City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

Agenda

Oxford City Council

Court House

TUESDAY, FEBRUARY 1, 2022

EXECUTIVE SESSION
7:00 pm

TUESDAY, FEBURARY 1, 2022

1. Roll Call. William Snavely, Mayor Chantel Raghu, Vice-Mayor Amber Franklin Jason Bracken Alex French Glenn Ellerbe David Prytherch

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MEETING PROCEDURE: Comments from the Public are welcome at two different times during the course of the meeting: (1) Comments on items not on the Agenda, and Consent Agenda items, will be heard under Public Comments – and (2) Comments on all Resolutions and Ordinances will be heard during Council consideration of said item. Please wait until you are recognized by the Mayor, proceed to the podium, state your name and address so that your comments may be properly recorded and limit your remarks to a period of five minutes or less.

REGULAR MEETING
7:30 P.M.

PLEDGE OF ALLEGIANCE

2. Approval of Agenda.

This facility is wheelchair accessible. If you plan to attend this meeting and you have a disability that requires special arrangements, please notify the City Manager's office 48 hours

in advance so that reasonable accommodations can be made.

3. Public Participation.

   A. Public Comments.

   The purpose of the Public Comments Section is for members of the Public to speak to the City Council on any subject not scheduled on the Agenda, except Consent Agenda items. City Council values your comments, and Council rules limit public comments to five minutes for each person. Presentations are not to be in the form of public debate, personal attacks on Council, City staff or other members of the public and Council shall not act except to direct the City Manager to take action or schedule the matter for discussion at a later date.

4. Consent Agenda.

   A. Minutes of the January 18, 2022 City Council Meeting (Heather Barbour, Clerk of Council) pg 6

   January 18, 2022 Minutes and Presentation

   B. Minutes of the January 18, 2022 City Council Work Session (Heather Barbour, Clerk of Council) pg 58

   January 18, 2022 Work Session Minutes

   C. Report regarding the January 20, 2022 Oxford Recreation Board Meeting (Casey Wooddell, Park and Recreation Director) pg 73

   January 20, 2022 Oxford Recreation Board Meeting Report

   D. A Resolution declaring certain City property no longer needed for any municipal purpose as surplus and authorizing its advertisement and sale to the highest bidder at public auction or internet auction. (John Jones, Police Chief) pg 75

   Surplus Vehicles Resolution

5. Resolutions.

   1. A Resolution Approving the Contract Between the City of Oxford, Ohio and the Oxford Professional Firefighters International Association of Firefighters Local 5272 and Authorizing the City Manager to Sign a Contract on Behalf of the City. (Doug Elliott, City Manager) pg 77

   Firefighters Contract

   2. A Resolution Accepting the Proposal and Authorizing the City Manager to Enter Into an Agreement with Swim Safe Pool Management Company for the Operations of the Oxford Aquatic Center for the 2022 Season. (Casey Wooddell, Parks and Recreation Director) pg 114

   Swim Safe Pool Management Contract

3. A Resolution Authorizing the City Manager to Accept the Ohio Body Worn Camera Grant in an amount not to exceed $31,451.38. (John Jones, Police Chief) pg 133

Ohio Body Worn Camera Grant

6. Ordinances.

A. First Reading.

1.An Ordinance Authorizing the City Manager to Enter into an Easement Agreement Between the City of Oxford and Rams Holdings LTD., LLC for a Permanent Easement over Portions of Real Property as Set Forth in Exhibit “B” Attached Hereto for the Construction and Maintenance of a New Sanitary Sewer System to Serve Said Property. (Mike Dreisbach, Service Director) pg 135

Rams Holdings LTD. LCC Easement Agreement

2.An Ordinance Authorizing the City manager to Enter into an Easement Agreement Between the City of Oxford and 4-Leaf Development, LLC for a Permanent Easement over Portions of Real Property as Set Forth in Exhibit “A” Attached hereto to Allow the Construction and Maintenance of a New Sanitary Sewer System to Serve Said Property. (Mike Dreisbach, Service Director) pg 143

4-Leaf Development LLC Easement #1

3.An Ordinance Authorizing the City Manager to Enter into an Easement Agreement Between the City of Oxford and 4-Leaf Development, LLC for Two Permanent Easements over Portions of Real Property as Set Forth in Exhibit “C” attached hereto and Labeled Exhibit “A” and “B” to Allow the Construction and Maintenance of a New Sanitary Sewer System to Serve Said Property. (Mike Dreisbach, Service Director) pg 151

4-Leave Development LLC Easement #2

4.An Ordinance Authorizing the City Manager to Enter into an Easement Agreement Between the City of Oxford and 4-Leaf Development, LLC for a Permanent Easement over Portions of Real Property as Set Forth in Exhibit “B” Attached hereto for the Construction and Maintenance of a New Sanitary Sewer System to Serve Said Property. (Mike Dreisbach, Service Director) pg 160

4-Leave Development LLC Easement #3

5.An Ordinance Adopting a Revised and Amended Water and Sanitary Sewer Improvement Specifications and Backflow Cross Connection Control Manual. (Mike Dreisbach, Service Director) pg 168

2022 Water and Sanitary Sewer Improvement Specifications Manual

6.An Ordinance Granting the Request of Thad and Renee Van Winkle, to Connect to an Existing City Water Line for a New Single Family Residence to be Located on a 10 Acre Parcel on Bonham Road Outside the Oxford Corporate Limits. (Mike Dreisbach, Service Director) pg 171

Water Utility Service Outside Corporate Limits

7.An Ordinance Amending Ordinance No. 3654 Supplemental Budget Ordinance Number 2 to Make Supplemental Appropriations for Fiscal Year 2022. (Joe Newlin, Finance Director) pg 178

Supplemental Budget #2

B. Second Reading

1.An Ordinance Authorizing the City Manager to enter into an Easement Agreement as set forth in Exhibit "A" Attached Hereto with Prestige Oxfordwide, LLC. and Accepting said Easement as set forth on Exhibits "B" and "C" attached Hereto to allow the Construction of a Public Sidewalk. (Mike Dreisbach, Service Director) pg 181

Sidewalk Easement Prestige Oxford Wide, LLC

2.An Ordinance Authorizing the City Manager to Enter Into an Addendum Agreement with the Board of Education of the Talawanda School District for the Purpose of Releasing and Termination a Permanent Roadway and Utility Easement and Temporary Construction Easement, Situated in Part of Lot #3772. (Sam Perry Community Development Director) pg 190

Talawanda Releasing Old Easement

3.An Ordinance Authorizing the City Manager to Accept a Permanent Roadway and Utility Easement and Temporary Construction Easement, Situated in Lot #3772 From the Board of Education of the Talawanda School District A Permanent Roadway. (Sam Perry, Community Development Director) pg 205

Talawanda Accept New Easement

7. A. Announcements & Communications.

1. Remarks from City Council and City staff. The comments expressed by individual members of Council or City staff during this portion of a City Council meeting do not necessarily reflect the views of the City of Oxford, The Oxford City Council, or the City staff.

2. Future Meetings.

WED – Feb 2 Environmental Commission 7 p.m. Municipal Building

TUES – Feb 8 Public Arts Commission Meeting 4:30 p.m. Municipal Building

TUES – Feb 8 Planning Commission Meeting 7: p.m.

WED – Feb 9 Historic & Architectural Preservation Commission Meeting 6:15 p.m.

THUR –Feb 10 Oxford Recreation Board Meeting 11:30 a.m. Municipal Building

MON – Feb 14 Oxford Parking & Transport. Advisory Board 9:30 a.m. Municipal Building

TUES –Feb 15 City Council Meeting 7:30 p.m.

THUR- Feb 17 Climate Action Steering Committee Meeting 8:30a.m. Municipal Building

MON - Feb 21 Holiday City Offices Closed

TUES – Feb 22 Board of Zoning Appeals Meeting 6:30 p.m.

FRI - Feb 25 Community Improvement Corporation Meeting 12 p.m. OFD Training Room

MON – Feb 28 Housing Advisory Commission Meeting 3:30 p.m. LCNB Community Room

TUES – Mar 1 City Council Meeting 7:30 p.m.

WED – Mar 2 Environmental Commission Meeting 7 p.m. Municipal Building

8. Adjourn.

OXFORD CITY COUNCIL

Meeting Minutes

Tuesday, January 18, 2022

Roll Call.

William Snavely, Mayor, Chantel Raghu, Vice-Mayor, Amber Franklin, Jason Bracken, Alex French, Glenn Ellerbe, David Prytherch

A regular meeting of the Oxford City Council was called to order by Mayor William Snavely on Tuesday January 18, 2022 at 7:30 p.m. Members in attendance were, Amber Franklin, Alex French, Jason Bracken, Glenn Ellerbe, Chantel Raghu, and David Prytherch.

Staff members in attendance were: Mr. Doug Elliott, City Manager; Mr. John Jones, Police Chief; Mr. Chris Conard, Law Director; Mr. Mike Dreisbach, Service Director; Mr. Casey Wooddell, Parks and Recreation Director; Mr. Sam Perry, Community Development Director; Mr. Joe Newlin, Finance Director; Mr. Geoffrey Robinson, Police Lieutenant; Mr. John Detherage, Fire Chief; and Ms. Heather Barbour, Clerk of Council.

Approval of Agenda.

Ms. Raghu moved to approve the agenda. Ms. Franklin seconded. The motion passed 7-0-0.

Public Participation.

Proclamation – "Rev. Dr. Martin Luther King, Jr. Day"

Mayor Snavely read the "Rev. Dr. Martin Luther King Jr. Day" Proclamation and presented it to Ms. Fran Jackson a member of the Oxford NAACP. Ms. Jackson accepted and thanked the Council for the Proclamation and their service to the City of Oxford.

Presentation – ASPIRE – Randi Thomas

Mr. Randi Thomas thanked Council for their service to the City. Mr. Thomas presented an update on the College@Elm project. Mr. Thomas gave highlights on partnerships, basic floor layouts and a tentative timeline. Slides can be found in the minutes.

Notice of Legislative Authority- Transfer of permits D5 and D6 to Firefly Hospitality Group LLC DBA Circle 15 E High St. 1st FL Rear & BSMT PO Box 378 Oxford, Ohio 45056

Mr. Bracken moved to proceed without comment. Ms. Raghu seconded. The motion passed 7-0-0.

Notice of Legislative Authority- Transfer of permits D5 and D6 to Firefly Hospitality Group LLC DBA Mac & Joes 21 E High St. Rear PO Box 378 Oxford, Ohio 45056

Ms. Raghu moved to proceed without comment. Ms. Franklin seconded. The motion passed 7-0-0.

Public Comments.

Mr. Mike Everett from McCullough-Hyde Memorial Hospital gave a brief COVID update. Mr. Everett thanked Council for their leadership for the hard decisions Council has had to make and will continue to make during this pandemic with the best interests of the Community in mind. Mr. Everett noted that this is the fourth surge or wave and McCullough-Hyde has been stretched these last two weeks. Mr. Everett shared that the Northern states are starting to see a decline in the number of cases. Mr. Everett feels this trend will soon come our way.

Mr. Everett advised the hospital has seen what they had anticipated and have managed through. Mr. Everett offered to answer any questions.

Mr. Prytherch asked what percentage of beds or hospital traffic during the regular semester is Miami related, for reasons other than COVID.

Mr. Everett mentioned McCullough-Hyde sees very few Miami University student admissions, most coming from the Urgent Care or the Emergency Department. Mr. Everett noted most hospitalizations come from non-student adults.

Mr. Ellerbe asked if McCullough-Hyde was currently considering the suspension of elective surgery at this time.

Mr. Everett mentioned that suspension is part of the plan if the hospital gets to that point. Mr. Everett noted the Tri Health Team has jumped in to manage so the hospital hasn't had to suspend elective surgery since elective surgery is not elective for that patient.

Ms. Peggy Branstrator 18 Meadow Circle - Ms. Branstrator addressed Council on the City's current carbon-neutral plan. Ms. Branstrator noted the kickoff in November 2021, with a good turn out and lots of good ideas. Ms. Branstrator mentioned a few ideas such as a recognition program, people and households pledging to lower their carbon footprint, rental property energy rating system, solar panels on business rooftops and residential buildings, and possibly hosting an electric car show.

Consent Agenda.

Minutes of the January 4, 2022 City Council Meeting (Heather Barbour, Clerk of Council)

Report regarding the December 28, 2021 Board of Zoning Appeals Meeting (Sam Perry, Community Development Director)

Report regarding the January 5, 2022 Environmental Commission Meeting (Mike Dreisbach, Service Director)

Ms. Raghu moved to approve the consent agenda. Mr. Prytherch seconded. The motion passed 7-0-0.

Resolutions.

Face Mask Resolution

A Resolution Encouraging and Recommending All Individuals within the City of Oxford to be Fully Vaccinated and Wear Face Masks in Public Indoor Settings. (Doug Elliott, City Manager)

Mr. Elliott drafted this resolution encouraging and recommending all individuals within the City of Oxford to be fully vaccinated including a booster shot and to wear face masks in public indoor settings.

There were no comments from the public.

Mr. Ellerbe mentioned the discussions from the last Council meeting regarding asking citizens to do something rather than forcing them.

Mayor Snavely added this is not an either-or situation. Mayor Snavely mentioned that the Resolution does something the Ordinance does not do, and that encourages people to be vaccinated.

Mr. Prytherch mentioned as a Resolution this is more of a statement of values. Mr. Prytherch noted his appreciation of the recognition of the vaccines.

Ms. Franklin mentioned an audience member who had emailed the Council expressing the benefits of a Resolution. Ms. Franklin shared her gratitude that it is not an either-or situation.

Mr. Ellerbe moved to adopt Resolution No. 7369. Mayor Snavely seconded. The motion passed 7-0-0.

Worldwide Industries Resolution

A Resolution Accepting the bid and Authorizing the City Manager to enter into an Agreement with Worldwide Industries Corp. for Applying a New Coating to the Elevated Water Reservoir at a Cost Not to Exceed $198,642.00. (Mike Dreisbach, Service Director)

Mr. Dreisbach asked for a friendly amendment of the amount not to exceed $243,506.20. Mr. Dreisbach noted $25,000.00 to allow the purchase of structural materials if to be necessary, as well as a 10% contingency amount of $19,864.20, therefore making the total amount not to exceed $243,506.20. Mr. Dreisbach explained the importance of routine maintenance, and the last time the elevated water storage reservoir was last recoated was in 2000. Dr. Dreisbach advised a coating usually will last about 20-25 years.

Mr. Dreisbach stated customers on the pressure zone served by this tank should not notice a difference in pressure or volume. Mr. Dreisbach offered to answer any questions.

There were no comments from the public.

Mr. Prytherch asked if the status or utility of this project would change given our potential future changes in the water supply.

Mr. Dreisbach answered that the coatings are dictated by the Ohio EPA, softened water or hard water would not have an impact on choice.

Ms. Raghu moved to adopt Resolution No. 7370. Ms. Franklin seconded. The motion passed 7-0-0.

Montrose Auto Group Resolution

A Resolution Authorizing the City Manager to Enter into a Contract with Montrose Auto Group for the Purchase of Three Ford Interceptor Utility Vehicles with Specified Options at State Contract Pricing at a Cost Not to Exceed $109,106.00. (Lt. Geoffrey Robinson, Police Division)

Lt. Robinson advised the 2022 Capital Improvement budget includes $141,595 in Capital Equipment Fund for the purchase of police vehicles and equipment necessary to maintain the operating integrity of the Police Department. Lt. Robinson noted the planned capital purchases are for one marked Ford Police Interceptor Utility vehicle and two unmarked Ford Interceptor Utility vehicles. Lt. Robinson stated the three new vehicles would be replacing three older vehicles currently in the Oxford Police Division Fleet, and offered to answer any questions.

There were no comments from the public.

Ms. Franklin asked what the remaining $32,000 would be used for.

Lt. Robinson answered that the $32,000 would to the outfitting of the vehicles with computers, seatbelt systems for the rear seats, lights, and other equipment that makes it a police vehicle.

Mr. Prytherch commended the Police Division for helping to support the goals of the Council by purchasing hybrid vehicles.

Ms. French asked why Montrose Ford since that dealership is in Akron Ohio.

Lt. Robinson said the police did look at other dealerships however the other dealerships were not able to beat the state contract pricing.

Ms. Raghu moved to adopt Resolution No. 7371. Mr. Franklin seconded. The motion passed 7-0-0.

Ordinances.

First Reading.

Face Mask Ordinance

An Ordinance Requiring Face Masks Inside Any Public Space Within the City of Oxford, Ohio, to Limit the Spread of COVID-19, and Declaring an Emergency. (Doug Elliott, City Manager)

Mr. Elliott reported the revisions that have been requested at the last Council meeting such as eliminating the references of "face coverings" to "face masks" and defining face masks as a three-ply surgical mask, KN95 mask, or N95 mask. Mr. Elliott reminded the Council that an emergency ordinance requires 3/4 (6) of all members elected to the Council for passage. Mr. Elliott offered to answer any questions.

Mr. Chris Skoglind - 211 Ryan Drive - Mr. Skoglind asked the Council to think about enforcement plans if the Mask Ordinance is passed. Mr. Skoglind mentioned concern for other Ordinances if this is not enforced what impact will have on new and existing Ordinances.

Ms. Ann Kamphaus - 590 Honor Lane and Church St. Social 107 E Church St. - Ms. Kamphaus noted she is in favor of health and safety and feels like the Resolution that just passed is sufficient. Ms. Kamphaus stated this mask mandate will have a negative impact on the Oxford Business Community.

Mr. Ron Siliko - 6244 Hester Road - Mr. Siliko suggested looking at a world view if citizens/residents are asked to show vaccination records before entering a business. Mr. Siliko noted the lack of discussion regarding natural immunity. Mr. Siliko asked the Council to consider making mask-wearing optional.

Mr. Steven Snell - 6 Old Stone Court - Mr. Snell mentioned we are all in this together and the division is between those who have had COVID and those who have not. Mr. Snell noted risk management the Resolution and the Ordinance both address the likelihood of the occurrence, but do nothing to mitigate the severity of the outcome. Mr. Snell asked the Council to consider all aspects before making this decision.

Mr. Prytherch noted being in sync with major institutional partners like Miami and Talawanda to create a town-wide culture and expectations. Mr. Prytherch would like to propose an amendment to include cloth masks.

Mr. Bracken agreed that an amendment to include cloth masks would be a good addition.

Ms. Franklin thanked Ms. Kamphaus for speaking. Ms. Franklin mentioned her first City Council meeting was a week before the previous Mask Mandate was set to expire. Ms. Franklin stated she wished she would have known how challenging it would be to start over, she might have asked for and am amendment to the Agenda to discuss and perhaps extend the deadline. Ms. Franklin recalled the rapid change after the Mask Mandate had expired. Ms. Franklin had asked Mr. Elliott at the last Council meeting to remove the fourth Whereas statement regarding the return of Miami students from the previous Mask Mandate. Ms. Franklin shared that this is not about the students returning to campus, COVID cases in the Community have been rising in the absence of the students who are highly vaccinated. Ms. Franklin mentioned receiving emails from residents who were not in attendance who did not feel comfortable coming to a public meeting because they have young children who cannot be vaccinated. Ms. Franklin shared these parents feel like they have been forgotten, and hopefully, the March 1st expiration date will take us through this waive. Ms. Franklin noted just because the City cannot do everything does not mean the City should do nothing.

Ms. Raghu agreed with Mr. Prytherch regarding the addition of cloth masks. Ms. Raghu noted an equity aspect and not everyone has access to the best masks.

Ms. French noted the timing is truly unfortunate with students returning to campus. Ms. French wanted to echo what Ms. Franklin said regarding the expiration of the previous Mask Mandate and wished Council would have just extended the expiration date before it had expired. Ms. French would like to protect the student and keep them here. Ms. French shared Miami's policy now states if a student lives within a 150 mile radius of Oxford and that student contracts COVID they need to leave campus. Ms. French mentioned students cannot go uptown if they are not here. Ms. French asked Mr. Elliott if a sundown provision could be put in place, maybe with the wastewater testing.

Mr. Elliott would not suggest that because the City typically only gets the report when cases go up and the numbers may not be a true reading. Mr. Elliott noted this is a useful indicator, but would not tie this report to the sundown date.

Ms. Raghu commented that part of the sundowning of the Mask Mandate would be to look at what's happening globally. Ms. Raghu noted we saw trends in other countries and the southern states.

Mr. Ellerbe proposed an amendment adding an exemption for fully vaccinated individuals. Mr. Ellerbe noted this was the same amendment he proposed back in August. Mr. Ellerbe mentioned this appears to be a discriminatory act, based on timing it targets a group. Mr. Ellerbe added the City is not incentivizing vaccines. Mr. Ellerbe suggested letting the individual business decide, citing the policies from Brick Street and Chipotle, noting compliance.

Mr. Bracken shared he did not do this because the students are returning to campus, it is because of Omicron.

Mr. Bracken noted the previous Mask Mandate never should have expired, and he should have asked to extend the expiration date. Mr. Bracken suggested that any time you quadruple the population density during a communicable disease outbreak that is a good reason to reinstate the Mask Mandate.

Mayor Snavely commented the reason behind the type of acceptable masks being changed is based on the CDC's recommendation.

Mr. Prytherch mentioned some communities are using American Recovery Act funds to purchase KN95 masks for lower-income residents.

Mr. Prytherch proposed an amendment to section #4 to read For the purpose of this Ordinance, "face mask" means three-ply surgical mask, KN95 masks, N95 masks, adding or not fully recommended a cloth mask. Ms. Raghu seconded. The motion passed 6-1-0.

Mayor Snavely commented that this Ordinance was not in any way caused by the students returning to campus and the expiration date of March 1, 2022 was chosen because we have a Council meeting that day. Mayor Snavely urges the public to have realistic expectations some will not follow the Ordinance and some will, but overall it is unenforceable.

Mr. Prytherch thanked everyone who has reached out to Council with their thoughts. Mr. Prytherch noted there is no perfect answer and this has been difficult for everyone.

Mr. Ellerbe expressed appreciation and mentioned he has the best interest of the City in mind. Mr. Ellerbe noted receiving several emails from the students, realizing this feels discriminatory like Winter DORA. Mr. Ellerbe shared the student's frustration on inclusivity.

Mr. Prytherch moved to adopt Ordinance No. 3657. Mr. Bracken seconded. The motion passed with the following roll call.

AYE: Ms. Franklin, Ms. French, Mr. Prytherch, Ms. Raghu, Mr. Bracken, Mayor Snavely (6)

NAY: Mr. Ellerbe (1)

ABS: None (0)

Sidewalk Easement

An Ordinance Authorizing the City Manager to enter into an Easement Agreement as set forth in Exhibit "A" Attached Hereto with Prestige Oxfordwide, LLC. and Accepting said Easement as set forth on Exhibits "B" and "C" attached Hereto to allow the Construction of a Public Sidewalk. (Mike Dreisbach, Service Director)

Mr. Dreisbach noted that Prestige Oxfordwide, LLC. is redeveloping the site at 135 Lynn Avenue (previously utilized for a Pizza Hut restaurant), and will be installing a 5' wide sidewalk to parallel Lynn Ave. Mr. Dreisbach mentioned as there previously was no sidewalk on this parcel, a public access easement is required by the City for construction. Mr. Dreisbach offered to answer any questions.

There were no comments from the public.

Mr. Prytherch gave two thumbs up.

Releasing Easement Talawanda

An Ordinance Authorizing the City Manager to Enter Into an Addendum Agreement with the Board of Education of the Talawanda School District for the Purpose of Releasing and Terminating a Permanent Roadway and Utility Easement and Temporary Construction Easement, Situated in Part of Lot #3772. (Sam Perry Community Development Director)

Mr. Perry explained that both Talawanda and City Staff have been working on this for a few months now, as a result of a change in operations for Talawanda to move the bus storage from Chestnut Fields location to the High School site. Mr. Perry advised this is the first Ordinance in the pair to release the old easement and offered to answer any questions.

There were no comments from the public.

Mr. Prytherch mentioned it is great function of our Parking and Transportation Advisory Board to have, it highlights the spirit of transportation plans.

Accept New Easement Talawanda

An Ordinance Authorizing the City Manager to Accept a Permanent Roadway and Utility Easement and Temporary Construction Easement, Situated in Lot #3772 From the Board of Education of the Talawanda School District A Permanent Roadway. (Sam Perry, Community Development Director)

Mr. Perry noted this is the second Ordinance is to accept the new Easement and offered to answer questions.

Mr. Conard mentioned Exhibit "B" might need to be updated. Mr. Conard noted this was a complex series of tasks since this is a partial release that includes two original recordings of easements that we did not want to release. Mr. Conard and Mr. Perry will update the Exhibits before the second reading.

There were no comments from the public.

Second Reading

Owl's Landing Preliminary Subdivision & Development

An Ordinance Accepting the Recommendation of the Planning Commission and Approving the Preliminary Subdivision and Preliminary Planned Development Applications for Owl's Landing Located Along Brookville Road in the City of Oxford With Conditions. (Sam Perry,)

Mr. Perry reported no changes since the first reading and offered to answer any questions.

Mr. Todd Hall of Todd Homes LLC. - thanked the Council for their commitment tonight and offered to answer any questions.

There were no comments from the public.

Ms. Franklin moved to adopt Ordinance No. 3658. Mr. Prytherch seconded. The motion passed with the following roll call:

AYE: Ms. Franklin, Ms. French, Mr. Prytherch, Ms. Raghu, Mr. Bracken, Mr. Ellerbe, Mayor Snavely (7)

NAY: None (0)

ABS: None (0)

Oxford Court Village Preliminary Subdivision & Development

An Ordinance Accepting the Recommendation of the Planning Commission and Approving the Preliminary Subdivision and Preliminary Planned Development Applications for Oxford Court Village (Episcopal Retirement Services) With Conditions. (Sam Perry,)

Mr. Perry reported no changes since the first reading and offered to answer any questions.

There were no comments from the public.

Mayor Snavely recused himself and left the table.

Mr. Prytherch will propose an amendment based on street size and who will be paying for the street.

Mr. Elliott noted from the first reading Mr. Dreisbach had reported tapering from Dana Drive to match Melissa Drive. Mr. Elliott mentioned the City would not be paying for the entire street.

Mr. Perry mentioned the traffic analysis and the volume was low from a pedestrian and bicycle standpoint. Mr. Perry also mentioned Mr. Dreisbach's idea of tapering and to take an overall look at the City's Subdivision Code would be wise.

Mayor Snavely - speaking as a citizen and resident of Dana Drive who rides a bike several times weekly. Mayor Snavely expressed his thoughts on a wider street being safer because if cars are parked on the street it would be dangerous for bikers.

Mr. Prytherch noted the width correlates with the speed and worries about over-designing the street.

Mr. Chris Skoglind- 211 Ryan Drive - Mr. Skoglind commented that Dana Drive has two ends and the existing street is at that width, with the option for people that live in the area to use the existing street instead of the new street. Mr. Skoglind noted the existing street will also connect to the trails.

Mr. Bill Levenderis - 6066 Contreras Road- Mr. Levenderis noted the great opportunity the City has with this affordable housing development, being a huge step forward for the City Council. Mr. Levenderis urged us to keep the progress moving to not get caught up in the small details and to be creative this is Oxford, let this project be the cornerstone.

Mr. Prytherch moved to amend Condition 11 the roadway be designed as a local street proportional to the existing Melissa Drive in accordance with the City's Complete Street Policy and to provide a direct multi-modal connection to the Oxford City Trails. Mr. Ellerbe seconded. The motion passed 6-0-1.

Ms. Raghu moved to adopt Ordinance No. 3659. Ms. French seconded. The motion passed with the following roll call:

AYE: Ms. French, Mr. Prytherch, Ms. Raghu, Mr. Bracken, Mr. Ellerbe, Ms. Franklin (6)

NAY: None (0)

ABS: Mayor Snavely (1)

Oxford Codified Ordinance Updates

An Ordinance to Approve Current Replacement Pages to the Oxford Codified Ordinances. (Doug Elliott, City Manager)

Mr. Elliott presented a brief overview answering Ms. Raghu's question from the last meeting regarding changes to the cruelty to companion animal Ordinance. Mr. Elliott noted the change being in the distribution of fine monies. Mr. Elliott offered to answer any questions.

There were no comments from the public.

Ms. Raghu moved to adopt Ordinance No. 3660. Ms. Franklin seconded. The motion passed by the following roll call.

AYE: Mr. Prytherch, Ms. Raghu, Mr. Bracken, Mr. Ellerbe, Ms. Franklin, Ms. French, Mayor Snavely (7)

NAY: None (0)

ABS: None (0)

Supplemental Budget #1

An Ordinance Amending Ordinance No. 3654 Supplemental Budget Ordinance Number 1 to make supplemental appropriations for fiscal year 2022. (Joe Newlin, Finance Director)

Mr. Newlin went over the as before mentioned adjustment of the general fund and offered to answer any questions. Details can be found on page 245 of Councils packet.

There were no comments from the public.

Mr. Ellerbe moved to adopt Ordinance No. 3661. Ms. Raghu seconded. The motion passed with the following roll call.

AYE: Ms. Raghu, Mr. Bracken, Mr. Ellerbe, Ms. Franklin, Ms. French, Mr. Prytherch, Mayor Snavely (7)

NAY: None (0)

ABS: None (0)

A. Announcements & Communications.

Remarks from City Council and City staff. The comments expressed by individual members of Council or City staff during this portion of a City Council meeting do not necessarily reflect the views of the City of Oxford, The Oxford City Council, or the City staff.

Mr. Elliott mentioned serving on the Butler County 911 planning committee, this is a one-year rotating position between the cities of Middletown, Fairfield, and Oxford. Mr. Elliott explained that the Committee is responsible for updating and maintaining the county-wide 911 Plan, and appointing members to the 911 Technical Advisory Committee. Mr. Elliott noted the contract with the Butler County Sheriff's Office for the handling of the City of Oxford's 911 calls effective December 2015, in January 2021 Fire and EMS Dispatch was added. Mr. Elliott is hopeful the City might see a slight reduction in the annual fee. Mr. Elliott mentioned the Resolution for Milford Township EMS Contract that Council adopted at the last meeting and has been signed by both parties. Mr. Elliott remarked on the expanded polystyrene ban that was adopted and City Staff will be notifying businesses about the ban being in place and giving them time to adjust.

Chief Jones mentioned on February 7, 2022 OPD will be holding the annual Citizens Police

Academy, this is a 10-week course on Monday nights held at the Courthouse. Chief Jones noted participants can meet the OPD Officers and learn about the Division. Chief Jones advised to be aware of tax season fraud and the OPD will be posting tips on Facebook.

Ms. Greene welcomed Ms. Ashley Keeton to the City Manager's Office, Ashley is the part-time communications specialist and will be focusing on the website content and social media. Ms. Greene thanked Oxford Parks and Recreation, Enjoy Oxford, Oxford Community Arts Center, and the Chamber of Commerce for executing the Chocolate Meltdown. Ms. Greene noted this is not an easy time to host events and she was impressed with the management of both the indoor and outdoor events. Ms. Greene explained that the City Manager's Office will be working to get the communications of the Mask Ordinance and Polystyrene Ban out to the community as quickly as possible. Ms. Greene advised of upcoming boards and commissions meetings that have been rescheduled and information can be found on the City's Website.

Ms. French welcomed Ms. Keeton and is looking forward to seeing the new City social media posts. Ms. French expressed her thoughts to the Staff members who are out sick.

Mr. Bracken urged everyone to get vaccinated, boosted, and wear a mask when you can and stay safe.

Mr. Prytherch mentioned the Climate Action Steering Committee has been approached about City-owned land and naturalization. Mr. Prytherch would like to explore the feasibility of creating an opportunity to provide a naturalized landscape to offset carbon emissions. Mr. Prytherch mentioned his planning class might be able to help with this project and would like confirmation to go ahead with this planning process.

Adjourn.

Ms. Raghu moved to adjourn at 10:15 pm. Ms. French seconded. The motion passed 7-0-0.

Public Comment to Council Form

Print

Submitted by: Liz Kiel Luebbe

Status: Open

Assigned To: Doug Elliott

Priority: Normal

Due Date: Open

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Liz

Enter your First Name

*** Last Name**

Kiel Luebbe

Enter your Last Name

*** Address**

1441 Dana Drive

*** City**

Oxford

*** State**

OH

*** Email**

lizkiel@hotmail.com

Phone

Ex. (123) 456-7890

*** I am a...**

- [ ] **Visitor**
- [x] **Resident**
- [ ] **Business Manager**
- [ ] **Business Owner**
- [x] **Employee in Oxford**
- [ ] **Student**
- [ ] **Other**

*** Comment(s)**

Hello City Council, I have appreciated all the efforts the City of Oxford has made to keep the risk of COVID low for its residents. I would politely request that the Council consider re-instating a mask mandate while the Omicron variant is surging. I am worried for business owners and employees who would not have the authority to protect themselves. I am also concerned that the mask mandate is expiring in the elementary schools on Jan. 10th. Action by the city would also help the schools. Thank you for your consideration and your service, Liz Kiel Luebbe

Make a public comment for review by City Council

Public Comment to Council Form

Print

Submitted by: Martha Castaneda

Status: Open

Assigned To: Doug Elliott

Priority: Normal

Due Date: Open

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Martha

Enter your First Name

*** Last Name**

Castaneda

Enter your Last Name

*** Address**

3443 Riggs Rd.

*** City**

Oxford

*** State**

OH

*** Email**

marthacastaneda@gmail.com

Phone

513-523-5216

*** I am a...**

- ☐ **Visitor**
- ☑ **Resident**
- ☐ **Business Manager**
- ☐ **Business Owner**
- ☐ **Employee in Oxford**
- ☐ **Student**
- ☐ **Other**

*** Comment(s)**

As a member of the Oxford community, I want to urge the city council to vote for a mask requirement. The mask requirement is a simple and low technology way to protect all citizens including vulnerable citizens. I am going through chemotherapy and I must be extremely careful to not get sick. A mask requirement makes it so that I can venture out a few times a month to essential areas such as the grocery store. Moreover, I am a parent of an elementary student in the Talawanda school district and I feel the community can help keep schools open with mask requirements that limit the community spread.

Make a public comment for review by City Council

Request has been sucessfully updated.

Public Comment to Council Form

Print

Submitted by: Rita Ross

Status: Acknowledged

Priority: Normal

Assigned To: Doug Elliott

Due Date: Open

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Rita

Enter your First Name

*** Last Name**

Ross

Enter your Last Name

*** Address**

110 Country Club Dr

*** City**

OXFORD

*** State**

oh

*** Email**

rjross1087@gmail.com

Phone

5132559096

*** I am a...**

- [ ] **Visitor**
- [x] **Resident**
- [ ] **Business Manager**
- [ ] **Business Owner**
- [ ] **Employee in Oxford**
- [ ] **Student**
- [ ] **Other**

*** Comment(s)**

I hope that you will consider reinstating the mask ordinance very soon. My husband and I have not eaten at a restaurant in town since the ordinance was ended - just in time for the omicron surge! - and we will not return to dining out until it is reinstated or the Covid situation improves drastically. Please keep the health and safety of the citizens in mind, as well as the finite capacities of our local medical facilities and practitioners. Thank you.

Make a public comment for review by City Council

Request has been sucessfully updated.

Public Comment to Council Form

Print

Submitted by: Nicholas Perry

Status: Open

Assigned To: Doug Elliott

Priority: Normal

Due Date: Open

Attachments

- Screenshot from 2022-01-16 14-46-29.png - 2022-01-16 02:46:22 pm

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Nicholas

Enter your First Name

*** Last Name**

Perry

Enter your Last Name

*** Address**

350 Western College Dr.

*** City**

Oxford

*** State**

Ohio

*** Email**

perryna4@miamioh.edu

Phone

Ex. (123) 456-7890

*** I am a...**

- [ ] **Visitor**
- [ ] **Resident**
- [ ] **Business Manager**
- [ ] **Business Owner**
- [x] **Employee in Oxford**
- [x] **Student**
- [ ] **Other**

*** Comment(s)**

I am here writing because I cannot be in person until the 21st and I still choose to make my voice heard. The mask ordinance that you are considering passing is downright ridiculous and borderline psychotic. Miami Students are vaccinated at a rate of about 93+% while the

general public is vaccinated at a rate of about 45+%. This means that Miami students are completely safer than typical residents. Yet you, as city council only decide to set the first ordinance to expire after students leave, then re-implement it once we come back. If you cared about protecting your full time residents (who are vaccinated at less than half the rate of Miami students) the ordinance would not have expired after we have left. The fact that you think students are the problem is asinine. Additionally, we should speak to the success of this previous mask mandate. Both Oxford Police Department AND Miami University Police Department outright refused to enforce this mandate, with severe backlash of the ordinance coming from rank-and-file police officers. Even if this mandate were to be imposed, there will be nobody to enforce it, and it will again make city council look silly. As far as we know, ZERO tickets for ordinance non-compliance were issued. Miami has re-instituted mask wearing for this semester, however they did not eliminate cloth masks as a viable option. With 20,000 students returning to campus and being told that off-campus businesses require N95s or Surgical masks, we can expect panic buying and a shortage of city compliant face coverings, which would force people not to patronize businesses in Oxford. Our local businesses are hurting enough. There's no reason to metaphorically execute them too. Finally, I wish to call into question the legitimacy of Councillor Jason Bracken. With the introduction of the last mandate, Bracken decided to make a public post on his Facebook account, stating that he was "not swayed by public opinion." The very nature of Bracken's position is to REPRESENT the opinions of the public, and therefore by not being at least impacted in a minor way, Mr. Bracken is unfit to serve. He honestly is a determent to this town and I can only hope that he finally gets his degree after failing once so he can leave this godforsaken town so that we all may actually live.

Make a public comment for review by City Council



Jason Bracken

August 30, 2021 ·

I'm not moved by public opinion. I'm moved by public benefit.

Take your medicine. This one saves you and others.

Request has been sucessfully updated.

Public Comment to Council Form

Print

Submitted by: Nicole Thesz

Status: Acknowledged

Priority: Normal

Assigned To: Doug Elliott

Due Date: Open

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Nicole

Enter your First Name

*** Last Name**

Thesz

Enter your Last Name

*** Address**

16 Fox Run Circle

*** City**

Oxford

*** State**

OH

*** Email**

theszn@miaimoh.edu

Phone

(513) 609 9211

*** I am a...**

- [ ] **Visitor**
- [x] **Resident**
- [ ] **Business Manager**
- [ ] **Business Owner**
- [ ] **Employee in Oxford**
- [ ] **Student**
- [ ] **Other**

*** Comment(s)**

Dear All, I'm writing in support of reinstating a mask mandate in the City of Oxford. With the current Omicron wave, schools are close to the breaking point (as are hospitals in many areas of the country), and a mask mandate is the best way to keep schools open and support the teachers, school board, and superintendent in enforcing this rule. Moreover, Miami students are about to return to town; the influx of cases, and the increased numbers of people & student activities will increase the spread, endangering older and vulnerable citizens as well as in-person learning. Finally, given Omicron's transmissibility despite vaccinations and boosters, masks are the only way to realistically support public health. Thank you for your work on behalf of Oxford - all the best for the new year!

Make a public comment for review by City Council

Request has been sucessfully updated.

Public Comment to Council Form

Print

Submitted by: Thomas Garcia

Status: Acknowledged

Assigned To: Heather Barbour

Priority: Normal

Due Date: Open

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Thomas

Enter your First Name

*** Last Name**

Garcia

Enter your Last Name

*** Address**

207 Northridge Drive

*** City**

Oxford

*** State**

OH

*** Email**

reginasimas@me.com

Phone

Ex. (123) 456-7890

*** I am a...**

- [ ] **Visitor**
- [x] **Resident**
- [ ] **Business Manager**
- [ ] **Business Owner**
- [ ] **Employee in Oxford**
- [ ] **Student**
- [ ] **Other**

*** Comment(s)**

A new mask mandate is crucial to stop the circulation of the Coronavirus in Oxford. Students come back this week, leaving us completely vulnerable to a new wave of Covid. Masks, besides vaccination, are the tools to contain that.

Make a public comment for review by City Council

Request has been sucessfully updated.

Public Comment to Council Form

Print

Submitted by: Regina Garcia

Status: Acknowledged

Assigned To: Jessica Greene

Priority: Normal

Due Date: Open

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Regina

Enter your First Name

*** Last Name**

Garcia

Enter your Last Name

*** Address**

207 Northridge Drive

*** City**

Oxford

*** State**

OH

*** Email**

reginasimas@me.com

Phone

Ex. (123) 456-7890

*** I am a...**

- [ ] **Visitor**
- [x] **Resident**
- [ ] **Business Manager**
- [ ] **Business Owner**
- [ ] **Employee in Oxford**
- [ ] **Student**
- [ ] **Other**

*** Comment(s)**

Reinstating the mask mandate in Oxford is an imperative measure to stop the circulation and consequent replication of the Coronavirus. With students coming back this week we are totally vulnerable to a new wave of Covid, not to mention the Flu and even Flurona. Oxford could be an example to the state of Ohio but we need a mask mandate for that.

Make a public comment for review by City Council

Request has been sucessfully updated.

Public Comment to Council Form

Print

Submitted by: Juliana Garcia

Status: Open

Assigned To: Doug Elliott

Priority: Normal

Due Date: Open

Public Comment To Council

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

*** First Name**

Juliana

Enter your First Name

*** Last Name**

Garcia

Enter your Last Name

*** Address**

207 Northridge Drive

*** City**

Oxford

*** State**

OH

*** Email**

reginasimas@me.com

Phone

Ex. (123) 456-7890

*** I am a...**

- [ ] **Visitor**
- [x] **Resident**
- [ ] **Business Manager**
- [ ] **Business Owner**
- [ ] **Employee in Oxford**
- [ ] **Student**
- [ ] **Other**

*** Comment(s)**

Please reinstate the mask mandate! It’s disgusting - revolting, actually, to see all those unmasked people at all businesses in town. BTW, businesses MUST reinforce the mandatory use of masks. Enough is enough. I’m tired of seeing business owners and managers turning a blind eye to unmasked people coming in.

Make a public comment for review by City Council

College@Elm
Innovation and Workforce Development Center



ASPIRE – Advancing Strategy & Partnerships

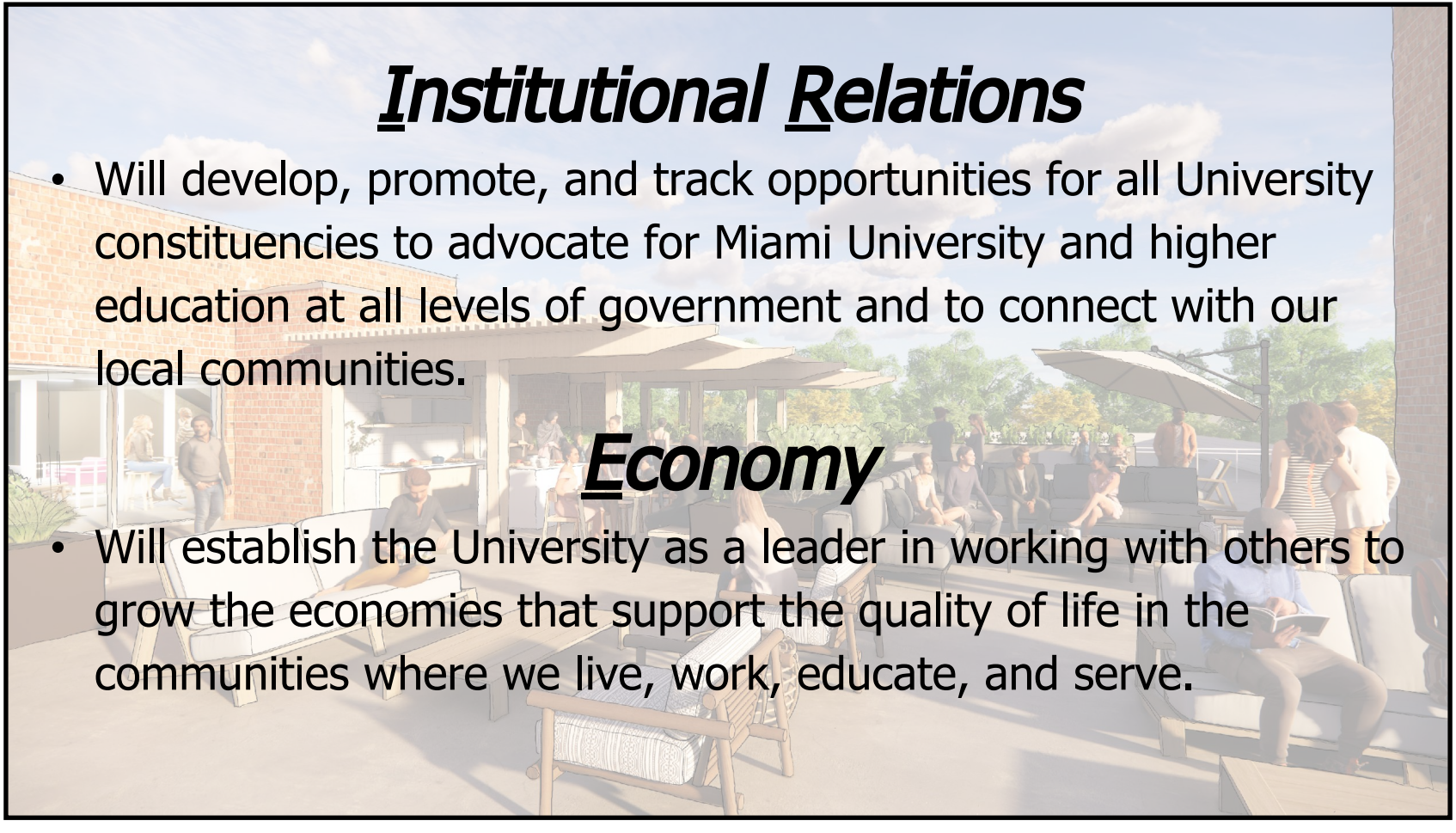
Advancing Strategy

- Will tracks all high-level strategic initiatives across all campuses – Miami RISE, Boldly Creative, research awards, corporate partnerships, etc. – and will regularly report to the Board of Trustees using robust scorecards to demonstrate the university's measurable progress .

Partnerships

- Will promote and coordinate the University's external private sector and community engagement interactions across the many offices and constituencies on our campuses.

ASPIRE – Institutional Relations & Economy



Institutional Relations

- Will develop, promote, and track opportunities for all University constituencies to advocate for Miami University and higher education at all levels of government and to connect with our local communities.

Economy

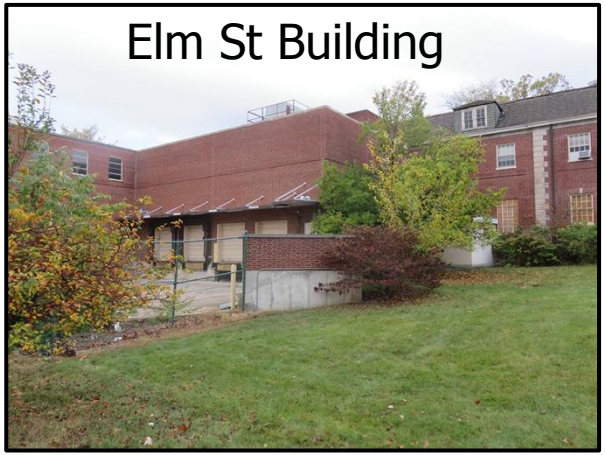
- Will establish the University as a leader in working with others to grow the economies that support the quality of life in the communities where we live, work, educate, and serve.

College@Elm Summary

Elm St Building



Elm St Building



Transform a 39K SF Building:

- Create a hub of art & science, creativity & innovation, & imagination & design
- Provide Workforce & Small Business Development Space & Assist
- Recruit/Develop Manufacturing & Tech Small Businesses/Start-ups

Tenants/Partners:

- Miami University, The Fischer Group, 1809 Project, City of Oxford
- Oxford Community Improvement Corp, SBDAC, & SCORE

Local & Regional Payroll & Jobs Impact:

Organization	Payroll	Jobs
Fischer Group	$2,063,000	51
Start-Ups	$900,000	15
Miami University	$856,000	10
Related Business	$100,000	2
Oxford	$60,000	1
TOTAL	$3,979,000	79

College@Elm Location



W. High St.

Bldg #2
Workforce
Training,
Innovation
& E-Ship

Elm St.

Nature, Park-like
Green Space

Amphitheatre



Bldg #1
Oxford Community
Arts Center



S. College Ave

New
Construction

Oxford
Municipal
Building

College@Elm Goals

Provide Relief to People, Small Businesses, & Industries Hit Hardest By COVID-19

- Workforce Training Programs
- Small Business Development
- Idea/Prototype/Manufacture
- Diversify Oxford Industry
- 12-Month Oxford Economy
- At Least 3 Startups Per Year



Leverage – Work + Program

Students

- Part-Time Salary (24 hrs/wk)
- Tuition Remission ($5250)
- 4-Year Resume

Companies

- Long Term Employee
- Audition Future Leaders
- Grow Responsibility (Retain)



Governor Mike DeWine signed Work+ into Law HB 614

Leverage Excellence in Entrepreneurship

College@Elm

Infrastructure

- Co-Major (117 Majors)
- Nearly 20% Students
- New Department Launch

Excellence

- Top 10 Ranking (13 years)
- NASDAQ Award
- B-Plan Competition

Our Graduates' Success
35 Companies Started 2020
250 Companies Formed Last Decade
Attracted >$10 B
8 Companies Market Valuation $1 B

Selected Partners

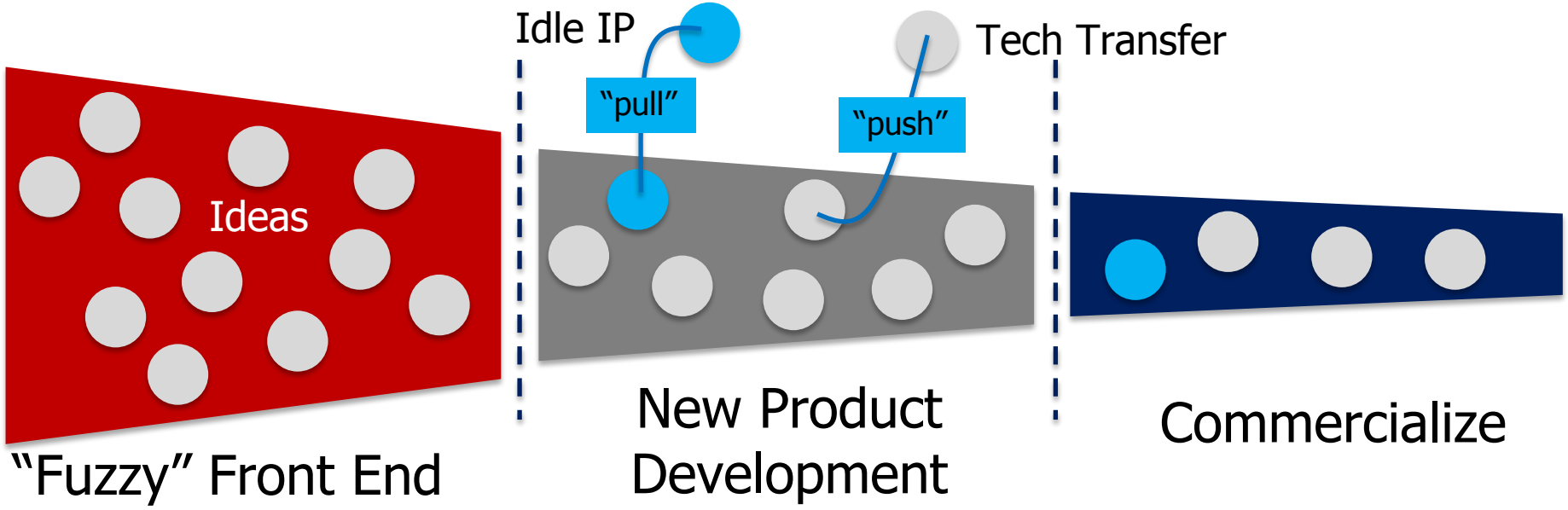
Taft/ cintrifuse WEST CAPITAL ADVISORS, LLC THE BRANDERY

FIFTH THIRD BANK

PNC BANK kroger HCDC Business Center FINTECH

flywheel SOCIAL ENTERPRISE HUB nc+ VENTURES NEXTGEN VENTURE PARTNERS cincytech SVP SOCIAL VENTURE PARTNERS

Leverage – IP "Pull" Strategy





1,000 Patents → 30 → 4

- Descendably
- BUNKR
- DeTox
- LumiRED

Leverage – MU Open for Business "Join Us!"



"Miami University is open for business – your business. We are a public institution with international reach and global ambition that advances research and teaching in emerging areas of clinical health, data and analytics, robotics and innovation. We seek partners who share our values of innovation, creativity, and inclusion; our mission to impact the world for sustainable good; and our conviction that no challenge is too big, no problem unsurmountable. Join us!" – **Gregory P. Crawford**

Cleveland Clinic

CVG
CINCINNATI/NORTHERN KENTUCKY
INTERNATIONAL AIRPORT

stryker®

University Support – Anchor Tenant



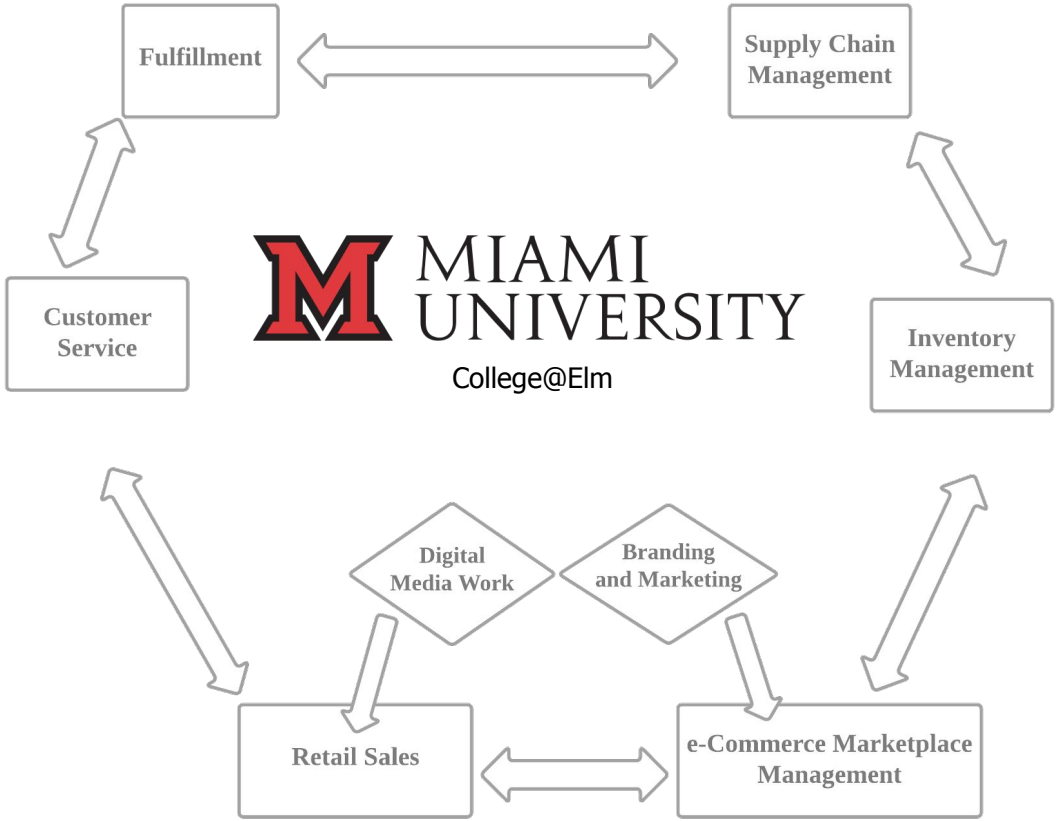


As an anchor tenant Miami University will:

- Offer related job searching skills: resume development, interviewing skills,& employment searches
- Offer the Miami University Work+ Program
- Support 25 high-quality jobs
- Infuse $1,756,000 into Oxford/Butler County economy
- Retain 3 spin-offs a year to reside in Oxford/Butler County
  In 2019-20, 152 students launched 35 start-up companies
- Attract external investments & provide opportunities for small Cos & recent graduates to locate in Butler County
- Leverage University investments in areas of County need
  $96M Clinical Health Science & Wellness Building

The Fischer Group– Anchor Tenant

- ✔ Operate & manage an innovation extension program as an expansion of current operations.
- ✔ Support 53 new high-quality jobs.
- ✔ $2,000,000 annual payroll after 5 year build out
- ✔ Create high-impact experiential learning opportunities for Miami students
- ✔ Moving a complete Supply Chain model to Miami through the College@Elm.
- ✔ Attract new investment to Oxford.



SBDC Support – Anchor Tenant

- Supports College@Elm Innovation & Workforce Development Center
- Operate a workforce training center in partnership with other tenants
- Operate a business start up center in partnership with other tenants
- Offer a variety of classroom learning courses led by qualified Subject-
  tTrac
  program



City Support – Anchor Tenant

- Supports College@Elm Innovation & Workforce Development Center
- Operate a workforce training center in partnership with other tenants
- Operate a business start up center in partnership with other tenants
- Committed to the expansion of a sewer & fiber line
- Retain 1 jo 0



College@Elm Budget & Financing

Refined Budget $15M
Project Financing

- $1M received – State Capital Budget
- $1.5M received – JobsOhio, Vibrant Community Grant
- $1M received – Miami University Alumni
- Requesting $10M from County
- Remaining $1.5M



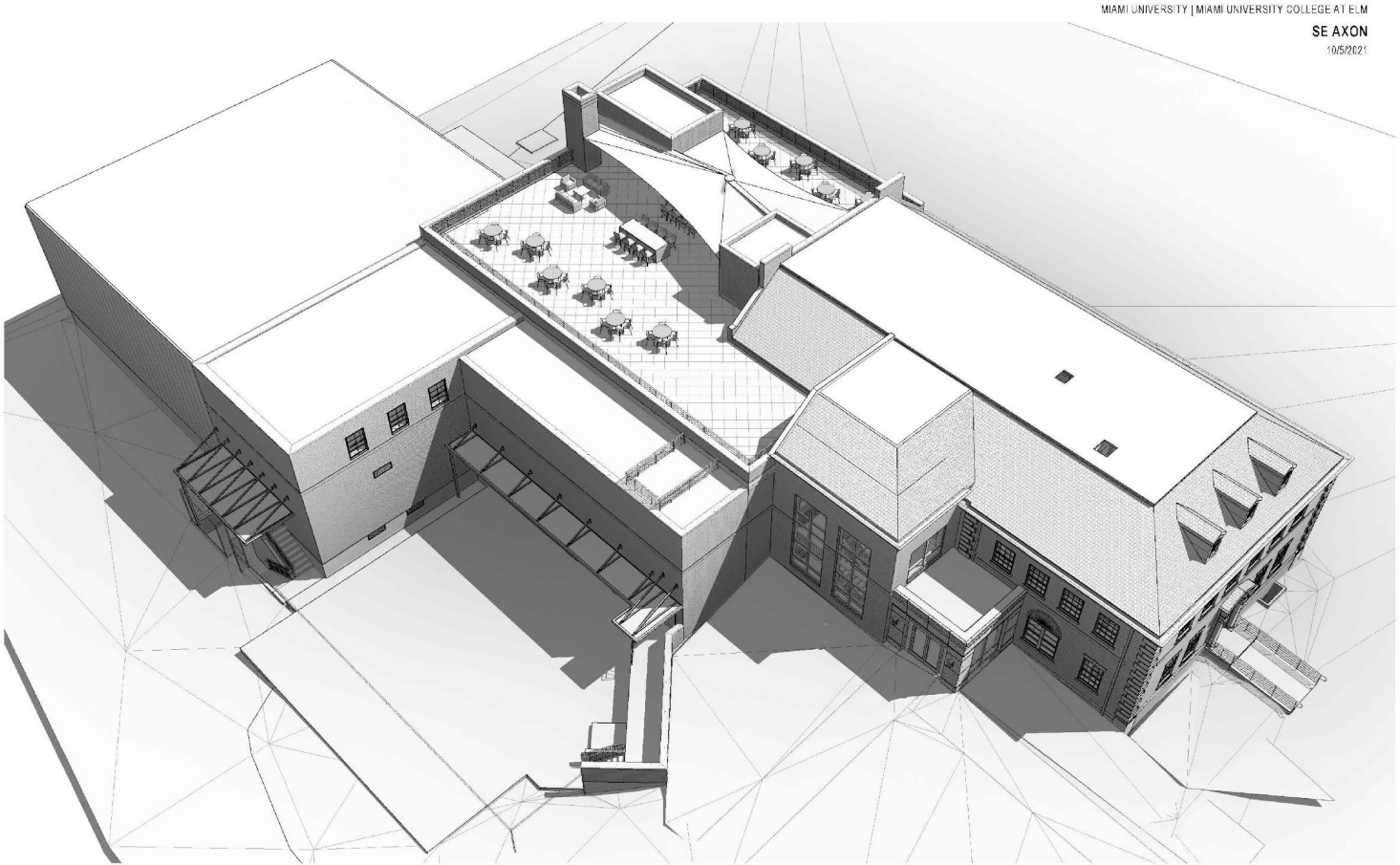
College@Elm Construction Schedule

Construction Schedule

- Renovations to begin in Spring of 2022
- 14 – 18 months to complete renovations
- Miami annually manages $300M in construction, design & planning projects



Project Renderings



Project Renderings





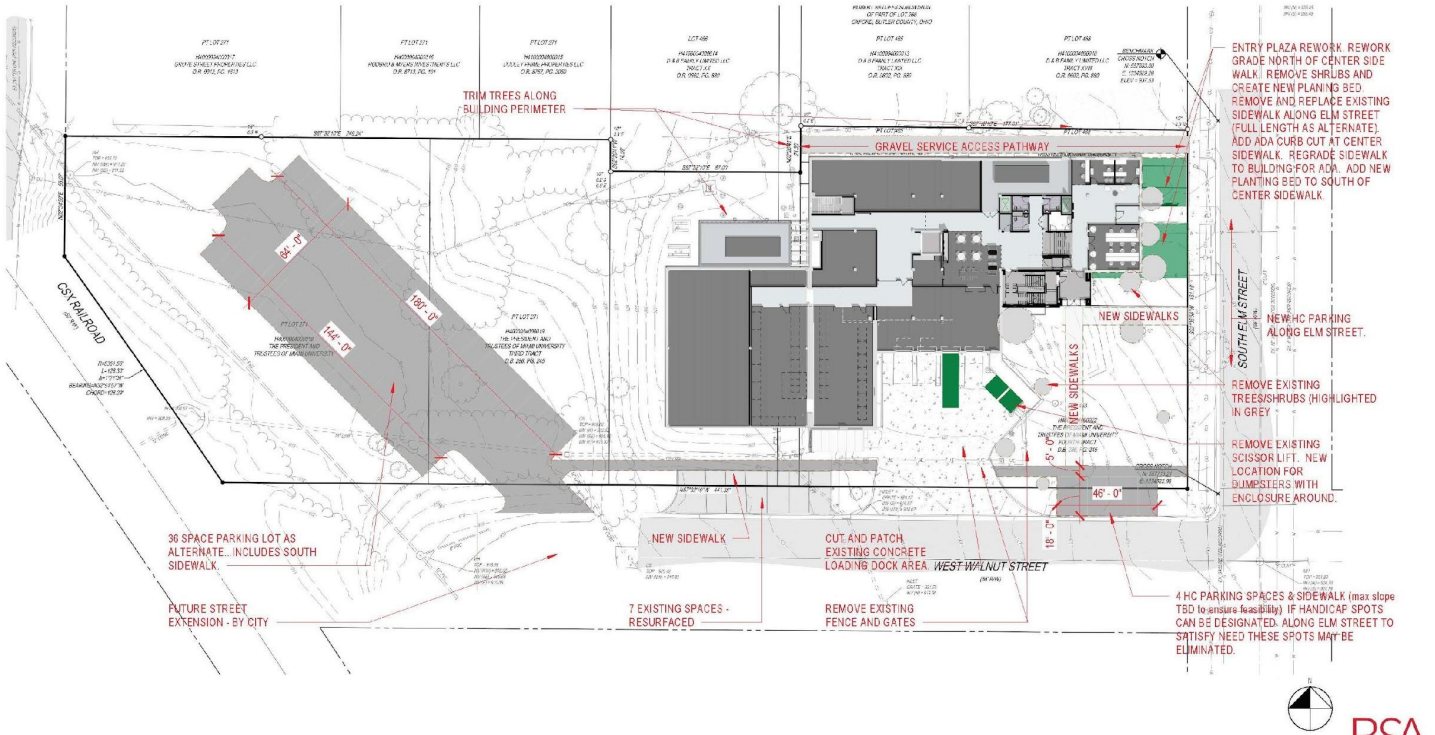


BSA

Project Renderings

MIAMI UNIVERSITY

SITE SCOPE PLAN



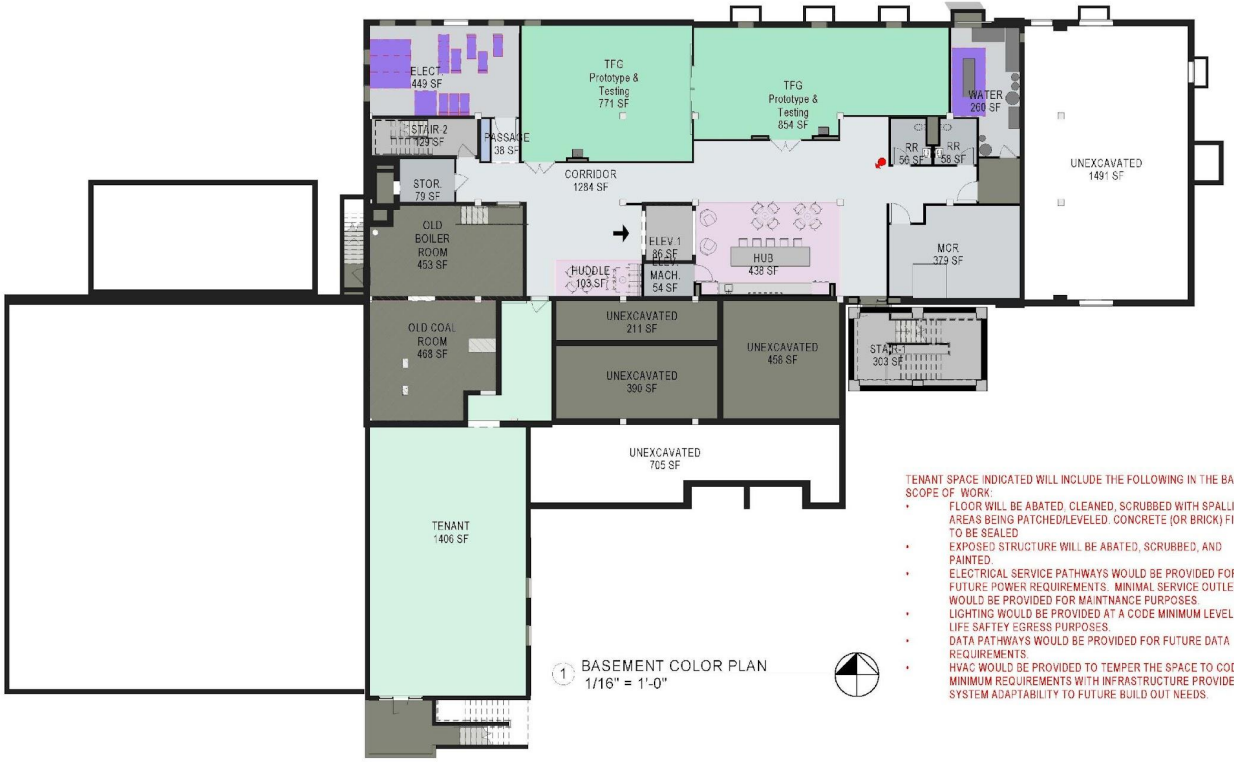
BSA

Project Renderings

MIAMI UNIVERSITY | MIAMI UNIVERSITY COLLEGE AT ELM

OPTION 2 BASEMENT LEVEL

10/5/2021

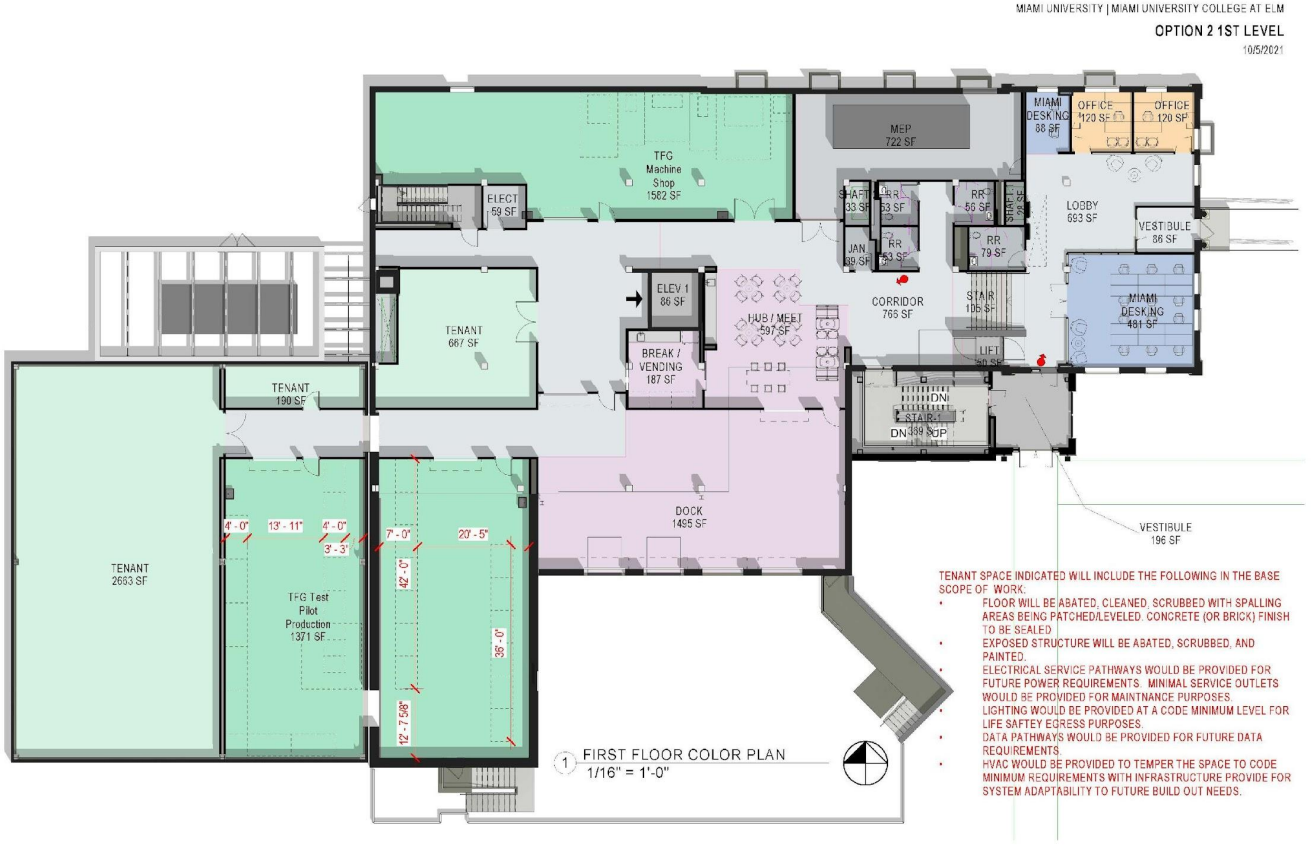


1 BASEMENT COLOR PLAN
1/16" = 1'-0"

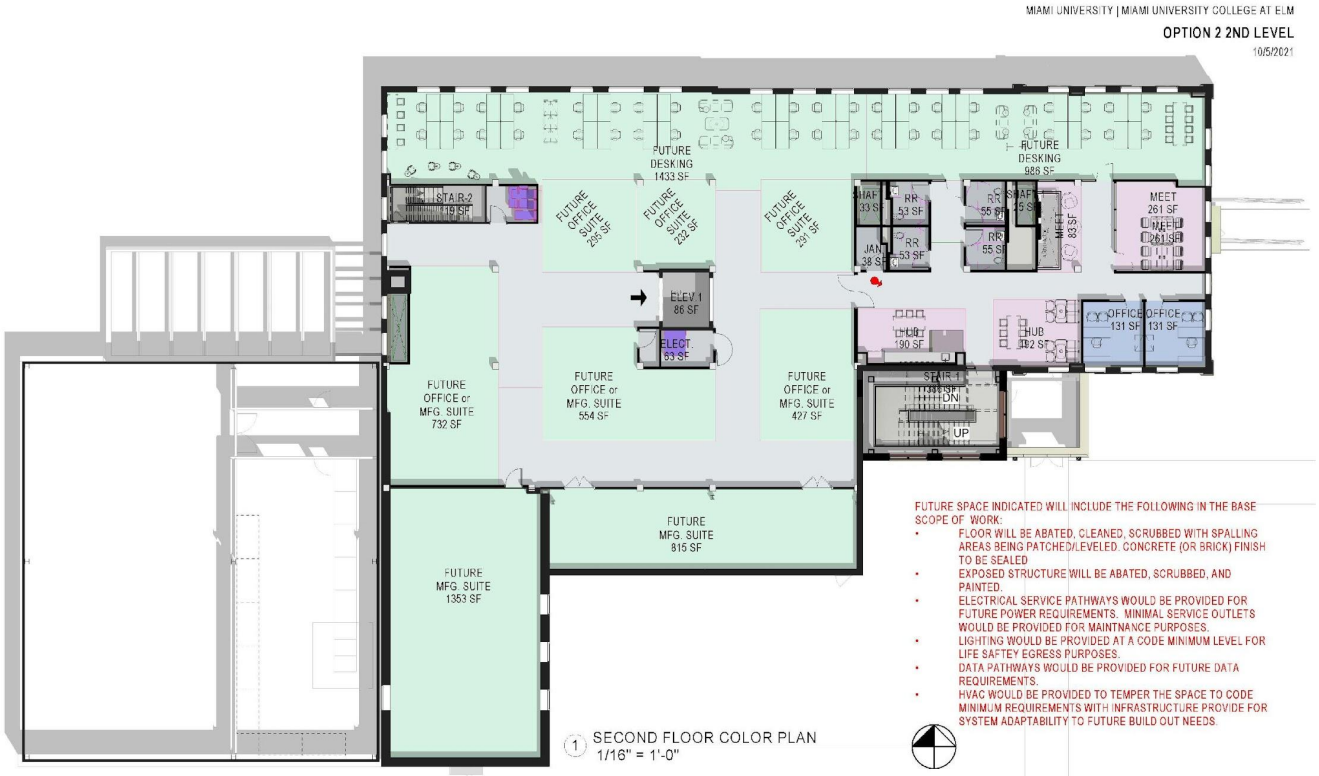
TENANT SPACE INDICATED WILL INCLUDE THE FOLLOWING IN THE BASE SCOPE OF WORK:

- FLOOR WILL BE ABATED, CLEANED, SCRUBBED WITH SPALLING AREAS BEING PATCHED/LEVELED. CONCRETE (OR BRICK) FINISH TO BE SEALED
- EXPOSED STRUCTURE WILL BE ABATED, SCRUBBED, AND PAINTED.
- ELECTRICAL SERVICE PATHWAYS WOULD BE PROVIDED FOR FUTURE POWER REQUIREMENTS. MINIMAL SERVICE OUTLETS WOULD BE PROVIDED FOR MAINTNANCE PURPOSES.
- LIGHTING WOULD BE PROVIDED AT A CODE MINIMUM LEVEL FOR LIFE SAFTEY EGRESS PURPOSES.
- DATA PATHWAYS WOULD BE PROVIDED FOR FUTURE DATA REQUIREMENTS.
- HVAC WOULD BE PROVIDED TO TEMPER THE SPACE TO CODE MINIMUM REQUIREMENTS WITH INFRASTRUCTURE PROVIDE FOR SYSTEM ADAPTABILITY TO FUTURE BUILD OUT NEEDS.

Project Renderings



Project Renderings



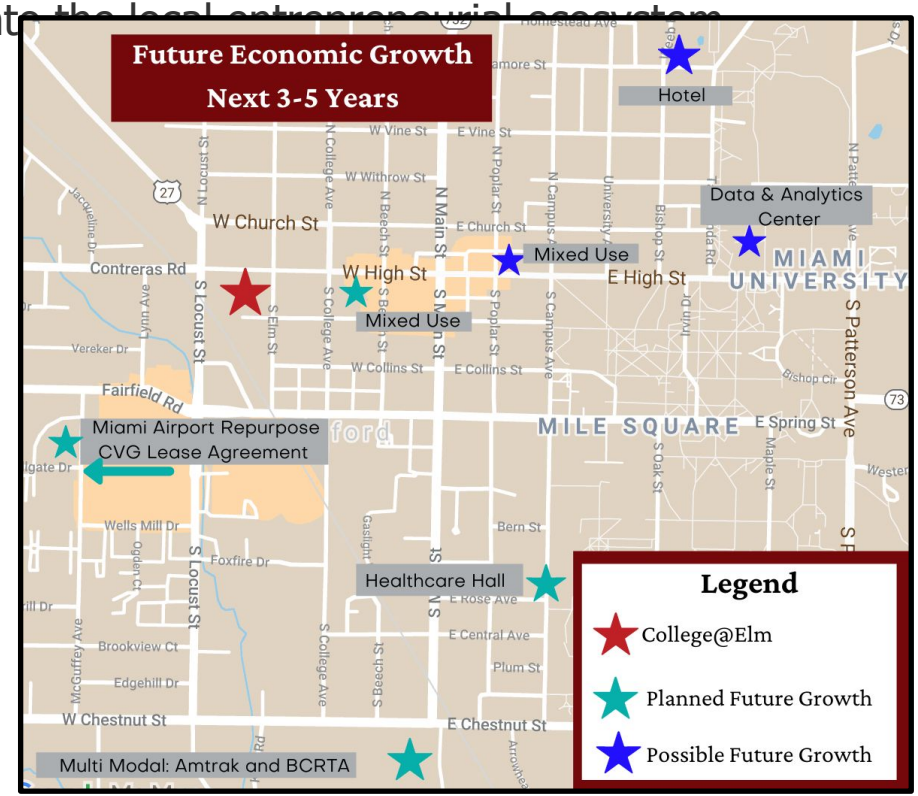
Project Renderings



Project Catalytic Impact

- Transform the Oxford economy from an 8 month to 12
- Serve as a rural model for infusing students into the local entrepreneurial ecosystem
- Leverage College@Elm to garner additional economic development support
- Recruit new businesses to locate in BC by leveraging Miami's expertise in STEM, Data Analytics, Health Sciences, Gerontology





CVG-Miami Partnership

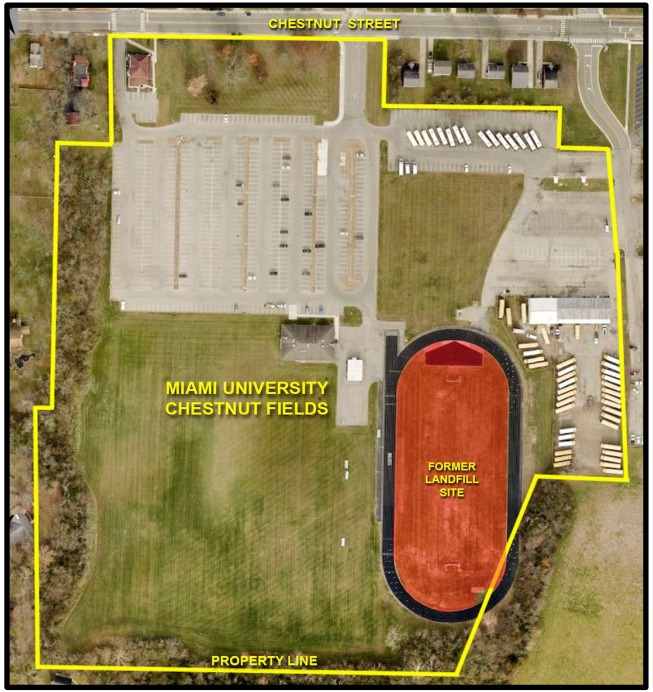
- Partner: CVG
- Identifying reuse opportunities for airport to leverage existing under utilized asset
- Possible areas of development include advancing maintenance, operational, or other economic airport efficiency measures





Chestnut Fields Development



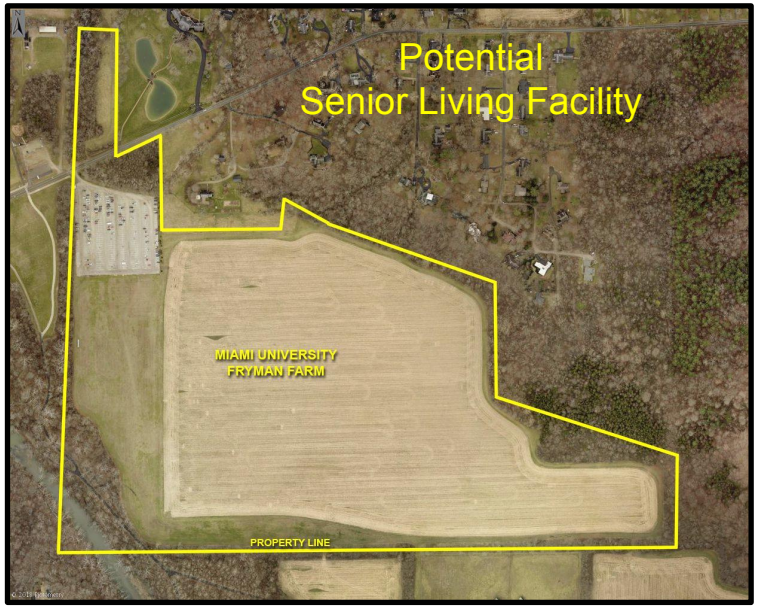


- Partners: BCRTA, Oxford, Talawanda School District, Amtrak
- Building a multimodal transportation hub & exploring creation of a solar park
- Hub features a park-in-ride with shuttles to campus & uptown, an Amtrak station, vehicle depot & maintenance bays for Miami, BCRTA, & Talawanda School District buses & large vehicles

Economic Development Initiatives

- Clinical Health & Wellness Building
- McVey Data Science Building
- Possible Marcum Conference Center development
- Possible senior living facility





Closing Remarks



A work session of the Oxford City Council was called to order by Mayor William Snavely on Tuesday, January 18, 2022 at 7:00 P.M. Council members present were Amber Franklin, Alex French, Jason Bracken, Glenn Ellerbe, Chantel Raghu, and David Prytherch.

Staff members present: Mr. Doug Elliott, City Manager; Ms. Jessica Greene, Assistant City Manager; Ms. Heather Barbour, Clerk of Council.

APPROVAL OF AGENDA

Ms. French moved approval of the Agenda. Ms. Raghu seconded. The motion passed 7-0-0.

2021 City Goal Review Year to Date: January – December Year End Report.

Ms. Greene presented slides and a goal tracking spreadsheet for Councils 2021 Goals. A copy of Ms. Greene's presentation can be found in the minutes. A retreat will be held later this month for Council and City Staff to set 2022 Goals.

ADJOURNMENT - 7:23 p.m. Mayor Snavely announced a short 5 minute break before the regular City Council Meeting would begin.

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

2021 City Goal Review

Year to Date: January-December

Year End Report

Work Session Date: January 18, 2022

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

2020: Council Adopts 5 Broad Goals

Economic Development
- The economy is viable year-round.
- Economic development is interpreted broadly to include quality of life, business attraction and retention, and workforce attraction and retention

Environmental Sustainability
- Strive toward being a carbon net neutral community.

Housing for Everyone
- Affordable housing and attractive housing options for all income groups. Prioritizing those most in need

Service Excellence
- Hire and maintain employees that provide effective and efficient core functions: public safety, water, wastewater, streets.

Town & Gown Relations
- A strong working relationship with Miami University

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

2021:
Council Adopts 3 Key Priority Objectives to Work Toward Goal Achievement.

Top Priority: Affordable Housing

Objective: Increase the diversity of housing options (especially affordable housing) by creating incentives and policy that allows new development to include housing for all income levels. Establish an affordable housing trust fund based on the needs from the housing study



Progress to date:

Lodging Tax legislation passed and will apply a tax to short term rentals. These funds will go toward a housing trust fund that will support housing initiatives.

Recommending that $1.2M of ARPA funds be invested to establish a community land trust and infrastructure to help create affordable housing.

Top Priority: Vibrant Business Districts

Objective: Work to build vibrant business districts and avoid non-occupancy in commercial properties. Encourage all commercial properties inside the Uptown district to be performing, by passing legislation for incentives and disincentives for business performance.



Progress to date:

Research was conducted to address how to impact non occupancy in the Uptown area. However, we found no viable options for a municipality.

Economic Development work pivoted:

Chestnut Streets Area:
- $2.7M grant to extend Oxford Area Trail up to Chestnut Street, and from Peffer Park over to TMS.
- Amtrak planning continues. Site visit by Amtrak in May 2021.

College@Elm:
- $4.8M raised to date for this project.
- Ground breaking will begin in 2022.

$1.1M of ARPA funds recommended
- Economic Development Projects that will lead to job growth.

Top Priority: Climate Sustainability

Objective: Research and expand solar and renewable energy options in Oxford Community. (Consider Town-Gown Partnership for implementation).



Progress to date:

Solar Array Contract has been entered into for the old landfill area.

First reports submitted to the Global Covenant of Mayors Reporting Portal.

- Community wide greenhouse gas inventory
- Community risk and vulnerability assessment.
- Carbon neutrality goals were adopted by City Council.

Department Performance

CITY MANAGER'S OFFICE

Vaccine hotline:
- 252 vaccine clinic sign-ups
- 18 individuals were provided with transportation
- Volunteers
    - We had 8 volunteer community members volunteer for 180 hours.

CARES Act Implementation (carry over from 2022)
Public Wi-Fi installation-park view arms and several public parks
- PVA
- Uptown
- TRI
- Community Park

Oxford Area Trail
2 grants written
- $2.5M Grant Award for Phase 5 THS to TMS
- $500K pending

Trail planning and public input

Amtrak Planning
Meetings with many partners to work toward next steps.

City Operations Performance

COMMUNITY DEVELOPMENT

- 472 Construction Activity permits issued
- 3,808 Inspections completed (includes inspections from Service/Engineering)
- 4,456 Rental Property Certificates Issued
- 1,304 Plan Reviews completed (includes multiple departments)
- 67 Planning/Zoning Cases processed
- 2 new FT staff

City Operations Performance

FINANCE DIVISION:

- 26 successful payrolls-primarily with one person
- Review new payroll and HR system
- Thousands of utility accounts on and off each year
- Thousands of utility accounts managed each month

- Balanced Budget
- Fiscal Best Practices
- Budget Excellence Awards

Department Performance

FIRE DIVISION

2,205 EMS Runs
- 1,445 City
- 356 Miami
- 161 Oxford Township
- 19 Mutual Aid
- 172 Milford Township
- 3 Reily Township
- 39 College Corner

846 Fire Runs
- 596 City
- 173 Miami
- 44 Oxford Township
- 10 Mutual Aid
- 18 Milford Township
- 5 Reily Township

3,051 calls for service

Department Performance

POLICE DIVISION

16,769 calls for service.

Difficult year with 5 fewer staff during the fall semester.

This shortage was due to two officer who were injured on duty and were off work for months, two officers still in the field training program, and Sgt. Price attending training at SPI for several weeks.

Employees stepped up and worked through these conditions to strive for excellent service.

Department Performance

RECREATION DIVISION

Summer Camp (11 weeks, 5 days per week, 40 campers per day)
60 unique children served.

Youth Sports: 1,565 participants
- Basketball: 180 players
- Flag Football: 94 players
- Tennis: 28 players
- Miami Little League: 389 players
- Select Baseball Teams: 60 players
- Ready Set Run: 32 participants
- Archery: 20 participants:
- SAY Soccer: 341 (spring) + 367 (fall)
- Select Soccer: 54 players

Community Events: Egg Scrambles, Freedom Fest, Halloween, Veterans Day and Holiday Fest: Over 6,000 people served

Teen Programming: Bowling, Snow Tubing, Top Golf, Main Event, Lock-In
- Over 1,000 teens served

Epic Cup served over 200 teams from the Midwest Region, and served over 10,000 total participants

Department Performance

SERVICE DIVISION

Infrastructure:
1200 Ft of Curb & Gutter were replaced
300 Square Feet of Alley Aprons
6 streets were Resurfaced
- 27,159 Square yards of Streets were milled off, and new Asphalt placed
- 3.5 Lane Miles
- 1,192.6 tons of base repairs were made before the surface was applied
- 3,020 tons of surface asphalt was placed

Traffic & Pedestrian Safety
- Installed new RRFB (Rectangular Rapid Flash Beacon) and a Crosswalk on North Poplar at McCullough Hyde Hospital
- Installed permanent speed device on Fairfield Rd
- Purchased 2 new message boards

Oxford Area Trail System
- Installed new signage
- Installed new benches along trail
- General up keep & maintenance/inspections
- Engineering and Design for phases 3 &4

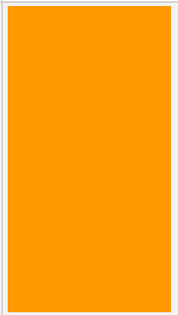
Water Production: 802.5 Million gallons
Wastewater Treated: 841.7 Million gallons

Other staff goals and objectives

Review staff updates

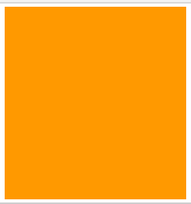
Combined City of Oxford Goals 2021 - 4th Quarter

City Council Goal	Department	Department Objective	Department Strategies	Implementation Tasks	Measures of Success	Progress Percent	Bar	Target Completion Date	Update Narrative
Economic Development	City Manager	**Objective #1**: Improve resident outreach and communication	Educate residents about City Council goals and actions	Share posts and create articles about efforts under City Council Goal Area.	Once each quarter a City Goal Topic will be shared with progress updates toward goals.	100		Dec-21	YTD progress has been shared with Council and residents.
Economic Development	City Manager	**Objective #1**: Secure funding for Oxford Area Trail	Research grants for Oxford Area Trail	Write grants to fund Oxford Area Trail constructions	2 grants are written to support Oxford Area Trail. Goal $1M additional funding is secured.	100		Dec-21	$2.7M was alwarded for phase 5 of the Oxford Area Trail. $500K is pending with Clean Ohio.
Economic Development	Community Development	**Objective #3**: Housing construction projects that lead to attainable housing for all people	Work with Housing Advisory Commission, staff and developers to move actual construction projects forward	Get Western knolls purchase agreement/is signed. Identify and fund a second project not on city land	Signed agreement with city developer by March 2021 and funding allocated for 2nd developer by Nov 2021	40		Mar-21, June-21, Dec-21	Developer #1 is planning to move forward with an application. Developer #2 is coordinating with city and Developer #1. Staff is recruiting a firm to create a master plan for the rest of the land.
Economic Development	Community Development	**Objective #4**: Review of regulatory and financial obstacles affecting job growth	Work with City Council, Township, Dept. Heads and Planning Commission to identify obstacles that affect job growth	Conduct feasibility on adding additional building height, annexing new land and offering of financial incentives to offset employer startup	Consultant retained by March 2021. Internal recommendations vetted by June 2021	0		Mar-21, June-21, Dec-21	Internal discussions have taken place. Nothing has been published. If the Comp Plan process confirms the need for economic diversity/growth, additional steps will be taken
Economic Development	Community Development	**Objective #5**: Expand Oxford's amenities and unique identity	Work with EcDeve, Planning, and consultant to leverage amenity/identity as a financial asset	Implement Community Strategic Plan to inform, inspire, and plan	Existing conditions published in Q1 and consultant retained by March 2021	10		Mar-21, Dec-21	More details will come out of the Comp Plan process
Economic Development	Economic Development	**Objective #1**: Create a culture that is supportive to business	Provide a Business Start up Support Team	Work with CD department to provide customer support to potential developers.	12 Monthly meetings held between ED and CD departments for joint support of projects.	100		Dec-21	ED and CD staff have been working closely together to support business start up. Seth responds to all business inquiries for the City.
Economic Development	Economic Development	**Objective #1**: Create a culture that is supportive to business	Provide customer support and educational resources to individuals interested in starting a business	Update website to include business start up tools and resources.	New website page is built and promoted.	100		Jul-21	The website launched. Has business start up resources. Also maintain a list of available commercial space for all inquiries.
Economic Development	Economic Development	**Objective #1**: Create a culture that is supportive to business	Modernize our Revolving Loan Fund process to better serve our business community with a streamlined application process	Update forms. Create FAQ page. Promote to businesses	New process adopted and marketing of program completed.	100		Dec-21	New RLF rules and models have been adopted by Council. Our next step is to promote the new programs.

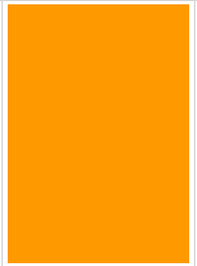
Economic Development	Economic Development	**Objective #2**: Recruit new businesses and create new jobs.	Continue work on Elm Street Building and business recruitment incubator	Continue to seek funding and develop the program model in partnership with MU.	$10.7M secured and redevelopment of Elm Street begins.	90		Dec-21	Miami has hired a design build firm for College@Elm and construction is planned for early 2022. Occupancy expected in early 23.
Economic Development	Economic Development	**Objective #2**: Recruit new businesses and create new jobs.	Review demographics and identify gaps in our business community.	Conduct a gap analysis to determine what types of businesses would thrive in Oxford.	Gap analysis completed by July 2021.	100		Jul-21	Student group determined that an agribusiness would do well in Oxford, Ohio as a light industrial employer.
Economic Development	Economic Development	**Objective #3**: Encourage residence in and around the City of Oxford	Work with area employers to encourage new hires to move to Oxford area.	Develop welcome packet and/or welcome video with area employers (they are part of the creation and "pitch" team) for area employers that shares about Oxford community	Video created and 100 welcome packets are distributed by December 2021.	0		Jul-21	This will not occur due to the continued existence of COVID and staff time allocation available.
Economic Development	Economic Development	**Objective #3**: Encourage residence in and around the City of Oxford	Use creative placemaking to attract residents	Work with community partners to identify one creative placemaking project and identify a funding source	Apply for grant to implement placemaking project	50		Jul-21	We achieved creative placemaking through hosting the Red Brick Friday events. We have not been successful in any creative placemaking grants.
Economic Development	Economic Development	**Objective #4**: Develop Infrastructure for Sustainable Growth	Define infrastructure gaps: Transportation, Data, Fiber/Internet, Sewer/Water, Energy	Review Utility services, internet bandwidth, commercial land and structures, zoning districts and permitted uses, transportation infrastructure.	Data gathered and compiled by July 2021.	50		Jul-21	We have been able to identify partners to address broadband disparities through a regional effort. Staff secured support from all townships in TSD area and made a presentation to Butler County Commissioners to advcoate for County support. All staff efforts went to this endeavor and did not leave time for other infrastructure analysis.
Economic Development	Parks and Recreation Department	**Objective #1**: Provide regional and national events and facilities to encourage visitors to Oxford	Sports staff will continue relationships with organizations such as Epic Cup, 3v3, Little League and others that host large events	Schedule 2021 dates / events with multiple organizations. Market opportunities and facilities locally and regionally to encourage participation	At least 3 combined occurrences. Aquatic Center participation and revenue numbers exceed any previous year's total	90		June-21, Dec-21	Aquatic Center was very successful this summer; attracting visitors from several counties and states. Epic Cup soccer tourney drew teams from all around the region also. We were seeking one additional regional event for this year, but it did not occur. We are hosting a cross-county "pro bowl" flag football game in October, which will bring visitors from Preble County.

Economic Development	Parks and Recreation Department	**Objective #3**: Operate a successful and self-supporting aquatic center	Marketing: local and regional efforts	Butler County Guide, Enjoy Oxford, Chamber of Commerce, SOcial Media Boosts, Newspaper, KidsLinked, Butler County Visitors Bureau	Increase Facebook followers to 4,000. Produce daily updates/posts. Full page ad published in BC Guide. At least one boosted post per month. Total summer visitors and season pass sales exceed 2019 totals	100		May-21, June-21, July-21, Aug-21, Sept-21	4,400+ facebook followers. Full page ad was published. National article published in Parks and Rec Business magazine. Total season pass revenue and daily admissions revenues exceeded 2019 totals. All revenues exceed expenses in 2021.
Economic Development	Police Division	**Objective #1**: Increase the quality of life in our community by reducing the fear and incidence of crime and addressing quality of life violations	Effective investigation and prosecution of crimes and adjusting patrol strategies depending upon trends	Maintain high patrol visibility and improve clearance rate for investigations	Reduce reported crimes by 5%	50		Dec-21	Validated UCR stats won't be in for months, but preliminary data shows no decrease in crime, but increases in certain areas. Social/external factors beyond OPD control may be to blame. Staffing continues to be an issue.
Economic Development	Police Division	**Objective #3**: Effectively manage parking as a public resource and implement new technology to increase customer service	Implement the transition from NuPark software to Passport software	Work with the software implementation team from Passport to change back end software and handheld enforcement software	Enforcement officers writing 100% citation on Passport handheld devices	100		Apr-21	Passport software being used for enforcement activities and is operating efficiently.
Economic Development	Police Division	**Objective #3**: Effectively manage parking as a public resource and implement new technology to increase customer service	Upgrade of parking infrastructure to Smart Meter technology	Multimeter pay stations installed in lots and Smart Meters replace old meters in specific areas	Finish Phase 1 of Smart Meter project for the uptown area	100		Dec-21	IPS technology and infrastructure has been installed and is operating effectively in uptown area and all along S. Campus Ave.
Economic Development	Police Division	**Objective #4**: Develop an Officer Safety and Wellness policy to improve the wellness of our officers to better protect the community	Programming and policies to improve safety of officers and the physical and mental fitness of officers	As a participant in the BJA Valor Immersion Project, OPD will receive training and technical assistance from experts in the field	Programming and policies to improve safety of officers and the physical and mental fitness of officers	75		Apr-21	Officers received training in VALOR topics and efforts to improve wellness have been made. More work is needed to develop officer wellness policies. Lexipol project in 2022 will assist in this effort.
Economic Development	Service Department: Engineering	**Objective #2**: Installation of Electric Vehicle Charging Stations	Install EV charging stations in the parking garage, Main and Church St. surface lot, and Municipal Building parking lot	Write grant requests to OEPA / Volkswagen diesel mitigation program	Obtaining funding and installation of stations	75		Nov-21	
Economic Development	Service Department: Engineering	**Objective #3**: Development of design /specifications for a passenger rail platform	Work with BCRTA for consultant selection and identify funding sources for project	Publish RFP in conjunction with RTA building project; verify AMTRAK concurrence	Develop design/specs for rail platform and evaluate available funding sources	75		Nov-21	
Economic Development	Service Department: Engineering	**Objective #4**: Finalize OATS alignment for Phases III and IV; develop plans and specifications for bidding	Develop alignment strategies and specifications for future OATS segments	Develop plans and specs in preparation for bidding in compliance with ODOT and OKI rules	Project on schedule for construction in 2022 and 2023	75		Nov-21	

Economic Development	Service Department: Environmental Affairs	**Objective #2**: Develop solar array	Develop solar array for surface of closed sanitary landfill to generate renewable power	Document search / other successful projects; develop specifications for a RFP	Publishing of RFP to evaluate options	100		Nov-21	Entered into solar array contract with BQ Energy.
Environmental Sustainability	City Manager	**Objective #2**: Make progress on goals outlined in Global Covenant of Mayors	Finalize strategies for Community Greenhouse Gas (GHG) Inventory	Working with PSP students, complete Community GHG	Community GHG is completed and results are shared with City Council.	100		May-21	GHG inventory was submitted to the Global Covenant of Mayors reporting portal.
Environmental Sustainability	City Manager	**Objective #2**: Make progress on goals outlined in Global Covenant of Mayors	Finalize strategies for Risk and Vulnerability Assessment	Work with PSP students to complete risk and vulnerability assessment.	Risk and vulnerability assessment complete and shared with City Council and Miami University	100		May-21	Risk and Vulnerability Assessment was submitted to the Global Covenant of Mayors reporting portal.
Environmental Sustainability	Community Development	**Objective #6**: Support historic sites as a part of Oxford's unique identity	Work with the Historic Commission, a hired consultant, and a graduate student intern to update Design Guidelines for non-historic construction	Recruit a paid graduate student intern and a paid consultant for spring or summer 2021	Completed draft of Design Guidelines by August 2021	10		Aug-21	HAPC has appointed a subcommittee
Environmental Sustainability	Service Department: Engineering	**Objective #1**: Conversion of City streetlights to LED technology	Work with Duke Energy to develop product specifications and timelines	Develop specs; see if other vendors can provide a lower cost	How many streetlights were converted from traditional to LED?	65		Nov-21	
Environmental Sustainability	Service Department: Environmental Affairs	**Objective #1**: Identify methane releases from closed sanitary landfill	Current models use estimates for passive methane releases	Procure calibrated instruments and measures to accurately assess releases and seasonal variations	Successful data collection for all passive vents	100		Nov-21	
Environmental Sustainability	Service Department: Environmental Affairs	**Objective #3**: Replace public trees lost to Emerald Ash Borer	Remove and replace trees infected with EAB	Replace trees lost with new disease resistant cultivars in compliance with Ordinance	Measurement of trees replaced vs trees removed	50		Dec-21	
Environmental Sustainability	Service Department: Street Maintenance	**Objective #1**: Procurement of Electric Vehicle	Review available options for electric vehicles and reference checks	Review joint purchase agreements for vehicle meeting the needs of Staff	Retirement of Honda and place EV into service (in conjunction with EV charging stations)	100		Nov-21	
Environmental Sustainability	Service Department: Street Maintenance	**Objective #2**: Continue providing recycling programs	Continue to provide curbside recycling with solid waste management, yard waste collection and compositing including fall leaves, Christmas trees, and food scraps	Continue, and expand where possible, these environmental programs plus concrete recycling into aggregate	Volumes of recycled materials measured and analyzed	100		Nov-21	
Environmental Sustainability	Service Department: Wastewater	**Objective #1**: Replacement of rotating drum aeration system including high efficiency motors	Develop specifications for equipment and motor replacement and ensure NPDES Permit compliance	Develop specs and award project	Compliance with NPDES permit and measure reduction in energy consumption	60		Nov-21	

Environmental Sustainability	Service Department: Wastewater	**Objective #2**: Evaluation of methane collection system, utilization, and flaring effectiveness	Evaluate raw methane being released to atmosphere	Data and measurement evaluation to confirm releases are prevented	Evaluate if releases occurred and why; if so, change process control procedures to prevent in future	75		Nov-21	
Environmental Sustainability	Service Department: Water	**Objective #1**: Replace inefficient drives at West Booster Station	Develop specs to replace antiquated switchgear and drives with modern variable frequency drives	Develop RFP for high efficiency equipment replacements	Measure power consumption at this facility for savings in conjunction with SCADA programming	80		Nov-21	
Housing for Everyone	Community Development	**Objective #1**: Housing Policy Changes that lead to attainable housing for all people	Work with City Council, Housing Advisory Commission and staff to find agreeable housing policy steps	Review housing study for City policy recommendations	Complete a "Housing for Everyone" element of the Community Strategic Plan	20		Dec-21	Steering Committee has made some progress in this area. HAC has appointed a subcommittee to review approaches to structuring a new housing non-profit
Housing for Everyone	Community Development	**Objective #2**: Housing funding programs that lead to attainable housing for all people.	Work with City Council, Housing Advisory Commission, staff, and nonprofits to identify realistic funding options	Work with County to identify frequency of programs already being used. Identify growth and marketing opportunities for existing and new programs	Produce a frequency report by June 2021 and report on marketing results by September 2021	10		June-21, Sept-21, Dec-21	County has been unresponsive possibly due to staff changes. An HAC member has volunteered to make an attempt.
Service Excellence	City Manager	**Objective #1**: Conduct Successful Labor Negotiations	Work with Non Commissioned Police Department Employees Union to establish a positive, safe, and productive work environment	Participate in union negotiations to develop a mutually beneficial contract.	Union contract is developed and agreed upon by both parties	100		Dec-21	This contract ends in Dec 21 and we will begin a new CBA in early 2022.
Service Excellence	City Manager	**Objective #1**: Conduct Successful Labor Negotiations	Work with new Fire/EMS Union and HR Department to establish a positive, safe and productive work environment.	Participate in union negotiations to develop a mutually beneficial contract.	Union contract is developed and agreed upon by both parties	90		Jul-21	We feel we are very close to a final agreement with the OFD bargaining unit.
Service Excellence	City Manager	**Objective #2**: Partner with surrounding communities to provide emergency services.	Coordinate with Milford Township and review coordinated services	Develop a mutually beneficial contract with Milford Township to provide them EMS Services	Contract is developed and agreed upon by both parties	100		Jul-21	
Service Excellence	City Manager	**Objective #3**: Work toward creation of Safety, Health & Equity chapter in new City Comprehensive Plan	Work with Civil Rights Commission and Police Community Relations & Review Board to determine community needs and goals.	Host public input sessions with both commissions on the topic of healthy, safety and equity.	Establish goals in the areas safety and police relations to enter into the new Safety, Healthy and Equity Chapter.	50		Dec-21	The public input sessions regarding this topic will be included in the comp plan public sessions. These meetings have been delayed to allow us to bring MKSK onboard. Public input sessions will be hosted in February 2022.
Service Excellence	City Manager	**Objective #1**: Improve resident outreach and communication	Have more regular posting on social media	Post 3x a week on Facebook, Instagram and Twitter	Gain 2K followers	0		Mar-21	This will not occur due to the continued existence of COVID and staff time allocation available.

Service Excellence	City Manager	**Objective #2**: Improve customer service for residents	Explore ways for residents to communicate with City Staff about issues of concern.	Research 311 programs to allow for calls, emails, texts to one central customer service hub.	311 program developed. 1 staff person assigned to be operator/customer service rep for the City.	50		Dec-21	This action step is not planned to continue. Our new website allows for easier citizen communication on issues and allows them to upload photos of concerns. We have also streamlined our staff who work on citizen complaints.
Service Excellence	Finance Department	**Objective #1**: Improve public understanding of the budget process	Review tools for interactive budgeting and public review process	Prepare and list RFP to solicit new tools to help with budget creation process	RFP awarded and the 2023 budget in the new format	100		Aug-21	
Service Excellence	Finance Department	**Objective #2**: Provide transparency and service excellence with public tax dollars	Complete the City's budgeting process and have City Council pass the 2021 budget	Submit 2021 budget to the Government Finance Officers Association for the "Distinguished Budget Presentation" Award	Award presented to the City of Oxford	100		Mar-21	
Service Excellence	Finance Department	**Objective #2**: Provide transparency and service excellence with public tax dollars	Complete the compilation and audit of the City's 2020 Comprehensive Annual Financial Report	Submit 2020 CAFR to the Government Finance Officers Association for the "Certificate of Achievement for Excellence in Financial Reporting" Award	Award presented to the City of Oxford	100		June-21	
Service Excellence	Finance Department	**Objective #2**: Provide transparency and service excellence with public tax dollars	Complete the compilation and audit of the City's 2020 Comprehensive Annual Financial Report and prepare the Popular Annual Financial Report	Submit 2020 PAFR to the Government Finance Officers Association for the "Award for Outstanding Popular Annual Financial Reporting" Award	Award presented to the City of Oxford	100		June-21	
Service Excellence	Finance Department	**Objective #3**: Promote service excellence among Finance staff	Review educational options for Finance staff	Select appropriate training options for the Finance staff	Finance staff will attend at the minimum of one training session depending on time and budget constraints	100		Dec-21	
Service Excellence	Fire Division	**Objective #1**: Improve employee EMS training	Increase and maintain advanced EMS skills	Schedule 4 quarterly trainings with Dr. Calhoun	Full-time employees attend all sessions	50		Dec-21	Due to University Hospital COVID policy, Dr. Calhoun was not permitted to conduct training in station. He completed one session in July and we hope to have at least one more by year end. Dr. Calhoun was in for training in December .
Service Excellence	Fire Division	**Objective #2**: Implement fire rescue 1 online training	Provide fire and EMS continuing education online opportunities for staff with new platform	On-board all regularly scheduled employees, monitor usage of program	Complete a minimum of 450 on-line hours department wide	100		Dec-21	We have completed 486+ hours as of the end of third quarter.

Service Excellence	Fire Division	**Objective #3**: Recreate orientation program for inexperienced new hires	Recreate employee orientation program to facilitate new part-time hires with no fire service experience	Research skills to be focused on, time frame, and evaluation prior to being added to the schedule	Complete a document that will provide a roadmap to success for a new employee with no fire service experience	100		Dec-21	Updated employee orientation manual to make it more usable for inexperienced hires.
Service Excellence	Human Resources	**Objective #1**: Improve Employee Onboarding	Help staff feel more supported and learn their job correctly.	Create instruction guides and checklists for training.	Instruction guide and employee training checklist created by March 2021.	10		Mar-21	This was largely placed on hold due to the extreme impact of continued the COVID pandemic and the necessary HR staff response to support staff needs.
Service Excellence	Human Resources	**Objective #2**: Improve Employee Engagement & Morale	Develop relationship with employees.	Visit each department and visit with staff members. Listen to their feedback.	Visit each department and visit employee staff meetings at least 1x each year.	20		Dec-21	This was largely placed on hold due to the extreme impact of continued the COVID pandemic and the necessary HR staff response to support staff needs.
Service Excellence	Human Resources	**Objective #2**: Improve Employee Engagement & Morale	Engage employees across department. Build morale	Host quarterly lunch and learns offered to all employees	30% of staff or 40 staff members will attend at least 1 lunch and learn.	50		Dec-21	We have been able to implement 2nd Tuesday Lunch n Learns for all employees via zoom with our wellness partner, Cincy Healthworks. To date, we've had 30+ attendees at two educational sessions.
Service Excellence	Human Resources	**Objective #3**: Improve Employee Wellness	Create an employee wellness program.	Research employee wellness programs and get input from Employee Advisory Committee	Employee wellness program is researched and has estimated budget and implementation strategies created by September 2021.	100		Sep-21	We have partnered with Cincinnati Health Works to host our wellness program efforts. They conduct lunch and learns, do our biometric screening and offer one to one health coaching.
Service Excellence	Human Resources	**Objective #4**: Work to ensure workplace is inclusive and welcoming.	Review HR recruitment and hiring practices to check for bias.	Update HR recruitment and application procedures to remove identified bias areas.	New recruitment and application is in place by March 2021.	50		Mar-21	We are reviewing not asking for past salary levels as this impacts gender and race pay equity. No formal decision has been made at this time.
Service Excellence	Human Resources	**Objective #4**: Work to ensure workplace is inclusive and welcoming.	Offer employee trainings on inclusivity and diversity.	Research inclusivity and diversity topics and offer training to all employees.	Inclusive and diversity trainings are offered to all employees at least 1x each year.	100		Dec-21	All staff were required to attend a DEI online learning module that was 40 minutes in length. We hope to offer DEI training every 2 years.
Service Excellence	Parks and Recreation Department	**Objective #2**: Continue strong partnerships with Miami University and Talawanda School Districts (events, internships, facilities, etc.)	Communicate regularly with Talawanda School District administration, athletic director and other staff	Update Mutual Facilities License for '21-'22 and send to Talawanda for review. Sports staff will schedule youth events directly with TSD Athletic Director	Continue existing Mutual Facilities Usage License and renew again in August 2021. Partner with TSD on at least two community events	100		June-21, Dec-21	Youth tennis lessons hosted at Talawanda courts this spring/summer. Mutual Facilities agreement signed in August/September. We coordinated partnership with THS staff for the Class 23 students in the spring. Youth Flag FB League having youth night at Talawanda Football game.

Service Excellence	Parks and Recreation Department	**Objective #3**: Operate a successful and self-supporting aquatic center	Staff: Recruiting, hiring, and training in advance	Post positions on social media, website, Miami Handshake, Talawanda e News, and via emails. Schedule training / guard certification course	Hire at least 30 total lifeguards. Provide at least 4 hours pre-season training and 4 hours per month ongoing training to each employee	100		Apr-21, Sept-21	Employed over 30 lifeguards with routine training all summer, including the annual Summer Games event for all seasonal staff.
Service Excellence	Parks and Recreation Department	**Objective #4**: Construct and operate new tennis and/or pickle ball courts	Collaborate with TRI Board, local citizens, and City of Oxford to construct new courts in 2021	Meetings with TRI Board. Propose options / alternatives. Discuss with Recreation Board. ANalyze long-term sustainability and maintenance	Construction completed in 2021	100		Dec-21	Four permanent pickleball courts; 1 permanent tennis court opened Labor Day weekend. Project completed under budget, and included new basketball court renovations also.
Service Excellence	Police Division	**Objective #2**: Achieve police legitimacy through actions and accountability measures designed to ensure bias-free policing	Conduct a community wide survey to obtain feedback on policing from residents	In conjunction with Polco, contract for the National Police Services Survey	Oxford be rated in the top 20% for policing services against other cities	100		Jul-21	OPD received high marks in the NPSS. Residents generally feel safe in Oxford and community trust in OPD is strong. Residents prioritize school safety and OPD's communication efforts.
Service Excellence	Service Department: Wastewater	**Objective #3**: Work with ODH and OEPA to evaluate SARS-CoV-2 in Oxford	Collect WW influent samples for analysis with ODH and OEPA to determine virus RNA quantities	Influent samples sent to lab for analysis and reporting	Successful sample and data collection/reporting	100		Nov-21	
Service Excellence	Service Department: Water	**Objective #2**: Water softening technology evaluation at Water Treatment Plant	Complete an evaluation of softening tech including lime; fluidized bed reactor; ion exchange, and membrane technology	Develop report with Strand Associates to study pros and cons of each technology and make a recommendation to the CM and Council	Plan of action developed for future goals	90		Nov-21	
Town and Gown Relations	Human Resources	**Objective #5**: Create Internship Program Partnership with Miami University	Develop relationship with Miami University departments for public administration interns	Partner with Miami University to recruit and fund interns in City Administration	3 new interns are hired and are partially paid for by Miami University Internship Program.	100		Mar-21	We have three interns on staff but the Miami program we were hoping to partner with for funding has switched priorities.
Town and Gown Relations	Parks and Recreation Department	**Objective #2**: Continue strong partnerships with Miami University and Talawanda School Districts (events, internships, facilities, etc.)	Communicate regularly with Miami University athletics, recreation center and other staff / faculty	Advertise spring internship with Director of OPRD for a Miami Student. Schedule meeting with Miami Athletics	Provide at least one internship for a Miami student. Collaborate on at least one event with Miami athletics. Partner with Miami on at least two community events	100		June-21, Dec-21	Internship student completed in spring 2021, and that student has continued employment with OPRD this summer. Miami Athletics assisted with Freedom Fest event on July 3rd. Miami Activities & Planning partnering with Holiday Fest. Miami Pickleball Club hosted tourney on TRI courts. Working with Miami Senior Design class on new Pump Track project.
Town and Gown Relations	Police Division	**Objective #2**: Achieve police legitimacy through actions and accountability measures designed to ensure bias-free policing	Maintain certification with Ohio Collaborative, increase training, and collect data to demonstrate success	Develop a data collection tool for traffic stops and field contacts which contains demographic data	Obtain Ohio Collaborative certification and present stop data to PCRRC	100		Dec-21	Policy and compliance documentation was uploaded to the Collaborative. Staff met with assigned assessor and we were awarded Final Certification for our recertification of Group 1 standards on October 25, 2021.

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45215

STAFF REPORT

ORIGINATING DEPARTMENT:	Parks & Recreation
PREPARED BY:	Casey Wooddell
DATE PREPARED:	January 21, 2022
COUNCIL MEETING DATE:	February 1, 2022
AGENDA TITLE:	Oxford Recreation Board – January 20, 2022
BUDGETED AMOUNT:	
ACCOUNT CODE:	
RECOMMENDATION:	Approve DRE 1-26-22
CITY MANAGER/DEPT HEAD APPROVAL:	CDW 1/21/22

DISCUSSION:
Attendance:
Recreation Board: Craig Bennett, Ken Bogard, Wes Cole, Holli Morrish, Kevin Ackley
Staff: Casey Wooddell, Deanna Barbour, Alex French (Council Rep.)
TRI Board: Doug Curry, Kris Winkler, Joe Wilhelm, Jim Squance, Missy Burke, Dan Purcell & Rick Verst

The Oxford Recreation Board met with the Talawanda Recreation, Inc. (TRI) Board of Directors on Thursday, January 20 at LaRosa's Pizzeria. These two boards meet once per year in an effort to maintain collaborative efforts towards ensuring the recreation goals of the Oxford community are being met, as well as to plan for future recreation needs.

The TRI Board of Directors presented information to the Oxford Recreation Board about the TRI's plans to research, design and begin fundraising for a new indoor community center, including some historical context about the creation of the TRI, donations of land, and fundraising for the original construction. The TRI owns the facilities and grounds located at 6025 Fairfield Road, which currently is the site of the TRI Community Center, skate park, pickleball courts, basketball courts, playgrounds, ball field and open green space. This property is not owned by the City, but the grounds, facilities and building are under the operations of the Oxford Parks and Recreation Department per a contracted agreement between the City and TRI.

The TRI also discussed the potential of partnering with the Oxford Senior Center to provide a new facility that would meet the needs of all three organizations, meaning the TRI, Senior Center and City of Oxford. In addition, the conversation included potential plans for how a new facility could meet existing needs for Talawanda School

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District and Miami University. The TRI explained the vision of not just a creating a recreation center, but a Community Center to serve many needs and organizations within the Talawanda District.

The TRI outlined how it is currently forming sub-committees to focus on tasks such as facility planning, marketing, fundraising, legal, and city liaisons. These committees will be a combination of TRI Board members, Recreation Board members, City staff and community volunteers. There is a tentative launch date of September 1, 2022 scheduled to begin the fundraising campaign. Total costs, facility designs, and a fundraising timeline are still being discussed and finalized.

The Oxford Recreation Board members asked many questions about and engaged in discussions with the TRI Board concerning potential corporate partnerships, private donations, grant possibilities, funding needs, and what types of amenities are being visualized.

The Oxford Recreation Board will continue to aid and support the TRI Board in this effort, as the proposed new facility will serve many recreation needs in the community, enhance the quality of life for residents, promote physical and mental health and wellness, and be a positive asset towards creating a healthy year round economy.

Following the joint meeting between both Boards, the Oxford Recreation Board held a second meeting in which it elected its officers for the 2022 year. Current Chairperson Ken Bogard and current Secretary Deanna Barbour were both nominated and re-elected to the same positions for 2022.

A follow-up discussion occurred within that second meeting amongst Recreation Board members about how a new community center, particularly one that partnered with and served other local organizations, would positively contribute to the overall vision of Oxford and how it would attract residents to live and work in the City and the District.

Meeting officially adjourned at 12:51pm. Next meeting February 10 at 11:30am in the Oxford Municipal Building.

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The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Police
PREPARED BY:	John A. Jones, Chief of Police
DATE PREPARED:	January 24, 2022
COUNCIL MEETING DATE:	February 1, 2022
AGENDA TITLE:	Surplus Vehicles
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	
RECOMMENDATION:	Approve DRE 1-26-22
CITY MANAGER/DEPT HEAD APPROVAL:	

DISCUSSION:

The following vehicles have reached the end of their useful service to the Police Division. Staff requests authorization to declare the following vehicles as surplus so they may be taken out of service. Vehicles shall be auctioned to the highest bidder.

2009 Ford Crown Victoria (Unit #0425) VIN#: 2FABP7BV5X102425

2011 Land Rover (unmarked) VIN#: SALME1D41CA369916

This Resolution will authorize the City Manager to dispose of the above referenced vehicles by public auction, including Internet electronic auction, at the earliest convenience of the City.

RESOLUTION NO.

A RESOLUTION DECLARING CERTAIN CITY PROPERTY NO LONGER NEEDED FOR ANY MUNICIPAL PURPOSE AS SURPLUS AND AUTHORIZING ITS ADVERTISEMENT AND SALE TO THE HIGHEST BIDDER AT PUBLIC AUCTION OR INTERNET AUCTION.

WHEREAS, vehicle # 0425 a 2009 Ford Crown Victoria and an unmarked vehicle a 2011 Land Rover are no longer needed for Police Division operations; and

WHEREAS, the City Manager and the Police Chief recommend vehicle # 0425 and an unmarked 2011 Land Rover be declared surplus and that the same be advertised and sold to the highest bidder at public auction or internet auction at the earliest convenience of the City.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY RESOLVES THAT:

SECTION 1: Council accepts the recommendation of the City Manager and the Police Chief and hereby declares vehicle # 0425 and an unmarked 2011 Land Rover as surplus.

SECTION 2: Council further authorizes the advertisement and sale of vehicle # 4025 and an unmarked 2011 Land Rover to the highest bidder at public auction or internet auction with proceeds thereof deposited in the General Fund.

SECTION 3: This resolution shall take effect at the earliest date allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	City Manager
PREPARED BY:	Doug Elliott
DATE PREPARED:	1.25.22
COUNCIL MEETING DATE:	2.1.22
AGENDA TITLE:	A Resolution Approving the Contract Between the City of Oxford, Ohio and the Oxford Professional Firefighters International Association of Firefighters Local 5272 and Authorizing the City Manager to Sign a Contract on Behalf of the City.
RECOMMENDATION:	Approve DRE 1-26-22
CITY MANAGER/DEPT HEAD APPROVAL:	

DISCUSSION:

An agreement has been reached with the City of Oxford Professional Firefighters IAFF 5272 bargaining unit. This is the first labor agreement with this recently formed union. The term of the proposed agreement is three years (2021, 2022, and 2023). The proposed agreement includes a pay increase of 3% for 2021, 4% for 2022, and 3.5% for 2023. It has been approved by the bargaining unit members.

I am recommending that City Council approve the proposed agreement between the City of Oxford and the Oxford Professional Firefighters IAFF 5272 Bargaining Unit.

RESOLUTION NO.

A RESOLUTION APPROVING THE CONTRACT BETWEEN THE CITY OF OXFORD, OHIO AND THE OXFORD PROFESSIONAL FIREFIGHTERS INTERNATIONAL ASSOCIATION OF FIREFIGHTERS LOCAL 5272 AND AUTHORIZING THE CITY MANAGER TO SIGN A CONTRACT ON BEHALF OF THE CITY.

WHEREAS, the City Manager, City Attorney, and Fire Chief recommend Council authorize the City Manager to sign on behalf of the City the Contract referred to in substantially the same form as Exhibit "A" "Contract" with the Oxford Professional Firefighters, International Association of Fire Fighters, Local 5272. The term of this Contract is for three (3) years from January 1, 2021 through December 31, 2023.

THE COUNCIL OF THE CITY OF OXFORD OHIO, HEREBY RESOLVES THAT:

SECTION 1: Council hereby accepts the recommendation of the City Manager, City Attorney, and Fire Chief and approves the contract finding that the contract will benefit the community and is in the best interest of the City to authorize the City Manager to sign the contract on behalf of the City.

SECTION 2: This resolution shall take effect at the earliest date allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

CITY OF OXFORD

and

OXFORD PROFESSIONAL FIREFIGHTERS
IAFF LOCAL 5272

(Firefighter/Paramedics and Captains)

COLLECTIVE BARGAINING AGREEMENT

SERB No. 2021-MED-01-0071

January 1, 2021 to December 31, 2023

EXHIBIT 'A'

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THIS AGREEMENT WAS MADE AND ENTERED INTO by and between the City of Oxford, Ohio hereinafter referred to as the "City" or "Employer" and the Oxford Professional Firefighters, IAFF Local 5272, hereinafter referred to as the "Union" or "Employee."

ARTICLE 1
CONTRACT ADMINISTRATION/PREAMBLE

Section 1.1. This Agreement is entered into between the City of Oxford, Ohio ("City" or "Employer") and the City of Oxford Professional Firefighters members of I.A.F.F. Local 5272 ("Employee" or "Union"). Any reference to he, him, or their includes she, her, or hers. It is the purpose of this agreement to achieve and maintain harmonious relations between the Employer and the Union.

Section 1.2. The Employer and the Union recognize the need to provide efficient service to the public and to maintain the quality of service. Further, both parties agree to the need for establishing and maintaining a sound labor-management relationship and mutually agree to continue working toward this goal. Each side has been afforded the opportunity to put forth all its proposals and to bargain in good faith and both parties agree that this Agreement expresses the results of their negotiations.

ARTICLE 2
DURATION OF AGREEMENT

Section 2.1. This Agreement shall become a three (3) year contract effective January 1, 2021 after it has been mutually approved by Union Membership and Oxford City Council and shall remain in effect through December 31, 2023 (the expiration date).

Section 2.2. An effort should be made to start negotiations at least 90 days prior to the expiration date of this Agreement. Either party may notify the State Employment Relations Board (SERB) and the other party in writing that it wishes to modify the agreement.

Section 2.3. This Agreement shall remain in full force and effect until a successor agreement is reached by the parties or final ruling of a conciliator. This Agreement may be reopened at any time based upon mutual consent from both parties. Neither party has any obligation, either under this Agreement or otherwise, to negotiate modifications to any Article or provision of this Agreement midterm.

ARTICLE 3
AGREEMENT COMPLETE

Section 3.1 Waiver of Further Bargaining. The parties acknowledge that during negotiations which resulted in this Agreement, each had the unlimited right and opportunity to make demands and proposals with respect to wages, hours, fringe benefits and working conditions, and that the understandings and agreements arrived at by the parties after the exercise of that right and opportunity are set forth in this Agreement.

Therefore, the City and the Union, for the life of this Agreement, each agree that the other shall not be obligated to bargain collectively with respect to any subject or matter without mutual consent, even though such subjects or matters may not have been within the knowledge or contemplation of either or both of the parties at the time that they negotiated and signed this Agreement. All terms and conditions of employment not covered by this Agreement shall continue to be subject to the City's direction and control.

Notwithstanding the above, the parties expressly recognize the obligation to negotiate regarding any contemplated change which will significantly affect a term or condition of employment not contained in this Agreement.

Section 3.2 Modification of Agreement. The express provisions of this Agreement may be changed midterm only by mutual agreement between the parties. Neither party has any obligation, under this Agreement or otherwise, to negotiate modifications to this Agreement midterm. Negotiated changes will be reduced to writing, dated, and signed by the parties to this Agreement.

ARTICLE 4
RECOGNITION

Section 4.1. The bargaining unit shall be defined as certified by the State Employment Relations Board CASE # 2020-REP-06-0050. The Employer recognizes the Union as the sole exclusive bargaining agent and representative for the purpose of collective bargaining for all full-time Firefighter/Paramedics and Captains ("Employees") employed with the Division of Fire, City of Oxford, Ohio.

Section 4.2. Excluded from the bargaining unit are: All part-time employees, and the Fire Chief and all other employees excluded in Ohio Revised Code (O.R.C.) Chapter 4117. The terms of this Agreement cover and are limited to the Employees included within the bargaining unit for which the Union is recognized.

Section 4.3 The Union has sole exclusive bargaining rights under this Agreement with respect to those mandatory subjects of bargaining as defined under O.R.C. Chapter 4117.

ARTICLE 5
SAVINGS CLAUSE

Section 5.1. If any provision of this Agreement, or the application of such provision should be declared invalid by any court of competent jurisdiction, or by reason of any existing or subsequently enacted State or Federal legislation, or Federal or State administrative ruling, such invalid provision shall be deemed null and void. The parties shall meet within thirty (30) days of a request by either party to determine the extent, if any, to which changes must be made to the affected provision. Only the invalid provision, and to the extent necessary the Article within which the provision is contained, shall be discussed. The remaining parts or portions of this Agreement shall remain in full force and effect.

ARTICLE 6
SUCCESSORS

Section 6.1. If the City takes over the operation of, contracts with for service, or takes part in the forming of a Joint Fire District, it is intended that this Agreement will become binding upon the City or any such other municipal corporation. All the rights and benefits of the transferred Employees guaranteed under this Agreement shall be continued for the term of this Agreement.

Section 6.2. This Agreement shall be binding upon any employee organization that, during the term of this Agreement, succeeds the Union as the recognized employee organization to represent Employees covered by this Agreement.

ARTICLE 7
LABOR MANAGEMENT

Section 7.1. In the interest of sound relations between the Union and the City, a joint committee of no more than six (6) members, half of whom shall be from the Employer and half of whom shall be from the Union, will convene quarterly at mutually agreed upon times for the purpose of discussing subjects of mutual concern. For circumstances in which neither party wishes to meet, the meeting for that particular quarter may be waived.

The City and Union agree to discuss in Labor Management Committee meetings innovative solutions to the various sources within the Oxford community that have a greater impact on the City of Oxford Fire/EMS resources, including Miami University's student population. An agreement to discuss manpower in Labor Management Committee shall not be used as precedent by either party now or in the future nor shall the agreement to discuss manpower in Labor Management be deemed a waiver of Management's Rights set forth in Ohio Revised Code 4117, including but not limited to, the right to direct, supervise, evaluate or hire employees; determine the adequacy of the workforce and effectively manage the workforce.

Section 7.2. The purpose of the joint committee is to facilitate improved labor-management relationships by providing a forum for the free discussion of mutual concerns.
Additional meetings may be requested by either party to discuss urgent matters upon agreement by both parties. The meeting must be held within thirty (30) calendar days, unless extended by mutual agreement of the parties. There shall be no obligation upon the City or Union to renegotiate working conditions, pay or any other policy or practice which may be the subject of such discussions.

Section 7.3. Prior to any meeting, an agenda shall be created with both sides afforded the opportunity to add items they wish to discuss in the meeting. Within seven (7) calendar days after the meeting, Minutes of such meeting shall be mutually drafted and approved by both parties.

Section 7.4. The City agrees that prior to changing any existing or introducing any new policy, practice or procedure constituting a mandatory subject of bargaining as defined under Ohio Revised Code 4117, the parties shall meet through Labor Management and such policy, practice or procedure shall not be implemented until the dispute is resolved.

ARTICLE 8
NO STRIKE-NO LOCKOUT

Section 8.1 No Strike. The City and the Union subscribe to the principle that differences shall be resolved by peaceful and appropriate means without interruption of work. During the term of this Agreement, neither the Union nor its agents or any employee, for any reason will authorize, institute, aid, condone or engage in a slowdown, work stoppage, strike, or any other interference with the work and statutory functions or obligations of the employer.

Section 8.2 No Lockout. The Employer agrees that neither it, its officer, agents, or representatives, individually or collectively will authorize, instigate, cause, aid or condone any lockout of bargaining unit employees.

ARTICLE 9
NO DISCRIMINATION

Section 9.1. Neither the City or the Union shall discriminate against or in favor of any Employee on account of race, color, marital status, religion, creed, national origin, sex, sexual orientation, gender identity, disability, age, union activity, or membership or non-membership in the Union.

ARTICLE 10
UNION BUSINESS

Section 10.1 Union Leave.

Negotiations – One member of the Union negotiating team will be granted leave from duty, when necessary, with full pay and benefits for sessions between the City and the Union for negotiating purposes when such meetings are scheduled on the employee's duty day. The position of the employee of the Union negotiating team will be back filled with a corresponding number and certification level of employees as to not affect the division's service to the community while these meetings are being conducted. Meetings shall be ended immediately and rescheduled at a mutual time and date in the instance that an emergency has occurred and the Union negotiation team is needed to respond. The Union bargaining team may consist of up to three bargaining team members (not including the IAFF Union representative).

Administration- With the prior approval of the Fire Chief, bargaining unit members shall have the right to engage in union activity at work, so long as the activity does not interfere with the member's duties as an employee. Union officials shall have access to the fire station(s) to perform union business.

Section 10.2 Union Activity. There will be no discrimination, interference, restraint, or coercion by the employer against any Employee for their activity on behalf of, or membership in, the Union.

Section 10.3 Meeting Area. The Employer agrees to allow the Union to conduct its business meetings in City facilities, provided the appropriate facilities have not previously been reserved for other purposes, or such other time as may be mutually agreed. Union business shall not include fundraising or fundraising events held at City facilities, unless the event is a joint fundraising event

between the City and Union for the mutual benefit of the City and the Union or a joint fundraising event between the City and Union for the benefit of a third party with prior approval by the City Manager. On-Duty personnel will be allowed to attend such meetings, provided that attendance does not interfere with the efficiency and operation of the Division. Should it be determined by the Chief that the attendance of on-duty personnel interferes with the efficiency and/or operation of the Division, the Union shall suspend the practice until an acceptable remedy is sought through Labor Management or the grievance procedure.

Section 10.4 Dues Check-Off.

Section 10.4.1 Paycheck Deduction. Upon presentation of a written deduction authorization signed by an employee, the City agrees to deduct the dues, initiation fees, and assessments of members of the Union from the available wages earned by such employee each pay period and to transmit the same to the Union Treasurer each month. This authorization will terminate immediately following the City's receipt of such Employee's written notice to cancel the deduction of the Union dues from such employee's paycheck. Withdraws will occur in the bi-weekly, for 26 pay periods annually. If an employee does not have adequate funds in their check to cover the dues it will be deducted from their next paycheck.

Section 10.4.2 Union Certification. The Union will certify the amount to be deducted from each employee's Paycheck under Section 1 above and the City will be entitled to rely upon the accuracy of such certification and will not be liable to any employee by reason of any error in such certification. The Union must indemnify and save harmless the City from and against any claim or demand brought or asserted by any employee by reason of the City deducting from such employee's paycheck the amount certified by the Union under the provisions in this Article.

Section 10.4.3 Service Fee. Employees who do not join the Union may pay a voluntary service fee to the Union in place of a membership fee (Dues). This agreement shall commence thirty (30) days following the signed agreement between the member and the local. This provision shall not require any employee to become a member of the Union, nor shall the service fee exceed dues paid by members of the Union. The written authorization for such deduction of a service fee by the Employer from the payroll check of the employee and its payment shall be provided to the City by the parties entering into the agreement. Service fee payment to the union shall be as outlined in this article.

ARTICLE 11
MANAGEMENT'S RIGHTS

Section 11.1. The Union and Employer agree that all matters pertaining to wages, hours, or terms and other conditions of employment and the continuation, modification or deletion of an existing provision of this agreement are subject to collective bargaining between the Employer and Union as outlined in ORC 4117.08, except where otherwise herein specified.

Unless otherwise memorialized in this collective bargaining agreement by and between the Union and Employer, The Union recognizes that the City expressly maintains all management rights set forth in Ohio Revised Code Section 4117.08(C)(1)-(9). With respect to those management rights, the City shall have the clear right to make decisions in all areas, on a unilateral basis and such decisions, except as provided herein, shall not be subject to the grievance procedure.

The exercise by the City of, or its waiver of, or its failure to exercise, its full rights of management on any matter or occasion shall not be precedent or binding on the City, nor the subject or basis of any grievance.

Section 11.2. The Employer will have the right to, in connection with its function of maintaining discipline and directing the workforce, publish and amend Rules of Conduct and department policy. The Union will receive notification of a modification to work rules that affect members of the Union or have the potential to affect members of the union at least seven (7) days prior their effective date, except in emergency situations where delay may affect the health and safety of the members or the health and safety of the general public.

ARTICLE 12
GRIEVANCE PROCEDURE

Section 12.1 Purpose. The term "grievance" shall mean an allegation by a bargaining unit employee that there has been a violation of this Agreement, department policy or an allegation that discipline has not been for just cause.

Section 12.2 "Days" Defined. The term "days" in Article 12 and 13 shall refer to actual calendar days, excluding Saturday, Sunday, and City recognized holidays.

Section 12.3 General. Each grievance must state the Article of the Agreement where the violation has occurred and the remedy requested to settle the grievance. Grievances will be settled at the earliest possible step of the procedure. The employee must proceed through all steps of the grievance procedure in proper order and within the prescribed time limits, except as otherwise noted. Time limits may be extended upon mutual agreement of the parties. Any step in the grievance procedure outlined below may be skipped on any grievance by mutual consent of the parties.

Section 12.4 Grievance Procedure. Both parties agree that mutual benefit is derived from the City considering and responding to all grievances in a timely manner as prescribed by the time limits herein. The parties agree to cooperate in attempting to resolve grievance issues. However, should the Employer, at any step, fail to render a response within the time limits set in this article to the grievant and union, the grievance shall be deemed denied and may be advanced immediately to the next step by the grievant.

Should the grievant or union fail to inform the employer of their wish to move the grievance to the next step, the grievance shall be determined to be dropped by the grievant and or union.

Meetings shall be scheduled at a time that is convenient for the employer, grievant and union representative.

Section 12.5 Process and Cadence.

Step 1 – Immediate Supervisor. Any employee or IAFF representative having a grievance shall present their or her grievance in writing to their immediate supervisor. In order for the grievance to be recognized, it must be presented within fifteen (15) calendar days from the date of the incident or

when the employee knew or should have known of the incident giving rise to the grievance. Within fifteen (15) calendar days from the date the employee first presented their or her complaint, the supervisor will attempt to resolve the matter or provide a written response to the grievance.

Step 2 – Division Head. If the grievance is not resolved in Step 1, the employee may pursue the matter by presenting the grievance to the Fire Chief within seven (7) calendar days of the date of the reply was received in Step 1. The Chief will meet with the grievant and their/her representative(s) and otherwise attempt to resolve the matter within fifteen (15) calendar days of receipt of the grievance. The Chief, after review and investigation of all matters of fact relative to the grievance, shall issue a decision on the grievance from within fifteen (15) calendar days following the meeting.

Step 3 – City Manager. Where the grievant is not satisfied with the Step 2 response, the aggrieved may submit the grievance to the City Manager within seven (7) calendar days of the date of receipt of the Step 2 answer. The City Manager will review the grievance and all responses within fifteen (15) calendar days following the date he received the grievance. The City Manager shall Conduct a meeting with all parties involved in attendance and available for questioning within fifteen (15) calendar days following the day he received the grievance. The City Manager or designee will inform the grievant of his or her decision within fifteen (15) calendar days of the meeting.

Arbitration. When the grievant is unsatisfied, the matter may be taken to arbitration by informing the City within fifteen (15) calendar days of the decision of the City Manager.

The State Employment Relations Board (SERB) under its rules will appoint the arbitrator, unless the Union and the Employer mutually agree on an arbitrator. Either the Union or the Employer may request the State Employment Relations Board to make the appointment.

The arbitrator must have no authority to amend, modify, nullify, ignore, add to or subtract from the specific provisions of this agreement. They must only consider and make a decision with respect to the specific issue submitted to them by the parties. They must have no authority to make a decision on any other issue not so submitted. To the extent that the arbitrator's decision is in accordance with the provisions of this Section, it will be final and binding on all parties.

Where the arbitrator decides the issue in favor of one party, the losing party will pay the cost of the arbitrator. Where the arbitrator splits the decision in any way the parties will split the cost of the arbitrator. Each party will bear their non-arbitrator cost.

Section 12.6 Mediation. The parties, prior to arbitration, may elect to attempt to settle the grievance through mediation. A mediator may be selected by mutual agreement from SERB or Federal Mediation and Conciliation Service (FMCS). During the time of mediation, all timelines shall pause.

ARTICLE 13
DISCIPLINE/DISCHARGE

Section 13.1 General. The term "days" in Article 12 and 13 shall refer to actual calendar days, excluding Saturday, Sunday, and City recognized holidays.

The Employer may take disciplinary action, including discharge, against any employee in the bargaining unit only for just cause, except for a probationary employee who has not been appointed as a permanent employee. The Employee shall have the right to be accompanied and represented by the Union and/or legal counsel at any hearing held to investigate charges prior to the imposition of discipline or discharge. Prior to any hearing for this purpose, the Employee shall be notified in writing of the charges, the right to representation by the Union and/or legal counsel, and the time and place of the hearing.

Any employee may be disciplined for the following reasons, including but not limited to, incompetency, inefficiency, dishonesty, drinking or being under the influence of intoxicants, narcotics, controlled substances or hallucinogens during duty hours, fighting on duty, habitual tardiness, immoral conduct, insubordination, neglect of duty, conviction of criminal charges, misfeasance, malfeasance, nonfeasance, discourteous treatment of the public, failure to pay just debts, violation of the Administrative Regulations of the City, violation of the Division of Fire Rules, Regulations, general or special orders, and any other failure of good behavior, or an accumulation of infractions. Possible forms of disciplinary action are as follows:

1. Oral Reprimand
2. Written Reprimand
3. Suspension with pay
4. Suspension without pay
5. Reduction of pay
6. Demotion to lower classification or rank
7. Discharge

An employee who is placed on an administrative leave with pay pending an investigation and final determination of the findings is not discipline.

Section 13.2 Procedure. When appropriate and in the discretion of the Employer, discipline shall be accomplished in a constructive, progressive manner, so as to rehabilitate and correct an offender. However, the disciplinary action taken may not necessarily be progressive in nature depending upon the severity of conduct and whether the violation is a repeat offense.

Whenever the Employer determines that an employee may be disciplined for just cause that could result in suspension, reduction, or termination, a pre-disciplinary hearing will be scheduled to give the employee an opportunity to offer explanation of the alleged misconduct. Prior to the hearing, the employee shall be given written explanation of the charges and all evidence supporting such charges.

A pre-disciplinary hearing, if any, shall be completed within fifteen (15) calendar days from the presentation to the employee of the written explanation of charges. A copy of the Hearing Officers decision will be provided to the employee within fifteen (15) calendar days following the Pre-disciplinary Hearing. Any disciplinary action to be administered must be issued within forty-five (45) calendar days of the receipt of the hearing officer's decision. Time frames may be extended by mutual agreement.

Pre-disciplinary hearings will be conducted by the City Manager and/or Fire Chief. The employee may choose to:

1. Appear at the hearing to present oral or written statements in their defense

2. Appear at the hearing and have an employee or non-employee representative of the IAFF present oral or written statements in their defense

3. Elect in writing to waive the opportunity to have a pre-disciplinary hearing

At the pre-disciplinary hearing, the hearing officer(s) will ask the employee or their representatives to respond to the allegations of misconduct which were outlined to the employee. At the hearing, the employee may present any testimony, witnesses, or documents which he feels may be germane to the charges. The employee shall provide a list of witnesses, and the name and occupation of their representative, if any, to the Employer as far in advance as possible, but not later than eight (8) hours prior to the hearing. It is the employee's responsibility to notify their witnesses that he desires their attendance at the hearing.

The employee will be permitted to confront and cross-examine witnesses, if called by the Employer. The Employer will decide what discipline, if any, is appropriate.

The hearing shall be scheduled at a time that is convenient for the City, Employee and Union representative.

Section 13.3 Appeal. Disciplinary action may be appealed through the grievance and arbitration procedure. Appealable disciplinary actions must be filed at the appropriate level of the grievance procedure within fifteen (15) calendar days from receipt of the notice of discipline by the employee.

Section 13.4 Representation. The bargaining unit employee under investigation shall be entitled to the presence of an employee and/or non-employee IAFF representative at any questioning of the member, unless the member consents in writing to being questioned outside the presence of the representative. Meeting shall be postponed or rescheduled to a time at a union representative may attend.

Section 13.5 Professional Manner. The City agrees that all disciplinary procedures shall be carried out in a professional manner.

ARTICLE 14
LIMITED DUTY

Section 14.1 General. An Employee whose physical/medical condition prevents him or her from performing his or her normal work assignments may be re-assigned to alternative or light duty by the Fire Chief. The decision of the Fire Chief shall not be grievable.

A light duty assignment is strictly temporary and does not serve to permanently change or modify the essential functions of the Employee's regular assignment. The availability of limited duty shall be at the discretion of the chief.

Alternative duty shall be limited to that which is medically appropriate and which contributes in a meaningful and identifiable way to the function and mission of the Division.

Once an Employee has been medically certified as fit for duty, that Employee will be returned to the position and duties to which the Employee was assigned prior to the limited or light duty assignment.

An Employee's pay while on light duty shall not be less than that which they would have received had they continued to perform the regular and ordinary duties assigned to them prior to the injury or illness. While on limited duty, an Employee may become temporarily assigned to a forty (40) hour week, subject to availability and the Employee's own medical restrictions as determined by the Employee's physician.

ARTICLE 15
SENIORITY

Section 15.1 General. "Seniority" shall be computed on the basis of uninterrupted length of continuous service with the City. A termination of employment lasting less than thirty-one (31) days shall not constitute a break in continuous service. Once continuous service is broken, unless the employee is reinstated, the employee loses all previously accumulated seniority. Seniority shall govern the dispensing of all privileges provided by and listed as governed by seniority in this Agreement.

Section 15.2 Leave of Absence. An approved leave of absence of six (6) months or less does not constitute a break in continuous service, provided the employee follows the proper procedure for such leave and returns to active service immediately following the expiration of the approved leave.

Section 15.3 Probation. Employees shall have no seniority during their probationary period, but shall be granted seniority upon successful completion of the probationary period, calculated from the date of hire with the City.

Section 15.4 Loss of Seniority. An Employee's seniority shall be lost and employment terminated when he or she:

(a) terminates voluntarily;

(b) is discharged for cause;

(c) exceeds an official leave of absence;

(d) is laid off for a period of more than twenty-four (24) months;

(e) failure to return to work within thirty (30) calendar days without just cause, following recall subsequent to a lay-off;

(f) failure to report to work for three (3) days without just cause;

(g) re-enlistment in the armed services after resignation from the City of Oxford.

ARTICLE 16
LAYOFFS & RECALL

Section 16.1 Layoffs. The City can layoff Employees for any reason permitted in Chapter 124 of the Ohio Revised Code. In the event the Employer determines that a layoff of Oxford Fire Division employees is necessary, the following procedures shall be followed:

A. The Employer may send notification to the Union indicating the need for the reduction of personnel. At the City Manager's discretion, the Parties may meet within 72 hours to discuss the effects of a lay-off and to consider alternative proposals or plans. Should the Employer determine that need for a reduction in personnel still exists following the discussion with the Union, the Employer may send notice to the employees giving a thirty (30) day notification of the impending lay-off. If a 30-day notice is not possible or practical under the circumstances, the City may notify Employees of impending lay-off as soon as practicable. The City's failure to provide notice in accordance with this Section shall not be grievable. The City's decision to not meet with the Union to discuss the effects of a lay-off and consider alternative options shall not be grievable.

B. Oxford Fire Division employees will be laid off in the inverse order of their seniority (i.e., least senior Employees being laid off first). Any lay-off shall proceed in the following order:

    1. Seasonal, temporary, volunteer, and casual employees;
    2. All part-time employees;
    3. Full-time employees.

Section 16.2 Recall. In the event of a layoff, the Employer shall maintain an active "recall list" for a period of twenty-four (24) months, in accordance with O.R.C. 124.37. Whenever a vacancy occurs in a position for which laid off Employees are qualified, such Employees shall be recalled in accordance with their seniority in the reverse order that they were laid off, in accordance with the following provisions:

A. Notice of recall shall be sent to the employees by certified or registered mail. The Employer shall be deemed to have fulfilled its obligations by mailing the recall notice by certified mail, return receipt requested, to the last mailing address provided by the employee.
B. The recalled employee shall have five (5) calendar days following the date of the receipt of the recall notice to notify the Employer of their intention to return to work and shall return to work on the date and time specified in the notice unless a different date and/or time is agreed to by the Employer.
C. No new employees shall be hired in the Fire Division until all full-time employees who are laid off have been given the opportunity to return to work.
D. Layoff/Termination. An employee who is on lay-off for a period of twenty-four (24) months is automatically terminated and loses all seniority.

ARTICLE 17
RESIDENCY RULE

Section 17.1. No Employee will be required to live in the City of Oxford.

ARTICLE 18
DRUGS AND DRUG TESTING

Section 18.1. Alcoholism, drug addiction, or drug abuse (the abuse of a legal drug) are recognized by the parties as interfering with the Division's services and as posing a danger to the public's health and safety. The Employer has the right to insist on an alcohol and drug-free environment. The City has a legal and financial responsibility to provide timely, cost effective, quality service to its citizens and the community. Alcohol and/or drugs in an Employee's system impair the Employee's ability to perform services in a safe and efficient manner.

For the purposes of this Article, a positive result in an alcohol screening will be a blood alcohol content (BAC) test of 0.04 or greater. A positive result in a drug screen will be a urine test in which the illegal use of drugs is detected.

Section 18.2 - Terms and Definitions

1. Alcohol

The intoxicating agent in beverage alcohol, ethyl alcohol, or other low molecular weight alcohol including methyl and isopropyl alcohol.

2. Alcoholic Concentration (or Content)

The alcohol in a volume of breath expressed in terms of grams of alcohol per 210 liters of breath as indicated by an evidential breath test

3. Drugs

Refers to marijuana, cocaine, opiates, amphetamines, and phencyclidine, as well as other illegal controlled substances

4. Substance Abuse Professional

A licensed physician, or a licensed or certified psychologist, social worker, employee assistance professional, or certified addiction counselor with knowledge of and clinical experience in the diagnosis and treatment of alcohol and controlled substance-related disorders

Section 18.3 – Required Tests

Pre-Employment. Applicants are required to pass a screening for illegal drugs as part of the pre-employment medical examination. City employment will be contingent upon the successful passage of this screening. Applicants who test positive for the illegal use of drugs will be disqualified from City employment.

Reasonable Suspicion (Just Cause). The illegal use of drugs or alcohol while on the job is strictly prohibited. The City Manager or Fire Chief shall order that an Employee submit to a drug and/or alcohol analysis when there is reasonable suspicion of substance abuse. Reasonable suspicion

means that specific facts or inferences exist which lead to a belief that an individual is under the influence of drugs or alcohol.

A supervisor or division head who has reasonable suspicion of an employee engaged in substance abuse will immediately relieve the Employee from their duties. Under no circumstances will the suspected employee be permitted to operate a vehicle, machinery or equipment. A division head or supervisor will personally transport the Employee to the testing facility.

If a drug screen is performed, the employee will be permitted to use accrued and available sick, vacation, or personal leave pending the result. If the result is negative the leave will be reimbursed.

All Employees are responsible for the consistent enforcement of this policy. Any Employee who knowingly permits a violation of this policy will be subject to disciplinary action.

Post-Accident Testing. As soon as is practicable following an on-duty accident involving a commercial motor vehicle where a loss of life is involved and/or the driver receives a moving traffic citation, the driver will be tested for the presence of drugs and alcohol which violate the prohibitions listed above. Any driver who is subject to post-accident testing shall remain readily available for such testing or may be deemed as refusing such testing.

Section 18.4– Consequences of a Positive Alcohol/Drug Test Result

Permanent Full-Time Employees:

A permanent full-time Employee who fails any of the drug or alcohol tests outlined in this policy will be subject to the following tests and provisions:

The Employee will be referred to the City's Employee Assistance Program; an evaluation will be conducted and, where necessary, a rehabilitation program will be prescribed. The Employee will be permitted to use accrued and available sick, vacation and/or personal leave pending completion of the evaluation.

The Employee will meet with the City Manager and Human Resources Director, who will consider the recommendation of the substance abuse professional and determine when the Employee may return to work. If, in the opinion of the substance abuse professional, the Employee is not capable of working, the Employee will be permitted to use accrued and available sick, vacation, or personal leave until such time as the substance abuse professional may recommend a return to work.

Before an Employee may return to any duties requiring the performance of safety sensitive functions, the Employee shall undergo a return-to-duty drug test with a negative result and/or return-to-duty alcohol test with an alcohol concentration of less than 0.02. The return-to-duty test shall be administered within a reasonable time period as determined by the City Manager and Human Resources Director.

Following a determination that an Employee is in need of assistance in resolving problems associated with drug/alcohol abuse, the Employee is subject to unannounced follow-up alcohol or drug testing after return to duty. The number and frequency of these tests shall be directed by

a substance abuse professional and shall consist of at least 6 tests in 12 months following the employee's return to duty. Testing shall not exceed 60 months from the Employee's return to duty. The substance abuse professional may terminate follow-up testing after the first six tests have been administered if the substance abuse professional determines that testing is no longer necessary.

A positive test result on any follow-up test, or on any subsequently administered drug or alcohol screening will result in the employee's termination.

Section 18.5- Miscellaneous Provisions.

If an Employee undergoes a test which indicates an alcohol concentration of greater than 0.02 but less than 0.04, that Employee will not be permitted to perform "safety sensitive functions" for twenty four (24) hours, or until a test result of less than 0.02, whichever comes first.

Refusal to submit to any of the drug/alcohol tests outlined in this policy will result in the employee's immediate termination.

Failure to complete a rehabilitation program prescribed by the substance abuse professional under the guidelines established in this Section will result in the Employee's immediate termination.

An Employee shall not report for, or remain on duty for a safety-sensitive functions while being in possession or using any drugs, except when the use is pursuant to the instructions of a physician who has advised the Employee that the drug does not adversely affect his/her ability to safely operate a motor vehicle or perform safety-sensitive functions. An Employee may be required to inform his/her supervisor of any therapeutic drug use if there is a chance the drug may affect their job performance. Light duty may be considered while the Employee is using the prescribed drug. A supervisor having knowledge of an Employee's use of a drug that interferes with job performance shall not permit the Employee to perform or continue performing a safety-sensitive function or driving a vehicle.

All results and actions taken under or pursuant to this Article shall be kept confidential in accordance with state and federal law.

The Employer shall pay for drug and alcohol screening and confirmatory tests.

ARTICLE 19
PROBATION AND PROMOTION

Section 19.1 Probation: New Employee. New employees, which shall include an Employee newly hired as a full-time firefighter from the part-time firefighter ranks, are on probation for one (1) year following the commencement of their employment. Probationary employees may be disciplined or discharged at the discretion of the Employer.

Section 19.2 Probation: Promotion. All promotions within the Division shall be subject to a six (6) month probationary period.

ARTICLE 20
OUTSIDE EMPLOYMENT

Section 20.1. Bargaining unit employees shall be permitted to outside employment as long as it does not interfere with the Fire Division Operations and the Employee is able to meet the performance standards of their job with the City.

The outside job shall not conflict with the Employee's duties as a member of the Fire Division. Employee shall consider the impact that outside employment may have on their health and physical endurance. All Employees will be judged by the same performance standards and will be subject to the Employer's scheduling demands, regardless of any existing outside work requirements.

If it is determined that an Employee's outside work interferes with his or her performance or the ability to meet employment requirements of the Fire Division, the Employee may be required to terminate the outside employment.

All Employees upon request of the City shall disclose to the City of any outside employment.

Outside employment that constitutes a conflict of interest, as determined by the Fire Chief and/or City Manager, is prohibited.

ARTICLE 21
FAMILY MEDICAL LEAVE ACT AND AMERICANS WITH DISABILITIES ACT

Section 21.1. Nothing in this Agreement shall be used or construed to prevent or inhibit the City from complying with the provisions of the Americans with Disabilities Act (ADA) or the Family Medical Leave Act (FMLA).

ARTICLE 22
EMERGENCY WAIVER

Section 22.1. In the event an emergency is proclaimed by the City Manager, the Chief of the Division may, after the declaration of an emergency, make such work assignments within the recognizable scope of Fire Division skills, as he deems necessary, without regard to Employee classifications, overtime limitations, or seniority.

Section 22.2. In cases of emergency declared by the City Manager, the Employer may temporarily suspend time limits for the processing of grievances. Upon the termination of the emergency, should a valid grievance exist, it shall be processed in accordance with the provision outlined in the grievance procedure of this Agreement and shall proceed from the point in the grievance procedure to which the grievance had properly progressed prior to the emergency declaration.

ARTICLE 23
OVERTIME PROGRAM

Section 23.1. Overtime, for the purpose of this Agreement, is defined as being any time worked outside the Employee's normally scheduled hours of work. The City shall pay overtime in accordance with the terms of the Agreement and existing rules and regulations applicable to the Fair Labor Standards Act (FLSA).

Section 23.2. The Oxford Fire Division manages two types of Overtime: Scheduled and Emergency. Except as otherwise modified by terms of this Agreement, the responsibility for the determination of the need for overtime and the number of hours to be worked shall be vested in the Fire Chief. The working of overtime is mandatory. When possible, the City will first attempt to fill overtime needs on a volunteer basis. However, if the City is unable to fill a need for overtime on a volunteer basis, the City will have the right to order an Employee to work the required overtime.

Overtime will be distributed in a manner in which most fairly allows for the equal distribution of overtime hours. The employer and union shall develop such a system by mutual agreement through the labor management committee, outlined in Article 7 of this agreement. Once finalized, the overtime program shall only be changed by mutual agreement of both parties. Such agreement shall be binding on each party and subject to the grievance process.

The Fire Chief shall have the sole authority to determine whether there is a need for overtime. Overtime articles contained within this Agreement shall apply as it relates to the scheduling of overtime and overtime compensation.

An up-to-date overtime list shall be posted in a conspicuous location showing cumulative overtime hours. For each call in, employees called for scheduled or emergency overtime shall be compensated for not less than three (3) hours, with the exception of overtime which occurs directly connected to the start or end time of a regularly scheduled shift, in which case overtime will be paid for actual hours worked.

In cases where non-overtime coverage for a shift is found subsequent to overtime being assigned to an employee, such overtime may be cancelled by the scheduling officer only upon both the consent of the employee, and the approval of the fire chief.

Section 23.3 Scheduled Overtime. Scheduled overtime is the foreseen need for additional staffing when ordinary leaves cause personnel shortages. Open shifts shall be filled no later than six (6) days prior to the start of the overtime shift.

Section 23.4 Emergency Overtime. Emergency Overtime is any unforeseen need for immediate staffing as declared by the Chief or their designee.

Emergency Overtime positions will be staffed in a manner that will fill the position(s) available as quickly as possible.

Emergency Overtime or recall may be used to meet staffing requirements.
If the Employer cannot maintain an adequate staff of certified personnel open positions shall be filled with overtime.

Section 23.5 Overtime Pay. An employee who performs their ordinary job duties, or additional tasks or assignments on behalf of or to the benefit of the employer outside of their regularly scheduled work hours will be compensated at their overtime rate. Any overtime accrued must have the prior approval of the Fire Chief or the Employee to which the Fire Chief has delegated scheduling authority.

Overtime is earned at a rate of time-and-a-half calculated from the Employee's regular pay rate except as otherwise provided in this Agreement.

Overtime will accrue in fifteen (15) minute increments.

Section 23.6 Emergency Recall. Recall for the purposes of this Article will be considered Emergency Overtime. Emergency recall means notifying an employee that he/she is to report back to work at a time disconnected from their shift and for the purposes of meeting unforeseen staffing needs generated by an emergency as declared by the Chief or their designee. A recall will be assumed with emergencies such as, but not limited to, Critical Care EMS, Structure Fires, Staffing recalls, and Weather emergencies. Employees that report back to work for emergency recall, shall be compensated for a minimum of three (3) hours of overtime.

Section 23.7 Pyramiding of Rates. In no event shall the overtime or premium pay established within this Agreement be pyramided. Thus, if two or more overtime or premium pay provisions are applicable to the same hours of work, only the provision yielding the largest pay amount shall satisfy the requirements of all other pay provisions.

ARTICLE 24
OFFICER IN CHARGE (OIC)

Section 24.1. When a firefighter acts in an officer's position and is expected to bear all responsibilities associated with that position, he/she will be compensated at ten percent (10%) above his or her current rate of pay. The Fire Chief and/or his or her designee will maintain a list of Employees eligible for acting in an officer's position.

ARTICLE 25
HOLIDAY PAY

Section 25.1 Recognized Holidays.

New Year's Day	Labor Day
Martin Luther King Jr. Day	Thanksgiving Day
President's Day	Day After Thanksgiving
Memorial Day	Christmas Eve
Independence Day	Christmas Day

Holiday pay shall count as time worked in computing overtime pay, except when the holiday occurs on a non-work day. In the case of forty (40) hour employees, a holiday which is observed on a regular workday occurring during an employee's vacation will not be counted as a day of vacation.

Section 25.2 Non-Shifted Employees. Fire Division employees who work on the 40-hour shift schedule will have the recognized holidays off as scheduled by the City. Employees will be compensated at their regular hourly rate for eight (8) hours on the recognized holidays.

Section 25.3 Shifted Employees. Fire Division employees who work on the 24/48 hour shift schedule shall be granted eighty (80) hours of holiday time annually, paid at the appropriate forty (40) hour rate. Employees will have holiday pay be paid as a lump sum and will be included in an extra paycheck with the first payroll in December. Holiday pay is paid on the basis of eight (8) regular hours per holiday for ten (10) City holidays each year.

Section 25.4 Premium Holidays. Employees who work New Year's Day, Christmas Eve and/or Christmas shall receive additional compensation at one-half of the members rate of pay for those members working between 7 AM the morning of the holiday and 7 AM the following day. This compensation is in addition to the regular holiday pay or premium pay if applicable.

ARTICLE 26
COMPENSATION UPON RESIGNATION, DISMISSAL, RETIREMENT OR LAYOFF

Section 26.1 Separation. Any employee who resigns, retires, is dismissed or laid off, and is eligible under state law will be compensated accordingly for all their accumulated overtime, and holiday time, for which the employee has not been paid. Vacation time (prorated for the current year) will also be compensated. All compensation will be made at the employee's current rate of pay.

Section 26.2 Death. In the event that any employee dies on-duty or off-duty, the employee's beneficiary will be entitled to the above compensation in Section 26.1.

ARTICLE 27
BENEFITS

Section 27.1 Insurance. The Employer agrees to maintain for bargaining unit members and their dependents the same Health Care Insurance Plan and Life Insurance Plan offered to all other City of Oxford employees. The City is committed to providing the best coverage at the lowest premium rate possible.

A Life Insurance Policy shall be provided to each employee for no less than one and a half (1.5) of the employee's annual wage per employee. The City may offer employees the option of purchasing additional life insurance through the City's group life insurance provider. Employees will be permitted to participate in any additional insurance plans which will be deducted from their wages so long as there is more than one career/non-career employee participating (Ex. Aflac).
The bargaining unit shall have one (1) member, of the local president's choice, participate in the Employee Advisory Committee.

Section 27.2 Deferred Compensation. The Employer shall make available during the term of this Agreement the opportunity for all Employees to participate through payroll deduction in a "deferred compensation plan" (Section 401K, Section 457, or other federally-approved deferred savings plan).

In addition, two (2) plans available for participation are the IAFF Financial Corporation and the OAPFF 457 Plan. Nothing in this Article shall prevent the Employer from offering additional plans for the Employees' investment option.

Any fees and/or other charges associated with the administration of the plan(s) will be the responsibility of the participating Employee. The Parties agree that there will be no fee and/or charge from the Employer for the deduction and transfer of Employee funds to the participating plan.

ARTICLE 28
WORK RELATED DISABILITY/INJURY LEAVE

Section 28.1 Work Related Disability Leave. An Employee who is disabled to the extent that he/she cannot perform regular duties as a result of injury sustained in an identifiable incident while in the course of public employment with the City, not through his/her own negligence, shall continue to receive for a period not to exceed one calendar year from that date an amount of compensation equivalent to his/her full salary less any and all funds or monies received from public or private agencies by way of pension, compensation, or indemnity for such disability.

The Employee, at the request of the City, shall make application for "temporary total" disability compensation under the Workers' Compensation Laws of Ohio, provided that the disability is of a type or nature which will prevent the Employee from returning to full duties.

In no case will the City pay a leave allowance for any period of time in excess of the "temporary total" disability time as determined and awarded by the Ohio Bureau of Workers' Compensation. After the temporary total disability ends, should the Employee remain unable to return to regular duties, the Worker's Compensation pay shall be changed to sick leave and deducted from the Employee's available accrued sick leave.

Upon having the Employee's pay changed to sick leave upon termination of temporary total disability, the Employee shall also be required to apply for all available benefits, funds and money that may accrue to him/her and be payable from the Police and Firemen's Disability and Pension Fund.

Upon request for disability and upon termination of temporary total disability, the City Manager is entitled to have the Employee be examined by a physician of the City's choice to determine the extent of the disability and may require subsequent examinations during the period of disability.

Section 28.2 Reinstatement. An Employee absent from work because of any service connected occupational illness or injury as determined by the Ohio Industrial Commission shall be entitled to reinstatement at the same rate of pay received prior to the date of such illness or injury plus any contractual increases upon approval of his/her application to return to work.

ARTICLE 29
SICK LEAVE

Section 29.1 Accrual. Each full-time employee shall accrue thirteen (13) hours of sick leave with pay per month. There shall be no maximum accrual. Sick leave is considered "Hours Worked".

Section 29.2 Standard Use. An employee may use sick leave for absence due to the employee's illness, injury, doctor's or dentist's appointments, or exposure to a contagious disease which could be communicated to other employees. If abuse is suspected or if an Employee misses two (2) full work days with sick leave, the Employee may be required to submit medical documentation or other verification to justify the use of sick time. Abuse of sick leave will lead to disciplinary action.

Section 29.3 Use for Care of Family. An employee may use sick leave to care for an ill or injured member of the immediate family, as defined in Section 29.4. The employer may reasonably request documentation from an attending physician that the employee's presence is necessary.

Section 29.4 Definition of Immediate Family. For the purpose of this Article, the "immediate family" is defined as only: spouse, child (biological, adopted, foster or stepchild), parent, stepparent, mother-in-law, father-in-law, brother, sister, brother-in-law, sister-in-law, son-in-law, daughter-in-law, grandparent, spouse's grandparent or grandchild, dependents, whether or not related by blood or legal relationship, are also included within the definition of immediate family member.

Section 29.5 Notification. Each employee shall notify or cause their supervisor to be notified of their absence not later than thirty (30) minutes prior to the regular starting time of the working day.

Section 29.6 Sick Leave Incentive. Employees shall receive a bonus of three hundred ten dollars ($310.00) per calendar quarter if the employee uses no sick leave during that quarter. Use of any

hours of sick leave will result in the Employee receiving no payment for that quarter. An employee who uses no sick leave for a calendar year shall receive an additional bonus of three hundred sixty dollars ($360.00). Any payment shall reflect applicable federal, state and local withholdings.

Section 29.7 Donation. Employees may donate sick time to individuals in need of excess time due to unforeseen circumstances, an unexpected illness or pregnancy. Each request shall be reviewed on a case-by-case basis by the City Manager and be approved at the sole discretion of the City Manager. Should an employee choose to donate sick time to another individual, they shall not be eligible for the sick leave bonus.

ARTICLE 30
FUNERAL/BEREAVEMENT LEAVE

Section 30.1. If a death occurs among members of an employee's immediate family as defined in Article 29.4 of this Agreement, with the addition of aunts, uncles and non-traditional family members, the non-shifted employee shall be granted three (3) days paid funeral leave/bereavement leave without loss of pay, benefits, days off, holidays or vacation time. 24/48 shift employees will be granted two (2) twenty-four (24) shifts for funeral/bereavement leave without loss of pay, benefits, days off, holidays or vacation time. Funeral/Bereavement leave is considered "Hours Worked". Employees using funeral leave may be required to submit either an obituary of the decedent or provide other documentation.

ARTICLE 31
COURT TIME

Section 31.1 Criminal or Administrative Matters. All employees who are required to appear on behalf of the employer in court for criminal proceedings or administrative hearings, when off duty, shall be credited with the actual time that they are required to be in court at a one-and-one-half rate. In no event will an employee receive less than three (3) hours of pay at a one and one-half time rate of pay. Court time will be considered "Hours Worked".

Section 31.2 Civil Matters. Employees will not ordinarily be paid for court appearances in civil matters. However, when the appearance of an employee in a civil action is at the request of the City or on behalf of the City in a matter in which the City is directly interested, or the testimony arises out of and is directly related to the performance of the employee's official duties, the employee, if on duty, shall be released from duty without loss of pay. If the employee, in such a case, is not on duty, he shall be paid for the time he is actually required to be at court at a rate of one-and-one-half rate, provided such time is in excess of their regularly scheduled hours, but in no event is less than three (3) hours' time to be paid at one and one-half times the regular rate of pay.

ARTICLE 32
JURY DUTY

Section 32.1. Employees shall promptly notify their division of their being served with a notice to perform jury duty or to appear as a witness at a hearing or trial. An employee will be paid their or her regular salary for performing jury duty or appearing as a witness if work related. Jury Duty is

considered "Hours Worked". The amount of compensation received as a witness or the amount received as compensation for jury duty must be provided to the City unless such duty is performed outside scheduled working hours for the Employee. An Employee who reports for such service and is excused shall contact his or her supervisor or the Fire Chief immediately and report for work if requested.

ARTICLE 33
HOURS OF WORK

Section 33.1 Schedule. Employees are either assigned a 24-hour shift followed by 48-hours off or they are assigned a 40-hour shift and will work either Monday – Thursday or Monday-Friday. Employee's shifts cannot be changed without just cause and the employee will be given thirty (30) days advanced notice. The City may need to adjust an Employee's work schedule from unit-day to unit-day and/or vary the starting and ending time of the tours-of-duty to meet the operational needs of the City. In such a situation, the City shall post changes at least seven (7) days in advance and will make every effort to promptly notify Employee(s) of changes in the posted schedule.

Section 33.2 Hours. Shifts shall start at 7 AM and run for twenty-four (24) continuous hours followed by forty-eight (48) consecutive hours off. In accordance with the FLSA, the parties agree that the work period will be twenty-eight (28) days. Over the course of three (3) work periods, an employee shall be scheduled an average of two hundred twelve (212) hours per work period, or the equivalent of a fifty-three (53) hour work week. This shall be accomplished by employees given the appropriate number of Earned Days Off (EDOs) per year. Employees may choose their EDO's based on division seniority. There shall be no restricted or dates blacked out in which employees are not permitted to take an EDO with the exception of Miami University student move-in dates in August and move-out dates in May, which may only be granted as EDO with the Fire Chief's approval at his or her sole discretion. Any hours worked in excess of two hundred twelve (212) hours or the maximum allowable by the United States Department of Labor in a single work period constitutes overtime.

The work period for purposes of calculating overtime for forty (40) hour employees shall be fourteen (14) days. Such Employees shall be compensated overtime for all authorized hours worked in excess of 106 hours in any one work period or in the excess of twelve (12) hours in any shift.

Section 33.3 Maximum Hours. Employees shall not be required to work in excess of forty-eight (48) consecutive hours without a twelve (12) hour off-duty period, nor shall they be permitted to do so without approval of the Fire Chief at his or her sole discretion. This does not include any employee deployed on a special detail or task force through a county, state or federal team. Should an emergency event be proclaimed by the City Manager, this Section is subject to the Emergency Waiver set forth in Article 22, which shall allow the Chief to require Employees to work in excess of forty-eight (48) consecutive hours at the Chief's discretion.

ARTICLE 34
LEAVES OF ABSENCE

Section 34.1 Leave of Absence. A leave of absence without pay for a period of up to one (1) year may be granted upon approval of the City Manager. Return of the Employee within the approved time period entitle the employee to reinstatement in the position held prior to the granting of the leave. Failure to return to work upon the termination of a leave of absence shall result in termination of employment. The City may require that any Employee requesting leave under the provisions of the Family and Medical Leave Act of 1993 utilize accrued paid time off before any non-paid time off shall be utilized.

No benefits shall accrue during the period of the leave of absence, unless any such time is mutually designated Family Medical Leave time. During such 12 week period the City will provide health insurance coverage as required by law.

Section 34.2 Family and Medical Leave. Subject to certain conditions, Employees who have at least 12 months of service and have worked at least 1250 hours during the prior 12-month period are entitled to a maximum of 12 weeks leave during any rolling 12-month period, for one or more of the following reasons:

(1) Because of the birth, adoption or foster case placement of a child of the Employee (leave must be taken within 12 months of the child's date of birth or in the case of adoption or foster care the first 12 months of custody);

(2) To care for a spouse, child or parent who has a serious health condition;

(3) Because of a serious health condition that makes the Employee unable to perform the Employee's job.

"Child" includes biological, adopted, foster or stepchild as well as legal ward who is under 18 or who is 18 or older but incapable of self-care due to a physical or mental disability.

In cases where both spouses are employed by the City, their combined leave may not exceed the 12-week limit where the leave is taken because of the birth or placement of a child or to care for a sick parent. In all cases, accrued sick leave, vacation time and personal time will be counted towards the 12-week limit. Where the leave is the result of a serious health condition of the employee or the employee's spouse, child or parent, the employee's accrued sick leave, va-cation and personal time will also be counted toward the 12-week limit. Whenever an employ-ee's leave of absence exceeds the amount of applicable accrued leave time, the remainder of the leave is without pay. In other words, if an employee is entitled eligible to for both FMLA leave and paid leave such as sick, personal or vacation time, the employee is required to use all appli-cable paid leave before unpaid leave is granted, however paid leave must be taken at the onset of the absence. Once the City is informed or becomes aware that the employee has an FMLA qualifying event, the City shall designate any leave taken from the onset as FMLA leave, regard-less of employee preference and alternative types of leave available. If paid leave is available to the

employee, the employee's paid leave will run concurrently with the FMLA leave from the onset.

Intermittent/Reduced Schedule Leave – Under certain circumstances, the FMLA permits employees to take leave on an intermittent basis or to work a reduced schedule:

(1) When medically necessary to care for a seriously ill family member, or because of the employee's serious health condition.

(2) To care for a newborn or newly placed adopted or foster care child only with the employer's approval.

Employees needing intermittent or reduced leave for foreseeable medical treatment must work with their Supervisor or Division Head to schedule the leave so as not to unduly disrupt the employer's operations. In such cases, the City may require the employee to transfer temporarily to an available position with equivalent pay and benefits which better accommodates recurring periods of leave than does the employee's regular position.

Where the necessity for a leave is foreseeable, employees are expected to provide at least 30 days' advance notice. Where unanticipated events or unusual circumstances prevent 30 days' advance notice, the employee is expected to provide notice of the leave at the earliest possible date.

With any request for a leave involving serious illness of the employee or the employee's spouse, child or parent, the City shall require written certification of the illness from the health care provider of the seriously ill person. Information regarding the specific items which must be addressed in the certificate may be obtained from the Human Resources Director. Under certain circumstances, the City may, at its expense, require the employee seeking the leave to obtain the opinion of one or more independent health care providers. The City may also require an employee to provide periodic certificates, as necessary and reasonable, from the treating health care provider during the course of the leave. In such circumstances, the employee is required to return completed certifications from the treating health care provider to the City. Where the leave was occasioned by a serious health condition of the employee, the employee must present a certificate from the employee's health care provider releasing the employee to return to work.

Upon return from leave all hourly and most salaried employees will return to the position held at the commencement of the leave or to an equivalent position.

If the Employee fails to return to work upon expiration of the leave the City may, where circumstances warrant, recover the amount which the City contributed to the employee's health insurance premiums during the period of the leave.

Serious Health Condition means an illness, injury, impairment, or physical or mental condition that involves:

Any period of incapacity or treatment connected with inpatient care (i.e., an overnight stay) in a hospital, hospice, or residential medical care facility.

(1) Any period of incapacity requiring absence of more than three calendar days from work, school or other regular daily activities that also involves continuing treatment by (or under the supervision of) a health care provider.

(2) Any period of incapacity due to pregnancy, or for prenatal care.

(3) Any period of incapacity (or treatment therefore) due to a chronic serious health condition (e.g., asthma, diabetes, epilepsy, etc.).

(4) A period of incapacity that is permanent or long-term due to a condition for which treatment may not be effective (e.g., Alzheimer's, stroke, terminal diseases, etc.).

(5) Any absences to receive multiple treatments (including any period of recovery therefrom) by, or on referral by, a health care provider for a condition that likely would result in incapacity of more than three consecutive days if left untreated (e.g., chemotherapy, physical therapy, dialysis, etc.).

Active Duty Leave – an employee may take up to 12 weeks of unpaid FMLA leave for any qualifying exigency (as defined by regulation) related to a spouse, son, daughter or parent's active duty or notification of an impending call or order to active duty in the Armed Forces in support of a contingency operation.

Service member Family Leave (Caregiver) – an employee who is the spouse, son, daughter, parent or next of kin of a covered service member is entitled to a total of 26 workweeks of leave during a 12-month period to care for the service member. The leave is available during a single 12-month period.

Section 34.3 Court and Military Leave. The Employer agrees to comply with State and Federal laws governing paid court and military leaves. If an Employee requires an additional twenty-four (24) hours of paid leave in addition to what is provided under Ohio Revised Code to travel to the location of an active duty assignment, this will be granted at the Fire Chief's discretion.

ARTICLE 35
PERSONAL LEAVE

Section 35.1. Employees shall receive forty-eight (48) hours of paid personal leave each year. Personal leave may be used for any purpose, including those purposes for which another form of leave is designated. Such leave may not be carried over into the next calendar year and may not be converted to pay or another form of leave. Personal leave is considered "Hours Worked".

ARTICLE 36
TRADING DUTY TIME

Section 36.1. At the Fire Chief's discretion and with the approval of the Fire Chief or his/her designee, Employees shall have the ability to exchange shifts when the change does not interfere with the operation of the Fire Division. Responsibility for arrangement for the repayment of such time rests with the employees involved. Employees will immediately inform the scheduling officer of the trade, or the shift supervisor if there is less than forty-eighty (48) hours to the start of the traded shift.

ARTICLE 37
UNIFORMS & EQUIPMENT

Section 37.1 Initial Issuance. Initially when a Fire Division employee is hired, the Employer shall supply at no cost to the Employee all uniforms and equipment required by the Employer, excluding socks and underwear, in quantities specified herein, including uniforms and other items required should a member be on a FEMA / USAR or other specialized services team.

A. 5 - t shirts

B. 5 - pairs of pants

C. 2 - short sleeve button ups

D. 1 - long sleeve button up

E. 2 - job shirts

F. 1 - winter coat

G. 1 - winter hat

H. 1 - baseball hat

I. 1 - dress uniform, complete

J. 2 – shirt badges

K. 2 – nameplate

L. 2 – sets of collar rank insignia, if applicable

M. 1- belt

N. 1 – pair of station boots

Upon receiving a promotion, Employees shall receive all appropriate upgrades commensurate with the Employee's new rank.

Equipment, insignia, buttons, and other items not issued or required by the Employer may be utilized or worn only with the permission of the Fire Chief.

Section 37.2 Ownership. All uniforms and equipment issued by the Employer, or for which a reimbursement was issued, are and shall remain the property of the Employer. Upon termination of employment of any bargaining unit Employee, all uniforms and equipment shall be returned to the Employer, allowing for reasonable wear and tear, prior to the issuance of any final compensation to the Employee.

Section 37.3 Replacement. All uniforms shall be replaced on an "as needed" basis due to damage, fading, or other conditions that makes the uniform unacceptable for duty. The Employee will notify the Employer of their needs and the purchases will be at the discretion of the Employer. The Chief shall have final say in any questionable needs.

Section 37.4 Laundry. The Employer will make available at each station a washing machine, dryer, and sufficient facilities so that Employees can launder uniforms, kitchen and bathing towels, and bed linens. Structural firefighting gear, mopheads, and towels/rags used on fire apparatus shall not be cleaned by utilizing machines intended for uniforms and linens. The City shall provide and maintain a washing machine designed specifically for Structural Firefighting Gear.

Section 37.5 Structural Gear. The City shall purchase required structural firefighting gear for all employees of the Oxford Fire Division. Structural firefighting gear will be repaired and replaced as needed and maintained in accordance with Ohio law and Administrative Code.

Section 37.6 Damage to Personal Property. Where a bargaining unit Employee supplies evidence that he/she sustained damage to personal property that is work-appropriate while performing the duties of their/her assigned work, the Employer shall reimburse the Employee for the cost of necessary repairs or replacement up to a maximum of five hundred dollars ($500.00) per contract term (per three years unless the duration of the Agreement provides otherwise). Requests for reimbursement require review and approval by the Fire Chief and/or City Manager.

Section 37.7 Retirement. Upon retirement, Employees shall be permitted to keep their fire helmets, fire boots and metal badges without the replacement cost being deducted from any final pay or compensation due the Employees upon their separation.

ARTICLE 38
VACATION LEAVE

Section 38.1 General. Bargaining unit employees shall be granted vacation leave with full pay, annually, based on their length of service to prior public employers and their full-time employment with the City, and subject to the terms of this Agreement.

At hire for a position in the bargaining unit, any previous service as a public employee will be credited toward their length of service for the calculation of vacation leave allocation. Years of full-time service will be credited in full. Part-time service will be counted as half of a year for each calendar year they worked not less than one thousand two hundred (1200) hours for a public employer. Employment by multiple public employers may be combined service to give a length of service credit of not more than one year for a calendar year of employment.

Vacation time is considered "Hours Worked".

Section 38.2 Allotment.

Vacation shall be earned as follows:

Length of Service	Eligible Vacation (40 hour employees)	
1st through 4th Anniversary	80 hours	
5th through 9th Anniversary	120 hours	
10th through 14th Anniversary	160 hours	
15th Anniversary and Subsequent	200 hours	

Length of Service	Eligible Vacation (24/48 Hour Employees)
Hire	72 Hours
1-4	120 Hours
5-9	144 Hours
10-14	180 Hours
15-19	216 Hours
20+	240 Hours

Section 38.3 Administration. Employees may carry over the previous year's allotment of earned hours, plus an additional 72 earned hours annually.

Whenever two or more employees in the same work unit wish to take their vacation at the same time and the work schedule of the department or division is such that not all employees can take their vacations at the same time, seniority as a City employee shall be the determining factor in deciding who shall have preference in selecting vacation dates. If an employee already has the vacation request submitted and approved the senior employee cannot override the approved request.

An employee who is terminated from their or her employment for cause or who quits their or her job without giving two weeks working notice shall not be entitled to vacation pay upon such termination.

Employees leaving the employment of the City, through either retirement or voluntary resignation, shall be entitled to unused vacation pay, which will be included in the final pay check.

Full-Time employees must be in active pay status for at least one year of continuous service to be eligible for a paid vacation or request and receive approval from the City Manager to take a paid vacation with less than one year of continuous service.

In the case of forty (40) hour employees, a holiday which is observed on a regular work day occurring during an employee's vacation will not count as a day of vacation.

ARTICLE 39
WAGES AND COMPENSATION

Section 39.1 Wages. All annual salaries shall be applied from January 1 to December 31 of the corresponding year, outlined in Table 14.1 of this article. Any adjustment needed from the ratification date of this agreement back to January 1, 2021 shall be paid to the employee in the next pay period following the ratification.

Table 14-1

	2021	2022	2023
Firefighter/Paramedic	$71,795.35	$74,667.16	$77,280.51
Captain	$80,300.86	$83,512.89	$86,435.84

Firefighter/Paramedic salary shall be calculated from Table 14.1 as follows:

In first year, pending Paramedic certification	80% of applicable rate
In first year, once holding paramedic certification	85% of applicable rate
With 12 months of service	90% of applicable rate
With 24 months of service	95% of applicable rate
With 36 months of service	100% of applicable rate

Captain salary shall be calculated from Table 14.1 as follows:

External hire Employees for the position of Captain shall have their salary calculated from Table 14.1 as follows:

Start of service / in rank	85% of applicable rate
With 12 months in rank	90% of applicable rate

With 24 months in rank	95% of applicable rate
With 36 months in rank	100% of applicable rate

Employees promoted from within the City Fire Division for the position of Captain shall have their salary calculated from Table 14.1 as follows:

Start of service/in rank	90% of applicable rate
After 6 months in rank	95% of applicable rate
After 12 months in rank	100% of applicable rate

Section 39.2 Training Pay. When possible and at the Fire Chief's discretion, Continuing Educational opportunities shall be made available in-service to employees to maintain required certifications. The City shall make available to Employees all training hours required for certification. It shall be the individual responsibility of each Employee to ensure that he or she attends the trainings offered by the City in order to maintain certification. All outside training courses must be approved by the Fire Chief to ensure the training meets the operational needs of the City. Employees assigned to or approved by the Fire Chief or their Designee to attend training during working hours will be released from duty without loss of pay. Training hours are considered "Hours Worked".

The expenses for permanent, full-time Employees who are required, or requested, by the City to attend training programs, schools, or other instructional programs shall be reimbursed by the City as follows:

A. Registration fees or tuition.

B. Costs of lodging, meals and mileage shall be at the same terms and conditions as other City employees as set forth in the City of Oxford Travel Policy or as otherwise set by ordinance.

C. Other incidental expenses as approved in advance by the Fire Chief (when appropriate the Fire Chief may authorize a per diem to cover such expenses).

For training day(s) outside the City and Oxford Township, the City will attempt to schedule Employees so that attendance at such training as well as related travel time will coincide with the Employee's normal work week. Employees attending training that is multiple days and requires travel outside the area, may work a 40 hour work week for that particular week. "Outside the area" shall be defined as travel to any location greater than 100 miles from the City of Oxford Fire Department. An employee attending training will not be paid less than their normal rate in a three (3) day period. Twenty-four (24) hour shifts may be divided into eight (8) hour increments for multiple day training classes.

For training day(s) (including in-service) within the City or Oxford Township, normal compensation rules apply.

Section 39.3. Pension. Eligible Employees of the City of Oxford Fire Division shall participate in the Ohio Police & Fire Pension Fund. The mandatory employee contributions required to be paid

under Section 742.31 of the Ohio Revised Code shall be withheld by the Employer through a payroll deduction and forwarded on behalf of the employee to the Ohio Police & Fire Pension Fund.

Section 39.4 Academic Incentive. For Employees who receive a final grade of "B" or "Pass" in a course graded on a "Pass-Fail" basis, the City will reimburse the Employee for fifty percent (50%) of the costs of required books, tuition and course-related fees, up to a maximum of one thousand dollars ($1,000) per Employee per contract year, and until the tuition reimbursement fund ("the Fund") is depleted,.

An Employee who receives a final grade of "A" will receive full reimbursement for tuition and course-related fees, up to a maximum of one thousand dollars ($1,000) per employee per contract year, until the Fund is depleted. As the Fund is limited, the Academic Incentive contained within this article is available on a first come, first served basis and there shall be no entitlement to reimbursement in accordance with this article if the Fund is depleted.

The City will place three thousand dollars ($3,000) in the Fund each contract year. If a balance remains in the Fund at the end of the contract year, the balance shall carry-over to the following contract year. The City will issue requests for reimbursement consistent with this Article within fourteen (14) calendar days of receipt of proof of grade and itemized receipts, tuition and fees. All courses must be approved in advance, in writing, by the City Manager. Only job-related course work and major fields of study shall receive this benefit.

Section 39.5 Premium Pay. Employees who pick up emergency overtime or agree to hold over their shift on a holiday as defined in Article 25 shall be compensated at a rate of two times their appropriate rate of pay (Double Time) for all hours worked on the holiday, but not less than four (4) hours, except when directly connected to the start or end time of a scheduled shift. This premium pay shall not be eligible to be converted to compensatory time.

ARTICLE 40
MANDATORY TRAINING

Section 40.1. Employees will be given no less than ten (10) days' notice for trainings that are deemed "mandatory." Notices less than ten (10) days will not be subject for discipline if an employee does not attend. Scheduled and approved time off made prior a mandatory training notice are excusable absences. All employees will do their best to attend mandatory trainings. An employee's absence due to unforeseen circumstances may be excused by the Fire Chief. Employees must fill out the "Mandatory Training Absence" form prior the scheduled training and turn it in to the Fire Chief.

ARTICLE 41
EXECUTION

Section 41.1. IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed.

IAFF LOCAL 5272:

_____
Bargaining Team Member

_____
Bargaining Team Member

_____
Bargaining Team Member

_____
IAFF Representative

Dated:_____

FOR THE CITY OF OXFORD:

_____
City Manager

_____
Fire Chief

_____
Law Director

Dated:_____

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45215

STAFF REPORT

ORIGINATING DEPARTMENT:	Parks and Recreation
PREPARED BY:	Casey D. Wooddell
DATE PREPARED:	January 11, 2022
COUNCIL MEETING DATE:	February 1, 2022
AGENDA TITLE:	Resolution to sign a contract with Swim Safe Pool Management Company for the operations of the Oxford Aquatic Center for the 2022 season.
BUDGETED AMOUNT:	n/a
ACCOUNT CODE:	n/a
RECOMMENDATION:	Approve 1-26-22 DRE
CITY MANAGER/DEPT HEAD APPROVAL:	CDW 1/11/2022

DISCUSSION:

Oxford Parks and Recreation Department (OPRD) advertised a Request for Proposals (RFP) for the operations of the Oxford Aquatic Center for the 2022 season. Two official proposals were received; one from Cincinnati Pool Management and one from Swim Safe Pool Management Company. Both proposals were very similar in overall costs and services provided.

Cincinnati Pool Management: $126,000
Swim Safe Pool Management: $123,500

The RFP also included an option to submit cost proposals for the operations of the Concessions services and Front Gate admissions, but we are not recommending we proceed with those services for 2022.

Contracting out aquatic operations is a growing trend in the industry, with very successful results for many other Cities and Villages in the state of Ohio. After review from multiple employees, as well as

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the City Manager, Oxford Parks and Recreation is recommending we proceed with a contract for the 2022 season with Swim Safe Pool Management Company.

Swim Safe Pool Management has an excellent reference history, and currently serves 15 other cities, villages or municipalities in the Dayton, Cincinnati and Columbus regions.

Swim Safe has proven to be a professional, reliable and highly recommended company. It is locally owned and operated, employs a robust staff of full-time, year-round employees, and possesses the knowledge and skills necessary to operate a successful Aquatic Center for the City of Oxford.

The benefits of contracting the aquatic services includes, but is not limited to; potential cost savings, reduction in human resources time, enhanced training services, greater number of available lifeguards, dedicated maintenance and repair personnel, reduced City of Oxford staff time, network of professionals available as needed, professional recommendations on capital improvement needs and forecasts, and reduced liability.

Contracting these services allows OPRD staff to redirect time towards achieving other important tasks during the summer months, including enhanced recreation opportunities for underprivileged communities as well as economic impact events to support local businesses. Additionally, OPRD staff will be able to dedicate more time to focus on the existing summer camp operations and evaluate the potential of new events or programs for the summer months.

Oxford Parks and Recreation is requesting City Council support the City Manager entering into a contract with Swim Safe Pool Management to provide Aquatic Operations Services for the 2022 season.

RESOLUTION NO.

A RESOLUTION ACCEPTING THE PROPOSAL AND AUTHORIZING THE CITY MANAGER TO ENTER INTO AN AGREEMENT WITH SWIM SAFE POOL MANAGEMENT COMPANY FOR THE OPERATIONS OF THE OXFORD AQUATIC CENTER FOR THE 2022 SEASON.

WHEREAS, a request for bids was published in the *Journal News* and on December 10, 2021 and on December 17, 2021. Sealed proposals were opened and read aloud with two firms submitting bids; and

WHEREAS, the City Manager and the Parks and Recreation Director recommend Council accept the proposal and authorize the City Manager to enter into an agreement with Swim Safe Pool Management Company for the operations of the Oxford Aquatic Center for the 2022 season for a total cost not to exceed $123,500.00.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY RESOLVES THAT:

SECTION 1: Council accepts the recommendation of the City Manager and the Parks and Recreation Director and accepts the proposal of Swim Safe Pool Management Company for the operations of the Oxford Aquatic Center for a total cost not to exceed $123,500.00.

SECTION 2: Council further authorizes the City Manager to enter into a one year agreement with Swim Safe Pool Management Company for the operations of the Oxford Aquatic Center for a total cost not to exceed $123,500.00. The agreement will be in substantially the same form as Exhibit "A".

SECTION 3: This resolution shall take effect at the earliest date allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

SWIMMING POOL MANAGEMENT AND MAINTENANCE AGREEMENT

This Swimming Pool Management and Maintenance Agreement (the "Agreement") is made and entered into on this _____day of February, 2022 (the Effective Date") by and between **SWIMSAFE POOL MANAGEMENT, INC.** ("SSPM"), an Ohio Corporation, and **CITY OF OXFORD** ("Client").

PURPOSE OF AGREEMENT

SSPM is in the business of managing, operating and servicing community swimming pools and pool areas.

Client is a municipality that owns and operates a community swimming pool and related fixtures, amenities and equipment (the "Pool") for its residents and their guests (collectively, the "Members") and is seeking to retain SSPM to provide pool management, maintenance, operation and related services on its behalf at the Pool.

The purpose of this Agreement is to state the terms and conditions under which SSPM proposes to and will provide Client Pool management, maintenance, operation and other reasonably related services as defined within this Agreement (the "Services").

In consideration of the mutual covenants set forth below, the parties agree as follows:

1. PROPOSAL EXPIRATION OPTION

(a) This document is an offer by SSPM to Client to provide management, maintenance, operation and related services at Client's Pool. The parties agree that, until executed by Client and delivered to SSPM, SSPM shall have no obligation under this Agreement. This offer will lapse if not executed by the Client and returned to SSPM **by the 4th day of February 2022.** By executing this Agreement, Client agrees that the terms and provisions of this Agreement will become binding upon it and this Agreement will be in full effect for the Term as stated in Section 3(a).

2. COMPENSATION; PAYMENT SCHEDULE AND FEES

(a) Client shall pay SSPM a fee for the Services provided during the Term in an amount equal to **$123,500.00** and Client will pay this amount in accordance with the schedule set out in Exhibit "A."

(b) All SSPM invoices shall be paid in full by Client within thirty (30) days from the invoice date. SSPM shall invoice Client once per month for all services and expenses incurred during the month. Payment of fees for each month to be due on the first day of the month as set forth in exhibit "A". Time is of the essence in paying all invoices submitted by SSPM. If Client fails to pay in full any invoice within thirty (30) days from the invoice date an initial late charge of two percent (2%) of the invoice amount will be charged and any unpaid amounts will accrue interest at the annual percentage rate of ten percent (10%) until paid, or if any amounts remain unpaid after 30 days, SSPM may suspend services, cancel this contract, or terminate all Services immediately and pursue collection of all unpaid amounts. The remedies provided for in this paragraph are cumulative, in addition to any rights existing at law or equity, and shall not limit or create any obligation for election of same.

3. TERM OF AGREEMENT

(a) This Agreement shall commence on the 1st day of February 2022 and terminate on the 31st day of December, 2022 (the "Term"). SSPM and Client may terminate this Agreement at any time by mutual written agreement upon such terms as shall be set forth in such termination.

(b) This agreement may be renewed, by mutual written agreement between SSPM and client by November 15th of the current year, for 1 year terms, with any revisions noted in written agreement. Any renewal agreements will become a binding part of this agreement.

4. SCOPE OF SSPM SERVICES

(a) SSPM shall provide Client management, maintenance, operation and related services as described in this section (the "Services"). The parties may mutually agree to amend or modify the Services during the Term or any Extended Period to include additional Services or exclude unnecessary Services by doing so in writing.

(b) Water Quality: Pool water will be maintained at the customary level of sanitation and chemistry by monitoring and maintaining the Pool's pH, alkalinity, calcium hardness and stabilizer within the following parameters:

1)FREE CHLORINE 1.0 TO 3.0 PPM
2)PH 7.2 TO 7.8
3)TOTAL ALKALINITY 80 TO 120 PPM
4)CALCIUM HARDNESS 200 TO 300 PPM

5)CYANURIC ACID LESS THAN 50 PPM

Pool water will be tested during all safety breaks, when the lifeguards are on duty, and the test results will be recorded in the Pool's daily log;

(c)**OFF-SEASON SERVICES**

After the swim season, SSPM will complete the following services:

(a) thorough cleaning of bathhouse, mechanical/pump rooms, guard rooms and storage areas
(b) stacking and storing all Pool furniture
(c) police grounds for leftover litter
(d) secure/store chairs, guard chairs, ladders, diving boards, tables, umbrellas, and all moveable pool items
(e) winterize all circulation equipment; for all pools, and all components at swimming pool, i.e., toilets/showers/pools, water heaters, drinking fountains, wash basins, hot water heaters, and pool heater (boiler)

(d)**PRE-SEASON SERVICES**

SSPM will prepare the Pool prior to the Swim-Season as reasonably required by completing the following Services including, without limitation:

(a) drain and clean all pools
(b) check pool water chemistry and make necessary adjustments to assure proper water quality
(c) clean, organize, and place furniture around pool; including lifeguard chairs, benches, concession tables, etc.
(d) clean pool area inside and around fence
(e) clean and stock bathhouse, manager's office, lifeguard room (including refrigerator and lockers), basement, including scrubbing all floors with appropriate cleaners, washing down walls and cleaning all toilet facilities, and waxing all porcelain with a paste wax
(f) restock all maintenance supplies, office supplies
(g) inventory and restock safety equipment, such as MSDS sheets, first aid supplies, and lifeguard equipment
(h) schedule and pass local health department inspection
(i) Clean and wax the slide and clean/polishing stainless steel gutters
(j) stocking adequate quality and quantity of pool water sanitation chemicals, for the entire pool season(s) and facility, at SSPM's cost.
(k)install diving boards, chemical feeders, shade umbrellas and all other removable items at the facility
(l) meet with City representatives for training on areas mentioned in the RFP
(m) train staff on all facility systems, including meeting with city representatives and EMS to discuss emergency action plans and other protocol
(n) implement pool rules, policies, facility schedules

(e) **SWIM-SEASON SERVICES**

The Swim-Season will begin when the pool is open on Memorial day weekend of each year. During the Swim-Season, SSPM will reasonably maintain and operate the Pool by completing the following daily Services:

(a) remove on a daily basis, all trash, garbage and debris from the swimming pool area. Client responsible for weekday cleaning of bathrooms and other areas of the Pool
(b) Place all trash, garbage and debris generated by the pool operation in a trash container
(c) The manager's room and lifeguard room shall be kept, **at all times**, clean and neat in appearance
(d) maintain Water Quality of the Pool in accordance with all applicable governmental rules and regulations
(e) skim water surface to remove floating matter and clean skimmer baskets or gutters as necessary, but at least once a day
(f) brush walls of swimming Pool, as needed
(g) clean gutters and scum line in the Pool
(h) manually vacuum entire Pool (s) at least once weekly, and use automatic vacuum system daily
(i) check pumps, strainers, and filters daily
(j) clean Pool, empty trash containers and place trash on curb or in dumpsters for pickup on days designated by the City of Oxford
(k) clean and maintain restrooms daily
(l) clean and maintain guardroom, chemical room, and pump room daily
(m)maintain and store in their location all safety and maintenance equipment
(n) organize and keep Pool furniture clean and orderly
(o) enforce Pool rules and regulations
(p) clean (including umbrella/table care) of the exterior concession
(q) use power washer daily to clean deck and algae areas
(r) preparing the Pool area for home swim meets during the season
(s) maintain and organize lost and found
(t) deposit daily, all money collected from the pool operation, with the City of Oxford
(u) inspect facility using safety checklist daily
(v) use a method devised by Oxford to keep track of daily attendance; and
(w) all completed Swim Season Duties will be recorded daily in the Pool's log.

(f) **COVID-19 PROTOCOLS**

SSPM will follow current CDC guidelines, state/local health department and City of Oxford requirements for the handling of Covid-19 during the term of this agreement.

5. CLIENT'S RESPONSIBILITIES AND OBLIGATIONS

(a) Cooperation: In order for SSPM to provide the level and quality of Services under this Agreement as expected by Client, SSPM will expect the unconditional and full cooperation of Client. Client therefore agrees to: 1) make available to SSPM personnel access to the Client's Pool facilities as necessary to provide Services; 2) respond to all reasonable requests of SSPM to facilitate performance of the Services; 3) provide good faith cooperation reasonably necessary for SSPM to perform the Services; and 4) comply with all governmental rules and regulations applicable to the Pool.

(b) Client will comply with or provide and maintain the following as the case may be: 1) an approved chemical circulation system to maintain Pool chemistry and Water Quality; 2) a working telephone at the Pool; 3) post all Pool rules and regulations in a conspicuous place and manner; 4) support SSPM in the enforcement of all Pool rules and regulations, which enforcement includes temporary or permanent expulsion from the Pool of any individual who fails to comply with a Pool rule or regulation; 5) deliver a copy of all Pool rules, regulations and guest policies to each Member; 6) all Pool enclosures, fences and gates adjacent to or comprising the Pool area pursuant to all applicable governmental rules and regulations; 7) three (3) sets of keys to all doors and gates; 8) shall provide and maintain the Pool and accessory structures in a safe and reasonable condition and shall foster a safe and cooperative working environment for SSPM's employees during and after regular Pool hours of operation; and 9) at Client's expense, all utilities, telephone service, water, and trash collection.

6. SCHEDULE AND STAFFING

(a) SSPM will provide lifeguards and other personnel as reasonably required to operate the Pool in accordance with the Pool schedules, hours of operation, and staffing requirements as shown on Exhibit "B." Client agrees to not open the Pool outside of the time periods as stated in Exhibit "B." Client further agrees to reimburse SSPM for all additional expenses SSPM incurs to operate or maintain the Pool due to or caused by Client allowing the use of the Pool outside the hours of operation as stated on Exhibit "B."

(b) Adult Swim:Once every hour the Pool will be cleared for a period of fifteen (15) minutes for an adult swim, other than the final hour of the day.

(c) Amendment or Modification:Pool schedules, hours of operation, or staffing requirements may be amended or modified upon the mutual agreement of the parties. Any amendment or modification will be in writing, signed by both parties and attached as an addendum to this Agreement and incorporated into this Agreement with full affect. The parties agree that any amendment or modification will be in accordance with the additional fees or itemized fees as shown on Exhibit "A", if applicable, or at a mutually agreed to fee or charge taking into consideration SSPM's costs or expenses for implementing the amendments or modifications. Any additional

fees or charges will be invoiced to Client as incurred on a monthly basis pursuant to Section 2 of this Agreement.

7. POOL CLOSING

(a) SSPM may close the Pool in an emergency, because of any failure or threatened failure of Pool equipment or for other unforeseen causes outside SSPM's control. The date on which the Pool is closed for any reason under this section will be the Pool Closing Date. The Pool may be closed by SSPM for the following:

(1) Emergency Closing: SSPM reserves the right to close the Pool if, in SSPM's personnel's reasonable belief, there is a threat to the safety or welfare of Members which may result from (without limitation): inclement weather, such as thunder, lighting, heavy rain or wind, or hazardous weather advisories, or contamination. SSPM personnel will reasonably attempt to contact Client's Representative if it is necessary to close the Pool early.

(2) Breakdown and Repair of Pool: In SSPM's best judgment, SSPM reserves the right to close the Pool due to a breakdown of the Pool including, without limitation, the Pool: 1) is inoperable for whatever reason; 2) requires repairs that must be performed during Pool hours of operation; 3) must be drained of water, or 4) requires Servicing after a Breakdown or Repair.

(b) In the event of a Pool Closing, the parties agree that there shall not be any cause for the amendment or modification of this Agreement and SSPM will not refund any amounts of compensation paid by Client because of a Pool Closing, except as allowed in Section C below.

(c) Should a time lapse of more than three (3) days from the Pool Closing Date be necessary to perform repairs and/or restore the Pool to normal operations, beginning on the fourth (4th) day, SSPM shall refund to Client $85.00 per scheduled operational hour as described in Exhibit "B." If the Pool is not opened for normal operation within twenty-eight (28) days after the Pool Closing Date the Client may cancel this Agreement by giving seven (7) days advance written notice to SSPM after the twenty-eighth (28th) day.

8. SSPM PERSONNEL

(a) All personnel who will work at the Pool under the terms of this Agreement shall be employees of SSPM, and not independent contractors. SSPM will pay the following for SSPM's employees:

1. Wages
2. Income tax withholdings
3. Social security withholdings
4. State unemployment insurance
5. Federal unemployment insurance

6. Workmen's Compensation insurance

(b) Personnel Approval or Dismissal: All personnel will be trained by SSPM in accordance with Client's requirements, and Client acknowledges that SSPM personnel are hired, trained and placed at the Pool in accordance with Client's needs and standards. Client may, in good faith, request the dismissal from employment at the Pool of any personnel that provides Services at the Pool; however, Client's request of dismissal must be reasonable. If Client wishes to exercise its right to request the dismissal any of SSPM's personnel, Client will give forty-eight (48) hours advance written notice to SSPM of its request, and will allow SSPM to independently determine the basis of Client's request.

(c) Certification: All lifeguards employed by SSPM shall have current StarGuard Lifeguarding, CPR for the Professional Rescuer, and First Aid Certificates, or equivalent Lifeguard Training Certificates as stated by the Ohio Board of Health, such as American Red Cross, YMCA, Ellis and Associates or Boy Scouts of America.

(d) Identification: Lifeguards will wear identification at all times. Such identification shall be in the form of a swimsuit or t-shirt displaying SSPM's name and/or logo.

(e) Authority: To create a safe and enjoyable swimming experience, Lifeguards shall have the authority to discipline all individuals, including expulsion, who use the Pool and will do so within the Lifeguards' best judgment and sole discretion and will be consistent with all published and posted rules of the Pool and minimum safety standards. Client agrees to support Lifeguards in enforcing the Pool rules and regulations to provide a safe swimming environment.

9. ADDITIONAL FACILITIES

(a)Client acknowledges that the parking lot, playground, or any other property or facilities furnished by Client to its Members not under the direct supervisions of SSPM personnel shall be beyond the parties' intended scope of services to be provided by SSPM.

(b)In no event shall SSPM be liable to any party for any loss or claim arising from any injury or other event or occurrence which takes place in any area not directly supervised by SSPM personnel

10. REPAIRS AND EQUIPMENT

(a)SSPM will supply all necessary personnel and chemicals to provide Services. Because equipment breakdowns cannot always be foreseen, Client agrees that any materials and repairs necessary for the proper operation of the Pool, which are outside the scope of SSPM's Services, shall be charged to Client. SSPM assumes no liability or responsibility for Water Quality or Pool maintenance due to inclement weather, breakdowns of Client's Pool, during periods of repair, or other unforeseen

reasons causing damage to the Pool, and SSPM shall not be responsible or liable to Client for a Pool Closing due to a Breakdown or Repair. SSPM will maintain Water Quality by balancing all readings of chemicals to a proper and safe level for swimmers within a reasonable time once repairs have been completed. Should additional services or chemicals be needed to restore the Pool to pre-construction condition, the cost of these services and chemicals will be charged to the Client. SSPM may close the Pool under this Section and Section 7 (Pool Closing) of this Agreement shall apply.

(b) SSPM shall have authority to replace, repair or obtain the services of third parties to replace or repair Pool equipment for all repairs that are equal to or less than $150.00 without the prior approval of Client. Such items will be billed separately to Client. Client must provide written approval for any repair expected to cost more than $150.00, except when repairs are immediately required to prevent further damage to the Pool or when SSPM reasonably believes there is an immediate need or emergency situation, or SSPM is unable to reasonably contact Client's Representative.

(c) Any repairs required as the result of SSPM's negligence shall be done at SSPM's expense.

11. DAMAGES DUE TO VANDALISM, WEATHER, AND ACTS OF GOD

(a) SSPM shall not be responsible for any vandalism or mischief, inclement weather or Acts of God which cause damage to the Pool or related facilities, and SSPM shall not be responsible for any additional expenses to restore Pool to working order. SSPM shall report any incidents of vandalism or mischief, or damages caused by inclement weather or Acts of God to Client's Representative prior to undertaking any repairs.

(b) In the event of vandalism or mischief, inclement weather, or Acts of God, SSPM personnel will take steps reasonably necessary to prevent damage to the Pool, but assumes no duty or responsibility for any failure to prevent damage and shall not be held responsible for any damages.

12. CHEMICAL AND MAINTENANCE SUPPLIES

(a) SSPM will provide Pool chemicals including **chlorine tablets, liquid chlorine, muratic acid, stabilizers, calcium chloride, soda ash, soda bicarbonate, pool tile cleaner and reagents** and other chemicals needed for normal Pool operation and to maintain Water Quality in a safe and sanitary manner.

(b) SSPM will provide miscellaneous cleaning and operating supplies including pool test equipment, Blood-borne pathogens kit, First aid kit (meeting OSHA standards), mops, brooms, dust pan and restroom cleaning materials.

(c) Any other supplies not specifically set forth in this section to be used at the Pool through the term of this Agreement shall be furnished by Client or at Client's

expense, including but not limited to toilet paper, paper towels, light bulbs, trash bags, hand soap, air fresheners, etc.

13. CLIENT SAFETY AND MAINTENANCE EQUIPMENT

Client shall provide, prior to Pre-Season or in a timely manner if requested by SSPM, at no cost to SSPM, the following equipment:

(a)**Safety Equipment**

Rescue tube (one per lifeguard)
Backboard with appropriate securing material (3 straps/head immobilizer)
Lifeguard Stands
Umbrellas for Lifeguard Stands (one per stand)
Ring Buoy and Line
Shepherds Crook
Fiberglass Reach Pole
Fire extinguisher
Goggles
Rubber gloves

(b)**Maintenance Equipment and Supplies**

12' – 24' extension pole
Commercial vacuum head
Leaf eater with fine mesh bag
50' commercial 1-1/2" vacuum hose
12" or longer nylon brush
12" or longer stainless steel bristle brush
clock
commercial skimmer net
garden hose and nozzle
deck squeegee
trash receptacles (with lids)

14. SWIMMING LESSONS

(a) SSPM can provide swimming lessons at the Pool as directed by Client. All swimming lessons offered by SSPM shall be held outside the normal hours of Pool Operation as listed on Exhibit "B." Swimming lessons will not interfere with the Services SSPM has agreed to provide under this Agreement.

(c) Group lessons will be available on the basis of six (6) classes of thirty to forty-five (30-45) minutes each (a "Session").

(d) Group Swim Lessons Rate per session should the City decide to offer lessons. One session equals six 30-45 minute sessions. To be billed separately at $250.00 Flat rate per 6 sessions of 30-45 minutes for Manager and 3 Lifeguards and an additional $90.00 per six session class taught.

15. INSURANCE

(a) Client and SSPM shall maintain applicable insurance coverage through the Term of this Agreement and during all Extended Periods, and shall promptly provide upon the execution of this Agreement, evidence that any and all such coverage is in full force and effect, and acknowledgement by such insurance carriers that thirty (30) days advance written notice shall be given if any policy or coverage is to be changed or cancelled prior to its expiration date.

(b) SSPM shall provide the following:

1) Worker's compensation insurance covering all personnel SSPM employs to provide Services under the Agreement;
2) General Liability Insurance in the amount of $10,000,000;

(c) The Client shall maintain the following:

1) Premises liability insurance; and
2) Comprehensive general liability insurance in the amount of $1,000,000 each accident and $1,000,000 each person.

16. INDEMNIFICATION

(a) The SSPM shall indemnify, defend and hold harmless the Client and its officers, directors, members, employees and agents from any and all claims, suits, actions, demands, judgments, court costs, attorney fees, and expenses for damages or injuries to person (including loss of life) and property occurring on or about the Pool or the Pool area and arising through or on account of any act of negligence or intentional act or omission by SSPM or its agents or employees.

(b) To the extent permitted by law, the Client shall indemnify, defend and hold harmless the SSPM and its officers, directors, members, employees and agents from any and all claims, suits, actions, demands, judgments, court costs, attorney fees and expenses for damages or injuries to person (including loss of life) and property occurring on or about the Pool or the Pool area and arising through or on account of any act of negligence or intentional act or omission by the Client or its agents or employees.

17. NOTICES

All notices required or permitted under this Agreement shall be deemed given if delivered personally or if mailed by certified mail, return receipt requested, to the address set forth below. Delivery shall be deemed satisfactorily made if such notice is actually received by mail or private courier at such address. If a party changes such address, such party shall notify the other party of it by the notice procedures of this paragraph.

SSPM: **SWIMSAFE POOL MANAGEMENT, INC.**
107 Commerce Drive
Loveland, OH 45140
(513) 755-7075

Client: **NAME:**_____

ADDRESS:_____

TELEPHONE NO.:_____

Each party's designated representative for day-to-day operations and in case of emergencies shall be:

SSPM's Representatives:

Name: Cary Belyea

Phone No.: 513-505-0938

Client's Representative:

Name: _____

Address: _____

Phone No.:_____

18. ENTIRE AGREEMENT, MODIFICATION AND EFFECT

This agreement constitutes the entire agreement of the parties and supersedes all prior agreements, relationships or negotiations, written or oral. This Agreement may not be modified or amended unless the parties give mutual written consent. This Agreement shall be binding upon and inure to the benefit of SSPM and Client and to their respective successor and assigns.

19. GOVERNING LAW

This Agreement shall be construed and enforced in accordance with the laws of the State of Ohio.

20. SERVERABILITY

If a Court of competent jurisdiction invalidates or finds any one or more of the provisions of this Agreement is unenforceable it shall in no way affect any of the other provisions hereof, which shall remain in full force and effect.

21. CAPTIONS/ HEADINGS

The captions or headings of this Agreement are for convenience of reference only, and in no way define, describe, extend or limit the scope or intent of this Agreement or the meaning or intent of any provision hereof.

22. WAIVER

The failure of either party to enforce or require performance of any provision in the Agreement shall not operate as a waiver or affect the right of the party to enforce any provision at a later date. Any delay or accommodation of SSPM in the collection of any amounts due under this Agreement, or any amendments or modifications, shall not be a waiver of SSPM's rights to demand payment of any amounts owed by Client under this Agreement.

23. PROVISION FOR CHANGES IN FEDERAL LAW

If Federal Law raises the minimum wage above the Ohio Minimum Wage (which adjusts annually for normal cost of living), or the State of Ohio adjust its minimum wage by more than 3 percent (3%), during the period of the contract, SSPM will present these additional cost to the Client. The Client, at its sole discretion may accept the additional costs, negotiate with SSPM on additional costs acceptable to both parties, or cancel this agreement.

24. OPTION IN THE EVENT OF COST INCREASE(S)

If there is an increase of ten percent (10%) or more in any costs (including necessary wages paid to pool staff, chemicals, supplies, etc.) related to this Agreement, SSPM may present to Client a reasonable increase in the price of this Agreement based solely on SSPM's additional costs for providing the services stated herein. The Client, at its sole discretion, may accept the additional costs, negotiate with SSPM on additional costs acceptable to both parties, or cancel this agreement 30 days from the proposed increase.

EXHIBITS

Exhibit "A" - Fee Schedule

Exhibit "B" - Pool Schedule, Hours of Operation, Staffing and Pool Parties

CITY OF OXFORD **SWIMSAFE POOL MANAGEMENT**

_____ _____

Options for Lifeguard Wages (initial one selection):

_____This agreement includes a Minimum Lifeguard wage of $10.00 per hour, at no additional cost to Client.

_____Client elects to have SSPM pay a Minimum Lifeguard wage of $11.00 per hour at an additional cost of $9,785.00, which will be added by proration to the payment schedule in Exhibit "A"

_____Client elects to have SSPM pay a Minimum Lifeguard wage of $12.00 per hour at an additional cost of $19,570.00, which will be added by proration to the payment schedule in Exhibit "A"

EXHIBIT "A"

Fees and Payment Schedule

CITY OF OXFORD

YEAR 2022

Month	Monthly Total
January	$0.00
February	$0.00
March	$0.00
April	$12,350.00
May	$18,525.00
June	$24,700.00
July	$24,700.00
August	$24,700.00
September	$18,525.00
October	$.00
November	$.00
December	$.00
	Total $123,500.00

Hourly Adjustment rate to Client should Client choose to shorten/reduce hours or shorten/reduce staff on any particular day. Example: low or no attendance at the pool or "inclement weather" in the area is $85.00 per hour.

Group Swim Lessons Rate per session should the Client decide to offer lessons. One session equals six 30-45 minute sessions. To be billed separately at $250.00 Flat rate per 6 sessions of 30-45 minutes for Manager and 3 Lifeguards and an additional $90.00 per six session class taught.

Hours Adjustment rate to SSPM should Client choose to extend hours on any particular day. Example: a special event at the pool extends beyond normal hours of operation is $20.00 per lifeguard hour, $25.00 per manager hour.

EXHIBIT "B"

Pool Schedule, Hours of Operation, and Staffing

DATES OF OPERATION:

May 28, 2022 through September 5, 2022
Weekends only after 2nd weekend in August.

HOURS OF OPERATION:

Saturday	11:00 a.m. to 6:00 p.m.
Sunday	12:00 p.m. to 5:00 p.m.
Monday	12:00 p.m. to 7:00 p.m.
Tuesday	12:00 p.m. to 7:00 p.m.
Wednesday	12:00 p.m. to 7:00 p.m.
Thursday	12:00 p.m. to 7:00 p.m.
Friday	12:00 p.m. to 7:00 p.m.

STAFFING:

- **Oversight:** Cary Belyea, Founder and CEO will be involved in the daily operation and oversight of this Agreement.

- **Supervision:** The pool staff will be supervised by Shane Wiggins, General Manager of Cincinnati managed Pools, and other personnel with a minimum of five (5) visits per week, to ensure the performance of the staff., Shane Wiggins and SSPM will be available 24/7 for emergency response.

- **Pool Manager:** One (1) Pool Manager, Assistant Manager or Head Lifeguard will be on duty during all hours of pool operation, including swim team, swimming lessons and any other event or party. This position will be out of the Lifeguard rotation.

- **Lifeguards:** A minimum of Nine (9) lifeguards will be provided during all hours of operation, including swim team, water aerobics and swim lessons, if offered. Additional lifeguards will be provided to handle busier operational times. Staffing will always exceed the Ohio Department of Health and Industry Standard.

SPECIAL EVENTS AND PROGRAMS:

- July 4th Pool Party – SSPM will provide a 4th of July event at the pool including Games and Prizes.
- Client will schedule Dive In Movie, Teen Party, Back to School Party, End of Season Dog Day and/or any other special events during the swim season. If the special event at the pool extends beyond normal hours of operation, the rate is $20.00 per lifeguard hour and $25.00 per manager hour.

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Police
PREPARED BY:	Chief John Jones
DATE PREPARED:	1/25/2022
COUNCIL MEETING DATE:	2/1/2022
AGENDA TITLE:	Resolution authorizing the acceptance of the Body Worn Camera Grant.
BUDGETED AMOUNT:	
ACCOUNT CODE:	
RECOMMENDATION:	Approve the resolution.
CITY MANAGER/DEPT HEAD APPROVAL:	1-26-22 DRE

DISCUSSION:

In August 2017, the Division of Police entered into a contract with Safariland/VieVu to purchase body worn cameras, associated equipment, data storage, and support. That contract expired in September 2020. The Division was notified in early 2018 that AXON Enterprise, INC. purchased the VieVu brand from Safariland. In September 2019 the Division was notified that the VieVu camera we used would no longer be supported by AXON and a migration to their platform with new technology would be necessary. In May 2021, City Council authorized a contract with Axon to purchase BWCs, associated equipment, data storage and support for an annual cost of $26,708.44. As staff worked to implement the program, we found additional product add-ons that would improve the efficiency and effectiveness of the BWC program and City Council approved an amended contract with Axon, bringing the annual contract cost to $35,000.

Governor Dewine prioritized the creation of the new Ohio Body Worn Camera Grant Program in the state's 2022-2023 operation budget that was passed by the Ohio General Assembly in June 2021. In October 2021, the Division of Police applied for the Body Worn Camera Grant with the goal of reimbursing the general fund money that was used last year to pay for our transition from VieVu to AXON body worn cameras. On Monday, January 24, 2022, Governor Dewine's office announced grant funding awards for 109 local law enforcement agencies. The Oxford Division of Police was awarded $31,451.38 in grant funding. This resolution authorizes the acceptance of the grant.

RESOLUTION NO.

AUTHORIZING THE CITY MANAGER TO ACCEPT THE OHIO BODY WORN CAMERA GRANT IN AN AMOUNT NOT TO EXCEED $31,451.38.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF OXFORD, BUTLER COUNTY, STATE OF OHIO, THAT:

SECTION 1: The City Manager and the Police Chief recommend the City Manager be authorized to accept the Ohio Bureau of Workers' Compensation Safety Grant in an amount not to exceed $31,451.38

SECTION 2: The City Manager is hereby authorized to accept the Ohio Bureau of Workers' Compensation Safety Grant in an amount not to exceed $31,451.38

SECTION 4: This resolution shall take effect at the earliest date allowed by law.

MAYOR

ADOPTED:

ATTEST:

CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW(STAFF)

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Service Department
PREPARED BY:	Michael Dreisbach
DATE PREPARED:	December 27, 2021
COUNCIL MEETING DATE:	**February 1, 2022**
AGENDA TITLE:	Ordinance Accepting A Utility Easement from Rams Holdings, Ltd., LLC
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	N/A
RECOMMENDATION:	Approve DRE 1-26-22
CITY MANAGER/DEPT HEAD APPROVAL:	MBD 1/13/22

Discussion:

In the area of Lake Forest Dr. off of Millville-Oxford Road, 4-Leaf Development, LLC is planning the construction of a new sanitary sewer to serve the area around this newly constructed street. In order to construct and maintain the proposed sanitary sewer in this area, four easements are required by the City. Three of the easements are to be provided by 4-Leaf Development, LLC. The other easement will be provided by Rams Holdings, Ltd, LLC.

Once the sanitary sewer is constructed by the developers and passes all inspections, it will become part of the City's utility system; these easements will give the City access to the system should future maintenance or repair become necessary.

Staff recommends the City Council authorize the City Manager to sign the Easement Agreements and take all steps necessary to have such recorded with the Butler County Recorder.

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ENTER INTO AN EASEMENT AGREEMENT BETWEEN THE CITY OF OXFORD AND RAMS HOLDINGS LTD., LLC FOR A PERMANENT EASEMENT OVER PORTIONS OF REAL PROPERTY AS SET FORTH IN EXHIBIT "B" ATTACHED HERETO FOR THE CONSTRUCTION AND MAINTENANCE OF A NEW SANITARY SEWER SYSTEM TO SERVE SAID PROPERTY.

WHEREAS, Rams Holdings LTD., LLC is the owner of Lot #3 in the area of Lake Forest Dr. off of Millville Oxford Road (US27); and

WHEREAS, three easements are required for the construction and maintenance of a new sanitary sewer system to serve said property; and

WHEREAS, the City Manager and the Service Director recommend Council authorize the City Manager to enter into an easement agreement between the City of Oxford and Rams Holdings LTD., LLC for a permanent easement over portions of real property as set forth in Exhibit "B" and labeled Exhibit "A" attached hereto for the construction and maintenance of a new sanitary sewer system to serve said property.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY ORDAINS THAT:

SECTION 1: Council hereby accepts the recommendation of the City Manager and the Service Director and further authorizes the City Manager to enter into an easement agreement between the City of Oxford and Rams Holdings LTD., LLC for a permanent easement over portions of real property as set forth in Exhibit "B" attached hereto and labeled Exhibit "A" to allow the construction and maintenance of a new sanitary sewer system to serve said property.

SECTION 2: Council further directs the Clerk of Oxford City Council to cause the same to be recorded with the Butler County, Ohio Recorder's Office.

SECTION 3: This ordinance shall take effect at the earliest time allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

Easement Agreement

In consideration of the sun of one dollar ($1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, Rams Holdings, Ltd., an Ohio limited liability company, with a mailing address of 676 Motex Dr., Naples, FL. 34102 ("Grantor"), hereby grants to the City of Oxford, Ohio, an Ohio municipal corporation, with a mailing address of 15 South College Ave., Oxford, OH 45056, and its successors and assigns (collectively, "Grantee"), a perpetual, nonexclusive easement (the "Easement") in, upon , over, under, through and across the following describe real estate (the "Easement Area"):

See Exhibit A attached hereto and made a part hereof,

to construct, reconstruct, operate, patrol, maintain, repair, replace, add to, modify, and remove underground: (a) sanitary sewer and other utility lines; and (b) appurtenances for those lines for the underground transmission and distribution of utility services, including, but not limited to, all necessary and convenient supporting structure, grounding systems and all other appurtenances, fixtures, and equipment. The items described in clauses (a) and (b) in the preceding sentence are collectively hereinafter referred to as the "Facilities". The Easement Area is located on the following property ("Grantor's Property") owned by Grantor:

See Exhibit B attached hereto and made a part hereof.

This Easement Agreement ("Agreement") shall be subject to the following terms and conditions which shall be binding on Grantor and Grantee, as applicable:

1. Grantee shall have the right of ingress and egress over the Easement Area and a temporary construction easement ("Temporary Construction Easement") over the area of Grantor's Property, not to exceed fifty feet (50 feet) in width, on the side of the Easement Area located on the Grantor's Property (the "Temporary Construction Easement Area"). Grantee shall have the right to use the Temporary Construction Easement Area solely for the purpose of constructing the Facilities and to perform subsequent repair, maintenance, replacement, and modification activities thereon.

2. The use of the Easement Area and the Temporary Construction Easement Area by Grantee, its employees, agents and contractors shall, at all times, comply with this Agreement and all applicable law, rules, and regulations.

3. Grantee shall have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation upon or over the Easement Area. Grantee shall also have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation located in the Temporary Construction Easement Area, but only to the extent such vegetation may endanger, as reasonably determined by Grantee, the safe or reliable operation of the Facilities. All trimming activities shall be performed at the sole cost and expense of Grantee.

4. During those times when Grantee is constructing, reconstructing, maintaining, repairing, replacing, modifying, or removing the Facilities, Grantee shall have the right to temporarily: (a) pile dirt and other material on the Easement Area and the Temporary Construction Easement Area; and (b) operate equipment on the Easement Area or the Temporary Construction Easement Area.

5. Excluding the removal of vegetation and the like provided for in this Agreement, any damage caused by Grantee, its employees, agents and contractors to Grantor's Property shall be promptly repaired or restored, at no cost or expense of Grantor, to a condition which is reasonably close to the condition it was in prior to the damage.

6. Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area in any manner which is consistent with the rights granted herein to Grantee. Grantor shall not, without the prior written consent of Grantee, construct or install, or permit the construction or installation of any above-ground structure upon the Easement Area. Notwithstanding anything to the contrary contained in this Agreement, Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area for ingress and egress purposes and for the construction of ingress and egress improvements [not to exceed three (3) feet in height] thereon.

7. The rights and duties of Grantor and Grantee set forth in this Agreement shall inure to the benefit of and shall be binding upon the respective successors, assigns, heirs, personal representatives, lessees, licensees or tenants of Grantor and Grantee. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

IN WITNESS WHEREOF, Grantor and Grantee have signed this Easement Agreement as of the 8th day of November, 2021.

Rams Holdings, Ltd.

By: _____

City of Oxford, Ohio

Approved as to Form:

_____
City Law Director

By: _____
Douglas R. Elliott, Jr., City Manager

STATE OF Florida, COUNTY OF Collier, SS

before me this 8th day of , by the authorized Member of and on behalf of Rams Holdings, Ltd., an Ohio limited liability company.

No

My
Bonded through National Notary Assn.

Notary ic

STATE OF OHIO, COUNTY OF BUTLER, SS:

The foregoing instrument was acknowledged before me this _____ day of 2021, by Douglas R. Elliott, Jr., the City Manager of the City of Oxford, an Ohio municipal corporation, on behalf of the municipal corporation.

Notary Public

MILLIKIN & FITTON LAW FIRM
A Legal Professional Association
Hamilton, Ohio

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EXHIBIT A

Date: October 13, 2021

Description: Part of Lot #3
Sanitary Sewer Easement

Location: Oxford Township,
Butler County, Ohio

Situated in the State of Ohio, Congress Lands West of the Miami River, Part of Lot #3, Section 36, Town 5, Range 1, Oxford Township, Butler County and being a Thirty (30) Foot Sanitary Sewer Easement in part of Lot #3 of said Section 36 and being in part of the lands of Rams Holdings, Ltd. (25.00 Ac.) as recorded in Official Record 9516, Page 1759 of the Butler County, Ohio Recorder's Office and taken Fifteen (15) Feet evenly off of the following described centerline:

Commencing at the southeast corner of part of Lot #3716 of the designated list of lots in the City of Oxford and being part of the lands of 4-Leaf Development, LLC (105.820 Ac.) of the Butler County, Ohio Recorder's Office; thence, with the easterly boundary of said part of Lot #3716, North 02° 38' 43" East, 1274.31 feet to the **True Point of Beginning;**

thence, leaving the easterly boundary of said part of Lot #3716 and through said part of Lot #3 of said lands of Rams Holdings, Ltd. (25.00 Ac.) for the following four courses:

1) North 82° 57' 47" East, 15.45 feet;
2) North 26° 35' 05" East, 392.67 feet;
3) South 71° 11' 25" East, 290.76 feet;
4) North 29° 32' 27" East, 158.45 feet to its terminus and being on the northerly boundary of said lands of Rams Holdings, Ltd. (25.00 Ac.). The lines of said strip to be shortened or lengthened to the westerly and northerly boundary of said lands of Rams Holdings, Ltd. (25.00 Ac.).

Also subject to a Fifty (50) Foot Temporary Construction Easement and taken Twenty-Five (25) Feet evenly off of, parallel and adjacent to the above described centerline. The lines of said strip to be shortened or lengthened to the westerly and northerly boundary of said lands of Rams Holdings, Ltd. (25.00 Ac.).

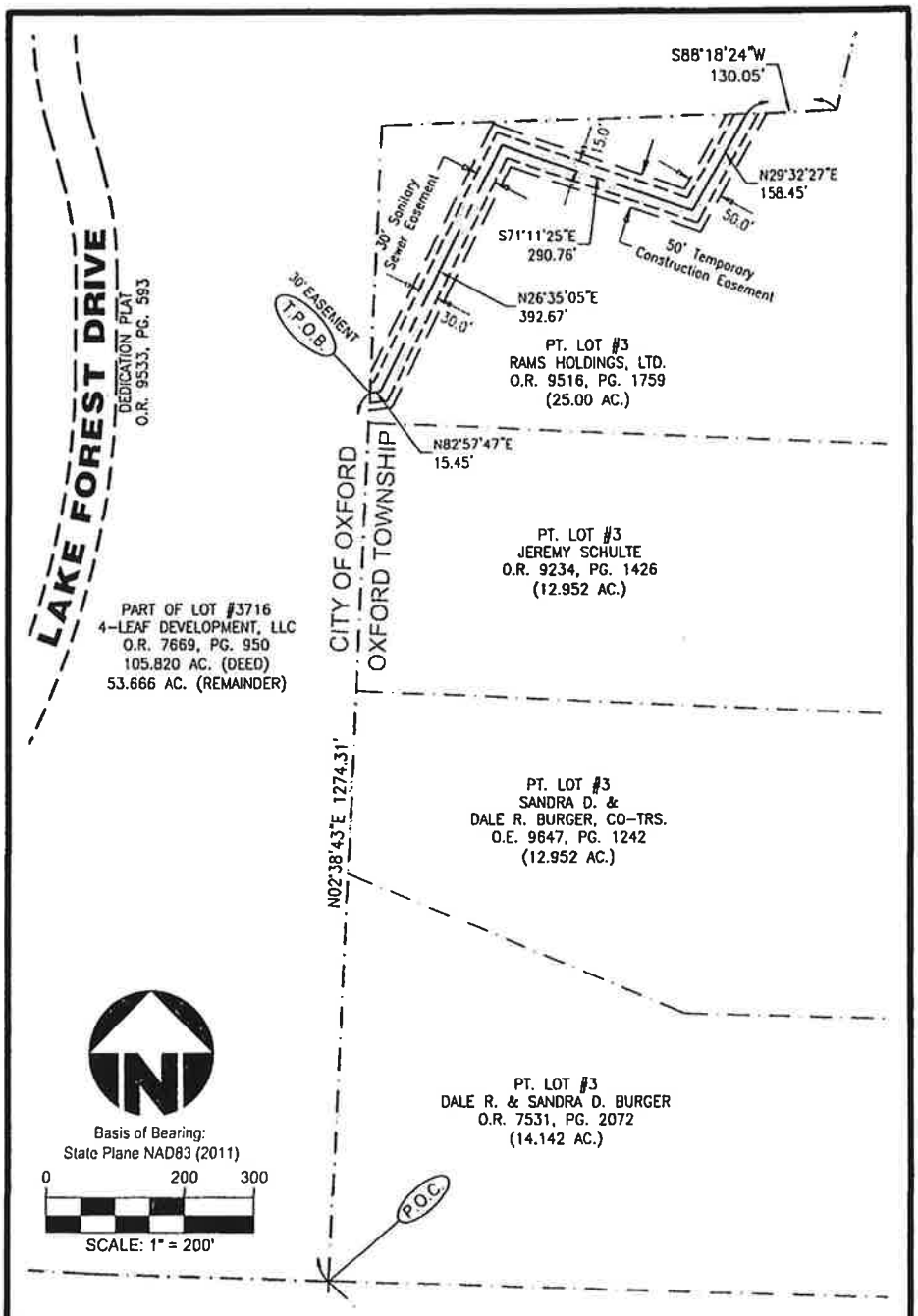
The above description was prepared from an exhibit prepared by Bayer Becker, Brian R. Johnson, Professional Surveyor #8484 in the State of Ohio, October 13, 2021.

Exhibit B

Being part of Lot Numbered 3, Section 36, Town 5, Range 1 East in oxford Township, Butler County, Ohio and being bounded and described a follows:

Beginning at a point in the east line of said Lot Numbered 3, located 1212.71 feet north of the southeast corner of said Lot Numbered 3; then North 89 degrees, 44 minutes West 1425.80 feet to a point in the grantor's west line; thence North 0 degrees, 23 minutes 3 seconds East 425.47 feet; thence North 86 degrees 07 minutes East 658.35 feet to a point in Lick Run; thence North 12 degrees, 16 minutes East 189.75 feet; thence North 30 degrees fifty nine minutes East 363.00 feet; thence North 61 degrees 51 minutes East 429.00 feet; thence North 35 degrees 16 minutes East 297.00 feet to a point in said east line; thence South 0 degrees 16 minutes West along said west line 1421.16 feet to the point of beginning, containing 25.00 acres, more or less and subject to the legal right-of-way of Woodruff Road as recorded in the Butler County Road record Book H, Page 178, and any other easements of record. Also being recorded in Butler County Land Survey Records, Volume 8, Page 162.

Parcel ID No. H3610-039.000-040
Property Address 4061 Woodruff Road, Oxford, OH 45056



Note: This exhibit was prepared from existing deeds and surveys of record. It does not represent a boundary survey.

Drawing:	16-0158 EX
Scale	1"=200'
Drawn by:	PAH
Checked By:	BRJ
Issue Date:	10-11-21

PART OF LOT #3
RAMS HOLDINGS, LTD.
CONGRESS LANDS WEST OF THE MIAMI RIVER
SECTION 36, TOWN 5, RANGE 1
OXFORD TOWNSHIP
BUTLER COUNTY, OHIO

SANITARY SEWER EXHIBIT

bayer becker
www.bayerbecker.com
110 S. College Avenue, Suite 101
Oxford, OH 45056 - 513.523.4270

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Service Department
PREPARED BY:	Michael Dreisbach
DATE PREPARED:	December 27, 2021
COUNCIL MEETING DATE:	**February 1, 2022**
AGENDA TITLE:	Ordinance Accepting Utility Easements from 4-Leaf Development, LLC.
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	N/A
RECOMMENDATION:	Approve DRE 1-26-22
CITY MANAGER/DEPT HEAD APPROVAL:	MBD 1/13/22

Discussion:

In the area of Lake Forest Dr. off of Millville-Oxford Road, 4-Leaf Development, LLC is planning the construction of a new sanitary sewer to serve the area around this newly constructed street. In order to construct and maintain the proposed sanitary sewer in this area, four easements are required by the City. Three of the easements are to be provided by 4-Leaf Development, LLC. The other easement will be provided by Rams Holdings, Ltd, LLC.

Once the sanitary sewer is constructed by the developers and passes all inspections, it will become part of the City's utility system; these easements will give the City access to the system should future maintenance or repair become necessary.

Staff recommends the City Council authorize the City Manager to sign the Easement Agreements and take all steps necessary to have such recorded with the Butler County Recorder.

Lot 3716

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ENTER INTO AN EASEMENT AGREEMENT BETWEEN THE CITY OF OXFORD AND 4-LEAF DEVELOPMENT, LLC FOR A PERMANENT EASEMENT OVER PORTIONS OF REAL PROPERTY AS SET FORTH IN EXHIBIT "A" ATTACHED HERETO TO ALLOW THE CONSTRUCTION AND MAINTENANCE OF A NEW SANITARY SEWER SYSTEM TO SERVE SAID PROPERTY.

WHEREAS, 4-Leaf Development, LLC is the owner of lot 3716 in the area of Lake Forest Dr. off of Millville Oxford Road (US27); and

WHEREAS, easements are required for the construction and maintenance of a new sanitary sewer system to serve said property; and

WHEREAS, the City Manager and the Service Director recommend Council authorize the City Manager to enter into an easement agreement between the City of Oxford and 4- Leaf Development, LLC for a permanent easement over portions of real property as set forth in Exhibit "B" and labeled Exhibit "A" attached hereto for the construction and maintenance of a new sanitary sewer system to serve said property.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY ORDAINS THAT:

SECTION 1: Council hereby accepts the recommendation of the City Manager and the Service Director and further authorizes the City Manager to enter into an easement agreement between the City of Oxford and 4-Leaf Development, LLC for a permanent easement over portions of real property as set forth in Exhibit "B" attached hereto and labeled Exhibit "A" to allow the construction and maintenance of a new sanitary sewer system to serve said property.

SECTION 2: Council further directs the Clerk of Oxford City Council to cause the same to be recorded with the Butler County, Ohio Recorder's Office.

SECTION 3: This ordinance shall take effect at the earliest time allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

EASEMENT AGREEMENT

In consideration of the sum of One ($1.00) Dollar and other good and valuable consideration, the receipt of which is hereby acknowledged, 4-Leaf Development, LLC, an Ohio limited liability company, LLC, an Ohio limited liability company, with a mailing address of 125 W. Spring Street, Oxford Ohio 45056 ("Grantor"), hereby grants to City of Oxford, Ohio, an Ohio municipal corporation, with a mailing address of 15 South College Ave., Oxford, OH 45056, and its successors and assigns (collectively, "Grantee"), a perpetual, nonexclusive easement (the "Easement") in, upon, over, along, under, through and across the following described real estate (the "Easement Area"):

See Exhibit A attached hereto and made a part hereof,

to construct, reconstruct, operate, patrol, maintain, repair, replace, add to, modify and remove underground: (a) sanitary sewer and other utility lines; and (b) appurtenances for those lines for the underground transmission and distribution of utility services, including, but not limited to, all necessary and convenient supporting structures, grounding systems and all other appurtenances, fixtures and equipment. The items described in clauses (a) and (b) in the preceding sentence are collectively hereinafter referred to as the "Facilities". The Easement Area is located on the following property ("Grantor's Property") owned by Grantor:

See Exhibit B attached hereto and made a part hereof.

This Easement Agreement ("Agreement") shall be subject to the following terms and conditions which shall be binding on Grantor and Grantee, as applicable:

1. Grantee shall have the right of ingress and egress over the Easement Area and a temporary construction easement ("the Temporary Construction Easement") over the area of Grantor's Property, not to exceed ten (10) feet in width, on the side of the Easement Area located on the Grantor's Property (the "Temporary Construction Easement Area"). Grantee shall have the right to use the Temporary Construction Easement Area solely for purposes of constructing the Facilities and to perform subsequent repair, maintenance, replacement and modification activities thereon.

2. The use of the Easement Area and the Temporary Construction Easement Area by Grantee, its employees, agents and contractors shall at all times comply with this Agreement and all applicable law, rules and regulations.

3. Grantee shall have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation upon or over the Easement Area. Grantee shall also have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation located in the Temporary Construction Easement Area, but only to the extent such vegetation may endanger, as reasonably determined by Grantee, the safe or reliable operation of the Facilities. All trimming activities shall be performed at the sole cost and expense of Grantee.

4. During those times when Grantee is constructing, reconstructing, maintaining, repairing, replacing, modifying, or removing the Facilities, Grantee shall have the right to temporarily: (a) pile dirt and other material on the Easement Area and the Temporary Construction Easement Area; and (b) operate equipment on the Easement Area or the Temporary Construction Easement Area.

5. Excluding the removal of vegetation and the like provided for in this Agreement, any damage caused by Grantee, its employees, agents and contractors to Grantor's Property shall be promptly repaired or restored, at no cost or expense of Grantor, to a condition which is reasonably close to the condition it was in prior to the damage.

6. Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area in any manner which is consistent with the rights granted herein to Grantee. Grantor shall not, without the prior written consent of Grantee, construct or install, or permit the construction or installation of any above-ground structure upon the Easement Area. Notwithstanding anything to the contrary contained in this Agreement, Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area for ingress and egress purposes and for the construction of ingress and egress improvements [not to exceed three (3) feet in height] thereon.

7. The rights and duties of Grantor and Grantee set forth in this Agreement shall inure to the benefit of and shall be binding upon the respective successors, assigns, heirs, personal representatives, lessees, licensees or tenants of Grantor and Grantee. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

IN WITNESS WHEREOF, Grantor and Grantee have signed this Easement Agreement as of the ____ day of _____, 2021.

4-Leaf Development, LLC

By: _____

City of Oxford, Ohio

Approved as to Form:

_____
City Law Director

By: _____
Douglas R. Elliott, Jr., City Manager

STATE OF OHIO, COUNTY OF BUTLER, SS:

The foregoing instrument was acknowledged before me this 1 day of December, 2021, by James M. Clawson, the authorized Member of and on behalf of 4-Leaf Development, LLC, an Ohio limited liability company.

Pamela S. Lindley
Notary Public
In and For the State of Ohio
Recorded in Butler County
My Commission Expires
01/27/2022

Pamela S Lindley
Notary Public

STATE OF OHIO, COUNTY OF BUTLER, SS:

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by Douglas R. Elliott, Jr., the City Manager of the City of Oxford, an Ohio municipal corporation, on behalf of the municipal corporation.

_____
Notary Public

MILLIKIN & FITTON LAW FIRM
A Legal Professional Association
Hamilton, Ohio

s:\mason\transactional\cle easements\hds\city oxford 4leaf3718.doc

Exhibit A

Date: October 13, 2021

Description: Part of Lot #3718
Sanitary Sewer Easement

Location: City of Oxford,
Butler County, Ohio

Situated in the State of Ohio, Congress Lands West of the Miami River, Section 25, Town 5, Range 1, City of Oxford, Butler County and being a Thirty (30) Foot Sanitary Sewer Easement in part of Lot #3718 of the designated list of lots in the City of Oxford and being in part of the lands of 4-Leaf Development, LLC (45.159 Ac.) as recorded in Official Record 7662, Page 780 of the Butler County, Ohio Recorder's Office and taken Fifteen (15) Feet evenly off of the following described centerline:

Commencing at the northeast corner of Lot #3710 of said City of Oxford and being the southeast corner of Lot #2022 of said City of Oxford; thence, leaving the northeast corner of said Lot #3710 and with the easterly boundary of said Lot #2022, North 02° 09' 31" East, 549.93 feet to the **True Point of Beginning**;

thence, leaving the easterly boundary of said Lot #2022 and through said part of Lot #3718 for the following six courses:

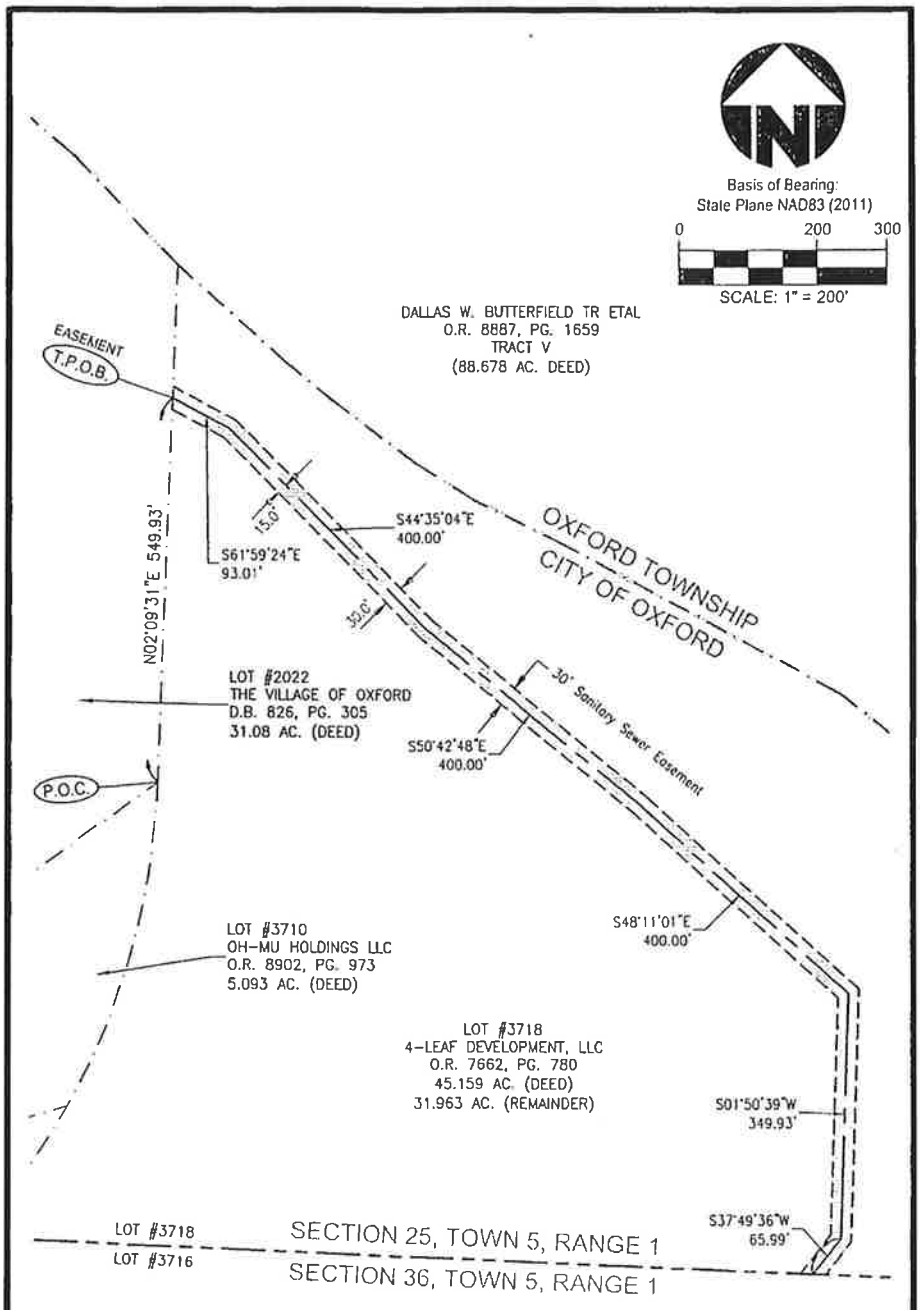
1) South 61° 59' 24" East, 93.01 feet;
2) South 44° 35' 04" East, 400.00 feet;
3) South 50° 42' 48" East, 400.00 feet;
4) South 48° 11' 01" East, 400.00 feet;
5) South 01° 50' 39" West, 349.93 feet;
6) South 37° 49' 36" West, 65.99 feet to its terminus and being on the northerly boundary of part of Lot #3716 of said City of Oxford and the southerly line of said Section 25. The lines of said strip to be shortened or lengthened to the easterly boundary of said Lot #2022 and the northerly boundary of said part of Lot #3716 and the southerly line of said Section 25.

The above description was prepared from an exhibit prepared by Bayer Becker, Brian R. Johnson, Professional Surveyor #8484 in the State of Ohio, October 13, 2021.

Exhibit B

Inlot Number 3,718 as the same is known and designated on the List of Lots in the City of Oxford, County of Butler, State of Ohio.

Parcel No. H4100-109-000-011



Note: This exhibit was prepared from existing deeds and surveys of record. It does not represent a boundary survey.

Drawing: 16-0158 EX	PART OF LOT #3718 4-LEAF DEVELOPMENT LLC	bayer becker
Scale: 1"=200'	CONGRESS LANDS WEST OF THE MIAMI RIVER SECTION 25, TOWN 5, RANGE 1 CITY OF OXFORD BUTLER COUNTY, OHIO	www.bayerbecker.com 110 S. College Avenue, Suite 101 Oxford, OH 45056 - 513.523.4270
Drawn by: PAH		
Checked By: BRJ		
Issue Date: 10-11-21	SANITARY SEWER EXHIBIT	

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Service Department
PREPARED BY:	Michael Dreisbach
DATE PREPARED:	December 27, 2021
COUNCIL MEETING DATE:	**February 1, 2022**
AGENDA TITLE:	Ordinance Accepting Utility Easements from 4-Leaf Development, LLC.
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	N/A
RECOMMENDATION:	Approve DRE 1-26-22
CITY MANAGER/DEPT HEAD APPROVAL:	MBD 1/20/22

Discussion:

In the area of Lake Forest Dr. off of Millville-Oxford Road, 4-Leaf Development, LLC is planning the construction of a new sanitary sewer to serve the area around this newly constructed street. In order to construct and maintain the proposed sanitary sewer in this area, four easements are required by the City. Three of the easements are to be provided by 4-Leaf Development, LLC. The other easement will be provided by Rams Holdings, Ltd, LLC.

Once the sanitary sewer is constructed by the developers and passes all inspections, it will become part of the City's utility system; these easements will give the City access to the system should future maintenance or repair become necessary.

Staff recommends the City Council authorize the City Manager to sign the Easement Agreements and take all steps necessary to have such recorded with the Butler County Recorder.

Lot 3716-B

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ENTER INTO AN EASEMENT AGREEMENT BETWEEN THE CITY OF OXFORD AND 4-LEAF DEVELOPMENT, LLC FOR TWO PERMANENT EASEMENTS OVER PORTIONS OF REAL PROPERTY AS SET FORTH IN EXHIBIT "C" ATTACHED HERETO AND LABELED EXHIBIT "A" AND "B" TO ALLOW THE CONSTRUCTION AND MAINTENANCE OF A NEW SANITARY SEWER SYSTEM TO SERVE SAID PROPERTY.

WHEREAS, 4-Leaf Development, LLC is the owner of lot 3716 in the area of Lake Forest Dr. off of Millville Oxford Road (US27); and

WHEREAS, easements are required for the construction and maintenance of a new sanitary sewer system to serve said property; and

WHEREAS, the City Manager and the Service Director recommend Council authorize the City Manager to enter into an easement agreement between the City of Oxford and 4- Leaf Development, LLC for permanent easements over portions of real property as set forth in Exhibit "C" and labeled Exhibits "A" and "B" attached hereto to allow the construction and maintenance of a new sanitary sewer system to serve said property.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY ORDAINS THAT:

SECTION 1: Council hereby accepts the recommendation of the City Manager and the Service Director and further authorizes the City Manager to enter into an easement agreement between the City of Oxford and 4-Leaf Development, LLC for a permanent easement over portions of real property as set forth in Exhibit "C" attached hereto and labeled Exhibits "A" and "B" to allow the construction and maintenance of a new sanitary sewer system to serve said property.

SECTION 2: Council further directs the Clerk of Oxford City Council to cause the same to be recorded with the Butler County, Ohio Recorder's Office.

SECTION 3: This ordinance shall take effect at the earliest time allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

Easement Agreement

In consideration of the sun of one dollar ($1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, Rams Holdings, Ltd., an Ohio limited liability company, with a mailing address of 676 Motex Dr., Naples, FL. 34102 ("Grantor"), hereby grants to the City of Oxford, Ohio, an Ohio municipal corporation, with a mailing address of 15 South College Ave., Oxford, OH 45056, and its successors and assigns (collectively, "Grantee"), two perpetual, nonexclusive easements (the "Easements") in, upon , over, under, through and across the following describe real estate (the "Easement Areas"):

See Exhibits A and B attached hereto and made a part hereof,

to construct, reconstruct, operate, patrol, maintain, repair, replace, add to, modify, and remove underground: (a) sanitary sewer and other utility lines; and (b) appurtenances for those lines for the underground transmission and distribution of utility services, including, but not limited to, all necessary and convenient supporting structures, grounding systems and all other appurtenances, fixtures, and equipment. The items described in clauses (a) and (b) in the preceding sentence are collectively hereinafter referred to as the "Facilities". The Easement Areas are located on the following property ("Grantor's Property") owned by Grantor:

See Exhibit C attached hereto and made a part hereof.

This Easement Agreement ("Agreement") shall be subject to the following terms and conditions which shall be binding on Grantor and Grantee, as applicable:

1. Grantee shall have the right of ingress and egress over the Easement Areas and temporary construction easements ("Temporary Construction Easements") over the area of Grantor's Property, not to exceed fifty feet (50 feet) in width, on the side of the Easement Areas located on the Grantor's Property (the "Temporary Construction Easement Areas"). Grantee shall have the right to use the Temporary Construction Easement Areas solely for the purpose of constructing the Facilities and to perform subsequent repair, maintenance, replacement, and modification activities thereon.

2. The use of the Easement Areas and the Temporary Construction Easement Areas by Grantee, its employees, agents and contractors shall, at all times, comply with this Agreement and all applicable law, rules, and regulations.

3. Grantee shall have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation upon or over the Easement Area. Grantee shall also have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation located in the Temporary Construction Easement Area, but only to the extent such vegetation may endanger, as reasonably determined by Grantee, the safe or reliable operation of the Facilities. All trimming activities shall be performed at the sole cost and expense of Grantee.

4. During those times when Grantee is constructing, reconstructing, maintaining, repairing, replacing, modifying, or removing the Facilities, Grantee shall have the right to temporarily: (a) pile dirt and other material on the Easement Area and the Temporary Construction Easement Area; and (b) operate equipment on the Easement Area or the Temporary Construction Easement Area.

5. Excluding the removal of vegetation and the like provided for in this Agreement, any damage caused by Grantee, its employees, agents and contractors to Grantor's Property shall be promptly repaired or restored, at no cost or expense of Grantor, to a condition which is reasonably close to the condition it was in prior to the damage.

6. Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area in any manner which is consistent with the rights granted herein to Grantee. Grantor shall not, without the prior written consent of Grantee, construct or install, or permit the construction or installation of any above-ground structure upon the Easement Area. Notwithstanding anything to the contrary contained in this Agreement, Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area for ingress and egress purposes and for the construction of ingress and egress improvements [not to exceed three (3) feet in height] thereon.

7. The rights and duties of Grantor and Grantee set forth in this Agreement shall inure to the benefit of and shall be binding upon the respective successors, assigns, heirs, personal representatives, lessees, licensees or tenants of Grantor and Grantee. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

IN WITNESS WHEREOF, Grantor and Grantee have signed this Easement Agreement as of the ____ day of _____, 2021.

4-Leaf Development, LLC

By: _____

City of Oxford, Ohio

Approved as to Form:

_____
City Law Director

By: _____
Douglas R. Elliott, Jr., City Manager

STATE OF OHIO, COUNTY OF BUTLER, SS:

The foregoing instrument was acknowledged before me this 1 day of December, 2021, by James M. Clawson, the authorized Member of and on behalf of 4 Leaf Development, LLC, an Ohio limited liability company.

Pamela S. Lindley
Notary Public
In and For the State of Ohio
Recorded in Butler County
My Commission Expires
6/27/2022

Pamela S Lindley
Notary Public

STATE OF OHIO, COUNTY OF BUTLER, SS:

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by Douglas R. Elliott, Jr., the City Manager of the City of Oxford, an Ohio municipal corporation, on behalf of the municipal corporation.

_____
Notary Public

MILLIKIN & FITTON LAW FIRM
A Legal Professional Association
Hamilton, Ohio

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EXHIBIT "A"

Date: October 13, 2021

Description: Part of Lot #3716
Sanitary Sewer Easement

Location: City of Oxford
Butler County, Ohio

Situated in the State of Ohio, Congress Lands West of the Miami River, Section 36, Town 5, Range 1, City of Oxford, Butler County and being a Thirty (30) Foot Sanitary Sewer Easement in part of Lot #3716 of the designated list of lots in the City of Oxford and being in part of the lands of 4-Leaf Development, LLC (105.820 Ac.) as recorded in Official Record 7669, Page 950 of the Butler County, Ohio Recorder's Office and taken Fifteen (15) Feet evenly off of the following described centerline:

Commencing at the southeast corner of said part of Lot #3716; thence, with the easterly boundary of said part of Lot #3716, North 02° 38' 43" East, 1274.31 feet to the **True Point of Beginning**;

thence, leaving the easterly boundary of said part of Lot #3716 and through said part of Lot #3716 for the following two courses:

1) South 82° 57' 47" West, 363.84 feet;

2) South 08° 48' 32" West, 164.22 feet to its terminus. The lines of said strip to be shortened or lengthened to the easterly boundary of said part of Lot #3716 and the easterly right of way of Lake Forest Drive.

The above description was prepared from an exhibit prepared by Bayer Becker, Brian R. Johnson, Professional Surveyor #8484 in the State of Ohio, October 13, 2021.

6900 Tylersville Road, Suite A
Mason, OH 45040
513-336-6600

110 South College Ave, Suite 101
Oxford, OH 45056
513-523-4270

1404 Race Street, Suite 204
Cincinnati, OH 45202
513-834-6151

209 Grandview Drive
Fort Mitchell, KY 41017
859-261-1113

http://www.bayerbecker.com

Ex i it

Date: October 13, 2021

Description Part of Lot #3716
Sanitary Sewer Easement

Location: City of Oxford
Butler County, Ohio

Situated in the State of Ohio, Congress Lands West of the Miami River, Section 36, Town 5, Range 1, City of Oxford, Butler County and being a Twenty (20) Foot Sanitary Sewer Easement in part of Lot #3716 of the designated list of lots in the City of Oxford and being in part of the lands of 4-Leaf Development, LLC (105.820 Ac.) as recorded in Official Record 7669, Page 950 of the Butler County, Ohio Recorder's Office and taken Ten (10) Feet evenly off of the following described centerline:

Commencing at the southeast corner of said part of Lot #3716; thence, with the southerly boundary of said part of Lot #3716 for the following two courses: 1) North 88° 16' 21" West, 335.78 feet; 2) North 87° 12' 11" West, 583.52 feet to the northerly right of way of Millville Oxford Road (U.S. #27) as dedicated in Official Record 9742, Page 555 of the Butler County, Ohio Recorder's Office; thence, with the northerly right of way of said Millville Oxford Road (U.S. #27), North 34° 01' 03" West, 169.33 feet to the easterly right of way of Lake Forest Drive as dedicated in Official Record 9533, Page 593 of the Butler County, Ohio Recorder's Office; thence, with the easterly right of way of said Lake Forest Drive for the following two courses: 1) North 56° 16' 05" East, 191.73 feet; 2) with a curve to the left, having a central angle of 11° 54' 02", a radius of 1232.50 feet, an arc length of 256.00 feet, and a chord bearing and distance of North 50° 19' 04" East, 255.54 feet to the **True Point of Beginning**;

thence, leaving the easterly right of way of said Lake Forest Drive and through said part of Lot #3716, South 44° 08' 25" East, 140.56 feet to its terminus. The lines of said strip to be shortened or lengthened to the easterly right of way of said Lake Forest Drive.

The above description was prepared from an exhibit prepared by Bayer Becker, Brian R. Johnson, Professional Surveyor #8484 in the State of Ohio, October 13, 2021.

6900 Tylersville Road, Suite A
Mason, OH 45040
513-336-6600

110 South College Ave, Suite 101
Oxford, OH 45056
513-523-4270

1404 Race Street, Suite 204
Cincinnati, OH 45202
513-834-6151

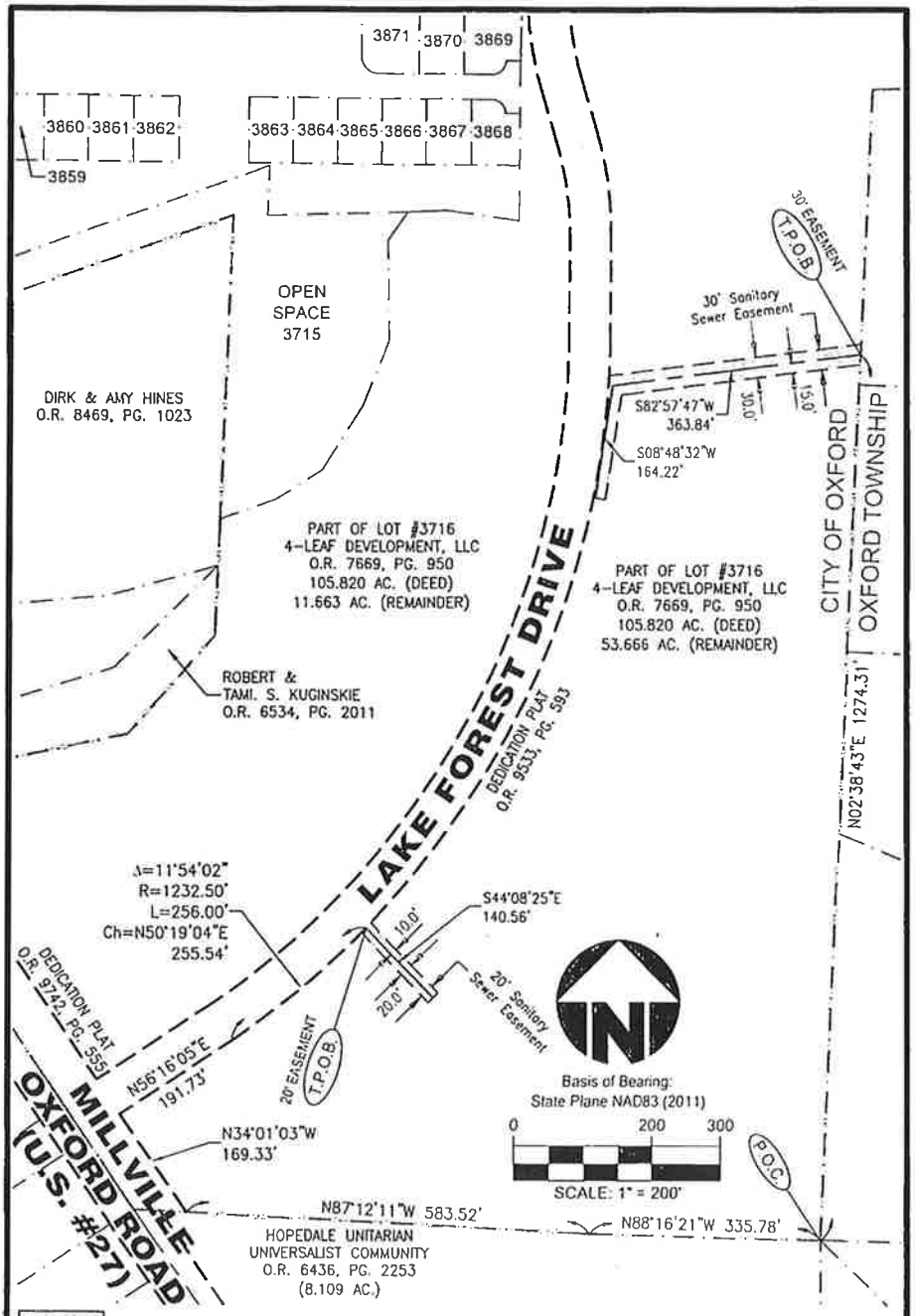
209 Grandview Drive
Fort Mitchell, KY 41017
859-261-1113

Ex i it C

Inlot Number 3,716 as the same is known and designated on the List of Lots in the City of Oxford, County of Butler, State of Ohio.

Save and Except the right-of-way dedication to the City of Oxford for Oxford- Millville Road (U.S. #27) as shown and described in the Dedication Plat at Plat Envelope 9742, page 555, Official Records, Butler County, Ohio.

Parcel No. H4100-143-000-006



Note: This exhibit was prepared from existing deeds and surveys of record. It does not represent a boundary survey.

Drawing: 16-0158 EX	PART OF LOT #3716 4-LEAF DEVELOPMENT, LLC CONGRESS LANDS WEST OF THE MIAMI RIVER SECTION 36, TOWN 5, RANGE 1 CITY OF OXFORD BUTLER COUNTY, OHIO	bayer becker www.bayerbecker.com 6900 Tylersville Road, Suite A Mason, OH 45040 - 513.336.6600
Scale: 1"=200'		
Drawn by: PAH		
Checked By: BRJ		
Issue Date: 10-11-21	SANITARY SEWER EXHIBIT	

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Service Department
PREPARED BY:	Michael Dreisbach
DATE PREPARED:	December 27, 2021
COUNCIL MEETING DATE:	**February 1, 2022**
AGENDA TITLE:	Ordinance Accepting Utility Easements from 4-Leaf Development, LLC.
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	N/A
RECOMMENDATION:	Approve DRE 1-26-22
CITY MANAGER/DEPT HEAD APPROVAL:	MBD 1/13/22

Discussion:

In the area of Lake Forest Dr. off of Millville-Oxford Road, 4-Leaf Development, LLC is planning the construction of a new sanitary sewer to serve the area around this newly constructed street. In order to construct and maintain the proposed sanitary sewer in this area, four easements are required by the City. Three of the easements are to be provided by 4-Leaf Development, LLC. The other easement will be provided by Rams Holdings, Ltd, LLC.

Once the sanitary sewer is constructed by the developers and passes all inspections, it will become part of the City's utility system; these easements will give the City access to the system should future maintenance or repair become necessary.

Staff recommends the City Council authorize the City Manager to sign the Easement Agreements and take all steps necessary to have such recorded with the Butler County Recorder.

Lot 3718

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ENTER INTO AN EASEMENT AGREEMENT BETWEEN THE CITY OF OXFORD AND 4- LEAF DEVELOPMENT, LLC FOR A PERMANENT EASEMENT OVER PORTIONS OF REAL PROPERTY AS SET FORTH IN EXHIBIT "B" ATTACHED HERETO FOR THE CONSTRUCTION AND MAINTENANCE OF A NEW SANITARY SEWER SYSTEM TO SERVE SAID PROPERTY.

WHEREAS, 4-Leaf Development, LLC is the owner of lot 3718 in the area of Lake Forest Dr. off of Millville Oxford Road (US27); and

WHEREAS, a thirty foot easement as shown on Exhibit "A" is required for the construction and maintenance of a new sanitary sewer system to serve said property; and

WHEREAS, the City Manager and the Service Director recommend Council authorize the City Manager to enter into an easement agreement between the City of Oxford and 4- Leaf Development, LLC for a permanent easement over portions of real property as set forth in Exhibit "B" attached hereto to allow the construction and maintenance of a new sanitary sewer system to serve said property.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY ORDAINS THAT:

SECTION 1: Council hereby accepts the recommendation of the City Manager and the Service Director and further authorizes the City Manager to enter into an easement agreement between the City of Oxford and 4-Leaf Development, LLC for a permanent easement over portions of real property as set forth in Exhibit "B" attached hereto and labeled Exhibit "A" for the construction and maintenance of a new sanitary sewer system to serve said property.

SECTION 2: Council further directs the Clerk of Oxford City Council to cause the same to be recorded with the Butler County, Ohio Recorder's Office.

SECTION 3: This ordinance shall take effect at the earliest time allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

EASEMENT AGREEMENT

In consideration of the sum of One ($1.00) Dollar and other good and valuable consideration, the receipt of which is hereby acknowledged, 4-Leaf Development, LLC, an Ohio limited liability company, LLC, an Ohio limited liability company, with a mailing address of 125 W. Spring Street, Oxford Ohio 45056 ("Grantor"), hereby grants to City of Oxford, Ohio, an Ohio municipal corporation, with a mailing address of 15 South College Ave., Oxford, OH 45056, and its successors and assigns (collectively, "Grantee"), a perpetual, nonexclusive easement (the "Easement") in, upon, over, along, under, through and across the following described real estate (the "Easement Area"):

See Exhibit A attached hereto and made a part hereof,

to construct, reconstruct, operate, patrol, maintain, repair, replace, add to, modify and remove underground: (a) sanitary sewer and other utility lines; and (b) appurtenances for those lines for the underground transmission and distribution of utility services, including, but not limited to, all necessary and convenient supporting structures, grounding systems and all other appurtenances, fixtures and equipment. The items described in clauses (a) and (b) in the preceding sentence are collectively hereinafter referred to as the "Facilities". The Easement Area is located on the following property ("Grantor's Property") owned by Grantor:

See Exhibit B attached hereto and made a part hereof.

This Easement Agreement ("Agreement") shall be subject to the following terms and conditions which shall be binding on Grantor and Grantee, as applicable:

1. Grantee shall have the right of ingress and egress over the Easement Area and a temporary construction easement ("the Temporary Construction Easement") over the area of Grantor's Property, not to exceed ten (10) feet in width, on the side of the Easement Area located on the Grantor's Property (the "Temporary Construction Easement Area"). Grantee shall have the right to use the Temporary Construction Easement Area solely for purposes of constructing the Facilities and to perform subsequent repair, maintenance, replacement and modification activities thereon.

2. The use of the Easement Area and the Temporary Construction Easement Area by Grantee, its employees, agents and contractors shall at all times comply with this Agreement and all applicable law, rules and regulations.

3. Grantee shall have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation upon or over the Easement Area. Grantee shall also have the right to cut down, clear, trim, remove, and otherwise control any trees, shrubs, undergrowth, overhanging branches or other vegetation located in the Temporary Construction Easement Area, but only to the extent such vegetation may endanger, as reasonably determined by Grantee, the safe or reliable operation of the Facilities. All trimming activities shall be performed at the sole cost and expense of Grantee.

4. During those times when Grantee is constructing, reconstructing, maintaining, repairing, replacing, modifying, or removing the Facilities, Grantee shall have the right to temporarily: (a) pile dirt and other material on the Easement Area and the Temporary Construction Easement Area; and (b) operate equipment on the Easement Area or the Temporary Construction Easement Area.

5. Excluding the removal of vegetation and the like provided for in this Agreement, any damage caused by Grantee, its employees, agents and contractors to Grantor's Property shall be promptly repaired or restored, at no cost or expense of Grantor, to a condition which is reasonably close to the condition it was in prior to the damage.

6. Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area in any manner which is consistent with the rights granted herein to Grantee. Grantor shall not, without the prior written consent of Grantee, construct or install, or permit the construction or installation of any above-ground structure upon the Easement Area. Notwithstanding anything to the contrary contained in this Agreement, Grantor shall have the right to use the Easement Area and the Temporary Construction Easement Area for ingress and egress purposes and for the construction of ingress and egress improvements [not to exceed three (3) feet in height] thereon.

7. The rights and duties of Grantor and Grantee set forth in this Agreement shall inure to the benefit of and shall be binding upon the respective successors, assigns, heirs, personal representatives, lessees, licensees or tenants of Grantor and Grantee. This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio.

IN WITNESS WHEREOF, Grantor and Grantee have signed this Easement Agreement as of the ____ day of _____, 2021.

4-Leaf Development, LLC

By: _____

City of Oxford, Ohio

Approved as to Form:

_____

City Law Director

By: _____

Douglas R. Elliott, Jr., City Manager

STATE OF OHIO, COUNTY OF BUTLER, SS:

The foregoing instrument was acknowledged before me this 1 day of December, 2021, by James M. Clawson, the authorized Member of and on behalf of 4-Leaf Development, LLC, an Ohio limited liability company.

Pamela S. Lindley
Notary Public
In and For the State of Ohio
Recorded in Butler County
My Commission Expires
6/27/2022

Pamela S Lindley
Notary Public

STATE OF OHIO, COUNTY OF BUTLER, SS:

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by Douglas R. Elliott, Jr., the City Manager of the City of Oxford, an Ohio municipal corporation, on behalf of the municipal corporation.

_____
Notary Public

MILLIKIN & FITTON LAW FIRM
A Legal Professional Association
Hamilton, Ohio

s:\mason\transactional\cle easements\lhds\city oxford 4leaf3716 one legal.doc

Exhibit A

Date: October 13, 2021

Description: Part of Lot #3716
Sanitary Sewer Easement

Location: City of Oxford,
Butler County, Ohio

Situated in the State of Ohio, Congress Lands West of the Miami River, Section 36, Town 5, Range 1, City of Oxford, Butler County and being a Thirty (30) Foot Sanitary Sewer Easement in part of Lot #3716 of the designated list of lots in the City of Oxford and being in part of the lands of 4-Leaf Development, LLC (105.820 Ac.) as recorded in Official Record 7669, Page 950 of the Butler County, Ohio Recorder's Office and taken Fifteen (15) Feet evenly off of the following described centerline:

Commencing at the northwest corner of part of Lot #2 of Section 36, Oxford Township and being part of the lands of Scott R. Schulte, et al (89.396 Ac.) as recorded in Official Record 9187, Page 1062 of the Butler County, Ohio Recorder's Office and being on the northeast of said part of Lot #3716 and being on the northerly line of said Section 36; thence, leaving the northwest corner of said Lot #2 and with the northerly boundary of said part of Lot #3716 and the northerly line of said Section 36, North 87° 35' 54" West, 153.50 feet to the **True Point of Beginning**;

thence, leaving the northerly boundary of said part of Lot #3716 and the northerly line of said Section 36 and through said part of Lot #3716 for the following six courses:

1) South 37° 49' 36" West, 304.01 feet;
2) South 87° 11' 23" West, 135.00 feet;
3) South 39° 28' 06" West, 305.00 feet;
4) South 21° 46' 57" West, 146.00 feet;
5) South 27° 41' 58" West, 301.00 feet;
6) South 29° 32' 27" West, 168.62 feet to its terminus and being on the northerly boundary of part of Lot #3 of said Section 36, Oxford Township and being the lands of Rams Holdings, Ltd. (25.00 Ac.) as recorded in Official Record 9516, Page 1759 of the Butler County, Ohio Recorder's Office. The lines of said strip to be shortened or lengthened to the northerly line of said Section 36 and the northerly boundary of said part of Lot #3.

The above description was prepared from an exhibit prepared by Bayer Becker, Brian R. Johnson, Professional Surveyor #8484 in the State of Ohio, October 13, 2021.

6900 Tylersville Road, Suite A
Mason, OH 45040
513-336-6600

110 South College Ave, Suite 101
Oxford, OH 45056
513-523-4270

1404 Race Street, Suite 204
Cincinnati, OH 45202
513-834-6151

209 Grandview Drive
Fort Mitchell, KY 41017
859-261-1113

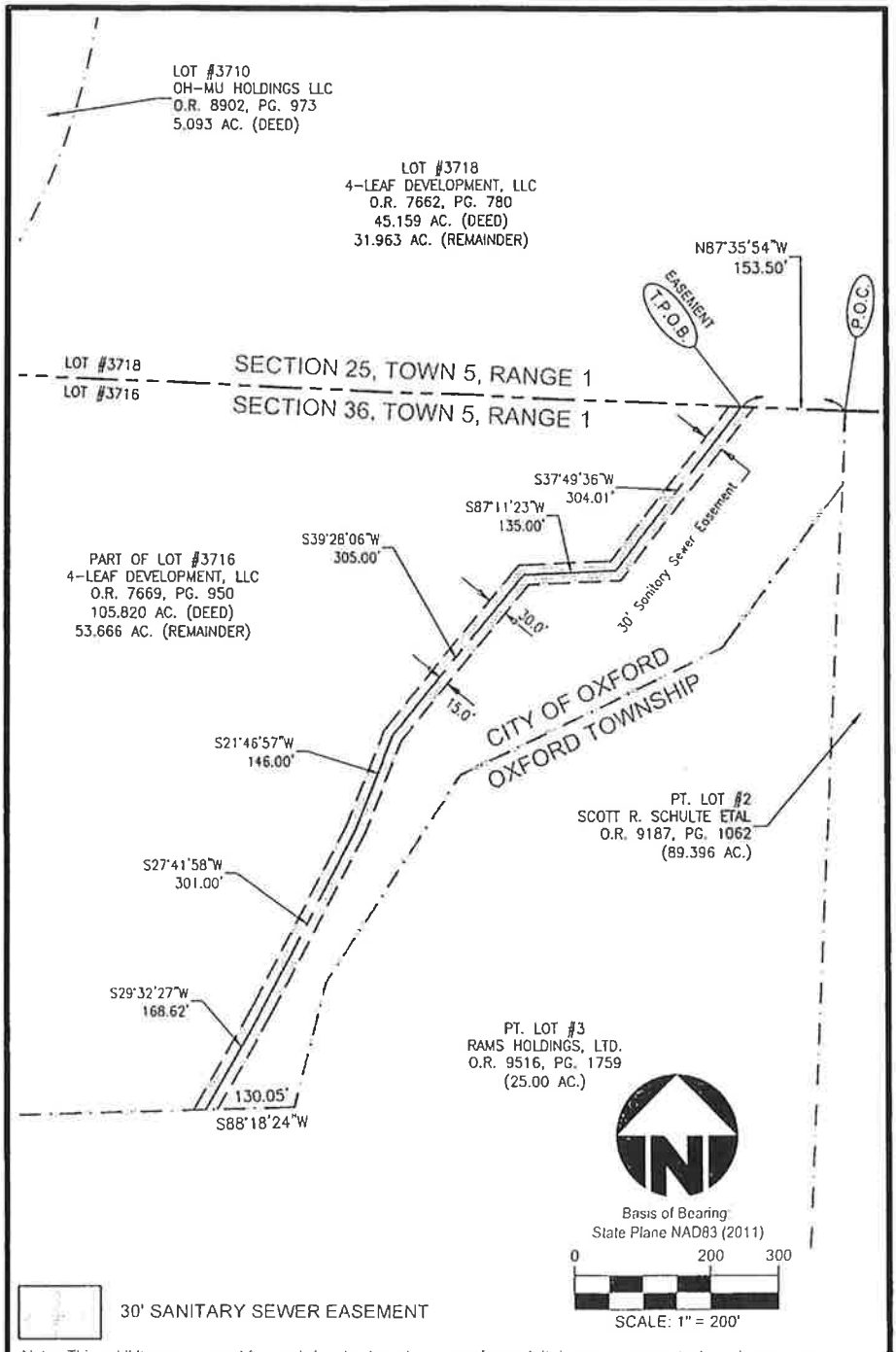
http://www.bayerbecker.com

Exhibit B

Inlot Number 3,716 as the same is known and designated on the List of Lots in the City of Oxford, County of Butler, State of Ohio.

Save and Except the right-of-way dedication to the City of Oxford for Oxford- Millville Road (U.S. #27) as shown and described in the Dedication Plat at Plat Envelope 9742, page 555, Official Records, Butler County, Ohio.

Parcel No. H4100-143-000-006



Note: This exhibit was prepared from existing deeds and surveys of record. It does not represent a boundary survey.

Drawing:	16-0158 EX
Scale	1"=200'
Drawn by:	PAH
Checked By	BRJ
Issue Date	10-11-21

PART OF LOT #3716
4-LEAF DEVELOPMENT LLC

CONGRESS LANDS WEST OF THE MIAMI RIVER
SECTION 36, TOWN 5, RANGE 1
CITY OF OXFORD
BUTLER COUNTY, OHIO

SANITARY SEWER EXHIBIT

bayer becker
www.bayerbecker.com
110 S. College Avenue, Suite 101
Oxford, OH 45056 - 513.523.4270

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Service Department
PREPARED BY:	Michael Dreisbach
DATE PREPARED:	January 24, 2022
COUNCIL MEETING DATE:	**February 1, 2022**
AGENDA TITLE:	Ordinance Approving Modifications to the *City of Oxford Water and Sanitary Sewer Specifications Manual*
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	N/A
RECOMMENDATION:	Approve DRE 1/26/22
CITY MANAGER/DEPT HEAD APPROVAL:	MBI 1/24/22

Oxford Codified Ordinance Section 921.03 (Water Utility) and Section 923.04 (Wastewater Utility) authorize the Director of Service to adopt and enforce, subject to the approval of the City Manager, rules and regulations as deemed necessary to execute duties and responsibilities in the operation of the Utilities. The most recent modification was approved by the City Council per **Ordinance No. 3352** on April 19, 2016 requiring all water and sanitary sewer systems in the City of Oxford to be constructed in accordance with the *Water and Sanitary Sewer Improvement Specifications Manual (including Backflow & Cross Connection Controls).*

Service Department staff have completed a review of the *Water and Sanitary Sewer Improvement Specifications Manual* (176 pages) and have made modifications to clarify various requirements of the manual and also to simplify the language of the manual where possible. Construction drawings have also been modified to clarify notes and comments in the drawings.

The most substantial changes in the *Water and Sanitary Sewer Improvement Specifications Manual* include the following items:

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

- Clarifications of definitions, terms, and national standards utilized in operating City of Oxford utility operations.
- Clarifications regarding the City's separate sewer systems for stormwater and sanitary flows.
- Requirement for a concept review meeting in conjunction with the Community Development Department for significant projects.
- Obligations for projects requiring Ohio EPA approvals.
- Contact information for regulating Agencies including web sites and phone numbers.
- Updated 811 (Call Before You Dig) information for contractors
- Minimum insurance limits for contractors working on utility systems within the City of Oxford utility service areas.
- The City may require a downstream manhole on new developments and / or utility extensions for the purposes of inspection and effluent sampling.
- Standard drawings were updated and clarified.

The existing manual, as well as the updated manual showing strikethrough and bold changes, are available on the City's website at https://www.cityofoxford.org/our_community/city_services/index.php

Upon Council approval of the revised *City of Oxford Water and Sanitary Sewer Improvement Specifications Manual*, staff will notify existing owners of record of our *Manual* of modifications to the document.

ORDINANCE NO.

AN ORDINANCE ADOPTING A REVISED AND AMENDED WATER AND SANITARY SEWER IMPROVEMENT SPECIFICATIONS AND BACKFLOW CROSS CONNECTION CONTROL MANUAL.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF OXFORD, BUTLER COUNTY STATE OF OHIO, THAT:

SECTION 1: The City Manager and the Service Director recommend the adoption of the revised and amended portions of the Water and Sanitary Sewer Improvement Specifications and Backflow Cross Connection Control Manual for the purpose of establishing construction standards for the construction of water and sanitary sewer systems in the City of Oxford.

SECTION 2: Council hereby accepts the recommendation of the City Manager and the Service Director and hereby adopts the revised and amended Water and Sanitary System Improvement Specifications and Backflow Cross Connection Control Manual and orders all water and sanitary sewer systems to be constructed or improved henceforth under the standards of the Manual.

SECTION 3: This Ordinance shall take effect at the earliest time allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

WATER AND SANITARY SEWER IMPROVEMENT SPECIFICATIONS AND BACKFLOW CROSS CONNECTION CONTROL MANUAL

REVISED
2005
UPDATED
2010
2016
2022

City of Oxford
Service Department
~~101 East High Street~~ 15 S. College Avenue
Oxford, Ohio 45056-1887
(513) 524-5206
www.cityofoxford.org

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SECTION ONE

INTRODUCTION

1.0 PURPOSE

The purpose of this Manual is to provide procedural information and define material specifications for the construction of water and sanitary sewer mains and all appurtenances that are to become a part of the City of Oxford's Water and Wastewater Utilities. The requirements contained herein are to be followed by any person, firm, partnership, or corporation in the construction of residential, industrial, and commercial subdivisions and/or developments in which water and/or sanitary sewer utilities will be constructed. The goal of this Manual is to ensure the protection of the health and welfare of the City of Oxford.

It is not the intent of this Manual to take away, from the design ENGINEER, any responsibility for the technical adequacy of his design or freedom to use his engineering judgment and discretion in the practice of his profession. It is recognized that matters of engineering design cannot be put in writing to cover all situations. Design methods, or criteria different than that listed, will receive consideration for approval, provided the proposed variances and the reasons for its use are submitted in writing to the City of Oxford. The UTILITY shall have the final determination.

1.1 DEFINITIONS

AMERICAN WATER WORKS ASSOCIATION (AWWA) - An organization that develops, adopts, and publishes standards for the construction, operation and maintenance of improvements to water systems.

APPROVED - Material, equipment, workmanship, process or method that has been accepted by the City of Oxford as suitable for the proposed use.

AS-BUILT - A certification by the ENGINEER whose stamp appears on the plans that the measurements, depths, materials, and facilities that are shown on the plans are true and correct and are constructed in accordance with the Water and Sanitary Sewer Improvement Specifications Manual.

CONTRACTOR - The person, firm, or corporation that will perform the construction of the utility improvements. The CONTRACTOR may be the OWNER/DEVELOPER; an agent of the OWNER/DEVELOPER; or a person, firm, partnership, or corporation with whom the OWNER/DEVELOPER has executed an agreement to perform the construction of utility improvements. The CONTRACTOR may be a person, firm, partnership or corporation with whom the City of Oxford has executed an agreement to perform the construction of utility improvements.

ENGINEER - A registered Professional ENGINEER, licensed to practice engineering as defined by the Registration Act of the State of Ohio who is employed by and agrees to perform services for the OWNER/DEVELOPER.

FINAL INSPECTION – Inspection conducted by the UTILITY prior to final approval of the improvements.

IMPROVEMENTS - Construction work, including materials and workmanship, to the water and/or sanitary sewer UTILITY systems that are part of, will become part of or be connected to the City of Oxford's Water and Sanitary Sewer Utilities. Water improvements include but are not limited to water mains, valves, fire hydrants, service lines, pumps, meter pits, etc. Sanitary sewer improvements include, but are not limited, to sanitary sewer mains, manholes, laterals, clean-outs, sampling pits, etc.

INSPECTOR - The ENGINEER, or his representative, who may be required to be on the job site during any construction of facilities that are to become part of the City of Oxford.

IRON PIPE STANDARD – (IPS)

OHIO DEPARTMENT OF TRANSPORTATION – (ODOT) – District 8 – ~~1-800-831-2142 or 1-513-932-3030.~~ 513-933-6568

OHIO ENVIRONMENTAL PROTECTION AGENCY SOUTHWEST DISTRICT - (OEPA) – 1-937-285-6357.

OHIO UTILITIES PROTECTION SERVICE - (OUPS) – 1-800-362-2764 or 811.

OWNER/DEVELOPER - An individual, group of individuals, partnership, firm, association or corporation that is constructing, or is having constructed, water and/or sanitary sewer improvements that are to become a part of or be connected to the City of Oxford water and/or sanitary sewer utilities.

RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES – 10 State Standards – Latest Edition.

RECOMMENDED STANDARDS FOR WATER WORKS – 10 State Standards – Latest Edition.

SHALL – A mandatory requirement.

TOTAL DYNAMIC HEAD – TDH – The addition of static lift + static height + friction loss.

UTILITY - The City of Oxford Service Director or City Engineer.

1.2 REFERENCES

Certain technical aspects concerning construction materials and methods of construction are based on the Ohio Department of Transportation, Construction and Material Specifications, hereafter referred to as ODOT.

Other standards or specifications referred to are those of the American Society of Testing Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), Portland Cement Association (PCA), American Public Works Association (APWA), the American Water Works Association (AWWA), and the Ten States Standards.

1.3 GENERAL REQUIREMENTS

Prior to the development of detailed plans and specifications for the construction of proposed improvements, the OWNER/DEVELOPER shall complete and file an Application for Utility Service with the City of Oxford so that the impact of the proposed improvements can be evaluated and determined.

In order to ensure that the design and construction of water and sanitary sewer IMPROVEMENTS meet generally accepted Engineering Standards and Practices, the OWNER/DEVELOPER proposing the IMPROVEMENTS must employ a Professional Engineer registered in the State of Ohio. The OWNER/DEVELOPER shall employ the ENGINEER to:

1. Prepare detailed construction drawings on standard drawing sheets of 24" x 36".
2. Provide to the UTILITY detailed submittals of all parts and materials required to be used during construction in accordance with the approved plans.
3. Provide a complete set of "As-Built" drawings to the UTILITY. "As-Built" drawings shall be provided on mylar sheets (4-mil double matte finish, white) and as a digital file compatible with the City of Oxford's version of AutoCad. "As-Built" drawings shall contain the following:

    a. As constructed invert elevations for all sanitary sewer manholes
    b. Center of all sanitary sewer manholes and clean-outs tied to the Ohio South State Plane Coordinate System
    c. Center of all water main valves and fire hydrant valves tied to the Ohio South State Plane Coordinate System
    d. Fire hydrants tied to the Ohio South State Plane Coordinate System
    e. The corner of the easement located on private property tied to the Ohio South State Plane Coordinate System for each lot

"As-Built" drawings shall be submitted <u>before</u> the final inspection.

1.4 UTILITY AUTHORITY

The UTILITY shall be responsible for answering questions that may arise as to the quality and acceptability of construction materials used and workmanship performed. The UTILITY shall interpret the intent of the requirements contained in this Manual in a fair and unbiased manner. Nothing contained in this Manual is intended to conflict with any State or Federal law or regulation. If such a case arises**,** the more stringent requirement shall be met. In no case shall the requirements of this Manual be less stringent than any existing State or Federal law or regulation.

Plans are approved by the UTILITY subject to the condition of compliance with applicable Federal, State and local laws, rules, regulations, and standards. Approval of plans does not constitute an assurance that the proposed improvements will properly function, operate or be compliant with Federal, State or local laws and regulations.

The UTILITY, at any time during design or construction, shall have the authority to modify any engineering or construction detail or require additional testing whenever necessary for the protection of the public interest.

This Manual shall be revised as needed to ensure that the requirements contained herein remain

current with State and Federal laws and regulations, approved construction materials and recognized construction methods.

1.5 OBLIGATION OF THE CONTRACTOR

The CONTRACTOR shall perform and complete the work to the satisfaction of the UTILITY and in accordance with approved plans. The CONTRACTOR shall conduct work so as to minimize interference with public and/or private business and traffic. The CONTRACTOR shall, at his own expense, whenever necessary or required, provide barricades, flaggers, maintain lights, and take other precautions as may be necessary to protect life, property, adjacent buildings, and structures.

The CONTRACTOR shall be liable for all damages and injuries received or sustained by any person(s) or property as consequence of any neglect in safeguarding the work of subcontractors, employees or workers. Traffic control procedures shall follow the most current ODOT regulations and the Ohio Manual of Uniform Traffic Control Devices.

The CONTRACTOR shall pay for all overtime expenses of UTILITY personnel for testing, inspection or "Call-Outs" after normal business hours or on holidays.

At least two (2) working days prior to the start of any construction, the CONTRACTOR shall notify the UTILITY in writing of his intent to commence work.

The CONTRACTOR is responsible for contacting all utilities covered under The Ohio Utilities Protection Service (OUPS), (1-800-362-2764, 811, or OUPS.org) as well as any utility in the Oxford area that is not a member of OUPS.

The CONTRACTOR is responsible for meeting state certifications where applicable, i.e. state fire codes for installation, etc.

The CONTRACTOR shall be responsible for correcting and/or repairing defects found to exist or those that develop in the IMPROVEMENTS for a period of one year from the date of final inspection and acceptance by the UTILITY. Failure of the CONTRACTOR to comply with this manual or directive by the UTILITY may result in a revocation of permit, denial of future permits, as well as associated costs and /or penalties.

1.6 DEFECTIVE MATERIAL AND WORKMANSHIP

Materials and workmanship not in accordance with the approved plans and/or specifications shall be rejected.

Upon notification by the ENGINEER and/or UTILITY, corrections shall be required to comply with the approved plans and/or specifications.

1.7 CONSTRUCTION INSPECTION

The UTILITY may at any time and at its own discretion, provide an on site inspector during construction of the IMPROVEMENTS. The UTILITY's inspector may conduct on site inspections as work progresses, and will call to the attention of the person in charge of the work any deviations, omissions or unsatisfactory work as noted.

All improvements shall be completed prior to the final inspection and acceptance by the UTILITY. The FINAL INSPECTION will be made upon written request of the CONTRACTOR to the UTILITY stating that all IMPROVEMENTS are complete and all corrections have been made. Prior to the final acceptance of the work, the UTILITY shall be given a completed set of "As-Built" plans. All sanitary manholes or access openings shall be opened and all appurtenances shall be cleaned of all dirt, mud, and other foreign matter. The CONTRACTOR shall provide personnel as required to aid in the performance of the FINAL INSPECTION.

1.8 EXISTING UTILITIES

Precautions shall be taken by the CONTRACTOR to avoid damage to existing overhead and underground utilities owned and operated by public or private utility companies.

Where existing underground or above-ground utilities or structures are encountered, these utilities shall not be displaced or disturbed unless necessary, and in such case shall be replaced in as good or better condition than found in accordance with the UTILITY's standards. Immediate notification to the UTILITY is required.

The CONTRACTOR shall bear the entire responsibility for locating, avoiding, or repairing damage to said existing utilities.

SECTION TWO

PROCEDURES

2.0 PURPOSE

The purpose of this section is to establish a working relationship between the OWNER/DEVELOPER, ENGINEER, CONTRACTOR and UTILITY by describing the step by step procedure to be followed by each party in initiating and completing the construction of any improvements that are to be connected to or become a part of the utility system. The UTILITY reserves the right to waive any or all parts of the specifications in specific instances as appropriate, except where Ohio EPA, Federal and/or State regulations would be violated by such a waiver.

2.1 APPLICATION PHASE

The first step in the procedure is for the OWNER/DEVELOPER to provide a Concept Plan of the development, including but not limited to, estimated water demand and wastewater flow created by the development.

~~The first step in the procedure is for the OWNER/DEVELOPER to file an Application for utility Service to the Service Department of the City of Oxford requesting permission to connect the proposed project to the existing utilities. In order to properly coordinate the work with Planning and Zoning, a copy of the application shall be submitted to the City of Oxford Planning Department to serve as notification of the project. The application form may be obtained from the Service Department office at 101 East High Street, Oxford, Ohio. It is recommended that the OWNER/DEVELOPER engage the services of an ENGINEER in the beginning to assist in preparing the application since much of the information requested must be provided by the ENGINEER.~~

The OWNER/DEVELOPER shall meet with the City of Oxford Service Department and Community Development Department to discuss the scope of the project and how City of Oxford Specifications and Regulations apply to the project.

~~In addition to the information to be provided on the application form, a site plan shall be provided on a 24" x 36" sheet in sufficient detail to show the location of the proposed development.~~

Upon receipt of ~~an application~~ the concept plan, the UTILITY shall evaluate the impact the proposed development will have upon the existing facilities. From the estimated water demand and the wastewater flow provided by the OWNER/DEVELOPER'S ENGINEER, the UTILITY shall determine whether the existing water system is adequate to provide service (both domestic and fire protection) and whether the existing sanitary sewer system has capacity to receive the estimated wastewater flow. A determination that capacity is available at the time of application does not guarantee nor reserve that capacity indefinitely for that development. Approval of the application by the UTILITY indicates that capacity will be available for service immediately upon completion of the project proposed in the application. If the UTILITY is capable of providing these services, a letter of conditions shall be issued listing the requirements that must be met in order to obtain acceptance of the proposed facilities by the UTILITY. Should it be determined that capacity for water or sanitary sewer service is unavailable, the OWNER/DEVELOPER should contact the UTILITY to explore alternate solutions.

2.2 DESIGN PHASE

Upon receipt of the letter of conditions from the UTILITY, the OWNER/DEVELOPER may authorize his ENGINEER to prepare plans for the proposed development in accordance with the requirements contained in the detailed specifications herein.

During the design phase, the ENGINEER shall work closely with the UTILITY to ensure that the final product meets all requirements of the UTILITY. There shall be no provisional approval. All plans must show all necessary details before approval is granted.

Plans and specifications for water distribution and sanitary sewer improvements shall be prepared by, or under the supervision of, a registered professional engineer in the State of Ohio who shall affix his seal and signature to each plan and/or plan-profile sheet and specifications.

The ENGINEER shall provide the following design data attached to the plans:

1. Hydraulic calculations for the water system (The OWNER/DEVELOPER, or ENGINEER, may receive pressure readings at or near the point of connection from the UTILITY upon request in writing). A minimum pressure of 20 psi must be maintained throughout the system for all fire flow and domestic use conditions. All water mains must be looped unless a dead end main is approved by the UTILITY in writing.

2. Design calculations of gravity sanitary sewer mains shall show the grade, expected average flow, peak flow, capacity, and velocity at peak flow between each manhole.

3. Design calculations of sewage pump stations and force mains shall show pump capacity at design TDH, head loss thru the force main, static head between pump discharge and force main discharge, the velocity thru the force main, capacity of wet well, and expected frequency of operation. A copy of the manufacturer's pump curve data and specifications must be provided. The OWNER/DEVELOPER shall provide emergency power back-up for the pump station. The OWNER/DEVELOPER shall provide duplicate pumps, operating controls, and emergency back-up power supply for the pump station.

Plans prepared by the ENGINEER for the **CONSTRUCTION OF WATER MAINS** shall be drawn on plan sheets, 24" x 36", to a minimum scale of 1" = 20' for plan, and 1" = 5' for profile, and shall contain the following minimum information:

Title Sheet

1. Name and address of ENGINEER
2. Name and address of OWNER/DEVELOPER
3. Name of development and phase number, if applicable
4. Vicinity map at a scale of 1"=1000'
5. Lines for signatures, titles, and date (Developer/Owner, City Manager, Community Development Director, Service Director, City Engineer)
6. Specifications (name and date)
7. Project (Development) limits

8. Work area limit

Plan Sheet

1. Topography and layout of development (streets, curb and gutter, sidewalks, drainage headwalls, storm drains, lot lines, utility poles, utility easements**,** etc.)
2. Pipe material and pressure rating
3. Pipe size
4. Location and type of valves
5. Location and type of hydrants
6. Location and size of blowoff
7. Location, size and material of water services, curb stop, box, water meter pit and assembly
8. Profile of water main and other proposed underground utilities
9. Existing utilities; i.e. hydrants, valves, line sizes, storm drains, and sanitary sewer lines
10. The statement “All construction shall be in accordance with the City of Oxford Specifications”

Plans prepared by the ENGINEER for the **CONSTRUCTION OF SANITARY SEWER MAINS** shall be drawn on plan sheets, 24” x 36”, to a minimum scale of 1” = 20’ for plan and 1” = 5’ for profiles and shall contain the following minimum information:

Title Sheet

1. Name and address of ENGINEER
2. Name and address of OWNER/DEVELOPER
3. Name of Development and Phase number if applicable
4. Vicinity map at a scale of 1” = 1000’

Plan Sheet

1. Topography and layout of development (street, curb and gutter, sidewalks, drainage headwalls, utility poles, lot lines and utility easements)
2. Pipe material
3. Pipe size
4. Location by station number and manhole type
5. Length of sanitary sewer and grade between manholes
6. Invert of sanitary sewer at each manhole for both inlet and outlet and the fall within the manhole
7. Location, size and material of house connections and sanitary clean-out
8. Profile of sanitary sewer main and other proposed underground utilities
9. Existing utilities; i.e. manholes, line sizes, storm drains, and water lines
10. The statement “All construction shall be in accordance with the City of Oxford Specifications”

Plans prepared by the ENGINEER for the **CONSTRUCTION OF SEWAGE PUMP STATIONS** shall be drawn on plan sheets, 24” x 36”, to a scale of 1/4” = 1'0” and shall contain the following minimum information:

Title Sheet

1. Name and address of ENGINEER
2. Name and address of OWNER/DEVELOPER
3. Name of Development and Phase number, if applicable
4. Vicinity map at a scale of 1" = 1000'

Plan Sheet

1. Name of station manufacturer
2. Name of pump manufacturer
3. Number of pumps
4. Pump discharge at design TDH
5. Dimensions, elevations, and capacity of wet well
6. Location and type of pump controls
7. Cathodic protection for steel tanks
8. Piping and valve arrangement inside station
9. The statement "All construction shall be in accordance with the City of Oxford Specifications"

General Notes Sheet

1. Plan notes
2. Effected utilities (name of UTILITY, contact person, title, address, phone number)

Plan Details Sheet

1. Standard detail applicable to the plan
2. Modified details applicable to the plan

General Summary Sheet

1. Typical section(s), if not on a separate sheet
2. Tabulation of estimated quantities, including the sheet number from where the quantity was carried

Plan Line Sheet

1. The sheets should be plan on top, and profile of the section on bottom (the profile must indicate all existing and/or proposed utilities, structures, etc., that are indicated on the plan section)
2. Table of estimated quantities on the particular sheet

2.3 COST ESTIMATE

The ENGINEER shall prepare an itemized cost estimate of the proposed improvements. The estimate shall be reviewed and approved by the UTILITY prior to approval of the plans and submittal of a Public Improvement Bond.

2.4 REVIEW PHASE

Three sets of plans shall be submitted to the UTILITY for review and approval. The OWNER/DEVELOPER should allow a 30 calendar day period for the review time, however, the UTILITY shall conduct its review as expeditiously as possible. The UTILITY reserves the right for an additional 30 calendar day review period upon receipt of corrected material.

The UTILITY shall review the plans as to the standard specifications contained herein. Any plans submitted that do not completely comply with all requirements of the UTILITY shall be returned to the OWNER/DEVELOPER unapproved with the necessary corrections noted. After all corrections are made, the corrected plans shall be returned to the UTILITY so that each sheet may be stamped "Approved". Final written approval shall not be granted until the UTILITY has received a copy of the approval from the Ohio Environmental Protection Agency.

The OWNER/DEVELOPER shall submit plans and specifications in accordance with the policies for plan submittals to the Ohio EPA for approval and permits to install.

2.5 SUBMITTAL OF WATER AND SANITARY SEWER PLANS TO OHIO EPA FOR APPROVAL

The purpose of this section is to establish the procedure for submission of water and/or sanitary sewer plans to the Ohio Environmental Protection Agency (OEPA) for approval.

Prior to plans being submitted to OEPA for approval, the plans shall have been approved by the UTILITY subject to OEPA's conditions and approval. Upon approval of the plans by the UTILITY, the UTILITY will provide ~~to OEPA~~ a letter of recommendation for review and approval by the OEPA.

It should be noted that the UTILITY's review relates directly to those water mains and sanitary sewers that are to become public utilities. Private sanitary sewer and water mains are required to meet the UTILITY's standards as well as OEPA requirements.

The OWNER/DEVELOPER is responsible for payment of all fees for the application, review, Permit to Install, or other costs associated with OEPA approval.

OEPA submittals shall meet all current requirements of the OEPA.

~~OEPA submittal requirements for water system improvements are as follows:~~

~~Plans and Specifications.....3 copies~~
~~Water Supply Data Sheet.....1 copy~~
~~Water Review Fee Worksheet.....1 copy~~
~~Letter from UTILITY requesting OEPA approval.....1 copy~~
~~Check payable to the Treasurer, State of Ohio, for the total amount determined on the fee worksheet and forwarded to the City Engineer for submittal to the OEPA.~~

~~OEPA submittal requirements for wastewater system improvements are as follows:~~

~~Plans and Specifications.....3 copies~~
~~Sanitary sewer Data Sheet.....1 copy~~
~~Sanitary Review Fee Worksheet.....1 copy~~

~~Permit to Install Application.....1 copy~~
~~Letter from UTILITY requesting OEPA approval.....1 copy~~
~~Check payable to the Treasurer, State of Ohio, for the total amount determined on the fee worksheet and forwarded to the City Engineer for submittal to the OEPA.~~

~~It shall be the OWNER/DEVELOPER'S (or his agent's) responsibility to assemble and submit the above documents and associated fees to the UTILITY for submittals to the OEPA for approval.~~

~~Information submitted to the UTILITY shall be sent to the following via next-day provider:~~

~~Ohio EPA~~
~~Southwest District Office~~
~~401 East Fifth Street~~
~~Dayton, Ohio 45402-2911~~

Responses to OEPA questions during their review shall be ~~mailed~~ sent to the OEPA representative involved with a copy sent to the UTILITY.

~~At the same time plans are sent to the OEPA for review and approval, one (1) complete set of all materials submitted to OEPA shall be sent to:~~

~~Service Department~~
~~Engineering Division~~
~~City of Oxford~~
~~101 East High Street~~
~~Oxford, Ohio 45056-1887~~

The UTILITY is required to be copied on all correspondence both to and from the OEPA.

It is the OWNER/DEVELOPER'S responsibility to provide corrected copies of material during the review process to the UTILITY so that the UTILITY has a complete set of plans as approved by the OEPA.

When the UTILITY is notified of the OEPA's approval, it will notify the OWNER/DEVELOPER.

2.6 APPROVED PLANS

No work shall commence on any water or sanitary sewer system until the CONTRACTOR has, in his possession, a complete set of approved plans. Each set of plans shall also be approved and signed by the UTILITY. Reproduction and distribution of the approved set of plans for use by the Contractor and his agents is the responsibility of the OWNER/DEVELOPER.

2.7 BONDING

Prior to construction, a Public Improvement bond is required to cover construction of all public improvements constructed by the OWNER/DEVELOPER. Upon completion of the plans and approval by the UTILITY, the amount of the bond will be determined by the ENGINEER and submitted to the UTILITY for approval.

After written acceptance of the constructed improvements and a complete set of "As-Built" plans have been received by the UTILITY in hard copy and digital format, the public improvement bond

may be reduced to an amount determined by the UTILITY, but shall be no less than 10% of the original bond amount. A maintenance bond will be held for a period of twelve months to ensure a remedy of any project defects. After this period the bond will be released to the OWNER/DEVELOPER. No reduction of the Public Improvement Bond will be made prior to completion of the following:

1. All sanitary sewer mains and laterals completed and functioning properly.
2. All storm sewers completed and functioning properly.
3. All water mains and water services completed and functioning properly.
4. All other utilities (i.e. gas, electric, etc.) in place and functioning properly.
5. All street lighting installed and functioning properly.
6. All valve covers and castings built to final grade and functioning properly.
7. Leveling roadway surface in place with no deficiencies.
8. Detention Pond constructed as per plan and functioning properly.
9. All outstanding "punch list" items completed to the satisfaction of the UTILITY.
10. All fire hydrants and appurtenances functioning properly.

2.8 PERMITS, EASEMENTS, AND RIGHTS-OF-WAY

The OWNER/DEVELOPER shall make application for, obtain, and pay for all licenses, permits, easements, and rights-of-way. The CONTRACTOR shall be required to comply with all State and Municipal ordinances, laws, and codes that may apply to same.

2.9 INSURANCE REQUIREMENTS

The CONTRACTOR will not be permitted to commence work until he has obtained all insurance required by these documents and such insurance has been approved by the UTILITY.

Such insurance shall be secured from an insurance company or companies authorized to write casualty and property insurance in the State of Ohio and shall protect the CONTRACTOR, his subcontractors, and the OWNER/DEVELOPER from claims for bodily injury, death, property damage, fire, and other risks set out herein.

Each policy of insurance covering the CONTRACTOR'S operations under the contract shall provide, either in the body of the policy or by appropriate endorsement (rider) to the policy, that such policy cannot be altered or canceled in less than ten (10) days after the mailing of written notice of such alteration or cancellation to the OWNER/DEVELOPER (ensured) and the ENGINEER or not less than five (5) days after actual receipt by the OWNER/DEVELOPER (ensured) and the ENGINEER, of written notice of such pending alteration or cancellation.

Certificates of insurance coverage shall include a statement of alteration or cancellation provisions of the policy, sufficient to show definitely that such provisions comply with the requirements stated herein.

The construction phase shall not begin until a written Notice to Proceed from the UTILITY is received by the OWNER/DEVELOPER. When the UTILITY is ready to issue a Notice to Proceed, a Pre-Construction Conference will be scheduled and held jointly by the UTILITY and the CONTRACTOR. The OWNER/DEVELOPER shall be responsible to the UTILITY for the proper construction of the facilities.

2.9.1 Insurance, Worker's Compensation

The CONTRACTOR shall take out and maintain during the life of the contract, Worker's Compensation Insurance, as required by State of Ohio statute, for all of his employees employed at the site of the project, and in case any work is sublet, for all the subcontractor's employees not otherwise ensured. In case any class of an employee, who is engaged in hazardous work at the site of the project is not protected under the Worker's Compensation Statute, the CONTRACTOR shall provide adequate coverage for the protection of the employees not otherwise protected.

2.9.2 Insurance, Public Liability

The CONTRACTOR shall take out, and maintain during the life of the contract, such Public Liability (Bodily Injury and Property Damage) Insurance as shall protect him and any subcontractor performing work at the site from claims for damages because of bodily injury, including accidental death and from claims for property damages which may arise from operations under the contract, whether such operations be by him or by any subcontractor, or by anyone directly or indirectly employed by either of them.

Liability coverage is to be written on a comprehensive general liability policy and must include (a) premises-operations, manufacturers and contractors, owners, landlords and tenants; (b) contractors protective; (c) products-completed operations; (d) contractual liability. General liability shall also include underground property damage by mechanical equipment. During blasting, coverage must be provided for the explosion hazard.

Where work on railroad rights-of-way is involved, the CONTRACTOR shall also be covered by Railroad Property Liability Insurance with limits of liability as required by the railroad company on whose property the work is being performed.

All comprehensive-automobile-general liability insurance policies shall include, as named ensured, the CONTRACTOR, the OWNER/DEVELOPER, and the City of Oxford, Ohio.

2.9.3 Minimum Insurance Limits

The minimum amounts of insurance to be furnished by and for the general contractor and the subcontractors under this contract are:

a. Worker's Compensation - Ohio Statutes
   Employers Liability - $500,000 limit of liability

b. Comprehensive General Liability
   Coverage A - Bodily Injury Liability -
   $2,000,000 aggregate
   Coverage B - Property Damage Liability -
   $1,000,000 each occurrence
   $1,000,000 aggregate

c. Comprehensive Automobile Liability
   Coverage A - Bodily Injury Liability -
   $1,000,000 each occurrence

Coverage B - Property Damage Liability -
$1,000,000 each occurrence

d. Railroad Protection Insurance - (where work is to be executed within the railroad right-of-way) Loss of Life or Injury to Person - As required by Railroad Property Damage - As required by Railroad

2.10 CONSTRUCTION PHASE

The construction phase shall not begin until a written Notice to Proceed from the UTILITY is received by the OWNER/DEVELOPER. When the UTILITY is ready to issue a Notice to Proceed, a pre-construction conference will be scheduled and held jointly by the UTILITY and the Contractor. The OWNER/DEVELOPER shall be responsible to the UTILITY for the proper construction of the improvements.

The UTILITY shall be notified immediately of any conflicts encountered in the field between the proposed improvements and the existing infrastructure.

It is required that the CONTRACTOR contact the UTILITY when water or sanitary sewer lines have been backfilled under streets so that a representative may visually inspect the backfill material before final surface is placed on the streets. Any deviation, change, addition or deletion from the approved plans must be approved by the UTILITY in writing before the deviation, change, addition or deletion is made during construction. Representatives of the UTILITY shall have the right to enter upon the project site to make periodic inspections of the work in progress. The City of Oxford requires a 48 hour notice prior to any scheduled testing.

Upon completion of construction, the CONTRACTOR shall pressure test and disinfect all water lines, and conduct infiltration, exfiltration or air tests on sanitary sewer lines as outlined in these standard specifications. Any section of lines that does not pass the prescribed test must be corrected to the satisfaction of the UTILITY and retested until all testing procedures are satisfied. All testing must be conducted in the presence of the UTILITY. Upon completion of construction, the OWNER/DEVELOPER shall certify to the UTILITY in writing that all payments have been made to all parties involved in the construction of the facilities. The certifications shall state the final total project cost. Upon completion, the OWNER/DEVELOPER shall transfer ownership of the new facilities to the UTILITY and said facilities shall become an asset of the UTILITY.

2.11 CERTIFICATION OF COMPLETION

Upon completion of construction, the ENGINEER shall certify, in writing to the UTILITY, that the project has been constructed in accordance with the approved plans and the standard specifications contained herein. A complete set of “As-Built” drawings on mylar (4-mil double matte finish white) and one digital copy in a format compatible with AutoCad must accompany the ENGINEER’S certification.

Upon receipt of these certifications and “As-Built” drawings, the UTILITY shall accept the facilities as an extension of the existing public system and deliver water service to and accept wastewater from the development.

SECTION THREE

WATER MAINS

3.0 PURPOSE

The purpose of this SECTION is to outline requirements for design, construction, inspection, and final acceptance of potable water mains and appurtenances, water service connections, and public fire protection systems.

3.1 DESIGN REQUIREMENTS

Water system improvements shall be installed in public rights-of-way or, upon approval in a public utility easement granted to the City of Oxford UTILITY. These utility easements and rights-of-way must be recorded at Butler County by the Developer. A copy of this recorded easement/right-of-way must be supplied to the City of Oxford before being accepted by the City of Oxford. A water main maintenance area shall be provided. This water main maintenance area width shall be no less than twenty feet (20') and shall be completely within the public right-of-way or public utility easement. The water main maintenance area shall be evenly divided on both sides of the water main.

No water main or appurtenance shall run between residential or commercial structures unless authorized in writing by the UTILITY.

Dead end water mains shall be minimized by looping the water mains with multiple feed points. Where dead ends occur, they shall terminate with a fire hydrant, flushing hydrant, or water sampling station, with a resilient wedge gate valve or any combination of the three devices herein described. This configuration shall be determined by the UTILITY.

To ensure future looping of the water system, the OWNER/DEVELOPER shall install the proposed water main along the entire road frontage of the development and to the property boundary lines of the development. Final determination of the water extension shall be at the discretion of the UTILITY.

3.1.1 Water Mains

Water mains are those pipes used to distribute water to service connections and public fire hydrants and are owned or under the control of the UTILITY. Water mains must be sized to meet present water consumption and projected average and maximum daily demands, including fire flow demand. The ENGINEER shall provide design criteria and calculations to establish water usage demands. A complete set of hydraulic computations, in a tabular form, shall be provided to the UTILITY that document average and peak flows, ground elevations, elevations of hydraulic grade line, and system operating pressures.

Peak design flows shall be the greater of the following:

a. Flow determined by the ENGINEER as the instantaneous demand placed upon the

system by the development; or
b. Flow required for fire protection by Insurance Services Offices of Ohio guidelines; or
c. Computed peak flow if development is commercial or industrial; or
d. As directed by the UTILITY

All water mains, including those not designed to provide fire protection, shall be designed to maintain a minimum pressure of 20 psi at ground level for all flow conditions. A minimum flow of 1000 GPM at a residual pressure of 20 psi shall be required by the UTILITY for all new construction.

Water mains shall be the size specified by the most current City of Oxford Master Plan for the water system expansion. In no case shall the size of the water main be less than eight inches (8") in diameter, unless approved in writing by the UTILITY.

The required depth of cover over the top of a water main and all fire hydrant branches shall be no less than four feet (48"). Any water main installed in a trench over five feet (60") in depth must first have the approval of the UTILITY, in writing.

Fire hydrant branch lines shall be the size specified by the UTILITY. In no case shall branch lines for fire hydrants be less than six inches (6") in diameter.

Water mains not designed nor intended to carry fire flows shall not be connected to fire hydrants.

3.1.2 Water Service Lines

Water service lines are those water lines that tap off the water main and provide potable water service to a specific property, utility customer or water user. All water service lines shall be connected to a designated utility water main.

The corporation stop, service line with appropriate gooseneck application, curb stop, curb box, meter assembly, meter pit, meter pit ring, plastic inner lid (Ford W3BPD), and cover lid shall be installed, in a manner approved by the UTILITY, from the water main to the meter pit (DRAWING # 51). Where applicable, a minimum of ten foot (10') extension of the water service shall be provided to avoid conflicts with future sidewalks.

The water service line, curb stop and curb box, and meter pit assembly shall run in a perpendicular manner from the water main to the designated area between the curb and sidewalk; or an area approved by the UTILITY in writing. A ten foot (10') horizontal distance between water service lines and sanitary sewer laterals shall be maintained at all times. The intent is for the water service line and the sanitary sewer lateral to run parallel from the main connections to the residential or commercial building in a perpendicular manner. Water service lines, curb stops, curb boxes, and meter pit assemblies, shall be located outside of the driveway whenever possible.

Water service lines and appurtenances located within the utility right-of-way shall be maintained by the UTILITY. The outlet side of the copper setter shall be the demarcation point where said maintenance by the UTILITY ends. The curb stop and curb stop box shall be located on the back side of the curb. Sufficient room shall be available to accommodate the placement of the meter pit adjacent to the curb stop box between the curb and sidewalk. The water meter assembly shall be located between the curb and the sidewalk, within a water meter pit. When a sidewalk is not applicable, the water meter pit shall be located no less than two feet (2') and no more than four feet (4') from the back side of the curb. Where neither situation is applicable, the UTILITY will have the final determination for the placement of the water meter and or water meter pit assembly.

Water service lines from the water main to the water meter shall be at least one inch (1") and shall be type "K" copper tubing unless otherwise approved by the UTILITY in writing. All water service lines, from the water main to the ~~water meter~~ structure, shall be covered with a minimum of forty-two inches (42") and a maximum of forty-eight inches (48") of backfill material, measured from the top of the water service pipe to the final finished ground level.

In certain cases where the water service line from the water meter to the structure will be in excess of 150 feet, plastic water service may be used with written approval from the UTILITY meeting all requirements of the most recent addition of the Ohio Plumbing Code.

Wherever a water service line crosses a concrete street curb, the CONTRACTOR shall clearly mark the location of the water service line with a "W" cut or imprinted into the concrete curb near the top.

The UTILITY shall determine if a heavy duty traffic lid assembly is required.

3.1.3 Fire Protection

Water lines designed or constructed to carry water for fire protection shall comply, as a minimum, with all City of Oxford utility specifications, and the most current Ohio Building Code regulations as adopted by the State of Ohio.

Fire suppression system lines and domestic service lines shall be two separate entities each requiring a separate tap from the utility water main. Combination domestic and fire suppression service lines are not acceptable.

Fire lines shall be located in a separate trench from the potable water service lines. The separation shall be no less than four feet (4') from the pipe edge to pipe edge, unless approved in writing by the UTILITY. Water service lines designated for fire suppression shall have an OEPA approve backflow preventer installed at the point of enter (POE) to the structure. An ASSE 1015 Double Check Valve Assembly or an ASSE 1048 Double Check Detector check valve assembly is required. No chemicals are to be added to the fire line.

~~All water lines constructed for the purpose of fire lines shall have, at the point of entry (POE), an OEPA approved backflow device and shall conform to and abide by all rules and regulations contained in the City of Oxford's Backflow/Cross Connection Control Program. An ASSE 1015 Double Check Valve Assembly or an ASSE 1048 Double Check Detector Check Valve Assembly is required on all fire line applications. A written document stating no chemical additives will be added to this fire line is required for final approval.~~

Fire hydrants and their drainage systems shall not be connected to or located within ten feet (10') of sanitary sewers or storm drain systems, unless approved in writing by the UTILITY. Fire suppression systems are to be tested and installed by a licensed State of Ohio fire protection system technician.

3.1.4 Separation of Water and Sanitary Sewer Lines

Water mains shall be installed at least ten feet (10') horizontally from any existing or proposed ~~sanitary sewer~~ gravity sanitary or storm sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a ten foot (10') separation, the UTILITY may allow deviation on a case-by-case basis, if supported by data from the ENGINEER. Such deviation may

allow installation of the water main closer to a ~~sanitary sewer~~ gravity sanitary or storm sewer, provided that the water main is installed in a separate trench or on an undisturbed earth shelf located on one side of the sanitary sewer at such an elevation that the bottom of the water main is at least eighteen inches (18") above the top of the sanitary sewer.

Water mains crossing ~~sanitary sewers~~ gravity sanitary or storm sewers shall be installed to provide a minimum vertical distance of eighteen inches (18") between the bottom of the water main and the outside top of the ~~sanitary sewer~~ gravity sanitary or storm sewer. This shall be the case where the water main is either above or below the ~~sanitary sewer~~ gravity sanitary or storm sewer. At crossings, one full length of water main shall be located so both joints will be as far from the ~~sanitary sewer~~ gravity sanitary or storm sewer as possible. Special structural support for the water and ~~sanitary sewer~~ gravity sanitary or storm sewer pipes may be required. Any deviations from these standards will first be submitted in writing from the ENGINEER to the UTILITY for final determination. The UTILITY shall have final determination on all exceptions, and place such determinations in writing.

No water main or service shall pass through or come in contact with any part of a sanitary or storm sewer main, lateral, manhole, or any other sanitary or storm sewer appurtenance.

Design engineers should exercise caution when locating water mains at or near certain sites such as sewage treatment plants or industrial complexes. Individual septic tanks must be located and avoided. The ENGINEER must contact the UTILITY to establish specific design requirements for locating water mains near any source of contamination.

Surface water, aerial, or railroad crossings present special problems. The UTILITY shall be consulted before any plans are prepared or submitted for design review.

Aerial water main crossings shall be adequately supported and anchored, protected from damage and freezing, and accessible for repair or replacement.

Underwater main crossings shall have a minimum cover of two feet (2') over the pipe and shall be encased in concrete. When crossing water courses which exceed fifteen feet (15') in width, the following shall be provided on both sides: (1) the pipe shall be of special construction, for the purpose of under water construction; (2) Valves shall be provided on both sides of the water crossing so that the section can be easily isolated for testing or repair; (3) the valves shall be easily accessible, and not subject to flooding; (4) both valves shall be in a manhole with a one inch (1") corporation stop tapped into the top of the water main approximately one foot (1') on each side of the valves for the purpose of disinfection and testing. (DRAWING # 63 and DRAWING # 68)

3.2 PIPE MATERIAL

Water mains shall be constructed of Class 53 ductile iron unless otherwise approved by the UTILITY in writing.

3.2.1 Ductile Iron Pipe, Fittings, and Joints

Ductile iron pipe shall be designed in accordance with the latest revision of ANSI/AWWA C150/A21.50 for a minimum 150 psi (or project requirements, whichever is greater) rated working pressure plus a 100 psi minimum surge allowance; a 2 to 1 factor of safety on the sum of working pressure plus surge pressure; where a Trench Type shall be in accordance with 3.8.1 and 3.8.2. (DRAWING # 10)

Ductile iron pipe shall be manufactured in accordance with the latest revision of ANSI/AWWAC151/A21.51. Each pipe shall be subjected to a hydrostatic pressure test of at least 500 psi at the point of manufacture.

Pipe shall have standard asphaltic coating on the exterior with a cement mortar lining on the interior in accordance with the most current revision of ANSI/AWWA C104/A21.4.

The class or nominal thickness, net weight without lining, and casting period shall be clearly marked on each length of pipe. Additionally, the manufacturer's mark, country where cast, year in which the pipe was produced, and the letters “DI” or “Ductile” shall be cast or stamped on the pipe.

All pipe shall be furnished with push-on type joints, such as “Tyton®” or “Fastite®” unless mechanical joints are required by the UTILITY. Joints shall be in accordance with ANSI/AWWA C111/A21.11, of latest revision, and be furnished complete with all necessary accessories. Field LOK® gaskets or UTILITY approved equal may be required by the UTILITY where designated. Fittings shall be either ductile iron or gray iron. Ductile iron fittings shall conform to the latest revisions of either ANSI/AWWA C110/A21.10 or ANSI/AWWA C153/A21.53. Gray iron fittings shall be in accordance with ANSI/AWWA C110/A21.10, of latest revision. Fittings shall have a standard asphaltic coating on the exterior and a cement mortar lining on the interior in accordance with ANSI/AWWA C104/A21.4, of the latest revision.

Fittings and accessories shall be furnished with either mechanical or push-on type joints in accordance with ANSI/AWWA C111/A21.11, of latest revision.

All pipe, fittings, and accessories shall be installed and tested in accordance with the latest revision of AWWA Standard C600. Newly installed ductile iron water mains shall be disinfected in accordance with the latest revision of AWWA Standard C651 prior to placing in service. (Chart – section 3.11 Hydrostatic/Leakage Testing of Main and section 3.12 Disinfection of water main).

Where ductile iron pipe is to be installed in corrosive soil conditions, the pipe shall be protected by an 8 -mil thick polyethylene encasement meeting the requirements of ANSI A21.5. Such corrosive soils include but are not limited to salt marshes, saturated alkaline soils, cinder fills, areas of decaying vegetation, and waste dumps. This shall be determined by the UTILITY.

Mechanical joints as well as plain and bell ends of fittings shall conform to the dimensions set forth in AWWA C111-90 (ANSI A 21.11). The cleaning and assembly of pipe and fitting joints shall be in accordance with the manufacturer's recommendations.

Care is to be taken when loading and unloading ductile iron pipe and its appurtenances. Improper handling may result in damage. Damaged material will not be accepted by the UTILITY.

3.2.2 Encasement Pipe

Encasement pipe shall be steel, plain end, uncoated, unwrapped, have a minimum yield point strength of 35,000 psi, and conform to ASTM A252 Grade 2 of ASTM Al30 Grade B without hydrostatic test. The steel pipe shall have welded joints and be in at least 18 foot (18’) lengths.

The wall thickness of the pipe shall be a minimum of 0.250 inches for highway crossings and 0.344 inches for railroad crossings. The diameter of the pipe shall conform to the requirements of ODOT for highway crossings.

3.3 WATER MAIN APPURTENANCES

3.3.1 Gate Valves

Gate valves shall be rated at 200 psi water working pressure with 40 psi hydrostatic test for structural soundness for 2" through 12". Testing shall be conducted in accordance with AWWA C500.

Gate valves shall be furnished with type of end connection specified as follows: 125# ANSI B 16.1 flange drilling, mechanical joint per AWWA C111 with accessories.

All ductile iron (DI) shall conform to A536 Gr. 65-45-12. Castings shall be clean and sound without defects that will impair their service. No plugging or welding of such defects will be allowed. Stems shall be manganese bronze having a minimum tensile strength of 60,000 psi, a minimum yield of 20,000 psi for a 20" valve. Bolts shall be electro-zinc plated steel with hex heads and hex nuts in accordance with ASTM A307 and A563, respectively.

Gate valves shall be of the non-rising stem type (NRS) meeting all of the applicable requirements of AWWA C500. NRS valves shall be furnished with O-ring stem seals using two O-rings located above the stem collar. On all valves, O-rings shall be set in the seal plate. Disc for valve sizes 2" through 4" shall be bronze; for sizes 6" and larger, they shall be cast iron, bronze faced. Bronze facing shall be machined after insertion into disc face. Disc spreaders for valves 2" through 8" shall be bronze. Spreaders in valves 10" shall be cast iron, bronze faced. Spreaders shall actuate from the stem nut independent of the bottom of the valve body. Direction to open shall be counter-clockwise unless otherwise specified.

The inside and outside of all valves, together with the working parts except bronze and machined faces, shall be coated in accordance with AWWA standards.

Marking shall be in accordance with AWWA C500 standards, to include name of the manufacturer, the year of manufacture, maximum working pressure and size of valve.

The valve shall conform to the latest revision of AWWA Resilient Seated Gate Valve Standard C509 and be UL listed, FM approved.

All internal parts shall be accessible without removing the body from the line.

The wedge shall be cast iron, completely encapsulated with resilient material. The resilient sealing material shall be permanently bonded to the cast iron wedge with a rubber tearing bond to meet ASTM D429.

NRS stems shall be cast bronze with integral collars in compliance with AWWA. OS&Y stems shall be bronze. The NRS stuffing box shall have two O-ring seals above the thrust collar and one below. The top two O-rings shall be field replaceable without removing the valve from service.

There shall be low friction thrust bearings above and below the stem collar. The stem nut shall be independent of the wedge and of solid bronze. The waterway in the seat area shall be smooth, unobstructed, free of cavities and for valves 4" and larger at least 0.19" greater in diameter than the nominal valve size.

The body and bonnet shall be coated both interior and exterior with a fusion bonded heat cured

thermo setting material meeting all the application and requirements of AWWA C550. The gasket seal between two surfaces shall employ the use of O-ring type gaskets retained to prevent the possibility of blow out.

Each valve shall be hydrostatically tested to the requirements of both AWWA and UL/FM and be rated for 250 psi AWWA service 2" - 12" and 200 psi 14" - 24".

3.3.1A Butterfly Valves

All butterfly valves shall be of the rubber-seated tight-closing type. They shall meet or exceed AWWA Standard C504. All valves shall be Clow 4500 or MH 4500 butterfly valves or UTILITY approved equal by the UTILITY.

The valves body shall be high-strength cast iron ASTM A126 Class B with 18-8 Type 304 stainless steel body seat. Valve vane shall be high-strength cast iron ASTM A48 Class 40, having rubber seat mechanically secured with an integral 18-8 stainless steel clamp ring and 18-8 stainless steel self-locked screws.

Rubber seat shall be full circle 360 degree seat not penetrated by the valves shaft. For valves 4" – 12" the valve shaft shall be one piece, extending full size through the entire valve. Valve shaft shall be 304 stainless steel. Packing shall be O-ring cartridge designed for permanent duty in underground service. For 14" and larger valve shaft shall be 18-8 stainless steel stub shaft design keyed to the vane with stainless steel torque plugs.

Short body valves per Table 2 of AWWA Spec C504. Flanges shall be 125# ANSI (available all sizes). Also flanged by MJ in 6", 8", 12", and 16" sizes.

Both ends of valve shall be "MJ" per AWWA C111. "MJ" accessories (bolts, glands, gaskets) must be supplied by valve manufacturer. (Available all sizes-also flanged by MJ in 6", 8", 12", and 16" sizes.)

Valve operator shall be of the traveling-nut type, sealed, gasketed, and lubricated for underground service.

Valve shall be capable of easy closure by one person using standard valve key, even under emergency line-break conditions. Operators come with easy external adjustment.

All valves shall open left, and be equipped with 2" AWWA operating nut.

Cylinder operator shall be of the base mounted configuration, and shall meet all applicable provisions of AWWA Standard C504, latest revision.

3.3.1B Valves

Sufficient valves shall be provided on water mains so that inconvenience and sanitary hazards will be minimized during repairs. Valves should be located at not more than 500 foot intervals in commercial districts and not more than one block or 800 feet in other districts. The final determination for the location, amount and style of valves shall rest with the UTILITY.

Valves required in manholes will have a one inch (1") corporation stop tapped into the top of the

water main approximately one foot (1') on each side of the (RW) gate valve. This one inch (1") corporation stop will be utilized to inject disinfectant for new main construction and serve as a future disinfection or testing station. (DRAWING # 63)

All water valves sixteen inches (16") in diameter and larger shall be mechanical joint butterfly valves with gear operated closing mechanism.

3.3.1C Tapping Sleeves and Valves

Tapping sleeves for connecting to existing water mains shall be stainless steel tapping sleeves with working pressures of 250 psi, with removable bolts and 360 degree gasket and shall be Ford Style FTSS, FTS, or equal approved by the UTILITY.

Resilient Wedge Tapping valves shall be of the mechanical joint type suitable for working pressures of 250 psi and shall conform to the latest revision of AWWA Standard for Gate Valves for Ordinary Water Works Service, AWWA C-509. Valves shall be manufactured by Clow®, Darling®, Kennedy®, Waterous® or equal approved by the UTILITY.

3.3.2 Valve Boxes

Standard valve boxes shall be heavy duty traffic models and shall be of 5.25 inch standard cast iron, three piece, screw type valve box with drop cover marked "WATER". Valve Box specifications: East Jordan Iron Works® Series # 6860 or UTILITY approved equal by the UTILITY. Valve boxes shall be accurately centered over the valve operating nut, and backfill shall be compacted thoroughly about them. Valve box bases shall not rest on the valves but shall be supported on crushed stone fill, concrete block or brick for stabilization. The box shall be set vertically and properly cut and/or adjusted so that the tops of boxes will be at grade in any paving, walk, yard or road surface. (DRAWING #62A and #63)

3.3.3 Fire Hydrants

Fire hydrants installed within the City of Oxford shall comply with the latest published specifications of the UTILITY as to material type, performance, and placement (DRAWING #57).

Hydrants shall be provided at each street intersection and at intermediate points between intersections as recommended by the Insurance Services Office of Ohio and the UTILITY. Fire hydrant spacing shall not exceed 300 feet in residential areas.

Fire hydrants installed outside of the City of Oxford but connected to the utility water system shall comply with the requirements specified herein and be spaced as follows:

a. In areas where the fire flow demand is more than 2,000 gpm, fire hydrants shall be spaced or located not more than 250 feet apart.
b. In areas where the fire flow demand is not more than 2,000 gpm, fire hydrants shall be spaced or located not more than 300 feet apart.

The CONTRACTOR shall furnish and install fire hydrants where shown on the plans. Hydrant barrels shall have a safety breakage feature (traffic model) above the ground line. All hydrants shall have a six inch (6") mechanical joint shoe connection, two, two and one half inch (2.5") discharge nozzles national standard thread (NST) and one four and one half inch (4.5") inside diameter (I D) pumper (steamer) nozzle with caps fitted with cap chains. The pumper or steamer cap shall be

fitted with a Storz® fitting. Connection threads and operation nuts shall conform to the National Standard Specifications as adopted by the National Board of Fire Underwriters.

The operation nut shall be pentagonal in shape and shall open by turning to the left (counterclockwise) with National Standard Threads (NST) on the hydrant caps.

The main valve closure shall be of the compression type, opening against the pressure and closing with the pressure. Traffic feature shall be designed so that the nozzle section of the hydrant can be rotated (by degree) through a full 360 degree circle during field installations, if necessary.

The main valve opening shall not be less than five and one quarter inch (5.25") and be designed so that the seat, drain valve mechanism, internal rod and all working parts can be removed through the top of the hydrant. These parts shall be removable without disturbing the ground line joint or the nozzle section of the hydrant. The bronze seat shall be threaded into mating threads of bronze for easy field removal. The lower barrel section shall be made of ductile iron.

The draining system of the hydrant shall be bronze and shall be activated by the main stem without the use of an auxiliary rod, toggles, pins, etc. The drain mechanism shall be completely closed after no more than three turns of the operating nut in the opening direction. There shall be a minimum of two (2) inside ports and four (4) drain port outlets to the exterior of the hydrant. Drain shut-off shall be by direct compression closure. Sliding drain seals are not acceptable.

The operating nut, main stem, coupling, and main valve assembly shall be capable of withstanding input torque of 200 ft/lbs, in opening or closing directions. There shall be an internal top housing with triple O-Rings to seal operating threads from the waterway and accommodate an anti-friction washer.

Hydrant bonnet assembly shall be provided with a grease reservoir and lubrication system that automatically circulates lubricant to all operating stem threads and bearing surfaces each time the hydrant is operated. Downward stem travel shall be limited by a travel stop located in the upper housing of the hydrant. Nozzle sections of the hydrant shall be designed to permit field replacement of damaged threads without special tools, excavation, or disturbance of the ground line joint. Bronze nozzles are to be locked into the hydrant barrel with locking lugs and be sealed by a heavy duty O-Ring. The threading of nozzles and the shape of operating nuts are to be of National Standard.

Fire Hydrants shall be located not more than six feet (6') nor less than two feet (2') from the back side of the curb or from the edge of existing or proposed edge of pavement unless otherwise approved by the UTILITY. Hydrants shall be installed with a vertical distance from the center of the pumper nozzle to the ground per the manufacturer's specifications. All fire hydrants shall be provided with no less than a six inch (6") resilient wedge gate valve attached to no less than a six inch (6") ductile iron hydrant branch connected to the water main. No water service or water testing line shall be permitted between the fire hydrant watch valve and the fire hydrant.

Fire Hydrant set-backs shall be determined by the UTILITY at the time when improvement plans are submitted by the OWNER/DEVELOPERS, and are reviewed by the UTILITY. The fire hydrant watch valve shall be attached directly to an anchor tee or tapping saddle on the water main, unless approved otherwise, in writing, by the UTILITY.

Fire hydrants shall be secured to the shut off valve (auxiliary or watch) by mega-lugs or UTILITY approved equal. Where fire hydrant branches exceed one (1) pipe length, Field LOK® gaskets or

UTILITY approved equal (ANSI/AWWA C111/A21.11) shall be required.

Hydrants shall be American Darling® B-62-B and painted red.

Fire hydrant watch valve boxes shall be of 5.25 inch standard cast iron, three piece, screw type valve box with a drop cover marked "WATER", East Jordan Iron Works® Series 6860 or UTILITY approved equal by the UTILITY (DRAWING #62A AND #63). Valve boxes shall be accurately centered over valve operating nut, with backfill thoroughly compacted around them. The valve box base shall not rest on the valves but shall be supported on crushed stone fill or block footers. Valve boxes shall be set vertically and properly cut and/ or adjusted so that the top of the boxes will be at grade in any paving, walk or road surface. (DRAWING # 57)

3.3.4 Air Release Valves and Boxes

Air release valves shall be the combined vacuum and air release type and shall be equipped with cast iron body and cover, stainless steel float, Buna-N seat, and bronze linkage. Valve shall have one inch threaded inlet and be suitable for 150 psi working pressure. Valve shall be APCO No. 200-A or equal approved by the UTILITY.

Air release valves shall be installed at the high point on the water main as shown on the approved plans. They shall be connected to the main by a corporation stop with inside IPS threaded outlet. The inlet pipe to the air release valve shall be ASTM B43 extra strong seamless red brass pipe with IPS male threaded ends and isolation valve.

The air release valve box shall be 24 inch reinforced concrete pipe conforming to ASTM C76, Class II, Wall B, and shall be set on a round, washed, crushed stone or gravel base. The cover shall be cast iron, medium duty, perforated, and of the size to fit the bell of the pipe.

3.3.5 Blow offs

Blow-offs shall only be installed at the direction of the UTILITY. Approved fire hydrants shall be used in place of blow-offs wherever possible. The UTILITY shall have the final determination for the application of blow-offs and the substitution of blow-offs with approved fire hydrants.

~~3.3.6 Fire Protection Lines~~

~~Water service lines to be used for private fire protection systems (i.e., sprinkler systems) shall have an OEPA approved backflow preventer installed at the point of entry (POE) to the building. An ASSE 1015 Double Check Valve Assembly and an ASSE 1048 Double Check Detector Check Valve Assembly is acceptable with written documentation that no chemicals will be added to the fire line. Fire protection service lines shall require a separate tap from the water main and be located in a separate trench no less than four feet (4') from the potable water service line. Combination fire suppression system and domestic supply lines shall not be permitted unless the fire sprinkler system contains less than twenty (20) sprinkler heads. In this case, the fire sprinkler system lines must be of the same material as the domestic service.~~

~~Fire suppression systems are to be tested and installed by a State of Ohio licensed fire protection system contractors.~~

3.4 TRENCH EXCAVATION

Unless specifically directed otherwise by the UTILITY, not more than 500 feet of trench shall be opened ahead of the pipe installation work of any one crew and not more than 500 feet of open ditch shall be left behind the pipe installation work of any one crew.

All backfilled ditches shall be maintained in such a manner that they will offer no hazard to the passage of traffic. The convenience of the traveling public and property owners abutting shall be taken into consideration. All public or private drives shall be taken into consideration and shall be promptly backfilled or bridged. Excavated materials shall be disposed of so as to cause the least interference.

Trenches in which pipes are to be installed shall be excavated via open cut to the depths shown on

the approved plans. The minimum allowable trench width shall not be less than the outside diameter of the pipe plus eight inches (8"). Where rock is encountered, the rock shall be removed to a minimum depth of four inches (4") below the pipe bells.

Unless specifically authorized by the UTILITY, trenches shall in no case be excavated or permitted to become wider than two feet six inches (2' 6"), plus the nominal diameter of the pipe at the level of or below the top of the pipe.

All excavation materials shall be placed a minimum of two feet (2') back from the edge of the trench.

It is the CONTRACTORS sole responsibility to maintain safe working conditions on the job site and to conform to "Specific Safety Requirements Relating to Construction of the Industrial Commission of Ohio", Construction Safety and Health Regulations, Part 1926, Subpart P "Occupational Safety and Health Administration", U. S. Department of Labor, and all local laws, ordinances, and regulations.

Trenches shall be kept free of water during the installation of pipe until the pipeline trench has been backfilled.

3.4.1 Obstructions

In cases where storm sewers, sanitary sewers, gas lines, water lines, telephone lines, electric lines, and other utilities, or other underground structures are encountered, these aforementioned items, or any not listed, shall not be displaced or disturbed unless necessary, in which case they shall be replaced as approved by the UTILITY, as quickly as possible. These affected utilities shall be notified prior to being disturbed.

~~The CONTRACTOR shall notify the utility companies 48 hours prior to beginning construction work.~~ ~~**All utilities covered under OUPS are to be called, as well as the utilities in the Oxford area that are not a member of OUPS.**~~ **The CONTRACTOR is responsible to notify the Ohio Utilities Protection Service (OUPS) by calling 811 or visiting www.ohio811.org 48 hours prior to beginning construction work. The CONTRACTOR is responsible to notify any utilities in the Oxford area that are not members of OUPS.**

3.4.2 Shoring, Sheeting, and Bracing

The shoring, sheeting and bracing of excavations shall be performed by the CONTRACTOR in compliance with applicable safety codes and OSHA requirements.

Where unstable material is encountered or where the depth of excavation in earth exceeds five feet (5'), the sides of the trench or excavation shall be supported by substantial sheeting, bracing and shoring, or the sides shall be sloped to the angle of repose. Sloping the sides of the ditch to the angle of repose will not be permitted in streets, roads, narrow rights-of-way or other constricted areas unless otherwise specified. The design and installation of all sheeting, sheet piling, bracing and shoring shall be based on computations of pressure exerted by the materials to be retained under construction conditions. Adequate and proper shoring of all excavations shall be the sole responsibility of the CONTRACTOR; however, the ENGINEER may require the submission of shoring plans (accompanied by supporting computations) for review prior to the CONTRACTOR undertaking any portion of the work.

Excavations to be made below the depth of an existing foundation, shall be supported by shoring, bracing or underpinning as long as the excavation shall remain open, or thereafter if required to ensure the stability of the structure supported by the foundation. The CONTRACTOR shall be held strictly responsible for any damage to said foundation.
Care should be taken to avoid excessive backfill loads on the completed pipelines. The requirements that the width of the ditch at the level of the crown of the pipe be no more than two feet six inches (2' 6") plus the nominal diameter of the pipe shall be strictly observed.

Trench shoring shall not be removed until sufficient backfill has been placed to protect the pipe.

3.5 PIPE BEDDING

In all cases, the foundation for pipes shall be prepared so that the entire load of the backfill on top of the pipe will be carried on the barrel of the pipe and so that none of the load will be carried on the bells.

Where undercutting and granular bedding are involved, the depth at the bottom of the bells of the pipe will be at least four inches (4") above the bottom of the trench as excavated.

Supporting of pipe shall be as set out herein before, and in no case shall the supporting of pipe on blocks be permitted. (DRAWING #10)

3.5.1 Earth Foundation

The installation of water main pipe and its bedding and backfill shall be in accordance with ANSI/AWWA C600 "Standard for Installation of Ductile Iron Water Main and Their Appurtenances." When bedding material is required, it shall be free from rock and acceptable to the UTILITY. In no case shall pipe be supported directly on rock.

3.5.2 Rock Foundation

If the trench bottom is in rock, the excavation shall be undercut to a minimum depth of six inches (6") below the bottom of the pipe. The pipe shall be installed on a bed of granular material to provide continuous support for the lower section of the pipe.

3.5.3 Special Bedding

In wet, yielding, mucky locations, where pipe is in danger of sinking below grade or floating out of line or grade, or where backfill materials are of such a fluid nature that the movements of the pipe

might take place during the placing of the backfill, the pipe must be weighted or secured permanently in place by such means as will prove effective. When ordered by the UTILITY, yielding and mucky material in subgrades shall be removed below ordinary trench depth in order to prepare a proper bed for the pipe. Approved granular material shall be used to replace poor subgrade material and shall be classified as “Special Pipe Bedding.”

3.6 PIPE INSTALLATION

All pipe shall be installed with ends abutting true to line and grade as shown on the plans. Supporting of pipe shall be as specified under “Pipe Bedding” specified herein and in no case shall be supported on blocks.

Fittings for the water mains shall be provided and placed as shown on the plans. All open ends of pipes and branches shall be sealed or plugged at the end of each working day.

Before each piece of pipe is lowered into the trench, it shall be thoroughly cleaned and inspected for defects. Any piece of pipe or fitting which is known to be defective shall not be installed or placed in the lines. Any defective pipe or fitting discovered after the pipe is installed shall be removed and replaced with a satisfactory pipe or fitting. In case a length of pipe is cut to fit in a line, it shall be cut so as to leave a smooth edge at right angles to the horizontal axis of the pipe.

Granular bedding material as specified herein, shall be used to correct irregularities in the earth trench subgrade.

The interior of the pipe shall be maintained clean. When the installation of any pipe is stopped for any reason, the exposed end of such pipe shall be closed with an appropriate AWWA approved plug device fitted into the pipe bell, so as to exclude earth or other material.

No backfilling (except for securing pipe in place) over pipe will be allowed until the UTILITY has made an inspection of the joints, alignment and grade in the section installed, but such inspection shall not relieve the CONTRACTOR of further liability in case of defective joints, misalignment caused by backfilling, and other such deficiencies that are identified later.

The CONTRACTOR shall install a four inch by four inch (4”x 4”) wood location post at the ends of all water lines, including water mains and water service connections, so as to identify the termination point of the line. (DRAWING #73) The location posts shall be painted blue and marked so as to identify the line as a water pipe and be extended a minimum of four feet (4’) above existing grade. The curb shall be cut or stamped with a “W” to mark the location of the water service line.

3.7 JOINTING PIPE

Pipe joints described herein shall be installed in accordance with the manufacturer's recommendations.

Field-LOK gaskets or approved equal are required for the first three (3) joints upstream and downstream of all bends, tees, reducers, plugs/caps, and other fittings. Additional Field-LOK gaskets or approved equal may be required by the City of Oxford where designated by the UTILITY.

3.8 BACKFILLING PIPELINE TRENCHES

All backfilling shall be accomplished in accordance with the pipe manufacturer's recommended

installation and backfilling method for the pipe being buried and with the requirements of this SECTION. Any variances must be approved in writing by the UTILITY.

When directed by the UTILITY, the CONTRACTOR shall add water to the backfill material or dry out the material when needed to attain a condition near optimum moisture content for a maximum density of the material when it is compacted. The CONTRACTOR shall obtain a compaction of the backfill of at least 95 percent of standard Proctor density (ASTM D698) where mechanical compaction of backfill is required.

In all cases, walking or working on the completed pipelines, except as may be necessary in compaction procedures or backfilling, will not be permitted until the trench has been backfilled to a point one foot (1') above the top of the pipe. The filling of the trench and the compaction of the backfill shall be carried on simultaneously on both sides of the pipe in such a manner that the completed pipeline will not be disturbed and injurious side pressures do not occur.

3.8.1 Method "A" Backfilling in Open Terrain

Backfilling of pipeline trenches in open terrain shall be accomplished as specified herein.

The lower portion of the trench, from the pipe bedding to the springline (centerline) of the pipe shall be backfilled with granular material, or equal approved by the UTILITY.

When installing ductile iron pipe, the portion of the trench from the springline of the pipe to a point six inches (6") above the pipe shall be backfilled with granular material that is free from large rock.

The upper portion of the trench above the compacted portion shall be backfilled with material that is free from large rock. Incorporation of rock having volume exceeding one-half cubic foot is prohibited. Backfilling this portion of the trench may be accomplished by any means approved by the UTILITY. (DRAWING #10)

3.8.2 Method "B" Backfilling Under Paved Areas

Backfilling pipeline trenches under sidewalks, streets, proposed streets, and driveways shall be shown on the Standard Drawings and as specified herein.

The lower portion of the trench, from the pipe bedding to a point six inches (6") below the bottom of the pavement or concrete subslab, shall be backfilled with dense granular aggregate (DGA) compacted in eight inch (8") lifts, or as approved by the UTILITY.

The upper portion of the trench, from a point six inches (6") below the bottom of the pavement or concrete sub-slab up to grade, shall be backfilled with ODOT item 304. At such time that pavement replacement is accomplished, the excess base course shall be removed as required. Where the UTILITY finds it necessary, low strength mortar backfill (ODOT Item 613) shall be required within the right-of-way. (DRAWING #10)

3.8.3 Settlement of Trenches

The CONTRACTOR shall be responsible for any trench settlement and subsequent damage as a result of such settlement. The CONTRACTOR shall restore all settled areas as directed by the UTILITY. (DRAWING #10)

3.9 CONCRETE CRADLE, ANCHORS, OR ENCASEMENT

Concrete cradle, anchors, or encasement of water mains and fittings shall be placed where shown on the plans. Concrete shall be 4,000 psi and shall be mixed sufficiently wet to permit it to flow under the pipe to form a continuous bed. While placing concrete, care shall be taken not to disturb the grade or line of the pipe or injure the joints.

Water mains shall have concrete thrust or “kicker” blocks at all pipe intersections and changes of direction to resist forces acting on the pipeline.

In places where concrete will be poured at a mechanical joint fitting, polyethylene (plastic) sheets having a minimum thickness of 8 mil, shall be wrapped around the fitting to prevent the concrete from coming in contact with the fitting's bolts and nuts. The accessibility of the mechanical joints must be maintained for future maintenance and/or repair. (DRAWING #66, DRAWING #68)

3.10 HIGHWAY AND RAILROAD CROSSINGS

Steel encasement pipe for road and railroad crossing shall be bored and/or jacked in place to the elevations shown on the plans. All joints between lengths shall be solidly welded with a smooth non-obstructing joint inside. The encasement pipe shall be installed without bends. The water main pipe line shall be installed after the encasement pipe is in place. The location of the two required resilient wedge gate valves and valve chambers must be approved by the UTILITY. (DRAWING #63)

Stainless steel casing spacers (Cascade Waterworks Mfg.) or their equal, approved by the UTILITY, will be installed on the water main in the encasement pipe per the manufacturer’s recommendations. After the water main has been installed, inspected, and tested as specified, both ends of the cover pipe shall be closed with brick or concrete block masonry in a manner acceptable to the UTILITY.

All street cutting, street boring, highway boring, or railroad boring permits will be the responsibility of the CONTRACTOR. (DRAWING #63, DRAWING #68, and DRAWING #71)

3.11 HYDROSTATIC/LEAKAGE TESTING OF MAINS

Upon completion of the construction of water mains, but prior to FINAL INSPECTION, all water mains and appurtenances shall be tested for leaks as specified herein. The UTILITY shall be notified at least 48 hours in advance of the scheduled test time and, at its own discretion, shall have an inspector present during the performance of the test. Where practicable, pipelines shall be tested between main valves or plugs in lengths of not more than 1,500 feet.

A. The UTILITY or its designee shall be the only person(s) allowed to open or close a water valve to the Public Water Supply.

B. The UTILITY shall determine the procedure for disinfection and testing of the water main.

C. The UTILITY or its designee shall slowly fill the completed water main until all air has been expelled through the water main and all its appurtenances.

D. The CONTRACTOR shall perform both a hydrostatic pressure test and a leakage test on the installed water main under the supervision of the UTILITY.

E. The two tests shall be conducted after the trench has been backfilled, but must be

completed before replacement of pavement and final restoration.

F. The CONTRACTOR shall use a UTILITY approved supply of water and furnish the pump, pipe connection corporation stops in the pipe, and water meters used for leakage measurement.

G. The CONTRACTOR shall furnish the pressure gauges and meters for the test.

H. The CONTRACTOR shall be responsible for all labor and equipment necessary to conduct the tests including excavating and backfilling the test pit at the locations selected by the UTILITY.

I. The UTILITY shall require, for the purposes of testing and flushing, the installation of water taps and permanent fire hydrants, by the CONTRACTOR.

J. The test pressure for the hydrostatic pressure test shall be 150 psi, or 1.5 times the operating pressure, whichever is greater, based on the elevation of the lowest point in the section under test and corrected to the elevation of the test gauge unless otherwise directed by the UTILITY. The minimum length of time for this test is two (2) hours.

K. Allowable leakage per 1000 ft. of pipeline - gallons per hour (see chart below).

Average Test Pressure (psi)	**Nominal Pipe Diameter-inches**								
	6	8	10	12	16	20	24	30	36
200	0.64	0.85	1.06	1.28	1.70	2.12	2.55	3.19	3.82
175	0.59	0.80	0.99	1.19	1.59	1.98	2.38	2.98	3.58
150	0.55	0.74	0.92	1.10	1.47	1.84	2.21	2.76	3.31
125	0.50	0.67	0.84	1.01	1.34	1.68	2.01	2.52	3.02
100	0.45	0.60	0.75	0.90	1.20	1.50	1.80	2.25	2.70

L. The exposed pipe and/or the top of the trench shall be carefully inspected after the pressure test for any signs of leakage.

M. Any cracked or defective pipe, fittings, valves or hydrants discovered in consequence of the pressure test shall be removed and replaced by the CONTRACTOR with sound material and the test shall be repeated until satisfactory results are obtained.

N. The CONTRACTOR is responsible for locating, excavating and backfilling the water main trench in addition to replacing the defective material at his expense.

O. Measurement of the leakage shall be conducted in conjunction with the pressure test.

P. The CONTRACTOR shall maintain the 150 psi hydrostatic pressure at all times during the leakage test through his test pump.

Q. Leakage shall be defined as the quantity of water that must be supplied into the newly installed pipe, or any valved section thereof, to maintain the specified leakage test pressure after the air has been expelled and the pipe has been filled with water.

R. The CONTRACTOR shall be responsible for any fees associated with the failure of a test per the current City of Oxford Fee Ordinance.

3.12 DISINFECTION OF WATER MAINS

New potable water mains shall not be placed into service, either temporarily or permanently, until they have been thoroughly disinfected in accordance with the following requirements and to the satisfaction of the UTILITY.

A. Disinfection shall be done by the CONTRACTOR, under the direction of the UTILITY.

B. The practices and procedures for disinfecting the water mains and the chemicals to be used shall be in accordance with the requirements of AWWA C 651, 2014 or latest edition.

C. Chlorine in the form of tablets and granules shall not be used, unless approved by the UTILITY.

D. The UTILITY required method for disinfection is as follows:

1. Water from the existing distribution system shall be controlled so as to flow slowly into the newly installed pipeline during the application of chlorine. At the point of entry (POE) of the new water line into the distribution system, there shall be installed a valve chamber assembly for the purpose of feeding a chlorine solution. There shall be an approved ASSE 1013 Reduced Principle backflow device installed on the water feed line.
2. There shall be a positive displacement pump and water meter for pumping and maintaining an accurate control of the chemical feed ratio for the chlorine mixture.
3. An application of 25 ppm (mg/L), is required for proper disinfection to produce a minimum chlorine residual of 10 ppm (mg/L) after 24 hours.
4. Valves shall be operated so that the strong chlorine solution in the main being treated will not flow back into the main supplying the water.
5. A mixture of water and a chlorine-bearing compound of known chlorine content shall be used.
6. The UTILITY must approve, in advance, all types and formulations of calcium hypochlorite or sodium hypochlorite.
7. Commercial types of calcium hypochlorite are known as HTH, Perchloron and Pittchlor.
8. Following the disinfection of the main, the strong chlorine solution shall be flushed until the chlorine residual is consistent with the standard residuals of the Public Water System. Two consecutive (within 24 hrs.) bacteriological samples shall be collected and analyzed in accordance with the requirements of the EPA Standards. When the samples have been tested and reported safe from contamination, the tested water main may be connected to the system. The UTILITY shall keep on record written documentation that the water sample passed the bacteriological test and is safe. All fees shall be paid in accordance with the most recent City of Oxford Fee Ordinance.

E. The CONTRACTOR shall be responsible for any fees associated with the failure of a test per the current City of Oxford Fee Ordinance.

3.13 CONNECTING TO THE WATER SYSTEM

The Developer/Contractor shall be responsible for the completion of the utility connection application and all fees. The Developer/Contractor shall arrange for all scheduling of the approved installation through the City Engineer's Office.

3.14 CUSTOMER SERVICE CONNECTIONS

Services to be installed outside of new developments shall be installed by the City of Oxford Water Distribution Division.

The division shall install the service connection tap on the water main, service line from the water main to a curb stop and curb box, water meter pit assembly, and a ten foot (10') tail piece where applicable upon application for water service and payment of the appropriate tap fee.

Sleeving of customer service connection lines by use of PVC or any other material shall only be done with the approval and specifications of the UTILITY.

3.15 CROSS CONNECTION CONTROL

There shall be no connection between the water distribution system and any pipes, pumps, hydrants, or other material that may be discharged or drawn into the public water system.

3.16 RESPONSIBILITY FOR MAINTENANCE

Prior to formal acceptance of the IMPROVEMENTS by the UTILITY, the CONTRACTOR and/or OWNER/DEVELOPER shall be responsible for the maintenance and repair of the IMPROVEMENTS in compliance with these specifications for a period of one year after construction completion and acceptance by the UTILITY.

SECTION FOUR

SANITARY SEWERS

4.0 PURPOSE

The purpose of this SECTION is to outline requirements for design, construction, inspection, and final acceptance of sanitary sewer mains, service connections, manholes, wastewater lift stations, and appurtenances.

4.1 DESIGN REQUIREMENTS

A. It shall be the OWNER/DEVELOPER'S responsibility to determine the down stream critical section of the existing sanitary sewer system. Should this section not be able to handle the additional flow, it shall be upgraded at the sole expense of the OWNER/DEVELOPER.

B. When an existing sanitary sewer main needs to be extended to the OWNER/DEVELOPER'S property, the same size line shall be extended by the OWNER/DEVELOPER unless a larger size line is needed.

C. In cases where the expected flow from a proposed development will require a larger size line than already exists, the OWNER/DEVELOPER shall be responsible, at his sole expense, for upgrading the existing system to an increased size that will handle the additional flow.

D. In cases where sanitary sewer is not available to a site, it shall be the OWNER/DEVELOPER'S sole responsibility and cost to extend the sanitary sewer to his site.

E. Interruption of Service
The contractor shall provide continuous, uninterrupted service to all users in and upstream of the project area.

F. Flow Handling Plan
Prior to beginning work on any sanitary sewer manhole or main requiring flow modification, the Contractor shall present a plan for handling wastewater flow to the UTILITY for approval. The plan shall describe the methods to be used and shall identify all materials and equipment that will be required for flow handling. The contractor's plan shall also identify a contingency plan and procedures to be implemented in the event of a failure or other emergency. In the event that bypass pumping is necessary, the contractor is required to have personnel on site for the duration of the project to handle emergency conditions. In the event that bypass pumping is necessary, the CONTRACTOR is required to have duplicate pumps sized to handle the flow independently, and personnel onsite for the duration of the project to handle emergency situations that may occur.

G. Methods
At no time shall wastewater flows be allowed on the ground surface, streets, storm sewers, or other places that may constitute a health hazard. Whenever in the opinion of the UTILITY, a health hazard exists as a result of actions or inactions of the Owner/Developer and/or Contractor, the Owner/Developer and/or Contractor shall immediately correct the situation to the satisfaction of the UTILITY. If not corrected in a timely manner, the UTILITY may take actions necessary to remove the health hazard and charge the Owner/Developer

and/or Contractor for any and all costs incurred.

H. Damages to Property
Any damages to public or private property due to backups, overflows or surcharging resulting from the work under this section shall be the responsibility of the Owner/Developer and/or Contractor and shall be corrected as soon as practical and at no cost to the UTILITY. If not corrected in a timely manner, the UTILITY will take the necessary action and charge the Owner/Developer and/or Contractor for any and all costs incurred.

I. Plans shall indicate the elevation of the one hundred (100) year flood plain. All manholes shall be designed so as the rim elevation is one foot (1') above the one hundred (100) year flood plain.

J. Sewers shall be extended to all upstream boundaries of the property or development being served. This includes installing sewer through non-developed land, open space, green space, etc., when there is developable upstream property, as determined by the Utility.

Pipe and joint materials shall conform in all respects to the material requirements outlined in this SECTION and to the manufacturer's recommendations.

All pipe, fittings, and joints for sanitary sewer shall be constructed of polyvinyl chloride (PVC) or ductile-iron (DI) pipe unless otherwise approved by the UTILITY. Sanitary sewer mains larger than eighteen inches (18") in diameter require special design considerations and shall be given special design criteria. An OWNER/DEVELOPER anticipating construction of sanitary sewer mains larger than eighteen inches (18") in diameter shall meet with the UTILITY to establish design criteria.

When, in the opinion of the UTILITY, the proposed sanitary sewer pipe material and appurtenances will be incompatible with the wastewater to be transported, the UTILITY reserves the right to specify sanitary sewer pipe material and appurtenances which are compatible with the wastewater. Sanitary sewer pump station design and requirements are referred to in Section 6.0.

4.1.1 Protection of Public Water Supplies

~~There shall be no physical connection between a public or private potable water system and a sanitary sewer or its appurtenances, which would permit passage of any sewage into the potable water supply system.~~

~~Sanitary sewers and manholes shall be installed at least ten feet (10') horizontally from any existing or proposed water main. When local conditions prevent a separation of ten feet (10'), a sanitary sewer main may be installed closer than ten feet (10') to a water main if it is installed in a separate trench; if it is installed in the same trench, the water main must be located at one side on a bench of undisturbed earth. In either case, the elevation of the crown of the sanitary sewer must be at least eighteen inches (18") below the invert of the water main.~~

~~When it is not possible to obtain proper horizontal and vertical separation as stipulated above, the sanitary sewer shall be constructed of ductile iron (DI) pipe. The sanitary sewer main shall be pressure tested and shall withstand a 150 psi pressure test for a distance of ten feet (10') on each side of the water main. One full length of sanitary sewer main should be centered over the water main so that both joints will be as far from the water main as possible. (Current 10 State Standards)~~

When sanitary sewers are proposed in the vicinity of any water supply facilities, requirements of the most current "Recommended Standards for Water Works – 10 State Standards" should be used to

confirm acceptable isolation distances in addition to the following requirements:

1. Cross Connections Prohibited

   There shall be no physical connections between a public or private potable water supply system and a sanitary sewer or appurtenance which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come into contact with any part of a sanitary sewer manhole.

2. Relation to Water Works Structures

   While no general statement can be made to cover all conditions, it is generally recognized that sewers shall meet the requirements of the appropriate reviewing agency with respect to minimum distances from public water supply wells and other water supply sources or structures. All existing waterworks units, such as basins, wells, or other treatment units, within 200 feet of the proposed sanitary sewer shall be shown on the engineering plans. Soil conditions in the vicinity of the proposed sewer within 200 feet of waterworks units shall be determined and shown on the engineering plans.

3. Relation to Water Mains

   Sanitary sewers shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge. For gravity sewers where it is not practical to maintain a 10 foot separation, the appropriate reviewing agency may allow deviation on a case-by-case basis, if supported by data from the ENGINEER. Such deviation may allow installation of the gravity sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on one side of the gravity sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for gravity sewers, both the water main and gravity sewer shall be constructed of slip-on or mechanical joint pipe complying with Section 8.1 and Section 8.7 of the most current "Recommended Standards for Water Works – 10 State Standards" and shall be pressure rated to at least 150 psi and pressure tested to ensure watertightness.

   Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper horizontal and vertical separation as stipulated above, one of the following methods shall be specified:

   a. The sewer shall be designed and constructed equal to water pipe, as described above.

   b. Either the water main or the sanitary sewer may be encased in a watertight carrier pipe that extends 10 feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be made of materials approved by the UTILITY for use in water main construction.

4.1.2 Storm Water Prohibited

The following two notes shall appear on all sanitary sewer plans submitted for review and approval:

1. Roof drains, foundation drains, sump pump drains, and all other clean water

connections to the sanitary sewer system are prohibited.

2. No buildings shall be connected to a sanitary sewer lateral until the building is under roof or as directed by the UTILITY.

4.2 SANITARY SEWER MAIN PIPE MATERIAL

All new construction of sanitary sewer mains shall consist of ~~truss pipe in sizes 8" through 15" and be A2000 for 18" or larger~~ SDR-35 or SDR-26 Polyvinyl Chloride (OVC) pipe, fittings, and joints unless otherwise directed by the UTILITY.

Pipe must be delivered to the job site by means that will adequately support it and not subject it to undue stresses. In particular, the load shall be so supported that the bottom rows of pipe are not damaged by crushing. Pipe shall be unloaded carefully and strung or stored as close to the final point of placement as is practical. Pipe shall be stored on the job site in accordance with the manufacturer's recommendations. Any pipe that has been left uncovered and has subsequently been allowed to discolor, (this discoloration represents an indication of a possible reduction in pipe impact strength) may be subject to rejection by the UTILITY.

The UTILITY shall determine the type of pipe to be installed.

4.2.1 Polyvinyl Chloride Pipe (PVC), Fittings, and Joints

PVC pipe shall meet the requirements for Polyvinyl Chloride (PVC) gravity sanitary sewer pipes with integral bell and spigot gasketed joints. Nominal sized 4", 6", 8", 10", 12", and 15" are manufactured to meet requirements of American Society for Testing and Materials standard ASTM D-3034, Standard Specification for Type PSM Polyvinyl Chloride (PVC) Sanitary Sewer Pipe. Nominal sized 18", 21", 24", 27", and 30" comply with ASTM F-679, Standard Specification for PVC Large Diameter Plastic Gravity Sanitary Sewer Pipe.

All pipes used shall be manufactured for use in gravity flow applications, such as sanitary sewer lines. These pipes shall be produced with wall thickness corresponding to dimension ratio SDR-35, with pipe stiffness value of 46 psi when tested in accord with ASTM D-2412, Standard Test Methods for Determination of External Loading of Plastic Pipe by Parallel Plate Loading.

All pipe shall utilize a "locked in" integral gasket joint design meeting the requirements of ASTM D-3212 Standard Specification for Joints for Drain and Sanitary Sewer Plastic Pipes Using Flexible Elastomeric Seals. The gaskets shall be reinforced with a steel band and conform to the requirements of ASTM F-477, Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipes.

The pipe shall be manufactured from PVC compound meeting the requirements of cell class 12454-B as defined by ASTM D-1784, Standard Specification for Rigid Polyvinyl Chloride (PVC) Compounds. These materials are classified as type T-I in ASTM F-679.

Pipe markings shall be as specified in ASTM D-3034 and ASTM F-679.

Quality assurance testing shall be as required by ASTM D-3034 and ASTM F-679.

4.2.2 Gasketed PVC Truss Pipe (8" - 15"), Fittings, and Joints

PVC composite pipe shall conform to the requirements of ASTM Designation D2680-90 (or latest

revision). Pipe and fitting shall be homogeneous throughout and free from visible cracks, holes, foreign inclusions, or other injurious defects. Minimum pipe stiffness, when measured in accordance with ASTM Test Method D2412, shall be 200 psi. The thermoplastic material shall be a rigid PVC plastic and shall meet or exceed the requirements of ASTM Specification D1784 for a minimum cell classification of 12454B or 12454C. The other component for semi-rigid pipe shall be Portland cement, Mearlcrete concrete or other inert filler material that essentially fills the truss annulus to form a composite pipe.

All fittings for PVC composite pipe shall conform to ASTM D2680-90 Section 7.1 and Tables 5 and 6. To ensure compatibility, the pipe manufacturer shall furnish all fittings.

All joints shall be made with gasketed bell coupling connections. The manufacturer shall provide documentation showing no leakage when gasketed pipe joints are tested in accordance with ASTM D2680 Section 10.4.2 and ASTM Test Method D3212. Elastomeric seals (gaskets) shall meet the requirements of ASTM Designation F477.

4.2.3 A-2000 PVC Sanitary Sewer Pipe (18" - 36"), Fittings, and Joints

This specification covers the material, manufacture, installation, and testing of A-2000 PVC gravity sanitary sewer pipe.

The thermoplastic material shall be a rigid PVC (polyvinyl chloride) compound and shall meet or exceed the requirements of ASTM Specification D 1784, for a minimum cell classification of 12454B, 12454C, or 13343C as defined in ASTM Specification D 1784.

The A-2000 PVC sanitary sewer pipe shall be manufactured per ASTM F949 with a pipe stiffness (tested in accordance with ASTM D 2412) of 50 psi. There shall be no evidence of splitting, cracking, or breaking when pipe is tested in accordance with ASTM D 2412 at 60 percent (60%) flattening. Pipe dimensions shall meet the requirements given in ASTM F 949 when measured in accordance with ASTM D 2122.

Gasketed pipe joints shall show no leakage when tested in accordance with ASTM D 3212. Elastomeric seals (gaskets) shall meet the requirements of ASTM Specification F 477.

Install per ASTM D 2321-89.

4.2.4 Ductile Iron Pipe, Fittings, and Joints

Ductile iron pipe shall conform to ANSI A21.51 and AWWA C151. All ductile iron pipe thickness shall be designed according to ANSI A21.50 and AWWA C 151 requirements.

Ductile iron pipe and fittings shall receive the standard cement mortar lining with bituminous seal coat on the inside in accordance with ANSI 21.4 requirements. Pipe and fittings shall have a standard coal tar or asphalt based bituminous outside coating a minimum of 1 mil. thick.

Each piece of pipe shall bear the manufacturer's name or trademark, the year in which it was produced and the letters "DI" or word "DUCTILE". Shop inspection and testing shall be in accordance with the AWWA Specifications cited above and shall be certified by an independent laboratory.

Fittings for ductile iron pipe shall be mechanical joint Class 50 gray iron conforming to ANSI A21.10

and AWWA C110 for short body cast iron fittings or as approved by the UTILITY. Fittings shall have bituminous seal coat on the inside as specified herein.

Where ductile iron pipe is to be installed in corrosive soil conditions, the pipe shall be protected by an 8 mil. thick polyethylene encasement meeting the requirements of ANSI A21.5. Such corrosive soils include, but are not limited to salt marshes, saturated alkaline soils, cinder fills, areas of decaying vegetation, and waste dumps. This shall be determined by the UTILITY.

All ductile iron pipes and fitting used for sanitary sewer gravity mains or force mains shall have Protecto 401 ceramic epoxy interior lining or equal, as provided by the UTILITY.

4.2.5 Steel Encasement Pipe

Encasement pipe shall be steel, plain end, uncoated and unwrapped, have minimum yield point strength of 35,000 psi, and conform to ASTM A252 Grade 2 of ASTM A130 Grade B without hydrostatic tests. The steel pipe shall have welded joints and be in at least eighteen foot (18') lengths. The wall thickness of the pipe shall be a minimum of 0.250 inches for highway crossings and 0.344 inches for railroad crossings. The diameter of the pipe shall conform to the requirements of the American Railway Engineering Association for railroad crossings, and the requirements of ODOT for highway crossings.

4.3 SANITARY SEWER LINES (Collectors, Mains, and Trunk Lines)

4.3.1 Sizing

All public sanitary sewers conveying raw sewage shall be at least eight inches (8") in diameter. New sanitary sewer systems shall be designed on the basis of an average daily per capita flow of sewage of not less than 100 gallons per capita per day (gpcd). This figure is assumed to cover normal infiltration, but an additional allowance should be made when conditions are unfavorable or as directed by the UTILITY.

Sanitary sewers shall be designed on a peak flow basis using a peak factor of four (4) times the total calculated average daily wastewater flow for sanitary sewer mains, and a peak factor of 2.5 for trunk sanitary sewers. The UTILITY shall determine what constitutes a sanitary sewer main versus a sanitary trunk main for purposes of calculating. The peak flow for areas which do not have a 24 hour run-off period shall be calculated as follow:

$$\text{Peak Factor} = \frac{3.33 \times 24 \text{ (hours)}}{\text{Run - Off Period (Hours)}}$$

Peak hourly design flow (gpd) = peak factor x average daily flow

Facility type	Run-Off Period(5)	Peak Factor(s)
Factories	Length of work day	Variable
Subdivision or Municipalities > 250 homes	24 hours	3.33
Subdivision or Municipalities < 250 homes	16 hours	5.0
Hospitals, Nursing and Rest Homes	16 hours	5.0
Camps	16 hours	5.0
Public Schools	8 hours	10
Restaurants	8 to 12 hours	10-6.66
Boarding schools	16 hours	5.0
Mobil home parks	16 hours	5.0

Apartments, Motels	16 hours	5.0

Use of other run - off periods must be justified.

A complete set of computations that indicate expected flow for sizing of sanitary sewers, depth of flow, and velocities at minimum, average, and maximum daily waste flows for the different sizes of sanitary sewers proposed shall be provided to the UTILITY. **Sewers shall be designed with enough capacity to serve the proposed development and all potential flow from upstream properties, as determined by the Utility.**

4.3.2 Depth

In general, sanitary sewers shall be deep enough to prevent freezing and to receive sewage from basements and cellars. In no case shall mains be less than thirty-six inches (36") deep. All homes within a new development shall be serviced by gravity flow to the sanitary sewer main, unless approved in writing by the Utility.

4.3.3 Location

Public sanitary sewer mains shall be installed in public rights-of-way or upon approval, in a public utility easement granted to the City of Oxford UTILITY. These utility easements and rights-of-way must be recorded at Butler County by the Developer. A copy of this recorded easement/right-of-way must be supplied to the City of Oxford before being accepted by the City of Oxford. A sanitary sewer maintenance area shall be provided. This sanitary sewer maintenance area's width shall be no less than twenty feet (20') and shall be completely within the public right-of-way or public UTILITY easement. The sanitary sewer maintenance area shall be evenly divided on both sides of the sanitary sewer main.

No sanitary sewer main or appurtenance shall run between residential or commercial structures unless authorized in writing by the UTILITY.

The CONTRACTOR shall install a four-inch by four inch (4"x 4") wood location post, a minimum of four feet (4') above grade of the existing soil at all sanitary sewer plugs, including sanitary sewer main termination points. The location post shall be painted green and marked so as to identify the sanitary sewer line. (DRAWING #73) An "S" shall be cut or stamped on the curb to reference the location of the sanitary sewer lateral. (DRAWING #73)

The location of sanitary mains and trunk lines should be located as close as possible to the center of the street, therefore minimizing infiltration from surface runoff into the ventilated manhole lid.

4.3.4 Alignment

The sanitary sewer mains shall be installed at uniform grade and in straight alignment. Proper grade and alignment shall be verified for each section of pipeline using appropriate instrumentation and methodology.

4.3.5 Flow Velocity

All sanitary sewers shall be designed to give a mean velocity of at least two feet (2') per second when flowing full. This is based on Manning's formula for design. When velocities greater than fifteen feet (15') per second are expected, provisions shall be made to protect against displacement and erosion of the pipe.

4.3.6 Slope

Sanitary sewers shall be installed with uniform slope and straight alignment between manholes. The following are the minimum slopes which shall be provided, however, slopes greater than these are desirable. The last upstream section of the pipeline shall be installed at 1.0% regardless of the pipe size unless waived by the UTILITY. **The UTILITY shall have final approval of slope designs**.

Sanitary Sewer Size	Minimum Slope %
8 inch	0.40
10 inch	0.28
12 inch	0.22
14 inch	0.17
15 inch	0.15
16 inch	0.14
18 inch	0.12
21 inch	0.10
24 inch	0.08
27 inch	0.067
30 inch	0.058
36 inch	0.046
39 inch	0.041
42 inch	0.037
48 inch	0.030

4.3.7 Changes in Pipe Size

All changes in pipeline size and grade shall occur in a manhole.

4.4 SANITARY SEWER SERVICE LINES (Laterals)

The UTILITY shall approve the location of the sanitary sewer service laterals on the sanitary sewer main. The CONTRACTOR shall install the sanitary sewer service lateral from the sanitary sewer main to a point between the curb and the sidewalk, installing a clean out with a screw out cap and a Ford® metallic lid assembly marked “Sewer” or Utility approved equal. (DRAWING #22) Where a sidewalk is not applicable, the clean out shall be located no less than two feet (2') and no more than four feet (4') from the back side of the curb. When neither situation is applicable the UTILITY will have the final determination for the location of the sanitary sewer cleanout. Sanitary sewer laterals and cleanouts shall be located outside of driveways whenever possible.

It shall be the responsibility of the property owner to pay the cost of constructing and maintaining the building sanitary sewer from the point where such building sanitary sewer connects with the public sanitary sewer line into the building or premises served.

All sanitary sewer service laterals shall be PVC SDR 35 or SCH 40 only, as specified herein unless otherwise specified by the UTILITY. Trenching, pipe laying, joints and backfilling shall conform to the requirements set out herein. All open ends shall be sealed with standard plugs to the

satisfaction of the UTILITY.

All sanitary sewer service laterals must be embedded and compacted in washed round stone (# 57) to twelve inches (12”) above the top of the sanitary sewer lateral unless otherwise approved by the UTILITY.

The installation of sanitary sewer laterals shall follow immediately or be concurrent with the construction of the sanitary sewer main.

4.4.1 Size

The size of sanitary sewer laterals shall be subject to the approval of the UTILITY, but in no case shall the diameter be less than six inches (6”) from the sanitary sewer main to the required UTILITY cleanout assembly. (DRAWING #22)

The sanitary sewer clean out shall be covered at grade level by an approved Ford® Type A cover marked SEWER. (DRAWING #22) Sanitary sewer laterals shall tie directly to the building sanitary sewer.

The transition coupling from the building sanitary sewer to the UTILITY'S clean out will be accomplished by the use of a rigid coupling (PVC, rubber/stainless steel) or UTILITY approved equal by the UTILITY.

4.4.2 Slope

The general requirements for the slope of sanitary sewer laterals shall be not less than one quarter (1/4) inch per linear foot (2% slope). (DRAWING #22)

4.4.3 Location

No sanitary sewer lateral shall be installed parallel to or within five feet (5') of any load-bearing wall that might thereby be weakened.

Whenever a sanitary sewer service line crosses a concrete street curb, the CONTRACTOR shall clearly mark the location of the sanitary sewer service line with an “S” cut or imprinted into the concrete curb.

4.4.4 Depth

Sanitary sewer laterals shall be deep enough to receive sewage from basements and cellars and at sufficient depth to prevent freezing. The minimum sanitary sewer lateral depth of cover shall be thirty-six inches (36”).

4.4.5 Alignment

The sanitary sewer lateral shall be installed in a uniform grade and in perpendicular alignment from the main to meet the probable building sanitary sewer grade at the UTILITY standard clean-out assembly so that no bends will be required.

Sanitary laterals are to run perpendicular to the sanitary sewer main from the UTILITY standard clean-out assembly. Any deviation from this standard must have the written approval of the UTILITY.

4.4.6 Clean Outs

Clean outs for sanitary sewer laterals shall be built at all horizontal or vertical changes of direction greater than 45 degrees and shall consist of a six-inch (6") directional tee and wye. Along straight segments of pipe outside the right-of-way, cleanouts shall be installed as required by the Ohio Plumbing Code. (DRAWING # 22)

The clean out cap/plug shall have an operating nut. Cleanouts shall be covered by a Ford® Type A32**,** or Utility approved equal, with a single lid cover lettered SEWER with an 11 1/2" locking lid to be flush with final ground level. Installation of cleanouts in traffic areas shall be covered by an "extra heavy cover Ford® Type A32H, or Utility approved equal, with a single lid cover lettered SEWER with an 11-1/2" locking lid; flush to the grade of the pavement. (DRAWING #22)

4.4.7 Lateral Connections

Lateral connections to the sanitary sewer main shall only be located at an existing "Wye" connection on the main. When none exist on the main, any method of tapping a sanitary sewer main must first be approved in writing by the UTILITY. Concrete encasement shall only be permitted by special written authorization by the UTILITY. (DRAWING #22)

All connections between the sanitary sewer main and sanitary sewer lateral, as well as the connection between the sanitary sewer lateral and the building connection, shall be inspected by the UTILITY prior to backfilling.

4.4.8 Reuse of Existing Sanitary Sewer Laterals

Existing sanitary sewer laterals may be used upon request for connection of new buildings only when they are found, on examination and tested by the Utility, to meet requirements of current City Specifications and be in good condition.

4.5 SANITARY GRINDER/LIFT PUMPS

Sufficient depth of sanitary sewer mains shall be provided to allow gravity flow for all sanitary sewer lateral connections. The use of grinder/lift pumps for sanitary sewer laterals is strictly prohibited. Any alternative requested to gravity flow must be submitted in writing to the UTILITY. The UTILITY may review an alternative method to gravity flow based on pre-existing conditions. If an alternate method to a gravity flow sanitary sewer is approved by the UTILITY, the owner shall, in writing, take full responsibility for the installation and maintenance of this alternate method for sanitary sewer removal from the property.

4.6 TRENCH EXCAVATION

Unless specifically directed otherwise by the UTILITY, not more than 500 feet of trench shall be opened ahead of the pipe installation work of any one crew and not more than 500 feet of open ditch shall be left behind the pipe installation work of any one crew.

All backfilled ditches shall be maintained in such a manner that they will offer no hazard to the passage of traffic. The convenience of the traveling public and property owners abutting shall be taken into consideration. All public or private drives shall be taken into consideration and shall be promptly backfilled or bridged. Excavated materials shall be disposed of so as to cause the least

interference.

Trenches in which pipes are to be installed shall be excavated via open cut to the depths shown on the approved plans. The minimum allowable trench width shall not be less than the outside diameter of the pipe plus eight inches (8”). Where rock is encountered, it shall be removed to a minimum depth of four inches (4”) below the pipe bells. Unless specifically authorized by the UTILITY, trenches shall in no case be excavated or permitted to become wider than two feet six inches (2' 6”), plus the nominal diameter of the pipe at the level of or below the top of the pipe.

All excavation materials shall be placed a minimum of two feet (2’) back from the edge of the trench.

It is the CONTRACTOR’S sole responsibility to maintain safe working conditions on the job site and to conform to “Specific Safety Requirements Relating to Construction of the Industrial Commission of Ohio”; Construction Safety and Health Regulations, Part 1926, Subpart P “Occupational Safety and Health Administration”, U. S. Department of Labor, and all local laws, ordinances, and regulations.

Trenches shall be kept free of water during the installation of pipe until the pipeline has been backfilled.

4.6.1 Obstructions

In cases where storm sewers, sanitary sewers, gas lines, water lines, telephone lines, electric lines and other utilities, or other underground structures are encountered, these aforementioned items, or any not listed, shall not be displaced or disturbed unless necessary, in which case they shall be replaced in as good of condition as found as quickly as possible. The affected utilities shall be notified prior to being disturbed or repaired.

The CONTRACTOR shall notify the Ohio Utilities Protection Service (OUPS) at 1-800-362-2764 (also know as *Call Before You Dig*) at least two business days prior to beginning any construction work. The CONTRACTOR shall also notify, at least two business days prior to work, any utility within Oxford’s utility service area that does not subscribe to the OUPS. It shall be the responsibility of the CONTRACTOR to determine that all impacted utilities have been properly notified prior to any construction of work.

4.6.2 Shoring, Sheeting, and Bracing

The shoring, sheeting, and bracing of excavations shall be performed by the CONTRACTOR in compliance with applicable safety codes and OSHA requirements.

Where unstable material is encountered or where the depth of excavation in earth exceeds five feet (5'), the sides of the trench or excavation shall be supported by substantial sheeting, bracing, and shoring, or the sides shall be sloped to the angle of repose. Sloping the sides of the ditch to the angle of repose will not be permitted in streets, roads, narrow rights-of-way or other constricted areas unless otherwise specified. The design and installation of all sheeting, sheet piling, bracing, and shoring shall be based on computations of pressure exerted by the materials to be retained under construction conditions. Adequate and proper shoring of all excavations shall be the entire responsibility of the CONTRACTOR, however, the ENGINEER may require the submission of shoring plans (accompanied by supporting computations) for review prior to the CONTRACTOR undertaking any portion of the work.

Excavations to be made below the depth of an existing foundation, shall be supported by shoring, bracing or underpinning as long as the excavation shall remain open, or thereafter if required to ensure the stability of the structure supported by the foundation. The CONTRACTOR shall be held strictly responsible for any damage to said foundation.
Care should be taken to avoid excessive backfill loads on the completed pipelines. The requirements that the width of the ditch at the level of the crown of the pipe be no more than two feet six inches (2' 6") plus the nominal diameter of the pipe shall be strictly observed.

Trench shoring shall not be removed until sufficient backfill has been placed to protect the pipe. All sheeting, planking, timbering, bracing, and bridging shall be placed, renewed, and maintained as long as necessary.

4.7 PIPE BEDDING

In all cases, the foundation for sanitary sewer mains shall be prepared so that the entire load of the backfill on top of the sanitary sewer pipe will be carried on the barrel of the pipe so that none of the load will be carried on the bells.

Where undercutting and granular bedding are involved, the depth at the bottom of the bells of the pipe will be at least six inches (6") above the bottom of the trench as excavated. Supporting of sanitary sewer pipe shall be as set out herein, and in no case shall the sanitary sewer pipe be supported on blocks. (DRAWING #11)

4.7.1 Earth Foundation

All sanitary sewer pipes shall be supported on a granular bedding material, washed round stone (#57). Bedding material shall be free from rock and be acceptable to the UTILITY. In no case shall pipe be supported directly on rock.

4.7.2 Rock Foundation

If the trench bottom is in rock, the excavation shall be undercut to a minimum depth of six inches (6") below the bottom of the pipe. The pipe shall be installed on a bed of granular material, washed round stone (#57), to provide continuous support for the lower section of the pipe.

4.7.3 Special Bedding

When ordered by the UTILITY, yielding and mucky material in subgrades shall be removed below ordinary trench depth in order to prepare a proper bed for the pipe. Approved granular material shall be used to replace poor subgrade material and shall be classified as "Special Pipe Bedding".

4.8 PIPE INSTALLATION

All pipe shall be installed with ends abutting true to line and grade as shown on the plans. Supporting of pipe shall be as specified under "Pipe Bedding" specified herein and in no case shall be supported on blocks.

Fittings for the sanitary sewer mains shall be provided and placed as shown on the plans. All open ends of pipes and branches shall be sealed or plugged.

Before each piece of pipe is lowered into the trench, it shall be thoroughly cleaned and inspected for

defects. Any piece of pipe or fitting which is known to be defective shall not be installed or placed in the line. Any defective pipe or fitting discovered after the pipe is installed shall be removed and replaced with a satisfactory pipe or fitting. In case a length of pipe is cut to fit in a line, it shall be so cut as to leave a smooth edge at right angles to the longitudinal axis of the pipe. Granular bedding material as specified herein, shall be used to correct irregularities in the earth trench subgrade.

The interior of the pipe shall be maintained clean. When the installation of pipe is stopped for any reason, the exposed end of such pipe shall be closed with a plug fitted into the pipe bell, so as to exclude earth or other material from entering the pipe.

No backfilling (except for securing pipe in place) over pipe will be allowed until the UTILITY has made an inspection. This inspection shall not relieve the CONTRACTOR of further liability in case of defective joints, misalignment caused by backfilling, and other such deficiencies that are identified later.

4.9 BACKFILLING PIPELINE TRENCHES

All backfilling shall be accomplished in accordance with the details shown on the Standard Drawings and the requirements of this SECTION. Any variances must be approved in writing by the UTILITY.

When directed by the UTILITY, the CONTRACTOR shall add water to the backfill material or dry out the material when needed to attain a condition near optimum moisture content for a maximum density of the material when it is compacted. The CONTRACTOR shall obtain a compaction of the backfill of at least 95 percent of standard Proctor density (ASTM D698) where mechanical compacting of backfill is required.

In all cases, walking or working on the completed pipelines except as may be necessary in compacting or backfilling will not be permitted until the trench has been backfilled to a point one foot (1') above the top of the pipe. The filling of the trench and the tamping of the backfill shall be carried on simultaneously on both sides of the pipe in such a manner that the completed pipeline will not be disturbed and injurious side pressures do not occur.

4.9.1 Method “A” Backfilling Open Terrain

Backfilling of pipeline trenches in open terrain shall be as shown on the Standard Drawings and as specified herein.

The lower portion of the trench, from a point six inches (6”) above the pipe shall be bedded with washed round stone (size 57) as approved by the UTILITY,

Backfilling this portion of the trench may be accomplished by any means approved by the UTILITY. The trench backfill shall be heaped over or leveled. (DRAWING #11)

4.9.2 Method “B” Backfilling- Under Paved Areas

Backfilling of pipeline trenches under sidewalks, streets, proposed streets, and driveways shall be as shown on the Standard Drawings and as specified herein.

The lower portion of the trench, from the bedding to a point six inches (6”) below the bottom of the pavement or concrete subslab up to grade, shall be backfilled with a base course of dense grade aggregate backfill (ODOT item 304) crushed gravel, or low strength mortar backfill (ODOT item 613)

suitable to the UTILITY. At such time that pavement replacement is accomplished, the excess base course shall be removed as required. (DRAWING #11)

4.9.3 Settlement of Trenches

The CONTRACTOR shall be responsible for any trench settlement that occurs within the right-of-way within one year from the time of final acceptance of the work. If paving shall require replacement because of trench settlement within this time, it shall be replaced by the CONTRACTOR. Repair of settlement damage shall meet the approval of the UTILITY. (DRAWING #11)

4.10 MANHOLES

Manholes shall be of the pre-cast concrete type. Manhole lift holes and grade adjustment rings shall be sealed with non-shrinking mortar or other material approved by the UTILITY. Inlet and outlet pipes shall be joined to the manhole with a gasketed, flexible, watertight connection or any watertight connection arrangement that allows differential settlement of the pipe and manhole wall to take place. Watertight manhole covers are to be used wherever the manhole tops may be flooded by street runoff or high water. Locked manhole covers may be desirable in isolated easement locations or where vandalism may be a problem as indicated by the UTILITY.

For the purposes of inspection and sampling, the City of Oxford may require, at the owner's expense, the installation of a sanitary sewer manhole, downstream of the property in question, as determined by the City of Oxford per City of Oxford Codified Ordinance Section 923.

Manholes shall be installed: at the end of each line; at all changes in grade, size or alignment; at all intersections; and at distances not greater than 400 feet for sanitary sewers 15 inches or less, and 500 feet for sanitary sewers 18 inches to 30 inches, except that distances up to 600 feet may be approved in cases where adequate modern cleaning equipment for such spacing is provided. Greater spacing may be permitted in larger sanitary sewers. Cleanouts may be used only for special conditions and shall not be substituted for manholes nor installed at the end of laterals greater than 150 feet in length.

The minimum diameter of manholes shall be 48 inches (48"). Larger diameter manholes are preferable for large diameter sanitary sewers. A minimum access diameter of 24 inches (24") shall be provided.

The flow channel straight through a manhole shall be made to conform as closely as possible in shape and slope to that of the connecting sanitary sewers. The channel walls shall be formed or shaped to the full height of the crown of the outlet sanitary sewer in such a manner to not obstruct maintenance, inspection or flow in the sanitary sewers.

A bench shall be provided on each side of any manhole channel when the pipe diameter(s) is less than the manhole diameter. The bench shall be sloped no less than ½ inch per foot (4 percent). No sanitary sewer lateral, service connection, or drop manhole pipe shall discharge onto the surface of the bench.

A drop pipe shall be provided for a sanitary sewer entering a manhole at an elevation of 24 inches (24") or more above the manhole invert. Where the difference in elevation between the incoming sanitary sewer and the manhole invert is less than 24 inches (24"), the invert shall be filleted to

prevent solids deposition. Drop manholes shall be constructed with an outside drop connection. Due to the unequal earth pressures that would result from the backfilling operation in the vicinity of the manhole, the entire outside drop connection shall be encased in concrete. Where corrosive conditions, due to septicity or other causes, is anticipated, consideration shall be given to providing corrosion protection on the interior of the manholes. Inside drop manholes may only be utilized with the approval of the UTILITY.

Manhole connections to the sanitary sewer main shall be accomplished with a rubber boot or gasket seal to ensure a watertight seal. Ends of pipes that enter manholes shall be cut smooth, straight, and at right angles to the pipe axis. The annular space between the boot or gasket and the pipe shall be grouted flush so that a smooth continuous channel is formed through the manhole. The annular space above the flow channel shall not be grouted. (DRAWING #2 and #5A)

4.10.1 Slope of Trough

The slope through a sanitary manhole (influent line to effluent line) shall be a minimum of 0.1 feet unless otherwise approved by the UTILITY.

4.11 TESTING OF SANITARY SEWER MAINS AND MANHOLES

The UTILITY will require a prior notice of not more than 48 hours and not less than 24 hours to schedule an inspection of all applicable sanitary sewer appurtenances. The CONTRACTOR shall inspect the sanitary sewer main and laterals with the use of a video camera and/or other means made available. All defects will be corrected by the CONTRACTOR as directed by the UTILITY. A UTILITY representative must be present during the video inspection process and a copy of the video inspection tape/inspection report shall be forwarded to the UTILITY for file.

Sanitary sewer pipe joints shall be watertight and all leakage shall be repaired in a manner approved by the UTILITY.

All sanitary sewer mains constructed as part of the IMPROVEMENTS shall be tested for leakage and pipe deflection by the CONTRACTOR in the presence of the UTILITY. The UTILITY may require the CONTRACTOR to perform additional infiltration and/or exfiltration tests to demonstrate the quality of the sanitary sewer main IMPROVEMENTS.

After the IMPROVEMENTS have been completed but prior to performing any test herein specified, the CONTRACTOR shall clean the sanitary sewer line constructed in the IMPROVEMENTS by high-pressure flushing or other approved method. The CONTRACTOR shall ensure that gravel and debris is not flushed into the existing sanitary sewer system. This process shall be witnessed by the UTILITY.

Prior to the first layer of blacktop the CONTRACTOR shall contact the UTILITY to make arrangements for final inspections of the improvements.

All lines or section of lines that are found to be installed improperly with respect to line or grade, that are found to contain broken or leaking sections of pipe, or are obstructed in such a manner that they cannot be satisfactorily corrected otherwise, shall be removed and replaced by the CONTRACTOR. This work shall be to the satisfaction of, and as directed by, the UTILITY. Emergency repairs and subsequent inspections deemed necessary by the UTILITY shall be at the sole expense of the contractor.

4.11.1 Pipe Deflection Test

Deflection tests shall be performed by the CONTRACTOR on all flexible pipe. The test shall be conducted after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system.

No pipe shall exceed a deflection of 5 percent (5%). If deflection exceeds 5 percent (5%), replacement or corrections shall be accomplished as directed by the UTILITY.

The rigid ball or mandrel used for the deflection test shall have a diameter not less than 95 percent (95%) of the base inside diameter or average inside diameter of the pipe depending on which is specified in the ASTM Specification, including the appendix, to which the pipe is manufactured. The test shall be performed without mechanical pulling devices.

4.11.2 Low Pressure Air Test

The air test shall, as a minimum, conform to the test procedure described in ASTM F-1417 for plastic pipe, and for other material test procedures approved by the UTILITY.

All air tests shall be done prior to Final Inspection by the CONTRACTOR in the presence of the UTILITY who will determine if the tested pipe span is acceptable. The air test is conducted between two consecutive manholes. All pipe outlets must be plugged in the section being tested using suitable test plugs.

The air test will be made after backfilling has been completed and compacted. The air test shall, as a minimum, conform to the test procedure described in UNI-B-6-98.

Summary of Method

The section of the sanitary sewer line to be tested shall be plugged. Low pressure air is introduced into the plugged line. The amount and rate of air loss is used to determine the acceptability of the section being tested.

Preparation of the Sanitary Sewer Line

Flush and clean the sanitary sewer line prior to testing, thus serving to wet the pipe surface as well as clean out any debris. A wetted interior pipe surface will produce more consistent results. Plug all pipe outlets to resist the test pressure. Give special attention to stoppers and laterals.

Procedure

Determine the test duration for the section under test by computation from the applicable equation shown in ASTM C, or from prepared air test tables. The pressure holding time is based on an average holding pressure of 3 psi or a drop from 3.5 psi to 2.5 psi.

Add air until the internal air pressure of the sanitary sewer line is raised to approximately 4.0 psi. After an internal pressure of approximately 4.0 psi is obtained, allow time for the pressure to stabilize. The pressure will normally show some drop until the temperature of the air in the test section stabilizes.

When the pressure has stabilized and is at or above the starting test pressure of 3.5 psi, commence

the test. Before starting the test, the pressure may be allowed to drop to 3.4 psi. Record the drop in pressure for the test period. If the pressure has dropped more than 1.0 psi during the test period, the line is presumed to have failed. The test may be discontinued when the prescribed test time has been completed even though the 1.0 psi drop has not occurred.
The test procedure may be used as a presumptive test which enables the installer to determine the acceptability of the line prior to backfill and subsequent construction activities.

MINIMUM SPECIFIED TIME REQUIRED FOR A 1.0 PSI PRESSURE DROP FOR SIZE AND LENGTH OF PIPE INDICATED FOR Q=0.0015

PIPE SPECIFICATION TIME FOR LENGTH (L) SHOWN (MIN:SEC)
DIA. (in.)

Pipe Length

Pipe Size (dia. / inches)	**100ft**	**150ft**	**200ft**	**250ft**	**300ft**	**350ft**	**400ft**	**450ft**
4	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	5:40	5:40	5:40	5:40	5:40	5:42	6:24
8	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:49
12	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31
24	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	8:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46

At the time of the air test, each manhole shall be inspected by the UTILITY to determine possible leaks. Sanitary sewer manholes shall be vacuum tested by the CONTRACTOR in the presence of the UTILITY.

4.11.3 Vacuum Test

A. Each manhole shall be tested immediately after assembly and prior to backfilling.

B. All lift holes shall be plugged with an approved non-shrink grout.

C. No grout will be placed in the horizontal joints before testing, unless prior approval is granted by the UTILITY.

D. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole.

E. The test head shall be placed at the inside of the top of the cone section and the seal inflated in accordance with the manufacturer's recommendation.

F. A vacuum of ten inches (10") of mercury shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to not drop below nine inches (9") of mercury. The manholes shall pass if the time meets or exceeds the following table.

MINIMUM TEST TIME FOR VARIOUS MANHOLES

Depth of Manhole	48" Dia.	60" Dia.	72"Dia
0-10 feet	40 secs.	90 secs.	120 secs.
11-20 feet	80 secs.	120 secs.	150 secs.
21-30 feet	120 secs.	150 secs.	180 secs.

G. If the manhole fails the initial test, necessary repairs shall be made with a non-shrink grout. Retesting shall proceed until a satisfactory test is obtained.

The air test shall, as a minimum, conform to the test procedure described in ASTM C-828-76T.

The air test will be made after backfilling has been completed and compacted.

All tees and ends of sanitary sewer services shall be plugged with flexible joint plugs or caps securely fastened to withstand the internal test pressures. Such plugs or caps shall be readily removable, and shall provide a socket suitable for making a flexible jointed lateral connection or extension.

4.12 CONNECTIONS TO EXISTING LINES

The CONTRACTOR shall provide all labor and material required in connecting the newly constructed sanitary sewer main to an existing sanitary sewer main or manhole as shown on the approved drawings. A representative of the UTILITY must be present while the connection is being made. The UTILITY shall be given at least a 24 hour advance notice before the connection is made.

4.13 CONCRETE CRADLE, ANCHORS OR ENCASEMENT

Concrete cradles, anchors or encasement of sanitary sewer mains and/or fittings shall be placed as

shown on the plans. In areas requiring concrete encasement, Class 53 ductile iron shall be used unless waived by the UTILITY. Concrete shall be Class “C” and shall be mixed sufficiently wet to permit it to flow under the pipe to form a continuous bed. While placing the concrete, care shall be taken not to disturb the grade or line of the pipe or injure the joints.
Concrete encasement shall completely surround the pipe and shall have a minimum thickness at any point of one fourth (1/4) of the outside diameter of the pipe or four inches (4”), whichever is greater. In addition, four (4) reinforcing bars of a size shown on the approved plans shall be evenly spaced around the pipe and have length equal to the length of the encasement. Wherever the strength of the pipe is not sufficient to support the external loads, the encasement should be designed to provide the necessary additional strength. (DRAWING #68)

4.14 HIGHWAY AND RAILROAD CROSSINGS

Steel encasement pipe for road and railroad crossings shall be bored and/or jacked into place to the elevations shown on the plans. All joints between lengths shall be solidly welded with a smooth, non-obstructing joint inside. The sanitary sewer pipe shall be installed after the encasement pipe is in place. Installation of the sanitary sewer main in the encasement pipe shall be as per the manufacturer's recommendations. After the sanitary sewer main has been installed, inspected, and tested as specified, both ends of the cover pipe shall be closed with a rubber gasketed donut, brick, or concrete block masonry in a manner acceptable to the UTILITY.

Encasement pipe shall be steel, plain end, uncoated, and unwrapped, have minimum yield point strength of 35,000 psi, and conform to ASTM A252 Grade 2 of ASTM A130 Grade B without hydrostatic tests. The steel pipe shall have welded joints and be in at least 18 foot (18’) lengths. The wall thickness of the pipe shall be a minimum of 0.250 inches for highway crossing and 0.344 inches for railroad crossings. The diameter and strength, including welds of the pipe, shall conform to the most recent requirements of the American Railway Engineering Association for railroad crossings and the requirements of ODOT for highway crossings. (DRAWING #71)

4.15 RESPONSIBILITY FOR MAINTENANCE

Prior to formal acceptance of the IMPROVEMENTS by the UTILITY, the CONTRACTOR and/or OWNER/DEVELOPER shall be responsible for the maintenance and repair of the IMPROVEMENTS in compliance with these specifications for a period of one year after construction completion and acceptance by the UTILITY.

SECTION FIVE

SANITARY SEWER FORCE MAIN

5.0 PURPOSE

The purpose of this SECTION is to specify the materials utilized in the construction of sanitary sewer pump stations and force mains.

5.1 DESIGN REQUIREMENTS

Final determination of size, style, and brand of equipment is at the sole discretion of the UTILITY. Pump stations are to be designed with duplicate control systems allowing for independent operation from the Wastewater Treatment Plant SCADA system. A user programmable automated alarm monitor/telephone dialer with a battery backup power supply shall be provided. The unit shall be designed to monitor power supply, high-level alarm, and site security. A bond for construction and maintenance, equal to the initial cost of the pump station is required prior to operation of the pump station by the OWNER/DEVELOPER.

5.2 PIPE MATERIALS

5.2.1 Ductile Iron Pipe, Fittings, and Joints

Ductile iron pipe, fittings, and joints used for the construction of sanitary sewer force mains shall comply with section 3.2.1 of this Manual.

5.2.2 Steel Encasement Pipe

Steel encasement pipe used for the construction of sanitary sewer force mains shall comply with section 3.2.2 of this Manual.

5.3 TESTING OF SANITARY SEWER FORCE MAINS

As a minimum, all sanitary sewer force mains shall be tested in accordance with the Hydrostatic Testing Requirements of AWWA C600 standard for ductile iron pipe. Upon completion of the construction of sanitary sewer force mains, but prior to Final Inspection, all sanitary sewer force mains and appurtenances shall be tested as specified herein. The UTILITY shall be notified at least 48 hours in advance of the scheduled test time and at its own discretion, shall have an inspector present during the performance of the test.

1. The contractor shall perform both a hydrostatic pressure test and a leakage test on the installed force main under the supervision of the UTILITY
2. The UTILITY may provide water for the testing of force mains, however, the Contractor will be responsible for piping or hauling water if necessary. If water is to be used from fire hydrants, the UTILITY or its designee shall be the only person(s) permitted to open or close valves to the public water supply.
3. The two tests shall be performed after the ditch has been backfilled but prior to pavement and/or final restorations.
4. The pipe shall be slowly filled with water and the specified test pressure applied by means of a pump connected to the pipe in a manner satisfactory to the UTILITY. All force mains shall be given a hydrostatic test of at least 1.5 times the shut off head of

the pump or 150 psi, whichever is greater. Loss of water pressure during the test shall not exceed 5 psi in a 2-hour period. The pump, pipe connections, and all necessary apparatus required for the test shall be supplied by the Contractor. Before applying the test pressure, all air shall be expelled from the pipe. If permanent air vents are not located at all high points, the Contractor shall install corporation cocks at such points so that air can be expelled as the pipe is filled with water. After all of the air is expelled, the corporation cocks can be closed and the test pressure applied.

5. Allowable leakage per 1000 foot of pipeline – gallons per hour.

ALLOWABLE LEAKAGE PER 1000 FEET OF PIPELINE* IN GALLONS PER HOUR

Pipe Size in Inches

Avg. Test Pressure psi	3	4	6	8	10	12	14	16	18	20	24	30	36	42
250	0.36	0.47	0.71	0.95	1.19	1.42	1.66	1.90	2.14	2.37	2.85	3.56	4.27	4.99
225	0.34	0.45	0.68	0.90	1.13	1.35	1.58	1.80	2.03	2.25	2.70	3.38	4.05	4.73
200	0.32	0.43	0.64	0.85	1.06	1.28	1.48	1.70	1.91	2.12	2.55	3.19	3.82	4.46
175	0.30	0.40	0.59	0.80	0.99	1.19	1.39	1.59	1.79	1.98	2.38	2.98	3.58	4.17
150	0.28	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.66	1.84	2.21	2.76	3.31	3.86
125	0.25	0.34	0.50	0.67	0.84	1.01	1.18	1.34	1.51	1.68	2.01	2.52	3.02	3.53
100	0.23	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.80	2.25	2.70	3.15

*If the pipeline under test contains sections of various diameters, the allowable leakage will be the sum of the computed leakage for each size.

6. Where leaks are visible at exposed joints and/or evident on the surface where the joints are covered, the Contractor shall repair the joints, retighten the bolts, reinstall the pipe, or replace the pipe until the leak is eliminated, regardless of the total leakage as shown by the hydrostatic test.
7. Lines that fail to meet the test shall be repaired and restored as necessary until test results are in compliance.

5.4 CONNECTING FORCE MAIN TO MANHOLE

All sanitary sewer force mains must connect to manholes at the flow channel elevation. The ENGINEER shall show the method of connecting force mains to manholes in the plan's details.

5.5 CONCRETE THRUST BLOCKS

Concrete thrust blocks shall be provided at all bends on the sanitary sewer force main. Concrete cradles, anchors, or encasement of force mains and fittings shall be placed where shown on the plans. Concrete shall be 4,000 psi and shall be mixed sufficiently wet to permit it to flow under the pipe to form a continuous bed. While placing concrete, care shall be taken not to disturb the grade or line of the pipe or injure the joints.

Force mains constructed under creeks or drainage waterways shall be encased in concrete to a point at least ten feet (10') beyond the edge of the creek or drainage ways.

In places where concrete will be poured at a mechanical joint or fitting, a polyethylene (plastic) sheet having a minimum thickness of 8 mil, shall be wrapped around the fitting to prevent the concrete from coming in contact with the fitting's bolts and nuts.

SECTION SIX

SANITARY SEWER PUMP STATIONS

6.0 INTRODUCTION

This document has been developed to provide guidance to land developers, their consulting engineers, and contractors as to the requirements of the City of Oxford for design and technical specifications of sanitary sewer pump stations. These requirements are intended to supplement the requirements set forth by the Ohio Environmental Protection Agency (Ohio EPA) and in the following City of Oxford documents:

1. Water & Sanitary Sewer Specifications Manual
2. Sanitary Sewer Pump Station Policy
3. Pump Station Standard Drawings

There are several general requirements for all new and replacement sanitary sewer pump stations to be built in the City of Oxford. These include the following:

All new and replacement sanitary sewer pump stations shall be fitted with submersible pumps.

Typically, new pump stations will be duplex stations, where each of two pumps will be capable of meeting the station's design capacity. In some cases, larger capacity pump stations may be required, which shall be constructed with three or more pumps.

Where possible, the requirements presented in this document have been developed to address both temporary and permanent installations; however, the City reserves the right to modify the requirements for individual projects as deemed necessary for the protection of public health and/or the environment.

In general, ALL pump stations shall be considered to be permanent unless a project exists on the City of Oxford's 5-year Capital Improvements Plan that would eliminate the pump station or the Developer has specific plans for eliminating the pump station within approximately 5 years. However, each pump station will be reviewed at the inception of design by the Utility to determine whether the pump station will be considered permanent or temporary for design purposes. If a pump station is to be temporary (as determined by the Utility, certain requirements may be modified or omitted at the discretion of the Utility. In general these modifications and omissions will be as defined in Appendix A.

The Utility will also evaluate options for the extension of gravity sewers to the site. The Contractor may be required to evaluate these options to determine feasibility and estimated costs for the gravity sewer extensions as well as the estimated cost of the proposed pump station and force main. These costs will be compared to assist in determining if a pump station will be allowed or a gravity sewer extension will be required.

Wherever the requirements specify "Contractor," they are intended to refer to land developers and their agents, who are typically contractors, and their consulting engineers. Nothing in these requirements is intended to assign responsibility contradictory to legitimate contractual arrangements between those parties.

Where these specifications are included with Plans and Bidding Documents for a project publicly bid

by the City of Oxford, the Plans and Detailed Specifications shall govern in the event of conflicts between them and this document.

The specifications herein given are general and subject to any special provision or requirements set forth in the sections of this document.

6.1 Scope of Work

A. The Contractor shall, unless otherwise notified, furnish all labor, materials, equipment, tools, and incidentals necessary to install, test, complete, and make ready for operation a submersible sanitary sewer pump station. This includes the furnishing and installation of all necessary and desirable accessory equipment and auxiliaries, whether specifically mentioned in these specifications or not, as required for an installation incorporating the highest standards for the types of service which this pump station is to perform.

B. These specifications are intended to give a general description of that which is required and do not purport to describe all details of the equipment to be furnished. Such details are considered to be either standard among all manufacturers or variable in accordance with specific equipment formulations, but resulting, in either case, in equipment equal in performance, long-term reliability, and life-cycle cost-effectiveness.

C. The Contractor shall be responsible for all excavation and removal of obstructions and restoration of all properties involved directly with the construction and/or installation of the pump station.

6.2 Land

A. A minimum of 6,000 square feet of property (excluding road right-of-way) shall be deeded to the City of Oxford for each sanitary sewer pump station. A larger area may be required, depending upon the configuration of the station, shape of the area, length of the driveway, terrain, and other factors. Enough space shall be provided for the proposed facilities as well as space for construction of a future replacement pump station.

B. The pump station must be located far enough from property lines, other utilities, etc. to permit excavation for the wet well and other structures and an adequate work area for construction. Generally, an area about 100 ft. x 100 ft. (centered around the wet well) is necessary for construction.

6.3 Capacity

A. The facility shall be sized to handle all flows from the total upstream watershed, except for the pumps and motors, which shall be sized to handle twice the design peak flow of the proposed participating development (but not less than the total of the proposed participating development plus any existing development in the watershed) or the total upstream watershed, whichever is less. However, the facility shall be designed to permit future installation of pumps sized to handle the peak flow of the upstream watershed.

B. The capacity of a pump station handling flow from existing gravity sewers shall be adequate to manage existing flows, including infiltration/inflow, as well as additional flows anticipated to be required for the proposed development.

6.4 Design

A. Design of pump stations shall be coordinated at all stages with City of Oxford. Complete construction drawings (including electrical and instrumentation) shall be submitted for review and approval along with the sewer construction drawings for the development requiring the pump station. Plan review fees shall be paid according to standard departmental policies.

B. Plans shall indicate the elevation of the 100-year flood plain at the pump station site. The tops of the wet well, valve pit and all upstream manholes, as well as the generator and control panel pads, shall be at least one foot above the 100-year flood plain. The minimum service level of all buildings served by the pump station as well as the wet well top slab shall be at least one foot (1') above the elevation of the lowest point of free overflow (manhole rim) upstream of the pump station. Buoyancy calculations and foundation design prepared by a Professional Engineer registered in the State of Ohio shall be submitted for all pump station structures to prevent flotation of the structures with water at the 100-year flood elevation and all structures empty. A safety factor of at least 1.5 shall be considered in this design.

C. See Section 6.12.1 for pump selection considerations.

D. See Section 6.13.1 for requirements related to the wet well, valve pit and other structures.

E. The design engineer shall review this entire document and incorporate all aspects of these requirements into the design of the pump station.

6.5 Inspection

Materials provided and work performed shall be subject to inspections by Utility representatives and/or by appointed agents of the Utility. Acceptance of the pump station shall be contingent on the condition that all materials, equipment, and workmanship provided pass set inspections, satisfactory completion of all work, and proper operation of the completed pump station.

6.6 Warranty

A. A minimum of a full twelve (12) month warranty shall be provided for the pump station. This warranty shall begin on the date the pump station is accepted by the Utility for operation. The warranty shall cover the following:

1. All equipment, parts, and labor.
2. Site materials, roadways, and fences.
3. Ground subsidence and settlement of valve chamber and wet well.

B. The pumps shall have at least an eighteen (18)-month full (all parts and labor) manufacturer's warranty and 5-year prorated manufacturer's warranty, which shall both begin no earlier than the date of shipment to the Contractor. In the event that the pump station is not accepted within six months of shipment of the pumps, the full warranty shall be extended to twelve months from the date the pump station is accepted by the Utility for operation.

6.7 Tools and Spare Parts

A. All special tools and recommended spare parts required for normal operation and maintenance shall be supplied for each piece of equipment furnished.

B. The following spare parts shall be furnished as a minimum:

1. One set of 1 upper and 1 lower mechanical seals for each pump and a seal tool
2. One set of upper and lower bearings for each pump
3. One set of gaskets, O-rings, grommets, and other sealing devices for each pump
4. One rotating wear ring (if so equipped) or a spare painted impeller for each pump, and one stationary wear ring (if so equipped) or a spare painted volute for each pump
5. One complete set of spare fuses for all electrical devices
6. Ten spare bulbs for each lamp type

C. All tools and spare parts shall be properly packed and protected for long storage and placed in containers clearly identified in indelible markings as to contents.

6.8 Submittals

A. The Contractor shall submit to the Utility, a minimum of five sets of plans, on City of Oxford standard size sheets (24"x36"), of the following for approval prior to ordering equipment and materials or initiating construction. Four sets will be kept by the Utility. The remaining sets will be returned to the Contractor with comments and/or approvals.

1. Certified shop and erection drawings and data regarding pumps, motors, characteristics, and performance. The data shall include guaranteed performance curves, based on actual shop tests of duplicate pumping units, which show that the units meet the specified requirements for head, capacity, efficiency, and input power. Curves shall be submitted in quadruplicate on 8-1/2-inch by 11-inch sheets. For pumping units of the same size and type, only curves for a single unit need be provided.
2. Literature and drawings describing the equipment and showing all important details of construction and dimensions
3. Complete data on motors, including schematic electrical wiring diagrams and other data as required
4. Complete schematic electrical wiring diagrams for pump station, control panel, and SCADA
5. Conduit routing and wire-pulling schedules
6. Complete grounding scheme

B. Submittals shall be provided for each of the items listed in Appendix B of this document.

6.9 Operation and Maintenance Manuals

A. Four complete sets of installation, operation, and maintenance instructions shall be provided for all equipment and electrical components. The manuals shall be prepared specifically for the installation to which they pertain and shall include all available installation manuals, operation manuals, maintenance manuals, catalog cuts, drawings, wiring diagrams, equipment and parts lists, list of spare parts provided, warranties, product descriptions, etc. All four sets of manuals for major equipment shall be original manufacturer's manuals-copies will not be acceptable. Only one set of original manufacturer's literature is required for miscellaneous components; copies of this literature will be acceptable for the other three O&M manuals.

All manuals shall be furnished to the Utility no later than the date of acceptance.

B. The manual for each piece of equipment shall be a separate document with the following

specific requirements:

1. Contents:

   a. Table of contents and index
   b. Brief description of each system and its components
   c. Starting and stopping procedures
   d. Special operating instructions
   e. Routine maintenance procedures
   f. Manufacturer's printed operating and maintenance instructions, parts list, illustrations, and diagrams
   g. Instrumentation data sheets with calibration data and specifications
   h. One copy of each wiring diagram
   i. Conduit routing and wire-pulling schedules
   j. One copy of each approved shop drawing and each Contractor's coordination and layout drawing
   k. List of spare parts, manufacturer's price, and recommended quantity
   l. Name, address, and telephone numbers of local service representatives

2. Material:

   a. Loose leaf, on 24-pound punched paper
   b. Holes reinforced with plastic, cloth, or metal
   c. Page size, 8-1/2 inches by 11 inches
   d. Diagrams, illustrations, and attached foldouts as required, of original quality, reproduced by dry-copy method
   e. Covers of oil-, moisture-, and wear-resistant material, 9-1/2-inches by 12-inches in size

6.10 Record Drawings

A. The Record Drawings shall consist of the Contract Drawings revised per as-built conditions and the approved Shop Drawings. As-built revisions to the Contract Drawings shall be professionally drafted. The Record Drawings shall be submitted to the Utility in reproducible form (i.e., 3-mil Mylar) upon completion of the construction.

B. Contract Drawings shall be legibly marked to record actual construction, including:

   1. All deviations in location or elevation of any underground installation from that shown on the Contract Drawings—including gravity sewers, force main, valves, electrical conduits, grounding, etc.
   2. Actual pipe elevations (inverts of gravity sewers, tops of exposed force main piping and tops of buried valve operators); bottom elevations of wet well, valve pit, and manholes; slab elevations (wet well, valve pit and manhole tops; generator slab, control panel slab, and driveway slab)
   3. Any significant changes in above-ground installations from the approved Shop Drawings or Contract Drawings—including locations of wet well, valve pit, manholes, air release installations, generator, control panel, antenna pole, electrical transformer, driveway, fencing, etc.
   4. Indication of the Utility's approval of any such deviations or changes from the Contract

Drawings or approved Shop Drawings

C. Specifications and addenda shall be legibly marked to record:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed
2. Changes made by change order or field order
3. Other matters not originally specified

D. Shop Drawings shall be legibly annotated to record changes made after review.

E. Reproducible Record Drawings shall be submitted within seven calendar days after the date of acceptance.

6.11 Additional Items

A. Each installation shall be individually assessed as to the need for equipment, structures, procedures and other items not named or described in these specifications. Some examples of possible additional items are odor control systems, electrical control buildings, variable frequency drives, electric valve actuators, sewage grinders, dual wet wells, potable water service, retaining walls, drainage improvements, etc. Installation of these items may be required at the discretion of the Utility.

B. Any variations from the specifications provided in this document must be approved through the Utility representative or the appointed agent of the Utility.

C. These specifications are subject to change or revision without notification. All developers, engineers and contractors shall ensure they have the most recent version of these specifications prior to commencing work on a new pump station project.

6.12 SUBMERSIBLE PUMPS

The pumps used in all submersible sanitary sewer pump stations shall meet the following specifications.

6.12.1 Pump Selection

A. Pump selection shall be made by the design Engineer, subject to review and approval by the Utility. The Engineer should confirm pump selection(s) with the pump supplier/manufacturer. The Utility may reject a pump selection for failure to comply with the following considerations or in preference of a pump selection that better meets the required conditions.

B. The Engineer shall evaluate the following factors to determine the most appropriate pump selection(s).

1. Coordinate force main size, pump station piping size, and pump selection to maintain at least 2 feet per second force main velocity, minimize head losses, minimize overall life-cycle costs (installation costs, electric and other operating costs, and maintenance costs), and provide the best overall system.
2. Consider possible advantages of triplex vs. duplex pump configuration. For triplex stations, ensure

that duty points for both one pump and two pumps running are satisfactory.

3. Static head shall be calculated based on a wet well water level at the top of the pump volute or the manufacturer's minimum allowable water level. However, the selected pump must also operate at an acceptable duty point when the wet well is full. A larger motor may be necessary in some cases to prevent overloading of the pump motor when pumping from a full wet well.
4. Friction head loss calculations shall be based on the Hazen-Williams formula utilizing a C-value between 100 and 120. Regardless of the C-value used for system design, the Engineer shall verify that the pump will operate satisfactorily with a C-value anywhere in the range of 100 to 140 to account for varying conditions.
5. The available surplus capacity in the receiving gravity sewer shall be determined assuming ultimate peak flows at complete build-out of the drainage area. Only this available surplus capacity will be available for a proposed pump station. The maximum pump station pumping rate (calculated at a full wet well and C value of 140) shall not exceed the available surplus capacity of the receiving sewer.
6. When practicable, pump motors should be non-overloading throughout the entire range of the pump curve from shut-off head to runout. Pump motors shall at least be non-overloading at all duty points considered in the pump selection as discussed herein.
7. Pump shall be selected to minimize net positive suction head required (NPSHRe) at the design duty point(s). In general, NPSHRe shall not exceed 24 feet at the design duty point(s). In no case shall the NPSHRe exceed 30 feet at any point in the expected operating range of the pump (i.e. C-values from 100 to 140).
8. Pump shall be selected to maximize efficiency to the extent practicable. An attempt shall be made to select a pump that will operate near its peak efficiency at the design duty point.
9. When the initial pump selection is not sized to pump the design peak flow from the total upstream watershed, the initial and future pump selections shall be coordinated to facilitate the future pump replacement. The following options should be considered:

    a. Install ultimate pump and motor with smaller impeller, initially. Requires that only the impeller be changed in the future.
    b. Install ultimate pump with smaller motor and impeller, initially. Requires that only the motor and impeller must be changed in the future.
    c. Whenever possible, the initial pump shall utilize the same size guide rails and discharge connection as the ultimate pump.

6.12.2 Pumps, Motors, and Installation

A. Pumps shall be ITT Flygt CP/NP or equal, shall be capable of passing solids at least three inches in diameter (except NP series), shall have a maximum ambient operating temperature of at least 104° F, and shall be capable of withstanding corrosive materials normally found in domestic and industrial waste. Other characteristics shall include:

    1. The pumps shall be centrifugal, non-clog submersible in design capable of running dry while pumping raw, unscreened sewage. The design shall be such that the pump unit will be mounted in the wet pit and piped to the valve pit as shown on the drawings.
    2. The pump, with its appurtenances, shall be capable of continuous submergence under water without loss of water-tight integrity to a depth of 65 feet.
    3. The motor cooling system plus the design of the mechanized seals shall enable the unit to operate at any load or completely dry without damage. In addition, the motor cooling system shall allow the pump to be operated down to 30 percent of the nameplate speed

without undue effects from heat generation.

B. Pump motors shall be 460/480 volt AC, 3-phase, 60 Hz.

C. A nameplate of 316 stainless steel shall be attached to each pump, giving the name of the manufacturer, rated capacity, head, speed, model number, serial number, and all other pertinent data.

D. All anchor bolts shall be of 316 stainless steel. All stainless steel bolt threads shall be coated with an anti-seize product. Anchor bolts shall use an appropriate Hilti chemical anchoring system or UTILITY approved equal.

E. Each pump shall be provided with a sufficiently long power cable to suit its installation without splicing. The power cable shall be Type SPC cable, chloroprene rubber-jacketed, suitable for submersible pump applications. The power cable shall be sized according to NEC and ICEA standards and shall also meet with P-MSHA approval. Each power cable shall be installed in a separate conduit to the control panel.

F. A 316 stainless steel lifting chain shall be provided for each pump, of sufficient length to reach from the pump attachment to a chain holder, furnished by the equipment manufacturer and installed near the upper guide rail support for that pump. The chain shall be of sufficient strength to allow the raising and lowering of the pump with a safety factor of at least 2 above the chain's working load, but in no case less than 1/4-inch chain links. (Note: Safety factor shall be applied to the safe working load of the chain—not the test load or breaking load.) An ITT Flygt Corp. "Grip-eye" or equal sized for the pump lifting chains shall be provided for each pump station.

G. The pump shall be supplied with a mating cast-iron discharge connection elbow, which shall be properly anchored and grouted in place. The discharge connection elbow shall be permanently installed in the wet well along with the discharge piping. The pump shall be automatically connected to the discharge connection elbow when lowered into place and shall be easily removed for inspection or service. There shall be no need for personnel to enter the wet well to install, remove, or maintain the pumps.

H. Sealing of the pumping unit to the discharge connection elbow shall be accomplished by a simple linear downward motion of the pump. A sliding guide bracket shall be an integral part of the pump unit. The entire weight of the pump unit shall be guided by no less than two guide bars and shall be pressed tightly against the discharge connection elbow with metal-to-metal contact. Sealing of the devices by any other means shall not be acceptable. No portion of the pump shall bear directly on the floor of the wet well, and the minimum clearance specified by the manufacturer shall be maintained with at least 4" in all cases. The pump, with its appurtenances and cable, shall be capable of continuous submergence under water to a depth of 65 feet without loss of watertight integrity.

I. Major pump components shall be of gray cast iron, with smooth surfaces devoid of blow holes and other irregularities. All exposed nuts and bolts shall be of AISI-type 304 stainless steel or brass construction. All surfaces which will come into contact with sewage, other than stainless steel or brass, shall be protected by an approved sewage-resistant coating. The impeller shall be factory-coated with acrylic dispersion zinc phosphate primer. The pump exterior shall be protected by a factory-applied spray coating of acrylic dispersion zinc phosphate primer with a polyester resin paint finish.

J. All mating surfaces where watertight sealing is required shall be machined and fitted with nitrile rubber O-rings. Fitting shall be such that sealing is accomplished by metal-to-metal contact between machined surfaces. This shall result in controlled compression of the O-rings without the requirement of a specific torque limit. No secondary sealing compounds, rectangular gaskets, elliptical O-rings, grease, or other devices shall be used.

K. The design of the cable-entry water seal shall ensure a watertight and submersible seal. A single cable entry to the pump housing shall contain all leads. The cable entry shall be comprised of a single cylindrical elastomer grommet, flanked by stainless steel washers, all having a close-tolerance fit against the outside diameter of the cable and compressed by the entry body containing a strain-relief function, separate from the function of sealing the cable. The cable entry junction chamber and motor shall be separated by a stator lead sealing gland or terminal board, which shall protect the interior of the motor from foreign material which might gain access through the top of the pump. Epoxies, silicones, or other secondary sealing systems shall not be considered acceptable. The pump supplier shall provide a watertight connector, equal to a Crouse Hinds type CGB with a neoprene gland to terminate the cable in the pump disconnect.

L. The pump motor shall be designed and manufactured by the same manufacturer as the pump. The pump motor shall be of a squirrel-cage, induction, shell-type design, housed in an air-filled, watertight chamber. The stator winding and stator leads shall be insulated with moisture-resistant Class F insulation which shall resist a temperature of 155º C. The stator shall be dipped and baked three times in Class F varnish and shall be fitted into the stator housing by heat-shrinking. The use of bolts, pins, or other fastening devices requiring penetration of the stator housing shall not be acceptable. The motor shall be designed for continuous duty, capable of sustaining a minimum of ten starts per hour with the liquid surface located at the top of the pump's volute but below the motor casing, with a temperature rise not exceeding 40º C above ambient temperature.

M. The junction chamber, containing the terminal board, shall be sealed from the motor by an elastomer compression seal (O-ring). Connection between the cable conductors and stator leads shall be made with threaded, compressed-type binding posts permanently affixed to a terminal board.

N. Each motor 20 horsepower or larger shall be provided with an adequately designed cooling system, consisting of a water jacket encircling the stator housing. The water jacket shall be provided with a separate circulation of the pumped liquid. Cooling media channels and ports shall be non-clogging by virtue of their dimensions. Systems that utilize a closed loop cooling system such as ethylene or propylene glycol or oil shall not be acceptable.

O. Each pump shaft shall be of either stainless steel or carbon steel C1035 and shall be completely isolated from the pumped liquid.

P. Each pump shall be provided with a tandem mechanical shaft seal system consisting of two totally independent seal assemblies. The upper of the tandem set of seals shall operate in an oil chamber located just below the stator housing. This set shall contain one stationary tungsten carbide ring and one positively driven rotating tungsten carbide ring and shall function as an independent secondary barrier between the pumped liquid and the stator housing. The lower of the tandem set of seals shall function as the primary barrier between the pumped liquid and the stator housing. This set shall consist of a stationary ring and a positively driven rotating ring, both of which shall be of tungsten carbide. Each interface

shall be held in contact by its own spring system. The seals shall require neither maintenance nor adjustment, but shall be easily inspected and replaceable. The following seal types shall not be considered acceptable nor equal to the dual independent seals specified:

1. Shaft seals without positively driven rotating members
2. Conventional double mechanical seals containing either a common or double spring acting between the upper and lower units (this conventional system requires a pressure differential to offset external pressure and effect sealing).

Q. The only functions of the oil chamber shall be as a secondary barrier between the pumped liquid and as a seal lubricant. It shall be designed to compensate for oil expansion that can occur due to temperature variations. Drain and inspection plugs, with positive sealing, shall be easily accessible from the outside.

R. The pump shaft shall rotate on two permanently lubricated bearings. The upper bearing, providing for radial thrust, shall be a single-row roller bearing. The lower bearing shall be a two-row angular-contact bearing to compensate for axial thrust and radial thrust.

S. The impeller shall be of a gray cast-iron, dynamically balanced, double-shrouded, non-clogging design having a long throughlet without acute turns. The impeller shall be capable of handling grit, solids, fibrous materials, heavy sludge, and other matter found in normal sewage applications. The pump manufacturer shall furnish data on mass moment of inertia for the proposed impeller. The fit between the impeller and the shaft shall be a sliding fit with one key, and the fastening of the impeller to the shaft shall be made by a locking assembly which is sealed from the liquid by a protective rubber cap and a bolt threaded to the shaft terminal.

T. The volute shall be of a single-piece, non-concentric design and shall have smooth fluid passages large enough at all points to pass any solids which can pass through the impeller. The volute bottom shall be of a suction-bell design. A replaceable wear-ring system shall be installed to provide efficient sealing between the volute inlet and the impeller skirt. The wear rings shall consist of a stationary brass wear ring in the volute. Pumps 14 horsepower or larger shall also have a rotating stainless steel wear ring on the impeller skirt.

U. Cable support shall be provided for the pump power cable and shall consist of a stainless steel braided wire sleeve with attachment tails for connection to stainless steel J-hooks (e.g. cable support brackets) installed at the access hatch(es) within reach of operators, as approved by the Engineer.

V. A mix-flush system shall be provided for each pump. The mix-flush system shall be an ITT FLYGT 4901 flush valve or UTILITY approved equal. The valve shall use the ejector principle, in which water exiting the valve shall violently agitate the liquid in the sump, thereby re-suspending any accumulation of sludge. The flushing period of the valve shall be adjustable. The direction of discharge from the mix-flush system shall be adjustable in 360-degrees to any part of the wet well.

W. Pumps shall be accessible for removal by the Utility standard truck-mounted hoists.

6.12.3 Mounting Hardware

All slide rails shall be made of 316 stainless steel and shall be of tubular design. Upper guide bar

brackets, middle support brackets, and float hangers shall also be made of 316 stainless steel. All other hardware (bolts, nuts, etc.) shall similarly be made of 316 stainless steel. All stainless steel bolt threads shall be coated with an anti-seize product.

6.12.4 Protection

A. Thermal sensors shall be used to monitor stator temperatures on all pumps. The stator shall be equipped with three (3) normally closed thermal switches, embedded in the end coils of the stator winding (one switch in each stator phase). Should high temperature occur, the thermal switches shall open, stop the motor and activate an alarm.

B. A lower bearing temperature sensor shall be provided on larger pump motors. The sensor shall directly contact the outer face of the thrust bearing providing for accurate temperature monitoring. Coordinate requirements with the Utility.

C. All pumps shall be equipped with seal leak detectors in the stator chamber to detect the presence of water, so as to give adequate warning if the lower seal unit should fail. Use of voltage sensitive solid state sensors shall not be allowed.

D. The thermal switches, leakage sensor and the lower bearing temperature monitor (where required) shall be connected to a CAS (Control and Status) or MiniCAS monitoring unit. The unit shall be a Flygt CAS/MiniCAS module or UTILITY approved equal.

6.12.5 Shop Testing of Pumps

A. All pumps of 35 horsepower capacity or greater shall undergo certified testing at the factory for capacity, power requirements, and efficiency at specified extremes for rated head, shutoff head, and operating head, and at as many other points as necessary for accurate plotting of performance curves, with the completely assembled pump and motor that will be furnished.

B. All tests and test reports shall be made in conformity with the requirements and recommendations of the Hydraulic Institute Standards.

C. Copies of the test logs, a description of the test piping, equipment, and set-up, and a discussion of the test procedure shall accompany certified test performance curves and shall be submitted to the Utility. The curves shall include head, bhp, overall (wire-to-water) efficiency, rpm, and test NPSH plotted against capacity. The curves shall be easily read and plotted to scales consistent with performance requirements.

6.12.6 Field Acceptance Tests

A. After installation of the pumping equipment, and after inspection, operation, testing and adjustment have been completed by the manufacturer's representative, each pump shall be given a running test in the presence of the Utility during which it shall determine the pump's ability to operate without vibration or overheating, and to deliver its rated capacity under the specified conditions.

B. During the drawdown and field tests, observations shall be made of head, capacity, and motor input. All defects or defective equipment revealed by or noted during the tests shall be corrected or replaced promptly at the expense of the Contractor, and if necessary, the tests shall be repeated until results acceptable to the Utility are obtained. The Contractor

shall furnish all labor, piping, equipment, water and materials necessary for conducting the tests.

C. The field verification and/or drawdown tests shall include measuring or determining the following items:

1. Flow rate.
2. Total head on the pump.
3. Power input.
4. Static head on the pump.
5. Correct pump rotation.

D. On those pumps or set of pumps that have a flowmeter in the discharge line, the flowmeter may be used to determine the flow rate once its accuracy has been verified in the field.

6.13 STRUCTURES, BACKFILL AND EMBANKMENT

Structures shall be constructed as required, in accordance with the following specifications:

6.13.1 Wet Well and Valve Pit Design and Construction

A. Wet wells and valve pits shall be constructed using either precast concrete sections or poured-in-place concrete. If precast construction is used, each section shall be set and sealed with the proper gasket and joint sealing compound approved by the Utility. If the pump station will be constructed of poured-in-place concrete, the concrete shall be reinforced with reinforcement rod in accordance with acceptable engineering design practice and shall be certified by a Professional Engineer registered in the State of Ohio.

B. Either type of construction shall have a foundation designed so as to adequately support the station. At least one subsurface test boring shall be made at the pump station site to at least five feet below the proposed bottom of the wet well. A complete soil analysis including ground water level shall be submitted with the plans. Soil analysis shall include at least Standard Penetration Tests (ASTM D 1586); classification of soils' textures and consistencies; tests for natural moisture content; engineering classification of predominant soil horizons (including sieve and hydrometer analysis (ASTM D 422), Atterberg limits (ASTM D 4318), and specific gravity (ASTM D 854); and determination of Rock Quality Designation values. This analysis shall be used by the design engineer to verify that adequate ground support exists for the station as well as to design the structure to prevent flotation. This design shall be certified by a Professional Engineer registered in the State of Ohio. See also Section 6.4B for additional foundation requirements.

C. Top slabs of wet well, valve pit and other below-ground structures shall be elevated six to twelve inches (6" - 12") above surrounding grade to prevent vehicles from driving onto them. If necessary to meet the flood-protection requirements listed in Section 6.4B, the structures may extend higher; however, handrails with kick plates shall be provided around any structures more than 30" above grade. Stairs shall be provided for any structures more than 18" above grade. Top slab of any below-ground structure located within the driveway or other traffic areas shall be approximately one inch (1") above grade and shall be designed for H-20 traffic loading.

D. Design shall be such that a 30-minute cycle time for each pump (i.e. 15-minute overall cycle

time for duplex stations; 10-minute overall cycle time for triplex stations) shall be obtained at average design flow. The wet well shall also incorporate a design sufficient to provide an emergency storage volume equal to at least two hours at ultimate design average flow. This emergency storage volume shall be calculated from the high water alarm elevation to the invert of the influent sewer. In no case shall this distance be less than six feet. In some instances (especially for large pump stations), the Utility may permit the emergency storage volume to be calculated from the high water alarm elevation to the lowest point of free overflow upstream of the pump station.

E. No more than one influent sewer shall enter the wet well, and it shall be located opposite the pumps (or as close as possible). The influent flow shall not discharge directly onto a pump.

F. Wet wells shall have a minimum inside diameter of six feet. Valve pits shall have a minimum inside dimension in all directions of six feet. Excessively deep valve pits will not be permitted.

G. A grout fillet shall be properly designed and constructed around the full circumference of the wet well's bottom to direct grit and other solids to the pumps. The slope of this fillet shall be at least 1:1. The inner diameter of this "grout circle" shall be as recommended by the pump manufacturer for the specified pump (or future pump) and approved by the Utility, but in general should be as small as possible without creating a vortex condition around the pumps. The inner "grout circle" shall be centered around the pumps. Either of the following mixes will be acceptable for this fillet, but the final mix design and slump shall be determined by the Contractor and approved by the Utility:

1. Sand-cement grout consisting of one part Portland cement, two parts fine aggregate and a maximum of 4.5 gallons of water per sack (cubic foot) of cement. Portland cement shall be Type III conforming to ASTM C 150. Fine aggregate shall be natural siliceous sand, consisting of hard, clean, sharp, dense, durable and uncoated particles, free from organic material and injurious amounts of deleterious substances. 100% of fine aggregate shall pass a Size No. 4 sieve.

2. 4,000 psi concrete mix, with 5-7 percent air content and 3/4"-1" slump. Mix shall include 510 lbs. Type I cement conforming to ASTM C 150; 90 lbs. Class F fly ash conforming to ASTM C 618; 1,315 lbs. sand conforming to ASTM C 33, ODOT 703.02; 1,651 lbs. AASHTO M-43 Size No. 8 aggregate; 200 lbs. water; and 2-4 oz./100 lbs. Type A or D water reducer conforming to ASTM C 494.

H. Each valve pit shall be fitted with a drainage system such that any liquid entering the valve pit will be drained back to the wet well. Drainage of the valve pit shall be ensured by a 1-degree slope to the floor of the valve chamber draining to the invert of a drain line or to an approved cast iron floor drain. The drain line shall be minimum 2" diameter constructed of schedule 80 PVC. A utility approved check valve shall be installed. The check valve shall be attached to the drain pipe with a NPT threaded joint. The pipe shall extend at least 12" into the wet well but shall not interfere with pump removal.

I. Each valve pit shall also be furnished with a valved connection to the force main beyond the pump isolation valves for emergency pumping. This connection shall be sized to equal the discharge piping from the pumps, unless otherwise directed by the Utility, and shall have a minimum diameter of six inches. This connection shall be equipped with a galvanized steel Bauer fitting for ease of hose connection. Equivalent quick-connect fittings are not

acceptable. Bauer fitting and accessories shall be as follows, with one discharge connection, one rubber sealing ring, and one end cap.

Part Numbers

Size & Type	Discharge Connection	Lever Ring	HK Rubber Sealing Ring	End Cap
6" Flanged	100-7005	included	107-0140	107-0201
6" Threaded	107-0811	106-0134	107-0140	107-0201
8" Flanged	100-7003	included	108-0140	108-0201
8" Threaded	108-0811	108-0134	108-0140	108-0201

J. All pipe and conduit penetrations through the wet well and valve pit structures shall be sealed watertight with Dura-seal rubber compression gaskets, rubber Link Seal sleeves with stainless steel components, or UTILITY approved equal products.

K. The wet well shall be provided with at least one “gooseneck” inverted vent pipe. The piping shall be made of epoxy-coated ductile iron, aluminum, or stainless steel and shall be at least as large as the largest pump discharge piping (minimum 4"). Black iron pipe will not be allowed. Also, PVC or other plastic pipe will not be allowed. The exterior end of the pipe shall be covered with a stainless steel screen.

L. Adequate water-proofing of the wet well and valve pit shall be included in the design and performed by the Contractor. A leakage test shall be performed on the entire wet well and valve pit prior to backfilling (see Section 6.13.5). The Contractor/Developer shall be responsible for properly repairing any leaks or correcting any other problems discovered during this test.

M. All valve pits shall be fitted with an aluminum ladder for access. Ladder shall be Halliday Products Series L1D or equal. An aluminum ladder safety extension post (Bilco Ladder-Up, Halliday Products Series L1E, or equal) shall be provided as well.

6.13.2 Sluice Gate Manhole

A. A separate manhole with a slab top shall be installed on the influent sewer within 15 feet of the wet well within the fence. Polypropylene manhole steps shall be installed in the manhole per City of Oxford Standard Specifications.

B. A zinc-plated steel anchor bolt and safety D-ring assembly shall be provided on the top slab of the manhole for personnel fall protection. The exact location shall be coordinated with the Owner in the field. This safety D-ring assembly and anchor bolt shall be rated for one person, 310 pound capacity. D-ring system shall be DBI Sala Model 2104560 or UTILITY approved equal.

C. A 24" x 24" (minimum) aluminum hatch shall be provided in the top slab of this manhole

above the manhole steps and shall open away from the manhole steps.

D. A sluice gate shall be installed at the outlet side of the manhole. The gate shall be the same size as the sewer (minimum 8”). The sluice gate wall pipe shall be installed level in the manhole. Ductile iron pipe shall be installed between this manhole and the wet well at the slope indicated on the drawings; an appropriate fitting shall be provided, if necessary, to transition from the sluice gate wall pipe to the sewer pipe.

E. A cast iron floor box with lid shall be installed in the top slab of the manhole directly above the sluice gate operator to permit operation of the valve with a T-wrench.

6.13.3 Flow Meter Manhole (When Required—See Section 6.17.10)

A. The magnetic flow meter shall be installed in a five foot (5’) diameter (minimum) manhole with slab top and a 30” x 30” (minimum) aluminum access hatch.

B. The flow meter manhole shall be watertight (except for the aluminum access hatch) and shall not be fitted with any drainage system.

6.13.4 Wet Well, Valve Pit and Sluice Gate Manhole Lids and Accessories

A. Wet well, valve pit and sluice gate manhole lids shall be composed of 0.25-inch-thick aluminum rated at 150 pounds per square foot minimum (H-20 load rating in traffic bearing situations or if top of structures are not elevated at least 6" above grade). Lids shall be affixed with stainless steel hinges and hardware. A retractable handle constructed of stainless steel shall be furnished with each lid such that when the lid is closed, there shall be no protrusions above the lid level.

B. The channel frame shall be 1/4 inch minimum aluminum with anchor flange around the perimeter with a drain into the wet well.

C. Factory finish shall be mill-finish with bituminous coating applied to the exterior of the frame.

D. Each lid shall be furnished with a stainless steel padlock tab for securing the lid, a stainless steel snap lock with gasketed, threaded cover plug and removable key wrench, and a stainless steel hold-open arm with release handle for securing the lid in a 90° open position. Also, compression-spring operators enclosed in telescopic tubes shall be provided for smooth, easy and controlled door operation throughout the entire arc of opening and closing.

E. Pump access lids shall be sized according to the pump manufacturer’s recommendation. Access hatch(es) on the valve pit shall be large enough to permit easy installation and removal of the check valves and gate valves, as well as permit access to the Bauer connection. Every structure shall have at least one access lid with a minimum size of 30" x 30" (except that the hatch on the sluice gate manhole may be 24" x 24"). When selecting equipment hatch sizes, care shall be taken to ensure that the actual clear opening (or effective size) is large enough for installation and removal of the intended equipment. For example, on some hatches (esp. H-20 rated hatches), the lower portion of the open hatch lid overhangs the hatch opening, thereby reducing the effective size of the opening.

F. Access lids over the pumps in the wet well shall lift away from the pump guide rails (e.g. toward the influent sewer).

G. Access to the control panels (e.g. clearance between panels and hatches) shall meet National Electric Code (NEC) conditions with the lids in the 90º open position.

H. Aluminum access lids shall be as manufactured by Bilco or UTILITY approved equal.

I. The Contractor shall post the following signs on every aluminum hatch door frame: 5" x 7" "**DANGER**: CONFINED SPACE: ENTER BY: "PERMIT ONLY" and 5" x 7" "FALL PROTECTION REQUIRED". Signs shall be according to State and Federal OSHA requirements. Signs shall be heavy gauge 0.063" aluminum with rounded corners and 1/4" I.D. corner eyelets for mounting. Paint or ink shall be weather-resistant, and the face of the sign shall be covered with a clear mylar topcoat. Signs shall be mounted on the hatch frames so they are visible with the hatches open or closed. Signs shall be attached with stainless steel self-tapping screws or other appropriate aluminum or stainless steel fasteners. Signs shall be mounted such that they do not present a tripping hazard.

J. A zinc-plated steel anchor bolt and safety D-ring assembly shall be provided on the top slab at each hatch on the wet well for personnel fall protection. The exact location(s) shall be coordinated with the Owner in the field. This safety D-ring assembly and anchor bolt shall be rated for one person, 310 pound capacity. D-ring system shall be DBI Sala Model 2104560 or UTILITY approved equal.

6.13.5 Leakage Testing of Wet Well, Valve Pit, Sluice Gate Manhole and Flow Meter Manhole

Wet well, valve pit, sluice gate manhole and flow meter manhole shall be tested for leakage prior to backfilling as follows: structures shall be filled with water and allowed to remain for 24 hours. Any visible leaks shall be repaired immediately (prior to backfilling). If the water level in the structures drops substantially (generally, more than 3") during the leakage test, the Contractor may be required to investigate for additional leaks and another test may be required. It shall be noted that this testing method is not an acceptable test for a structure that has already been backfilled.

6.13.6 Backfill and Embankment

A. The Contractor shall provide all labor, materials, tools, equipment, and incidentals required to place the compacted backfill or embankment where shown on the plans or where directed by the Engineer and as specified herein.

B. Compacted backfill and embankment shall consist of suitable excavated material approved by the Engineer or Granular Backfill meeting City of Oxford Specifications for Water and Sanitary Sewer Construction. This material may be obtained from suitable excavated material elsewhere on the project, if available. Use of frozen material, wood, rocks, or rubbish for backfill or embankment will not be permitted. If suitable material cannot be obtained from the excavated material, the Contractor shall furnish the material.

C. No fill shall be placed covering other work until such work has been inspected and approved by the Utility. Where fill is required on both sides of a foundation or wall, the fill shall be placed simultaneously on each side. Fill against building walls shall not be placed until the first floor slab has been poured and set, unless otherwise approved by the Utility. Fill against other work shall be in a manner and at such time as not to endanger the stability of or damage the work. No fill shall be placed against water bearing walls until they have been inspected, tested, and approved by the Utility. No fill shall be placed over snow or frozen material.

D. All fill shall be compacted as specified herein, unless otherwise shown.

1. Backfill. Backfill shall be placed in 6" loose layers and each layer compacted to not less than 95% of maximum dry density; the moisture content shall be not greater than 3 percentage points above optimum as determined by ASTM D698. Compaction shall be accomplished with a vibratory double-drum steel wheel roller no less than 2.0 Tons and no greater than 3.0 Tons or by other means approved in writing by the Engineer. Flushing with water before compacting is also encouraged if satisfactory drainage is provided for the free water. The method of compaction within road rights-of-way shall be per City of Oxford Water & Sanitary Sewer Improvement Specifications Manual.

2. Embankments. Embankment areas shall be constructed in accordance with this specification. Embankment fill shall be placed in 6" loose layers and each layer compacted to not less than the percent of maximum dry density specified herein; the moisture content shall be not less than optimum and not greater than 3 percentage points above optimum. For material which displays pronounced elasticity or deformation under action of compaction equipment, the moisture content shall be reduced and proper stability obtained. Moisture density shall be as determined by ASTM D698.

Maximum Dry Density (lbs/cu ft)	Compaction Percent Maximum Dry Density
90-104.9	102
105-119.9	100
120 and more	98

3. Subgrade. All pavement subgrades for new pavement shall be compacted to a depth of 12". Subgrade soils with a maximum dry density of less than 100 pounds per cubic foot are considered unsuitable for use where subgrade compaction for a depth of 12" is required, and when encountered in the upper 12" of the subgrade shall be replaced with suitable soil or granular material. Soil subgrade with maximum dry density of 100 to 105 pounds per cubic foot shall be compacted to not less than 102% of maximum dry density. All other soil subgrade shall be compacted to not less than 100% of maximum dry density; the moisture content shall be not greater than 3 percentage points above optimum as determined by ASTM D698.

E. The Contractor shall obtain up to three (3) soil samples where directed by the Engineer and transport the samples to an approved testing agency for Standard Proctor dry density testing (ASTM D-698). In addition, the Contractor shall cause a trained and experienced soil technician from an approved testing agency to be onsite during all backfill and embankment placement and to conduct at least two field density tests for every vertical foot of backfill or embankment placed. The Engineer shall review and approve the field density test reports at least every ten (10) vertical feet of embankment, and placement of embankment may not continue without this approval.

6.14 PIPES AND VALVES

All pipes and related equipment shall conform to the following specifications:

6.14.1 Pipes

A. The force main and other piping at the pump station shall be a minimum of four inches (4") in diameter. Pipes shall be of Class 53 ductile iron meeting ANSI/AWWA C151/A21.51. All pipes shall have either cement-lining per ANSI/AWWA C104/A21.4 standards with asphaltic seal coating or other special lining on the interior as required on the Drawings or in the City of Oxford's Standard Specifications. Exterior of buried piping shall be coated with standard asphaltic coating.

B. Force main piping shall have standard push-on bell and spigot joints meeting ANSI/AWWA C111/A21.11 and shall be installed in accordance with ANSI/AWWA C600. Ring gaskets shall be of approved composition suitable for the required service. Fittings shall be ductile iron conforming to ANSI/AWWA C153/A21.53 or C110/A21.10. Piping at all bends and at both ends of the force main shall be restrained for sufficient lengths to withstand the higher of: a) the test pressure, or b) the operating pressure plus a reasonable surge allowance. Substitution of concrete thrust-blocks in accordance with AWWA and City of Oxford standards in lieu of restrained joint pipe is permitted in some cases—refer to the City of Oxford's Standard Specifications for further requirements.

C. Force mains shall have a minimum cover of 4.0 feet and a maximum cover of 12.0 feet. High points in the force main should be minimized by the use of deeper cuts through small hills and rolling topography along the alignment. Storm sewer design (where applicable) should consider force main alignment, with storm sewers running under (not over) the force main wherever possible. The force main shall discharge into a separate terminal manhole having no upstream gravity sewer connections (existing or future) at an elevation not more than 2 feet above the invert of the receiving sewer. A ductile iron drop of the force main (per City of Oxford Standard Details) may be allowed in some cases, especially when it will eliminate the need for an air release valve. A smooth uniform invert shall be poured in the manhole from the force main discharge to the gravity sewer.

D. All mating ends in the pump station and valve pit shall be Class 125 flanged meeting ANSI/AWWA C110/A21.10 and C115/A21.15, with a gasket no larger than 0.125 inch between flanges. Restrained flange adapters shall be installed only where approved by the Utility—typically one on each pump discharge line immediately prior to the check valve and one after the flow meter (where applicable). Flange adapters shall be Meg-a-Flange or UTILITY approved equal. Union Flange and other similar adapters will not be allowed. All flanges shall be ductile iron, not gray iron. All flange bolts shall be 316 stainless steel. All stainless steel bolt threads shall be coated with an anti-seize product.

E. Only one joint or fitting will be permitted on each pipe between the wet well and the valve pit. This shall be a restrained flexible coupling appropriate for buried service capable of providing both expansion and deflection. Flexible coupling shall be Flex-Tend or equal with stainless steel hardware. No flanged joints will be permitted outside the wet well and valve pit.

6.14.2 Isolation Plug Valves

A. Each pump discharge line shall be furnished with an individual isolation plug valve. Isolation plug valves shall also be furnished for the Bauer connection and on the common force main beyond the flow meter (outside the valve pit, if no flow meter is provided). An isolation plug valve shall also be installed on the force main side of the surge relief valve, if applicable.

B. Plug valves shall be eccentric style with valve bodies manufactured of ASTM A-126 cast

iron, Class B. Plug valves shall have corrosion resistant non-lubricating heavy duty bearings and bolted one-piece bonnet.

C. Plug valves shall have resilient plug facings suitable for raw sewage applications providing dead-tight shutoff without the use of sealing lubricants. Even if small solids are trapped between the plug and seat, the resilient facing shall provide tight shutoff without seat damage. Seats shall be welded-in solid nickel.

D. Exposed valve ends shall be ANSI B16.1 Class 125 standard flanged with face-to-face dimensions in accordance with ANSI B16.1 and flanges in accordance with ANSI B16.10. Buried valve ends shall be AWWA C111/ANSI A21.11 mechanical joint.

E. Valve stem seals shall use multiple v-ring packing rings to provide a reliable long-life seal.

F. Valve body shall be rated for minimum 175 psi working pressure, tight shut-off with line pressure in either direction.

G. All bonnet and packing gland bolts shall be steel, electro-plated with either zinc or cadmium; packing gland bolts shall have stainless steel nuts.

H. Provide gear reducer actuator for valves 8-inch and larger. Exposed valves 6-inch and smaller shall have lever actuator, and exposed valves larger than 6-inches shall have handwheel actuator. Valves in exposed locations shall have position indicator. Buried valve actuator shall be square nut with adapters and valve box for tee-wrench actuation. Provide stem extension for buried valves as necessary to extend square nut within four feet from top of valve box.

I. All valves shall be marked in accordance with AWWA standards, including the name of the manufacturer, valve size, working pressure, and year of manufacture.

J. Valves shall open counter-clockwise and close clockwise. Permanent labels shall be provided for each valve, showing both the "Open" position and indicating arrows.

K. Plug valves shall be coated, interior, exterior, and valve bonnet, with Tnemec epoxy paint or UTILITY approved equal suitable for the intended application.

L. All plug valves shall be installed in the proper orientation as directed by the manufacturer.

M. Plug valves shall be DeZurik or UTILITY approved equal.

6.14.3 Check Valves

A. Check valves for ductile iron pipelines shall be swing-type and shall meet the material requirements of AWWA specification C508 swing-check valves for ordinary waterworks service. The valves shall be of cast-iron body, bronze-mounted, single-disc, non-shock, and hydrostatically tested at twice the working pressure. Valve ends shall be 125-pound ANSI B16.1 flanges. Interior and exterior of valve body shall be coated with fusion-bonded epoxy in accordance with AWWA C-550. Valves shall be designed for working pressure as follows:

Valve Size (diameter)	Pressure
4 to 12 inches	175 psi
14 to 24 inches	150 psi
30 inches and larger	120 psi

B When there is no flow through the line, the disc shall hang lightly against its seat in a vertical position. When open, the disc shall swing clear of the waterway.

C. Check valves shall have bronze seat and body rings, extended bronze hinge pins, and bronze nuts on the bolts of bolted covers.

D. Valves shall be fitted with an extended hinge arm with outside lever and weights. Valves shall be so constructed that disc and body seat may be easily removed and replaced without removing the valve from the line. Check valves shall thus be installed with enough clearance between the valves and the walls of the valve pit to permit removal of the shaft for maintenance purposes.

E. Pump stations designed with a total dynamic head above 100 feet or force main velocity above 4 feet per second shall be evaluated to determine the need for hydraulic cushion check valves. If indicated, check valves shall be equipped with a hydraulic cushion to dampen the last ten percent of the valve closing action. The hydraulic-cushion chamber shall be arranged so that the valve closing speed is adjustable to meet the service requirements. Air-cushioned check valves are not allowed.

F. All check valve shafts shall be designed to accept a hydraulic cushion in case future modification is desired.

G. Check valves shall be Golden-Anderson Model 250DOC, APCO Series 6000B or UTILITY approved equal.

H. PVC check valves for valve pit drain piping shall be Red Valve Series 2633, Tide Flex TF-2 or UTILITY approved equal.

6.14.4 Sluice Gate

The gate shall be cast iron with an appropriate operator. An operating stem with 2” square operating nut shall be included on the sluice gate and shall extend to about 6" below the bottom of the manhole’s top slab in line with a floor box. All components and hardware shall be stainless steel or other corrosion-resistant materials approved by the Utility. The gate shall conform to the AWWA Standard for sluice gates (C501-80) and shall be manufactured by the Rodney-Hunt Co., Waterman Industries, Inc., Hydro-Gate Corp., or UTILITY approved equal.

6.14.5 Surge Relief Valves

A. Pump stations designed for a total dynamic head greater than 100 feet and/or force main velocity greater than 4 feet per second shall be evaluated to determine the need for a surge relief valve. The surge relief valve shall be designed to prevent damage to any piping, valves, or other equipment in the event of a power failure during operation of all pumps in the station.

B. Any surge relief valve shall be installed in the valve pit with discharge into the wet well.

C. The surge relief valve shall meet the same material and pressure-rating requirements as the check valves.

D. Surge relief valve design and construction shall be approved by the Utility. Surge relief valves shall have a hydraulic cylinder and externally-adjustable spring. Surge relief valves shall be APCO Angle-style Surge Relief Valve (Drawing No. S-3000) or UTILITY approved equal.

6.14.6 Air Release Valves

Automatic air release valves (ARVs) shall be installed per the City of Oxford Standard Specifications and Details at each high point on the force main and at other appropriate locations. Air release valves shall not be installed in the valve pit.

6.14.7 Pressure Determination

A. Each pump discharge line shall have a ½" NPT tap with a lever-operated ball valve installed in the valve pit between the wall and the check valve to permit installation of a pressure gauge (by the Utility).

B. A full-size flanged pressure sensor (minimum 4") as manufactured by Red Valve (Series 40) or UTILITY approved equal shall be installed on the common force main between the individual pump isolation valves and the valve on the common force main. A stainless steel, glycerin-filled diaphragm gauge suitable for raw sewage service shall be provided on this pressure sensor. The gauge shall have at least a 4 ½-inch face with a polycarbonate window and a full scale pressure of approximately twice the shut-off head of the pump.

C. Piping and connections shall be NPT stainless steel or brass with a minimum pressure rating of 200 psi.

D. Ball valves shall be lever operated stainless steel with vinyl grip handles and NPT connections. Valves shall be rated for at least 350 psi working pressure. Hydrostatic tests shall be performed with ball valves turned off.

6.14.8 Painting - General

All piping inside the wet well, valve pit, and otherwise exposed to air or sewage shall be provided with an epoxy primer on the exterior—NOT the standard asphaltic coating. These pipes shall be field-painted with epoxy-based paint per the below specification.

6.14.9 Painting - Products

A. All painting materials shall be by the Tnemec Company, Inc.; equals by Ameron (VyGuard); DuPont or equal. The painting schedule has been prepared on the basis of Tnemec products (unless otherwise noted) and Tnemec recommendations for application. These specifications are not intended to override the paint manufacturer's recommendations for application.

B. All painting materials shall be delivered to the mixing room in unbroken packages, bearing the manufacturer's brand and name. They shall be used without adulteration and mixed,

thinned and applied in strict accordance with manufacturer's directions for the applicable materials and surface and with the Engineer's approval before using.

C. Shop priming shall be done with primers that are guaranteed by the manufacturer to be compatible with the finish paints to be used.

D. No paint containing lead will be allowed.

E. Work areas will be designated by the Engineer for storage and mixing of all painting materials. Materials shall be in full compliance with the requirements of pertinent codes and fire regulations. Proper containers outside of the buildings shall be provided and used for painting wastes and no plumbing fixture shall be used for this purpose.

6.14.10 Painting – Preparation of Surfaces

A. All surfaces to be painted shall be prepared as specified herein and shall be dry and clean before painting. Special care shall be given to thoroughly clean surfaces to receive polyamide cured epoxy paint of all marks before application of finish.

B. All metal welds, blisters, etc., shall be ground and sanded smooth. All pits and dents shall be filled and all imperfections shall be corrected so as to provide a smooth surface for painting. All rust, loose scale, oil, tar and asphalt bearing coatings, grease and dirt shall be removed by use of approved solvents, wire brushing, grinding or sanding.

C. All PVC pipe and other plastic matrix surfaces to be painted shall be lightly sanded and cleaned of residue before painting.

D. Galvanized, aluminum and copper surfaces shall have all oxidation and foreign material removed before painting by SSPC SP1, using an approved V.O.C. compliant method. Galvanized and, when ordered, the other metal surfaces specified above shall be hand tool cleaned to SSPC SP2 standards to provide a uniform 1 mil surface profile.

6.14.11 Painting – Painting Schedule

A. All colors will be selected by the Utility.

B. The following types of paints by Tnemec Co. have been used as a basis for the paint schedule:

1. Hi-build Epoxoline (Series 66) - polyamide cured epoxy
2. Envirofil (No. 130-6602 off-white color) - waterborne cementitious acrylic
3. Endura-Shield III - semi-gloss (Series 73) - high-build acrylic polyurethane enamel.
4. Silicone Aluminum (No. 39-661) - high heat silicone aluminum (to 600 degrees F).
5. FC Typoxy (Series N27) - tie coat, low VOC, polyamide epoxy.
6. PVA Sealer (No. 51-792) - vinyl acrylic primer.

C. The following surfaces shall have the types of paint scheduled below applied at the dry film thickness (DFT) in mils per coat noted:

1. Exterior ferrous metals (except first coat-hollow metal-pressed metal work).

a. 1 coat No. 66 (white in color) on properly prepared unprimed metal or for touch-up (2.0-3.0 DFT)
b. 1 coat Series 66 (4.0 DFT), 1 coat Series 73 (3.0 DFT)

2. Interior ferrous metals (except first coat-hollow metal-pressed metal work).
   a. 1 coat No. 66 (white in color) on properly prepared unprimed metal or for touch-up (2.0-3.0 DFT)
   b. 2 coats Series 66 (3.0 DFT)

3. Plastic piping and, where scheduled to be painted, plastic components
   a. 2 coats Series 66 (3.0 DFT)

4. Previously painted metal surfaces and hollow metal-pressed metal work - first coat on substrates prepared as approved and replacing first coat of above-specified systems.
   Complete painting with remainder of specified system for each type of substrate.
   a. First Coat - FC Typoxy Series N27 (5 DFT)

6.14.12 Painting – Workmanship

A. General

1. Protection of movable objects, equipment, fittings and accessories shall be provided throughout the painting operation. Canopies of lighting fixtures shall be loosened and removed from contact with surface, covered and protected and reset upon completion. Remove all electric plates, surface hardware, etc., before painting, protect and replace when completed. Mask all machinery nameplates and all machined parts not receiving a paint finish. Dripped or spattered paint shall be promptly removed. Lay drop cloths in all areas where painting is being done to adequately protect flooring and other work from all damage during the operation and until the finished job is accepted.
2. On metal surfaces apply each coat of paint at the rate specified by the manufacturer to achieve the minimum dry mil thickness required. If material has thickened or must be diluted for application by spray gun, the coating shall be built up to the same film thickness achieved with undiluted material. One gallon of paint as originally furnished by the manufacturer shall not cover a greater area when applied by spray gun than when applied unthinned by brush. Deficiencies in film thickness shall be corrected by the application of an additional coat(s).
3. Upon completion, remove all paint where it has been spilled, splashed, or spattered on all surfaces, including floors, fixtures, equipment, furniture, etc, leaving the work ready for inspection.

B. Field Priming

1. Steel members, metal castings, mechanical and electrical equipment and other metals which are shop primed before delivery at the site will not require a prime coat on the job. All piping and other bare metals to be painted shall receive one coat of primer before exposure to the weather, and this prime coat shall be the first coat as specified in the painting schedule. Surface preparation of bare metal shall be the responsibility of the Contractor.
2. Equipment which is specified to receive a baked-on enamel finish or other factory

finish shall not be field painted unless the finish has been damaged in transit or during installation. Surfaces that have been shop painted and have been damaged or where the shop coat or coats of paint have deteriorated, shall be properly cleaned and retouched before any successive painting is done on them in the field. All such field painting shall match as nearly as possible the original finish. Preparation and painting shall be provided by the Contractor.

3. Equipment shipped with a protective shop painting coat or coats shall be touched up to the satisfaction of the Owner with primers as recommended by the manufacturer of the finish paint. Preparation and painting shall be provided by the Contractor.

C. Field Painting

1. All painting at the site shall be under the strict inspection of the Owner. Only skilled painters and, where dictated by special conditions or systems and so ordered, specialist painters shall be used on the work.
2. All paint shall be at room temperature before applying, and no painting shall be done when the temperature is below 60 degrees F, in dust-laden air, when rain or snow is falling, or until all traces of moisture have completely disappeared from the surface to be painted.
3. Successive coats of paint shall be different shades (from paint manufacturer's stock or shop mixed paint) of the required colors so as to make each coat easily distinguishable from each other with the final undercoat the approximate shade of the finished coat to ensure no show-through as approved.
4. Finish surfaces shall not show brush marks or other irregularities. Undercoats shall be thoroughly and uniformly sanded with the type paper appropriate for the undercoats to remove defects and provide a smooth even surface.
5. Painting shall be continuous and shall be accomplished in an orderly manner so as to facilitate inspection. Materials subject to weather shall be primed coated as quickly as possible. Surfaces of exposed members that will be inaccessible after erection shall be cleaned and painted before erection.
6. All painting shall be performed by approved methods with number of coats modified as required to obtain the total dry film thickness specified. Spray painting shall be performed specifically by methods submitted and as approved by the Owner.
7. All surfaces to be painted as well as the atmosphere in which painting is to be done shall be kept warm and dry by heating and ventilation, if necessary, until each coat of paint has hardened. Any defective paint shall be removed and repainted in accordance with the Owner's directions.
8. Before final acceptance of the work, all damaged surfaces of paint shall be cleaned and repainted as directed by the Owner.

6.15 ELECTRICAL

All electrical equipment and components shall conform to the following specifications:

6.15.1 General Requirements

A. All electrical components shall meet NEMA standards, and shall comply with the most current version of NEC and UL as applicable to construction and installation of wiring and components. The electrical system inside the wet well shall comply with the National Electric Code for Hazardous Locations, Class I, Division 1, Group D.

B. All enclosures, panels, etc. (including the motor control panel) shall be UL-listed and shall be fabricated by a UL certified and registered manufacturer of electrical panels in accordance with NFPA 79 Electrical Standards for Industrial Machinery. Manufacturer must produce documentation demonstrating that they are UL certified and registered before shop drawings for the panel(s) will be reviewed. Firms pre-qualified to fabricate the panels are:

1. Adgo, Inc.
   3988 McMann Road
   Cincinnati, Ohio 45245
2. Panelmatic Cincinnati, Inc.
   258 Donald Drive
   Fairfield, Ohio 45018
3. Panel FAB, Inc.
   10520 Taconic Terrace
   Cincinnati, Ohio 45215

C. An enclosure complete with all electrical equipment and appurtenances shall be supplied with each sanitary sewer pump station as described in this section and outlined on the Drawings. The enclosure shall be located on a separate reinforced concrete pad adjacent to the wet well as close to the wet well as safely and practically possible. The pad shall be of sufficient size to support the enclosure and provide access in accordance with NEC requirements.

D. The utility company electric meter, utility company CT enclosure, service entrance-rated main breaker or fusible disconnect, and automatic transfer switch enclosure shall be mounted on a structure of 3" stainless steel strut (square tubing and U-channel) to one side of the main motor control panel enclosure on the same concrete pad (see detail on Drawing). The control transformer shall be mounted either on the stainless steel strut or on the side or back of the main control panel enclosure.

E. Approved Drawings shall be stamped and signed by a licensed professional engineer in the State of Ohio.

F. All electrical devices, conduit, wiring and grounding must be installed and connected by a licensed Electrical Contractor. The Electrical Contractor will be responsible for obtaining all necessary permits and inspections.

G. Equipment, materials, and installation shall comply with the requirements of all federal, state, and local authorities having jurisdiction.

6.15.2 Enclosures

A. The main enclosure shall contain both the motor control panel and the Supervisory Control and Data Acquisition (SCADA) equipment. The SCADA equipment shall be separated from the motor control panel as shown on the Drawings. Refer to Section 6.17 for requirements of the SCADA system. Hardwire controls must be kept away from the RTU to prevent electrical noise interference.

B. Enclosures supplied with each station shall be freestanding, double-door Hoffman # A-74H7224SSLP or equal (or appropriately sized equivalent) and shall be rated NEMA Type 4X. The enclosure shall be large enough to provide an unused space equal to at least 30%

of the space required. This space shall be reserved for installation of future equipment by the Utility, and no wiring or controls shall intrude into this reserved space. The construction shall be of 12-gauge 304 stainless steel, in accordance with ASTM A-167, and shall include a continuous hinge on each door and smooth seamless sides. All bolts, screws, pins, and other fasteners used in the enclosure shall be stainless steel.

C. The enclosure shall include add-on kits equal to the Hoffman kits listed by catalog number below:
   1. Two A-DSTOPK Door Stop Kits.
   2. Two A-LF16M18 Lights with remote switch.
   3. Two Design-air Electric Heaters, 115 volt, with built-in thermostat, Model D-AH4001B or other Hoffman model sized properly to ensure proper air transfer and heating of entire enclosure (provide 20 F temperature rise above ambient).
   4. Hoffman Model A-CSHELF18 (18”x18”) Folding Shelf Kit bolted to inside of enclosure’s inner door.
   5. A-DP2 Data Pocket mounted inside the enclosure.
   6. A-DK72SS6 stainless steel Drip Shield Kit.

D. Each enclosure shall have a door-in-door arrangement with interior swing-out panels on each side. The alternating on-off switch, circuit breakers, control switches, pilot lights, etc., shall be accessible to the operator from the inner panel without opening the inner doors. The outer panel shall be void of control devices.

E. The outer panel doors of the enclosure shall be secured as follows: Both the right-hand and left-hand doors shall be secured with pad-lockable Hoffman latch, Cat. # A-L1CR.

F. The subpanel in the back of the main enclosure shall be steel painted with white ceramic paint (Hoffman A-72P72 or equal). All other components of the enclosure shall be stainless steel.

G. An outline drawing of the control panel shall be provided, showing panel elevation, dimensions, and weight. Interconnecting/one-line wiring diagrams shall be provided, which show all electrical connections within the control panel as well as between field-installed equipment and the control panel. Schematic control wiring diagrams shall be provided, showing all control components, switches, pilot lights, relays, etc. The wiring diagrams shall indicate wire and terminal numbers using the standard numbering system. Each component shall be uniquely labeled. A copy of all as-built electrical/control/instrumentation drawings shall be laminated (or otherwise sealed in plastic) and permanently located in the main control panel enclosure.

H. The Contractor shall provide for the Utility to inspect the motor control panel during fabrication and testing when the panel is substantially complete, but before it has been shipped from the site of assembly. This inspection shall be by one of the following methods at the discretion of the Utility: either employees of the Utility will travel (at the Utility’s expense) to the site of assembly, or the Contractor shall provide to the Utility sufficient digital photographs in a format acceptable to the Utility clearly showing all portions and details of the control panel to the Utility’s satisfaction. The control panel shall not be shipped without the approval of the Utility.

I. A 24"x24"x8" (minimum) stainless steel NEMA 4X junction box with stainless steel drip shield shall be mounted over the wet well over a 4” (minimum) sleeve through the wet well

top slab (See detail on Drawing). The door of this junction box shall open in a direction away from any access hatches in the wet well, and the door shall be padlockable. All wires entering the wet well or other hazardous area (pump power and control wires, float wire, etc.) shall extend through at least 24" of open air below the junction box and shall be connected to terminal blocks inside this junction box with corresponding wires extending to the main control panel. Terminals shall be labeled as "Pump 1," "Pump 2," etc. Cord grip connectors with stainless steel braided wire sleeves (as shown on the Drawings) shall be used at the bottom of this junction box for all wires entering the wet well to seal the opening and provide strain relief for the wires. The Contractor shall post the following sign on the exterior surface of the junction box:

DANGER
HIGH VOLTAGE
ENERGIZED BY MULTIPLE POWER SOURCES
DISCONNECT BEFORE SERVICING

6.15.3 Circuit Breakers

A. All circuit breakers shall be of the thermal magnetic type, with molded case breakers. Breakers shall be UL-listed and CSA-certified, and shall meet Federal Specification W-C-375B/GEN.

B. Three-pole breakers shall be manufactured by Square D and shall have a short-circuit rating equal to 125% of the available fault current. Regardless of the available fault rating, circuit breakers shall not be less than Style FA for applications under 100 amps, or Style KA for applications from 100 to 250 amps.

C. Single-pole breakers shall be Square D QOU series and shall be used for control circuitry and peripheral devices.

D. A main circuit breaker shall be provided inside the main enclosure for the control panel (on the load side of the automatic transfer switch), with separate circuit breakers for each motor and transformer primary, as well as single-pole circuit breakers for control circuitry, RTU, lighting, flow meter, generator block heater, generator battery charger, receptacles, etc. Another 100-amp (minimum) service-entrance-rated circuit breaker or fusible disconnect shall be provided in a NEMA 4X stainless steel enclosure outside the main enclosure on the line side of the automatic transfer switch, lightning arrester, etc. Each breaker shall be fully coordinated with its upstream breaker to ensure the appropriate breaker trips under fault conditions.

E. Circuit breakers for the main, pumps, 3-phase voltage monitor and control transformer shall be accessible by opening the inner door. The main breaker shall have an external handle mounted on the inner door. All other circuit breakers shall be accessible to the operator through the inner panel door, once the outer door is open, without having to come in contact with open wiring. The motor branch circuit breakers shall be provided with an attachment that allows the operator to lock-out the circuit in the "Off" position.

F. A minimum of two spare 120-volt AC, 20-amp circuit breakers shall be provided and mounted on the panel.

6.15.4 Starters

A. Motor starters shall be electronic overload starters with adjustable trip phase loss, ground fault, and phase reversal protection. They shall be equipped with three poles and shall be provided with auxiliary contacts for use in the control circuit for overload alarm and for run status inputs to the SCADA system. Starters shall be Allen Bradley Bulletin 509 type with SMP-2 adjustable overload relay; Square D Class 8536 full voltage NEMA starters with optional solid state motor logic overload relay (Class 9065 if ordered separately); Furnas ESP 100 series, Class 14 with Class 20 trip overload, with solid state adjustable thermal overloads; or Cutler Hammer A200 Freedom line starter with equivalent features. No other starters will be considered equal or allowed.

B. Starters shall conform to all NEMA ratings. The minimum size starter shall be NEMA 1.

C. Electronic soft-start starters shall be supplied for all motors 30 horsepower or larger or where otherwise required by a local power company or the Utility. Soft-start starters shall be Allen Bradley SMC Flex or UTILITY approved equal. The basic features shall include:

1. Soft Start that gradually increase the voltage over a programmable time period
2. Soft Stop that gradually decreases the voltage over a programmable time period
3. Pump Control to minimize surges
4. Motor Protection
5. Metering
6. LCD Display
7. Keypad programming
8. Auxiliary contacts for remote interface
9. Undervoltage/Overvoltage/Unbalance protection
10. Ethernet communications (20-COMM-E)

6.15.5 Control Transformers

A. Control transformers shall be dry type, stainless steel enclosed (NEMA 3R), mounted external to the main control panel. Primary voltage shall be 480 volt AC (same as main power supply) and secondary voltage shall be 120 volt AC. Transformer case must be grounded.

B. The transformer shall be 10 KVA and shall be protected by circuit breakers on the primary and secondary sides. The transformer shall be Square-D Model 10S40FSS, Cutler Hammer S20N11S10 or UTILITY approved equal.

C. Control transformers for 24-volt control shall be 120-24V, 100VA mounted inside the control panel. Transformer to be ACME Model TA-2-81143 or UTILITY approved equal.

6.15.6 Control Relays

A. All control relays shall be of the 8- or 11-pin octal plug-in type, Allen Bradley 700-HA32A1 or equivalent. Relays may be either direct panel-mounted or DIN rail-mounted. Control relays shall be of at least DPDT configuration.

B. An intrinsically safe relay (Warrick Series 27A1D0 Intrinsic Barrier or UTILITY approved equal) shall be provided for operation with the float switch. Wiring associated with the

intrinsically safe relay shall adhere to UL requirements for intrinsically safe wiring and shall be segregated from other power and control wiring.

6.15.7 Lead Pump Selection/Alternation

A. Alternation of the lead pump will be accomplished by the SCADA programming.

B. A lead pump selection switch shall be provided in the control panel to allow for selection of any pump as lead pump or auto-alternating. Selector switch shall be Allen Bradley 800T Series or UTILITY approved equal.

6.15.8 Switches and Pilot Lamps

A. All lamps shall be of the transformer type.

B. Switches and pilot lamps shall be oil-tight and shall meet NEMA standards for A600 heavy-duty contacts. Each pump shall have a separate selector switch with the following settings: HAND -- OFF -- AUTO. Each pump shall also have a green pilot lamp connected to auxiliary contacts on the starter to indicate when the pump is running. These switches and lights should be located inside the control panel.

C. All HOA switches and pilot lamps shall be Allen-Bradley 800T series or UTILITY approved equal. Switches and pilot lamps shall be oil-tight and shall meet NEMA standards for A600 heavy-duty contacts. All pilot lamps shall have the push-to-test feature.

6.15.9 Voltage Monitors

A. A voltage monitor shall be supplied to monitor the incoming voltage. This unit shall be manufactured by SSAC, Model No. WVM911AL (480 volt) or UTILITY approved equal. The monitor shall be rated at 480 volt AC, consistent with the incoming voltage source. The restart delay shall be adjustable from 0.25 to 64 seconds. Voltage monitor shall monitor all incoming phases. Protection of the voltage monitor, on the incoming voltage, shall be through 2-amp fast-blow fuses (Bussman KTK-R2 or equal).

B. When a power alarm condition occurs, an alarm shall be sent via the SCADA system after an adjustable time delay.

6.15.10 Wiring and Cable

A. All wiring and cable installation shall conform to NEC regulations and shall comply with local codes. All conductors shall be copper. Wiring shall not be operated above 75° C.

B. For electrical equipment feeders (motor control centers, motor branch circuits, etc.), located below grade or for exterior control and motor circuits, wiring shall be NEC Type THHN through #2 AWG and NEC Type RHH for larger than #2 AWG.

C. For branch circuits for lighting and receptacles, wiring shall be NEC Type THHN in conduit. For branch circuits for interior control, wiring shall be NEC Type MTW.

D. Power wiring shall be 12 AWG minimum, and control wiring shall be 14 AWG minimum.

E. For instrumentation (i.e. 4-20 mA signals), cables shall be 16 AWG copper, NEC-Type TC

rated at 600 volts (Belden No. 1118A or equal) individually shielded twisted pair cable. All digital signal wires may be of the type of wire specified above.

F. All SCADA and signal wires shall be in conduit separate from any AC power lines. All motor circuits must be in separate conduits apart from any lighting, receptacle, or control wiring.

G. All conductors shall be sized such that voltage drop does not exceed three percent for branch circuits or five percent for feeder branch circuit combinations.

H. The use of pulling compound shall be required in all installations of wire pulled in conduit as needed. All conduits shall be sized in accordance with NEC regulations and/or local codes.

I. All terminal blocks shall be Allen Bradley terminals Model # 1492-CA1 for wire sizes #22 - #8 with mounting channel Model # 1492-N1, end barriers Model # 1492-N16, and end anchors Model # 1492-N23, or UTILITY approved equal. At least 10% spare terminals shall be provided on all terminal strips. Bare wire ends shall be connected into the recessed terminals. No fork-tongue compression terminals shall be used unless approved by the Owner for specific applications. No more than two wires may be connected to any individual terminal. A UL-listed anti-oxidation compound shall be used on any wires connected with wire nuts.

J. All wiring and components shall be tag-numbered and clearly marked at each termination in accordance with the drawings and as directed by the Engineer. Wire tags shall be heat shrink type wire markers with permanent legible machine printed markings and numbers. Adhesive or taped-on tags are not acceptable.

6.15.11 Raceways and Conduit

A. All conduits shall be of one of the following types:

1. Rigid aluminum, which shall comply with NEC and local codes. Rigid aluminum conduit shall be used for all above-grade installations and shall not be used for buried conduits.
2. PVC plastic, which shall be Schedule 80. All PVC conduit shall comply with NEC and local codes and have glued joints. PVC conduit shall not be used for interior conduits or above-grade exterior conduits, but shall be used for all buried conduits.
3. Liquid-tight, shall be flexible non-metallic conduit with fused PVC jacket. This conduit shall have a smooth non-wrinkling PVC jacket that will not pull away from fittings. Flexible conduit shall be installed with appropriate non-metallic fittings. This conduit shall be Carflex liquid-tight Type LFNC-B as manufactured by Carlon or UTILITY approved equal. Liquid-tight conduit shall be used for any final runs into instrumentation equipment, and shall not exceed 18 inches in length.

B. Conduits between the wet well and control panel shall have a minimum size of 2" and shall be as follows, unless otherwise noted or approved by the Utility:

1 conduit for each pump power wiring
1 conduit for miscellaneous pump wiring (use for both pumps)
1 conduit for future mixer or influent grinder (spare)
1 conduit for high level float to sluice gate manhole via wet well junction box (this conduit also used for future MultiTrode level sensor)

1 conduit for yard light (1" conduit)–to yard light, not wet well.
1 conduit for telephone – to telephone service, not wet well
2 conduits for radar level sensor power/signal (each conduit to be 1")

C. All conduits shall be tagged and identified with brass tags held on by copper wire at both ends.

D. Conduit routing and wire-pulling schedules shall be submitted with shop drawings. The Utility shall inspect and approve conduit installation prior to backfilling.

E. Conduits for three phase wires between the main transformer and the transfer switch, as well as between the generator and the transfer switch, shall be encased in a minimum of three inches of concrete on all sides. Other conduits shall be encased in concrete when shown on the plans. Other buried conduits may be encased at the discretion of the Contractor. Concrete encasement shall be colored as required by electrical codes. Buried conduits shall be backfilled with gravel, sand or dirt (no rocks). Provide caution tape in trench.

F. Plastic conduit spacers shall be used for all buried conduits, whether encased in concrete or not.

G. Where underground PVC conduit turns to go above ground, provide an Aluminum-to-PVC transition fitting below grade. For the portion of aluminum conduit that is below grade, coat the conduit with Scotchwrap primer (or UTILITY approved equal) and wrap it with 10 mil corrosion tape. Tape to be 3M Scotchwrap 50 or UTILITY approved equal.

H. Exposed conduit ends shall be sealed with Liquid Nails expanding foam sealant or equal.

6.15.12 Grounding

A. All submitted site plans shall show a grounding scheme. Grounding shall comply with NEC requirements. All equipment, reinforcing steel and SCADA antenna shall be grounded as required by NEC.

B. Ground rods shall be driven vertically into the earth not more than one foot below finished grade. Multiple ground rods shall be connected in a triad configuration. All connections made below grade shall be exothermic.

C. The grounding system shall be tested using the fall-of-potential method at the point where the grounding electrode conductor connects to the main power distribution equipment. The test shall not be performed within 48 hours after a rainfall event. The resistance value of the main grounding conductor measured between the main and a good earth ground shall not exceed five ohms. Results of the test shall be submitted to the Utility in a written report, which shall include:

1. Type of instrument used
2. Ground resistance readings obtained at various test distances
3. Ground resistant/distance curve
4. Value of grounding electrode resistance at knew of curve
5. Sketch showing setup of instrumentation and location of grounding electrode(s) and test probes

6. Proposed method to achieve the specified resistance, should an unacceptable reading be obtained
7. Ground resistance readings obtained after incorporating modifications (if applicable).

6.15.13 Security System Devices

A. Security system devices shall be furnished and installed as described below.

B. For pump stations with a building, a limit switch shall be mounted on each exterior door such that the switch opens when the door is opened. All such switches shall be connected in series to the Site Entry input point on the SCADA RTU.

C. The control panel shall have a limit switch mounted at each exterior door such that the switch opens when the door is opened. All such switches shall be connected in series to the Site Entry input point on the SCADA RTU.

D. A limit switch shall also be mounted at the control panel subpanel door that covers the SCADA RTU, radio, modules, etc. such that the switch closes when this subpanel door is opened. This limit switch shall be connected to the Tamper Switch input point on the SCADA RTU.

E. Limit switches at building doors shall be Allen Bradley Model BUL802M-AY5 (or UTILITY approved equal) with lever arm. Conduit shall be continuous to the limit switch or the Contractor shall install heavy duty, moisture proof cable Type ST00W-A 16 AWG 4C by AIW Corp. or equal from the limit switch to the conduit grip end.

F. An Allen Bradley Model 800T-H33A key switch shall be used for the operator ("Entry/Depart") switch.

G. Limit switches on panel doors shall be Allen Bradley Model 802M-AY5 or approved equal.

6.15.14 Nameplates

A. Engraved nameplates shall be provided for every circuit breaker, control switch, pilot light, etc. Nameplates shall be white-faced tags with engraved black letters. Letters shall be at least 3/16-inch in height.

B. Nameplates shall be attached to the panel by means of stainless steel machine screws or stainless steel rivets.

6.15.15 Line Surge Protection

A. A lightning arrester and line-surge capacitor shall be provided on the incoming power lines. The lightning arrester shall be of the 650-volt, 3-phase, "Transquell" type, as manufactured by General Electric Co., Cat. No. 9L15ECC001, Square D Model SDSA3650, or UTILITY approved equal. Line-surge capacitors shall be 650-volt, 3-phase, non-toxic liquid-insulated, as manufactured by General Electric Co., Cat. No. 9L18BBB301, or UTILITY approved equal. The lightning arrester and line-surge capacitor shall be mounted outside the control panel.

6.15.16 Elapsed Time Meters

A. An elapsed-time meter connected to auxiliary contacts on the pump starter shall be furnished for each pump.

B. Elapsed-time meters shall have an increment of 1/100 hour.

C. Elapsed-time meters shall be non-resettable.

D. An elapsed-time meter shall be furnished that indicates when two pumps run simultaneously. It shall be connected to auxiliary contacts from each pump starter connected in series.

E. Elapsed-time meters shall be Grasslin Model FWZ72-120V or UTILITY approved equal.

6.15.17 Site Lighting

A 1,500 watt Quartz flood light, or UTILITY approved equal shall be mounted on a wooden pole at least 15 feet above the ground. For installations where the antenna is installed on a wooden pole, the light may be installed on the same pole below the antenna. The light shall be Model QF1500 by Rab Electric Manufacturing Co., Hubbel, General Electric, or UTILITY approved equal, with appropriate lamp. Conduit shall be extended continuously up the pole to the light. A two-position switch shall be mounted on the interior door of the main control panel to control this light. A photoelectric cell shall not be installed.

6.15.18 Telephone Service

A. Telephone service shall be provided for any pump station that utilizes a dialer.

B. All underground phone cable shall be Type C5 with gel-filled coating, approved for underground use, whether direct-buried or installed in conduit.

6.15.19 Receptacles

Duplex receptacles shall be furnished where shown on the Drawings. Receptacles shall be 20 Amp, 120 volt, with ground fault circuit protection. Mount one receptacle inside the control panel behind the inner door. Mount another beside the panel in an FS box with a Meyers hub, and plastic in-use type cover. Provide separate breakers for each inside the control panel.

6.15.20 Uninterruptible Power Supply (UPS)

A. Provide a 1,000 VA UPS in the main control panel. UPS shall be American Power Conversion (APC) Model No. SUA1000XL or UTILITY approved equal capable of connecting to additional battery packs.

B. Provide an aluminum or stainless steel platform in the bottom of the panel for mounting the UPS.

C. Provide a dedicated, single (non-GFI) receptacle inside the bottom of the panel for the UPS.

D. The UPS shall power the following equipment:

1. SCADA PLC power supplies, including all I/O modules
2. Radio
3. Ethernet switch
4. Radar level sensor
5. High level float (intrinsically-safe relay)
6. MultiTrode controller (future)
7. Telephone dialer

6.16 STANDBY POWER

All requirements for standby power shall conform to the following specifications:

6.16.1 General Requirements

A. Standby power shall be provided for each permanent pump station and any other station where required by the Ohio EPA or the Utility (see Appendix A) through a permanent on-site standby generator with an automatic transfer switch and fuel tank.

B. Installation must comply with local electrical codes, as well as with any and all EPA and OSHA regulations.

C. NEC Compliance – Comply with applicable standby generator requirements of NEC including, but not limited to, emergency and standby power generation systems, and Articles 230, 517, 700, 701, and 702.

D. NFPA Requirements – Comply with applicable requirements of NFPA No. 37 and 110 pertaining to stationary combustion engines, and life safety code.

E. UL Compliance – Comply with applicable requirements of UL 1008, Automatic Transfer Switches.

6.16.2 Permanent On-Site Generator Set

A. Each generator set shall be sized to supply emergency backup power capable of starting and operating a sufficient number of pumps to pump the maximum design flow for the station, as well as operating all other electrical components. The generator set shall be manufactured by Caterpillar, Onan/Cummins, or Kohler, for 480 Volts (same as main power supply), 3 phase, 4 wire, 60 Hz operation, complete with all standard equipment and all accessories described herein.

B. Generator set shall be sized for sequential pump starting with a maximum voltage dip of 10%, maximum frequency dip of 10%, maximum harmonics of 10%, minimum 0.8 power factor and 130 º C temperature rise. Generator set shall be designed to allow pumps to run on future VFDs.

C. The backup power supply unit shall be a modular, self-contained package. Each permanent generator set shall be mounted on a raised reinforced concrete pad in a weatherproof steel enclosure with louvers and lockable, gasketed, removable panels to allow access to the engine, generator, and controls for easy routine maintenance. Enclosure shall be constructed of 14 gauge sheet metal with a minimum ambient capability of 125º F. The enclosure shall be mounted to the generator set structural steel base and shall be

completely rodent-proofed. All hinges and locks shall be stainless steel with zinc plated hardware. A lockable service access cover shall be provided for easy access to the radiator fill cap. The roof shall be pitched to prevent moisture accumulation, and the exhaust silencer shall be mounted on top of the enclosure. An external mounted emergency stop switch shall be provided. Each piece of the enclosure shall be painted utilizing electrostatically applied polyester powder bake paint, prior to assembly. Enclosure color shall be a standard color to be selected by the Utility. Permanent generators shall be located so as to be accessible by a truck for maintenance purposes.

D. A sound-attenuating treatment shall be provided to reduce sound levels to no more than 60 dbA at the closest existing or future residence. Information regarding sound levels shall be provided by the manufacturer with shop drawing submittals.

E. Engine:

1. The engine shall be water cooled in line, 4 stroke cycle compression ignition diesel. It shall meet specifications when operating on No. 2 domestic burner oil (ASIM D396). Diesel engines requiring premium fuels will not be considered. The engine shall be equipped with fuel, lube oil, and intake air filters; lube air coolers; fuel transfer pump; flexible fuel lines; fuel pressure gauge; oil drain extension and gear driven water pump. The engine shall be manufactured in the United States.
2. The governor shall maintain frequency regulation three (3) percent from no load to full rated load. Steady state operating band shall be ± 0.33 percent.
3. The unit shall be mounted on a structural steel base and shall be provided with vibration isolators between the base and generator set.
4. Safety shutoffs for high coolant temperature, low coolant level, low oil pressure, overspeed, and engine overcrank shall be provided.
5. Lube Oil shall be furnished by the generator set supplier.
6. Cooling system: An engine-mounted radiator with a blower-type fan shall be sized to maintain safe operation at 125º F. maximum ambient temperature. Air flow restriction from the radiator shall not exceed 0.5 in H_2O. The engine cooling system shall be filled with a solution of 50% ethylene glycol.
7. Exhaust system: Provide a stainless steel flexible exhaust element, hospital-grade exhaust silencer (unless otherwise approved), tail pipe and rain cap.

F. Each location with a permanent generator shall be equipped with a UL 142 listed sub-base fuel tank capable of supplying fuel sufficient for a minimum of forty eight hours of generator operation at full load. The fuel tank shall be self-contained and double-walled and with threaded pipe connections, mechanical fuel gauge, low level fuel switch with alarm contact, leak detection with alarm contact, vent with cap, emergency pressure relief vent and whistle valve to alarm when tank is full. Fuel tank shall comply with all local codes and ordinances. Provide a stub-up area to accommodate power wiring to the generator. The tank shall be factory installed to the generator set structural steel base by the generator set manufacturer.

G. Generator:

1. The generator shall be a 3 phase, 60 Hz, single bearing, synchronous type with brushless exciter and be built to NEMA Standards. Class H insulation shall be used on the stator and rotor, and both shall be further protected with 100% epoxy impregnation and an overcoat of resilient insulating material to reduce possible fungus and/or abrasion deterioration. Generator shall incorporate reactive droop compensation for parallel

operation and shall also include fuses for exciter/regulator protection against extended low factor loads and faults. The generator rotor shall be layer wound, tested for 150% overspeed at 170º ambient and dynamically balanced to ½ mil. A 120 volt anti-condensation heater shall also be provided.

2. A generator mounted volts per hertz type regulator with 3 phase voltage sensing shall be provided to match the characteristics of the generator engine. Voltage regulation shall be ± ½ % from no load to full rated load. Readily accessible voltage droop, voltage level and voltage gain controls shall be provided. Voltage level adjustment shall be a minimum of ±10%. Overvoltage shutdown protection shall be included.
3. A permanent magnet pilot excitation system shall provide power to the voltage regulator to improve the generator motor starting ability and short circuit support. It will also isolate the voltage regulator power circuit from voltage distortions created when the generator supplies a non-linear load.

H. Automatic Starting System:

1. A 12 or 24 volt DC electric starting system with positive engagement drive shall be furnished for each unit.
2. Fully automatic generator set start/stop controls in the generator control panel shall be provided. Control shall provide shut down for oil pressure, high water temperature, overspeed, overcrank and one auxiliary contact for activating accessories. Control shall include cycle crank with adjustable 1 - 60 second crank/rest period.
3. A 12 or 24 volt lead acid storage battery set of the heavy duty diesel starting type shall be provided for the unit. The battery set shall be of sufficient capacity to provide for 1 ½ minutes total cranking type without recharging. A battery rack with necessary cables and clamps shall be provided.
4. A current limiting 2 rate battery charger shall be furnished to automatically recharge batteries. Charger shall float at 2.17 volts per cell and equalize at 2.33 volts per cell. It shall include overload protection, silicone diode wave reflectors, voltage surge suppressers, DC ammeter, DC voltmeter, low DC voltage alarm relay, and fused AC input. AC input voltages shall be 120 volt single phase. Amperage output shall be no less than 10 amperes. The charger shall be mounted inside each diesel generator enclosure. Chargers mounted inside the automatic transfer switch enclosure are not acceptable.
5. Provide on the engine, a unit mounted thermal circulation type water heater, incorporating a thermostatic switch that shall be furnished to maintain engine jacket water to 90º F in an ambient temperature of 30º F. Voltage shall be 120 volt, single phase, 60 Hz. Valves shall be installed in the inlet and outlet lines at the block to allow replacement of the lines and heater element without draining the cooling system.

I. Main Line Circuit Breaker

1. Provide a generator mounted UL listed main line molded case circuit breaker (minimum rating of 100 amp), which shall be installed as the generator load circuit interrupting and protection devices. It shall operate both manually for normal switching function and automatically during overload and short circuit conditions.
2. The trip unit for each pole shall have elements providing inverse time delay during overload conditions and instantaneous magnetic tripping for short circuit protection. The circuit breaker shall meet standards established by Underwriter's Laboratories, National Electric Manufacturer's Association, and National Electrical Code.
3. The circuit breaker must include all necessary lugs for the required wire size.

J. A generator mounted NEMA 1 type vibration isolated dead front, 14 gauge steel generator control panel, built in accordance with NFPA 110, shall be provided. The panel shall contain, but not be limited, to the following:

1. Voltmeter/ ammeter,
2. Frequency meter,
3. Ammeter/voltmeter selector switch,
4. Service hours,
5. Tachometer (engine rpm),
6. Oil pressure gauge,
7. Engine coolant temperature gauge,
8. Safety shutdown protection with led indicators or alarm lights (for low oil pressure, high coolant temperature, low coolant level, overcrank and overspeed),
9. Engine control switch (auto, manual start and off/reset),
10. Automatic starting controls as specified above,
11. DC battery voltmeter,
12. Cooldown timer, adjustable 1 – 30 minutes. Factory set for five minutes.
13. Emergency stop push button with LED indicator – red
14. Voltage adjust rheostat
15. Panel lights and on/off switch
16. Digital displays for meters must be accurate through a temperature range of -40º F to 158º F and distorted wave forms and SCR load applications shall not affect instrument accuracy.
17. Panel anti-condensation heater, if available.
18. Auxiliary prealarm module with LED annunciation or alarm lights for high coolant temperature, low coolant temperature, low oil pressure, low battery voltage, battery charger malfunction, low fuel level and system not in auto mode.
19. Alarm horn and silence button.

K. Auxiliary contacts shall be furnished and installed to interface with the SCADA system for monitoring purposes. This shall include an engine run relay and a common failure relay. Common failure shall include the following alarms:

1. Overspeed.
2. Overcrank.
3. High engine temperature.
4. Low oil pressure.
5. Low coolant temperature.
6. Low coolant level.
7. Pre-alarm high engine temperature.
8. Pre-alarm low oil pressure.
9. Battery charger malfunction and/or low battery voltage.
10. Low fuel level.
11. Fuel tank leak.

6.16.3 Automatic Transfer Switch

A. The Automatic Transfer Switch (ATS) shall be the electrically-operated type that is mechanically held in both operating positions. ATS shall be suitable for use in standby systems described in NFPA 70. The complete switch assembly shall be listed under UL-1008 for use on emergency systems. ATS shall be rated for continuous duty at the

continuous current rating specified. All rating data shall be shown on shop drawings, and shall equal or exceed those specified. Switches shall be adequately rated for the application indicated and shall have the following characteristics and features.

1. Voltage: 480 Volts AC (same as main power supply)
2. Number of Phases: Three (3)
3. Number of Wires: Four (4)
4. Number of Switched Poles: Three (3)
5. Frequency: 60 Hz
6. Type of Load: Total system load
7. Continuous Phase or Main Current Rating: Equal to or exceeding the rating shown, but in no case less than 125 percent of the full load rating of the emergency power source or 100 amperes.
8. Overload Rating: minimum 100 amperes, RMS symmetrical
9. Main and Neutral Contacts: Contacts shall have a silver composition and shall be protected by approved arcing contacts. Neutral contacts or busbar shall have not less than 1.5 times the continuous current rating of the main or phase contacts.
10. Auxiliary contacts for normal and emergency positions that shall be connected to SCADA.
11. Pilot lights to indicate normal or emergency switch position as well as normal or emergency
    source availability.
12. Maintain-type test switch and automatic exercise capabilities with load/no-load selector switch.
13. Enclosure: Stainless steel NEMA 4X with enclosure heater and drip shield. All switches, lights and other controls for the transfer switch shall be accessible to the operator without being exposed to wiring and terminals; such control devices shall be internal to the enclosure; either on an inner hinged door or an inner removable "standout." This inner door or "standout" shall shield the operator from all exposed wiring, terminals, and devices not accessed for routine operation. No controls or devices shall be mounted through the outside of the enclosure.

B. The transfer switch shall be double throw, actuated by two electrical operators momentarily energized and connected to the transfer mechanism by a simple over-center linkage to provide "quick-make", "quick-break" operation of the contacts when operated electrically or manually. The switch shall provide a time delay in the "Off" position between the opening of the closed contacts and the closing of the open contacts to allow for the demagnetizing of motor and transformer loads. The time delay shall be a minimum of 25 Hz., and shall be adjustable 0-2 minutes (timers TETD and TNTD, both field set to 5 seconds). In-phase monitor systems are not acceptable.

C. The transfer switch shall be capable of transferring successfully in either direction with 70% of rated voltage applied to the switch terminals.

D. The normal and emergency contacts shall be positively interlocked mechanically and electrically to prevent simultaneous closing. Designs relying on electrical interlocks only are not acceptable. Main contacts shall be mechanically locked in position in both the normal and emergency positions without the use of hooks, latches, magnets or springs, and shall be silver tungsten alloy. Separate arcing contacts, with magnetic blowouts, shall be provided on all transfer switches. Interlocked molded case circuit breakers or contact are not acceptable.

E. The transfer switch shall be equipped with a safe manual operator designed to prevent injury to operating personnel. The manual operator shall provide the same contact-to-contact transfer speed as the electrical operator to prevent a flashover from switching the main contacts slowly.

F. The transfer switch shall be equipped with a microprocessor based control system, to provide all the operational functions of the automatic transfer switch. The controller shall have two asynchronous serial ports. The controller shall have a real time clock with Nicad battery back-up. Other features include:

1. The CPU shall be equipped with self diagnostics which perform periodic checks of the memory I/O and communication circuits, with a watchdog/power fail circuit.
2. The controller shall include a 20 character LCD display, with a keypad, which allows access to the system.
3. The controller shall include three phase, over/under volt, over/under frequency, phase sequence detection and phase differential monitoring on both normal and emergency sources.

G. When the voltage on any phase of the normal source drops below 90% (Undervolt DO) or increases to 110% (Overvolt PU); or frequency drops below 90% (Underfreq DO) or increase to 110% (Overfreq PU); or 20% voltage differential between phase occurs (Differentialvolt PU), after a programmable time delay period of 0-9999 seconds to allow for momentary dips (timer TD1, field set to 5 seconds), the engine starting contact shall close to start the generating plant.

H. After the generating plant has reached specified voltage and frequency and following another programmable time delay period of 0-9999 seconds to allow the emergency source to stabilize (timer TD3, field set to 3 seconds), the transfer switch shall begin the transfer to emergency sequence.

I. After restoration of normal power on all phases to a preset value of at least 95% (Undervolt PU) to 105% (Overvolt DO) of rated voltage, and at least 95% (Underfreq PU) to 105% (Overfreq DO) of rated frequency, and voltage differential is below 20% (Differential PU), an adjustable time delay period of 0-9999 seconds (timer TD2, field set at 600 seconds) shall delay retransfer to allow stabilization of normal power. If the emergency power source shall fail during this time delay period, the switch shall automatically return to the normal source. Emergency source operating parameters shall be field set as follows: Undervolt PU = 90%, Undervolt DO = 80%, Overvolt PU = 120%, Overvolt DO = 110%, Underfreq PU = 90%, Underfreq DO = 70%, Overfreq PU = 120%, Overfreq DO = 110%, and Differentialvolt PU = 20%.

J. After retransfer to normal, the engine generator shall be allowed to operate at no load for a programmable period of 0-9999 seconds (timer AUT). The combined time of timer AUT and the cool-down timer in the generator controller shall be field set to no more than 330 seconds.

K. Approval – as a condition for approval, the manufacturer of the automatic transfer switches shall verify that his switches are listed by Underwriters Laboratories, Inc., Standard UL-1008 with 3 cycle short circuit closing and withstand of 42,000 RMS Symmetrical Amps.

L. During the 3 cycle closing and withstand tests, there shall be no contact welding or damage.

The 3 cycle test shall be performed without the use of current limiting fuses, and oscillograph traces across the main contacts shall be furnished to verify that contact separation has not occurred, and there is contact continuity across all phases after completion of testing. Test procedures shall be in accordance with UL-1008, and testing shall be certified by Underwriter's Laboratories, Inc.

M. Transfer switch shall be Russelectric or UTILITY approved equal.

N. The transfer switch shall have the following label affixed to the exterior surface of the panel:

DANGER
HIGH VOLTAGE
ENERGIZED BY MULTIPLE POWER SOURCES
DISCONNECT BEFORE SERVICING

6.16.4 Portable Generator (Temporary Pump Stations Only)

If no permanent generator is provided, a weatherproof auxiliary receptacle and manual transfer switch shall be provided suitable for connecting to the Utility's portable generator. The transfer switch shall be 3-pole, 480 VAC, double-throw (center position off) stainless steel, externally-mounted. The transfer switch shall be Square D Class 3140 or equal. The receptacle shall be Killark, 200-amp, Style 1, 4-wire, 4-pole.

6.17 INSTRUMENTATION

All instrumentation shall conform to the following specification.

6.17.1 General Requirements

A. All pump stations shall be supplied with Supervisory Control and Data Acquisition (SCADA) equipment. The SCADA equipment shall include all materials and software; and all necessary installation, programming, and testing procedures shall be performed by the Contractor or by the Utility at the Contractor's expense (as determined by the Utility). SCADA equipment shall conform to the existing WWTP SCADA system.

B. Level sensors and associated hardware shall comply with the specifications set forth in Part II – Liquid Level Devices.

C. Flowmeter, where required, shall comply with the specifications set forth in Part III – Flow Metering.

Part I – Supervisory Control and Data Acquisition (SCADA)

6.17.2 SCADA Equipment

A. The SCADA equipment shall be Allen Bradley SLC 500 with modular design to allow expansion and upgrading by adding or replacing individual modules. Configuration of the SCADA equipment shall consist of one complete Allen Bradley SLC 5/05 Enet processor module (Model No. 1747-L551), 7 slot mounting rack (Model No. 1746-A7) and power supply (Model No. 1746-P2). The processor shall be equipped with all input/output (I/O) modules needed to monitor and/or control all functions outlined in Sections 6.17.5 and 6.17.6, below.

A 24 VDC power supply (Phoenix Contact Model No. PS100-240AC/24DC/1 or equal) shall be provided to power the I/O modules. A Model No. MDS entraNET 900 spread spectrum radio as manufactured by Microwave Data Systems and an Ethernet switch (Hirschmann RS2-TX or equal) shall also be included. The radio shall be programmed as necessary to integrate with the Utility's existing systems. All cables necessary to connect the various components shall be provided. Use Category 5E Ethernet cable for Ethernet connections.

B. The processor shall be housed in the main control enclosure (see Section 6.15.2).

C. The Allen Bradley SCADA equipment can be obtained from Rexel Electric, Northwest Controls or other supplier.

6.17.3 Electrical

A. All wiring, conduits, and grounding shall adhere to the provisions and specifications in Section 6.15.1, Wiring and Cable; Section 6.15.10, Raceways and Conduit; and Section 6.15.12, Grounding.

B. Lightning protection must be provided on all DC signal loops connected to the RTU or instrumentation from a location outside of the main control enclosure. Surge protection shall be provided for the level sensor and signal. Equipment to be:

1. Level sensor power surge protection shall be CITEL Model DS210-D or approved equal.
2. Analog surge protection shall be Phoenix Contact Type UFBK-M2-PE-24DC-ST (Order No. 28 17 05 5) protective plugs with Type UAK-BE (Order No. 2748674) base elements or UTILITY approved equal.

6.17.4 Antenna

A. A computer path study and an actual path study at the site shall be performed by J & K Communications, Inc., 222 South Tower View Drive, Columbia City, IN 46725, (260) 244-7975, or other approved in advance by the Utility, to determine antenna type and placement. A formal report with all documentation and data obtained from the study shall be provided to the Utility.

B. The antenna shall be an all-copper radiating structure enclosed in a weather-sealed, UV suppressed fiberglass tube. Included shall be a gold-anodized aluminex mounting sleeve and end cap. Rated wind velocity shall be for 150 mph. Antenna shall be Cellwave Model PD10108-2 (directional), Model A09209-24TO (omni-directional) or equal by decibel, as recommended by the path study and approved by the Utility. Location and height of the antenna shall be such that a 99% communications rate with the City of Oxford WWTP shall be guaranteed year round with a 15-year design goal.

C. Mounting shall be as determined by the path study. Wood utility poles used for antenna mounting shall be Class #5 up to 30' long and Class #4 for 30' to 70' long. Composite/fiberglass poles may be used instead of wood poles. Fiberglass poles shall meet the following requirements: 1) Direct burial, tapered shaft fiberglass reinforced composite, with color specified by the OWNER, 2) Include a coating to protect against ultraviolet radiation for at least 25 years, 3) Strength shall be comparable or greater than a Class #4 wood pole, 4) Horizontal load shall be 2,400 pounds or greater. Installation of poles must be plumb and straight. Poles with heights of 20-45 feet shall be buried to a depth determined

by the following formula: 2 + (height/10). It is the responsibility of the Contractor to ensure that underground utilities are properly marked before digging. All mounting brackets shall be aluminum, stainless steel, or galvanized steel. Shop drawings for all antenna and antenna cable assembly hardware shall be submitted and approved.

D. Connection from the antenna to the RTU shall be through the use of Andrews ½-inch heliax. Cable connectors shall be Andrews heliax connectors Type N.

E. Installation of the cable, grounding and lightning protection shall conform to all manufacturer's specifications.

F. The heliax cable shall be properly grounded by the use of shield grounding kits. Surge suppression which is rated for exterior weather conditions shall be provided at the RTU end of the heliax cable. A Polyphaser bulkhead type lightning surge protector shall be provided for the antenna installation and shall be mounted on the outside wall of the main enclosure. Provide a lightning rod elevated above the antenna sufficient to provide a 60 degree core of protection.

G. The installation of the antenna shall be by a certified radio Contractor (J&K Communications or UTILITY approved equal). This includes mounting antenna, installing all connectors, lightning protection and programming the radio.

6.17.5 I/O Requirements

A. All input/output points on a standard two-pump sanitary sewer pump station are presented in the list below. All inputs and outputs at the sanitary sewer pump station shall conform to this listing. Pump stations using soft starters with Ethernet communication and pump stations having more than two pumps will have slightly different input/output arrangements as directed by the Utility.

Slot 1 Digital Input Module (1746-IB16)

No.	Name	Description	Status[1]	
1	Site entry	Limit switches on exterior doors	0 = alarm	1= secure
2	Operator switch	Switch on subpanel door	0 = depart	1 = entry
3	Tamper switch	Limit switch on SCADA subpanel door	0 = secure	1 = alarm
4	Site Power	3-phase voltage monitor	0 = normal	1 = alarm
5	Spare	(Reserved for Smoke Detector)	0 = normal	1 = alarm
6	Spare	(Reserved for High Sump)	0 = normal	1 = alarm
7	Spare			
8	Level Sensor Reset	Momentary pushbutton on Ctrl Panel	0 = normal	1 = reset
9	Pump #1 Auto	Relay contact from H-O-A Switch	0 = manual	1 = auto
10	Pump #2 Auto	Relay contact from H-O-A Switch	0 = manual	1 = auto
11	Spare	(Reserved for Pump #3 Auto)		
12	Spare	(Reserved for Pump #4 Auto)		
13	Pump #1 Lead	From Lead Pump Selector Switch	0 = Auto	1 = Lead
14	Pump #2 Lead	From Lead Pump Selector Switch	0 = Auto	1 = Lead
15	Spare	(Reserved for Pump #3 Lead)		
16	Spare	(Reserved for Pump #4 Lead)		

Slot 2 Digital Input Module (1746-IB16)

No.	Name	Description	Status[1]	
1	P1 run status	Auxiliary contacts from motor starter	0 = off	1 = on
2	P1 fail	Contacts from motor starter	0 = normal	1 = fail
3	P1 overtemp	Contacts from Flygt MiniCAS	0 = normal	1 = fail
4	P1 seal leak	Contacts from Flygt MiniCAS	0 = normal	1 = fail
5	P2 run status	Auxiliary contacts from motor starter	0 = off	1 = on
6	P2 fail	Contacts from motor starter	0 = normal	1 = fail
7	P2 overtemp	Contacts from Flygt MiniCAS	0 = normal	1 = fail
8	P2 seal leak	Contacts from Flygt MiniCAS	0 = normal	1 = fail
9	Spare	(Reserved for P3 run status)		
10	Spare	(Reserved for P3 fail)		
11	Spare	(Reserved for P3 overtemp)		
12	Spare	(Reserved for P3 seal leak)		
13	Spare	(Reserved for P4 run status)		
14	Spare	(Reserved for P4 fail)		
15	Spare	(Reserved for P4 overtemp)		
16	Spare	(Reserved for P4 seal leak)		

Slot 3 Digital Input Module (1746-IB16)

No.	Name	Description	Status[1]	
1	Spare		(Reserved for Multi-Trode Level 1)	
2	Spare		(Reserved for Multi-Trode Level 2)	
3	Spare		(Reserved for Multi-Trode Level 3)	
4	Spare		(Reserved for Multi-Trode Level 4)	
5	Spare		(Reserved for Multi-Trode Level 5)	
6	Spare		(Reserved for Multi-Trode Level 6)	
7	Spare		(Reserved for Multi-Trode Level 7)	
8	Spare		(Reserved for Multi-Trode Level 8)	
9	Spare		(Reserved for Multi-Trode Level 9)	
10	Spare		(Reserved for Multi-Trode Level 10)	
11	High Level Float	From float in Sluice Gate Manhole	0 = normal	1 = alarm
12	Spare		(Reserved for Grinder Fail)	
13	Generator status[2]	Auxiliary contacts from generator	0 = off	1 = on
14	Generator fail[2]	From generator common fail relay	0 = normal	1 = alarm
15	ATS Status[2]	Auxiliary contacts from transfer switch	0= CG&E	1=generator
16	Spare			

Slot 4 Digital Relay Output Module (1746-OW16)

No.	Name	Description	Status	
1	Communications fail	Local pilot lamp (Red)	0=OK	1=CommFail
2	Spare	(Reserved for High Sump pilot lamp)		
3	Lead Pump Call	Local pilot lamp (Amber)	0 = OFF	1 = ON
4	Generator Alarm	Local pilot lamp (Red)	0=OK	1=Generator Alarm
5	Lag Pump	Call Local pilot lamp (Amber)	0 = OFF	1 = ON
6	Spare	(Reserved for Grinder Fail pilot lamp)		
7	Pump #1	Call Connect to pump cntrl cct	0 = OFF	1 = ON
8	Pump #2	Call Connect to pump cntrl cct	0 = OFF	1 = ON
9	Spare	(Reserved for Pump #3 Call)		
10	Spare	(Reserved for Pump #4 Call)		
11	High Level Float	Local pilot lamp (Red)	0 = OK	1 = High Level
12	Backup level control	Local pilot lamp (Amber)	0 = OK	1=Backup

				lvl ctrl in use
13	Pump #1 Fail	Local pilot lamp (Red)	0 = OK	1 = Pump #1 Fail
14	Pump #2 Fail	Local pilot lamp (Red)	0 = OK	1 = Pump #2 Fail
15	Spare	(Reserved for Pump #3 Fail)		
16	Spare	(Reserved for Pump #4 Fail)		

Slot 5 Analog Input Module (1746-NI8)

1	Station flow	4-20 madc input from flowmeter	Range 0 - xxxx gpm
2	Wet well level	4-20 madc input from level sensor	Range 0 - xx feet
3 - 8	Spares		

Slot 6 Filler Plate (1746-N2)

Notes: [1]Digital input: 0 = open contact, 1 = closed contact
[2]If applicable to site configuration

6.17.6 I/O Equipment

All input devices shall be identical to existing equipment previously installed on the UTILITY'S central SCADA systems within City of Oxford sanitary sewer pump stations and/or specified in Section 6.

6.17.7 Programming and Testing

A. Programming of the local RTU, the Utility's central SCADA system, and other related equipment, as well as all testing procedures (OATs & FATs) shall be performed at the Contractor's expense by an integrator/programmer approved by the Utility. The Contractor shall resolve any equipment or wiring deficiencies discovered during the testing.

Part II – Liquid Level Devices

6.17.8 Float Switches

A. Float switches shall be supplied with a normally open contact closure rated at 10 amp. All floats shall have an adjustable external cable weight.

B. Each station shall have one float switch, which shall be located in the sluice gate manhole. It shall be connected to the SCADA system and will be used to indicate a high level and activate a pump if the radar level sensor fails.

C. All floats shall be provided with enough extra cable to permit installation at the bottom of the manhole. Cable shall be continuous from the float to the wet well junction box. Excess cable shall be neatly looped on a stainless steel float hanger. Cable support shall be provided for the float cable and shall consist of a stainless steel braided wire sleeve with attachment tails for the connection to the stainless steel float hanger. Float hanger shall be located at the edge of the hatch opening, unless otherwise shown on the plans or directed by the Engineer.

E. Float switches shall be non-mercury type, encapsulated mechanical tilt float type. Floats shall be Warrick F Series, Anchor Scientific or UTILITY approved equal.

6.17.9 Radar Level Sensor

A. The radar level sensor shall be a pulse based microwave level sensor with the following basic features:

1. 4-20 mA analog output signal
2. 3" stainless steel flange
3. Aluminum epoxy coated housing
4. PTFE antenna material

B. Mount sensor to a flanged stainless steel plate anchored over a 6" diameter (or larger) sleeve in the top slab of the wet well. Level sensor shall be located over the lowest portion of the wet well away from the grout fillet, pumps, pump cables, incoming sewer flow, and other items that could interfere with the radar signal.

C. Sensor to be Siemens Milltronics IQ Radar 300 or UTILITY approved equal.

6.17.10 Flowmetering General Requirements

A. All pump stations shall be provided with a UTILITY approved flowmetering device for monitoring the discharge from each station. Station discharge piping shall be configured with a straight run of pipe with no valves, tees or reducers upstream of the flowmeter equal in length to at least ten pipe diameters and downstream of the flowmeter equal in length to at least six pipe diameters--or as otherwise recommended by the flowmeter manufacturer, to provide an acceptable flow pattern through the flowmeter.

B. All flowmeters shall be calibrated at the factory prior to shipment to the site. The contractor shall be responsible for the complete installation.

C. All new pump station flowmeters shall be magnetic flowmeters and shall include the transmitter, the remote-mounted flow tube, and the vendor-supplied shielded cable between the two elements.

6.17.11 Magnetic Flowmeter Flow Element

A. The flow element of the magnetic flowmeter shall conform to the following specifications.

B. Pulsed DC electromagnetic induction-type, providing a signal that is linear in relation to the liquid flow rate.

C. Functional/performance specifications shall be as follows:

1. Power requirements shall be matched to the flow transmitter/ converter.
2. Accuracy shall be 0.25 percent of rate (including the transmitter/converter).
3. The flowmeter liner shall be suitable for operations in process liquid temperatures up to 95º C.
4. RFI protection shall be provided.
5. The flowmeter shall be capable of operations under pressures of 240 psi, if 150-

pound flanges are used, and 700 psi, if 300-pound flanges are used.

6. The flowmeter shall be capable of running under no-flow conditions without damage to any component.

D. Physical specifications shall be as follows:

1. The metering tube of the flowmeter shall be carbon steel, unless otherwise indicated.
2. Flowmeter flanges shall be ANSI 150-pound carbon steel, unless otherwise indicated.
3. The flowmeter tube shall have a neoprene liner with liner protectors.
4. Electrodes shall be 316 stainless steel, bullet-nosed or elliptical self-cleaning type, unless otherwise indicated. The flowmeter shall have self-grounding electrodes.
5. Flowmeters shall be housed in below-grade vaults and shall have a submersion kit that will allow continuous submergence at a water depth of 33 feet. The unit shall be FM certified for installation in Class 1, Division 2 hazardous locations.
6. All external surfaces of the flowmeters shall be painted with a chemical- and corrosion-resistant epoxy finish.

E. Accessories/options required:

1. All flowmeters shall be factory-calibrated. A copy of the calibration report shall be available during start-up and be included in the operations and maintenance manual. A startup report including the flow range, calibration factor, and other relevant information shall also be included in the O&M manual.
2. Flowmeters shall be grounded according to manufacturer's recommendation. All accessories, such as a ground ring, ground wires, gaskets, etc., shall be provided as required or as otherwise specified. All materials shall be suitable for the liquid being measured.
3. The flowmeter shall be complete with potting compound and proper conduit seal to provide a water-tight seal for the cable.
4. The flowmeter shall comply with NEC Class 1, Division 2, Group D location.

F. Flowmeters shall be a Foxboro 9200 Series, Krohne, or UTILITY approved equal.

6.17.12 Magnetic Flowmeter Transmitter/Converter

A. The flow transmitter/converter shall be supplied by the manufacturer of the flow element. It shall be Foxboro IMT-25 or UTILITY approved equal.

B. Functional/performance specifications shall be as follows:

1. Power requirements shall be 120 volt AC, ±10 percent.
2. Accuracy shall be as defined for the flow element.
3. The operating temperature range shall be -25C to 65C
4. The output shall be isolated 4-20 mA. DC into 0 to 1000 ohms

C. The flowmeter transmitter/converter shall be mounted in the main control panel.

D. Accessories/options required:

1. A signal cable shall be provided between the flow element and the signal converter.
2. A local indicator shall be provided with an engineering scale to indicate actual flow

rate and total flow.

3. A second flow rate indicator and non-resettable totalizer shall be provided on the enclosure RTU subpanel if the transmitter is not located in the enclosure. This unit shall be a Newport P6000 ratemeter/totalizer, Kessler Ellis (KEP) Intellect-69 or UTILITY approved equal.

6.18 PERIMETER FENCE

All fencing and related equipment shall conform to the following specifications:

6.18.1 General Requirements

A. The pump station area shall be enclosed with industrial-grade chain-link fence. This fence shall be 9-gauge chain link, with 3-inch end posts and 2-inch line posts. A 1-5/8" top rail shall be placed on the fence. The end posts, line posts, and top rail shall be structural galvanized steel with a rating of SS40. The fence shall be six feet high and shall be topped with three strands of barbed wire facing outward. The fence fabric shall be kept approximately 3-4 inches off the ground to allow trimming but prevent access under the fence.

B. Access through the perimeter fence shall be by means of a lockable sliding gate with a working length of 16 feet. In the event that the site layout makes a sliding gate impractical, dual-leaf swinging gates (8' each) may be acceptable. Either gate shall be constructed with SS40 structural galvanized steel for the outside frame (2.5" for sliding gate or 2" for dual-leaf swinging gates) and SS40 structural galvanized steel 1-5/8" filler supports. All welding shall be completed prior to galvanizing. All open pipe ends shall be permanently capped. The frame shall be covered in 9-gauge chain link. The gate shall be capable of being padlocked to prevent unauthorized access to the station.

C. A personnel access swing gate (minimum 3 feet wide) shall also be installed in the fence in addition to the sliding gate. This gate shall be located on the perimeter fence as appropriate for convenient access to the station. This personnel access gate shall be capable of being padlocked to prevent unauthorized access to the station. The gate shall be constructed of SS40 structural galvanized steel tubing and 9-gauge chain link. The frame shall be 2" tubing with 1-5/8" filler support.

D. The perimeter fence shall be constructed no closer than ten feet from the wet well, valve pit, or any building, or four feet from the generator pad, control panel pad, or SCADA pole. Gate placement shall be such that there is adequate truck access to the wet well, valve chamber, and generator, or, if a portable generator is used, to a plug and transfer switch. There shall be sufficient room within the fence to permit later installation of a generator (if one is not initially installed) while still meeting the above requirements.

E. The Contractor shall post the following 14" x 20" sign on the sliding gate: “DANGER: HIGH VOLTAGE” (EMED Co., Inc. Sign No. PD102859 or equal). The sign shall be according to State and Federal OSHA requirements. The sign shall be heavy gauge 0.063" aluminum with rounded corners and 1/4" I.D. corner eyelets for mounting. The sign shall be attached with aluminum or stainless steel fasteners. Paint or ink shall be weather-resistant, and the face of the sign shall be covered with a clear mylar topcoat.

6.18.2 Chain Link Fence Specifications

A. The Contractor shall provide all labor, materials, tools, and equipment required to furnish and install in good workmanlike manner the chain link fence and gates complete as shown on the plans and as specified herein.

B. GENERAL

1. Layout. Unless directed otherwise by the Engineer, the fence shall be erected in close conformance with lines, grades, and locations shown.
2. Hot Dip Zinc Coating (Galvanizing) After fabrication, all steel fence parts shall be coated with a minimum of 1.2 ounces of zinc per square foot of surface area. The coating shall be applied by the hot dip process. Provide manufacturer's certification as to process and thickness of coating.
3. Shapes All post, rails, and gate frames noted herein are nominal size, Schedule 40 steel pipe; however, "H" shapes may be substituted with the approval of the Engineer.

C. DRAWING APPROVAL Shop drawings for all work in this section shall be presented to the Engineer for approval and shall indicate size, gauge, weight and finish of all materials, method of anchorage, gate details, hardware, and a plan layout. Fabrication and erection shall be in accordance with the approved shop drawings.

D. MATERIAL

1. Fabric Fence fabric shall be 2 inch mesh of a 9 gauge medium carbon steel wire. Fabric shall be woven as one piece to the heights shown on the plans. Fabric shall have the selvage edges twisted and barbed at the top and at the bottom.
2. Top Rail Top rail shall be 1-5/8 inch at 2.49 pounds per foot of length.
3. Bottom Rail or Tension Wire
   a. Bottom Rail Bottom rail shall be 1-3 inch at 2.27 pounds per foot.
   b. Tension Wire Tension wire shall be 0.177 inch diameter, high carbon steel coil spring wire.
4. Line post Line post shall be 2 inch diameter at 3.65 pounds per foot.
5. Terminal and Straining Posts Terminal and straining posts shall be 3 inch diameter at 7.58 pounds per foot.
6. Gate Posts Gate posts shall be sized to meet the following:
   a. 2-2 inch at 5.79 pounds per foot for gate leaves up to 6 feet wide
   b. 3-2 inch at 9.11 pounds per foot for gate leaves from 6 to 13 feet wide
   c. 6 inch at 18.97 pounds per foot for gate leaves from 13 to 18 feet wide
   d. 8 inch at 24.70 pounds per foot for gate leaves over 18 feet wide
7. Post Brace Post brace shall be 1-5/8 inch diameter at 2.49 pounds per foot.
8. Truss Rod Truss rods shall be 2 inch diameter steel rod complete with turnbuckle.
9. Gates The gates shall be of the same height and fabric as the fence to which the gate is installed. Gate frame shall be fabricated from 2 inch diameter galvanized steel pipe at 3.65 pounds per foot (for gate leaves up to 11 feet wide) or 2-2 inch diameter pipe at 5.79 pounds per foot (for gate leaves from 11 to 18 feet wide). Gates shall be adequately braced for the size or sizes shown with all corners electrically welded. Sliding gates shall slide fully open one way with stops at both ends to prevent derailment. Swinging gates shall be capable of opening 180 degrees in at least one direction.
10. Barbed Wire Fence posts shall be fitted with adjustable barbed wire arms for

carrying three strands of barbed wire at a 45 degree angle. Barbed wire shall be four point pattern consisting of two strands of 12.5 gauge steel wire with heavy steel barbs spaced not greater than 5 inches on center.

11. Hardware Fence shall come complete with all necessary hardware; such as, tension bars, tension bands, brace bands, end clamps, gate post caps, nuts, and bolts. Gate hardware shall consist of bottom corner pivot hinge, upper hinge, latch fork with lock keeper and guide, fork catch, stop and hold open, and plunger bar and "mushroom" catch (for double leaf units).
12. Concrete. Concrete for setting posts in the ground shall be at least Class B (ODOT Specification).

E. INSTALLATION

1. Clearing and Grading The Contractor shall perform such clearing, grubbing and grading as may be necessary to construct the fence to the required alignment and shall provide a reasonably smooth ground profile at the fence line.
2. Posts
   a. Ground Installation Post placed in the ground shall be set vertically in concrete not less than 32 inches below finished grade. Concrete encasement shall be a minimum of 36 inches below finished grade with 6 inches around the post and a 1 inch crown.
   b. Concrete Installation Posts placed in concrete slabs, walls, or floors shall be set vertically in preformed holes, not less than 8 inches deep with the inside diameter 1 inch greater than the outside diameter of the post. Fill the annular space with non-shrink grout.
   c. Spacing Lines posts shall be spaced at not more than 10 foot centers, except when fence is utilized as railing, then post spacing shall meet all local, state, and OSHA codes.
3. Fabric The fabric shall not be erected until after 5 days from the time of setting posts in concrete. The fabric shall be fastened to the line posts with clips or bands spaced at approximately 14 inches apart, and to the top and bottom rails with bands or tie wires at approximately 24 inch intervals. The fabric shall be fastened to terminal posts using a tension bar with tension bands spaced 12 inches apart. Fabric shall be rigid and taut.
4. Horizontal Deflection Special treatment will not be required at deflection points where the fence changes alignment by 5 degrees or less. At points of deflection where the fence changes alignment by more than 5 degrees, a post brace and truss rod shall be provided in each fence panel adjacent to the post located at the angle point.
5. Post Braces A post brace and truss rod shall support each gate, straining, and terminal post. The brace shall extend from the line post back to the gate, straining, or terminal post.
6. Bottom Rail or Tension Wire When a bottom rail is not shown or noted on the plans, the bottom of the fabric shall be reinforced by a galvanized spring steel wire stretched through the fabric and tied to the posts with the fabric.
7. Barbed Wire Three strands of barbed wire shall be pulled and anchored to the arms. Alternate location of barbs in each strand so that barbs will be spaced not greater than 22 inches on center in alternate layers. Barbed wire shall not be spliced.
8. Any galvanized piping that is cut or welded after galvanizing shall be protected with an appropriate cold galvanizing compound. Covering damaged galvanizing with any

other paint or coating is not acceptable.

6.19 FINAL GRADING AND FINISH WORK

Site grading and finish work shall conform to the following specifications:

6.19.1 General Requirements

A. Initial backfill for the pump station structure shall be non-compacting, size #57 washed round stone, extending to five feet above the bottom of the wet well. From that point to a point two to three feet (2'-3') below final grade, backfill shall consist of compacted fill dirt excavated from the station site, unless otherwise directed by the Utility. The next 18" – 30" shall be backfilled with compacted clay. No rock or unstable backfill will be accepted. The Contractor shall ensure that compaction is sufficient to prevent any subsidence. All ground shall be stable, and Contractor is responsible for repairing all subsidence and associated damage for twelve (12) months from acceptance of the pump station by the Utility.

B. Any access driveway longer than 120 feet should be constructed with a turnaround at the pump station allowing a minimum 50 foot turning radius for a truck 8 ft. - 5 in. wide with an overall length of 33 ft. - 6 in.

C. Access driveways and turnarounds shall be paved. Base for paving shall consist of one 4-inch (minimum) course of Item 304 Aggregate Base of the State of Ohio Department of Transportation (ODOT) Construction Materials and Specifications. The intermediate course shall consist of 4½ inches of ODOT Item 301 Bituminous Aggregate Base. The surface shall consist of one 1½ -inch (minimum) course of ODOT Item 448 Asphalt Concrete. Access driveway shall not slope more than ten percent (10%).

D. A concreted parking area with slope not greater than 12:1 shall be provided for trucks. This area shall be located inside the perimeter fence if site considerations allow; otherwise, it shall be located outside the perimeter fence as near as possible to the sliding gate. This area shall be a minimum of 8" of 4,500 psi concrete with steel mesh reinforcing. A reinforced concrete slab (minimum 4" thick) shall be poured under the control panel. This slab shall have at least four times the horizontal surface area of the control panel to help prevent settlement. A minimum 4"-thick gravel base of ODOT Item 304 shall be provided under all concrete.

E. Six inches (6") of AASHTO M 43 Size No. 57 crushed stone or ODOT Item 304 aggregate base shall be provided around the wet well, valve chamber, generator pad, etc., over all non-concreted areas within the perimeter fence. A solid layer of visquine plastic (minimum 6 mil thickness) shall be placed under the crushed stone to prevent vegetative growth.

F. Pavement subgrades shall be compacted in accordance with the most recent ODOT Construction and Materials Specifications.

G. Finish grading shall provide positive drainage away from the wet well, valve pit, manholes, control panel, generator, and parking areas. Grade shall not be greater than 3:1. Unless otherwise indicated on the plans, tops of all structures shall be elevated six to twelve inches (6" - 12") above surrounding grade. The area around the pump station site shall be graded to drain away from the pump station.

H. All unpaved areas around the pump station shall be finish-graded and planted with grass seed, to meet ODOT Item 659 requirements. Shrubs and trees shall be planted in accordance with the surrounding landscaping and anticipated land use, as approved by the Utility. In general, the site shall be left in an aesthetically pleasing manner.

APPENDIX A: TEMPORARY PUMP STATIONS

In general, ALL pump stations shall be considered to be permanent unless a project exists on the City of Oxford's 5-year Capital Improvement Plan that would eliminate the pump station or the Developer has specific plans for eliminating the pump station within approximately 5 years. However, each pump station will be reviewed at the inception of design by the UTILITY to determine whether the pump station will be considered "permanent" or "temporary" for design purposes.

The criteria to be considered by the Utility will include: 1) capacity of the pump station, 2) complexity of operation, 3) overflow impact upon customers, 4) overflow impact upon the environment, 5) location and ease of entry/exit for emergency equipment such as sludge trucks, etc., 6) proximity to the nearest gravity sewer and likelihood of a future sewer extension to eliminate the pump station, 7) proximity to existing and proposed residential development, and 8) other factors unique to a given pump station site.

If a pump station is to be "temporary" (as determined by the Utility), certain requirements may be modified or omitted at the discretion of the Utility. An outline of what these modifications and omissions will generally be is provided below.

A. The Utility will not require the pump station to be sized for the total upstream watershed. Instead, the pump station shall be sized for all existing and planned development (including all preliminary plans) within the watershed, regardless of whether or not all such development is associated directly with the pump station. This means that the pump station shall have the capacity to both eliminate any existing upstream pump stations and serve development in the watershed being planned by others. Also, the requirement of one hour emergency storage at twice ultimate average flow will remain.

B. A permanent on-site generator and automatic transfer switch will not be required. Instead, a manual transfer switch and auxiliary receptacle shall be provided as described in Section ~~6.4~~ 6.16.4. There shall be sufficient room within the perimeter fence to park a portable generator or install an on-site generator at a later time. Also, if the generator required to operate the pump station would be too large to pull on a trailer behind a pickup truck, a permanent on-site generator will be required.

The Utility will assess each "temporary" pump station individually, based on the criteria listed above, to determine the acceptability of each modification and omission. Therefore, it is possible that a "temporary" pump station may be required to meet some or all of the "permanent" standards.

All other requirements listed within the Sanitary Sewer Pump Station Requirements shall apply universally to all pump stations, regardless of their status as "permanent" or "temporary."

APPENDIX B: REQUIRED SUBMITTALS

The Contractor shall submit at least five (5) copies (size 24”x36”) of submittals for each of the following items. One of the five copies will be returned to the Contractor with comments and/or approvals.

Wet well structure
Valve pit structure
Flow meter manhole (if applicable)
Sluice gate manhole
Other manholes & covers (if applicable)
Aluminum hatches
Ladder(s) & safety post
Vent pipe & screen for wet well
Waterproofing (if applicable)
Gaskets/seals for pipe & conduit penetrations through concrete structures

PVC drain pipe & check valve
Gravity sewer pipe
Ductile iron pipe, fittings, flange adapter, mega-lugs, etc.
Polyethylene encasement
Pipe mounting brackets (for mounting to wet well walls)
Plug valves
Check valves
Sluice gate & related components
Surge relief valve (if applicable)
Air release valve(s) (if applicable)
Pipe supports (in valve pit)
Bauer fitting(s)
Pressure gauge, sensor, valves, piping, etc.
Misc. fasteners, anchors, & hardware
Epoxy paint for ductile iron piping

Pumps (incl. discharge bases, other misc. components, & spare parts)
Float switch
Cable support bracket
Stainless steel (Kellems or equal) cable grips
Guide rails
Upper & intermediate guide rail brackets
Chains and Grip-eye for lifting pumps

Influent grinder—incl. frame, hydraulic drive unit, grinder unit, etc. (if applicable)
Flow meter (primary & secondary devices, cables, grounding kit, etc.) (if applicable)

Generator and automatic transfer switch (incl. housing, battery charger, controller, etc.)
Enclosure for ATS

SCADA: All Allen Bradley SCADA equipment, including processor, power supply, I/O modules, etc.
Ethernet spread spectrum radio
Ethernet switch
Path study

Antenna
Lightning surge protector, grounding kit, connectors, etc.
SCADA wiring diagram and I/O list

Electrical, Instrumentation & Control:

Interconnecting diagrams/wiring and control schematics for pump station and control panel
Panel layout (dimensioned) for all planes
Site electrical plan
Conduit routing/layout and wire-pulling schedules
Grounding scheme
Bill of materials

Conduit, wiring & connectors
Enclosure(s) & junction boxes, incl. all accessories
Panel supports (i.e. stainless steel strut, anchors, etc.)

Equipment: Quartz yard light
Main disconnect, incl. st. stl. enclosure (outside panel)
Control transformer, incl. st. stl. enclosure (outside panel)
Power blocks & terminal blocks
Ground lugs
Lightning arrestor and surge capacitor
Main circuit breaker (inside panel)
Pump circuit breakers
Voltage monitor, incl. disconnect and fuses
Motor starters w/ electronic overloads
Radar level sensor—incl. mounting details
Primary circuit breaker for control xfmr. (& secondary CB, if applicable)
Auxiliary circuit breakers
Handle assembly for main CB (& pump CB's, if applicable)
All fuses and fuse holders
Panel light(s)
Panel heater(s)

Duplex GFCI receptacle & cover plate
Selector switches, pushbuttons, and pilot lights
Elapsed-time meters
Relays, incl. intrinsically-safe relay
24V transformer for MiniCAS (if applicable)
MiniCAS relay or equivalent relays
Limit switches for security and tamper alarms
Engraved labels/tags

Concrete slabs (incl. reinforcing) for generator, control panel, transformer, etc.
Chain link fence & gates
Signage
Ready mixed concrete
Granular materials & other fill
Testing reports (backfill compaction, leakage tests, etc.)

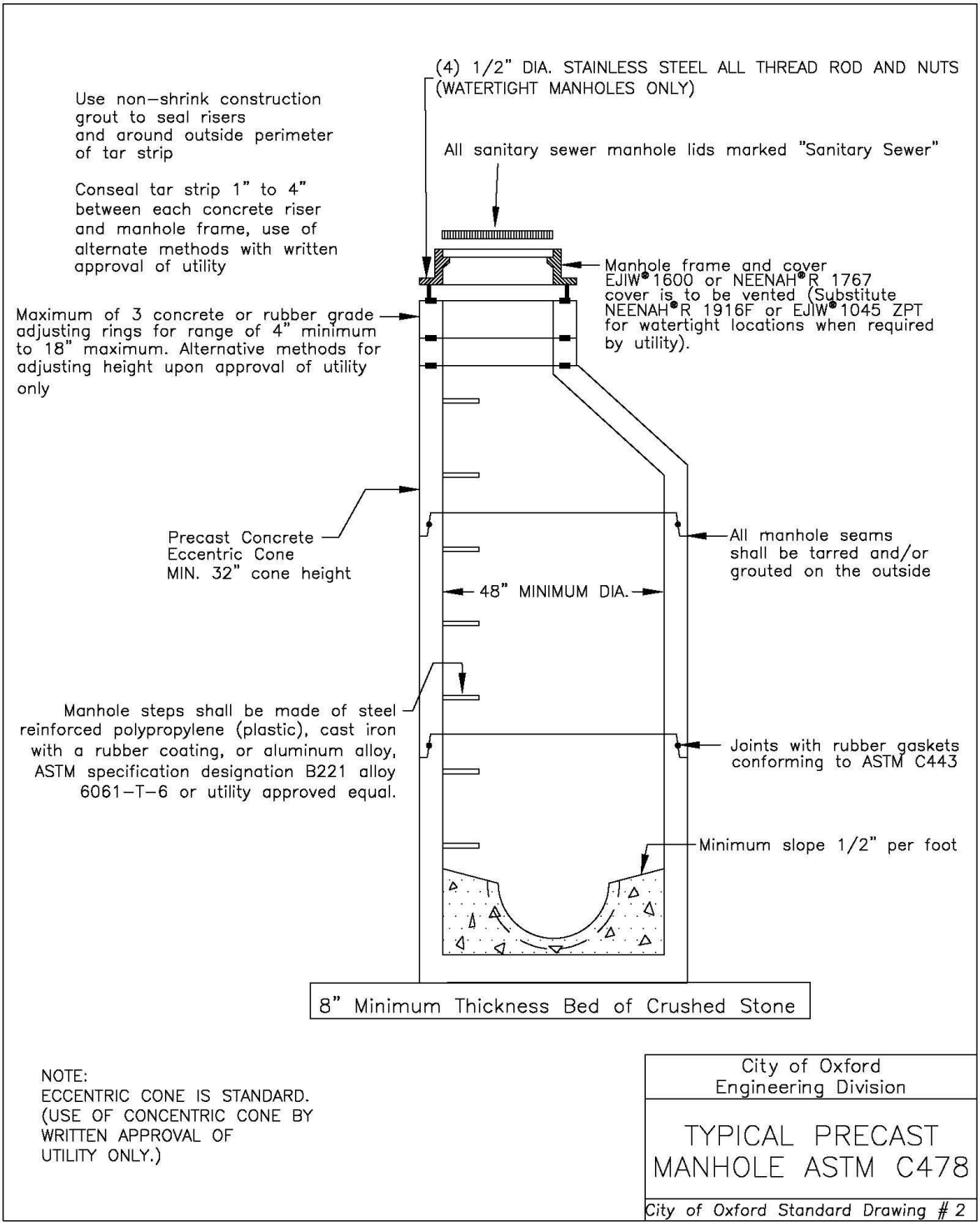
SECTION SEVEN

STANDARD DRAWINGS

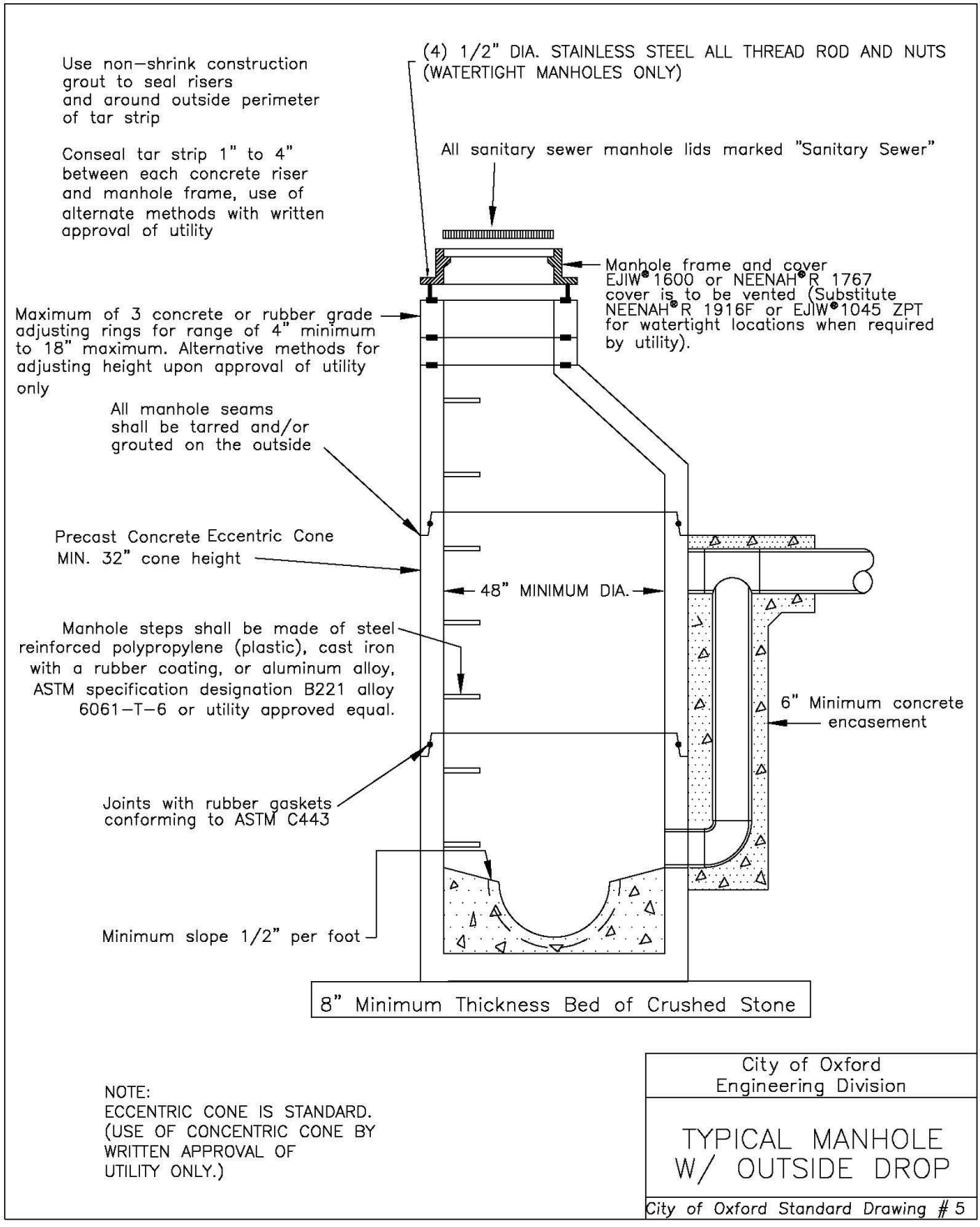
Index

Typical Precast Manhole ASTM C478	#2
Typical Manhole w/ Outside Drop	#5
Typical Manhole with Inside Drop	#5A
Pipe Bedding and Trench Detail for Water Main	#10 (revised)
Pipe Bedding and Trench Detail for Sanitary Sewer	#11 (revised)
Pipe Plug Detail	#16 (revised)
Standard Sanitary Sewer Service Connection and Cleanout Detail	#22 (revised)
Standard Water Meter Pit and Assembly	#51(revised)
Precast 1 ½" and 2" Water Meter Pit (off road use only)	#54
3" and 4" Meter Pit Installation (for off road use)	#54A
Double 3" and 4" Meter Pit Installation (for off road use)	#54B
Fire Hydrant Installation Requirements	#57
Valve Operating Nut Stem Extension	#62
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Standard Tees, Plugs and Bends	#66
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Concrete Encasement Detail	#68 (revised)
Storm Sewer Crossing Over Existing Water Main	#69
Storm Sewer Crossing Over Existing Water Main	#70
Casing Pipe Detail	#71
Service Line Termination Staking	#73 (revised)
Temporary Construction Water Meter Pit and Hot Box Assembly	#78 (revised)

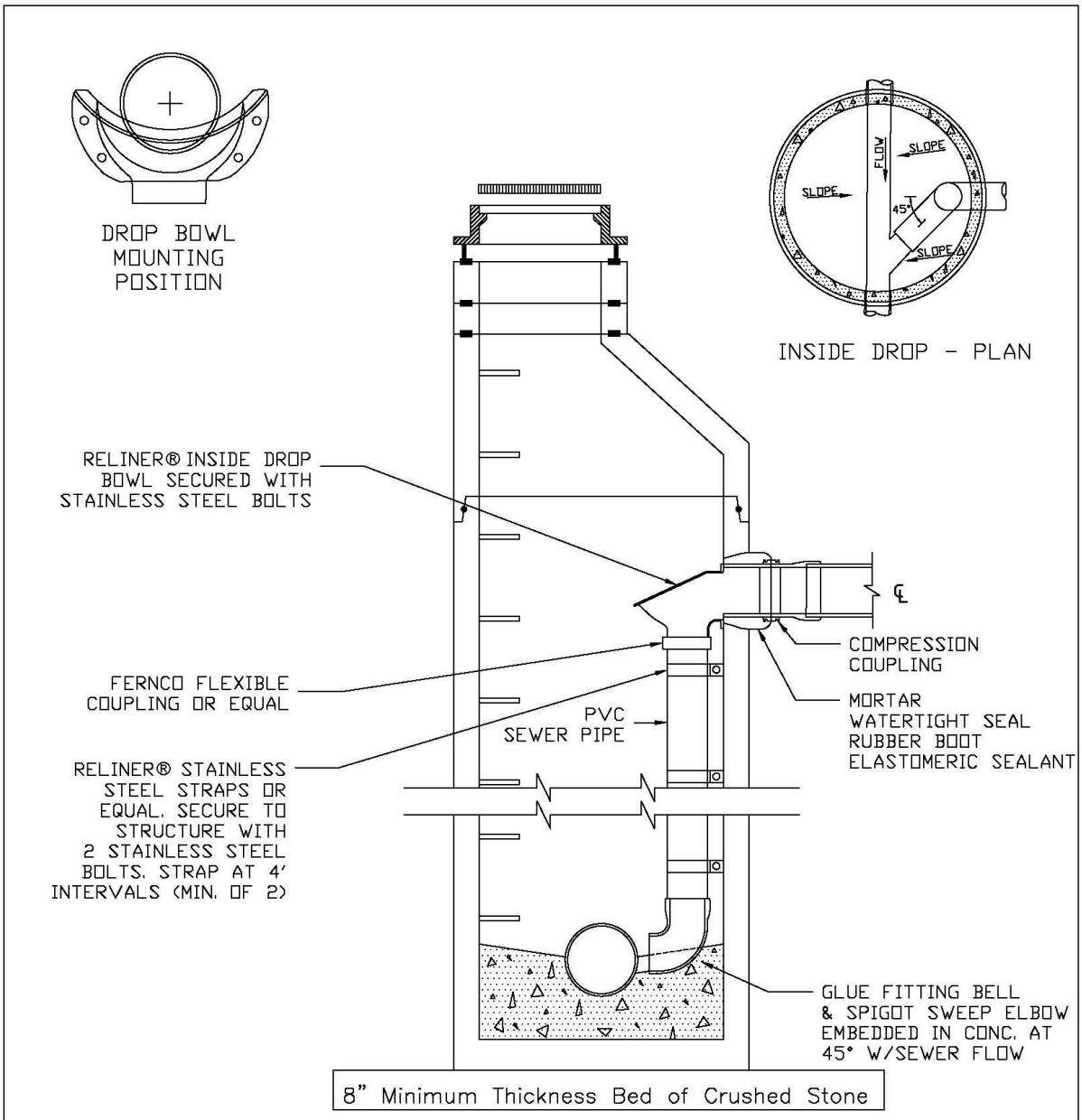
These detail drawings shall not be changed or altered in any manner except by the UTILITY. It is the responsibility of the user to acquire the most current version of the detail.



Revised 2005/2010/2016/2022



Revised 2005/2010/2016/2022



NOTES:

1. INSIDE DROP MANHOLE SHALL ONLY BE USED WHERE APPROVED BY UTILITY.
2. ALL MANHOLES SHALL BE VACUUM TESTED PRIOR TO ACCEPTANCE.
3. REVIEW CITY OF OXFORD STANDARD DRAWING #2 FOR FURTHER DETAIL ON MANHOLE ASSEMBLY.

City of Oxford
Engineering Division

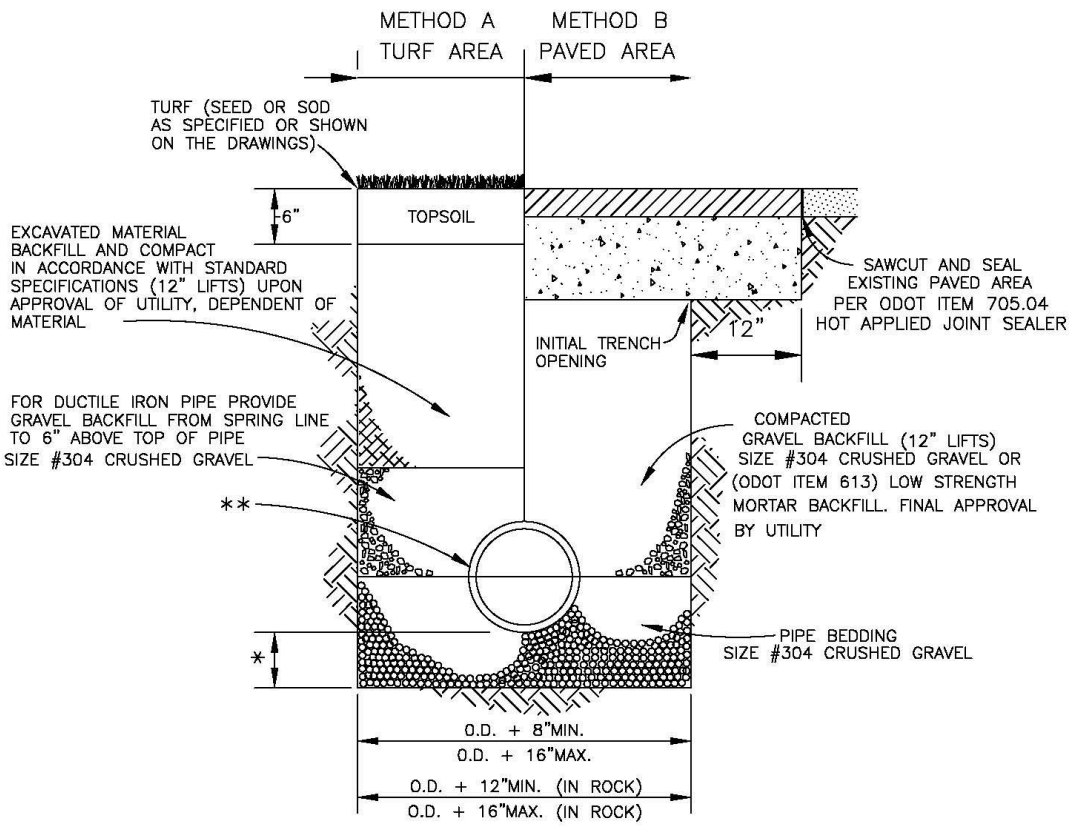
TYPICAL MANHOLE W/INSIDE DROP

REVISED 2015

City of Oxford Standard Drawing #5A

Revised 2005/2010/2016/2022

FOR PAVEMENT AND TURF RESTORATION



* 6" OR PIPE O.D. (INCHES) / 8 WHICHEVER IS LARGER

** DUCTILE IRON (CLASS 53)

City of Oxford
Engineering Division

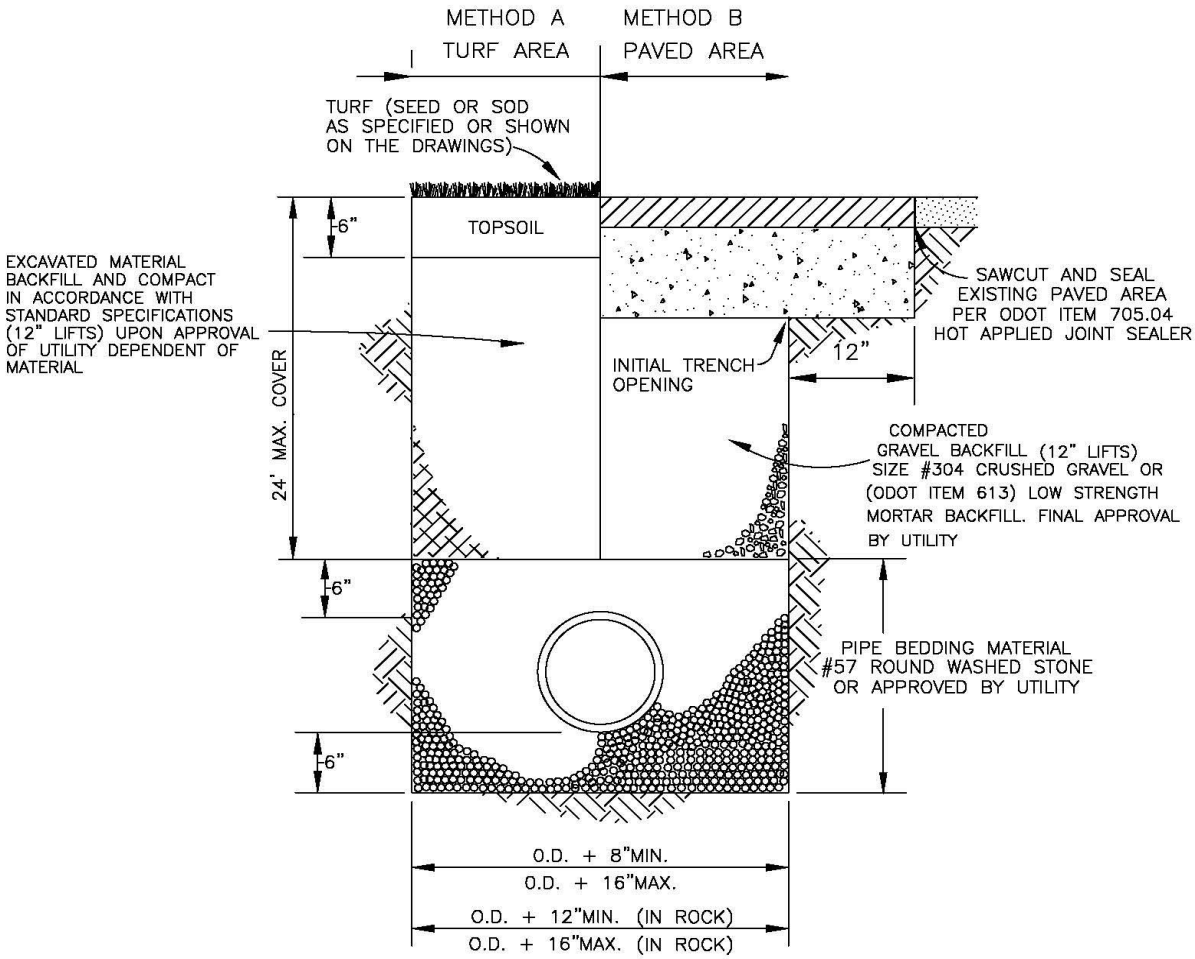
PIPE BEDDING AND TRENCH DETAIL FOR WATER MAIN

REVISED 2015

City of Oxford Standard Drawing # 10

Revised 2005/2010/2016/2022

FOR PAVEMENT AND TURF RESTORATION



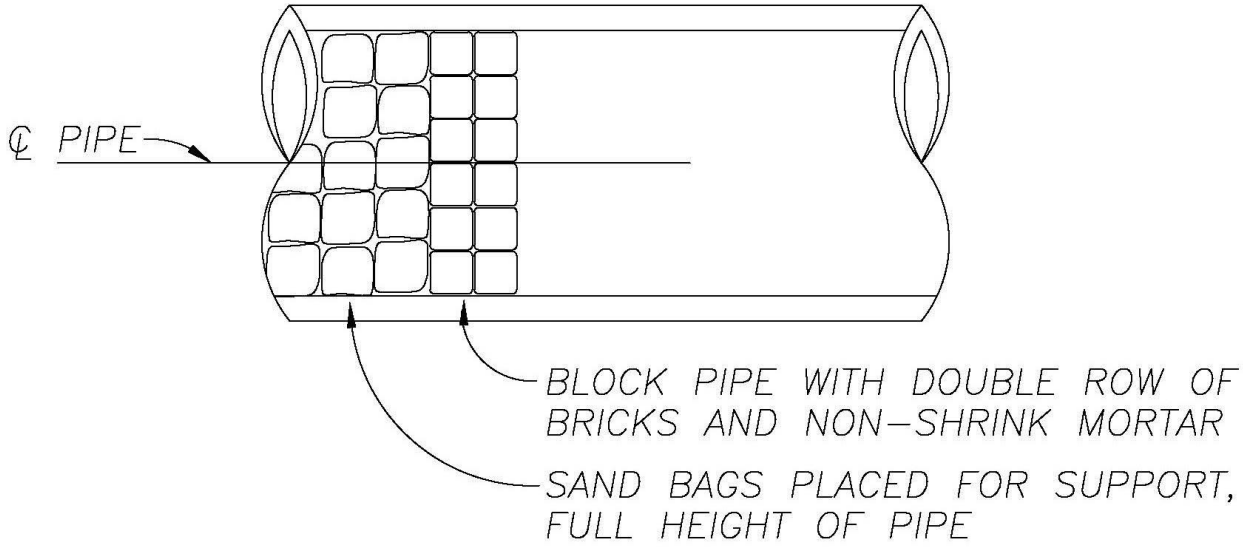
City of Oxford
Engineering Division

PIPE BEDDING AND TRENCH DETAIL FOR SANITARY SEWER

REVISED 2015

City of Oxford Standard Drawing # 11

TO ABANDON SANITARY SEWER LATERALS, THE PIPE MATERIAL SHALL DETERMINE THE METHOD THAT IS ACCEPTABLE TO PLUG THE LINE IN PLACE.



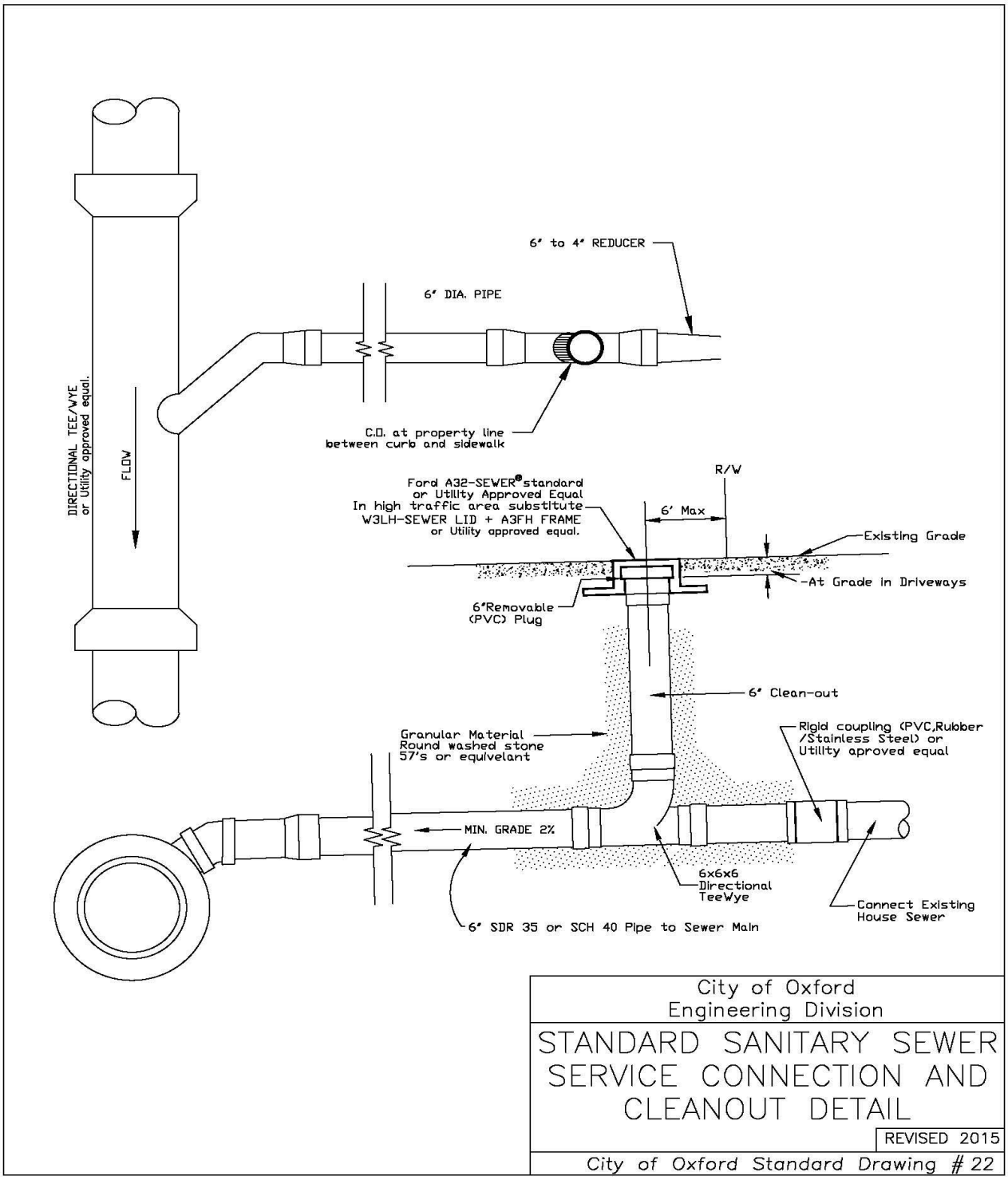
SDR 35 & SCHEDULE 40 PIPE SHALL BE PLUGGED WITH GASKETED END CAPS, GLUED SPIGOT PLUGS, OR FERNCO QWIK CAPS OR UTILITY APPROVED EQUAL.

City of Oxford
Engineering Division

PIPE PLUG
DETAIL

REVISED 2015

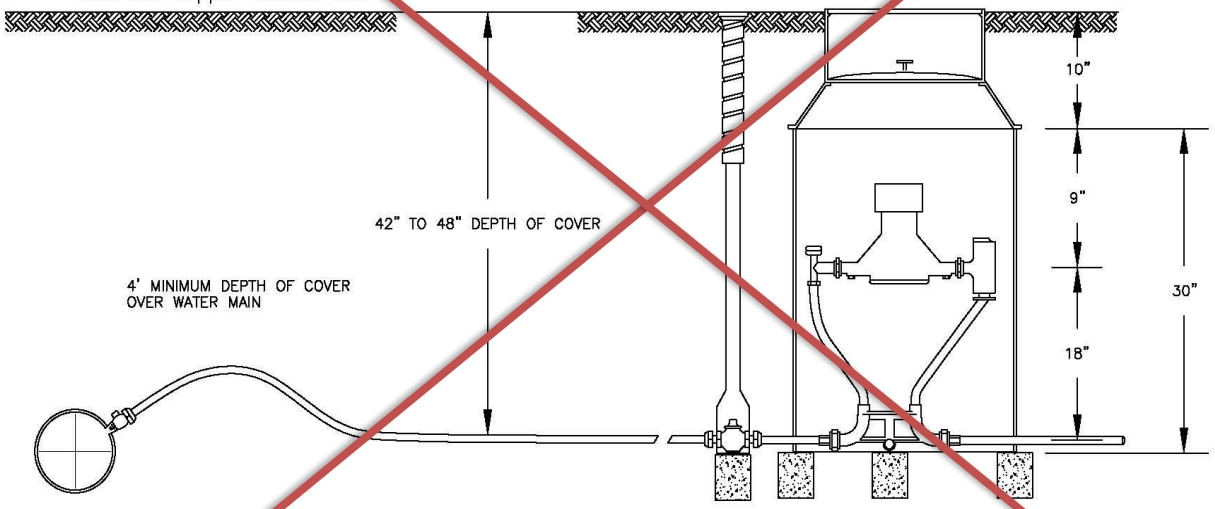
City of Oxford Standard Drawing # 16


6" to 4" REDUCER
6" DIA. PIPE
C.O. at property line
between curb and sidewalk
DIRECTIONAL TEE/WYE
or Utility approved equal.
FLOW
R/W
Ford A32-SEWER® standard
or Utility Approved Equal
In high traffic area substitute
W3LH-SEWER LID + A3FH FRAME
or Utility approved equal.
6' Max
Existing Grade
At Grade in Driveways
6"Removable
(PVC) Plug
6" Clean-out
Granular Material
Round washed stone
57's or equivelant
Rigid coupling (PVC,Rubber
/Stainless Steel) or
Utility aproved equal
MIN. GRADE 2%
6x6x6
Directional
TeeWye
Connect Existing
House Sewer
6" SDR 35 or SCH 40 Pipe to Sewer Main
City of Oxford
Engineering Division
STANDARD SANITARY SEWER
SERVICE CONNECTION AND
CLEANOUT DETAIL
REVISED 2015
City of Oxford Standard Drawing # 22

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City of Oxford (Water Meter Pit and Assembly)

1. Water Meter shall be "furnished" and "purchased from" the City of Oxford.
2. Corporation Stop (Flare F–600–4 Compression FB–1000–4) shall be installed at a 22–1/2 degree angle (2:00 and 10:00) 1" standard or utility approved equal.
3. Service Line shall be K–Copper Tubing only. 1" standard from water main to copper setter
4. Curb Stop shall be (Ford® B–44–444 Compression, or Ford® B–22–444 Flare) 1" standard or Utility approved equal.
5. Curb Box shall be Tyler® 2–piece or Utility approved equal.
6. Meter Pit shall be rigid PVC 20" width x 30" depth (Sono–loc)® or Utility approved equal.
7. Meter pit lid assembly shall be a Ford® Wabash Double Lid Cover (W3–T) w/plastic (W3BPD) frost lid and single hole for touch pad for 11–1/2" lid size and 20" meter pit or Utility approved equal. Where required by the Utility an extra heavy lid assembly (**W3–HT) shall be installed.
8. Meter Setting Parts (Copper Setters) shall be Ford VBHC72–18W44–44 with incorporated #7 Dual Check Valve, the Brace Pipe Eye on the copper setter is to be utilized for stabilization with the appropriate size (1/2") PVC pipe or Utility approved equal.
9. Backfill material shall be sand, #9's, pea gravel or approved equal by the Utility With a minimum cover of 12" over the copper service line.



DRAWING NOT TO SCALE

City of Oxford
Engineering Division

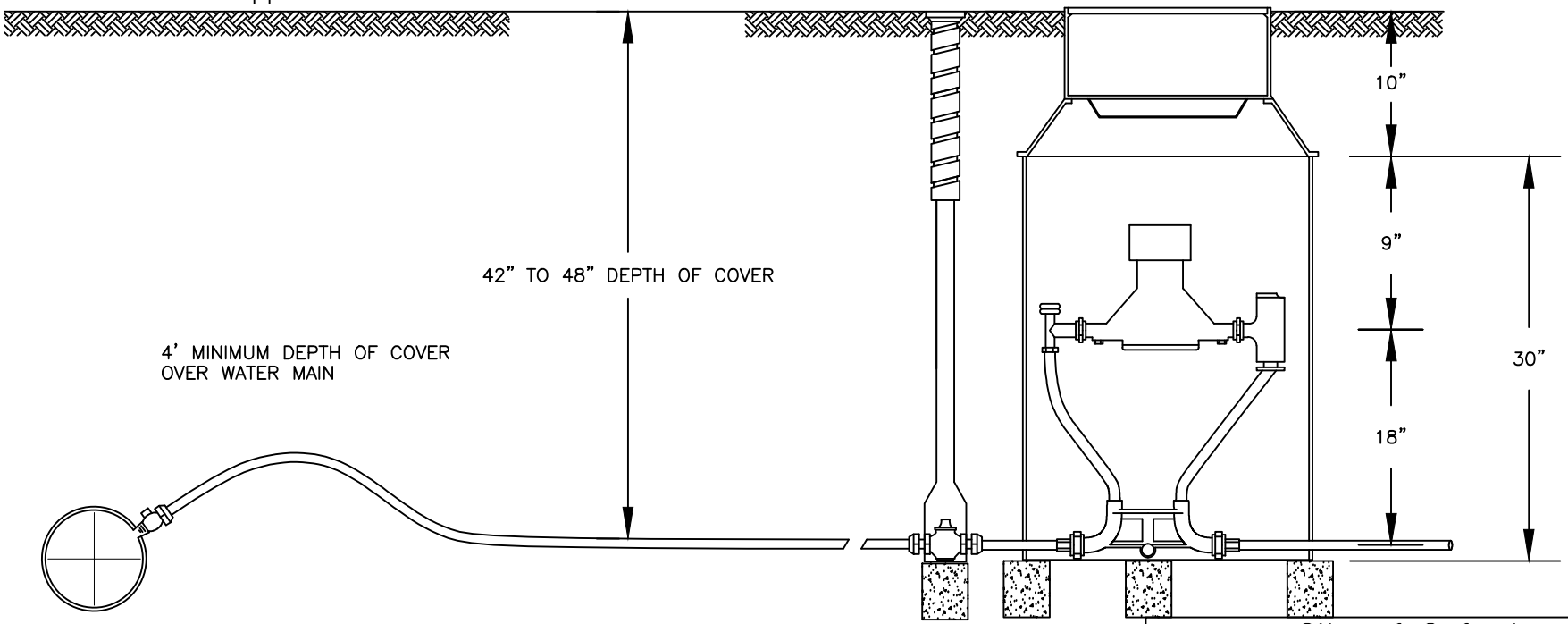
Standard Water Meter Pit and Assembly

REVISED 2015

City of Oxford Standard Drawing #51

City of Oxford (Water Meter Pit and Assembly)

1. Water Meter shall be "furnished" and "purchased from" the City of Oxford.
2. Corporation Stop (Flare F–600–4 Compression FB–1000–4) shall be installed at a 22–1/2 degree angle (2:00 and 10:00) 1" standard or utility approved equal.
3. Service Line shall be K–Copper Tubing only. 1" standard from water main to copper setter
4. Curb Stop shall be (Ford® B–44–444 Compression, or Ford® B–22–444 Flare) 1" standard or Utility approved equal.
5. Curb Box shall be Tyler® 2–piece or Utility approved equal.
6. Meter Pit shall be rigid PVC 20" width x 30" depth (SIGMA HDPE Products) RMP 2030 W/B or Utility approved equal.
7. Meter pit lid assembly shall be a Ford® Wabash Double Lid Cover (W3–T–Recessed) w/plastic (W3BPD) frost lid and single hole for touch pad for 11–1/2" lid size and 20" meter pit or Utility approved equal. Where required by the Utility an extra heavy lid assembly (**W3H–T) shall be installed.
8. Meter Setting Parts (Copper Setters) shall be Ford VBHC72–18W–44–44–NL with incorporated #7 Dual Check Valve, the Brace Pipe Eye on the copper setter is to be utilized for stabilization with the appropriate size (1/2") PVC pipe or Utility approved equal.
9. Backfill material shall be sand, #9's, pea gravel or approved equal by the Utility. With a minimum cover of 12" over the copper service line.



NOTE: REPLACEMENT IRON LID FOR IRON FRAME # WA3L–C–REC463–T

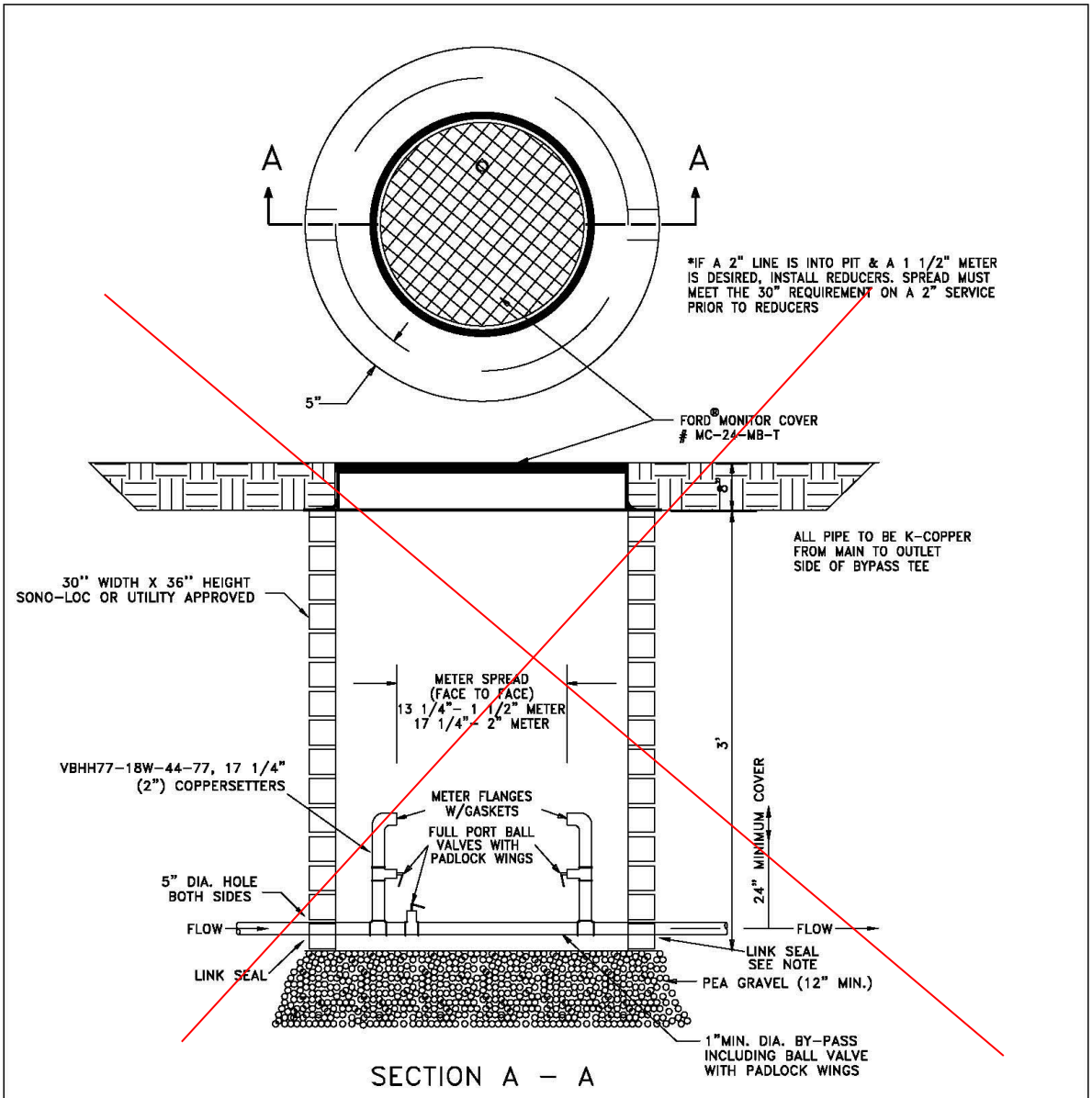
DRAWING NOT TO SCALE

City of Oxford
Engineering Division

Standard Water Meter Pit and Assembly

REVISED 2021

City of Oxford Standard Drawing #51



SECTION A – A

NOTE: ALTERNATE PIT DESIGN MAY BE SUBMITTED FOR REVIEW

FORD® VVB66-18B x 13 1/4" (1 1/2")

BACKFLOW PREVENTION DEVICE SPECIFIED BY CITY OF OXFORD WILL BE REQUIRED AT SERVICE ENTRANCE

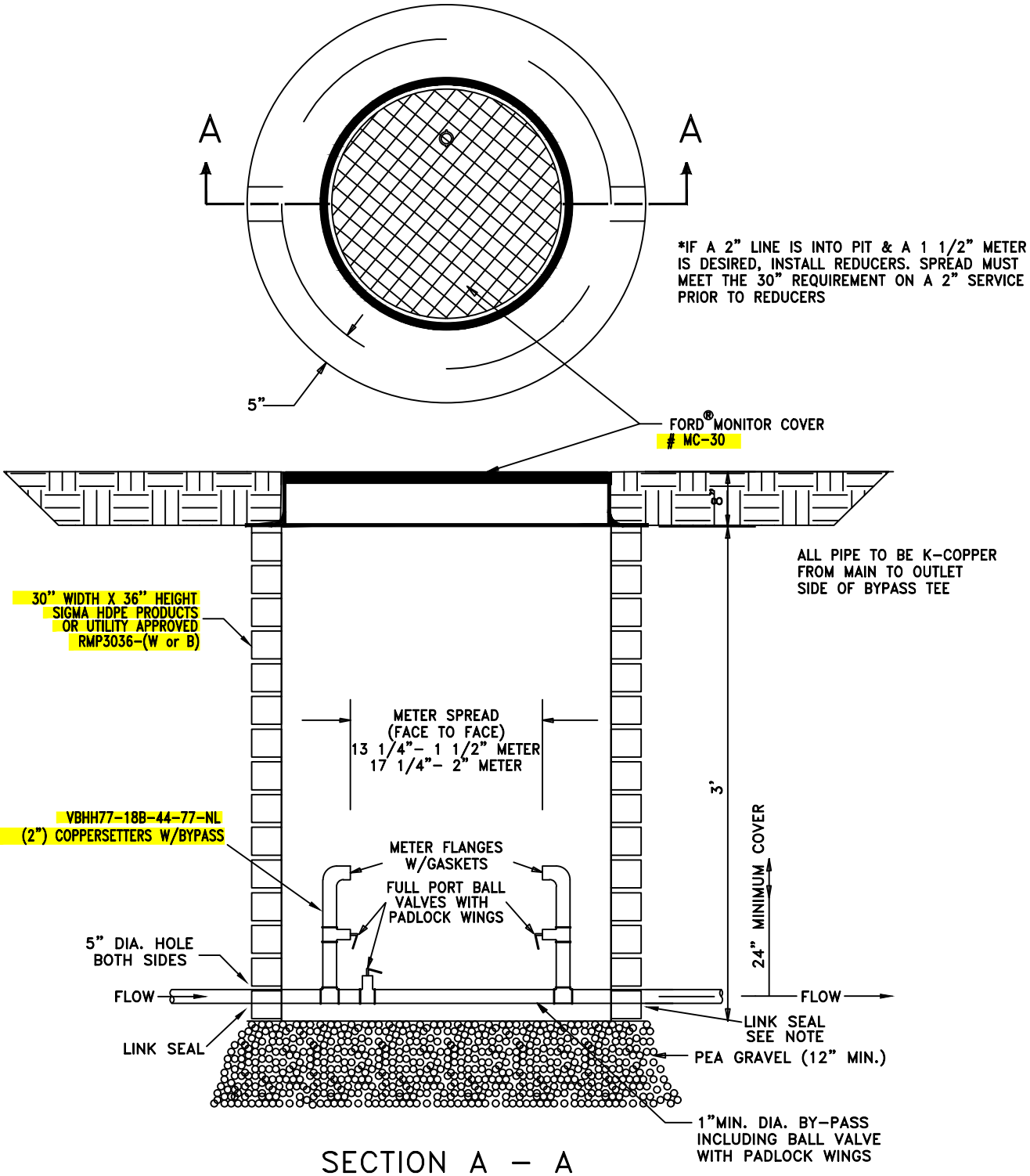
City of Oxford
Engineering Division

PRECAST 1–1/2" & 2" WATER METER PIT (1–1/2" & 2" SERVICE LINE)

(For off road use only)

City of Oxford Standard Drawing # 54

Revised 2005/2010/2016/2022



SECTION A – A

NOTE: ALTERNATE PIT DESIGN MAY BE SUBMITTED FOR REVIEW

BACKFLOW PREVENTION DEVICE SPECIFIED BY CITY OF OXFORD WILL BE REQUIRED AT SERVICE ENTRANCE

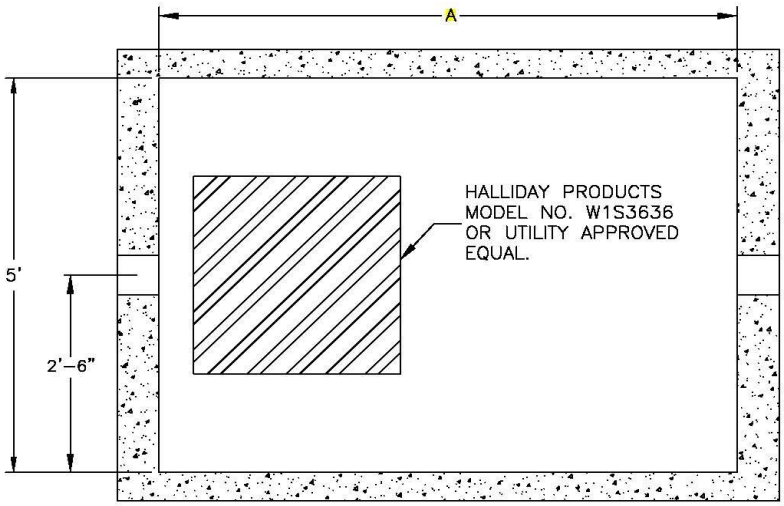
City of Oxford
Engineering Division

PRECAST 1-1/2" & 2" WATER METER PIT (1-1/2" & 2" SERVICE LINE)

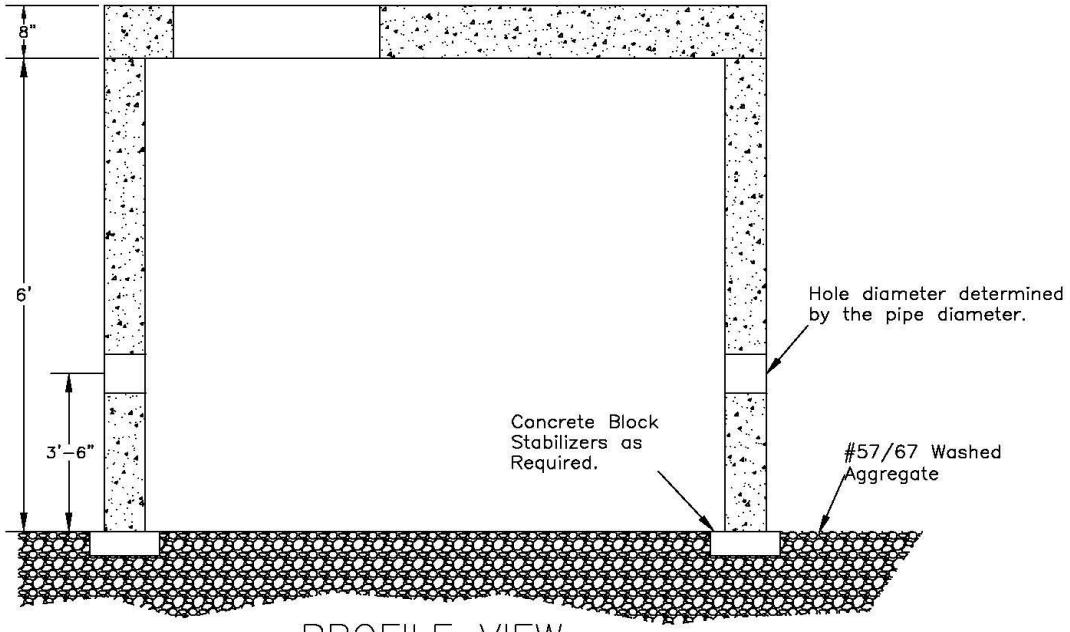
(For off road use only)

REVISED 2021

City of Oxford Standard Drawing #54



PLAN VIEW



PROFILE VIEW

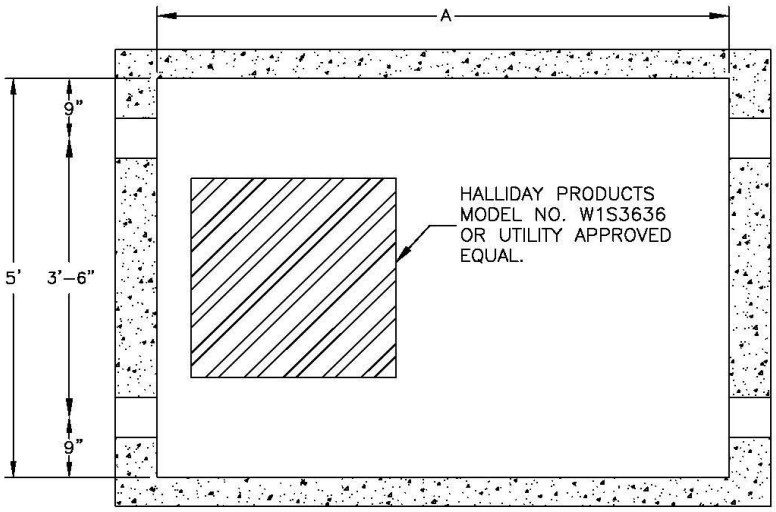
Notes:
1. Dimension "A" is 84" for 3" meter, 96" for 4" meter

City of Oxford
Engineering Division

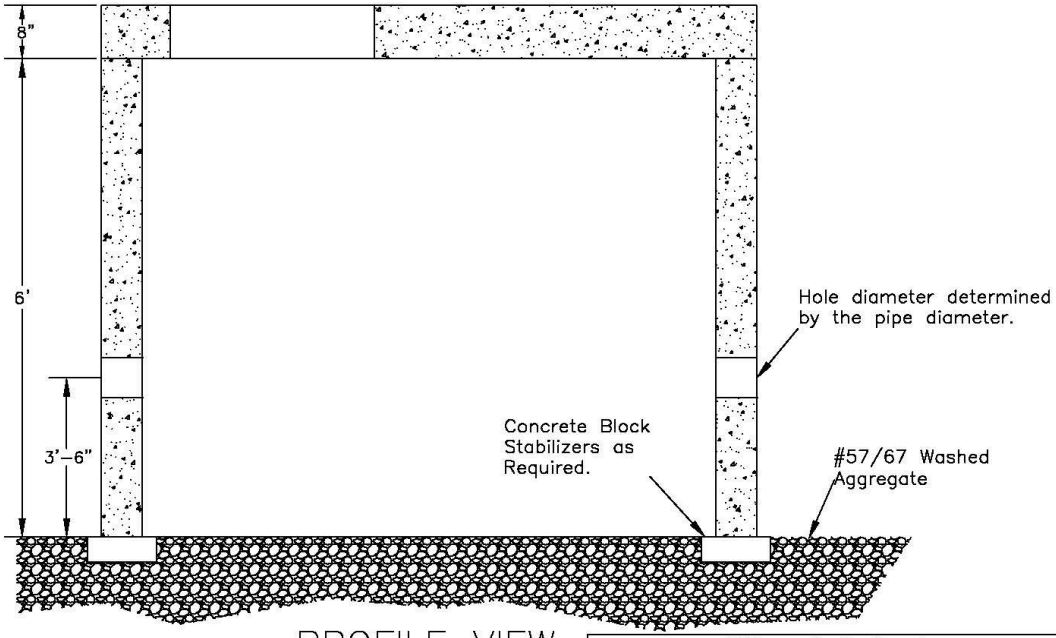
3" AND 4" METER VAULT
INSTALLATION
(For off road use only)

City of Oxford Standard Detail #54A

Revised 2005/2010/2016/2022



PLAN VIEW



PROFILE VIEW

Notes:
1. Dimension "A" is 84" for 3" meter, 96" for 4" meter

City of Oxford
Engineering Division

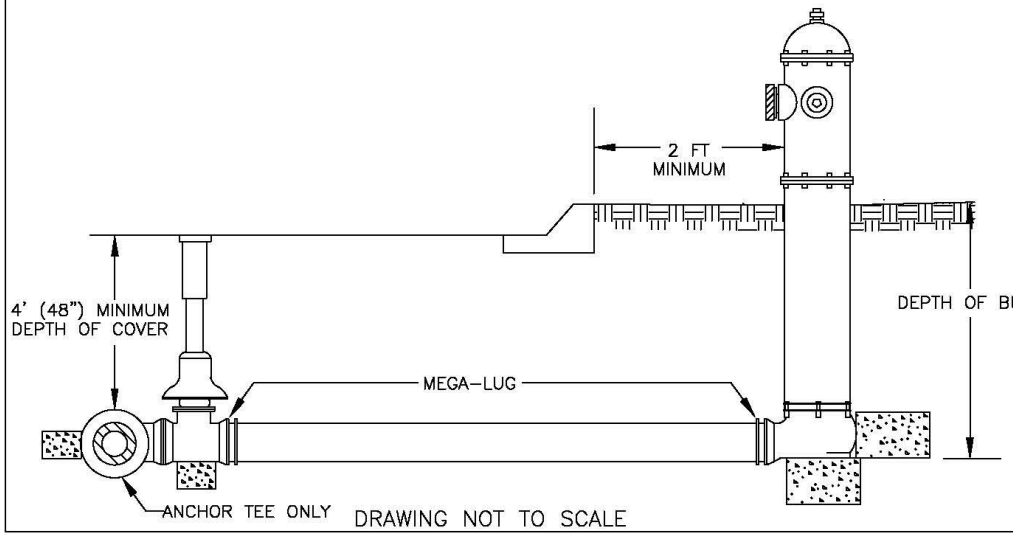
DOUBLE
3" & 4" METER VAULT
INSTALLATION
(For off road use only)

REVISED 2015

City of Oxford Standard Detail # 54B

FIRE HYDRANT INSTALLATION REQUIREMENTS

1. American Darling® B–62–B Hydrant (Utility Specifications).
2. Branch Line 6" Ductile Iron (Class 53).
3. Watch Valve Resilient Wedge Gate Valve (Utility Approved).
   Tap–in Valves Resilient Wedge Gate Valve (Utility Approved).
4. Tapping Sleeve, Mechanical Joint or Stainless Steel.
5. Restraining devices Duc–Lugs®, Threaded Rod, and/or Mega–Lugs® (AWWA Approved).
6. Blocking– concrete Blocks or Approved Equal by the Utility; there shall be no poured concrete to come in contact with the Hydrant.
7. The Depth of Bury Line shall be strictly observed.
8. The distance between the Hydrant face and the front of the curb shall be no less than two feet. Any other distance allowance due to existing conditions shall be determined in writing by the Utility.
9. The minimum Depth of Cover over all water mains as well as Fire Hydrant branches shall be no less than four feet (48"), any depth of cover over five feet (60") shall have the written approval of the Utility.
10. The drainage area around the weep holes on the Fire Hydrant shoe shall have no less than 1/2 cubic yard of washed round stone in place around the shoe area. The washed stone shall be no less in size of that of pea gravel. To keep the drainage pit from becoming non–porous, the stone should be covered with 8–10 mil polyethylene or tar paper before backfilling.
11. Any alterations to these guidelines must be submitted in writing for review to the Utility who shall have the final determination.
12. The pumper or steamer cap shall be fitted with a Storz® fitting.
13. The fire hydrant watch valve box shall consist of a three piece screw type assembly with the drop cover marked "WATER". The valve box shall be East Jordan Iron Works® series 6860 or approved equal by the Utility.

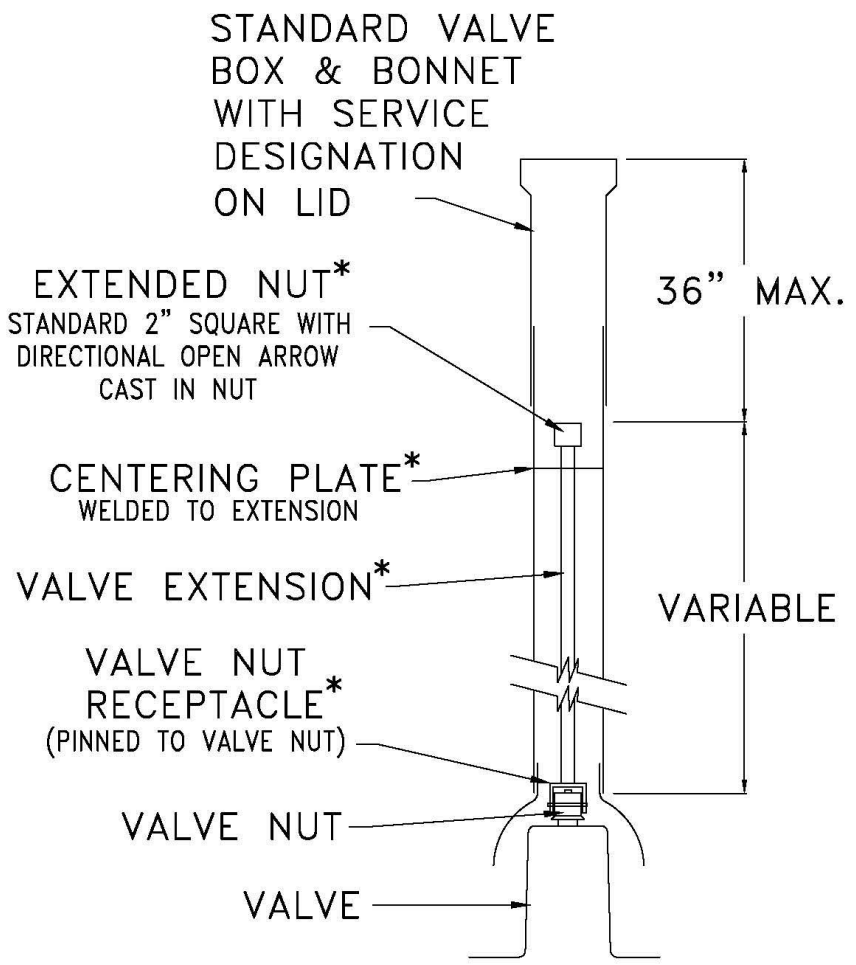


City of Oxford
Engineering Division

FIRE HYDRANT
INSTALLATION
REQUIREMENTS

City of Oxford Standard Drawing #57

Revised 2005/2010/2016/2022



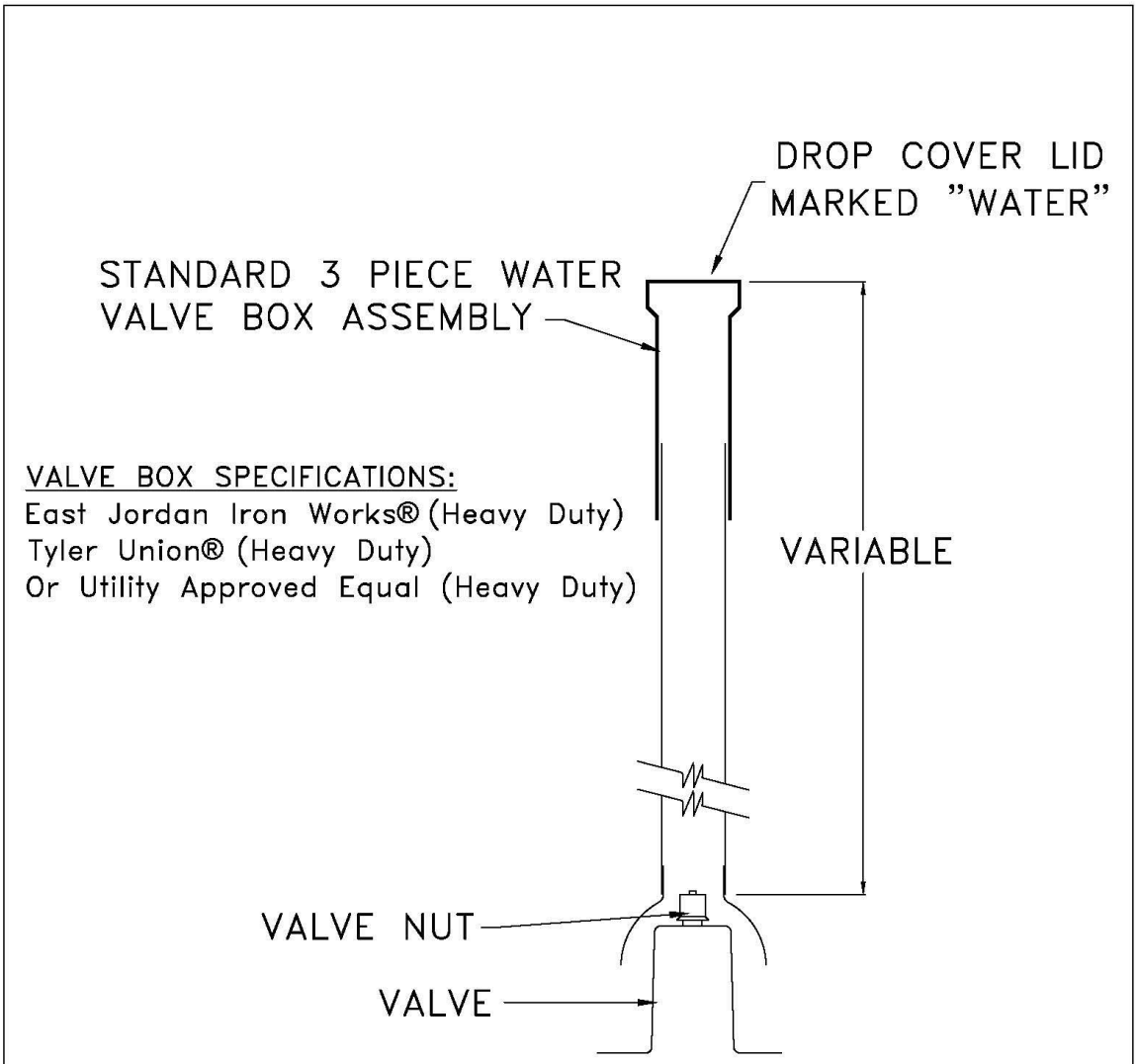
*CORROSION RESISTANT STEEL COMPATIBLE WITH VALVE AND BOX COMPONENTS

City of Oxford
Engineering Division

VALVE OPERATING NUT STEM EXTENSION

City of Oxford Standard Drawing # 62

Revised 2005/2010/2016/2022



STANDARD VALVE BOX SHALL BE HEAVY DUTY TRAFFIC MODELS AND SHALL BE 5.25 INCH STANDARD CAST IRON, THREE PIECE, SCREW TYPE VALVE BOX WITH DROP COVER MARKED "WATER"

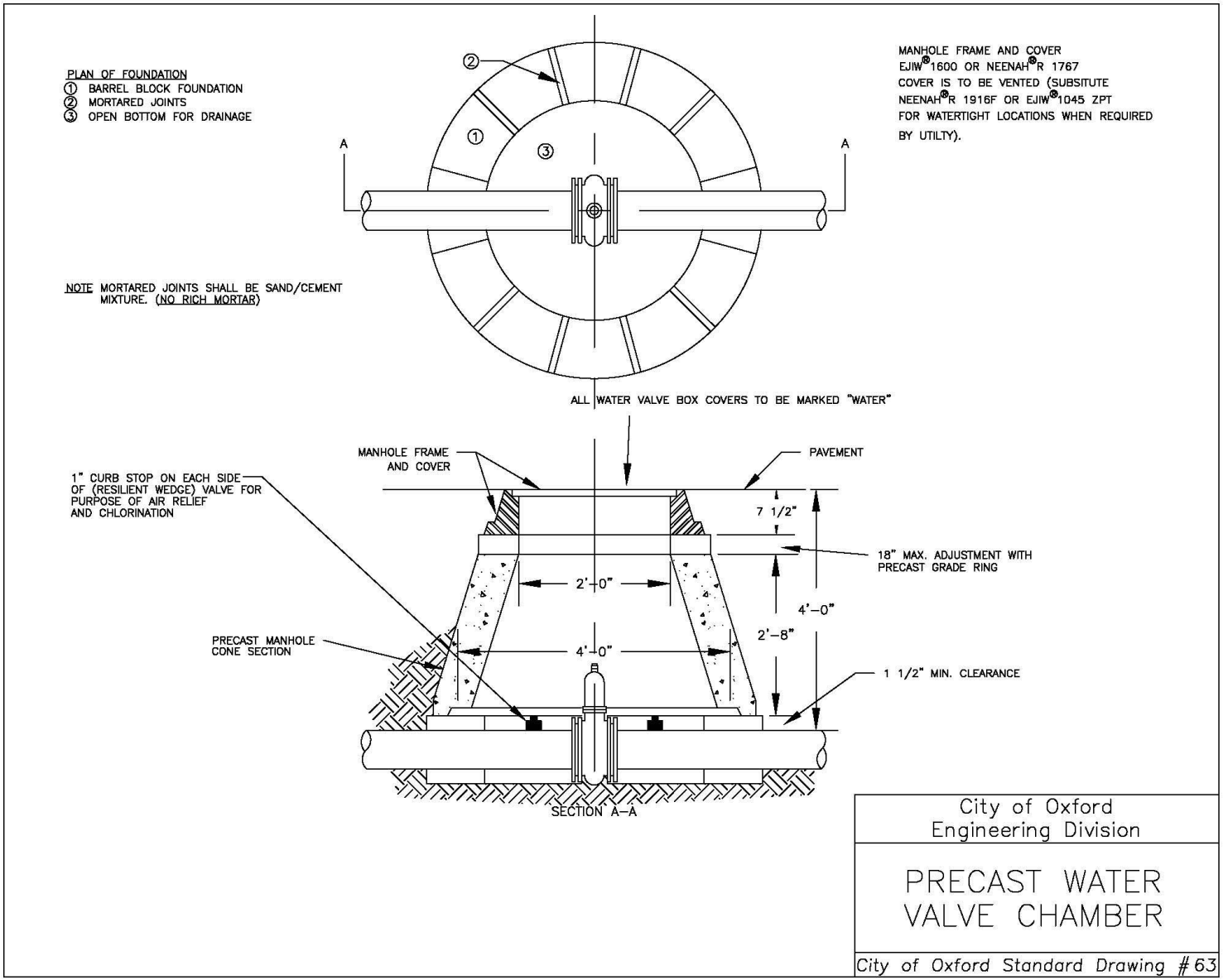
City of Oxford
Engineering Division

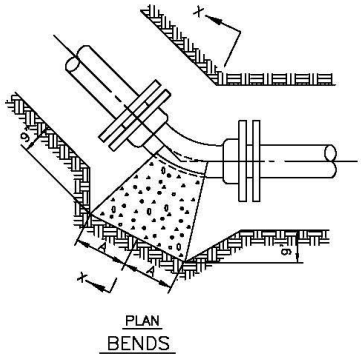
STANDARD
VALVE BOX

REVISED 2015

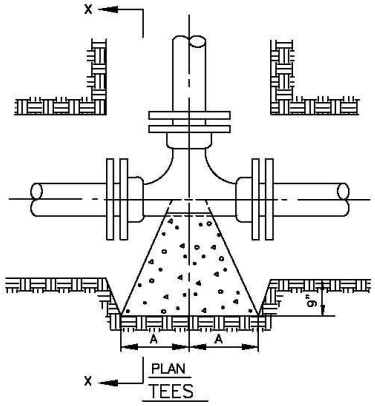
City of Oxford Standard Drawing # 62A

Revised 2005/2010/2016/2022

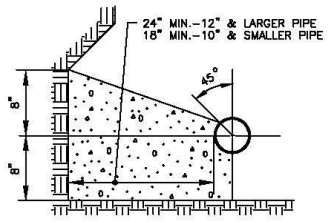

PLAN OF FOUNDATION
① BARREL BLOCK FOUNDATION
② MORTARED JOINTS
③ OPEN BOTTOM FOR DRAINAGE
NOTE MORTARED JOINTS SHALL BE SAND/CEMENT MIXTURE. (NO RICH MORTAR)
MANHOLE FRAME AND COVER EJIW®1600 OR NEENAH®R 1767 COVER IS TO BE VENTED (SUBSITUTE NEENAH®R 1916F OR EJIW®1045 ZPT FOR WATERTIGHT LOCATIONS WHEN REQUIRED BY UTILTY).
A
A
ALL WATER VALVE BOX COVERS TO BE MARKED "WATER"
MANHOLE FRAME AND COVER
PAVEMENT
1" CURB STOP ON EACH SIDE OF (RESILIENT WEDGE) VALVE FOR PURPOSE OF AIR RELIEF AND CHLORINATION
7 1/2"
18" MAX. ADJUSTMENT WITH PRECAST GRADE RING
2'-0"
4'-0"
2'-8"
PRECAST MANHOLE CONE SECTION
4'-0"
1 1/2" MIN. CLEARANCE
SECTION A-A
City of Oxford
Engineering Division
PRECAST WATER VALVE CHAMBER
City of Oxford Standard Drawing #63



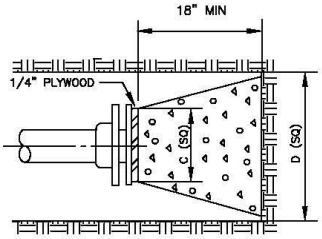
PLAN
BENDS



PLAN
TEES



SECTION "X–X"
BENDS & TEES



PLAN & ELEVATION
PLUGS

TYPE	SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
		A	B	A	B	A	B	A	B	C	D
2000 PSF SOIL	6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
	8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
	10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
	12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
	14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
	16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"
	20"	46"	36"	25"	36"	15"	30"	30"	39"	24"	68"

NOTE:

BASED ON 100 P.S.I. STATIC PRESSURE PLUS A.W.W.A. WATER HAMMER

ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
ALL PIPE SURFACES COMING IN CONTACT WITH CONCRETE SHALL BE WRAPPED WITH 8–10 MIL POLY.

City of Oxford
Engineering Division

STANDARD TEES, PLUGS & BENDS

City of Oxford Standard Drawing # 66

Revised 2005/2010/2016/2022

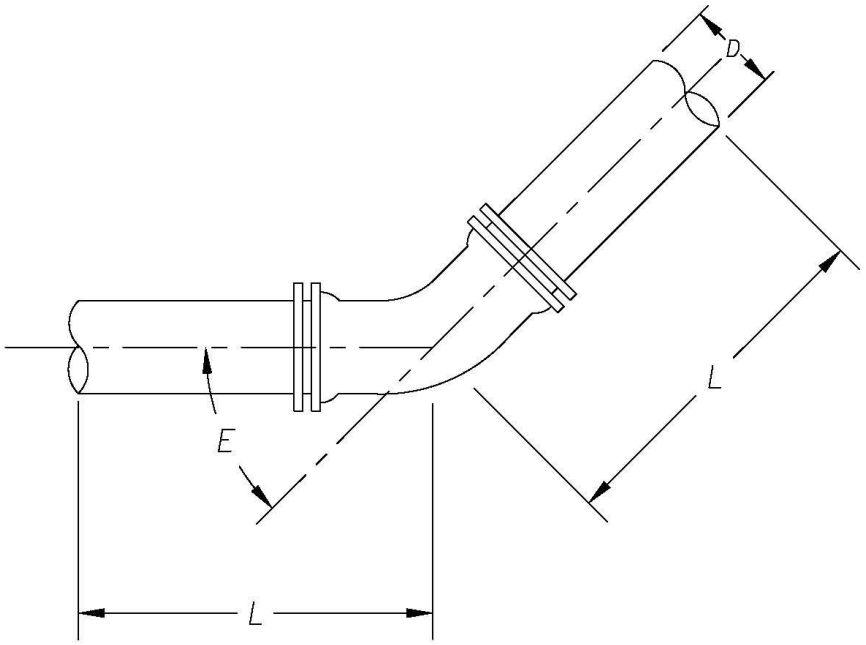


TABLE FOR *L* (FEET)
REQUIRED LENGTH OF RESTRAINED JOINTS
D – DIAMETER OF PIPE
E – DEGREE OF DEFLECTION

		D							
		4"	6"	8"	10"	12"	16"	20"	24"
E	11 1/4°	*	*	*	*	*	5	5	6
	22 1/2°	*	2	3	5	6	8	10	12
	45°	4	8	12	14	20	30	36	45

L

* REQUIRED RESTRAINED JOINT AT FITTING ONLY

City of Oxford
Engineering Division

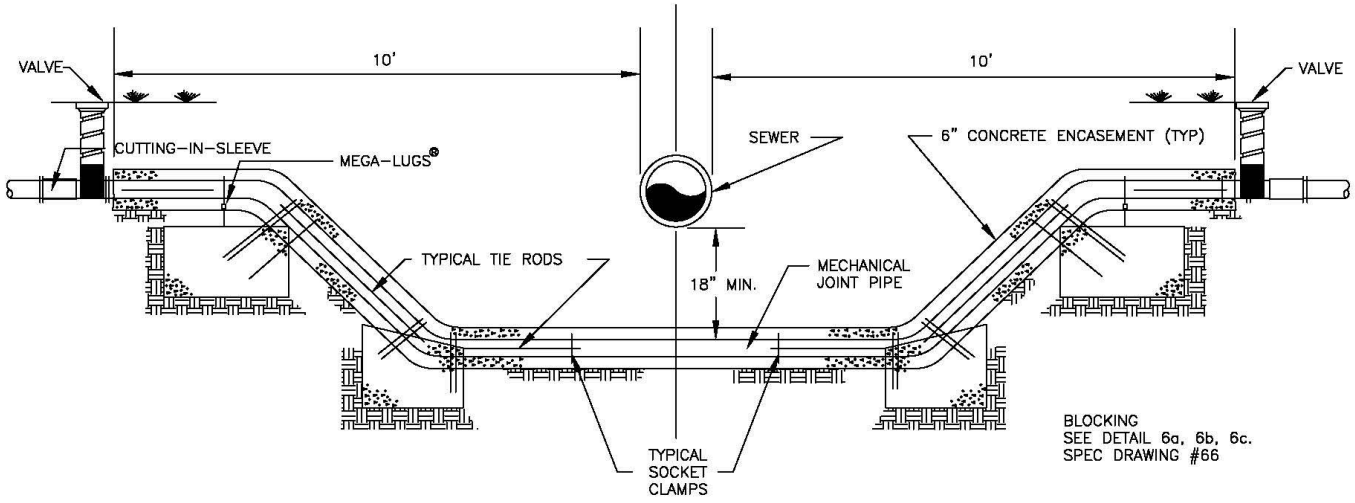
REQUIRED RESTRAINED JOINTS FOR BENDS

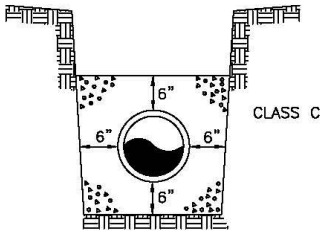
REVISED 2015

City of Oxford Standard Drawing #67

Revised 2005/2010/2016/2022

WATERLINE RELOCATION
&
CONCRETE ENCASEMENT DETAIL





Water valves shall be installed per Drawing #63 unless otherwise determined by the Utility.

NOTE:

BLOCKING AND ALL ASSOCIATED ANCHORING AND FITTINGS INCLUDING BEDDING AND BACK-FILL SHALL BE INCLUDED IN THE WATERLINE RELOCATION ITEM.

CONCRETE ENCASEMENT DETAILS SHALL APPLY WHERE EVER WATERLINE CROSSES UNDER ALL EXISTING OR PROPOSED SEWER OR WITHIN 18" ABOVE A SEWER.

MEGA-LUGS® AT EVERY MECHANICAL JOINT

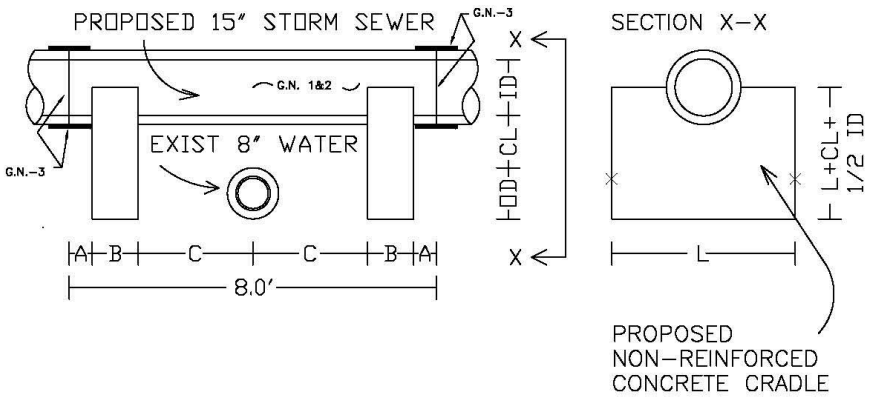
City of Oxford
Engineering Division

CONCRETE
ENCASEMENT DETAIL

REVISED 2015

City of Oxford Standard Drawing # 68

PROPOSED STORM SEWER CROSSING OVER EXISTING WATER MAIN



GENERAL NOTES (G.N.)

1) 8 FOOT LENGTH OF C-76 CONCRETE SEWER PIPE CENTERED OVER THE EXISTING WATER MAIN

2) THE C-76 CONCRETE SEWER PIPE USED TO SPAN BETWEEN THE PROPOSED CRADLES SHOULD BE CLASS V OR AS HIGH OF CLASS OF PIPE MANUFACTURED IN THE REQUIRED SIZE

3) THE JOINTS SHALL BE SEALED WITH BITUMINOUS PIPE JOINT FILLER AND THEN WRAPPED WITH 11 INCH WIDE CADILLAC EXTERNAL PIPE JOINT MATERIAL OR EQUAL MEETING ASTM C-877.

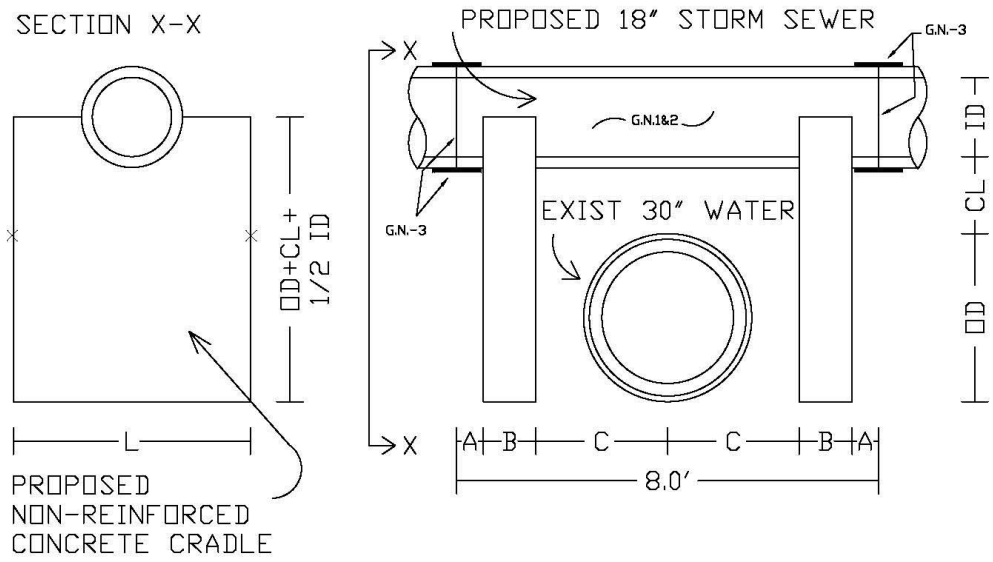
319+64 LT	PROPOSED 15" STORM SEWER CROSSING EXISTING 8" WATER MAIN
A	.5'
B	1'
C	2.5'
OD	13.37" (BELL)
ID	15"
CL	1.13'
L	4'

City of Oxford
Engineering Division

STORM SEWER CROSSING OVER EXISTING WATER MAIN

City of Oxford Standard Drawing # 69

Revised 2005/2010/2016/2022



GENERAL NOTES (GN)

1) 8 FOOT LENGTH OF C-76 CONCRETE SEWER PIPE CENTERED OVER THE EXISTING WATER MAIN

2) THE C-76 CONCRETE SEWER PIPE USED TO SPAN BETWEEN THE PROPOSED CRADLES SHOULD BE CLASS V OR AS HIGH OF CLASS OF PIPE MANUFACTURED IN THE REQUIRED SIZE.

3) THE JOINTS SHOULD BE SCALED WITH BITUMINOUS PIPE JOINT FILLER AND THEN WRAPPED WITH 11 INCH WIDE CADILLAC EXTERNAL PIPE JOINT MATERIAL OR EQUAL MEETING ASTM C-877.

319+45 RT	PROPOSED 18" STORM SEWER CROSSING EXISTING 30" WATER MAIN
A	.5'
B	1'
C	2.5'
OD	38 1/4 " (BELL)
ID	18"
CL	1.35'
L	4.5'

City of Oxford
Engineering Division

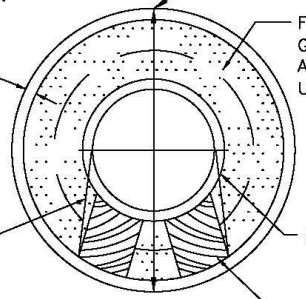
STORM SEWER CROSSING OVER EXISTING WATER MAIN

City of Oxford Standard Drawing # 70

Revised 2005/2010/2016/2022

THE I.D. OF THE STEEL CASING PIPE SHALL BE AT LEAST 6 INCHES LARGER THAN THE LARGEST OUTSIDE DIAMETER OF ANY JOINT APPENDAGE (INCLUDING RESTRAINED MECHANICAL JOINTS FOR DUCTILE IRON PIPE.

UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE DRAWINGS, WALL THICKNESS SHALL COMPLY WITH THE CHART SHOWN ON THIS PAGE.



REQUIRED CASING PIPE SIZES AND WALL THICKNESSES FOR RAILROAD & HIGHWAY CROSSINGS *

NOMINAL SIZE	ACTUAL O.D.	RAILROAD CROSSINGS BARE	HIGHWAY CROSSINGS BARE *
8"	8 5/8"	.250	.250
10"	10 3/4"	.250	.250
12"	12 3/4"	.250	.250
14"	14"	.281	.250
16"	16"	.281	.250
18"	18"	.321	.250
20"	20"	.344	.312
24"	24"	.406	.312
30"	30"	.469	.375
36"	36"	.532	.500
42"	42"	.563	.500
48"	48"	.625	.625
54"	54"	.688	.625
60"	60"	.750	.625
66"	66"	.813	.625
72"	72"	.875	.750

NOTE:
* BASED ON HS20 HIGHWAY LOADINGS WITH A MINIMUM COVER AT 4'6".

STEEL CASING PIPE SHALL HAVE A STEEL YIELD STRENGTH OF 35,000 PSI, MEET ATSM A139 GRADE B REQUIREMENTS

NO HYDROTEST IS REQUIRED

CHART BASED ON RECOMMENDATIONS FROM NATIONAL UTILITY CONTRACTORS ASSOCIATION

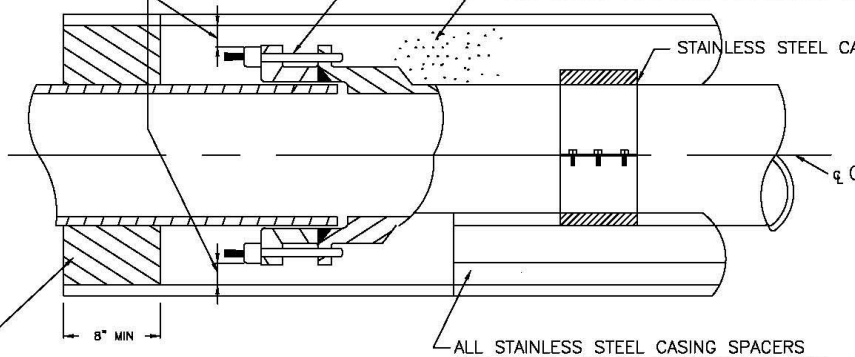
TO BE AN EQUAL DISTANCE OR AT LEAST 3" OFF THE BOTTOM OF CASING PIPE.

RESTRAINED MECHANICAL JOINT PIPE (SHOWN AS EXAMPLE ONLY)

FILL CASING PIPE WITH PEA GRAVEL OR APPROVED EQUAL WHEN REQUIRED BY THE UTILITY

STAINLESS STEEL CASING SPACERS (CASCADE WATERWORKS MFG.) OR APPROVED EQUAL BY UTILITY.

REQUIRES VALVES ON EACH SIDE OF CROSSING



CONCRETE MASONRY BULKHEAD AT EACH END PROVIDE GROUT HOLES AS REQUIRED

ALL STAINLESS STEEL CASING SPACERS ARE TO BE USED TO SUPPORT THE PIPE WITHIN THE CASING PIPE

MAXIMUM SPACING OF BLOCKING IS 8'–0" CENTER TO CENTER ALONG PIPE.

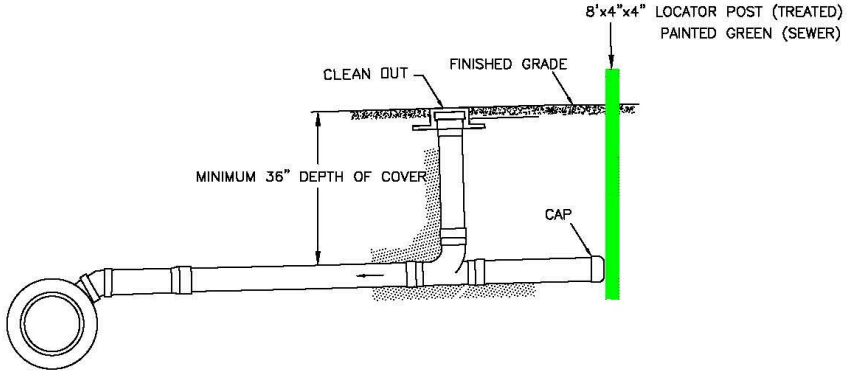
City of Oxford
Engineering Division

CASING PIPE DETAIL

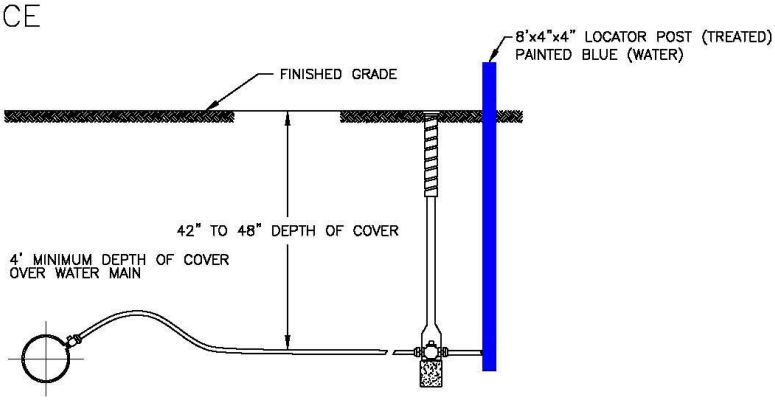
City of Oxford Standard Drawing # 71

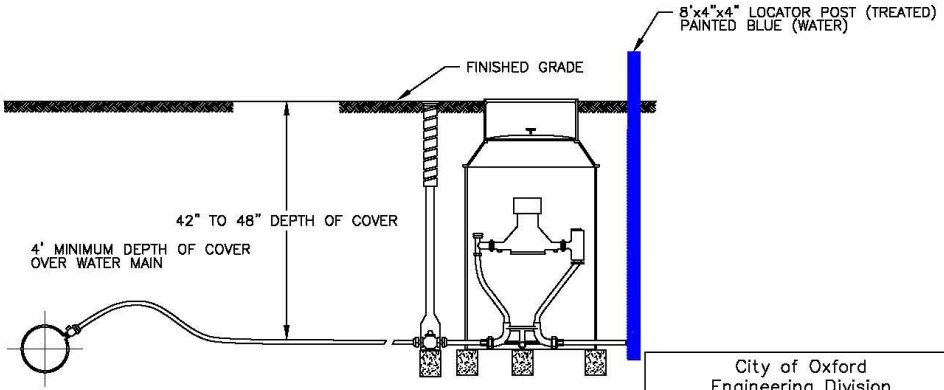
Revised 2005/2010/2016/2022

SANITARY SEWER SERVICE



WATER SERVICE





DRAWING NOT TO SCALE

City of Oxford
Engineering Division

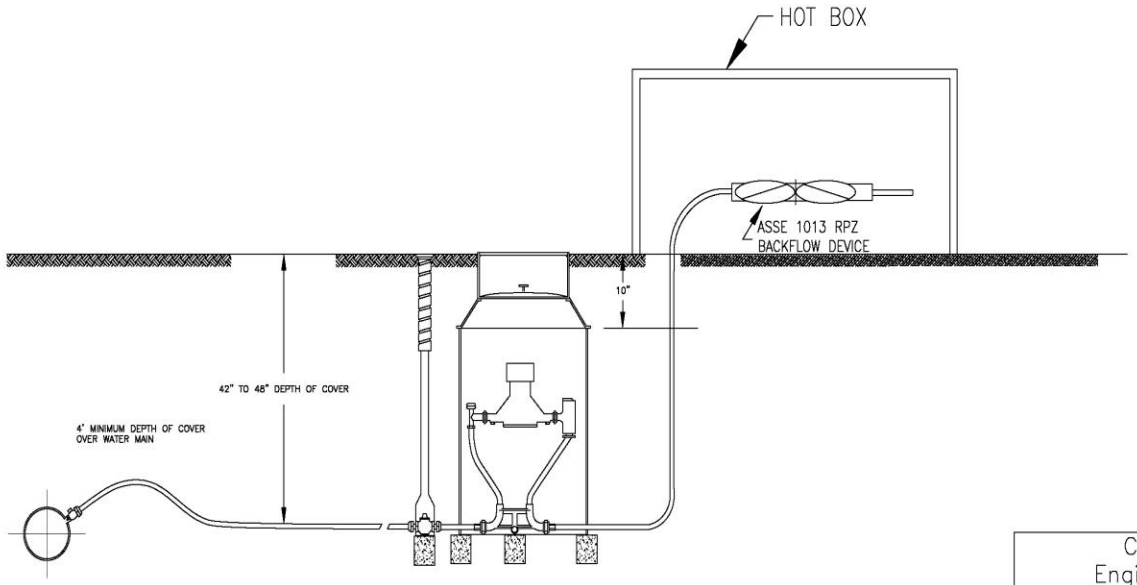
SERVICE LINE
TERMINATION STAKING

REVISED 2015

City of Oxford Standard Drawing # 73

City of Oxford (Water Meter Pit and Assembly)

1. Water Meter shall be "furnished" and "purchased from" the City of Oxford.
2. Corporation Stop (Flare F–600–4 Compression F–1000–4) shall be installed at a 22–1/2 degree angle (2:00 and 10:00) 1" standard or utility approved equal.
3. Service Line shall be K–Copper Tubing only. 1" standard from water main to copper setter.
4. Curb Stop shall be (Ford® B–44–444 Compression, or Ford® B–22–444 Flare) 1" standard or Utility approved equal.
5. Curb Box shall be Tyler® 2–piece 6500 or Utility approved equal.
6. Meter Pit shall be rigid PVC 20" width x 30" depth (Sono–loc)® or Utility approved equal.
7. Meter Pit Lid shall be Ford W3–T Double Lid Meter Pit Cover w/plastic (W3BPD) frost lid and single hole for touch pad for 11–1/2" lid size and 20" diameter meter pit or Utility approved equal.
8. Meter Setting Parts (Copper Setters) shall be Ford VBHC72–18W–44–44 or Utility approved equal.
9. Backfill material shall be sand, #9's, pea gravel or approved equal by the Utility. With a minimum cover of 12".
10. HOT BOX® shall be locking and vandalism proof, weather tight, and cold protectant to –30 deg. fahrenheit with an electric heating element or Utility approved equal.
11. Back flow device to be ASSE 1013 RPZ or utility approved equal.



DRAWING NOT TO SCALE

City of Oxford
Engineering Division

Temporary Construction Water
Meter Pit and Hot Box Assembly

REVISED 2015

City of Oxford Standard Drawing #78

SECTION ~~8~~ Eight

Backflow/Cross Connection Control Program

8.0 INTRODUCTION

The responsibility for backflow/cross-connection control lies jointly with the public water supply (City of Oxford (City)), the water consumer, and the regulatory agencies (Ohio Environmental Protection Agency (OEPA), Ohio Department of Health, the Butler County Board of Health, and the Ohio Department of Commerce).

The Ohio EPA requires the City ~~of Oxford~~, under Rule 3745-95 of the Ohio Administrative Code, to implement and conduct an ongoing backflow prevention and cross-connection control program. The City ~~of Oxford~~ is committed to meeting the requirements of the Ohio Environmental Protection Agency, to assuring water quality at the user's tap, and controlling potential hazards to the City's water system~~s~~ posed by backflow/cross-connection conditions.

Enclosed is the Backflow/Cross-connection Control Ordinance that gives enforcement authorization to the City ~~of Oxford~~. This ordinance complies with the requirements set forth by the Ohio Environmental Protection Agency for the protection of ~~Oxford's~~ the City's public water supply.

The use of an approved backflow preventer at the water service connection point of entry (POE), does not affect or eliminate the need for individual fixture devices or air gaps as required by the Plumbing Code of the State of Ohio.

Ordinance No. 2373

ORDINANCE PROVIDING AN EFFECTIVE MEANS FOR PROTECTING THE PUBLIC WATER SYSTEM FROM CONTAMINATION DUE TO BACKFLOW OF CONTAMINANTS THROUGH THE WATER SERVICE CONNECTION INTO THE PUBLIC WATER SYSTEM.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF OXFORD, BUTLER COUNTY, STATE OF OHIO THAT:

SECTION 1: Section 6109.13 of the Ohio Revised Code requires protection of the public water system from contamination through any connection whereby water from a private, auxiliary or emergency water system may enter the public water system;

SECTION 2: Section 3745-95 of the Ohio Administrative Code requires protection of the public water system from contamination due to backflow of contaminants through the water service connection;

SECTION 3: The Ohio Environmental Protection Agency requires the maintenance of a continuing program of cross-connection control that will systematically and effectively prevent the contamination of all potable water systems;

SECTION 4: To accomplish these goals, it is necessary to introduce restrictions that go beyond usual plumbing code requirements, and these restrictions will hereinafter be referred to as "The City of Oxford Backflow/Cross-Connection Control Program."

SECTION 5: If, in the judgment of the City of Oxford Service Director or his representative, an approved backflow prevention device is necessary for the safety of the public water system, the Service Director or his representative will give notice to the water consumer to install such an approved device immediately. The water consumer shall, at their own expense, install such an approved device at a location and in a manner approved by the Service Director or his representative and shall have inspections and tests made of such approved devices as required by the Service Director or his representative.

SECTION 6: No person, firm or corporation shall establish or permit to be established or maintain or permit to be maintained any connection whereby a private, auxiliary or emergency water supply other than the regular public water supply of the City of Oxford may enter the supply or distributing system of said municipality, unless such private, auxiliary or emergency water supply and the method of connection and use of such supply shall have been approved by the Service Director or his representative of the City of Oxford and by the Ohio Environmental Protection Agency.

SECTION 7: That it shall be the duty of the Service Director or his representative to cause surveys and investigations to be made of industrial and other properties served by the public water supply where actual or potential hazards to the public water supply may exist. Such surveys and investigations shall be made a matter of public record and shall be repeated as often as the Service Director or his representative shall deem necessary.

SECTION 8: That the City of Oxford's authorized representative shall have the right to enter, at

any reasonable time, any property served by a connection to the public water supply or distribution system of the City of Oxford for the purpose of inspecting the piping system or systems thereof. On demand, the owner, lessees or occupants of any property so served shall furnish to the Service Director or his representative any information that he may request regarding the piping system or systems or water use on such property. The refusal of such information, when demanded, shall, within the discretion of the Service Director or his representative, be deemed evidence of the presence of improper connections as provided in this ordinance.

SECTION 9: That the Service Director or his representative of the City of Oxford is hereby authorized and directed to discontinue, after reasonable notice to the occupant thereof, the water service to any property wherein any connection in violation of the provisions of this ordinance is known to exist, and to take such other precautionary measures as he may deem necessary to eliminate any danger of contamination of the public water supply distribution mains. Water service to such property shall not be restored until such conditions shall have been eliminated or corrected in compliance with the provisions of this ordinance.

SECTION 10: This ordinance shall take effect at the earliest date allowed by law.

MAYOR

ADOPTED: November 15, 1994 ATTEST:

CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: Alan Kyger

Prepared by Law (Staff)

8.1 DEFINITIONS

The following definitions shall apply in the interpretation and enforcement of these rules and regulations as used in Section 3745-95-01 of the Ohio Administrative Code and by authorized representatives of the City ~~of Oxford~~:

A. "Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the flood level rim of the receptacle.

B. "Approved" means that a backflow prevention assembly, device or method has been accepted by the supplier of water and the Director as suitable for the proposed use.

C. "Auxiliary water system" means any water system on or available to the premises other than the public water system. These auxiliary water systems shall include used water or water from a source other than the public water system, such as wells, cisterns or open reservoirs that are equipped with pumps or other prime movers, including gravity.

D. "Backflow" means the flow of water or other liquids, mixtures or substances into the distributing pipes of a potable water supply from any source other than the intended source of the potable water supply.

E. "Backflow preventer" means any assembly, device, method or type of construction intended to prevent backflow into a potable water system. This definition applies wherever "backflow prevention device" is used in this chapter.

F. "Booster pump" means any device which is intended to increase the in-line water pressure.

G. "Certified Technician" means an individual, licensed by the State of Ohio, to conduct backflow testing.

H. "City of Oxford" means the person acting on behalf of the City of Oxford in accordance with the City of Oxford Charter, Ohio Administrative Code and the Ohio Revised Code.

I. "Consumer" means the owner or person in control of any premises supplied by or in any manner connected to a public water system.

J. "Consumer's water system" means any water system, located on the consumer's premises, supplied by or in any manner connected to a public water system. A household plumbing system is considered to be a consumer's water system.

K. "Contamination" means an impairment of the quality of the water by sewage, process fluid or waste to a degree which could create an actual hazard to public health through poisoning or through spread of disease by exposure.

L. "Containment principle backflow preventer" is a backflow preventer, installed in a consumer's water system that is intended to contain the water within the premises in order to prevent any polluted or contaminated water from backflowing into the public water system. Typically, the containment principle backflow preventer is placed at the service connection unless placement is otherwise specified by rule herein.

M. "Cross-connection" means any arrangement whereby backflow can occur.

N. "Degree of hazard" is a term derived from an evaluation of the potential risk to health and welfare**.**

O. "Director" means the Director of environmental protection or the Director's duly authorized representative.

P. "Double check valve assembly" means an assembly composed of two single, independently acting, check valves, including tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the water-tightness of each check valve.

Q. "Double check-detector check valve assembly" means a specially designed assembly composed of a line-size approved double check valve assembly with a specific bypass water meter and a meter-sized approved double check valve assembly. The meter shall register accurately or only very low rates of flow and shall show a registration for all rates of flow.

R. "Health hazard" means any condition, device, or practice in a water system or its operation that creates, or may create, a danger to the health of users.

S. "Human consumption" means the ingestion or absorption of water or water vapor as the result of drinking, cooking, dishwashing, hand washing, bathing, showering, or oral hygiene.

T. "Interchangeable connection" means an arrangement or device that will allow alternate but not simultaneous use of two sources of water and includes an approved reduced pressure principle backflow prevention assembly or an approved reduced pressure principle-detector assembly on the public water system side of the connection.

U. "Non-potable water" means water not safe for drinking, personal, or culinary use. ~~(not in OEPA definitions)~~

V. "Person" means the state, any political subdivision, public or private corporation, individual, partnership, or other legal entity.

W. "Point of Entry (POE)" Designates the location where backflow devices(s) are installed on the service line to a consumer's water system. This location, on the consumer's side of the water meter, shall be as close to the meter as reasonably practical and prior to any other connection. This backflow device shall be installed at the location and in a matter approved by the City of Oxford. The rules and regulations governing backflow prevention and cross-connection control in Ohio are the Ohio Revised Code, the Ohio Administrative Code and the Ohio Building Code. ~~(Not in OEPA doc)~~

X. "Pollutional hazard" means a condition through which an aesthetically objectionable or degrading material, which is not dangerous to the public water system or health of users, may enter the public water system or portion of a consumer's water system.

Y. "Potable water" means water intended for human consumption.

Z. "Premises" means any building, structure, dwelling or area containing plumbing or piping supplied from a public water system.

AA. "Pressure vacuum breaker" means an assembly composed of an independently acting spring loaded check valve located downstream of an independently acting spring loaded air inlet valve including, tightly closing shutoff valves located at each end of the assembly and suitable connections for testing the integrity of the air inlet and check valves.

BB. "Process fluids" means any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a pollutional, system, health, or severe health hazard if introduced into the public water system or portion of a consumer's water system. This includes, but is not limited to:

a. polluted or contaminated waters;
b. process waters;
c. used waters originating from the public water system which may have deteriorated in sanitary quality;
d. cooling waters;
e. contaminated natural waters taken from wells, lakes, streams, or irrigation systems;
f. chemicals in solution or suspension;
g. oils, gases, acids, alkalis, and other liquid and gaseous fluids used in industrial or other processes, or for fire fighting purposes.

CC. "Public water system "Or "PWS" means a system which provides water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days out of the year. Such term includes any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, any collection of pretreatment storage facilities not under such control which are used primarily in connection with such system, and any water supply system serving an agriculture labor camp, as defined in section 3733.41 of the Revised Code. Such term does not include any "special irrigation district," as defined in 40 CFR 141.2. A public water system is either a "community water system" or a "non-community water system." An existing public water system is prohibited from splitting the distribution system or adding additional sources to avoid regulation by Chapter 6109 of the Revised Code.

DD. "Reduced pressure principle backflow prevention assembly" (RPZ) means a ~~device~~ an assembly containing a minimum of two independently acting check valves together with an automatically operated pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the assembly, and each assembly shall be fitted with properly located test cocks.

EE. "Reduced pressure principle-detector assembly" (RPZ) means a specially designed assembly composed of a line-size approved reduced pressure principle backflow prevention assembly with a specific bypass water meter and a meter sized approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for only very low rates of flow and shall show a registration for all rates of flows.

FF. "Service connection" means the terminal end of a service line from the public water

system. If a meter is installed at the end of the service, then the service connection means the downstream end of the meter.

GG. "Severe health hazard" means a health hazard to users that could reasonably be expected to result in significant morbidity or death.

HH. "Supplier of water" means the owner or operator of a public water system.

II. "System hazard" means a condition posing an actual or potential threat of damage to the physical properties of the public water system or a consumer's potable water system.

JJ. "Used water" means any water supplied by a supplier of water from a public water system to a consumer's water system after it has passed through the service connection and is no longer under the control of the supplier.

KK. "Water system" means a system for the provision of piped water or process fluids, and includes any collection, treatment, storage or distribution facilities used primarily in connection with such system.

LL. "Weep holes" means a series of small diameter holes located in the wall of the supply pipe for a yard hydrant that allow for drainage of accumulated water from the delivery piping. These holes are usually part of a plunger and valve system that seals off the holes during water usage and opens the holes during shutdown. These openings are located below ground level and below the frost line in areas where the threat of freezing exists.

MM. "Yard hydrant" means a device that is located outside of a building, equipped with a valved mechanism that controls the delivery of potable water, and is not designed to supply a fire department pumper.

8.2 OVERVIEW

The City of Oxford Backflow/Cross-Connection Control Program is designed to protect the public water supply from the hazards of pollution and contamination caused by unauthorized cross-connections and resultant backflow of pollutants and contaminants.

The City of Oxford's program is implemented in two phases of equal standing: new water services and existing services.

8.2.1 New Services

All new commercial sites requiring City water shall have an appropriate backflow prevention device installed prior to water service being activated. The type of backflow device required in each application is decided by the City of Oxford. The program began with an investigation of new service applications. A request for water service requires that a review of proposed water uses be made. The program, while recognizing the need for individual fixture protection, requires that an approved backflow preventer be installed on the service line immediately downstream from the meter. The program protects City water customers from possible backflow/cross-connection contaminants from an adjacent service, but not from their own. The plumbing code, which provides individual fixture protection, functions to complement the requirements of the Oxford Water System.

When ordered by the City of Oxford, the owner or his agent is required to install an approved backflow preventer. The type of backflow preventer required is based on the degree of hazard presented to the public water supply.

A potential threat to the water system that can impair the quality of the water, thereby creating a pollution hazard if allowed to backflow into the supply, can effectively be eliminated with the installation of a double check backflow preventer, a device which consists of two independently acting check valves. A reduced-pressure principle backflow preventer is required when a substance, backflowing into the public water supply, would create the danger of a health hazard. The preventer has the ability to discharge the water to the atmosphere if backflow occurs and the check valves fail to hold.

For new services, determination of the degree of hazard is based on an evaluation of the site and proposed use of the water supply. An RPZ (ASSE 1013) is required on all potable water systems as determined by the City. A Double Check Assembly (ASSE 1015) and/or a Double Check Detector Check (ASSE 1048) is required on all fire suppression systems as determined by the City**.** If the degree of hazard is in question, the City of Oxford shall have the final authority.

8.2.2 Existing Services

Requirements for cross-connection control are retroactive and thus pertain to those facilities that have existing water service. A City of Oxford computerized listing of customer water meters by street location for commercial establishments will be used to determine compliance sites.

An introductory letter (exhibit 1) is presented to the person in charge at each location detailing the purpose of the survey. A field survey (exhibit 2) is then conducted at each commercial site. The Authorized Representative then inspects the site water meter, documenting size, serial number, and overall condition. If a backflow preventer already existed at the site, its type, size, model number, make and serial number is noted. Any modifications to the device are also noted. The entire site is then investigated for the existence of cross connections. Any hazardous materials observed are noted. Before leaving the site, as necessary, the Authorized Representative evaluates the entire site for backflow risk and also makes a field recommendation as to the type of backflow preventer needed to protect the City water supply from backflow risk observed.

The City of Oxford will review the data collected through the survey and make a final determination as to the required backflow protection.

Notice letters (exhibit 3b) and instructions, (exhibit 3a) explaining procedures for re-certification testing and overhaul, are then mailed to the owner/agent regarding the requirement of backflow protection and directing to comply by obtaining a permit (exhibit 4) and having a backflow preventer installed within thirty (30) days or as designated by the City of Oxford. After the backflow preventer has been installed, the installing plumber or technician who has Ohio backflow certification, forwards to the City of Oxford a certification statement to that effect.

If there is no response by the specified date, a second notice (exhibit 5) is mailed specifying a 15-day deadline for accomplishing the backflow preventer installation.

If there again is no response within the additional time allowed, a final notice will be sent by certified mail (exhibit 6), allowing one final, 10-day period from the date of return receipt of signature, in which the site can come into full compliance with the requirement. This final notice specifies that water service to the location may be terminated at the end of this last period without further notice.

If the site remains in violation at the expiration of this final grace period, the City, at its sole discretion, may authorize water service termination to the site.

8.2.3 Testing of Prevention Devices

Once every 12 months, backflow prevention devices are required to have thorough inspections and operational tests to assure the City of the device's continued proper operation.

At the appropriate time the City notifies, by mail, the owner/agent of the site of the requirement to test the backflow preventer (exhibit 7) by a specified date. Notices are generally sent at least one month prior to the specified date for testing. A City permit must be obtained by an approved certified technician for the proper accomplishment of the test. A fee is required for processing required forms.

The certified technician then conducts an on-site test of the backflow preventer within the Ohio EPA testing guidelines (Ohio EPA, Division of PWS, Backflow Prevention and Cross Control 4th Edition 2015. The technician completes the inspection report obtained at the Inspections Department at the Municipal Building, certifies the test and returns the report to the City of Oxford. The device will be rebuilt any time it fails to meet testing criteria. The rebuilt device will be recertified by the certified technician.

Non-compliance by the specified date will result in a second notice (exhibit 8) being mailed allowing an additional 30-day grace period in which to comply.

If there again is no response within the additional time allowed, a final notice (exhibit 9) will be sent by certified mail allowing one final, 10-day period from the date of return receipt signature in which the site can come into full compliance with the requirement. This final notice specifies that water service to the location may be terminated at the end of this last period without further notice.

If the site remains in violation at the expiration of this final grace period, the City of Oxford, at its sole discretion, may authorize water service termination to the site.

8.3 GENERAL POLICY

A. Purpose The purpose of these Rules and Regulations is:

1. To protect the public potable water supply from contamination or pollution by isolating, within the consumer's water system, contaminants or pollutants which could backflow through the service connection into the public potable water system.

2. To promote the elimination or control of existing cross-connections, actual or potential, between the public or consumer's potable water system and non-potable water systems, plumbing fixtures and sources or systems containing process fluids.

3. To provide for the maintenance of a continuing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of the public and consumer's potable water systems.

B. Application These Rules and Regulations shall apply to all premises served by the public potable water system of the City of Oxford, Ohio.

C. Policy The City ~~of Oxford~~ shall be responsible for the protection of the public potable water system from contamination due to backflow of contaminants through the water service connection. If, in the judgment of the City ~~of Oxford~~, an approved backflow prevention device is necessary at the water service connections to any consumer's premises for the safety of the water system, the City's ~~of Oxford's~~ authorized representative shall give notice to the consumer to install such approved backflow prevention device at each service connection to his premises. The consumer shall immediately install such approved device or devices at his own expense, and failure, refusal or inability on the part of the consumer to install such device or devices immediately shall constitute grounds for discontinuing water service to the premises until such device or devices have been installed.

8.4 WATER SYSTEM

A. The water system shall be considered to be made up of two parts: the public potable water system and the consumer's water system.

B. The public potable water system shall consist of the source facilities and the distribution system, and shall include all those facilities of the potable water system under the control of the City ~~of Oxford~~ up to the point where the consumer's water system begins.

C. The source shall include all components of the facilities utilized in the production, treatment, storage and delivery of water to the public distribution system.

D. The public distribution system shall include the network of conduits used for delivery of water from the source to the consumer's water system.

E. The consumer's water system shall include those parts of the facilities beyond the service connection which are utilized in conveying water from the public distribution system to points of use.

8.5 CROSS-CONNECTIONS PROHIBITED

A. No person shall install or maintain a water service connection to any premises where actual or potential cross-connection to a public water system or a consumer's water system may exist unless such actual or potential cross-connections are abated or controlled to the satisfaction of the supplier of water.

B. No person a shall install or maintain a connection between a public water system or consumer's water system and an auxiliary water system unless the auxiliary water system, the method of connection, and the use of such system has been approved by the supplier of water and by the Director as required by section 6109.13 of the Ohio Revised Code.

C. A public water system shall develop and implement a backflow prevention and cross-connection control program consistent with this chapter.

8.6 SURVEY AND INVESTIGATIONS

A. The supplier of water shall conduct or cause to be conducted an initial assessment and periodic surveys or investigations of water use practices within a consumer's premises to determine whether there are actual or potential cross-connections to the consumer's water system through which contaminants or pollutants could backflow into the public water

system or determine where in the judgment of the supplier of water, a pollutional system, health or severe health hazard to the public water system exists.

To meet this requirement, the supplier of water shall conduct or cause to be conducted an on-site investigation of all premises at least every five years to identify changes in water use practices at the consumer's property so that new or increased hazards to the water supply are identified and mitigated.

1. In lieu of conducting an onsite investigation of all premises every five years, the supplier of water can document, in writing, an alternate, on-going, methodology to identify changes in water use practices that may represent a new or increased hazard to the public water supply. An on–site investigation is required when a potential new or increase hazard is suspected to confirm the degree or risk and how it will be addressed. Information obtained through a water use survey questionnaire or in coordination with the local building, zone, health, fire protection and other licensing agencies may be used as an indicator of when and on-site investigation should be conducted. Other triggers, such as a request to the supplier of water for a new or additional service line, or an additional or larger meter should warrant an on-site investigation.

2. In lieu of conducting an on-site investigation of each residential premise, the supplier of water may institute and on-going educational campaign to inform consumers of common backflow hazards created during residential water use, and provide a reporting mechanism for suspected cross-connections. An education campaign may use local media and advertising resources, but must also include information delivered, either electronically or hard copy, to each residential service connection at least annually.

B. The supplier of water, or the supplier's authorized representative, shall have the right to enter premises served by the public water system at all reasonable times for the purpose of making surveys and investigations of water use practices within the premises.

C. On request by the supplier of water, or the supplier's authorized representative, the consumer shall furnish the supplier or the supplier's authorized representative, information on water use practices within the consumer's premises.

C. Paragraph (A) of this rule does not relieve the consumer of the responsibility for conducting, or causing to be conducted, periodic surveys of water use practices on this premises to determine whether there are actual or potential cross-connections in the consumer's water system through which contaminant or pollutants could backflow into a public water system or a potable consumer's water system.

8.7 WHERE PROTECTION IS REQUIRED

A. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises, where in the judgment of the supplier of water or the Director, a pollutional, system, health or severe health hazard to the public water system exists.

B. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where the following conditions exist:

1. Premises having an auxiliary water system on the premises, unless such auxiliary system is accepted as an additional source by the supplier of water and the source is approved by the Director.

2. Premises on which any substance is handled in such a fashion as to create an actual or potential hazard to the public potable water system. This shall include premises having sources or systems containing process fluids or waters originating from the public potable water system which are no longer under the sanitary control of the City.

3. Premises having internal cross-connections that, in the judgment of the supplier of water, are not correctable, or intricate plumbing arrangements which make it impractical to determine whether or not cross-connections exist;

4. Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey;

5. Premises having a repeated history of cross-connections being established or re-established; or

6. Others specified by the Director.

C. The following requirements apply to premises that have an auxiliary water system on the real property that is owned or under control of the consumer and adjacent to the premises.

1. A physical separation shall be maintained between the public water system or a consumer's water system and the auxiliary water system as required by paragraph (B) of rule 3745-95-02 of the Administrative Code; and

2. An approved backflow prevention device shall be installed on each service connection serving the consumer's water system, unless the supplier of water does all of the following:

a. Determines, on a case-by-case basis, that the installation of an approved backflow prevention device on a service connection is not required in consideration of factors including, but not limited to, the past history of cross connections being established or re-established on the premises, the ease or difficulty of connecting the auxiliary water system with the public water system on the premises, the presence or absence of contaminants on the property or other risk factors;

b. Requires the consumer to sign an agreement which specifies the penalties, including those set forth in rule 3745-95-08 of the Administrative Code, for creating a connection between the public water system and the auxiliary water system;

c. Conducts or causes to be conducted an inspection at least every twelve months to certify that no connection or means of connection has been created between the public water system and the auxiliary water system;

d. Maintains an inventory of each consumer's premises where an auxiliary water system is on or available to the premises, or on the real property adjacent to the premises; and

e. Develops and implements an education program to inform all consumers served by the public water system about the dangers of cross-connections and how to eliminate cross-connections.

D. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities unless the Director determines that no severe health, health, system or pollutional hazard to the public water system exists:

1. Hospitals, mortuaries, clinics, nursing homes;
2. Laboratories;
3. Piers, docks, waterfront facilities;
4. Wastewater treatment plants, wastewater pumping stations or storm water pumping stations;
5. Food or beverage processing plants;
6. Chemical plants;
7. Metal plating industries;
8. Petroleum processing or storage plants;
9. Radioactive material processing plants or nuclear reactors;
10. Car washes;
11. Others specified by the City of Oxford or the Director.

E. An approved backflow prevention device shall be installed at any point of connection that is approved in accordance with paragraph (B) of rule 3745-95-02 of the Administrative Code between a public water system or a consumer's water system and an auxiliary water system, unless such auxiliary system is accepted as an additional source by the supplier of water, and the source is approved by the Director.

8.8 TYPE OF PROTECTION REQUIRED

A. The type of protection required under Section 8.7 (A), (B), (C) of these regulations shall depend on the degree of hazard which exists as follows:

1. An approved air gap separation shall be installed where the public water system may be contaminated with substances that could cause a severe health hazard;

2. An approved air gap separation, an approved reduced pressure principle backflow prevention assembly or an approved reduce pressure detector check assembly shall be installed where the public water system may be contaminated with any substances that could cause a system or a health hazard;

3. An approved air gap separation, an approved reduced pressure principle backflow prevention assembly, an approved reduced pressure principle-detector check assembly, or an approved double check valve assembly shall be installed where the public water system may be contaminated with any substance that could cause a pollutional hazard.

B. The type of protection required under Section 8.7(E) of these regulations shall be an approved air gap separation or an approved interchangeable connection. A removable spool piece connection is not an acceptable method.

C. Where an auxiliary water system is used as a secondary source of water for a fire protection system, the provisions of paragraph (B) of this rule for an approved air gap separation or an approved interchangeable connection may be waived by the Director, provided the following conditions exist:

1. At premises where the auxiliary water system may be contaminated with substances that could cause a system, health, or severe health hazard, the public water system or consumer's water system shall be protected against backflow by installation of an approved reduced pressure principle backflow prevention assembly or an approved reduced pressure principle-detector check assembly;

2. At all other premises, the public water system or a consumer's water system shall be protected against backflow by installation of an approved reduced pressure principle backflow prevention assembly, an approved reduced pressure principle-detector check assembly, an approved double check valve assembly or an approved double check-detector check valve assembly;

3. The public water system or a consumer's water system shall be the primary source of water for the fire protection system;

4. The fire protection system shall be normally filled with water from the public water system or a consumer's water system;

5. The water in the fire protection system shall be used for fire protection only, with no other use of water from the fire protection system downstream from the approved backflow prevention device;

6. The water in the fire protection system shall contain no additives.

D. An exception to the requirement in paragraph (A)(2) of this rule may be applied when mitigating the health hazard associated with a water-only, residential-type irrigation system that is not subjected to the backpressure and it not equipped with pumps or other prime movers which can create backpressure to the public or the consumer's water system. In this instance, an approved pressure vacuum breaker can be used to isolate the service line to the irrigation system in lieu of installing a containment assembly at the service connection. The same maintenance and testing requirements as outlined in rule for containment assemblies apply. This exception does not apply if an additive is used within the irrigation

system. The supplier of water may determine other hazards exist that warrant additional containment protection at the service connection.

8.9 BACKFLOW PREVENTION DEVICES

A. Any containment principle backflow prevention device required by rules 3745-95-04 and 3745-95-05 of the Administrative Code shall be of a model or construction approved by the supplier of water, and conform to at least one of the following standards:

1. For air gap separations: the specific edition of the American National Standards Institute (ANSI) and the American Society of Mechanical Engineers (ASME) standard as referenced in rule 4101:3-13-01 of the Administrative Code.

2. For reduced pressure principle backflow prevention assemblies: the specific edition of the ANSI and the American Water Works Association (AWWA) standard, or the American Society of Sanitary Engineering (ASSE) standard , or the Canadian Standards Association (CSA) standard as referenced in rule 4101:3-13-01 of the Administrative Code; or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies for Reduced Pressure Principle Assemblies – tenth edition (2009);

3. For double check valve assemblies: the specific edition of the ANSI and the AWWA standard, or the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code; or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies for Double Check Valve Assemblies-tenth edition (2009);

4. For reduced pressure principle-detector assemblies: the specific edition of the ANSI and the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code; or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies Reduced Pressure Principle-Detector Assemblies – tenth edition (2009);

5. For double check-detector check valve assemblies: the ANSI and the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code, or the Foundation for Cross Connection Control and Hydraulic Research, University of Southern California Specifications of Backflow Assemblies for Double Check Detector Assemblies – tenth edition (2009);

6. For pressure vacuum breakers: the ANSI and the ASSE standard, or the CSA standard as referenced in rule 4101:3-13-01 of the Administrative Code.

B. Any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code shall be installed at a location and in a manner approved by the supplier of water and shall be installed at the expense of the water consumer. In addition, any backflow prevention device required by paragraphs (B) and (C) of rule 3745-95-05 of the Administrative Code shall be installed at a location and in a manner approved by the Director as required by section 6109.13 of the Revised Code.

C. It shall be the duty of the water consumer to maintain any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code in proper working order and in continuous operation.

1. The supplier of water shall retain authority over any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code.

2. It shall be the duty of the supplier of water to see that the tests and inspections required under this paragraph are made.

3. The consumer shall, on any premises on which any containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code are installed, have thorough inspections and operational tests made of the backflow preventers at the time of installation or repair, and as may be reasonably required by the supplier of water or the Director, but in all cases at least once every twelve months. These inspections and tests shall be at the expense of the water consumer and shall be performed by the supplier of water or a person approved by the supplier as qualified to inspect and test backflow preventers.

4. These devices shall be repaired, overhauled or replaced at the expense of the consumer whenever they are found to be defective.

5. Records of such inspections, tests, repairs, and overhaul shall be kept by the consumer and made available to the supplier of water.

6. The supplier of water shall maintain a paper or electronic record of inventory of survey, investigation and containment principle backflow preventer installation report. Records of inspections, tests, repairs and overhauls related to the containment principle backflow preventer required by rules 3745-95-04 and 3745-95-05 of the Administrative Code shall be maintained by the supplier of water for a minimum of five years.

D. The supplier of water shall inspect or cause to be inspected, all installations where an approved connection exists between an auxiliary water system and the public water system or a consumer's water system at least once every twelve months and shall maintain an inventory of all such installations and inspections records. Such inventories and inspection records shall be made available during sanitary surveys and at other reasonable times. Paper or electronic inspection records shall be maintained by the supplier of water for a minimum of five years.

E. Containment principle backflow preventers approved by the supplier of water and conforming to prior or subsequent editions of the standards cited in paragraph (A) of this rule, and which are properly maintained in accordance with paragraph (C) of this rule shall be excluded from the requirements of paragraphs (A) and (B) of this rule if the supplier of water and the Director are assured that the backflow preventer will satisfactorily protect the public water system.

[Comment: This rule incorporates the following standard by reference: The manual of cross-connection control, tenth edition, published by the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California. At the effective date of this rule, a copy of this document may be obtained from the Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, research annex 219, 3716 Hope Street, Los Angeles, CA 90089-7700, phone: 866-545-6340, world-wide web address: http://www.usc.edu/dept/fccchr/. This document is available for review at Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH 43215]

8.10 INSTALLATION

A. Backflow prevention devices required by these rules and regulations shall be installed at a location and in a manner approved by and at the expense of the water consumer. In addition, any backflow prevention device required by Section 8 (B) and 8 (C) of these regulations shall be installed at a location and in a manner approved by the Director as required by Section 6109.13 of the Ohio Revised Code.

B. Backflow prevention devices installed on the service line to a consumer's water system shall be located on the consumer's side of the water meter, as close to the meter as reasonably practical, and prior to any other connection.

C. Pits or vaults shall be of water-tight construction, be so located and constructed as to prevent flooding and shall be maintained free from standing water by means of either a sump pump or a suitable drain. Such sump pump or drain shall not connect to a sanitary sewer nor permit flooding of the pit or vault by reverse flow from its point of discharge. An access ladder and adequate natural or artificial lighting shall be provided to permit maintenance, inspection and testing of the backflow prevention device.

D. Reduced pressure principle backflow prevention devices must be installed above ground level or floor level, whichever is higher.

8.11 INSPECTION AND MAINTENANCE

A. It shall be the duty of the consumer at any premises on which backflow prevention devices required by these regulations are installed to have inspections, tests and overhauls made in accordance with the following schedule, or more often where inspections indicate a need:

1. Air gap separations shall be inspected at the time of installation and at least every twelve months thereafter;

2. Double check valve assemblies shall be inspected and tested for tightness at the time of installation and at least every twelve months thereafter.

3. Reduced pressure principle backflow prevention devices shall be inspected and tested for tightness at the time of installation and at least every twelve months thereafter.

4. Interchangeable connections shall be inspected at the time of installation and at least every twelve months thereafter.

B. Inspections, tests and overhauls of backflow prevention devices shall be made at the expense of the water consumer and shall be performed by a certified technician.

C. Whenever backflow prevention devices, required by these regulations, are found to be defective, they shall be repaired, overhauled or replaced at the expense of the consumer without delay. Documentation of the rebuilding and recertification shall be forwarded to the Service Department, City of Oxford Municipal Building.

D. The water consumer must maintain a complete record of each backflow prevention device from purchase to retirement. This shall include a comprehensive listing that includes a record of all tests, inspections, repairs and overhauls. Records of inspections, tests, repairs and overhauls shall be submitted to the City ~~of Oxford~~.

E. Backflow prevention devices shall not be bypassed, made inoperative, removed or otherwise made ineffective without specific authorization by the City ~~of Oxford~~.

8.12 BOOSTER PUMPS

A. No person shall install or maintain a water service connection where a booster pump has been installed, unless an approved method is in place and is operational to maintain a minimum suction pressure as prescribed as presented in the following:

1. For booster pumps not intended to be used for fire suppression, no person shall install or maintain a water service connection to any premises where a booster pump has been installed on the service line to or within such premises, unless such booster pump is equipped with a low pressure cut-off designed to shut off the booster pump when the pressure in the service line on the suction side of the pump drops to ten pounds per square inch gauge or less.

2. For booster pumps used for fire suppression, also referred to as fire pumps, installed after August 8, 2008, no person shall install or maintain a water service connection to any premises where a fire pump has been installed on the service line to or within such premises, unless the pump is equipped with one of the following:
   a. A low suction throttling valve which is a pilot-operated valve installed in the discharge piping that maintains positive pressure in the suction piping, while monitoring pressure in the suction piping through a sensing line. The valve must throttle the discharge of the pump when necessary so that suction pressure will not be reduced below ten pounds per square inch gauge while the pump is operating.
   b. A variable speed suction limiting control which is a speed control system used to maintain a minimum positive suction pressure at the pump inlet by reducing the pump driver speed while monitoring pressure in the suction piping through a sensing line. It will be set so that the suction pressure will not be reduced below ten pounds per square inch gauge while the pump is operating.

3. For booster pumps used for fire suppression, also referred to as fire pumps, installed prior to August 8, 2008, which are equipped with a low pressure cut-off as defined in paragraph (A)(1) of this rule, are not required to modify the installation solely for the

purpose of meeting the new methods accepted after this date, under paragraph (B)(1) of this rule.

B. It shall be the duty of the water consumer to maintain the low pressure cut-off device, the low suction throttling valve, or the variable speed suction limiting control in proper working order and to certify to the supplier of water, at least once every twelve months that the minimum suction pressure sustaining method is operable and maintained in a continuous operation.

C. The supplier of water must maintain electronic or paper records of inventory of booster pump installations. Electronic or paper records certifying operation must be retained for a period of five years.

D. The provision of this rule shall be followed nothwithstanding inconsistent provisions in the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers or "Recommended Standards for Water works" (2012).

[Comment: "Recommended Standards for Water Works" 2012 edition. Copies are available from "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, Ohio 43215, (614) 644-2752" or online at http://10statesstandards.com or www.epa.ohio.gov/ddagw.]

8.13 VIOLATIONS

A. The City ~~of Oxford~~ shall deny or discontinue, after reasonable notice to the occupants thereof, the water service to any premises wherein any backflow prevention device required by these regulations is not installed, tested and maintained in a manner acceptable to the City ~~of Oxford~~, or if it is found that the backflow prevention device has been removed or by-passed, or if any unprotected cross-connection exists on the premises, or if a low pressure cut-off required by these regulations is not installed and maintained in working order or if the City ~~of Oxford~~ or the authorized representative is denied entry to determine compliance with the corresponding rule 3745-95-07 of the Administrative Code.

B. Water service to such premises shall not be restored until the consumer has corrected or eliminated such conditions or defects in conformance with these regulations and to the satisfaction of the City ~~of Oxford~~.

8.14 Yard Hydrants

A. Yard hydrants with weep holes:

1. Yard hydrants with weep holes used for human consumption installed on a public water system are prohibited unless the weep holes are sealed.

2. Yard hydrants with weep holes not used for human consumption installed on a public water system, and those installed on a consumer's water system, shall have an appropriate backflow prevention assembly on the service line to protect the public water system. Yard hydrants with weep holes installed on the public water systems shall be clearly labeled as "non-potable" or "not for human consumption."

B. Sanitary yard hydrants that do not have weep holes, such as those that meet the requirements of the "American Society of Sanitary Engineers (ASSE) standard 1057

Performance Requirements for Freeze Resistant Yard Hydrants with Backflow Protection" (2001), are not prohibited provided:

1. The device is acceptable to the public water system to which it will be connected.

2. Any other applicable backflow prevention and cross-connection control requirements of this chapter are met.

8.15 EXCLUSIONS

A. The program and its rules and regulations are designed to protect the City's public potable water system from the hazards of pollution and contamination caused by cross-connections. The remedies specified are solely for the protection of the City system.

B. The program is designed to protect the City's water system. If there is the risk of a backflow problem within the customer's system it will not be addressed by this program.

C. The owner/agent is completely responsible for the internal protection of his potable water system for his own use and should take appropriate action.

D. If a question of degree of hazard exists, the City ~~of Oxford~~ will have the final determination.

8.16 REQUIRED TIME PERIODS FOR INSTALLATION, TESTING AND REBUILDING

A. Installation After the City ~~of Oxford~~ makes a final determination as to whether a backflow prevention device is required at a service address and decides on the type of device required, a notice letter is immediately sent to the owner/agent of the service address. The owner/agent is notified of the permit requirements and directed to have a backflow preventer installed within thirty (30) days or as designated by the City ~~of Oxford~~ (exhibit 3b). After the preventer has been installed, the installing plumber or technician forwards, to the City ~~of Oxford~~, a certification statement to that effect. If there is no response within the specified time, a second notice (exhibit 5) is mailed specifying a 15-day deadline.

If there again is no response within this 15-day period, a final notice will be sent, by certified mail (exhibit 6), allowing one final, 10-day period from the date of return receipt signature. This final notice clearly specifies that water service to the location may be terminated at the end of this 10-day period without further notice.

If this site continues in violation at the end of this final, 10-day grace period, the City ~~of Oxford~~, at his sole discretion, may authorize water service termination to the site without further notice.

B. Annual Testing Annually, Reduced Pressure Zone, ASSE 1013, and Double Check Valve, ASSE 1015, devices, are required to have thorough inspections and operational tests to assure their continued efficient operation. At the appropriate time the City will notify the owner/agent (exhibit 7) of the requirement to test the backflow preventer by a specified date. Notices are generally sent at least one month prior to the specified date for testing.

The owner/agent contacts a State of Ohio certified technician. The certified tester has 30 days to purchase a permit, conduct an on-site test, and return the test results to the City ~~of Oxford.~~

Non-compliance by the specified date will result in a second notice (exhibit 8) being mailed, allowing an additional 30-day grace period in which to comply.

If there again is no response within this 30-day period, a final notice (exhibit 9) will be sent certified mail allowing one final 10-day period from the date of the letter. This final notice clearly specifies that water service to the location may be terminated at the end of this last 10-day period without notice.

If the site continues in violation at the end of this final 10 day grace period, the City ~~of Oxford~~, at his sole discretion, may authorize service termination to the site without further notice.

C. Rebuilding Reduced Pressure Zone, ASSE 1013, and Double Check Valve, ASSE 1015, as well as the ASSE 1048, Double Check Detector Check Valve Assembly require rebuilding when a problem surfaces during normal operation or is found during the annual inspection process. All rebuilding must be performed by a State of Ohio certified tester at the expense of the owner/agent. Documentation of the repair and recertification shall be forwarded to the City ~~of Oxford~~.

8.17 THERMAL EXPANSION

Thermal expansion occurs when water expands due to being heated by a water heater. When a backflow preventer is put on-line, the expanded water is no longer allowed to flow back into the City main to be dissipated. This may result in a pressure build-up on the water heater, causing the relief valve to open and vent water into the atmosphere. Other possible side effects are damage to the center flue of a gas fired water heater from constant internal pressure which could spur a hazardous presence of carbon monoxide gas or even a water heater explosion.

State plumbing code~~s~~ 4101: 3 Section 60 Safety Devices, of the Ohio Administrative Code Section E or the most current edition, requires that an expansion tank or other device designed for thermal expansion control be installed on the cold water supply to the heater. *This code is to be followed by plumbers in making backflow installations.*

While thermal expansion units are not required by the City ~~of Oxford~~ the property owner must comply with this ordinance and should be aware of the requirements of the Ohio Plumbing Code and the concerns of the City of Oxford.

8.18 PERMIT FEES

In accordance with the City of Oxford Codified Ordinances a permit fee shall be paid for each device installation or re-certification. The fee should be paid at the City of Oxford Inspections Department, 101 East High Street, Oxford, Ohio 45056-1887.

8.19 Exhibits used in the Backflow / Cross Connection Control Program

Exhibit #:

1. Survey Introduction: Owner Agent Letter Given by an Authorized Representative at initiation of field survey.

2. Site Identification: Water Service Survey Used by an Authorized Representative during inspection of site facilities. Includes pertinent data for site identification and evaluation for backflow risk and recommended remedy.

3a. Instructions for Backflow Preventer Installation, Recertification Testing and Overhaul Relevant procedures for Owner/Agent/Manager/Plumber.

3b. Notice to Install Backflow Preventer (First Notice) Forwarded to Owner/Manager.

4. Backflow Preventer Permit Required for installation, recertification and overhaul.

5. Notice to Install Backflow Preventer (Second Notice) Forwarded to Owner/Manager.

6. Notice to Install Backflow Preventer (Final Notice) Forwarded to Owner/Manager (Certified Mail). Non-compliance may result in termination of water service.

7. Notice to Test Existing Backflow Prevention Device (First Notice) Forwarded to Owner/Manager.

8. Notice to Test Existing Backflow Prevention Device (Second Notice) Forwarded to Owner/Manager.

9. Notice to Test Existing Backflow Prevention Device (Final Notice) Forwarded to Owner/Manager (Certified Mail). Non-compliance may result in termination of water service.

Exhibit 1: Owner/Agent Letter

CITY OF OXFORD
HOME OF MIAMI UNIVERSITY

DATE:

OWNER/MANAGER:

ADDRESS:

SUBJECT: CITY OF OXFORD BACKFLOW/CROSS CONNECTION PREVENTION PROGRAM

Dear City of Oxford Water Customer:

The Ohio Environmental Protection Agency Regulations require the City of Oxford, under Rule 3745-95 of the Ohio Administrative Code, to control potential hazards to the City water system posed by backflow/cross connection conditions.

As part of Oxford's Cross-Connection Control Program, a field survey is being conducted for the purpose of determining potential site contamination of the water supply.

A City of Oxford authorized representative will inspect your water meter and piping systems and, as a result, your location will be evaluated for this contamination hazard and City records will be updated.

Should you have questions regarding this matter please call (513) 524-0203. Thank you for your cooperation.

Sincerely,

«Org_Signature »

File

BACKFLOW SITE IDENTIFICATION

City of Oxford, Ohio

Billing Address : _____
(if different) _____
Account # : _____
Building Name : _____
Type of Business : _____

Site Owner :_____
Address :_____
_____
Phone :_____
Site Manager :_____
Address :_____
_____
Phone :_____

Is water use consistent with type of business? YES NO If NO, explain:_____
_____

Is there an auxiliary water supply? YES NO If YES, describe: _____
_____

Is there a lawn sprinkler system? YES NO If YES, Describe:_____
_____

Is there a fire control sprinkler system? YES NO If YES, describe: _____
_____

Check valve type:_____ Make _____ Model _____Serial #_____

METER:
Size_____
Make_____
Serial # _____
Supply Line Size_____
Condition_____

BACKFLOW PREVENTER
Is a Backflow device present:
YES NO (If YES, describe)
Size_____ Type_____
Model #_____
Maker _____ Serial # _____

Has the device been modified?
YES NO
If YES, describe: _____
_____
_____
_____

RISK ANALYSIS

⇨ Are there connections on supply line before meter? YES NO If YES, Describe:_____
_____
_____

⇨ Any cross connection on premises? YES NO If YES, describe:_____
_____

⇨ Is there weather protection of meter and existing preventer? YES NO Describe condition:
_____
_____

⇨ Are there hazardous materials on site? YES NO If YES, describe: _____
_____
_____

⇨ Entire site evaluation for backflow risk: Describe: _____
_____

EVALUATION

Name of Surveyor _____ Date of survey _____

Evaluation:

_____ No backflow devices required
_____ Air gap required at: _____
_____ Inch Reduced Pressure Device required at: _____
_____ Inch Double Check Device required at: _____
_____ Low Pressure Cut Off Switch required on following pumps:

Additional
Remarks:_____

INSTRUCTIONS FOR BACKFLOW PREVENTER INSTALLATION, RECERTIFICATION TESTING, AND OVERHAUL

1. Contact a certified technician of backflow prevention devices.

2. Prior to testing, have the certified technician obtain a permit for each device at the Oxford Municipal Building. A permit fee is required for recertification, testing and overhaul.

3. Have the certified technician install, test or overhaul the approved device as required by notice accompanying these instructions.

4. Return the installation, test or overhaul certification, as applicable to:

City of Oxford
Inspections Department
Backflow/Cross-Connection Control
101 East High Street
Oxford, Ohio 45056-1887

Exhibit 3b: First Notice to Install Backflow Preventer

CITY OF OXFORD
HOME OF MIAMI UNIVERSITY

«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

Dear «Mail_Greeting »,

Our records indicate that one or more backflow prevention assemblies have been installed:

«ServiceAddress ».

Backflow prevention assemblies within the City of Oxford are required to be tested on a regular basis.

In order to comply with the Ordinance 2373 and departmental regulations, the listed backflow prevention assemblies must be tested annually by a certified and licensed tester. Accordingly, you are required to have the listed assemblies tested and a completed inspection report returned to our office within 30 days from the date of this letter.

If you have any questions, feel free to contact the Cross Connection Control Supervisor at the above address or you may phone **«Org_Phone »**.

Sincerely,

«Org_Signature »

Exhibit 4: Backflow Preventer Permit

Permit Fee $_____ **City of Oxford** Permit #

Backflow Prevention Permit
101 East High Street, Oxford, Ohio 45056
513/524-5205

Customer Name _____ **Telephone #** _____

Address _____

New **Rebuild** **Replacement** **Annual Test** **Sprinkler Meter**

Note – New and rebuilt devices with test ports require testing by a State of Ohio Certified Technician

Received $_____ **Date**_____ **Signature**_____

Bottom portions should be filled out by a Certified Technician

BACKFLOW PREVENTER INFORMATION

Size _____ **Make**_____ **Serial #** _____

Location of Device _____ **Address of Device** _____

Date Installed _____

Test Information
***Note: This information needs to be completed and returned to the Utilities Inspector, c/o Inspections Department, city of Oxford at the above address.**
1. Reduce Pressure Backflow Preventer (ASSE 1013)
2. Double Check Valve Assembly (ASSE 1015)
(Use Check Valve No. 1 and Check Valve No. 2 Tests Only)

DIFFERENTIAL PRESSURE

	Check Valve #1	Check Valve #2	Relief Valve
Test Before Repair	**Leaked** **Closed Tight**	**Leaked** **Closed Tight**	**Opened at _____ psi** **Reduced Pressure**
Describe Repair			
Materials Used			
Final Test	**Closed Tight**	**Closed Tight**	**Opened at _____ psi** **Reduced Pressure**

By_____ _____ _____
Certified Tester Name (Print) **Signature** **Date**

_____ _____
Plumbing Company (Print) **Certified Tester Number**

White – Original Canary – Customer Pink – Technician Goldenrod - Inspector

Exhibit 5: Second Notice to Install Backflow Preventer

CITY OF OXFORD
HOME OF MIAMI UNIVERSITY

«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

Re: Second Notice New Installation of Backflow Prevention Assembly

Dear «Mail_Greeting »,

We have not as yet received a reply to our above-referenced notification to you. This is our second letter in this regard. Backflow prevention assemblies within the City of Oxford are required to be tested on a regular basis.

Our records indicate that we have not received the test reports on the following backflow prevention assembly:

«ServiceAddress »

In order for backflow prevention assemblies to continue to operate efficiently they must be tested and serviced when required. As well, in order to comply with the enabling legislation the listed backflow prevention assemblies must be tested annually by a certified and licensed tester. Accordingly, you are required to have the listed assemblies tested and a completed inspection report returned to our office.

This letter is to give you notice that the requested tests must be completed and the necessary inspection forms returned to this office within 15 days of the date of this letter or the water service to the subject premises may be discontinued without further notice.

If you have any questions, do feel free to contact the Cross Connection Control Supervisor at the above address or you may phone **«Org_Phone »**.

Sincerely,

«Org_Signature »

Exhibit 6: Final Notice to Install Backflow Preventer

CITY OF OXFORD
HOME OF MIAMI UNIVERSITY

«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

Re: FINAL NOTICE New Installation of Backflow Prevention Assembly

Dear «Mail_Greeting »,

We have not yet received a reply to our notifications to you. This is our third letter in this regard.

You are hereby notified that in accordance with the enabling legislation and departmental regulations the water supply to your premises located at:

«ServiceAddress »

will be discontinued **«[Current Letter]Response Days»** days from the date of this letter and it shall remain discontinued until you have complied with the letters of this office.

This action is required by enabling legislation: Ordinance 2373 and departmental regulations.

If you have any questions, feel free to contact the Cross Connection Control Supervisor at the above address or you may phone **«Org_Phone »**.

Sincerely,

«Org_Signature »

Exhibit 7: First Notice to Test Existing Backflow Prevention Device

CITY OF OXFORD
HOME OF MIAMI UNIVERSITY

«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate »
First Notice to Test

«Mailing_Address »

Re: Backflow Prevention Assembly Test Report Due

Dear «Mail_Greeting »:

The City of Oxford Ordinance 2373, requires annual testing of backflow prevention devices to ensure their ability to prevent a backflow incident. This testing and certification must be performed by a State of Ohio certified backflow prevention technician and requires the appropriate City of Oxford permit. Permits are obtainable at the Municipal Building at 101 East High Street for a charge of $25.00 for each permit/device (effective 1/8/05). All costs involved with this procedure are the responsibility of the property owner/manager.

Our records indicate that the backflow prevention device(s) at the above address is due for annual testing. City Ordinance requires you to arrange for the inspection, test, and re-certification of your backflow device at the aforementioned service address. A copy of the re-certification document should be forwarded to the Inspections office by «ResponseDueDate ».

Thank you for your continued commitment to our water system. If you have any questions, please call (513) 524-0203.

Sincerely,

«Org_Signature »

Assemblies Due to be Tested:

«FacAssembList »

Exhibit 8: Second Notice to Test Existing Backflow Prevention Device

CITY OF OXFORD
HOME OF MIAMI UNIVERSITY

«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»

«Mailing_Address »

RE: Second Notice to Test Existing Backlow Prevention Device

Dear «Mail_Greeting »:

We previously mailed you a notice that it is time to have your backflow prevention device(s) tested. It is required that a State of Ohio certified backflow prevention technician examine, test and re-certify your backflow device(s). An appropriate City of Oxford permit is required for this work. Permits are obtainable at the Municipal Building at 101 East High Street. The current cost for each permit it $25.00 (effective 1/8/05).

This certification must be returned to the City of Oxford Inspections Office. You are required to take immediate action on this matter in order to avoid a discontinuation of water service within the next 30 days.

Your attention to this matter would be appreciated. If you have any questions, please call (513) 524-0203.

Sincerely,

«Org_Signature »

Over Due Assemblies:

«FacAssembList »

Exhibit 9: Final Notice to Test Existing Prevention Device

CITY OF OXFORD
HOME OF MIAMI UNIVERSITY

«LetterSentDate :Month Day, Year:Internal date long»

TEST FORM DUE
NO LATER THAN: «ResponseDueDate :Month Day, Year:Internal date long»
Final Notice to Test

VIA CERTIFIED MAIL/RETURN RECEIPT REQUESTED

«Mailing_Address »

RE: FINAL NOTICE - Non compliance with this notification will subject service address to water service disconnect without further notice.

Dear «Mail_Greeting »:

On two previous occasions, you were mailed requests to initiate action to have your backflow prevention device(s) tested. It is required that a State of Ohio certified backflow prevention technician examine, test and re-certify your backflow device(s). An appropriate City of Oxford permit is required for this work. This permit can be obtained at the City of Oxford Municipal Building in the Inspections office.

Our records indicate that there has been no response from you on this matter. In order to ensure uninterrupted water service for this property, it is required that you arrange for re-certification of the existing device(s) no later than 10 days from receipt of this letter.

If we can be of further assistance to meet this requirement, please call (513) 524-0203.

Sincerely,

«Org_Signature »

Over Due Assemblies:
«FacAssembList »

NOTES

NOTES

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Service Department
PREPARED BY:	Michael Dreisbach
DATE PREPARED:	January 19, 2022
COUNCIL MEETING DATE:	February 1, 2022
AGENDA TITLE:	Ordinance Approving Water Utility Service Outside the Corporate Limits of Oxford – Parcel No. H3610027000014
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	N/A
RECOMMENDATION:	Approve
CITY MANAGER/DEPT HEAD APPROVAL:	DRE 1-27-28 MBD 1/19/22

Discussion: Staff received a request from Thad and Renee Van Winkle to connect to and/or extend the City water utility to serve a single family residence on a 10 acre parcel on Bonham Road north of the City's corporation limit. The request for service includes a maximum of one domestic water tap. The City's water utility serves this area, and the proposed demand will not have a noticeable effect on the City's utilities for reliability, acceptable flow, pressure and volume.

In reviewing the request, staff considered the following issues: 1) Extension Policy; 2) Location; 3) Owner's Obligation.

Extension Policy – Any extension of utility lines or service outside the City limits is reserved to the exclusive control and jurisdiction of City Council. The City may grant such a request provided the City has a supply of surplus capacity sufficient to grant the request and that such a request be beneficial and in the interest of the City. City Council amended the policy for extension of water service outside the corporate limits in December 2013. This policy permits the extension of water and sewer utilities with the condition of the owner signing an annexation agreement with the City.

Location – Connections to the City's utilities shall be conditional upon final approval by the Service Department assuring that all technical aspects of the services meet City standards and specifications.

Owner's Obligation – The owner must pay for the total cost of any required utility extensions, all necessary water taps, water capacity benefit charges, and any surcharges for the use of the City utilities outside the corporate limits. The owner must also meet City of Oxford standards for utility construction and sign an Annexation Agreement with the City.

ORDINANCE NO.

AN ORDINANCE GRANTING THE REQUEST OF THAD AND RENEE VAN WINKLE, TO CONNECT TO AN EXISTING CITY WATER LINE FOR A NEW SINGLE-FAMILY RESIDENCE TO BE LOCATED ON A 10 ACRE PARCEL ON BONHAM ROAD OUTSIDE THE OXFORD CORPORATE LIMITS.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF OXFORD, BUTLER COUNTY, STATE OF OHIO, THAT:

SECTION 1: Thad and Renee Van Winkle have requested connection to water services for the property located on Bonham Road more particularly described in Exhibit "A" attached hereto.

SECTION 2: Council has determined that the City has surplus water and that the grant of this request will not be detrimental to the City's water supply or its residents. Further the granting of such request will be beneficial to the City and is in the best interest of the City.

SECTION 3: The applicant shall pay for the total cost of the connections, all necessary water taps, water capacity benefit charges, and any surcharges for the use of the City utilities outside the corporate limits. The owner shall also meet the Oxford standards for utility construction.

SECTION 4: The costs associated with any necessary permits and the acquisition of any easements shall be the sole responsibility of the applicant.

SECTION 5: No additional water taps into this water line shall be allowed without prior approval of Council.

SECTION 6: This grant is further conditioned upon the applicants, Thad and Renee Van Winkle, signing a water service agreement requiring the owners, successors and assigns, to annex the property into the City of Oxford at the City's sole request.

SECTION 7: This Ordinance shall take effect at the earliest time allowed by law.

MAYOR

ADOPTED:

ATTEST:

CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW(STAFF)

EXHIBIT 'A'

Profile
Transfers
Board of Revision
Residential
Manufactured Homes
Commercial
Out Buildings
Permits
Land
Photos
Tax Distribution
Tax Detail 2021
Tax Detail 2020
Tax Detail 2019
Tax Detail 2018
Tax Detail 2017
Tax Detail 2016
Tax Detail 2015
Tax Detail 2014
Tax Detail 2013
Tax Detail 2012
Tax Detail 2011
Sketch
Value History
Maps
Special Assessments

PARID: H3610027000014
VANWINKLE THAD & RENEE BONHAM RD

Parcel

Parcel Id	H3610027000014
Address	BONHAM RD
Building/Unit #	
Class	AGRICULTURAL
Land Use Code**	100 A - AGRICULTURAL VACANT LAND
Neighborhood	00001013
Total Acres	10.4580
Taxing District	H36
District Name	OXFORD TWP-TALAWANDA CSD-D L
Gross Tax Rate	79.07
Effective Tax Rate	43.519354
Non Business Credit	.092057
Owner Occupied Credit	N/A

****Land Use Code is for Auditor assessment purposes only. It is not a true representation of legal zoning designation. For more information on zoning and legal property usage, please contact the local zoning department.**

Dwelling

Stories	
Gross Living Area	
Construction	
Total Rooms	
Bedrooms	
Year Built	
Finished Basement	

Current Value

Land (100%)		$115,660
Building (100%)		$0
Total Value (100%)		$115,660
CAUV		$0
Assessed Tax Year	2021	
Land (35%)		$40,480
Building (35%)		$0
Assessed Total (35%)		$40,480

Incentive District Parcels What is this?

Parcel identifier	Value Type	value
H3610027000014	Base Parcel	115,660
	Total Value	115,660

Homestead Credits How do I qualify?

Homestead Exemption	NO
Owner Occupied Credit	NO
100% Disabled Veteran Exemption	NO

CAUV & Agricultural District What is this?

CAUV	NO
Agricultural District	NO

Owner and Legal *Future ?*

Owner 1	VANWINKLE THAD &

1 of 1
Return to Search Results

Actions
Printable Summary
Printable Version

Reports
Mailing List Export
Csv/Buffer Export
Property Report Card
Go

Links
$ Pay My Tax Bill
Tax Code Definitions
Special Assessment Project Codes
Pending Specials
Land Use/Land Type/Sketch Code
Commercial Structure Codes
Tax Calculator

Owner 2	RENEE
Legal 1	1 5 24 N CTR PT OF NW 1/4
Legal 2	
Legal 3	
Future	

Taxbill Mailing Address Can I change my mailing address?

Mailing Name 1	THAD & RENEE VANWINKLE
Mailing Name 2	
Address 1	15198 WASHINGTON AVE
Address 2	
Address 3	BAINBRIDGE ISLAND WA 98110

Transfers *(Date represents time of transfer)*

Date	Sale Amount
12-AUG-20	$165,000
27-DEC-13	$157,625

Butler County Auditor
130 High Street
Hamilton, OH 45011
Map Location

Board of Commissioners

Office Hours
8 AM-4:30 PM Mo

Conveyance Desk
closes daily at 3:3

Phone: 513-887-3

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Property Layout

NOTE:
This drawing is intended to be an accurate approximation (per 3701-29-10 Paragraph (C) Section 9c) of the noted site at the time of plan development. It is intended solely to aid in acquisition of a permit for septic system installation. It is NOT intended for use legally as representation in place of a binding document or survey of the property. The proposed system has been designed to meet the rules and limitations implemented by 3701-29. The designer is not to be held responsible for any reason due to system expectations not being met. The information presented in this design is the property of Smallwood Septic & Excavating and will not be used without expressed written consent stating as such.

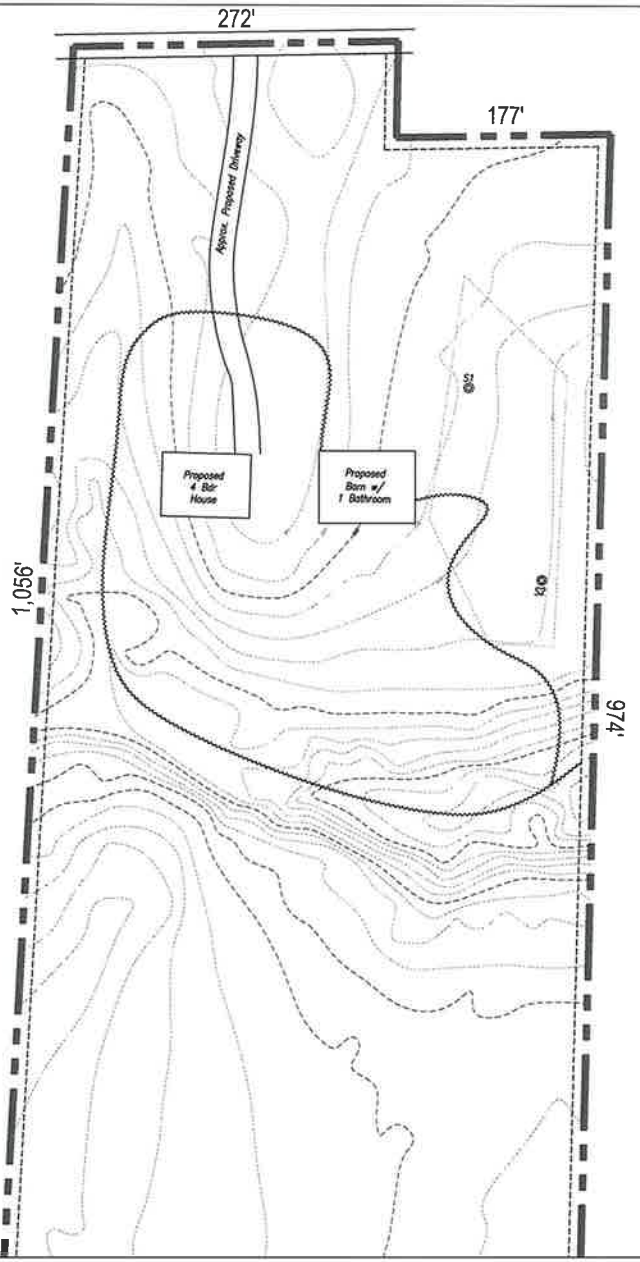
Legend

- Soil Sample Site
- Property Line
- 10 ft Contours
- 2 ft Contours

0 50 100

ORIGINAL SCALE: 1" = 100'

Contours shown are from County Auditor's website or previous plot plans and may deviate from current conditions. Installer should verify field conditions in order to install system per guidelines in this design and per ODH specifications.



Tad Van Winkle - (206) 949-4767
Bonham Road. Oxford, Ohio 45056
Oxford Township, Butler County
Parcel # H3610027000014, 10.4580 Acres
Proposed 5 Bedroom House. Public Water Supply

Scale: As Noted

Drawn By: SSD

Date: 11/01/2021

Drawing Number: 1 of 5


BONHAM RD
COULTER RD
HILLCREST DR
Oxford
Oxford

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Finance
PREPARED BY:	Joe Newlin
DATE PREPARED:	1/25/2022
COUNCIL MEETING DATE:	2/1/2022
AGENDA TITLE:	Supplemental Budget Ordinance
BUDGETED AMOUNT:	
ACCOUNT CODE:	
RECOMMENDATION:	Approval
CITY MANAGER/DEPT HEAD APPROVAL:	DRE 1/26/22 1/25/22

DISCUSSION:

Issue 1
To make adjustment to budget revenue for the receipt of funds from the Body Worn Camera Grant Funds

Action Needed:

Revenue Side

General Fund (110) 31,451.38

Expense Side

Net Effect on Fund Balance/(s) Increase/(Decrease) 31,451.38

City of

OHIO

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

Total Net Effect on Fund Balance/(s) Increase/(Decrease)	31,451.38
Breakdown by Fund	
General Fund (110)	31,451.38
Net Effect on Fund Balance/(s) Increase/(Decrease)	31,451.38

ORDINANCE NO

AN ORDINANCE AMENDING ORDINANCE NO. 3654 SUPPLEMENTAL BUDGET ORDINANCE NUMBER 2 TO MAKE SUPPLEMENTAL APPROPRIATIONS FOR FISCAL YEAR 2022.

WHEREAS, additional appropriations are needed for the current fiscal year and monies are available for appropriation in those funds, and changes to estimated revenues.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY ORDAINS THAT:

SECTION 1: Additional appropriations are needed for the current fiscal year and monies are available for appropriation in those funds, and changes to estimated revenues;

SECTION 2 The following increase/(decrease)in revenues be made:

General Fund 110	31,451.38

SECTION 3 In all other respects, Ordinance No. 3654 shall remain in full force and effect.

SECTION 4 This ordinance shall take effect immediately upon its adoption.

MAYOR

ADOPTED:

ATTEST:

CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Service Department
PREPARED BY:	Michael Dreisbach
DATE PREPARED:	January 6, 2022
COUNCIL MEETING DATE:	**January 18, 2022**
AGENDA TITLE:	Ordinance Accepting A Public Sidewalk Easement from Prestige Oxfordwide, LLC
BUDGETED AMOUNT:	N/A
ACCOUNT CODE:	N/A
RECOMMENDATION:	Approve
CITY MANAGER/DEPT HEAD APPROVAL:	DRE 1-11-22 MBD 1/7/22

Discussion:

Prestige Oxfordwide, LLC is redeveloping the site at 135 Lynn Avenue (previously utilized for a Pizza Hut restaurant), and will be installing a 5' wide sidewalk to parallel Lynn Ave. As there previously was no sidewalk on this parcel, a public access easement is required by the City for construction.

Staff recommends the City Council authorize the City Manager to accept the Public Sidewalk Easement and take all steps necessary to have such recorded with the Butler County Recorder.

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ENTER INTO AN EASEMENT AGREEMENT AS SET FORTH IN EXHIBIT "A" ATTACHED HERETO WITH PRESTIGE OXFORDWIDE, LLC. AND ACCEPTING SAID EASEMENT AS SET FORTH ON EXHIBITS "B" AND "C" ATTACHED HERETO TO ALLOW THE CONSTRUCTION OF A OF A PUBLIC SIDEWALK.

WHEREAS, Prestige Oxfordwide, LLC. is redeveloping the site at 135 Lynn Avenue (previously utilized for a Pizza Hut restaurant), an easement is required for construction of 5' wide sidewalk to parallel Lynne Avenue; and

WHEREAS, the City Manager and the Service Director recommend City Council authorize the City Manager to enter into an easement agreement with Prestige Oxfordwide, LLC. as set forth in Exhibit "A" attached hereto and accept said easement as set forth on Exhibits "B" and "C" attached hereto for the purpose of constructing a public sidewalk.

THE COUNCIL OF THE CITY OF OXFORD, OHIO, HEREBY ORDAINS THAT:

SECTION 1: City Council accepts the recommendation of the City Manager and the Service Director and hereby authorizes the City Manager to enter into an easement agreement with the Prestige Oxfordwide, LLC. as set forth in Exhibit "A" attached hereto and further accepts said easement as set forth on Exhibits "B" and "C" attached hereto for the purpose of constructing a public sidewalk.

SECTION 2: This Ordinance shall take effect at the earliest time allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
CLERK OF OXFORD CITY COUNCIL

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

After recording return to:
Timothy Lynch, Esq.
Hemmer DeFrank Wessels PLLC
250 Grandview Drive, Suite 500
Fort Mitchell, KY 41017

Parcel No.: H4100016000070

Address: 135 Lynne Avenue, Oxford, Ohio 45056

PUBLIC SIDEWALK EASEMENT

This Public Sidewalk Easement (Agreement") is made effective as of _____ ____, 2021, by Prestige Oxfordwide, LLC, an Ohio limited liability company ("Grantor"), having a notice mailing address of 135 Lynn Avenue, Oxford, Ohio 45056, to and for the benefit of The City of Oxford, Ohio, a municipal corporation ("Grantee"), having a notice mailing address of 15 South College Avenue, Oxford, Ohio 45056.

WHEREAS, Grantor is the fee simple owner of that certain real property being Parcel No. H4100016000070 located at 135 Lynn Avenue, Oxford, Ohio 45056, as more particularly described in Exhibit A attached hereto and incorporated herein by reference ("Servient Parcel"); and

WHEREAS, Grantor desires to grant and convey to Grantee, its successors and assigns, an easement over, in, upon and through that portion of the Servient Parcel as more particularly by the legal description in Exhibit B, and more particularly described as the "Sidewalk Easement Area" on the plat drawing in Exhibit C, both attached hereto and incorporated herein by reference; and

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor, intending to be legally bound, does hereby act and agree as follows:

1. Grantor hereby grants and conveys to Grantee, its successors and assigns, a perpetual non-exclusive easement over, in, upon, and through that portion of the Servient Parcel more particularly described in the legal description in Exhibit B, and more particularly described as the "Sidewalk Easement Area" in the plat drawing in Exhibit C for the use of a public sidewalk to be constructed therein ("Improvements"), together with the right of the general public to use said Improvements for access and pedestrian travel.

2. Grantor hereby grants and conveys to Grantee the right of ingress and egress to and from the Sidewalk Easement Area and the Improvements at such times and at such places as may reasonably be necessary for the Grantee's exercise of its rights set forth herein.

3. No structures shall be constructed, erected, or placed upon the surface of the Sidewalk Easement Area that will materially impair the normal operation and use of the Improvements for pedestrian access by the general public.

4. The Grantor hereby agrees that the Grantee shall have no obligation or liability to maintain or repair the Improvements. All maintenance and repair of the Improvements shall be the obligation and liability of the Grantor, and its successors and assigns.

5. All of the easements, covenants, agreements, and conditions set forth in this Agreement shall be construed as covenants running with the land, binding upon, and inuring to the benefit of and enforceable by the parties hereto and their respective successors and assigns. This Agreement shall be interpreted under the domestic laws of the State of Ohio. Grantor, at its expense, shall record this Agreement in the public real estate records of the Butler County Recorder.

GRANTOR:

PRESTIGE OXFORDWIDE, LLC
An Ohio limited liability company

By: _____
Bryan Hornfeck – Sole Member

State of Ohio)
County of Butler)

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by Bryan Hornfeck, the Sole Member of Prestige Oxfordwide, LLC, an Ohio limited liability company, on behalf of the limited liability company.

_____
Notary Public
My commission expires: _____

:

Timothy Lynch, Esq.
Hemmer DeFrank Wessels PLLC
250 Grandview Drive, Suite 200
Fort Mitchell, Kentucky 41017

EXHIBIT A

LEGAL DESCRIPTION OF SERVIENT PARCEL

Situate in the City of Oxford, Butler County, Ohio and being all of Lot Number 2592 of the Replat of Lots 2181 and 2182 of Williamsburg Square Subdivision, as the same appears of record in Plat Envelope 1671, Page A of the Butler County, Ohio Recorder's Office.

Being the same property conveyed to Grantor herein from Lenore O. Stulbarg Family Limited Partnership by deed dated June 9, 2021, and in O.R. Book 9675, Page 429 of the Butler County Ohio Recorder's office.

: H4100016000070

: 135 Lynne Avenue, Oxford, Ohio 45056

EXHIBIT B

~~EXHIBIT A~~

GRANT OF EASEMENT
PT. LOT# 2592
CITY OF OXFORD, BUTLER COUNTY, OHIO
CONTAINING 0.017 ACRES
DECEMBER 30, 2021

Situate in Section 22, Town 5, Range 1, City of Oxford, County of Butler, State of Ohio, being part of Lot 2592 of the Replat of Lots 2181 and 2182 of Williamsburg Square Subdivision, Plat Envelope 1671, Page A, conveyed to Prestige Oxfordwide LLC, as recorded in Official Record Book 9675 Page 429, hereinafter referred to as "Grantor's Property", and more particularly bounded and described as follows (all references to deeds, microfiche, plats, surveys, etc. refer to the records of the Butler County Recorder's Office, unless noted otherwise):

Easement shall be a strip of land 5 feet in width off the Grantor's west property line along the right of way of Lynn Avenue and described as follows:
Beginning at the northwest corner of the Grantor's Property and in the east right-of-way line of Lynn Avenue;

thence along the north line of the Grantor's Property, South eighty-seven degrees thirty-four minutes six seconds East (S87°34'06"E) for five and 00/100 feet (5.00') to a point;

thence leaving said north line and across Grantor's Property, South three degrees thirty-three minutes fifty-four seconds West (S03°33'54"W) for one hundred forty-five and 03/100 feet (145.03') to a point in the south line of the Grantor's property;

thence along said south line, North eighty-seven degrees thirty-four minutes six seconds West (N87°34'06"W) for five and 00/100 feet (5.00') to a point in said east right of way line of Lynn Avenue;

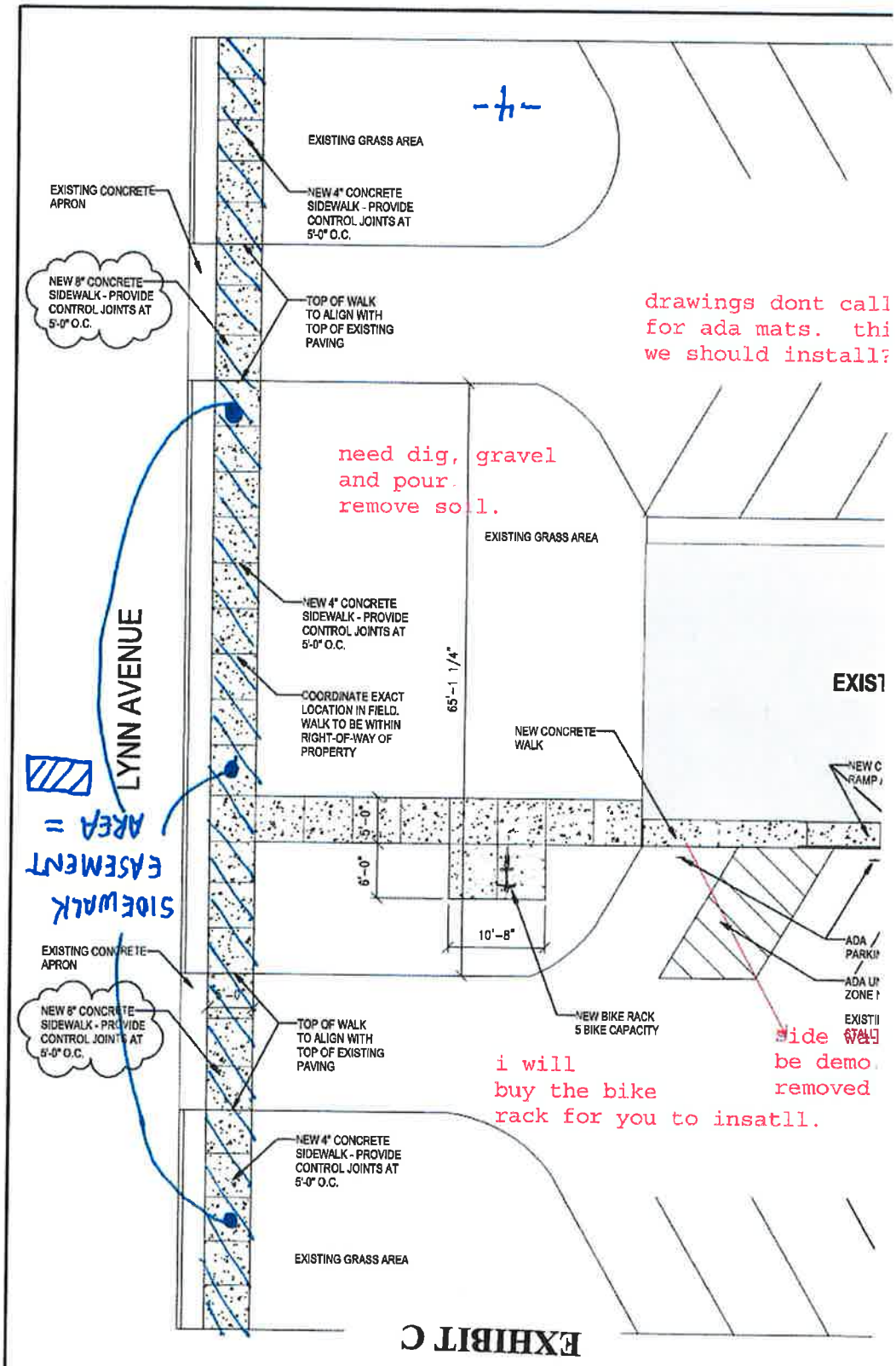
thence along said right of way line, North three degrees thirty-three minutes fifty-four seconds East (N03°33'54"E) for one hundred forty-five and 03/100 feet (145.03') to the **POINT OF BEGINNING**, containing no and 017/1000 acres (0.017 ac.) more or less.

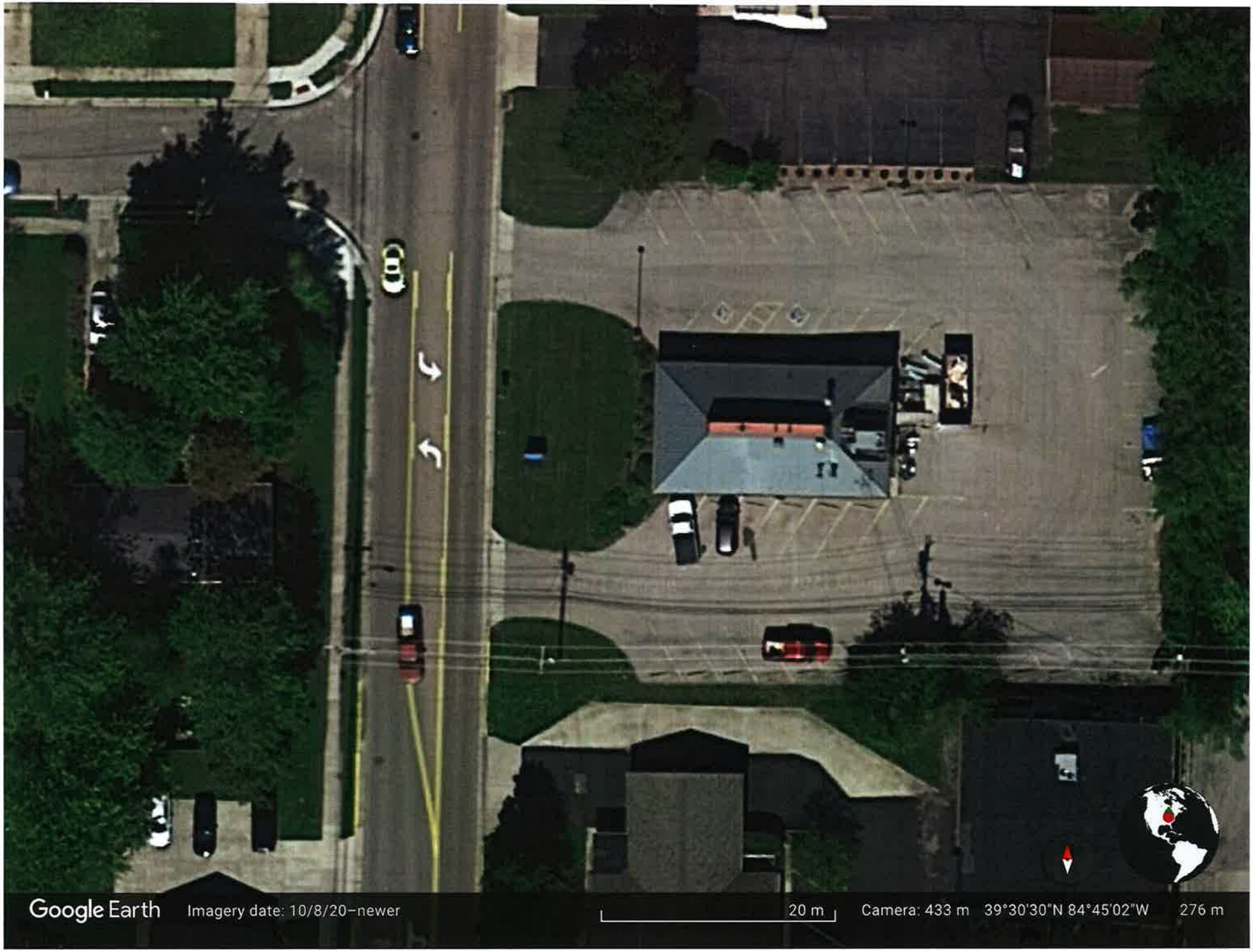
This description was prepared from record information obtained from the Butler County Record's Office in Hamilton, Ohio.

12-31-21

Eric W. Hafer, PS date
Ohio Registered Surveyor #8038




EXISTING GRASS AREA
NEW 4" CONCRETE SIDEWALK - PROVIDE CONTROL JOINTS AT 5'-0" O.C.
EXISTING CONCRETE APRON
NEW 6" CONCRETE SIDEWALK - PROVIDE CONTROL JOINTS AT 5'-0" O.C.
TOP OF WALK TO ALIGN WITH TOP OF EXISTING PAVING
drawings dont call for ada mats. thi we should install?
need dig, gravel and pour. remove soil.
EXISTING GRASS AREA
NEW 4" CONCRETE SIDEWALK - PROVIDE CONTROL JOINTS AT 5'-0" O.C.
COORDINATE EXACT LOCATION IN FIELD. WALK TO BE WITHIN RIGHT-OF-WAY OF PROPERTY
65'-1 1/4"
NEW CONCRETE WALK
LYNN AVENUE
AREA = SIDEWALK EASEMENT
6'-0"
10'-8"
EXISTING CONCRETE APRON
NEW 6" CONCRETE SIDEWALK - PROVIDE CONTROL JOINTS AT 5'-0" O.C.
TOP OF WALK TO ALIGN WITH TOP OF EXISTING PAVING
NEW BIKE RACK 5 BIKE CAPACITY
i will buy the bike rack for you to insatll.
side wal be demo removed
NEW 4" CONCRETE SIDEWALK - PROVIDE CONTROL JOINTS AT 5'-0" O.C.
EXISTING GRASS AREA
EXHIBIT C


Google Earth
Imagery date: 10/8/20–newer
20 m
Camera: 433 m 39°30'30"N 84°45'02"W 276 m

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Community Development
PREPARED BY:	Sam Perry
DATE PREPARED:	January 11, 2022
COUNCIL MEETING DATE:	January 18, 2022
AGENDA TITLE:	Release of Roadway and Utility Easement – University Park Boulevard – Talawanda School Board – Talawanda High School
CITY MANAGER/DEPT HEAD APPROVAL:	Sam Perry DRE 1-11-22

The Talawanda School Board is in the process of identifying a new home for its buses. The proposed location is at the High School property on University Park Boulevard. The proposed bus storage location on the High School campus conflicts with a roadway easement obtained by the City in 2014. City staff and Talawanda staff have been working on a potential solution that would maintain the public interest for long-range transportation plans as well as the current needs of the District. The joint request is to modify the easement location from an east-west orientation to a north-south orientation. The Parking and Transportation Advisory Board (OPTAB) met on December 13, 2021 to review the potential change. OPTAB recommended that City Council grant the request to vacate the current easement and accept the new easement. OPTAB found that the proposed alignment aligns more closely with long-range transportation plans than the current alignment does. Therefore, the change does not require a modification of the 2007 Thoroughfare Plan. Talawanda Board and staff also prefer the proposed alignment because it provides greater physical separation of a potential future roadway from current student activities.

Oxford Charter 2.11(3), Powers of Council, and Oxford Code 1101.404 (Streets) provide support for City Council to maintain and plan for future transportation connectivity.

The Law Director staff reviewed, researched and prepared the documents.

At this time, there is no schedule or funding for a new roadway within the area of either easement location. Staff recommends that Council adopt the easement release ordinance.

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ENTER INTO AN ADDENDUM AGREEMENT WITH THE BOARD OF EDUCATION OF THE TALAWANDA SCHOOL DISTRICT FOR THE PURPOSE OF RELEASING AND TERMINATING A PERMANENT ROADWAY AND UTILITY EASEMENT AND TEMPORARY CONSTRUCTION EASEMENT, SITUATED IN PART OF LOT #3772.

WHEREAS, the Board of Education of the Talawanda School District (the "District") owns real property located at 5301 University Park Blvd, Oxford, Ohio 45056 and situated in Part of Lot #3772; and

WHEREAS, in February 2014, the District and the City entered into an agreement ("Easement Agreement") whereby the District granted a permanent roadway and utility easement and temporary construction easement in Part of Lot #3772 to the City of Oxford (the "Old Easement" attached hereto as Exhibit A); and

WHEREAS, The Easement Agreement also included two unrelated easements know as Easement for Lot #2665 and Easement for Part of Lot #2821. These easements shall not be released and are intended to remain of record.

WHEREAS, the District wishes to construct a bus and maintenance garage and the Easement is located within the desired location of such garage. The District has asked the City of Oxford to release and terminate the Old Easement so that it may move forward with constructing the bus and maintenance garage; and

WHEREAS, the City of Oxford agrees to release and terminate the Old Easement so that the District may construct the bus and maintenance garage because it is in the best interest of the citizens of Oxford and the citizens of the Talawanda School District; and

WHEREAS, the District and the City of Oxford wish to enter into an Addendum to the Easement Agreement for the purpose of releasing and terminating the Old Easement (the "Addendum to the Easement Agreement", is attached hereto as Exhibit B); and

WHEREAS, the City Manager recommends the City Council of the City of Oxford ("Council") authorize him to enter into the Addendum with the District releasing the Old Easement.

NOW THEREFORE, THE COUNCIL OF THE CITY OF OXFORD HEREBY ORDAINS THAT:

Section 1: Council has reviewed the Easement Agreement and the Addendum and finds the same to be acceptable in form and finds it is in the best interest of the citizens of Oxford and the Talawanda School District.

Section 2: The City Manager is authorized to execute the attached Addendum and such other documents as may be required in order to release the Easement in Part of Lot #3772.

Section 3. The Clerk of Council shall cause this release to be officially recorded at the Butler County Recorder's Office.

Section 4. This ordinance shall take effect at the earliest time allowed by law.

_____
MAYOR

ADOPTED:

ATTEST:

_____
Clerk of Oxford City Council

INTRODUCED BY: WILLIAM SNAVELY

PREPARED BY: LAW (STAFF)

ADDENDUM TO FEBRUARY 21, 2014 EASEMENT AGREEMENT

This Addendum is hereby entered into this ___ day of _____, 2022 by and between the City of Oxford, Ohio, a municipal corporation (the "City") and the Board of Education of the Talawanda City School District (the "District"), collectively referred to herein as the "Parties".

WHEREAS, the City and District are Parties to an Agreement entered into as of February 21, 2014 recorded in the Official Records of Butler County, Ohio at Official Record 8690, Page 461 (the "Original Agreement"); and

WHEREAS, the Agreement is an exhibit to a Permanent Roadway and Utility Easement and Temporary Construction Easement recorded in the Official Records of Butler County, Ohio at Official Record 8690, Page 451 (the "Old Easement"); and

WHEREAS, the Parties wish to amend the Original Agreement to release and terminate the Old Easement and record a new permanent easement (the "New Roadway and Utility Easement") in accordance with the terms and provisions of this Addendum.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. This Addendum shall be attached as an exhibit to the Permanent Roadway and Utility Easement and Temporary Construction Easement between the Parties (the "Release of the Old Easement") and as an exhibit to a new Permanent Roadway and Utility Easement and Temporary Construction Easement between the Parties (the "New Roadway and Utility Easement"), both of which are being executed between the Parties concurrently with this Addendum. The Release of Old Easement and New Roadway and Utility Easement with exhibits shall be recorded by the District with the Butler County Recorder.

2. The Addendum modifies the Original Agreement to effectuate the release and termination of the Old Easement identified as Exhibit A attached hereto.

3. The Original Agreement shall be further modified to effectuate the New Roadway and Utility Easement attached hereto as Exhibit B.

4. The District agrees to not contest the future dedication of public right of way for the area identified in Exhibit B.

5. Provided that the City does not receive compensation for the future dedication of public right of way for the area identified in Exhibit B, the District agrees to not require compensation for the land for such future dedication of public right of way for the area identified in Exhibit B.

Witness my hand this _____ day of _____, 2022.

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Board President

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through _____, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Board President.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 2022.

_____
Notary Public

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Shaunna Tafelski, Treasurer

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through Shaunna Tafelski, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Treasurer.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 2022.

_____
Notary Public
CITY OF OXFORD, OHIO

By: _____
City Manager

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named City of Oxford, Ohio, by and through _____, who acknowledged that he/she is duly authorized to sign, and did sign, the foregoing on behalf of the City of Oxford, Ohio and that the same is the free act and deed of said City and of himself/herself as City Manager.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 2022.

_____
Notary Public

w:\wdox\client\012081\00115\01267658.docx

TRANSFER NOT NECESSARY
ROGER REYNOLDS, CPA
BY 4/30/14 (KT) DEPT.
AUDITOR, BUTLER CO., OHIO

PERMANENT ROADWAY AND UTILITY EASEMENT AND TEMPORARY CONSTRUCTION EASEMENT

BOARD OF EDUCATION OF THE TALAWANDA CITY SCHOOL DISTRICT, an Ohio public school district, located at 131 West Chestnut Street; Oxford, OH 45056 ("Grantor") for good and valuable consideration received and acknowledged, hereby grants a permanent roadway and utility easement as well a temporary easement for construction purposes to **THE CITY OF OXFORD, OHIO,** an Ohio municipal corporation, whose address is 101 E. High Street, Oxford, OH 45056 ("Grantee"), upon the following REAL PROPERTIES:

See Attached Exhibits 1, 1(A), 2, 2(A), 3, and 3(A).

The perpetual easements herein are granted to Grantee, its successors, and its assigns forever, for public roadway and road purposes and for utility purposes. The temporary construction easements herein are granted to Grantee for the purpose of performing work incidental to a road improvement project upon the real property described in Exhibits 1, 1(A), 2, 2(A), 3, and 3(A).

The perpetual easements granted herein are subject to the terms of the Agreement between the Grantor and the Grantee. See attached Exhibit D. The Grantee shall be responsible for the maintenance of the roadway when constructed.

Prior Instrument Reference: Grantor claims title through the following Instrument References from Official Records of Butler County, Ohio.

Exhibit 1 and 1(a) – Official Record 8096, Page 1515.
Exhibit 2 and 2(a) – Deed Book 1601, Page 419.
Exhibit 3 and 3(a) – Official Record 7861, Page 23.

Auditor's Permanent Parcel ID: Portions of parcels H4100134000015 and H4100132000002 and Parcel H4100132000013

* There is also another prior instrument reference for these exhibits, which is: Official Record 6978, Page 2200

Witness my hand this 29th day of April, 2014.

Image ID: 000008757778 Type: OFF
Recorded: 04/30/2014 at 03:37:07 PM
Fee Amt: $300.00 Page 1 of 36
Workflow# 0000214036-0004
Butler County, Ohio
Dan Crank COUNTY RECORDER
File# 2014-00016416
BK 8690 PG 451

EXHIBIT
tabbies
A

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Mark Butterfield, Board President

STATE OF OHIO, BUTLER COUNTY} SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through Mark Butterfield, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Board President.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this 29th day of April, 2014.

_____
Notary Public
ROBIN L. PARKER, ATTORNEY AT LAW
Notary Public, State of Ohio
My commission has no expiration date.
Section 147.03 R.C.

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Mike Davis, Treasurer

STATE OF OHIO, BUTLER COUNTY} SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through Mike Davis, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Treasurer.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this 5th day of April, 2014.

_____
Notary Public

NOTARY PUBLIC
STATE OF OHIO

STEPHEN M. MCHUGH, Attorney at Law
Notary Public, State of Ohio
My Commission has no expiration date.
Section 147.03 O. R. C.

This instrument was prepared in its unexecuted form by: Stephen M. McHugh, Coolidge Wall Co., LPA, 33 W. First Street, Suite 200, Dayton, Ohio 45402

EXHIBIT B

Date: December 6, 2013

Description: Roadway and Utility Easement
Board of Education of the
Talawanda City School District

Location: Part of Lot #3772, City of Oxford
Butler County, Ohio

Situated in part of Lot #3772 of the City of Oxford, Butler County, Ohio, and being a roadway and utility easement in part of the lands of the Board of Education of the Talawanda City School District, as recorded in Official Record 8096, Page 1518 of the Butler County Recorder's Office, and being further described as follows:

Commencing, at the northwest corner of right of way of University Boulevard being the southwest corner of Lot #3289; of Indian Trace & Arrowhead Crossing as recorded in Plat Envelope 3313, Page A of the Butler County Recorder's Office;

thence, leaving said southwest corner of Lot #3289; of Indian Trace & Arrowhead Crossing and with the west right of way of said University Boulevard, South 02° 17' 31" West, 9.01 feet to the **True Point of Beginning;** thence, continuing with said west right of way of said University Boulevard, South 02° 17' 31" West, 82.17 feet;

thence, leaving said west right of way of said University Boulevard and through said lands of the Board of Education of the Talawanda City School District for the following six courses:

1) with a curve to the right, having a central angle of 47° 30' 33", a radius of 411.00 feet, an arc length of 340.80 feet, and a chord bearing and distance of North 67° 17' 42" West, 331.12 feet;
2) North 43° 32' 26" West, 275.90 feet;
3) with a curve to the left, having a central angle of 45° 00' 00", a radius of 329.00 feet, an arc length of 258.40 feet, and a chord bearing and distance of North 66° 02' 26" West, 251.81 feet;
4) North 88° 32' 26" West, 637.24 feet;
5) with a curve to the left, having a central angle of 14° 54' 44", a radius of 329.00 feet, an arc length of 85.63 feet, and a chord bearing and distance of South 84° 00' 12" West, 85.39 feet;
6) South 76° 32' 51" West, 521.97 feet to the centerline of the CSX Railroad, being the east line of the lands of Duvall Properties, LLC, as recorded in Official Record 7362, Page 2165 of the Butler County Recorder's Office;

thence, with said centerline of the CSX Railroad and with said east of the lands of Duvall Properties, LLC, with a curve to the left, having a central angle of 01° 14' 03", a radius of 3811.23 feet, an arc length of 82.10 feet, and a chord bearing and distance of North 16° 14' 07" West, 82.10 feet to the southwest corner of Lot #2820, being the lands of Clawson Properties I, LLC, as recorded in Official Record 7577, Page 1342 of the Butler County Recorder's Office;

6900 Tylersville Road, Suite A
Mason, Ohio 45040
513-336-6600

209 Grandview Drive
Fort Mitchell, Kentucky 41017
859-261-1113

318 South College Avenue
Oxford, Ohio 45056
513-523-4270

P.O. Box, LLC 3706
Lawrenceburg, Indiana 47025
812-537-9084

Engineering – Surveying – Landscape Architecture – Planning
www.bayerbecker.com

EXHIBIT B (Page 2)

thence, leaving said centerline of the CSX Railroad and said east line of Duvall Properties, LLC and with the south line of said Lot #2820, North 76° 32' 51" East, 579.74 feet;

thence, continuing with said Lot #2820., South 88° 32' 26" East, 691.03 feet;

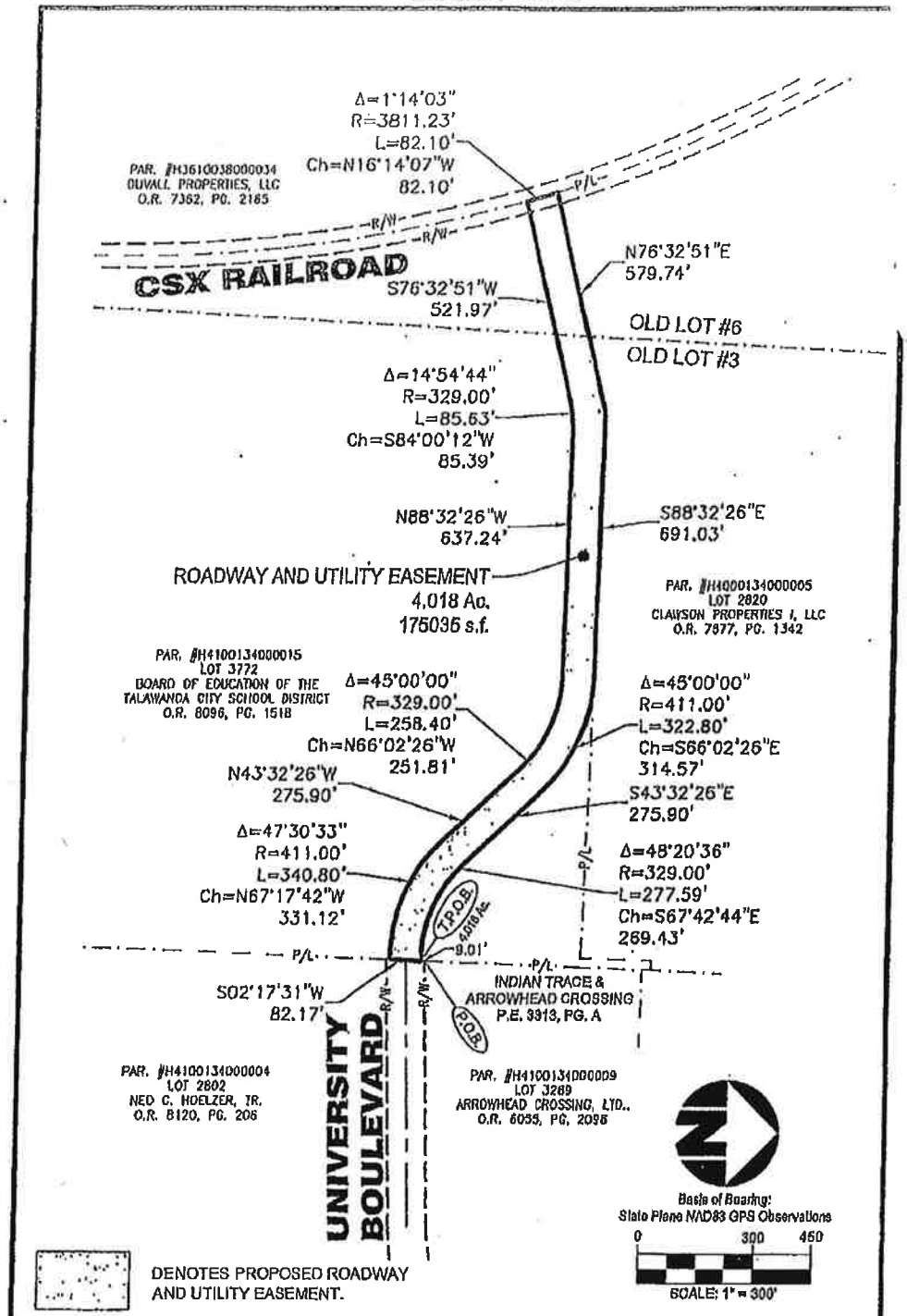
thence, leaving said Lot #2820 for the following three courses:

1) with a curve to the right, having a central angle of 45° 00' 00", a radius of 411.00 feet, an arc length of 322.80 feet, and a chord bearing and a distance of South 66° 02' 26" East, 314.57 feet;
2) South 43° 32' 26" East, 275.90 feet;
3) with a curve to the left, having a central angle of 48° 20' 36", a radius of 329.00 feet, an arc length of 277.59 feet, and a chord bearing and distance of South 67° 42' 44" East, 269.43 feet to the **True Point of Beginning**, containing 4.018 acres of land, more or less and being subject to all legal highways, easements, restrictions and agreements of record.

The above description was prepared from an Exhibit prepared by Bayer Becker, David Douglas Smith, Licensed Professional Surveyor #7121 in the State of Ohio, December 6, 2013.

BK 8690 PG 470
File# 2014-00016416
Image ID: 000008757797 Type: OFF
Page 20 of 36

EXHIBIT B (1)



NOTE: THIS EXHIBIT WAS PREPARED FROM EXISTING DEEDS AND SURVEYS OF RECORD. IT DOES NOT REPRESENT A BOUNDARY SURVEY

Drawing:	13D034-000 ES
Scale	1"=200'
Drawn by:	DDS
Checked by:	BRJ
Issue Date:	12-06-13

BOARD OF EDUCATION OF THE TALAWANDA CITY SCHOOL DISTRICT
PART OF LOT #3772
CITY OF OXFORD
BUTLER COUNTY, OHIO

ROADWAY AND UTILITY EXHIBIT

bayer becker
318 S. College Avenue
Oxford, OH 45056 - 513.523.4270

EXHIBIT D

AGREEMENT

This Agreement is hereby entered into this day of 7-21- 2014 by and between the City of Oxford, Ohio a municipal corporation (herein after referred to as "City") and the Talawanda City School District (herein after referred to as "District"), collectively referred to herein as the "Parties".

WHEREAS the Parties believe it to be in the best interest of the City and District for the old high school property to be sold to Miami University; and

WHEREAS the District has negotiated an agreement with Miami University to sell the old high school property to Miami University; and

WHEREAS, the City has a reversionary right in a portion of the old high school property; and

WHEREAS, to transfer the old high school property the reversionary right of the City must be released before the property can be sold to Miami University; and

WHEREAS, the City also seeks to preserve right of way across land owned by the District for future roadway and utility expansion; and

WHEREAS, the District has agreed to grant to the City permanent easements across three (3) parcels of land owned by the District in exchange for the City releasing its reversionary rights to a 9.37 acre parcel.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. The City has agreed to release and convey by quit claim deed its titled interest in an approximately 9.37 acre tract of land located on the old high school site, which parcel is more particularly described on Exhibit "1".

2. The District has agreed to grant three (3) permanent easements to the City on the three (3) parcels of land for permanent roadway and utility purposes.

3. The three (3) parcels herein referred to as "Parcels" on which the City shall receive a permanent roadway and utility easement are as follows:

    a) Lot 2665, located in the City and consisting of approximately 2.050 acres of land more or less, and more particularly described on Exhibit "A" and "A(1)".

    b) Part of Lot 3772, located in the City and consisting of approximately 4.018 acres more or less, and more particularly described on Exhibit "B" and "B(1)".

c) Part of Lot 2821, located in the City and consisting of approximately 3.889 acres more or less, and more particularly described on Exhibit "C" and "C(1)".

4. The City shall have the perpetual right in the future to construct or to have constructed by others, roadway and/or utilities on these parcels.

5. The roadway and utility easement granted is eighty-two (82) feet wide except as otherwise described on Exhibits A, A(1);B, B(1); and C, C(1)

   Additionally the City and or anyone acting for or with the permission of the City shall have the right to access for temporary construction purposes a 20 foot strip of land, which shall be immediately adjacent to the roadway and utility easements described herein.

6. The City shall allow the District to place gravel on a portion of the land comprising roadway and utility easements described in Exhibit A, A(1); B, B(1); and C, C(1). The District shall abandon its use of the gravel parking area upon notification of the City's intended use of all or a portion of the easement area.

7. The District agrees that no fence or other permanent structure shall be constructed on any of the easement areas. The District further agrees that by its continued use of the parcels described that it shall not acquire nor claim to have acquired in the future any right to the land described in the easements by adverse possession, abandonment or other claims.

8. The terms in the Agreement are contingent upon the purchase of the old high school site property consisting of approximately twenty-six (26) acres by Miami University on or before April 30, 2014. If the old high school site property is not sold to Miami University by said date the terms set forth herein shall be null and void.

9. The Parties agree that as a condition of the sale of the old high school site property to Miami University, this Agreement shall be recorded of record as an exhibit to the easement that shall be recorded at the time of the Miami University closing.

10. The Parties agree to split the costs of the survey, closing and recording costs of this transaction. Each party will pay their own attorney fees.

Image ID: 000008757802 Type: OFF
Page 25 of 36
File# 2014-00016416
BK 8690 PG 475

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL
DISTRICT

By: Mark J. Butterfield
Mark Butterfield, Board President

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through Mark Butterfield, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Board President.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this 21st day of February, 2014

Notaly Public

NOTARIAL SEAL STATE OF OHIO

GARY STEDRONSKY
ATTORNEY AT LAW
Notary Public, State of Ohio
My Commission Has No Expiration
Section 147.03 R.C.

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL
DISTRICT

By: Mike Davis
Mike Davis, Treasurer

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through Mike Davis, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Treasurer.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this 21st day of February, 2014.

Notary Public

NOTARIAL SEAL STATE OF OHIO

GARY STEDRONSKY
ATTORNEY AT LAW
Notary Public, State of Ohio
My Commission Has No Expiration
Section 147.03 R.C.

CITY OF OXFORD

By: _____
Douglas R. Elliott Jr., City Manager

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named City of Oxford, by and through Douglas R. Elliott Jr., who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of the City of Oxford and that the same is the free act and deed of said City and of himself as City Manager.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this 21 day of February, 2014

_____
Notary Public

LORA L. ISENHART
Notary Public, State of Ohio
My Commission Expires August 29, 2016

This instrument was prepared in its unexecuted form by:
Stephen M. McHugh, Coolidge Wall Co., LPA, 33 W. First Street, Suite 200, Dayton, Ohio 45402

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

The City of Oxford
(513) 524-5200
15 S. College Ave.
Oxford, OH 45056

STAFF REPORT

ORIGINATING DEPARTMENT:	Community Development
PREPARED BY:	Sam Perry
DATE PREPARED:	January 11, 2022
COUNCIL MEETING DATE:	January 18, 2022
AGENDA TITLE:	Acceptance of New Roadway and Utility Easement – University Park Boulevard – Talawanda School Board – Talawanda High School
CITY MANAGER/DEPT HEAD APPROVAL:	Sam Perry — DRE 1-11-22

As noted in the previous item to release the current easement, the Talawanda School Board is in the process of identifying a new home for its buses. The proposed bus storage location is at the High School property on University Park Boulevard. The proposed site on the High School campus conflicts with a roadway easement obtained by the City in 2014. The Parking and Transportation Advisory Board (OPTAB) met on December 13, 2021 to review the potential change. OPTAB recommended that City Council grant the request to vacate the current easement and accept the new easement.

Oxford Charter 2.11(3), Powers of Council, and Oxford Code 1101.404 (Streets) provide support for City Council to maintain and plan for future transportation connectivity.

The Law Director staff reviewed, researched and prepared the documents.

At this time, there is no schedule or funding for a new roadway within the area of either easement location. Staff recommends that Council adopt the easement acceptance ordinance.

ORDINANCE NO.

AN ORDINANCE AUTHORIZING THE CITY MANAGER TO ACCEPT A PERMANENT ROADWAY AND UTILITY EASEMENT AND TEMPORARY CONSTRUCTION EASEMENT, SITUATED IN LOT #3772 FROM THE BOARD OF EDUCATION OF THE TALAWANDA SCHOOL DISTRICT A PERMANENT ROADWAY.

WHEREAS, the Board of Education of the Talawanda School District (the "District") owns real property located at 5301 University Park Blvd, Oxford, Ohio 45056 and situated in Lot #3772; and

WHEREAS, the District wishes to grant a permanent roadway and utility easement and temporary construction easement in part of Lot #3772 to the City of Oxford (the "New Roadway and Utility Easement" a diagram depicting the easement area is attached hereto as Exhibit A); and

WHEREAS, the District and the City will enter into an Addendum to an Easement Agreement dated February 21, 2014 (the "Addendum", a copy of which is attached hereto as Exhibit B) granting the New Roadway and Utility Easement that will include the area in Exhibit A ; and

WHEREAS, the City Manager recommends the City Council of the City of Oxford ("Council") authorize him to accept the New Roadway and Utility Easement.

NOW THEREFORE, THE COUNCIL OF THE CITY OF OXFORD HEREBY ORDAINS THAT:

Section 1: Council has reviewed the New Roadway and Utility Easement finds the same to be acceptable in form and finds it is in the best interest of the citizens of Oxford and the Talawanda School District.

Section 2: The City Manager is authorized to execute the attached New Roadway and Utility Easement and the Addendum and such other documents as may be required in same or substantially similar form in order to create the new easement as depicted in Exhibit A.

Section 3. The Clerk of Council shall cause this easement to be officially recorded at the Butler County Recorder's Office.

Section 4. This ordinance shall take effect at the earliest time allowed by law

MAYOR

ADOPTED:
ATTEST:

Clerk of Oxford City Council

INTRODUCED BY: WILLIAM SNAVELY
PREPARED BY: LAW (STAFF)

PERMANENT ROADWAY AND UTILITY EASEMENT AND TEMPORARY CONSTRUCTION EASEMENT

BOARD OF EDUCATION OF THE TALAWANDA CITY SCHOOL DISTRICT, an Ohio public school district, located at 131 West Chestnut Street, Oxford, OH 45056 ("Grantor") for good and valuable consideration received and acknowledged, hereby grants a permanent roadway and utility easement as well as a temporary easement for construction purposes to **THE CITY OF OXFORD, OHIO**, an Ohio municipal corporation, whose address is 15 S. College Ave, Oxford, OH 45056 ("Grantee"), upon the following REAL PROPERTY:

See Attached Exhibit A.

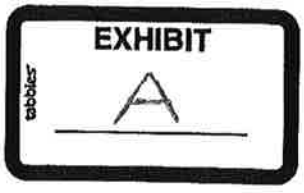
The perpetual easements herein are granted to Grantee, its successors, and its assigns forever, for public roadway and road purposes and for utility purpose. The temporary construction easements herein are granted to Grantee for the purpose of performing work incidental to a road improvement project upon the real property descried in Exhibit A.

The perpetual easements granted herein are subject to the terms of an Addendum between the Grantor and the Grantee, which is attached hereto as Exhibit B. The Grantee shall be responsible for the maintenance of the roadway when constructed.

Prior Instrument Reference: Grantor claims title through the following Instruments Referenced from Official Records of Butler County, Ohio.

Exhibit A – Official Record 8096, Page 1518, Official Record 8096, Page 1521, and Official Record 8107, Page 1766.

Auditor's Permanent Parcel ID: Parcel H4100134000015



Witness my hand this _____ day of _____, 202_.

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Board President

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through _____, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Board President.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 202_.

_____
Notary Public

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Shaunna Tafelski, Treasurer

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through Shaunna Tafelski, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Treasurer.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 202_.

_____
Notary Public

Date: December 6, 2021

Description: Lot #3772
Roadway & Utility Easement

Location: City of Oxford
Butler County, Ohio

Situated in the State of Ohio, Congress Lands West of the Miami River, Section 35, Town 5, Range 1, City of Oxford, Butler County and being a Roadway & Utility Easement in part of Lot #3772 of the designated lost of lots of the City of Oxford and being part of the lands of the Board of Education of the Talawanda City School District as recorded in Official Record 8096, Page 1518, Official Record 8096, Page 1521 & Official Record 8107, Page 1766 of the Butler County, Ohio Recorder's Office and being further described as follows:

Beginning at the northwest corner of Part of Lot #2802 of the lands of Calista Enterprises LLC as recorded in Official Record 9064, Page 1685 of the Butler County, Ohio Recorder's Office and being on the southerly right of way of University Park Boulevard and being on its westerly terminus and being the **True Point of Beginning;**

thence, leaving the northwest corner of said Part of Lot #2802 and the westerly terminus of said University Park Boulevard and through said Lot #3772 for the following two courses:

1) North 87° 42' 30" West, 100.00 feet;

2) North 02° 19' 31" East, 501.13 feet to the southerly boundary of Lot #2820 of the lands of Clawson Properties I, LLC as recorded in Official Record 7577, Page 1342 of the Butler County, Ohio Recorder's Office;

thence, with the southerly boundary of said Lot #2820, South 88° 30' 26" East, 75.68 feet to the southeast corner of said Lot #2820;

thence, leaving the southeast corner of said Lot #2820 and through said Lot #3772, South 88° 30' 26" East, 24.33 feet to westerly boundary of Lot #3289 of Indian Trace & Arrowhead Crossing as recorded in Plat Envelope 3313, Page A of the Butler County, Ohio Recorder's Office;

thence, with the westerly boundary extended of said Lot #3289 of said Indian Trace & Arrowhead Crossing and the westerly terminus of said University Park Boulevard, South 02° 19' 31" West, 502.52 feet to the **True Point of Beginning.**

The above description was prepared from an easement exhibit prepared by Bayer Becker, Brian R. Johnson, Professional Surveyor #8484 in the State of Ohio, December 6, 2021.

6900 Tylersville Road, Suite A
Mason, OH 45040
513-336-6600

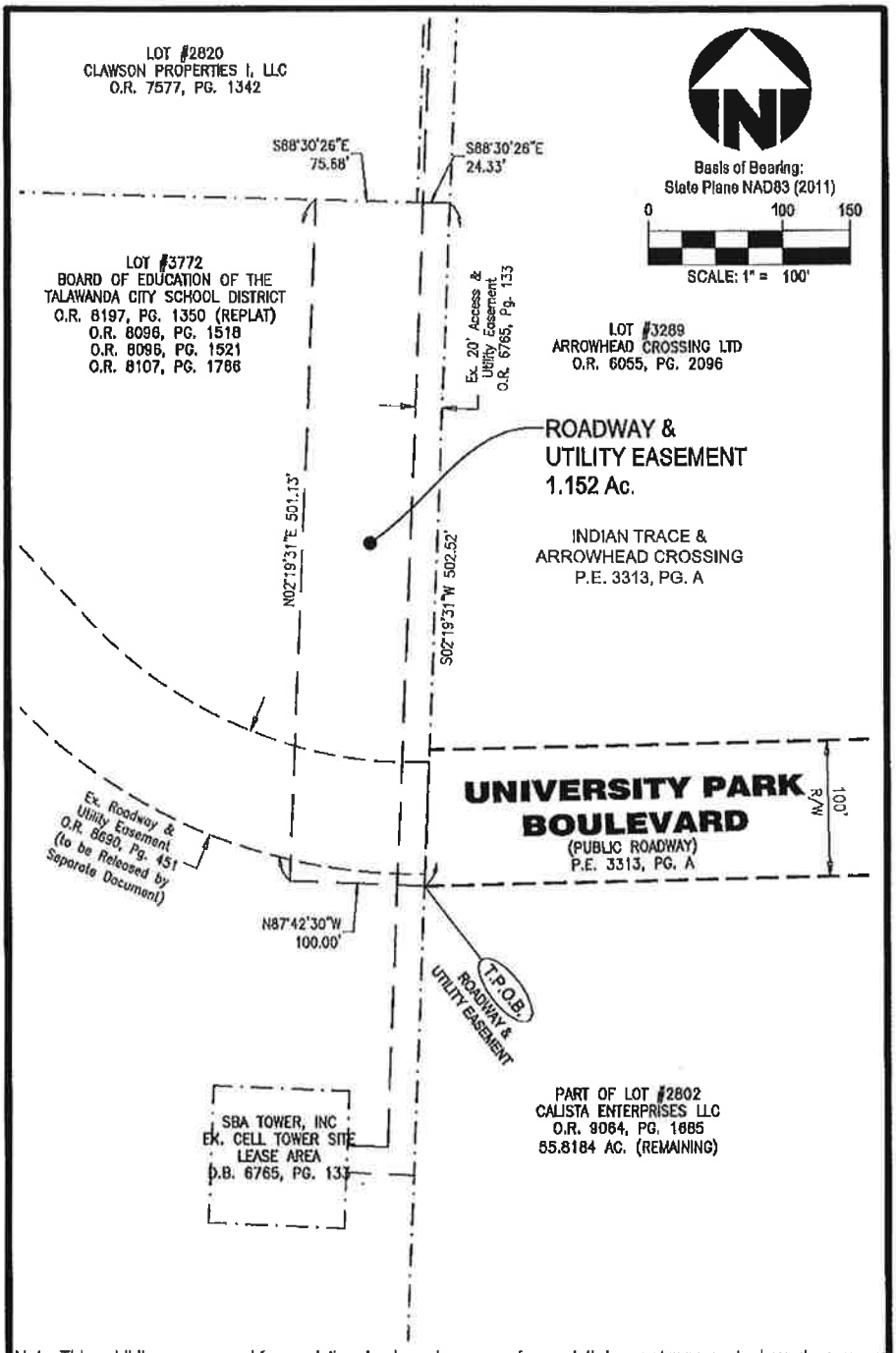
110 South College Ave, Suite 101
Oxford, OH 45056
513-523-4270

1404 Race Street, Suite 204
Cincinnati, OH 45202
513-834-6151

209 Grandview Drive
Fort Mitchell, KY 41017
859-261-1113

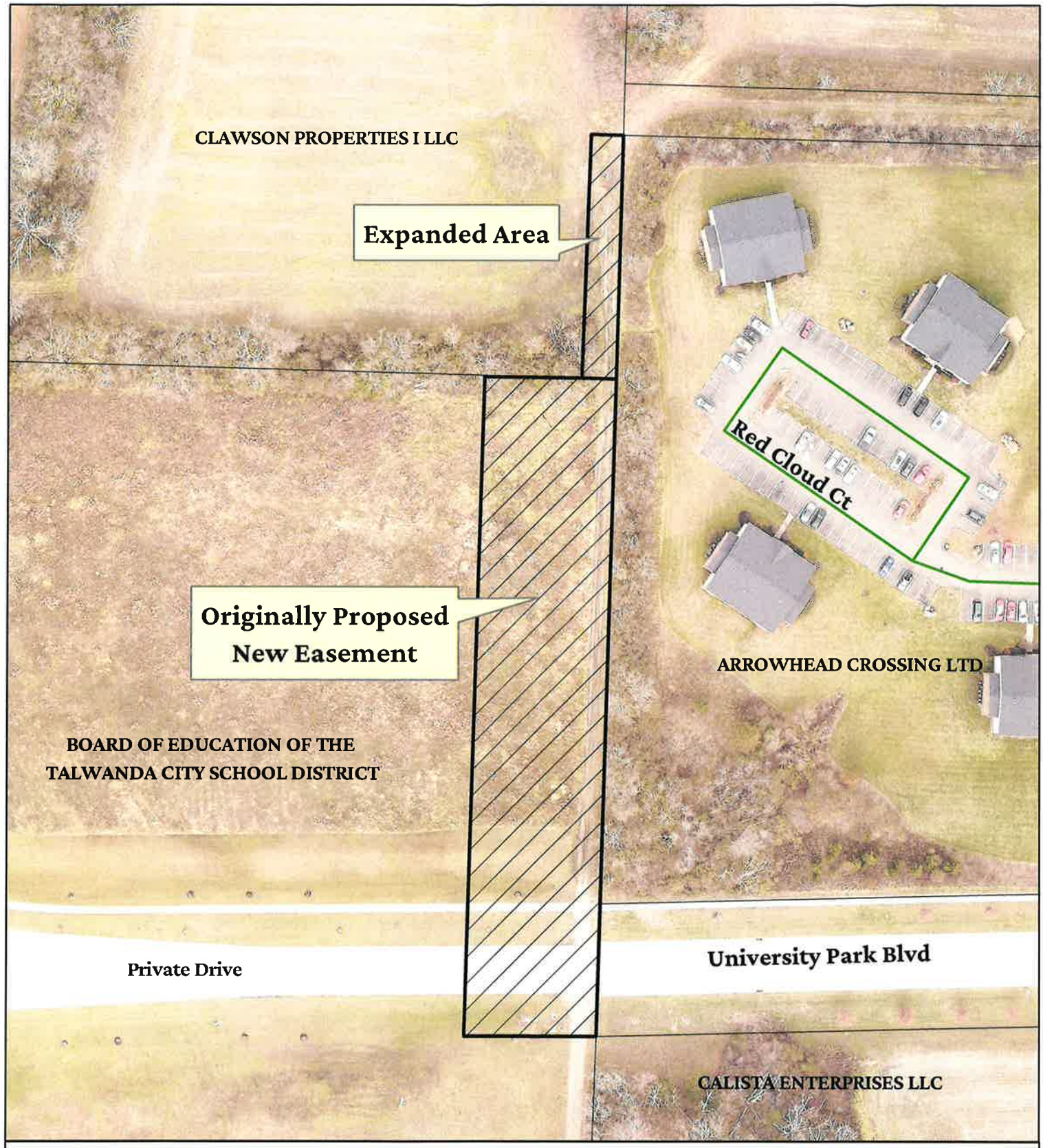
http://www.bayerbecker.com

Exhibit A



Note: This exhibit was prepared from existing deeds and surveys of record. It does not represent a boundary survey.

Drawing: 21-0202 EX	**LOT #3772**	bayer becker
Sheet: 1 of 1	**CONGRESS LANDS WEST OF THE MIAMI RIVER**	
Drawn by: PAH	**SECTION 35, TOWN 5, RANGE 1**	
Checked By: BRJ	**CITY OF OXFORD**	
Issue Date: 12-06-21	**BUTLER COUNTY, OHIO**	
	EASEMENT EXHIBIT	www.bayerbecker.com 110 S. College Avenue, Suite 101 Oxford, OH 45056 - 513.523.4270



0 50 100 200 Feet

N
W E
S

City of Oxford OHIO
HOME OF MIAMI UNIVERSITY

Roadway & Utility Easement Revision
Talawanda High School Property

Drawing Created 1-26-22

ADDENDUM TO FEBRUARY 21, 2014 EASEMENT AGREEMENT

This Addendum is hereby entered into this ___ day of _____, 2022 by and between the City of Oxford, Ohio, a municipal corporation (the "City") and the Board of Education of the Talawanda City School District (the "District"), collectively referred to herein as the "Parties".

WHEREAS, the City and District are Parties to an Agreement entered into as of February 21, 2014 recorded in the Official Records of Butler County, Ohio at Official Record 8690, Page 461 (the "Original Agreement"); and

WHEREAS, the Agreement is an exhibit to a Permanent Roadway and Utility Easement and Temporary Construction Easement recorded in the Official Records of Butler County, Ohio at Official Record 8690, Page 451 (the "Old Easement"); and

WHEREAS, the Parties wish to amend the Original Agreement to release and terminate the Old Easement and record a new permanent easement (the "New Roadway and Utility Easement") in accordance with the terms and provisions of this Addendum.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. This Addendum shall be attached as an exhibit to the Permanent Roadway and Utility Easement and Temporary Construction Easement between the Parties (the "Release of the Old Easement") and as an exhibit to a new Permanent Roadway and Utility Easement and Temporary Construction Easement between the Parties (the "New Roadway and Utility Easement"), both of which are being executed between the Parties concurrently with this Addendum. The Release of Old Easement and New Roadway and Utility Easement with exhibits shall be recorded by the District with the Butler County Recorder.

2. The Addendum modifies the Original Agreement to effectuate the release and termination of the Old Easement identified as Exhibit A attached hereto.

3. The Original Agreement shall be further modified to effectuate the New Roadway and Utility Easement attached hereto as Exhibit B.

4. The District agrees to not contest the future dedication of public right of way for the area identified in Exhibit B.

5. Provided that the City does not receive compensation for the future dedication of public right of way for the area identified in Exhibit B, the District agrees to not require compensation for the land for such future dedication of public right of way for the area identified in Exhibit B.

Witness my hand this _____ day of _____, 2022.

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Board President

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through _____, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Board President.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 2022.

_____
Notary Public

BOARD OF EDUCATION OF THE
TALAWANDA CITY SCHOOL DISTRICT

By: _____
Shaunna Tafelski, Treasurer

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named Board of Education of the Talawanda City School District, by and through Shaunna Tafelski, who acknowledged that he is duly authorized to sign, and did sign, the foregoing on behalf of Board of Education of the Talawanda City School District and that the same is the free act and deed of said school district and of himself as Treasurer.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 2022.

_____
Notary Public
CITY OF OXFORD, OHIO

By: _____
City Manager

STATE OF OHIO, BUTLER COUNTY } SS:

Before me, a notary public in and for said county and state, personally appeared the above-named City of Oxford, Ohio, by and through _____, who acknowledged that he/she is duly authorized to sign, and did sign, the foregoing on behalf of the City of Oxford, Ohio and that the same is the free act and deed of said City and of himself/herself as City Manager.

IN WITNESS WHEREOF, I have subscribed my name and affixed my notarial seal this _____ day of _____, 2022.

_____
Notary Public

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