F11

City of Hiawatha

Engineering Department

101 Emmons St., Hiawatha Iowa, 52233-1697
PHONE (319) 393-1515 ext. 511 FAX (319) 393-1516

To: **Mayor and City Council** **Date:** **May 9, 2019**

From: John Bender PE, City Engineer

Re: **Heritage Green 12th Addition**

Description: Approve Revised Plan of Improvements

Report:

The plan of improvements for Heritage Green 12th Addition has been submitted and constructed for the next 27 lots in the Heritage Green Addition. This revised set of storm sewer plans includes an additional storm sewer installation across lots 9 and 10 at #341 and #351 Worthington Court. This plan includes approximately the following construction:

- 221 LF of storm sewer,
- 2 storm manholes

Engineering has reviewed the plan of improvements that are proposed for this development. Engineering recommends approval of these public improvement plans and authorizing the developer to proceed.

If you need any further information, please let me know.

HERITAGE GREEN 12TH ADDITION: STORMWATER IMPROVEMENTS

HIAWATHA, IOWA

LOCATION MAP
NOT TO SCALE

STANDARD LEGEND AND NOTES

- PROPERTY &/or BOUNDARY LINES
- CONGRESSIONAL SECTION LINES
- RIGHT-OF-WAY LINES
- EASEMENT-OF-WAY LINES
- CENTER LINES
- EXISTING CENTER LINES
- LOT LINES, INTERNAL
- LOT LINES, PLATTED OR BY DEED
- PROPOSED EASEMENT LINES
- EXISTING EASEMENT LINES
- BENCHMARK
- RECORDED DIMENSIONS
- CURVE SEGMENT NUMBER
- POWER POLE
- POWER POLE W/DROP
- POWER POLE W/TRANS
- POWER POLE W/LIGHT
- GUY POLE
- LIGHT POLE
- SANITARY MANHOLE
- FIRE HYDRANT
- WATER VALVE
- DRAINAGE MANHOLE
- CURB INLET
- FENCE LINE
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- WATER LINES
- ELECTRICAL LINES
- TELEPHONE LINES
- GAS LINES
- CONTOUR LINES (1' INTERVAL)
- PROPOSED GROUND
- EXISTING TREE LINE
- EXISTING DECIDUOUS TREE & SHRUB
- EXISTING EVERGREEN TREES & SHRUBS

THE ACTUAL SIZE AND LOCATION OF ALL PROPOSED FACILITIES SHALL BE VERIFIED WITH CONSTRUCTION DOCUMENTS, WHICH ARE TO BE PREPARED AND SUBMITTED SUBSEQUENT TO THE APPROVAL OF THIS DOCUMENT.

BENCHMARK INFORMATION

POINT	ELEVATION	DATUM	DESCRIPTION
NO. 10067	825.908	ASSUMED	NE BOLT ON HYDRANT LOCATED SOUTH SIDE OF HERITAGE TRAIL 195' WEST OF INTERSECTION OF HERITAGE TRAIL AND RIDGEWOOD DRIVE.
NO. 11108	820.740	ASSUMED	NE BOLT ON HYDRANT LOCATED WEST SIDE OF BLAIRSFERRY CROSSING 270' NORTH OF INTERSECTION OF BLAIRSFERRY CROSSING AND BLAIRS FERRY ROAD.

HORIZONTAL CONTROL

POINT	NORTHING	EASTING	DESCRIPTION
H1-3	348197.44'	3408652.43'	CUT X ON TOP OF CURB IN NORTHEAST AREA OF PARKING LOT OF UNIVERSITY OF IOWA COMMUNITY CREDIT UNION
H2-8	348303.75'	3406841.85'	PIN

Sheet Index

1	TITLE SHEET
2	DEMOLITION PLAN, GRADING, AND EROSION CONTROL PLAN
3	STORMWATER PLAN, PROFILE, AND NOTES

UTILITY COMPANY CONTACTS

SERVICE	SUPPLIER	PHONE NO.
TELEPHONE & CABLE TV	INFOR COMMUNICATIONS ATTN: LERNIE MARNER	319-281-4840
NATURAL GAS	MIDAMERICAN ENERGY ATTN: AMY ICENBICE	319-298-5157
TELEPHONE & CABLE TV	IOWA METRONIC SERVICES ATTN: JEFF KLOCKO	515-830-0440
ELECTRICITY	LINN COUNTY REC ATTN: JOSHUA NUNEMAKER	319-377-1587
TELEPHONE & CABLE TV	CENTURYLINK ATTN: ROBERT COLLINS	319-360-8975
WATER	CITY OF HIAWATHA ATTN: CARL RANSFORD	319-393-5556
TELEPHONE & CABLE TV	MEDIACOM ATTN: DON COOK	319-395-9689
SEWER	CITY OF HIAWATHA ATTN: ROD JASA	319-393-5556

UTILITIES

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

IOWA ONE CALL
800/292-8989

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 THOSE 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, THAT WERE NOT ENCOUNTERED PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR PRESENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

LICENSED PROFESSIONAL ENGINEER
RONALD L. AMELON
14501
IOWA

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

RONALD L. AMELON P.E. Iowa Lic. No. 14501

Signed this _____ day of _____, 20____.

Pages or sheets covered by this seal:

SEAL

DRAFT

PROJAC

MMS

CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS

1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
(319) 351-8282
www.mmsconsultants.net

Date	Revision
4/30/19	STORM REVISION -DLC

OVERALL SITE PLAN

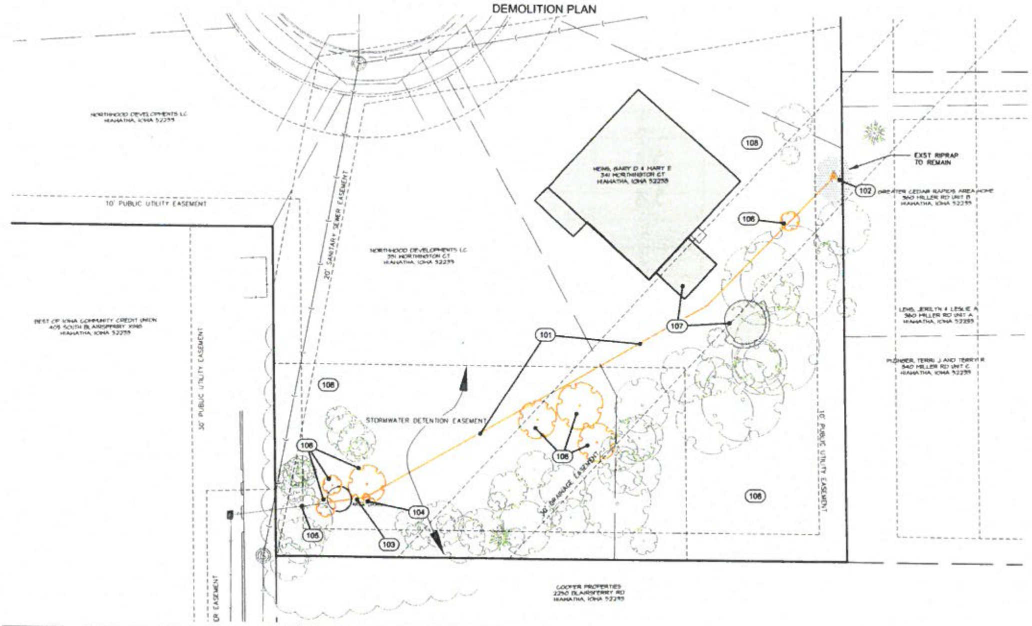
HERITAGE GREEN 12TH ADDITION STORMWATER IMPROVEMENTS

HIAWATHA
LINN COUNTY
IOWA

MMS CONSULTANTS, INC.

Date:	11/08/2018
Designed by: DLC	Field Book No.
Drawn by: DLC	Scale: 1" = 20'
Checked by: RLA	Sheet No. 1 of 3
Project No. IOWA CITY 2563-050	

DEMOLITION PLAN



DEMOLITION NOTES:

1) COORDINATE ALL DEMOLITION ACTIVITIES WITH OWNER BEFORE COMMENCING ANY DEMOLITION WORK.

2) THE CONTRACTOR SHALL CONTACT ALL UTILITIES AND ARRANGE FOR THEIR LOCATION OF FACILITIES BEFORE BEGINNING DEMOLITION. THE CONTRACTOR SHALL COORDINATE WITH ALL PUBLIC UTILITIES FOR DISCONNECTION AND REMOVAL OF THEIR FACILITIES.

3) CLEARING AND REMOVAL OF TREES, BUSHES AND BRUSH SHALL INCLUDE REMOVAL FROM THE SITE OF ALL TRUNKS, BRANCHES, STUMPS AND ROOTS. THE CONTRACTOR SHALL REMOVE ALL STUMPS AND ROOTS.

4) ADJACENT STREETS ARE TO BE MAINTAINED CLEAN AS PER CITY OF HIAWATHA REQUIREMENTS.

THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PER IDOT STANDARD ROAD PLANS & CITY OF HIAWATHA REQUIREMENTS AT ALL TIMES DURING WORK WITHIN PUBLIC R.O.W.

THE CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR ANY REQUIRED RELOCATION OF EXISTING UTILITIES.

0 2.5 10 15 20
GRAPHIC SCALE IN FEET
1"=20'

KEYNOTES

NUMBER	KEYNOTE	DETAIL
101	REMOVE 211LF EXISTING 12" ADS PIPE	
102	REMOVE EXISTING FES	
103	REMOVE 8LF EXISTING STORMPIPE	
104	REMOVE EXISTING BEEHIVE INTAKE	
105	PROTECT EXISTING 42" STORM RCP	
106	REMOVE TREES	
107	PROTECT EXISTING DECK AND CONCRETE FIRE PIT DURING DEMOLITION AND CONSTRUCTION	
108	PROTECT EXISTING TREES, GROUNDCOVER, AND SLOPES DURING DEMOLITION AND CONSTRUCTION	

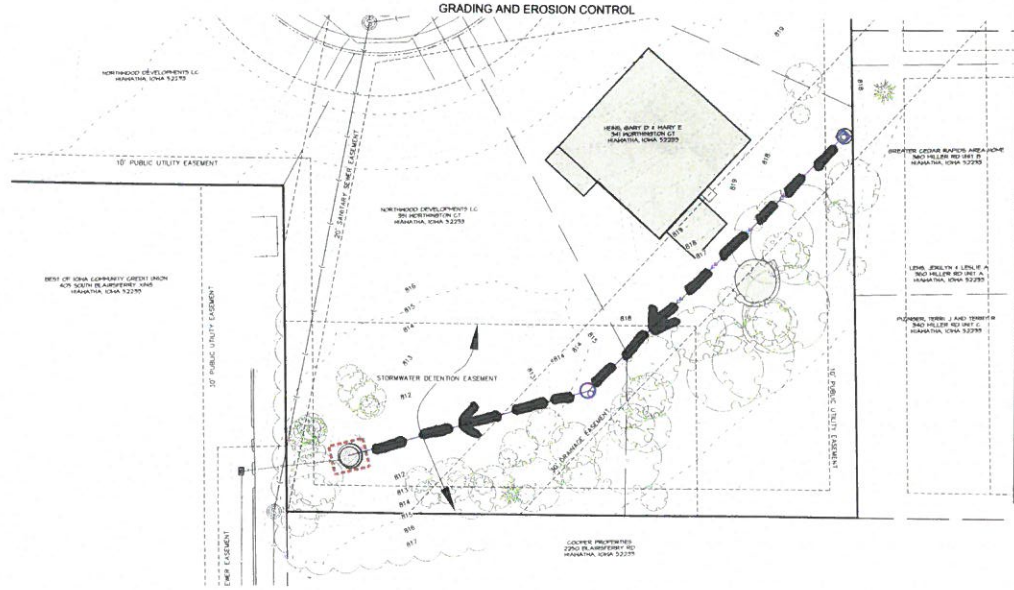
UTILITIES

IOWA ONE CALL. 800/292-8989

THE CONTRACTOR SHALL NOTIFY IOWA ONE CALL NO LESS THAN 48 HRS. IN ADVANCE OF ANY DIGGING OR EXCAVATION.

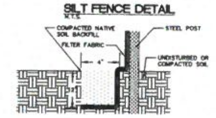
WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR 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 CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK.

GRADING AND EROSION CONTROL



SILT FENCE DETAIL

N.T.S.



INSTALLATION

1. POSTS SHALL BE 1.33 POUNDS PER LINEAL FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
2. SILT FENCE FABRIC SHALL CONFORM TO I.D.O.T. STANDARD SPECIFICATION SECTION 4196.01.A. SILT FENCING SHALL BE A MINIMUM OF 24" AND A MAXIMUM OF 36" HIGH WHEN COMPLETE.
3. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE FENCE TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, THE FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP, AND SECURELY SEALED.
4. POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART AND DRIVEN SECURELY INTO THE GROUND ALONG THE FENCE ALIGNMENT. POSTS SHALL BE DRIVEN INTO THE GROUND A MINIMUM OF 28".
5. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4" WIDE BY 12" DEEP ALONG THE UPSLOPE SIDE OF THE POSTS.
6. FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE POSTS SUCH THAT THE FABRIC EXTENDS INTO THE TRENCH AS SHOWN ABOVE. THE FABRIC SHALL BE FASTENED A MINIMUM OF THREE PLACES ON EACH POST.
7. THE TRENCH SHALL BE BACK FILLED WITH EXCAVATED MATERIAL AND THOROUGHLY COMPACTED.

MAINTENANCE

1. SILT FENCES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAIN-FALL EVENT OF 0.5 INCHES OR MORE. DURING PERIODS OF PROLONGED RAIN INSPECTIONS SHALL BE AT LEAST DAILY. ANY REPAIRS NEEDED TO MAINTAIN THE SILT FENCE'S EFFECTIVENESS SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO STABILIZING THE UPSLOPE AREAS THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE FENCE. SILTS REMOVED SHALL BE PLACED IN A PROTECTED PLACE THAT WILL PREVENT THEIR ESCAPE FROM THE CONSTRUCTION SITE.
4. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER NEEDED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
5. SILT FENCE SHALL REMAIN IN PLACE UNTIL IT IS NO LONGER NEEDED AS DIRECTED BY THE POLLUTION PREVENTION PLAN. GENERALLY SILT FENCES SHALL REMAIN UNTIL THE UPSLOPE AREAS ARE STABILIZED WITH AN ESTABLISHED GRASS COVER AS A MINIMUM.

EROSION CONTROL LEGEND

SILT FENCE/FILTER SOCK	PERIMETER SILT FENCE
TEMPORARY ROCK CONSTRUCTION ENTRANCE/EXIT	TEMPORARY SOIL STOCKPILE AREA
TEMPORARY PARKING AND STORAGE	DIRECTION OF OVERLAND FLOW
(CW) CONCRETE TRUCK/EQUIPMENT WASHOUT	(D) DUMPSTER FOR CONSTRUCTION WASTE
(PR) PORTABLE RESTROOM	RIP RAP OUTLET PROTECTION
(DL) DOCUMENT LOCATION (PERMITS, SWPPP, INSPECTION FORMS, ETC.)	(01) OTHER MEASURE: ______
FILTER SOCK INLET PROTECTION	(02) OTHER MEASURE: ______
FILTER SOCK BEHIND CURB AT CURB RAMP	(03) OTHER MEASURE: ______

THE ABOVE LISTED ITEMS ARE SHOWN IN THEIR RECOMMENDED LOCATIONS. IF A CONTROL MEASURE IS ADDED OR MOVED TO A MORE SUITABLE LOCATION, INDICATE THE REVISION ON THIS SHEET. THE BLANKS LEFT FOR OTHER MEASURES SHOULD BE USED IF AN ITEM NOT SHOWN ABOVE IS IMPLEMENTED ON SITE. ADDITIONAL PRACTICES FOR EROSION PREVENTION AND SEDIMENT CONTROL CAN BE FOUND IN APPENDIX D OF THE SWPPP.

GRADING NOTES

1.) MAXIMUM SLOPE ON CUTS AND FILLS SHALL BE 3.5: HORIZONTAL TO 1: VERTICAL.

2.) NO EXCAVATION SHALL BE ALLOWED WITHIN 2' OF PROPERTY LINES.

3.) WHERE HEIGHT OF FILL IS GREATER THAN 30' AN INTERMEDIATE TERRACE OF AT LEAST 8' WIDE SHALL BE ESTABLISHED AT MID HEIGHT. SEE TYPICAL FILL SECTION.

4.) COMPACTION TO BE 90% MODIFIED STANDARD PROCTOR WHERE > 8:1 SLOPE.

5.) ALL TREES OUTSIDE THE LIMITS OF GRADING OPERATIONS SHALL BE SAVED, UNLESS OTHERWISE INDICATED TO BE REMOVED. TREES NEAR THE EDGES OF GRADING LIMITS AND IN THE STORM WATER DETENTION BASIN AREAS SHALL BE SAVED IF POSSIBLE, WITHIN THE REQUIREMENTS OF THE SPECIFICATIONS.

6.) PRIOR TO ANY GRADING A CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED 50 FEET FROM TRUNKS OF TREES TO BE PROTECTED.

7.) STABILIZATION SEEDING SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT MORE THAN 14 DAYS, UPON COMPLETION OF GRADING IN ANY AREA OF GRADING OPERATIONS. DISTURBED AREAS SHALL BE KEPT AS SMALL AS POSSIBLE TO PREVENT LARGE SCALE EROSION PROBLEMS. IF THE GRADING CONTRACTOR STOPS GRADING OPERATIONS FOR MORE THAN 14 DAYS, THEN STABILIZATION SEEDING SHALL BE DONE ON ALL DISTURBED AREAS.

8.) SILT FENCE LOCATIONS AND LENGTHS, AS INDICATED, ARE APPROXIMATE ONLY. FINAL LOCATIONS AND LENGTHS WILL BE DETERMINED, UPON COMPLETION OF THIS PROJECT.

9.) ALL STREET SUBGRADES SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH CITY OF HIAWATHA DESIGN AND CONSTRUCTION STANDARDS AND PROCEDURES.

10.) PRIOR TO FINAL SEEDING, ALL COMPACTED SOILS SHALL BE TILLED TO A MINIMUM DEPTH OF 12" AND RESPREAD A MINIMUM OF 8" OF TOPSOIL OVER ALL DISTURBED AREAS. TOPSOIL SHALL BE FREE OF ROCKS AND DEBRIS.

11.) ALL CONSTRUCTION MUST BE COMPLETED ACCORDING TO THE REQUIREMENTS OF THE CURRENT NPDES PERMIT FOR THE PROJECT.

EROSION CONTROL NOTES

TOTAL SITE AREA: 0.27 ACRES
TOTAL AREA TO BE DISTURBED: 0.27 ACRES

EROSION CONTROL MEASURES SHOWN SHALL BE USED DURING FILL ACTIVITIES. EROSION CONTROL MEASURES SHALL BE REEVALUATED AND MODIFIED, IF NECESSARY, AT THE TIME OF SITE DEVELOPMENT.

ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES THAT COULD BE USED ON SITE, IF NEEDED, CAN BE FOUND IN APPENDIX D OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BINDER PREPARED FOR THE SITE. IF MEASURES ARE USED, INDICATE THE TYPE AND LOCATION OF SAID MEASURE ON THIS PLAN.

PERMANANT SEEDING OF URBAN AREAS

THE FOLLOWING SEED MISTURE SHALL BE USED FOR PERMANENT SEEDING OF URBAN AREAS, INCLUDING ANY AREAS PREVIOUSLY MAINTAINED AS A LAWN. THE APPLICATION RATE SHALL BE 4 POUNDS PER 1,000 SQUARE FEET (2 kg per 100 m².)

BLUEGRASS, KENTUCKY	70%
RYEGRASS, PERENNIAL (FINELEAF VARIETY)	10%
FESCUE, CREEPING RED	20%

FERTILIZER SHALL BE APPLIED AT A RATE OF 450 LBS PER ACRE USING CHEMICALLY COMBINED COMMERCIAL 13-13-13 FERTILIZER.

PROJAC

CIVIL ENGINEERS
LAND PLANNERS
LAND SURVEYORS
LANDSCAPE ARCHITECTS
ENVIRONMENTAL SPECIALISTS
1917 S. GILBERT ST.
IOWA CITY, IOWA 52240
(319) 351-8282
www.mmsconsultants.net

Date	Revision
4/30/19	STORM REVISION -DLC

DEMOLITION, GRADING & EROSION CONTROL PLAN

HERITAGE GREEN 12TH ADDITION STORMWATER IMPROVEMENTS

HIAWATHA
LINN COUNTY
IOWA

MMS CONSULTANTS, INC.

Date: 11/06/2018	
Designed by: DLC	Field Book No:
Drawn by: DLC	Scale: 1" = 20'
Checked by: RLA	Sheet No: 2
Project No: IOWA CITY 2563-050	of: 3

RESOLUTION NO. 19-

RESOLUTION AUTHORIZING CONTRACTOR TO PROCEED WITH REVISED IMPROVEMENTS INSTALLATION FOR HERITAGE GREEN TWELFTH ADDITION

WHEREAS, On March 16, 2016, City Council passed Resolution #16-051 approving the plans, profiles, cross sections, and specifications for construction of improvements for Heritage Green Twelfth Addition in the City of Hiawatha, Linn County, Iowa, and

WHEREAS, the City Engineer has reviewed said revised plan of improvements, including an additional storm sewer installation across lots 9 and 10 at #341 and #351 Worthington Court, including approximately 221 LF of storm sewer and two (2) storm manholes, for Heritage Green Twelfth Addition in the City of Hiawatha, Linn County, Iowa, and recommends that they are in conformance to design standards of the City of Hiawatha, and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HIAWATHA, IOWA, to grant permission for Contractor to proceed with installation of revised improvements for Heritage Green Twelfth Addition including an additional storm sewer installation across lots 9 and 10 at #341 and #351 Worthington Court, including approximately 221 LF of storm sewer and two (2) storm manholes, in the City of Hiawatha, Linn County, Iowa.

AYES:
NAYS:

PASSED AND APPROVED this 15th day of May, 2019.

_____
Bill Bennett, Mayor

ATTEST:

_____
Amy Scheer, Deputy City Clerk