

# PLANNING COMMISSION MEETING LOCATION: TOWNSHIP ANNEX, 7527 HIGHLAND ROAD, WHITE LAKE, MI 48383 THURSDAY, OCTOBER 17, 2024 – 6:30 PM

White Lake Township | 7525 Highland Rd | White Lake, MI 48383 | Phone: (248) 698-3300 | www.whitelaketwp.com

# AGENDA

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. PLEDGE OF ALLEGIANCE
- 4. APPROVAL OF AGENDA
- 5. APPROVAL OF MINUTES
  - A. <u>October 3, 2024</u>
- 6. CALL TO THE PUBLIC (FOR ITEMS NOT ON THE AGENDA)
- 7. PUBLIC HEARING
- 8. CONTINUING BUSINESS
- 9. NEW BUSINESS
  - A. <u>Ginko Self-Storage</u> Location: located on the north side of White Lake Road, west of Old White Lake Road, consisting of 2.14 acres. Currently zoned Light Manufacturing (LM). Identified as vacant parcel 12-01-127-004 Request: Final site plan approval Applicant: Ginko Investments, LLC
- **10. OTHER BUSINESS**
- 11. PLANNING CONSULTANT'S REPORT
- **12. LIAISON'S REPORT**
- **13. COMMUNICATIONS**
- 14. NEXT MEETING DATE: November 7, 2024
- **15. ADJOURNMENT**

Procedures for accommodations for persons with disabilities: The Township will follow its normal procedures for individuals with disabilities needing accommodations for effective participation in this meeting. Please contact the Township Clerk's office at (248) 698-3300 X-164 at least two days in advance of the meeting. An attempt will be made to make reasonable accommodations.

# WHITE LAKE TOWNSHIP PLANNING COMMISSION OCTOBER 3, 2024

# CALL TO ORDER

Chairperson Seward called the meeting to order at 6:30 P.M. He then led the Pledge of Allegiance.

# **ROLL CALL**

# Present:

T. Joseph Seward, Chairperson Merrie Carlock, Vice Chairperson Mona Sevic Pete Meagher Matt Slicker Steve Anderson

# Absent:

Debby Dehart Robert Seeley Scott Ruggles, Township Board Liaison

# Others:

Sean O'Neil, Community Development Director Lisa Hamameh, Township Attorney Michael Leuffgen, DLZ Hannah Kennedy-Galley, Recording Secretary

# **APPROVAL OF AGENDA**

MOTION by Commissioner Carlock, seconded by Commissioner Meagher to approve the agenda as presented. The motion carried with a voice vote: (6 yes votes).

# **APPROVAL OF MINUTES**

A. September 5, 2024

MOTION by Commissioner Anderson, seconded by Commissioner Sevic to approve the minutes as presented. The motion carried with a voice vote: (6 yes votes).

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

Evan Whipple, 6450 Teluride, wanted to know when Elizabeth Lake Road would open. Director O'Neil said the road should be open by November.

# PUBLIC HEARING

None.

# **CONTINUING BUSINESS**

None.

# **NEW BUSINESS**

# A. Culver's

Property described as parcel number 12-20-276-035, located on the north side of Highland Road (M-59) and west of Bogie Lake Road, with a project area on the parcel consisting of approximately 1.69 acres, currently zoned (PB) Planned Business District.
Request: 1) Final site plan approval
2) PDA approval recommendation
Applicant: Katie Schmitt

Director O'Neil gave a brief review of the applicant's request. He noted that the Township Attorney, Ms. Hamameh, will draft the planned development agreements going forward. The site is shovel-ready, and staff is comfortable approving the site plan subject to the remaining outstanding comments being addressed.

Mr. Leuffgen summarized his review letter. His ultimate recommendation is approval of the final site plan contingent on the few remaining items being addressed. An on-site stormwater maintenance management agreement and easement will be requested by the Township.

Commissioner Meagher asked Mr. Leuffgen about the remaining outstanding comments. Mr. Leuffgen said a response letter from the applicant helps streamline the review, and the outstanding comments are minor.

Director O'Neil said building material samples were available this evening.

Raymond Embach, AMAG, architect, said the exterior building samples were brick, thin stone, and efface paint samples. He wanted to request a change to the building materials from thin brick to hardy board siding due to the costly price of the thin brick. He said the hardy board would be an equal exchange for the thin brick in terms of quality.

Commissioner Anderson asked if other Culver's that have the hardy board siding. Mr. Embach said the restaurants in Waterford and Fenton have the hardy board siding.

Commissioner Anderson expressed his desire to keep the brick over the hardy board. He said the Planning Commission valued the cost-saving effort, but the request was last minute.

Director O'Neil suggested mixing and matching materials so the brick would be front-facing, and the hardy board would be out of plain sight.

Commissioner Slicker added that the west and north sides of the building probably weren't visible.

Commissioner Seward was in favor of the brick, as was Commissioner Carlock.

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Commissioner Anderson asked Director O'Neil about the signage. Director O'Neil said the proposed signage was compliant and would be included in the PDA's exhibit B. Meijer would not allow a monument sign.

Attorney Hamameh briefly went over the development agreement. She wanted to confirm a record of the community impact statement being waived. Commissioner Anderson said he remembered a discussion regarding a \$10,000.00 contribution toward the Corridor Improvement Authority instead of a sidewalk as a community benefit.

Director O'Neil added that the CIA plan includes sidewalk connection projects, and the funds could go toward a more meaningful pathway connection.

Bob Hoffman, 2521 Rose Center Road, said the hardy siding will look traditional and match more with Meijer's architecture.

MOTION by Commissioner Anderson, seconded by Commissioner Carlock, to approve the final site plan for Culver's, identified as parcel number 12-20-276-035, subject to addressing staff and consultant comments, and for the exterior thin brick to remain as shown in the plan.

(Slicker/yes, Sevic/yes, Anderson/yes, Seward/yes, Carlock/yes, Meagher/yes).

MOTION by Commissioner Meagher, seconded by Commissioner Anderson, to recommend the Township Board approve Culver's planned development agreement as amended based on the discussion this evening. The motion carried with a voice vote: (6 yes votes).

# **OTHER BUSINESS**

None.

# LIAISON'S REPORT

Commissioner Carlock stated Trunk or Treat is October 19, 2024, at Fisk Farm from 6-8 P.M. October 6, 2024, is the Harvest Happenings at Hess Hathaway Park in Waterford. The Phase 1 work at Stanley Park will be re-bid due to the contractor failing to perform.

# PLANNING CONSULTANT'S REPORT

None.

# **DIRECTOR'S REPORT**

There has been no activity from Panera or Black Rock. A site plan for River Caddis is under review. The property at the corner of Elizabeth Lake Road and M-59 will be applying for a rezoning request soon.

There is site work underway at the Civic Center property. The Township Board accepted the Capital Improvement Plan.

COMMUNICATIONS

None.

NEXT MEETING DATE: October 17, 2024

ADJOURNMENT

MOTION by Commissioner Anderson, seconded by Commissioner Carlock, to adjourn at 7:22 P.M. The motion carried with a voice vote: (6 yes votes).

# Director's Report

Project Name: Ginko Self Storage

Description: Final site plan approval

Date on Agenda this packet pertains to: October 17, 2024

□ Public Hearing

 $\Box$  Special Land Use

⊠Initial Submittal

□Rezoning □Other:

 $\Box$ Revised Plans

 $\Box$ Preliminary Approval

 $\boxtimes$  Final Approval

Contact	Consultants &	Approval	Denial	Approved w/Conditions	Other	Comments
	Departments					
Sean	CDD Director				$\boxtimes$	Per reviewer's comments
O'Neil						
DLZ	Engineering			$\boxtimes$		Per letter dated 10/09/24.
	Consultant					
Justin	Staff Planner			$\boxtimes$		Per letter dated 10/03/24.
Quagliata						
Jason	WLT Fire			$\boxtimes$		Per letter dated10/08/24.
Hanifen	Marshal					



October 9, 2024

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

# RE: Ginko Self Storage -Final Site Plan/Final Engineering Plan Review-3<sup>rd</sup> Review Stormwater Maintenance Agreement Review-1<sup>st</sup> Review

DLZ # 2345-7567-04

Dear Mr. O' Neil,

Our office has reviewed the above-mentioned revised plan prepared by PEA Group and dated September 6, 2024. These plans were reviewed for conformance with the Township Engineering Design Standards. In addition, we have also reviewed the above mentioned stormwater document. We offer the following comments for your consideration:

In addition, the following comments from our Preliminary Site Plan review letter dated December 21, 2023 remain as notations and/or will also need to be addressed:

# <u>General</u>

1. There is a Master Deed as part of the Prospectors Square Condominium overall plan. The requirements of this deed will need to be met. Comment addressed. Design engineer has responded that the requirements of the Master Deed have been met. The design engineer has noted that the project design complies with the requirements of the Prospectors Square Condominium Master Deed. Comment remains as a notation.

# Grading/Paving

1. The proposed parking layout has been revised from a previous layout in order to provide for 5 (versus 4 previously proposed) parking spaces. DLZ notes that the revised configuration is not ideal in terms

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of backing out of the northern two spaces; however, we believe there is sufficient room to physically make the turning movements required. **Comment remains as a notation.** 

# Sanitary Sewer

1. Oakland County Health Department will need to approve and permit septic field for this property. Comment remains.

# Watermain

- 1. We defer to the Township Fire Department with regard to fire suppression requirements. Comment remains.
- Provide a fire truck turning plan for a 40 foot fire truck to demonstrate all proposed buildings are accessible by a fire truck. Comment addressed; however, it is not clear how Building #1 will be accessed by fire truck in the event of a fire. We defer to Township Fire Department for further comment. We note that the current submittal provides for a 250' fire hose length to cover Building #1. We continue to defer to the Township Fire Department as to whether this is considered acceptable relative to fire suppression coverage. Comment remains as a notation.
- 3. Oakland County will need to approve the well and permit for this property. **Comment remains.**
- 4. A well is proposed as the source of water for this site. Per our files, there exists a Water Supply Agreement that states that wells are to be abandoned if water main becomes available for use. We defer to the Township as to whether this agreement was ever signed. Please note that our files indicate that this agreement was received by the Township on December 18, 2000. The design engineer has commented that the owner will sign the agreement; please provide a copy of the signed agreement. Comment remains and <u>the signed agreement shall be required prior to a preconstruction meeting.</u>

# Stormwater Management

1. Per the Prospectors Square Condominium Plan, Master Deed, and Exhibit B to the Master Deed, each lot within the condominium must retain stormwater. The Master Deed and the Exhibit B to the Master Deed also require the owner of each lot to retain a specific amount of storm water and detain the remainder before out letting to the existing pond in the rear of the property. Please provide additional stormwater calculations supporting the required detention volume. Comment outstanding; the calculations on the plan need to be clarified to show they meet minimum White Lake Township design standards. Required detention volume calculations need to be provided to demonstrate site improvements can achieve the required storage volume. The Engineering design Standards do not allow retention (i.e., no positive outlet) in parking areas, please refer to Item C.4.0 of the Engineering Design Standards. This will need to be updated on the plan set to demonstrate



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feasibility. Comment addressed. The site shall have zero runoff and stormwater shall be managed via infiltration. Calculations demonstrating this have been provided by the design engineer.

#### Comment remains as a notation.

In addition, leaching basins are only allowed per the following requirements from WLT Engineering Design Standards C.5.a.-c.:

*Engineered Infiltration Systems may be utilized when all the following conditions exist:* 

- a. No adequate storm sewer, open ditch, or road drain is available for storm water disposal and an open retention pond is not prudent or feasible. Condition not met; this condition has not been demonstrated on the plan set. A statement has been provided on the plan set to this effect on Sheet C-6.0; condition satisfied. Comment remains as a notation.
- b. Soil composition is optimum and ground water table is suitable for percolation. Optimum soil conditions defines soil composed entirely of coarse sand, gravel, or a coarse sand gravel mixture. A soils report by a licensed engineer with borings to 10 feet below the bottom of the infiltration system with groundwater level data and in situ or laboratory determined permeability rates and recommending the advisability of an Engineered Infiltration System shall be provided. Condition not met; this condition has not been demonstrated on the plan set. Design engineer states that a geotechnical report is forthcoming. Condition satisfied. A geotechnical report has been provided demonstrating the above requirements; we also note that the recommendations of the report, relative to site construction, be followed. **Comment remains as a notation.**
- c. Leaching basins shall be sized as a combination storage and groundwater discharge detention basin with storage volume determined the same as open detention basins. The discharge rate shall not exceed a perc rate of 6" per hour for the bottom and sides of the soil/stone interface (sides of the trenches). Stone voids ratio may be assumed as 0.40. This has not been provided on the plan set; please provide calculations supporting the required storage volume. Comment outstanding; calculations do not demonstrate that the storage volume like what would be required for a detention basin can be accommodated. Condition satisfied. Calculations now demonstrate required storage volume will be provided.

One of two standard basins based on the designs shown on the Township Standard Storm Sewer Detail Sheet or proprietary underground storage/infiltration systems or



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other engineered systems if approved by the Township Engineer may be used. Condition satisfied and remains as a notation.

#### FSP/FEP Comments-

Please note that comments from our August 13, 2024 review are in *italics*. Responses to those comments are in **bold**. New comments are in standard font.

#### <u>General</u>

- Sheets C-3.0,4.0,6.0, L-1.0, and A-1.0- Remove all references to 'Preliminary' in the title boxes on these sheets. In addition, we note that all sheets are marked as 'Not for Construction.' Comment partially addressed. All references to 'Preliminary' have been removed with the exception of Sheet 4.0. Please remove reference on this sheet. Comment partially addressed. All references to 'Preliminary' have now been removed. We note that in the sheet index of drawings on the cover sheet that Sheet A-1.0 is listed as 'preliminary.' Please remove the preliminary reference for this line item.
- 2. Cover Sheet- Revisions box- Please add latest revision date of 7/25/24. Comment addressed. Revision date has been added to this box.

#### Grading/Paving

- Sheet C-3.0- Add note to plan to place 'Sidewalk Ends' sign and guardrail at end of sidewalk at eastern property line. A guardrail or fence shall be required due to the steep grade in this area. Comment partially addressed. A sign and guardrail are now shown on this sheet; please add a guardrail detail to Sheet C-9.1 and add sheet reference note on Sheet C-3.0. Comment addressed. A guardrail detail is now shown on Sheet C-9.1.
- Sheet C-4.0- Provide an expanded view of the grading, with detailed grades provided, for the ADA parking and loading zone. Grades shall be required to comply with ADA standards. Comment partially addressed. An expanded view of the ADA parking and loading zone has been provided; however, the 29.65 grade in the expanded view does not match that shown on the grading plan (29.60). Comment addressed. Grade has been revised.



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- Construction of the proposed retaining wall on the east side of the property will likely require an offsite easement from the property to the east for access and construction due to the close proximity of the wall to the eastern property line. Please comment. Comment addressed. Per the design engineer response dated September 24, 2024, the wall can be constructed within the limits of the property and thus the need for an off-site easement is not required.
- 4. Sheets C-1.0 to C-6.0-Please correct the spelling of 'asphalt' for White Lake Road. In addition, please correct the spelling for dual for the dual striping note on Sheet C-3.0. Comment addressed. All spelling items have been corrected.
- Sheets C-3.0 and C-4.0-Show curb cuts, striping, and warning strips at both the sidewalk crossing for Coastal Parkway and the entrance to Ginko Storage. Comment addressed. Information has now been shown.
- 6. Sheet C-4.0- SE corner of site at 'Match EX. +- 28.60'. This is a low point; the proposed road ditch grading as shown will not function properly as drainage from the Match EX +-29.40' grade will flow toward the low point of 28.60. In addition, drainage from the north and north west shall also collect and pond at this low point. Please revise. Comment partially addressed. A storm structure has been added at the low point to collect the drainage that would collect in this area; however, please show/shade in storm piping on Sheet C-6.0.
- Sheet C-4.0- There is a low point of 32.45 along the eastern drive entrance. We recommend a spillway be provided to route the drainage into the ditch. In addition, there is a low point (32.25) in the Detail M gutter. Comment addressed. Grades have now been revised for positive drainage and a spillway to route the drainage to the ditch has now been provided.
- 8. Sheet C-4.0- Provide TW and BW grades for the eastern end of the dry laid fieldstone wall. Comment addressed. The grades have been provided.
- Sheet C-4.0-It appears that the grading will be too steep (at the 31.30 asphalt grade near eastern end of fieldstone wall/berm) from top of curb elevation (31.80) to the 1030 berm contour. Please revise as needed. Comment addressed. Grades have been revised to reduce the slope. In addition, a note has been added to this area indicating that the slope in this area shall be a 1:3 maximum.
- Sheet C-4.0- Invert grade of ES17 (28.85) will result in ponding of water at this elevation as the adjacent ditch contour to the west (1029) will act as a high point. Please revise. Comment addressed. Adjacent ditch contour has been adjusted to minimize ponding in this area.
- **11.** Sheet C-4.0-Clarify what the 'Xs' are for at the Coastal Parkway and Ginko entrance sidewalk crossings. **Comment addressed. 'Xs' are for a Type R sidewalk ramp.**
- 12. Sheet C-4.0- Provide existing grades for Coastal parkway sidewalk. Currently note says 'Match Ex.' Comment addressed. Existing grades have been provided.



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**13.** Sheet C-4.0- There is a low point in the sidewalk at 1028 and this grade sits lower than the adjacent proposed ditch grades of 1028.30 and 1028.05. Please revise for positive drainage. **Comment** 

# addressed. Sidewalk grade has been revised for positive drainage.

- Sheet C-4.0- It appears that drainage will pond in a flat area on the south side of the proposed berm before it will head west. Please revise grades here for positive drainage. Comment addressed. Grading has been revised for positive drainage.
- 15. Sheet C-5.0- We note that there are several grades shown on this sheet that do not match the grading plan. Example: Grade 1029.50 adjacent to topsoil stockpile does not match grade of 1029.70 shown on Sheet C-4.0. Please double check and revise grades on the SESC plan such that they match those on Sheet C-4.0. Comment addressed. Grades on SESC plan now appear consistent with Sheet C-4.0.

# Stormwater Management

- Sheet C-4.0- Please remove the ridge lines that are going through the buildings and only show ridge lines for the drive areas. Comment partially addressed. Ridge lines through buildings have now been removed; however, on Sheet C-4.0, provide ridge lines at the following locations: 1) Between LB6 and LB7; 2) Between LB14 and LB15; 3) Between LB11 and LB12. Comment addressed. Ridge lines for the above locations are now shown.
- Sheet C-7.0- The following pipe segments do not match Sheet C-6.0 in terms of footage, slope, or both. Please revise: 1) ES1-LB2; 2) LB4-MH5; 3) MH5-LB6; 4) LB6-LB7; 5) LB8-LB9; 6) LB2-LB10; 7) LB10-LB11; 8) LB11-LB12; 9) MH5-LB17; 10) LB13-LB14; 11) LB14-LB15. Comment partially addressed. Footages and slopes have been adjusted and now match with the exception of LB2-ES1. Comment partially addressed. LB2-ES1 footage and slope now match; however, it now appears that the footage for LB3-LB-2 was adjusted and now does not match between Sheets C-6.0 and C-7.0.
- 3. There are two (2) Sheet C-6.0s attached to both the paper version and electronic version of the plan. Both of these sheets have the same revision dates; however, the information on these sheets regarding storm sewer rims, etc. differ between the two sheets. The second sheet C-6.0 appears to be the correct sheet, and this is the sheet that we reviewed and used to compare the storm sewer profiles with. <u>Any references to Sheet C-6.0 within the Stormwater Management comments will be in</u> <u>reference to the second Sheet C-6.0.</u> Comment addressed.



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- Sheet C-6.0- Detention/Infiltration Calculations- Average Infiltration Area (At) LF of storm pipe is incorrect; It should be 1008 LF. We also calculate 1010 LF based on given footages on Sheet C-6.0. Please verify. Comment addressed. LF of storm pipe has been corrected.
- 5. Sheet C-7.0- The following rim structures do not match those shown on Sheet C-6.0: LB2, LB3, LB4, MH5, and LB17. Comment addressed. Rim elevations now match between sheets.
- 6. Sheet C-7.0- LB8-Rim elevation does not match Sheets C-4.0 and C-6.0. Comment addressed. Rim elevation now matches.
- 7. Sheet C-7.0-Add 12" INV.23.65 to MH5. Comment addressed. Invert has been added.

# Stormwater Maintenance Agreement

- 1. Page 1 of the agreement is undated. Please complete.
- Exhibits A and B are missing from the submitted document. Exhibit B shall be a metes and bounds description of the storm sewer easements as well as a metes and bounds sketch of the easements. Both exhibits shall be signed and sealed by a registered Professional Surveyor.

# **Required Permits and Approvals**

The following permits and approvals will be required:

- 1. Permit from the Road Commission for all work within the White Lake Road right of way. **Permit** application review is in process.
- 2. SESC permit from OCWRC. Permit application review is in process.
- 3. Permit from Oakland County Health Department for the well. Well permit application is in process.
- 4. Permit from Oakland County Health Department for the septic tank and field. **Septic permit application is in process.**
- 5. Executed Stormwater Maintenance Agreement and exhibit. **Reviewed by our office. See above comments.**
- A temporary grading and construction easement/agreement for off-site work/ grading near/on the western property line may be required. Rescinded. Per the design engineer, no easement is needed.
- 7. An easement for construction of the sidewalk located near Coastal Parkway may be required. **Per the design engineer, no easement is required.**



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# **Recommendation**

The majority of our previous comments have been addressed. There are a few remaining comments listed above that can be addressed on the final stamping set and prior to a preconstruction meeting; the Stormwater Maintenance Agreement comments provided above will also be required to be addressed prior to a preconstruction meeting. In addition, per our Preliminary Site Plan Watermain Comment 4 above, the signed Water Supply Agreement shall be required to be provided prior to a preconstruction meeting.

Please contact our office should you have any questions.

Sincerely,

**DLZ** Michigan

M Leve

Michael Leuffgen, P.E. Department Manager

Victoria Loemker, P.E. Senior Engineer

Cc: Andrew Littman, Community Development, via email Matteo Passalacqua, Carlisle Wortman, via email Hannah Kennedy- Galley, Community Development, via email Aaron Potter, DPS Director, White Lake Township, via email Nick Spencer, Building Official, White Lake Township via email Jason Hanifen, Fire Marshall, White Lake Township, via email

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117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

October 3<sup>rd</sup>, 2024

# Revised Final Site Plan Review for Special Land Use for White Lake Charter Township, Michigan

Applicant:	Ginko Investment, LLC
Project Name:	Ginko Self Storage
Second Revised Plan Date:	September 6 <sup>th</sup> , 2024
First Revised Plan Date:	July 25 <sup>th</sup> , 2024
<b>Original Plan Date:</b>	April 26 <sup>th</sup> , 2024
Location:	Southwest of White Lake Road and Andersonville Road intersection Parcel ID: 12-01-127-004
Action Requested: Review of revised final site plan (Revision #2)	

# **PROJECT NARRATIVE**

The applicant is requesting final site plan approval for a new self-storage facility, which is a special land use in the LM Light Manufacturing zoning district. Special land use approval was granted at the February 1<sup>st</sup>, 2024 Planning Commission meeting. Preliminary site plan approval was granted February 20<sup>th</sup>, 2024. The proposed project site is currently vacant.

The purpose of final site plan review is to determine if the proposed use and site are consistent with Township ordinances and other applicable county, state, and federal laws and regulations and to identify reasonable conditions that may be necessary to mitigate potential negative impacts to surrounding properties and the community.

The Planning Commission is the review and approval authority for special land uses. Preliminary site plans are reviewed by the Planning Commission with recommendations then provided to the Township Board for approval, approval with conditions or denial. Final site plan review and approval is conducted solely by the Planning Commission.

Revised Final Site Plan Review (Revision 2) October 3, 2024

This review focuses on revised information provided by the Applicant per updated site plan drawings dated September 6<sup>th</sup>, 2024 as well as a letter provided by PEA Group and dated September 24<sup>th</sup>, 2024. The following report will review whether items to be addressed identified from the planner report dated August 9<sup>th</sup>, 2024 have been satisfied or are still outstanding. Notes provided are **blue**.

# SITE DESCRIPTION

Lot Area:	2.13 acres
Frontage:	375 feet along White Lake Road
Address:	TBD: Sheet A-1.0 indicates building address sign locations and letter height on all proposed buildings.
Current Use:	Vacant

# Aerial image of the site



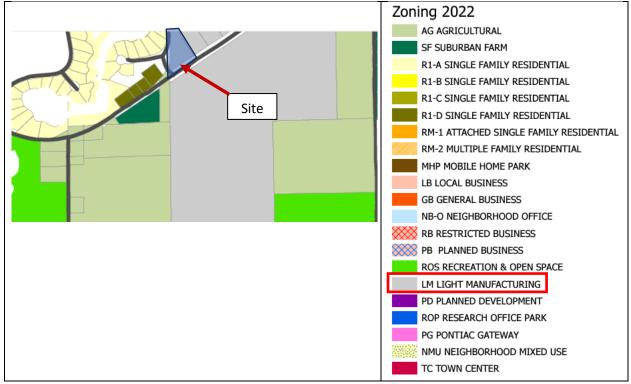
Source: NearMap May 31, 2024

Revised Final Site Plan Review (Revision 2) October 3, 2024

	North	East	South	West
Surrounding Zoning	M-1, Light Industrial (Springfield Twp.)	LM, Light Manufacturing	LM, Light Manufacturing	R1-A, Single Family Residential
Surrounding Land Uses	Vacant (Springfield Twp.)	Vacant	Light Industrial	Single Family Homes
Future Land-Use Map	Limited Industrial (Springfield Twp.)	Production / Technology	Production / Technology	Agriculture / Rural Residential

Current Zoning	M-1 Light Industrial
	The LM, Light Manufacturing District is established as a district in which the principal uses allowed are light manufacturing, fabrication, processing, wholesale activities or warehousing activities. The intent of this article is to control nuisance effects of warehousing, wholesale activities, open storage, and light industry such as smoke, noise, odor, dust, dirt, glare, vibrations, and other adverse effects so that such uses could be compatible with other nearby land uses such as commercial or residential.
	The light manufacturing district encourages uses to locate on major highways so that
	traffic generated by these uses would not utilize local residential streets.

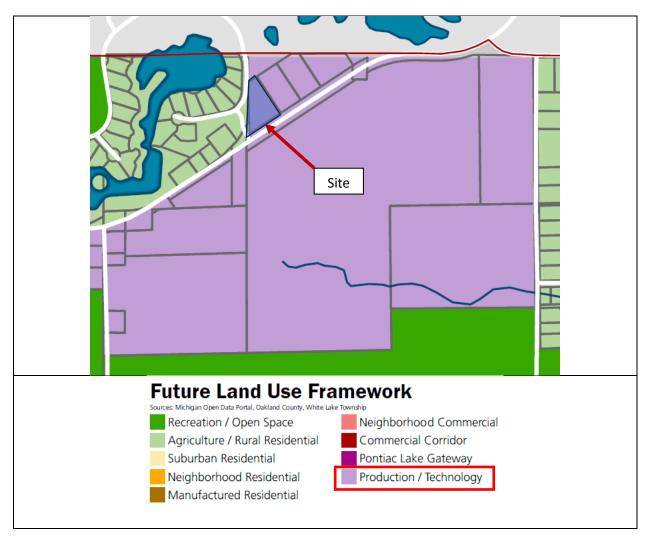
# **Current Zoning Map**



Future Land Use **Production / Technology** 

Serves community's need for research facilities and light industrial opportunities.

# Future Land Use Map



Items to be Addressed: None.

# NATURAL RESOURCES

**Topography:** Sheet C-1.0 shows existing site topography. The southern portion of the lot is relatively flat. A steep ridge exists along the mid-western border of the site. Sheet C-4.0 outlines proposed site grading. Grading is proposed throughout the central portions of the site to accommodate level surfaces for asphalt and structures. Grading along the western edge is for the purpose of smoothing in preparation for onsite septic and proposed landscaping.

<b>Ginko Self Storage</b> Revised Final Site Pla October 3, 2024	an Review (Revision 2)	
Wetlands:	Wetlands are not present on the site.	
Woodland:	Woodlands clusters are scattered throughout the site along with various scrub vegetation.	
Soils:	Updipsamments soils are predominant on the site.	
Water:	The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map indicates no floodplain is present on the site. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Wetland Map indicates a wetland is located offsite to the north.	
Itomata ha Addres	and Any sited concerns from Township Engineering for items related to grading. These	

*Items to be Addressed:* Any cited concerns from Township Engineering for items related to grading. These items appear to be addressed however we defer to Township Engineering.

# **ACCESS & CIRCULATION**

Sheet C-3.0 shows the proposed site will have exclusive access via White Lake Road. The proposed access point is an electronic gate system providing limited entry to the storage facilities via a card reader located on the western curb of the ingress/egress drive. The drive along the eastern portion of the site will be one-way heading north. All other drives are proposed as two-way.

Gate and Knox Box details have been provided on Sheets C-9.0 and C-9.1. Gate construction approval is permitted administratively by the Township.

Sheet C-3.1 outlines maneuvering capabilities for fire trucks. We defer to Township Engineering to assess the conformance of lot design and Public Safety to assess the conformance of maneuverability and accessibility for the site.

We note the placement of the access drive has been relocated approximately seventy-six (76) feet southwest along White Lake Road. The new access drive provides fifty (50) foot tapers on each side.

Section 6.4.C.i outlines standards for same-side-of-road driveway spacing. White Lake Road is forty-five (45) miles per hour in this area. Per the ordinance, the minimum distance for between drives should be three-hundred fifty (350) feet. The distance from center of Coral Parkway and center of the access drive is shown as two-hundred ninety-five (295) feet. While this is not in conformance with the standards, the applicant has stated the Road Commission of Oakland County (RCOC) requested the modification. While the Planning Commission can waive this requirement, RCOC has jurisdiction over roads and access in the Township.

We also note an access drive located on the opposite side of the road. The distance shown between these two drives is one-hundred seventy (170) feet. This meets the requirement of a minimum of one-hundred fifty (150) foot requirement.

Sheet C-3.1 provides fire truck maneuvering via the altered access drive. We defer to Township Public Safety for any cited concerns.

Item A

**Items to be Addressed**: 1) Any cited concerns from Township Engineering for items related to site traffic design. These items appear to be addressed however we defer to Township Engineering. 2.) Any cited concerns from Township Public Safety for items related to access and maneuverability. Addressed. 3.) Instructions on gate operation, both with or without power, must be added to Sheet C-9.0. Addressed.

# ESSENTIAL SERVICES & UTILITIES

Final site plan reviews require applicants to identify the location of all underground and aboveground storage tanks for such uses as fuel storage, waste old holding tanks, collection of contaminated stormwater, and similar uses. We do not anticipate the storage of hazardous or contaminated materials onsite. Methods for the storage and or management of water, sewer and storm runoff are provided below.

Sheet C-6.0 provides preliminary utility layout and information. The site will utilize well pump and septic fields. A note on the Sheet states "No adequate storm sewer, open ditch or road ditch is available for storm sewer disposal. Since soil composition is optimum and groundwater table is suitable for percolation, Township standard leaching basins and stone trench are proposed. If the system becomes restricted an overflow pipe is provided to discharge into the wetlands. A geotechnical report will be provided." We defer to the Township Engineer to determine if this proposal is adequate.

Sheet C-6.0 also provides septic calculations as well as shows the location of the septic field and well pump. A note indicates the site will connect to public water should it become available at the property.

*Items to be Addressed: Stormwater management, well pump and septic design approval by the Township Engineer.* These items appear to be addressed however we defer to Township Engineering.

# LANDSCAPING & SCREENING

Due to existing topographic features on the site as well as established mature woodlands along the western side of the proposed development, the applicant sought variances from specific screening and buffer landscape requirements in-lieu of retaining much of the western boarder's natural features as buffers from the adjacent residential development. The motion approved by the ZBA is stated below:

MOTION by Member Seiber, seconded by Member Aseltyne, to approve the variances requested by Ginko Investment, LLC (John Sutphin) from Article 5.19.D.i of the Zoning Ordinance for Parcel Number 12-01- 127-004 in order to modify the landscape and screening requirements associated with the construction of a self-storage facility. This approval will have the following conditions:

- The variances shall become effective if and when the final site plan for the development is approved by the Planning Commission.

- Approval is in accordance with the preliminary landscape plan prepared by PEA Group dated February 2, 2023 (revision date October 24, 2023).

- The westerly fence will be shortened to allow saving the two evergreen trees.

- The tree spacing along the White Lake Road right-of-way shall be reduced from 30 feet to 20 feet.

Sheet L-1.0 shows a dense array of new and existing deciduous and evergreen trees as well as numerous shrubs along the western property line. Protective fencing is shown encompassing existing trees during construction. A twenty (20) foot wide buffer is shown along White Lake Road and meets the requirements of landscape screening variance along the right of way.

Sheet L-1.0 indicates the two evergreen trees to be saved by the modified fence design.

Information provided on Sheet L-1.0 indicates irrigated portions of the site as well as a note stating irrigation plans to be provided at final site plan with rain sensors. These notes and irrigated areas are carried over from drawings dated October 24, 2023. Acceptable irrigation plans and designs should be submitted for consideration by the Planning Commission.

Sheet L-1.0 provides planting materials and sizes as well as indicates the construction of a rock retaining wall used to protect an existing mature oak tree. Based on landscaping standards for the LM district and the variances granted by the Zoning Board of Appeals, the site meets or exceeds the required plantings.

**Items to be Addressed:** 1.) ZBA meeting in which variances were granted should be corrected to March 28, 2024 as shown on Sheet C-3.0. Addressed. 2.) Tree spacing dimensions along White Lake Road should be added to Sheet L-1.0 to confirm the ZBA condition from the March 28, 2024 meeting. Addressed 3.) Sheet L-1.0 should be updated to align with fence placement shown on Sheet C-3.0 and contain a note indicating the evergreen trees to be saved by this modification. Addressed 4.) A note should be added Sheet L-1.0 indicating why the decorative fence is not proposed to encompass the site with exception of the portion being shortened to preserve two existing evergreen trees. Addressed 5.) Acceptable irrigation plans and designs should be submitted for consideration by the Planning Commission and/or Building Official. Addressed. 6.) The Planning Commission will need to determine if the non-obscuring fencing is acceptable. Comment remains as a notation.

# **LIGHTING & NOISE**

# **Lighting Requirements**

Sheet #24-29620 V1 provides proposed pole and building mounted lighting fixtures as well as a photometric layout for the site. Below is a review of lighting information provided as it relates to the requirements outlined in Section 5.18.G of the zoning ordinance.

i. The Planning Commission or Building Official shall determine if the proposed light levels meet the minimum necessary to provide safe and secure illumination. We note exterior lighting ranges exceed various portions of the property lines. The most prevalent area is along the eastern lot line abutting a vacant light industrial lot. Light ranges exceeding property lines shared with residential uses is sporadic and not in excess of 0.1 foot candle.

# Revised Final Site Plan Review (Revision 2) October 3, 2024

- ii. The specification sheets for pole and building mounted light fixtures are provided. The models proposed appear to have a cut-off angle of less than 90 degrees, however that specific information is not provided. A note should be added to Sheet #24-29620 V1 indicating the cut-off angle of the proposed fixtures.
- iii. All proposed light poles are more than five (5) feet from property lines and are directed away from neighboring sites. The current footcandle measurements near the main entrance range from one point one (1.1) to six point six (6.6) footcandles. We do note that this is the main gated entrance to the facility where drivers will likely need to stop, input necessary security credentials, then pass through the gate. It is reasonable to expect brighter lighting at these areas. All light ranges are below the zero point two (0.2) footcandles requirement along all neighboring residential zoned and used lots.
- iv. With the exception of the main entrance lighting cited above, site glare does not appear to be an issue.
- v. Both proposed fixtures are LED which meet the intent of utilizing high efficiency lighting.
- vi. A note should be added to Sheet #24-296220 V1 indicating that all site lighting will be stationary and will not flicker, flash or oscillate.
- vii. The site plan indicates that all pole and building mounted lighting is at or below the maximum allowed height for mounting.
- viii. Table on Sheet #24-29620 V1 shows the varying footcandle averages over specific areas of the site. The average footcandles standard for the entire site is .5 footcandles which is the maximum permissible for LM zones. The average footcandle at the entryway is 1.6 footcandles and the average footcandle for site drive lanes is 1.7 footcandles. These exceed the one (1) footcandle maximum requirement however we note that no footcandles are present at property lines with the exception of the entry drive. The Planning Commission may modify these requirements to address nearby residential developments and/or driver visibility. We would recommend a waiver to allow the proposed lighting as is to promote the safety of drivers at the main entrance and within the site during evening hours.
- ix. No flood lighting is proposed.
- x. Sheet C-3.0 indicates a proposed ground sign. No sign specific lighting is proposed on Sheet #24-29620 V1.

# **Noise Requirements**

No audio equipment has been proposed by the applicant. Should future audible systems be required, an application to the Township for review shall be required.

**Items to be Addressed:** 1.) Planning Commission consideration of allowing current footcandle lighting levels per onsite safety. Comment remains as notation. 2.) A note should be added to Sheet #24-29620 V1 indicating the cut-off angle of the proposed fixtures. Outstanding. 3.) A note should be added to Sheet #24-

Revised Final Site Plan Review (Revision 2) October 3, 2024 296220 V1 indicating that all site lighting will be stationary and will not flicker, flash or oscillate. Addressed.

# SIGNAGE

Proposed traffic and parking signage consists of handicap "Reserved" and "No" parking signs. Sheet C-9.0 provides the general dimensions and design of these signs. "Reserved Parking" and "Van Accessible" signs are placed facing parking spaces designated for barrier free access. "No Parking" signs are not shown on the plan however a note indicates that "No Parking – Fire Lane" signs shall be posted along all fire lanes at 100-foot intervals or as directed by the fire official." An additional note states "Placement of No Parking Fire Lane signs shall be evaluated and installed prior to certificated of occupancy being issued."

Sheet C-3.0 shows the proposed location of a four (4) foot by five (5) foot ground sign. A basic elevation of the sign is shown on Sheet C-9.1. Signs are reviewed and permitted administratively by the Township however applications may be presented to the Planning Commission for review. The proposed monument sign currently meets dimensional standards for the LM district.

*Items to be Addressed: Proposed monument sign will require separate permitting per Township review standards.* Comment remains as a notation.

# **ARCHITECTURE & LAYOUT**

No large equipment is proposed for the self-storage use. We note final site plan applications shall include information regarding where large equipment or machinery is to be installed as part of the development if proposed. The location, type of horsepower, fuel, dimension, noise, vibration and emission levels, and other data of all such equipment or machinery shall be required should the site proposed such equipment in the future.

Architectural information required at final site plan review includes the types of facing materials to be used on structures. Sheet A-1.0 indicates all elevations will be faced with metal panels, steel roll up doors, and common brick with limestone caps. The sheet provides a note stating *"A material sample board shall be provided for the Planning Commission review. Colored elevations shall be provided as part of the final site plan review"*. Colored elevations are included in the final stie plan.

**Items to be Addressed:** 1.) Exterior construction material sample boards and colored elevations shall be provided for Building Official and Planning Commission review. Comment remains as a notation. 2.) Roofing materials and colors should be shown on color elevations as well as Sheet A-1.0. Addressed.

# **SPECIAL LAND USE**

Section 6.10 provides for general standards applicable to all special land uses. The applicant was granted special land use approval February 1<sup>st</sup>, 2024 by the Planning Commission. A recommended condition of

Revised Final Site Plan Review (Revision 2) October 3, 2024 that approval was that 24-hour self -storage shall be prohibited; the self-storage facility shall be closed daily between 10:00PM and 6:00AM. This note has been added to Sheet C-3.0 in the general notes section.

While approval has already been granted, a review the ordinance criteria, most recent application materials, and ZBA approvals indicate the proposal conforms to the requirements and intent of the special land use general standards.

Items to be Addressed: None.

# **SUMMARY**

The revised final site plan is substantially complete, except as otherwise noted in this report. We recommend approval of the final site plan with the conditions offered below. Additional potential conditions could also be identified at the Planning Commission meeting.

# Waivers / Modifications / Determinations

1. Planning Commission consideration of allowing current footcandle lighting levels per onsite safety.

#### **Recommended Conditions**

- 1. Any cited concerns from Township Engineering are addressed.
- 2. Any cited concerns from Township Public Safety are addressed.
- 3. A note should be added to Sheet #24-29620 V1 indicating the cut-off angle of the proposed fixtures.
- 4. Exterior construction material sample boards and colored elevations shall be provided for Building Official and Planning Commission review.

Respectfully,

CÁRLISLE/WORTMAN ASSÓC., INC. Matteo Passalacqua Community Planner



**Fire Department** Charter Township of White Lake 7420 Highland Road White Lake, MI 48383 Office (248) 698-3993 www.whitelaketwp.com/fire

# Site / Construction Plan Review

To: Sean O'Neil, Planning Department Director

Date: 10/08/2024

Project: GINKO SELF STORAGE

Job #: 2002-248A

#### Date on Plans: 09/06/2024

The Fire Department has the following comments with regards to the 8<sup>th</sup> review of preliminary site plans for the project known as Ginko Self Storage.

- 1. The access drive and parking lot shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all weather driving capabilities.
- 2. The access drive shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except for approved security gates in accordance with section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches.
- 3. The required turning radius shall accommodate the largest Fire Department apparatus (40') and provide a turn radius profile showing apparatus movement on future plans. Needs to be shown throughout the site plan. (Needs to show movement from the middle drive between building #2 & #3 moving North and turning to the West towards building #1).
- 4. The angle of approach/Departure to and from White Lake roads shall not exceed 8 degrees.
- 5. Placement of "No Parking Fire Lane" Signs will be evaluated and installed prior to Certificate of Occupancy being issued.
- 6. The use of traffic calming devices shall be prohibited unless approved by the fire code official. Plans <u>must</u> be submitted for approval if traffic calming devices are being considered for use.
- 7. Plans for proposed access gate <u>must</u> be submitted to the fire code official for approval. Please provide Fire Dept. operation instructions as well as how to operate the gate during the times of power outages. Power gates must have 24hr emergency access with battery backup and an emergency bypass if the battery becomes weak or dead.
- 8. 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.

# The fire Dept. has no further comments at this time

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.

# **GINKO SELF STORAGE** WHITE LAKE ROAD WHITE LAKE TOWNSHIP, OAKLAND COUNTY, MICHIGAN

# PERMIT / APPROVAL SUMMARY

DATE SUBMITTED DATE APPROVED 2/2/2023

PERMIT / APPROVAL

SPA AND SLU APPROVAL

# R.C.O.C. NOTE:

- . CALL INSPECTOR OR PERMIT SUPERVISOR BEFORE BEGINNING ANY WORK IN THE R.O.W.
- "PROPER SIGNING" IS REQUIRED BEFORE ANY WORK IN THE R.O.W. IS STARTED.
- LANE CLOSURES RESTRICTED TO 9AM-3PM (MONDAY-FRIDA)
- 4. FLAG PERSON REQUIRED FOR TEMPORARY ONE LANE ROADS
- 5. MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES.
- 5. HAND DIG AROUND ALL UTILITIES.
- KEEP ROADS CLEAN OF DIRT AND DEBRIS.
- B. REMOVE OR RELOCATE FIXED OBJECTS PRIOR TO EXCAVATION
- 9. FIXED OBJECTS TO BE A MINIMUM 6 FEET OF BACK OF CURB OR 12 FEET OF EDGE OF PAVEMENT.

10. PROJECTS EXCEEDING 3-DAYS REQUIRE GROUND MOUNTED SIGNS PER MDOT SSC/SEC 812.03

# WHITE LAKE TOWNSHIP STANDARD SITE CONSTRUCTION NOTES

- 1. All construction shall be in accordance with the current standards and specifications of White Lake Charter Township.
- 2. The developer shall contact the Township Planning Department at (248) 698-3300 to schedule a pre-construction meeting. The developer's prime site contractor shall attend. A copy of all permits must be submitted to the Planning Department prior to scheduling the meeting.
- The contractor shall contact the Township Engineer at (248) 681-7800 48 hours prior to the beginning of construction. The contractor shall keep the inspector appraised of the need for inspection an a day by day basis. Lacking specific scheduling with the inspector, the contractor shall give 48 hours notice to the Township Engineer prior to re-commencing work requiring inspection. Failure to inform the inspector or the Township Engineer of a work cancellation may result in a one half day inspection charge to the developer. The contractor shall call (248)844-5400 to schedule sanitary sewer main line inspection.
- 4. All watermain or sanitary sewer work will require full time inspection. Full time inspection will generally be required for underground storm sewer construction, concrete curbing and paving operations. Site grading and detention basin construction will generally be inspected on an intermittent basis.
- The contractor shall contact MISS DIG at (800) 482-7171 72 hours in advance of 5. construction to have existing underground facilities located. Contractor shall contact the White Lake Township Water Department at (248) 698-3300 ext 165 separately 72 hours in advance of construction to have water utilities located.

# DESIGN TEAM

# OWNER

GINKO INVESTMENT COMPANY, LLC 2438 NORTH ROCHESTER ROAD OAKLAND TOWNSHIP , MICHIGAN 48363 CONTACT: JOHN SUTPHIN PHONE: (248) 880-8093 EMAIL: JSUTPHIN@USA.NET

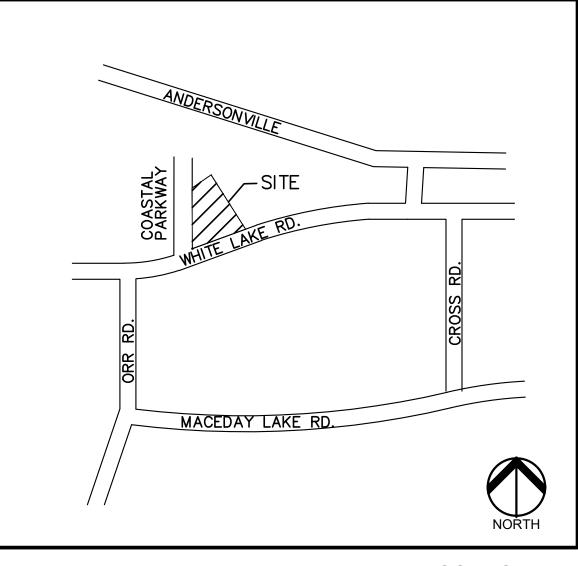
# DEVELOPER

MICHAEL GRASSER 2276 GARLAND AVENUE SYLVAN LAKE, MICHIGAN 48320 PHONE: (248) 505-4744 EMAIL: BOCCEMG@ICLOUD.COM CIVIL ENGINEER

PEA GROUP 1849 POND RUN AUBURN HILLS, MICHIGAN 48326 CONTACT: JAMES P. BUTLER, PE PHONE: 844.813.2949 EMAIL: JBUTLER@PEAGROUP.COM

LANDSCAPE ARCHITECT

PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM FINAL SITE PLAN / ENGINEERING APPROVAL



LOCATION MAP NO SCALE

# $\mathsf{P} = \bigwedge$ GROUP

INDEX OF DRAWINGS		
NUMBER	TITLE	
	COVER SHEET	
C-1.0	TOPOGRAPHIC SURVEY	
C-2.0	DEMOLITION PLAN	
C-3.0	SITE PLAN	
C-3.1	FIRE TRUCK TURNING MOVEMENTS	
C-4.0	GRADING PLAN	
C-5.0	SESC PLAN	
C-6.0	UTILITY PLAN	
C-7.0	UTILITY PROFILES	
C-9.0	NOTES AND DETAILS	
C-9.1	DETAILS	
1 OF 1	WHITE LAKE CHARTER TWP STORM SEWER STD. DETAILS	
1 OF 1	OAKLAND COUNTY SESC DETAILS	
L-1.0	LANDSCAPE PLAN	
L-1.1	LANDSCAPE DETAILS	
I-1.0	IRRIGATION PLAN	
A-1.0	PRELIMINARY FLOOR PLAN AND BUILDING ELEVATIONS	
V-1	PHOTOMETRIC PLAN	

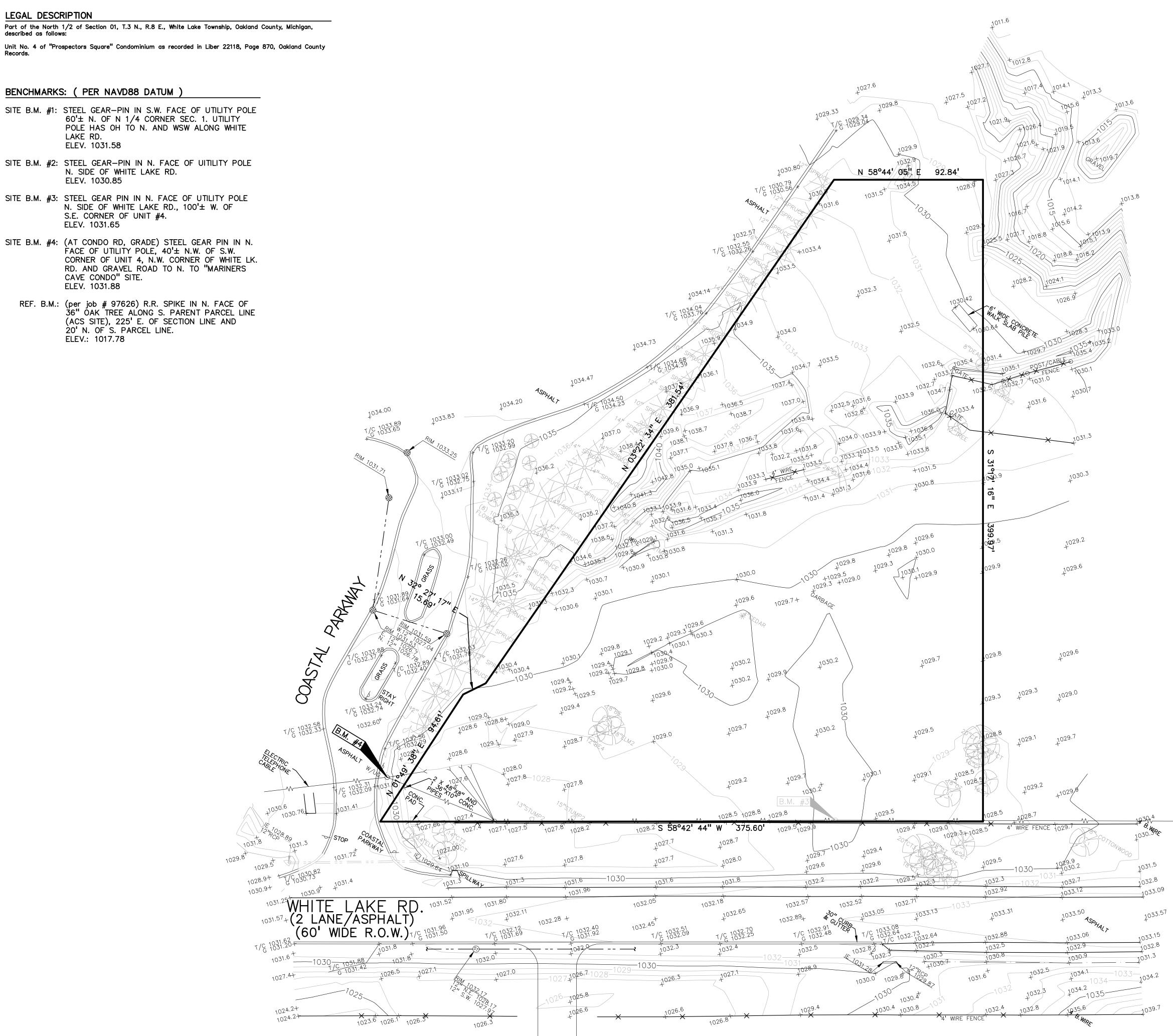
REVISIONS	3
DESCRIPTION	DATE
PER AGENCIES COMMENTS	5/30/2023
PER AGENCIES COMMENTS	6/29/2023
PER AGENCIES COMMENTS	8/4/2023
PER AGENCIES COMMENTS	9/22/2023
PER AGENCIES COMMENTS	10/24/2023
PER AGENCIES COMMENTS	4/26/2024
PER AGENCIES COMMENTS	7/25/2024
PER AGENCIES COMMENTS	9/6/2024



Part of the North 1/2 of Section 01, T.3 N., R.8 E., White Lake Township, Oakland County, Michigan, described as follows:

# BENCHMARKS: ( PER NAVD88 DATUM )

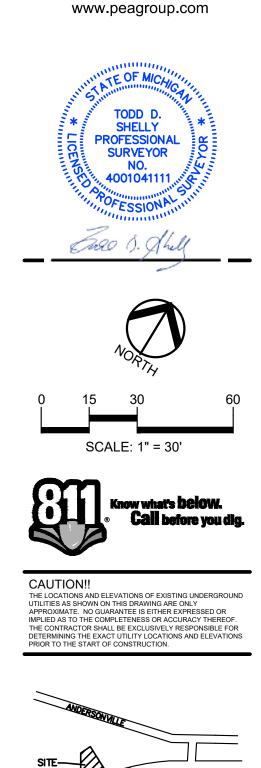
- SITE B.M. #1: STEEL GEAR-PIN IN S.W. FACE OF UTILITY POLE  $60'\pm$  N. OF N 1/4 CORNER SEC. 1. UTILITY POLE HAS OH TO N. AND WSW ALONG WHITE LAKE RD. ELEV. 1031.58
- SITE B.M. #2: STEEL GEAR-PIN IN N. FACE OF UITILITY POLE N. SIDE OF WHITE LAKE RD. ELEV. 1030.85
- SITE B.M. #3: STEEL GEAR PIN IN N. FACE OF UTILITY POLE N. SIDE OF WHITE LAKE RD.,  $100'\pm$  W. OF S.E. CORNER OF UNIT #4. ELEV. 1031.65
- SITE B.M. #4: (AT CONDO RD, GRADE) STEEL GEAR PIN IN N. FACE OF UTILITY POLE, 40<sup>+</sup>± N.W. OF S.W. CORNER OF UNIT 4, N.W. CORNER OF WHITE LK. RD. AND GRAVEL ROAD TO N. TO "MARINERS CAVE CONDO" SITE. ELEV. 1031.88
- REF. B.M.: (per job # 97626) R.R. SPIKE IN N. FACE OF 36" OAK TREE ALONG S. PARENT PARCEL LINE (ACS SITE), 225' E. OF SECTION LINE AND 20' N. OF S. PARCEL LINE. ELEV.: 1017.78







-0H-ELEC	EX. OH. ELEC, POLE & GUY WIRE
-UG-CATV	EX. U.G. CABLE TV & PEDESTAL
-UG-СОММ⊠-①-	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOL
-UG-ELEC-E-E	EX. U.G. ELEC, MANHOLE, METER & HANDHOLE
	EX. GAS LINE
G GAS	EX. GAS VALVE & GAS LINE MARKER
T II	EX. TRANSFORMER & IRRIGATION VALVE
	EX. WATER MAIN
∀ ~ W	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
⊗ %	EX. WATER VALVE BOX & SHUTOFF
	EX. SANITARY SEWER
© S	EX. SANITARY CLEANOUT & MANHOLE
©	EX. COMBINED SEWER MANHOLE
	EX. STORM SEWER
© §7	EX. CLEANOUT & MANHOLE
	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
O <sup>Y.D.</sup> ®	EX. YARD DRAIN & ROOF DRAIN
?	EX. UNIDENTIFIED STRUCTURE
⊠ → *	EX. MAILBOX, SIGN & LIGHTPOLE
——————————————————————————————————————	EX. FENCE
• <u>•</u> •••	EX. GUARD RAIL
, 0 <sup>00</sup>	EX. SPOT ELEVATION
<b>*</b> 670	EX. CONTOUR
ىف ىف ىف ىغد يغد	EX. WETLAND
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ø ø	NAIL FOUND / NAIL & CAP SET
Ø	BRASS PLUG SET
۲	MONUMENT FOUND / SET
🕒	SECTION CORNER FOUND
RMC	RECORDED / MEASURED / CALCULATED



**ק** 

GROUP

t: 844.813.2949



PER AGENCIES COMMENTS	08/04/23
PER AGENCIES COMMENTS	09/22/23
PER AGENCIES COMMENTS	10/24/23
PER AGENCIES COMMENTS	04/26/24
PER AGENCIES COMMENTS	07/25/24
PER AGENCIES COMMENTS	09/06/24

DRAWING TITLE TOPOGRAPHIC SURVEY

2002-248A

JPB SWS

SWS

ORIGINAL ISSUE DATE: FEBRUARY 2, 2023

PEA JOB NO.

DRAWING NUMBER:

C-1.0

P.M.

DN.

DES.

REVISIONS	
PER AGENCIES COMMENTS	05/30/23
PER AGENCIES COMMENTS	06/29/23
PER AGENCIES COMMENTS	08/04/23
PER AGENCIES COMMENTS	09/22/23
PER AGENCIES COMMENTS	10/24/23
PER AGENCIES COMMENTS	04/26/24
PER AGENCIES COMMENTS	07/25/24
PER AGENCIES COMMENTS	09/06/24

GINKO SELF STORAGE

PROJECT TITLE

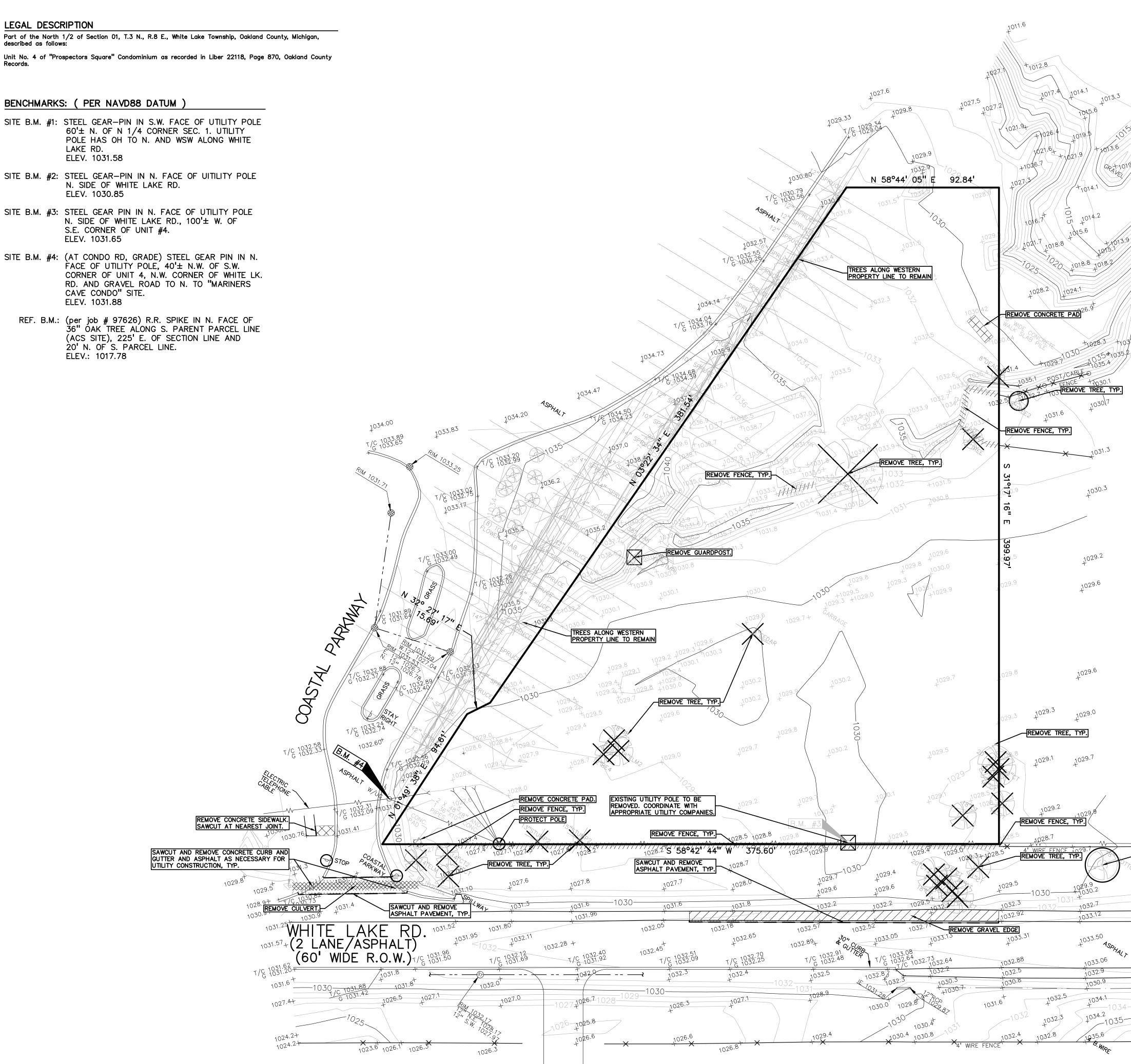




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# GENERAL DEMOLITION NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:

- ALL MATERIAL TO BE REMOVED, WHETHER SPECIFICALLY NOTED IN THE PLANS OR NOT, SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF OFF-SITE IN A LEGAL MANNER. NO ON-SITE BURY OR BURN PITS SHALL BE ALLOWED.
- ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
- STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
- SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT WILL NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF THE DEMOLITION THAT WILL BE REQUIRED PRIOR TO SUBMITTING A BID.
- REMOVE ALL STRUCTURES DESIGNATED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, FLOOR SLABS, UNDERGROUND UTILITIES, CONCRETE, ASPHALT, TREES, ETC.
- 6. REFER TO SHEET C-1.0 FOR TREE PROTECTION DETAILS. THE CONTRACTOR SHALL, AS A MINIMUM, PROVIDE TREE PROTECTION
- FENCING AROUND EXISTING TREES TO BE SAVED THAT ARE WITHIN 15 FEET OF CONSTRUCTION ACTIVITIES AND AS INDICATED IN THE PLANS OR PER LOCAL AGENCY REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL, STREET SWEEPING AND HOURS OF OPERATION IN ACCORDANCE WITH THE LOCAL CODES.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, MARKINGS, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES TO PROTECT THE WORK ZONE AND SAFELY MAINTAIN TRAFFIC PER AGENCY REQUIREMENTS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 0. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO CONFIRM THAT UTILITY LEADS HAVE BEEN TAKEN OUT OF SERVICE PRIOR TO DEMOLITION.
- 1. ALL BUILDING GAS LEADS, METERS AND ASSOCIATED EQUIPMENT SHALL BE REMOVED AS SHOWN ON THE PLANS. COORDINATE ALL ASSOCIATED WORK WITH THE APPROPRIATE UTILITY COMPANY.
- 2. REMOVE ALL OVERHEAD AND UNDERGROUND ELECTRICAL LINES WITHIN THE AREA OF CONSTRUCTION AS SHOWN ON THE PLANS. COORDINATE SHUTDOWNS AND REMOVALS WITH ELECTRICAL SERVICE PROVIDER OR THE APPROPRIATE UTILITY COMPANY. (NOTE: PHONE AND CABLE T.V. SERVICES MAY ALSO BE LOCATED ON OVERHEAD LINES.)
- 13. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF SIGNS AND SUPPORTS WITHIN THE WORK AREA, AS NECESSARY TO FACILITATE CONSTRUCTION. SIGNS SHALL BE PROTECTED OR STOCKPILED FOR REUSE AS SPECIFIED IN THE PLANS OR AS REQUIRED BY THE AGENCY OF JURISDICTION. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SIGNS AND SUPPORTS AT NO ADDITIONAL COST TO THE OWNER.
- 4. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

DEMOLITION LEGEND: ITEM TO BE PROTECTED ITEM TO BE REMOVED

CURB/FENCE REMOVAL

CONCRETE PAVEMENT AND SIDEWALK REMOVAL

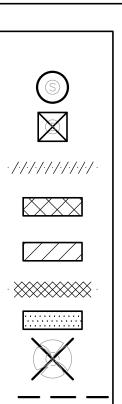
AREA OR ITEMS TO BE REMOVED

UTILITY REMOVAL

ASPHALT REMOVAL

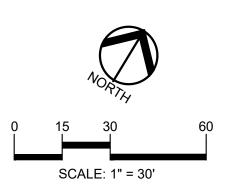
TREE REMOVAL

SAWCUT LINE



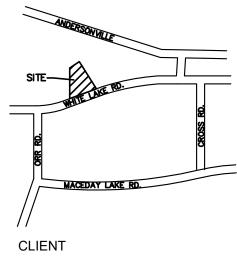








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PROJECT TITLE

GINKO SELF STORAGE

# REVISIONS PER AGENCIES COMMENTS 05/30/23 PER AGENCIES COMMENTS 06/29/23 PER AGENCIES COMMENTS 08/04/23 PER AGENCIES COMMENTS 09/22/2 PER AGENCIES COMMENTS 10/24/23 PER AGENCIES COMMENTS 04/26/24 PER AGENCIES COMMENTS 07/25/24 PER AGENCIES COMMENTS 09/06/24

ORIGINAL ISSUE DATE:

**FEBRUARY 2, 2023** DRAWING TITLE

DEMOLITION PLAN

PEA JOB NO.	2002-248A
P.M.	JPB
DN.	SWS
DES.	SWS
DRAWING NUMBER	<b>२</b> :

C-2.0

103914

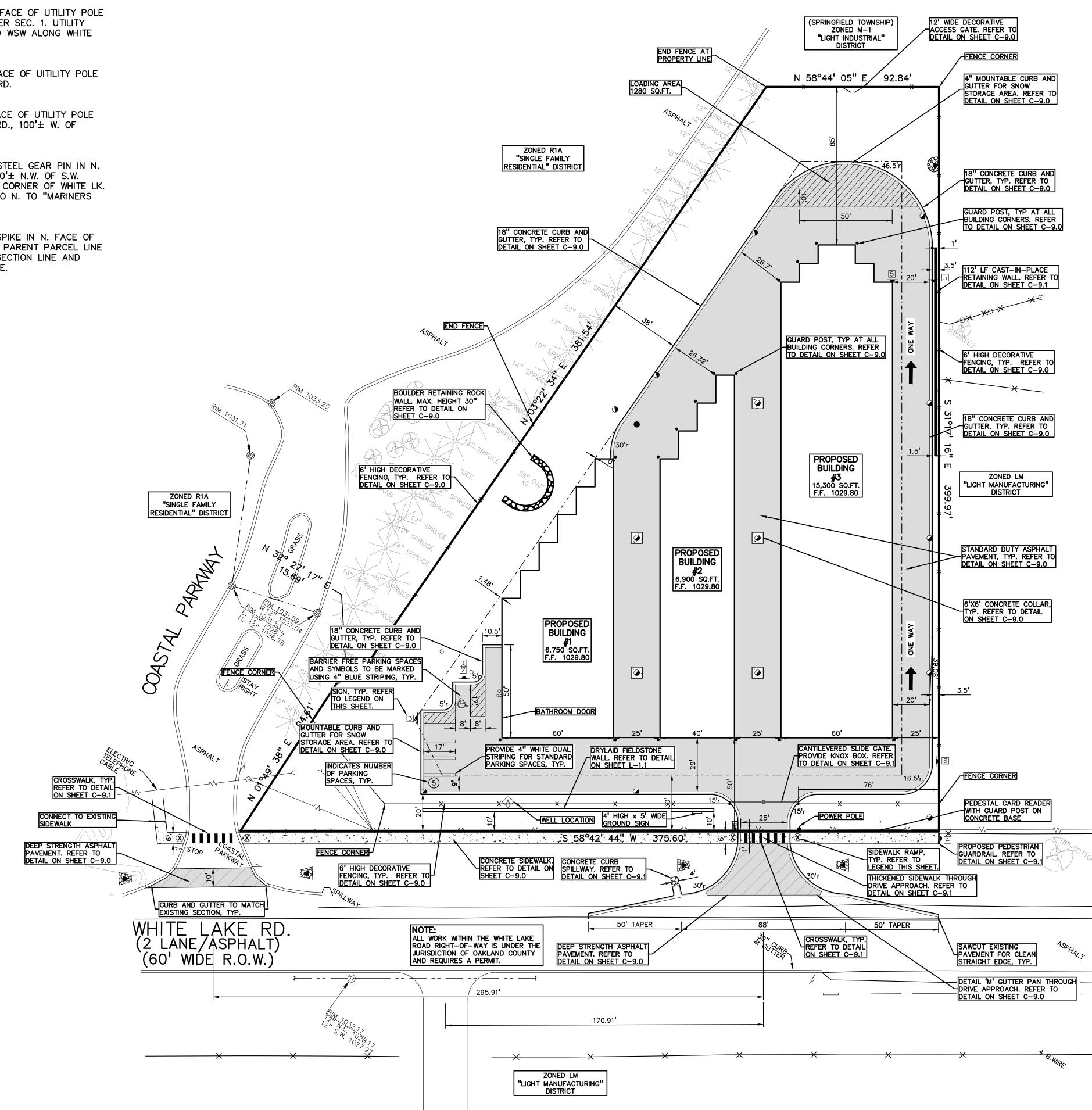
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013.8

Part of the North 1/2 of Section 01, T.3 N., R.8 E., White Lake Township, Oakland County, Michigan, described as follows: Unit No. 4 of "Prospectors Square" Condominium as recorded in Liber 22118, Page 870, Oakland County

# BENCHMARKS: ( PER NAVD88 DATUM )

- SITE B.M. #1: STEEL GEAR-PIN IN S.W. FACE OF UTILITY POLE 60'± N. OF N 1/4 CORNER SEC. 1. UTILITY POLE HAS OH TO N. AND WSW ALONG WHITE LAKE RD. ELEV. 1031.58
- SITE B.M. #2: STEEL GEAR-PIN IN N. FACE OF UITILITY POLE N. SIDE OF WHITE LAKE RD. ELEV. 1030.85
- SITE B.M. #3: STEEL GEAR PIN IN N. FACE OF UTILITY POLE N. SIDE OF WHITE LAKE RD., 100'± W. OF S.E. CORNER OF UNIT #4. ELEV. 1031.65
- SITE B.M. #4: (AT CONDO RD, GRADE) STEEL GEAR PIN IN N. FACE OF UTILITY POLE, 40'± N.W. OF S.W. CORNER OF UNIT 4, N.W. CORNER OF WHITE LK. RD. AND GRAVEL ROAD TO N. TO "MARINERS CAVE CONDO" SITE. ELEV. 1031.88
- REF. B.M.: (per job # 97626) R.R. SPIKE IN N. FACE OF 36" OAK TREE ALONG S. PARENT PARCEL LINE (ACS SITE), 225' E. OF SECTION LINE AND 20' N. OF S. PARCEL LINE. ELEV.: 1017.78



SITE DATA TABLE:						
PARCEL NUMBER: 12-01-127-004	PARCEL NUMBER: 12-01-127-004					
SITE AREA: 2.14 ACRES (93,090 S	SQ.FT.) NET A	ND GROSS				
ZONING: LM - LIGHT MANUFACTURIN	1G					
PROPOSED USE: COMMERCIAL (28,950	0 SF)					
BUILDING INFORMATION: MAXIMUM ALLOWABLE BUILDING HEIGHT = 40 FEET (2 STORIES) PROPOSED BUILDING HEIGHT = 1 STORY						
BUILDING FOOTPRINT AREA = 28,950	SQ.FT.					
BUILDING LOT COVERAGE = 31.10%						
SETBACK REQUIREMENTS:REQUIRED:PROPOSED:FRONT:30'50'WEST SIDE:20'38'EAST SIDE:20'25'REAR:40'84.99'						
PARKING CALCULATIONS: COMMERCIAL = MINIMUM 4 PER 1000 SF OF OFFICE + ONE PER EMPLOYEE. TOTAL RETAIL PARKING REQUIRED = 5 SPACES						
TOTAL PROPOSED PARKING SPACES =	= 5 SPACES I	NC. 1 H/C SPACES				
LOADING CALCULATIONS: LOADING REQUIRED = 0 TO 20,000 SQ.FT. + 1 SPACE FOR EACH 20,000 SQ.FT. IN EXCESS OF 20,000 SQ.FT. = 2 SPACES ( $10' \times 50'$ ) OR 1000 SQ.FT. LOADING PROVIDED = 1280 SQ.FT.						
SITE SOILS INFORMATION: ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR OAKLAND COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:						
50D - UNDIPSAMMENTS ROLLING TO STEEP						

# GENERAL NOTES:

- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
- 1. ALL DIMENSIONS SHOWN ARE TO FACE OF GUTTER PAN, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
- 2. 'NO PARKING-FIRE LANE' SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
- REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.
   IF A DUMPSTER IS PROPOSED IN THE FUTURE, AN AMENDED SITE PLAN SHALL BE SUBMITTED FOR ADMINISTRATIVE REVIEW TO ENSURE THE LOCATION AND SCREENING COMPLY WITH THE ZONING ORDINANCE STANDARDS.
- 5. 24 HOUR SELF STORAGE SHALL BE PROHIBITED; THE SELF STORAGE FACILITY SHALL BE CLOSED DAILY BETWEEN 10:00 P.M. AND 6:00 A.M..

# FIRE DEPARTMENT NOTES:

- 1. THE ACCESS DRIVE AND PARKING LOT SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE SURFACES SO AS TO PROVIDE ALL WEATHER DRIVING CAPABILITIES.
- 2. THE ACCESS DRIVE SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAT 20 FEET, EXCLUSIVE OF SHOULDERS, EXCEPT FOR APPROVED SECURITY GATES IN ACCORDANCE WITH SECTION 503.6, AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF 13.5 FEET..
- 3. PLACEMENT OF "NO PARKING FIRE LANE" SIGNS WILL BE EVALUATED AND INSTALLED PRIOR TO CERTIFICATED OF OCCUPANCY BEING ISSUED.
- 4. THE USE OF TRAFFIC CALMING DEVICES SHALL BE PROHIBITED UNLESS APPROVED BY THE FIRE CODE OFFICIAL. PLANS MUST BE SUBMITTED FOR APPROVAL IF TRAFFIC CALMING DEVICES ARE BEING CONSIDERED FOR USE.
- 5. PROPOSED GATE PLANS MUST BE SUBMITTED TO THE FIRE CODE OFFICIAL FOR APPROVAL
- VARIANCES GRANTED BY ZBA ON 03-28-2024
- 1. APPROVAL TO ELIMINATE THE REQUIREMENT FOR THE INSTALLATION OF A 6 FOOT HIGH BERM, OR A 3 FOOT HIGH BERM AND A 6 FOOT HIGH MASONRY SCREEN WALL ALONG THE WEST PROPERTY LINE.
- 2. APPROVAL TO INSTALL A 20 FOOT GREENBELT IN LIEU OF A 38 FOOT WIDE EXTENSIVE LAND FORM BUFFER ALONG THE WHITE LAKE ROAD RIGHT-OF-WAY.

LEGEND:	
STD HEAVY R.O.W. DUTY DUTY ONLY	CONCRETE PAVEMENT
STD HEAVY DEEP DUTY DUTY STRENGTH	ASPHALT PAVEMENT
	GRAVEL
ىغد يىد يەد يەد	WETLAND
	CONCRETE CURB AND GUTTE
	REVERSE GUTTER PAN
	SETBACK LINE
* *	SIGN LIGHTPOLE FENCE GUARD RAIL
SIGN LEGEND:	

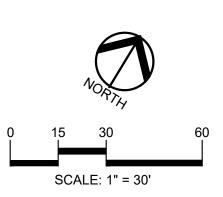
'BARRIER FREE' SIGN	1
"VAN ACCESSIBLE" SIGN	2
"NO PARKING" SIGN	3
"SIDEWALK ENDS" SIGN	4
"DO NOT ENTER" SIGN	5
"ONE WAY" SIGN	6
REFER TO DETAIL SHEET FOR S	GIGN DETAILS

# SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R' 🛞 REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

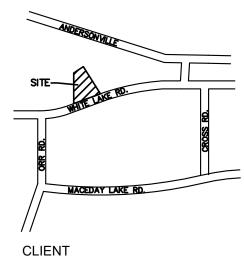








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# GINKO INVESTMENT COMPANY, LLC 2438 ROCHESTER ROAD OAKLAND TOWNSHIP, MICHIGAN 48363

PROJECT TITLE GINKO

# GINKO SELF STORAGE WHITE LAKE TOWNSHIP, MICHIGAN

# REVISIONSPER AGENCIES COMMENTS05/30/23PER AGENCIES COMMENTS06/29/23PER AGENCIES COMMENTS08/04/23PER AGENCIES COMMENTS09/22/23

	00/01/20
PER AGENCIES COMMENTS	09/22/23
PER AGENCIES COMMENTS	10/24/23
PER AGENCIES COMMENTS	04/26/24
PER AGENCIES COMMENTS	07/25/24
PER AGENCIES COMMENTS	09/06/24

ORIGINAL ISSUE DATE:

FEBRUARY 2, 2023 DRAWING TITLE

# SITE PLAN

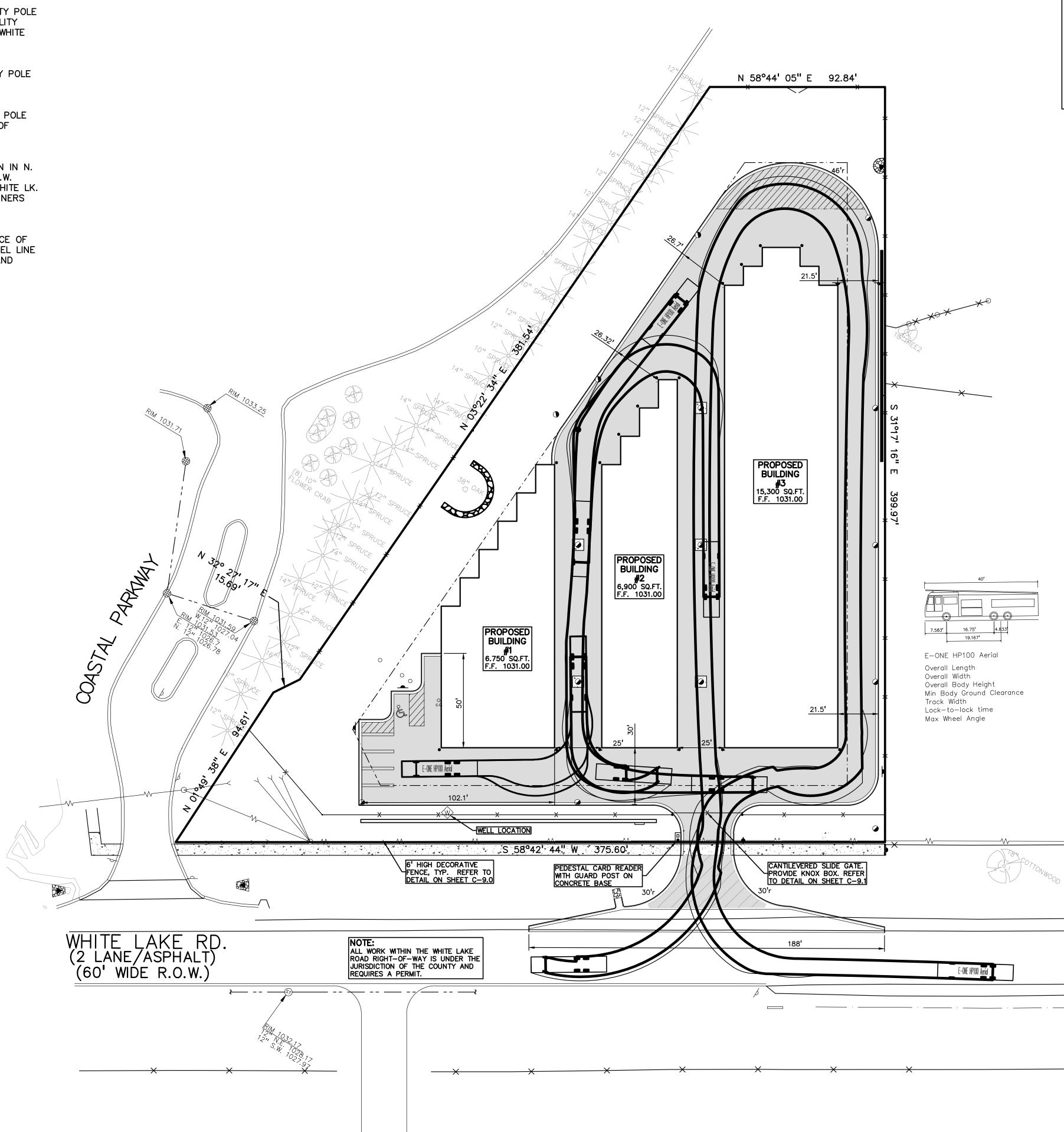
PEA JOB NO.	2002-248A
P.M.	JPB
DN.	SWS
DES.	SWS
DRAWING NUMBEI	R:

C-3.0

Part of the North 1/2 of Section 01, T.3 N., R.8 E., White Lake Township, Oakland County, Michigan, described as follows: Unit No. 4 of "Prospectors Square" Condominium as recorded in Liber 22118, Page 870, Oakland County

# BENCHMARKS: ( PER NAVD88 DATUM )

- SITE B.M. #1: STEEL GEAR-PIN IN S.W. FACE OF UTILITY POLE  $60'\pm$  N. OF N 1/4 CORNER SEC. 1. UTILITY POLE HAS OH TO N. AND WSW ALONG WHITE LAKE RD. ELEV. 1031.58
- SITE B.M. #2: STEEL GEAR-PIN IN N. FACE OF UITILITY POLE N. SIDE OF WHITE LAKE RD. ELEV. 1030.85
- SITE B.M. #3: STEEL GEAR PIN IN N. FACE OF UTILITY POLE N. SIDE OF WHITE LAKE RD.,  $100'\pm$  W. OF S.E. CORNER OF UNIT #4. ELEV. 1031.65
- SITE B.M. #4: (AT CONDO RD, GRADE) STEEL GEAR PIN IN N. FACE OF UTILITY POLE, 40'± N.W. OF S.W. CORNER OF UNIT 4, N.W. CORNER OF WHITE LK. RD. AND GRAVEL ROAD TO N. TO "MARINERS CAVE CONDO" SITE. ELEV. 1031.88
- REF. B.M.: (per job # 97626) R.R. SPIKE IN N. FACE OF 36" OAK TREE ALONG S. PARENT PARCEL LINE (ACS SITE), 225' E. OF SECTION LINE AND 20' N. OF S. PARCEL LINE. ELEV.: 1017.78





# FIRE DEPARTMENT NOTES:

40.000ft

8.333ft 11.000ft

1.393ft

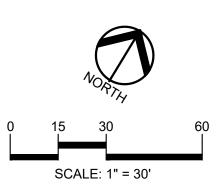
8.333ft

6.00s

45.00°

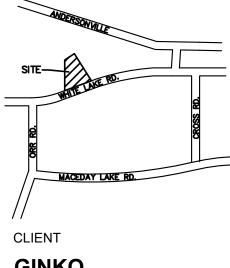
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GINKO INVESTMENT COMPANY, LLC 2438 ROCHESTER ROAD OAKLAND TOWNSHIP, MICHIGAN 48363

PROJECT TITLE GINKO

SELF STORAGE

REVISIONS PER AGENCIES COMMENTS 05/30/23 PER AGENCIES COMMENTS 06/29/23 PER AGENCIES COMMENTS 08/04/23 PER AGENCIES COMMENTS 09/22/23 PER AGENCIES COMMENTS 10/24/23 PER AGENCIES COMMENTS 04/26/24 PER AGENCIES COMMENTS 07/25/24 PER AGENCIES COMMENTS 09/06/24

ORIGINAL ISSUE DATE:

FEBRUARY 2, 2023

DRAWING TITLE



PEA JOB NO. 2002-248A P.M. JPB DN. SWS SWS DES. DRAWING NUMBER:

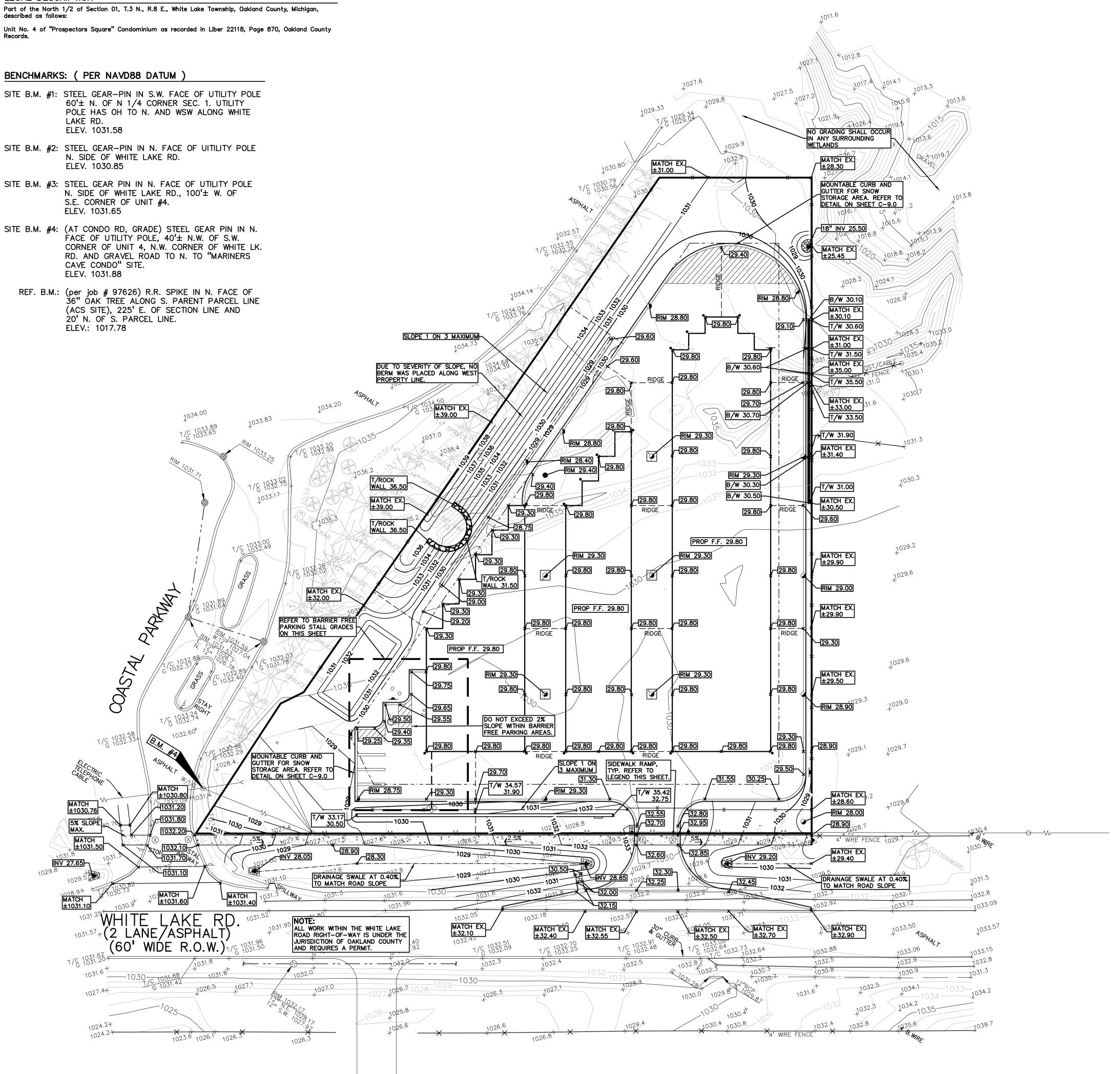
C-3.1

30

Unit No. 4 of "Prospectors Square" Condominium as recorded in Liber 22118, Page 870, Oakland County Records.

# BENCHMARKS: ( PER NAVD88 DATUM )

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- (ACS SITE), 225' E. OF SECTION LINE AND 20' N. OF S. PARCEL LINE.



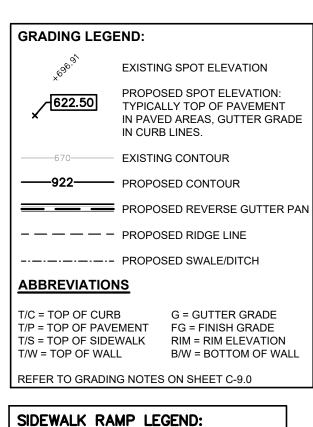
Item A.

# RETAINING WALL NOTE:

TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

# EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

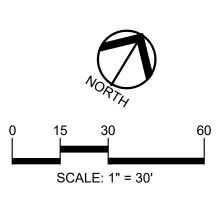


SIDEWALK RAMP 'TYPE R'

REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

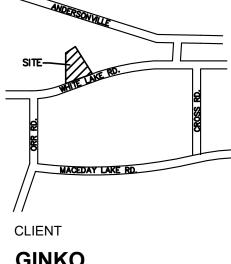
GROUP t: 844.813.2949 www.peagroup.com







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# GINKO SELF STORAGE

REVISIONS	
PER AGENCIES COMMENTS	05/30/23
PER AGENCIES COMMENTS	06/29/23
PER AGENCIES COMMENTS	08/04/23
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PER AGENCIES COMMENTS	07/25/24
PER AGENCIES COMMENTS	09/06/24

GENCIES COMMENTS	

ORIGINAL ISSUE DAT 

FEBRUARY 2, 2023	
DRAWING TITLE	

**GRADING PLAN** 

PEA JOB NO.

DRAWING NUMBER:

C-4.0

P.M.

DN.

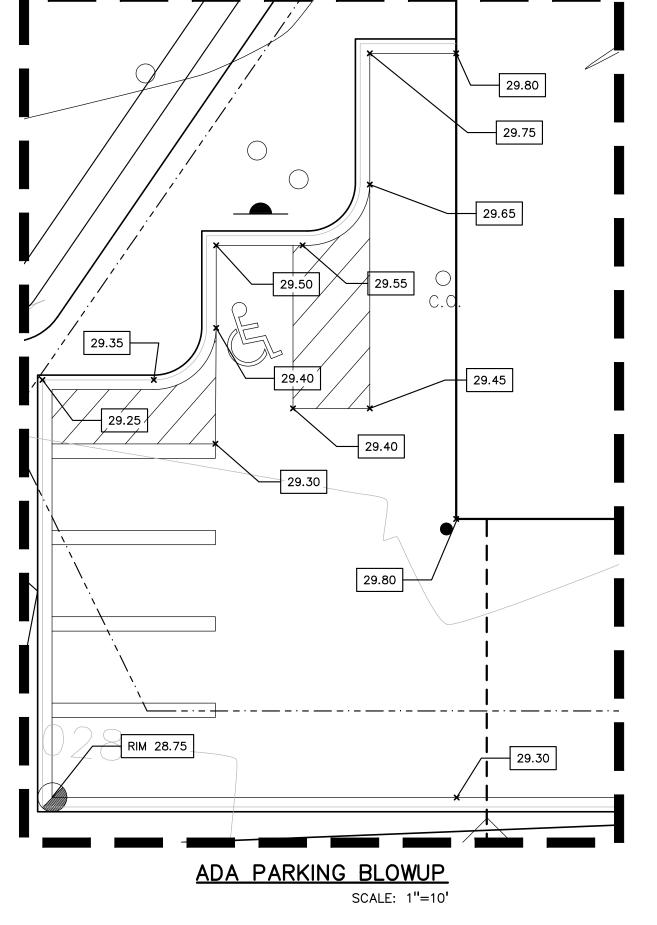
DES.

2002-248A

JPB

SWS

SWS

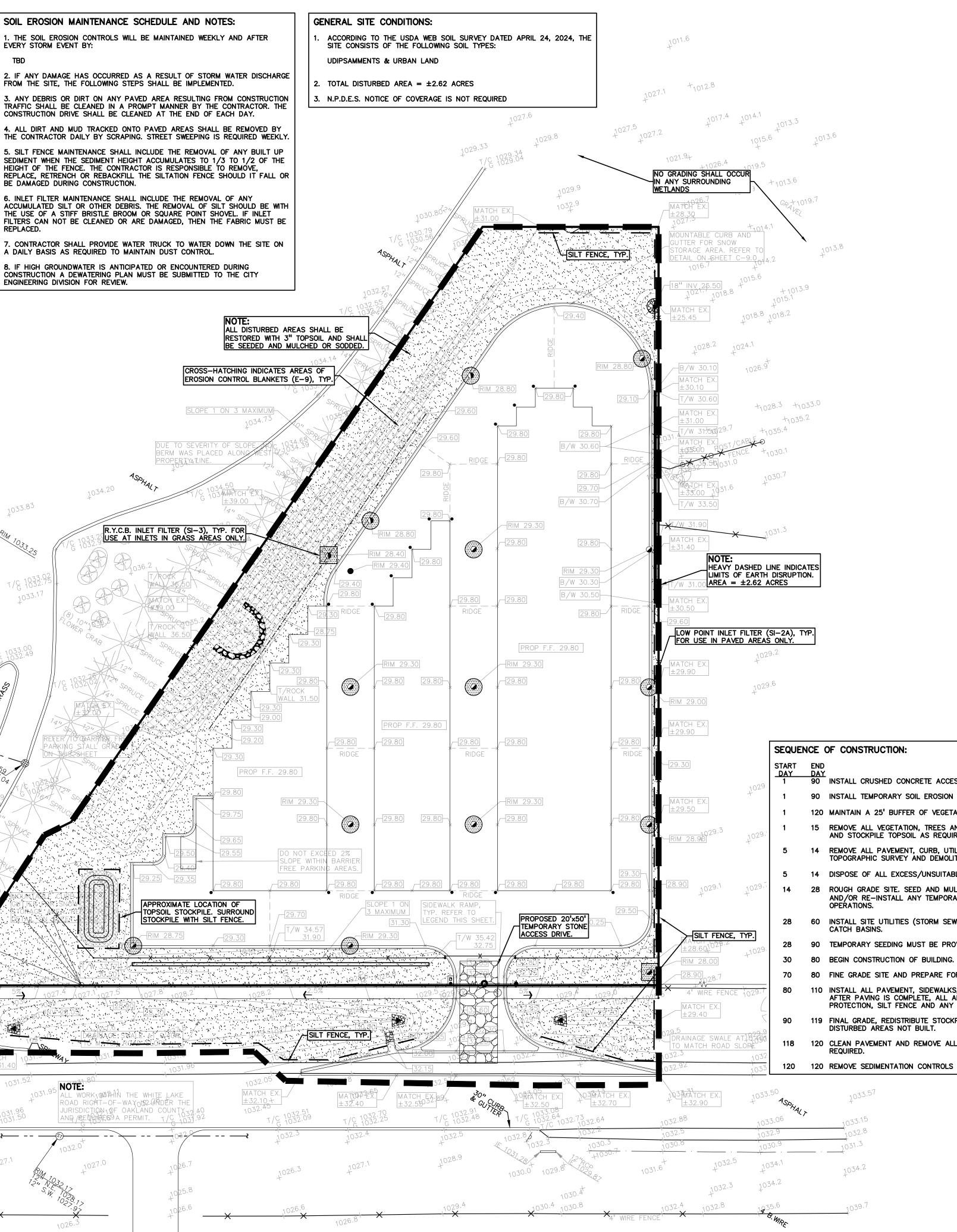


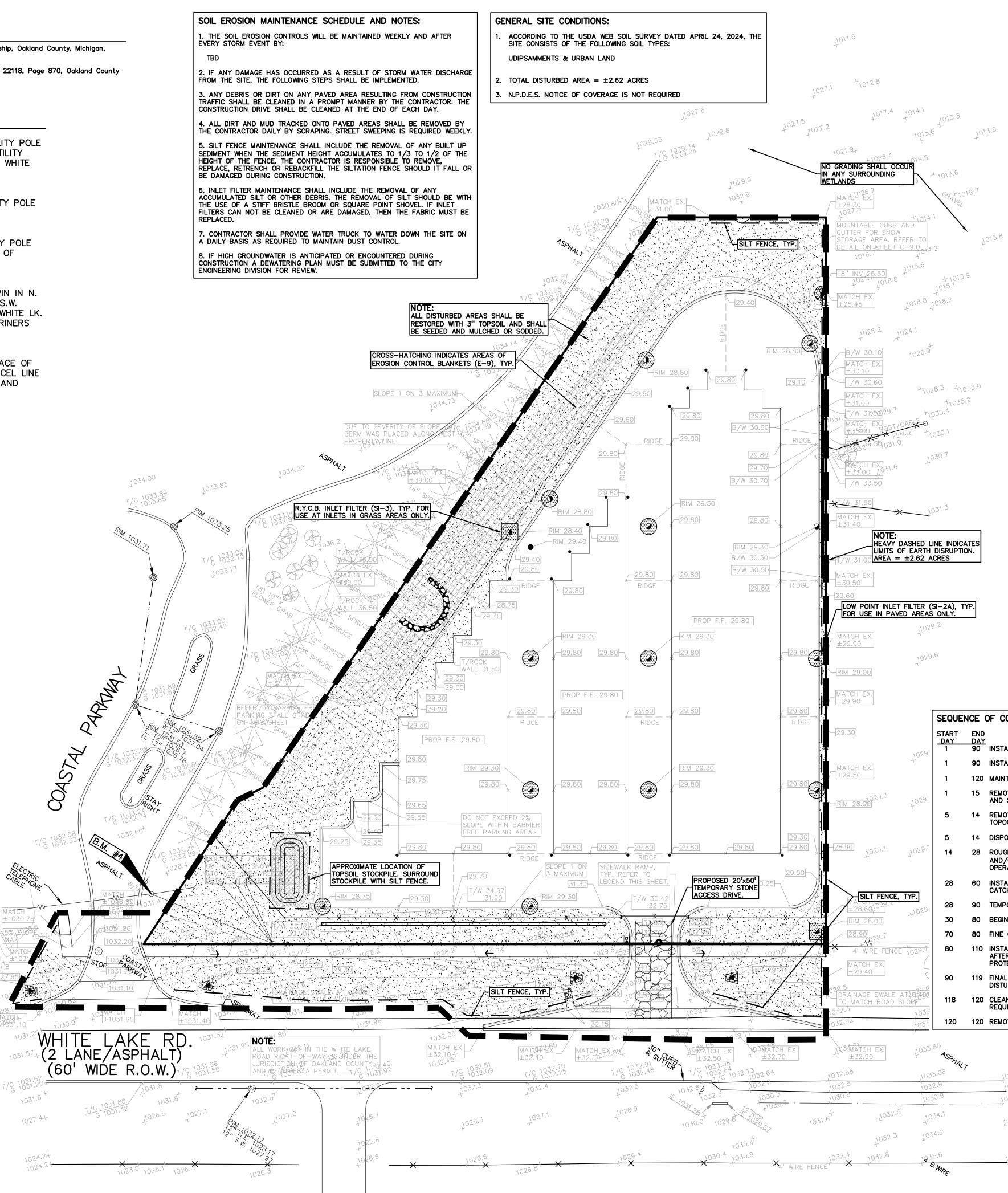
# LEGAL DESCRIPTION Part of the North 1/2 of Section 01, T.3 N., R.8 E., White Lake Township, Oakland County, Michigan, described as follows:

Unit No. 4 of "Prospectors Square" Condominium as recorded in Liber 22118, Page 870, Oakland County Records.

# BENCHMARKS: ( PER NAVD88 DATUM

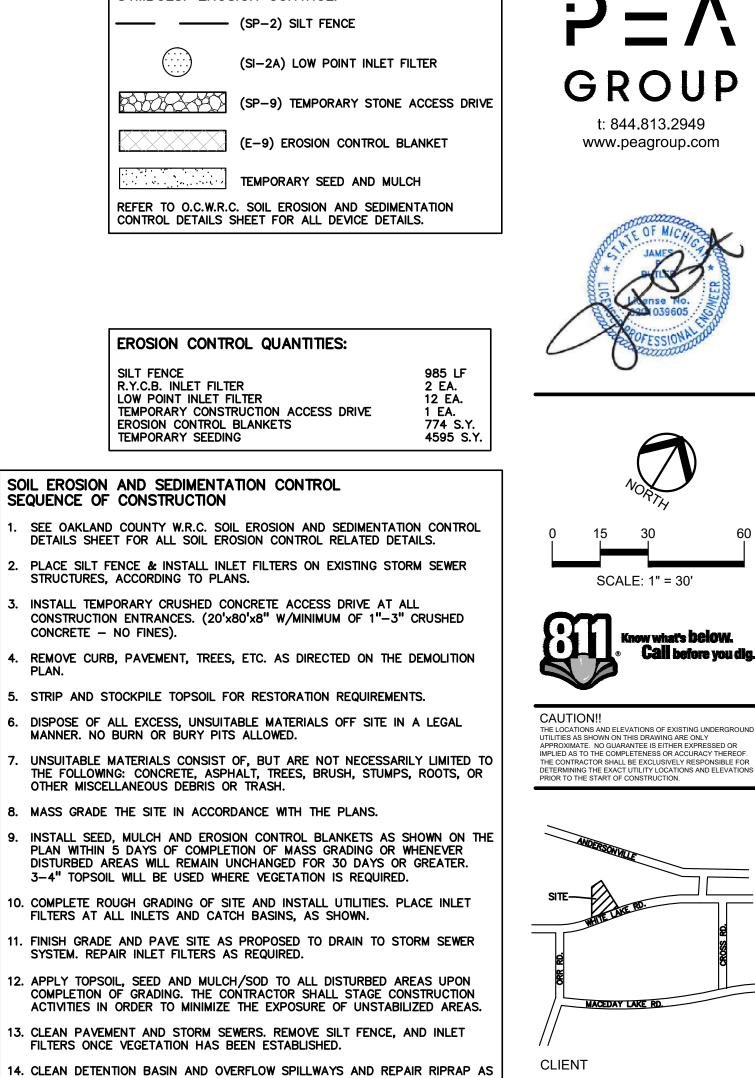
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Λ

Item A.



NECESSARY.

15. ALL DIRT AND MUD TRACKED ONTO PUBLIC ROADS SHALL BE REMOVED DAILY.

SYMBOLS: EROSION CONTROL:

16. STREET CATCH BASINS TO BE PERIODICALLY CLEANED AND FILTER CLOTH CHANGED AND MAINTAINED.

90 INSTALL CRUSHED CONCRETE ACCESS APPROACH AT SITE ROAD APPROACH.

90 INSTALL TEMPORARY SOIL EROSION CONTROL MEASURES, SILT FENCES, INLET PROTECTION, ETC. AS NECESSARY.

120 MAINTAIN A 25' BUFFER OF VEGETATION AROUND PERIMETER OF SITE WHERE POSSIBLE.

15 REMOVE ALL VEGETATION, TREES AND BRUSH FROM THE PROPOSED CONSTRUCTION AREA UNLESS MARKED TO REMAIN. STRIP AND STOCKPILE TOPSOIL AS REQUIRED. ALL STOCKPILES MUST BE GRADED AND SEEDED. REMOVE ALL PAVEMENT, CURB, UTILITIES, ETC. AS REQUIRED TO INSTALL THE PROPOSED WORK AS SHOWN ON THE

TOPOGRAPHIC SURVEY AND DEMOLITION PLAN. 14 DISPOSE OF ALL EXCESS/UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO ON-SITE BURN OR BURY PITS ALLOWED. ROUGH GRADE SITE. SEED AND MULCH BLANKETS MUST BE INSTALLED AS SHOWN WITHIN 5 DAYS OF FINAL GRADE. REPAIR AND/OR RE-INSTALL ANY TEMPORARY SOIL EROSION CONTROL MEASURES THAT WERE DAMAGED DURING GRADING

60 INSTALL SITE UTILITIES (STORM SEWER, SANITARY SEWER, WATER MAIN ETC.). INSTALL INLET PROTECTION AT ALL PROPOSED CATCH BASINS.

90 TEMPORARY SEEDING MUST BE PROVIDED IN AREAS NOT TO BE WORKED ON FOR 15 DAYS OR LONGER.

80 FINE GRADE SITE AND PREPARE FOR SITE PAVING OPERATIONS.

110 INSTALL ALL PAVEMENT, SIDEWALKS, CURBING AS PROPOSED. IF PERMANENT LANDSCAPING IS NOT TO BE INSTALLED SOON AFTER PAVING IS COMPLETE, ALL AREAS WITHIN 20 FEET OF BACK OF CURB MUST BE TEMPORARILY SEEDED. REPAIR INLET PROTECTION, SILT FENCE AND ANY OTHER DAMAGED SOIL EROSION CONTROL MEASURES AS NECESSARY.

119 FINAL GRADE, REDISTRIBUTE STOCKPILED TOPSOIL, ESTABLISH VEGETATION AND INSTALL ALL PERMANENT LANDSCAPING IN AL DISTURBED AREAS NOT BUILT. 120 CLEAN PAVEMENT AND REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES. RE-ESTABLISH VEGETATION AS

120 120 REMOVE SEDIMENTATION CONTROLS ONCE ENTIRE SITE HAS BEEN PERMANENTLY STABILIZED.

034.4

# PER AGENCIES COMMENTS 10/24/23 PER AGENCIES COMMENTS 04/26/24 PER AGENCIES COMMENTS 07/25/24 PER AGENCIES COMMENTS 09/06/24

PER AGENCIES COMMENTS 05/30/23

PER AGENCIES COMMENTS 06/29/23

08/04/23

09/22/2

PER AGENCIES COMMENTS

PER AGENCIES COMMENTS

ORIGINAL ISSUE DATE **FEBRUARY 2, 2023** 

DRAWING TITLE

GINKO

2438 ROCHESTER ROAD

PROJECT TITLE

GINKO

REVISIONS

**INVESTMENT** 

COMPANY, LLC

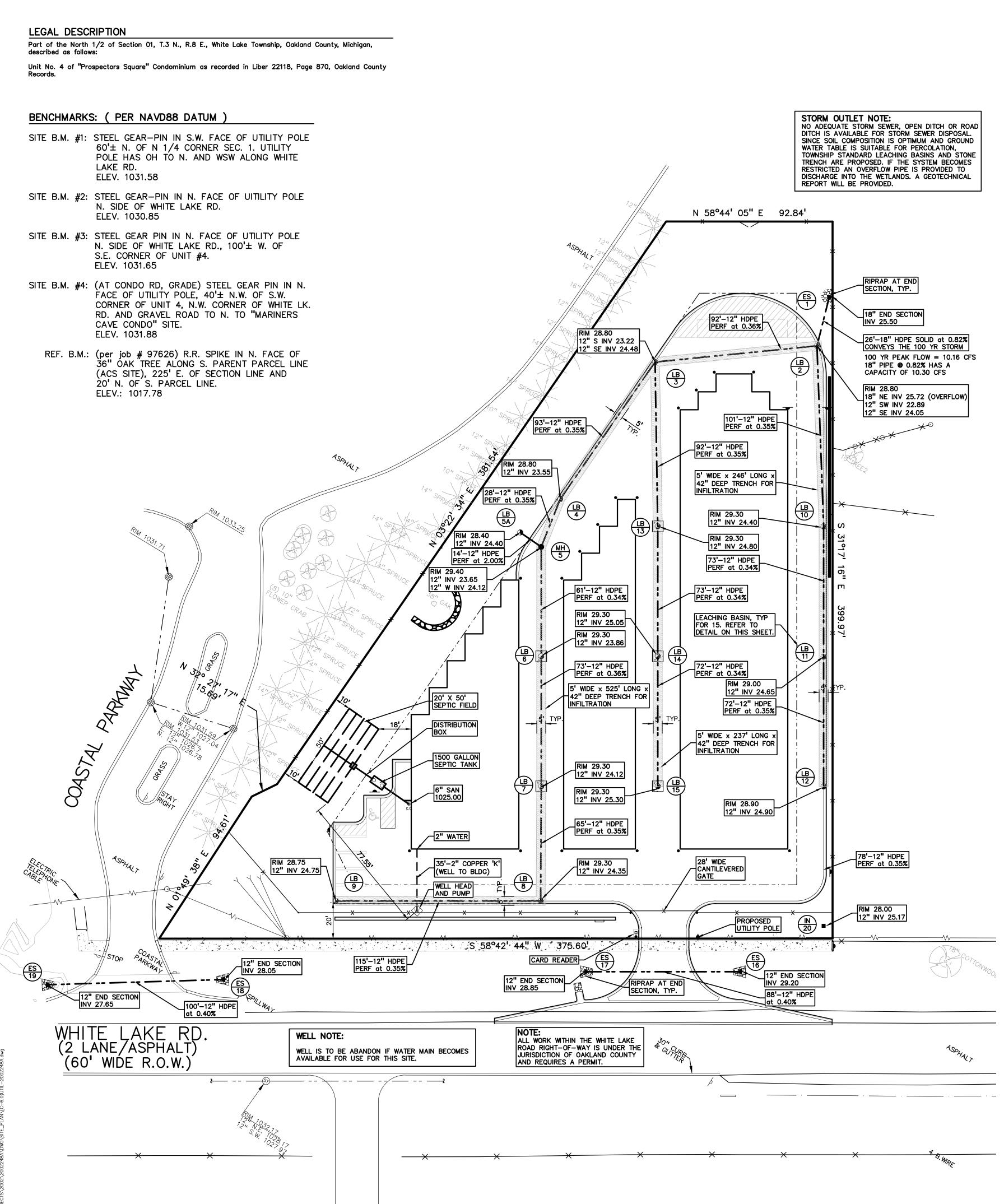
OAKLAND TOWNSHIP, MICHIGAN 48363

SELF STORAGE

# **SESC PLAN**

# 2002-248A PEA JOB NO. JPB ΡM SWS DN DES. SWS DRAWING NUMBER:

C-5.0

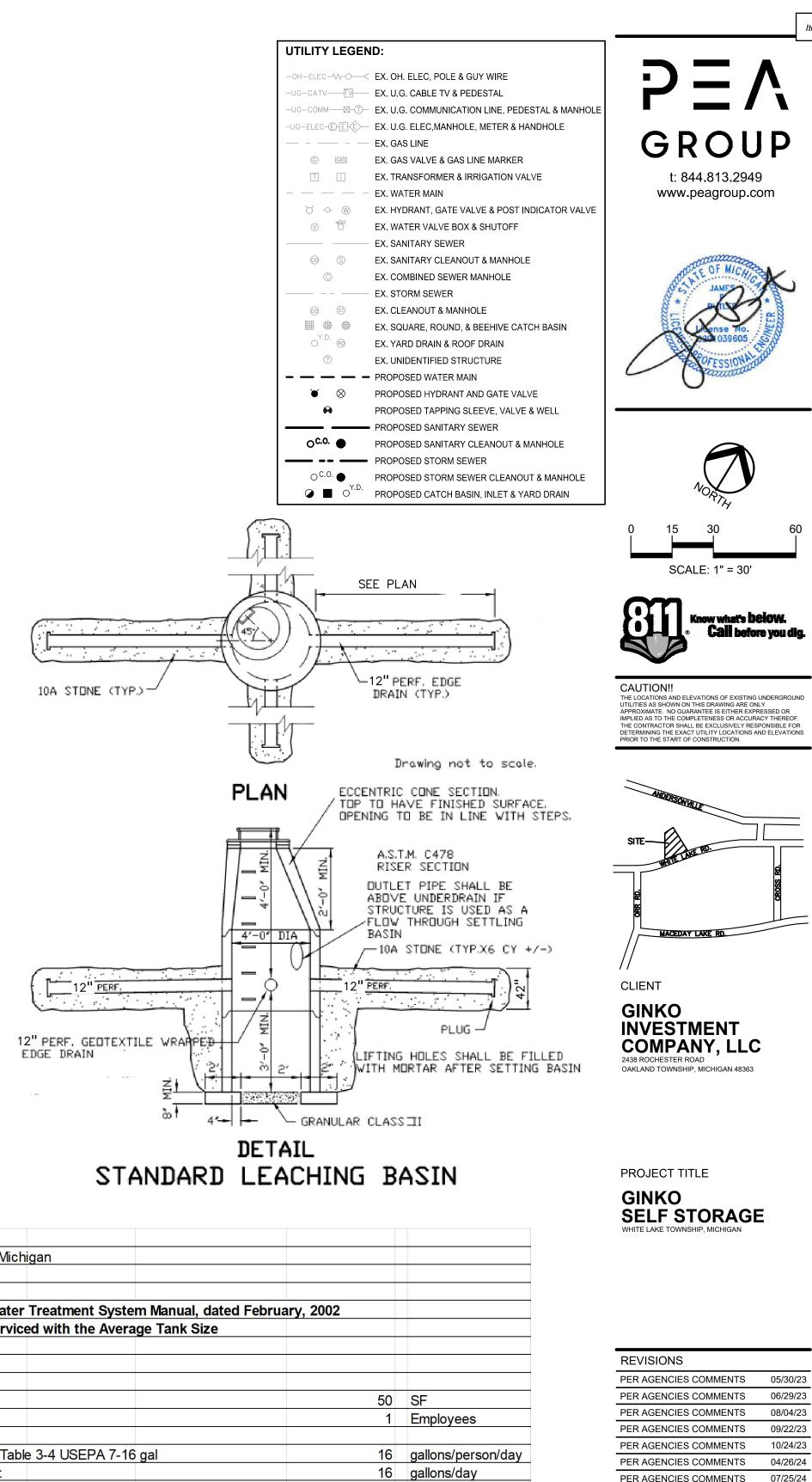


Site Drainage Data				
Total Area (A):		acre		
Weighted Coefficient of Runoff	(C):	0.62		
Rainfall Intensity				
Time of Concentration (T <sub>c</sub> )		10.00	min	
Since Tc <= 15 min, 11 = 2.0 in	n/hr			
I1 = 30.2 /[ (T + 9.17)^.81]		2.00	in/hr	
110 = 50.12 / (T + 9.17)^.81		4.58	in/hr	
1100 = 83.3 / (T + 9.17)^.81		7.62	in/hr	
100-Year Peak Inflow		10.16	cfs	
Q <sub>100IN</sub> = C(I <sub>100</sub> )A				
CPVC: Channel Protection Ve	olume			
Vcpvc = (4,719)CA		6,290	cf	
Detention / Infiltration Of		<b>N</b>		_
Retention / Infiltration Storag	•	•	- 5	
Vrb = (18,985 x C x A) - Vcpvc		<u>19,017</u>	cf	
Design Requirements		Volume		
CPVC		6,290		
Retention Storage Volume		19,017	cf	-
Provided Pipe Volume:		13,017	01	-
rovided ripe volume.				
Average Infiltration Area (At)				
At = 1010 LF storm pipe x 5' with	de	5,050	sf	
Surface Storage Volume (Vss	5)			
Vss = At x H (3.5' high) x .40		7,070	cf	
minus 12" storm pipe void x .40		<u>316</u>	cf	
		6,754	cf	
Subsurface Storage Volume				_
Vsubsurface = NO Engineered	Sub Soils	0	cf	
W. Harry Mark Marker Marker Marker	8 121 Mar 22	i veno		
Infiltration Volume (Vi) (based				
Ksat = Infiltration Rate per "A" s	soil group	4.58	in/hr	
Sf = Ksat safety factor		1		
Vi = (Ksat x Sf x 6 x At) / 12 in		11,565	ct	
Total Sedimentation Storage	Volume (Vt)			
Vt = Vss + Vsubsurface + Vi		<u>18,319</u>	cf	
Pipe Storage Design				
Length =		1010.00	ft.	
Pipe Diameter =		12.00	in.	
c.f. / ft. =		0.7850	cf/ft	
Volume =		<u>792.85</u>	cf	
T-4-11/- hur		10/11/07	- 6	
Total Volume =		19111.35	CT	ok

# SEPTIC CALCULATIONS

Destant	Circles Calf Of				
Project:	Ginko Self Storage				
Location:	White Lake Township, Mich	nigan			
Project No:	2002-248A				
Design per the	USEPA Onsite Wastewater	Treatment Sy	stem Manual, dated Fel	oruary, 2002	
as well as the	amount of customers servic	ed with the Av	erage Tank Size		
Building Usage:					
Office/Sales					
Current Building	Space:			50	SF
Total Number of				1	Employees
Office or Indust	iral (Flow per Employee): Tab	le 3-4 USEPA 7	7-16 gal	16	gallons/person/day
	gn Flow (Daily Peak Flow):			16	gallons/day
					gementer des j
Number of Cust	omer/dav			2	Customers
	(Table 3-4 USEPA) per user	3-6 gallons		6	gal./customer/day
Customer Daily		generie		12	gallons/day
					gunorio, dalg
Peak Facility De	esian Flow			28	gallons/day
r curr uomry Do				20	galloriorady
	ng Poto: (for a bod system)			0.40	gpd/ft <sup>2</sup>
	ng Rate: (for a bed system)				under C.5 of MCSSD
Contin Field Are	- Deguizement (Seil Dieneze				
Septic Field Are	ea Requirement (Soil Dispersa	li Area):		70	sft
Duran a sa di Oran	tia Field Colordations				
	tic Field Calculations			00	6
PRIMARY Sept	C 1. C 1. D 10 00. 00.			20	ft
PRIMARY Sept				50	ft
PRIMARY Sept	c Field Area:			1,000	sft
Septic Tank Ca					
	Tank Capacity Per Oakland	County for Com	nmercial Site for flows		
	day is 1500 gallons				
Proposed Septi	c Tank Capacity:			1,500	gallons

Item A.



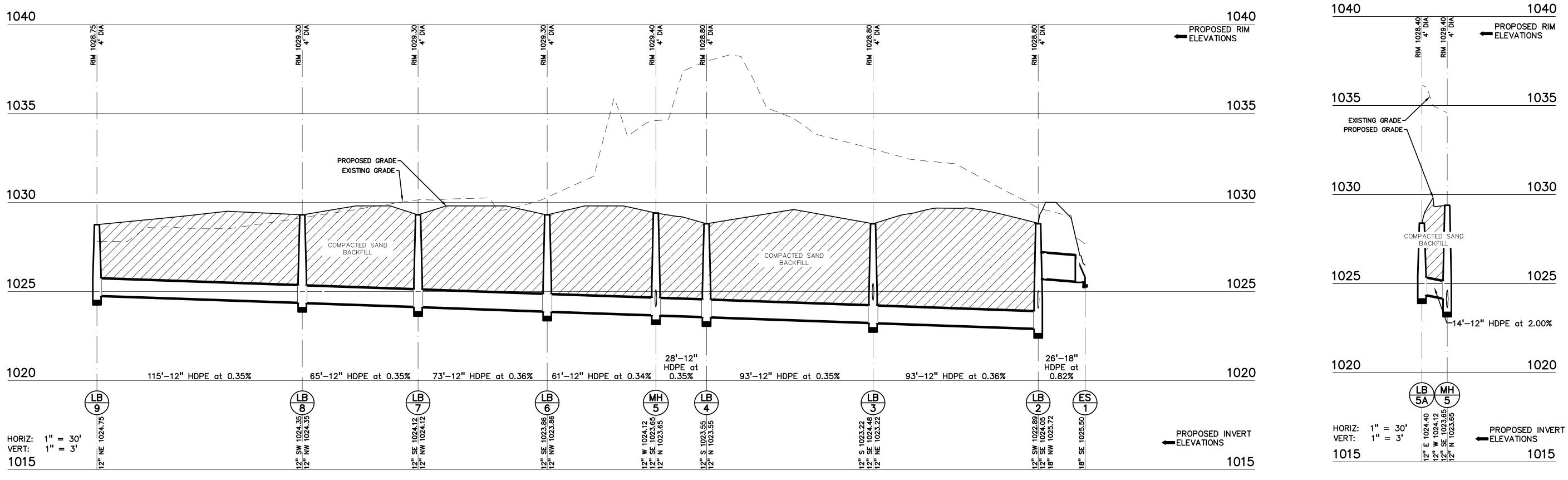
REVISIONS	
PER AGENCIES COMMENTS	05/30/23
PER AGENCIES COMMENTS	06/29/23
PER AGENCIES COMMENTS	08/04/23
PER AGENCIES COMMENTS	09/22/23
PER AGENCIES COMMENTS	10/24/23
PER AGENCIES COMMENTS	04/26/24
PER AGENCIES COMMENTS	07/25/24
PER AGENCIES COMMENTS	09/06/24

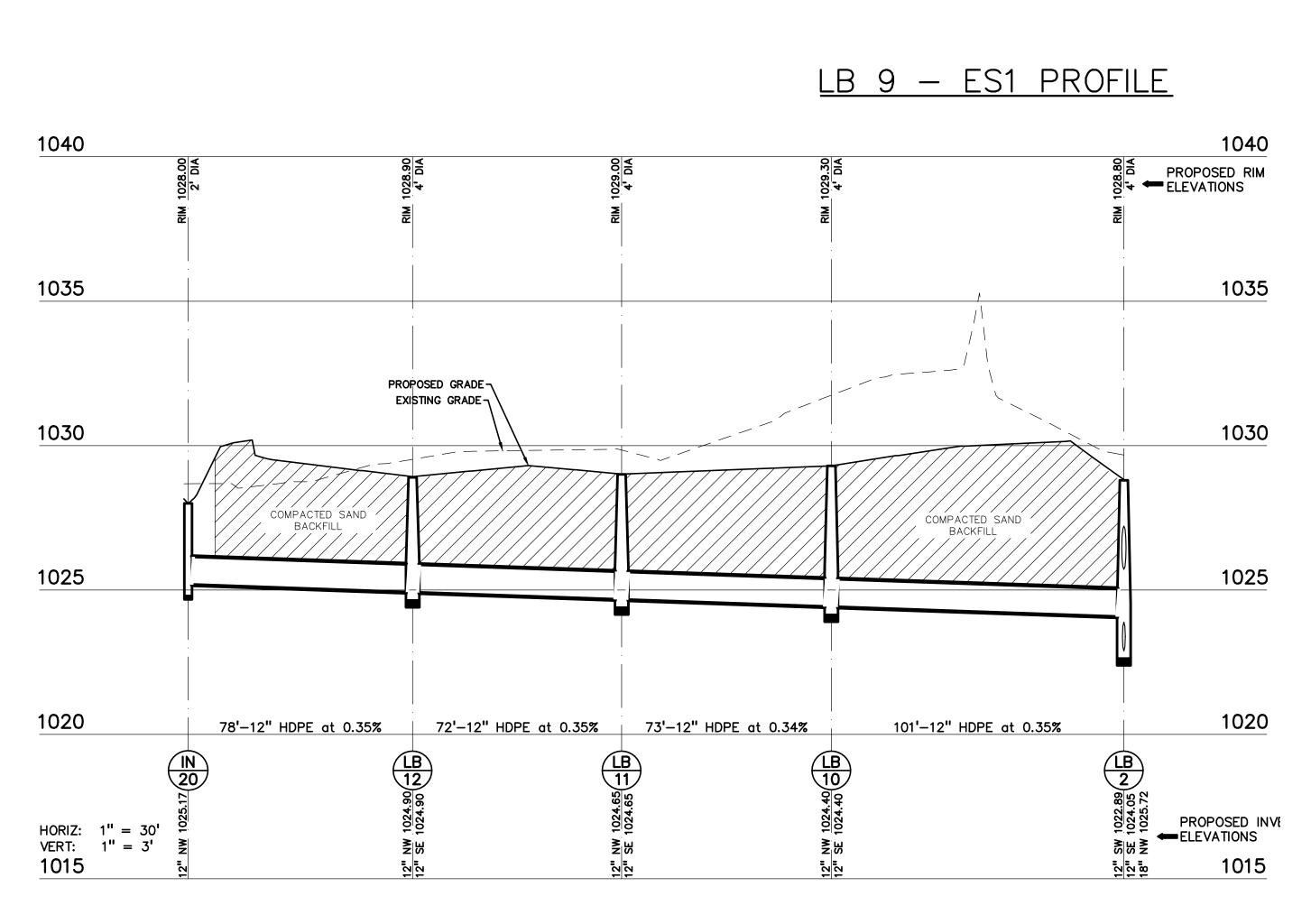
PER AGENCIES COMMENTS	08/04/23
PER AGENCIES COMMENTS	09/22/23
PER AGENCIES COMMENTS	10/24/23
PER AGENCIES COMMENTS	04/26/24
PER AGENCIES COMMENTS	07/25/24
PER AGENCIES COMMENTS	09/06/24

ORIGINAL ISSUE DATE: FEBRUARY 2, 2023
DRAWING TITLE UTILITY PLAN

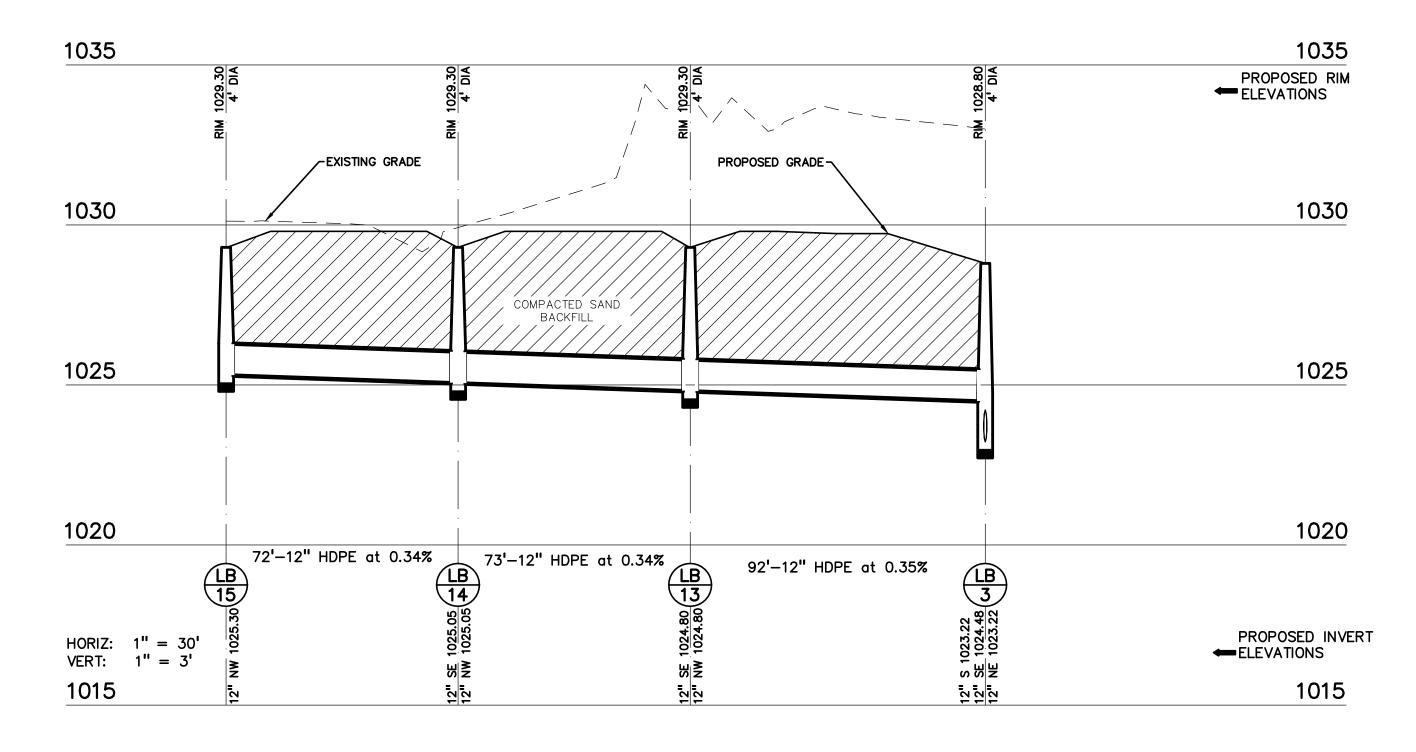
PEA JOB NO.	2002-248A
P.M.	JPB
DN.	SWS
DES.	SWS
DRAWING NUMBER:	:

C-6.0





<u>LB 20 – LB 2 PROFILE</u>



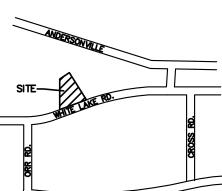








THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



SITE WITE LARE RD. MACEDAY LAKE RD CLIENT



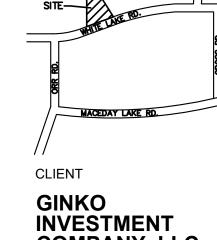












PROJECT TITLE

SELF STORAGE

PER AGENCIES COMMENTS 05/30/23

PER AGENCIES COMMENTS 06/29/23 PER AGENCIES COMMENTS 08/04/23

PER AGENCIES COMMENTS 10/24/23 PER AGENCIES COMMENTS 04/26/24 PER AGENCIES COMMENTS 07/25/24 PER AGENCIES COMMENTS 09/06/24

09/22/23

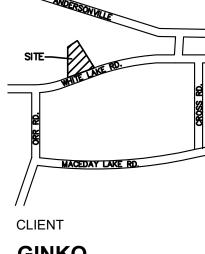
PER AGENCIES COMMENTS

ORIGINAL ISSUE DATE: FEBRUARY 2, 2023

DRAWING TITLE

GINKO

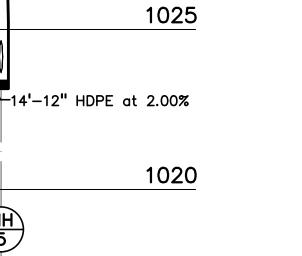
REVISIONS

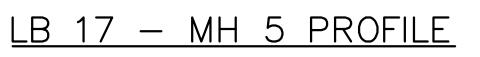












<u>LB 16 – LB 3 PROFILE</u>

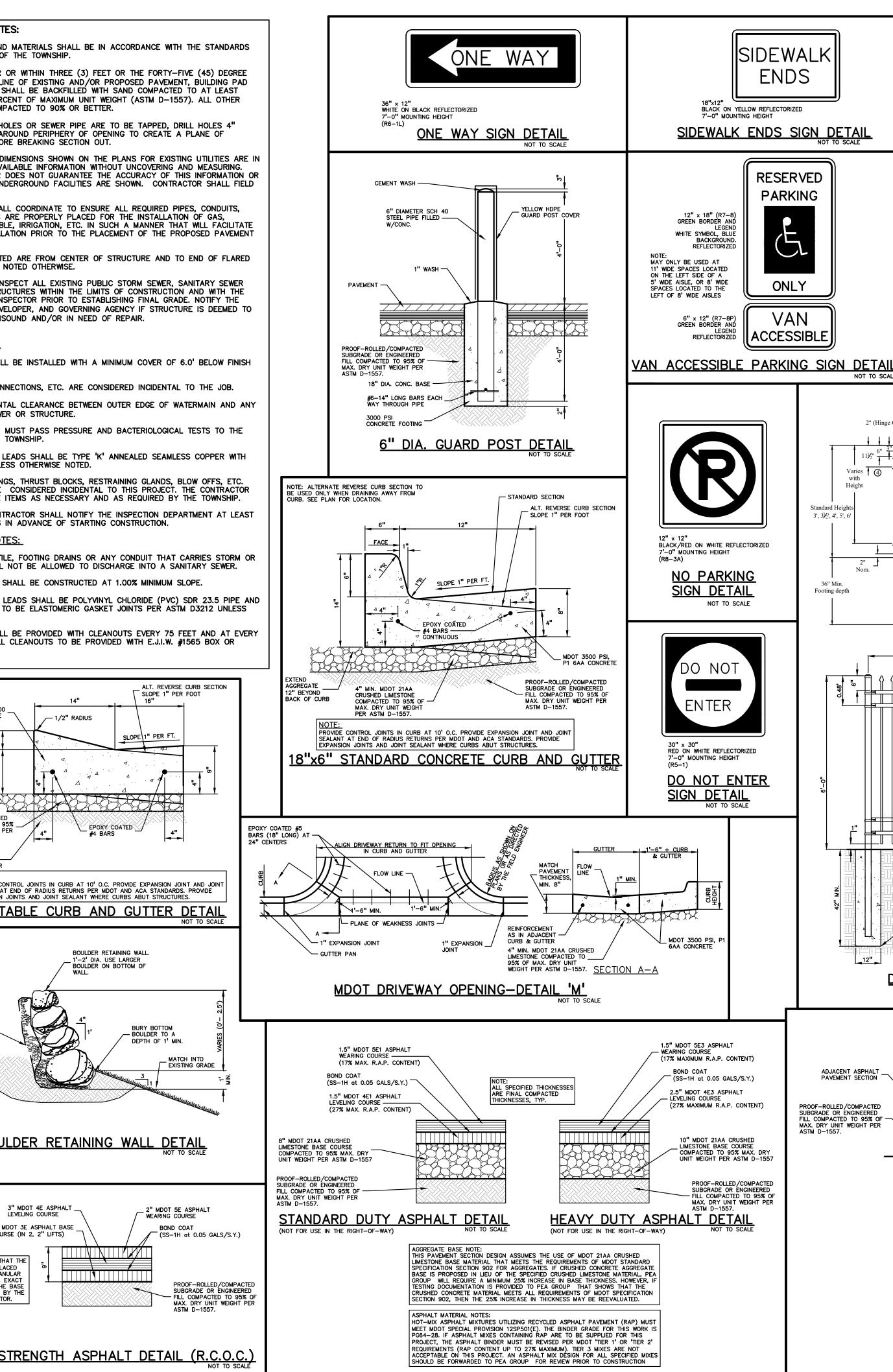
# JPB SWS

UTILITY

PROFILES

PEA JOB NO. 2002-248A P.M. DN. SWS DES.

GENERAL NOTES:	GEI	IERAL UTILITY NOT
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.	1.	ALL WORKMANSHIP AND AND SPECIFICATIONS OF
1. ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.		ALL TRENCHES UNDER ZONE OF INFLUENCE LII
2. THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.		OR DRIVE APPROACH S NINETY-FIVE (95) PERC TRENCHES TO BE COMP
3. THE CONTRACTOR SHALL CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.		WHERE EXISTING MANHO CENTER TO CENTER, AF
4. ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL TOWNSHIP INSPECTION FEES.	4.	WEAKNESS JOINT BEFO
5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.		ACCORDANCE WITH AVA THE DESIGN ENGINEER THAT ALL EXISTING UNI VERIFY UTILITIES. THE CONTRACTOR SHAI
5. CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE	6.	CABLES AND SLEEVES ELECTRIC, PHONE, CABI THEIR PROPER INSTALL AND LANDSCAPING. PIPE LENGTHS INDICATE
EXPENSE TO THE CONTRACTOR. 7. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.	7.	END SECTION UNLESS I CONTRACTOR SHALL IN AND WATER MAIN STRU
3. ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.		GOVERNING AGENCY IN ENGINEER, OWNER/DEVI BE STRUCTURALLY UNS
D. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, TOWNSHIP AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY	<u>WA</u>	TER MAIN NOTES: ALL WATER MAIN SHAL
REGULATIONS DURING THE CONSTRUCTION PERIOD. 0. THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.	2.	GRADE. ALL TEES, BENDS, CON MAINTAIN 10' HORIZONI
11. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.	4.	SANITARY/STORM SEWE ALL NEW WATER MAIN SATISFACTION OF THE
PAVING NOTES:		WATER MAIN SERVICE L FLARED FITTINGS, UNLE
I. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.		ALL NECESSARY FITTING FOR WATER MAIN ARE SHALL INSTALL THESE
2. REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS. 5. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE		THE WATER MAIN CONT THREE WORKING DAYS
MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.		NITARY SEWER NOT
ALL EXPANSION JOINTS AND CONCRETE PAVEMENT JOINTS TO BE SEALED.		GROUND WATER SHALL
<ul> <li>5.1. JOINTS WHEN ADJACENT TO ASPHALT PAVEMENT</li> <li>5.1.1. PLACE CONTRACTION JOINTS AT 10' INTERVALS</li> <li>5.1.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.</li> </ul>	3.	ALL SANITARY SEWER I FITTINGS. ALL JOINTS T
5.1.3. PLACE 1" EXPANSION JOINT: 5.1.3.1. AT SPRING POINTS OF INTERSECTIONS OR ONE OF THE END OF RADIUS LOCATIONS IN A CURVE 5.1.3.2. AT 400' MAXIMUM INTERVALS ON STRAIGHT RUNS	4.	OTHERWISE NOTED. SANITARY LEADS SHALI
5.1.3.3. AT THE END OF RADIUS AT OPPOSITE ENDS IN A CURBED LANDSCAPE ISLAND 5.2. JOINTS WHEN TIED TO CONCRETE PAVEMENT 5.2.1. PLACE CONTRACTION JOINTS OPPOSITE ALL TRANSVERSE CONTRACTION JOINTS IN PAVEMENT		BEND AS SHOWN. ALL EQUAL.
5.2.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING. 5.2.3. PLACE 1"EXPANSION JOINT OPPOSITE ALL TRANSVERSE EXPANSION JOINTS IN PAVEMENT 5.2.4. CURB AND GUTTER AND CONCRETE SHALL BE TIED TOGETHER SIMILAR TO A LONGITUDINAL LANE TIE JOINT (MDOT B1 JOINT)		
<ul> <li>5.3. IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT):</li> <li>5.3.1. CARRY THE REBAR CONTINUOUSLY BETWEEN POURS</li> <li>5.3.2. IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY, THEN TIE TWO PIECES OF REBAR PER THE LATEST MDOT SPECIFICATIONS</li> </ul>		MDOT 3500 CONCRETE
5. CONCRETE SIDEWALK JOINTING - UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION 6.1. PLACE TRANSVERSE CONTRACTION JOINTS EQUAL TO THE WIDTH OF THE WALK WHEN WIDTH IS LESS THAN 8'		4
<ul> <li>6.2. PLACE TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS EQUAL TO 1/2 THE WIDTH OF THE WALK WHEN WIDTH IS EQUAL TO OR GREATER THAN 8'</li> <li>6.3. PLACE 1" EXPANSION JOINT WHERE ABUTTING SIDEWALK RAMP AND/OR RADIUS IN INTERSECTION</li> </ul>		a o
<ul> <li>6.4. PLACE TRANSVERSE 1/2" EXPANSION JOINT AT MAXIMUM OF 100' SPACING</li> <li>6.5. PLACE 1/2" EXPANSION JOINT WHEN ABUTTING A FIXED STRUCTURE, OTHER PAVEMENT (CONCRETE PAVEMENT AND DRIVE APPROACHES), UTILITY STRUCTURES, LIGHT POLE BASES AND COLUMNS</li> </ul>		EXTEND AGGREGATE 12" BEYOND BACK OF CURB
	J	イ 4" MIN. MDOT 21AA CRUSHEI LIMESTONE COMPACTED TO 9 OF MAX. DRY UNIT WEIGHT P
ENERAL GRADING AND EARTHWORK NOTES: HESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT		ASTM D-1557. COMPACTED SUBGRADE OR ENGINEERED FILL COMPACTED TO 95% OF
CONTRACTOR SHALL FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.		ASTM D-1557.
. ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED. . THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.		SEALANT A EXPANSION
ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE COUNTY PRIOR TO CONSTRUCTION.		<u>4" MOUNT</u>
. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT.		
. REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES. . ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A		
MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED. . THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR		FILTER FABRIC (MIRAFI
PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL. . ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON-SITE SOIL IS USED, IT SHOULD		140N OR EQUAL) & COMPACTED GRAVEL
BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS. O. THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEOGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL		
OR AS DICTATED BY FIELD CONDITIONS. 1. SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL AREAS OR BELOW PROPOSED SUBCRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBCRADE UNDERCUTTING		
PROPOSED SUBGRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING. 2. SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING		BOU
REPORT FOR THE PROJECT. 3. ANY SUBGRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.		
NOTE: CROSS-SLOPE OF SIDEWALK MUST NOT AT INTERVALS EQUAL TO THE WIDTH OF THE		
4" WIDE WHITE STRIPING FOR STANDARD SPACES, TYP. WIDTH VARIES – SEE PLAN CLEAN FILL P CLEAN FILL P CLEAN FILL P	RETE ER	4" M COUF * R.C.O.C. REQUIRES TH
CURRENT MDC 2% MAX. CROSS SLOPE CURRENT MDC RESTORE ARE LANDSCAPING	OT SPEC. A PER	9" OF ASPHALT BE PLA OVER A SUITABLE GRAN COMPACTED SUBBASE. E REQUIREMENTS FOR THE
1 ON 1 SLOPE		R.C.O.C. FIELD INSPECTO
SUBGRADE OR ÉNGINEERED         4" MDOT CLASS II SAND BASE       FILL COMPACTED TO 95% OF         COURSE COMPACTED TO 95%       ASTM D-1557.		
		<u>9" DEEP S</u>
DOUBLE STRIPING DETAIL		
NOT TO SCALE		

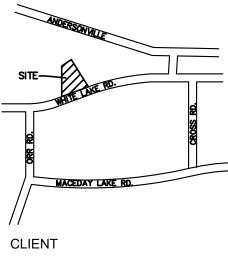


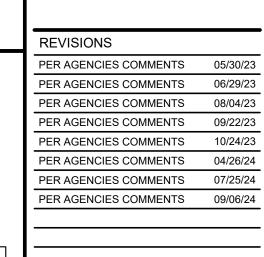
12"x18" x 0.080" ALUMINUM BARRIER FREE PARKING SIGN (R7-8). BOLT SIGN TO STEEL TUBE WITH 36" CADMIUM PLATED BOLTS, NUTS, AND WASHERS. 6"x12" x 0.080" ALUMINUM VAN ACCESSIBLE SIGN (R7-8P) WHERE APPLICABLE. SECONDARY/PENALTY SIGNAGE GROUP - PER JURISDICTIONAL REQUIREMENTS WHERE APPLICABLE 2"x2"x.188" GALVANIZED STEEL TUBE. EXTEND INTO CONCRETE FILLED PIPE t: 844.813.2949 BOLLARD A MINIMUM OF 2'-0". PROVIDE WELDED WATERTIGHT CAP. www.peagroup.com 6" DIA, SCHEDULE 40 GALVANIZED STEEL PIPE FILLED WITH CONCRETE (WHEN SIGN IS LOCATED IN PAVED AREA OR SIDEWALK). PROVIDE ROUNDED WASH AT TOP OF CONCRETE FILL WITH 1% FINISHED SLOPE. PAINT BOLLARD WITH 2 COATS OF SAFETY YELLOW PAINT, OR PROVIDE YELLOW BOLLARD SLEEVE..

Item A.



HE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUN ILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.





**NOTES AND** DETAILS

2002-248A PEA JOB NO. JPB SWS DN DES. SWS DRAWING NUMBER:

C-9.0

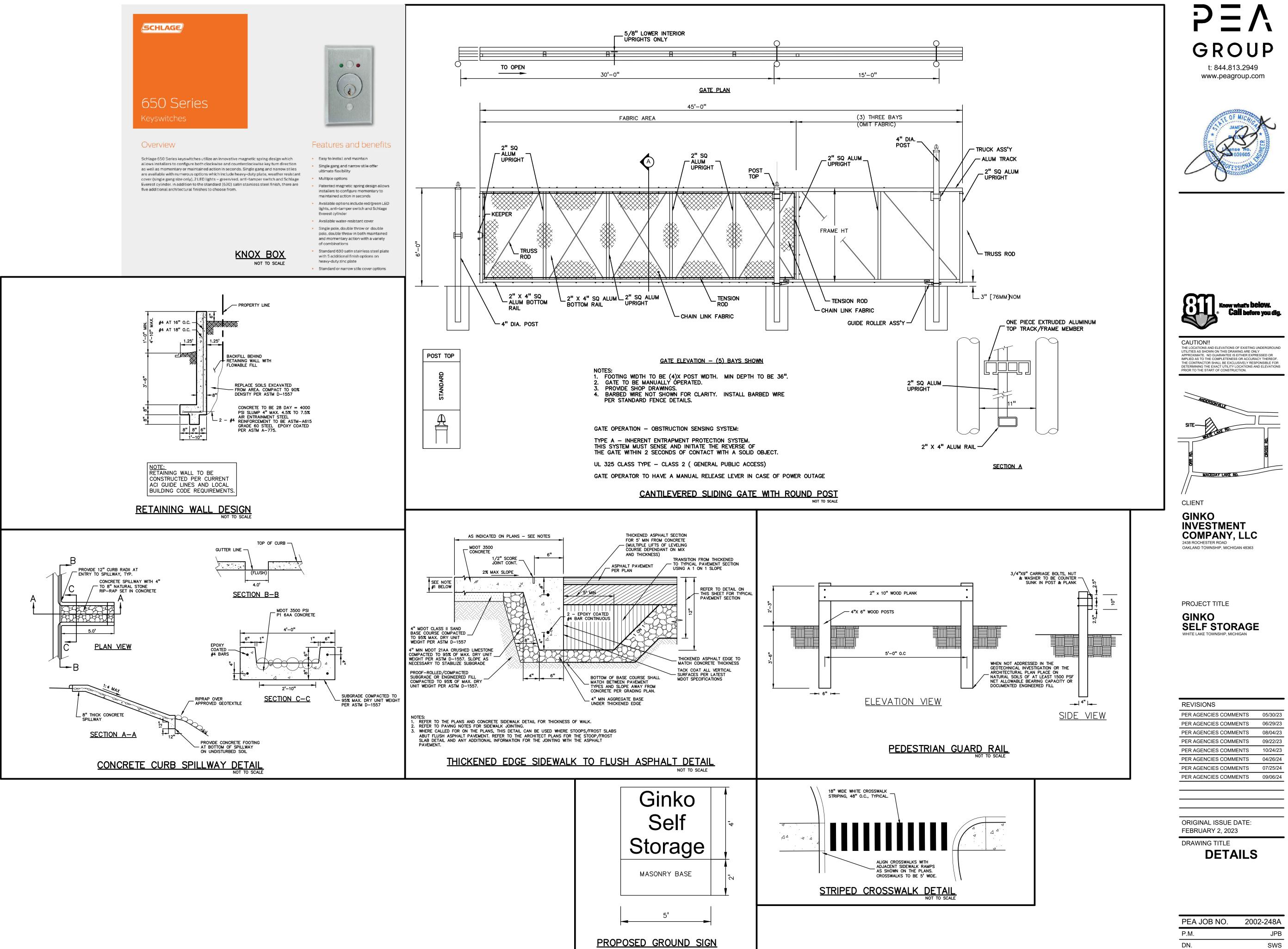
18" DIA. CONCRETE FOOTING USING PARKING 72" 110 M.D.O.T. 'P1' CONCRETE, 3500 PSI, 6AA OR APPROVED EQUAL — PAVEMENT SURFACE INSTALL BREAKAWAY TUBE POST — IN SIGN LOCATIONS WHERE PIPE BOLLARD IS NOT REQUIRED. ONLY VAN ACCESSIBLE BARRIER FREE SIGN AND POST DETAIL NOT TO SCALE — Over all Out to Out (2) Ameristar Standard 2" (Hinge Clearance) ----- 2" (Hinge Clearance) Leaf Widths (2) - 1⅛" MONTAGE PLUS™ Rail See Cross- Section on Pane Post size varies with Height (See MONTAGE PLUS<sup>TM</sup> Post-Sizing cha 1 with 🖟 Gate Upright Height 1¾" x 14 ga. CAUTION!! andard Height 3', 31/2', 4', 5', 6' <u>∕</u> ¾"**Ø** x 18ga. Picket 
 Image:  $\rightarrow$   $3^{15}/_{16}$ " TYP. 36" Min. Footing depth Double gate Arrangement 8'-0" O.C. Nom. 1½" MONTAGE PLUS™ Rail <u>اً</u> هَ أَبِهِ ` (See Cross- Section Below) \_\_\_Post 2½" ☑ x 14ga GINKO **INVESTMENT COMPANY, LLC** <u>∽¾"</u>⊿ 14ga Picket 2438 ROCHESTER ROAD OAKLAND TOWNSHIP, MICHIGAN 48363 - FINISH GRADE PROJECT TITLE 3<sup>1</sup>%6" (TYP) - BRACKET GINKO - CONCRETE FOOTING SELF STORAGE (3000 PSI) COMPACTED SUBGRADE WHEN NOT ADDRESSED IN THE GEOTECHNICAL INVESTIGATION OR THE ARCHITECTURAL PLAN TO 95% MOD PROCTOR - PLACE ON NATURAL SOLS OF AT LEAST 1500 PSF NET ALLOWABLE BEARING CAPACITY OR DOCUMENTED ENGINEERED FILL . •• DECORATIVE FENCE AND GATE DETAIL SLOPE TO PROVIDE POSITIVE DRAINAGE TOWARD CATCH BASIN, (CONSTRUCT FLUSH WITH PAVEMENT FOR MANHOLE STRUCTURE) TOP OF CONCRETE - COLLAR TO MATCH PAVEMENT ELEVATION NOTE: ROUT A 1" X 3/4" RESERVOIR AROUND EDGES. POUR HOT RUBBER - NON-SILICONE BASED SEALANT ALONG ALL EDGES OF CONCRETE COLLAR ADJACENT TO ASPHALT PAVEMENT. ADJACENT ASPHALT 1% MIN. (TYP.) - A DE PROOF-ROLLED/COMPACTED SUBGRADE OR ENGINEERED FILL COMPACTED TO 95% OF MAX. DRY UNIT WEIGHT PER ASTM D-1557. HEAVY DUTY CONCRETE SECTION. REFER TO DETAIL. NOTE: COLLARS USED AT MANHOLES, GATE WELLS ETC. CAN UTILIZE THIS SAME DETAIL, EXCEPT THAT THE PAD GRADES SHOULD CONFORM TO THE SURROUNDING PAVEMENT GRADES, NOT PITCH TO THE STRUCTURE CASTING AS SHOWN FOR CATCH BASINS SECTION "A-A" NOT TO SCALE ORIGINAL ISSUE DATE: FEBRUARY 2, 2023 SAWCUT CONTRACTION JOINTS DRAWING TITLE IN CONCRETE COLLAR 1/4 DEPTH OF SLAB . √ NOTE: ROUT A 1" X 3/4" RESERVOIR AROUND EDGES. POUR HOT RUBBER NON-SILICONE BASED SEALANT ALONG ALL EDGES OF CONCRETE COLLAR ADJACENT TO ASPHALT PAVEMENT. . ⊲ CONCRETE COLLAR DETAIL

0

84" 0F 0F

 $( \neg )$ 

# SCHLAGE



NOT TO SCALE



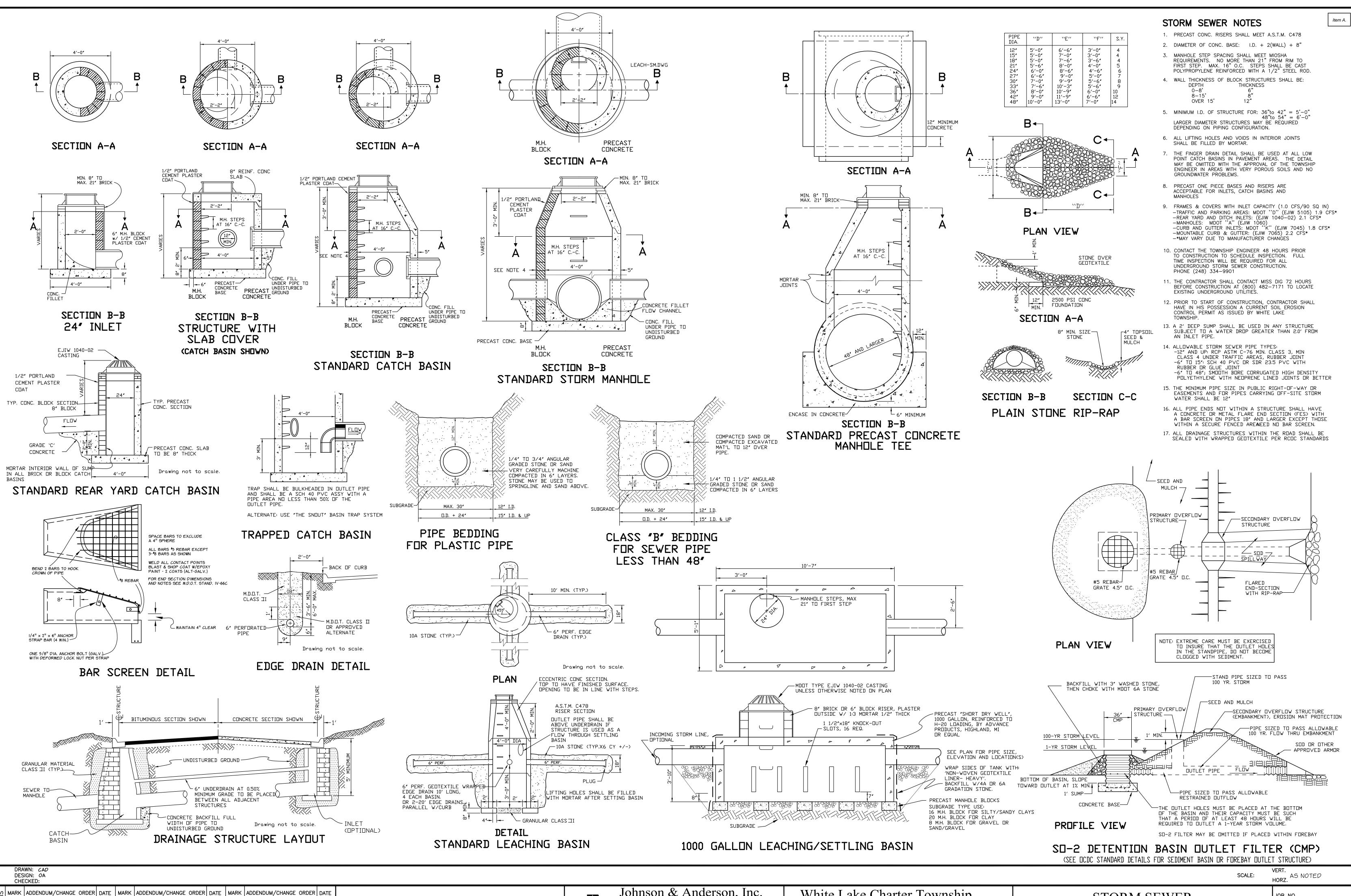
C-9.1

DES.

DRAWING NUMBER:

36

SWS



CHE	CKED:								
MARK	ADDENDUM/CHANGE ORDER	DATE	MARK	ADDENDUM/CHANGE ORDE	DATE	MARK	ADDENDUM/CHANGE ORDER	DATE	
	FIRST ISSUE	8-16-95		REVISE	10-3-02		REVISE	6-1-07	
	ADD SO-1	6-17-96		REVISE	12-17-03				
	NEW BAR GRATE	11-3-97		SEC REFERENCE	5-17-05				
		FIRST ISSUE ADD SO-I	MARK ADDENDUM/CHANGE ORDER DATE FIRST ISSUE 8-16-95 ADD SO-1 6-17-96	MARKADDENDUM/CHANGE ORDERDATEMARKFIRST ISSUE8-16-95ADD SO-16-17-96	MARK       ADDENDUM/CHANGE ORDER       DATE       MARK       ADDENDUM/CHANGE ORDER         FIRST ISSUE       8-16-95       REVISE         ADD SO-1       6-17-96       REVISE	MARK       ADDENDUM/CHANGE ORDER       DATE       MARK       ADDENDUM/CHANGE ORDER       DATE         FIRST ISSUE       8-16-95       REVISE       10-3-02         ADD SO-1       6-17-96       REVISE       12-17-03	MARK       ADDENDUM/CHANGE ORDER       DATE       MARK       ADDENDUM/CHANGE ORDER       DATE       MARK         FIRST ISSUE       8-16-95       REVISE       10-3-02         ADD SO-1       6-17-96       REVISE       12-17-03	MARK       ADDENDUM/CHANGE ORDER       DATE       MARK       ADDENDUM/CHANGE ORDER       DATE       MARK       ADDENDUM/CHANGE ORDER         FIRST ISSUE       8-16-95       REVISE       10-3-02       REVISE       REVISE         ADD SO-1       6-17-96       REVISE       12-17-03       Image: Comparison of the second seco	MARK       ADDENDUM/CHANGE ORDER       DATE       MARK       ADDENDUM/CHANGE ORDER       DATE       MARK       ADDENDUM/CHANGE ORDER       DATE         FIRST ISSUE       8-16-95       REVISE       10-3-02       REVISE       6-1-07         ADD SO-1       6-17-96       REVISE       12-17-03       10-3-02       10-3-02       10-3-02



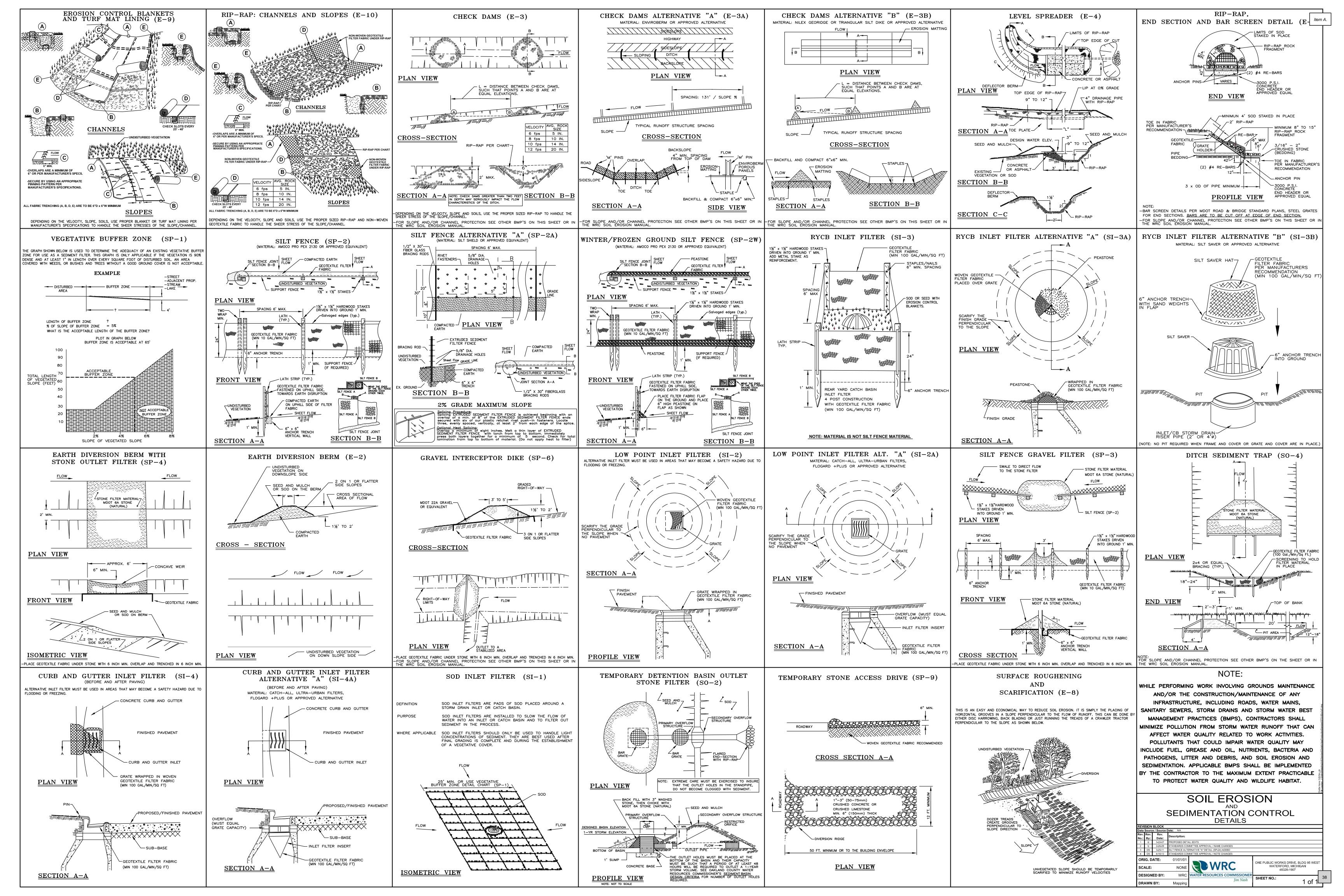
White Lake Charter Township 7525 Highland Road, White Lake, Mich (248) 698-3300

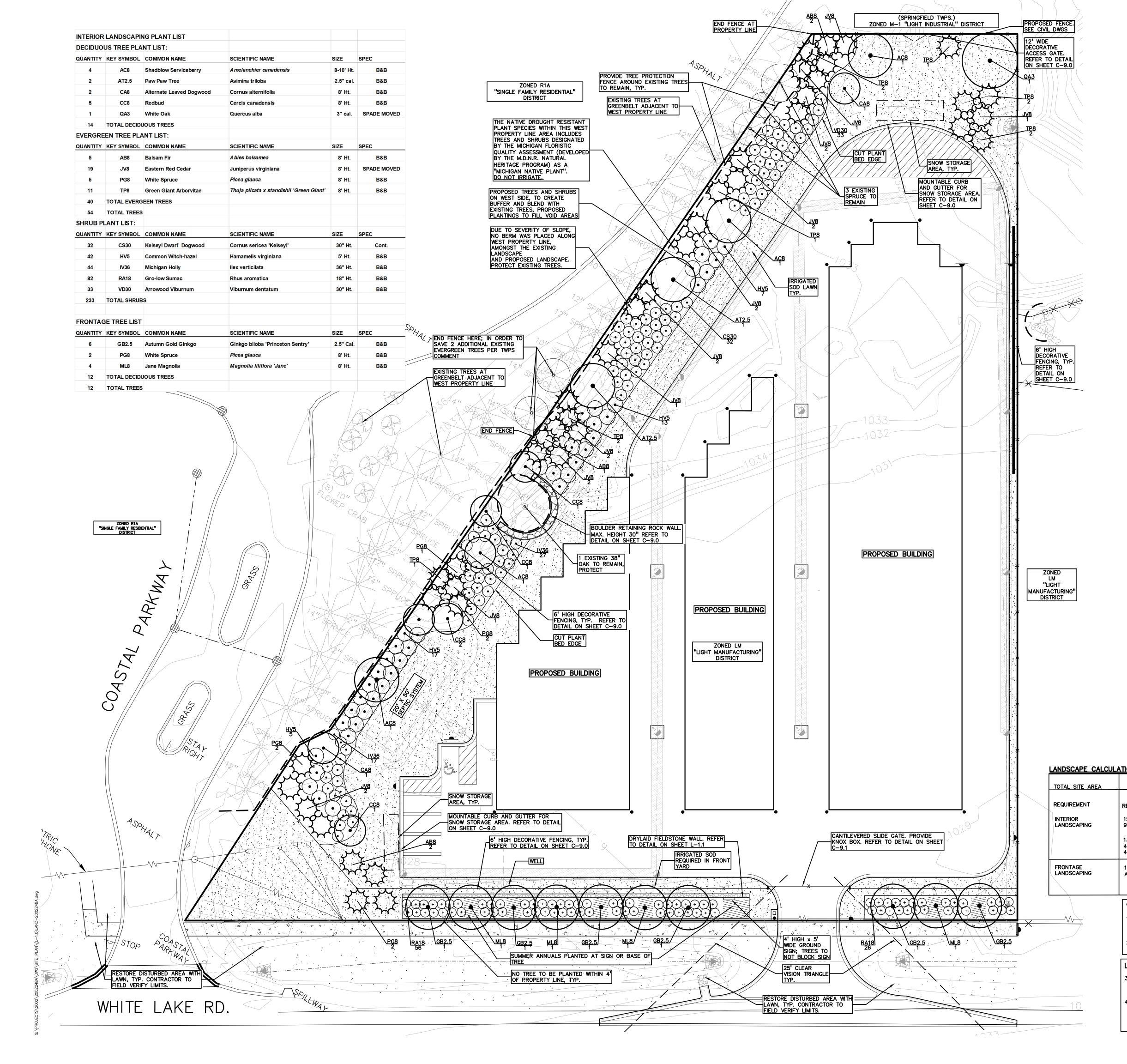
	L
igan	48383-2900

**STORM SEWER** STANDARD DETAILS

JOB NO. DATE ISSUED

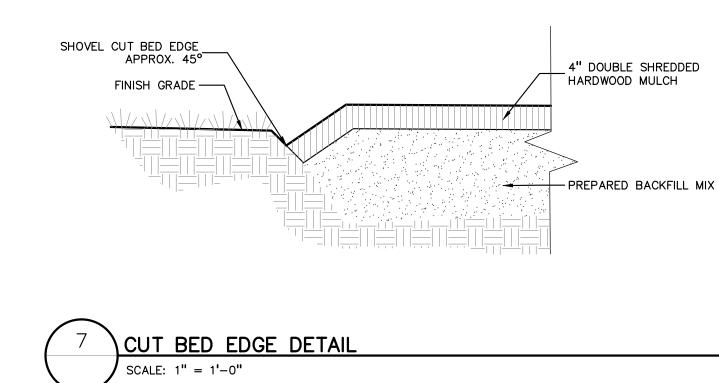
SHEET NO.

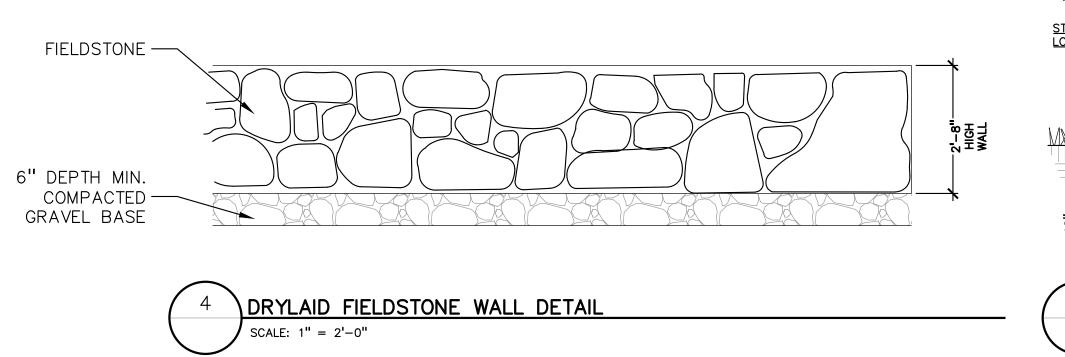


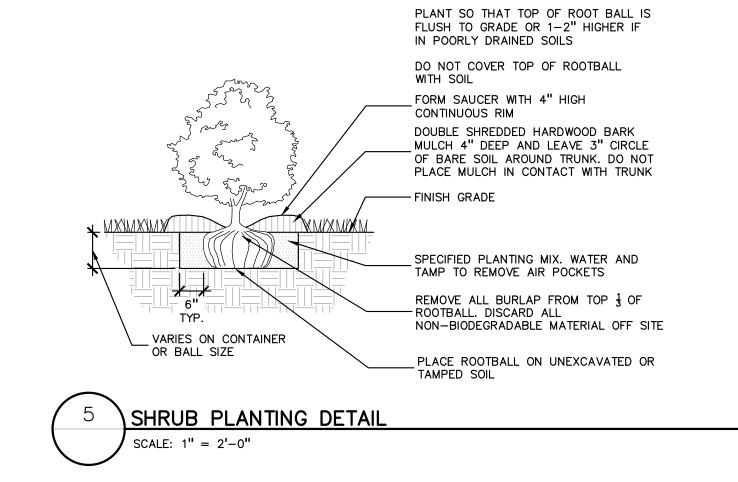


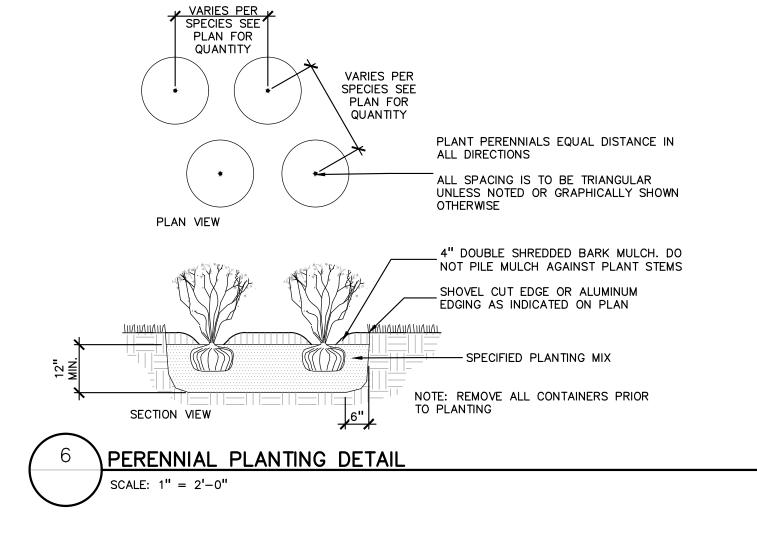
	KEY:	Item A.					
	• = DECIDUOUS TREES						
	= EVERGREEN TREES	PEV					
		<b>GROUP</b> t: 844.813.2949					
		www.peagroup.com					
	= IRRIGATED SOD LAWN SOD IN FRONT YARD AS REQUIRED	SE OF MICHINA					
	= RESTORED SEED LAWN AT LAWN AREAS DISTURBED IN R.O.W. OR ADJACENT PROPERTIES	GONROY					
	= ANNUALS AT SIGN AND TREE BASE SEE PLAN, BY OWNER	APCHITECT 5					
	= SNOW STORAGE AREA AT LOCATIONS OF MOUNTABLE CURBS	Svpscape A					
	= EXISTING TREE TO REMAIN, PROTECT WITH TREE FENCE						
	NO CONSTRUCTION SHALL OCCUR UNTIL TREE PROTECTION HAS BEEN INSTALLED AND APPROVED BY THE COMMUNITY DEVELOPMENT DIRECTOR.	0 10 20 40					
	SEE L-1.1 FOR LANDSCAPE DETAILS IRRIGATION PLANS (WITH RAIN SENSOR)	SCALE: 1" = 20'					
GENERAL PLANTING NOTES		Know what's below.					
PROPOSED PLANTING AND RELATED WORK.	, INSPECT EXISTING SITE CONDITIONS AND REVIEW IN CASE OF DISCREPANCY BETWEEN PLAN AND IES. CONTACT LANDSCAPE ARCHITECT WITH ANY	Call before you dig.					
MAY BE LOCATED BY CALLING MISS DIG 1- SERVICES SHALL BE THE RESPONSIBILITY O ALL RELATED ACTIVITIES WITH OTHER TRAD	RK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION 800-482-7171. ANY DAMAGE OR INTERRUPTION OF F CONTRACTOR. CONTRACTOR SHALL COORDINATE	CAUTION!! THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS					
ASSOCIATION OF NURSERYMEN STANDARD I SHALL BE NORTHERN GROWN, NO. 1. GRAD		PRIOR TO THE START OF CONSTRUCTION.					
PRIOR TO PRICING THE WORK.	NG ALL QUANTITIES SHOWN ON LANDSCAPE PLAN THE RIGHT TO REJECT ANY PLANT MATERIAL NOT	ANDERSONVILLE					
6. ALL SINGLE STEM SHADE TREES TO HAVE 7. ALL SINGLE TRUNK SHADE TREES TO HAVE	A CENTRAL LEADER; TREES WITH FORKED OR	SITE					
IRREGULAR TRUNKS WILL NOT BE ACCEPTE 8. ALL MULTI STEM TREES SHALL BE HEAVILY SIDED TREES OR THOSE WITH THIN OR OPE							
9. ALL EVERGREEN TREES SHALL BE HEAVILY IN SHAPE AND NOT SHEARED FOR THE LAS 10. ALL TREES TO HAVE CLAY OR CLAY LOAM	MACEDAY LAKE RD.						
11. NO MACHINERY IS TO BE USED WITHIN THE	<ol> <li>10. ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.</li> <li>11. NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.</li> </ol>						
12. ALL TREE LOCATIONS SHALL BE STAKED B THE APPROVAL OF THE LANDSCAPE ARCHI MATERIAL.	GINKO INVESTMENT						
13. IT IS MANDATORY THAT POSITIVE DRAINAGE 14. ALL PLANTING BEDS SHALL RECEIVE 4" DO EMERGENT, SEE SPECIFICATIONS. SHREDDED	COMPANY, LLC 2438 ROCHESTER ROAD OAKLAND TOWNSHIP, MICHIGAN 48363						
15. ALL LANDSCAPED AREAS SHALL RECEIVE 4 16. SEE SPECIFICATIONS FOR ADDITIONAL COMM WARRANTY STANDARDS. PLANT REPLACEME	IENTS, REQUIREMENTS, PLANTING PROCEDURES AND						
	UNDER BUILDING OVERHANG AND SHALL NOTIFY						
SIGNS, ADDRESS OR LIGHT POLES. SHIFT T 20. ALL LANDSCAPE AREAS SHALL BE PROVIDI	ED WITH A READILY AVAILABLE WATER SUPPLY. NEWLY	PROJECT TITLE GINKO					
IRRIGATION SYSTEMS SHALL NOT BE LOCAT 21. RECOMMENDED PLANTING DATES ARE MARC	CH 1 TO MAY 15 FOR ALL MATERIALS AND OCTOBER	SELF STORAGE WHITE LAKE TOWNSHIP, MICHIGAN					
PRIOR TOWNSHIP APPROVAL, AND MAY REC OR MULCHING, TO INCREASE SURVIVAL POT	RIALS PLANTINGS OUTSIDE THESE DATES SHALL HAVE QUIRE SPECIAL TREATMENT, SUCH AS EXTRA WATERING ENTIAL. UCTION DWGS. A RAIN SENSOR OR SIMILAR MEASURE						
	N DOES NOT OCCUR DURING OR SHORTLY AFTER						
BE OF THE SAME SPECIES. PER TWPS. ORI		REVISIONS					
BY THE COMMUNITY DEVELOPMENT DIRECT		PER AGENCIES COMMENTS         05/30/23           PER AGENCIES COMMENTS         06/29/23           PER AGENCIES COMMENTS         08/04/23					
<u>IONS PER WHITE LAKE TWP.: ZONED LM LIGHT</u>	1.37 ACRES (59,526 SF) NET AND GROSS	PER AGENCIES COMMENTS00/04/20PER AGENCIES COMMENTS09/22/23PER AGENCIES COMMENTS10/24/23					
REQUIRED	PROVIDED	PER AGENCIES COMMENTS04/26/24PER AGENCIES COMMENTS07/25/24PER AGENCIES COMMENTS09/06/24					
15% OF TOTAL LOT AREA 93,090 SQ FT. X .15 = 13,963 SQ FT. REQ.	31,529 SF LANDSCAPE AREA (33.9 %)						
13,963 SQ FT / 300 = 46.5 46.5 * 1 = 47 DEC./EVG. TREES 46.5 * 5 = 233 SHRUBS	54 PROPOSED TREES, 233 PROPOSED SHRUBS,	ORIGINAL ISSUE DATE:					
1 TREE PER 20 LF; LESS DRIVE ACCESS APPROX 237 LF / 20 = 12 TREES	12 PROPOSED TREES AT WHITE LAKE RD. (10 DEC TREES AND 2 EVERGREEN)	FEBRUARY 2, 2023					
		LANDSCAPE					
VARIANCES GRANTED BY ZBA ON 03-28-20 1. APPROVAL TO ELIMINATE THE REQUIREMENT FOR THE DEPM. OF A 7 FOOT HIGH DEPM. AND A 6 FOOT HIGH	IE INSTALLATION OF A 6 FOOT HIGH	PLAN					
<ul> <li>BERM, OR A 3 FOOT HIGH BERM AND A 6 FOOT HI WEST PROPERTY LINE.</li> <li>2. APPROVAL TO INSTALL A 20 FOOT GREENBELT IN L LAND FORM DUFFER ALONG THE WHITE LAKE DOAD</li> </ul>	IEU OF A 38 FOOT WIDE EXTENSIVE						
LAND FORM BUFFER ALONG THE WHITE LAKE ROAD		PEA JOB NO.         2002-248A           P.M.         JPB					
3. APPROVAL TO END THE FENCE MIDWAY ON THE SO IN ORDER TO SAVE 2 ADDITIONAL EXISTING EVERGI EXISTING EVERGREENS.	DUTHWEST SIDE OF THE SITE,	DN. BZ DES. JLE					
4. APPROVAL TO NOT PROVIDE THE DECORATIVE FENO ENTIRE SITE, SO AS TO PRESERVE AND PROTECT / THE WEST BORDER. CLIENT DOES NOT FEEL THE FI	ADDITIONAL EXISTING TREES ON ENCE IS NECESSARY	DRAWING NUMBER:					
AROUND THE ENTIRE SITE FOR SECURITY DUE TO P VEGETATION.		L-1.0					











UNDERSTORY -

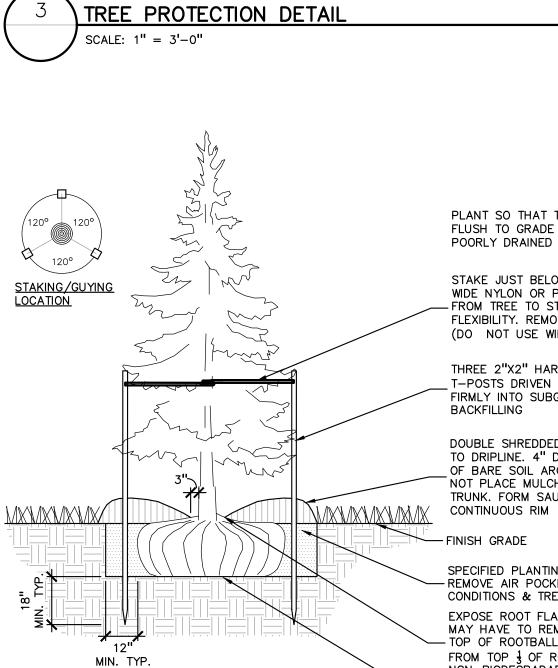
PROTECTIVE FENCING

'T' - POLES @ 5' O.C. ---





# ORGANIC LAYER TOPSOIL MINERAL LAYER



PLANT SO THAT TOP OF ROOT BALL IS FLUSH TO GRADE OR 1-2" HIGHER IF IN POORLY DRAINED SOILS

- DRIPLINE

STAKE JUST BELOW BRANCHES WITH 2"-3" WIDE NYLON OR PLASTIC STRAPS. CONNECT - FROM TREE TO STAKE AND ALLOW FOR FLEXIBILITY. REMOVE AFTER (1) ONE YEAR. (DO NOT USE WIRE & HOSE)

THREE 2"X2" HARDWOOD STAKES OR STEEL T-POSTS DRIVEN A MIN. OF 18" DEEP FIRMLY INTO SUBGRADE PRIOR TO BACKFILLING

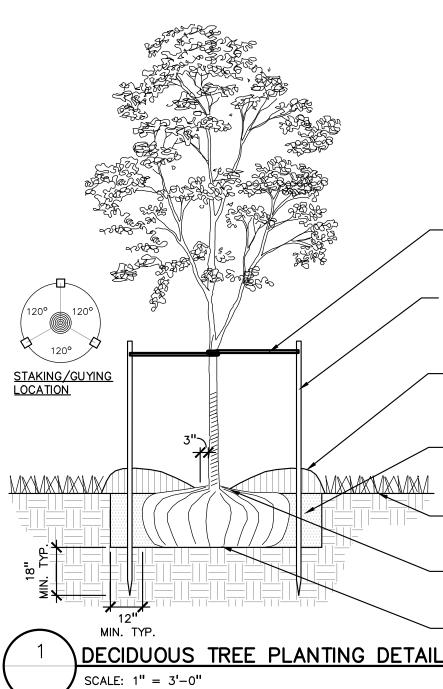
DOUBLE SHREDDED HARDWOOD BARK MULCH TO DRIPLINE. 4" DEEP AND LEAVE 3" CIRCLE OF BARE SOIL AROUND TREE TRUNK. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. FORM SAUCER WITH 4" HIGH

# - FINISH GRADE

EXPOSE ROOT FLARE OF TREE. CONTRACTOR MAY HAVE TO REMOVE EXCESS SOIL FROM - TOP OF ROOTBALL. REMOVE ALL BURLAP FROM TOP  $\frac{1}{3}$  OF ROOTBALL. DISCARD ALL

NON-BIODEĞRADABLE MATERIAL OFF SITE

\_ PLACE ROOTBALL ON UNEXCAVATED OR TAMPED SOIL



EVERGREEN TREE PLANTING DETAIL

SCALE: 1'' = 3' - 0''

PLANT SO THAT TOP OF ROOT BALL IS FLUSH TO GRADE OR 1-2" HIGHER IF IN POORLY DRAINED SOILS

SECURE TREE WRAP WITH BIODEGRADABLE MATERIAL AT TOP & BOTTOM, REMOVE AFTER FIRST WINTER

DO NOT PRUNE TERMINAL LEADER PRUNE ONLY DEAD, BROKEN BRANCHES AS DIRECTED BY LANDSCAPE ARCHITECT

STAKE JUST BELOW BRANCHES WITH 2"-3" WIDE NYLON OR PLASTIC STRAPS. CONNECT FLEXIBILITY. REMOVE AFTER (1) ONE YEAR. (DO NOT USE WIRE & HOSE)

(3) THREE 2"X2" HARDWOOD STAKES DRIVEN A MIN. OF 18" DEEP FIRMLY INTO SUBGRADE PRIOR TO BACKFILLING

DOUBLE SHREDDED HARDWOOD BARK MULCH TO DRIPLINE. 4" DEEP AND LEAVE 3" CIRCLE OF BARE SOIL AROUND TREE TRUNK. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. FORM SAUCER WITH 4" HIGH CONTINUOUS RIM

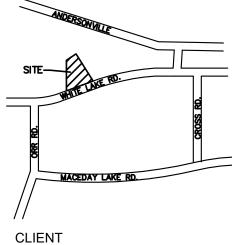
SPECIFIED PLANTING MIX, WATER & TAMP TO - REMOVE AIR POCKETS, AMEND SOIL PER SITE CONDITIONS & TREE REQUIREMENTS

# - FINISH GRADE

EXPOSE ROOT FLARE OF TREE. CONTRACTOR MAY HAVE TO REMOVE EXCESS SOIL FROM - TOP OF ROOTBALL. REMOVE ALL BURLAP FROM TOP  $\frac{1}{3}$  OF ROOTBALL. DISCARD ALL NON-BIODEGRADABLE MATERIAL OFF SITE \_ PLACE ROOTBALL ON UNEXCAVATED OR TAMPED SOIL







GINKO INVESTMENT COMPANY, LLC 2438 ROCHESTER ROAD OAKLAND TOWNSHIP, MICHIGAN 48363

PROJECT TITLE

GINKO SELF STORAGE

REVISIONS	
PER AGENCIES COMMENTS	05/30/23
PER AGENCIES COMMENTS	06/29/23
PER AGENCIES COMMENTS	08/04/23
PER AGENCIES COMMENTS	09/22/23
PER AGENCIES COMMENTS	10/24/23
PER AGENCIES COMMENTS	04/26/24
PER AGENCIES COMMENTS	07/25/24
PER AGENCIES COMMENTS	09/06/24

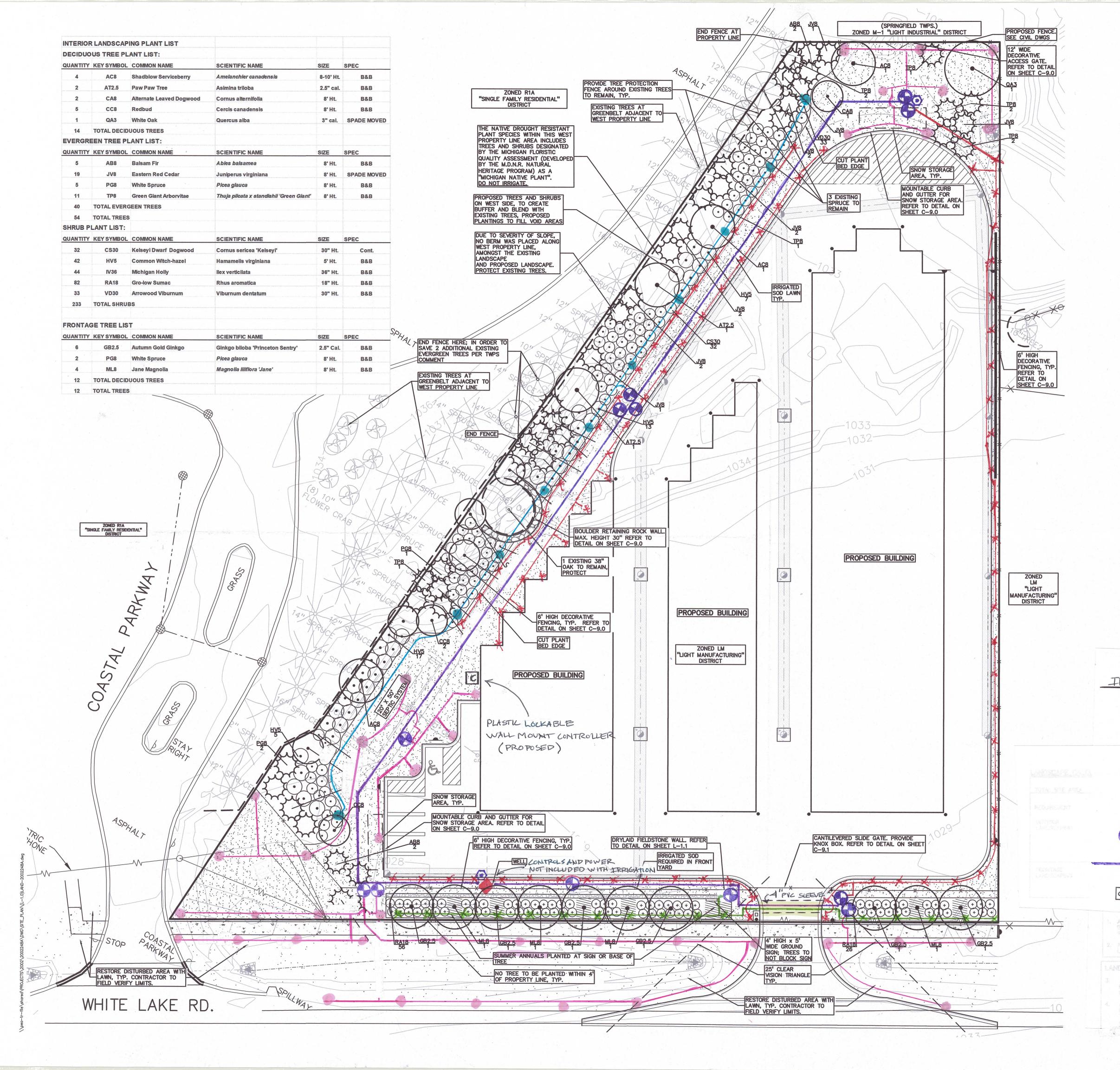
ORIGINAL ISSUE DATE: FEBRUARY 2, 2023

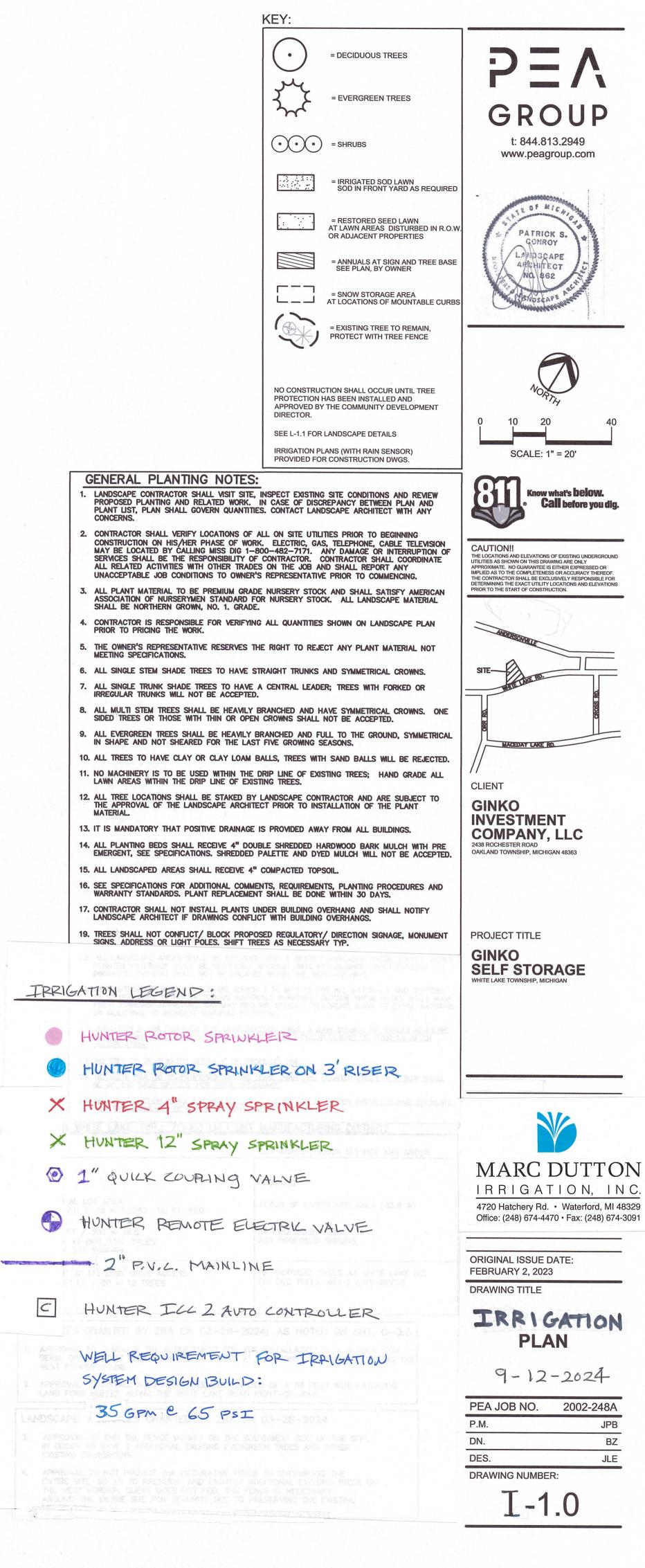
DRAWING TITLE

# LANDSCAPE DETAILS

PEA JOB NO.	2002-248A
P.M.	JPB
DN.	JLE
DES.	JLE
DRAWING NUMBE	R:

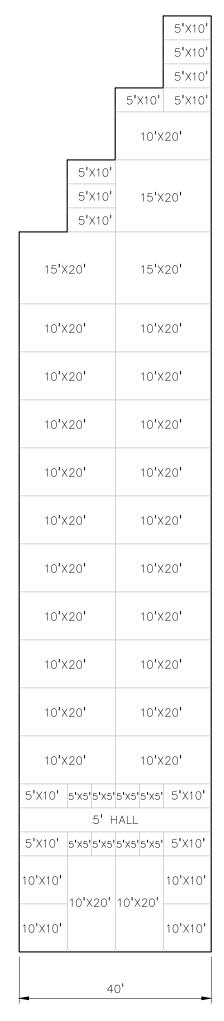
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Item A.





5'X10'

5'X10'

5'X10

15**'**X20'

15**'**X30'

15'X40'

15**'**X50'

0'X10' 10'X10' 10'X10' 10'X10' 10'X10' 10'X10'

5' HALL

0'X10' 10'X10' 10'X10' 10'X10' 10'X10' 10'X10'

10'X10' 10'X10' 10'X10' 10'X10' 10'X10' 10'X10'

5' HALL

10'X15' 10'X15' 10'X15' 10'X15' 10'X15'

10'X10'

10'X10'

0'X10'

0'X10' 🗖

BATH

0'X10'

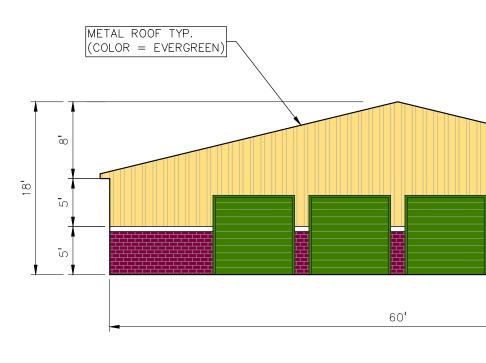
SCALE : 1'' = 20'

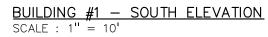
BUILDING #2 FLOOR PLAN (6,900 SF) SCALE : 1'' = 20'

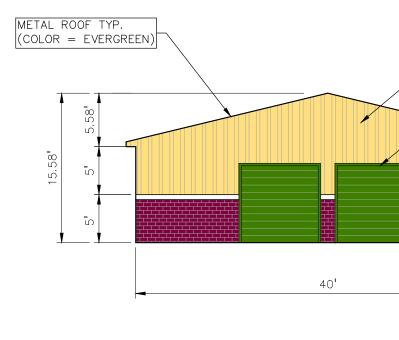
10'X10'	10'X20'	10'X30'			0.0 X . O I	10'X20'	)	10 <b>'</b> X10'			
10	)'X25'		5'X10'		5'X10'		10'X20'				
10	)'X25'		5'X10'	5' HALL	5'X10' 5'X10'		10'X20'				
10	)'X25'	5'X10' 5'X10'		ſ	5'X10'		10'X	20'			
5'X10'	5'X10'	5'>	×10'		5'X5'	5'×	(10 <b>'</b>	5 <b>'</b> X10			
5'X10'	5'X10'	5'>	5' ×10'	HA	LL 5'X5'	5'X	(10 <b>'</b>	5'X10			
10'X	20'	10'×	(10'			10	o'x2	25'			
10'X	20'	10 <b>'</b> ×	(10'			10	0'X2	25'			
10'X	20'	10 <b>'</b> ×	(10'			10	0'X2	25'			
10'X	20'	10 <b>'</b> X10'		5' HALL	10'X25'						
10'X20'		10 <b>'</b> X10'			10 <b>'</b> X25'						
10'X	10'X20'		10 <b>'</b> X10'		10'X25'						
10'X	20'	10 <b>'</b> ×	(10'		10'X25'			25'			
10'X10'	10 <b>'</b> X10'	10'×	(10'		5'X5' 5'X5'	5'X10'	5'X10'	10'X10'			
			5	' H <i>A</i>							
10'X10'	10'X10'	10'×	(10'		5'X10'	5'X10'	1(	)'X15'			
10'X	20'	10 <b>'</b> ×	(10'		10 <b>'</b> X	10'	1(	)'X15'			
10'X	20'	10 <b>'</b> X10'			10'X	10'	1(	) <b>'</b> X15'			
10'X	20'	10 <b>'</b> ×	(10'	5' HALL	10'X	10'	1(	) <b>'</b> X15'			
10'X	10'X20' 10		10'X10'				10'X10'		1(	10'X15'	
10'X	20'	10'×	(10'		10'X	10'	1(	)'X15'			
10'X	20'	10 <b>'</b> ×	(10'		10'X10' 10'X15'			) <b>'</b> X15'			
5'X10'	5'X5'5'X5'	5 <b>'</b> X5'			5'x5'5'x5'5'x5' 5'			5'X10'			
5'X10'	5'X5'5'X5'	'5 <b>'</b> X5'		НА 5'X5		5'X5'	5'X5'	5'X10'			
10'X20'	10'X20'	-002-01	074 01		10 X 70	10'X20'	2	10'X20'			

BUILDING #3 FLOOR PLAN (15,300 SF) SCALE : 1" = 20'

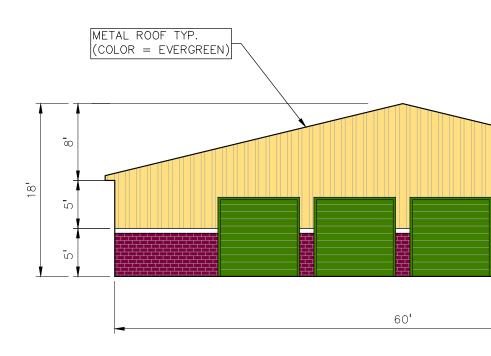
<u>BUILDING #1 — #3</u> <u>UNIT TABLUATION</u>						
SIZE	UNITS	SQ. FT.				
5'X5'	27	675				
5'X10'	39	1950				
10'X10'	55	5500				
10'X15'	12	1800				
10'X20'	51	10200				
10'X25'	10	2500				
10'X30'	2	600				
15'X20'	4	1200				
15'X30'	1	450				
15'X40'	1	600				
15'X50'	1	750				
BATH	1	50				
TOTAL	203	26275				



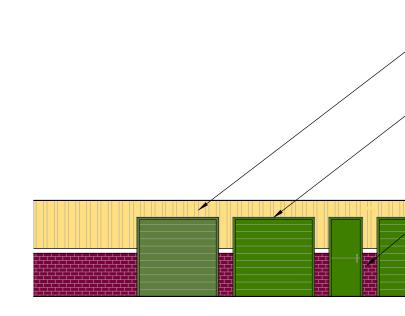




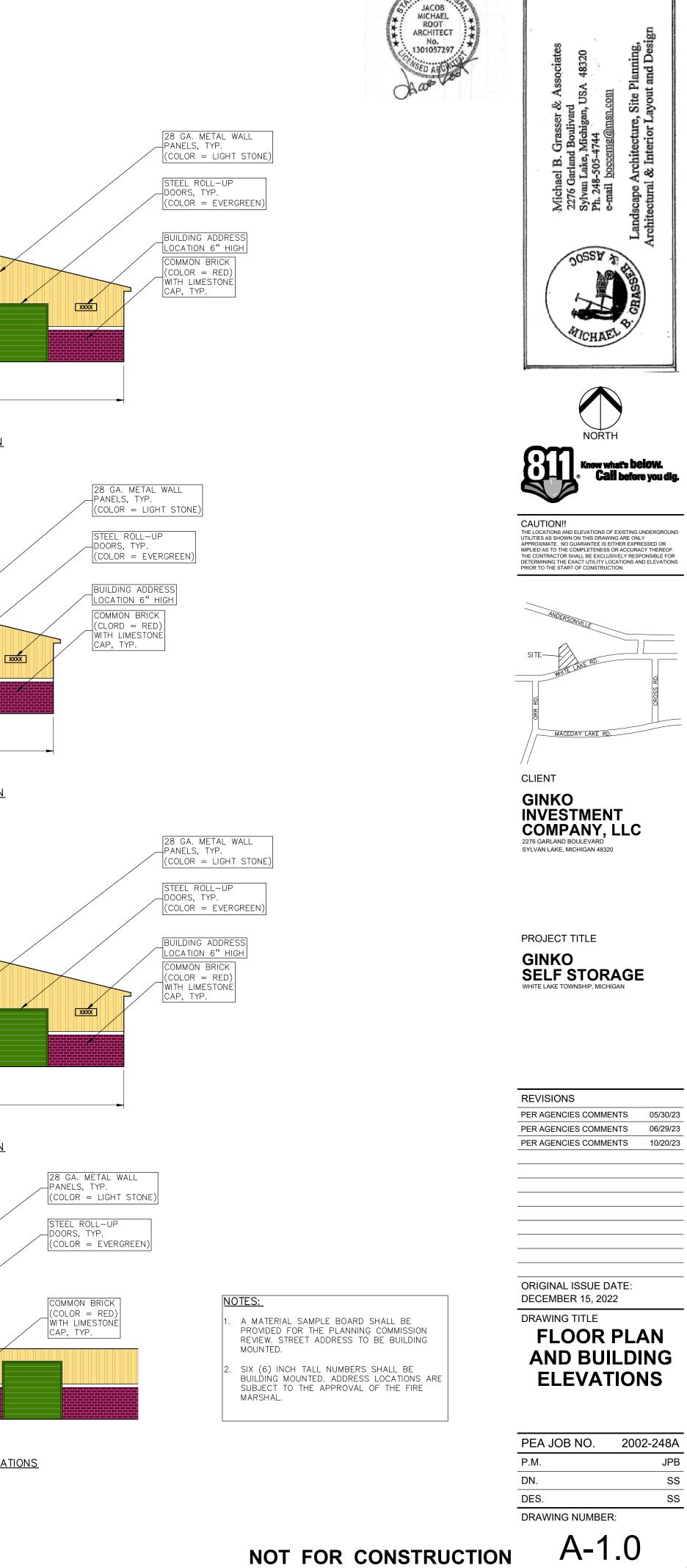
<u>BUILDING #2 – SOUTH ELEVATION</u> SCALE : I = I0



BUILDING #3 - SOUTH ELEVATION SCALE : 1'' = 10'



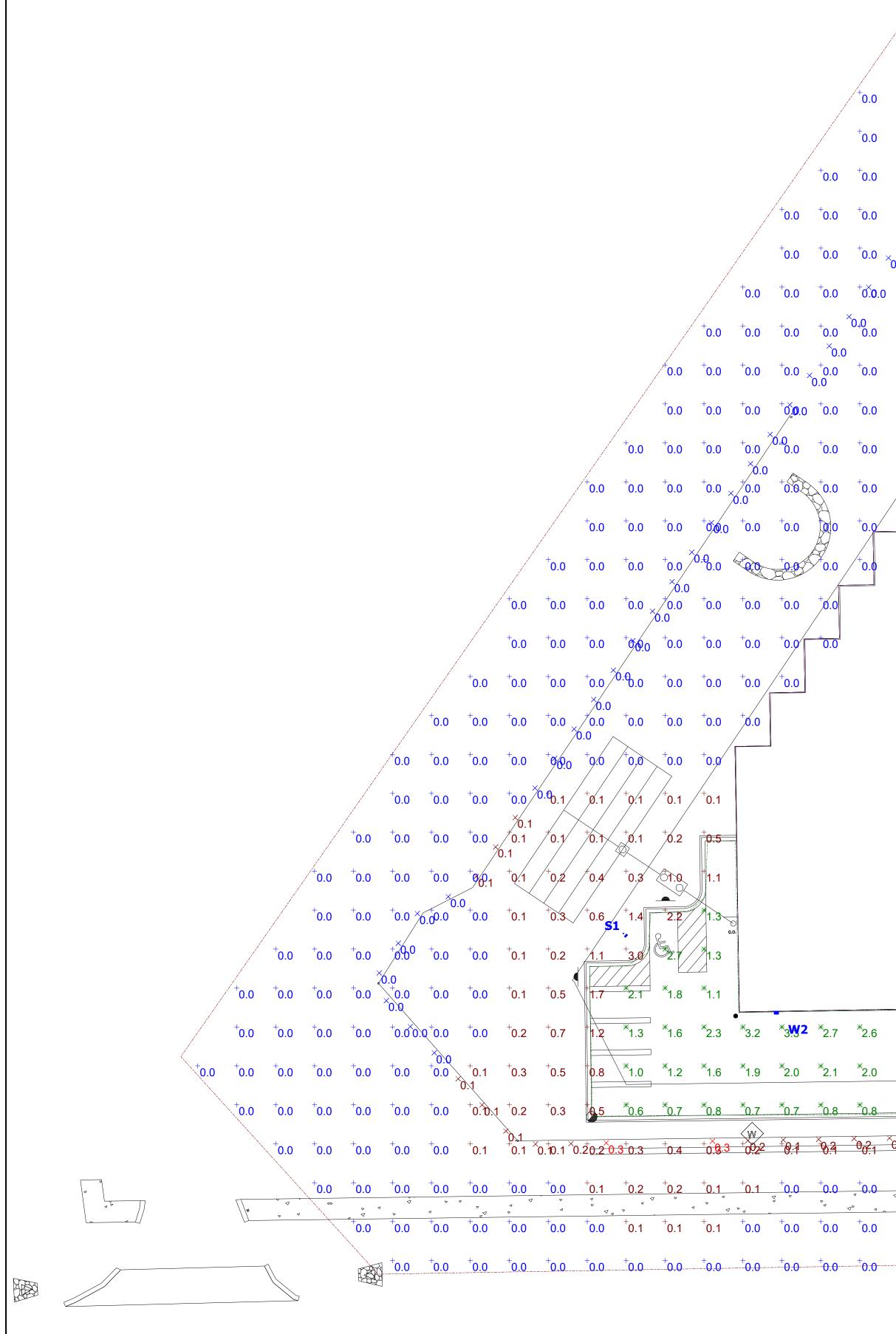
TYPICAL BUILDING EAST/WEST ELEVATIONS SCALE : 1" = 10'

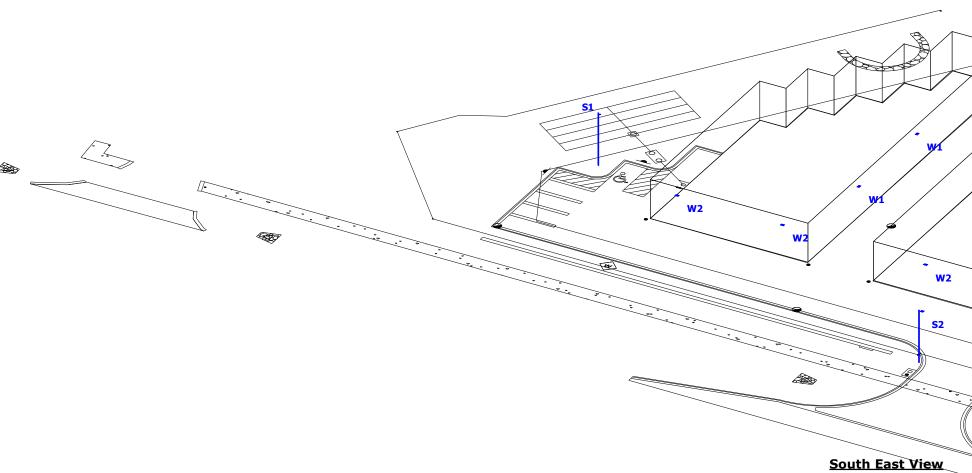


JPB

SS SS

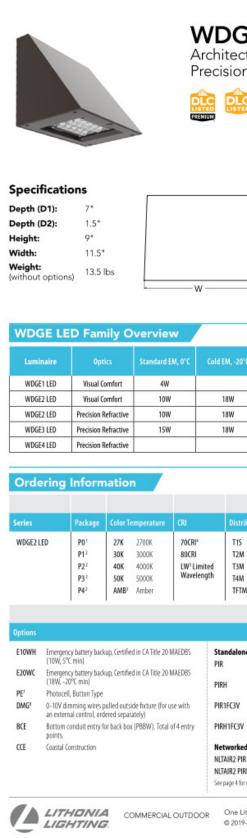
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$\begin{array}{c} \overset{+}{0.0} & \overset{+}{0.0} &$	10 $100$ $1$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Height: Weight: (SPA mount) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.57 ft² (0.05 m²)       21.8° (55.4 cm) (SPA mount)         1.3.3° (33.8 cm)       1.3.3° (33.8 cm)         3.0° (7.4 cm) Main Body       22.0 lbs (10.0 kg)         22.0 lbs (10.0 kg)       Items markedays or less.         22.0 lbs (10.0 kg)       See orderin         10 ft formation       Eters markedays or less.         9 Information       Eters markedays or less.         Package       Color         Package       Distribution         Voltage       NVOLT         Package       Color         Package       Distribution         Voltage       NVOLT         Package       Sok 3000X         Pa       30K 3000X         Pa       30K 3000X         Pa       Sok 5000X         Pa </th <th>vel motion/ambient sensor <sup>NULID, W</sup> DNAXD Natural Alum DWHXD White DDBTXD Textured Dar DBLEXD Textured Bar DNATXD Textured Wh ture) <sup>2</sup></th> <th>vinum k Bronze ck ural Numinum</th> <th>Height: Width: Weight: (without options) WDGE LED P Uminaire WDGE LED V WDGE2 LED V WDGE2 LED Pre WDGE4 LED Pre</th> <th>Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect A</th> <th>Image: Sensor     Polymetric       Polymetric     Polymetric       Image: Sensor     Polymetric</th> <th>SE LED family is designed to meet specifil-mounted lighting need in a widely account of the lends with any architecture. The clear resign from 1,200 to 25,000 lumens, and a true site-wide solution. Embedded will wireless controls, the WDGE family provides great uniform distribution and op then combined with multiple integrated cy battery backup options, including an increase with industry leading precision refractive options, the WDGE becomes the mounted lighting solution for pedestriations in any environment.         proximate Lumens (4000K, 80CRI)         P2       P3       P4       P5         000       3,000       4,500       6,000         000       3,000       4,500       6,000         000       3,000       4,500       6,000         000       3,000       12,000          3,000       12,000           3,000       12,000           3,000       12,000           3,000       12,000           3,000       12,000           4       WS       3/8inch Architectural wall spa province mounted back box (tring ingtr conduit entry). Use where is no junction box available         4       BBW       Subface mounted back box (tring ingtr conduit entry). Use where is no junction box available         5       DBBXD       Back       D</th> <th>repted in in in in in in in in in in in in in</th>	vel motion/ambient sensor <sup>NULID, W</sup> DNAXD Natural Alum DWHXD White DDBTXD Textured Dar DBLEXD Textured Bar DNATXD Textured Wh ture) <sup>2</sup>	vinum k Bronze ck ural Numinum	Height: Width: Weight: (without options) WDGE LED P Uminaire WDGE LED V WDGE2 LED V WDGE2 LED Pre WDGE4 LED Pre	Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect Precision Architect A	Image: Sensor     Polymetric       Polymetric     Polymetric       Image: Sensor     Polymetric	SE LED family is designed to meet specifil-mounted lighting need in a widely account of the lends with any architecture. The clear resign from 1,200 to 25,000 lumens, and a true site-wide solution. Embedded will wireless controls, the WDGE family provides great uniform distribution and op then combined with multiple integrated cy battery backup options, including an increase with industry leading precision refractive options, the WDGE becomes the mounted lighting solution for pedestriations in any environment.         proximate Lumens (4000K, 80CRI)         P2       P3       P4       P5         000       3,000       4,500       6,000         000       3,000       4,500       6,000         000       3,000       4,500       6,000         000       3,000       12,000          3,000       12,000           3,000       12,000           3,000       12,000           3,000       12,000           3,000       12,000           4       WS       3/8inch Architectural wall spa province mounted back box (tring ingtr conduit entry). Use where is no junction box available         4       BBW       Subface mounted back box (tring ingtr conduit entry). Use where is no junction box available         5       DBBXD       Back       D	repted in in in in in in in in in in in in in
$\begin{array}{c} +0.0 & +0 \\ +0.0 & +0 \\ \hline \end{array} \\ \begin{array}{c} & & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & $	*1.7 $\mathbf{W_{1}}_{2.1}$ *1.4 *2.2 *1.4 *1.8 *1.7 *2.8 $\mathbf{W_{1}}$ *1.5 *2.2 *1.3 *2.4 *1.5 *2.1 *1.6 $\mathbf{W_{1}}_{3.3}$ *1.3 *1.9 *1.3 *2.1 *1.5 *2.1 *1.5 *2.1 *1.3 *2.1 *1.3 *2.1 *1.3 *1.9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	<ul> <li>+0.0</li> <li>+0.0</li> <li>+0.0</li> <li>+0.0</li> <li>+0.0</li> <li>+0.0</li> <li>+0.0</li> <li>+0.0</li> <li>+0.0</li> <li>*0.0</li> <li>The second sec</li></ul>		Catalog	Avg         2.6 fc         0.5 fc         0.1 fc         1.7 fc		0.4 fc 0.0 fc 0.0 fc 0.4 fc	Max/Min 16.5:1 N/A N/A 14.3:1	6.5:1 N/A N/A 4.3:1	Mounting Height
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	. <u>1 *3.2 *3.1 *2.0 *1.7 *1.8 *1.8 *1.5</u>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	<sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0 <sup>+</sup> 0.0 W1	Lighting 3 Lithonia Lighting 15 Lithonia Lighting 5 Lithonia	RSX1 LED RSX1 LED WDGE2 LE 40K 70CRI WDGE2 LE 40K 70CRI	Pac 40K RSX Pac D WD PAC	kage 40 K Area Lu kage 40 GE2 LED CKAGE, 4 GE2 LED	00K CCT uminaire S	OCRI MANCE		20' 20' 12' 12'
+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.1 +0.2 +0. +0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0		+0.0 +0.0 +0.0 +0.0 +0.0 +0.0 +0.0	+0.0	<b>Note</b> All sit	e lighting wil	l be statio	nary and v	will not flick	cer, flash, o	r oscillate.	
S2 VI VI VI VI VI VI				2. SEE LU 3. CALCU THE ENGI CONDITIO TAKEN UI METHODS ELECTRIO INDICATE THESE LI SYSTEM S ENERGY O UNLESS E	<b>Note</b> CHEDULE FOR LUMINAIR JMINAIRE SCHEDULE FOR LATIONS ARE SHOWN IN INEER AND/OR ARCHITE ONS. THIS LIGHTING LA NDER CONTROLLED CON 5. ACTUAL PERFORMANC CAL VOLTAGE, TOLERANC ED ARE FROM GRADE AN COLTING CALCULATIONS SUITABILITY AND SAFET CODE AND LIGHTING QU EXEMPT, PROJECT MUST CIFIC INFORMATION CO	R LIGHT LOSS FACT FOOTCANDLES AT CT MUST DETERMIN YOUT REPRESENTS NDITIONS IN ACCOF E OF ANY MANUFAC CE IN LAMPS, AND D/OR FLOOR UP. ARE NOT A SUBST Y. THE ENGINEER A ALITY COMPLIANCE COMPLY WITH LIG	OR. : 0' - 0" NE APPLICABILITY ILLUMINATION LE RDANCE WITH ILLU CTURER'S LUMINAI OTHER VARIABLE F ITUTE FOR INDEPE AND/OR ARCHITEC HTING CONTROLS	VELS CALCULATED F IMINATING ENGINEE RE MAY VARY DUE T FIELD CONDITIONS. NDENT ENGINEERIN I IS RESPONSIBLE T REQUIRMENTS DEFII	ROM LABORATORY DA RING SOCIETY APPRO O VARIATION IN MOUNTING HEIGHTS G ANALYSIS OF LIGHT O REVIEW FOR MICHI NED IN ASHRAE 90.1	ATA WED TING GAN	





Statistics											
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min					
Main Entrance	Ж	2.6 fc	6.6 fc	0.4 fc	16.5:1	6.5:1					
Overall	+	0.5 fc	6.6 fc	0.0 fc	N/A	N/A					
Property/Fence	X	0.1 fc	0.3 fc	0.0 fc	N/A	N/A					
Drive Lanes/Parking	Ж	1.7 fc	5.7 fc	0.4 fc	14.3:1	4.3:1					

FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

Alternates Note THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

# Drawing Note

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Mounting Height Note MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

GINKO SELF STORAGE PHOTOMETRIC LAYOUT GASSER BUSH ASSOCIATES WWW.GASSERBUSH.COM

Designer KS Date 05/21/2024 Scale Not to Scale Drawing No. #24-29620\_V2