

**WHITE LAKE TOWNSHIP
INTER-OFFICE MEMORANDUM
COMMUNITY DEVELOPMENT DEPARTMENT**

DATE: May 9, 2022

TO: Rik Kowall, Supervisor
Township Board of Trustees

FROM: Sean O'Neil, AICP
Community Development Director

**SUBJECT: Hypershine Car Wash
Preliminary site plan approval.**
Property described as parcel number 12-23-202-006 (9345 Highland Road), located on the south side of Highland Road, west of Fisk Road, consisting of approximately 4.91 acres.

The above request is now ready for Township Board Consideration. The matter was considered by the Planning Commission at their regular meeting of April 21, 2022 at which time the **Planning Commission recommended approval** of the preliminary site plan and **approved** the special land use for a car wash. The matter was considered by the Zoning Board of Appeals at their regular meeting of April 28, 2022 meeting for variances needed in regards to dumpster placement and landscaping, at which time the Zoning Board of Appeals **approved** the requested variances. The request is now ready to be considered by the Township Board.

Please find enclosed the following related documents:

- Minutes from the Planning Commission meeting held on April 21, 2022.
- Review letter prepared by Michael Leuffgen, Township Engineer, dated April 4, 2022.
- Review letter prepared by Justin Quagliata, Staff Planner, dated April 1, 2022.
- Review letter prepared by Jason Hanifen, White Lake Township Fire Marshal, dated March 21, 2022.
- Memo prepared by Jeanine Smith, Assessor, dated March 21, 2022.
- Minutes from the Zoning Board of Appeals meeting held April 28, 2022.
- Staff Review prepared by Justin Quagliata, Staff Planner, dated April 28, 2022.
- Plans and elevations submitted by the applicant.

Please place this matter on the next available Township Board agenda. Do not hesitate to contact me should you require additional information.

**WHITE LAKE TOWNSHIP
PLANNING COMMISSION**

Township Annex, 7527 Highland Road
White Lake, MI 48383
April 21, 2022 @ 7:00 PM

CALL TO ORDER

Chairperson Anderson called the meeting to order at 7:00 PM and led the Pledge of Allegiance. Roll was called.

ROLL CALL

Steve Anderson
Merrie Carlock
Pete Meagher
Debby Dehart
Scott Ruggles
Matt Slicker
Robert Seeley
T. Joseph Seward

Absent: Mark Fine

Also Present: Sean O'Neil, Community Development Director
Justin Quagliata, Staff Planner
Mike Leuffgen, DLZ
Kyle Gall, DLZ
Lisa Kane, Recording Secretary

Visitors: 20+ members of the public were present

APPROVAL OF AGENDA

Commissioner Meagher moved to approve the agenda of the April 21, 2022 Planning Commission Meeting.

Commissioner Carlock supported and the **MOTION CARRIED** with a voice vote: 8 yes votes.

APPROVAL OF MINUTES

- a. Regular meeting minutes of April 7, 2022

Commissioner Meagher moved to approve the Minutes of April 7, 2022

Commissioner Seward supported and the **MOTION CARRIED** with a voice vote: 8 yes votes.

CALL TO THE PUBLIC (FOR ITEMS NOT ON THE AGENDA)

None

PUBLIC HEARING

A. White Lake Hill LLC

Property described as parcel number 12-20-101-003 (1085 Hill Road), located on the north side of Highland Road, west of Hill Road, consisting of approximately 68.96 acres. Property described as parcel number 12-20-126-006, located north of Highland Road, east of Hill Road, consisting of approximately 41.06 acres.

Requests:

1) Preliminary site plan approval

2) Rezoning request: Applicant requests to rezone parcel number 12-20-101-003 from (AG) Agricultural and (PB) Planned Business to (PD) Planned Development or any other appropriate zoning district, and parcel number 12-20-126-006 from (R1-A) Single Family Residential to (PD) Planned Development or any other appropriate zoning district.

Applicant: White Lake Hill, LLC
31550 Northwestern Highway
Farmington Hills, MI 48334

Applicant Present: Mark Kassab

Director O'Neil presented the Fire Department's comments and Assessing's comments on the parcels.

Commissioner Slicker disclosed a professional relationship with the applicant and asked to recuse himself from voting.

Commissioner Meagher moved to allow Commissioner Slicker to recuse himself due to the professional relationship with the applicant. Commissioner Seward supported and the motion carried with a roll call vote (7 yes votes)
(Carlock/yes, Dehart/yes, Meagher/yes, Anderson/yes, Seeley/yes, Seward/yes, Ruggles/yes)

Commissioner Ruggles disclosed a professional relationship for consideration by the board, as his family has farmed that land in the past. It was determined that there were no conflicts of interest and Commissioner Ruggles remained present for the public hearing.

Mr. Leuffgen presented the engineering report from DLZ Engineering. Because sidewalks are not feasible on both sides of Hill Road and the applicant has offered a community benefit for sidewalk fund to compensate for that. The ordinance requires that work done within the 25-foot wetland buffer will need a plan in place to restore it to the original vegetative state. All roads, whether private or public, need to meet Road Commission of Oakland County requirements and this will be required to be indicated on the final site plan. The preliminary site plan provides a reasonable means of stormwater management. The sanitary sewer ordinance requires that sewer be extended across the full extent of the property frontage for the benefit of future use, however the grade and location of trees will make it difficult to extend all the way to the northern property line on Hill Road, therefore it may be left about 40 feet short. The recommendation is for the applicant to consider depositing funds in an escrow account for future use when there is a need for it by an adjoining property. The master plan does include sanitary sewer extending north on Hill Road. It should be considered to include a condition for a loop system for the water supply which provides a redundant source of water service to provide redundancy and reliability concern. A pump station analysis is recommended for the sewage system as the closed pump station has two pumps and a third pump may be warranted. There is a concern regarding building envelopes in relation to patios and decks extending into the sewer easements that should be limited as much as possible.

Commissioner Seeley inquired about the single point of road access and if there is a number of units that would indicate the need of a second road access.

Mr. Quagliata stated that the Fire Department indicated that the preliminary site plan met the intent of the fire code.

Commissioner Ruggles inquired about the loop water system and if the water main on Highland Road would meet the needs of the development.

Mr. Leuffgen explained that where this project would tie in to the water main is in a different pressure district than the water tower. There is not a water main on Hill Road but they are proposing installing one.

Commissioner Anderson inquired about the number of units, the need for the looping water system and if the residents nearby would benefit from the looping water system.

Mr. Leuffgen stated that the residents on Highland Road have direct access to the water main on Highland Road and would not require access to the looped water system.

Discussion occurred of the benefits of looped water system and whether it stabilizes water pressure.

Mr. Quagliata presented the project as 493 total units which consists of 87 detached single-family site condos and 406 multiple-family rental apartment units. The single-family homes will be governed by a declaration of covenant and the apartment rentals will remain owned and managed by the developer. The property on the west side of Hill Road has split zoning, which would be remedied by the rezoning. Rezoning to Planned Development is necessary to develop these properties as indicated on the preliminary site plan. The clubhouse is in the hub of the apartments providing amenities such as a patio and pool and the single-family dwellings will not have access to the clubhouse. The applicant has proposed a public benefit of \$100,000 Parks and Rec fund. Between the two parcels 22 wetlands are identified and are regulated by EGLE, the applicant has stated that any natural area that requires grading for walk-out basements will be returned to its natural, undisturbed state with only native plantings. The multi-family apartments on Hill Road will have a boulevard style entrance. The traffic impact statement recommends a signal be installed east of Hill Road with a right turn taper installed, which is consistent with generally accepted engineering standards. MDOT has jurisdiction of Highland Road and will need to approve any traffic light or changes to the roadway. The Planning Commission can consider waivers in exchange for amenities requested. The applicant would request a waiver for some recreation space. Parallel plans could be considered for parcels without Planned Development district approval, in which the applicant would request a waiver for density. The Planning Commission should consider if the proposed setbacks and lot coverage are appropriate for this project. They will request a 5-foot waiver for some lots' setbacks. There would be no deck or patio in any setback, however a waiver for some patios or decks in the storm water easement may be requested. The ordinance requires double striping and the applicant has indicated that they will seek a waiver for parking striping as double striping is more appropriate for commercial properties, not residential. A 930-foot waiver for the length of street due to topographies and natural features. Sidewalks will be installed on the west side of Hill Road but not on the east side of the road and the applicant has proposed a contribution to the Township Sidewalk Fund to accommodate for that. The applicant would also seek a waiver for a third sign as only two signs are allowed. The dumpster enclosure by the clubhouse would either need a concrete pad in front of it or to seek a waiver. Staff recommends approval as the rezoning and site plan are consistent and compatible with the master plan, subject to getting final site plan approval and all comments and reports in the final site plan are addressed.

Commissioner Seward is troubled by the statement that this is consistent with the master plan because this area is rural and it will increase traffic.

Mr. Quagliata stated that the master plan prescribes residential at this location at a greater density than what is proposed in this project.

Director O'Neil added that this property was rezoned about 15 years ago to Planned Business in preparation for a Super Target to be built. That project did not materialize but there was anticipation of another similar project being brought forward. This residential project will bring less traffic than a large scale commercial project would.

Mr. Quagliata stated that Hill Road will be paved to the north and that they do not expect that traffic will travel north on Hill Road as there isn't anywhere to cut through to.

Commissioner Anderson reminded the public that they would have an opportunity to speak after the applicant makes their presentation.

Commissioner Carlock inquired about the orientation of the single-family units on the southeast side of Hill Road and the road that would serve them.

Mr. Quagliata stated that the road to those units would be a private road that the Homeowner's Association would maintain. The roads that serve the rest of the single-family dwellings would be petitioned by the developer to the Road Commission of Oakland County to be public. However, the roads in the multi-family apartment complex would remain private and maintained by the owner of the property.

Commissioner Meagher inquired if there was a need for rental properties.

Mr. Quagliata stated that the applicant can respond to that market analysis.

Commissioner Dehart inquired if the signs would need a variance.

Mr. Quagliata stated that the process of preliminary site plan review includes the area, quantity, location and dimension for signs but only the location was included in the submitted plan. They would have to comply with the residential standards for signs which can be approved administratively. If the requested rezoning passes, they can request a waiver for the third sign that is indicated on the preliminary site plan. The recommendation could be made at final site plan review to recommend for approval to the Township Board some or all of the waivers requested.

Discussion occurred regarding the different residential zoning districts and the density and lot size requirements for them.

Mr. Quagliata stated that if this does get approval it will be governed by a development agreement and the final site plan is a part of the development agreement. The development agreement would have designation stating that they cannot change the product or method of ownership without Township approval. The final site plan requires a list of all waivers requested, the preliminary site plan considers number of units, road layout, and similar details.

Mark Kassab, representing White Lake Hills, LLC, stated that he and his partners bought this property about 17 years ago with the intent of developing it commercially. A PowerPoint presentation was shared featuring other nearby properties they have and the commissioners were invited to visit other properties they have developed in Novi, Wixom and Commerce Township. A market study was completed which indicates demand for both single-family homes and rental properties. There is a considerable grade to be

considered with this site, approximately 75% from Highland Road to the north end of the property. The survey found approximately 8.5 acres of wetlands on the site, however only .75 acres will be impacted by development. Mr. Kassab states that wetlands are a feature that they want to keep as it is desirable to home buyers. Mr. Kassab presented the different unit models and floor plans available. Every unit has a 2 car garage and a washer and dryer with rent ranging from \$2000-\$2700 and home sales ranging from \$450,000-\$500,000. Topography made it impossible for a second access road to the apartment complex. Regarding the sidewalks on Hill Road, they preferred to put sidewalks on both side but topography was a deterrence. The applicants funded a water main study that that found that the northeast portion has low pressure and the loop system through Meijer would alleviate the pressure issue. They have various building elevations to choose from so the building envelopes could be met to limit the impact on the stormwater easements. The public park requirement within the development is believed to be better met with a contribution to Stanley Park as a public benefit. The clubhouse amenities, such as dog wash, dog park and walking trails will be desirable to residents. There will be an Amazon delivery center for packages to be safely received. There will also be a full gym and yoga studio accessed with key card. Every residence will have a separate entryway, no common hallways. This is an all-ages community, with the ranch-style homes benefiting the aging. Single-family dwellings will have a master deed with CCR which will be turned over to a Homeowner's Association. Community benefits include paving Hill Road according to the traffic study comments, a contribution to Stanley Park instead of public park within development.

Commissioners thanked Mr. Kassab for his presentation.

Commissioner Seeley inquired about the willingness to scale back the waivers.

Mr. Kassab stated that they are extremely willing to work with the Township to meet any requirements.

Commissioner Anderson opened public comment at 8:22 PM

Derrick Near of 1850 Hill Road has concerns about the traffic that will travel north on Hill Road. GPS mapping systems navigate travelers north on Hill Road to get to any destination north of M59. Paving the road is going exacerbate the problem. He would like to see that the development only allow access to Highland Road.

Sean O'Callohan of 1831 Hill Road appreciates the rural area that he lives in and is concerned about increased crime. He would prefer there were no two-story buildings.

Robert Lousey of 6501 Manchester was drawn to this area by the rural nature and doesn't believe the project meets the character of Hill Road. He is also concerned about the crime that rental properties draw.

Laura Mahler of 1445 Hill Road is concerned about the density of this development. Mrs. Maher is concerned that the development has not obtained a permit from EGLE. This development is adverse to the character of Hill Road. She requests that the Planning Commission declines the request.

Tamar Near of 1850 Hill Road is concerned about the noise that will be generated by the construction, how long the project will take to complete and what will the hours of construction be.

Jim Powers of 3711 Ormon Road complimented the applicant for the presentation and appreciated that the development will create jobs and help with the tax base for the Township. He believes this will be a great attribute to the Township. He states that traffic is something that we all have to live with and he doesn't believe that crime will increase with a high rent development such as this.

John and Mary Rankin of 1829 Hill Road submitted an email which will be available on record.

Corbin McLaughlin of 1245 Hill Rd is concerned about car accidents on Highland Road and there is littering on Hill Road.

Andrea Liveright?? of 5347 Woodland is concerned about traffic and additional traffic if there is an accident on Highland Road as drivers use Hill Road to detour. She doesn't understand how it fits in with the master plan.

Anna Wilson of 1795 Hill Road enjoys the rural nature and is very upset about the idea of having so many people residing in this area.

Commissioner Anderson closed the public hearing at 8:42 PM

Director O'Neil explained the history of the master plan, how it is developed and that they would encourage residents to be a part of the process when they review the Master Plan.

Andrea Liveright of 5347 Woodland asked if consideration is taken about how the nearby residents feel when they develop the master plan.

Director O'Neil addressed some questions from the residents and informed that the wetlands permit is not required at this stage of the process.

Applicant Mr. Kassab replied to questions about density, traffic, crime and construction time frame. The income levels are expected to be over \$100,000 annually for residents of the rental apartments and it isn't anticipated that the crime rate will increase. The project that was planned for the parcel zoned Planned Business would have been something similar to a Super Target and the buffering would have been multi-family residential. The traffic study does not support increased traffic on Hill Road. This type of development is not determined by density, they aren't trying to cram as many dwellings into the lots as possible and are willing to consider less units to better meet the needs of the Township. Some waivers will be critical to create a proper development. They will abide by Road Commission of Oakland County and MDOT requirements. The duration of construction will likely be in one phase for the single-family and two phases for the multi-family complex, it will be limited by trades and materials availability.

Commissioner Ruggles asked about the anticipated duration of the phases.

Mr. Kassab responded that construction timeframe could be 2 years.

Commissioner Carlock has concerns with the natural areas to the north being preserved.

Commissioner Seward agrees with Commissioner Carlock about the north end wooded lot. He inquired about the possibility of deterring people from traveling north on Hill Road.

Commissioner Dehart sees the need for adding residential to support the local economy but has reservations because she appreciates the rural nature of White Lake.

Commissioner Seeley is concerned about the density and the size of the lots.

Mr. Quagliata addressed the concern about the rezoning stating that the rezoning to Planned Development allows the Planning Commission to consider waivers and whether or not they are appropriate.

Director O'Neil explained the broad range of the zoning of Planned Neighborhood and that the master plan doesn't perfectly align with all of the zoning districts but it is consistent with the future land use for this area and it falls within the prescribed range for density.

Discussion regarding the differences in zoning and the designations in the master plan for this area.

Commissioner Ruggles asked if the roads will be public or private.

Mr. Kassab stated that the roads in the single-family area will be public but the rental apartment homes will be private so that they can maintain them as the rental property management. He also explained that there is a waiver that they can sign so that the police can respond to violations on the private roads.

Commissioner Ruggles shares the concerns of many of the residents about the traffic on Hill Road and with the density.

Commissioner Meagher moved to forward a favorable recommendation, subject to the applicant addressing all of the staff and consultant comments and recommendations to the Township Board, the preliminary site plan for the property described as parcel number 12-20-101-003 (1085 Hill Road), located on the north side of Highland Road, west of Hill Road, consisting of approximately 68.96 acres. Property described as parcel number 12-20-126-006, located north of Highland Road, east of Hill Road, consisting of approximately 41.06 acres.

Commissioner Anderson supported, and the MOTION FAILED with a roll call vote (2 yes votes): (Carlock/no, Dehart/no, Meagher/yes, Anderson/yes, Seeley/no, Seward/no, Ruggles/no)

Commissioner Seeley moved to forward a favorable recommendation, subject to getting preliminary site plan approval, to the Township Board, the rezoning from parcel number 12-20-101-003 from (AG) Agricultural and (PB) Planned Business to (PD) Planned Development or any other appropriate zoning district.

Commissioner Dehart supported, and the MOTION CARRIED with a roll call votes (6 yes votes): (Carlock/yes, Dehart/yes, Meagher/yes, Anderson/yes, Seeley/yes, Seward/no, Ruggles/yes)

Commissioner Seeley moved to forward a favorable recommendation, subject to getting preliminary site plan approval, to the Township Board, the rezoning from parcel number parcel number 12-20-126-006 from (R1-A) Single Family Residential to (PD) Planned Development or any other appropriate zoning district.

Commissioner Meagher supported, and the MOTION CARRIED with a roll call votes (5 yes votes): (Carlock/yes, Dehart/no, Meagher/yes, Anderson/yes, Seeley/yes, Seward/no, Ruggles/yes)

Director O'Neil will have a conversation with the Township attorney about how to proceed.

Commissioner Anderson reminded the attendees that agendas are posted on the website and they will need to check to see when this project is coming back to the Planning Commission for consideration.

B. Hypershine Car Wash

Property described as parcel number 12-23-202-006 (9345 Highland Road), located on the south side of Highland Road, west of Fisk Road, consisting of approximately 4.91 acres.

Requests:

1) Preliminary site plan approval

2) Special land use approval

Applicant: EROP, LLC
2390 East Federal Drive
Decatur, IL 62526

Applicant present: Reid Cooksy of EROP, LLC

Mr. Quagliata presented the project for the parcel that was rezoned two years ago by a developer who wanted to bring plans forward for a carwash but it did not materialize. Driveways are required to meet setbacks from adjacent driveways and be offset from opposing driveways. The applicant will need to request from the Planning Commission a waiver from interlocking driveway rule or they would need a variance from the Zoning Board of Appeals. They are proposing a six-foot vinyl fence to provide screening from the residential properties. The outdoor lighting plan would be reviewed at final site plan review. There are concerns about the dumpster placement and the gate orientation which may require a variance from the Zoning Board of Appeals. The required number of stacking spaces and parking spaces are met. The ordinance requires a certain number of shrubs and trees in greenbelt. There is a water main easement that is deterring them from meeting the planting requirements. They will request a variance for one wall sign placement as the water main easement is deterring them from a monument sign.

Commissioner Dehart inquired about the previous applicant's proposal to give the rear portion of the parcel to the township.

Mr. Quagliata replied that the current applicant has not proposed the same offer.

Commissioner Slicker inquired about the need of a bypass lane.

Mr. Quagliata explained that the ordinance does not require a bypass lane and that they providing more stacking space than is required.

Mr. Quagliata stated that six variances would be requested: potentially two for the driveway, for the 450 ft separation although the Planning Commission can consider a waiver for driveways; one for the dumpster location; potentially two for the landscaping trees & shrubs in the greenbelt; and one for the sign.

Director O'Neil commented on the possible ways that the applicant could avoid requesting variances.

Commissioner Dehart inquired who determines the addition of a deceleration lane.

Director O'Neil responded that MDOT has jurisdiction over Highland Road.

Commissioner Slicker inquired about the greenbelt requirements.

Mr. Quagliata stated that the applicant meets the width for the greenbelt but did not indicate the proper number of trees and shrubs to be planted.

Commissioner Seeley also inquired about the bypass lane and if there is not a teller available in the pay booth how will someone exit who accidentally pulled in to the driveway.

Discussion occurred regarding the requirements of a frontage road for cross access between adjacent businesses.

Mr. Leuffgen of DLZ Engineering presented the second review for engineering feasibility. It was noted

that a 20-foot one way drive was required by the Fire Department for the exit of the carwash. A storm water management plan including a storm water detention pond with an outlet discharging to the MDOT storm system will need to be approved by MDOT. It is recommended that the sanitary sewer connection be a pressure sewer including a grinder station. Clarification from the Oakland County Water Resource Commissioner is needed at final site plan review on the need of an external oil gride separator. Mr. Leuffgen finds nothing that prohibits recommending an approval from engineering.

Commissioner Slicker inquired about the grade entering Highland Road to avoid parking lot run off.

Mr. Cooksy responded to concerns about stacking and circulation of the site. Membership based model, three lanes: two are membership lanes which use license plate readers and one is pay based. Vacuums are free after paying for wash with unlimited use. The entrance was aligned with the opposing boulevard entrance to avoid needing a variance. They weren't aware that they could plant within three feet of the watermain in the greenbelt and they will work with landscaping requirement.

Commissioner Slicker inquired about the bypass lane and how will patrons leave without paying for a carwash if they decide not to use the service.

Mr. Cooksy answered that there are constraints to the parcel including overhead electrical lines to creating a bypass lane and the throughput time is very fast so even with a lot of cars stacked they will get through the tunnel quickly.

Commissioner Dehart inquired about the orientation of the dumpster.

Mr. Cooksy responded that due to the size of the refuse truck, it will not be able to enter the rear of the property. He also is willing to work with the Township to find an alternative.

Commissioner Anderson inquired about the fees for the services.

Mr. Cooksy stated that that the fee structure model is mainly the monthly membership which ranges from \$30 - \$40 per month but there will be employees on site to assist customers but not in a booth to take payment.

Commissioner Meagher asked if someone needed to get through without paying would someone be available to help them continue through without paying for a wash.

Commissioner Seeley informed that there is an ordinance requirement for a frontage road and that would provide a bypass for people who didn't intend on obtaining carwash services.

Mr. Cooksy stated that they will provide a stub and an easement to the east that is part of the employee parking spaces for a future possible frontage road.

Commissioner Anderson opened public comment at 10:26 PM

Commissioner Anderson stated that two emails were received from the Kenneth T Johnson Jr and Rachel Cook who do not support the project.

Shannon Frescas of 9240 Steephollow Dr. is adamantly against this project, is concerned about the project and is very concerned about the noise.

Ken Moomah of 9218 Steephollow Dr. is concerned about the excess lighting in the parking lot. Mr. Moomah has also reminded the commission that routing the traffic through the Dance Studio would not be safe with all of the children entering and leaving the building. Mr. Moomah added the concern about the former Brendel's property being developed.

Richard Morris of 9211 Steephollow Dr. appreciates the quietness of living on Tull Lake. Mr. Morris is concerned about the noise and is concerned about the chemicals and impact of the cleaning agents.

Margaret Penner of 9651 Steephollow Dr. shares the other residents' concerns and is also concerned about the well head protection.

Darryl Davis of 9265 Steephollow Dr. would like a taller fence and landscaping to buffer the noise.

Dave Gian of 9315 Steephollow Dr agrees with all of the concerns from other residents and would like to see trees to buffer the rear of the lot. He would also like to know what the plan is for the runoff from the parking lot as well as the runoff from the cleaning of the cars.

Marcy Denesca of 4745 Berry Patch Lane is concerned about the impact on the lake.

Kathleen Grant of 9268 Steephollow Dr takes great pride in her neighborhood and the lake. Ms. Grant is concerned about the drainage and runoff.

Monica Wilcowski of 9292 Steephollow Dr believes there are other carwashes and doesn't see the need for another one.

Ken Moomah of 9218 Steephollow Dr. returned to ask if there was the possibility of the back part of the parcel being split and sold to other commercial development.

Mr. Quagliata responded that the area indicated is landlocked and would not be able to be split and sold because there would be no way to access it from Highland Road.

A member of the audience asked what the hours of operation would be.

Mr. Cooksy responded that the hours of operation would be 8am-8pm, 7 days of the week.

Commissioner Anderson closed public comments at 10:41 PM

Commissioner Carlock inquired about the water source, if it would be the water main at Highland Road and how run off from the parking lot and waste water would be managed.

Director O'Neil replied that they would be connected to the municipal water and sewer, runoff would

drain into the stormwater basin at the curb and the waste water generated from the carwash will enter a reclamation system for processing, but ultimately enter the sanitary sewer.

Commissioner Slicker asked why the Belle Tire doesn't have an access road.

Director O'Neil answered that the reciprocal access easements came in when there was a traffic study done with MDOT in about 2003, that is when the Township's access management plan was adopted and Belle Tire had been in operation for years before that. They do share the driveway with the old Tim Hortons restaurant. And they were required by the township to make a connection to the shopping center to the east.

Discussion occurred regarding the possibility of a frontage road.

Mr. Cooksy responded to questions from residents about the waste water, fence, trees and water shed. Concerning light and noise, studies have been done on these vacuum systems, which have mufflers, they are less than 60 decibels at the property line. The lights meet the ordinance allowances and will not impact the neighboring. No drainage will leave the site as it will be directed to the detention pond. Considering the sanitary discharge, the reclamation tanks inside separate oil and chemicals and it cleans the water and sends very minimal discharge into the sanitary sewer system. The 6-foot-tall fence is what is required by the Township and can plant trees on the west side. All chemicals are contained and employees will maintain the property. The noise study can be provided. The wash tunnel has silencers on the blowers at the end of the tunnel which mitigate the noise.

Discussion occurred about the noise study and the noise generated from the vacuums and from the tunnel itself.

Commissioner Carlock inquired about the special land use for this zoning.

Commissioner Meagher inquired about the screening wall composition.

Director O'Neil explained that the screening will include the 400-foot buffer of vacant land which will help mitigate all noise and light.

Discussion about the feasibility of the project due to the inability to provide a frontage lane.

Commissioner Slicker moved to table the project until the applicant can comply with the requirement for the front access road.

Commissioner Seward supported and the **MOTION FAILED** with a roll call vote (2 yes votes): (Carlock/no, Dehart/no, Meagher/no, Anderson/no, Seeley/no, Seward/yes, Ruggles/no, Slicker/yes)

Commissioner Seeley moved to forward a favorable recommendation, subject to the applicant addressing all of the staff and consultant comments and recommendations, the easement requirement, providing a waiver for the coordination of the driveway and subject to special approval, to the Township Board, the preliminary site plan for the property described as parcel number 12-23-202-006 (9345 Highland Road), located on the south side of Highland Road, west of Fisk Road, consisting of approximately 4.91 acres.

Commissioner Meagher supported, and the MOTION CARRIED with a roll call vote (6 yes votes):
(Carlock/yes, Dehart/yes, Meagher/yes, Anderson/yes, Seeley/yes, Seward/no, Ruggles/yes,
Slicker/no)

Commissioner Meagher moved to approve the special land use for the property described as
parcel number 12-23-202-006 (9345 Highland Road), located on the south side of Highland Road,
west of Fisk Road, consisting of approximately 4.91 acres.

Commissioner Seeley supported and the MOTION CARRIED with a roll call vote (8 yes votes):
(Carlock/yes, Dehart/ yes, Meagher/ yes, Anderson/ yes, Seeley/yes, Seward/yes, Ruggles/yes,
Slicker/yes)

CONTINUING BUSINESS

None

NEW BUSINESS

None

OTHER BUSINESS

None

LIAISON'S REPORT

None

DIRECTOR'S REPORT

COMMUNICATIONS

NEXT MEETING DATES: May 5, 2022
May 19, 2022

ADJOURNMENT

Commissioner Meagher moved to adjourn the meeting at 11:27 PM
Commissioner Seeley supported and the MOTION CARRIED with a voice vote: 8 yes votes



INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

April 4, 2022

Sean O' Neil
Community Development Department
Charter Township of White Lake
7525 Highland Road
White Lake, Michigan 48383

RE: Hypershine Car Wash- Preliminary Site Plan Review – 2nd Review

Ref: DLZ No. 2245-7382-03 Design Professional: Stonefield Engineering & Design

Dear Mr. O' Neil,

Our office has performed a Preliminary Site Plan review for the above-mentioned revised plan dated March 16, 2022. The plans were reviewed for feasibility based on general conformance with the Township Engineering Design Standards.

General Site Information

This site is located on the south side of M-59, west of Fisk Road, and north of Tull Lake. Total site acreage is approximately 4.854 acres.

Site Improvement Information:

- Construction of car wash building totaling 3756 square feet.
- Associated paved and curbed parking for both car wash employees and for patrons utilizing central vacuum system for their vehicles as well as maneuvering aisles. One (1) ADA accessible parking space is also proposed.
- Site to be serviced by watermain and sanitary sewer.
- Storm water runoff is proposed to be detained in proposed detention basin, located on southwestern side of the site, with discharge to the existing storm sewer in M-59.

We offer the following comments:

Note that comments from our February 22, 2022 review letter are in *italics*. Responses to those comments are in **bold**. New comments are in standard typeface.

The following items should be noted with respect to Planning Commission review:

- a) *Although the plan indicates that the existing asphalt walkway along the M-59 frontage is to remain, the paved walkway will need to be removed and replaced with an 8' wide path (1' inside ROW line) such that a greenbelt area between it and M-59 would be established. We defer to the Township and the Township Planning review letter dated February 18, 2022 for further comment and discussion.*
Comment addressed. The existing asphalt walkway shall be removed; an 8' wide path located 1' inside the ROW is now shown.
 - b) *A plan indicating fire truck access and turning radii shall be provided so as to demonstrate fire truck accessibility to the site.* **Comment addressed. A Fire Truck Turning Exhibit plan sheet has now been provided.**
 - c) *The proposed ADA parking space does not currently meet the required dimensions (8" stall with adjacent 8' access aisle) per Zoning Ordinance 5.11.O.iii.* **Comment addressed. The proposed ADA space now meets Zoning Ordinance requirements.**
 - d) *The proposed one-way drive on the east side of the proposed building and vacuum area does not appear to meet the minimum required width of 20' for a one way drive per Zoning Ordinance 5.11 Q.v.* **The applicant has indicated the 20' drive requirement is for site ingress/egress, not for internal drive isles. This appears consistent with the Ordinance considering that one way drive isles are shown within the Ordinance for angled or parallel parking adjacent at dimensions less than 20 feet. DLZ defers Ordinance interpretation to the Township's Community Development Department.**
 - e) *The location of the proposed dumpster pad appears to present a conflict regarding the flow and exit of traffic on site; it appears that a garbage truck could hinder traffic flows on site causing backup of vehicles coming from the West and heading eastbound on M-59, that intend to right hand turn into the carwash. There is also the concern that westbound traffic intending to left turn into the car wash would end up with a long queue in the left hand turn lane with the potential to cause conflicts with outbound traffic from the opposing boulevard entrance on the north side of M-59.* **Comment addressed. Per the design engineer's response letter dated March 16, 2022, the dumpster and enclosure have been moved back out of the front yard setback; trash pickup shall occur during car**
-

wash off hours. The design engineer refers to MDOT for input with respect to potential queuing of vehicles in the M-59 westbound turn lane.

- f) *Preliminary detention basin contours and sizing calculations are required to demonstrate adequate required storage volume; clarification shall also be made relative to the ‘infiltration basin’ label shown on Sheet C-4 of the plan. Should the applicant desire to discharge to the existing M-59 storm sewer as shown on the plan, permission from MDOT would be required as this storm sewer is under MDOT jurisdiction. Design engineer shall also indicate method by which storm sewer shall be installed under M-59 for connection to the existing storm sewer on the north side of the road.*

Comment addressed. The design engineer states: “Proposed site discharge is to be reduced compared to existing discharge rates. Plans to be submitted to MDOT for stormwater and access approval prior to Final Site Plan. Stormwater design will be coordinated with MDOT as required. Final calculations are pending the results of geotechnical testing to confirm infiltration rates on site and will be provided at Final Site Plan. Storm pipe is to be jack and bored beneath Highland Road as required by MDOT. Drilling pit locations to be shown on demolition plan at Final Site Plan.”

- g) *Method of stormwater pretreatment shall be provided. Comment addressed. A mechanical water quality unit is proposed for storm water pretreatment. Details regarding manufacturer and TSS removal rated (80% required) shall be provided at time of FSP/FEP submittal.*
- h) *Storm sewer easements shall be shown on plan; it appears that a portion of the concrete pad with induction loops along the western side of property would encroach into the sewer easement, which is not allowed. Comment addressed. 10’ wide storm sewer easements are now shown on the plan. Per the design engineer, the proposed induction loops and concrete pad are not located in the storm easement.*
- i) *Clarification on the water reclaim system will be required along with coordination with White Lake Township DPS and Oakland County WRC regarding the potential need for an external 1000-gallon oil/grit separator; a 4’ diameter sampling MH located downstream of the oil/grit separator shall also be provided. A sampling manhole has been added upstream of the proposed duplex grinder station. In the design engineer’s response letter, the engineer states that oil and grit separation occurs internally. Further clarification with respect to the process used shall be required to be coordinated with White Lake Township DPS and Oakland County WRC at the time of Final Site Plan. The concern is adequately protecting the sanitary sewer grinder station from grit and oils.*
- j) *The proposed gas valve for the proposed gas lead encroaches into the existing watermain easement and shall be relocated. Comment addressed. Gas valve has now been located outside existing watermain easement.*
- k) *Storm/Sanitary Crossing CR1 elevation data appear to be in error; reference Sheet C-5. Elevations in this data table appear to have an elevation difference of approximately 30’ as compared to*
-

surrounding topography. **Comment addressed. The elevation data error has now been corrected. As-Built plans for the Sanitary Sewer have been sent over separately.**

- l) *The proposed Evergreen trees shown along the western property line on the landscape plan Sheet C-7 will need to be planted a minimum horizontal distance of 10' from the storm sewer.* **Comment addressed. Location of proposed trees has been revised to meet the 10' horizontal separation requirement.**

The following items can be addressed at the time of Final Site Plan/ Final Engineering Plan Submittal:

FSP/FEP Comments-

General

1. *Plan shall contain notes per White Lake Township Engineering Design Standards Section A. 8. a.-d.* **Comment addressed.**

Paving/Grading

1. *All proposed barrier free ramps will need to meet ADA standards in terms of slopes and dimensions.* **Comment addressed. ADA notes/standards have been added to the grading plan sheet.**
2. *Bollard steel pipe shall be 6" minimum diameter per Zoning Ordinance 5.19N.i.d.* **Comment addressed. The pipe is now shown as 6" diameter.**
3. *Parking stall markings shall be per Zoning Ordinance 5. 11Q. xi. (dual striping).* **Comment addressed. Detail on Construction Details sheet has now been updated.**

Watermain

1. *We defer to the Fire Department with regard to items related to fire suppression including proposed hydrant locations.* **Comment remains as a notation.**

Sanitary Sewer

1. *Provide peak flows for the grinder station as the station will need to be sized to accommodate anticipated discharge.* **Comment remains. Design engineer notes that this information will be provided on the FSP/FEP.**
-

Permits

1. *Permission from White Lake Township will be required for work within the existing 15' wide watermain easement. **Comment remains as a notation.***

Recommendation

We recommend approval of the Preliminary Site Plan subject to confirmation that a 15' one way drive lane is acceptable per Comment d) above. Any remaining comments can be addressed at the time of Final Site Plan/ Final Engineering Plan submittal.

Please feel free to contact our office should you have any questions.

Sincerely,

DLZ Michigan



Michael Leuffgen, P.E.
Department Manager



Victoria Loemker, P.E.
Senior Engineer

Encl. None

Cc: Justin Quagliata, Community Development, *via email*
Hannah Micallef, Community Development, *via email*
Aaron Potter, DPS Director, White Lake Township, *via email*
John Holland, Fire Chief, White Lake Township, *via email*
Jason Hanifen, Fire Marshall, White Lake Township, *via email*

X:\Projects\2022\2245\738203 WLT Hypershine Car\PSP Review.02\Review.02.docx

WHITE LAKE TOWNSHIP PLANNING COMMISSION

REPORT OF THE COMMUNITY DEVELOPMENT DEPARTMENT

TO: Planning Commission

FROM: Sean O'Neil, AICP, Community Development Director
Justin Quagliata, Staff Planner

DATE: April 1, 2022

RE: Hypershine Auto Wash
Preliminary Site Plan and Special Land Use – Review #2

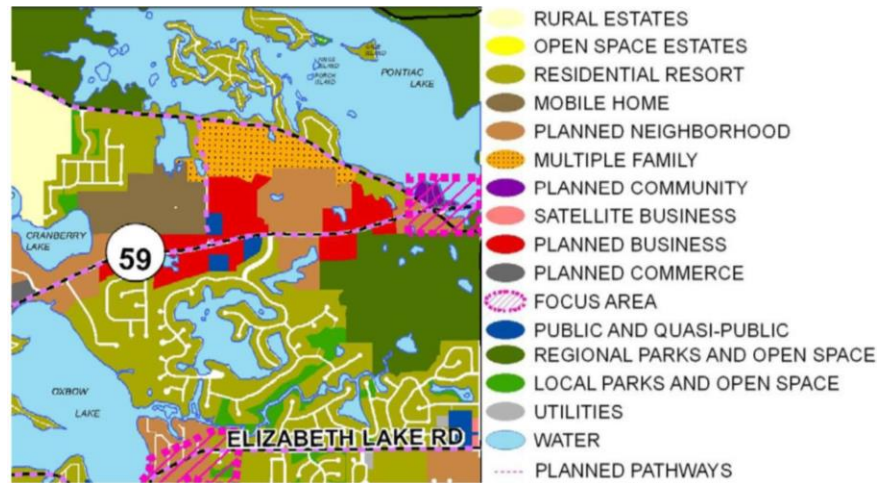
Staff reviewed the revised site plan prepared by Stonefield Engineering & Design (revision date March 16, 2022). The following comments from the first review dated February 18, 2022 are listed below. Responses to those comments are provided in **(red)**.

EROP, LLC has requested preliminary site plan and special land use approval to construct a 3,756 square foot automobile wash establishment at 9345 Highland Road (Parcel Number 12-23-202-006). The 4.85-acre subject site is zoned GB (General Business).

Master Plan

The Future Land Use Map from the Master Plan designates the subject site in the Planned Business category. All development in Planned Business is required to adhere to strict access management principles in order to minimize traffic conflict and maximize safety throughout the M-59 corridor. Connections to and segments of the Township's community-wide pathway system are required as an integral part of all Planned Business development.

FUTURE LAND USE MAP



Zoning

Automobile wash establishments are permitted with special land use approval in the GB zoning district. At its meeting on July 21, 2020 the Township Board approved rezoning the parcel from Local Business (LB) and R1-C (Single Family Residential) to GB (General Business), which requires a minimum lot area of one (1) acre and 200 feet of lot width. The subject site contains 338.2 feet of frontage along Highland Road and 4.85 acres of lot area.

Physical Features

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Wetland Map and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map indicate neither wetlands nor floodplain are present on or near the site. Currently a vacant house and three accessory buildings are located on the property. **A demolition plan shall be provided at final site plan.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

Access

The site fronts on Highland Road, which along the property is a five-lane road (counting the center turn lane). The site plan notes the existing paved shoulder along Highland Road would remain. **The existing paved shoulder shall be removed and converted to greenbelt.** (Comment addressed. The existing paved shoulder is to be removed. An eight-foot-wide asphalt sidewalk one-foot off the property line has been proposed). The zoning ordinance requires a minimum eight-foot-wide sidewalk placed one-foot from the inside edge of the right-of-way along the Highland Road property frontage. Direct pedestrian access from the sidewalk to the building is also required. **The applicant is not proposing to install the required sidewalk as part of the project; therefore, a variance from the public sidewalk standards is required from the Zoning Board of Appeals.** (Comment addressed. A sidewalk is now proposed). Along the front (north side) of the building, a 10-foot-wide sidewalk is provided.

Driveways must have a minimum of 455 feet of spacing provided from other driveways along the same side of the street, measured centerline to centerline. The centerline of the proposed driveway would be located approximately 242 feet from the existing driveway (Art of Dance) to the east and approximately 220 feet from the existing driveway (vacant Brendel's Septic property) to the west; **therefore, variances are required from the Zoning Board of Appeals. (Comment outstanding; however, the applicant intends to seek a variance from the Zoning Board of Appeals).** The proposed Highland Road driveway must be aligned with the existing driveway on the opposite side of the street or offset 350 feet, measured centerline to centerline. **The centerline of the proposed driveway shall exactly offset the west side of the existing boulevard driveway (Fisk Corners) on the north side of Highland Road, or a variance shall be required from the Zoning Board of Appeals. (Comment outstanding; however, the applicant intends to seek a variance from the Zoning Board of Appeals).** The minimum distance between a proposed driveway and the nearest intersection shall not be less than the minimum required driveway-to-driveway spacing. Also, a proposed driveway on the approach to an intersection shall not be opposite a dedicated left-turn lane for the intersection, or within 100 feet upstream of that lane. This provision may be waived by the Planning Commission if supported by a traffic impact study. The nearest street intersection (Fisk Road and Highland Road – to the east) is approximately 422 feet from the subject site. **As the driveway is not 455 feet from the intersection, a variance from the Zoning Board of Appeals is required, or a waiver is required by the Planning Commission if supported by a traffic impact study. (Comment addressed. The applicant's engineer stated the proposed driveway is approximately 524 feet from the Fisk Road intersection (measured centerline to centerline). A variance/waiver is not required).**

To minimize turning conflicts, boulevard-style access drives (or local streets) shall generally not be approved opposite undivided access drives, or vice versa. If cause has been shown for a Planning Commission waiver of this requirement, interlocking entering left turns must be minimized by aligning the entering side of the divided drive with the undivided drive. **The proposed undivided two-way driveway is opposite a boulevard-style access drive (Fisk Corners). A waiver from the coordination of divided and undivided driveways is required. (Comment outstanding. The applicant is requesting a Planning Commission waiver from this requirement. If cause has been shown for a waiver of this requirement, interlocking entering left turns must be minimized by aligning the entering side of the divided drive with the undivided drive).**

Utilities

Municipal water and sanitary sewer are available to serve the site. The Township Engineering Consultant will perform an analysis of utilities, stormwater, and grading to ensure compliance with all applicable ordinances as well as the Township Engineering Design Standards.

Staff Analysis

Special land uses for automobile wash establishments are evaluated using the general standards for all special land uses listed in Article 6, Section 10 of the zoning ordinance and the following specific standards for automobile wash establishments found in Article 4, Section 11:

- A. *Buildings shall be set back sixty (60) feet from the existing or proposed right-of-way line. The proposed front yard setback is 135.2 feet.*
- B. *Entrance and exit drives shall be no less than one hundred (100) feet from any street intersection and at least two hundred (200) feet from any residential district. The nearest street intersection (Fisk Road and Highland Road – to the east) is approximately 422 feet from the subject site. The proposed driveway exceeds the minimum 200-foot setback from a residential zoning district.*
- C. *Waiting spaces shall be provided in an amount equal to seven (7) times the maximum automobile capacity within the building. No vehicle shall be permitted to wait or stand within a dedicated right-of-way. The site plan states there would be four car capacity within the building; therefore, 28 stacking spaces are required. 32 stacking spaces are shown on the plan.*
- D. *The site shall be drained so as to dispose of all surface water in such a way as to preclude drainage of water onto adjacent property or heavy tracking onto a public street. A combination of alternatives may be used, including, but not limited to, blowers, hand-drying, length of exit drive and general site design. The Community Development Department defers to the Director of Public Services and Township Engineering Consultant on the stormwater management plan for the site.*
- E. *The site plan shall detail the location of all proposed vacuum stations. These areas shall be located so as not to conflict with any required parking, drive, or automobile standing areas. Self-contained, covered waste receptacles shall be provided at each proposed vacuum station to provide convenient disposal of customer refuse. Vacuum stations (quantity: 26) are located north of the building (25 spaces – 13' by 18' in size); **however, waste receptacles for each vacuum station are not shown. Trash receptacles are required to be of commercial quality and complement the building design and style. (Comment partially addressed. The applicant's engineer stated waste receptacles are mounted at each vacuum; this shall be noted on the site plan. Additionally, if this project proceeds to final site plan, a detail of the trash receptacles shall be provided at that time).** The zoning ordinance states no noise, as measured from a property line, exceeding 70 dB(A) from 6:00 a.m. to 9:00 p.m. or 65 dB(A) from 9:00 p.m. to 6:00 a.m. shall be emitted. **The applicant shall confirm if it was intentional to provide 26 vacuum stations served by 25 parking spaces.** (Comment addressed. The applicant's engineer stated there are 26 vacuums for 25 spaces because vacuums are provided on each side of each vehicle space).*

Staff recommends reducing the number of vacuum stations by 50 percent. (Comment remains as a notation. The applicant’s engineer stated 25 vacuums are anticipated to be required for the customer volume. The Planning Commission should determine if the number of vacuums are acceptable or if the number of vacuums should be reduced).
Also, the applicant shall submit a predictive noise analysis to demonstrate noise levels for the site will not exceed the performance standards. (Comment remains as a notation. The applicant’s engineer stated the hours of operation are 8:00 a.m. to 8:00 p.m. and the site would comply with the performance standards. The Planning Commission should determine if a predictive noise analysis is required. In making its determination, the Planning Commission should consider the proposed use in relation to adjoining properties and uses).

F. *An outdoor lighting plan shall specify the type of fixtures to be used, light intensity, and method of shielding the fixtures so that light does not project onto adjoining properties or on any public or private street or right-of-way. Dropped fixtures shall not be allowed. The site plan shall include a photometric plan and catalog details for all proposed fixtures. Outdoor lights must meet the performance standards of Section 5.18.* Information on site lighting was provided and will be reviewed in detail during final site plan review. Following are initial comments on the lighting (photometric) plan:

- **Footcandles shall be measured at approximately six feet above grade. Revise accordingly, and the plan must contain a note confirming footcandles are measured at six feet above grade. (Comment addressed. Lighting calculations have been updated to reflect data at six-feet above grade).**
- **Complete catalog details (lighting fixture specification sheets) for all proposed fixtures shall be provided. Light fixture selections and colors are subject to review and approval by the Township. (Comment partially addressed. Partial lighting fixture specifications have been provided on Sheet C-10. Complete catalog details shall be submitted separately at final site plan).**
- **No wall-mounted decorative or architectural lighting shall be installed on the south (rear) facade of the building. (Comment addressed. The applicant’s engineer stated the south wall-packs would only turn on in emergency situations only). Up-lighting or outward shining lighting are also not permitted on the building. (Comment remains as a notation).**
- **The light pole detail indicating height (Sheet C-9) is inconsistent with the height labeled on the lighting plan. Revise accordingly to provide the total height, including the base, pole, and light fixture. (Comment outstanding. Total height shall be measured to the top of the fixture. Additionally, the light pole detail (Sheet C-10 of the revised plans) does not accurately represent the fixture to be utilized on the pole-mounted luminaries. For reference, the fixture is the assembly holding a lamp (bulb). Revise accordingly).**

- The Planning Commission may require special conditions for properties adjacent to residential uses and districts.

G. *A screen wall or obscuring fence shall be provided on those sides abutting a residential district, in accordance with the provisions of this Ordinance.* While the proposed building is located 427.7 feet from the residential zoning district to the south, **the required screening is not shown on the plan. If not provided, a variance shall be required from the Zoning Board of Appeals.** (Comment addressed. A six-foot-tall vinyl opaque fence has been proposed. If the project proceeds to final site plan, a fence detail shall be provided).

Development Standards

The site plan shows compliance with building and parking setback requirements. Proposed building height is 19'-4", which complies with the maximum building height allowed in the GB zoning district (35 feet or 2 stories, whichever is less). **The height of the parapet tower shall be dimensioned on the exterior elevations.** Based on a note on the site plan, it appears the maximum height of the parapet is 24 feet. (Comment outstanding. Sheet A-2 (exterior elevations) notes the parapet cap is 124'-3³/₄" tall. This appears to be an error, as the applicant's engineer stated the parapet tower height is 24'-3³/₄". Revise accordingly).

Building Architecture and Design

In accordance with the M-59 architectural character requirements, exterior building materials shall be composed primarily of high quality, durable, low maintenance material, such as masonry, stone, brick, glass, or equivalent materials. Buildings should be completed on all sides with acceptable materials. The proposed building materials for the project are a mix of brick veneer, and cultured stone veneer with a stone cap four feet up around the base of the building. Faux columns add architectural interest to the building, with an EFIS (exterior insulation finishing system) parapet tower at the west side of the building. Pre-fabricated decorative metal panels are located below the EFIS parapet on the south and west elevations. An aluminum parapet cap complimentary in color to the proposed building materials would be located on top of the walls around the building (with the exception of the parapet tower). Tinted mirrored windows are proposed on three elevations of the building (no windows on east side), with aluminum lattice canopies using aluminum kicker legs at each end to attach to the building. Aluminum clad fascia (stripe) is proposed on three elevations of the building (not proposed on the rear). **The fascia shall be removed from the building, or be the same color as the cap on top of the walls around the building. If the fascia (stripe) attracts attention to the building, a variance shall be required from the Zoning Board of Appeals.** (Comment partially addressed. The fascia is specified as 'sierra tan', the same color as the wall caps as to not attract attention to building. A note shall be added to the exterior elevations stating all cladding/fascia and wall caps shall be 'sierra tan' color).

A sample board of building materials to be displayed at the Planning Commission meeting and elevations in color are required by the zoning ordinance and must be submitted at final site plan. (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

Address identification characters are proposed on the east elevation of the building. A note on the plan states each character shall be a minimum of four inches high. **Six-inch-tall numbers visible from the street shall be required. The address location is subject to approval of the Township Fire Marshal.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review. Revised elevations are to be provided at final site plan).

The applicant shall provide an explanation in writing for the purpose of the second overhead door (north door) on the east elevation of the building. (Comment partially addressed. The applicant's engineer stated the second overhead door at the exit is to be utilized for chemical deliveries and maintenance access to mechanical equipment. Sheet A-1 (floor plan) shows equipment locations. Sheet A-1 shall be revised; it incorrectly identifies the east elevation of the building as the car wash entrance and the west elevation of the building as the car wash exit. Those labels (and directorial arrows) are reversed and shall be revised at the time of final site plan).

Parking

In addition to the required stacking spaces previously described, one parking space per each employee (working on the largest shift) must be provided. Four 'Employee Only' parking spaces are proposed at the northeast corner of the site. **The applicant shall verify the employee information provided with the parking data represents the number of employees working on the largest shift.** (Comment addressed. The response letter provided to the first review indicates four (4) employees would be the maximum number of employees on any shift).

The accessible parking stall detail on Sheet C-8 is inconsistent with the dimensions on the site plan, which shows a three-foot-wide access aisle west of the barrier-free space. In accordance with the zoning ordinance and Americans with Disabilities Act (ADA), the adjacent access aisle shall be eight-feet-wide. The plan shall be revised accordingly. (Comment addressed. ADA accessible space and standard detail has been revised to comply with ADA requirements. **The zoning ordinance also requires each individual parking space be delineated by dual stripes, two feet apart centered on the dividing lines and painted white. The plan (including the parking stall markings detail) shall be revised accordingly to indicate the required striping.** (Comment addressed. Parking stall striping and detail has been revised to provide dual striping).

The zoning ordinance requires one-way drives be a minimum of 20-feet-wide. The plan shall be revised accordingly, or a variance is required from the Zoning Board of Appeals. (Comment outstanding. A variance from this standard is required from the Zoning Board of Appeals. This variance request shall be added to the zoning relief table on Sheet C-1).

Off-Street Loading Requirements

The zoning ordinance requires one loading space for a development of this size. Such loading and unloading space must be an area 10 feet by 50 feet, with a 15-foot height clearance. **No loading space is proposed; therefore, a variance is required from the Zoning Board of Appeals.** (Comment partially addressed. A loading space is now proposed. The response letter provided to the first review indicates any loading/unloading would occur off-hours as to not conflict with customer traffic flow; a plan note stating such shall be provided on the final site plan).

Trash Receptacle Screening

The zoning ordinance requires dumpsters to be surrounded by a six-foot-tall to eight-foot-tall wall on three sides and an obscuring wood gate on a steel frame on the fourth side, located on a six-inch concrete pad extending 10 feet in front of the gate, with six-inch concrete-filled steel bollards to protect the rear wall and gates. **The bollards for the dumpster enclosure shown on Sheet C-8 shall be six-inch diameter instead of four-inch diameter, and bollards shall be provided six inches in front of (north) of each gate post.** (Comment addressed. Bollard detail has been revised from four-inch to six-inch bollards. Trash enclosure detail has been revised to show bollards six-inches from front gate posts). The proposed enclosure is located north of the building. The zoning ordinance prohibits trash enclosures within a required front yard setback, and does not allow enclosures closer to the front lot line than the principal building. The proposed dumpster enclosure is located closer to Highland Road than the automobile wash building, and does not meet the front yard setback. As proposed, **the following variances are required from the Zoning Board of Appeals: an 89-foot variance to project into the front yard, and a 10-foot variance to encroach into the front yard setback.** (Comment partially addressed. The trash enclosure detail was shifted south out of the front yard setback. However, the trash enclosure is projecting approximately 81.3 feet into the front yard (Sheet C-2 shall be revised to measure the projection to the northern extent of the trash enclosure). The applicant intends to seek a variance from the Zoning Board of Appeals).

At the time of trash pick-up, the location of the dumpster enclosure could cause conflict with traffic entering and exiting the site. Circulation must be considered when relocating the dumpster enclosure, or during consideration of a variance request to allow the dumpster location at the currently proposed location. (Comment remains as a notation. The response letter provided to the first review indicates all trash pickup would occur prior to 8:00 a.m. before the car wash opens).

An eight-foot-tall split-face block (8" CMU) screen wall is proposed around three sides of the dumpster enclosure, with steel doors on the north side of the structure. The zoning ordinance states dumpsters and trash storage enclosures shall be constructed of the same decorative masonry materials as the buildings to which they are accessory. Brickform concrete (simulated brick pattern) or stained, decorative CMU block are not permitted where the principal building contains masonry. Plain CMU block is also prohibited. **The dumpster enclosure shall match the same brick veneer as the facade of the building with a steel backed wood gate painted a complementary color to the brick veneer. The trash/recycle enclosure detail on Sheet C-8 shall be revised to show brick veneer on the outside walls of the concrete enclosure and indicate the color of the gate.** (Comment partially addressed. The gate as shown on the front elevation detail does not match the gate detail. Additionally, the gate detail states the cedar boards are to be stained "color as selected by owner." The color/stain of the gate is subject to review and approval by the Township. The gate shall be stained a color similar to 'sierra tan'. Revise accordingly).

Landscaping and Screening

Landscaping must comply with the provisions of the zoning ordinance and should be designed to preserve existing significant natural features and to buffer service areas, parking lots, and dumpsters. A mix of evergreen and deciduous plants and trees are preferred, along with seasonal accent plantings. A landscape plan is not required as part of the preliminary site plan, but was provided for consideration and will be reviewed in detail during final site plan review if the preliminary site plan is approved. Following are initial comments on the landscape plan:

- Interior Landscaping Requirements: for every new development requiring site plan review, except site condominiums as regulated in Article 6, Section 1, interior landscaping areas shall be provided, equal to at least 15 percent of the total lot area. These landscaped areas shall be grouped near all building entrances, building foundations, pedestrian walkways, and service areas, and may also be placed adjacent to fences, walls, or rights-of-way. These planting areas shall be so located as to breakup an otherwise continuous abutment of building facade with sidewalks and/or parking areas. All interior landscaping shall provide one large deciduous, small ornamental deciduous, or evergreen tree and five shrubs for every 300 square feet of required interior landscaping area.
- Parking Lot Landscaping: within every parking area containing 10 or more spaces, there shall be parking lot landscaping in accordance with this Subsection. These landscaping areas shall be located so as to better define parking spaces and drives. Landscaping on the perimeter of the parking lot does not satisfy the parking lot landscaping requirement. Island locations shall also be considered in a manner that will assist in controlling traffic movements. The requirements, for trees and islands, may be modified when it is found through careful coordination of parking lot landscaping with peripheral and building plantings an unnecessary duplication of plantings would be created. In addition, consideration shall be given to situations when an excess number of small islands would be created that would only serve to disrupt reasonable traffic patterns and maintenance activities. **Trees as previously described are not provided; therefore, a variance is required from the Zoning Board of Appeals.** (Comment addressed. Additional trees have been proposed).

- Transformer and Mechanical Equipment Screening: all ground mounted transformers, climate control, and similar equipment shall be screened from view from any street or adjacent property by a wall constructed of the same decorative exterior materials as the building and not less than the height of the equipment to be screened. As an alternative, the equipment may be screened by landscaping approved by the Planning Commission. All rooftop climate control equipment, transformer units, and similar equipment shall be screened. The materials used to screen the equipment shall be compatible in color and type with exterior finish materials of the building. All rooftop equipment shall conform to the maximum height regulations of this Ordinance. **The plans do not show proposed locations for mechanical units or provide the method of screening. The plans shall be revised accordingly to provide the location(s) and method of screening.** (Comment partially addressed. Electric transformer has been shown on the plans screened by evergreen shrubs. The proposed shrubs shall be replaced with arborvitae. Revise accordingly).
- Greenbelts are required between nonresidential parking areas adjacent to road rights-of-way and shall be at least 20-feet-wide and improved with one large deciduous or evergreen tree and eight shrubs for every 30 lineal feet, except they may be substituted in part with a masonry screen wall, 30 inches in height, at the discretion of the Planning Commission, in which case, a five-foot greenbelt adjacent to the screen wall must be provided. **Trees as previously described are not provided; therefore, a variance is required from the Zoning Board of Appeals.** (Comment outstanding. The applicant intends to seek a variance from the Zoning Board of Appeals. Their reason for requesting the variance is the front greenbelt is within a watermain easement. This variance request shall be added to the zoning relief table on Sheet C-1).
- **Arborvitae are not considered evergreen trees; they are considered shrubs. The Plant Schedule shall be revised accordingly.** (Comment addressed. The proposed arborvitae have been replaced with White Spruce trees, which staff supports as preferable in the proposed locations. As previously stated, arborvitae shall screen the transformer).
- **Trees identified for protection during construction and the means of protection shall be identified prior to final site plan. No construction shall occur until tree protection has been installed and approved by the Community Development Director.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).
- Trees shall not be planted closer than four feet to a property line. **Add note to landscape plan at final site plan.** (Comment addressed. A note has been added to the landscape plan (Sheet C-7)).
- All required landscape areas in excess of 200 square feet shall be irrigated to assist in maintaining a healthy condition for all plantings and lawn areas. **An irrigation plan shall be provided at final site plan.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

- All required site irrigation systems shall include a rain sensor or similar measure to ensure irrigation does not occur during or shortly after precipitation events. All site plans shall note installation of required irrigation. **Add note to all plans.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).
- **Six-inch straight-faced (vertical) curb of concrete construction shall be used around landscape and parking areas. The standard Michigan Department of Transportation (MDOT) detail for six-inch straight-faced curb shall be provided on Sheet C-9 of the site plan.** (Comment addressed. MDOT standard curb details have been added to Sheet C-9 of the plans).
- **The zoning ordinance requires a land form buffer, buffer strip and obscuring fence, or screen wall between the subject site and the property to the west. No screening as previously described is proposed; therefore, a variance for the west screening is required from the Zoning Board of Appeals.** (Comment addressed. A six-foot-tall vinyl fence has been proposed. If the project proceeds to final site plan, a fence detail shall be provided).
- **Note 2 on the landscape plan mentions seed, and sod is required.** (Comment addressed. Note 2 has been revised to indicate sod).
- **Note 3 on the landscape plan mentions mulch. The zoning ordinance states the mulch product itself shall be at least doubled-shredded quality.** (Comment addressed. Note 3 has been revised to specify double-shredded quality).
- All required landscape areas in excess of 200 square feet must be irrigated to assist in maintaining a healthy condition for all landscape plantings and lawn areas. **An irrigation plan shall be required at final site plan.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

Signs

The site plan does not show the location of a monument sign along Highland Road. Exterior elevations show two wall signs on the building (both on the parapet tower (north side and west side)). A maximum of one wall sign is permitted for each principal building; the one permitted wall sign must be located flat against the building's front facade or parallel to the front facade on a canopy. Total area of a wall sign cannot exceed 10 percent of the front facade of the building. **The wall sign on the west elevation shall be removed, or a variance is required from the Zoning Board of Appeals. (Comment remains as a notation. The response letter provided to the first review indicated the west wall sign is to be removed. Revised elevations are to be provided at final site plan).** Additionally, wall signs cannot extend above the roofline of a building. **A variance from the Zoning Board of Appeals is required to install a wall sign extending above the roofline of the building. (Comment outstanding; however, the applicant intends to seek a variance from the Zoning Board of Appeals).**

Planning Commission Options / Recommendation

The Planning Commission may recommend approval, approval with conditions, or denial of the preliminary site plan to the Township Board; action on the special land use is determined by the Planning Commission. **Staff recommends the plans be revised and resubmitted to address the items identified in this memorandum. A list of any requested variances shall also be provided. (Staff recommends the project is eligible for consideration by the Planning Commission. Any recommendation of approval of the preliminary site plan or approval of the special land use shall be conditioned on the applicant addressing all staff and consultant review comments and recommendations, and requesting and receiving the necessary variances from the Zoning Board of Appeals).**

Notes:

1. A notarized signature of the property owner shall be provided on the site plan application. Evidence, satisfactory to the Township Attorney, that the signatories on the application are authorized to execute on behalf of the property owner and applicant shall be a condition of any approvals.
 - a. Paragraph 5.h of the Operating Agreement of the LLC provides the Assistant Managers with authority to execute development documents related to a property only “Upon the Manager’s approval of a letter of intent or other document evidencing the approval of the acquisition of a parcel or parcels of real property (and such document being hereinafter referred to as an “LOI”) ...”
 - b. The LOI provided for the subject property is not signed by a Manager, but an Assistant Manager. Without the “Manager’s approval of the LOI,” the Assistant Managers are without authority to take any action related to the development of the subject property.
2. A date (including revision dates) shall be provided on the exterior elevations and floor plan. Said plans shall also be sealed by the Registered Architect who prepared the plans.



Site / Construction Plan Review

To: Sean O'Neil, Planning Department Director

Date: 3/21/2022

Project: Hypershine Auto Wash

Project ID #: DET-210462

Date on Plans: 3/16/2022

The Fire Department has the following comments with regards to the 2nd Review of Hypershine Auto Wash.

1. The access layout has the potential (depending on customer demand) to completely block fire department access, forcing the apparatus to remain and operate off of Highland Rd.
2. Customer approach and departure is likely to create traffic since there is only one means of site access.
3. The North drive exceeds the 150 feet threshold for dead-end fire apparatus access roads, and will require an approved turnaround. Dead-end fire apparatus access roads in excess of 150 feet shall be provided with width and turnaround provisions in accordance with table D103.4. (120-foot hammerhead, 60 foot "Y" or 96-foot diameter cul-de-sac).

Jason Hanifen
Fire Marshal
Charter Township of White Lake
(248)698-3993
jhanifen@whitelaketwp.com

Plans are reviewed using the International Fire Code (IFC), 2015 Edition and Referenced NFPA Standards.

Memo

To: Sean O'Neil, Planning

From: Jeanine A Smith

Date: March 21, 2022

Re: Project Name: Hypershine Car Wash File No: Parcel Number:12-23-201-006

Comments:

No comment.

**WHITE LAKE TOWNSHIP
ZONING BOARD OF APPEALS
REGULAR MEETING
APRIL 28, 2022**

CALL TO ORDER

Chairperson Spencer called the meeting to order at 7:00 P.M. She then led the Pledge of Allegiance.

ROLL CALL

Present:

Clif Seiber
Tony Madaffer
Debby Dehart, Planning Commission Liaison
Niklaus Schillack, Vice Chairperson
Jo Spencer, Chairperson

Others:

Justin Quagliata, Staff Planner
Hannah Micallef, Recording Secretary

15 members of the public present

APPROVAL OF AGENDA

MOVED by Member Schillack, SUPPORTED by Member Dehart, to approve the agenda as presented. The motion CARRIED with a voice vote (5 yes votes).

APPROVAL OF MINUTES:

- a. Zoning Board of Appeals Regular Meeting of March 24th, 2022

MOVED by Member Seiber, SUPPORTED by Member Schillack to approve the Zoning Board of Appeals Regular Meeting Minutes of March 24th, 2022 as presented. The motion CARRIED with a voice vote (5 yes votes).

NEW BUSINESS:

- A. Applicant: Andrew Giles
672 N. Milford Road Suite 152
Highland, MI 48357
Location: **471 Hillwood Drive**
White Lake, MI 48383 identified as 12-21-452-015
Request: The applicant requests to construct an accessory building (garage), requiring a variance from Article 3.1.6.E, R1-D Single Family Residential Front-Yard Setback.

Chairperson Spencer noted for the record that owners within 300 feet were notified. 23 letters were received in favor, 0 letters were received in opposition, and 1 letter was returned undeliverable from the U.S. Postal Service.

Staff Planner Quagliata presented his staff report. He noted the architectural plans did not scale.

Member Schillack asked staff about the submitted survey; he noted the well and septic field were not shown, and asked if identifying these items were required. Staff Planner Quagliata said yes; there was a checklist an applicant received with a building permit application requiring several different items be provided on a plan.

Benjamin Nelms, homeowner, was present to speak on behalf of his builder. Mr. Nelms said he was unaware the septic field and well were required to be identified on the plan. Mr. Nelms said the well was in the front of the house, and the septic field was in the rear of the house.

Mr. Schillack asked Mr. Nelms where the septic was in regard to the property lines. Mr. Nelms said the well was around 26 feet from the front property line, and the septic field was around 30 feet from the rear property line. He said his house was around 100 feet from Brendel Lake.

Staff Planner Quagliata said the topography was not shown on the survey.

Mr. Nelms said he wanted to build a garage for his children to play in it, and for his wife to park her vehicle in the winter.

Member Dehart asked Mr. Nelms if the orange traffic cones on his property were where the proposed garage was to be erected. Mr. Nelms confirmed, and said the walkway to the house would be redone during this project as well.

Member Seiber asked Mr. Nelms if there was to be a second floor on the proposed garage. Mr. Nelms said yes, and it would be used for storage with an attic access only. He would prefer storage tresses.

Member Schillack asked Mr. Nelms if he considered moving the garage closer to the house. Mr. Nelms said then he would have to consider the slope of the lot, and the slab was preexisting.

Chairperson Spencer opened the public hearing at 7:16 P.M.

Mike Krecek, 525 Hillwood, spoke in favor of the applicant's case.

Chairperson Spencer closed the public hearing at 7:18 P.M.

Member Seiber stated he understood the applicant's request based on the slope of the lot.

The ZBA discussed the standards from Article 7, Section 37 from the ClearZoning Ordinance:

- A. Practical Difficulty
 - Chairperson Spencer said the topography of the lot posed a practical difficulty. Member Schillack and Member Dehart agreed.
- B. Unique Situation
 - Chairperson Spencer said the lot was unique. Member Schillack agreed.
- C. Not Self-Created
 - Member Schillack said the applicant did not create the topography.
- D. Substantial Justice
 - Member Seiber said the surrounding neighbors had garages. Member Dehart said the neighbor's garages were closer to the road.
- E. Minimum Variance Necessary
 - Chairperson Spencer said the variances requested were the minimum necessary.

Member Schillack MOVED to approve the variance requested by Andrew Giles from Article 3.1.6.E of the Zoning Ordinance for Parcel Number 12-21-452-015, identified as 471 Hillwood Drive, in order to construct an accessory building (detached garage) that would encroach 15.18 feet into the required front yard setback. This approval will have the following conditions:

- **The Applicant shall obtain all necessary permits from the White Lake Township Building Department.**
- **Plans drawn to scale and a complete plot plan / survey shall be submitted to meet requirements of the Building Official.**
- **An as-built survey shall be required to verify the approved setbacks.**
- **The garage shall not include stairs or a second story or loft area or living space.**

Member Dehart SUPPORTED, and the motion CARRIED with a roll call vote (5 yes votes): (Schillack/yes, Dehart/yes, Seiber/yes, Spencer/yes, Madaffer/yes)

- B. Applicant: Andrew Bienkowski and Rachel Menard
2230 Wiggen Lane
White Lake, MI 48386
Location: **2230 Wiggen Lane**
White Lake, MI 48386 identified as 12-14-231-003
Request: The applicant requests to construct a single-family house, requiring variances from Article 3.1.6.E, R1-D Single Family Residential Front-Yard Setback, Side-Yard Setback, Rear-Yard Setback, and Maximum Lot Coverage. A variance from Article 3.11.Q, Natural Features Setback is also required

Chairperson Spencer noted for the record that 26 owners within 300 feet were notified. 0 letters were received in favor, 0 letters were received in opposition, and 0 letters were returned undeliverable from the U.S. Postal Service.

Staff Planner Quagliata presented his staff report.

Member Schillack asked staff if the previous construction was done by the current owner. Staff Planner Quagliata said no, it was done by the previous owner.

Member Dehart asked staff the distance of the existing house to the side-yard. Staff Planner Quagliata said a variance was received for the side yard and was not built to the variance received. The proposed house would decrease the nonconformity on the south and north side of the lot, but create nonconformities by encroaching into the rear yard setback and natural features setback.

Andrew Bienkowski and Rachel Menard, 2230 Wiggen Lane, were present. Their goal was to create a safe house built to code. A new house would provide that, as well as keep in line with what the other neighbors had done in the neighborhood. Mr. Bienkowski said the south end addition was preexisting, it was from the 1950s.

Member Dehart asked the applicants if the shed would be removed. Ms. Menard confirmed.

Chairperson Spencer stated the house could be downsized to be brought more into compliance with the zoning ordinance.

Chairperson Spencer opened the public hearing at 7:46 P.M.

Roger Harrington, 2240 Wiggen Lane, spoke in support of the applicant's request.

Chairperson Spencer closed the public hearing at 7:50 P.M.

Member Seiber said the front setback and side yard setbacks would be an improvement, but the proposed house would be pushed 9 feet closer the lake. The depth of the lot was shallow, and would only leave a 30-foot-deep building envelope. He stated the way the lake surrounded the lot made it difficult to achieve the setback from the lake.

The ZBA discussed the standards from Article 7, Section 37 from the ClearZoning Ordinance:

A. Practical Difficulty

- Member Seiber said the shape and lack of depth of the lot presented a practical difficulty.

B. Unique Situation

- Member Schillack said the lot was unique based on the shape.

C. Not Self-Created

- Chairperson Spencer said the proposed house could be downsized and the request was a self-created problem.

D. Substantial Justice

- Member Seiber said the neighboring houses did not fully comply with the zoning ordinance.
- Member Schillack said the proposed house could impact the view of the neighbors to the south.

E. Minimum Variance Necessary

- Chairperson Spencer said the proposed house could be downsized to reduce variance requests.

Member Dehart asked the applicants if they would consider reducing the rear corners of the house on the south and north sides to eliminate some of the requested variances. The ZBA discussed modifying the south side yard setback request to result in a setback of 7.5 feet.

Member Schillack MOVED to table the variance requests of Andrew Bienkowski and Rachel Menard for Parcel Number 12-14-231-003, identified as 2230 Wiggen Lane, to consider comments stated during this public hearing.

SUPPORT by Member Madaffer and the motion CARRIED with a roll call vote (5 yes votes): (Schillack/yes, Madaffer/yes, Dehart/yes, Spencer/yes, Seiber/yes).

C. Applicant: EROP, LLC (Jeff Justice)

3130 North Kandy Lane

Decatur, IL 62526

Location: **9345 Highland Road**

White Lake, MI 48386 identified as 12-23-202-006

Request: The applicant requests to construct an automobile wash establishment, requiring variances from Article 6.4.C.i, Minimum Driveway Spacing – Same Side of Road, Article 5.19.N.i.c, Dumpsters and Trash Storage Enclosures, Article 5.19.D, Required Minimum Screening and Landscaping, Article 5.9.F.iv, Prohibited Signs.

Chairperson Spencer noted for the record that 22 owners within 300 feet were notified. 0 letters were received in favor, 3 letters were received in opposition, and 1 letter was returned undeliverable from the U.S. Postal Service.

Staff Planner Quagliata presented his staff report.

Chairperson Spencer asked staff if the driveway would be shifted to align with the driveway across Highland Road. Staff Planner Quagliata said yes, the applicant had made the change after last week's Planning Commission meeting. The frontage road was stubbed at the east and west side property lines. The dumpster was moved closer to the building from its previously proposed location.

Reid Cooksey, 607 Shelby St, Detroit, was present to speak on behalf of the applicant. He said the comments from the applicant were took to heart. Front greenbelt landscaping was added, and the drive was shifted to align with the drive across Highland Road at Fisk Corners. The Michigan Department of Transportation (MDOT) approvals would be requested. The dumpster enclosure was placed where it was because the trash vehicles needed to be kept away from the drive into the tunnel and the vacuum spaces. The building was pushed as far back on the lot as it could; the DTE powerline prevented the building from being moved closer to the rear property line. Screening would be provided in the north and rear of the property.

Member Schillack asked Mr. Cooksey why the dumpster enclosure could not be located behind the front line of the building. Mr. Cooksey said due to the DTE overhead lines. In addition, heavy machinery driven over sensors and near the vacuum spaces had the potential to damage equipment.

Mr. Cooksey added the withdrawn sign variance was requested to provide the car wash visibility since there was a water main easement along the frontage that would prohibit a monument sign.

Chairperson Spencer opened the public hearing at 8:48 P.M. She read three letters in opposition of the applicant's request.

Mary Earley, 5925 Pineridge Court, spoke in opposition of the car wash in regards to traffic.

Robert Zawideh, 440 Berry Patch Lane, spoke regarding concerns of water runoff from the car wash to the lake. He was concerned about traffic as well.

Melissa Wheeler, 9229 Highland, owner of the Art of Dance, said her clients were voicing their concerns regarding the traffic.

David Gian, 9315 Steephollow Drive, had concerns about traffic and the lake.

Chairperson Spencer closed the public hearing at 9:04 P.M.

Member Dehart said the building provided a 428-foot setback from the back of the building to the rear property line.

Mr. Cooksey said the closest property to the car wash was the Art of Dance more than 70 feet away, and the decibels measured from the studio to the car wash would be zero. The vacuums were state of the art and were as muffled as could be. The soaps used would be bio degradable and environmentally friendly.

The ZBA discussed the proposed white vinyl fence versus a masonry screen wall. Staff Planner Quagliata stated a screen wall was usually suggested when the commercial activity was closer to a residential area. He added the Planning Commission was okay with the vinyl fence due to car wash being setback 428 feet from the rear property line. He added he also suggested the number of vacuums be reduced by 50 percent; however, the Planning Commission did not take offense to the proposed number of vacuums.

The ZBA discussed the standards from Article 7, Section 37 from the ClearZoning Ordinance:

A. Practical Difficulty

- Member Dehart said the access management standards posed a practical difficulty due to the width of the lot, and the dumpster location was a practical difficulty due to the DTE power lines.

B. Unique Situation

- Member Seiber said the access situation was unique; failure to grant the variance on the driveway would prohibit access to the site.

C. Not Self-Created

- Member Dehart said the applicant did not place the powerlines.

D. Substantial Justice

- Chairperson Spencer said if the driveway variances were not granted, the applicant would be denied substantial justice. The dumpster was necessary as well, as heavy machinery loading could not be done over the drives to the tunnel.

E. Minimum Variance Necessary

- Chairperson Spencer said the variance for the dumpster was reduced. Member Schillack understood the variance for the driveway was necessary and minimal.

Member Dehart MOVED to approve the variances requested by EROP LLC from Article 6.4.C.i and Article 5.19.N.i.c of the Zoning Ordinance for Parcel Number 12-23-202-006, identified as 9345 Highland Road, in order to allow construction of a driveway 197 feet from the driveway to the east and 262 feet from the driveway to the west, and a 40-foot variance to allow the dumpster enclosure to project in front of the principal building. This approval will have the following conditions:

- The Applicant shall obtain all necessary permits from the White Lake Township Building Department.
- The Applicant shall receive preliminary site plan approval from the Township Board and final site plan approval from the Planning Commission.
- The Highland Road site access drive shall align with the divided drive across the street (Fisk Corners boulevard-style access drive).

Member Madaffer SUPPORTED and the motion CARRIED with a roll call vote (4 yes votes): (Dehart/yes, Madaffer/yes, Seiber/yes, Spencer/yes, Schillack/no).

OTHER BUSINESS

Staff Planner Quagliata said there may be a Special Zoning Board of Appeals meeting in May to discuss zoning ordinance amendments.

ADJOURNMENT

MOVED by Member Seiber, SUPPORTED by Member Dehart to adjourn the meeting at 9:32P.M. The motion CARRIED with a voice vote (5 yes votes).

NEXT MEETING DATE: May 26, 2022 Regular Meeting

DRAFT

**WHITE LAKE TOWNSHIP
ZONING BOARD OF APPEALS**

**REPORT OF THE
COMMUNITY DEVELOPMENT DEPARTMENT**

TO: Zoning Board of Appeals
FROM: Justin Quagliata, Staff Planner
DATE: April 28, 2022

Agenda item: 7c
Appeal Date: April 28, 2022
Applicant: EROP, LLC (Jeff Justice)
Address: 3130 N. Kandy Lane
Decatur, IL 62526
Zoning: GB (General Business)
Location: 9345 Highland Road
White Lake, MI 48386

Property Description

The approximately 4.85-acre parcel identified as 9345 Highland Road is located on the south side of Highland Road, west of Fisk Road, and zoned GB (General Business).

Applicant's Proposal

EROP LLC, the applicant, is proposing to construct an automobile wash establishment, and associated landscaping and parking, and install a prohibited sign.

Planner's Report

The requested variances are listed in the following table.

Variance #	Ordinance Section	Subject	Standard	Requested Variance	Result
1 & 2	Article 6.4.C.i	Minimum driveway spacing	455 feet (same side of road)	242 feet (east) 209 feet (west)	213 feet (east) 246 feet (west)
3	Article 5.19.N.i.c	Dumpsters and trash storage enclosures	0-foot projection	80.2 feet	80.2 feet
4 & 5	Article 5.19.D	Required minimum screening and landscaping	20-foot greenbelt with 1 tree and 8 shrubs per 30 linear feet	11 trees 28 shrubs	0 trees 62 shrubs
6	Article 5.9.F.iv	Prohibited Signs	Above-the-roof signs prohibited	1 sign above the roof line on the building parapet	1 sign above the roof line on the building parapet

The variances are being processed concurrently with the preliminary site plan and special land use requests. The staff report for the preliminary site plan and special land use (attached) should be referenced for a more complete overview of the project. At its April 21, 2022 meeting the Planning Commission recommended approval of the preliminary site plan to the Township Board, with conditions, including the applicant receiving approval from the Zoning Board of Appeals. The special land use was approved by the Planning Commission with the same conditions.

Variances #1 and #2: Driveways must have a minimum of 455 feet of spacing provided from other driveways along the same side of the street, measured centerline to centerline. The centerline of the proposed driveway would be located approximately 213 feet from the existing driveway (Art of Dance) to the east and approximately 246 feet from the existing driveway (formerly utilized by Brendel's Septic) to the west.

Variance #3: The proposed dumpster enclosure is located north of the building. The zoning ordinance prohibits trash enclosures within a required front yard setback and does not allow enclosures closer to the front lot line than the principal building. The proposed dumpster enclosure is located closer to Highland Road than the automobile wash building. An 80.2-foot variance is requested to allow the trash enclosure to project into the front yard.

Variances #4 and #5: Greenbelts are required between nonresidential parking areas adjacent to road rights-of-way and must be at least 20-feet-wide and improved with one large deciduous or evergreen tree and eight shrubs for every 30 linear feet, except they may be substituted in part with a masonry screen wall, 30 inches in height, at the discretion of the Planning Commission, in which case, a five-foot greenbelt adjacent to the screen wall must be provided. Eleven trees and 90 shrubs are required in the greenbelt, and 0 trees and 62 shrubs are proposed. Therefore, variances are requested to waive the installation of 11 trees and 28 shrubs.

Variance #6: A maximum of one wall sign is permitted for each principal building; the one permitted wall sign must be located flat against the building's front facade or parallel to the front facade on a canopy. Total area of a wall sign cannot exceed 10 percent of the front facade of the building. Exterior elevations show two wall signs on the building (both on the parapet tower (north side and west side)). The response letter provided to the first preliminary site plan and special land use review indicated the west wall sign is to be removed. Revised elevations would be provided if the project proceeds to final site plan. Wall signs cannot extend above the roofline of a building. A variance is requested to install a wall sign extending above the roofline of the building.

Zoning Board of Appeals Options:

Approval: I move to approve the variances requested by EROP LLC from Article 6.4.C.i, Article 5.19.N.i.c, Article 5.19.D, and Article 5.9.F.iv of the Zoning Ordinance for Parcel Number 12-23-202-006, identified as 9345 Highland Road, in order to allow construction of a driveway 242 feet from the driveway to the east and 209 feet from the driveway to the west, an 80.2-foot variance to allow the dumpster enclosure to project in front of the principal building, variances to waive the installation of 11 trees and 28 shrubs in the front (north) greenbelt, and a variance to allow one wall sign to be installed above the roofline of the building. This approval will have the following conditions:

- The Applicant shall obtain all necessary permits from the White Lake Township Building Department.
- The Applicant shall receive preliminary site plan approval from the Township Board and final site plan approval from the Planning Commission.
- The Highland Road site access drive shall align with the entering side of the divided drive across the street (east side of the Fisk Corners boulevard-style access drive).

- The wall sign on the parapet tower shall not exceed 12 square feet in size.
- No additional signage shall be permitted on the building or site.
- Any future modification to signage on the building or site, except for eliminating signage, shall require approval of the Zoning Board of Appeals.

Denial: I move to deny the variances requested by EROP LLC for Parcel Number 12-23-202-006, identified as 9345 Highland Road, due to the following reason(s):

Table: I move to table the variance requests of EROP LLC for Parcel Number 12-23-202-006, identified as 9345 Highland Road, to consider comments stated during this public hearing.

Attachments:

1. Staff report to the Planning Commission dated April 1, 2022.
2. Variance application dated April 5, 2022.
3. Applicant's written statement dated April 20, 2022.
4. Preliminary site plan prepared by Stonefield Engineering and Design (revision date March 16, 2022).
5. Floor plan and exterior elevations prepared by REB Architects.

7.37 STANDARDS

General variances: The Zoning Board of Appeals may authorize a variance from the strict application of the area or dimensional standard of this Ordinance when the applicant demonstrates all of the following conditions "A - E" or condition F applies.

- A. Practical difficulty: A practical difficulty exists on the subject site (such as exceptional narrowness, shallowness, shape or area; presence of floodplain; exceptional topographic conditions) and strict compliance with the zoning ordinance standards would unreasonably prevent the owner from using of the subject site for a permitted use or would render conformity unnecessarily burdensome. Demonstration of a practical difficulty shall have a bearing on the subject site or use of the subject site, and not to the applicant personally. Economic hardship or optimum profit potential are not considerations for practical difficulty.
- B. Unique situation: The demonstrated practical difficult results from exceptional or extraordinary circumstances or conditions applying to the subject site at the time the Ordinance was adopted or amended which are different than typical properties in the same zoning district or the vicinity.

- C. Not self created: The applicants problem is not self created.
- D. Substantial justice: The variance would provide substantial justice by granting the property rights similar to those enjoyed by the majority of other properties in the vicinity, and other properties in the same zoning district. The decision shall not bestow upon the property special development rights not enjoyed by other properties in the same district, or which might result in substantial adverse impacts on properties in the vicinity (such as the supply of light and air, significant increases in traffic, increased odors, an increase in the danger of fire, or other activities which may endanger the public safety, comfort, morals or welfare).
- E. Minimum variance necessary: The variance shall be the minimum necessary to grant relief created by the practical difficulty.
- F. Compliance with other laws: The variance is the minimum necessary to comply with state or federal laws, including but not necessarily limited to:
- i. The Michigan Right to Farm Act (P.A. 93 of 1981) and the farming activities the Act protects;
 - ii. The Americans with Disabilities Act of 1990 (as amended), and the needs of handicapped individuals the Act protects, including accessory facilities, building additions, building alterations, and site improvements which may not otherwise meet a strict application of the standards of this Ordinance.

Under no circumstances shall the Board of Appeals grant a variance to allow a use not permissible under the terms of this Ordinance in the district involved, or any use expressly or by implication prohibited by the terms of this Ordinance in said district.

WHITE LAKE TOWNSHIP PLANNING COMMISSION

REPORT OF THE COMMUNITY DEVELOPMENT DEPARTMENT

TO: Planning Commission

FROM: Sean O'Neil, AICP, Community Development Director
Justin Quagliata, Staff Planner

DATE: April 1, 2022

RE: Hypershine Auto Wash
Preliminary Site Plan and Special Land Use – Review #2

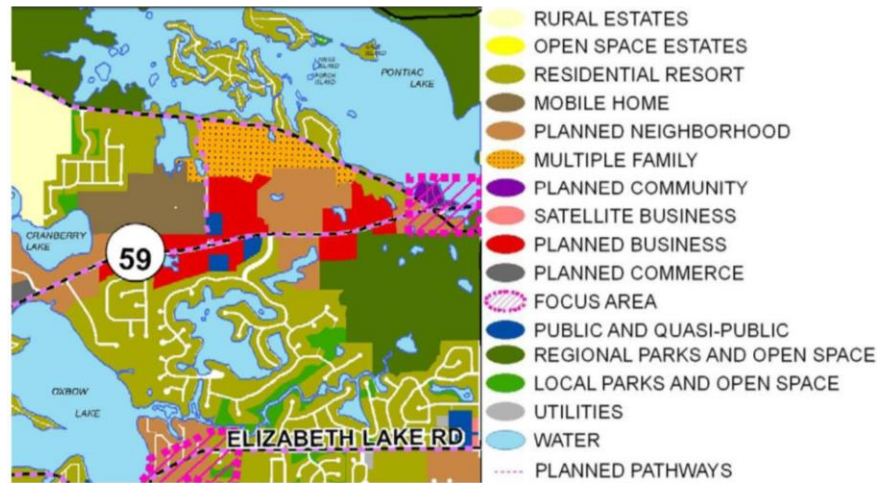
Staff reviewed the revised site plan prepared by Stonefield Engineering & Design (revision date March 16, 2022). The following comments from the first review dated February 18, 2022 are listed below. Responses to those comments are provided in **(red)**.

EROP, LLC has requested preliminary site plan and special land use approval to construct a 3,756 square foot automobile wash establishment at 9345 Highland Road (Parcel Number 12-23-202-006). The 4.85-acre subject site is zoned GB (General Business).

Master Plan

The Future Land Use Map from the Master Plan designates the subject site in the Planned Business category. All development in Planned Business is required to adhere to strict access management principles in order to minimize traffic conflict and maximize safety throughout the M-59 corridor. Connections to and segments of the Township's community-wide pathway system are required as an integral part of all Planned Business development.

FUTURE LAND USE MAP



Zoning

Automobile wash establishments are permitted with special land use approval in the GB zoning district. At its meeting on July 21, 2020 the Township Board approved rezoning the parcel from Local Business (LB) and R1-C (Single Family Residential) to GB (General Business), which requires a minimum lot area of one (1) acre and 200 feet of lot width. The subject site contains 338.2 feet of frontage along Highland Road and 4.85 acres of lot area.

Physical Features

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Wetland Map and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map indicate neither wetlands nor floodplain are present on or near the site. Currently a vacant house and three accessory buildings are located on the property. **A demolition plan shall be provided at final site plan.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

Access

The site fronts on Highland Road, which along the property is a five-lane road (counting the center turn lane). The site plan notes the existing paved shoulder along Highland Road would remain. **The existing paved shoulder shall be removed and converted to greenbelt.** (Comment addressed. The existing paved shoulder is to be removed. An eight-foot-wide asphalt sidewalk one-foot off the property line has been proposed). The zoning ordinance requires a minimum eight-foot-wide sidewalk placed one-foot from the inside edge of the right-of-way along the Highland Road property frontage. Direct pedestrian access from the sidewalk to the building is also required. **The applicant is not proposing to install the required sidewalk as part of the project; therefore, a variance from the public sidewalk standards is required from the Zoning Board of Appeals.** (Comment addressed. A sidewalk is now proposed). Along the front (north side) of the building, a 10-foot-wide sidewalk is provided.

Driveways must have a minimum of 455 feet of spacing provided from other driveways along the same side of the street, measured centerline to centerline. The centerline of the proposed driveway would be located approximately 242 feet from the existing driveway (Art of Dance) to the east and approximately 220 feet from the existing driveway (vacant Brendel's Septic property) to the west; **therefore, variances are required from the Zoning Board of Appeals. (Comment outstanding; however, the applicant intends to seek a variance from the Zoning Board of Appeals).** The proposed Highland Road driveway must be aligned with the existing driveway on the opposite side of the street or offset 350 feet, measured centerline to centerline. **The centerline of the proposed driveway shall exactly offset the west side of the existing boulevard driveway (Fisk Corners) on the north side of Highland Road, or a variance shall be required from the Zoning Board of Appeals. (Comment outstanding; however, the applicant intends to seek a variance from the Zoning Board of Appeals).** The minimum distance between a proposed driveway and the nearest intersection shall not be less than the minimum required driveway-to-driveway spacing. Also, a proposed driveway on the approach to an intersection shall not be opposite a dedicated left-turn lane for the intersection, or within 100 feet upstream of that lane. This provision may be waived by the Planning Commission if supported by a traffic impact study. The nearest street intersection (Fisk Road and Highland Road – to the east) is approximately 422 feet from the subject site. **As the driveway is not 455 feet from the intersection, a variance from the Zoning Board of Appeals is required, or a waiver is required by the Planning Commission if supported by a traffic impact study. (Comment addressed. The applicant's engineer stated the proposed driveway is approximately 524 feet from the Fisk Road intersection (measured centerline to centerline). A variance/waiver is not required).**

To minimize turning conflicts, boulevard-style access drives (or local streets) shall generally not be approved opposite undivided access drives, or vice versa. If cause has been shown for a Planning Commission waiver of this requirement, interlocking entering left turns must be minimized by aligning the entering side of the divided drive with the undivided drive. **The proposed undivided two-way driveway is opposite a boulevard-style access drive (Fisk Corners). A waiver from the coordination of divided and undivided driveways is required. (Comment outstanding. The applicant is requesting a Planning Commission waiver from this requirement. If cause has been shown for a waiver of this requirement, interlocking entering left turns must be minimized by aligning the entering side of the divided drive with the undivided drive).**

Utilities

Municipal water and sanitary sewer are available to serve the site. The Township Engineering Consultant will perform an analysis of utilities, stormwater, and grading to ensure compliance with all applicable ordinances as well as the Township Engineering Design Standards.

Staff Analysis

Special land uses for automobile wash establishments are evaluated using the general standards for all special land uses listed in Article 6, Section 10 of the zoning ordinance and the following specific standards for automobile wash establishments found in Article 4, Section 11:

- A. *Buildings shall be set back sixty (60) feet from the existing or proposed right-of-way line. The proposed front yard setback is 135.2 feet.*
- B. *Entrance and exit drives shall be no less than one hundred (100) feet from any street intersection and at least two hundred (200) feet from any residential district. The nearest street intersection (Fisk Road and Highland Road – to the east) is approximately 422 feet from the subject site. The proposed driveway exceeds the minimum 200-foot setback from a residential zoning district.*
- C. *Waiting spaces shall be provided in an amount equal to seven (7) times the maximum automobile capacity within the building. No vehicle shall be permitted to wait or stand within a dedicated right-of-way. The site plan states there would be four car capacity within the building; therefore, 28 stacking spaces are required. 32 stacking spaces are shown on the plan.*
- D. *The site shall be drained so as to dispose of all surface water in such a way as to preclude drainage of water onto adjacent property or heavy tracking onto a public street. A combination of alternatives may be used, including, but not limited to, blowers, hand-drying, length of exit drive and general site design. The Community Development Department defers to the Director of Public Services and Township Engineering Consultant on the stormwater management plan for the site.*
- E. *The site plan shall detail the location of all proposed vacuum stations. These areas shall be located so as not to conflict with any required parking, drive, or automobile standing areas. Self-contained, covered waste receptacles shall be provided at each proposed vacuum station to provide convenient disposal of customer refuse. Vacuum stations (quantity: 26) are located north of the building (25 spaces – 13' by 18' in size); **however, waste receptacles for each vacuum station are not shown. Trash receptacles are required to be of commercial quality and complement the building design and style. (Comment partially addressed. The applicant's engineer stated waste receptacles are mounted at each vacuum; this shall be noted on the site plan. Additionally, if this project proceeds to final site plan, a detail of the trash receptacles shall be provided at that time).** The zoning ordinance states no noise, as measured from a property line, exceeding 70 dB(A) from 6:00 a.m. to 9:00 p.m. or 65 dB(A) from 9:00 p.m. to 6:00 a.m. shall be emitted. **The applicant shall confirm if it was intentional to provide 26 vacuum stations served by 25 parking spaces.** (Comment addressed. The applicant's engineer stated there are 26 vacuums for 25 spaces because vacuums are provided on each side of each vehicle space).*

Staff recommends reducing the number of vacuum stations by 50 percent. (Comment remains as a notation. The applicant’s engineer stated 25 vacuums are anticipated to be required for the customer volume. The Planning Commission should determine if the number of vacuums are acceptable or if the number of vacuums should be reduced).
Also, the applicant shall submit a predictive noise analysis to demonstrate noise levels for the site will not exceed the performance standards. (Comment remains as a notation. The applicant’s engineer stated the hours of operation are 8:00 a.m. to 8:00 p.m. and the site would comply with the performance standards. The Planning Commission should determine if a predictive noise analysis is required. In making its determination, the Planning Commission should consider the proposed use in relation to adjoining properties and uses).

F. *An outdoor lighting plan shall specify the type of fixtures to be used, light intensity, and method of shielding the fixtures so that light does not project onto adjoining properties or on any public or private street or right-of-way. Dropped fixtures shall not be allowed. The site plan shall include a photometric plan and catalog details for all proposed fixtures. Outdoor lights must meet the performance standards of Section 5.18.* Information on site lighting was provided and will be reviewed in detail during final site plan review. Following are initial comments on the lighting (photometric) plan:

- **Footcandles shall be measured at approximately six feet above grade. Revise accordingly, and the plan must contain a note confirming footcandles are measured at six feet above grade. (Comment addressed. Lighting calculations have been updated to reflect data at six-feet above grade).**
- **Complete catalog details (lighting fixture specification sheets) for all proposed fixtures shall be provided. Light fixture selections and colors are subject to review and approval by the Township. (Comment partially addressed. Partial lighting fixture specifications have been provided on Sheet C-10. Complete catalog details shall be submitted separately at final site plan).**
- **No wall-mounted decorative or architectural lighting shall be installed on the south (rear) facade of the building. (Comment addressed. The applicant’s engineer stated the south wall-packs would only turn on in emergency situations only). Up-lighting or outward shining lighting are also not permitted on the building. (Comment remains as a notation).**
- **The light pole detail indicating height (Sheet C-9) is inconsistent with the height labeled on the lighting plan. Revise accordingly to provide the total height, including the base, pole, and light fixture. (Comment outstanding. Total height shall be measured to the top of the fixture. Additionally, the light pole detail (Sheet C-10 of the revised plans) does not accurately represent the fixture to be utilized on the pole-mounted luminaries. For reference, the fixture is the assembly holding a lamp (bulb). Revise accordingly).**

- The Planning Commission may require special conditions for properties adjacent to residential uses and districts.

G. *A screen wall or obscuring fence shall be provided on those sides abutting a residential district, in accordance with the provisions of this Ordinance.* While the proposed building is located 427.7 feet from the residential zoning district to the south, **the required screening is not shown on the plan. If not provided, a variance shall be required from the Zoning Board of Appeals.** (Comment addressed. A six-foot-tall vinyl opaque fence has been proposed. If the project proceeds to final site plan, a fence detail shall be provided).

Development Standards

The site plan shows compliance with building and parking setback requirements. Proposed building height is 19'-4", which complies with the maximum building height allowed in the GB zoning district (35 feet or 2 stories, whichever is less). **The height of the parapet tower shall be dimensioned on the exterior elevations.** Based on a note on the site plan, it appears the maximum height of the parapet is 24 feet. (Comment outstanding. Sheet A-2 (exterior elevations) notes the parapet cap is 124'-3³/₄" tall. This appears to be an error, as the applicant's engineer stated the parapet tower height is 24'-3³/₄". Revise accordingly).

Building Architecture and Design

In accordance with the M-59 architectural character requirements, exterior building materials shall be composed primarily of high quality, durable, low maintenance material, such as masonry, stone, brick, glass, or equivalent materials. Buildings should be completed on all sides with acceptable materials. The proposed building materials for the project are a mix of brick veneer, and cultured stone veneer with a stone cap four feet up around the base of the building. Faux columns add architectural interest to the building, with an EFIS (exterior insulation finishing system) parapet tower at the west side of the building. Pre-fabricated decorative metal panels are located below the EFIS parapet on the south and west elevations. An aluminum parapet cap complimentary in color to the proposed building materials would be located on top of the walls around the building (with the exception of the parapet tower). Tinted mirrored windows are proposed on three elevations of the building (no windows on east side), with aluminum lattice canopies using aluminum kicker legs at each end to attach to the building. Aluminum clad fascia (stripe) is proposed on three elevations of the building (not proposed on the rear). **The fascia shall be removed from the building, or be the same color as the cap on top of the walls around the building. If the fascia (stripe) attracts attention to the building, a variance shall be required from the Zoning Board of Appeals.** (Comment partially addressed. The fascia is specified as 'sierra tan', the same color as the wall caps as to not attract attention to building. A note shall be added to the exterior elevations stating all cladding/fascia and wall caps shall be 'sierra tan' color).

A sample board of building materials to be displayed at the Planning Commission meeting and elevations in color are required by the zoning ordinance and must be submitted at final site plan. (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

Address identification characters are proposed on the east elevation of the building. A note on the plan states each character shall be a minimum of four inches high. **Six-inch-tall numbers visible from the street shall be required. The address location is subject to approval of the Township Fire Marshal.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review. Revised elevations are to be provided at final site plan).

The applicant shall provide an explanation in writing for the purpose of the second overhead door (north door) on the east elevation of the building. (Comment partially addressed. The applicant's engineer stated the second overhead door at the exit is to be utilized for chemical deliveries and maintenance access to mechanical equipment. Sheet A-1 (floor plan) shows equipment locations. Sheet A-1 shall be revised; it incorrectly identifies the east elevation of the building as the car wash entrance and the west elevation of the building as the car wash exit. Those labels (and directorial arrows) are reversed and shall be revised at the time of final site plan).

Parking

In addition to the required stacking spaces previously described, one parking space per each employee (working on the largest shift) must be provided. Four 'Employee Only' parking spaces are proposed at the northeast corner of the site. **The applicant shall verify the employee information provided with the parking data represents the number of employees working on the largest shift.** (Comment addressed. The response letter provided to the first review indicates four (4) employees would be the maximum number of employees on any shift).

The accessible parking stall detail on Sheet C-8 is inconsistent with the dimensions on the site plan, which shows a three-foot-wide access aisle west of the barrier-free space. In accordance with the zoning ordinance and Americans with Disabilities Act (ADA), the adjacent access aisle shall be eight-foot-wide. The plan shall be revised accordingly. (Comment addressed. ADA accessible space and standard detail has been revised to comply with ADA requirements. **The zoning ordinance also requires each individual parking space be delineated by dual stripes, two feet apart centered on the dividing lines and painted white. The plan (including the parking stall markings detail) shall be revised accordingly to indicate the required striping.** (Comment addressed. Parking stall striping and detail has been revised to provide dual striping).

The zoning ordinance requires one-way drives be a minimum of 20-foot-wide. The plan shall be revised accordingly, or a variance is required from the Zoning Board of Appeals. (Comment outstanding. A variance from this standard is required from the Zoning Board of Appeals. This variance request shall be added to the zoning relief table on Sheet C-1).

Off-Street Loading Requirements

The zoning ordinance requires one loading space for a development of this size. Such loading and unloading space must be an area 10 feet by 50 feet, with a 15-foot height clearance. **No loading space is proposed; therefore, a variance is required from the Zoning Board of Appeals.** (Comment partially addressed. A loading space is now proposed. The response letter provided to the first review indicates any loading/unloading would occur off-hours as to not conflict with customer traffic flow; a plan note stating such shall be provided on the final site plan).

Trash Receptacle Screening

The zoning ordinance requires dumpsters to be surrounded by a six-foot-tall to eight-foot-tall wall on three sides and an obscuring wood gate on a steel frame on the fourth side, located on a six-inch concrete pad extending 10 feet in front of the gate, with six-inch concrete-filled steel bollards to protect the rear wall and gates. **The bollards for the dumpster enclosure shown on Sheet C-8 shall be six-inch diameter instead of four-inch diameter, and bollards shall be provided six inches in front of (north) of each gate post.** (Comment addressed. Bollard detail has been revised from four-inch to six-inch bollards. Trash enclosure detail has been revised to show bollards six-inches from front gate posts). The proposed enclosure is located north of the building. The zoning ordinance prohibits trash enclosures within a required front yard setback, and does not allow enclosures closer to the front lot line than the principal building. The proposed dumpster enclosure is located closer to Highland Road than the automobile wash building, and does not meet the front yard setback. As proposed, **the following variances are required from the Zoning Board of Appeals: an 89-foot variance to project into the front yard, and a 10-foot variance to encroach into the front yard setback.** (Comment partially addressed. The trash enclosure detail was shifted south out of the front yard setback. However, the trash enclosure is projecting approximately 81.3 feet into the front yard (Sheet C-2 shall be revised to measure the projection to the northern extent of the trash enclosure). The applicant intends to seek a variance from the Zoning Board of Appeals).

At the time of trash pick-up, the location of the dumpster enclosure could cause conflict with traffic entering and exiting the site. Circulation must be considered when relocating the dumpster enclosure, or during consideration of a variance request to allow the dumpster location at the currently proposed location. (Comment remains as a notation. The response letter provided to the first review indicates all trash pickup would occur prior to 8:00 a.m. before the car wash opens).

An eight-foot-tall split-face block (8" CMU) screen wall is proposed around three sides of the dumpster enclosure, with steel doors on the north side of the structure. The zoning ordinance states dumpsters and trash storage enclosures shall be constructed of the same decorative masonry materials as the buildings to which they are accessory. Brickform concrete (simulated brick pattern) or stained, decorative CMU block are not permitted where the principal building contains masonry. Plain CMU block is also prohibited. **The dumpster enclosure shall match the same brick veneer as the facade of the building with a steel backed wood gate painted a complementary color to the brick veneer. The trash/recycle enclosure detail on Sheet C-8 shall be revised to show brick veneer on the outside walls of the concrete enclosure and indicate the color of the gate.** (Comment partially addressed. The gate as shown on the front elevation detail does not match the gate detail. Additionally, the gate detail states the cedar boards are to be stained "color as selected by owner." The color/stain of the gate is subject to review and approval by the Township. The gate shall be stained a color similar to 'sierra tan'. Revise accordingly).

Landscaping and Screening

Landscaping must comply with the provisions of the zoning ordinance and should be designed to preserve existing significant natural features and to buffer service areas, parking lots, and dumpsters. A mix of evergreen and deciduous plants and trees are preferred, along with seasonal accent plantings. A landscape plan is not required as part of the preliminary site plan, but was provided for consideration and will be reviewed in detail during final site plan review if the preliminary site plan is approved. Following are initial comments on the landscape plan:

- Interior Landscaping Requirements: for every new development requiring site plan review, except site condominiums as regulated in Article 6, Section 1, interior landscaping areas shall be provided, equal to at least 15 percent of the total lot area. These landscaped areas shall be grouped near all building entrances, building foundations, pedestrian walkways, and service areas, and may also be placed adjacent to fences, walls, or rights-of-way. These planting areas shall be so located as to breakup an otherwise continuous abutment of building facade with sidewalks and/or parking areas. All interior landscaping shall provide one large deciduous, small ornamental deciduous, or evergreen tree and five shrubs for every 300 square feet of required interior landscaping area.
- Parking Lot Landscaping: within every parking area containing 10 or more spaces, there shall be parking lot landscaping in accordance with this Subsection. These landscaping areas shall be located so as to better define parking spaces and drives. Landscaping on the perimeter of the parking lot does not satisfy the parking lot landscaping requirement. Island locations shall also be considered in a manner that will assist in controlling traffic movements. The requirements, for trees and islands, may be modified when it is found through careful coordination of parking lot landscaping with peripheral and building plantings an unnecessary duplication of plantings would be created. In addition, consideration shall be given to situations when an excess number of small islands would be created that would only serve to disrupt reasonable traffic patterns and maintenance activities. **Trees as previously described are not provided; therefore, a variance is required from the Zoning Board of Appeals.** (Comment addressed. Additional trees have been proposed).

- Transformer and Mechanical Equipment Screening: all ground mounted transformers, climate control, and similar equipment shall be screened from view from any street or adjacent property by a wall constructed of the same decorative exterior materials as the building and not less than the height of the equipment to be screened. As an alternative, the equipment may be screened by landscaping approved by the Planning Commission. All rooftop climate control equipment, transformer units, and similar equipment shall be screened. The materials used to screen the equipment shall be compatible in color and type with exterior finish materials of the building. All rooftop equipment shall conform to the maximum height regulations of this Ordinance. **The plans do not show proposed locations for mechanical units or provide the method of screening. The plans shall be revised accordingly to provide the location(s) and method of screening.** (Comment partially addressed. Electric transformer has been shown on the plans screened by evergreen shrubs. The proposed shrubs shall be replaced with arborvitae. Revise accordingly).
- Greenbelts are required between nonresidential parking areas adjacent to road rights-of-way and shall be at least 20-feet-wide and improved with one large deciduous or evergreen tree and eight shrubs for every 30 lineal feet, except they may be substituted in part with a masonry screen wall, 30 inches in height, at the discretion of the Planning Commission, in which case, a five-foot greenbelt adjacent to the screen wall must be provided. **Trees as previously described are not provided; therefore, a variance is required from the Zoning Board of Appeals.** (Comment outstanding. The applicant intends to seek a variance from the Zoning Board of Appeals. Their reason for requesting the variance is the front greenbelt is within a watermain easement. This variance request shall be added to the zoning relief table on Sheet C-1).
- **Arborvitae are not considered evergreen trees; they are considered shrubs. The Plant Schedule shall be revised accordingly.** (Comment addressed. The proposed arborvitae have been replaced with White Spruce trees, which staff supports as preferable in the proposed locations. As previously stated, arborvitae shall screen the transformer).
- **Trees identified for protection during construction and the means of protection shall be identified prior to final site plan. No construction shall occur until tree protection has been installed and approved by the Community Development Director.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).
- Trees shall not be planted closer than four feet to a property line. **Add note to landscape plan at final site plan.** (Comment addressed. A note has been added to the landscape plan (Sheet C-7)).
- All required landscape areas in excess of 200 square feet shall be irrigated to assist in maintaining a healthy condition for all plantings and lawn areas. **An irrigation plan shall be provided at final site plan.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

- All required site irrigation systems shall include a rain sensor or similar measure to ensure irrigation does not occur during or shortly after precipitation events. All site plans shall note installation of required irrigation. **Add note to all plans.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).
- **Six-inch straight-faced (vertical) curb of concrete construction shall be used around landscape and parking areas. The standard Michigan Department of Transportation (MDOT) detail for six-inch straight-faced curb shall be provided on Sheet C-9 of the site plan.** (Comment addressed. MDOT standard curb details have been added to Sheet C-9 of the plans).
- **The zoning ordinance requires a land form buffer, buffer strip and obscuring fence, or screen wall between the subject site and the property to the west. No screening as previously described is proposed; therefore, a variance for the west screening is required from the Zoning Board of Appeals.** (Comment addressed. A six-foot-tall vinyl fence has been proposed. If the project proceeds to final site plan, a fence detail shall be provided).
- **Note 2 on the landscape plan mentions seed, and sod is required.** (Comment addressed. Note 2 has been revised to indicate sod).
- **Note 3 on the landscape plan mentions mulch. The zoning ordinance states the mulch product itself shall be at least doubled-shredded quality.** (Comment addressed. Note 3 has been revised to specify double-shredded quality).
- All required landscape areas in excess of 200 square feet must be irrigated to assist in maintaining a healthy condition for all landscape plantings and lawn areas. **An irrigation plan shall be required at final site plan.** (Comment remains as a notation. This requirement was acknowledged by the applicant's engineer in the response letter provided to the first review).

Signs

The site plan does not show the location of a monument sign along Highland Road. Exterior elevations show two wall signs on the building (both on the parapet tower (north side and west side)). A maximum of one wall sign is permitted for each principal building; the one permitted wall sign must be located flat against the building's front facade or parallel to the front facade on a canopy. Total area of a wall sign cannot exceed 10 percent of the front facade of the building. **The wall sign on the west elevation shall be removed, or a variance is required from the Zoning Board of Appeals. (Comment remains as a notation. The response letter provided to the first review indicated the west wall sign is to be removed. Revised elevations are to be provided at final site plan).** Additionally, wall signs cannot extend above the roofline of a building. **A variance from the Zoning Board of Appeals is required to install a wall sign extending above the roofline of the building. (Comment outstanding; however, the applicant intends to seek a variance from the Zoning Board of Appeals).**

Planning Commission Options / Recommendation

The Planning Commission may recommend approval, approval with conditions, or denial of the preliminary site plan to the Township Board; action on the special land use is determined by the Planning Commission. **Staff recommends the plans be revised and resubmitted to address the items identified in this memorandum. A list of any requested variances shall also be provided. (Staff recommends the project is eligible for consideration by the Planning Commission. Any recommendation of approval of the preliminary site plan or approval of the special land use shall be conditioned on the applicant addressing all staff and consultant review comments and recommendations, and requesting and receiving the necessary variances from the Zoning Board of Appeals).**

Notes:

1. A notarized signature of the property owner shall be provided on the site plan application. Evidence, satisfactory to the Township Attorney, that the signatories on the application are authorized to execute on behalf of the property owner and applicant shall be a condition of any approvals.
 - a. Paragraph 5.h of the Operating Agreement of the LLC provides the Assistant Managers with authority to execute development documents related to a property only “Upon the Manager’s approval of a letter of intent or other document evidencing the approval of the acquisition of a parcel or parcels of real property (and such document being hereinafter referred to as an “LOI”) ...”
 - b. The LOI provided for the subject property is not signed by a Manager, but an Assistant Manager. Without the “Manager’s approval of the LOI,” the Assistant Managers are without authority to take any action related to the development of the subject property.
2. A date (including revision dates) shall be provided on the exterior elevations and floor plan. Said plans shall also be sealed by the Registered Architect who prepared the plans.

CHARTER TOWNSHIP OF WHITE LAKE
ZONING BOARD OF APPEALS APPLICATION
Community Development Department, 7525 Highland Road,
White Lake, Michigan, 48383
(248) 698-3300 x5

APPLICANT'S NAME: EROP, LLC (Jeff Justice) PHONE: 215-521-2348

ADDRESS: 3130 North Kandy Lane Decatur Illinois 62526

APPLICANT'S EMAIL ADDRESS: jeffj@hypershinecw.com

APPLICANT'S INTEREST IN PROPERTY: OWNER BUILDER OTHER: _____

ADDRESS OF AFFECTED PROPERTY: 9345 Highland Road PARCEL # 12 -23-202-006

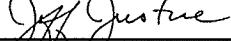
CURRENT ZONING: General Business PARCEL SIZE: 4.85 AC

STATE REQUESTED VARIANCE AND ORDINANCE SECTION: FIVE (5) REQUIRED VARIANCES.
SEE ATTACHED VARIANCE REQUEST LETTER.

VALUE OF IMPROVEMENT: \$ 429,192.10 SEV OF EXISTING STRUCTURE: \$ UNKNOWN

STATE REASONS TO SUPPORT REQUEST: (ATTACH WRITTEN STATEMENT TO APPLICATION)

APPLICATION FEE: \$440.00 (CALCULATED BY THE COMMUNITY DEVELOPMENT DEPARTMENT)

APPLICANT'S SIGNATURE:  DATE: 4/5/2022

STONEFIELD

Wednesday, April 20, 2022

Charter Township of White Lake
Zoning Board of Appeals
Community Development Department
7525 Highland Road
White Lake, MI 48383

**RE: Variance Requests
Proposed Car Wash
9345 Highland Road
White Lake, MI 48383
Parcel ID: 12-23-202-006**

To the Members of the Zoning Board of Appeals:

Attached is an application for several variances requested for the proposed car wash development at 9345 Highland Road. The following outlines the variances being requested and addresses the criteria required for variances to be granted:

**I & 2. § 6.4.C.i Requirement: Minimum center-to-center driveway spacing (same side of road): 455 FT
Proposed: 213 FT to eastern drive
246 FT to western drive**

- A. Practical difficulty: The subject site's only frontage is 338 FT along Highland Road. The parcels to the East and West both have existing driveways in locations on Highland Road which prohibit any proposed development at the subject site to comply with the 455 FT spacing requirement in either direction regardless of where the driveway is proposed on site.
- B. Unique situation: The subject site is unique in the fact that there are adjacent existing driveway locations and no potential for cross access or access via a side street.
- C. Not self-created: The problem is not self-created.
- D. Substantial justice: The granting of this variance would provide access to the site which would otherwise be landlocked without any permitted curb cut on Highland Road.
- E. Minimum variance necessary: The proposed driveway location is aligned with that across Highland Road at the request of the Planning Department. With 213 FT spacing provided to the eastern existing drive and 246 FT spacing provided to the western existing drive this proposed driveway location results in the minimum variance request necessary.

3. § 5.19.N.c **Requirement: No enclosures shall be permitted within a required front yard or street-side yard setback, nor closer to the front lot line than the principal building.**

Proposed: Trash enclosure proposed 80.2 FT closer to the setback than the principal building.

- A. Practical difficulty: The subject site is required to have a 60 FT setback for all structures and is also bound by overhead wires and utility poles to the South. These difficulties dictate the building placement on site which requires the trash enclosure to be located in front of the building for pick-up access.
- B. Unique situation: The required 60 FT setback in conjunction with the overhead wires and utility poles limiting vertical clearance are unique to the subject site.
- C. Not self-created: The problem is not self-created.
- D. Substantial justice: The granting of this variance would allow for an accessible path for sanitation to access the refuse container for trash pickup.
- E. Minimum variance necessary: The trash enclosure is proposed adjacent to the required exit gate and is located outside of the required 60 FT front yard setback. There is no other alternative location on site that would provide a lesser variance request. Trash pick up will always occur off hours as to not disrupt any traffic patterns.

4. § 5.19.D **Requirement: 20 FT Right-of-way greenbelt with 1 tree and 8 shrubs per 30 linear feet. (11 trees, 90 shrubs).**

Proposed: 20 FT Right-of-way greenbelt, 0 trees, 62 shrubs.

- A. Practical difficulty: The subject site's has a 20' wide water main easement along the 338 FT frontage of the site along Highland Road. This easement prohibits any plantings.
- B. Unique situation: The subject site is unique in the fact that a 20' water main easement encompasses the entire required 20' greenbelt.
- C. Not self-created: The problem is not self-created.
- D. Substantial justice: The granting of this variance would allow the water main to be protected from any potential damages caused by plantings.
- E. Minimum variance necessary: The maximum number of shrubs were provided along the frontage without encroaching into the water main easement.

5. § 5.9.F.iv

Requirement: Above the roof signs prohibited.

Proposed: Sign above the roof line on the building parapet. (See provided architectural elevations).

- A. Practical difficulty: The subject site's has a 20' wide water main easement along the 338 FT frontage of the site along Highland Road. This easement prohibits any structures including signage for the proposed development. The development is also bound by utility poles and overhead wires to the South of the building preventing the development to be shifted South.
- B. Unique situation: The subject site is unique in the fact that the developable area is bound by a large utility easement to the North as well as overhead wires and utility poles to the South.
- C. Not self-created: The problem is not self-created.
- D. Substantial justice: The granting of this variance would allow customers and emergency services to easily identify the subject site from Highland Road.
- E. Minimum variance necessary: The applicant is proposing only one (1) sign on the building which is to front Highland Road and includes only the tenant name "White Water Express Car Wash" (See provided architectural elevations).

Thank you for your time and consideration.

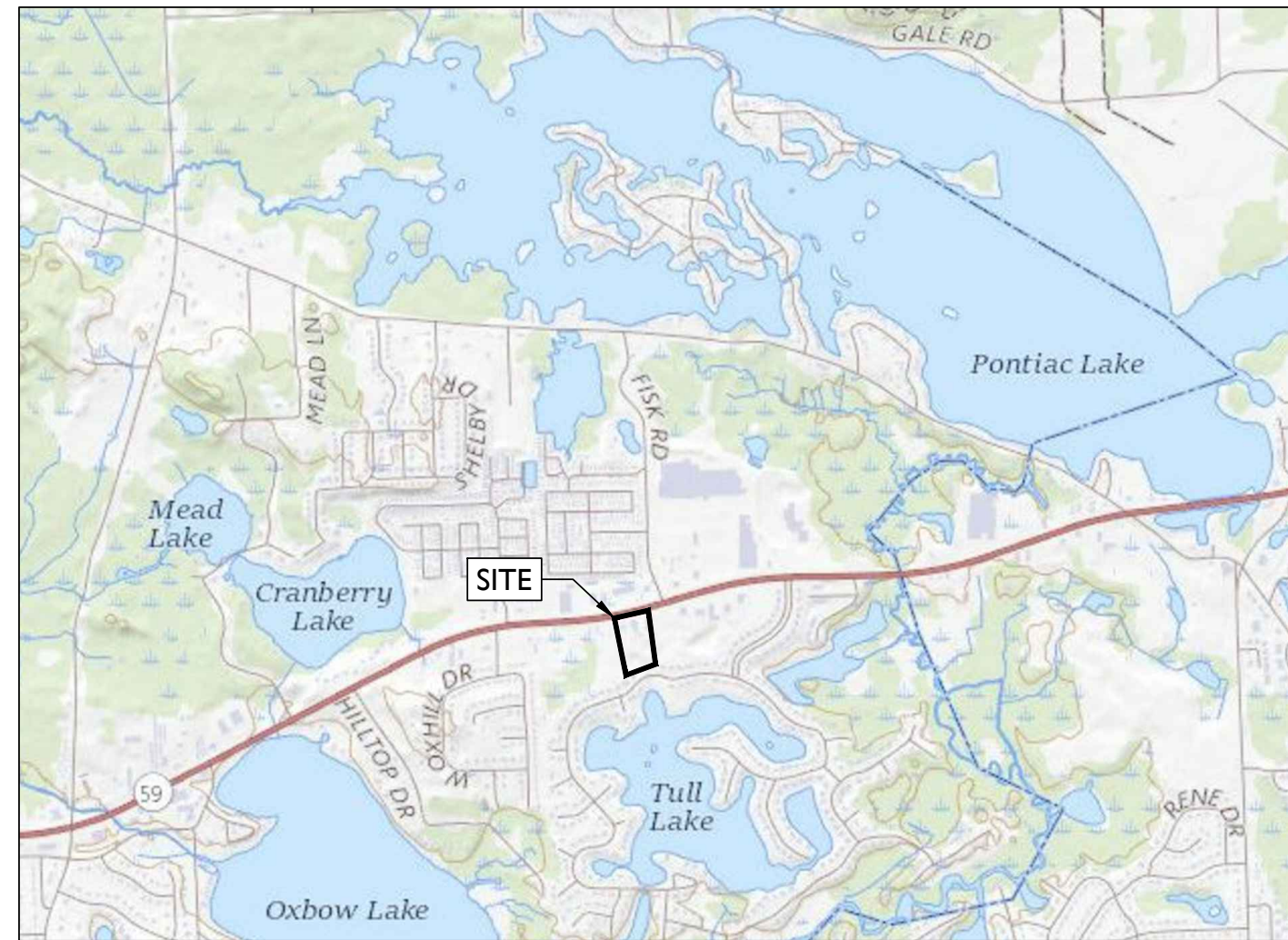
Best Regards,



J. Reid Cooksey
Stonefield Engineering and Design, LLC



Erin McMachen
Stonefield Engineering and Design, LLC



SOURCE: USGS NATIONAL MAPPER

LOCATION MAP

SCALE: 1" = 2,000'±

SITE DEVELOPMENT PLANS



PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
 9345 HIGHLAND ROAD (M-59)
 WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

ZONING RELIEF TABLE			
RELIEF TYPE	CODE SECTION	REQUIRED	PROPOSED
VARIANCE	§ 6.4.C.i	MINIMUM CENTER-TO-CENTER DRIVEWAY SPACING (SAME SIDE OF ROAD): 455 FT	213 FT TO EAST EXISTING DRIVE
VARIANCE	§ 6.4.C.i	MINIMUM CENTER-TO-CENTER DRIVEWAY SPACING (SAME SIDE OF ROAD): 455 FT	246 FT TO WEST EXISTING DRIVE
WAIVER	§ 6.4.D.i	TO MINIMIZE TURNING CONFLICTS, BOULEVARD-STYLE ACCESS DRIVES (OR LOCAL STREETS) SHALL GENERALLY NOT BE APPROVED OPPOSITE UNDIVIDED ACCESS DRIVES, OR VICE VERSA	UNDIVIDED ACCESS DRIVE
VARIANCE	§ 5.19.N.c	NO ENCLOSURES SHALL BE PERMITTED WITHIN A REQUIRED FRONT YARD OR STREET-SIDE SIDE YARD SETBACK, NOR CLOSER TO THE FRONT LOT LINE THAN THE PRINCIPAL BUILDING.	80.2' PROJECTION INTO FRONT YARD
VARIANCE	§ 5.19.N.c	20 FT RIGHT-OF-WAY GREENBELT WITH 1 TREE AND 8 SHRUBS PER 30 LINEAR FEET. (REQUIRED: 11 TREES, 90 SHRUBS)	20' GREENBELT, 0 TREES, 62 SHRUBS
VARIANCE	§ 5.9.F.iv	PROHIBITED SIGNS: ABOVE THE ROOF SIGNS	ABOVE THE ROOF SIGN

APPLICANT

EROP, LLC
 3130 NORTH KANDY LANE
 DECATUR, ILLINOIS 62526
 215-521-2348

ARCHITECT

REB ARCHITECTS, PLLC
 WIND HAVEN DRIVE SUITE 101
 NICHOLASVILLE, KENTUCKY 40356
 859-523-1500

REVISED PER SITE PLAN REVIEW #1	FOR PRELIMINARY SITE PLAN APPROVAL	DESCRIPTION
2	1	ISSUE
03/16/2022	01/05/2022	DATE
ECH	BAC/ECH	BY

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
 engineering & design

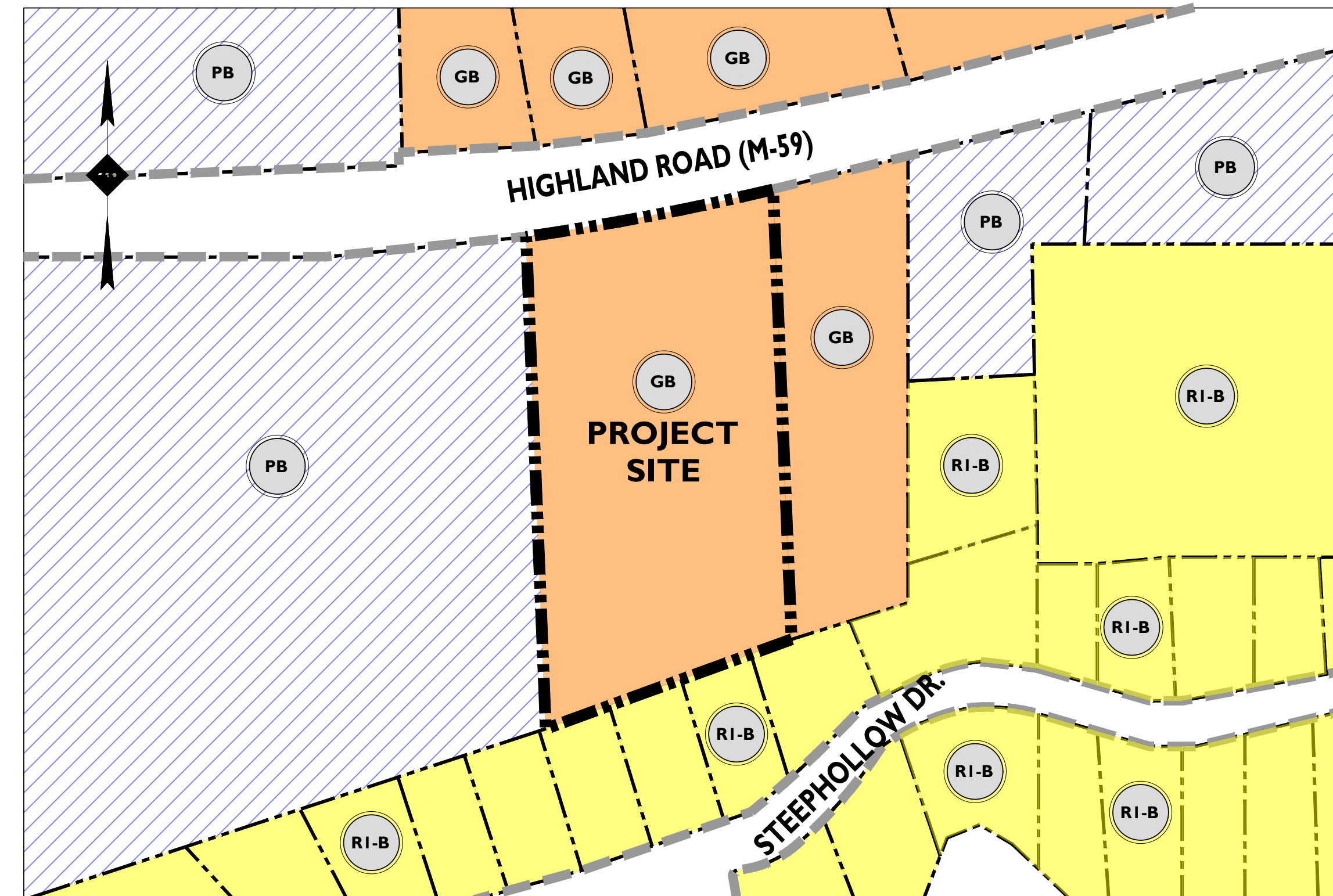
Detroit, MI · New York, NY · Rutherford, NJ
 Princeton, NJ · Tampa, FL · Boston, MA
 www.stonefieldeng.com
 607 Shelby Suite 200, Detroit, MI 48226
 Phone 248.247.1115



SOURCE: GOOGLE EARTH PRO

AERIAL MAP

SCALE: 1" = 150'±



SOURCE: CITY OF WHITE LAKE ZONING MAP

ZONING MAP

SCALE: 1" = 150'±

PLANS PREPARED BY:



Detroit, MI · New York, NY · Rutherford, NJ
 Princeton, NJ · Tampa, FL · Boston, MA
 www.stonefieldeng.com

607 Shelby Suite 200, Detroit, MI 48226
 Phone 248.247.1115

WHITE LAKE CHARTER TOWNSHIP ENGINEERING NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWNSHIP'S CURRENT STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION, 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- CONTRACTOR SHALL CONTACT MISS DIG AT 800-482-7171, 72 HOURS IN ADVANCE OF CONSTRUCTION, FOR EXISTING UNDERGROUND UTILITY LOCATIONS.
- IN ORDER TO VERIFY COMPLIANCE WITH APPROVED PLANS, FULL-TIME CONSTRUCTION OBSERVATION WILL GENERALLY BE REQUIRED DURING ALL PHASES OF UNDERGROUND SITE CONSTRUCTION INCLUDING INSTALLATION OF SANITARY SEWER, STORM SEWERS, DRAINS, WATERMANS AND APPURTENANCES AS WELL AS PRIVATE STREET CURBING AND PAVING CONSTRUCTION. INTERMITTENT OBSERVATIONS WILL BE MADE FOR SITE GRADING, PARKING LOT CURBING AND PAVING, RETAINING WALL CONSTRUCTION AND OTHER SURFACE ACTIVITY.



Know what's below
 Call before you dig.

PROPERTY DESCRIPTION:

THE LAND SITUATED IN THE TOWNSHIP OF WHITE LAKE, COUNTY OF OAKLAND, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

PART OF THE EAST 1/2 OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 23, TOWN 3 NORTH, RANGE 8 EAST, BEGINNING AT A POINT DISTANT NORTH 02 DEGREES 24 MINUTES 20 SECONDS EAST, 1731.78 FEET AND SOUTH 75 DEGREES 05 MINUTES 00 SECONDS WEST 249.56 FEET FROM THE SOUTH 1/8 CORNER OF THE NORTHEAST 1/4; THENCE SOUTH 75 DEGREES 05 MINUTES 00 SECONDS WEST, 351.83 FEET; THENCE NORTH 02 DEGREES 47 MINUTES 20 SECONDS EAST, 661.50 FEET; THENCE NORTHEASTERLY ALONG THE SOUTHERLY LINE OF HIGHLAND ROAD, ALONG A CURVE TO THE LEFT, RADIUS OF 3869.83 FEET, DISTANCE OF 338.35 FEET; THENCE SOUTH 02 DEGREES 43 MINUTES 15 SECONDS WEST, 605.50 FEET TO THE POINT OF BEGINNING.

PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - ALTA / NSPS LAND TITLE SURVEY PREPARED BY KEM-TEC & ASSOCIATES INC. DATED 01/20/2022
 - ARCHITECTURAL PLANS PREPARED BY REB ARCHITECTS DATED 02/01/2022
 - GEOTECHNICAL REPORT PREPARED BY MATERIALS TESTING CONSULTANTS DATED 01/28/2022
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO
 - LOCATION MAP OBTAINED FROM USGS NATIONAL MAPPING SYSTEM
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
SITE PLAN	C-2
GRADING PLAN	C-3
STORMWATER MANAGEMENT PLAN	C-4
UTILITY PLAN	C-5
LIGHTING PLAN	C-6
LANDSCAPING PLAN	C-7
CONSTRUCTION DETAILS	C-8 TO C-10
FIRE TRUCK TURNING EXHIBIT	C-11

ADDITIONAL SHEETS

DRAWING TITLE	SHEET #
ALTA / NSPS LAND TITLE SURVEY	1 OF 1
TANK DETAILS	1 OF 1

SITE DEVELOPMENT PLANS

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
 9345 HIGHLAND ROAD (M-59)
 WHITE LAKE TOWNSHIP
 OAKLAND COUNTY, MICHIGAN



SCALE: AS SHOWN PROJECT ID: DET-210462

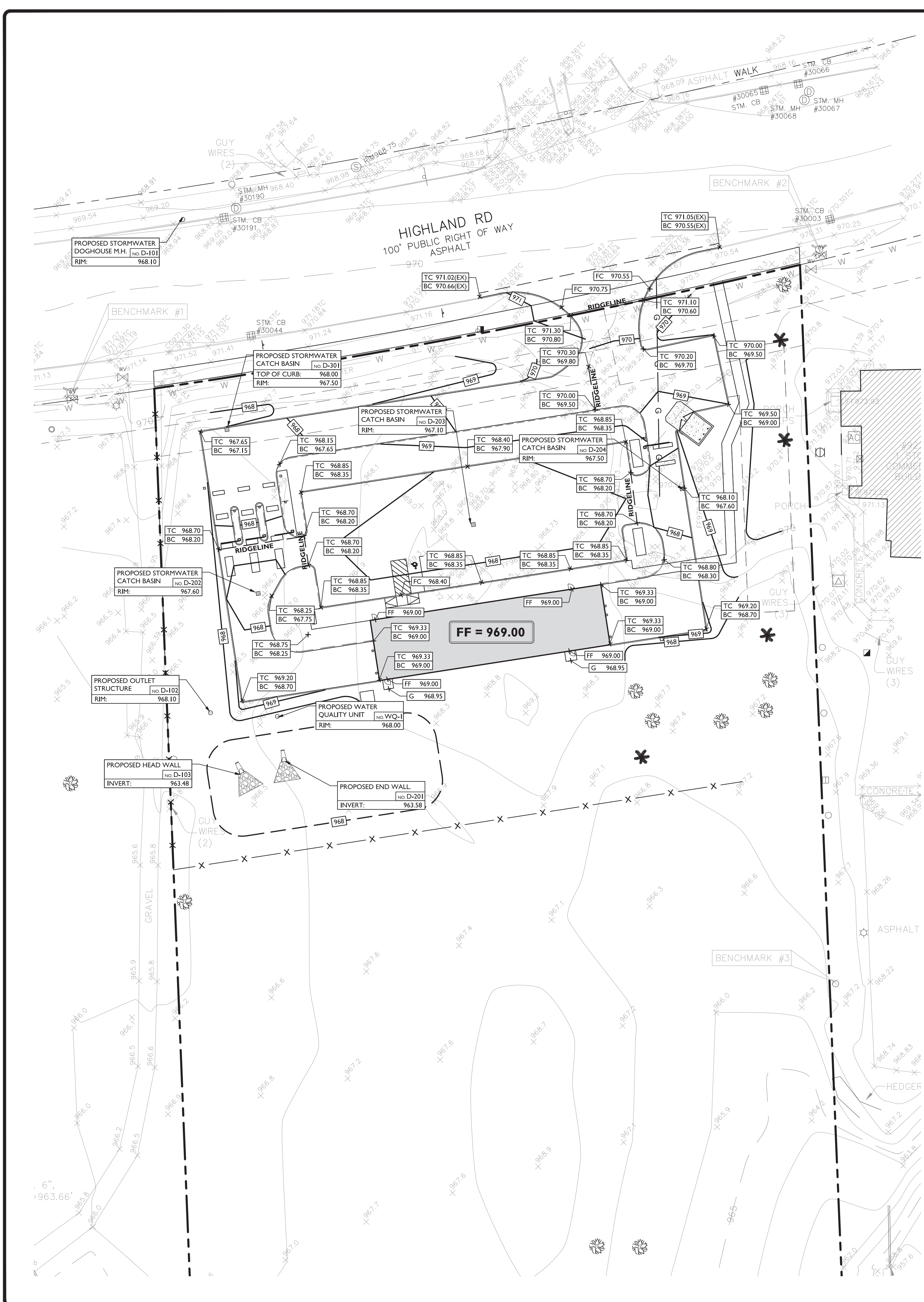
TITLE:

COVER SHEET

DRAWING:

C-1

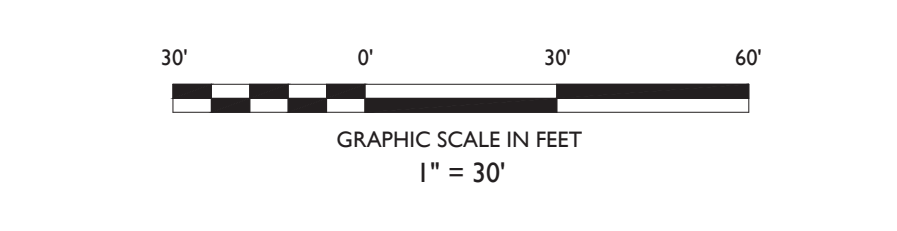
V:\PROJECTS\12-23-202-006\12-23-202-006_HIGHLAND ROAD, WHITE LAKE TOWNSHIP, MICHIGAN\PHOTOS - CONSIDING



SYMBOL	DESCRIPTION
---	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
-----	PROPOSED GRADING RIDGELINE
←	PROPOSED DIRECTION OF DRAINAGE FLOW
X G 100.00	PROPOSED GRADE SPOT SHOT
X TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
X FC 100.00	PROPOSED FLUSH CURB SPOT SHOT

- GRADING NOTES**
- ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
 - THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
 - PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
 - THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
 - MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
 - CURB GUTTER: 0.50%
 - CONCRETE SURFACES: 1.00%
 - ASPHALT SURFACES: 1.00%
 - A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IF THIS CONDITION CANNOT BE MET.
 - FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

- ADA NOTES**
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
 - THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP. AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL, THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00%. IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP, FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURB RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
 - ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 - A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
 - THE CONTRACTOR SHALL ENSURE A MAXIMUM OF ¼ INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN ¼ INCHES AND ½ INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP ¼ INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
 - THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ¼ INCH.



REVISION	DATE	ISSUE	BY	DESCRIPTION
2	03/16/2022	ECH		REVISED PER SITE PLAN REVIEW #1
1	01/03/2022	BAC/ECH		FOR PRELIMINARY SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN

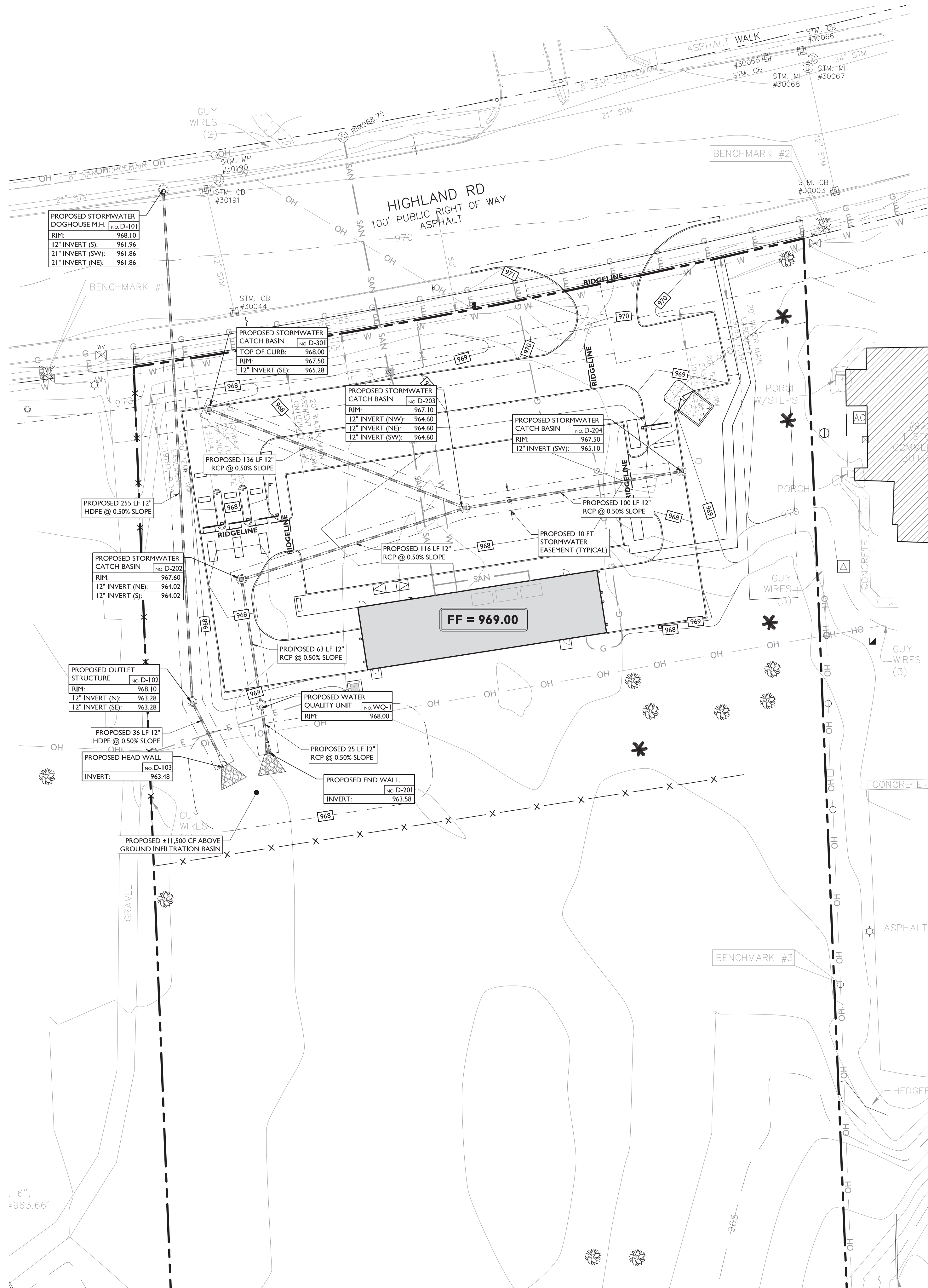
STATE OF MICHIGAN
JAMES W. COFFEY
REGISTERED PROFESSIONAL ENGINEER
MICHIGAN LICENSE NO. 96978
LIFE MEMBER

STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210462

TITLE:
GRADING PLAN

DRAWING:
C-3



SYMBOL	DESCRIPTION
---	PROPERTY LINE
—100—	PROPOSED GRADING CONTOUR
---	PROPOSED GRADING RIDGELINE
⊕ ⊖ ⊗ ⊙	PROPOSED STORMWATER STRUCTURES
—	PROPOSED STORMWATER PIPING
⊙	PROPOSED UNDERGROUND OUTLET STRUCTURE

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN



STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210462

TITLE:
**STORMWATER
MANAGEMENT PLAN**

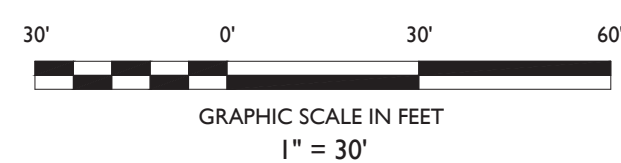
DRAWING:
C-4

MANHOLE SCHEDULE

#	TYPE	RIM (FT)	SIZE (IN)	DIRECTION	INVERT (FT)
30003	CATCH BASIN	969.98	12	N	963.48
30044	CATCH BASIN	970.93	12	N	962.93
30065	CATCH BASIN	967.54	12	E	962.74
30066	CATCH BASIN	967.63	12	W	962.63
30067	STORM MANHOLE	967.78	12	SW	962.03
			12	SE	962.63
			12	NW	962.28
			24	E	959.38
			21	W	959.43
30068	STORM MANHOLE	967.89	12	S	962.39
			12	NE	962.29
30190	STORM MANHOLE	969.35	12	SW	961.53
			21	E	960.97
			21	W	960.90
30191	CATCH BASIN	968.78	12	NE	962.08
			12	S	962.28

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP GRADIENT.
 - THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

- EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES**
- THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION. THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
 - THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
 - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL SHORING DESIGNER. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
 - THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.



NOTED: IDENTIFY AND LOCATE ALL HIGH AND LOW SPOTS, WHITE LAKE TOWNSHIP, MICHIGAN, DETROIT, MI 48226

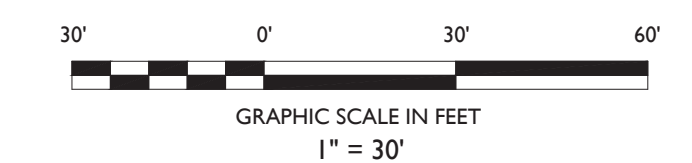
NOTES: 1. IDENTIFY ALL UTILITIES ALONG HIGHLAND ROAD, WHITE LAKE TOWNSHIP, MICHIGAN. PHOTOGRAPH UTILITIES.



SYMBOL	DESCRIPTION
---	PROPERTY LINE
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E	PROPOSED ELECTRIC CONDUITS
G	PROPOSED GAS LINE
⊗	PROPOSED VALVE
⊕	PROPOSED WATER TEE / BEND
⊙	PROPOSED SANITARY MANHOLE / CLEANOUT
⊞	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS

#	TYPE	RIM (FT)	SIZE (IN)	DIRECTION	INVERT (FT)
30003	CATCH BASIN	969.98	12	N	963.48
30044	CATCH BASIN	970.93	12	N	962.93
30065	CATCH BASIN	967.54	12	E	962.74
30066	CATCH BASIN	967.63	12	W	962.63
30067	STORM MANHOLE	967.78	12	SE	962.03
			12	NW	962.28
			24	E	959.38
			21	W	959.43
30068	STORM MANHOLE	967.89	12	S	962.39
			12	NE	962.29
30190	STORM MANHOLE	969.35	12	SW	961.53
			21	E	960.97
			21	W	960.90
30191	CATCH BASIN	968.78	12	NE	962.08
			12	S	962.28

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 - A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 - CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP GRADIENT.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.



REVISION	DATE	BY	DESCRIPTION
2	03/16/2022	ECH	REVISED PER SITE PLAN REVIEW #1
1	01/05/2022	BAC/ECH	FOR PRELIMINARY SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN

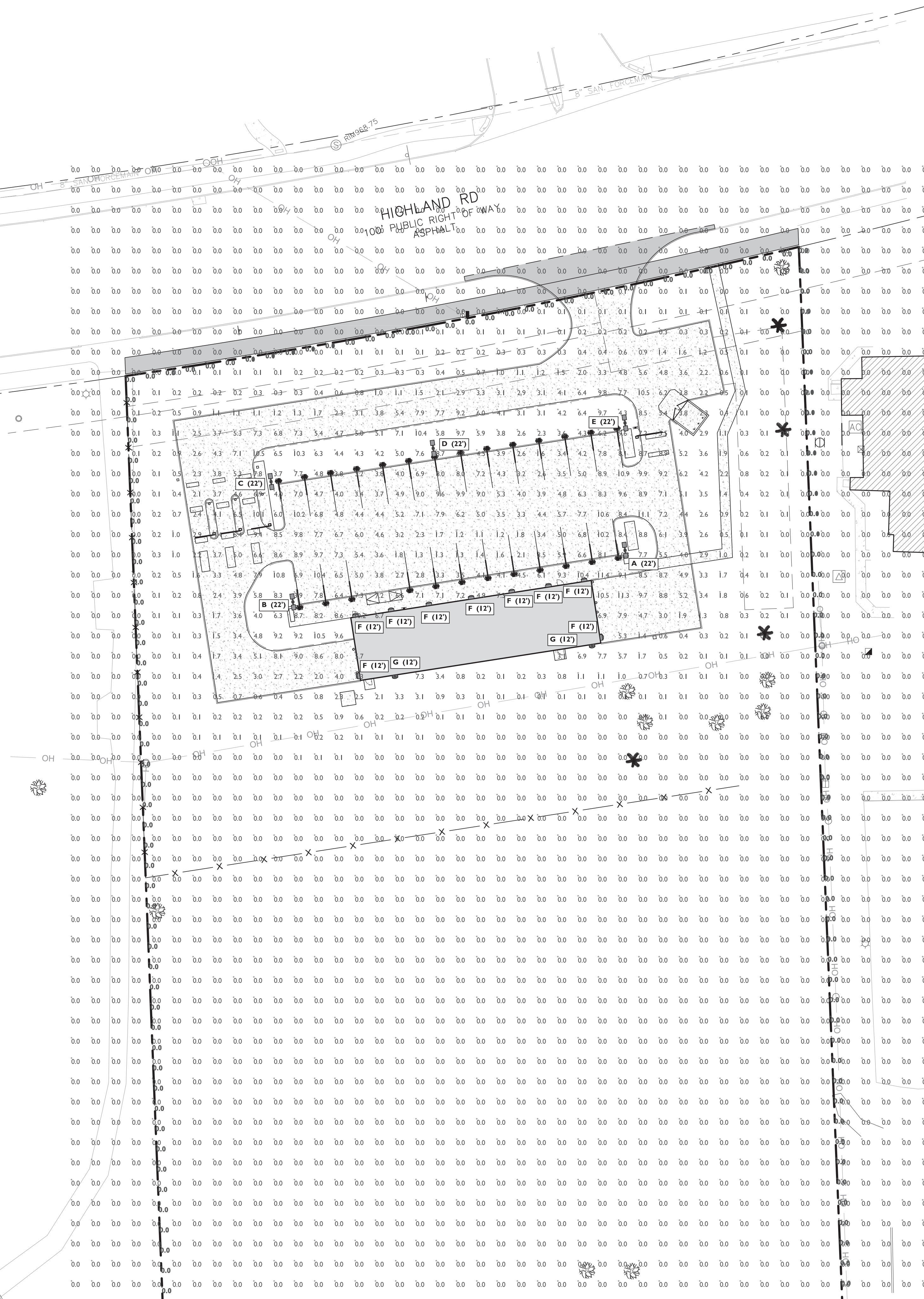


STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210462

TITLE: **UTILITY PLAN**

DRAWING: **C-5**



PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	LIGHTING SPECIFICATION	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-ILIES
	B	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-ILIES
	C	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-ILIES
	D	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-ILIES
	E	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-ILIES
	F	9	MIRADA OUTDOOR LED WALLPACK	FT	0.9	LSI LIGHTING	XWM-FT-LED-03L-40IES
	G	2	MIRADA OUTDOOR LED WALLPACK (EMERGENCY FIXTURE ONLY)	II	0.9	LSI LIGHTING	XWM-2-LED-03L-40IES

SYMBOL	DESCRIPTION
A (XX)	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
XX	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT

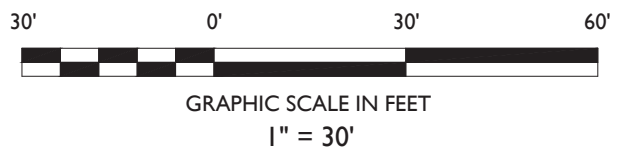
LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 5.18.G	LIGHT FIXTURES SHALL BE FULL CUT OFF AT 90°	PROVIDED
§ 5.18.G.ii	MINIMUM PROPERTY LINE SETBACK: 5 FT	60.0 FT
§ 5.18.G.via	MAXIMUM FIXTURE HEIGHTS: WITHIN 25 FT OF PROPERTY LINE: 16 FT WITHIN 26-60 FT OF PROPERTY LINE: 20 FT WITHIN 61-100 FT OF PROPERTY LINE: 25 FT > 100 FT OFF PROPERTY LINE: 30 FT	N/A N/A 22 FT N/A
§ 5.18.G.iii	PERMITTED GLARE: ALL PROPERTY LINES: 0 FC	0.0 FC

LIGHTING STATISTICS			
DESCRIPTION	AVERAGE	MINIMUM	MAXIMUM
OVERALL PARCEL	0.56 FC	0.00 FC	15.3 FC
DEVELOPMENT AREA	2.91 FC	0.00 FC	15.3 FC
PROPERTY LINE	0.00 FC	0.00 FC	0.0 FC

(1) ALL CALCULATIONS MEASURED 6 FT ABOVE GRADE

SECURITY CAMERAS TO BE MOUNTED ON EACH POLE 10 FT ABOVE GRADE		
POLE LABEL	NUMBER OF CAMERAS	DIRECTION OF CAMERAS
A		
B		
C		
D		
E		

- GENERAL LIGHTING NOTES**
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
 - WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
 - UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.30
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
 - THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.



REVISION	DATE	DESCRIPTION
2	03/16/2022	FOR PRELIMINARY SITE PLAN APPROVAL
1	01/03/2022	

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9145 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN



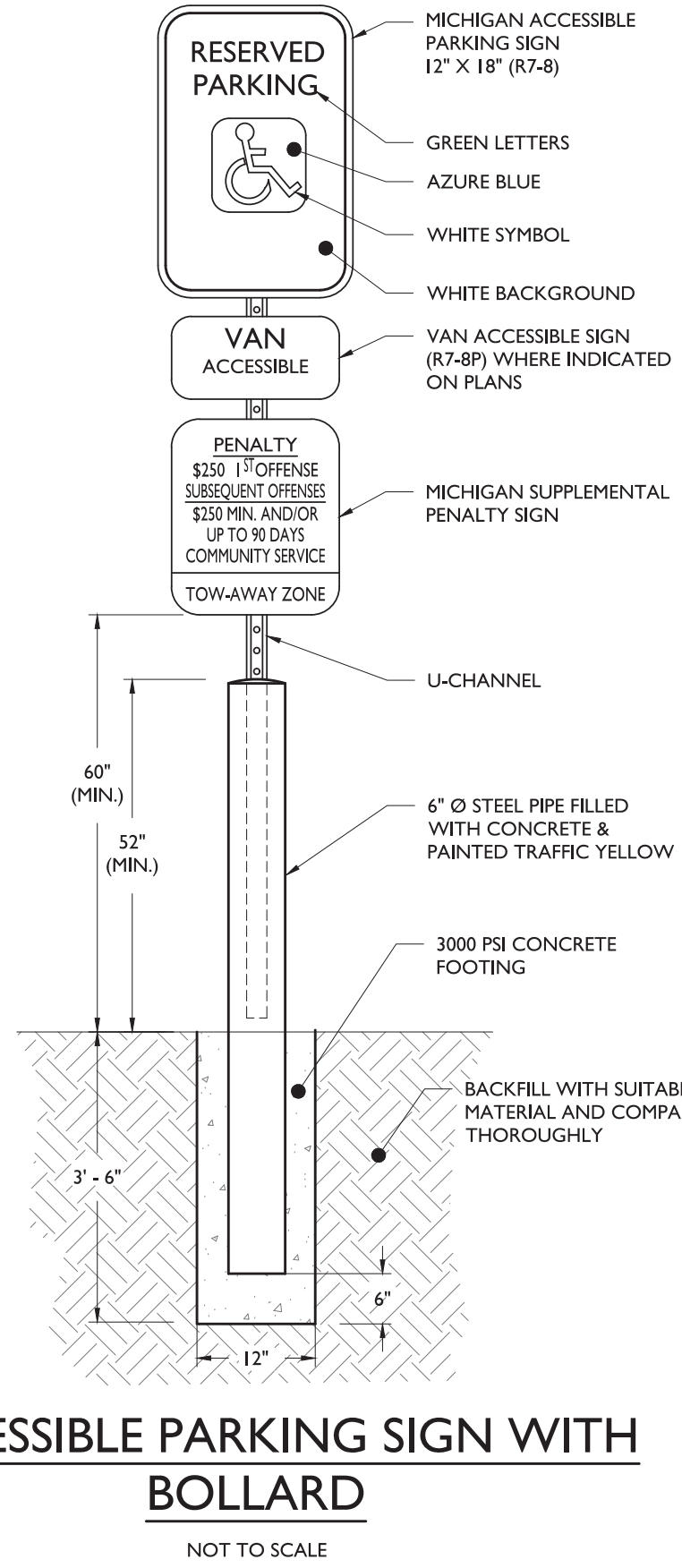
STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210462

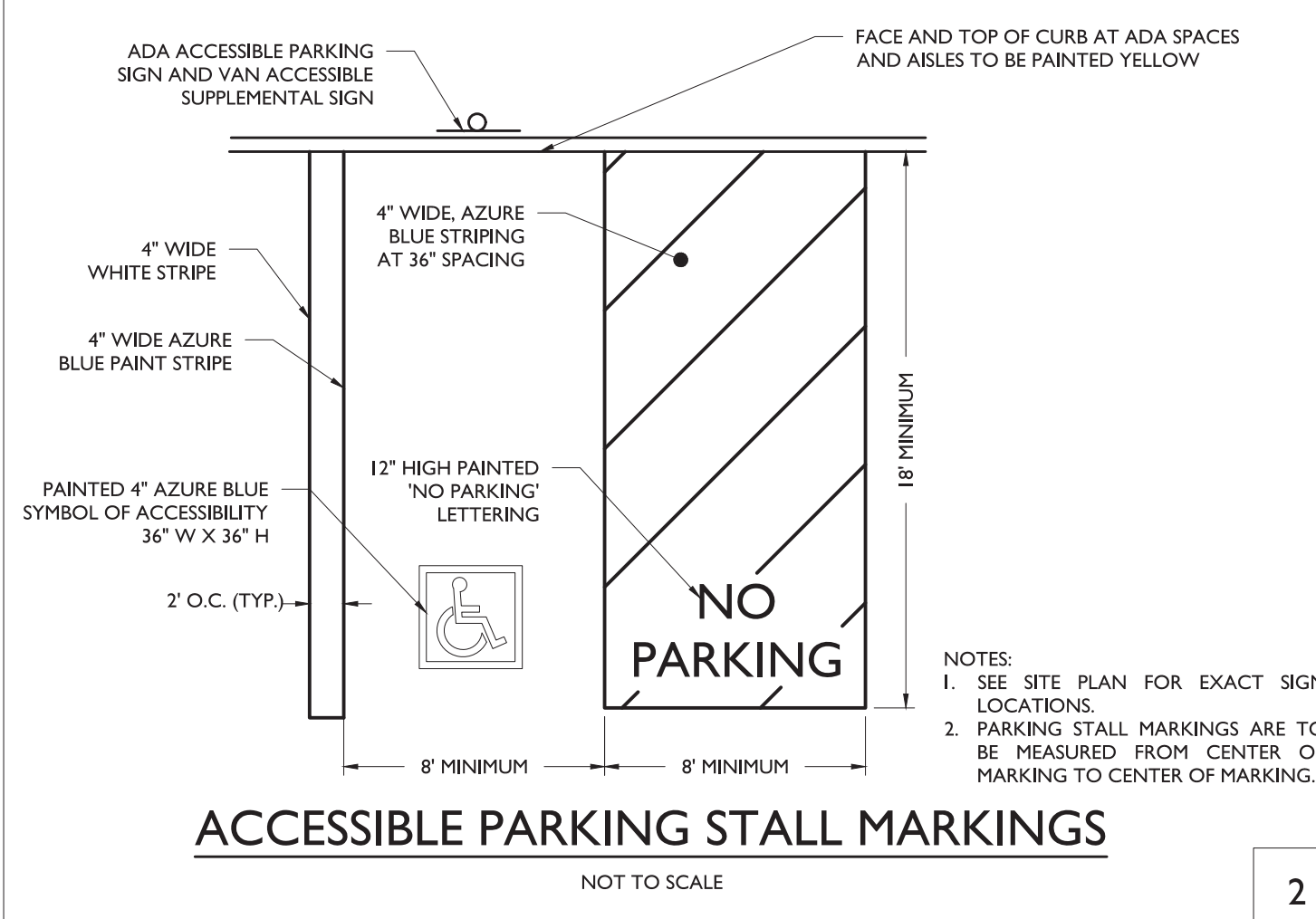
TITLE:
LIGHTING PLAN

DRAWING:
C-6

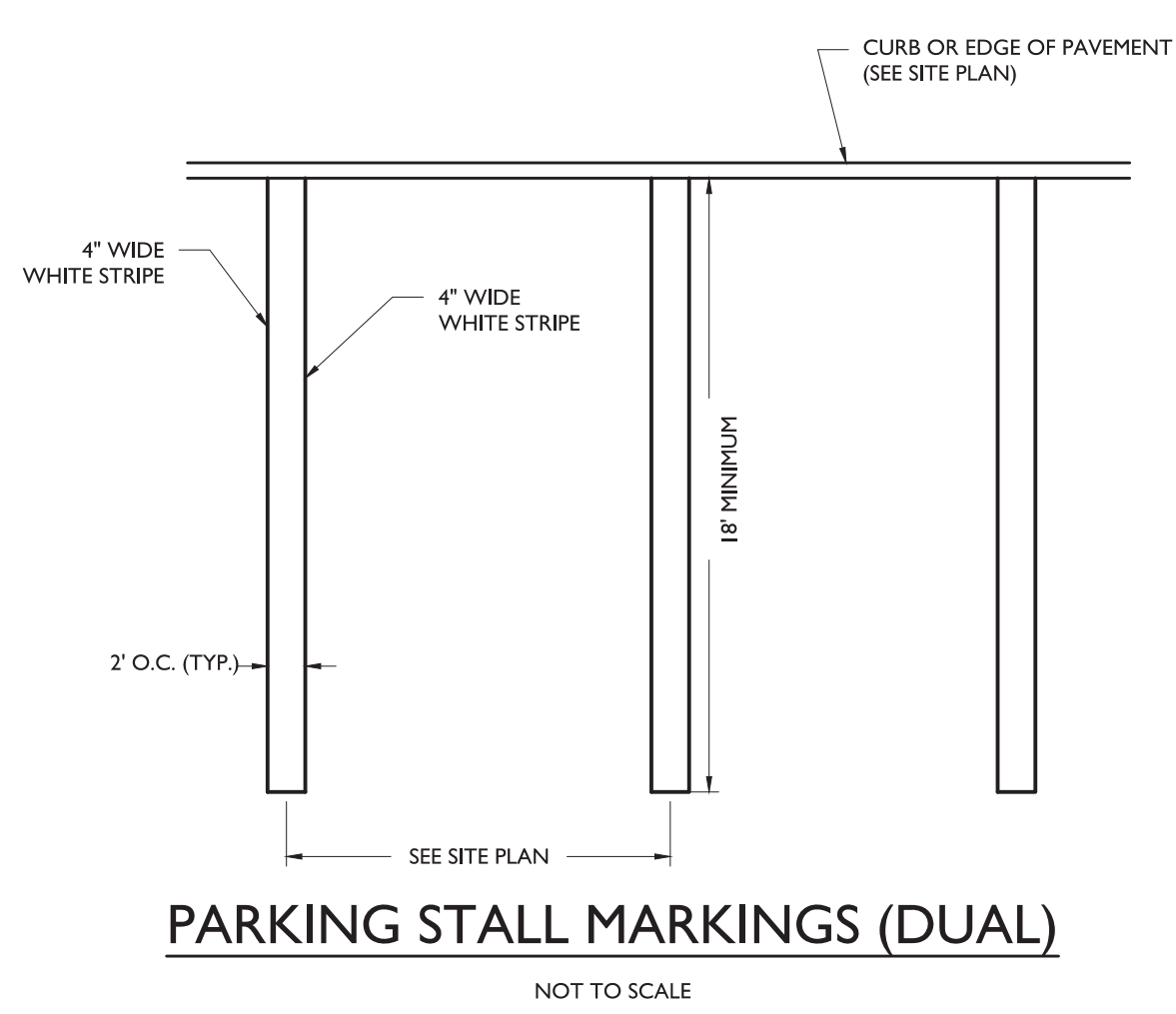
NOT FOR CONSTRUCTION. ALL DIMENSIONS SHOWN ARE TO THE CENTERLINE UNLESS OTHERWISE NOTED. SEE PLAN FOR ALL DIMENSIONS.



ACCESSIBLE PARKING SIGN WITH BOLLARD
NOT TO SCALE

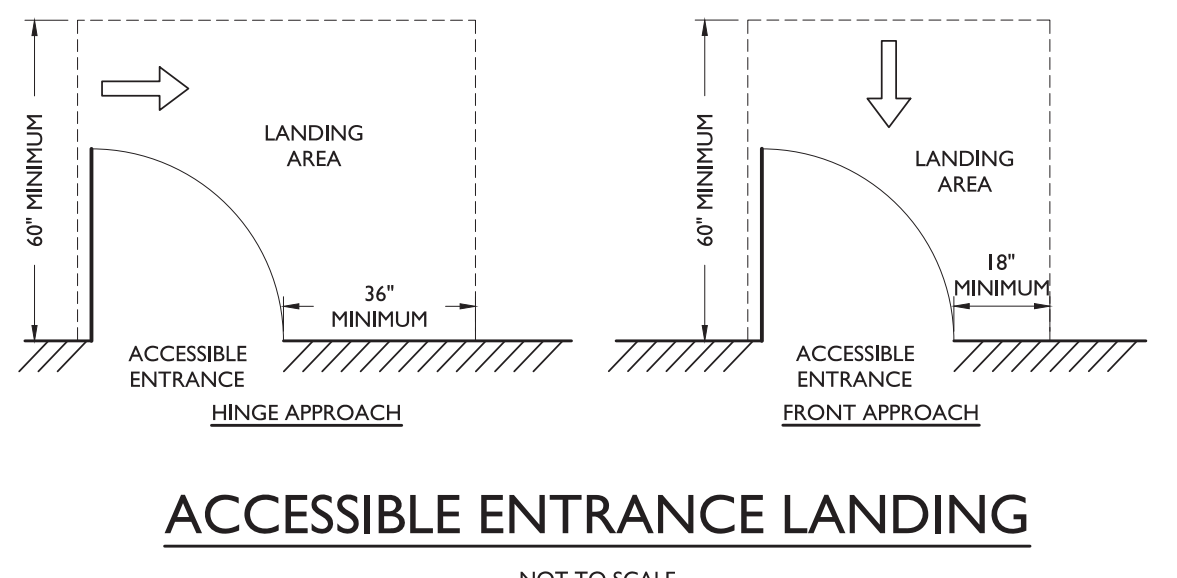


ACCESSIBLE PARKING STALL MARKINGS
NOT TO SCALE



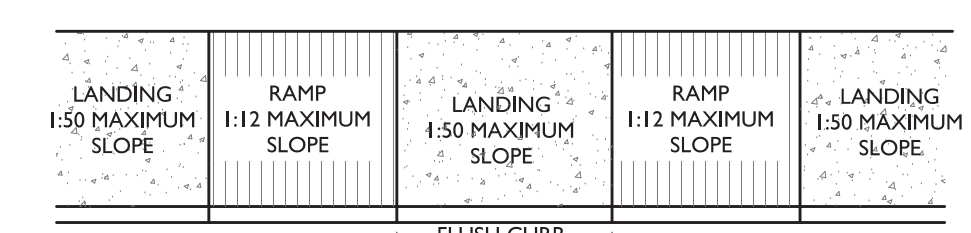
PARKING STALL MARKINGS (DUAL)
NOT TO SCALE

- PAVEMENT STRIPING & MARKINGS NOTES:**
1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.
 2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
 3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.
 4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.
 5. UNLESS OTHERWISE SPECIFIED, ON SITE PARKING STALL STRIPING, FIRE LANE STRIPING AND DIRECTIONAL ARROWS SHALL BE EPOXY PAINT. ON SITE STOP BARS, "DO NOT ENTER" BARS, AND ASSOCIATED LETTERING SHALL BE THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.

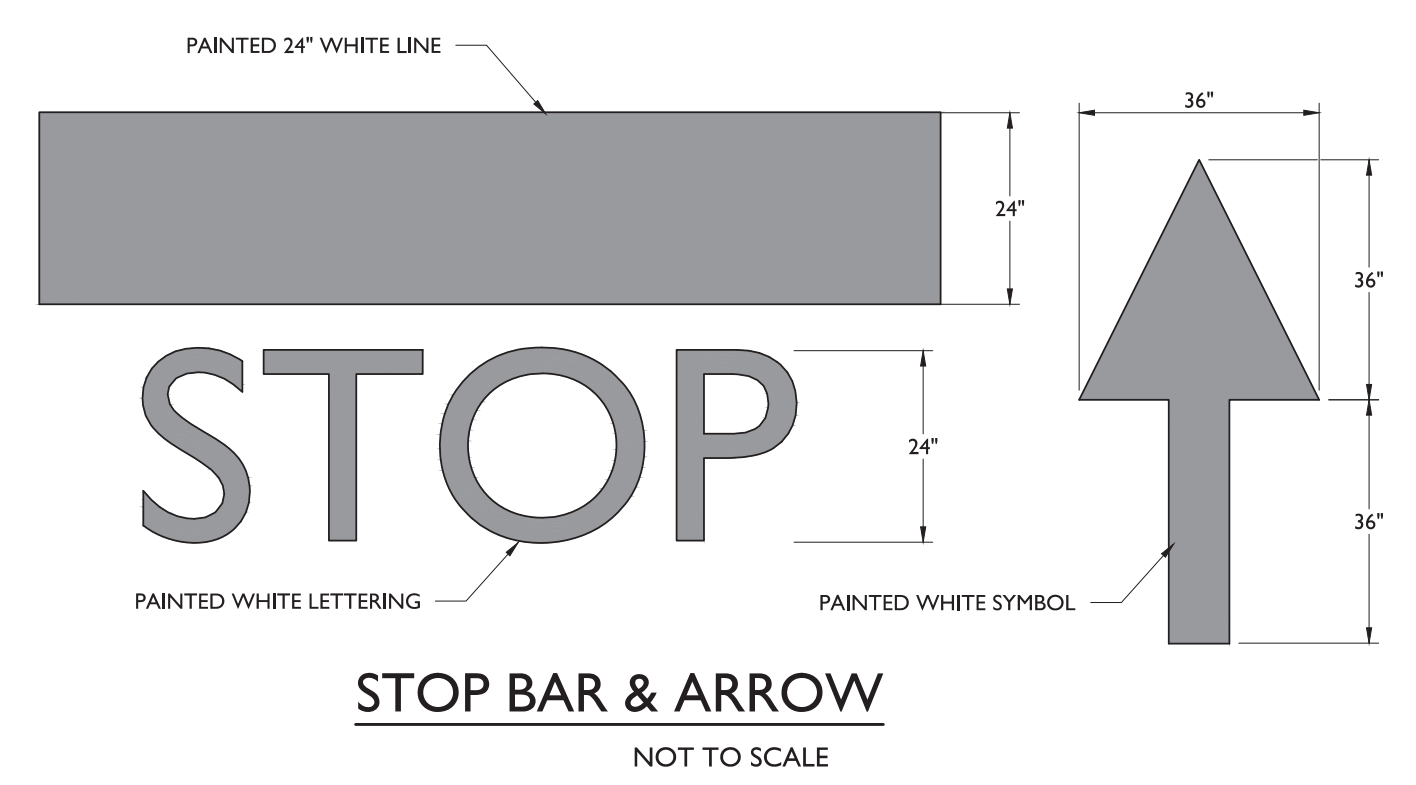


ACCESSIBLE ENTRANCE LANDING
NOT TO SCALE

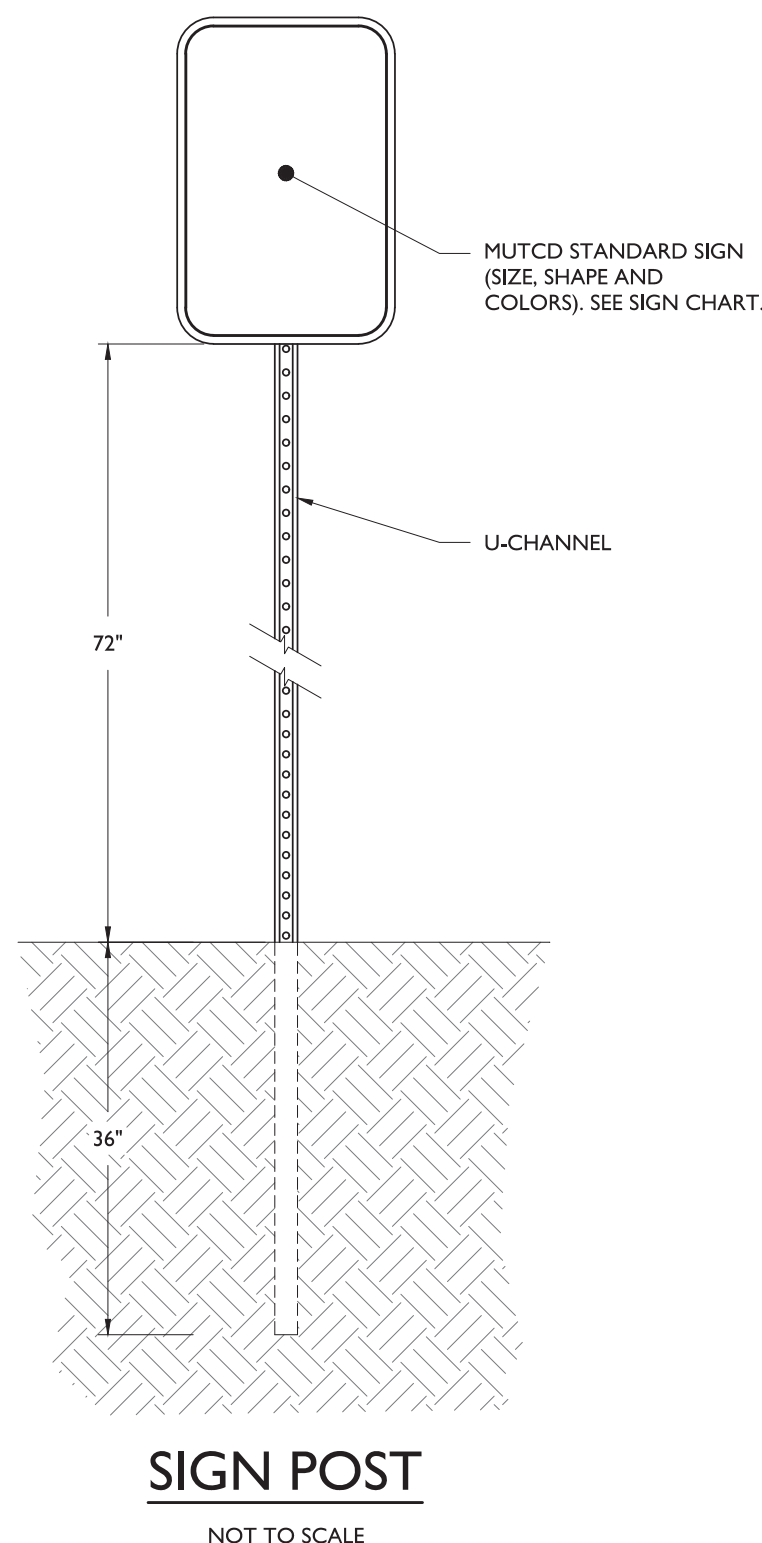
- NOTES:**
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%.
 2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.
 3. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.



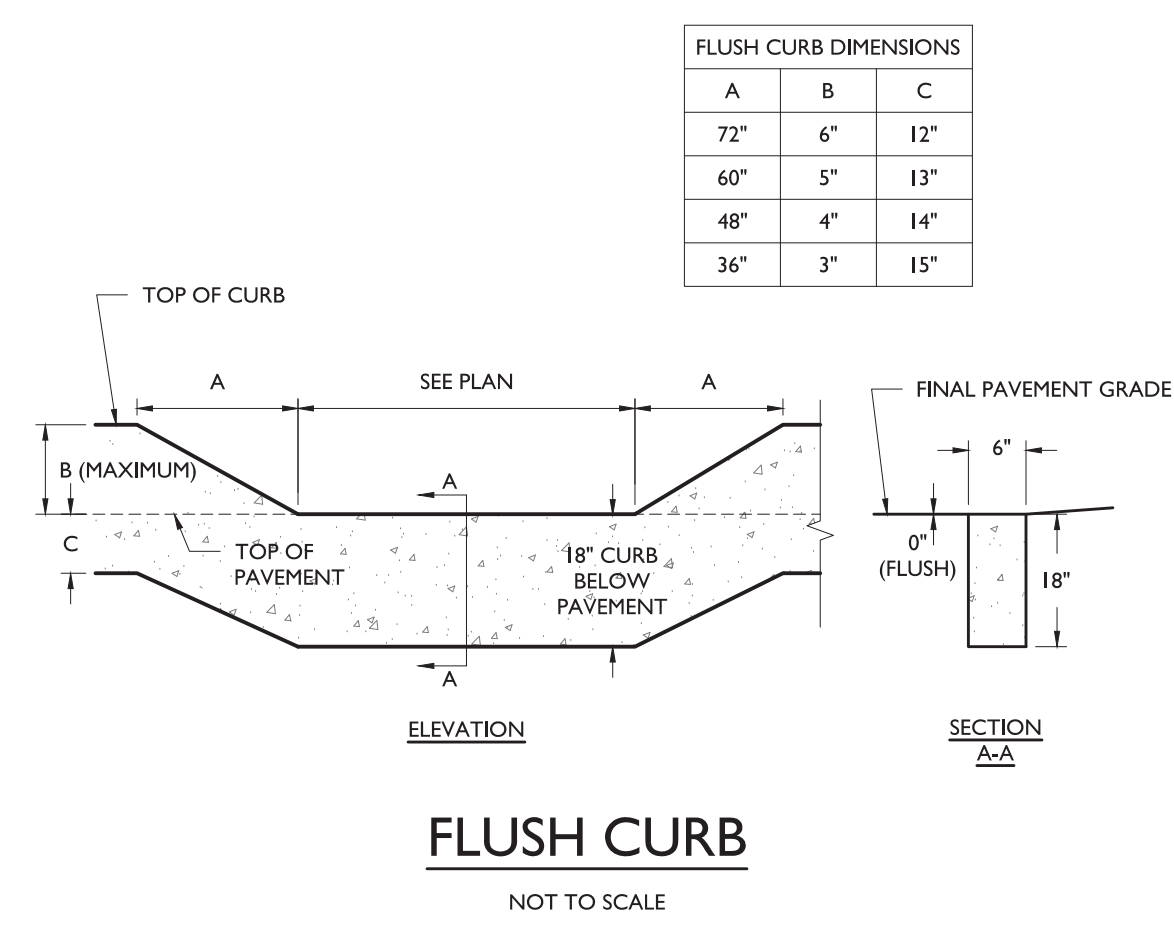
TRANSITION RAMP DETAIL
NOT TO SCALE



STOP BAR & ARROW
NOT TO SCALE

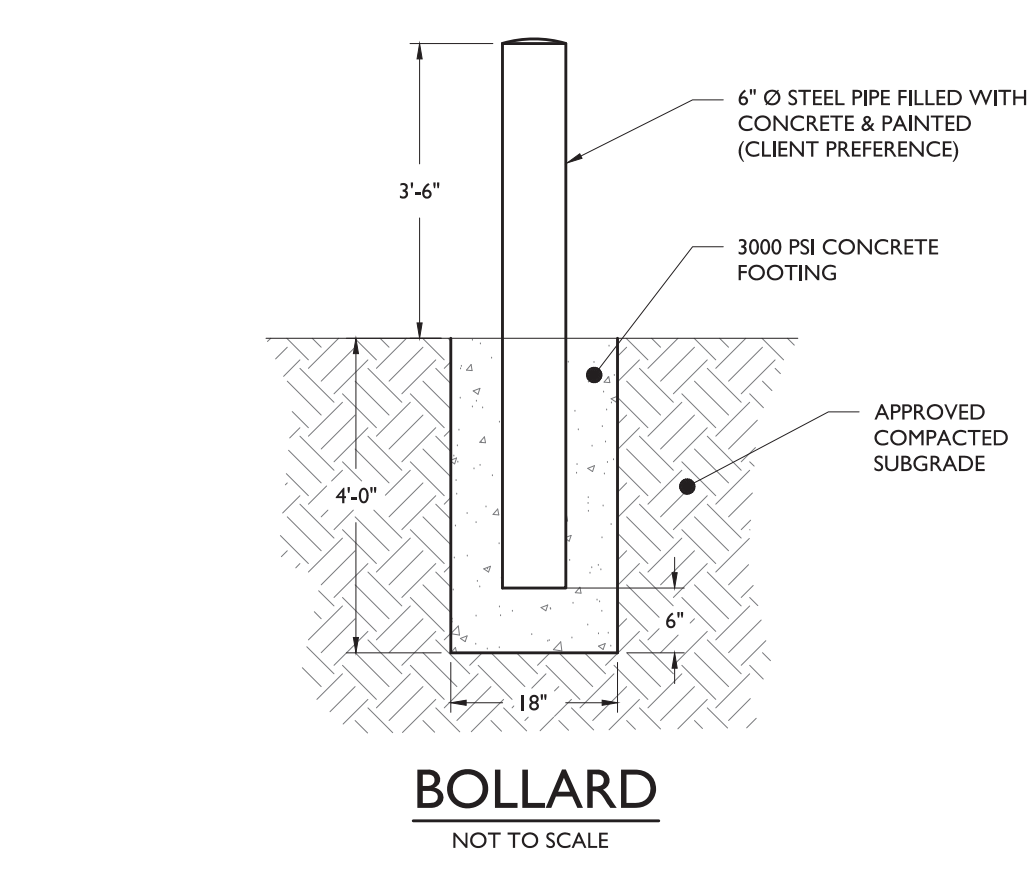


SIGN POST
NOT TO SCALE



FLUSH CURB
NOT TO SCALE

FLUSH CURB DIMENSIONS		
A	B	C
72"	6"	12"
60"	5"	13"
48"	4"	14"
36"	3"	15"

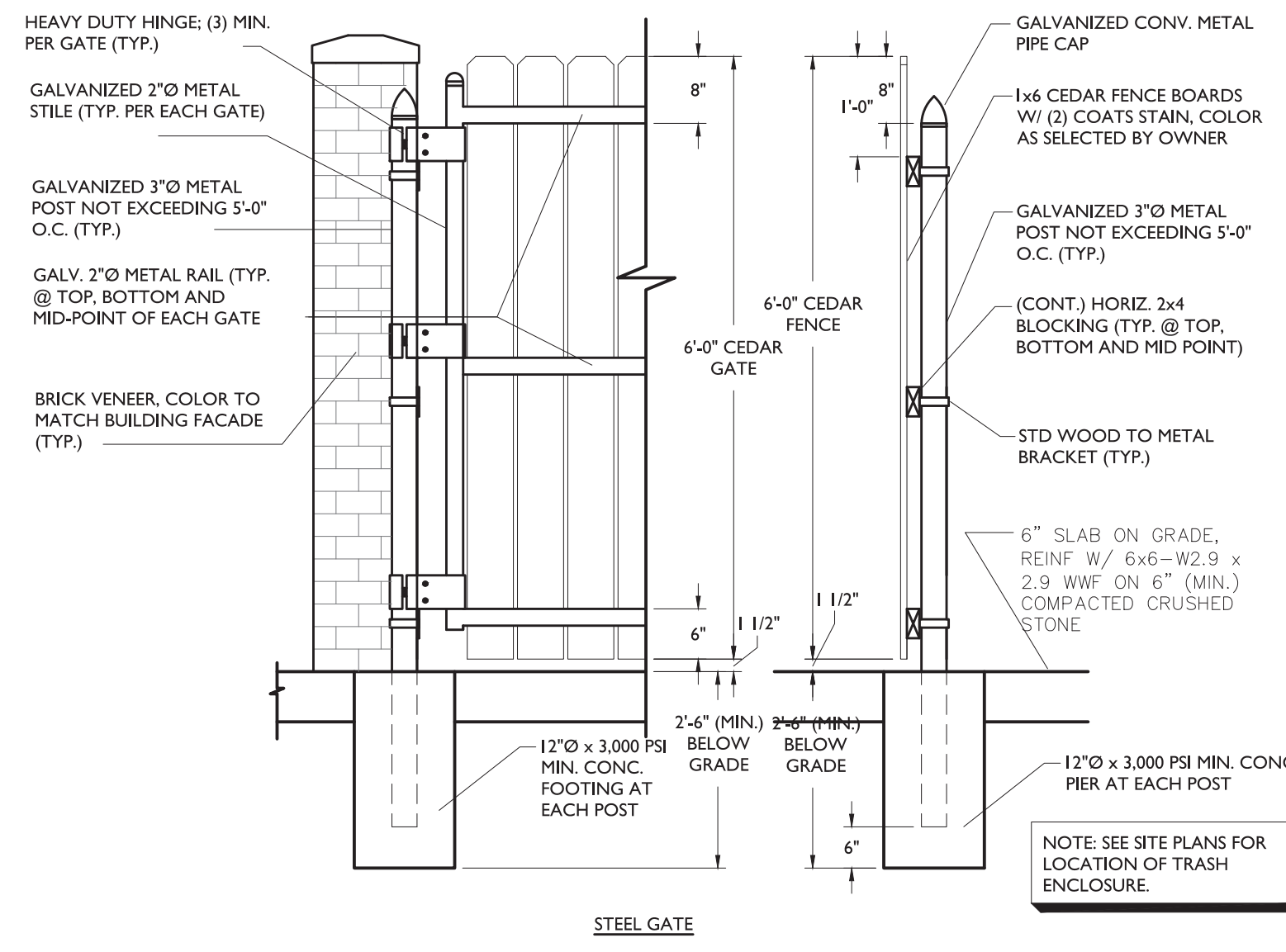


BOLLARD
NOT TO SCALE

M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
STOP SIGN (R1-1)		WHITE	RED	36"x36"	GROUND
DO NOT ENTER (R5-1)		RED	WHITE	30"x30"	GROUND

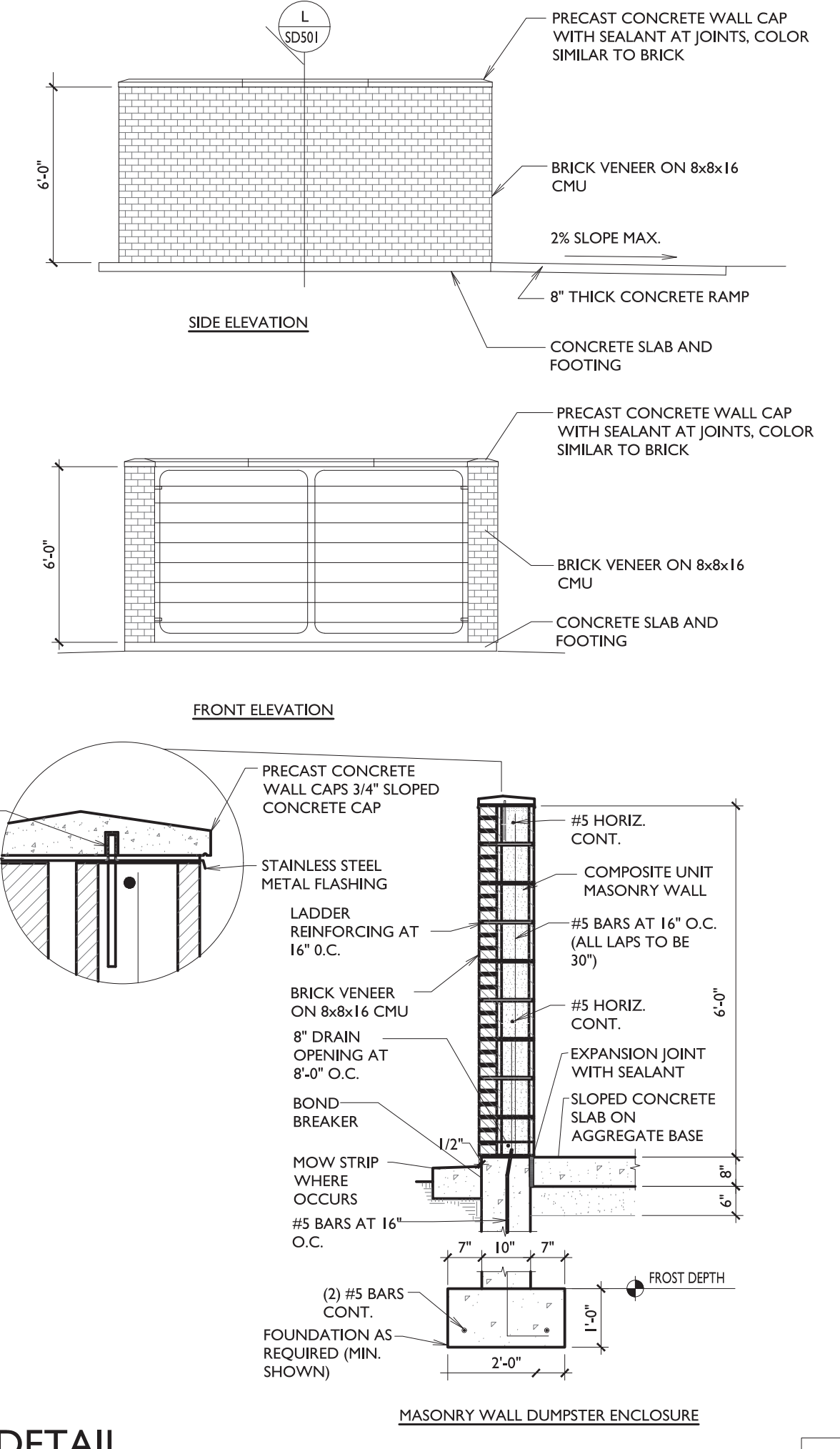
SIGN DATA TABLE
NOT TO SCALE

- NOTE:**
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
 2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.



TRASH / RECYCLE ENCLOSURE DETAIL
NOT TO SCALE

- NOTE:**
1. BLOCK COLOR TO MATCH BUILDING OR AS SPECIFIED BY OWNER.



MASONRY WALL DUMPSTER ENCLOSURE

REVISION	DATE	BY	DESCRIPTION
2	03/16/2022	ECH	REVISED PER SITE PLAN REVIEW #1
1	01/05/2022	BAC/ECH	FOR PRELIMINARY SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE
PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN

STATE OF MICHIGAN
MICHIGAN PROFESSIONAL ENGINEERS
MICHAEL J. STONEFIELD, P.E.
LICENSED PROFESSIONAL ENGINEER

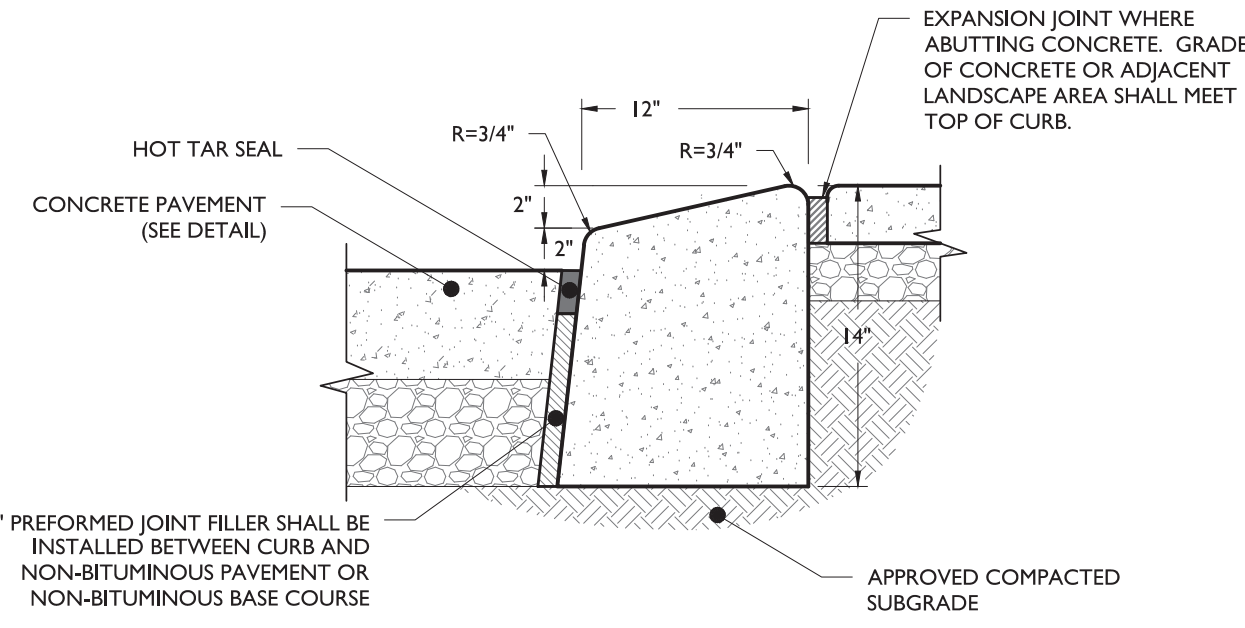
STONEFIELD
engineering & design

SCALE: AS SHOWN PROJECT ID: DET-21042

TITLE: **CONSTRUCTION DETAILS**

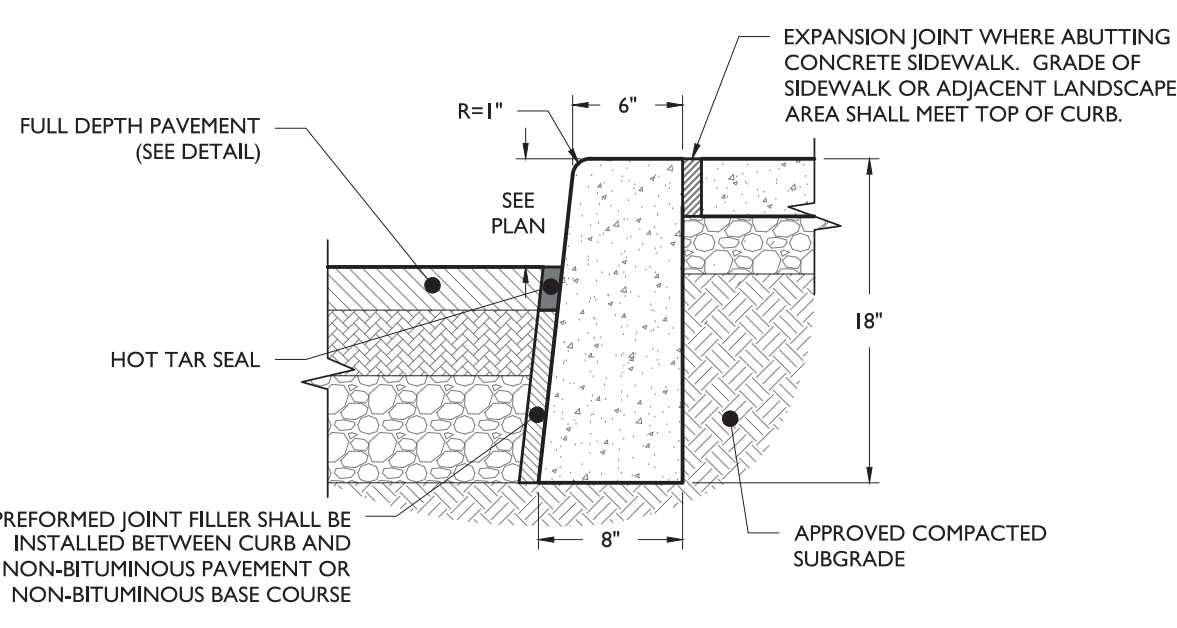
DRAWING: **C-8**

NOTES: 1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.



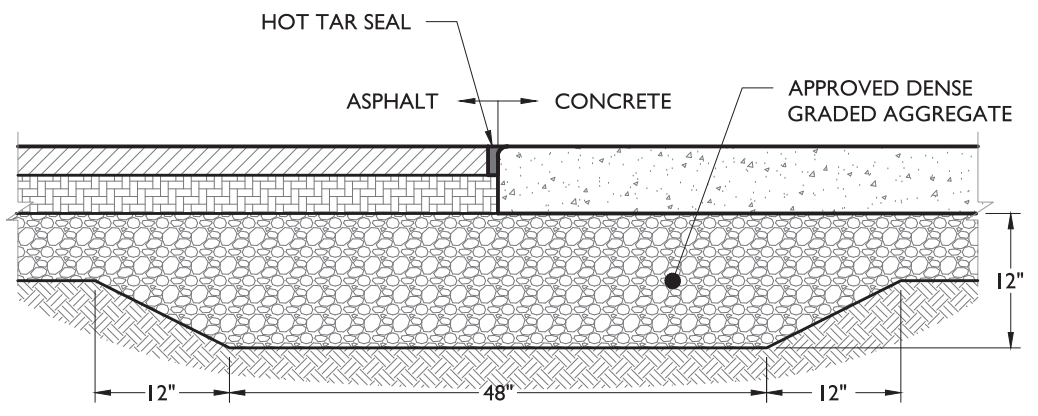
MOUNTABLE CONCRETE CURB

- NOTES:
- CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 - TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 - HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 - 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



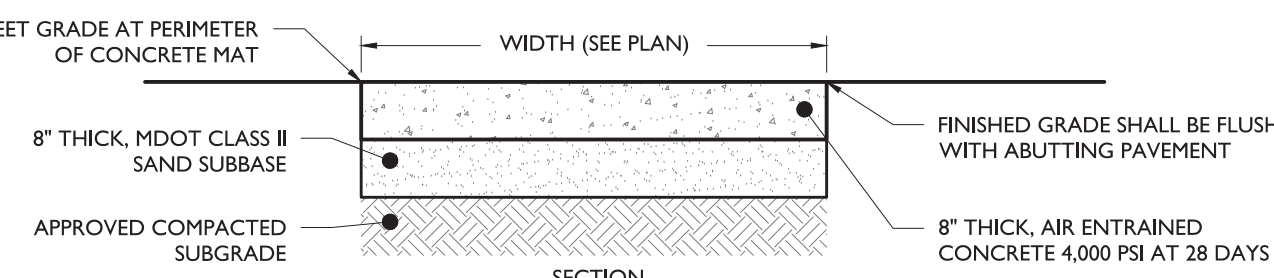
CONCRETE CURB DETAIL (ON-SITE)

- NOTES:
- CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 - TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 - HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 - 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



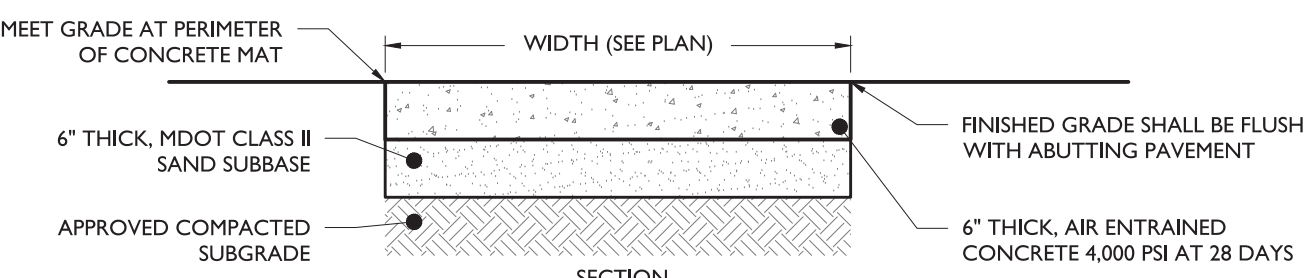
CONCRETE TO ASPHALT TRANSITION

NOT TO SCALE



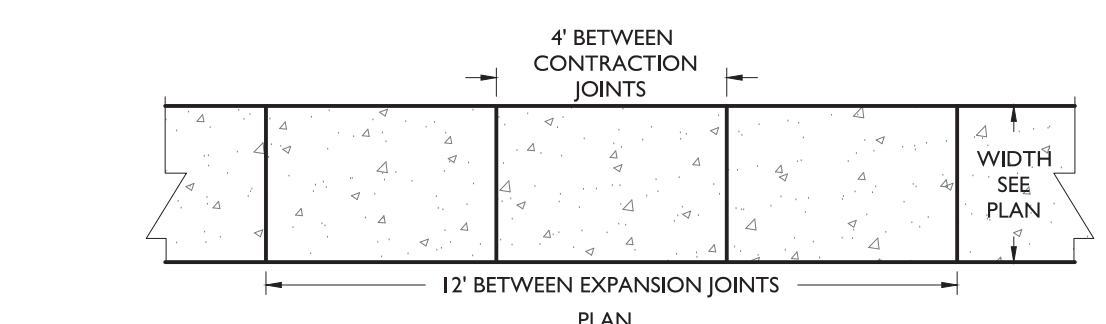
CONCRETE PAVEMENT

- NOTES:
- 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 - 1" DEEP BY 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
 - CONCRETE SHALL RECEIVE BROOM FINISH.
 - ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



CONCRETE MAT

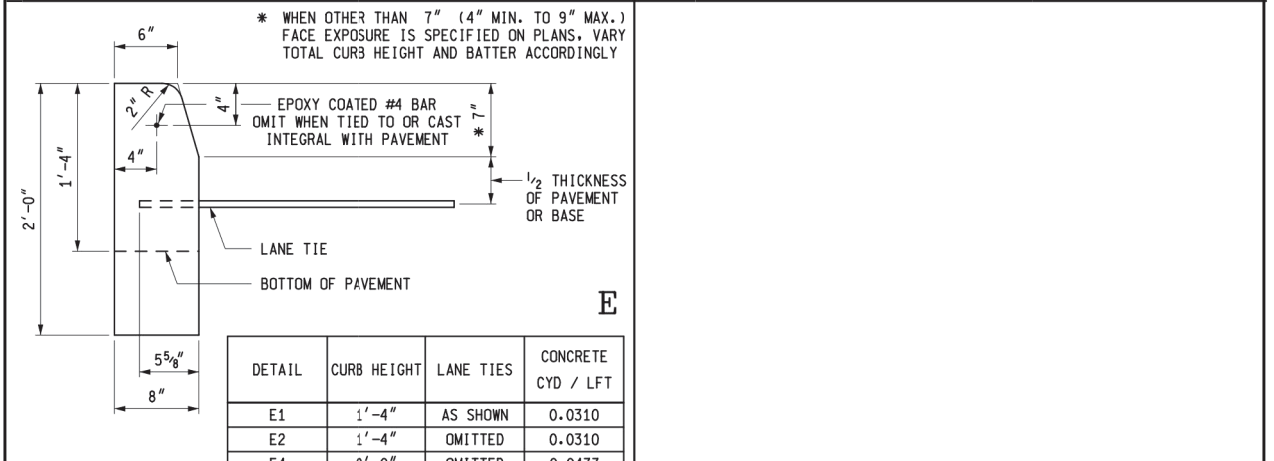
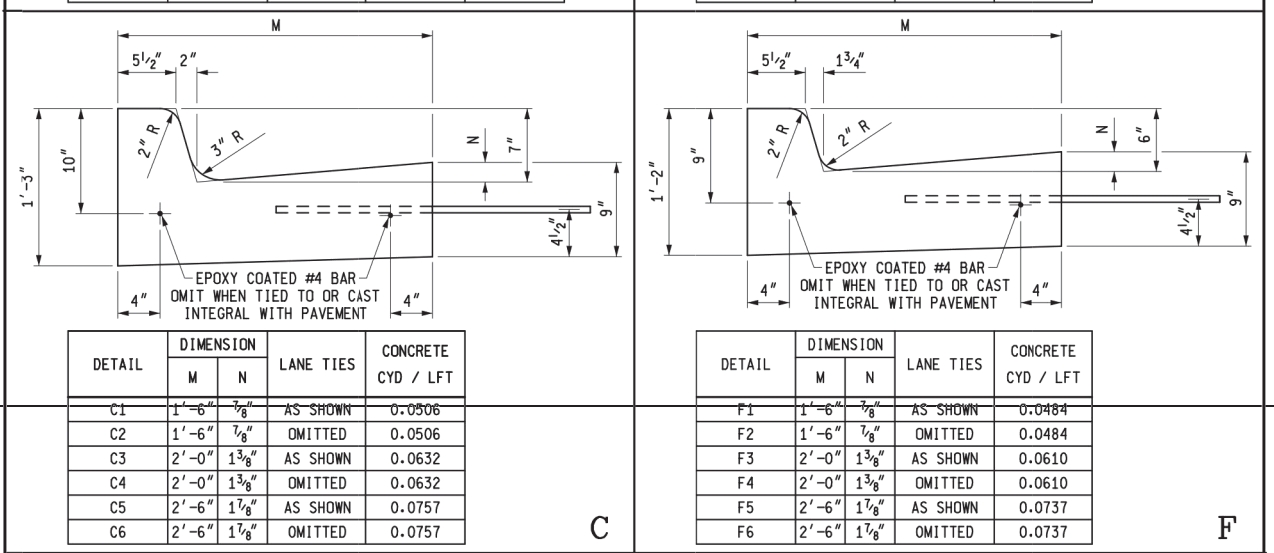
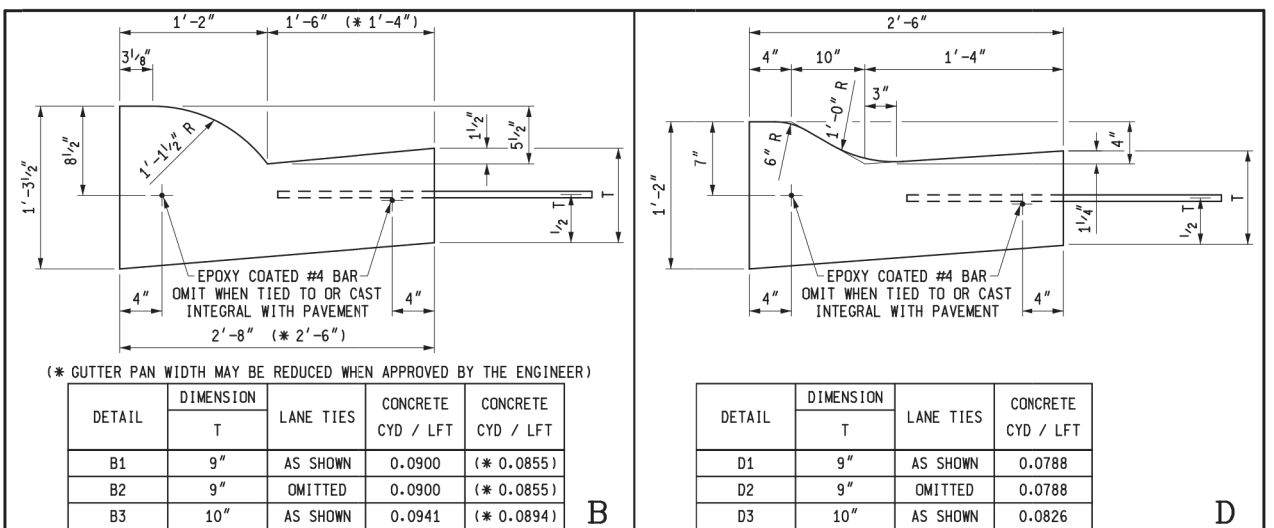
- NOTES:
- 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 - 1" DEEP BY 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
 - CONCRETE SHALL RECEIVE BROOM FINISH.
 - ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



CONCRETE WALKWAY

NOT TO SCALE

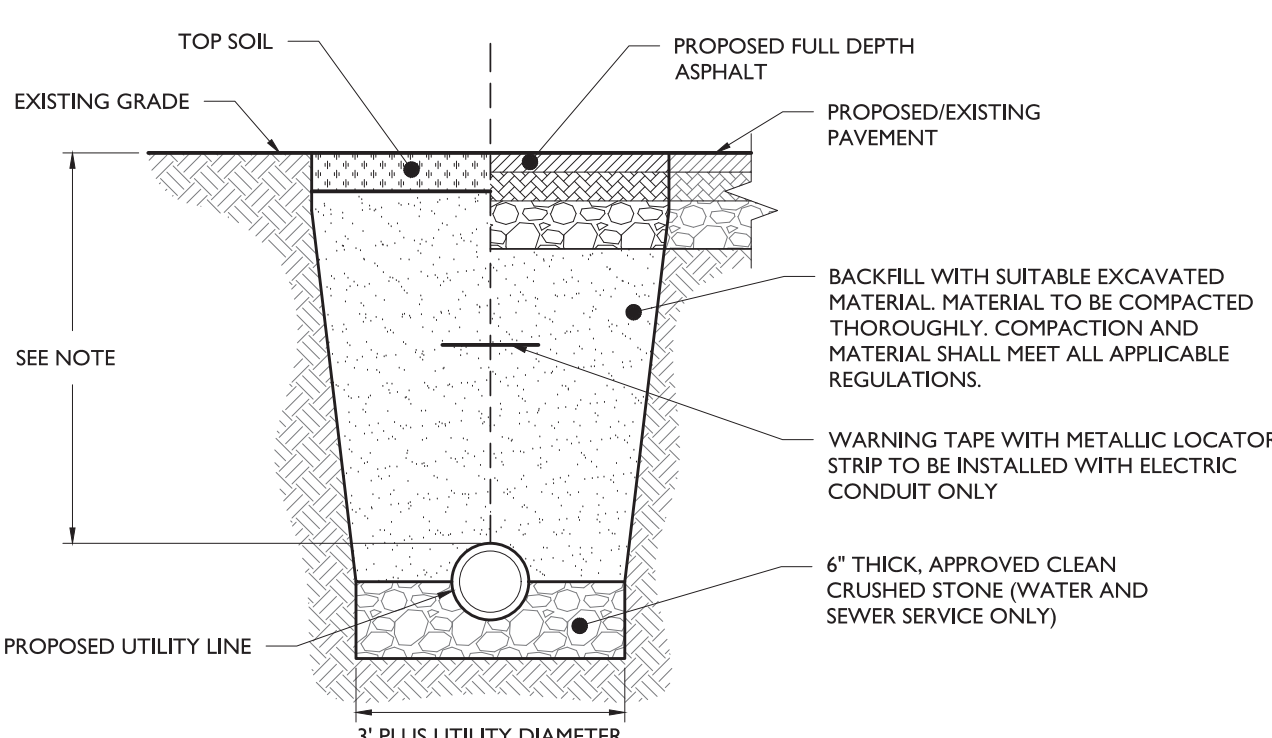
- NOTES:
- MAXIMUM CROSS SLOPE SHALL BE 1/4" PER FOOT.
 - 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE.
 - 1" DEEP BY 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
 - EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.



DETAIL	CONCRETE CTD / LFT	CONCRETE CTD / LFT
B1	9"	AS SHOWN 0.0900 (4 0.0851)
B2	9"	OMITTED 0.0900 (4 0.0851)
B3	10"	AS SHOWN 0.0941 (4 0.0894)
D1	9"	AS SHOWN 0.0788
D2	9"	OMITTED 0.0788
D3	10"	AS SHOWN 0.0826
C1	1'-6"	AS SHOWN 0.0006
C2	1'-6"	OMITTED 0.0006
C3	2'-0"	AS SHOWN 0.0632
C4	2'-0"	OMITTED 0.0632
C5	2'-6"	AS SHOWN 0.0757
C6	2'-6"	OMITTED 0.0757
E1	1'-4"	AS SHOWN 0.0350
E2	1'-4"	OMITTED 0.0350
E4	2'-0"	OMITTED 0.0417

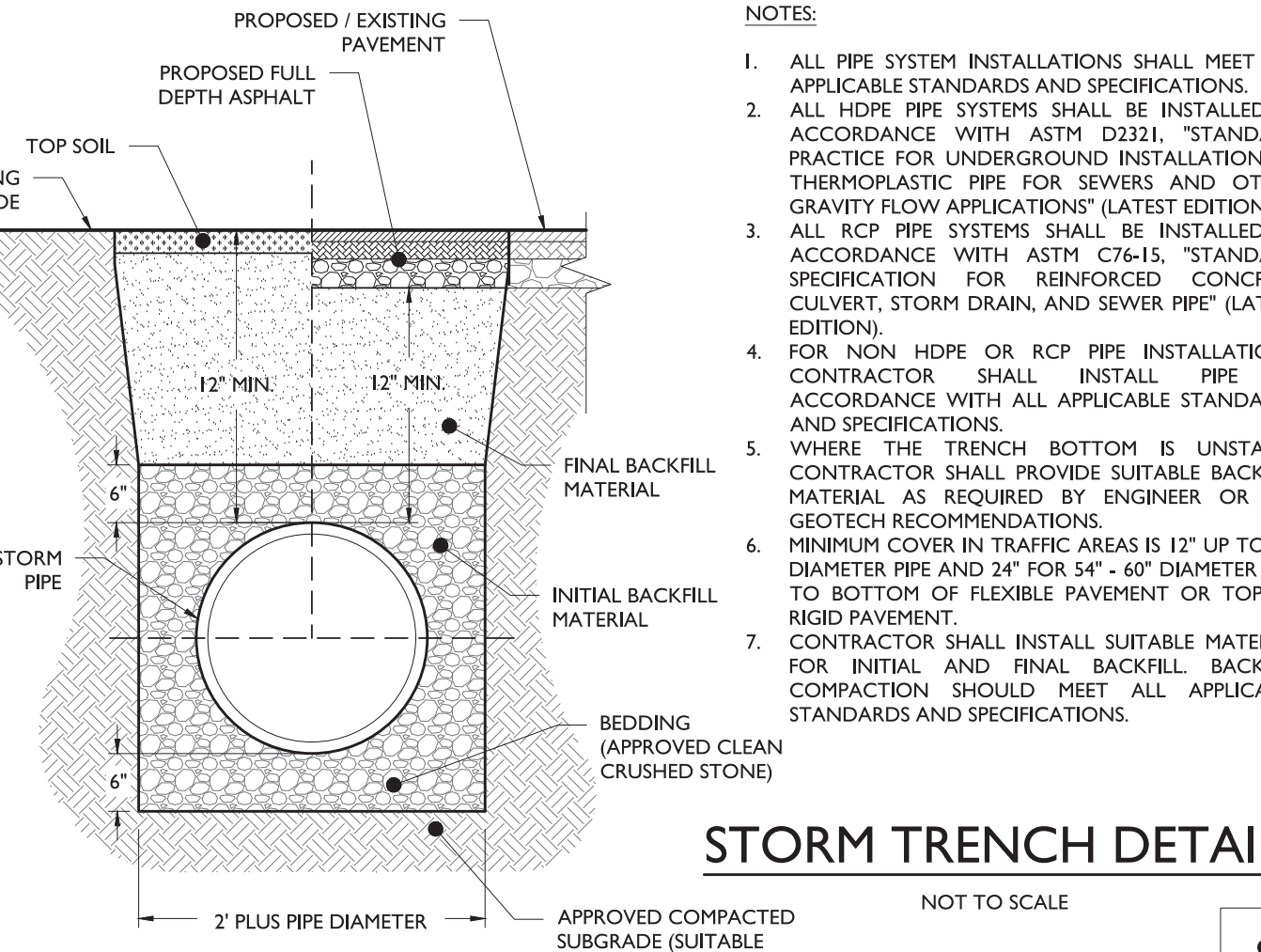
MDOT CONCRETE CURB DETAILS (RIGHT-OF-WAY)

NOT TO SCALE



UTILITY TRENCH

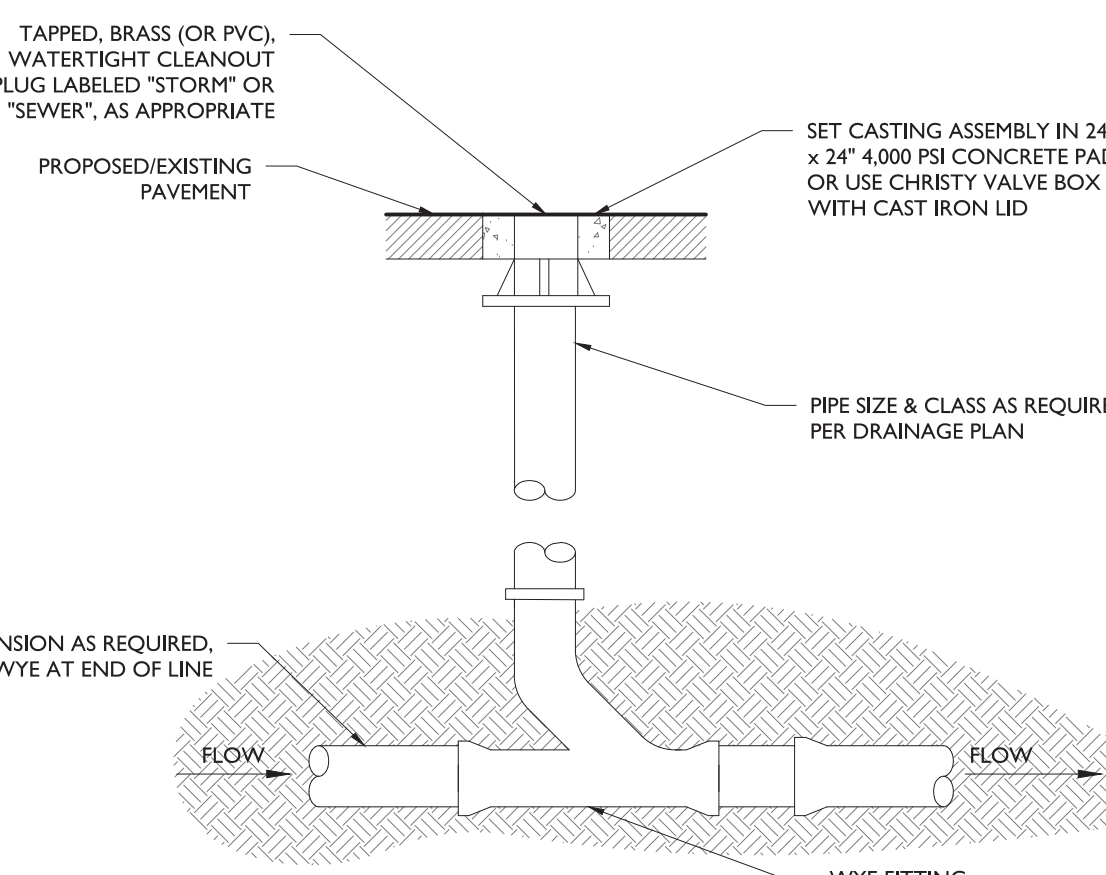
- NOTE:
- MINIMUM PIPE COVER SHALL BE AS FOLLOWS:
- ELECTRIC SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - GAS SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - SEWER SERVICE - 36" MINIMUM
 - WATER SERVICE - 48" MINIMUM



STORM TRENCH DETAIL

NOT TO SCALE

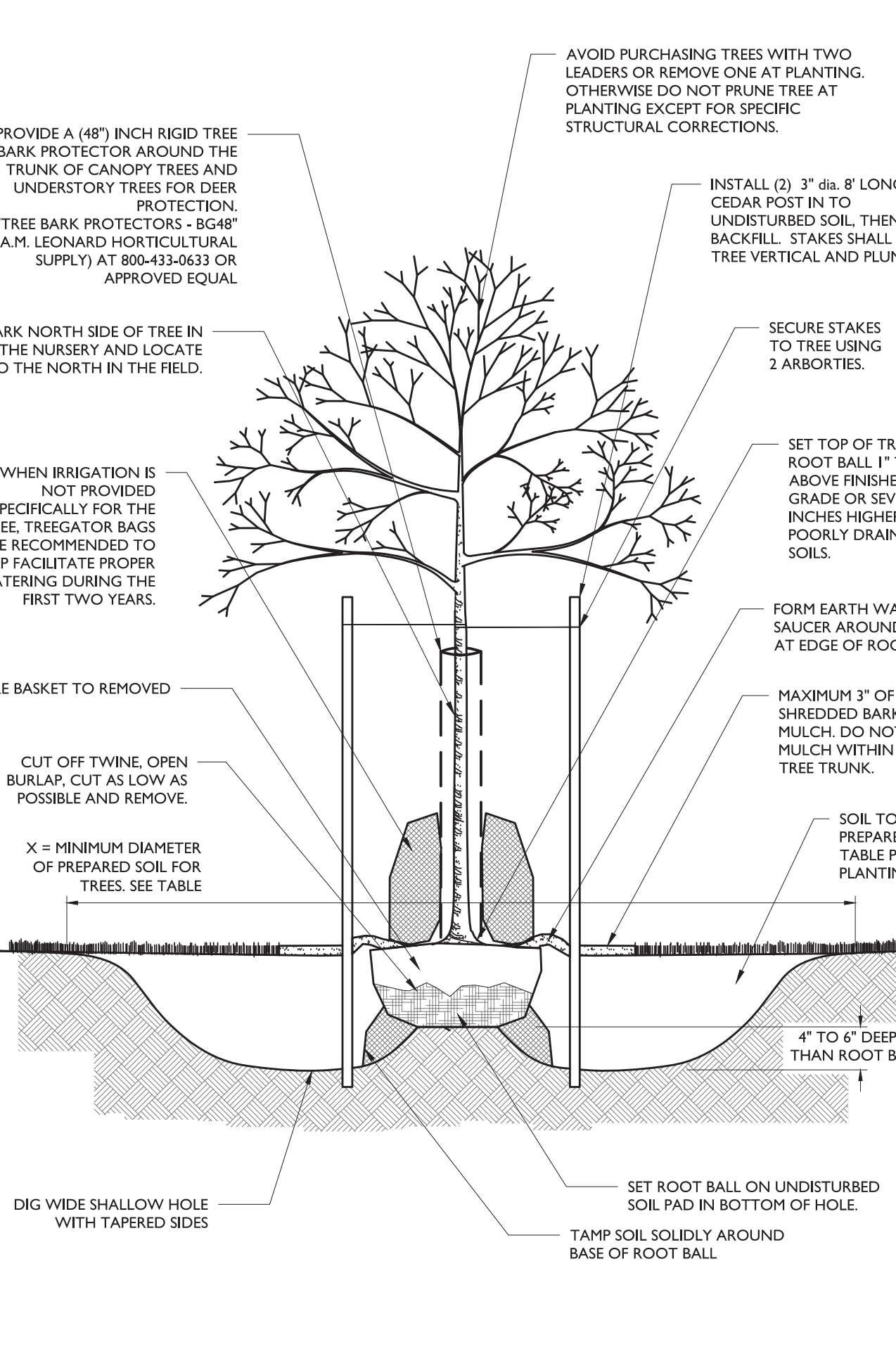
- NOTES:
- ALL PIPE SYSTEM INSTALLATIONS SHALL MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
 - ALL HDPE PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" (LATEST EDITION).
 - ALL RCP PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C76-15, "STANDARD SPECIFICATION FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE" (LATEST EDITION).
 - FOR NON HDPE OR RCP PIPE INSTALLATIONS, CONTRACTOR SHALL INSTALL PIPE IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.
 - WHERE THE TRENCH BOTTOM IS UNSTABLE, CONTRACTOR SHALL PROVIDE SUITABLE BACKFILL MATERIAL AS REQUIRED BY ENGINEER OR PER GEOTECH RECOMMENDATIONS.
 - MINIMUM COVER IN TRAFFIC AREAS IS 12" UP TO 48" DIAMETER PIPE AND 24" FOR 54" - 60" DIAMETER PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT.
 - CONTRACTOR SHALL INSTALL SUITABLE MATERIAL FOR INITIAL AND FINAL BACKFILL. BACKFILL COMPACTION SHOULD MEET ALL APPLICABLE STANDARDS AND SPECIFICATIONS.



HARDSCAPE CLEAN-OUT

NOT TO SCALE

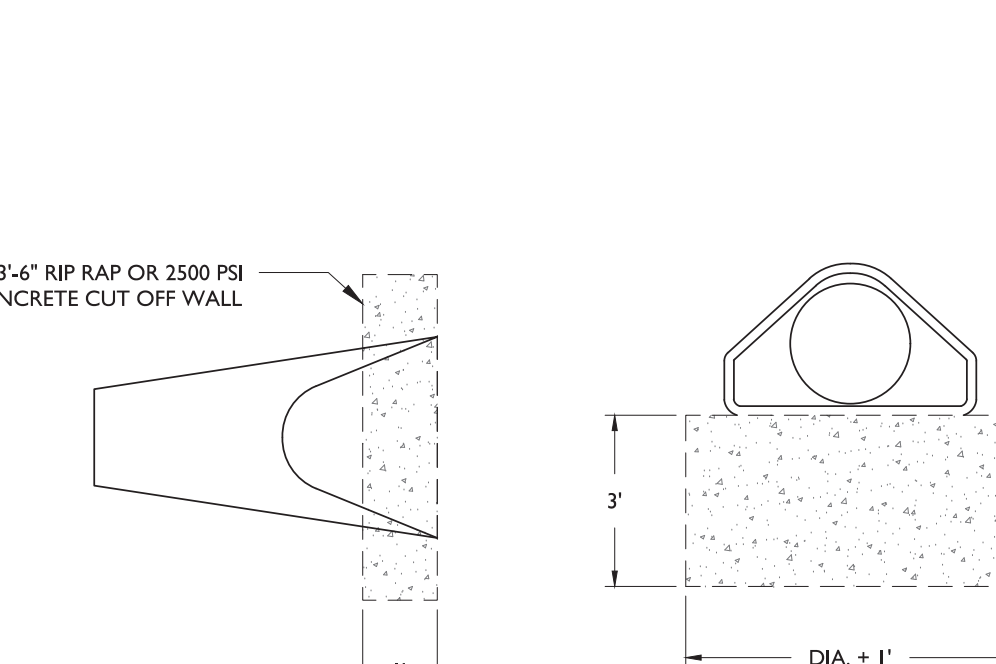
- NOTES:
- 1" DEEP BY 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
 - EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.



DECIDUOUS TREE PLANTING DETAIL

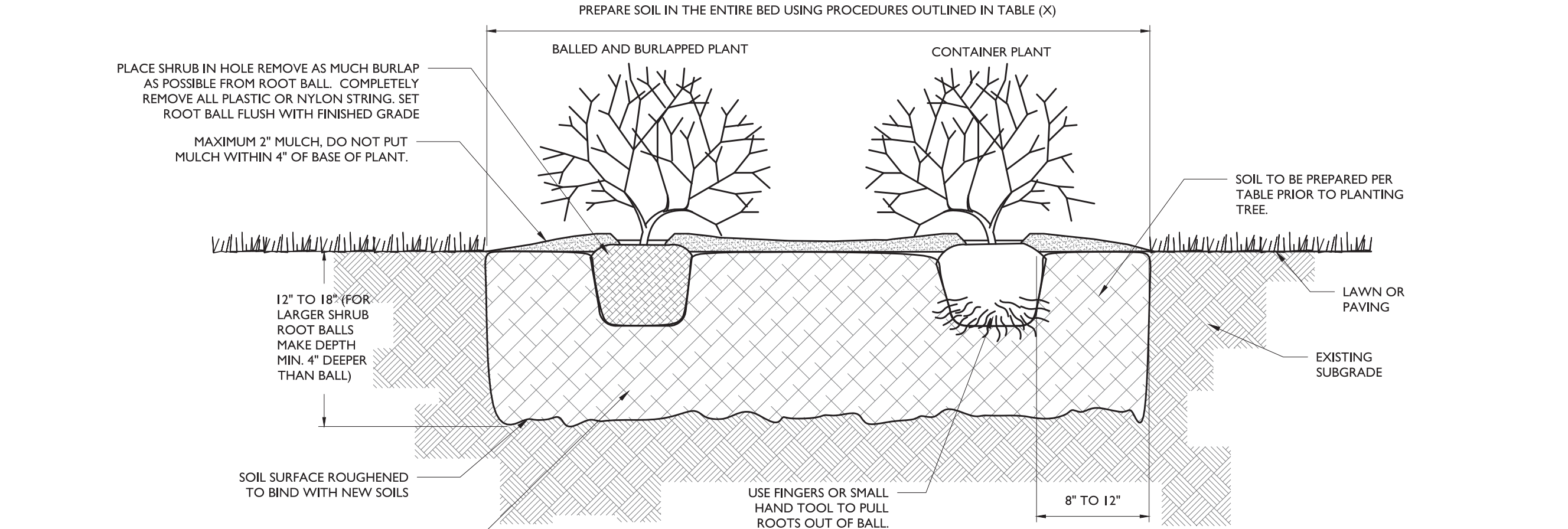
NOT TO SCALE

- NOTES:
- PROVIDE A (48") INCH RIGID TREE BARK PROTECTOR AROUND THE TRUNK OF CANOPY TREES AND UNDERSTORY TREES FOR DEER PROTECTION.
 - "TREE BARK PROTECTORS - 8648" (A.M. LEONARD HORTICULTURAL SUPPLY) AT 800-433-0633 OR APPROVED EQUAL.
 - AVOID PURCHASING TREES WITH TWO LEADERS OR REMOVE ONE AT PLANTING. OTHERWISE DO NOT PRUNE TREE AT PLANTING EXCEPT FOR SPECIFIC STRUCTURAL CORRECTIONS.
 - INSTALL (2) 3" dia. 8' LONG CEDAR POST IN TO UNDISTURBED SOIL. THEN BACKFILL. STAKES SHALL KEEP TREE VERTICAL AND PLUMB.
 - SECURE STAKES TO TREE USING 2 ABORTIES.
 - SET TOP OF TRUE ROOT BALL 1" TO 2" ABOVE FINISHED GRADE OR SEVERAL INCHES HIGHER IN POORLY DRAINING SOILS.
 - FORM EARTH WATERING SAUCER AROUND TREE AT EDGE OF ROOT BALL.
 - MAXIMUM 3" OF SHREDDED BARK MULCH. DO NOT PLACE MULCH WITHIN 6" OF TREE TRUNK.
 - SOIL TO BE PREPARED PER TABLE PRIOR TO PLANTING TREE.
 - 4" TO 6" DEEPER THAN ROOT BALL.
 - TAMP SOIL SOLIDLY AROUND BASE OF ROOT BALL.
 - DIG WIDE SHALLOW HOLE WITH TAPERED SIDES.
 - CUT OFF TWINE OPEN BURLAP, CUT AS LOW AS POSSIBLE AND REMOVE.
 - WIRE BASKET TO BE REMOVED.
 - WHEN IRRIGATION IS NOT PROVIDED SPECIFICALLY FOR THE TREE, TREECATOR BAGS ARE RECOMMENDED TO HELP FACILITATE PROPER WATERING DURING THE FIRST TWO YEARS.
 - MARK NORTH SIDE OF TREE IN THE NURSERY AND LOCATE TO THE NORTH IN THE FIELD.
 - WHEN IRRIGATION IS NOT PROVIDED SPECIFICALLY FOR THE TREE, TREECATOR BAGS ARE RECOMMENDED TO HELP FACILITATE PROPER WATERING DURING THE FIRST TWO YEARS.



FLARED END SECTION DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE

- NOTES:
- PREPARE SOIL IN THE ENTIRE BED USING PROCEDURES OUTLINED IN TABLE (X).
 - PLACE SHRUB IN HOLE REMOVE AS MUCH BURLAP AS POSSIBLE FROM ROOT BALL. COMPLETELY REMOVE ALL PLASTIC OR NYLON STRINGS. SET ROOT BALL FLUSH WITH FINISHED GRADE.
 - MAXIMUM 2" MULCH. DO NOT PUT MULCH WITHIN 4" OF BASE OF PLANT.
 - 12" TO 18" FOR LARGER SHRUB ROOT BALLS MAKE DEPTH MIN. 4" DEEPER THAN BALL.
 - SOIL TO BE PREPARED PER TABLE PRIOR TO PLANTING TREE.
 - SOIL SURFACE ROUGHENED TO BIND WITH NEW SOILS.
 - USE FINGERS OR SMALL HAND TOOL TO PULL ROOTS OUT OF BALL.
 - 8" TO 12"
 - LAWN OR PAVING
 - EXISTING SUBGRADE

STONEFIELD engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN

SCALE: AS SHOWN PROJECT ID: DET-210462

TITLE: CONSTRUCTION DETAILS

DRAWING: C-9

ISSUE DATE: 03/16/2022

REVISIONS:

NO.	DATE	DESCRIPTION
1	03/16/2022	FOR PRELIMINARY SITE PLAN APPROVAL

Type: _____

Mirada Medium Outdoor LED Area Light

Back to Quick Links

ORDERING GUIDE

Typical Order Example: **MRM LED 36L SIL FTA UNV DIM 50 70CR1 ALSCS04 BRZ IL**

Luminaire Profile	Light Source	Lumen Package	Light Output	Distribution	Orientation*	Voltage	Driver
MRM - Mirada	LED	7L - 7,000 lms 14L - 14,000 lms 17L - 17,000 lms 19L - 19,000 lms 24L - 24,000 lms 30L - 30,000 lms 36L - 36,000 lms 42L - 42,000 lms 48L - 48,000 lms	SL - Square	2 - Spot 2 3 - Type 3 SW - Type 5 Wide FT - Forward Throw FTM - Forward Throw Automotive AM - Automotive Manhandle	(Blank) - Standard L - Optics rotated left 90° R - Optics rotated right 90°	UNV - Universal Voltage (120-277V) HV - High Voltage (347-480V)	DM - 0-10V Dimming (0-10V)

Color Temp	Color Rendering	Finish	Options
50 - 5,000 CCT 65 - 6,500 CCT 90 - 9,000 CCT	70CRI - 70 CRI	BRZ - Bronze BLK - Black GPT - Graphite MSV - Metallic Silver WHT - White P/P - Platinum Plus SVG - Satin Verde Green	(Blank) - None IH - Integral Housecode Shield† IL - Integral Lens† (Legacy "Spot Light Luminaire")

Accessory Ordering Information*

Controls Accessories	Order Number*	Mounting Accessories*	Order Number*
PC120 Photofit for use with CRFP option (120V)	122514	Universal Mounting Bracket	684616LR
PC120-277 Photofit for use with CRFP option (208V/240V/277V)	122515	Adjustable Slip Fitter (F - 2.38" Taper)	688130LR
Test Lock Photofit (68V) for use with CRFP†	122516	Enclosed Slip Fitter (F - 2.38" Taper)	682130LR
Test Lock Photofit (68V) for use with CRFP†	122518	Quick Mount Pole Bracket (Square Pole)	687075LR
ArtLine 5 Pin Test Lock Controller†	681409	Quick Mount Pole Bracket (4.5" Round Pole)	688030LR
ArtLine 7 Pin Test Lock Controller†	681410	T5 Tilt Quick Mount Pole Bracket (Square Pole)	689030LR
PM0524 24V Pin-Mounted Occupancy Sensor (24V)	682842LR	T5 Tilt Quick Mount Pole Bracket (4.5" Round Pole)	689035LR
Shorting Cap for use with CRFP	148329	Wall Mount Bracket	382130LR
		Wood Pole Bracket (6" Minimum Pole Diameter)	713279LR

Feeding Accessories*

Description	Order Number	Miscellaneous Accessories	Order Number
Single Feeding (120V)	FK130	14" Integral Lumen Shield†	69098
Single Feeding (120V)	FK227	18" Integral Lumen Side Shield†	714115
Double Feeding (208V/240V)	DK4243	10" Linear Bird Spike Kit (2" Recommended per Luminaire)	736795
Double Feeding (240V)	DK4489		
Double Feeding (277V)	DK4347		

FOOTNOTES:

- Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DUC listed.
- Not available with 5W distribution.
- Consult Factory for availability.
- Not available in HV.
- IMSBT is field configurable via the LSI app that can be downloaded from our smartphone's native app store.
- Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
- Accessories are shipped separately and field install.
- Factory installed CRFP option required. See Options.
- "CCT" denotes lumen. See Finish options.
- Only available with ALSC/ALSCM control options.
- Feeding must be located in hand hole of pole.
- Only available in 9L and 12L Lumen Packages. Consult factory for lead time and availability.
- Only available in 9L and 12L Lumen Packages. Consult factory for lead time and availability.

LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsicorp.com
(515) 372-3200 • ©2020 LSI Industries Inc. All Rights Reserved. Specifications subject to change without notice.

Page 2/8 Rev. 10/21/20
595C-1045-A-040

SPECIFICATIONS FOR FIXTURES 'A' - 'E'

NOT TO SCALE

Type: _____

Mirada Wall Sconce (XWM)

Back to Quick Links

ORDERING GUIDE

Typical Order Example: **XWM 2 LED 03L 30 UE BRZ ALSC**

Luminaire Profile	Distribution	LED Technology	Lumen Package	Color Temperature	Voltage
XWM - Mirada Wall Sconce	2 - Type 2 3 - Type 3 FT - Type 4 Forward Throw	LED	0L - 3,000 lms 1L - 4,000 lms 2L - 6,000 lms 3L - 8,000 lms 4L - 10,000 lms 5L - 12,000 lms	AL - 2,000K EL - 4,000K SL - 5,000K	UE - Universal Voltage (120-277V) HV - High Voltage (347-480V)

Finish	Controls (Choose One)	Options
BRZ - Bronze BLK - Black GPT - Graphite MSV - Metallic Silver WHT - White P/P - Platinum Plus SVG - Satin Verde Green	Wireless Controls ALSC - ArtLink Synapse Control System† ALSCM1 - ArtLink Synapse Control System with 8-12" Motion Sensor† ALSCM2 - ArtLink Synapse Control System with 12-20" Motion Sensor† ALSCM3 - ArtLink Blue Wireless Motion & Photo Sensor Controller (8-24" mounting height)† ALSCM4 - ArtLink Blue Wireless Motion & Photo Sensor Controller (25-40" mounting height)† Standalone Controls DM - 0-10V Dimming leads extended to housing exterior IMSBT1 - Integral Bluetooth™ Motion and Photo Sensor max 8-24" mounting height† IMSBT2 - Integral Bluetooth™ Motion and Photo Sensor max 25-40" mounting height† Button Type Photofits PC120 - 120V PC120-277 - 208 - 277V PC147 - 347V	BB - Battery Back-up† CWB - Cold Weather Battery Backup† XMB - Pole Mounting Bracket SP1 - 10kV Surge Protection TB - Terminal Block

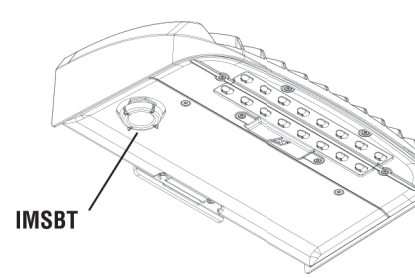
Accessory Ordering Information*

Description	Order Number	Description	Order Number
XWM SW BLK - Surface Wiring Box (Available in black only)	356915BLK	DK - Double Fusing	DKF209†
FK109 - Single Fusing	FK109†	DK - Double Fusing (240V)	DKF249†
FK277 - Single Fusing	FK277†	DK - Double Fusing (480V)	DKF489†
FK347 - Single Fusing	FK347†	10" Linear Bird Spike Kit (2" Recommended per Luminaire)	736795

FOOTNOTES:

- Consult Factory for availability.
- Not available in HV.
- Consult Factory for Site Layout.
- IMSBT is field configurable via the LSI app that can be downloaded from our smartphone's native app store.
- Fusing must be located in a hand hole for pole or in the junction box.
- Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DUC listed.

Luminaire Shown with IMSBT



LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsicorp.com
(515) 372-3200 • ©2020 LSI Industries Inc. All Rights Reserved. Specifications subject to change without notice.

Page 2/8 Rev. 10/21/20
595C-1045-A-040

SPECIFICATIONS FOR FIXTURE 'F'

NOT TO SCALE

Type: _____

Mirada Wall Sconce (XWM)

Back to Quick Links

ORDERING GUIDE

Typical Order Example: **XWM 2 LED 03L 30 UE BRZ ALSC**

Luminaire Profile	Distribution	LED Technology	Lumen Package	Color Temperature	Voltage
XWM - Mirada Wall Sconce	2 - Type 2 3 - Type 3 FT - Type 4 Forward Throw	LED	0L - 3,000 lms 1L - 4,000 lms 2L - 6,000 lms 3L - 8,000 lms 4L - 10,000 lms 5L - 12,000 lms	AL - 2,000K EL - 4,000K SL - 5,000K	UE - Universal Voltage (120-277V) HV - High Voltage (347-480V)

Finish	Controls (Choose One)	Options
BRZ - Bronze BLK - Black GPT - Graphite MSV - Metallic Silver WHT - White P/P - Platinum Plus SVG - Satin Verde Green	Wireless Controls ALSC - ArtLink Synapse Control System† ALSCM1 - ArtLink Synapse Control System with 8-12" Motion Sensor† ALSCM2 - ArtLink Synapse Control System with 12-20" Motion Sensor† ALSCM3 - ArtLink Blue Wireless Motion & Photo Sensor Controller (8-24" mounting height)† ALSCM4 - ArtLink Blue Wireless Motion & Photo Sensor Controller (25-40" mounting height)† Standalone Controls DM - 0-10V Dimming leads extended to housing exterior IMSBT1 - Integral Bluetooth™ Motion and Photo Sensor max 8-24" mounting height† IMSBT2 - Integral Bluetooth™ Motion and Photo Sensor max 25-40" mounting height† Button Type Photofits PC120 - 120V PC120-277 - 208 - 277V PC147 - 347V	BB - Battery Back-up† CWB - Cold Weather Battery Backup† XMB - Pole Mounting Bracket SP1 - 10kV Surge Protection TB - Terminal Block

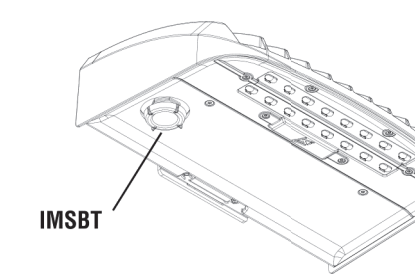
Accessory Ordering Information*

Description	Order Number	Description	Order Number
XWM SW BLK - Surface Wiring Box (Available in black only)	356915BLK	DK - Double Fusing	DKF209†
FK109 - Single Fusing	FK109†	DK - Double Fusing (240V)	DKF249†
FK277 - Single Fusing	FK277†	DK - Double Fusing (480V)	DKF489†
FK347 - Single Fusing	FK347†	10" Linear Bird Spike Kit (2" Recommended per Luminaire)	736795

FOOTNOTES:

- Consult Factory for availability.
- Not available in HV.
- Consult Factory for Site Layout.
- IMSBT is field configurable via the LSI app that can be downloaded from our smartphone's native app store.
- Fusing must be located in a hand hole for pole or in the junction box.
- Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DUC listed.

Luminaire Shown with IMSBT



LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsicorp.com
(515) 372-3200 • ©2020 LSI Industries Inc. All Rights Reserved. Specifications subject to change without notice.

Page 2/8 Rev. 10/21/20
595C-1045-A-040

SPECIFICATIONS FOR FIXTURE 'G'

NOT TO SCALE

Type: _____

Mirada Wall Sconce (XWM)

Back to Quick Links

ORDERING GUIDE

Typical Order Example: **XWM 2 LED 03L 30 UE BRZ ALSC**

Luminaire Profile	Distribution	LED Technology	Lumen Package	Color Temperature	Voltage
XWM - Mirada Wall Sconce	2 - Type 2 3 - Type 3 FT - Type 4 Forward Throw	LED	0L - 3,000 lms 1L - 4,000 lms 2L - 6,000 lms 3L - 8,000 lms 4L - 10,000 lms 5L - 12,000 lms	AL - 2,000K EL - 4,000K SL - 5,000K	UE - Universal Voltage (120-277V) HV - High Voltage (347-480V)

Finish	Controls (Choose One)	Options
BRZ - Bronze BLK - Black GPT - Graphite MSV - Metallic Silver WHT - White P/P - Platinum Plus SVG - Satin Verde Green	Wireless Controls ALSC - ArtLink Synapse Control System† ALSCM1 - ArtLink Synapse Control System with 8-12" Motion Sensor† ALSCM2 - ArtLink Synapse Control System with 12-20" Motion Sensor† ALSCM3 - ArtLink Blue Wireless Motion & Photo Sensor Controller (8-24" mounting height)† ALSCM4 - ArtLink Blue Wireless Motion & Photo Sensor Controller (25-40" mounting height)† Standalone Controls DM - 0-10V Dimming leads extended to housing exterior IMSBT1 - Integral Bluetooth™ Motion and Photo Sensor max 8-24" mounting height† IMSBT2 - Integral Bluetooth™ Motion and Photo Sensor max 25-40" mounting height† Button Type Photofits PC120 - 120V PC120-277 - 208 - 277V PC147 - 347V	BB - Battery Back-up† CWB - Cold Weather Battery Backup† XMB - Pole Mounting Bracket SP1 - 10kV Surge Protection TB - Terminal Block

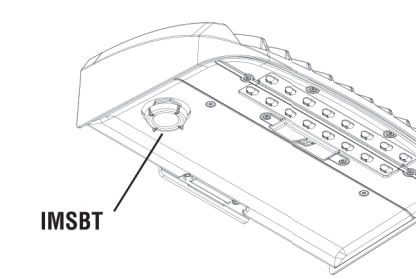
Accessory Ordering Information*

Description	Order Number	Description	Order Number
XWM SW BLK - Surface Wiring Box (Available in black only)	356915BLK	DK - Double Fusing	DKF209†
FK109 - Single Fusing	FK109†	DK - Double Fusing (240V)	DKF249†
FK277 - Single Fusing	FK277†	DK - Double Fusing (480V)	DKF489†
FK347 - Single Fusing	FK347†	10" Linear Bird Spike Kit (2" Recommended per Luminaire)	736795

FOOTNOTES:

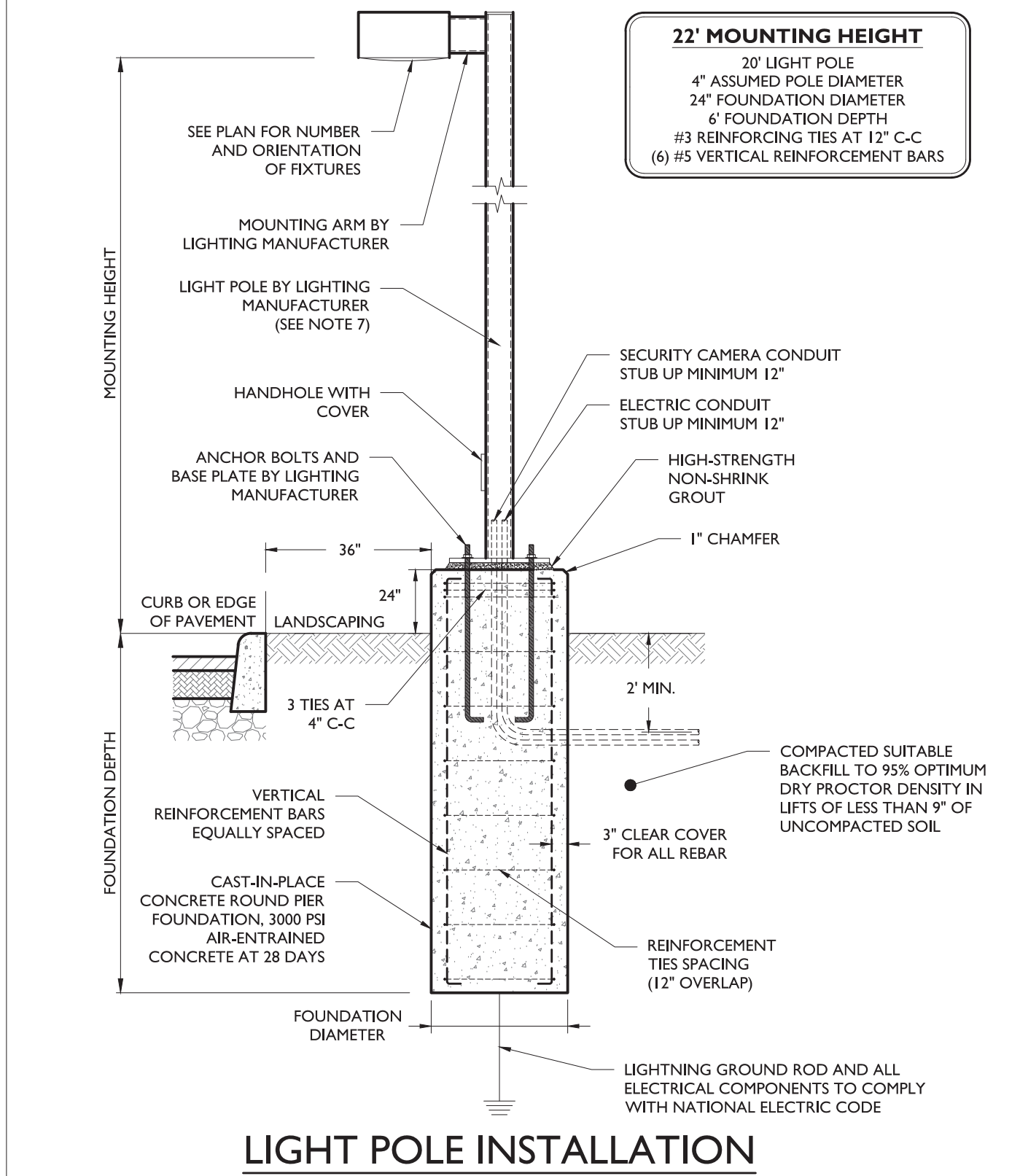
- Consult Factory for availability.
- Not available in HV.
- Consult Factory for Site Layout.
- IMSBT is field configurable via the LSI app that can be downloaded from our smartphone's native app store.
- Fusing must be located in a hand hole for pole or in the junction box.
- Custom lumen and wattage packages available consult factory. Values are within industry standard tolerances but not DUC listed.

Luminaire Shown with IMSBT



LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsicorp.com
(515) 372-3200 • ©2020 LSI Industries Inc. All Rights Reserved. Specifications subject to change without notice.

Page 2/8 Rev. 10/21/20
595C-1045-A-040



- NOTES:**
- MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
 - CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
 - ALL REBAR TO BE NEW GRADE 60 STEEL.
 - PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
 - CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING LIGHT POLE. POURED CONCRETE MIX REQUIRED TO OBTAIN 80% OF DESIGN STRENGTH PRIOR TO INSTALLING LIGHT POLE.
 - CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
 - POLE SHALL BE RATED FOR 10 MPH HIGHER THAN MAXIMUM WIND SPEED 33FT ABOVE GROUND FOR THE AREA BASED ON ANSIS/ASCE 7-93.
 - POUR TO BE TERMINATED AT A FORM.
 - WORK SHALL CONFORM TO ACI BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS.
 - CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.

REVISED PER SITE PLAN REVIEW #1	FOR PRELIMINARY SITE PLAN APPROVAL	DESCRIPTION
2	03/16/2022	ECH
1	01/03/2021	RAC/ECH
		ISSUE
		DATE
		BY

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddeng.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYBERSHINE
PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9145 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN



STONEFIELD
engineering & design

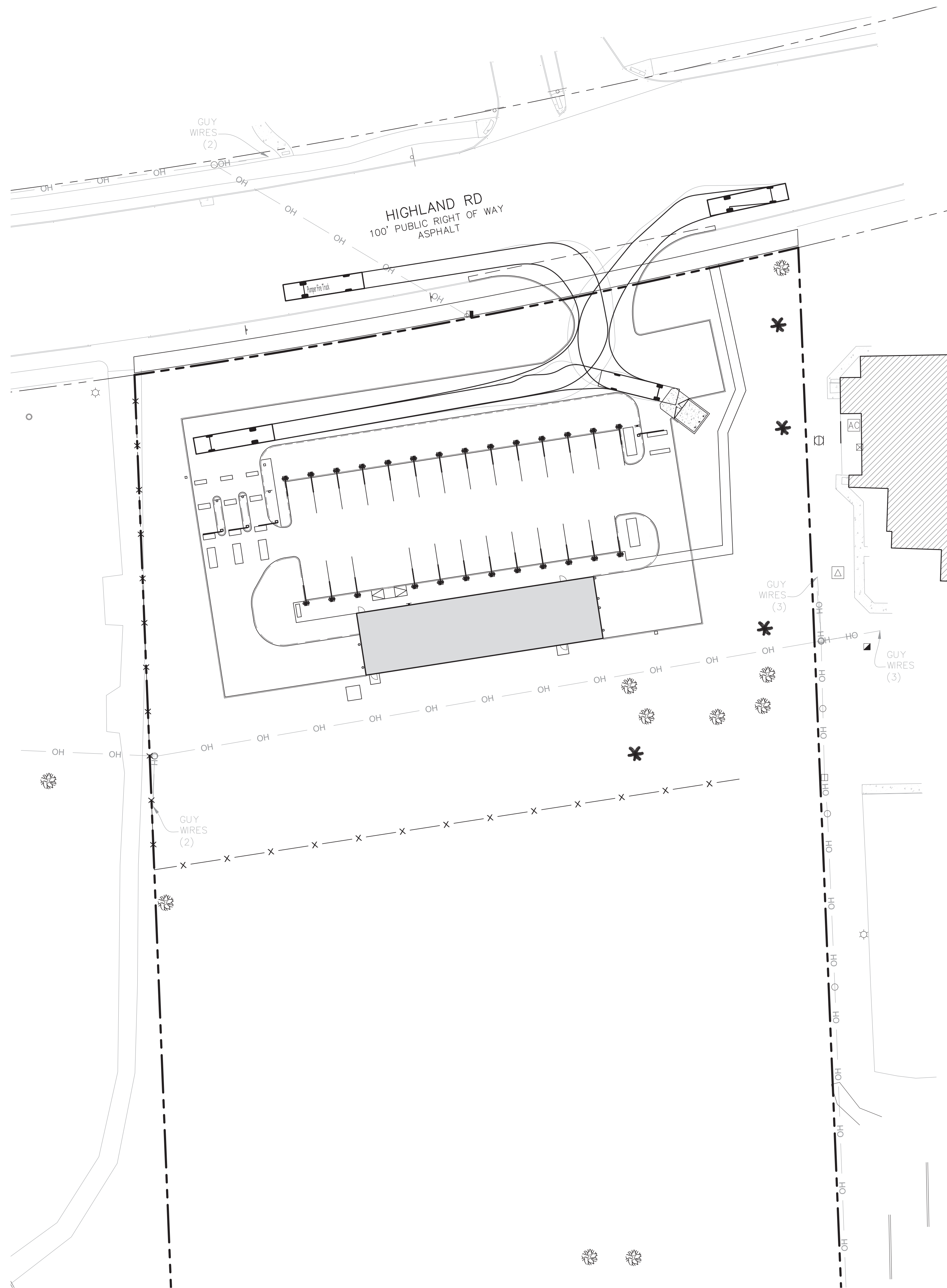
SCALE: AS SHOWN PROJECT ID: DET-210462

TITLE:
CONSTRUCTION DETAILS

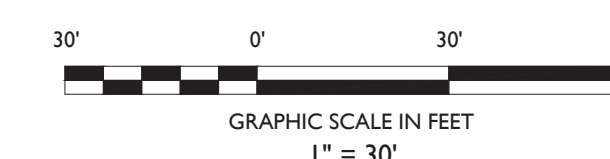
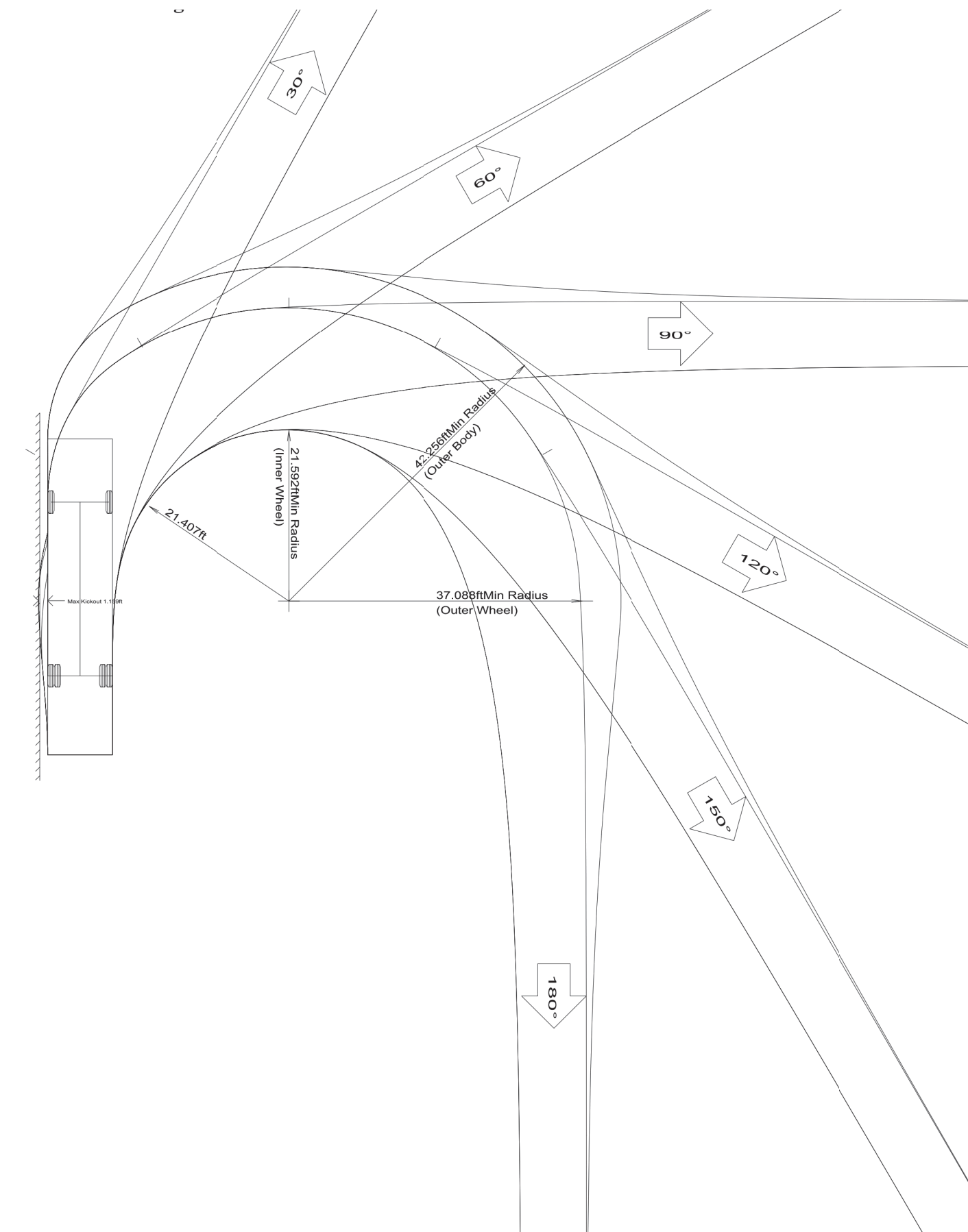
DRAWING:
C-10

V:\072012\DET-210462\CAD\03\HIGHLAND ROAD, WHITE LAKE TOWNSHIP, MICHIGAN\PHOTO\06-10-21.DWG

NOT FOR CONSTRUCTION. ALL DIMENSIONS SHOWN ARE APPROXIMATE. THIS DRAWING IS THE PROPERTY OF STONEFIELD ENGINEERING & DESIGN. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF STONEFIELD ENGINEERING & DESIGN IS STRICTLY PROHIBITED.



Pumper Fire Truck
 Overall Length 40.000ft
 Overall Width 8.167ft
 Overall Body Height 7.745ft
 Min Body Ground Clearance 0.656ft
 Track Width 8.167ft
 Lock-to-lock time 5.00s
 Max Wheel Angle 45.00°



NOT APPROVED FOR CONSTRUCTION



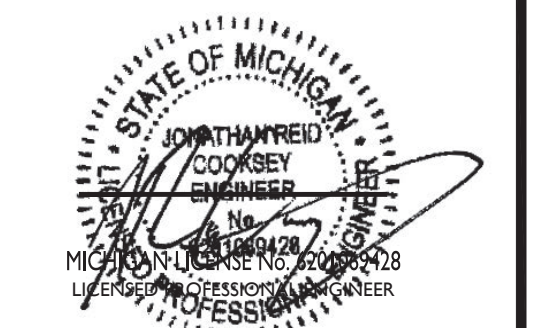
Detroit, MI · New York, NY · Rutherford, NJ
 Princeton, NJ · Tampa, FL · Boston, MA
 www.stonefielddesign.com
 607 Shelby Suite 200, Detroit, MI 48226
 Phone 248.247.1115

SITE DEVELOPMENT PLANS

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
 9345 HIGHLAND ROAD (M-59)
 WHITE LAKE TOWNSHIP
 OAKLAND COUNTY, MICHIGAN



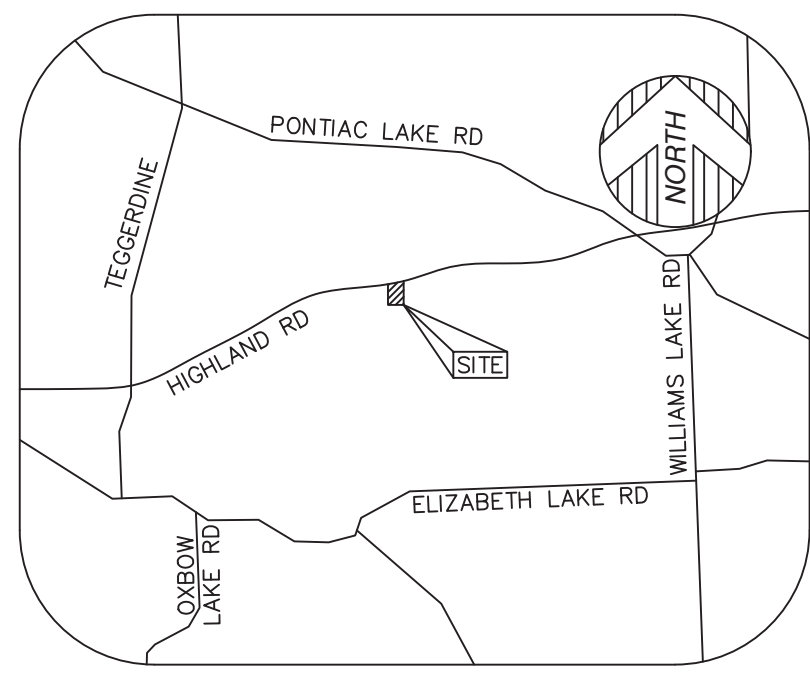
SCALE: 1" = 30' PROJECT ID: DET-210462

TITLE:
FIRE TRUCK TURNING EXHIBIT

DRAWING:

C-11

ISSUE	DATE	BY	DESCRIPTION
2	03/16/2022	ECH	REVISED PER SITE PLAN REVIEW #1
1	01/05/2022	RAC/ECH	FOR PRELIMINARY SITE PLAN APPROVAL



VICINITY MAP
(NOT TO SCALE)

PARKING

NO MARKED PARKING ON SITE.

PARCEL AREA

211,476± SQUARE FEET = 4.854± ACRES

BASIS OF BEARING

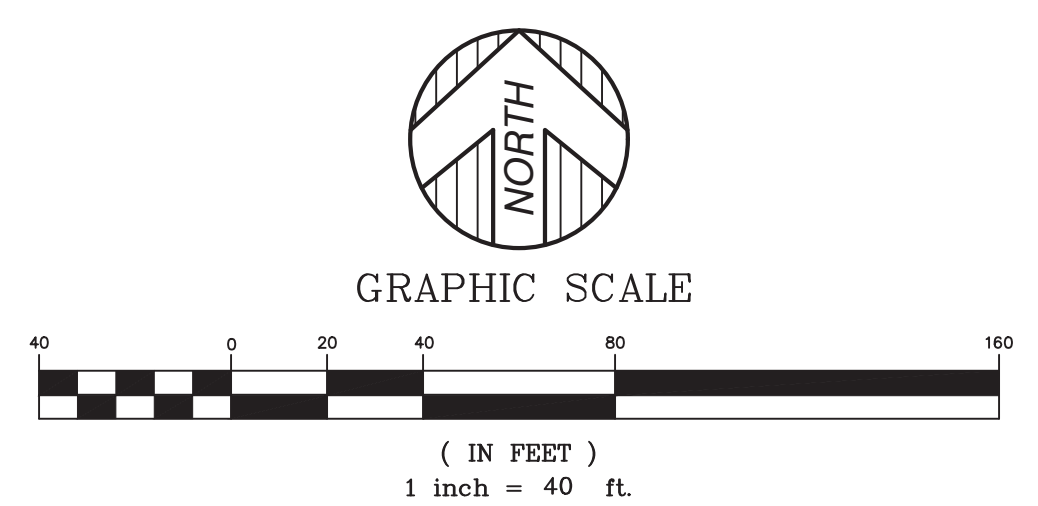
SOUTH 75°05'00" WEST, BEING THE SOUTHERLY LINE OF SUBJECT PARCEL, AS DESCRIBED.

BENCHMARK

- SITE BENCHMARK #1**
ARROW ON FIRE HYDRANT, ±42' WEST OF NW PROPERTY CORNER.
ELEVATION = 973.53' (NAVD 88)
- SITE BENCHMARK #2**
ARROW ON FIRE HYDRANT, ±12' EAST OF NE PROPERTY CORNER.
ELEVATION = 972.98' (NAVD 88)
- SITE BENCHMARK #3**
MAG NAIL IN 3RD UTILITY POLE NORTH OF FENCE, E. OF E. LINE OF PROPERTY.
ELEVATION = 968.56' (NAVD 88)

LEGEND

- SET 1/2" REBAR WITH CAP P.S. 47976
- FOUND MONUMENT (AS NOTED)
- ⊙ FOUND SECTION CORNER (AS NOTED)
- (R&M) RECORD AND MEASURED DIMENSION
- (R) RECORD DIMENSION
- (M) MEASURED DIMENSION
- 0.00 GROUND ELEVATION
- ⊕ ELECTRIC METER
- ⊕ ELECTRIC PANEL
- ⊕ TRANSFORMER
- UTILITY POLE
- GAS LINE MARKER
- GAS METER
- ⊕ TELEPHONE RISER
- ⊕ CABLE TV RISER
- ⊕ SANITARY MANHOLE
- ⊕ SQUARE CATCH BASIN
- ⊕ STORM DRAIN MANHOLE
- ⊕ FIRE HYDRANT
- WATER VALVE
- WELL
- AIR CONDITIONING UNIT
- LIGHTPOST/LAMP POST
- SINGLE POST SIGN
- ⊕ DECIDUOUS TREE (AS NOTED)
- ⊕ CONIFEROUS TREE (AS NOTED)
- PARCEL BOUNDARY LINE
- PLATTED LOT LINE
- ADJOINER PARCEL LINE
- SECTION LINE
- - - EASEMENT (AS NOTED)
- BUILDING
- CONCRETE CURB
- RAISED CONCRETE
- EDGE OF CONCRETE (CONC.)
- EDGE OF ASPHALT (ASPH.)
- EDGE OF GRAVEL
- FENCE (AS NOTED)
- TREE / BRUSH LINE (AS NOTED)
- OVERHEAD UTILITY LINE
- GAS LINE
- SANITARY LINE
- STORM LINE
- WATER LINE
- UNDERGROUND CABLE
- COMMUNICATION LINE
- UNDERGROUND PIPE (AS NOTED)
- EDGE OF WATER (AS NOTED)
- MINOR CONTOUR LINE
- MAJOR CONTOUR LINE
- BUILDING AREA
- ASPHALT
- CONCRETE



PROPERTY DESCRIPTION

LAND SITUATED IN THE TOWNSHIP OF WHITE LAKE, COUNTY OF OAKLAND AND STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:
PART OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 23 TOWN 3 NORTH, RANGE 8 EAST, WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT, SAID POINT BEING DISTANT NORTH 02 DEGREES 24 MINUTES 30 SECONDS EAST, 1731.78 FEET, AND SOUTH 75 DEGREES 05 MINUTES WEST, 483.89 FEET, FROM THE SOUTHEAST CORNER OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SAID SECTION; THENCE RUNNING SOUTH 75 DEGREES 05 MINUTES WEST, 217.5 FEET, TO A POINT; THENCE NORTH 02 DEGREES 47 MINUTES 20 SECONDS EAST, 661.50 FEET, TO A POINT ON THE SOUTHERLY LINE OF M-59 HIGHWAY; THENCE NORTHEASTERLY ALONG SAID HIGHWAY LINE AND ALONG THE ARC OF CURVE TO THE LEFT (RADIUS BEING 3869.83 FEET, AND CENTRAL ANGLE BEING 03 DEGREES 05 SECONDS) 208.35 FEET, TO A POINT; THENCE SOUTH 02 DEGREES 43 MINUTES 15 SECONDS WEST, 623.2 FEET, TO THE POINT OF BEGINNING.

AND
PART OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 23, TOWN 3 NORTH, RANGE 8 EAST, WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT, SAID POINT BEING DISTANT NORTH 02 DEGREES 24 MINUTES 30 SECONDS EAST, 1731.73 FEET, AND SOUTH 75 DEGREES 05 MINUTES WEST, 149.56 FEET, FROM THE SOUTHEAST CORNER OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SAID SECTION; THENCE RUNNING SOUTH 75 DEGREES 05 MINUTES WEST, 134.33 FEET TO A POINT; THENCE NORTH 02 DEGREES 43 MINUTES 15 SECONDS EAST, 623.2 FEET TO A POINT ON THE SOUTHERLY LINE OF M-59 HIGHWAY; THENCE NORTHEASTERLY ALONG SAID HIGHWAY LINE AND ALONG THE ARC OF A CURVE TO THE LEFT (RADIUS BEING 3869.83 FEET, AND CENTRAL ANGLE BEING 01 DEGREE 55 MINUTES 30 SECONDS) 130.00 FEET, TO A POINT; THENCE SOUTH 02 DEGREES 43 MINUTES 15 SECONDS WEST, 605.5 FEET, TO THE POINT OF BEGINNING.

TITLE REPORT NOTE

- 10. RIGHT OF WAY IN FAVOR OF STATE OF MICHIGAN RECORDED ON MARCH 26, 1937 IN LIBER 53 OF MISCELLANEOUS RECORDS, PAGE 5. (AS SHOWN)
- 11. HIGHWAY EASEMENT RELEASE IN FAVOR OF STATE OF MICHIGAN RECORDED ON SEPTEMBER 16, 1976 IN LIBER 6754, PAGE 549. (AS SHOWN)
- 12. DECLARATION OF EASEMENT RECORDED ON APRIL 29, 1996 IN LIBER 16222, PAGE 297. (AS SHOWN)
- 13. EASEMENT FOR WATER MAIN IN FAVOR OF CHARTER TOWNSHIP OF WHITE LAKE RECORDED ON NOVEMBER 18, 1998 IN LIBER 19187, PAGE 341. (AS SHOWN)

SURVEYOR'S NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

MANHOLE SCHEDULE

#	TYPE	RIM (FT)	SIZE (IN)	DIRECTION	INVERT (FT)	
30003	CATCH BASIN	969.98	12	N	963.48	
30044	CATCH BASIN	970.93	12	N	962.93	
30065	CATCH BASIN	967.54	12	E	962.74	
30066	CATCH BASIN	967.63	12	W	962.63	
				SE	962.63	
30067	STORM MANHOLE	967.78	12	SW	962.03	
				12	SE	962.63
				24	E	959.38
				21	W	959.43
30068	STORM MANHOLE	967.89	12	S	962.39	
				12	NE	962.29
30190	STORM MANHOLE	969.35	12	SW	961.53	
				21	E	960.97
				21	W	960.90
30191	CATCH BASIN	968.78	12	NE	962.08	
				12	S	962.28

SURVEYOR'S CERTIFICATION

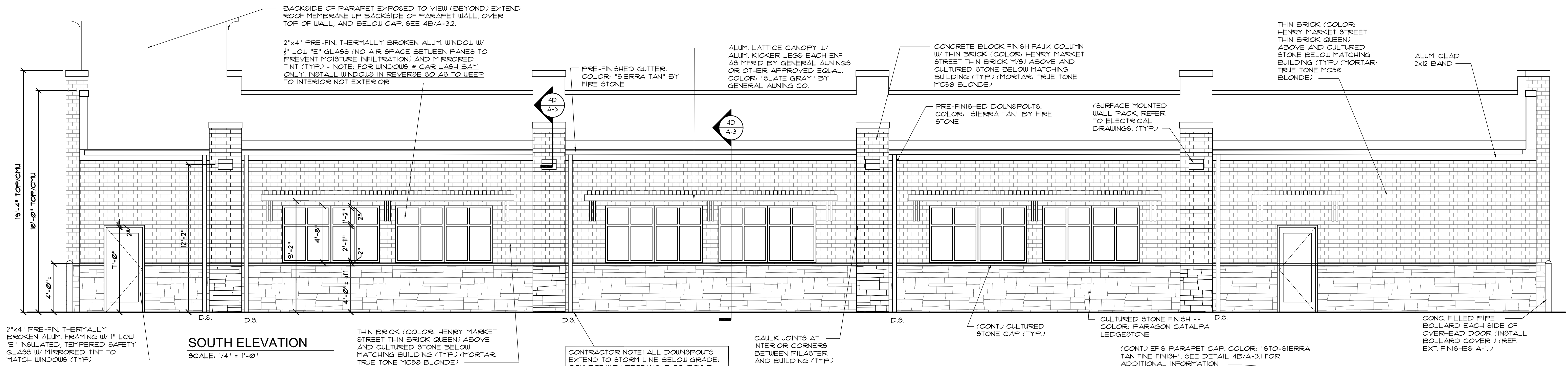
TO ERUP LLC, AN ILLINOIS LIMITED LIABILITY COMPANY; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY:
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 4, 5, 7A, 8, 11A, AND 11B OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 12/20/21.
DATE OF PLAT OR MAP: 12/22/21
ANTHONY T. SYCKO, JR., P.S.
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 47976
22556 GRATIOT AVE., EASTPOINTE, MI 48021
TSycko@kemttec-survey.com



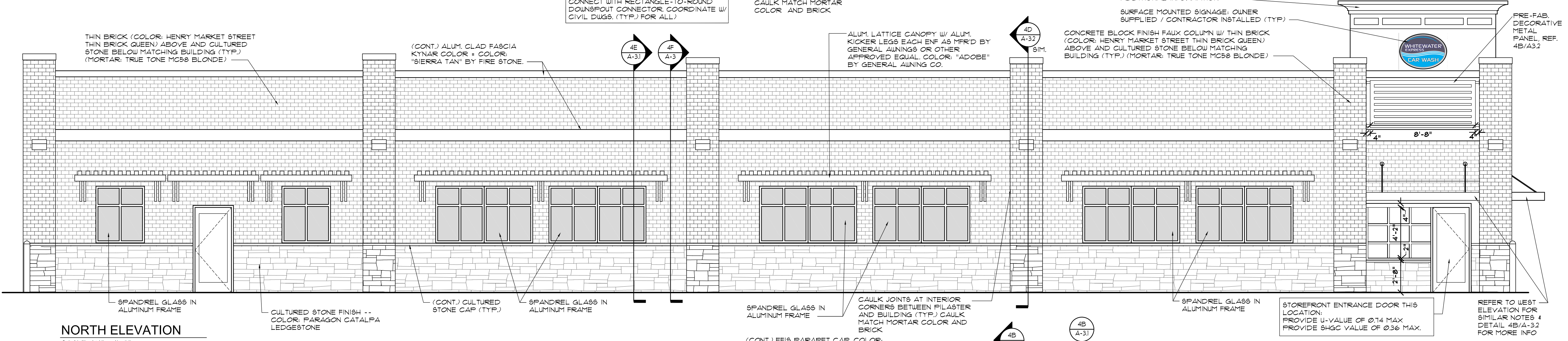
KEM-TEC
PROFESSIONAL ENGINEERING, SURVEYING & ENVIRONMENTAL SERVICES
A GROUP OF COMPANIES
Eastpointe, MI 48021
Detroit, MI 48226
Grand Blanc, MI 48030
(800) 285-7222 (313) 788-9977 (734) 994-0888 (888) 694-0001
www.kemttecgroupofcompanies.com

ALTA / NSPS LAND TITLE SURVEY
PREPARED FOR: STONEFIELD ENGINEERING AND DESIGN
9345 HIGHLAND RD, WHILE LAKE, MICHIGAN,
PART OF SECTION 23,
TOWN 3 NORTH, RANGE 8 EAST

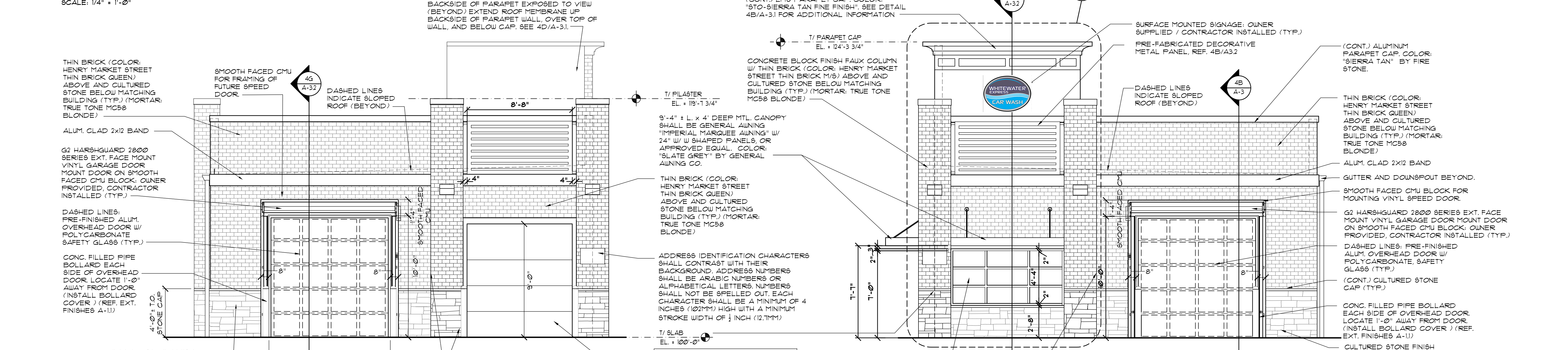
DATE	BY	REVISION	DESCRIPTION
01/13/22	JDM	1	PER NEW TITLE WORK



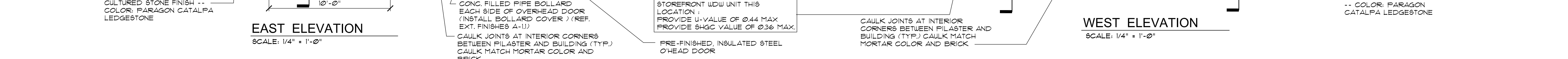
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



EAST ELEVATION
SCALE: 1/4" = 1'-0"



WEST ELEVATION
SCALE: 1/4" = 1'-0"

REVISION	DATE

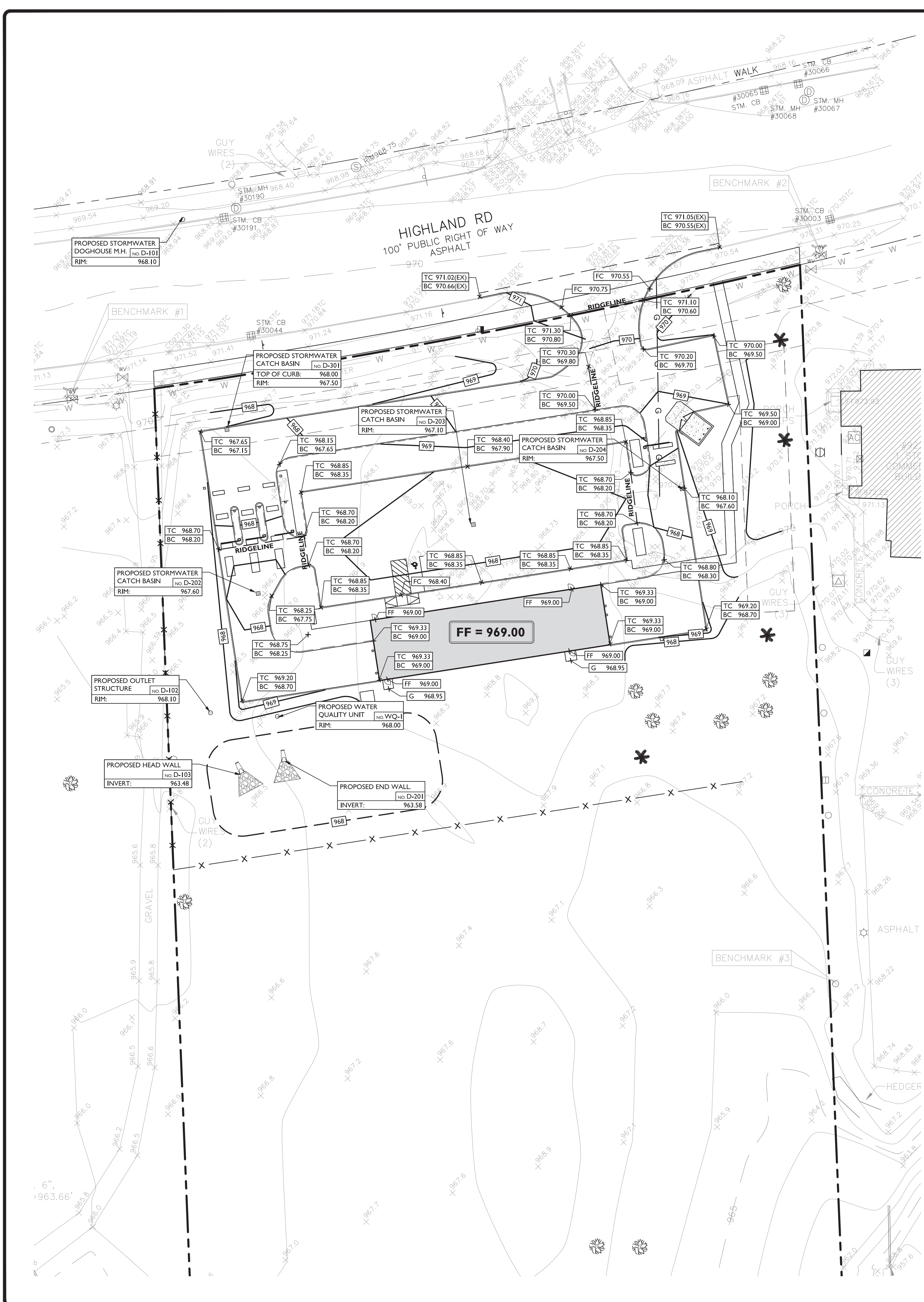
xx/xx/xx
Permit Set

PROJECT NUMBER

DRAWN BY: REB

Hypershine Carwash
9345 Highland Road
White Lake MI 48386

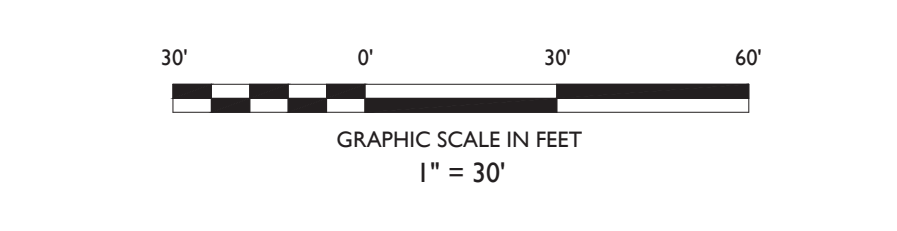
Exterior Elevations



SYMBOL	DESCRIPTION
---	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
—RIDGE LINE—	PROPOSED GRADING RIDGELINE
←	PROPOSED DIRECTION OF DRAINAGE FLOW
X G 100.00	PROPOSED GRADE SPOT SHOT
X TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
X FC 100.00	PROPOSED FLUSH CURB SPOT SHOT

- GRADING NOTES**
- ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL STATE AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.
 - THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
 - PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.
 - THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
 - MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
 - CURB GUTTER: 0.50%
 - CONCRETE SURFACES: 1.00%
 - ASPHALT SURFACES: 1.00%
 - A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IF THIS CONDITION CANNOT BE MET.
 - FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

- ADA NOTES**
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
 - THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP. AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL, THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00%. IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP, FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURB RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
 - ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 - A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
 - THE CONTRACTOR SHALL ENSURE A MAXIMUM OF ¼ INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN ¼ INCHES AND ½ INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP ¼ INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
 - THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ¼ INCH.



REVISED PER SITE PLAN REVIEW #1	ECH	BY
03/16/2022		
01/03/2022	RAC/ECH	
2	1	ISSUE

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN

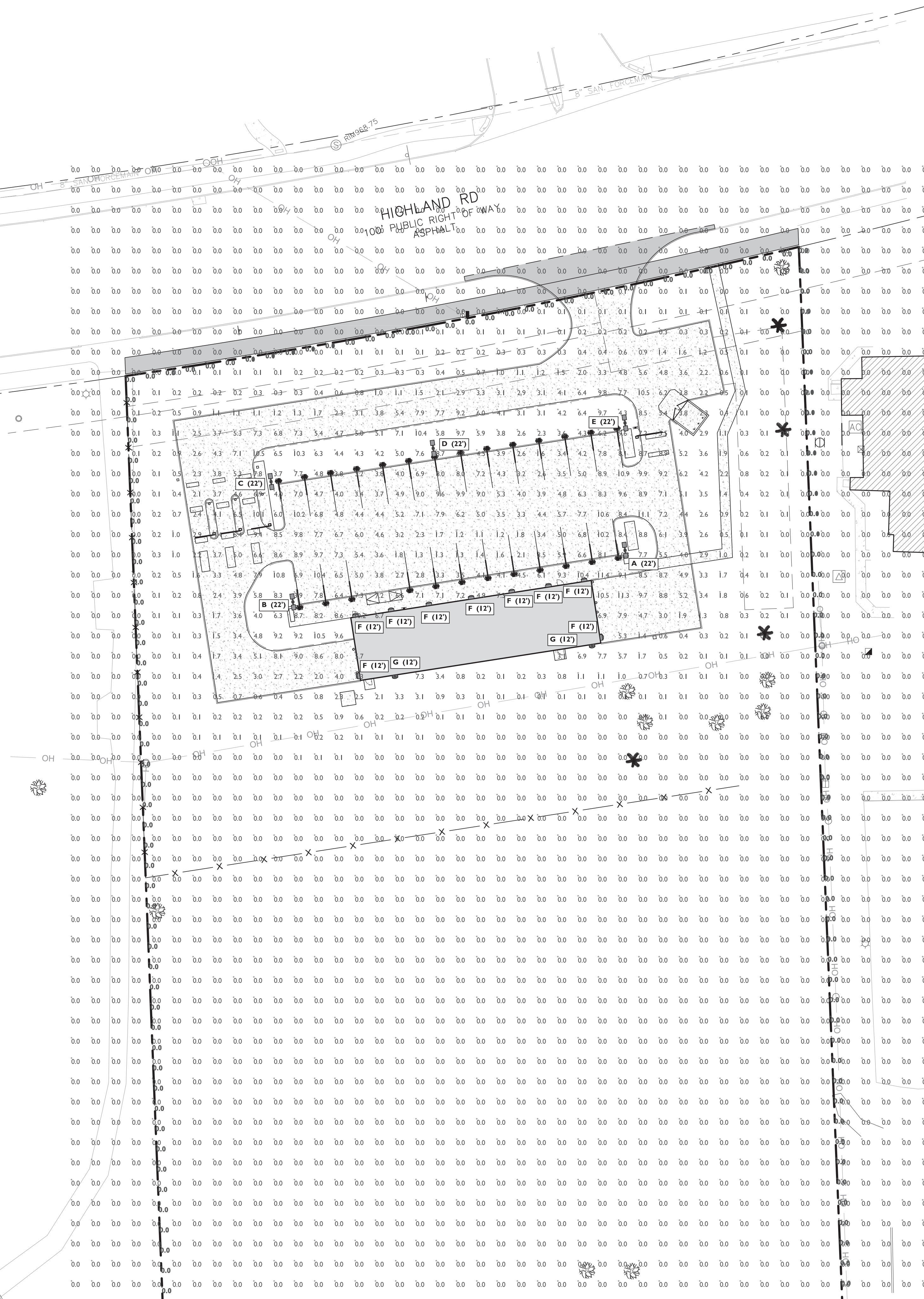
STATE OF MICHIGAN
JAMES W. COFFEY
REGISTERED PROFESSIONAL ENGINEER
MICHIGAN LICENSE NO. 96978
LANSING, MICHIGAN

STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210462

TITLE:
GRADING PLAN

DRAWING:
C-3



PROPOSED LUMINAIRE SCHEDULE							
SYMBOL	LABEL	QUANTITY	LIGHTING SPECIFICATION	DISTRIBUTION	LLF	MANUFACTURER	IES FILE
	A	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-HLIES
	B	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-HLIES
	C	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-HLIES
	D	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-HLIES
	E	1	MIRADA MEDIUM OUTDOOR LED AREA LIGHT W/ INTEGRAL LOUVER FULL CUTOFF SHIELD (2 @ 90°)	III	0.9	LSI LIGHTING	MRM-LED-18L-SIL-3-40-70CRI-HLIES
	F	9	MIRADA OUTDOOR LED WALLPACK	FT	0.9	LSI LIGHTING	XWM-FT-LED-03L-40IES
	G	2	MIRADA OUTDOOR LED WALLPACK (EMERGENCY FIXTURE ONLY)	II	0.9	LSI LIGHTING	XWM-2-LED-03L-40IES

SYMBOL	DESCRIPTION
A (XX)	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
XX	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT

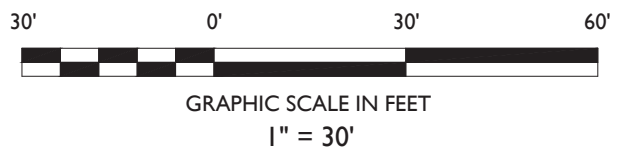
LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 5.18.G	LIGHT FIXTURES SHALL BE FULL CUT OFF AT 90°	PROVIDED
§ 5.18.G.ii	MINIMUM PROPERTY LINE SETBACK: 5 FT	60.0 FT
§ 5.18.G.vi.a	MAXIMUM FIXTURE HEIGHTS: WITHIN 25 FT OF PROPERTY LINE: 16 FT WITHIN 26-60 FT OF PROPERTY LINE: 20 FT WITHIN 61-100 FT OF PROPERTY LINE: 25 FT > 100 FT OFF PROPERTY LINE: 30 FT	N/A N/A 22 FT N/A
§ 5.18.G.ii	PERMITTED GLARE: ALL PROPERTY LINES: 0 FC	0.0 FC

LIGHTING STATISTICS			
DESCRIPTION	AVERAGE	MINIMUM	MAXIMUM
OVERALL PARCEL	0.56 FC	0.00 FC	15.3 FC
DEVELOPMENT AREA	2.91 FC	0.00 FC	15.3 FC
PROPERTY LINE	0.00 FC	0.00 FC	0.0 FC

(1) ALL CALCULATIONS MEASURED 6 FT ABOVE GRADE

SECURITY CAMERAS TO BE MOUNTED ON EACH POLE 10 FT ABOVE GRADE		
POLE LABEL	NUMBER OF CAMERAS	DIRECTION OF CAMERAS
A		
B		
C		
D		
E		

- GENERAL LIGHTING NOTES**
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
 - WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
 - UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.30
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
 - THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.



REVISION	DATE	ISSUE	BY	DESCRIPTION
2	03/16/2022	1		FOR PRELIMINARY SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9145 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN



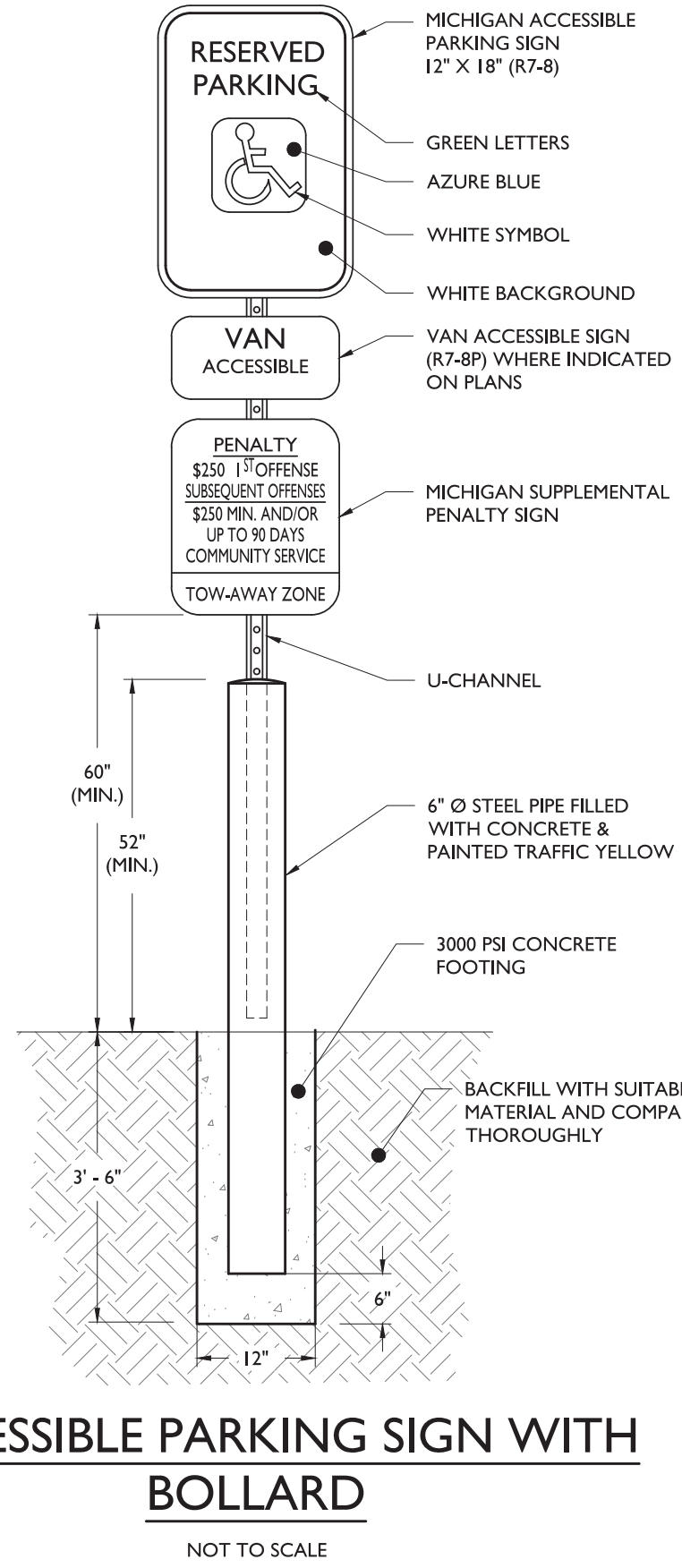
STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210462

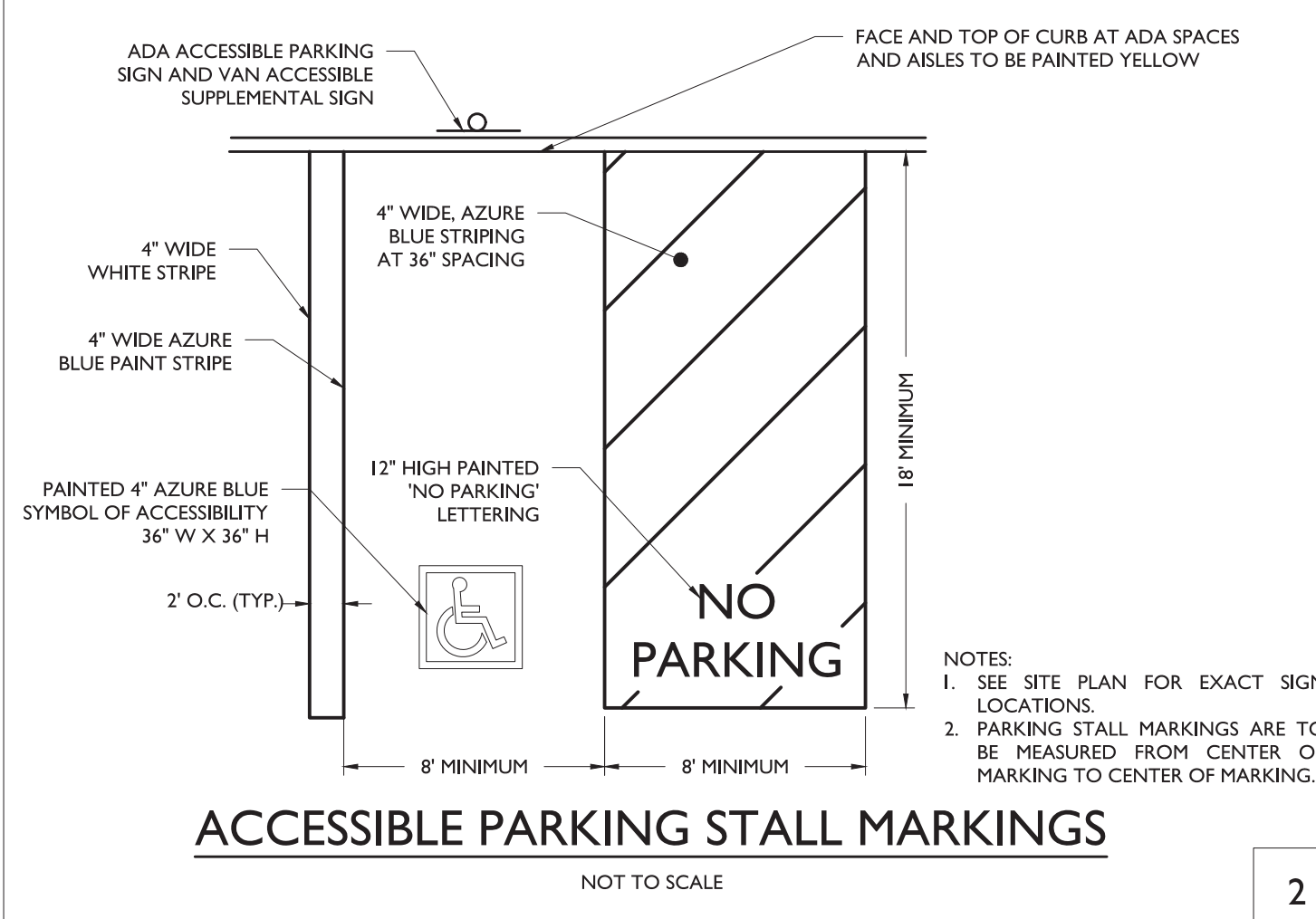
TITLE:
LIGHTING PLAN

DRAWING:
C-6

V:\PROJECTS\2022\12-23-202-006\HIGHLAND RD\WHITE LAKE TOWNSHIP\HIGHLAND RD\LIGHTING

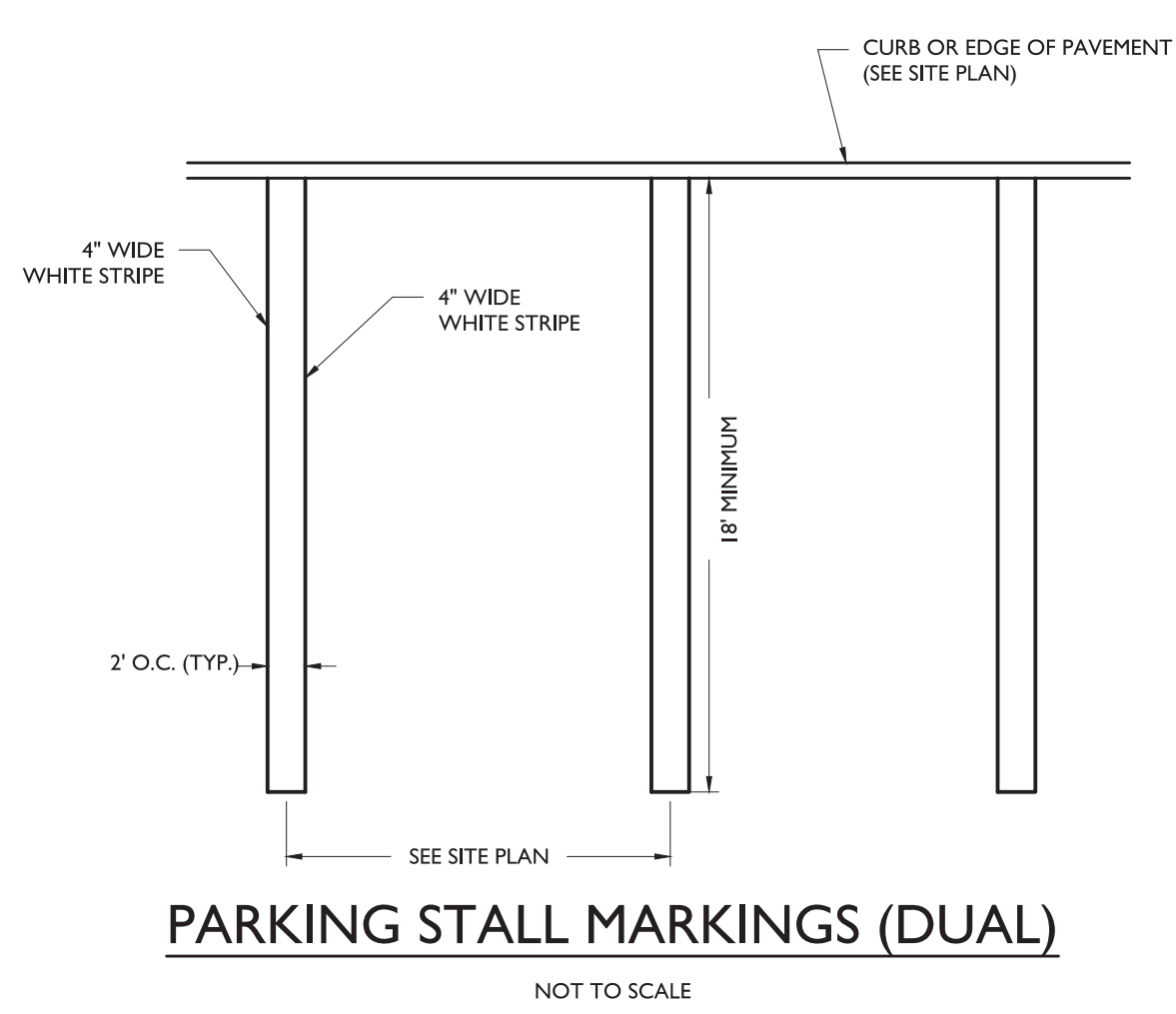


ACCESSIBLE PARKING SIGN WITH BOLLARD
NOT TO SCALE



ACCESSIBLE PARKING STALL MARKINGS
NOT TO SCALE

2

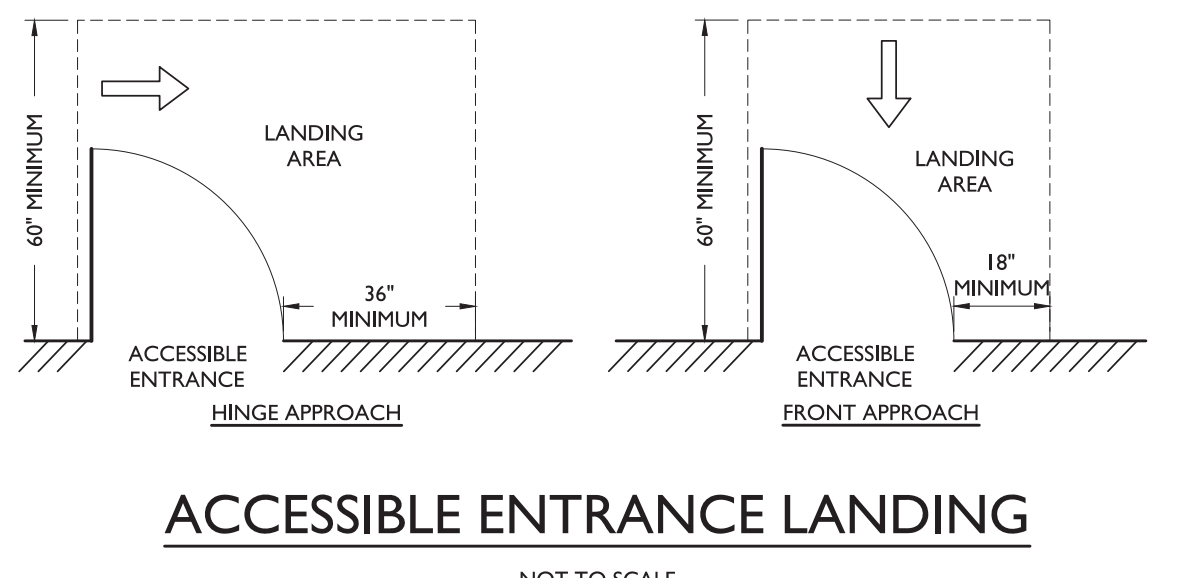


PARKING STALL MARKINGS (DUAL)
NOT TO SCALE

3

- PAVEMENT STRIPING & MARKINGS NOTES:**
1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.
 2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
 3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.
 4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.
 5. UNLESS OTHERWISE SPECIFIED, ON SITE PARKING STALL STRIPING, FIRE LANE STRIPING AND DIRECTIONAL ARROWS SHALL BE EPOXY PAINT. ON SITE STOP BARS, "DO NOT ENTER" BARS, AND ASSOCIATED LETTERING SHALL BE THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.

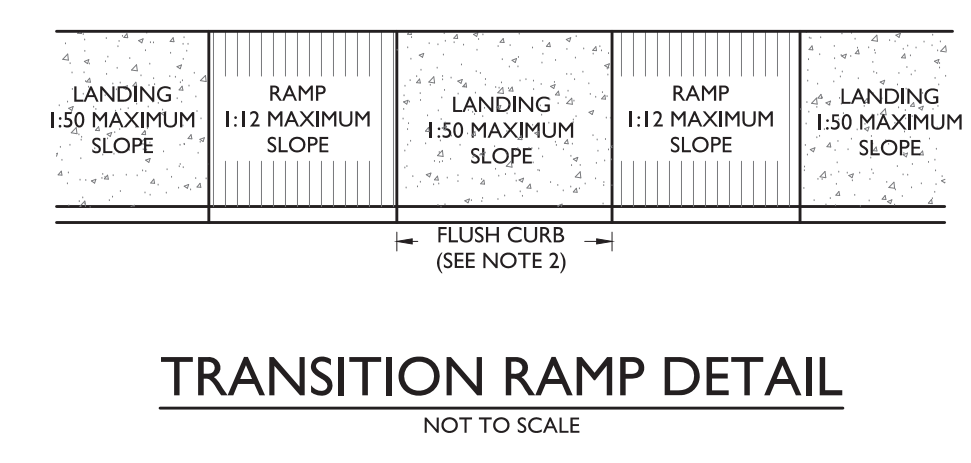
4



ACCESSIBLE ENTRANCE LANDING
NOT TO SCALE

- NOTES:**
1. MAXIMUM SLOPE ON LANDING SHALL BE 1:50 IN ALL DIRECTIONS
 2. DIMENSIONS SHOWN HERE ARE THE MINIMUM DIMENSIONS REQUIRED FOR AN ADA COMPLIANT LANDING AT THE ACCESSIBLE ENTRANCE. REFER TO SITE PLAN FOR SITE SPECIFIC DIMENSIONS THAT MAY SPECIFY A LARGER LANDING AREA.
 3. CONTRACTOR SHALL CONTACT THE ENGINEER BEFORE CONSTRUCTION IF THE ACCESSIBLE ENTRANCE ON SITE DOES NOT MATCH THE SCENARIO SHOWN ABOVE.

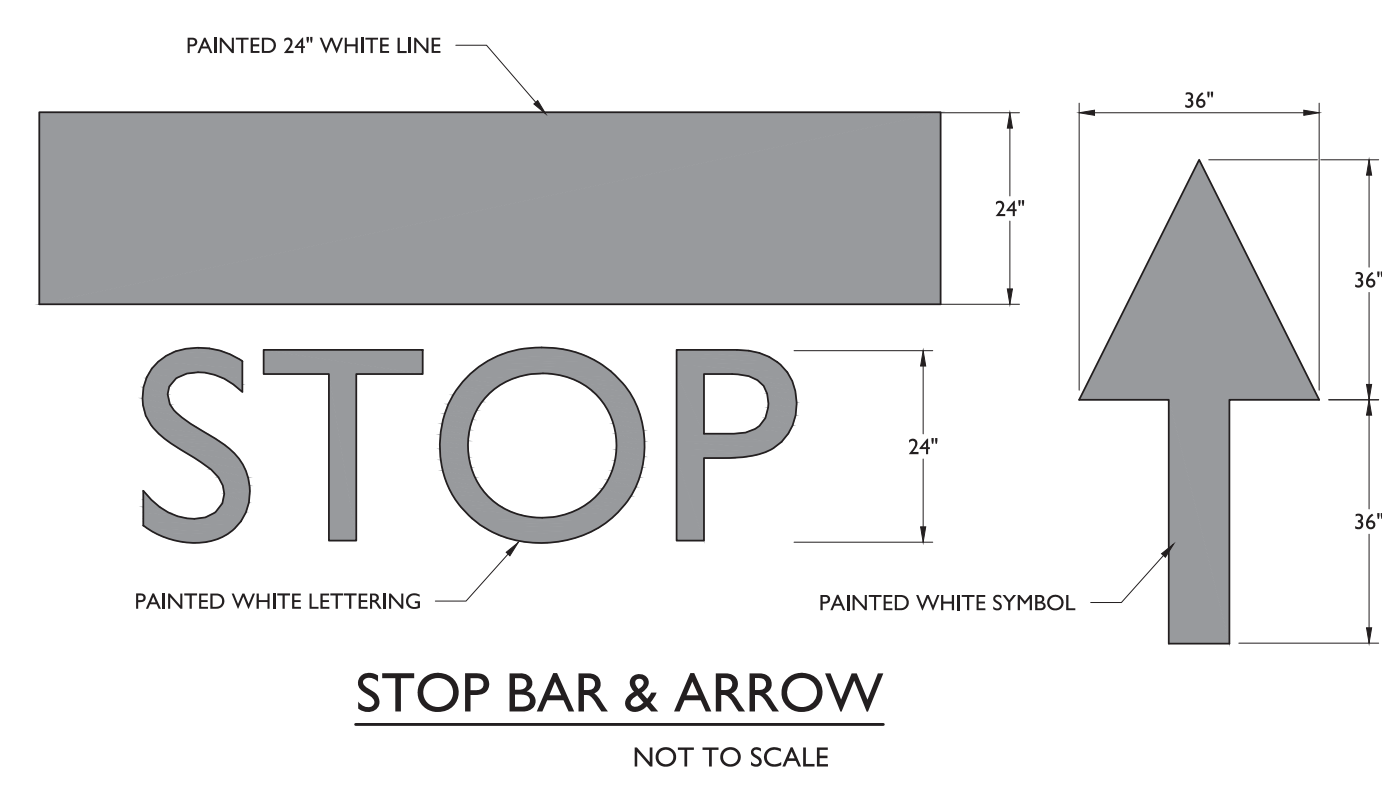
5



TRANSITION RAMP DETAIL
NOT TO SCALE

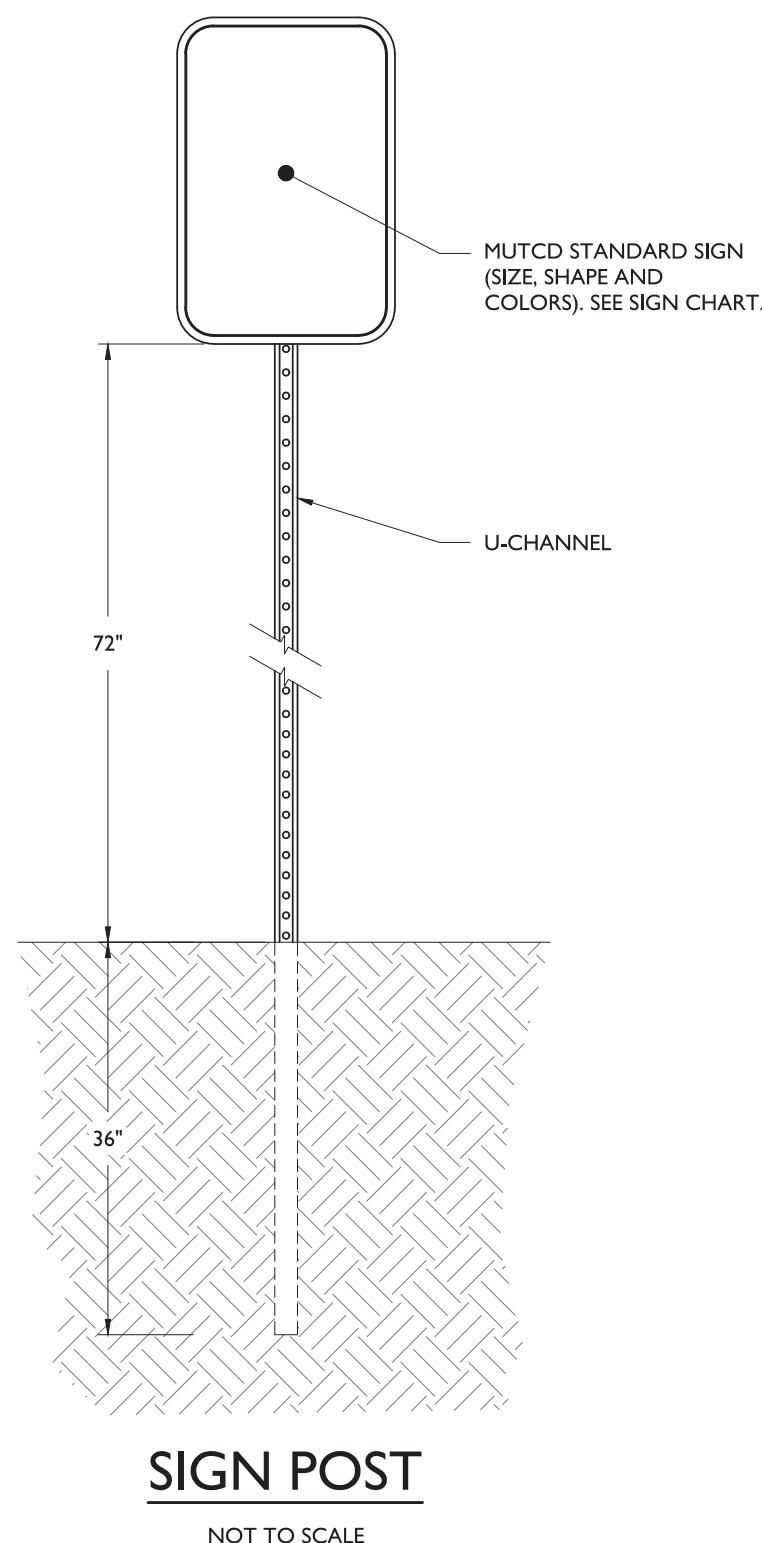
- NOTES:**
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%
 2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.
 3. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.

6



STOP BAR & ARROW
NOT TO SCALE

7

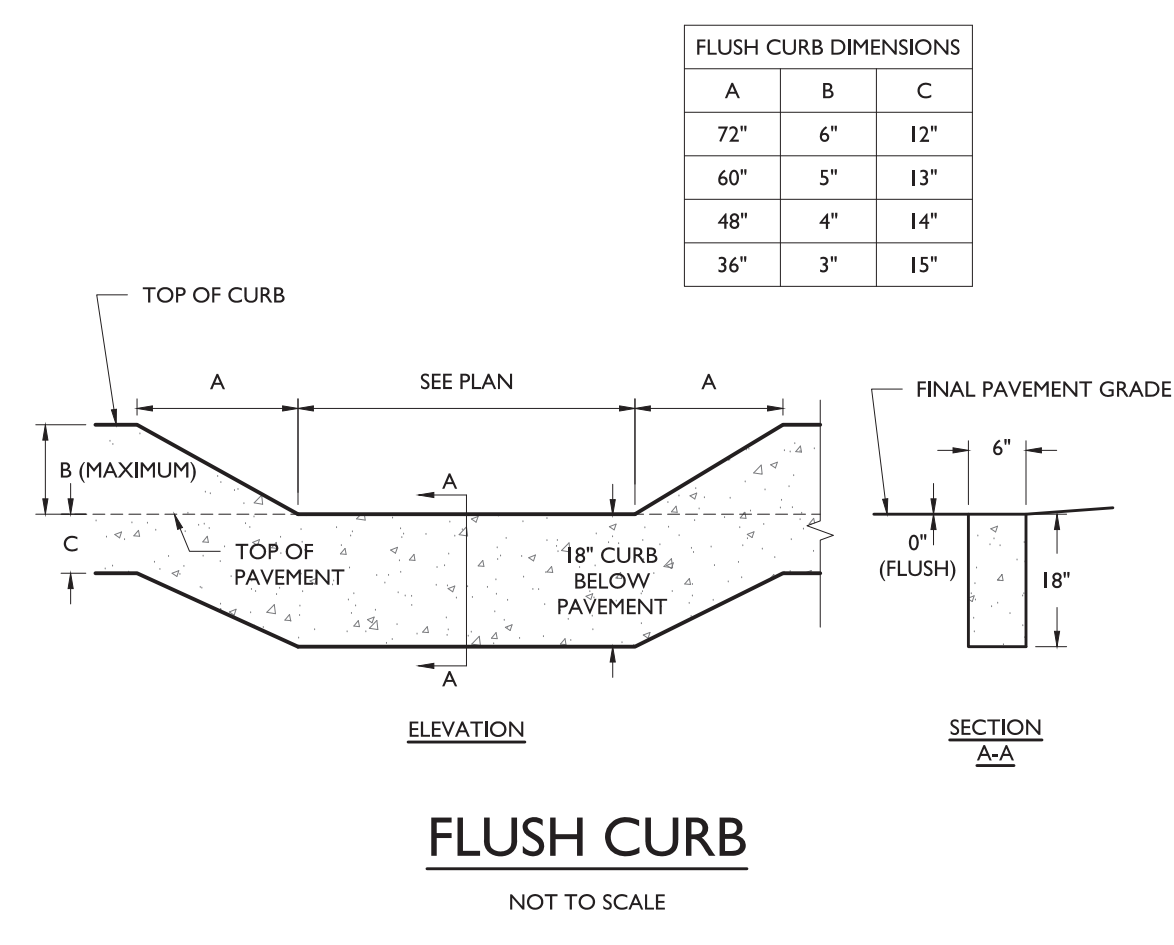


SIGN POST
NOT TO SCALE

M.U.T.C.D. NUMBER	TEXT	COLOR	LEGEND	BACKGROUND	SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
STOP SIGN (R1-1)		WHITE	RED	WHITE	36"x36"	GROUND
DO NOT ENTER (R5-1)		RED	WHITE	WHITE	30"x30"	GROUND

SIGN DATA TABLE
NOT TO SCALE

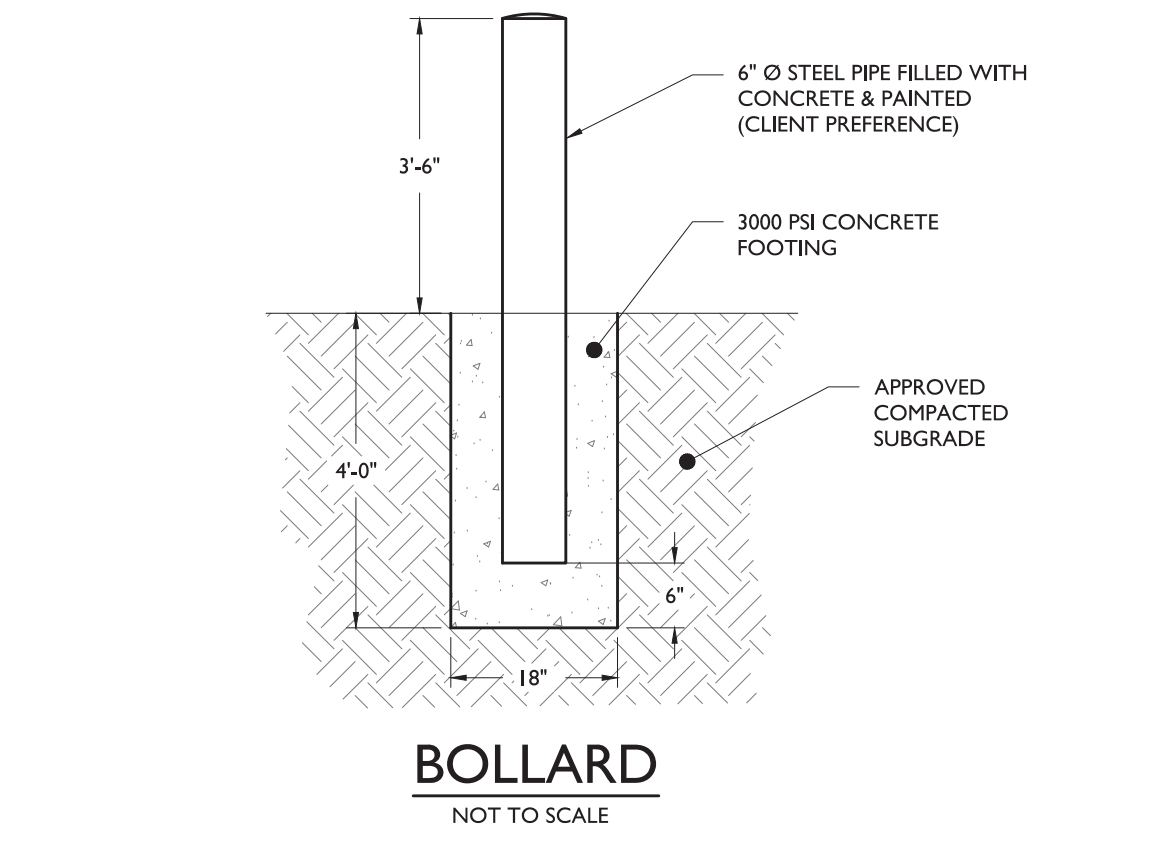
8



FLUSH CURB
NOT TO SCALE

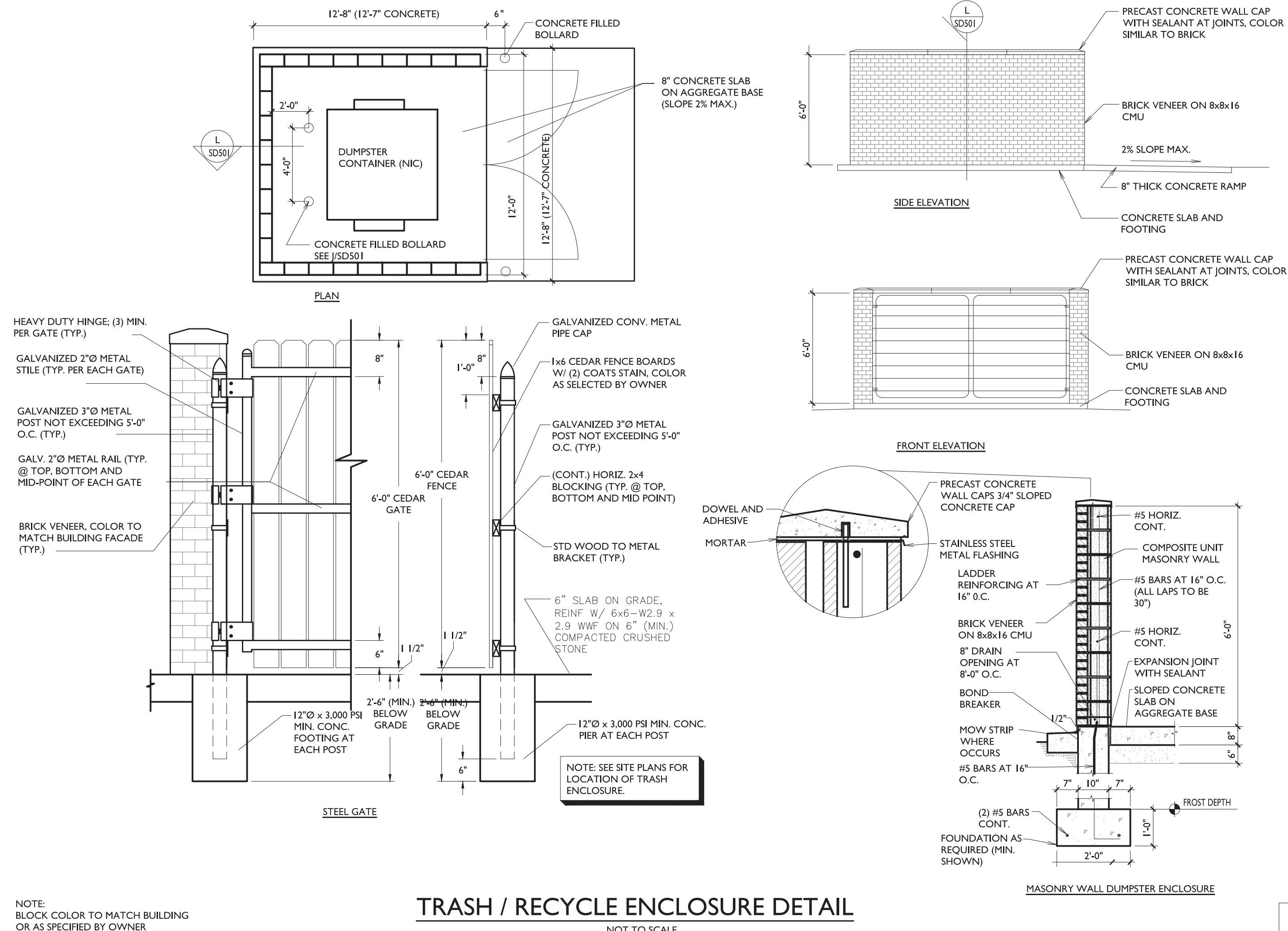
FLUSH CURB DIMENSIONS		
A	B	C
72"	6"	12"
60"	5"	13"
48"	4"	14"
36"	3"	15"

9



BOLLARD
NOT TO SCALE

10



TRASH / RECYCLE ENCLOSURE DETAIL
NOT TO SCALE

- NOTE:** BLOCK COLOR TO MATCH BUILDING OR AS SPECIFIED BY OWNER

11

REVISION	DATE	BY	DESCRIPTION
2	03/16/2022	ECH	REVISED PER SITE PLAN REVIEW #1
1	01/05/2022	BAC/ECH	FOR PRELIMINARY SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN

STATE OF MICHIGAN
MICHIGAN PROFESSIONAL ENGINEERS
MICHAEL J. STONEFIELD, P.E.
LICENSED PROFESSIONAL ENGINEER

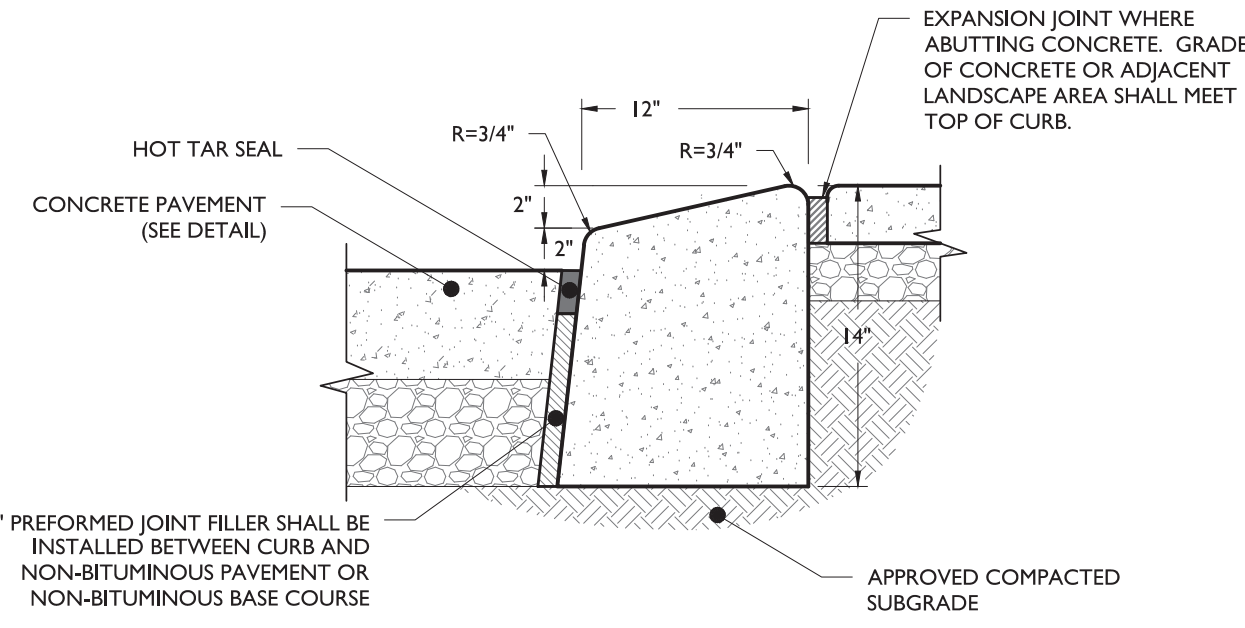
STONEFIELD
engineering & design

SCALE: AS SHOWN PROJECT ID: DET-21042

TITLE:
CONSTRUCTION DETAILS

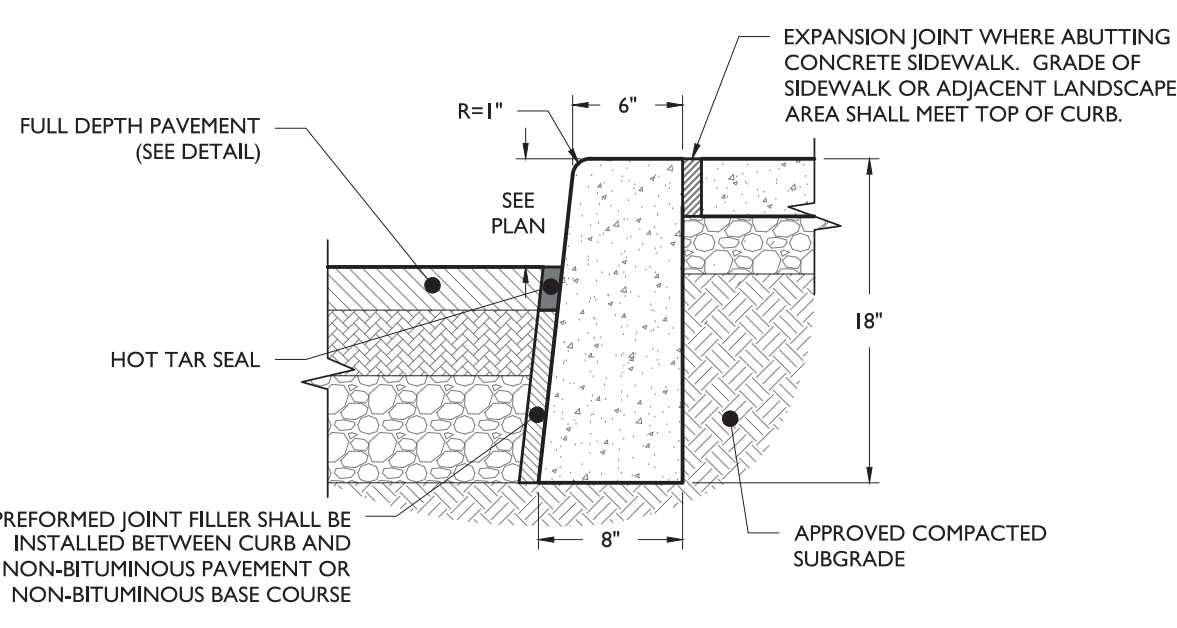
DRAWING:
C-8

NOT FOR CONSTRUCTION. ALL DIMENSIONS SHOWN ARE IN FEET AND INCHES. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.



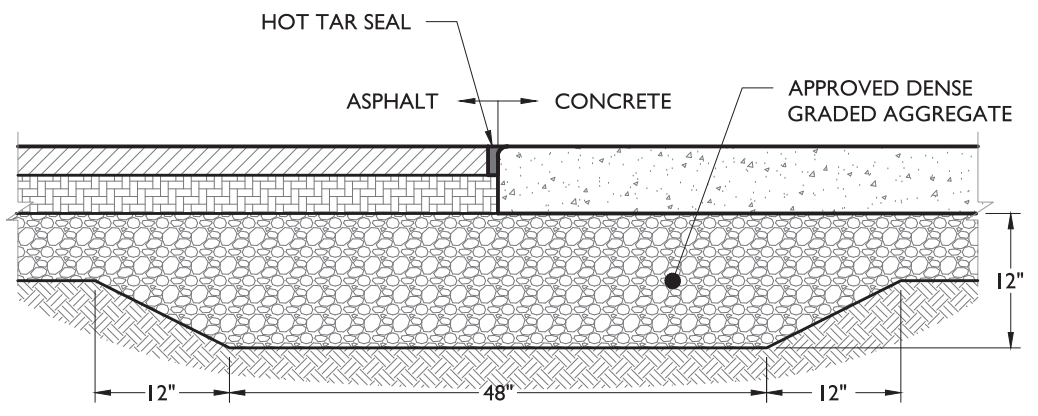
MOUNTABLE CONCRETE CURB

- NOTES:
- CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 - TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 - HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 - 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



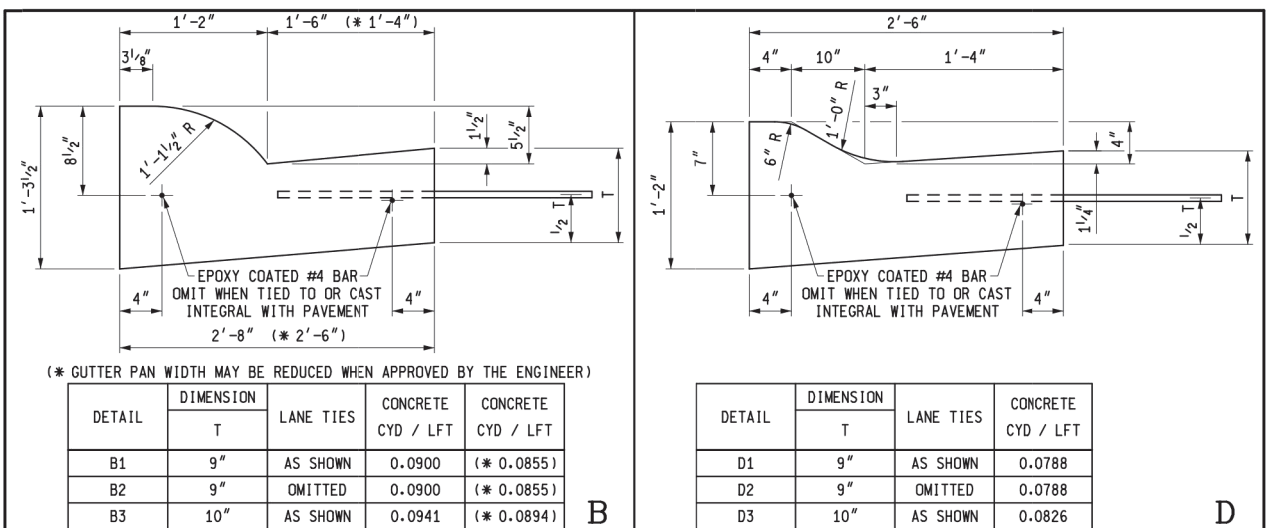
CONCRETE CURB DETAIL (ON-SITE)

- NOTES:
- CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 - TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 - HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 - 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



CONCRETE TO ASPHALT TRANSITION

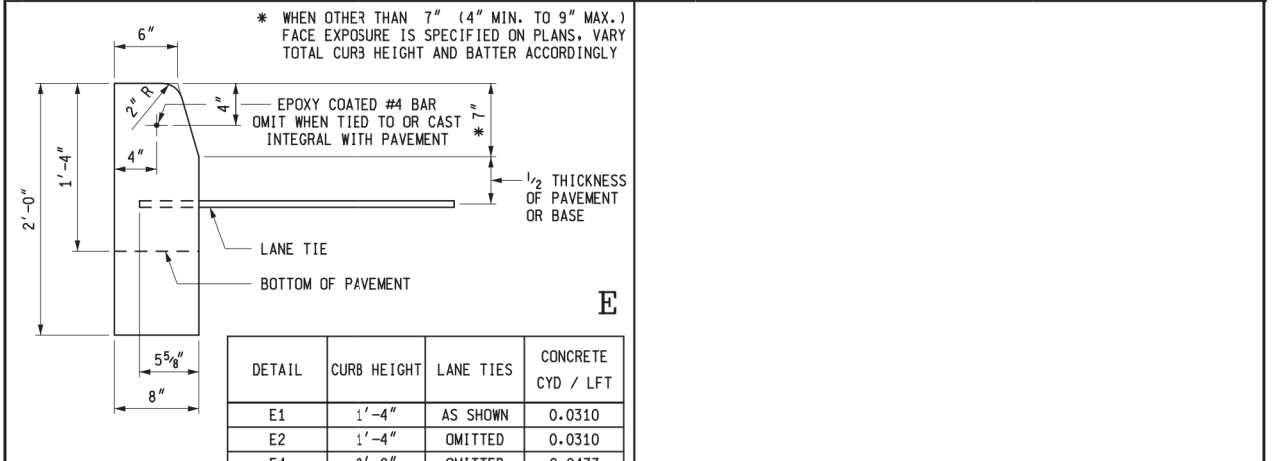
NOT TO SCALE



CONCRETE CURB AND GUTTER

NOT TO SCALE

DETAIL	T	LANE TIES	CONCRETE CTD / LFT	CONCRETE CTD / LFT
B1	9"	AS SHOWN	0.0900	(# 0.0851)
B2	9"	OMITTED	0.0900	(# 0.0851)
B3	10"	AS SHOWN	0.0941	(# 0.0894)



CONCRETE MAT AND CONCRETE PAVEMENT

NOT TO SCALE

DETAIL	M	N	LANE TIES	CONCRETE CTD / LFT
C1	1'-6"	1/2"	AS SHOWN	0.0006
C2	1'-6"	1/2"	OMITTED	0.0006
C3	2'-0"	1/2"	AS SHOWN	0.0032
C4	2'-0"	1/2"	OMITTED	0.0032
C5	2'-6"	1/2"	AS SHOWN	0.0075
C6	2'-6"	1/2"	OMITTED	0.0075

MDOT CONCRETE CURB DETAILS (RIGHT-OF-WAY)

NOT TO SCALE

DETAIL	LANE TIES	CONCRETE CTD / LFT
E1	1'-4"	AS SHOWN
E2	1'-4"	OMITTED
E4	2'-0"	OMITTED

CONCRETE WALKWAY

NOT TO SCALE



CONCRETE WALKWAY

NOT TO SCALE

DETAIL	LANE TIES	CONCRETE CTD / LFT
F1	1'-6"	AS SHOWN
F2	1'-6"	OMITTED
F3	2'-0"	AS SHOWN
F4	2'-0"	OMITTED
F5	2'-6"	AS SHOWN
F6	2'-6"	OMITTED

CONCRETE WALKWAY

NOT TO SCALE

DETAIL	LANE TIES	CONCRETE CTD / LFT
G1	1'-4"	AS SHOWN
G2	1'-4"	OMITTED
G4	2'-0"	OMITTED

CONCRETE WALKWAY

NOT TO SCALE

DETAIL	LANE TIES	CONCRETE CTD / LFT
H1	1'-6"	AS SHOWN
H2	1'-6"	OMITTED
H4	2'-0"	OMITTED

CONCRETE WALKWAY

NOT TO SCALE

DETAIL	LANE TIES	CONCRETE CTD / LFT
I1	1'-6"	AS SHOWN
I2	1'-6"	OMITTED
I4	2'-0"	OMITTED

CONCRETE WALKWAY

NOT TO SCALE

DETAIL	LANE TIES	CONCRETE CTD / LFT
J1	1'-6"	AS SHOWN
J2	1'-6"	OMITTED
J4	2'-0"	OMITTED

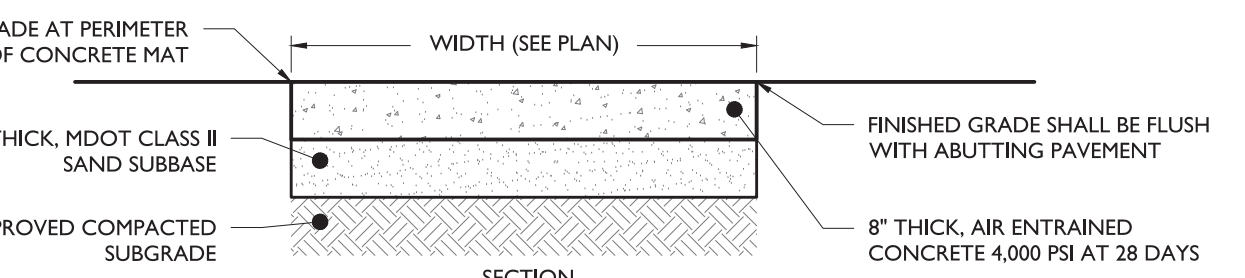
CONCRETE WALKWAY

NOT TO SCALE

DETAIL	LANE TIES	CONCRETE CTD / LFT
K1	1'-6"	AS SHOWN
K2	1'-6"	OMITTED
K4	2'-0"	OMITTED

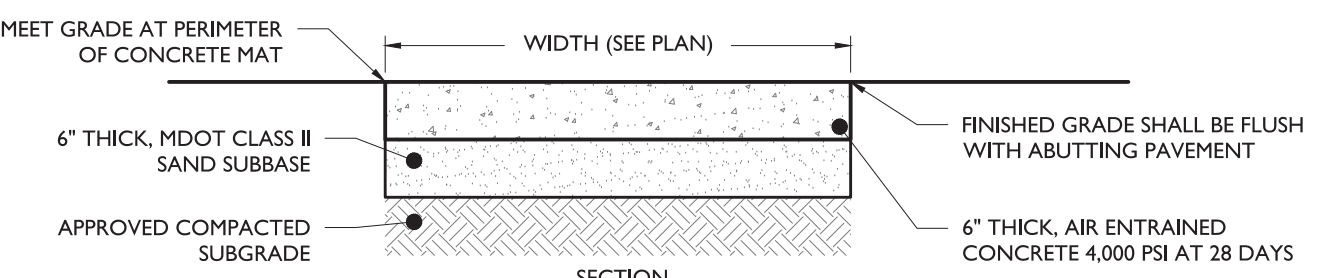
CONCRETE WALKWAY

NOT TO SCALE



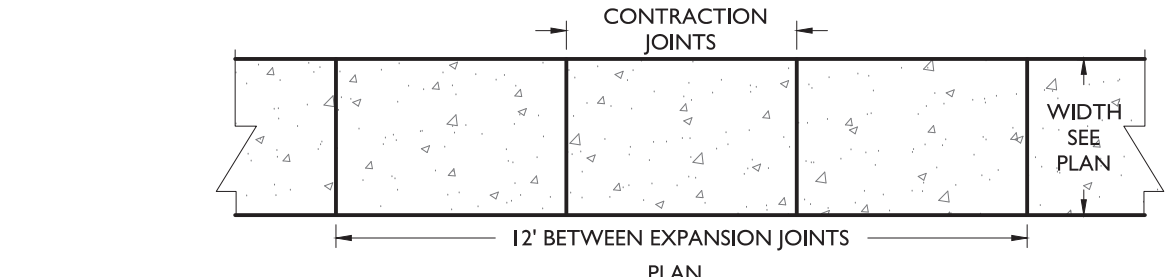
CONCRETE PAVEMENT

- NOTES:
- 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 - 1" DEEP BY 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
 - CONCRETE SHALL RECEIVE BROOM FINISH.
 - ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



CONCRETE MAT

- NOTES:
- 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 - 1" DEEP BY 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
 - CONCRETE SHALL RECEIVE BROOM FINISH.
 - ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



CONCRETE WALKWAY

NOT TO SCALE

- NOTES:
- MAXIMUM CROSS SLOPE SHALL BE 1/4" PER FOOT.
 - 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE.
 - 1" DEEP BY 1/2" WIDE TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
 - EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.

CONCRETE WALKWAY

NOT TO SCALE



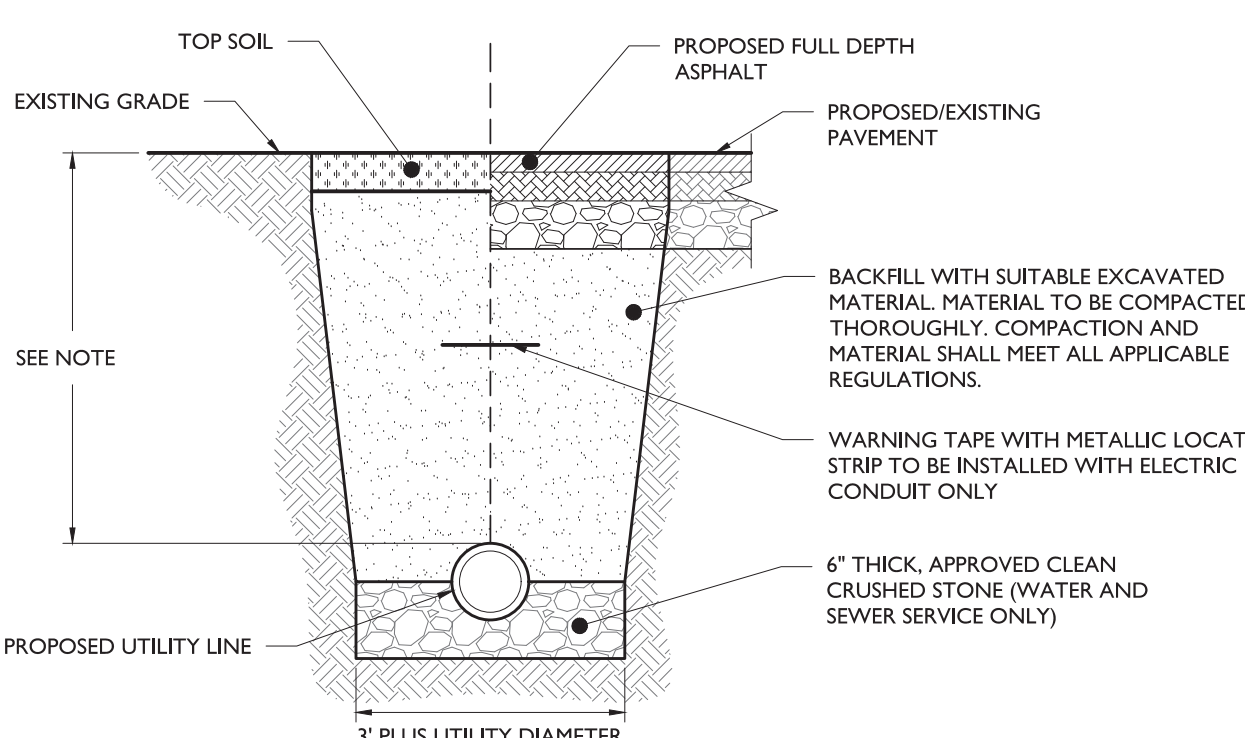
STORM TRENCH DETAIL

NOT TO SCALE



HARDSCAPE CLEAN-OUT

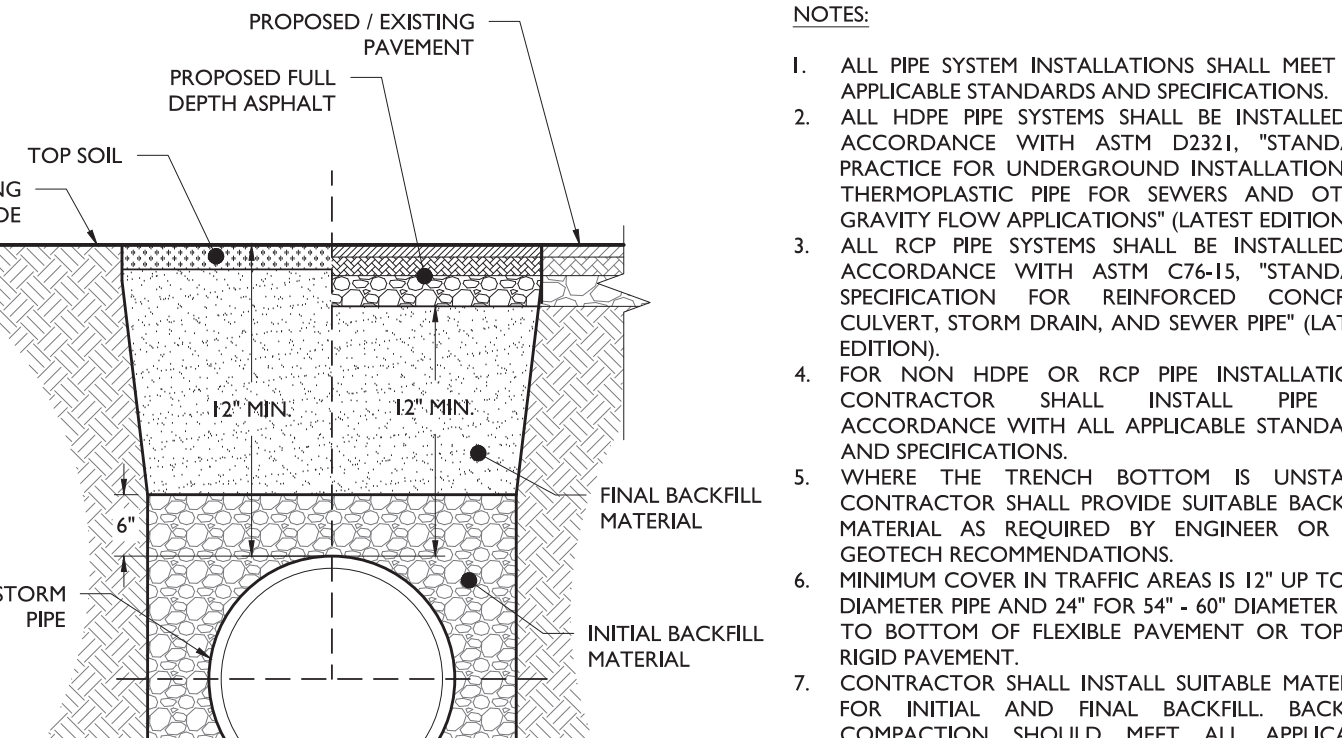
NOT TO SCALE



UTILITY TRENCH

NOT TO SCALE

- NOTE:
- MINIMUM PIPE COVER SHALL BE AS FOLLOWS:
- ELECTRIC SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - GAS SERVICE - PER APPLICABLE UTILITY AUTHORITY
 - SEWER SERVICE - 36" MINIMUM
 - WATER SERVICE - 48" MINIMUM



STORM TRENCH DETAIL

NOT TO SCALE



HARDSCAPE CLEAN-OUT

NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

- PROVIDE A (48") INCH RIGID TREE BARK PROTECTOR AROUND THE TRUNK OF CANOPY TREES AND UNDERSTORY TREES FOR DEER PROTECTION. "TREE BARK PROTECTORS - 8648" (A.M. LEONARD HORTICULTURAL SUPPLY) AT 800-433-0633 OR APPROVED EQUAL.

- AVOID PURCHASING TREES WITH TWO LEADERS OR REMOVE ONE AT PLANTING. OTHERWISE DO NOT PRUNE TREE AT PLANTING EXCEPT FOR SPECIFIC STRUCTURAL CORRECTIONS.

- INSTALL (2) 3" dia. 8' LONG CEDAR POST IN TO UNDISTURBED SOIL. THEN BACKFILL. STAKES SHALL KEEP TREE VERTICAL AND PLUMB.

- SECURE STAKES TO TREE USING 2 ABORTIES.

- SET TOP OF TRUE ROOT BALL 1" TO 2" ABOVE FINISHED GRADE OR SEVERAL INCHES HIGHER IN POORLY DRAINING SOILS.

- FORM EARTH WATERING SAUCER AROUND TREE AT EDGE OF ROOT BALL.

- MAXIMUM 3" OF SHREDDED BARK MULCH. DO NOT PLACE MULCH WITHIN 6" OF TREE TRUNK.

- SOIL TO BE PREPARED PER TABLE PRIOR TO PLANTING TREE.

- 4" TO 6" DEEPER THAN ROOT BALL.

- DIG WIDE SHALLOW HOLE WITH TAPERED SIDES.

- SET ROOT BALL ON UNDISTURBED SOIL PAD IN BOTTOM OF HOLE.

- TAMP SOIL SOLIDLY AROUND BASE OF ROOT BALL.

- WIRE BASKET TO BE REMOVED.

- CUT OFF TWINE OPEN BURLAP, CUT AS LOW AS POSSIBLE AND REMOVE.

- X = MINIMUM DIAMETER OF PREPARED SOIL FOR TREES. SEE TABLE.

- SOIL TO BE PREPARED PER TABLE PRIOR TO PLANTING TREE.

- 4" TO 6" DEEPER THAN ROOT BALL.

- DIG WIDE SHALLOW HOLE WITH TAPERED SIDES.

- SET ROOT BALL ON UNDISTURBED SOIL PAD IN BOTTOM OF HOLE.

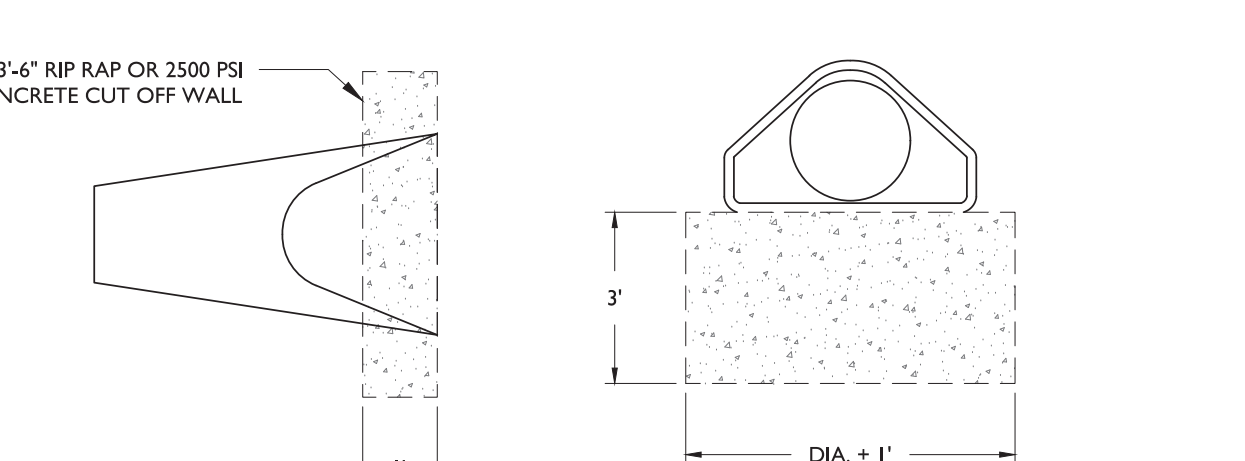
- TAMP SOIL SOLIDLY AROUND BASE OF ROOT BALL.

- WIRE BASKET TO BE REMOVED.

- CUT OFF TWINE OPEN BURLAP, CUT AS LOW AS POSSIBLE AND REMOVE.

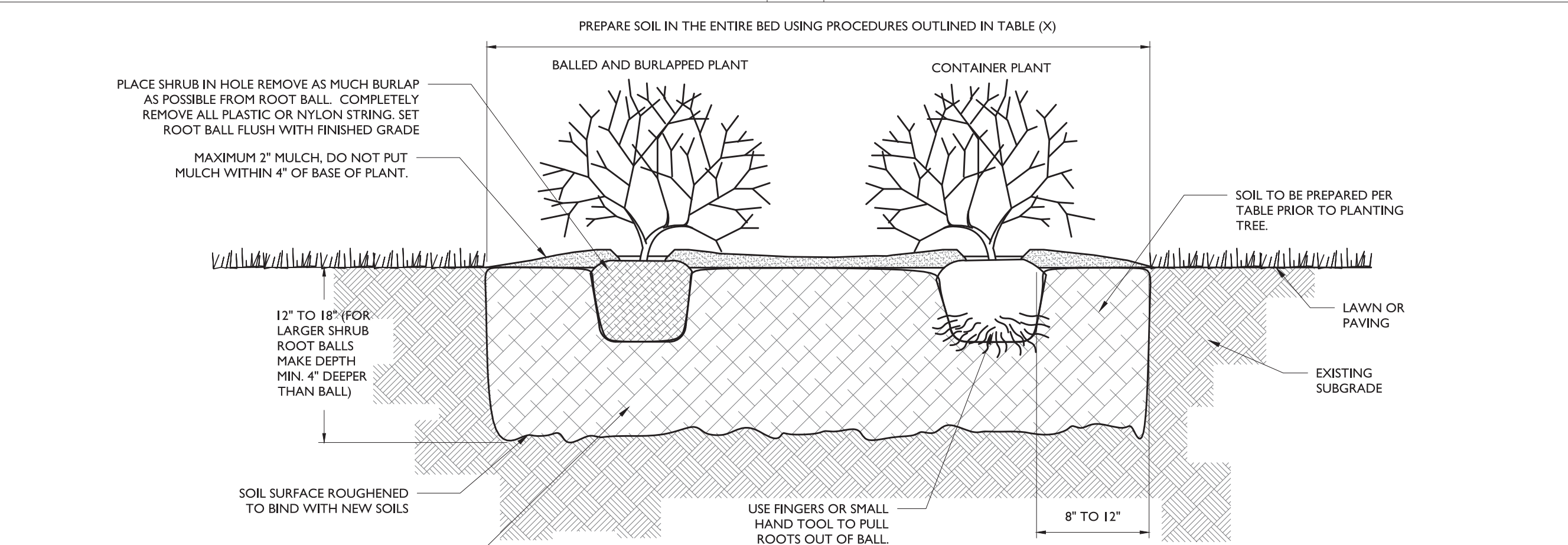
- X = MINIMUM DIAMETER OF PREPARED SOIL FOR TREES. SEE TABLE.

- SOIL TO BE PREPARED PER TABLE PRIOR TO PLANTING TREE.



FLARED END SECTION DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE

- PREPARE SOIL IN THE ENTIRE BED USING PROCEDURES OUTLINED IN TABLE (X)

- PLACE SHRUB IN HOLE REMOVE AS MUCH BURLAP AS POSSIBLE FROM ROOT BALL. COMPLETELY REMOVE ALL PLASTIC OR NYLON STRINGS. SET ROOT BALL FLUSH WITH FINISHED GRADE.

- MAXIMUM 2" MULCH. DO NOT PUT MULCH WITHIN 4" OF BASE OF PLANT.

- 12" TO 18" FOR LARGER SHRUB ROOT BALLS MAKE DEPTH MIN. 4" DEEPER THAN BALL

- SOIL TO BE PREPARED PER TABLE PRIOR TO PLANTING TREE.

- LAWN OR PAVING

- EXISTING SUBGRADE

- SOIL SURFACE ROUGHENED TO BIND WITH NEW SOILS

- USE FINGERS OR SMALL HAND TOOL TO PULL ROOTS OUT OF BALL

- 8" TO 12"

STONEFIELD engineering & design

Detroit, MI • New York, NY • Rutherford, NJ
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

HYPERSHINE

PROPOSED AUTO WASH

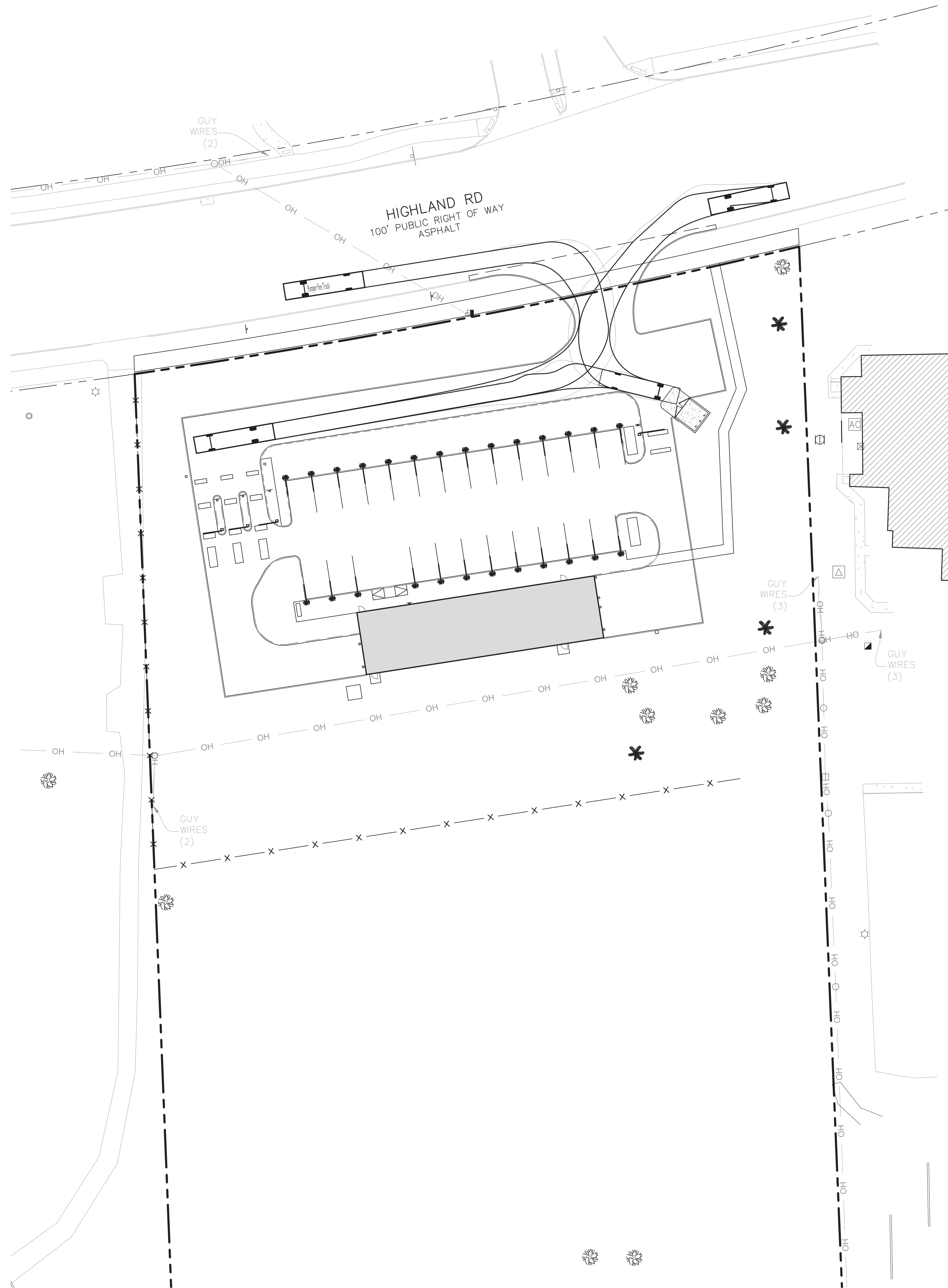
PARCEL ID: 12-23-202-006
9345 HIGHLAND ROAD (M-59)
WHITE LAKE TOWNSHIP
OAKLAND COUNTY, MICHIGAN

SCALE: AS SHOWN PROJECT ID: DET-210462

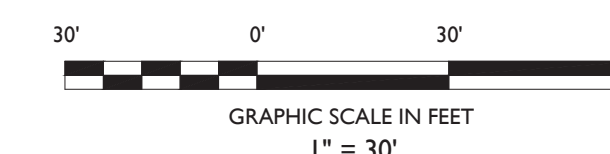
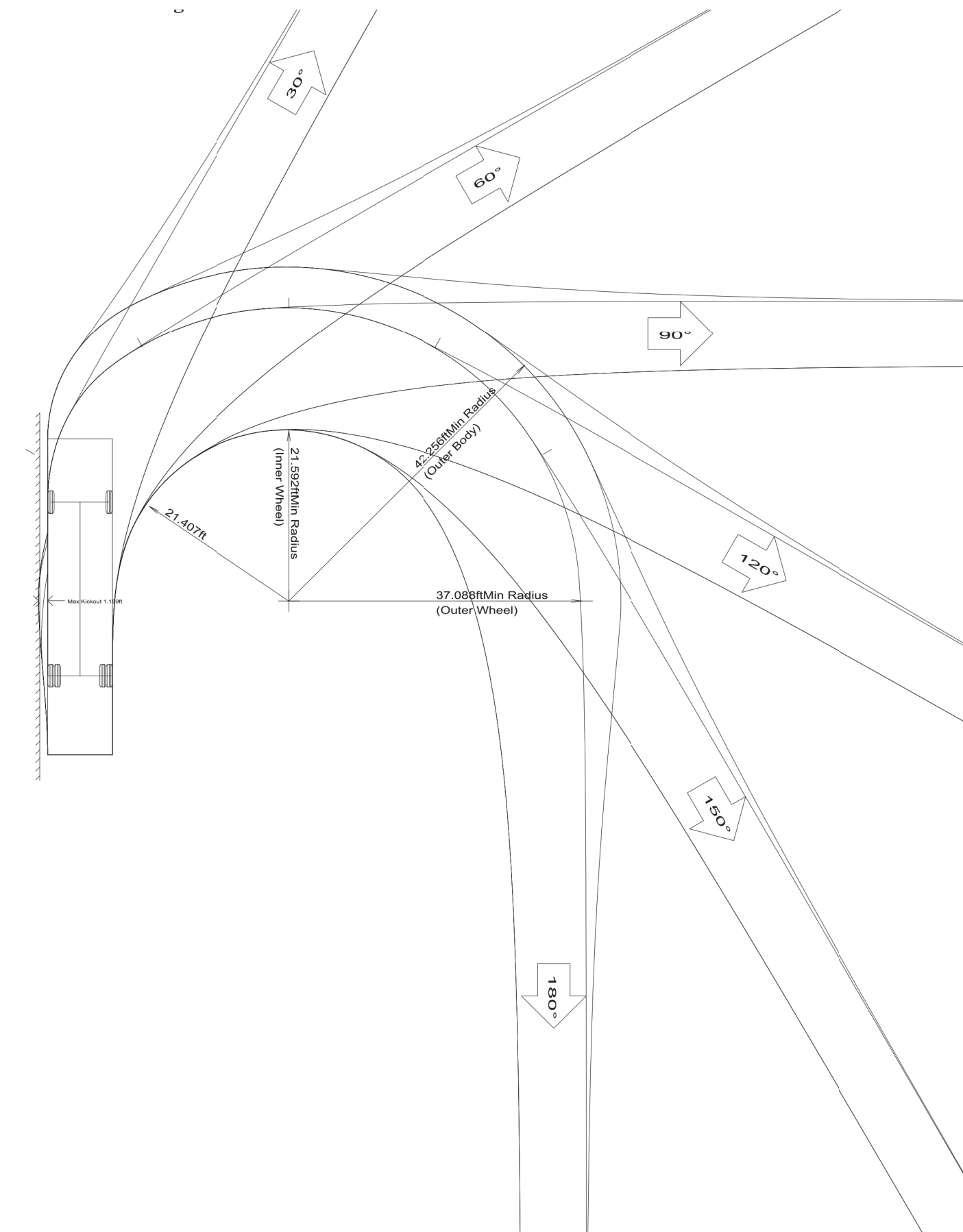
TITLE: CONSTRUCTION DETAILS

DRAWING: C-9

NOT FOR CONSTRUCTION. ALL DIMENSIONS SHOWN ARE APPROXIMATE. THIS DRAWING IS THE PROPERTY OF STONEFIELD ENGINEERING & DESIGN. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF STONEFIELD ENGINEERING & DESIGN IS STRICTLY PROHIBITED.



Pumper Fire Truck
 Overall Length 40.000ft
 Overall Width 8.167ft
 Overall Body Height 7.745ft
 Min Body Ground Clearance 0.656ft
 Track Width 8.167ft
 Lock-to-lock time 5.00s
 Max Wheel Angle 45.00°



ISSUE	DATE	BY	DESCRIPTION
2	03/16/2022	ECH	REVISED PER SITE PLAN REVIEW #1
1	01/05/2022	RAC/ECH	FOR PRELIMINARY SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
 engineering & design

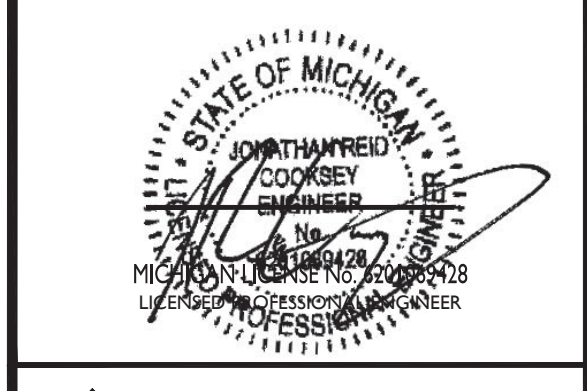
Detroit, MI · New York, NY · Rutherford, NJ
 Princeton, NJ · Tampa, FL · Boston, MA
 www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226
 Phone 248.247.1115

SITE DEVELOPMENT PLANS

HYPERSHINE
 PROPOSED AUTO WASH

PARCEL ID: 12-23-202-006
 9345 HIGHLAND ROAD (M-59)
 WHITE LAKE TOWNSHIP
 OAKLAND COUNTY, MICHIGAN

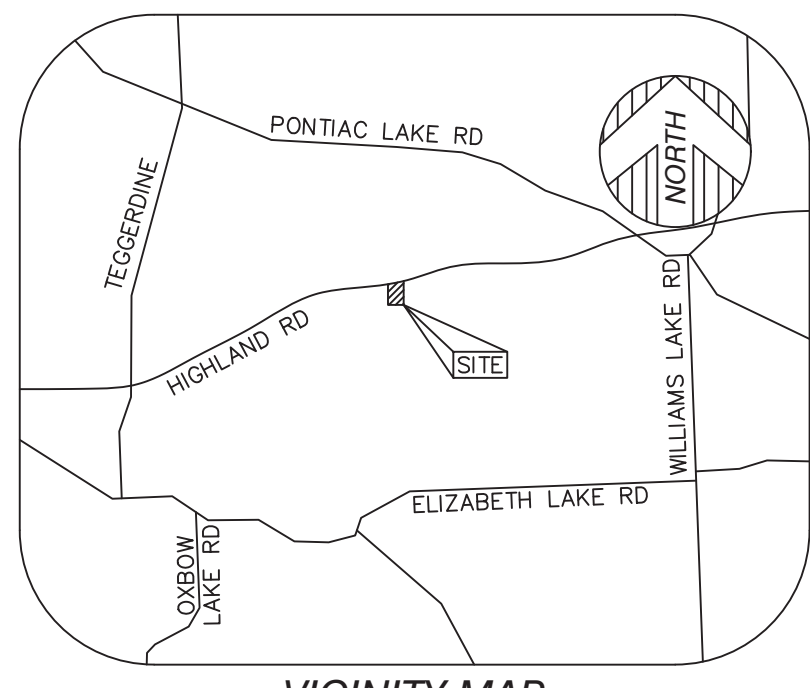


STONEFIELD
 engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210462

TITLE:
FIRE TRUCK TURNING EXHIBIT

DRAWING:
C-11



VICINITY MAP
(NOT TO SCALE)

PARKING

NO MARKED PARKING ON SITE.

PARCEL AREA

211,476± SQUARE FEET = 4.854± ACRES

BASIS OF BEARING

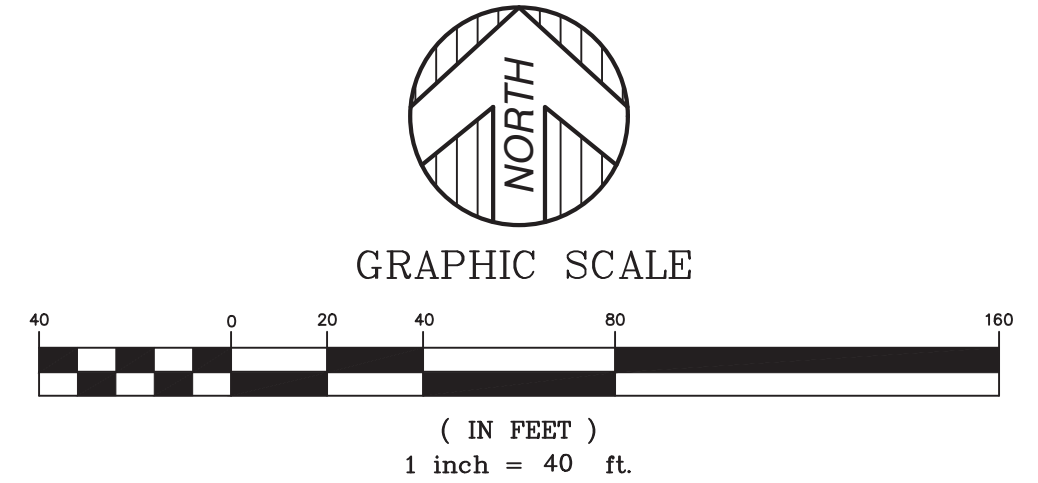
SOUTH 75°05'00" WEST, BEING THE SOUTHERLY LINE OF SUBJECT PARCEL, AS DESCRIBED.

BENCHMARK

- SITE BENCHMARK #1**
ARROW ON FIRE HYDRANT, ±42' WEST OF NW PROPERTY CORNER.
ELEVATION = 973.53' (NAVD 88)
- SITE BENCHMARK #2**
ARROW ON FIRE HYDRANT, ±12' EAST OF NE PROPERTY CORNER.
ELEVATION = 972.98' (NAVD 88)
- SITE BENCHMARK #3**
MAG NAIL IN 3RD UTILITY POLE NORTH OF FENCE, E. OF E. LINE OF PROPERTY.
ELEVATION = 968.56' (NAVD 88)

LEGEND

- SET 1/2" REBAR WITH CAP P.S. 47976
- FOUND MONUMENT (AS NOTED)
- ⊙ FOUND SECTION CORNER (AS NOTED)
- (R&M) RECORD AND MEASURED DIMENSION
- (R) RECORD DIMENSION
- (M) MEASURED DIMENSION
- 0.00 GROUND ELEVATION
- ⊕ ELECTRIC METER
- ⊖ ELECTRIC PANEL
- ⊡ TRANSFORMER
- UTILITY POLE
- GAS LINE MARKER
- GAS METER
- ⊕ TELEPHONE RISER
- ⊖ CABLE TV RISER
- ⊙ SANITARY MANHOLE
- ⊙ SQUARE CATCH BASIN
- ⊙ STORM DRAIN MANHOLE
- ⊙ FIRE HYDRANT
- WATER VALVE
- WELL
- AIR CONDITIONING UNIT
- LIGHTPOST/LAMP POST
- SINGLE POST SIGN
- ⊕ DECIDUOUS TREE (AS NOTED)
- ⊖ CONIFEROUS TREE (AS NOTED)
- PARCEL BOUNDARY LINE
- PLATTED LOT LINE
- ADJOINER PARCEL LINE
- SECTION LINE
- - - EASEMENT (AS NOTED)
- BUILDING
- CONCRETE CURB
- RAISED CONCRETE
- EDGE OF CONCRETE (CONC.)
- EDGE OF ASPHALT (ASPH.)
- EDGE OF GRAVEL
- FENCE (AS NOTED)
- TREE / BRUSH LINE (AS NOTED)
- OVERHEAD UTILITY LINE
- GAS LINE
- SANITARY LINE
- STORM LINE
- WATER LINE
- UNDERGROUND CABLE
- COMMUNICATION LINE
- UNDERGROUND PIPE (AS NOTED)
- EDGE OF WATER (AS NOTED)
- MINOR CONTOUR LINE
- MAJOR CONTOUR LINE
- BUILDING AREA
- ASPHALT
- CONCRETE



PROPERTY DESCRIPTION

LAND SITUATED IN THE TOWNSHIP OF WHITE LAKE, COUNTY OF OAKLAND AND STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:
PART OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 23 TOWN 3 NORTH, RANGE 8 EAST, WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT, SAID POINT BEING DISTANT NORTH 02 DEGREES 24 MINUTES 30 SECONDS EAST, 1731.78 FEET, AND SOUTH 75 DEGREES 05 MINUTES WEST, 483.89 FEET, FROM THE SOUTHEAST CORNER OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SAID SECTION; THENCE RUNNING SOUTH 75 DEGREES 05 MINUTES WEST, 217.5 FEET, TO A POINT; THENCE NORTH 02 DEGREES 47 MINUTES 20 SECONDS EAST, 661.50 FEET, TO A POINT ON THE SOUTHERLY LINE OF M-59 HIGHWAY; THENCE NORTHEASTERLY ALONG SAID HIGHWAY LINE AND ALONG THE ARC OF CURVE TO THE LEFT (RADIUS BEING 3869.83 FEET, AND CENTRAL ANGLE BEING 03 DEGREES 05 SECONDS) 208.35 FEET, TO A POINT; THENCE SOUTH 02 DEGREES 43 MINUTES 15 SECONDS WEST, 623.2 FEET, TO THE POINT OF BEGINNING.

AND
PART OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SECTION 23, TOWN 3 NORTH, RANGE 8 EAST, WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS FOLLOWS: BEGINNING AT A POINT, SAID POINT BEING DISTANT NORTH 02 DEGREES 24 MINUTES 30 SECONDS EAST, 1731.73 FEET, AND SOUTH 75 DEGREES 05 MINUTES WEST, 149.56 FEET, FROM THE SOUTHEAST CORNER OF THE WEST 1/2 OF THE NORTHEAST 1/4 OF SAID SECTION; THENCE RUNNING SOUTH 75 DEGREES 05 MINUTES WEST, 134.33 FEET TO A POINT; THENCE NORTH 02 DEGREES 43 MINUTES 15 SECONDS EAST, 623.2 FEET TO A POINT ON THE SOUTHERLY LINE OF M-59 HIGHWAY; THENCE NORTHEASTERLY ALONG SAID HIGHWAY LINE AND ALONG THE ARC OF A CURVE TO THE LEFT (RADIUS BEING 3869.83 FEET, AND CENTRAL ANGLE BEING 01 DEGREE 55 MINUTES 30 SECONDS) 130.00 FEET, TO A POINT; THENCE SOUTH 02 DEGREES 43 MINUTES 15 SECONDS WEST, 605.5 FEET, TO THE POINT OF BEGINNING.

TITLE REPORT NOTE

- 10. RIGHT OF WAY IN FAVOR OF STATE OF MICHIGAN RECORDED ON MARCH 26, 1937 IN LIBER 53 OF MISCELLANEOUS RECORDS, PAGE 5. (AS SHOWN)
- 11. HIGHWAY EASEMENT RELEASE IN FAVOR OF STATE OF MICHIGAN RECORDED ON SEPTEMBER 16, 1976 IN LIBER 6754, PAGE 549. (AS SHOWN)
- 12. DECLARATION OF EASEMENT RECORDED ON APRIL 29, 1996 IN LIBER 16222, PAGE 297. (AS SHOWN)
- 13. EASEMENT FOR WATER MAIN IN FAVOR OF CHARTER TOWNSHIP OF WHITE LAKE RECORDED ON NOVEMBER 18, 1998 IN LIBER 19187, PAGE 341. (AS SHOWN)

SURVEYOR'S NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.

MANHOLE SCHEDULE

#	TYPE	RIM (FT)	SIZE (IN)	DIRECTION	INVERT (FT)
30003	CATCH BASIN	969.98	12	N	963.48
30044	CATCH BASIN	970.93	12	N	962.93
30065	CATCH BASIN	967.54	12	E	962.74
30066	CATCH BASIN	967.63	12	W	962.63
30067	STORM MANHOLE	967.78	12	SE	962.63
30068	STORM MANHOLE	967.89	12	SW	962.03
30190	STORM MANHOLE	969.35	12	S	962.39
30191	STORM MANHOLE	969.35	12	NE	962.29
30191	STORM MANHOLE	969.35	12	SW	961.53
30191	STORM MANHOLE	969.35	12	E	960.97
30191	STORM MANHOLE	969.35	12	W	962.90
30191	STORM MANHOLE	969.35	12	NE	962.08
30191	STORM MANHOLE	969.35	12	S	962.28

SURVEYOR'S CERTIFICATION

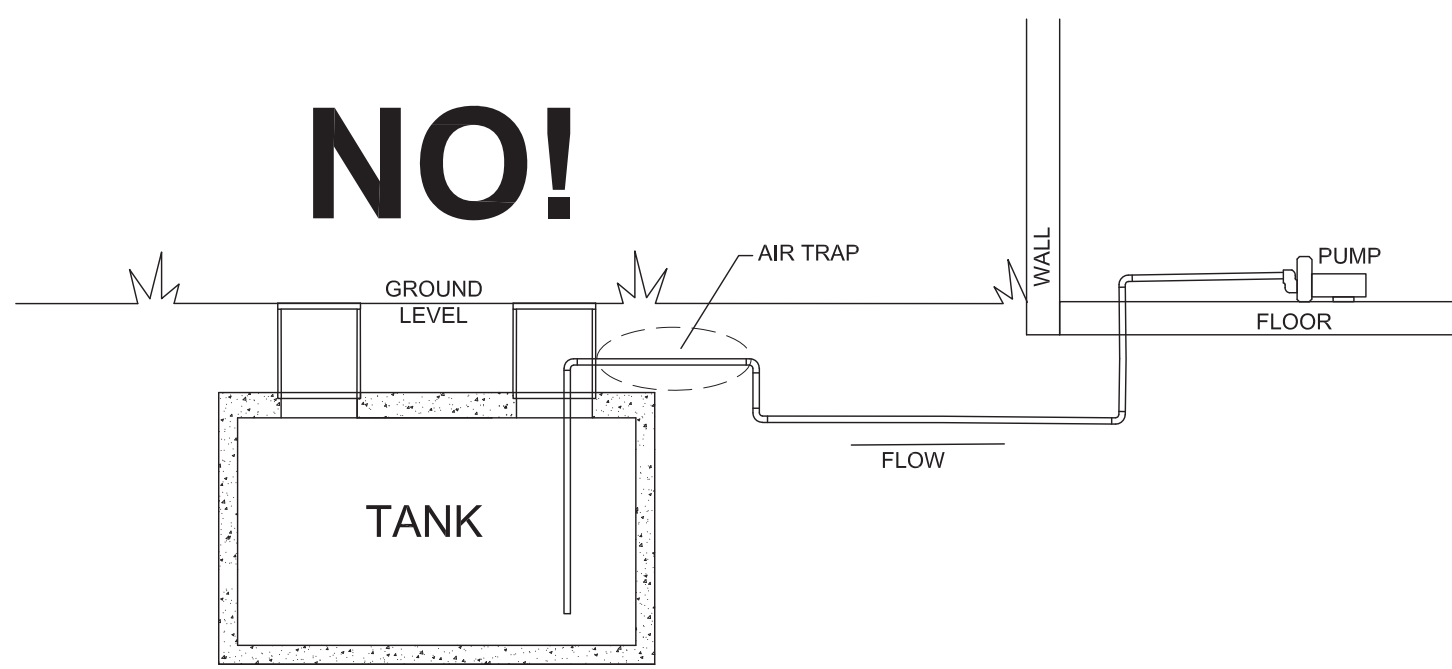
TO ERUP LLC, AN ILLINOIS LIMITED LIABILITY COMPANY; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY:
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 4, 5, 7A, 8, 11A, AND 11B OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 12/20/21.
DATE OF PLAT OR MAP: 12/22/21
ANTHONY T. SYCKO, JR., P.S.
PROFESSIONAL SURVEYOR
MICHIGAN LICENSE NO. 47976
22556 GRATIOT AVE., EASTPOINTE, MI 48021
TSycko@kemttec-survey.com



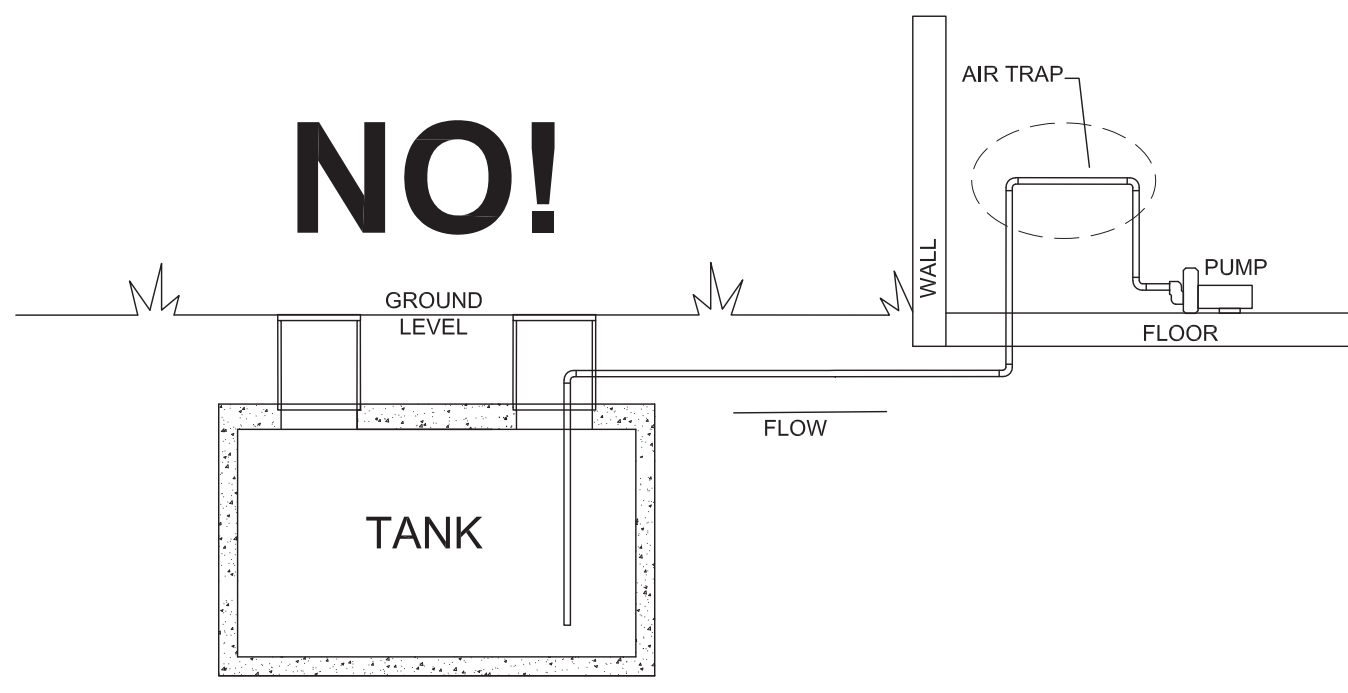
KEM-TEC
PROFESSIONAL ENGINEERING, SURVEYING & ENVIRONMENTAL SERVICES
A GROUP OF COMPANIES
Eastpointe, MI 48021
Detroit, MI 48226
Grand Blanc, MI 48030
(800) 285-7222 (313) 788-9977 (734) 994-0888 (888) 694-0001
www.kemttecgroupofcompanies.com

ALTA / NSPS LAND TITLE SURVEY
PREPARED FOR: STONEFIELD ENGINEERING AND DESIGN
9345 HIGHLAND RD, WHILE LAKE, MICHIGAN,
PART OF SECTION 23,
TOWN 3 NORTH, RANGE 8 EAST

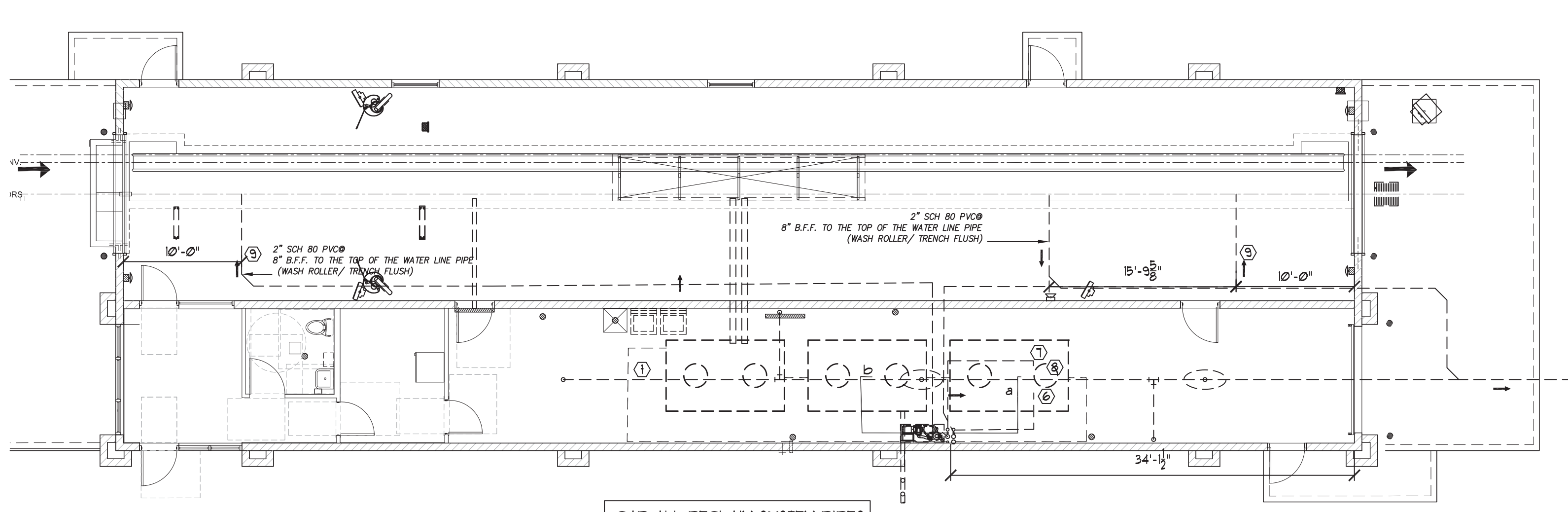
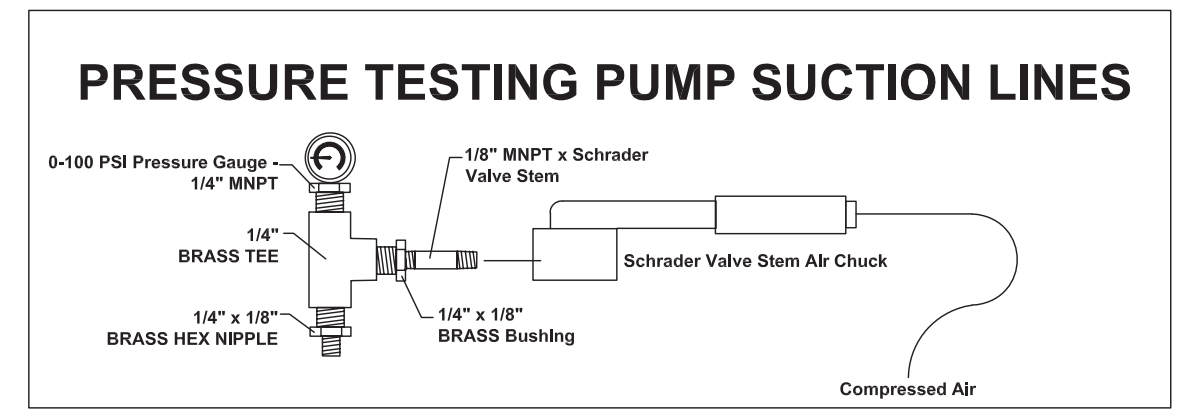
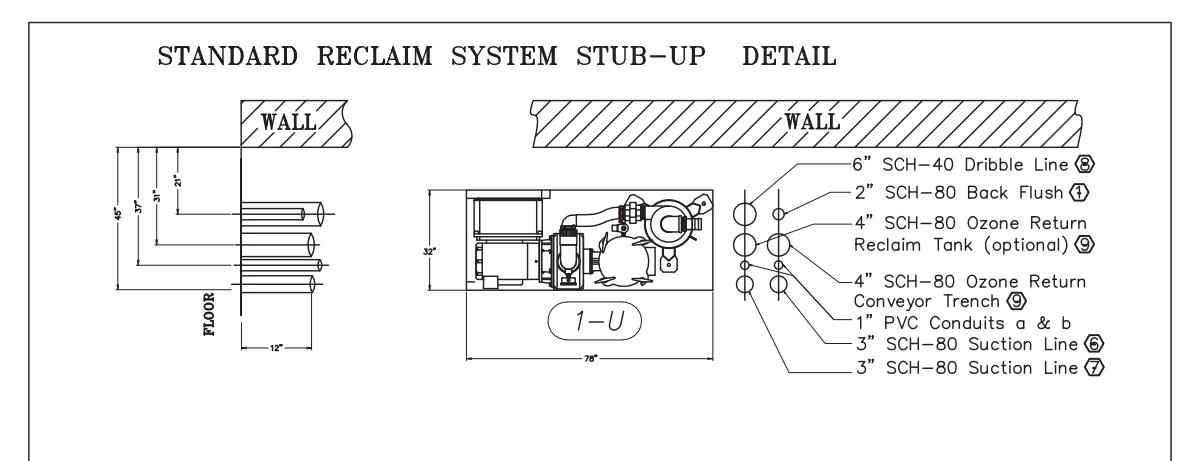
DATE	BY	REVISION	DESCRIPTION
01/13/22	JDM	1	PER NEW TITLE WORK



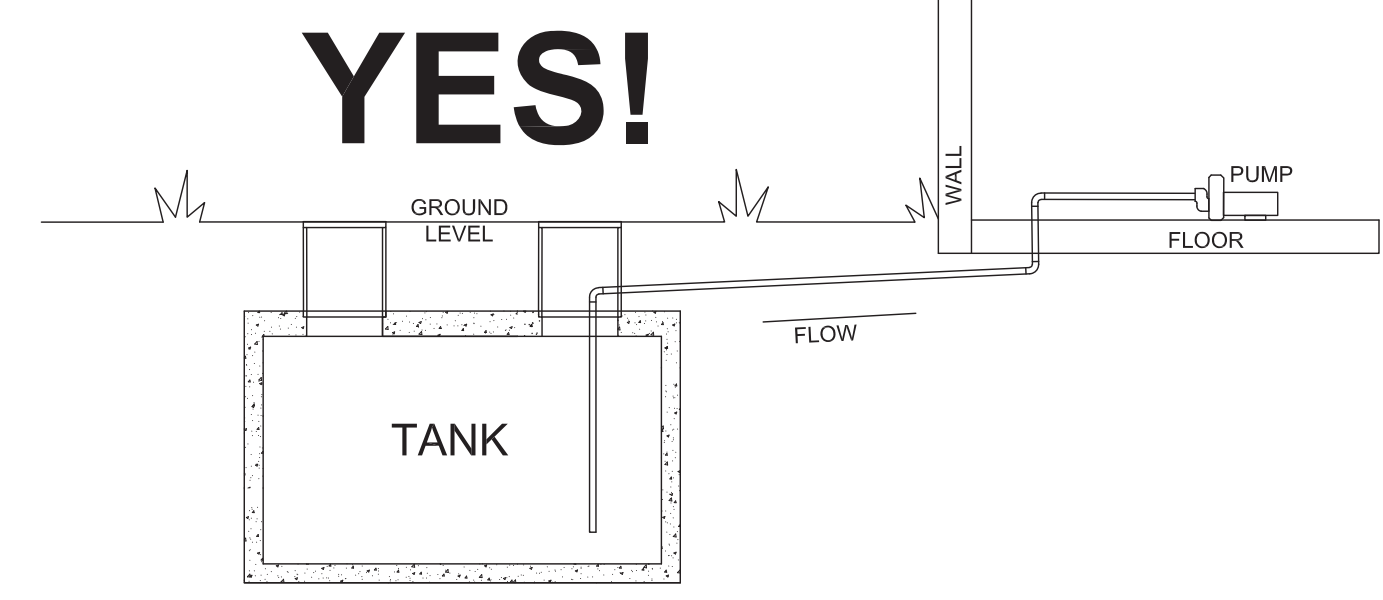
BELOW GROUND TANKS
ALL suction lines must NEVER slope down and then back up again (Air Trap).



BELOW GROUND TANKS
ALL suction lines must NEVER slope up and then back down again (Air Trap).

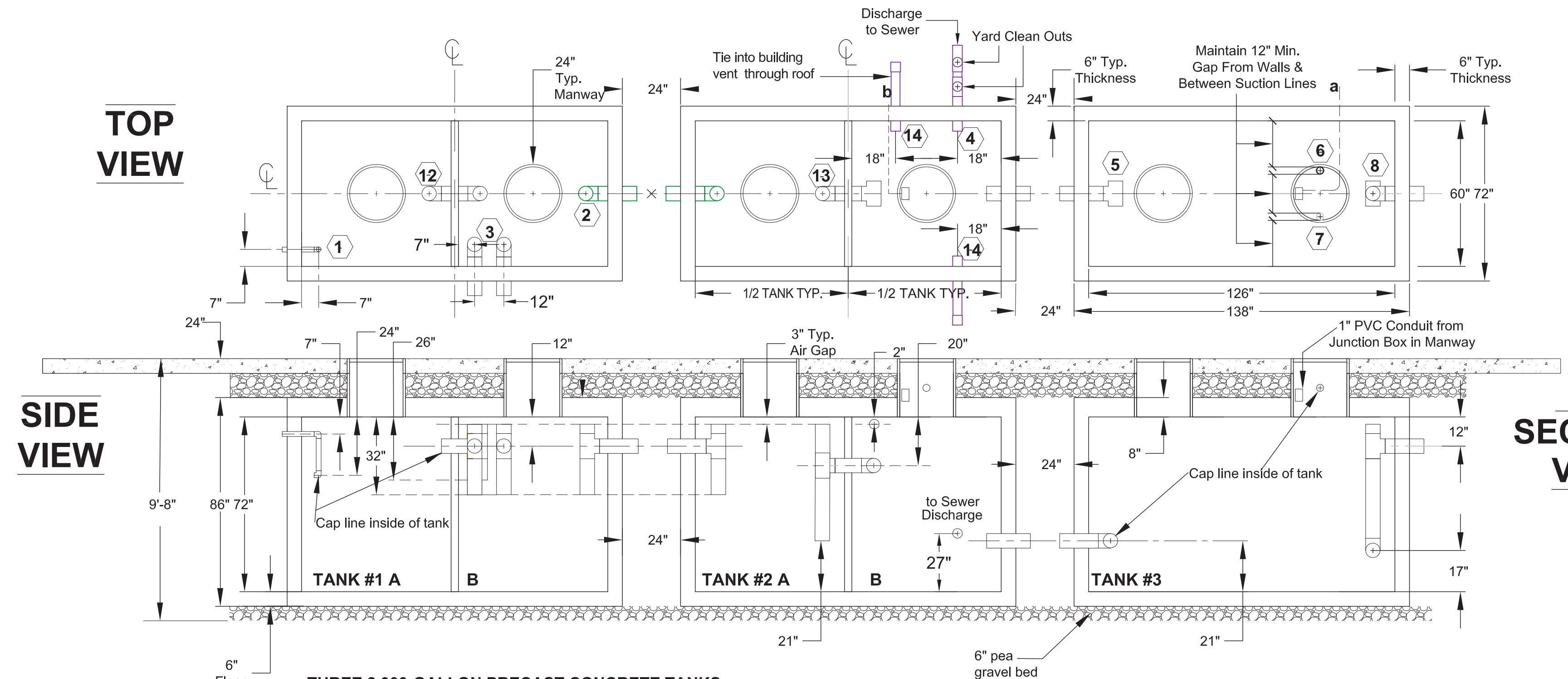


RECLAIM SYSTEM PLAN
SCALE: 1/8" = 1'-0"



BELOW GROUND TANKS
ALL suction lines require a continuous upward slope to the Equipment Room.

Three 2,000 Gallon Precast Concrete Tanks



THREE 2,000-GALLON PRECAST CONCRETE TANKS
138" Length x 72" Width x 86" Height

TANK #1 - 1A Underflow - 1B Primary Settlement
TANK #2 - Secondary Settlement w/ Baffle
TANK #3 - Future use

- PLUMBING LEGEND**
- 1 - 2" sch 80 PVC Pipe - Underflow Discharge - To TANK 1A
 - 2 - 6" sch 40 PVC Pipe - External Crossover - From TANK 1B to TANK 2A
 - 3 - Two 6" sch 40 PVC Pipes - Center Trench - To TANK 1B
 - 4 - 6" sch 40 PVC Pipe - Discharge to Sewer - From TANK 2B
 - 5 - 6" sch 40 PVC Pipe - External Crossover - From TANK 2B to TANK 3
 - 6 - 3" sch 80 PVC Pipe - Filter Pump Suction Line - From TANK 3
 - 7 - 3" sch 80 PVC Pipe - Optional Extra Suction Line - From TANK 3
 - 8 - 6" sch 40 PVC Pipe - AquaPrep Discharge - To TANK 3
 - 12 - 6" sch 40 PVC Pipe - Internal Crossover - From TANK 1A to TANK 1B
 - 13 - 6" sch 40 PVC Pipe - Internal Crossover - From TANK 2A to TANK 2B
 - 14 - 3" sch 40 PVC Pipe - Local Vent - from TANK 2B, Tie into building vent and exit through roof

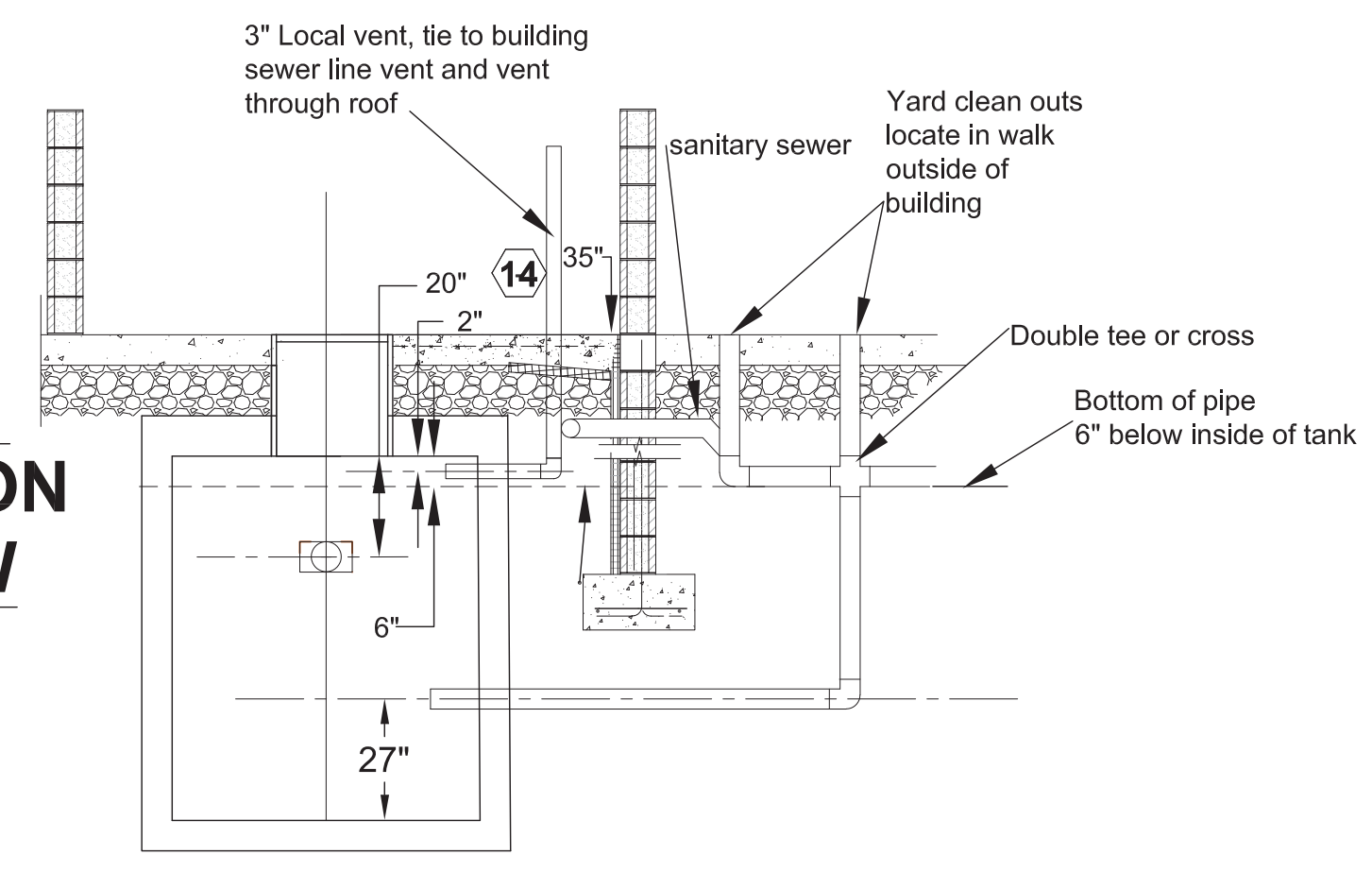
- ELECTRICAL LEGEND**
- a - 1" PVC Conduit - Low Water Protection Float Switch (FS-2) - TANK 3
 - b - 1" PVC Conduit - FOR FUTURE USE - TANK 2B

- NOTES:**
- All underground plumbing & tanks by other.
 - Actual tank dimensions may vary.
 - Plumbing should be placed as shown regardless of what tanks are used.
 - All pipes must be set below frost line.
 - Suction lines MUST be sch 80 PVC.
 - Do NOT install screens on foot valve.
 - All tank bottoms should be same elevation.
 - Consult engineer for elevations.

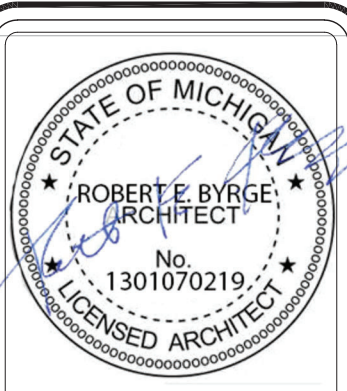
DRAWING NOT TO SCALE

(If Foot Valve is Raised, The Float Switch Also Needs to be Raised) Keep a 10" Distance Between Them!

BOTTOM OF TANK TOPS @ 32" B.F.F., TYP.



TANK #2 B
Section through end



103 WIND HAVEN DR, STE 101
NICHOLASVILLE KY 40356
859.523.1500

REVISION	DATE

xx/xx/xx
Permit Set

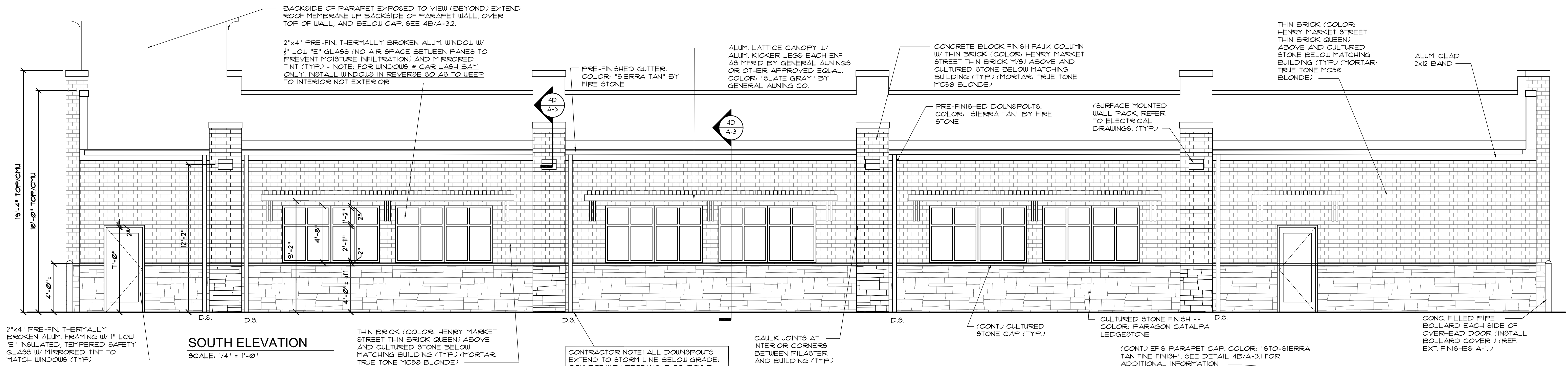
PROJECT NUMBER

DRAWN BY: REB

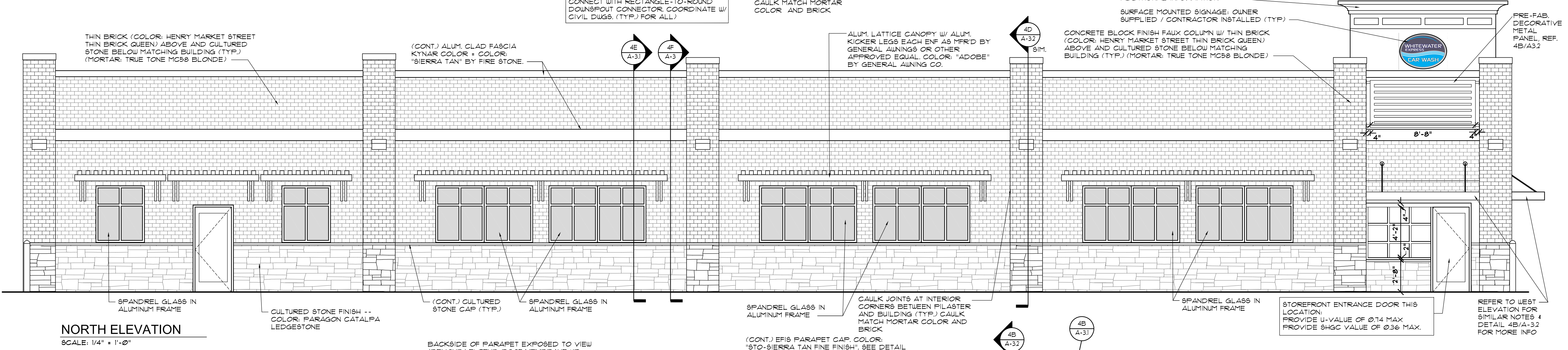
Hypershine Carwash
2703 E. Grand River
East Lansing MI 48823

Tank details & Stub up locations future sys.

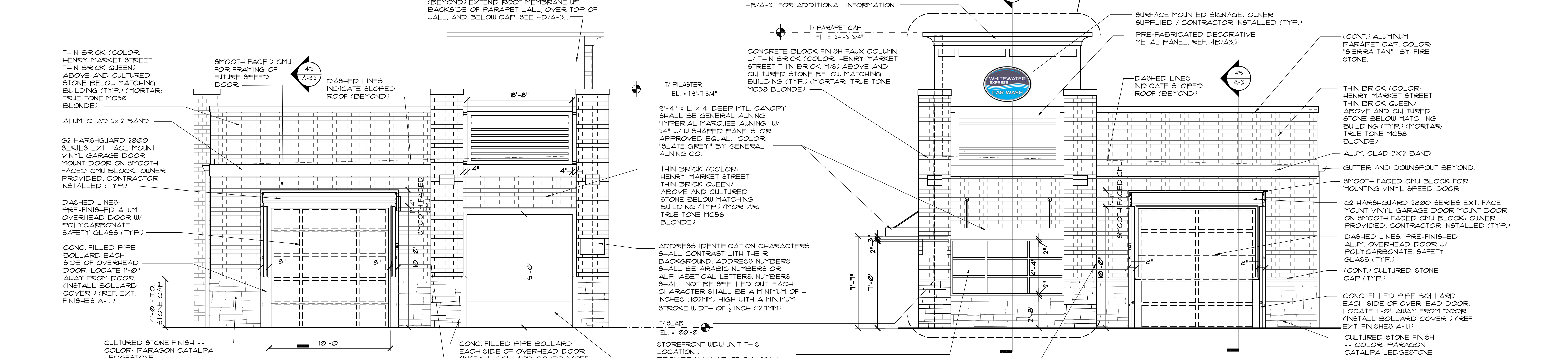
SHEET NUMBER
P-2



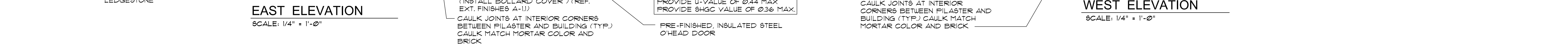
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



EAST ELEVATION
SCALE: 1/4" = 1'-0"



WEST ELEVATION
SCALE: 1/4" = 1'-0"

Not for Construction

103 WIND HAVEN DR, STE 101
NICHOLASVILLE KY 40356
859.523.1500

REVISION	DATE

xx/xx/xx
Permit Set

PROJECT NUMBER
-

DRAWN BY: REB

Hypershine Carwash
 9345 Highland Road
 White Lake MI 48386
Exterior Elevations

SHEET NUMBER
A-2