

**CITY OF WEST DES MOINES  
PLAN AND ZONING COMMISSION COMMUNICATION**

**Meeting Date:** June 22, 2020

**Item:** The Wilder Pines Plat 1, 1000 and 1100 S. 60<sup>th</sup> Street – Subdivide the Property into Eleven Lots for Single Family Development – Pines, LLC. – PP-004630-2020

**Requested Action:** Recommend Approval of Preliminary Plat

**Case Advisor:** Kara Tragesser, AICP 

**Applicant's Request:** The applicant and owner, Pines, LLC., represented by Jared Murray of Civil Design Advantage, is requesting approval of a Preliminary Plat for approximately 9.74 acres located at 1000 and 1100 S. 60<sup>th</sup> Street. The applicant proposes to subdivide the property into 11 lots for single family development (see Attachment B – Location Map and Attachment C – Preliminary Plat).

**History:** The properties have had one single family residential dwelling each. On June 22, 2020, the Plan and Zoning Commission considered requests for a Comprehensive Plan Land Use amendment and the establishment of The Wilder Pines Planned Unit Development.

**City Council Subcommittee:** This development was presented to the Development and Planning City Council Subcommittee on February 17, 2019. The Subcommittee was supportive of the preliminary plat.

**Staff Review and Comment:** This request was distributed to other City departments and other agencies for their review and comment. There are no outstanding issues. Of note:

*PUEs in Front Yards:* City Code provides that public utility easements (PUE) be located within the rear and side yards. The Code also provides that where, by determination of the City Council, certain conditions exist to make the location of the easements unreasonable or impractical, these utilities may be placed in the front yard, so long as they don't interfere with any other existing or proposed utility. The applicant is attempting to conserve trees and is locating a conservation easement along the east boundary of the plat. Due to the desire to save trees the applicant is requesting to allow the PUEs in the front yard.

*Setbacks and density:* The density of the development is capped at 11 lots through The Wilder Pines Planned Unit Development that is under review by the Plan & Zoning Commission on June 22, 2020. The density calculation results in a density of 1.12 dwelling units per acre. The lot size ranges from .41 acres to 1.54 acres. Since all lots were not able to meet the minimum 40,000 sq. ft. lot size, the Residential Estate zoning district could not be applied. The setbacks have been applied for the Single Family Residential (R-1) zoning. These development standards are provided for in the planned unit development and are shown on the preliminary plat.

**Comprehensive Plan Consistency:** The project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan and the land use map of the Comprehensive Plan.

**Findings:** This proposed project was distributed to various city departments for review and comment. Based upon that review, the following findings have been made on the proposed project:

1. The proposed development and use is consistent with the West Des Moines Comprehensive Plan in that the project has been reviewed for consistency with the Comprehensive Plan. Based upon that review, a finding has been made that the proposed project is consistent with the Comprehensive Plan in that the project is consistent with all of the goals and policies of the Comprehensive Plan.
2. The proposed development and use do assure compatibility of property uses within the zone and general area in that this project was reviewed by various City Departments for compliance with the Zoning Ordinance.
3. All applicable standards and conditions have been imposed which protects the public health, safety, and welfare in that this project was reviewed by various City Departments and public agencies for compliance with the various state and local regulations. Based upon that review a finding is made that the project has been adequately conditioned to protect the health, welfare, and safety of the community.
4. There is adequate on-site and off-site public infrastructure to support the proposed development in that this project was reviewed by various public agencies and City Departments and public utilities to ensure that either the petitioner will construct or the project has been conditioned to construct adequate public infrastructure to serve the development.
5. The proposed development and use have met the requirements contained in the City Code in that this project was reviewed by various City Departments and the project has complied with or has been conditioned to comply with all City Code requirements.
6. The proposed development and use is in keeping with the scale and nature of the surrounding neighborhood in that the proposed project is consistent with the zoning designation and Comprehensive Plan which designates this site as suitable for development such as that proposed by this project.

**Staff Recommendation And Conditions Of Approval:** Based upon the preceding review and a finding of consistency with the goals and policies of the Comprehensive Plan, staff recommends the Plan and Zoning Commission adopt a resolution recommending the City Council approve the Preliminary Plat to create 11 lots for single family development, subject to the applicant meeting all City Code requirements and the following:

1. The applicant providing final drawings of the preliminary plat which address staff comments, prior to the construction of any improvements on the site.
2. That the City Council allow public utility easements in front yards.
3. That the proposed Comprehensive Plan Land Use Amendment and adoption of the Wilder Pines planned unit development are complete before the preliminary plat is released for construction.

**Property Owner:** Pines, LLC  
9550 Hickman Road, Suite 101  
Clive IA 5325m

**Applicant:** Same

**Applicant's Representatives:** Jared Murray  
Civil Design Advantage

3405 SE Crossroads Dr. Suite G  
Grimes IA 50111  
515-369-4400  
jaredm@cda-eng.com

**ATTACHMENTS:**

- Attachment A - Plan and Zoning Commission Resolution
- Exhibit A – Conditions of Approval
- Attachment B - Location Map
- Attachment C - Preliminary Plat (illustrative only. Official copy will be held at City Hall)

Attachment A

RESOLUTION NO. PZC-040

**A RESOLUTION OF THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES, RECOMMENDING TO THE CITY COUNCIL THAT IT APPROVE A PRELIMINARY PLAT TO SUBDIVIDE PROPERTY INTO ELEVEN LOTS FOR SINGLE FAMILY DEVELOPMENT**

**WHEREAS**, pursuant to the provisions of Title 10, Chapter 1 et seq, of the West Des Moines Municipal Code, the applicant, Pines, LLC, has requested approval for a Preliminary Plat (PP-004630-2020) to create eleven lots for single family development at 1000 and 1100 S. 60<sup>th</sup> Street; and

**WHEREAS**, studies and investigations were made and staff reports and recommendations were submitted which is made a part of this record and herein incorporated by reference; and

**WHEREAS**, on June 22, 2020, this Commission held a duly-noticed public meeting to consider the application for a Preliminary Plat (PP-004630-2020).

**NOW, THEREFORE, THE PLAN AND ZONING COMMISSION OF THE CITY OF WEST DES MOINES DOES RESOLVE AS FOLLOWS:**

**SECTION 1.** The findings, for approval, in the staff report or as amended orally at the Plan and Zoning Commission meeting are adopted.

**SECTION 2.** The Preliminary Plat (PP-004630-2020) to subdivide the property into eleven lots for single family development is recommended to the City Council for approval, subject to compliance with all the conditions in the staff report including conditions added at the meeting, and attached hereto as Exhibit "A." Violation of any such conditions shall be grounds for revocation of the permit, as well as any other remedy which is available to the City.

PASSED AND ADOPTED on June 22, 2020.

\_\_\_\_\_  
Erica Andersen, Chair  
Plan and Zoning Commission

ATTEST:

\_\_\_\_\_  
Recording Secretary

I HEREBY CERTIFY that the foregoing resolution was duly adopted by the Plan and Zoning Commission of the City of West Des Moines, Iowa, at a regular meeting held on June 22, 2020, by the following vote:

AYES:  
NAYS:  
ABSTENTIONS:  
ABSENT:

ATTEST:

---

Recording Secretary

**Exhibit A**  
**CONDITIONS OF APPROVAL**

1. The applicant providing final drawings of the preliminary plat which address staff comments, prior to the construction of any improvements on the site.
2. That the City Council allow public utility easements in front yards.
3. That the proposed Comprehensive Plan Land Use Amendment and adoption of the Wilder Pines planned unit development are complete before the preliminary plats is released for construction.



# The Pines 1000 and 1100 S. 60th Street



1:8,000

1,333.3 Feet

666.67

0

1,333.3

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
© City of West Des Moines, Iowa

Disclaimer: The City of West Des Moines makes no warranties regarding the accuracy or completeness of the data provided herein.  
THIS MAP IS NOT TO BE USED FOR NAVIGATION

### Legend

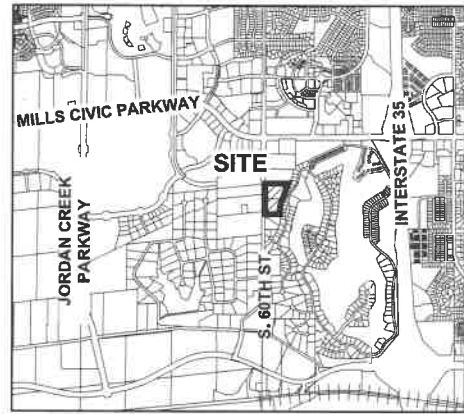
- Corporate Limits
- Parcels



# PRELIMINARY PLAT AND SITE PLAN FOR: WILDER PINES PLAT 1 WEST DES MOINES, IOWA

ATTACHMENT C

**VICINITY MAP**  
NOT TO SCALE



WEST DES MOINES, IOWA

**OWNER / APPLICANT**

PINES, LLC  
 CONTACT: TOBY TORSTENSON  
 9550 HICKMAN RD. SUITE 101  
 CLIVE, IA 50325  
 (515)-208-8325

**ENGINEER**

CIVIL DESIGN ADVANTAGE  
 CONTACT: JARED MURRAY  
 3405 SE CROSSROADS DRIVE, SUITE G  
 GRIMES, IOWA 50111  
 PH. (515) 369-4400  
 FX. (515) 369-4410

**SURVEYOR**

CIVIL DESIGN ADVANTAGE, LLC  
 CONTACT: MIKE BROONER  
 3405 SE CROSSROADS DRIVE, SUITE G  
 GRIMES, IOWA 50111  
 PH. (515) 369-4400  
 FX. (515) 369-4410

**DATE OF SURVEY**

JANUARY 10, 2020

**PROJECT ADDRESS**

1000 AND 1100 W. 60TH STREET

**SUBMITTAL DATES**

FIRST SUBMITTAL: 02/10/2020  
 SECOND SUBMITTAL: 03/06/2020  
 THIRD SUBMITTAL: 05/07/2020

**ZONING**

EXISTING = RE-1A: RESIDENTIAL ESTATE  
 PROPOSED = PUD W/ UNDERLYING R-1

**COMPREHENSIVE PLAN LAND USE**

EXISTING = LD: LOW DENSITY RESIDENTIAL  
 PROPOSED = PUD: SINGLE FAMILY RESIDENTIAL

**DEVELOPMENT SUMMARY**

AREA: 9.74 ACRES (424,187 SF)

**SETBACKS:**  
 GARAGE SETBACK = 25' FROM SIDEWALK  
 BUILDING SETBACK = 15' FROM SIDEWALK  
 REAR SETBACK = 20' FROM PRESERVATION OR LANDSCAPE BUFFER EASEMENT  
 SIDE SETBACK = 7' FROM PROPERTY LINE  
 LOT 4 NORTH SETBACK = 7' FROM PRESERVATION EASEMENT

**DENSITY**  
 11 LOTS/9.74 AC = 1.13 LOTS/ AC (5.8 MAX)

**CONSTRUCTION SCHEDULE**

ANTICIPATED START DATE = SPRING 2020  
 ANTICIPATED FINISH DATE = SUMMER 2020

**BENCHMARKS**

WEST DES MOINES BM#124 @ INTERSECTION OF JORDAN CREEK PARKWAY AND MILLS CIVIC PARKWAY, 169 FEET +/- EAST OF THE WEST END OF MEDIAN IN THE CENTER OF 6 FEET GRASS MEDIAN IN MILLS CIVIC PARKWAY, 17 FEET +/- WEST OF THE ANGLE POINT IN THE CURB FOR THE WEST BOUND TURN LANE. ELEVATION=203.65

BURY BOLT ON NE CORNER OF HYDRANT ON EAST SIDE OF SOUTH 60TH STREET, FIRST HYDRANT SOUTH OF MILLS CIVIC PARKWAY. ELEVATION=181.35

BURY BOLT ON SE CORNER OF HYDRANT ON EAST SIDE OF SOUTH 60TH STREET, EAST OF MIDAMERICAN SUB STATION, THIRD HYDRANT SOUTH OF MILLS CIVIC PARKWAY. ELEVATION=148.24

**UTILITY WARNING**

ANY UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY AND RECORDS OBTAINED BY THIS SURVEYOR. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN COMPRISE ALL THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION SHOWN.

**LEGAL DESCRIPTION**

LOTS 2 AND 3 OF WESTVIEW COUNTRY ESTATES REPLAT, AN OFFICIAL PLAT IN THE CITY OF WEST DES MOINES, POLK COUNTY, IOWA, EXCEPT THE WEST 27.00 FEET THEREOF.

**INDEX OF SHEETS**

NO.	DESCRIPTION
1.0	COVER SHEET
2.0	TYPICAL SECTIONS AND DETAILS
3.0	TOPOGRAPHIC SURVEY AND DEMOLITION PLAN
4.0	DIMENSION AND HYDRANT COVERAGE PLAN
5.0-5.1	GRADING PLAN
6.0-6.1	EROSION AND SEDIMENT CONTROL PLAN
7.0-7.2	PAVEMENT AND STORM SEWER PLAN AND PROFILE
8.0	LANDSCAPE PLAN

**NOTES**

- EROSION CONTROL MEASURES WILL BE INSTALLED AND MONITORED BY OTHERS.
- PRIVATE UTILITIES TO BE INSTALLED PER SUDAS SPECIFICATIONS.
- ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS AND DSM METRO DESIGN STANDARDS.
- CONTACT WEST DES MOINES WATER WORKS AT LEAST ONE WEEK PRIOR TO CONSTRUCTION.
- ALL SIDEWALK CROSS SLOPES SHALL NOT EXCEED 1.5%.
- CONSTRUCTION CANNOT BEGIN ON THE HOMES UNTIL A FINAL PLAT HAS BEEN REVIEWED AND APPROVED BY THE CITY COUNCIL.
- ALL LONGITUDINAL SIDEWALK SLOPES SHALL NOT EXCEED 5%.
- PRIVATE STREETS AND UTILITIES SHALL BE MAINTAINED BY THE OWNER, TO INCLUDE:
  - DETENTION POND AND APPURTENANCES
  - PRIVATE STORM SEWER
  - PRIVATE WATER MAIN AND SERVICES
  - ALL INTERNAL CIRCULATION ROADS
- PRIOR TO CONSTRUCTION OF ANY PUBLIC IMPROVEMENTS ASSOCIATED WITH THIS SUBDIVISION, CONSTRUCTION PLANS FOR SAID IMPROVEMENTS NEED TO BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE WDM ENGINEERING SERVICES 222-3475 TO SCHEDULE ANY REQUIRED INSPECTIONS. IT IS IMPORTANT TO NOTE CITY APPROVAL OF THIS PLAN IS SUBJECT TO THE APPLICANT OBTAINING ALL NECESSARY EASEMENTS/AGREEMENTS AND APPLICABLE PERMITS.
- SIGNS, OVER STORY TREES, CONIFEROUS TREES, PRIVATE STREETLIGHT ETC. ARE NOT ALLOWED IN THE PUBLIC EASEMENTS.
- THE GATED COMMUNITY WILL BE REQUIRED TO PROVIDE 24/7/365 ACCESS TO WDMWW CREWS. THIS CAN BE ACCOMPLISHED BY PROVIDING A KEY, KEY CARD, AND OR KEYPAD CODE.
- WEST DES MOINES WATER WORKS RECOMMENDS AGAINST PLANTING TREES AND OTHER LANDSCAPING OVER PRIVATE WATER MAIN INFRASTRUCTURE.
- WALLS CONSTRUCTED AT FOUR FEET IN HEIGHT OR OVER REQUIRE ENGINEERED DRAWINGS AND A BUILDING PERMIT SEPARATE FROM THE RESIDENTIAL BUILDING PERMIT.

**GENERAL LEGEND**

PROPOSED	EXISTING
PROPERTY BOUNDARY	SANITARY MANHOLE
SECTION LINE	WATER VALVE BOX
CENTER LINE	FIRE HYDRANT
RIGHT OF WAY	WATER CURB STOP
BUILDING SETBACK	WELL
PERMANENT EASEMENT	STORM SEWER MANHOLE
TEMPORARY EASEMENT	STORM SEWER SINGLE INTAKE
TYPE SW-501 STORM INTAKE	STORM SEWER DOUBLE INTAKE
TYPE SW-502 STORM INTAKE	FLARED END SECTION
TYPE SW-503 STORM INTAKE	DECIDUOUS TREE
TYPE SW-505 STORM INTAKE	CONIFEROUS TREE
TYPE SW-506 STORM INTAKE	DECIDUOUS SHRUB
TYPE SW-512 STORM INTAKE	CONIFEROUS SHRUB
TYPE SW-513 STORM INTAKE	ELECTRIC POWER POLE
TYPE SW-401 STORM MANHOLE	GUY ANCHOR
TYPE SW-402 STORM MANHOLE	STREET LIGHT
FLARED END SECTION	POWER POLE W/ TRANSFORMER
TYPE SW-301 SANITARY MANHOLE	UTILITY POLE W/ LIGHT
STORM/SANITARY CLEANOUT	ELECTRIC BOX
WATER VALVE	ELECTRIC TRANSFORMER
FIRE HYDRANT ASSEMBLY	ELECTRIC MANHOLE OR VAULT
SIGN	TRAFFIC SIGN
DETECTABLE WARNING PANEL	TELEPHONE JUNCTION BOX
WATER CURB STOP	TELEPHONE MANHOLE/VAULT
SANITARY SEWER	TELEPHONE POLE
SANITARY SERVICE	GAS VALVE BOX
STORM SEWER	CABLE TV JUNCTION BOX
STORM SERVICE	CABLE TV MANHOLE/VAULT
WATERMAIN WITH SIZE	MAIL BOX
WATER SERVICE	BENCHMARK
SAWCUT (FULL DEPTH)	SOIL BORING
SILT FENCE	UNDERGROUND TV CABLE
USE AS CONSTRUCTED	GAS MAIN
MINIMUM PROTECTION ELEVATION	FIBER OPTIC
	UNDERGROUND TELEPHONE
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	FIELD TILE
	SANITARY SEWER W/ SIZE
	STORM SEWER W/ SIZE
	WATER MAIN W/ SIZE

THIS PROJECT REQUIRES AN IOWA NPDES PERMIT #2 AND CITY OF WEST DES MOINES GRADING PERMIT. CIVIL DESIGN ADVANTAGE WILL PROVIDE THE PERMITS AND THE INITIAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE CONTRACTORS USE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING THE SWPPP THROUGHOUT CONSTRUCTION AND MEETING LOCAL, STATE AND FEDERAL REQUIREMENTS.

ALL CONSTRUCTION MATERIALS, DUMPSTERS, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC R.O.W.

THE MOST RECENT EDITION OF THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS, THE 1993 DES MOINES METRO DESIGN STANDARDS WITH THE WEST DES MOINES ADDENDA, AND THE WEST DES MOINES WATER WORKS GENERAL SUPPLEMENTAL SPECIFICATIONS FOR WATER INFRASTRUCTURE SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.

THIS DESIGN SPECIFICALLY PREPARED FOR USE AT THE LOCATION SHOWN. USE IN ANY OTHER MANNER EXCEEDS THE INTENDED PURPOSE OF THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS.

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.

**PRELIMINARY**

FOR CONSTRUCTION

DATE: \_\_\_\_\_

LICENSE NUMBER 23496

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021

PAGES OR SHEETS COVERED BY THIS SEAL:

SHEETS 1.0-7.2

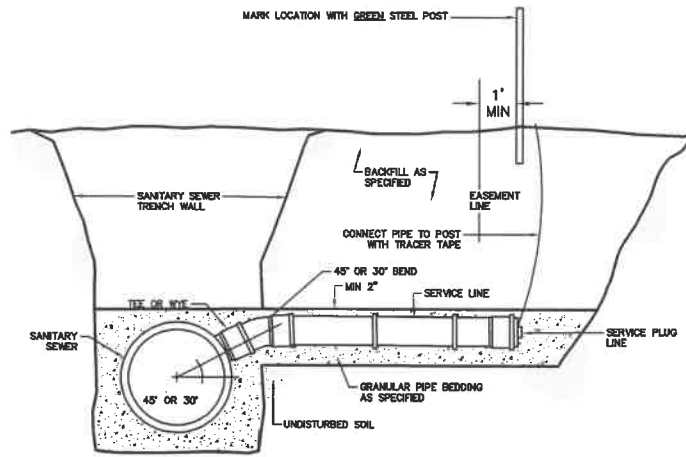
1-800-292-8989  
www.iowaonecall.com

**CIVIL DESIGN ADVANTAGE**

3405 SE CROSSROADS DR. SUITE G, GRIMES, IOWA 50111  
PH: (515) 369-4400 Fax: (515) 369-4410  
PROJECT NO. 1909.460

WILDER PINES PLAT 1

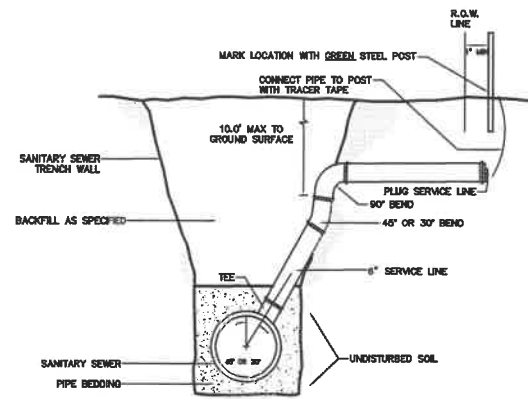
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NOTE:  
1. USE FOR SERVICE CONNECTION WHEN SANITARY SEWER DEPTH IS 12.0' OR LESS OR WHEN REQUIRED TO SERVE ADJACENT PROPERTY.

**SANITARY SEWER SERVICE**

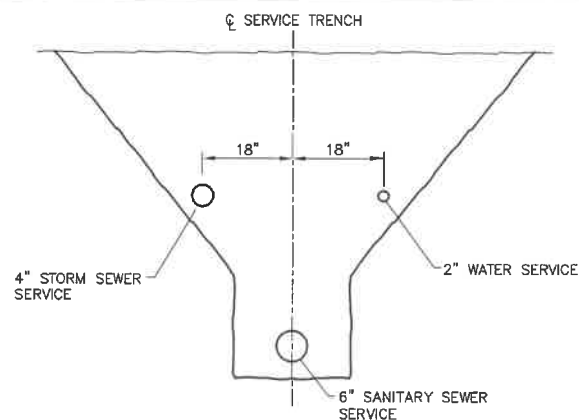
NOT TO SCALE  
CITY OF WEST DES MOINES DETAIL 4.5



NOTE:  
1. USE FOR SERVICE CONNECTION WHEN SANITARY SEWER DEPTH IS 12.0' OR UNLESS ADDITIONAL DEPTH IS NECESSARY TO SERVE ADJACENT PROPERTY.

**SANITARY SEWER SERVICE RISER**

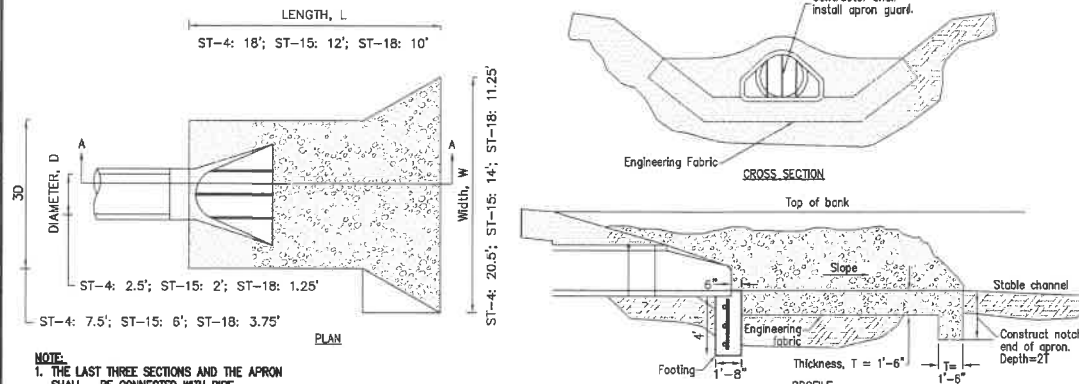
NOT TO SCALE  
CITY OF WEST DES MOINES DETAIL 4.6



NOTE:  
EXTEND SANITARY SERVICES 15 FOOT BEYOND THE BACK OF CURB. WATER AND STORM SEWER SERVICES SHALL STOP 5 FEET PAST THE 4" SIDEWALK. MARK ENDS OF SERVICES WITH STEEL POSTS. CONTRACTOR SHALL COORDINATE ALL SERVICE LINE CROSSINGS WITH MAIN UTILITIES.

**TYPICAL SERVICE INSTALLATION DETAILS**

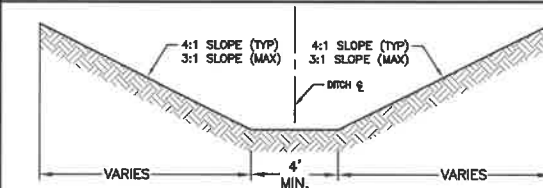
NOT TO SCALE



NOTE:  
1. THE LAST THREE SECTIONS AND THE APRON SHALL BE CONNECTED WITH PIPE CONNECTIONS PER SECTION 4030.302C OF SUDAS.  
2. INSTALL A 3' CLAY WATERSTOP AT ALL STORM SEWER OUTLETS.

**ROCK APRON FOR PIPE OUTLET**

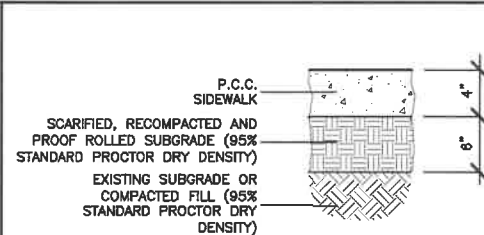
NOT TO SCALE



**TYPICAL SWALE DETAIL**

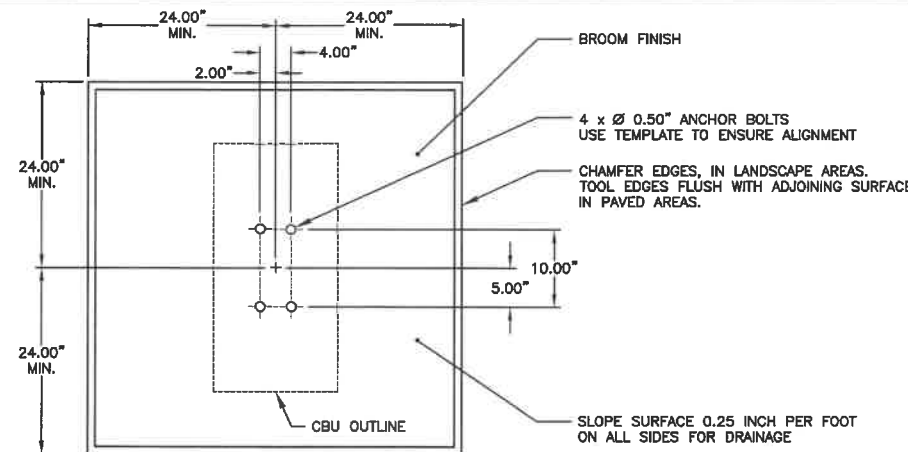
NOT TO SCALE

NOTE:  
SEE SWPPP FOR EROSION CONTROLS AND STABILIZATION PRIOR TO SEEDING. SEED WITH TYPE 4 MIX (SUDAS).



**P.C.C. SIDEWALK DETAIL**

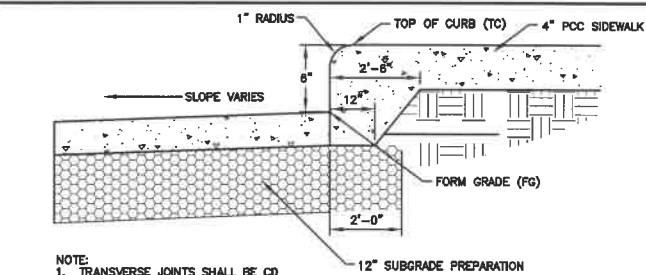
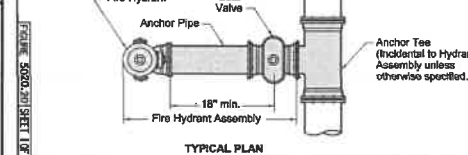
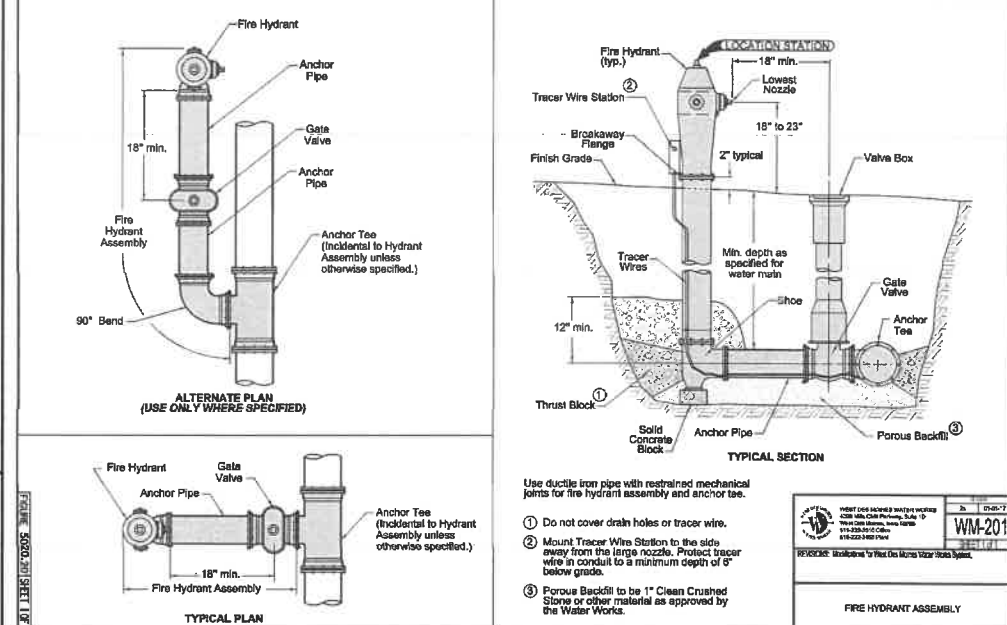
NOT TO SCALE



**MAILBOX CLUSTER PAD DETAIL**

NOT TO SCALE

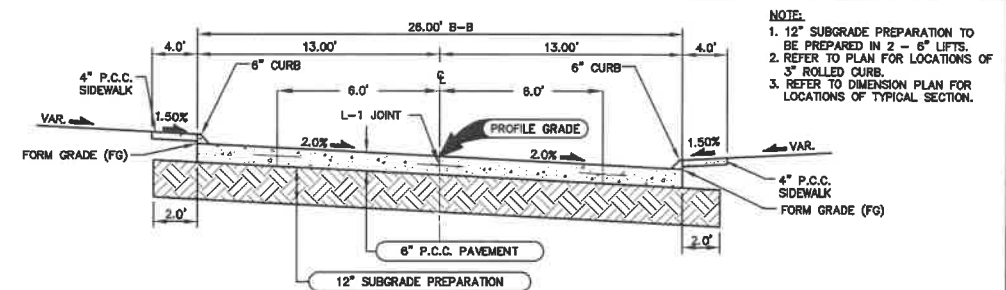
NOTES:  
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN. - 6% MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50" - 4.00" SLUMP IN ACCORDANCE WITH ACI 301.  
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.  
3. ANCHOR BOLTS SHALL CONFORM TO ASTM A193, GRADE B8M, TYPE 316 STAINLESS STEEL.



**CLASS A CURB & SIDEWALK**

NOT TO SCALE

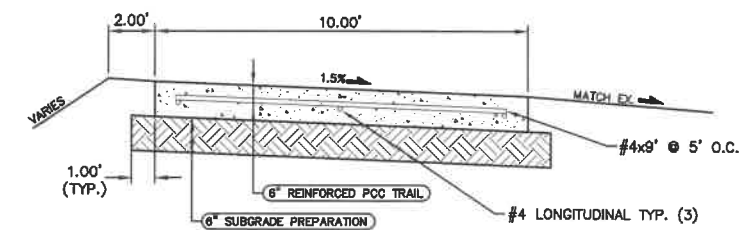
NOTE:  
1. TRANSVERSE JOINTS SHALL BE CD JOINTS AT 15' MAX. SPACING.  
2. LONGITUDINAL JOINTS SHALL BE INTERCHANGEABLE, L-2 OR KT-2.



**TYPICAL SECTION - 26' P.C.C. ROADWAY**

NOT TO SCALE

NOTE:  
1. 12" SUBGRADE PREPARATION TO BE PREPARED IN 2 - 6" LIFTS.  
2. REFER TO PLAN FOR LOCATIONS OF 3" ROLLED CURB.  
3. REFER TO DIMENSION PLAN FOR LOCATIONS OF TYPICAL SECTION.



**REINFORCED PCC TRAIL**

NOT TO SCALE

1. TYPICAL C JOINT SPACING IS 10'.  
2. BOTTOM REINFORCEMENT SHALL HAVE A MINIMUM OF 3 INCHES OF CLEAR COVER.

FILE: N:\2014\10440\DWG\WATER-SITES\DWG\PLAT 1 - TYPICAL SECTIONS AND DETAILS.dwg  
 DATE PLOTTED: 5/7/2020 3:06 PM  
 PLOTTED BY: JARED MURRAY  
 CHECKED BY: JARED MURRAY

DATE	REVISIONS
05/07/20	3RD SUBMITTAL
03/06/20	2ND SUBMITTAL
02/10/20	1ST SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410

EI: CWO  
ENGINEER: JMM

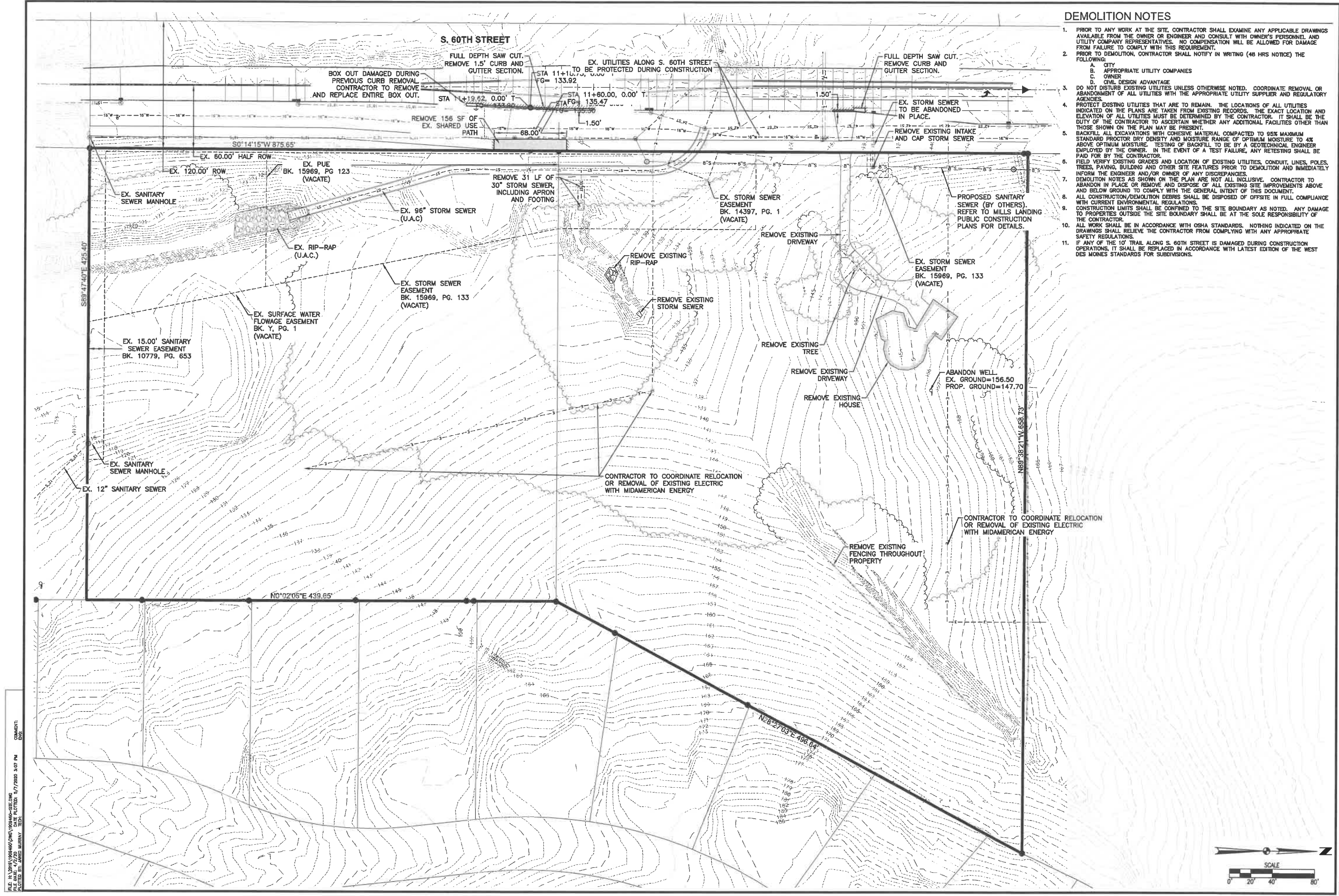


**WILDER PINES PLAT 1**  
**TYPICAL SECTIONS AND DETAILS**  
WEST DES MOINES, IOWA

**2.0**

1909.460





**DEMOLITION NOTES**

- PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER OR ENGINEER AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
- PRIOR TO DEMOLITION, CONTRACTOR SHALL NOTIFY IN WRITING (48 HRS NOTICE) THE FOLLOWING:
  - CITY
  - APPROPRIATE UTILITY COMPANIES
  - OWNER
  - CIVIL DESIGN ADVANTAGE
- DO NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE NOTED. COORDINATE REMOVAL OR ABANDONMENT OF ALL UTILITIES WITH THE APPROPRIATE UTILITY SUPPLIER AND REGULATORY AGENCIES.
- PROTECT EXISTING UTILITIES THAT ARE TO REMAIN. THE LOCATIONS OF ALL UTILITIES INDICATED ON THE PLANS ARE TAKEN FROM EXISTING RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLAN MAY BE PRESENT.
- BACKFILL ALL EXCAVATIONS WITH COHESIVE MATERIAL COMPACTED TO 95% MAXIMUM STANDARD PROCTOR DRY DENSITY AND MOISTURE RANGE OF OPTIMUM MOISTURE TO 4% ABOVE OPTIMUM MOISTURE. TESTING OF BACKFILL TO BE BY A GEOTECHNICAL ENGINEER EMPLOYED BY THE OWNER. IN THE EVENT OF A TEST FAILURE, ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR.
- FIELD VERIFY EXISTING GRADES AND LOCATION OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PAVING, BUILDING AND OTHER SITE FEATURES PRIOR TO DEMOLITION AND IMMEDIATELY INFORM THE ENGINEER AND/OR OWNER OF ANY DISCREPANCIES.
- DEMOLITION NOTES AS SHOWN ON THE PLAN ARE NOT ALL INCLUSIVE. CONTRACTOR TO ABANDON IN PLACE OR REMOVE AND DISPOSE OF ALL EXISTING SITE IMPROVEMENTS ABOVE AND BELOW GROUND TO COMPLY WITH THE GENERAL INTENT OF THIS DOCUMENT.
- ALL CONSTRUCTION/DEMOLITION DEBRIS SHALL BE DISPOSED OFFSITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
- CONSTRUCTION LIMITS SHALL BE CONFINED TO THE SITE BOUNDARY AS NOTED. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- IF ANY OF THE 10' TRAIL ALONG S. 60TH STREET IS DAMAGED DURING CONSTRUCTION OPERATIONS, IT SHALL BE REPLACED IN ACCORDANCE WITH LATEST EDITION OF THE WEST DES MOINES STANDARDS FOR SUBDIVISIONS.

DATE	REVISIONS
05/07/20	
03/06/20	3RD SUBMITTAL
02/10/20	2ND SUBMITTAL
	1ST SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G  
 GRIMES, IOWA 50111  
 PHONE: (515) 369-4400 FAX: (515) 369-4410  
 ENGINEER: JMM

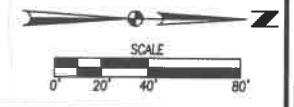
**WILDER PINES PLAT 1**  
 TOPOGRAPHIC SURVEY AND DEMOLITION PLAN  
 WEST DES MOINES, IOWA

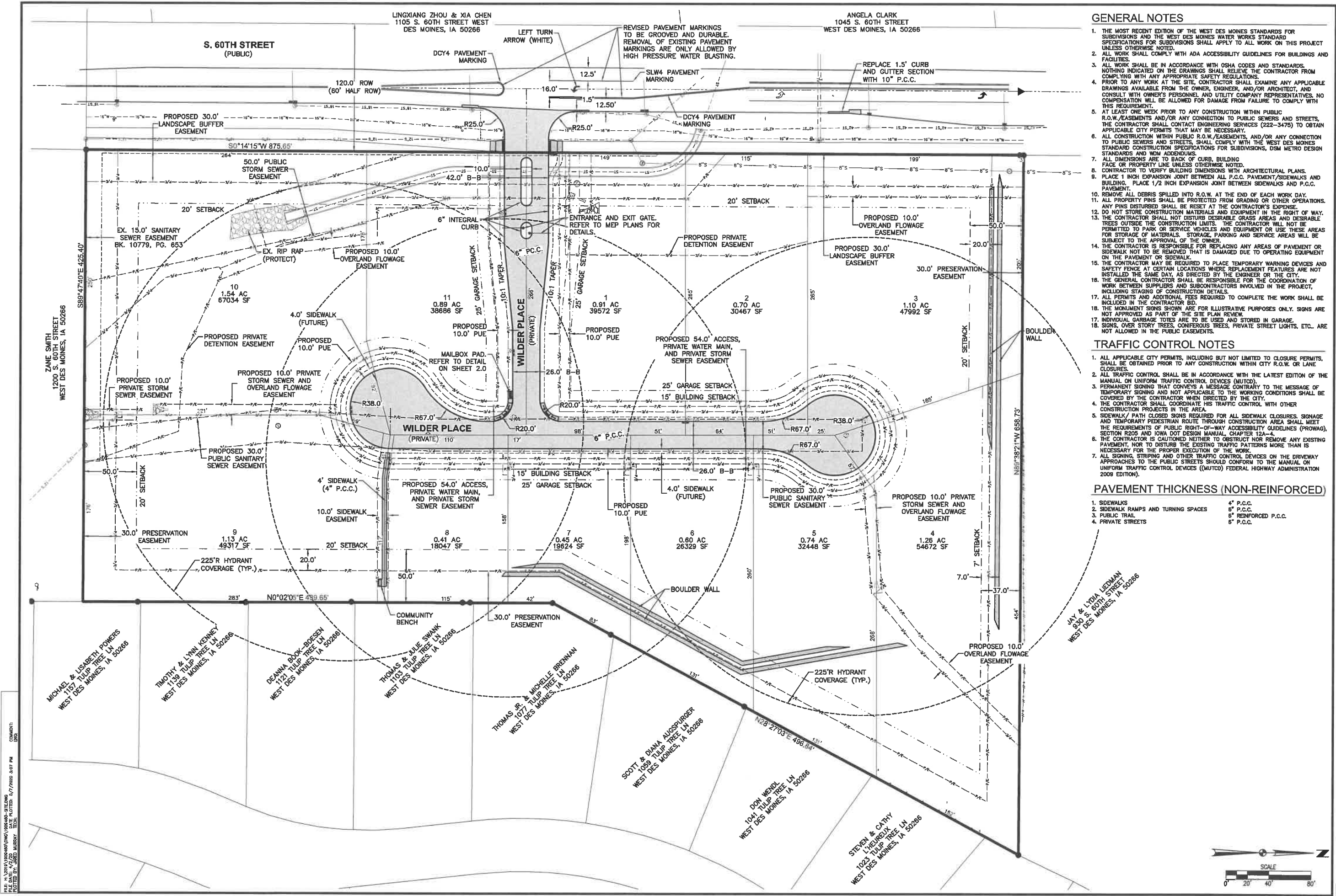
**CIVIL DESIGN ADVANTAGE**

**3.0**

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 DATE PLOTTED: 4/27/20 DATE PRINTED: 5/7/2020 3:07 PM  
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**GENERAL NOTES**

1. THE MOST RECENT EDITION OF THE WEST DES MOINES STANDARDS FOR SUBDIVISIONS AND THE WEST DES MOINES WATER WORKS STANDARD SPECIFICATIONS FOR SUBDIVISIONS SHALL APPLY TO ALL WORK ON THIS PROJECT UNLESS OTHERWISE NOTED.
2. ALL WORK SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
3. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
4. PRIOR TO ANY WORK AT THE SITE, CONTRACTOR SHALL EXAMINE ANY APPLICABLE DRAWINGS AVAILABLE FROM THE OWNER, ENGINEER, AND/OR ARCHITECT, AND CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANY REPRESENTATIVES. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.
5. AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT ENGINEERING SERVICES (222-3475) TO OBTAIN APPLICABLE CITY PERMITS THAT MAY BE NECESSARY.
6. ALL CONSTRUCTION WITHIN PUBLIC R.O.W./EASEMENTS, AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS, DSM METRO DESIGN STANDARDS AND WDM ADDENDUMS.
7. ALL DIMENSIONS ARE TO BACK OF CURB, BUILDING FACE OR PROPERTY LINE UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
9. PLACE 1 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT.
10. REMOVE ALL DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY.
11. ALL PROPERTY PINS SHALL BE PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
12. DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT OF WAY.
13. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR WILL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OF MATERIALS, STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
14. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
15. THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE CITY.
16. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK BETWEEN SUPPLIERS AND SUBCONTRACTORS INVOLVED IN THE PROJECT, INCLUDING STAGING OF CONSTRUCTION DETAILS.
17. ALL PERMITS AND ADDITIONAL FEES REQUIRED TO COMPLETE THE WORK SHALL BE INCLUDED IN THE CONTRACTOR BID.
18. THE MONUMENT SIGNS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. SIGNS ARE NOT APPROVED AS PART OF THE SITE PLAN REVIEW.
19. INDIVIDUAL GARBAGE TOTES ARE TO BE USED AND STORED IN GARAGE.
20. SIGNS, OVER STORY TREES, CONIFEROUS TREES, PRIVATE STREET LIGHTS, ETC. ARE NOT ALLOWED IN THE PUBLIC EASEMENTS.

**TRAFFIC CONTROL NOTES**

1. ALL APPLICABLE CITY PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN CITY R.O.W. OR LAKE CLOSURES.
2. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE CITY.
4. THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
5. SIDEWALK / PATH CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES. SIGNAGE AND TEMPORARY PEDESTRIAN ROUTE THROUGH CONSTRUCTION AREA SHALL MEET THE REQUIREMENTS OF PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), SECTION 205 AND IOWA DOT DESIGN MANUAL, CHAPTER 12A-4.
6. THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
7. ALL SIGNING, STRIPING AND OTHER TRAFFIC CONTROL DEVICES ON THE DRIVEWAY APPROACHES TO THE PUBLIC STREETS SHOULD CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FEDERAL HIGHWAY ADMINISTRATION 2009 EDITION).

**PAVEMENT THICKNESS (NON-REINFORCED)**

- |                                      |                      |
|--------------------------------------|----------------------|
| 1. SIDEWALKS                         | 4" P.C.C.            |
| 2. SIDEWALK RAMPS AND TURNING SPACES | 6" P.C.C.            |
| 3. PUBLIC TRAIL                      | 6" REINFORCED P.C.C. |
| 4. PRIVATE STREETS                   | 6" P.C.C.            |

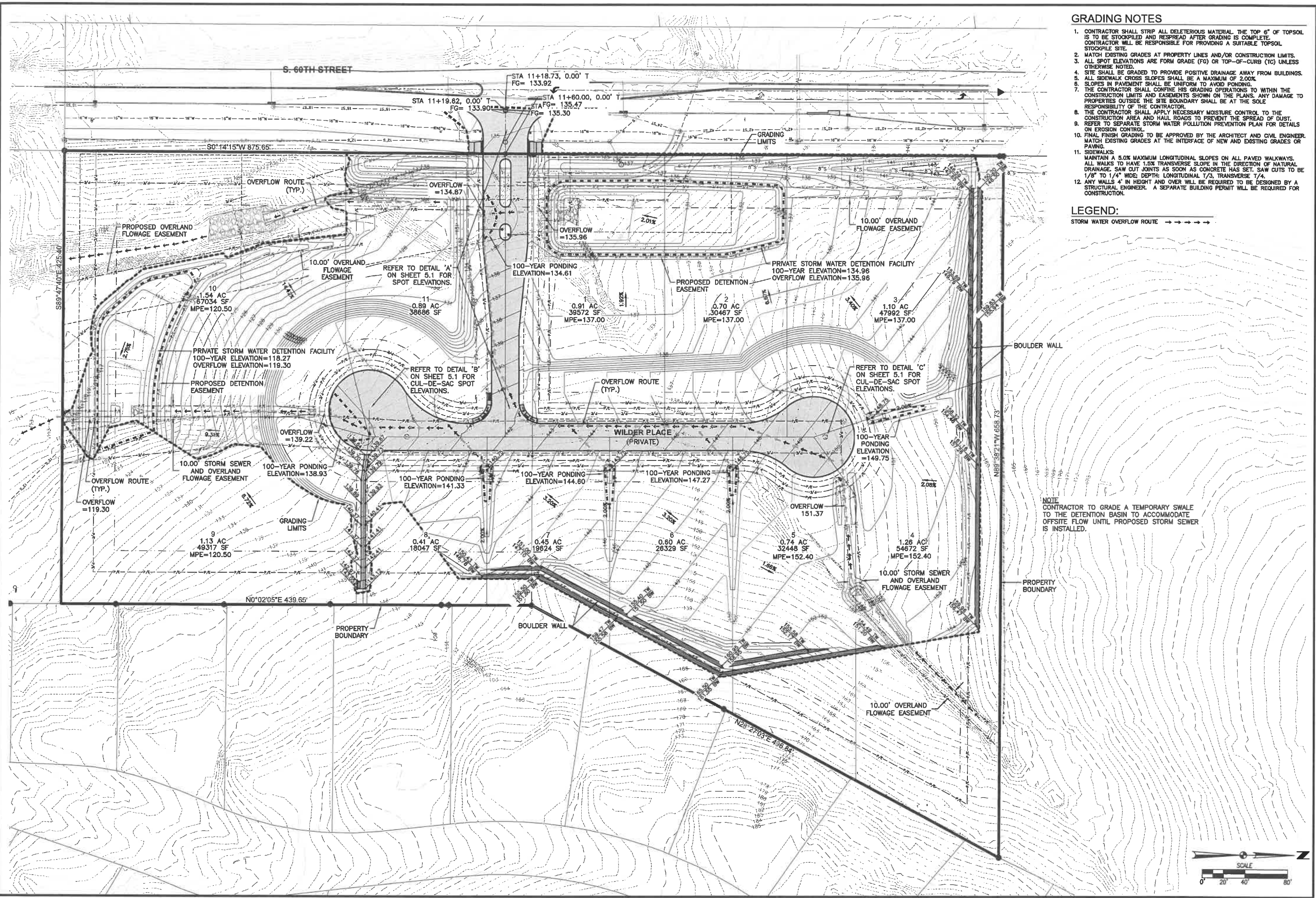
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REVISIONS	03/06/20
	02/10/20
3RD SUBMITTAL	
2ND SUBMITTAL	
1ST SUBMITTAL	

3405 S.E. CROSSROADS DRIVE, SUITE G  
 PHOENIX, IOWA 50111 FAX: (515) 369-4410  
 ENGINEER: JMM

**WILDER PINES PLAT 1**  
 DIMENSION AND HYDRANT COVERAGE PLAN  
 WEST DES MOINES, IOWA

4.0  
 1909.460

FILE: H:\DWG\2004\05\WILDER PINES\WILDER PINES GRADING PLAN.dwg  
 PLOTTED BY: JARED MURRAY  
 DATE: 5/7/2008 3:07 PM  
 SCALE: 1"=40'



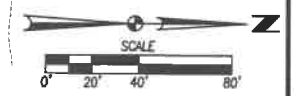
**GRADING NOTES**

- CONTRACTOR SHALL STRIP ALL DELETERIOUS MATERIAL THE TOP 6" OF TOPSOIL IS TO BE STOCKPILED AND RESPAVED AFTER GRADING IS COMPLETE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING A SUITABLE TOPSOIL STOCKPILE SITE.
- MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
- ALL SPOT ELEVATIONS ARE FORM GRADE (FG) OR TOP-OF-CURB (TC) UNLESS OTHERWISE NOTED.
- SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS.
- ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 2.00%.
- SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING.
- CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN THE CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAIL ROADS TO PREVENT THE SPREAD OF DUST.
- REFER TO SEPARATE STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS ON EROSION CONTROL.
- FINAL FINISH GRADING TO BE APPROVED BY THE ARCHITECT AND CIVIL ENGINEER. MATCH EXISTING GRADES AT THE INTERFACE OF NEW AND EXISTING GRADES OR PAVING.
- SIDEWALKS: MAINTAIN A 5.0% MAXIMUM LONGITUDINAL SLOPES ON ALL PAVED WALKWAYS. ALL WALKS TO HAVE 1.5% TRANSVERSE SLOPE IN THE DIRECTION OF NATURAL DRAINAGE. SAW CUT JOINTS AS SOON AS CONCRETE HAS SET. SAW CUTS TO BE 1/8" TO 1/4" WIDE; DEPTH: LONGITUDINAL 1/3, TRANSVERSE 1/4.
- ANY WALLS 4' IN HEIGHT AND OVER WILL BE REQUIRED TO BE DESIGNED BY A STRUCTURAL ENGINEER. A SEPARATE BUILDING PERMIT WILL BE REQUIRED FOR CONSTRUCTION.

**LEGEND:**

STORM WATER OVERFLOW ROUTE → → → → →

NOTE  
 CONTRACTOR TO GRADE A TEMPORARY SWALE TO THE DETENTION BASIN TO ACCOMMODATE OFFSITE FLOW UNTIL PROPOSED STORM SEWER IS INSTALLED.



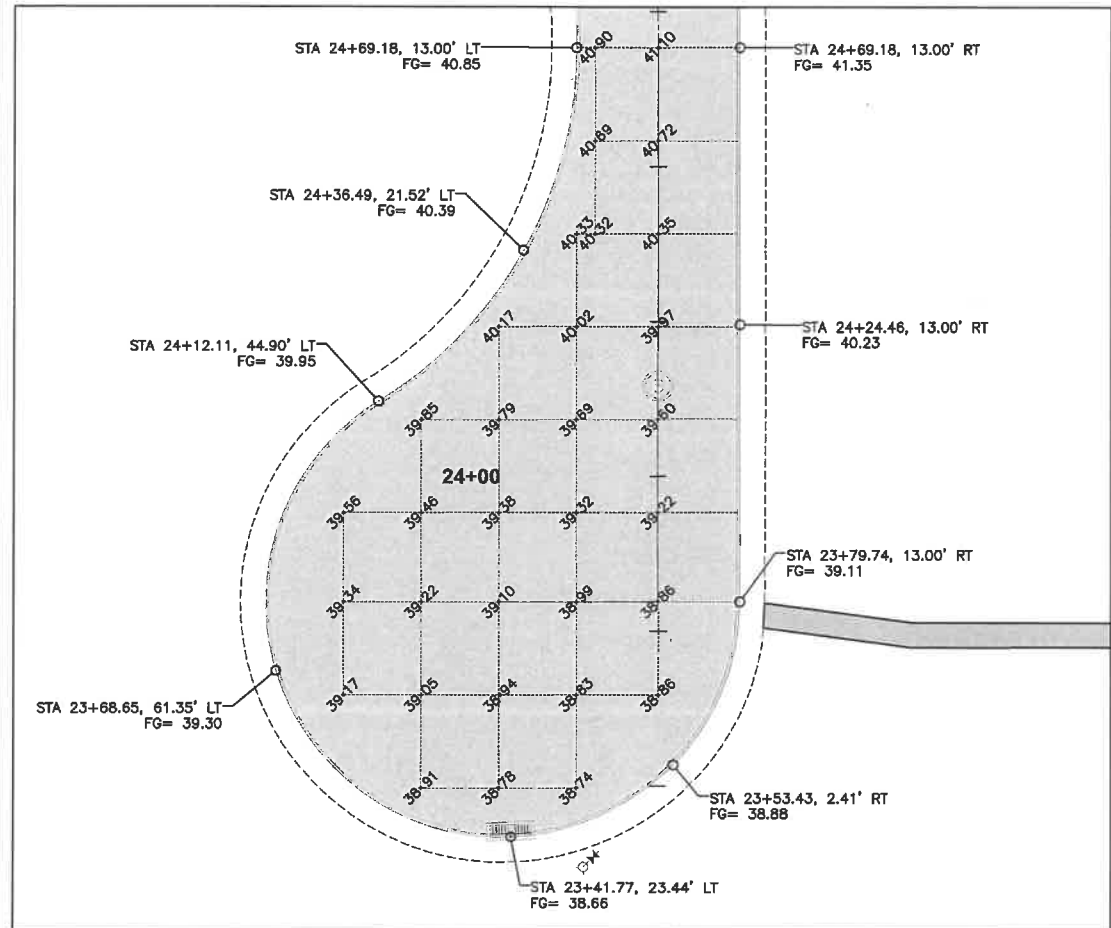
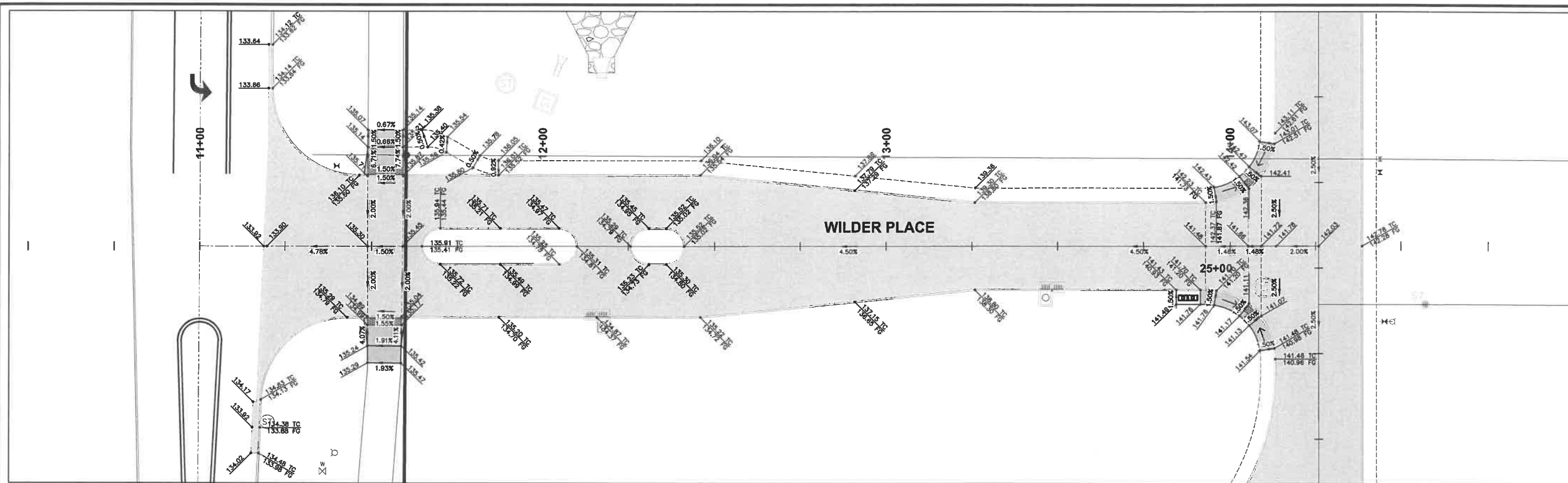
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3RD SUBMITTAL	03/08/20
2ND SUBMITTAL	02/10/20
1ST SUBMITTAL	

REVISIONS

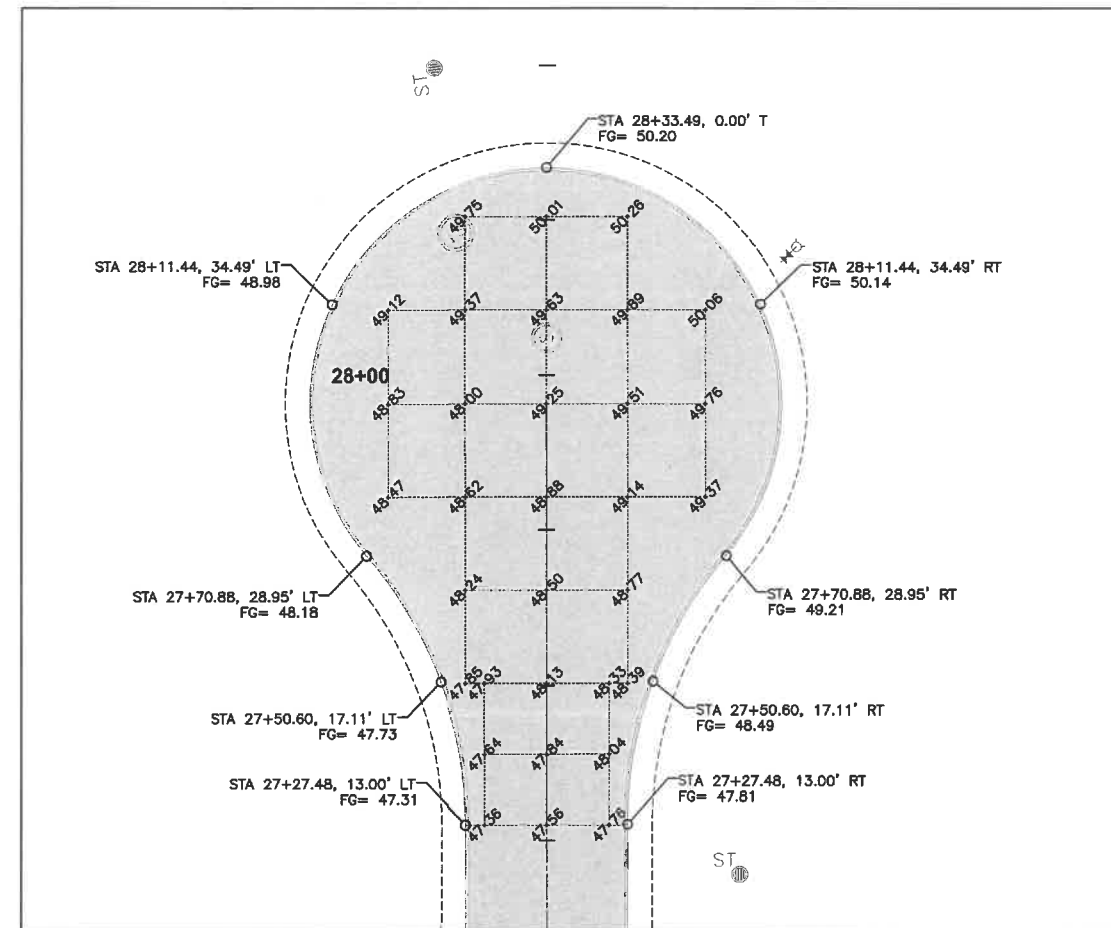
3405 S.E. CROSSROADS DRIVE, SUITE G  
 PHONE: (515) 369-4400 FAX: (515) 369-4410  
 WEST DES MOINES, IOWA  
 ENGINEER: JMM  
 EI: CWO

**WILDER PINES PLAT 1**  
**GRADING PLAN**

**5.0**  
 1909.460



DETAIL 'B'



DETAIL 'C'



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 PLOTTED BY: JARED MURRAY DATE:  
 6/7/2020 3:07 PM  
 SHEET: 5/2

REVISIONS	DATE
3RD SUBMITTAL	05/07/20
2ND SUBMITTAL	03/06/20
1ST SUBMITTAL	02/10/20

3405 S.E. CROSSROADS DRIVE, SUITE G  
 GRIMES, IOWA 50111  
 PHONE: (515) 369-4400 FAX: (515) 369-4410  
 ENGINEER: JMM EI: CWO



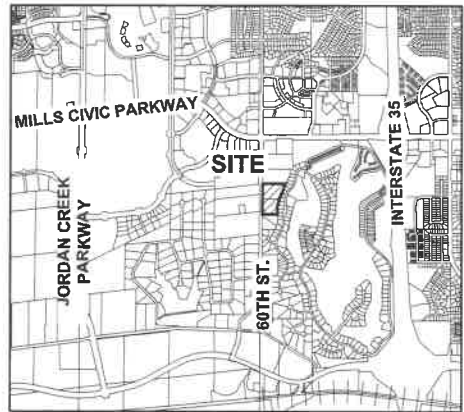
**WILDER PINES PLAT 1**  
**GRADING PLAN**

# WILDER PINES PLAT 1

## EROSION AND SEDIMENT CONTROL PLAN

### VICINITY MAP

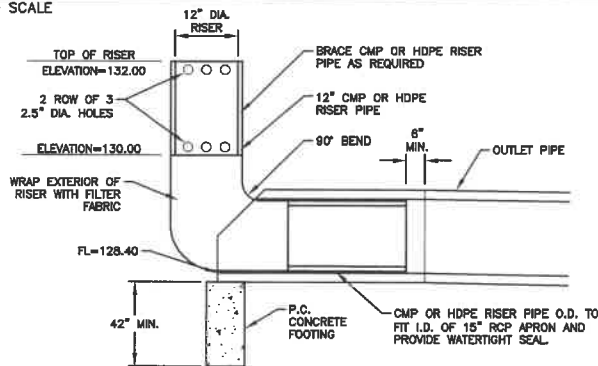
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WEST DES MOINES, IOWA

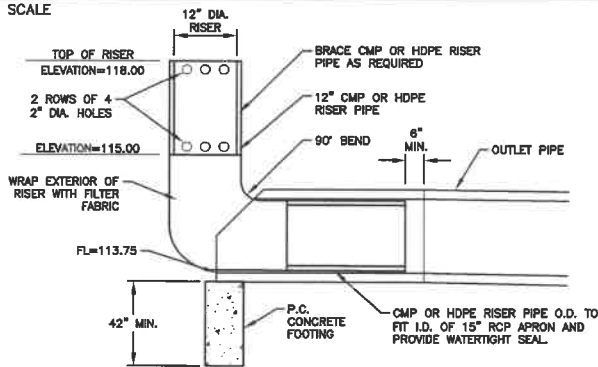
### TEMPORARY STAND PIPE DETAIL #1

NOT TO SCALE



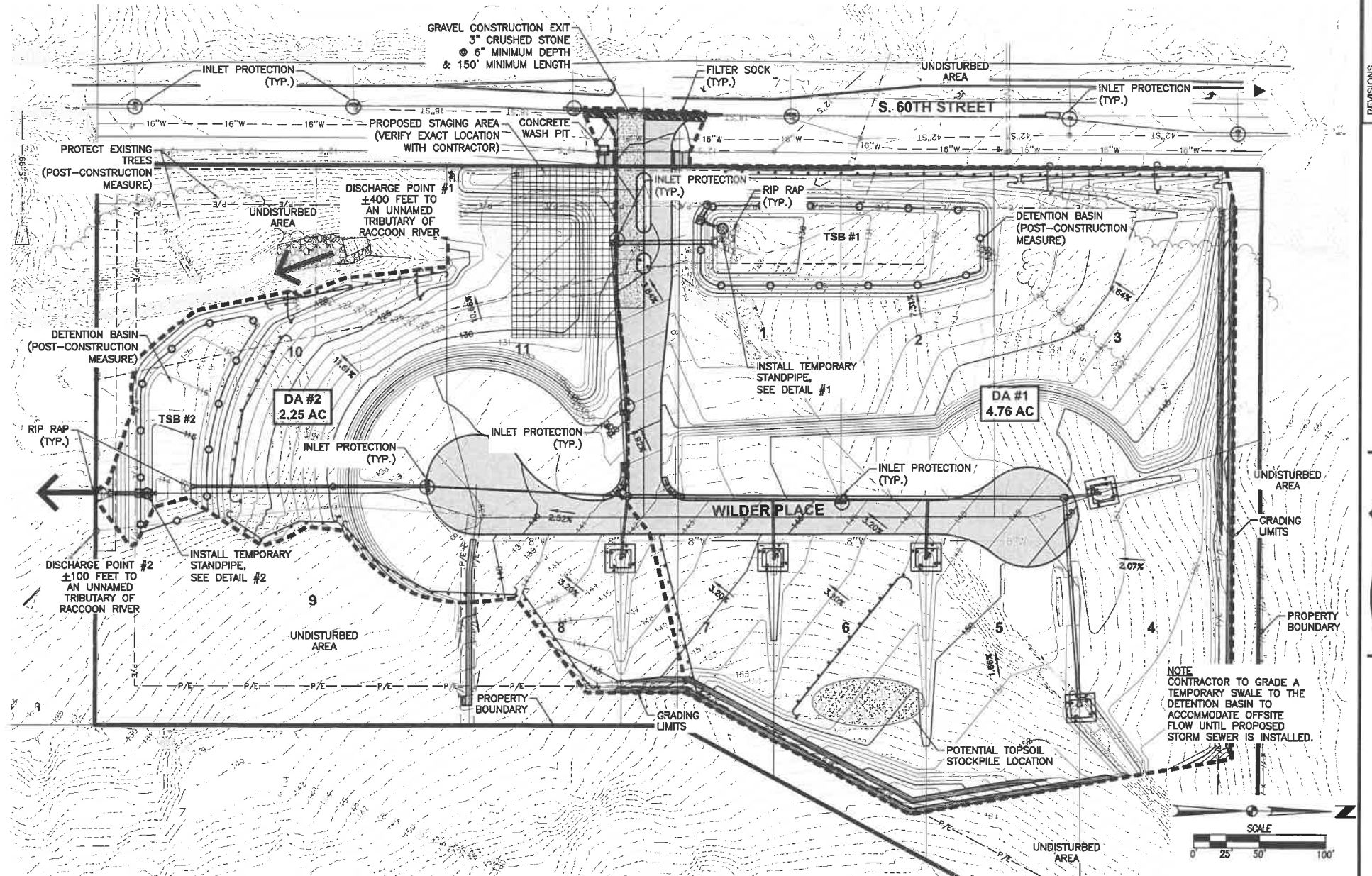
### TEMPORARY STAND PIPE DETAIL #2

NOT TO SCALE



### SWPPP LEGEND

DRAINAGE ARROW		AREA TO BE SEEDED	
GRADING LIMITS		STRAW MAT	
FILTER SOCK		UNDISTURBED AREA	
SILT FENCE		RIP-RAP	
DITCH CHECK		GRAVEL ENTRANCE	
INLET PROTECTION		STAGING AREA	
PORTABLE RESTROOM		TEMPORARY SEDIMENT BASIN	
TEMPORARY STANDPIPE			
CONCRETE WASHOUT PIT			



### STABILIZATION QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	SILT FENCE	LF	1,505
2	SEEDING, FERTILIZING, AND MULCHING	AC	6.27
3	INLET PROTECTION DEVICES	EA	10
4	CONCRETE WASHOUT PIT	EA	1
5	18" PVC TEMPORARY STANDPIPE	EA	1
6	15" PVC TEMPORARY STANDPIPE	EA	1

### DISCHARGE POINT SUMMARY

DISCHARGE POINT #1 TO UNNAMED TRIBUTARY OF RACCOON RIVER ±400 FT	QUANTITY
TOTAL AREA DISTURBED TO DISCHARGE POINT	4.76 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	17,136 CU FT
VOLUME PROVIDED IN FILTER SOCK (70 LF @ 2.0 CU FT/LF OF SOCK)	140 CU FT
VOLUME PROVIDED IN SILT FENCE (1307 LF @ 4.5 CU FT/LF OF FENCE)	3,882 CU FT
VOLUME PROVIDED IN TSB	18,208 CU FT
TOTAL VOLUME PROVIDED	22,230 CU FT
DISCHARGE POINT #2 TO UNNAMED TRIBUTARY OF RACCOON RIVER ±100 FT	QUANTITY
TOTAL AREA DISTURBED TO DISCHARGE POINT	2.25 ACRES
STORAGE VOLUME REQUIRED (# OF ACRES*3600 CU FT)	8,100 CU FT
VOLUME PROVIDED IN SILT FENCE (882 LF @ 4.5 CU FT/LF OF FENCE)	3,969 CU FT
VOLUME PROVIDED IN TSB	15,922 CU FT
TOTAL VOLUME PROVIDED	19,891 CU FT

### NOTES:

- IF DEWATERING IS NEEDED FOR ANY REASON, DISCHARGE OF WATER OFFSITE IS TO CONFORM WITH THE GENERAL PERMIT #2 REQUIREMENTS.
- DISTURBED AREAS SHALL BE TEMPORARILY SEEDED OR MULCHED PRIOR TO THE SITE SHUTTING DOWN FOR WINTER CONDITIONS.
- PREPARATION OF SEED-BED:
  - AREAS ACCESSIBLE TO MACHINERY: AREAS ACCESSIBLE TO FIELD MACHINERY SHALL BE THOROUGHLY WORKED TO A DEPTH OF NOT LESS THAN THREE INCHES. THE SOIL SHALL BE BROUGHT TO A LOOSE, FRIABLE CONDITION, AND SHALL BE PICKED FREE OF ROCKS AND CONCRETE CHUNKS IN EXCESS OF ONE INCH DIAMETER WHERE WEED GROWTH HAS DEVELOPED EXTENSIVELY. THE USE OF A DISK WILL BE ALLOWED TO DISK THESE WEEDS INTO THE GROUND IF WEEDS CAN BE COMPLETELY COVERED BY THIS METHOD.
  - AREAS INACCESSIBLE TO MACHINERY: AREAS INACCESSIBLE TO FIELD MACHINERY SHALL BE PREPARED BY HAND TO A DEPTH OF NOT LESS THAN ONE AND ONE-HALF INCHES. THE SOIL SHALL BE BROUGHT TO A LOOSE FRIABLE CONDITION.
  - THE SEEDBED SHALL BE INSPECTED AND APPROVED BY THE CITY ENGINEER PRIOR TO SEEDING.
- PEZZETTI EROSION CONTROL LLC WILL BE RESPONSIBLE FOR INSTALLATION, PERIODIC CHECKING AND REINSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES.
 

MIKE KOSLOSKE  
5700 UNIVERSITY AVE, SUITE 220  
WEST DES MOINES, IA 50266  
PH: 515-967-0639
- A STABILIZED ROCK CONSTRUCTION ENTRANCE IS PROVIDED TO HELP KEEP MUD AND DEBRIS FROM ENTERING THE PUBLIC R.O.W.

DATE	REVISIONS
05/07/20	1ST SUBMITTAL
03/06/20	2ND SUBMITTAL
02/10/20	3RD SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410  
ENGINEER: JMM  
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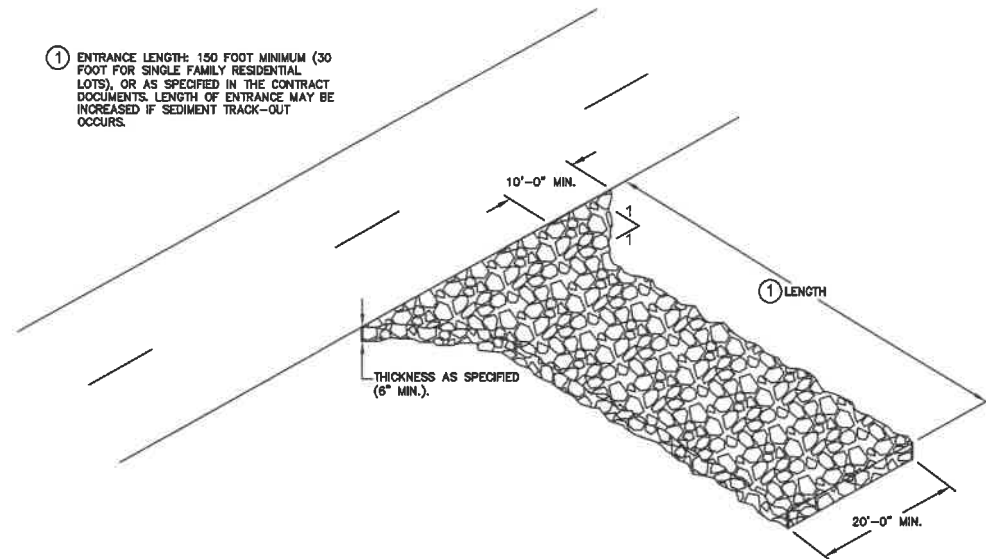
**WILDER PINES PLAT 1**  
EROSION AND SEDIMENT CONTROL PLAN  
WEST DES MOINES, IOWA

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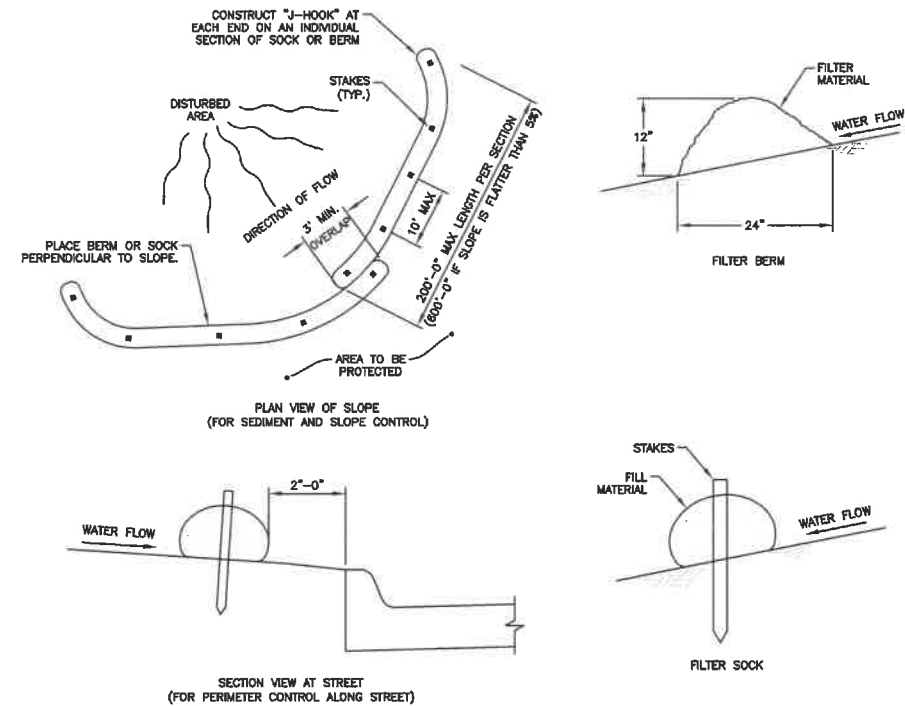
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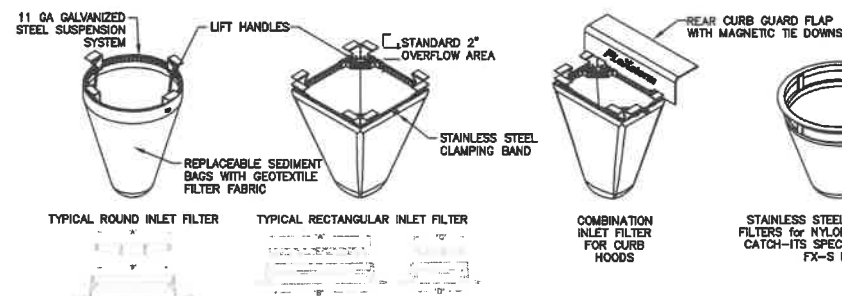
① ENTRANCE LENGTH: 150 FOOT MINIMUM (30 FOOT FOR SINGLE FAMILY RESIDENTIAL LOTS), OR AS SPECIFIED IN THE CONTRACT DOCUMENTS. LENGTH OF ENTRANCE MAY BE INCREASED IF SEDIMENT TRACK-OUT OCCURS.



STABILIZED CONSTRUCTION ENTRANCE



TYPICAL PLACEMENT OF FILTER BERM OF SOCK



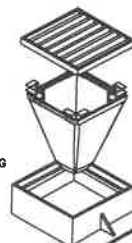
1. IDENTIFY YOUR FRAME STYLE AND SIZE

STYLE	FRAME STYLE AND SIZE	Frame P/N
ROUND	Small Round 10 1/2" dia. (10 1/2" dia. x 10 1/2" dia.)	82093
	Med Round 15 1/2" dia. (15 1/2" dia. x 15 1/2" dia.)	82094
	Large Round 25 1/2" dia. (25 1/2" dia. x 25 1/2" dia.)	82095
	XL Round 35 1/2" dia. (35 1/2" dia. x 35 1/2" dia.)	82096
RECT. SQUARE	Small Rect. 10 1/2" dia. (10 1/2" dia. x 10 1/2" dia.)	82097
	Med Rect. 15 1/2" dia. (15 1/2" dia. x 15 1/2" dia.)	82098
	Large Rect. 25 1/2" dia. (25 1/2" dia. x 25 1/2" dia.)	82099
	XL Rect. 35 1/2" dia. (35 1/2" dia. x 35 1/2" dia.)	82100
COMBO INLETS	Small Rect. 10 1/2" dia. (10 1/2" dia. x 10 1/2" dia.)	82101
	Med Rect. 15 1/2" dia. (15 1/2" dia. x 15 1/2" dia.)	82102
	Large Rect. 25 1/2" dia. (25 1/2" dia. x 25 1/2" dia.)	82103
	XL Rect. 35 1/2" dia. (35 1/2" dia. x 35 1/2" dia.)	82104
NYLOPLAST	12" diameter NYLOPLAST casting (12" dia. x 12" dia.)	82105
	18" diameter NYLOPLAST casting (18" dia. x 18" dia.)	82106
	24" diameter NYLOPLAST casting (24" dia. x 24" dia.)	82107
	30" diameter NYLOPLAST casting (30" dia. x 30" dia.)	82108

SPECIFICATIONS FOR STANDARD BAGS BY NOMINAL SIZE

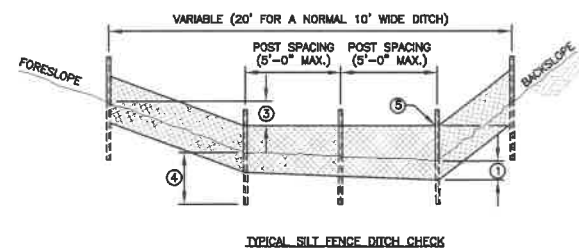
Size	Capacity (Gals)	Filter Area (sq. ft.)	Flow Rate (GPM)
Small	1.5	1.5	0.5
Medium	3.5	3.5	1.0
Large	7.5	7.5	2.0
XL	15.0	15.0	4.0

- NOTES:
- ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7 YEAR MINIMUM SERVICE LIFE.
  - UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
  - FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT [WWW.INLETFILTERS.COM](http://WWW.INLETFILTERS.COM)

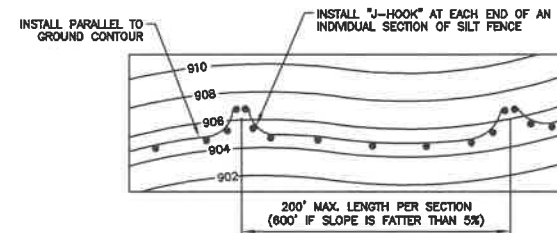


- INSTALLATION:
- REMOVE GRATE
  - DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
  - REPLACE GRATE

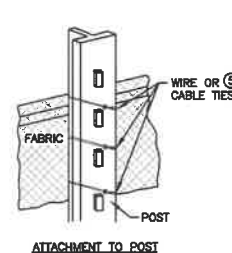
ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC. A DIVISION OF ABS, INC. [WWW.INLETFILTERS.COM](http://WWW.INLETFILTERS.COM) (663) 261-8655 PH (663) 265-3477 FX [INFO@INLETFILTERS.COM](mailto:INFO@INLETFILTERS.COM)



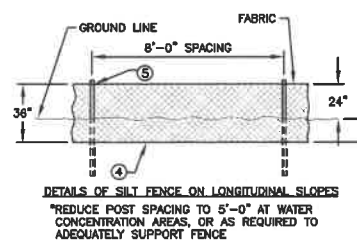
TYPICAL SILT FENCE DITCH CHECK



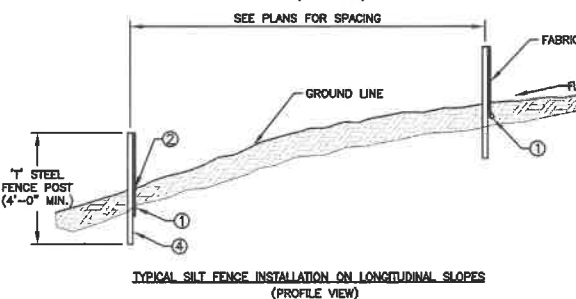
TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES (PLAN VIEW)



ATTACHMENT TO POST



DETAILS OF SILT FENCE ON LONGITUDINAL SLOPES  
REDUCE POST SPACING TO 5'-0" AT WATER CONCENTRATION AREAS, OR AS REQUIRED TO ADEQUATELY SUPPORT FENCE



TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES (PROFILE VIEW)

SILT FENCE

GENERAL NOTES:  
INSTALL SILT FENCE ACCORDING TO THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS AND AT LOCATIONS SHOWN IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE JURISDICTIONAL ENGINEER.

- INSERT 12 IN. OF FABRIC A MINIMUM OF 6 IN. DEEP (FABRIC MAY BE FOLDED BELOW THE GROUND LINE)
- COMPACT GROUND BY DRIVING ALONG EACH SIDE OF THE SILT FENCE AS REQUIRED TO SUFFICIENTLY SECURE THE FABRIC IN THE TRENCH TO PREVENT PULLOUT AND FLOW UNDER THE FENCE.
- IN DITCHES, EXTEND SILT FENCE UP SIDE SLOPE SO THE BOTTOM ELEVATION AT THE END OF THE FENCE IS A MINIMUM OF 2 IN. HIGHER THAN THE TOP OF THE FENCE IN THE LOW POINT OF THE DITCH.
- STEEL POSTS TO BE EMBEDDED 20 IN. UNLESS OTHERWISE ALLOWED BY THE JURISDICTIONAL ENGINEER.
- SECURE TOP OF ENGINEERING FABRIC TO STEEL POSTS USING WIRE OR PLASTIC TIES (50 LB. MIN.). SEE DETAILS OF ATTACHMENT TO POSTS.

FLEXSTORM CATCH-IT FILTERS FOR TEMPORARY INLET PROTECTION  
PRODUCT SELECTION AND SPECIFICATION DRAWING

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P.L.C. DATE: 5/7/2020 DATE PLOTTED: 5/7/2020 3:07 PM  
DESIGNER: JMM CHECKER: MURRAY

COMMENT:  
SBS

DATE	REVISIONS
05/07/20	
03/06/20	3RD SUBMITTAL
02/10/20	2ND SUBMITTAL
	1ST SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G  
GRIMES, IOWA 50111  
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: JMM  
EI: CWO



CIVIL DESIGN ADVANTAGE  
WEST DES MOINES, IOWA

WILDER PINES PLAT 1  
EROSION AND SEDIMENT CONTROL PLAN

**UTILITY NOTES**

- FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
- ADJUST ALL MANHOLES AND INTAKES TO FINISHED GRADES.
- ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WEST DES MOINES PLUMBING CODE.
- 12" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN. SEWER PIPES OVER WATER PIPES NEED TO MEET IOWA DNR MATERIAL REQUIREMENTS.
- MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND WATER MAINS.
- WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES, UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THEREON. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY ONE-CALL SERVICE AT 800-292-6888 AT LEAST 48 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
- PRIVATE UTILITIES TO BE INSTALLED PER THE CITY OF WEST DES MOINES STANDARD CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS AND THE 2012 UNIFORM PLUMBING CODE. CONTACT BUILDING INSPECTION A MINIMUM OF 24 HOURS IN ADVANCE FOR UTILITY INSTALLATION INSPECTIONS.
- OWNER IS RESPONSIBLE FOR MAINTENANCE OF PRIVATE UTILITIES.
- CONTRACTOR SHALL PREVENT ENTRY OF MUD, DIRT, DEBRIS AND OTHER MATERIAL INTO NEW AND EXISTING SEWER SYSTEMS. SHOULD ANY CONTAMINATION OCCUR DURING CONSTRUCTION, THE CONTRACTOR SHALL CLEAN AT NO COST TO THE OWNER. INSTALL SILT FENCE AT ALL PERMANENT STORM SEWER INLETS.
- ALL STORM SEWER APRONS SHALL HAVE FOOTINGS AND APRON GUARDS.

**WEST DES MOINES WATER WORKS NOTES**

- ALL WATER WORK SHALL BE DONE IN ACCORDANCE WITH WEST DES MOINES WATER WORKS STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY WEST DES MOINES WATER WORKS AT LEAST ONE WEEK PRIOR TO CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.
- CONTACT BUILDING INSPECTION (515-222-3630) A MINIMUM OF 24 HOURS IN ADVANCE FOR PRIVATE UTILITY INSPECTIONS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE WEST DES MOINES WATER WORKS AND CITY'S CROSS-CONNECTION CONTROL/CONTAINMENT PROVISION.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION OF AN APPROVED BACKFLOW PREVENTION ASSEMBLY(S) FOR CONTAINMENT IN ALL NEW CONSTRUCTION. BACKFLOW PREVENTION TO BE INSTALLED PER CITY ORDINANCE 1297, 54-1996. CONTRACTOR SHALL NOTIFY WEST DES MOINES WATER WORKS, RALPH RENTERIA, ENGINEERING TECHNICIAN (515)-222-3465) A MINIMUM OF 24 HOURS AFTER INSTALLATION AND TESTING OF ALL BACKFLOW DEVICES TO SCHEDULE FINAL INSPECTION.
- BUILDING FIRE SPRINKLER AND FIRE ALARM SYSTEM SHALL BE DESIGNED PER WEST DES MOINES FIRE CODE.
- WATER SHALL BE PROVIDED TO PROPERTY VIA PRIVATE WATER MAIN. OWNER SHALL ALLOW WEST DES MOINES WATER WORKS ACCESS TO THE METERS AND VALVES AS NEEDED FOR EMERGENCY MAINTENANCE AND SHUT OFF IN THE EVENT OF NON-PAYMENT.
- AN EXISTING WELL LOCATED ALONG THE NORTH PROPERTY LINE, SERVES THIS PROPERTY. THIS WELL SHOULD BE ABANDONED IN ACCORDANCE WITH ALL APPLICABLE COUNTY AND STATE RULES. CONTACT POLK COUNTY ENVIRONMENTAL HEALTH FOR ADDITIONAL INFORMATION.
- WEST DES MOINES WATER WORKS RECOMMENDS AGAINST PLANTING TREES AND OTHER LANDSCAPING OVER PRIVATE WATER INFRASTRUCTURE.
- 24/7/365 ACCESS TO THE DEVELOPMENT IS REQUIRED TO ALLOW WEST DES MOINES WATER WORKS CREWS TO PERFORM MAINTENANCE.

**PRIVATE WATER MAIN QUANTITIES**

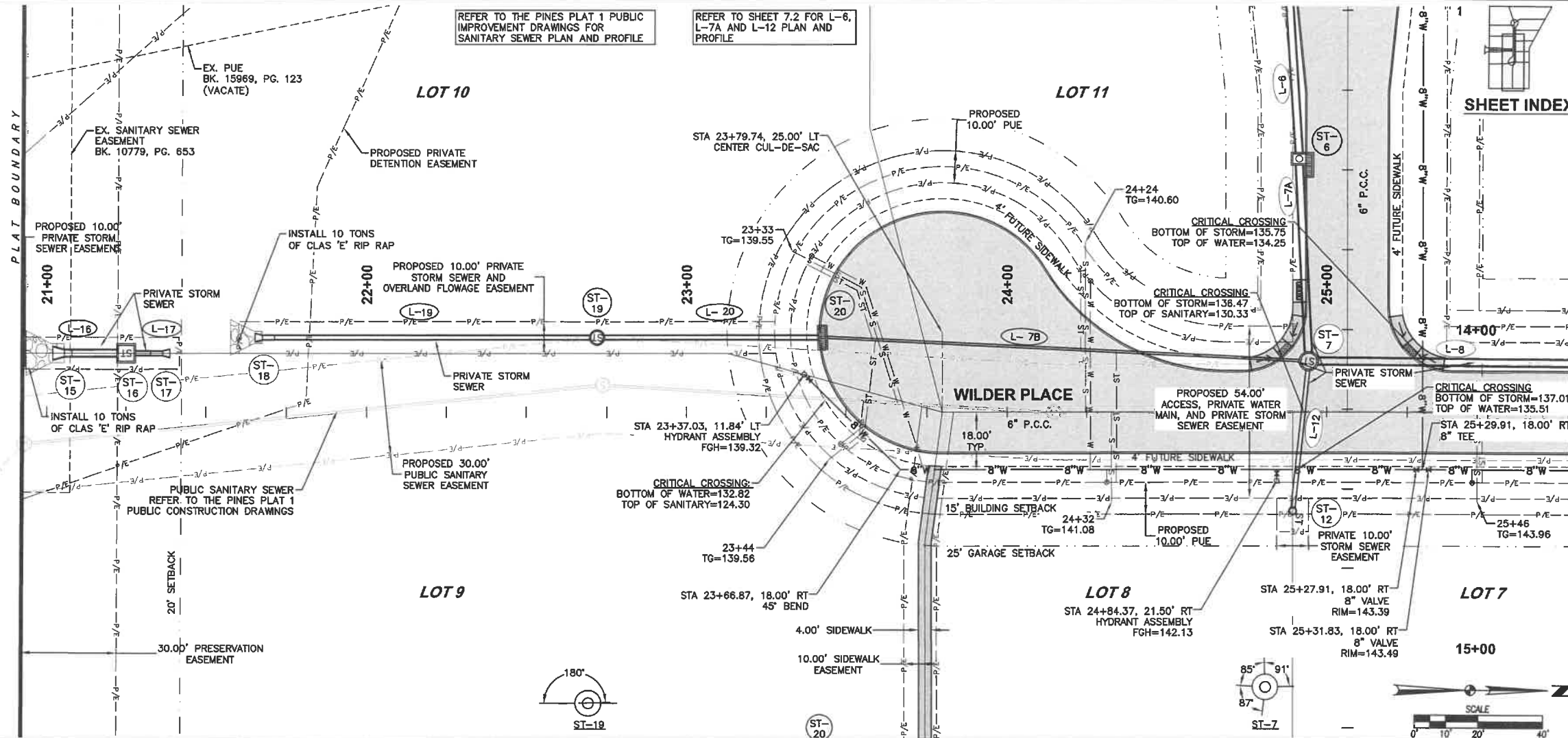
HYDRANT ASSEMBLY	3 EA
6" VALVE	2 EA
8" WATER MAIN	508 LF
2" WATER SERVICE	11 EA

**NOTE:**

REFER TO THE APPROVED PUBLIC IMPROVEMENT PLANS FOR CONSTRUCTION OF THE PUBLIC SANITARY SEWER.

REFER TO THE PINES PLAT 1 PUBLIC IMPROVEMENT DRAWINGS FOR SANITARY SEWER PLAN AND PROFILE

REFER TO SHEET 7.2 FOR L-6, L-7A AND L-12 PLAN AND PROFILE



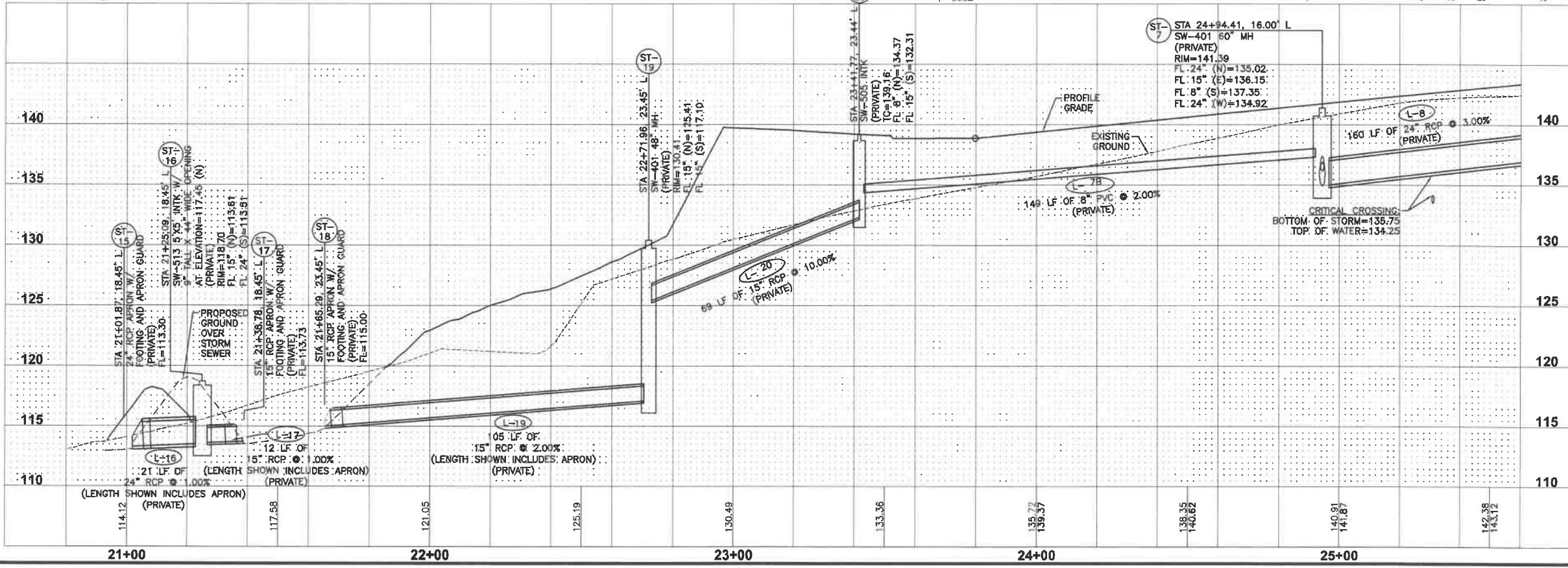
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REVISIONS	3RD SUBMITTAL 03/06/20
	2ND SUBMITTAL
	1ST SUBMITTAL 02/10/20

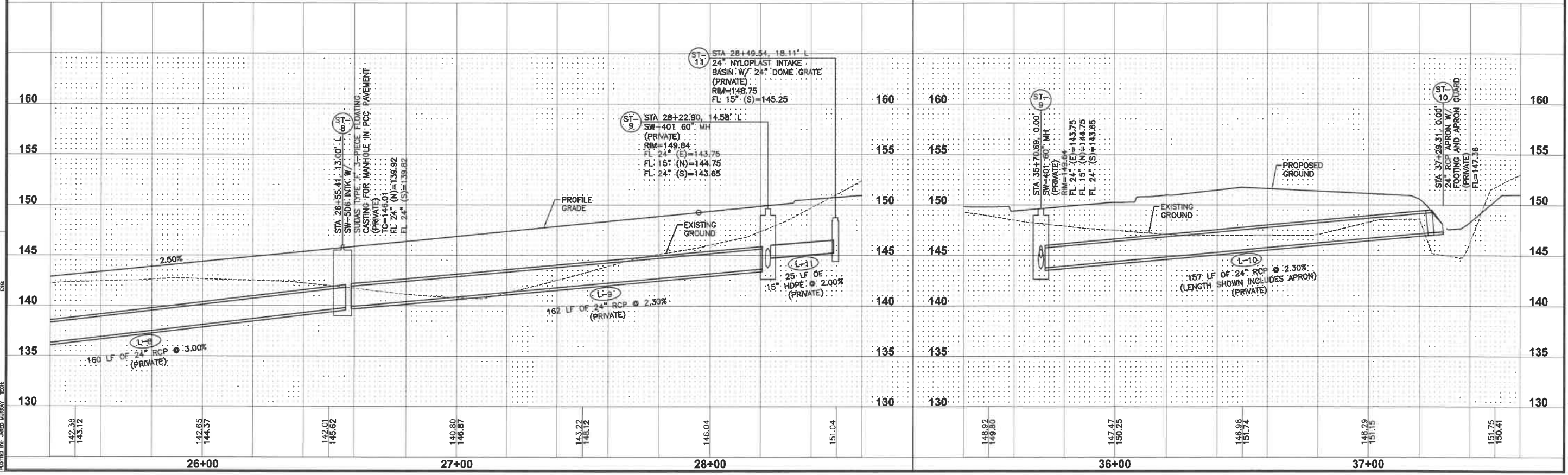
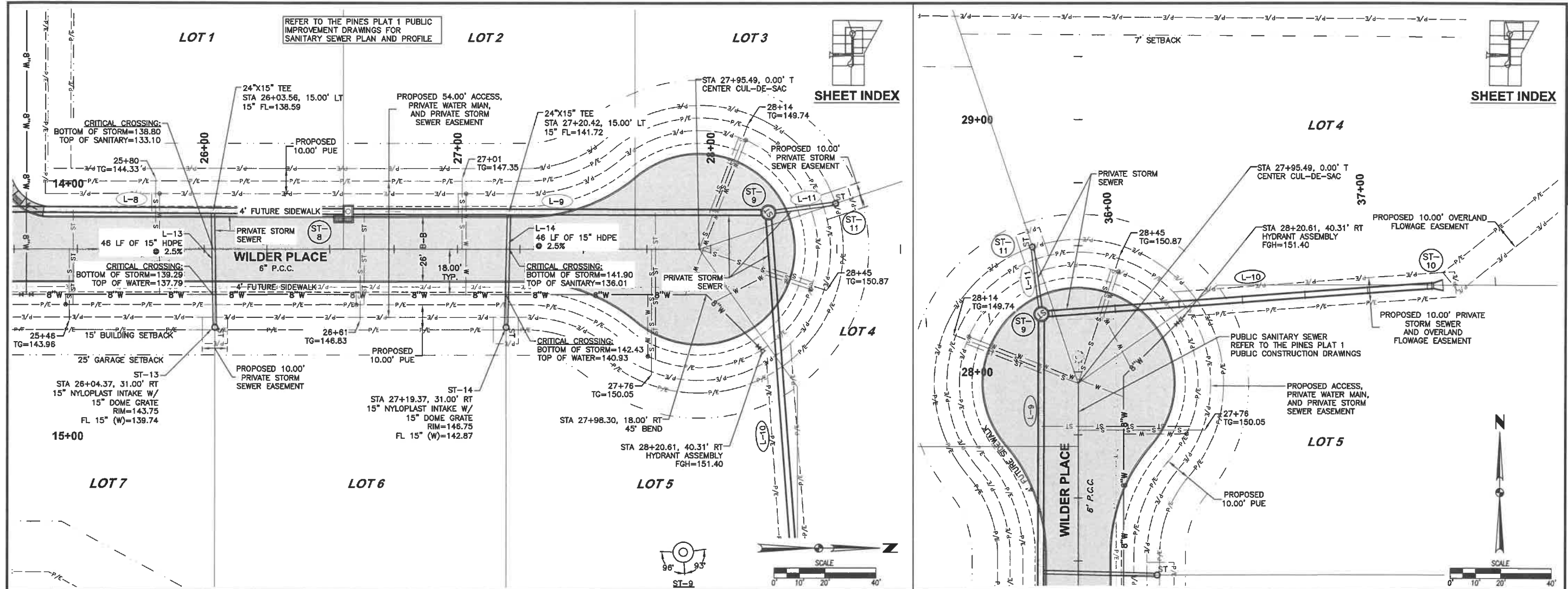
3405 S.E. CROSSROADS DRIVE, SUITE G  
 WEST DES MOINES, IOWA 50311  
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 ENGINEER: JMM  
 EI: CWO



**WILDER PINES PLAT 1**  
 PAVEMENT AND STORM SEWER PLAN AND PROFILE



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**WILDER PINES PLAT 1**  
PAVEMENT AND STORM SEWER PLAN AND PROFILE

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03/06/20  
02/10/20

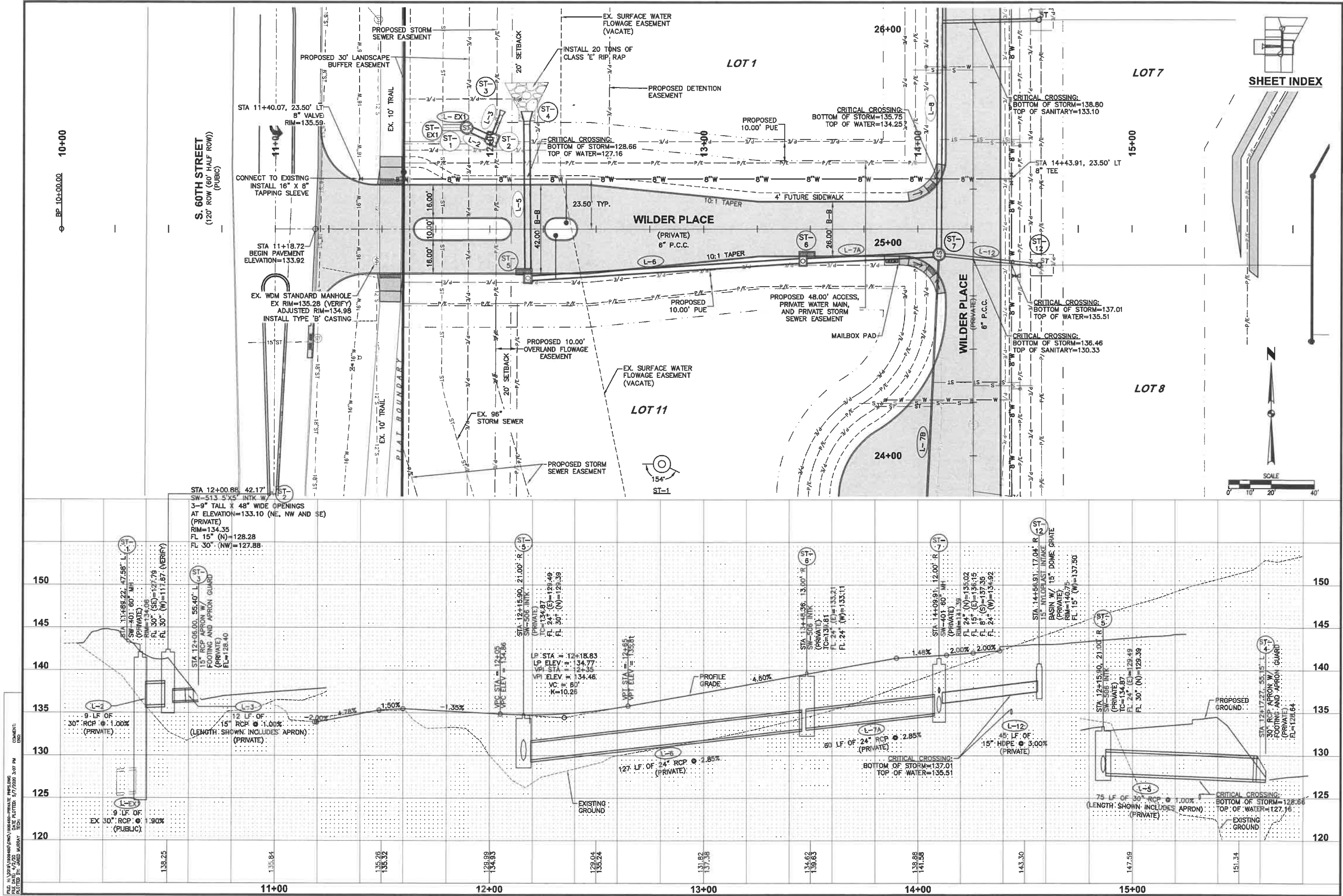
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3405 S.E. CROSSROADS DRIVE, SUITE G  
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ENGINEER: JMM  
EI: CWO

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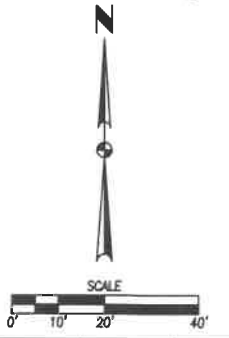
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03/06/20	3RD SUBMITTAL
02/10/20	2ND SUBMITTAL
	1ST SUBMITTAL

3405 S.E. CROSSROADS DRIVE, SUITE G  
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 EI: CWO



**WILDER PINES PLAT 1**  
**PAVEMENT AND STORM SEWER PLAN AND PROFILE**

SHEET INDEX



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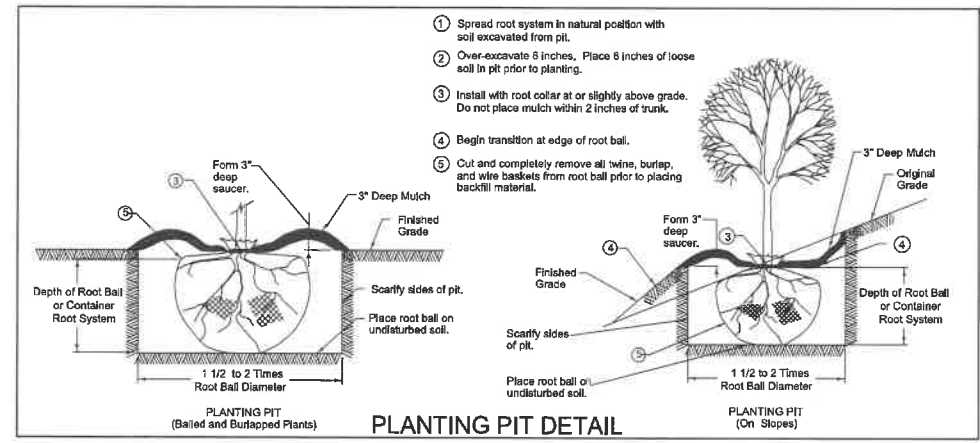
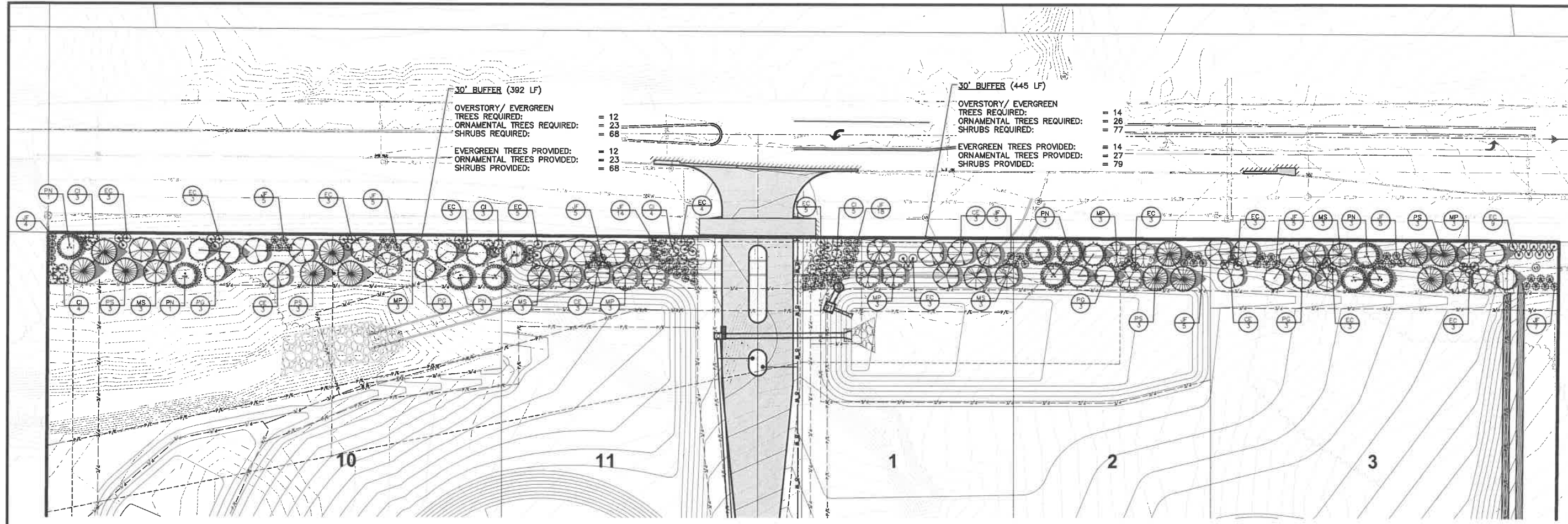
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1ST SUBMITTAL	02/10/20

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CIVIL DESIGN ADVANTAGE  
 WEST DES MOINES, IOWA

**WILDER PINES PLAT 1  
 LANDSCAPE PLAN**



**LANDSCAPE NOTES**

**MINIMUM PLANT SIZES**

DECIDUOUS OVERSTORY TREES	=2" CAL
DECIDUOUS OVERSTORY TREES (CLUMP)	=1" CAL
EVERGREEN TREES	=6' HEIGHT
ORNAMENTAL TREES	=1.5" CAL
DECIDUOUS SHRUBS (5'-8')	=36" HEIGHT
DECIDUOUS SHRUBS (3'-5')	=24" HEIGHT
DECIDUOUS SHRUBS (0-3')	=15" HEIGHT

**30' BUFFER REQUIREMENTS**

- A LANDSCAPED AND BERMED AREA OF NOT LESS THAN THIRTY FEET (30') IN WIDTH COMPRISED OF LANDSCAPE PLANTINGS.

THE EQUIVALENT OF ONE OVERSTORY TREE OR UPRIGHT EVERGREEN TREE, TWO (2) UNDERSTORY TREES AND SIX (6) SHRUBS SHALL BE PROVIDED PER THIRTY FIVE (35) LINEAR FEET OF THE BUFFER PARK.

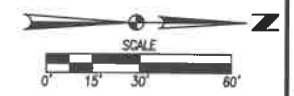
**PLANT SUBSTITUTIONS**

- (2) ORNAMENTAL TREES = (1) OVERSTORY TREE OR EVERGREEN
  - (10) SHRUBS = (1) UNDERSTORY TREE
  - NO MORE THAN 50% OF THE REQUIRED PLANT TYPE MAY BE SUBSTITUTED.
  - AT LEAST 35% OF TREES REQUIRED ON SITE SHALL BE EVERGREEN.
- |                      |            |
|----------------------|------------|
| TOTAL TREES REQUIRED | = 74       |
| EVERGREENS REQUIRED  | = 26 (35%) |
| EVERGREENS PROVIDED  | = 26 (35%) |

TREES	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
CE	12	Eastern Redbud Multi-trunk	<i>Cercis canadensis</i>	B&B, 1.5" CALIPER
MP	15	Prolifera Crab Apple	<i>Malus x 'Prolifera'</i>	B&B, 1.5" CALIPER
MS	12	Spring Snow Crab Apple	<i>Malus x 'Spring Snow'</i>	B&B, 1.5" CALIPER
PG	14	Colorado Blue Spruce	<i>Picea pungens 'Glauca'</i>	B&B, 6' HEIGHT
PN	11	Newport Flowering Plum	<i>Prunus caroliniana 'Newport'</i>	B&B, 1.5" CALIPER
PS	12	White Pine	<i>Pinus strobus</i>	B&B, 6' HEIGHT

SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	CONDITION AND SIZE
Q	19	Isanti Redstart Dogwood	<i>Cornus sericea 'Isanti'</i>	36" HT.
EC	50	Compact Burning Bush	<i>Eurocyamus alatus 'Compactus'</i>	24" HT.
JF	78	Sea Green Juniper	<i>Juniperus chinensis 'Sea Green'</i>	24" HT.



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