20 WEST INDUSTRIAL CENTER
LETTING DATE
MAY 1, 2024
RM-2160(618)--9D-31

CITY OF DYERSVILLE - DELAWARE COUNTY

IOWA DNR STORM WATER PERMIT
THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2. THE CONTRACTOR SHALL CARRY OUT THE TERMS AND CONDITIONS OF GENERAL PERMIT NO. 2 AND THE STORM WATER POLLUTION PREVENTION PLAN WHICH IS PART OF THESE CONTRACT DOCUMENTS. REFER TO SECTION 2602 OF THE IDOT STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION.

NPDES PERMIT DISCHARGE AUTHORIZATION NUMBER 41617-41242
ISSUED FOR 20 WEST INDUSTRIAL CENTER - SEVENTH ADDITION CONSTRUCTION
WEST END OF INDUSTRIAL PARKWAY SW IN THE CITY OF DYERSVILLE, DELAWARE COUNTY
LOCATED AT NE 1/4 SEC 2 T88N R3W.
COVERAGE PROVIDED THROUGH 8/1/2025

TRAFFIC CONTROL PLAN
THIS ROAD SHALL BE CLOSED TO VEHICULAR AND PEDESTRIAN TRAFFIC DURING CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES, PROCEDURES, AND LAYOUTS WITHIN THE LIMITS OF THIS PROJECT SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, (MUTCD) AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC), CHAPTER 130." THE CONTRACTOR SHALL FURNISH TRAFFIC CONTROL INCLUDING BARRICADES AND SIGNS IN ACCORDANCE WITH TC-252 AND THE MUTCD. CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL DEVICES ON A 24 HOUR PER DAY, 7 DAYS A WEEK BASIS DURING THE CONSTRUCTION PERIOD. CONTRACTOR TO PROVIDE 24 HOUR CALL NUMBER FOR REPAIR OF DEFICIENCIES. SEE SHEET D.2 AND TRAFFIC CONTROL ESTIMATE REFERENCE NOTE FOR TRAFFIC CONTROL AT WEST END OF EXISTING INDUSTRIAL PARKWAY PAVEMENT.

CITY OF DYERSVILLE - DELAWARE COUNTY

RM-2160(618)--9D-31

20 WEST INDUSTRIAL CENTER
PHASE 3

CONTRACT D-STORM SEWER, PAVING AND LIGHTING

THE 2023 EDITION OF THE IOWA DEPARTMENT OF TRANPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, GENERAL SUPPLEMENTAL SPECIFICATIONS AND APPLICABLE SUPPLEMENTAL SPECIFICATIONS, DEVELOPMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS SHALL APPLY UNLESS OTHERWISE SUPERCEDED BY THE CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS.

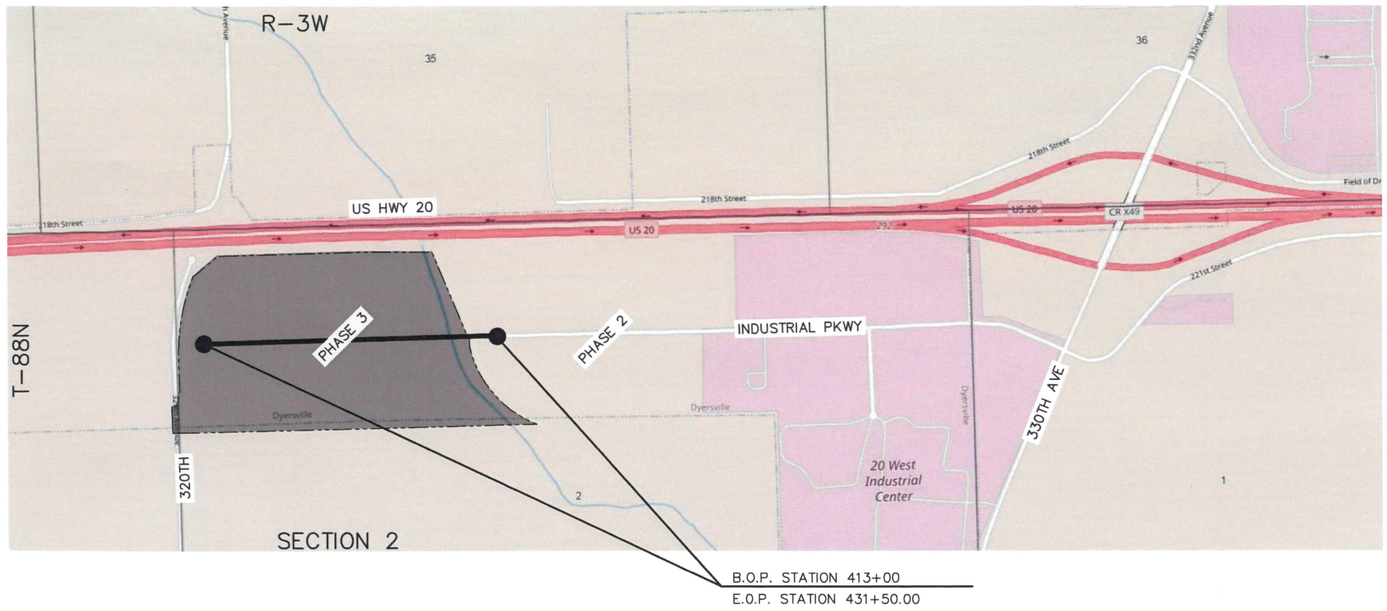
SEE SHEET C.3 FOR STANDARD ROAD PLAN TABULATION

TOTAL SHEETS
31

PROJECT NUMBER
RM-2160(618)--9D-31

INDEX OF SHEETS

105-3
10-18-05



APPROX. SCALE:
0 500 1000
SCALE IN FEET

MILEAGE SUMMARY

105-1
09-27-94

DIV.	LOCATION	LIN. FT.	MILES
1	INDUSTRIAL PARKWAY STA 413+00 TO 431+50.00	1850	0.35
	TOTAL	1850	0.35

WATER & SEWER:	CITY OF DYERSVILLE wandsnider@cityofdyersville.com (563) 875-7724
GAS:	BLACK HILLS ENERGY BRIAN.MCWILLIAM@BLACKHILLSCORP.COM (563) 927-1017
ELECTRICAL POWER:	ALLIANT ENERGY CHAD MEYER (563) 587-4510
COMMUNICATION:	WINDSTREAM COMMUNICATIONS (800) 289-1901
COMMUNICATION:	CENTURY LINK (918) 547-0147
COMMUNICATION:	IOWA COMMUNICATIONS NETWORK (800) 572-3940
ONE CALL	IOWA ONE CALL 1 (800) 292-8989

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800 556-4491
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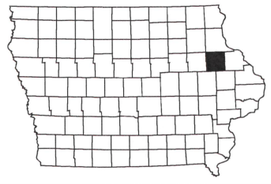
LOCATION MAP



WORKING DRAWINGS/SUBMITTALS/SHOP DRAWINGS WILL BE CHECKED BY ORIGIN DESIGN
137 MAIN STREET, DUBUQUE, IA 52001
563-556-2464 (PHONE); 563-556-7811 (FAX)
JON LUTZ
jon.lutz@origindesign.com

IOWA 811 ONE CALL SM
1 (800) 292 - 8989

LICENSED PROFESSIONAL ENGINEER
JONATHAN H. LUTZ
13164
IOWA

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

FOR ORIGIN DESIGN CO.

JONATHAN H. LUTZ — DATE 3/19/2024
PE 13164 — RENEWAL DATE 12/31/2024
LICENSE #

PAGES OR SHEETS COVERED BY THIS CERTIFICATION:
ALL SHEETS SHOWN IN INDEX

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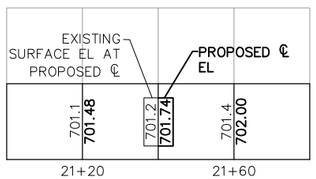
RM-2160(618)--9D-31

ABBREVIATIONS

Δ	CENTRAL ANGLE
A/C	AIR CONDITIONING(ER)
AC	ACRES
A.F.F.	ABOVE FINISHED FLOOR
AGG	AGGREGATE
AOH	ARROW ON HYDRANT
ARCH	ARCHITECTURAL
ASPH	ASPHALT
AVG	AVERAGE
B-B	B/C - B/C
B/C, BOC	BACK OF CURB
B/DITCH	BOTTOM OF DITCH
BFP	BACKFLOW PREVENTOR
B/L	BASE LINE
B/S	BOTTOM OF SLOPE
BLDG	BUILDING
B.M.	BENCH MARK
BOP	BEGINNING OF PROJECT
BOT	BOTTOM
BSMT	BASEMENT
BV	BUTTERFLY VALVE
C&G	CURB AND GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
C-C	CENTER TO CENTER
CF	CUBIC FEET
CH	CHORD
CH BRG	CHORD BEARING
CIP	CAST IRON PIPE
C-I-P	CAST-IN-PLACE
CISP	CAST IRON SOIL PIPE
CJ	CONTROL JOINT
℄ OR CL	CENTERLINE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPACTED
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
COR	CORNER
CP	CONTROL POINT
CPE	CORRUGATED POLYETHYLENE PIPE
CRST	CRUSHED STONE
CSP	CORRUGATED STEEL PIPE
CTRD	CENTERED
CTR	CENTER
CULT	CULTIVATED
CV	CHECK VALVE
CY	CUBIC YARD
D	DEGREE OF CURVE
DIA (ø)	DIAMETER
DIP	DUCTILE IRON PIPE
DN	DOWN
DRWY	DRIVEWAY
DS	DOWNSPOUT
DWG(S)	DRAWING(S)
DWL(S)	DOWEL(S)
E	EAST
E'LY	EASTERLY
EA	EACH
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMBED	EMBEDMENT
ENGR	ENGINEER
ENTR	ENTRANCE
EOP	END OF PROJECT
EOR	END OF RADIUS
E/P	EDGE OF PAVEMENT
EQ	EQUAL
E/S	EDGE OF SHOULDER
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
EXC	EXCAVATE/EXCAVATION
EXP	EXPANSION
EXT	EXTERIOR
EXTD	EXTEND
EW	EACH WAY
FD	FLOOR DRAIN
FDN	FOUNDATION
F.E.	FIELD ENTRANCE
FES	FLARED END SECTION
F-F	FACE TO FACE
FFE	FINISH FLOOR ELEVATION
FG	FORM GRADE
FIN GR	FINISHED GRADE
FL	FLOWLINE
FLG	FLANGE
FLR	FLOOR
FM	FORCE MAIN
FND	FOUND
FT	FOOT/FEET
FTG	FOOTING
FUT	FUTURE
FV	FIELD VERIFY
G	GUTTER
GC	GENERAL CONTRACTOR
GALV	GALVANIZED
GND	GROUND
GRAN	GRANULAR
GRD	GRADE
GV	GATE VALVE
HMA	HOT MIX ASPHALT
HORIZ	HORIZONTAL
HPT	HIGH POINT
HSD	HEADLIGHT STOPPING DISTANCE
HYD	HYDRANT
ID	INSIDE DIA/INSIDE DIM
IE	INVERT ELEVATION
IMP	IMPROVEMENTS
IN	INCHES
INV	INVERT
IP	IRON PIPE
JB	JUNCTION BOX
JT	JOINT/JOINT LENGTH
K	RATE OF VERT CURVATURE
L	LENGTH OF CURVE
LAT	LATERAL
LF	LINEAL FOOT
LONG	LONGITUDINAL
LP	LIGHT POLE
LPT	LOW POINT
LT	LEFT
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MON	MONUMENT
MP	MILE POST
N	NORTH
N/A	NOT APPLICABLE
NE'LY	NORTHEASTERLY
N'LY	NORTHERLY
NO/#	NUMBER
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NW'LY	NORTHWESTERLY
OC	ON CENTER
OD	OUTSIDE DIAMETER
PC	POINT OF CURVE
PERF	PERFORATED
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
PM	PRINCIPAL MERIDIAN
POB	POINT OF BEGINNING
POC	POINT OF CURVE
POT	POINT OF TANGENT
PRC	POINT OF REVERSE CURVE
PRELIM	PRELIMINARY
PROP	PROPOSED
PRV	PRESSURE REDUCING VALVE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS
R&R	REMOVE & REPLACE
R&S	REMOVE & SALVAGE
RCB	REINFORCED CONCRETE BOX
RCAP	REINFORCED CONCRETE ARCH PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REBAR	REINFORCING BAR
REF	REFERENCE
REINF	REINFORCING/REINFORCED
REV	REVISION
RIM	RIM ELEVATION
ROW	RIGHT OF WAY
RP	RADIUS POINT
RS	RESILIENT SEAT
RT	RIGHT
S	SOUTH
S=	SUPERELEVATION
SAN	SANITARY
SANS	SANITARY SEWER
SB	SOIL BORING
SCH	SCHEDULE
SD	SUB DRAIN
SEC	SECTION
SE'LY	SOUTHEASTERLY
SF	SQUARE FOOT
S.F.D.	STEP FOOTING DOWN
SHT	SHEET
SIG.	SIGNAL
SIM.	SIMILAR
S'LY	SOUTHERLY
SOG	SLAB ON GRADE
SPEC	SPECIFICATION
SS	STAINLESS STEEL
SSD	STOPPING SIGHT DISTANCE
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STM	STORM
STMS	STORM SEWER
SW'LY	SOUTHWESTERLY
SY	SQUARE YARD
T	TANGENT LENGTH
T/B	TOP OF BANK
T/DITCH	TOP OF DITCH
T/C, TC	TOP OF CURB
T/GRAV	TOP OF GRAVEL
T/WALL	TOP OF WALL
T/P, TP	TOP OF PAVEMENT
T/S	TOP OF SLOPE
T/SUB	TOP OF SUBGRADE
T/W, TW	TOP OF WALK
T/WM	TOP OF WATER MAIN
T & B	TOP AND BOTTOM
T.O.B.	TOP OF BEAM
T.O.B.L.	TOP OF BRICK LEDGE
T.O.C.	TOP OF CONCRETE
T.O.E.F.	TOP OF EXISTING FOOTING
T.O.F.	TOP OF FOOTING
T.O.M.	TOP OF MASONRY
T.O.P.	TOP OF PIER
T.O.S.	TOP OF STEEL
TCE	TEMP CONSTRUCTION EASEMENT
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK / THICKNESS
TWP	TOWNSHIP
TYP	TYPICAL
U	UTILITY
UAC	USE AS CONSTRUCTED
UE	UTILITY EASEMENT
UL	UNDERWRITERS LABORATORIES, INC.
ULFM	UNDERWRITERS LABORATORIES FACTORY MUTUAL
UNO	UNLESS NOTED OTHERWISE
VAR	VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VER	VERIFY
VERT	VERTICAL
VOL	VOLUME
VPC	VERT POINT OF CURVE
VPI	VERT POINT OF INTERSECTION
VPT	VERT POINT OF TANGENCY
W	WEST
W/	WITH
W'LY	WESTERLY
WM	WATER MAIN
W/O	WITHOUT
W.P.	WORKING POINT
WD	WOOD
WSO	WATER SHUT OFF
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
YD	YARD



PROFILE LEGEND

LEGEND

EXISTING		PROPOSED
	PROPERTY LINE	
	EASEMENT	
	SECTION LINE	
	QUARTER SECTION LINE	
	QUARTER QUARTER SECTION LINE	
	CENTERLINE	
D	STORM SEWER	D
SD	SUB DRAIN	SD
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
W	WATER LINE	W
G	GAS LINE	G
OHE	OVERHEAD ELECTRIC	OHE
E	UNDERGROUND ELECTRIC	E
OHT	OVERHEAD TELEPHONE	OHT
T	UNDERGROUND TELEPHONE	T
OHTV	OVERHEAD TELEVISION	OHTV
TV	UNDERGROUND TELEVISION	TV
FIB	FIBER OPTIC	FIB
X	WIRE FENCE	X
O	CHAINLINK FENCE	O
□	WOOD FENCE	□
000	CONTOUR LINE	000
	RAILROAD TRACKS	
	GUARD RAIL	
+ 0.00	SPOT ELEVATION	+ 0.00
	DIRECTION OF FLOW	
	TREE LINE	

EXISTING		PROPOSED
	CATCH BASIN	
	AREA INTAKE	
D	STORM MANHOLE	
S	SANITARY MANHOLE	
U	UTILITY MANHOLE	
V	WATER VALVE MANHOLE	
	FIRE HYDRANT	
	WATER SHUT OFF	
WV	WATER VALVE	
	YARD HYDRANT	
GV	GAS VALVE	GV
	SIGN	
	UTILITY POLE	
	UTILITY POLE WITH LIGHT	
	TRAFFIC SIGNAL POLE	
	GUY ANCHOR	
	LIGHT POLE	
	UTILITY PEDESTAL	
W	WELL	
	MAILBOX	
	WATER LEVEL	
	BOLLARD	
	SOIL BORING	
PIV	POST INDICATOR VALVE	PIV
	DECIDUOUS TREE W/ TRUNK DIA.	
	CONIFEROUS TREE W/ TRUNK DIA.	
	SHRUB OR BUSH	

EROSION CONTROL LEGEND

TEMPORARY	
SF / SW	PERIMETER CONTROL (STRAW WATTLES, FILTER SOCKS & SILT FENCE ARE GENERALLY INTERCHANGEABLE)
CW	CONCRETE WASHOUT
CE	CONSTRUCTION ENTRANCE
TM	MULCHING
TS	SEEDING
CB	COMPOST BLANKET
DC / RD	DITCH CHECK (ROCK DAM)
SI	SEDIMENT TRAP
IP	INLET PROTECTION
DC	DUST CONTROL

TEMPORARY	
	ROLLED EROSION CONTROL PRODUCT (RECP) PER PLAN
T	STREAM CROSSING
CRS	CONSTRUCTION ROAD STABILIZATION
TD	TEMPORARY DIVERSION
	LEVEL SPREADER

PERMANENT	
PS	SEEDING
S	SODDING
SFM	SEED, FERTILIZER & MULCH
OP	OUTLET PROTECTION
RS	REVETMENT SLOPE PROTECTION
	SOD DROP INLET PROTECTION
CD	CHECK DAM
SC	STONE CHECK
SB	SEDIMENT BASIN
	SURFACE ROUGHENING
	TURF REINFORCEMENT MAT (TRM)
SD	SLOPE DRAIN
PD	PERMANENT DIVERSION
	LEVEL SPREADER

PERMANENT	
V	VEGETATIVE STREAMBANK STABILIZATION
S	STRUCTURAL STREAMBANK STABILIZATION
RR	RIP RAP LINED CHANNEL
GL	GRASS LINED CHANNEL (_____) MATERIAL REQUIRED

SURVEY

■	FOUND REBAR
●	FOUND IRON PIPE
O	SET REBAR

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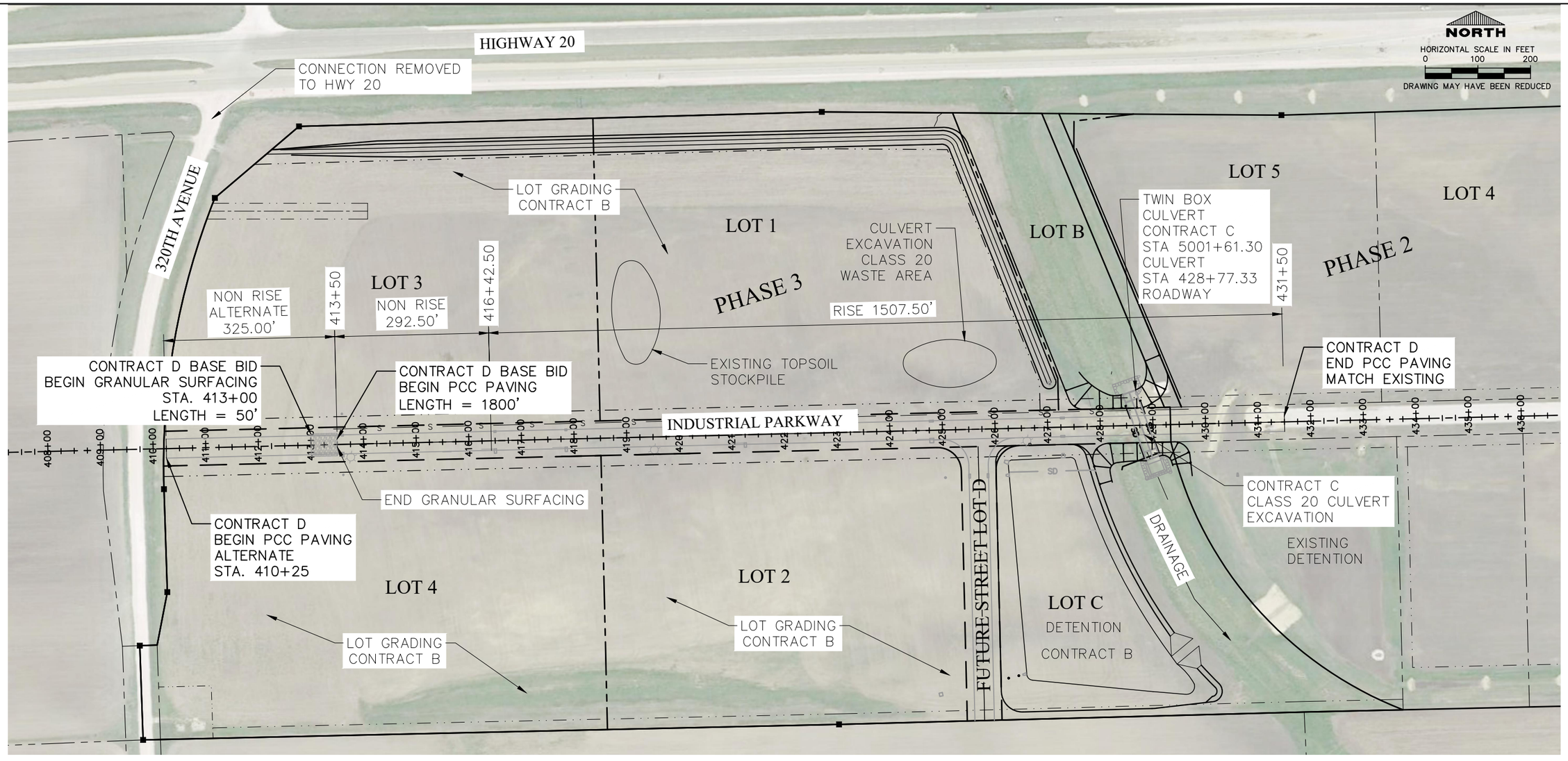
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	LEGENDS AND ABREVIATIONS	03-19-24	A.2

RM-2160(618)--9D-31



20 WEST INDUSTRIAL CENTER
OVERALL PLAN

PHASE 3 CONSTRUCTION

PREVIOUS WORK COMPLETED
- CONTRACT A – SANITARY SEWER & WATER MAIN
- CONTRACT B – LOT GRADING & SITE STORM SEWER
- CONTRACT C – CULVERT

THIS CONTRACT
- CONTRACT D – PAVING, ROADWAY STORM SEWER & LIGHTING

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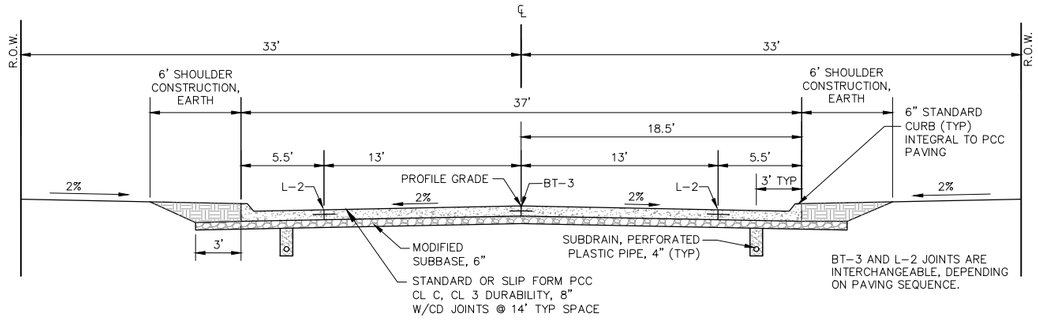
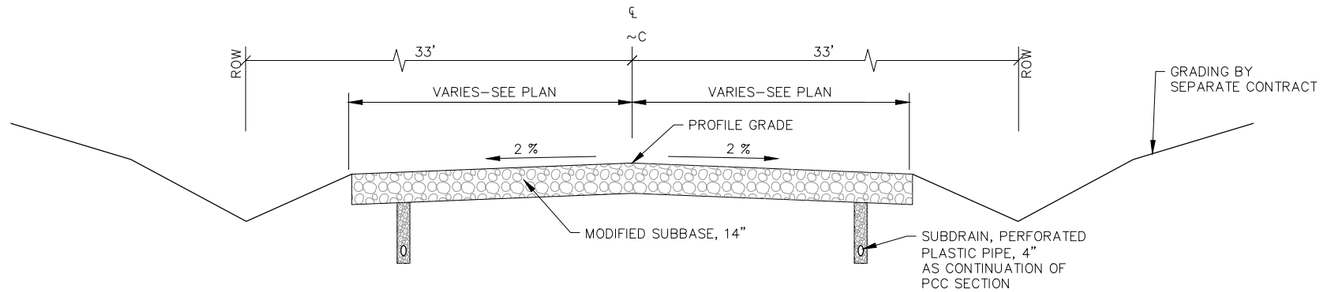


11 / B.1 TYPICAL STREET SECTION

37'-0" B-B INDUSTRIAL PARKWAY SW **NOT TO SCALE**



413+00 TO 413+50

16 / B.1 GRAVEL CUL-DE-SAC

NOT TO SCALE

STORM SEWER STRUCTURE NOTES:
1. EXCAVATION WILL BE BACKFILLED WITH SPECIAL BACKFILL GRANULAR MATERIAL. THIS MATERIAL SHALL BE MECHANICALLY TAMPED IN 6 IN. LIFTS. THE COST OF THE BACKFILL SHALL BE PAID AS REPLACEMENT OF UNSUITABLE BACKFILL MATERIAL.

2. ROADWAY SUBDRAIN SHALL CONNECT TO THE INTAKE SUBDRAIN AT THE LOCATIONS SHOWN ON THE ROADWAY STORM SEWER SHEETS.

3. ALL LOCATIONS ALONG THE INTAKE SUBDRAIN MUST DRAIN TOWARDS THE FABRICATED TEE FITTING.

4. PLACE GRATE TOWARD DIRECTION OF FLOW ACCORDING TO MANUFACTURE'S INSTRUCTION.

5. THE CAST IRON GRATE SHOWN IN THE CONTRACT DOCUMENTS SHALL BE INCLUDED IN THE COST OF THE INTAKE.

6. CAST IRON GRATE AND FRAME SHALL BE NEENAH R-3246 AL, DEETER 2064, EJIW 7510Z1, OR APPROVED EQUAL. FRAMES USED IN THIS CATCH BASIN REQUIRE FLANGES TO BE REMOVED WHERE THEY BUTT TOGETHER. FRAMES SHALL BE FASTENED TOGETHER USING STAINLESS STEEL BOLTS, 5/8"ø x1 1/2" LENGTH, IN TWO LOCATIONS ALONG THE BUTTED EDGE.

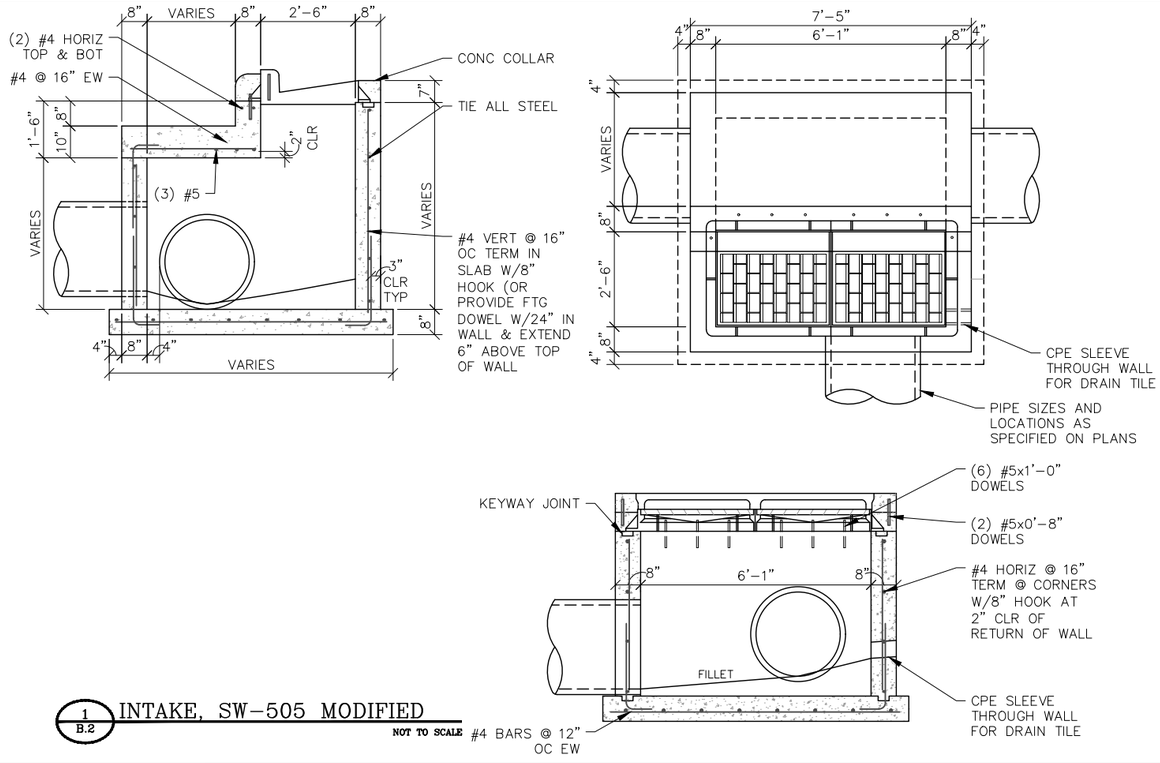
7. DIMENSIONS SHOWN ARE FOR THE CONSTRUCTION OF A 6 INCH STANDARD CURB AS A PART OF THE PAVEMENT.

8. ALL BARS SHALL BE ASTM A 615, GRADE 60 EPOXY COATED.

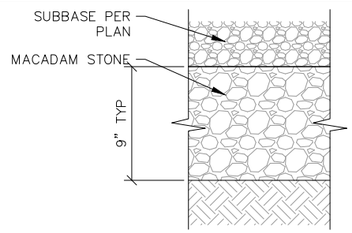
9. PRECAST CONCRETE UNITS WITH THESE DIMENSIONS MAY BE UTILIZED. PIPE CONNECTIONS TO PRECAST UNITS SHALL BE GROUTED.

10. WHEN INTAKE IS CONSTRUCTED OVER EXISTING PIPE, THE PIPE SHALL BE CUT TO PROPER LENGTH. THE COST OF CUTTING THE PIPE IS INCIDENTAL TO THE COST OF CONSTRUCTING THE INTAKE.

11. FOR INTAKES AND UTILITY ACCESSES, PAYMENT LINES FOR GRANULAR BACKFILL SHALL BE VERTICAL AND 2 FEET OUTSIDE THE NEAT LINES OF THE FOUNDATIONS IN EACH DIRECTION HORIZONTALLY.



1 B.2 INTAKE, SW-505 MODIFIED
NOT TO SCALE



TO BE PLACED AT LOCATIONS AS DIRECTED BY THE ENGINEER WHERE SUBGRADE IS NOT STABLE AFTER PROOF-ROLLING.

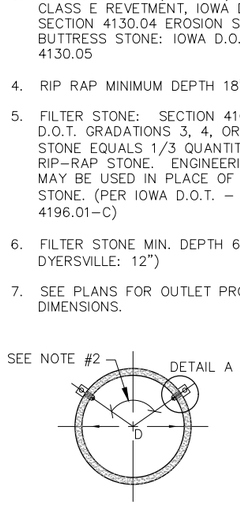
ADDITIONAL OVER EXCAVATION MAY BE REQUIRED IF SUBGRADE CONDITION WARRANTS, IF APPROVED BY THE ENGINEER.

5 B.2 SUBGRADE STABILIZATION DETAIL
NOT TO SCALE

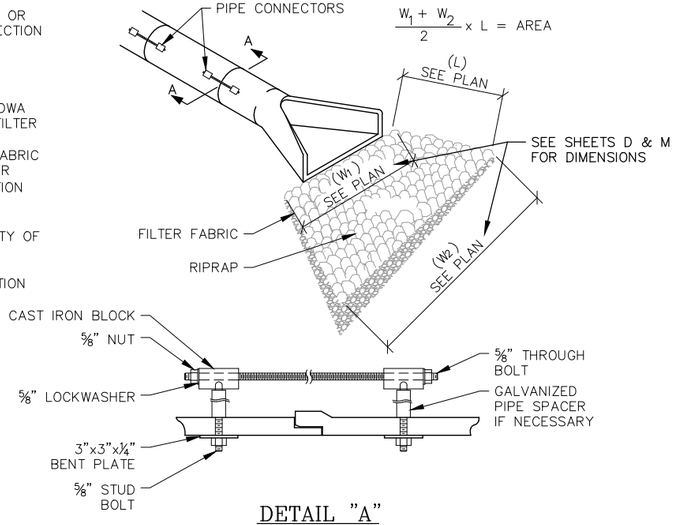
NOTES:

1. PIPE CONNECTORS ARE REQUIRED ON LAST THREE JOINTS.
2. PIPE CONNECTORS TO BE LOCATED AND SIZED PER MANUFACTURER'S RECOMMENDATIONS.
3. EROSION STONE (RIP-RAP) GRADATION: CLASS E REVETMENT, IOWA D.O.T. SECTION 4130.04 EROSION STONE OR BUTTRESS STONE: IOWA D.O.T. SECTION 4130.05
4. RIP RAP MINIMUM DEPTH 18"
5. FILTER STONE: SECTION 4109, IOWA D.O.T. GRADATIONS 3, 4, OR 5. FILTER STONE EQUALS 1/3 QUANTITY OF RIP-RAP STONE. ENGINEERING FABRIC MAY BE USED IN PLACE OF FILTER STONE. (PER IOWA D.O.T. – SECTION 4196.01-C)
6. FILTER STONE MIN. DEPTH 6" (CITY OF DYERSVILLE: 12")
7. SEE PLANS FOR OUTLET PROTECTION DIMENSIONS.

IF NOTED ON PLAN, FLARED END SECTIONS SHALL HAVE PIPE APRON GUARDS REFER TO IDOT STANDARD ROAD PLAN SHEET DR-213

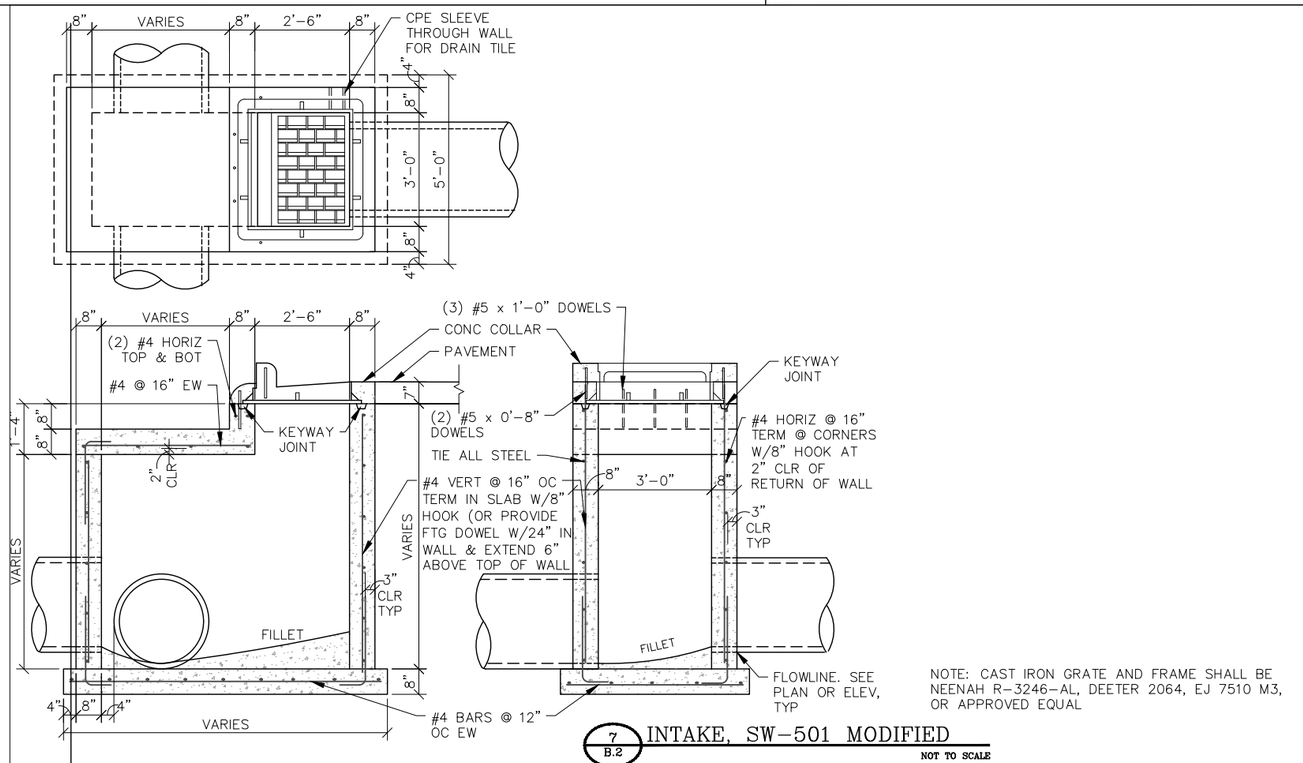


SECTION A-A



DETAIL "A"

16 B.2 FLARED END SECTION
NOT TO SCALE



NOTE: CAST IRON GRATE AND FRAME SHALL BE NEENAH R-3246-AL, DEETER 2064, EJ 7510 M3, OR APPROVED EQUAL

7 B.2 INTAKE, SW-501 MODIFIED
NOT TO SCALE

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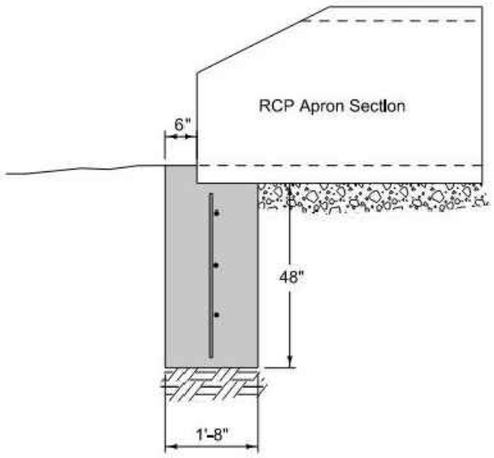
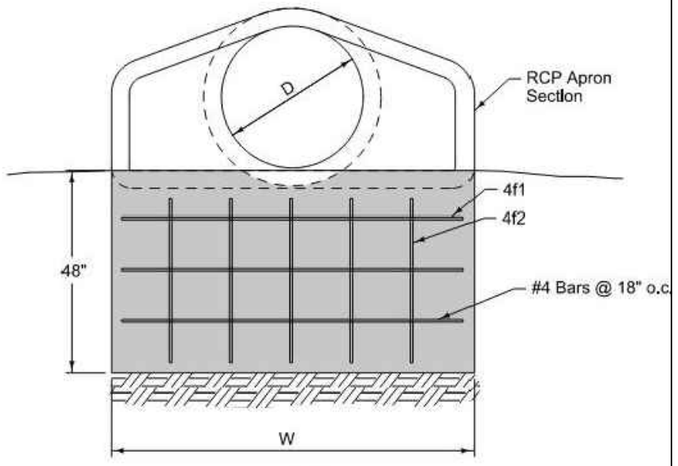


TYPICAL SECTION



ELEVATION

REINFORCING BAR LIST

D	W	Mark	Size	Length	Count
12"	2'-4"	4f1	4	2'-0"	3
		4f2	4	3'-8"	2
15"	2'-10 ½"	4f1	4	2'-6 ½"	3
		4f2	4	3'-8"	2
18"	3'-5"	4f1	4	3'-1"	3
		4f2	4	3'-8"	3
24"	4'-6"	4f1	4	4'-2"	3
		4f2	4	3'-8"	3
30"	5'-7"	4f1	4	5'-3"	3
		4f2	4	3'-8"	4
36"	6'-8"	4f1	4	6'-4"	3
		4f2	4	3'-8"	5
42"	7'-3"	4f1	4	6'-11"	3
		4f2	4	3'-8"	5
48"	7'-10"	4f1	4	7'-6"	3
		4f2	4	3'-8"	6
54"	8'-5"	4f1	4	8'-1"	3
		4f2	4	3'-8"	6
60"	8'-11"	4f1	4	8'-7"	3
		4f2	4	3'-8"	6
66"	8'-11"	4f1	4	8'-7"	3
		4f2	4	3'-8"	6
72"	10'-0"	4f1	4	9'-8"	3
		4f2	4	3'-8"	7
78"	10'-7"	4f1	4	10'-3"	3
		4f2	4	3'-8"	7
84"	11'-1"	4f1	4	10'-9"	3
		4f2	4	3'-8"	8

FIGURE 4030.221 SHEET 1 OF 1

11 / B.3 APRON FOOTING

NOT TO SCALE

ESTIMATED PROJECT QUANTITIES

20 West Industrial Center - Phase 3 - Contract D RM-2160(618)--9D-31 Base Bid

REF. NO.	ITEM CODE	BID ITEM DESCRIPTION	UNITS	DIVISION 1 RISE Quantities	DIVISION 2 Non-Participating Quantities	TOTAL QUANTITIES
1	2109-8225100	SPECIAL COMPACTION OF SUBGRADE	STA	15.08	3.42	18.5
2	2115-0100000	MODIFIED SUBBASE	CY	1200.4	325.8	1526.2
3	2123-7450000	SHOULDER CONSTRUCTION, EARTH	STA	30.15	5.85	36
4	2210-0475290	BASE MACADAM STONE	TON	227	44	271
5	2301-1033080	STANDARD OR SLIP FORM PCC CL C, CL 3 DURABILITY, 8 INCH	SY	6198	1203	7401
6	2416-0100030	APRON, CONCRETE, 30 INCH	EA	0	1	1
7	2416-0100042	APRON, CONCRETE, 42 INCH	EA	1	0	1
8	2416-0100048	APRON, CONCRETE, 48 INCH	EA	1	0	1
9	2435-0250100	INTAKE, SW-501	EA	4	1	5
10	2435-0250110	INTAKE, SW-501 MODIFIED	EA	3	1	4
11	2435-0250500	INTAKE, SW-505	EA	2	0	2
12	2435-0250510	INTAKE, SW-505 MODIFIED	EA	1	0	1
13	2435-0251224	INTAKE, SW-512, 24 IN.	EA	0	2	2
14	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	3090	685	3775
15	2502-8221303	SUBDRAIN OUTLET, DR-303	EA	12	2	14
16	2502-8221305	SUBDRAIN OUTLET, DR-305	EACH	2	0	2
17	2503-0114215	STORM SEWER, GRAVITY MAIN, TRENCHED, RCP, 2000D (CL 3), 15 INCH	LF	0	81	81
18	2503-0114218	STORM SEWER, GRAVITY MAIN, TRENCHED, RCP, 2000D (CL 3), 18 INCH	LF	148	37	185
19	2503-0114230	STORM SEWER, GRAVITY MAIN, TRENCHED, RCP, 2000D (CL 3), 30 INCH	LF	0	68	68
20	2503-0114236	STORM SEWER, GRAVITY MAIN, TRENCHED, RCP, 2000D (CL 3), 36 INCH	LF	38	311	349
21	2503-0114242	STORM SEWER, GRAVITY MAIN, TRENCHED, RCP, 2000D (CL 3), 42 INCH	LF	64	451	515
22	2503-0114248	STORM SEWER, GRAVITY MAIN, TRENCHED, RCP, 2000D (CL 3), 48 INCH	LF	62	436	498
23	2507-3250005	ENGINEERING FABRIC	SY	65	0	65
24	2507-6800061	REVETMENT, CLASS E	TON	100	0	100
25	2523-0000100	LIGHTING POLES	EA	2	1	3
26	2523-0000200	ELECTRICAL CIRCUITS	LF	1025	268	1293
27	2523-0000310	HANDHOLES AND JUNCTION BOXES	EA	2	1	3
28	2523-0000400	CONTROL CABINET	EA	1	0	1
29	2528-2518000	SAFETY CLOSURE	EA	1	0	1
30	2528-8445110	TRAFFIC CONTROL	LS	1	0	1
31	2533-4980005	MOBILIZATION	LS	0.8375	0.1625	1
32	2599-9999010	CONCRETE WASHOUT	LS	1	0	1
33	2601-2634100	MULCHING	AC	2.5	1.5	4
34	2601-2636044	SEEDING AND FERTILIZING (URBAN)	AC	2.5	1.5	4
35	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)	AC	2.5	1.5	4
36	2602-0000020	SILT FENCE	LF	350	100	450
37	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	350	100	450
38	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	35	10	45
39	2602-0000150	STABILIZED CONSTRUCTION ENTRANCE, EC-303	LF	100	0	100
40	2602-0000309	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 INCH DIA.	LF	600	150	750
41	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	600	150	750
42	2602-0010010	MOBILIZATIONS, EROSION CONTROL	EA	3	1	4
43	2602-0010020	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	1	0	1
44	2602-0000530	GRATE INTAKE SEDIMENT FILTER BAG	EACH	4	10	14
45	2602-0000540	MAINTENANCE OF GRATE INTAKE SEDIMENT FILTER BAG	EACH	4	10	14
46	2602-0000550	REMOVAL OF GRATE INTAKE SEDIMENT FILTER BAG	EACH	4	10	14

ADDITIVE ALTERNATE 1 - PAVING EXTENSION

REF. NO.	ITEM CODE	BID ITEM DESCRIPTION	UNITS	DIVISION 1 RISE Quantities	DIVISION 2 Non-Participating Quantities	TOTAL QUANTITIES
A1	2109-8225100	SPECIAL COMPACTION OF SUBGRADE	STA	0	2.75	2.75
A2	2115-0100000	MODIFIED SUBBASE	CY	0	165.9	165.9
A3	2123-7450000	SHOULDER CONSTRUCTION, EARTH	STA	0	6.5	6.5
A4	2210-0475290	BASE MACADAM STONE	TON	0	42	42
A5	2301-1033080	STANDARD OR SLIP FORM PCC, CL C, CL 3, 8"	SY	0	1336	1336
A6	2502-8212034	SUBDRAIN, LONGITUDINAL, (SHOULDER) 4 IN. DIA.	LF	0	560	560

ESTIMATE REFERENCE INFORMATION
20 West Industrial Center Phase 3 - Contract D RM-2160(618)--9D-31

DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS

REF. NO.	DESCRIPTION
1	SEE TYPICAL SECTION ON SHEET B.1 FOR LOCATION. APPLIES UNDER MODIFIED SUBBASE PLACED FOR PCC PAVEMENT TO A DEPTH OF 1' BELOW BOTTOM OF THE MODIFIED SUBBASE.
2	TO BE USED AS BASE MATERIAL UNDER ROADWAY AS SHOWN ON THE TYPICAL SECTIONS ON B.1. ALSO PLACED AS GRANULAR SURFACING AT THE WEST END OF PROPOSED PAVING OPERATIONS IF ADDITIVE ALTERNATE 1 IS NOT SELECTED. SEE PCC PAVEMENT TABULATION ON C SHEETS.
3	FOR USE CONSTRUCTING EARTH SHOULDER ADJACENT TO CURB ALONG THE ROADWAY, AS INDICATED IN THE TYPICAL SECTION ON SHEET B.1. TOPSOIL MATERIAL MAY BE USED FOR FULL DEPTH OF MATERIAL ADJACENT TO PAVEMENT AS WELL AS THE TOP 4 INCHES AT THE SURFACE. PROVIDING, HAULING, AND PLACING MATERIAL FOR PLACEMENT AS PART OF EARTH SHOULDER CONSTRUCTION IS INCIDENTAL TO THIS ITEM. SUFFIENT MATERIAL, ESTIMATED TO BE 910 CY, IS ANTICIPATED TO BE AVAILABLE STOCKPILED NEAR THE PROJECT AREA AS PART OF PREVIOUS CONTRACT WORK AS SHOWN ON SHEET A.3.
4	FOR USE AT LOCATIONS AS DIRECTED BY THE ENGINEER WHERE SUBGRADE IS NOT STABLE AFTER PROOF ROLLING. MATERIAL MAY INCLUDE FINES. SEE SUBGRADE STABILIZATION DETAIL ON SHEET B.2.
5	SEE TYPICAL SECTION ON B.1 AND LOCATIONS ON THE D SHEETS. TYPICAL JOINT TYPES ARE NOTED ON SHEET B.1. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION.
6	SEE D AND M SHEETS FOR TABULATION AND LOCATION. APRON SHALL BE TIED TO ADJACENT PIPE SECTION PER DETAIL ON SHEET B.2. MATERIALS AND INSTALLATION FOR PIPE CONNECTORS ARE INCIDENTAL TO THIS ITEM.
7	SEE D AND M SHEETS FOR TABULATION AND LOCATION. APRON SHALL BE TIED TO ADJACENT PIPE SECTION PER DETAIL ON SHEET B.2. PROVIDE APRON FOOTING PER DETAIL ON SHEET B.3. MATERIALS AND INSTALLATION FOR APRON FOOTING AND PIPE CONNECTORS ARE INCIDENTAL TO THIS ITEM. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS.
8	SEE D AND M SHEETS FOR TABULATION AND LOCATION. APRON TYPE INCLUDES ENDWALL PER DR-205, SEE DETAIL ON SHEET M.3 FOR ADDITIONAL INFORMATION. APRON SHALL BE TIED TO ADJACENT PIPE SECTION PER DETAIL ON SHEET B.2. PROVIDE APRON FOOTING PER DETAIL ON SHEET B.3. MATERIALS AND INSTALLATION FOR APRON FOOTING AND PIPE CONNECTORS ARE INCIDENTAL TO THIS ITEM. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS.
9	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS.
10	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS. SEE DETAIL ON SHEET B.2.
11	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS.
12	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS. SEE DETAIL ON SHEET B.2.
13	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS.
14	INCLUDES STADARD ROADWAY SUBDRAIN. SEE D SHEETS FOR LOCATIONS. DR-303, TYPE 12 INSTALLATION.
15	SEE M SHEETS FOR LOCATIONS. FOR CONNECTION OF SUBDRAIN TO INTAKE STRUCTURES AS NOTED.
16	SEE D SHEETS FOR LOCATIONS. FOR OULETTING SUBDRAIN TO DITCH. TYPE A INSTALLATION.
17	SEE M SHEETS FOR TABULATION AND LOCATIONS.
18	SEE M SHEETS FOR TABULATION AND LOCATIONS.
19	SEE M SHEETS FOR TABULATION AND LOCATIONS. BID ITEM SHALL INCLUDE MATERIALS AND INSTALLATION FOR CONNECTED PIPE JOINTS PER DR-121 FOR THE FIRST THREE PIPE SECTIONS ADJACENT TO CONCRETE APRONS ON PIPE RUNS WITH AN APRON. USE TYPE 3 CONNECTIONS.
20	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS.
21	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS. BID ITEM SHALL INCLUDE MATERIALS AND INSTALLATION FOR CONNECTED PIPE JOINTS PER DR-121 FOR THE FIRST THREE PIPE SECTIONS ADJACENT TO CONCRETE APRONS ON PIPE RUNS WITH AN APRON. USE TYPE 3 CONNECTIONS.
22	SEE D AND M SHEETS FOR TABULATION AND LOCATIONS. BID ITEM SHALL INCLUDE MATERIALS AND INSTALLATION FOR CONNECTED PIPE JOINTS PER DR-121 FOR THE FIRST THREE PIPE SECTIONS ADJACENT TO CONCRETE APRONS ON PIPE RUNS WITH AN APRON. USE TYPE 3 CONNECTIONS.
23	PLACED UNDER CLASS E REVETMENT AT OUTLET LOCATIONS FOR STORM SEWER. SEE SHEET D.2 FOR PLACEMENT AREAS.
24	FOR USE AT OUTLET LOCATIONS FOR STORM SEWER. SEE SHEET D.2 FOR PLACEMENT AREAS.
25	SEE P SHEETS FOR LOCATIONS AND SHEET C.3 FOR TABULATIONS. INCLUDES BREAKAWAY BASE ASSEMBLY. LIGHT POLE FOUNDATION SHALL BE CONCRETE. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR CAST IN PLACE COMPONENTS.
26	SEE P SHEETS FOR LOCATIONS AND SHEET C.3 FOR TABULATIONS. INCLUDES CONDUCTORS, CONDUIT, TRENCHING AND BACKFILL. VERTICAL RUNS ARE INCIDENTAL TO THE BID ITEMS.
27	SEE P SHEETS FOR LOCATIONS AND SHEET C.3 FOR TABULATIONS. USE TYPE 2 PER LI-103
28	SEE P SHEETS FOR LOCATION AND SHEET P.3 FOR DETAILS.
29	TO BE INSTALLED AT THE EXISTING END OF PAVEMENT ON INDUSTRIAL PARKWAY AS NOTED ON SHEET D.2.
30	SEE TABULATION OF STANDARD ROAD PLANS ON SHEET C.3. INCLUDES INSTALLATION OF "ROAD CLOSED AHEAD" SIGN 100 FEET IN ADVANCE OF THE SAFETY CLOSURE NOTED ON SHEET D.2, OTHER TC-252 SIGNAGE NOT REQUIRED. ALSO INCLUDES REMOVAL OF EXISTING BARRICADE LOCATED IN GRAVEL TURNAROUND AT WEST END OF EXISTING INDUSTRIAL PARKWAY PAVEMENT.

ESTIMATE REFERENCE INFORMATION
20 West Industrial Center Phase 3 - Contract D RM-2160(618)--9D-31

DATA BELOW IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A BASIS FOR EXTRA WORK ORDER REQUESTS

REF. NO.	DESCRIPTION
31	OTHER WORK MAY BE OCCURING IN THE PROJECT AREA AS PART OF OTHER CONTRACTS, SEE SHEET A.3 FOR ADDITIONAL INFORMATION. THE CONTRACTOR IS RESPONSBILE FOR COORDINATION BETWEEN CONTRACTORS TO ENSURE THEIR SCHEDULE, ACCESS, AND OTHER CONSTRUCTION NEEDS ARE MET.
32	FOR FURNISHING PERIODIC CLEANING AND MAINTENANCE OF THE WASHOUT AREA AS DIRECTED BY THE ENGINEER. SEE DETAIL ON SHEET RR.1. CONCRETE WASHOUTS SHALL BE MAINTAINED THROUGH THE DURATION OF THE PROJECT. CONCRETE WASHOUT LOCATION SHALL BE NOTED IN THE SWPPP. METHOD OF MEASUREMENT AND BASIS OF PAYMENT SHALL BE LUMP SUM. INCLUDES INSTALLATION, MAINTAINING WASHOUT AND SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED TO INSTALL AND MAINTAIN THE CONCRETE WASHOUT.
33	ALL DISTURBED AREAS WITHOUT PAVING OR STONE. HYDROMULCHING IS ALLOWED.
34	ALL DISTURBED AREAS WITHOUT PAVING OR STONE.
35	FOR USE AT DISTURBED LOCATIONS THAT WILL NOT BE SEEDED OR SURFACED WITH PAVEMENT OR STONE WITHIN THE TIMEFRAME ALLOWED BY THE NPDES PERMIT.
36	FOR USE ON SLOPES TO PREVENT EROSION AND AS PERIMETER CONTROL TO PREVENT SEDIMENT FROM LEAVING SITE. PRELIMINARY DEVICE LOCATIONS ARE SHOWN ON THE RR SHEETS. PRIOR TO PLACEMENT, VERIFY LOCATIONS WITH THE ENGINEER.
37	REMOVE DEVICES ONLY AS DIRECTED BY THE ENGINEER. OWNER MAY CHOOSE TO REMOVE SOME OR ALL OF THE DEVICES.
38	- -
39	SEE SHEET RR.2 FOR SUGGESTED INSTALLATION LOCATION.
40	FOR USE IN GRADED AREAS TO PREVENT EROSION AND TO PREVENT SEDIMENT FROM LEAVING SITE. PRELIMINARY DEVICE LOCATIONS ARE SHOWN ON THE RR SHEETS. PRIOR TO PLACEMENT, VERIFY LOCATIONS WITH THE ENGINEER.
41	REMOVE DEVICES ONLY AS DIRECTED BY THE ENGINEER. OWNER MAY CHOOSE TO REMOVE SOME OR ALL OF THE DEVICES.
42	WILL BE BY COUNT FOR EACH MOBILIZATION IN THE ACCEPTED ECIP AND ACCEPTABLY PERFORMED, AS WELL AS ADDITIONAL MOBILIZATIONS ORDERED OR APPROVED BY THE ENGINEER AND ACCEPTABLY PERFORMED.
43	USED FOR A SUDDEN OCCURRENCE OF A SERIOUS AND URGENT NATRUE WHICH IS BEYOND NORMAL MAINTENANCE OF EROSION CONTROL ITEMS.
44	PER STANDARD ROAD PLAN EC-604, INSTALL ON INTAKES AND DRAINAGE STRUCTURES AFTER THE GRATES ARE INSTALLED. METHOD OF MEASUREMENT SHALL BE BY EACH GRATE SEDIMENT FILTER BAG INSTALLED AS MEASURED BY THE ENGINEER. BASIS OF PAYMENT INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT FOR THE INSTALLATION OF THE GRATE SEDIMENT FILTER BAG IN ACCORDANCE WITH EC-604.
45	MAINTENANCE INCLUDES REMOVAL AND DISPOSAL OF SILT MATERIAL TRAPPED BY THE FILTER BAG, WITHOUT ALLOWING THE MATERIAL TO BE DISCHARGED INTO THE INTAKE OR MANHOLE. METHOD OF MEASUREMENT SHALL BE FOR EACH TIME MAINTENANCE AND CLEANING IS REQUIRED BY THE ENGINEER. BASIS OF PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT TO CLEAN THE FILTER BAG AND DISPOSE OF THE MATERIAL.
46	REMOVAL INCLUDES REMOVAL OF THE FILTER BAG, WITHOUT ALLOWING ANY TRAPPED SILT MATERIAL TO BE DISCHARGED INTO THE INTAKE OR MAHNOLE. METHOD OF MEASUREMENT SHALL BE FOR REMOVAL OF EACH GRATE SEDIMENT FILTER BAG AS MEASURED BY THE ENGINEER. BASIS OF PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT TO REMOVE THE FILTER BAG AND DISPOSE OF IT AND ANY TRAPPED MATERIAL.

ADDITIVE ALTERNATE 1 - PAVING EXTENSION

REF. NO.	DESCRIPTION
A1	SEE TYPICAL SECTION ON SHEET B.1 FOR LOCATION. APPLIES UNDER MODIFIED SUBBASE PLACED FOR PCC PAVEMENT TO A DEPTH OF 1' BELOW BOTTOM OF THE MODIFIED SUBBASE.
A2	TO BE USED AS BASE MATERIAL UNDER ROADWAY AS SHOWN ON THE TYPICAL SECTIONS ON B.1. IF ADDITIVE ALTERNATE 1 IS SELECTED, UTILIZE MATERIAL FOR GRANULAR SURFACING AT WEST END OF BASE BID PAVING FOR ADDITIONAL PAVING BASE INSTEAD.
A3	FOR USE CONSTRUCTING EARTH SHOULDER ADJACENT TO CURB ALONG THE ROADWAY, AS INDICATED IN THE TYPICAL SECTION ON SHEET B.1. TOPSOIL MATERIAL MAY BE USED FOR FULL DEPTH OF MATERIAL ADJACENT TO PAVEMENT AS WELL AS THE TOP 4 INCHES AT THE SURFACE. PROVIDING, HAULING, AND PLACING MATERIAL FOR PLACEMENT AS PART OF EARTH SHOULDER CONSTRUCTION IS INCIDENTAL TO THIS ITEM. SUFFIENT MATERIAL, ESTIMATED TO BE 165 CY, IS ANTICIPATED TO BE AVAILABLE STOCKPILED NEAR THE PROJECT AREA AS PART OF PREVIOUS CONTRACT WORK AS SHOWN ON SHEET A.3.
A4	FOR USE AT LOCATIONS AS DIRECTED BY THE ENGINEER WHERE SUBGRADE IS NOT STABLE AFTER PROOF ROLLING. MATERIAL MAY INCLUDE FINES. SEE SUBGRADE STABILIZATION DETAIL ON SHEET B.2.
A5	SEE TYPICAL SECTION ON B.1 AND LOCATIONS ON THE D SHEETS. TYPICAL JOINT TYPES ARE NOTED ON SHEET B.1. CONTRACTOR SHALL SUPPLY CERTIFIED PLANT INSPECTION.
A6	INCLUDES STADARD ROADWAY SUBDRAIN. SEE D SHEETS FOR LOCATIONS. DR-303, TYPE 12 INSTALLATION.

LIGHTING CONDUIT

This Data Entry Sheet fills Tab 108-2A effective 08-01-08

	Handholes			Conduits						
	No.	Station	LI-103 Type	Conduit No.	Location From	Location To	Conduit Type	Dia. IN	Length	Notes
NON RISE	HH1	413+80.81, 24.5' RT	II	**E1	LP1	HH1	HDPE	2.0	6.0	CIRCUIT A * 6' NON RISE
RISE	HH2	419+51.95, 29.5' RT	II	E2	HH1	HH2	HDPE	2.0	570.0	CIRCUIT A * 262' NON RISE 308' RISE
RISE	HH3	426+54.98, 24.5' RT	II	**E3	HH2	LP2	HDPE	2.0	5.0	CIRCUIT A * 5' RISE
				E4	HH2	HH3	HDPE	2.0	702.0	CIRCUIT A * 702' RISE
				**E5	HH3	LP3	HDPE	2.0	5.0	CIRCUIT A * 5' RISE
				E6	HH3	CP1	HDPE	2.0	5.0	CIRCUIT A * 5' RISE
		Non Rise	1							
		Rise	2							TOTAL 1293' 268' NON RISE 1025' RISE

* CIRCUIT A SHALL BE (2) #10 xHHW COPPER AND (1) #10 xHHW COPPER GROUND.
** INCLUDE ADDITIONAL SPARE CONDUIT.

GENERAL NOTES:

1. ALL UNSALVAGEABLE MATERIAL AND RUBBLE GENERATED DURING THIS PROJECT SHALL BE DISPOSED OF OFF THE HIGHWAY RIGHT-OF-WAY IN A WASTE AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE WASTED MATERIAL MUST NOT CREATE AN UNSIGHTLY CONDITION WHEN VIEWED FROM PUBLIC HIGHWAYS. REMOVALS AND DISPOSALS SHALL BE IN ACCORDANCE WITH SECTION 2401 OF THE STANDARD SPECIFICATIONS. ALSO, ALL EXCESSIVE EXCAVATED MATERIAL AND UNSUITABLE MATERIAL FOR BACKFILL WILL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE DISPOSED OF OFF SITE. ALL BORROW MATERIAL SHALL BE SUPPLIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
2. NO EXTRA PAYMENT IS ALLOWED FOR COLD WEATHER PROTECTION DURING CONSTRUCTION. WORKING DAYS WILL BE CHARGED OVER THE WINTER.
3. CITY OF DYERSVILLE WILL PROVIDE THE CONSTRUCTION STAKING FOR USE BY THE CONTRACTOR.
4. ROAD CONTRACTOR IS TO USE DUE CAUTION IN WORKING OVER AND AROUND ALL TILE LINES. BREAKS IN THE TILE LINE DUE TO THE CONTRACTOR'S CARELESSNESS ARE TO BE REPLACED AT THE CONTRACTOR'S EXPENSE WITHOUT COST TO CITY OF DYERSVILLE. ANY TILE LINES BROKEN OR DISTURBED BY DESIGNATED CUT LINES WILL BE REPLACED AS DIRECTED BY THE ENGINEER AND PAID PER LINEAR FOOT OF SUBDRAIN ITEM.

105-4
10-18-11

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this project.

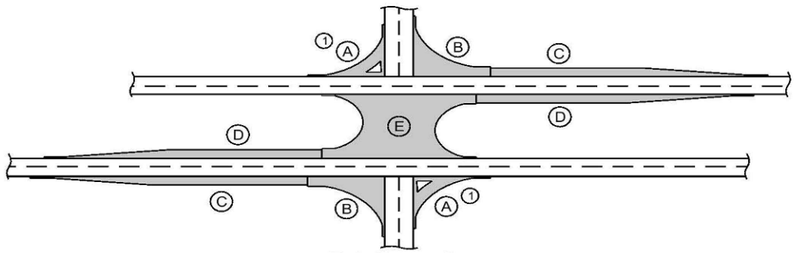
Number	Date	Title
DR-201	10-17-23	Concrete Aprons
DR-205	10-17-23	Concrete Apron with End Wall
DR-303	10-17-17	Subdrains (Longitudinal)
DR-305	04-19-22	Subdrain Outlets (Standard Subdrain, Pressure Release and Special)
EC-201	04-20-21	Silt Fence
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
EC-303	10-19-21	Stabilized Construction Entrance
EC-604	10-17-23	Grate Intake Sediment Filter Bag
EW-403	04-18-17	Temporary Erosion Control Measures
PV-101	04-19-22	Joints
LI-101	10-21-14	Light Pole Location
LI-103	04-19-22	Conduit and Precast Handholes
LI-201	04-18-17	Light Pole Foundation
PV-102	04-21-20	PCC Curb Details
SW-102	04-20-21	Rigid Gravity Pipe Trench Bedding
SW-211	04-17-18	Storm Sewer Pipe Connections
SW-501	04-21-20	Single Grate Intake
SW-505	04-21-20	Double Grate Intake
SW-512	04-21-20	Circular Area Intake
SW-514	04-17-18	Boxouts for Grate Intakes
SW-603	10-16-18	Castings for Grate Intakes
SW-604	04-21-20	Castings for Area Intakes
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-252	04-21-20	Routes Closed to Traffic

LIGHTING INSTALLATIONS

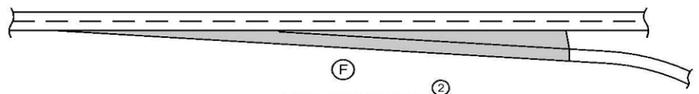
This Data Entry Sheet fills Tab 108-1 effective 10-21-14

Location		LI-101			LI-201	Remarks	
No.	Station	Type		E FT	Type		
LP1	413+74.98, 24.50' R	2		6.0	A	30-8-III-X-LP1	NON RISE
LP2	419+51.95, 24.50' R	2		6.0	A	30-8-III-X-LP2	RISE
LP3	426+59.99, 24.50' R	2		6.0	A	30-8-III-X-LP3	RISE

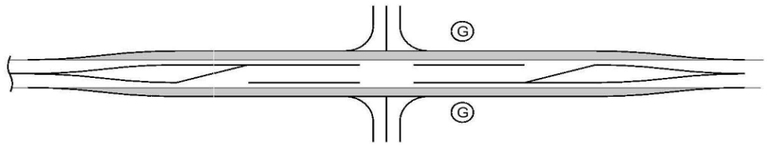
PCC PAVEMENT



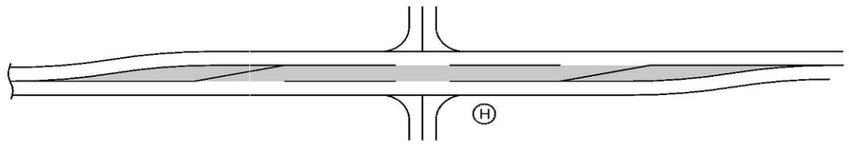
Typical Intersection



Ramp or Loop Taper (2)



Channelized Intersection
Widen Existing Roadway



Channelized Intersection
Reconstructed Roadway

Location				Mainline			Area (3)								Total Area By Pavement Thickness	Special Backfill	Modified Subbase 6"	Modified Subbase 14"	Remarks
Road Identification	Direction of Travel	Station to Station		Width	Length	Area	A (1)	B	C	D	E	F (2)	G	H	8 IN				
				FT	FT	SY	SY	SY	SY	SY	SY	SY	SY	SY	SY	TONS	CY	CY	
ALTERNATE	W & E	410+25.00	413+50.00	37.0	325.0	1336.1									1336.1		258.8		DIVISION 2 NON-RISE
TEMPORARY ROCK TURN-AROUND	W & E	413+00.00	413+50.00	43.0	50.0	238.9												92.9	DIVISION 2 NON-RISE
INDUSTRIAL PARKWAY	W & E	413+50.00	416+42.50	37.0	292.5	1202.5									1202.5		232.9		DIVISION 2 NON-RISE
INDUSTRIAL PARKWAY	W & E	416+42.50	431+50.00	37.0	1507.5	6197.5									6197.5		1200.4		DIVISION 1 RISE

ROADWAY QUANTITY TOTAL				
TYPE	DIVISION 1 RISE TOTAL	DIVISION 2 NON RISE TOTAL	DIVISION 2-TURNAROUND NON RISE TOTAL	DIVISION 2-ALTERNATE NON RISE TOTAL
8" PCC SY	6198	1203		1336
MOD SUBBASE CY	1200.4	232.9	92.9	165.9

RM-2160(618)--9D-31

POLLUTION PREVENTION PLAN

This Data Entry Sheet fills Tab 110-12L effective 10-20-20

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed during construction, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The Contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

I. ROLES AND RESPONSIBILITES

A. Designer:
1. Prepares Base PPP included in the project plan.
2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
3. Is signature authority on the Base PPP. If consultant designed, signature from Contracting Authority is also required.

B. Contractor:
1. Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications.
3. Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications.
4. Installs and maintains appropriate controls. This work may be subcontracted as documented through Subcontractor Request Forms (Form 830231).
5. Supervises and implements good housekeeping practices according to Paragraph III, C, 2.
6. Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports.
7. Complies with training and certification requirements of Section 2602 of the Standard Specifications.
8. Submits amended PPP site map according to Section 2602 of the Standard Specifications.

C. Subcontractors:
1. Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if: responsible for sediment or erosion controls; involved in land disturbing activities; or performing work that is a source of potential pollution as defined in this PPP. Subcontracted work items are identified in Subcontractor Request Forms (Form 830231). All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Implement good housekeeping practices according to Paragraph III, C, 2.

D. RCE/Project Engineer:
1. Is Project Storm Water Manager.
2. Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit compliance.
3. Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit.
4. Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and subcontractors.
5. Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements.
6. Is familiar with the Project PPP and storm water site map.
7. Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements.
8. Is signature authority on Notice of Discontinuation.
9. Maintains an up-to-date record of contractors, subcontractors, and subcontracted work items through Subcontractor Request Forms (Form 830231).
10. Makes information to determine permit compliance available to the DNR upon their request.

E. Inspector:
1. Updates PPP through fieldbook entries and storm water site inspection reports if there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project.
2. Makes information to determine permit compliance available to the DNR upon their request.
3. Conducts joint required inspections of the site with the contractor/subcontractor.
4. Completes an inspection report after each inspection.
5. Is signature authority on storm water inspection reports.

II. PROJECT SITE DESCRIPTION

A. This Pollution Prevention Plan (PPP) is for the construction of City of Dyersville, 20 West Industrial Center, Phase 3, Contract B.

B. This PPP covers approximately 50 acres with an estimated 3.5 acres being disturbed. The portion of the PPP covered by this contract has *Provide # of Acres* acres disturbed.

C. The PPP is located in an area of 2 soil associations Kenyon-Clyde-Floyd and Dinsdale-Klinger. The estimated weighted average runoff coefficient number for this PPP after completion will be 0.45.

D. Storm Water Site Map - Multiple sources of information comprise the base storm water site map including:
1. Drainage Patterns – Plan and Profile sheets and Situation plans.
2. Proposed Slopes – Cross Sections.
3. Areas of Soil Disturbance – Construction limits shown on Plan and Profile sheets.
4. Location of Structural Controls – Tabulations and plans in RR sheets.
5. Locations of Non-structural Controls – Tabulations and plans in RR sheets.
6. Locations of Stabilization Practices – Generally within construction limits shown on Plan and Profile sheets.
7. Surface Waters (including wetlands) – Project Location Map and Plan and Profile sheets.
8. Locations where Storm Water is Discharged – Plan and Profile sheets.

E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries and amended PPP site map.

F. Runoff from this work will flow into Bear Creek to North Fork Maquoketa River to Middle Fork Catfish Creek to Catfish Creek to Mississippi River.

III. CONTROLS

A. The Contractor's ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented.

B. Preserve vegetation in areas not needed for construction.

C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries, amended PPP site map, or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water site inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications.

1. EROSION AND SEDIMENT CONTROLS

a. Stabilization Practices
1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
a) Permanently ceased on any portion of the site, or
b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
4) Permanent and Temporary Stabilization practices to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C sheets.
5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets. Additional information may be found in Tabulations in the C or T sheets or is referenced in Section 2105 of Standard Specifications.

b. Structural Practices
1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.
2) Structural practices to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found in the B sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C sheets.

c. Storm Water Management
Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C sheets. The installation of these devices may be subject to Section 404 of the Clean Water Act.

2. OTHER CONTROLS
Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive applicable laws, rules or regulations shall apply.
a. Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
b. Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
c. Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
d. Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
e. Spill Prevention and Control - Implement chemical spill and leak prevention and response procedures to contain and clean up spills and prevent material discharges to the storm drain system and waters of the state.
f. Concrete Residuals and Washout Wastes - Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
g. Concrete Grooving/Grinding Slurry – Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
h. Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
i. Litter Management - Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
j. Dewatering – Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.

3. APPROVED STATE OR LOCAL PLANS
During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

IV. MAINTENANCE PROCEDURES

The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

NPDES Permit Discharge Authorization Number 41617–41242 Issued for 20 West Industrial Center – Seventh Addition Construction West end of Industrial Parkway SW in the City of Dyersville, Delaware County located at NE 1/4, Section 2, T88N, R3W.
Coverage provided through 8/1/2025

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RM-2160(618)--9D-31

V. INSPECTION REQUIREMENTS

A. Inspections shall be made jointly by the Contractor and the Contracting Authority's inspector at least once every seven calendar days. Storm water site inspections will include:
   1. Date of the inspection.
   2. Summary of the scope of the inspection.
   3. Name and qualifications of the personnel making the inspection.
   5. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
   6. Major observations related to the implementation of the PPP.
   7. Identification of corrective actions required to maintain or modify erosion and sediment control measures.

B. Include storm water site inspection reports in the amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.

VI. NON-STORM WATER DISCHARGES

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.

VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION

Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

VIII. DEFINITIONS

A. Base PPP - Initial Pollution Prevention Plan.
B. Amended PPP - Base PPP amended during construcion. May include Plan Revisions or Contract Modifications for new items, storm water site inspection reports, fieldbook entries made by the inspector, amended PPP site map by the Contractor, ECIP, NOI, co-permittee certifications, and Subcontractor Request Forms. Items amending the PPP are stored electronically and are readily available upon request.
C. Fieldbook Entries – This contains the inspector's daily diary and bid item postings.
D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
E. Signature Authority - Representative authorized to sign various storm water documents.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Mick Michel, City Administrator
Printed or Typed Name

Signature

Jon Lutz, P.E.
Printed or Typed Name

3/19/2024

CONTRACTOR'S CERTIFICATION

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

CONSTRUCTION ACTIVITY ASSOCIATED WITH THE 20 WEST INDUSTRIAL CENTER – PHASE 3 – CONTRACT B, DELAWARE COUNTY, IOWA.

NAME _____ TITLE _____ DATE _____
CONTRACTING FIRM: _____
ADDRESS: _____ TELEPHONE: _____

NAME _____ TITLE _____ DATE _____
CONTRACTING FIRM: _____
ADDRESS: _____ TELEPHONE: _____

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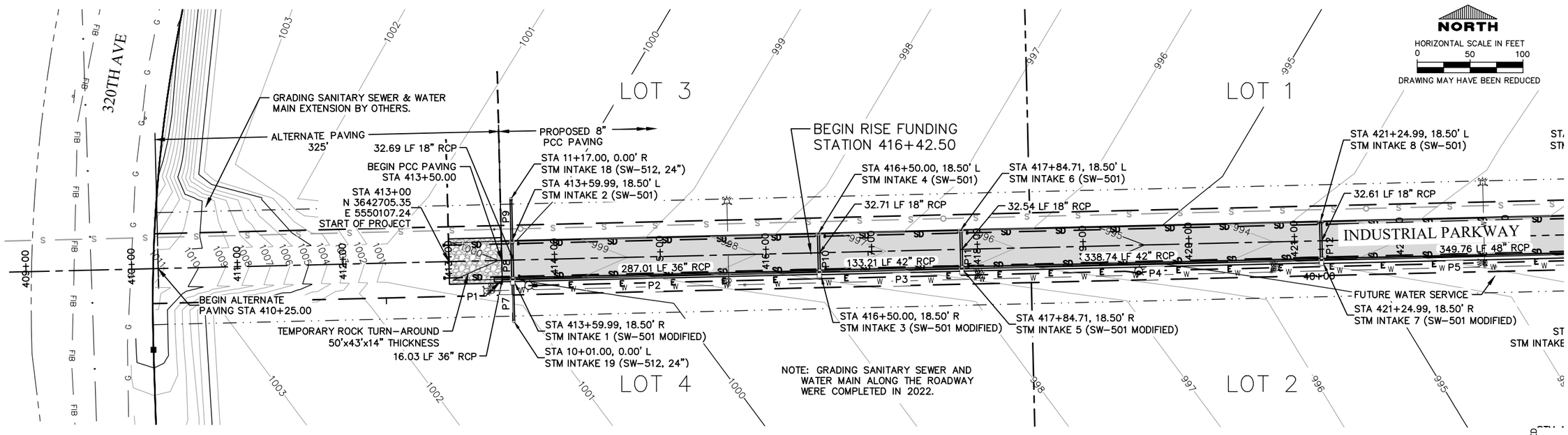
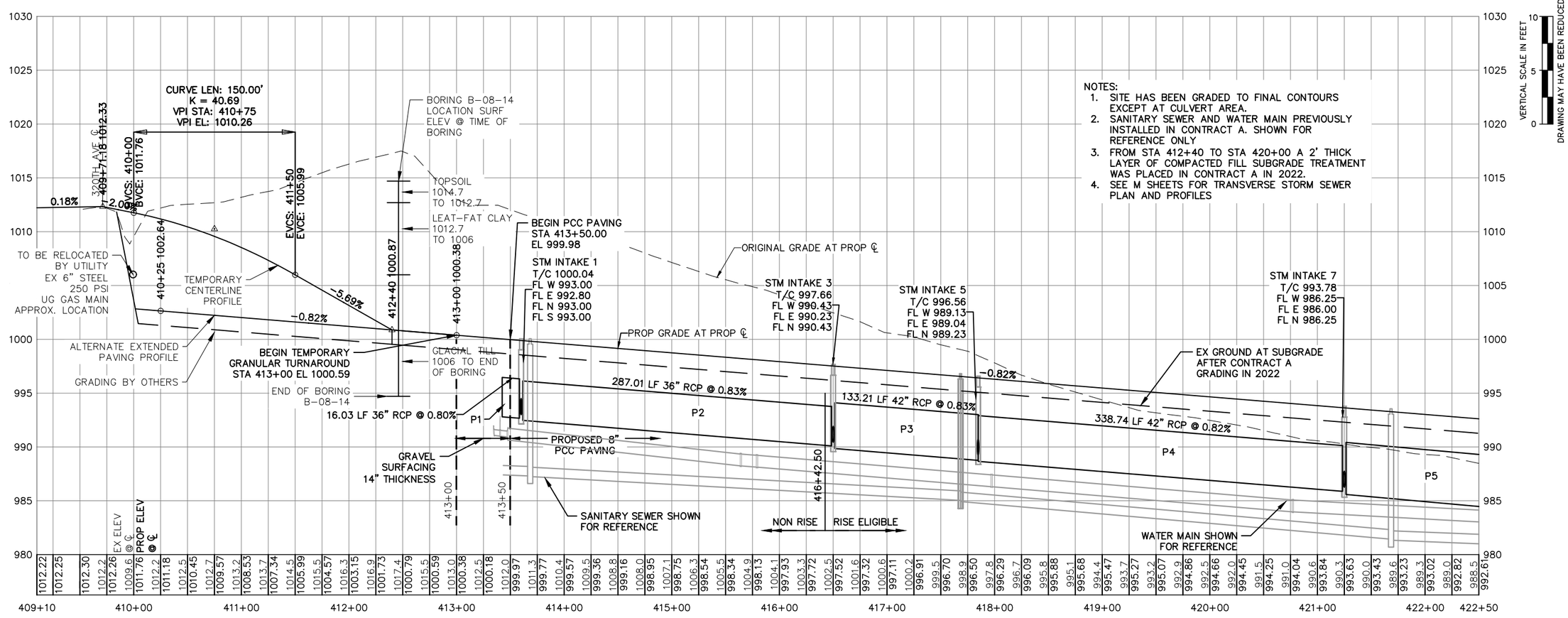
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design® 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	POLLUTION PREVENTION PLAN	03-19-24	C.6

RM-2160(618)--9D-31





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PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	PAVING AND STORM SEWER	03-19-24	D.1

RM-2160(618)--9D-31

NOTE: GRADING SANITARY SEWER AND WATER MAIN ALONG THE ROADWAY WERE COMPLETED IN 2022

LOT 1

LOT 5

NORTH

HORIZONTAL SCALE IN FEET
0 50 100
DRAWING MAY HAVE BEEN REDUCED

STA 421+24.99, 18.50' L
STM INTAKE 8 (SW-501)

32.61 LF 18" RCP

STA 421+24.99, 18.50' R
STM INTAKE 7 (SW-501 MODIFIED)

STA 424+79.23, 18.50' L
STM INTAKE 10 (SW-501)

32.72 LF 18" RCP

STA 424+79.23, 18.50' R
STM INTAKE 9 (SW-505 MODIFIED)

INDUSTRIAL PARKWAY

349.76 LF 48" RCP

141.95 LF 48" RCP @ 2.14%

P5

P6

P13

P14

P15

P16

STA 427+04.46, 86.54' L
STM APRON 5 (DR-205, 30" RCP)

STA 427+28.14, 18.50' L
STM INTAKE 12 (SW-505)

STA 427+28.14, 18.50' R
STM INTAKE 11 (SW-505)

36" RCP

42" RCP

EX. 24" RCP

INSTALLED IN CONTRACT B

CONTRACT A
6" HDPE SUDRAIN
CLASS E REVETMENT 2' THICKNESS OVER ENGINEERING FABRIC (15'x25')

EXISTING REVETMENT (UAC)

CONTRACT D
STA 12+91.62, 0.00' R
STM APRON 6 (DR-201, 48" RCP)
FL= 979.17'

FUTURE STREET

STA 427+28.14, 58.19' R
STM APRON 1 (DR-201, 42" RCP)

CLASS E REVETMENT 2' THICKNESS OVER ENGINEERING FABRIC (10'x20')

INSTALLED IN CONTRACT B

BOX CULVERT INSTALLED IN CONTRACT C

EX. 36" RCP

REMOVE EXISTING GRAVEL TURN-AROUND & BARRICADE

STA 431+50
N 3642749.62
E 5551956.71
EOP - END PCC PAVING

INSTALL SAFETY CLOSURE AT STATION 431+75

(2) SUBDRAIN OUTLET, DR-305, TYPE A

B-08-13

NOTES:
1. SITE HAS BEEN GRADED TO FINAL CONTOURS EXCEPT AT CULVERT AREA.
2. SANITARY SEWER AND WATER MAIN PREVIOUSLY INSTALLED IN CONTRACT A. SHOWN FOR REFERENCE ONLY
3. FROM STA 412+40 TO STA 420+00 A 2' THICK LAYER OF COMPACTED FILL SUBGRADE TREATMENT WAS PLACED IN CONTRACT A IN 2022.
4. SEE M SHEETS FOR TRANSVERSE STORM SEWER PLAN AND PROFILES.

K = 101.61
VPI STA: 424+25
VPI EL: 991.18

CURVE LEN: 200.00'
K = 71.63
VPI STA: 426+84.96
VPI EL: 985.98

CURVE LEN: 100.00'
K = 55.75
VPI STA: 428+94.67
VPI EL: 987.65

CURVE LEN: 100.00'
K = 58.93
VPI STA: 432+86.64
VPI EL: 983.72

BVCS: 423+65
BVCE: 991.67

EVCS: 424+85
EVCE: 989.98

BVCS: 425+84.96
BVCE: 987.98

LPT STA: 427+28.15
LPT EL: 986.55

EVCS: 427+84.96
EVCE: 986.78

BVCS: 428+44.67
BVCE: 987.25

STA 428+77.33
HPT STA: 428+88.89
HPT EL: 987.43

EVCS: 429+44.67
EVCE: 987.15

BVCS: 432+36.64
BVCE: 984.22

LPT STA: 432+95.64
LPT EL: 983.93

EVCS: 433+36.64
EVCE: 984.07

431+50 985.09

434+60.74 984.93

BORING B-08-13
SURF ELEV @ TIME OF BORING

STM INTAKE 9
T/C 990.24
FL W 982.84
FL N 982.33
FL E 982.21

EOLIAN SAND
994
TO
988.5

SANDY LEAN CLAY
988.5 TO 981.5

GLACIAL TILL
981.5
TO
END OF BORING

END OF BORING
B-08-13

349.76 LF 48" RCP @ 0.90%

141.95 LF 48" RCP @ 2.14%

-2.00%

0.79%

-1.00%

-1.00%

0.70%

EX GROUND AT DIRT SUBGRADE AFTER CONTRACT A GRADING

PROP GRADE AT PROP ℄ TOP OF CONCRETE

EX GRADE AT PROP ℄

END PAVING MATCH EXISTING

APRON FOOTING, SEE DETAIL ON SHEET B.3

STA 12+92, 0' R
STM APRON 6 (DR-201, 48" RCP)
FL 979.17

SANITARY SEWER SHOWN FOR REFERENCE

FILL TO BE PLACED BY CONTRACT A CONTRACTOR

TWIN 12X5 RCP CULVERT SHOWN FOR REFERENCE

PROPOSED 8" PCC PAVING

EXISTING 8" PCC PAVING TO REMAIN

WATER MAIN SHOWN FOR REFERENCE

EX ELEV @ ℄	PROP ELEV @ ℄
983.0	990.18
982.3	989.68
981.7	989.18
981.1	988.68
980.7	988.18
980.4	987.70
980.1	987.29
979.8	986.98
979.7	986.75
979.6	986.61
979.4	986.55
979.3	986.58
979.3	986.70
979.2	986.90
978.9	987.09
978.7	987.29
983.5	987.09
982.0	987.41
982.5	987.41
982.5	987.31
984.9	986.84
984.9	986.59
982.4	986.34
985.0	986.09
984.8	985.84
984.3	985.59
984.5	985.34
985.1	985.09
984.9	984.84
984.6	984.59
984.3	984.34
984.1	984.11
984.0	983.97
983.8	983.93
983.9	984.00
984.1	984.16
984.3	984.34
984.4	984.51
984.5	984.69
984.7	984.86
984.8	
985.0	
985.1	
985.2	

422+00 423+00 424+00 425+00 426+00 427+00 428+00 429+00 430+00 431+00 432+00 433+00 434+00 435+00 435+40

1010 1005 1000 995 990 985 980 975 970

VERTICAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

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PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	PAVING AND STORM SEWER	03-19-24	D.2

STORM SEWER

① Diameter or equivalent diameter
* Bid Item
** For SW-545

INTAKES AND UTILITY ACCESSES

No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade Elev.	Bottom Well Elev.	Notes
STM 19	10+01.00	SW-512, 24"	998.5	993.17	NON-RISE, SW-604 TYPE 4B Casting
STM 1	413+59.99	SW-501 MOD	1000.04	992.8	NON-RISE, See Sheet B.2
STM 2	413+59.99	SW-501	1000.04	993.23	NON-RISE, SW-603 Type R Casting
STM 18	11+17.00	SW-512, 24"	998.5	993.62	NON-RISE, SW-604 TYPE 4B Casting
STM 3	416+50.00	SW-501 MOD	997.66	990.23	RISE, See Sheet B.2
STM 4	416+50.00	SW-501	997.66	990.66	RISE, SW-603 Type R Casting
STM 5	417+84.71	SW-501 MOD	996.56	989.04	RISE, See Sheet B.2
STM 6	417+84.71	SW-501	996.56	989.46	RISE, SW-603 Type R Casting
STM 7	421+24.99	SW-501 MOD	993.78	986.0	RISE, See Sheet B.2
STM 8	421+24.99	SW-501	993.78	986.48	RISE, SW-603 Type R Casting
STM 9	424+79.23	SW-505 MOD	990.24	982.21	RISE, See Sheet B.2
AP 6	12+91.62	DR-201, 48"		979.17	RISE, With Apron Footing
STM 10	424+79.23	SW-501	990.24	982.74	RISE, SW-603 Type R Casting
STM 11	427+28.14	SW-505	986.7	979.66	RISE, SW-603 Type R Casting
AP 1	427+28.14	DR-201, 42"		979.5	RISE, With Apron Footing
STM 12	427+28.14	SW-505	986.7	980.46	RISE, SW-603 Type R Casting
AP 5	427+04.46	DR-205, 30"		982.0	NON-RISE, Drop Apron

PIPE

Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 2 ft length is added to each end of the Design Length to account for estimated length to center of structures.

Line Number	Intake/ Utility Access No. From	To	Class 'D'	Pipe ① Diameter IN	Bid* Length FT	Change to 2 if an Apron is used FT	Design Length FT	Slope %	Flow Lines Inlet Elevation	Flow Lines Outlet Elevation	Pipe Profile Sheet No.	Notes RISE	Notes NON-RISE
P7	STM 19	STM 1	2000	15	38	4	34.0	0.5	993.17	993.0	M.2		38
P8	STM 1	STM 2	2000	18	37	4	32.7	0.7	993.23	993.0	M.2		37
P9	STM 2	STM 18	2000	15	43	4	38.6	0.50	993.62	993.43	M.2		43
P1		STM 1	2000	36	19	2	16.0	0.80	993.13	993.0	D.1		19
P2	STM 1	STM 3	2000	36	292	4	287.0	0.83	992.8	990.43	D.1		292
P10	STM 3	STM 4	2000	18	37	4	32.7	0.70	990.66	990.43	M.2	37	
P3	STM 3	STM 5	2000	42	138	4	133.2	0.83	990.23	989.13	D.1	17	121
P11	STM 5	STM 6	2000	18	37	4	32.5	0.70	989.46	989.23	M.2	37	
P4	STM 5	STM 7	2000	42	343	4	338.7	0.82	989.04	986.25	D.1	43	300
P12	STM 7	STM 8	2000	18	37	4	32.6	0.70	986.47	986.25	M.2	37	
P5	STM 7	STM 9	2000	48	354	4	349.8	0.90	986.0	982.84	D.2	44	310
P6	STM 9	AP 6	2000	48	144	2	142.0	2.14	982.21	979.17	D.2	18	126
P13	STM 9	STM 10	2000	18	37	4	32.7	1.27	982.74	982.33	M.3	37	
P14	AP 1	STM 11	2000	42	34	2	31.7	0.50	979.66	979.5	M.3	4	30
P15	STM 11	STM 12	2000	36	38	4	33.2	2.00	980.46	979.8	M.3	38	
P16	STM 12	AP 5	2000	30	68	2	65.9	1.52	981.0	980.46	M.3		68

STRUCTURE QUANTITY TOTAL		
TYPE	DIVISION 1 RISE TOTAL	DIVISION 2 NON RISE TOTAL
SW-501	4	1
SW-501 MOD	3	1
SW-505	2	
SW-505 MOD	1	
SW-512-24"		2
DR-201-18"		0
DR-201-42"	1	
DR-201-48"	1	
DR-205-30"		1

PIPE QUANTITY TABLE				
TYPE	DIVISION 1 RISE TOTAL LONGITUDINAL (66/530)	DIVISION 2 NON RISE TOTAL LONGITUDINAL	DIVISION 1 RISE TOTAL TRANSVERSE	DIVISION 2 NON RISE TOTAL TRANSVERSE
15" RCP				81
18" RCP			148	37
30" RCP				68
36" RCP		311	38	
42" RCP	64	451		
48" RCP	62	436		

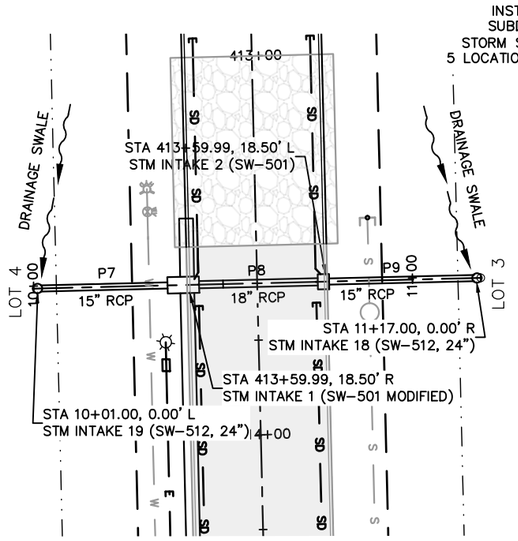
PIPE QUANTITY TABLE												
PIPE SIZE												
	15		18		30		36		42		48	
	RISE	NON RISE	RISE	NON RISE	RISE	NON RISE	RISE	NON RISE	RISE	NON RISE	RISE	NON RISE
P7		38										
P8				37								
P9		43										
P1								19				
P2								292				
P10			37									
P3									17	121		
P11			37						125			
P4									43	300		
P12			37								44	310
P5											18	126
P6												
P13			37									
P14									4	30		
P15							38					
P16						68						
TOTAL	0	81	148	37	0	68	38	311	64	451	62	436

NOTE: DRAINAGE RATIO 66/530± = .125 FOR LONGITUDINAL STORM SEWER

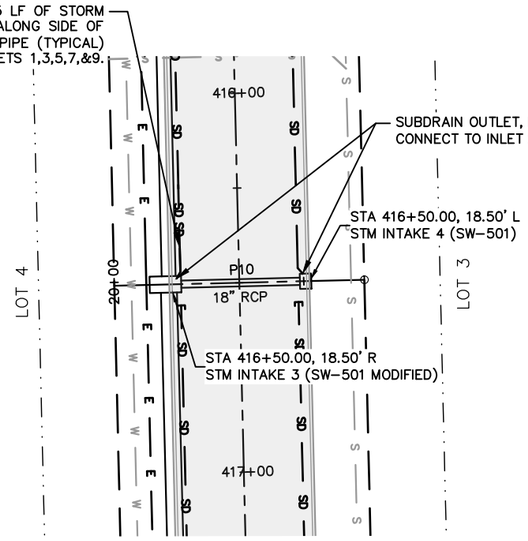
RM-2160(618)--9D-31

NORTH

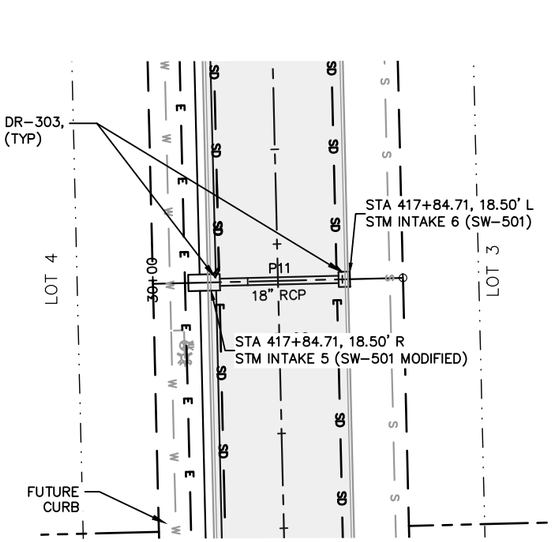
HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED



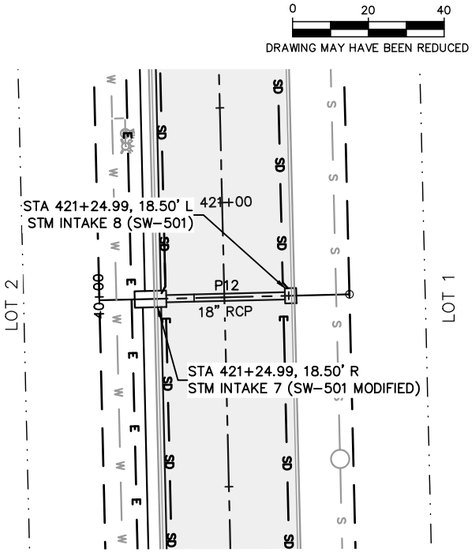
NON RISE



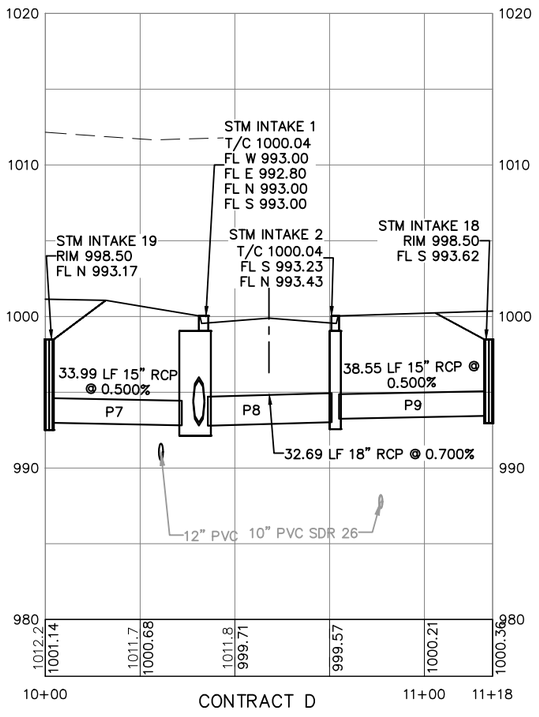
RISE

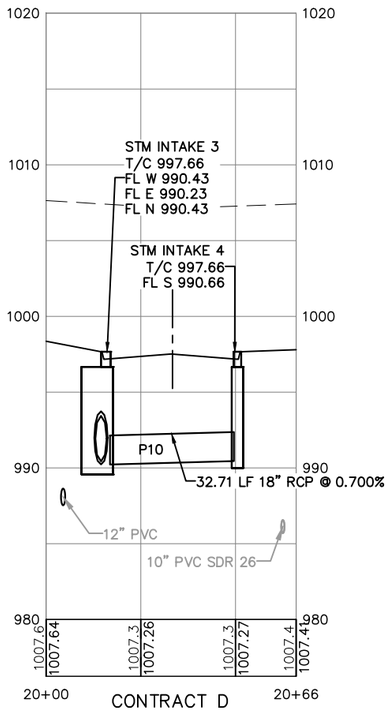


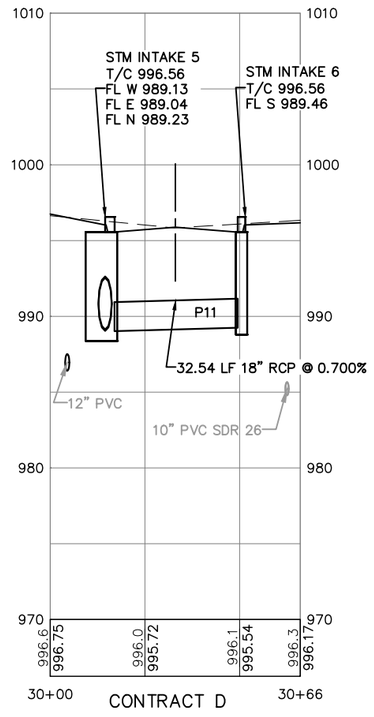
RISE

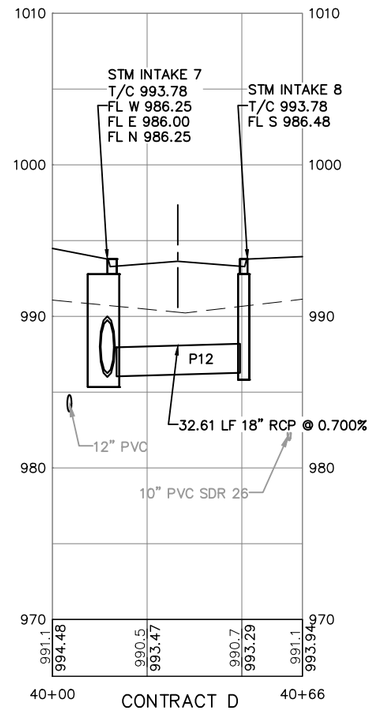


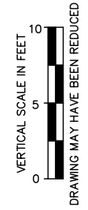
RISE











PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	STORM SEWER PLAN AND PROFILE	03-19-24	M.2

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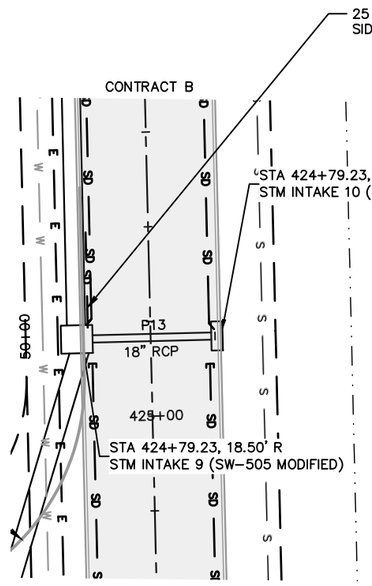
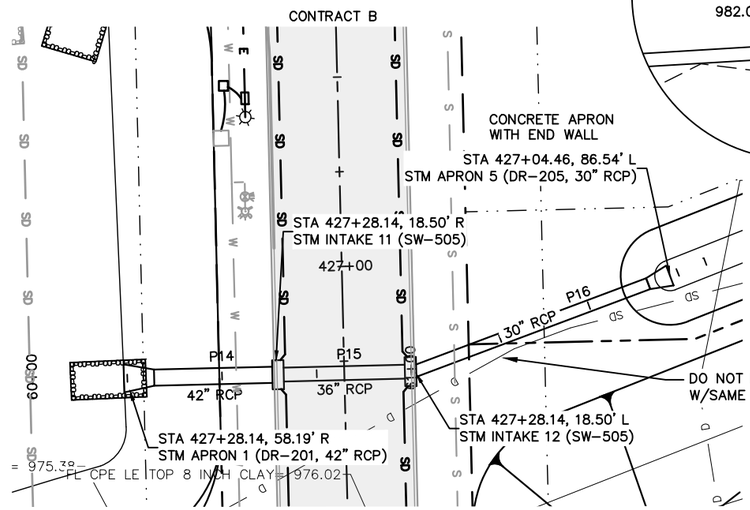
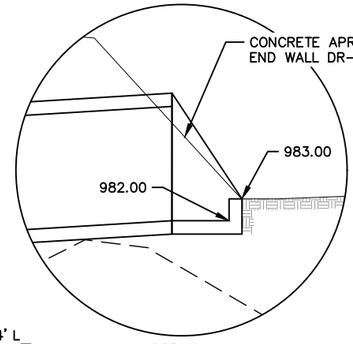
RM-2160(618)--9D-31



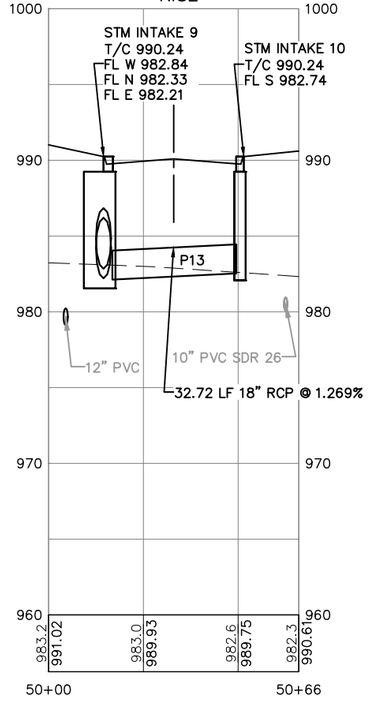




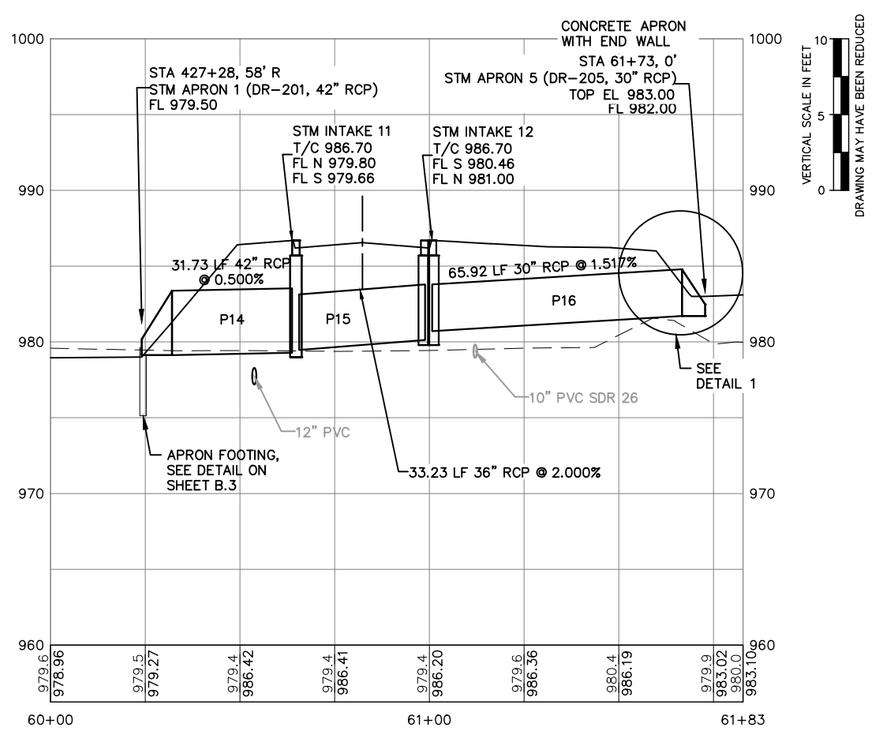
DETAIL 1

NORTH

HORIZONTAL SCALE IN FEET
0 20 40
DRAWING MAY HAVE BEEN REDUCED



CONTRACT D



VERTICAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

CONTRACT D

PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	STORM SEWER PLAN AND PROFILE	03-19-24	M.3

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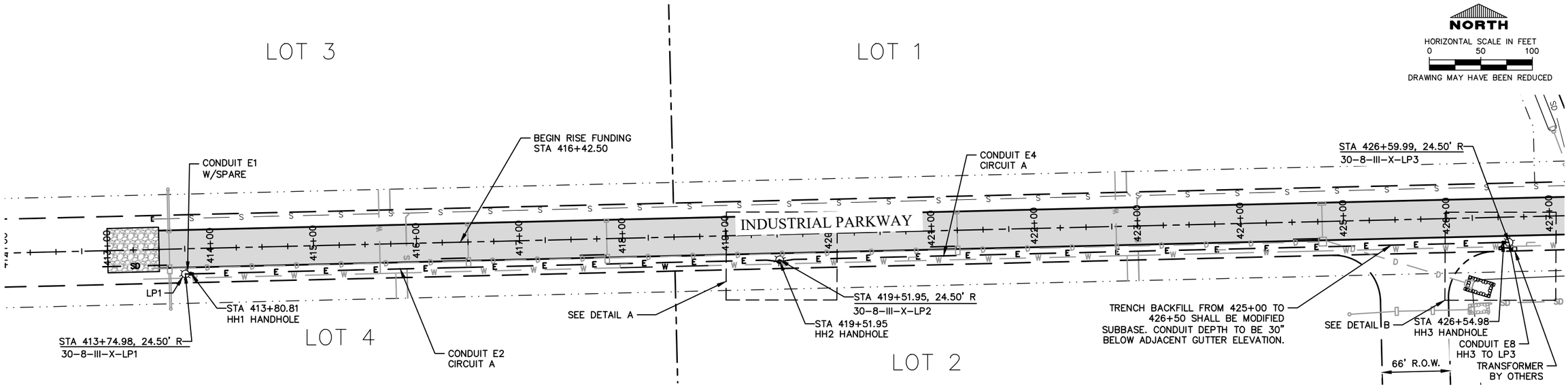
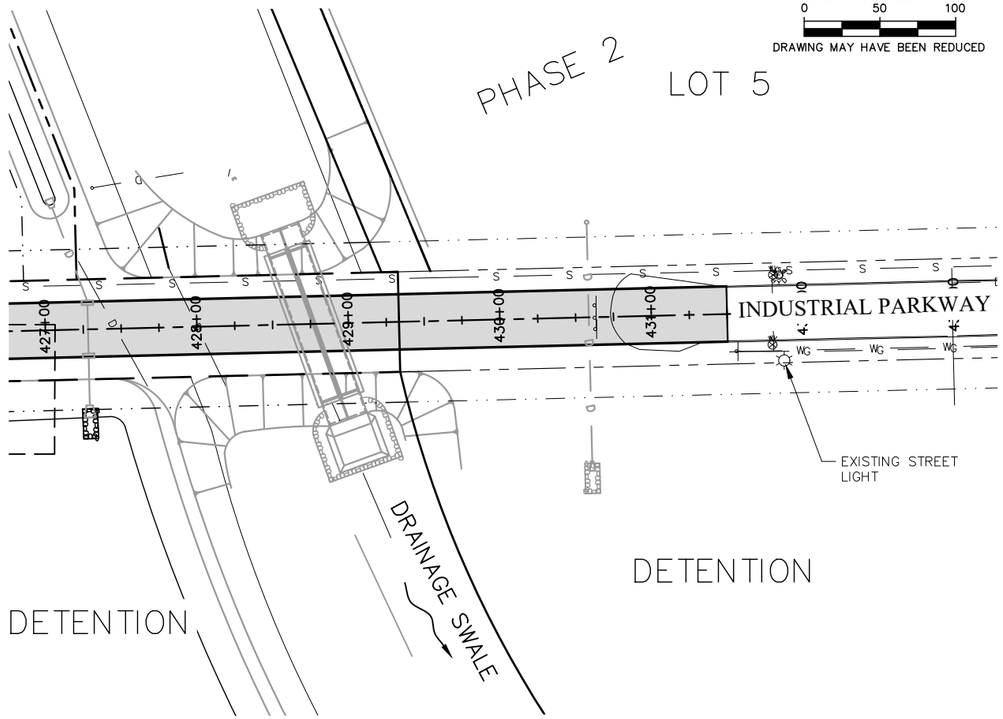
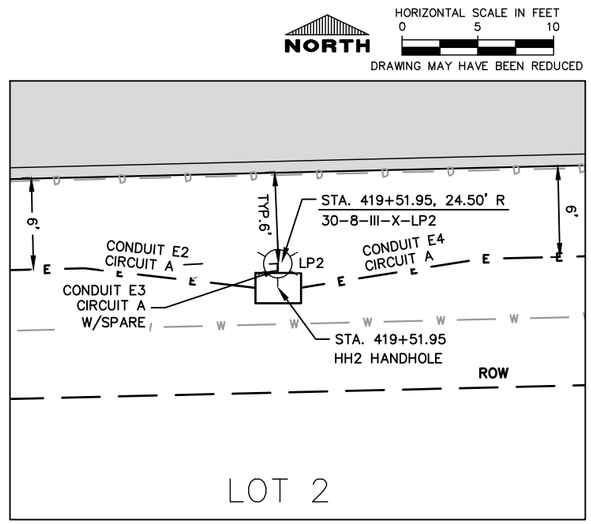
RM-2160(618)--9D-31

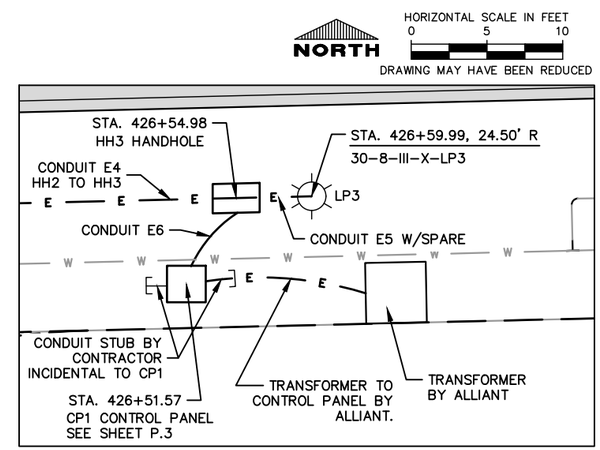


NOTES:
SEE SHEET C.3 FOR LIGHTING CONDUIT TABLE
SEE SHEET C.3 FOR LIGHTING INSTALLATION TABLE
SEE SHEET P.1 FOR CIRCUITS

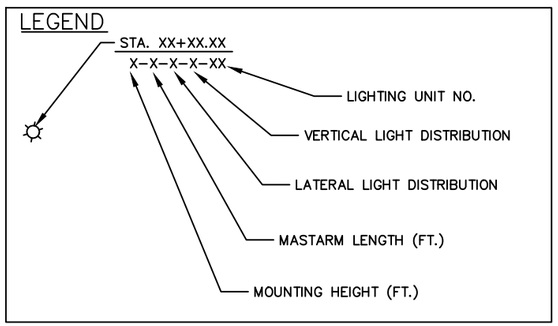




DETAIL A



DETAIL B



LIGHTING AND ELECTRICAL NOTES:

1. CONSTRUCTION SHALL CONFORM TO THE CURRENT IOWA DOT STANDARD SPECIFICATIONS, SPECIAL PROVISION AND CURRENT SUPPLEMENTAL SPECIFICATIONS FOR HIGHWAY LIGHTING, AND THE NATIONAL ELECTRIC CODE.
2. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY CABLE SPLICES, CONNECTOR ASSEMBLIES, AND FUSES AT EACH HANDHOLE OR BASE AS REQUIRED.
3. ALLIANT ENERGY WILL INSTALL A TRANSFORMER AT LOCATION SHOWN ON THE PLANS. CONTRACTOR SHALL INSTALL A COMMERCIAL GRADE WEATHERPROOF METER & CONTROLLER WITH BASE FOR SINGLE PHASE 120/240 VOLTS. PHOTOCELL LIGHT SENSOR FOR LIGHTING CIRCUITS SHALL BE ON CONTROLLER.
4. ALL CONDUIT LENGTHS ARE MEASURED AND PAID BASED UPON THE HORIZONTAL DISTANCE FROM CENTER OF HANDHOLE TO CENTER OF HANDHOLE OR CENTER OF LIGHT BASE OR CENTER OF METER PEDESTAL. VERTICAL RUNS OF WIRE/CONDUIT ARE INCIDENTAL TO ASSOCIATED BID ITEMS.
5. CONDUIT DEPTH OF BURY FOR STREET LIGHTS SHALL BE 30". TRENCH BACKFILL WITHIN 5' OF EXISTING OR PROPOSED PAVEMENT SHALL BE MODIFIED SUBBASE TO WITHIN 6" OF FINISH GRADE OR BOTTOM OF SUBBASE. TRENCH BACKFILL OUTSIDE 5' OF EXISTING OR PROPOSED PAVEMENT MAY BE INSITU MATERIAL ADEQUATELY COMPACTED.

PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	LIGHTING PLAN	03-19-24	P.1

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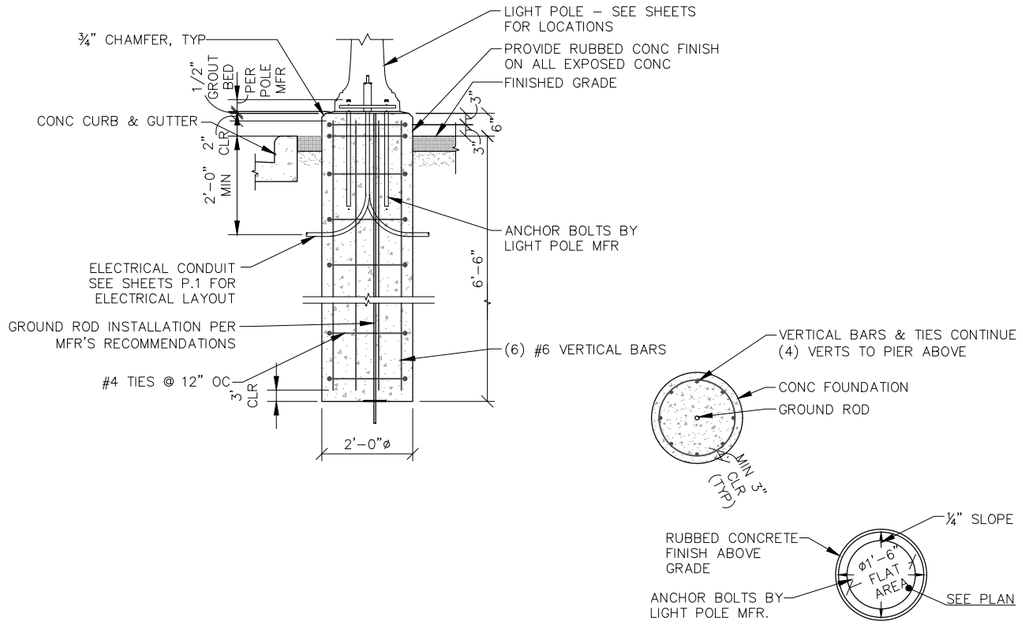
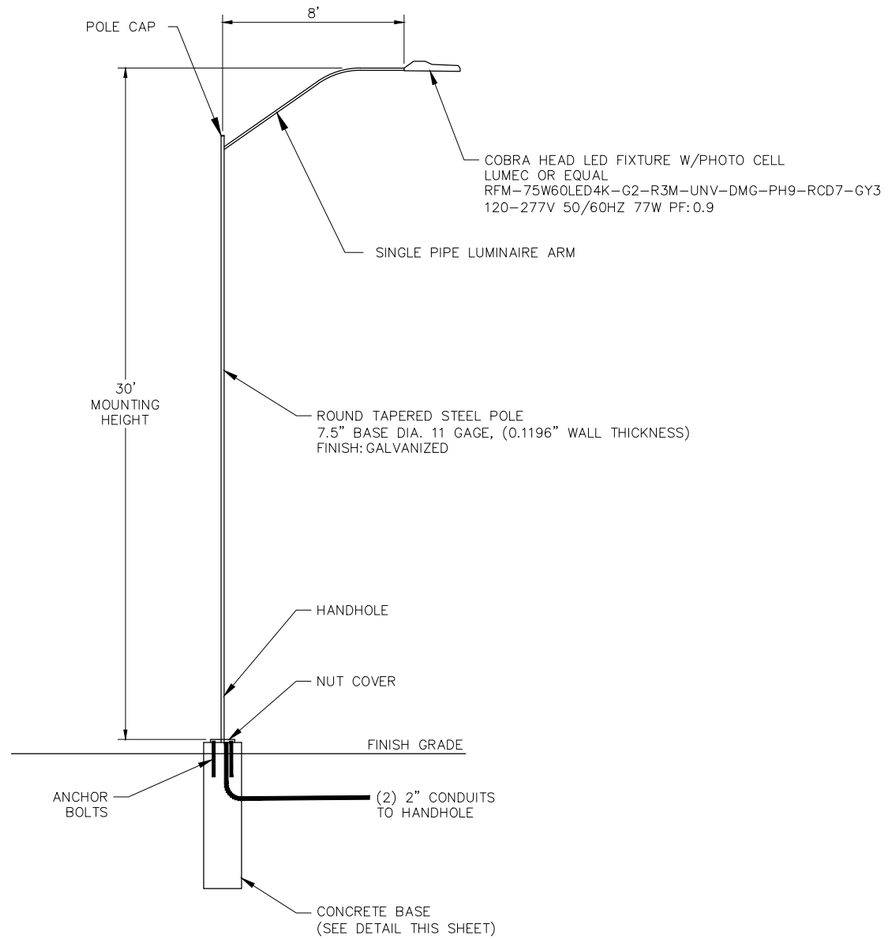


1 P.2 STREET LIGHT FOUNDATION DETAIL

NOT TO SCALE

NOTE

1. STREET LIGHT FOUNDATION SHALL BE 24" DIAMETER BY 84" DEEP PRECAST CONCRETE BASE BY IOWA BASE, INC. OR EQUIVALENT AND IS CONSIDERED INCIDENTAL TO STREET LIGHT.
2. FOUNDATION SHOULD INCLUDE ACCESS HOLES FOR SEPARATE 2" CONDUITS AS SHOWN ON PLANS CONNECTING TO POLE.
3. GROUND ROD IS TO BE PER MANUFACTURER'S RECOMMENDATION AND IS CONSIDERED INCIDENTAL TO STREET LIGHT

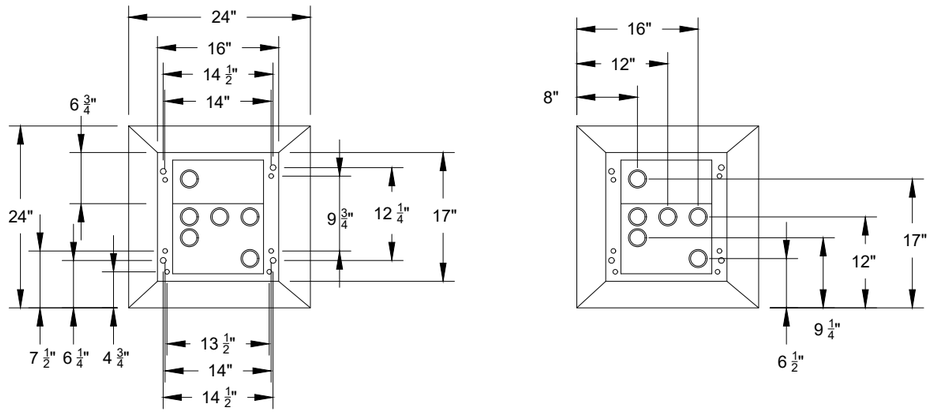


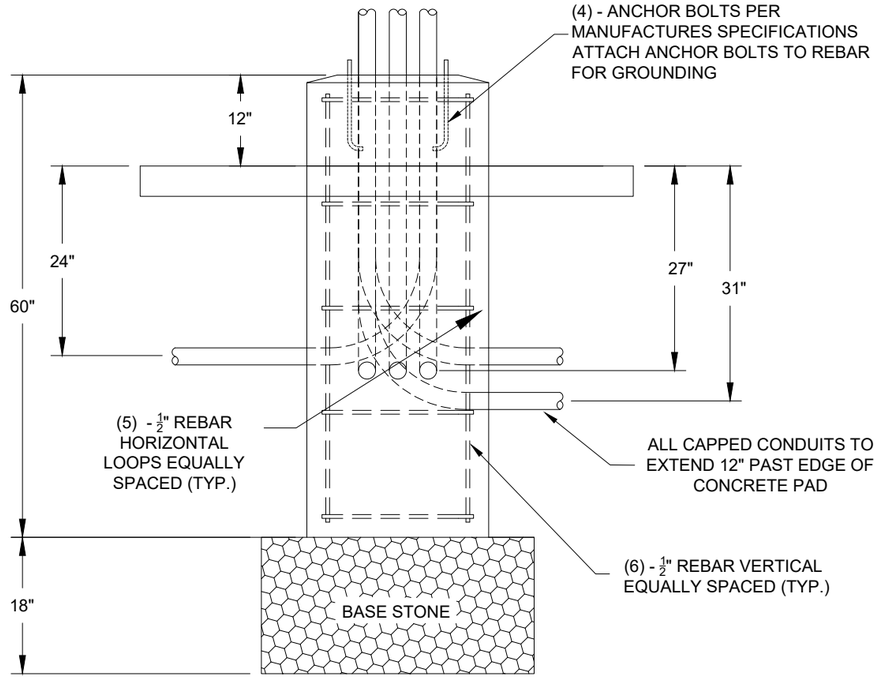
POLE:
VALMONT
DS50-750A270-8S-GV-HH-PC-NC-AB
OR APPROVED EQUAL

2 P.2 STREET LIGHT DETAIL

NOT TO SCALE

PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	LIGHTING DETAILS	03-19-24	P.2

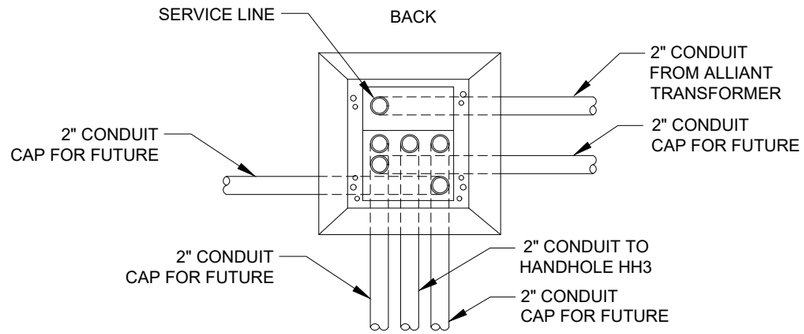


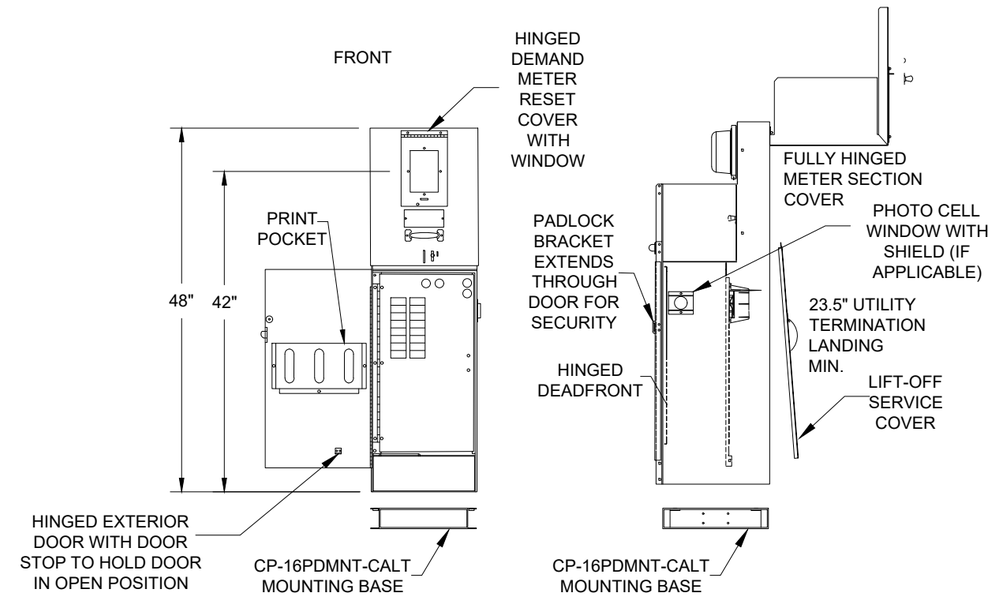


NOTE:
A GRADED STONE BASE SHALL BE USED UNDER THE PC CONCRETE SLAB AS DEEMED NECESSARY BY THE ENGINEER.

NOTE:
ALL REINFORCING STEEL SHALL REMAIN 2.5" FROM ALL SIDES OF CONTROLLER FOUNDATION.

FOUNDATION DETAIL





METER & CABINET DETAIL

ALLIANT ENERGY COORDINATION:

SERVING UTILITY: ALLIANT ENERGY – ENGINEERING CONTACT PERSON: CHAD MEIER 563-587-4564

TRANSFORMER: ALLIANT ENERGY WILL PROVIDE A PAD MOUNTED TRANSFORMER NEAR THE LOCATION OF THE SERVICE CONNECTION INDICATED ON PLAN SHEET P.1. ALLIANT ENERGY WILL PROVIDE CONNECTION FROM THE TRANSFORMER TO THE CONTROLLER.

TYPE OF SERVICE:
THE SERVICE WILL BE 120/240 VOLT, 100 AMP, SINGLE PHASE, GROUNDED AND WILL BE RUN UNDERGROUND FROM A NEW ALLIANT ENERGY SERVICE/METER. THE CONTRACTOR SHALL PROVIDE AND INSTALL CONDUCTORS OF THE PROPER SIZE FROM THE LIGHTING PANEL TO THE SERVICE/METER. THIS SHALL BE DONE SO AS TO COMPLY WITH THE LATEST PROVISIONS OF THE ALLIANT ENERGY "ELECTRIC SERVICE RULES, CHAPTER 6, SECTION 616".

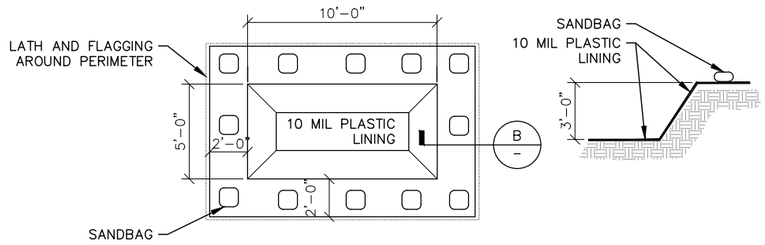
ENGINEERING CONTACT PERSON: JON LUTZ, PROJECT ENGINEER, ORIGIN DESIGN, 563-556-2464

CONTRACTOR: THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL CONDUIT AND CONDUCTORS TO THE VARIOUS LOCATIONS AS SHOWN ON THE PLANS OR AS DESCRIBED HEREIN. THE CONTRACTOR SHALL COORDINATE THE PLACEMENT OF THE SERVICE CONDUCTOR AND THE METERING EQUIPMENT WITH ALLIANT ENERGY, AND PROVIDE FOR THESE REQUIREMENTS AS PART OF THEIR CONTRACT. ALL UNDERGROUND BENDS SHALL BE SWEEP TYPE. ALL WIRING SHALL BE COPPER.

CODE: ALL WORK SHALL CONFORM TO NEC AND ANY LOCAL OR STATE ORDINANCES.

CONSTRUCTION COORDINATION: THE CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WORK WITH ALLIANT ENERGY AND THE CITY OF DYERSVILLE.

REFERENCE PLANS AND SPECIFICATIONS: THE ELECTRICAL CONTRACTOR SHOULD REVIEW THE FOLLOWING PLAN SHEETS AND SPECIFICATIONS: PLAN SHEETS P.1-P.3, C.1-C.3.



6 / RR.1 TEMPORARY CONCRETE WASHOUT

NOT TO SCALE

NOTES:

1. WASHOUT FACILITY SHALL NOT BE LOCATED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES OR WATERBODIES.
2. WASHOUT FACILITIES MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED ONCE THE FACILITY IS 75% FULL. HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF. IF THE FACILITY IS TO BE REUSED, LINE THE STRUCTURE WITH NEW 10 MIL POLYETHYLENE SHEETING FREE OF HOLES OR TEARS.
3. A SIGN SHALL BE POSTED ADJACENT TO THE FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS OF THE FACILITY OR THE JOB SITE SUPERINTENDENT SHALL ENSURE THAT CONCRETE EQUIPMENT OPERATORS USE THE WASHOUT FACILITY.
4. IF NECESSARY, A CRUSHED STONE PATH SHALL BE CONSTRUCTED TO PROVIDE EASE OF ACCESS FOR EQUIPMENT.
5. WHEN THE FACILITY IS NO LONGER REQUIRED, THE HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF, THE MATERIALS USED TO CONSTRUCT THE FACILITY SHALL BE REMOVED, AND THE HOLE BACKFILLED AND THE SURROUNDING AREA REPAIRED.

RM-2160(618)--9D-31

NORTH

HORIZONTAL SCALE IN FEET
0 50 100

DRAWING MAY HAVE BEEN REDUCED

LOT 3

LOT 1

LOT 4

LOT 2

PHASE 3

320TH AVE

INDUSTRIAL PARKWAY

SEEDING & EROSION CONTROL BY OTHERS

SILT FENCE TYP.

STRAW WATTLE TYP.

GRATE INTAKE SEDIMENT FILTER BAG, EC-604 (TYP)

B-08-14

B-08-13

0.9%

0.7%

LEGEND

SEEDING & FERTILIZING (URBAN) CONTRACT D (THIS CONTRACT)

PROPOSED CULVERT BY OTHERS

66' ROW

18" RCP

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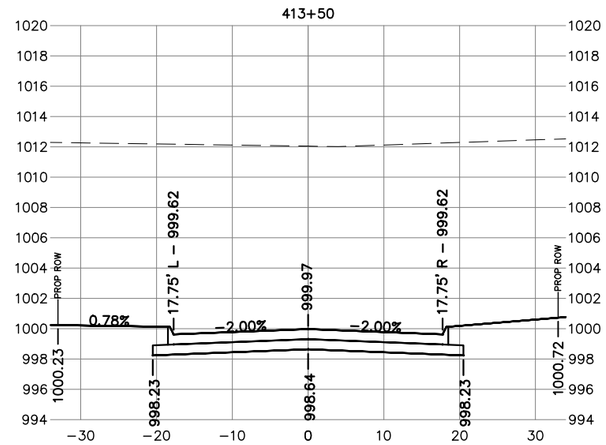
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	EROSION CONTROL PLAN	03-19-24	RR.2

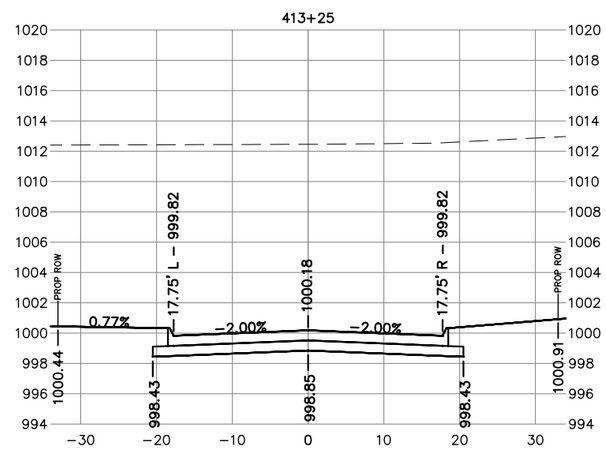
RM-2160(618)--9D-31

HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

NOTES:
1. SITE HAS BEEN GRADED TO FINAL CONTOURS INCLUDING AT CULVERT AREA.
2. DIRT SUBGRADE HAS BEEN COMPACTED AND ROUGH TRIMMED TO 1" HIGH TO 3' OUTSIDE CURB IN 2023.





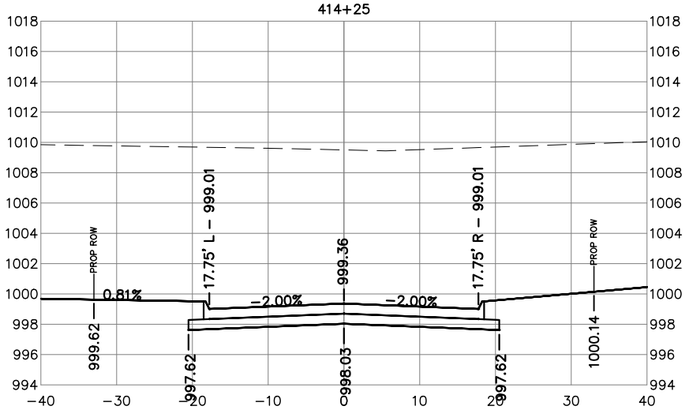
P:\21249\DRAWINGS\CIVIL\21249D ZZ 11 XS4(DOT).DWG 3/19/2024 11:58:45 AM LYNN NEAL

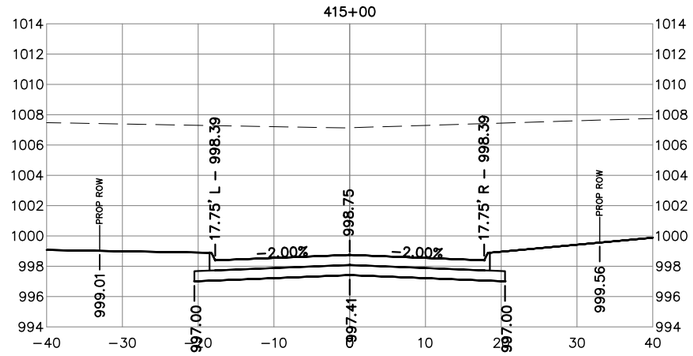
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.1

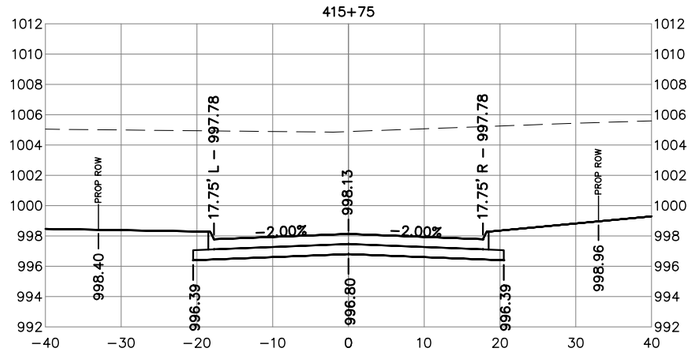
RM-2160(618)--9D-31

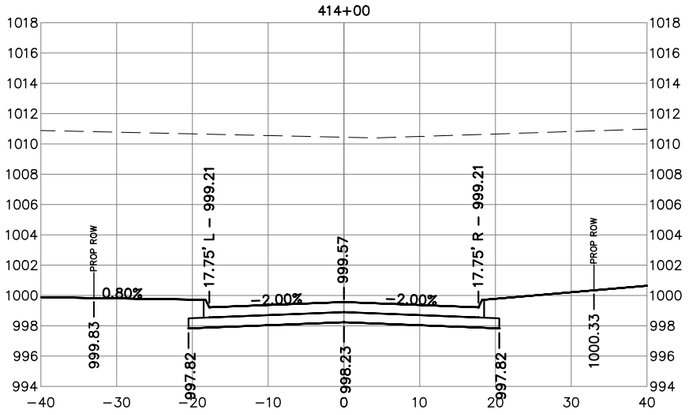
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

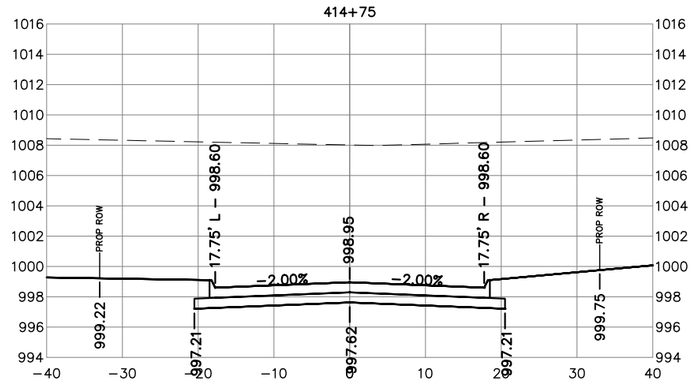
VERTICAL SCALE IN FEET
0 5 10
DRAWING MAY HAVE BEEN REDUCED

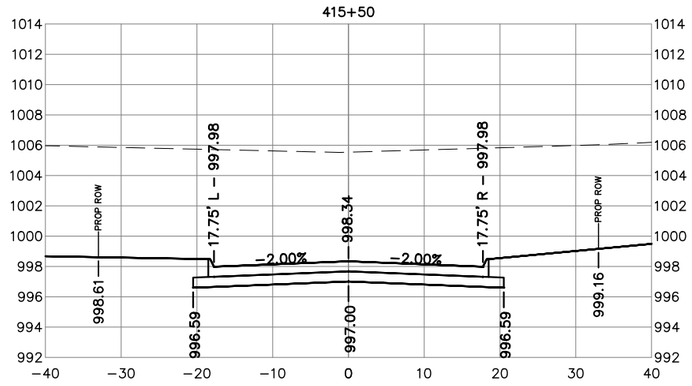


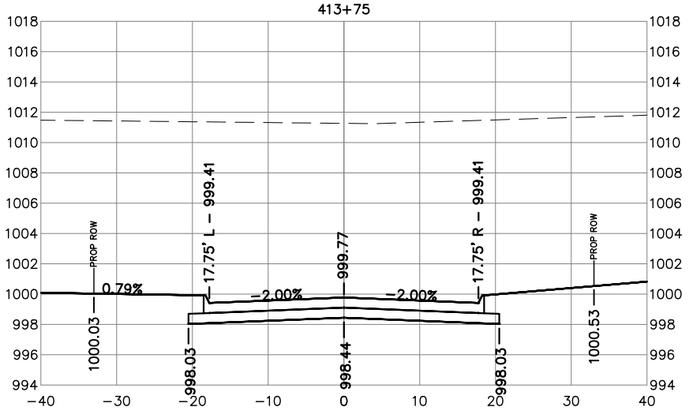


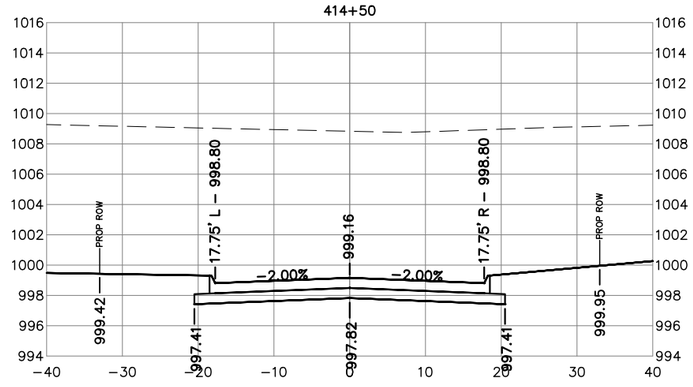


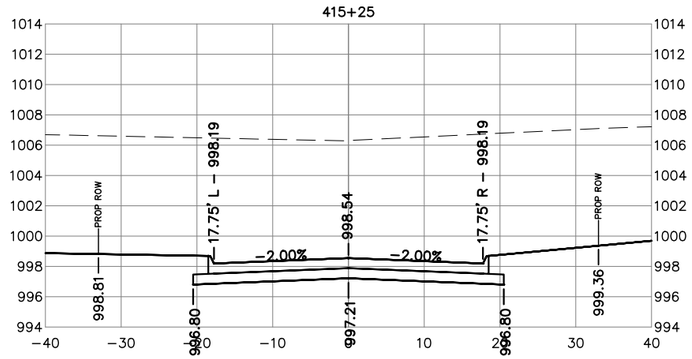












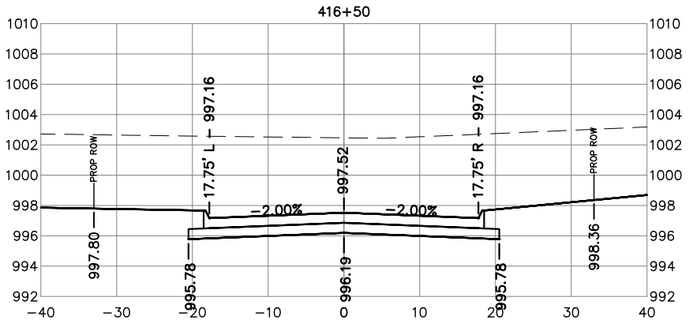
P:\21\249\DRAWINGS\CIVIL\21249D ZZ 11 XS4(DOT).DWG 3/19/2024 11:58:48 AM LYNN NEAL

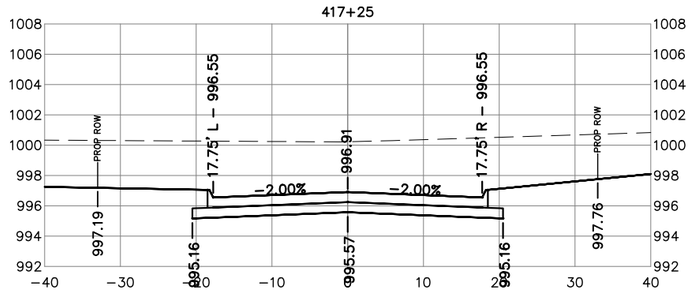
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.2

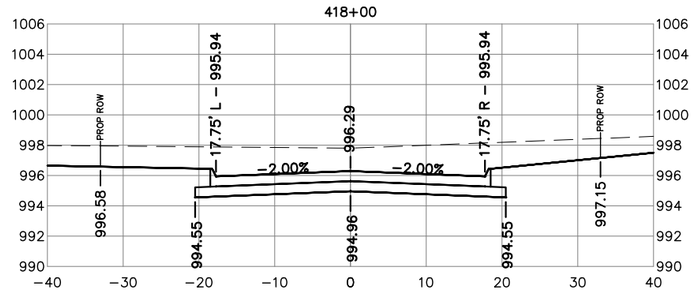
RM-2160(618)--9D-31

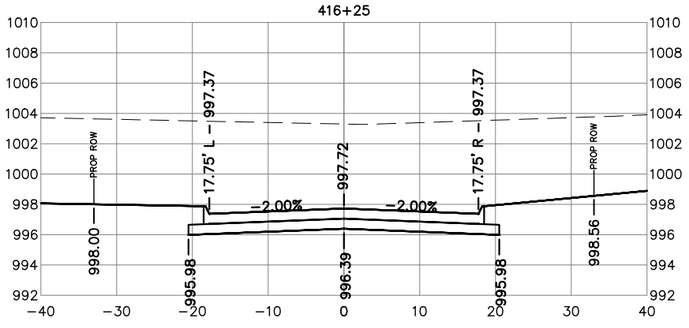
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

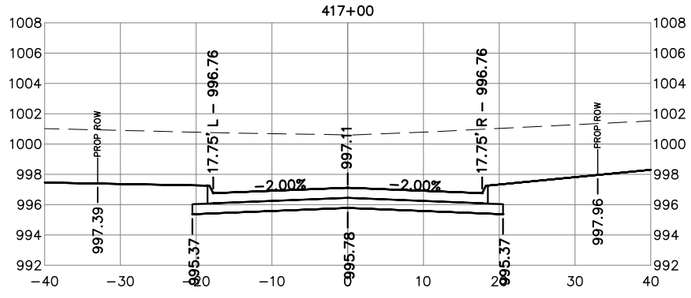
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

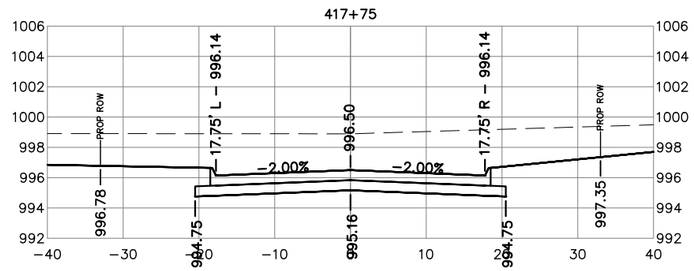


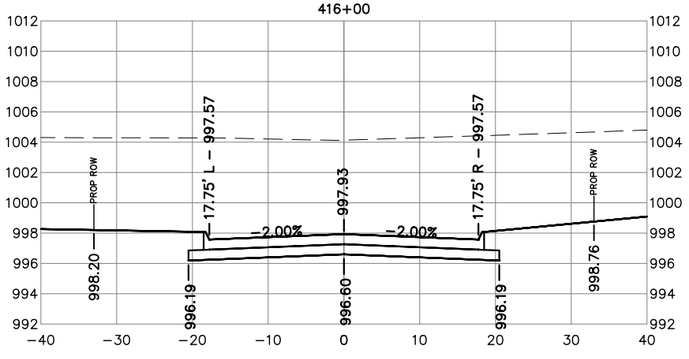


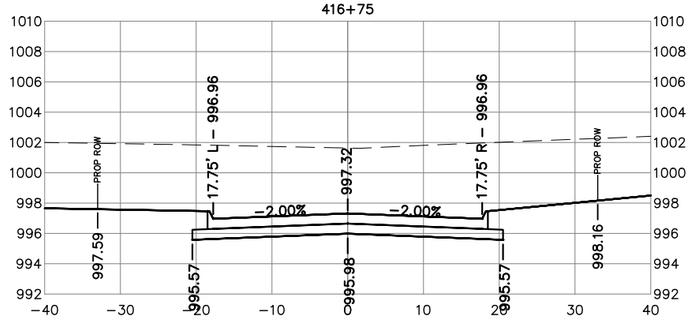


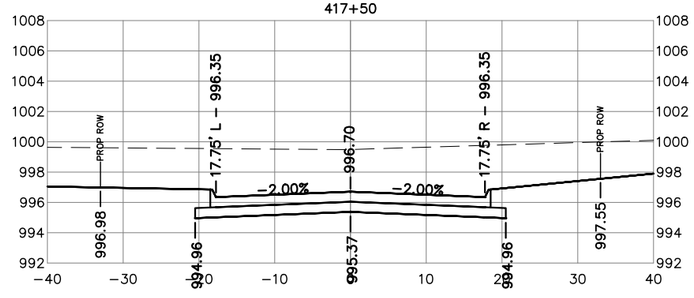












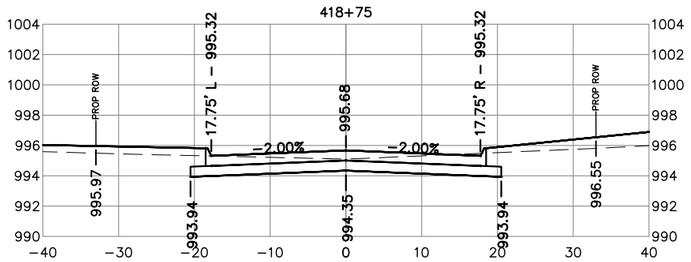
P:\21\249\DRAWINGS\CIVIL\21249D ZZ 11 XS4(DOT).DWG 3/19/2024 11:58:50 AM LYNN NEAL

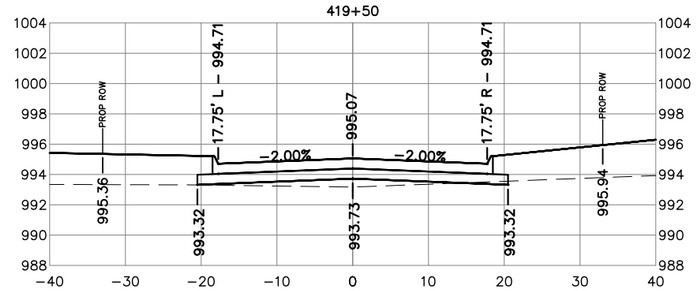
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.3

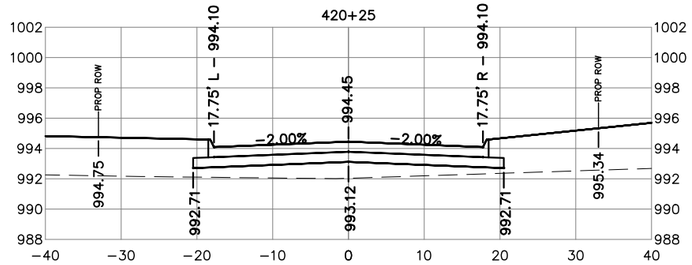
RM-2160(618)--9D-31

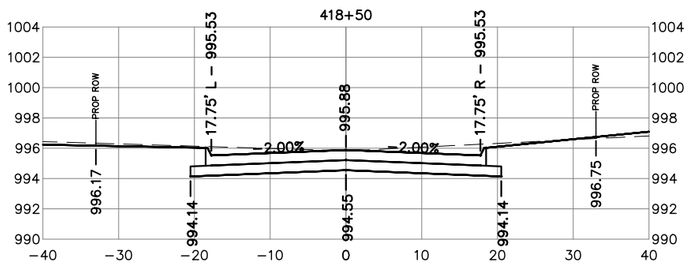
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

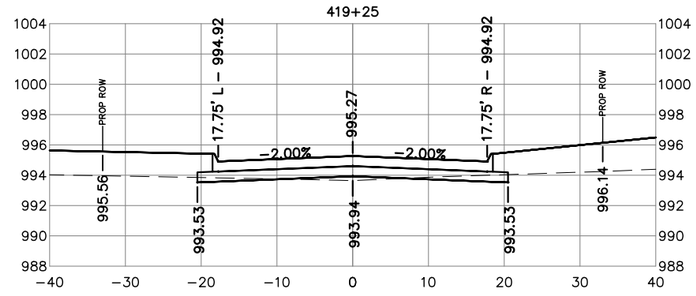
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

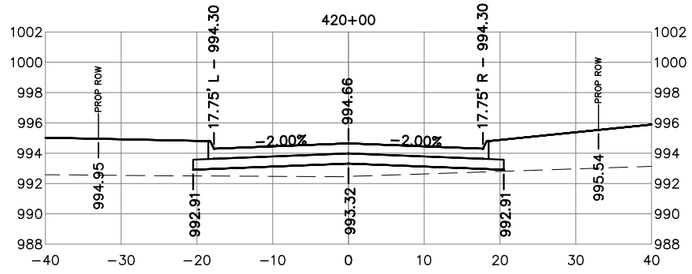


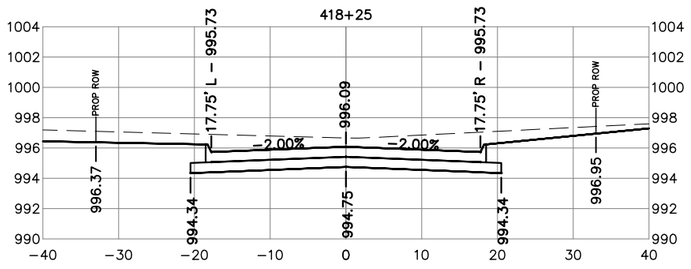


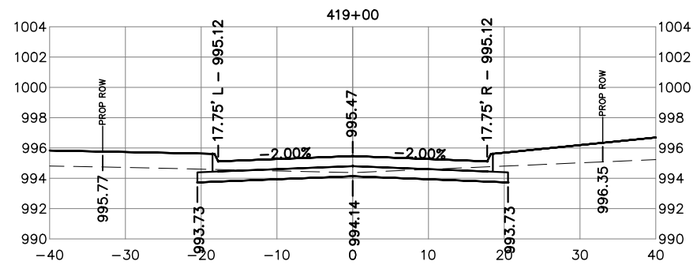


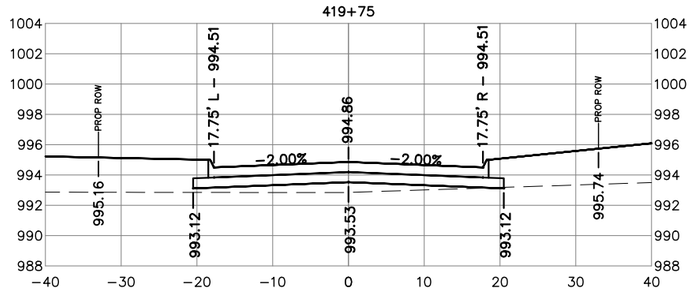












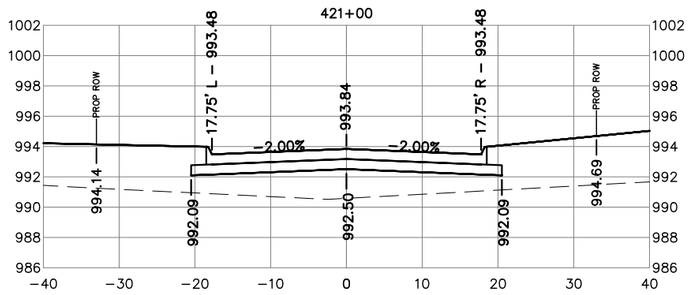
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.4

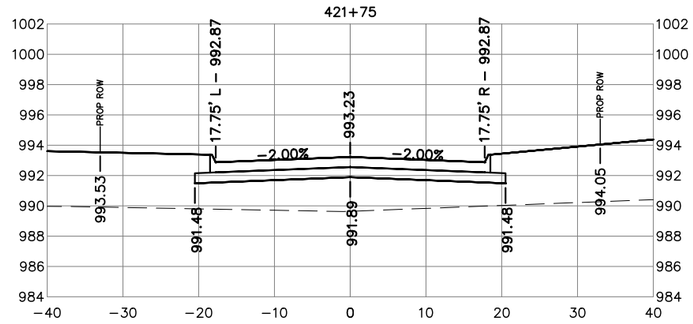
P:\21\249\DRAWINGS\CIVIL\21249D ZZ 11 XS4(DOT).DWG 3/19/2024 11:58:53 AM LYNN NEAL

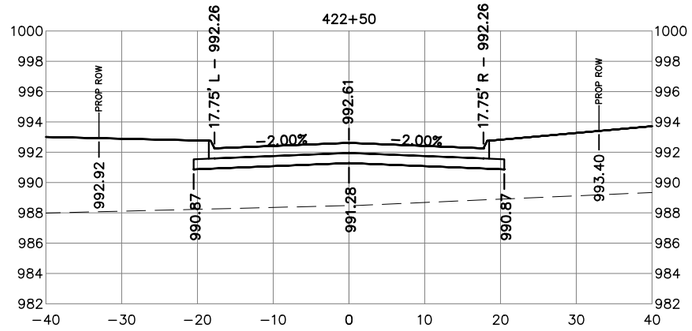
RM-2160(618)--9D-31

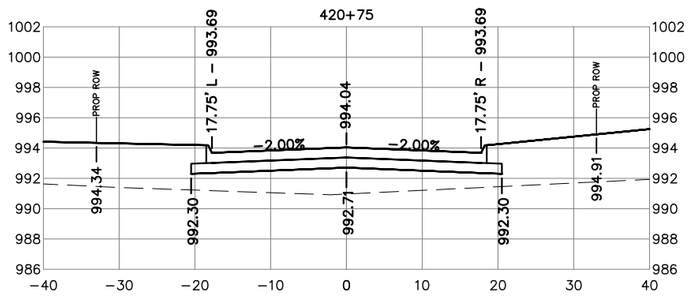
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

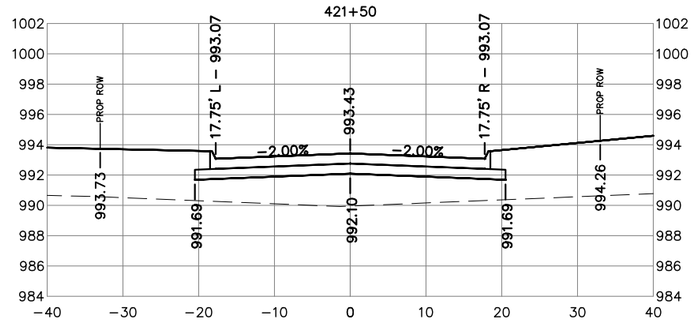
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

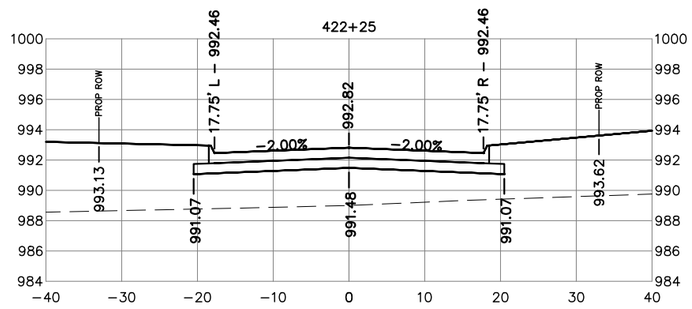


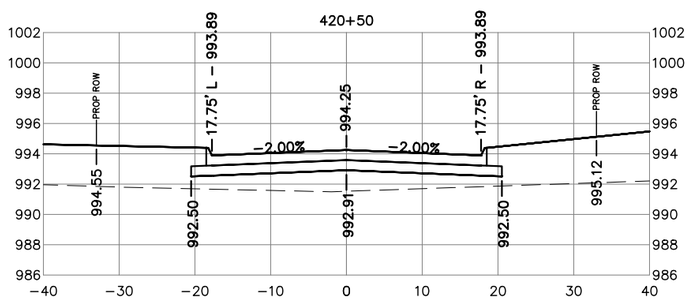


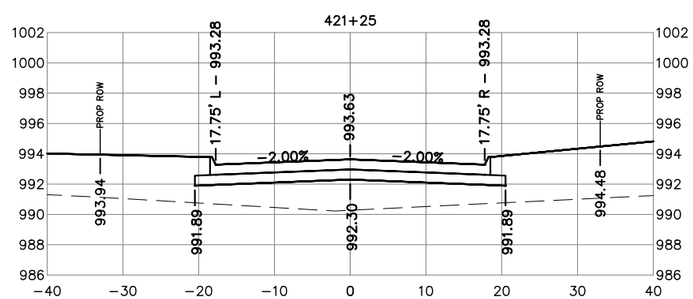


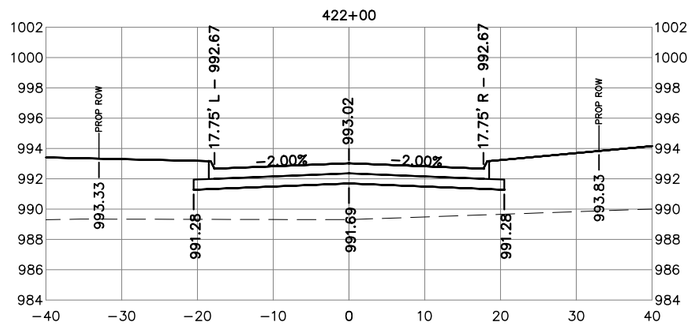












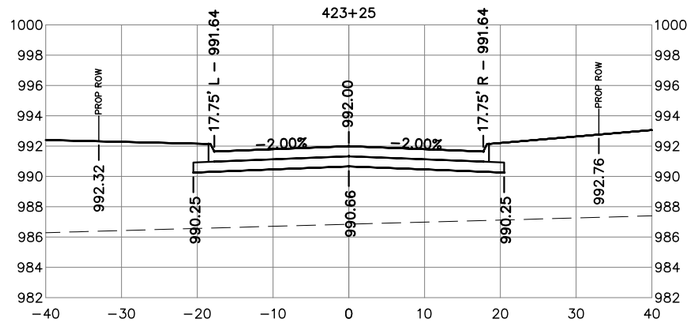
P:\21\249\DRAWINGS\CIVIL\21249D ZZ 11 XS4(DOT).DWG 3/19/2024 11:58:55 AM LYNN NEAL

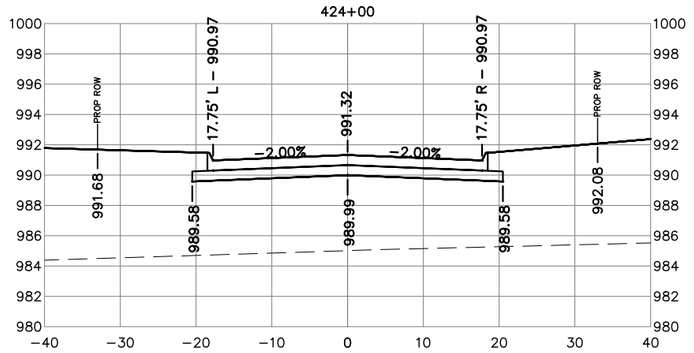
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.5

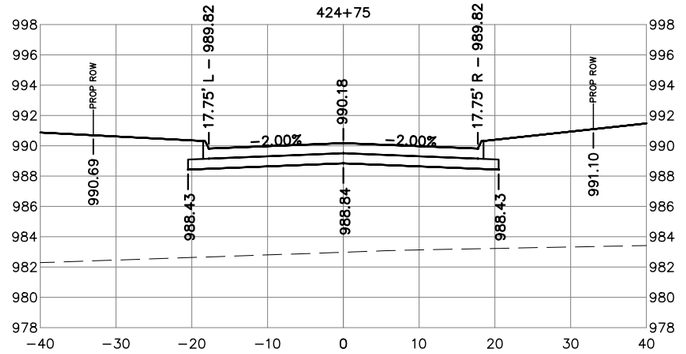
RM-2160(618)--9D-31

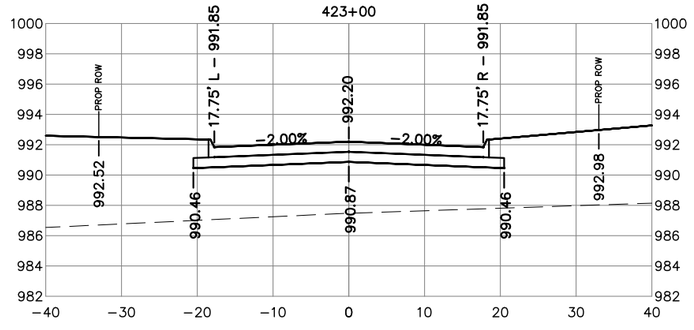
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

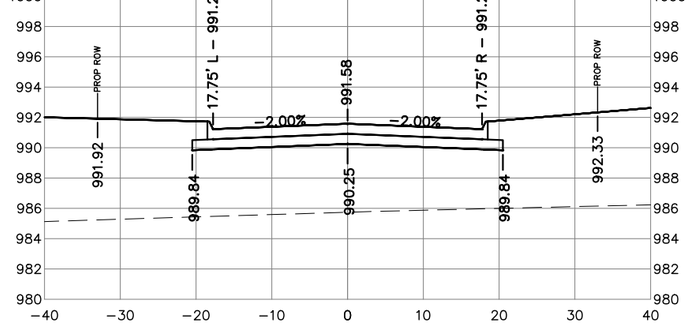
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

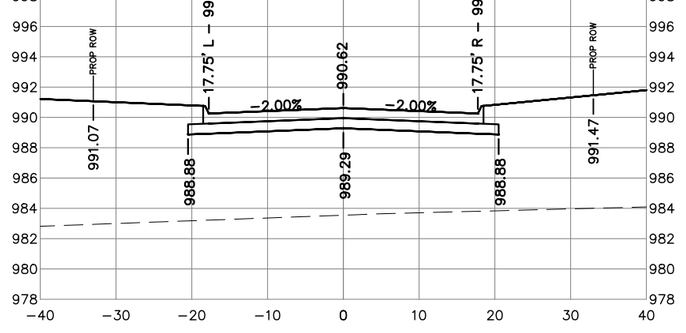


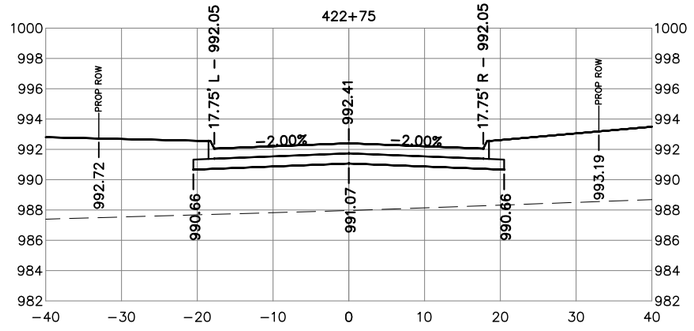


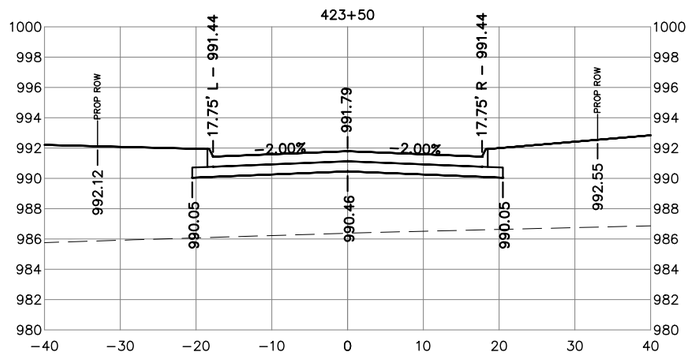


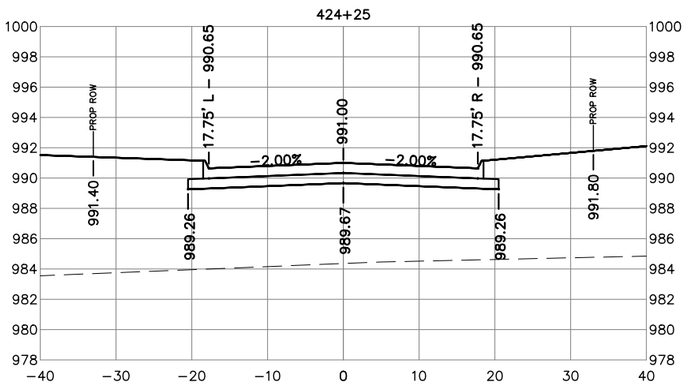












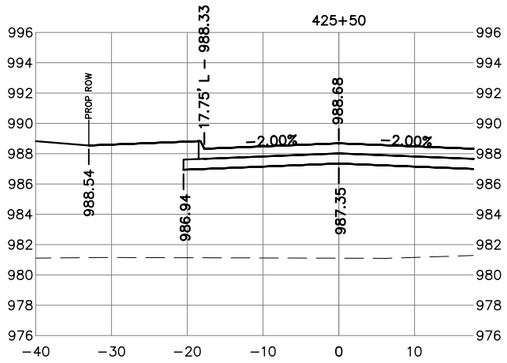
P:\21\249\DRAWINGS\CIVIL\21249D ZZ 11 XS4(DOT).DWG 3/19/2024 11:58:58 AM LYNN NEAL

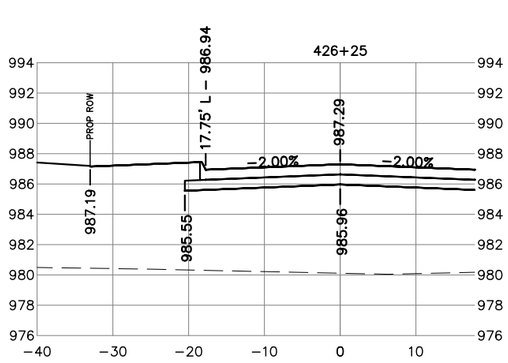
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.6

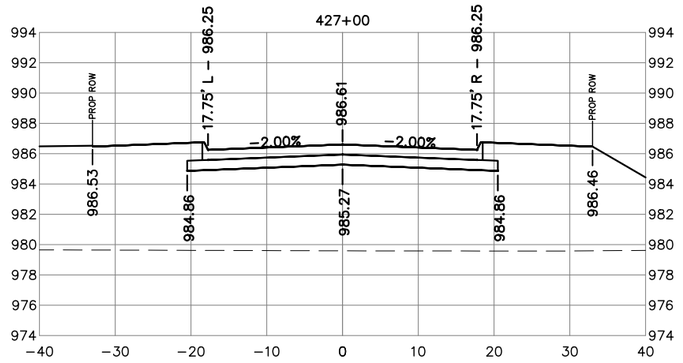
RM-2160(618)--9D-31

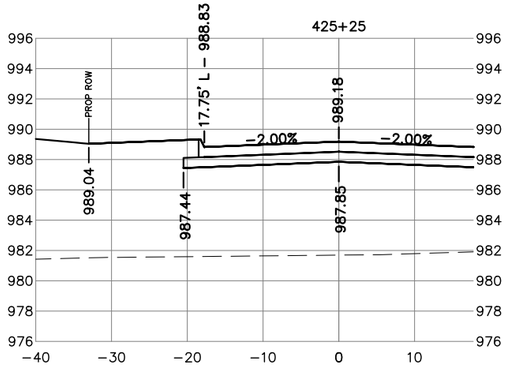
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

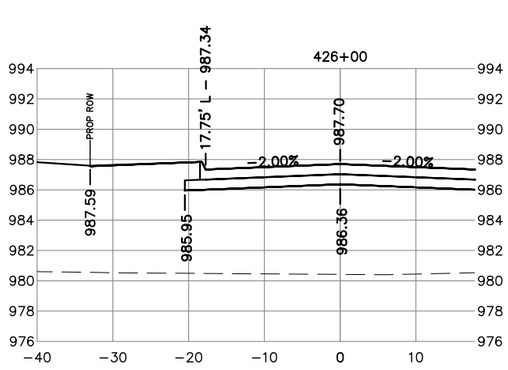
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

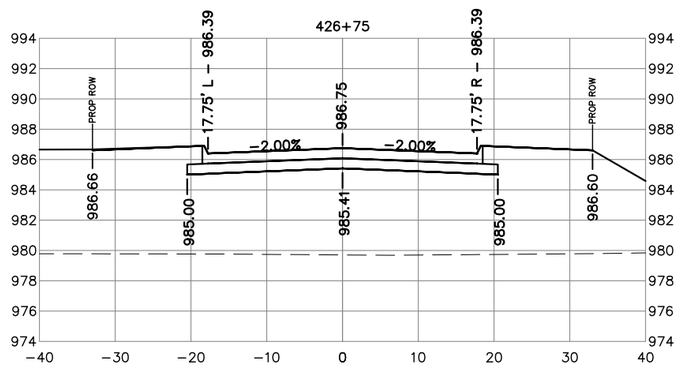


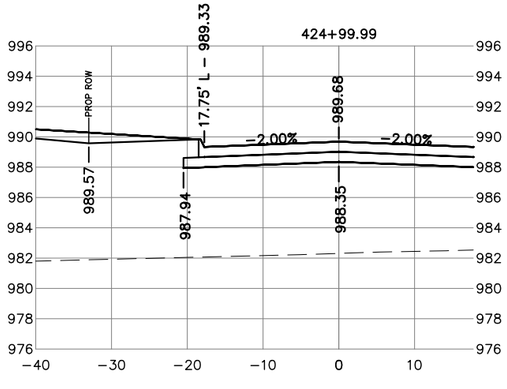


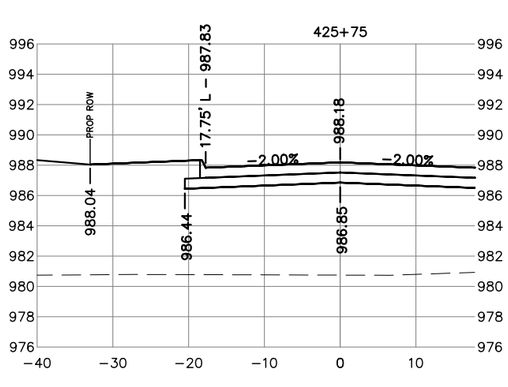


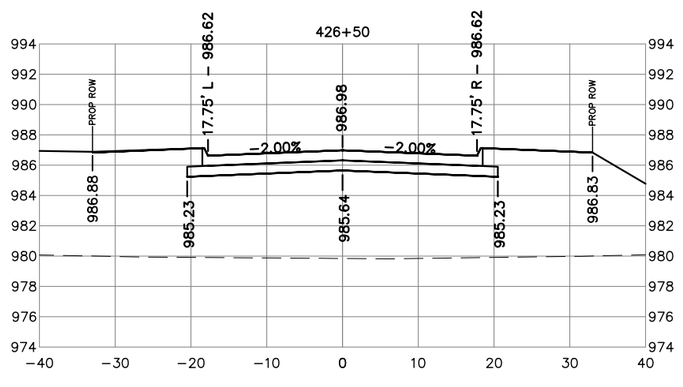












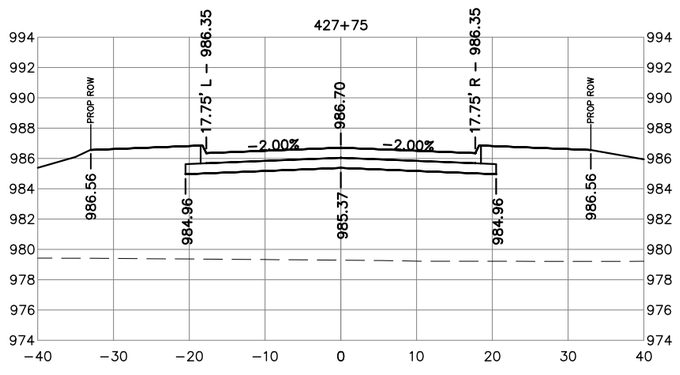
P:\21\249\DRAWINGS\CIVIL\21249D ZZ 11 XS4(DOT).DWG 3/19/2024 11:59:00 AM LYNN NEAL

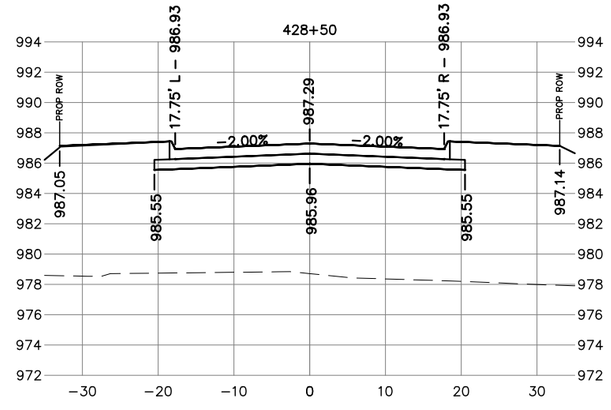
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.7

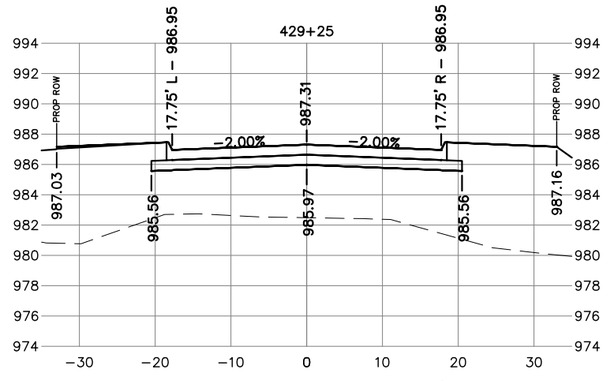
RM-2160(618)--9D-31

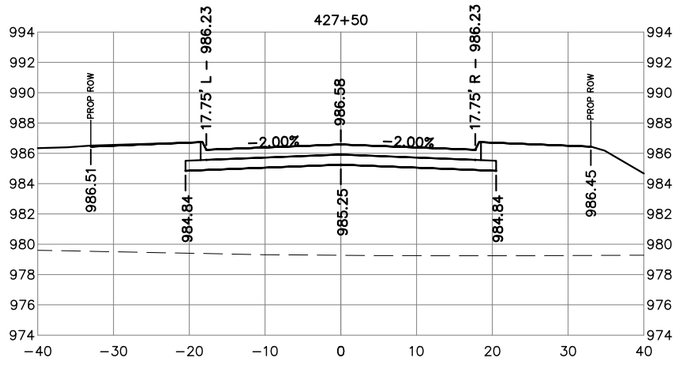
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

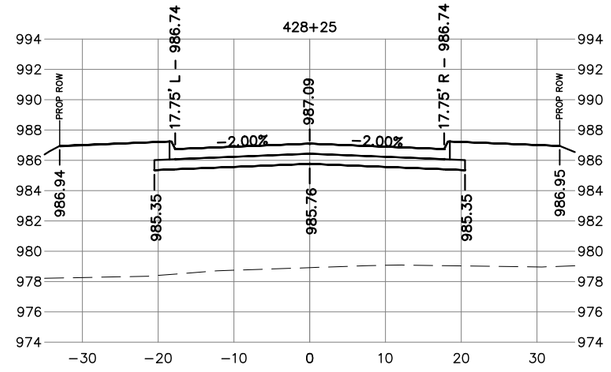
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

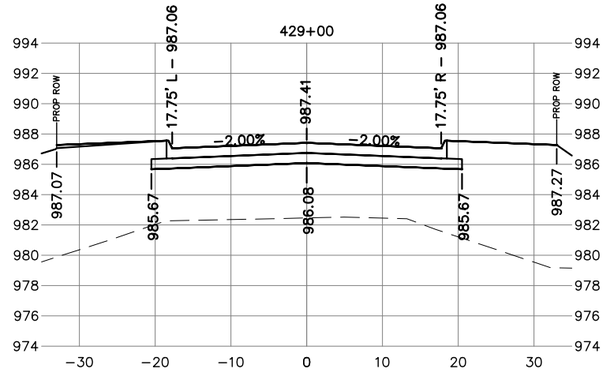


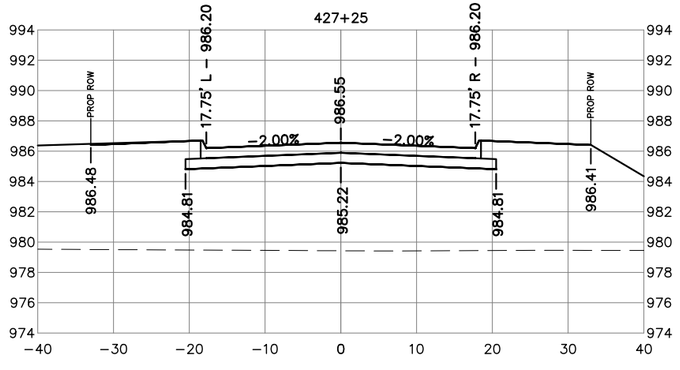


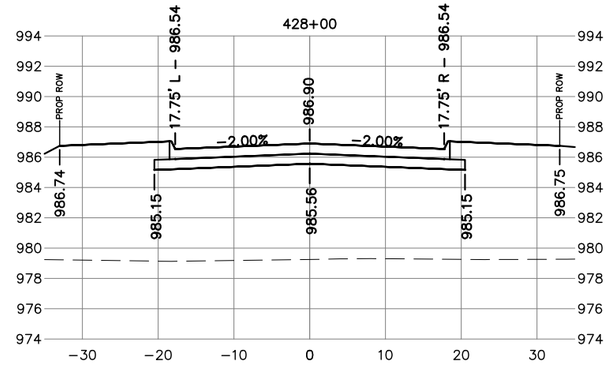


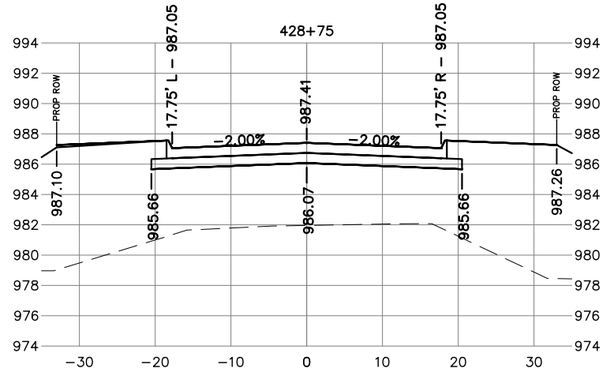












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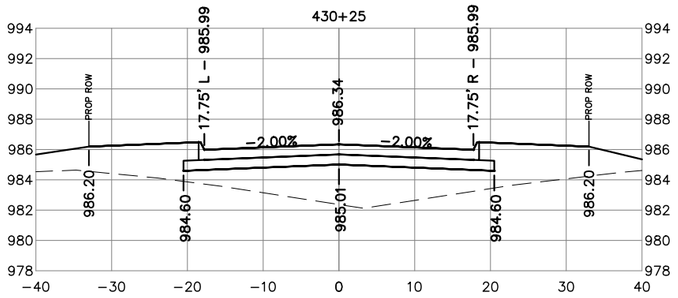
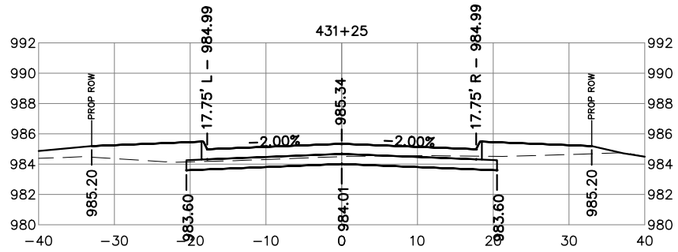
PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.8

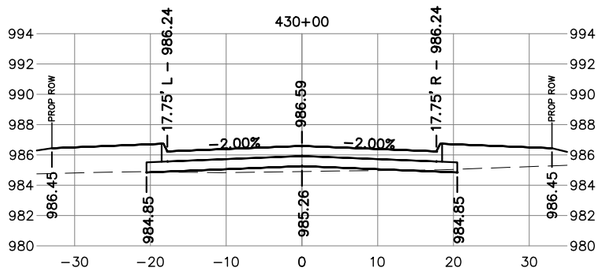
RM-2160(618)--9D-31

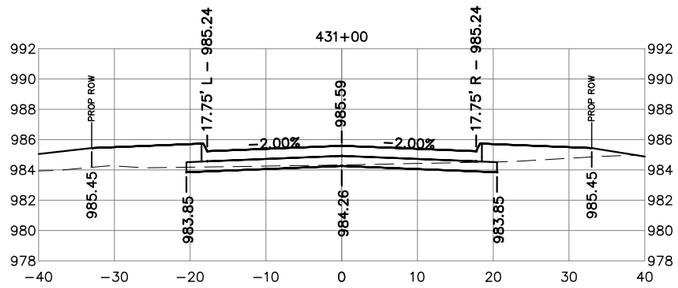
HORIZONTAL SCALE IN FEET
0 10 20
DRAWING MAY HAVE BEEN REDUCED

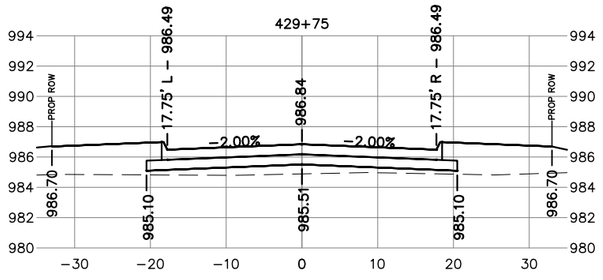
VERTICAL SCALE IN FEET
10 5 0
DRAWING MAY HAVE BEEN REDUCED

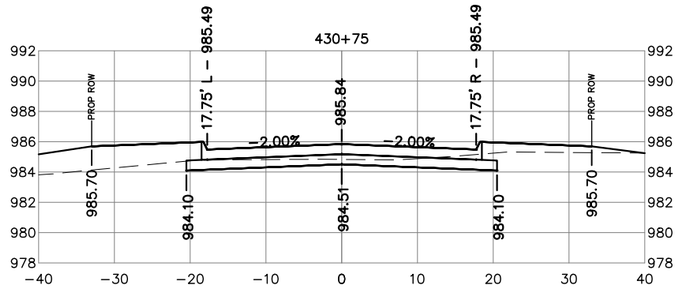


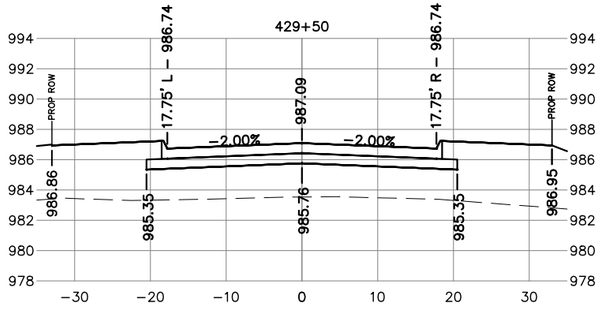


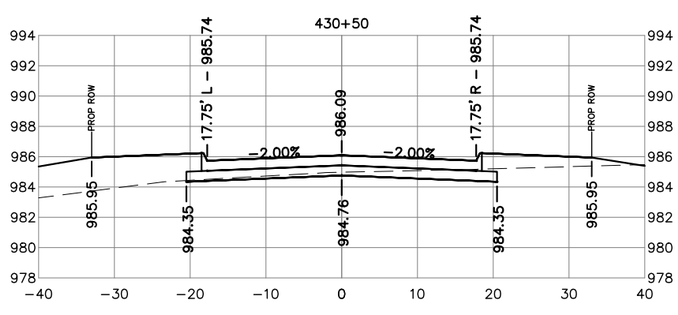












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PROJECT NUMBER	RM-2160(618)--9D-31	20 WEST INDUSTRIAL CENTER - PHASE 3 - CONTRACT D	origin design 800 556-4491	CITY OF DYERSVILLE - DELAWARE COUNTY	CROSS SECTIONS	03-19-24	W.9