCH EX.
	1200.00 PROPOSED TOP OF 2" CURB ELEV.
	1200.00 PROPOSED TOP OF 6" CURB AT SIDEWALK ELEV.
	1200.00 PROPOSED TOP OF SIDEWALK ELEV.
	1200.00 PROPOSED TOP OF SIDEWALK ELEV. TO MATCH EX.

RIGHT OF WAY LEGEND

	PROPOSED RIGHT OF WAY
	EXISTING RIGHT OF WAY
	EXISTING AND PROPOSED RIGHT OF WAY
	EASEMENT AND EXISTING RIGHT OF WAY
	BORROW
	EASEMENT (TEMPORARY)
	EASEMENT
	EXCESS
	PROPERTY LINE
	A/C ACCESS CONTROL

THE ENGINEER HAS ATTEMPTED TO SHOW ON THE PLANS ALL ABOVEGROUND AND UNDERGROUND FACILITIES, INCLUDING PUBLIC AND PRIVATE UTILITIES, WHICH MAY BE AFFECTED BY THE WORK. THE LOCATION, DEPTH, AND SIZE OF EACH SUCH FACILITY SHOWN ON THE PLANS IS APPROXIMATE ONLY AND IS NOT GUARANTEED. OTHER UNDERGROUND FACILITIES THAT HAVE BEEN RELOCATED AND SERVICES THAT WERE NOT LOCATED BY THE UTILITY OWNER MAY EXIST AND THEIR LOCATION MAY NOT BE PRESENTLY KNOWN OR IDENTIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL SUCH FACILITIES LOCATED WITHIN THE CONSTRUCTION AREA PRIOR TO CONSTRUCTION TO AVOID DAMAGE TO ALL FACILITIES.

CONVENTIONAL SIGNS

	SURVEY LINE
	SECTION CORNER
	PROPOSED PROFILE GRADE
	RAILROAD
	FIELD TILE
	CULVERTS
	STREAM

UTILITY LEGEND

	CITY OF SIOUX CITY
	CITY OF SIOUX CITY
	CITY OF SIOUX CITY
	MIDAMERICAN ENERGY GAS
	MIDAMERICAN ENERGY OVERHEAD POLE
	MIDAMERICAN ENERGY OVERHEAD ELECTRIC
	MIDAMERICAN ENERGY ELECTRIC
	CABLE ONE OVERHEAD TV
	CABLE ONE TV
	FIBERCOMM FIBER OPTIC
	CENTURY LINK OVERHEAD TELEPHONE
	CENTURY LINK TELEPHONE
	WINDSTREAM TELEPHONE

F&I = FURNISH AND INSTALL
 ST = STORM
 SAN = SANITARY
 W = WATER
 FO = FIBER OPTIC
 TELE = TELEPHONE
 E = ELECTRIC
 OHE = OVERHEAD ELECTRIC
 UGE = UNDERGROUND ELECTRIC
 V = WATER VALVE
 GV = GAS VALVE
 STA = STATION
 IE N = INVERT ELEVATION NORTH
 IE S = INVERT ELEVATION SOUTH
 IE W = INVERT ELEVATION WEST
 IE E = INVERT ELEVATION EAST
 VCP = VITRIFIED CLAY PIPE
 RCP = REINFORCED CONCRETE PIPE
 MH = MANHOLE
 SS = STORM SEWER

<p>Century Link Justin Melohn Office 712-732-8348</p> <p>Area Plant Supervisor Brandon Rogers Office 712-279-4256 Cell 712-202-6097</p>	<p>City of Sioux City Engineering Division 405 6th Street Sioux City, IA 51101 712-279-6324</p> <p>City of Sioux City Sign & Signal Shop Tony Ferrine 712-898-4609 (cell)</p>	<p>City of Sioux City Field Services 1921 18th St. Sioux City, IA 51104 712-279-6164 fieldservices@sioux-city.org</p>	<p>Cable One 900 Steuben St. Sioux City, IA 51101 Travis Paugh, Field Tech 712-301-8048</p> <p>Robert (Fuzzy) Wignes Technical Operations Manager 712-224-7700 (office) 712-490-4718 (cell) robert.wignes@cableone.biz</p>
<p>MidAmerican Energy (MEC) Sioux City, IA Gas-Dean Burger 712-233-4865 Electric-Tony Bengford 712-233-4823</p>	<p>FiberComm L.C. Rick Welch 712-224-2020 r Welch@fibercomm.net</p>	<p>Windstream McLeod Rich Higgins 641-990-3279 richard.higgins@windstream.com</p>	

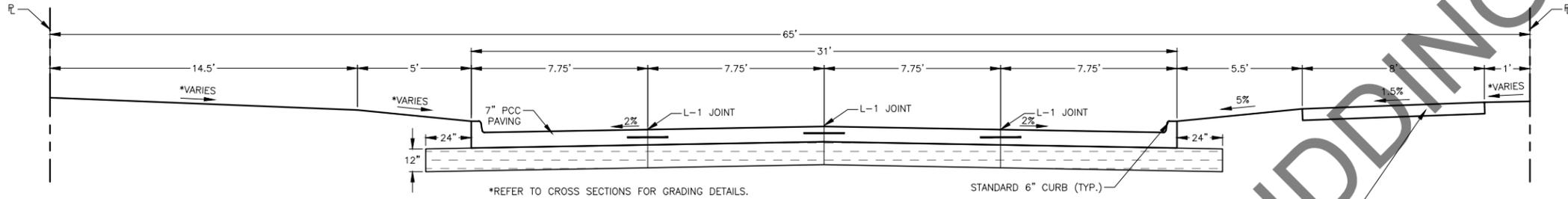
REVIEW SHEET ONLY

SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

LEGEND SHEET

Project Manager: BNV
 Designer: TJL
 Project Number: 266003
 Phone: (712) 266-1554





NOTES:

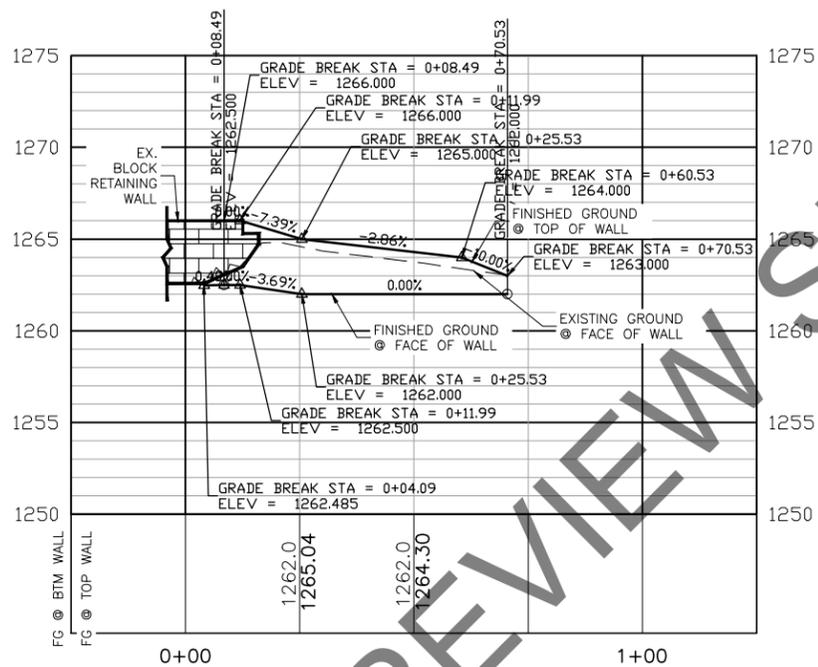
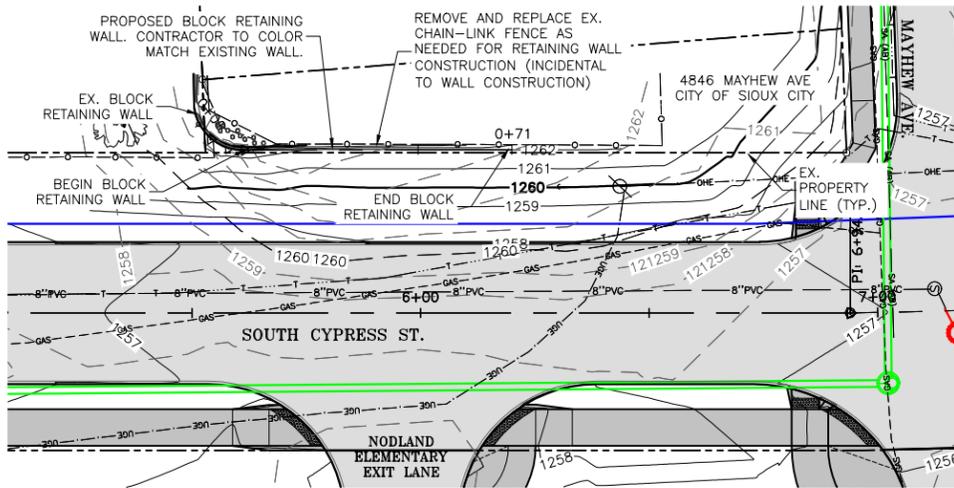
1. TRANSVERSE JOINTS TO BE TYPE "C" JOINTS @ 12' MAX. SPACING, UNLESS OTHERWISE NOTED.
2. ALL ROADWAY PAVING JOINTS TO BE SEALED WITH HOT POURED SEALANT.
3. 12" PREPARED SUBGRADE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY WITHIN -3% TO +2% OF OPTIMUM MOISTURE CONTENT FOR COHESIVE MATERIALS AND WITHIN -5% TO +2% OF OPTIMUM MOISTURE CONTENT FOR SILT MATERIALS (IF CONTRACTOR CANNOT ACHIEVE NECESSARY COMPACTION, MATERIAL SHALL BE COMPACTED IN (2) 6" LIFTS).

ALL SIDEWALK AND DRIVEWAYS SHALL HAVE 12" OF SUBGRADE PREP. IN (2) 6" LIFTS. MOISTURE CONDITION AND COMPACT THE MATERIAL. MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY WITHIN -3% TO +2% OF OPTIMUM MOISTURE CONTENT FOR COHESIVE MATERIALS AND WITHIN -5% TO +2% OF OPTIMUM MOISTURE CONTENT FOR SILT MATERIALS.

S. CYPRESS ST. TYPICAL SECTION - PCC W/ SIDEWALK

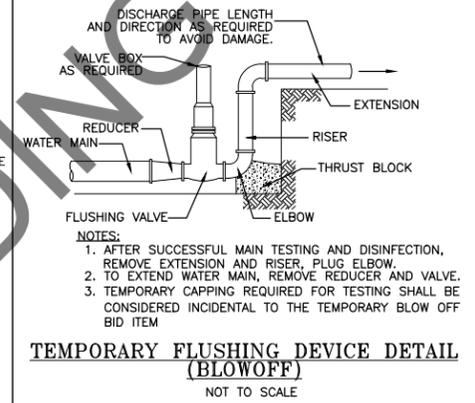
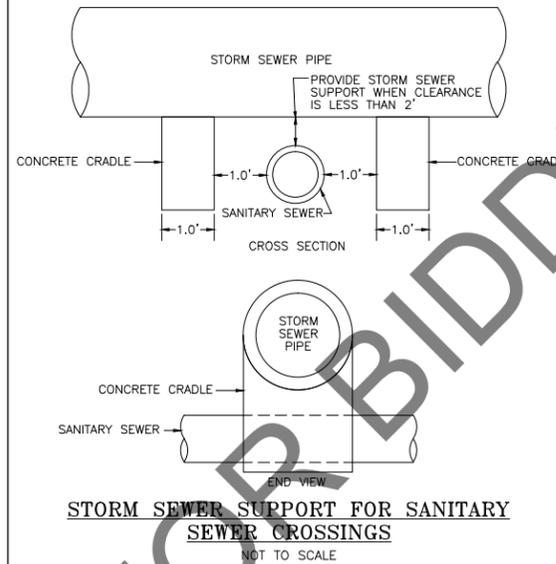
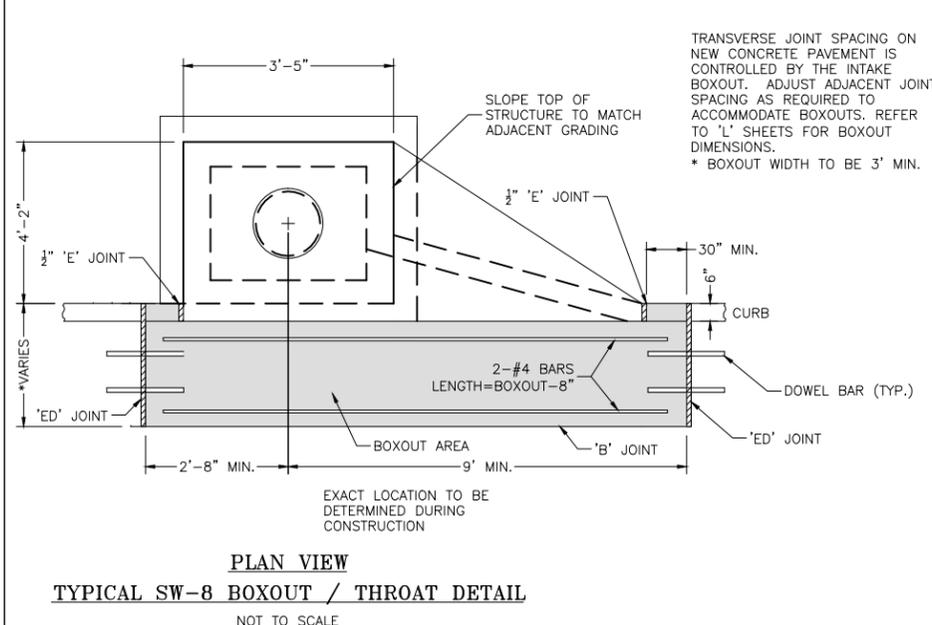
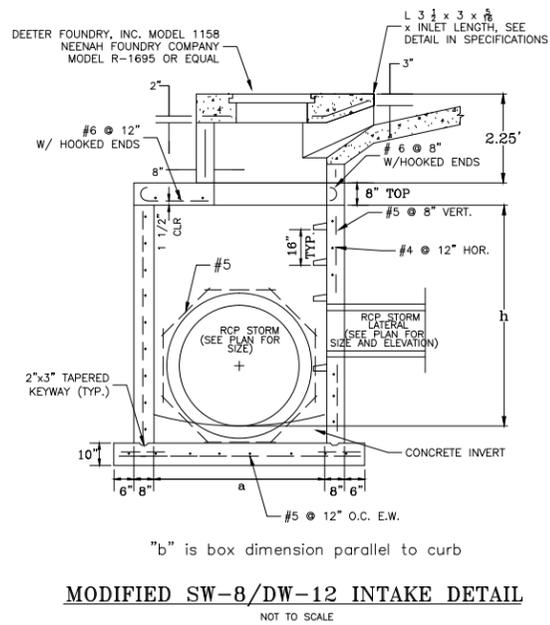
NOT TO SCALE

ROAD IDENTIFICATION	STATION TO STATION	REMARKS	
S. CYPRESS ST.	0+43.6	3+99.8	B.O.P.
	3+99.8	4+84.8	NODLAND ENTRANCE, REFER TO 'L' SHEETS FOR DETAILS
	4+84.8	5+53.5	
	5+53.5	6+38.5	NODLAND EXIT, REFER TO 'L' SHEETS FOR DETAILS
	6+38.5	6+72.9	
	6+72.9	7+69.3	INTERSECTION WITH MAYHEW, REFER TO 'L' SHEETS FOR DETAILS
	7+69.3	10+15.3	
	10+15.3	11+53.8	EAST HIGH ENTRANCE/EXIT, REFER TO 'L' SHEETS FOR DETAILS
	11+53.8	14+02.9	E.O.P.



BLOCK RETAINING WALL PLAN AND PROFILE

SCALE 1:20



GENERAL WATER MAIN NOTES:

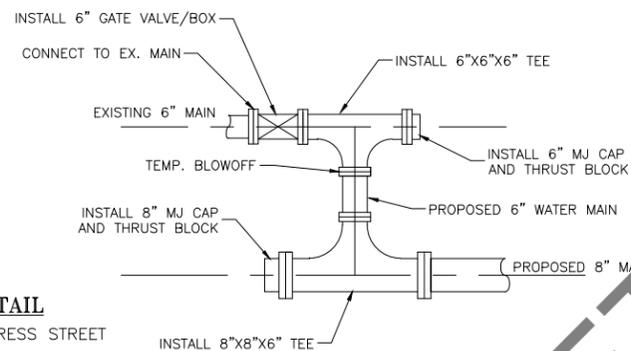
1. NO USER SHALL BE OUT OF WATER FOR MORE THAN 4 HOURS AT ANY ONE TIME. EXISTING WATER MAIN SHALL BE SHUT DOWN AND CUT, THEN PREASSEMBLED FITTINGS INSTALLED AND BLOCKED. THIS SHOULD ALLOW FOR MINIMAL SHUT DOWNS.
2. THERE SHOULD BE ONLY ONE CONNECTION BETWEEN THE EX. WATER SYSTEM AND THE PROPOSED WATER MAIN PRIOR TO PRESSURE TESTING AND DISINFECTION OF NEW MAIN TO PREVENT THE CHANCE OF CROSS-CONTAMINATION.
3. ALL VALVE BOXES TO BE LOCATED IN THE ROADWAY PAVING SHALL BE A MINIMUM OF 1' CLEAR TO THE PROPOSED GUTTER LINE. NO VALVE BOXES SHALL BE LOCATED WITHIN THE PROPOSED CURB LINE OR SIDEWALK.
4. CONTRACTOR TO FIELD VERIFY EXISTING WATER MAIN LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. EXISTING WATER MAIN LOCATION SHOWN IN THE PLANS IS BASED UPON LOCATES.
5. THE CONTRACTOR IS NOT ALLOWED TO OPERATE VALVES ONCE INSTALLED ON THE LIVE SYSTEM. THE CONTRACTOR SHALL COORDINATE WITH CITY FIELD SERVICES ON THE OPENING AND CLOSING OF ALL WATER MAIN VALVES.
6. REMOVAL OF EXISTING WATER MAIN NECESSARY FOR PROPOSED WATER MAIN CONSTRUCTION AND ALL TEMPORARY CAPPING/BLOCKING AND THRUST BLOCKS REQUIRED DURING WATER MAIN TESTING SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE BID ITEM

CONNECTION QUANTITIES:

- 1-8"x8"x6" TEE
- 1-8" MJ CAP AND THRUST BLOCK
- 8LF OF 6" WM
- 1-6"x6"x6" TEE
- 1-6" MJ CAP AND THRUST BLOCK
- 1-TEMPORARY BLOWOFF
- 1-6" GATE VALVE/BOX
- 1-CONNECT TO EX. 6" MAIN

WATER MAIN DETAIL

MAYHEW AVE - WEST OF CYPRESS STREET
NOT TO SCALE

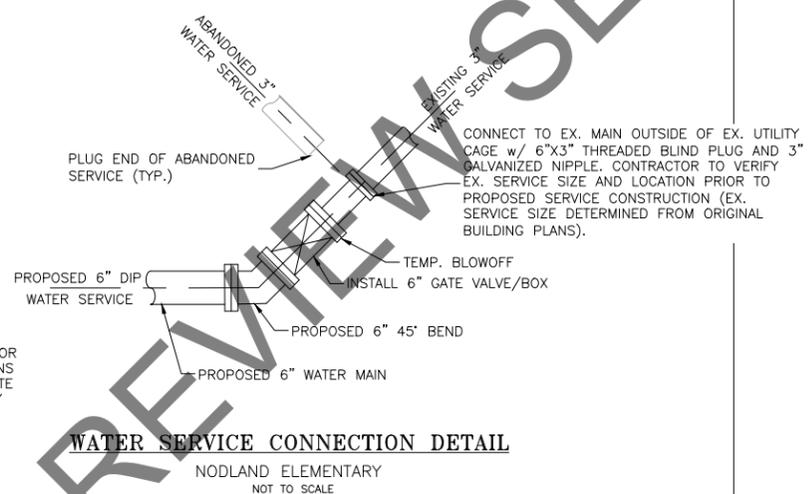


CONNECTION QUANTITIES - DIV. II:

- 1-6" 45' BEND
- 1-6" GATE VALVE/BOX
- 1-TEMPORARY BLOWOFF
- 1-CONNECT TO EX. 3" MAIN w/ 6"x3" THREADED BLIND PLUG AND 3" GALVANIZED NIPPLE

NOTES:

- WATER SERVICE SHALL NOT BE INTERRUPTED DURING SCHOOL HOURS PRIOR TO JUNE 5, 2017 OR DURING FUNCTIONS AT SCHOOL. CONTRACTOR TO COORDINATE WITH SCHOOL 72 HOURS PRIOR TO ANY PLANNED WATER OUTAGES.



ESTIMATED PROJECT QUANTITIES

Item No.	Item Code	Item	Unit	Quantity	As Built
Division I - Street Improvements (100% City)					
1	1090-105-D-0	Mobilization	L.S.	1	
2	2010-108-A-0	Clearing and grubbing, 6"-18"	Ea.	12	
3	2010-108-A-0	Clearing and grubbing, >18"-24"	Ea.	3	
4	2010-108-A-0	Clearing and grubbing, >24"-36"	Ea.	7	
5	2010-108-E-0	Excavation, class 10	C.Y.	2,919	
6	2010-108-G-0	Subgrade preparation, 12"	S.Y.	7,341	
7	2010-108-J-1	Remove and salvage street signs	L.S.	1	
8	2010-SP-1	Breakup and remove concrete	C.Y.	25	
9	3010-SP-1	Remove trench backfill material	C.Y.	100	
10	3010-SP-2	Furnish and install trench soils	C.Y.	100	
11	4010-108-A-1	Sanitary sewer gravity main, trenched, 8" VCP	L.F.	71	
12	4010-SP-1	Sanitary sewer service, trenched, 8" VCP	L.F.	88	
13	4020-108-A-1	Storm sewer, trenched, class III RCP, 15"	L.F.	506.0	
14	4020-108-A-1	Storm sewer, trenched, class III RCP, 18"	L.F.	752.2	
15	4020-108-A-1	Storm sewer, trenched, class III RCP, 24"	L.F.	47.5	
16	4020-108-C-1	Removal of storm sewer, ≤27"	L.F.	162	
17	4020-SP-1	Construct storm sewer support	Ea.	1	
18	4060-SP-1	Video inspection of storm/sanitary sewer main	L.F.	1,377	
19	5010-108-A-1	Water main, trenched, 6"	L.F.	28	
20	5010-108-A-1	Water main, trenched, 8"	L.F.	764	
21	5010-108-A-1	Water main, trenched, 8" RJ	L.F.	65	
22	5010-108-C-1	Fitting, DIP tee, 6"x6"x6"	Ea.	1	
23	5010-108-C-1	Fitting, DIP tee, 8"x8"x6"	Ea.	4	
24	5010-108-C-1	Fitting, DIP tee, 8"x8"x8"	Ea.	1	
25	5010-108-C-1	Fitting, MJ cap, 6"	Ea.	1	
26	5010-108-C-1	Fitting, MJ cap, 8"	Ea.	1	
27	5010-108-C-1	Fitting, DIP 22.5° bend, 8"	Ea.	2	
28	5010-108-C-1	Fitting, DIP 90° bend, 8"	Ea.	1	
29	5010-SP-1	Connect to existing 6" water main	Ea.	1	
30	5010-SP-1	Connect to existing 8" water main	Ea.	2	
31	5010-SP-2	1" corporation stop and tap	Ea.	1	
32	5010-SP-3	Water service, trenched, cu, 1"	L.F.	18	
33	5010-SP-4	1" curb stop and valve box	Ea.	1	
34	5020-108-A-0	Valve, gate valve/box, 6"	Ea.	1	
35	5020-108-A-0	Valve, gate valve/box, 8"	Ea.	4	
36	5020-108-C-0	Fire hydrant assembly	Ea.	3	
37	5020-108-D-0	Temporary blowoff on 6" main	Ea.	1	
38	5020-SP-1	Furnish and cut-in 8" gate valve/box	Ea.	1	
39	5020-SP-2	Remove fire hydrant assembly	Ea.	2	
40	5020-SP-3	Fire hydrant extension, 6"	Ea.	1	
41	5020-SP-3	Fire hydrant extension, 12"	Ea.	1	
42	6010-108-B-0	Intake type, SW-501	Ea.	3	

ESTIMATED PROJECT QUANTITIES

Item No.	Item Code	Item	Unit	Quantity	As Built
43	6010-108-B-0	Intake type, SW-503	Ea.	1	
44	6010-108-B-0	Intake type, SW8	Ea.	4	
45	6010-108-B-0	Intake type, SW8-modified	Ea.	2	
46	6010-108-E-0	Manhole adjustment, minor	Ea.	1	
47	6010-108-F-0	Manhole adjustment, major	Ea.	1	
48	6010-108-G-0	Connect to existing intake	Ea.	1	
49	6010-108-H	Remove storm structure	Ea.	4	
50	6010-108-H	Remove sanitary manhole	Ea.	3	
51	6010-SP-1	Storm manhole, SW-401, 48", base, ring and cover and chimney seal	Ea.	2	
52	6010-SP-2	Storm manhole, SW-401, 48"	V.F.	11.2	
53	6010-SP-3	Sanitary manhole, type SW-301 base, ring and cover and chimney seal	Ea.	4	
54	6010-SP-4	Sanitary manhole, type SW-301, 48"	V.F.	35.6	
55	7010-108-A-0	Pavement, PCC, 7"	S.Y.	6,593	
56	7010-SP-1	Furnish and install 18" #5 bar (24" O.C.)	Ea.	55	
57	7010-SP-2	Furnish and install HMA paving	Ton	10	
58	7030-108-G-0	PVC or composite detectable warning panel	S.F.	286	
59	7030-108-H-1	Driveway, paved, PCC, 6"	S.Y.	43	
60	7030-SP-1	Pavement removal, sidewalk	S.F.	6,550	
61	7030-SP-4	Sidewalk, PCC, 4"	S.F.	871	
62	7030-SP-4	Sidewalk, PCC, 5" w/ fibermesh	S.F.	12,700	
63	7040-108-H-0	Pavement removal, street/driveway	S.Y.	2,553	
64	7040-SP-1	Sawcut paving	L.F.	302	
65	7080-SP-1	Painted pavement markings, epoxy	L.F.	3,999	
66	7080-SP-2	Removal of existing pavement markings	L.F.	175	
67	9020-108-A-0	Sodding	SQ.	508	
68	9040-108-F	Wattle 9", furnish, install, maintain and remove	L.F.	2,563	
69	9040-108-N	Silt fence, furnish, install, maintain and remove	L.F.	1,405	
70	9040-SP-1	Erosion control	L.S.	1	
71	9060-SP-1	Removal of fence	L.F.	251	
72	9070-SP-1	Construct modular block retaining wall	L.S.	1	
73	SP-1	Conductor, 3/C-#8, Cu, with ground, 600 volt	L.F.	1,800	
74	SP-2	Foundation, direct drill	Ea.	10	
75	SP-3	Fuse	Ea.	10	
76	SP-4	Ground Rod	Ea.	5	
77	SP-5	Handhole	Ea.	5	
78	SP-6	Conduit, PVC, 2"	L.F.	1,800	
79	SP-7	Fixture, cobra head	Ea.	10	
80	SP-8	Pole, cobra head, anchor base	Ea.	10	
81	SP-9	Trench, 24" deep	LF	1,800	
82	SP-IDOT-2506	Furnish and install flowable mortar	C.Y.	15	
83	SP-IDOT-2528	Traffic control	L.S.	1	

SOUTH CYPRESS EXTENSION
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

ESTIMATED PROJECT QUANTITIES

Project Manager: B. WELLS
Designer: T. LOW
Project Number: 266003
Phone: (712) 266-1554



ESTIMATED PROJECT QUANTITIES

Item No.	Item Code	Item	Unit	Quantity	As Built
Division II - Site Improvements (100% School)					
84	1090-105-D-0	Mobilization	L.S.	1	
85	2010-108-A-0	Clearing and grubbing, 6"-18"	Ea.	6	
86	2010-108-A-0	Clearing and grubbing, >18"-24"	Ea.	4	
87	2010-108-A-0	Clearing and grubbing, >24"-36"	Ea.	1	
88	2010-108-E-0	Excavation, class 10	C.Y.	809	
89	2010-108-G-0	Subgrade preparation, 12"	S.Y.	2,655	
90	2010-108-J-1	Remove and salvage street signs	L.S.	1	
91	4010-108-I-0	Sanitary sewer cleanout	Ea.	1	
92	4010-SP-1	Sanitary sewer service, trenched, 8" PVC	L.F.	181.5	
93	4010-SP-2	Removal of sanitary service, ≤8"	L.F.	155	
94	4010-SP-3	Sanitary sewer service wye on existing main	Ea.	1	
95	4020-108-A-1	Storm sewer, trenched, class III RCP, 15"	L.F.	122.9	
96	4040-108-A-0	Subdrain, 4"	L.F.	16	
97	4040-108-D-0	Subdrain outlet	Ea.	1	
98	4060-SP-1	Video inspection of storm/sanitary sewer main	L.F.	123	
99	5010-108-A-1	Water main, trenched, 6" DIP	L.F.	80	
100	5010-108-A-1	Water main, trenched, 6" DIP RJ	L.F.	71	
101	5010-108-C-1	Fitting, DIP tee, 8"x8"x6"	Ea.	1	
102	5010-108-C-1	Fitting, DIP 45° bend, 6"	Ea.	1	
103	5010-SP-5	Connect to existing 3" water service w/ 6"x3" threaded blind plug and 3" galvanized nipple	L.S.	1	
104	5020-108-A-0	Valve, gate valve/box, 6"	Ea.	2	
105	5020-108-D-0	Temporary blowoff on 6" main	Ea.	1	
106	5020-SP-1	Furnish and cut-in 6" gate valve/box	Ea.	1	
107	6010-108-B-0	Intake type, SW-501	Ea.	2	
108	6010-108-B-0	Intake type, SW-507	Ea.	1	
109	6010-108-B-0	Intake type, SW-511	Ea.	1	
110	6010-108-H	Remove storm structure	Ea.	1	
111	6010-108-H	Remove sanitary manhole	Ea.	2	
112	6010-SP-1	Storm manhole, SW-401, 48", base, ring and cover and chimney seal	Ea.	1	
113	6010-SP-2	Storm manhole, SW-401, 48"	V.F.	6.2	
114	7010-108-A-0	Pavement, PCC, 7"	S.Y.	2,322	
115	7010-108-E-0	Curb and Gutter, 24" wide, 7" thick	L.F.	160	
116	7010-SP-1	Furnish and install 18" #5 bar (24" O.C.)	Ea.	57	
117	7020-108-A-0	Overlay, HMA	Ton	225	
118	7030-108-G-0	PVC or composite detectable warning panel	S.F.	56	
119	7030-SP-1	Pavement removal, sidewalk	S.F.	6,962	
120	7030-SP-2	Remove existing stairs	L.S.	1	
121	7030-SP-3	Remove existing loading dock	L.S.	1	
122	7030-SP-4	Sidewalk, PCC, 5" w/ fibermesh	S.F.	9,266	
123	7030-SP-5	Furnish and install 1.5-inch extruded polystyrene insulation	S.F.	1,529	

ESTIMATED PROJECT QUANTITIES

Item No.	Item Code	Item	Unit	Quantity	As Built
124	7030-SP-6	Furnish and install geofoam stoop	L.S.	1	
125	7040-108-G-0	Milling, HMA	S.Y.	300	
126	7040-108-H-0	Pavement removal, street/driveway	S.Y.	1,867	
127	7040-SP-1	Sawcut paving	L.F.	710	
128	7080-SP-1	Painted pavement markings, epoxy	L.F.	4,682	
129	7080-SP-3	Painted pavement symbols, epoxy	Ea.	11	
130	7080-SP-4	Furnish and install handicap sign/bollard and symbol	Ea.	4	
131	9040-SP-1	Erosion control	L.S.	1	
132	9060-SP-1	Removal of fence	L.F.	119	

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SOUTH CYPRESS EXTENSION
RAVINE PARK LANE TO LINCOLN WAY
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ESTIMATE REFERENCE INFORMATION		
Item No.	Item Code	Description
1 & 84	1090-105-D-0	<p>Mobilization This item shall consist of preparatory work and operation, including but not limited to the necessary movement of personnel, equipment, and incidentals to the project site; for the establishment of offices, buildings and other facilities necessary for work on the project; and for work and operations which must be performed and for cost incurred before starting work on various contract items on the project site. The basis of payment shall be 50 percent of lump sum price paid on first Certificate for Payment and 100 percent of lump sum price paid when 50 percent of the value of work is completed.</p> <p>Bid item shall include the following incidental items (for both Division I and Division II):</p> <ul style="list-style-type: none"> - Removal and disposal of trees and shrubs less than 6" diameter. - Removal and disposal of all existing guard post as called out in the plans. <p>Bid item shall include the following incidental items (for Division I):</p> <ul style="list-style-type: none"> - Coordinating garbage pickup along Mayhew Avenue during road closure with collection service. Collection and disposal by contractor will be required at houses with frontages affected by construction activities. The Contractor may need to extend the collection of homeowner's trash beyond the construction limits if adjacent areas are not accessible by the collection agency or if the streets are full of equipment or parked cars. It shall be the Contractor's responsibility to coordinate with the collection agency and to ensure access in and out on the dead end streets that abut the construction. In addition, the Contractor shall coordinate with the City or the collection agency on the schedule of trash pick-up as it shall be maintained during and throughout construction by the Contractor. - Removal, temporary relocation outside of construction limits and reinstallation following construction of existing mailbox at 4813 Mayhew Avenue. Construction of new mailbox footing shall be required for reinstallation of mailbox.
2-4 & 85-87	2010-108-A-0	<p>Clearing and grubbing The Contractor shall make every effort to work around and protect the existing trees, shrubs and root systems which are not listed to be removed. Only portions of the shrubs that are in the right of way and in the way of construction operations shall be removed. Removal of trees or stumps less than 6" diameter and removal and grubbing of all shrubs shall be considered incidental to the project's mobilization bid item.</p>
5 & 88	2010-108-E-0	<p>Excavation, class 10 All excavation shall be completed following the recommendations of the attached soils report provided in the Appendix of the project specifications. All asphalt, concrete, soft material, organic material, and unsuitable soils in the construction area shall be stripped from the site and properly disposed of by the contractor.</p> <p>Fill materials should be silt material free of organic or other deleterious materials, have a maximum particle less than 3-inches, and have a liquid limit less than 45 and plasticity index less than 22.</p> <p>Fill should be placed in maximum loose lifts of 4-inches for hand compaction equipment and 8-inches for riding compaction equipment and compacted to meet SUDAS and City of Sioux City Supplement. Every other lift of compacted-engineered fill should be tested by a representative of the geotechnical engineer prior to placement of subsequent lifts.</p> <p>If topsoil is present, the contractor shall be responsible for stripping the topsoil in the work area and then either spread it following construction in areas to be seeded/sodded or dispose of the material offsite. This work will not be measured or paid for separately and shall be considered incidental to the excavation bid item.</p>

ESTIMATE REFERENCE INFORMATION		
Item No.	Item Code	Description
		<p>Contractor shall leave the top of finish grade adjacent to back of curb, driveway, and/or sidewalk paving approximately 2-inches below top of paving as this area will be sodded.</p> <p>Excavation, backfill and compaction of material from back of proposed curb to 2' beyond back of curb required to complete subgrade preparation or subbase material placement shall be considered incidental to the "Excavation, class 10" bid item and will not be measured or paid for separately.</p> <p>Excavation, Class 10 quantities are measured from the existing ground surface after removals are completed to the finish ground surface for non-paved areas and top of PCC paving section subgrade for paved areas. In determining earthwork quantities, it is assumed that the existing pavement thickness is equal to the proposed pavement thickness.</p> <p>The earthwork quantities have been calculated at follows:</p> <p>Division I – B.O.P. STA 0+43.6 to STA 5+00 -1,369 CY of cut and 396 CY of fill +40%</p> <p>STA 5+00 to STA 7+75 -650 CY of cut and 530 CY of fill +40%</p> <p>STA 7+75 to E.O.P STA 14+02.9 -900 CY of cut and 985 CY of fill +40%</p> <p>Division I Total: -2,919 CY of cut and 1,911 CY of fill +40%</p> <p>Division II – Nodland Elementary -709 CY of cut and 549 CY of fill +40%</p> <p>East High parking lot entrance/exit -24 CY of cut and 135 CY of fill +40%</p> <p>Sidewalk replacement along existing S. Cypress -76 CY of cut and 0 Cy of fill+40%</p> <p>Division II Total: -809 CY of cut and 684 CY of fill +40%</p>
6 & 89	2010-108-G-0	<p>Subgrade preparation, 12" Following completion of utility work and excavation to the proposed subgrade level, the entire subgrade shall be proofrolled in the presence of the Owner, Engineer and/or designated soil testing representative in order to delineate soft, disturbed or poorly compacted areas which may exist below subgrade level. Proofrolling may be accomplished with a loaded, tandem-axle dump truck or similar piece of heavy rubber tired equipment (typically with an axle load greater than 9-tons). Proofrolling shall be considered incidental to the work. Soils that are observed to rut or deflect excessively (typically greater than 1 inch) under the moving load should be undercut and replaced with properly compacted fill. If excessive deflecting is not observed, then the subgrade shall be scarified to 12 inches, moisture conditioned and compacted.</p>

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SOUTH CYPRESS EXTENSION
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Designer: T. LOW
Project Number: 266003
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Sheet
C.03

ESTIMATE REFERENCE INFORMATION		
Item No.	Item Code	Description
		<p>Work included in subgrade preparation includes all work as noted above as well as, scarifying, drying material, applying water, discing, blading, and controlling moisture as necessary to compact subgrade below the pavement to the specified depth and Standard Proctor density with optimum moisture ranges as shown in the typical sections of the drawings.</p> <p>Subgrade preparation shall extend 2 feet beyond the back of curb. The Contractor shall be responsible for maintaining the subgrade (shape and density) in good condition prior to paving. The required moisture content of the subgrade shall be maintained until immediately prior to paving. However, at no time shall enough water be added to soften the surface of the subgrade.</p> <p>Quantities were estimated assuming subgrade preparation for 100% of the street and parking lot paving areas.</p> <p>The Owner's Authorized Representative and the soil engineer will observe the soil conditions encountered and must approve of the method to prepare the subgrade for paving.</p>
7 & 90	2010-108-J-1	<p>Remove and salvage street signs The work shall include the removal and delivery of existing street signs located within the project limits. Existing street signs along existing Mayhew Ave and S. Cypress St. located within the proposed construction limits shall be delivered to the City sign shop located at 715 Omaha Street. Existing signs located on school property and within the proposed construction limits shall be delivered to Operations and Maintenance Bldg. at 2620 28th Street. The respective owners will be reinstalling the signs following construction.</p>
8	2010-SP-1	<p>Breakup and remove concrete This item shall include all work necessary to A) breakup/remove and dispose of all concrete footings (with or without steel reinforcing) which is not shown on the plans but maybe encountered throughout the course of the project and B) replace and backfill with suitable soils compacted according to project specifications. Measurement and payment shall be cubic yards measured as in place volume by the project observer.</p>
9 & 10	3010-SP-1 & SP-2	<p>Remove and replace trench backfill material All sanitary sewer, storm sewer, and water main shall be backfilled using the criteria that follows:</p> <p>Section 3010, Paragraph 2.01 - Materials Excavated From A Trench, part A.2 of the Statewide Urban Standards, add the following paragraphs: Excavated soils may be found unsuitable for backfill material for the following reasons or conditions: (1) Soil composition is unsuitable, such as organic debris, decomposable material, etc. (2) Soil moisture is too high to allow effective compaction. (3) Soil moisture is too low to allow effective compaction. Too high moisture will be greater than six (6) percent points over for loess soil (other types of soil may be used with moisture more than 6%) and too low moisture will be greater than three (3) percent under the optimum moisture content for a cohesive material, as determined by Standard Proctor Density (ASTM D698), unless otherwise directed by the Owner's Authorized Representative. Silt material should be placed at a moisture content of between 5 percent below optimum to 2 percent above optimum as determined in general accordance of ASTM D 698.</p> <p>Under condition (1), the Contractor shall remove and dispose of unsuitable soil at a Contractor arranged disposal site. The Contractor shall haul in suitable backfill material to replace that hauled out, sufficient to backfill the trench. Payment will be made as specified below.</p> <p>Under condition (2), the Contractor shall remove and dry out or dispose of wet soil at a Contractor arranged site. The Contractor shall haul in suitable backfill material to replace that hauled out,</p>

ESTIMATE REFERENCE INFORMATION		
Item No.	Item Code	Description
		<p>sufficient to backfill the trench. Suitable backfill material may consist of bringing back in suitable material excavated from the trench after it has been hauled away and dried out. Payment will be made as specified below.</p> <p>Under condition (3), the Contractor shall add water to bring the soil moisture within the desirable range prior to or during compaction work. There will be no separate payment for water for compaction, but any costs related thereto shall be incidental to the contract price for furnishing and installing the respective bid item.</p> <p>The Owner's Authorized Representative and the soil engineer will observe the soil conditions encountered and must approve of the material being classified as unsuitable for backfilling. Suitable backfill material proposed by the Contractor for use on the project must be cohesive non-organic soil with the proper moisture content to achieve the specified minimum density. The backfill material shall be approved prior to use on the project by the Owner's Authorized Representative and the soil engineer.</p> <p>Payment under the "Remove Trench Soils" bid item will cover removal and disposal of unsuitable material from the project and will be based on the unit bid price per cubic yard of in-place volume. Payment for "Furnish and Install Trench Soils" bid item will also be based on the unit bid price per cubic yard of in-place volume. Contractor shall provide suitable off-site soils pipe trench backfill material. This volume will be measured in the field during construction by the Owner's Authorized Representative. The volume measurement will not exceed the limits specified below.</p> <p>a. Sanitary Sewer, Water Main and Storm Sewer: (a) on the bottom, the top of the compacted granular pipe bedding material or bottom of trench ; (b) on the top, the bottom of the pavement where existing subgrade soils are used (or top of subgrade where C-Stone subbase is used), or the surface of the ground in unpaved areas; (c) width will be fifty-four (54) inches for inside pipe diameters 24 inches and smaller and 1.25 times the outside diameter of pipe plus 1 foot for pipes 30 inches or greater (d) the outside surface of the pipe being backfilled.</p> <p>b. Sanitary and Storm Manholes: (a) on the bottom, the bottom of the manhole base; (b) on the top, the bottom of the pavement where existing subgrade soils are used (or top of subgrade where C-Stone subbase is used) or the surface of the ground in unpaved areas; (c) on the sides, two foot beyond the outside diameter of the manhole on each side of the manhole; and (d) the outside surface of the manhole being backfilled.</p> <p>Quantities under "Remove Trench Soils" and "Furnish and Install Trench Soils" were estimated at 50 cubic yards for the project. The actual volume for payment under "Remove Trench Soils" and "Furnish and Install Trench Soils" will be measured in the field by the Owner's Authorized Representative.</p>
11	4010-108-A-1	<p>Sanitary sewer gravity main, trenched, 8" VCP Bypass pumping, if used, will be considered incidental to furnish and install sanitary sewer. No payment for bypass pumping will be made. The Contractor will be required to discharge sewage being bypass pumped into an adequately sized sanitary sewer. Bypass pumping into the storm sewer system will not be allowed. Plugging of sanitary sewer which are to be abandoned in place with a non-shrink grout or push-on plugs shall be considered incidental to the cost of installing the new sanitary sewer. All costs to furnish and install pipe bedding material as noted in the plans shall be considered incidental to the respective sanitary sewer bid item and will not be measured or paid for separately.</p>

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		All costs of labor, materials and equipment necessary to locate and connect to existing sewer pipe shall be considered incidental to this bid item. All sewer repair couplings shall be Flex-Seal Adjustable Repair Couplings or approved equal with stainless steel shear band. Verifying existing sanitary sewer location and elevation at proposed connection points prior to construction shall be considered incidental to this bid item. All costs of labor, materials, and equipment necessary to remove and dispose of sanitary main noted for removals in the plans regardless of material and size shall be considered incidental to this bid item.
91	4010-108-I-0	Sanitary sewer cleanout
12 & 92	4010-SP-1	Sanitary sewer service, trenched Existing sanitary sewer services shall be removed from the main to the point of connection of the new service line to the existing service line from the building as shown in the plans. Removal of the existing service shall be considered incidental to the proposed service when located within the same location. Traps and cleanouts may be found on sanitary sewer service lines and shall be removed as part of the installation of the new sanitary sewer service. Locating, removing and connecting to the existing sanitary sewer service shall be incidental to the respective sanitary sewer service bid item. All sewer repair couplings shall be Flex-Seal Adjustable Repair Couplings or equivalent with stainless steel shear band. Sanitary services shall include required pipe bedding as noted in the plans. All costs to furnish and install pipe bedding material shall be considered incidental to the respective sanitary sewer service bid item and will not be measured or paid for separately. PVC services shall be SDR 26 with type F-3 bedding.
93	4010-SP-2	Removal of sanitary sewer service This item shall include all labor, materials, and equipment necessary to remove and dispose of existing sanitary service noted for removals in the plans regardless of material and size. Use of this bid item shall only be for removal of existing sanitary service when proposed service is not to be installed within the same location. If proposed service is shown in the plans within the same location as the existing, removal of existing service shall be considered incidental to the respective "Sanitary sewer service, trenched" bid item. Backfilling and compacting trench with suitable soils to 95% Standard Density after removal shall be considered incidental to this bid item. Plugging existing sanitary sewer pipe that is to be abandoned will be considered incidental to removing existing sanitary sewer pipe.
94	4010-SP-3	Sanitary sewer service wye on existing main Proposed 8" PVC sanitary sewer service shall be connected to existing 8" PVC sanitary sewer main at location noted in the plans. This connection shall be made by rolling a wye into the existing main and connecting it to the existing main with Flex-Seal Adjustable Repair Couplings or approved equal stainless steel shear bands. Contractor shall verify existing main material prior to construction. This bid item shall include all costs associated with locating and excavating the existing main, verifying material, furnishing and installing wye and all connections and backfilling the main with suitable material in accordance to contract documents.
13-15 & 95	4020-108-A-1	Storm sewer, trenched Measurement and payment for storm sewer pipe will be of linear foot installed as measured along the completed work centerline from inside face of structures to end of line, including all fittings and connections. Plugging ends of existing storm sewer with non-shrink grout or push-on plugs that are to be abandoned where noted on the plans will be incidental to furnish and install storm sewer pipe. All storm sewer shall have rubber O-ring profile gaskets.
16	4020-108-C-1	Removal of storm sewer This item shall include all labor, materials, and equipment necessary to remove (regardless of material), dispose and backfill and compact trench with suitable soils to 95% Standard Density. Pipe aprons shall be regarded as storm sewer pipe. Plugging existing storm sewer pipe that is to

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		be abandoned and removal of any cleanouts shall be considered incidental to removing existing storm sewer pipe.
17	4020-SP-1	Construct storm sewer support Bid item shall include all labor, materials, excavation, equipment and suitable backfill to construct storm sewer supports at locations shown in the plans and backfill and compacting around support with suitable material according to excavation specifications. Measurement and payment will be made at bid price for each support constructed according to contract documents.
96	4040-108-A-0	Subdrain, 4" All subdrains shall be installed as shown in the plans. Contractor to furnish and install caps on all upstream ends not connected to an intake. Capping subdrain ends, furnishing and installing porous backfill/engineering fabric will not be measured and paid for separately and shall be considered incidental to the bid item.
97	4040-108-D-0	Subdrain outlet Subdrain outlets shall be a 2' section of double-walled HDPE or PVC pipe of the same diameter as the subdrain. No corrugated metal outlets will be allowed. Rodent guards are required on all outlets.
18 & 98	4060-SP-1	Video inspection of storm/sanitary sewer main Video inspection of all sanitary sewer main and storm sewer main shall be conducted after all backfill and compaction operations are completed and prior to paving as well as following paving. This includes all new storm and sanitary mains installed during this project. The Contractor shall hire an independent third party to televise the sewers and have them provide copies to City Engineering and Utilities Field Office (Division I), School District (Division II), and DGR Engineering. Refer to SUDAS Section 4060. The video needs to show footages, and a detailed printed report must be provided along with a plan page showing what was televised. Method of measurement and basis of payment will be the contract unit price of televised main per linear foot of storm and sanitary sewer main as shown in the contract documents. Unit price shall be full compensation for video inspection conducted prior to paving and following paving.
19-21 & 99-100	5010-108-A-1	Water main, trenched Water main with material not specified in the plan sheets shall be DIP or PVC as allowed by the Sioux City Supplement. The standard depth of cover for water main shall be 6 feet from finished grade to top of pipe. All water main shall be placed with tracer wire according to the Iowa Statewide Urban Standard Specifications for Public Improvements and the current Sioux City Supplement. A tracer wire station shall be installed at the back of each fire hydrant per Figure 5010.5 or approved equal. All DIP water main shall be poly wrapped. Removal of existing water main including valves, fittings, etc. at locations of proposed water main shall be considered incidental to the installation of new water main and will not be paid for separately. The Contractor shall notify the Utilities Department of proposed water main shutdowns at least 24 hours in advance. Water main shutdowns shall be staged and scheduled such that service to businesses/residents is not interrupted for more than 4 hours. The Contractor shall notify all affected property owners/tenants 72 hours in advance of service interruptions. Temporary capping and thrust blocking of the new water main and/or the existing main as needed to maintain service and to pressure test and disinfect the new water main shall be considered incidental to the cost of the water main. At the Contractor's option and cost, temporary water main may be installed to provide potable water to all residents during and throughout

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		<p>construction. The temporary water main will need to be bacteria tested prior to being placed into service. The Contractor shall be responsible for properly treating the highly chlorinated water flushed from the new main as needed to dispose of the water in a safe manner.</p> <p>Plugging of existing water mains which are to be abandoned in place with a non-shrink grout or push-on plugs shall be considered incidental to the cost of installing the new water main.</p> <p><u>Suggested Water Main Installation Sequence:</u></p> <ol style="list-style-type: none"> Complete proposed water main installation and testing from Lincoln Way to proposed hydrant located at approximately Sta. 3+40, including service to Nodland Elementary. Cut-in valve and complete water main work at approximately Sta. 10+73 and also cut-in valve at approximately Sta. 11+68. Install 6" valve, 6"x6"x6" tee and 6" MJ cap and thrust block at proposed connection with existing main on Mayhew Avenue west of S. Cypress Street. Complete proposed residential water service work. Existing main in Mayhew and S. Cypress intersection will now be dead to complete remaining proposed water main installation. <p>Note:</p> <ul style="list-style-type: none"> Water service shall not be disrupted during school hours prior to June 1, 2017 or during functions at school. Contractor to coordinate water shut downs with school. Contractor to complete sequences "b,c&d" simultaneously to limit number of proposed water disruptions to residents.
22-28 & 101-102	5010-108-C-1	Water main fittings
29-30 &	5010-SP-1	Connect to existing water main This bid item shall include all materials and work necessary to cut existing pipe, remove existing pipe or fitting, furnish and install sleeves and connect to existing water main, including removing caps if necessary. Contractor shall be responsible for verifying all existing water main elevations and locations at tie in locations prior to installation of proposed water mains. Measurement and payment will be made at the contract unit price per connection for the respective bid item.
31	5010-SP-2	Water service corporation stop and tap
32	5010-SP-3	Water service, trenched All labor, equipment and materials necessary to connection to existing water service lines or existing corporation stops shall be considered incidental to the respective water service bid item and will not be measured or paid for separately.
33	5010-SP-4	Water service curb stop and valve box
103	5010-SP-5	Connect to existing 3" water service w/ 6"x3" threaded blind plug and 3" galvanized nipple This bid item shall include all materials and work necessary to cut existing pipe, remove existing pipe or fitting, furnish and install all required materials to connect to existing water service. Contractor shall be responsible for verifying existing water service size and elevation at tie in location prior to installation of proposed water service. Measurement and payment will lump sum.
34-35 & 104	5020-108-A-0	Valve, gate valve/box
36	5020-108-C-0	Fire hydrant assembly

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		The contractor shall not place hydrant valves within the street or sidewalk paving. The contractor to coordinate with surveyor to stake back of curb and edges of sidewalks to verify valve location to be outside of paving. This may require an additional spool pipe of varying length to be furnished and installed by contractor between tee and valve. All this work is incidental to fire hydrant bid item. Contractor to furnish and install tracer wire stations at all proposed fire hydrants (incidental to bid item).
37 & 105	5020-108-D-0	Temporary blowoff on 6" main Temporary blowoff shall be installed as noted on the plans. The nominal size of the blowoff shall be two sizes smaller than the main. There should be only one connection between the existing and new water main prior to pressure testing and disinfection of the new main to prevent the chance of cross contamination.
38 & 106	5020-SP-1	Furnish and cut-in gate valve/box This bid item shall include all materials and work necessary to cut existing pipe, remove existing pipe or fitting, furnish and install gate valve/box and connect to existing water main on both sides. When additional proposed pipe or fittings are called out in the plans next to the valve, the respective "Furnish and cut-in gate valve/box" bid item shall cover all costs, material and labor to connect both valve end and connect the proposed pipe/fitting end to the existing water main. Measurement and payment will be made at the contract unit price per gate valve/box installed.
39	5020-SP-2	Remove fire hydrant assembly This item shall include all labor, materials, equipment, and incidental work to remove existing fire hydrants including valves/boxes (when noted in the plans for removal) and deliver them to the Field Office of the Department of Utilities, 18th Street.
40-41	5020-SP-3	Fire hydrant extension Fire hydrant extensions will be paid for if the profile of the main as noted in the plans must be varied in order to cross other nearby utilities. Bid items for 6-inch and 12-inch extensions have been included to establish bid prices; however, these items may not be needed. The bid item for the fire hydrant extension shall include all labor and materials necessary to furnish and install the necessary hydrant extension. No payment for materials or restocking fees will be made for fire hydrant extensions if they are not needed.
42-45 & 107-109	6010-108-B-0	Intake
46	6010-108-E-0	Manhole adjustment, minor Adjustment bid items shall include new castings and chimney seals.
47	6010-108-F-0	Manhole adjustment, major Adjustment bid items shall include new castings and chimney seals.
48	6010-108-G-0	Connect to existing intake Bid item shall include existing intake invert modifications as needed to match flowline of the proposed pipe connection. All equipment, material and labor to modify existing invert as needed will not be measured or paid for separately and shall be considered incidental to this bid item.
49-50 & 110-111	6010-108-H	Remove storm/sanitary structure Items shall include all labor, materials, equipment, and incidental work to remove the storm and sanitary manholes or intakes and salvage and deliver the castings and manhole lids to the Field Office of the Department of Utilities, 18th Street.
51 & 112	6010-SP-1	Storm manhole, SW-401, base, ring and cover and chimney seal
52 & 113	6010-SP-2	Storm manhole, SW-401 Measurement of Payment to be per vertical dimension in feet from the flowline to the bottom of casting.

REVIEW SET ONLY

NOT FOR BIDDING

SOUTH CYPRESS EXTENSION
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

ESTIMATE REFERENCE INFORMATION

Project Manager: B. WELLS
Designer: T. LOW
Project Number: 266003
Phone: (712) 266-1554



ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
53	6010-SP-3	Sanitary manhole, type SW-301 base, ring and cover and chimney seal Vacuum testing will not be required
54	6010-SP-4	Sanitary manhole, type SW-301 Measurement of Payment to be per vertical dimension in feet from the flowline to the bottom of casting.
55 & 114	7010-108-A-0	Pavement, PCC, 7" PCC pavement shall be placed with a slip form paving machine except for small or irregular areas which may be constructed with fixed forms. All concrete placed with a screed shall be vibrated in front of the screed. Limestone and Quartzite are the only coarse aggregate materials allowed. Dowel bars used to tie the proposed paving to existing pavement will be paid for under the bid item "Furnish and install 18", #5 bar". All cold joints are to be reinforced with 24", #4 dowel bars @ 30" O.C. All reinforcing steel, including structural steel, dowel bars, bent bars, etc., shall be epoxy coated. All paving within the school sites shall be sealed with caulk type sealant. Joints to be caulked shall be Crafcro Roadsaver Silicone SL, Sonolastic Paving Joint Sealant (by Sonneborn) or Dymeric (by Tremco) or approved equal. All roadway PCC paving joint sealant are to be a hot poured sealer per SUDAS section 7010. A ½" expansion board shall be placed between the back of curb and sidewalks. This joint shall be sealed with caulk. Adjustment of valve boxes to grade and construction of required thickened edges at tie in locations shall be considered incidental to the respective paving bid item. Thickened edge shall match existing pavement thickness at the tie-in location or proposed pavement thickness, whichever is greater. Thickened edge shall extend into proposed pavement a minimum of 24-inches from the tie-in before transitioning to the proposed pavement thickness over 18-inches.
115	7010-108-E-0	PCC curb and gutter, 24" wide, 7" thick
56 & 116	7010-SP-1	Furnish and install 18" #5 bar (24" O.C.) Bid item shall be used for dowel bars used to tie the proposed paving to existing pavement. All dowel bars shall be epoxy coated. Basis of measurement and payment will be made per each tie bar installed.
57	7010-SP-3	Furnish and install HMA paving The HMA to be placed for patching at construction limits shall be HMA (300K ESAL) Surface, 1/2-inch, PG 58-28. Bid price shall include all costs to clean and prepare the location prior to HMA placement.
117	7020-108-A-0	Overlay, HMA HMA shall be 300k ESAL Surface, ½-inch, PG 64-22. Existing surface shall be cleaned and tacked per Iowa Department of Transportation Standard Specification 2303. Construction of leveling courses as noted in the plans shall be paid for with this bid item per ton of material placed.
58 & 118	7030-108-G-0	PVC or composite detectable warning panel Detectable warning panels shall be Composite Panel Paver System manufactured by ADA Solutions, Inc. or approved equal. Panel color shall be yellow at all locations.
59	7030-108-H-1	Driveway, paved, PCC, 6" All driveways shall have 12" of subgrade preparation completed in two 6" lifts, moisture conditioned and compacted to the Standard Proctor density with optimum moisture ranges as shown in the typical sections of the drawings. Subgrade preparation shall be considered incidental to the driveway paving bid item.
60 & 119	7030-SP-1	Pavement removal, sidewalk Payment will be made at the contract unit price per SF of sidewalk removed and disposed at locations shown in the plans regardless of material or thickness.

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
120	7030-SP-2	Removal of existing stairs Payment will be made at the contract lump sum price for removal and disposal of existing concrete stairs at the location shown in the plans regardless of size, material, footing/footing depth or thickness. Backfilling and compacting area to match existing adjacent ground elevations with suitable soils after removals and removal of all handrails shall be considered incidental to this bid item.
121	7030-SP-3	Removal of existing loading dock Payment will be made at the contract lump sum price for removal and disposal of existing concrete loading dock at the location shown in the plans regardless of size, material, footing/footing depth or thickness. Backfilling and compacting area to match existing adjacent ground elevations with suitable soils after removal shall be considered incidental to this bid item.
61-62 & 122	7030-SP-4	Sidewalk, PCC Thickened edge and additional thickness for ramps and landing spaces (minimum 6" per SUDAS Figure 7030.25) shall be considered incidental to the respective sidewalk bid item and will not be paid for separately. A ½" expansion joint shall be placed between back of curb and sidewalk when sidewalk is adjacent to the curb. This joint shall be sealed with caulk. All 5-inch sidewalk slabs shall be reinforced with Fibermesh INFORCE polypropylene fibrillated fibers at a rate of 1.5 lbs. per cubic yard. All 5-inch sidewalk paving joints shall be sealed with caulk type sealant. Joints to be caulked shall be Crafcro Roadsaver Silicone SL, Sonolastic Paving Joint Sealant (by Sonneborn) or Dymeric (by Tremco) or approved equal. All curved sidewalks shall be constructed with flexible forms as shown in the plans. All sidewalks shall have 12" of subgrade preparation completed in two 6" lifts, moisture conditioned and compacted to the Standard Proctor density with optimum moisture ranges as shown in the typical sections of the drawings. Subgrade preparation shall be considered incidental to the respective sidewalk paving bid item.
123	7030-SP-5	Furnish and install 1.5-inch extruded polystyrene insulation This item shall include all labor, materials, equipment and incidental work to install a 1.5-inch below grade rated insulation board under the sidewalk paving in areas as shown in the plans.
124	7030-SP-6	Furnish and install geofoam stoop This item shall include all labor, excavation, materials, equipment and incidental work to install a 14' wide by 6' long by 4' deep closed-cell expanded polystyrene insulation block as a frost protection stoop in areas as shown in the plans.
125	7040-108-G-0	Milling, HMA Mill existing HMA parking lot at locations as noted in the plans.
63 & 126	7040-108-H-0	Pavement removal, street/driveway The work shall include the removal and disposal of existing pavement (street and driveway), including curb where shown and steps, regardless of type or thickness, which is not covered under other bid items. Sawcuts completed at staging limits shall be considered incidental to the pavement removal bid item.
64 & 127	7040-SP-1	Sawcut paving Prior to removal operations, the Contractor shall saw cut the street paving 2' away from the removal limit of each street at his cost. Any damage caused to the existing pavement at the removal limit caused by Contractor will be repaired by the Contractor at his cost. The Contractor shall saw a neat, vertical, and straight edge to existing concrete paving prior to placing new paving adjoining existing paving. All saw cut shall be full depth.
65 & 128	7080-SP-1	Painted pavement markings, epoxy All markings are to be epoxy based. Reflective beads are required for this bid item. Method of measurement and basis of payment for the markings shall be per linear foot along centerline of

ESTIMATE REFERENCE INFORMATION

Project Manager: B. WELLS
 Designer: T. LOW
 Project Number: 266003
 Phone: (712) 266-1554



Sheet
C.07

SOUTH CYPRESS EXTENSION
 RAVINE PARK LANE TO LINCOLN WAY
 SIOUX CITY, IA

ESTIMATE REFERENCE INFORMATION		
Item No.	Item Code	Description
		marking and based on a 4-inch wide line. Measurement of lines wider than 4-1/2-inches will be adjusted by the ratio to a 4-inch line.
66	7080-SP-2	Removal of pavement markings Remove pavement markings as noted in the plans according to Iowa Department of Transportation Standard Specification 2527. Method of measurement and basis of payment for the removals shall be per linear foot along centerline of the existing marking to be removed and based on a 4-inch wide line. Measurement of existing lines wider than 4-1/2-inches will be adjusted by the ratio to a 4-inch line.
129	7080-SP-3	Painted pavement symbols, epoxy All symbols are to be epoxy based. Reflective beads are required for this bid item. Method of measurement and basis of payment for the symbol shall be per each installed at locations noted in the plans. Contractor shall refer to MUTCD Standard Highway Signs and Pavement Marking Manual for symbol details.
130	7080-SP-4	Furnish and install handicap sign/bollard and symbol Bid item shall include all costs associated with furnishing and installing handicap sign/bollard and symbol at locations as shown in the plans. Refer to plans for sign/bollard and symbol details. Symbol shall be epoxy based. Measurement and payment will be made at the contract unit price per each handicap sign/bollard/symbol grouping installed.
67	9020-108-A-0	Sodding Refer to SUDAS Section 9020 for specifications regarding preparation of sod bed, fertilizing applications, installation of sod, maintenance, including watering, and warranty. The maintenance period, including watering, shall be for 30 days following immediate installation of sod. Areas that are disturbed outside of the limits shown in the erosion control plans which have not been approved by the Engineer shall be re-sodded at the Contractor's cost. Estimated quantity under "Sodding" for includes 5% overrun.
68	9040-108-F	Wattle 9", furnish, install, maintain and remove Refer to SUDAS Figure 9040.102. Contractor to place additional soil on the upstream end of the wattle, in the seam between the tube and the ground. Diameter shall be 9 inches. Contractor shall furnish, install, maintain, and remove. Wattles when located within the street shall be removed at the beginning and replaced at the end of each day as needed for that day's work to guard against sediment leaving the site. The wattles are to be installed following removal of the existing street pavement and be maintained to just prior to street paving. Depending on the contractor's progress and duration between work tasks, the wattles may need to be installed and removed several times within the same area. All of this work shall be included in the respective bid item bid price regardless to how many times the wattles need to be installed and removed within the work area. Replacement of wattles made necessary due to improper installation, removal or maintenance will not be paid for separately.
69	9040-108-N	Silt fence, furnish, install, maintain and remove Silt fence shall be furnished and installed per Section 9040 of SUDAS and at locations noted in the plans. When sediment accumulates to one-half the height of the silt fence, the sediment shall either be removed and the existing silt fence left in place, or a new silt fence shall be installed upstream. Payment will be made for each linear foot of silt fence installed and shall include the cost of furnishing, installing, maintaining and removing the silt fence after final stabilization. Repair or replacement of silt fence made necessary due to improper installation, removal or maintenance will not be paid for separately.
70 & 131	9040-SP-1	Erosion control A storm water discharge permit has been obtained by the Owner as part of this project. A copy of the Notice of Intent, the Pollution Prevention Plan, and the Contractor's Certification associated with this project will be provided to the successful Contractor following the bid date. The Contractor shall perform his operations to comply with this permit and Pollution Prevention Plan.

ESTIMATE REFERENCE INFORMATION		
Item No.	Item Code	Description
		This includes performing his operations in a manner which minimizes the sediment carried from the site by storm water runoff and mud or dirt tracked on city streets by vehicular traffic, for providing intake protection (silt fence intake protection prior to paving or stabilization and rock bags following paving but prior to final stabilization), and for sweeping and cleaning the pavement in areas where materials are stockpiled or used as haul routes. The Contractor and all subcontractors will be required to sign a copy of the "Contractor's Certification" and will be a co-permittee on the project. The Erosion Control bid item shall include furnishing, installing, maintaining and removing the intake protection, stabilized construction entrances/exits where traffic enters and leaves the area, silt berms throughout the site and downstream end of the construction limits to force storm water into adjacent intakes, flushing and cleaning storm sewer pipes, and sweeping and cleaning adjacent streets and haul routes to remove tracked dirt and mud and furnishing and applying water for dust control. The basis of payment shall be paid as a percentage of work completed for each division of the project. All costs associated with furnishing, installing and maintaining silt fence and wattles at locations noted in the plans for Division II shall be considered incidental to the Div. II "Erosion Control" bid item.
71 & 132	9060-SP-1	Removal of fence Unit price shall include but not limited to, removal and disposal of fence as noted in the plans regardless of type, size and material, including post and all post footings.
72	9070-SP-1	Construct modular block retaining wall Basis of measurement and payment will be lump sum for the block retaining wall as shown in the plans and shall include all labor, materials, excavation, leveling pad, backfill and equipment necessary to design and construct wall. Bid item shall include all costs necessary to connect to existing block retaining wall. Costs shall include, but not limited to removing portion of existing block retaining wall as needed to excavate existing ground to proposed elevations and reconstructing existing wall as necessary according to SUDAS 9070 specifications. Contractor shall color match existing block retaining wall. Removal and replacement of existing chain-link fence as necessary for construction of proposed retaining wall shall be considered incidental to this bid item.
73-81	SP-1 – SP-9	Street Lighting See technical specifications
82	SP-IDOT-2506	Furnish and install flowable mortar Bid item shall be used for filling abandoned utilities as noted in the plans and backfilling utilities at proposed crossings where proper compaction cannot be obtained due to small clearances. Item shall only be used with construction observer's authorization and will be paid for by the cubic yard volume of material used, taken from the provided truck ticket. Bid price shall be for all labor, materials and equipment necessary to furnish and install the bid item. No payment will be made if item is not needed.
83	SP-IDOT-2528	Traffic control The Contractor shall furnish, erect, operate, move, remove, and maintain at all times, during the execution of the work and until completion and final acceptance thereof, suitable and requisite barricades, signs and other types of traffic control devices as may be necessary and required to insure the safety of the public as well as those engaged in the work. All road closures shall The basis of payment shall be 50 percent of Lump Sum price paid on first Certificate for Payment for and 100 percent of Lump Sum price paid when 95 percent of the value of the work is completed. Refer to J sheets for traffic control requirements and details.

REVISIONS - NOT FOR CONSTRUCTION

SOUTH CYPRESS EXTENSION
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

ESTIMATE REFERENCE INFORMATION

Project Manager: B. WELLS
Designer: T. LOW
Project Number: 266003
Phone: (712) 266-1554



General Notes:

1. **Specifications Applicable:** The specifications used on this project are:
The 2016 version of the Iowa Statewide Urban Standard Specifications for Public Improvements and the 2015 version of the Sioux City Supplement to the Iowa Statewide Urban Standard Specifications for Public Improvements and as modified in the following General Notes and Estimate Reference Information Notes.
2. **Coordination of Work:** The Contractor will be required to coordinate their work with other contractors in the area, including but not limited to MidAmerican Energy, CableOne, CenturyLink, Fibercomm, Windstream etc.
3. **Contractor Construction Schedule:** The Contractor shall provide the Engineer with a schedule for completion of work a minimum of two working days prior to the pre-construction meeting. The schedule shall provide a separate time bar for each significant construction activity. This construction schedule shall be approved by the Engineer prior to construction of the project. Subsequent revisions, if necessary, shall be provided to the engineer as work progresses.
4. **Notification to Property Owners:** The Owner will provide an informational paper that is to be given to the property owners on the streets this project affects. The Contractor shall provide liaison between his activities and all residences and distribute this paper seven (7) days prior to the time when works begins and/or when their street will be closed for construction, in order to allow the affected businesses and residences to compensate for disruptions caused by the project. Additional notices maybe required, depending on the project staging. The City will also mail out a copy of the informational paper to all property owners on the street. Property owners will be notified seventy-two (72) hours prior to any scheduled utility outage including water outages.
5. **Contact Personnel:** Contractor shall provide the Owner and the 911 Operator with the name and phone number of their representative to be contacted during working and non-working hours as necessary.
6. **Observation:** Observation of the construction of the work shall be under the control of the Owner's Authorized Representative.
7. **Quality of Materials and Equipment:** Whenever in any of the contract documents an item of material or equipment is defined by describing a proprietary product, or by using the name of a manufacturer or vendor, the term "or equal" if not inserted, shall be implied. The specific item of material or equipment

mentioned shall be understood as establishing a standard type, function, efficiency, minimum basis of design and quality desired. Other manufacturer's products of comparable quality, design and efficiency, and suitable for the service intended will be considered. Where so specified, manufacturers other than the named manufacturers will be considered only if requirements for submittal of information prior to the bid letting are met.

8. **Shrinkage Cracks:** Any shrinkage cracks and surface tears found in the new pavement shall be cause for removal and replacement of affected pavement by the Contractor at no cost to the Owner.
9. **Utilities:** Sewer, water, gas and telephone mains and services are indicated on the plans in accordance with information received from the respective utility. This information is furnished merely for the convenience of all concerned. It shall be the sole responsibility of the Contractor to ascertain the number and location of all of these mains and services affected by the project.

The Contractor shall notify any utility companies with facilities in this area at least 72 hours before any work is started in order that they may locate their mains and services at the job site. Iowa One Call 1-800-292-8989.

Should the Contractor ruin or damage any of these utilities, he shall replace them at no cost to the Owner. All such replacement shall be in accordance with the construction specifications of the utility involved.

It shall be the responsibility of the Contractor to contact any involved utility regarding moving of poles and/or lowering services to accommodate dirt work, or new sewer and water lines.

10. **Measurement and Payment:** Measurement for acceptable work shall be in units of measure contained in the Contractor's Proposal for each bid item. Payment for acceptable work performed on this project shall be in accordance with the unit price amounts contained in the Contractor's Proposal.
11. **Damage to Private Property:** It is the Contractor's responsibility to review and document existing project site conditions prior to construction. Any damage to private property, i.e. retaining walls, footings, etc., shall be fully and solely the responsibility of the contractor.
12. **Field Verify:** The Contractor shall field verify all existing utilities as noted on the plans prior to removal, construction and installation of new utilities. Adjustments in elevation to proposed utilities may be required during construction. All of this work shall be

considered incidental to installation of the related utility.

13. **Removal and Disposal:** The Contractor shall provide a disposal site for all materials removed and not reused in the project. Separate payment will not be made for disposal but will be included with respective bid items.
14. **De-Watering:** The Owner and DGR Engineering accept no responsibility for subsurface conditions and all costs associated with de-watering shall be incidental to the various bid items.
15. **Maintain Storm Water Drainage:** The Contractor shall maintain storm water drainage during construction. This work may include ditching and constructing silt berms and/or bypass pumping of storm water. All of this work shall be incidental to other various bid items and will not be paid for separately.
16. **Water Required for Construction:** The Contractor will be responsible for obtaining water for dust control and soils moisture and density. The Contractor shall contact the City customer service office for water rates and the City for location of hydrants which may be used for obtaining water. There will be no additional payment for obtaining and applying water and shall be considered incidental to various bid items.
17. **Trench Excavations:** The Contractor will be responsible for trench excavation and excavation safety in accordance with the requirements of OSHA 29 CFR., Part 1926, Subpart P, "Excavations and Trenches" and other applicable codes.
18. **Granular Pipe Bedding:** Granular pipe bedding shall be used for storm sewer, sanitary sewer (main and services), and water main when required by the 2016 SUDAS Standards and 2015 Sioux City Supplement to SUDAS or when needed to provide a stable trench bottom. Granular pipe bedding is to be included in the price bid per foot of pipe and shall meet the minimum requirements as follows:

Water main: None required.

Storm/Sanitary sewer mains and services: Refer to construction plans sheets for requirements.
19. **Trench Backfilling:** All sanitary sewer, storm sewer, water main, conduits, etc. shall be backfilled using the criteria that follows:

Section 3010 Trench Excavation and Backfill of the Statewide Urban Standards and the City of Sioux City's supplement shall be modified as follows:

All trench backfill soils shall be compacted to 95% of Standard Proctor Density.

The Contractor shall make every reasonable effort to compact the backfill in accordance with the specifications, so that the specified minimum percent densities are achieved. In cohesive soils, good success has been achieved on past projects by use of a sheep-foot style roller mounted on a backhoe boom.

The Contractor shall be responsible to make his own determination of the actual quantity and shrink rate needed to backfill utility trenches with suitable soils. No additional payment will be made to haul in or haul out soil material to complete trench backfill.

13. **Fuel and Price Adjustments:** No fuel or material price adjustments will be made for this project.

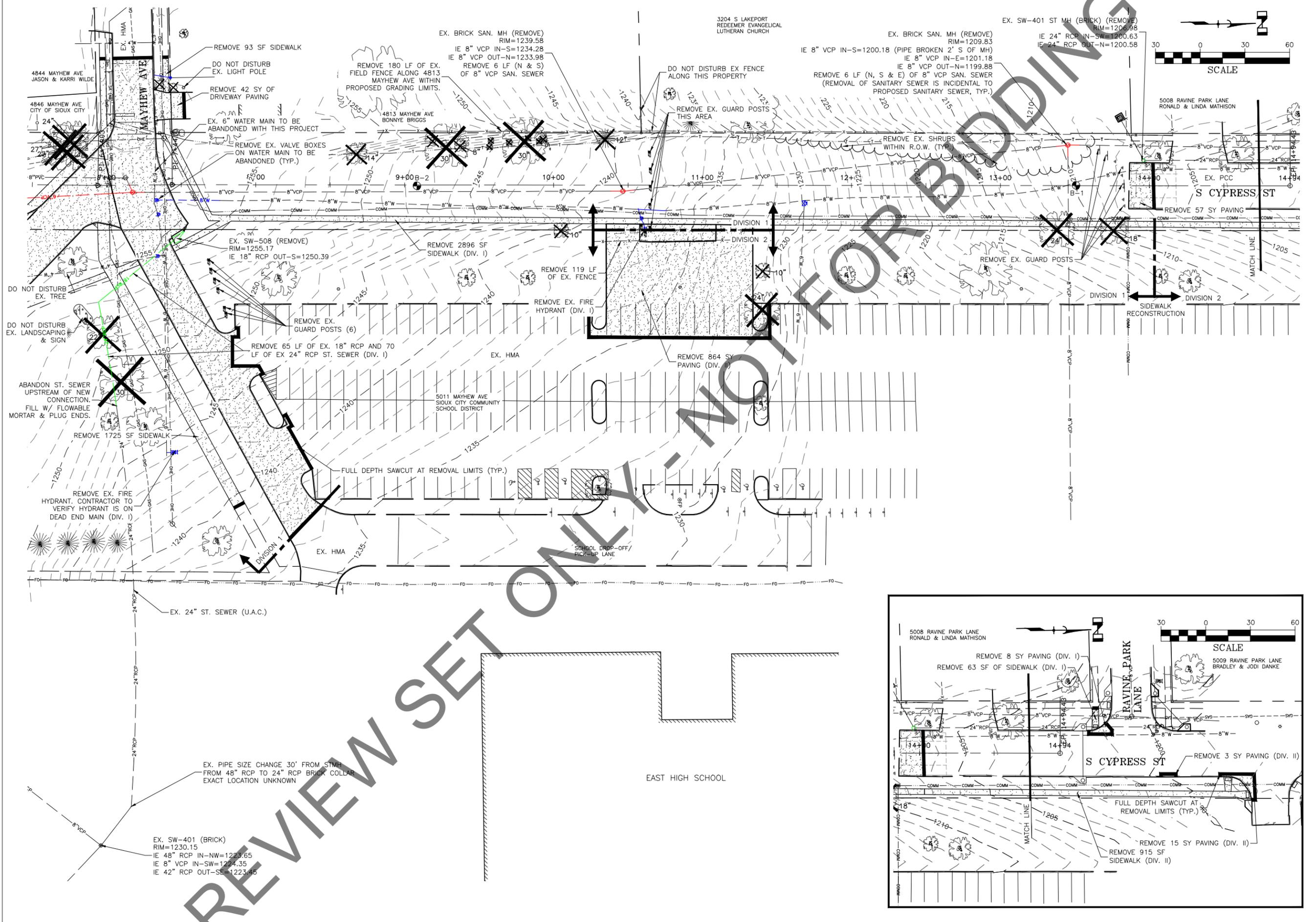


SOUTH CYPRESS EXTENSION
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

GENERAL NOTES

Project Manager: B. WELLS
Designer: T. LOW
Project Number: 266003
Phone: (712) 266-1554





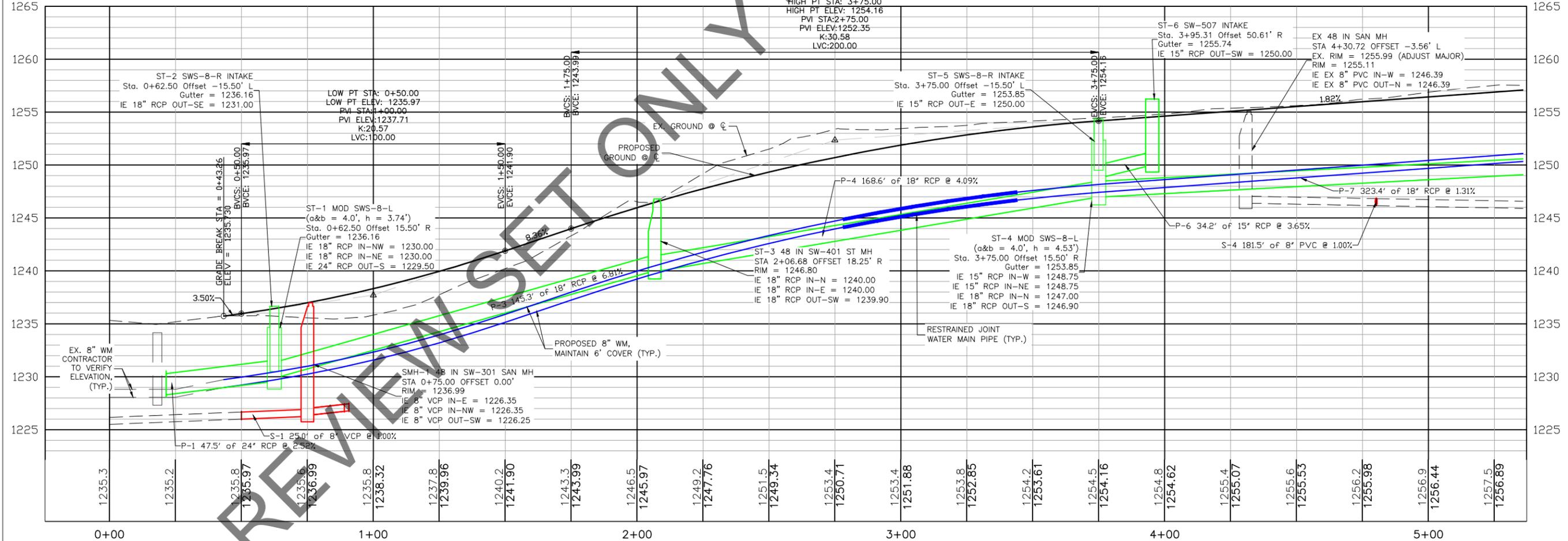
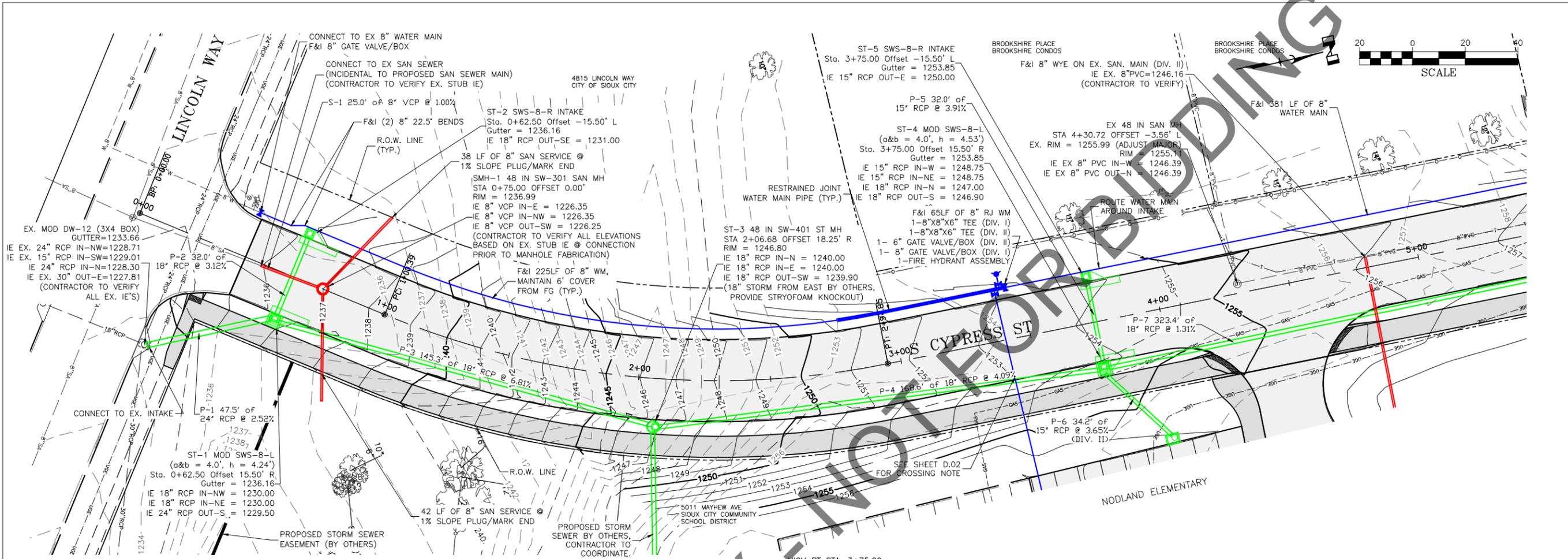
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

REMOVAL PLAN
NORTH

Project Manager: BNW
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554



Sheet
R.02



**SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA**

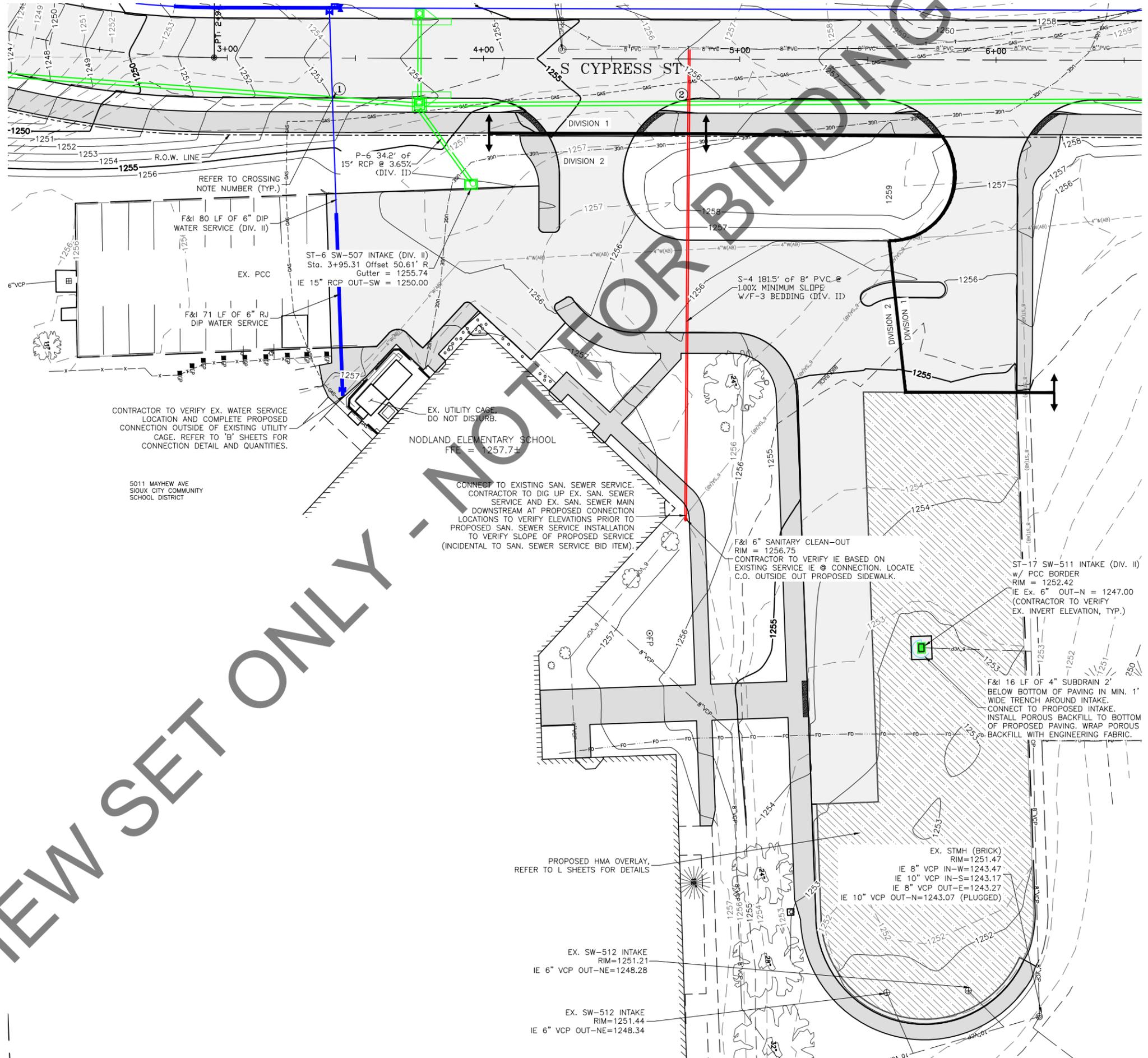
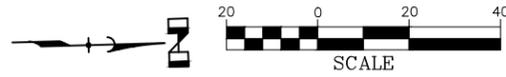
PLAN & PROFILE
S. CYPRESS ST. STA. 0+00 TO 5+00

Project Manager: BNW
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554

ENR ENGINEERING
Sheet
D.01

UTILITY CROSSING NOTES

1. ROUTE 6" DIP WATER SERVICE OVER PROPOSED 18" ST. SEWER. MAINTAIN MINIMUM 4.5' COVER FROM FG TO TOP OF SERVICE.
2. ROUTE PROPOSED 8" SAN. SERVICE UNDER PROPOSED 18" ST. SEWER. BTM 18" RCP = 1248.10 TOP 8" VCP = 1247.10 CLEARANCE 1.0'(VERIFY) CONSTRUCT PCC ST. SEWER CRADLE.



REVIEW SET ONLY - NOT FOR BIDDING

**SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA**

**SITE PLAN
NODLAND PARKING LOT**

Project Manager: BNW
 Designer: TJJ
 Project Number: 266003
 Phone: (712) 266-1554

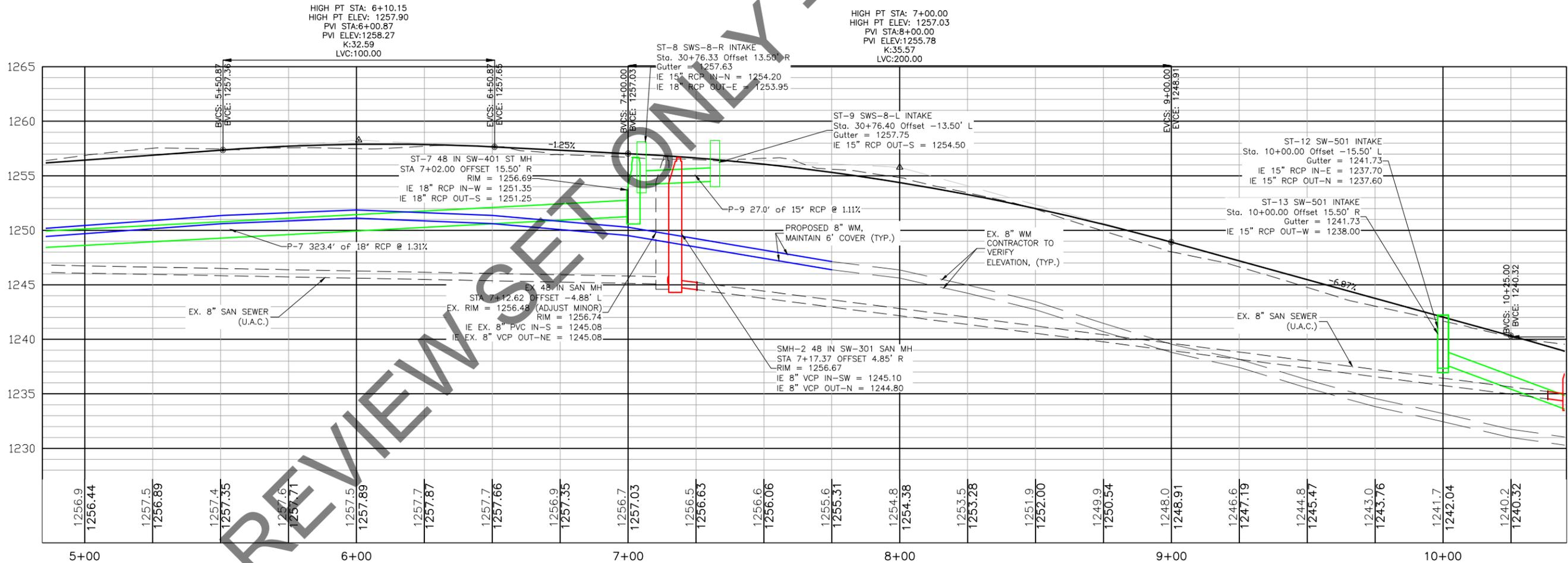
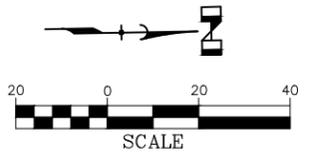
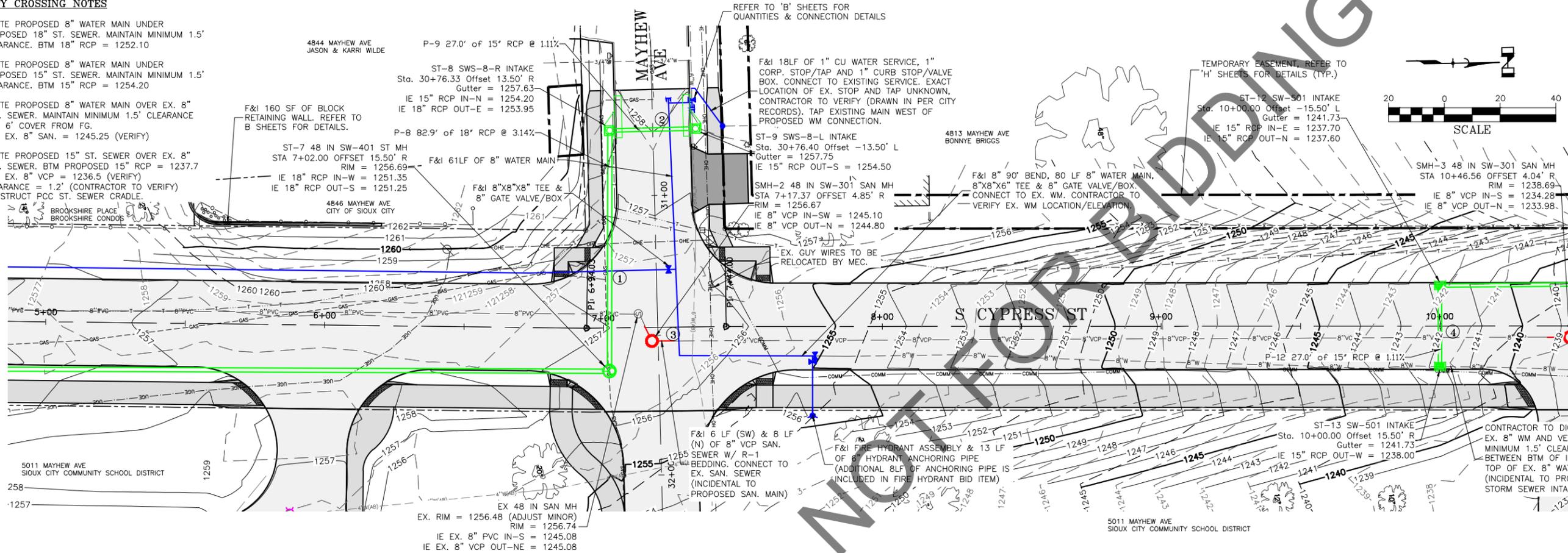


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D.02

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UTILITY CROSSING NOTES

- ROUTE PROPOSED 8" WATER MAIN UNDER PROPOSED 18" ST. SEWER. MAINTAIN MINIMUM 1.5' CLEARANCE. BTM 18" RCP = 1252.10
- ROUTE PROPOSED 8" WATER MAIN UNDER PROPOSED 15" ST. SEWER. MAINTAIN MINIMUM 1.5' CLEARANCE. BTM 15" RCP = 1254.20
- ROUTE PROPOSED 8" WATER MAIN OVER EX. 8" SAN. SEWER. MAINTAIN MINIMUM 1.5' CLEARANCE AND 6" COVER FROM FG. TOP EX. 8" SAN. = 1245.25 (VERIFY)
- ROUTE PROPOSED 15" ST. SEWER OVER EX. 8" SAN. SEWER. BTM PROPOSED 15" RCP = 1237.7 TOP EX. 8" VCP = 1236.5 (VERIFY) CLEARANCE = 1.2' (CONTRACTOR TO VERIFY) CONSTRUCT PCC ST. SEWER CRADLE.



SOUTH CYPRESS STREET EXTENSION, RAVINE PARK LANE TO LINCOLN WAY SIOUX CITY, IA

PLAN & PROFILE S. CYPRESS ST. STA. 5+00 TO 10+00

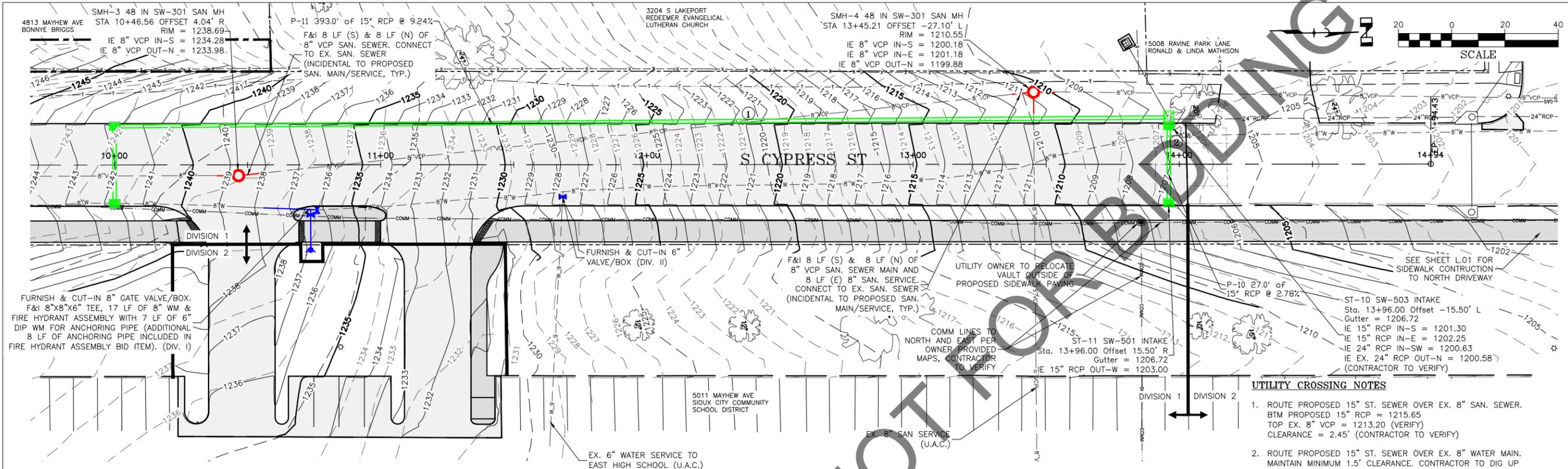
Project Manager: BNW
 Designer: TJL
 Project Number: 266003
 Phone: (712) 266-1554



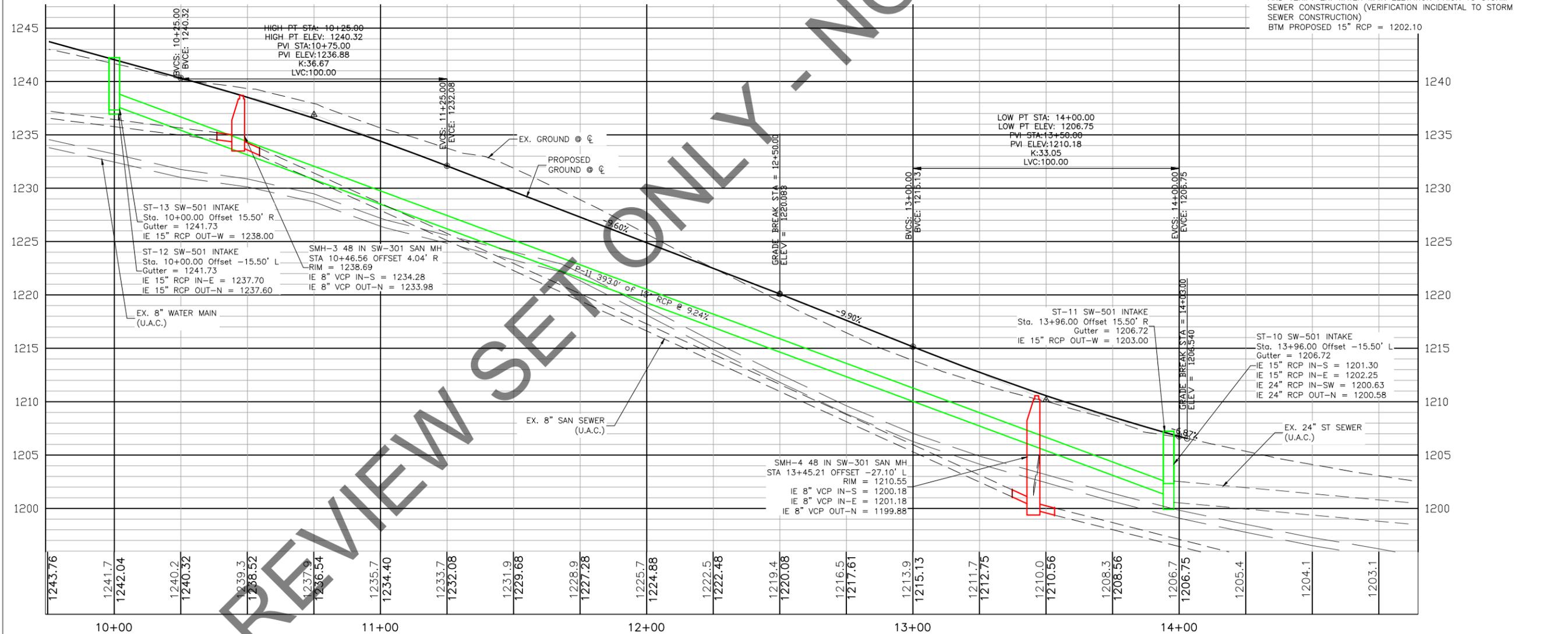
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- UTILITY CROSSING NOTES**
- ROUTE PROPOSED 15" ST. SEWER OVER EX. 8" SAN. SEWER.
 BTM PROPOSED 15" RCP = 1215.65
 TOP EX. 8" VCP = 1213.20 (VERIFY)
 CLEARANCE = 2.45' (CONTRACTOR TO VERIFY)
 - ROUTE PROPOSED 15" ST. SEWER OVER EX. 8" WATER MAIN.
 MAINTAIN MINIMUM 1.5' CLEARANCE. CONTRACTOR TO DIG UP
 AND VERIFY EX. WATER MAIN ELEVATION PRIOR TO STORM
 SEWER CONSTRUCTION (VERIFICATION INCIDENTAL TO STORM
 SEWER CONSTRUCTION)
 BTM PROPOSED 15" RCP = 1202.10



**SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA**

PLAN & PROFILE
S. CYPRESS ST. STA. 10+00 TO 14+00

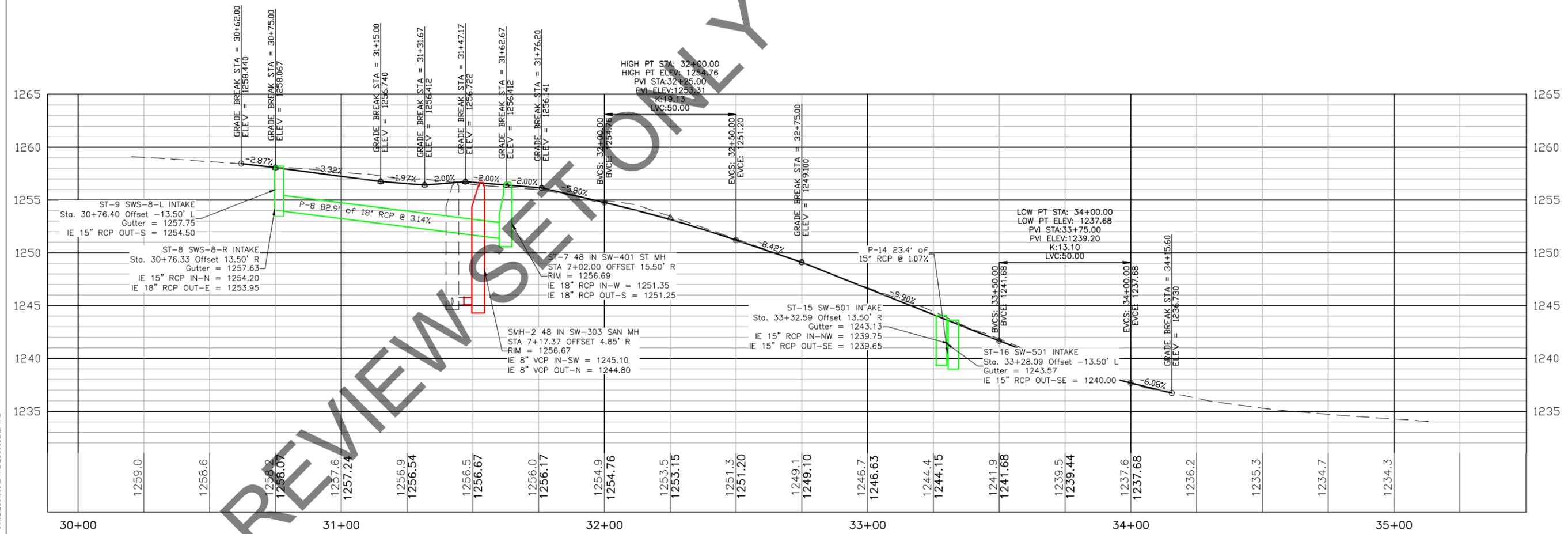
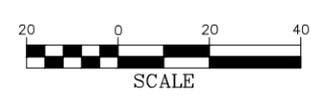
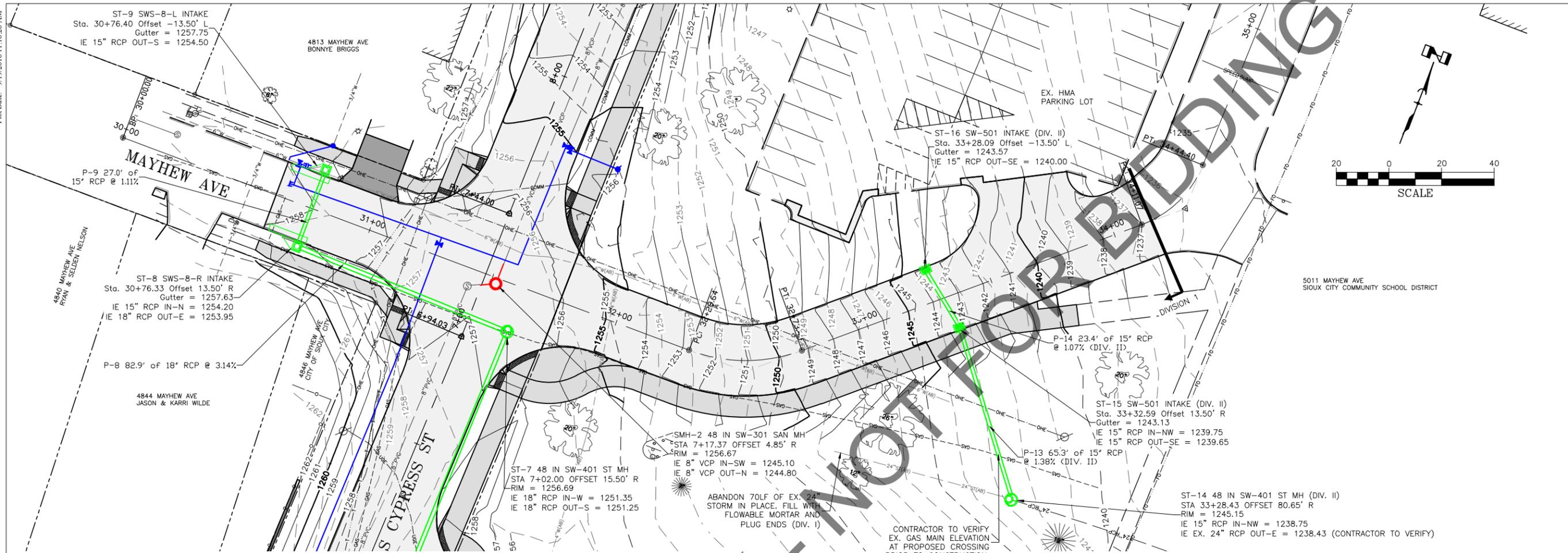
Project Manager: BNW
 Designer: TJJ
 Project Number: 266003
 Phone: (712) 266-1554

DR
ENGINEERING

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D.04

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Plot Date: 9/19/2016 11:16:26 AM



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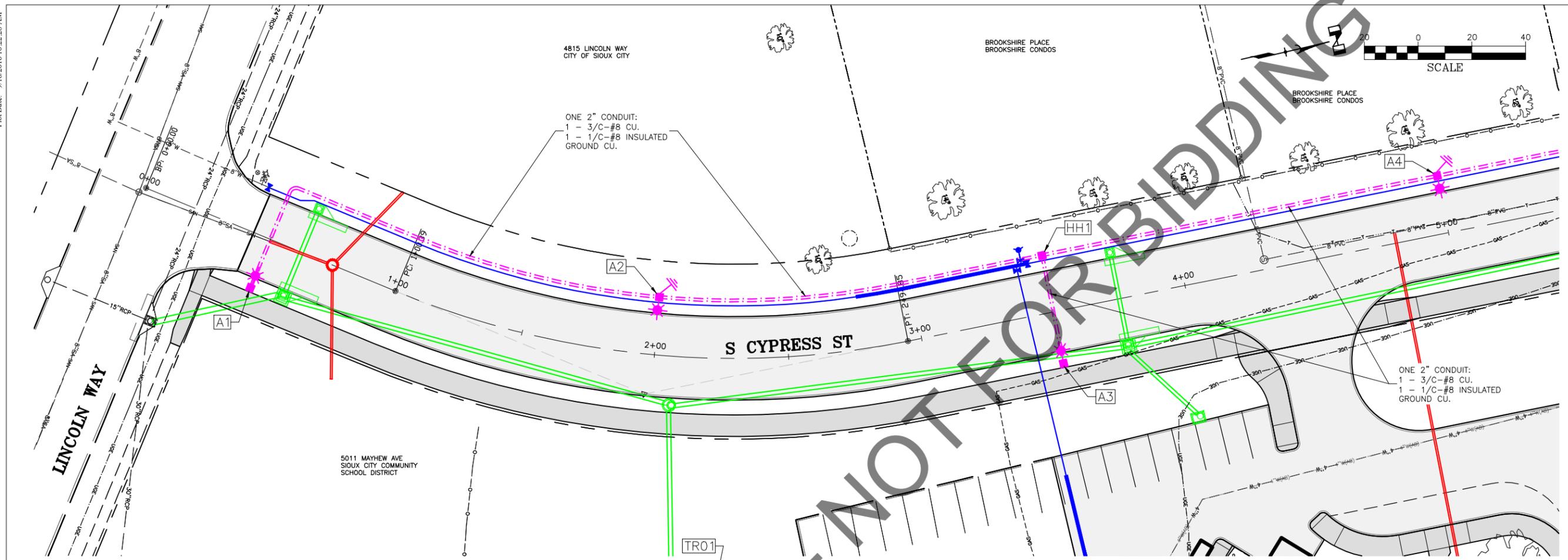
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

PLAN & PROFILE
MAYHEW AVE - EAST HIGH DRIVEWAY

Project Manager: BNW
 Designer: TJJ
 Project Number: 266003
 Phone: (712) 266-1554

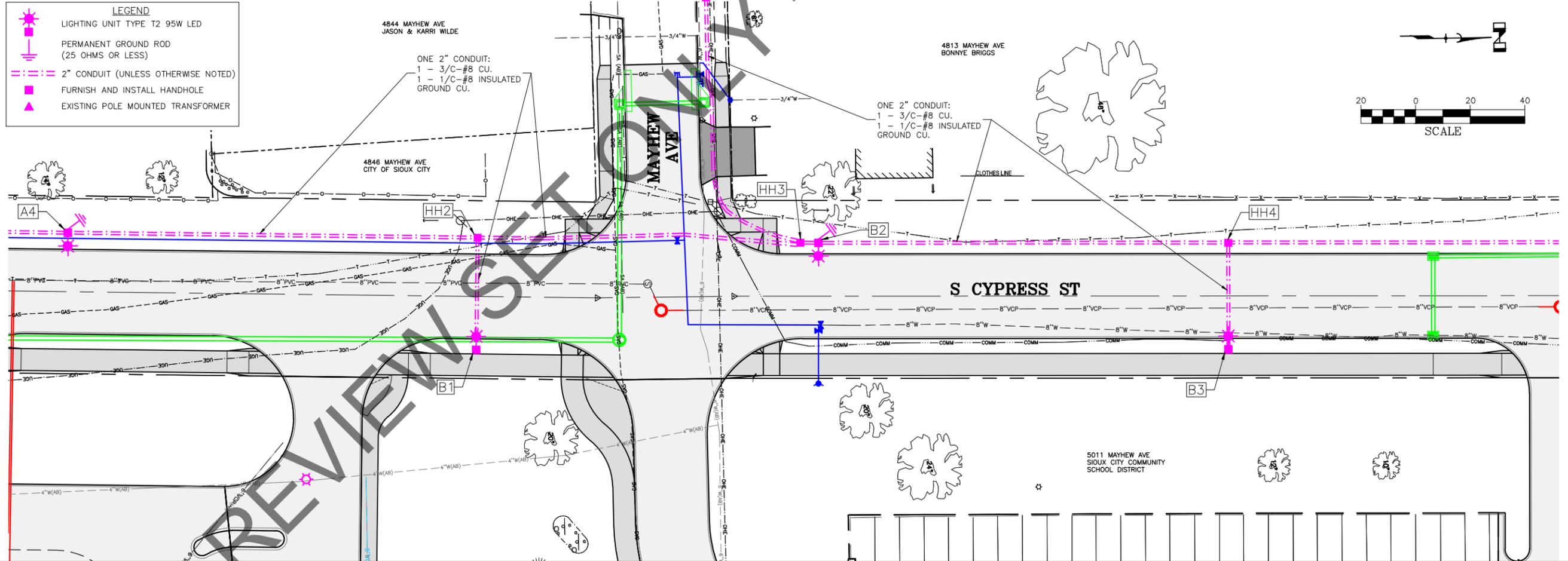
EGR ENGINEERING

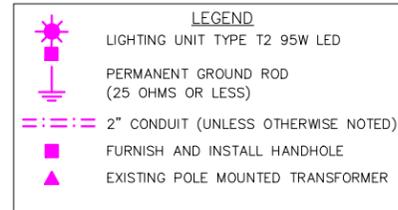
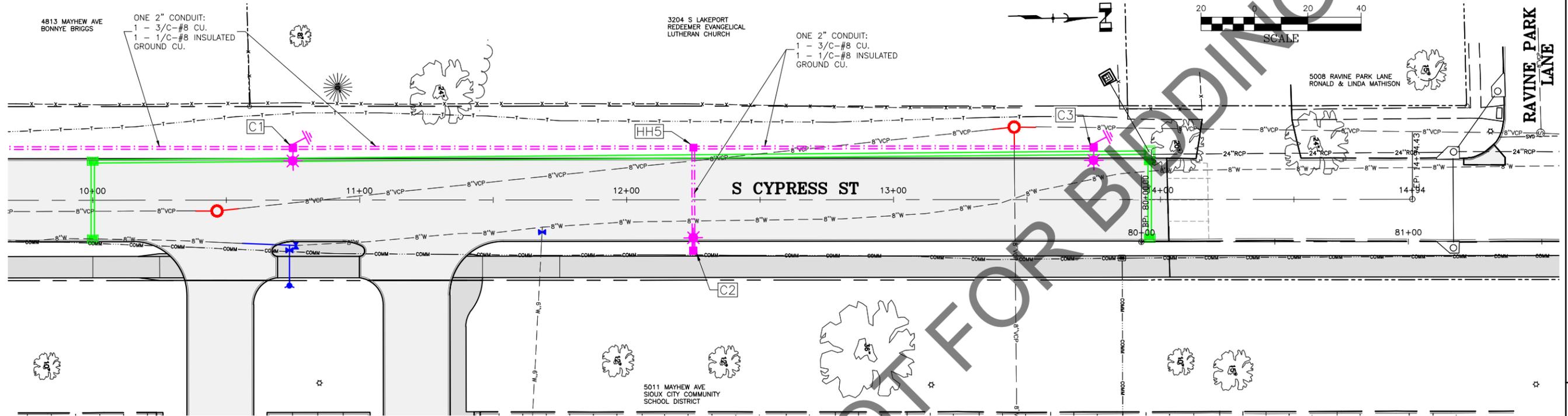
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LEGEND

- LIGHTING UNIT TYPE T2 95W LED
- PERMANENT GROUND ROD (25 OHMS OR LESS)
- 2" CONDUIT (UNLESS OTHERWISE NOTED)
- FURNISH AND INSTALL HANDHOLE
- EXISTING POLE MOUNTED TRANSFORMER

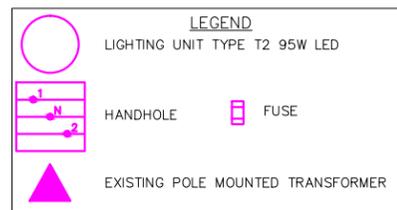
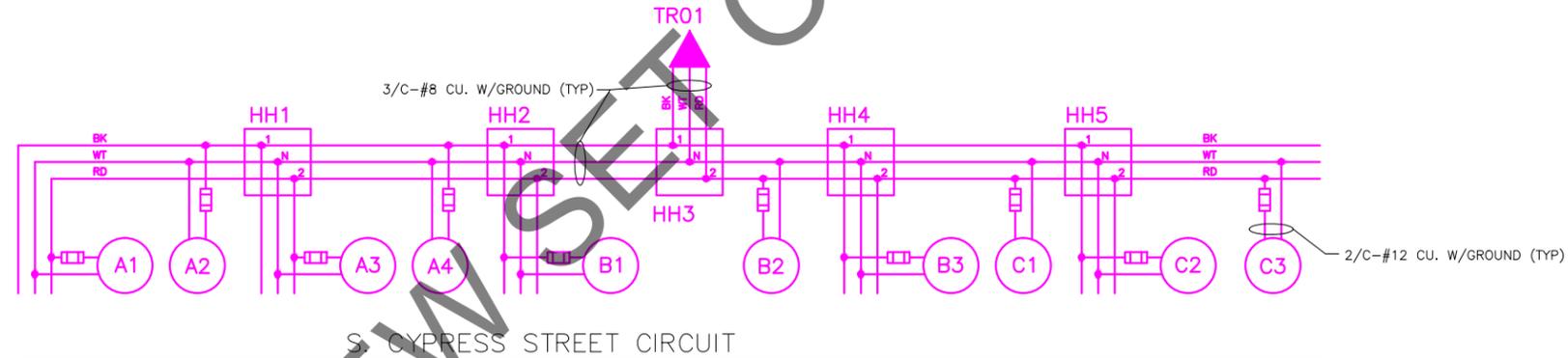




- NOTES**
- DISTANCE BETWEEN STREET CENTER-LINE AND STREET LIGHT BASE IS SHOWN AS APPROXIMATE. VERIFY ACTUAL DISTANCE FROM STREET CENTER-LINE TO STREET LIGHT BASE TO MAINTAIN A 3.5' CLEARANCE BETWEEN STREET LIGHT BASE AND BACK OF STREET CURB WHILE AVOIDING OTHER UTILITIES.
 - ALL HANDHOLES SHALL BE PVC WITH METAL FRAMES AND COVERS.
 - THIS PLAN SPECIFIES CONDUIT SIZE, TYPE AND GENERAL LOCATIONS. THE EXACT LOCATION WILL BE DETERMINED IN THE FIELD.
 - ALL CONDUIT SHALL BE PVC - SCHEDULE 40.
 - CONTRACTOR TO LEAVE 40' OF CABLE AT BASE OF TRANSFORMER POLE FOR RISER AND CONNECTION TO TRANSFORMER BY OTHERS.
 - FIXTURE ORIENTATION ANGLE IS REFERENCED FROM THE NORTH DIRECTION.

LIGHTING STANDARDS AND BASES

N.O.	STATION	L.T. (ft)	R.T. (ft)	ORIENTATION	LOCATION	TYPE	POLE BASE	FIXTURE
A1	00+50	--	19.5	55° WEST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
A2	02+00	21.5	--	110° EAST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
A3	03+50	--	19.5	90° WEST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
A4	05+00	21.5	--	90° EAST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
B1	06+50	--	19.5	90° WEST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
B2	07+75	19.5	--	90° EAST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
B3	09+25	--	19.5	90° WEST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
C1	10+75	19.5	--	90° EAST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
C2	12+25	--	19	90° WEST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED
C2	13+75	19.5	--	90° EAST	S. CYPRESS ST.	T2	NON-BREAKWAY	95W LED



- NOTES**
- BK AND RD DENOTE CURRENT CARRYING CONDUCTORS. WT DENOTES NEUTRAL CONDUCTOR.
 - ALL FUSES ARE RATED 3 AMPS UNLESS OTHERWISE NOTED.
 - FINAL CONNECTIONS TO TRANSFORMER TO BE MADE BY OTHERS.

SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

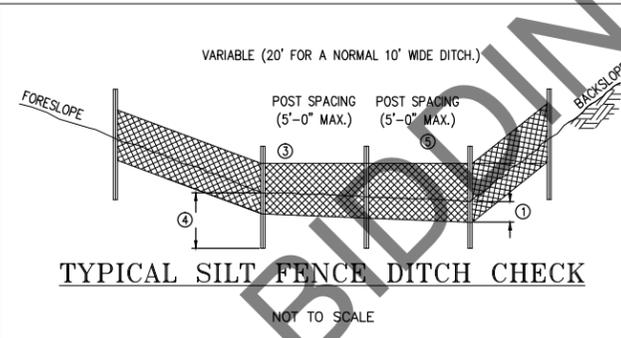
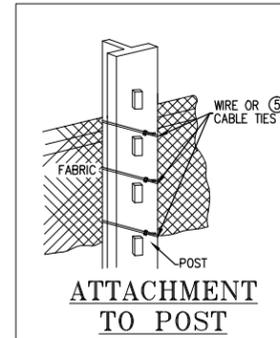
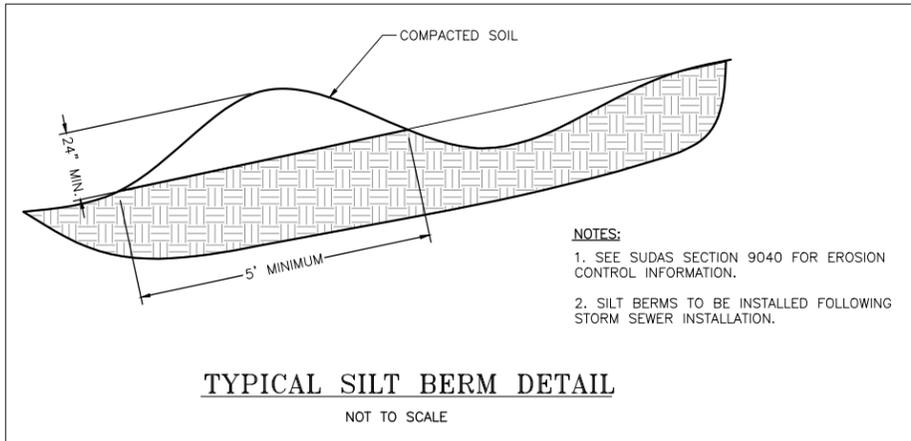
LIGHTING PLAN
S. CYPRESS ST. STA. 10+00 TO 14+00

Project Manager: BNV
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554

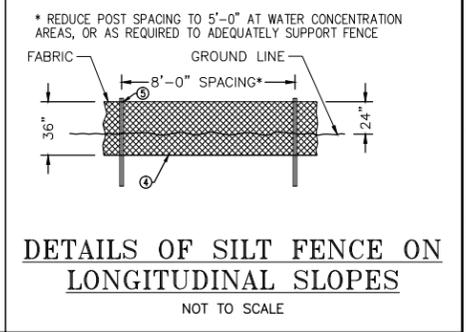
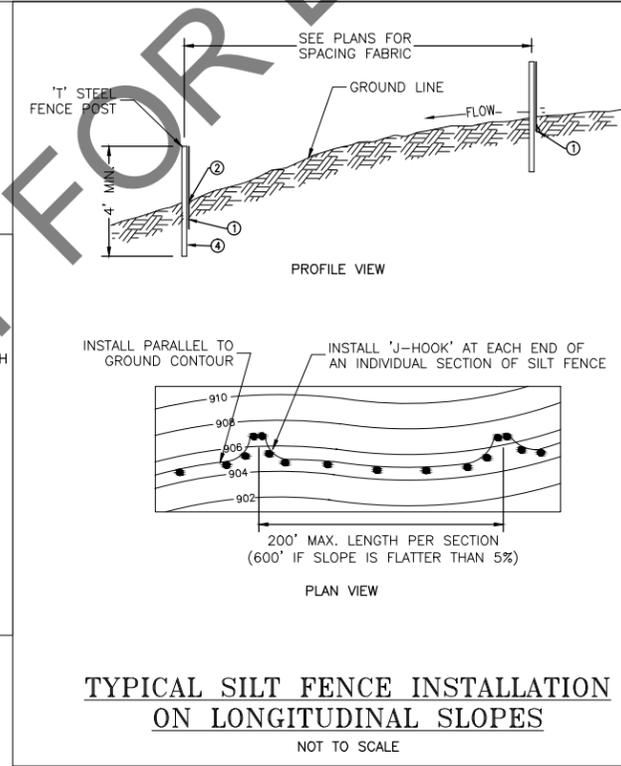
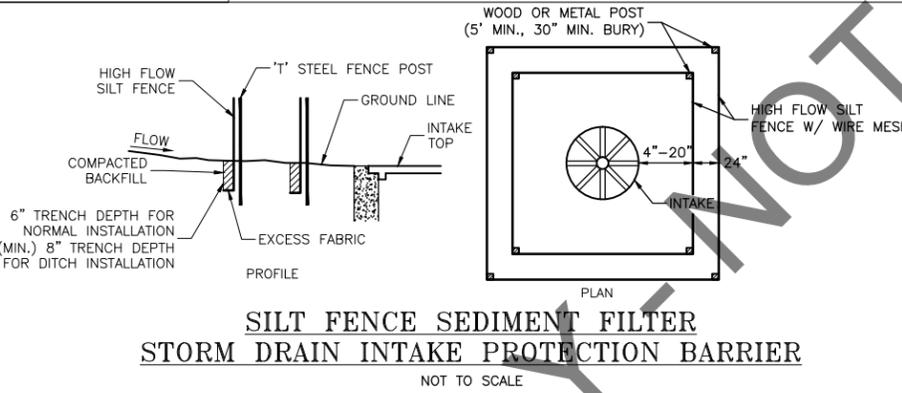
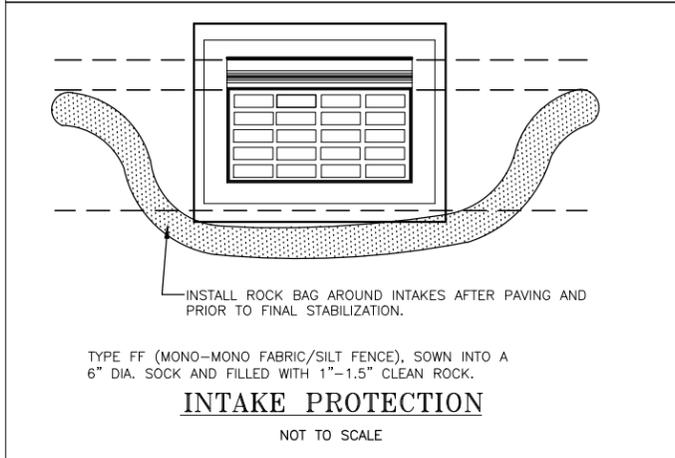


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E.02

-  PROPOSED WATTLES
-  PROPOSED SILT FENCE
-  F&I 484 SQUARES OF SOD DIVISION I



- GENERAL NOTES:**
Install silt fence according to the requirements of Section 9040, 2.13 and at locations shown in the contract documents or as directed by the Jurisdictional Engineer.
- ① Insert 12 in. of fabric a minimum of 6 in. deep (fabric may be folded below the ground line)
 - ② Compact ground by driving along each side of the silt fence as required to sufficiently secure the fabric in the trench to prevent pullout and flow under the fence.
 - ③ In ditches, extend silt fence up side slope so the bottom elevation at the end of the fence is a minimum of 2 in. higher than the top of the fence in the low point of the ditch.
 - ④ Steel posts to be embedded 20 in. unless otherwise allowed by the Jurisdictional Engineer.
 - ⑤ Secure top of engineering fabric to steel posts using wire or plastic ties (50 lb. min.). See details of "Attachment to Posts."



EROSION CONTROL NOTES:

A STORM WATER DISCHARGE PERMIT HAS BEEN OBTAINED FOR THIS SITE BY THE OWNER. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL THE REQUIREMENTS OF THIS PERMIT. ALL SUBCONTRACTORS WILL BE REQUIRED TO SIGN A COPY OF THE CONTRACTORS CERTIFICATION AND WILL ALSO BE RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE STORM WATER DISCHARGE PERMIT.

THE CONTRACTOR SHALL ERECT SILT FENCE AND/OR 9" WATTLES AT THE LIMITS OF THE SITE IN ALL LOCATIONS WHERE STORM WATER CARRYING SEDIMENT COULD POSSIBLY LEAVE THE SITE PRIOR TO BEGINNING REMOVALS, GRADING OR CONSTRUCTION. SILT FENCE AND/OR WATTLES SHALL BE INSTALLED AROUND ALL EXISTING AND NEW STORM SEWER INTAKES AT ALL TIMES. SILT FENCE AND/OR WATTLE LOCATIONS MAY NEED TO MODIFIED BY THE CONTRACTOR AND ADDITIONAL SILT FENCE AND/OR WATTLES MAY BE REQUIRED BY THE CONTRACTOR TO PROPERLY PROTECT THE SITE DEPENDING ON THE STAGE OF CONSTRUCTION AND CONTRACTOR SCHEDULING.

THE CONTRACTOR SHALL CONSTRUCT A ROCK CONSTRUCTION ENTRANCE/EXIT AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC LEAVES THE SITE. THE CONSTRUCTION ENTRANCE/EXIT SHALL BE 2" TO 3" CLEAN, CRUSHED AGGREGATE AND SHALL BE APPROXIMATELY 30' WIDE BY 100' LONG X 6" THICK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE ENTRANCE/EXIT CLEAN AND SMOOTH AS WELL AS ADDING ROCK WHEN NEEDED. THE CONTRACTOR WILL BE RESPONSIBLE FOR KEEPING THE ADJACENT STREET FREE OF ANY SILT OR MATERIAL SPREAD BY VEHICLES AND EQUIPMENT LEAVING THE SITE. THE CONSTRUCTION ENTRANCES/EXITS SHALL BE REMOVED WHEN PERMANENT PAVED ENTRANCES INTO THE SITE ARE COMPLETED.

THE CONTRACTOR SHALL ERECT SILT FENCE OR 9" WATTLE INTAKE PROTECTION AFTER STORM SEWER INSTALLATION AND MAINTAIN IT UNTIL PAVING IS COMPLETED AROUND THE STORM SEWER INTAKE. AFTER PAVING IS COMPLETED, A ROCK BAG OR 9" WATTLE INTAKE PROTECTION SHALL BE USED TO KEEP SEDIMENT OUT OF THE STORM SEWER FROM CONTINUED CONSTRUCTION OPERATIONS UNTIL FINAL STABILIZATION.

THE CONTRACTOR SHALL PLACE 9" WATTLES ON SLOPES ALONG THE CONTOUR LINES AT INTERVALS SHOWN ON THE PLAN.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, CLEANING OUT AND/OR REPLACING THE SILT FENCE OR WATTLE AND SILT FENCE OR WATTLE INTAKE PROTECTION AS NECESSARY DURING CONSTRUCTION. SILT FENCE AND WATTLES SHALL BE CLEANED OR REPLACED WHENEVER SILT BUILDS UP TO ONE-HALF THE HEIGHT OF THE SILT FENCE OR WATTLE. THE CONTRACTOR AND OWNER'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR JOINT INSPECTIONS OF ALL SEDIMENT AND EROSION CONTROL FEATURES. THE SILT FENCE AND WATTLES SHALL BE REVIEWED WEEKLY TO INSURE THAT IT IS BEING MAINTAINED IN PROPER WORKING ORDER. AT THE TIME OF COMPLETION OF THE SITE, ALL WATTLES AND SILT FENCE THAT ARE TO REMAIN IN PLACE SHALL BE IN PROPER WORKING ORDER AND SHALL BE LESS THAN 1/2 FULL OF SILT.

THE CONTRACTOR SHALL EXCAVATE 10'X10'X1' DEEP CONCRETE WASH OUT AREA AND MOUND DIRT AROUND THE EXCAVATION TO FORM A 1' HIGH BERM WITH SIDE SLOPES OF 3:1. CONCRETE WASHOUT PIT SHALL BE LINED WITH TWO LAYERS OF IMPERMEABLE PLASTIC LINER WITH A MINIMUM THICKNESS OF 10 MILS. PORTABLE DISPOSAL CONTAINERS ARE ALSO ACCEPTABLE. SIGNS SHALL BE INSTALLED INFORMING DRIVERS AND DIRECTING THEM TO THIS AREA FOR CLEANING OUT THEIR TRUCKS. ONCE CONCRETE HAS HARDENED, REMOVE AND DISPOSE OF PROPERLY.

THE CONTRACTOR SHALL EMPLOY ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY, BEYOND THOSE NOTED IN THE PLANS AND TO UPDATE THE SWPPP, TO KEEP SEDIMENT ON THE SITE AND PROTECT ADJACENT PROPERTIES FROM FLOODING, DUST, EROSION, SEDIMENT RUNOFF, ETC.

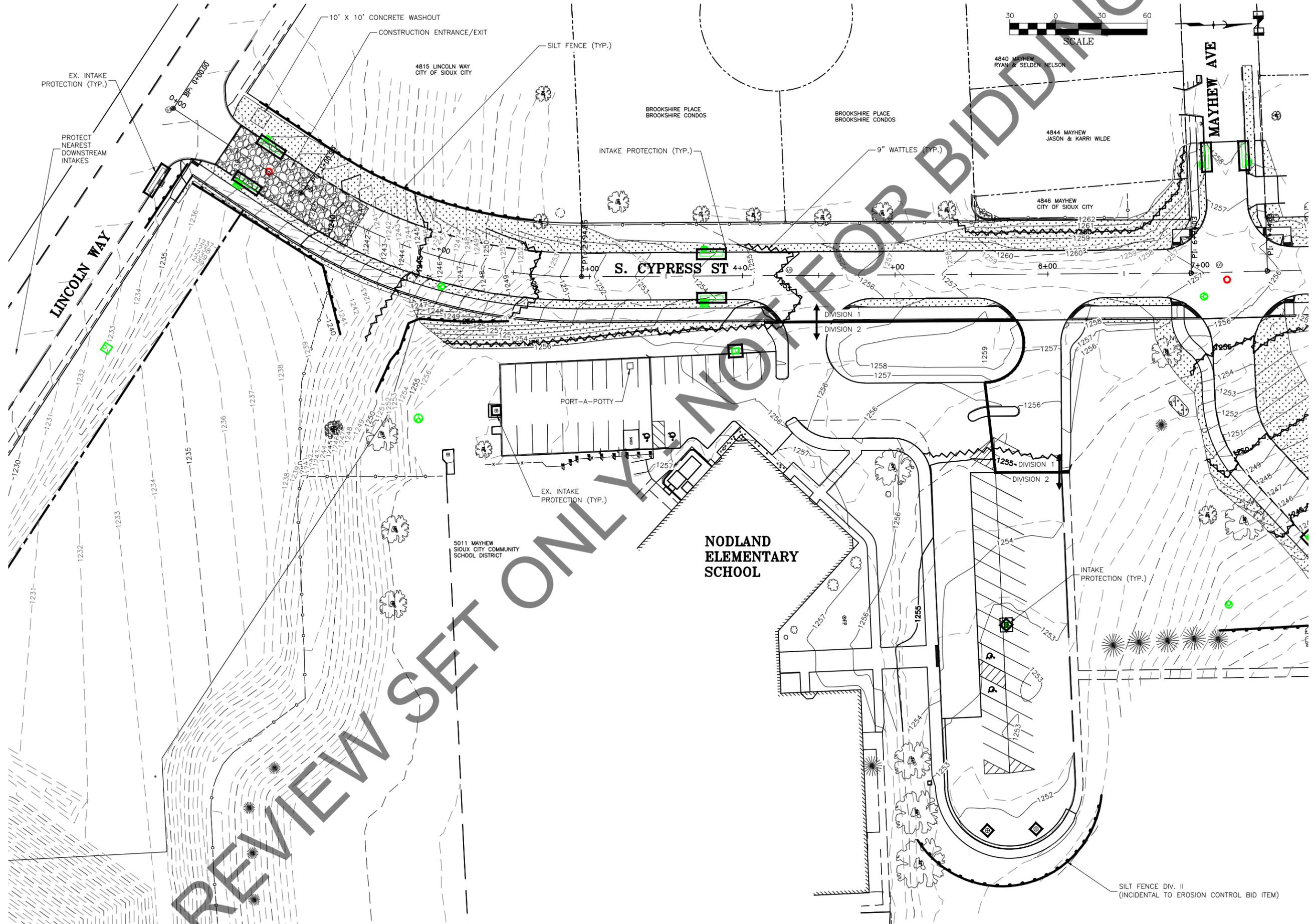
THE CONTRACTOR SHALL EMPLOY WHATEVER MEANS NECESSARY TO CONTROL DUST FROM AREAS WITHIN THE CONSTRUCTION LIMITS AND/OR ITS MIGRATION TO ADJACENT PROPERTIES. THIS MAY REQUIRE WATERING THE SITE MORE THAN ONCE PER DAY.

EROSION CONTROL WORK/SEEDING AND SODDING ON THE PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE 2016 VERSION OF THE IOWA STATEWIDE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS (SUDAS) SECTION (9040) AND THE 2015 SIOUX CITY SUPPLEMENT.

AS SOON AS SLOPE FINISH GRADING HAS BEEN COMPLETED, CONTRACTOR SHALL IMMEDIATELY COMPLETE TOP-SOIL, SEEDING/SODDING AND/OR WATTLE INSTALLATION TO ACHIEVE FINAL STABILIZATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY STABILIZATION (SEEDING) OF ALL DISTURBED AREAS IF CONSTRUCTION ACTIVITY IS NOT PLANNED TO OCCUR IN A DISTURBED AREA FOR AT LEAST 21 DAYS, THE AREA SHALL BE STABILIZED BY TEMPORARY SEEDING OR MULCHING WITHIN 14 DAYS OF THE LAST CONSTRUCTION ACTIVITY. TEMPORARY SEEDING SHALL BE A SUDAS TYPE 4 TEMPORARY EROSION CONTROL MIXTURE OR APPROVED EQUAL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PERMANENT STABILIZATION (SEEDING OR SODDING) OF ALL DISTURBED CITY AREAS AS SHOWN ON THE EROSION CONTROL PLANS. PRIOR TO FINAL STABILIZATION, ALL DISTURBED AREAS SHALL BE TOPSOILED WITH A MINIMUM 4 INCH THICKNESS OF SOIL SUITABLE FOR SUPPORTING VEGETATION. SCHOOL TO COMPLETE FINAL SEEDING/SODDING WORK WITHIN ALL DIVISION II DISTURBED AREAS.



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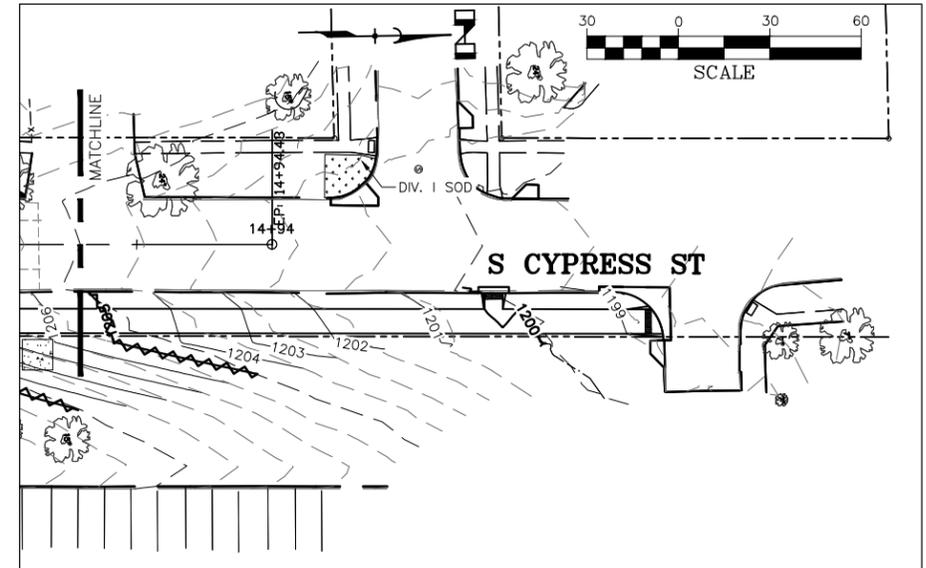
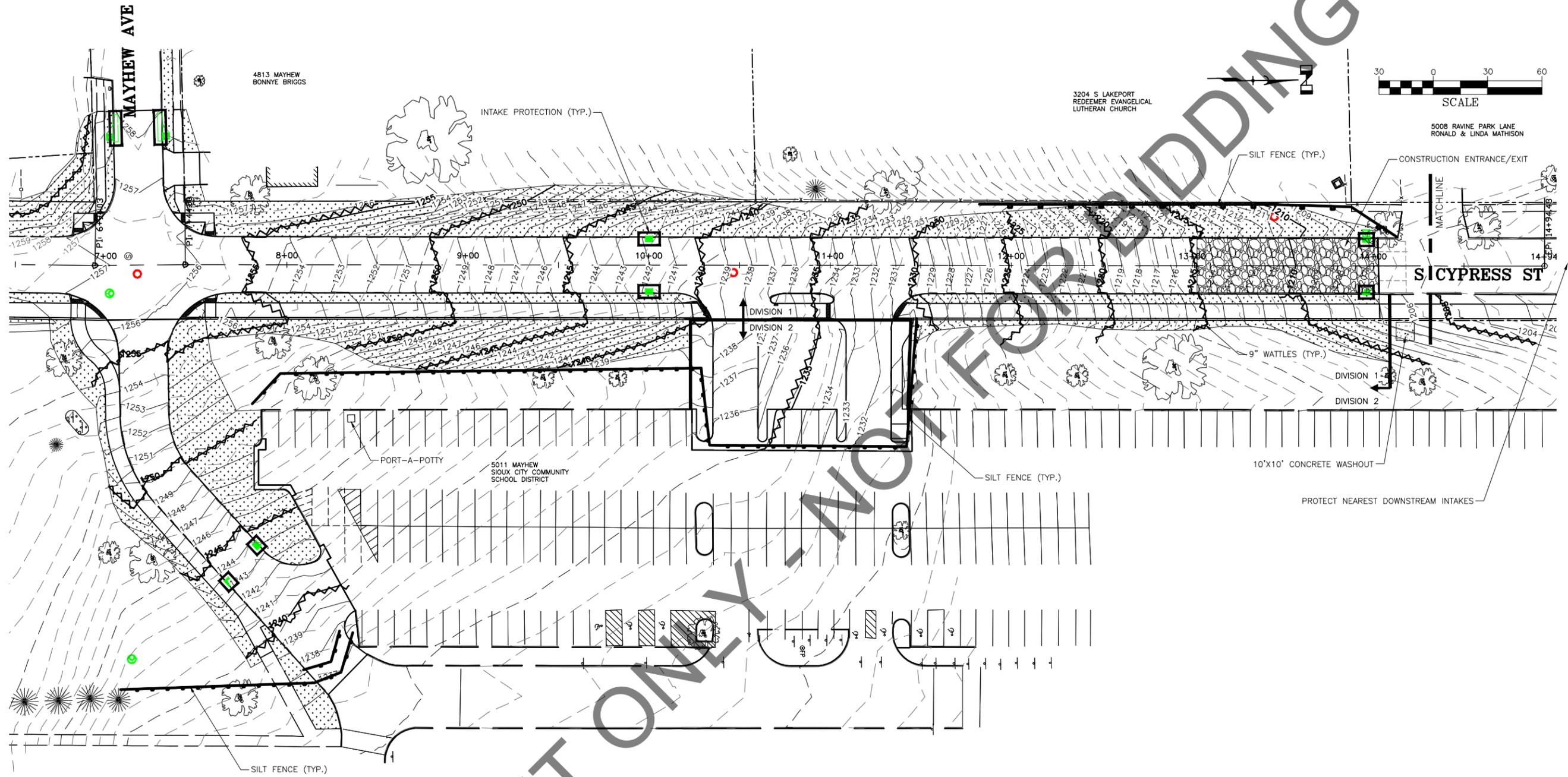
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

EROSION CONTROL PLAN
SOUTH

Project Manager: BNW
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554



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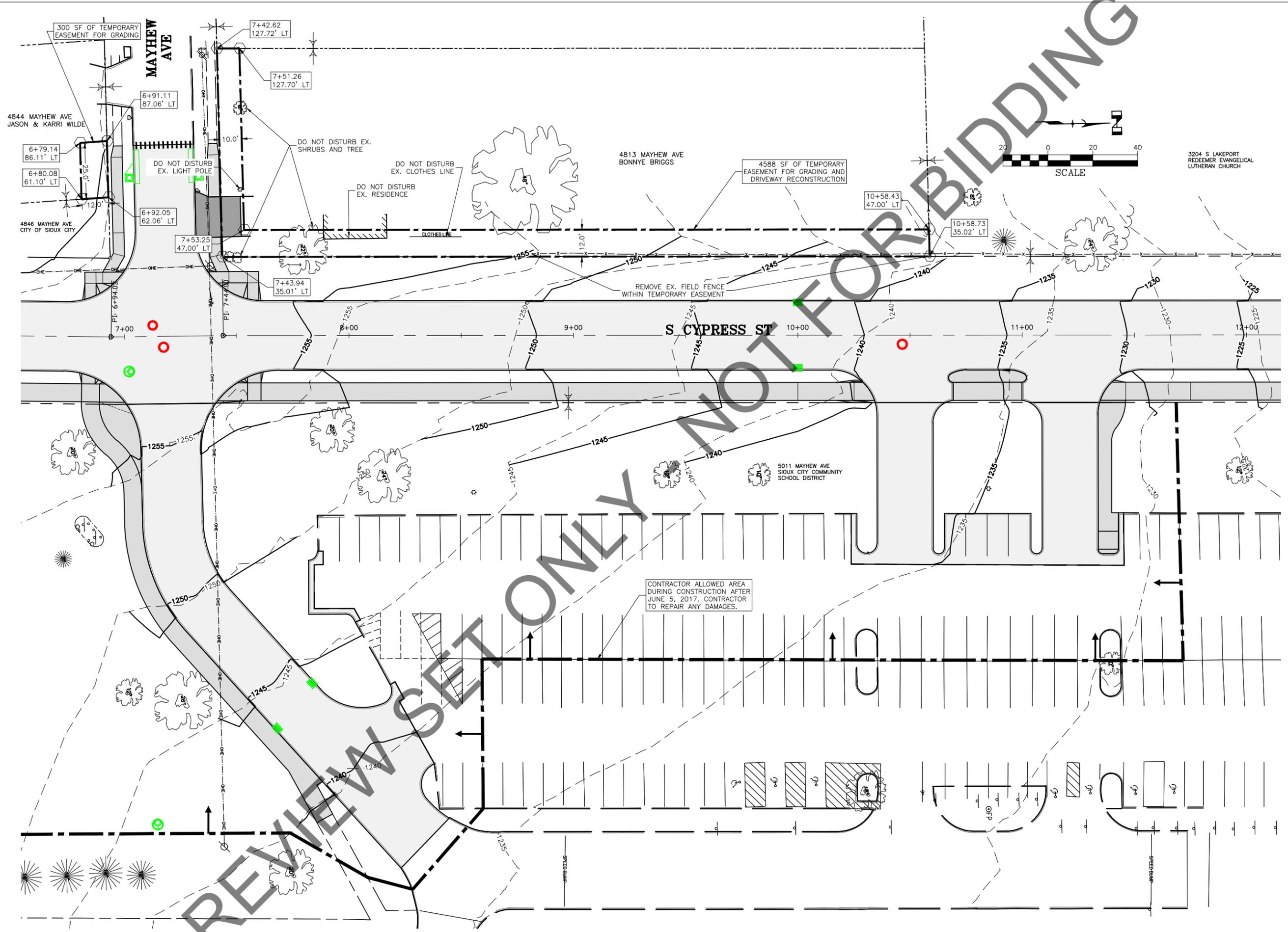
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

EROSION CONTROL PLAN
NORTH

Project Manager: BNW
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554



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SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

TEMPORARY EASEMENT PLAN

Project Manager: BNW
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554



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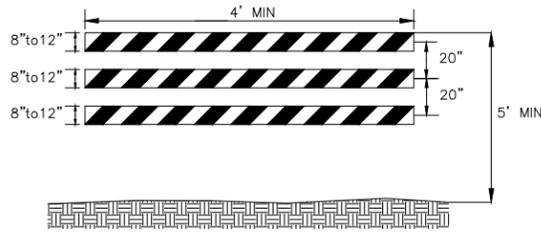
W20-1
48"x48"

①



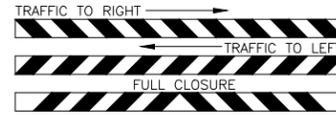
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②



TYPE III BARRICADE

③

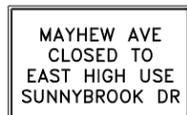


BARRICADE CONFIGURATION



R11-2
48"x30"

④



48"x30"

⑤

NOTE: PLACE ORANGE SAFETY FENCE ACROSS ENTIRE ROADWAY WIDTH AT ALL ROAD CLOSURE LOCATIONS



48"x30"

⑥



48"x30"

⑦

TRAFFIC CONTROL PLAN

1. TRAFFIC CONTROL AND SIGNING ON THIS PROJECT SHALL BE IN ACCORDANCE WITH STANDARD IOWA DEPARTMENT OF TRANSPORTATION REQUIREMENTS, IOWA STATEWIDE URBAN DESIGN STANDARDS AND SPECIFICATIONS (SUDAS) AND SIOUX CITY SUPPLEMENT, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. WHERE POSSIBLE ALL POST MOUNTED SIGNS SHALL BE PLACED A MINIMUM OF TWO FEET CLEAR OF THE BACK OF CURB.
3. PERMANENT SIGNS AND SIGNAL HEADS CONVEYING A MESSAGE CONTRARY OR CONTRADICTORY TO THE MESSAGE OF THE TEMPORARY SIGNS AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL DEVICES, INCLUDING WOODEN POSTS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
5. THE LOCATION FOR STORAGE OF EQUIPMENT BY THE CONTRACTOR DURING NON-WORKING HOURS SHALL BE AS APPROVED BY THE ENGINEER IN CHARGE OF CONSTRUCTION.
6. PROPOSED SIGN SPACING MAY BE MODIFIED, AS APPROVED BY THE ENGINEER, TO MEET EXISTING FIELD RESTRICTIONS OR TO PREVENT OBSTRUCTIONS OF THE MOTORIST'S VIEW OF PERMANENT SIGNING.
7. PROPOSED CHANGES IN THE TRAFFIC CONTROL PLAN SHALL BE REVIEWED WITH THE ENGINEER BEFORE CHANGES ARE MADE.
8. THE BID ITEM "TRAFFIC CONTROL" SHALL INCLUDE THE COST FOR ALL TRAFFIC CONTROL MEASURES REQUIRED OF THE CONTRACTOR.
9. ALL CONTRACTOR- FURNISHED BARRICADES, VERTICAL PANELS, AND FIXED POST MOUNTED TRAFFIC CONTROL SIGNS SHALL BE REFLECTORIZED WITH ENCAPSULATED LENS SHEETING MEETING STANDARD SPECIFICATIONS AND CURRENT SUPPLEMENTAL SPECIFICATIONS.
10. ARTICLE 2528.12 OF THE I.D.O.T. STANDARD SPECIFICATIONS REQUIRES MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES, INCLUDING MAINTENANCE OF THE DEVICES DURING NON-WORKING HOURS IN ORDER TO ASSURE PROPER OPERATION.
11. WHEN USED FOR TRAFFIC CONTROL OR PROTECTION OF THE WORK SITE, I.E. OPEN TRENCHES, SAFETY FENCE MUST BE FIRMLY SUPPORTED IN A VERTICAL POSITION. RELATED COSTS WILL BE INCLUDED IN THE TRAFFIC CONTROL BID ITEM.
12. ROAD CLOSED TO TRAFFIC SHALL HAVE AN ORANGE SAFETY FENCE ERECTED AT THE LIMITS OF THE WORKING AREA. A TYPE III BARRICADE WITH TWO TYPE 'A' WARNING LIGHTS AND A "ROAD CLOSED" SIGN SHALL BE ERECTED IN FRONT OF THE FENCE. SEE PLAN HEREON FOR THE LOCATIONS OF THE TYPE III BARRICADES AND ORANGE SAFETY FENCE.

SIDEWALK NOTES

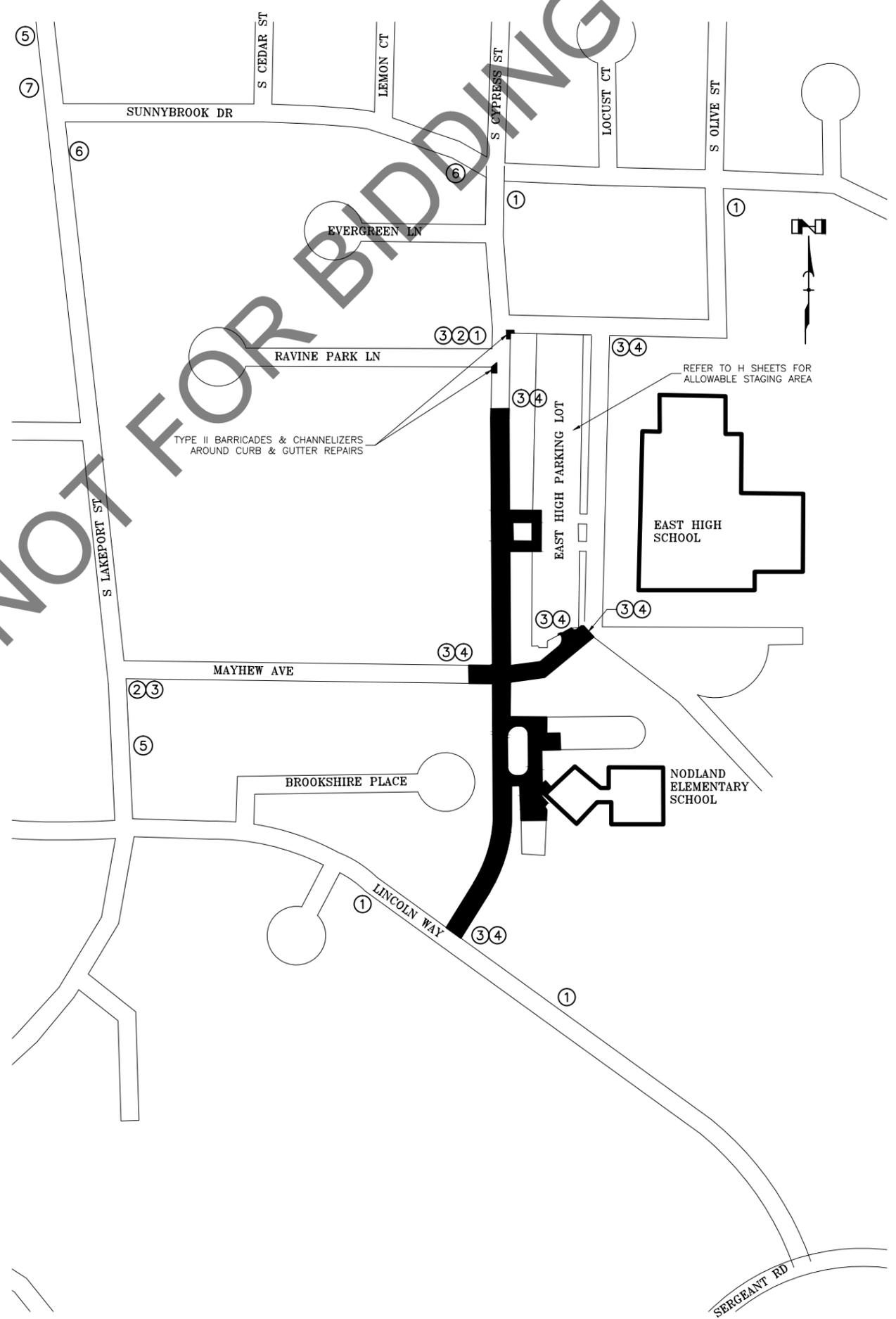
1. ALL TEMPORARY SIDEWALK CLOSURES SHALL BE BY TYPE III BARRICADE WITH "SIDEWALK CLOSED" SIGN AND ORANGE SAFETY FENCE PLACED ACROSS ENTIRE WIDTH OF SIDEWALK AT CLOSURE LIMITS. A TYPE III BARRICADE WITH "SIDEWALK CLOSED AHEAD" SIGN SHALL BE PLACED AT THE NEAREST CROSSES TO CLOSED SIDEWALKS.

COORDINATION NOTES

1. PRIVATE UTILITY RELOCATIONS. REFER TO SHEET A.02 FOR UTILITY OWNER CONTACTS.
2. CONTRACTOR SHALL COORDINATE WATER SHUT DOWNS WITH SCHOOL DISTRICT. NO SHUT DOWNS WILL BE ALLOWED DURING SCHOOL OR EVENT HOURS.
3. REQUIRED ACCESS AS NEEDED TO NODLAND ELEMENTARY.
4. CONTRACTOR SHALL COORDINATE WITH PROPOSED STORM SEWER WORK BY OTHERS IN THE NORTHEAST QUADRANT OF LINCOLN WAY AND S. CYPRESS STREET.

WORK RESTRICTIONS

1. ALL EXISTING PAVEMENT AND TRAFFIC TO SCHOOLS SHALL BE MAINTAINED AND UNINTERRUPTED UP TO SUMMER BREAK OF APPROXIMATELY MAY 31, 2017.
2. WORK THAT DOES NOT AFFECT EXISTING PAVEMENT OR ACCESS TO SCHOOLS MAY COMENCE PRIOR TO MAY 31, 2017 (AREAS NORTH AND SOUTH OF EXISTING MAYHEW INTERSECTION).
3. ALL WORK IS TO BE COMPLETED ON OR BEFORE AUGUST 7, 2017.



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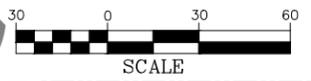
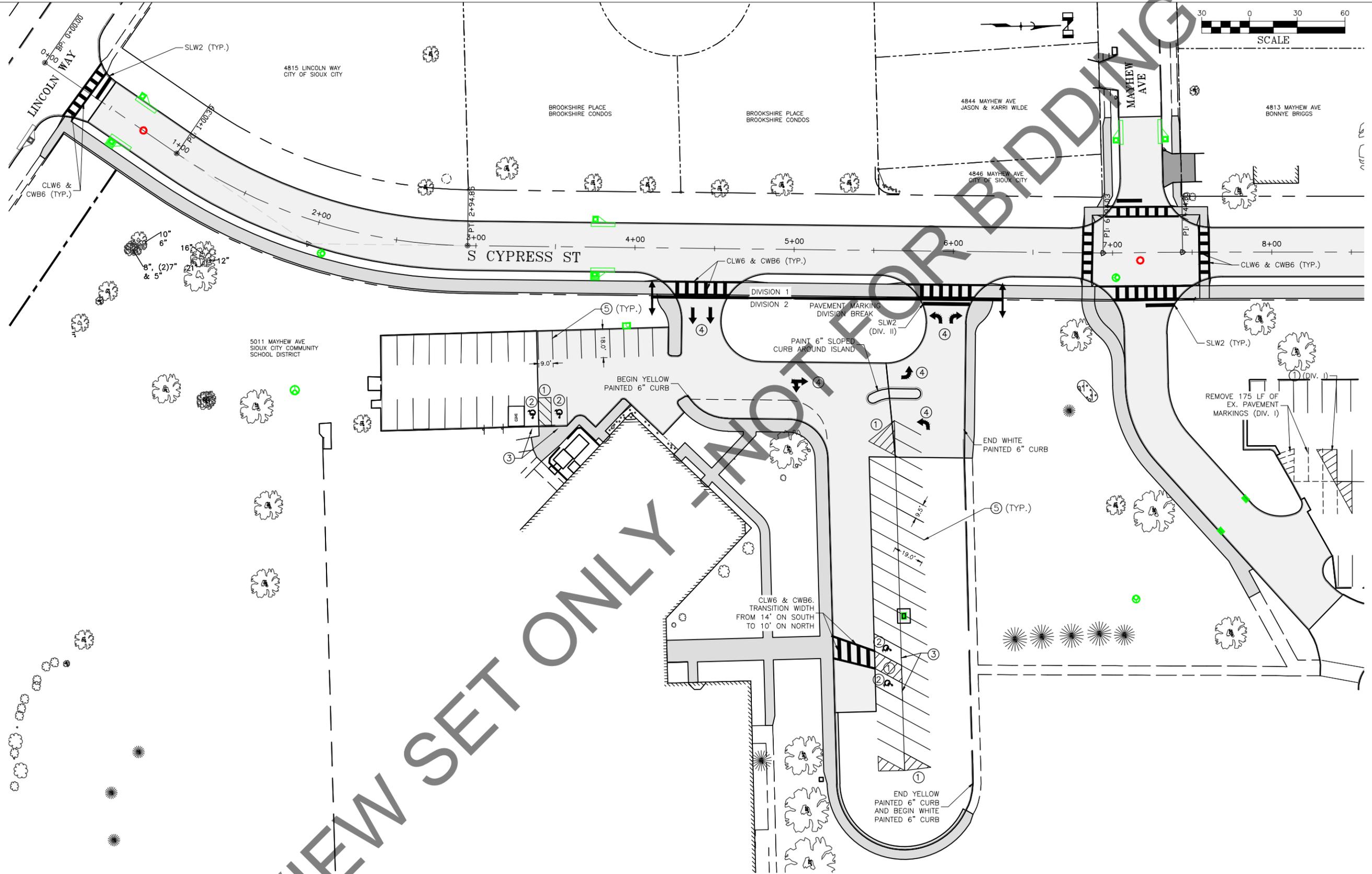
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

TRAFFIC CONTROL AND STAGING PLAN

Project Manager: BNV
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554



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J.01



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KEY	
①	PAINTED ISLAND - 4" YELLOW STRIPE @ 4'O.C.
②	PAINTED HANDICAP SYMBOLS (YELLOW), SEE PAGE J.03 FOR DETAILS
③	HANDICAP SIGNS, SEE PAGE J.03 FOR DETAILS
④	PAINTED ARROWS (YELLOW), REFER TO MUTCD STANDARD HIGHWAY SIGNS AND PAVEMENT MARKING MANUAL
⑤	PAINTED PARKING STALL - 4" WHITE STRIPE

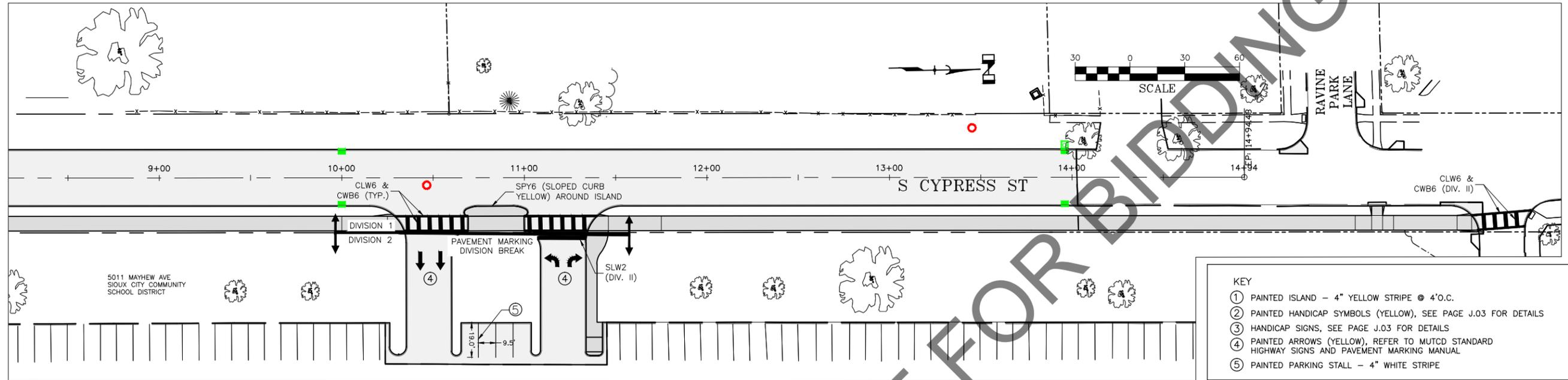
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

PAVEMENT MARKING PLAN

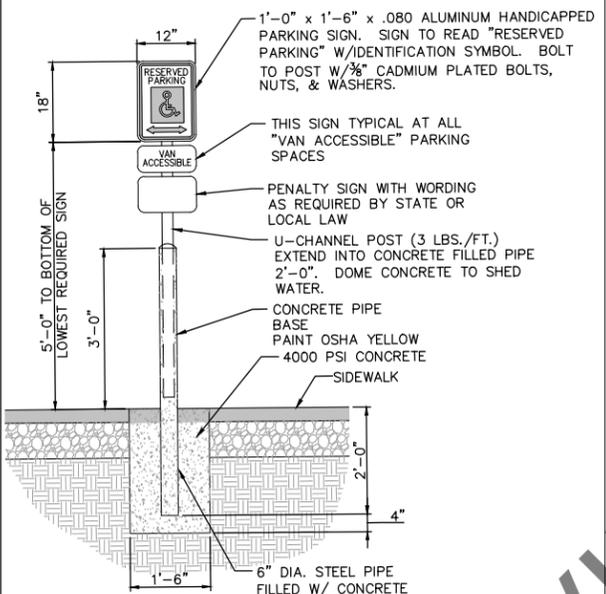
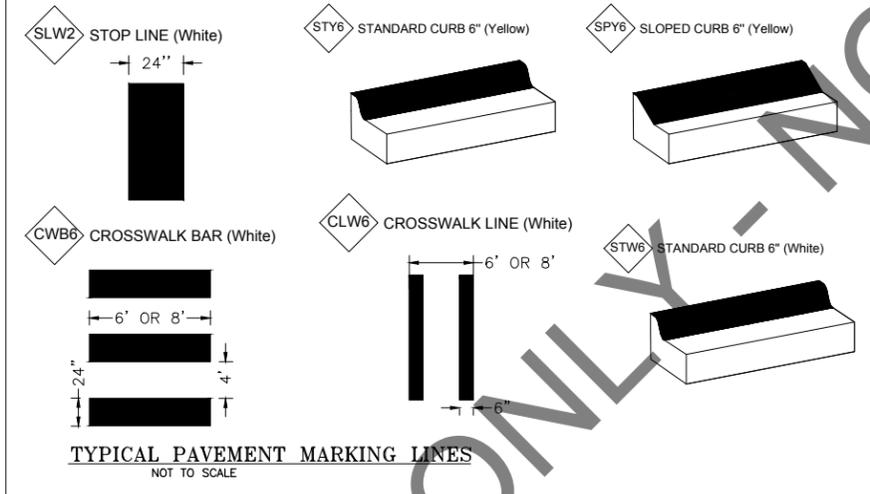
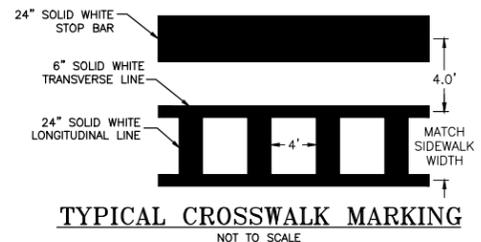
Project Manager: BNW
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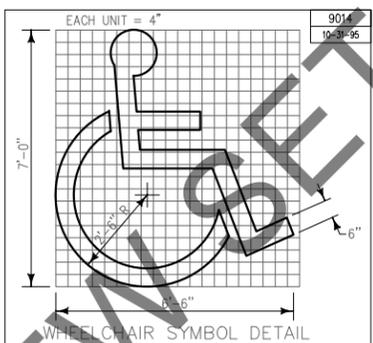
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- KEY**
- ① PAINTED ISLAND - 4" YELLOW STRIPE @ 4'O.C.
 - ② PAINTED HANDICAP SYMBOLS (YELLOW), SEE PAGE J.03 FOR DETAILS
 - ③ HANDICAP SIGNS, SEE PAGE J.03 FOR DETAILS
 - ④ PAINTED ARROWS (YELLOW), REFER TO MUTCD STANDARD HIGHWAY SIGNS AND PAVEMENT MARKING MANUAL
 - ⑤ PAINTED PARKING STALL - 4" WHITE STRIPE



ONE SIGN AT EACH HANDICAPPED PARKING SPACE. BOLLARD/SIGN SHOULD BE PLACED 9" FROM BACK OF PARKING LOT PAVING TO CENTER OF BOLLARD TO ACT AS PARKING STOP/PEDESTRIAN PROTECTION.



DIVISION I - PAVEMENT MARKING TABULATION

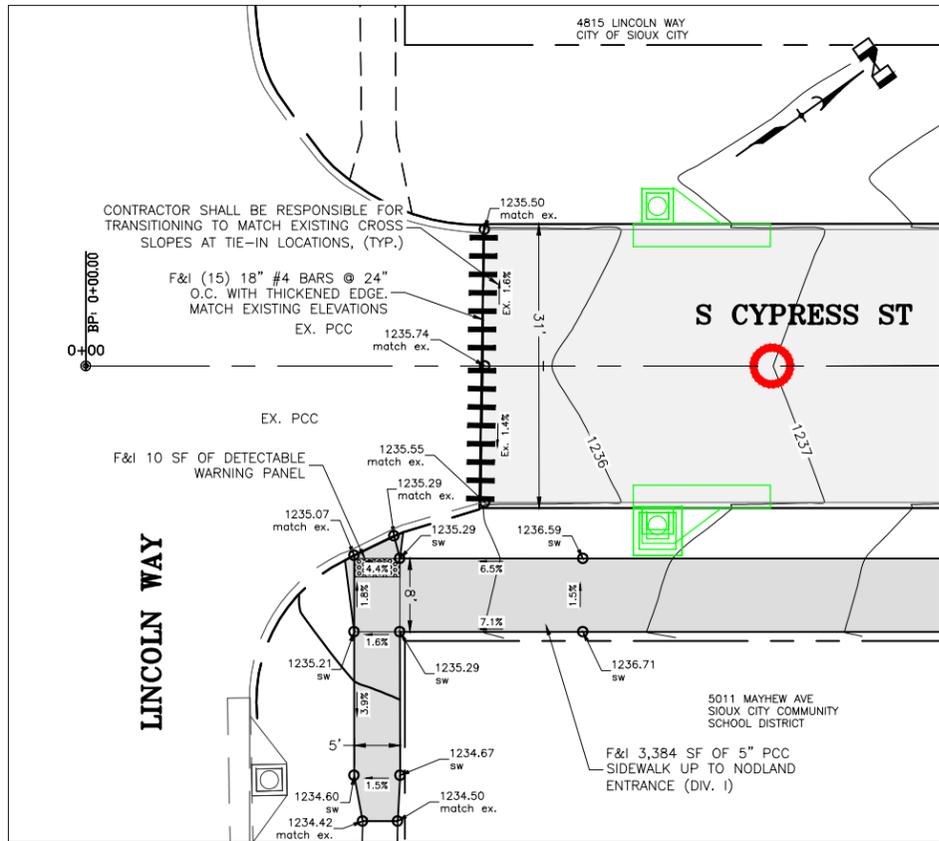
Location	CBW6	CLW6	SLW2	SPY6	STY6	STW6	Painted Island 4" Yellow	Parking Stall Line 4" White	Remarks
	White Crosswalk Bar (24") LF	White Crosswalk Line (6") LF	White Stop Bar LF	Sloped Curb 6" Yellow	Standard Curb 6" Yellow	Standard Curb 6" White			
Lincoln Way & S Cypress Intersection	36	77	16						
Nodland Entrance	48	86							
Nodland Exit			30 (DIV. II)						
S Cypress & Mayhew - South	30	72							
S Cypress & Mayhew - West	36	84	16						
S Cypress & Mayhew - East	56	102	18						
S Cypress & Mayhew - North	30	68							
East High Parking Lot Entrance	48	76							
East High Parking Lot Exit	48	76	28 (DIV. II)	45					
S Cypress & Ravine Park Lane	32 (DIV. II)	60 (DIV. II)							
Nodland SW. Parking Lot (DIV. II)							88	180	
Nodland N. Parking Lot (DIV. II)	50	56		76	440	220	250	833	
East High Parking Lot (DIV. II)							175 (DIV. I)	57	
Division I - Unfactored Total (LF)	380	727	50	45			175		
Division II - Unfactored Total (LF)	82	116	58	76	440	220	338	1070	
Factor (Based on 4" wide line)	6	1.5	6	3.4	3.03	3.03	1	1	
									TOTALS
DIVISION I - TOTAL (LF)	2280	1091	300	153			175		3999
DIVISION II - TOTAL (LF)	492	174	348	259	1334	667	338	1070	4682

SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

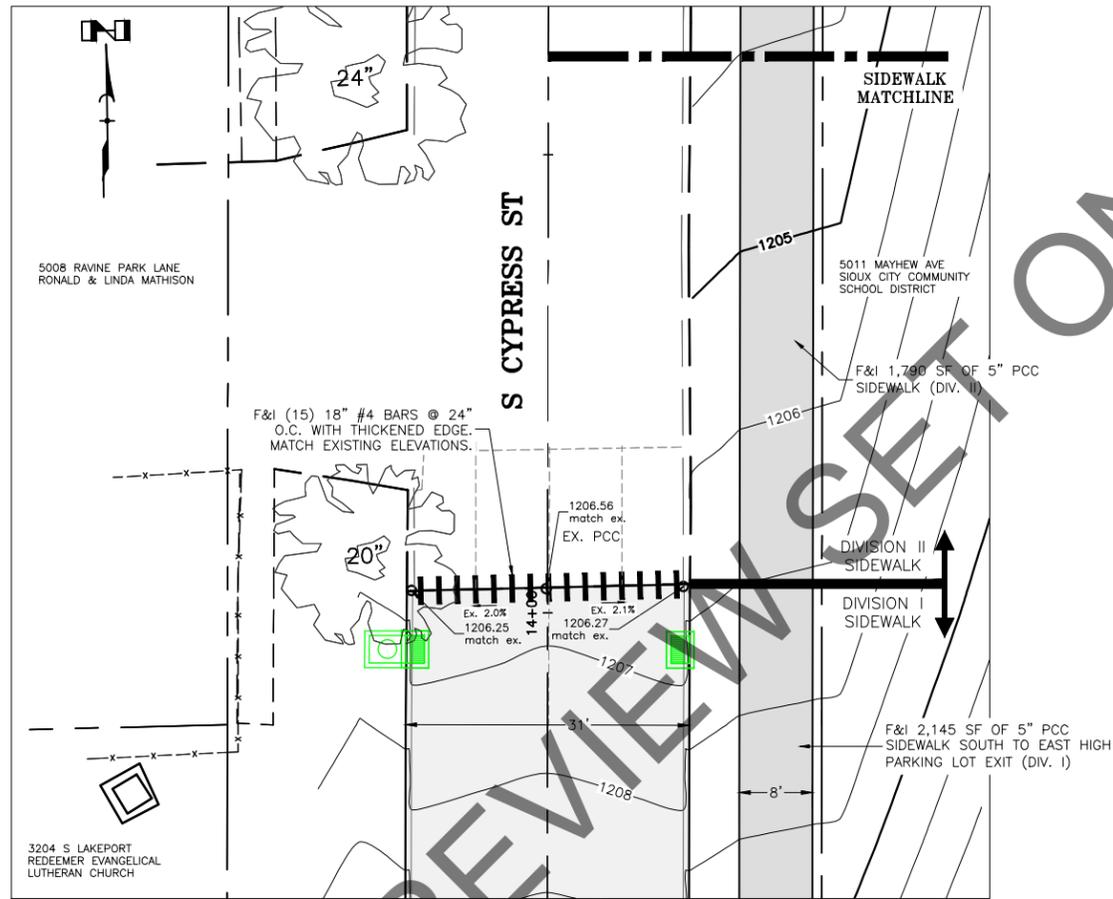
PAVEMENT MARKING DETAILS

Project Manager: BNV
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554

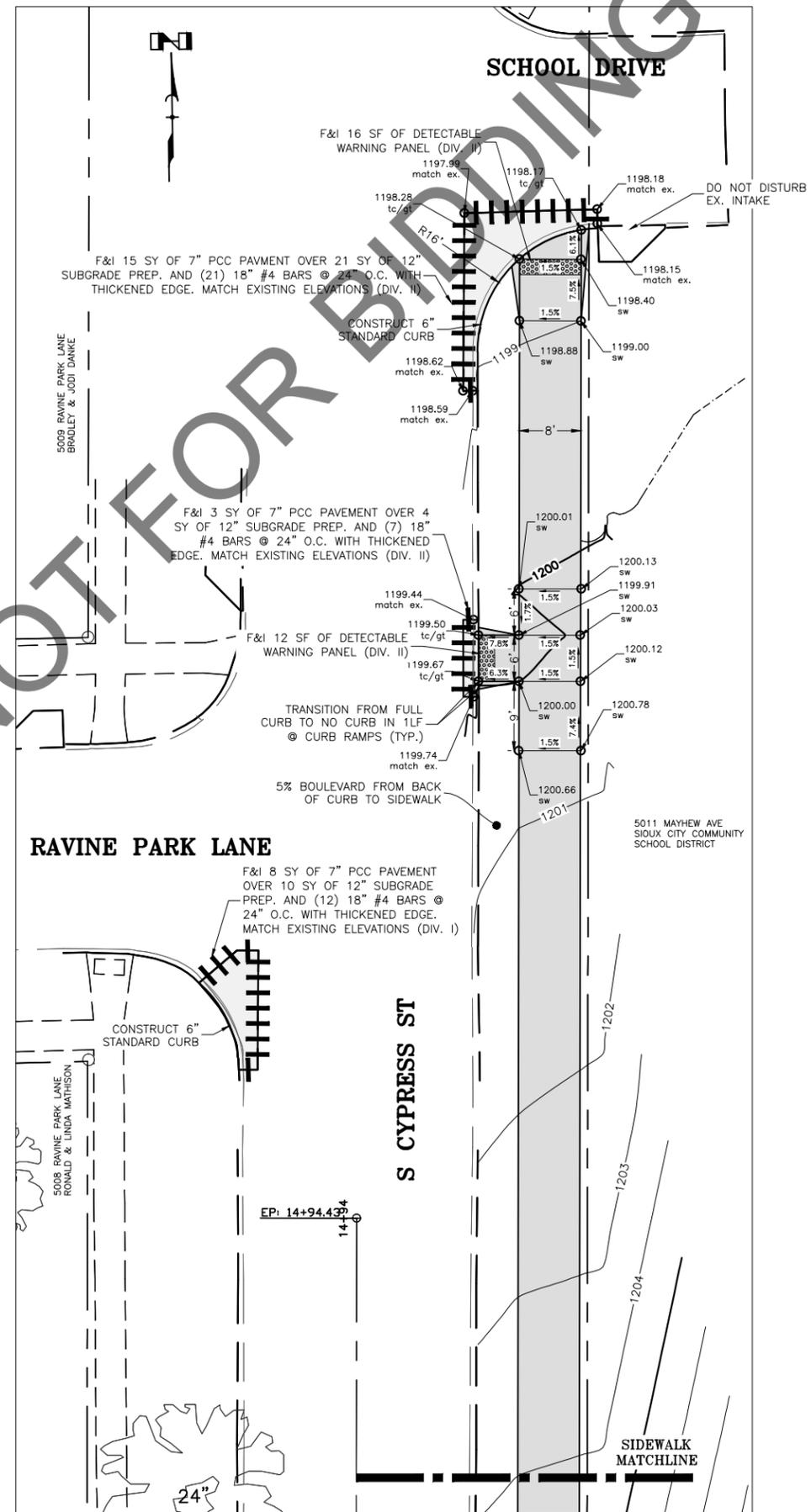




B.O.P. TIE-IN WITH EXISTING PAVING DETAIL
SCALE 1:10



E.O.P. TIE-IN WITH EXISTING PAVING DETAIL
SCALE 1:10



SIDEWALK EXTENSION PAVING DETAIL
SCALE 1:10

SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

PAVING DETAILS
BOP & EOP TIE-IN LOCATIONS

Project Manager: BNW
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554

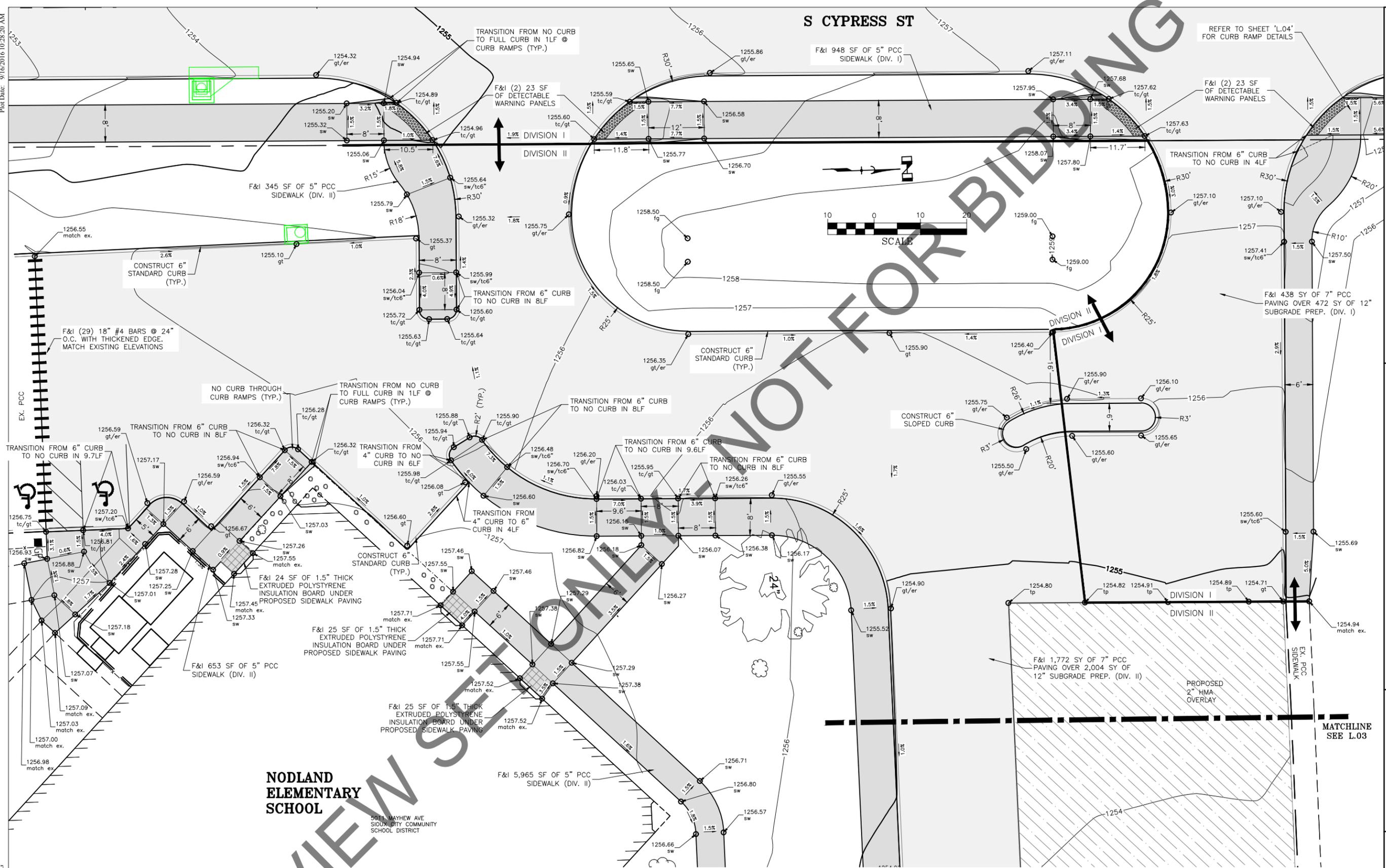


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S CYPRESS ST



NODLAND ELEMENTARY SCHOOL
 5011 MAYHEW AVE
 SIOUX CITY COMMUNITY SCHOOL DISTRICT

REVIEW SHEET

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SOUTH CYPRESS STREET EXTENSION,
 RAVINE PARK LANE TO LINCOLN WAY
 SIOUX CITY, IA

DRIVEWAY & PARKING LOT DETAILS
 SOUTH CYPRESS STREET - NODLAND ELEMENTARY

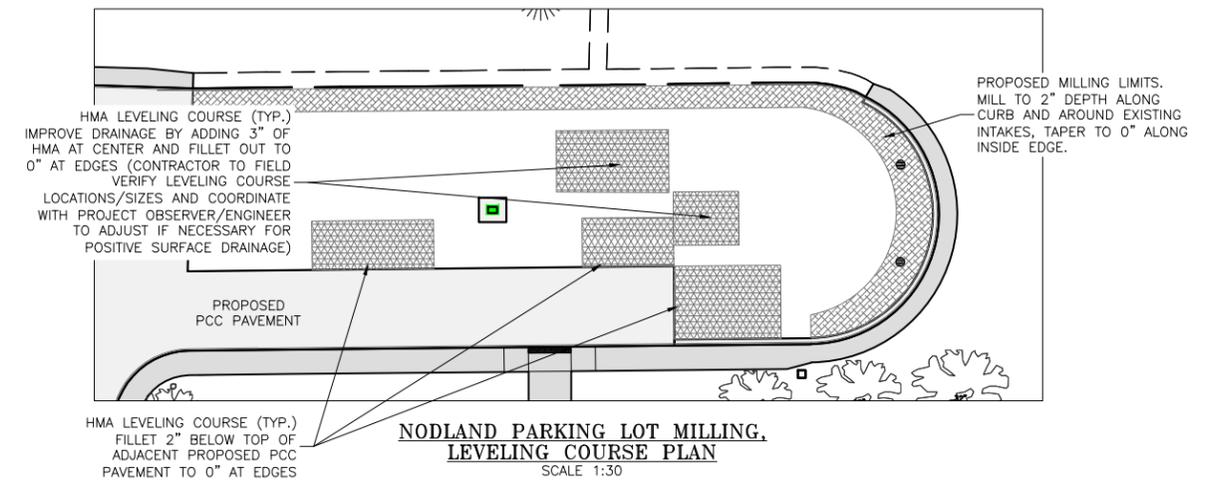
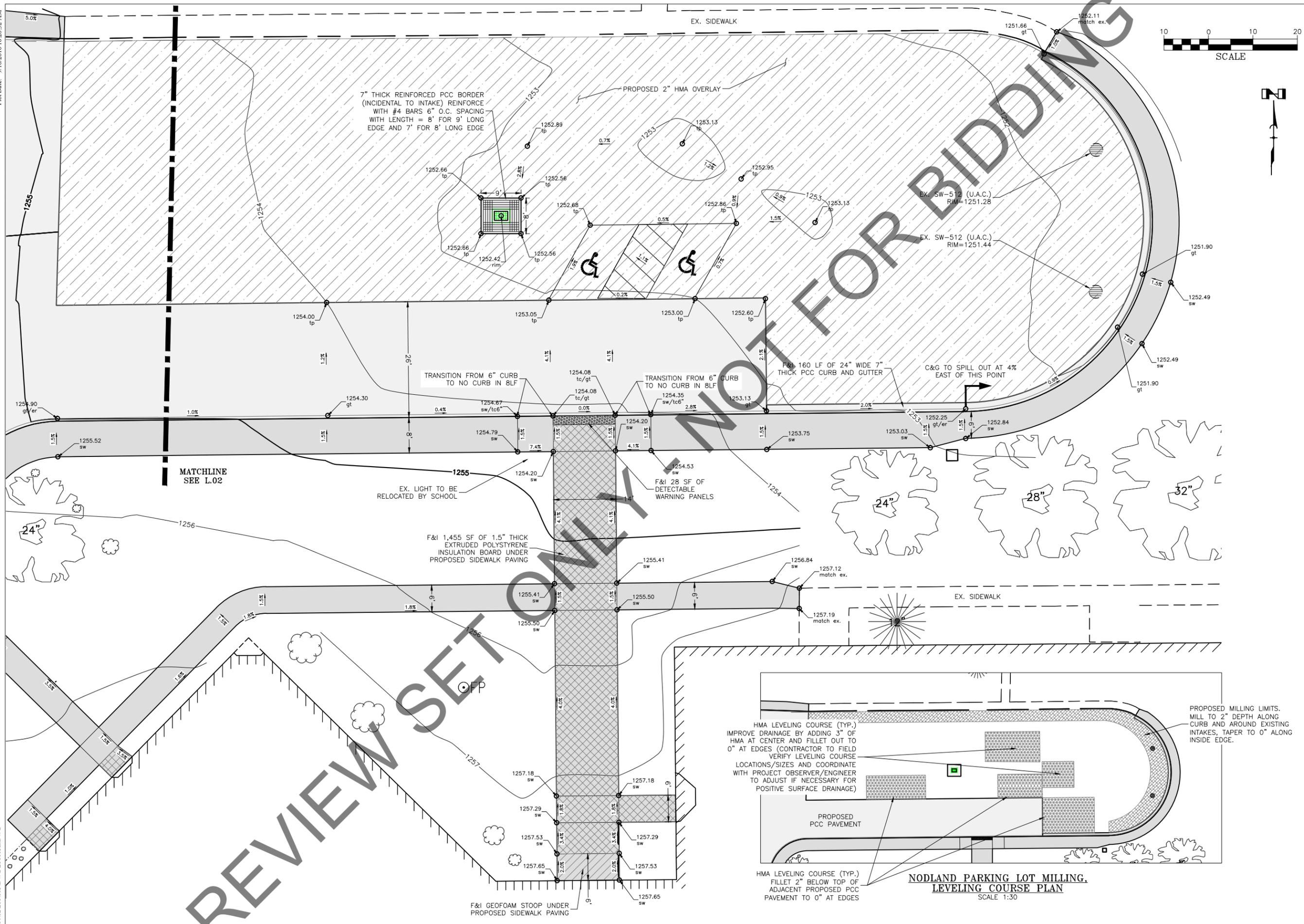
Project Manager: BNV
 Designer: TJJ
 Project Number: 266003
 Phone: (712) 266-1554



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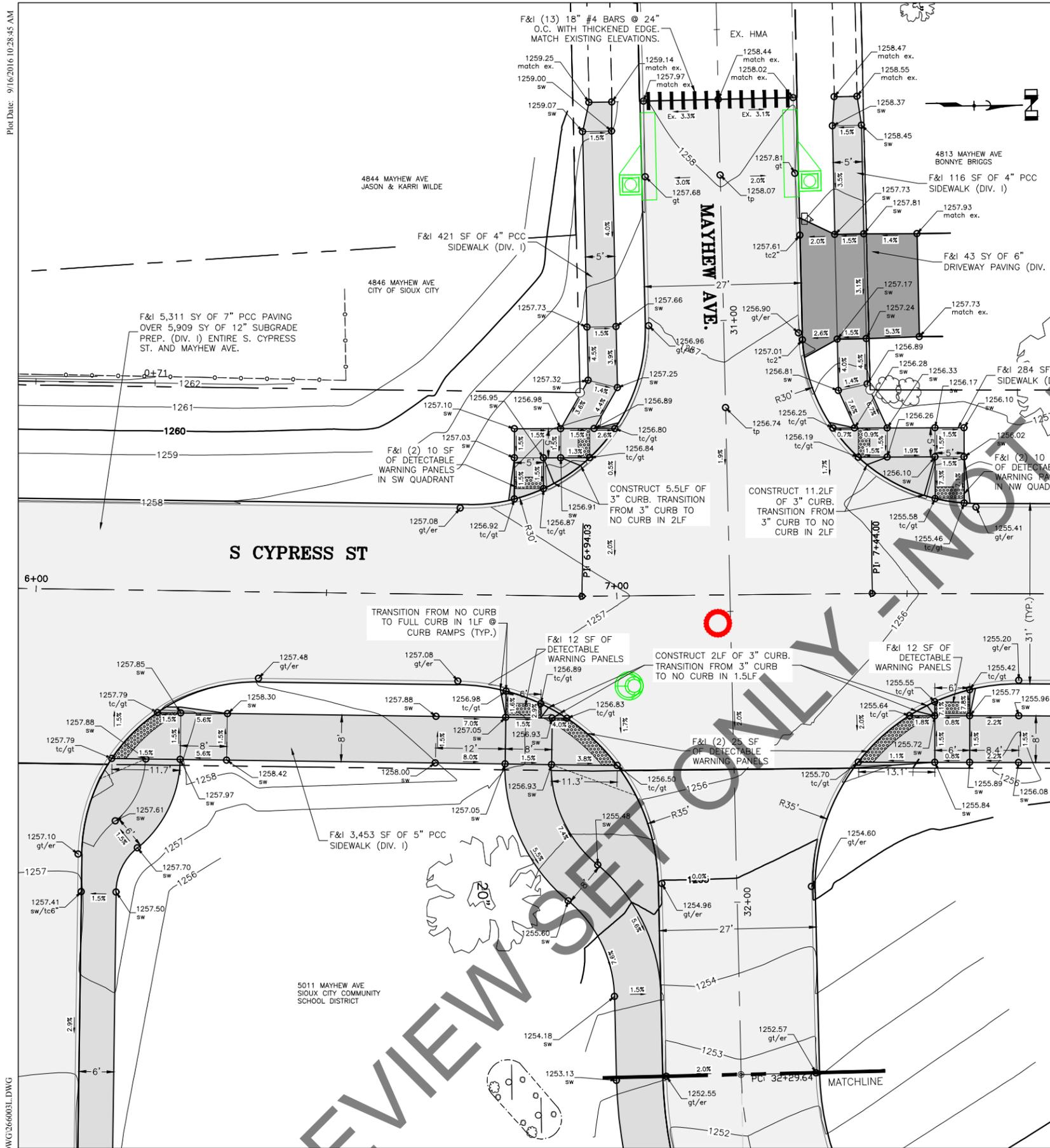
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA

DRIVEWAY & PARKING LOT DETAILS
SOUTH CYPRESS STREET - NODLAND ELEMENTARY

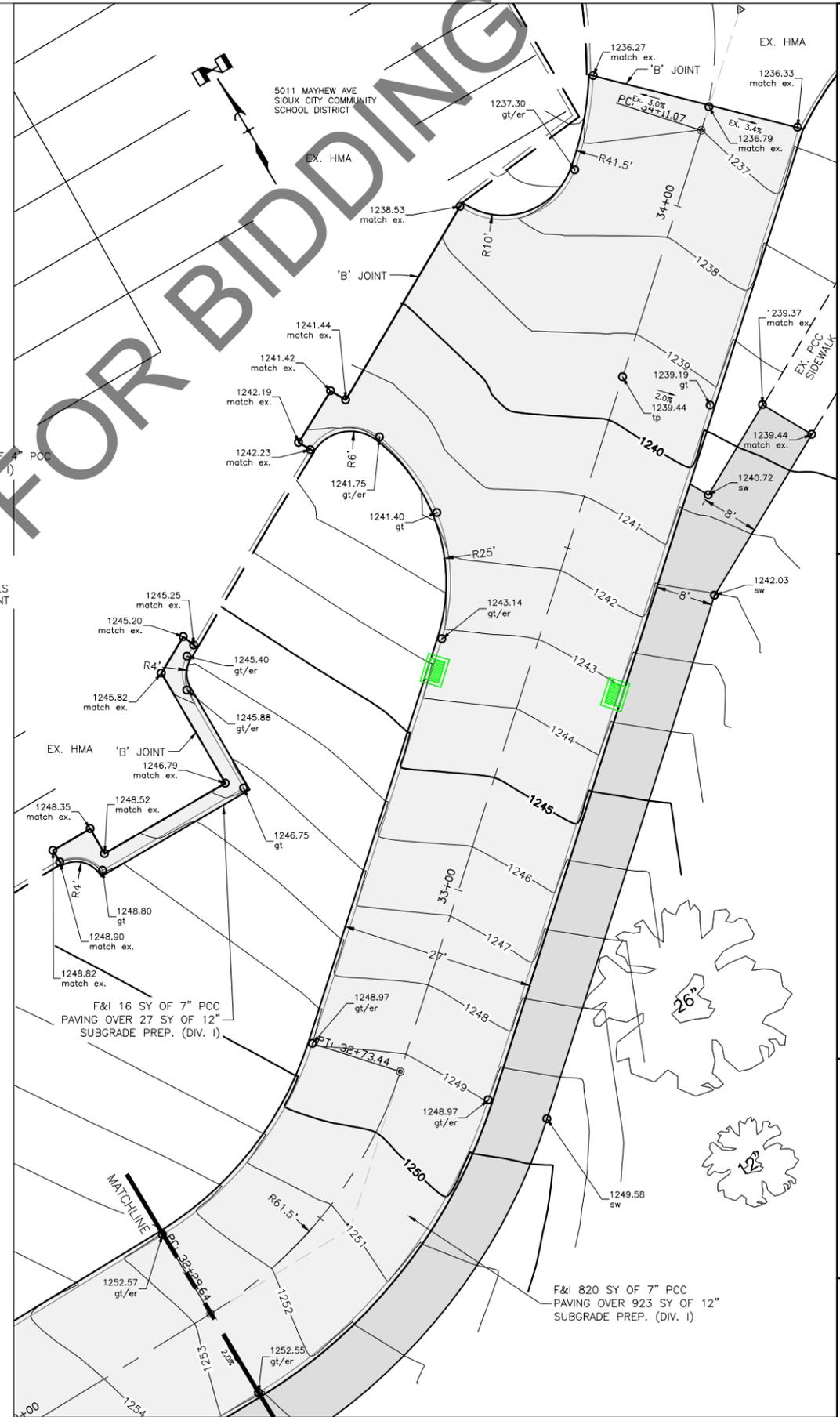
Project Manager: BNW
Designer: TJJ
Project Number: 266003
Phone: (712) 266-1554



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L.03



**S. CYPRESS AND MAYHEW
INTERSECTION PAVING DETAIL**
SCALE 1:10



EAST HIGH SOUTH DRIVEWAY PAVING DETAIL
SCALE 1:10

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**SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IA**

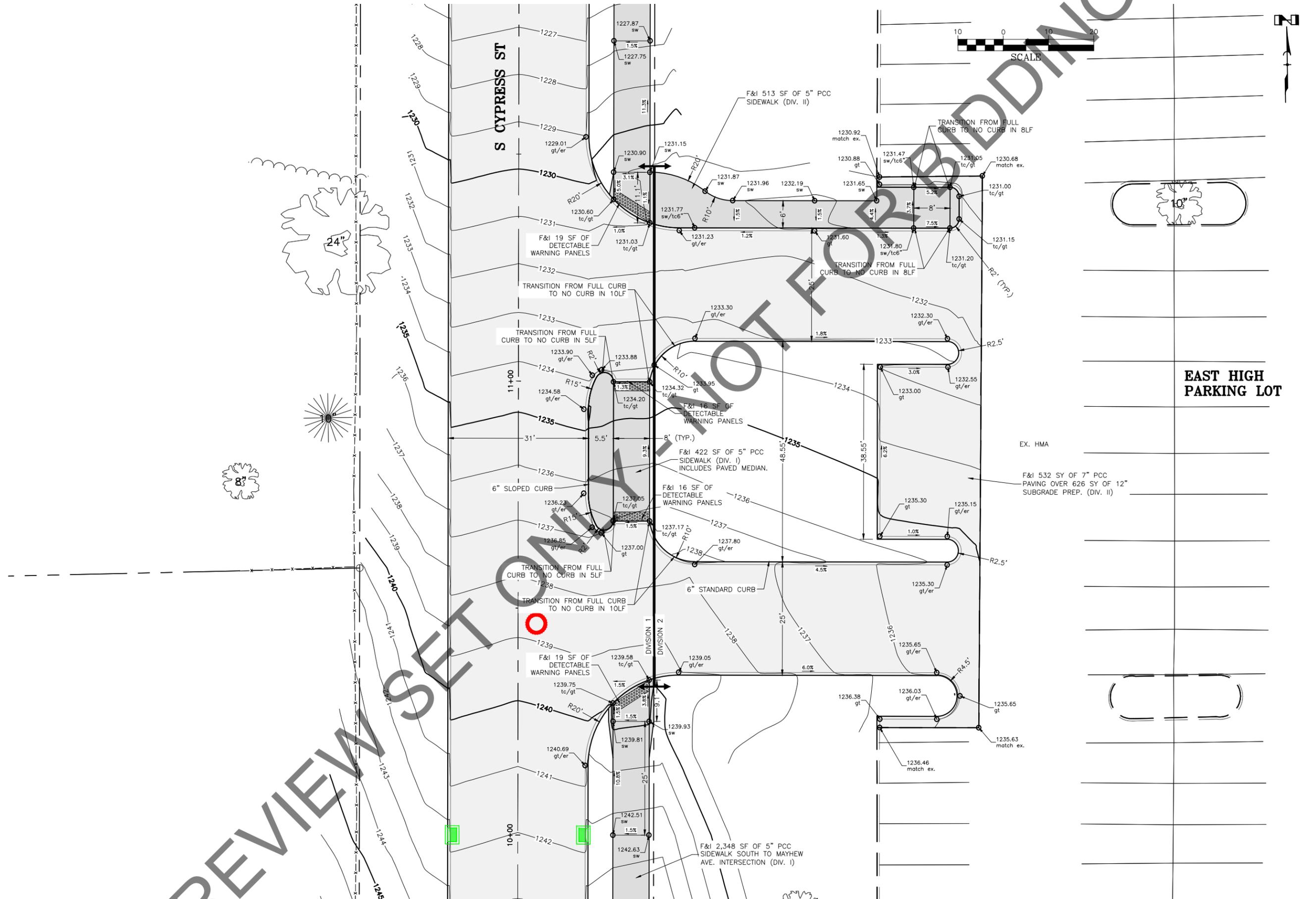
INTERSECTION & DRIVEWAY DETAILS
SOUTH CYPRESS STREET & MAYHEW AVE.

Project Manager: BNW
Designer: TJJ
Project Number: 266003
Phone: (712) 266-1554

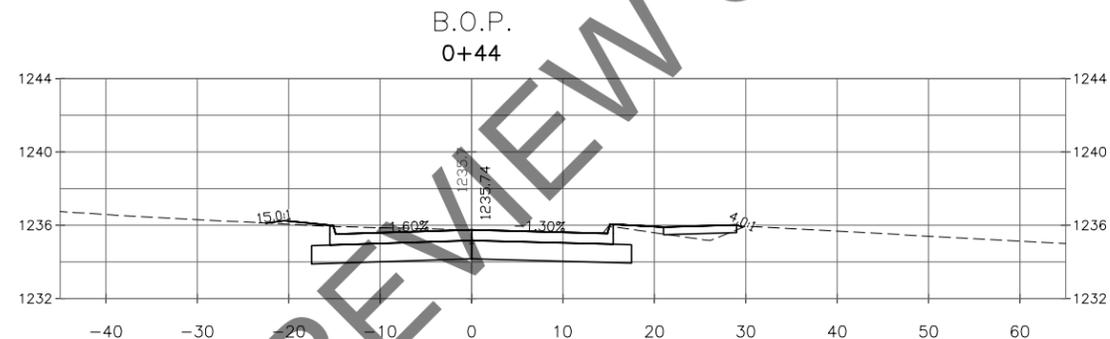
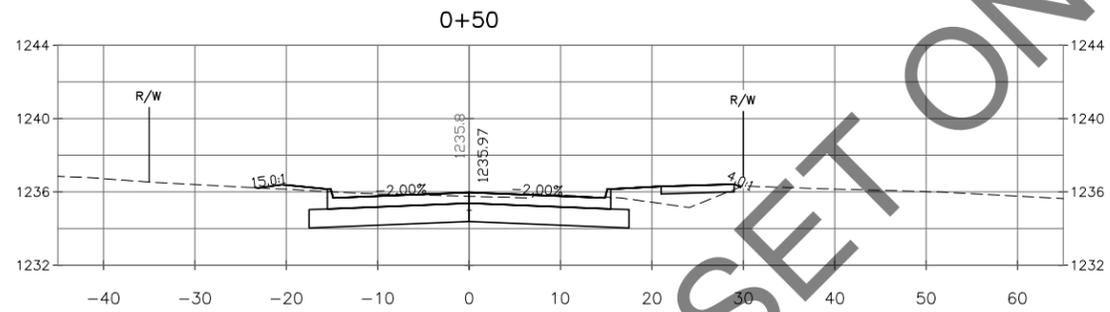
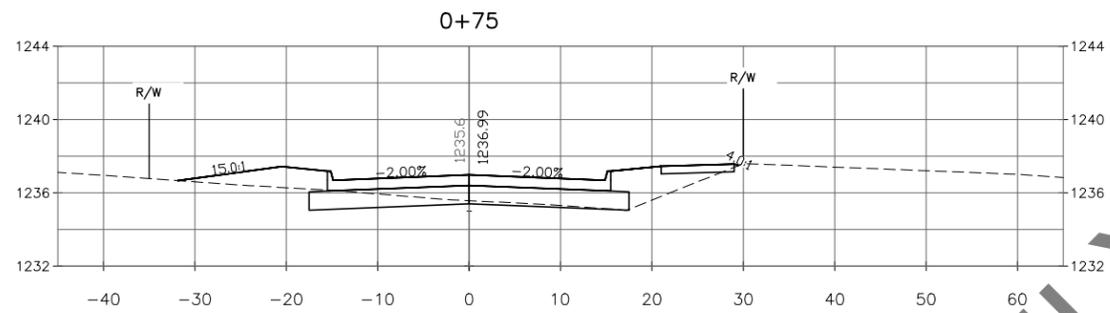
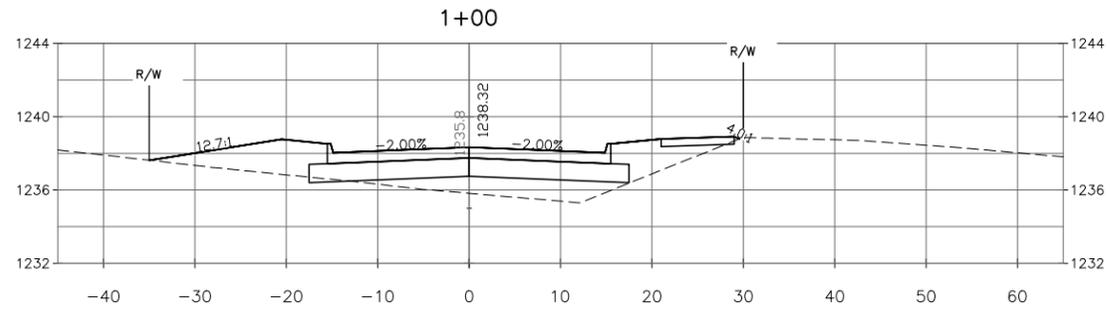
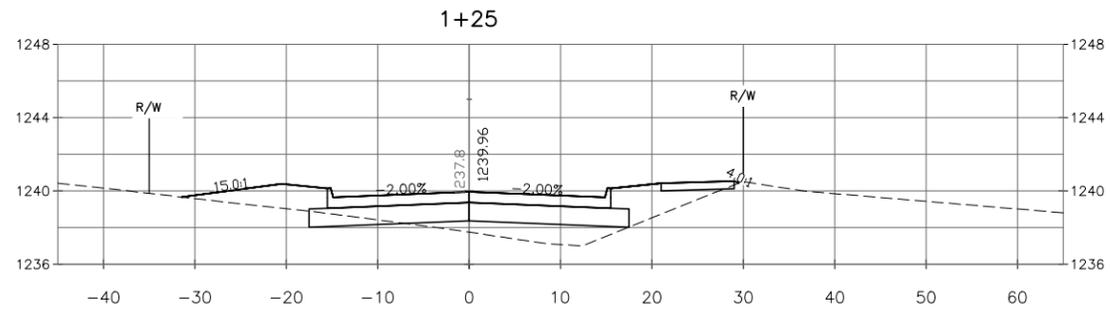


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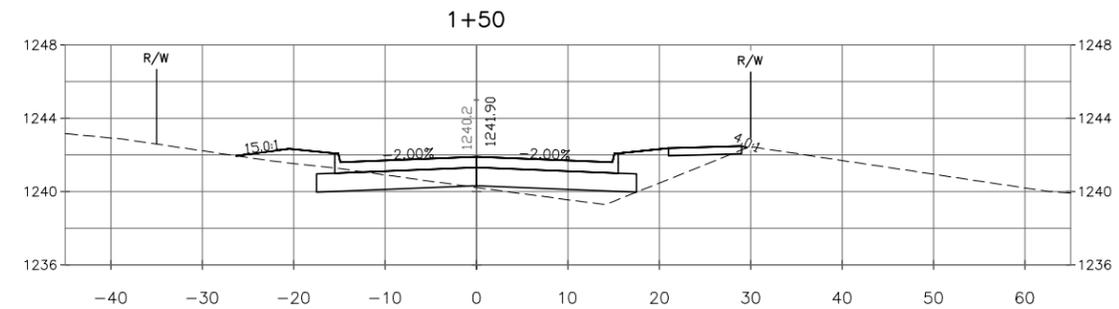
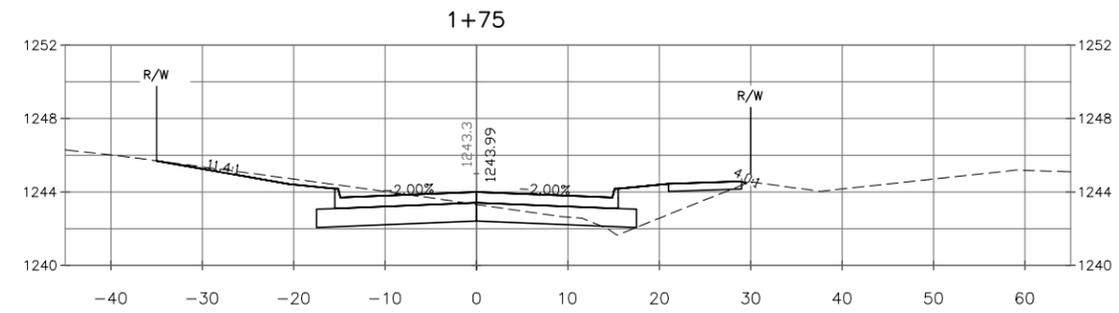
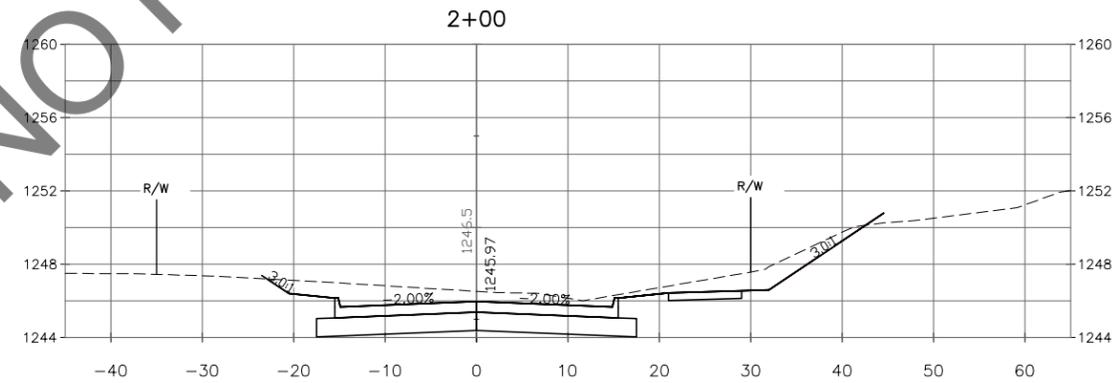
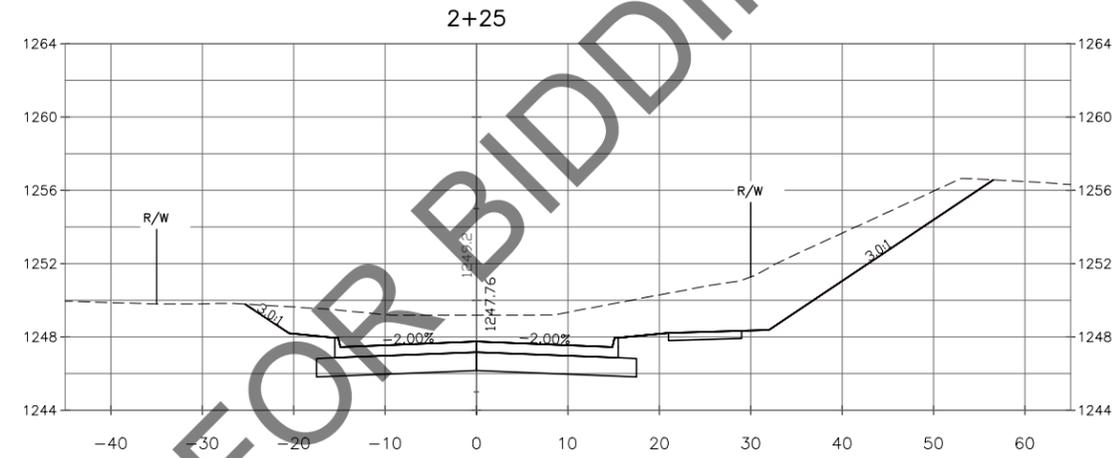
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SOUTH CYPRESS STREET EXTENSION, RAVINE PARK LANE TO LINCOLN WAY SIOUX CITY, IA	
DRIVEWAY DETAILS SOUTH CYPRESS STREET	
Project Manager: BNW Designer: TJL Project Number: 266003 Phone: (712) 266-1554	
ENR ENGINEERING	
Sheet L.05	



B.O.P.
0+44



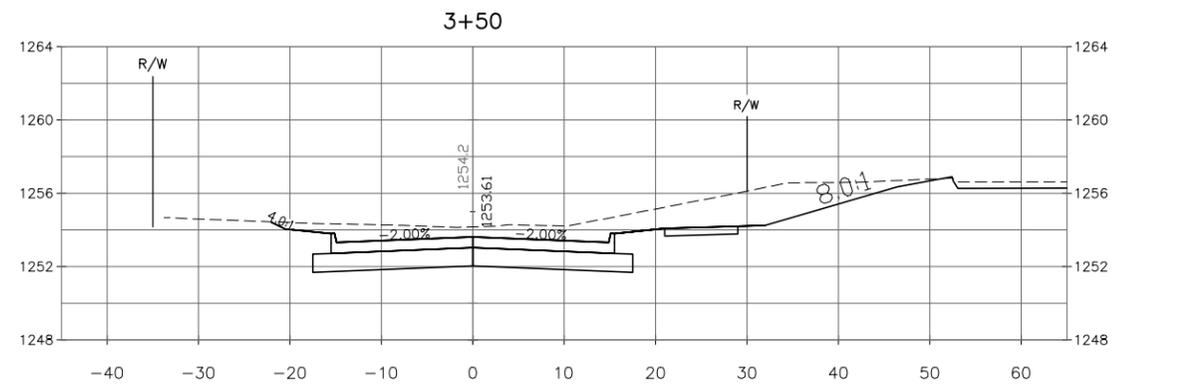
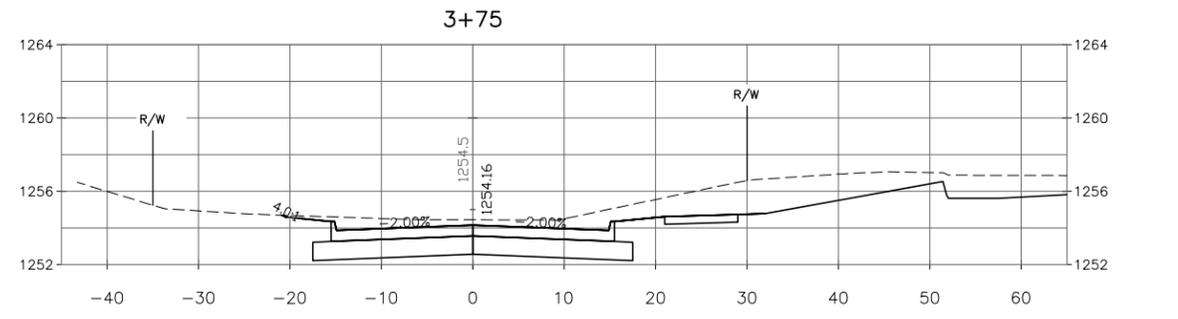
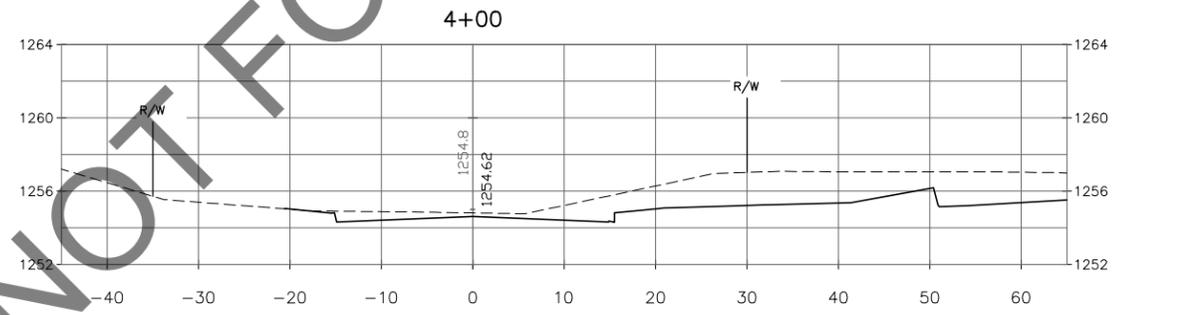
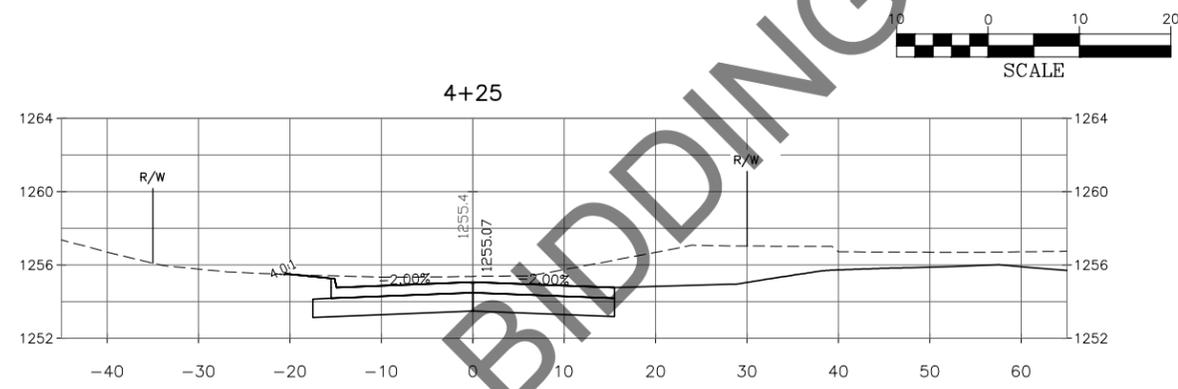
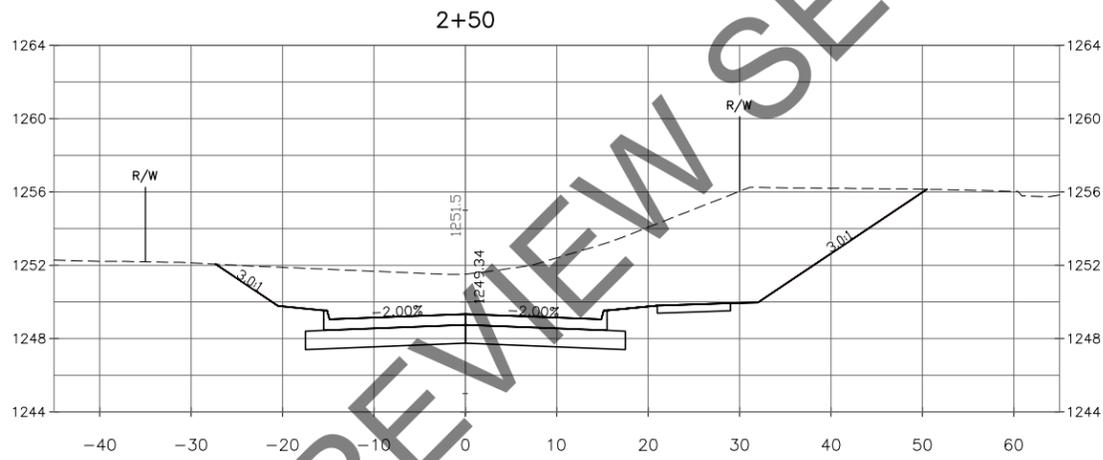
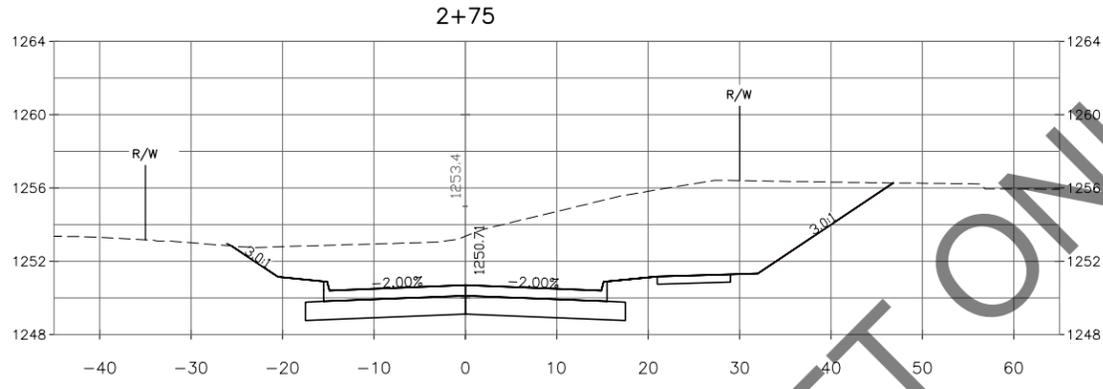
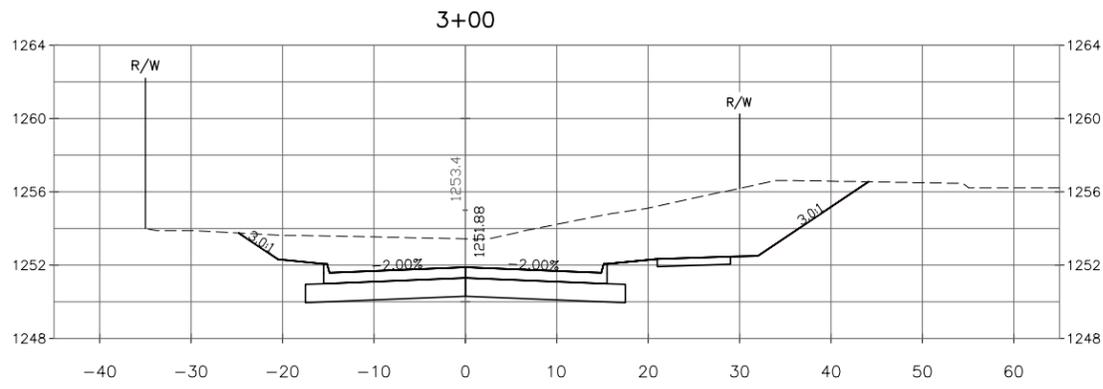
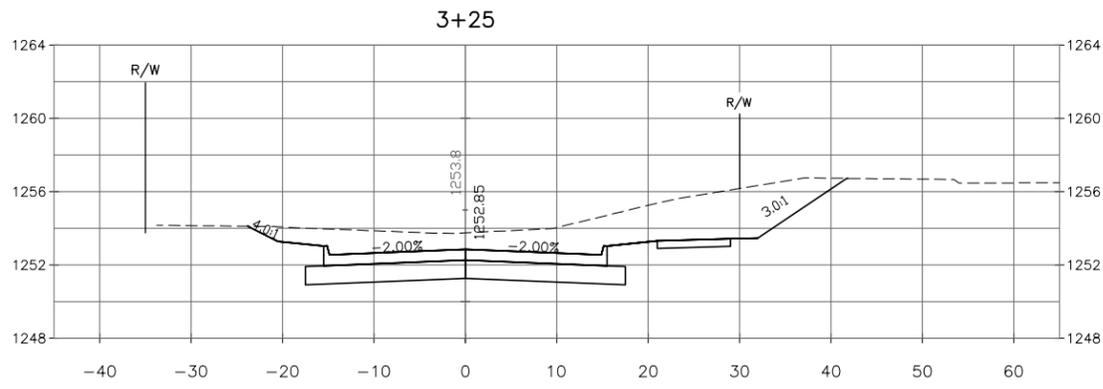
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SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IOWA

CROSS SECTIONS
SOUTH CYPRESS STREET

Project Manager: BNW
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554





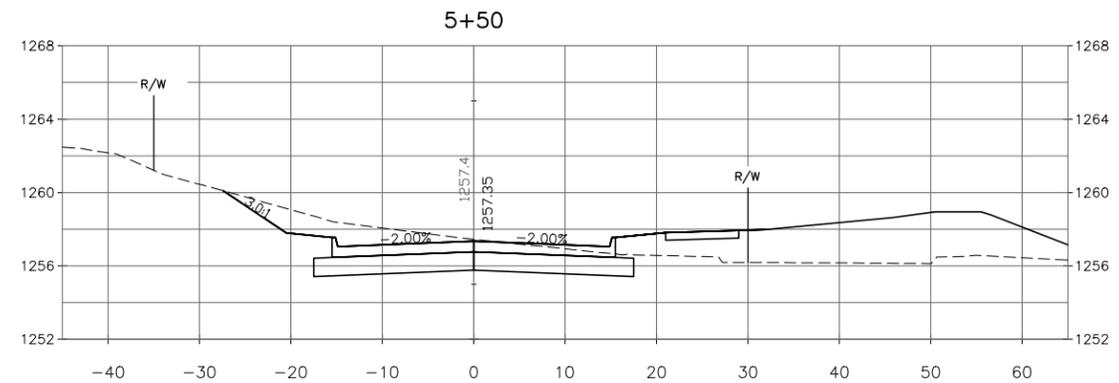
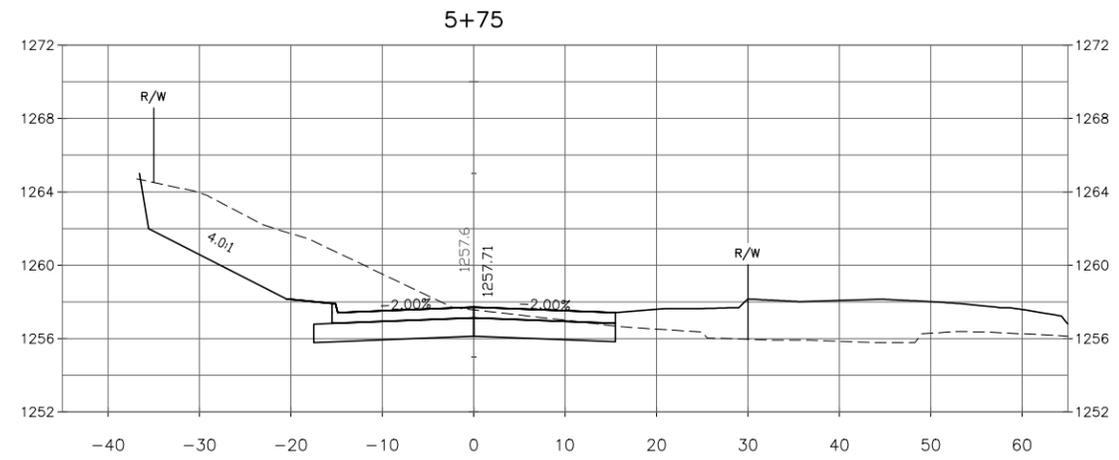
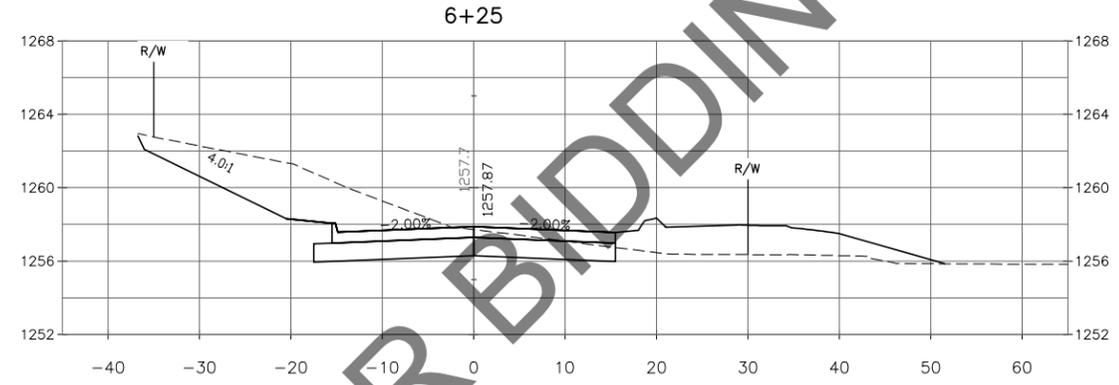
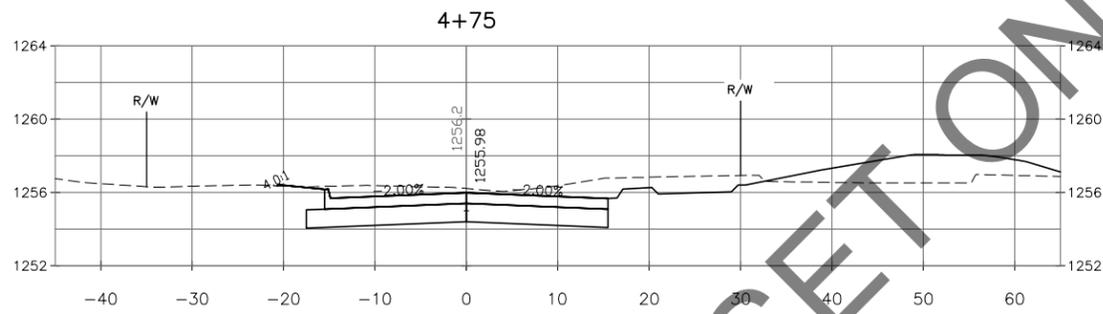
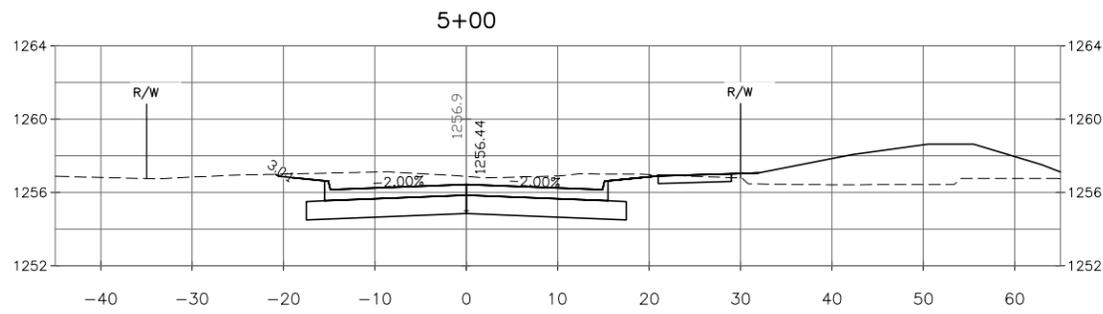
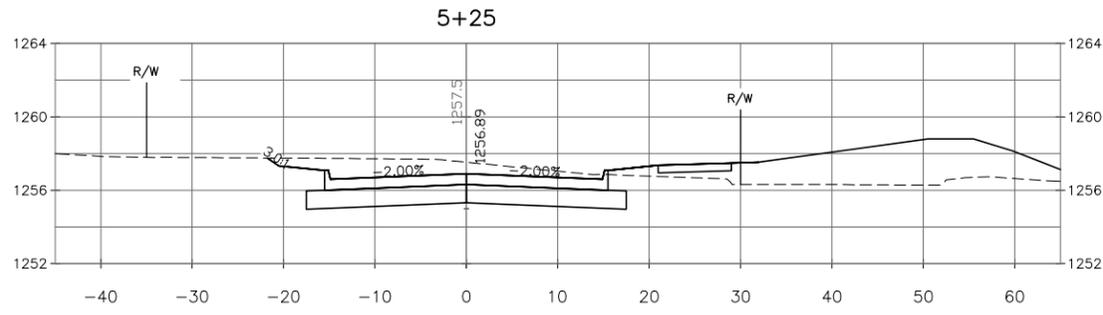
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SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IOWA

CROSS SECTIONS
SOUTH CYPRESS STREET

Project Manager: BNW
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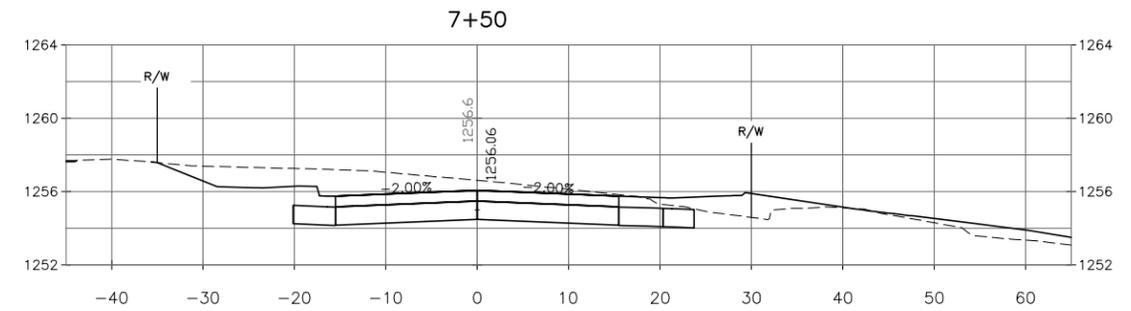
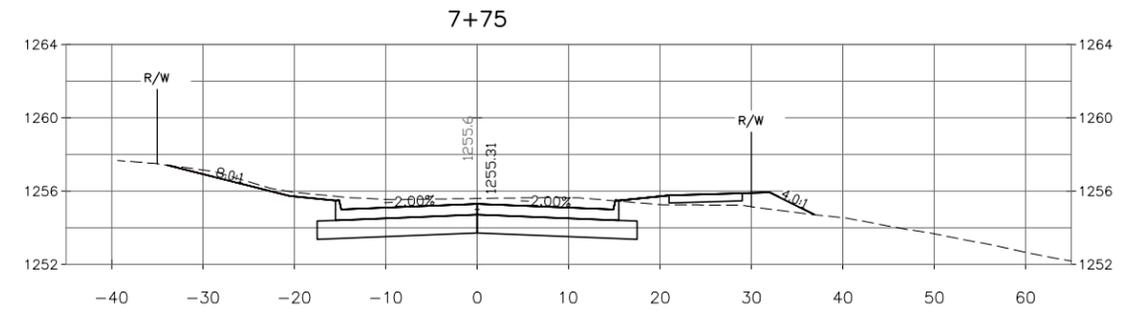
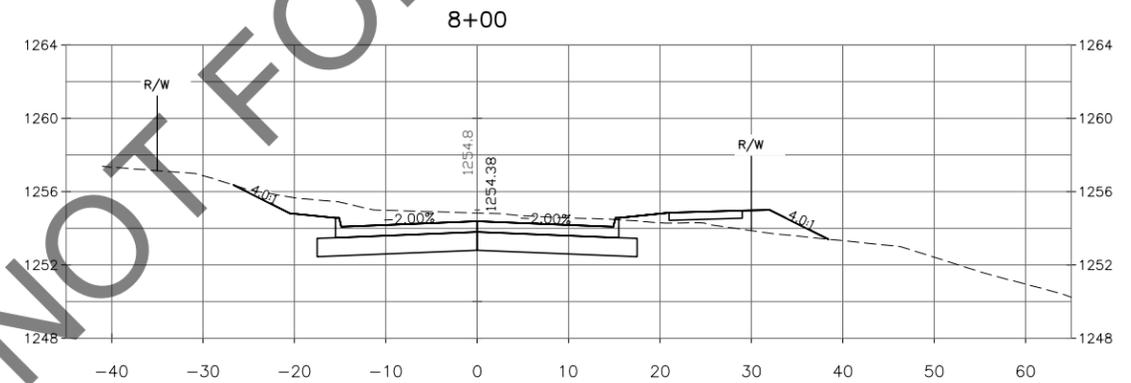
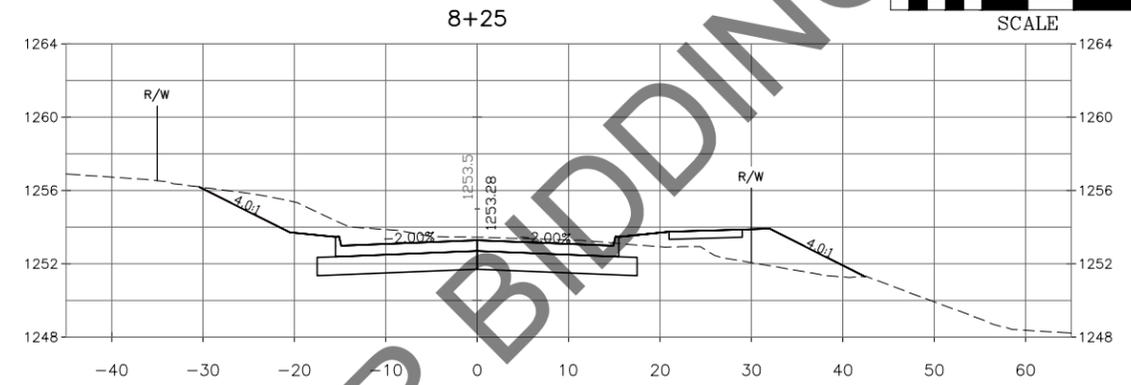
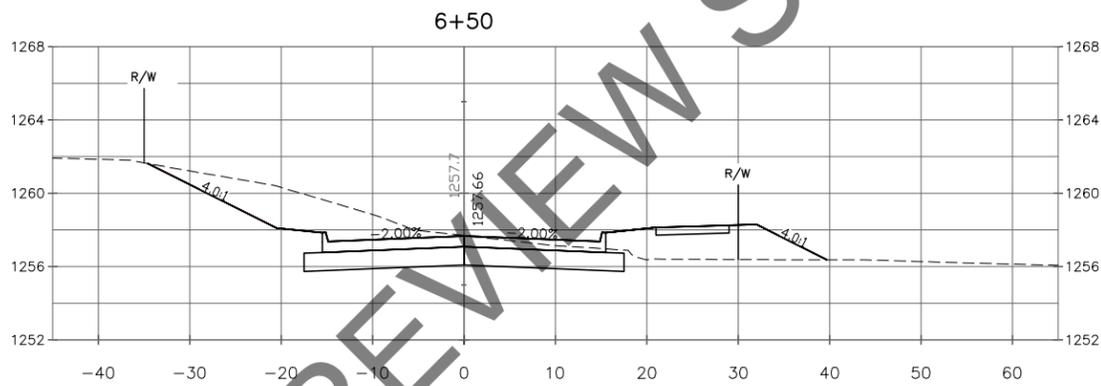
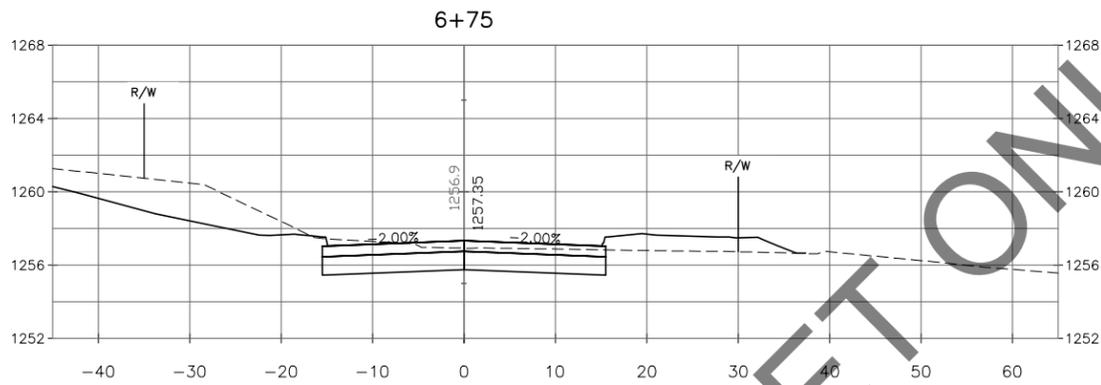
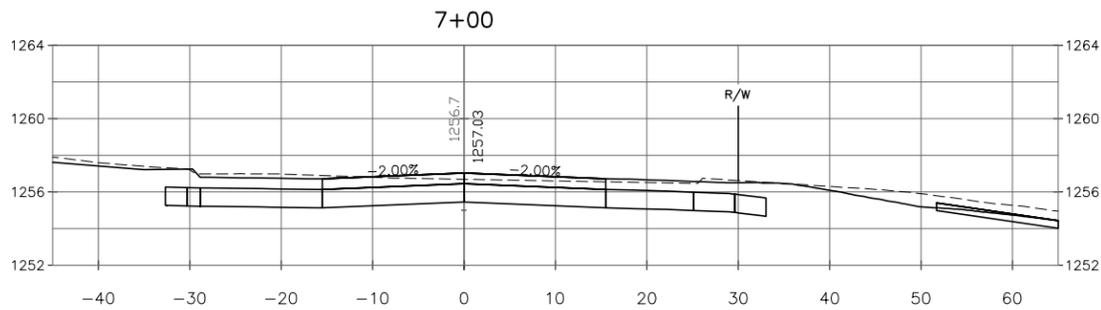
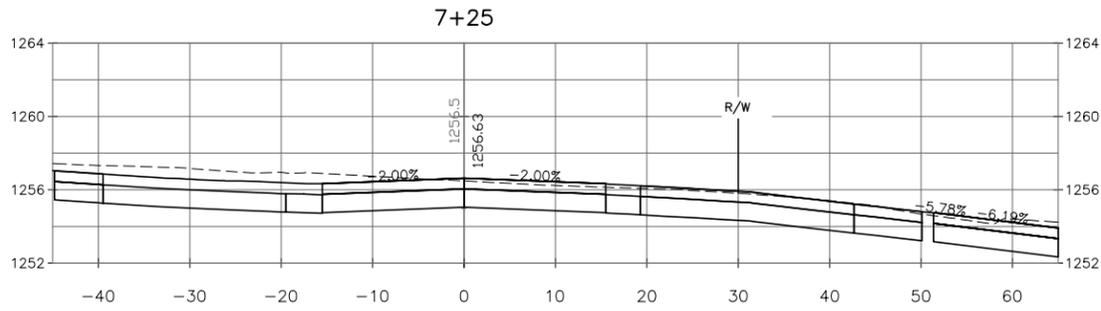
SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IOWA

CROSS SECTIONS
SOUTH CYPRESS STREET

Project Manager: BNV
Designer: TJL
Project Number: 266003
Phone: (712) 266-1554



MAYHEW AVE. INTERSECTION



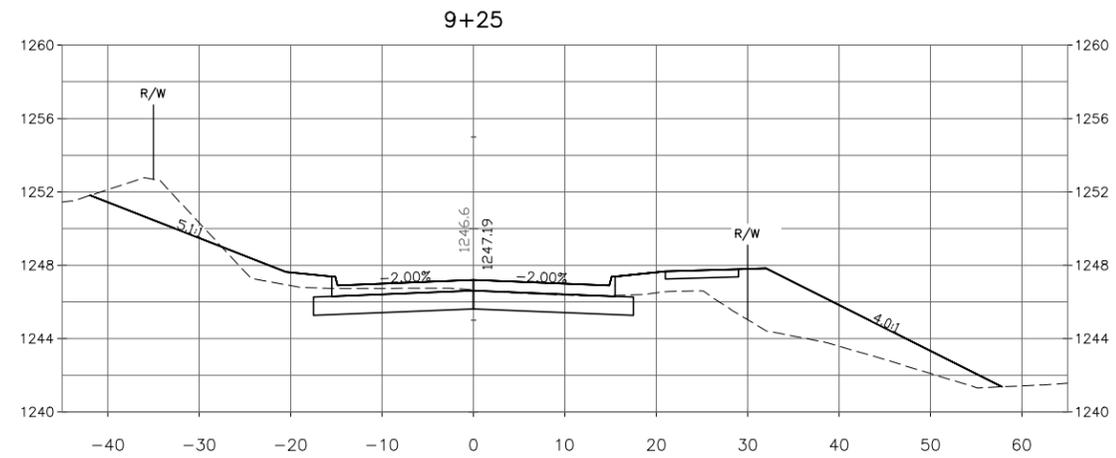
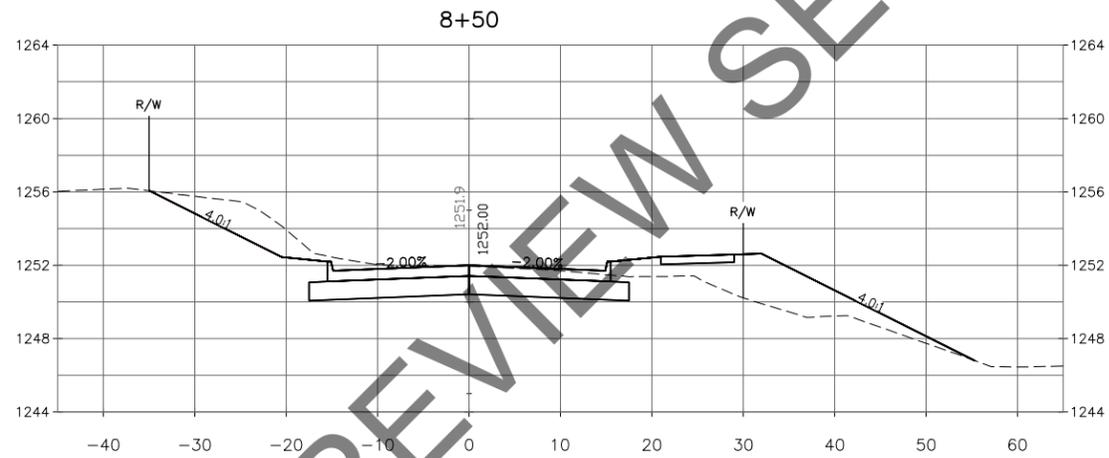
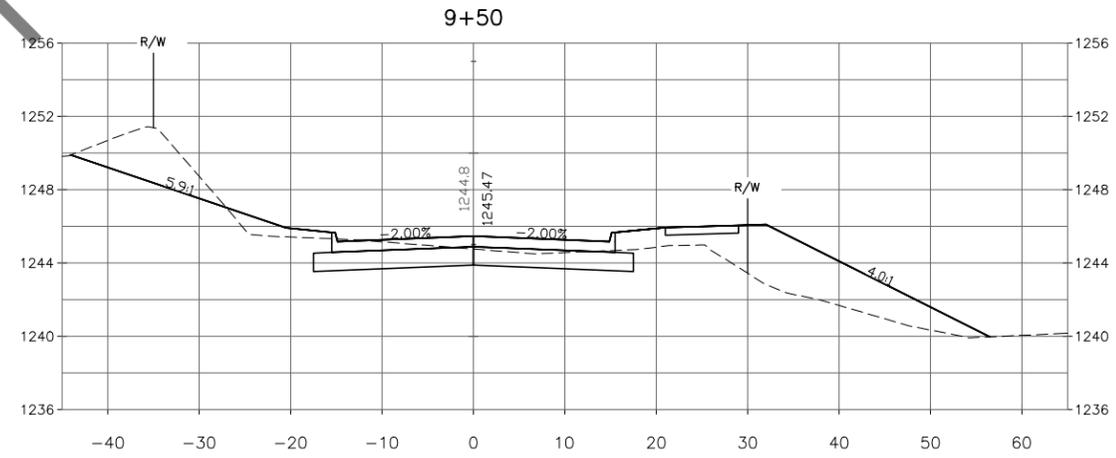
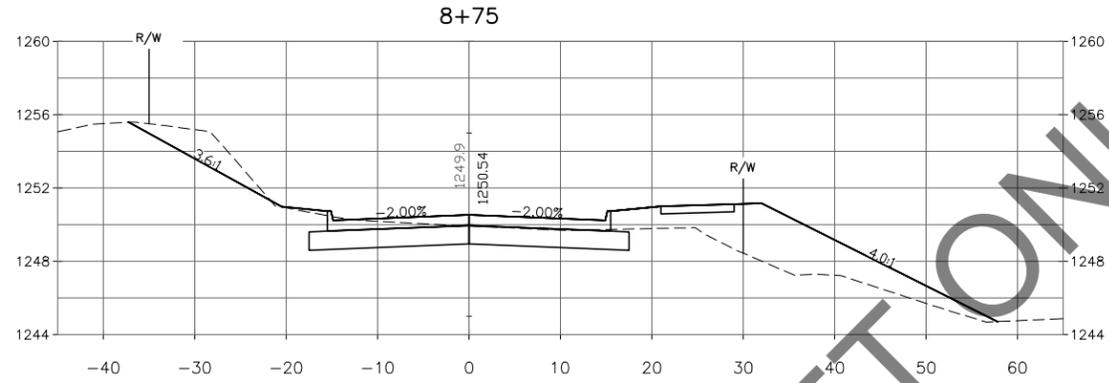
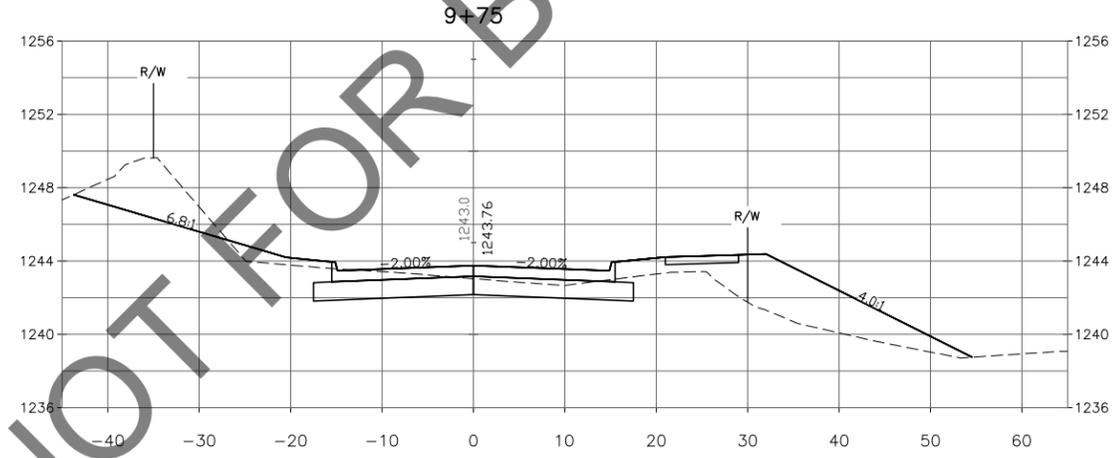
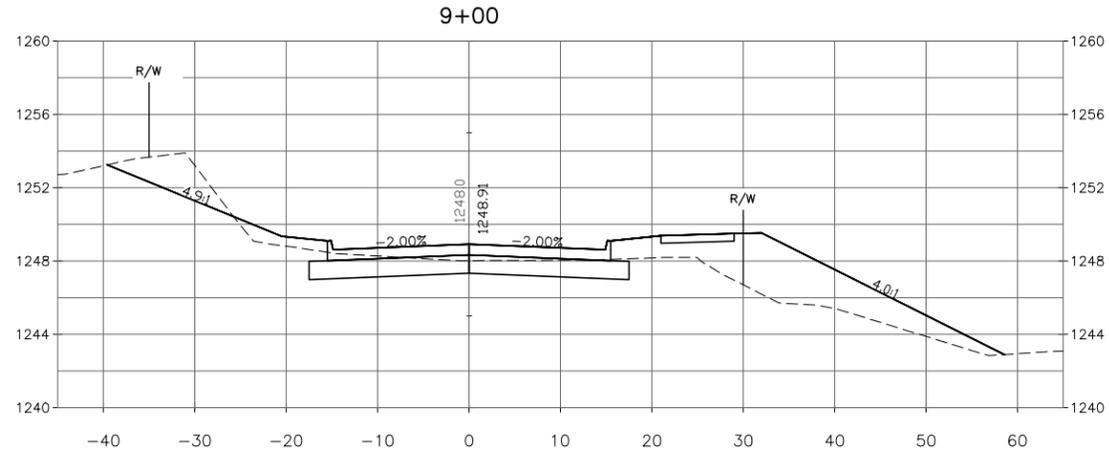
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SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IOWA

CROSS SECTIONS
SOUTH CYPRESS STREET

Project Manager: BNV
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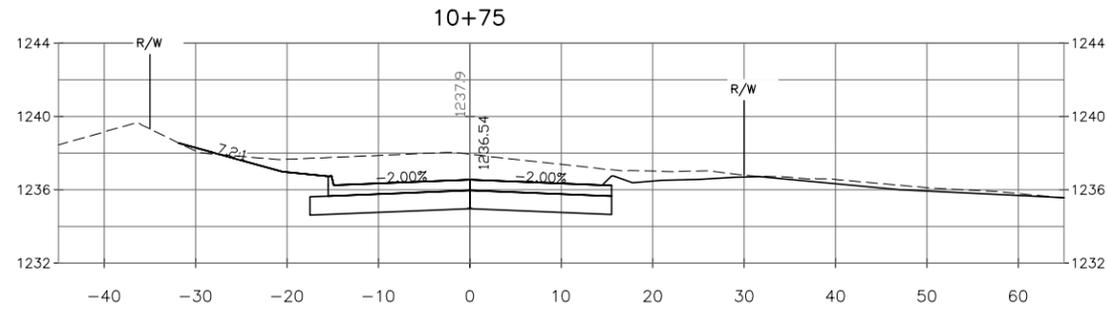
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SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IOWA

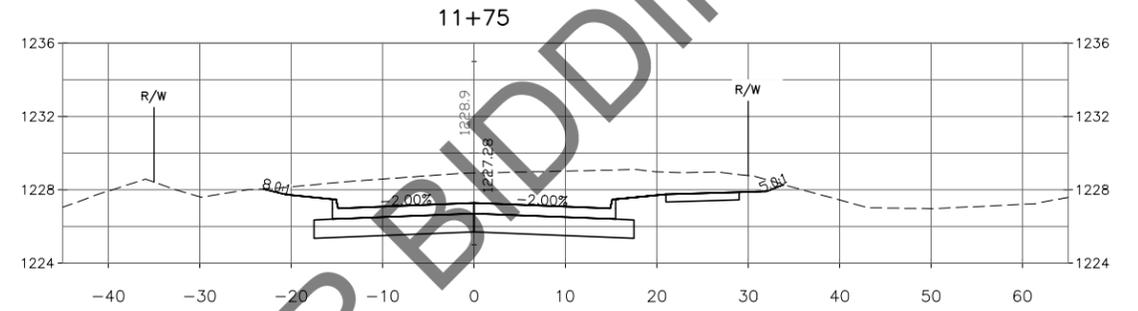
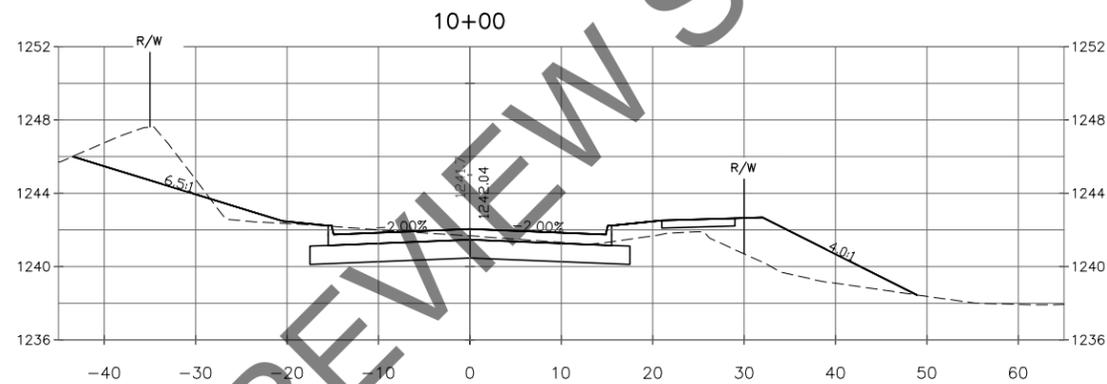
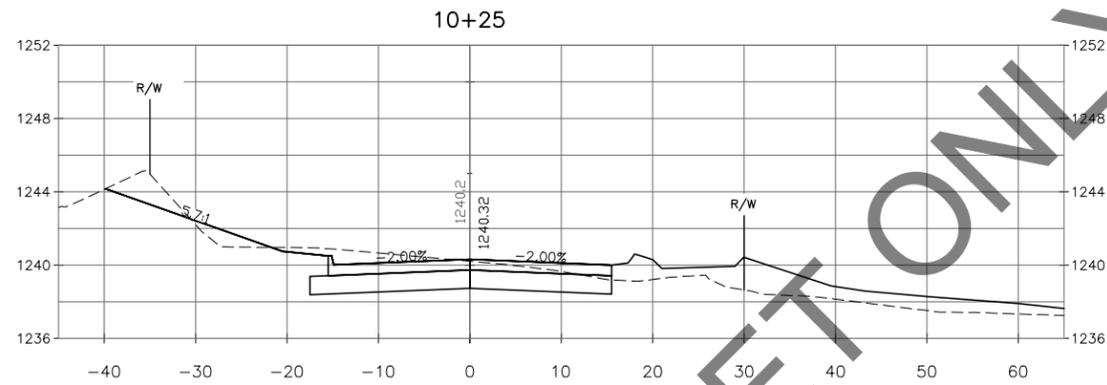
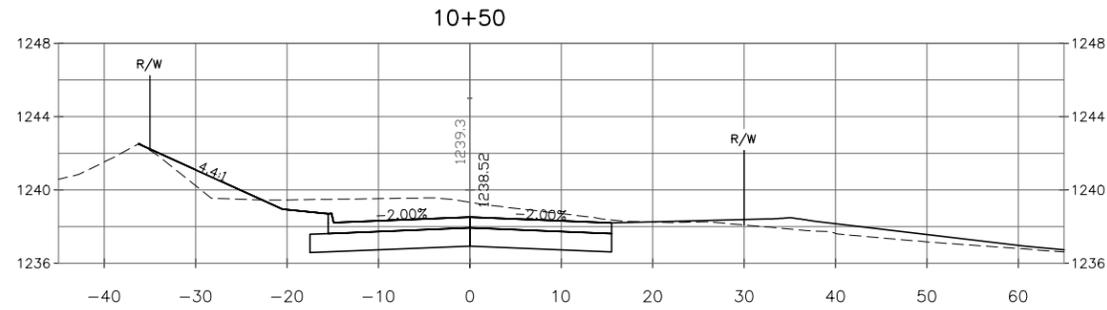
CROSS SECTIONS
SOUTH CYPRESS STREET

Project Manager: BNV
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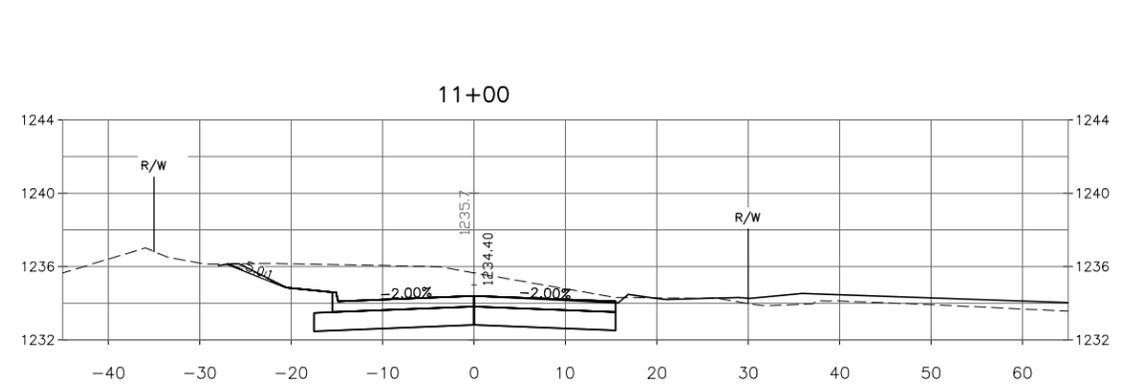
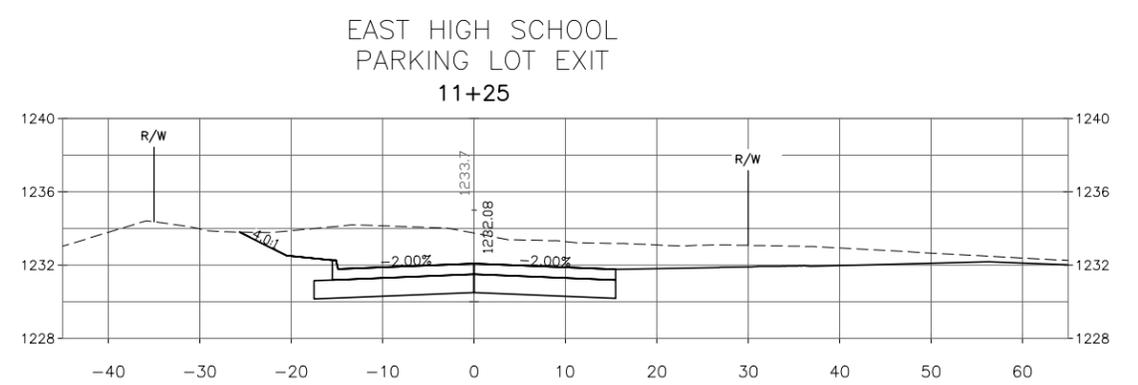
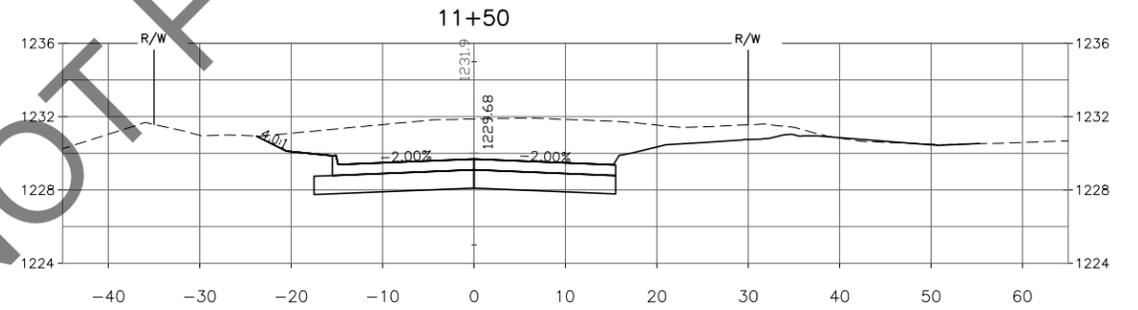




EAST HIGH SCHOOL
PARKING LOT ENTRANCE



EAST HIGH SCHOOL
PARKING LOT EXIT



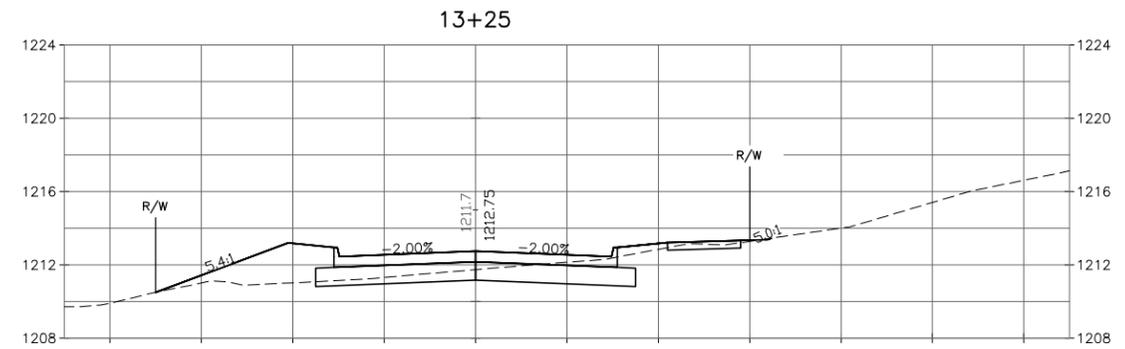
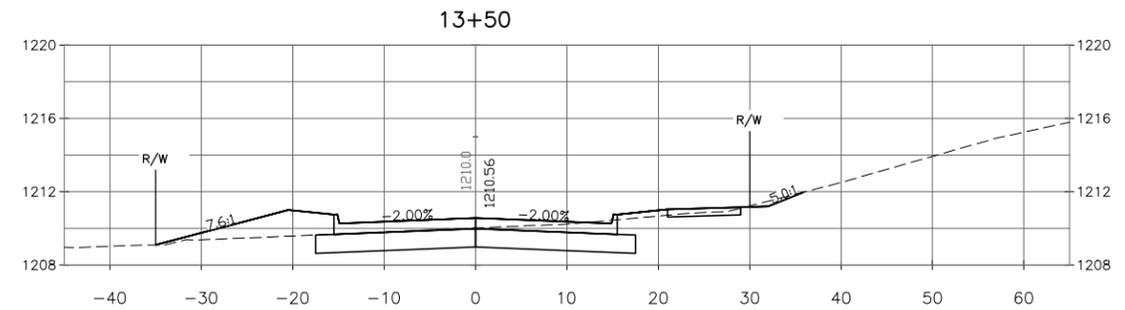
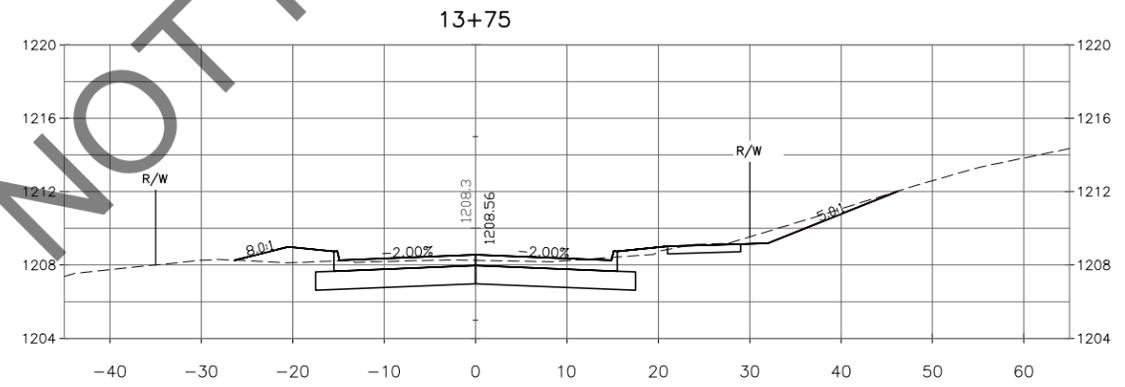
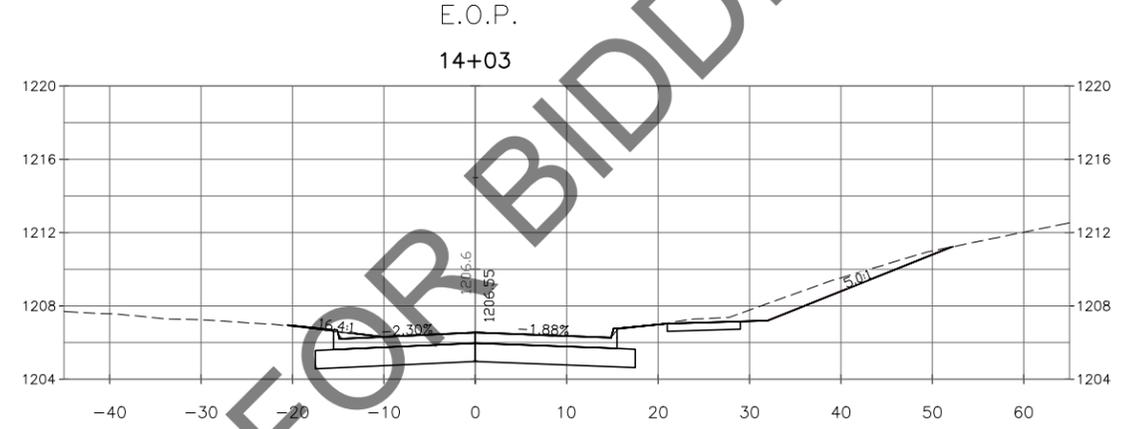
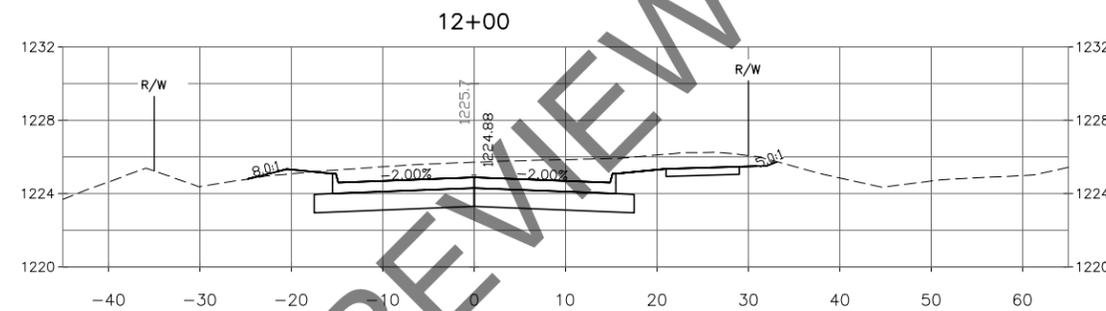
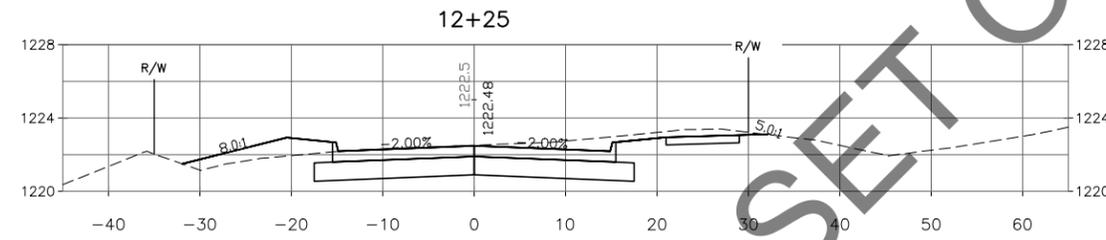
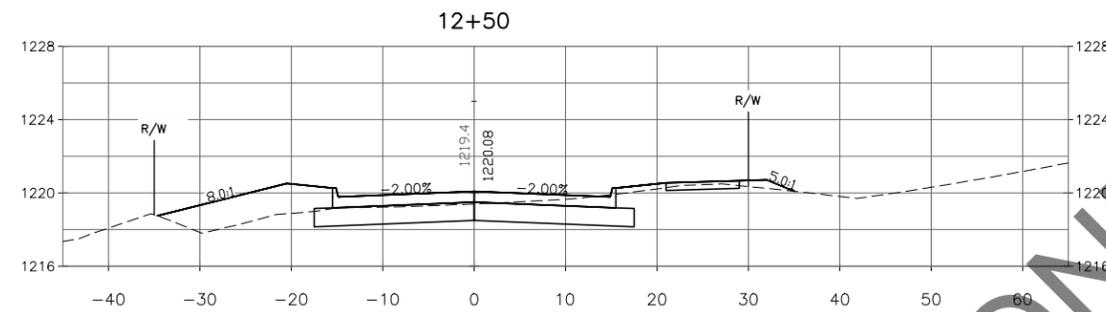
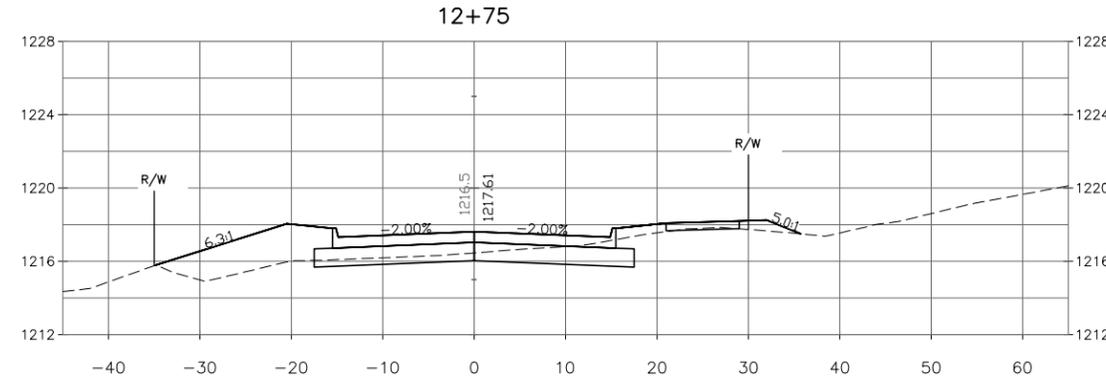
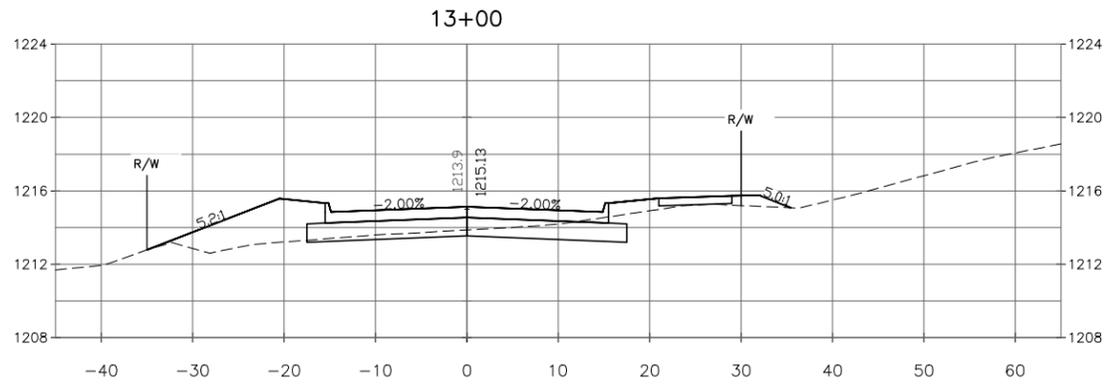
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SOUTH CYPRESS STREET EXTENSION,
RAVINE PARK LANE TO LINCOLN WAY
SIOUX CITY, IOWA

CROSS SECTIONS
SOUTH CYPRESS STREET

Project Manager: BNW
Designer: TJL
Project Number: 266003
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