



NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY IOWA ONE CALL 1-800-292-8989 OR 811

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

RESOURCE LIST

CITY OF WINDSOR HEIGHTS

City Hall
1145 66th St, Suite 1
Windsor Heights, IA 50324
515-279-3662

City Administrator:
Adam Plagge

Mayor: Mike Jones

City Council Members:
Lauren Campbell
Threase Harms
Joseph Jones
Michael Libbie
Susan Skeries

City Engineer:
Justin Ernst

Public Works Director:
Jason Roberts

UTILITIES

TELEPHONE

LUMEN
Ashlie Clements
(906) 284-2821

CABLE / INTERNET
MEDIACOM
(877) 561-6847

WATER

DES MOINES WATER WORKS
(515) 283-8700

ELECTRIC

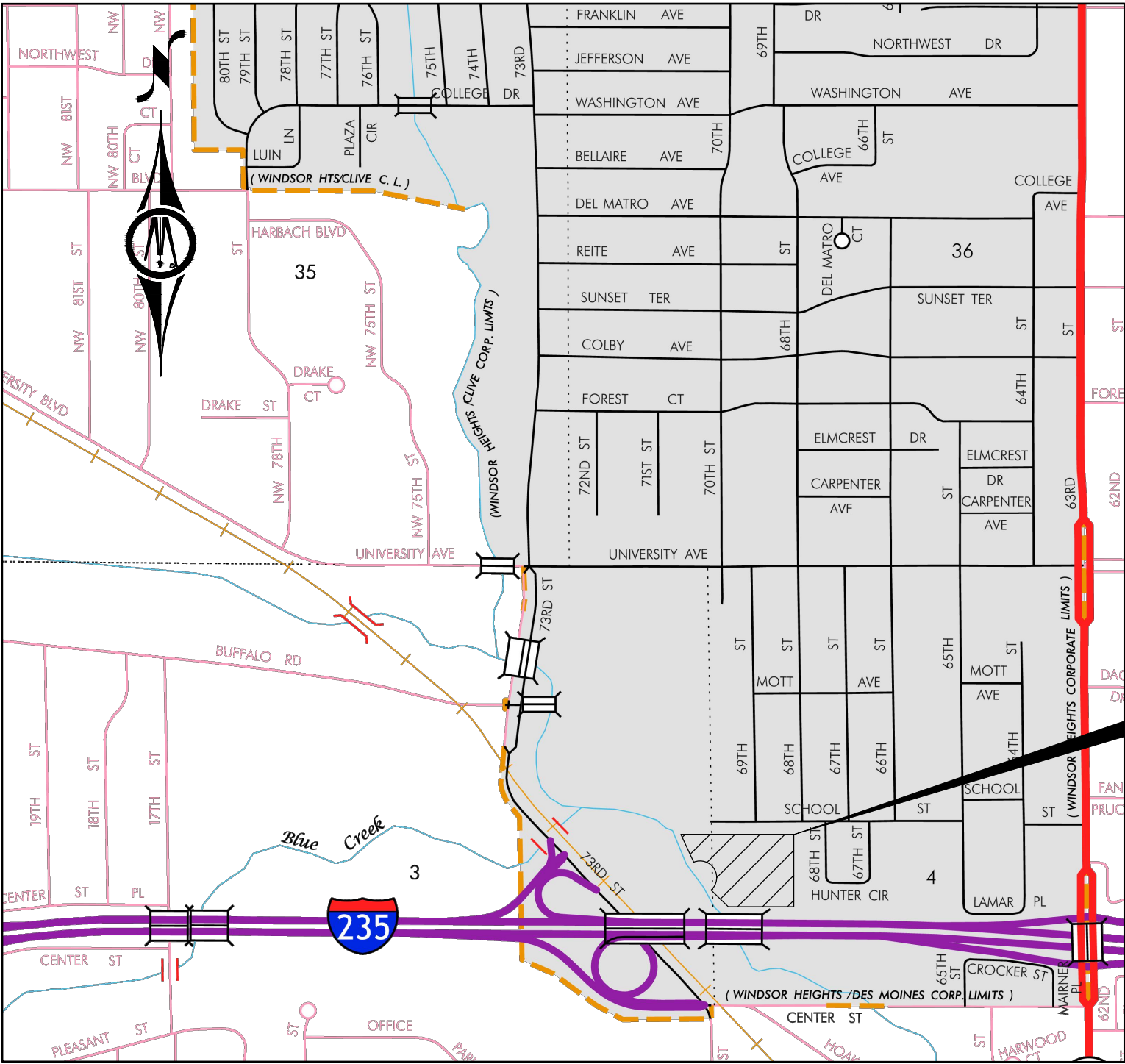
MIDAMERICAN ENERGY
(888) 427-5632

CITY OF WINDSOR HEIGHTS, IA

CONSTRUCTION PLANS FOR

2023 COLBY PARK IMPROVEMENTS

SEPTEMBER 19, 2023



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S.03	ADA RAMPS		
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T.02	GRADING PLAN		
T.03	GRADING PLAN		

PROJECT LOCATION

GOVERNING SPECIFICATIONS

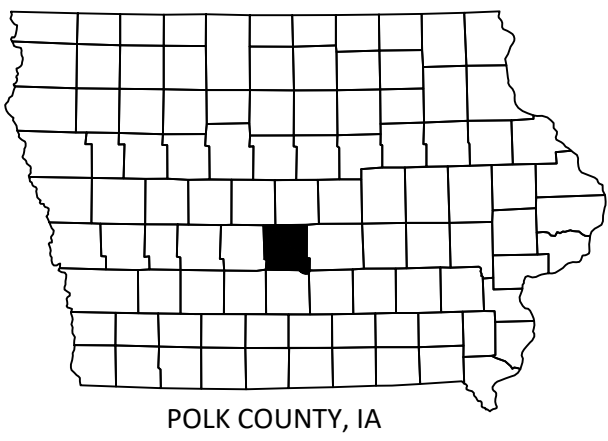
THE 2023 EDITION OF THE "IOWA STATEWIDE URBAN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS"

MUTCD 2009 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION.

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITHIN THE CONSTRUCTION OF THIS PROJECT.

HORIZ. SCALE 0 1000 2000 FEET

MAP OF PORTIONS OF THE CITY OF WINDSOR HEIGHTS POLK COUNTY, IA



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.

Signature _____ Date _____

Kenny Thelen, PE
License number P2442534

My license renewal date is: December 31, 2023

Pages or sheets covered by this seal:
E0.1-E.50



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

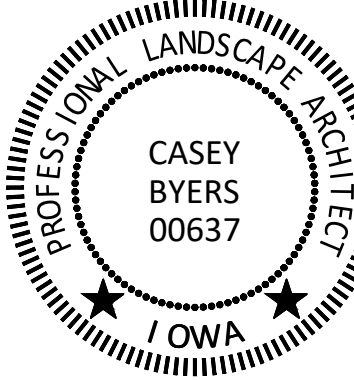
JASON GRAHAM, P.E.

LIC. NO. P22668 DATE: _____

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2024

PAGES OR SHEETS COVERED BY THIS SEAL:

STRUCTURAL SHEETS S0.01-S1.01



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

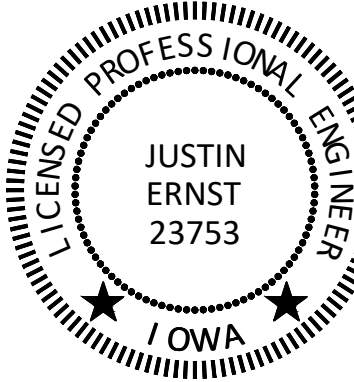
CASEY BYERS, L.A.

LIC. NO. 00637 DATE: 9/19/2023

MY LICENSE RENEWAL DATE IS JUNE 30, 2025

PAGES OR SHEETS COVERED BY THIS SEAL:

B.01-B.07 SHEETS, D SHEETS, L SHEETS



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JUSTIN ERNST, P.E.

LIC. NO. 23753 DATE: 9/19/2023

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2023

PAGES OR SHEETS COVERED BY THIS SEAL:

A, B.08, C, F, G, J, M, & T SHEETS, SHEET S.01, S.02, & S.03

NOTE:
THIS SET IS INTENDED TO BE PRINTED IN COLOR. IF PRINTING IN BLACK AND WHITE, SOME LEGIBILITY MAY BE REDUCED.

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0	BID SET	09-19-2023



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Email: DesMoines@bolton-menk.com
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CHECKED CB
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CITY OF WINDSOR HEIGHTS, IOWA

2023 COLBY PARK IMPROVEMENTS

TITLE SHEET

SHEET

A.01

EXISTING TOPOGRAPHIC SYMBOLS

	ACCESS GRATE		SATELLITE DISH
	AIR CONDITION UNIT		SIGN TRAFFIC
	ANTENNA		SIGNAL CONTROL CABINET
	AUTO SPRINKLER CONNECTION		SOIL BORING
	BARRICADE PERMANENT		SIREN
	BASKETBALL POST		TELEPHONE BOOTH
	BENCH		TILE INLET
	BIRD FEEDER		TILE OUTLET
	BOLLARD		TILE RISER
	BUSH		TRANSFORMER-ELECTRIC
	CATCH BASIN RECTANGULAR CASTING		TREE-CONIFEROUS
	CATCH BASIN CIRCULAR CASTING		TREE-DEAD
	CURB STOP		TREE-DECIDUOUS
	CLEAN OUT		TREE STUMP
	CULVERT END		TRAFFIC ARM BARRIER
	DRINKING FOUNTAIN		TRAFFIC SIGNAL
	DOWN SPOUT		TRASH CAN
	FILL PIPE		UTILITY MARKER
	FIRE HYDRANT		VALVE
	FLAG POLE		VALVE POST INDICATOR
	FLARED END / APRON		VALVE VAULT
	FUEL PUMP		VENT PIPE
	GRILL		WATER SPIGOT
	GUY WIRE ANCHOR		WELL
	HANDHOLE		WETLAND DELINEATED MARKER
	HANDICAP SPACE		WETLAND
	IRRIGATION SPRINKLER HEAD		WET WELL
	IRRIGATION VALVE BOX		YARD HYDRANT
	LIFT STATION CONTROL PANEL		
	LIFT STATION		
	LIGHT POLE		
	MAILBOX		
	MANHOLE-COMMUNICATION		
	MANHOLE-ELECTRIC		
	MANHOLE-GAS		
	MANHOLE-HEAT		
	MANHOLE-SANITARY SEWER		
	MANHOLE-STORM SEWER		
	MANHOLE-UTILITY		
	MANHOLE-WATER		
	METER		
	ORDER MICROPHONE		
	PARKING METER		
	PAVEMENT MARKING		
	PEDESTAL-COMMUNICATION		
	PEDESTAL-ELECTRIC		
	PEDESTRIAN PUSH BUTTON		
	PICNIC TABLE		
	POLE-UTILITY		
	POST		
	RAILROAD SIGNAL POLE		
	REGULATION STATION GAS		

PROPOSED TOPOGRAPHIC SYMBOLS

	CLEANOUT
	MANHOLE
	LIFT STATION
	STORM SEWER CIRCULAR CASTING
	STORM SEWER RECTANGULAR CASTING
	STORM SEWER FLARED END / APRON
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER VALVE
	WATER REDUCER
	WATER BEND
	WATER TEE
	WATER CROSS
	WATER SLEEVE
	WATER CAP / PLUG
	RIP RAP
	DRAINAGE FLOW
	TRAFFIC SIGNS
	LIGHT POLE

SURVEY SYMBOLS

	BENCH MARK LOCATION
	CONTROL POINT
	MONUMENT IRON FOUND
	CAST IRON MONUMENT

EXISTING TOPOGRAPHIC LINES

	RETAINING WALL
	FENCE
	FENCE-DECORATIVE
	GUARD RAIL
	TREE LINE
	BUSH LINE

SURVEY LINES

	CONTROLLED ACCESS BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE
	TEMPORARY EASEMENT

EXISTING UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE

PROPOSED UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	PIPE CASING

GRADING INFORMATION

	EXISTING CONTOUR MINOR
	EXISTING CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	PROPOSED CONTOUR MAJOR
	PROPOSED GRADING LIMITS / SLOPE LIMITS
	PROPOSED SPOT ELEVATION
	RISE:RUN (SLOPE)

EXISTING PRIVATE UTILITY LINES

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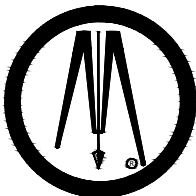
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	UNDERGROUND FIBER OPTIC
	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND COMMUNICATION
	OVERHEAD ELECTRIC
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITY

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE	GV	GATE VALVE	RT	RIGHT
ADJ	ADJUST	HDPE	HIGH DENSITY POLYETHYLENE	SAN	SANITARY SEWER
ALT	ALTERNATE	HH	HANDHOLE	SCH	SCHEDULE
B-B	BACK TO BACK	HMA	HOT MIX ASPHALT	SERV	SERVICE
BLDG	BUILDING	HP	HIGH POINT	SHLD	SHOULDER
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STA	STATION
BR	BEGIN RADIUS	HYD	HYDRANT	STD	STANDARD
BV	BUTTERFLY VALVE	I	INVERT	STM	STORM SEWER
CB	CATCH BASIN	K	CURVE COEFFICIENT	TC	TOP OF CURB
C&G	CURB AND GUTTER	L	LENGTH	TE	TEMPORARY EASEMENT
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TEMP	TEMPORARY
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TNH	TOP NUT HYDRANT
CL	CENTER LINE	LT	LEFT	TP	TOP OF PIPE
CL.	CLASS	MH	MANHOLE	TYP	TYPICAL
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VCP	VITRIFIED CLAY PIPE
C.O.	CHANGE ORDER	MPW	MUSCATINE POWER & WATER	VERT	VERTICAL
COMM	COMMUNICATION	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
CSP	CORRUGATED STEEL PIPE	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CLVT	CULVERT	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
DIA	DIAMETER	NTS	NOT TO SCALE	WM	WATERMAIN
DIP	DUCTILE IRON PIPE	NWL	NORMAL WATER LEVEL	WS	WATER SERVICE
DWY	DRIVEWAY	OHW	ORDINARY HIGH WATER LEVEL		
E	EXTERNAL CURVE DISTANCE	PC	POINT OF CURVE		
ESMT	EASEMENT	PCC	PORTLAND CEMENT CONCRETE	AC	ACRES
ELEC	ELECTRIC	PE	PERMANENT EASEMENT	CF	CUBIC FEET
ELEV/EL	ELEVATION	PED	PEDESTRIAN, PEDESTAL	CV	COMPACTED VOLUME
EOF	EMERGENCY OVERFLOW	PERF	PERFORATED PIPE	CY	CUBIC YARD
ER	END RADIUS	PERM	PERMANENT	EA	EACH
EX	EXISTING	PI	POINT OF INTERSECTION	EV	EXCAVATED VOLUME
FES	FLARED END SECTION	PL	PROPERTY LINE	LB	POUND
F-F	FACE TO FACE	PRC	POINT OF REVERSE CURVE	LF	LINEAR FEET
FF	FINISHED FLOOR	PT	POINT OF TANGENT	LS	LUMP SUM
F&I	FURNISH AND INSTALL	PVC	POLYVINYL CHLORIDE PIPE	LV	LOOSE VOLUME
FM	FORCEMAIN	PVMT	PAVEMENT	SF	SQUARE FEET
FO	FIBER OPTIC	R	RADIUS	SV	STOCKPILE VOLUME
F.O.	FIELD ORDER	RCP	REINFORCED CONCRETE PIPE	SY	SQUARE YARD
GRAN	GRANULAR	RET	RETAINING		
GRAV	GRAVEL	R/W	RIGHT-OF-WAY		
GU	GUTTER	RSC	RIGID STEEL CONDUIT		

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**BOLTON
& MENK**

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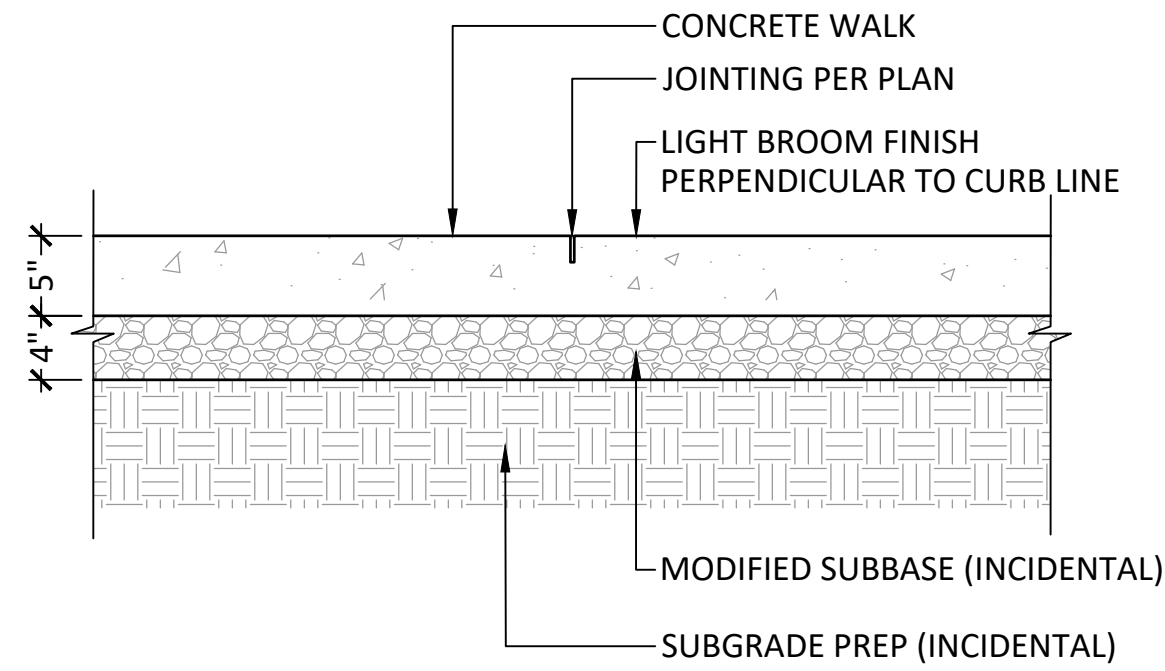
CITY OF WINDSOR HEIGHTS, IOWA

2023 COLBY PARK IMPROVEMENTS

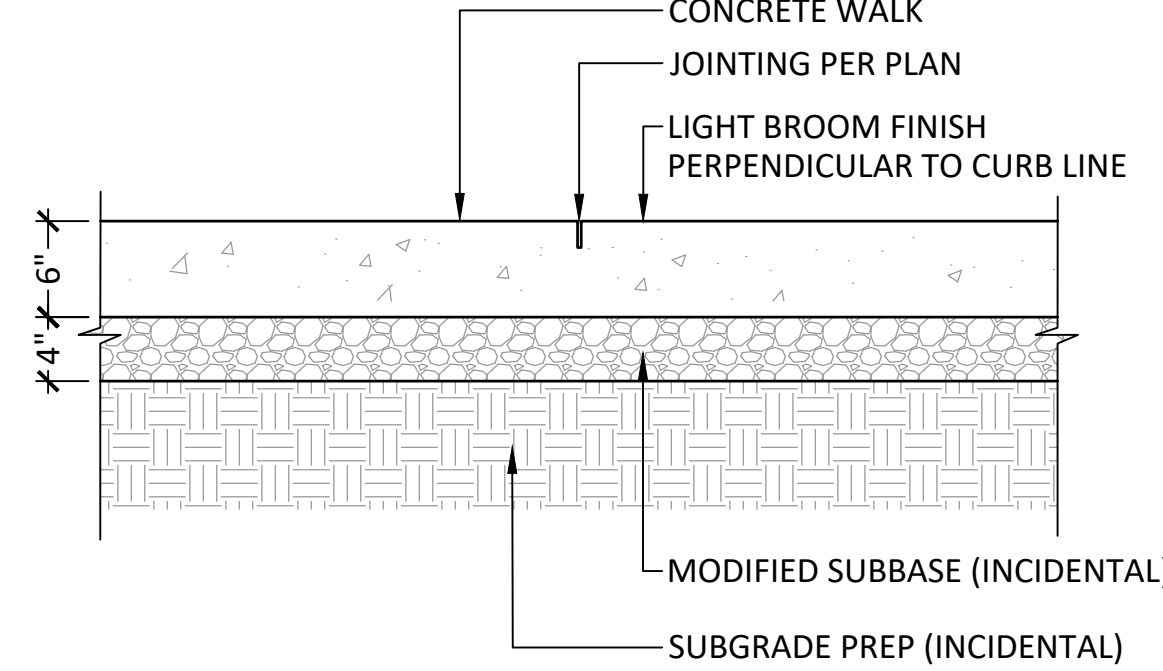
LEGEND

SHEET

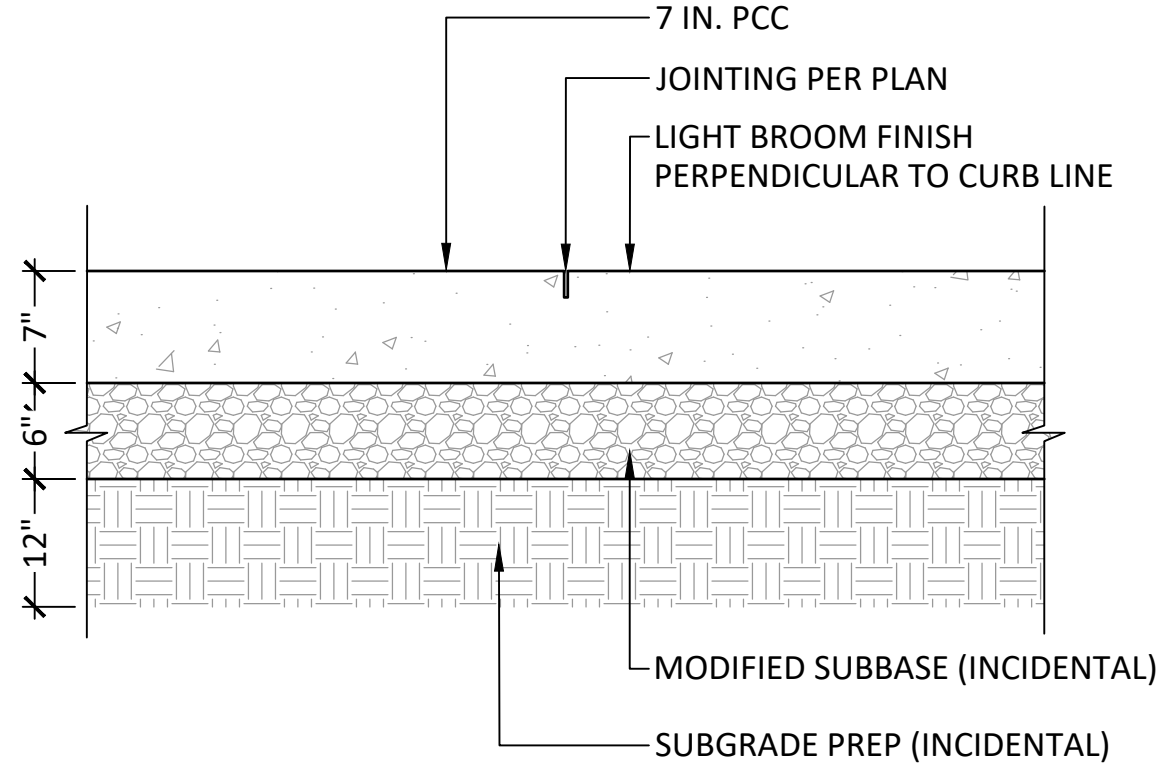
A.02



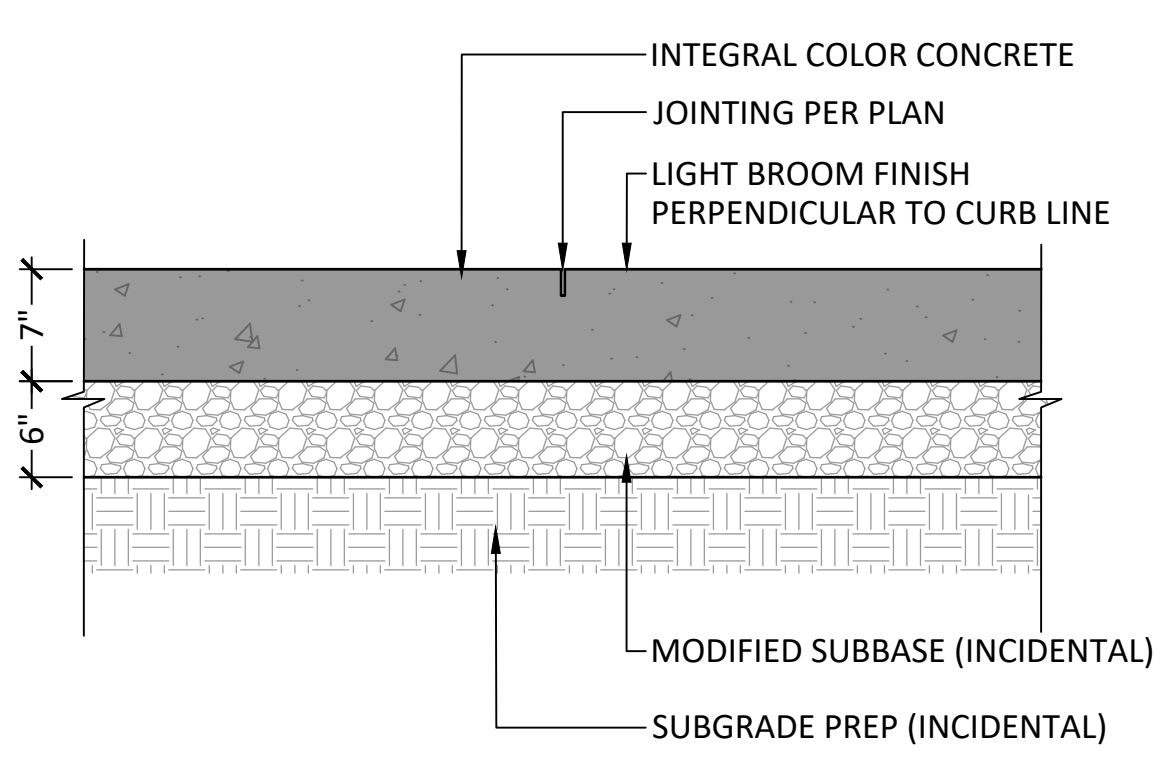
1 SIDEWALK, PCC, 5 IN.
SCALE: N.T.S.



2 SIDEWALK, PCC, 6 IN.
SCALE: N.T.S.

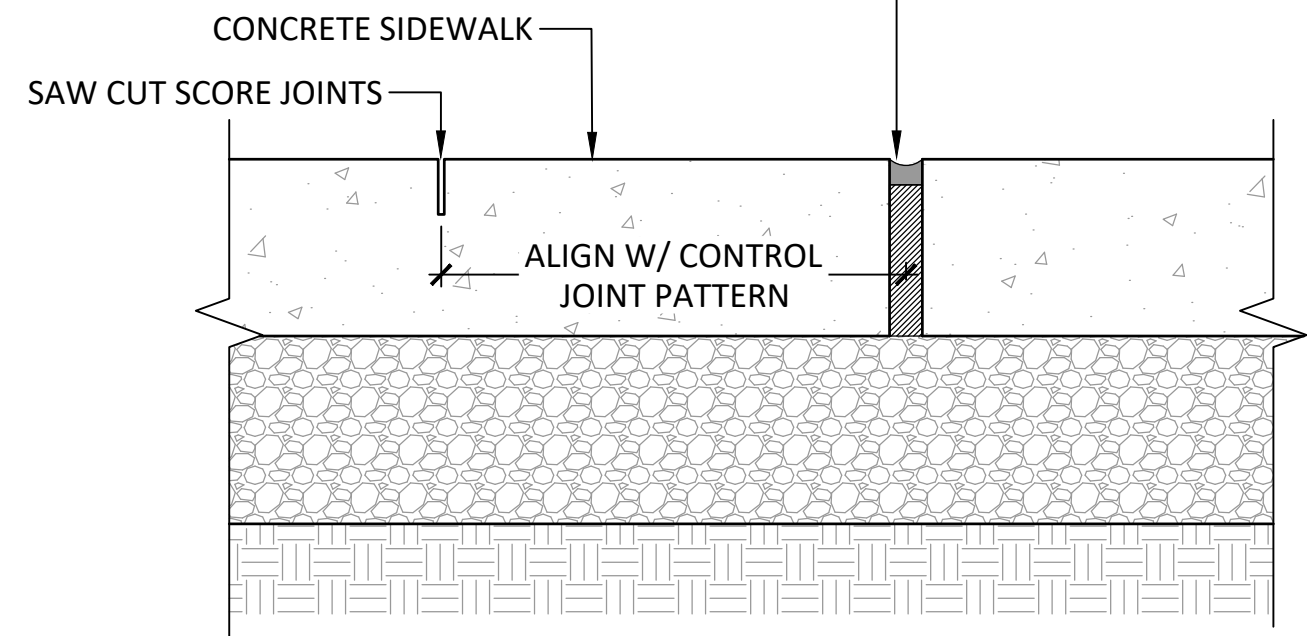


3 PAVEMENT, PCC, 7 IN.
SCALE: N.T.S.

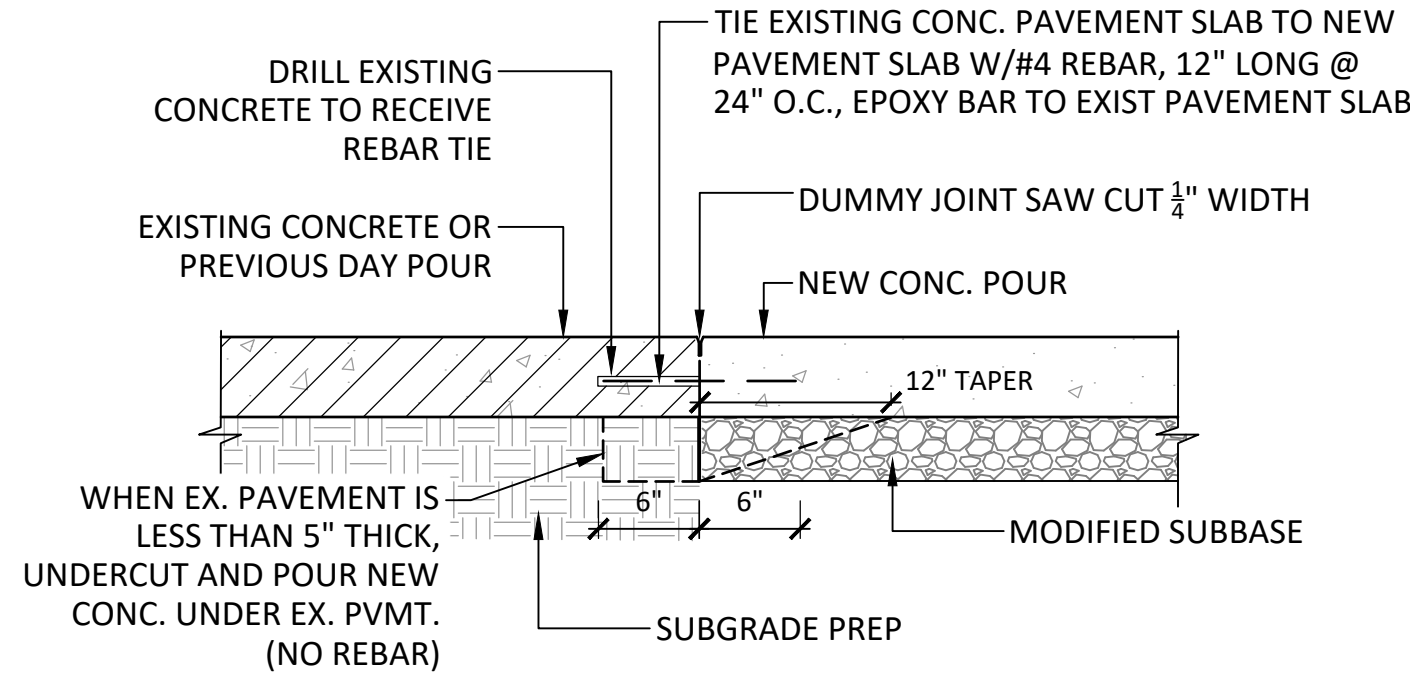


4 PAVEMENT, PCC, 7 INCH, INTEGRAL COLOR
SCALE: N.T.S.

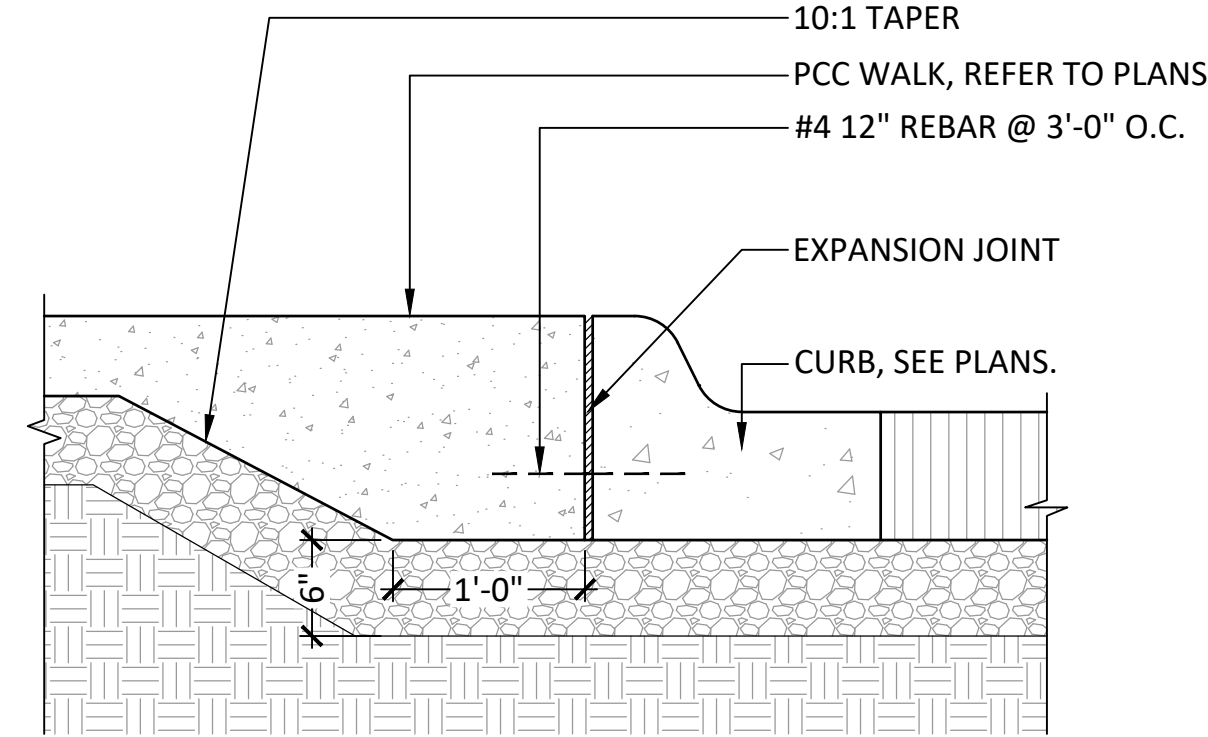
1/2" WIDE ISOLATION JOINT/EXPANSION JOINT W/ 1/2" DEPTH JOINT SEALANT, W/ ISOLATION JOINT MATERIAL. ISOLATION JOINT MATERIAL TO BE 3/4" POLYETHYLENE, CLOSED CELL BACKING. JOINT SEALER TO BE COMPATIBLE W/ EXPANSION JOINT MATERIAL. COLOR TO BE ALUMINUM GRAY. ALL MATERIALS TO BE INSTALLED AS PER MANUFACTURERS RECOMMENDATION. SUBMIT MATERIAL SAMPLES AND TECHNICAL DATA TO OWNER REPRESENTATIVE FOR APPROVAL PRIOR TO CONSTRUCTION



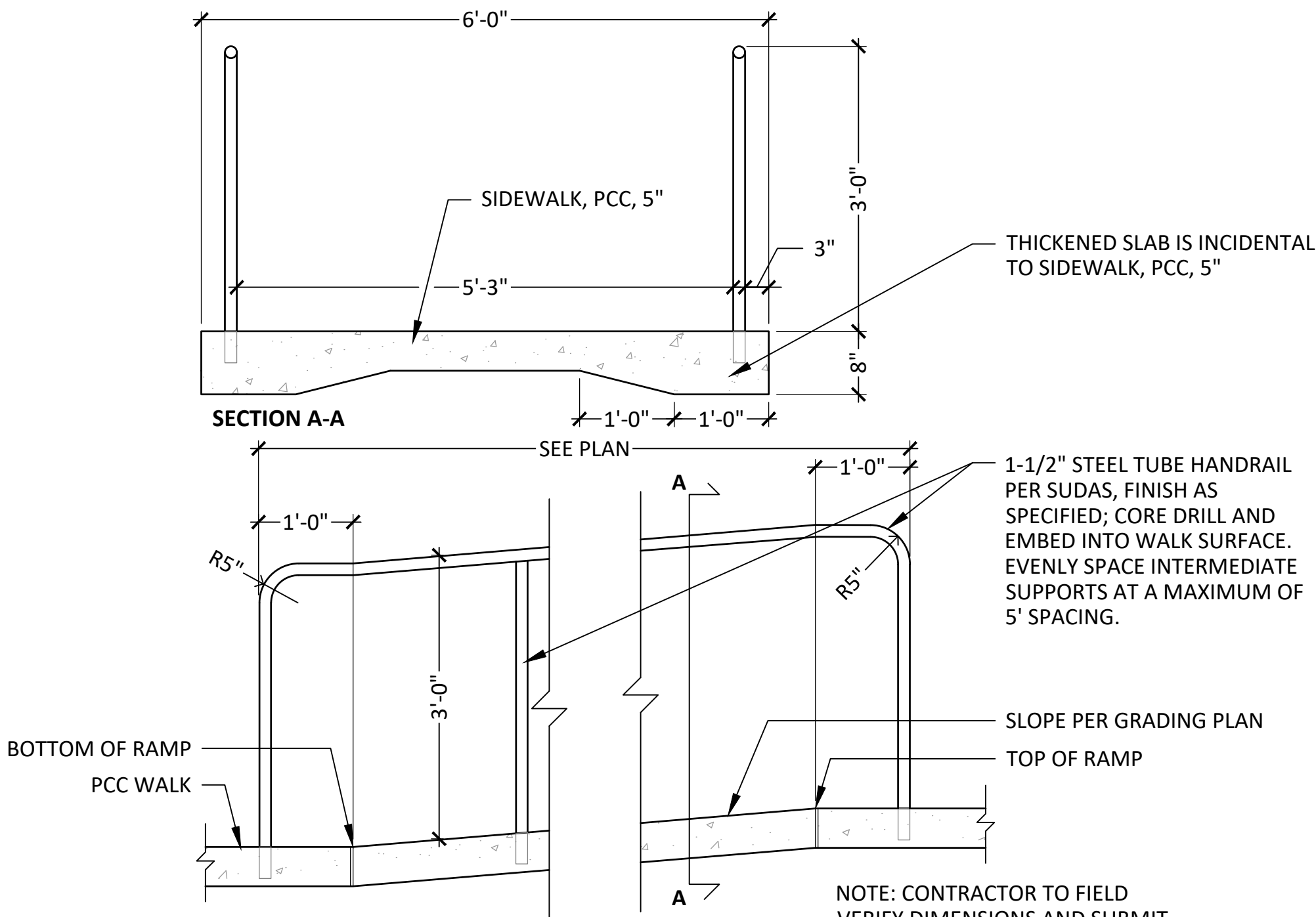
5 CONCRETE SIDEWALK JOINTS
SCALE: N.T.S.



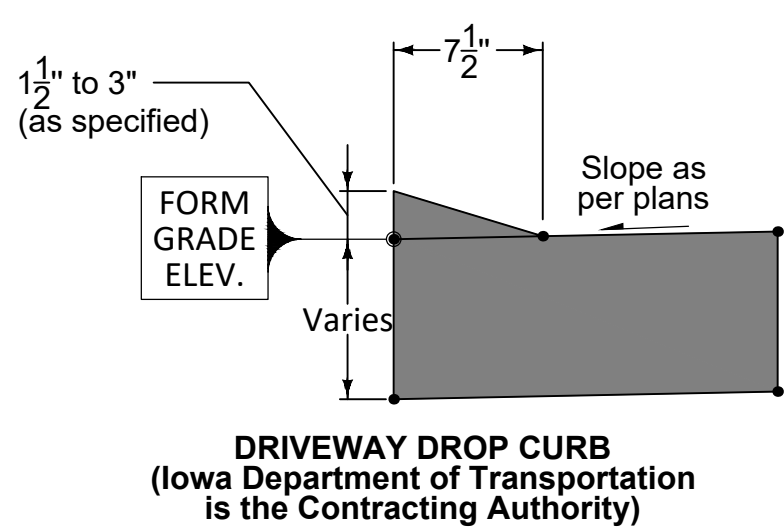
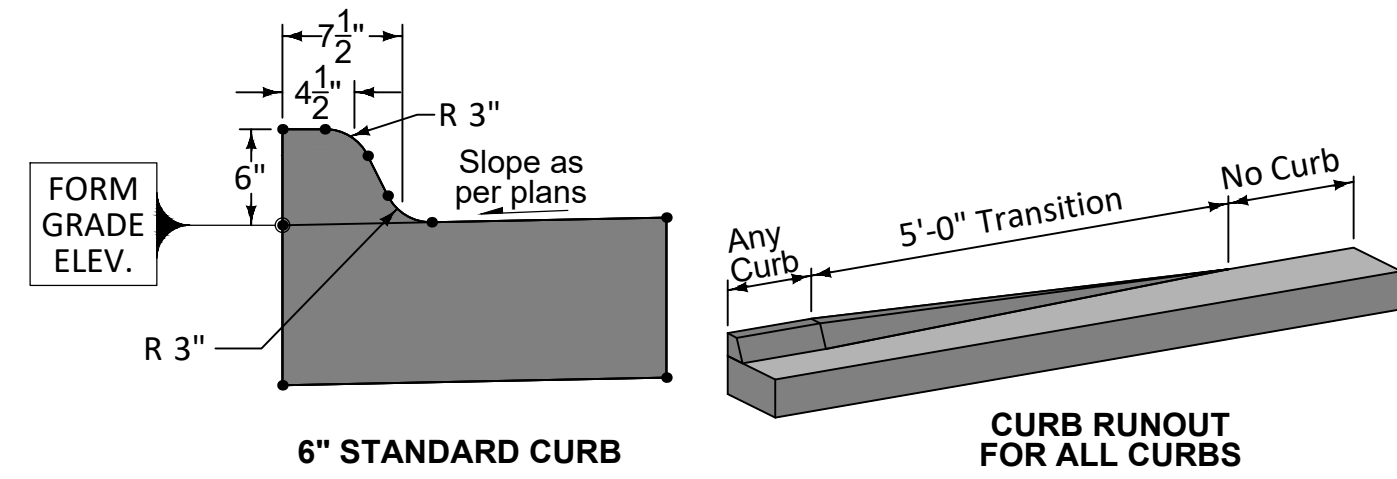
6 PAVEMENT JOINT AT EXISTING CONCRETE PAVEMENT
SCALE: N.T.S.



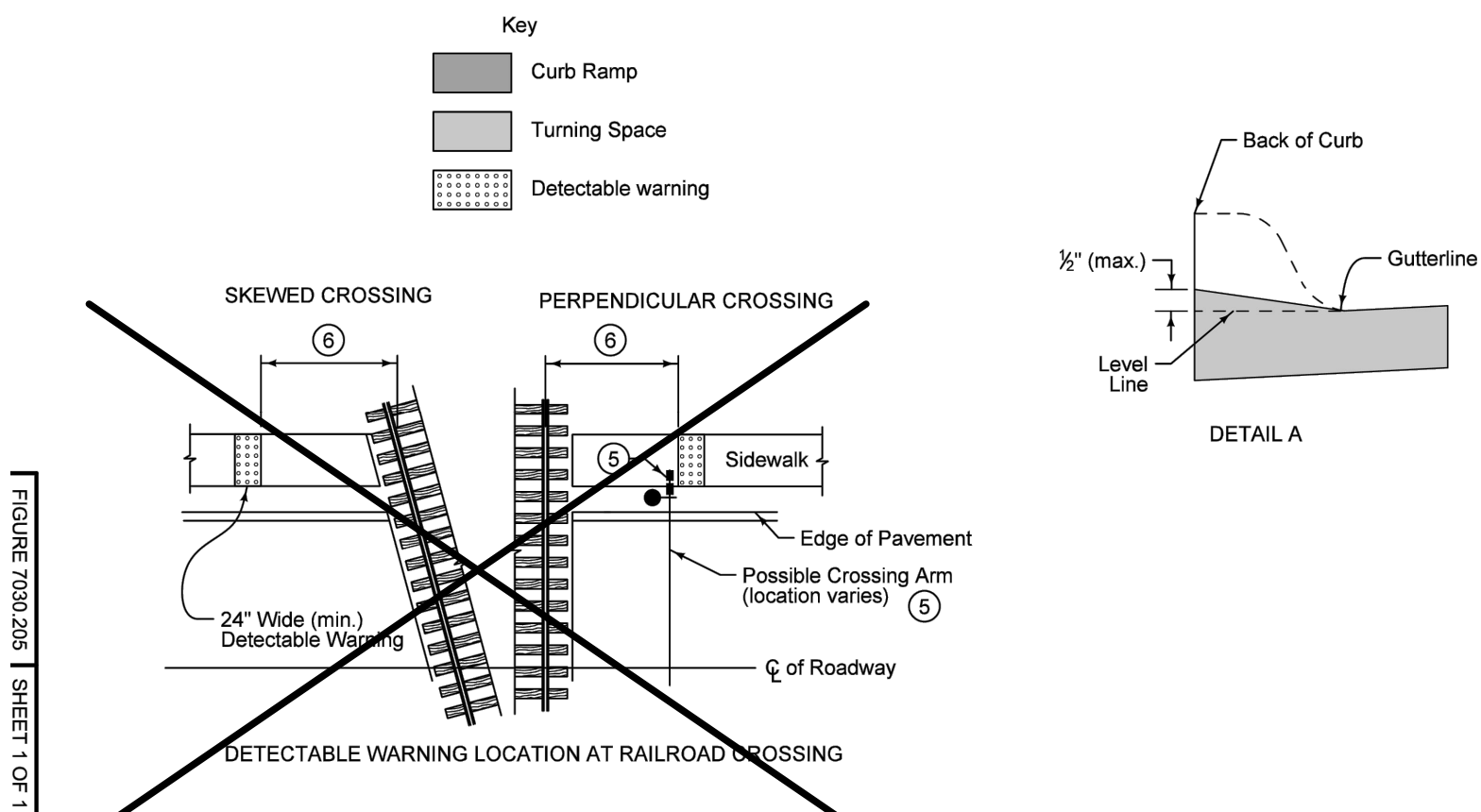
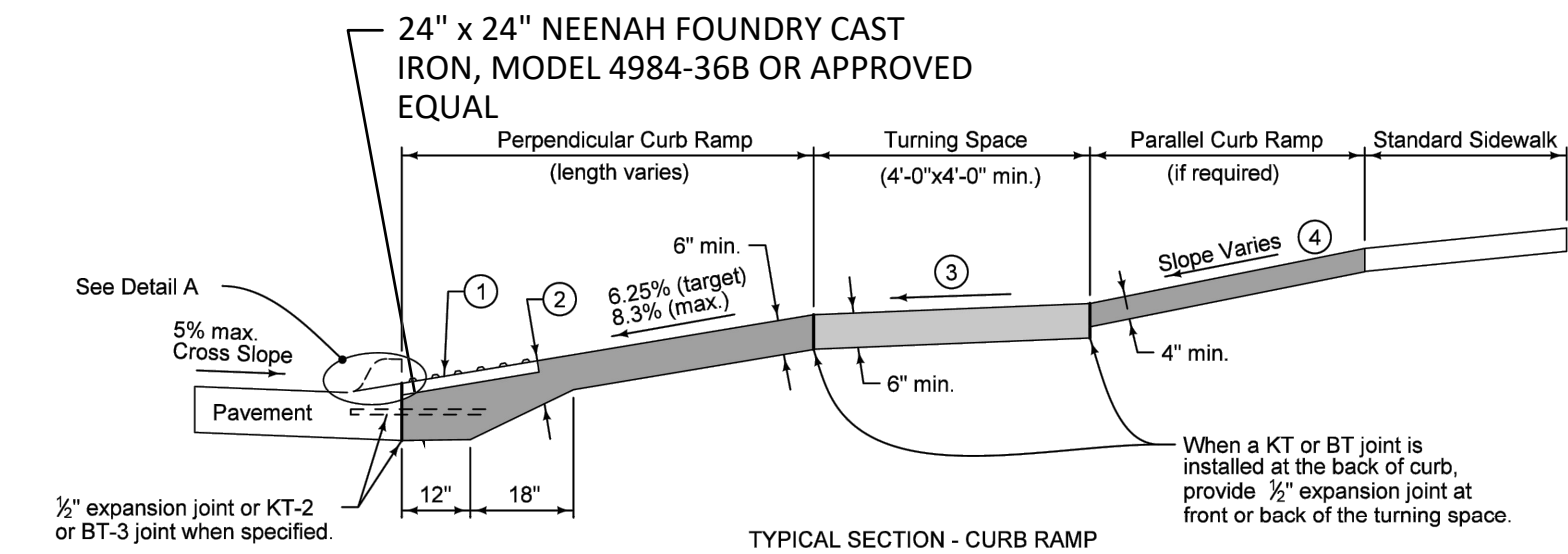
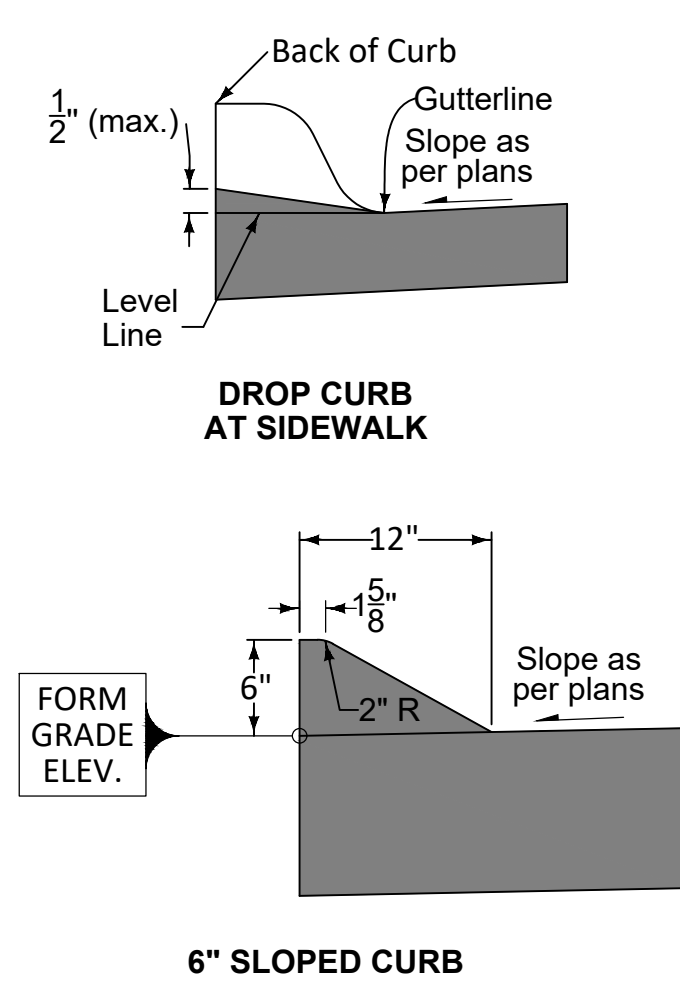
7 THICKENED SIDEWALK AT BACK OF CURB
SCALE: N.T.S.



8 RAMP WITH HANDRAIL
SCALE: N.T.S.



9 CURB DETAILS
SCALE: N.T.S.



10 PEDESTRIAN CURB RAMP/DETECTABLE WARNING
SCALE: N.T.S.

- Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares.
- Provide a minimum of 6 inches of concrete below the detectable warning panel.
- Minimum 4 feet by 4 feet. Target cross slope of 1.5% with a maximum cross slope of 2.0%.
- If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.
- The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
- If crossing gate conflicts with location of detectable warning or if pedestrian crossing gate is provided, place detectable warning panel in advance of the crossing gate.
- Locate front edge of detectable warning panel 12 to 15 feet from centerline of nearest rail. Orient truncated domes parallel to the direction of pedestrian travel.

	REVISION 1 10-20-15 7030.205 SHEET 1 of 1
SUDAS Standard Specifications	
GENERAL SIDEWALK AND CURB RAMP DETAILS	

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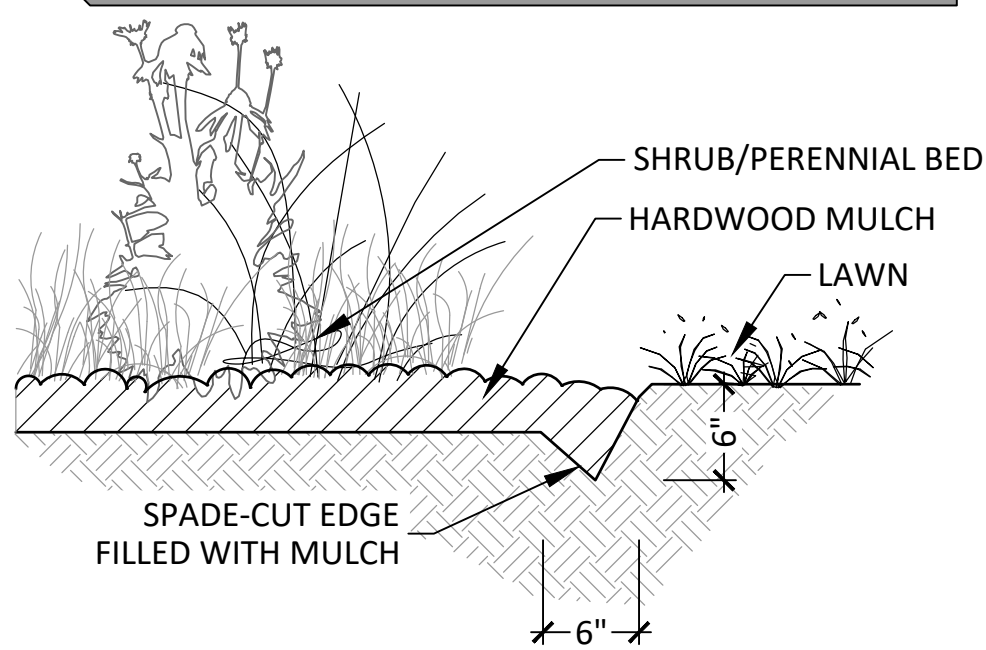
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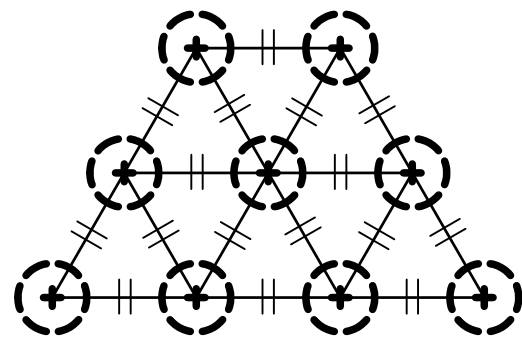
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CHECKED CB	CHECKED CB
CLIENT PROJ. NO. 076.128908	

CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
TYPICAL SECTIONS

NOTES:
SPADE-CUT EDGE TO BE INCIDENTAL TO PLANT MATERIAL AND SHALL BE USED WHERE ALL LANDSCAPE BEDS MEET ADJACENT SEEDED OR LAWN AREAS.

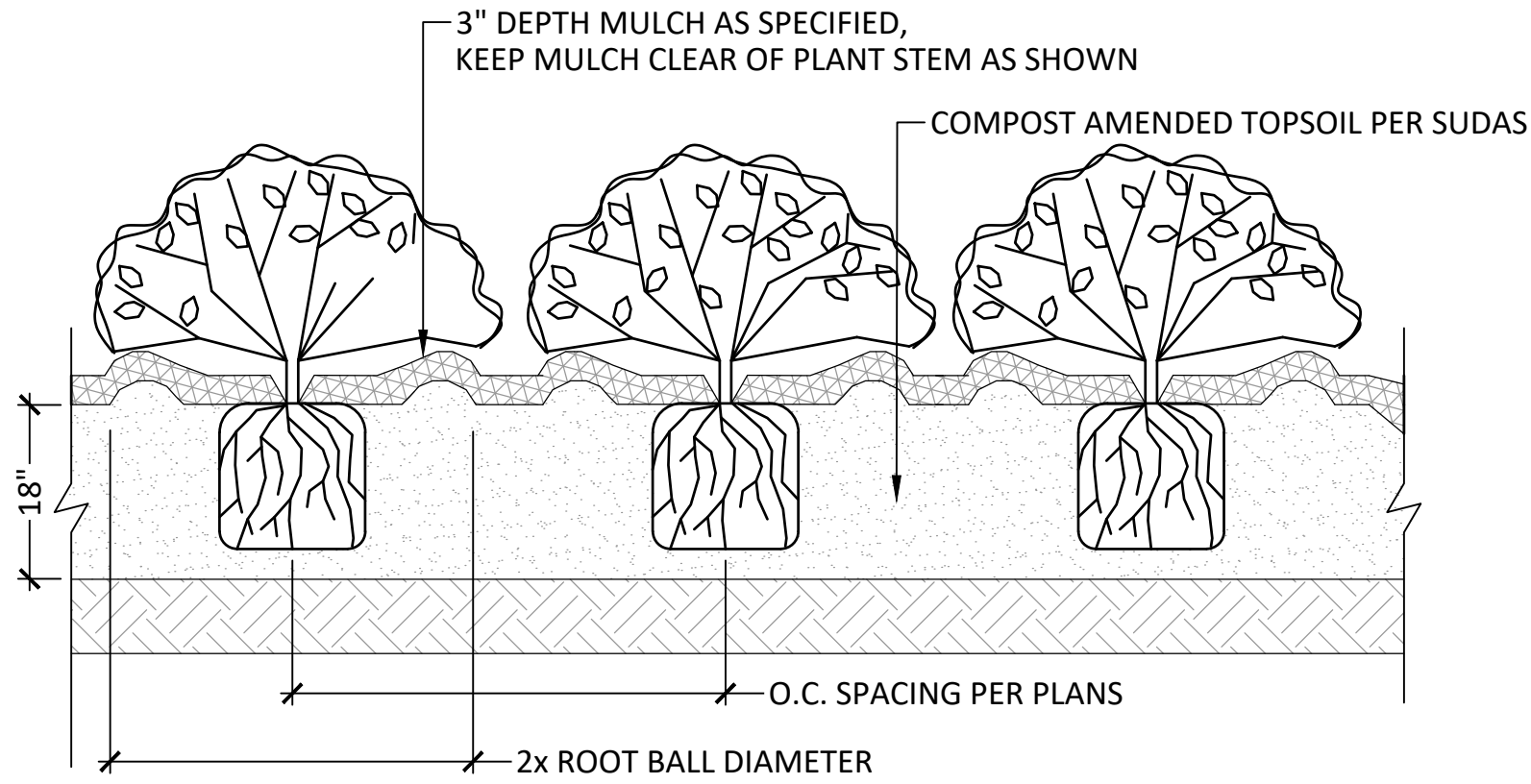


1 SECTION: SPADE-CUT EDGE
SCALE: N.T.S.

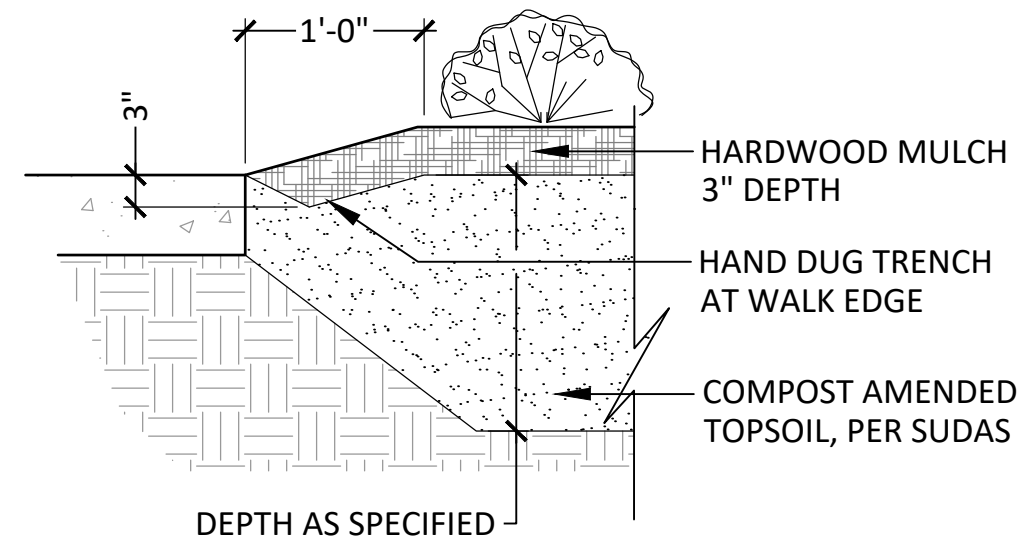


- NOTES:
- O.C. TRIANGULAR PLANT SPACING PER PLANS
 - AREAS IDENTIFIED ON PLANTING PLAN AS O.C. SHALL BE TRIANGULAR SPACED
 - SEE PLANTING PLAN/SCHEDULE FOR SPECIES

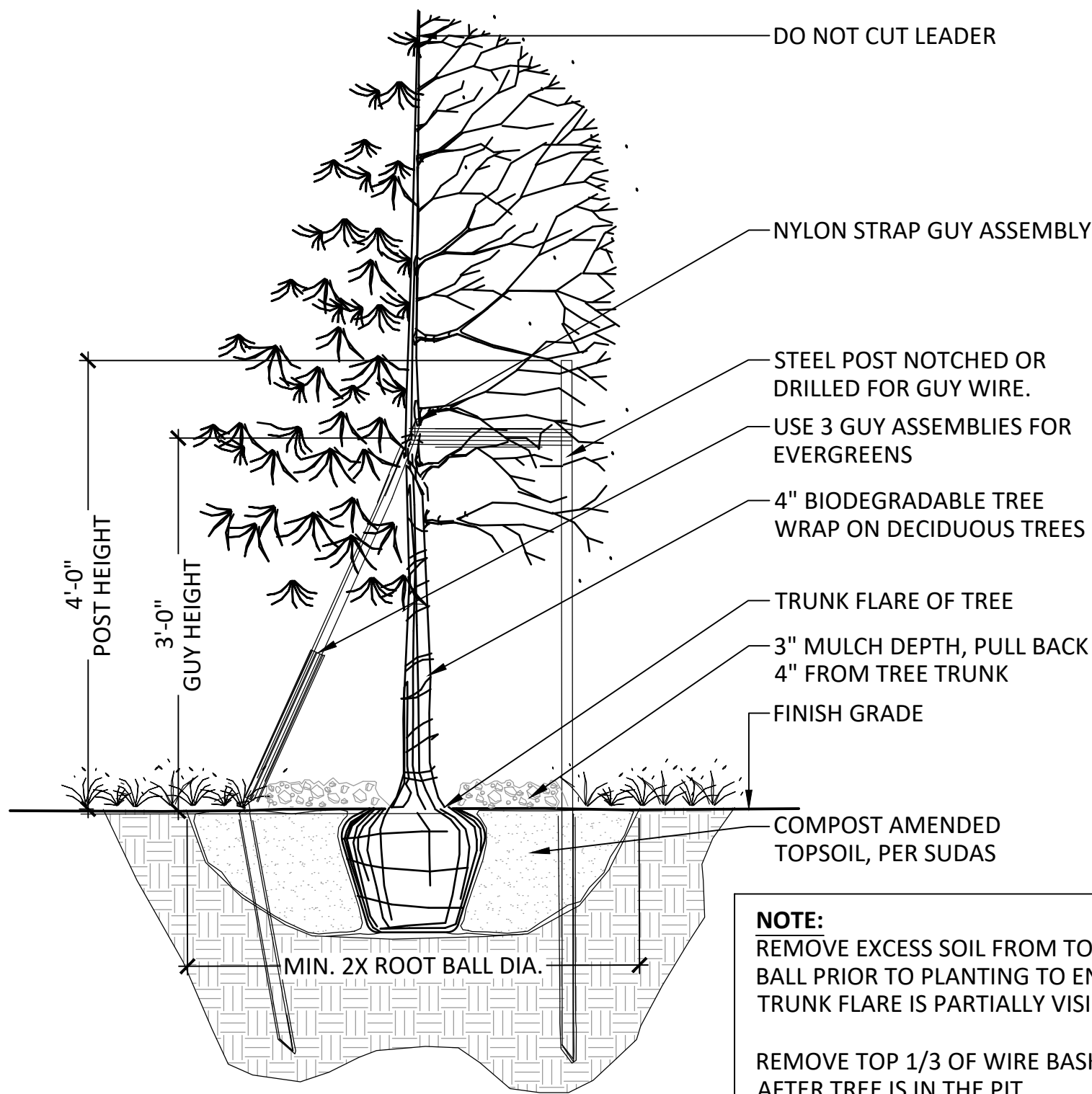
2 PERENNIAL PLANT SPACING
SCALE: N.T.S.



3 PERENNIAL / SHRUB PLANTING
SCALE: N.T.S.



4 PLANTING EDGE AT HARDSCAPE SURFACE
SCALE: N.T.S.

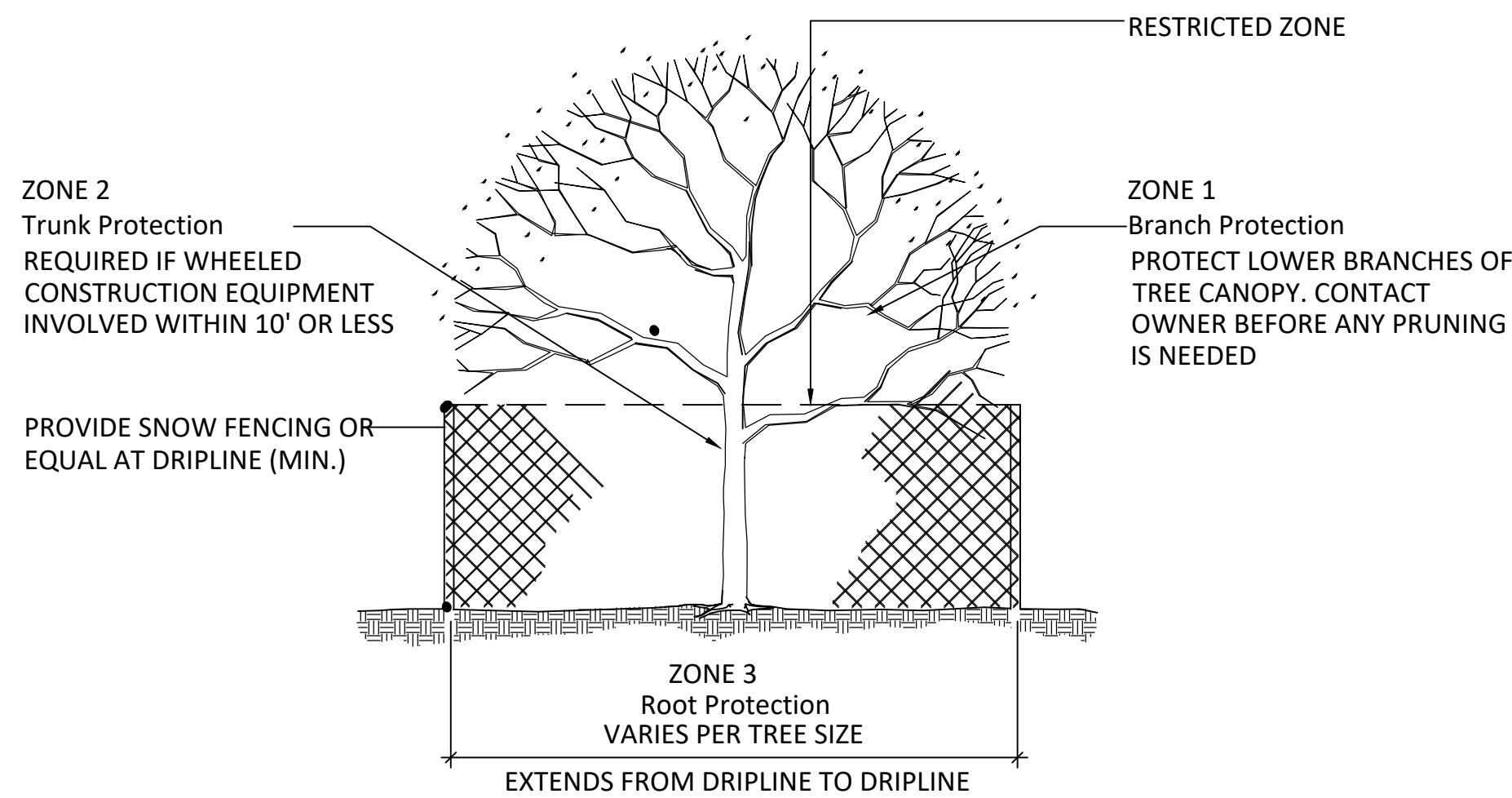


NOTE:
REMOVE EXCESS SOIL FROM TOP OF ROOT BALL PRIOR TO PLANTING TO ENSURE TRUNK FLARE IS PARTIALLY VISIBLE

REMOVE TOP 1/3 OF WIRE BASKET AFTER TREE IS IN THE PIT.
REMOVE TWINE, & PULL BURLAP FROM TREE TRUNK

SET TOP OF ROOT BALL 1" TO 2" ABOVE SURROUNDING FINISH GRADE

5 TREE PLANTING
SCALE: N.T.S.

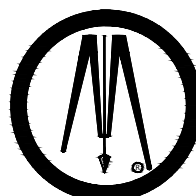


6 EXISTING TREE PROTECTION
SCALE: N.T.S.

TREE PROTECTION NOTES

- ALL TREES TO BE PROTECTED SHALL BE PER DETAIL. GROUPING OF MORE THAN ONE TREE MAY OCCUR.
- TREES TO BE PROTECTED AND PRESERVED SHALL BE IDENTIFIED ON THE TRUNK WITH WHITE SURVEY TAPE.
- TO PREVENT TREE ROOT SMOTHERING, SOIL STOCKPILES, SUPPLIES, EQUIPMENT OR ANY OTHER MATERIAL SHALL NOT BE PLACED OR STORED WITHIN A TREE DRIP LINE OR WITHIN 15 FEET OF A TREE TRUNK, WHICHEVER IS GREATER.
- TREE ROOTS SHALL NOT BE CUT UNLESS CUTTING IS UNAVOIDABLE.
- TRENCHES SHALL BE HAND DUG WITHIN THE DRIP LINE IN AREAS WHERE ROOTS TWO INCHES IN DIAMETER AND GREATER ARE PRESENT, OR WHEN IN CLOSE PROXIMITY TO LOW BRANCHING TREES. WHENEVER POSSIBLE, ROOTS TWO INCHES OR GREATER IN DIAMETER SHALL BE TUNNELED OR BORED UNDER AND SHALL BE COVERED TO PREVENT DEHYDRATION.
- WHEN ROOT CUTTING IS UNAVOIDABLE, A CLEAN SHARP CUT SHALL BE MADE TO AVOID SHREDDING OR SMASHING. ROOT CUTS SHOULD BE MADE BACK TO A LATERAL ROOT. WHENEVER POSSIBLE, TREE ROOTS SHOULD BE CUT BETWEEN LATE FALL AND BUD OPENING, WHEN ROOT ENERGY SUPPLIES ARE HIGH AND CONDITIONS ARE LEAST FAVORABLE FOR DISEASE CAUSING AGENTS. EXPOSED ROOTS SHALL BE COVERED IMMEDIATELY TO PREVENT DEHYDRATION. ROOTS SHALL BE COVERED WITH SOIL OR BURLAP AND KEPT MOIST.
- WATERING OF PROTECTED TREES IN WHICH ROOTS WERE CUT SHALL BE PROVIDED BY THE CONTRACTOR.
- AUGER TUNNELING RATHER THAN TRENCHING SHOULD BE USED FOR UTILITY PLACEMENT WITHIN DRIP LINE OF TREE.
- FENCING MATERIAL SHALL ENCIRCLE ANY TREE WHOSE OUTER DRIP LINE EDGE IS WITHIN 20 FEET OF ANY CONSTRUCTION ACTIVITIES.
- FENCING MATERIAL SHALL BE BRIGHT, CONTRASTING COLOR, DURABLE, AND A MINIMUM OF FOUR FEET IN HEIGHT.
- FENCING MATERIAL SHALL BE SET AT THE DRIP LINE OR 15 FEET FROM TREE TRUNK, WHICHEVER IS GREATER, AND MAINTAINED IN AN UPRIGHT POSITION THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.
- ANY GRADE CHANGES (SUCH AS THE REMOVAL OF TOPSOIL OR ADDITION OF FILL MATERIAL) WITHIN THE DRIP LINE SHOULD BE AVOIDED FOR EXISTING TREES TO REMAIN. RETAINING WALLS AND TREE WELLS ARE ACCEPTABLE ONLY WHEN CONSTRUCTED PRIOR TO GRADE CHANGE.

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Email: DesMoines@bolton-menk.com
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DESIGNED NW/NRJ/TJN
SEALED CB
CHECKED CB
CLIENT PROJ. NO. 076.128908

CITY OF WINDSOR HEIGHTS, IOWA

2023 COLBY PARK IMPROVEMENTS

TYPICAL SECTIONS

SHEET

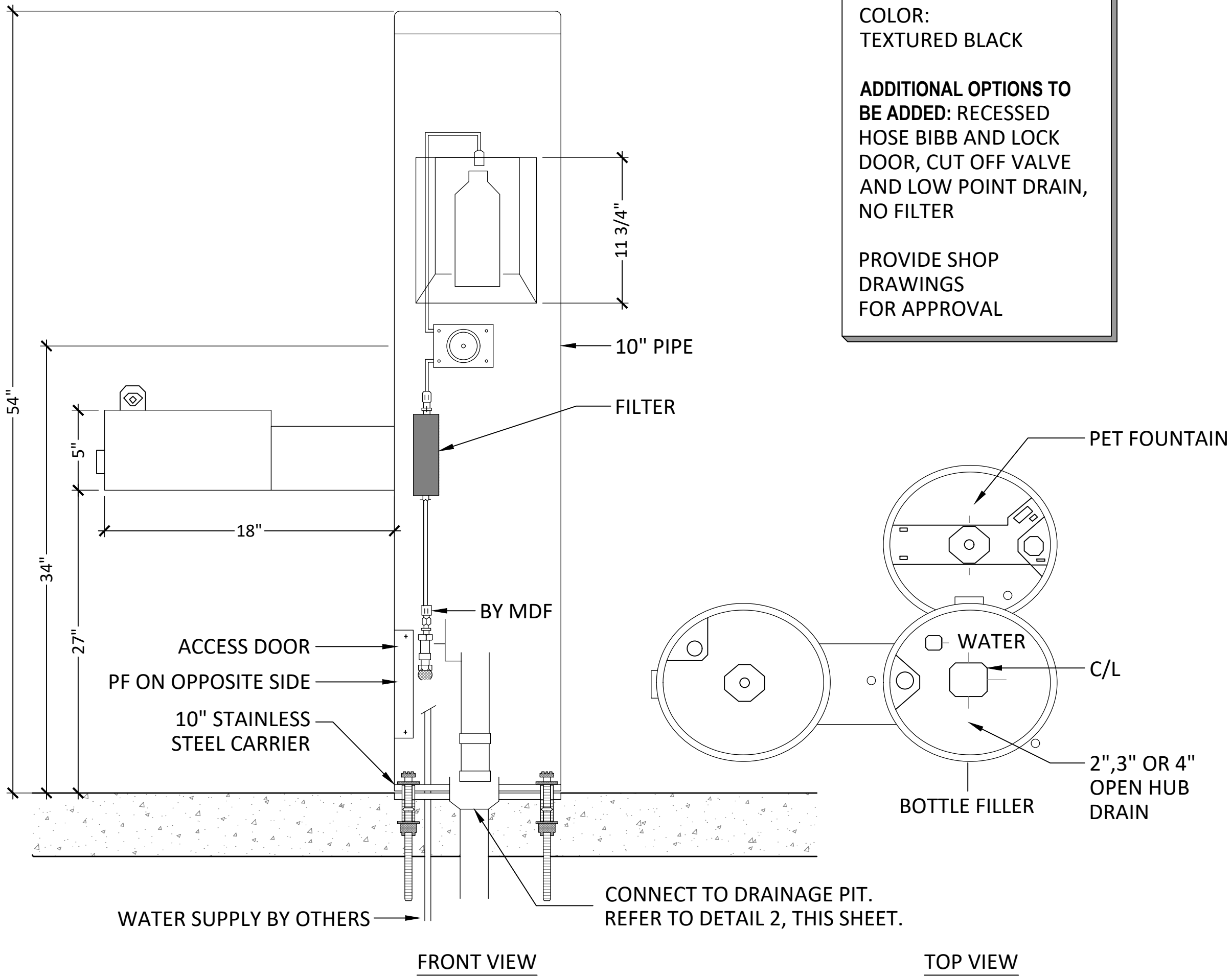
B.02

MOST DEPENDABLE FOUNTAINS, INC.
5705 COMMANDER DR. P.O. BOX 587
ARLINGTON, TN 38002-0587
PHONE: (901) 867-0039
www.mostdependable.com

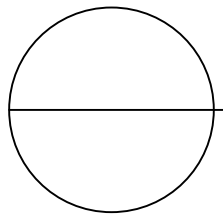
NOTE:
COLOR:
TEXTURED BLACK

ADDITIONAL OPTIONS TO
BE ADDED: RECESSED
HOSE BIBB AND LOCK
DOOR, CUT OFF VALVE
AND LOW POINT DRAIN,
NO FILTER

PROVIDE SHOP
DRAWINGS
FOR APPROVAL

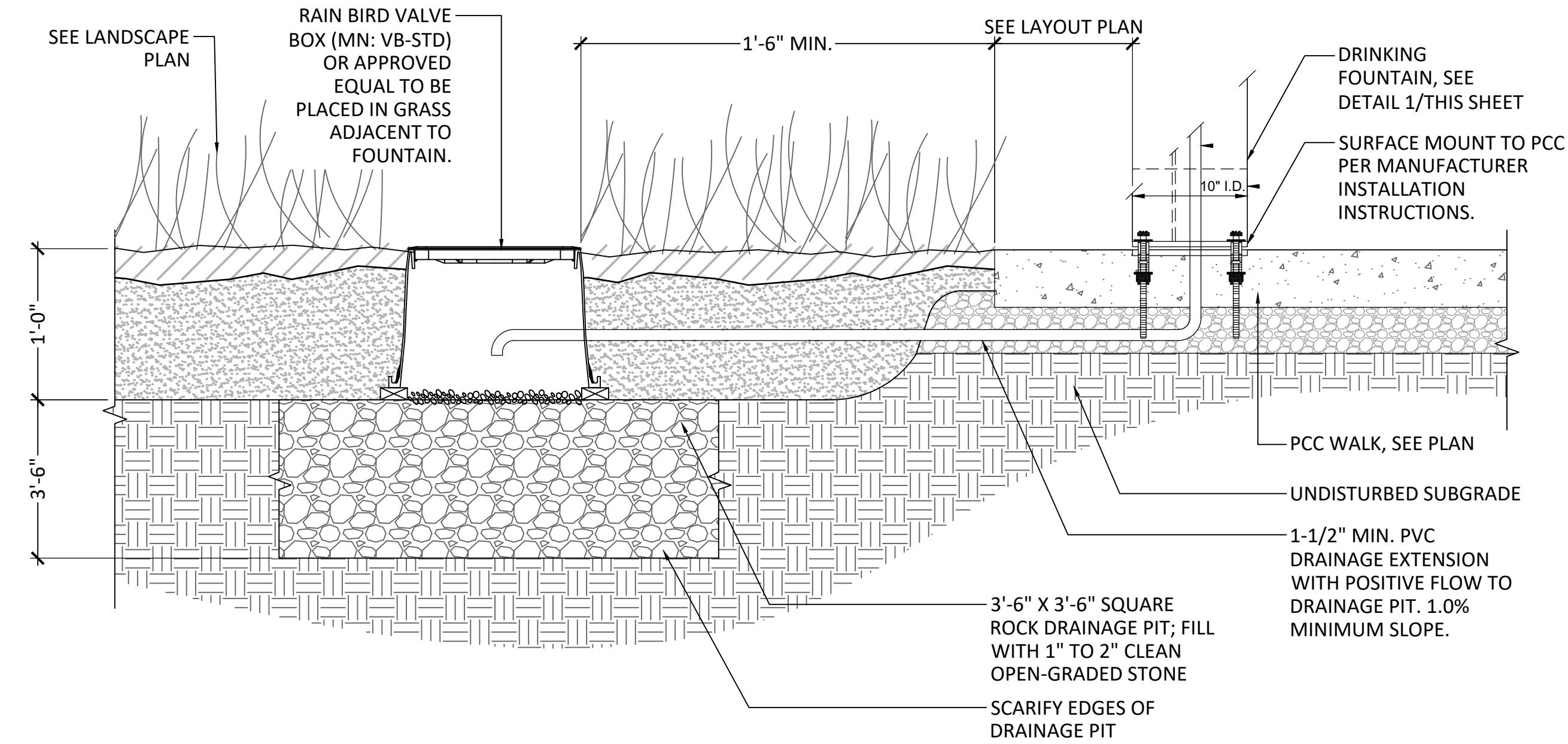


- NOTES:
1. OPTIONAL STAINLESS STEEL SURFACE CARRIER RECOMMENDED.
 2. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 3. DO NOT SCALE DRAWING.
 4. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
 5. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
 6. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 3354-17.7.

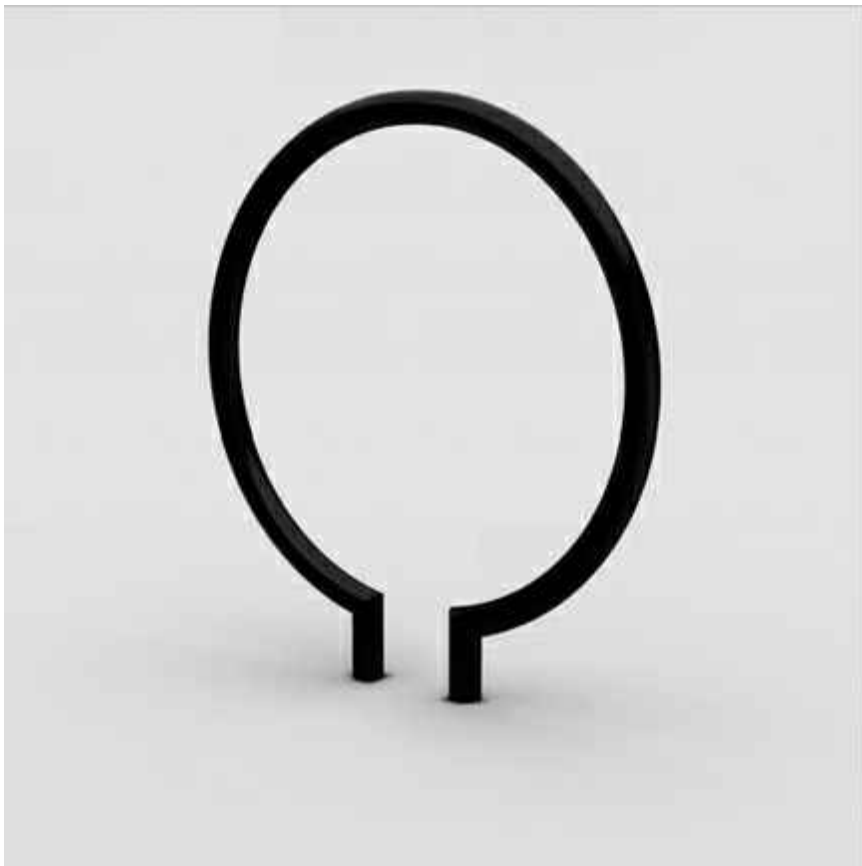
 **MODEL 10155SM**
10155SM SHOWN WITH OPTIONAL 10" SS SURFACE CARRIER

MUST BE INSTALLED
BY MAY 2024

1 DRINKING FOUNTAIN (MDF MODEL 10155SM)
SCALE: N.T.S.



2 DRINKING FOUNTAIN DRAINAGE PIT
SCALE: N.T.S.



BIKE RACK:

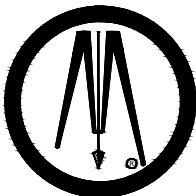
1. MANUFACTURER: LANDSCAPE FORMS
2. MODEL: RING
3. COLOR: BLACK
4. FINISH: POWDERCOAT, BLACK
5. MOUNTING: EMBEDDED PER MANUFACTURER

OR APPROVED EQUAL

CONTACT: STACY ERNST
Site Source, Ilc.
816-444-4376
stacye@landscapeforms.com

3 BIKE RACK

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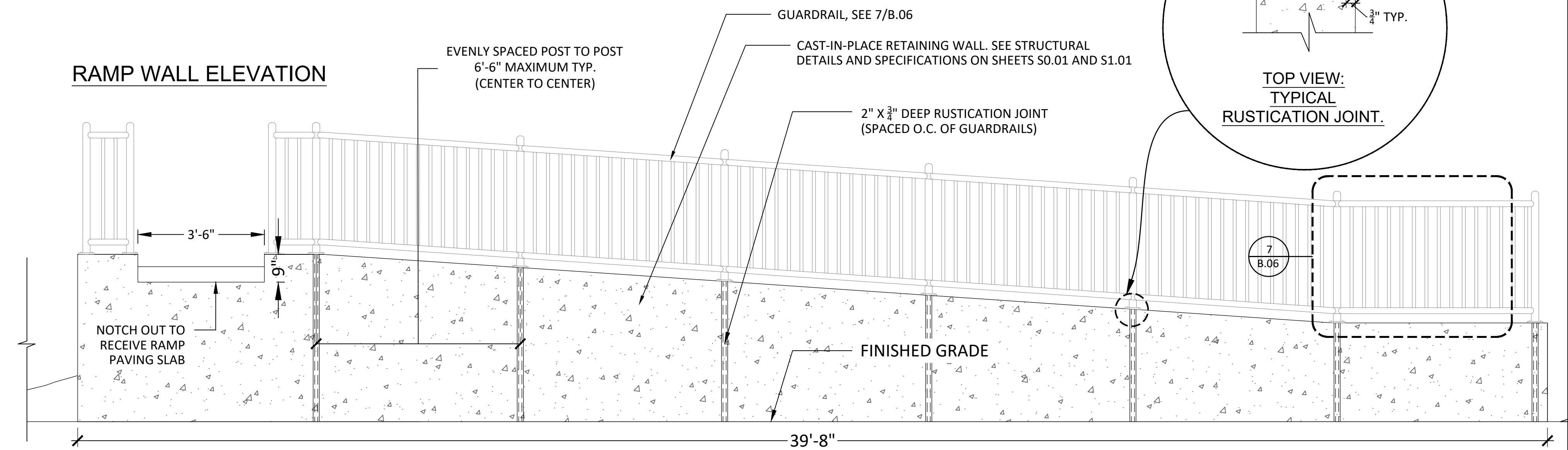
430 E GRAND AVE, SUITE 101
DES MOINES, IOWA 50309
Phone: (515) 259-9190
Email: DesMoines@bolton-menk.com
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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS

TYPICAL SECTIONS



GUARDRAIL, SEE 7/B.06

GUARDRAIL, SEE 7/B.06

SURFACE MOUNTED HANDRAIL, SEE 8/B.01

2" X $\frac{3}{4}$ " DEEP RUSTICATION JOINT (SPACED O.C. OF GUARDRAILS)

CAST-IN-PLACE RETAINING WALL. SEE STRUCTURAL DETAILS AND SPECIFICATIONS ON SHEETS S0.01 AND S1.01

FINISHED GRADE BERM

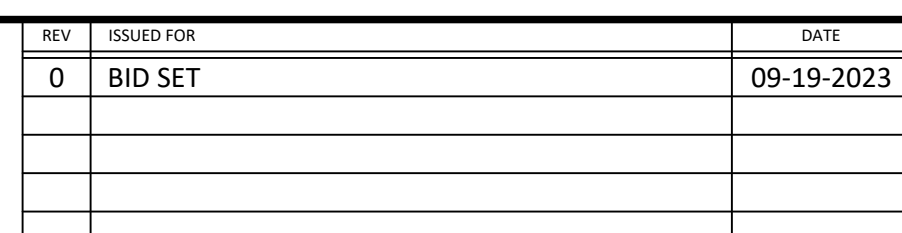
7/B.06

46'-11"

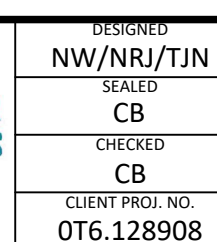
RAMP WALL ELEVATION

NOTE:
GUARDRAILS ON THIS SHEET TO BE INCIDENTAL TO PLAYGROUND EQUIPMENT. HANDRAILS PAID SEPARATELY.

HANDRAILS & GUARDRAILS SHALL FOLLOW ALL ADA DESIGN REQUIREMENTS.



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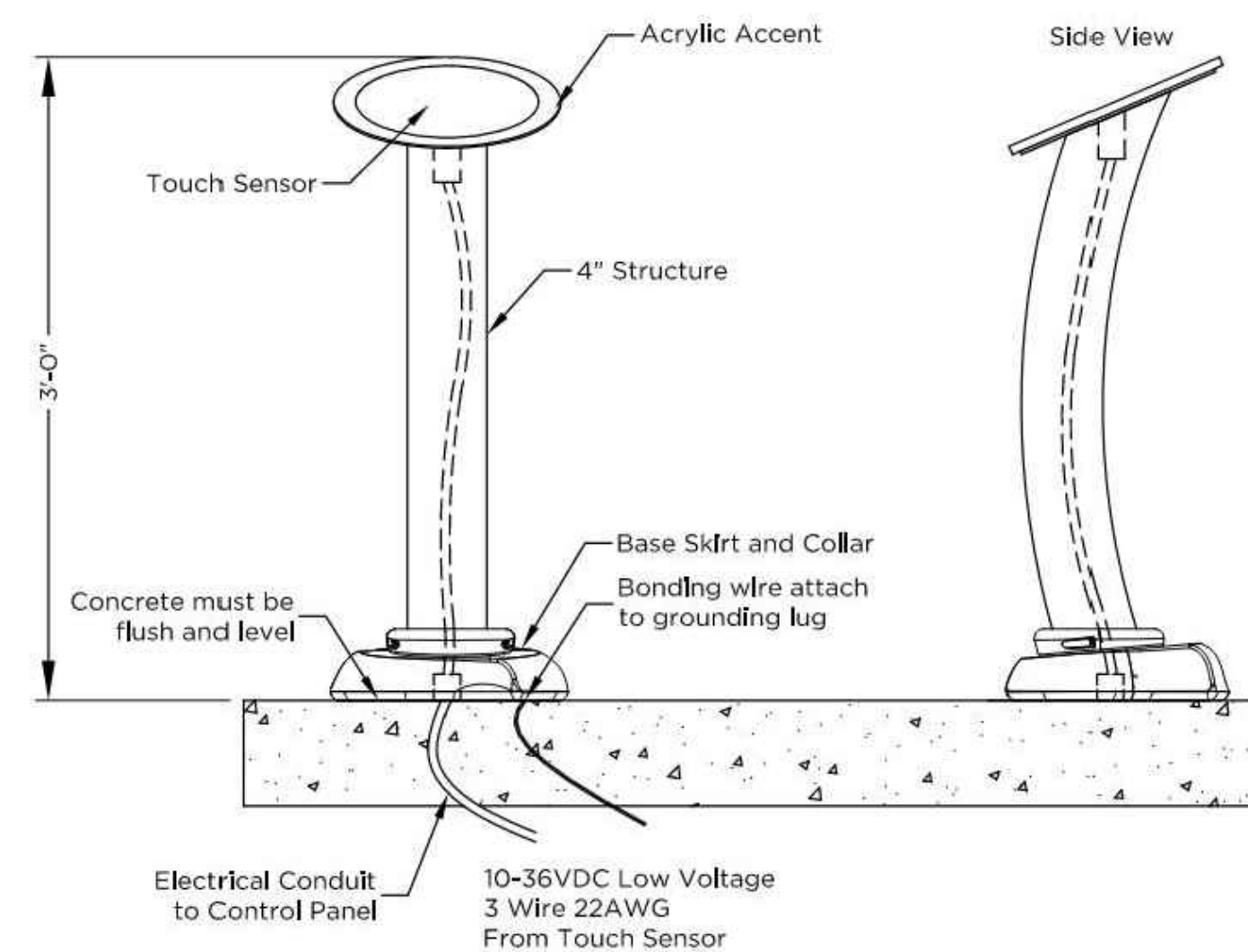


TYPICAL SECTIONS

3.04

Collar
Urethane
(see specification for details)

Recommended Distance From Aquavator(s) to Control Panel 50'



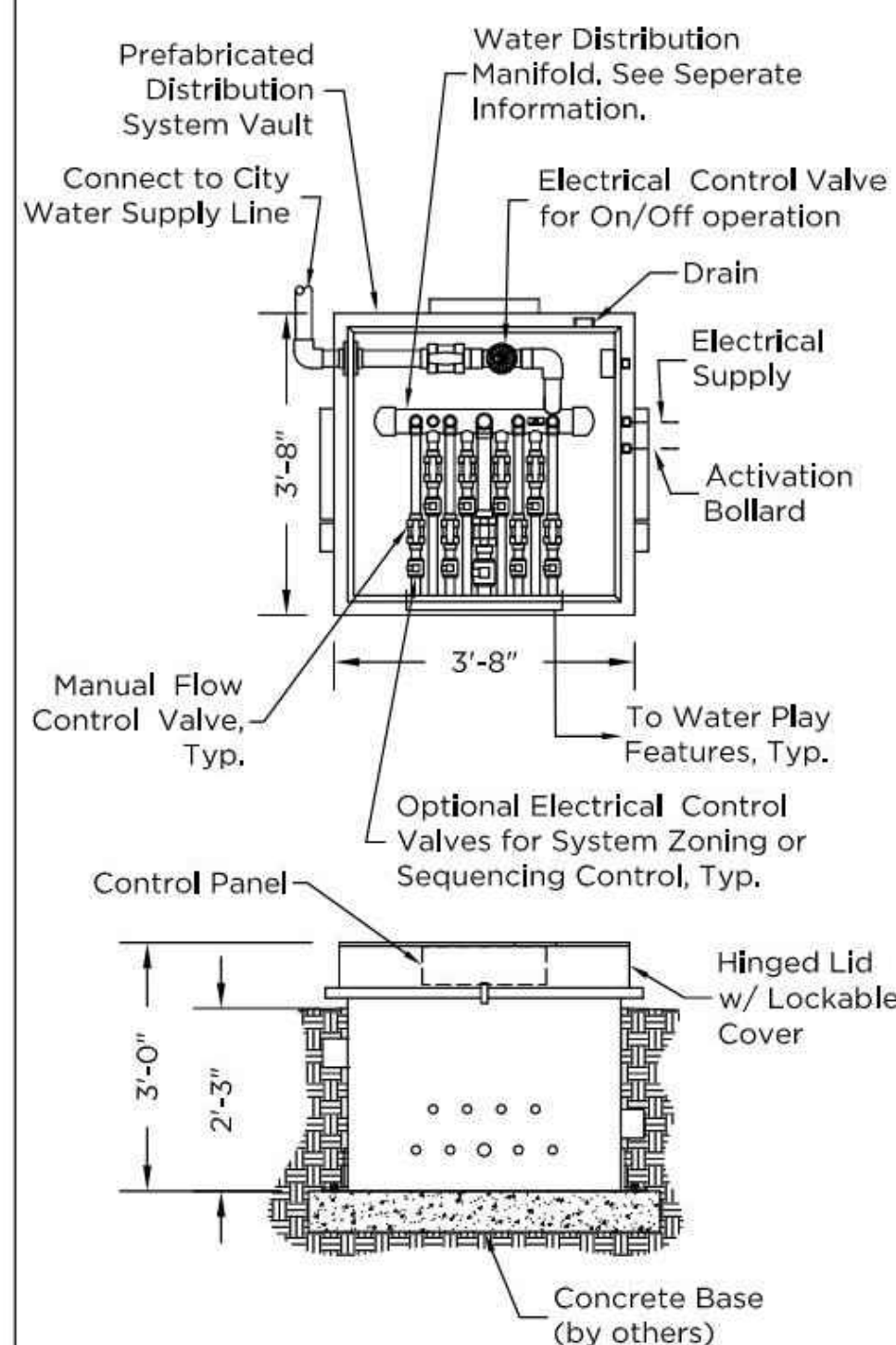
<u>Model No.</u>	<u>Description</u>
ACT-BP	Aquavator



877-632-0503
Local 952-445-5135
Fax 952-345-6444
aquatix.playlsi.com

JLS
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- Water Distribution Manifold -

Total Feature Flow Rate:	Project Specific
Optional Zoning Electrical Control Valves:	Yes / No
Optional Sequencing Electrical Control Valves:	Yes / No
Discharge Lines (11 max):	
- Control Panel -	
Standard Panel design for all on/off controls only:	Yes / No
PLC Based Panel for Zoned Controlled System:	Yes / No
PLC Based Panel for Sequenced Controlled System:	Yes / No
Power Feeds to Manifold:	_____ (# of Valves)
Activation Bollard Relay:	_____ (# of Bollard)
Main Power Supply #1:	
<u>120</u> volts	<u>Single</u> phase
<u>20A max.</u>	
(1 ph, 120 v, 60 hz.)	
(Power Supply to be GFI protected.)	

Note:
-Information provided is preliminary except the required main power supply
NEEDS 120v. / 1ph.

<u>Model No.</u>	<u>Max. Feature Flow Rate:</u>	<u>Water Supply Line**</u>
WDM-300-175	175 gpm	3"

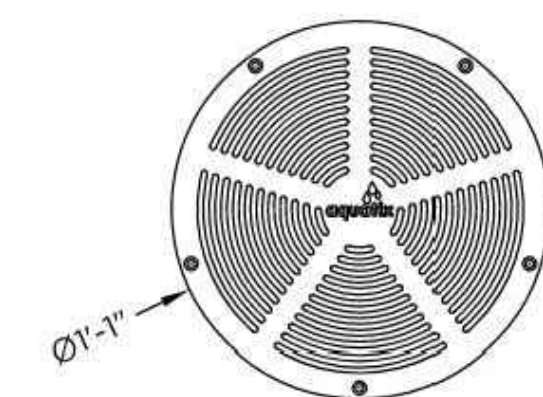
** Note: Water supply line flow rates are based on 20 to 30 psi.



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Fax 952-345-6444
aquat[x].playlsi.com

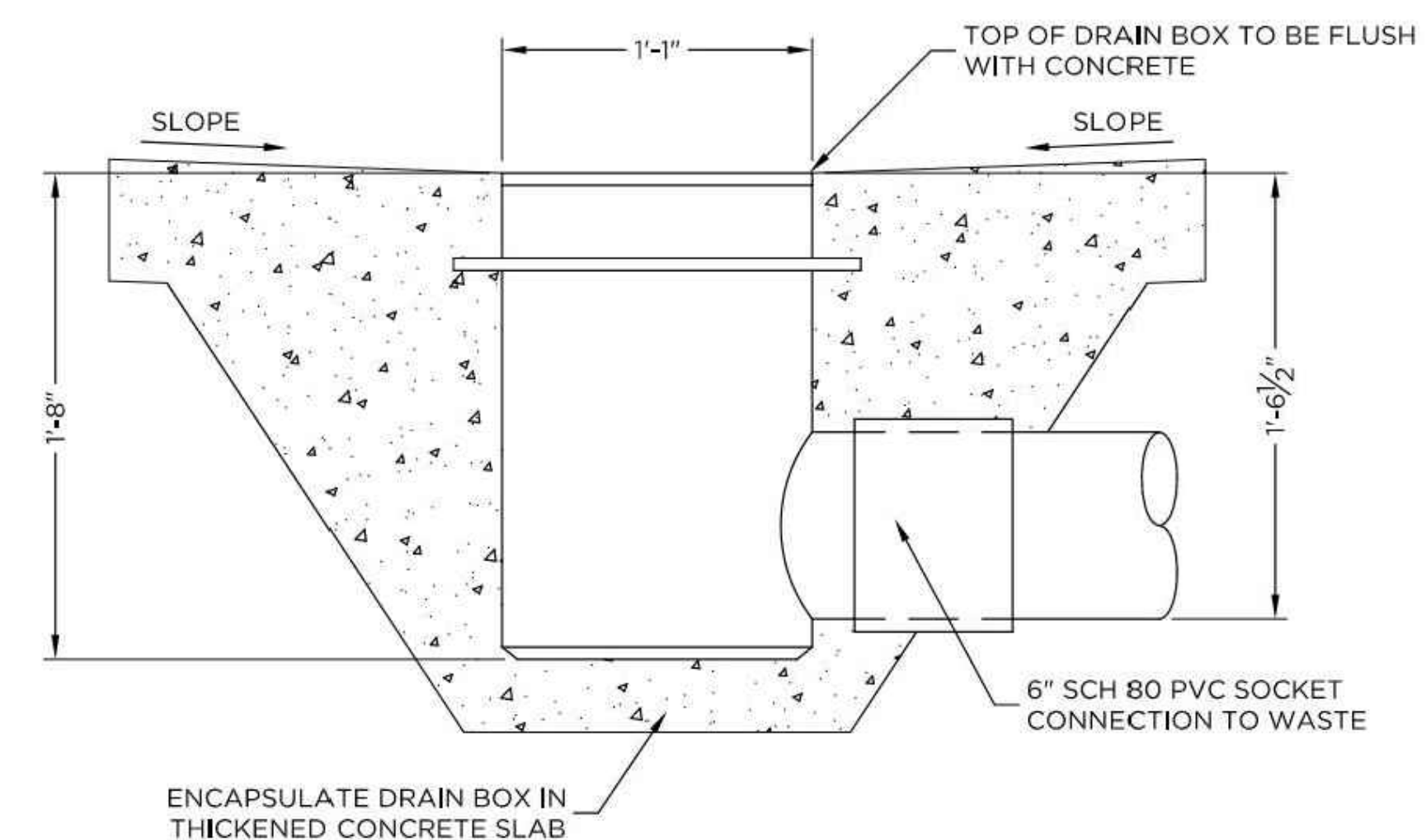
KML
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Max 120 gpm Gravity Flow Per Unit

Note:
-Above information is preliminary. Exact number of collector boxes needed for splash pad design based on total feature flow rate, size of splash pad, drainage needs for splash pad layout, and elevation/distance of collector box(es) to waste.



Model No.	Max. Gravity Flow Rate: (Per Box)
001	1000
002	1000
003	1000
004	1000
005	1000
006	1000
007	1000
008	1000
009	1000
010	1000
011	1000
012	1000
013	1000
014	1000
015	1000
016	1000
017	1000
018	1000
019	1000
020	1000
021	1000
022	1000
023	1000
024	1000
025	1000
026	1000
027	1000
028	1000
029	1000
030	1000
031	1000
032	1000
033	1000
034	1000
035	1000
036	1000
037	1000
038	1000
039	1000
040	1000
041	1000
042	1000
043	1000
044	1000
045	1000
046	1000
047	1000
048	1000
049	1000
050	1000
051	1000
052	1000
053	1000
054	1000
055	1000
056	1000
057	1000
058	1000
059	1000
060	1000
061	1000
062	1000
063	1000
064	1000
065	1000
066	1000
067	1000
068	1000
069	1000
070	1000
071	1000
072	1000
073	1000
074	1000
075	1000
076	1000
077	1000
078	1000
079	1000
080	1000
081	1000
082	1000
083	1000
084	1000
085	1000
086	1000
087	1000
088	1000
089	1000
090	1000
091	1000
092	1000
093	1000
094	1000
095	1000
096	1000
097	1000
098	1000
099	1000
100	1000

Note:
-120gpm MAXIMUM drainage is based on a 1/4" per foot slope from 6" collector box drainage line to waste.

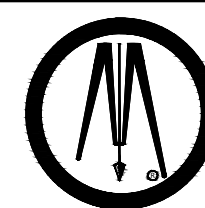


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P.J.
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CHECKED	CB
CLIENT PROJ. NO.	OT6.128908

2023 COLBY PARK IMPROVEMENTS

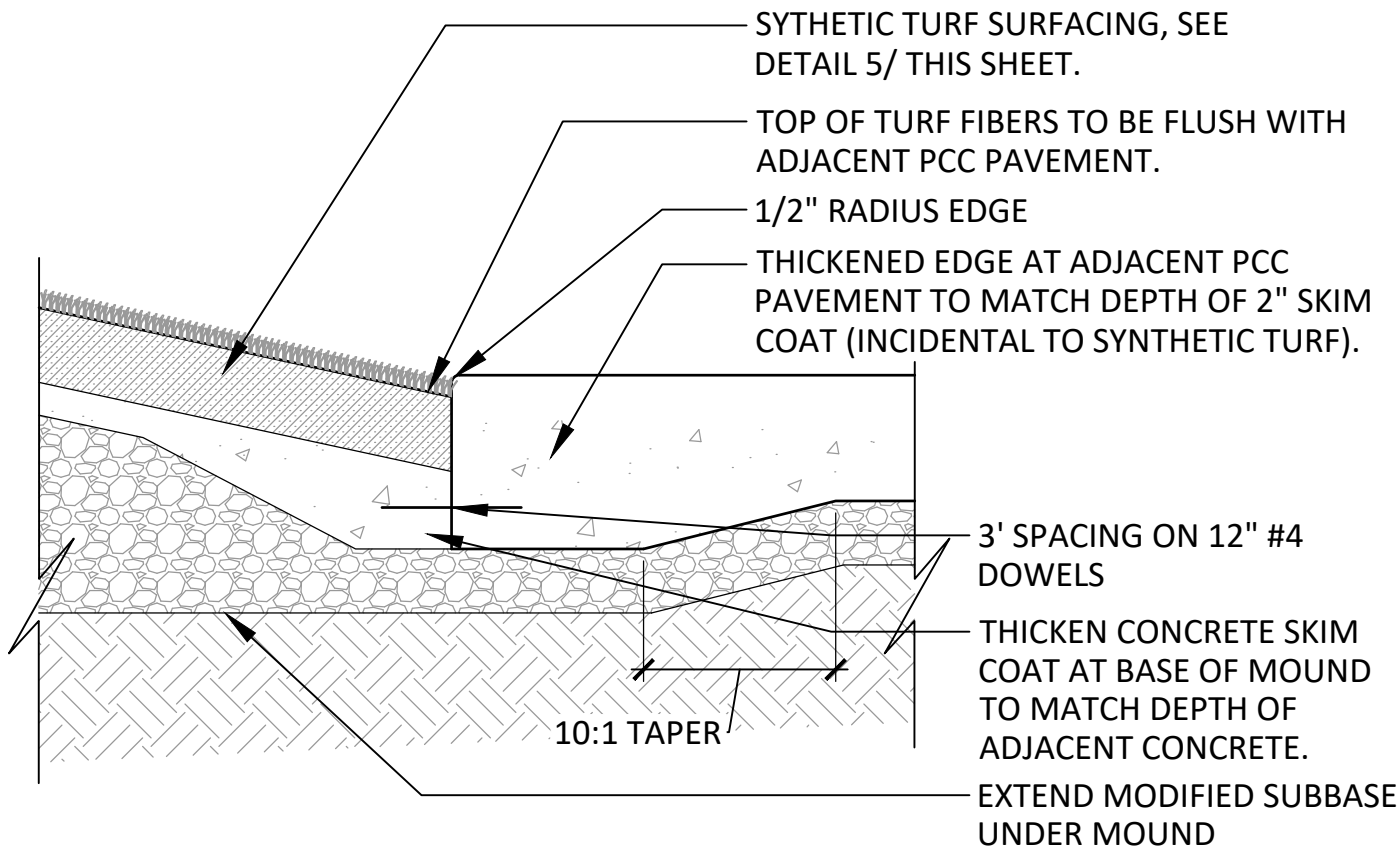
TYPICAL SECTIONS

SHEET

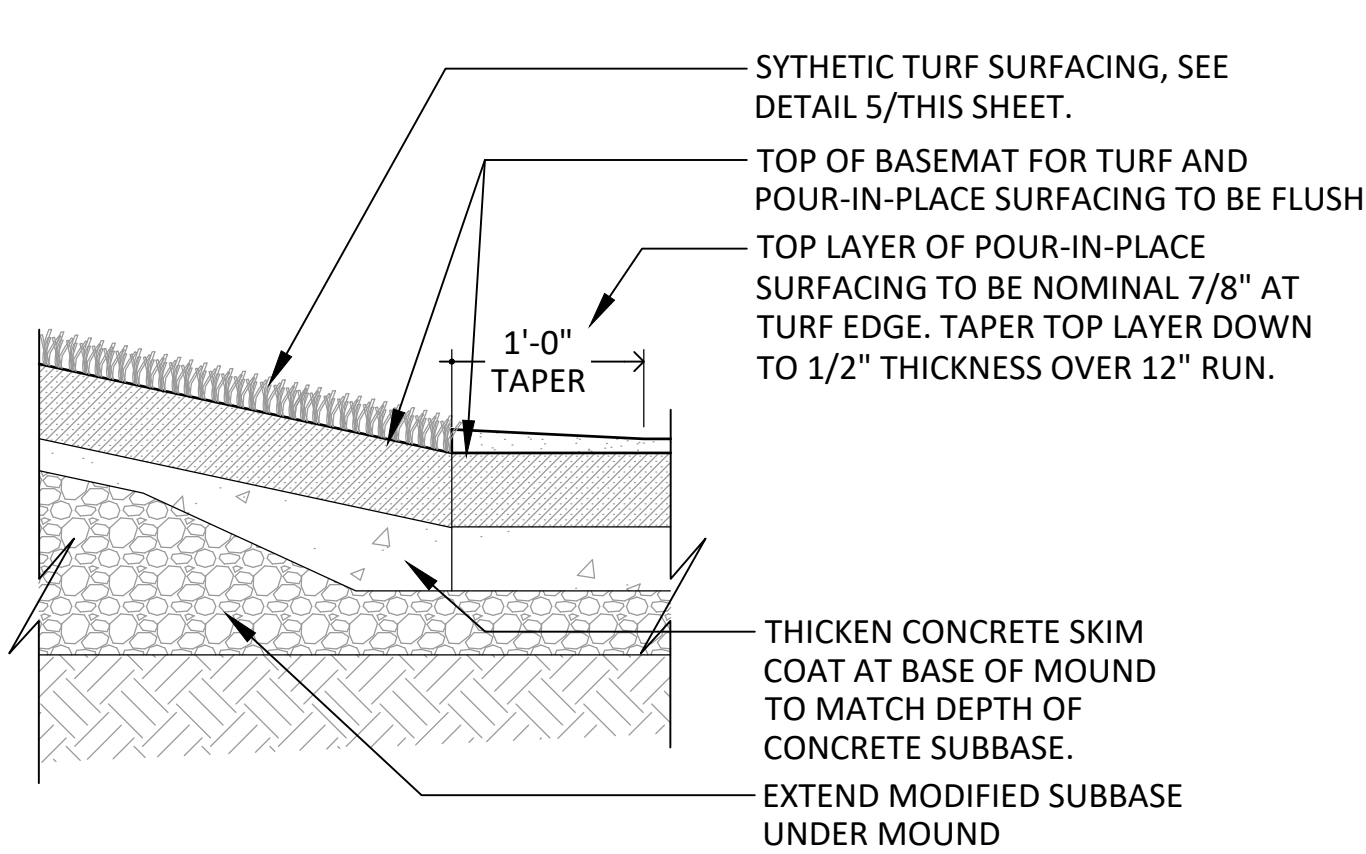
3.05

POURED-IN-PLACE PLAYGROUND SURFACING NOTES:

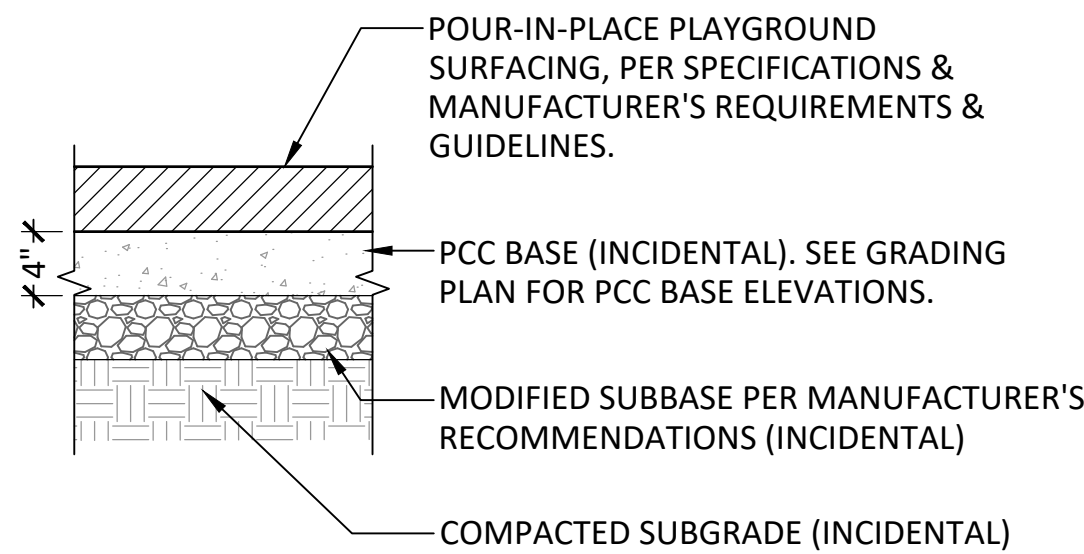
- A. MANUFACTURER: SURFACE AMERICA
CONTACT: DIANE WITT, OUTDOOR RECREATION PRODUCTS
WEST DES MOINES, IOWA
515-802-9861
DIANE@OUTDOORREC.NET
- B. PLAYGROUND SURFACING:
- PLAYBOUND - POURED-IN-PLACE SURFACING
- ALIPHATIC SYSTEM (EXTREME 10 WARRANTY)
- FIVE (5) COLOR VARIATIONS, PATTERN TBD; NO MORE THAN 25% OF PATTERN TO BE MANUFACTURER'S PREMIUM COLORS
- COLOR MIX RATIO: 50% COLOR, 50% BLACK.
- MINIMUM SURFACING DEPTH: 5 1/2" (CONTRACTOR TO VERIFY WITH MANUFACTURER)
- C. ALL COLORS AND AVAILABLE OPTIONS TO BE SUBMITTED TO OWNER FOR APPROVAL.
- D. PROVIDE SHOP DRAWINGS FOR APPROVAL. MANUFACTURER TO CONFIRM SURFACING DEPTH BASED ON SPECIFIED PLAYGROUND LAYOUT.
- E. SURFACING, CONCRETE BASE AND AGGREGATE SUBBASE TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS



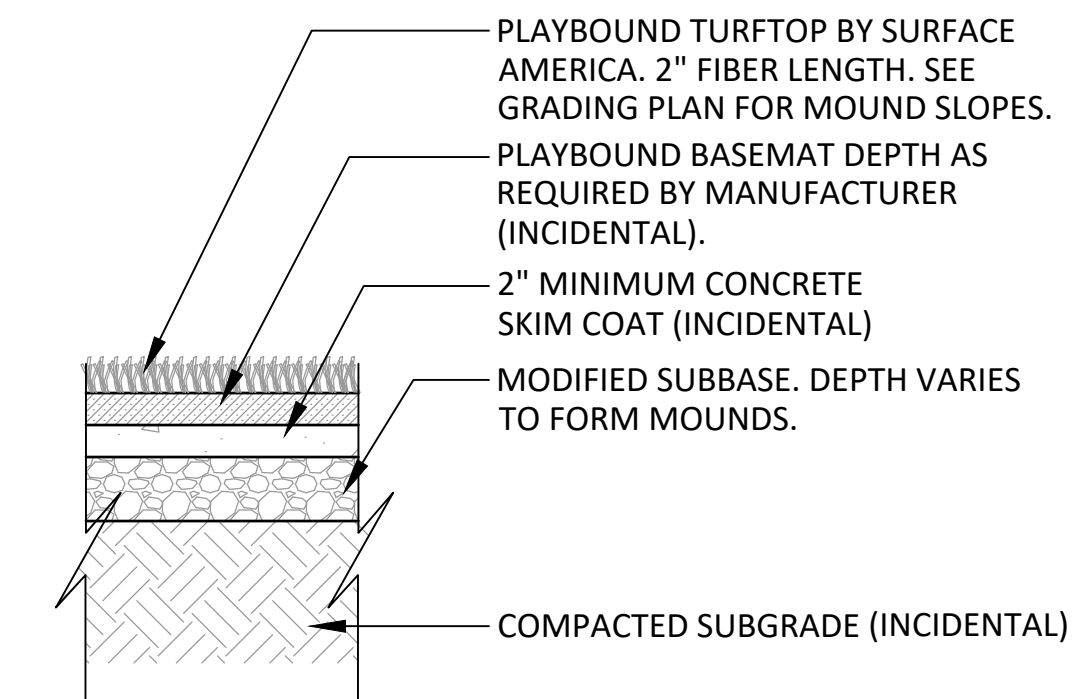
2 SYNTHETIC TURF AT CONCRETE EDGE
SCALE: N.T.S.



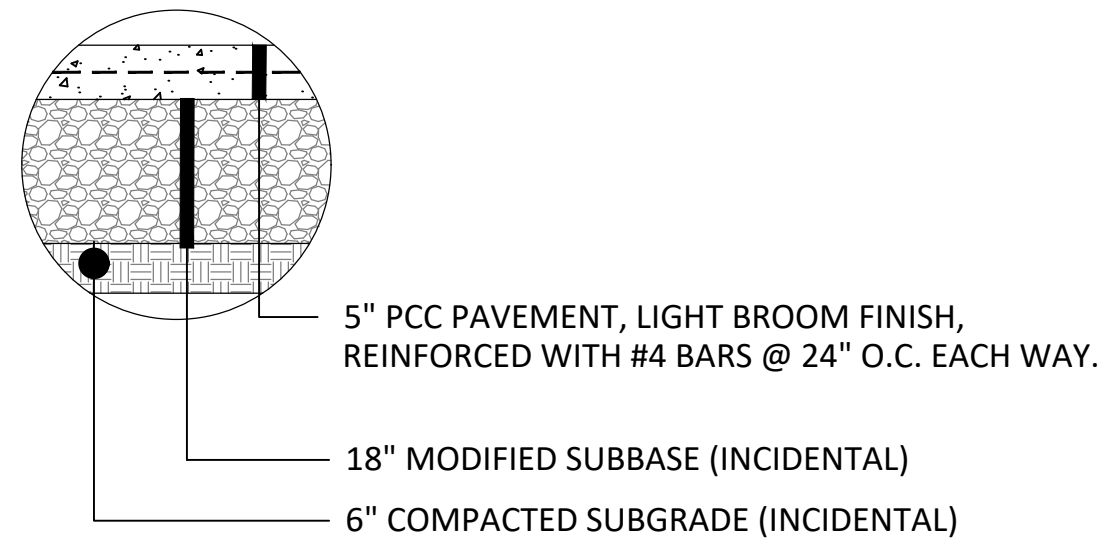
3 SYNTHETIC TURF AT POUR-IN-PLACE SURFACING EDGE
SCALE: N.T.S.



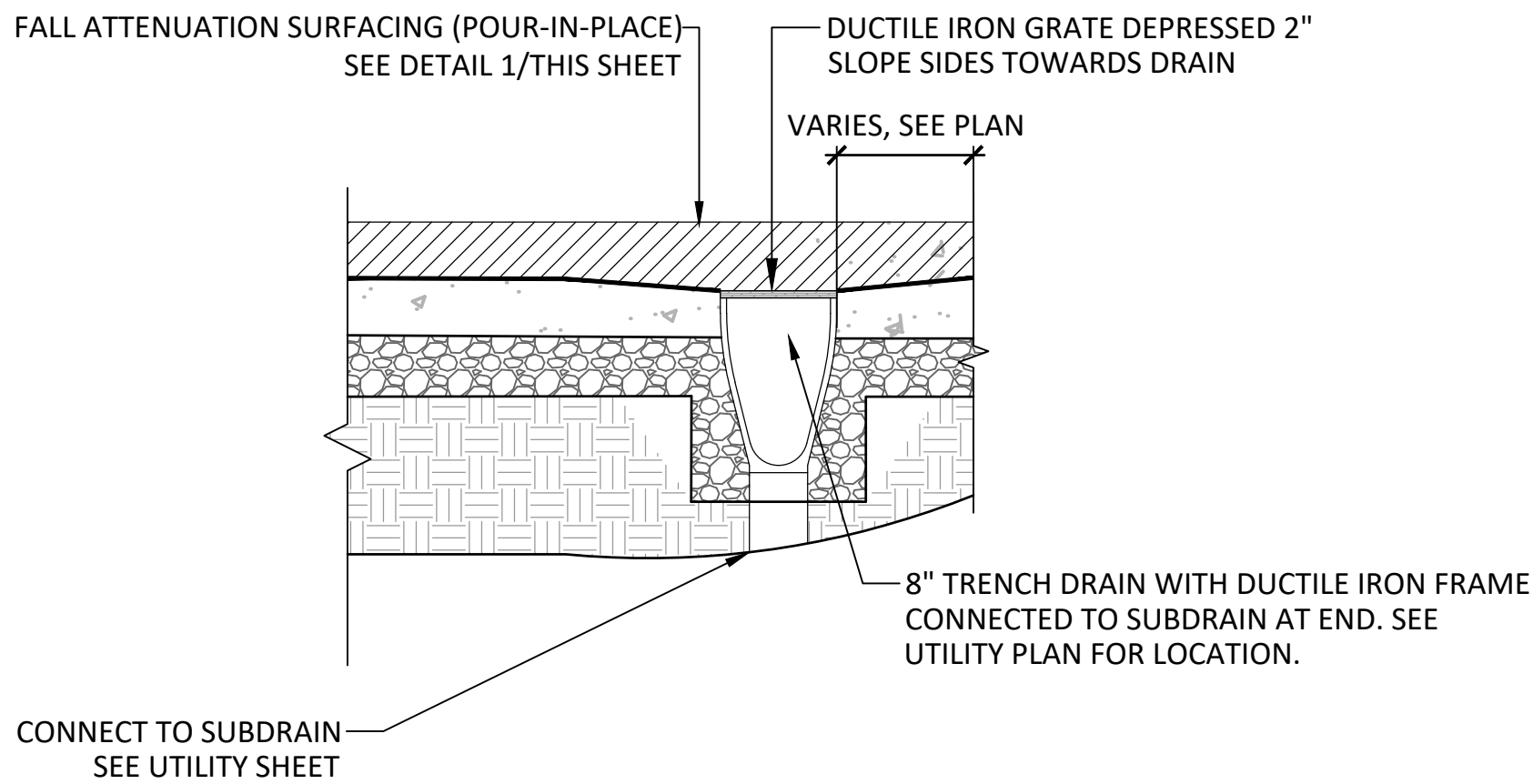
1 FALL ATTENUATION SURFACING (POUR-IN-PLACE)
SCALE: N.T.S.



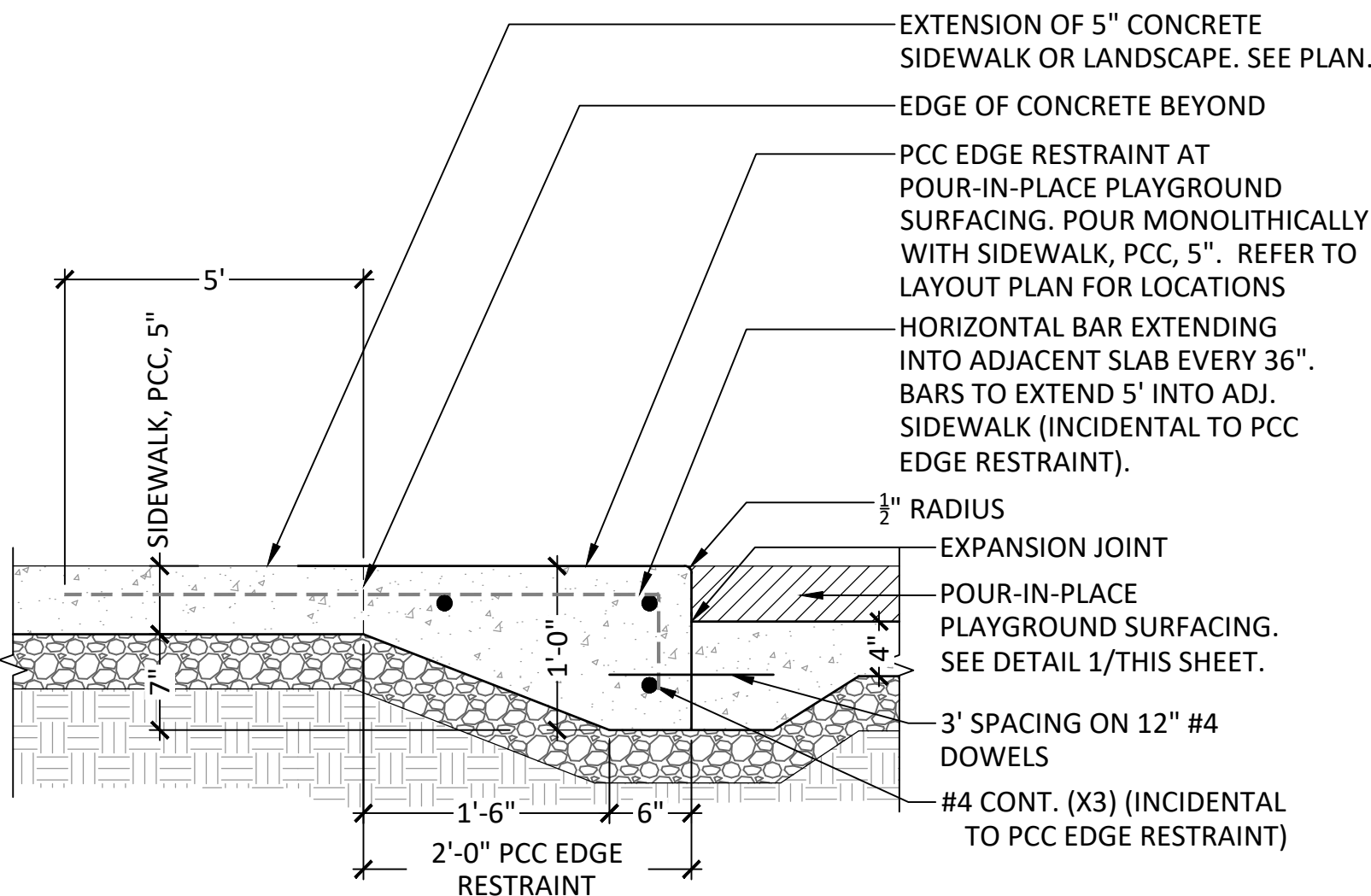
4 FALL ATTENUATION SURFACING (SYNTHETIC TURF)
SCALE: N.T.S.



5 PAVEMENT, PCC, 5" REINFORCED (SPASH PAD)
SCALE: N.T.S.

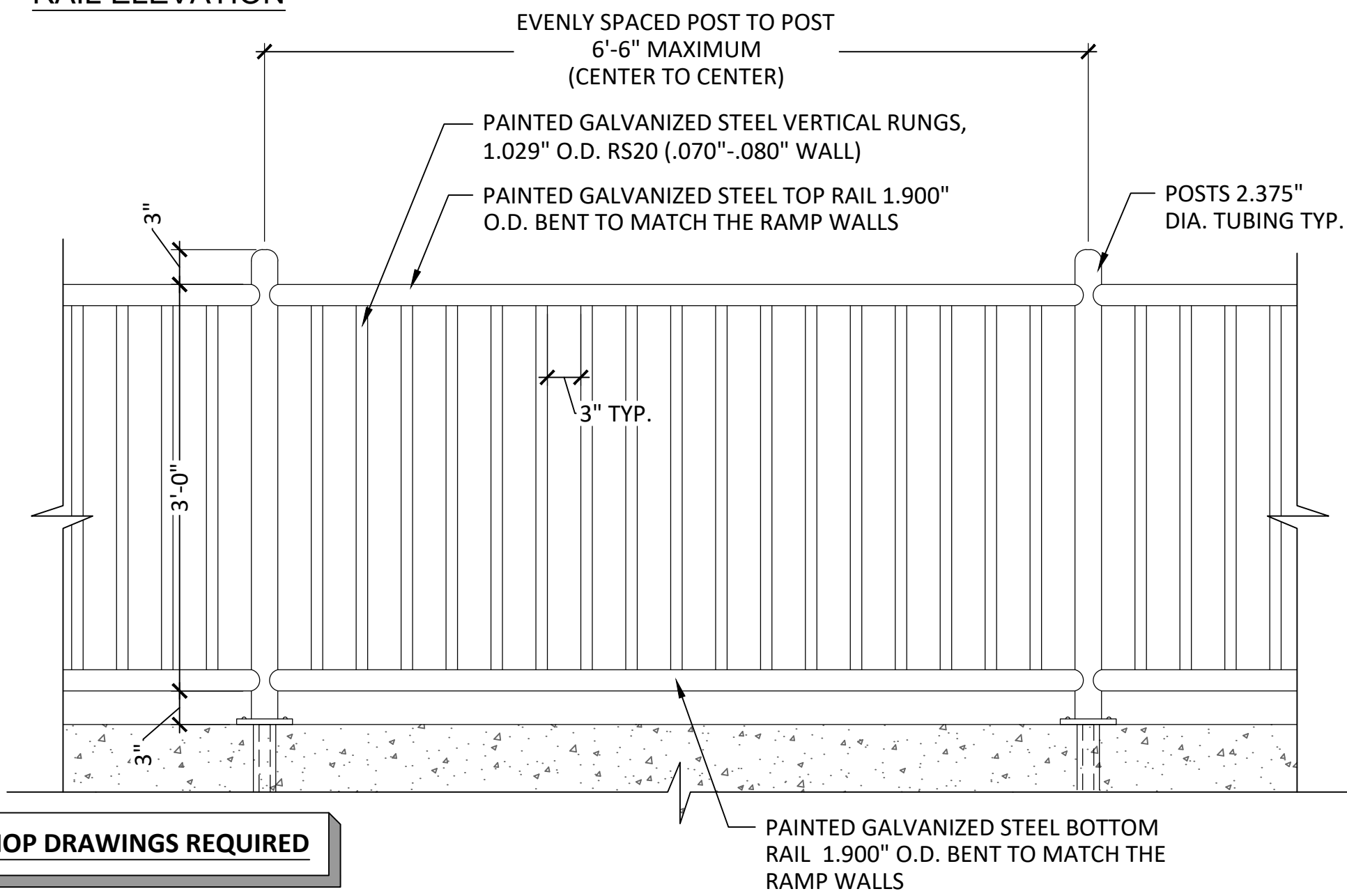


6 LINEAR TRENCH DRAIN
SCALE: N.T.S.



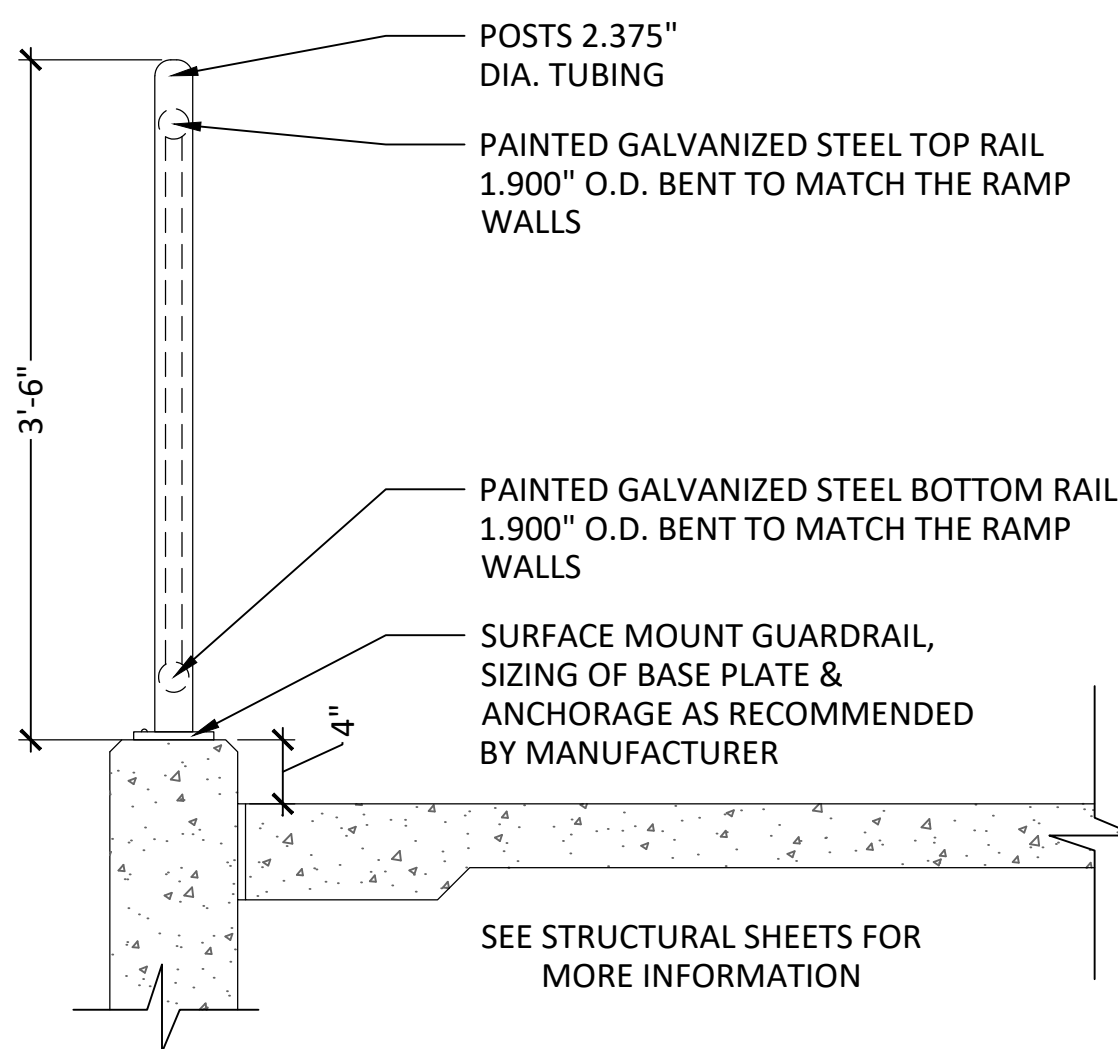
7 PCC EDGE RESTRAINT AT PLAYGROUND SURFACING
SCALE: N.T.S.

RAIL ELEVATION



SHOP DRAWINGS REQUIRED

RAIL SECTION



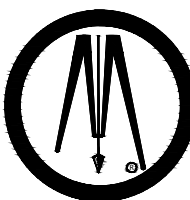
- GUARDRAILS/HANDRAILS:
1. MANUFACTURER: LANDSCAPE STRUCTURES
 2. FINISH: PROSHIELD BY LANDSCAPE STRUCTURES
 3. COLOR: TO BE SELECTED FROM MANUFACTURER'S STANDARD COLORS.
 4. MOUNTING: SURFACE MOUNT

OR APPROVED EQUAL
CONTACT: DIANE WITT
402-289-0400
diane@oudoorrec.net
outdoorrecreationproducts.com

SHOP DRAWINGS REQUIRED

8 PLAYGROUND GUARDRAILS (ELEVATION)
SCALE: N.T.S.

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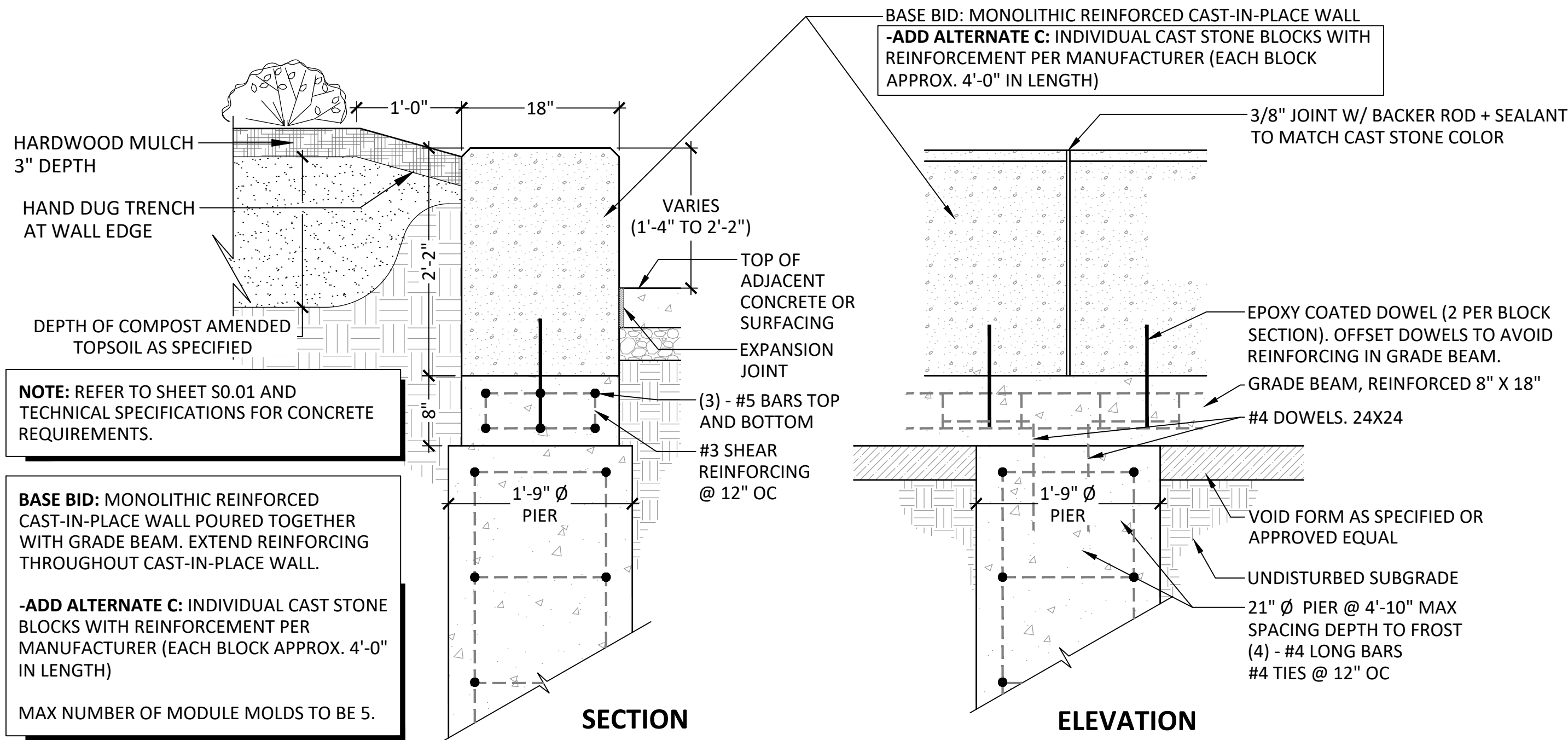
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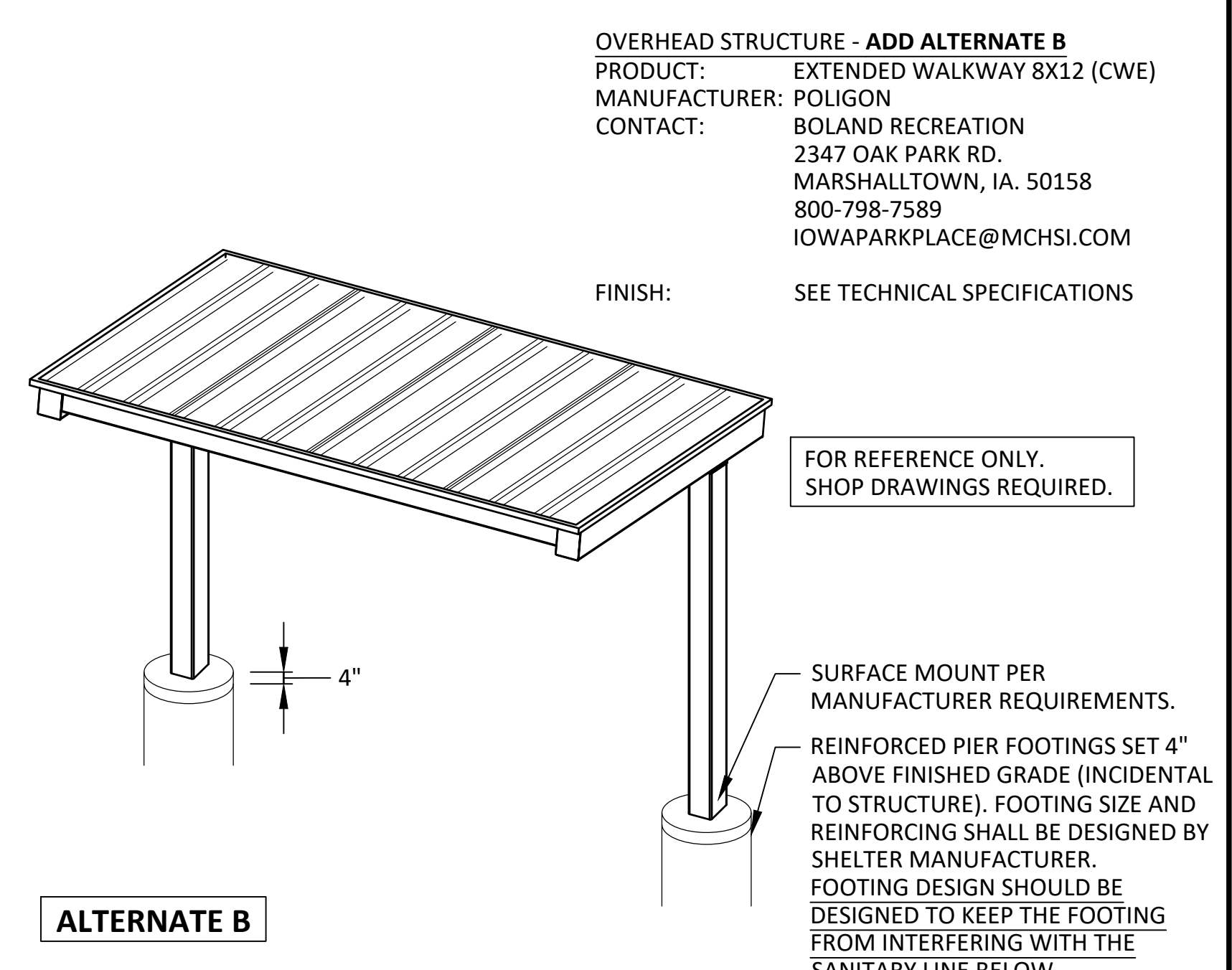


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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
TYPICAL DETAILS

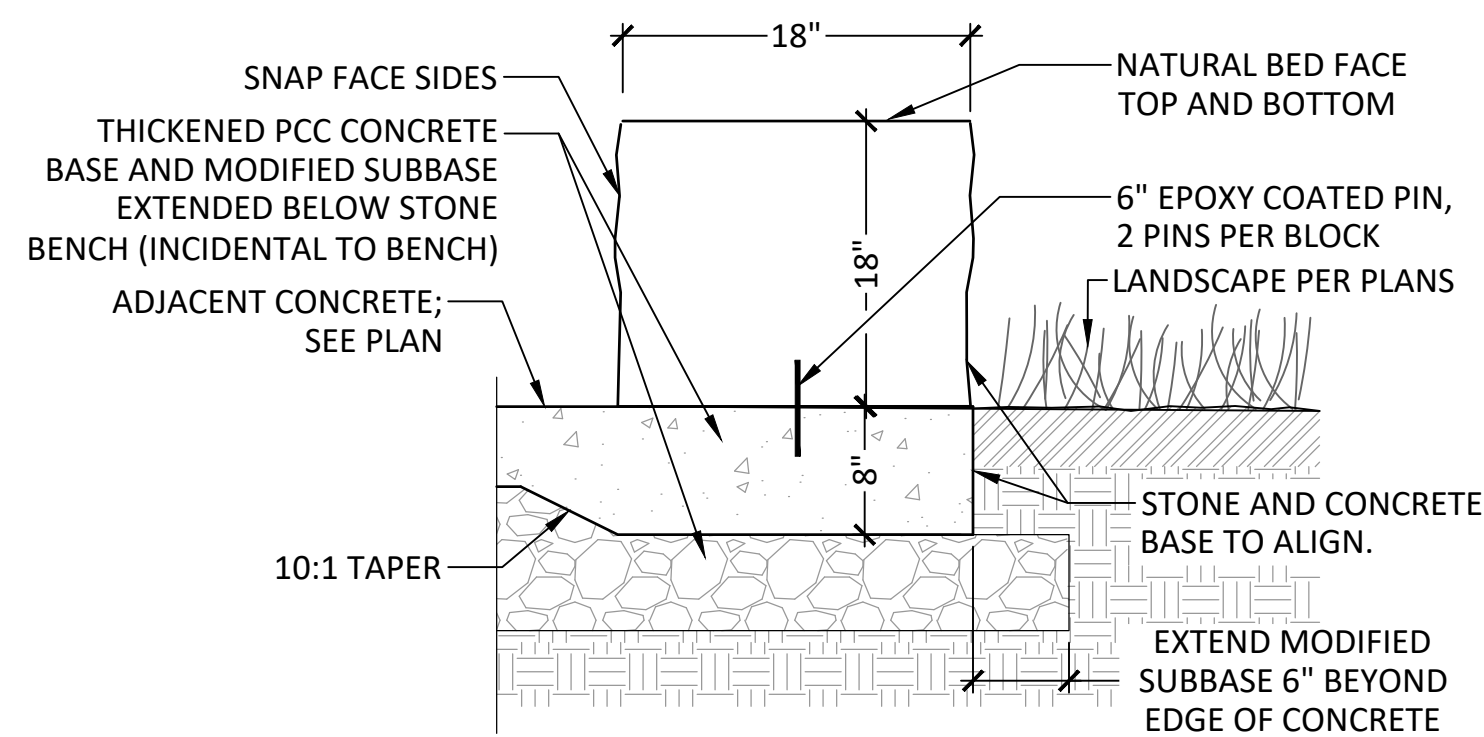


1 CAST STONE RETAINING WALL ON CONCRETE GRADE BEAM
SCALE: N.T.S.



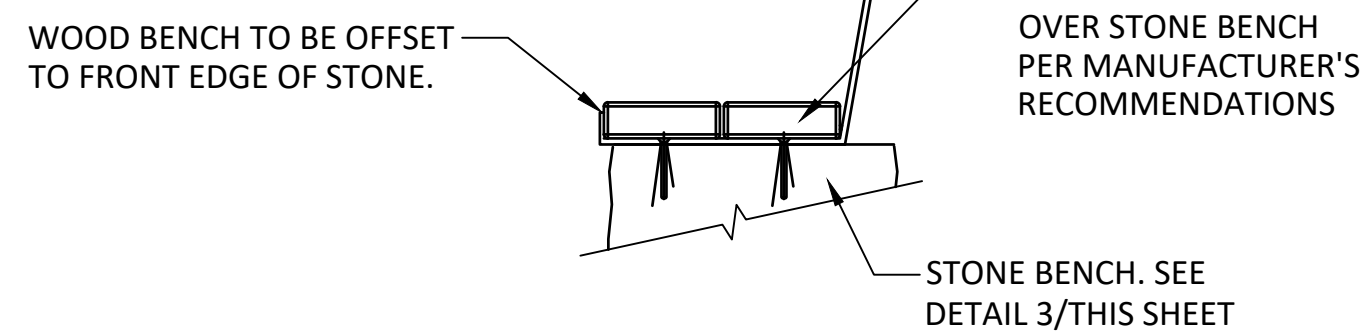
2 OVERHEAD STRUCTURE - ADD ALTERNATE B
SCALE: N.T.S.

PRODUCT CONTACT: IOWA LANDSCAPE SUPPLY
HEIGHT: 18"
WIDTH: 18"
LENGTH: 72"
COLOR/TYPE: LARGER IOWA BUFF WALLSTONE (PER IOWA LANDSCAPE SUPPLY WEBSITE)
SUBMIT PRODUCT INFORMATION (INCLUDING PHYSICAL SAMPLES AND SOURCE) FOR REVIEW AND APPROVAL BY OWNER OR OWNER'S REP.

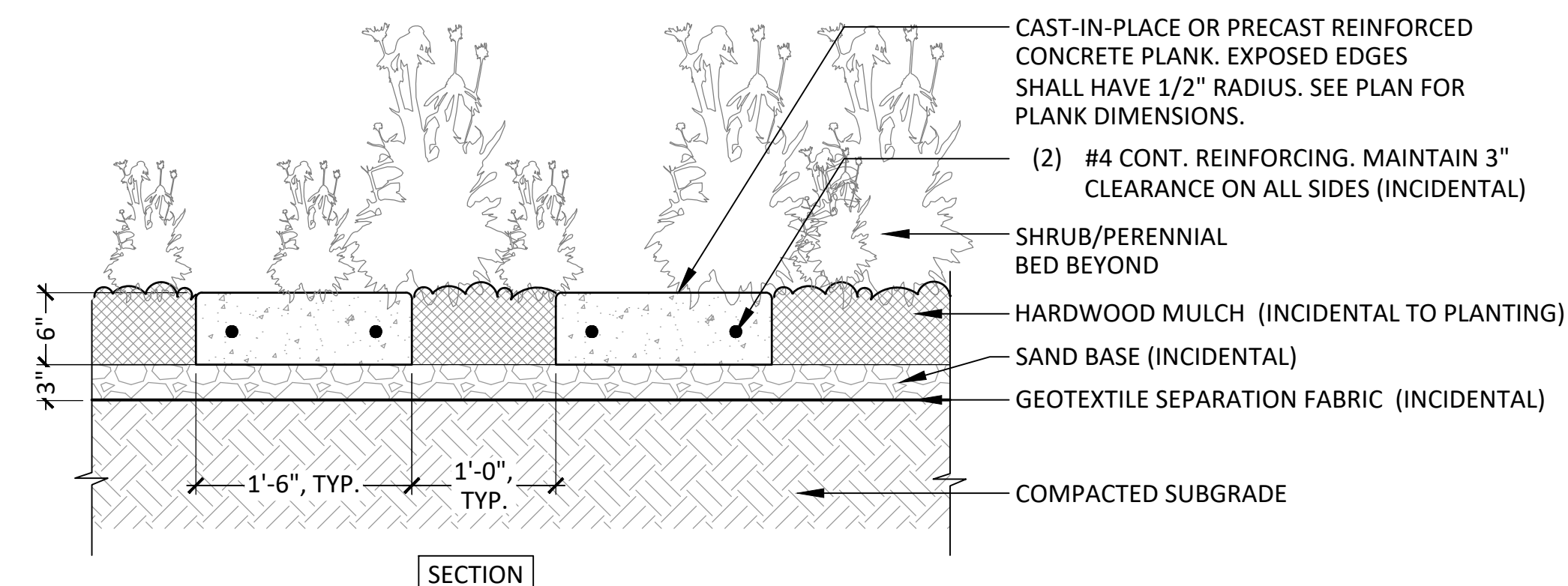


3 STONE BLOCK BENCH - SIDE VIEW
SCALE: N.T.S.

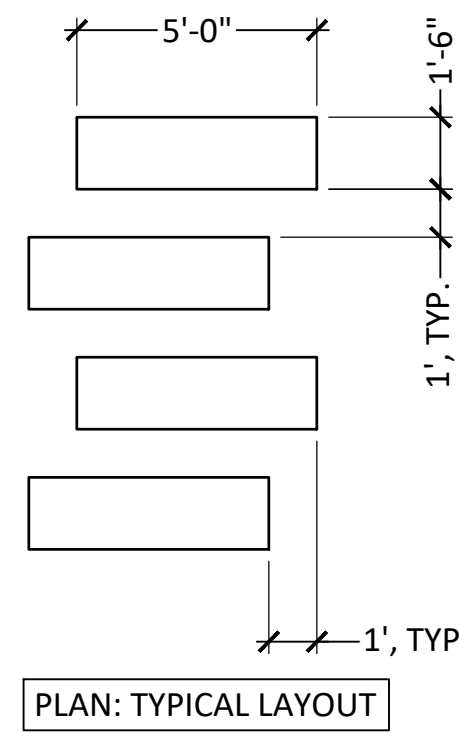
WOOD TOP BENCH:
• CENTRAL PARK 2030 WALL TOP BY TIMBERFORM
CONTACT: TIMBERFORM
PH: 1-800-547-1940
• CENTRAL PARK 2030 WALL TOP BENCH
• BENCH LENGTH: 5'-10"
• BENCH WIDTH: 1'-6"
• MATERIAL: DOUGLAS FIR WOOD (TO BE TREATED WITH CLEAR WOOD SEALER AS APPROVED BY MANUFACTURER)
• STRAP COLOR: BLACK
3. OR APPROVED EQUAL



4 BENCH (WOOD) ON STONE BLOCK BENCH - SIDE VIEW
SCALE: N.T.S.



5 CONCRETE STEPPING PLANKS
SCALE: N.T.S.



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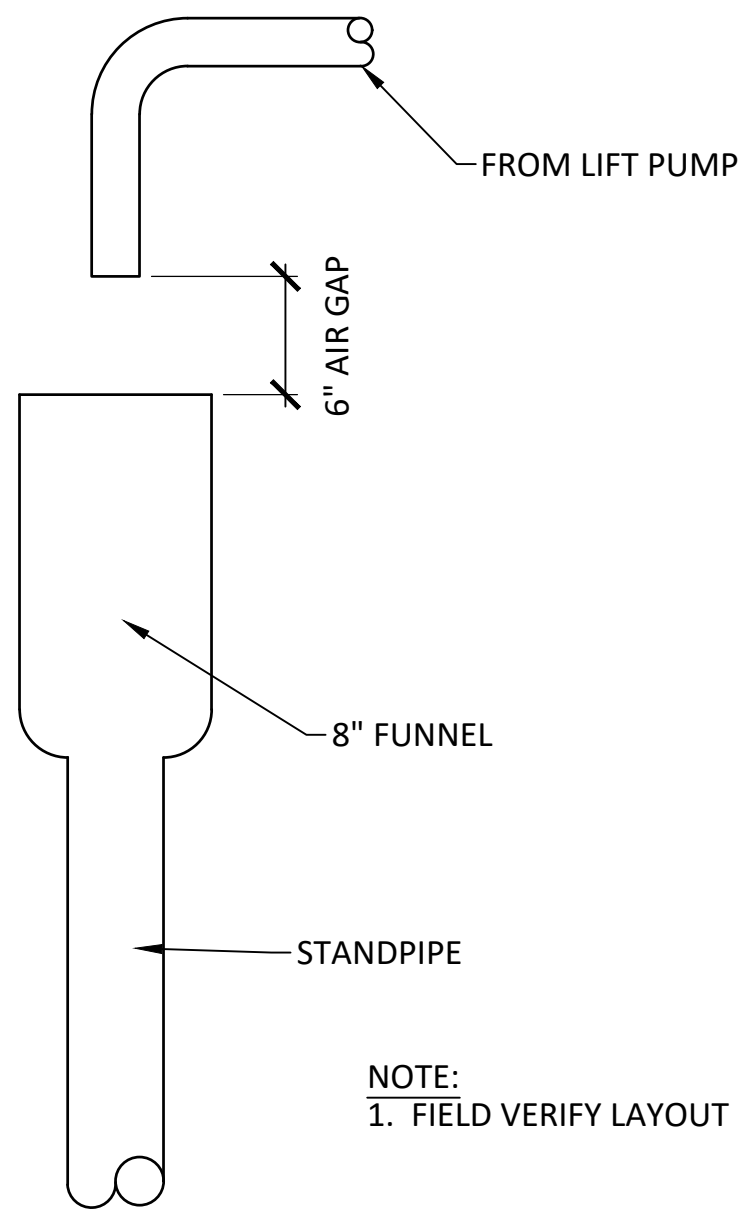


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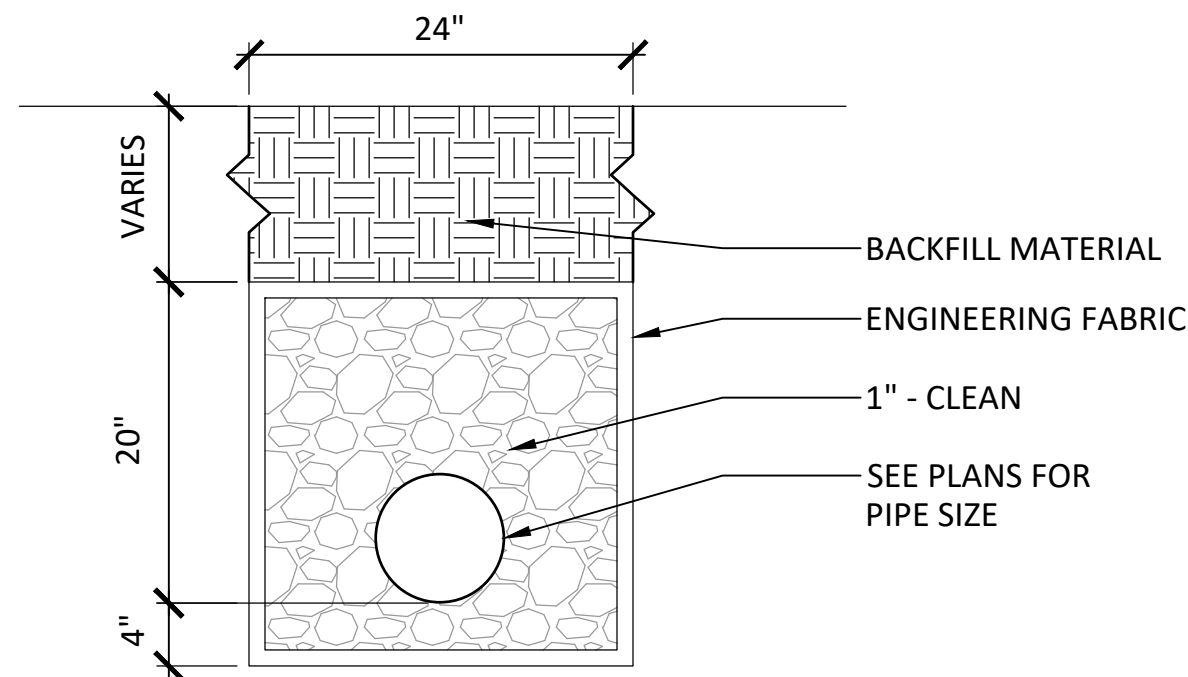


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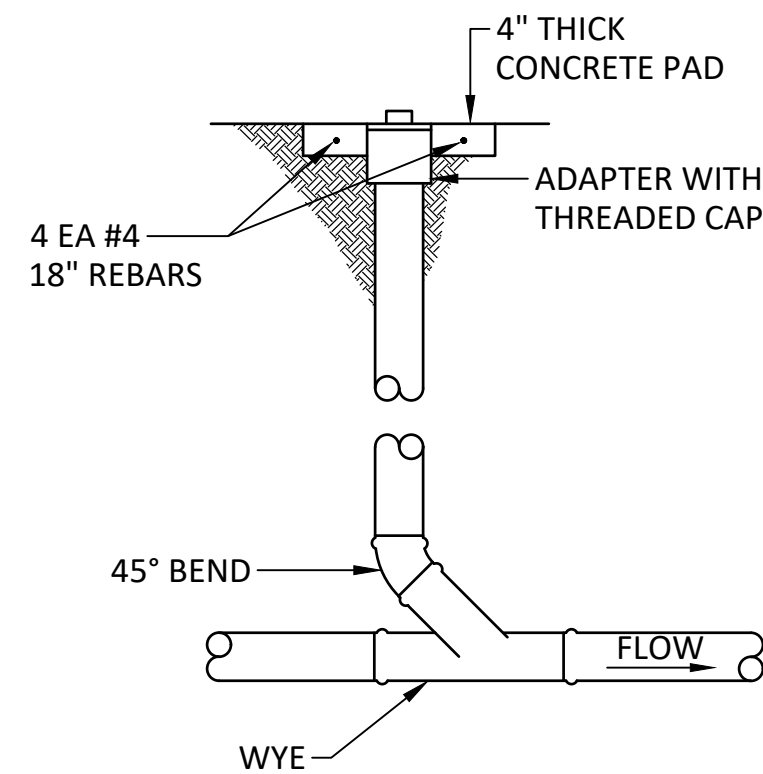
CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
TYPICAL DETAILS



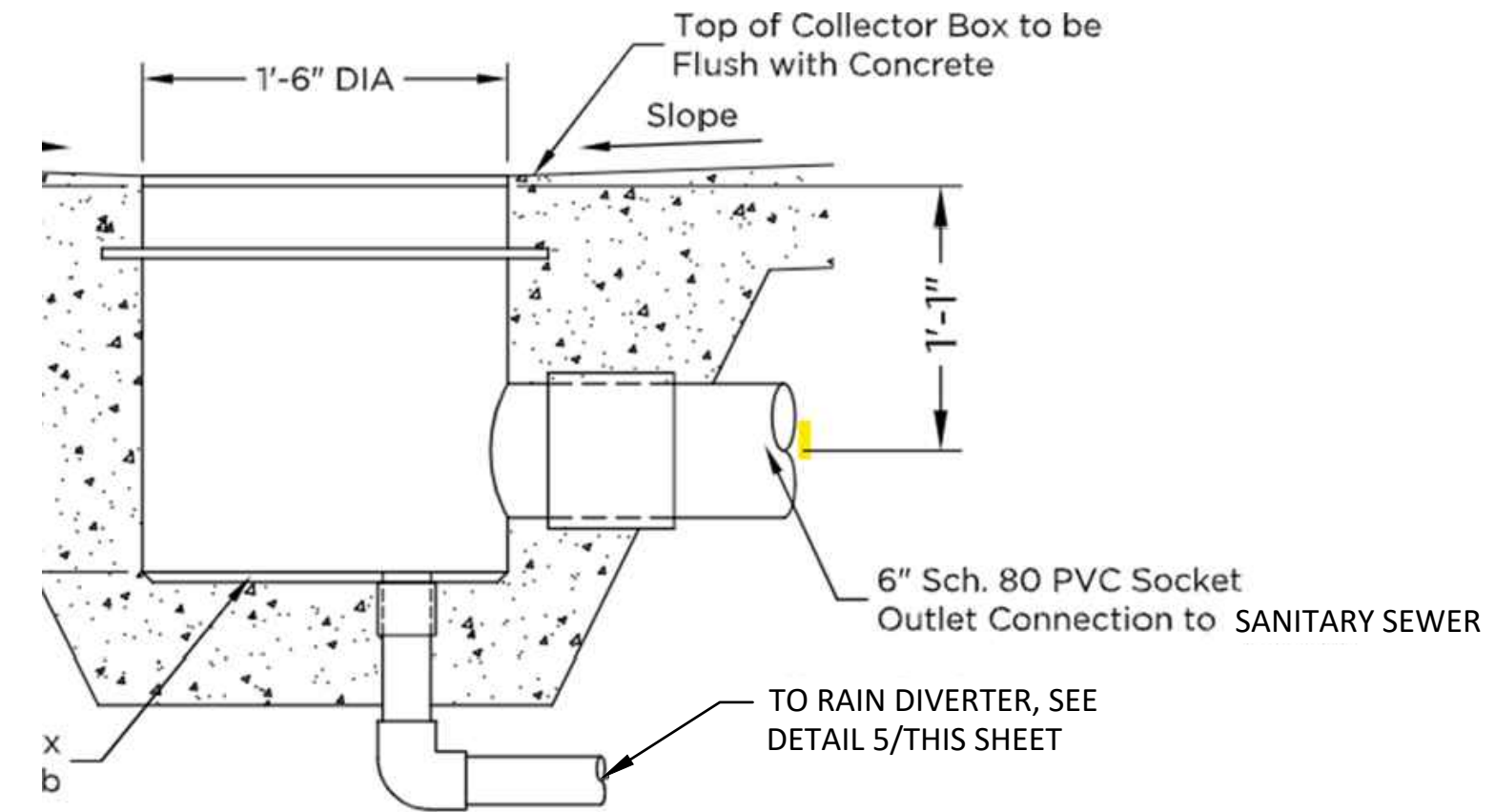
1 BACKWASH STANDPIPE
SCALE: N.T.S.



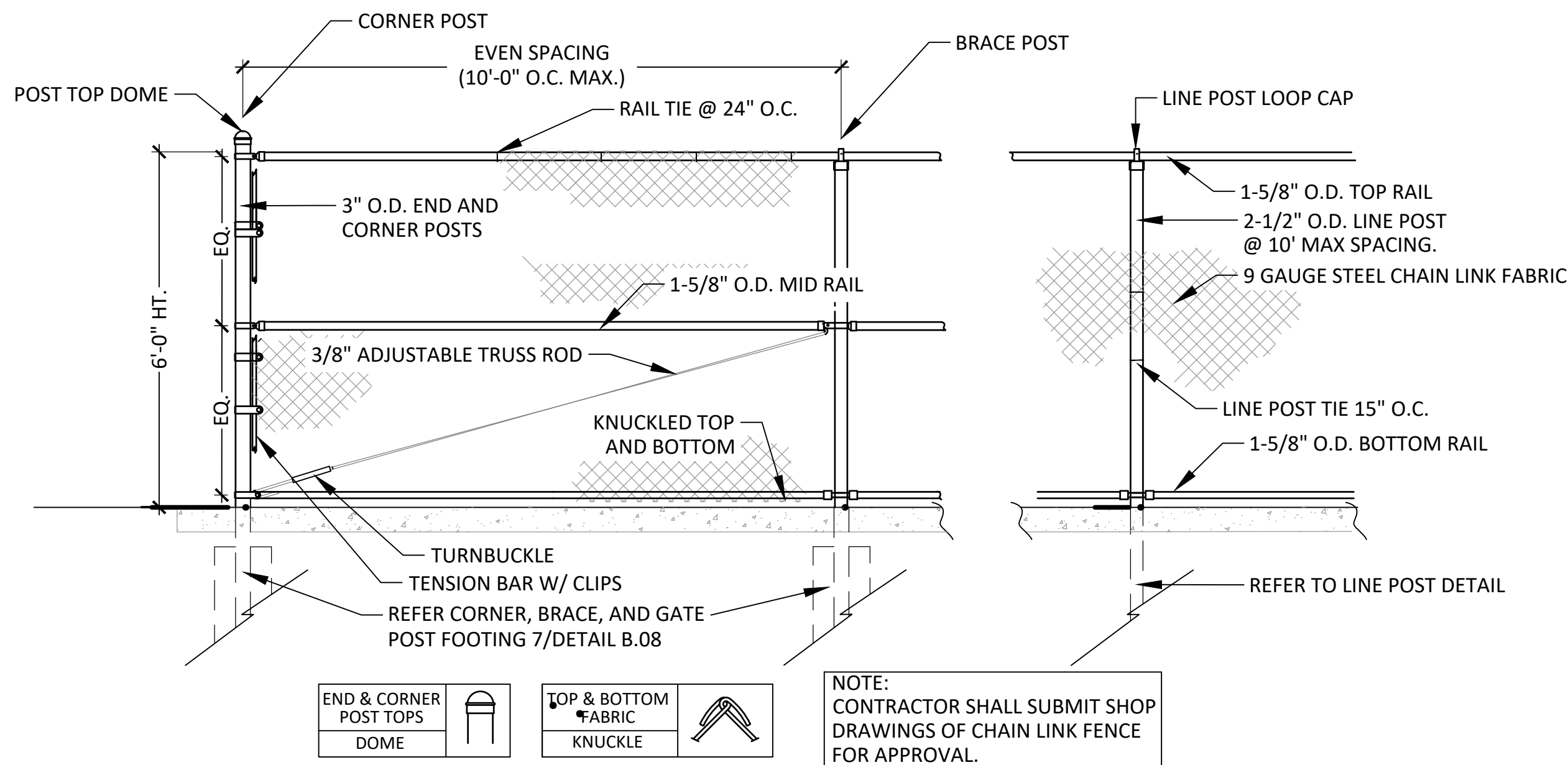
2 DRAIN TILE DETAIL
SCALE: N.T.S.



3 CLEANOUT
SCALE: N.T.S.



4 CATCH BASIN (INCIDENTAL TO SPLASHPAD)
SCALE: N.T.S.



6 6' HT. FENCE
SCALE: N.T.S.

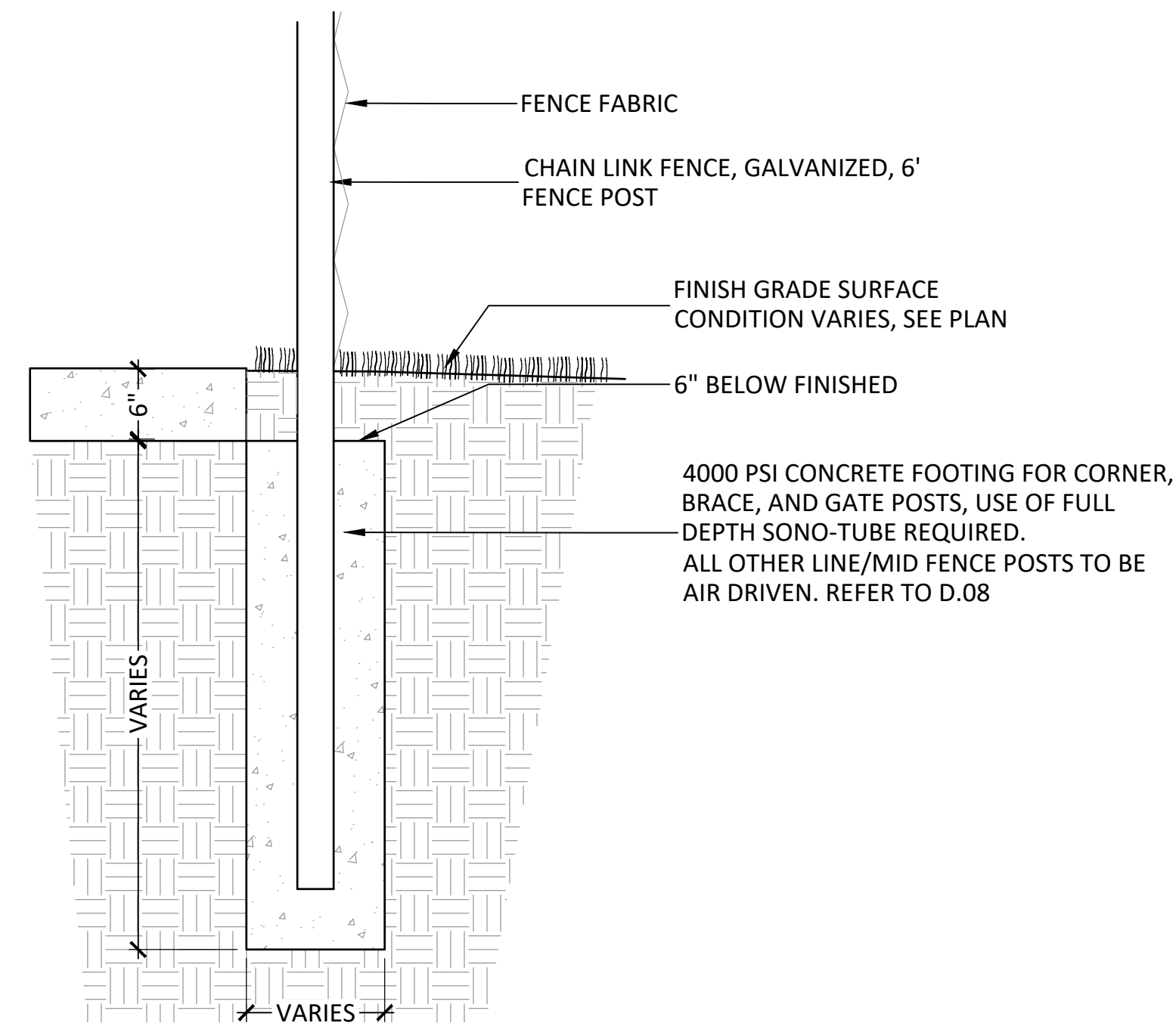
FENCE INFORMATION

MANUFACTURER:
AMERICA'S FENCE STORE
CONTACT: SCOTT MATTIS
EMAIL: dsm1@americafence.com
ADDRESS: 6300 NW BEAVER DR JOHNSTON, IA 50131
PHONE: 515-265-6100

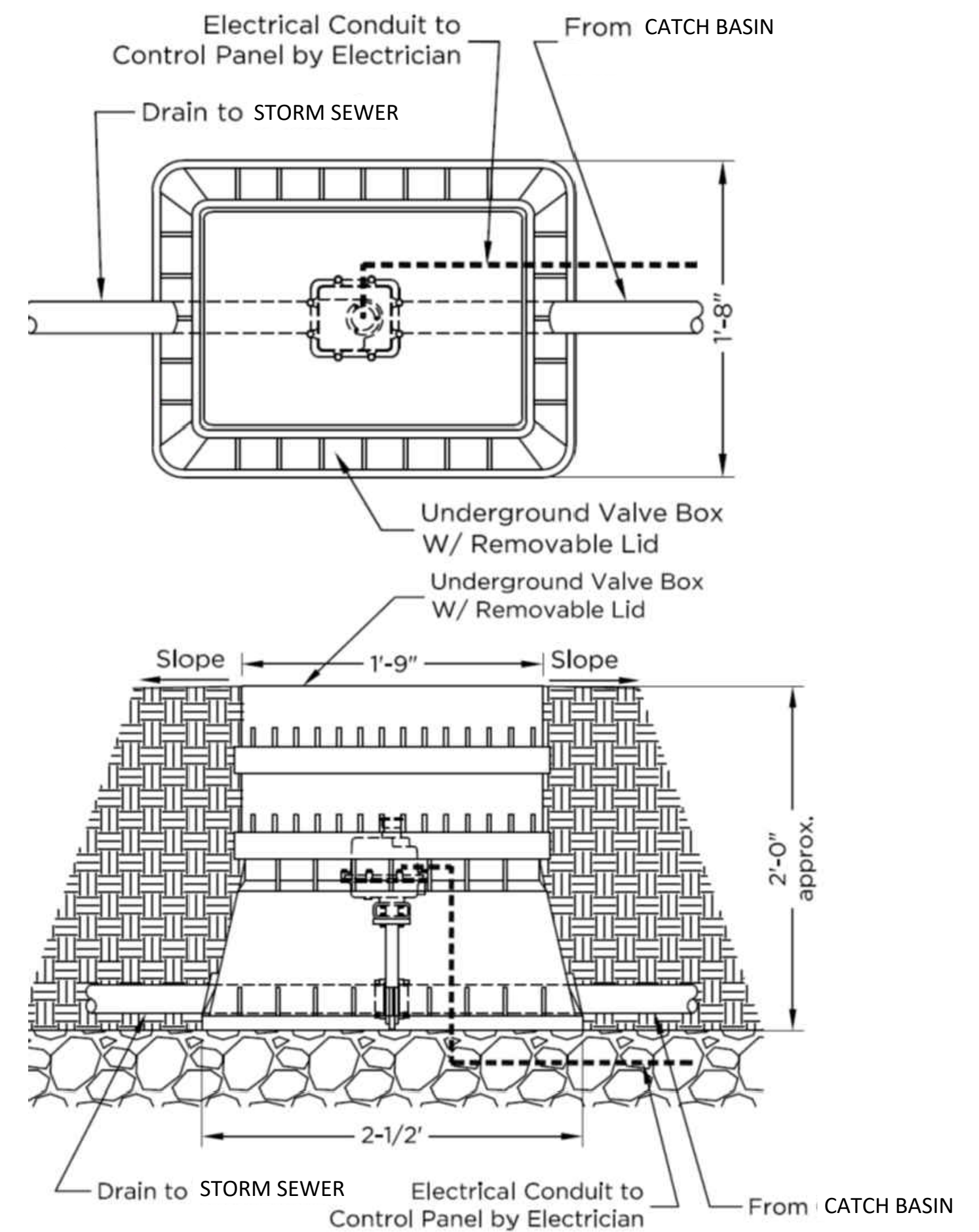
FENCE

- CHAIN LINK FENCE, GALVANIZED, 6' COMMERCIAL CHAIN LINK FENCE TO MEET ASTM F668 FOR FINISHES FOR COATED FABRIC. CONTRACTOR TO PROVIDE SHOP DRAWINGS, PRODUCT MATERIALS, AND CUT SHEETS.
- CHAIN LINK FENCE, GALVANIZED, 6' FABRIC FITTINGS & FRAMEWORK
- EXPOSED HARDWARE USED ON POWDER COATED ELEMENTS TO BE PAINTED TO MATCH & CONTRACTOR RESPONSIBLE FOR ALL HARDWARE REQUIRED FOR INSTALLATION COMPLETE.
- CONTRACTOR RESPONSIBLE FOR STRUCTURAL INTEGRITY OF FENCE AND SHALL AD TENSION RODS AS REQUIRED FOR STRUCTURAL STABILITY. DETAILS SHOWN IN THE BID SET ARE FOR AESTHETICS AND DESIGN GUIDANCE ONLY. NOTIFY OWNER AND ENGINEER IF FENCE DESIGN AND DETAILING REQUIRE ADJUSTMENTS TO ACHIEVE ADEQUATE STRUCTURAL STABILITY.

OR APPROVED EQUAL



7 CORNER AND BRACE POSTS AND FOOTINGS
SCALE: N.T.S.



5 RAIN DIVERTER (INCIDENTAL TO SPLASHPAD)
SCALE: N.T.S.

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CITY OF WINDSOR HEIGHTS, IOWA

2023 COLBY PARK IMPROVEMENTS

TYPICAL DETAILS

SHEET

B.08

GENERAL NOTES:

1. TYPICAL STRUCTURAL DETAILS AND NOTES SHALL APPLY UNLESS NOTED OTHERWISE ON THE DRAWINGS.
2. EXAMINE SITE AND DRAWINGS TO DETERMINE LOCATIONS AND DIMENSIONS OF UTILITIES, AND SITE IMPROVEMENTS.
3. BEFORE CONSTRUCTION FABRICATION AND ERECTION OF ANY MATERIALS, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS, DIMENSIONS AND CONDITIONS AS SHOWN ON THE DRAWINGS AND REPORT DISCREPANCIES TO THE ENGINEER AT ONCE FOR RESOLUTION.
4. ALL DIMENSIONS, LOCATIONS, ELEVATIONS AND CONDITIONS OF EXISTING STRUCTURES SHOWN ON THE CONTRACT DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
5. THE STRUCTURAL DESIGN IS BASED ONLY ON THE STRUCTURE IN ITS COMPLETED STATE. CONTRACTORS AND THEIR SUBCONTRACTORS SHALL TAKE WHATEVER PRECAUTIONS ARE NECESSARY TO WITHSTAND ALL HORIZONTAL AND VERTICAL LOADING THAT MAY BE ENCOUNTERED DURING THE CONSTRUCTION PROCESS PRIOR TO THE COMPLETION OF THE STRUCTURE.
6. WRITTEN DISTANCES & ELEVATIONS SHALL GOVERN OVER SCALED DISTANCES & ELEVATIONS.
7. ELEVATIONS ARE BASED ON THE BENCH MARKS NOTED ON THE DRAWINGS.

MATERIAL NOTES:

REINFORCED CONCRETE:

CONCRETE:

4000 PSI @ 28 DAYS

REINFORCEMENT BARS:
DEFORMED BARS

ASTM A615, GRADE 60

DESIGN CRITERIA & LOADING NOTES:

1. CODE: 2018 INTERNATIONAL BUILDING CODE (IBC)
2. DESIGN LOADING

DEAD LOADS (D)

MATERIALS

CALCULATED

LIVE LOADS (L)

WALKWAY & LANDINGS

60 PSF

LATERAL EARTH PRESSURE LOADS (H)

BACKFILL FRICTION ANGLE

K_a

0.30

K_p

4.9

SOIL UNIT WEIGHT, MOIST

130 PCF (ASSUMED)

CONCRETE NOTES:

1. LAP SPLICES AND 90 DEGREE END HOOKS SHALL BE AS SHOWN BELOW UNLESS NOTED. WHEN BARS OF TWO DIFFERENT SIZES ARE SPLICED, THE LONGER LAP LENGTH SHALL APPLY.

F'c=4,000 PSI	SLAB, WALL, COLUMN		BEAM		90 DEGREE HOOK
	BAR LAP	TOP BAR	BAR LAP	TOP BAR	
#3	19 IN.	24 IN.	28 IN.	36 IN.	6 IN.
#4	25 IN.	32 IN.	37 IN.	48 IN.	8 IN.
#5	31 IN.	40 IN.	46 IN.	60 IN.	10 IN.

*TOP BAR LAP SPLICES ARE HORIZONTAL REINFORCEMENT PLACED SUCH THAT MORE THAN 12 IN. OF CONCRETE IS CAST IN THE MEMBER BELOW THE SPLICE

2. REINFORCING BARS SHALL HAVE THE FOLLOWING CONC. COVER UNLESS NOTED OTHERWISE.

FOOTINGS AND OTHER UNFORMED SURFACES

3"

CONCRETE EXPOSED TO EARTH, WEATHER OR FLUIDS

#6 BARS OR LARGER

2"

#5 BARS OR SMALLER

1-1/2"

CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND

BEAMS, COLUMNS, TIES, SPIRALS AND STIRRUPS

1-1/2"

SLABS, WALLS & JOISTS

3/4"

3. CONCRETE SHALL BE PLACED WITHOUT CONSTRUCTION JOINTS EXCEPT WHERE SPECIFICALLY SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER.
4. CAST-IN-PLACE CONCRETE SHALL NOT BE PLACED IN STANDING WATER, ON FROZEN SOIL OR ON FROZEN CONCRETE.
5. FOR LOCATIONS AND DIMENSIONS OF SLEEVES, CURB, OPENINGS AND DEPRESSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS, SEE ARCHITECTURAL, CIVIL/MECHANICAL, YARDWORK, PLUMBING, HVAC AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL VERIFY AND COORDINATE REQUIREMENTS FOR AND LOCATION OF ABOVE ITEMS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT.
6. BEVEL ALL EXPOSED CORNERS OF CONCRETE 3/4" x 3/4".

EXCAVATION NOTES:

1. TEMPORARY GROUND CONTROL IS BY CONTRACTOR DESIGN.
2. CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TEMPORARY SHEETING AND BRACING NECESSARY TO PROTECT PERSONNEL AND ADJACENT PROPERTY FROM INJURY OR DAMAGE DURING CONSTRUCTION OPERATION.
3. EXCAVATIONS OR TRENCHING WITHIN CLOSE PROXIMITY TO UNDERGROUND STRUCTURES, UTILITIES, OR UTILITY POLES WILL REQUIRE PROTECTION AND SUPPORT TO PREVENT DAMAGE OR INTERRUPTION TO SERVICE. THE COST TO PROVIDE THIS PROTECTION SHALL BE INCLUDED IN THE CONTRACTOR'S TOTAL BASE BID PRICE.

FOUNDATION & SOIL NOTES:

1. THE GEOTECHNICAL ENGINEER SHALL REVIEW AND APPROVE FOUNDATION BEARING SURFACES PRIOR TO THE PLACEMENT OF FOOTINGS OR FOUNDATION.
2. PROVIDE A MINIMUM OF 3'-6" OF SOIL COVER AT EXTERIOR WALL FOOTINGS.
3. REFER TO GEOTECHNICAL REPORT FOR BACKFILL REQUIREMENTS
4. PROTECT FOUNDATION SOILS FROM FREEZING DURING CONSTRUCTION.
5. PLACE FILL AND BACKFILL AND COMPACT TO FOLLOWING MAXIMUM STANDARD PROCTOR DENSITIES UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS:

LOCATION

DENSITY

FILL BELOW FOOTINGS

98%

FILL BELOW SLABS ON GRADE

95%
6. FOUNDATION DESIGN IS BASED ON REQUIREMENTS OF GEOTECHNICAL EVALUATION
REPORT NO. 222114CPR
DATED: 11/2/2022
PREPARED BY: CONSTRUCTION MATERIALS TESTING (CMT)
7. SOIL BEARING PRESSURES:
ALLOWABLE SOIL BEARING PRESSURE: 3,000 PSF (AFTER BACKFILL OVER-EXCAVATION AND FILL CORRECTION)

INTERPRETATION OF CONFLICT NOTES:

1. SHOULD CONFLICT OCCUR IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REQUEST INTERPRETATION BEFORE PROCEEDING WITH THE ASSOCIATED WORK. ALL SUCH REQUESTS SHALL FIRST BE PRECEDED BY A DILIGENT INVESTIGATION INTO THE CONTRACT DOCUMENTS. EVIDENCE OF SUCH INVESTIGATION SHALL BE COMBINED IN ALL REQUESTS FOR INTERPRETATIONS SUBMITTED.
2. IF THE CONTRACTOR FAILS TO MAKE SUCH A REQUEST, NO EXCUSE WILL THEREAFTER BE ENTERTAINED FOR FAILURE TO CARRY OUT THE WORK IN A SATISFACTORY MANNER. SHOULD CONFLICTS OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR IS DEEMED TO HAVE ESTIMATES ON THE MORE EXPENSIVE WAY OF DOING THE WORK UNLESS HAVING ASKED FOR, AND OBTAINED, WRITTEN DECISION BEFORE SUBMISSION OF PROPOSAL AS TO WHICH METHOD OF MATERIALS WILL BE REQUIRED.

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	BID SET	09-19-2023



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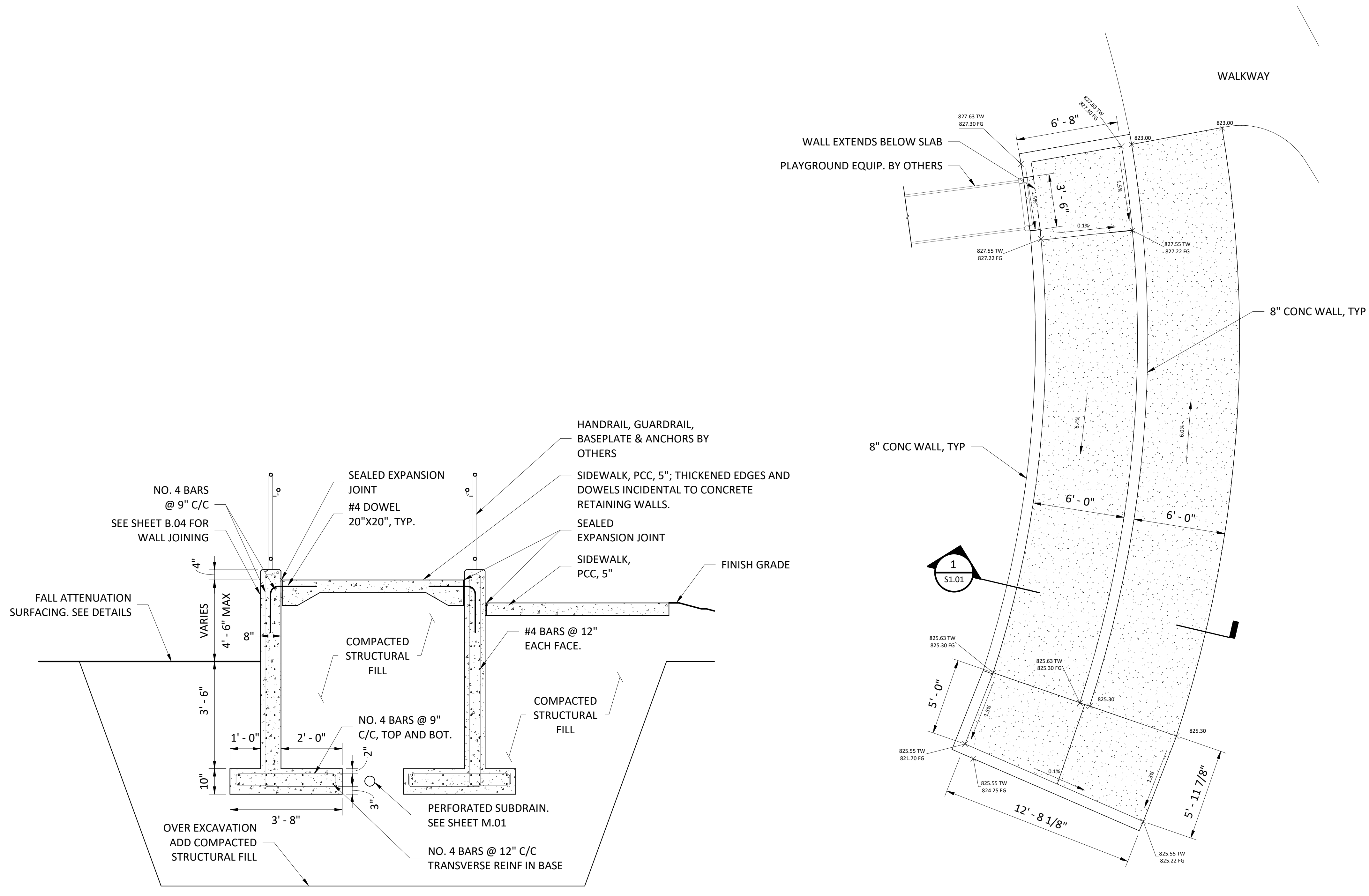
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DRAWN	MDH
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CITY OF WINDSOR HEIGHTS, IOWA	
2023 COLBY PARK IMPROVEMENTS	
GENERAL (DESIGN CRITERIA & LOADING)	

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1
S1.01
DETAIL - RETAINING WALL & WALKWAY REINFORCEMENT
1/2" = 1'-0"

2
S1.01
RAMP TOP
1/4" = 1'-0"

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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
PLAYGROUND RAMP & RETAINING WALLS PLAN & SECTION



SHEET
S1.01

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ESTIMATED PROJECT QUANTITIES - BASE BID					
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
1	2010-C	CLEARING AND GRUBBING	LS	1	
2	2010-D-2	TOPSOIL, COMPOST AMENDED	CY	500	
3	2010-E	EXCAVATION, CLASS 13	CY	2500	
4	2010-J	SUBBASE, MODIFIED, BERM	TON	255	
5	4020-C	LINEAR TRENCH DRAIN, 8 INCH	LF	75	
6	4020-X	SUBDRAIN, SOLID WALL PVC, 4 INCH	LF	50	
7	4020-X	SUBDRAIN, SOLID WALL PVC, 8 INCH	LF	288	
8	4040-A	SUBDRAIN, HDPE, 8 INCH	LF	85	
9	4040-C	SUBDRAIN CLEANOUT, 8 INCH, TYPE A-1	EA	2	
10	4040-D	SUBDRAIN OUTLETS AND CONNECTIONS, 8 INCH, TO STRUCTURE	EA	2	
11	5010-X-1	WATER SERVICE	LS	1	
12	5010-X-1	WATER SERVICE, WATER FOUNTAIN	LS	1	
13	5020-A	VALVE, GATE, 4 INCH	EA	1	
14	5020-X	BACKFLOW PREVENTER	EA	1	
15	5020-X1	METER PIT	EA	1	
16	5020-X1	PRESSURE REDUCING VALVE	EA	1	
17	5020-E	FLUSHING DEVICE (BLOW OFF), 4 INCH	EA	1	
18	5020-X	PREPARE EXCAVATION FOR TAPPING SLEEVE AND VALVE	EA	1	
19	6010-B	INTAKE, SW-512, 48 INCH	EA	2	
20	6010-X	NYLOPLAST DRAIN BASIN, 12 INCH	EA	3	
21	6010-C-2	EXTERNAL DROP CONNECTION	EA	1	
22	6010-E	MANHOLE ADJUSTMENT, MINOR	EA	1	
23	6010-F	MANHOLE ADJUSTMENT, MAJOR	EA	2	
24	6010-F	MANHOLE ADJUSTMENT, MAJOR, WRA	EA	1	
25	6010-H	REMOVE INTAKE	EA	2	
26	7010-A	PAVEMENT, PCC, 7 INCH	SY	345	
27	7010-A	PAVEMENT, PCC, 5 INCH, REINFORCED (SPLASHPAD)	SY	258	
28	7010-A	PAVEMENT, PCC, 7 INCH, INTEGRAL COLOR	SY	305	
29	7010-E	CURB AND GUTTER, 2 FT, 7 INCH	LF	45	
30	7030-A	REMOVAL OF SIDEWALK	SY	1275	
31	7030-E	SIDEWALK, PCC, 5 INCH	SY	2410	
32	7030-E	SIDEWALK, PCC, 6 INCH	SY	175	
33	7040-H	PAVEMENT REMOVAL	SY	895	
34	7040-H	SALVAGE BRICK PAVERS	SY	250	
35	7040-I	CURB AND GUTTER REMOVAL	LF	45	
36	7080-G	PCC EDGE RESTRAINT, FLUSH, 2 FEET	LF	210	
37	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	
38	9010-A	CONVENTIONAL SEEDING, SEEDING, FERTILIZING, AND MULCHING (LOW GROW FESCUE)	AC	1	
39	9020-A	SOD	SQ	250	
40	9030-B	DECIDUOUS SHRUBS	EA	195	
41	9030-B	ORNAMENTAL TREE	EA	18	
42	9030-B	PERENNIAL GROUND COVER (1 GAL)	EA	897	
43	9030-B	DECIDUOUS TREE	EA	19	
44	9030-B	EVERGREEN TREE	EA	7	
45	9040-A-1	SWPPP PREPARATION	LS	1	
46	9040-A-2	SWPPP MANAGEMENT	LS	1	
47	9040-D-1	FILTER SOCK, 8", INSTALL, MAINTAIN, AND REMOVE	LF	5000	
48	9080-B	HANDRAIL, PAINTED	LF	442	
49	11020-A	MOBILIZATION	LS	1	
50	11050-A	CONCRETE WASHOUT	LS	1	
51	12000-X-X	TENNIS COURT PAVEMENT AND FENCE REMOVAL	LS	1	
52	12010-X-X	CONCRETE SURFACE STAIN	SF	1335	
53	12010-X-X	NON-SKID RUBBERIZED COATING (SPLASHPAD)	SF	1945	
54	12010-X-X	REINFORCED CAST-IN-PLACE CONCRETE RETAINING WALL (PLAYGROUND RAMP WALL)	CY	30	
55	12010-X-X	REINFORCED CAST-IN-PLACE CONCRETE PIERS (LEAF SEAT WALLS)	EA	36	
56	12010-X-X	REINFORCED CAST-IN-PLACE CONCRETE WALL (LEAF SEAT WALLS)	CF	785	
57	12010-X-X	CONCRETE STEPPING PLANKS	EA	7	
58	12010-X-X	DRINKING FOUNTAIN	EA	1	
59	12010-X-X	SPLASH PAD EQUIPMENT & INSTALLATION	LS	1	
60	12010-X-X	SALVAGE & REINSTALL FURNISHINGS	LS	1	
61	12010-X-X	PLAYGROUND EQUIPMENT & INSTALLATION	LS	1	

62	12010-X-X	FALL ATTENUATION SURFACING, POUR-IN-PLACE	SF	6825	
63	12010-X-X	FALL ATTENUATION SURFACING, SYNTHETIC TURF	SF	2000	
64	12010-X-X	BIKE RACK	EA	8	
65	12010-X-X	BENCH (WOOD)	EA	4	
66	12010-X-X	STONE BLOCK BENCH	EA	8	
67	12010-X-X	ELECTRICAL IMPROVEMENTS, DEMO & SITE PREP	LS	1	
68	12030-X-X	ELECTRICAL IMPROVEMENTS, CIRCUITS	LS	1	
69	12030-X-X	ELECTRICAL IMPROVEMENTS, POLE-TOP LIGHTS	LS	1	
70	12030-X-X	ELECTRICAL IMPROVEMENTS, BOLLARDS	LS	1	
71	12030-X-X	ELECTRICAL IMPROVEMENTS, SALVAGE & RELOCATE B-CYCLE	LS	1	
72	12030-X-X	SALVAGE AND REINSTALL SCULPTURE (BUTTERFLY)	LS	1	
73	12030-X-X	IRRIGATION CAP	LS	1	

ESTIMATED PROJECT QUANTITIES (ALTERNATE A)					
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
A1	7010-A	PAVEMENT, PCC, 7 INCH	SY	227	
A2	7010-E	CURB AND GUTTER, 2 FT, 7 INCH	LF	64	
A3	7040-H	PAVEMENT REMOVAL	SY	155	
A4	7040-I	CURB AND GUTTER REMOVAL	LF	64	

ESTIMATED PROJECT QUANTITIES (ALTERNATE B)					
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
B1	12010-X-X	SPLASH PAD OVERHEAD STRUCTURES	EA	3	

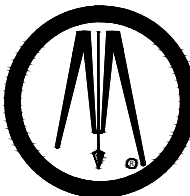
ESTIMATED PROJECT QUANTITIES (ALTERNATE C)					
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
C1	12010-X-X	CAST STONE CUSTOM WALLS (LEAF SEAT WALLS)	CF	599	

ESTIMATED PROJECT QUANTITIES (ALTERNATE D)					
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
D1	12030-X-X	IRRIGATION MODIFY AND EXTEND	LS	1	

ESTIMATED PROJECT QUANTITIES (ALTERNATE E)					
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
E1	12030-X-X	CHAIN LINK FENCE, GALVANIZED, 6'	LF	87	

ESTIMATE REFERENCE INFORMATION		
ITEM NO.	ITEM CODE	DESCRIPTION
1	2010-C	<u>CLEARING AND GRUBBING</u> THIS ITEM SHALL INCLUDE ALL NECESSARY TRIMMING AND CLEARING AND GRUBBING TO COMPLETE CONSTRUCTION. PLANTING BED REMOVALS SHALL BE INCIDENTAL TO THIS ITEM. PROTECTION OF ALL TREES NOT MARKED FOR REMOVAL SHALL BE INCIDENTAL TO THIS ITEM.
2	2010-D-2	<u>TOPSOIL, COMPOST AMENDED</u> ITEM INCLUDES FURNISHING AND INCORPORATING TOPSOIL, SAND, AND COMPOST TO BE PLACED IN PLANTINGS BEDS AT THE DEPTHS INDICATED IN THE B SHEETS. MEASUREMENT SHALL BE THE AMOUNT OF COMPOST AMENDED TOPSOIL PLACED. MIX RATIO IS SPECIFIED ON SHEET L.01. EXCESS HAUL OFF INCIDENTAL.
3	2010-E	<u>EXCAVATION, CLASS 13</u> ALL EXCESS MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND HAULED OFFSITE. TOPSOIL SHALL BE STRIPPED, SALVAGED AND RESPREAD TO A MINIMUM THICKNESS OF 6" IN ALL DISTURBED TURF AREAS (INCIDENTAL). ITEM INCLUDES HAULING OFF-SITE TO STORE AND HAULING BACK IN IF NEEDED.
4	2010-J	<u>SUBBASE, MODIFIED, BERM</u> THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, PLACING, COMPACTING, AND TRIMMING TO THE PROPER GRADE FOR THE SYNTHETIC TURF BERMS IN THE PLAYGROUND AREA.
5	4020-C	<u>LINEAR TRENCH DRAIN, 8 INCH</u> THIS ITEM SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIAL REQUIRED TO FURNISH THE LINEAR TRENCH DRAIN INCLUDING FITTINGS FOR CONNECTIONS TO SUBDRAINS. THE TRENCH DRAIN SHALL BE 8 INCH WIDE AND SHALL HAVE A DUCTILE IRON GRATE AND FRAME. THIS ITEM SHALL USE A BOTTOM STYLE OUTLET.
6	4020-X	<u>SUBDRAIN, SOLID WALL PVC, 4 INCH</u> INCLUDES THE INSTALLATION OF ALL REQUIRED BENDS AND TRACER WIRE WITH A TERMINATION POINT INSIDE OF CLEANOUT CASTING.
7	4020-X	<u>SUBDRAIN, SOLID WALL PVC, 8 INCH</u> INCLUDES THE INSTALLATION OF ALL REQUIRED BENDS AND TRACER WIRE WITH A TERMINATION POINT INSIDE OF CLEANOUT CASTING.
8	4040-A	<u>SUBDRAIN, HDPE, 8 INCH</u> INCLUDES THE INSTALLATION OF ALL REQUIRED BENDS AND TRACER WIRE WITH A TERMINATION POINT INSIDE OF CLEANOUT CASTING.

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CITY OF WINDSOR HEIGHTS, IOWA

2023 COLBY PARK IMPROVEMENTS

QUANTITIES AND ESTIMATE REFERENCE NOTES

SHEET

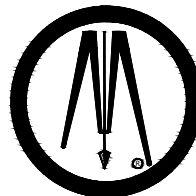
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9	4040-C	<u>SUBDRAIN CLEANOUT, 8 INCH, TYPE A-1</u> THIS ITEM SHALL INCLUDE CONNECTING THE CLEANOUT TO NEW SUBDRAIN.
10	4040-D	<u>SUBDRAIN OUTLETS AND CONNECTIONS, 8 INCH, TO STRUCTURE</u>
11	5010-X-1	<u>WATER SERVICE</u> BID ITEM INCLUDES THE INSTALLATION OF APPROXIMATELY 65 FEET OF NEW 4" C900, DR-14, RESTRAINED JOINT, PVC WATER SERVICE FROM THE TAP AT THE STREET TO THE SPLASHPAD CABINET. THE WATER SERVICE SHALL BE OPEN TRENCHED AT BOTH ENDS OF THE WATER SERVICE WITH THE OPTION OF OPEN TRENCH OR DIRECTIONAL DRILLING BETWEEN AS NECESSARY. FITTINGS SHALL BE DI WITH MEGA-LUG RESTAINED CONNECTIONS. TRACER WIRE SHALL ALSO BE INSTALLED ALONG THE LENGTH OF THE SERVICE LINE. TRACER WIRE SHALL BE IN ACCORDANCE WITH SECTION 5010, 2.05.B AND FIGURE 5010.102. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS. CONTRACTOR SHALL BE REQUIRED TO SUBMIT ALL NECESSARY APPLICATIONS REQUIRED FOR WORK. WORK SHALL BE PERFORMED BY A LICENSED PLUMBER AS REQUIRED. INCIDENTAL TO THIS ITEM IS THE SHUTOFF GATE VALVE AND VALVE BOX LOCATED JUST OUTSIDE THE SPLASH PAD CONTROL VAULT, AT THE END OF THE 4" WATER SERVICE. INCLUDED IN THIS BID ITEM IS ALL INSTALLATION, MATERIALS, AND TESTING, WHICH SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATIONS, SUDAS DIVISION 5, DMWW RULES, CODES AND FIGURES, CITY OF WINDSOR HEIGHTS PLUMBING CODE, AND PROJECT PLANS. CONTRACTOR SHALL COORDINATE WITH DMWW INSPECTOR AND CITY PLUMBING INSPECTON DURING CONSTRUCTION.
12	5010-X-1	<u>WATER SERVICE, WATER FOUNTAIN</u> BID ITEM INCLUDES THE INSTALLATION OF APPROXIMATELY 200 FEET OF NEW 1/2" C900, DR-14, RESTRAINED JOINT, PVC WATER SERVICE FROM THE WYE ON THE 4" SERVICE TO THE WATER FOUNTAIN. THE WATER SERVICE SHALL BE OPEN TRENCHED AT BOTH ENDS OF THE WATER SERVICE WITH THE OPTION OF OPEN TRENCH OR DIRECTIONAL DRILLING BETWEEN AS NECESSARY. FITTINGS SHALL BE DI WITH MEGA-LUG RESTAINED CONNECTIONS. TRACER WIRE SHALL ALSO BE INSTALLED ALONG THE LENGTH OF THE SERVICE LINE. TRACER WIRE SHALL BE IN ACCORDANCE WITH SECTION 5010, 2.05.B AND FIGURE 5010.102. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS. CONTRACTOR SHALL BE REQUIRED TO SUBMIT ALL NECESSARY APPLICATIONS REQUIRED FOR WORK. WORK SHALL BE PERFORMED BY A LICENSED PLUMBER AS REQUIRED. INCIDENTAL TO THIS ITEM IS THE SHUTOFF GATE VALVE AND VALVE BOX LOCATED JUST OUTSIDE THE SPLASH PAD CONTROL VAULT, AT THE END OF THE 4" WATER SERVICE. INCLUDED IN THIS BID ITEM IS ALL INSTALLATION, MATERIALS, AND TESTING, WHICH SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATIONS, SUDAS DIVISION 5, DMWW RULES, CODES AND FIGURES, CITY OF WINDSOR HEIGHTS PLUMBING CODE, AND PROJECT PLANS. CONTRACTOR SHALL COORDINATE WITH DMWW INSPECTOR AND CITY PLUMBING INSPECTON DURING CONSTRUCTION.
13	5020-A	<u>VALVE, GATE, 4 INCH</u>
14	5020-X	<u>BACKFLOW PREVENTER</u> BID ITEM INCLUDES THE INSTALLATION OF THE BACKFLOW PREVENTER, THE BACKFLOW PREVENTER CABINET, ALL PIPE AND FITTINGS FROM THE GATE VALVES ON EACH SIDE OF THE BACKFLOW PREVENTER, INCLUDING THE TWO GATE VALVES WITH VALVE BOXES AS SHOWN IN THE TYPICAL DETAILS. ALL WORKAND MATERIALS REFERRING TO THE BACKFLOW PREVENTER DETAIL SHALL BE INCLUDED IN THIS BID ITEM. CONTRACTOR SHALL PROVIDE NECESSARY INITIAL TESTING. CERTIFICATION OF BACKFLOW PREVENTER UPON COMPLETION OF WORK, WHICH IS INCIDENTAL TO THIS ITEM. BACKFLOW PREVENTER SHALL BE A WATTS 957NRS, OR ENGINEER APPROVED EQUAL. BACKFLOW PREVENTER CABINET SHALL BE AN AQUASHIELD, MODEL BFP3 OR WATTS WB, OR ENGINEER APPROVED EQUAL, SIZED APPROPRIATELY FOR THE BACKFLOW ASSEMBLY AND PIPING AS SHOWN IN THE TYPICAL DETAIL. ALSO INCLUDED IN THIS ITEM IS THE REINFORCED 6" PCC SLAB, ON 6" COMPACTED ROCK BASE, FOR SETTING AND ANCHORING THE BACKFLOW ENCLOSURETO, INCLUDING THE GRADING REQUIRED FOR THE SLAB. ALL WORK AND MATERIALS SHALL BE DONE IN ACCORDANCE AND AS REQUIRED BY THE DES MOINES WATER WORKS, THE SUPPLEMENTAL SPECIFICATIONS, SUDAS DIVISION 5, DMWW RULES, CODES, AND FIGURES, AND CITY OF WINDSOR HEIGHTS PLUMBING CODE. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND COORDINATE WITH DMWW INSPECTOR AND CITY PLUMBING INSPECTION DURING CONSTRUCTION.
15	5020-X1	<u>METER PIT</u> BID ITEM INCLUDES THE INSTALLATION OF THE METER PIT. ALL WORK AND MATERIALS SHALL BE DONE IN ACCORDANCE AND AS REQUIRED BY THE DES MOINES WATER WORKS, THE SUPPLEMENTAL SPECIFICATIONS, SUDAS DIVISION 5, DMWW RULES, CODES, AND FIGURES, AND CITY OF WINDSOR HEIGHTS PLUMBING CODE. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND COORDINATE WITH DMWW INSPECTOR AND CITY PLUMBING INSPECTION DURING CONSTRUCTION.
16	5020-X1	<u>PRESSURE REDUCING VALVE</u> BID ITEM INCLUDES THE INSTALLATION OF THE METER PIT. ALL WORK AND MATERIALS SHALL BE DONE IN ACCORDANCE AND AS REQUIRED BY THE DES MOINES WATER WORKS, THE SUPPLEMENTAL SPECIFICATIONS, SUDAS DIVISION 5, DMWW RULES, CODES, AND FIGURES, AND CITY OF WINDSOR HEIGHTS PLUMBING CODE. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS AND COORDINATE WITH DMWW INSPECTOR AND CITY PLUMBING INSPECTION DURING CONSTRUCTION.
17	5020-E	<u>FLUSHING DEVICE (BLOW OFF), 4 INCH</u>
18	5020-X	<u>PREPARE EXCAVATION FOR TAPPING SLEEVE AND VALVE</u>
19	6010-B	<u>INTAKE, SW-512, 48 INCH</u> SEE STRUCTURE TABLE FOR GRATE TYPE.
20	6010-X	<u>NYLOPLAST DRAIN BASIN, 12 INCH</u> THIS ITEM SHALL INCLUDE ALL NECESSARY LABOR AND MATERIALS FOR INSTALLING THE DRAIN BASINS INCLUDING GRATES. SEE STRUCTURE TABLE FOR GRATE TYPE.
21	6010-C-2	<u>EXTERNAL DROP CONNECTION</u> CORING AN OPENING IN EXISTING MANHOLE SHALL BE INCIDENTAL TO THIS ITEM.
22	6010-E	<u>MANHOLE ADJUSTMENT, MINOR</u>
23	6010-F	<u>MANHOLE ADJUSTMENT, MAJOR</u> ADJUSTING RINGS TO BE CRETEX PRO-RING OR APPROVED EQUAL.
24	6010-F	<u>MANHOLE ADJUSTMENT, MAJOR, WRA</u> CASTING AND FRAME TO BE COMPOSITE ACCESS PRODUCT (CAP) OR EAST JORDAN GMI COMPOSITE CASTING WITH TWO LOCKING TABS. THE TOOL FOR THE LOCKING TABS MUST BE PROVIDED TO THE WRA. THE WORD "SEWER" SHALL BE STAMPED ON THE TOP OF THE MANHOLE COVER. CONTACT BRETT WARGA AT 402-575-8988 FOR INFORMATION ON COMPOSITE ACCESS PRODUCTS.
25	6010-H	<u>REMOVE INTAKE</u>

26	7010-A	<u>PAVEMENT, PCC, 7 INCH</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
27	7010-A	<u>PAVEMENT, PCC, 5 INCH, REINFORCED (SPLASHPAD)</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, MODIFIED SUBBASE, SUBGRADE PREP, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. WIRE MESH REINFORCEMENT IN THE SPLASH PAD APRON AS SPECIFIED IS INCIDENTAL. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
28	7010-A	<u>PAVEMENT, PCC, 7 INCH, INTEGRAL COLOR</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING. INCLUDES INCORPORATION OF INTEGRAL COLOR PIGMENTATION IN THE MIX, MOCKUPS OF EACH SPECIFIED COLOR FOR REVIEW BY THE ENGINEER, AND SURFACE SEALANT AS RECOMMENDED BY THE MANUFACTURER.
29	7010-E	<u>CURB AND GUTTER, 2 FT, 7 INCH</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
30	7030-A	<u>REMOVAL OF SIDEWALK</u>
31	7030-E	<u>SIDEWALK, PCC, 5 INCH</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
32	7030-E	<u>SIDEWALK, PCC, 6 INCH</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
33	7040-H	<u>PAVEMENT REMOVAL</u>
34	7040-H	<u>SALVAGE BRICK PAVERS</u> ITEM INCLUDES THE REMOVAL, CLEANING, PALLETIZING, AND DELIVERY OF BRICK PAVERS TO PUBLIC WORKS AT 6900 SCHOOL STREET, WINDSOR HEIGHTS, IOWA. REMOVAL AND DISPOSAL OF ANY SUBBASE MATERIALS (CONCRETE OR AGGREGATE) WILL BE INCIDENTAL TO THIS ITEM. PAYMENT SHALL BE MADE FOR THE AREA OF PAVER REMOVAL REGARDLESS OF THICKNESS OF THE SUBBASE MATERIALS.
35	7040-I	<u>CURB AND GUTTER REMOVAL</u>
36	7080-G	<u>PCC EDGE RESTRAINT, FLUSH, 2 FEET</u> MEASUREMENT WILL BE IN LINEAR FEET MEASURED FROM CENTER OF EDGE RESTRAINT. INCLUDES ALL REINFORCING AS SHOWN IN DETAIL 2/B.06.
37	8030-A	<u>TEMPORARY TRAFFIC CONTROL</u> REFER TO J SHEETS FOR DETAILS. THIS ITEM SHALL INCLUDE ALL SIGNAGE DIRECTING VEHICLE AND PEDESTRIAN TRAFFIC DURING ALL PHASES OF CONSTRUCTION. ANY ADDITIONAL SIGNS REQUIRED SHALL BE INCIDENTAL TO THIS ITEM.
38	9010-A	<u>CONVENTIONAL SEEDING, SEEDING, FERTILIZING, AND MULCHING (LOW GROW FESCUE)</u> SEE PLANS FOR SEED MIX AND REQUIREMENTS. REINFORCED EROSION CONTROL PRODUCT AS SPECIFIED IN THE DRAWINGS IS INCIDENTAL TO THIS ITEM.
39	9020-A	<u>SOD</u> THIS ITEM INCLUDES BUT IS NOT LIMITED TO, PREPERATION OF SOD AND SODBED, STAKES, FERTILIZING, WATERING, MAINTENANCE, AND CLEAN UP. ALSO INCLUDES ANY NECESSARY SOD REPLACEMENTS DURING MAINTENANCE PERIOD.
40	9030-B	<u>DECIDUOUS SHRUBS</u> THIS ITEM INCLUDES LABOR, MATERIAL, AND EQUIPMENT TO FURNISH AND INSTALL SHRUBS AS INDICATED IN THE PLANS. PLANTINGS SHALL HAVE ONE YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE FOR ALL PLANTINGS IN THE PROJECT. ACCEPTANCE OF PLANT MATERIALS CONSTRUES FULL PAYMENT (MINUS ANY PROJECT RETAINAGE). INCLUDES ALL, BUT NOT LIMITED TO, WATERING, EXCAVATION, INSTALLATION, MULCHING, HERBICIDE, MAINTENANCE DURING ESTABLISHMENT PERIOD, AND WARRANTY AND REJECTION REPLACEMENTS.
41	9030-B	<u>ORNAMENTAL TREE</u> THIS ITEM INCLUDES LABOR, MATERIAL, AND EQUIPMENT TO FURNISH AND INSTALL ORNAMENTAL TREES AS INDICATED IN THE PLANS. PLANTINGS SHALL HAVE ONE YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE FOR ALL PLANTINGS IN THE PROJECT. ACCEPTANCE OF PLANT MATERIALS CONSTRUES FULL PAYMENT (MINUS ANY PROJECT RETAINAGE). INCLUDES ALL, BUT NOT LIMITED TO, WATERING BAG, AMENDED SOILS DELIVERY, EXCAVATION, INSTALLATION, MULCHING, HERBICIDE, MAINTENANCE DURING ESTABLISHMENT PERIOD, AND WARRANTY AND REJECTION REPLACEMENTS.
42	9030-B	<u>PERENNIAL GROUND COVER (1 GAL)</u> THIS ITEM INCLUDES LABOR, MATERIAL, AND EQUIPMENT TO FURNISH AND INSTALL PERENNIALS AND ORNAMENTAL GRASSES AS INDICATED IN THE PLANS. PLANTINGS SHALL HAVE ONE YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE FOR ALL PLANTINGS IN THE PROJECT. ACCEPTANCE OF PLANT MATERIALS CONSTRUES FULL PAYMENT (MINUS ANY PROJECT RETAINAGE). INCLUDES ALL, BUT NOT LIMITED TO, WATERING, EXCAVATION, INSTALLATION, MULCHING, HERBICIDE, MAINTENANCE DURING ESTABLISHMENT PERIOD, AND WARRANTY AND REJECTION REPLACEMENTS.
43	9030-B	<u>DECIDUOUS TREE</u> THIS ITEM INCLUDES LABOR, MATERIAL, AND EQUIPMENT TO FURNISH AND INSTALL TREES AS INDICATED IN THE PLANS. PLANTINGS SHALL HAVE ONE YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE FOR ALL PLANTINGS IN THE PROJECT. ACCEPTANCE OF PLANT MATERIALS CONSTRUES FULL PAYMENT (MINUS ANY PROJECT RETAINAGE). INCLUDES ALL, BUT NOT LIMITED TO, WATERING BAG, AMENDED SOILS DELIVERY, EXCAVATION, INSTALLATION, MULCHING, HERBICIDE, MAINTENANCE DURING ESTABLISHMENT PERIOD, AND WARRANTY AND REJECTION REPLACEMENTS.
44	9030-B	<u>EVERGREEN TREE</u> THIS ITEM INCLUDES LABOR, MATERIAL, AND EQUIPMENT TO FURNISH AND INSTALL EVERGREEN TREES AS INDICATED IN THE PLANS. PLANTINGS SHALL HAVE ONE YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE FOR ALL PLANTINGS IN THE PROJECT. ACCEPTANCE OF PLANT MATERIALS CONSTRUES FULL PAYMENT (MINUS ANY PROJECT RETAINAGE). INCLUDES ALL, BUT NOT LIMITED TO, WATERING BAG, AMENDED SOILS DELIVERY, EXCAVATION, INSTALLATION, MULCHING, HERBICIDE, MAINTENANCE DURING ESTABLISHMENT PERIOD, AND WARRANTY AND REJECTION REPLACEMENTS.

REV	ISSUED FOR	DATE
0	BID SET	09-19-2023



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CITY OF WINDSOR HEIGHTS, IOWA

2023 COLBY PARK IMPROVEMENTS

ESTIMATE REFERENCE NOTES

SHEET

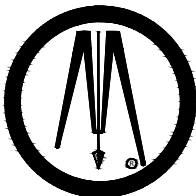
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45	9040-A-1	SWPPP PREPARATION
46	9040-A-2	SWPPP MANAGEMENT
47	9040-D-1	<u>FILTER SOCK, 8", INSTALL, MAINTAIN, AND REMOVE</u> INCLUDES INSTALLATION, MAINTENANCE, AND REMOVAL.
48	9080-B	<u>HANDRAIL, PAINTED</u> INCLUDES ALL MATERIALS, LABOR, AND EQUIPMENT TO INSTALL HANDRAILS AS INDICATED IN THE PLANS. MEASUREMENT AND PAYMENT SHALL BE FOR THE LINEAL FOOT OF HANDRAILS INSTALLED ON THE PROJECT.
49	11020-A	<u>MOBILIZATION</u> THIS ITEM IS FOR ALL PREPARATORY WORK AND COSTS INCURRED BEFORE BEGINNING THE WORK ON THE PROJECT AND DURING THE PROJECT INCLUDING INSTALLING, MAINTAINING, AND REMOVING CONSTRUCTION FENCING TO SECURE THE JOBSITE. THIS ITEM SHALL ALSO INCLUDE THE COSTS FOR ANY STAGED CONSTRUCTION AND EQUIPMENT SET UP TO COMPLETE THE WORK. NO CHANGE IN THE CONTRACT PRICE WILL BE MADE FOR ANY CHANGE IN STAGING OR COMBINATION THEREOF.
50	11050-A	<u>CONCRETE WASHOUT</u>
51	12000-X-X	<u>TENNIS COURT PAVEMENT AND FENCE REMOVAL</u> ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS. REMOVAL OF TENNIS COURT FENCING, PAVEMENT, NETTING, AND POSTS SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.
52	12010-X-X	<u>CONCRETE SURFACE STAIN</u> INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR DECORATIVE STAINING OF CONCRETE IN AREAS INDICATED ON THE PLANS. MEASUREMENT AND PAYMENT SHALL BE PER SQUARE FOOT OF STAIN APPLIED AS SPECIFIED ON THE DRAWINGS. ALL SURFACE PREP, LIGHT SANDBLASTING, STAINING, SEALER, PROTECTION OF SURROUNDINGS, CLEAN UP, AND TOUCH UP AS REQUIRED AND DETAILED IN THE PLANS ARE CONSIDERED INCIDENTAL. SEE SUPPLEMENTAL SPECIFICATIONS FOR CONCRETE SURFACE STAIN IN THE CONTRACT DOCUMENTS.
53	12010-X-X	<u>NON-SKID RUBBERIZED COATING (SPLASHPAD)</u> INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR FURNISHING AND COMPLETE APPLICATION OF NON-SKID RUBBERIZED COATING. MEASUREMENT AND PAYMENT SHALL BE PER SQUARE FOOT OF COATING AS SPECIFIED ON THE DRAWINGS. ALL SURFACE PREP AND PRIMING COATS ARE CONSIDERED INCIDENTAL. SEE SUPPLEMENTAL SPECIFICATIONS FOR NON-SKID RUBBERIZED COATING (TUFFCOAT) IN CONTRACT DOCUMENTS.
54	12010-X-X	<u>REINFORCED CAST-IN-PLACE CONCRETE RETAINING WALL (PLAYGROUND RAMP WALL)</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH MATERIALS AND CONSTRUCT THE CONCRETE RETAINING WALLS FOR THE PEDESTRIAN RAMP SYSTEM AT THE PLAYGROUND. SEE SHEETS S0.01 AND S1.01 FOR DETAILS AND SPECIFICATIONS. ITEM IS TO BE MEASURED AND PAID FOR ON A CUBIC YARD BASIS OF CONCRETE RETAINING WALL AND FOOTINGS CONSTRUCTED. ALL ITEMS NECESSARY FOR COMPLETE EXCAVATION, COMPACTION, FORMWORK, REINFORCING, TESTING AND PLACEMENT OF CONCRETE, BACKFILL, REINFORCING TIES TO RAMP SURFACE PAVEMENT, AND ANY OTHER ITEMS REQUIRED FOR COMPLETE CONSTRUCTION OF THE WALLS ARE CONSIDERED INCIDENTAL TO THIS ITEM. MOCKUPS TO BE USED FOR QUALITY CONTROL, AS STATED IN THE SPEC, ARE ALSO INCIDENTAL TO THIS ITEM.
55	12010-X-X	<u>REINFORCED CAST-IN-PLACE CONCRETE PIERS (LEAF SEAT WALLS)</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH MATERIALS AND CONSTRUCT THE CONCRETE PIERS SUPPORTING THE LEAF SEATWALLS IN THE PLAYGROUND AND PLAZA AREAS. ITEM IS TO BE MEASURED AND PAID FOR ON A COUNT BASIS FOR EACH CONCRETE PIER CONSTRUCTED. ALL ITEMS NECESSARY FOR COMPLETE EXCAVATION, REINFORCING, TESTING AND PLACEMENT OF CONCRETE, BACKFILL AND ANY OTHER ITEMS REQUIRED FOR COMPLETE CONSTRUCTION OF THE PIER FOUNDATIONS ARE CONSIDERED INCIDENTAL TO THIS ITEM. MOCKUPS TO BE USED FOR QUALITY CONTROL, AS STATED IN THE SPEC, ARE ALSO INCIDENTAL TO THIS ITEM.
56	12010-X-X	<u>REINFORCED CAST-IN-PLACE CONCRETE WALL (LEAF SEAT WALLS)</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH MATERIALS AND CONSTRUCT THE DECORATIVE CONCRETE LEAF SEATWALLS IN THE PLAYGROUND AND PLAZA AREAS. ITEM IS TO BE MEASURED AND PAID FOR ON A CUBIC FOOT BASIS OF CONCRETE SEATWALLS CONSTRUCTED. ALL ITEMS NECESSARY FOR COMPLETE EXCAVATION, COMPACTION, FORMWORK, VOID FORMS, REINFORCING, TESTING AND PLACEMENT OF CONCRETE, BACKFILL AND ANY OTHER ITEMS REQUIRED FOR COMPLETE CONSTRUCTION OF THE WALLS ARE CONSIDERED INCIDENTAL TO THIS ITEM. MOCKUPS TO BE USED FOR QUALITY CONTROL, AS STATED IN THE SPEC, ARE ALSO INCIDENTAL TO THIS ITEM.
57	12010-X-X	<u>CONCRETE STEPPING PLANKS</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH MATERIALS AND INSTALL THE CONCRETE STEPPING PLANKS. ITEM IS TO BE MEASURED AND PAID FOR ON A COUNT BASIS FOR EACH CONCRETE STEPPING PLANK INSTALLED. ALL ITEMS NECESSARY FOR COMPLETE EXCAVATION, SAND SETTING BED, SEPARATION FABRIC, REINFORCING, PLACEMENT OF CONCRETE, BACKFILL AND ANY OTHER ITEMS REQUIRED FOR COMPLETE INSTALLATION OF THE CONCRETE STEPPING PLANKS ARE CONSIDERED INCIDENTAL TO THIS ITEM.
58	12010-X-X	<u>DRINKING FOUNTAIN</u> THIS ITEM INCLUDES ALL LABOR, MATERIAL, AND EQUIPMENT TO FURNISH AND INSTALL THE DRINKING FOUNTAIN AND ASSOCIATED ROCK DRAINAGE PIT. THE CONNECTION TO WATER SERVICE, ROCK DRAINAGE PIT, AND AT-GRADE MAINTENANCE VAULT TO DRAINAGE PIT ARE INCIDENTAL TO THIS ITEM AS DETAILED. THIS ITEM MUST BE INSTALLED BY MAY 2024 AND THE PROJECT SHALL BE STAGED BY THE CONTRACTOR TO FACILITATE THIS INSTALLATION TIMELINE.
59	12010-X-X	<u>SPLASH PAD EQUIPMENT & INSTALLATION</u> THIS ITEM INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR COMPLETE INSTALLATION OF THE SPLASH PAD EQUIPMENT AS INDICATED IN THE DRAWINGS AND SPECS. ITEM INCLUDES ALL FURNISHING AND INSTALLATION OF ALL EQUIPMENT MAKING UP THE SPLASH PAD SYSTEM BEGINNING WITH THE DISTRIBUTION MANIFOLD VAULT AND EXTENDING TO AND INCLUDING THE RAIN DIVERTING WASTE VALVE BOX. SEE SUPPLEMENTAL SPECIFICATIONS FOR SPLASHPADS IN CONTRACT DOCUMENTS.
60	12010-X-X	<u>SALVAGE & REINSTALL FURNISHINGS</u> THIS ITEM INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR SALVAGING, RELOCATING, AND SURFACE MOUNTING SIGNS AND KIOSKS AND THE HARMONY PARK PLAY EQUIPMENT PER MANUFACTURER INSTALLATION REQUIREMENTS WITH NEW STAINLESS STEEL MOUNTING HARDWARE. MANUFACTURER-APPROVED STORAGE OF THE EQUIPMENT DURING THE CONSTRUCTION OF THE PROJECT IS INCIDENTAL TO THIS ITEM.
61	12010-X-X	<u>PLAYGROUND EQUIPMENT & INSTALLATION</u> THIS ITEM INCLUDES FURNISHING AND INSTALLATION OF ALL PLAY EQUIPMENT IN THE PLAYGROUND IN ADDITION TO THE MATCHING GUARDRAIL SYSTEM ON THE ACCESSIBLE RAMP. ALL MANUFACTURER FEES TO PROVIDE FINAL DESIGN OF EQUIPMENT, FOOTINGS, AND GUARDRAILS ARE INCLUDED IN THIS ITEM. ITEM INCLUDES OVEREXCAVATION, EXPLORATORY POTHOLING FOR UTILITY CONFLICTS, SUBGRADE PREP, FORMWORK, REINFORCING, AND PLACEMENT OF CONCRETE FOOTINGS FOR THE PLAYGROUND EQUIPMENT AS REQUIRED BY THE MANUFACTURER. PLAYGROUND EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH THE PLAYGROUND MANUFACTURER'S RECOMMENDATIONS, REQUIREMENTS, AND SPECIFICATIONS. PLAYGROUND EQUIPMENT TO BE INSTALLED BY AN INSTALLER CERTIFIED BY THE PLAYGROUND EQUIPMENT MANUFACTURER.

62	12010-X-X	<u>FALL ATTENUATION SURFACING, POUR-IN-PLACE</u> THIS ITEM INCLUDES ALL TESTING, LABOR, MATERIALS, AND EQUIPMENT TO PLACE POURED-IN-PLACE FALL ATTENUATION SURFACING IN THE PLAYGROUND AREA AS INDICATED IN THE DOCUMENTS. INCIDENTAL TO THIS ITEM IS ALL BASE MATERIAL, INCLUDING CONCRETE PAVING, AGGREGATE SUBBASE, AND ANY SUBGRADE PREPARATION AS NECESSARY TO OBTAIN PROPER COMPACTION LEVELS. SEE SUPPLEMENTAL SPECIFICATIONS FOR POURED-IN-PLACE RUBBER SURFACING IN CONTRACT DOCUMENTS.
63	12010-X-X	<u>FALL ATTENUATION SURFACING, SYNTHETIC TURF</u> THIS ITEM INCLUDES ALL TESTING, LABOR, MATERIALS, AND EQUIPMENT TO PLACE SYNTHETIC TURF FALL ATTENUATION SURFACING AND SYSTEM BUILDUP IN THE PLAYGROUND AREA AS INDICATED IN THE DOCUMENTS AND AS REQUIRED BY THE MANUFACTURER. INCIDENTAL TO THIS ITEM IS ALL MANUFACTURER PROVIDED BASE MATTING, AND CONCRETE SKIM COAT REQUIRED FOR THE CONSTRUCTION OF THE SYNTHETIC TURF MOUNDS. INCREASED MATERIAL SQUARE FOOTAGE RESULTING FROM VERTICAL DIMENSIONS OF SYNTHETIC TURF BERMS ARE INCIDENTAL TO THIS ITEM.
64	12010-X-X	<u>BIKE RACK</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND INSTALL BIKE RACKS. SEE PLANS FOR LOCATIONS, DETAILS, AND SPEC INFORMATION. ITEM IS TO BE MEASURED AND PAID FOR ON A COUNT BASIS PER EACH.
65	12010-X-X	<u>BENCH (WOOD)</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND INSTALL WOOD BENCHES TO BE SURFACE MOUNTED ON TOP OF STONE BENCHES. SEE PLANS FOR LOCATIONS, DETAILS, AND SPEC INFORMATION. ITEM IS TO BE MEASURED AND PAID FOR ON A COUNT BASIS PER EACH.
66	12010-X-X	<u>STONE BLOCK BENCH</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND INSTALL STONE BENCHES. CONCRETE BASE, PINS, AND MODIFIED SUBBASE UNDER THE STONES IS INCLUDED IN THIS ITEM. SEE PLANS FOR LOCATIONS, DETAILS, AND SPEC INFORMATION. ITEM IS TO BE MEASURED AND PAID FOR ON A COUNT BASIS PER EACH.
67	12010-X-X	<u>ELECTRICAL IMPROVEMENTS, DEMO & SITE PREP</u> THIS ITEM INCLUDES LABOR, MATERIAL, AND EQUIPMENT TO REMOVE OR ABANDON ANY EXISTING CIRCUITS NOTED TO BE REMOVED IN THE PLANS. INCLUDES REMOVAL AND DISPOSAL OF EXISTING LIGHTPOLES, BOLLARDS, AND FOOTINGS, INCLUDING EXISTING TENNIS COURT LIGHT POLES, NOTED TO BE REMOVED OR REPLACED. SEE ELECTRICAL SUPPLEMENTAL SPECIFICATION SECTION FOR ADDITIONAL INFORMATION. THIS ITEM WILL BE PAID ON A LUMP SUM BASIS.
68	12030-X-X	<u>ELECTRICAL IMPROVEMENTS, CIRCUITS</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND INSTALL NEW CIRCUITS, PANELS, AND CONDUIT FOR ELECTRICAL IMPROVEMENTS. SEE PLANS FOR LOCATION, DETAILS, AND SPEC INFORMATION. ITEM IS TO BE MEASURED AND PAID AS A LUMP SUM FOR CIRCUITRY COMPLETE. CABINETS, CONDUIT & FEEDERS (TRENCHED OR BORED AS NECESSARY), PERMITS, TESTING, AND SITE RESTORATION TO ORIGINAL CONDITIONS IN TRENCHED AREAS ARE INCIDENTAL TO THIS ITEM. SEE ELECTRICAL SUPPLEMENTAL SPECIFICATION SECTION FOR ADDITIONAL INFORMATION. ELECTRICAL SERVICE AND CONNECTIONS TO THE SPLASH PAD MANIFOLD, RAIN DIVERTING WASTE VALVE BOX, AND AQUAVATOR ACTUATION UNIT.
69	12030-X-X	<u>ELECTRICAL IMPROVEMENTS, POLE-TOP LIGHTS</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND INSTALL POLE TOP AREA LIGHTS (NOTED AS "S2" IN THE PLANS). SEE PLANS FOR LOCATION, DETAILS, AND SPEC INFORMATION. ITEM IS TO BE MEASURED AND PAID AS A LUMP SUM FOR POLE TOP AREA LIGHTS COMPLETE. LIGHTS, POLES, FOOTINGS, AND CONNECTIONS ARE INCIDENTAL TO THIS ITEM. SEE ELECTRICAL SUPPLEMENTAL SPECIFICATION SECTION FOR ADDITIONAL INFORMATION.
70	12030-X-X	<u>ELECTRICAL IMPROVEMENTS, BOLLARDS</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH AND INSTALL BOLLARD LIGHTS AND PERSONAL CHARGING PEDESTALS (NOTED AS "S1" AND "PED-1" IN THE PLANS, RESPECTIVELY). SEE PLANS FOR LOCATION, DETAILS, AND SPEC INFORMATION. ITEM IS TO BE MEASURED AND PAID AS A LUMP SUM FOR BOLLARD LIGHTS AND PERSONAL CHARGING STATIONS COMPLETE. FOOTINGS AND CONNECTIONS ARE INCIDENTAL TO THIS ITEM. SEE ELECTRICAL SUPPLEMENTAL SPECIFICATION SECTION FOR ADDITIONAL INFORMATION.
71	12030-X-X	<u>ELECTRICAL IMPROVEMENTS, SALVAGE & RELOCATE B-CYCLE</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO SALVAGE, RELOCATE, AND CONNECT B-CYCLE BICYCLE RENTAL UNIT. SEE PLANS FOR LOCATIONS. ITEM IS TO BE MEASURED AND PAID AS A LUMP SUM FOR RELOCATION OF THE B-CYCLE STATION COMPLETE. COORDINATION WITH VENDOR TO INSTALL PER VENDOR'S REQUIREMENTS IS INCIDENTAL TO THIS ITEM. SEE ELECTRICAL SUPPLEMENTAL SPECIFICATION SECTION FOR ADDITIONAL INFORMATION.
72	12030-X-X	<u>SALVAGE AND REINSTALL SCULPTURE (BUTTERFLY)</u> THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO SALVAGE, RELOCATE, AND CONNECT B-CYCLE BICYCLE RENTAL UNIT. SEE PLANS FOR LOCATIONS. ITEM IS TO BE MEASURED AND PAID AS A LUMP SUM FOR RELOCATION OF THE B-CYCLE STATION COMPLETE. COORDINATION WITH VENDOR TO INSTALL PER VENDOR'S REQUIREMENTS IS INCIDENTAL TO THIS ITEM. SEE ELECTRICAL SUPPLEMENTAL SPECIFICATION SECTION FOR ADDITIONAL INFORMATION.
73	12030-X-X	<u>IRRIGATION CAP</u> INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE DESIGN MODIFICATIONS AND CAPPING OF EXISTING IRRIGATION ZONES IMPACTED BY THE PROJECT. INCLUDES ALL ITEMS NECESSARY TO PROVIDE A FULLY FUNCTIONAL MODIFIED IRRIGATION SYSTEM TO BE CAPPED AT AREAS IMPACTED BY THE PROJECT.

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ESTIMATE REFERENCE NOTES

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ESTIMATE REFERENCE INFORMATION (ALTERNATE A)		
ITEM NO.	ITEM CODE	DESCRIPTION
A1	7010-A	<u>PAVEMENT, PCC, 7 INCH</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
A2	7010-E	<u>CURB AND GUTTER, 2 FT, 7 INCH</u> CONCRETE WILL BE C MIX WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SLAG IS NOT ALLOWED. FINAL TRIMMING OF SUBGRADE OR SUBBASE, INTEGRAL CURB, BARS AND REINFORCEMENT, JOINTS AND SEALING, SURFACE CURING, PAVEMENT PROTECTION, SAFETY FENCING, CONCRETE FOR RIGID HEADERS, AND BOXOUTS FOR FIXTURES SHALL BE INCIDENTAL TO THIS ITEM. NO EXTRA PAYMENT FOR COLD WEATHER PAVING.
A3	7040-H	<u>PAVEMENT REMOVAL</u> ALL REMOVALS TO BE MARKED AND MEASURED BY THE ENGINEER. FULL DEPTH SAW CUTS ALONG THE REMOVAL LIMITS ARE INCIDENTAL TO THIS ITEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL REMOVAL, EARTHWORK, SUBGRADE PREPARATION, MODIFIED SUBBASE AND PAVING EXPENSES DUE TO DAMAGED EDGES. ADDITIONAL REMOVAL TO BE DETERMINED BY ENGINEER. PAYMENT SHALL BE MADE FOR THE AREA OF PAVEMENT REMOVED REGARDLESS OF THICKNESS.
A4	7040-I	<u>CURB AND GUTTER REMOVAL</u>

ESTIMATE REFERENCE INFORMATION (ALTERNATE B)		
ITEM NO.	ITEM CODE	DESCRIPTION
B1	12010-X-X	<u>SPLASH PAD OVERHEAD STRUCTURES</u> THIS ITEM INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR COMPLETE FURNISHING AND INSTALLATION OF ALL COMPONENTS OF THE OVERHEAD STRUCTURES AS INDICATED IN THE DRAWINGS AND SPECIAL PROVISIONS. INCIDENTAL TO THIS ITEM IS THE REINFORCED CONCRETE FOOTING PER MANUFACTURER AND MANUFACTURER'S STRUCTURAL ENGINEERING FEES. CONSTRUCTION OF THE FOOTINGS, INCLUDING EXCAVATION, REINFORCING, AND BACKFILL, ARE ALSO INCIDENTAL TO THIS ITEM. THIS ITEM WILL BE PAID ON A COUNT BASIS PER EACH STRUCTURE INSTALLED. SEE SUPPLEMENTAL SPECIFICATIONS FOR SHELTERS IN CONTRACT DOCUMENTS.

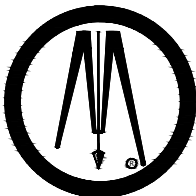
ESTIMATE REFERENCE INFORMATION (ALTERNATE C)		
ITEM NO.	ITEM CODE	DESCRIPTION
C1	12010-X-X	<u>CAST STONE CUSTOM WALLS (LEAF SEAT WALLS)</u> THIS ITEM INCLUDES THE ADDITIONAL COST TO UPGRADE THE PORTION OF THE REINFORCED CAST-IN-PLACE CONCRETE WALL (LEAF SEAT WALLS) TO CAST STONE AS INDICATED ON SHEET B.07. THIS ITEM INCLUDES LABOR, MATERIALS AND EQUIPMENT TO FURNISH MATERIALS AND CONSTRUCT THE CAST STONE CUSTOM WALLS (LEAF SEATWALLS) IN THE PLAYGROUND AND PLAZA AREAS. ITEM IS TO BE MEASURED AND PAID FOR ON A CUBIC FOOT BASIS OF CAST STONE SEATWALLS CONSTRUCTED. ALL ITEMS NECESSARY FOR COMPLETE PROCUREMENT AND INSTALLATION OF CAST STONE, SEALING OF JOINTS, AND BACKFILLING REQUIRED FOR COMPLETE CONSTRUCTION OF THE WALLS AS RECOMMENDED BY THE MANUFACTURER ARE CONSIDERED INCIDENTAL TO THIS ITEM. CAST STONE MANUFACTURER SHALL BE EDWARDS CAST STONE, DUBUQUE, IOWA -- OR APPROVED EQUAL.

ESTIMATE REFERENCE INFORMATION (ALTERNATE D)		
ITEM NO.	ITEM CODE	DESCRIPTION
D1	12030-X-X	<u>IRRIGATION MODIFY AND EXTEND</u> THIS ITEM INCLUDES THE ADDITIONAL COST ASSOCIATED WITH EXTENDING THE EXISTING IRRIGATION SYSTEM INTO THE PROJECT AREA AS INDICATED ON THE L-SERIES SHEETS. ITEM INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE DESIGN AND INSTALLATION OF THE EXPANSION OF THE IRRIGATION SYSTEM AS INDICATED IN THE PLANS FOR ADD ALTERNATE D. INCLUDES ALL ITEMS NECESSARY TO PROVIDE A FULLY FUNCTIONAL IRRIGATION SYSTEM IN THE EXISTING IRRIGATED AREAS AND THE ADDITIONAL AREAS INDICATED ON THE PLAN SET.

ESTIMATE REFERENCE INFORMATION (ALTERNATE E)		
ITEM NO.	ITEM CODE	DESCRIPTION
E1	12030-X-X	<u>CHAIN LINK FENCE, GALVANIZED, 6'</u> INCLUDES ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE DESIGN AND INSTALLATION OF THE CHAINLINK FENCE AS INDICATED IN THE PLANS FOR ADD ALTERNATE E. INCLUDES ALL ITEMS NECESSARY TO PROVIDE A FULLY INSTALLED FENCE SYSTEM IN THE AREAS INDICATED ON THE PLAN SET INCLUDING BUT NOT LIMITED TO EXCAVATIONS, CONCRETE FOOTINGS, BACKFILLING AND INSTALLATION OF ALL COMPONENTS AND HARDWARE.

Structure Table					
Structure Name	Structure Details	HEIGHT	SUMP/INV	STRUCTURE TYPE	BID ITEM
CO - 1	RIM = 821.14 SUMP = 816.75 Pipe - (25) INV OUT = 817.20	4.48	816.75	SUBDRAIN CLEANOUT, 8 INCH	SUBDRAIN CLEANOUT, 8 INCH
CO - 2	RIM = 824.58 SUMP = 820.10	4.48	820.10	SUBDRAIN CLEANOUT, 8 INCH	Structure Text
EX - 2	RIM = 823.55 SUMP = 812.12 Pipe - (26) (1) INV IN =812.94 Pipe - (19) INV IN =812.84 Pipe - (27) INV IN =812.94 Pipe - (26) INV IN =818.15 Pipe - (18) INV OUT = 812.84	11.42	812.12	EX SANITARY	EXTERNAL DROP CONNECTION MANHOLE ADJUSTMENT, MAJOR
INT - 0	RIM = 821.00 SUMP = 816.87 Pipe - (20) INV IN =816.97 Pipe - (17) INV OUT = 816.87	4.13	816.87	SW-512 (24in, TYPE 3B GRATE)	INTAKE, SW-512
INT - 1	RIM = 823.55 SUMP = 819.36 Pipe - (2) (2) INV IN =819.60 Pipe - (4) INV IN =819.50 Pipe - (20) INV OUT = 819.50	4.19	819.36	NYLOPLAST 12" DRAIN BASIN: 2812AG GRATE: 1299CGSL	NYLOPLAST DRAIN BASIN, 12 INCH
INT - 2	RIM = 824.26 SUMP = 820.95 Pipe - (1) INV IN =820.95 Pipe - (2) INV OUT = 820.95	3.31	820.95	NYLOPLAST 12" DRAIN BASIN: 2812AG GRATE: 1299CGPL	NYLOPLAST DRAIN BASIN, 12 INCH
INT - 3	RIM = 824.24 SUMP = 821.20 Pipe - (1) INV OUT = 821.36	3.03	821.20	NYLOPLAST 12" DRAIN BASIN: 2812AG GRATE: 1299CGPL	NYLOPLAST DRAIN BASIN, 12 INCH
INT - 4	RIM = 824.30 SUMP = 819.77 Pipe - (3) INV IN =819.82 Pipe - (16) INV IN =820.04 Pipe - (4) INV OUT = 819.82	4.53	819.77	NYLOPLAST 12" DRAIN BASIN: 2812AG GRATE: 1299CGSL	NYLOPLAST DRAIN BASIN, 12 INCH
INT - 5	RIM = 824.06 SUMP = 820.36 Pipe - (3) INV OUT = 820.45	3.70	820.36	NYLOPLAST 12" DRAIN BASIN: 2812AG GRATE: 1299CGSL	NYLOPLAST DRAIN BASIN, 12 INCH
INT - 6	RIM = 820.30 SUMP = 816.62 Pipe - (25) INV IN =817.11 Pipe - (21) INV OUT = 817.11	3.69	816.62	TRENCH DRAIN, ACO KLASSIKDRAIN KS100	LINEAR TRENCH DRAIN
INT - 7	RIM = 820.22 SUMP = 816.42 Pipe - (21) INV IN =816.77 Pipe - (28) INV IN =816.87 Pipe - (22) INV OUT = 816.77	3.79	816.42	TRENCH DRAIN, ACO KLASSIKDRAIN KS100	LINEAR TRENCH DRAIN
INT - 8	RIM = 820.39 SUMP = 816.60 Pipe - (28) INV OUT = 817.36	3.79	816.60	TRENCH DRAIN, ACO KLASSIKDRAIN KS100	LINEAR TRENCH DRAIN
INT - 9	RIM = 821.36 SUMP = 815.87 Pipe - (22) INV IN =815.97 Pipe - (23) INV OUT = 815.87	5.49	815.87	SW-512 (18in, TYPE 4A GRATE)	INTAKE, SW-512

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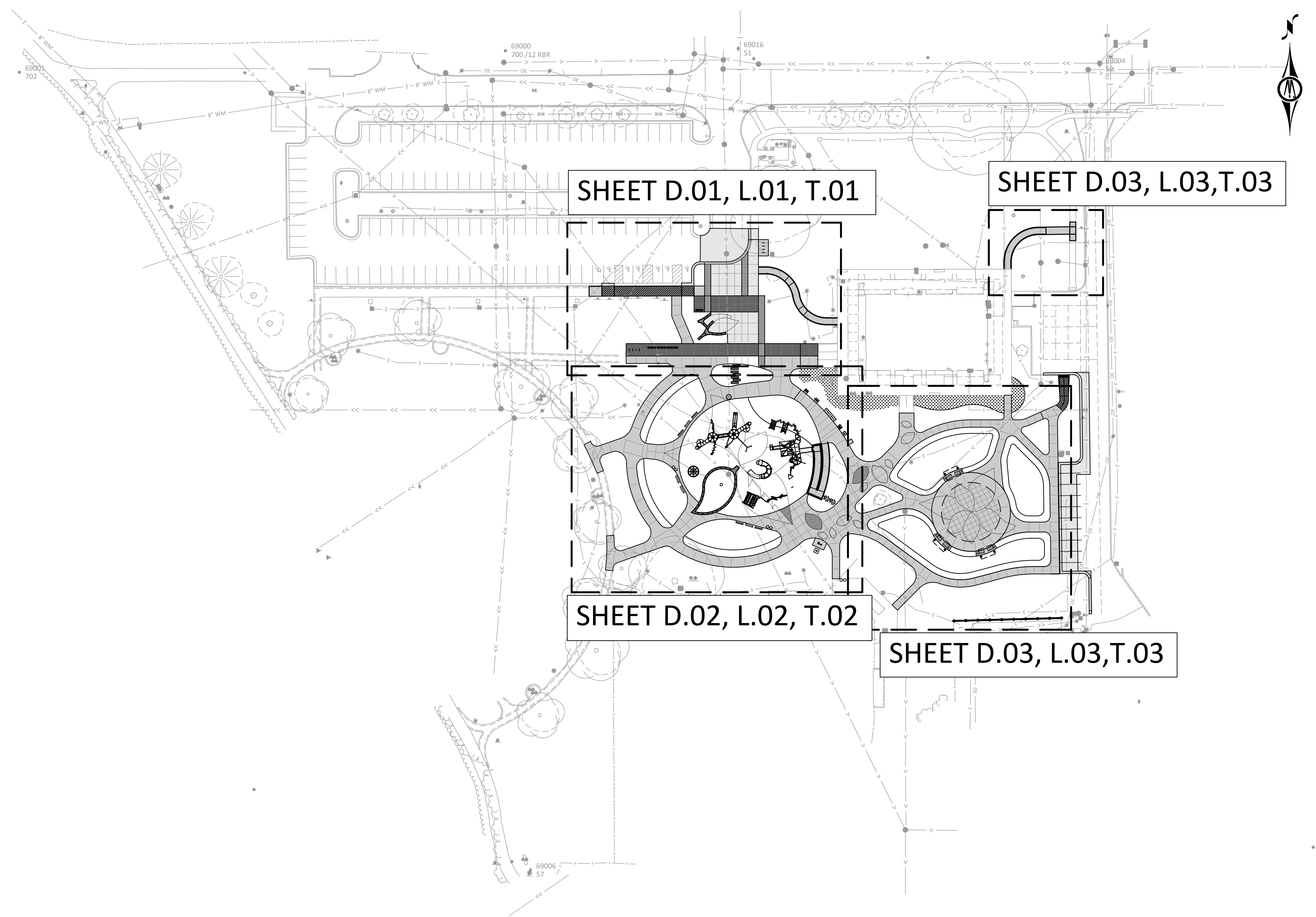
CITY OF WINDSOR HEIGHTS, IOWA

2023 COLBY PARK IMPROVEMENTS

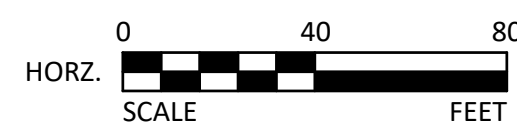
ESTIMATE REFERENCE NOTES

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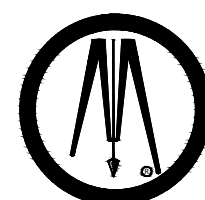
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CITY OF WINDSOR HEIGHTS, IOWA
 2023 COLBY PARK IMPROVEMENTS
 OVERALL SITE MAP

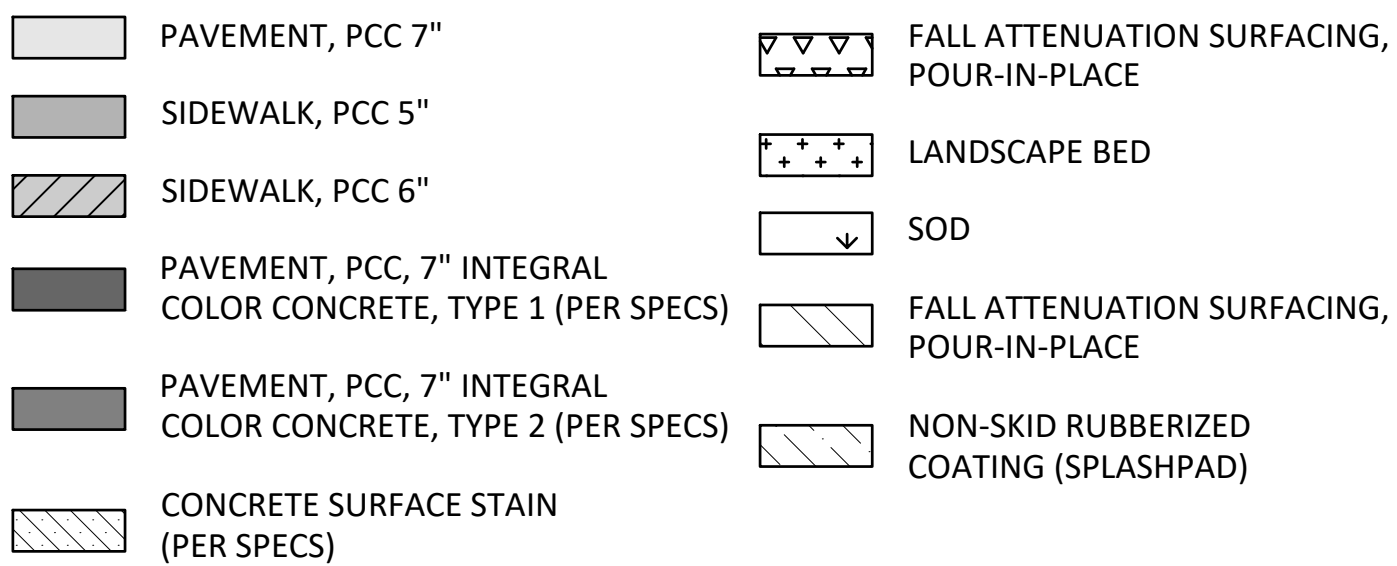
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SITE LAYOUT KEYNOTES:

- ① REINFORCED CAST-IN-PLACE CONCRETE WALL (LEAF SEAT WALLS) OR CAST STONE CUSTOM WALLS, SEE DETAIL 1/B.07
- ② CONCRETE STEPPING PLANKS, SEE DETAIL 5/B.07
- ③ RAMP WITH HANDRAIL, SEE GRADING SHEETS & DETAIL SHEET 8/B.01
- ④ NOT USED
- ⑤ BIKE RACK, SEE DETAIL 3/B.03
- ⑥ B-CYCLE STATION, (**COORDINATE W/B-CYCLE BEFORE REMOVAL & NEW PLACEMENT**)
- ⑦ LANDSCAPE BERM, SEE GRADING SHEETS
- ⑧ STONE BLOCK BENCH, SEE DETAIL 3/B.07
- ⑨ STONE BLOCK BENCH WITH BENCH (WOOD), SEE DETAIL 4/B.07
- ⑩ DRINKING FOUNTAIN, SEE DETAIL SHEET B.03 (**WATER FOUNTAIN MUST BE INSTALLED BY MAY 2024**)
- ⑪ TRASH & RECYCLING RECEPTACLES, BY OTHERS
- ⑫ DUMOR BENCH, BY OTHERS
- ⑬ LIGHTING, SEE ELECTRICAL SHEETS
- ⑭ EXISTING KIOSK, REMOVE AND REINSTALL (BY OWNER)
- ⑮ REINSTALL SALVAGED BUTTERFLY SCULPTURE AND CONCRETE BASE

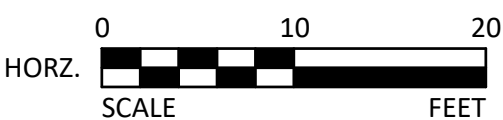
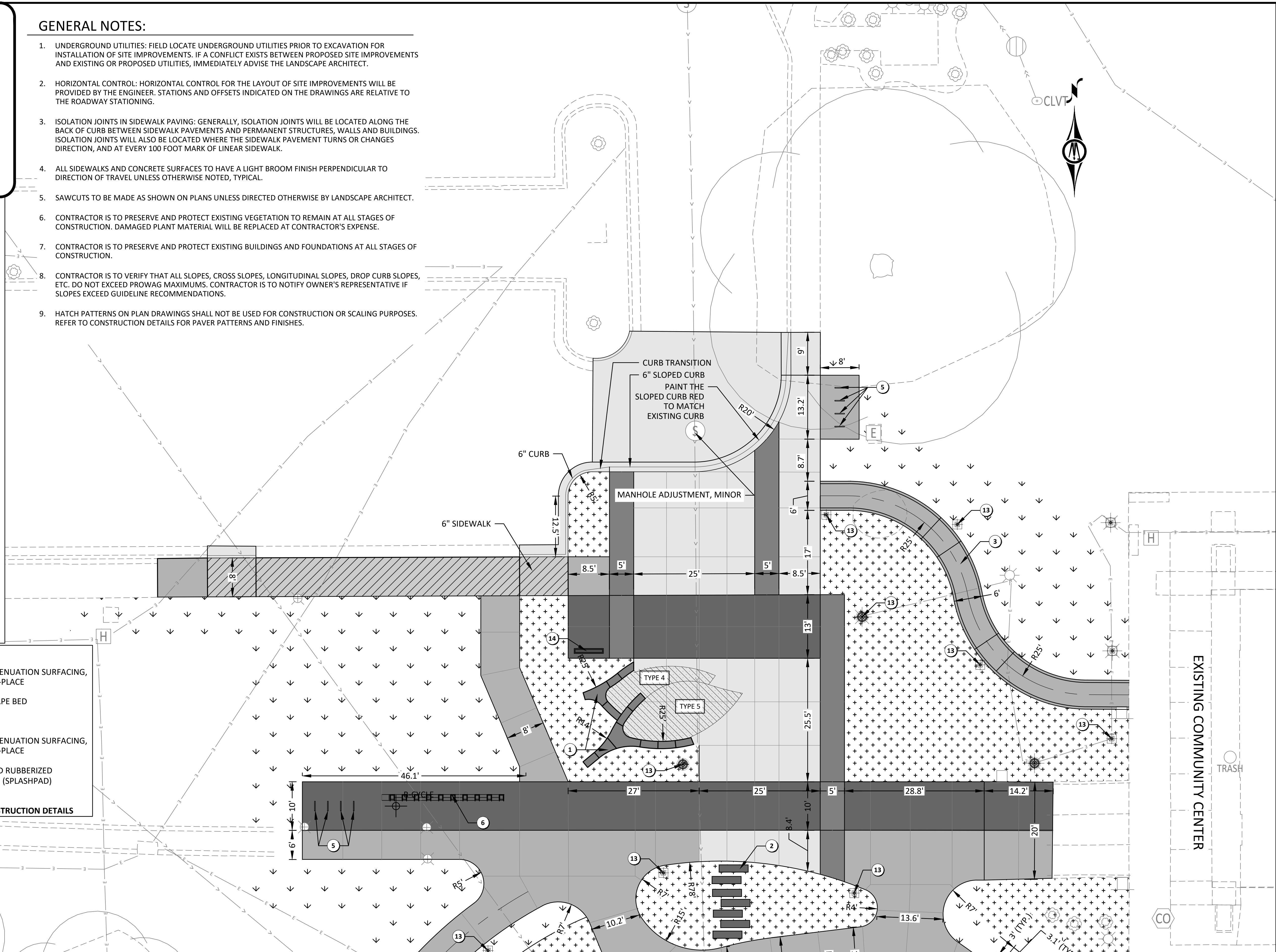
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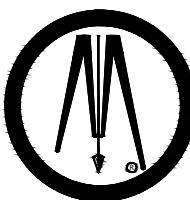
SEE B SHEETS FOR ALL CONSTRUCTION DETAILS

GENERAL NOTES:

1. UNDERGROUND UTILITIES: FIELD LOCATE UNDERGROUND UTILITIES PRIOR TO EXCAVATION FOR INSTALLATION OF SITE IMPROVEMENTS. IF A CONFLICT EXISTS BETWEEN PROPOSED SITE IMPROVEMENTS AND EXISTING OR PROPOSED UTILITIES, IMMEDIATELY ADVISE THE LANDSCAPE ARCHITECT.
2. HORIZONTAL CONTROL: HORIZONTAL CONTROL FOR THE LAYOUT OF SITE IMPROVEMENTS WILL BE PROVIDED BY THE ENGINEER. STATIONS AND OFFSETS INDICATED ON THE DRAWINGS ARE RELATIVE TO THE ROADWAY STATIONING.
3. ISOLATION JOINTS IN SIDEWALK PAVING: GENERALLY, ISOLATION JOINTS WILL BE LOCATED ALONG THE BACK OF CURB BETWEEN SIDEWALK PAVEMENTS AND PERMANENT STRUCTURES, WALLS AND BUILDINGS. ISOLATION JOINTS WILL ALSO BE LOCATED WHERE THE SIDEWALK PAVEMENT TURNS OR CHANGES DIRECTION, AND AT EVERY 100 FOOT MARK OF LINEAR SIDEWALK.
4. ALL SIDEWALKS AND CONCRETE SURFACES TO HAVE A LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL UNLESS OTHERWISE NOTED, TYPICAL.
5. SAWCUTS TO BE MADE AS SHOWN ON PLANS UNLESS DIRECTED OTHERWISE BY LANDSCAPE ARCHITECT.
6. CONTRACTOR IS TO PRESERVE AND PROTECT EXISTING VEGETATION TO REMAIN AT ALL STAGES OF CONSTRUCTION. DAMAGED PLANT MATERIAL WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
7. CONTRACTOR IS TO PRESERVE AND PROTECT EXISTING BUILDINGS AND FOUNDATIONS AT ALL STAGES OF CONSTRUCTION.
8. CONTRACTOR IS TO VERIFY THAT ALL SLOPES, CROSS SLOPES, LONGITUDINAL SLOPES, DROP CURB SLOPES, ETC. DO NOT EXCEED PROWAG MAXIMUMS. CONTRACTOR IS TO NOTIFY OWNER'S REPRESENTATIVE IF SLOPES EXCEED GUIDELINE RECOMMENDATIONS.
9. HATCH PATTERNS ON PLAN DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION OR SCALING PURPOSES. REFER TO CONSTRUCTION DETAILS FOR PAYER PATTERNS AND FINISHES.



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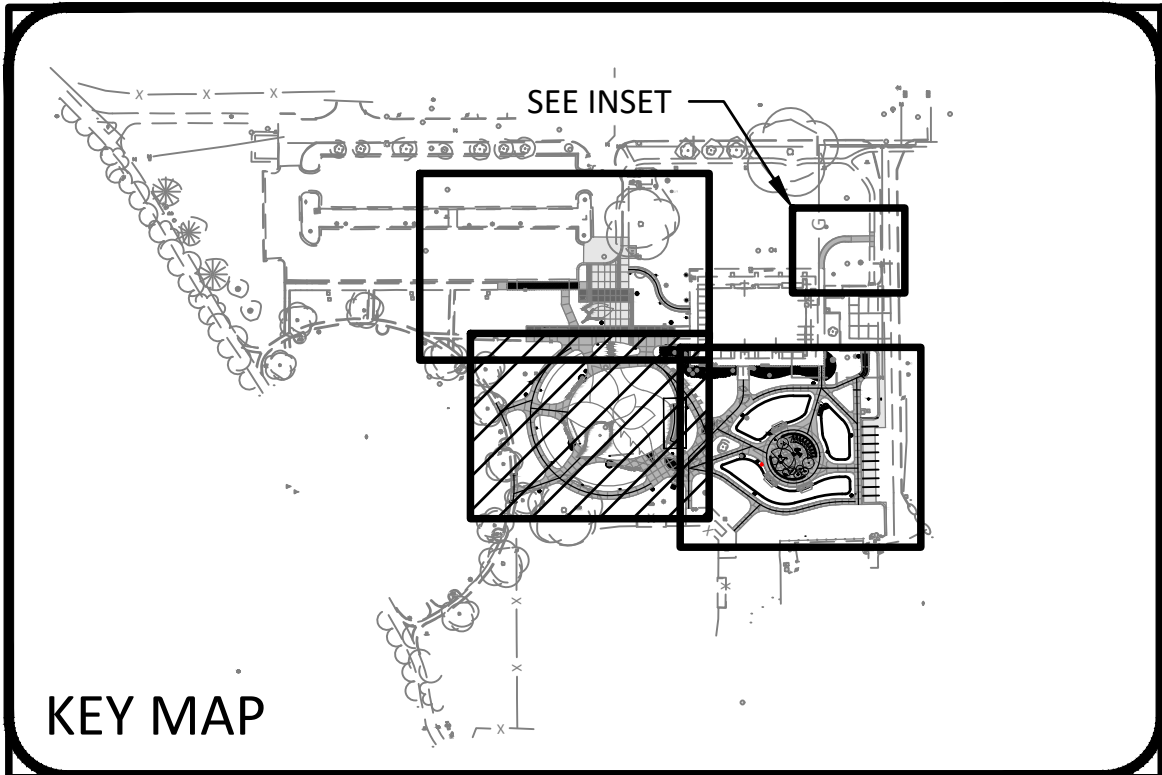
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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS

LAYOUT PLAN

SHEET

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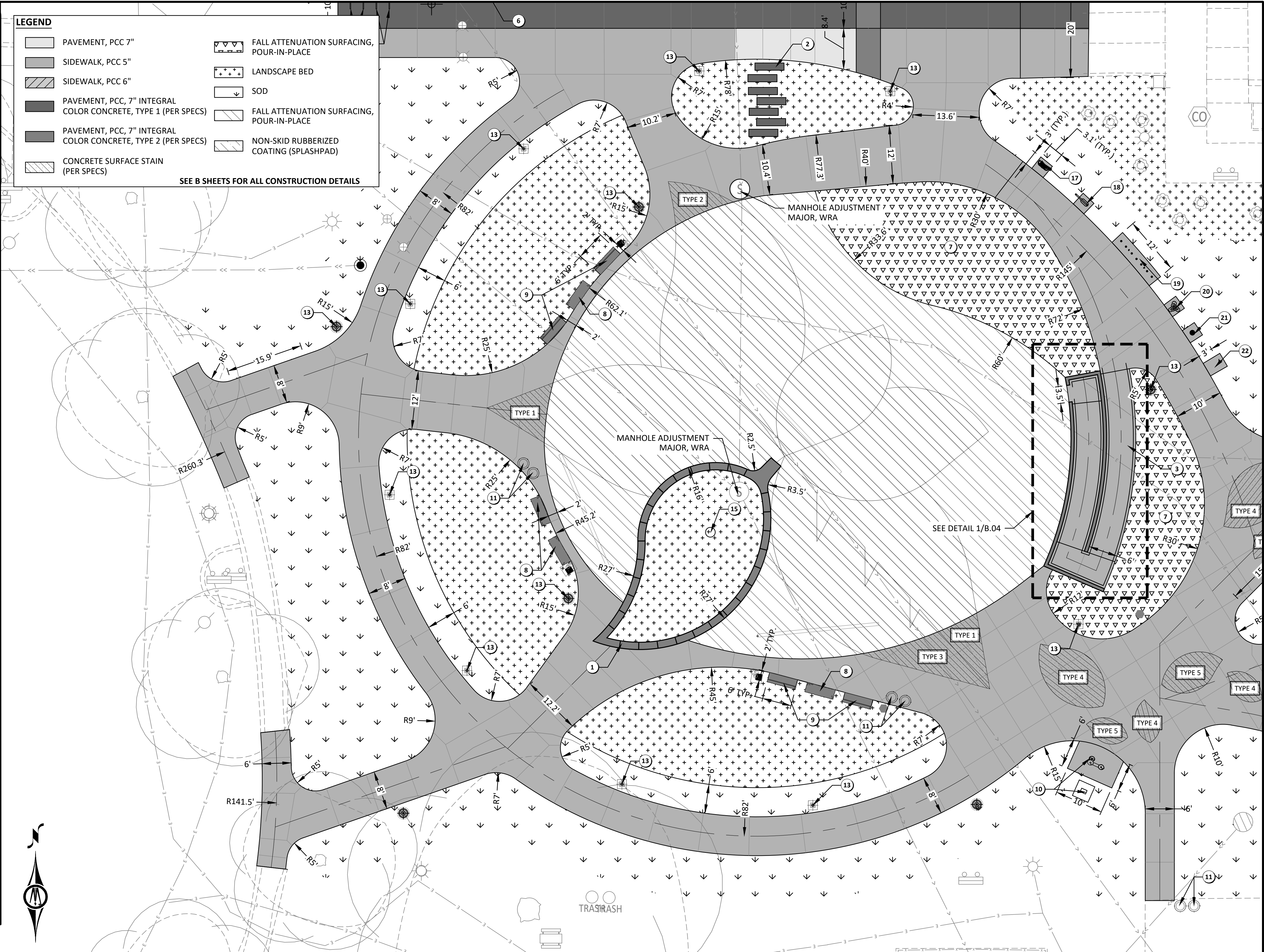
SITE LAYOUT KEYNOTES:

- 1 REINFORCED CAST-IN-PLACE CONCRETE WALL (LEAF SEAT WALLS) OR CAST STONE CUSTOM WALLS, SEE DETAIL 1/B.07
- 2 CONCRETE STEPPING PLANKS, SEE DETAIL 5/B.07
- 3 RAMP WITH HANDRAIL, SEE GRADING SHEETS & DETAIL SHEET 8/B.01
- 4 NOT USED
- 5 BIKE RACK, SEE DETAIL 3/B.03
- 6 B-CYCLE STATION, (COORDINATE W/B-CYCLE BEFORE REMOVAL & NEW PLACEMENT)
- 7 LANDSCAPE BERM, SEE GRADING SHEETS
- 8 STONE BLOCK BENCH, SEE DETAIL 3/B.07
- 9 STONE BLOCK BENCH WITH BENCH (WOOD), SEE DETAIL 4/B.07
- 10 DRINKING FOUNTAIN, SEE DETAIL SHEET B.03 (WATER FOUNTAIN MUST BE INSTALLED BY MAY 2024)
- 11 TRASH & RECYCLING RECEPTACLES, BY OTHERS
- 12 DUMOR BENCH, BY OTHERS
- 13 LIGHTING, SEE ELECTRICAL SHEETS
- 14 EXISTING KIOSK, REMOVE AND REINSTALL (BY OWNER)
- 15 REINSTALL SALVAGED BUTTERFLY SCULPTURE AND CONCRETE BASE
- 16 SPLASHPAD OVERHEAD STRUCTURES (ALTERNATE B), SEE DETAIL SHEET 2/B.07
- 17 ARIA (HARMONY PARK ELEMENT), TO BE SURFACE MOUNTED PER MANUFACTURER REQ.
- 18 HARP (HARMONY PARK ELEMENT), TO BE SURFACE MOUNTED PER MANUFACTURER REQ.
- 19 CONTRABASS CHIMES (HARMONY PARK ELEMENT), TO BE SURFACE MOUNTED PER MANUFACTURER REQ.
- 20 LILYPAD CYMBALS (HARMONY PARK ELEMENT), TO BE SURFACE MOUNTED PER MANUFACTURER REQ.
- 21 PAGODA BELLS (HARMONY PARK ELEMENT), TO BE SURFACE MOUNTED PER MANUFACTURER REQ.
- 22 MANTA RAY (HARMONY PARK ELEMENT), TO BE SURFACE MOUNTED PER MANUFACTURER REQ.
- 23 6' HIGH GALVANIZED CHAIN LINK FENCE, SEE DETAIL 6/B.08 (ALTERNATE F)

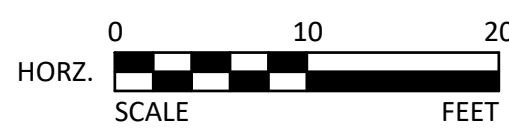
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PAVEMENT, PCC 7"	FALL ATTENUATION SURFACING, POUR-IN-PLACE
SIDEWALK, PCC 5"	LANDSCAPE BED
SIDEWALK, PCC 6"	SOD
PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 1 (PER SPECS)	FALL ATTENUATION SURFACING, POUR-IN-PLACE
PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 2 (PER SPECS)	NON-SKID RUBBERIZED COATING (SPLASHPAD)
CONCRETE SURFACE STAIN (PER SPECS)	

SEE B SHEETS FOR ALL CONSTRUCTION DETAILS



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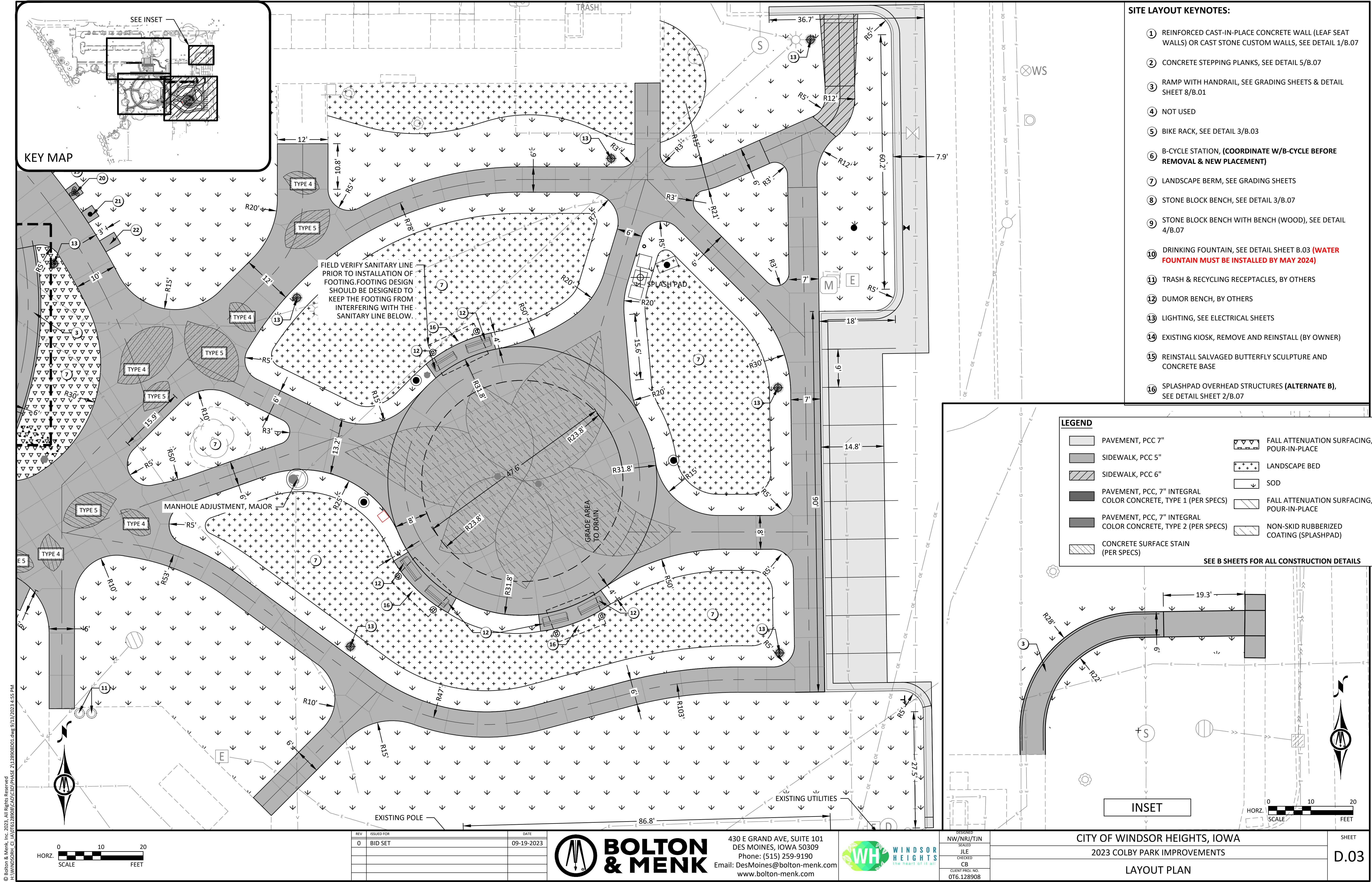
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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS

LAYOUT PLAN

SHEET

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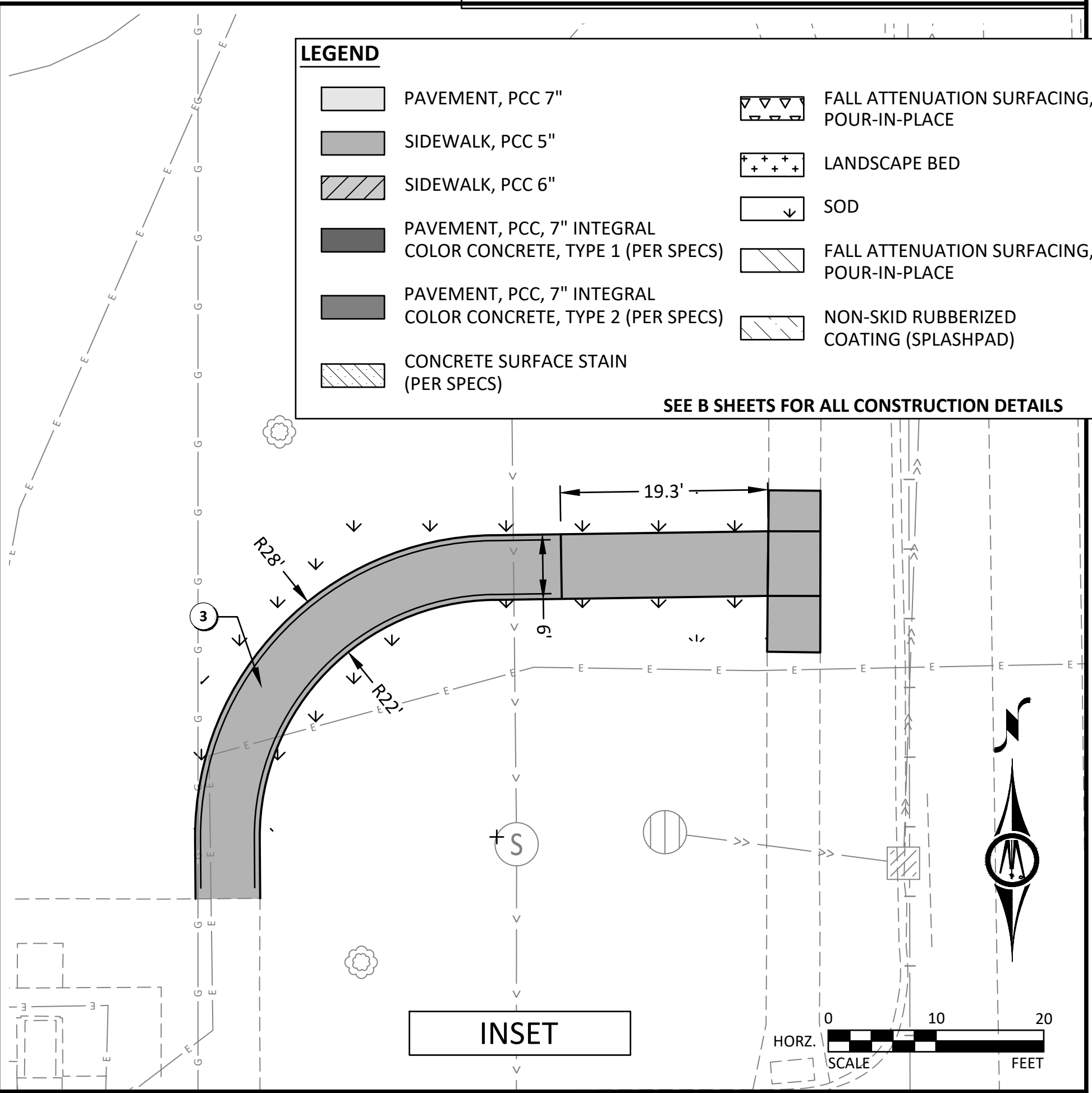


- SITE LAYOUT KEYNOTES:**
- 1 REINFORCED CAST-IN-PLACE CONCRETE WALL (LEAF SEAT WALLS) OR CAST STONE CUSTOM WALLS, SEE DETAIL 1/B.07
 - 2 CONCRETE STEPPING PLANKS, SEE DETAIL 5/B.07
 - 3 RAMP WITH HANDRAIL, SEE GRADING SHEETS & DETAIL SHEET 8/B.01
 - 4 NOT USED
 - 5 BIKE RACK, SEE DETAIL 3/B.03
 - 6 B-CYCLE STATION, (COORDINATE W/B-CYCLE BEFORE REMOVAL & NEW PLACEMENT)
 - 7 LANDSCAPE BERM, SEE GRADING SHEETS
 - 8 STONE BLOCK BENCH, SEE DETAIL 3/B.07
 - 9 STONE BLOCK BENCH WITH BENCH (WOOD), SEE DETAIL 4/B.07
 - 10 DRINKING FOUNTAIN, SEE DETAIL SHEET B.03 (WATER FOUNTAIN MUST BE INSTALLED BY MAY 2024)
 - 11 TRASH & RECYCLING RECEPTACLES, BY OTHERS
 - 12 DUMOR BENCH, BY OTHERS
 - 13 LIGHTING, SEE ELECTRICAL SHEETS
 - 14 EXISTING KIOSK, REMOVE AND REINSTALL (BY OWNER)
 - 15 REINSTALL SALVAGED BUTTERFLY SCULPTURE AND CONCRETE BASE
 - 16 SPLASHPAD OVERHEAD STRUCTURES (ALTERNATE B), SEE DETAIL SHEET 2/B.07

LEGEND

	PAVEMENT, PCC 7"		FALL ATTENUATION SURFACING, POUR-IN-PLACE
	SIDEWALK, PCC 5"		LANDSCAPE BED
	SIDEWALK, PCC 6"		SOD
	PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 1 (PER SPECS)		FALL ATTENUATION SURFACING, POUR-IN-PLACE
	PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 2 (PER SPECS)		NON-SKID RUBBERIZED COATING (SPLASHPAD)
	CONCRETE SURFACE STAIN (PER SPECS)		

SEE B SHEETS FOR ALL CONSTRUCTION DETAILS



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HORZ. SCALE FEET

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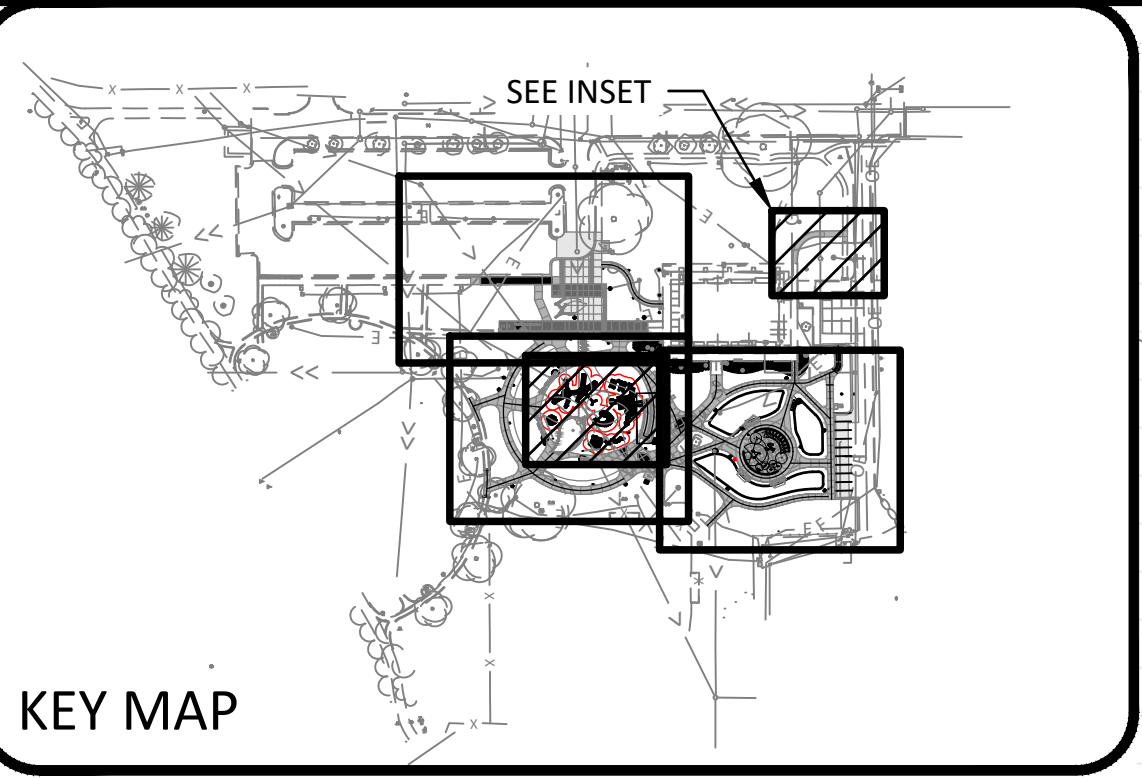
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Email: DesMoines@bolton-menk.com
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WINDSOR HEIGHTS
the heart of it all

DESIGNED: NW/NRJ/TJN
SEALED: JLE
CHECKED: CB
CLIENT PROJ. NO: 076.128908

CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
LAYOUT PLAN

SHEET
D.03



KEY MAP

PLAYGROUND EQUIPMENT KEYNOTES:

- (A) SUPER NETPLEX BY LANDSCAPE STRUCTURES
- (B) WE-GO-ROUND W/ DIGIFUSE PANELS BY LANDSCAPE STRUCTURES
- (C) FOXTROT MULTI-CLIMBER
- (D) FOOTPRINT STEPPER 8"
- (E) FOOTPRINT BALANCE BEAM
- (F) FOX DEN HANGOUTS
- (G) WELCOME SIGN (2-5 YEARS)
- (H) WELCOME SIGN (5-12 YEARS)
- (I) FORMA ALPINE SLIDE
- (J) HILLSIDE CLIMBING HANDGRIPS
- (K) RAMP W/BARRIER
- (L) PLAYBOOSTER STRUCTURE FOR 5-12Y AGE GROUP. INCLUDES: TRANSFER DECK, RAMP ACCESS, MULTIPLE ACTIVITY PANELS, DECK PLATFORMS, MULTIPLE CLIMBERS. SEE DETAIL SHEET.
- (M) FOOTPRINT STEPPER 24"
- (N) POD CLIMBER 16"
- (O) POD CLIMBER 8"
- (P) RING TANGLE CLIMBER
- (Q) HILL NET CLIMBER

NOTE: LAYOUT OF PLAY EQUIPMENT SHOWN FOR REFERENCE ONLY. FINAL LAYOUT OF PLAY EQUIPMENT BY MANUFACTURER.

LEGEND

- PAVEMENT, PCC 7"
- SIDEWALK, PCC 5"
- SIDEWALK, PCC 6"
- PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 1 (PER SPECS)
- PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 2 (PER SPECS)
- CONCRETE SURFACE STAIN (PER SPECS)
- FALL ATTENUATION SURFACING, POUR-IN-PLACE
- LANDSCAPE BED
- SOD
- FALL ATTENUATION SURFACING, POUR-IN-PLACE
- NON-SKID RUBBERIZED COATING (SPLASHPAD)
- 7" THICKNESS (FIRE ACCESS)

SEE B SHEETS FOR ALL CONSTRUCTION DETAILS

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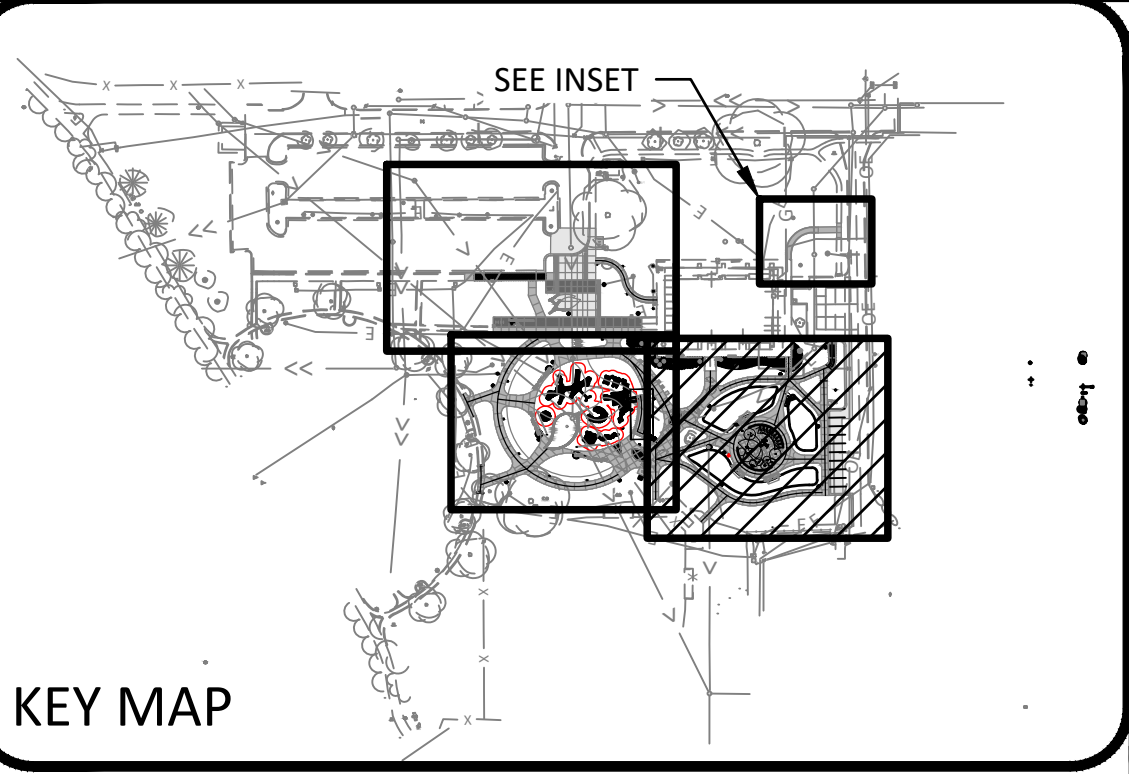


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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
PLAYGROUND LAYOUT PLAN

SHEET

D.04



KEY MAP

SPLASHPAD EQUIPMENT KEYNOTES:

- ⑤ CANOPY CLUSTER W/ ACRYLIC
- ① HYDROSPHERE
- ④ ARCH JET
- ⑥ CRACKLE CORN
- ⑦ CROWN JET
- ⑧ GROUND FUNNEL
- ⑨ JUNIOR WATER JEWEL
- AA STREAM JET
- BB STREAM JET TRIANGLE
- CC AQUAVATOR
- DD DRAIN BOX
- EE VALVE VAULT

LEGEND

- PAVEMENT, PCC 7"
- SIDEWALK, PCC 5"
- SIDEWALK, PCC 6"
- PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 1 (PER SPECS)
- PAVEMENT, PCC, 7" INTEGRAL COLOR CONCRETE, TYPE 2 (PER SPECS)
- CONCRETE SURFACE STAIN (PER SPECS)
- FALL ATTENUATION SURFACING, POUR-IN-PLACE
- LANDSCAPE BED
- SOD
- FALL ATTENUATION SURFACING, POUR-IN-PLACE
- NON-SKID RUBBERIZED COATING (SPLASHPAD)

SEE B SHEETS FOR ALL CONSTRUCTION DETAILS

CONTACT: DIANE WITT
402-289-0400
diane@outdoorrec.net
outdoorrecreationproducts.com

NOTE: SPLASHPAD EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH THE SPLASHPAD EQUIPMENT MANUFACTURER'S RECOMMENDATIONS, REQUIREMENTS, AND SPECIFICATIONS. SPLASHPAD EQUIPMENT TO BE INSTALLED BY AN INSTALLER CERTIFIED BY SPLASHPAD EQUIPMENT MANUFACTURER.

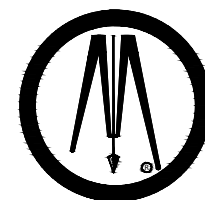
NON-SKID RUBBERIZED COATING TO BE APPLIED TO SPLASHPAD SURFACE.

MANUFACTURER: TUFFCOAT

COLOR: TBD



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2023 COLBY PARK IMPROVEMENTS

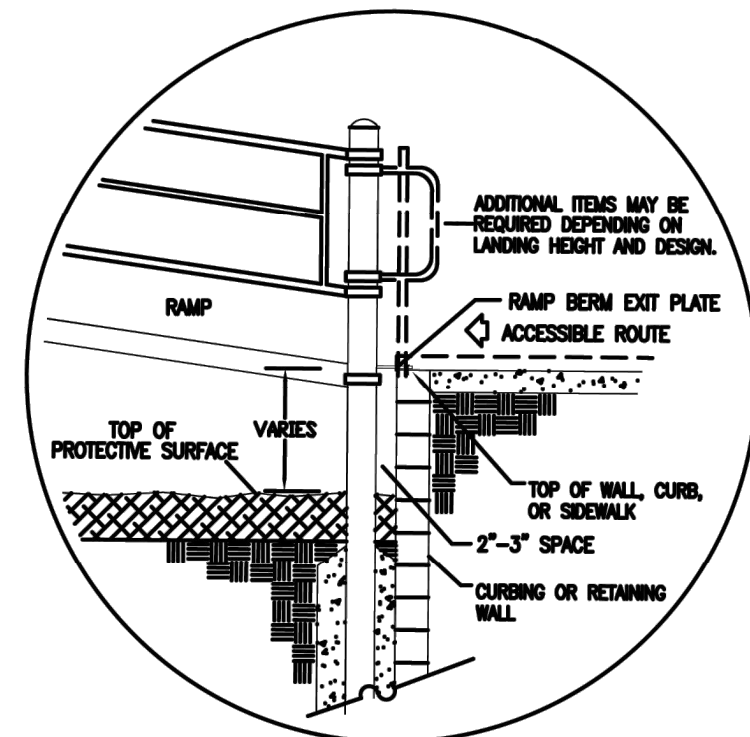
SPLASHPAD LAYOUT PLAN

SHEET

D.05

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PlayBooster®EvoS®and Forma™
(5-12 years)
Max Fall Height: 144 inches



SUGGESTED ELEVATED RAMP BERM EXIT PLATE
24" PLUS DECK TO GRADE/DB INSTALLATION
REFER TO RAMP BERM EXIT PLATE INSTALLATION SHEET
SEE PLAN FOR ELEVATION OF PLATE

landscape
structures

IT IS THE MANUFACTURERS OPINION AND
INTENT THAT THE USE AND LAYOUT OF
THESE COMPONENTS CONFORM WITH THE
AMERICAN SOCIETY FOR TESTING AND
MATERIALS (ASTM) STANDARD ASTM F1487

THIS PLAY AREA & PLAY EQUIPMENT IS
DESIGNED FOR AGES 2-12 YEARS
UNLESS OTHERWISE NOTED ON PLAN.

IT IS THE MANUFACTURERS OPINION THAT
THIS PLAY AREA DOES CONFORM TO
THE A.D.A. ACCESSIBILITY STANDARDS,
ASSUMING AN ACCESSIBLE PROTECTIVE
SURFACING IS PROVIDED, AS INDICATED, OR
WITHIN THE ENTIRE USE ZONE.

THIS CONCEPTUAL PLAN WAS BASED ON
INFORMATION AVAILABLE TO US. PRIOR TO
CONSTRUCTION, DETAILED SITE INFORMATION
INCLUDING SITE DIMENSIONS, TOPOGRAPHY, EXISTING
UTILITIES, SOIL CONDITIONS, AND DRAINAGE
SOLUTIONS SHOULD BE OBTAINED, EVALUATED, &
UTILIZED IN THE FINAL DESIGN. PLEASE VERIFY ALL
DIMENSIONS OF PLAY AREA, SIZE, ORIENTATION, AND
LOCATION OF ALL EXISTING UTILITIES, EQUIPMENT,
AND SITE FURNISHINGS PRIOR TO ORDERING. SLIDES
SHOULD NOT FACE THE HOT AFTERNOON SUN.

CHOOSE A PROTECTIVE SURFACING MATERIAL THAT
HAS A CRITICAL HEIGHT VALUE TO MEET THE
MAXIMUM FALL HEIGHT FOR THE EQUIPMENT (REF.
ASTM F1487 STANDARD CONSUMER SAFETY
PERFORMANCE SPECIFICATION FOR PLAYGROUND
EQUIPMENT FOR PUBLIC USE, SECTION 8 CURRENT
REVISION). THE SUBSURFACE MUST BE WELL
DRAINED. IF THE SOIL DOES NOT DRAIN NATURALLY
IT MUST BE TILED OR SLOPED 1/8" TO 1/4" PER
FOOT TO A STORM SEWER OR A "FRENCH DRAIN".

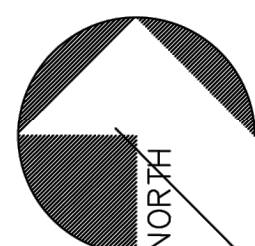
DESIGNED BY:
DEW

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601 7th STREET SOUTH - P.O. BOX 198
DELANO, MINNESOTA 55328
PH: 1-800-328-0035 FAX: 1-763-972-6091

7/6/2023	1171503-02-02	VAO
5/11/23	1171503-02-01	VAO
4/19/23	1171503-01-01	VAO
Date	Previous Drawing #	Initials



SCALE IN FEET:
0' 2.5' 5' 10'



Colby Park Playground
Playground Improvements
6900 School St, Windsor Heights, IA 50324

Outdoor Recreation
Products
Diane Witt

SYSTEM TYPE:
PlayBooster

DRAWING #:
1171503-02-03_ORP

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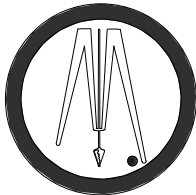
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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
PLAYGROUND LAYOUT PLAN

SHEET

D.07

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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
ELECTRICAL COVER SHEET

SHEET

E0.1

ONE LINE/SCHEDULE GENERAL NOTES	
SYMBOL	DESCRIPTION
[LSIG]	ELECTRONIC TRIP CIRCUIT BREAKER (LONG TIME, SHORT TIME, INST. GROUND FAULT)
[LSI]	ELECTRONIC TRIP CIRCUIT BREAKER (LONG TIME, SHORT TIME, INST)
[LSIA]	ELECTRONIC TRIP CIRCUIT BREAKER (LONG TIME, SHORT TIME, INST. GROUND FAULT ALARM)
HL	HANDLE LOCK
SD	DENOTES SERVICE DISCONNECT
(ST)	120V SHUNT TRIP OPERATOR
(GF)	GROUND FAULT CIRCUIT INTERRUPTER
(E)	EXISTING BREAKER IN EXISTING PANEL
(N)	NEW BREAKER IN EXISTING PANEL
(NE)	NEW BREAKER, EXTEND EXISTING LOAD

GENERAL ELECTRICAL SYMBOLS	
	CONNECTION TO MECHANICAL EQUIPMENT
	ELECTRICAL CNNECTION TO MISC EQUIPMENT
	BOILER EMERGENCY STOP PUSH BUTTON, ONE NORMALLY OPEN AND ONE NORMALLY CLOSED CONTACT, RED MUSHROOM HEAD WITH ALARMED, CLEAR, HINGED COVER, PROVIDE WITH ENGRAVED LABEL, "EMERGENCY BOILER SHUT-DOWN"
	DIGITAL POWER METER, LCD DISPLAY, MONITORING OF VOLTAGE, CURRENT, POWER, PF, FREQUENCY, MIN/MAX AND AVERAGE VALUES, AND ENERGY
	PANELBOARD - SEE SCHEDULES FOR MORE INFORMATION
	TRANSFORMER - SEE SCHEDULES FOR MORE INFORMATION
	SWITCHBOARD - SEE SCHEDULES FOR MORE INFORMATION
	TRANSFORMER - SEE SCHEDULES FOR MORE INFORMATION
	DISCONNECT SWITCH, HEAVY DUTY, SIZE INDICATED ON PLANS (A/B/C) WHERE A = RATING IN AMPS, B = NUMBER OF POLES, C = NEMA RATING (E.G. 1 = NEMA 1), XXX = NAME OF LOAD SERVED
	POWER METER

GENERAL ELECTRICAL SYMBOLS	
C.M.	CONSTRUCTION MANAGER
M.C.	MECHANICAL CONTRACTOR
P.C.	PLUMBING/PIPING CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
A.T.C.	AUTOMATIC TEMPERATURE CONTROLS CONTRACTOR
G.C.	GENERAL CONTRACTOR
F.P.C.	FIRE PROTECTION CONTRACTOR
K.E.C.	KITCHEN EQUIPMENT CONTRACTOR
EQUIPMENT	SCHEDULED EQUIPMENT (UNDERLINED)
EQUIPMENT	NON-SCHEDULED EQUIPMENT
X_EQUIPMENT	EXISTING EQUIPMENT (X_ PREFIX)
A	6" ABOVE COUNTER OR BACKSPLASH TO CENTERLINE OF DEVICE
M	INSTALL DEVICE IN MILLWORK
XX	LOCATION-SPECIFIC MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTERLINE OF DEVICE
H	INSTALL DEVICE HORIZONTALLY
B	BLACK DEVICE COLOR WITH BLACK UNBREAKABLE THERMOPLASTIC COVER PLATE
/	USED BETWEEN TWO OR MORE SUBSCRIPTS
	SECTION VIEW, TOP REPRESENTS DETAIL NUMBER, BOTTOM REPRESENTS SHEET NUMBER

GENERAL LIGHTING SYMBOLS	
SYMBOL	DESCRIPTION
	DOUBLE FACED EXIT SIGN
	SINGLE FACED EXIT SIGN
	RECESSED ARCHITECTURAL TROFFER
	RECESSED DOWNLIGHT
	EMERGENCY FIXTURE
	POLE MOUNTED SITE FIXTURE
	POLE MOUNTED SITE FIXTURE
	INDUSTRIAL FIXTURE
	SURFACE OR PENDANT LINEAR FIXTURE
	SURFACE OR PENDANT CIRCULAR FIXTURE
	WALL MOUNTED FIXTURE
	WALL SCONCE

GENERAL SWITCH SYMBOLS	
SYMBOL	DESCRIPTION
	SWITCH REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION.
	REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION
	REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION
	REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION

GENERAL POWER SYMBOLS	
SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE, NEMA 5-20R, EMERGENCY POWER
	DUPLEX RECEPTACLE, REFER TO SUBSCRIPT SCHEDULE FOR MORE INFORMATION.
	CORD REEL
	CORD DROP
	DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R
	SIMPLEX RECEPTACLE, NEMA 5-20R
	SPECIAL RECEPTACLE
	RECESSED FLOOR BOX OR POKE-THRU
	DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R, EMERGENCY POWER

DEMOLITION NOTES	
1.	REFER TO SPECIFICATION SECTION 260502 FOR ADDITIONAL DEMOLITION INFORMATION.
2.	REMOVE POWER, LIGHTING, CONTROL, AND COMMUNICATIONS DEVICES SHOWN, UNLESS NOTED OTHERWISE. REMOVE ALL UNUSED CONDUIT, RACEWAYS, WIRING, JUNCTION BOXES, DISCONNECTS, AND ACCESSORIES COMPLETELY BACK TO THE SOURCE.
3.	MAKE PROVISIONS AND BACK-FEED OR RE-CIRCUIT ANY ITEMS THAT ARE EXISTING TO REMAIN WHICH ARE AFFECTED BY DEMOLITION.
4.	INVESTIGATION OF EXISTING POWER AND LIGHTING SYSTEMS WILL BE REQUIRED BY THE E.C. AS PART OF THE BIDDING PROCESS TO DETERMINE THE FULL EXTENT OF DEMOLITION WORK REQUIRED. THE E.C. SHALL BE RESPONSIBLE FOR REMOVAL OF SOME PORTIONS OF POWER AND LIGHTING SYSTEMS NOT EXPLICITLY SHOWN ON THESE DRAWINGS, BUT ARE REQUIRED FOR THE PROJECT.
5.	E.C. SHALL FIELD VERIFY ACTUAL LOCATION AND SIZES OF EXISTING CONDUIT, WIRING, AND EQUIPMENT.
6.	PROTECT ALL FINISHED SURFACES THAT ARE NOT SCHEDULED FOR DEMOLITION. IF DAMAGED, THE RESPONSIBLE CONTRACTOR SHALL REPAIR TO MATCH EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.
7.	ALL SALVAGE SHALL REMAIN THE PROPERTY OF THE OWNER. DELIVER TO A LOCATION ON SITE AS DESIGNATED BY THE OWNER. IN THE EVENT THE OWNER DOES NOT WANT TO RETAIN THE SALVAGE MATERIAL, THE MATERIAL BECOMES THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OR RECYCLED BY THE CONTRACTOR.

GENERAL ELECTRICAL NOTES	
1.	ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH N.E.C., LOCAL, AND ALL OTHER APPLICABLE CODES.
2.	INSTALLATION OF EQUIPMENT SHALL BE IN ACCORDANCE WITH CURRENT STANDARDS AND SPECIFICATIONS APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ). PLACE ALL CABLE/WIRING IN CONDUIT OR RACEWAY UNLESS NOTED OTHERWISE. PROVIDE NEW WIRING FOR ALL BRANCH CIRCUITS AND FEEDERS.
3.	FEEDERS ON DRAWINGS ARE SCHEMATIC ONLY. CONDUIT RUNS SHALL COMPLY WITH CONDUIT SPECIFICATIONS AND CONTAIN BENDS THAT ARE NOT GREATER THAN 90 DEGREES.
4.	ALL FEEDER AND BRANCH CIRCUITS TO PANELS, MOTORS, LIGHTS, RECEPTACLES, GENERAL DISTRIBUTION, ETC. SHALL CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR SIZED ACCORDING TO THE N.E.C. THE CONDUIT SYSTEM SHALL NOT BE CONSIDERED AN ACCEPTABLE GROUND.
5.	ALL WIRING AND FEEDER SIZES ON DRAWINGS ARE SIZED FOR COPPER WIRING UNLESS SPECIFICALLY NOTED OTHERWISE.
EQUIPMENT/DEVICE HOME RUN KEY	
1.	BRANCH CIRCUIT WIRING SHALL BE #10AWG UNLESS NOTED OTHERWISE ON THE PLAN OR IN THE SCHEDULES.
2.	AS A MINIMUM USE 10 AWG CONDUCTOR FOR 20 AMPERE, 120 VOLT BRANCH CIRCUIT HOME RUNS LONGER THAN 100 FEET.
3.	REFER TO SPECIFICATION SECTION 260519 FOR ADDITIONAL REQUIREMENTS.
LINE TYPE KEY	

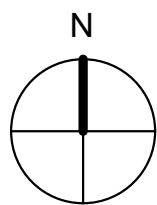
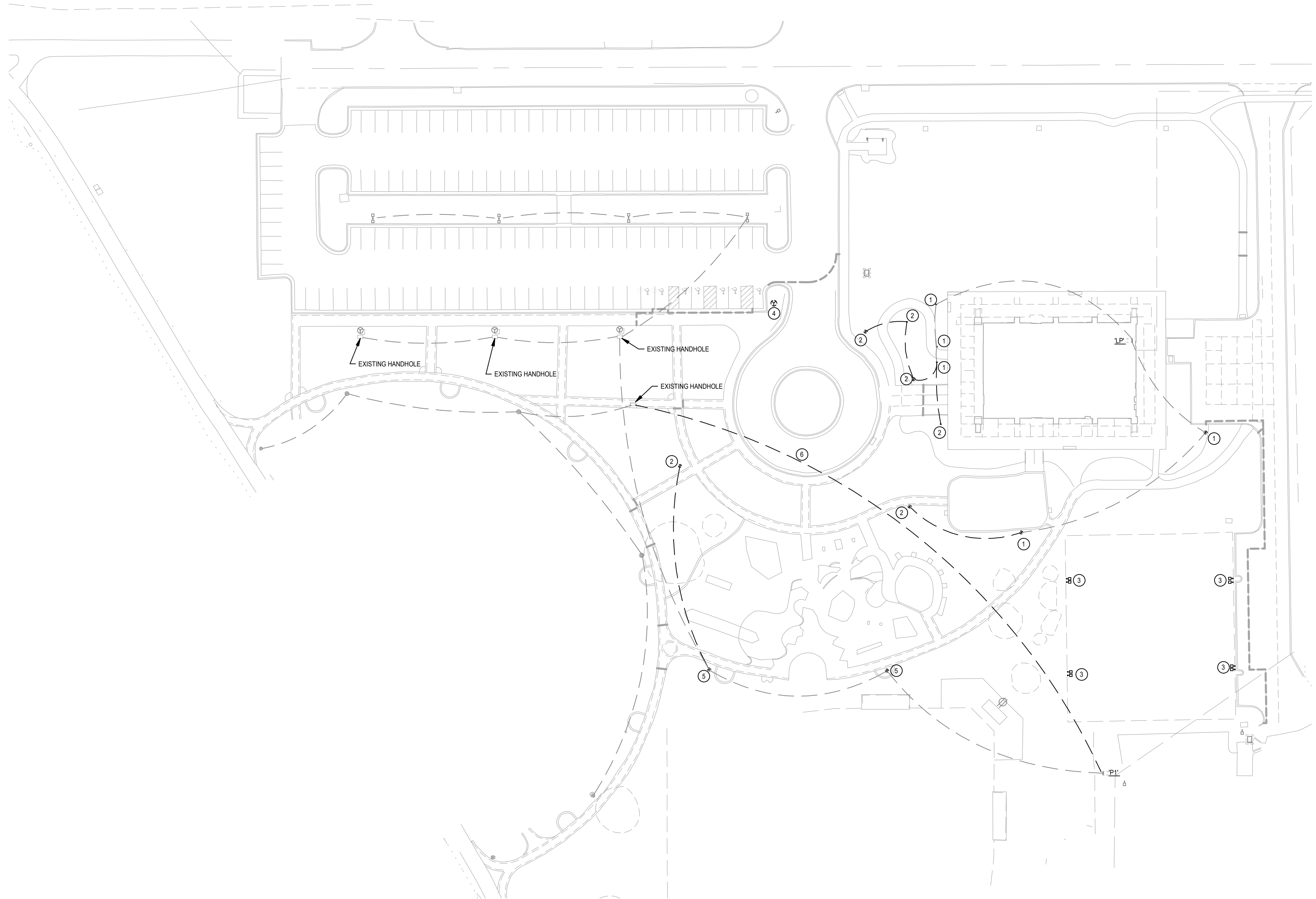


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Johnston, IA 50131
515-727-0700
www.bluestonemep.com/
Project #: 123-004A

KEYED NOTES:

1. REMOVE LIGHT FIXTURE. MAINTAIN BASE AND WIRING FOR USE WITH NEW LIGHT FIXTURE IN SAME LOCATION.
2. REMOVE LIGHT FIXTURE, BASE, AND WIRE BACK TO LOCATION OF LAST EXISTING LIGHT FIXTURE LOCATION TO REMAIN. ABANDON THE EXISTING CONDUIT IN PLACE.
3. DEMO EXISTING TENNIS COURT LIGHTING, POLES, CONDUIT, AND CONDUCTORS BACK TO PANEL "P1".
4. DISCONNECT B-CYCLE POWER CONNECTION FOR RELOCATION. CONTRACTOR SHALL COORDINATE WITH DSM B-CYCLE PRIOR TO DISCONNECTING AND RELOCATING.
5. REMOVE LIGHT FIXTURE AND BASE. A HAND HOLE IS TO BE INSTALLED IN THIS LOCATION DURING CONSTRUCTION FOR SPLICING AND EXTENDING EXISTING CIRCUITS.
6. DISCONNECT THE EXISTING LIGHTING CIRCUIT AND REMOVE WIRE FROM HANDHOLE TO PANEL. CONDUIT TO BE ABANDONED IN PLACE. CIRCUITS SHALL BE REFEED DURING CONSTRUCTION TO AVOID THE PLAYGROUND.

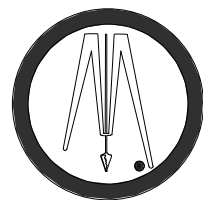


1 ELECTRICAL DEMO PLAN
1" = 40'-0"



HORZ. SCALE
0 40 80
FEET

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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
ELECTRICAL DEMO PLAN

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bluestone
engineering

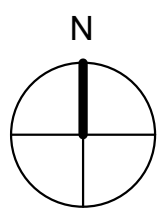
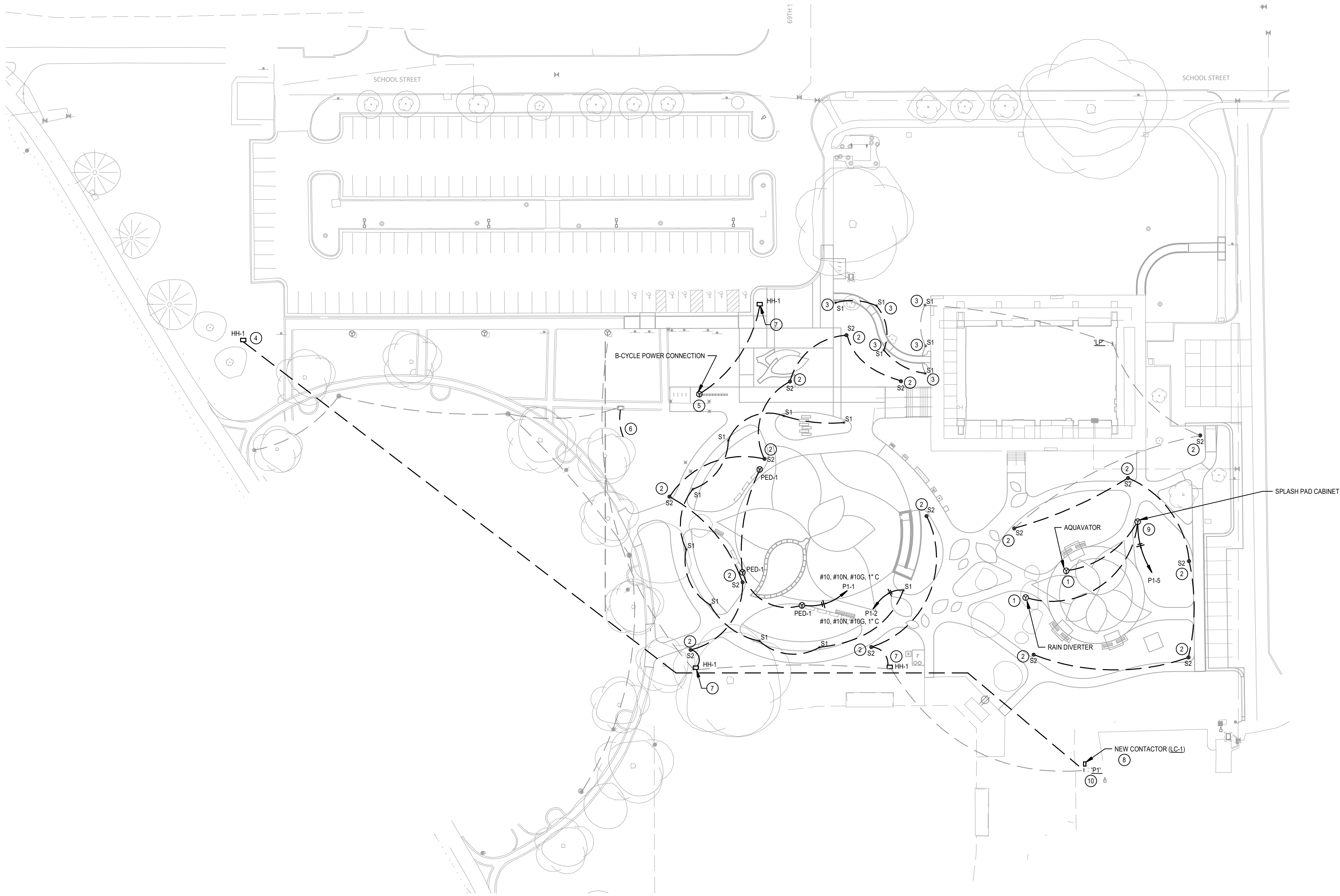
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GENERAL NOTES:

1. SEE SHEET E.50 FOR DETAILS AND SCHEDULES.
2. CONDUITS AND WIRES SHALL NOT BE ROUTED UNDER THE PLAYGROUND OR SPLASH PAD AREA.

KEYED NOTES:

1. INSTALL 1" CONDUIT FROM SPASH PAD CONTROLLER TO AQUAVATOR AND 1" CONDUIT FROM SPASH PAD CONTROLLER TO RAIN DIVERTER. CONFIRM LOCATION OF AQUAVATOR AND RAIN DIVERTER WITH SPASH PAD INSTALLER.
2. UTILIZE THE EXISTING SITE LIGHT CIRCUIT FOR THE NEW POLE FIXTURES. EXTEND CIRCUIT TO NEW LIGHT FIXTURE LOCATIONS. 2#10, #10N, #10G, 1" CONDUIT.
3. UTILIZE THE EXISTING SITE LIGHT CIRCUIT FOR THE NEW BOLLARD. EXTEND CIRCUIT TO NEW LIGHT FIXTURE LOCATIONS. #10, #10N, #10G, 1" CONDUIT.
4. INSTALL THREE 1" CONDUITS AND ONE 1 1/2" CONDUIT FROM PANEL TO NEW HANDHOLE ON PLANS FOR FUTURE TENNIS COURT LIGHTING. INSTALL PULL STRING IN EACH CONDUIT.
5. EXTEND EXISTING CIRCUIT SERVING THE B-CYCLE POWER CONNECTION TO NEW LOCATION. #10, #10N, #10G, 1" CONDUIT.
6. PUMP OUT AND CLEAN WATER AND MUD OUT OF THE EXISTING HAND HOLD. REFEED LIGHTING CIRCUITS FROM PANEL P1 TO AVOID THE PLAYGROUND. 2#10, #10N, #10G, 1" CONDUIT.
7. INSTALL NEW HANDHOLES AT THE PREVIOUS LOCATION OF SITE LIGHT FIXTURES OR ELECTRICAL CONNECTION AS A SPLICE POINT FOR THE EXISTING CIRCUITS.
8. INSTALL NEW LIGHTING CONTACTOR (LC-1) FOR SITE LIGHTING. THE EXISTING PHOTOCELL NEAR PANEL P1 SHALL CONTROL THE NEW LIGHTING CONTACTOR. CONTROL WITH CIRCUIT P1-3. MOUNT LC-1 TO THE EXISTING UNISTRUT RACK.
9. INSTALL BONDING AND EQUIPMENT GROUNDING IN ACCORDANCE WITH NEC 680.6 FOR ALL ELECTRICAL EQUIPMENT ASSOCIATED WITH THE SPLASH PAD.
10. ELECTRICAL CONTRACTOR SHALL VERIFY THE CIRCUITING OF THE EXISTING LOADS IN PANEL P1. PROVIDE UPDATED PANEL SCHEDULE AT END OF PROJECT.



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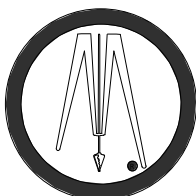
ELECTRICAL SITE PLAN

1" = 40'-0"



HORZ. SCALE
0 40 80
FEET

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2023 COLBY PARK IMPROVEMENTS
ELECTRICAL SITE PLAN

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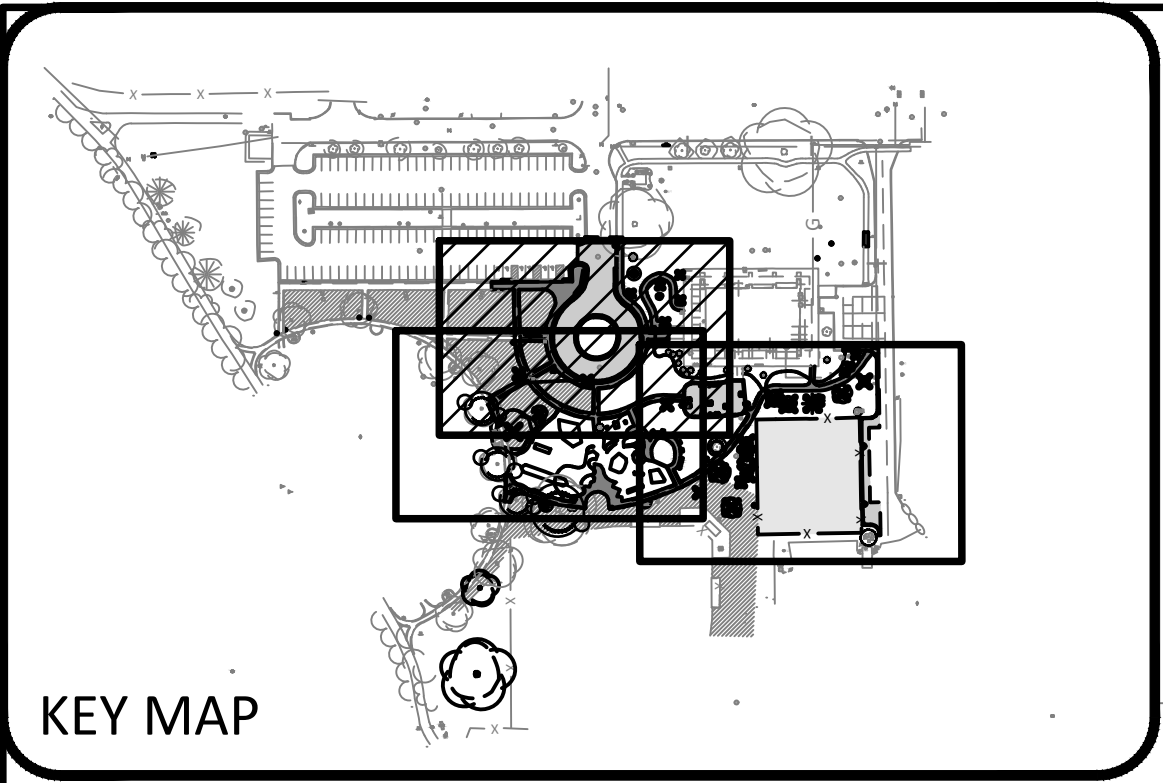
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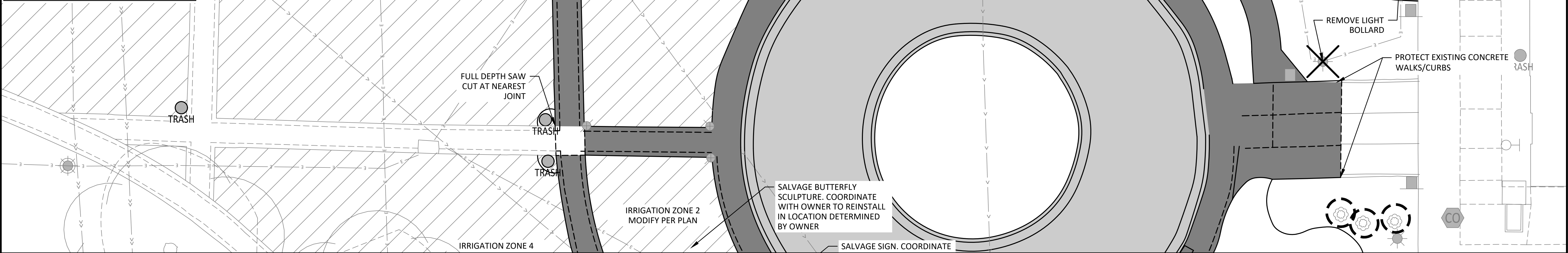
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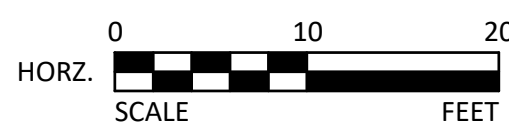
- NOTES**
1. FIELD VERIFY ALL UTILITIES PRIOR TO REMOVALS. IF THE CONTRACTOR DETERMINES THAT FIELD CONDITIONS DIFFER FROM INFORMATION PROVIDED, THEY SHALL CEASE CONSTRUCTION ACTIVITIES AND CONTACT THE ENGINEER FOR DIRECTION.
 2. SAW PAVEMENT FULL DEPTH AND IN STRAIGHT LINE (WHEN POSSIBLE) TO PROVIDE A UNIFORM EDGE.
 3. PROTECT ALL EXISTING FEATURES NOT DESIGNATED FOR REMOVAL. ALL PUBLICLY-OWNED SIGNS SHALL BE SALVAGED TO THE CITY. ALL IN GRADE UTILITY BOXES AND HANDHOLES SHALL BE COORDINATED WITH THE UTILITY PROVIDER TO BE PROTECTED OR TEMPORARILY REMOVED AND REPLACED AND/OR ADJUSTED TO NEW FINISHED GRADES.
 4. ALL SITE FURNISHING TO BE REMOVED BY THE OWNER (N.I.C) **(NEED SEVERAL WEEKS NOTICE BEFORE REMOVAL OF FRONT PLAZA AND EXISTING VEGETATION)**
 5. UNLESS NOTED OTHERWISE, ALL DEMOLISHED AND/OR REMOVED ITEMS SHALL BE HAULED COMPLETELY AWAY FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR.
 6. ALL VOIDS REMAINING AFTER THE REMOVAL OF PIPE, MANHOLES AND INLET STRUCTURES SHALL BE FILLED AND RECOMPACTED PER IOWA DOT STANDARDS.
 7. CONTRACTOR TO COORDINATE WITH OWNER TO MODIFY OR CAP THE IRRIGATION SYSTEM AT THE NEW PROJECT EXTENTS.
 8. REFER TO ELECTRICAL DEMO PLAN FOR ADDITIONAL REMOVALS.

LEGEND

- REMOVE PAVEMENT
- REMOVE SIDEWALK
- PROTECT ITEM
- REMOVE ITEM
- CURB REMOVAL
- TREE PROTECTION FENCE



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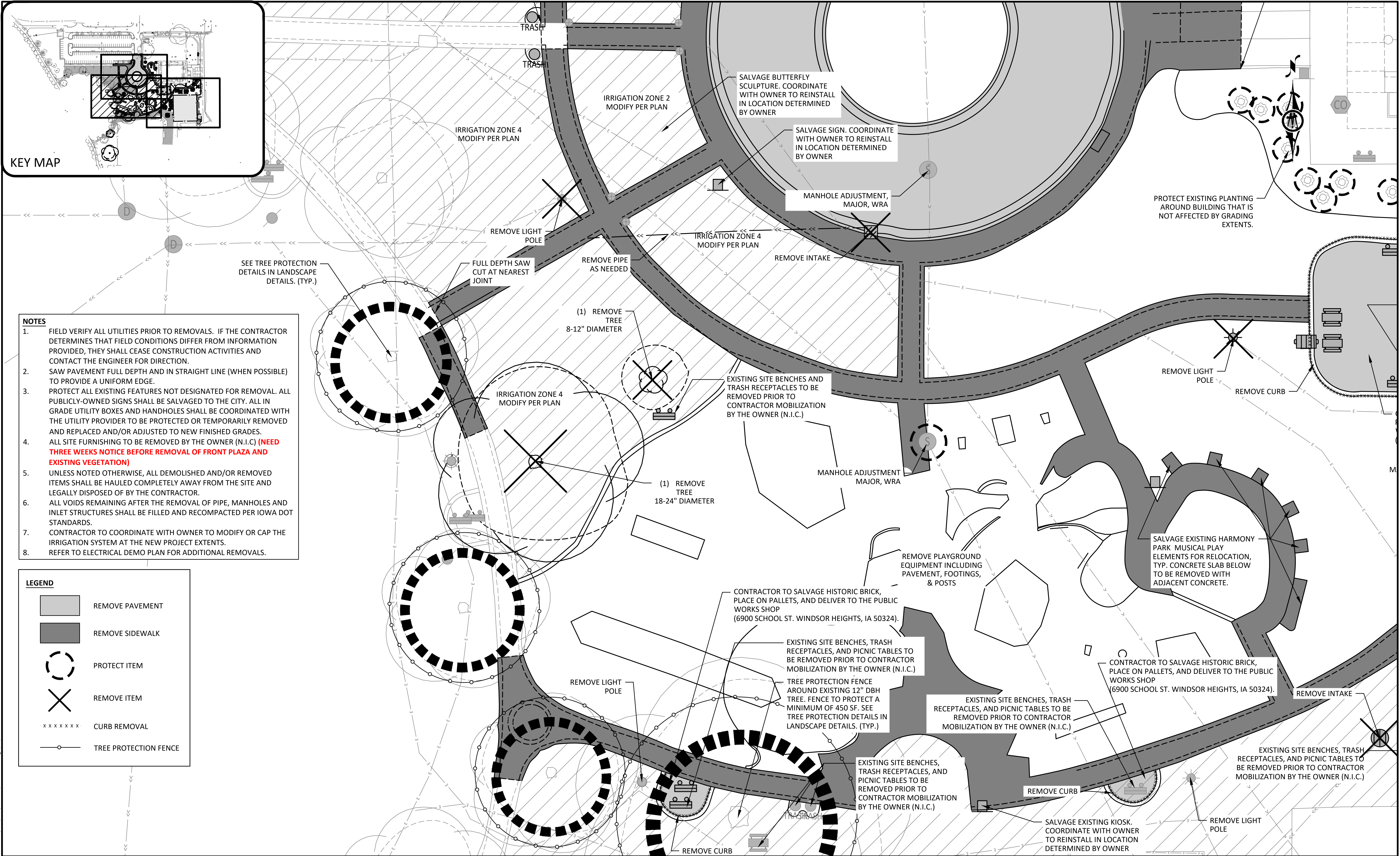


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CITY OF WINDSOR HEIGHTS, IOWA
2023 COLBY PARK IMPROVEMENTS
REMOVALS

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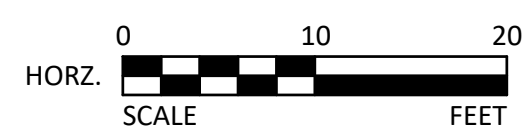
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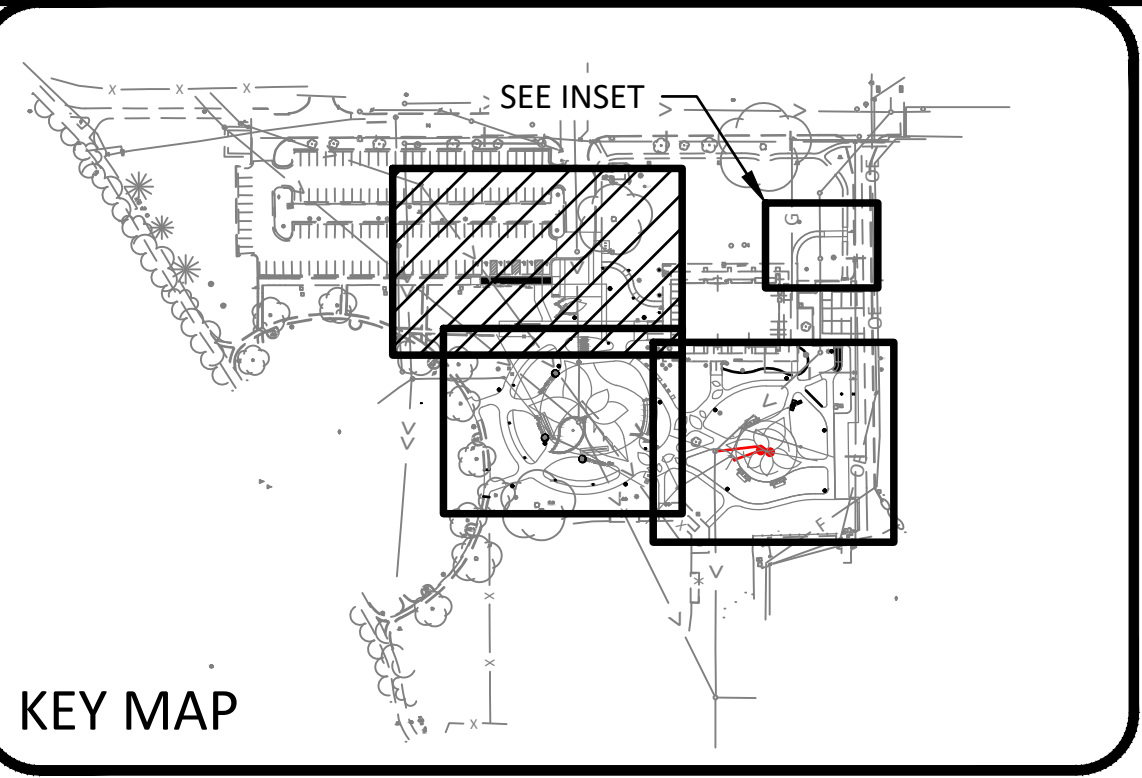


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KEY MAP

IRRIGATION NOTES:

THE BASE BID WILL INCLUDE CAPPING ANY EXISTING IMPACTED IRRIGATION ZONES.

IN ALTERNATE D ALL AFFECTED IRRIGATION ZONES AND NEW TURF AREAS TO THE SOUTH OF THE COMMUNITY CENTER WILL HAVE NEW AND ADDITIONAL IRRIGATION.

IRRIGATION NOTES:

- CONTRACTOR IS RESPONSIBLE FOR IRRIGATION SYSTEM DESIGN & INSTALLATION. SUBMIT DESIGN DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT.
- CONTRACTOR TO COORDINATE WITH IRRIGATION COMPANY ON SCHEDULING AND INSTALLATION OF DRIP LINE IRRIGATION FOR PLANTING BED AREAS.
- ALL PLANTING BEDS TO BE IRRIGATED WITH AUTOMATIC DRIP LINE IRRIGATION SYSTEM BY RAINBIRD & TURF AREAS WITH SPRAY HEADS.

OR APPROVED EQUAL.

LEGEND

- LOW-GROW FESCUE
(SEE LANDSCAPE NOTES)
- SOD PER SUDAS (TYP.)
- EXISTING PLANTING BED
- IRRIGATION EXTENTS
(ALTERNATE D)

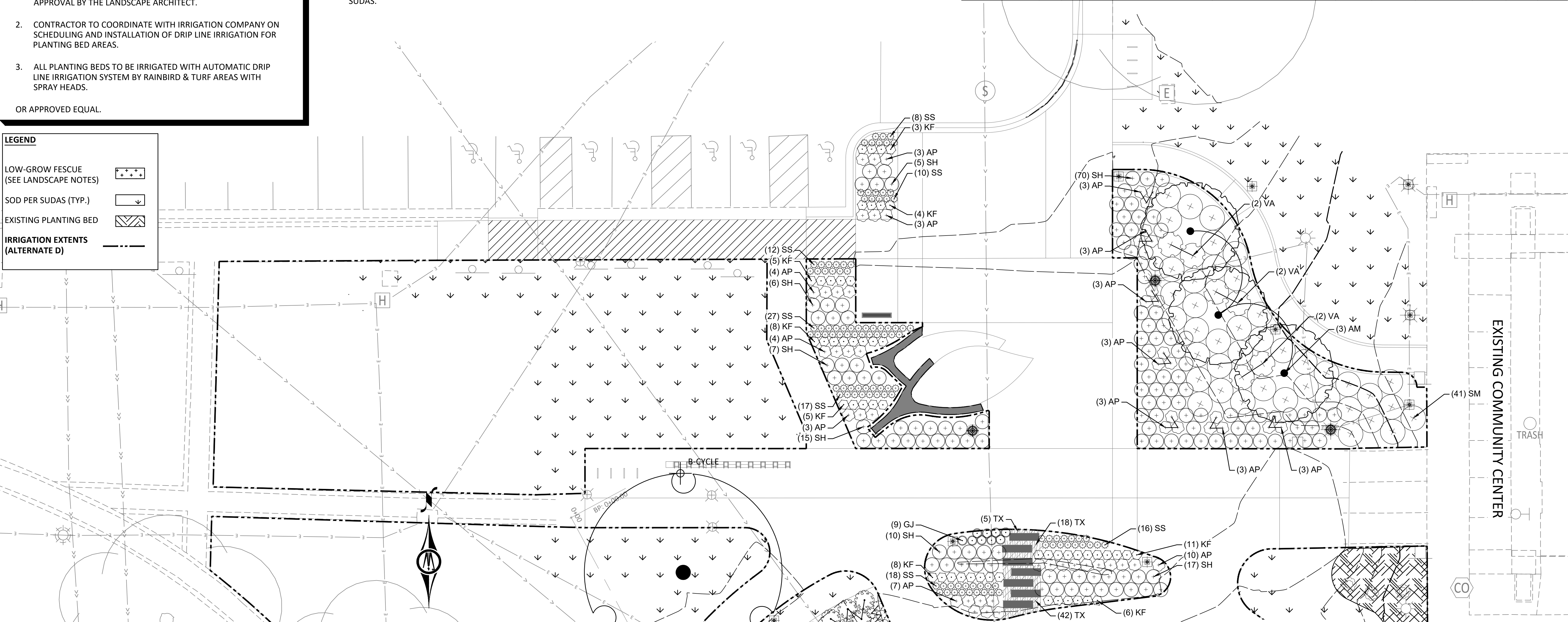
PLANTING & SITE RESTORATION NOTES:

- PERENNIALS/GRASSES ARE LISTED IN THE MASTER PLANT SCHEDULE. IF THERE IS A CONFLICT BETWEEN THE QUANTITIES SHOWN ON THE DRAWINGS AND THE QUANTITIES SHOWN IN THE PLANT SCHEDULE, THE PLAN QUANTITIES SHALL PREVAIL.
- CONTRACTOR SHALL LAYOUT A TYPICAL PLANTING BED, AND OBTAIN APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
- SHRUB & PERENNIAL GROUPINGS SHALL BE PLANTED AND MULCHED IN ONE CONTINUOUSLY MULCHED BED. ALL BEDS ABUTTING TURF AREAS SHALL BE SPADE CUT EDGE.
- HARDWOOD MULCH PER SUDAS TO BE PLACED IN ALL PLANTING BEDS.
- CONTRACTOR TO VERIFY LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS WITH TREE PLANTINGS.
- ALL DISTURBED AREAS NOT INDICATED AS PAVING, STRUCTURES, PLANTINGS, OR SIGNAGE SHALL BE SODDED UNLESS NOTED OTHERWISE ON THE PLANS.
- LOW-GROW FESCUE MIX:

- SUPER SHADE FINE FESCUE MIX BY UNITED SEEDS, INC. (OR APPROVED EQUAL)
- APPLICATION RATES, PLACEMENT, AND FERTILIZER AS RECOMMENDED BY THE SUPPLIER.
- ALL SEEDED AREAS SHALL BE COVERED WITH RECP TYPE 2.C PER SUDAS.

- COMPOST AMENDED TOPSOIL: DEPTH AS SPECIFIED IN PLANTING DETAILS ON B-SHEETS. PLANTING BACKFILL SHALL CONSIST OF SUITABLE TOPSOIL AMENDED TO CONSIST OF 60% TOPSOIL, 30% SAND AND 10% COMPOST.

PLANT SCHEDULE									
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	HABIT/FORM	SPREAD	HEIGHT	SPACING
AC	3	ABIES CONCOLOR	WHITE FIR	6" HT.	B&B	PYRAMID	20'-25'	40'-60'	SEE PLAN
PD	4	PICEA GLAUCA 'DENSATA'	BLACK HILLS WHITE SPRUCE	6" HT.	B&B	PYRAMID	10'-15'	20'-40'	SEE PLAN
ORNAMENTAL TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	HABIT/FORM	SPREAD	HEIGHT	SPACING
AM	5	AMELANCHIER CANADENSIS	CANADIAN SERVICEBERRY MULTI-TRUNK	1.5" CAL.	B&B	MULTI-STEM	15'-20'	15'-20'	SEE PLAN
CE	9	CERCIS CANADENSIS	EASTERN REDBUD MULTI-TRUNK	1.5" CAL.	B&B	MULTI-STEM	15'-25'	15'-20'	SEE PLAN
CK	4	CORNUS KOUSA	KOUSA DOGWOOD	1.5" CAL.	B&B	UPRIGHT/OVAL	15'-25'	15'-25'	SEE PLAN
OVERSTORY TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	HABIT/FORM	SPREAD	HEIGHT	SPACING
CP	3	CLADRASTIS KENTUEKA 'PERKINS PINK'	PERKINS PINK YELLOWWOOD	2" CAL.	B&B	ROUNDED	40'	40'	SEE PLAN
GB	2	GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY MAIDENHAIR TREE	2" CAL.	B&B	BROAD/UPRIGHT	20'-30'	40'-50'	SEE PLAN
PO	2	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2" CAL.	B&B	ROUNDED	30'-40'	30'-60'	SEE PLAN
QM2	4	QUERCUS MACROCARPA	BUR OAK	2.5" CAL.	B&B	ROUNDED	40'-70'	40'-70'	SEE PLAN
QM	3	QUERCUS MUEHLENBERGII	CHINKAPIN OAK	2" CAL.	B&B	ROUNDED	40'-60'	40'-50'	SEE PLAN
UP	5	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	2" CAL.	B&B	BROAD/UPRIGHT	30'-50'	50'-70'	SEE PLAN
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPREAD	HEIGHT			SPACING
CS	46	CLETHRA ALNIFOLIA 'SIXTEEN CANDLES'	SIXTEEN CANDLES SUMMERSWEET	#3 CONT.	3'-5'	3' - 5'			48" o.c.
SA	38	SYMPHORICARPUS X DOOR 'CANDY'	CANDY CORALBERRY	#3 CONT.	2'-3'	2'-3'			36" o.c.
SM	65	SYRINGA MEYERI 'PALIBIN'	DWARF KOREAN LILAC	#3 CONT.	5'-7'	4'-5'			60" o.c.
VA	46	VIBURNUM DENTATUM 'CHRISTOM'	BLUE MUFFIN® ARROWWOOD VIBURNUM	#3 CONT.	3'-4'	3' - 5'			60" o.c.
ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPREAD	HEIGHT			SPACING
KF	85	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#1 CONT.	1.5' - 2.5'	3' - 5'			24" o.c.
SS	239	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	STANDING OVATION LITTLE BLUESTEM	#1 CONT.	1.5'-2'	2'-4'			18" o.c.
SH	286	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	#1 CONT.	2'-3'	2'-3'			36" o.c.
PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPREAD	HEIGHT			SPACING
AP	152	ASTER NOVAE-ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER	#1 CONT.	1' - 2'	1'-2'			30" o.c.
GJ	35	GERANIUM X 'JOHNSON'S BLUE'	JOHNSON'S BLUE GERANIUM	#1 CONT.	2'-2.5'	1'-1.5'			24" o.c.
MC	32	MONARDA DIDYMA 'CROFTWAY PINK'	CROFTWAY PINK BEE BALM	#1 CONT.	1' - 2'	2'-3'			24" o.c.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	TYPE					SPACING
TX	65	THYMUS X 'RUBY CARPET'	RUBY CARPET THYME	PLUG					12" o.c.



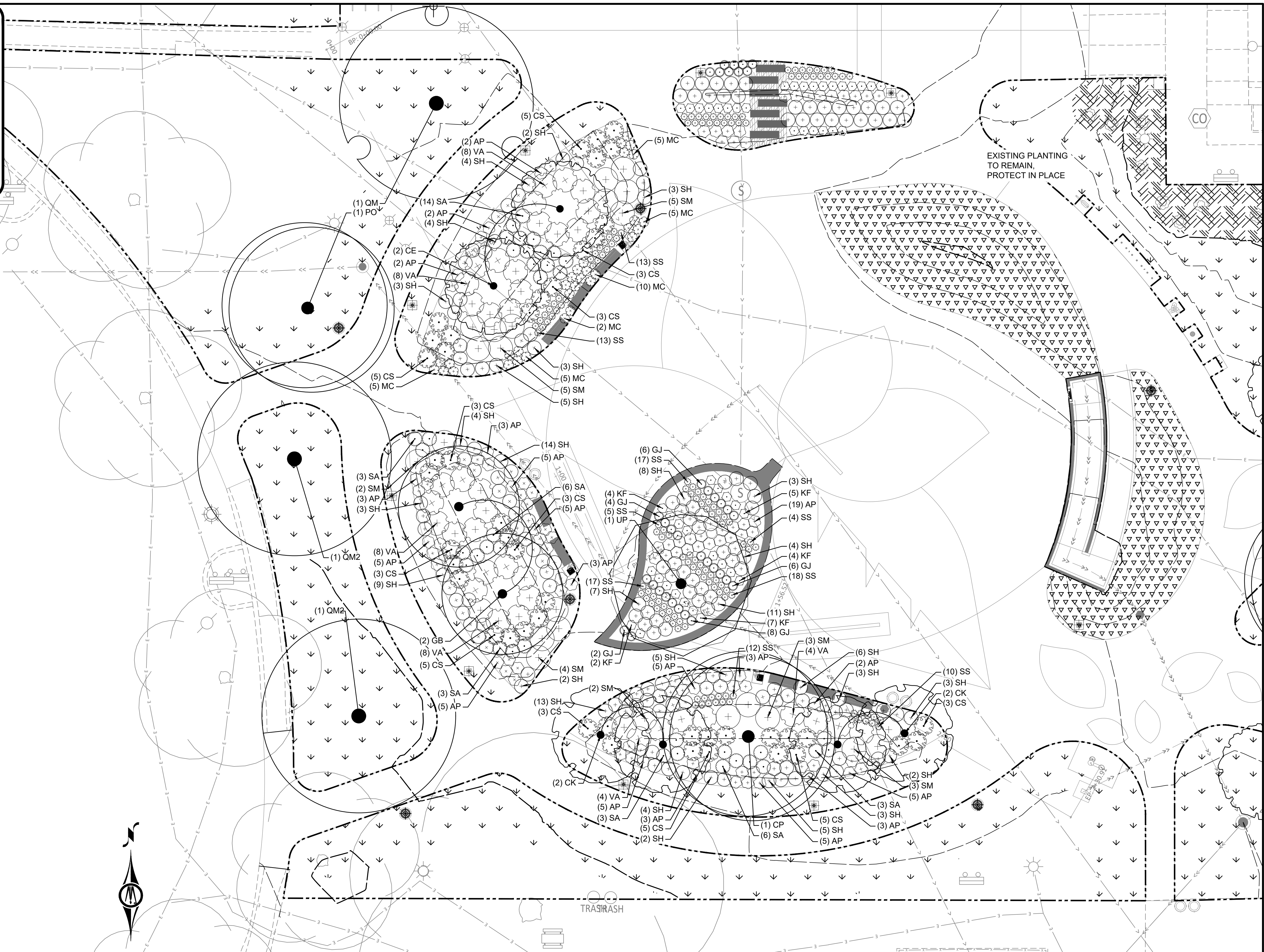
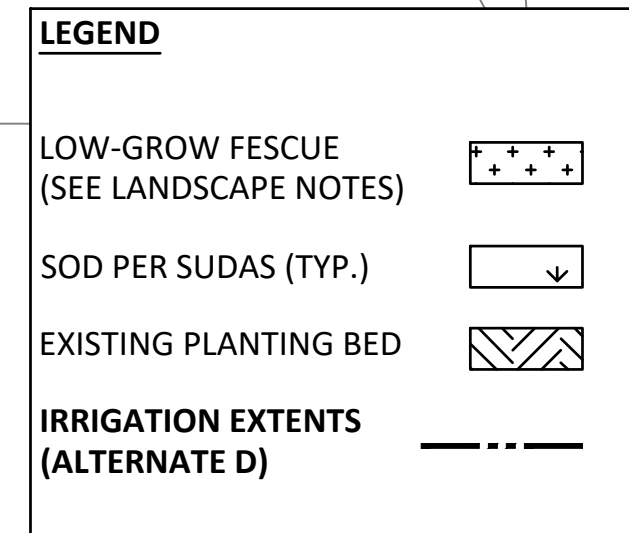
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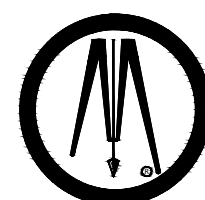
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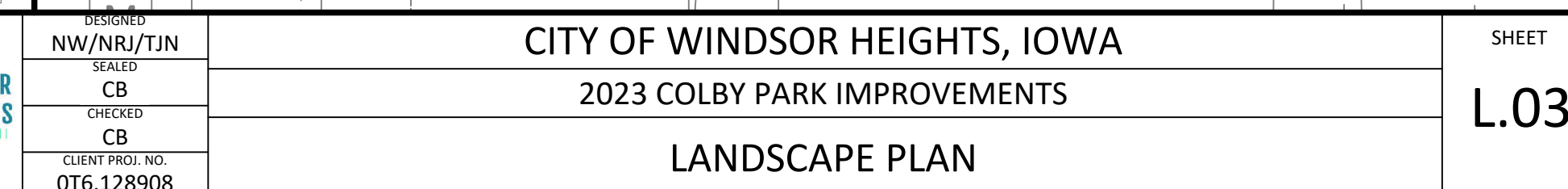
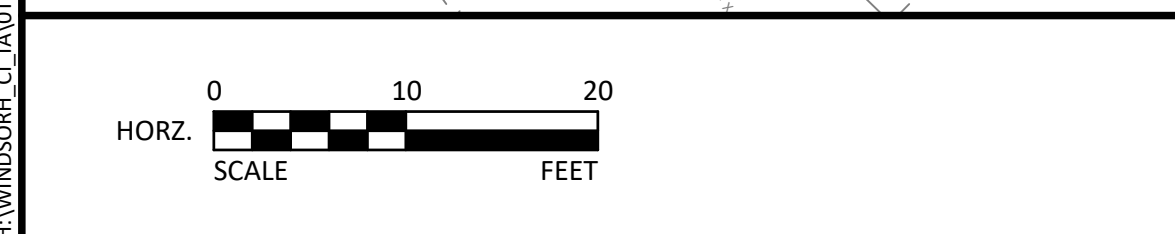
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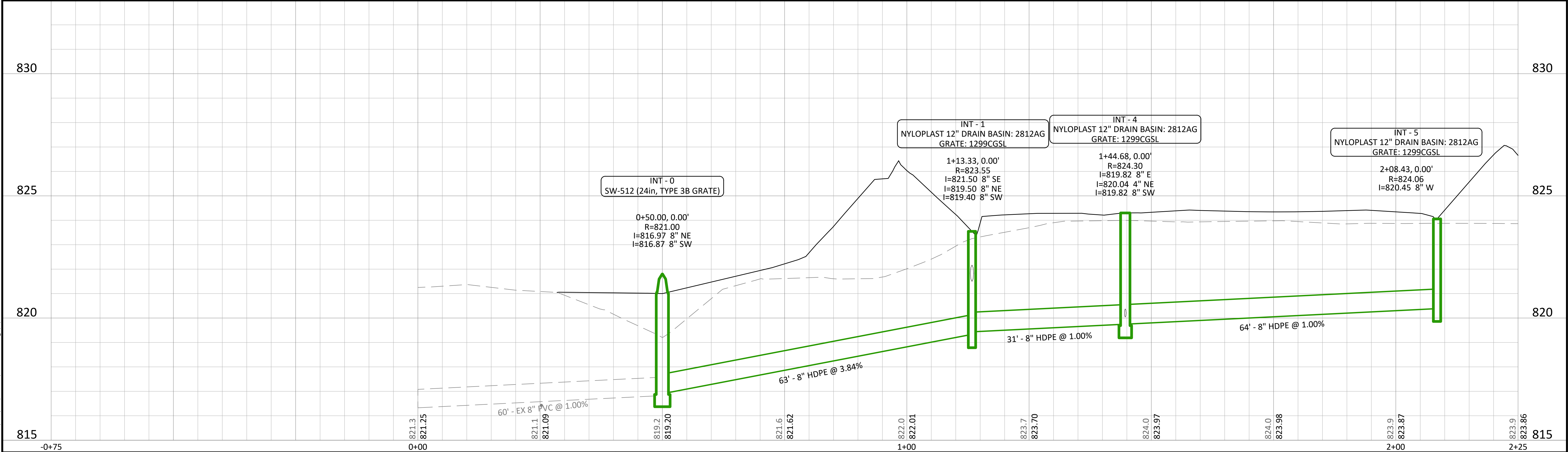
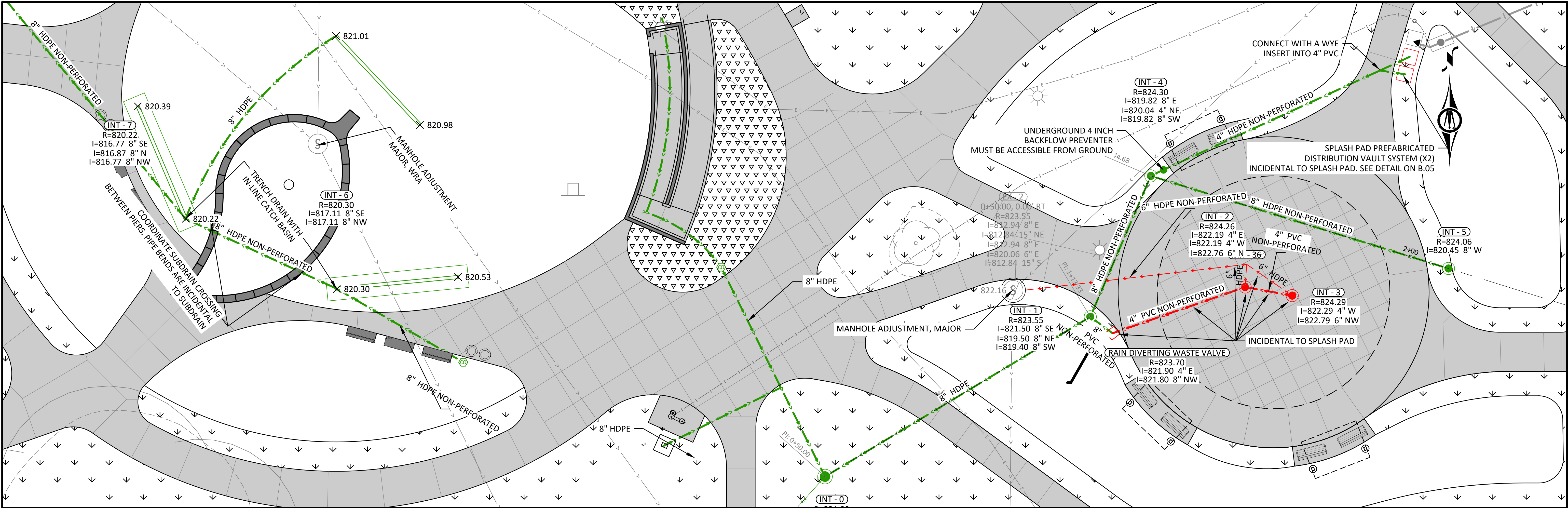
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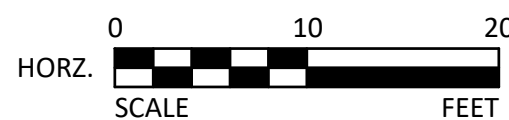
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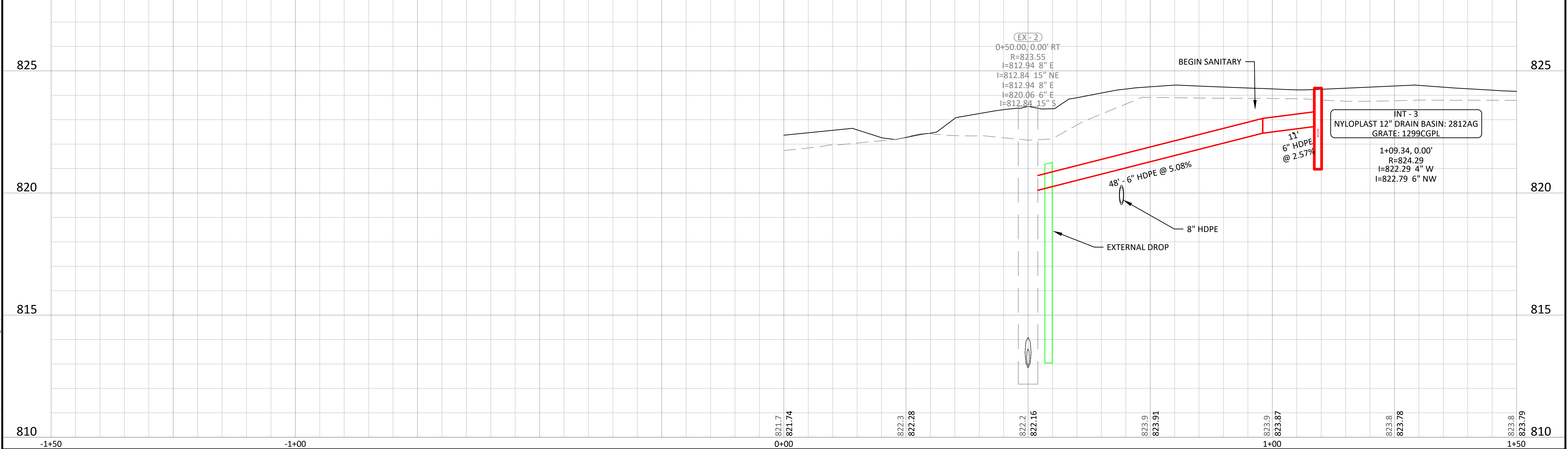
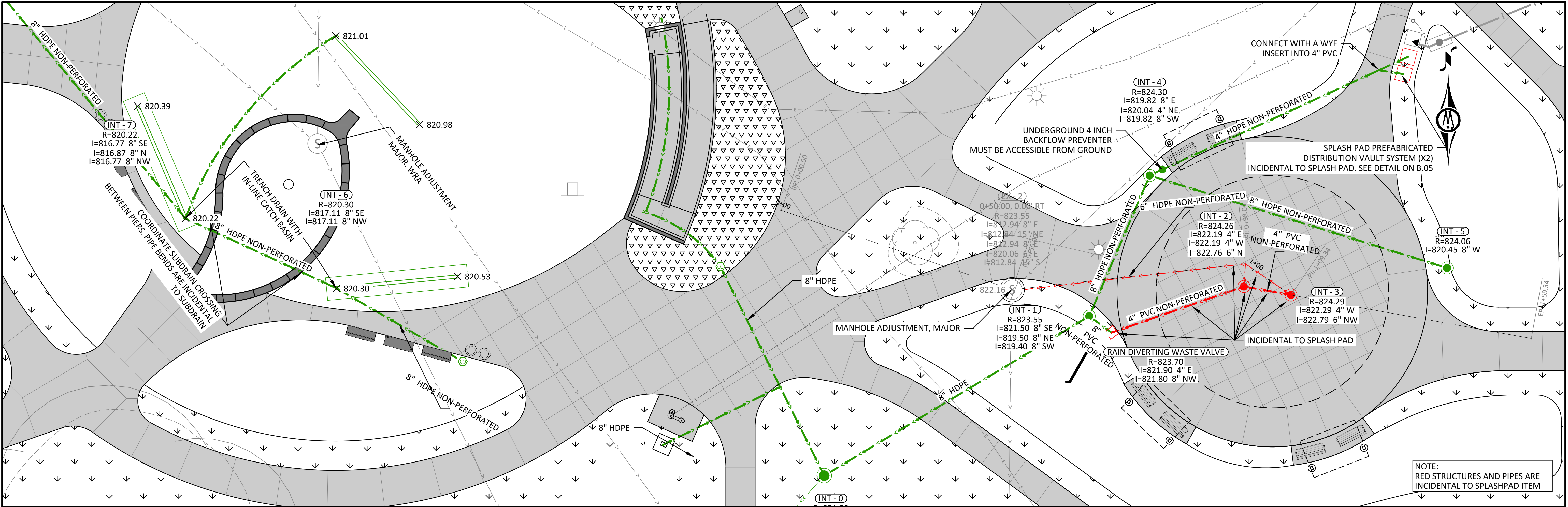
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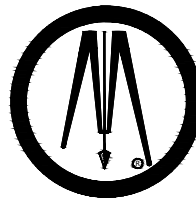
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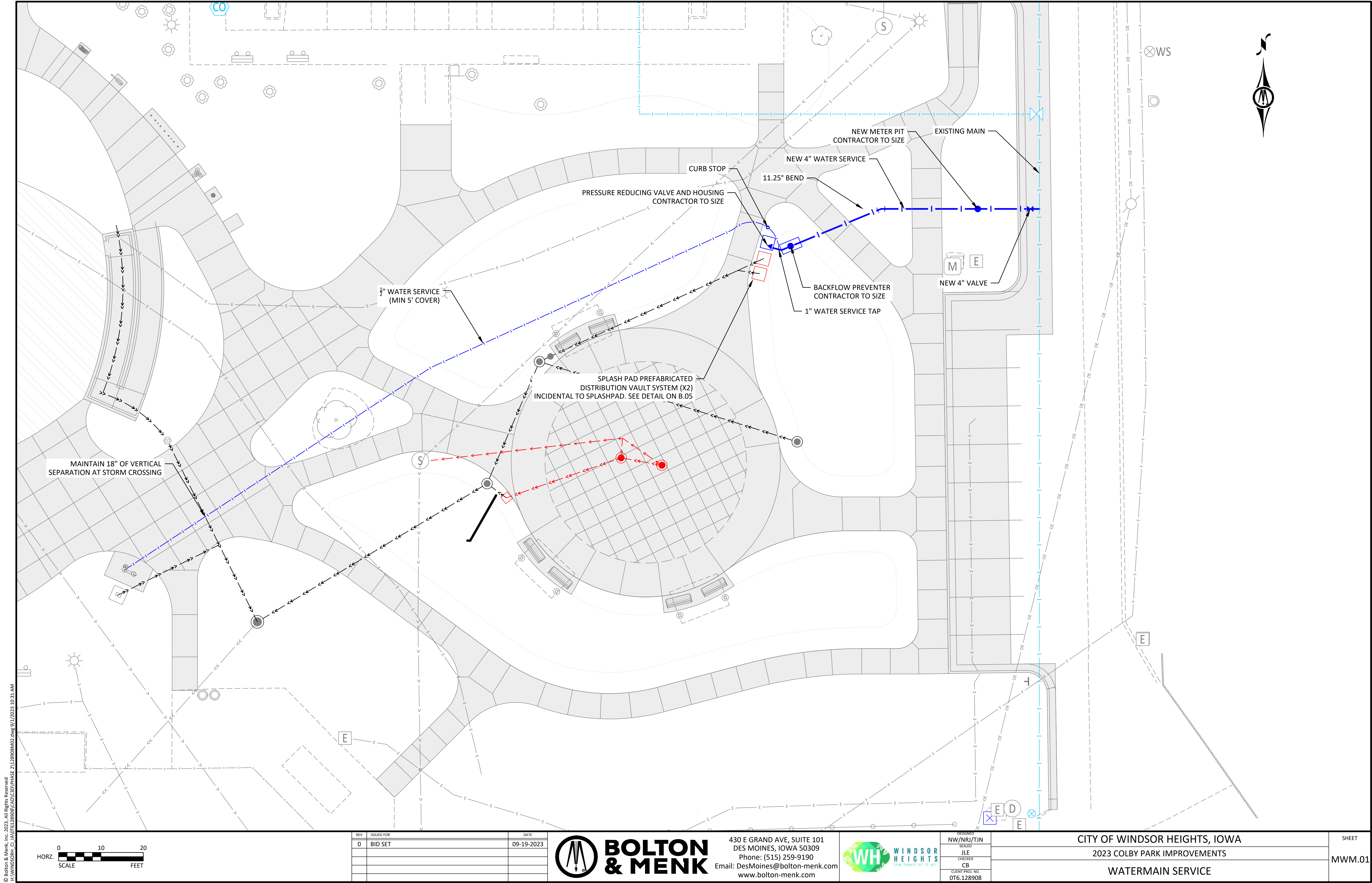


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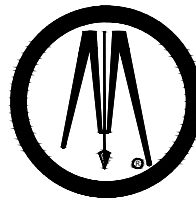
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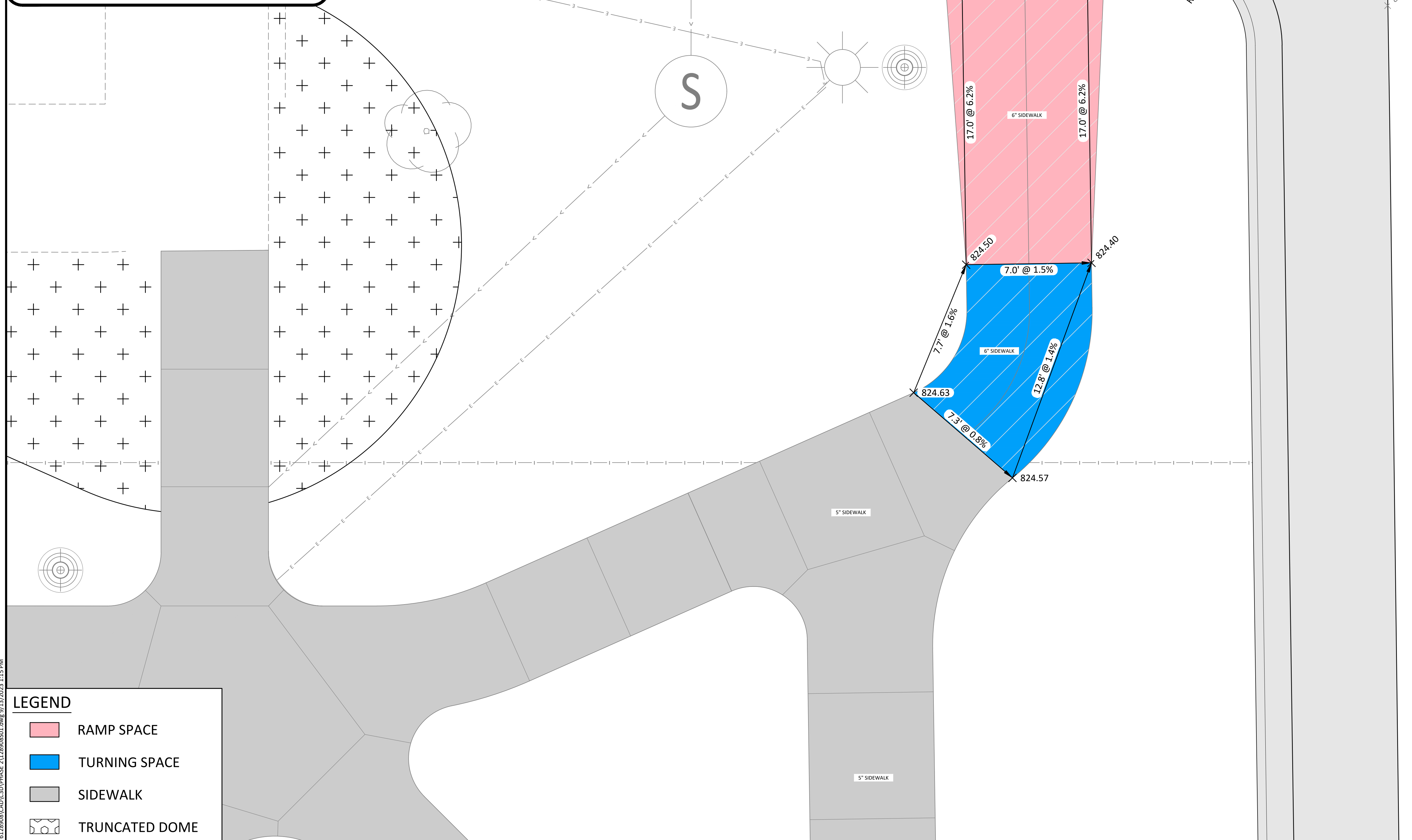
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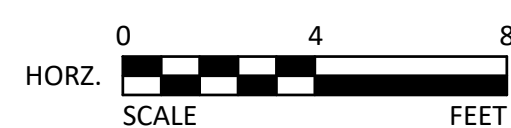
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LEGEND

-  RAMP SPACE
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 SIDEWALK
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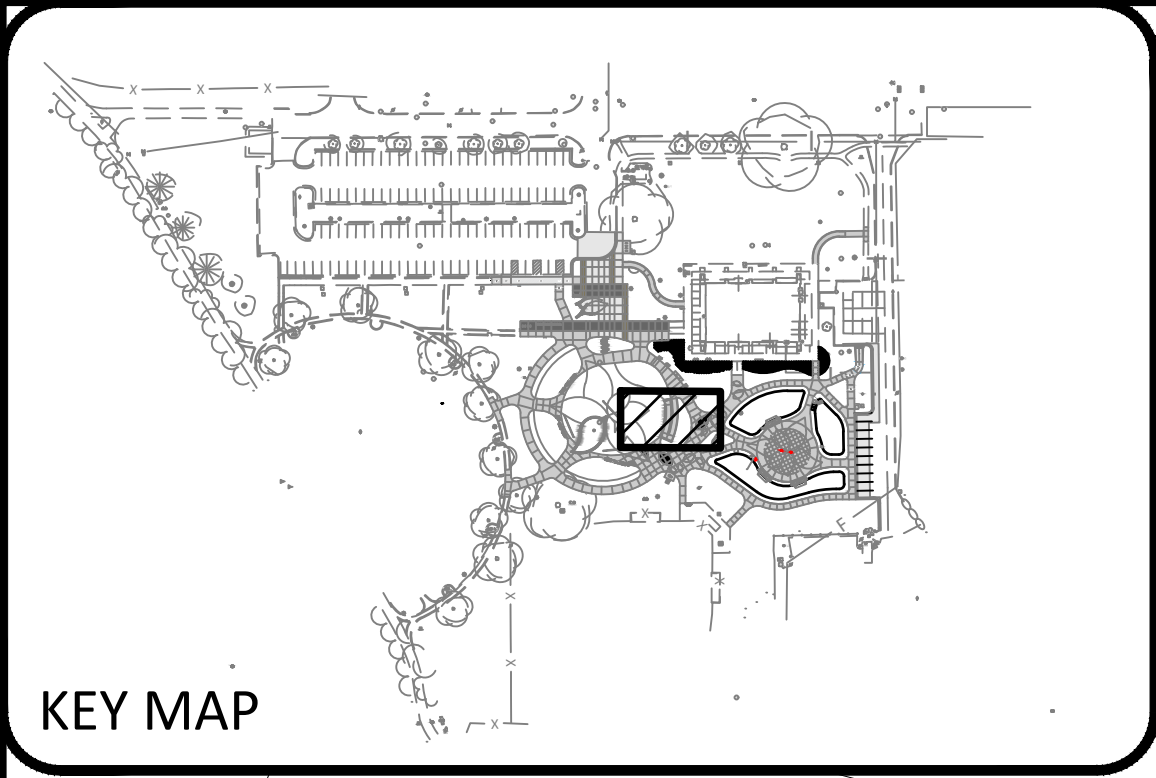
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ADA RAMPS

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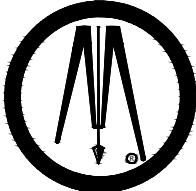


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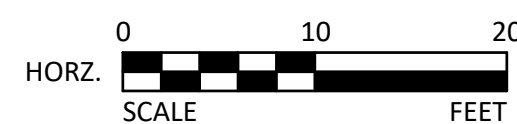
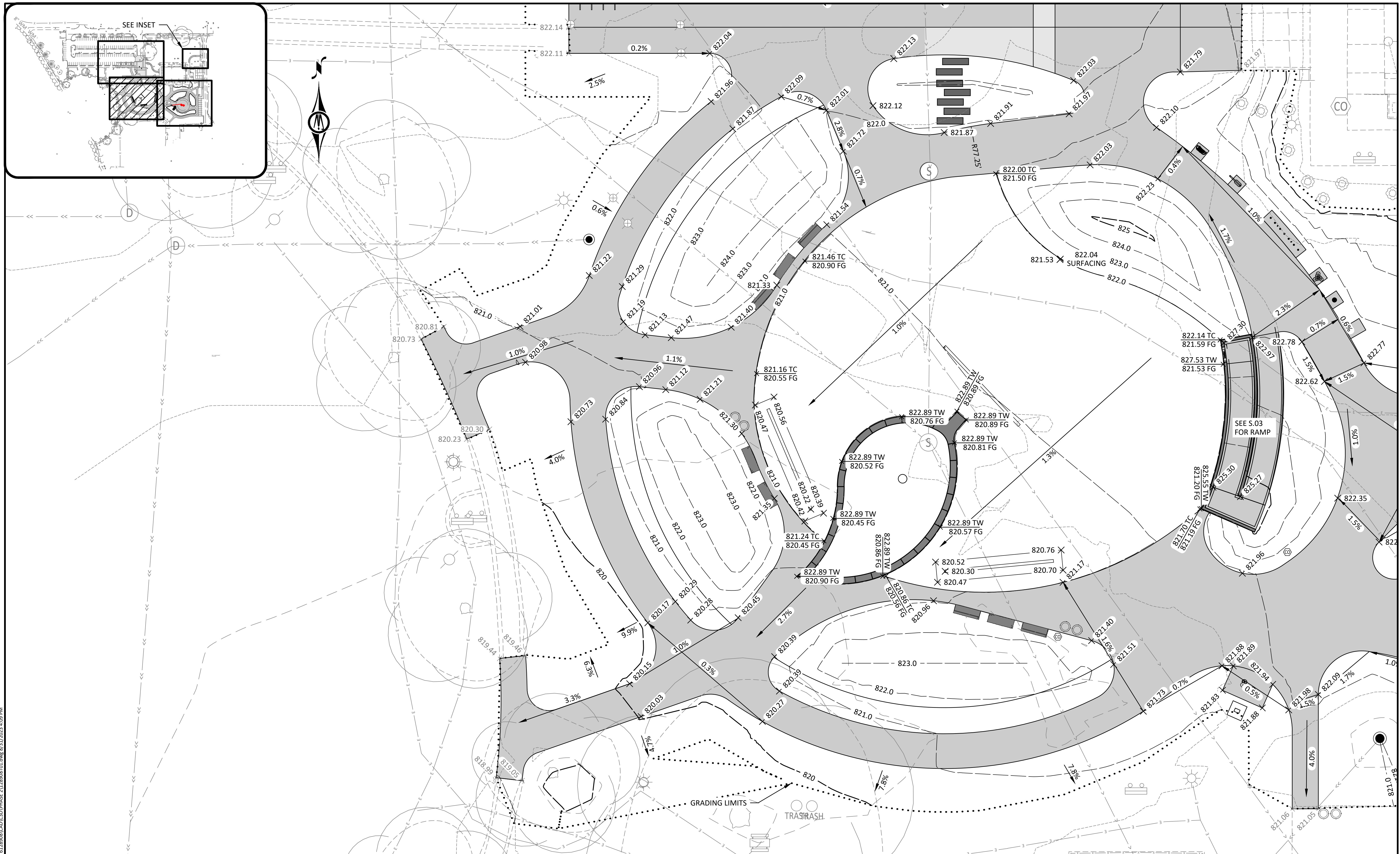
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