



CITY OF BURTON

BURTON PLANNING COMMISSION MEETING

APRIL 9, 2019

MINUTES

Council Chambers

Regular Meeting

5:00 PM

4303 S. CENTER ROAD
BURTON, MI 48519

This meeting was opened by Chairperson Deb Walton at 5:00 PM.

A. PLEDGE OF ALLEGIANCE

Mr. Burge recognized the passing of Jackie Beutler's mother with a moment of silence.

B. ROLL CALL

Attendee Name	Title	Status	Arrived
Vaughn Smith	Councilman	Present	
Kevin Burge	Vice Chair	Present	
Mary Ann White	Commissioner	Present	
Tom Gorang	Commissioner	Excused	
Deb Walton	Chairperson	Present	
John Benthall	Commissioner	Present	
Kris Johns	Commissioner	Present	
Robert Johnson	Commissioner	Excused	

C. STAFF PRESENT

Amber Abbey, Planning/Zoning Superintendent
Racheal Boggs, Deputy Clerk

D. APPROVAL OF MINUTES

1. Planning Commission - Regular Meeting - Mar 12, 2019 5:00 PM

RESULT:	ACCEPTED [UNANIMOUS]
MOVER:	John Benthall, Commissioner
SECONDER:	Kevin Burge, Vice Chair
AYES:	Smith, Burge, White, Walton, Benthall, Johns
EXCUSED:	Gorang, Johnson

E. SITE PLAN REVIEW

1. SPR #19-07

By: Mike Wizynajtys
3487 S. Linden Rd.
Flint, MI 48507

Re: Vacant Parcel on Belsay Rd. Burton, MI 48509

59-14-526-037

For: Proposed storage facility development

Mike Wizynajtys is the developer and civil engineer for this project. This is 15 acres of property at the southwest corner of Belsay Road. It is zoned C-2. Our intention is to develop a storage facility here. There will be a green barrier and security fence with slats in it as protection for the neighboring residents. We would also like to deed some of the green belt on the back side of the property to the neighbors because we have more land than we need there.

Mrs. Abbey stated the applicant came to the office with a full site plan. He also has to go in front of the Zoning Board of Appeals (ZBA). If you feel comfortable approving this tonight it will need to be with the contingency of ZBA approval. The property has been undeveloped for many years. There has not been many inquiries about the space so this development would be great for the city. We did speak about the green buffer between this property and the adjoining property owners as well as a screened fence. He has met all of the requirements. As far as deeding land to neighboring properties, this is not something we are comfortable with. We are unsure if the neighbors would even want the property. We would prefer he keep the property and be responsible for the maintenance of the trees. The site plan looks good so we recommend approval contingent upon ZBA approval of the use.

Mr. Burge would like to know if there will be a shield on the back of the light so it doesn't bother the adjoining residents.

Mr. Wizynajtys stated they will use full cut down lights so the light will shine in a downward direction. We have a storage facility in Grand Blanc Township on Baldwin Road and we did the same thing there. We want it to be secure and have lighting in and around the doors for our customers but we do not want to create issues for those around us. We want to be good neighbors. With the fencing and the trees we plan to put into place, I think it will even help with the existing freeway noise for the neighbors there.

Mr. Burge stated this is a great project for this area. What is your plan to keep the dust and dirt under control during development?

Mr. Wizynajtys stated this is part of the soil erosion control permit issued by the Genesee County Drain Commissioner's office. I am very familiar with this because we have done many projects in the past. We have to comply and we intend to comply with it.

Mr. Burge stated the tree line and the privacy fence are great. I am glad you are thinking of the residents. I would like to see this approved. In terms of deeding the property, which will raise assessments, I don't want anything to do with that.

Mr. Wizynajtys stated if this part of the plan doesn't work for you, we will be happy to keep the property and maintain the berm ourselves.

Ms. White agrees with Mr. Burge about not deeding the property to the residents. What is your plan for outside parking and storage?

Mr. Wizynajtys stated the idea is to only allow people to park RV's, boats and vehicles there. We don't want it to look ugly. Only nice, neat things will be parked there.

Mr. Smith stated he agrees with the other commission members about the deeding of the property. Otherwise, I am fine with this.

Mrs. Walton asked how many storage facilities they currently own and if there will be a separate driveway going in there.

Mr. Wizynajtys stated he only owns one facility but this will be the third he has developed. The curb cut will be shared with the restaurant there but separated as much as possible.

Mrs. Walton asked if there will be an entrance to the business from Court Street.

Mr. Wizynajtys said, no.

Mr. Burge asked about the owner of the property.

Mr. Wizynajtys stated his decision to purchase this property from the current owner is contingent upon the approval of this project.

Mr. Burge would like to make a motion to approve this site plan with the following contingencies: eliminating the deeding of land to adjoining property owners and approval by the Zoning Board of Appeals on May 16, 2019.

RESULT:	CARRIED AS AMENDED [UNANIMOUS]
MOVER:	Kevin Burge, Vice Chair
SECONDER:	Vaughn Smith, Councilman
AYES:	Smith, Burge, White, Walton, Benthall, Johns
EXCUSED:	Gorang, Johnson

F. AUDIENCE PARTICIPATION

None.

G. BOARD DISCUSSION

Mrs. Abbey stated there are some training opportunities if anyone is interested. Rowe Engineering has a free training on Tuesday, April 23rd from 7:00PM-9:00PM. The topics include The Right to Farm Act and site plan reviews and developments. If you are interested, I will email the information to you. Another training opportunity I have is for the Spring Institute through the Michigan Association of Planning. We have enough money in the budget to take two of you, if anyone is interested. It is a one day training on Thursday, April 25th from 8:30 AM-4:30 PM in Lansing. I will need a decision tonight on who would like to go so we can get you signed up. The topics being discussed are the art and science of planning and data and recreational marijuana in Michigan. There will also be other presentations and keynote speakers.

The Planning Commission decided to have Mr. Smith and Mr. Johns go to the training.

Mrs. Abbey provided the following updates:

- I am hoping to have some kind of summary from the State of Michigan workgroup I was a part of for recreational marijuana. We are in good shape because we already have an ordinance for medical marijuana. We talked about having a work group for this which will be a public meeting and should be done at night so the public can attend. I will keep you updated as I receive more information.
- The medical facility at 2065 South Center Road is having their Grand Opening this Friday, April 12th at 12:00. Everyone is invited.
- AEY Capital has officially pulled their application for special use for the Elwood's property. If they decide to pursue a special use with this or any other property, they will have to reapply.
- I have the right of way plans for Genesee Road for the General Motors property with me tonight for you to look at. Davison Road is not complete due to some infrastructure issues. Genesee Road includes a bypass lane near the entrance as well as a de-acceleration lane going southbound. I can answer your questions and if there is anything I need to forward to the engineers, I can do that.

Mr. Burge asked if we have an inspector come out to a property when we have projects being done like the storage unit tonight. The dust and mud have been an issue in the past with other projects.

Mrs. Abbey stated we do investigate these. In the most recent project, the DEQ gave the opinion that they were doing all they could at the time based on the weather conditions. They had two watering trucks working full time but because of the amount of dirt they had exposed it was difficult to keep the dust down.

Mrs. Walton would like to know the protocol for Planning Members going to City Council meetings to speak on projects that we have voted on in Planning Meetings. I feel once we vote here, we are done. I am confident that City Council will do what they need to do and Mr. Smith will answer any questions they may have.

Mrs. Abbey stated you have every right to attend any meeting you so chose to represent your board. You should feel comfortable that Mr. Smith is the Council Representative on the Planning Commission and he presents this boards opinion to the council for you. So, it's not necessary for you to go but you can if you want to. If you say you are representing the Planning Commission and you give false information, that is not a good idea but if you are giving your own opinion or an explanation of why you voted a certain way, that's fine.

THE NEXT REGULAR SCHEDULED PLANNING MEETING WILL BE HELD ON MAY 14, 2019 @ 5:00 PM.

Agendas and minutes may be found at www.burtonmi.gov

Meeting was adjourned at 5:35 PM.



CITY OF BURTON

BURTON PLANNING COMMISSION MEETING

MARCH 12, 2019

MINUTES

Council Chambers

Regular Meeting

5:00 PM

4303 S. CENTER ROAD
BURTON, MI 48519

This meeting was opened by Chairperson Deb Walton at 5:00 PM.

A. PLEDGE OF ALLEGIANCE

B. ROLL CALL

Attendee Name	Title	Status	Arrived
Vaughn Smith	Councilman	Excused	
Kevin Burge	Vice Chair	Present	
Mary Ann White	Commissioner	Excused	
Tom Gorang	Commissioner	Excused	
Deb Walton	Chairperson	Present	
John Benthall	Commissioner	Present	
Kris Johns	Commissioner	Present	
Robert Johnson	Commissioner	Present	

C. STAFF PRESENT

Amber Abbey, Planning/Zoning Superintendent
Racheal Boggs, Deputy Clerk

D. APPROVAL OF MINUTES

1. Planning Commission - Regular Meeting - Jan 8, 2019 5:00 PM

RESULT: ACCEPTED [UNANIMOUS]
MOVER: Robert Johnson, Commissioner
SECONDER: Kevin Burge, Vice Chair
AYES: Burge, Walton, Benthall, Johns, Johnson
EXCUSED: Smith, White, Gorang

E. PUBLIC HEARING

1. SPR #19-03 / ZC#324

By: Ronald James
3189 Carr St.
Flint, MI 48506

Re: 4274 Davison Rd. Burton, MI 48509

Minutes Acceptance: Minutes of Mar 12, 2019 5:00 PM (Approval of Minutes)

59-10-200-001

For: Zoning change from R-1B, Single Family Residential to M-1, Light Industrial

Ronald James of Flint states his is the only property within a mile that is zoned R-1.

Mrs. Abbey stated by changing this zoning it is not going to spot-zone anything. Additionally, the ZBA has approved similar uses so the administration recommends approval.

Mr. Burge asked if he can do anything he wants within this zoning.

Mrs. Abbey stated if they are permitted uses within those zones.

Mr. Burge would like to know the owners intention for this property.

Mr. James stated they would like to do used car sales in addition to detailing.

Mr. Burge asked the administration when they will have to have a paved parking lot.

Mrs. Abbey stated as the property sits today, they are doing car detail. They came back to the ZBA to request an auto sales lot. At that time, the ZBA put some stipulations on them. They chose not to do the auto sales lot so they never had to put the stipulations in. That will go away if the zoning change happens. The variance is no longer necessary. They need to have a hard surface for required parking spaces. For site plan review, they will have to have it based on the use. Since we are not considering a use today, we cannot tell them they must put in so many hard surface spaces. Today we are talking about all uses permitted within that zone.

Mrs. Walton asked if the applicant will have to come back to the Planning Commission.

Mrs. Abbey said, that depends because some things can be done administratively however, the Planning Commission can tell me if there is something you would like to have included. If they are doing any type of work, they will come before you and you can put stipulations on them.

Mr. James stated I shouldn't have had to come here. This should have already been rezoned when the rest of the properties were zoned commercial.

Mr. Burge would like to place a stipulation that they have a paved parking lot when it comes back to the administration whether it is this owner or a new owner.

Mrs. Abbey said you cannot place stipulations on a re-zoning.

Mr. Johnson stated our business tonight is only for the zoning change; to make a recommendation to City Council.

RESULT:	CARRIED [3 TO 2]
MOVER:	Robert Johnson, Commissioner
SECONDER:	Kris Johns, Commissioner
AYES:	Benthall, Johns, Johnson
NAYS:	Burge, Walton
EXCUSED:	Smith, White, Gorang

F. SITE PLAN REVIEW

1. SPR #19-05

By: Vash Investments Group
4040 E. Bristol Rd.
Burton, MI 48519

Re: 4040 E. Bristol Rd. Burton, MI 48519
59-34-100-044 – C-2 General Business Zone

For: 4 Warehouse Style Self Storage Units – Cold Storage only

Bill Clark of Vash Investment Group stated he would like to build a 40 X 120 warehouse. It will be similar to what we have at the corner of Dort Highway and Bristol Road. We are seeking approval to go to the next step.

Mrs. Abbey stated last month they were approved by the ZBA to have the self storage facility on the site. We have added a sidewalk stipulation; at the road frontage. The only other stipulation I would like to include is that the sidewalk be included beginning in phase 1 of the project. The administration recommends approval.

RESULT:	CARRIED [UNANIMOUS]
MOVER:	Kevin Burge, Vice Chair
SECONDER:	John Benthall, Commissioner
AYES:	Burge, Walton, Benthall, Johns, Johnson
EXCUSED:	Smith, White, Gorang

G. ADMINISTRATIVE SITE PLAN REVIEW

1. SPR #19-01

By: Michael Bully
4499 Davison Rd.
Burton, MI 48509

Re: 4499 Davison Rd. Burton, MI 48509

For: Additional tenant to an existing auto dealer

2. SPR #19-02

By: Ray Powell
1096 N. Center Rd. Suite 131
Burton, MI 48509

Re: 1096 N. Center Rd. Suite 131 Burton, MI 48509

For: Additional tenant in existing auto wholesale

3. SPR #19-04

By: Michael Pickard
5500 Brigham Rd.
Goodrich, MI 48438

Re: 1423 E. Bristol Rd. Burton, MI 48529

For: Dog Groomer

H. AUDIENCE PARTICIPATION

None.

I. BOARD DISCUSSION

Mrs. Abbey stated she will keep the board updated in regards to recreational marijuana.

Meeting was adjourned at 5:32 PM.

Minutes Acceptance: Minutes of Mar 12, 2019 5:00 PM (Approval of Minutes)



Burton Planning Commission

4303 S. Center Road
Burton, MI 48519

Meeting: 04/09/19 05:00 PM
Department: Department of Public Works
Category: Site Plan Review
Prepared By: Amber Abbey
Department Head: Bette Bigsby

E.1

ADOPTED

AGENDA ITEM (ID # 4306)

DOC ID: 4306

SPR #19-07

By: Mike Wizynajtys
3487 S. Linden Rd.
Flint, MI 48507

Re: Vacant Parcel on Belsay Rd. Burton, MI 48509
59-14-526-037

For: Proposed storage facility development

COMMENTS - Current Meeting:

Mike Wizynajtys is the developer and civil engineer for this project. This is 15 acres of property at the southwest corner of Belsay Road. It is zoned C-2. Our intention is to develop a storage facility here. There will be a green barrier and security fence with slats in it as protection for the neighboring residents. We would also like to deed some of the green belt on the back side of the property to the neighbors because we have more land than we need there.

Mrs. Abbey stated the applicant came to the office with a full site plan. He also has to go in front of the Zoning Board of Appeals (ZBA). If you feel comfortable approving this tonight it will need to be with the contingency of ZBA approval. The property has been undeveloped for many years. There has not been many inquiries about the space so this development would be great for the city. We did speak about the green buffer between this property and the adjoining property owners as well as a screened fence. He has met all of the requirements. As far as deeding land to neighboring properties, this is not something we are comfortable with. We are unsure if the neighbors would even want the property. We would prefer he keep the property and be responsible for the maintenance of the trees. The site plan looks good so we recommend approval contingent upon ZBA approval of the use.

Mr. Burge would like to know if there will be a shield on the back of the light so it doesn't bother the adjoining residents.

Mr. Wizynajtys stated they will use full cut down lights so the light will shine in a downward direction. We have a storage facility in Grand Blanc Township on Baldwin Road and we did the same thing there. We want it to be secure and have lighting in and around the doors for our customers but we do not want to create issues for those around us. We want to be good neighbors. With the fencing and the trees we plan to put into place, I think it will even help with the existing freeway noise for the neighbors there.

Mr. Burge stated this is a great project for this area. What is your plan to keep the dust and dirt under control during development?

Mr. Wizynajtys stated this is part of the soil erosion control permit issued by the Genesee

Mr. Burge stated the tree line and the privacy fence are great. I am glad you are thinking of the residents. I would like to see this approved. In terms of deeding the property, which will raise assessments, I don't want anything to do with that.

Mr. Wizynajtys stated if this part of the plan doesn't work for you, we will be happy to keep the property and maintain the berm ourselves.

Ms. White agrees with Mr. Burge about not deeding the property to the residents. What is your plan for outside parking and storage?

Mr. Wizynajtys stated the idea is to only allow people to park RV's, boats and vehicles there. We don't want it to look ugly. Only nice, neat things will be parked there.

Mr. Smith stated he agrees with the other commission members about the deeding of the property. Otherwise, I am fine with this.

Mrs. Walton asked how many storage facilities they currently own and if there will be a separate driveway going in there.

Mr. Wizynajtys stated he only owns one facility but this will be the third he has developed. The curb cut will be shared with the restaurant there but separated as much as possible.

Mrs. Walton asked if there will be an entrance to the business from Court Street.

Mr. Wizynajtys said, no.

Mr. Burge asked about the owner of the property.

Mr. Wizynajtys stated his decision to purchase this property from the current owner is contingent upon the approval of this project.

Mr. Burge would like to make a motion to approve this site plan with the following contingencies: eliminating the deeding of land to adjoining property owners and approval by the Zoning Board of Appeals on May 16, 2019.

ATTACHMENTS:

- Back up 19-06 (PDF)

RESULT:	CARRIED AS AMENDED [UNANIMOUS]
MOVER:	Kevin Burge, Vice Chair
SECONDER:	Vaughn Smith, Councilman
AYES:	Smith, Burge, White, Walton, Benthall, Johns
EXCUSED:	Tom Gorang, Robert Johnson

E.1



City of Burton
 Department of Public Works
 4093 Manor Drive
 Genesee County, Burton, Michigan 48519
 (810) 742-9230



APPLICATION FOR SITE PLAN REVIEW

DATE FILED: 3-26-19
 FEE: \$400.00
 RECEIPT NO: [Signature]
 CHECK NO: 24687

SPR #: 19-07

PLEASE PRINT

DATE OF PLANNING COMMISSION MEETING: April 9, 2019
 APPLICANTS NAME: Mike Wizenajtys
 APPLICANTS ADDRESS: 3487 S. Linden Road
 APPLICANTS PHONE NO: 810-845-5364
 PROPOSED NAME OF BUSINESS: Belsay Road Storage
 SITE ADDRESS: Part of 1076 S. Belsay Rd
 SUBDIVISION & LOT # OR PARCEL NUMBER: Part of 59-14-526-035 & 59-14-526-037
 RE: Proposed Storage Facility development

APPLICANT: IT IS TO YOUR ADVANTAGE TO ATTEND THE ABOVE SCHEDULED MEETING. THE PLANNING COMMISSION MAY HAVE QUESTIONS THAT DIRECTLY AFFECT APPROVAL, DENIAL, OR POSTPONING UNTIL THESE QUESTIONS CAN BE ANSWERED.

APPLICANTS SIGNATURE: [Signature]

NOTE: All site plans must be filed at least two (2) weeks prior to the Planning Commission hearing and **MUST** comply with the procedures set forth in Section 157.092 of Codified Ordinance as attached. Must include **twelve (12) sets** of prints in order to process the application.

Attachment: Back up 19-06 (4306 : SPR #19-07)

NOTES:

PUBLIC UTILITY STATEMENT – ALL SANITARY SEWERS FOR THIS PROJECT ARE DESIGNED FOR AND WILL BECOME A PUBLIC SYSTEM UPON SATISFACTORY APPROVAL BY THE GENESEE COUNTY DRAIN COMMISSIONER, WATER AND WASTE SERVICES DIVISION.

EASEMENT STATEMENT – ALL PUBLIC SANITARY SEWERS SHALL HAVE AN EASEMENT GRANTED TO THE AGENCY OR MUNICIPALITY RESPONSIBLE FOR MAINTENANCE, REPAIR, AND/OR REPLACEMENT.

CONTRACTOR ALERT – THIS PROJECT HAS BEEN DESIGNED USING THE LATEST GCDC CRITERIA. REVIEW THE NOTES, DETAILS AND DESIGN CAREFULLY PRIOR TO SUBMITTING A BID. FULL COMPLIANCE WITH THE NEW STANDARDS WILL BE REQUIRED.

UTILITY WARNING – UNDERGROUND UTILITY LOCATIONS AS SHOWN ON THESE PLANS WERE OBTAINED FROM UTILITY OWNERS, AND WERE NOT FIELD LOCATED. A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY "MISS DIG" (800-482-7171) AND HAVE ALL UNDERGROUND UTILITIES STAKED BEFORE ANY WORK MAY BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ALL UTILITIES THAT MAY INTERFERE WITH CONSTRUCTION. 72 HOURS BEFORE YOU DIG – CALL "MISS DIG" (800-484-7171).

NOTE: NO CONSTRUCTION OF PUBLIC UTILITIES IS PROPOSED AT THIS TIME. NO CONNECTION TO A PUBLIC UTILITY IS PROPOSED AT THIS TIME.

TOTAL DISTURBED AREA: 12.4 ACRES ±, NPDES STORMWATER PERMIT IS REQUIRED.

BENCH MARK
FF OF EXISTING
RESTAURANT BLDG
770.36 N.A.V.D.88

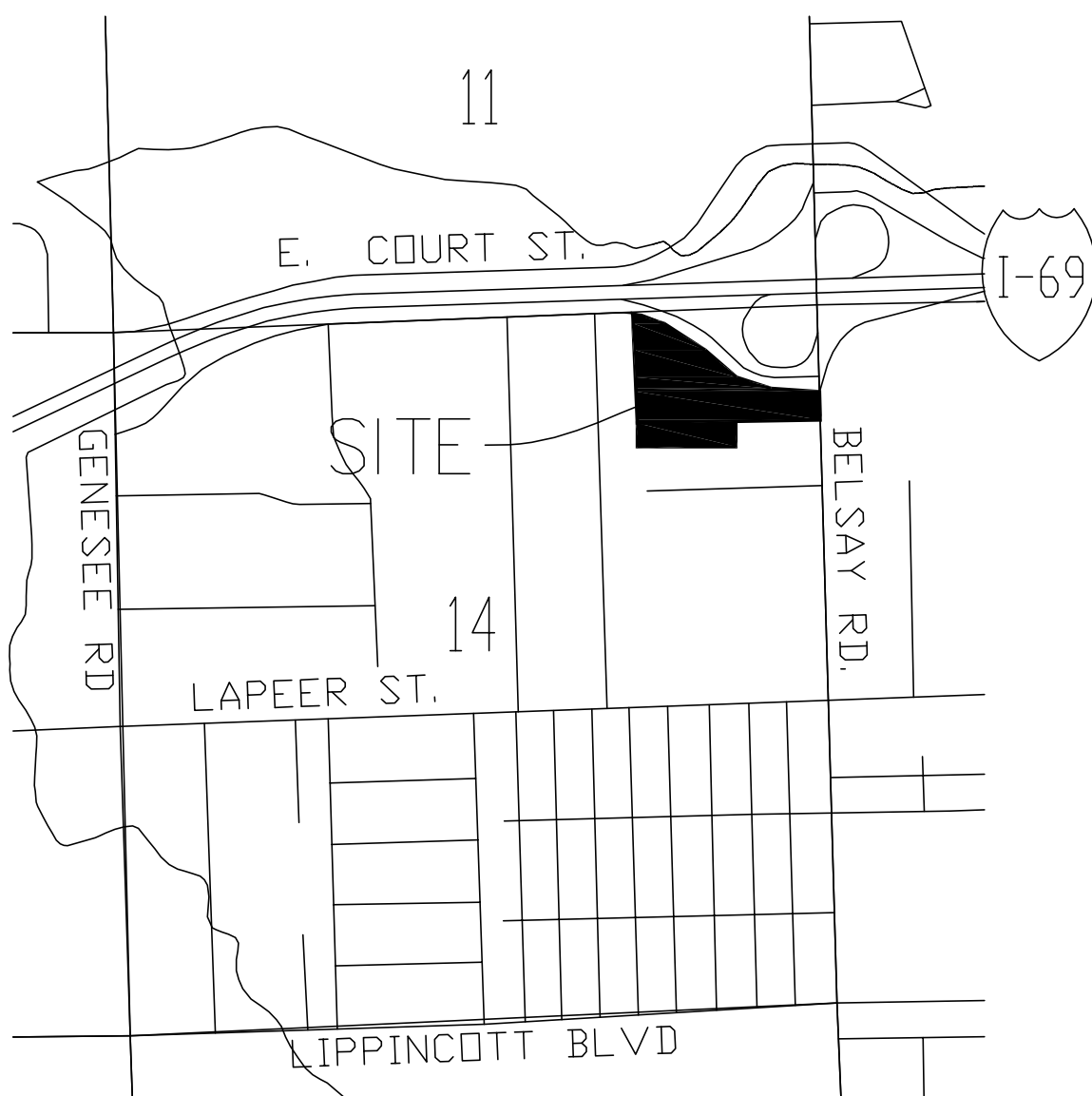


SITE PLAN
FOR

BELSAY ROAD STORAGE

A SELF STORAGE FACILITY

LOCATED IN THE N.E. 1/4 OF SECTION 14, TOWN 7 NORTH, RANGE 7 EAST,
CITY OF BURTON, GENESEE COUNTY, MICHIGAN



LOCATION MAP

LEGAL DESCRIPTIONS AS PROVIDED AND SURVEYED

PARCEL NO. 59-14-526-035
ADDRESS: 1076 S. BELSAY ROAD
PART OF LOTS 43 THRU 45 BEGINNING 74.85 FEET FROM THE
NORTHEAST CORNER OF SECTION; THENCE S01°09'E, 708.45 FEET AND
S88°21'32"W, 75 FEET AND S01°09'E 74.85 FEET FROM THE
NORTHEAST CORNER OF SECTION; THENCE S01°09'E, 124.77 FEET;
THENCE S88°19'52"W, 637.59 FEET; THENCE N01°38'08"W, 206.55
FEET; THENCE N88°19'52"E, 510.78 FEET; THENCE ON A CURVE TO
THE RIGHT HAVING A CHORD BEARING OF S73°03'04"E, 38.31 FEET;
THENCE S54°26'E, 114.94 FEET TO PLACE OF BEGINNING.

PARCEL NO. 59-14-526-037
PART OF LOTS 41 & 44 THRU 48 DESCRIBED AS BEGINNING
S01°09'E, 708.45 FEET AND S88°21'32"W, 75 FEET FROM THE
NORTHEAST CORNER OF SECTION; THENCE S01°09'E, 74.85 FEET;
THENCE N54°26'W, 114.94 FEET; THENCE ON A CURVE TO THE LEFT
HAVING A CHORD BEARING AND DISTANCE OF N73°03'04"W, 38.31
FEET; THENCE S88°19'52"W, 510.78 FEET; THENCE S01°38'08"E,
206.55 FEET; THENCE S88°22'41"E, 22.623 FEET; THENCE
S01°07'08"E, 170.07 FEET; THENCE S88°21'51"W, 642.163 FEET;
THENCE N01°13'22"W, 170.23 FEET; THENCE N01°18'11"W, 425.00
FEET; THENCE N88°19'52"E, 151.57 FEET; THENCE N01°42'28"W,
294.35 FEET; THENCE N88°17'32"E, 135 FEET; THENCE N01°42'28"W,
96.71 FEET; THENCE S69°26'58"E, 31.19 FEET AND S56°26'58"E, 250
FEET AND S49°26'58"E, 407.60 FEET AND S70°20'21"E, 155.68 FEET
AND N88°46'15"E, 120.04 FEET AND S54°26'E, 213.39 FEET TO
PLACE OF BEGINNING.

SHEET INDEX

1. COVER SHEET
2. GCDCWWS STANDARD NOTES
3. EXISTING SURVEY
4. SITEPLAN
5. PAVING, GRADING AND DRAINAGE PLAN
6. STORM AND DRAINAGE CALCULATIONS
7. SOIL EROSION AND SEDIMENT CONTROL PLAN
8. MICHIGAN UNIFIED KEYING SYSTEM

REVISIONS

1	03/25/2019	ORIGINAL SET	MJW				
NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY



PLANS PREPARED FOR:
BELSAY ROAD STORAGE, LLC

3487 S. LINDEN ROAD
FLINT, MI 48507
(810) 845-5364

PLANS PREPARED BY:
REC ENGINEERS
REAL ESTATE CONSULTING ENGINEERS, LLC
16509 BELFAST DRIVE
FENTON, MICHIGAN 48430
(810) 869-0194 OR (810) 845-5364

JOSEPH A. WIZYNAJTY P.E. 21585
STATE OF MICHIGAN



SHEET 1 OF 8 SHEETS

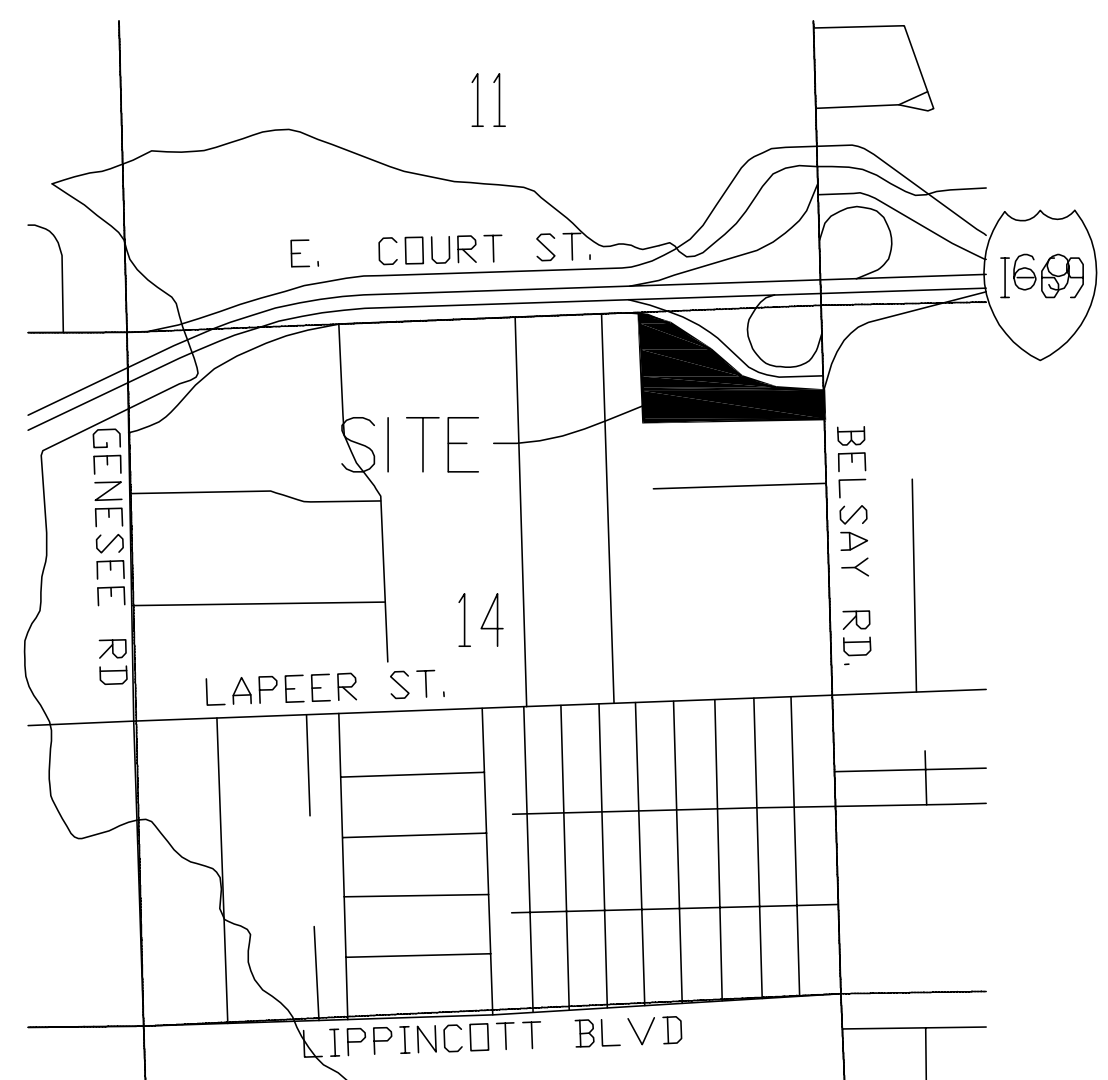
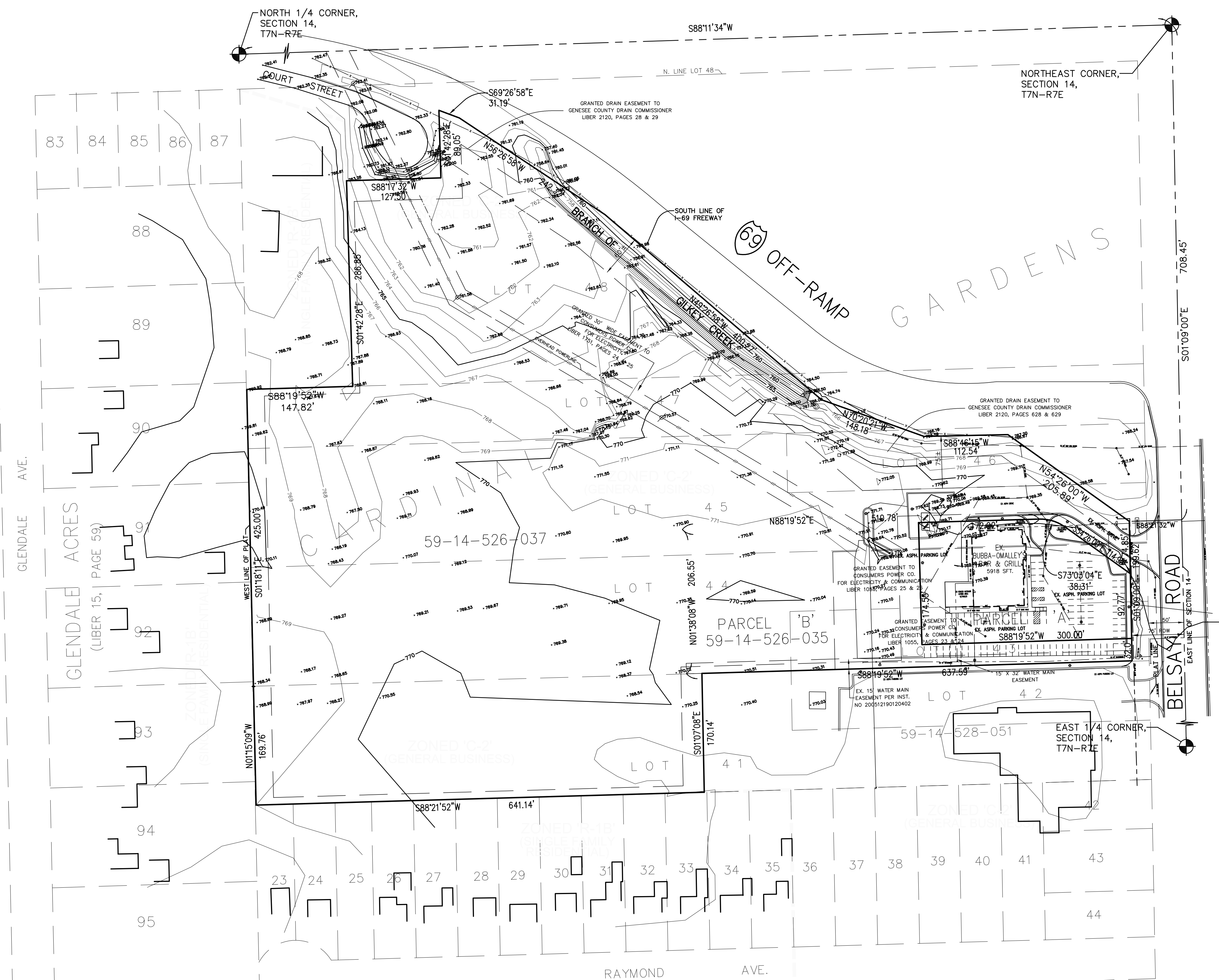
GCDC-WWS STANDARD NOTES FOR PRELIMINARY PLATS & SITE PLANS

- a. **EXTENSION OF PUBLIC UTILITIES:** ALL PUBLIC SANITARY SEWER AND/OR WATERMAIN **SHALL** BE EXTENDED TO THE FURTHEST LIMITS OF THE PROPERTY, INCLUDING CORNER LOTS, WITH THE PIPE SIZE AND MATERIAL APPROVED BY GCDC-WWS. THIS IS NECESSARY FOR PLAN APPROVAL. FOR WATER SERVICES OF 1" OR LESS OR A BUILDING ON A CORNER LOT, THE REQUIREMENTS TO EXTEND THE PUBLIC WATERMAIN AND/OR SANITARY SEWER ALONG BOTH PROPERTY LINES WILL BE REVIEWED. FINAL DETERMINATION SHALL BE MADE BY GCDC-WWS.
- b. **WATERMAIN LOOPING:** ALL PUBLIC WATERMAINS SHALL BE LOOPED WHENEVER POSSIBLE. THE PIPE SIZE REQUIREMENTS SHALL BE APPROVED BY GCDC-WWS.
- c. **INDUSTRIAL PRETREATMENT PROGRAM (IPP):** THIS PERMIT IS REQUIRED FOR ALL COMMERCIAL (NON-RESIDENTIAL) AND INDUSTRIAL DISCHARGES. THE OWNER SHALL OBTAIN AN INDUSTRIAL PRETREATMENT DISCHARGE PERMIT PRIOR TO THE ISSUANCE OF A SEWER CONNECTION PERMIT. INDUSTRIAL DISCHARGE PERMITS ARE NON-TRANSFERABLE. CHANGES IN FACILITY USE WILL REQUIRE A NEW INDUSTRIAL DISCHARGE PERMIT. FOR MORE INFORMATION CALL ANTHONY RAGNONE TREATEMENT PLANT AT (810) 232-7662.
- d. SOIL EROSION: THE DEVELOPER SHALL SUBMIT A DETAILED SOIL EROSION AND SEDIMENTATION CONTROL PLAN AND OBTAIN AN ACT 451 PART 91, SOIL EROSION AND SEDIMENTATION CONTROL PERMIT. THIS INCLUDES THE PAYMENT OF FEES AND THE PROVIDING OF NECESSARY BONDS. **NO EARTH CHANGES OR EXCAVATION SHALL BE STARTED PRIOR TO THE ISSUANCE OF THIS PERMIT.** THE DEVELOPER SHALL PROTECT ALL EXISTING AND PROPOSED STORM SEWER FACILITIES ON AND ADJACENT TO THE SITE DURING EXCAVATION AND CONSTRUCTION. ALL SEDIMENT SHALL BE CONTAINED ON SITE. ANY SILT IN COUNTY DRAINS, STORM SEWER, CULVERTS, ETC. AS A RESULT OF THIS PROJECT, SHALL BE REMOVED BY THE DEVELOPER AT THE COST OF THE DEVELOPER.
- e. **FLOOD PLAIN OR WETLAND CONSTRUCTION:** THE DEVELOPER SHALL APPLY TO THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY FOR A PERMIT FOR THE ALTERATION AND/OR OCCUPATION OF A FLOOD PLAIN OR FLOODWAY, AS REQUIRED UNDER PA 451. EVIDENCE OF THIS PERMIT MAY BE REQUIRED PRIOR TO PLAN APPROVAL BY GCDC-WWS.
- f. **NPDES STORM WATER DISCHARGE PERMIT:** THE OWNER OF THE PROPERTY SHALL OBTAIN A NPDES STORM WATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES FROM MDEQ AS REQUIRED UNDER PUBLIC ACT 451. THE NOTICE OF COVERAGE FORM SHALL BE SUBMITTED THROUGH GCDC-WWS WITH THE SOIL EROSION CONTROL PERMIT APPLICATION. ALL MDEQ FEES SHALL ACCOMPANY THE NOTICE OF COVERAGE. EVIDENCE OF THE PERMIT MAY BE REQUIRED PRIOR TO PLAN APPROVAL BY GCDC-WWS.
- g. **GENESEE COUNTY PERMIT TO CONSTRUCT A PUBLIC UTILITY:** AFTER THE APPROVAL OF THIS PRELIMINARY PLAT OR SITE PLAN, THE DEVELOPER SHALL SUBMIT A DETAILED PLAN FOR CONSTRUCTION OF ALL PUBLIC SANITARY SEWER AND WATERMAIN. THE PLANS MUST HAVE GCDC-WWS APPROVAL, A S-PERMIT ISSUED, AND APPROVAL FROM THE MDEQ PRIOR TO BEGINNING CONSTRUCTION.
- h. **GENESEE COUNTY ROAD COMMISSION PERMIT:** THE DEVELOPER SHALL OBTAIN A PERMIT FROM THE GENESEE COUNTY ROAD COMMISSION TO PERFORM WORK WITHIN THE GENESEE COUNTY ROAD COMMISSION RIGHT-OF-WAY. ALL FEES FOR THE PERMIT, BONDS AND INSURANCE ARE THE RESPONSIBILITY OF THE DEVELOPER.
- i. **MUNICIPALITY SANITARY SEWER AND WATER PERMIT:** PRIOR TO THE ISSUANCE OF A BUILDING PERMIT BY THE LOCAL MUNICIPALITY, THE DEVELOPER SHALL BE REQUIRED TO OBTAIN A SANITARY SEWER AND/OR WATER TAP-IN PERMIT FROM THE LOCAL MUNICIPALITY, IF AUTHORIZED, OR GCDC-WWS.
- j. **STATE CONSTRUCTION PERMITS:** THE SANITARY SEWER AND WATERMAIN CONSTRUCTION PERMIT APPLICATION FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY SHALL BE SUBMITTED TO THE MDEQ AFTER APPROVAL FROM GCDC-WWS. CONSTRUCTION SHALL NOT BEGIN UNTIL THESE STATE PERMITS ARE ISSUED.

ADDITIONAL GCDC-WWS NOTES FOR SITE PLANS. THE FOLLOWING NOTES ARE TO BE USED AS APPLICABLE WHEN SUBMITTING PLANS FOR REVIEW BY GCDC-WWS. USE ONLY THOSE APPLICABLE AND ADAPT THEM FOR THE SPECIFIC PROJECT.

- A. SANITARY SEWER SADDLE TAPS SHALL BE MADE BY GCDC-WWS PERSONNEL. THE DEVELOPER SHALL OBTAIN THE REQUIRED MUNICIPALITY SANITARY SEWER PERMIT AND PAY GCDC-WWS THE REQUIRED FEE FOR A SADDLE TAP.
- B. THE CONTRACTOR SHALL VERIFY THE SANITARY SEWER DEPTH AND BE RESPONSIBLE FOR PROVIDING ADEQUATE SLOPE OF SEWER TOWARD THE MAINLINE SEWER IN STRICT ACCORDANCE WITH GCDC WWS STANDARD DETAILS AND SPECIFICATIONS.
- C. SANITARY SERVICES LEADS SHALL BE ENCASED IN 6AA CRUSHED LIMESTONE (A1) IN ACCORDANCE WITH GCDC-WWS STANDARD DETAILS AND SPECIFICATIONS.
- D. WATER SERVICE CONNECTION AND CURB BOX SHALL BE INSTALLED IN ACCORDANCE WITH GCDC-WWS STANDARD DETAILS AND SPECIFICATIONS.
- E. ALL WATER SERVICE LEADS SHALL BE "K" COPPER. THE MINIMUM SIZE SHALL BE 3/4".
- F. ALL WATERMAIN PRESSURE TAPS AND CUT IN VALVES 4" AND LARGER SHALL BE CONSTRUCTED WITH A CAST IRON OR STAINLESS STEEL TAPPING SLEEVES AND WITHIN A MANHOLE PER GCDC-WWS STANDARD DETAILS AND SPECIFICATIONS.
- G. SAND FILL UNDER ANY FLOOR SLAB, WALKS, PAVED AREAS, ETC. SHALL MINIMUM MDOT CLASS II SAND BACKFILL (A5). THE SAND SHALL BE COMPACTED TO 95% OF THE MATERIAL UNIT WEIGHT BE MODIFIED PROCTOR.
- H. ALL EXISTING UTILITIES SERVING THE PROPERTY SHALL BE PROPERLY TERMINATED IN COMPLIANCE WITH LOCAL AND/OR COUNTY REGULATIONS. REMOVE ALL TREES, INCLUDING ROOT STRUCTURES, EXCEPT THOSE SPECIFICALLY NOTED TO REMAIN AND THOSE ON PROPERTY LINES. DO NOT CLEAR SITE PRIOR TO COORDINATING WITH THE OWNER AND THE LANDSCAPING PLAN TO DETERMINE WHICH TREES ARE TO REMAIN.
- I. FOR ANY DEMOLITION WORK, PLEASE SEE DEMOLITION NOTES ATTACHED HEREWITH.
- J. VERIFY EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- K. CONTRACTOR IS TO ADJUST ANY UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN OUT, VALVE BOXES, MANHOLES, CATCH BASINS, INLETS, ETC.) THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT. THE CONTRACTOR SHALL OBTAIN ANY NECESSARY PERMITS FOR ADJUSTMENT AT THE CONTRACTOR'S EXPENSE.
- L. THE WATER SUPPLY FOR ALL COMMERCIAL AND INDUSTRIAL BUILDINGS SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION DEVICE IN ACCORDANCE WITH BUILDING CODES.
- M. ALL ON SITE WATER SERVICES SHALL MEET THE REQUIREMENTS OF GCDC-WWS STANDARD DETAILS AND SPECIFICATIONS.
- N. THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) THREE (3) WORKING DAYS PRIOR TO STARTING ANY EXCAVATION WITH POWER EQUIPMENT.
- O. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, COUNTY, AND STATE REGULATIONS FOR ALL WORK THAT TAKES PLACE ON THE SITE.
- P. THE CONTRACTOR/DEVELOPER SHALL PAY FOR AND OBTAIN ALL PERMITS REQUIRED BY FEDERAL, STATE, LOCAL, OR PRIVATE AGENCIES AND PAY ALL CHARGES FOR INSPECTION AND TESTING.
- Q. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP THE PREMISES, AND UPON COMPLETION OF THE PROJECT, LEAVE THE SITE IN AN ACCEPTABLE CONDITION AS DETERMINED BY THE GCDC-WWS.
- R. COMMERCIAL BUILDINGS SHALL USE A 6" SANITARY RISER FROM THE MAIN TO THE STRUCTURE. THE SERVICE RISER SHALL CONNECT TO THE MAINLINE AND NOT AT A MANHOLE.
- S. FOR COMMERCIAL ESTABLISHMENTS THAT GENERATE GRIT OR GREASE, AN EXTERNAL GREASE/GRIT TRAP SHALL BE PROVIDED. SHOW THE DETAIL ON THE PLANS WITH APPROPRIATE NOTES. THE DOMESTIC SEWAGE SHALL BE DESIGNED TO BYPASS THE GREASE/GRIT TRAP.
- T. THE MINIMUM SLOPE FOR A COMMERCIAL LEAD IS 1 FOOT OF FALL PER 100 FEET OF PIPE. SHOW THE INVERT AT THE STRUCTURE AND THE SLOPE TO THE PROPERTY LINE.
- U. ALL SANITARY SEWER RISERS SHALL BE SDR-26 PVC.
- V. EACH PARCEL OF LAND SHALL HAVE AN INDIVIDUAL RISER.

SCALE 1"=80'



LOCATION MAP

LEGAL DESCRIPTIONS AS PROVIDED AND SURVEYED

PARCEL NO. 59-14-526-035

ADDRESS: 1076 S. BELSAY ROAD
PART OF LOTS 43 THRU 45 BEGINNING S01°09'E, 708.45 FEET AND
S88°21'32"W, 75 FEET AND S01°09'E 74.85 FEET FROM THE
NORTHEAST CORNER OF SECTION; THENCE S01°09'E, 124.77 FEET;
THENCE S88°19'52"W, 637.59 FEET; THENCE N01°38'08"W, 206.55
FEET; THENCE N88°19'52"E, 510.78 FEET; THENCE ON A CURVE TO
THE RIGHT HAVING A CHORD BEARING OF S73°03'04"E, 38.31 FEET;
THENCE S54°26'E, 114.94 FEET TO PLACE OF BEGINNING.

PARCEL NO. 59-14-526-037

PART OF LOTS 41 & 44 THRU 48 DESCRIBED AS BEGINNING S010'9"E, 708.45 FEET AND S88'21'32"W, 75 FEET FROM THE NORTHEAST CORNER OF SECTION; THENCE S010'9"E, 74.85 FEET; THENCE N54'26"W, 114.94 FEET; THENCE ON A CURVE TO THE LEFT HAVING A CHORD BEARING AND DISTANCE OF N73'03'04"W, 38.31 FEET; THENCE S88'19'52"W, 510.78 FEET; THENCE S01'38'08"E, 206.55 FEET; THENCE S88'22'41"E, 22.23 FEET; THENCE S01'07'08"E, 170.07 FEET; THENCE S66'21'50", 642.163 FEET; THENCE N01'13'22"E, 170.23 FEET; THENCE N01'18'11"W, 425.00 FEET; THENCE N88'19'52"E, 151.57 FEET; THENCE N01'42'28"W, 294.35 FEET; THENCE S70'20'21"E, 155.68 FEET; THENCE N01'42'28"W, 294.35 FEET; THENCE S69'26"W, 31.19 FEET AND S66'56"W, 250 FEET AND S49'26"E, 40.70 FEET AND S70'20'21", 155.68 FEET AND N88'46'15"E, 120.04 FEET AND S54'26"E, 213.39 FEET TO PLACE OF BEGINNING.

BENCH MARK
FF OF EXISTING
RESTAURANT BLDG
770.36 N.A.V.D.88

NOTE: SURVEY BY OTHERS. NO SURVEY BY REC WAS
MADE IN THE FIELD AT THIS TIME.

No.	REVISIONS	DATE	BY



Know what's below.
Call before you dig

JOSEPH A. WIZYNAJTYS P.E. DATE
NO. 21585
STATE OF MICHIGAN

SCALE:
1"=80'

DESIGNED BY:

MJW

CHECKED BY:

DATE:
3/25/19

DRAWN BY:

M.J.W

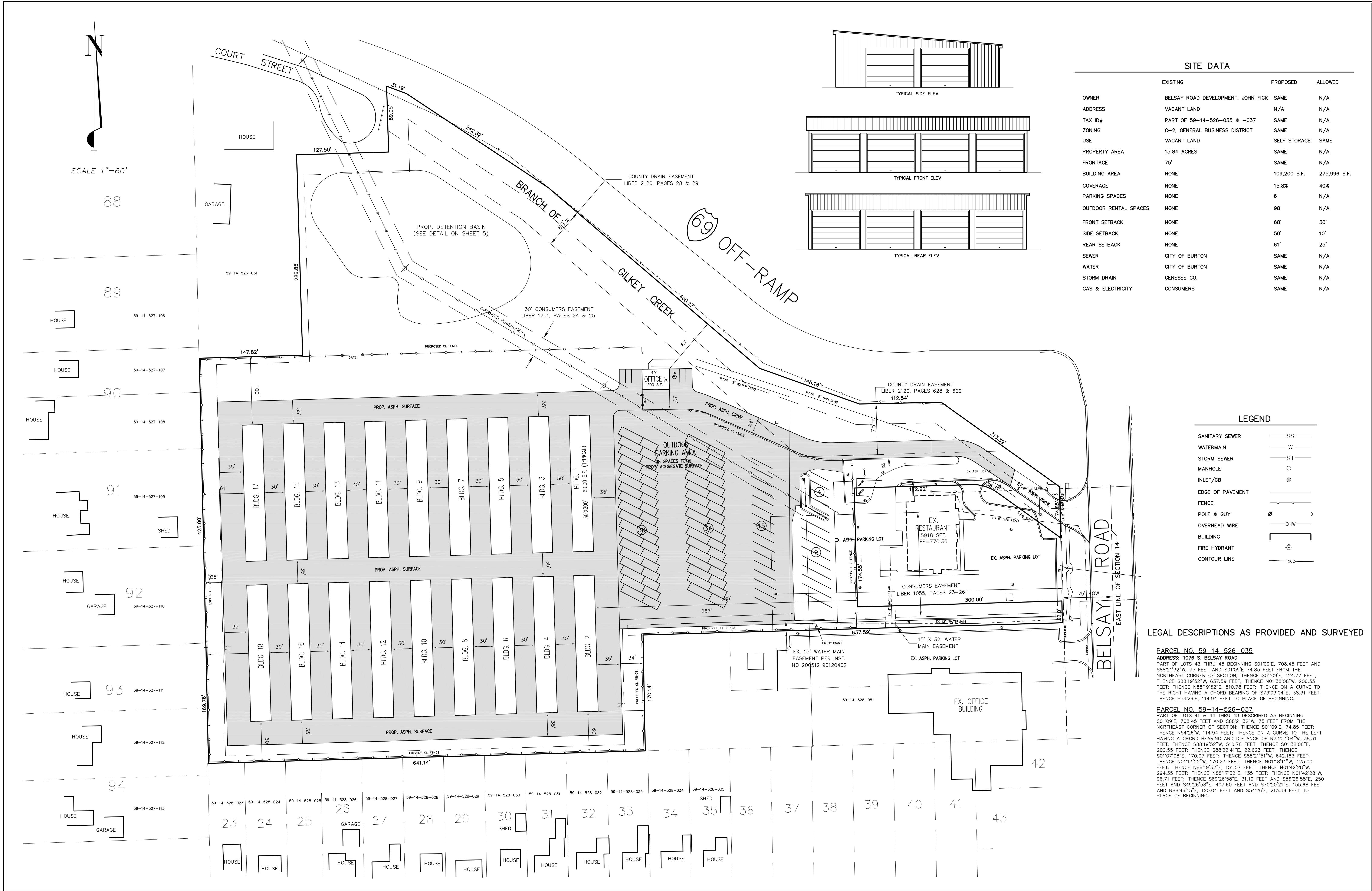
MOW
FIELD CREW

PROPRIETOR
BELSAY ROAD STORAGE, LLC
3487 S. LINDEN ROAD
FLINT, MI 48507
(810) 845-5364

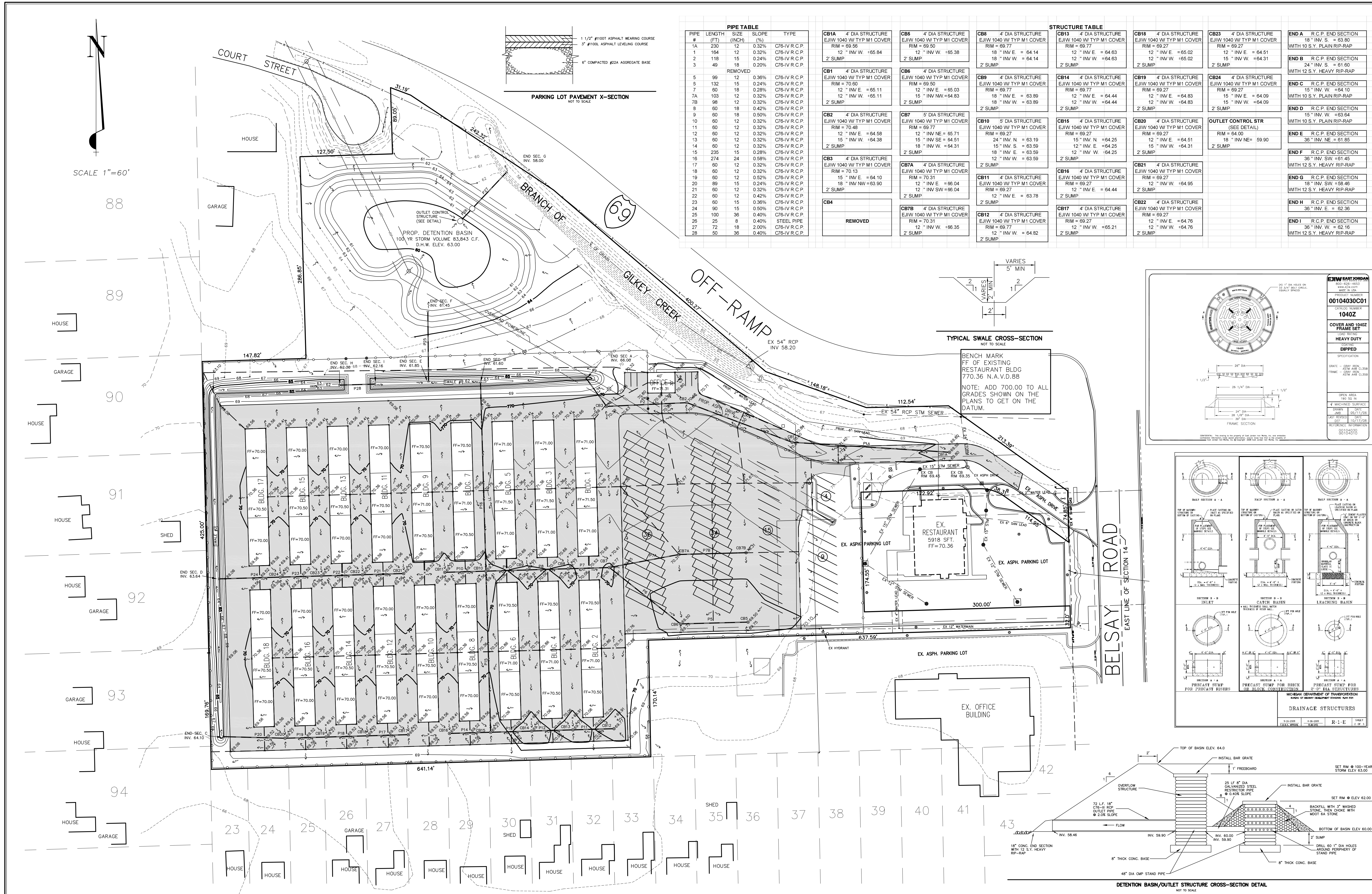
REC ENGINEERS
REAL ESTATE CONSULTING ENGINEERS, LLC
16509 BELFAST, FENTON, MICHIGAN 48430
(810) 869-0194 OR (810) 845-5364

EXISTING SURVEY
FOR
BELSAY ROAD STORAGE

SHEET 3 OF 8

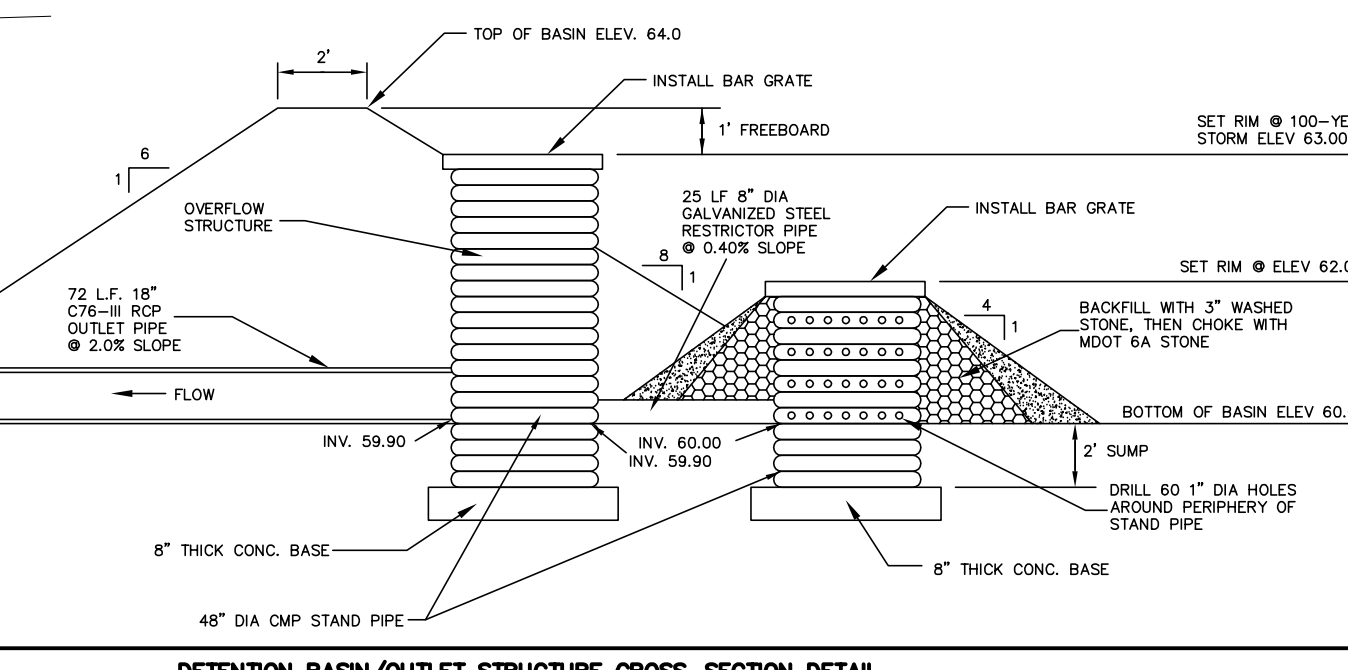
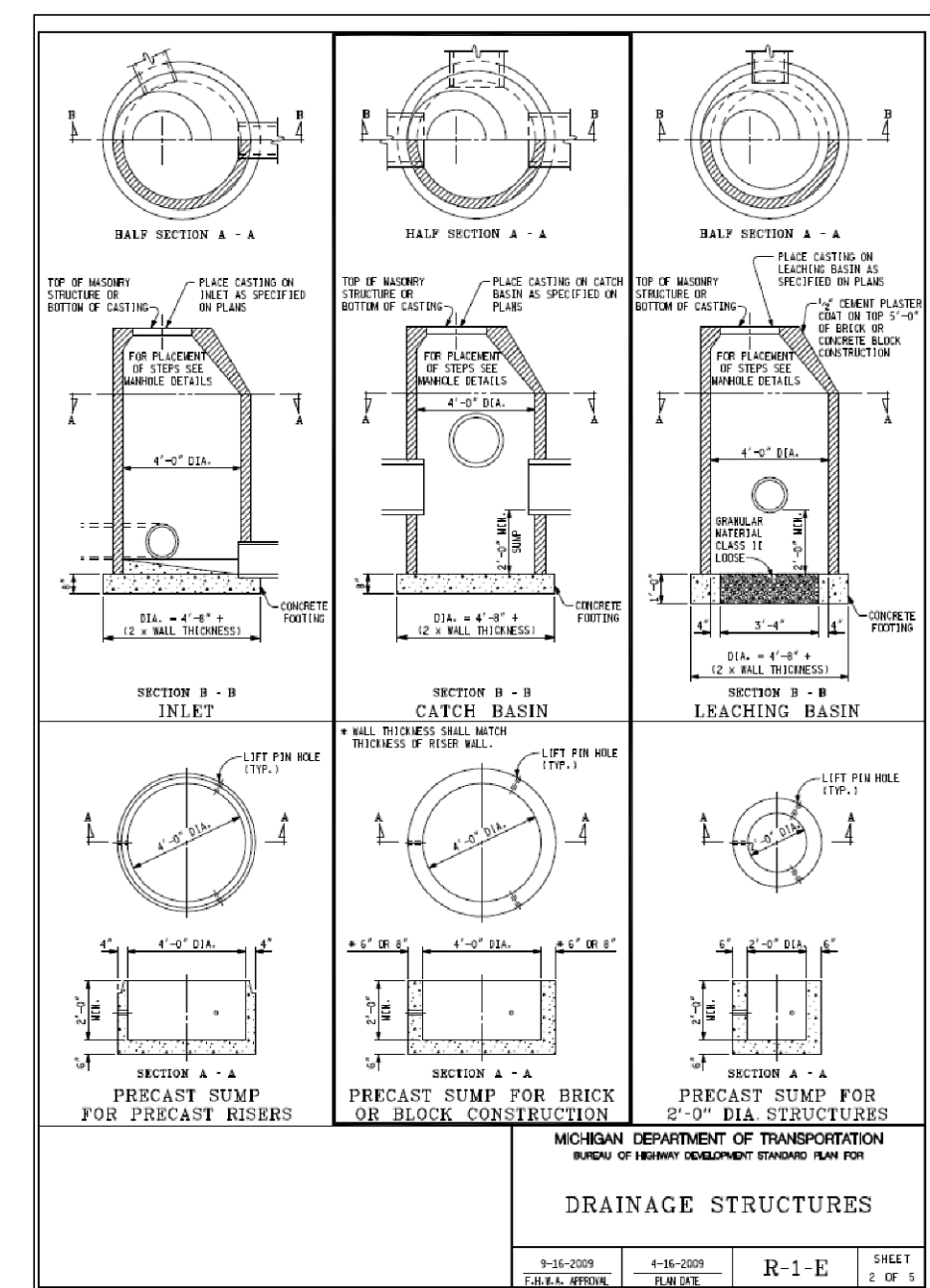
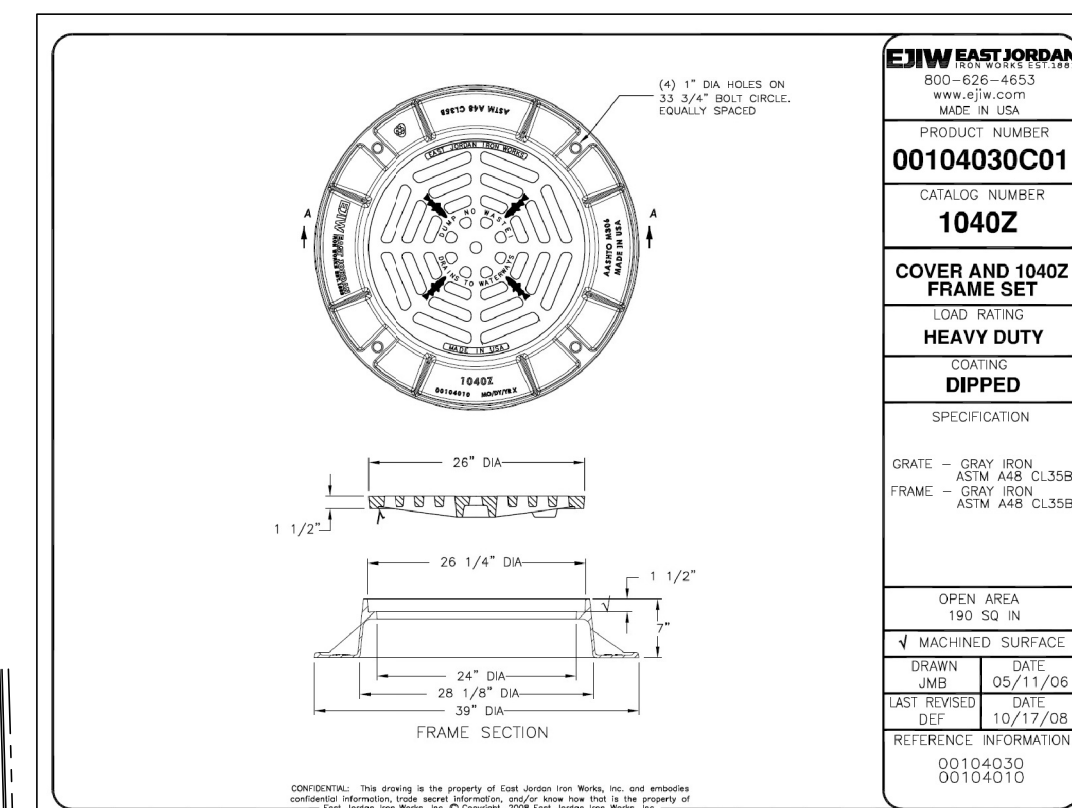
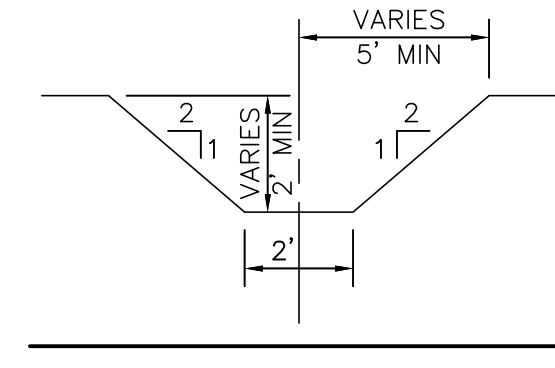


REVISIONS			811 Know what's below. Call before you dig.	JOSEPH A. WIZYNAUTYS, P.E. NO. 21585 STATE OF MICHIGAN	SCALE: 1"=60'	DATE: 3/25/19	DESIGNED BY: M.J.W.	DRAWN BY: M.J.W.	CHECKED BY: JAW	FIELD CREW CHIEF N/A	PROPRIETOR BELSAY ROAD STORAGE, LLC 3487 S. LINDEN ROAD FLINT, MI 48507 (810) 845-5364	REC ENGINEERS REAL ESTATE CONSULTING ENGINEERS, LLC 16509 BELFAST, FENTON, MICHIGAN 48430 (810) 869-0194 OR (810) 845-5364	CITY OF BURTON GENESEE COUNTY MICHIGAN	SITE PLAN FOR BELSAY ROAD STORAGE	SHEET 4 OF 8	Attachment: Back up 19-06 (4306 : SPR #19-07)
No.	DATE	BY														



PIPE TABLE				
PIPE #	LENGTH (FT)	SIZE (INCH)	SLOPE (%)	TYPE
1A	230	12	0.32%	C76-IV R.C.P.
1	164	12	0.32%	C76-IV R.C.P.
2	116	15	0.24%	C76-IV R.C.P.
3	49	18	0.20%	C76-IV R.C.P.
REMOVED				
5	99	12	0.36%	C76-IV R.C.P.
6	132	15	0.24%	C76-IV R.C.P.
7	60	18	0.28%	C76-IV R.C.P.
7A	103	12	0.32%	C76-IV R.C.P.
7B	98	12	0.32%	C76-IV R.C.P.
8	60	18	0.42%	C76-IV R.C.P.
9	60	18	0.50%	C76-IV R.C.P.
10	60	12	0.32%	C76-IV R.C.P.
11	60	12	0.32%	C76-IV R.C.P.
12	60	12	0.32%	C76-IV R.C.P.
13	60	12	0.32%	C76-IV R.C.P.
14	60	12	0.32%	C76-IV R.C.P.
15	235	15	0.28%	C76-IV R.C.P.
16	274	24	0.58%	C76-IV R.C.P.
17	60	12	0.32%	C76-IV R.C.P.
18	60	12	0.32%	C76-IV R.C.P.
19	60	12	0.52%	C76-IV R.C.P.
20	89	15	0.24%	C76-IV R.C.P.
21	60	12	0.32%	C76-IV R.C.P.
22	60	12	0.42%	C76-IV R.C.P.
23	60	15	0.36%	C76-IV R.C.P.
24	90	15	0.50%	C76-IV R.C.P.
25	100	36	0.40%	C76-IV R.C.P.
26	25	8	0.40%	STEEL PIPE
27	72	18	2.00%	C76-IV R.C.P.
28	50	36	0.40%	C76-IV R.C.P.

STRUCTURE TABLE				
CB1A	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 69.56 12" INV W. = 65.84 2' SUMP	CB5	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB1	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 70.60 12" INV E. = 65.11 12" INV W. = 65.11 2' SUMP	CB6	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB2	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 70.48 12" INV E. = 64.58 15" INV SE = 64.38 2' SUMP	CB7	5' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB3	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 70.13 15" INV E. = 64.10 18" INV NW = 63.90 2' SUMP	CB7A	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB4	REMOVED		CB7B	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB8	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 69.77 18" INV E. = 64.14 18" INV W. = 64.14 2' SUMP	CB9	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB13	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 69.77 12" INV E. = 64.63 12" INV W. = 64.63 2' SUMP	CB10	5' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB18	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 69.27 12" INV E. = 65.02 12" INV W. = 65.02 2' SUMP	CB11	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
CB23	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER	RIM = 69.27 15" INV E. = 64.51 15" INV W. = 64.51 2' SUMP	CB12	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
END A	R.C.P. END SECTION 18" INV. S. = 63.80 WITH 10 S.Y. PLAIN RIP-RAP		CB16	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
END B	R.C.P. END SECTION 15" INV. S. = 61.60 WITH 12 S.Y. HEAVY RIP-RAP		CB17	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
END C	R.C.P. END SECTION 15" INV. W. = 64.10 WITH 10 S.Y. PLAIN RIP-RAP		CB22	4' DIA STRUCTURE EJW 1040 W/ TYP M1 COVER
END D	R.C.P. END SECTION 15" INV. W. = 63.64 WITH 10 S.Y. PLAIN RIP-RAP		OUTLET CONTROL STR	(SEE DETAIL)
END E	R.C.P. END SECTION 36" INV. NE = 61.85 WITH 12 S.Y. HEAVY RIP-RAP		END F	R.C.P. END SECTION 36" INV. SW = 61.45 WITH 12 S.Y. HEAVY RIP-RAP
END G	R.C.P. END SECTION 18" INV. SW = 58.46 WITH 12 S.Y. HEAVY RIP-RAP		END H	R.C.P. END SECTION 36" INV. E. = 62.36 WITH 12 S.Y. HEAVY RIP-RAP
END I	R.C.P. END SECTION 36" INV. W. = 62.16 WITH 12 S.Y. HEAVY RIP-RAP			



BASIN	AREA	C	C x A	
grass	6.69	0.20	1.34	
pave/roof	8.93	0.90	8.04	
	15.62		9.38	
WEIGHTED C = 0.60				

GENESEE COUNTY DRAIN COMMISSION
STORMWATER DETENTION DESIGN
100 YEAR STORM

PROJECT Belsay Road Storage

1. DETERMINATION OF ALLOWABLE DISCHARGE

BASIN AREA 15.62 AC (INPUT)

MAXIMUM DISCHARGE LIMITED TO EXISTING 0.2 CFS/ACRE. 3.12 CFS (CALC)

TOTAL DETENTION VOLUME CALCULATED WITH AVG DISCHARGE OF 3.12

2. DEVELOPED COEFFICIENT OF RUNOFF

Wt. C = 0.60 (CALC'D)

4. DETERMINATION OF DETENTION VOLUME

STORAGE VOLUME CALCULATION

Tc (MIN)	i100 (IN/HR)	CwA (A IN AC)	Qin (CFS)	Avg. Qout (CFS)	Qin-Qout (CFS)	VOL (CF)
10	6.39	9.38	59.90	3.12	56.77	34063
20	5.00	9.38	46.88	3.12	43.75	52501
30	4.11	9.38	38.50	3.12	35.38	63685
40	3.48	9.38	32.67	3.12	29.55	70911
50	3.03	9.38	28.37	3.12	25.25	75743
60	2.67	9.38	25.07	3.12	21.95	79015
70	2.40	9.38	22.46	3.12	19.34	81215
80	2.17	9.38	20.34	3.12	17.22	82646
90	1.98	9.38	18.59	3.12	15.46	83508
120	1.58	9.38	14.77	3.12	11.64	83843
180	1.12	9.38	10.47	3.12	7.34	79307

MIN.VOLUME TO BE STORED: 83843 CF

ORIFICE FORMULA

Q = C x A x (2 g h)SQRT

C = 0.62 (INPUT)
h = 3.1 FT (INPUT)
Q = 3.124 CFS (INPUT)
A = 0.357 SF (CALC'D)
D = 0.674 FT (CALC'D)
D = 8.086 INCHES (CALC'D)

USE ONE 8" DIA PIPE IN WATER CONTROL STRUCTURE
(SEE DETAIL)

BASIN STORAGE PROVIDED

ELEV.	AREA	DEPTH	VOLUME	TOTAL	
	(FT ²)	(FT)	(FT ³)	VOLUME	
				(FT ³)	
764	49250	1	45,958	139,410	
763	42666	1	39,575	93,452	D.H.W.
762	36484	1	33,595	53,877	
761	30705	1	20,283	20,283	
760	9860		0	0	

STORM SEWER DESIGN COMPUTATIONS FOR BELSAY ROAD STORAGE																25-Mar-19 by M.J.W.															
FROM	TO	Pipe #	DRAIN AREA	ACRES A	AREA IMPERV 0.9	AREA PERV 0.2	RUNOFF COEFF C	EQUIV. AREA A * C	INTEN- I	TIME OF CONC. Tc	ADD'L RUNOFF Q	RUNOFF (CFS) Q	PIPE LENGTH (LF)	PIPE DIA. (IN)	VELOCITY FLOWING FULL (FPS)	HYDRAULIC GRADIENT SLOPE %	ACTUAL SLOPE USED	MANNING FLOW CAP	MANNING'S VELOCITY (FT/SEC)	TIME (MIN)	HG ELEV UPPER END	HG ELEV LOWER END	RIM ELEV UPPER END	INVERT UPPER END	INVERT LOWER END						
CB1A	CB1	1A	CB1A	0.15	0.15	0	0.90	0.135	4.38	15.00		0.59	230	12	0.75	0.03%	0.32%	2.02	2.57	1.49	66.64	65.91	69.56	65.84	65.11						
CB1	CB2	1	CB1	0.22	0.22	0	0.90	0.198	4.22	16.49		1.43	164	12	1.82	0.16%	0.32%	2.02	2.57	1.06	65.91	65.38	70.60	65.11	64.58						
CB2	CB3	2	CB2	0.33	0.33	0	0.90	0.297	4.11	17.55		2.65	118	15	2.16	0.17%	0.24%	3.17	2.59	0.76	65.38	65.10	70.48	64.38	64.10						
CB3	END A	3	CB3	0.32	0.32	0	0.90	0.288	4.04	18.31		3.81	49	18	2.16	0.13%	0.20%	4.71	2.67	0.31	65.10	65.00	70.13	63.90	63.80						
CB5	CB6	5	CB5	0.33	0.33	0	0.90	0.297	3.89	20.00		1.16	99	12	1.47	0.10%	0.36%	2.14	2.73	0.60	66.18	65.83	69.50	65.38	65.03						
CB6	CB7	6	CB6	0.43	0.43	0	0.90	0.387	3.84	20.60		2.64	132	15	2.15	0.17%	0.24%	3.17	2.59	0.85	65.83	65.51	69.50	64.83	64.51						
CB7	CB8	7	CB7	0.2	0.2	0	0.90	0.18	3.77	21.46	1.81	5.13	60	18	2.90	0.24%	0.28%	5.57	3.15	0.32	65.51	65.34	69.77	64.31	64.14						
CB8	CB9	8	CB8	0.46	0.46	0	0.90	0.414	3.74	21.77		6.68	60	18	3.78	0.40%	0.42%	6.83	3.86	0.26	65.34	65.09	69.77	64.14	63.89						
CB9	CB10	9	CB9	0.19	0.19	0	0.90	0.171	3.72	22.03		7.31	60	18	4.14	0.48%	0.50%	7.45	4.21	0.24	65.09	64.79	69.77	63.89	63.59						
CB10	END B	16	CB10	0.46	0.46	0	0.90	0.414	3.70	22.27	3.99	12.83	274	24	4.08	0.32%	0.58%	17.28	5.50	0.83	64.79	63.20	69.27	63.19	61.60						
CB7B	CB7A	7B	CB7B	0.31	0.31	0	0.90	0.279	3.89	20.00		1.09	98	12	1.38	0.09%	0.32%	2.02	2.57	0.63	67.15	66.84	70.31	66.35	66.04						
CB7A	CB7	7A	CB7A	0.21	0.21	0	0.90	0.189	3.83	20.63		1.81	103	12	2.30	0.26%	0.32%	2.02	2.57	0.67	66.84	66.51	70.31	66.04	65.71						
										21.30																					
CB11	CB10	10	CB11	0.19	0.19	0	0.90	0.171	3.78	21.30		0.65	60	12	0.82	0.03%	0.32%	2.02	2.57	0.39	64.58	64.39	69.27	63.78	63.59						
CB12	CB13	11	CB12	0.12	0.12	0	0.90	0.108	4.38	15.00		0.47	60	12	0.60	0.02%	0.32%	2.02	2.57	0.39	65.83	65.82	69.77	64.82	64.63						
CB13	CB14	12	CB13	0.25	0.25	0	0.90	0.225	4.33	15.39		1.45	60	12	1.84	0.16%	0.32%	2.02	2.57	0.39	65.72	65.63	69.77	64.63	64.44						
CB14	CB15	13	CB14	0.12	0.12	0	0.90	0.108	4.29	15.78		1.91	60	12	2.43	0.29%	0.32%	2.02	2.57	0.39	65.49	65.31	69.77	64.44	64.25						
CB15	CB10	15	CB15	0.25	0.25	0	0.90	0.225	4.25	16.17	0.47	3.34	235	15	2.72	0.27%	0.28%	3.43	2.79	1.40	65.25	64.59	69.27	64.25	63.59						
CB16	CB15	14	CB16	0.12	0.12	0	0.90	0.108	4.38	15.00		0.47	60	12	0.60	0.02%	0.32%	2.02	2.57	0.39	65.57	65.56	69.27	64.44	64.25						
CB17	CB18	17	CB17	0.25	0.25	0	0.90	0.225	4.38	15.00		0.98	60	12	1.25	0.08%	0.32%	2.02	2.57	0.39	66.01	65.82	69.27	65.21	65.02						
CB18	CB19	18	CB18	0.12	0.12	0	0.90	0.108	4.33	15.39		1.45	60	12	1.85	0.17%	0.32%	2.02	2.57	0.39	65.82	65.63	69.27	65.02	64.83						
CB19	CB20	19	CB19	0.25	0.25	0	0.90	0.225	4.29	15.78		2.42	60	12	3.08	0.46%	0.52%	2.58	3.28	0.30	65.63	65.31	69.27	64.83	64.51						
CB20	END C	20	CB20	0.12	0.12	0	0.90	0.108	4.26	16.08		2.88	89	15	2.35	0.20%	0.24%	3.17	2.59	0.57	65.31	65.10	69.27	64.31	64.10						
CB21	CB22	21	CB21	0.46	0.46	0	0.90	0.414	3.89	20.00		1.61	60	12	2.05	0.20%	0.32%	2.02	2.57	0.39	65.75	65.56	69.27	64.95	64.76						
CB22	CB23	22	CB22	0.19	0.19	0	0.90	0.171	3.86	20.39		2.27	60	12	2.89	0.40%	0.42%	2.32	2.95	0.34	65.56	65.31	69.27	64.76	64.51						
CB23	CB24	23	CB23	0.46	0.46	0	0.90	0.414	3.83	20.73		3.85	60	15	3.14	0.35%	0.36%	3.89	3.17	0.32	65.31	65.09	69.27	64.31	64.09						
CB24	END D	24	CB24	0.19	0.19	0	0.90	0.171	3.80	21.04		4.50	90	15	3.67	0.48%	0.50%	4.58	3.73	0.40	65.09	64.64	69.27	64.09	63.64						
END H	END I	28	Swale 1	2.17	1.56	0.61	0.70	1.526	3.70	22.27	15.48	21.13	50	36	2.99	0.10%	0.40%	42.30	5.98	0.14	64.76	63.36		62.36	62.16						
			Swale 2	1.01	0.7	0.31	0.69	0.692	3.80	21.04	7.38	10.01																			
END E	END F	25									31.14	31.14	100	36	4.41	0.22%	0.40%	42.30	5.98	0.28	64.25	63.85		61.85	61.45						
OUT STR	END G	27								Q into Detn at 120 minutes =	14.77	72	18	8.36	1.97%	2.00%	14.90	8.43	0.14	61.10	59.66	64.00	59.90	58.46							

Channel Calculator
Swale #1

Given Input Data:

Shape Trapezoidal
Solving for Depth of Flow
Flowrate 15.9900 cfs
Slope 0.0020 ft/ft
Manning's n 0.0175
Height 2.0000 ft
Bottom width 2.0000 ft
Left slope 0.5000 ft/ft (V/H)
Right slope 0.5000 ft/ft (V/H)

Computed Results:

Depth 1.2072 ft
Velocity 3.0513 fps
Full Flowrate 48.4551 cfs
Flow area 5.3289 ft2
Flow perimeter 7.3986 ft
Hydraulic radius 0.7203 ft
Top width 6.8287 ft
Area 12.0000 ft2
Perimeter 10.9443 ft
Percent full 60.3586 %

Channel Calculator
Swale #2

Given Input Data:

Shape Trapezoidal
Solving for Depth of Flow
Flowrate 7.5300 cfs
Slope 0.0020 ft/ft
Manning's n 0.0175
Height 2.0000 ft
Bottom width 2.0000 ft
Left slope 0.5000 ft/ft (V/H)
Right slope 0.5000 ft/ft (V/H)

Computed Results:

Depth 0.8176 ft
Velocity 2.4728 fps
Full Flowrate 48.4551 cfs
Flow area 2.9723 ft2
Flow perimeter 5.6566 ft
Hydraulic radius 0.5255 ft
Top width 5.2705 ft
Area 12.0000 ft2
Perimeter 10.9443 ft
Percent full 40.8818 %

SUBJECT TO CHANGE

No.	REVISIONS	DATE	BY



JOSEPH A. WIZYNAUTYS P.E.
NO. 21585
STATE OF MICHIGAN

SCALE: N/A	DATE: 3/25/19
DESIGNED BY: MJW	DRAWN BY: MJW
CHECKED BY: JAW	FIELD CREW CHIEF N/A

PROPRIETOR
BELSAY ROAD STORAGE, LLC
3487 S. LINDEN ROAD
FLINT, MI 48507
(810) 845-5364

REC ENGINEERS
REAL ESTATE CONSULTING ENGINEERS, LLC
16509 BELFAST, FENTON, MICHIGAN 48430
(810) 869-0194 OR (810) 845-5364

STORM & DRAINAGE CALCULATIONS
FOR
BELSAY ROAD STORAGE

CITY OF BURTON

GENESEE COUNTY

MICHIGAN BELSAY

SHEET 6 OF 8

SOIL EROSION AND SEDIMENTATION CONTROL (SESC) NOTES

1. SOIL EROSION: THE CONTRACTOR SHALL SUBMIT A DETAILED SOIL EROSION AND SEDIMENTATION CONTROL PLAN AND OBTAIN ACT 451 PART 91, SOIL EROSION AND SEDIMENTATION CONTROL PERMIT. THIS INCLUDES THE PAYMENT OF FEES AND THE PROVIDING OF NECESSARY BONDS. NO CHANGES TO EXCAVATION SHALL BE STARTED PRIOR TO THE ISSUANCE OF THIS PERMIT. THE CONTRACTOR SHALL PROTECT ALL EXISTING AND PROPOSED STORM SEWER FACILITIES ON AND ADJACENT TO THE SITE DURING EXCAVATION AND CONSTRUCTION. ALL SEDIMENT SHALL BE CONTAINED ON SITE. ANY SILT IN COUNTY DRAINS, STORM SEWER, CULVERTS, ETC., AS A RESULT OF THIS PROJECT, SHALL BE REMOVED BY THE CONTRACTOR AT THE COST OF THE CONTRACTOR.
2. ALL SOIL EROSION AND SEDIMENTATION CONTROL WORK SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF THE CITY OF BURTON AND THE GENEESE COUNTY DRAIN COMMISSIONER'S OFFICE-DIVISION OF WATER & WASTE SERVICES (GDCD-WWS). THE CONTRACTOR SHALL OBTAIN A SOIL EROSION AND SEDIMENTATION CONTROL PERMIT OR WAIVER FROM GDCD-WWS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS.
3. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
4. CONTRACTOR SHALL PLACE AND MAINTAIN ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY THE CITY OF BURTON AND THE GDCD-WWS AND AS SHOWN ON THE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS ALL PERMANENT EROSION CONTROL MEASURES HAVE BEEN COMPLETED AND APPROVED BY THE CITY OF BURTON AND/OR THE GDCD-WWS.
5. EROSION AND ANY SEDIMENT CREATED FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN ANY DRAINAGE FACILITIES. DRAINAGE FACILITIES INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
6. ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS FROM THE SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR. ALL MUD, DIRT AND DEBRIS TRACKED OR SPILLED ONTO PAVED SURFACES WITHIN THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
7. CONTRACTOR MUST IMPLEMENT APPROPRIATE MEASURES AS REQUIRED TO CONTROL DUST AT ALL TIMES, AS APPROVED BY THE CITY OF BURTON AND/OR THE GDCD-WWS.
8. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
9. FAILURE TO COMPLY WITH ALL APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS MAY RESULT IN WORK STOPPAGE BY THE CITY OF BURTON AND/OR GDCD-WWS.
10. CONTRACTOR MUST IMMEDIATELY HAUL AWAY ALL EXCAVATED DIRT TO AN APPROVED OFF-SITE LOCATION OR TEMPORARILY STORE THE MATERIAL ON THE SITE. ALL STORED MATERIAL MUST BE PROTECTED TO PREVENT EROSION.
11. THE CONTRACTOR MUST PROVIDE A WRITTEN SCHEDULE INDICATING THE TIMING AND SEQUENCING OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND CONSTRUCTION ITEMS, INCLUDING THE INSTALLATION OF ALL PERMANENT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.
12. APPROXIMATELY 12.4 ACRES WILL BE DISTURBED IN CONSTRUCTION OF THIS PROJECT. THEREFORE, AN NPDES STORM WATER DISCHARGE PERMIT WILL BE REQUIRED.

1. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING ANY PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE CLEANED AND MAINTAINED AS REQUIRED SUCH THAT THE MEASURES ARE EFFECTIVE AND IN PROPER WORKING ORDER AT ALL TIMES.
4. ALL MUD/DIRT TRACKED ONTO ROADS OR ANY PARKING LOT FROM THE SITE DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
5. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, BOTH PERMANENT AND TEMPORARY, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

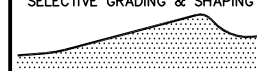
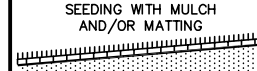
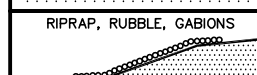
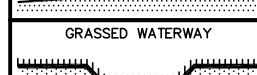
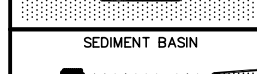
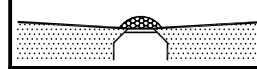
PARCEL NO. 59-14-526-035

ADDRESS: 1076 S. BELSAY ROAD
PART OF LOTS 43 THRU 45 BEGINNING S01°09'E, 708.45 FEET AND
S88°21'32"W, 75 FEET AND S01°09'E 74.85 FEET FROM THE
NORTHEAST CORNER OF SECTION; THENCE S01°09'E, 124.77 FEET;
THENCE S88°19'52"W, 637.59 FEET; THENCE N01°38'08"W, 206.55
FEET; THENCE N88°19'52"E, 510.78 FEET; THENCE ON A CURVE TO
THE RIGHT HAVING A CHORD BEARING OF S73°03'04"E, 38.31 FEET
THENCE S54°26'E, 114.94 FEET TO PLACE OF BEGINNING.

PARCEL NO. 59-14-526-037

PORT OF LOTS 41 & 44 THRU 48 DESCRIBED AS BEING FROM
 S01P9E, 70.45 FEET AND S88°23'52", 75 FEET FROM THE
 SOUTHEAST CORNER OF LOT 41 TO THE SOUTHEAST CORNER OF
 LOT 44; THENCE N42°52'E, 114.94 FEET; THENCE ON A CURVE TO THE
 HAVING A CHORD BEARING AND DISTANCE OF N73°03'04", 38.31
 FEET; THENCE S81°9'52", 51.70 FEET; THENCE S01°38'30"E,
 206.35 FEET; THENCE S88°22'41", 22.63 FEET; THENCE
 S01P9E, 70.45 FEET AND S88°23'52", 75 FEET TO THE
 SOUTHEAST CORNER OF LOT 44; THENCE N01°18'11", 425.00
 FEET; THENCE N81°9'52", 151.57 FEET; THENCE N04°42'28",
 29.35 FEET; THENCE N88°17'32", 131.15 FEET; THENCE N42°52'
 96.71 FEET; THENCE S69°28'38", 31.19 FEET AND S56°28'58", 22
 56.71 FEET; THENCE S01P9E, 40.70 FEET AND S70°02'1", 155.68 FEET
 TO THE SOUTHEAST CORNER OF LOT 48; THENCE S45°28', 213.39 FEET
 TO PLACE OF BEGINNING.

MICHIGAN UNIFIED KEYING SYSTEM
(AS MODIFIED BY THE GENESEE COUNTY DRAIN COMMISSIONER. SEE SHEET 7)

1	DUST CONTROL —NO DETAIL— 	DUST CONTROL APPLICATIONS CAN INCLUDE WATERING, CHEMICAL, CURB DISPLACEMENT, GRAVEL, OR ASPHALT SURFACING, TEMPORARY AGGREGATE COVER AND HAUL TRUCK COVERS.
2	SELECTIVE GRADING & SHAPING 	WATER CAN BE DIVERTED TO MINIMIZE EROSION FLATTER SLOPES EASE EROSION PROBLEMS
6	SEEDING WITH MULCH AND/OR MATTING 	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGeways WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY MOTORIZED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED
13	RRPAF, RUBBLE, GARDENS 	USED WHERE VEGETATION IS NOT EASILY ESTABLISHED EFFECTIVE FOR DRAINAGeways OR HIGH CONCENTRATIONS POINTS RUNOFF TO NEUTRALIZE SOIL DISSIPATES ENERGY LONG AT SYSTEM OUTLETS
24	GRASSED WATERWAY 	MUCH MORE STABLE FORM OF DRAINAGE WAY THAN BARE CHANNEL GRASSES TEND TO SLOW EROSION AND FILTER OUT SEDIMENT USED WHERE BARE CHANNEL WOULD BE ERODED
34	SEDIMENT BASIN 	TRAPS SEDIMENT RELEASES RUNOFF AT NON-EROSIVE RATES CONTROLS RUNOFF AT SYSTEM OUTLETS CAN BE VISUAL, AESTHETIC
54	GEOTEXTILE SILT FENCE 	USES GEOTEXTILE AND POSTS OR POLES MAY BE CONSTRUCTED OR PREMANUFACTURED EASY TO CONSTRUCT AND LOCATE AS NECESSARY
55	STONE FILTER—BEFORE PAVING 	STONE FILTER TO PROVIDE NEARSPERMEABLE AND EASILY CONSTRUCTED SEDIMENT CONTROL PRIOR TO PAVING SEE DETAIL TO LEFT
55A	STONE FILTER—AFTER PAVING 	STONE FILTER TO PROVIDE NEARSPERMEABLE AND EASILY CONSTRUCTED SEDIMENT CONTROL AFTER TO PAVING SEE DETAIL TO LEFT
60	TEMPORARY CONSTRUCTION ENTRANCE 	ASSISTS IN REMOVING SOIL FROM THE TIRES OF CONSTRUCTION EQUIPMENT OR VEHICLES WHEN ENTERING THE CONSTRUCTION SITE THIS REDUCES TRACKING EXCESSIVE SEDIMENT ON TO THE ADJACENT ROAD

SHEET 7 OF 8

BELSAY

Packet Pg. 19

* indicates applicability of a specific control measure to one or more of the seven problem areas

SOIL EROSION KEY SHEET

GENESEE COUNTY
WWS
DRAIN COMMISSIONER

XX

TO BE COMPLETED BY CONTRACTOR FOR PERMIT

2019

**Know what's below.
Call before you dig.**

CITY OF BURTON

GENESEE COUNTY

MICHIGAN | BELSAY

Packet Pg. 20

Attachment: Back up 19-06 (4306 : SPR #19-07)