

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
JANUARY 12, 2015
6:30 P.M.
AGENDA**

CALL TO ORDER:

PLEDGE OF ALLEGIANCE:

APPROVAL OF AGENDA:

ELECTION OF OFFICERS:

CALL TO THE PUBLIC:

(Note: The Board reserves the right to not begin new business after 10:00 p.m.)

OPEN PUBLIC HEARING #1... Review of sketch plan for a proposed 12,439 sq. ft. church and coffee shop to occupy space within the multi-tenant building located at the northwest corner of Grand River Avenue and Genoa Business Park Drive (2250 Genoa Business Park Drive), Brighton, Michigan 48114, parcel # 4711-13-103-003. The request is petitioned by The Well c/o Lindhout Associates.

Planning Commission disposition of petition

- A. Disposition of Sketch Plan. (12-18-14)

OPEN PUBLIC HEARING #2... Review of a site plan, environmental impact, and PUD amendment for a proposed redevelopment of an existing outparcel to demolish the existing Bennigan's Restaurant and construct a new 12,000 sq. ft. multi-tenant building, located at 3950 E. Grand River Avenue, Howell, Michigan 48443, parcel # 4711-05-400-047. The request is petitioned by RG Properties, Inc.

- A. Recommendation regarding PUD Agreement Amendment.
- B. Recommendation of Environmental Impact Assessment. (12-01-14)
- C. Recommendation of Site Plan. (12-23-14)

OPEN PUBLIC HEARING #3... Review of a rezoning, PUD amendment, site plan, and environmental impact assessment for a proposed 3,848 sq. ft. Red Olive Restaurant, located at 3838 E. Grand River Avenue, Howell, Michigan 48443, # 4711-05-400-025. The request is petitioned by PKJJ, LLC.

- A. Recommendation regarding Rezoning from RCD to NR-PUD.
- B. Recommendation of PUD Agreement Amendment.
- C. Recommendation of Environmental Impact Assessment. (04-25-14)
- D. Recommendation of Site Plan. (12-17-14)

OPEN PUBLIC HEARING #4... Request to table site plan, special use, and environmental impact assessment for a proposed new 22,600 sq. ft. industrial building used to sort, warehouse, and distribute batteries, located at 5900 Brighton Pines Court, Howell, Michigan 48443, parcel # 4711-15-200-031. The request is petitioned by Brivar Construction Company.

Planning Commission disposition of petition

A. Table request to February 9, 2015 meeting.

Administrative Business:

- *Staff report*
- *Approval of December 8, 2014 Planning Commission meeting minutes*
- *Member discussion*
- *Adjournment*



GENOA CHARTER TOWNSHIP APPLICATION

Sketch Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION:

APPLICANT NAME & ADDRESS: The Well 7191 Grand River Ave. Brighton, MI
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Damas Genoa Retail Center, LLC 28345 Beck Road, Ste. 100 Wixom, MI 48393

SITE ADDRESS: 2250 Genoa Business Park Drive PARCEL #(s): 11-13-103-001

APPLICANT PHONE: (810) 229-8400 OWNER PHONE: (248) 344-8995

LOCATION AND BRIEF DESCRIPTION OF SITE: The Genoa Retail Center is located off of Grand River Ave., east of Euler Road and west of St. Joseph Mercy Hospital.

The building has three existing tenants and four vacant units.

BRIEF STATEMENT OF PROPOSED USE: The Well is buying the Genoa Retail Center from Damas Genoa Retail LLC. The Well Church will be moving here from it's current location, just east of Pless Drive.

THE FOLLOWING IMPROVEMENTS ARE PROPOSED: A full tenant build-out is planned for the Worship area of the church at the north end of the existing building. A smaller renovation will occur for the children's ministry which will be located south of the existing dentist office.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: Holly Osterhout

ADDRESS: Lindhout Associates 10465 Citation Drive Brighton, MI 48116

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Holly Osterhout of Lindhout Associates at hao@lindhout.com
Name Business Affiliation Email Address

FEE EXCEEDANCE AGREEMENT

All sketch plans are allocated one (1) consultant review and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal for a Land Use Permit. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: [Signature] DATE: 12/18/14
PRINT NAME: JEFF WATERMAN PHONE: 810-772-1154



January 5, 2015

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
Subject:	The Well Worship Facility and Coffee Shop – Sketch Plan Review #1
Location:	2250 Genoa Business Park Drive – northwest corner of Grand River Avenue and Genoa Business Park Drive
Zoning:	GCD General Commercial District

Dear Commissioners:

As requested, we have reviewed the sketch plan (dated 12/18/14) proposing a new use for two units in the existing retail center at 2250 Genoa Business Park Drive. Specifically, the applicant proposes a 6,918 square foot worship facility (including a 1,000 square foot coffee bar) and a 4,048 square foot youth ministry facility.

We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance and provide the following comments for your consideration.

A. Summary

1. As a change in use for an existing building, the project is eligible for sketch plan review (as opposed to a full site plan).
2. No exterior site improvements are proposed as part of this project.
3. The applicant must provide a signed shared parking agreement between the property owners, along with evidence in support of this arrangement.
4. The Commission may wish to require improvements to deficiencies in exterior site features, such as landscaping, lighting and/or waste receptacles and enclosures.
5. Any new signage proposed must be in accordance with Article 16 and a permit must be obtained prior to any sign installation.

B. Proposal/Process

The applicant requests sketch plan approval for a change in use within an existing multi-tenant building in the GCD. Places of worship and related facilities are permitted by right in the GCD.

Given the scope of the project, it is eligible for sketch plan review (as opposed to full site plan review) in accordance with Article 18 of the Township Zoning Ordinance.

C. Sketch Plan Review

- 1. Dimensional Requirements.** With respect to the dimensional requirements of Section 7.03, no external changes are proposed to the existing multi-tenant building.
- 2. Building Materials and Design.** There are no changes proposed to the exterior elevations of the existing building.



Aerial view of site and surroundings (looking west)

- 3. Parking.** Based on the parking calculations provided by the applicant, a total of 168 spaces are required (based on individual uses), while 105 are provided on site. As a side note, we believe 1 additional space is required due to a fractional space not counted for the mortgage office.

In order to mitigate this deficiency, the applicant proposes a shared parking agreement with the adjacent office building to the north (Cross Pointe) for use of an additional 67 spaces.

Section 14.02.04 allows the Commission to consider shared parking when:

- The property owners provide a signed agreement; and
- A determination is made that the peak usage will occur at different periods of the day.

The submittal does not include a signed agreement, nor is any evidence provided supporting this arrangement. While one can reasonably assume that the peak usage of a church and office building will be at different periods, the applicant must provide documentation in support of this proposal.

Pertinent information includes the nature of the offices in Cross Pointe, an indication of the hours of operation for those offices, parking calculations for Cross Pointe and details on usage for The Well.

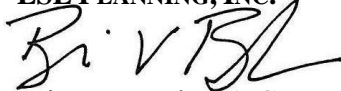
- 4. Pedestrian Circulation.** The site plan identifies existing sidewalks along both roadways and between the parking lot and building. Additionally, a new sidewalk is proposed on the north side of the site to connect with the proposed shared parking area on the Cross Pointe property.
- 5. Vehicular Circulation.** The site currently has one driveway accessing Genoa Business Park Drive. The plan does not identify any changes to the existing vehicular circulation pattern as part of this project.
- 6. Landscaping.** The plan does not identify any existing or proposed landscaping. If there are deficiencies in site landscaping, the Commission may wish to require improvements as part of this project.

7. **Exterior Lighting.** The plan does not identify details of existing exterior site lighting. If existing light fixtures are not up to current Ordinance standards, the Commission may wish to require improvements as part of this project.
8. **Waste Receptacles.** The plan identifies 4 existing receptacles/enclosures along the west side of the site. If the existing receptacles/enclosures are not up to current standards, the Commission may wish to require improvements as part of this project.
9. **Signage.** The submittal does not identify any new signage proposed as part of this project. New signage must be designed in accordance with the requirements of Article 16 and a permit must be obtained prior to the installation of any new signage.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at borden@lsplanning.com.

Sincerely,

LSL PLANNING, INC.

A handwritten signature in black ink, appearing to read "B. V. Borden". The signature is stylized and written over the printed name below.

Brian V. Borden, AICP
Senior Planner



January 6, 2015

Ms. Kelly Van Marter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: The Well Worship Facility
Sketch Plan Review**

Dear Ms. Van Marter:

We have reviewed the sketch plan submittal from Lindhout Associates Architects, AIA, PC, dated December 14, 2014. The petitioner is proposing to purchase the existing Genoa retail center located at 2250 Genoa Business Park Drive and convert the four currently vacant units into the new location of The Well Church located at 7191 Grand River Avenue. The northern end of the building will be completely built out for the proposed worship center and coffee shop, with the southern unit converted into a children's ministry. Three existing tenants will remain in the retail center.

SUMMARY

1. Provide a copy of the impact assessment for the development.
2. Provide construction, grading and drainage details for the proposed sidewalk.
3. Review pedestrian flow and access around the site.

PLAN REVIEW

1. An impact assessment should be completed to include any changes to the planned use of the building which may affect the existing zoning and utility usage.
2. There are no contours provided in the area where the proposed sidewalk is shown. Sidewalk should be designed to meet the Americans with Disabilities Act (ADA) design requirements. Sidewalk ramps should be shown on each end. Adding sidewalk will increase the impervious area of the site, and the existing site drainage calculations should be verified to ensure the system remains adequate and provides for the full site plan application.
3. The petitioner is planning to utilize approximately 68 parking spaces in the adjacent parking lot for the Cross Pointe Office Building. There are only two existing pedestrian ramps on the east side of the building which are the intended access to the various units. With plans to utilize the majority

Tetra Tech

401 South Washington Square, Suite 100, Lansing, MI 48933
Tel 517.316.3930 Fax 517.484.8140 www.tetrattech.com

Ms. Kelly Van Marter
The Well Worship Facility – Sketch Plan Review
January 6, 2015
Page 2

of the parking spaces, additional ramps to the sidewalk around the building should be explored to increase parking lot safety.

The petitioner should provide an impact assessment and revise and resubmit the site plan to address the above comments prior to approval.

Please call if you have any questions.

Sincerely

A handwritten signature in blue ink, appearing to read "Kelly Van Marter". The signature is fluid and cursive, with a large initial "K" and "V".A handwritten signature in blue ink, appearing to read "Joseph C. Swartz". The signature is cursive and somewhat stylized, with a large initial "J".

copy: Holly Osterhout – Lindhout Associates



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

December 29, 2014

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: The Well Worship Facility & Coffee Shop
2340 Genoa Business Park Drive
Site Plan Review

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on December 23, 2014 and the drawings are dated December 18, 2014. The plan review is based on the requirements of the International Fire Code (IFC) 2012 edition.

The project is based on an existing 20,000 square foot building that is protected with a sprinkler system. The uses are currently a mixed use of Assembly, Business, and vacant uses. The applicant is proposing to occupy two of the currently vacant spaces located on either side of the Dentist office for Education (Day Care) and Assembly (Religious Worship) uses.

Areas of concern with this submittal include: the primary fire access drive around the building being only 24' wide and not the currently required 26'; A single point of access off of the main road; and turning radius that do not meet the current standard. However, with consideration being given that this is an existing building that is protected with a sprinkler system and that the proposed uses are similar to the existing uses, no alterations to these features are being requested.

With the following General Comments being corrected, this submittal appears to be in general conformity with the adopted fire prevention code.

General Comments:

1. The address on the plan and on the application is incorrect. The Genoa Retail Center has several addresses ranging from 2340 to 2394. 2394 is the existing restaurant on the south end and 2340 is the vacant space on the north end that the Well Church would be occupying. This should be corrected.
2. Future project submittals shall include the address and street name of the project in the title block.

IFC 105.4.2
3. The building shall include the building address on the building. The address shall be a **minimum of 6"** high letters of contrasting colors and be clearly visible from the street. The location and size shall be verified prior to installation.

IFC 505.1



BRIGHTON AREA FIRE AUTHORITY

December 29, 2014

Page 2

*The Well Worship Facility & Coffee Shop
2250 Genoa Business Park Drive
Site Plan Review*

The applicants design team is reminded that Fire Protection System plans (sprinkler & alarm alterations) and the building life safety plan are reviewed by the fire department. Additional comments will be given during the building plan review process (specific to the building plans and occupancy). If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "Michael Evans".

Michael Evans, EFO, CFPS
Deputy Fire Chief



2911 Dorr Road
 Brighton, MI 48116
 810.227.5225
 810.227.3420 fax
 genoa.org

CONNECTION FEE MEMORANDUM

RE: The Well/Coffee Shop
 FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director
 DATE: January 8, 2015

This memo will describe the connection fees required for the proposed church and coffee shop in the multi-tenant building located at 2250 Genoa Business Park Drive.

Assuming a 12,439 sq.ft. church and a coffee shop:

CHURCH - 10,966 sq. ft. (0.13 REUs per 1,000 sq.ft.)	1.47 REU
COFFEE SHOP -	2.6 REU
TOTAL REU's -	4.07 REU
Less 1.2 REU previously paid (Technology Connection)	-1.2 REU
Total Amount of REU's Due	2.87 REUs

New Connection Charge

Water	2.87 REU @ \$7,900 (MHOG Water)	\$ 22,673.00
Sewer	2.87 REU @ \$5,500 (Lake Edgewood West)	\$ 15,785.00
Total amount due:		\$ 38,458.00

Connection Fees must be paid at time of land use permit issuance.

A meter package may also need to be purchased including the appropriate sized meter and a MIU (meter interface unit). I trust this satisfies your request. Should you have any questions please feel free to contact me at 810-227-5225.

SUPERVISOR
 Gary T. McCririe

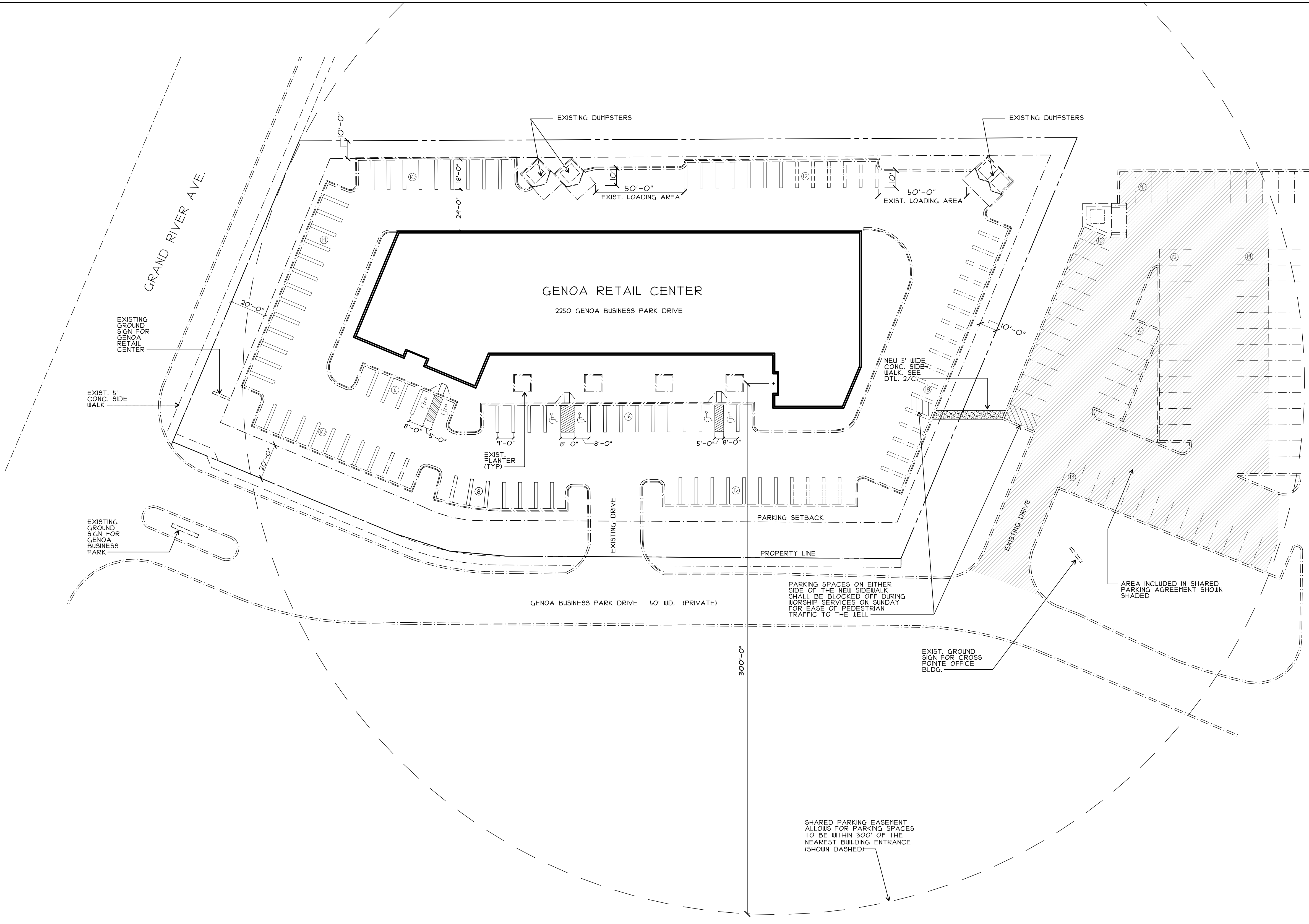
CLERK
 Paulette A. Skolarus

TREASURER
 Robin L. Hunt

MANAGER
 Michael C. Archinal

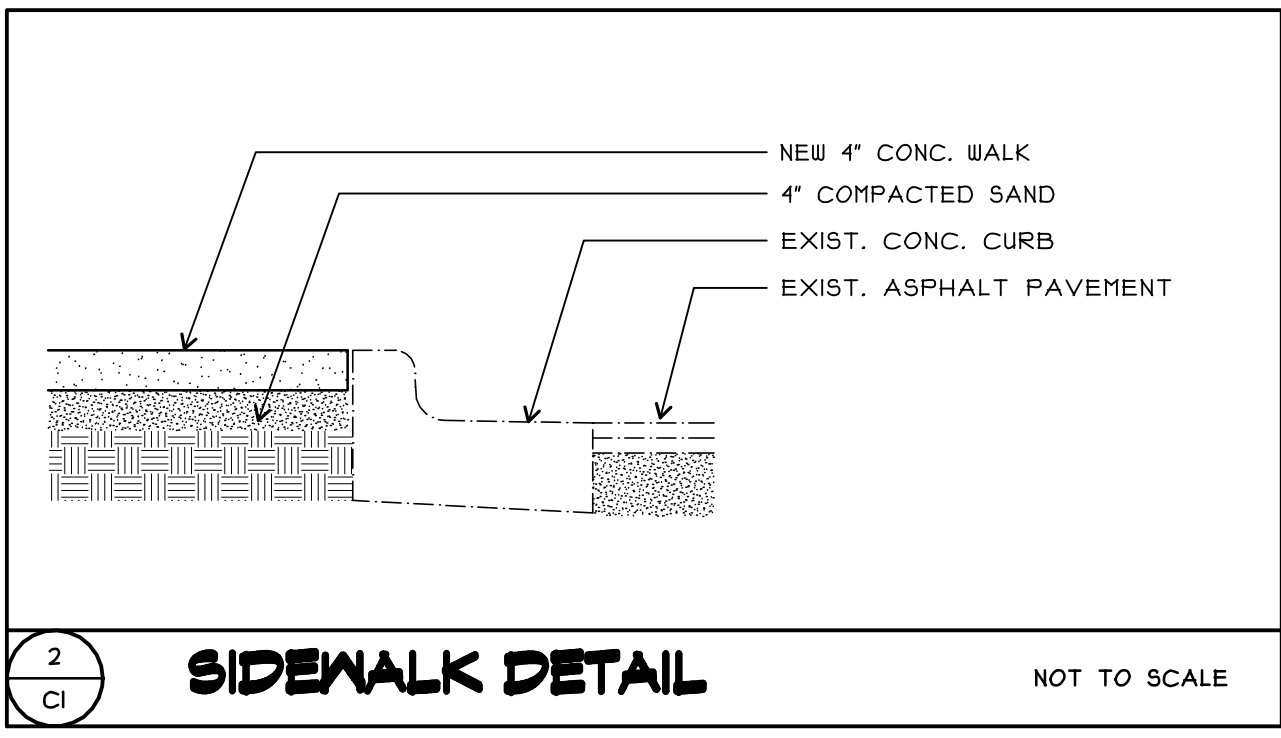
TRUSTEES
 H. James Mortensen
 Jean W. Ledford
 Todd W. Smith
 Linda Rowell

FILE LOCATION: H:_8400\WORKING\01\CHUCK\CHUCK - Site Sketch Plan - Parking - COPYRIGHT © 2013
 DATE PLOTTED: 12/29/2014
 LINDHOUT ASSOCIATES architects aia pc
 THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED THEREIN IS PROPRIETARY AND IS NOT TO BE USED OR REPRODUCED WITHOUT PRIOR WRITTEN APPROVAL



LEGAL DESCRIPTION

UNIT 1 OF "GENOA ONE CONDOMINIUM" LIVINGSTON COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 215, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, ALSO DESCRIBED AS:
 PART OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF SECTION 13, T2N, R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:
 COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 13;
 THENCE S00°15'51" W 610.32 FEET;
 THENCE N88°14'47" W 453.43 FEET ALONG THE NORTH LINE OF "GENOA ONE CONDOMINIUM";
 THENCE S00°15'51" W 191.88 FEET ALONG THE WEST LINE OF "GENOA ONE CONDOMINIUM" TO THE NORTHWEST CORNER OF UNIT 1 OF "GENOA ONE CONDOMINIUM" AND TO THE POINT OF BEGINNING;
 THEN S47°24'33" E 258.25 FEET;
 THENCE S00°15'51" W 221.55 FEET;
 THENCE 44.42 FEET ALONG THE CURVE TO THE RIGHT, HAVING A RADIUS OF 145.00 FEET AND THE CHORD BEARING S12°24'14" W 44.01 FEET;
 THENCE S22°31'11" W 135.21 FEET TO THE NORTHEASTERLY LINE OF GRAND RIVER AVENUE 100.00 FEET WIDE);
 THENCE N41°22'43" W 184.14 FEET ALONG THE NORTHEASTERLY LINE OF GRAND RIVER AVENUE 100.00 FEET WIDE);
 THENCE N41°22'43" W 184.14 FEET ALONG THE NORTHEASTERLY LINE OF GRAND RIVER AVENUE;
 THENCE N00°15'51" W 431.42 FEET ALONG THE WEST LINE OF "GENOA ONE CONDOMINIUM" TO THE POINT OF BEGINNING.



NOTE:
SHARED PARKING AGREEMENT SHALL BE AGREED UPON BY THE WELL & CROSS POINTE OFFICE BUILDING BEFORE SUCH PARKING CAN BE UTILIZED

NOTE:
THE SHARED PARKING AGREEMENT BETWEEN THE WELL & CROSS POINTE OFFICE BUILDING INCLUDES PERMISSION TO CONSTRUCT A NEW 5' CONCRETE SIDEWALK TO CONNECT THE TWO PARKING LOTS

LINE LEGEND

- NEW CONSTRUCTION
- - - EXISTING TO REMAIN
- - - HIDDEN WORK
- EXISTING TO BE REMOVED

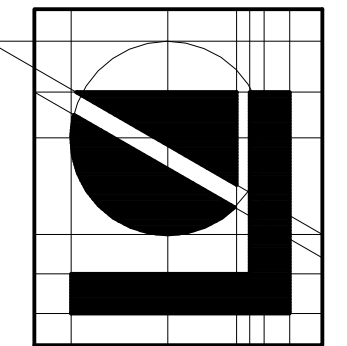
SHARED PARKING CALCULATIONS

REQUIRED PARKING PER TENANT USE:

GRAND RIVER GRILL	
1 SPACE PER 2 SEATS; 134 SEATS / 2 = 68 SPACES	
TOWNE MORTGAGE	
1400 S.F. / 250 = 5 SPACES	
DENTIST OFFICE	
2800 S.F. / 200 = 14 SPACES	
TOTAL FOR EXIST. TENANTS = 87 SPACES	
THE WELL; 11,439 S.F.	
200 MAX. SEATS IN MAIN UNIT OF WORSHIP / 3 = 67 SPACES	
NEW COFFEE SHOP; 1,000 S.F.	(LOCATED WITHIN THE WELL- THE COFFEE SHOP WILL NOT BE OPEN TO THE PUBLIC DURING WORSHIP SERVICES ON SUNDAY)
1000 S.F. / 70 = 14 SPACES	
TOTAL REQUIRED ON SITE: 87 (EXIST. TENANTS) + 67 (THE WELL) + 14 (COFFEE SHOP) = 168 SPACES	
EXISTING PARKING LOT = 104 SPACES	
* HOLD OPEN (1) PARKING SPACE FOR SIDEWALK ACCESS; NEW TOTAL = 105 SPACES	
SHARED PARKING AGREEMENT W/ CROSS POINTE OFFICE BLDG. = 67 ADDITIONAL SPACES	
TOTAL PARKING PROVIDED = 112 SPACES	
BARRIER FREE PARKING REQUIRED:	
151 - 200 TOTAL SPACES PROVIDED = 4 REQUIRED BARRIER FREE	
EXISTING BARRIER FREE SPACES AT GENOA RETAIL CENTER = 4	
LOADING SPACES	
1 SPACE FOR 5,000 S.F. + 1 SPACE FOR EACH ADDITIONAL 20,000 S.F. = 2 SPACES REQ.	2 SPACES PROVIDED

1
CI
SKETCH PLAN - PARKING

SCALE: 1" = 30'-0"



Lindhout Associates
 architects aia pc
 10465 citation drive, brighton, michigan 48116-9510
 www.lindhout.com (810)227-5668 fax: (810)227-5655

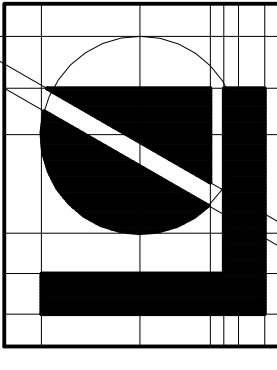
consultant

SKETCH SITE PLAN SUBMITTAL
 OWNER REVIEW
 BUILDING COMMITTEE MEETING
 issued for
 12-18-14
 11-10-14
 11-2-14
 date
 dr: TWJ, HAO
 ck'd: XXX
 app'd: XXX

BUILDING RENOVATION for:
THE WELL
 GENOA TOWNSHIP, MICHIGAN
SKETCH SITE PLAN

C1
 1498

NEW HOME OF THE WELL



**Lindhout Associates
architects aia pc**
10465 citation drive, brighton, michigan 48116-9510
www.lindhout.com (610)227-5668 fax: (610)227-5855

consultant

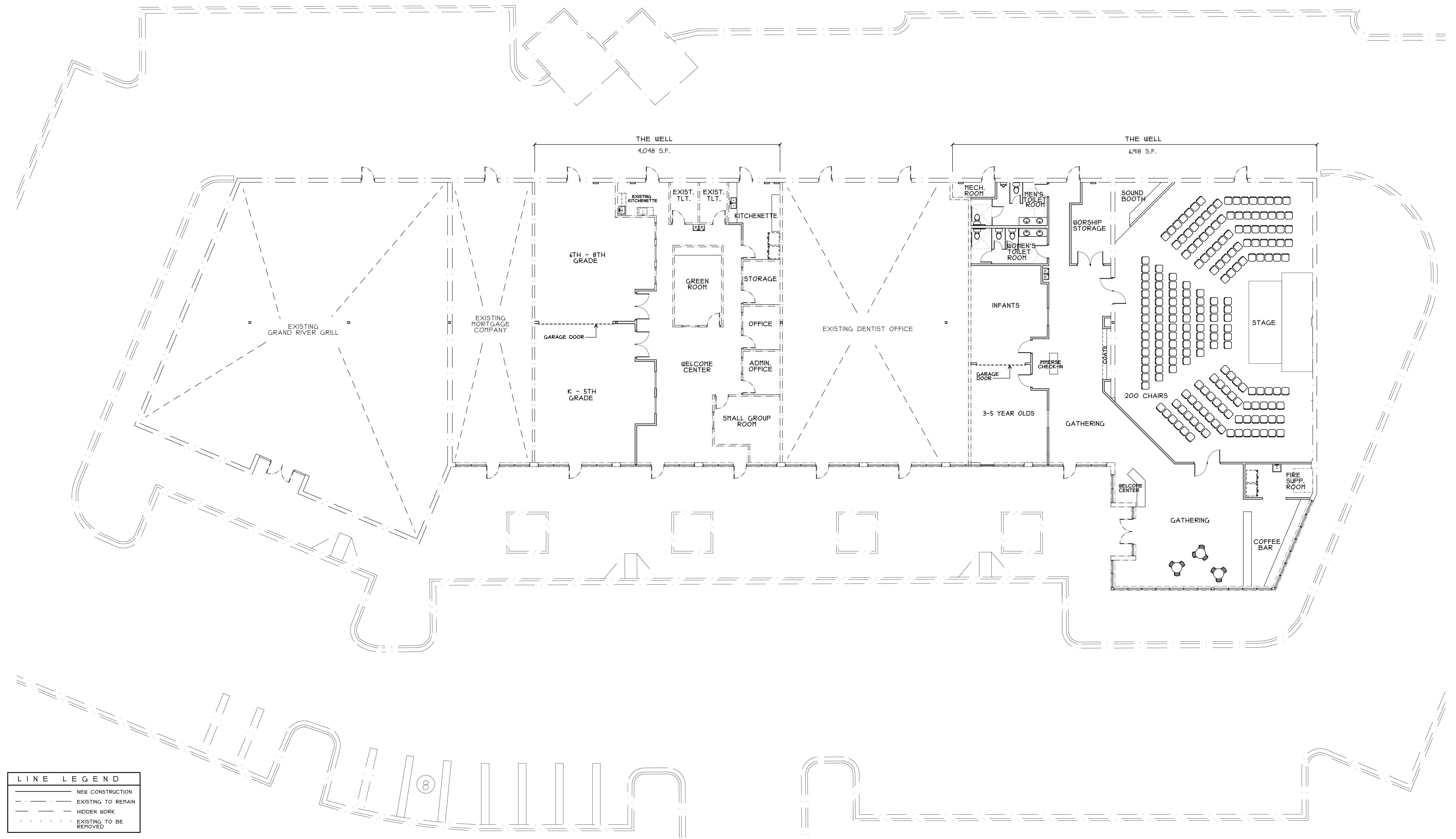
SKETCH SITE PLAN SUBMITTAL
OWNER REVIEW
OWNER REVIEW
BUILDING CODE REVIEW
OWNER USE
issued for

12-18-14
12-14-14
11-24-14
10-21-14
2-7-14
date

dr: HAO
ck'd: XXX
app'd: XXX

BUILDING RENOVATION for:
THE WELL
GENOA TOWNSHIP, MICHIGAN
SCHEMATIC FLOOR PLAN

A1
149B



LINE LEGEND	
(Solid line)	NEW CONSTRUCTION
(Dashed line)	EXISTING TO REMAIN
(Dotted line)	HIDDEN WORK
(Dash-dot line)	EXISTING TO BE REMOVED

DATE PLOTTED: 12/19/2014 PLOTTED BY: lslg COPYRIGHT © 2013 LINDHOUT ASSOCIATES architects aia pc THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED THEREIN IS PROPRIETARY AND IS NOT TO BE USED OR REPRODUCED WITHOUT PRIOR WRITTEN APPROVAL.



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

GENOA TOWNSHIP
DEC 01 2014

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Jim Blair, 10050 Innovation Dr., Suite 100, Dayton, OH 45342
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: GCG Howell, Ltd., 10050 Innovation Dr., Suite 100, Dayton, OH 45342

SITE ADDRESS: 3950 E Grand River Ave, Howell, MI PARCEL #(s): 11-05-400-047

APPLICANT PHONE: 937-424-3904 OWNER PHONE: 937-434-7218

OWNER EMAIL: jblair@rgproperties.com

LOCATION AND BRIEF DESCRIPTION OF SITE: Lot 4 of the Livingston
Commons shopping center

BRIEF STATEMENT OF PROPOSED USE: redevelopment of existing outparcel
for a new multi-tenant retail building.

THE FOLLOWING BUILDINGS ARE PROPOSED: 12,000 SF of mutli-tenant retail

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: [Signature]

ADDRESS: 10050 Innovation Dr., Suite 100, Dayton, OH 45342

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Jim Blair of RG Properties, Inc. at jblair@rgproperties.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE:  DATE: 11/20/14

PRINT NAME: Jim Blair PHONE: 937-424-3904

ADDRESS: 10050 Innovation Dr., Suite 100, Dayton, OH 45342



January 7, 2015

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
Subject:	Redevelopment of Livingston Commons Lot #4 – Site Plan Review #2
Location:	Southwest corner of Grand River Avenue and Latson Road
Zoning:	NR-PUD Non-Residential Planned Unit Development District

Dear Commissioners:

At the Township’s request, we have reviewed the revised site plan (dated 12/23/14) proposing a new multi-tenant commercial building, including a drive-through restaurant, for the 2.03-acre site currently occupied by a Bennigan’s restaurant.

The site is located at the southwest corner of Grand River Avenue and Latson Road within Phase I of the Livingston Commons PUD, which is zoned NR-PUD. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance.

A. Summary

1. Given the high visibility of this corner, we recommend the applicant retain the “entrance landmark” near the interchange and provide the identification feature near the intersection (with suggested enhancements).
2. There are several proposed amendments to the PUD Agreement, including allowance for a double row of parking in the front yard.
3. The use conditions for drive-through restaurants are met.
4. The applicant requests that side yard parking setbacks be waived per Section 14.06.11.
5. The Planning Commission has approval authority over the building elevations, including materials and colors.
6. Given the high visibility of this corner, we are of the opinion there is too much EIFS on the front façade and do not feel that wood tiles constitute a high quality natural material. The rear façade, which will be highly visible, is also lacking in design elements.
7. The building has the appearance of a multi-tenant center that could be found anywhere and should be enhanced to be more representative of this important corner.
8. We recommend the applicant include a note on the building elevation drawing clarifying the number of wall signs for the end units.
9. We suggest the Township require details of typical outdoor patio elements at such time as each tenant seeks to use the outdoor dining spaces.

B. Proposal

The applicant requests site plan review/approval for a new 12,000 square foot commercial building with space for up to 5 tenants. The largest tenant space is intended for use as a drive through restaurant.

Drive through restaurants would typically require special land use approval; however, based on the proposed amendments to the PUD Agreement, one drive through restaurant would be permitted on Lot #4 (although others in the future would require special land use approval). Nonetheless, we have reviewed the drive through component of the project for compliance with the use conditions of Section 7.02.02(j).



Aerial view of site and surroundings (looking north)

C. PUD Agreement

The submittal includes proposed amendments to the existing PUD Agreement for Livingston Commons Phase I. Proposed amendments include:

- Inclusion of the “Red Olive” site into the PUD.
- Allowance for 1 drive-through restaurant on Lot #4 with the potential for future drive through restaurants with special land use approval, even if they are within 500 feet of each other.
- Allowance for the “Red Olive” site to maintain access to Grand River with a right-in/right-out limitation.
- Allowance for one double row of parking in front of a multi-tenant building on Lot #4.
- Removal of the applicant’s obligation for an entranceway landmark near the interchange and replacement with a Township identification sign (a 3-foot tall by 10-foot long brick wall with Genoa Township signage affixed and a flagpole in the background).

Our comments are as follows:

- The Red Olive project has been reviewed separately and will require approval for PUD rezoning and site plan review; however, its inclusion is logical from a planning/zoning perspective.
- We defer to the Township Engineer for comments on retaining the access to Grand River; however, it seems unnecessary given the ability to now access the site from the internal service drive.
- The double row of parking in the front yard is a relatively major change. If this were not allowed, the building could be moved closer to the roadway, demonstrating a better presence along this important intersection.
- The interchange area is more of an entry to the community and we do not fully understand the need/desire for a change to entranceway landmark feature that was originally agreed upon.
- We support the identification sign near the intersection and likely would have suggested some type of feature in this location. However, we recommend this be provided in addition to the entranceway landmark near the interchange, as opposed to trading one for the other.
- We believe enhancements are warranted to the identification sign given the importance of this intersection. Suggestions include an increase in size (both height and length), use of decorative lighting (upward or back-lit) and the addition of limestone accents (caps and piers).

D. Use Conditions (Drive-through Restaurant)

Section 7.02.02(j) provides the following conditions for drive-through restaurants:

- 1. Principal and accessory buildings shall be setback fifty (50) feet from any adjacent public right of way line or property line.**

This standard is met.

- 2. The establishment of a new drive-through restaurant shall require the lot be separated a minimum of five hundred (500) feet from any other lot containing a drive-through restaurant.**

This standard is met.

- 3. Only one (1) access shall be provided onto any street.**

Lot #4 does not have direct access to either Grand River Avenue or Latson Road. Vehicular access to this part of the development will be via the existing interior service drive, which has access to both roadways.

- 4. Such restaurants constructed adjacent to other commercial developments shall have a direct vehicular access connection where possible.**

The site plan includes internal access points to the remainder of the Livingston Commons development.

E. Site Plan Review

- 1. Dimensional Requirements.** As described in the table below, the proposal complies with the dimensional standards for this PUD:

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
NR-PUD	1	150	70	15	50	20 front 10 side/rear	35	35% building 75% impervious
Proposal	2.03	270 (Latson)	101.3 (Grand River) 71.3 (Latson)	74.6 (NW) 80.4 (S)	60 (S)	20 front 0 side* 22 rear	28.3	13.6% building 72.1% impervious

* The applicant seeks Planning Commission approval in accordance with Section 14.06.11, which allows modification to side and rear yard parking setbacks where there is shared access.

- 2. Building Materials and Design.** The proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission.

Materials include quick brick, masonry ground face block, wood tile and EIFS, while colors include brown, gray and off-white. We request the applicant present material and color samples to the Commission for their consideration.

We are of the opinion that the front façade contains too much EIFS, particularly given the highly visible location. The PUD Agreement requires 80% of building wall surfaces to be natural materials (such as brick or stone). In response, the applicant notes that 86% of the building is comprised of such materials; however, we do not believe the front façade meets this standard.

Furthermore, we do not believe that the wood tiles are consistent with what was intended by the material requirement. The applicant has indicated that this material “is a new prototypical elevation requirement for Panera Bread.”

Additionally, the rear elevation will be highly visible from the internal service drive. While this side of the building is predominantly brick, it lacks the design elements of the front façade. At a minimum, consideration should be given to wrapping the parapet/cornice details around the building.

In closing, the applicant notes that the PUD Agreement requires building architecture that is consistent/compatible with that of surrounding buildings; however, this building has the appearance of a multi-tenant center that could be found anywhere and we believe that enhancements would provide a development more representative of this important corner.

3. **Parking.** As outlined in the table on Sheet C-2.0, 120 spaces are required for the proposed multi-tenant building. Additionally, given the nature of the uses, 12 RV spaces, 3 waiting spaces and 10 stacking spaces are also required.

There are 78 spaces proposed within the confines of Lot #4, as well as a portion of the 12 RV spaces, the 3 waiting spaces and the 10 stacking spaces. Additional spaces are available via shared parking with the reconfigured lots west and south of Lot #4.

The parking spaces and drive aisles meet or exceed the dimensional standards of Section 14.06 and a note on Sheet C-2.0 indicates the use of looped (double striped) spaces.

4. **Pedestrian Circulation.** The plan identifies the existing sidewalks along Grand River and Latson with a connection proposed between the public sidewalk and building. Sidewalks are also proposed around the building and along the Lot #4 side of the existing interior service drive.
5. **Vehicular Circulation.** As previously noted, Lot #4 does not have direct vehicular access to either roadway. Instead, access is provided at 2 points to the existing interior service drive.

The only potential traffic conflict we see is related to potential blocking of the northerly waste receptacle area by drive through stacking. The applicant has acknowledged this potential conflict and indicated they “will schedule trash pickup to minimize impacts during peak delivery/drive through periods.”

6. **Loading.** The plan identifies the 2 required loading spaces at the rear of the building.
7. **Landscaping.** We have reviewed the landscape plan as follows:

Location	Requirements	Proposed	Comments
Front yard greenbelt (Grand River & Latson)	17 canopy trees 17 evergreen trees 67 shrubs 20-foot width	18 canopy trees 18 evergreen trees 72 shrubs 20-foot width (minimum)	Requirements met
Parking lot	12 canopy trees 1,210 SF landscaped area Hedgerow	12 canopy trees 4,200 SF landscaped area Hedgerow	Requirements met

8. **Waste Receptacle and Enclosure.** The project includes 2 new waste receptacle areas. Section 12.04 requires a rear yard or non-required side yard location, unless otherwise approved by the Planning Commission. The proposed placement complies with these standards.

Details on Sheet C-2.3 identify the required concrete base pad and a masonry enclosure, which will match materials used on the building.

9. Exterior Lighting. The submittal includes a lighting plan (Sheet C-6.0), which proposes the installation of 3 new light poles, 4 new light fixtures on existing poles and 12 wall mounted fixtures. The details and photometric readings on Sheets C-6.0 and C-6.1 are all in accordance with the requirements of Section 12.03.

10. Signs. In total, the submittal includes 2 monument signs (existing structures with new sign faces added) and 12 wall signs (3 for each end unit and 2 for each internal unit). Two menu boards are also shown on the site plan. For the applicant's information, up to 2 menu boards are allowed with a maximum size of 16 square feet per board.

Given the site's presence as a corner lot, 2 wall signs are permitted for each business and the Planning Commission may permit 2 monument signs; however, there is nothing in the Ordinance or PUD Agreement that permits a 3rd wall sign for a business. In response, the applicant has indicated that the intent is for the tenants of the end units to pick 2 out of the 3 wall sign options. In order to avoid any confusion in the future, we recommend the applicant add a note to this effect on the building elevation drawings.

Information on sign sizes is needed to confirm compliance with the dimensional standards of Article 16; however, the applicant has stated that it will be each tenant's responsibility to obtain approval and a permit prior to sign installation.

11. Impact Assessment. The submittal includes an Impact Assessment (dated 12/1/14). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

12. Additional Considerations. The site plan identifies 3 outdoor dining patios; however, no details are provided. In response, the applicant indicated that the details are the responsibility of each tenant.

As such, we suggest the Township require information on typical elements such as tables, chairs, umbrellas, trash receptacles and fencing at such time as individual tenants seek to utilize these spaces.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at borden@lslplanning.com.

Sincerely,

LSL PLANNING, INC.



Brian V. Borden, AICP

Senior Planner



January 6, 2015

Ms. Kelly Van Marter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Re: Livingston Commons Lot 4 Redevelopment Site Plan Review # 2

Dear Ms. Van Marter:

We have reviewed the resubmitted impact assessment and site plan documents prepared by Wade Trim for the Livingston Commons Lot 4 Redevelopment dated December 23, 2014. The site is on the southwest corner of the intersection of Grand River Avenue and Latson Road. The petitioner is planning to demolish the existing Bennigan's Restaurant and construct a 12,000 sft multi-tenant retail building.

We offer the following comments for consideration by the planning commission:

SUMMARY

1. Review proposed hydrant connection.

SITE PLAN

1. The updated plans include a hydrant on the east side of the building, per the fire department review. MHOG records indicate that there is no 12-inch water line adjacent to the curb line along the north and east sides of the site. Recommend installing a tapping sleeve and valve off the water main that runs along the western side of the lot and extend the water main around the south side of the building to the proposed hydrant location. This new water main will become a public main and an easement will be required, per MHOG standards. Construction plans for the public water main must be reviewed by MHOG. Petitioner will be required to include a completed permit application with the construction plan review

The petitioner should revise and resubmit the site plan to address the above comments prior to approval. Please call if you have any questions.

Sincerely,

A blue ink signature of Kelly Van Marter, written in a cursive style.

Unit Vice President

A blue ink signature of Joseph C. Swick, written in a cursive style.

copy: Charles Christy, P.E., Wade Trim



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

January 8, 2015

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Livingston Commons Shopping Center
3950 E. Grand River (Lot 4 redevelopment)
Site Plan Review

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on December 29, 2014 and the drawings are dated December 1, 2014, with revisions on December 23, 2014. The project is based on the demolition of an existing A-use building and the construction of a new mixed-use building. The building is planned as new 12,000 square foot structure with assembly and mercantile spaces. The plan review is based on the requirements of the International Fire Code (IFC) 2012 edition.

1. To achieve proper spacing and placement, an additional fire hydrant is required to be installed on the Grand River side of the property. Provide the location of the water main to be looped around the building and the new hydrant location. (Hydrant is to be placed on the grassy peninsula located along Latson Rd. between Grand River and southeast corner of the parking lot). This hydrant shall be located within 100' of the approved location for the fire department connection. **(Corrected by installation of new hydrant to be placed on the Latson Rd. 12" water main; previously unidentified on plan)**
IFC 912.2
2. The building shall be provided with an automatic sprinkler system in accordance with NFPA 13, *Standard for the Installation of Automatic Sprinkler Systems*. **(Corrected on Plan)**
IFC 903
 - A. The FDC shall be located on the front of the building (Grand River). The location is to be coordinated with the general and fire suppression contractors; and approved by the fire authority. **(Corrected on Plan)**
IFC 912.2.1
 - B. The size of the fire protection lead and gate valve shall be indicated on the utility site plan. Gate valve is to be controlled with curb box rather than PIV. **(Lead size is cited as a 4". Fire protection leads shall be a minimum 6" to meet the size, design and installation requirements of the MHOG Water Authority.)**
 - C. Each tenant space shall be provided with its own fire protection lead or proprietary means of control and water flow detection of the fire suppression system if derived from a single riser. **(Noted in response letter)**
3. Future project submittals shall include the address and street name of the project in the title block. **(Corrected on Plan)**
IFC 105.4.2



- 4. The building shall include the building address on the building. The address shall be a **minimum of 6"** high letters of contrasting colors and be clearly visible from the street (Grand River). The location and size shall be verified prior to installation. **(Noted, to be corrected during building submittal)**

IFC 505.1

- 5. The plan indicates access road/drive width of 24' into the site. The roads shall be provided and maintained at a minimum of 26' wide around the building. With a width of 26' wide, the building side of the drive shall be marked as a fire lane. Include the location of the proposed fire lane signage and include a detail of the fire lane sign in the submittal. Access roads to site shall be provided and maintained during construction. Access roads shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds. **(Corrected on Plan)**

IFC D 103.5

IFC D 103.6

IFC D 103.1

IFC D 102.1

- 6. Access around building shall provide emergency vehicles with an outside turning radius of 55' and a minimum vertical clearance of 13 ½ feet. **(Corrected on Plan)**

IFC D 103.3

- 7. The location of a key box (Knox Box) shall be indicated on future submittals. The Knox box will be located adjacent to the main entrance of each proposed tenant space in the structure. **(Corrected on Plan)**

IFC 506.1

- 8. Provide names, addresses, phone numbers, emails of owner or owner's agent, contractor, architect, on-site project supervisor. **(Corrected on Plan)**

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

Capt. Rick Boisvert
Fire Inspector



2911 Dorr Road
 Brighton, MI 48116
 810.227.5225
 810.227.3420 fax
 genoa.org

MEMORANDUM

TO: Bo Gunlock

FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director

DATE: January 8, 2015

RE: Lot 4 (Bennigan's) Redevelopment Sewer and Water Tap Fees
 3950 E. Grand River (11-05-400-047)

This memo will describe the connection fees required for a new 12,000 sq. ft. multi-tenant building located at 3950 E. Grand River. The connection fees are based on the proposed uses on the site plan dated 12/1/14 revised 12/23/14 as follows:

4,400 sq. ft. sit down restaurant (no liquor) @ 2.4 REU per 1,000 sq. ft. =	10.56 REU
3,228 sq. ft. retail @ 0.20 REU per 1,000 sq. ft. =	0.65 REU
4,372 sq. ft. drive through restaurant @ 7.5 REU per premise =	7.50 REU
TOTAL REU NEW BUILDING =	18.71 REU
Less previously paid by Bennigan's	-16.60 REU
NEW CONNECTION CHARGE =	2.11 REU

Water	2.11 REU @ \$7,900	\$ 16,669.00
Sewer	2.11 REU @ \$7,200	\$ 15,192.00
		Total Due: \$ 31,861.00

SUPERVISOR
 Gary T. McCririe

CLERK
 Paulette A. Skolarus

TREASURER
 Robin L. Hunt

MANAGER
 Michael C. Archinal

TRUSTEES
 H. James Mortensen
 Jean W. Ledford
 Todd W. Smith
 Linda Rowell

Connection Fees must be paid at time of land use permit issuance.

A meter package may also need to be purchased including the appropriate sized meter and a MIU (meter interface unit). Should you have any questions please feel free to contact me at 810-227-5225.

COVER SHEET FOR
AMENDMENT TO PLANNED UNIT DEVELOPMENT AGREEMENT
FOR PHASE I AND PHASE II LAND
BETWEEN
RLG HOWELL LLC AND GCG HOWELL LLC
AND
PKJJ, LLC
AND
TOWNSHIP OF GENOA
DATED _____, 2014

Prepared By and After Recording
Return To:
April Ann Jordan
Hedrick & Jordan Co., LPA
100 E. Third Street, Suite 500
Dayton, Ohio 45402
937-228-3889

**STATE OF MICHIGAN
COUNTY OF LIVINGSTON
TOWNSHIP OF GENOA**

AMENDMENT TO PLANNED UNIT DEVELOPMENT AGREEMENT

This Amendment to Planned Unit Development Agreement is made and entered into this ___ day of _____, 2014, by **RLG HOWELL LLC**, a Michigan limited liability company, and **GCG HOWELL LLC**, a Michigan limited liability company, both of 10050 Innovation Drive, Suite 100, Dayton, Ohio 45342 (collectively, "Owner"); **PKJJ, LLC**, a Michigan limited liability company, of _____ ("PKJJ"); and **GENOA CHARTER TOWNSHIP**, a Michigan municipal corporation, 2911 Dorr Road, Brighton, Michigan 48116 ("Township").

RECITATIONS:

Owner possesses fee title to certain real property located in Genoa Charter Township, Livingston County, State of Michigan, described in that certain Planned Unit Development Agreement dated April 6, 1999, and recorded at Liber 2609, Page 0205 of the records of Livingston County, Michigan (the "Phase I PUD").

Subsequent to the Phase I PUD, Owner and Township entered into that certain Planned Unit Development Agreement for Phase II Land dated August 17, 2009, and recorded at 200R-023916 of the records of Livingston County, Michigan (the "Phase II PUD"). The Phase I PUD applied to Phase I and Phase II land described therein, and the Phase II PUD modified provisions pertaining to Phase II.

In 2011 Owner and Township considered a further Amendment to the Phase I PUD Agreement that contemplated the reconfiguration of Lot #4 into two sub-lots; provided however the amendment was never finalized or executed, and as such is of no force or effect.

Pursuant to Article IV, Internal Road Network, subsection 4.1, the Phase I PUD contemplated that the property formerly owned by the Prairie House Restaurant and now owned by PKJJ (the "Red Olive Parcel") described on Exhibit A attached hereto could benefit from an easement established by Owner over and across the Red Olive Parcel.

Owner and PKJJ have agreed to amend Owner's existing Declaration of Restrictions and Easements for Outlots dated September 2, 1999, recorded September 10, 1999, at Liber 2652, Page 0082 of the records of Livingston County, Michigan (the "Declaration") to provide the Red Olive Parcel with access over the access ways on the adjacent lands of Owner and to subject the Red Olive Parcel to the terms of the Declaration.

In connection therewith, Owner and PKJJ wish to amend the Phase I PUD and the Phase II PUD to subject the Red Olive Parcel thereto pursuant to the terms contained herein.

NOW, THEREFORE, Owner and PKJJ, in consideration of the mutual promises contained in this Agreement, hereby agree as follows:

1. Article I, General Terms of Agreement of the Phase I PUD, shall be amended to add the following additional subsection:

1.7 The Red Olive Parcel shall be subject to the terms and conditions of the Phase I PUD, subject to the provisions of this Amendment.

2. Article II, Land Use Authorization, subsection 2.1 of the Phase I PUD, shall be amended to delete the sentence reading “Further, only one drive through restaurant facility shall be permitted and such use shall only be permitted on Lot #1.” The following shall be placed in its stead:

One drive through restaurant facility may be allowed on Lot 4. Additional drive through restaurant facilities may be allowed on all parcels within five hundred feet (500’) of each other, subject to Special Land Use approval by the Township, including the Special Use Requirements as outlined in the Special Land Use Regulations as they may exist from time to time. The Township and Owner agree that this use shall be considered upon providing that the stacking or queuing of such drive through restaurant facilities shall be sufficient to accommodate expected peak volumes and to minimize conflict with the internal road network located on the Property, as well as any public roadways.

3. Article IV, Internal Road Network of the Phase I PUD, shall be amended to add the following additional sentence:

Notwithstanding anything contained in the Phase I PUD to the contrary, the Red Olive Parcel shall be allowed to maintain access to the Grand River Avenue existing curb cut, provide such access shall be limited to “right-in, right-out” movement.

4. Article VI, Site Improvements, subsection 6.5(a) shall be amended to add the following additional sentence:

Notwithstanding anything contained herein to the contrary, in the event a multi tenant building is constructed on Lot #4, then one double row of parking may be installed in front of the building (also called the “front yard”) on Lot #4.

5. Article VI, Site Improvements, subsection 6.5(b) of the Phase I PUD, and subsection 6.4(B) of the Phase II PUD, shall each be deleted, it being acknowledged that Owner shall have no obligation to the Township to provide an entranceway landmark pursuant to the Phase I PUD or the Phase II PUD because such location or locations are not available for such signage. The following shall be inserted instead:

In the event a multi tenant building is constructed on Lot #4, then in addition to any signage otherwise permitted on Lot #4, a Township identification sign shall be placed by the Township on Lot #4. The type and design of the Township identification sign is depicted on

Exhibit B attached hereto. After the installation of the Township identification sign, Owner shall maintain same in good condition and repair.

6. Article VII, Design of Building and Signs, subsection 7.2, Signage, shall be amended to add the following additional sentence:

The owner of the Red Olive Parcel may install a monument sign abutting Grand River Avenue and other signs as may be permitted under the Declaration.

APPROVED by Owner and PKJJ on this ___ day of _____, 2014.

WITNESSES:

RLG HOWELL LLC, a Michigan limited liability company

By: Randall L. Gunlock, Trustee under the Amended Revocable Trust Agreement Dated May 30, 2013, Randall L. Gunlock, Grantor, Managing Member

By: Randall L. Gunlock
Its: Trustee

GCG HOWELL LLC, a Michigan limited liability company

By: Glenn C. Gunlock
Its: Managing Member

PKJJ, LLC, a Michigan limited liability company

By: _____
Its: _____

STATE OF)
) SS:
COUNTY OF)

The foregoing instrument was acknowledged before me the ___ day of _____, 2014, by Randall L. Gunlock, Trustee under the Amended Revocable Trust Agreement Dated May 30, 2013, Randall L. Gunlock, Grantor, Managing Member of RLG Howell LLC, a Michigan limited liability company, on behalf of the company.

Notary Public

STATE OF)
) SS:
COUNTY OF)

The foregoing instrument was acknowledged before me the ___ day of _____, 2014, by Glenn C. Gunlock, Managing Member of GCG Howell LLC, a Michigan limited liability company, on behalf of the company.

Notary Public

STATE OF)
) SS:
COUNTY OF)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by _____, the _____ of PKJJ, LLC, a Michigan limited liability company, on behalf of the company.

Notary Public

APPROVED by the Township Board for the Township of Genoa on the ____ day of _____, 2014, at a meeting duly called and held.

WITNESSES:

TOWNSHIP OF GENOA:

 By:
 Its:

 By:
 Its:

STATE OF _____)
) SS:
 COUNTY OF _____)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by _____, who was duly authorized by the Genoa Township Board to sign this Amendment on behalf of Genoa Township and who acknowledged the same to be his/her free act and deed.

 Notary Public

STATE OF _____)
) SS:
 COUNTY OF _____)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by _____, who was duly authorized by the Genoa Township Board to sign this Amendment on behalf of Genoa Township and who acknowledged the same to be his/her free act and deed.

 Notary Public

EXHIBIT A

LEGAL DESCRIPTION OF RED OLIVE PARCEL

EXHIBIT B

TOWNSHIP IDENTIFICATION SIGN

Customer Name:	
Company:	
Street:	
City:	
State:	Zip:
Country:	
Phone:	
Fax:	
E-mail:	

Job Number:	
Order Taken By:	
Order Date:	
Delivery Date:	
Shipping:	
File Name: RGprop_genoaatwp_1214.fs	
Comments:	
Description:	

NOTE: All sales are final once proofing has begun. There are no refunds once production has begun. Jobs canceled prior to production may be subject to design fees. %50 deposit required before production to begin. Artwork & Files are owned exclusively by W4 Signs, Inc. unless originally provided by client or specifically stated. Original artwork files and rights may be purchased for an additional fee.

It is the responsibility of the client to ensure proof accuracy, including all spelling, colors & materials as indicated. After the 3rd proof, each additional revision will incur an additional \$20 fee. Proof approval authorizes W4 Signs to proceed with production of the design selected. Call for specific estimated completion time, otherwise jobs will be completed within the production schedule and/or notified for installation.

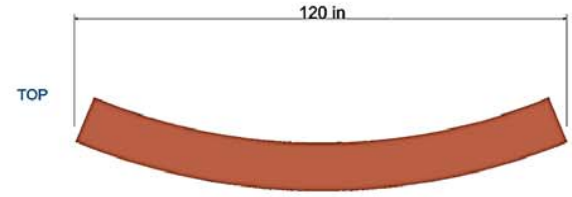
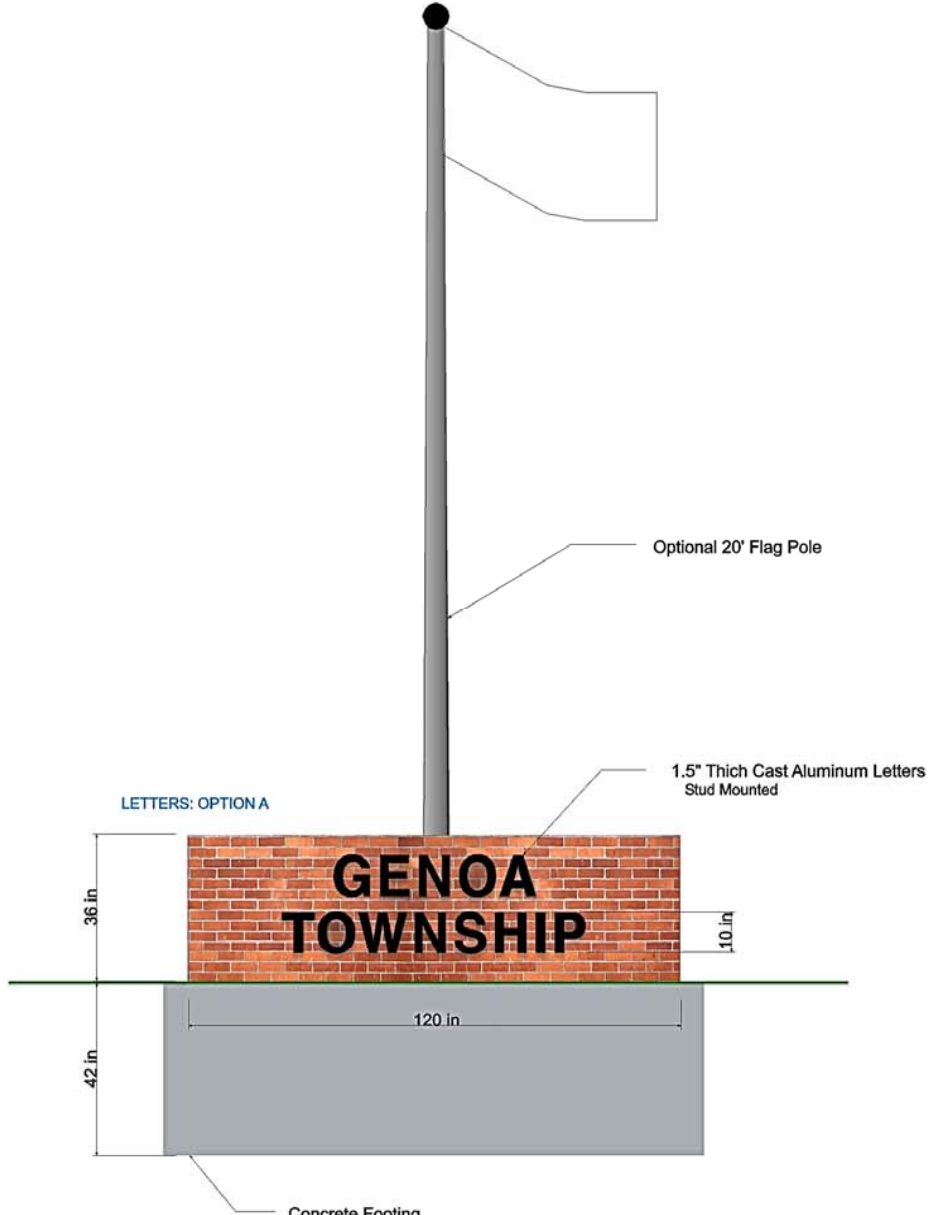
All Balances due upon completion / Installation.

Revisions: 1 2 3 4 5 6

Please verify your proof approval or revisions have been received.

It is the responsibility of the client to ensure proof accuracy, including all spelling, colors & materials specified.

Approval Signature: _____ Date: _____ NOT APPROVED: APPROVED: APPROVED W/ REVISIONS:



LETTERS: OPTION B



LETTERS: OPTION C



LETTERS: OPTION D



Impact Assessment
Redevelopment of Lot 4
Livingston Commons Shopping Center
Genoa Township, Michigan

December 1, 2014

Prepared for:
RG Properties
10050 Innovation Drive, Suite 100
Dayton, OH 45342

Prepared by:
Wade Trim, Inc.
555 South Saginaw Street, Suite 201
Flint, MI 48502
Charles J. Christy, PE MI #39122



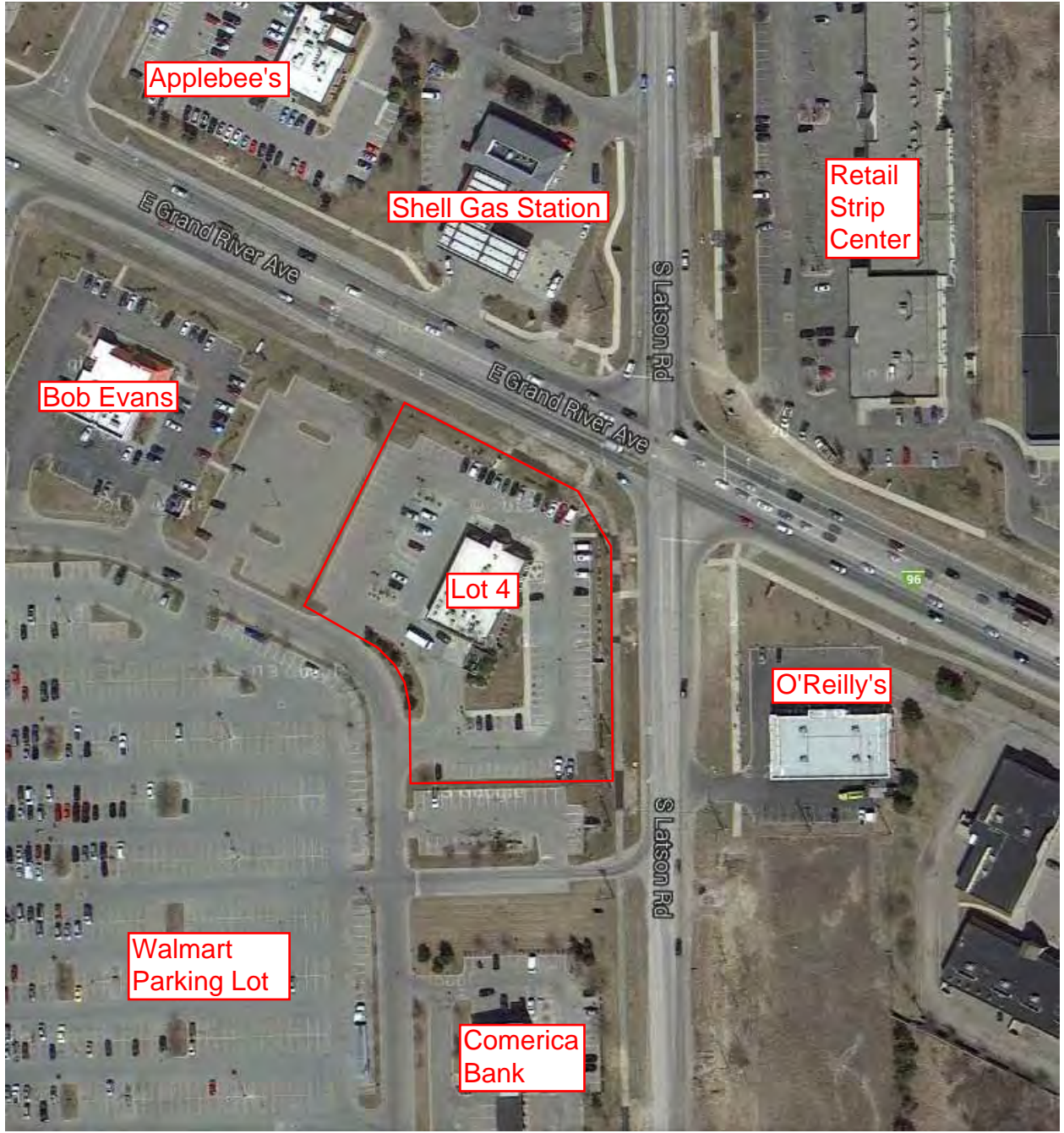
Written Impact Assessment
for
Redevelopment of Lot 4
Livingston Commons

18.07.01 **Preparer** - This impact assessment is prepared and assembled by Charles J. Christy, PE. Mr. Christy has been licensed as a professional engineer in the State of Michigan since 1993. During the past 21 years, his experience has primarily focused on land development with commercial, industrial, and residential projects. Mr. Christy has completed numerous site plans, special use permits, and planned unit developments across the State.

18.07.02 **Location** - The project is located at Livingston Commons Shopping Center, 3950 East Grand River Avenue, Howell, MI. The site is currently developed with a Bennigan's restaurant on approximately 2.03 acres (88,427sft). The site is located at the southwest corner of the intersection of East Grand River Avenue and South Latson Road and is part of a larger overall development which includes WalMart, Lowes, Staples, and other out parcels.

Adjacent properties are occupied by Bob Evans (to the west), O'Reilly Auto Parts (east across Latson), Comerica Bank (to the south), Shell Gas Station (north across E. Grand River), Applebee's (across E Grand River to the west), and a small strip center at the north east quadrant of E Grand River and Latson.

An aerial photograph of the project area is included on the following page.



Applebee's

Shell Gas Station

Retail
Strip
Center

Bob Evans

Lot 4

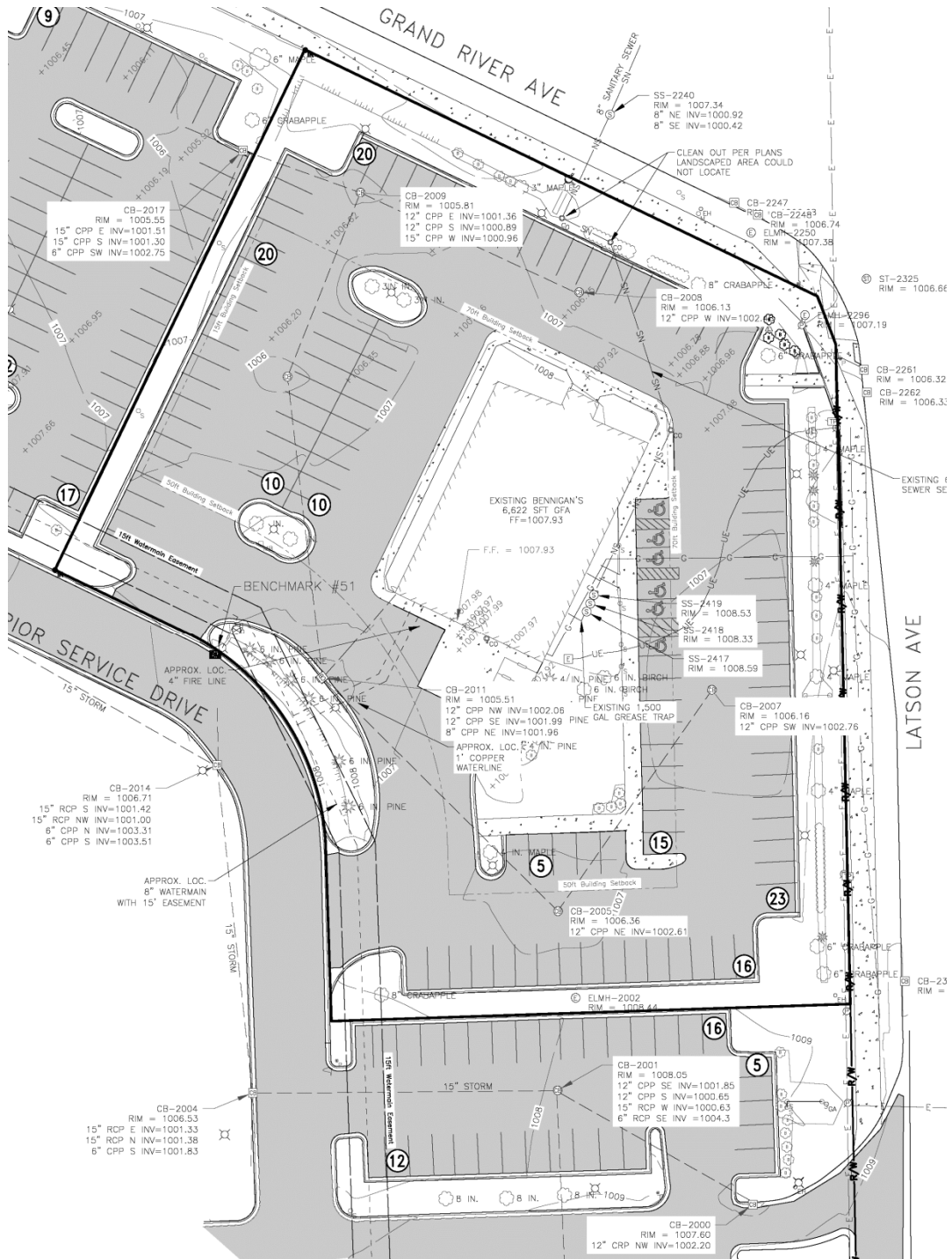
O'Reilly's

Walmart
Parking Lot

Comerica
Bank

18.07.03

Impact on natural Features – The site is currently developed with an approximately 6,622sft restaurant, 119 parking space parking lot, storm sewer collection system, sanitary and potable water services, franchise utility services, and landscaping. Please refer to plan Sheet C-0.1 for the existing conditions survey for greater detail. No wetlands are on or adjacent to the site. See below for a snap shot of the existing conditions.



18.07.04

Impact on Stormwater Management – The site is currently approximately 76% impervious and has a series of catch basins and storm sewer pipes to collect surface water runoff. The storm system leaves the site at the northwest corner of the parcel and enters the larger storm water management system for the overall PUD. The overall development, when constructed, has a regional storm water management system consisting of several basins which were designed to manage storm water from all parcels in the PUD.

The proposed redevelopment will be approximately 72% impervious. A majority of the existing catch basins and storm sewer pipe will be retained and utilized to convey storm water runoff after redevelopment, maintaining the existing discharge point from the site. Since the redeveloped site will contain less impervious surfaces due to an increase in landscaping area, the total volume of storm water runoff will be less and the time of concentration will be greater, resulting in a lower peak discharge rate. This being the case, we have not quantified the decrease in runoff or peak discharge rate. We are not proposing any changes to the regional storm water management system (basins).

The proposed work will entail removing some pavement, demolition of the existing building and utilities, and new landscaping. A majority of the existing pavement will remain, including storm structures and pipes. The existing asphalt that is to remain, will be surface milled and overlaid with a new top course. Grading and earthwork, by design, will be kept to a minimum only as required to maintain/re-establish drainage patterns and to allow for the new landscaping.

Managing soil erosion will be accomplished with silt fences, inlet protection, and construction entrance BMP's. Final restoration will consist of asphalt, concrete, lawn and landscaping. Additional detail on the soil erosion control measures can be found in the plan submittal set, Sheets C-7.0 through C-7.3. A soil erosion and sedimentation control permit will be applied for at the Livingston County Drain Commission office.

18.07.05

Impact on Surrounding Land Uses – The surrounding area is developed into retail uses consisting of restaurants, gas service station, and other commercial retail establishments. Both E. Grand River and S. Latson Road are 4 lane roads with a center turn lane and right turn lanes where appropriate. The intersection of E. Grand River and S. Latson Road is signalized with protected left turn lanes.

The proposed redevelopment is a similar use when compared to the existing Bennigan's and the uses on the surrounding properties. Hours of operation will be similar to the surrounding uses. However, Bennigan's is currently not open for breakfast and the proposed development will be open for breakfast. The existing access to the site will remain as currently configured.

The existing lighting on the site will be reconfigured. Several of the light poles will be removed, several of the existing light fixtures will be replaced with lower wattage, and

several new light poles will be strategically located to provide safety and security. Overall, the redevelopment will result in lower lighting intensities.

Dust control will be utilized during the demolition and construction phase to minimize air pollution.

Due to the nature, use, and size of this project, it is not anticipated that the noise levels generated on this site will be greater than the adjacent traffic on E. Grand River and S. Latson Road. Additionally, since this is a retail development, the project will not generate or cause concern with regards to: smoke, airborne solids, odor, vibration, radioactive materials, fire and safety hazards, UST's, or hazardous materials.

18.07.06 Impact on Public Facilities and Services – The proposed use will be nearly double in size as the existing building. The restaurant uses of the proposed building will be approximately 31% larger than the existing use and approximately 3,300sft of retail use will be added to the site.

The increase in use is a fraction of the total square footage of comparable uses in the immediate area. There are other uses in the immediate area that are larger and more susceptible to police action. Although we have not contacted police, fire, or emergency services regarding this project, we conclude that the respective agencies are prepared to respond to the larger uses adjacent to our site, and therefore, have the ability to respond appropriately to incidents on this site.

18.07.07 Impact on Public Utilities – The site is currently serviced by M.H.O.G. for water and sanitary sewer service. An 8-inch water main and hydrants are located along the existing interior service drive. An 8-inch sanitary sewer lead is extended to the site across E. Grand River. The existing sewer service will be extended to the new building and, due to its size, has the capacity to serve the proposed building (an 8-inch pipe at minimum grade has capacity of over 500,000 GPD or 347gpm. A 6-inch pipe at minimum grade has capacity of approximately 400,000 GPD or 277gpm).

Equivalent User Table for proposed building (to be confirmed at building permit application stage).

User	Unit Factor	Qty	Sub-Total
Restaurants (fast food, including drive thru & primary drink service)	7.5 per premise	1 Ea	7.5
Restaurants (meals w/service & dishes)	2.4 per 1,000sft	2,200sft	5.28
Restaurants (take out)	1.0 per 1,000sft	2,200sft	2.2
Retail Stores	0.20 per 1,000sft	3,228sft	0.65
TOTAL			15.63

Based on a REU equivalent of 218 gallons per day, the proposed building would generate 3,407 gallons of sewage per day (15.63 x 218).

The existing water service consists of a potable water lead and 4-inch fire protection main. The existing 4-inch fire protection main will be extended to the new building, providing fire protection through a fully automatic sprinkler system. A new post indicator valve (PIV) will be installed in the 4-inch service near the existing main and a fire department connection (FDC) will be installed on the building.

The existing potable water service connection will be demolished back to the existing main and five (5) new services to the building are proposed.

- 18.07.08 **Storage and Handling of any hazardous Materials** – The proposed use is retail in nature. No hazardous materials will be generated, used, or disposed of on-site.
- 18.07.09 **Traffic Impact Study** – We have completed a Trip Generation Comparison for the redevelopment for Township review. This comparison is included at the end of this Impact Assessment.
- 18.07.10 **Historic and Cultural Resources** – The existing structure is not more than 50 years old.
- 18.07.11 **Special Provisions** – The Owner of Lot 4 has a REA agreement with the other tenants / Owners of the overall PUD development allowing shared use of the: internal drives, drive access to E. Grand River & S. Latson Road, and storm water management system. A copy of this REA is included at the end of this Impact Assessment.
- 18.07.12 **List of Sources** – Google for image in 18.07.02
- 18.07.13 **Previous Impact Assessments** – An impact assessment was previously completed for the PUD. This impact assessment focuses on the redevelopment of Lot 4.

TECHNICAL MEMORANDUM

Livingston Commons Lot 4 Trip Generation Comparison

PREPARED FOR: Kelly VanMarter, AICP/ Genoa Township

PREPARED BY: Aimée L. Giachero, PE/Wade Trim *ALG*

DATE: November 7, 2014

PROJECT TASK: RGP1001.01F Phase 240 Impact Assessment

FILE LOCATION: P:\Aaa1000\Agiachero\Draft\Projects\Livingston Commons\TechMemo.docx

RG Properties is proposing to redevelop the existing Bennigan's Restaurant in the southwest quadrant of Grand River Avenue and Latson Road in Genoa Township. This area is part of the overall Livingston Commons Shopping Center. The redevelopment would consist of two new multi-tenant buildings in place of the existing Bennigan's Restaurant. The overall scope was to determine the difference in trip generation between the existing restaurant use and the proposed redevelopment project to determine the additional trips that would be generated by the multi-tenant use. This memorandum summarizes the expected difference in trip generation.

Existing Trip Generation

Existing trips generated by the Bennigan's Restaurant were estimated based on the Institute of Transportation Engineer's (ITE) report *Trip Generation, Ninth Edition, 2012*. Trip estimates were developed for the existing 6,622 square foot restaurant based on the High Turnover (Sit-Down) Restaurant use, Land Use Code 932. The weekday afternoon peak hour trip generation estimates are shown in Table 1. This Bennigan's Restaurant was not open during the morning peak hour, thus the existing trip generation during the morning peak hour is zero.

Traffic for a restaurant type use consists of new trips, whose sole purpose is the visit to the site, internal or shared trips, and pass-by trips. New Trips are those that are new to the study area and consist of motorists whose primary destination is the restaurant.

A development that contains multiple uses, such as this one, can be expected to have some internal trip sharing. Since this restaurant is part of the Livingston Commons Shopping Center which includes several banks, restaurants, a Wal-Mart Supercenter, a Lowe's, etc., it is expected that some internal trip sharing occurs between uses. A shared trip is one that visits more than one use on the site and thus lessens the overall impact of a multiple use site on the adjacent street system. An internal trip factor of 20% was applied to the site based on ITE's *Trip Generation Handbook*.

Pass-by trips are typically associated with retail uses, as well as gas stations and restaurants. Pass-by trips are comprised of vehicles already traveling on the adjacent roads, which divert

from their original path of travel to visit the development. The ultimate destination of a pass-by trip is directed elsewhere. Pass-by trips were also applied to the existing restaurant use on the site. The pass-by rates were based on ITE’s *Trip Generation Handbook*. Based on information provided, a pass-by rate of 43 percent was applied to the restaurant. As a result, the existing restaurant is estimated to generate a total of 30 trips during the during the afternoon peak hour.

Table 1 Existing Bennigan’s Weekday PM Peak Hour Trip Generation Estimate

Land Use	In	Out	Total
Bennigan’s Restaurant	39	26	65
<i>Less Internal Capture (20%)</i>	-8	-5	-13
Net Trips	31	21	52
<i>Less Pass-by Trips (43%)</i>	-13	-9	-22
New Trips	18	12	30

Proposed Trip Generation

Trip estimates were then developed for the proposed redevelopment of the property to 11,903 square feet of retail and restaurant uses. The redevelopment project is proposed to consist of a 4,300 square foot bread/donut/bagel restaurant with a drive-thru facility, two 2,200 square foot fast-food restaurants without drive-through facilities, and 3,203 square feet of specialty retail uses such as an apparel store, real estate office, cell phone store, florist, mattress store, etc.

Trip estimates were developed for the proposed uses based upon information provided in ITE’s *Trip Generation* and *Trip Generation Handbook*. Trips generated for the specialty retail were based on the Specialty Retail land use, Land Use Code 826. The trip generation potential for the bread/donut/bagel restaurant was developed based on the Bread/Donut/Bagel Shop with Drive Through, Land Use Code 940. Trip generation estimates were developed for the two fast-food restaurants based on Land Use Code 933, Fast-Food Restaurant without Drive-Through. None of the proposed uses are expected to be open during the morning peak hour except for the bread/donut/bagel restaurant.

Traffic for the proposed redevelopment will consist of both new trips, whose sole purpose is the visit to the site, internal or shared trips, and pass-by trips. New trips are those that are new to the study area and consist of motorists whose primary destination is the proposed project.

An area that contains multiple uses, such as this one, can be expected to have some internal trip sharing. A shared trip is one that visits more than one use on the site and thus lessens the overall impact of a multiple use site on the adjacent street system. Since this development is part of the Livingston Commons Shopping Center which includes banks, restaurants, a Wal-Mart Supercenter, a Lowe’s, etc., it is expected that some internal trip sharing will occur between uses. It is expected that the number of trips generated by these uses will be reduced due to their interaction between the other uses in the development. An internal trip factor of 20% was applied to the site based on ITE’s *Trip Generation Handbook*. This is the same factor that was applied to

the existing Bennigan’s restaurant. This factor was only applied to the afternoon peak hour trip estimates, and not the morning peak hour estimates for the bread/donut/bagel restaurant.

Pass-by trips involve motorists who are diverted off of the adjacent street system to visit this development. A portion of the trips generated by the redevelopment were assumed to be pass-by trips. These trips divert from existing travel paths to stop at the site and then resume the original trip path. Thus additional trips are not added to the area road system by these pass-by trips. Surveys conducted by ITE have shown that many trips made to grocery stores, restaurants, and shopping areas are diverted from the existing traffic on the roadway system. This is particularly true during the weekday morning and evening peak hours when traffic is diverted from the home-to-work and work-to-home trips. Pass-by rates were based on information provided in ITE’s *Trip Generation Handbook*. A pass-by rate of 43% was used for the fast-food restaurants and a rate of 49% was used for the bread/donut/bagel shop restaurant during both the morning and afternoon peak hours. No pass-by was considered for the specialty retail portion of the redevelopment.

The weekday morning peak hour trip generation estimates are shown in Table 2 and the weekday afternoon peak hour trip generation estimates are provided in Table 3.

Table 2 Proposed Weekday AM Peak Hour Trip Generation Estimate

Land Use	In	Out	Total
Bread/Donut/Bagel Restaurant	83	83	166
<i>Less Pass-by Trips (49%)</i>	<i>-41</i>	<i>-41</i>	<i>-82</i>
New Trips	42	42	84

Table 3 Proposed Weekday PM Peak Hour Trip Generation Estimates

Land Use	LUC	Size (SF)	Total Trips		Internal Trips		Net Trips		Pass-by Trips		New Trips	
			In	Out	In	Out	In	Out	In	Out	In	Out
Bread/Donut/Bagel Restaurant w/Drive-Thru	940	4,300	40	42	8	8	32	34	16	16	16	18
Fast-Food Restaurant (No Drive-Thru)	933	2,200	30	28	6	6	24	22	10	10	14	12
Fast-Food Restaurant (No Drive-Thru)	933	2,200	30	28	6	6	24	22	10	10	14	12
Spec. Retail	826	3,203	13	16	3	3	10	13	0	0	10	13
Total			113	114	23	23	90	91	36	36	54	55

No access changes to the overall shopping center are proposed with the redevelopment of the restaurant lot. The existing accesses for the Livingston Commons Shopping Center are to be used to access these new land uses. There are currently two accesses to Grand River Avenue, one of which is signalized, and three accesses to Latson Road, two full movement accesses and one right in/right out only access.

Table 4 shows the difference in overall trips estimated between the existing restaurant and the proposed redevelopment project based on detailed land uses.

Table 4 Trip Generation Difference

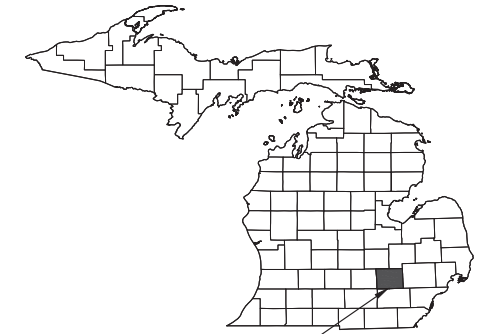
Scenario	AM PEAK HOUR						PM PEAK HOUR					
	Net Trips		Pass-by Trips		New Trips		Net Trips		Pass-by Trips		New Trips	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Existing Restaurant	0	0	0	0	0	0	31	21	13	9	18	12
Proposed Redevelopment	83	83	41	41	42	42	90	91	36	36	54	55
Difference	+83	+83	+41	+41	+42	+42	+59	+70	+23	+27	+36	+43

As expected, the proposed development will generate more trips than the existing restaurant use during both the morning and afternoon peak hours. However, the net trip difference is less than 100 directional trips under both peak hours and the actual new trip difference is less than 50 directional trips under both peak hours.

The largest difference in trips between the two occurs during the morning peak hour. This is due to the existing Bennigan’s restaurant not being open for breakfast. However, the existing restaurant use approved for this site likely doesn’t restrict a restaurant from being open during the morning peak hour. In fact, if it was open, this same size restaurant would generate 72 net trips and 31 new trips, after pass-by traffic is accounted, for with 17 inbound and 14 outbound trips, thus lessening the morning peak hour trip difference. In addition, morning peak hour traffic volumes for this shopping center are lighter than during the weekday afternoon peak hour. Both the Lowe’s and Wal-Mart Supercenter generate fewer trips during the morning peak hour than during the afternoon peak hour. In addition, the fast-food restaurants and banks that are part of this shopping center are not open during the morning peak hour. Therefore, it is expected that the additional trips generated by the bread/donut/bagel restaurant during the morning peak hour can be accommodated by the existing driveways for the shopping center as there are less overall trips from the shopping center during this same time period.

Please feel free to contact us at any time if you have questions regarding the information provided in this memorandum or if you need any additional information.

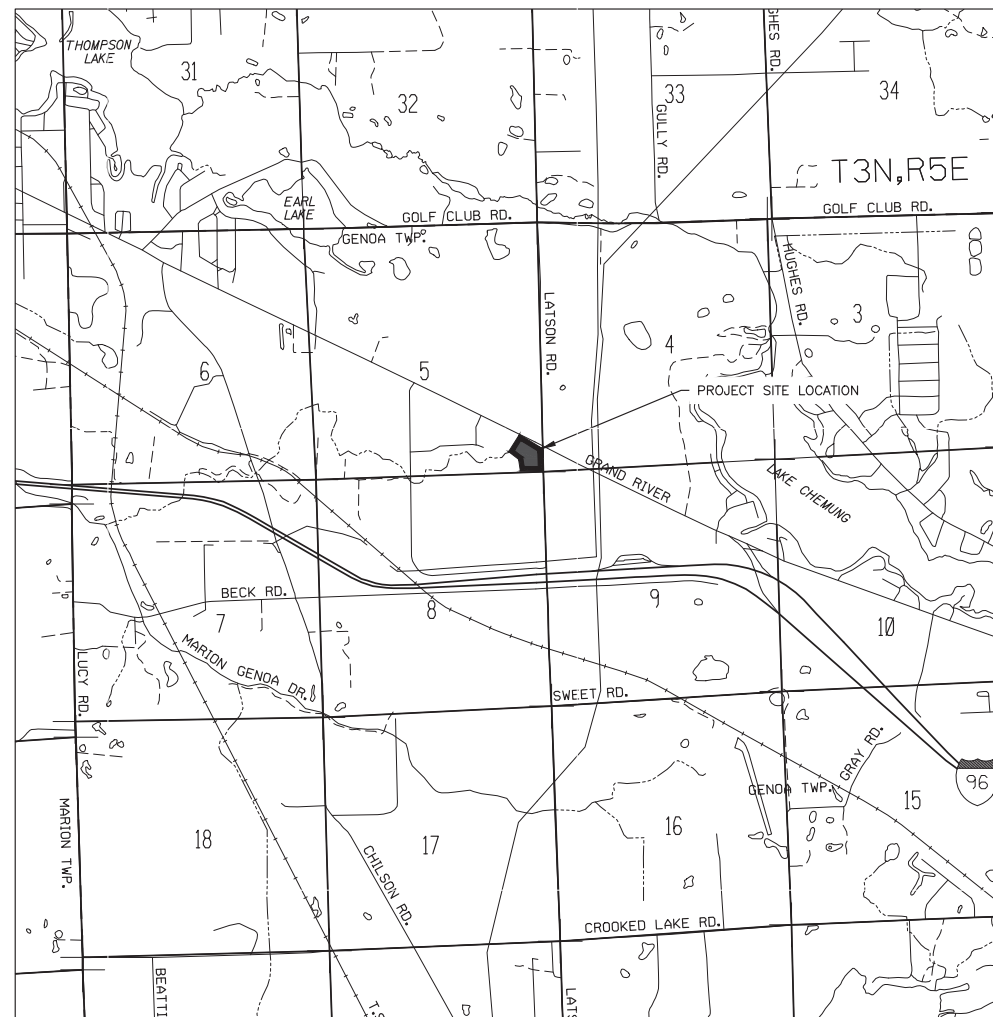
SITE PLANS FOR LIVINGSTON COMMONS, LOT 4 GENOA TOWNSHIP LIVINGSTON COUNTY, MICHIGAN



PROJECT LOCATION:
LIVINGSTON COUNTY, MI

KEY MAP
NOT TO SCALE

UTILITY CONTACTS	
GAS	CONSUMER'S ENERGY 101 S. WASHINGTON SQUARE HOWELL, MI 48843 (517) 545-8722
TELEPHONE	AT&T (800) 464-7929
ELECTRIC	DETROIT EDISON 101 S. WASHINGTON SQUARE LANSING, MI 48933 (517) 485-1939
TRANSPORTATION	MDOT MARK SWEENEY 10321 E. GRAND RIVER, SUITE 500 BRIGHTON, MI 48116 (810) 227-4681
TRANSPORTATION (LATSON RD.)	LIVINGSTON COUNTY ROAD COMMISSION 3535 GRAND OAKS DRIVE HOWELL, MI 48843 (517) 546-4250
WATER SERVICE	M.H.O.G WATER AUTHORITY GREG TATARA 2911 DORR ROAD BRIGHTON, MI 48116 (810) 227-5225
SANITARY SEWER	M.H.O.G WATER AUTHORITY GREG TATARA 2911 DORR ROAD BRIGHTON, MI 48116 (810) 227-5225
STORM SEWER	LIVINGSTON COUNTY DRAIN COMMISSIONER 2300 E GRAND RIVER AVE, SUITE 105 HOWELL, MI 48843 (517) 546-0040
SOIL EROSION	LIVINGSTON COUNTY DRAIN COMMISSIONER 2300 E GRAND RIVER AVE, SUITE 105 HOWELL, MI 48843 (517) 546-0040
PLANNING & ZONING	GENOA TOWNSHIP 2911 DORR ROAD BRIGHTON, MI 48116 (810) 227-5225



VICINITY MAP

1"=2000'
HOWELL, T3N, R5E, SECTION 5

PROJECT SITE ADDRESS

3950 E GRAND RIVER AVE.
HOWELL, MICHIGAN 48843

GENOA TOWNSHIP ZONING DISTRICT

NON-RESIDENTIAL PLANNED UNIT DEVELOPMENT

SHEET INDEX	
GENERAL SHEETS	SHEET NO.
COVER SHEET	C-0.0
EXISTING CONDITIONS SURVEY	C-0.1
DEMOLITION PLAN	C-1.0
SITE PLAN	C-2.0
SITE DETAILS	C-2.1
SITE DETAILS	C-2.2
SITE DETAILS	C-2.3
UTILITY PLAN	C-3.0
WATER DETAILS	C-3.1
SANITARY DETAILS	C-3.2
SANITARY DETAILS	C-3.3
STORM & MISCELLANEOUS UTILITY DETAILS	C-3.4
GRADING PLAN	C-4.0
DRAINAGE MAP	C-4.1
LANDSCAPE PLAN	C-5.0
LANDSCAPE DETAILS	C-5.1
SITE LIGHTING PLAN	C-6.0
SITE LIGHTING DETAILS	C-6.1
SESC & SWPPP NOTES	C-7.0
SESC & SWPP PLAN - PHASE I	C-7.1
SESC & SWPP PLAN - PHASE II	C-7.2
SESC & SWPPP DETAILS	C-7.3
PLANS PREPARED BY OTHERS	SHEET NO.
PROPOSED RETAIL BUILDING	A3

LEGAL DESCRIPTION: (ALSO SEE SHEET C-0.1)

LOT 4
4711-05-400-047

PARCEL OR LAND SITUATED IN THE TOWNSHIP OF GENOA, COUNTY OF LIVINGSTON, STATE OF MICHIGAN DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SECTION 5, TOWN 2 NORTH, RANGE 5 EAST; THENCE SOUTH 87 DEGREES 37 MINUTES 12 SECONDS WEST ALONG THE SOUTH LINE OF SAID SECTION, 60.02 FEET TO THE WESTERLY RIGHT OF WAY LINE OF LATSON ROAD; THENCE NORTH 00 DEGREES 54 MINUTES 40 SECONDS WEST, ALONG SAID RIGHT OF WAY LINE, 214.95 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 88 DEGREES 27 MINUTES 00 SECONDS WEST, 215.08 FEET; THENCE NORTH 01 DEGREES 33 MINUTES 24 SECONDS WEST, 71.01 FEET TO A TANGENTIAL CURVE TO THE LEFT; THENCE NORTHWESTERLY ALONG SAID CURVE, R= 102.00, DELTA = 62 DEGREES 27 MINUTES 31 SECONDS, A DISTANCE OF 111.19 FEET; THENCE NORTH 64 DEGREES 00 MINUTES 14 SECONDS WEST, 59.21 FEET; THENCE NORTH 25 DEGREES 59 MINUTES 46 SECONDS EAST, 236.98 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF GRAND RIVER ROAD; THENCE SOUTH 63 DEGREES 57 MINUTES 17 SECONDS EAST, ALONG SAID RIGHT OF WAY, 233.50 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY LINE OF LATSON ROAD; THENCE SOUTH 20 DEGREES 31 MINUTES 52 SECONDS EAST, ALONG SAID RIGHT OF WAY LINE, 21.17 FEET; THENCE SOUTH 00 DEGREES 54 MINUTES 40 SECONDS EAST, ALONG SAID RIGHT OF WAY LINE, 270.73 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 2.03 ACRES, MORE OR LESS.

THE ABOVE LEGAL DESCRIPTION DOES NOT CONSIDER LAND DEEDED TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) IN 2012, DEED DOCUMENT #2012R-030745

MDOT STANDARD PLANS

WHERE INDICATED ON THE PLANS, ITEMS ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARDS REFERENCED, UNLESS OTHER NOTED. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CURRENT COPY OF THE MDOT STANDARD PLANS.

GENOA TOWNSHIP STANDARD PLANS

WHERE INDICATED ON THE PLANS, ITEMS ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARDS REFERENCED, UNLESS OTHER NOTED. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CURRENT COPY OF THE GENOA TOWNSHIP STANDARD PLANS.

LIVINGSTON COUNTY STANDARD PLANS

WHERE INDICATED ON THE PLANS, ITEMS ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARDS REFERENCED, UNLESS OTHER NOTED. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CURRENT COPY OF THE LIVINGSTON COUNTY STANDARD PLANS.

SITE DEVELOPER

JIM BLAIR
RG PROPERTIES, INC.
10050 INNOVATION DR, SUITE 100
DAYTON, OH 45342
(937) 424-3904
jblair@rgproperties.com

ARCHITECT

STANFORD R. JOSEPH, AIA
9900 CARVER ROAD
CINCINNATI, OH 45242
(513) 984-6000
mamajo100@aol.com

SITE ENGINEER-SURVEYOR

WADE TRIM
CHARLES J. CHRISTY, PE
555 S. SAGINAW STREET, SUITE 201
FLINT, MI 48502
(810) 235-2555
cchristy@wadetrim.com

CONTRACTOR

NOT KNOWN AT THIS TIME

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED: PC: DECEMBER 23, 2014

JOB NO. RGP1001.01F SHEET C-0.0



555 South Saginaw Street, Suite 201
Flint, MI 48502
810.235.2555/800.841.0342
FAX: 810.235.4975
www.wadetrim.com

Building relationships on a foundation of excellence

PREPARED UNDER THE SUPERVISION OF:

CHARLES CHRISTY
REGISTERED PROFESSIONAL ENGINEER
No. 131252
12/23/14

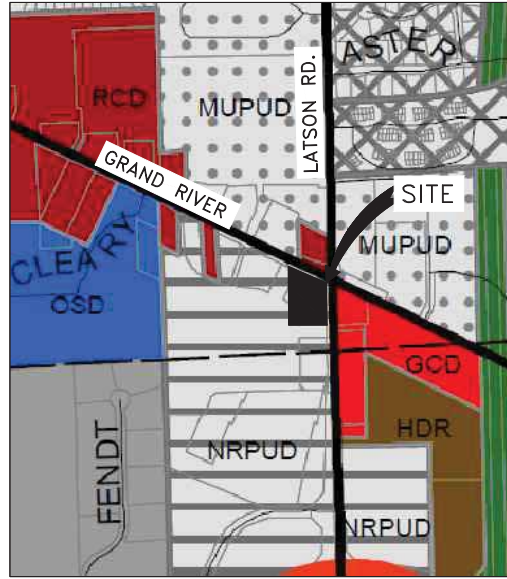


Know what's below.
Call before you dig.

PROJECT MANAGER: C:\PW_WORK\CHRISTY\00564861\GCS-PLTS-COVERSHEET.DWG - C-0.0 - PLOTTED: 12/22/2014 5:13 PM BY CHRISTY, CHARLES

© Wade Trim Group, Inc. LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

ZONING & LAND USE MAP
NO SCALE



LEGAL DESCRIPTION:

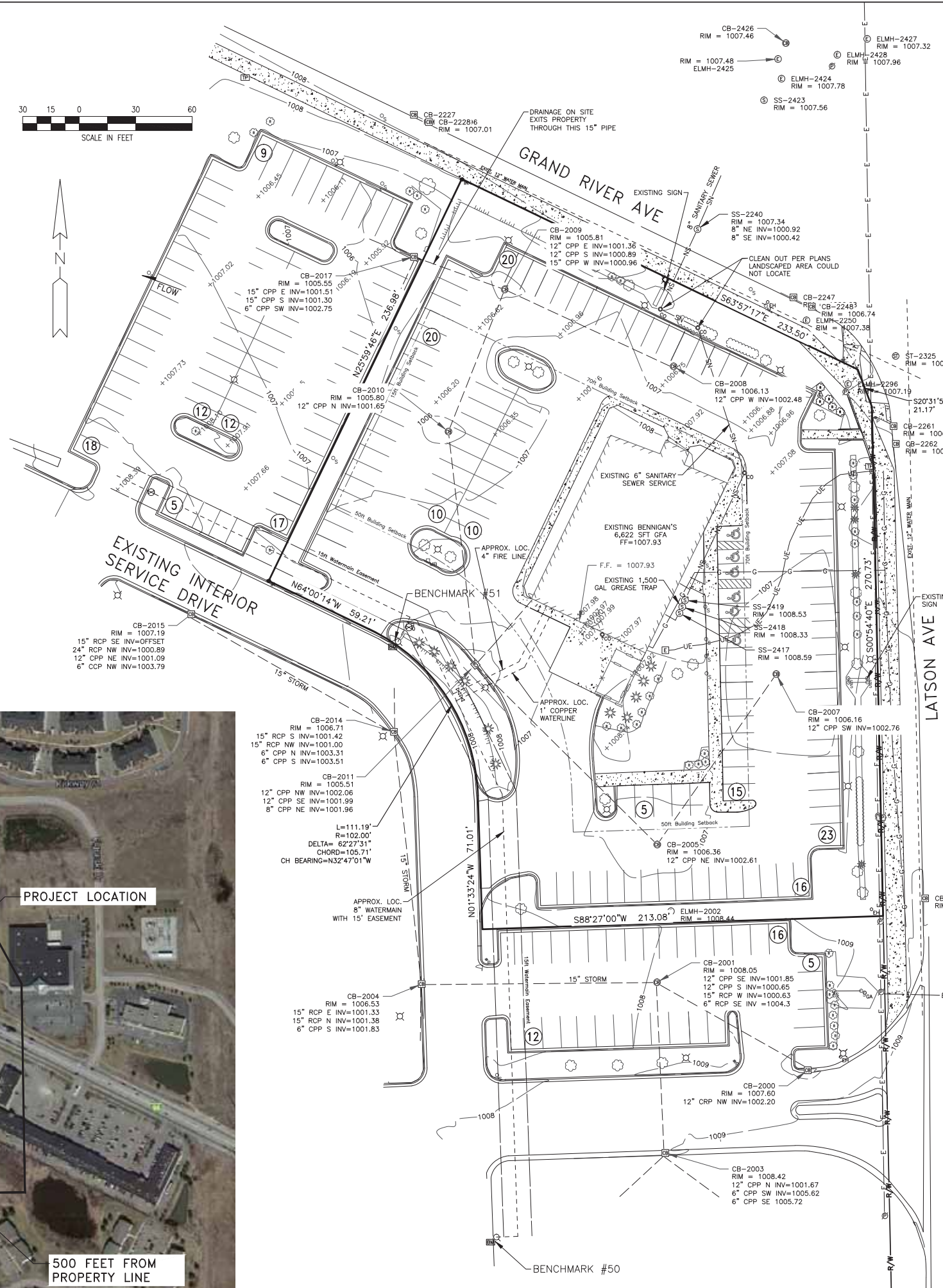
LOT 4
11-05-400-047
SAID PARCEL CONTAIN 2.03 ACRES, MORE OR LESS
(88,427 SFT)
REFER TO PREVIOUS TOPOGRAPHICAL SURVEY COMPLETED FOR
BENNIGAN'S RESTAURANT BY BARTOW & KING ENGINEERS, DATED
JUNE 2003

SETBACKS:

FRONT 70'
SIDE 15'
REAR 50'

FOR SOILS INFORMATION, REFER TO SHEET C-7.0

AERIAL MAP
NO SCALE



LEGEND

BENCHMARK	⊕
LIGHT POLE	⊗
UTILITY POLE	⊙
GUY ANCHOR	⊕
ELECTRIC HANDHOLE	⊕
ELECTRIC OUTLET	⊕
ELECTRIC MANHOLE	⊕
ELECTRIC TRANSFORMER BOX	⊕
ELECTRIC METER	⊕
TELEPHONE PEDESTAL	⊕
MAILBOX	⊕
SIGN	⊕
POST	⊕
GATE VALVE	⊕
HYDRANT	⊕
STORM MANHOLE	⊕
CATCH BASIN	⊕
SANITARY MANHOLE	⊕
CLEAN OUT	⊕
DECIDUOUS TREE	⊕
DECIDUOUS BUSH	⊕
CONIFEROUS TREE	⊕
UNDERGROUND MARKER	⊕
OVERHEAD ELECTRIC	—E—
BUILDING LINE	—
FENCE	—X—
WALL	—
PARKING STRIPE	—
BACK OF CURB	—
EDGE OF PAVEMENT	—
GUTTER	—
TOP OF BANK	—
EDGE OF LANDSCAPE	—
STORM LINE	—SN—
SANITARY SEWER LINE	—SN—
MINOR CONTOUR	—158—
GAS LINE	—G—
CONCRETE	—
ASPHALT	—

BENCHMARKS:

BM #50 - 1010.89
ARROW ON TOP OF HYDRANT LOCATED ON THE SOUTHWEST QUADRANT OF THE WAL-MART DRIVE
AND ENTRANCE DRIVE 4500' SOUTH OF THE INTERSECTION OF GRAND RIVER AVE AND LATSON AVE,
AVE, ±270 WESTERLY OF LATSON AVE.

BM #51 - 1010.77
ARROW ON TOP OF HYDRANT LOCATED AT THE EASTERLY SIDE OF THE WAL-MART SERVICE DRIVE

SURVEY NOTES

1. BEARING ARE BASED ON ALTA SURVEY BY BARTOW & KING ENGINEERS DATED JUNE 2003.
2. HORIZONTAL - NAD83 (2011) MICHIGAN STATE PLANE COORDINATES SOUTH ZONE (2113)
VERTICAL - NAVD88 (CORS) GPS DERIVED

UTILITY NOTE:

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

CERTIFICATION

WE, WADE-TRIM, INC., CERTIFY THAT WE PERFORMED THIS SURVEY ON OCTOBER 20, 2014
AND THAT THE DRAWING IS A TRUE AND ACCURATE REPRESENTATION THEREOF.

Kristine N. Saia, PS#58654



REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS

NOT VALID FOR CONSTRUCTION
UNLESS SIGNED AND DATED:

Wade-Trim
10000 Southpark Drive, Suite 201
Farmington Hills, MI 48334
810.285.2580/810.411.0242
www.wadetrिम.com

LIVINGSTON COMMONS, LOT 4
3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843

EXISTING CONDITIONS SURVEY

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

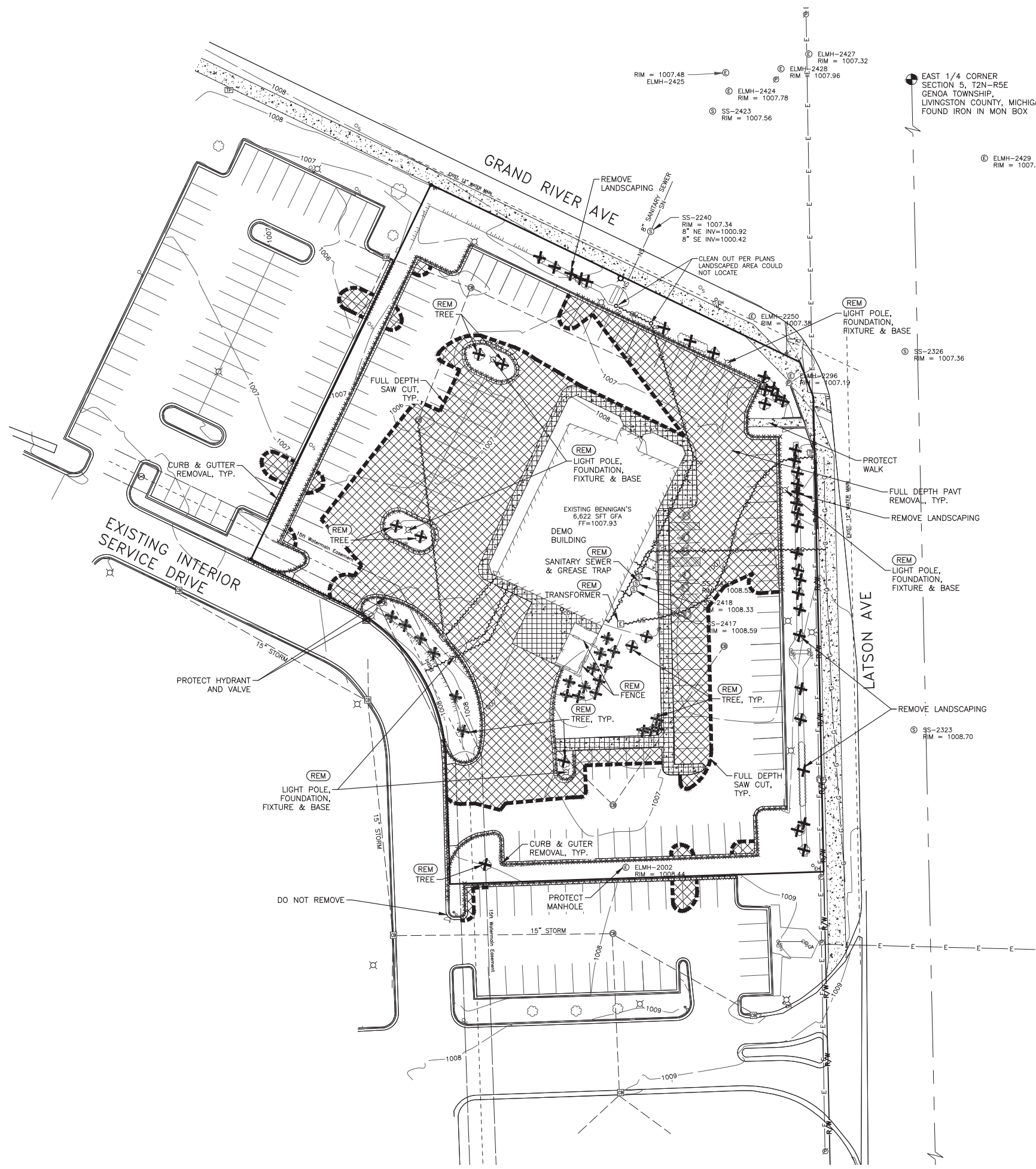
ISSUED FOR: DATE: BY:
PC 12/1/14 CJC

JOB NO.
RGP1001.01F

SHEET
C-0.1

PROJECT MANAGER: CHARLES J. CHRISTY, PE
C:\P\WORK\CHRISTY\0564661\159-BASE-HOWELL-102414.DWG - C-0.1 - PLOTTED 12/20/2014 12:40 PM BY: CHRISTY, CHARLES

PROJECT MANAGER: CHARLES J. CHRISTY, PE
 C:\PW\WORK\CHRISTY\0564861\PL1-VSP-DEMOLITION PLAN.DWG - C-1.0 - PLOTTED 12/22/2014 10:18 AM BY CHRISTY, CHARLES



LEGEND

CURB AND GUTTER REMOVAL	-XXXXXXXXXX-
SAW CUT, FULL DEPTH	-----
FULL-DEPTH ASPHALT REMOVAL	XXXXXX
CONCRETE REMOVAL	XXXXXX
REMOVE ITEM	(REM)
TREE REMOVAL	+
UTILITY REMOVAL	~~~~~

- NOTES:**
- CONTRACTOR TO GRIND OFF & REMOVE ALL REMAINING PVMT STRIPING THAT IS NOT PART OF FINAL PLAN
 - THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR COMPLETENESS OR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES TO OBTAIN ONSITE LOCATIONS OF EXISTING UTILITIES
 - ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER A BUILDING
 - CONTRACTOR TO COORDINATE DEMO & REMOVAL OF ELECTRIC SERVICE, ELECTRIC TRANSFORMER, COMMUNICATION LINES TO BUILDING, GAS METER & SERVICE, & WATER SERVICES
 - CONTRACTOR SHALL PROTECT IMPROVEMENTS TO REMAIN
 - DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 - ALL MATERIAL TO BE DISPOSED OF OFF SITE IN ACCORDANCE W/ STATE & FEDERAL REGULATIONS
 - ALL DEMOLISHED MATERIALS ARE PROPERTY OF THE CONTRACTOR
 - EXISTING 1 INCH WATER SERVICE TO EXISTING BUILDING SHALL BE DEMOLISHED AND REMOVED BACK TO THE EXISTING 8 INCH WATER MAIN. TERMINATE CONNECTION IN ACCORDANCE WITH TOWNSHIP AND MHOOG REQUIREMENTS.



REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS

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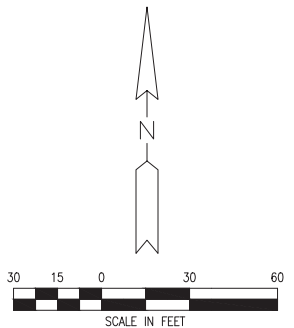
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LIVINGSTON COMMONS, LOT 4
3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843

DEMOLITION PLAN

ISSUED FOR: PC	DATE: 12/1/14	BY: CJC
JOB NO. RGP1001.01F	SHEET	
C-1.0		

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN



PARKING REQUIREMENTS		
TYPE	CALCULATION	NO. OF SPACES
REQUIRED		
SIT-DOWN RESTAURANT W/OUT LIQUOR 1 SPACE PER 100 SQ. FT. + UP TO 5 LONG SPACES	2 BUILDINGS AT 2,200 SFT GFA EACH 4,400 GFA SFT/1000 SFT = 44 SPACES	44 SPACES 10 LONG SPACES
SHOPPING CENTER WITH MULTIPLE TENANTS 1 SPACE PER 250 SQ. FT.	3,300 SFT GFA/250 SFT = 13.2 = 14 SPACES	14 SPACES
DRIVE THROUGH RESTAURANT 1 SPACE PER 70 SQ. FT. + 3 WAITING SPACES + 10 STACKING SPACES + 2 LONG SPACES	4,300 SFT GFA/ 40 SFT = 61.4 = 62 SPACES + 3 WAITING SPACES + 10 STACKING SPACES + 2 LONG SPACES	62 SPACES 2 LONG SPACES 10 STACKING 3 WAITING
TOTAL REQUIRED PARKING	44+14+62 = 120 SPACES + 3 WAITING SPACES + 10 STACKING SPACES + 12 LONG SPACES = 145	120 PARKING 12 LONG 13 WAITING/STACKING
PROVIDED **SEE BELOW		
ON-SITE SPACES AVAILABLE		78
LONG SPACES		12
STACKING SPACES		10
WAITING SPACES		3
A.D.A. SPACES		
REQUIRED		
101 TO 150 TOTAL PARKING IN LOT (PER A.D.A. ACCESSIBILITY GUIDELINES)		5
PROVIDED		
ON SITE		5

SITE DATA TABLE	
NOTE: INFORMATION BELOW IS PROVIDED FOR THE PROPERTY BOUNDARY AS INDICATED ON THIS PLAN SHEET.	
EXISTING ZONING	NR/PD (NON-RESIDENTIAL PLANNED UNIT DEVELOPMENT)
EXISTING USE	SIT-DOWN RESTAURANT
PROPOSED USE	RESTAURANT & RETAIL
BUILDING AREA	12,000 SFT. GFA/GLA/USABLE
LOT AREA	88,465 SFT
BUILDING COVERAGE	13.6 %
PROPOSED IMPERVIOUS COVERAGE	63,765 SFT, 72.1%

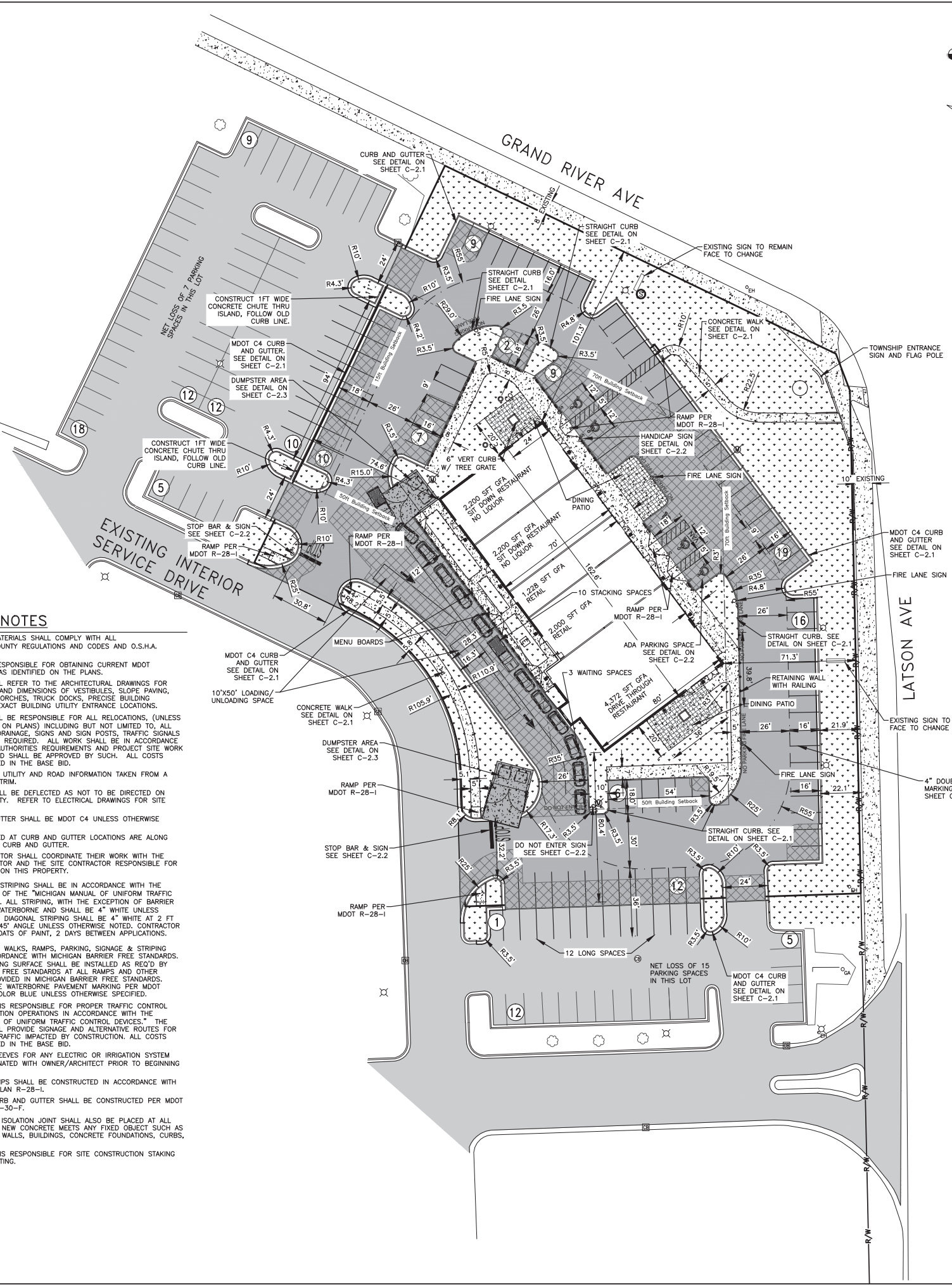
** PER WAL-MART/HOME DEPOT PLANS:

WAL-MART REQUIRED PARKING 1,071+27=	1,098
HOME DEPOT REQUIRED PARKING 535+33=	568
20,000 SFT OFFICE STORE=	100
TOTAL REQ'D PARKING=	1,766
PARKING PROVIDED FOR WM/HD/OFFICE STORE=	1,796
NET LOSS DUE TO PILOT RECONFIGURATION=	22
REVISED PARKING PROVIDED FOR HD/WM/OFFICE STORE	1,774
EXCESS PARKING=	8

NOTE: OWNER MAY SHARE PARKING BETWEEN USES/LOTS, REFER TO R.E.A.

SITE PLAN NOTES

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL TOWNSHIP/CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING CURRENT MDOF STANDARD PLANS AS IDENTIFIED ON THE PLANS.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS AND SIGN POSTS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES' REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COSTS SHALL BE INCLUDED IN THE BASE BID.
- SITE TOPOGRAPHY, UTILITY AND ROAD INFORMATION TAKEN FROM A SURVEY BY WADE TRIM.
- SITE LIGHTING SHALL BE DEFLECTED AS NOT TO BE DIRECTED ON ADJACENT PROPERTY. REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING.
- ALL CURB AND GUTTER SHALL BE MDOF C4 UNLESS OTHERWISE NOTED.
- ALL RADI SPECIFIED AT CURB AND GUTTER LOCATIONS ARE ALONG THE FACE OF THE CURB AND GUTTER.
- THE SITE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE BUILDING CONTRACTOR AND THE SITE CONTRACTOR RESPONSIBLE FOR ALL OTHER WORK ON THIS PROPERTY.
- ALL PARKING LOT STRIPING SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". ALL STRIPING, WITH THE EXCEPTION OF BARRIER FREE, SHALL BE WATERBORNE AND SHALL BE 4" WHITE UNLESS OTHERWISE NOTED. DIAGONAL STRIPING SHALL BE 4" WHITE AT 2 FT ON CENTER AT A 45° ANGLE UNLESS OTHERWISE NOTED. CONTRACTOR SHALL APPLY 2 COATS OF PAINT, 2 DAYS BETWEEN APPLICATIONS.
- ALL BARRIER FREE WALKS, RAMPS, PARKING, SIGNAGE & STRIPING SHALL BE IN ACCORDANCE WITH MICHIGAN BARRIER FREE STANDARDS. DETECTABLE WARNING SURFACE SHALL BE INSTALLED AS REQ'D BY MICHIGAN BARRIER FREE STANDARDS AT ALL RAMPS AND OTHER LOCATIONS AS PROVIDED IN MICHIGAN BARRIER FREE STANDARDS. STRIPING SHALL BE WATERBORNE PAVEMENT MARKING PER MDOF SPECIFICATIONS, COLOR BLUE UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPER TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS IN ACCORDANCE WITH THE "MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES." THE CONTRACTOR SHALL PROVIDE SIGNAGE AND ALTERNATIVE ROUTES FOR ALL PEDESTRIAN TRAFFIC IMPACTED BY CONSTRUCTION. ALL COSTS SHALL BE INCLUDED IN THE BASE BID.
- PLACEMENT OF SLEEVES FOR ANY ELECTRIC OR IRRIGATION SYSTEM SHALL BE COORDINATED WITH OWNER/ARCHITECT PRIOR TO BEGINNING CONSTRUCTION.
- ALL SIDEWALK RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MDOF STANDARD PLAN R-28-1.
- ALL CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED PER MDOF STANDARD PLAN R-30-F.
- A 1" THICK (MIN.) ISOLATION JOINT SHALL ALSO BE PLACED AT ALL LOCATIONS WHERE NEW CONCRETE MEETS ANY FIXED OBJECT SUCH AS CONCRETE WALKS, WALLS, BUILDINGS, CONCRETE FOUNDATIONS, CURBS, AND ETC.
- THE CONTRACTOR IS RESPONSIBLE FOR SITE CONSTRUCTION STAKING AND MATERIAL TESTING.



LEGEND

- PARKING COUNT
- TRAFFIC FLOW ARROW (PAINTED ONLY WHERE INDICATED)
- SIGN AND SIGN POST
- ACCESSIBLE SYMBOL, REFER TO SHEET C-3.2
- CANOPY LIMITS
- CURB AND GUTTER
- BUILDING SETBACK
- RAILING
- THICKENED EDGE CONCRETE SEE DETAIL ON SHEET C-2.1
- 1.5" MILL & FILL ASPHALT SURFACE. SEE DETAIL ON SHEET C-2.1
- FULL DEPTH STANDARD DUTY ASPHALT. SEE DETAIL ON SHEET C-2.1
- 4-INCH CONCRETE SEE DETAIL ON SHEET C-2.1
- 7" HEAVY DUTY CONCRETE. SEE DETAIL ON SHEET C-2.1
- LANDSCAPED AREA
- EXISTING ASPHALT SURFACE
- 4" CONCRETE, SCORED 2" O.C.

CHANGES MADE ON THIS SHEET AS PART OF REVISION A.

- ADDED TOWNSHIP ENTRANCE SIGN AND FLAG POLE.
- ROTATED DUMPSTER AT SOUTH EAST CORNER OF SITE.
- ADDED FIRE LANE SIGNS.
- ADJUSTED DEPTH OF PARKING STALLS TO ACCOMMODATE 26 FOOT FIRE LANE.
- INDICATED 55 FOOT OUTSIDE RADIUS OF FIRE LANE.
- ADD FIRE LANE PAVEMENT MARKINGS TO PLAN.

EAST 1/4 CORNER SECTION 5, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN FOUND IRON IN MON BOX

SOUTHEAST CORNER SECTION 5, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN FOUND IRON IN MON BOX

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3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843

SITE PLAN

ISSUED FOR: DATE: BY: PC 12/1/14 CJC

JOB NO. RGP1001.01F

SHEET C-2.0

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

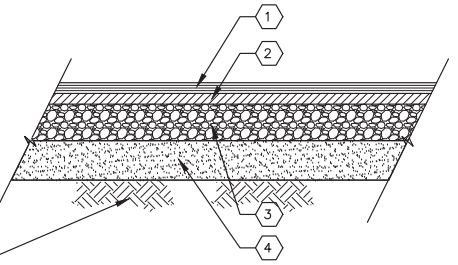
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PROJECT MANAGER: CHARLES J. CHRISTY, PE
C:\PW\MWORK\CHRISTY\0564661\PL1-CSP-SITE PLANNING - C-2.0 - PLOTTED 12/22/2014 3:06 PM BY CHRISTY, CHARLES



SPECIFICATIONS		
PAVEMENT SECTION		
ITEM	THICKNESS	MATERIAL
1	2"	MDOT 4C
2	2"	MDOT 3C
3	8"	MDOT 21AA AGGREGATE
4	12"	MDOT CLASS II GRANULAR MATERIAL

PREPARATION, COMPACTION & TESTING OF SUBBASE, BASE, AND HMA SHALL BE PER MDOT SPECIFICATIONS.

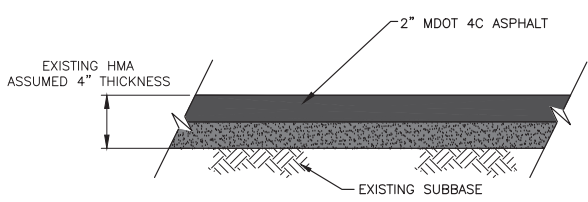


REMOVE ALL TOPSOIL AND UNSUITABLE MATERIAL. SHAPE, COMPACT, AND PROOF ROLL SUBGRADE PRIOR TO PLACEMENT OF GRANULAR SUBBASE & AGGREGATE BASE.

HOT MIX ASPHALT (HMA) APPLICATION TABLE				
ITEM	DEPTH (IN)	RATE (LB/SYD)	PERFORMANCE GRADE	REMARKS
HMA, MDOT 4C	2	220	64-28	PLACED AND ROLLED TO MEET MDOT STANDARDS. SHALL BE INSPECTED AND TESTED PER MDOT STANDARDS
HMA, MDOT 3C	2	220	64-28	PLACED AND ROLLED TO MEET MDOT STANDARDS. SHALL BE INSPECTED AND TESTED PER MDOT STANDARDS

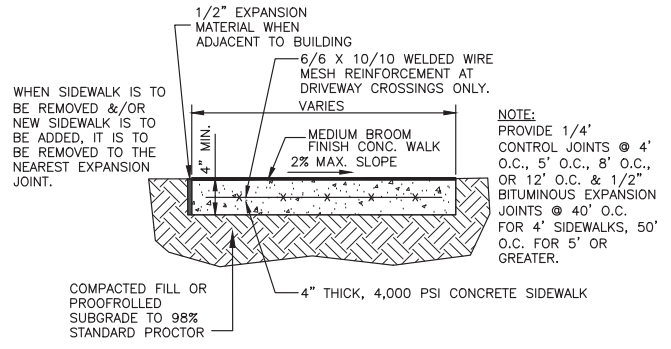
HMA BOND COAT SS-1H, 0.05 TO 0.15 GAL/SYD BETWEEN PROPOSED HMA LIFTS. THE AGGREGATE WEAR INDEX FOR ALL TOP COURSES SHALL BE AWI = 260 MINIMUM.

FULL DEPTH ASPHALT PAVEMENT SECTION FOR PARKING LOT
NO SCALE

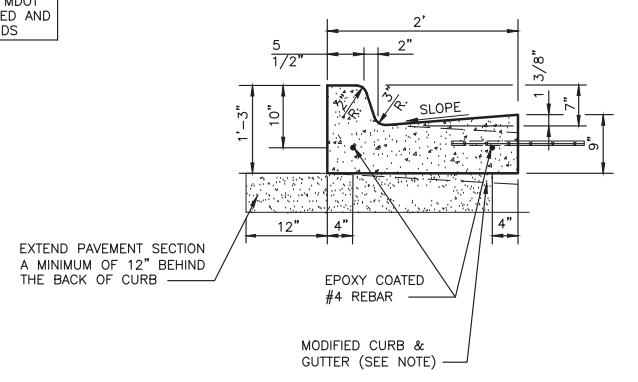


MILL & FILL ASPHALT SECTION
NO SCALE

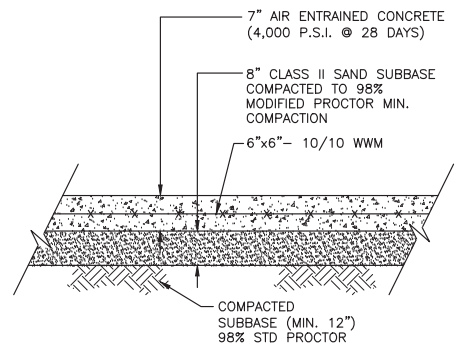
- PAVEMENT SHALL BE MILLED TO THE LINES AND GRADES AS SHOWN ON THE PLANS.
 - IMMEDIATELY AFTER MILLING, CONTRACTOR SHALL CLEAN THE MILLED SURFACE.
 - CONTRACTOR IS RESPONSIBLE TO DISPOSE OF RESULTING DEBRIS/MILLINGS
- BITUMINOUS MIXTURE SPECIFIED ON THE PLANS, WHEN TESTED AT OPTIMUM ASPHALT CONTENT (DETERMINED IN ACCORDANCE WITH MDOT PROCEDURES MANUAL FOR MIX DESIGN PROCESSING), SHALL MEET THE REQUIREMENTS FOR STABILITY, FLOW, VOIDS IN MINERAL AGGREGATE (VMA), AIR VOIDS, FINES/BINDER RATIO, FINE AGGREGATE ANGULARITY, L.A. ABRASION LOSS, AND SOFT PARTICLES AS SPECIFIED IN MDOT SPECIAL PROVISION FOR MARSHALL HOT MIX ASPHALT MIXTURE (DOCUMENT 12SP501(F))
- AGGREGATE MIXTURES FAILING TO MEET THE REQUIREMENTS SPECIFIED IN MDOT SPECIAL PROVISION FOR MARSHALL HOT MIX ASPHALT MIXTURE (DOCUMENT 12SP501(F)) WILL BE REJECTED AND THE CONTRACTOR WILL BE REQUIRED TO SUBMIT ADDITIONAL SAMPLES OF BITUMINOUS MIXTURES UNTIL A COMBINATION OF MATERIAL IS FOUND WHICH WILL PRODUCE A MIXTURE MEETING THE REQUIREMENTS OF MDOT SPECIAL PROVISION FOR MARSHALL HOT MIX ASPHALT MIXTURE (DOCUMENT 12SP501(F))



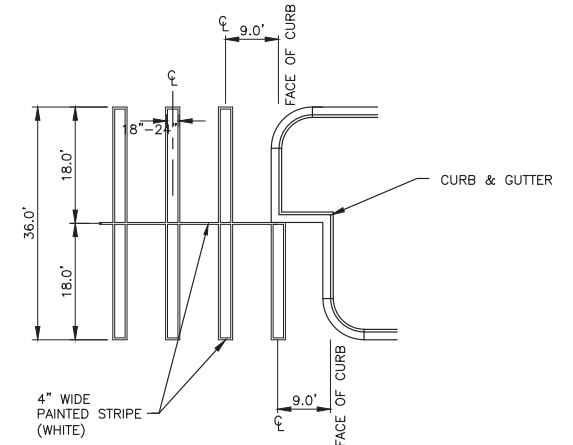
STANDARD SIDEWALK DETAIL
NO SCALE



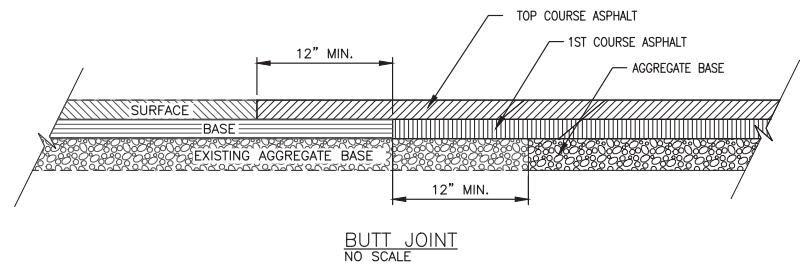
M.D.O.T. C-4 CURB & GUTTER DETAIL
NO SCALE



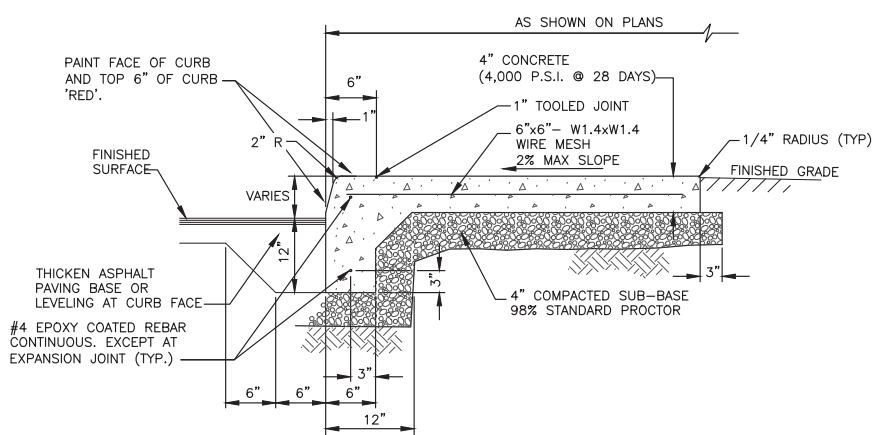
7" - HEAVY DUTY CONCRETE SURFACE @ DUMPSTERS
NO SCALE



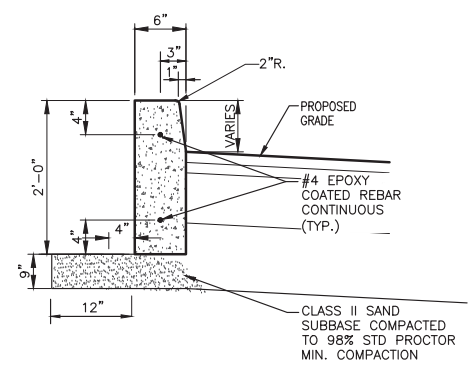
90° PARKING STRIPING DETAIL
NO SCALE



BUTT JOINT
NO SCALE



CONCRETE WALK W/THICKENED EDGE
NO SCALE



STRAIGHT CURB DETAIL
NO SCALE

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HOWELL, MICHIGAN 48843

SITE DETAILS

ISSUED FOR: DATE: BY: PC 12/1/14 CJC

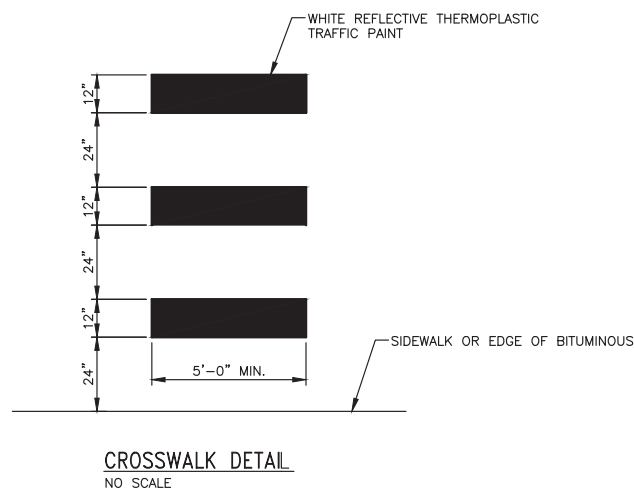
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SHEET C-2.1

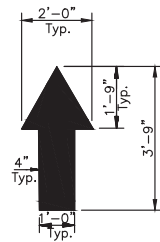


PROJECT MANAGER: CHARLES J. CHRISTY, PE
C:\PW\WORK\CHRISTY\0504466\PL1-CSP-PLAN.DWG - C-2.1 - PLOTTED 12/20/2014 11:55 AM BY: CHRISTY, CHARLES

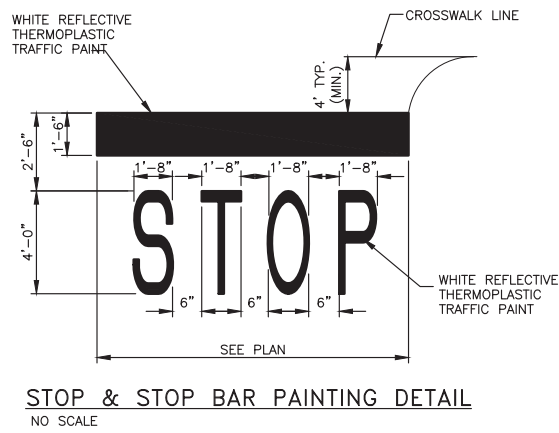
LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN



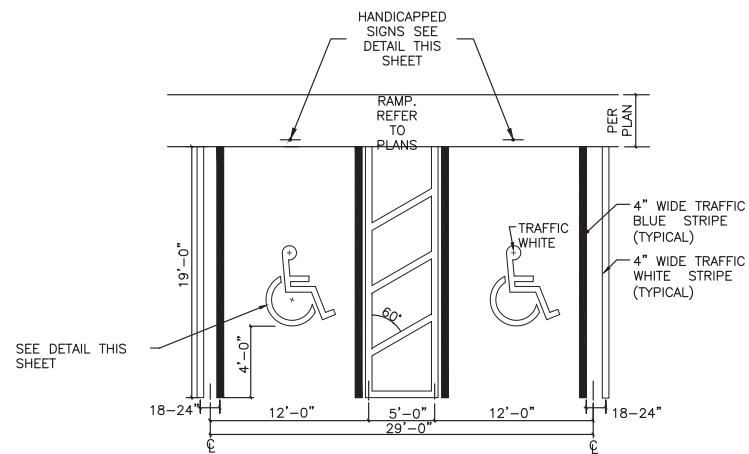
CROSSWALK DETAIL
NO SCALE



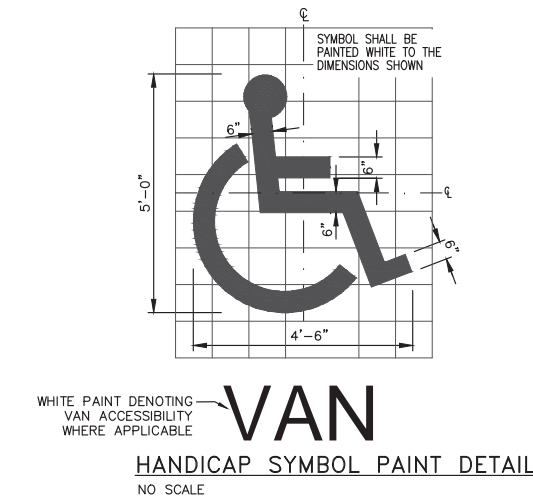
NOTE: ALL TRAFFIC FLOW
ARROWS TO BE REFLECTIVE WHITE
PAINT PER MDOT SPECS.
TRAFFIC FLOW ARROW
NO SCALE



STOP & STOP BAR PAINTING DETAIL
NO SCALE

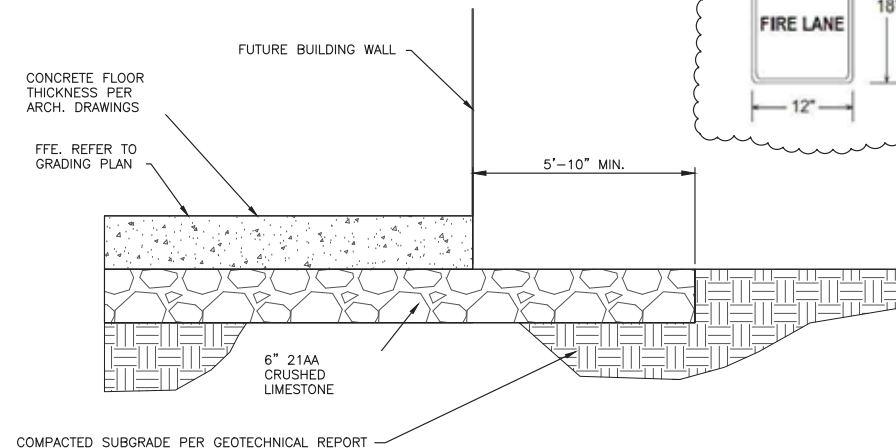
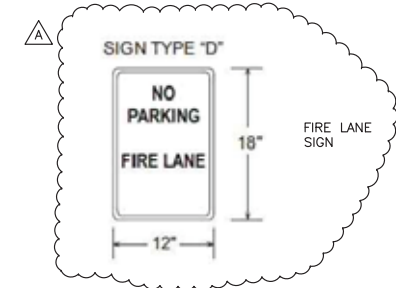
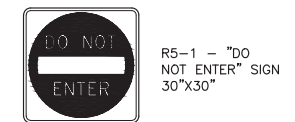


TYPICAL DOUBLE HANDICAPPED STALL
NO SCALE

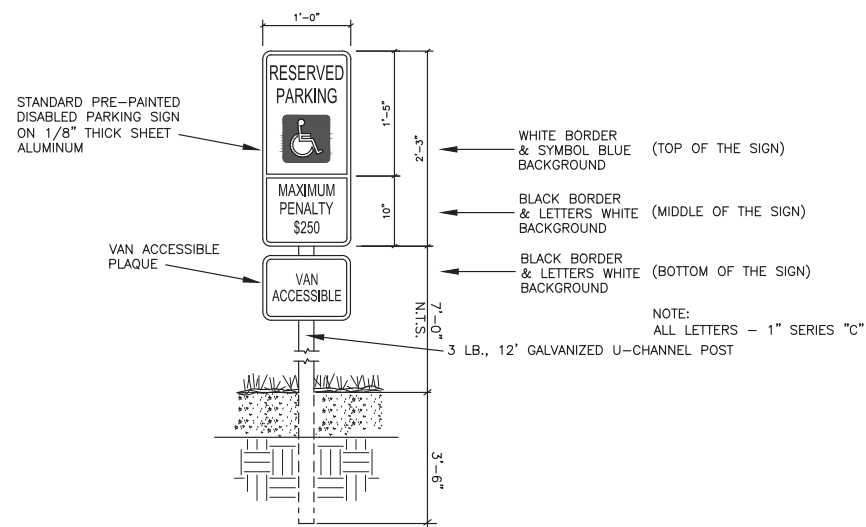


HANDICAP SYMBOL PAINT DETAIL
NO SCALE

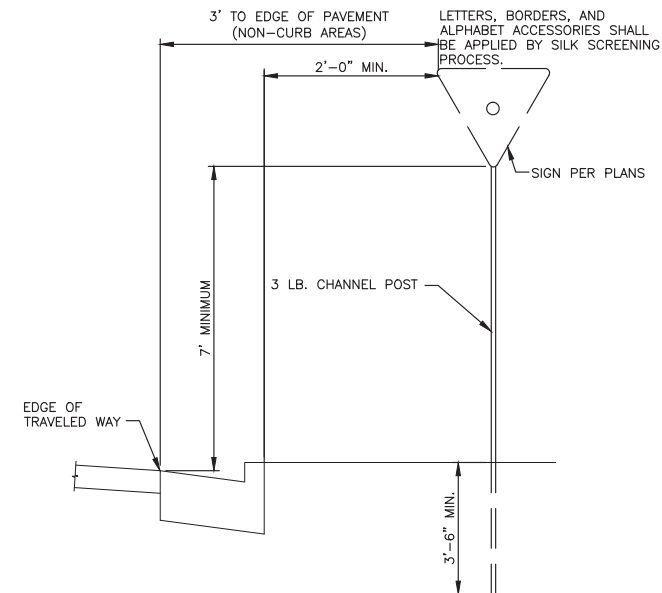
SIGN LEGEND



BUILDING PAD PREPARATION DETAIL
NO SCALE



TYPICAL HANDICAPPED USIGN DETAIL
NO SCALE



TYPICAL CURB & GUTTER SECTION SIGN DETAIL
NO SCALE

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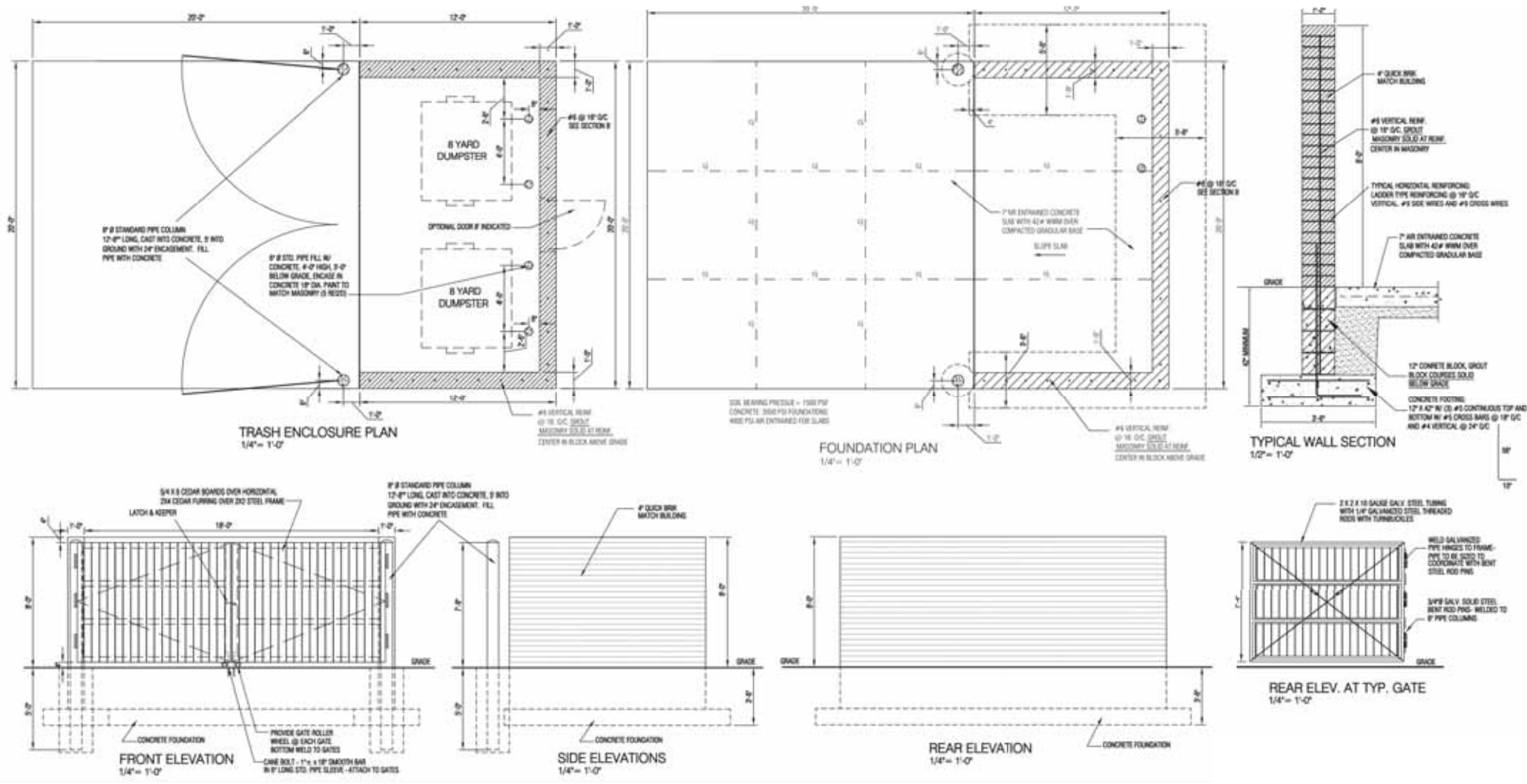
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 SHEET C-2.2



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PROJECT MANAGER: CHARLES J. CHRISTY, PE
 CIVIL WORK: CHRISTY00564661\PL1-CSP-SITE PLANNING - C-2.3 - PLOTTED 12/20/2014 11:56 AM BY: CHRISTY, CHARLES



DUMPSTER ENCLOSURE DETAILS
 NO SCALE

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 RGP1001.01F

SHEET
 C-2.3



LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

SANITARY SEWER					
	TYPE	LENGTH	BEGIN INV.	END INV.	SLOPE
SSWR #1	6" PVC SCH 40	96	1000.91	1001.91	1.04%
SSWR #2	6" PVC SCH 40	80	1002.21	1003.04	1.04%

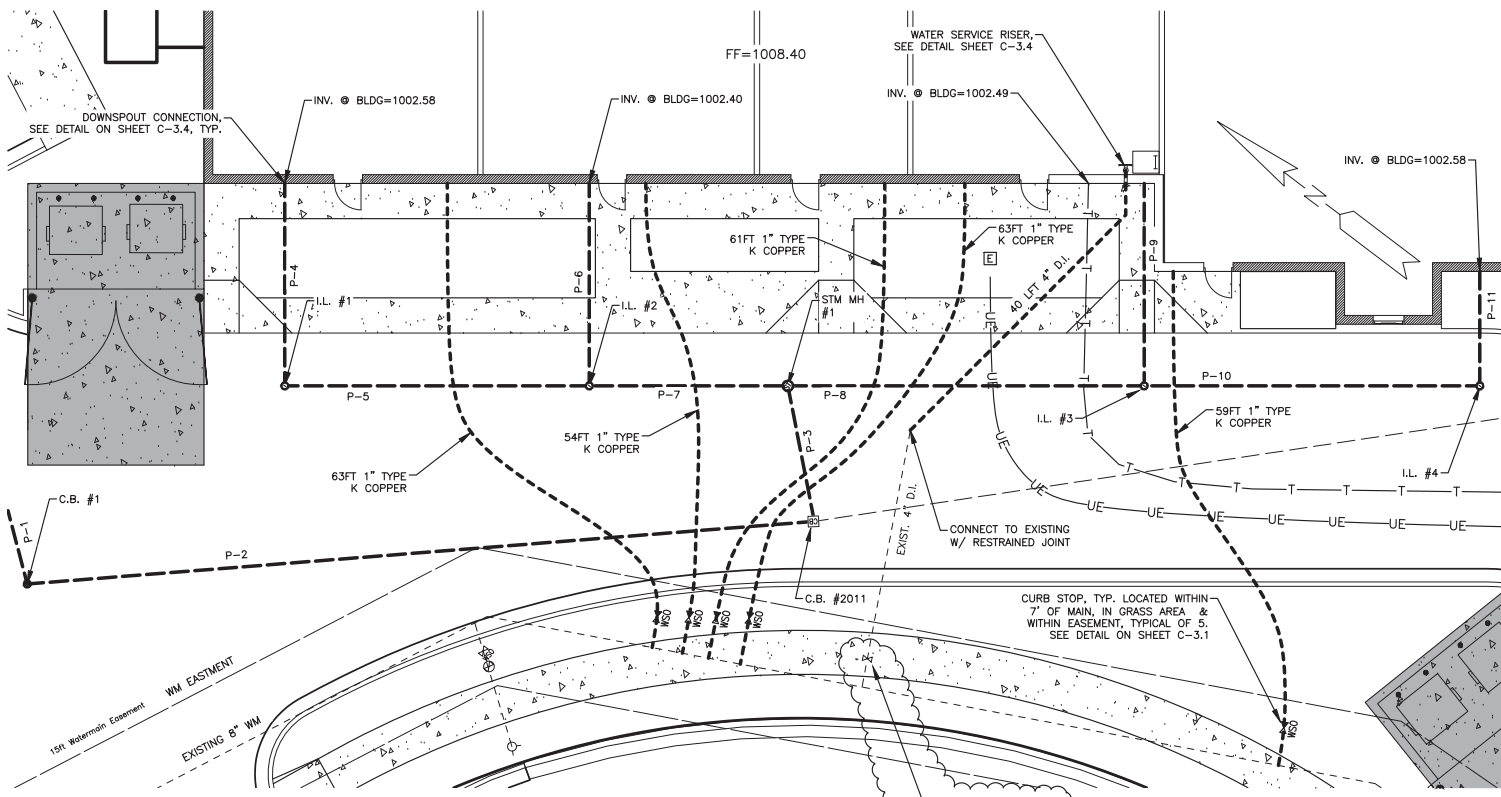
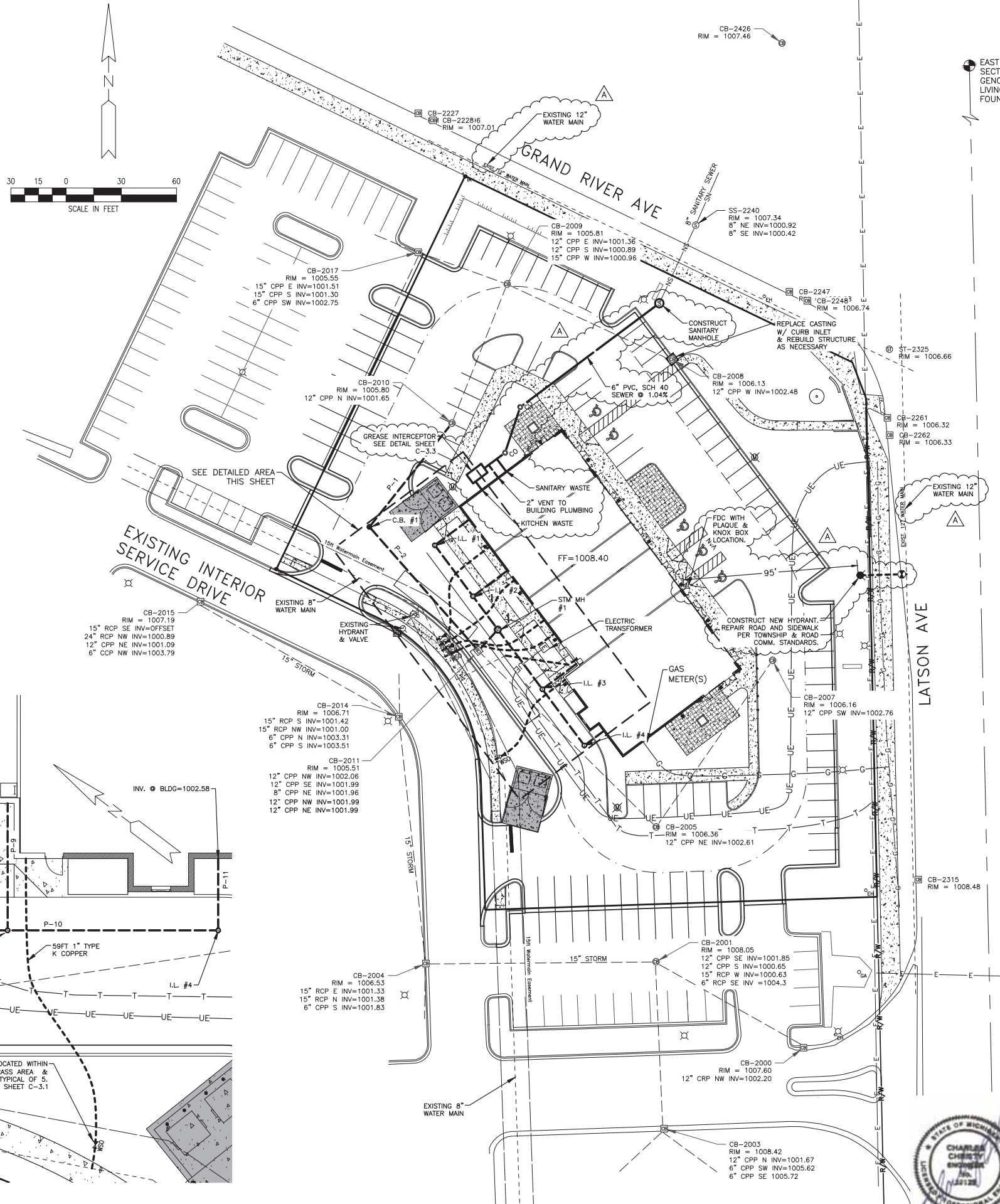
STORM SEWER				
	RIM ELEV.	INV	COVER	
CB #1	1007.27	1001.80	FLAT, RADIAL GRATE, EJIW #1040 Z / 1040 M3	
STM #1	1006.43	1002.07	FLAT, RADIAL GRATE, EJIW #1040 Z / 1040 M3	
IL #1	1008.18	1002.36	SOLID, TRAFFIC RATED	
IL #2	10067.31	1002.18	SOLID, TRAFFIC RATED	
IL #3	1006.64	1002.27	SOLID, TRAFFIC RATED	
IL #4	1007.39	1002.46	SOLID, TRAFFIC RATED	

STORM PIPING						
PIPE	FROM	TO	LENGTH	SLOPE	MATERIAL	SIZE
P-1	CB-2010	CB #1	72	0.21%	ADS-N12	12"
P-2	CB #1	CB-2011	90	0.21%	ADS-N12	12"
P-3	CB-2011	STM MH #1	16	0.50%	ADS-N12	12"
P-4	I.L. #1	BLDG	22	1.00%	PVC	10"
P-5	I.L. #2	I.L. #1	35	0.50%	PVC	12"
P-6	I.L. #2	BLDG	22	1.00%	PVC	10"
P-7	STM MH #1	I.L. #2	22	0.50%	PVC	12"
P-8	STM MH #1	I.L. #3	40	0.50%	PVC	12"
P-9	I.L. #3	BLDG	22	1.00%	PVC	10"
P-10	I.L. #3	I.L. #4	38	0.50%	PVC	12"
P-11	I.L. #4	BLDG	12	1.00%	PVC	10"

LEGEND

- STORM SEWER
- CATCH BASIN
- STORM SEWER MANHOLE
- NYLOPLAST JUNCTION SEE SHEET C-3.4
- SANITARY SEWER
- SANITARY CLEAN OUT
- UNDERGROUND ELECTRIC
- TELEPHONE LINE
- GAS LINE
- WATER LINE
- FIRE DEPARTMENT CONNECTION
- POST INDICATOR VALVE
- SHUT OFF VALVE
- EXISTING WATER MAIN
- EXISTING HYDRANT
- EXISTING SHUT OFF VALVE
- EXISTING GATE VALVE & BOX
- EXISTING SANITARY CLEAN OUT
- EXISTING SANITARY SEWER
- EXISTING GAS

1. CHECK VALVE SHALL BE INSTALLED ON 1" AND 4" WATER LINES INSIDE BUILDING.
2. CONTRACTOR SHALL LOCATE EXISTING 4" GATE VALVE ON EXISTING 4" FIRE LINE AND RAISE TO GRADE. IF 4" GATE VALVE CANNOT BE LOCATED OR IS NOT PRESENT, CONTRACTOR SHALL INSTALL 4" GATE VALVE ON EXISTING 4" FIRE LINE WITHIN THE EXISTING WATER MAIN EASEMENT.
3. NEW 4" FIRE LINE SHALL BE D.I., CL 52 AND WRAPPED WITH POLYETHYLENE.
4. WATER SERVICES ADJUSTED FOR THIS REVISION, ADJUSTED LOCATION OF SHUTOFFS.



DETAILED VIEW
SCALE: 1"=10'

PROJECT MANAGER: CHARLES J. CHRISTY, PE
C:\PW\WORK\CHRISTY\0504861\PL-UTILITY PLAN.DWG - C-3.0 - PLOTTED 12/23/2014 1:48 PM BY CHRISTY, CHARLES

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LIVINGSTON COMMONS, LOT 4
3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843

ISSUED FOR: DATE: BY:
PC 12/1/14 CJC

JOB NO. **RGP1001.01F**

SHEET **C-3.0**

UTILITY PLAN

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

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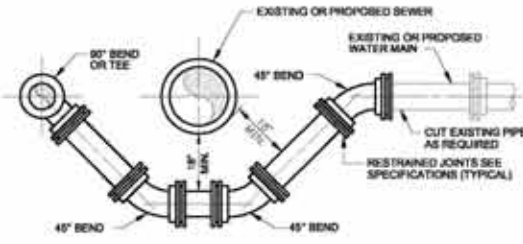


PIPE RESTRAINT SCHEDULE

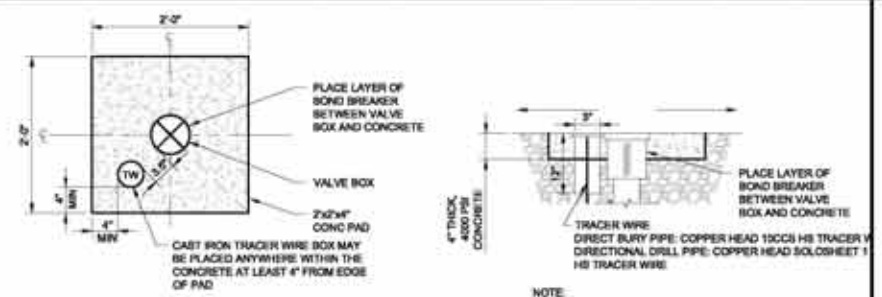
GROUND BURIED PRESSURE PIPE - POLYETHYLENE ENCASED DUCTILE IRON PIPE

PIPE DIAMETER	TEES, 90° BENDS	45° BENDS	22-1/2° BENDS	11-1/4° BENDS	DEAD ENDS	REDUCERS (ONE SIZE REDUCTION)*	REDUCERS (TWO SIZE REDUCTION)*
4	13	5	3	1	40	-	-
6	18	8	4	2	58	31	-
8	24	10	5	2	75	30	70
12	34	14	7	3	107	57	118
18	43	18	9	4	139	59	137
20	52	22	10	4	169	59	134
24	61	25	12	6	199	60	132
30	73	30	15	7	242	65	168
36	84	35	17	8	281	64	168

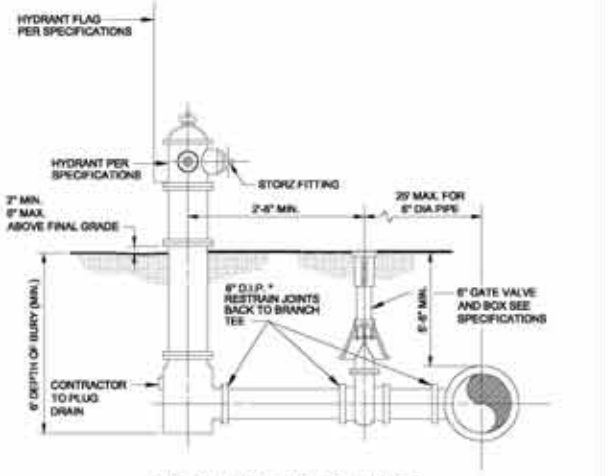
- LENGTHS OF PIPE RESTRAINT ARE GIVEN IN FEET.
 - IF REQUIRED PIPE DIAMETER IS NOT LISTED IN THIS TABLE, THE NEXT LARGEST PIPE DIAMETER SHALL BE USED.
 - THIS TABLE IS BASED ON A TEST PRESSURE OF 180 PSI (OPERATING PRESSURE PLUS WATER HAMMER, FOR OTHER TEST PRESSURES, ALL VALUES TO BE INCREASED OR DECREASED PROPORTIONALLY).
 - THE VALUES PROVIDED OF RESTRAINT LENGTH ARE IN EACH DIRECTION FROM THE POINT OF DEFLECTION OR TERMINATION EXCEPT FOR TEES, AT WHICH ONLY THE BRANCH IN THE DIRECTION OF THE STEM.
 - IF THE RODS ARE USED, USE FOUR RODS MINIMUM AND ADD 1/8-INCH TO BAR DIAMETER AS CORROSION ALLOWANCE.
 - SIZE REDUCTION IS BASED UPON THE PIPE DIAMETER SHOWN IN THIS TABLE.
- BASED UPON:
- | | |
|--------------------|-----------|
| INTERNAL PRESSURE: | 180 |
| PIPE DEPTH: | 5 |
| BEDDING CLASS: | TYPE 4 |
| SOIL TYPE: | GOOD SAND |
| SAFETY FACTOR: | 2 |



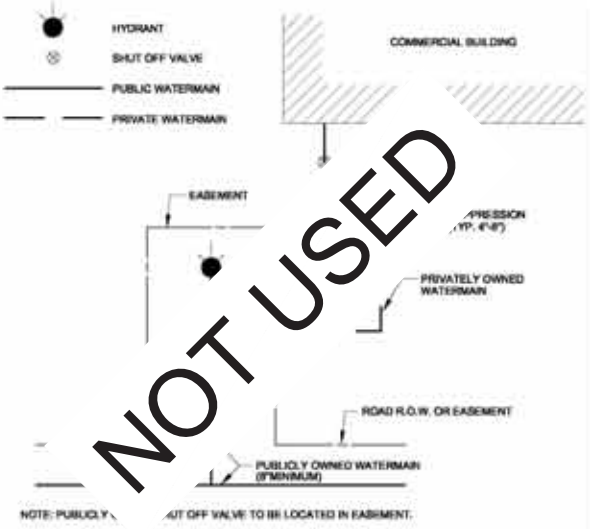
WATER MAIN UTILITY OFFSET



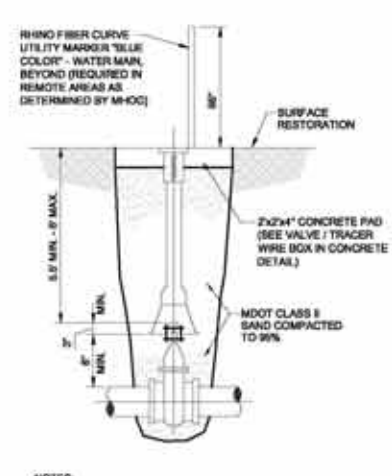
PLAN VALVE/TRACER WIRE BOX IN CONCRETE DETAIL
NO SCALE



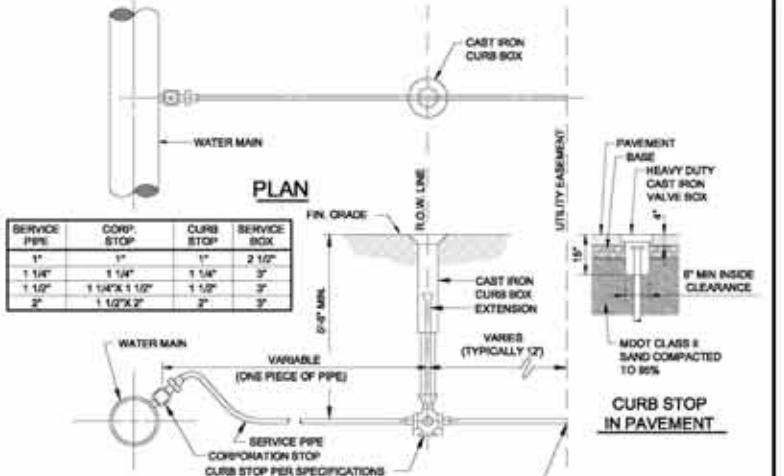
FIRE HYDRANT ASSEMBLY



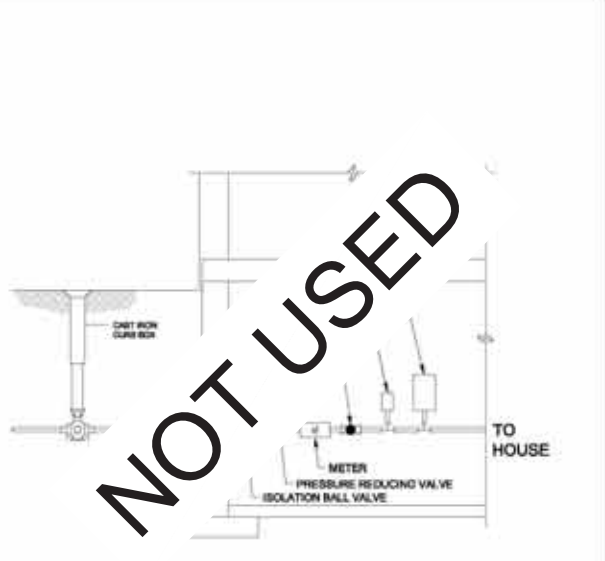
COMMERCIAL BUILDING WATER SERVICE LAYOUT



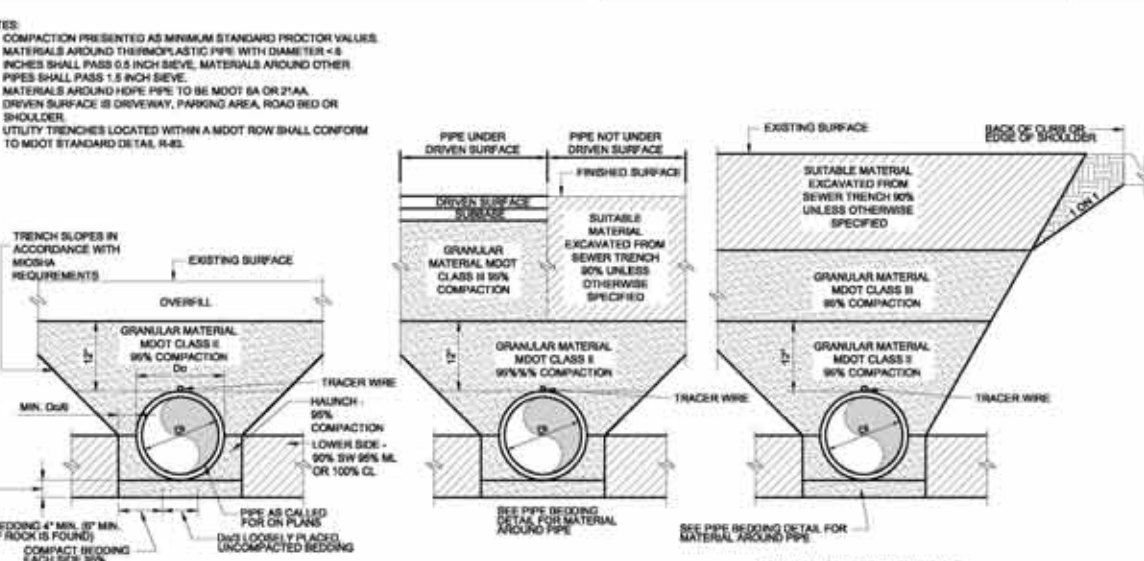
GATE VALVE AND BOX



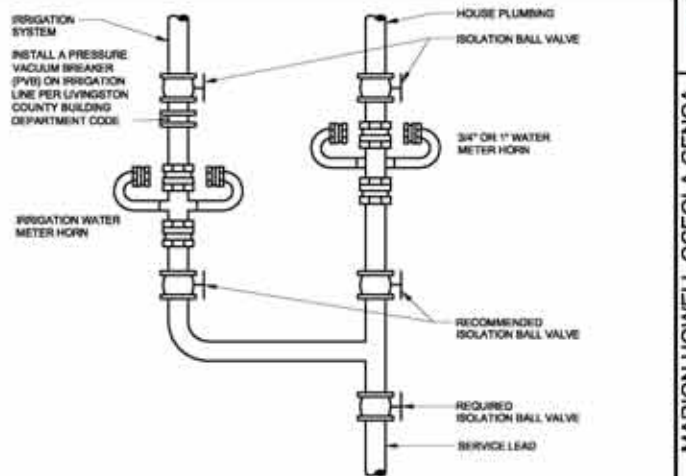
SECTION WATER SERVICE LATERAL



PRIVATE RESIDENCE PRESSURE REDUCING VALVE (PRV)



PIPE BEDDING TRENCH EXCAVATION & PIPE BEDDING



TYPICAL METER HORN INSTALLATION



MARION HOWELL OCEOLA GENOA
Sewer and Water Authority



LIVINGSTON COMMONS, LOT 4
3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843

ISSUED FOR: DATE: BY: PC 12/1/14 CJC

JOB NO. RGP1001.01F

SHEET C-3.1

REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS

PROJECT MANAGER: CHARLES J. CHRISTY, PE CIVIL WORK (CHRISTY0056486) PLUMBING - UTILITY PLAN.DWG - C-3.1 - PLOTTED 12/29/2014 12:56 PM BY: CHRISTY, CHARLES

Friday, January 03, 2014 1:42:29 PM DRAWING LOCATION: M:\Projects\Livingston Commons\DWG

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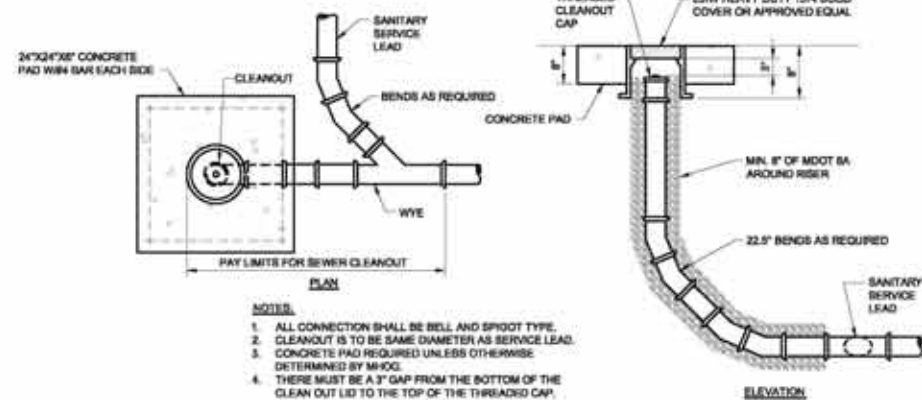
LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

NOT USED



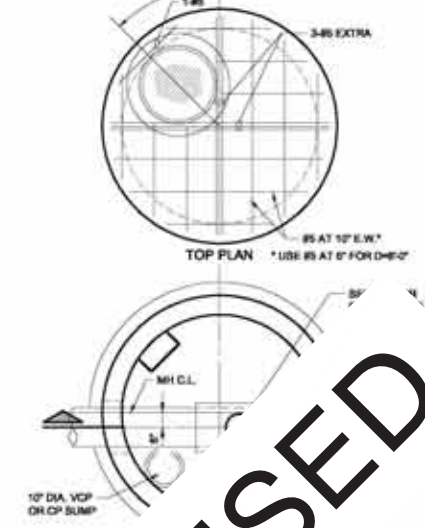
NOTE: RISER PIPE MAY NOT BE REQUIRED FOR SHALLOW SEWERS AS SHOWN.

SANITARY SEWER LATERAL



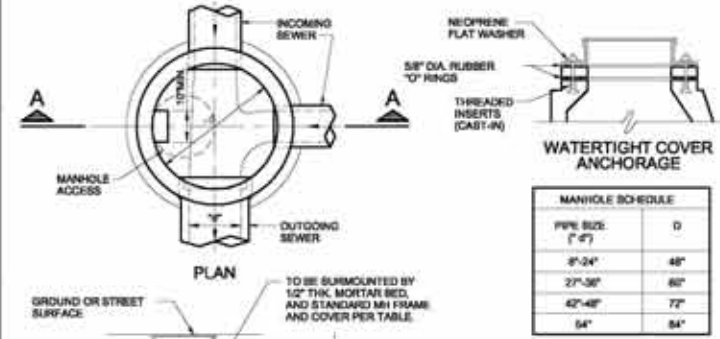
- NOTES:
1. ALL CONNECTION SHALL BE BELL AND SPIGOT TYPE.
 2. CLEANOUT IS TO BE SAME DIAMETER AS SERVICE LEAD.
 3. CONCRETE PAD REQUIRED UNLESS OTHERWISE DETERMINED BY MHO.
 4. THERE MUST BE A 3" GAP FROM THE BOTTOM OF THE CLEAN OUT LID TO THE TOP OF THE THREADED CAP.

SEWER CLEANOUT DETAIL

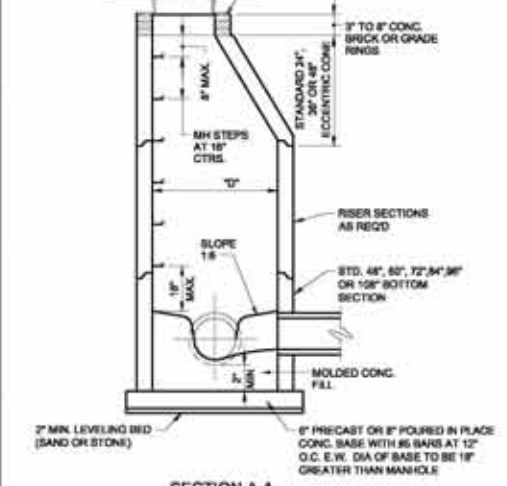


NOT USED

AIR RELIEF STRUCTURE



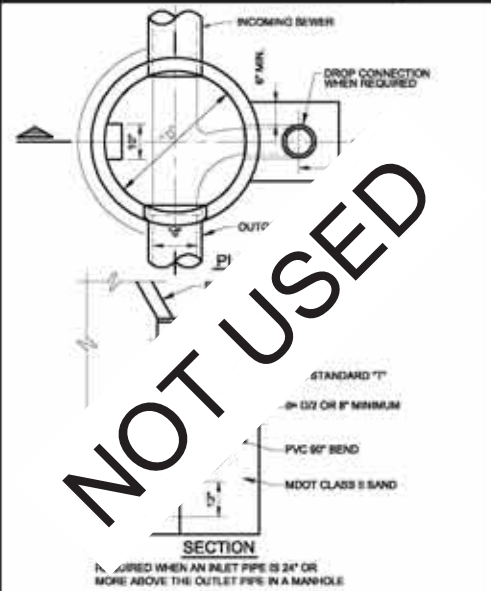
PIPE SIZE (F O.D.)	D
8"-24"	48"
27"-36"	60"
42"-48"	72"
54"	84"



- NOTES:
1. ALL SANITARY MANHOLES TO BE PRECAST REINFORCED CONCRETE WITH PREMIUM JOINTS. SEE SPECIFICATIONS FOR BASE SLAB AND PIPE OPENINGS AND CONNECTIONS.
 2. MANHOLE CONES SHALL BE THE ECCENTRIC TYPE.
 3. PROVIDE 8" OF COMPACTED GRANULAR MATERIAL UNDER ALL PRECAST CONCRETE BASE SLABS.
 4. FORCE MAINS CONNECT DIRECTLY TO A MANHOLE SHALL BE INSTALLED SO THAT THE ELEVATION OF THE PIPE CROWNS MATCH. THE FORCE MAIN SHALL BE DIRECTED DOWNWARD INTO THE FLOW CHANNEL.
 5. FOR SANITARY SEWERS ALL PIPES SHALL ENTER MANHOLE THROUGH RUBBER BOOTED CONNECTION.

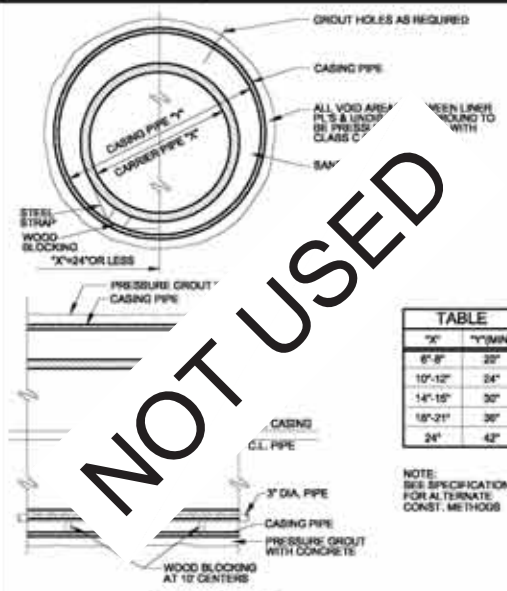
TYPE	TYPE OF COVER	MANUFACTURER OR EQUAL	
		EAST JORDAN	NEENAH
MH	SANITARY - SOLID SELF-SEALING	1040.0000	R-1842
MH	SANITARY - SOLID WATERTIGHT	1040-APT	R-1916-F
CD	SOLID	1574A	R-1973-A

STANDARD MANHOLE



NOT USED

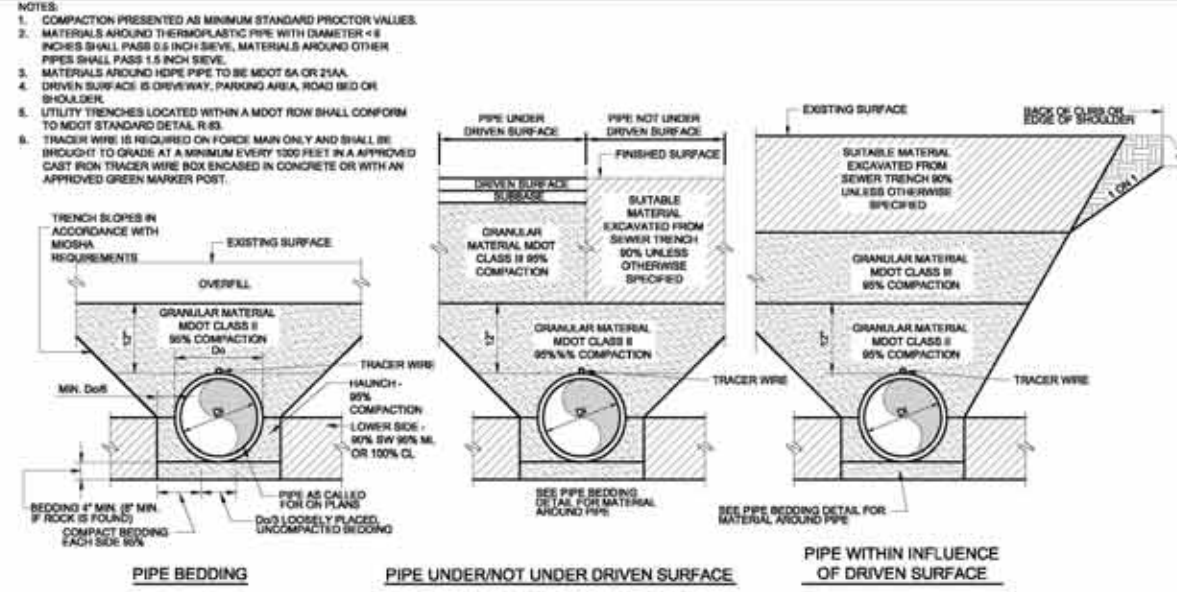
DROP CONNECTION



"X"	"Y"(MIN)
6"-8"	20"
10"-12"	24"
14"-18"	30"
18"-24"	36"
24"	42"

NOTE: SEE SPECIFICATIONS FOR ALTERNATE CONST. METHODS

CASING PIPE



TRENCH EXCAVATION & PIPE BEDDING



NOT USED

SEWER LATERAL DROP CONNECTION



GENOA OCEOLA
Sewer and Water Authority

SANITARY SEWER
STANDARD DETAILS



LIVINGSTON COMMONS, LOT 4
3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843

ISSUED FOR: DATE: BY:
PC 12/1/14 CJC

JOB NO. RGP1001.01F
SHEET C-3.2

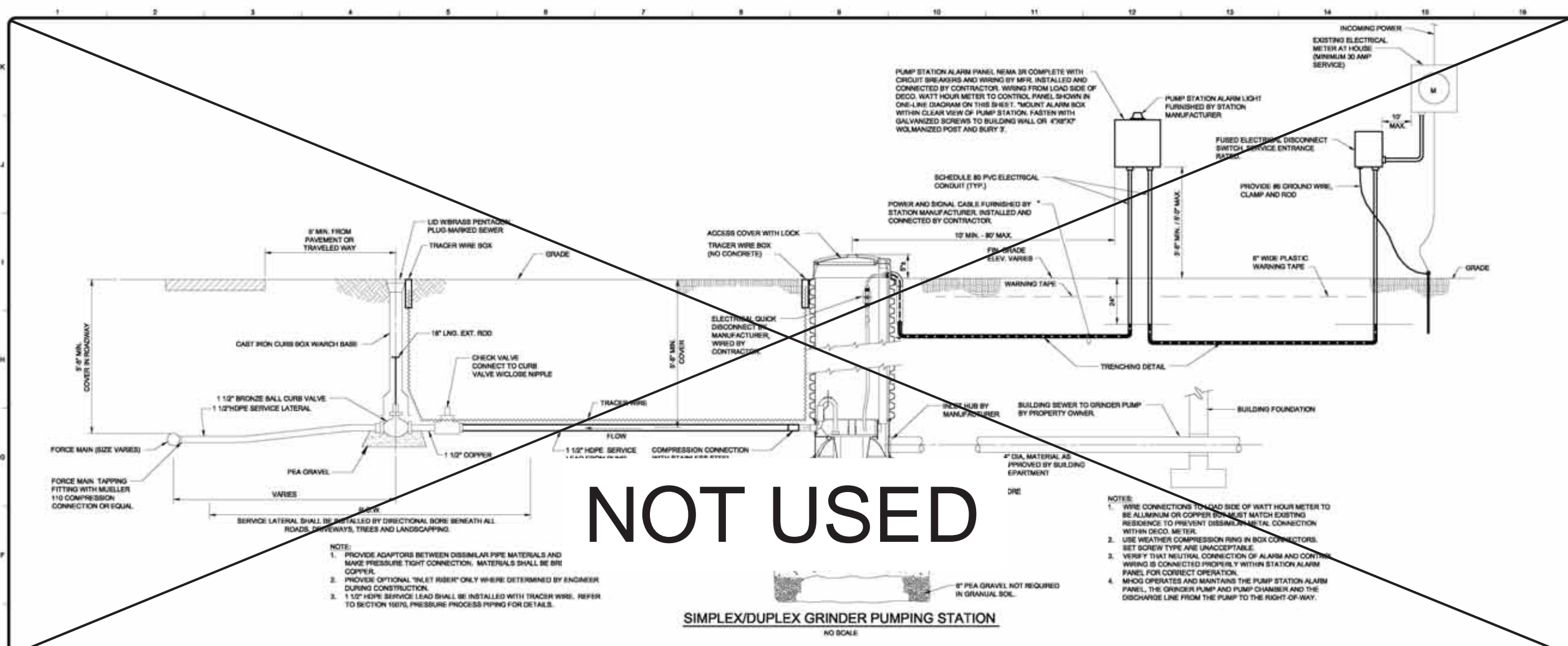
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A	12/23/14	1st TOWNSHIP REVIEW COMMENTS

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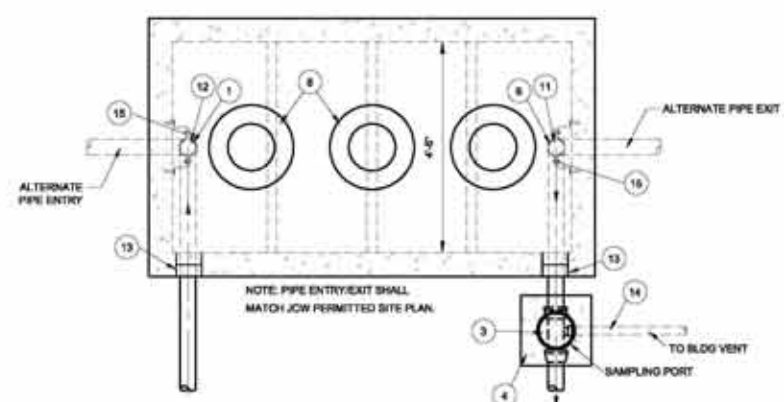
Building relationships on a foundation of excellence.

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN



NOT USED

SIMPLEX/DUPLEX GRINDER PUMP STATION
NO SCALE



GREASE INTERCEPTOR 1000 GALLON
NO SCALE

ITEM	DESCRIPTION
1	4\"/>

* 8\"/>
 ** REFER TO CLEAN OUT DETAILS ON STANDARD DETAILS SHEET.
 *** CLAY & BAILEY 2008 8V OR EQUAL (FROST PROOF COVERS OPTIONAL)
 **** 1/4\"/>

- NOTES:
- THREE COVERS AND RISERS SHOWN. TWO COVERS AND RISERS CENTERED OVER UPPER TWO BAFFLES ARE OPTIONAL.
 - INTERCEPTOR SIZE - 1000 GAL MINIMUM (REVISE THE SIZE DIMENSIONS, AS NEEDED, FOR LARGER CAPACITY INTERCEPTORS)
 - ALL JOINTS AT THE FRAME & COVER, CONCRETE ADJUSTMENT RINGS AND THE LID OF THE INTERCEPTOR SHALL BE SEALED WITH A MINIMUM OF TWO (2) ROWS OF 3/4\"/>



GENOA OCEOLA
Sewer and Water Authority
SANITARY SEWER STANDARD DETAILS



LIVINGSTON COMMONS, LOT 4
 3950 E. GRAND RIVER
 HOWELL, MICHIGAN 48843

JOB NO. RGP1001.01F
 SHEET C-3.3

REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS

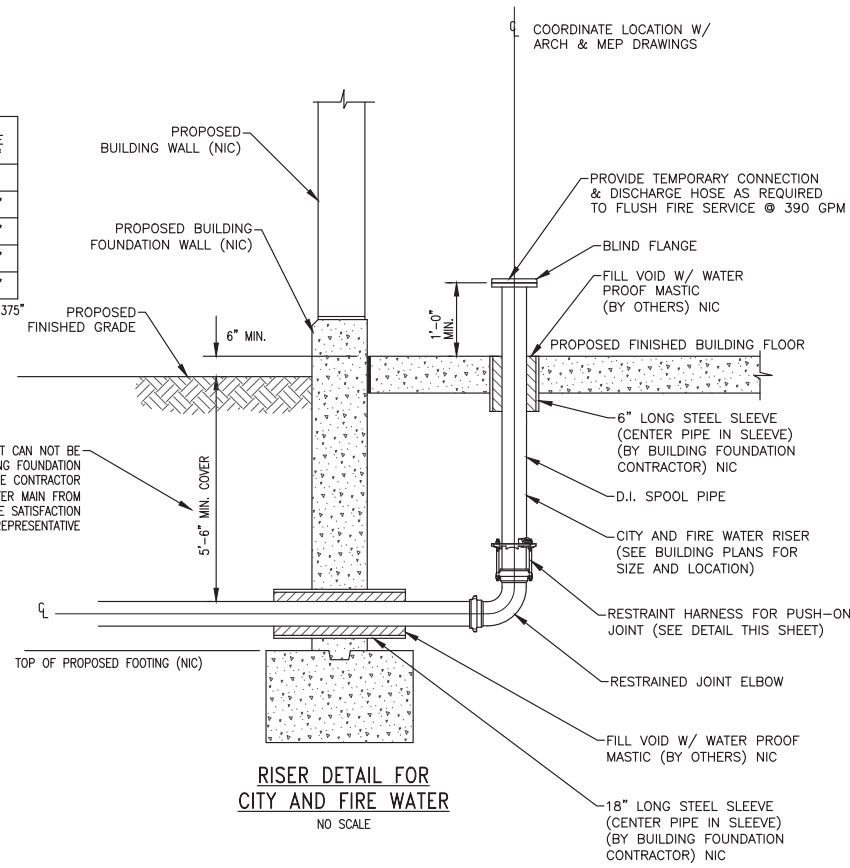
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SANITARY DETAILS
 LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

D.I. PIPE (DIA.)	STEEL SLEEVE (DIA.)*
4"	8"
6"	10"
8"	12"
10"	14"
12"	16"

* WALL THICKNESS 0.375"

IF THE MINIMUM COVER OF 5.5 FT CAN NOT BE ATTAINED DUE TO THE BUILDING FOUNDATION DESIGN CONSTRAINTS, THEN THE CONTRACTOR SHALL PROTECT/INSULATE THE WATER MAIN FROM FREEZING. THIS SHALL BE TO THE SATISFACTION OF THE OWNERS CONSTRUCTION REPRESENTATIVE



RISER DETAIL FOR CITY AND FIRE WATER
NO SCALE

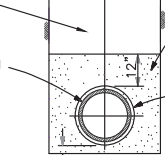
TRENCH WIDTHS	
MAX WIDTH OF TRENCH 12" ABOVE TOP OF PIPE	
6" THRU 12" PIPE - 30" WIDE	
15" THRU 36" PIPE - O.D. + 16"	
42" THRU 60" PIPE - O.D. + 20"	
OVER 60" PIPE - O.D. + 24"	

NOTE: GEOTEXTILE FILTER FABRIC TO BE MIRAFI "140N" OR APPROVED EQUAL

NOTE: ALL PIPE THAT RUNS BENEATH THE PAVED SURFACE SHALL RECEIVE 100% SAND BACKFILL COMPACTED TO 95% OF MAX. UNIT WEIGHT TO A DEPTH AS PER PLAN.

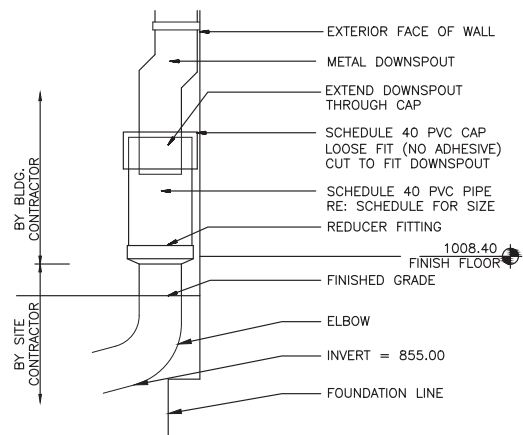
REFER TO DETAIL THIS SHEET FOR TRENCH BACK FILL REQUIREMENTS

PIPE MATERIAL AND SIZE PER PLAN

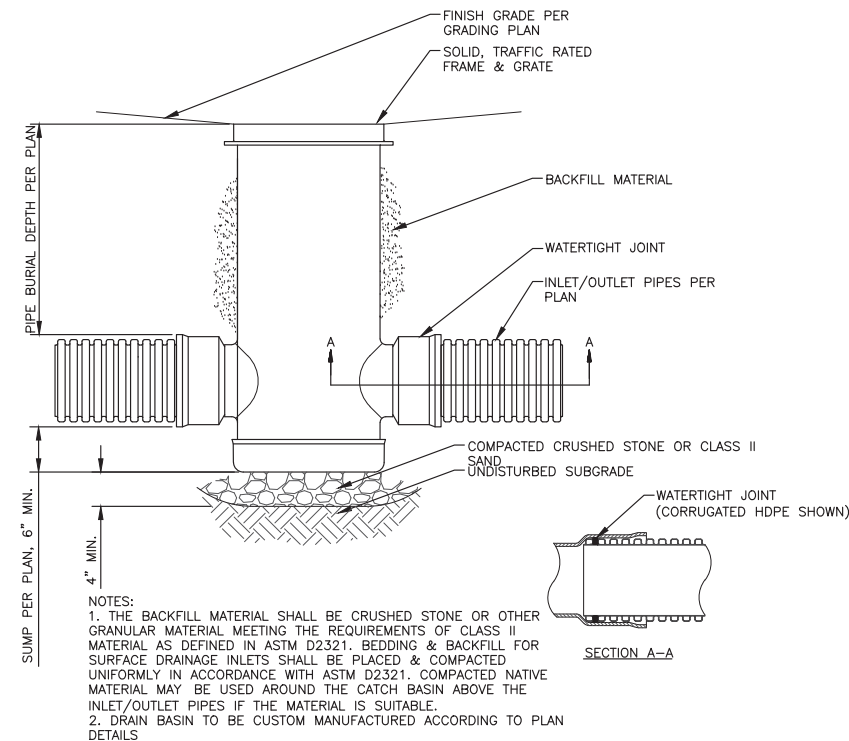


STORM SEWER BEDDING DETAIL
NO SCALE

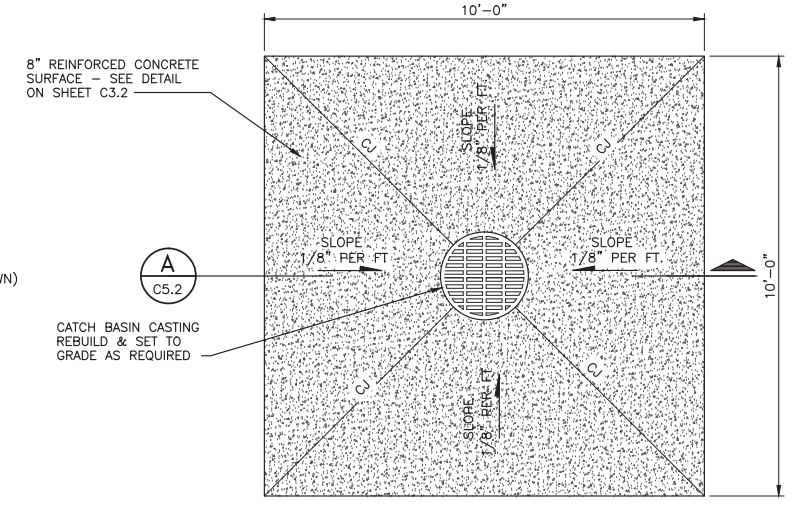
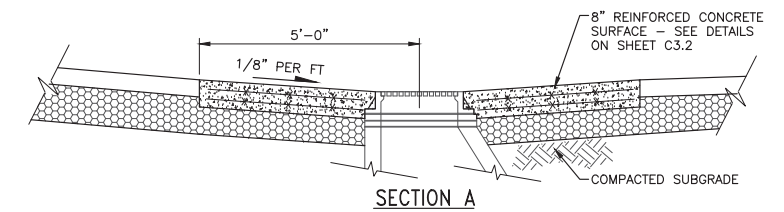
SCHEDULE	
DOWNSPOUT	PVC PIPE WITH BELL FITTING
4"x4" or 6"	12" DIA.
5"x5"	12" DIA.
8"x8"	12" DIA.
9"x9"	15" DIA.
10"x10"	15" DIA.



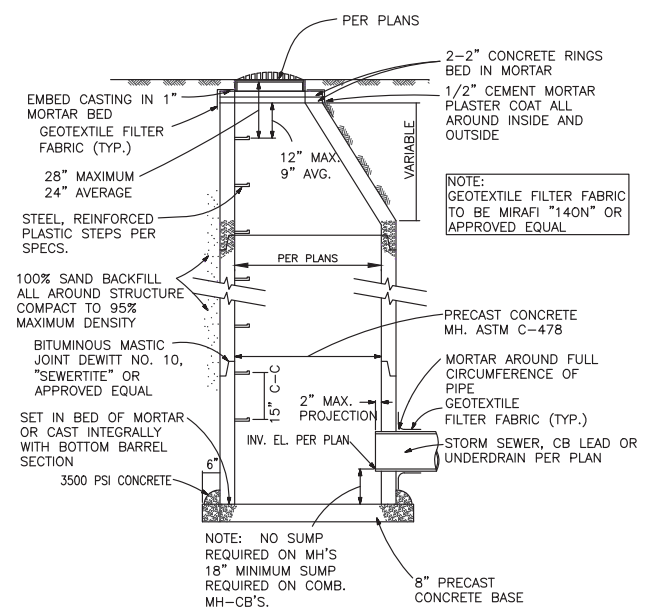
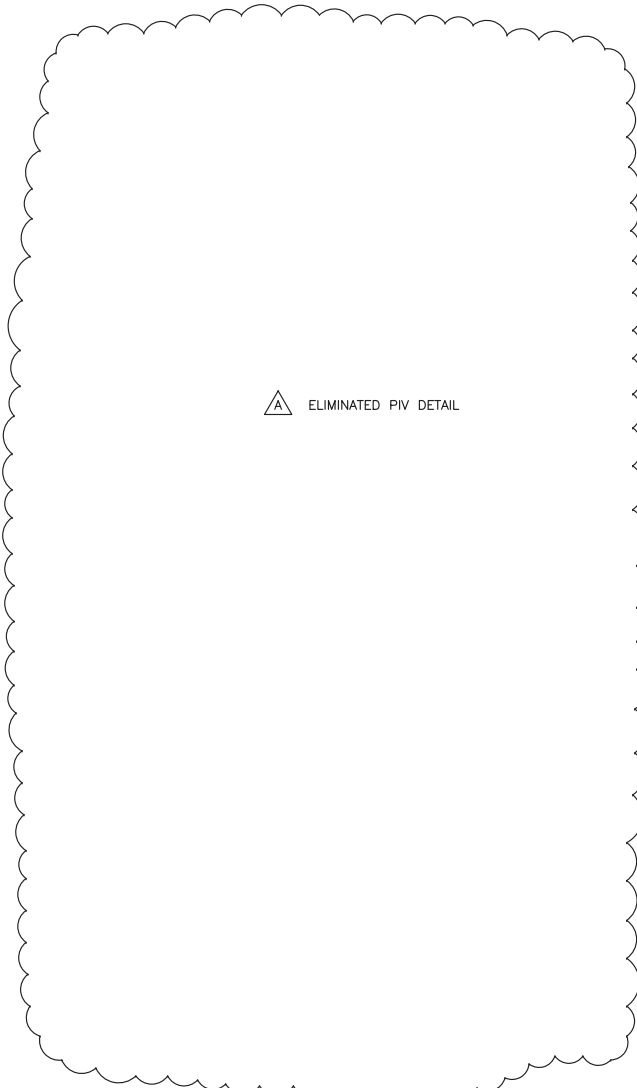
DOWNSPOUT CONNECTION DETAIL
NO SCALE



18"-24" NYLOPLAST JUNCTION, I.L #1-#4
NO SCALE



CONCRETE COLLAR DETAIL
NO SCALE



STORM MANHOLE AND MANHOLE-CATCHBASIN COMBINATION DETAIL
NO SCALE

PROJECT MANAGER: CHARLES J. CHRISTY, PE
C:\PW\WORK\CHRISTY\0504466\PL1-CJP-UTILITY PLAN.DWG - C-3.4 - PLOTTED 12/20/2014 12:50 PM BY: CHRISTY, CHARLES



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LIVINGSTON COMMONS, LOT 4
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HOWELL, MICHIGAN 48843

STORM & MISCELLANEOUS DETAILS

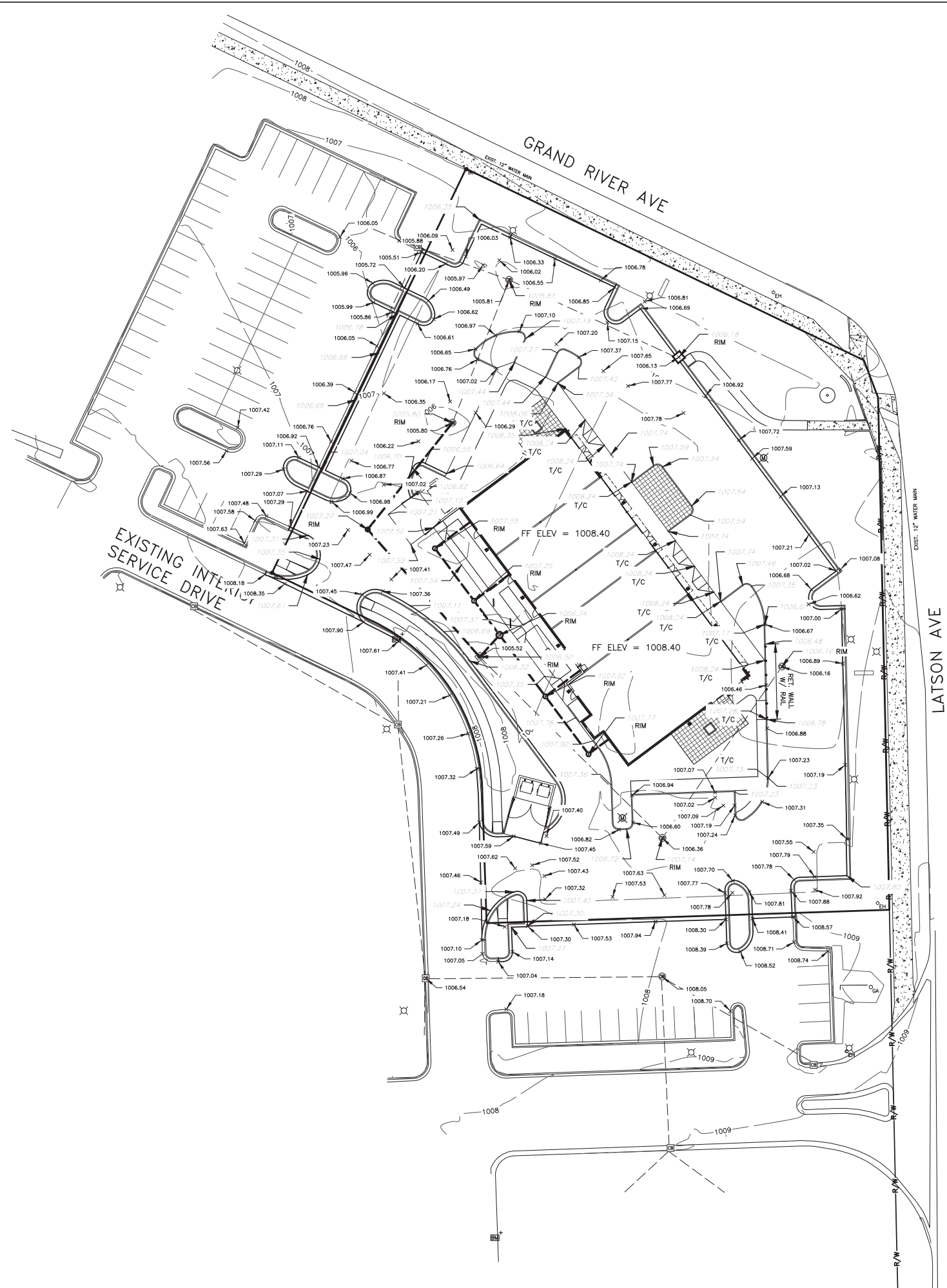
LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

ISSUED FOR: DATE: BY:
PC 12/1/14 CJC

JOB NO. RGP1001.01F

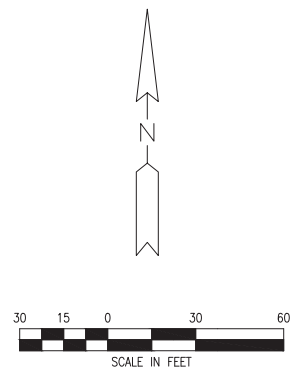
SHEET C-3.4

PROJECT MANAGER: CHARLES J. CHRISTY, PE
 CIVIL WORK: CHRISTY00564861\PL1-CGP-GRADING PLANDWG - C-4.0 - PLOTTED 12/22/2014 4:34 PM BY: CHRISTY, CHARLES

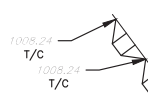



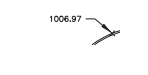
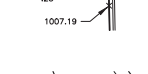
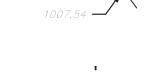



EAST 1/4 CORNER
 SECTION 5, T2N-R5E
 GENOA TOWNSHIP,
 LIVINGSTON COUNTY, MICHIGAN
 FOUND IRON IN MON BOX

SOUTHEAST CORNER
 SECTION 5, T2N-R5E
 GENOA TOWNSHIP,
 LIVINGSTON COUNTY, MICHIGAN
 FOUND IRON IN MON BOX



LEGEND

-  TOP OF CURB ELEVATION
-  PROPOSED TOP OF ASPHALT ELEVATION ADJACENT TO NEW VERTICAL CURB
-  NEW OR EXISTING DRAINAGE STRUCTURE, ADJUST RIM TO ELEVATION SHOWN.
-  EXISTING PAVEMENT SPOT ELEVATION, CONSTRUCT CURB GUTTER PAN FLUSH WITH FINAL PAVEMENT SURFACE.
-  EXISTING PAVEMENT SPOT ELEVATION, CONSTRUCT VERTICAL CURB SO TOP OF CURB IS 6-INCHES ABOVE FINAL PAVEMENT SURFACE.
-  EXISTING PAVEMENT SPOT ELEVATION AT GUTTER PAN OF EXISTING CURB.
-  PROPOSED PAVEMENT SPOT ELEVATION ADJACENT TO THICKENED EDGE SIDEWALK, CONSTRUCT SIDEWALK WITH 6-INCH REVEAL.
-  PROPOSED PAVEMENT SPOT ELEVATION ADJACENT TO PROPOSED CURB AND GUTTER, ELEVATION IS EDGE OF PAVEMENT AT GUTTER PAN EDGE.

REV#	DATE	DESCRIPTION
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CJC		
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GRADING PLAN

ISSUED FOR: PC DATE: 12/1/14 BY: CJC

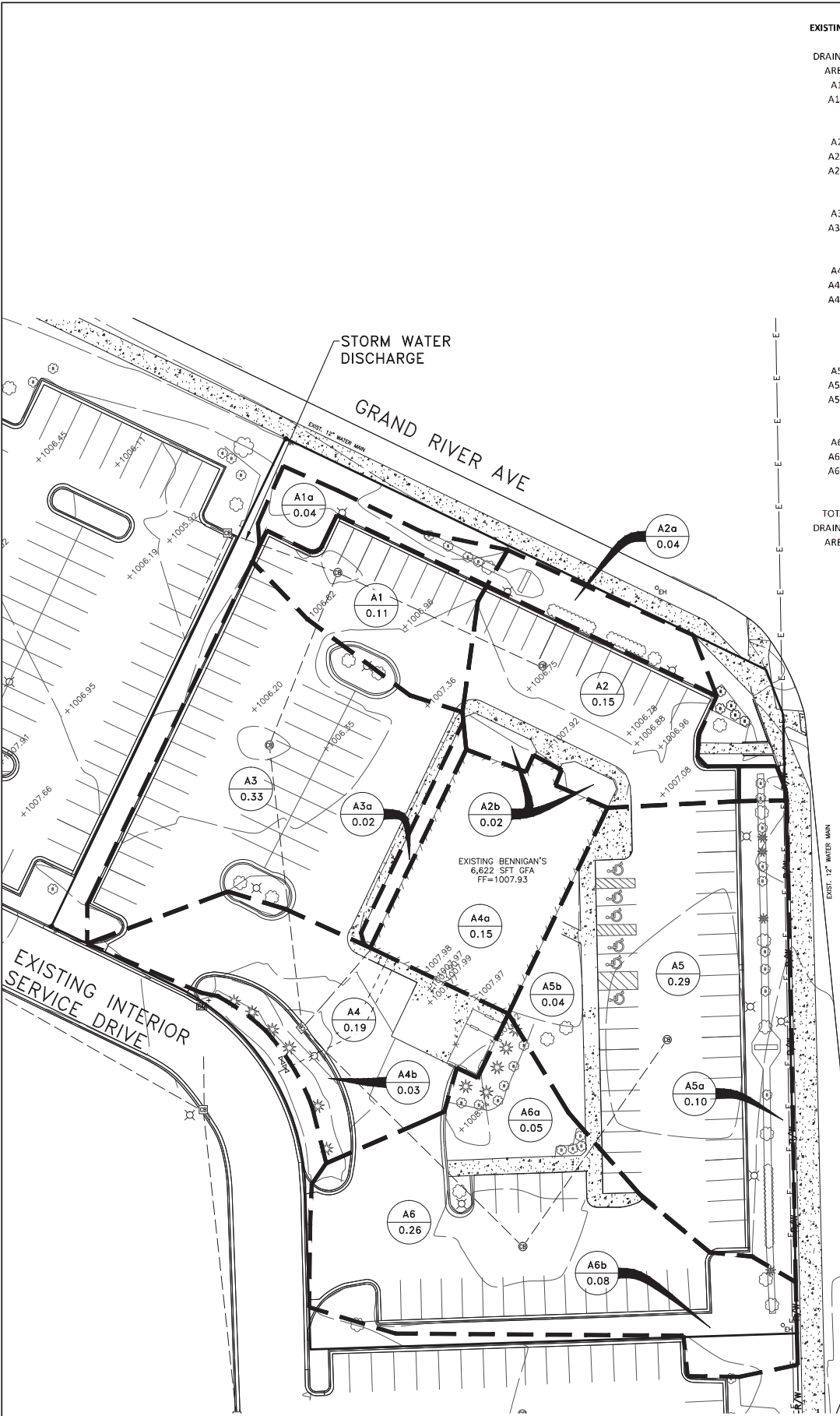
JOB NO. RGP1001.01F

SHEET C-4.0



LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

PROJECT MANAGER: CHARLES J. CHRISTY, PE
 CIVIL WORK: CHARLES J. CHRISTY, PE
 FIELD BOOK INFORMATION: C-4.1 - PLOTTED 12/22/2014 4:12 PM BY: CHRISTY, CHARLES

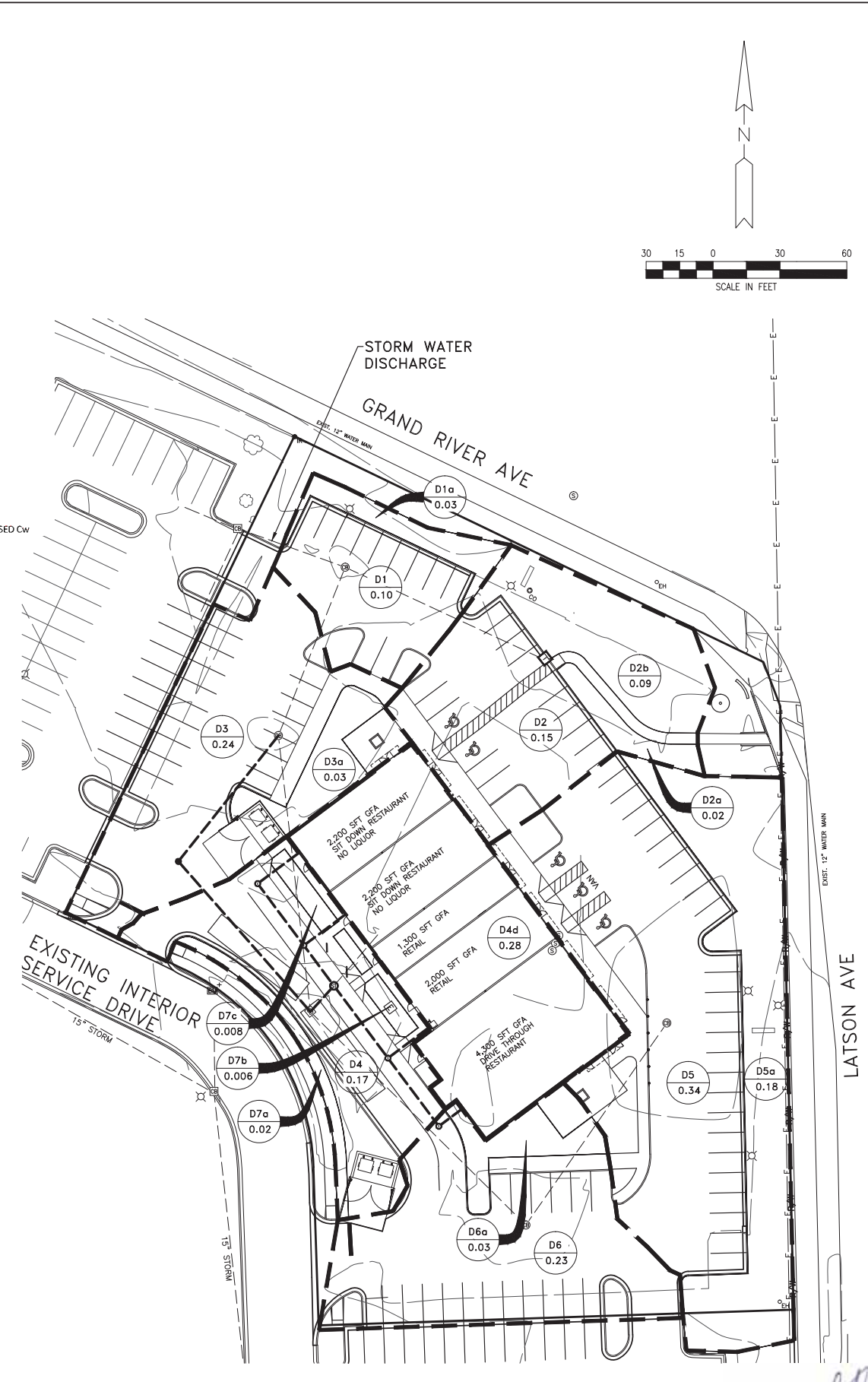
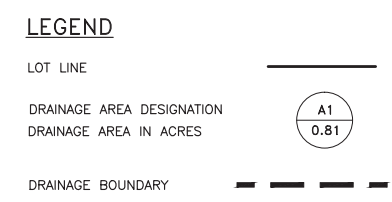


EXISTING SITE	
DRAINAGE AREA	81,457.2 SFT (1.87 AC)
PERVIOUS AREA	16,989.0 SFT (0.39 AC)
IMPERVIOUS AREA	64,468.2 SFT (1.48 AC)
BUILDING COVERAGE	6,622 SFT (7.5%)

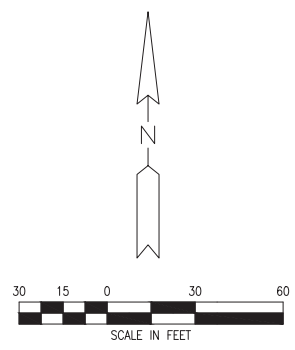
EXISTING DRAINAGE Cw COMPUTATION			
DRAINAGE AREA	AREA (Ac.)	C	Cw
A1	0.11	0.9	
A1a	0.04	0.2	
	0.15		0.71
A2	0.15	0.9	
A2a	0.04	0.2	
A2b	0.02	0.2	
	0.21		0.70
A3	0.33	0.9	
A3a	0.02	0.2	
	0.35		0.86
A4	0.19	0.9	
A4a	0.15	0.9	
A4b	0.03	0.2	
	0.37		0.84
A5	0.29	0.9	
A5a	0.1	0.2	
A5b	0.04	0.2	
	0.43		0.67
A6	0.26	0.9	
A6a	0.05	0.2	
A6b	0.05	0.2	
	0.36		0.71
TOTAL DRAINAGE AREA	1.87		0.75 EXISTING Cw

PROPOSED DRAINAGE Cw COMPUTATION			
DRAINAGE AREA	AREA (Ac.)	C	Cw
D1	0.1	0.9	
D1a	0.03	0.2	
	0.13		0.74
D2	0.15	0.9	
D2a	0.02	0.2	
D2b	0.09	0.2	
	0.26		0.60
D3	0.24	0.9	
D3a	0.03	0.2	
	0.27		0.82
D4	0.17	0.9	
D4a	0.15	0.2	
D4b	0.006	0.2	
D4c	0.008	0.2	
D4d	0.2	0.9	
	0.534		0.69
D5	0.34	0.9	
D5a	0.18	0.2	
	0.52		0.66
D6	0.23	0.9	
D6a	0.03	0.2	
	0.26		0.82
TOTAL DRAINAGE AREA	1.974		0.71 PROPOSED Cw

- NOTES:
- SEE SHEET C-1.0 & C-3.0 FOR EXISTING & PROPOSED STORM SEWER PIPE SIZES.
 - STORM WATER DISCHARGE LOCATION WILL NOT CHANGE FROM THE CURRENT LOCATION.
 - A REGIONAL STORM WATER QUALITY & QUANTITY FACILITY HAS BEEN CONSTRUCTED, IN USE & OPERATION FOR THE PARCEL AND PARCELS IN THIS P.U.D.. THE ORIGINAL DESIGN OF THE STORM WATER MANAGEMENT FACILITY WILL NOT CHANGE AS A RESULT OF THE REDEVELOPMENT OF LOT 4.
 - THE REDEVELOPMENT OF LOT 4 WILL CREATE ADDITIONAL PERVIOUS SURFACES, DECREASING THE VOLUME OF RUNOFF AND INCREASING THE TIME OF CONCENTRATION. AS A RESULT NO CALCULATIONS HAVE BEEN PERFORMED.



PROPOSED SITE	
DRAINAGE AREA	85,987.4 SFT (1.974 AC)
PERVIOUS AREA	23,696.6 SFT (0.544 AC)
IMPERVIOUS AREA	62,290.8 SFT (1.43 AC)
BUILDING COVERAGE	12,000 SFT (13.6%)



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WADETRIM
 225 South State Street, Suite 201
 Farmington Hills, MI 48334
 810.285.2550/810.411.0342
 www.wadetrtrim.com

LIVINGSTON COMMONS, LOT 4
 3950 E. GRAND RIVER
 HOWELL, MICHIGAN 48843

DRAINAGE MAP

ISSUED FOR: DATE: BY:
 PC 12/1/14 CJC

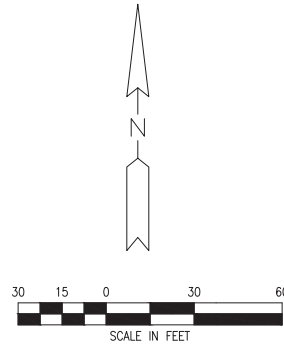
JOB NO. RGP1001.01F
 SHEET C-4.1

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

REV# DATE DESCRIPTION

A 12/23/14 1st TOWNSHIP REVIEW COMMENTS

CJC
 BT



LANDSCAPE REQUIREMENTS

FRONTAGE GREENBELT BUFFER:

REQUIREMENTS -
 20 FOOT WIDE, TYPE B PER P.U.D. ARTICLE VI, SECTION 6.2
 TYPE B BUFFER, PER 30 FOOT OF FRONTAGE:
 1 - CANOPY TREE
 1 - EVERGREEN TREE
 4 - SHRUBS

PROVIDED -
 503 FEET OF FRONTAGE, 20 FEET WIDE
 18 - CANOPY TREES
 18 - EVERGREEN TREES
 72 - SHRUBS

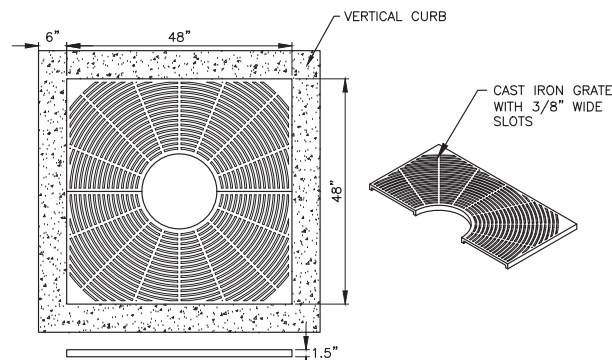
PARKING AREA LANDSCAPING

REQUIREMENTS -
 101-200 PARKING SPACES
 1 - CANOPY TREE & 100sft OF LANDSCAPED AREA PER 12 SPACES
 (Required parking is 145 spaces, 145/12 = 12 Canopy Trees & 1,210sft of landscape area)
 1/3rd OF THE TREES PLANTED ON THE INTERIOR OF THE PARKING AREA
 PARKING IN FRONT YARD
 HEDGE ROW, 2ft TALL, 2-1/2 FEET ON CENTER, EVERGREEN OR DECIDUOUS SHRUBS

PROVIDED -
 9 - CANOPY TREES INTERIOR
 3 - CANOPY TREES PERIMETER
 4,220sft LANDSCAPE AREA INTERIOR, AROUND BUILDING
 CONTINUOUS HEDGE ROW ALONG FRONT YARD PARKING
 DUMPSTER ENCLOSURE SCREENING

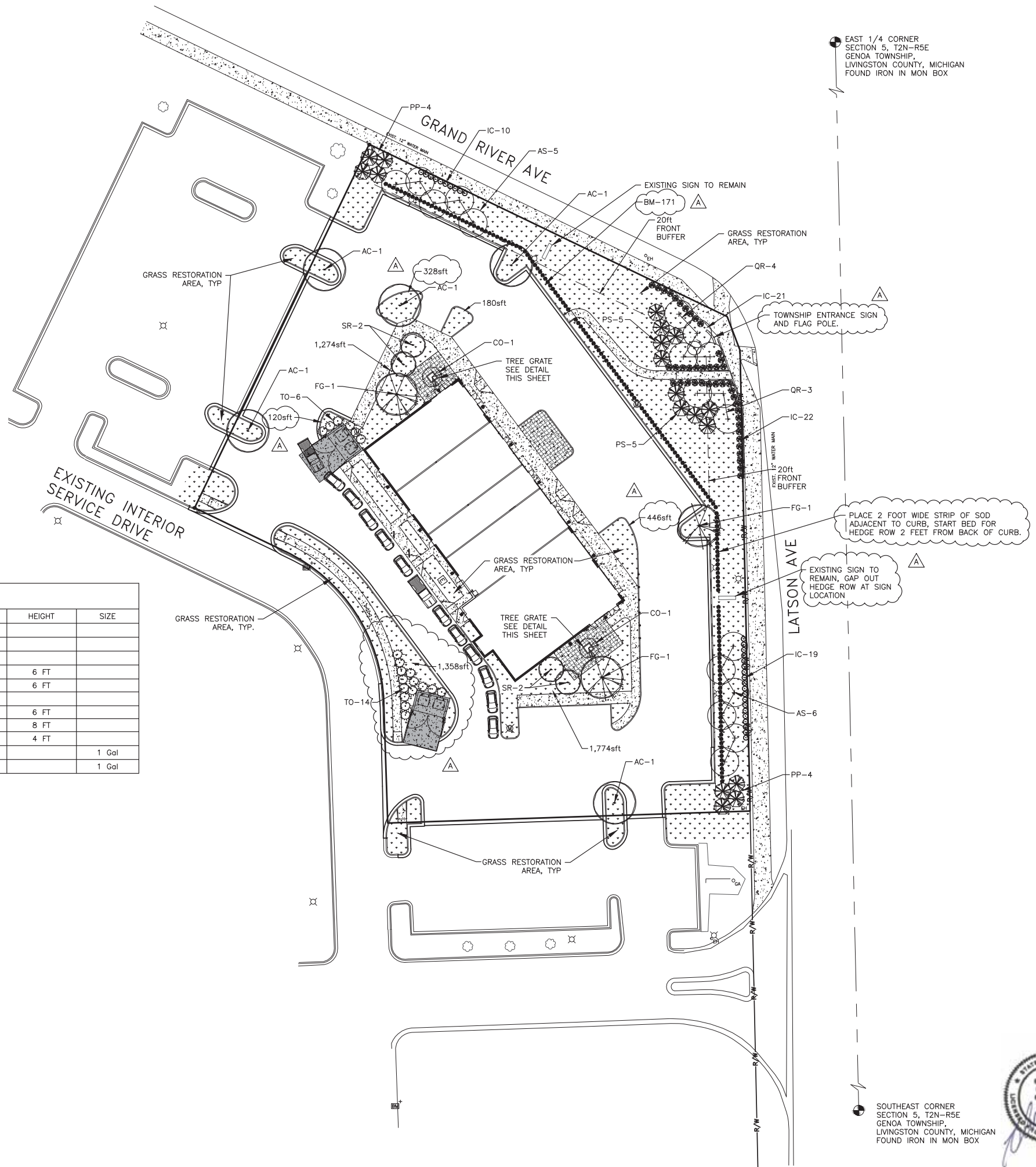
PLANT LIST

QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	CALIPER	HEIGHT	SIZE
11	AS	<i>Acer saccharum</i>	SUGAR MAPLE	2-1/2"		
7	QR	<i>Quercus rubra</i>	NORTHERN RED OAK	2-1/2"		
5	AC	<i>Acer saccharinum</i>	SILVER MAPLE	2-1/2"		
8	PP	<i>Picea pungens glauca</i>	COLORADO BLUE SPRUCE		6 FT	
10	PS	<i>Pinus Strobus</i>	EASTERN WHITE PINE		6 FT	
3	FG	<i>Fagus grandifolia</i>	AMERICAN BEECH	2-1/2"		
4	SR	<i>Syringa reticulata</i>	JAPANESE TREE LILAC		6 FT	
2	CO	<i>Celtis occidentalis</i>	HACKBERRY		8 FT	
20	TO	<i>Thuja occidentalis 'Smaragd'</i>	EMERALD GREEN ARBOVITAE		4 FT	
171	BM	<i>Buxus microphylla var. 'Eseles'</i>	BOXWOOD - WEDDING RING			1 Gal
72	IC	<i>Ilex x 'Castle Wall'</i>	HOLLY - CASTLE WALL			1 Gal



TREE GRATE DETAIL

NO SCALE



EAST 1/4 CORNER SECTION 5, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN FOUND IRON IN MON BOX

EXISTING SIGN TO REMAIN, GAP OUT HEDGE ROW AT SIGN LOCATION

SOUTHEAST CORNER SECTION 5, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN FOUND IRON IN MON BOX

PROJECT MANAGER: CHARLES J. CHRISTY, PE FIELD BOOK INFORMATION: C-5.0 - PLOTTED 12/20/2014 11:52 AM BY CHRISTY, CHARLES

REV#	DATE	TOWNSHIP REVIEW COMMENTS	DESCRIPTION
A	12/23/14		

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LANDSCAPE PLAN

ISSUED FOR: DATE: BY: PC 12/1/14 CJC

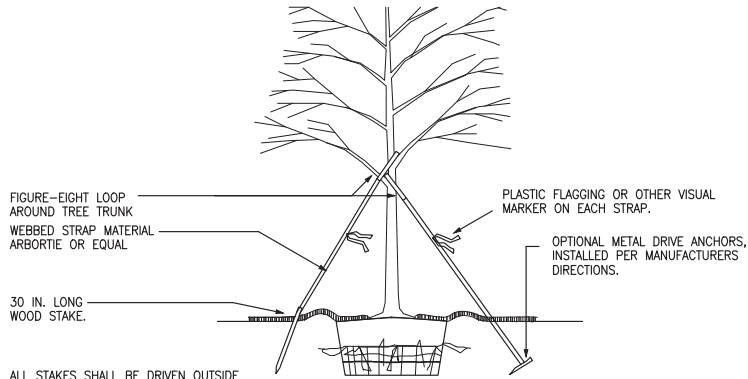
JOB NO. RGP1001.01F

SHEET C-5.0

12/23/14

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

TIGHTEN WEBBED STRAP MATERIAL ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. INSTALL THREE STRAPS PER TREE, SPACED EVENLY AROUND THE TRUNK. INSTALL AS LOW ON TRUNK AS POSSIBLE.



ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL.

REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS TO OVERCOME THE PROBLEM THAT REQUIRED THE TREE TO BE STAKED. STAKES SHALL BE REMOVED NO LATER THE END OF THE FIRST GROWING SEASON AFTER PLANTING.

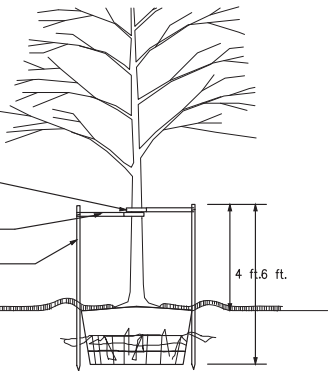
TREES NORMALLY DO NOT NEED TO BE STAKED AND STAKING CAN BE HARMFUL TO THE TREE. STAKING SHOULD BE DONE ONLY WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT IF IT IS EXPECTED THAT THE TREE WILL NOT BE ABLE TO SUPPORT ITSELF. THE FOLLOWING ARE REASONS WHY TREES DO NOT REMAIN STRAIGHT:

- o TREES WITH POOR-QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED. REJECT RATHER THAN STAKE.
- o TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS. REJECT RATHER THAN STAKE.
- o PLANTING PROCEDURES THAT DO NOT ADEQUATELY TAMP SOILS AROUND THE ROOT BALL. CORRECT THE PLANTING PROCEDURE.
- o ROOT BALLS PLACED ON SOFT SOIL. TAMP SOILS UNDER ROOT BALL PRIOR TO PLANTING.
- o ROOT BALLS WITH VERY SANDY SOIL OR VERY WET CLAY SOIL. STAKING ADVISABLE.
- o TREES LOCATED IN A PLACE OF EXTREMELY WINDY CONDITIONS. STAKING ADVISABLE.

TREE STAKING DETAIL - 1.75 IN. CALIPER OR LARGER

NOT TO SCALE

TIGHTEN WEBBED STRAP MATERIAL ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT.



ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL.

REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS TO OVERCOME THE PROBLEM THAT REQUIRED THE TREE TO BE STAKED. STAKES SHALL BE REMOVED NO LATER THE END OF THE FIRST GROWING SEASON AFTER PLANTING.

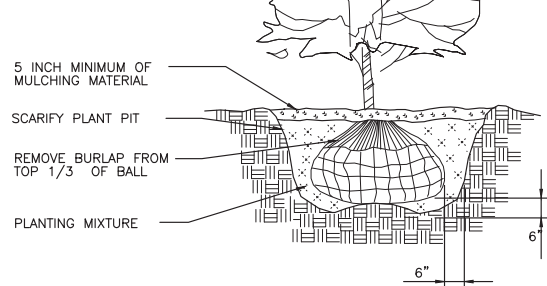
TREES NORMALLY DO NOT NEED TO BE STAKED AND STAKING CAN BE HARMFUL TO THE TREE. STAKING SHOULD BE DONE ONLY WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT IF IT IS EXPECTED THAT THE TREE WILL NOT BE ABLE TO SUPPORT ITSELF. THE FOLLOWING ARE REASONS WHY TREES DO NOT REMAIN STRAIGHT:

- o TREES WITH POOR - QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED. REJECT RATHER THAN STAKE.
- o TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS. REJECT RATHER THAN STAKE.
- o PLANTING PROCEDURES THAT DO NOT ADEQUATELY TAMP SOILS AROUND THE ROOT BALL. CORRECT THE PLANTING PROCEDURE.
- o ROOT BALLS PLACED ON SOFT SOIL. TAMP SOILS UNDER ROOT BALL PRIOR TO PLANTING.
- o ROOT BALLS WITH VERY SANDY SOIL OR VERY WET CLAY SOIL. STAKING ADVISABLE.
- o TREES LOCATED IN A PLACE OF EXTREMELY WINDY CONDITIONS. STAKING ADVISABLE.

TREE STAKING DETAIL - 1.5 IN. CALIPER OR LESS

NOT TO SCALE

NOTE: SHRUB SHALL BEAR SAME RELATION TO FINISH GRADE AS TO PREVIOUS EXISTING GRADE



SHRUB PLANTING DETAIL

NOT TO SCALE

NOTES:

PURCHASE TREE WITH ONE CENTRAL LEADER. DO NOT PRUNE TREE AT PLANTING EXCEPT AS DIRECTED BY LANDSCAPE ARCHITECT.

SET TREE PLUMB WITH VERTICAL TRUNK.

STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT SEE SPECIFICATIONS.

WRAP TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

3 INCHES MULCH. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.

BEFORE PLANTING, ADD 3" TO 4" OF WELL COMPOSTED LEAVES OR RECYCLED YARD WASTE TO BED AND TILL INTO TOP 6" OF LOOSENEED SOIL.

AMEND EXISTING SOIL PER SOIL PREPARATION PLAN

1:1 SLOPE

DIG WIDE, SHALLOW HOLE WITH TAPERED SIDES

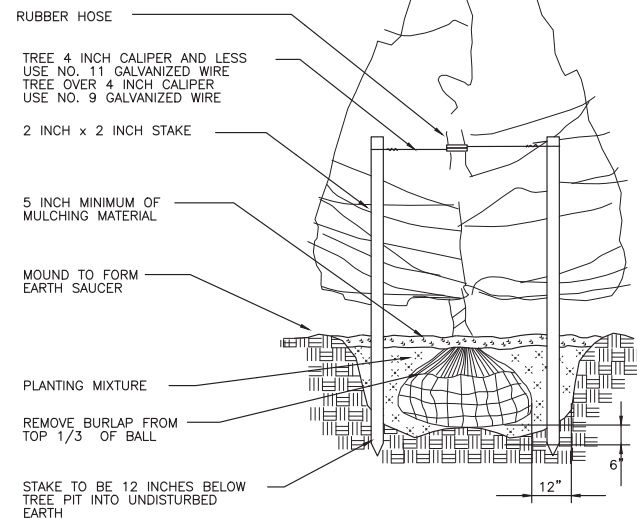
NOTES:

1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OR THE CONTAINER.
2. AFTER DIGGING HOLE, FILL WITH WATER TO CONFIRM THAT WATER DRAINS OUT OF THE SOIL. IF HOLE DOES NOT PERC, DO NOT PLANT TREE. NOTIFY LANDSCAPE ARCHITECT FOR DIRECTION.
3. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL IMMEDIATELY AFTER PLANTING.
4. THE PLANTING PROCESS IS SIMILAR FOR DECIDUOUS AND EVERGREEN TREES.

TREE PLANTING DETAIL AND TREE STAKING DETAILS

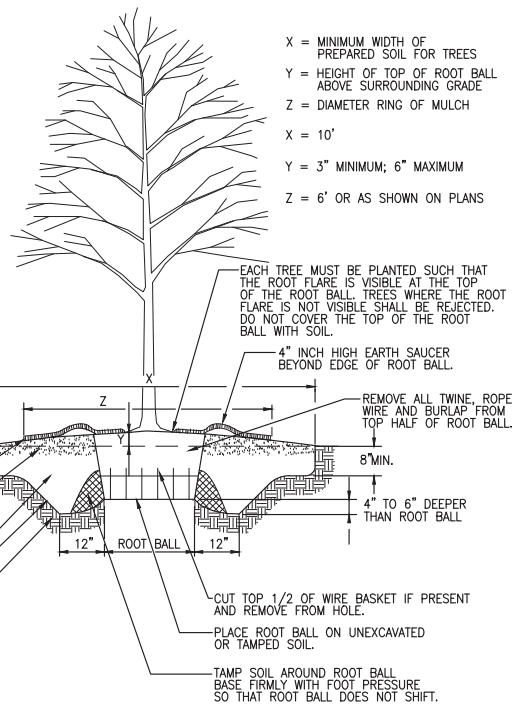
NOT TO SCALE

NOTE: STAKE ALL EVERGREEN TREES



PLANTING DETAIL - EVERGREEN

NOT TO SCALE



SOIL PREPARATION, PLANTING, MAINTENANCE AND LANDSCAPE WARRANTY NOTES:

1. Have both sub-grade soils in planting areas and stripped topsoil tested. Determine fertilizer and lime rates from soil test results.
2. Soil Preparation:
 - A. Tree Planting: Prepare soil per "Tree Planting Detail" for individual trees.
 - B. Planting Areas for Trees/Shrubs/Ornamental Grasses:
 - Loosen subgrade to depth of 6 inches with a chisel plow, subsoiler, or other suitable device. Spread triple superphosphate over loosened subgrade at rate of 2 lbs. /1000 SF.
 - Spread existing stockpiled topsoil over loosened subgrade with a minimum depth of 4 inches; 6 inches if sufficient topsoil is available.
 - Spread 4 inches of Grade A quality compost (horticultural grade milled pine bark or commercially-produced compost mixture) and fertilizer, lime and other amendments as indicated by soil test over topsoil. Rototill entire mixture to a depth of 6 inches.
3. All disturbed areas not otherwise planted shall be seeded per sheet C-5.0 at rates recommended by the seed supplier/manufacturer.
4. All plants to be installed in accordance with American Association of Nurserymen landscape standards.
5. Spacing of plant materials shall be as shown on drawing or on plant list. The engineer shall review the placement of plant material prior to and after installation, and reserve the right to adjust layout to accommodate site conditions and design intent.
6. All plant materials shall conform to plant schedules. Sizes shall be the minimum stated on the plant list or larger. All measurements shall be in accordance with the latest edition of the "A.A.N. Standards for Nursery Stock."
7. Planting should not proceed until approximate finish grade has been achieved. Such grades should be reviewed and approved by engineer prior to planting. Final finish grades in immediate proximity around plantings should be hand-shaped to minimize soil compaction and damage to plants.
8. Final plant locations shall be marked by contractor three working days prior to planting for engineer review.
9. Relationship of tree root flare to finish grade:
 - A. Trees shall be set on flat-tamped or unexcavated pads at the same relationship to finished grade as they were to the ground from which they were dug, except as noted below. Plants must be set plumb and braced in position until topsoil or planting mix has been placed and tamped around the base of the root ball. Improper compaction of the soil around the root ball may result in the tree settling or leaning. Plants shall be set so that they will be at the same depth and so that the root ball does not shift or move laterally one year later. Determine the elevation of the root flare and ensure that it is planted at the specified height. This may require that the tree be set higher than the grade in the nursery.
 - If the root flare is less than 2 inches below the soil level of the root ball, plant the tree at the appropriate level above the grade to set the flare even with the grade. If the flare is more than 2 inches below the soil level at the center of the root ball, the tree shall be rejected.
 - In poorly drained soil conditions, set the root flare 2-3 inches above grade, or as indicated by drawings or as directed by engineer.
 - B. Cut ropes or strings from the top of shrub root balls and trees smaller than 3 inches caliper after plant has been set. Remove burlap or cloth wrapping and any wire baskets from around top half of balls. Do not turn under and bury portions of burlap or wire basket.
 - C. Completely remove any waterproof or water repellent strings or wrappings from the root ball and trunk before backfilling.
10. In areas of slowly draining soils, set top of shrub root balls 2-3 inches higher than proposed finish grades and top of root flare of trees 3-6 inches higher than proposed finish grades. Provide sufficient, tamped backfill so that soil does not settle and expose root ball.
11. If for any reason any balled and burlapped (B&B) plant materials need to be stored on site longer than a 24-hour period, their root balls shall be shaded, protected from wind and kept well watered. B&B material shall not be stored on site longer than 3 days. Containerized plants may be stored on site for a maximum of two (2) weeks, or 14 days. Any plants allowed to dry out as determined by the engineer will be rejected.
12. No container grown stock will be accepted if it is root bound.
13. Topsoil shall consist of friable, shredded, and screened soil reasonably free of grass, roots, weeds, sticks, stones or other foreign materials. The topsoil material shall be approved by the engineer prior to placement.
14. Form saucers around trees per "Tree Planting Detail" and around all small trees and large evergreens. Do not place saucers around shrubs.
15. Contractor shall apply engineer approved pre-emergent herbicide to shrub and ground cover planting areas at the time of planting (if spring planted) or the following spring. Contractor shall ensure the plant materials are resistant to the herbicides properties. Herbicide shall be applied according to manufacturers specifications and in accordance with sound horticultural practices.
16. Thoroughly water all plants immediately after planting.
17. Stake or guy a tree only when necessary for the specific conditions encountered and with the approval of the engineer. Stakes and guys shall be removed at the end of the first full growing season. Any tree that is not stable at the end of this time shall be rejected. Locate stakes and guys within mulched planting areas.
18. Mulch all planting areas with 3 inches of shredded pine bark. Where plant beds meet pavements, lawn or steel edging, cut the grade to allow for mulch and 3-inch drop from adjoining finish grade.
19. Maintenance procedures such as control of invasive weeds, fertilization, animal damage, mulching, restocking, and watering shall be implemented to the extent needed to ensure plant survival for the warranty period.
20. Applications of fertilizer beyond the initial topsoil and seeding shall be based on soil test results and specific plants being fertilized.
21. Performance Standards:
 - A. The contractor shall guarantee all plant material to be in healthy and flourishing condition for a period of one year from the date of final completion.
 - B. When the work is accepted in parts, the guarantee periods extend from each of the partial acceptances to the terminal date of the guarantee of the last acceptance. Thus, all guarantee periods terminate at one time.
 - C. The contractor shall replace, without cost, as soon as weather conditions permit, and within a specified planting period, all plants determined by the engineer to be dead or in an unacceptable condition during and at the end of the guarantee period. To be considered acceptable, plants shall:
 - Be free of dead or dying branches and branch tips.
 - Be full, even and well-formed.
 - Bear foliage of normal density, size and color.
 - Demonstrate progressive and normal root and top growth.
 - Demonstrate progressive tolerance to typical environmental stresses commensurate with length of establishment.
 - Show no evidence of significant pests or diseases that would have been present prior to the end of the contractor's maintenance period or that could be a secondary result of such pests or diseases.
 - D. Replacements shall closely match adjacent specimens of the same species. Replacements shall be subject to all requirements stated in this specification.
 - E. At the end of the guarantee, the contractor shall reset grades that have settled below the proposed grades on the drawings.
22. Maintenance of Exterior Plants:
 - A. Maintenance of exterior plants shall begin immediately after each plant is planted and continue until its acceptance has been confirmed by the engineer.
 - B. Maintenance shall consist of pruning, watering, weeding, mulching, tightening and repairing guys and stakes, and restoring plants to proper grades or upright position, restoring of the planting saucer, and furnishing and applying such sprays or other materials as necessary to keep plantings free of insects and diseases and in vigorous condition.
 - C. Planting areas and plants shall be protected at all times against trespassing and damage of all kinds for the duration of the maintenance period. If a plant becomes damaged or injured, it shall be treated or replaced as directed by the engineer at no additional cost.
 - D. Watering: Contractor shall irrigate as required to maintain vigorous and healthy growth. Overwatering or flooding shall not be allowed. The contractor shall furnish material, equipment, and water to ensure adequate irrigation. Root balls of all trees and large shrubs shall be spot watered using handheld hoses during the first four months after planting, as required to ensure adequate water both within the root ball and within a zone extending 2 ft. beyond the root ball.
 - E. During periods of restricted water usage all governmental regulations (permanent and temporary) shall be followed. The contractor may have to transport water from ponds or other sources, at no additional expense to the owner when irrigation systems are unavailable.
 - F. Maintenance Period: Until Final Acceptance has been achieved.

PROJECT MANAGER: CHARLES J. CHRISTY, PE FIELD BOOK INFORMATION: C-5.1 - PLOTTED 12/20/2014 11:02 AM BY CHRISTY, CHARLES

REV#	DATE	TOWNSHIP REVIEW COMMENTS	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS	

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 www.wadetrtrim.com

LIVINGSTON COMMONS, LOT 4
3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843

LANDSCAPE DETAILS

ISSUED FOR: DATE: BY: PC 12/1/14 CJC

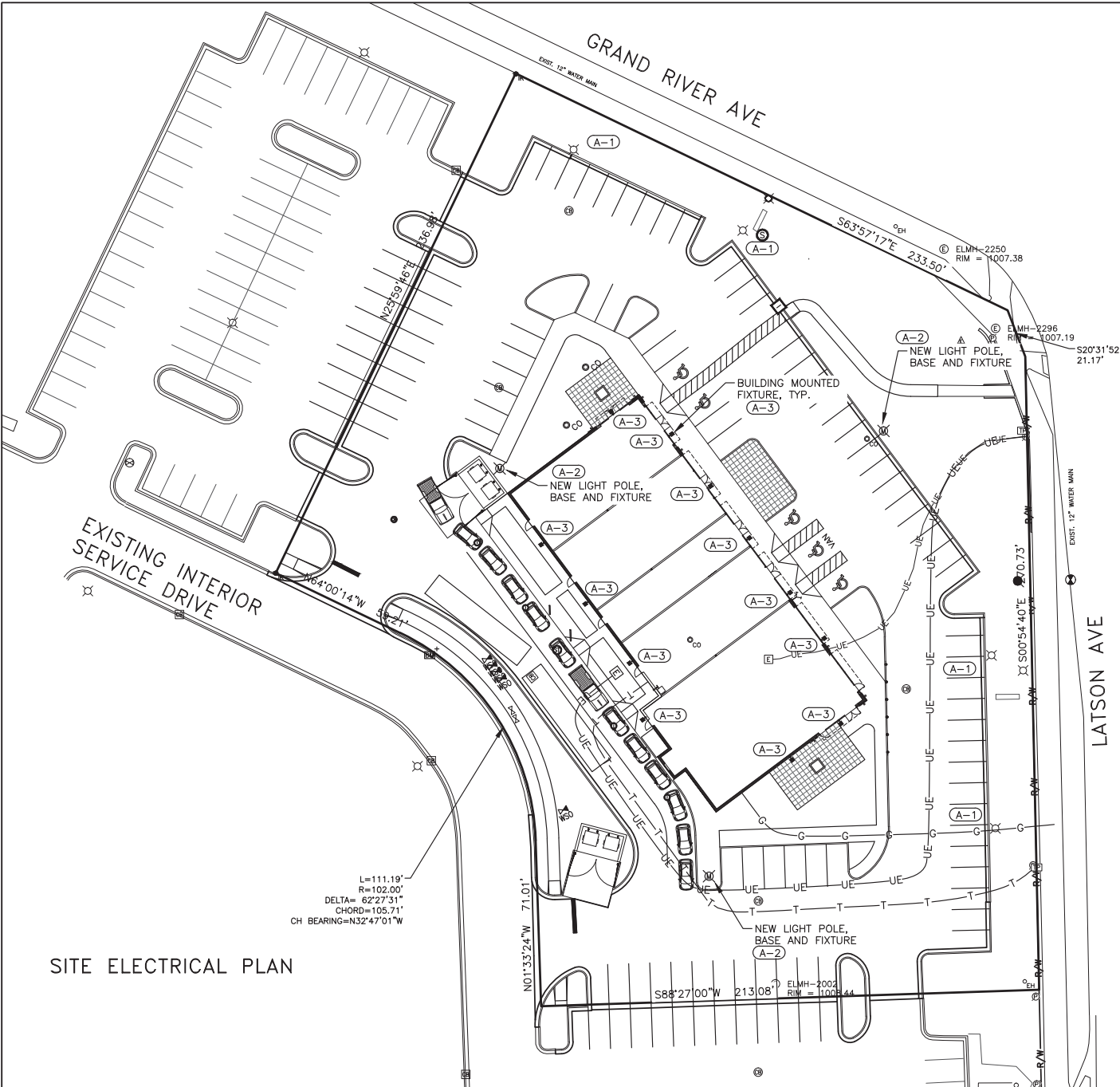
JOB NO. RGP1001.01F

SHEET C-5.1



LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

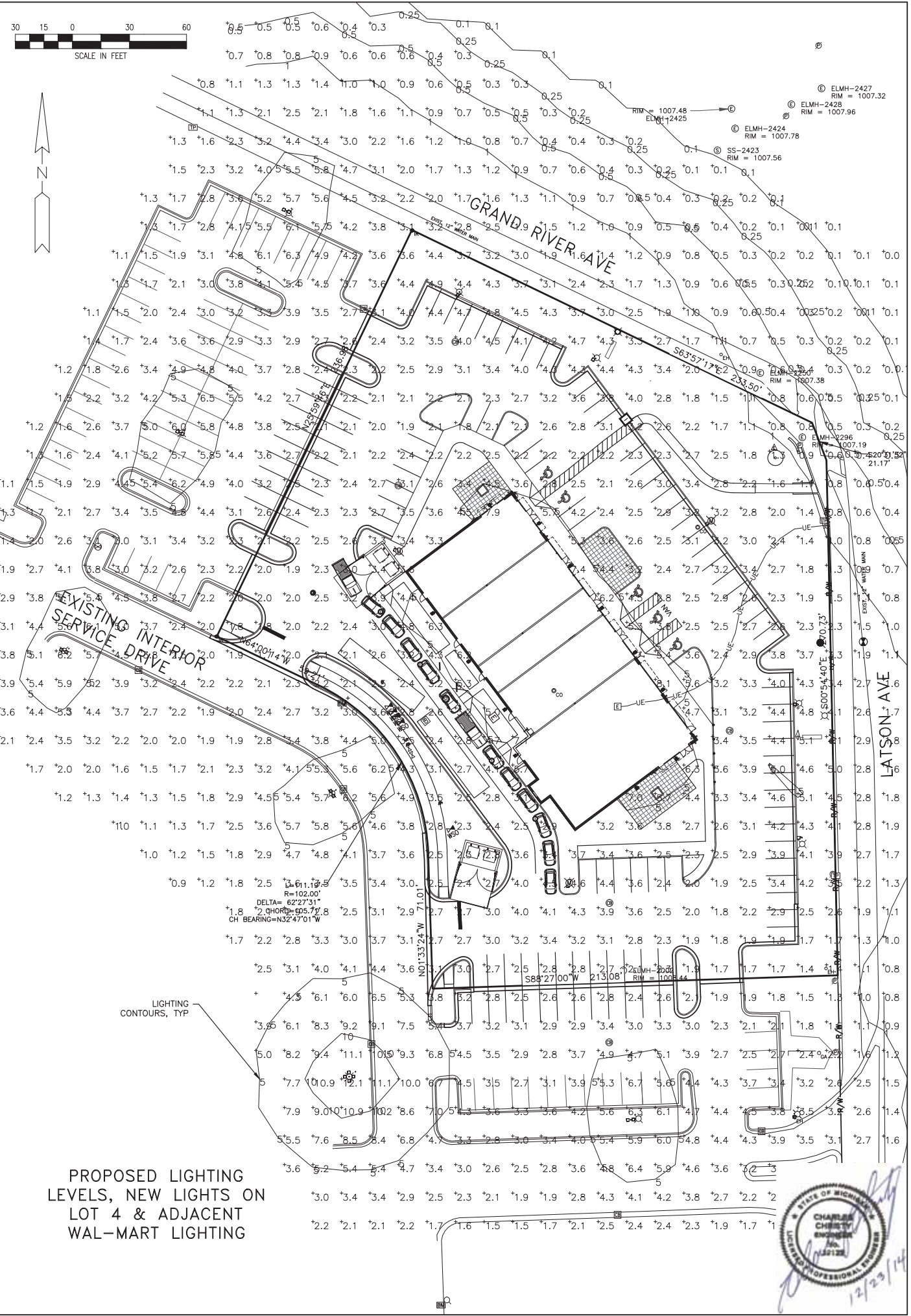
PROJECT MANAGER: CHARLES J. CHRISTY, P.E.
 FIELD BOOK INFORMATION: C:\PW\WORK\CHRISTY\0564861\PLT-ELP-SITE LIGHTING.DWG - C-6.0 - PLOTTED 12/20/2014 11:35 AM BY: CHRISTY, CHARLES



SITE ELECTRICAL PLAN

Symbol	Qty	Label	Arrangement	MANUFACTURER	Description	Comment
	4	A-1	SINGLE	GARDCO LIGHTING	EH-19-1-VS-450PSMH-480-BLP	Replace existing fixture, use existing 25' pole
	3	A-2	SINGLE	GARDCO LIGHTING	EH-19-1-VS-450PSMH-480-BLP	25ft Pole, Square, painted black
	12	A-3	SINGLE	GARDCO LIGHTING	EH-14-1-VS-150MH-480-BLP	Building Mounted 10ft Above Grade

- SITE LIGHTING NOTES:
- ALL LIGHTING SHALL BE METAL HALIDE.
 - CONTRACTOR SHALL PROTECT AND REUSE CIRCUITS TO THE EXTENT PRACTICAL, SEE ELECTRICAL ENGINEERS DRAWINGS.
 - BUILDING MOUNTED FIXTURES ARE SUBJECT TO CHANGE LOCATION, TYPE, AND MANUFACTURER. THE SUBSTITUTION SHALL NOT INCREASE THE LIGHTING LEVELS AND INTENSITIES INDICATED ON THIS PLAN.



PROPOSED LIGHTING LEVELS, NEW LIGHTS ON LOT 4 & ADJACENT WAL-MART LIGHTING

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WADETRIM
 800.255.5800
 810.255.5800
 www.wadetrिम.com

LIVINGSTON COMMONS, LOT 4
 3950 E. GRAND RIVER
 HOWELL, MICHIGAN 48843

SITE LIGHTING PLAN

ISSUED FOR: DATE: BY: PC 12/1/14 CJC

JOB NO. RGP1001.01F

SHEET C-6.0

STATE OF MICHIGAN
 CHARLES CHRISTY
 LICENSED PROFESSIONAL ENGINEER
 12/23/14

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN

REV#	DATE	TOWNSHIP REVIEW COMMENTS	DESCRIPTION
A	12/23/14	1st	



GENERAL DESCRIPTION: The Genko arm mounted Square Form Ten products are cutoff luminaires using high intensity discharge lamps up to 1000 watts. The FT units are manufactured from reinforced extruded aluminum and finished in an Architectural Class 1 anodizing. The FT and FTI style luminaires are die formed aluminum with a thermosealed epoxy resin. Both products can accept one of six (6) interchangeable and replaceable precision segmented optical systems.

ORDERING

UNIT	PREFIX	SIZE	CONFIGURATION	PHOTOMETRIC DISTRIBUTION	WIRING	VOLTAGE	FINISH	OPTIONS
FT	10	10"	1	1	See Table Below	120	SLA	F W1
FT	10	10"	2	2	See Table Below	120	SLA	L1 W2
FT	10	10"	3	3	See Table Below	120	SLA	PC W3
FT	10	10"	4	4	See Table Below	120	SLA	PCB W4
FT	10	10"	5	5	See Table Below	120	SLA	PCB W5
FT	10	10"	6	6	See Table Below	120	SLA	PCB W6

NOTES:

- FT and FTI luminaires, when used with the pole base described herein, shall have a height of 24" or 30" as indicated.
- ANCHOR BOLTS shall be installed per the manufacturer's instructions.
- Anchor bolts shall be installed in the concrete base.
- Anchor bolts shall be installed in the concrete base.
- Anchor bolts shall be installed in the concrete base.
- Anchor bolts shall be installed in the concrete base.

DIMENSIONS

Size	Height	Width	Depth	Weight
10" x 10" x 10"	24"	11"	11"	35 lbs
10" x 10" x 10"	30"	11"	11"	35 lbs
10" x 10" x 10"	30"	11"	11"	35 lbs
10" x 10" x 10"	30"	11"	11"	35 lbs

REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS
CJC		
BY		

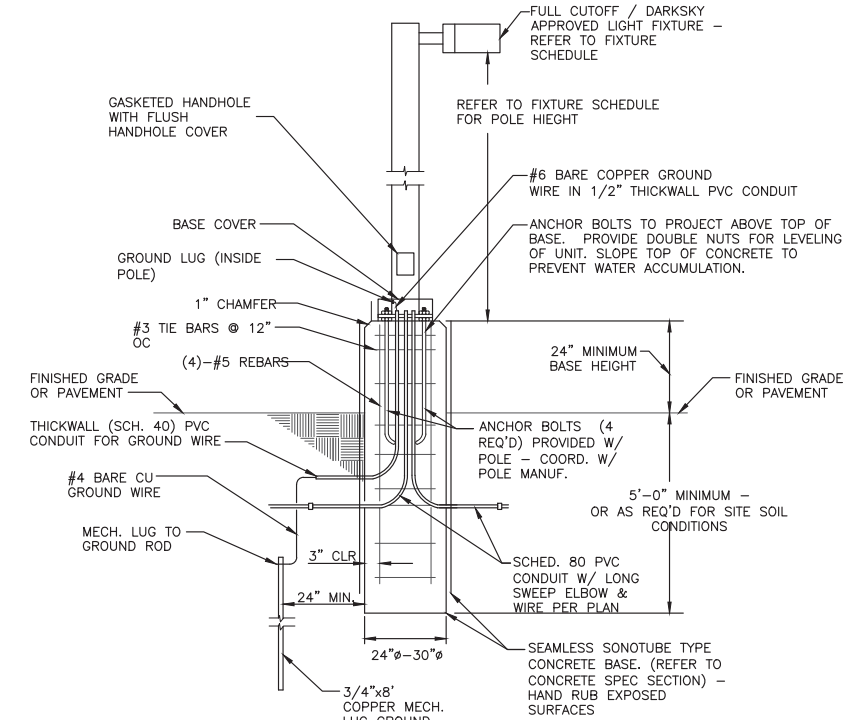
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WADETRIM
 825 South Schumaker Street, Suite 201
 Flint, MI 48922
 810.285.2550
 www.wadetrim.com

LIVINGSTON COMMONS, LOT 4
 3950 E. GRAND RIVER
 HOWELL, MICHIGAN 48843
 SITE LIGHTING DETAILS

ISSUED FOR: DATE: BY:
 PC 12/1/14 CJC

JOB NO. RGP1001.01F
 SHEET
 C-6.1

LIVINGSTON COMMONS, LOT 4, GENOA TOWNSHIP, HOWELL, MICHIGAN



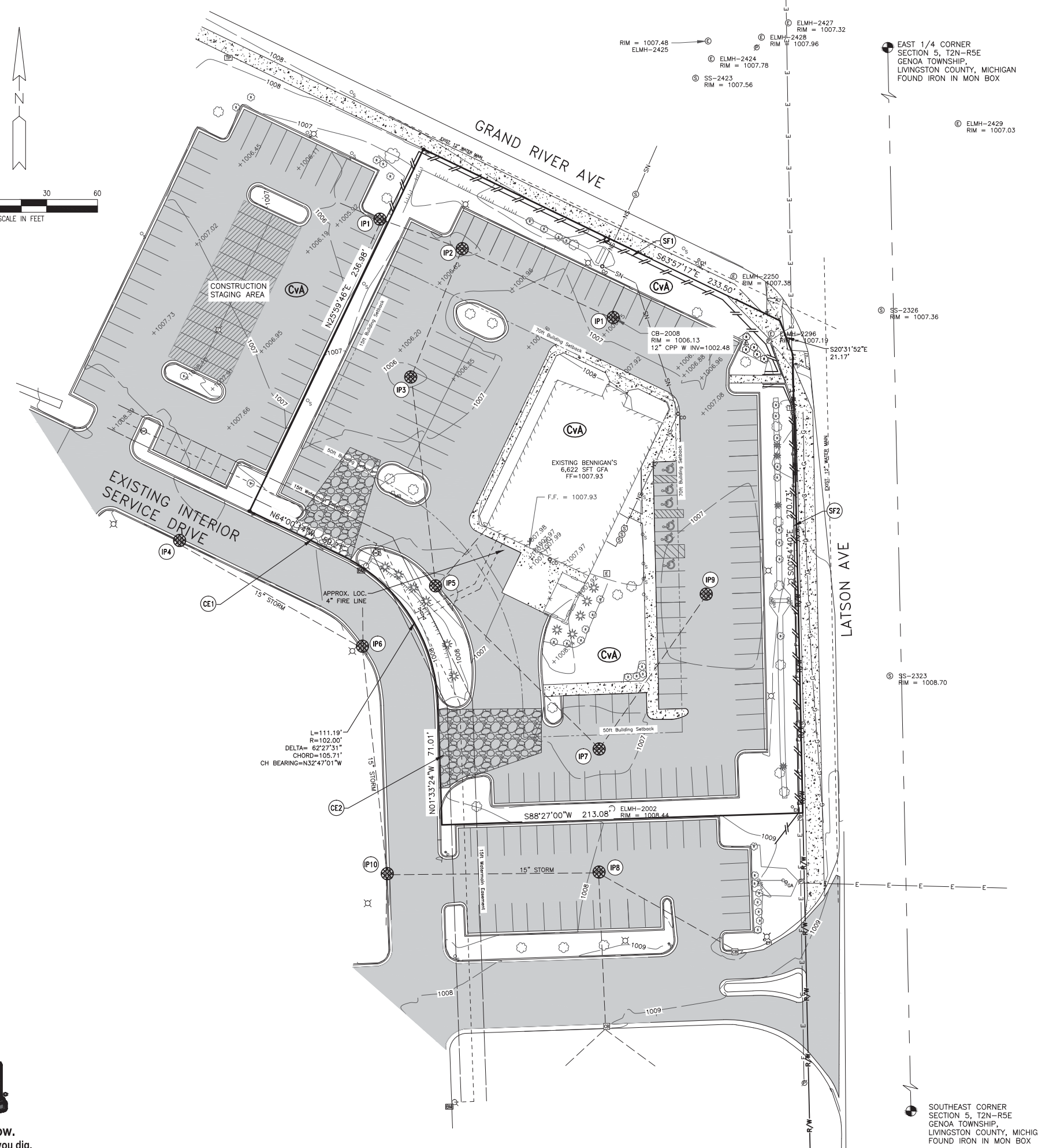
- NOTES:**
- ANCHOR BOLTS AND TEMPLATES FURNISHED BY ELECTRICAL CONTRACTOR. UNLESS NOTED OTHERWISE, CONCRETE BASE AND ANCHOR BOLTS INSTALLED BY ELECTRICAL CONTRACTOR.
 - CONCRETE BASE SHALL BE PER CONCRETE SPECIFICATION SECTION AND/OR 4000 PSI CONCRETE IF NOT SPECIFIED.
 - LIGHT POLE THICKNESS SHALL BE AS REQUIRED TO WITHSTAND WIND LOADS OF 100 MPH MINIMUM.

SITE LIGHTING POLE DETAIL
 NO SCALE





SCALE IN FEET



LEGEND

- TEMPORARY SILT FENCE
- TEMPORARY INLET PROTECTION
- STAGING AREA
- LIMITS OF DISTURBANCE/PROJECT LIMITS
- MAJOR CONTOUR
- MINOR CONTOUR
- EXISTING DRAINAGE STRUCTURE
- EXISTING STORM SEWER
- SILT FENCE IDENTIFICATION
- INLET PROTECTION IDENTIFICATION
- CONSTRUCTION ENTRANCE
- SOIL TYPE

SOIL TYPES

CvA= CONOVER LOAM, 0-2% SLOPE

PROJECT MANAGER: CHARLES J. CHRISTY, PE
 FIELD BOOK INFORMATION:
 C:\PW\MKRC\CHRISTY\0564861\PL1-SWPPP-PHASE LDWG - C-7.1 - PLOTTED 12/20/2014 11:40 AM BY CHRISTY, CHARLES



Know what's below.
Call before you dig.

REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS
CJC		
BT		

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:

WADETRIM
 225 South Schumaker Street, Suite 201
 Flint, MI 48802
 810.255.5580/810.1342
 www.wadetrtrim.com

LIVINGSTON COMMONS, LOT 4
 3950 E. GRAND RIVER
 HOWELL, MICHIGAN 48843
 SSSC and SWPP PLAN - PHASE I

ISSUED FOR: DATE: BY:
 PC 12/1/14 CJC

JOB NO. RGP1001.01F

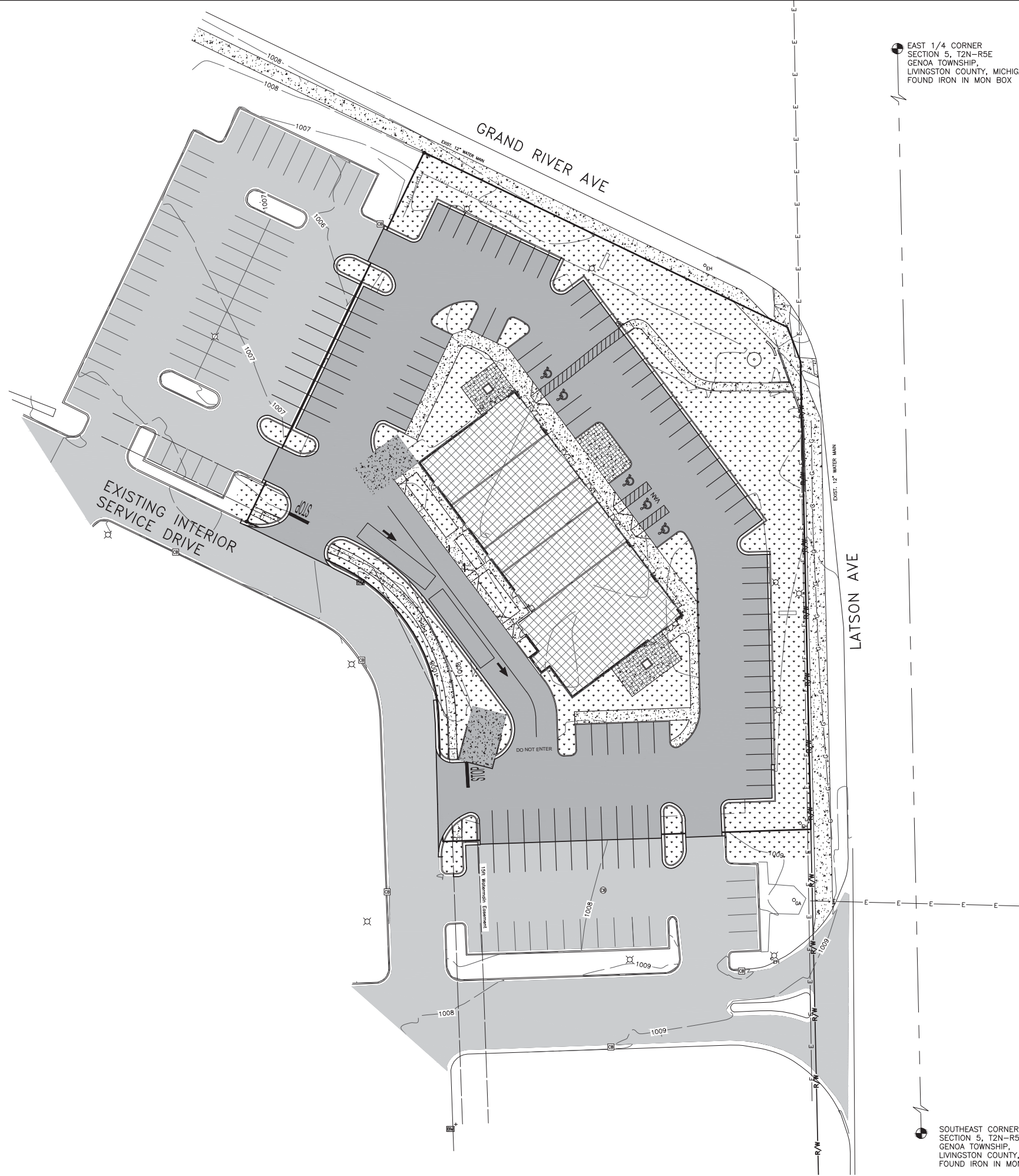
SHEET C-7.1



EAST 1/4 CORNER SECTION 5, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN FOUND IRON IN MON BOX

SOUTHEAST CORNER SECTION 5, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN FOUND IRON IN MON BOX

PROJECT MANAGER: CHARLES J. CHRISTY, PE
 FIELD BOOK INFORMATION:
 C:\PW\WORK\CHRISTY\056486\PLT-SWPPP-PHASE II.DWG - C-7.2 - PLOTTED 12/20/2014 11:42 AM BY CHRISTY, CHARLES

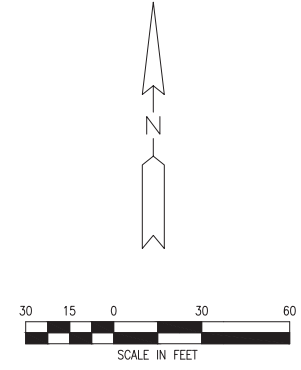


EAST 1/4 CORNER
 SECTION 5, T2N-R5E
 GENOA TOWNSHIP,
 LIVINGSTON COUNTY, MICHIGAN
 FOUND IRON IN MON BOX

SOUTHEAST CORNER
 SECTION 5, T2N-R5E
 GENOA TOWNSHIP,
 LIVINGSTON COUNTY, MICHIGAN
 FOUND IRON IN MON BOX

LEGEND

- PROPOSED ASPHALT
- EXISTING ASPHALT
- GRASS/LANDSCAPING
- BUILDING
- CONCRETE



REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS
CJC		
BT		

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:

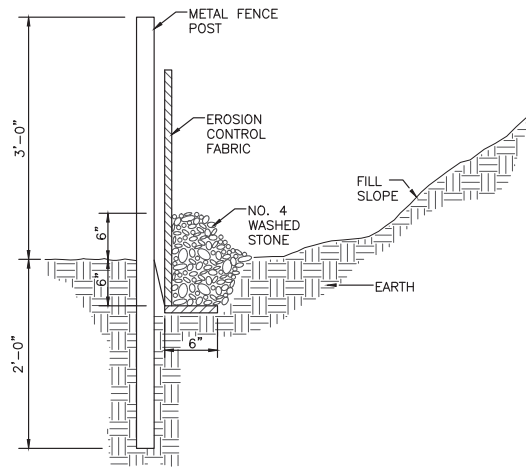
WADETRIM
 225 South Schwanen Street, Suite 201
 Flint, MI 48902
 810.255.5580/841.0342
 www.wadetrtrim.com

Building relationships on a foundation of excellence

LIVINGSTON COMMONS, LOT 4
 3950 E. GRAND RIVER
 HOWELL, MICHIGAN 48843
 SESC and SWPP PLAN - PHASE II

ISSUED FOR: PC	DATE: 12/1/14	BY: CJC
JOB NO. RGP1001.01F		
SHEET C-7.2		





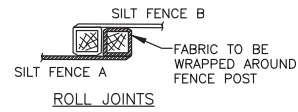
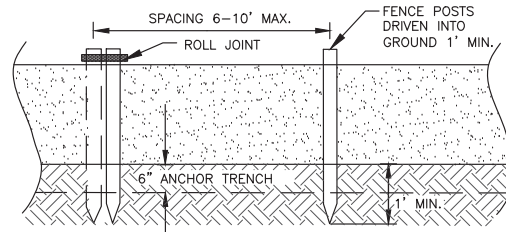
MAXIMUM PLACEMENT OF POST USING HOG WIRE WITH APPROVED EROSION CONTROL FABRICS TO BE 10 FEET.

POST - METAL T-POST 5 FEET OR 6 FEET IN HEIGHT DEPENDING ON FILL SLOPE.

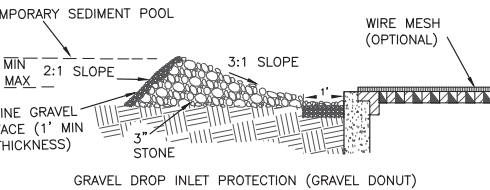
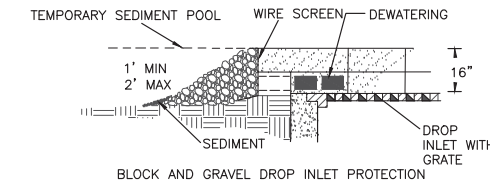
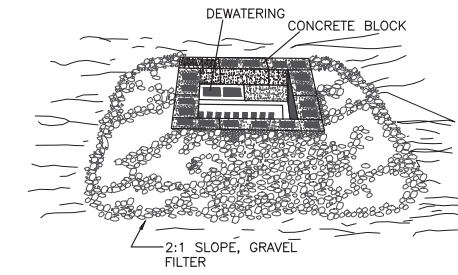
FABRIC - 36 INCHES IN WIDTH (MUST MEET ENGINEERS' SPECIFICATIONS FOR EROSION CONTROL).

STONE - NO. 4 WASHED STONE TO BE PLACED 12 INCHES DEEP AT SILT FENCE.

SILT FENCE DETAIL
NO SCALE



SILT FENCE
NO SCALE



CONSTRUCTION SPECIFICATIONS

- LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SITE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.
- CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2 INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.
- USE CLEAN GRAVEL, 3/4- TO 1/2-INCH DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT ON AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.
- IF ONLY STONE AND GRAVEL ARE USED, KEEP THE SLOPE TOWARD THE INLET NO STEEPER THAN 3:1. LEAVE A MINIMUM 1-FT WIDE LEVEL STONE AREA BETWEEN THE STRUCTURE AND AROUND THE INLET TO PREVENT GRAVEL FROM ENTERING INLET. ON THE SLOPE AWAY FROM THE INLET USE 1/2-3/4-INCH GRAVEL (NCDOT #57 WASHED STONE) AT A MINIMUM THICKNESS OF 1 FT.

MAINTENANCE

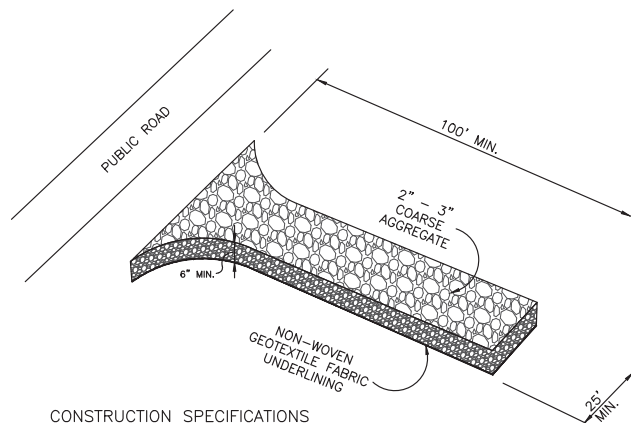
INSPECT THE BARRIER AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED.

REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.

WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

NOTE: CONTRACTOR SHALL UTILIZE BLOCK AND GRAVEL INLET PROTECTION OR GRAVEL DROP INLET PROTECTION DURING CONSTRUCTION. WHEN A DRAINAGE AREA HAS BEEN GRAVELED, PAVED, CONCRETED, TOPSOIL & SEEDDED, OR SODDED, THE CONTRACTOR SHALL INSTALL SILT SACKS PER DETAIL ON SHEET C-4.4 (OR APPROVED EQUAL/SIMILAR) AND MAINTAINED UNTIL PROJECT ACCEPTANCE.

BLOCK AND GRAVEL INLET PROTECTION
NO SCALE



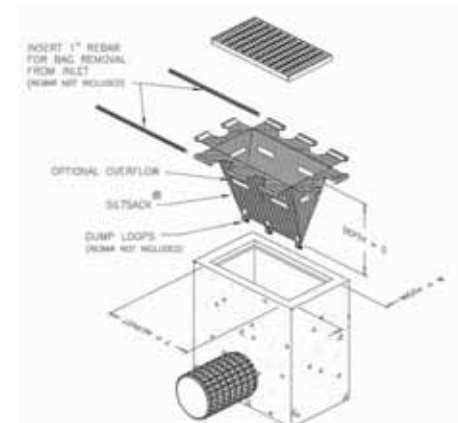
CONSTRUCTION SPECIFICATIONS

- CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
- PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
- PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
- USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

MAINTENANCE

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT AND STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
NO SCALE



DETAIL OF INLET SEDIMENT CONTROL DEVICE
NO SCALE

SILTSACK® TYPE A
SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

REGULAR FLOW SILTSACK

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4832	LBS	315 x 300
Grab Tensile Elongation	ASTM D 4832	%	15 x 15
Puncture Strength	ASTM D 4833	LBS	125
Mullen Burst Strength	ASTM D 3786	PSI	650
Trapezoid Tear Strength	ASTM D 4533	LBS	120 x 150
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	US SIEVE	40
Flow Rate	ASTM D 4491	Gal/Min/FT²	40
Permittivity	ASTM D 4491	Sec⁻¹	0.55

HI-FLOW SILTSACK

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4832	LBS	255 x 275
Grab Tensile Elongation	ASTM D 4832	%	20 x 15
Puncture Strength	ASTM D 4833	LBS	135
Mullen Burst Strength	ASTM D 3786	PSI	420
Trapezoid Tear Strength	ASTM D 4533	LBS	40 x 50
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	US SIEVE	40
Flow Rate	ASTM D 4491	Gal/Min/FT²	200
Permittivity	ASTM D 4491	Sec⁻¹	1.5

SILTSACK® TYPE B
SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED IN THE U.S.A. FROM A WOVEN MONOFILAMENT FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

REGULAR FLOW SILTSACK

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4832	LBS	315 x 300
Grab Tensile Elongation	ASTM D 4832	%	15 x 15
Puncture Strength	ASTM D 4833	LBS	125
Mullen Burst Strength	ASTM D 3786	PSI	650
Trapezoid Tear Strength	ASTM D 4533	LBS	120 x 150
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	US SIEVE	40
Flow Rate	ASTM D 4491	Gal/Min/FT²	40
Permittivity	ASTM D 4491	Sec⁻¹	0.55

HI-FLOW SILTSACK

Mechanical Properties	Test Method	Units	MARV
Grab Tensile Strength	ASTM D 4832	LBS	255 x 275
Grab Tensile Elongation	ASTM D 4832	%	20 x 15
Puncture Strength	ASTM D 4833	LBS	135
Mullen Burst Strength	ASTM D 3786	PSI	420
Trapezoid Tear Strength	ASTM D 4533	LBS	40 x 50
UV Resistance	ASTM D 4355	%	90
Apparent Opening Size	ASTM D 4751	US SIEVE	40
Flow Rate	ASTM D 4491	Gal/Min/FT²	200
Permittivity	ASTM D 4491	Sec⁻¹	1.5

DETAIL OF INLET SEDIMENT CONTROL DEVICE WITHIN A CURB LINE
NO SCALE

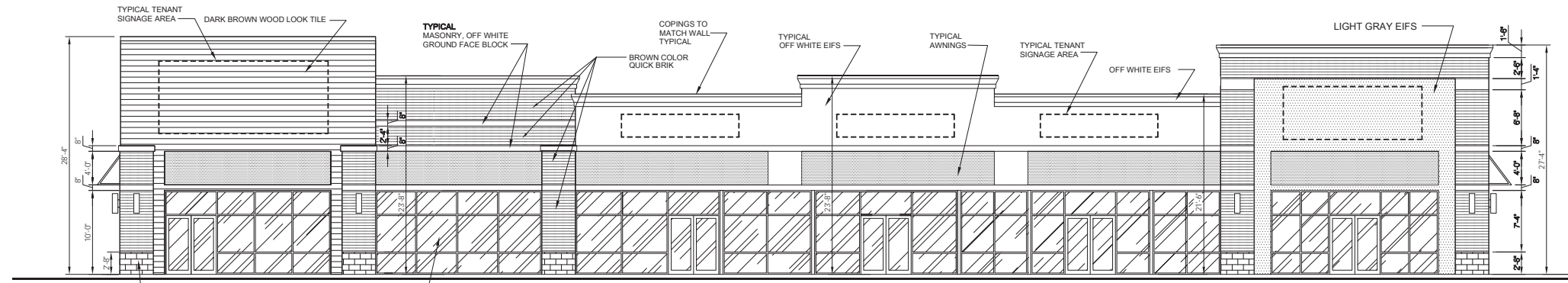
REV#	DATE	DESCRIPTION
A	12/23/14	1st TOWNSHIP REVIEW COMMENTS

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:
WADETRIM
10000 S. State Street, Suite 201
P.O. Box 48902
Liveston, Michigan 48041-0942
www.wadetrिम.com

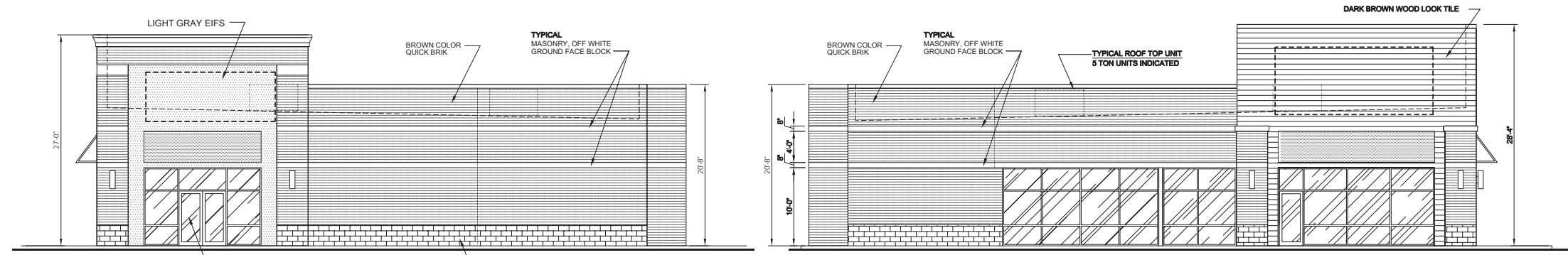
LIVINGSTON COMMONS, LOT 4
3950 E. GRAND RIVER
HOWELL, MICHIGAN 48843
SESC and SWPPP DETAILS

ISSUED FOR: DATE: BY: PC 12/1/14 CJC
JOB NO. RGP1001.01F
SHEET C-7.3



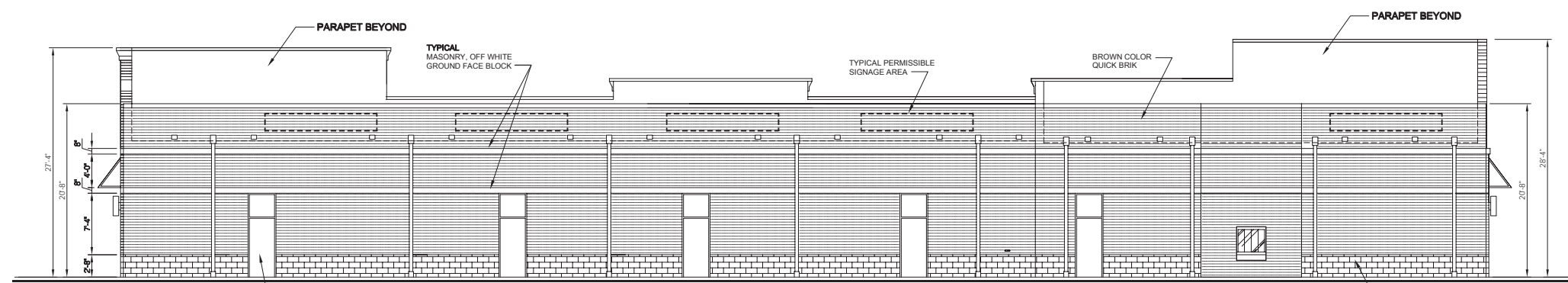


EAST ELEVATION
SCALE: 1/8" = 1'-0"

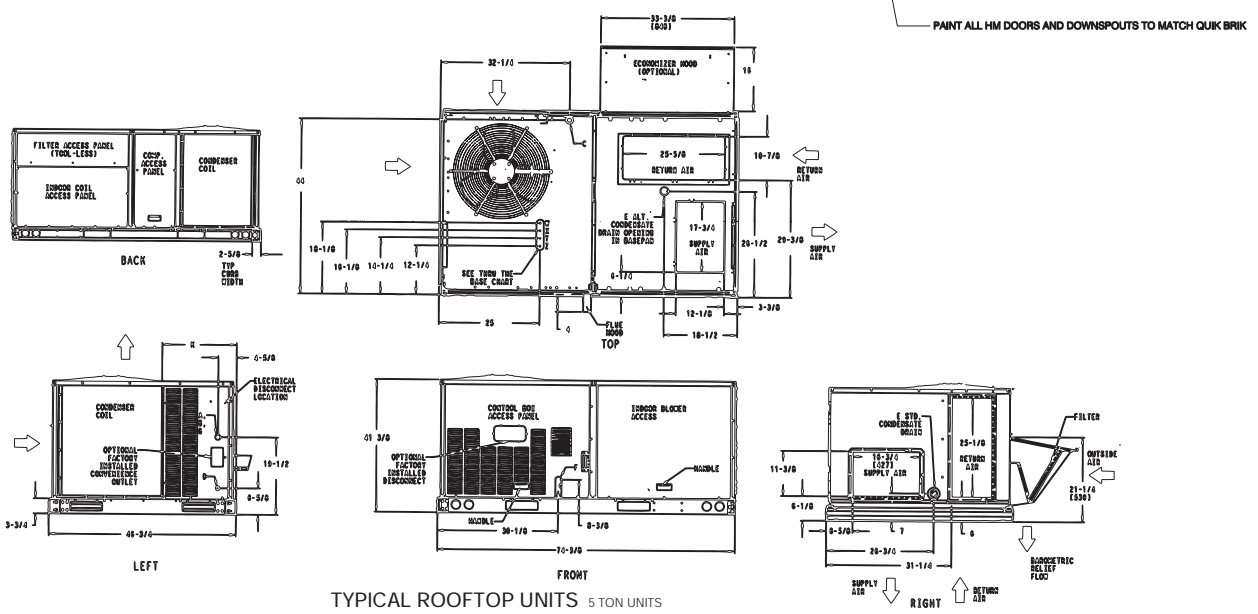


NORTH ELEVATION
SCALE: 1/8" = 1'-0"

SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



WEST ELEVATION
SCALE: 1/8" = 1'-0"



TYPICAL ROOFTOP UNITS 5 TON UNITS
NTS

NOTE:
ALL ROOFTOP EQUIPMENT WILL BE HIDDEN FROM VIEW BECAUSE OF HEIGHT OF THE PARAPETS.

NOTE: DOOR LOCATIONS TO BE COORDINATE WITH TENANTS

PAINT ALL HM DOORS AND DOWNSPOUTS TO MATCH QUIK BRICK

LIVINGSTON COMMONS LOT 4
PROPOSED RETAIL BUILDING
GENOA TOWNSHIP, LIVINGSTON CO., MI.

STANFORD R. JOSEPH, AIA · ARCHITECT
9600 CARMER ROAD CINCINNATI, OH 45242
(513) 884-6000 FAX (513) 884-0002

RG Properties
10050 INNOVATION DRIVE
SUITE 100
DAYTON, OHIO 45342
TEL 937/434-7218
FAX 937/434-0824
WEB SITE: WWW.RGPROPERTIES.COM
E-MAIL: LEASING@RGPROPERTIES.COM

DATE 11/25/14

SHEET NO.

A3

WOOD SAMPLE - This is NOT the building being built.





GENOA CHARTER TOWNSHIP
Application for Re-Zoning

GENOA TOWNSHIP
SEP 29 2014

APPLICANT NAME: PKJS LLC ADDRESS: Same
OWNER NAME: PKJJ LLC ADDRESS: 29329 Paramount Ct Farmington Hills Mi 48331
PARCEL #(s): 4711-05-400-025 PRIMARY PHONE: (248) 755-1408
EMAIL 1: PeteGoulas@gmail.com EMAIL 2: _____

We, the undersigned, do hereby respectfully make application to and petition the Township Board to amend the Township Zoning Ordinance and change the zoning map of the township of Genoa as hereinafter requested, and in support of this application, the following facts are shown:

A. REQUIRED SUBMITTAL INFORMATION

1. A legal description and street address of the subject property, together with a map identifying the subject property in relation to surrounding properties;
2. The name, signature and address of the owner of the subject property, a statement of the applicant's interest in the subject property if not the owner in fee simple title, and proof of consent from the property owner;
3. It is desired and requested that the foregoing property be rezoned from:

Regional Commercial District to ~~Non-Residential~~ Planned Unit Development District

4. A site plan illustrating existing conditions on the site and adjacent properties; such as woodlands, wetlands, soil conditions, steep slope, drainage patterns, views, existing buildings, sight distance limitations, relationship to other developed sites, and access points in the vicinity;
5. A conceptual plan demonstrating that the site could be developed with representative uses permitted in the requested zoning district meeting requirements for setbacks, wetland buffers access spacing, any requested service drives and other site design factors;
6. A written environmental assessment, a map of existing site features as described in Article 18 describing site features and anticipated impacts created by the host of uses permitted in the requested zoning district;
7. A written description of how the requested rezoning meets Sec. 22.04 "Criteria for Amendment of the Official Zoning Map."
8. The property in question shall be staked prior to the Planning Commission Public Hearing.

B. DESCRIBE HOW YOUR REQUESTED RE-ZONING MEETS THE ZONING ORDINANCE CRITERIA FOR AMENDING THE OFFICIAL ZONING MAP:

1. How is the rezoning consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subareas or corridor studies. If not consistent, describe how conditions have changed since the Master Plan was adopted?

See attached

2. Are the site's physical, geological, hydrological and other environmental features suitable for the host of uses permitted in the proposed zoning district?

See attached

3. Do you have any evidence that a reasonable return on investment cannot be received by developing the property with one (1) of the uses permitted under the current zoning?

See attached

4. How would all the potential uses allowed in the proposed zoning district be compatible with surrounding uses and zoning in terms of views, noise, air quality, the environment, density, traffic impacts, drainage and potential influence on property values?

See attached

5. Are infrastructure capacity (streets, sanitary sewer, water, and drainage) and services (police and fire protection, etc.) sufficient to accommodate the uses permitted in the requested district?

See attached

6. Is there a demonstrated demand in Genoa Township or the surrounding area for the types of uses permitted in the requested zoning district? If yes, explain how this site is better suited for the zoning than others which may be planned or zoned to accommodate the demand.

See attached

7. If you have a particular use in mind, is another zoning district more appropriate? Why should the Township re-zone the land rather than amend the list of uses allowed in another zoning district to accommodate your intended use?

See attached

8. Describe any deed restrictions which could potentially affect the use of the property.

See attached

C. AFFIDAVIT

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY:

Pete (Panagiotis) Goulas

ADDRESS:

29329 Paramount Court, Farmington Hills MI 48331

SIGNATURE

P. Goulas

The following contact should also receive review letters and correspondence:

Name:

James M. Barrowell

Email:

desine@desineinc.com

Business Affiliation:

Engineer

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

PROJECT NAME:

Red Olive

PROJECT LOCATON & DESCRIPTION:

3838 E. Grand River Howell MI 48843

SIGNATURE:

P. Goulas

DATE:

09/23/2014

PRINT NAME:

PETE (PANAGIOTIS) GOULAS

PHONE:

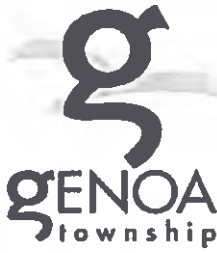
248 755-1408

COMPANY NAME & ADDRESS:

P&T Inc 29329 Paramount Ct Farmington Hills MI 48331

- 1) The existing restaurant was constructed on the 1 acre parcel in the mid 1990s and the property is currently zoned Regional Commercial District. The requested rezoning to Non-Residential Planned Unit Development District (NR-PUD) is consistent with the adjoining property. The property to the north across Grand River is zoned Mixed Use Planned Unit Development District (MU-PUD). The inclusion of this parcel into the existing PUD is consistent with Genoa Township Master Plan and studies of the Latson Road / Grand River corridor. The proposed use as a restaurant is consistent with the past use.
 - 2) The site gently slopes from north to south and is served by municipal sewer and water. Storm water currently discharges into the storm sewers serving the surrounding parcels. The site has supported a similar use in the past.
 - 3) The property can support the current and proposed use. The rezoning will permit the inclusion of the parcel into the existing PUD. This will permit a more cohesive integrated redevelopment of the property.
 - 4) The potential uses of the property are commercial uses which are consistent with the restaurants, general merchandise stores in the immediate area.
 - 5) Infrastructure is currently serving the site and will be adequate for the proposed redevelopment. No additional demands on services are expected as a result of redeveloping the property.
 - 6) There is a demand for commercial properties in the Grand River Corridor. This parcel is ideally located to be rezoned to and attached to the existing PUD zoning. The site is currently surrounded by similarly zoned property.
 - 7) The proposed use of the property is for a restaurant. The use is allowed in the current zoning, however, the rezoning will allow for an overall improvement to the access and utilization of the property. Eliminating left turns from Grand River to the site will improve traffic flow on Grand River
 - 8) The property will enter into an Agreement with the existing PUD which will permit a sharing of existing improvements within the existing PUD and a sharing of associated costs.
-

SEP 29 2014



GENOA CHARTER TOWNSHIP APPLICATION
Planned Unit Development (PUD)

APPLICANT NAME: PKJJ, LLC
APPLICANT EMAIL: PetecGoulas@gmail.com
APPLICANT ADDRESS & PHONE: 29329 Paramount Ct. Farmington Hills MI 48331
OWNER'S NAME: same
OWNER ADDRESS & PHONE: 29329 Paramount 248 755-1408
TAX CODE(S): 4711-05-400-025

QUALIFYING CONDITIONS (To be filled out by applicant)

1. A PUD zoning classification may be initiated only by a petition.
2. It is desired and requested that the foregoing property be rezoned to the following type of PUD designation:
 - Residential Planned Unit Development (RPUD)
 - Planned Industrial District (PID)
 - Mixed Use Planned Unit Development (MUPUD)
 - Redevelopment Planned Unit Development (RDPUD)
 - Non-residential Planned Unit Development (NRPUD)
 - Town Center Planned Unit Development (TCPUD)
3. The planned unit development site shall be under the control of one owner or group of owners and shall be capable of being planned and developed as one integral unit.

EXPLAIN Proposed one (1) acre to be incorporated with existing 89 acre NB-PUD

4. The site shall have a minimum area of twenty (20) acres of contiguous land, provided such minimum may be reduced by the Township Board as follows:
 - A. The minimum area requirement may be reduced to five (5) acres for sites served by both public water and public sewer.
 - B. The minimum lot area may be waived for sites zoned for commercial use (NSD, GCD or RCD) where the site is occupied by a nonconforming commercial, office or industrial building, all buildings on such site are proposed to be removed and a new use permitted within the underlying zoning district is to be established. The Township Board shall only permit the PUD on the smaller site where it finds that the flexibility in dimensional standards is necessary to allow for innovative design in redeveloping the site and an existing blighted situation will be eliminated. A parallel plan shall be provided showing how the site could be redeveloped without the use of the PUD to allow the Planning Commission to evaluate whether the modifications to dimensional standards are the

minimum necessary to allow redevelopment of the site, while still meeting the spirit and intent of the ordinance.

- C. The PUD site plan shall provide one or more of the following benefits not possible under the standards of another zoning district, as determined by the Planning Commission:
- preservation of significant natural or historic features
 - a complementary mixture of uses or a variety of housing types
 - common open space for passive or active recreational use
 - mitigation to offset impacts
 - redevelopment of a nonconforming site where creative design can address unique site constraints.
- D. The site shall be served by public sewer and water. The Township may approve a residential PUD that is not served by public sewer or water, provided all lots shall be at least one (1) acre in area and the requirements of the County Health Department shall be met.

Size of property is 1 (one) acres.

DESCRIBE BELOW HOW THE REQUESTED PUD DESIGNATION COMPLIES WITH AFOREMENTIONED MINIMUM LOT SIZE REQUIREMENTS.

see attached

STANDARDS FOR REZONING TO PLANNED UNIT DEVELOPMENT (RESPOND HERE OR WITHIN THE IMPACT STATEMENT)

1. How would the PUD be consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subarea or corridor studies. If conditions have changed since the Master Plan was adopted, the consistency with recent development trends in the area;

see attached

2. The compatibility of all the potential uses in the PUD with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of use, traffic impacts, aesthetics, infrastructure and potential influence on property values;

see attached

3. The capacity of infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the "health, safety and welfare" of the Township;

see attached

4. The apparent demand for the types of uses permitted in the PUD;

See attached.

AFFIDAVIT

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY: P. Goulet

ADDRESS: 29329 Paramount Ct. Farmington Hills Mi 48331

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

James M. Barnwell Engineer at desine@desineinc.com
Name Business Affiliation E-mail



FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

PROJECT NAME: Red Olive

PROJECT LOCATON & DESCRIPTION: 3838 E. Grand River Howell Mi 48843

SIGNATURE: P. Goulet DATE: 09/23/2014

PRINT NAME: Panagiotis Goulet PHONE: 248 755-1408

COMPANY NAME & ADDRESS: PKSS LLC.

PUD Application

A Planned Unit Development Agreement was developed with Genoa Township for the surrounding parcels in 1999. The Planned Unit Development Agreement was between Randall L. Gunlock and Glenn C. Gunlock and Township of Genoa and was dated April 6, 1999. This property consisted of approximately 89 acres and is designated as a Non-residential Planned Unit Development (NR-PUD). At that time, the applicants parcel was under different ownership and was not included in the PUD Agreement between the Developer(s) and Genoa Township. Discussion was held at that time about inclusion of this parcel in the overall plan and was referenced as the Prairie House parcel.

The property has recently been acquired by the applicant with the intent of redeveloping the property with a restaurant. The applicants property is currently zoned Regional Commercial District (RCD). The applicant is requesting a rezoning to NR-PUD. Concurrently with this application the applicant is requesting an amendment to the existing PUD Agreement. It is the applicants intent to enter into an Agreement with the adjacent owners which will permit this property to share the existing improvements within the current development. This will improve the traffic circulation and create a more cohesive overall development. The applicants are seeking to amend the PUD Agreement with Genoa Township to allow the redevelopment to occur. The applicants parcel, which is approximately one acre in size would bring the total NR- PUD parcel to over 90 acres.

- 1) The NR-PUD designation is consistent with the surrounding existing growth patterns in the area. The surrounding parcels are currently zoned as a Planned Unit Development. The Latson Road / Grand River Avenue area has seen tremendous commercial growth since the Prairie House Restaurant was constructed. The NR-PUD and surrounding development were constructed subsequent to this development. With the applicant redeveloping the parcel, the integration of this parcel into the larger complex is consistent with the goals and policies of Genoa Township including encouraging cross connections of commercial properties.
 - 2) The redevelopment of the property will be to the same use as previously on the property. Negligible negative impacts will occur as a result of the proposed development. A minor increase in impervious area is proposed. The access to Grand River is proposed to be limited to right turn in and out. Access will be provided to the internal NR-PUD drives.
 - 3) The redevelopment is consistent with the zoning and master plan for Genoa Township. The use of the property will not compromise the existing infrastructure or services of the Township.
 - 4) The additional parcel to the NR-PUD will not impact the character or proposed uses within the existing PUD and/or surrounding area.
-



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

GENOA TOWNSHIP

APR 30 2014

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: PKII LLC 1051 Ann Arbor Rd Plymouth MI 48170
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: PKSS, LLC 29329 Paramount Court Farmington Hills MI 48331

SITE ADDRESS: 3838 E. Grand River Ave, Howell PARCEL #(s): 11-05-400-025

APPLICANT PHONE: (248) 755-1408 OWNER PHONE: ()

OWNER EMAIL: PeteGoulas@gmail.com

LOCATION AND BRIEF DESCRIPTION OF SITE: Southside of Grand River Ave approximately 950 feet west of Latson Ave. The existing building (formerly Prairie House Restaurant) will be decommissioned and demolished. A new Red Olive restaurant is proposed.

BRIEF STATEMENT OF PROPOSED USE: A new restaurant, without alcohol and without a drive-thru pickup, is proposed.

THE FOLLOWING BUILDINGS ARE PROPOSED: One building is proposed for the new restaurant.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: P Goulas
ADDRESS: 29329 Paramount & Farmington Hills MI 48331

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Pete Goulas of Red Olive at Pete Goulas@gmail.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: P. Goulas DATE: 04/28/2014
PRINT NAME: Pete Goulas PHONE: 248 755-1408
ADDRESS: 29329 Paramount Ct Farmington Hills MI 48331



January 5, 2015

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Kelly VanMarter, AICP Assistant Township Manager/Community Development Director
Subject:	Red Olive – Non-Residential Planned Unit Development Review #2
Location:	3838 E. Grand River Avenue – south side of Grand River, west of Latson Road
Zoning:	RCD Regional Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the submittal (site plan dated 12/17/14) requesting inclusion of the subject site into the adjacent and surrounding Livingston Commons Planned Unit Development. The proposal includes rezoning of the site from RCD to NR-PUD, a site plan for development of a new restaurant and an amendment to the PUD Agreement for the entire development.

We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Master Plan and Zoning Ordinance and provide the following comments for your consideration.

A. Summary

1. The applicant should provide updated calculations pertaining to size of uses.
2. Building design and materials are subject to review and approval by the Planning Commission.
3. Any issues identified by the Township Engineer and/or Brighton Area Fire Department must be addressed.
4. Use of off-street parallel parking spaces is relatively unusual.
5. The barrier curb does not meet the conditions for reduced parking space depth, although vehicle overhang is unlikely to cause any conflicts.
6. The project does not include the 5 RV parking spaces required by Ordinance. We believe the intent is that such spaces can be found elsewhere within the PUD (although their use will not be convenient to drivers of such vehicles).
7. The landscape plan is deficient in terms of greenbelt, buffer zone and parking lot plantings.
8. There are minor discrepancies between the table of plantings and landscape plan that need to be corrected.
9. Authorization is needed from the adjacent property owner to the east for the 4 tree plantings proposed.
10. Planning Commission approval is needed for waste receptacle placement in a required side yard.
11. The PUD Agreement requires ornamental lighting along arterial rights-of-way. Based on the detail sheets, this appears to be provided although its location is unclear.
12. Planning Commission approval is need for the 2nd wall sign and 2nd monument sign.

B. Proposal

The applicant requests RCD to NR-PUD rezoning, as well as site plan approval and amendment to the existing PUD Agreement for the surrounding development (Livingston Commons).

The proposed project includes demolition of the existing building and construction of a 3,848 square foot restaurant in its place. Conventional sit-down restaurants are permitted land uses in the NR-PUD.



Aerial view of site and surroundings (looking south)

C. NR-PUD Rezoning Review

There are several sections of Article 10 (Planned Unit Development) applicable to this request. Given the proposal is to include a relatively small parcel (1.11 acres) into a much larger, established PUD (89 acres), we have reviewed the PUD rezoning component of the request based upon those standards most applicable to this specific request.

For reference purposes, this includes standards found in Sections 10.02 (Qualifying Conditions), 10.03.05 (Non-residential Planned Unit Developments) and 10.07 (Standards for Approval of Conceptual PUD Site Plan).

- 1. Qualifying Conditions.** Given the nature of the proposal, the larger PUD has already been determined to meet the qualifying conditions. In our opinion, the request to incorporate an adjacent 1-acre parcel within the overall PUD does not alter this condition.
- 2. NR-PUD.** The NR-PUD provides several specific requirements, including size of uses, open space, permitted uses, traffic circulation, site design, architecture and utilities. Comments are provided below on the regulations applicable to this particular request:
 - a. *Size of uses.* The NR-PUD limits the overall site to a maximum of 60% for commercial uses. While we do not expect the inclusion of the subject site into the PUD to have much of an impact on this standard, the applicant should provide the Township with updated calculations for confirmation.
 - b. *Open space.* The NR-PUD requires a minimum open space ratio of 25% throughout the PUD. Calculations provided by the applicant indicate the subject site will have an open space ratio of 30% upon redevelopment.
 - c. *Permitted uses.* Conventional restaurants are listed as permitted uses in the RCD.
 - d. *Traffic circulation.* The site currently has access via an easement on the adjacent property to the east. The proposal includes a vehicular connection to the remainder of the PUD site, which is consistent with the intent of a PUD and the PUD Agreement.

- e. *Site Design.* Elements such as landscaping, lighting, pedestrian circulation and signage are addressed in our site plan review below (paragraph D of this review letter).
- f. *Architecture.* Building materials and design are subject to review and approval of the Planning Commission.

The proposed flat-roofed building is predominantly brick with varying horizontal and vertical materials and accents. The proposed color palette is generally earth tones with splashes of color (red and green) coming from canvas awnings and signage.

The PUD Agreement requires that all out parcel buildings have wall surfaces with a minimum of 80% natural materials. Given the fact that the canopies cover brick portions of the building, we are of the opinion that this standard is met.

Our only remaining comment is that any roof mounted equipment must be fully screened.

- g. *Utilities.* Given the site's location along Grand River and the fact that it has already been developed, we are under the impression that necessary utilities will be available to serve the proposed redevelopment. With that being said, we defer to the Township Engineer and Brighton Area Fire Department for a detailed review under this criterion.

3. PUD Plan. Section 10.07 provides specific site plan requirements for PUD projects.

- a. *Qualification requirements.* Given the nature of the request, we are of the opinion that the proposal will not alter the original finding that the overall project met the PUD qualification requirements.
- b. *Beneficial effect.* The inclusion of the site should make for a more harmonious project. As noted in the submittal, at the time of the original PUD, the subject site was under different ownership and was excluded from the PUD.

From a planning and zoning standpoint, it seems logical to include the property within the larger surrounding development where benefits may include shared access and compatibility of site design features.

- c. *Master Plan.* The Township Master Plan identifies the site as Regional Commercial, which is consistent with the current use and zoning. In our opinion, the proposal to include the subject site within the overall PUD remains consistent with the goals, objectives and future land use map of the Township Master Plan.
- d. *Natural and historical features.* As a previously developed site, we are unaware of any natural or historical features that warrant protection under the PUD.
- e. *Utilities.* We defer to the Township Engineer and Brighton Area Fire Department for specific comments on utilities for the proposed project.
- f. *Vehicular and pedestrian circulation.* Although it does not show on the aerial photo on Page 2 of this letter, the submittal identifies an existing 8-foot wide sidewalk along Grand River Avenue. The proposed plan includes a 7-foot wide sidewalk between the building and parking lot.

Vehicular access is currently provided via a shared access easement with the adjacent property to the east. Proposed amendments to the PUD Agreement would allow for retention and use of this access drive/easement. As proposed, another shared access point will be provided at the rear of the subject site for connection to the remainder of the overall PUD.

Additionally, while minimum space dimensions are met, use of off-street parallel parking is relatively uncommon and parking within the southernmost space will likely be difficult. Furthermore, these spaces are 16 feet deep and about a 4-foot wide barrier curb. Section 14.06.06 allows a 2-foot vehicle overhang when spaces about a 7-foot wide sidewalk or a curbed landscape area. The barrier curb proposed does not meet this condition, although it will likely prevent conflicts due to vehicle overhang.

D. Site Plan Review

1. Dimensional Requirements. The project has been reviewed for compliance with the dimensional standards of this PUD as follows:

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
NR-PUD	1	120	10	10	5	5 side/rear	75	50% building 90% impervious
Proposal	1.11	120	35.7	20.5 (E) 20.8 (W)	250	10 side 20 rear	26	8% building 70% impervious

2. Parking. Based upon the standards of Section 14.04, the project requires 43 parking spaces, while 49 are provided including the 2 required barrier free spaces. If the proposed restaurant does not have a liquor license, 5 longer spaces for RVs and semi-trucks are required in addition to the minimum requirement.

The lack of on-site RV spaces will likely be mitigated given the site’s inclusion into the overall PUD; however, given site design, use of such spaces will not be convenient for RV or semi-truck drivers/passengers.

The parking spaces and drive aisles meet or exceed the dimensional standards of Section 14.06, although the applicant should be aware that looped (or double) striped spaces are required.

3. Loading. The required loading area is provided at the southwest corner of the building.

4. Landscaping. To help the applicant and Commission, we have reviewed the landscape plan based on the conventional standards of Section 12.02. Generally speaking, PUDs are expected to go beyond the minimum standards in terms of landscaping.

Location	Requirements	Proposed	Comments
Front yard greenbelt	4 canopy trees 20-foot width	3 ornamental trees 2 evergreen trees 30 shrubs 35-foot width	Deficient by 2 canopy trees, although 3 canopy trees are proposed on the adjacent property
Buffer zone “C” (E)	20 canopy trees OR 20 evergreens OR 80 shrubs (OR combination thereof) 10-foot width	12 existing evergreens 5 canopy trees 2 evergreen trees 1 ornamental tree 10-foot width	Deficient by 1 canopy/evergreen tree OR 4 shrubs, although 1 evergreen tree is proposed on the adjacent property
Buffer zone “C” (W)	20 canopy trees OR 20 evergreens OR 80 shrubs (OR combination thereof) 10-foot width	3 canopy trees 49 shrubs 10-foot width	Deficient by 5 canopy/evergreen trees OR 20 shrubs, although there are 7 existing evergreen trees on the adjacent property
Buffer zone “C” (S)	7 canopy trees OR 7 evergreens OR 26 shrubs (OR combination thereof) 10-foot width	3 canopy trees 2 evergreen trees 8 shrubs 20-foot width	Requirements met

Parking lot	5 canopy trees 490 SF of landscaped area	3 canopy trees 2 ornamental trees 1 evergreen tree 500+ SF of landscaped area	2 additional canopy trees
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There are inconsistencies between the table of plantings and landscape plan in terms of the number of plantings proposed for Red Maple, Dwarf Burning Bush and Rose Glow Barberry. The applicant must correct these minor discrepancies to ensure consistency/accuracy in the future.

Lastly, the applicant will need authorization from the adjacent property to the east for the 4 tree plantings proposed.

- 5. Waste Receptacle and Enclosure.** The project includes a new waste receptacle and enclosure southwest of the proposed building. Section 12.04 requires a rear yard or non-required side yard location, unless otherwise approved by the Planning Commission. The proposed placement encroaches into the required side yard.

Sheet SP notes the use of a 10' x 20' concrete base pad, while details include use of masonry enclosure, both of which comply with Ordinance requirements.

- 6. Exterior Lighting.** The submittal includes a lighting plan (Sheet LT1), which proposes the installation of 5 light poles along the driveway and within the parking lot, as well as 16 wall mounted fixtures. The photometric readings are rather modest (3.8 footcandle maximum) and well within that allowed by Ordinance.

Fixture/pole details on Sheet LT2 identify the use of an ornamental light pole/fixture at the site entry, as well as downward directed, cut-off pole and wall mounted fixtures.

The PUD Agreement states that ornamental lighting will be provided along arterial rights-of-way. It is unclear where the ornamental pole/fixture is to be placed.

- 7. Signs.** The submittal proposes 2 monument signs and 2 wall signs. The Ordinance limits businesses on internal lots to 1 wall sign and 1 monument sign. However, there are exceptions whereby the Planning Commission may allow a 2nd wall sign for lots that require additional visibility and a 2nd monument sign for an outlot with at least 100 feet of frontage and shared access.

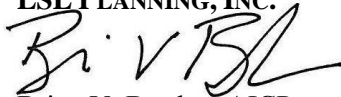
The size, design and placement of all signs are compliant with the conventional Ordinance, as well as the PUD Agreement, although the applicant should be aware that a sign permit will be required prior to installation (if approved).

- 8. Impact Assessment.** The submittal includes an Impact Assessment (4/25/14). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at borden@lslplanning.com.

Sincerely,

LSL PLANNING, INC.



Brian V. Borden, AICP
Senior Planner



January 6, 2015

Ms. Kelly Van Marter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Re: Red Olive Site Plan Review #2

Dear Ms. Van Marter:

We have reviewed resubmitted site plan documents and proposed PUD amendment for the Red Olive Restaurant dated December 19, 2014. The site is on the south side of Grand River just west of Latson Road and between the 5/3rd Bank and White Castle Restaurant and currently contains an old restaurant building. The petitioner is planning to demolish the existing building and associated parking lot and construct a new restaurant and parking lot.

The petitioner has also requested the property be re-zoned from Regional Commercial District to Non-Residential Planned Unit Development District. This would permit the property to join the surrounding PUD and utilize the existing private road network to improve site accessibility. Tetra Tech has reviewed the documents and offers the following comments for consideration by the planning commission:

SUMMARY

1. Review proposed hydrant arrangement and show all existing and proposed public water main easements.

SITE PLAN

1. The updated water main and service connections include two 6-inch tapping sleeves for the proposed fire hydrant and 6-inch fire protection line within several feet of one another. Existing water main easement should be shown on the drawings, including a new easement if the hydrant extends beyond the limit of the easement. Recommend combining into a single 8-inch tap and move fire suppression shutoff valve to the end of the line with the hydrant branch off a tee. This will help avoid with the adjacent storm sewer. Check if the water main to the east can be shut down to allow for a tee to be installed on the existing water main without a tapping sleeve.

Verify internal RPZ on fire department connection to avoid backflow into MHOG system. The connection is shown in plan view, however, no additional details or representation are included in the architectural drawings. The construction plans will be required to be submitted to MHOG for review.

Tetra Tech

1921 East Miller Road, Suite A, Lansing, MI 48911
Tel 517.394.7900 Fax 517.394.0011 www.tetrattech.com

Ms. Kelly Van Marter
Rezoning Application and Site Plan Review #2 – Red Olive
January 6, 2015
Page 2

The petitioner should revise and resubmit the site plan to address the above comments prior to approval.

Please call if you have any questions.

Sincerely,



Unit Vice President



copy: James Barnwell, P.E., Desine Inc.



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

December 29, 2014

Kelly VanMarter
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Red Olive Restaurant
3838 E. Grand River
Revised Site Plan Review

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned revised site plan. The plans were received for review on December 23, 2014 and the drawings have a revised date of December 17, 2014. The project is based on a new 3,848 square foot building to be used as a Restaurant (Assembly Use). The plan review is based on the requirements of the International Fire Code (IFC) 2012 Edition.

The applicant has addressed all of the issues made in our October 14, 2014 letter and this submittal now appears to be in general conformity with the adopted fire prevention code.

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "Michael Evans".

Michael Evans, EFO, CFPS
Deputy Fire Chief

**IMPACT ASSESSMENT
for
RED OLIVE RESTAURANT**

GENOA TOWNSHIP

DEC 19 2014

Owner:

PKJJ, LLC
29329 Paramount Court
Farmington Hills, MI 48331

Prepared by:
DESINE INC.
2183 Pless Drive
Brighton, Michigan 48114

April 25, 2014



A. INTRODUCTION

This impact assessment has been prepared pursuant to Article 18 – SITE PLAN REVIEW of the Zoning Ordinance for the Township of Genoa, Livingston County. This assessment addresses the impact of the proposed redevelopment of 1.11 acres on the natural features, economic condition, and social environment of the Township. The subject parcel is currently zoned RC (Regional Commercial) within the Official Township Zoning Map.

The existing facilities include a 2,546 sq., ft. one-story building and a small parking area to the south of the building. The paved access drive crosses adjacent property to the east over a 0.21 acre ingress and egress easement. Traffic exiting onto Grand River Avenue is restricted to right turns only by means of a sign and a raised curb-island.

The submitted Plan presents the applicant’s intended demolition and decommissioning of the existing building and construction of a proposed restaurant 3,848 sq., ft. in area. Landscaping will be added to the site. Drainage will be collected by subsurface storm sewers and directed to a surface inlet to subsurface drainage at the southeast corner of the site.

This impact assessment has been prepared under the direction of and by:

James M. Barnwell, P.E.
DESINE INC.
2183 Pless Drive
Brighton, Michigan 48114
(810) 227-9533

The civil engineering / surveying firm of DESINE INC. has been in practice since 1989. Mr. Barnwell is a licensed Civil Engineer with experience in private and municipal developments including a number of projects within Genoa Township and Livingston County.

B. SITE LOCATION / DESCRIPTION

The site consists of approximately 1.11 acres, which is currently zoned RC (Regional Commercial). The property is located along the south side of Grand River Avenue, approximately 950-feet westerly from Latson Road. The subject parcel currently has a 2,546 sq. ft. building with associated parking as presented on the Site Plan. The existing building and pavement will be demolished. A new 3,848 sq. ft. restaurant with curbed pavement will be constructed as shown on the Site Plan.

C. IMPACT ON NATURAL FEATURES

The existing topography of the site is generally flat, with a moderate grade from north to south. The site exhibits elevation differences from 1,010 +/- at the north property line to 1,003 +/- at the southeast property corner. Surface drainage is generally north to south. The current property has turf primarily north and east of the building and turf buffers adjacent to the parking pavement. The proposed layout slightly reduces the turf area and increases the landscaping vegetation.

The soils on the property are of the Miami Loam Series. The site is predominantly mild slopes of 2 to 6 percent. These soils are generally well drained, moderately permeable, loamy sands. The United States Department of Agriculture, Soil Conservation Service, prepared the soil classification as are presented in the "Soil Survey of Livingston County."

The applicant will be connecting to the existing sanitary sewer and water service leads to public sanitary sewer and water mains along Grand River Avenue. The sanitary lead will include a pre-treatment tank to collect fats, oils and greases prior to reaching the main. Routine maintenance to clean out the grease trap will be required.

The applicant is proposing to continue using the building and site features for food service related to their business (Red Olive Restaurant). The improvements to the site include new building construction, new parking lot, lighting, utilities and additional landscaping throughout the site.

A minor increase to the subject parcels impervious areas is proposed. The impervious and pervious surfaces drain from north to south into a surface inlet at the southeast corner of the property. Runoff continues through subsurface drainage sewers to a community detention basin to the west. Storage from the detention basin drains westerly through private drains that eventually arrive at the Marion-Genoa County Drain.

No impact to local aquifer characteristics or groundwater recharge capacity is anticipated. Surface water runoff from the site currently percolates through the soils or flows into the community detention basin to the south.

A minimum variety of wildlife habitats exist on the property. Wildlife supported in these areas is generally smaller field animals and birds. The current uses of the adjacent properties and the existence of Latson Road and Grand River Avenue limits the quality of upland habitat available.

Existing vegetation on the site will be improved. The natural vegetation buffer along the property edges will remain. The overall quality and quantity of vegetation and ground cover will be improved.

D. IMPACT ON STORM WATER MANAGEMENT

Minor changes to the subject parcels impervious areas are proposed that will not result in any significant change in the site run-off. A small portion of the site within the Grand River Avenue Right-of-Way will continue to be channeled to the Grand River Avenue drainage system. The south portion of the site will be collected by subsurface pipes outleting to the community detention basin to the west. The existing vegetation filters the stormwater runoff prior to being detained in the existing pond.

Soil erosion and sedimentation are controlled by the provisions of the Natural Resources and Environmental Protection Act, No. 451 of the Public Acts of 1994, as amended and is administered by the Livingston County Drain Commissioner. The Contractor will be required to comply with all regulations including control during and after construction. Required silt fence and inlet filter locations are depicted on Sheet SE.

The Contractor shall be responsible for initiating and maintaining adequate dust control measures during and after construction. Dust control measures used during construction may consist of site watering, mulching of completed areas, installation of windbreak fencing, and application of chemical dust control materials.

Implementing soil erosion control methods will minimize any impact to adjoining properties due to the temporary ground disturbance proposed for the site. Impacts to adjacent properties due to surface water runoff will be minimized by the Soil Erosion and Sedimentation Control measures proposed.

E. IMPACT ON SURROUNDING LAND USES

The property to the north of the subject parcel, across Grand River Avenue, is zoned MUPUD (Mixed Use Planned Unit Development). The properties to the east, south and west of the subject parcel are zoned NRPUD (Non-residential Planned Unit Development). To the east is the Fifth Third Bank. To the south is Walmart. To the west is White Castle restaurant.

The subject property is zoned RC (Regional Commercial) District. No change in use is proposed. The improvements to the site are consistent with the commercial uses in the area. The additional landscaping will upgrade the functionality of the property. All areas disturbed by construction will require restoration as outlined in the project plans and required by the permitting agencies.

F. IMPACT ON PUBLIC FACILITIES AND SERVICES

The Livingston County Sheriff and Michigan State Police will provide Police protection. Additional services required to accommodate this development are anticipated to be minor.

The Brighton Area Fire Department as a part of an existing governmental agreement will provide fire protection service. An existing fire hydrant is located directly south of the subject property on the south side of the adjacent service drive. No additional fire protection is required to service this facility. The existing entrances for the property will provide access for fire trucks and emergency vehicles.

The upgrade of this facility will not create any direct adverse impact on the schools.

G. IMPACT ON PUBLIC UTILITIES

The property is presently served by municipal sewer and water systems.

Connection to the water main and sanitary sewer is possible through the existing leads located north of the existing building.

The site is serviced by electric, gas, phone and cable systems located along Grand River Avenue. These utilities currently service the site and the utility companies have indicated they have the ability to provide the necessary utilities to operate the proposed facility.

H. STORAGE AND HANDLING OF ANY HAZARDOUS MATERIALS

The restaurant uses within the proposed building will not use, store, generate and/or discharge potentially polluting materials with the possible exception of industrial strength degreasing solvents and cleaners. All solid wastes will be properly disposed of by a licensed disposal firm on a regular basis. A visually screened dumpster is proposed on the site to the south of the building.

Hazardous materials that may be stored on site may include cleaning supplies. These materials would be in extremely small quantities. The cleaning supplies shall not be stored in any rooms or closets that have a floor drain.

I. IMPACT ON TRAFFIC AND PEDESTRIANS

Current access to the site consists of one drive from Grand River Avenue. The proposed site plan shows access to the parcel being provided both from the existing drive off Grand River Avenue and from a new proposed drive to the south service drive. Patrons exiting to Grand River Avenue will be restricted to a right turn only. The south service drive will permit routing to the existing traffic lights on Grand River Avenue. The drives and parking will be paved and curbed.

The proposed use is generally consistent with the "Quality Restaurant" category (Code 831) found within the Trip Generation Manual. The building area consists of 3848 +/- total square feet. The average weekday experiences 9.40 trips per peak hour for each 1,000 square feet of gross floor area. A restaurant has a peak hour on Saturdays with 10.82 trips per peak hour for each 1,000 square feet of gross floor area. The anticipated trip generation during the weekday for the peak hour on the subject parcel is 36 trips.

The peak hour on Saturday is projected at 41.6 trips.

A temporary one-lane closure may be required on Grand River during construction to direct traffic away from drive entrance work both at Grand River Avenue and the service drive to the south. The service drive to the south currently utilizes a timber retaining wall along the south property that will be removed and replaced with an at grade drive entrance.

The amount of parking being provided meets the Township Ordinance for restaurants with no drive through window and no alcohol served.

Loading will occur through the parking lot area in the back with no disruption to public traffic movement.

There is an existing sidewalk in front along Grand River Avenue with barrier free ramps at the driveway. The proposed curb island in the driveway will also include barrier free ramps.

No adverse impacts on vehicular or pedestrian traffic are anticipated.

J. SPECIAL PROVISIONS

No special provisions or requirements are currently proposed for this facility.

K. SITE LIGHTING

In addition to proposed building mounted exterior lights, three pole mounted lights, a maximum of 30 feet above parking lot grade, are proposed.

L. HOURS OF OPERATION

Hours of operation will be consistent with their existing locations as follows:

7:00 a.m. to 9:00 p.m. Monday – Thursday

7:00 a.m. to 10:00 p.m. Friday & Saturday

8:00 a.m. to 9:00 p.m. Sunday



2911 Dorr Road
 Brighton, MI 48116
 810.227.5225
 810.227.3420 fax
 genoa.org

MEMORANDUM

TO: Jim Barnwell, Desine Engineering

FROM: Kelly VanMarter, Assistant Township Manager/Community Development Director

DATE: January 8, 2015

RE: Red Olive Restaurant Sewer and Water Tap Fees
 3838 E. Grand River (11-05-400-025)

This memo will describe the connection fees required for a new 3,848 sq. ft. Red Olive restaurant located at 3838 E. Grand River.

3,848 sq. ft. sit down restaurant (no liquor) @ 2.4 REU per 1,000 sq. ft. = 9.23 REU

LESS PREVIOUSLY PAID:

Water (Grand River Water Special Assessment)	-6.0 REU
Sewer (former 2,922 sq. ft. restaurant @2.4 per 1,000 sq. ft.)	-7 REU

NEW CONNECTION CHARGE =

Water:	9.23 REU – 6 REU (assessed) =	3.23 REU
Sewer:	9.23 REU – 7 REU (credits for existing bldg.) =	2.23 REU

Water	3.23 REU @ \$7,900	\$ 25,517.00
Sewer	2.23 REU @ \$7,200	\$ 16,056.00
TOTAL DUE:		\$ 41,573.00

Connection Fees must be paid at time of land use permit issuance.

A meter package may also need to be purchased including the appropriate sized meter and a MIU (meter interface unit). Should you have any questions please feel free to contact me at 810-227-5225.

SUPERVISOR

Gary T. McCririe

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

MANAGER

Michael C. Archinal

TRUSTEES

H. James Mortensen
 Jean W. Ledford
 Todd W. Smith
 Linda Rowell

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
NOTICE OF PUBLIC HEARING
NOVEMBER 10, 2014
6:30 P.M.**

The Genoa Township Planning Commission will hold a public hearing at 6:30 p.m. on November 10, 2014 requesting recommendation of the following:

OPEN PUBLIC HEARING #1... Review of a site plan, environmental impact assessment, rezoning, and planned unit development amendment for a proposed 3,848 sq ft Red Olive Restaurant. The property in question is located at 3838 E. Grand River Avenue, Howell, Michigan 48443. The request is petitioned by PKJJ, LLC.

OPEN PUBLIC HEARING #2... Review of a sketch plan, special use, and environmental impact assessment for a proposed 6,000 sq ft baseball facility, located within an existing building at 7341 W. Grand River Avenue, Brighton, Michigan 48116. The request is petitioned by Batter Up Batting Cages, LLC.

Review of a sketch plan, special use, and environmental impact assessment for a proposed 6,000 sq ft baseball facility, located within an existing building at 7341 W. Grand River Avenue, Brighton, Michigan 48116. The request is petitioned by Batter Up Batting Cages, LLC.

Please address any written comments to the Genoa Township Planning Commission at 2911 Dorr Rd, Brighton, MI 48116 or via email at kathryn@genoa.org. All materials relating to this request are available for public inspection at the Genoa Township Hall prior to the hearing.

Genoa Township will provide necessary reasonable auxiliary aides and services to individuals with disabilities who are planning to attend. Please contact the Genoa Township Hall at (810) 227-5225 in advance of the meeting if you need assistance.

(10-26-2014 DAILY 218007)

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
NOTICE OF PUBLIC HEARING
JANUARY 12, 2014
6:30 P.M.**

The Genoa Township Planning Commission will hold a public hearing at 6:30 p.m. on January 12, 2014 requesting recommendation of the following:

OPEN PUBLIC HEARING #1... Review of a site plan, special use, and environmental impact assessment for a proposed new 22,600 sq. ft. industrial building. The building will be used to sort, warehouse, and distribute batteries which are categorized as hazardous materials. Storage and/or use of hazardous materials require special land use approval. The property in question is located at 5900 Brighton Pines Court, Howell, Michigan 48443. The request is petitioned by Brivar Construction Company.

OPEN PUBLIC HEARING #2... Review of a site plan, environmental impact assessment, rezoning, and planned unit development amendment for a proposed 3,848 sq. ft. Red Olive Restaurant. The property in question is located at 3838 E. Grand River Avenue, Howell, Michigan 48443. The request is petitioned by PKJJ, LLC.

OPEN PUBLIC HEARING #3... Review of a site plan, environmental impact, and planned unit development amendment for a proposed redevelopment of an existing outparcel for a new 12,000 sq ft multi-tenant building. The property in question is located at 3950 E. Grand River Avenue, Howell, Michigan 48443. The request is petitioned by RG Properties, Inc.

OPEN PUBLIC HEARING #4... Review of sketch plan for a proposed 12,439 sq. ft. worship facility and coffee shop to occupy space within the multi-tenant building located at the northwest corner of Grand River Avenue and Genoa Business Park Drive (2250 Genoa Business Park Drive). The request is petitioned by Lindhout Associates.

Please address any written comments to the Genoa Township Planning Commission at 2911 Dorr Rd, Brighton, MI 48116 or via email at kathryn@genoa.org. All materials relating to this request are available for public inspection at the Genoa Township Hall prior to the hearing.

Genoa Township will provide necessary reasonable auxiliary aides and services to individuals with disabilities who are planning to attend. Please contact the Genoa Township Hall at (810) 227-5225 in advance of the meeting if you need assistance.

(12-26-2014 DAILY 225473)



2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

October 20, 2014

To Whom It May Concern:

There will be a hearing for a rezoning in your general vicinity on Monday, November 10 at 6:30 p.m. at Genoa Township Hall, located at 2911 Dorr Road, Brighton, Michigan.

The property in question is located at the former Prairie House / BBQ restaurant site, 3838 East Grand River Avenue, Howell, Michigan 48843. The rezoning, site plan, environmental impact assessment, and planned unit development amendment have been requested for a proposed 3,848 sq ft Red Olive Restaurant. The request is petitioned by PKJJ, LLC.

Materials relating to this request are available for public inspection at the Genoa Township Hall during regular business hours. If you have any questions or objections in this regard, please be present at the public hearing noted above. Written comments may be addressed to the Planning Commission.

Genoa Township will provide necessary reasonable auxiliary aides and services to individuals with disabilities who are planning to attend. Please contact the Genoa Township Hall at (810) 227-5225 in advance of the meeting if you need assistance.

Sincerely,

Kelly VanMarter
Assistant Township Manager / Community Development Director
KKV/kp

SUPERVISOR
Gary T. McCririe

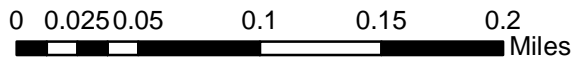
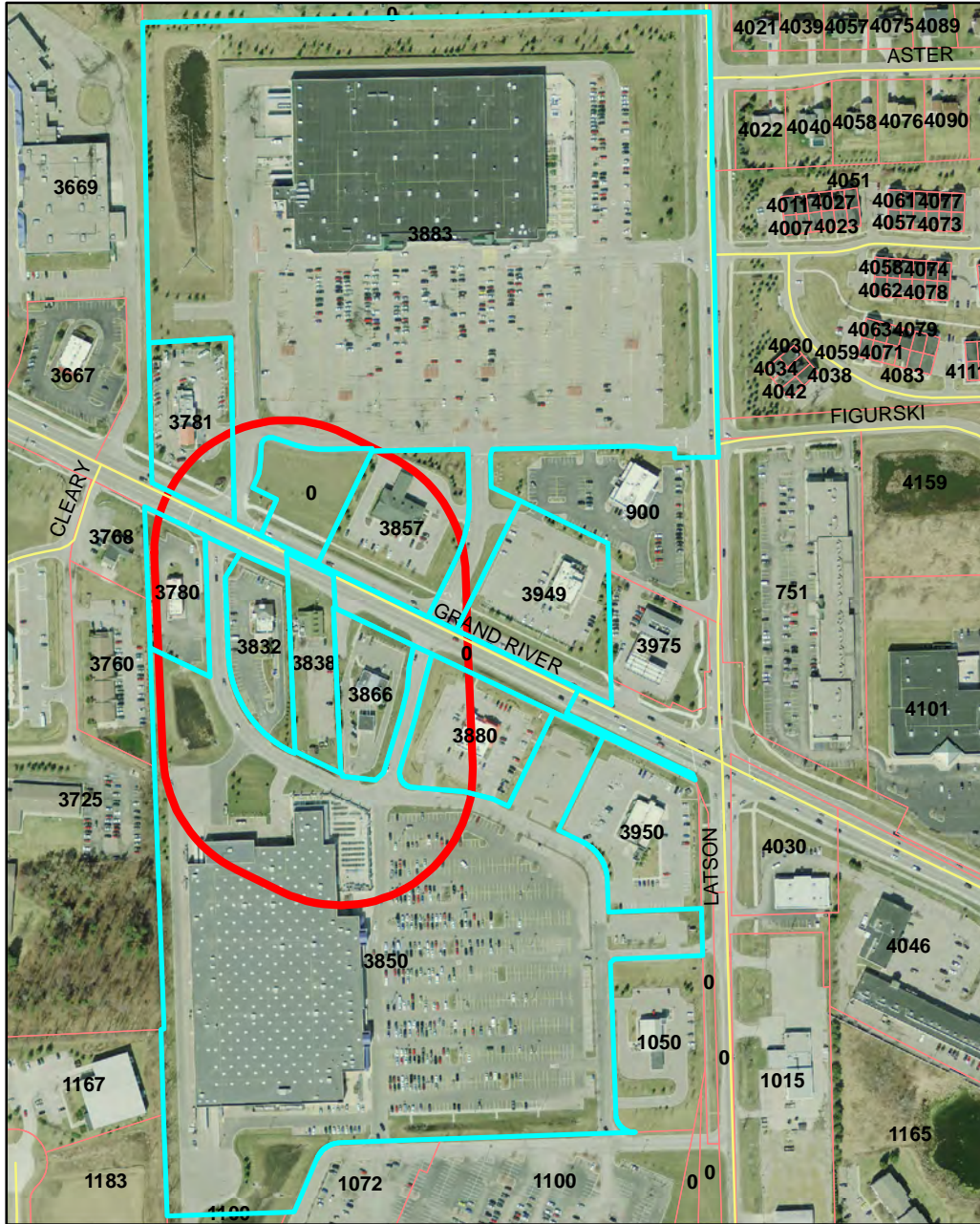
CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

MANAGER
Michael C. Archinal

TRUSTEES
H. James Mortensen
Jean W. Ledford
Todd W. Smith
Linda Rowell

300-Foot Buffer for Noticing



Planning Commission Case #14-04
Applicant: PKJJ, LLC
Parcel: 11-05-400-025
Meeting Date: November 10, 2014



A & R DEVELOPMENT II, LLC
130 60TH ST SW
GRAND RAPIDS, MI 49548

OCCUPANT
3949 E GRAND RIVER
HOWELL, MI 48843

LIVINGSTON COUNTY ROAD COMM.
3535 GRAND OAKS DR
HOWELL, MI 48843

RNS HOWELL LLC
5215 OLD ORCHARD RD STE #760
SKOKIE, IL 60077

OCCUPANT
3780 E GRAND RIVER
HOWELL, MI 48843

PKJJ, LLC
1051 ANN ARBOR RD
PLYMOUTH, MI 48170

OCCUPANT
3838 E GRAND RIVER
HOWELL, MI 48843

DIPIPPO ASSOCIATES, LP
73 MACKAY AVENUE
WALDWICK, NJ 7463

OCCUPANT
3866 E GRAND RIVER
HOWELL, MI 48843

MCDONALD'S CORP 21-1123
PO BOX 182571
COLUMBUS, OH 43218-2571

OCCUPANT
3781 E GRAND RIVER
HOWELL, MI 48843

WAL-MART #DIVISION-STORE
#1754, DEPT 0555
PO BOX 8050 MS 0555
BENTONVILLE, AR 72712-8050

OCCUPANT
3850 E GRAND RIVER
HOWELL, MI 48843

TCF BANK, FACILITIES MANAGEMT
801 MARQUETTE AVE
MINNEAPOLIS, MN 55405

OCCUPANT
3857 E GRAND RIVER
HOWELL, MI 48843

MEIJER INC. - PROPERTY TAX DEPT
2929 WALKER AVE NW
GRAND RAPIDS, MI 49544

OCCUPANT
3883 E GRAND RIVER
HOWELL, MI 48843

WHITE CASTLE MICHIGAN LLC
555 W GOODALE STREET
COLUMBUS, OH 43215

OCCUPANT
3832 E GRAND RIVER
HOWELL, MI 48843

BOB EVANS FARMS, INC.
8111 SMITH'S MILL RD
NEW ALBANY, OH 43054

OCCUPANT
3880 E GRAND RIVER
HOWELL, MI 48843

SOUTHWIND RESTAURANTS, LLC
109 EAST BROADWAY
MT PLEASANT, MI 48858

QDOBA
3825 E GRAND RIVER AVE
HOWELL, MI 48843

*Final
Red Olive
300' Labels
10/17/14*

COVER SHEET FOR
AMENDMENT TO PLANNED UNIT DEVELOPMENT AGREEMENT
FOR PHASE I AND PHASE II LAND
BETWEEN
RLG HOWELL LLC AND GCG HOWELL LLC
AND
PKJJ, LLC
AND
TOWNSHIP OF GENOA
DATED _____, 2014

Prepared By and After Recording
Return To:
April Ann Jordan
Hedrick & Jordan Co., LPA
100 E. Third Street, Suite 500
Dayton, Ohio 45402
937-228-3889

**STATE OF MICHIGAN
COUNTY OF LIVINGSTON
TOWNSHIP OF GENOA**

AMENDMENT TO PLANNED UNIT DEVELOPMENT AGREEMENT

This Amendment to Planned Unit Development Agreement is made and entered into this ___ day of _____, 2014, by **RLG HOWELL LLC**, a Michigan limited liability company, and **GCG HOWELL LLC**, a Michigan limited liability company, both of 10050 Innovation Drive, Suite 100, Dayton, Ohio 45342 (collectively, "Owner"); **PKJJ, LLC**, a Michigan limited liability company, of _____ ("PKJJ"); and **GENOA CHARTER TOWNSHIP**, a Michigan municipal corporation, 2911 Dorr Road, Brighton, Michigan 48116 ("Township").

RECITATIONS:

Owner possesses fee title to certain real property located in Genoa Charter Township, Livingston County, State of Michigan, described in that certain Planned Unit Development Agreement dated April 6, 1999, and recorded at Liber 2609, Page 0205 of the records of Livingston County, Michigan (the "Phase I PUD").

Subsequent to the Phase I PUD, Owner and Township entered into that certain Planned Unit Development Agreement for Phase II Land dated August 17, 2009, and recorded at 200R-023916 of the records of Livingston County, Michigan (the "Phase II PUD"). The Phase I PUD applied to Phase I and Phase II land described therein, and the Phase II PUD modified provisions pertaining to Phase II.

In 2011 Owner and Township considered a further Amendment to the Phase I PUD Agreement that contemplated the reconfiguration of Lot #4 into two sub-lots; provided however the amendment was never finalized or executed, and as such is of no force or effect.

Pursuant to Article IV, Internal Road Network, subsection 4.1, the Phase I PUD contemplated that the property formerly owned by the Prairie House Restaurant and now owned by PKJJ (the "Red Olive Parcel") described on Exhibit A attached hereto could benefit from an easement established by Owner over and across the Red Olive Parcel.

Owner and PKJJ have agreed to amend Owner's existing Declaration of Restrictions and Easements for Outlots dated September 2, 1999, recorded September 10, 1999, at Liber 2652, Page 0082 of the records of Livingston County, Michigan (the "Declaration") to provide the Red Olive Parcel with access over the access ways on the adjacent lands of Owner and to subject the Red Olive Parcel to the terms of the Declaration.

In connection therewith, Owner and PKJJ wish to amend the Phase I PUD and the Phase II PUD to subject the Red Olive Parcel thereto pursuant to the terms contained herein.

NOW, THEREFORE, Owner and PKJJ, in consideration of the mutual promises contained in this Agreement, hereby agree as follows:

1. Article I, General Terms of Agreement of the Phase I PUD, shall be amended to add the following additional subsection:

1.7 The Red Olive Parcel shall be subject to the terms and conditions of the Phase I PUD, subject to the provisions of this Amendment.

2. Article II, Land Use Authorization, subsection 2.1 of the Phase I PUD, shall be amended to delete the sentence reading “Further, only one drive through restaurant facility shall be permitted and such use shall only be permitted on Lot #1.” The following shall be placed in its stead:

One drive through restaurant facility may be allowed on Lot 4. Additional drive through restaurant facilities may be allowed on all parcels within five hundred feet (500’) of each other, subject to Special Land Use approval by the Township, including the Special Use Requirements as outlined in the Special Land Use Regulations as they may exist from time to time. The Township and Owner agree that this use shall be considered upon providing that the stacking or queuing of such drive through restaurant facilities shall be sufficient to accommodate expected peak volumes and to minimize conflict with the internal road network located on the Property, as well as any public roadways.

3. Article IV, Internal Road Network of the Phase I PUD, shall be amended to add the following additional sentence:

Notwithstanding anything contained in the Phase I PUD to the contrary, the Red Olive Parcel shall be allowed to maintain access to the Grand River Avenue existing curb cut, provide such access shall be limited to “right-in, right-out” movement.

4. Article VI, Site Improvements, subsection 6.5(a) shall be amended to add the following additional sentence:

Notwithstanding anything contained herein to the contrary, in the event a multi tenant building is constructed on Lot #4, then one double row of parking may be installed in front of the building (also called the “front yard”) on Lot #4.

5. Article VI, Site Improvements, subsection 6.5(b) of the Phase I PUD, and subsection 6.4(B) of the Phase II PUD, shall each be deleted, it being acknowledged that Owner shall have no obligation to the Township to provide an entranceway landmark pursuant to the Phase I PUD or the Phase II PUD because such location or locations are not available for such signage. The following shall be inserted instead:

In the event a multi tenant building is constructed on Lot #4, then in addition to any signage otherwise permitted on Lot #4, a Township identification sign shall be placed by the Township on Lot #4. The type and design of the Township identification sign is depicted on

Exhibit B attached hereto. After the installation of the Township identification sign, Owner shall maintain same in good condition and repair.

6. Article VII, Design of Building and Signs, subsection 7.2, Signage, shall be amended to add the following additional sentence:

The owner of the Red Olive Parcel may install a monument sign abutting Grand River Avenue and other signs as may be permitted under the Declaration.

APPROVED by Owner and PKJJ on this ___ day of _____, 2014.

WITNESSES:

RLG HOWELL LLC, a Michigan limited liability company

By: Randall L. Gunlock, Trustee under the Amended Revocable Trust Agreement Dated May 30, 2013, Randall L. Gunlock, Grantor, Managing Member

By: Randall L. Gunlock
Its: Trustee

GCG HOWELL LLC, a Michigan limited liability company

By: Glenn C. Gunlock
Its: Managing Member

PKJJ, LLC, a Michigan limited liability company

By: _____
Its: _____

STATE OF _____)
) SS:
COUNTY OF _____)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by Randall L. Gunlock, Trustee under the Amended Revocable Trust Agreement Dated May 30, 2013, Randall L. Gunlock, Grantor, Managing Member of RLG Howell LLC, a Michigan limited liability company, on behalf of the company.

Notary Public

STATE OF _____)
) SS:
COUNTY OF _____)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by Glenn C. Gunlock, Managing Member of GCG Howell LLC, a Michigan limited liability company, on behalf of the company.

Notary Public

STATE OF)
) SS:
COUNTY OF)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by _____, the _____ of PKJJ, LLC, a Michigan limited liability company, on behalf of the company.

Notary Public

APPROVED by the Township Board for the Township of Genoa on the ____ day of _____, 2014, at a meeting duly called and held.

WITNESSES:

TOWNSHIP OF GENOA:

By:
Its:

By:
Its:

STATE OF)
) SS:
COUNTY OF)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by _____, who was duly authorized by the Genoa Township Board to sign this Amendment on behalf of Genoa Township and who acknowledged the same to be his/her free act and deed.

Notary Public

STATE OF)
) SS:
COUNTY OF)

The foregoing instrument was acknowledged before me the ____ day of _____, 2014, by _____, who was duly authorized by the Genoa Township Board to sign this Amendment on behalf of Genoa Township and who acknowledged the same to be his/her free act and deed.

Notary Public

EXHIBIT A

LEGAL DESCRIPTION OF RED OLIVE PARCEL

EXHIBIT B

TOWNSHIP IDENTIFICATION SIGN

Customer Name:	
Company:	
Street:	
City:	
State:	Zip:
Country:	
Phone:	
Fax:	
E-mail:	

Job Number:	
Order Taken By:	
Order Date:	
Delivery Date:	
Shipping:	
File Name: RGprop_genoaatwp_1214.fs	
Comments:	
Description:	

NOTE: All sales are final once proofing has begun. There are no refunds once production has begun. Jobs canceled prior to production may be subject to design fees. %50 deposit required before production to begin. Artwork & Files are owned exclusively by W4 Signs, Inc. unless originally provided by client or specifically stated. Original artwork files and rights may be purchased for an additional fee.

It is the responsibility of the client to ensure proof accuracy, including all spelling, colors & materials as indicated. After the 3rd proof, each additional revision will incur an additional \$20 fee. Proof approval authorizes W4 Signs to proceed with production of the design selected. Call for specific estimated completion time, otherwise jobs will be completed within the production schedule and/or notified for installation.

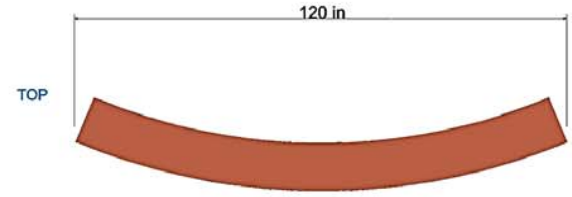
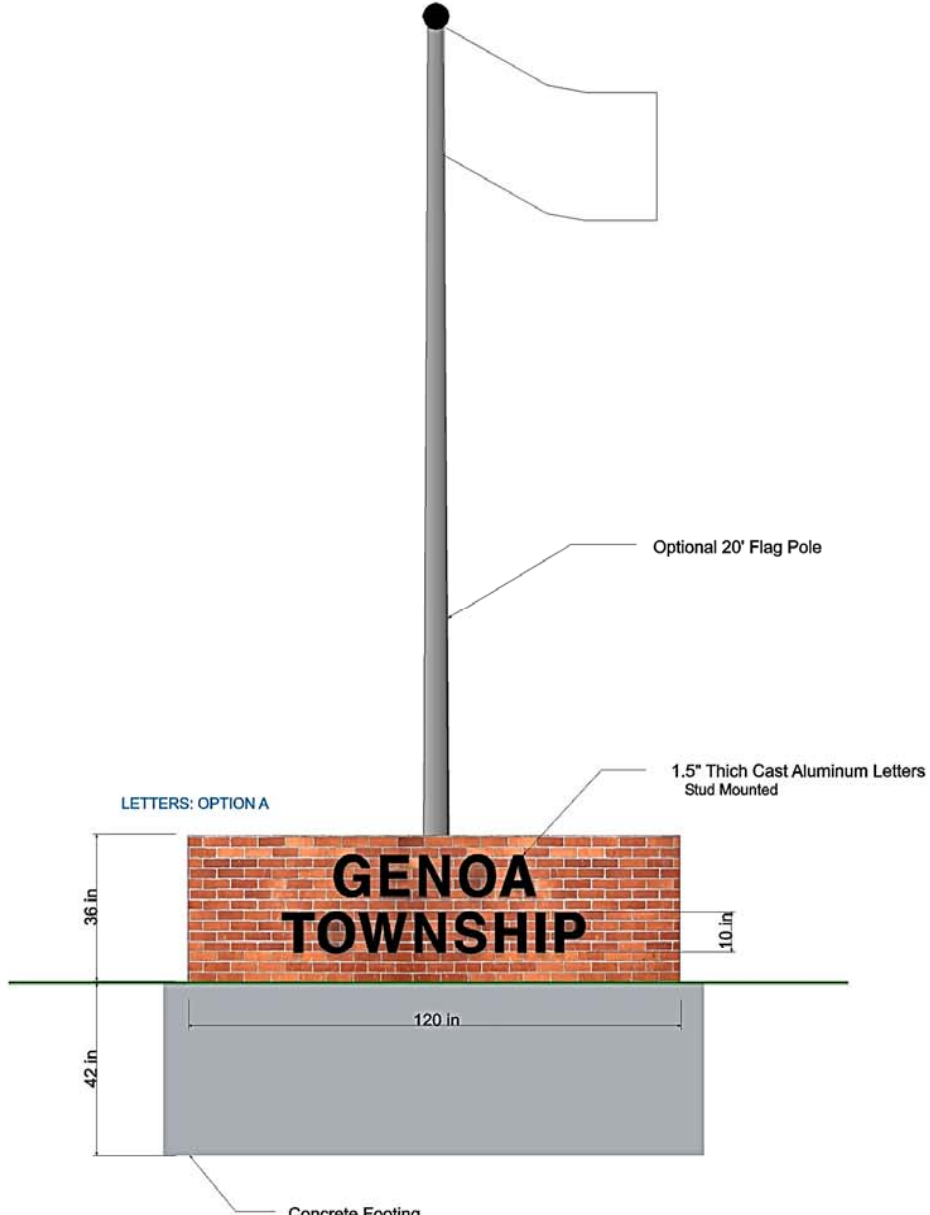
All Balances due upon completion / Installation.

Revisions: 1 2 3 4 5 6

Please verify your proof approval or revisions have been received.

It is the responsibility of the client to ensure proof accuracy, including all spelling, colors & materials specified.

Approval Signature: _____ Date: _____ NOT APPROVED: APPROVED: APPROVED W/ REVISIONS:



LETTERS: OPTION B



LETTERS: OPTION C

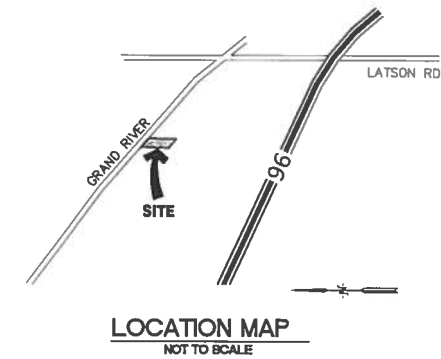


LETTERS: OPTION D



PROPOSED SITE PLAN FOR RED OLIVE RESTAURANT

3838 E. GRAND RIVER AVE, HOWELL
PART OF THE SOUTHEAST 1/4 OF SECTION 5
T2N-R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



LEGAL DESCRIPTION

Reference: Commitment for Title Insurance by Metropolitan Title Company, Commitment No. 121556 2014, Commitment Date April 10, 2007 at 8:00 a.m., Rev. B July 10, 2007

The land referred to in this Commitment, situated in the County of Livingston, township of Genoa, State of Michigan, is described as follows:

PARCEL No. 2

A part of the Southeast 1/4 of Section 5 Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, more particularly described as: Commencing at the Southeast Corner of Section 5 Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; thence N02°11'26"E 548.49 feet along the East line of said Section and the centerline of Latson Road; thence N60°51'00"W 982.34 feet along the centerline of Grand River Avenue to the POINT OF BEGINNING; thence S01°29'10"W 456.45 feet; thence N60°51'00"W 120.00 feet; thence N01°29'10"E 456.45 feet; thence S60°51'00"E 120.00 feet along said centerline of Grand River Avenue to the Point of Beginning. Subject to and together with easements and restrictions affecting title to the above described premises.

EASEMENT PARCEL

A non-exclusive easement for ingress and egress over a fifty foot wide strip of land being more particularly described as follows: Commencing at the Southeast Corner of Section 5, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; thence N02°11'26"E 548.49 feet along the East line of said Section and the centerline of Latson Road; thence N60°51'00"W 925.89 feet along the centerline of Grand River Avenue to the POINT OF BEGINNING; thence S01°29'10"W 173.79 feet; thence N88°30'50"W 50.00 feet; thence N01°29'10"E 200.00 feet; thence S60°51'00"E 56.45 feet along said centerline of Grand River Avenue to the Point of Beginning. Being a part of the Southeast 1/4 of Section 5, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan.

Tax Item No. 4711-05-400-025 201 47070

PROPERTY AREAS
PARCEL 2
CONTAINING
±48513 SF; ±1.11 ACRES

EASEMENT PARCEL
CONTAINING
±9344 SF; ±0.21 ACRES



AERIAL PHOTOGRAPHY BY:
Google maps

Aerial photographic underlay is an unrectified image and is oriented to the engineering line work with reasonable accuracy and precision, and may not accurately depict current site conditions.

SHEET INDEX

- EX EXISTING CONDITIONS/ DEMOLITION PLAN
- SP SITE DEVELOPMENT PLAN
- GR GRADING AND UTILITY PLAN
- SE1 SOIL EROSION AND SEDIMENT CONTROL PLAN
- SE2 SOIL EROSION NOTES AND DETAILS
- LA1 LANDSCAPE PLAN
- LA2 LANDSCAPE NOTES AND DETAILS
- LT1 PHOTO METRIC PLAN
- LT2 LIGHTING DETAILS
- DT1 SITE DEVELOPMENT NOTES AND DETAILS
- DT2 STORM SEWER & SANITARY SEWER NOTES AND DETAILS
- DT3 UNDERGROUND DETENTION NOTES AND DETAILS
- A 1 FLOOR PLANS
- A2 NORTH AND SOUTH ELEVATIONS
- A3 EAST AND WEST ELEVATIONS

OWNER/DEVELOPER
PKJJ, LLC
29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

ARCHITECT
PUCCI + VOLLMAR
508 E. GRAND RIVER AVENUE
BRIGHTON, MI. 48116
(810) 225-2930

CIVIL ENGINEER/LAND SURVEYOR
DESINE INC.
2183 PLESS DRIVE
BRIGHTON, MI. 48114
(810) 227-9533

DESINE INC.
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

REVISED	SCALE: NONE
SEP 18, 2014	PROJECT No.: 132308
DEC 17, 2014	DWG NAME: 2308-COV
	PRINT: DEC 17, 2014

EXISTING SOIL

MIAMI LOAM: 2-6% SLOPE
 GENERALLY SOILS ON THE PROPERTY ARE WELL DRAINED, MODERATELY PERMEABLE, LOAMY SANDS AS CLASSIFIED BY U.S.D.A. SOIL CONSERVATION SERVICE.

IMPACT ON SURROUNDING LAND USES

The property to the north of the subject parcel, across Grand River Avenue, is zoned MUPUD (Mixed Use Planned Unit Development). The properties to the east, south and west of the subject parcel are zoned NRPUD (Non-residential Planned Unit Development). To the east is the Fifth Third Bank. To the south is Red Olive. To the west is White Castle restaurant.

The subject property is zoned RCD (Regional Commercial District). No change in use is proposed. The improvements to the site are consistent with the commercial uses in the area. The additional landscaping will upgrade the functionality of the property. All areas disturbed by construction will require restoration as outlined in the project plans and required by the permitting agencies.

LEGAL DESCRIPTION

Reference: Commitment for Title Insurance by Metropolitan Title Company, Commitment No. 121556 2014, Commitment Date April 10, 2007 at 8:00 a.m., Rev. 8 July 10, 2007

The land referred to in this Commitment, situated in the County of Livingston, Township of Genoa, State of Michigan, is described as follows:

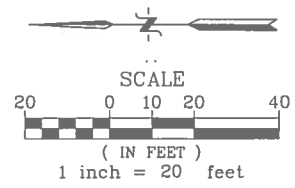
PARCEL No. 2

A part of the Southeast 1/4 of Section 5 Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, more particularly described as: Commencing at the Southeast Corner of Section 5 Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan; thence N02°11'26"E 548.49 feet along the East line of said Section and the centerline of Latona Road; thence N60°51'00"W 982.34 feet along the centerline of Grand River Avenue to the POINT OF BEGINNING; thence S01°29'10"W 456.45 feet; thence N60°51'00"W 120.00 feet; thence N01°29'10"E 456.45 feet; thence S60°51'00"E 120.00 feet along said centerline of Grand River Avenue to the Point of Beginning. Subject to and together with easements and restrictions affecting title to the above described premises.

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See Item No. 4711-05-400-025 201 47070



EXISTING STRUCTURE INVENTORY

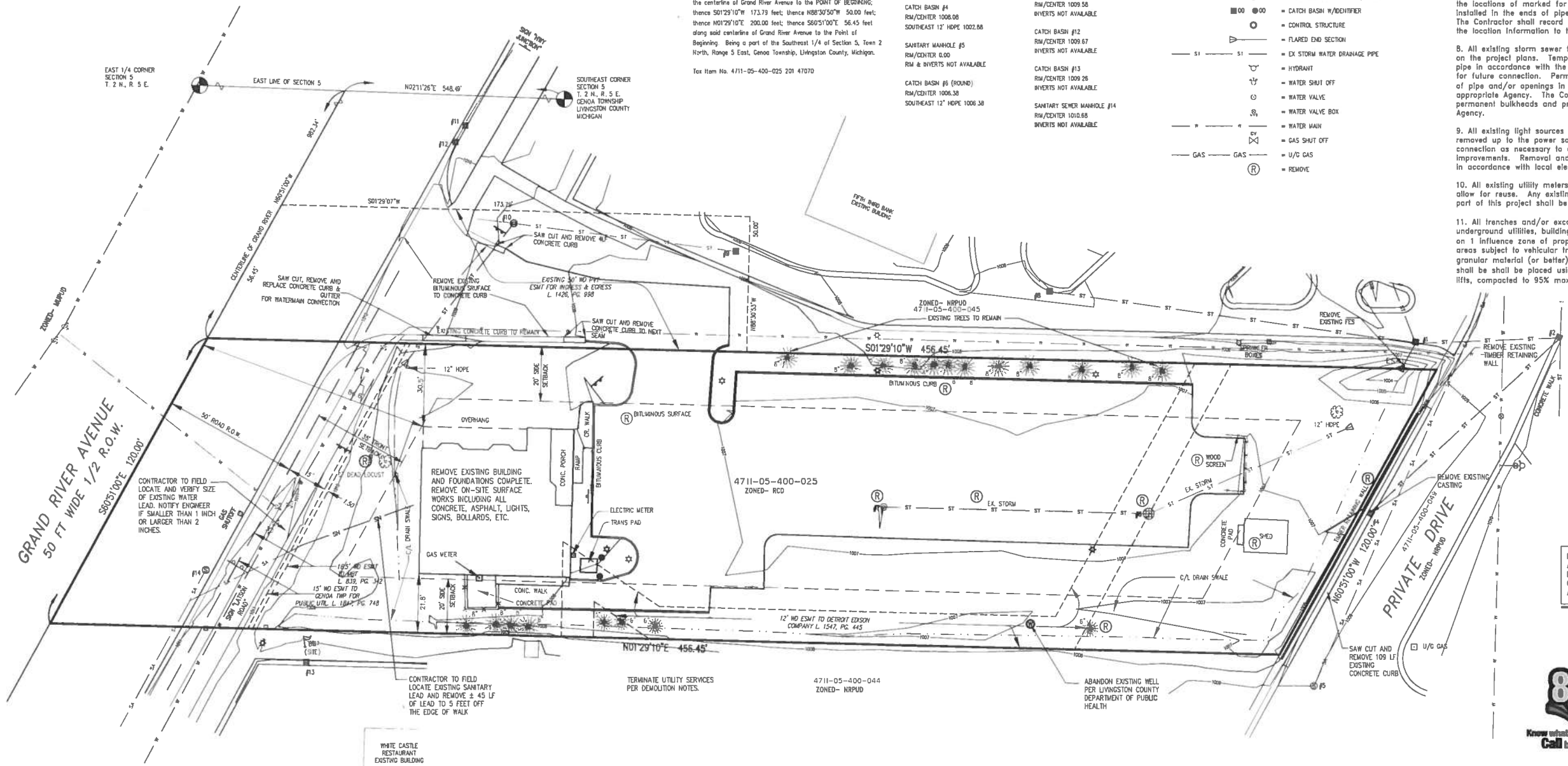
CATCH BASIN #1 RM/CENTER 1008.94 SOUTH 12' HOPE 1002.29 NORTHEAST 12' SDR 1003.59 NORTH 12' SDR 1002.64 NORTHWEST 12' HOPE 1002.54	STORM SEWER MANHOLE #7 RM/CENTER 1008.39 SOUTH 10' 1004.64
CATCH BASIN #2 RM/CENTER 1009.51 NORTH 12' HOPE 1002.01 NORTHWEST 12' HOPE 1001.91 WESTERLY 1001.11 EASTERLY 1001.11	CATCH BASIN #9 RM/CENTER 0.00 NORTHERLY 1001.11
SANITARY MANHOLE #3 RM/CENTER 0.00 RM & INVERTS NOT AVAILABLE	STORM SEWER MANHOLE #10 RM/CENTER 1008.53 SOUTH 12' SDR 1003.72 NORTH 12' SDR 1003.62
CATCH BASIN #4 RM/CENTER 1008.08 RM & INVERTS NOT AVAILABLE	CATCH BASIN #11 RM/CENTER 1009.58 INVERTS NOT AVAILABLE
CATCH BASIN #12 RM/CENTER 1009.67 INVERTS NOT AVAILABLE	CATCH BASIN #13 RM/CENTER 1009.26 INVERTS NOT AVAILABLE
CATCH BASIN #5 (ROUND) RM/CENTER 1006.38 SOUTHEAST 12' HOPE 1006.58	SANITARY SEWER MANHOLE #14 RM/CENTER 1010.88 INVERTS NOT AVAILABLE

LEGEND

	MISC. STRUCTURE (AS LABELED)
	WELL
	BOLLARD
	SIGN
	FLAG POLE
	LIGHT BASE
	STREET LIGHT
	UTILITY MANHOLE (AS LABELED)
	UTILITY POLE W/OUT WIRE
	OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
	U/G LINES (ELECTRIC/PHONE/CABLE)
	DECIDUOUS TREE W/DENIFIER
	CONIFEROUS TREE W/SIZE
	BUSH
	FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
	EX CONCRETE CURB (UNLESS OTHERWISE STATED)
	SANITARY SEWER MANHOLE W/DENIFIER
	SANITARY SEWER PIPE
	CLEAN OUT
	STORM WATER MANHOLE W/DENIFIER
	CATCH BASIN W/DENIFIER
	CONTROL STRUCTURE
	FLARED END SECTION
	EX STORM WATER DRAINAGE PIPE
	HYDRANT
	WATER SHUT OFF
	WATER VALVE
	WATER VALVE BOX
	WATER MAIN
	GAS SHUT OFF
	U/G GAS
	REMOVE

DEMOLITION NOTES:

- The demolition specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
- Contractor shall contact the MISS DIG locating system, DIGGERS HOTLINE or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to performing demolition work. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
- Contractor shall contact the appropriate Agencies to coordinate disconnect and disposition of the electric, gas, phone, cable and other public utilities as necessary prior to performing demolition work.
- Contractor shall contact the appropriate Agencies to coordinate removal and/or relocation of any at grade, underground and/or overhead public utility lines as necessary prior to performing demolition work.
- Contractor shall recycle and/or dispose of all demolition debris in accordance with the appropriate Local, County, State and Federal regulations.
- All bituminous and concrete pavement to be removed shall be saw cut at the limits of removal to provide for a clean straight edge for future abutment.
- All existing water main and sanitary sewer to be removed shall be terminated as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent plugs shall be installed in the ends of pipe in accordance with the appropriate Agency. The Contractor shall record the location of all permanent plugs and provide the location information to the appropriate Agency.
- All existing storm sewer to be removed shall be terminated as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent bulkheads shall be installed in the ends of pipe and/or openings in terminating structures in accordance with the appropriate Agency. The Contractor shall record the location of all permanent bulkheads and provide the location information to the appropriate Agency.
- All existing light sources to be removed shall have their power cables removed up to the power source or properly terminated for future connection as necessary to allow for construction of the proposed site improvements. Removal and termination of power cables shall be performed in accordance with local electric codes.
- All existing utility meters to be removed shall be properly removed to allow for reuse. Any existing utility meters that are not to be reused as a part of this project shall be returned to the appropriate Agency.
- All trenches and/or excavations resulting from the demolition of underground utilities, building foundations, etc., that are located within the 1 on 1 influence zone of proposed structures, paved areas and/or other areas subject to vehicular traffic shall be backfilled with MDT Class III granular material (or better) to the proposed subgrade elevation. Backfill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor).



BENCHMARK
 REF: DATUM BASED ON PREVIOUS SITE PLANS BY HOWAK & FRAUS, JOB NO. F002, DATE 10/4/07, FOR WHITE CASTLE
 BENCHMARK (PRIMARY)
 REF: SEE ABOVE
 SANITARY MANHOLE RM, LOCATED AT NORTH ENTRANCE OF ACCESS DRIVE, SOUTH SIDE OF GRAND RIVER.
 ELEVATION = 1011.52
 BENCHMARK (SITE)
 EAST SIDE OF FLAG POLE CONCRETE BASE, LOCATED NEAR THE NORTHEAST CORNER OF 3838 GRAND RIVER.
 ELEVATION = 1010.38

NOTE: ALL SHOWN EXISTING IMPROVEMENTS TO BE REMOVED EXCEPT EXISTING ENTRANCE CONCRETE CURB, DRIVE CULVERT, APPLE TREE, AND PINE TREES ALONG EAST AND WEST LINES.



DESIGN INC
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN:EDRWMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: RWL	1	12/17/14	REVISED PER MUNICIPALITY REVIEW COMMENTS			
CHECK: EDR						

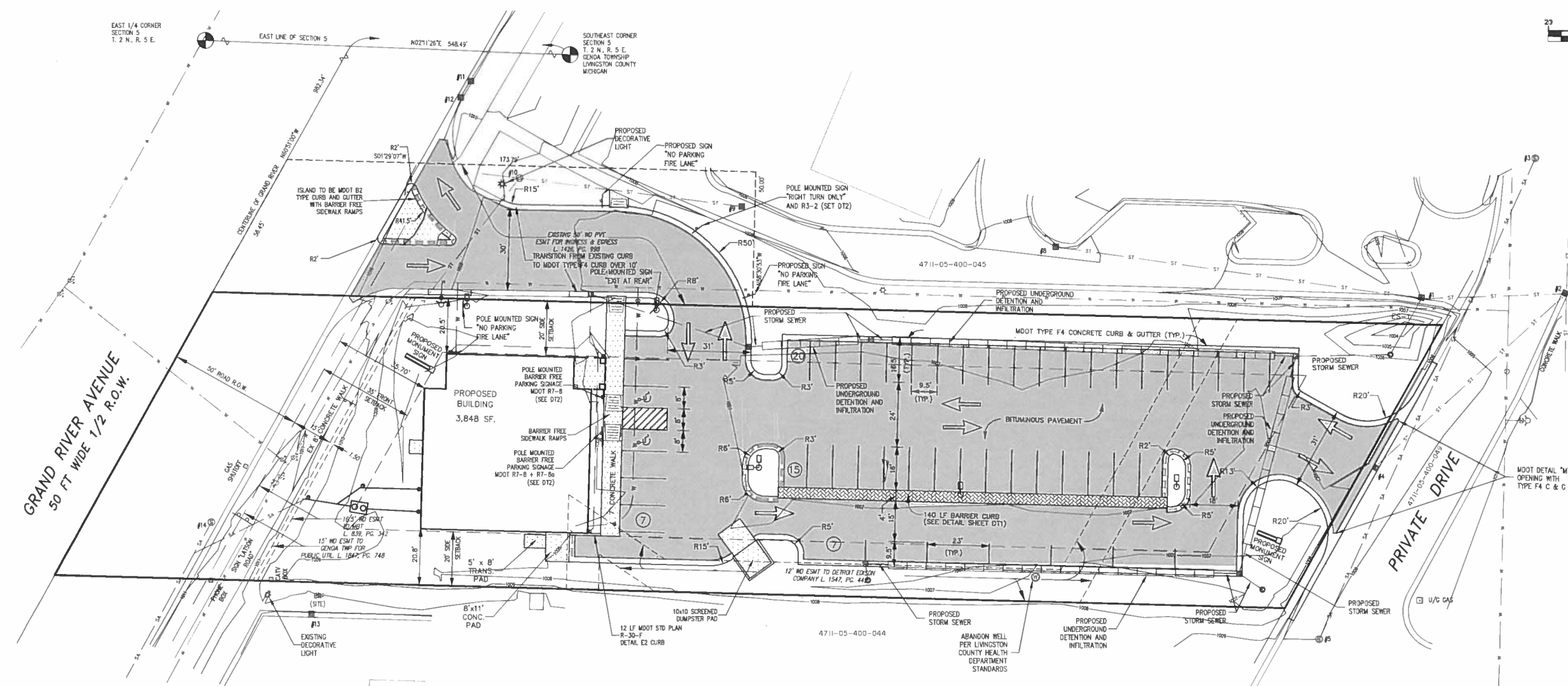
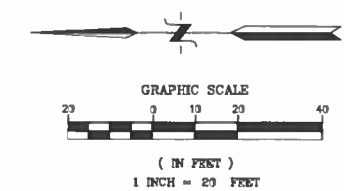
RED OLIVE RESTAURANT
 3838 E. GRAND RIVER

**EXISTING CONDITIONS/
 DEMOLITION
 PLAN**

CLIENT:
 PKJJ, LLC
 29329 PARAMOUNT COURT
 FARMINGTON HILLS, MI 48331

SCALE: 1"=20'
 PROJECT No.: 9132308
 DWG NAME: 2308-DEMO
 ISSUED: DEC 17, 2014

EX



IMPERVIOUS AREA
 EXISTING 32,288 SF 56%
 PROPOSED 40,427 SF 70%

LEGEND

- = MISC. STRUCTURE (AS LABELED)
- = WELL
- ⊙ = BOLLARD
- ⊛ = SIGN
- ⊜ = FLAG POLE
- ⊕ = LIGHT BASE
- ⊛ = STREET LIGHT
- = UTILITY MANHOLE (AS LABELED)
- ⊛ ⊕ = UTILITY POLE W/ GUY WIRE
- ⊕ ⊕ = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- ⊕ ⊕ ⊕ = U/G LINES (ELECTRIC/PHONE/CABLE)
- ⊕ ⊕ = DECIDUOUS TREE W/ IDENTIFIER
- ⊕ ⊕ = CONIFEROUS TREE W/ IDENTIFIER
- ⊕ ⊕ = STUMP
- ⊕ ⊕ = BUSH
- ⊕ ⊕ ⊕ = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- ⊕ ⊕ ⊕ = EX CONCRETE CURB (UNLESS OTHERWISE STATED)
- ⊕ ⊕ ⊕ = PROP. CONCRETE CURB (UNLESS OTHERWISE STATED)
- ⊕ ⊕ ⊕ = SANITARY SEWER MANHOLE W/ IDENTIFIER
- ⊕ ⊕ ⊕ = SANITARY SEWER PIPE
- ⊕ ⊕ ⊕ = CLEAN OUT
- ⊕ ⊕ ⊕ = STORM WATER MANHOLE W/ IDENTIFIER
- ⊕ ⊕ ⊕ = CATCH BASIN W/ IDENTIFIER
- ⊕ ⊕ ⊕ = CONTROL STRUCTURE
- ⊕ ⊕ ⊕ = FLARED END SECTION
- ⊕ ⊕ ⊕ = EX STORM WATER DRAINAGE PIPE
- ⊕ ⊕ ⊕ = PROP STORM WATER DRAINAGE PIPE
- ⊕ ⊕ ⊕ = HYDRANT
- ⊕ ⊕ ⊕ = WATER SHUT OFF
- ⊕ ⊕ ⊕ = WATER VALVE
- ⊕ ⊕ ⊕ = WATER VALVE BOX
- ⊕ ⊕ ⊕ = WATER MAIN
- ⊕ ⊕ ⊕ = GAS SHUT OFF
- ⊕ ⊕ ⊕ = U/G GAS

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DESIGN: JMB	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: RWL	1	12/17/14	REVISED PER MUNICIPALITY REVIEW COMMENTS			
CHECK: JMB						

RED OLIVE RESTAURANT
3838 GRAND RIVER

SITE DEVELOPMENT

CLIENT:
 PKJJ LLC
 29329 PARAMOUNT COURT
 FARMINGTON HILLS MI 48331

SCALE: 1"=20'
 PROJECT No.: 9132308
 DWG NAME: 2308-SP
 ISSUED: DEC 17, 2014

SP

Project: Red Olive Restaurant												Project#: 132308								
Design Criteria: 10 year event (I = 175(I + 25)) RCP n = 0.013 HDPE n = 0.011												Date: 12/17/2014								
From	To	Inc.	Eqv.	Total	T	I	Q	Di.	Slope	Slope	H.G.	Length	Vel.	Time	Cap	H.G.	Ground Elev.	Invert Elev.		
MS#	MS#	Acres	100%	Area	Time	Inch	(CIA)	of	%	%	ft.	ft.	ft./min.	min.	c.f.s.	ft.	Upper	Lower	Upper	Lower
CB#	CB#	"A"	"C"	CA	Min.	Per	c.f.s.	pipe	%	%	ft.	ft.	ft./min.	min.	c.f.s.	end	end	end	end	
YB 112	CB 113	0.088	0.20	0.02	0.02	15.0	4.36	0.08	12	0.32	0.00	6	2.57	0.0	2.02	1005.27	1006.80	1007.89	1004.12	1004.10
CB 113	CB 110	0.121	0.87	0.11	0.12	15.0	4.37	0.54	12	0.32	0.02	1.39	2.57	0.9	2.02	1005.27	1007.89	1007.59	1004.00	1003.57
YB 111	CB 110	0.055	0.21	0.01	0.01	15.0	4.36	0.04	12	0.32	0.00	10	2.57	0.1	2.02	1005.24	1006.70	1007.59	1003.60	1003.57
CB 110	CB 101	0.084	0.88	0.06	0.17	15.1	4.37	0.75	12	0.32	0.04	83	2.57	0.5	2.02	1005.24	1007.59	1007.29	1003.47	1003.20
CB 122	CB 121	0.194	0.74	0.14	0.14	15.0	4.36	0.83	12	0.32	0.03	62	2.57	0.4	2.02	1005.63	1007.74	1008.79	1004.26	1004.06
CB 121	CB 120	0.028	0.90	0.03	0.17	15.4	4.33	0.73	12	0.32	0.04	46	2.57	0.3	2.02	1005.61	1008.79	1007.69	1003.98	1003.81
CB 120	CB 101	0.157	0.86	0.14	0.30	15.7	4.30	1.31	12	0.32	0.13	158	2.57	1.0	2.02	1005.59	1007.69	1007.29	1003.71	1003.20
CB 101	SCS 100	0.144	0.90	0.13	0.60	16.7	4.19	2.54	12	0.32	0.51	35	3.23	0.2	2.02	1005.38	1007.29	1003.00	1003.15	1003.04

CONTROL STRUCTURE (SCS-100) CALCULATIONS			
Orifice Equation	C _q = 0.62 X Area X SQRT(2 * 32.2 * Height)		
Q Allowed =	0.30	CFS	
Height =	1.95	FT	
Solve for Area			
Area	0.043	SF	
Use	One 2.75"	HOLES	
Area Actual	0.041	SF	
Q actual	0.285	CFS	

PRAIRIE HOUSE - 60 YEAR STORM DETENTION CALCULATIONS						
Tributary Area (A) =	1.05 Acres					
Compound Runoff Coefficient (C) =	0.58					
Design Constant (K1) = A * C =	0.61					
Allowable Outflow Rate (Q _o) =	0.22 cfs					
1	2	3	4	5	6	7
Duration (Minutes)	Duration (Seconds)	Intensity (50-yr Storm) (in/hr)	Col. 2 * Col. 3 (inches)	Inflow Volume = Col. 4 * K1 (Cubic Feet)	Outflow Volume = Col. 2 * Q _o (Cubic Feet)	Storage Volume = Col. 5 - Col. 6 (Cubic Feet)
5	300	8.17	2450	1492	87	1425
10	600	7.00	4200	2599	134	2423
15	900	6.13	5813	3357	202	3158
20	1200	5.44	6533	3979	299	3710
30	1800	4.45	8018	4965	403	4480
60	3600	2.88	10378	6319	606	5513
90	5400	2.13	11504	7008	1210	5797
120	7200	1.88	12186	7409	1813	5798
180	10800	1.20	12807	7861	2419	5441

RED OLIVE - 60 YEAR STORM DETENTION CALCULATIONS						
Tributary Area (A) =	1.05 Acres					
Compound Runoff Coefficient (C) =	0.68					
Design Constant (K1) = A * C =	0.71					
Allowable Outflow Rate (Q _o) =	0.22 cfs					
1	2	3	4	5	6	7
Duration (Minutes)	Duration (Seconds)	Intensity (50-yr Storm) (in/hr)	Col. 2 * Col. 3 (inches)	Inflow Volume = Col. 4 * K1 (Cubic Feet)	Outflow Volume = Col. 2 * Q _o (Cubic Feet)	Storage Volume = Col. 5 - Col. 6 (Cubic Feet)
5	300	8.17	2450	1749	87	1662
10	600	7.00	4200	2999	134	2864
15	900	6.13	5813	3936	202	3734
20	1200	5.44	6533	4399	299	4399
30	1800	4.45	8018	5723	403	5322
60	3600	2.88	10378	7409	606	6802
90	5400	2.13	11504	8214	1210	7005
120	7200	1.88	12186	8866	1813	7073
180	10800	1.20	12807	9218	2419	6797

Note: Figures in Columns (3) and (4) are computed by the formula $I = 248 / (t + 25) (t \text{ in } 50\text{-yr Curve})$.

* Allowable outflow rate Q_o is computed by one of the following cases:

Case 1: Q_o = capacity of existing discharge conduit or channel.

Case 2: Q_o = q * A where q = Permissible discharge rate per acre of tributary area = 0.20 cfs / Acre

Storm Water Management:

Excess storm water will be retained on site and to percolate into the soil thru infiltration system consisting of 51 Stormtech SC-310 Chambers

Excess stormwater was calculated as the difference between existing storage requirements and proposed storage requirements:

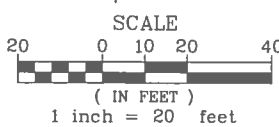
Excess storm runoff = 7073 CF - 5797 CF = 1276 CF

Installed Stormtech storage = 1581 CF

Soils on site per The United States Department of Agriculture, Soil Conservation Service are Miami Loam Series. The site is predominantly mild slopes of 2 to 6 percent. These soils are generally well drained, moderately permeable, loamy sands.

LEGEND

- = MISC. STRUCTURE (AS LABELED)
- = BOLLARD
- = SIGN
- = FLAG POLE
- = LIGHT BASE
- = STREET LIGHT
- = UTILITY MANHOLE (AS LABELED)
- = UTILITY POLE W/ GUY WIRE
- = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- = U/G LINES (ELECTRIC/PHONE/CABLE)
- = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- = EX CONCRETE CURB (UNLESS OTHERWISE STATED)
- = PROP. CONCRETE CURB (UNLESS OTHERWISE STATED)
- = SANITARY SEWER MANHOLE W/ IDENTIFIER
- = SANITARY SEWER PIPE
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- = STORM WATER MANHOLE W/ IDENTIFIER
- = CATCH BASIN W/ IDENTIFIER
- = CONTROL STRUCTURE
- = FLARED END SECTION
- = EX STORM WATER DRAINAGE PIPE
- = PROP STORM WATER DRAINAGE PIPE
- = HYDRANT
- = WATER SHUT OFF
- = WATER VALVE
- = WATER VALVE BOX
- = WATER MAIN
- = GAS SHUT OFF
- = U/G GAS
- = EX SPOT ELEVATION
- = PROP SPOT ELEVATION
- = EX 1' CONTOUR
- = EX 5' CONTOUR
- = STORM TECH UNDERGROUND INFILTRATION CHAMBERS

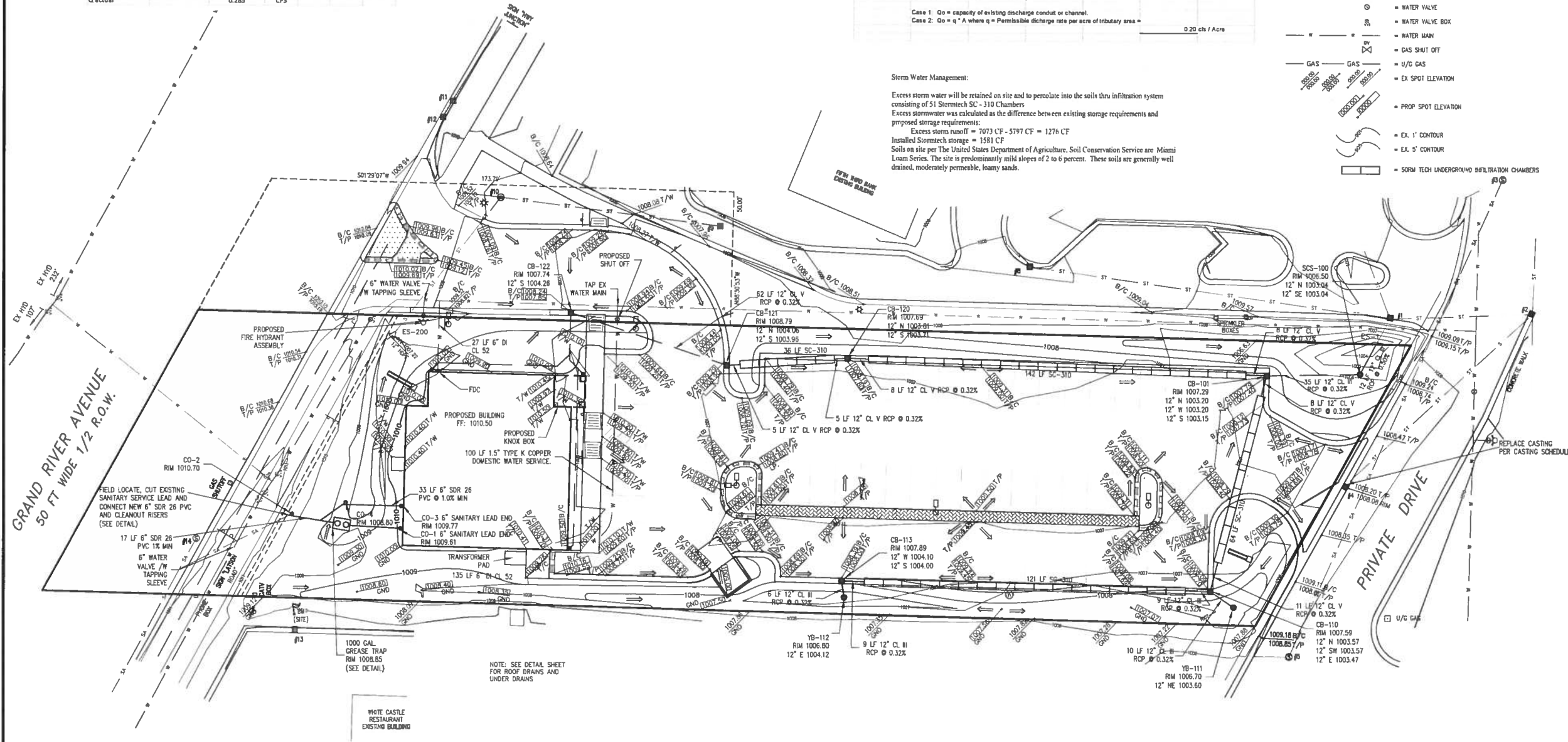


BENCHMARKS

REF: DATUM BASED ON PREVIOUS SITE PLANS BY NOWAK & FRAUS, JOB No. F002, DATE 10/4/07, FOR WHITE CASTLE

BENCHMARK (PRIMARY)
REF: SEE ABOVE
SANITARY MANHOLE RM, LOCATED AT NORTH ENTRANCE OF ACCESS DRIVE, SOUTH SIDE OF GRAND RIVER.
ELEVATION = 1011.52

BENCHMARK (SITE)
EAST SIDE OF FLAG POLE CONCRETE BASE, LOCATED NEAR THE NORTHEAST CORNER OF #3832 GRAND RIVER.
ELEVATION = 1010.39
REF: FIELD BOOK #214, PG. 7
POINT #53



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DRAFT: RWL	1	12/17/14	REVISED PER MUNICIPALITY REVIEW COMMENTS			
CHECK: JMB						

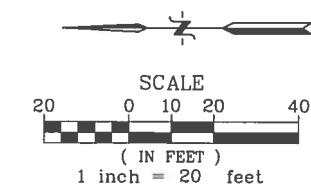
RED OLIVE RESTAURANT 3838 E. GRAND RIVER

GRADING AND UTILITY PLAN

CLIENT:
PKJJ, LLC
29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

SCALE: 1"=20'
PROJECT No.: 9132308
DWG NAME: 2308-GRD
ISSUED: DEC 17, 2014





SOIL EROSION MEASURES

6	STORM WATER SLOPE PROTECTION	INSTALL EROSION CONTROL MEASURES TO PREVENT SOIL EROSION ON SLOPES. STORM PLANS TO BE SUBMITTED TO THE MUNICIPALITY FOR REVIEW.
8	SEEDING	SEED SLOPES WITH GRASS SEED OR OTHER APPROPRIATE SEEDS TO PREVENT SOIL EROSION. SEEDS SHALL BE PLANTED AT A RATE OF 100 LBS PER ACRE.
13	SOIL NUTRIENT MANAGEMENT	USE NUTRIENT MANAGEMENT PRACTICES TO PREVENT SOIL EROSION AND POLLUTION. USE OF FERTILIZERS SHALL BE LIMITED TO THE NECESSARY AMOUNT.
14	VEGETATION	INSTALL VEGETATION TO PREVENT SOIL EROSION. VEGETATION SHALL BE PLANTED AT A RATE OF 100 LBS PER ACRE.
55	VEGETATION	USE VEGETATION TO PREVENT SOIL EROSION. VEGETATION SHALL BE PLANTED AT A RATE OF 100 LBS PER ACRE.
58	VEGETATION	USE VEGETATION TO PREVENT SOIL EROSION. VEGETATION SHALL BE PLANTED AT A RATE OF 100 LBS PER ACRE.
59	VEGETATION	USE VEGETATION TO PREVENT SOIL EROSION. VEGETATION SHALL BE PLANTED AT A RATE OF 100 LBS PER ACRE.

- T=TEMPORARY P=PERMANENT
- 36" SILT FENCE
- PROP CONTOUR
- DRAINAGE DIRECTION
- EX. 1' CONTOUR
- EX. 5' CONTOUR

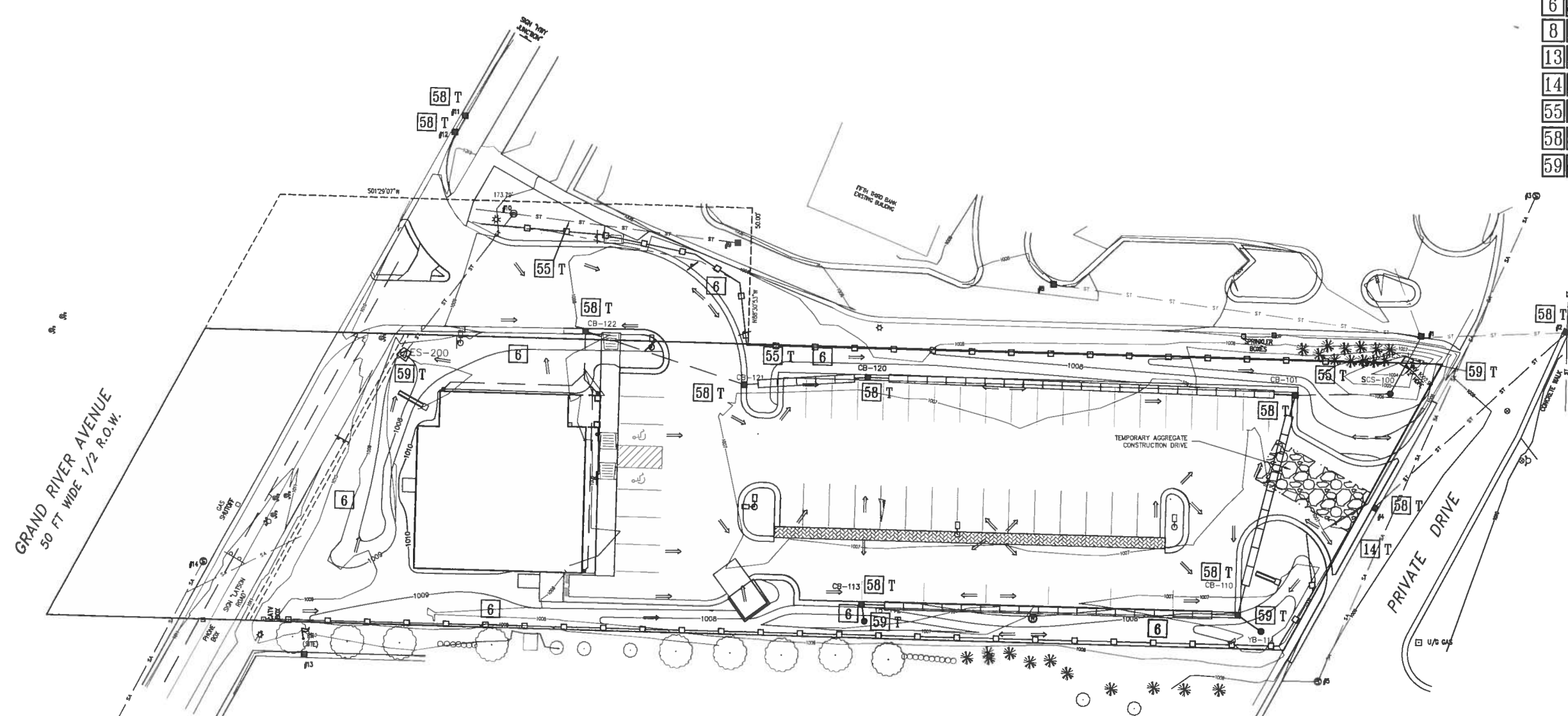
TOTAL SITE AREA = 1.328 ACRES
TOTAL DISTURBED AREA = 1.059 ACRES

BENCHMARKS

REF: DATUM BASED ON PREVIOUS SITE PLANS BY HOWAY & FRANKS, JOB NO. 7002, DATE 10/4/07, FOR WHITE CASTLE.

BENCHMARK (PRIMARY)
REF: SEE ABOVE.
SANITARY MANHOLE RM, LOCATED AT NORTH ENTRANCE OF ACCESS DRIVE, SOUTH SIDE OF GRAND RIVER.
ELEVATION = 1011.52

BENCHMARK (SITE)
EAST SIDE OF FLAG POLE CONCRETE BASE, LOCATED NEAR THE NORTHEAST CORNER OF #3832 GRAND RIVER.
ELEVATION = 1010.38



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CHECK: BS						

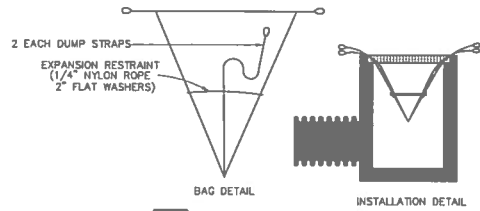
RED OLIVE RESTAURANT
3838 E. GRAND RIVER

SOIL EROSION AND SEDIMENTATION CONTROL

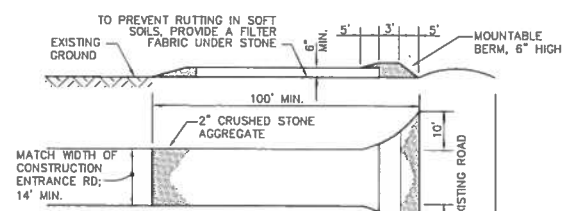
CLIENT: PKJJ, LLC
29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

SCALE: 1"=40'
PROJECT No.: 9132308
DWG NAME: 2308-SE1
ISSUED: DEC 17, 2014

SE1

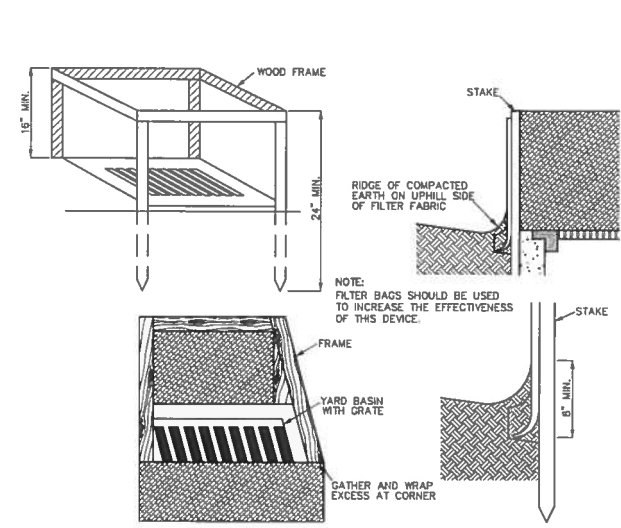


58 INLET SEDIMENT FILTER
NOT TO SCALE

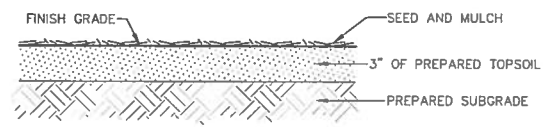


14 MUD TRACKING CONTROL MAT
NO SCALE

NOTE:
A. WHEN ACCEPTABLE TO ENGINEER, CONTRACTOR MAY INSTALL STONE BELOW THE SUBGRADE ELEVATION; THIS STONE MAY BE LEFT IN PLACE BELOW PAVEMENT.



59 INLET PROTECTION FABRIC DROP
NOT TO SCALE



SEEDING DETAIL
NOT TO SCALE

- Seed mixture shall consist of: 10% - Kentucky Blue Grass, 20% - Perennial Ryegrass, 30% - Hard Fescue, 40% - Creeping Red Fescue. Seed shall be uniformly applied at a rate of 210 pounds per acre.
- Topsoil shall be a dark, organic, natural surface soil free of clay lumps, peat or muck, subsoil, noxious weeds or other foreign matter such as roots, sticks, rocks over 1/2" in diameter and not frozen or muddy. Material shall meet with approval of the Engineer.
- Straw mulching shall be a minimum depth of 3" applied at a rate of 1.5 to 2 tons per acre. All mulching must have a tie down, such as tackifier, net binding, etc.
- Fertilizer shall be evenly applied at a rate which will provide 150 pounds per acre of chemical fertilizer nutrients, in equal portions, (10-10-10), of Nitrogen, Phosphoric Acid and Potash.
- Hydroseeding is not acceptable for slopes exceeding 1%. In such cases, stabilization shall be done with seed and straw mulch with a tackifier.
- The earthen areas to receive topsoil shall be at the required grade and properly trimmed. Topsoil shall be spread on the prepared areas to a depth of 3 inches. After spreading, any large clods and lumps of topsoil shall be broken up and pulverized. Stones and rocks over 1/2" in diameter, roots, litter, and all foreign matter shall be raked up and disposed of by the contractor. Place topsoil only when it can be followed within a reasonable time by seeding operations.



SOILS MAP

EXISTING SOIL:
M1b: MIAMI LOAM, 2-6% SLOPE
GENERALLY SOILS ON THE PROPERTY ARE WELL DRAINED, MODERATELY PERMEABLE, LOAMY SANDS AS CLASSIFIED BY U.S.D.A. SOIL CONSERVATION SERVICE.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

- The Soil Erosion and Sedimentation Control Specifications of the appropriate Local, County and/or State Agencies are a part of this work. Refer to the General Notes on the Project Plans for additional requirements.
- The Soil Erosion and Sedimentation Control (SESC) Permit Holder shall be responsible for compliance with the SESC Permit requirements for the duration of the project and until receipt of final approval from the Permitting Agency. For any site with an earth disturbance area of 1 acre or greater, the SESC Permit Holder shall retain a Certified Storm Water Operator in accordance with the SESC Permit requirements. The Certified Storm Water Operator shall perform routine inspections of the site and the SESC measures and file inspection reports in accordance with the SESC permit requirements. For any site with an earth disturbance area of 5 acres or greater, the SESC Permit Holder shall file a National Pollutant Discharge Elimination System (NPDES) Notice of Coverage Form with the State DEQ prior to any earth disruption.
- The Contractor shall install the appropriate Soil Erosion Control Measures in accordance with the Project Plans prior to massive earth disruption, including but not limited to: silt fence, mud tracking control mats and sediment filters on existing storm sewer structures. Densification work may be necessary prior to installation of some soil erosion control measures. In such cases, postpone installation of affected soil erosion control measures until immediately following demolition work. Refer to the Project Plans and the Soil Erosion Control and Construction Sequence for additional requirements.
- The Contractor shall schedule work so as to minimize the period of time that an area is exposed and disturbed. The Contractor shall observe the grading limits and limits of disturbance in accordance with the Project Plans. The Contractor shall maintain an undisturbed vegetative buffer around the work when shown on the Project Plans.
- The Contractor shall install and maintain Soil Erosion Control Measures in accordance with the Project Plans during the appropriate phases of construction. The Project Plans show the minimum requirements for Soil Erosion Control Measures. The Contractor shall install additional Soil Erosion Control Measures as necessary due to site conditions and as directed by the Permitting Agency and/or Engineer. The Contractor shall perform routine inspection and maintenance of all Soil Erosion Control Measures to ensure compliance with the permit requirements and proper operation of the Soil Erosion Control Measures.
- The Contractor shall strip and stockpile topsoil from all areas of proposed disturbance. Topsoil stockpiles shall be located in accordance with the Project Plans. Topsoil stockpiles shall be stabilized with vegetative growth (or covered with straw during the non-growing season) to prevent wind and water erosion. A temporary diversion berm and silt fence shall enclose all earthen material stockpiles, including but not limited to topsoil, sand and gravel.
- The Contractor shall install Soil Erosion Control Measures associated with the proposed storm sewer system during storm sewer construction. Inlet structure filters shall be installed immediately following completion of each storm inlet structure. Riprap shall be installed immediately following the installation of each filter and sections with the following exception: Storm drain outlets that do NOT empty into a Retention, Detention or Sedimentation Basin shall have a temporary 5' wide x 18" long x 3" deep sump installed at the termination of the storm sewer. Upon completion of the stabilization work, the sump area shall be filled and riprap shall be installed in accordance with the Project Plans.
- All disturbed areas outside of paved areas shall be restored within 15 days of finish grading. Proposed vegetative areas shall be restored with a minimum of 3-inches of topsoil, then seeded and mulched; unless noted otherwise on the Project Plans. During the non-growing season, temporary stabilization shall be provided using straw matting or as directed by the Permitting Agency and/or the Engineer.
- Following complete site restoration and stabilization, sediment shall be removed from all storm sewer structures, paved areas and storm basins. The SESC Permit Holder shall contact the Permitting Agency to request closure of the SESC Permit. For any site with an earth disturbance area of 5 acres or greater, the SESC Permit Holder shall file a NPDES Notice of Termination Form with the State DEQ.

MAINTENANCE NOTES FOR SOIL EROSION CONTROL MEASURES:

- The Construction Site and all Soil Erosion Control Measures shall be inspected periodically in accordance with the appropriate local municipality/authority and the DEQ NPDES rules and regulations. As a MINIMUM, inspections shall be performed once a week and within 24 hours following a storm event resulting in 1" of rainfall or greater. Inspections shall be performed throughout the duration of the construction process and until the site is completely stabilized. Following construction, the owner (or it's assignee) shall periodically inspect all permanent soil erosion control measures to ensure proper operation.
- CATCH BASINS:** Catch basins shall be inspected for accumulation of solids and sediment. Solids and sediment shall be removed from the catch basins by vacuum or aductor cleaning. Cleaning should be performed before the catch basin sumps are half full.
- MUD TRACKING CONTROL DEVICE / CONSTRUCTION ACCESS:** Mud tracking control devices shall be inspected for significant mud accumulation and to ensure the access is not eroding into public rights of way or drainage features. Add additional layers of stone or remove or replace stone each time the stone becomes covered with mud. All sediment dropped or eroded onto public rights of way shall be removed immediately. Sweeping of the public rights of way and/or paved access route shall be performed as necessary to maintain the access route free of sediment and debris.
- RIPRAP:** Inspect riprap immediately following the first rainfall event following installation of the riprap. Continue to perform inspections of the riprap at each periodic site inspection. Riprap shall be inspected to ensure erosion is not occurring within and/or around the riprap. The discharge points shall be inspected to ensure that concentrated flows are not causing erosion downstream. Displaced riprap shall be removed from downstream locations and the riprap beds shall be repaired or replaced. Significant sediment buildup shall be removed from riprap beds. Repair or replace failing or displaced riprap immediately. Address vegetation and/or erosion concerns as soon as weather permits.
- SEEDING:** Newly seeded areas shall be inspected until substantial vegetative growth is obtained. Seeded areas shall be inspected to ensure erosion is not occurring in the seeded area and vegetative growth is promoted. Eroded areas shall be finish graded as necessary to remove erosion channels or pull-ups and new seed placed as soon as weather permits.
- SILT FENCE:** Silt fencing shall be inspected for soil accumulation/clogging, undercutting, overtopping and sagging. Soil accumulations shall be removed from the face of the silt fence each time it reaches half the height of the fence. Removed sediment shall be disposed of in a stable inland site or added to a nearby stockpile. When undercutting occurs, grade cut areas of concentrated flow upstream of the silt fence to remove channels and/or pull-ups and repair or replace silt fence ensuring proper trenching techniques are utilized. Silt fencing which sags, falls over or is not staked in shall be repaired or replaced immediately. Silt fencing fabric, which decomposes or becomes ineffective, shall be removed and replaced with new fabric immediately. Silt fencing shall be removed once vegetation is well established and the up-slope area is fully stabilized.
- SOD:** Newly seeded areas shall be inspected to ensure sod is maturing. Sod shall be inspected for failure, erosion or damage. Slipping or eroding sod on steep slopes shall be immediately repaired or replaced and staked in place. Damaged or failed sod shall be immediately replaced.
- STOCKPILES:** Temporary and permanent topsoil and spoils stockpiles shall be seeded to promote vegetative growth. Stockpiles shall be inspected to ensure excessive erosion is not occurring. When runoff or wind erosion is evident, reduce the side slopes of the stockpile or stabilize the stockpile with pieces of mulch laid perpendicular to the slope. When filter fencing is used around a stockpile, the fencing shall be inspected to ensure piping has not occurred under the fencing and to ensure the fencing has not collapsed due to soil slippage or access by construction equipment. Repair or replace damaged fencing immediately. Berms at the base of stockpiles, which become damaged, shall be replaced.
- STORM STRUCTURE INLET FILTER:** Inlet filters shall be inspected for sediment accumulation, clogging and damage. When stone is used in conjunction with inlet filter fabric, replace the stone each time it becomes clogged with sediment. Clean or replace the inlet filter fabric each time it becomes clogged with sediment. Reinstall or replace fabric filter fabrics immediately. Replace damaged filter fabrics immediately.

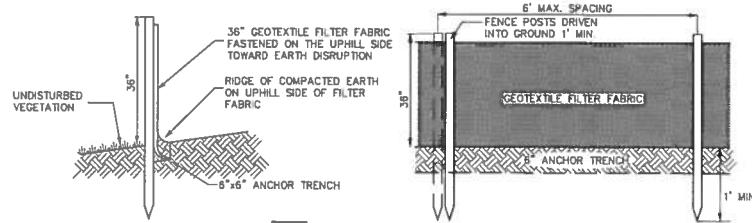
SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE:

- Obtain all necessary Soil Erosion and Sedimentation Control related permits from the appropriate Local, County and/or State Agencies. Refer to the General Notes on the project plans for additional requirements.
- Prior to commencement of any earth disruption install Silt Fence and Mud Tracking Control Devices in accordance with the Soil Erosion and Sedimentation Control Plan.
- Strip and stockpile topsoil. Perform mass grading and land balancing. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Install proposed underground utilities (i.e., storm and sanitary sewers, water main, etc.) Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct building(s) if required on the project plans. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct roadways and/or parking areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Finish grade all disturbed areas outside of pavement. Perform final restoration, including placement of topsoil and establishment of vegetative growth outside of pavement.
- Following establishment of sufficient vegetative ground cover and receipt of approval from the Permitting Agency, remove all temporary Soil Erosion Control Measures, clean all storm sewer structures and repair all permanent Soil Erosion Control Measures.

TIME LINE OF SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE

CONSTRUCTION & WORK CATEGORIES*	1	2	3	4	5	6	7	8	9
1 - OBTAIN PERMITS	█								
2 - SESC MEASURES	█	█	█	█	█	█	█	█	█
3 - INSPECT / MAINTAIN	█	█	█	█	█	█	█	█	█
4 - DEMOLITION WORK									
5 - EARTH WORK									
6 - UTILITIES									
7 - BUILDING									
8 - PAVEMENT									
10 - TOPSOIL/VEGETATION									
11 - LANDSCAPING									
12 - RESTORATION									
13 - PERMIT CLOSURE									

*REFER TO THE MAJOR WORK ITEMS OUTLINED IN THE SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE NOTES



55 SILT FENCE
NOT TO SCALE

- NOTES:
- REPAIR AND REPLACE SILT FENCE AS NEEDED, INCIDENTAL.
 - FIELD LOCATE SILT FENCE TO FOLLOW CONSTANT CONTOUR ELEVATIONS.
 - INSTALL SED. TRAP AND FILTER AT DRAINAGE LOW POINTS, INCIDENTAL.
 - OVERLAP FENCES AT JOINTS.

DESIGN:BS	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT:RWL	1	12/17/14	REVISED PER MUNICIPALITY REVIEW COMMENTS			
CHECK:JMB						

RED OLIVE RESTAURANT
3838 E. GRAND RIVER

SOIL EROSION NOTES AND DETAILS

CLIENT:
PKJJ, LLC
29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

SCALE: N/A
PROJECT No.: 9132308
DWG NAME: 2308-SE
ISSUED: DEC 17, 2014

SE2



SYMBOL LEGEND

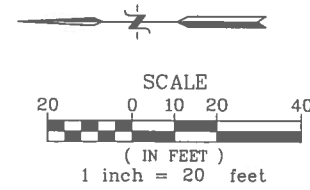


PROPOSED LANDSCAPE PLANTING LEGEND

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	ROOT
LANDSCAPE AREA					
DECIDUOUS TREES					
RM	8	<i>Acer rubrum</i>	Red Maple	3" Caliper	B & B
PPG	6	<i>Acer p. 'Emerald Queen'</i>	Emerald Queen Norway Maple	2.5" Caliper	B & B
AP	7	<i>Picea pungens 'glauca'</i>	Blue Spruce	6' Height	B & B
ORNAMENTAL TREES					
AR	1	<i>Cercis canadensis</i>	American Redbud	6' Height	B & B
FP	3	<i>Pyrus calleryana 'Cleveland Select'</i>	Cleveland Select Flowering Pear	6' Height	B & B
SS	2	<i>Malus 'Spring Snow'</i>	Spring Snow Crabapple	6' Height	B & B
EVERGREEN SHRUBS					
DY	8	<i>Taxus x media 'Densiflora'</i>	Dense Yew	2' Spread	Container
FJ	45	<i>Juniperus chinensis 'Pfitzer'</i>	Pfitzer Juniper	2' Spread	Container
DECIDUOUS SHRUBS					
BB	30	<i>Euonymus alata 'Compacta'</i>	Dwarf Burning Bush	2' Height	Container
RG	28	<i>Berberis thunbergii 'Rose Glow'</i>	Rose Glow Barberry	2' Height	Container

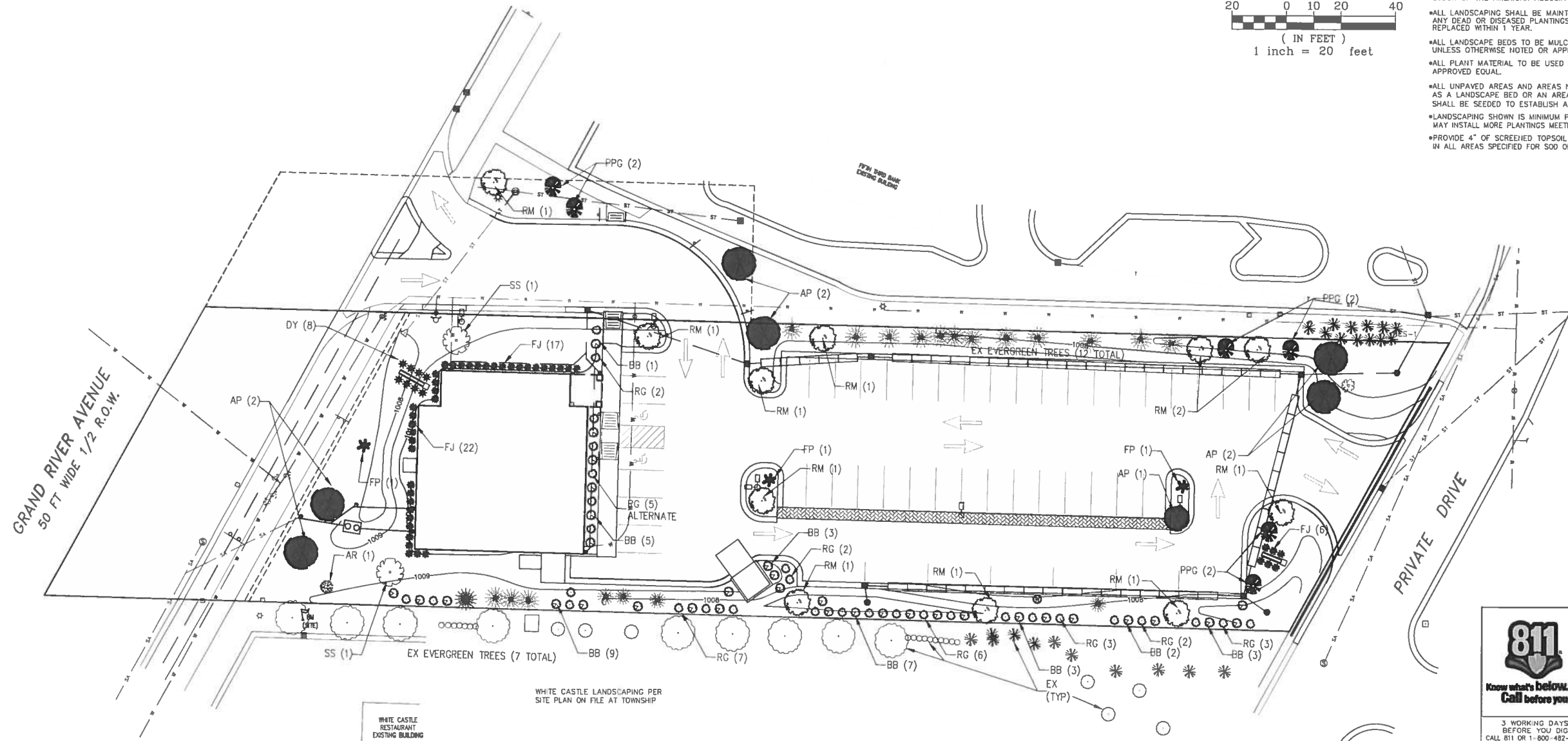
LANDSCAPE REQUIREMENTS

LOCATION	REQUIREMENTS	PROPOSED
FRONT YARD	4 CANOPY TREES	3 CANOPY / 30 SHRUBS
GREEN BELT	20-FOOT WIDTH	2 ORNAMENTALS
BUFFER ZONE "C" (E)	20 CANOPY TREES OR 20 EVERGREENS OR 80 SHRUBS (OR COMBINATION THEREOF)	12 EXISTING EVERGREEN 5 CANOPY TREES
BUFFER ZONE "C" (W)	20 CANOPY TREES OR 20 EVERGREENS OR 80 SHRUBS (OR COMBINATION THEREOF)	8 EXISTING EVERGREEN 3 CANOPY TREES 49 SHRUBS
BUFFER ZONE "C" (S)	7 CANOPY TREES OR 7 EVERGREENS OR 26 SHRUBS (OR COMBINATION THEREOF)	3 CANOPY TREES 2 EVERGREENS 6 SHRUBS
PARKING LOT	5 CANOPY TREES 490 SF OF LANDSCAPE AREA	4 CANOPY TREES 3 ORNAMENTALS 13 SHRUBS



GENERAL NOTES:

- *ALL PLANTING SIZES SHOWN SHALL BE AT TIME OF PLANTING.
- *ALL PLANT MATERIAL SHALL BE FREE OF DISEASE AND INSECTS AND SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF NURSERYMEN.
- *ALL LANDSCAPING SHALL BE MAINTAINED A HEALTHY CONDITION. ANY DEAD OR DISEASED PLANTINGS SHALL BE REMOVED AND REPLACED WITHIN 1 YEAR.
- *ALL LANDSCAPE BEDS TO BE MULCHED WILL HAVE CYPRESS MULCH UNLESS OTHERWISE NOTED OR APPROVED BY OWNER.
- *ALL PLANT MATERIAL TO BE USED SHALL BE AS SPECIFIED OR APPROVED EQUAL.
- *ALL UNPAVED AREAS AND AREAS NOT OTHERWISE PROPOSED AS A LANDSCAPE BED OR AN AREA TO BE CYPRESS MULCHED SHALL BE SEEDED TO ESTABLISH A VEGETATIVE LAWN COVER.
- *LANDSCAPING SHOWN IS MINIMUM PLANTING REQUIRED. OWNER MAY INSTALL MORE PLANTINGS MEETING ALL MUNICIPAL STANDARDS.
- *PROVIDE 4" OF SCREENED TOPSOIL ON TOP OF SUITABLE SOILS IN ALL AREAS SPECIFIED FOR SOO OR SEED LAWN.



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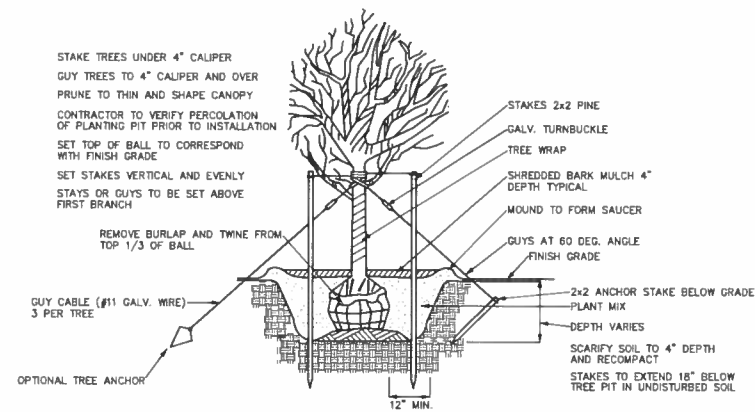
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DRAFT: RWL	1	12/17/14	REVISED PER MUNICIPALITY COMMENTS			
CHECK: BS						

RED OLIVE RESTAURANT
3838 E. GRAND RIVE

LANDSCAPE PLAN

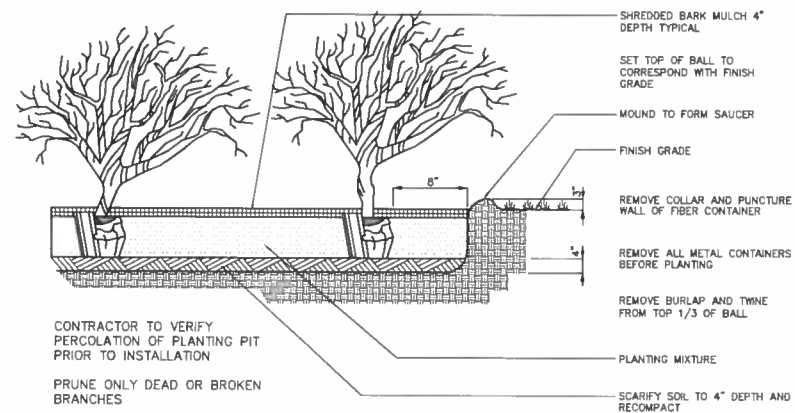
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PKJJ, LLC	PROJECT No.: 9132308
29329 PARAMOUNT COURT	DWG NAME: 2308-LA
FARMINGTON HILLS, MI 48331	ISSUED: DEC 17, 2014

LA1



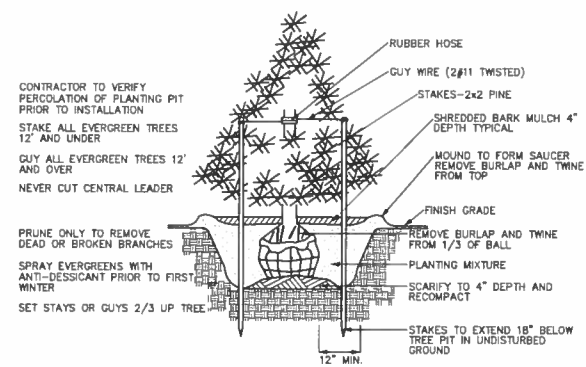
TYPICAL DECIDUOUS TREE PLANTING

NOT TO SCALE



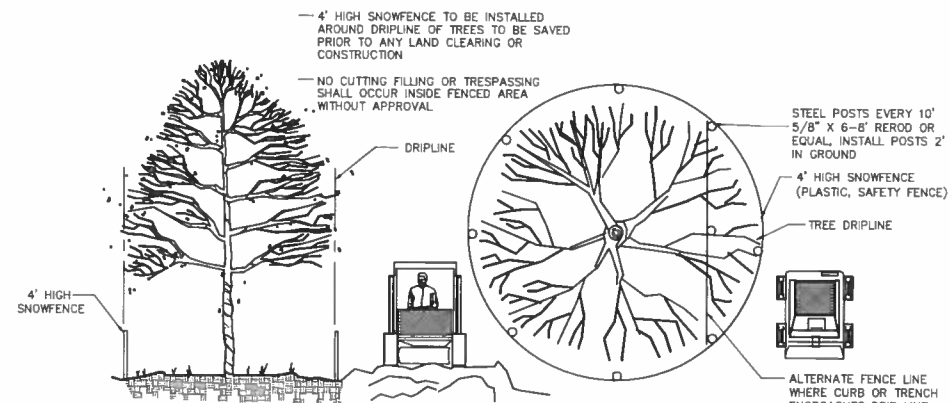
TYPICAL SHRUB PLANTING

NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING

NOT TO SCALE



TREE PROTECTION DETAIL

NOT TO SCALE

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DRAFT: RWL						
CHECK: BS						

RED OLIVE RESTAURANT
3838 E. GRAND RIVER

LANDSCAPE
NOTES AND DETAILS

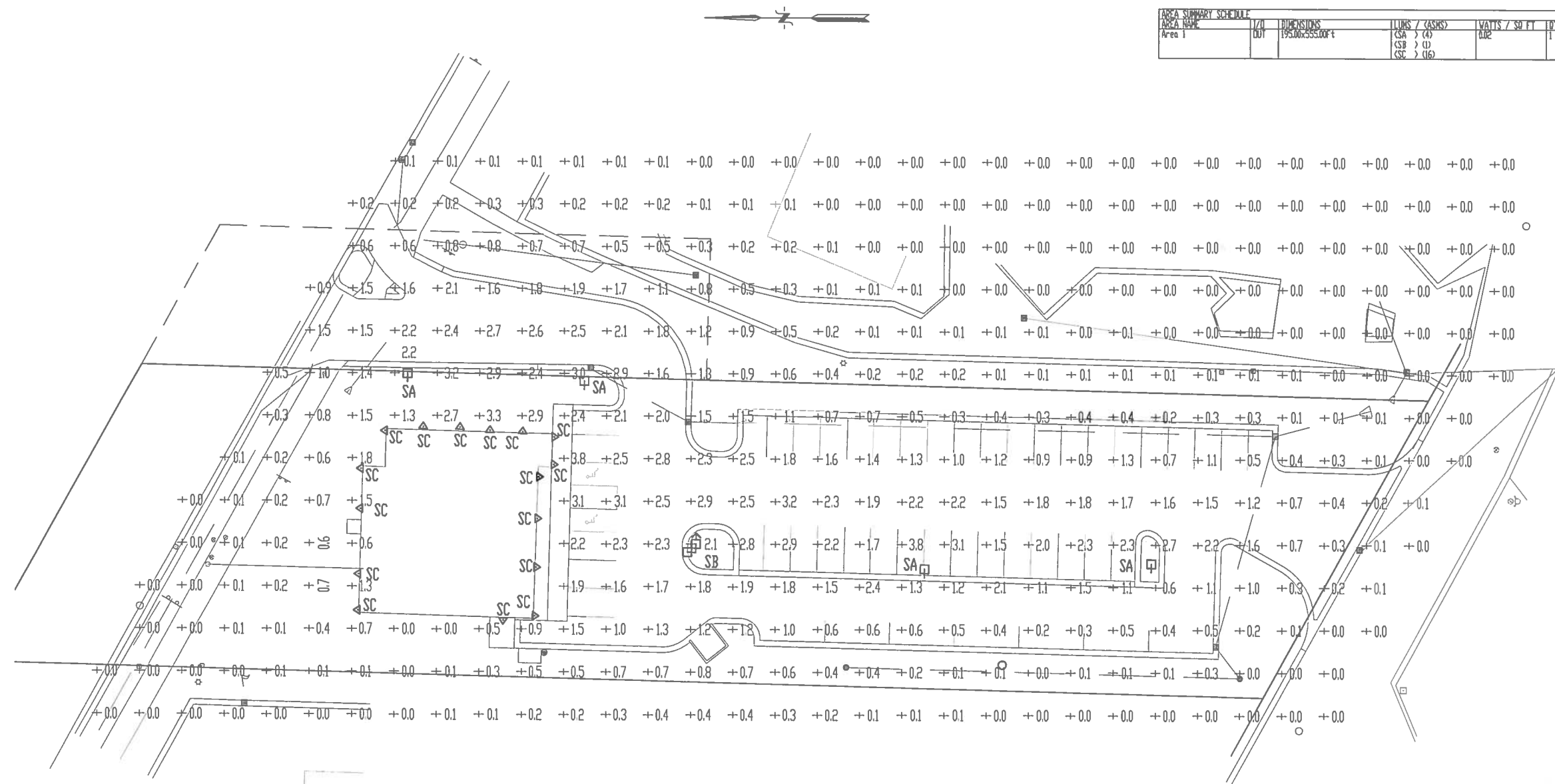
CLIENT: PKJJ, LLC
29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

SCALE: NO SCALE
PROJECT No.: 9132308
DWG NAME: 2308-LA
ISSUED: DEC 17, 2014

LA2

Red Olive (10450) LUMINAIRE SCHEDULE	TYP	SYMBOL	DESCRIPTION	LAMP	LUMENS	MOUNTING/BALLAST	LLF	DTY
SA	▲		LST INDUSTRIES GFH-3-250PS (1) 'B' GFH-3-250-PSHV-F	(1) 250V BU PSHV	23000	450W-SIIC-23 2' Conc base	0.75	4
SB	▲		LST INDUSTRIES 2 GFH-3-250PS (1) 'A' GFH-3-250-PSHV-F (1) 'B' GFH-3-250-PSHV-F	(1) 250V BU PSHV (1) 250V BU PSHV	23000 23000	450W-SIIC-23 2' Conc base	0.75 0.75	1
SC	▲		JAND LIGHTING VRRH-AB26-4K (1) 'D' VO-EYELID H. TRNS	(1)	3500	Wall mounted 10' A.F.G.	0.95	16

AREA SUMMARY SCHEDULE	AREA NAME	1/1	DIMENSIONS	LUMS / (ASHS)	WATTS / SQ FT	DTY
Area 1		DOT	195.00x355.00ft	CSA > (4) CSB > (1) CSC > (16)	0.02	1



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CALCULATION SUMMARY										
AREA NAME	DIMENSIONS	GRID / TYPE	# PTS	SPAC	GROUP	AVE	MAX	MIN	MAX/MIN	AVE/MIN
Area 1	195.00x355.00ft	New Grid / H-H	394	15.00	(*)	0.69	3.83	0.00	N/A	N/A



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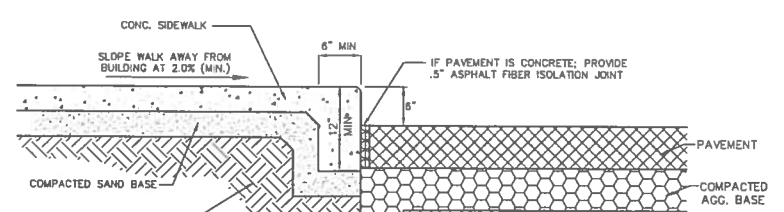
RED OLIVE RESTAURANT
3838 GRAND RIVER

PHOTO METRIC PLAN

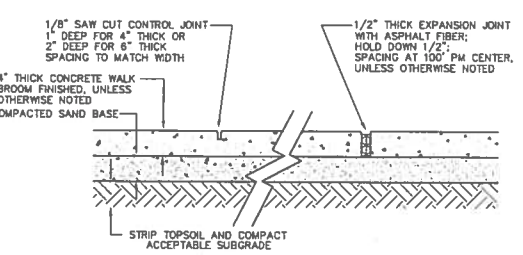
CLIENT:
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29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

SCALE: 1IN = 20FT
PROJECT No.: 9132308
DWG NAME: 2308-LT
ISSUED: DEC 17, 2015

LT1



SIDEWALK CURB & ISOLATION JOINT DETAIL
NOT TO SCALE

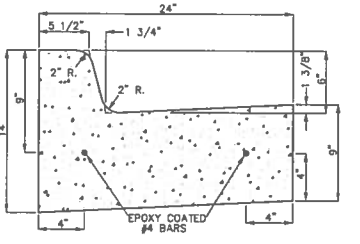


SIDEWALK CROSS SECTION
NOT TO SCALE

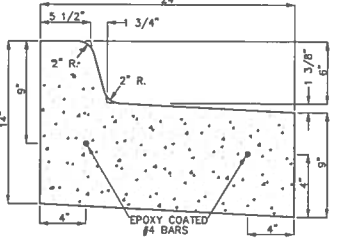
- NOTES:
1. SEE PLAN FOR WIDTH OF SIDEWALK.
2. PROVIDE CONCRETE TYPE PER LOCAL CODE. (3500 PSI AIR ENTRAINED)

PRIVATE DEVELOPMENT CURB NOTES:

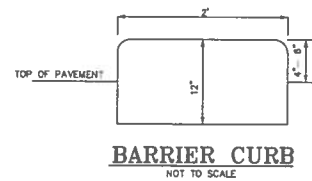
- Refer to the project plans for the proposed locations of the specific curb types.
- The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the Private Road Construction Notes and/or Driveway and Parking Lot Construction Notes and the General Notes on the project plans for additional requirements.
- Concrete material shall meet or exceed the specifications requirements of the appropriate Local Municipality. Unless specified otherwise by the Local Municipality, concrete material shall be air-entrained and shall have a minimum 28-day compressive strength of 3500 psi. Contractor shall submit concrete mix design and aggregate mechanical analysis report to the Local Municipality and Engineer for review and approval prior to use.
- Install transverse expansion control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse expansion control joints in curb as follows: 300' maximum on center. All spring joints of intersecting streets and within 10' on each side of catch basins. Transverse expansion control joints shall have 1" thick asphalt fiber joint filler matching entire curb cross section.
- Provide 0.5" asphalt fiber control joint between back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
- Curb Contractor shall provide final adjustment of catch basin castings in curb line. Castings shall be back pointed to structure water tight with concrete or mortar inside and outside of casting.
- Install curb cuts for all existing and proposed sidewalks and pedestrian ramps in accordance with the American Disabilities Act and the Barrier Free Design requirements of the appropriate Local, County and/or State Agency. Install curb cuts for all existing and proposed vehicular ramps and drives as noted on the project plans.



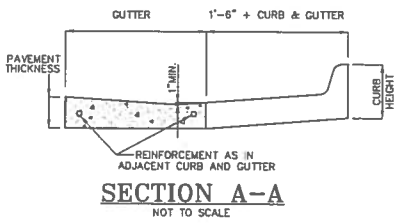
MDOT TYPE F4 CURB*
NOT TO SCALE



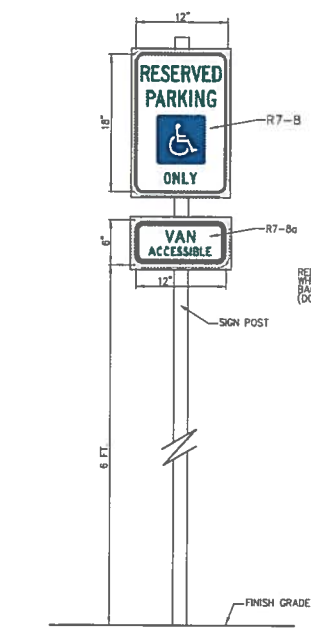
MDOT TYPE F4 CURB*
REVERSE PITCH
NOT TO SCALE



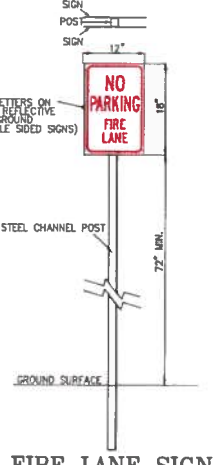
BARRIER CURB
NOT TO SCALE



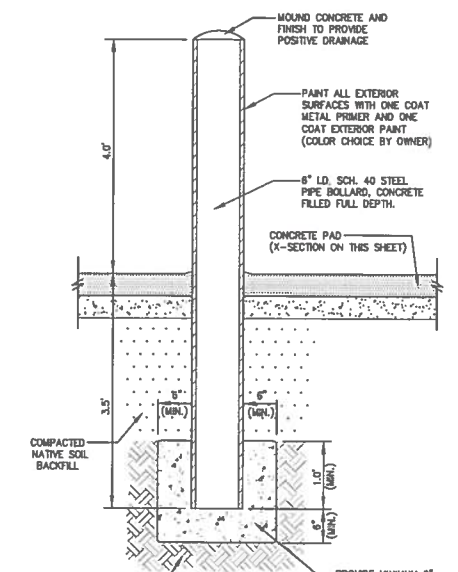
SECTION A-A
NOT TO SCALE



BARRIER FREE PARKING SIGN DETAIL
NOT TO SCALE



FIRE LANE SIGN DETAIL
NOT TO SCALE

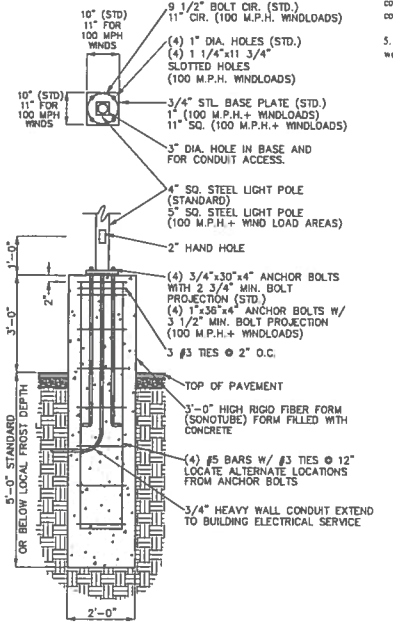


STEEL BOLLARD DETAIL
NOT TO SCALE

CONCRETE DRIVEWAY OPENING - MDOT DETAIL "M"
NOT TO SCALE

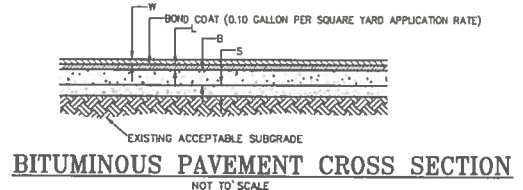


- * MDOT TYPE F CURB (N=24") CORRESPONDS TO GENOA TOWNSHIP TYPE A CURB. REFER TO GENOA TOWNSHIP, STANDARD PLAN R-1 'CATCH BASIN' FOR CASTING SCHEDULE.



LIGHT STANDARD DETAIL
NOT TO SCALE

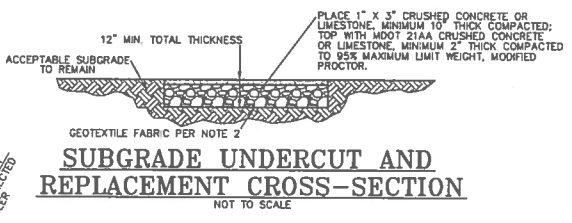
- NOTES:
1. FOUNDATION SHOWN IS A TYPICAL DESIGN. WIND LOADS MORE THAN 100 MPH AND UNSTABLE SOIL CONDITIONS MAY REQUIRE AN ALTERNATE DESIGN. VERIFY CONDITION OF SOILS WITH SOILS REPORT.
2. FOUNDATIONS SHALL EXTEND BELOW FROST DEPTH PER LOCAL CODES.
3. CONCRETE SHALL HAVE MIN 2500 PSI COMPRESSIVE STRENGTH AT 28 DAYS.



BITUMINOUS PAVEMENT CROSS SECTION
NOT TO SCALE

FOR USE IN MAIN DRIVE AISLE

KEY	DESCRIPTION	MATERIAL SPECIFICATION	MIN. COMP. THICKNESS
W	WEARING COURSE	MDOT 36A	2.0"
L	LEVELING COURSE	MDOT 13A	3.0"
B	AGGREGATE BASE	MDOT 21AA AGG.	10"
S	GRANULAR SUBBASE	N/A	N/A

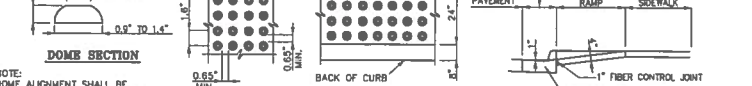
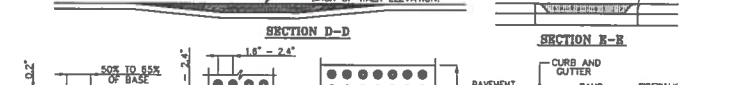
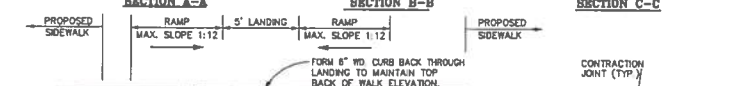
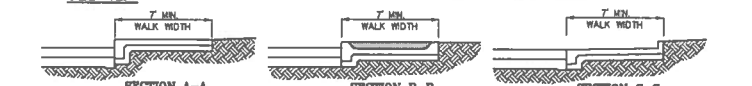
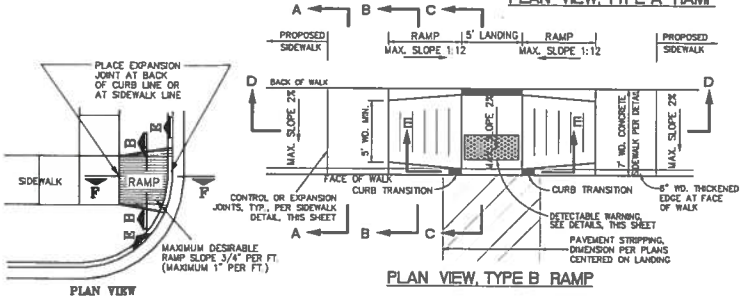
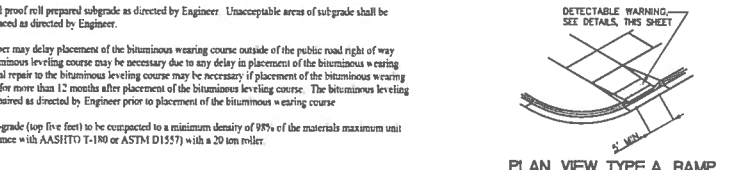


SUBGRADE UNDERCUT AND REPLACEMENT CROSS-SECTION
NOT TO SCALE

- NOTES:
1. UNACCEPTABLE AREAS OF SUBGRADE SHALL BE UNDERCUT AND REPLACED AS DIRECTED BY ENGINEER.
2. GEOTEXTILE FABRIC SHALL BE WOVEN, SURVIVABILITY CLASS 1, 0.43mm ADS, 0.10 PERMITTIVITY, AND SOFT @ 500 LBS STABILIZATION, PER AASHTO M288-96 REQUIREMENTS.

BITUMINOUS PAVEMENT NOTES:

- The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the General Notes, Road and/or Parking Lot Construction Notes and Typical Road and/or Pavement Cross Section details on the project plans for additional requirements.
- Unstable soils found within the 1 on 1 influence zone of the roadway, such as muck, peat, topsoil, marl, silt or other unstable materials shall be excavated and replaced up to the proposed subgrade elevation with MDOT Class III granular material compacted to 95% maximum unit weight, modified proctor.
- Contractor shall proof roll prepared subgrade as directed by Engineer. Unacceptable areas of subgrade shall be undercut and replaced as directed by Engineer.
- Owner/Developer may delay placement of the bituminous wearing course outside of the public road right of way. Repair of the bituminous leveling course may be necessary due to any delay in placement of the bituminous wearing course. Substantial repair to the bituminous leveling course may be necessary if placement of the bituminous leveling course is delayed for more than 12 months after placement of the bituminous leveling course. The bituminous leveling course shall be repaired as directed by Engineer prior to placement of the bituminous wearing course.
- Parking lot sub-grade (top five feet) to be compacted to a minimum density of 95% of the materials maximum unit weight (in accordance with AASHTO T-180 or ASTM D1557) with a 20 mm roller.



BARRIER FREE RAMP AND DETECTABLE WARNING DETAILS
NOT TO SCALE

- NOTE:
DOME ALIGNMENT SHALL BE PARALLEL AND PERPENDICULAR TO THE ALIGNMENT OF THE CROSSWALK.
DOMES INSTALLED AS LOCATED ON SHEET SP CROSSWALK.

DRIVEWAY AND PARKING LOT CONSTRUCTION NOTES:

- The grading, driveway and parking lot specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
- Driveway and Parking Lot work shall include site clearing of vegetation and tree stumps; stripping and stockpiling of topsoil for reuse; coarse grading and fills; removal of undesirable soils from the post surface influence area; culvert placement; subgrade preparation including fine grading and proof roll; subgrade undercuts and/or placement of geotextile fabric if needed; placement and preparation of granular subbase and aggregate base courses including fine grading and compaction; placement of concrete curb and gutter; watering of aggregate base within 24 hours of paving to obtain optimum moisture content; bituminous and/or concrete pavement including placement, compaction and bond coats; cleaning of bituminous pavements between courses if needed; preparation, finish work and restoration as needed to connect to existing pavements, ditches, driveways, etc.; adjustment of forms and safety structure castings to match finish grade; placement of shoulders and finish grading of ditches; pavement markings; topsoil placement; sand & mulch; site cleanup; restoration; and other work as shown on the project plans and specifications.
- Existing and proposed grades shown in the driveway profile view(s) are along the centerline of each driveway. Refer to the plan view and curve tables on the project plans for horizontal alignment and curve data. Proposed contours for ditches, curbs, driveway crown and pavement slope may not be shown in the plan view and/or grading plan.
- Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of driveway and/or parking lot work.
- Contractor shall coordinate construction staking, testing, documentation submitted and observation with the appropriate Agency, Surveyor and/or Engineer as required for construction, certification and/or acceptance of the driveway(s) and/or parking lot(s). All materials used and work done shall meet or exceed the requirements and specifications noted on the project plans. Any materials used or work done that does not meet requirements and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
- Contractor shall take all appropriate job site safety precautions. Refer to the Traffic Control specifications of the appropriate Regulatory Agency for work within a public road right of way.
- Contractor shall take precautions to prevent contamination of driveway and/or parking lot materials during handling, installation and construction processes. Contaminated materials shall be removed and replaced at Contractor's expense.
- Clear vision areas shall be created where required, refer to the Clear Vision Area detail on the project plans. Release existing signs/utilities as acceptable to the appropriate Agency. Owner/Developer shall coordinate installation of permanent street signage after completion of roadway.
- Contractor shall provide all excavation, shoring, shoring and dewatering as necessary to conform with MICHSA safety standards.

GENERAL NOTES:

- Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and all other Government and Regulatory Agencies with jurisdiction over the project. Contractor shall notify the appropriate Agencies in advance of each stage of work in accordance with each Agency's requirements.
- Contractor shall comply with all permit, insurance, licensing and inspection requirements associated with the work. Prior to construction, Contractor and Owner/Developer shall determine who is responsible for obtaining each required permit. Contractor shall verify that each required permit has been obtained prior to commencement of the stage of work associated with the required permit(s).
- Contractor shall furnish liability insurance and property damage insurance to save harmless the Owner, Developer, Architect, Engineer, Surveyor and Government Agencies for any accident occurring during the construction period. Refer to the appropriate Local, County and State Agencies for additional requirements. Copies of insurance certifications shall be made available to the Owner/Developer.
- Contractor shall conduct and perform work in a safe and competent manner. Contractor shall perform all necessary measures to provide for traffic and pedestrian safety from the start of work and through substantial completion. Contractor shall determine procedures and provide safety equipment such as traffic controls, warning devices, temporary pavement markings and signs as needed. Contractor shall comply with the standards of the State Department of Labor, the occupational health standards of the State Department of Health and safety regulations of the appropriate Local, County, State and Federal Agencies. Refer to the safety specifications of the appropriate Regulatory Agencies. The Contractor shall designate a qualified employee with complete job site authority over the work and safety precautions; said designated employee shall be on site at all times during the work.
- Contractor shall coordinate scheduling of all work in the proper sequence, including work by Subcontractors. Additional costs due to improper planning by Contractor or work done out of sequence as determined by standard acceptable construction practices, shall be Contractor's responsibility.
- Contractor shall contact the MISS DIG locating system, DIGGERS HOTLINE or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to construction. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (as possible) shall be verified in the field.
- Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.
- The Local Municipality, County and/or State in which the project is located may require an Engineer's Certification of construction of the proposed site improvements. Contractor shall verify the certification requirements with Engineer prior to commencement of work. Contractor shall coordinate construction staking, testing, documentation submitted and observation with the appropriate Agency, Surveyor and/or Engineer as required for the Engineer's Certification and Government Agency Acceptance. All materials used and work done shall meet or exceed the requirements of certification and acceptance, the contract documents and the material specifications noted on the project plans. Any materials used or work done that does not meet said requirements, contract documents and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
- Engineer may provide subsurface soil evaluation results, if available, to Contractor upon request. Subsurface soil evaluation results, soils maps and/or any other documentation does NOT guarantee existing soil conditions or that sufficient, acceptable on-site granular material is available for use as structural fill, pipe bedding, pipe backfill, road subbase or use as any other granular material specified on the project plans. On-site granular material that meets or exceeds the material specifications noted on the project plans may be used as structural fill, pipe bedding, pipe backfill and/or road subbase material. On-site granular material shall be stockpiled and tested as acceptable to the appropriate Agency and/or Engineer prior to use.
- During the performance of their work, Contractor shall be solely responsible for determining soil conditions and appropriate construction methods based on the actual field conditions. Contractor shall furnish, install and maintain shoring, shoring, bracing and/or other tools and equipment and/or construction techniques as needed for the safety and protection of the workers, pedestrians and vehicular traffic and for protection of adjacent structures and site improvements.
- Contractor shall install temporary and permanent soil erosion and sedimentation control devices at the appropriate stages of construction in accordance with the appropriate regulatory Agencies. Refer to Soil Erosion and Sedimentation Control Plans and Notes on the project plans.
- Structural fill shall be placed as specified on the project plans and within the 1 on 1 influence zone of all structures, paved areas and other areas subject to vehicular traffic. Structural fill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor). Fill material shall meet or exceed the specifications noted on the project plans or as directed by Engineer when not specified on the project plans.
- All existing monuments, property corners, ground control and benchmarks shall be protected and preserved; and if disturbed by Contractor, shall be restored at Contractor's expense. Contractor shall notify Surveyor of any conflicts between existing monuments, property corners, ground control and benchmarks and the proposed site improvements.
- Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions which are inconsistent with the project plans and/or specifications.
- When noted on the project plans for demolition and/or removal, Contractor shall remove existing structures, building and debris and recycle and/or dispose of in accordance with Local, County, State and Federal regulations.
- Contractor shall remove excess construction materials and debris from site and perform restoration in accordance with the project plans and specifications. Disposing of excess materials and debris shall be performed in accordance with Local, County, State and Federal regulations.
- Construction access to the site shall be located as acceptable to the Owner/Developer and to the appropriate Local, County and/or State Agency with jurisdiction over the road(s) providing access to the site. Construction access shall be maintained and cleaned in accordance with the appropriate Local, County and/or State Agencies and as directed by Owner/Developer and/or Engineer.
- Contractor shall take necessary precautions to protect all site improvements from heavy equipment and construction procedures. Damage resulting from Contractor actions shall be repaired at Contractor's expense.

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DRAFT: RWL	1	12/17/14	REVISED PER MUNICIPALITY REVIEW COMMENTS			
CHECK: BS						

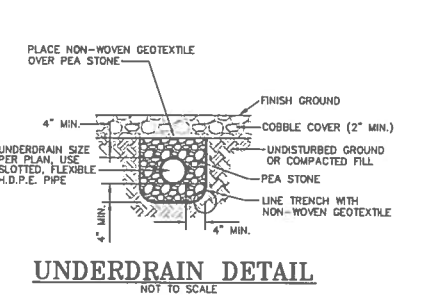
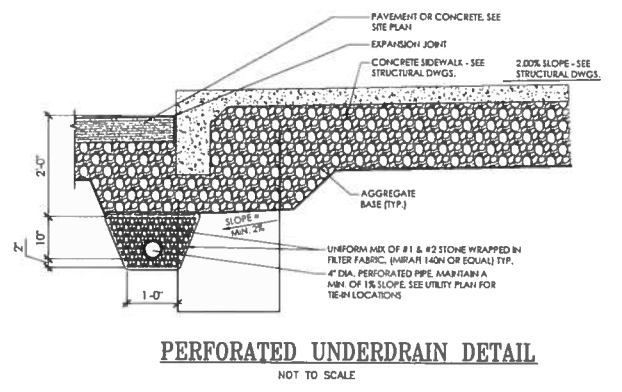
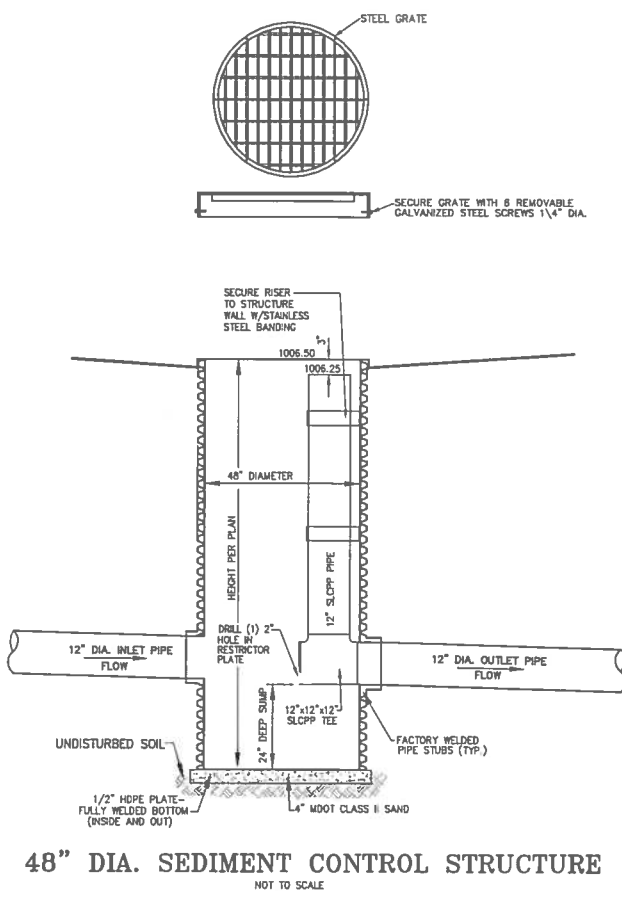
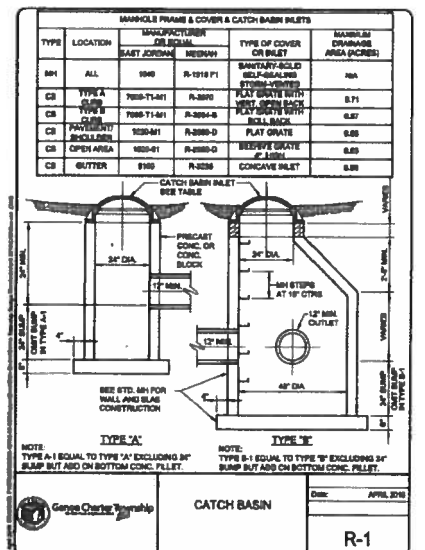
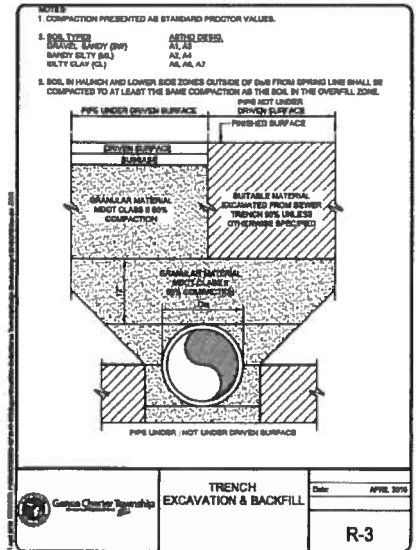
RED OLIVE RESTAURANT
3838 E. GRAND RIVER

SITE DEVELOPMENT
NOTES AND DETAILS

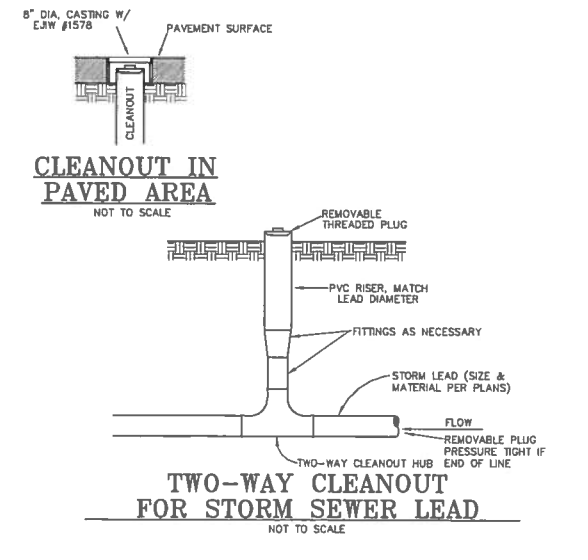
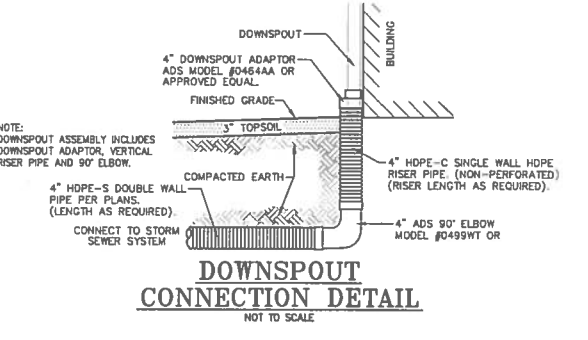
CLIENT: PKJJ,LLC
29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

SCALE: N/A
PROJECT No.: 9132308
DWG NAME: 2330-DETAILS
ISSUED: DEC 17, 2014

DT1



- STORM SEWER NOTES**
- The storm sewer and storm-water management specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
 - Storm sewer work shall include clearing of vegetation and tree stumps, stripping and stockpiling of topsoil for reuse, excavation of pipe trench, placement of pipe bedding, placement of pipe and structures including castings, connection to existing structures, tack pointing of structures, backfill of pipe trench, compaction of backfill, finish grading to provide positive drainage to structures, adjustment of castings to match finish grade, topsoil placement, seed & mulch, site cleanup and restoration, and other work as shown on the project plans and specifications.
 - Existing and proposed grades shown in profile view, when provided on the project plans, may be in relation to the centerline of road or item other than the centerline of pipe. The pipe lengths and grades shown in profile view on the project plans may not be to scale.
 - RCP when shown on the project plans shall be reinforced concrete pipe and shall conform to the specifications for reinforced concrete pipe per ASTM C76. RCP pipe joints shall be bell-and-spigot with rubber gaskets conforming to ASTM 433. Joints of pipe having a diameter of 30 inches or greater shall be lock-pointed on the inside with cement mortar after the backfill process is complete. Install reinforced concrete end sections incidental to work. Saw cut pipes to length as needed. When pipe class is not shown on the project plans, provide the following:
Pipe cover to proposed grade: 0 to 4 feet Class V
4.1 to 10 feet Class III*
10.1 to 18 feet Class IV
18.1 feet and greater Class V
* Use Class IV under paved surfaces
 - CMP when shown on the project plans shall be corrugated metal pipe and shall conform to the specifications for corrugated metal pipe per AASHTO Designation M16. CMP shall be 16-gauge steel minimum for 24 inch diameter or smaller and 14-gauge steel minimum for 30 inch diameter or greater. Install galvanized steel end sections and connection bands, incidental to work. Connection bands for CMP pipe joints located under paved surfaces shall be gasketed couplers. Saw cut pipes to length as needed.
 - HDPE - Type S when shown on the project plans shall be high density polyethylene pipe with a smooth interior and shall conform to the specifications for high density polyethylene pipe per AASHTO Designation M252 Type S for pipes of 3" to 10" diameter and per AASHTO Designation M294 Type S for pipes of 12" to 60" diameter. HDPE - Type S pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with gaskets conforming to ASTM F477. Tamp backfill at spring line of HDPE - Type S pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
 - HDPE - Type C when shown on the project plans shall be high density polyethylene pipe with a corrugated interior and shall conform to the specifications for high density polyethylene pipe per AASHTO Designation M252 Type C for pipes of 3" to 10" diameter and per AASHTO Designation M294 Type C for pipes of 12" to 60" diameter. HDPE - Type C pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with gaskets conforming to ASTM F477. Tamp backfill at spring line of HDPE - Type C pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.



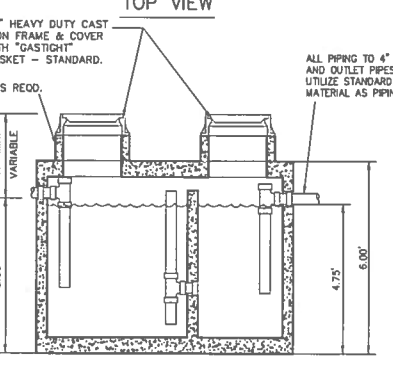
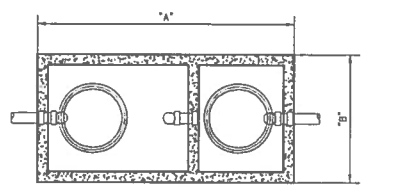
NOTE: TYPE A CURB CORRESPONDS TO MDT STANDARD PLAN R-30-F TYPE F CURB FOR 2' W DIMENSION.

48" DIA. SEDIMENT CONTROL STRUCTURE
NOT TO SCALE

RESTRICTOR
NOT TO SCALE

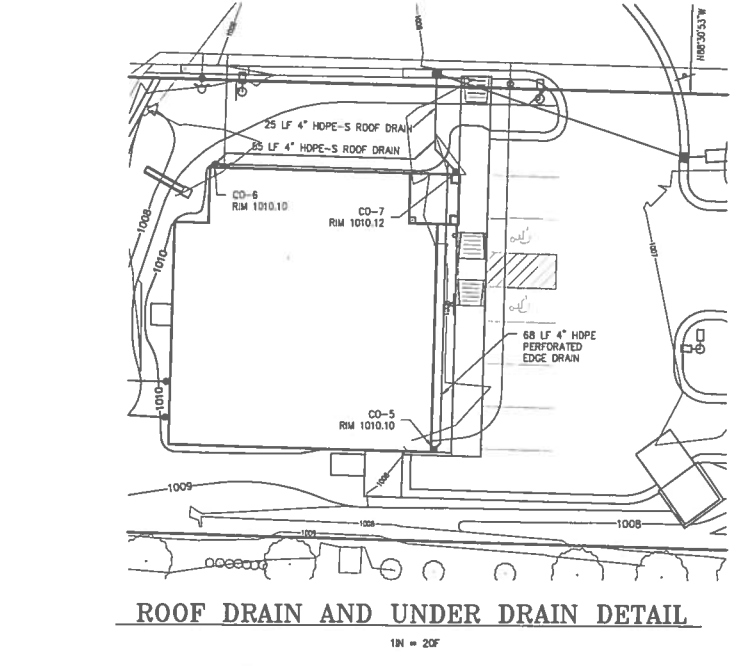
GRAVITY SANITARY SEWER LEAD NOTES:

- The Local Plumbing Code and sanitary sewer specifications of the Local Municipality with authority over the sanitary sewer are a part of this work. Refer to the General Notes and Gravity Sanitary Sewer Notes on the project plans for additional requirements.
- Sanitary sewer work shall include excavation of pipe trench, placement of pipe bedding, placement of pipe and structures including castings and covers, connection to existing sewer, excavation for grease trap, placement of grease trap, backfill of pipe trench and grease trap excavation, compaction of backfill, testing, cleanup and other sanitary sewer work as shown on the project plans and specifications.
- Sanitary Sewer Leads shall be PVC pipe conforming to ASTM D3034, SDR of 26. Pipe joints shall be push on bell-and-spigot type joints conforming to ASTM D3212 with factory installed flexible elastomeric gaskets conforming to ASTM F477. Solvent cemented joints shall only be used when noted on the project plans for specific applications and shall conform to ASTM D2555. Provide pipe diameter and slope per project plans. When proposed lead information is not noted on the project plans, provide 4" minimum diameter at 2.0% minimum slope for single family residential and 6" minimum diameter at 1.0% minimum slope for multiple family residential and all non-residential uses.
- Contract proposed 8" sanitary sewer lead to existing sanitary sewer lead. Locate and cut existing and to field fit appropriate fittings for lay out to include grease trap installation. Sewer lead fittings shall be of the same materials as the pipe.
- Contractor shall field locate all existing utilities prior to work. Contractor shall provide all bends and fittings as needed, incidental to work, to install the sanitary sewer leads and to provide the required clearance between the sanitary sewer leads and all existing and proposed utilities while maintaining the proposed minimum pipe slope and proposed lead end invert elevation. Contractor shall notify the Engineer immediately of any utility crossing conflicts.
- Provide 4' minimum cover from the top of the sanitary sewer lead pipe to the proposed finished grade when site conditions allow. When pipe cover is less than 4', install 12" thick by 24" wide Styrofoam insulation centered over pipe at 12" above top of pipe or as required by Local Code.
- For vacant property or when connection of the sanitary sewer lead to a building is not to be performed as a part of this project, install a 45 degree lead end riser starting at the proposed lead end and extending above proposed finish grade, 2.0' minimum, 4.0' maximum. Install a pressure tight plug and restricted joints as needed to allow for pressure testing of sanitary sewer. When connection of the sanitary lead to a building is to be performed as part of this project or when installation of a 45 degree lead end riser will conflict with the existing land use, install a temporary, water tight and pressure tight plug in the end of the lead and mark the lead end with a 2" x 4" wooden stake extending a minimum of 12" above proposed finish grade, incidental to work, or other lead end marking system as required by the Local Municipality.
- CPVC when shown on the project plans shall be corrugated polyvinyl chloride pipe and shall conform to the specifications for corrugated polyvinyl chloride pipe per ASTM F794 and F949. CPVC pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with gaskets conforming to ASTM F477. Tamp backfill at spring line of CPVC pipe. Install high density polyethylene end sections incidental to work. Saw cut pipes to length as needed.
- PVC when shown on the project plans shall be polyvinyl chloride pipe and shall conform to the specifications for polyvinyl chloride pipe per ASTM D2731, maximum SDR of 26. PVC pipe joints shall be bell-and-spigot type conforming to ASTM D3212 with gaskets conforming to ASTM F477 or solvent welded type conforming to ASTM D2564. Tamp backfill at spring line of PVC pipe. Saw cut pipes to length as needed.
- Concrete storm structures shall be pre-cast and shall conform to the specification of pre-cast concrete structures per ASTM C478. Brick, concrete block or cast in place storm structures may be substituted for pre-cast structures ONLY when acceptable to Owner, Engineer AND Municipality, refer to MDT standard plan R-1-D. Pipe openings in pre-cast structures shall be factory installed. All factory openings in storm structures shall be lock-pointed watertight with cement mortar. Refer to MDT standard plan R-2-D for storm structure details when pipe exceeds 42 inch diameter.
- Tap existing structures as acceptable to the Engineer and Municipality, incidental to work. All temporary openings in storm structures shall be lock-pointed watertight with cement mortar.
- Backfill all storm sewers in accordance with the Pipe Trench details provided on the project plans. Provide pipe bedding that meets or exceeds both the specifications of the Pipe Trench details on the project plans and the recommendation of the pipe manufacturer, incidental to work.
- When edge drains, under drains and/or finger drains are shown on the project plans, connection to storm structures is incidental to work. During storm sewer construction, install first 10 linear feet of edge drain and/or under drain from the storm structures in each specified direction and install temporary cap at end. Complete installation of edge drain following preparation of the subgrade when under paved surface or following finish grade when not under paved surface.
- Install removable plugs in storm sewer stubs as acceptable to Engineer and Municipality, incidental to work. Mark the end of all storm sewer stubs with a 2" x 4" wooden stake extending a minimum of 12" above finish grade, incidental to work.
- Storm structure castings shall be coated with water based asphaltic paint by the manufacturer. Seams and temporary openings between storm structures and castings shall be lock-pointed water tight with cement mortar. Coordinate correct curb box / hood / TF back as needed to match curb profile. See casting schedule on project plans for additional requirements.



G.T. SIZE	DIM. "A"	DIM. "B"
500 GALLON	8'-2"	4'-2"
750 GALLON	8'-1"	4'-0"
1000 GALLON	8'-2"	5'-1"
1200 GALLON	8'-6"	5'-9"

EXTERIOR GREASE TRAP
NOT TO SCALE



ROOF DRAIN AND UNDER DRAIN DETAIL
1IN = 20'

DESIGN:BS	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: RWL	1	12/17/14	REVISED PER MUNICIPALITY REVIEW COMMENTS			
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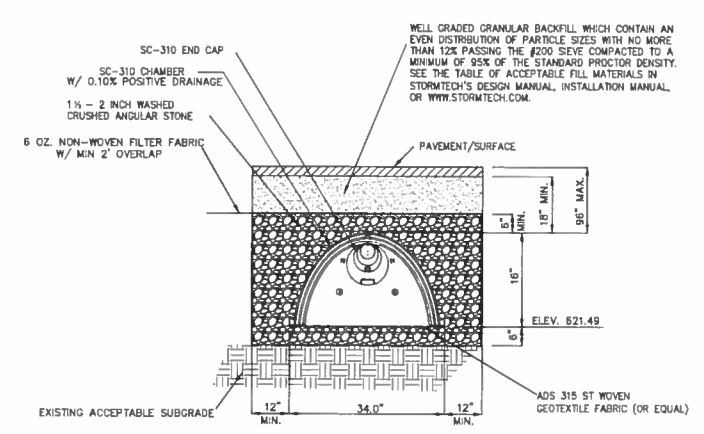
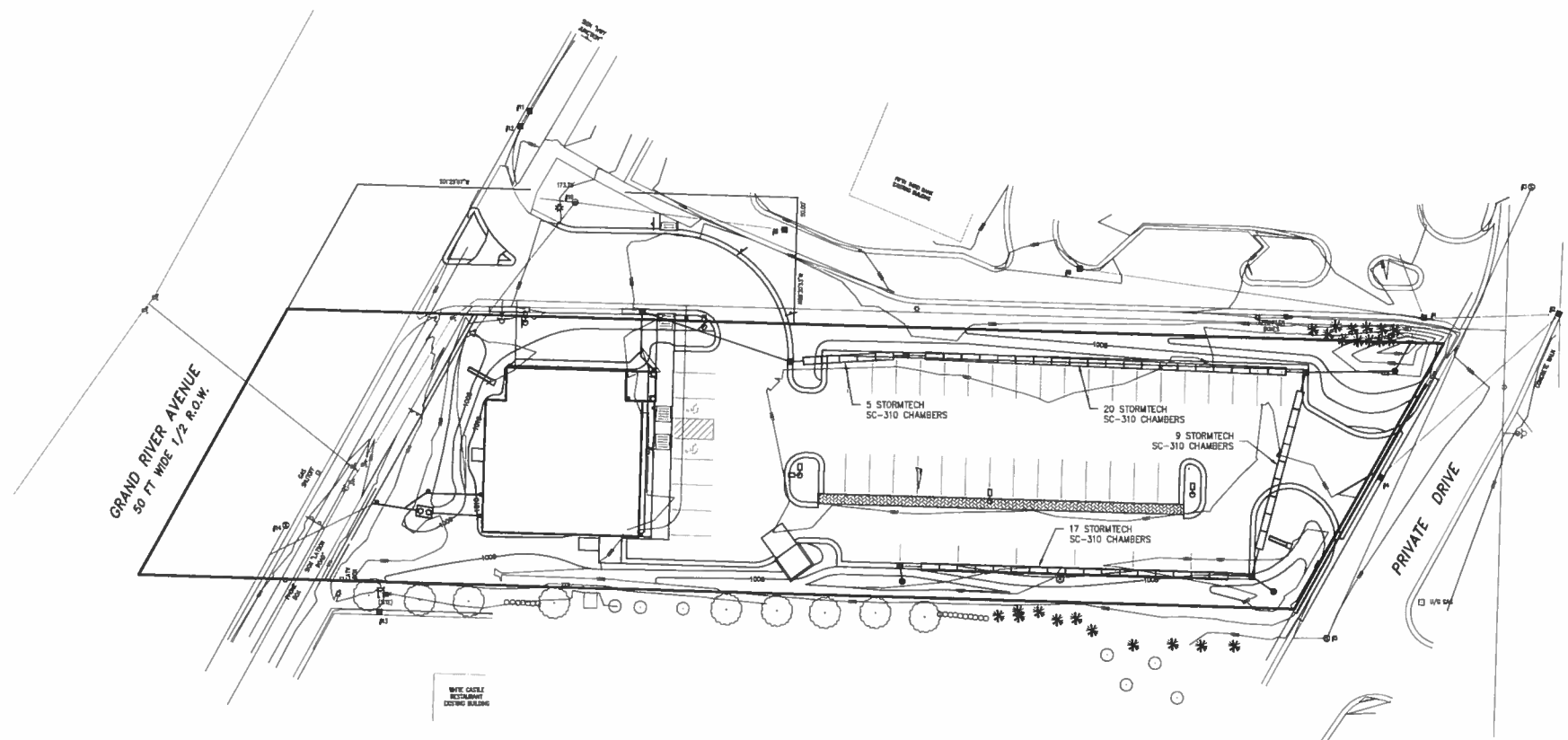
RED OLIVE RESTAURANT
3838 E. GRAND RIVER

STORM SEWER & SANITARY SEWER NOTES AND DETAILS

CLIENT: PKJJ, LLC
29329 PARAMOUNT COURT
FARMINGTON HILLS, MI 48331

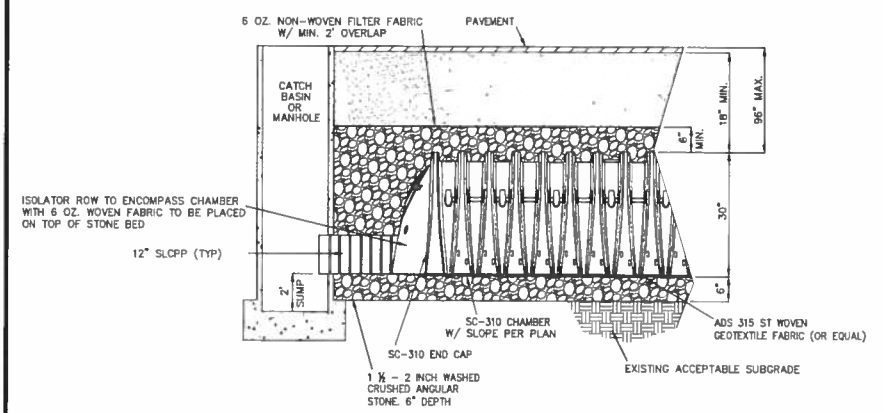
SCALE: N/A
PROJECT No.: 9132308
DWG NAME: 2308-DETAILS
ISSUED: DEC 17, 2014

DT2

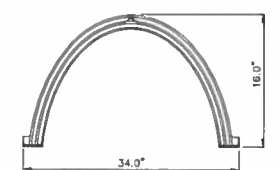
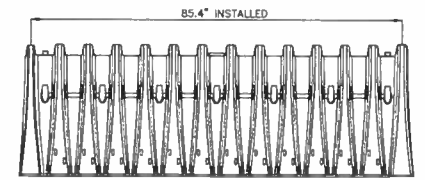
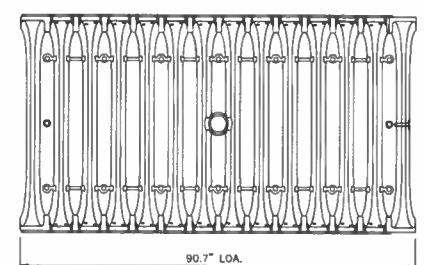


STORMTECH SC-310 CHAMBER SYSTEM
TYPICAL CROSS SECTION DETAIL

NOTE:
 ISOLATOR ROW TO ENCOMPASS CHAMBER WITH 6 OZ. WOVEN FABRIC TO BE PLACED ON TOP OF STONE BED.



STORMTECH SC-310 CHAMBER SYSTEM



STORMTECH SC-310 CHAMBER

NOMINAL CHAMBER SPECIFICATIONS
 SIZE (W x H x INSTALLED LENGTH) 34.0" x 18.0" x 85.4"
 CHAMBER STORAGE 14.7 CUBIC FEET 750 CF
 MINIMUM INSTALLED STORAGE 31.0 CUBIC FEET 1581 CF
 WEIGHT 37 LBS.

TOTAL INSTALLED CHAMBERS 51
 TOTAL CHAMBER STORAGE 750 CF
 MIN INSTALLED STORAGE 1581 CF

MANUFACTURER:
 STORM TECH
 P.O. BOX 619
 OLD SAYBROOK, CN 06475
 WWW.STORMTECH.COM

CONTACT:
 RANDY NOSEK
 (810) 348-8914

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DESIGN:BS	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: RWL	1	12/17/14	REVISED PER MUNICIPALITY REVIEW COMMENTS			
CHECK: JMB						

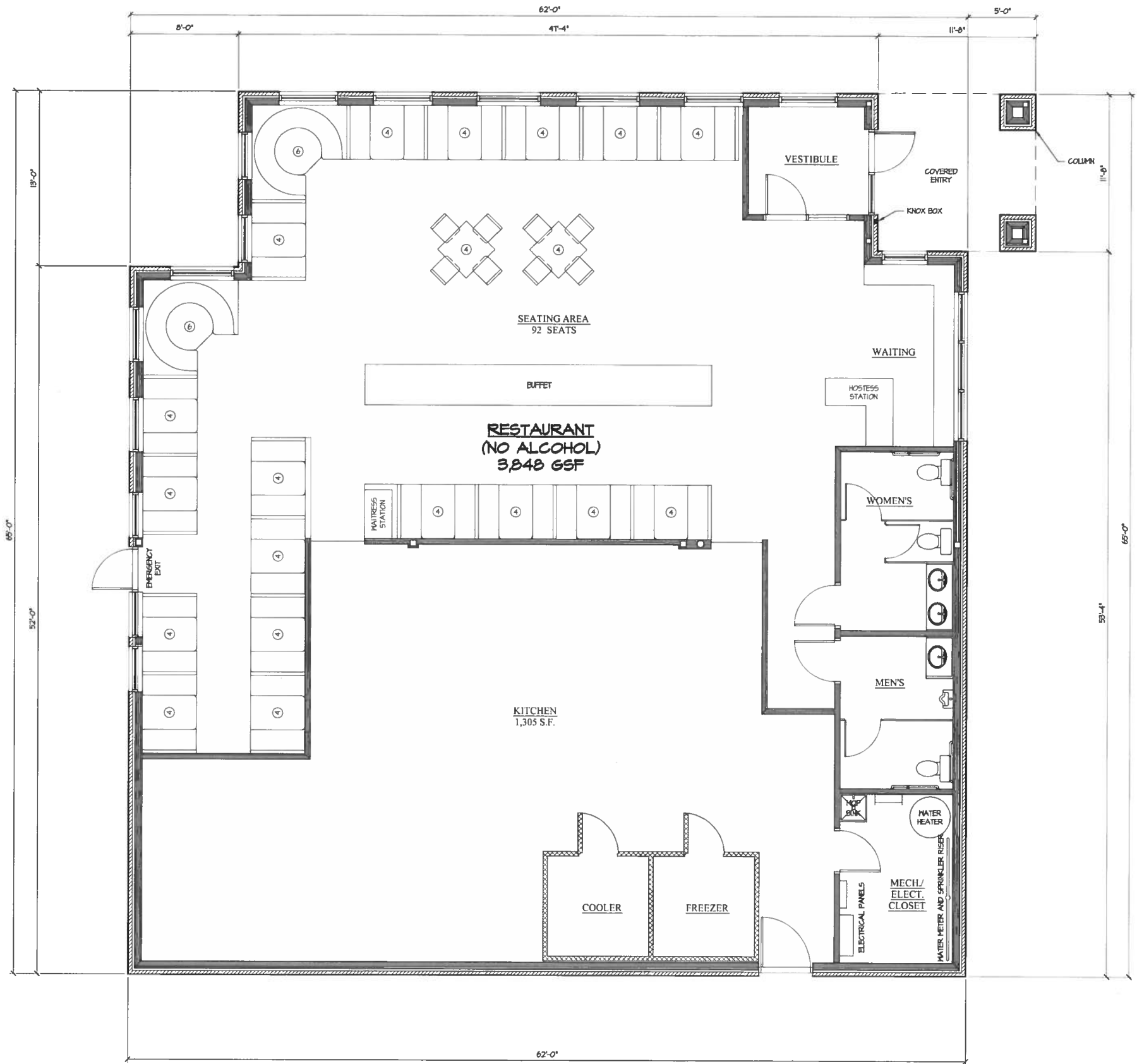
RED OLIVE RESTAURANT
3838 E. GRAND RIVER

UNDERGROUND DETENTION
NOTES AND DETAILS

CLIENT:
 PKJJ, LLC
 29329 PARAMOUNT COURT
 FARMINGTON HILLS, MI 48331

SCALE: N/A
 PROJECT No.: 9132308
 DWG NAME: 2308-DETAILS
 ISSUED: DEC 17, 2014

DT3



FLOOR PLAN
SCALE: 1/4" = 1'-0"



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3838 E. GRAND RIVER AVENUE
GENOA TOWNSHIP, MICHIGAN
FLOOR PLAN

NO.	DATE	BY	NOTES
1	12-15-2014	KV	REVISED PER TOWNSHIP REVIEW

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DRAWN BY: KV
CHECKED: KV
APPROVED: KV
DATE: APRIL 28, 2014
PROJECT: 1334

SHEET
A1

TOWNSHIP REGULATIONS

HEIGHT:
 ALLOWABLE HEIGHT = 3 STORIES / 45' MAX.
 PROPOSED HEIGHT = 1 STORY / 26' MAX. (COMPLIES)

MATERIALS:
 WALLS MUST BE 75% BRICK, STONE, OR CAST STONE.
 EIFS, OR PYPON = 25% MAX.

SIGNAGE:
 10% OF FACADE AREA, OR 100 SF. MAX.
 2 SIGNS ARE ALLOWED ON A THROUGH-LOT AS LONG AS THE MAX. SIGN AREA IS NOT EXCEEDED.
 2 SIGNS PROVIDED @ 50 SF. EACH = 100 SF. TOTAL (COMPLIES)

MATERIAL PERCENTAGES
 TOTAL FACADE AREA = 1521 SF
 GLASS AND DOOR AREA = 211 SF
 NET FACADE AREA = 1521 - 211 = 1310 SF
 BRICK, STONE, OR CAST STONE = 474 SF/36% SF = 14%
 EIFS, OR PYPON = 160 SF/136 SF = 12%
 CANVAS AWNINGS (BRICK BEHIND) = 102 SF/1316 SF = 14%



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

MATERIAL PERCENTAGES
 TOTAL FACADE AREA = 1521 SF
 GLASS AND DOOR AREA = 194 SF
 NET FACADE AREA = 1521 - 194 = 1327 SF
 BRICK, STONE, OR CAST STONE = 1062 SF/1300 SF = 77%
 EIFS, OR PYPON = 174 SF/1300 SF = 13%
 CANVAS AWNINGS (BRICK BEHIND) = 152 SF/1300 SF = 11%



SOUTH ELEVATION (REAR, OR, PARKING LOT FACE)
 SCALE: 1/4" = 1'-0"

AccuLite
 Project: _____
 Fixture Type: _____
 Location: _____
 Contact/Phone: _____

STONEWALL™ LED
 VANDAL RESISTANT
 WALL MOUNTED LUMINAIRE
 ROUND, 35W LED

PHOTOMETRY

Beam Angle	Lumens	% of Lumens
Beam Light 18° x 50°	313	88.1%
Beam Light 24° x 50°	78	21.9%
Beam Light 30° x 50°	11	3.1%
Beam Light 36° x 50°	2	0.6%
Beam Light 42° x 50°	1	0.3%
Beam Light 48° x 50°	0	0.0%
Beam Light 54° x 50°	0	0.0%
Beam Light 60° x 50°	0	0.0%
Beam Light 66° x 50°	0	0.0%
Beam Light 72° x 50°	0	0.0%
Beam Light 78° x 50°	0	0.0%
Beam Light 84° x 50°	0	0.0%
Beam Light 90° x 50°	0	0.0%

PRODUCT DESCRIPTION
 Stonewall architectural luminaires combine vandal resistant features with the energy efficiency and low maintenance cost of LED lighting. This virtually eliminates any maintenance for years after installation. Stonewall luminaires are ideal for schools and high traffic areas where the fixtures may be subjected to intentional or unintentional abuse. AccuLite LED engines carry a 5 year limited warranty.

PRODUCT SPECIFICATIONS
 Optics: Luminaires have opal white, translucent or clear lenses. All lenses are UV stabilized molded polycarbonate with high impact resistance properties. Mounting: Mounts flush to the wall or to the ceiling. Mounts on 3/16" or 1/4" junction boxes. Housings have four threaded and plugged 1/2" conduit entries.

Construction: Die cast, marine grade aluminum housing. Face plates are injection molded polycarbonate. Lenses and face plates are a minimum 1/8" thick for maximum resistance to vandalism. Drain channels are molded into the face plate keeping the luminaire clean. Torx™ T-15 pin-in-head tamperproof screws. Formed aluminum heat sink.

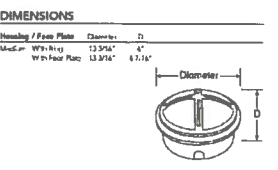
LED Thermal Management: Stonewall luminaires are equipped with a formed aluminum heat sink that creates a strong bond between the LED arrays and the aluminum housing, thus utilizing the entire mass and surface area of the luminaire as a heat sink. This reduces LED operating temperature and increases LED life.

Electrical: The luminaire is equipped with one LED driver with universal 120-277VAC input. Driver minimum operating temperature is -30°C (-23°F). Total Harmonic Distortion (THD) 20% Max. Power factor > 92% at full load, 115VAC, 230VAC. An independent surge suppressor provides 10 KAmp protection.

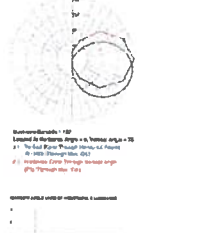
Finish: Bronze, white, black or silver. Die cast parts are polyester powder coat. Polycarbonate parts have the color molded in.

Certifications: UL1598 and CSA C22.2 250. Suitable for wet locations. Unison made Meets "Buy American Act" and AARRA.

Specifications subject to change without notice.



VRM-A026-4K-UN-W-E
 POLAR GRAPH
 Total Luminaire Power: 35W
 Total Luminaire Lumens: 400



PUCCI + VOLLMAR
ARCHITECTS, PC
 ARCHITECTURE + DESIGN + PLANNING
 508 E. GRAND RIVER AVE., SUITE 100B, BRIGITTON, MI 48116-1566
 PHONE: (810) 225-9398
 www.pv-architects.com



Red Olive RESTAURANT
 3838 E. GRAND RIVER AVENUE
 GENOA TOWNSHIP, MICHIGAN

PROJECT

SHEET TITLE CONCEPTUAL FRONT AND REAR EXTERIOR ELEVATIONS

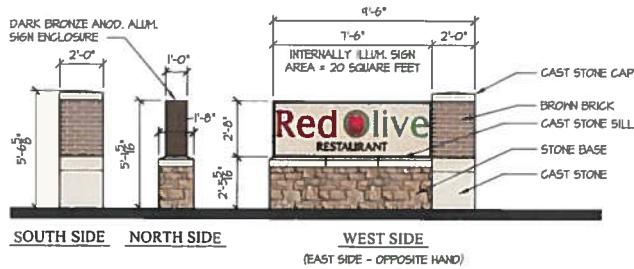
NO.	DATE	BY/NOTES	REVISIONS PER TOWNSHIP REVIEW

DO NOT SCALE THIS PRINT, USE DIMENSIONS SHOWN ONLY

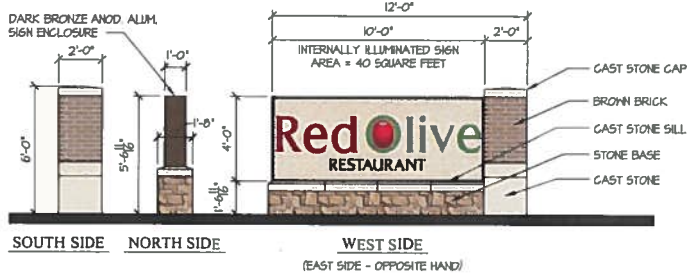
DRAWN BY: KV
CHECKED BY: KV
APPROVED BY: KV
DATE: APRIL 28, 2014
PROJECT: 1334

SHEET:
A2

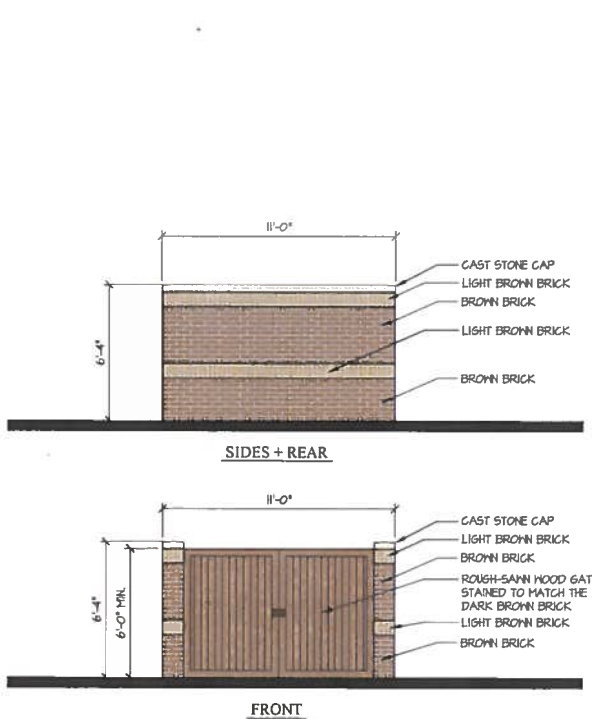




SOUTH MONUMENT SIGN ELEVATIONS

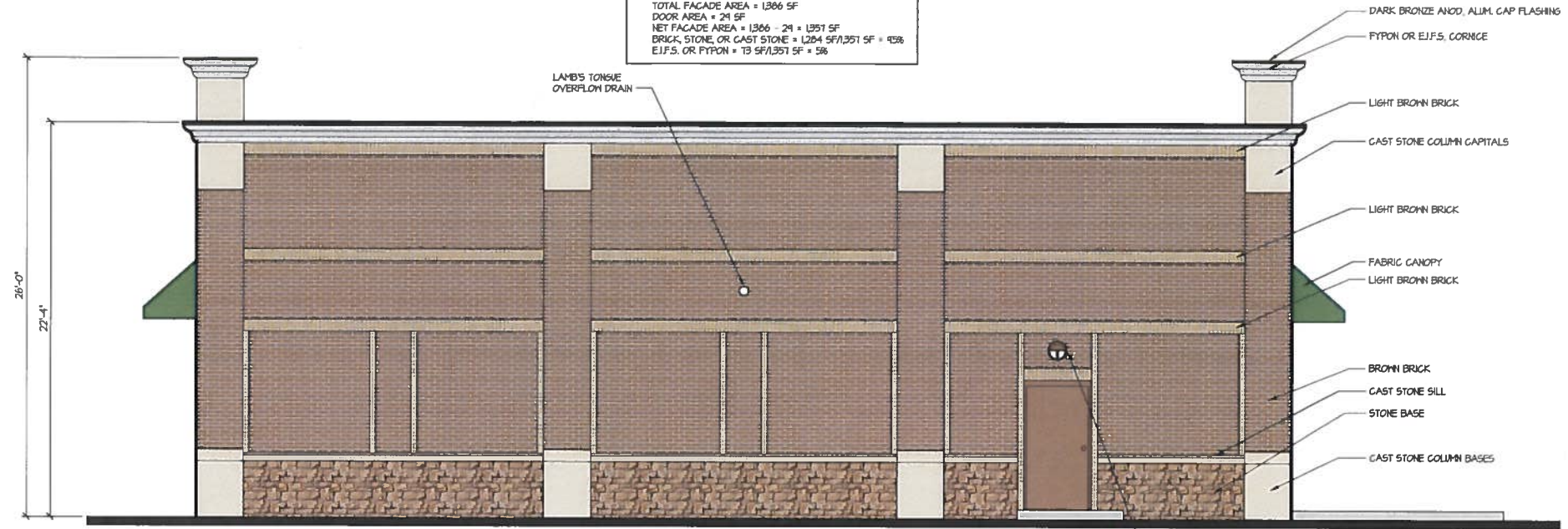


NORTH MONUMENT SIGN ELEVATIONS



DUMPSTER ENCLOSURE ELEVATIONS
SCALE: 1/4" = 1'-0" (REFER TO CIVIL DRAWINGS FOR CONSTRUCTION DETAILS)

MATERIAL PERCENTAGES
 TOTAL FACADE AREA = 1386 SF
 DOOR AREA = 24 SF
 NET FACADE AREA = 1366 - 24 = 1342 SF
 BRICK, STONE, OR CAST STONE = 1284 SF/1351 SF = 95%
 E.J.F.S. OR PYTON = 73 SF/1351 SF = 5%



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

MATERIAL PERCENTAGES
 TOTAL FACADE AREA = 1432 SF
 GLASS AREA = 234 SF
 NET FACADE AREA = 1432 - 234 = 1198 SF
 BRICK, STONE, OR CAST STONE = 904 SF/1198 SF = 75%
 PYTON OR E.J.F.S. = 80 SF/1198 SF = 7%
 CANVAS AWNINGS (BRICK BEHIND) = 124 SF/1198 SF = 10%



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

PUCCI + VOLLMAR ARCHITECTS, PC
 ARCHITECTURE + DESIGN + PLANNING
 508 E. GRAND RIVER AVE., SUITE 100B, BRIGLITON, MI 48116-1566
 PHONE: (810) 225-5938
 WWW.PV-ARCHITECTS.COM



Red Olive RESTAURANT
 3633 E. GRAND RIVER AVENUE
 GENOA TOWNSHIP, MICHIGAN

PROJECT: EXTERIOR ELEVATIONS, MONUMENT SIGN, AND DUMPSTER ENCLOSURE ELEVATIONS

SHEET TITLE: EXTERIOR ELEVATIONS, MONUMENT SIGN, AND DUMPSTER ENCLOSURE ELEVATIONS

NO.	DATE	BY	REVISED PER
1	12-18-2014	KV	REVISED PER TOWNSHIP REVIEW
2		BT	NOTES

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DRAWN BY: KV
 CHECKED: KV
 APPROVED: KV
 DATE: APRIL 28, 2014
 PROJECT: 1334



SHEET: **A3**



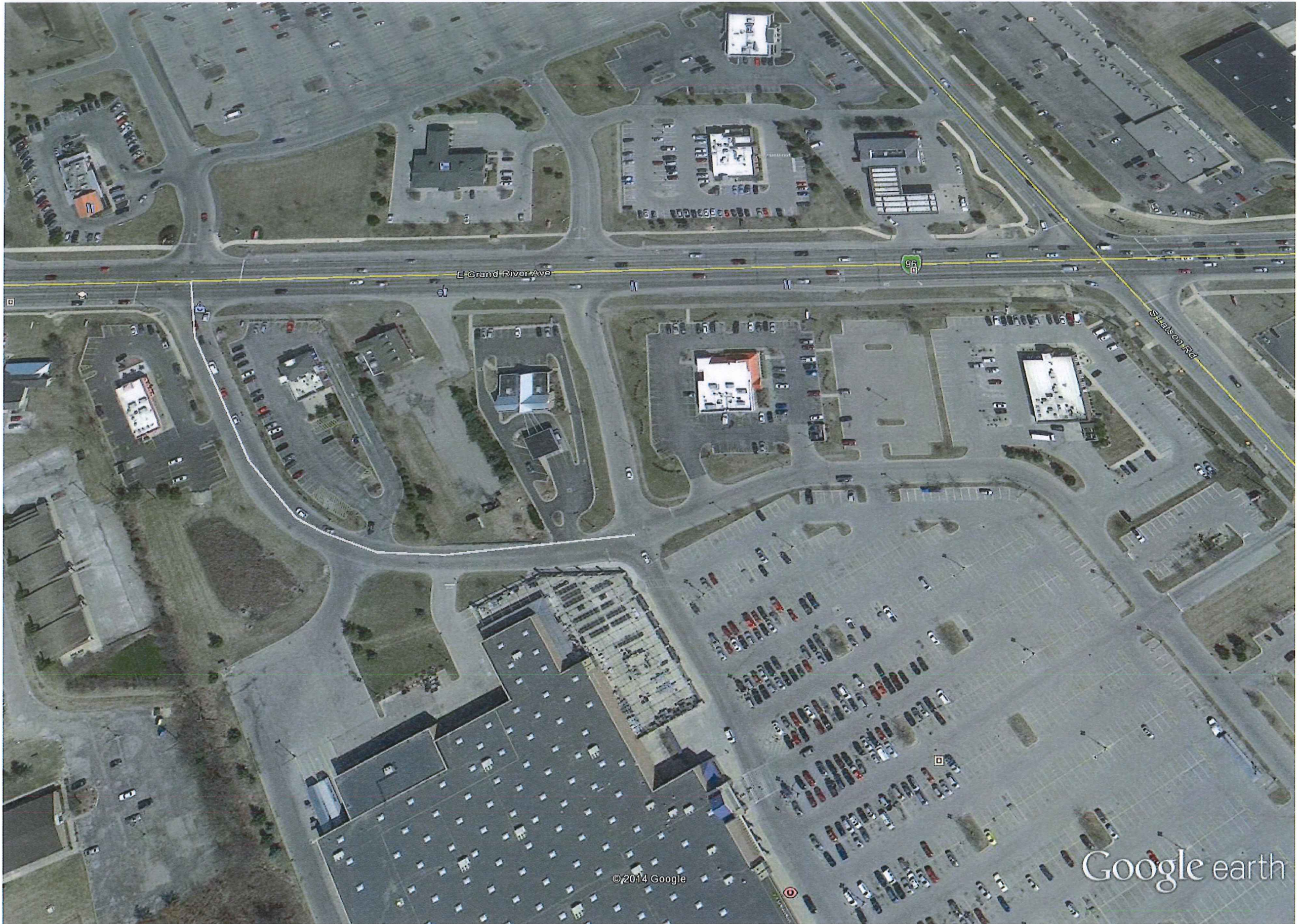
E Grand River Ave

96

Google earth







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Google earth

Google earth

feet
meters





- ◆ Design/Build
- ◆ General Contracting
- ◆ Construction Management

7258 Kensington Road
Brighton, MI 48116
Phone: 248-446-8000
Fax: 248-446-1800
www.brivar.com

January 5, 2015

Genoa Charter Township
Community Planning Dept.
ATTN: Kathryn Poppy
2911 Dorr Road
Brighton, MI 48116

RE: Battery Solutions Site Plan Approval - Table

Dear Kathryn,

Per your request, please let this serve as our formal request to table the Battery Solutions site plan item until the February 9, 2015 meeting. If you have further questions or concerns please do not hesitate to contact us.

Respectfully,

A handwritten signature in blue ink, appearing to read 'Craig Stockard'. The signature is written in a cursive, flowing style.

Craig Stockard
President



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

GENOA TOWNSHIP
DEC 01 2014

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: BRIVAR Construction Company 7258 Kensington Rd. Brighton, MI 48116
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Sova Leasing Brighton, LLC- 7260 Driftwood Drive Fenton, MI 48430

SITE ADDRESS: Parcels 5 & 6 Brighton Pines Industrial Park PARCEL #(s): 5 & 6 11-15-200-031

APPLICANT PHONE: 248-446-8000 OWNER PHONE: 800-852-8127

OWNER EMAIL: _____

LOCATION AND BRIEF DESCRIPTION OF SITE: _____

Located at existing facility at 5900 Brighton Pines Ct. in the
Brighton Pines Industrial Center

BRIEF STATEMENT OF PROPOSED USE: _____

Sorting, warehousing and distributing of used batteries and
related office use

THE FOLLOWING BUILDINGS ARE PROPOSED: _____

A 22,600 square foot addition to the existing building for office
and warehouse use

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: Craig Stockard, President

ADDRESS: BRIVAR Construction Company- 7258 Kensington Rd. Brighton, MI 48116

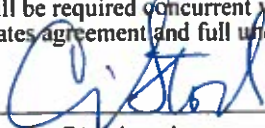
5900 Brighton Pines Ct
Howell 48843

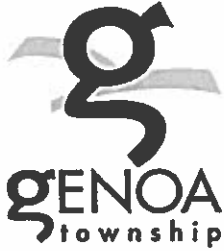
Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Craig Stockard of BRIVAR Construction Company at craig@brivar.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE:  DATE: 12/1/14
PRINT NAME Craig Stockard PHONE (248) 446-8000
ADDRESS 7258 Kensington Rd. Brighton, MI 48116



GENOA CHARTER TOWNSHIP
Special Land Use Application

GENOA TOWNSHIP
DEC 01 2014

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: BRIVAR Construction Company - 7258 Kensington Rd. Brighton, MI 48116

Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (248) 446-8000

EMAIL: craig@brivar.com

ATTN: Craig Stockard

OWNER NAME & ADDRESS: Sova Leasing Brighton, LLC - 7260 Driftwood Drive Fenton, MI 48430

SITE ADDRESS: Parcels 5 & 6 Brighton Pines Industrial Park

PARCEL #(s): 5 & 6

OWNER PHONE: (800) 852-8127

EMAIL: _____

ATTN: Chris Sova

Location and brief description of site and surroundings:

5900 Brighton Pines Ct.- located in the Brighton Pines Industrial Center

Surrounded by industrially zoned property on the northeast, southeast and northwest and by I-96 on the southwest.

Proposed Use:

Sorting, warehouse and distributing of used batteries and related office use.

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The proposed use is exactly in keeping with permitted uses within the Industrial District.

b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The site is designed with ample on-site parking and truck maneuvering. The building is designed to maintain the high aesthetics of the park. All operations will be contained within the building.

c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

There will be no negative impact or special requirements of public facilities and services.

- d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

Used batteries are stored in UL approved drums, pails or packaged on pallets, warehoused for short periods of time to consolidate shipping loads, then shipped off-site for recycling. All sorting, storage, loading and unloading is contained within the building.

- e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

None known.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Craig Stockard, Acting Agent, STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: Craig Stockard, President

ADDRESS: BRIVAR Construction Company- 7258 Kensington Rd. Brighton, MI 48116

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

Craig Stockard, President of BRIVAR Construction Company at craig@brivar.com
 Name Business Affiliation Email

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE:  DATE: 12/1/14

PRINT NAME: Craig Stockard PHONE: (248) 446-8000

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
DECEMBER 8, 2014
6:30 P.M.
MINUTES**

CALL TO ORDER: The meeting of the Genoa Township Planning Commission was called to order at 6:30 p.m. Present were James Mortensen, Barbara Figurski, Chairman Doug Brown, Eric Rauch, Chris Grajek. Absent was John McManus. Also present were Kelly VanMarter, Township Community Development Director and Assistant Township Manager; Brian Borden of LSL.

PLEDGE OF ALLEGIANCE: The Pledge of Allegiance was recited.

APPROVAL OF AGENDA: Ms. Figurski moved to approve the agenda. The motion was supported by Ms. Lowe. Motion carried unanimously.

CALL TO THE PUBLIC: A call to the public was made with no response.

OPEN PUBLIC HEARING #1... Review of a sketch plan for a proposed 194.1 sq ft equipment shelter, located at the City of Brighton Water Tank at 7925 Conference Center Drive, Brighton, Michigan 48116, parcel #11-24-200-062. The request is petitioned by Verizon Wireless c/o Stephen Crane.

Mr. Mortensen addressed the potential for conflict of interest, as Commissioner Lowe is the Clerk for the City of Brighton and the tower under discussion is owned by the City of Brighton. Ms. VanMarter read the conflict of interest guidelines adopted in 2009. It was determined no conflict of interest was present.

Mr. Jonathan Crane addressed the Planning Commission on behalf of the petitioner. Mr. Crane is a civil engineer and an attorney who practices at 1126 North Main in Rochester, Michigan. Mr. indicated that they have approached the City of Brighton about collocating on the water tower. The City required that site plan review be approved first. They have worked with the City's attorney so that the City could lease a portion of the leased premises. The original agreement was for a water tower and they have extended that to allow cellular. The City requested that a fence be placed around the fence, 6' tall, wrought iron. A brick veneer will be placed outside the shelter. They will pay money to the City of Brighton, providing service for approximately two miles to increase capacity which is under strain.

Mr. Mortensen asked if the antennas would be on the side of the tower. Is this equipment building of sufficient size to handle more than one carrier? Mr. Crane indicated it is for one carrier. The site is so small, there is no capacity for additional equipment. Mr. Mortensen asked whether another carrier might come along who wants additional storage. Mr. Crane indicated that the equipment is getting smaller and smaller. T-Mobile uses a 3' cube to store their equipment. Some locations have had 12'x30' buildings. Mr. Brown suggested that if another carrier comes along, we will need

to deal with the need at that time. Mr. Crane indicated that the easement area would have to be expanded. Cracker Barrel would need to be approached.

Mr. Borden indicated that the current applicant would not be responsible to provide space for future applicants. Future projects could be reviewed at the time they are needed with carriers approaching the Planning Commission with possible joint efforts for approval. There are specific ordinances in the township ordinance which could help direct future reviews of the site.

Mr. Borden indicated that the focus of this review is on the shelter; the antenna is a permit issue. This project is subject to setback standards, height standards, brick and fencing requirements, and a landscape plan requirement to help screen and beautify the area. The standards are met. There is some discretion allowed if the commission feels there is a need for additional landscaping.

Mr. Brown referred asked about what is allowed in the easement agreement. Mr. Crane indicated that the easement was strictly for the water tower. Mr. Brown asked Mr. Crane to ensure that Ms. VanMarter receives a copy of the agreement with the City of Brighton.

Mr. Rauch addressed the petitioner, expressing appreciation for the brick and wrought iron fencing. There are two air conditioning units and a cable bridge, with a large generator. Could additional evergreen trees help screen the building, one additional tree on the east and one on the west? It's conceivable that Cracker Barrel would cut the trees down.

Mr. Crane indicated that Cracker Barrel has been very cooperative. The bridge will be 7' high. Mr. Crane believes the evergreens will be 5' tall. Mr. Mortensen asked should we ask Cracker Barrel for an easement to include the trees? Mr. Crane indicated they would address this with Cracker Barrel and that in a few years the trees would grow and the building would not be seen. They use spruce trees. Mr. Brown indicated that he doesn't notice this structure when he is in the area and it is possible to overcrowd the area. Mr. Rauch indicated that one tree might be moved down slightly. Is the light on the building a security light or motion detector? Mr. Crane indicated that the light in the back could be removed for the benefit of neighboring residents.

Mr. Brown read the recommendation of the engineer and the fire department. Mr. Crane indicated the recommendation would be followed. Notice of dangerous materials will be given outside the building due to lead acid batteries.

Mr. Brown made a call to the public:

Ms. Laurie Sell asked if the trees would be watered the first year so that they would stay alive. Mr. Crane indicated that the nursery will provide watering for the first year. Mr. Jarrett Poppy asked how far the trees would be from the building. Mr. Crane indicated that the trees were 25' from the building. No other comments were made by the public.

Planning Commission disposition of petition

A. Disposition of Site Plan. (11-14-14)

Mr. Mortensen moved that we approve the sketch plan for a Verizon collocation facility near the city of Brighton water tower, dated November 14, 2014 subject to the following:

1. Two more evergreens will be added, one on the east and one on the west.
2. Prior to a land use permit being granted, documentation will be provided by the City of Brighton ensuring the Township that the evergreens on the Cracker Barrel property will be approved to exist. The form shall be in an amendment to the lease area or other documentation satisfactory to Township staff.
3. In the event that future needs require additional equipment shelter space, the applicant shall agree to cooperate with the City of Brighton on a possible expansion of the proposed shelter as needed and shall submit a statement to that effect in writing.
4. The requirements of the Township Engineer spelled out in his letter of Nov. 21, 2014 and the Fire Department letter from Nov. 21 will be complied with.
5. The light on the north building elevation shall be removed.
6. Genoa Township shall receive a copy of the proposed easement and/or agreement between the City of Brighton and Cracker Barrel.

Supported by Ms. Figurski. **Motion carried unanimously.**

OPEN PUBLIC HEARING #2... Review of a proposed third amendment to the Timber Green Planned Unit Development (PUD) site condominium and agreement for a proposed 1,440 sq ft overhang addition to the approved 5,760 sq ft accessory structure at the property located at 3800 Chilson Road, Howell, Michigan 48443, petitioned by Chestnut Development.

Ms. Laurie Sell addressed the Planning Commission on behalf of the petitioner. Ms. VanMarter indicated that the Planning Commission had approved a 5,760 sq ft building for his property but when the plans came through for a land use permit, the building plans included an overhang portion which is under the roof. The covered area exceeds the dimensions allowed in the previous approval.

Mr. Brown asked what would be stored under the overhang; what would be the reason for the overhang? Mr. Gronow was present by speaker phone and indicated that the overhang is for equipment storage, such as a snow blower and attachments. Mr. Grajek asked if there was any plan to enclose the overhang. Mr. Gronow said no, the overhang is for convenience with equipment. Mr. Brown indicated that this is a small change, given the size of the building already approved. The building is huge and well hidden. Mr. Rauch indicated that approving the storing of equipment outside may not be desirable. Mr. Brown indicated that additional buffering would be good. Mr. Grajek suggested that we should stipulate that the overhang cannot be enclosed.

A call was made to the public with no response.

Planning Commission disposition of petition

- A. Recommendation of PUD Agreement Amendment.

Mr. Mortensen moved that we recommend to the township board an approval of a third revision to the PUD agreement for Timber Green subject to the following change:

1. A parenthetical statement shall be added to the fourth paragraph on the second page of the agreement that no part of the overhang shall be enclosed. This recommendation is made because the Planning Commission believes it is a minor change to the existing amendments, all of which the Planning Commission believes is consistent with requirements of section 19.02 of the Township ordinance.

Supported by Ms. Lowe. **Motion carried unanimously.**

OPEN PUBLIC HEARING #3... Request to table rezoning, PUD amendment, site plan, and environmental impact assessment for a proposed 3,848 sq ft Red Olive Restaurant, located at 3838 E. Grand River Avenue, Howell, Michigan 48443, parcel # 4711-05-400-025. The request is petitioned by PKJJ, LLC.

Planning Commission disposition of petition

- A. Table request to January 12, 2015 meeting.

Mr. Grajek moved to table this public hearing at the request of the applicant.

Supported by Mr. Mortensen. **Motion carried unanimously.**

Administrative Business:

- *Staff report: Ms. VanMarter indicated that a redevelopment has been discussed on one of the most prominent intersections in the township, changing the status of the current Bennigan's location. Also, an office complex is proposed on Grand River and an addition is being proposed at the Battery Solutions location.*
- *Approval of November 10, 2014 Planning Commission meeting minutes. Motion by Ms. Figurski to approve the minutes as amended. Support by Mr. Rauch. **Motion carried unanimously.***
- *Member discussion*
- *Adjournment*



2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

January 6, 2015

Genoa Charter Township
Planning Commission

**RE: TIMBER GREEN/CHESTNUT DEVELOPMENT
POLE BARN COVERED PORCH AREA – MINOR DEVIATION FROM APPROVED PLAN**

Dear Commissioners,

Chestnut Development has requested approval for a 16'x8' porch overhang to protect the area near the front door to the pole barn. See attached image. As you may recall, our ordinance includes any area covered by a roof in the square footage calculation and this covered porch area would put the project over the approved size by 128 square feet. In response to this request, I have reviewed the ordinance and provide the following:

Section 10.11 of the Zoning Ordinance provides guidance in regard to amendments and deviations from an approved PUD plan. Specifically, Section 10.11.03 states that the Zoning Administrator may approve a minor revision upon finding the change would not alter the basic design nor any conditions imposed upon the original plan approval by the Planning Commission. In defining a "minor change" the Ordinance further provides under 10.11.03(a) that "for residential buildings, the size of structures may be reduced; or increased by five percent (5%), provided the overall density of units does not increase and the minimum square footage requirements are met."

Using the above criteria, I find that the proposed 128 square foot covered area would be an increase of 0.018% and I believe that this change would not alter the basic design nor any conditions imposed upon the original plan approval by the Planning Commission. Based on these findings I approve the overhang and have authorized an amendment to the Land Use Permit for this project.

Section 10.11 also requires that the Planning Commission be informed of deviations approved by the Zoning Administrator. Please accept this memorandum as written notification. If you have any questions please don't hesitate to contact me.

Sincerely,

Kelly VanMarter

Assistant Township Manager/Community Development Director

SUPERVISOR

Gary T. McCrie

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

MANAGER

Michael C. Archinal

TRUSTEES

H. James Mortensen

Jean W. Ledford

Todd W. Smith

Linda Rowell

