F10

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:** **November 1, 2018**

From: John Bender PE, City Engineer

Re: **Todd Hills 1st Addition**

Description: Approve Plan of Improvements

Report:

The plan of improvements for Todd Hills 1th Addition has been submitted for a new 34 lot residential subdivision south of Todd Hills Road and west of Edgewood Road. This new addition includes approximately the following:

- 2050LF of sanitary sewer,
- 1600LF of storm sewer,
- 2500LF of water main,
- 2300 LF of street paving, along with draintile.
- 7-LED Urbanscape street lights

Staff has reviewed the plan of improvements that are proposed for this development. The change that Council needs to be aware is the fact that the new Statewide Urban Design and Specifications (SUDAS) is being proposed for this addition. This new specification has been adopted by Marion with Cedar Rapids and Hiawatha planning to adopt this specification by the end of the year. The only major change in this specification is the new street standard proposed is a 26 foot wide street instead of the previously approved 28 foot street width. As a requirement, parking will always be removed from one side of the street. Other than this change, the new standard is very similar to the previous Cedar Rapids Metro Standard we have used since approximately 2006.

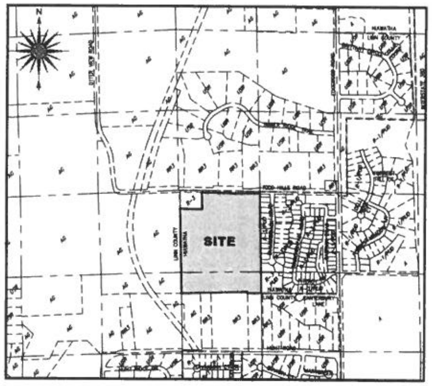
Engineering is also reviewing a proposed sanitary sewer lift station plan for service to this property. This pumping station will be located along Reed Road next to outlot "A", which is the regional detention basin. This plan will be accepted separately as we need to wait for the IDNR approval before we can proceed. This station will become property of the City when completed, as all improvement in new developments.

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

DRAWINGS OF PROPOSED PUBLIC IMPROVEMENTS
FOR
TODD HILLS FIRST ADDITION
TO HIAWATHA, IOWA

LOCATION MAP

1"=1000'



NOTES

1. THE PROPOSED IMPROVEMENTS INCLUDED IN THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH SUDAS AND HIAWATHA SPECIAL PROVISIONS EXCEPT AS LISTED BELOW:
   - NO EXCEPTIONS REQUESTED
2. CONTRACTOR TO SCHEDULE PRE-CONSTRUCTION MEETING WITH THE CITY OF HIAWATHA PRIOR TO BEGINNING CONSTRUCTION.

LEGEND

PROPERTY LINE
LOT LINE
ADJACENT PROPERTY LINE
SECTION LINE
EASEMENT LINE
BUILDING SETBACK LINE
EXISTING TRAFFIC SIGN
EXISTING CONIFEROUS TREE
EXISTING DECIDUOUS TREE
EXISTING TREE LINE
EXISTING SHRUB
UT — EXISTING UNDERGROUND TELEPHONE LINE
EXISTING TELEPHONE PEDESTAL
EXISTING TELEPHONE MANHOLE
OE — EXISTING OVERHEAD ELECTRIC
UE — EXISTING UNDERGROUND ELECTRIC
EXISTING ELECTRIC MANHOLE
EXISTING POWER POLE
EXISTING POWER POLE W/GUY WIRE & ANCHOR
EXISTING LIGHT POLE
UG — EXISTING GAS LINE
GV — EXISTING GAS VALVE
X — EXISTING FIELD FENCE
O — EXISTING CHAIN LINK FENCE
15" ST — EXISTING STORM SEWER
EXISTING STORM MANHOLE
EXISTING IDOT TYPE CURB INTAKE
EXISTING AREA INTAKE

EXISTING FLARED END SECTION
8" SAN — EXISTING SANITARY SEWER
EXISTING SANITARY MANHOLE
8"W — EXISTING WATER MAIN
EXISTING WATER GATE VALVE
EXISTING FIRE HYDRANT
841 — EXISTING GRADE CONTOUR
841 — PROPOSED GRADE CONTOUR
SF — PROPOSED SILT FENCE
PROPOSED STORM SEWER
PROPOSED SUBDRAIN
PROPOSED STORM MANHOLE
PROPOSED METRO RA-3 INTAKE
PROPOSED METRO RA-5 INTAKE
PROPOSED FLARED END SECTION
PROPOSED RIP-RAP BLANKET
PROPOSED SANITARY SEWER
PROPOSED SANITARY MANHOLE
PROPOSED WATER MAIN
PROPOSED WATER VALVE
PROPOSED FIRE HYDRANT

Developer: TODD HILLS, LLC
1840 COMMERCIAL DRIVE
WALFORD, IA 52351
CONTACT PERSON: MR. LOREN HARTELT
PHONE: 319-929-7414
FAX: 319-845-3066
E-MAIL: l.hartelt@schradergrp.com

Schnoor-Bonifazi Project Number: 18034

REFERENCED STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS – LATEST EDITION)

NOTE:
THE STANDARD DETAILS LISTED IN THIS TABLE ARE APPLICABLE TO BOTH THE PRIVATE AND PUBLIC IMPROVEMENTS INDICATED ON THESE PLANS.

DIVISION 2: Earthwork	
2010.1	Details of Embankments and Rebuilding Embankments
DIVISION 3: Trench and Trenchless Construction	
3010.101	Trench Bedding and Backfill Zones
3010.102	Rigid Gravity Pipe Trench Bedding
3010.103	Flexible Gravity Pipe Trench Bedding
3010.104	Pressure Pipe Trench Bedding
DIVISION 4: Sewers and Drains	
4010.201	Sanitary Sewer Service Stub
4030.221	RCP Apron Section Footing
4040.231	Subdrains
4040.232	Subdrain Cleanouts
DIVISION 5: Water Mains and Appurtenances	
5010.101	Thrust Blocks
5010.102	Tracer System
DIVISION 6: Structures for Sanitary and Storm Sewers	
6010.301	Circular Sanitary Sewer Manhole
6010.401	Circular Storm Sewer Manhole
6010.507	Single Open-throat Curb Intake, Small Box
6010.508	Single Open-throat Curb Intake, Large Box
6010.509	Double Open-throat Curb Intake, Small Box
6010.510	Double Open-throat Curb Intake, Large Box
6010.513	Open-Sided Area Intake
6010.601	Castings for Sanitary Sewer Manholes
6010.602	Castings for Storm Sewer Manholes
DIVISION 7: Streets and Related Work	
7010.101	Joints
7010.102	PCC Curb Details
7010.103	Manhole Boxouts in PCC Pavement
7010.901	PCC Pavement Jointing
7010.904	Typical Jointing Layout
7010.905	PCC Cul-de-sac Joint Locations
7030.104	Right-of-way Grading
DIVISION 9: Site Work and Landscaping	
9040.103	Rolled Erosion Control Product (RECP) Installation on Slopes
9040.104	Rolled Erosion Control Product (RECP) Installation in Channel
9040.110	Rip Rap Apron for Pipe Outlet onto Flat Ground
9040.111	Rip Rap Apron for Pipe Outlet into Channel
9040.119	Silt Fence
9040.120	Stabilized Construction Entrance

NOTE: ALL SUDAS SPECIFICATIONS AND HIAWATHA SPECIAL PROVISIONS, SHALL APPLY TO THE CONSTRUCTION OF THIS PROJECT.

UTILITY & EMERGENCY PHONE NUMBERS

ENGINEERING DEPARTMENT	(319)-743-6340
POLICE DEPARTMENT	(319)-377-1511
EMERGENCY	911
FIRE DEPARTMENT	(319)-377-8237
WATER DEPARTMENT	(319)-743-6310
SEWER MAINTENANCE DEPARTMENT	(319)-377-6367
STREET MAINTENANCE DEPARTMENT	(319)-377-6367
IOWA ONE CALL (UTILITIES)	(800)-292-8989
MID-AMERICAN ENERGY	(319)-298-5155
CENTURYLINK	
ENGINEER, WEST SIDE	(319)-399-7665
ENGINEER, EAST SIDE	(319)-399-7209
ALLIANT/IES INDUSTRIES (ELECTRIC, STEAM)	
INFORMATION, WEST SIDE	(319)-398-4540
INFORMATION, EAST SIDE	(319)-398-4555
MEDIACOM CABLE	
BUSINESS	(319)-395-9699
LOCATIONS	(800)-292-8989
AT&T (TELEPHONE)	(319)-364-6111
QWEST (US WEST) (TELEPHONE)	(319)-399-7495
LINN COUNTY REC	(319)-377-1587
CEDAR RAPIDS AND IOWA CITY RAILWAY CO.	(319)-398-7745
IOWA DEPARTMENT OF TRANSPORTATION	
DISTRICT ENGINEER	(319)-364-8189
MAINTENANCE GARAGES	(319)-336-9200
LINN COUNTY ENGINEER	(319)-398-3445
LINN COUNTY MAINTENANCE	(319)-398-3530

DESIGN SPEED & FUNCTIONAL CLASSIFICATIONS

WILSON WAY – 30 MPH DESIGN SPEED
LOCAL RESIDENTIAL CLASSIFICATION

REED ROAD – 30 MPH DESIGN SPEED
LOCAL RESIDENTIAL CLASSIFICATION

SHEET INDEX

NO.	DESCRIPTION
C1.1	OVERALL SITE LAYOUT PLAN
C2.1	SITE GRADING & EROSION CONTROL PLAN
C2.2	SITE GRADING & EROSION CONTROL PLAN
C3.1	REED ROAD PLAN & PROFILE
C3.2	REED ROAD PLAN & PROFILE
C3.3	REED ROAD PLAN & PROFILE
C3.4	REED ROAD PLAN & PROFILE
C4.1	MCLAIN WAY PLAN & PROFILE
C4.2	MCLAIN WAY PLAN & PROFILE
C4.3	MCLAIN WAY PLAN & PROFILE
C5.1	WATER MAIN EXTENSION PLAN & PROFILE
C5.2	STORM SEWER PLAN & PROFILE
C5.3	SANITARY SEWER PLAN & PROFILE
C6.1	SITE CONSTRUCTION NOTES & DETAILS

TODD HILLS FIRST ADDITION

CERTIFICATION

LICENSED PROFESSIONAL ENGINEER
JED SCHNOOR
19241
IOWA

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

SIGNATURE __________
NAME: JED SCHNOOR
DATE: 10/31/2018
MY LICENSE RENEWAL DATE IS: DECEMBER 31, 2018
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL:
COVER, C1.1 – C6.1

CITY OF HIAWATHA

THIS ENGINEERING DOCUMENT IS APPROVED FOR CONSTRUCTION

JOHN BENDER, CITY ENGINEER DATE

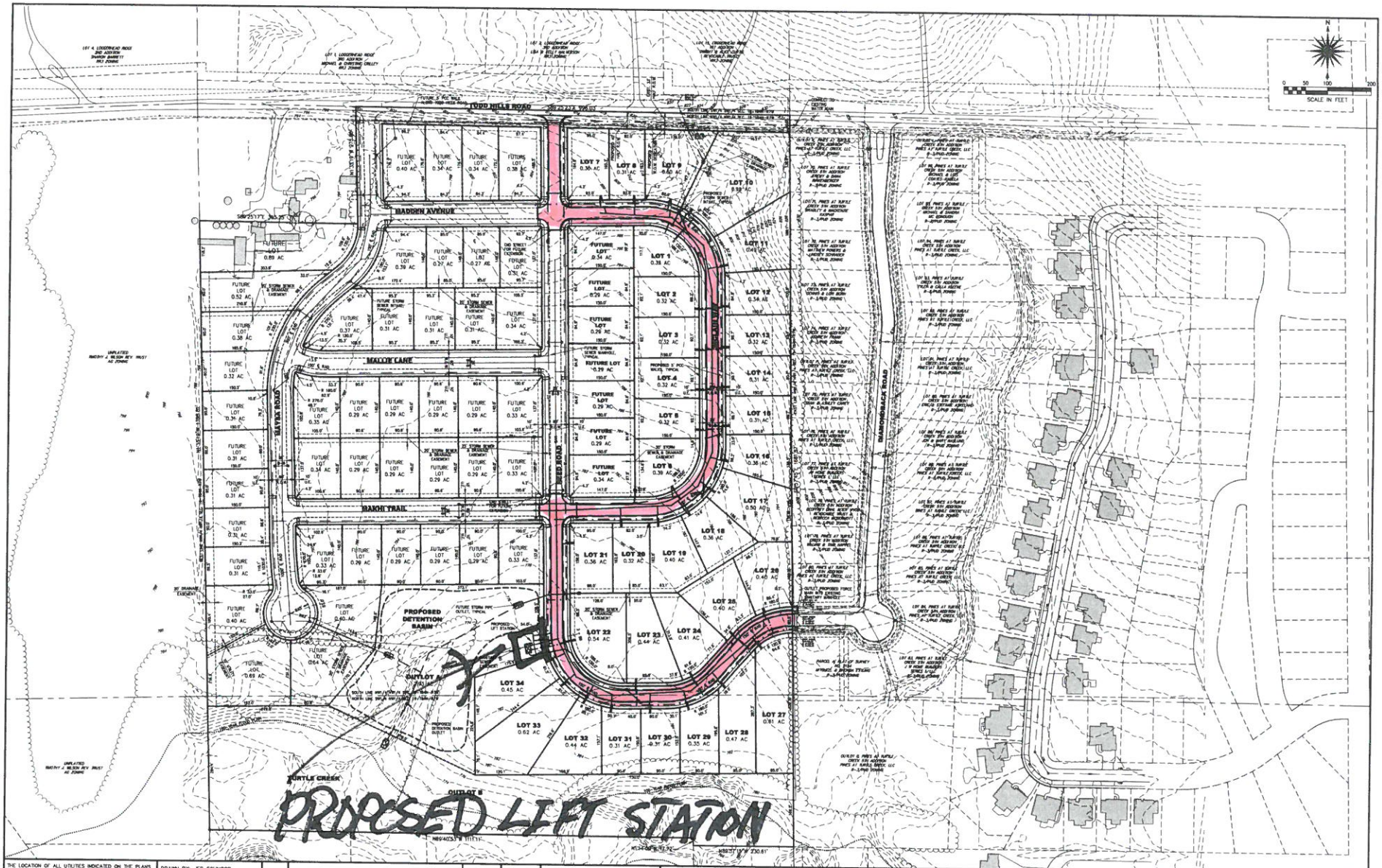
Hiawatha!™

Schnoor Bonifazi Engineering & Surveying

SCHNOOR-BONIFAZI ENGINEERING & SURVEYING, LC
431 FIFTH AVENUE SW
CEDAR RAPIDS, IA 52404
(319) 298-8888 (PHONE)

CITY APPROVAL

OCTOBER 31, 2018



THE LOCATION OF ALL UTILITIES INDICATED ON THE PLANS IS TAKEN FROM EXISTING PUBLIC RECORDS. THE EXACT LOCATION AND ELEVATION OF ALL PUBLIC 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.

DRAWN BY: JED SCHNOOR

APPROVED BY: JED SCHNOOR

DATE: 10/31/2018

REV NO.	REVISION DESCRIPTION	APPROVED	DATE

Hiawatha!

SCHNOOR-BONIFAZI ENGINEERING & SURVEYING, LC
431 FIFTH AVENUE SW
CEDAR RAPIDS, IA 52404
(319) 398-8000 (PHONE)

Schnoor Bonifazi

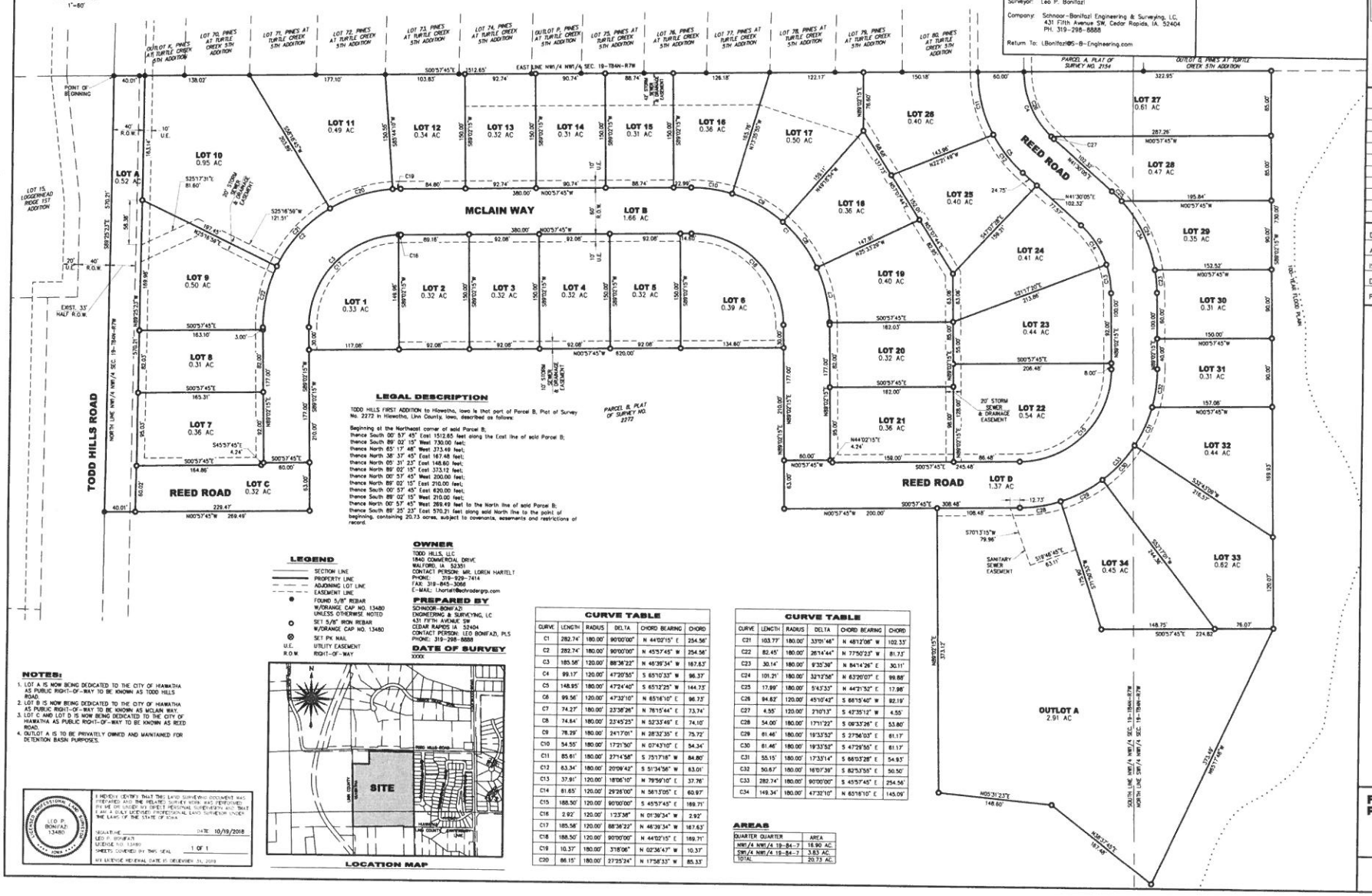
TODD HILLS FIRST ADDITION TO HIAWATHA, IOWA

TITLE: **OVERALL SITE LAYOUT PLAN**

SHEET NO. **C1.1**

FINAL PLAT
TODD HILLS FIRST ADDITION TO HIAWATHA, IOWA

SCALE IN FEET
1"=60'



INDEX LEGEND	
Location:	PARCEL B, PLAT OF SURVEY NO. 2272 NW 1/4 19-84-7
Requestor:	TODD HILLS, LLC.
Proprietor:	TODD HILLS, LLC.
Surveyor:	Leo P. Bonifazi
Company:	Schnoor-Bonifazi Engineering & Surveying, LC. 431 Fifth Avenue SW, Cedar Rapids, IA. 52404 PH. 319-298-8888
Return To:	LBonifazi@S-B-Engineering.com

SPACE RESERVED FOR RECORDING PURPOSES

Schnoor Bonifazi
Engineering & Surveying
SCHNOOR-BONIFAZI
ENGINEERING & SURVEYING, LC
431 FIFTH AVENUE SW
CEDAR RAPIDS, IA 52404
(319) 298-8888 (PHONE)

REVISIONS

DRAWN: JED SCHNOOR
APPROVED: LEO BONIFAZI
ISSUED FOR: REVIEW
DATE: 10/17/2018
PROJECT NO.: 18034

LEGAL DESCRIPTION

TODD HILLS FIRST ADDITION to Hiawatha, Iowa is that part of Parcel B, Plat of Survey No. 2272 in Hiawatha, Linn County, Iowa, described as follows:

Beginning at the Northeast corner of said Parcel B;
thence South 00° 57' 45" East 1512.65 feet along the East line of said Parcel B;
thence South 89° 02' 15" West 730.00 feet;
thence North 65° 17' 48" West 373.49 feet;
thence North 38° 37' 45" East 167.48 feet;
thence North 05° 31' 23" East 148.60 feet;
thence North 89° 02' 15" East 373.12 feet;
thence North 00° 57' 45" West 200.00 feet;
thence North 89° 02' 15" East 210.00 feet;
thence South 00° 57' 45" East 620.00 feet;
thence South 89° 02' 15" West 210.00 feet;
thence North 00° 57' 45" West 269.49 feet to the North line of said Parcel B;
thence South 89° 25' 23" East 570.21 feet along said North line to the point of beginning, containing 20.73 acres, subject to covenants, easements and restrictions of record.

LEGEND

- SECTION LINE
- PROPERTY LINE
- ADJOINING LOT LINE
- EASEMENT LINE
- FOUND 5/8" REBAR W/ORANGE CAP NO. 13480 UNLESS OTHERWISE NOTED
- SET 5/8" IRON REBAR W/ORANGE CAP NO. 13480
- SET PK NAIL
- U.E. UTILITY EASEMENT
- R.O.W. RIGHT-OF-WAY

OWNER

TODD HILLS, LLC
1840 COMMERCIAL DRIVE
WALFORD, IA 52351
CONTACT PERSON: MR. LOREN HARTELT
PHONE: 319-929-7414
FAX: 319-845-3068
E-MAIL: lhartelt@schroedergrp.com

PREPARED BY

SCHNOOR-BONIFAZI
ENGINEERING & SURVEYING, LC
431 FIFTH AVENUE SW
CEDAR RAPIDS IA 52404
CONTACT PERSON: LEO BONIFAZI, PLS
PHONE: 319-298-8888

DATE OF SURVEY

XXXX

NOTES:

1. LOT A IS NOW BEING DEDICATED TO THE CITY OF HIAWATHA AS PUBLIC RIGHT-OF-WAY TO BE KNOWN AS TODD HILLS ROAD.
2. LOT B IS NOW BEING DEDICATED TO THE CITY OF HIAWATHA AS PUBLIC RIGHT-OF-WAY TO BE KNOWN AS MCLAIN WAY.
3. LOT C AND LOT D IS NOW BEING DEDICATED TO THE CITY OF HIAWATHA AS PUBLIC RIGHT-OF-WAY TO BE KNOWN AS REED ROAD.
4. OUTLOT A IS TO BE PRIVATELY OWNED AND MAINTAINED FOR DETENTION BASIN PURPOSES.

I HEREBY CERTIFY THAT THIS LAND SURVEYING DOCUMENT WAS PREPARED AND THE RELATED SURVEY WORK WAS PERFORMED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF IOWA.

LEO P. BONIFAZI 13480 — LICENSED PROFESSIONAL LAND SURVEYOR — IOWA

SIGNATURE: _____ DATE: 10/19/2018
LEO P. BONIFAZI
LICENSE NO: 13480
SHEETS COVERED BY THIS SEAL: 1 OF 1
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2019

LOCATION MAP

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD
C1	282.74'	180.00'	90°00'00"	N 44°02'15" E	254.56'
C2	282.74'	180.00'	90°00'00"	N 45°57'45" W	254.56'
C3	185.56'	120.00'	88°36'22"	N 46°39'34" W	167.63'
C4	99.13'	120.00'	47°20'55"	S 65°10'33" W	96.37'
C5	148.95'	180.00'	47°24'40"	S 65°12'25" W	144.73'
C6	99.56'	120.00'	47°32'10"	N 65°16'10" E	96.73'
C7	74.27'	180.00'	23°38'26"	N 76°15'44" E	73.74'
C8	74.84'	180.00'	23°45'25"	N 52°33'46" E	74.10'
C9	76.29'	180.00'	24°17'01"	N 28°32'35" E	75.72'
C10	54.55'	180.00'	17°21'50"	N 07°43'10" E	54.34'
C11	85.61'	180.00'	27°14'58"	S 75°17'16" W	84.80'
C12	63.34'	180.00'	20°09'42"	S 51°34'56" W	63.01'
C13	37.91'	120.00'	18°06'10"	N 79°59'10" E	37.76'
C14	61.65'	120.00'	29°26'00"	N 58°13'05" E	60.97'
C15	188.50'	120.00'	90°00'00"	S 45°57'45" E	169.71'
C16	2.92'	120.00'	1°23'38"	N 01°39'34" W	2.92'
C17	185.56'	120.00'	88°36'22"	N 46°39'34" W	167.63'
C18	188.50'	120.00'	90°00'00"	N 44°02'15" E	169.71'
C19	10.37'	180.00'	3°18'06"	N 02°36'47" W	10.37'
C20	86.15'	180.00'	27°25'24"	N 17°58'33" W	85.33'

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD
C21	103.77'	180.00'	33°01'46"	N 48°12'08" W	102.33'
C22	82.45'	180.00'	26°14'44"	N 77°50'23" W	81.73'
C23	30.14'	180.00'	9°35'39"	N 84°14'26" E	30.11'
C24	101.21'	180.00'	32°12'56"	N 63°20'07" E	99.88'
C25	17.99'	180.00'	5°43'33"	N 44°21'32" E	17.98'
C26	94.62'	120.00'	45°10'42"	S 66°15'40" W	92.19'
C27	4.55'	120.00'	2°10'13"	S 47°35'12" W	4.55'
C28	54.00'	180.00'	17°11'22"	S 08°33'26" E	53.80'
C29	61.46'	180.00'	19°33'52"	S 27°56'03" E	61.17'
C30	61.46'	180.00'	19°33'52"	S 47°29'55" E	61.17'
C31	55.15'	180.00'	17°33'14"	S 66°03'28" E	54.93'
C32	50.67'	180.00'	16°07'39"	S 82°53'55" E	50.50'
C33	282.74'	180.00'	90°00'00"	S 45°57'45" E	254.56'
C34	149.34'	180.00'	47°32'10"	N 65°16'10" E	145.09'

AREAS

QUARTER	QUARTER	AREA
NW1/4	NW1/4 19-84-7	16.90 AC
SW1/4	NW1/4 19-84-7	3.83 AC
TOTAL		20.73 AC

FINAL PLAT
TODD HILLS FIRST ADDITION TO HIAWATHA, IOWA

FINAL PLAT

DRAFT

RESOLUTION NO. 18-
City Council

RESOLUTION AUTHORIZING CONTRACTOR TO PROCEED WITH IMPROVEMENTS INSTALLATION FOR TODD HILLS FIRST ADDITION

WHEREAS, plans, profiles, cross sections, and specifications for construction of improvements in Todd Hills First Addition to the City of Hiawatha, Linn County, Iowa have been submitted to the City of Hiawatha, and

WHEREAS, the City Engineer has reviewed said plans, profiles, cross sections and specifications for construction of improvements including sanitary sewer, storm sewer, water main, street paving along with drain tile and seven (7) LED urbanscape street lights, in Todd Hills First Addition to the City of Hiawatha, Linn County, Iowa, and recommends that they are in conformance to preliminary plat and design standards of the City of Hiawatha, and

WHEREAS, the Hiawatha Water Superintendent has reviewed the plan of improvements for Peck's Landing First Addition to the City of Hiawatha, Linn County, Iowa, and recommends approval, 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 improvements in Todd Hills First Addition including sanitary sewer, storm sewer, water main, street paving along with drain tile and seven (7) LED urbanscape street lights to the City of Hiawatha, Linn County, Iowa.

AYES:
NAYS:
ABSENT:

PASSED AND APPROVED this 7th day of November, 2018.

_____
Bill Bennett, Mayor

ATTEST:

_____
Kelly Kornegor, City Clerk