

CONSTRUCTION PLANS FOR HUGHES PARK IMPROVEMENTS - PHASE 1

CITY OF CEDAR RAPIDS, LINN COUNTY, IOWA

CONTRACT NUMBER: 307232-03

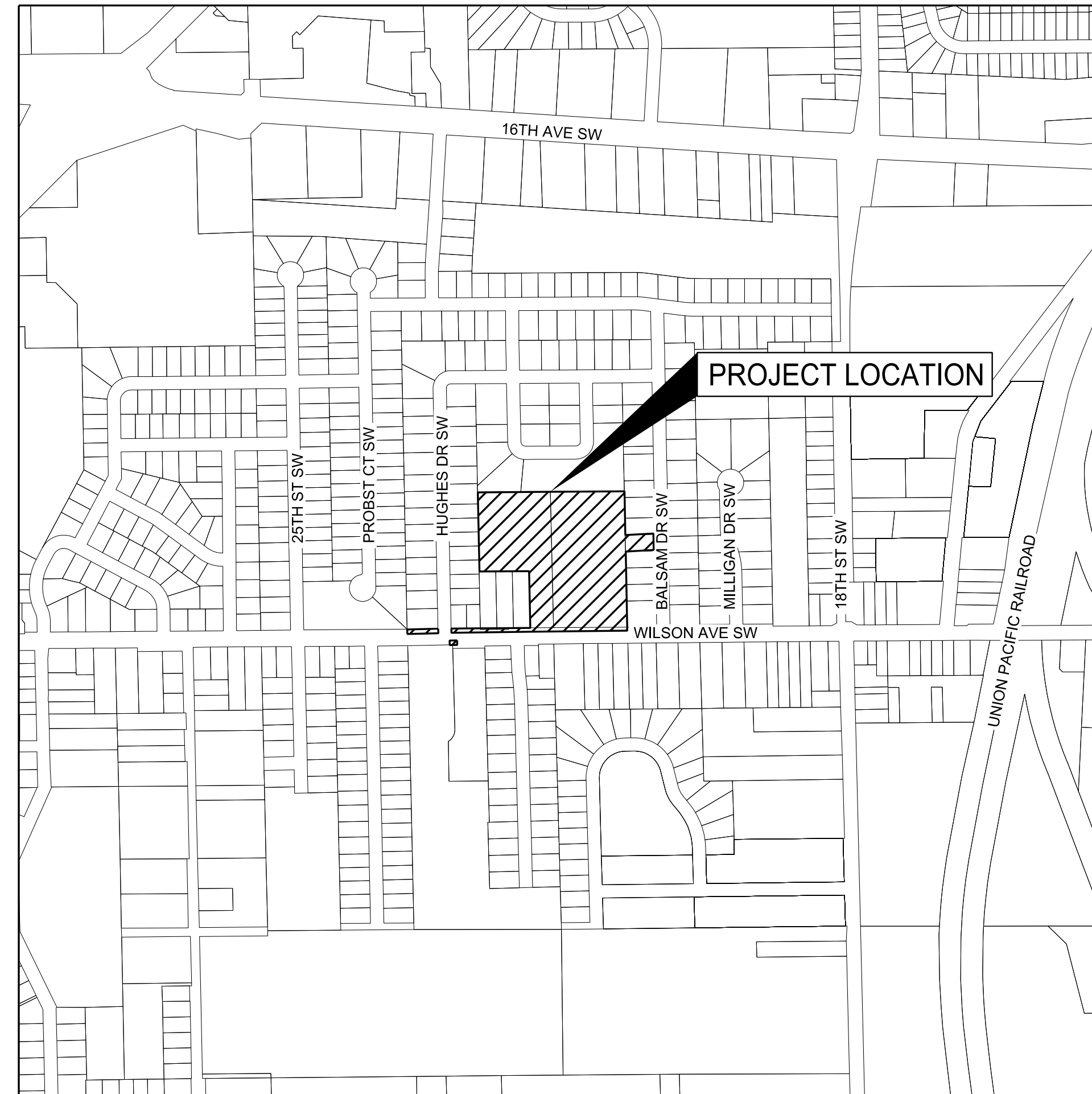
PROJECT NUMBER: PUR0418-171

BID DATE: 06/20/2018

LEGEND

Features

Existing	Proposed
Spot Elevation 93.0	Spot Elevation 93.0
Contour Elevation 93	Contour Elevation 93
Fence (Barbed, Field, Hog)	Fence (Barbed, Field, Hog)
Fence (Chain Link)	Fence (Chain Link)
Fence (Wood)	Fence (Wood)
Fence (Silt)	Fence (Silt)
Tree Line	Tree Line
Tree Stump	Tree Stump
Deciduous Tree \ Shrub	Deciduous Tree \ Shrub
Coniferous Tree \ Shrub	Coniferous Tree \ Shrub
Communication C(x)	C
Overhead Communication OC(x)	OC
Fiber Optic FO(x)	FO
Underground Electric E(x)	E
Overhead Electric OE(x)	OE
Gas Main with Size 4" G(x)	4" G
High Pressure Gas Main with Size 4" HPG(x)	4" HPG
Water Main with Size 8" W(x)	8" W
Sanitary Sewer with Size 8" S(x)	8" S
Duct Bank DUCT(x)	DUCT
Test Hole Location for SUE w/D 81	81
(x) Denotes the survey quality service level for utilities	
Sanitary Manhole 12" ST	Sanitary Manhole 12" ST
Storm Sewer with Size 12" ST	Storm Sewer with Size 12" ST
Storm Manhole	Storm Manhole
Single Storm Sewer Intake	Single Storm Sewer Intake
Double Storm Sewer Intake	Double Storm Sewer Intake
Fire Hydrant	Fire Hydrant
Water Main Valve	Water Main Valve
Water Service Valve	Water Service Valve
Well	Well
Utility Pole	Utility Pole
Guy Anchor	Guy Anchor
Utility Pole with Light	Utility Pole with Light
Utility Pole with Transformer	Utility Pole with Transformer
Street Light	Street Light
Yard Light	Yard Light
Electric Box	Electric Box
Electric Transformer	Electric Transformer
Traffic Sign	Traffic Sign
Communication Pedestal	Communication Pedestal
Communication Manhole	Communication Manhole
Communication Handhole	Communication Handhole
Fiber Optic Manhole	Fiber Optic Manhole
Fiber Optic Handhole	Fiber Optic Handhole
Gas Valve	Gas Valve
Gas Manhole	Gas Manhole
Gas Apparatus	Gas Apparatus
Fence Post or Guard Post	Fence Post or Guard Post
Underground Storage Tank	Underground Storage Tank
Above Ground Storage Tank	Above Ground Storage Tank
Sign	Sign
Satellite Dish	Satellite Dish
Mailbox	Mailbox
Soil Boring	Soil Boring



VICINITY MAP

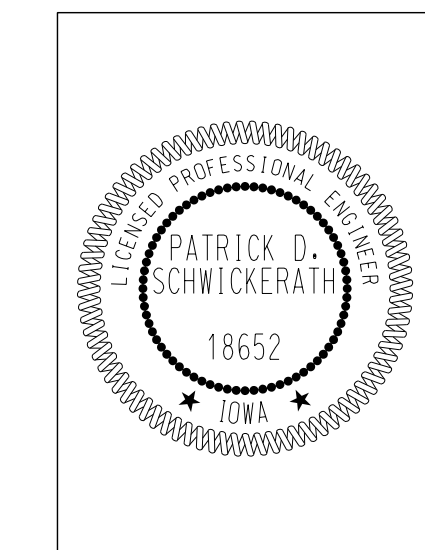
INDEX OF SHEETS

1. TITLE SHEET
2. PROJECT INFORMATION
3. & 4. DIMENSION PLAN
5. GRADING & UTILITY PLAN
6. & 7. JOINTS & ELEVATIONS
8. PPP
9. PPP & DETAILS

NOTE:
THE PROPOSED IMPROVEMENTS INCLUDED IN THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE CURRENT VERSION OF THE CEDAR RAPIDS METROPOLITAN AREA ENGINEERING DESIGN STANDARDS MANUAL. EXCEPTIONS ARE NOTED ON SHEET 2.

CIP FUNDS USED
307232
3012074

CITY COUNCIL MEMBERS
BRAD HART, MAYOR
SUSIE WEINACHT
ANN POE
TYLER OLSON
MARTY HOEGER
SCOTT OVERLAND
DALE TODD
SCOTT OLSON
ASHLEY VANORNY



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.
Patrick D. Schwickerath 05/08/2018
Patrick D. Schwickerath, P.E. Date
License Number 18652
My License Renewal Date is December 31, 2019
Pages or sheets covered by this seal:
ALL



MARK	REVISION	DATE	BY
SIDEWALK	SUBMITTAL	5/08/18	PS

Engineer: PDS Checked By: DPM Scale: 1"=1"
Technician: LFG Date: 05/08/18 Field Bk: Pg:
Project No: 118.0163 Sheet 1 of 9

HUGHES PARK IMPROVEMENTS - PHASE 1

TITLE SHEET

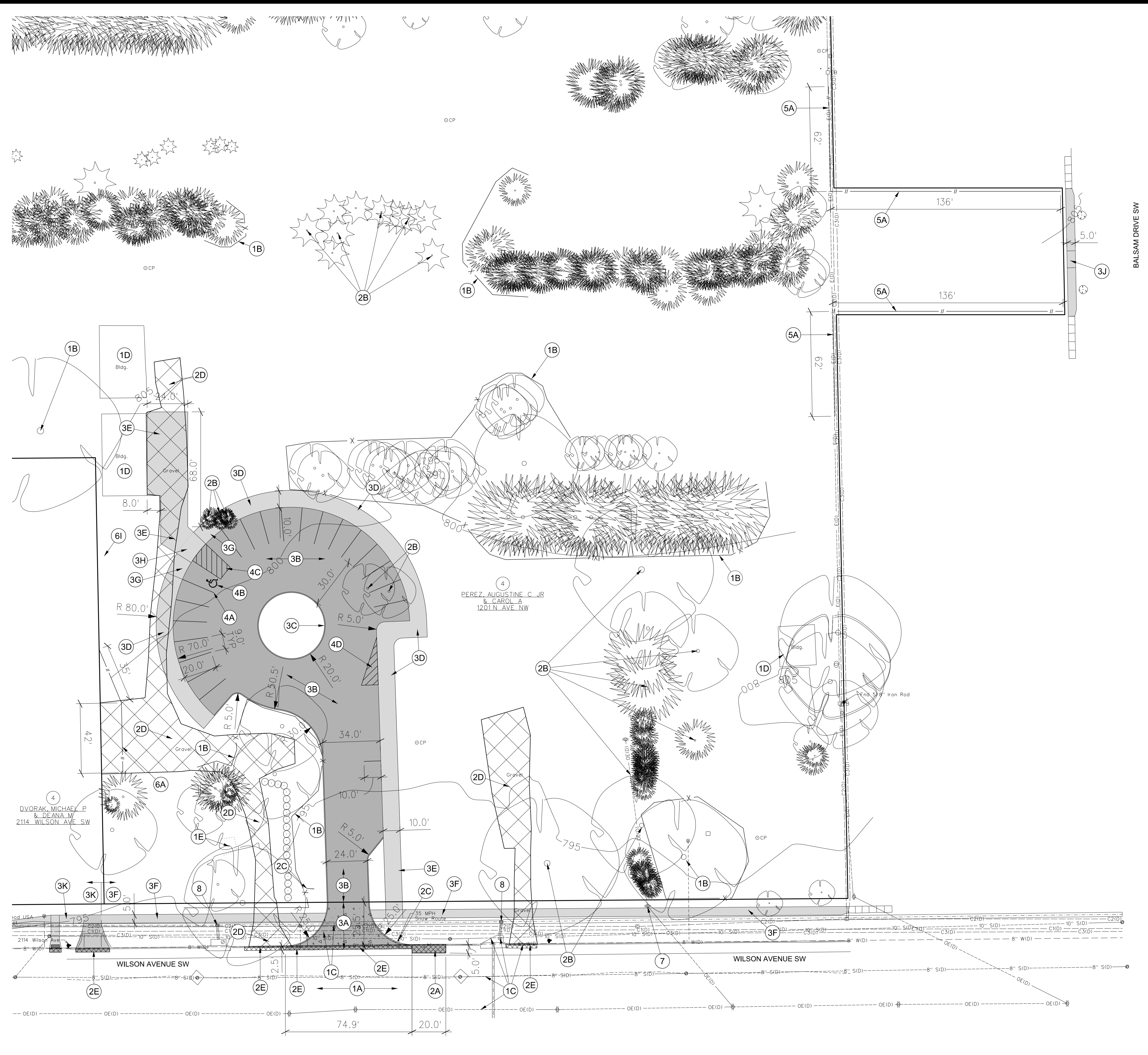
CEDAR RAPIDS, IOWA

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com

Project No: 118.0163
Sheet 1 of 9

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DIMENSION PLAN CONSTRUCTION NOTES

1. EXISTING FEATURES, PROTECT THE FOLLOWING:
 - A. PAVEMENTS TO REMAIN
 - B. EXISTING TREES, REFER TO SPECIAL PROVISIONS FOR MORE INFORMATION
 - C. EXISTING UTILITIES
 - D. EXISTING BUILDING
 - E. EXISTING WELL
2. DEMOLITION, REMOVE THE FOLLOWING:
 - A. BID ITEM 10, PCC FULL DEPTH REPAIR WITH 6" GRANULAR SUBBASE. MATCH ADJACENT TOP OF CURB AND GUTTER ELEVATIONS.
 - B. TREES, BY OWNER.
 - C. EXISTING SIGN WILL BE RELOCATED BY OWNER.
 - D. REMOVE ALL GRANULAR MATERIAL FROM DRIVEWAY AND REPLACE WITH SUITABLE TOPSOIL.
 - E. BID ITEM 11, PCC FULL DEPTH PAVEMENT REPAIR WITH 6" GRANULAR SUBBASE. MATCH ADJACENT TOP OF CURB AND GUTTER ELEVATIONS.
3. PAVEMENTS, PROVIDE THE FOLLOWING:
 - A. PCC DRIVES, 7" DEPTH PAVEMENT
 - B. PCC DRIVES AND PARKING, 6" DEPTH PAVEMENT WITH INTEGRAL CURB.
 - C. PCC 6" STANDARD CURB.
 - D. BID ITEM 14, PCC SIDEWALKS, 5" DEPTH PAVEMENT WITH INTEGRAL CURB. REFER TO DETAIL ON SHEET 9.
 - E. BID ITEM 14, PCC SIDEWALK, 5" DEPTH.
 - F. BID ITEM 14, PCC SIDEWALK, 4" DEPTH.
 - G. PEDESTRIAN RAMP, REFER TO CEDAR RAPIDS STANDARD DETAIL 2700-200 AND 2700-201.
 - H. PEDESTRIAN SIDEWALK TURNING SPACE, REFER TO CEDAR RAPIDS STANDARD DETAIL 2700-200 AND 2700-201.
 - I. SIDEWALK DETECTABLE WARNING PANELS.
 - J. BID ITEM 12, PCC SIDEWALK, 4" DEPTH.
 - K. BID ITEM 13, PCC SIDEWALK, 4" DEPTH.
 - L. HYDROSEEDING FOR DISTURBED AREAS IS INCIDENTAL WITH BID ITEMS 12, 13 AND 16.
4. PAVEMENT MARKINGS, PROVIDE THE FOLLOWING:
 - A. 4" WIDE PAINTED WHITE PARKING STALL LINES.
 - B. WHITE PAINTED STATE OF IOWA APPROVED ACCESSIBLE PARKING SYMBOL
 - C. ACCESSIBLE AISLE, 45° WHITE STRIPING AT 3' ON CENTER SPACING WHERE SHOWN.
 - D. 45° WHITE STRIPING AT 3' ON CENTER SPACING WHERE SHOWN.
5. FENCE, PROVIDE THE FOLLOWING:
 - A. BID ITEM 16, WOOD CEDAR FENCE, FINISHED BOTH SIDES, 6' HEIGHT. REFER TO DETAIL ON SHEET 9.
6. ADD ALTERNATES, PROVIDE THE FOLLOWING:
 - A. ALTERNATE BID ITEM 17, WOOD CEDAR FENCE, FINISHED BOTH SIDES, 6' HEIGHT. REFER TO DETAIL ON SHEET 9.
7. RELOCATION BY OTHERS TO BE COMPLETED PRIOR TO SIDEWALK CONSTRUCTION. IF RELOCATION IS NOT COMPLETE, CONTRACTOR TO COORDINATE WITH UTILITY COMPANY AND/OR THE CITY FOR A REVISED SIDEWALK ALIGNMENT AROUND THE OBSTRUCTION.
8. ADJUST EXISTING UTILITY STRUCTURE TO FINISH GRADE. REPLACE ALL GRATED LIDS WITH SOLID LIDS.

LEGEND

- REMOVE GRANULAR DRIVEWAY
- PCC PAVEMENT REPAIR

HUGHES PARK IMPROVEMENTS - PHASE 1
DIMENSION & GRADING PLAN
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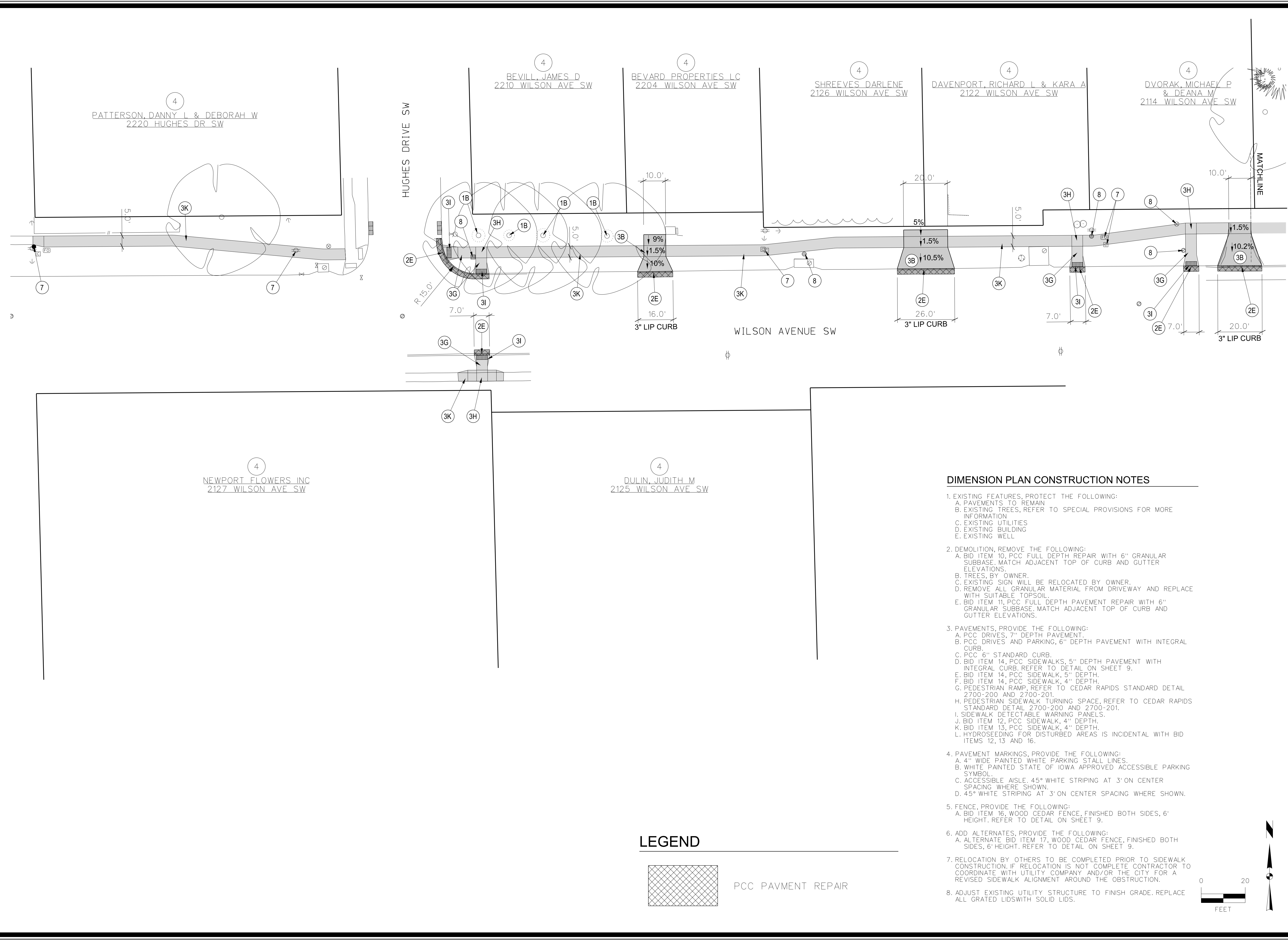
SIDEWALK SUBMITTAL	DATE	BY	5/08/18
MARK REVISION			
Engineer: PDS	Checked By: DFM	Scale: 1"= 30'	Pg:
Technician: LFG	Date: 05/08/18	Field Bk:	

Project No: 118.0163
 2727 S.W. SNYDER BLVD.
 ANKENY, IOWA 50023
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CEDAR RAPIDS, IOWA
SNYDER & ASSOCIATES, INC. I

Sheet 3 of 9

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DIMENSION PLAN CONSTRUCTION NOTES

- EXISTING FEATURES, PROTECT THE FOLLOWING:
 - A. PAVEMENTS TO REMAIN
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 - B. TREES, BY OWNER.
 - C. EXISTING SIGN WILL BE RELOCATED BY OWNER.
 - D. REMOVE ALL GRANULAR MATERIAL FROM DRIVEWAY AND REPLACE WITH SUITABLE TOPSOIL.
 - E. BID ITEM 11, PCC FULL DEPTH PAVEMENT REPAIR WITH 6" GRANULAR SUBBASE, MATCH ADJACENT TOP OF CURB AND GUTTER ELEVATIONS.
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- RELOCATION BY OTHERS TO BE COMPLETED PRIOR TO SIDEWALK CONSTRUCTION, IF RELOCATION IS NOT COMPLETE CONTRACTOR TO COORDINATE WITH UTILITY COMPANY AND/OR THE CITY FOR A REVISED SIDEWALK ALIGNMENT AROUND THE OBSTRUCTION.
- ADJUST EXISTING UTILITY STRUCTURE TO FINISH GRADE, REPLACE ALL GRATED LIDSWITH SOLID LIDS.

LEGEND



HUGHES PARK IMPROVEMENTS - PHASE 1

DIMENSION & GRADING PLAN

SNYDER & ASSOCIATES, INC.



Project No: 118.0163

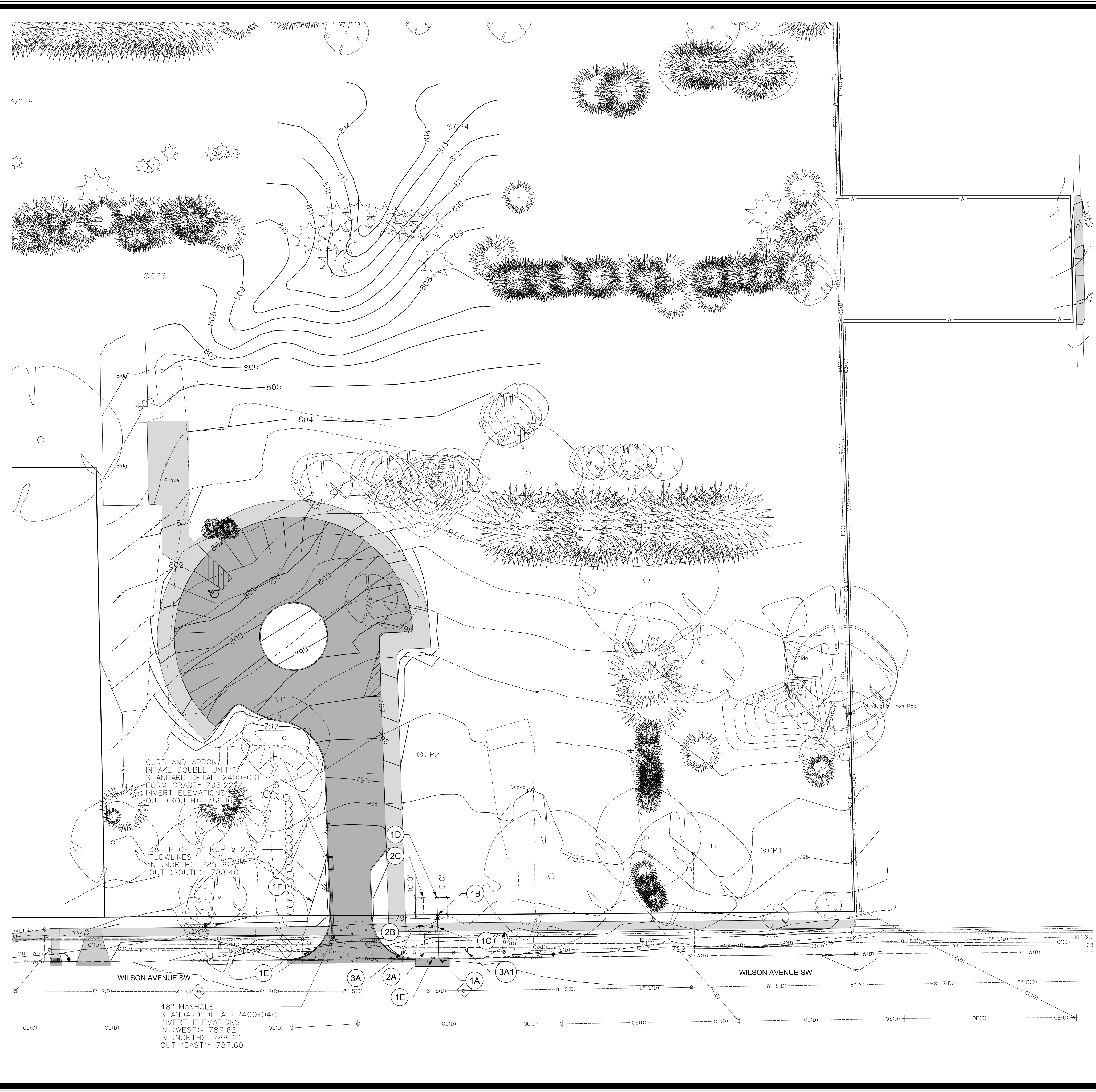
Sheet 4 of 9

CEDAR RAPIDS, IOWA

2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
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MARK	SUBMITTAL	DATE	BY
Engineer:	PDS	Checked By:	DPM
Technician:	LFG	Date:	05/08/18
Field Bk:	118.0163		
Project No:	118.0163		
			Sheet 4 of 9

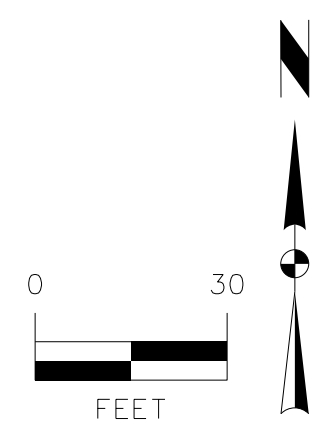
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UTILITY PLAN CONSTRUCTION NOTES

1. WATER SERVICES; PROVIDE THE FOLLOWING:
 - A. CONNECT TO EXISTING 8" WATER MAIN.
 - B. STOP BOX.
 - C. 1" WATER SERVICE LINE.
 - D. INSTALL TEMPORARY CAP OR PLUG AT THE END OF THE SERVICE. INSTALL A 4"x4" WOOD POST PAINTED BLUE AT THE END OF THE SERVICE LINE. POST TO BE 48" HT. ABOVE GRADE.
 - E. ADJUST WATER VALVE TO FINISHED GRADE ELEVATION.
 - F. CITY TO RELOCATE EXISTING PARK SIGN.
2. SANITARY SEWER SERVICES; PROVIDE THE FOLLOWING:
 - A. CONNECT TO EXISTING 10" SANITARY SERVICE LINE.
 - B. 4" SANITARY SEWER SERVICE LINE.
 - C. INSTALL TEMPORARY CAP OR PLUG AT THE END OF THE SERVICE. INSTALL A 4"x4" WOOD POST PAINTED GREEN AT THE END OF THE SERVICE LINE. POST TO BE 48" HT. ABOVE GRADE.
3. TRAFFIC SIGNS:
 - A. REMOVE AND REINSTALL TRAFFIC SIGNS WITH NEW POST, ANCHOR, AND ALL HARDWARE NECESSARY FOR INSTALLATION. INSTALL EXISTING SIGNS AT LOCATION "3A1".
4. THE ESTIMATED PROJECT UNCLASSIFIED EXCAVATION QUANTITY INCLUDES APPROXIMATELY 338 CY OF CUT AND 2,375 CY OF ADJUSTED FILL +30% SHRINKAGE. THE CONTRACTOR SHALL VERIFY ESTIMATED QUANTITIES PRIOR TO BIDDING.
5. HYDROSEEDING OF ALL DISTURBED AREAS IS INCLUDED.

CONTROL POINTS			
POINT#	NORTHING	EASTING	ELEVATION
CP1	3452425.92	5410699.64	796.39
CP2	3452482.22	5410498.33	795.67
CP3	3452762.91	5410337.86	808.66
CP4	3452850.38	5410515.62	812.41
CP5	3452865.06	5410251.59	815.59

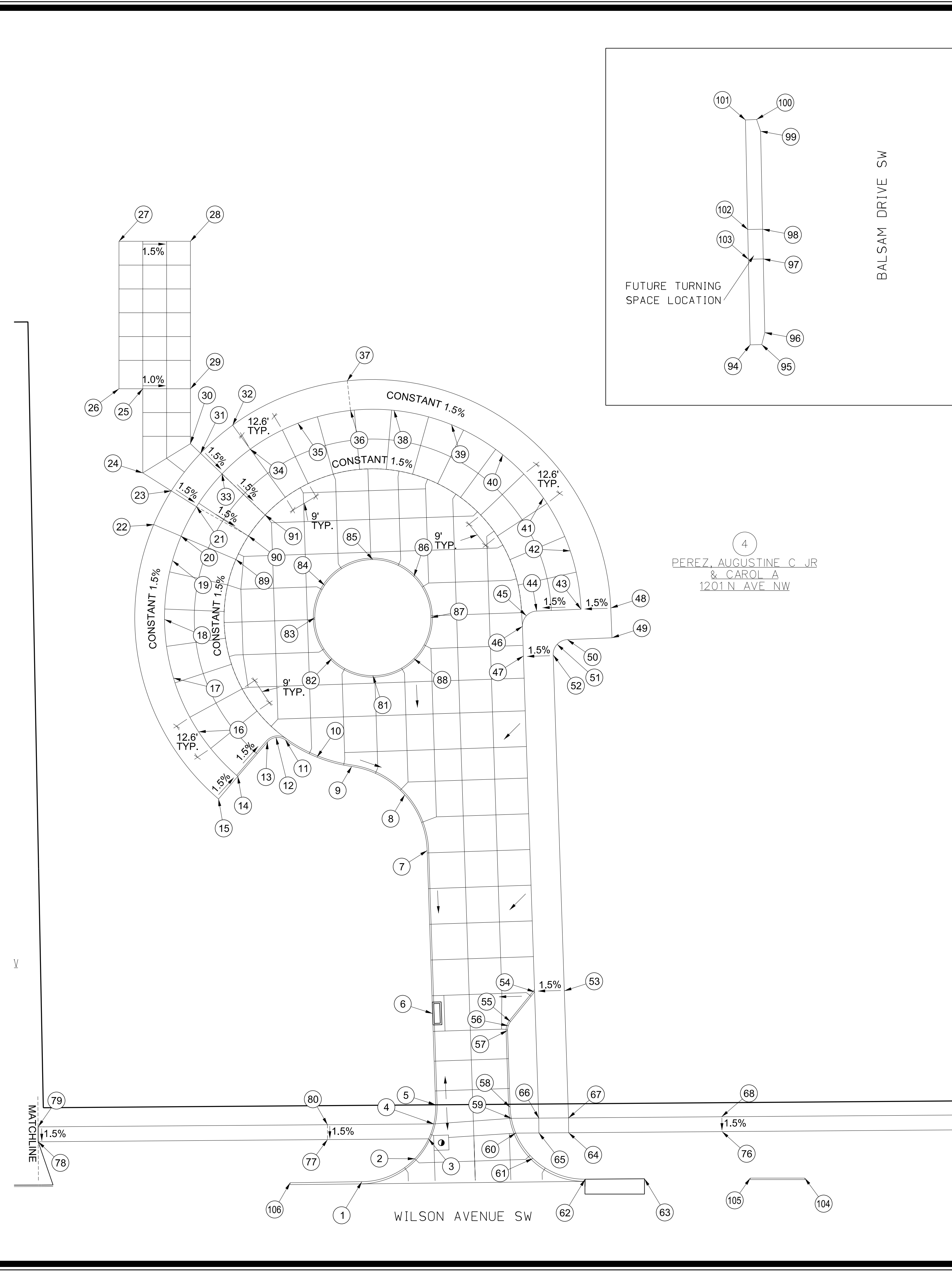


MARK	SIDEWALK SUBMITTAL	5/08/18	PS
Engineer:	REVISION	DATE	BY
Technician:	Checked By:	DPM	Scale: 1"= 30'
	LFG	Date: 05/08/18	Field Bk:
Project No:	118.0163	Sheet 5 of 9	

HUGHES PARK IMPROVEMENTS - PHASE 1
GRADING & UTILITY PLAN
SNYDER & ASSOCIATES, INC.
 CEDAR RAPIDS, IOWA
 2727 S.W. SNYDER BLVD.
 ANKENY, IOWA 50023
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SNYDER & ASSOCIATES
 Project No: 118.0163
 Sheet 5 of 9

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POINT#	NORTHING	EASTING	ELEVATION	NOTE
1	3452361.97	5410420.51	792.52	EX FG
2	3452369.67	5410438.33	792.98	FG
3	3452376.35	5410442.91	793.17	FG
4	3452381.36	5410444.64	793.25	FG
5	3452387.80	5410445.27	793.37	FG
6	3452418.44	5410444.25	793.22	FG
7	3452473.22	5410442.43	795.16	FG
8	3452491.94	5410434.90	796.20	FG
9	3452501.44	5410417.09	797.22	FG
10	3452504.57	5410405.40	797.80	FG
11	3452510.38	5410394.79	798.42	FG
12	3452511.19	5410391.64	798.45	FG
13	3452509.66	5410388.77	798.50	FG
14	3452498.13	5410378.82	798.73	FG
15	3452490.52	5410372.33	799.38	TOS
16	3452513.09	5410365.63	799.43	FG
17	3452531.14	5410357.19	800.13	FG
18	3452550.85	5410354.19	800.83	FG
19	3452570.60	5410356.86	801.52	FG
20	3452578.80	5410359.75	801.83	FG
21	3452588.71	5410364.93	802.00	FG
22	3452582.70	5410350.54	802.48	TOS
23	3452594.04	5410356.47	802.14	TOS
24	3452600.06	5410346.88	802.20	TOS
25	3452628.34	5410346.88	803.75	TOS
26	3452628.34	5410338.88	803.83	TOS
27	3452677.87	5410338.88	804.71	TOS
28	3452677.87	5410362.88	804.35	TOS
29	3452628.34	5410362.88	803.59	TOS
30	3452609.88	5410362.88	802.43	TOS
31	3452606.64	5410366.28	802.14	TOS
32	3452616.12	5410377.09	802.65	TOS
33	3452599.74	5410373.52	802.00	FG
34	3452608.03	5410382.98	802.00	FG
35	3452616.74	5410398.97	802.00	FG
36	3452621.04	5410416.67	802.00	FG
37	3452630.99	5410415.59	802.65	TOS
38	3452621.08	5410431.29	801.49	FG
39	3452616.25	5410450.63	800.79	FG
40	3452606.17	5410467.83	800.10	FG
41	3452591.64	5410481.49	799.40	FG
42	3452573.86	5410490.50	798.70	FG
43	3452554.25	5410494.13	798.00	FG
44	3452553.66	5410479.24	797.78	FG
45	3452552.06	5410475.78	797.74	FG
46	3452548.49	5410474.45	797.70	FG
47	3452538.57	5410474.78	797.83	FG
48	3452554.67	5410504.12	798.65	TOS
49	3452544.67	5410504.52	798.80	TOS
50	3452544.06	5410489.57	798.58	TOS
51	3452542.47	5410486.11	798.53	TOS
52	3452538.90	5410484.77	798.48	TOS
53	3452426.05	5410488.52	794.04	TOS
54	3452425.72	5410478.53	793.43	FG

Note:
All joints for 6" PCC Pavment shall be "C" joints, and "CD" traverse joints for 7" PCC Pavment.
All longitudinal joints for 7" PCC Pavment shall be LT-1 joints. Substitute KT-1 joints for LT-1 joints as necessary for 7" PCC Pavment.
The maximum joint spacing for the 6" PCC pavement shall be 12' and a maximum joint spacing for the 7" PCC Pavment shall be 15'.

POINT#	NORTHING	EASTING	ELEVATION	NOTE
55	3452415.72	5410470.45	793.37	FG
56	3452414.32	5410469.68	793.36	FG
57	3452412.74	5410469.45	793.35	FG
58	3452386.97	5410470.31	793.41	FG
59	3452383.25	5410470.71	793.35	FG
60	3452378.26	5410472.19	793.28	FG
61	3452369.76	5410477.98	792.87	FG
62	3452362.80	5410495.49	792.14	FG
63	3452362.93	5410515.45	792.05	EX FG
64	3452378.39	5410490.10	793.29	TOS
65	3452378.32	5410480.10	793.27	TOS
66	3452383.32	5410479.93	793.35	TOS
67	3452383.39	5410489.94	793.37	TOS
68	3452383.77	5410541.36	793.40	TOS
69	3452384.76	5410674.94	793.50	TOS
70	3452384.81	5410680.94	793.50	TOS
71	3452385.34	5410753.31	792.87	EX
72	3452381.49	5410753.39	792.54	EX
73	3452380.31	5410749.35	792.85	TOS
74	3452379.81	5410681.10	793.43	TOS
75	3452379.76	5410674.77	793.42	TOS
76	3452378.77	5410541.53	793.33	TOS
77	3452376.09	5410408.92	793.63	TOS
78	3452375.38	5410311.73	794.84	TOS
79	3452380.38	5410311.70	794.92	TOS
80	3452381.10	5410408.91	793.70	TOS
81	3452531.94	5410424.18	798.07	FG
82	3452537.65	5410410.40	798.77	FG
83	3452551.44	5410404.68	799.65	FG
84	3452562.28	5410407.97	800.12	FG
85	3452570.94	5410424.18	799.98	FG
86	3452565.23	5410437.97	799.33	FG
87	3452551.44	5410443.68	798.50	FG
88	3452537.65	5410437.97	797.95	FG
89	3452570.98	5410378.16	801.53	FG
90	3452578.90	5410382.40	801.70	FG
91	3452585.94	5410387.99	801.70	FG
92	3452385.00	5410706.73	793.52	TOS
93	3452380.00	5410706.90	793.44	TOS
94	3452734.32	5410883.45	802.48	EX
95	3452734.39	5410887.33	802.41	EX
96	3452738.43	5410888.36	802.56	TOS
97	3452763.17	5410887.84	803.49	TOS
98	3452773.16	5410887.63	803.69	TOS
99	3452806.09	5410886.93	804.98	TOS
100	3452810.03	5410885.61	805.10	EX
101	3452809.87	5410881.85	805.20	EX
102	3452773.06	5410882.63	803.77	TOS
103	3452763.06	5410882.84	803.61	TOS
104	3452363.17	5410569.33	791.71	EX
105	3452363.15	5410550.98	791.82	EX
106	3452361.60	5410396.39	792.59	EX

Note: All Elevations are top of slab unless otherwise noted.
EX= Match Existing
FG= Form Grade
TOS= Top of Sidewalk

HUGHES PARK IMPROVEMENTS - PHASE 1

JOINTS & ELEVATIONS PLAN

CEDAR RAPIDS, IOWA

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com



Project No: 118.0163

Sheet 6 of 9

MARK	DATE	BY
ENGINEER	DATE	BY
TECHNICIAN	DATE	BY
PROJECT NO.	118.0163	
SHEET NO.	6 OF 9	

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POLLUTION PREVENTION PLAN

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

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

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

I. ROLES AND RESPONSIBILITIES

- A. Designer:
 - 1. Prepares Base PPP included in the project plan.
 - 2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
 - 3. Signature authority on the Base PPP and NOI.
- B. Contractor/Subcontractor:
 - 1. Affected contractors/subcontractors are co-permittees with the IDOT and will sign a certification statement adhering to the requirements of the NPDES permit and this PPP plan. Affected contractors/subcontractors are anyone responsible for sediment or erosion controls or involved in land disturbing activities. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
 - 2. Submit an Erosion Control Implementation Plan (ECIP) according to Specifications Section 2602 and any additional plan notes.
 - 3. Install and maintain appropriate controls.
 - 4. Supervise and implement good housekeeping practices.
 - 5. Conduct joint required inspections of the site with inspection staff.
 - 6. Comply with training and certification requirements of Specifications Section 2602.
 - 7. Signature authority on Co-Permittee Certification Statements and storm water inspection reports.
- C. RCE/Inspector:
 - 1. Update PPP whenever there is a change in design, construction, operation or maintenance, which has a significant effect on the discharge of pollutants from the project.
 - 2. Maintain an up-to-date record that identifies contractors and subcontractors as co-permittees.
 - 3. Make these plans available to the DNR upon their request.
 - 4. Conduct joint required inspections of the site with the contractor/subcontractor.
 - 5. Complete an inspection report after each inspection.
 - 6. Signature authority on storm water inspection reports and Notice of Discontinuation (NOD).

II. PROJECT SITE DESCRIPTION

- A. This Pollution Prevention Plan (PPP) is for the construction of a Parking Lot for Hughes Park.
- B. This PPP covers approximately 8.24 acres with an estimated 3.24 acres being disturbed. The portion of the PPP covered by this contract has 3.24 acres disturbed.
- C. The PPP is located in an area of 1 type of soil association (Dinsdale-urban land Complex with slopes 2-5% & 5-9%) The estimated weighted average runoff coefficient number for this PPP after completion will be 0.68
- D. Storm Water Site Map - Multiple sources of information comprise the base storm water site map including:
 - 1. Drainage patterns - Plan and Profile sheets and Situation plans.
 - 2. Proposed Slopes - Cross Sections.
 - 3. Areas of Soil Disturbance - construction limits shown on Plan and Profile sheets.
 - 4. Location of Structural Controls - construction limits shown on Plan and Profile sheets.
 - 5. Locations of Non-structural Controls - construction limits shown on Plan and Profile sheets.
 - 6. Locations of Stabilization Practices - generally within construction limits shown on Plan and Profile sheets.
 - 7. Surface Waters (including wetlands) - Project Location Map and Plan and Profile sheets.
 - 8. Locations where storm water is discharged - Plan and Profile sheets.
- E. The base site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries.
- F. Runoff from this work will flow into storm sewer.

III. CONTROLS

- A. The contractor's ECIP specified in Article 2602.03 for accomplishment of storm water controls should clearly describe the intended sequence of major activities and for each activity define the control measure and the timing during the construction process that the measure will be implemented.
- B. Preserve vegetation in areas not needed for construction.
- C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water monitoring inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B.
 - 1. EROSION AND SEDIMENT CONTROLS
 - a. Stabilization Practices
 - 1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
 - 2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
 - a) Permanently ceased on any portion of the site, or
 - b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
 - 3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
 - 4) Permanent and Temporary Stabilization practices to be used for this project are located in the Plan Sheets Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation.

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POLLUTION PREVENTION PLAN

- 5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
- 6) Preservation of topsoil: Information may be found in the General Notes located in the plans sheets.

- b. Structural Practices
 - 1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.
 - 2) Structural practices to be used for this project are located in the plan sheets.

- c. Storm Water Management
 - 1) Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the plan sheets. The installation of these devices may be subject to Section 404 of the Clean Water Act.

2. OTHER CONTROLS

- a. Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive laws, rules or regulations shall apply.
 - 1) Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
 - 2) Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
 - 3) Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
 - 4) Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
 - 5) Spill Prevention and Control - Implement procedures to contain and clean-up spills and prevent material discharges to the storm drain system and waters of the state.
 - 6) Concrete Residuals and Washout Wastes - Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
 - 7) Concrete Grooving/Grinding Slurry - Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
 - 8) Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water.
 - 9) Litter Management - Ensure employees properly dispose of litter.
 - 10) Dewatering - Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.

3. APPROVED STATE OR LOCAL PLANS

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

IV. MAINTENANCE PROCEDURES

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

V. INSPECTION REQUIREMENTS

- A. Inspections shall be made jointly by the contractor and the contracting authority at least once every seven calendar days. Storm water monitoring inspections will include:
 - 1. Date of the inspection.
 - 2. Summary of the scope of the inspection.
 - 3. Name and qualifications of the personnel making the inspection.
 - 5. Review erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
 - 6. Major observations related to the implementation of the PPP.
 - 7. Identify corrective actions required to maintain or modify erosion and sediment control measures.
- B. Include storm water monitoring inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection.

VI. NON-STORM WATER DISCHARGES

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

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

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

VIII. DEFINITIONS

- A. Base PPP - Initial Pollution Prevention Plan.
- B. Amended PPP - May include Plan Revisions or Contract Modifications for new items, storm water monitoring inspection reports, and fieldbook entries made by the inspector.
- C. IDR - Inspector's Daily Report - this contains the inspector's daily diary and bid item postings.
- D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
- E. Signature Authority - Representative from Designer, Contractor/Subcontractor, or RCE/Inspector authorized to sign various storm water documents.

MARK	DATE	BY
Engineer:	PDS	Checked By: DPM
Scale:	1"= 20'	
Field Bk:	Date:	05/08/18
Project No:	118.0163	
Sheet 8 of 9		

HUGHES PARK IMPROVEMENTS - PHASE 1
PPP & DETAILS

CEDAR RAPIDS, IOWA

SNYDER & ASSOCIATES, INC.

2727 S.W. SNYDER BLVD.
ANKENY, IOWA 50023
515-964-2020 | www.snyder-associates.com



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POLLUTION PREVENTION PLAN

CERTIFICATION STATEMENT

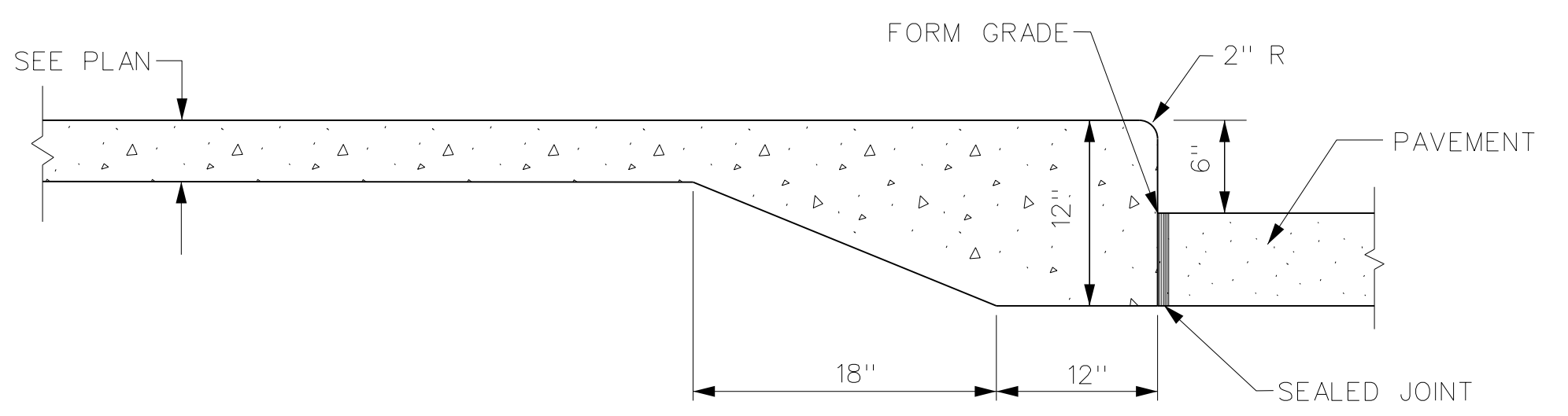
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage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

Patrick Schwickerath 05/08/2018
Signature

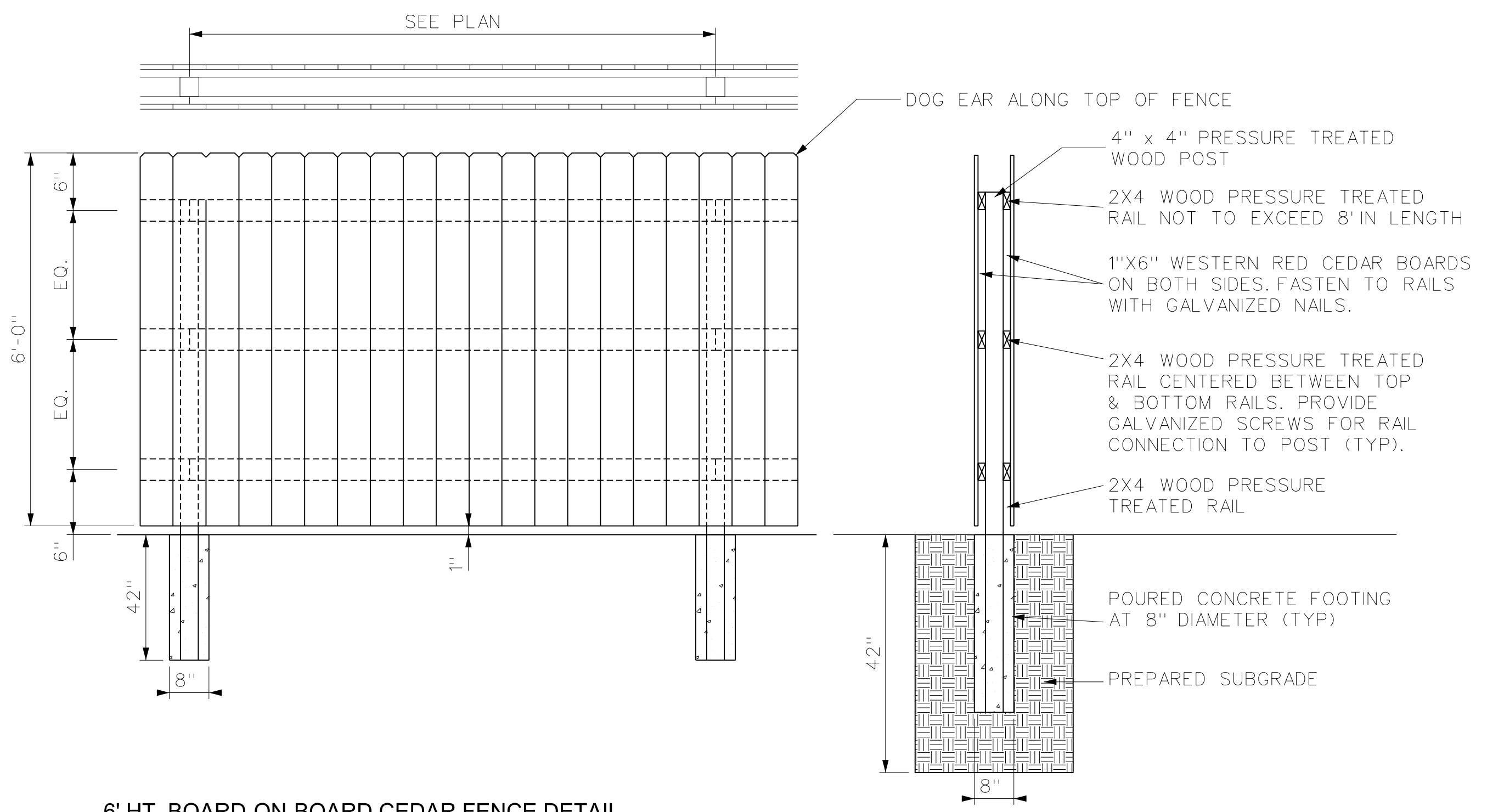
Patrick Schwickerath P.E.

Signature

Printed or Typed Name



INTEGRAL WALK/CURB DETAIL
NO SCALE



6' HT. BOARD-ON-BOARD CEDAR FENCE DETAIL
NO SCALE

MARK	REVISION	DATE	BY
SIDEWALK	SUBMITTAL	5/08/18	PS
Engineer:	PDS	Checked By:	DJM
Technician:	LFG	Date:	05/08/18
Field Bk:			

Project No: 118.0163
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HUGHES PARK IMPROVEMENTS - PHASE 1

PPP & DETAILS
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