



**CITY OF BURTON**  
**BURTON PLANNING COMMISSION MEETING**  
**FEBRUARY 9, 2016**  
**AGENDA**

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**Council Chambers**

**Regular Meeting**

**5:00 PM**

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**4303 S. CENTER ROAD**  
**BURTON, MI 48519**

**A. PLEDGE OF ALLEGIANCE**

**B. ROLL CALL**

**C. STAFF PRESENT**

**D. APPROVAL OF MINUTES**

1. Planning Commission - Regular Meeting - Jan 12, 2016 5:00 PM

**E. SITE PLAN REVIEW**

1. SPR #16-06

By: Timothy Bertram  
1330 Kenneth St.  
Burton, MI 48529

Re: 59-30-578-228 and 59-30-578-307 to be combined  
1330 Kenneth and 1328 Kenneth to be combined  
Burton, MI 48529

For: Addition to existing assisted living facility

2. SPR #16-07

By: Bruce Calhoun  
1111 Creekwood Trl.  
Burton, MI 48509

Re: 1070 Creekwood  
Burton, MI 48509  
59-11-551-007

For: Construction of a new office building

**F. PROPOSAL**

1. Consultant Presentation

This is the time that we ask each consultant to give a maximum 5 minute presentation about their proposal, and answer any questions the Commission may

have. We ask that during this time the other consultants leave the room.

2. Discussion on Proposals

Discussion on the Master Plan proposals submitted by the consultants

3. Approve and Authorize the acceptance of the Master Plan proposal by \_\_\_\_\_ and the recommendation to City Council to enter into a contract with \_\_\_\_\_ for consultant services in the development of the City of Burton's Master Plan.

**G. ADMINISTRATIVE SITE PLAN REVIEW**

1. SPR #16-01

By: Paula Thompson  
900 E. Geneva Dr.  
Dewitt, MI 48820

Re: 2458 S. Center Rd. Burton, MI 48519

For: Biggby Coffee

2. SPR #16-02

By: Daryl Simpson  
3309 Associates Dr.  
Burton, MI 48529

Re: 3323 Associates Dr. Burton, MI 48529

For: Medical Marijuana Grow Facility

3. SPR #16-03

By: Auction Wholesale, LLC.  
1096 N. Center Rd.  
Burton, MI 48509

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

For: Wholesale vehicles

4. SPR #16-04

By: Rob Bulyovsky  
1096 N. Center Rd. Suite 118  
Burton, MI 48509

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

For: Wholesale Vehicles

5. SPR #16-05

By: Ben Ashley  
3412 E. Bristol Rd.  
Burton, MI 48529

Re: 4232 S. Dort Hwy. Burton, MI 48529

For: Medical Marijuana Grow Facility

**H. AUDIENCE PARTICIPATION**

Now is the time set-aside for members of the audience to address the Burton Planning Commission. I would ask each individual to give their name and address for the record and to limit their comments to five (5) minutes and to speak on the topics germane to City business.

**I. BOARD DISCUSSION**

The next regularly scheduled meeting will be held on Tuesday, March 15, 2015 at 5:00 p.m.



# CITY OF BURTON

## BURTON PLANNING COMMISSION MEETING

JANUARY 12, 2016

### MINUTES

Council Chambers

Regular Meeting

5:00 PM

4303 S. CENTER ROAD  
BURTON, MI 48519

This meeting was opened by Chairman Robert Walls at 5:00 PM.

#### A. PLEDGE OF ALLEGIANCE

#### B. ROLL CALL

| Attendee Name   | Title                  | Status  | Arrived |
|-----------------|------------------------|---------|---------|
| Greg Kray       | Alternate Commissioner | Excused |         |
| Ellen Ellenburg | Councilwoman           | Excused |         |
| Robert Walls    | Chairman               | Present |         |
| Kevin Burge     | Commissioner           | Present |         |
| Robert Centilli | Commissioner           | Present |         |
| Mary Ann White  | Commissioner           | Present |         |
| Robert Johnson  | Commissioner           | Present |         |
| Tom Gorang      | Commissioner           | Present |         |
| Deb Walton      | Vice-Chairman          | Present |         |

#### C. STAFF PRESENT

#### D. APPROVAL OF MINUTES

1. Planning Commission - Regular Meeting - Dec 8, 2015 5:00 PM

**RESULT:** ACCEPTED [UNANIMOUS]  
**MOVER:** Robert Johnson, Commissioner  
**SECONDER:** Tom Gorang, Commissioner  
**AYES:** Walls, Burge, Centilli, White, Johnson, Gorang, Walton  
**EXCUSED:** Kray, Ellenburg

#### E. PUBLIC HEARING

1. SPR #15-67 / ZC# 316

By: Gary Ashley  
3413 Bristol Rd.  
Burton, MI 48529

Dennis Depifanio  
3822 Woodland Dr.  
Metamora, MI 48455



Re: 4396 S. Dort Hwy.  
Burton, MI 48529  
59-32-400-029

For: Rezone from C-2 General Business to M-1 Light Industrial

Mr. Richard Hamilton of Flint stated he is here on behalf of Mr. Ashley and Mr. Depifanio. They have owned this rental property for a long time. Over the years, it has had a number of different uses. They currently have a deposit from an organization that wants to use the property for the purpose of storage of repossessed vehicles. The property has been used for the past few years by a number of different tenants for uses probably beyond the scope of the C-2 zoning classification however, looking at the adjoining properties and the property across the street, the use is intensive and consistent. For the past two tenants, they have been required to seek a variance from the Zoning Board of Appeals. This is a more permanent recognition of an appropriate use for the property. This variance would eliminate the need for repeat variances and would classify the property more consistently with the neighboring properties.

Ella Delduca of Burton owns the property next door that has a house on the property where her daughter and grandsons reside. She stated they have brought in wreckers and beat up cars. She doesn't think the rezoning is a good idea. It is noisy and a nuisance. Her grandson is in High School and has to hear this all night. Her daughter has MS and it disturbs her sleep. There is also a residence across the street. She doesn't believe Dort Highway should be heavy industrial yet; maybe when her daughter is gone or the property all around it is heavy industrial.

Mrs. Abbey stated the property owner is requesting the variance because they have had tenants attempt to come in but didn't want to deal with the variance processes so they have withdrawn leasing the building because of that. In 2009 and 2013 there was a variance approved for the towing company. Both of these uses are industrial. They are not asking for general industrial. This is for light industrial. Semi truck parking or uses of that nature still will not be allowed within the M-1 zone. This should alleviate some issues of concern. They will be repossessing vehicles from people who have failed to pay so these vehicles will be in good condition. They are not storing junk or crashed vehicles. These are the uses this specific tenant is proposing. Not every tenant that comes in will have this use. He has had a hard time getting tenants to come into this building. This is an industrial area. To the east side of the road it is all zoned M-1 industrial. There is an industrial business to the South of them as well as a residential home. The administration recommends approval.

Mr. Burge asked if there have been complaints regarding noise or trash in this area from the Police Department or code enforcement.

Mrs. Abbey stated she can't answer that without asking the police department.

Mr. Cenitlli asked if there was other M-1 uses in the area.

Mrs. Abbey said yes, on the east side of Dort Highway. The golf course is north of it. South of that is an industrial business with a residential home, Delduca Welding.

Ms. White asked how long they have owned this property.

Mr. Hamilton stated he believes since the 1980's. Mr. Ashley also owns the collision shop and the storage facility by the creek on Bristol Road in Burton.

Mr. Burge stated Mr. Hamilton has been a representative of the City of Burton for a long time. In your position, have you seen any code enforcement issues or Police action in this area?

Mr. Hamilton stated none that he can recall; not in the 35 years he was involved in that type of activity.

Mr. Burge stated if there has been no trouble in the area, he would like to recommend approval of this action.

Mr. Walls said repo businesses do a large part of their activity at night time which means they will be delivering repossessed vehicles to the business for storage at night. So, tow trucks will be dropping off vehicles and making noise at 3:00 in the morning. If we approve this for the M-1 light, can we set hours of operation?

Mrs. Abbey stated if you express your time frame concern to me I can set that through the administrative approval. If they want to dispute it, they would appeal it through the Planning Commission. There is a Police enforced noise ordinance; anytime there is a reasonable nuisance to the adjoining property owner they can call to have it enforced. You can put time restrictions for the uses on as part of your rezoning as well.

Mrs. Walton asked how long Delduca has been in business there.

Mrs. Delduca stated since 1941.

Ms. White asked if they will have to put up privacy fencing if it was rezoned.

Mrs. Abbey stated rezoning has nothing to do with a fence requirement. There is always a privacy fence requirement between residential and commercial uses. If you want to require a six foot privacy fence along the property line, it is up to you.

Ms. White stated a six foot privacy fence doesn't eliminate the noise.

Mrs. Abbey said time restrictions will help with the noise. We will have to hope the resident calls and our Police Department enforces it.

Mr. Centilli asked if the City approves of this.

Mrs. Abbey stated yes, she recommended approval.

Mr. Centilli asked if this property has been vacant for a couple years.

Mrs. Abbey stated the last variance was in 2013 and he wasn't in there for too long. She would say it has been vacant for about two years.

Mr. Gorang asked if approved tonight, does this automatically go into effect?

Mrs. Abbey said it will go to City Council for a second hearing on January 18th at 6:30 PM.

Mr. Johnson asked the Delduca's normal business hours.

Mrs. Delduca stated 9:00 AM to 5:00 PM Monday through Saturday. Closed on Sunday.

Mrs. Abbey clarified with the Board that this is only a recommendation and this will go to City Council at the Public Hearing on Monday January 18th at 6:30 PM.

Mr. Walls asked if they will know it was turned down here.

Mrs. Abbey said yes, they get a copy of your minutes.

Mr. Hamilton said a motion was made to approve and it did not carry. What you really need to do is have a motion to recommend denial and have another vote so you have taken an affirmative action. What has really happened is you haven't taken an action yet.

Mr. Walls stated he understands and as an Attorney representing Mr. Ashley and Mr. Depifanio, if that would make you happy then he would be happy to accept a motion to recommend a denial of the request. He asked Mr. Hamilton if that was correct.

Ms. Boggs stated it is unnecessary to make another motion for denial. However, it is completely up to the board.

Mr. Walls said normally he would say not to do this but considering the customer is asking for it and it doesn't change the vote, he has no problem with it. This is only for procedural reasons. He asked Mr. Burge to restate the motion as a denial.

Mr. Walls asked for the opinion of the administration.

Mrs. Abbey stated she believes if an attorney is telling us we should do it maybe it would be a good idea. It is your choice.

Mr. Slattery said he concurs. It is probably unnecessary but it wouldn't hurt. It is being recommended by the customer who is an attorney so it is probably a good idea.

Mr. Walls said the customer realizes it is still going to be turned down. Mr. Hamilton has informed us of the proper way to do this in his opinion. The result will be the same and no litigation will come of it. He is just recommending that the commission turn down the request.

Motion to approve and send to City Council to rezone from C-2 General Business to M-1 Light Industrial.

|                  |                               |
|------------------|-------------------------------|
| <b>RESULT:</b>   | <b>FAILED [3 TO 4]</b>        |
| <b>MOVER:</b>    | Kevin Burge, Commissioner     |
| <b>SECONDER:</b> | Robert Centilli, Commissioner |
| <b>AYES:</b>     | Burge, Centilli, Gorang       |
| <b>NAYS:</b>     | Walls, White, Johnson, Walton |
| <b>EXCUSED:</b>  | Kray, Ellenburg               |

2. Motion to Deny Site Plan Review # 15-67: Rezone from C-2 General Business to M-1 Light Industrial.

|                  |                                       |
|------------------|---------------------------------------|
| <b>RESULT:</b>   | <b>CARRIED [5 TO 2]</b>               |
| <b>MOVER:</b>    | Kevin Burge, Commissioner             |
| <b>SECONDER:</b> | Mary Ann White, Commissioner          |
| <b>AYES:</b>     | Walls, White, Johnson, Gorang, Walton |
| <b>NAYS:</b>     | Burge, Centilli                       |
| <b>EXCUSED:</b>  | Kray, Ellenburg                       |

## F. APPROVAL OF RFP

1. Master Plan RFP

Approve and authorize the Request for Proposal for the City of Burton Master Plan.

Mrs. Abbey stated at the last meeting she got some ideas about what the board was looking for. The consultants preferred a formal RFP (Request for Proposal) so she developed an RFP. She welcomes any suggestions. She hopes to send this to the consultants tomorrow if we make action tonight. We are hoping to have them back by February 2nd. It will be on the agenda for the February 9th meeting. If you would like to do interviews or have the consultants here to answer questions, we can do it at that time.

Mr. Walls stated he thinks the consultants should be here.

Mrs. Abbey asked if the board would like the consultants to do presentations or to just be available to answer questions.

Mr. Walls said he would like them here to answer questions.

Ms. White would like the consultants to give a small five minute presentaion. The RFP is very thorough but she would like a brief presentation to refresh our memories from the last meeting.

The board agreed to a five minute presentation.

Mrs. Abbey stated there is an evaluation criteria which is what you should be using to determine your choice. Cost is a consideration but you should also look at their

understanding of the project, the approach, the overall work plan, outreach and their experience. You don't necessarily just go for the lowest cost because you may get a lesser product.

Mr. Gorang said he especially likes the section that outlines activities for getting community involvement. He will be looking closely at this with each proposal.

Mrs. Abbey stated that was something that the board expressed concern with and that was the main reason for having this in the RFP.

Mr. Gorang said Mrs. Abbey did an excellent job putting the RFP together.

Mr. Walls acknowledged Councilman Smith. He asked if he would like to make a comment.

Mr. Smith thanked the Planning Board on behalf of City Council. He said the Council is very excited about this master plan. We appreciate your work on this and we will support you in any way we can. Thank you for your help.

Motion to approve and authorize the Request for Proposal for the City of Burton Master Plan.

|                  |                                                        |
|------------------|--------------------------------------------------------|
| <b>RESULT:</b>   | <b>CARRIED [UNANIMOUS]</b>                             |
| <b>MOVER:</b>    | Robert Johnson, Commissioner                           |
| <b>SECONDER:</b> | Deb Walton, Vice-Chairman                              |
| <b>AYES:</b>     | Walls, Burge, Centilli, White, Johnson, Gorang, Walton |
| <b>EXCUSED:</b>  | Kray, Ellenburg                                        |

## G. AUDIENCE PARTICIPATION

None.

## H. ADMINISTRATIVE SITE PLAN REVIEW

### 1. SPR #15-56

By: Dollar Express Store, LLC.  
7520 E. Independence Blvd. Suite 100  
Charlotte, NC 28227

Re: 1181 Bristol Rd. Burton, MI 48529

For: Retail sales

### 2. SPR #15-57

By: Esphen Scott  
1096 N. Center Rd. Suite 120

Burton, MI 48509

Re: 1096 N. Center

For: Wholesale Automobiles

3. SPR #15-58

By: Gary Hubley  
1096 N. Center Rd. Suite 119  
Burton, MI 48509

Re: 1096 N. Center

For: Wholesale Automobiles

4. SPR #15-59

By: Daniel Barton  
1096 N. Center Rd. Suite 110  
Burton, MI 48509

Re: 1096 N. Center

For: Wholesale Automobiles

5. SPR #15-60

By: Michael Jarrett  
1096 N. Center Rd. Suite 111  
Burton, MI 48509

Re: 1096 N. Center

For: Wholesale Automobiles

6. SPR #15-61

By: Andrew Spencer  
1096 N. Center Rd. Suite 112  
Burton, MI 48509

Re: 1096 N. Center

For: Wholesale Automobiles

Minutes Acceptance: Minutes of Jan 12, 2016 5:00 PM (Approval of Minutes)

## 7. SPR #15-62

By: Raymond Powell  
1096 N. Center Rd. Suite 101  
Burton, MI 48509

Re: 1096 N. Center

For: Wholesale Automobiles

## 8. SPR #15-63

By: Jerry Drudi  
4463 S. Dort Hwy.  
Burton, MI 48529

Re: 4463 S. Dort Hwy.  
Burton, MI 48529

For: Used Car Sales Lot

## 9. SPR #15-64

By: Jeffrey Mayer  
3260 N. Henderson Rd.  
Davison, MI 48423

Re: 3063 Kleinpell St.  
Burton, MI 48529

For: Office for Trucking Company

## 10. SPR #15-65

By: Goodwill Industries of Mid Mi, Inc.  
501 S. Averill Ave.  
Flint, MI 48506

Re: 2188 S. Center Rd. Burton, MI 48519

For: Change from retail to office

## 11. SPR #15-66

By: KT Java  
4190 E. Court St.  
Burton, MI 48509

Re: 4190 E. Court St. Burton, MI 48509

For: Coffee Shop

## 12. SPR #15-68

By: Sean Hudson  
1096 N. Center Rd. Suite 121  
Burton, MI 48509

Re: 1096 N. Center

For: Wholesale Automobiles

## 13. SPR #15-69

By: Atanas Zelevarovski  
5506 Lapeer Rd.  
Burton, MI 48509

Re: 5506 Lapeer Rd. Burton, MI 48509

For: Building to be used for storage only

## 14. SPR #15-70

By: Lynnda Squires  
5118 Hartland Dr.  
Flint, MI 48506

Re: 1350 N. Belsay Rd.  
Burton, MI 48509

For: Child Care

**I. BOARD DISCUSSION**

Mr. Burge stated items two through seven under Administrative Site Plan Review are all the same address. Are they all different owners with this project?



Mrs. Abbey said this is the old shooting range. They will have an office and each individual wholesale dealer in the office has to hold a license so they have to obtain zoning approval. These are administrative approvals so they have been approved by me. They are on the agenda for your knowledge not action.

Mr. Walls asked how many wholesale businesses we are going to have in Burton. It seems popular lately.

Mrs. Abbey stated it is very popular right now.

Mrs. White said we approved the location on Davison Road and Covert Road. The agreement was they would have a privacy fence between the residential home and the business and the cars would be parked behind the fence. They currently have no fence and the cars are stacked out to Davison Road.

Mrs. Abbey will go check it out.

Mr. Johnson said the Fire Department had a call to that address and there was close to 300 cars packed to the fences on all four walls and only one entrance/exit.

Mrs. Abbey said they are supposed to keep isle ways. She will contact them.

Mr. Johnson asked regarding the former shooting range on Center Road, is the plan for them to store vehicles in the customer lot or behind the building?

Mrs. Abbey said the intent was for them to park behind the fence for security purposes but it is their choice.

Mrs. Walton stated Elite Auto at the corner of Bristol Road and N. Grand Traverse Street has vehicles hanging over the sidewalk. They now have cars parked on the grassy area.

Mrs. Abbey will pass this information on to the Code Enforcer.

The next regularly scheduled meeting will be held on Tuesday, February 9, 2016 at 5:00 p.m.

Meeting was adjourned at 5:48 PM.

Minutes Acceptance: Minutes of Jan 12, 2016 5:00 PM (Approval of Minutes)



**Burton Planning Commission**

4303 S. Center Road  
Burton, MI 48519

Meeting: 02/09/16 05:00 PM

Department: Department of Public Works

Category: Site Plan Review

Prepared By: Amber Abbey

Department Head: Robert Slattery

**E.1**

**ADOPTED**

**AGENDA ITEM (ID # 2117)**

DOC ID: 2117

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**SPR #16-06**

By: Timothy Bertram  
1330 Kenneth St.  
Burton, MI 48529

Re: 59-30-578-228 and 59-30-578-307 to be combined  
1330 Kenneth and 1328 Kenneth to be combined  
Burton, MI 48529

For: Addition to existing assisted livening facility

**ATTACHMENTS:**

- 16-06 (PDF)



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



### APPLICATION FOR SITE PLAN REVIEW

DATE FILED: 1-26-16  
FEE: 200.00  
RECEIPT NO: \_\_\_\_\_  
CHECK NO: 1474

SPR #: 16-06

#### PLEASE PRINT

DATE OF PLANNING COMMISSION MEETING: Feb, 9<sup>th</sup>, 2016 TIME: 5:00pm

APPLICANTS NAME: Timothy Bertram

APPLICANTS ADDRESS: 1330 Kenneth St  
Burton, MI 48529

APPLICANTS PHONE NO: 810-348-5923

PROPOSED NAME OF BUSINESS: Bertram WWS

SITE ADDRESS: 1330 Kenneth St

SUBDIVISION & LOT # OR PARCEL NUMBER: 59-30-578-228, 59-30-578-307

RE: Addition to Bldg.

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

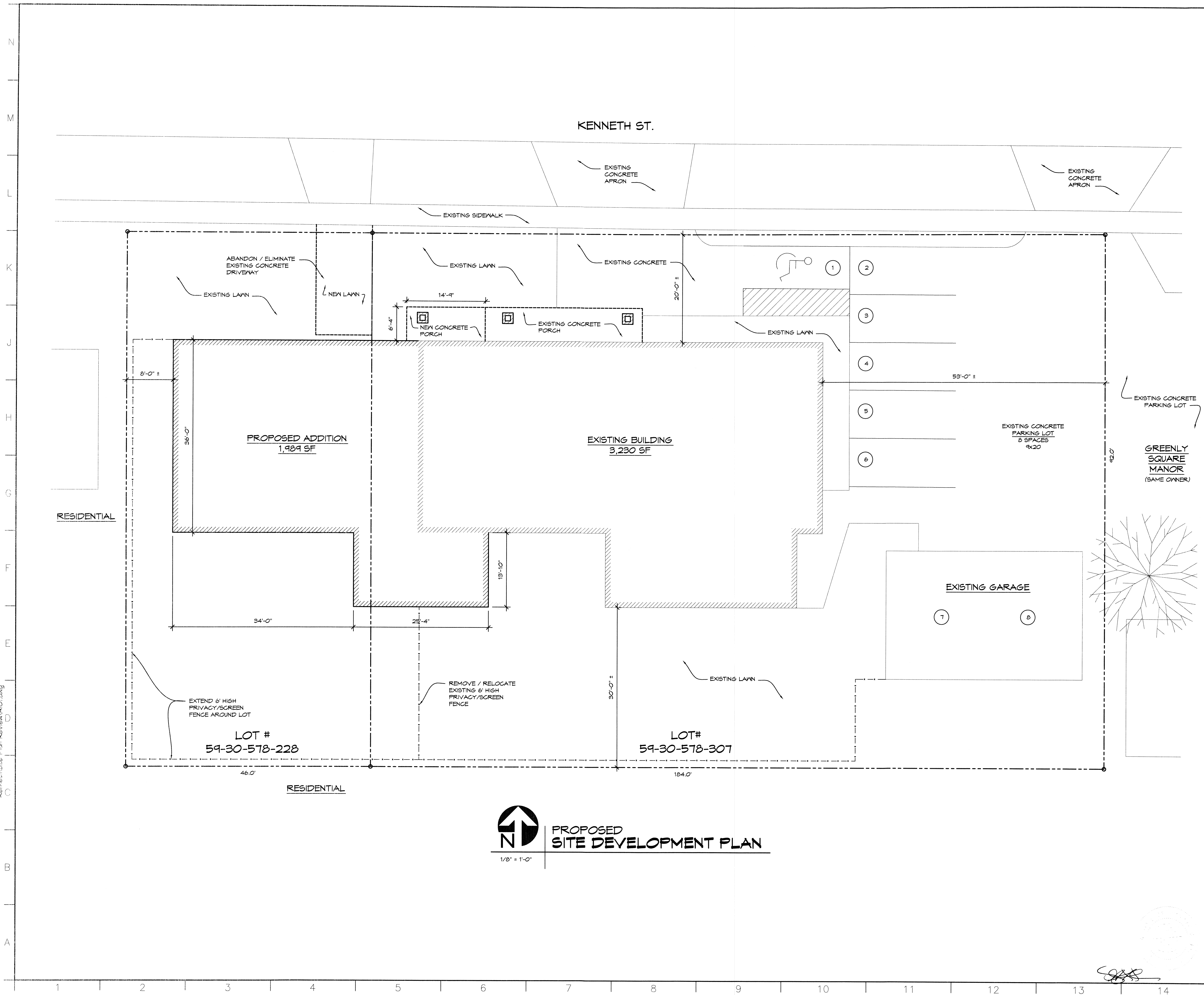
APPLICANTS SIGNATURE: Timothy Bertram

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

Attachment: 16-06 (2117 : SPR #16-06)



Z:\Projects\Rep Agree\15-310 1830  
Kenneth Site Plan Review\15-310  
PLOT DATE: 1/26/2016 9:30 PM



9100 Lapeer Rd. Suite B  
Davison, MI 48423  
(810) 412-5640

KEY

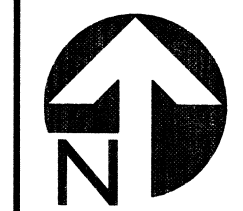
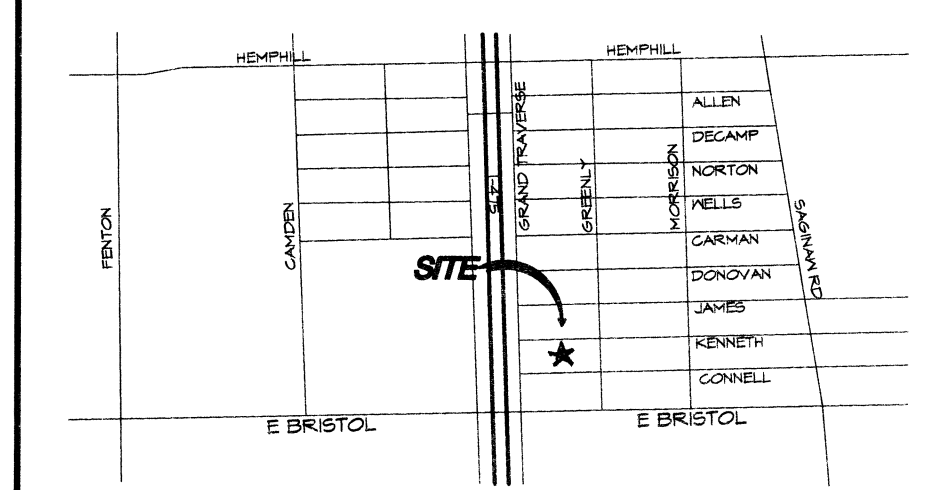
- 1 PARKING SPACE DESIGNATION - 9' x 20'

NOTES

PROPERTY = R1-C  
ZONED = SPECIAL LAND USE

SETBACKS: PROVIDED:  
FRONT 20'-0" 20'-0" OK  
REAR 30'-0" 30'-0" OK  
SIDE 1 5'-0" 8'-0" OK  
SIDE 2 15'-0" 53'-0" OK

PARKING: REQUIRED = 8 (12 UNITS / 2 + 2 EMPLOYEES)  
PARKING: PROVIDED = 8 (INCLUDES 1 PH SPACE)



LOCATION MAP

NO SCALE

| NO. | DESCRIPTION | DATE |
|-----|-------------|------|
| 6   |             |      |
| 5   |             |      |
| 4   |             |      |
| 3   |             |      |
| 2   |             |      |
| 1   |             |      |

ADDITION TO:  
**BERTRAM HAUS  
OF BURTON**  
1330 KENNETH  
BURTON, MICHIGAN

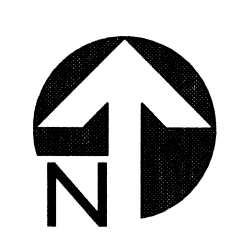
DRAWING TITLE

SITE PLAN

|             |         |
|-------------|---------|
| PROJECT NO. | 15-310  |
| DATE        | 1-26-16 |
| DRAWN       | EHD     |
| CHECKED     | SAA     |

C101

|              |              |       |        |
|--------------|--------------|-------|--------|
| CAD FILE NO. |              | C101  |        |
| SCALE        | 1/8" = 1'-0" | SHEET | 2 OF 2 |



PROPOSED  
SITE DEVELOPMENT PLAN

1/8" = 1'-0"

Attachment: 15-06 (2117 : SPR #16-06)

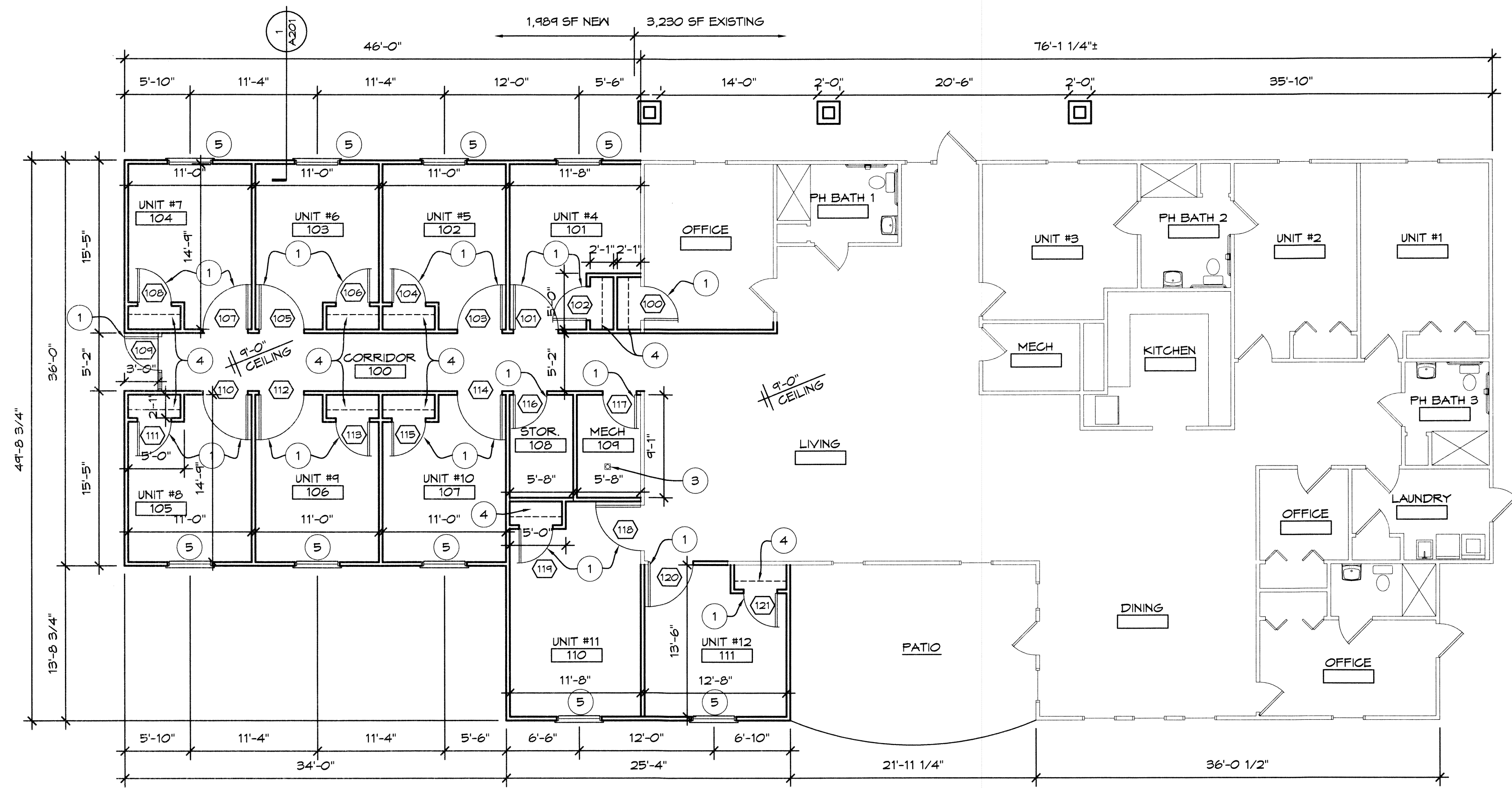




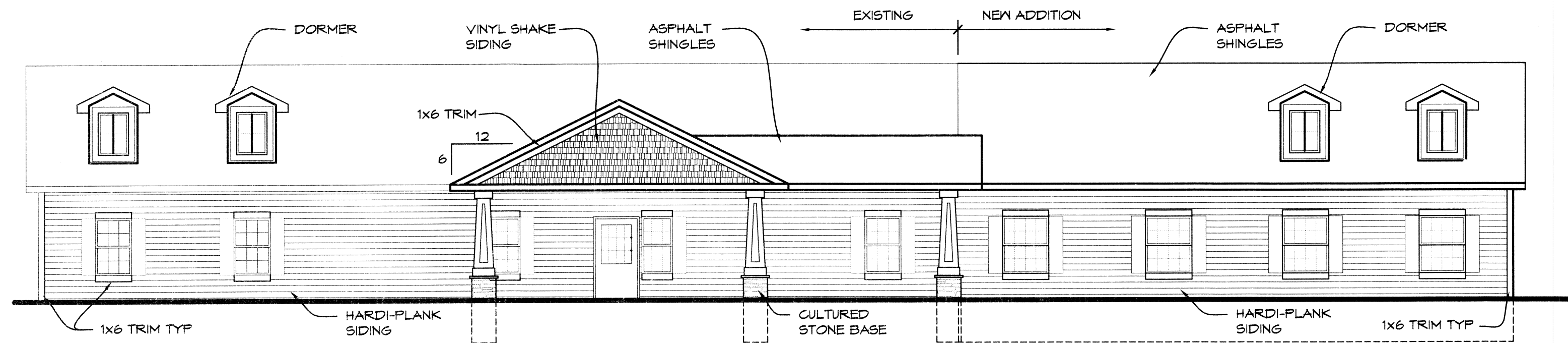
9100 Lapeer Rd. Suite B  
Davison, MI 48423  
(810) 412-5640

CONSTRUCTION NOTES

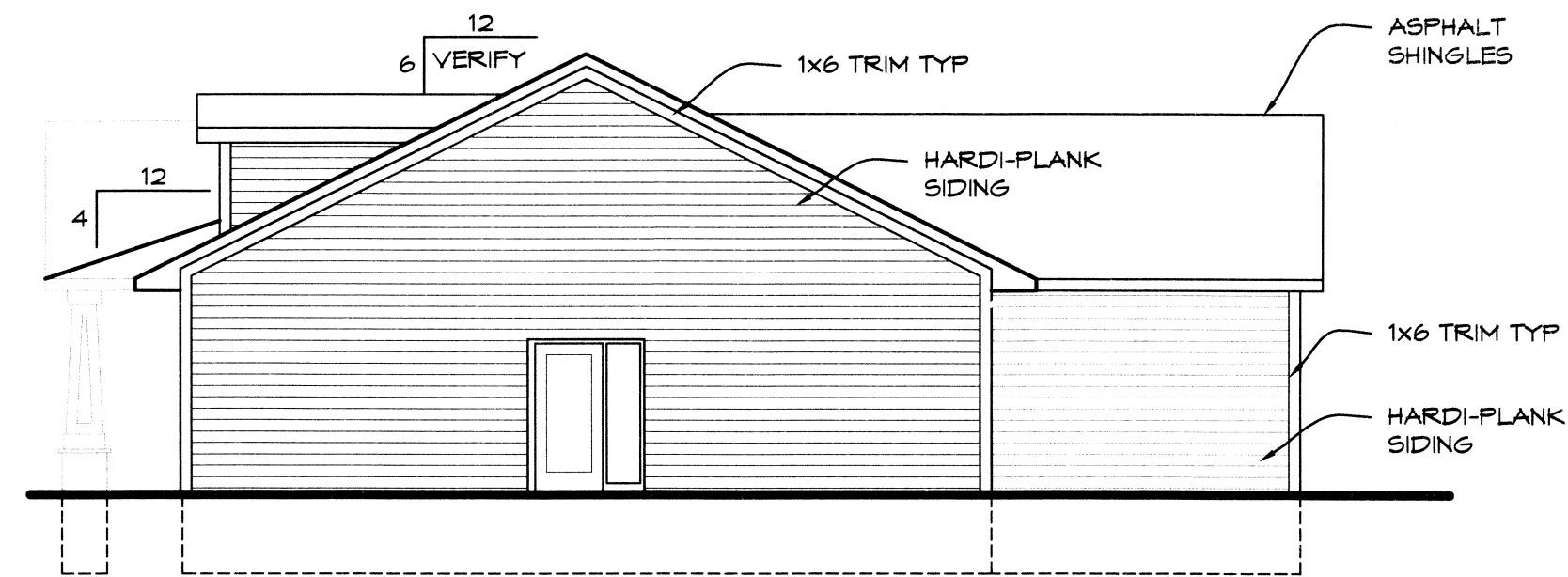
1. NEW DOOR AND FRAME
2. INFILL EXISTING OPENING, MATCH WALL THICKNESS AND FINISH
3. FLOOR DRAIN
4. ROD AND SHELF
5. EGRESS WINDOW ( TAB046 ANDERSON )



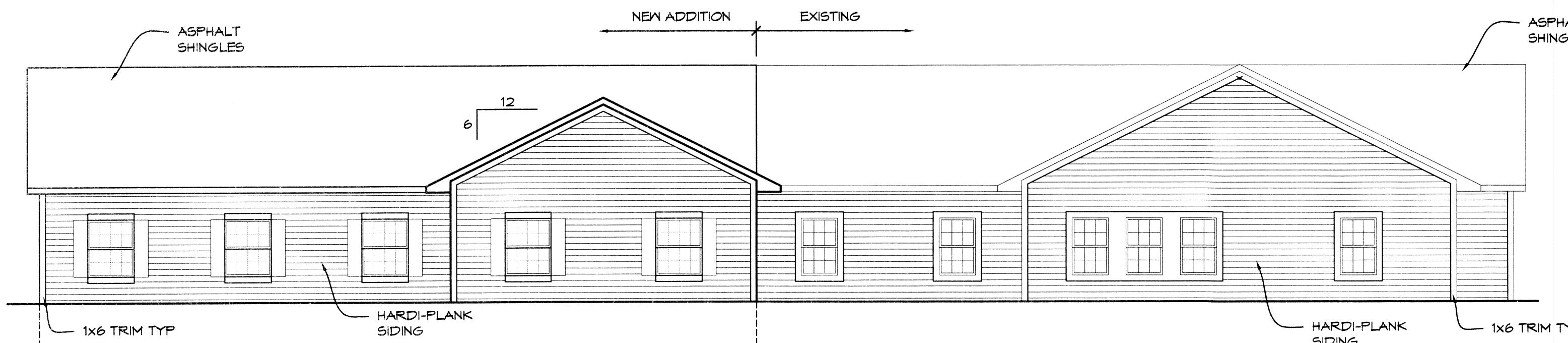
PROPOSED FLOOR PLAN  
1/8" = 1'-0"



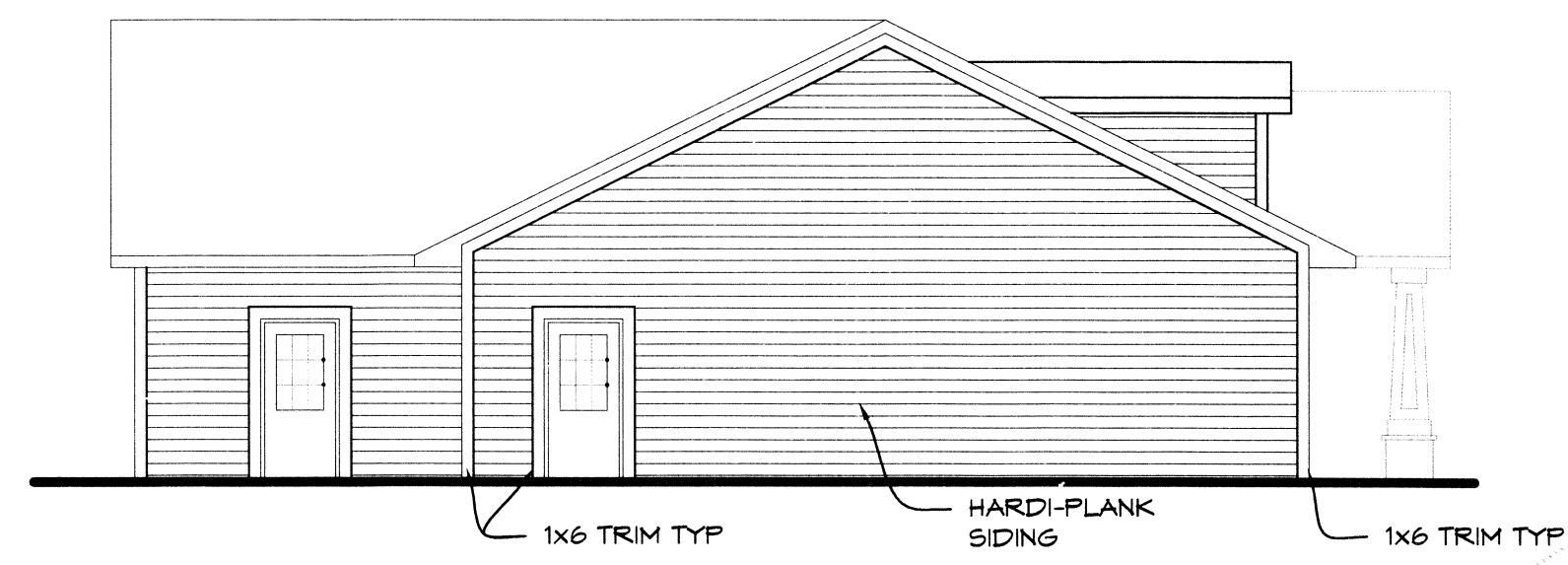
NORTH ELEVATION  
1/8" = 1'-0"



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



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



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

| NO. | DESCRIPTION | DATE |
|-----|-------------|------|
| 6   |             |      |
| 5   |             |      |
| 4   |             |      |
| 3   |             |      |
| 2   |             |      |
| 1   |             |      |

ADDITION TO:  
**BERTRAM HAUS  
OF BURTON**  
1330 KENNETH  
BURTON, MICHIGAN

DRAWING TITLE  
**PROPOSED  
FLOOR PLAN  
AND ELEVATIONS**

|             |         |
|-------------|---------|
| PROJECT NO. | 15-310  |
| DATE        | 1-26-16 |
| DRAWN       | EHD     |
| CHECKED     | SAA     |

**A101**

|              |              |
|--------------|--------------|
| CAD FILE NO. | A101         |
| SCALE        | 1/8" = 1'-0" |
| SHEET        | 1 OF 2       |





**Burton Planning Commission**

4303 S. Center Road  
Burton, MI 48519

Meeting: 02/09/16 05:00 PM

Department: Department of Public Works

Category: Site Plan Review

Prepared By: Amber Abbey

Department Head: Robert Slattery

**E.2**

**ADOPTED**

**AGENDA ITEM (ID # 2118)**

DOC ID: 2118

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**SPR #16-07**

By: Bruce Calhoun  
1111 Creekwood Trl.  
Burton, MI 48509

Re: 1070 Creekwood  
Burton, MI 48509  
59-11-551-007

For: Construction of a new office building

**ATTACHMENTS:**

- 16-07 (PDF)



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



**APPLICATION FOR SITE PLAN REVIEW**

DATE FILED: 1-27-16  
 FEE: \$ 400.00  
 RECEIPT NO: 106  
 CHECK NO: 106

SPR #: 16-07

**PLEASE PRINT**

DATE OF PLANNING COMMISSION MEETING: February 9<sup>th</sup> 2016 2:5:00

APPLICANTS NAME: BRUCE CALHOUN

APPLICANTS ADDRESS: 1111 CREEKWOOD TRAIL

APPLICANTS PHONE NO: 810 742 0480

PROPOSED NAME OF BUSINESS: (CJW GROUP LLC) WATKE, JUNE, CALHOUN CPA'S.

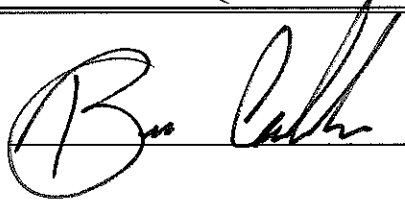
SITE ADDRESS: 1070 CREEKWOOD TRAIL

SUBDIVISION & LOT # OR PARCEL NUMBER: 59-11-551-007

LOTS 8 & 9 OF CREEKWOOD PROFESSIONAL VILLAGE

RE: Construction of a new office Bldg.

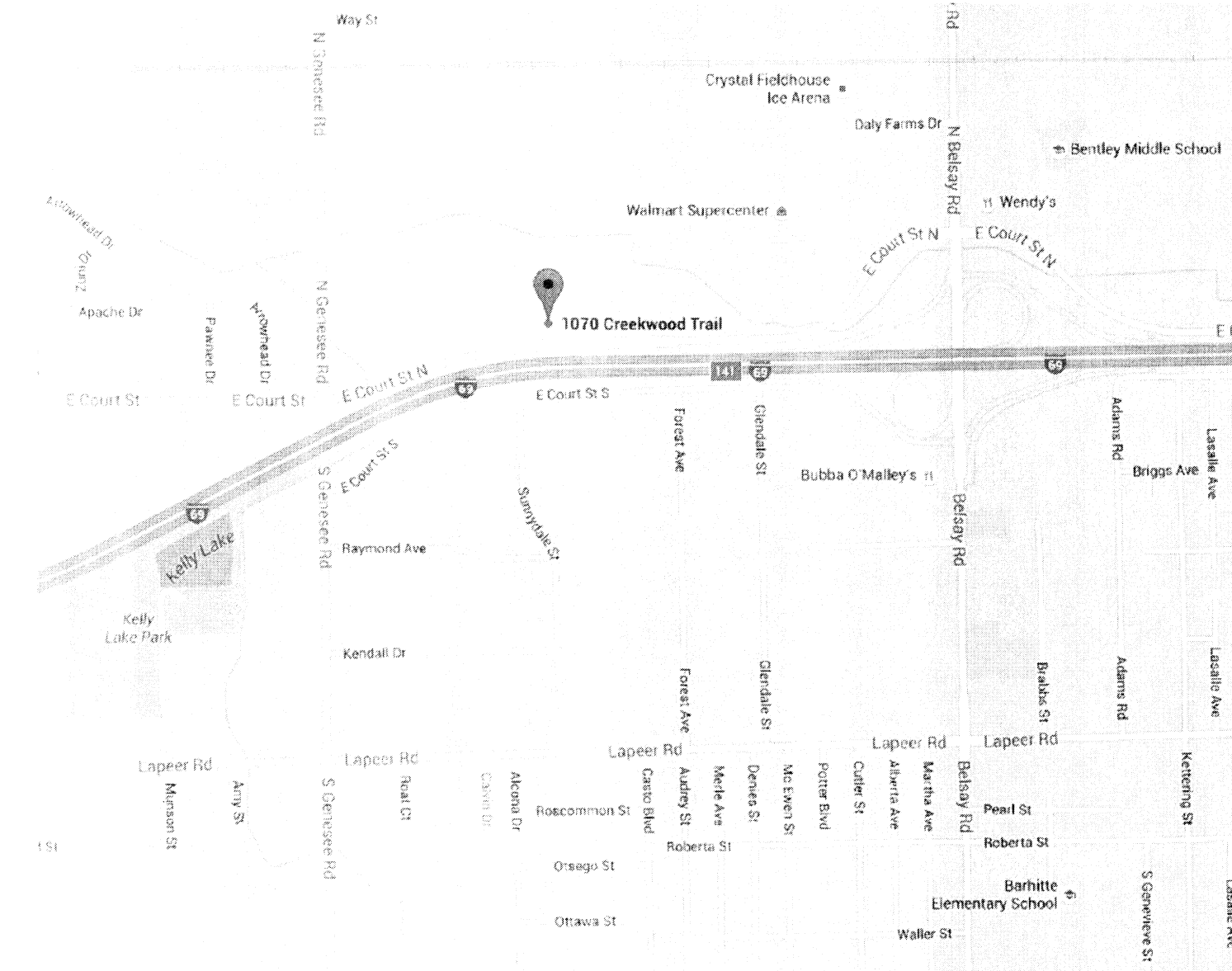
**APPLICANT:** IT IS TO YOUR ADVANTAGE TO ATTEND THE ABOVE SCHEDULED MEETING. THE PLANNING COMMISSION MAY HAVE QUESTIONS THAT DIRECTLY AFFECT APPROVAL, DENIAL, OR POSTPONING UNTIL THESE QUESTIONS CAN BE ANSWERED.

APPLICANTS SIGNATURE: 

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

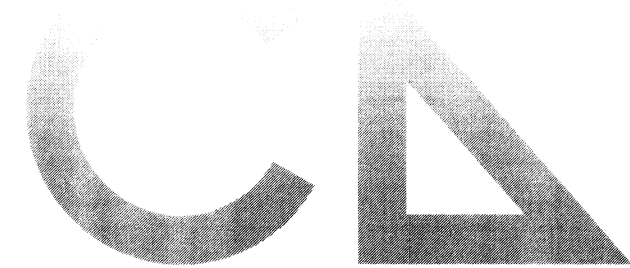
Attachment: 16-07 (2118 : SPR #16-07)





**BUILDING DEPARTMENT**  
**CITY OF BURTON BUILDING DEPT.**  
**4303 CENTER RD.**  
**BURTON, MI 48519**  
**TELEPHONE (810) 743-1500**

**OWNER**  
**CJW GROUP L.L.C.**  
**1200 CREEKWOOD TRAIL**  
**BURTON, MI. 48509**  
**TELEPHONE (810)743-5000**  
**contact**  
**TAMMY CALHOUN/ROBIN JUNE**  
**tammy@walkerjunecalhoun.com**  
**robin@walkerjunecalhoun.com**



**ARCHITECT:**  
**CREEKWOOD ARCHITECTURE, INC.**  
**1111 CREEKWOOD TRAIL**  
**BURTON, MI. 48509**  
**TELEPHONE (810) 742-0480**  
**FAX (810) 742-8393**  
**bcalhoun@creekwoodarch.com**

**10 STANDARD NOTES FOR PRELIMINARY PLATS AND SITE PLANS**

1. **EXTENSION OF PUBLIC UTILITIES:** All public sanitary sewer and/or water main SHALL be extended to the furthest limits of the property, including corner lots, with the pipe size and material approved by GCD-C-WWS. This is necessary for plan approval. For water service of 1" or less on a building on a corner lot, the requirements to extend the public water main and/or sanitary sewer along both property lines will be reviewed. Final determination shall be made by GCD-C-WWS.
2. **WATER MAIN LOOPING:** All public watermain shall be looped whenever possible. The pipe sizing shall be approved by GCD-C-WWS.
3. **INDUSTRIAL PRETREATMENT PROGRAM (IPP):** This permit is for all commercial and industrial discharges. The OWNER shall obtain an Industrial Pretreatment Discharge Permit prior to the issuance of a Sewer Connection Permit. Industrial Discharge Permits are non-transferable. Changes in facility use will require a new Industrial Discharge Permit.
4. **SOIL EROSION:** The DEVELOPER shall submit a detailed Soil Erosion and Sedimentation Control plan and obtain an Act 451 part 91, Soil Erosion and Sedimentation Control permit. This includes the payment of fees and the providing of necessary bonds. No earth changes or excavation shall be started prior to the issuance of this permit. The DEVELOPER shall protect all existing and proposed storm sewer facilities on and adjacent to the site during excavation and construction. All sediment shall be contained on site. Any silt in county drains, storm sewer, culverts, etc. as a result of this project, shall be removed by the DEVELOPER at the cost of the DEVELOPER.
5. **FLOOD PLAIN OR WETLAND CONSTRUCTION:** The DEVELOPER shall apply to the Michigan Department of Environmental Quality for a permit for the alteration and/or occupation of a flood plain or flood way, as required under FA 451. Evidence of this permit may be required prior to plan approval by GCD-C-WWS.
6. **NIDES STORM WATER DISCHARGE PERMIT:** The owner of the property shall obtain a NIDES Storm Water Discharge permit for construction activities from MDEQ as required under Public Act 451. The notice of coverage form shall be submitted through GCD-C-WWS with the Soil Erosion Control permit application. All MDEQ fees shall accompany the Notice of Coverage. Evidence of this permit may be required prior to plan approval by GCD-C-WWS.
7. **GENESEE COUNTY PERMIT TO CONSTRUCT A PUBLIC UTILITY:** After the approval of this preliminary plat or site plan, the DEVELOPER shall submit a detailed plan for construction of all public sanitary sewer and watermain. The plans must have GCD-C-WWS approval, an S-permit issued, and approval from the MDEQ prior to beginning construction.
8. **M.D.O.T MICHIGAN DEPARTMENT OF TRANSPORTATION:** The DEVELOPER shall obtain a permit from the MDOT to perform work within the MDOT Right-of-Way. All fees for the permit, bonds and insurances are the responsibility of the developer.
9. **MUNICIPALITY SANITARY SEWER AND WATER PERMIT:** Prior to the issuance of a building permit by the local municipality, the developer shall be required to obtain a sanitary sewer and/or water tap-in permit from the local municipality, if authorized, or GCD-C-WWS.
10. **STATE CONSTRUCTION PERMITS:** The sanitary sewer and water main construction permit application from the Michigan Department of Environmental Quality (MDEQ) shall be submitted to the MDEQ after receiving approval from GCD-C-WWS. Construction shall not begin until these state permits are issued.

**EASEMENT STATEMENT**

ALL PUBLIC SANITARY SEWER AND PUBLIC WATER MAINS SHALL HAVE AN EASEMENT GRANTED TO THE AGENCY OR MUNICIPALITY FOR MAINTENANCE, REPAIR, AND/OR REPLACEMENT. FOR CONDOMINIUMS, THE EASEMENT SHALL BE RECORDED ON THE MASTER DEED DOCUMENT AND FOR A SUBDIVISION, THE EASEMENT SHALL BE NOTED ON THE FINAL RECORDED PLAT. ALL OTHERS SHALL BE RECORDED ON STANDARD GCD-C EASEMENT DOCUMENTS.

**N.P.D.E.S. STATEMENT**

THERE WILL BE LESS THAN 5.0 ACRES DISTURBED, THEREFORE AN N.P.D.E.S. PERMIT IS NOT REQUIRED.

**CONTRACTOR ALERT STATEMENT**

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

**PUBLIC UTILITY STATEMENT**

ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER AND ALL WATER MAINS 6" AND LARGER IN DIAMETER FOR THIS PROJECT ARE DESIGNED FOR AND WILL BECOME A PUBLIC SYSTEM UPON SATISFACTORY APPROVAL BY THE AGENCY OR MUNICIPALITY.

UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF FACILITIES ONLY, AS DISCLOSED TO THIS FIRM BY THE VARIOUS UTILITY COMPANY'S RECORDS. NO GUARANTEE IS EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATION AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN FIELD. DURING CONSTRUCTION, CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR OVERHEAD AND/OR BURIED UTILITIES.

**PLAN SUBMISSION LIST**  
GENESEE COUNTY DRAIN COMMISSIONER-STORM DRAIN DIVISION — TOM JONES-6-4608 BEECHER ROAD, FLINT, MICHIGAN 48852  
GENESEE COUNTY DRAIN COMMISSIONER-DIVISION OF — MATT REYSIN PE-6-4610 BEECHER ROAD, FLINT, MICHIGAN 48852  
WATER AND WASTE SERVICES  
BURTON TWP. BUILDINGS INSPECTOR — STEWART MCKINCHY -4809 CENTER ROAD BURTON, MI 48504  
BURTON TWP. PLANNING/ZONING ADMINISTRATOR — AMBER ABBEY -4809 CENTER ROAD BURTON, MI 48504  
CONSUMER ENERGY — DAVID MCDANIEL-3201 E. COURT ST. FLINT, MICHIGAN 48501  
AMERITECH — PHILLIP BRACKEY-5022 BEECH ST. ROOM 402 FLINT, MICHIGAN 48502

**NOTE:**  
THIS PROJECT HAS BEEN DESIGNED IMPLEMENTING THE LATEST GCD-C-WWS DESIGN SPECIFICATIONS. CAREFULLY REVIEW THE NOTES, DETAILS AND DESIGN PRIOR TO SUBMITTING A BID. FULL COMPLIANCE WITH THE NEW STANDARDS WILL BE REQUIRED.

**LIST OF DRAWINGS**

**COVER SHEET**

**SURVEY**

**S1 SITE PLAN**  
**MISC. DETAILS**

**S2 SITE GRADING PLAN**  
**DUMPSTER ENCLOSUR**  
**DETAILS**

**S3 MISC DETAILS**

**S4 SOIL & EROSION PLAN**

**S5 SOIL & EROSION KEY PLAN**  
**LEGEND AND NOTES**

**A1 FLOOR PLAN**

**A2 ELEVATIONS**

**S6 DETAILS**

**S7 DETAILS**

**S8 NOTES**

**L1 LANDSCAPE PLAN**  
**& LIGHTING PLAN**

**BUILDING INFORMATION**

**BUILDING DATA:**

**ZONING-----**  
**USE GROUP-----**  
**CONSTRUCTION TYPE-----**

**BUILDING AREA-----**

**MEANS OF EGRESS-----**

**OCCUPANT LOAD-----**

**RO -RESTRICTED OFFICE**  
**B- BUSINESS**  
**SB COMBUSTIBLE,**  
**NOT PROTECTED**

73.3ft x 53ft 3,489 SQ. FT.

1-36"DOOR FRONT

(1) PER 100 SQ FT.  
TOTAL OCCUPANTS  
93 PERSONS

**DEFERRED SUBMITTALS**

**BUILDING SIGNAGE**  
**(BY OTHERS)**

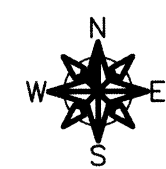
**PLAN DISTRIBUTION LIST & DATES:**

|                                       | SUBMITTED   | REVISIONS |
|---------------------------------------|-------------|-----------|
| CITY OF BURTON<br>BUILDING DEPARTMENT |             |           |
| SITE PLAN REVIEW                      | 27 JAN 2016 |           |

**REVISIONS**  
**13 JAN 2016**

**ARCHITECTS JOB # 15078-OF**





**LEGEND**

- FOUND IRON
- SET IRON
- FOUND MONUMENT
- SET MONUMENT

**LEGEND**

- (R) RECORDED
- (M) MEASURED
- (C) CALCULATED
- ⊕ SECTION CORNER

**EXISTING**

- ST STORM SEWER & MANHOLE
- SS SANITARY SEWER & MANHOLE
- W WATERMAIN, HYDRANT, & GATE VALVE
- G GAS MAIN & VALVE
- B BURIED ELECTRIC (MISS DIG MARKERS = D)
- O OVERHEAD ELECTRIC, POLE, & GUY WIRE
- CB CATCH BASIN (CURB & ROUND)
- FENCE
- W WELL
- L LIGHT POLE
- P POST
- S SIGN
- SP SIGNPOST
- M MAILBOX
- C CONCRETE
- A ASPHALT

**TREES**

**Know Calhoun**

Know what's below.  
Calbefore you dig.

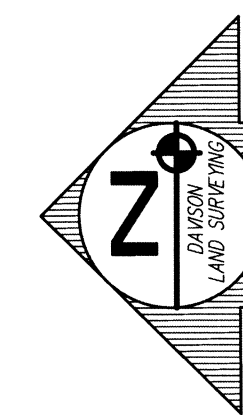
UNDERGROUND UTILITY LOCATIONS AS SHOWN ON THE PLANS WERE OBTAINED FROM UTILITY OWNERS, AND WERE NOT FIELD LOCATED. A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY "MISS DIG" (1-800-482-7171) AND HAVE ALL UNDERGROUND UTILITIES STAKED BEFORE ANY WORK MAY BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ALL UTILITIES THAT MAY INTERFERE WITH CONSTRUCTION. THREE (3) WORKING DAYS BEFORE YOU DIG - CALL MISS DIG (1-800-482-7171).

UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF FACILITIES ONLY, AS DISCLOSED TO THIS FIRM BY THE VARIOUS UTILITY COMPANY'S RECORDS. NO GUARANTEE IS EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

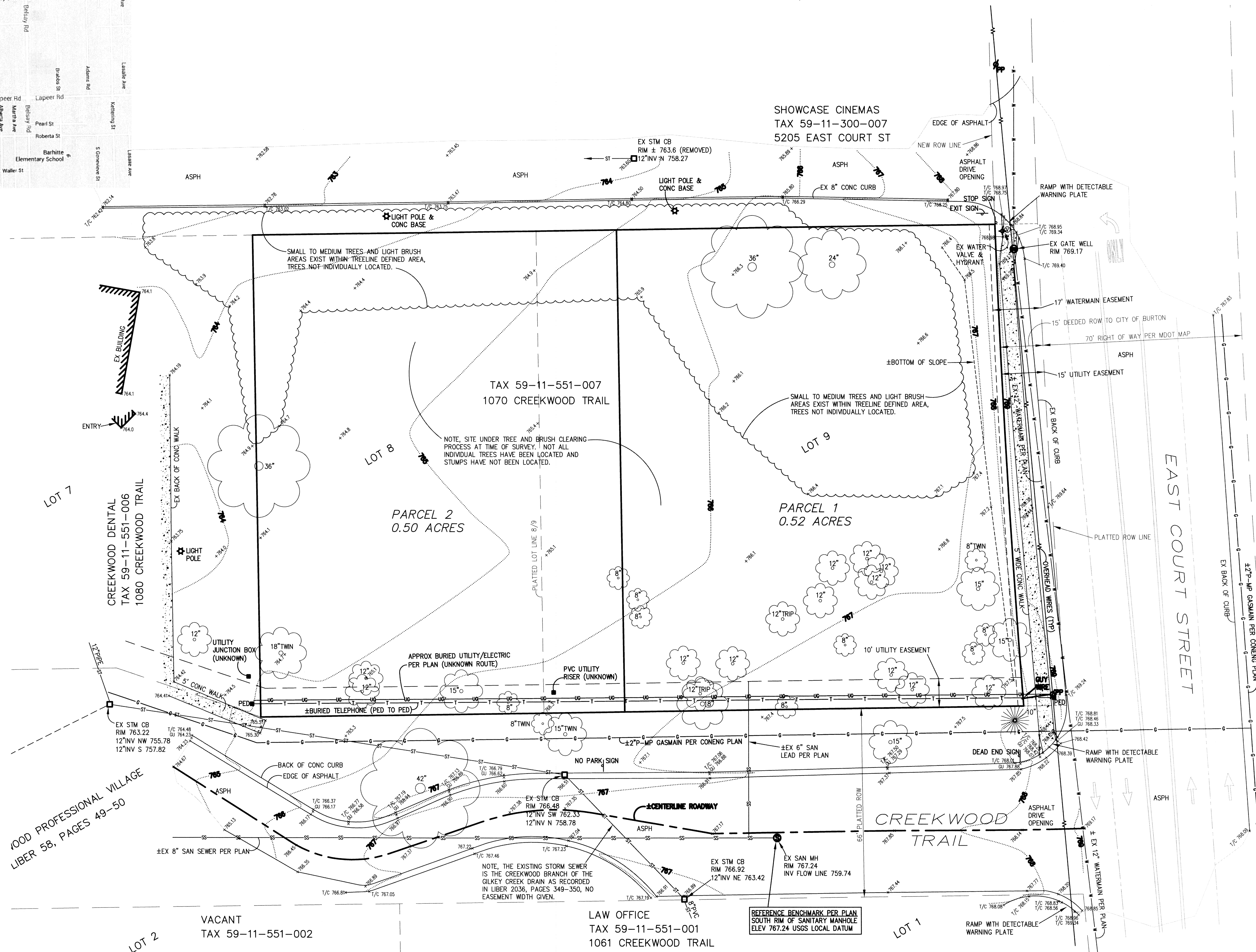
PRIOR TO CONSTRUCTION, ALL LOCATION AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN FIELD. DURING CONSTRUCTION, CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR OVERHEAD AND/OR BURIED UTILITIES.

PARCEL 1  
 Lot 9 except the North 28.00 feet and except the South 15.00 feet of CREEKWOOD PROFESSIONAL VILLAGE, according to the recorded Plat thereof as recorded in Liber 58 of Plats on Pages 49 and 50, Genesee County, Michigan Records. All being part of Section 11, T7N-R7E, City of Burton, Genesee County, Michigan.

Lot 8 and the North 28.00 feet of Lot 9 of CREEKWOOD PROFESSIONAL VILLAGE, according to the recorded Plat thereof as recorded in Liber 58 of Plats on Pages 49 and 50, Genesee County, Michigan Records. All being part of Section 11, T7N-R7E, City of Burton, Genesee County, Michigan.



( IN FEET )  
1 inch = 20 ft.



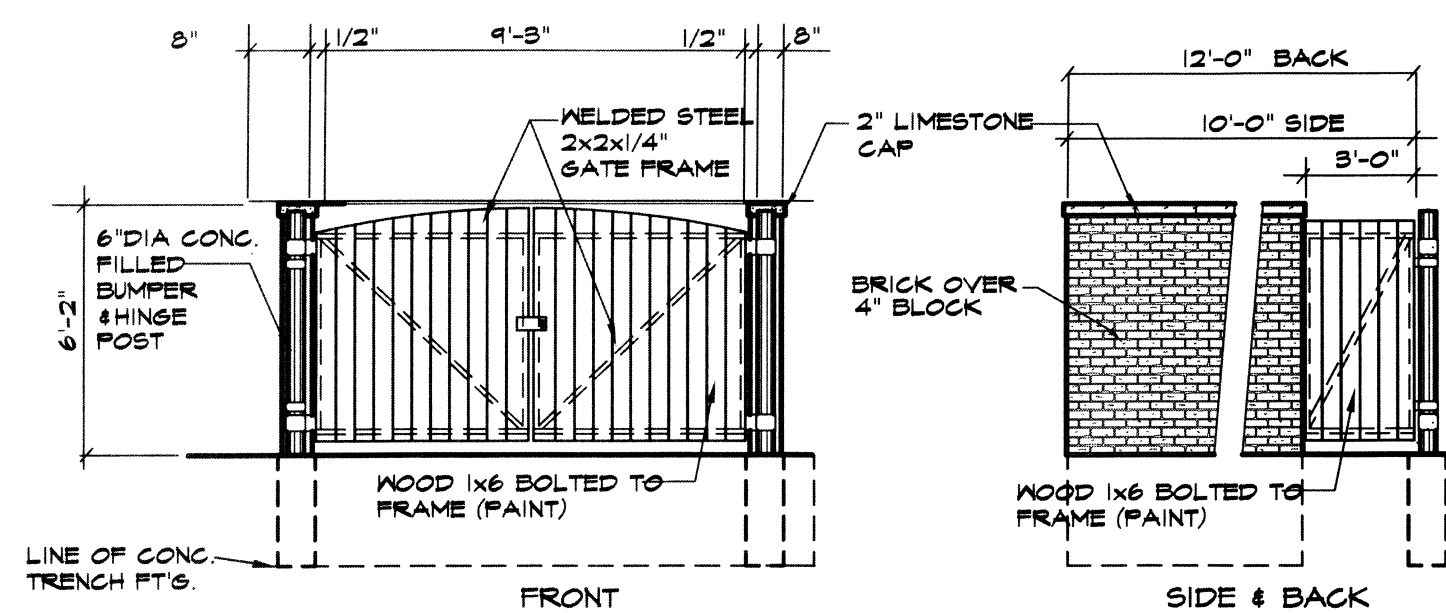
| No. | Description             | Date     | By  |
|-----|-------------------------|----------|-----|
| 1   | PARCEL 1-2 SPLIT UPDATE | 12-11-15 | RJV |
|     |                         |          |     |
|     |                         |          |     |
|     |                         |          |     |

|                  |                        |
|------------------|------------------------|
| Drawn by: R.J.V. | Field: C.L., R.V.      |
| Designed by: N/A | Checked by: W.P.M.     |
| Date: 12/02/15   | Date Revised: 12/11/15 |

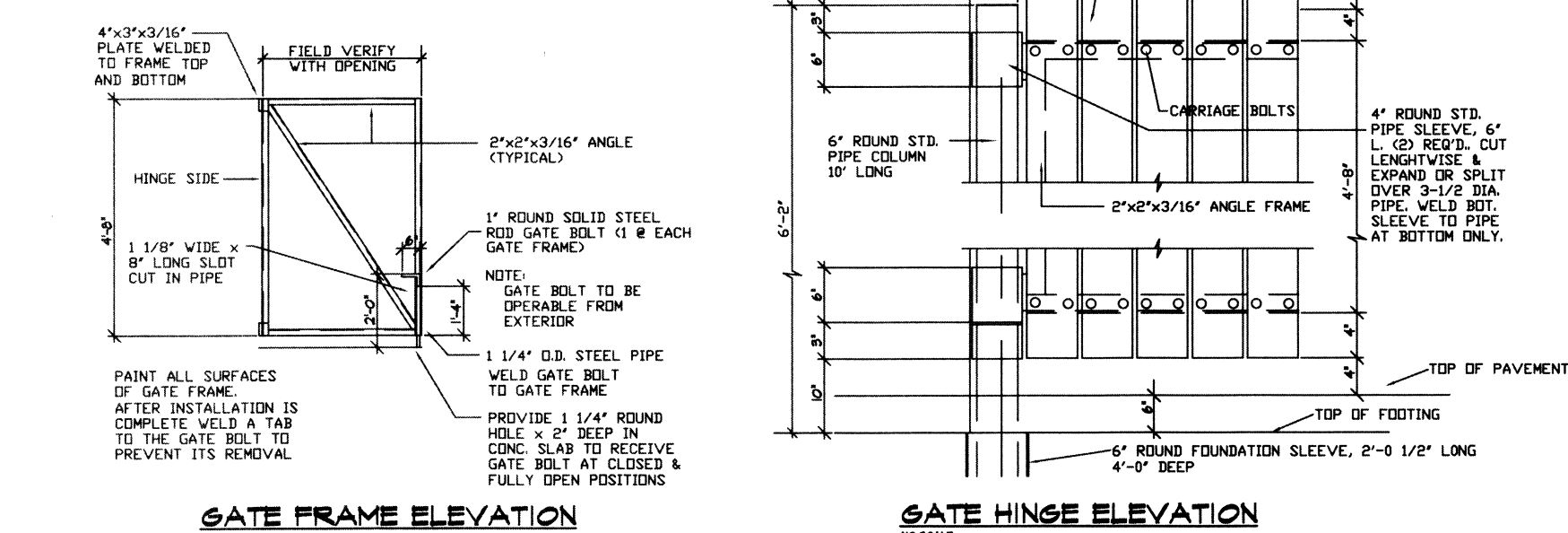
070 CREEKWOOD TRAIL  
TION 11, T7N-R7E, CITY OF BURTON, GENESSEE CO.  
CLIENT: CREEKWOOD ARCHITECTURE  
1111 CREEKWOOD TRAIL  
BURTON, MI 48529

SHEET NO.  
1 1



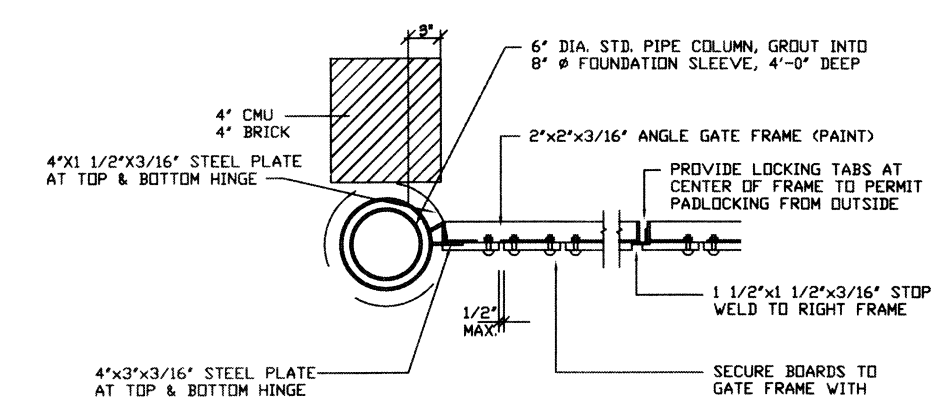


DUMPSTER ENCLOSURE ELEVATIONS

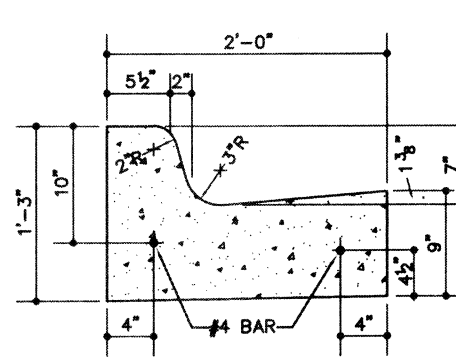


GATE FRAME ELEVATION

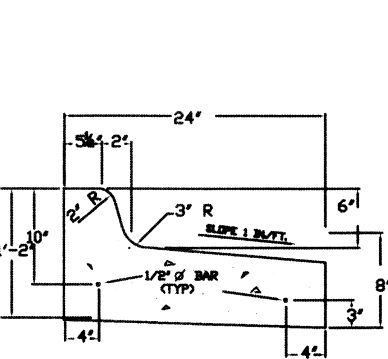
GATE HINGE ELEVATION



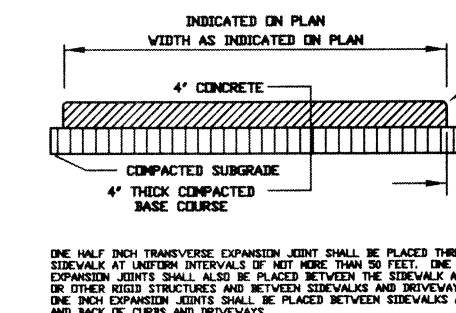
GATE HINGE PLAN



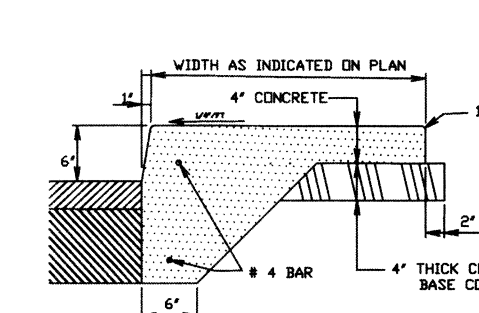
M.D.T. SPEC C-4 CURB DETAIL



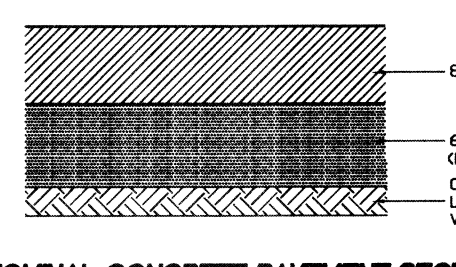
STRAIGHT FACE CURB W/ REVERSE SLOPE CUTTER



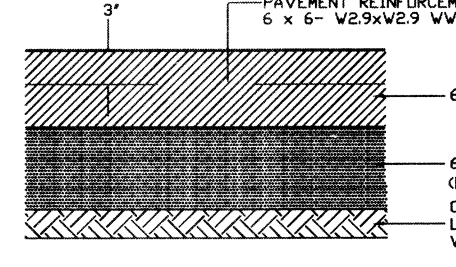
CONCRETE SIDEWALK DETAIL



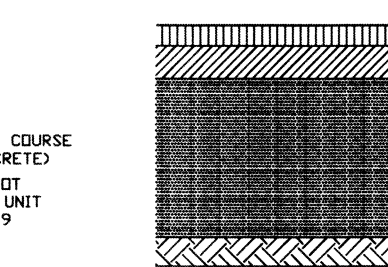
THICKENED EDGE SIDEWALK DETAIL



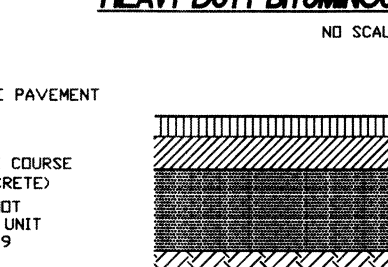
NOMINAL CONCRETE PAVEMENT SECTION



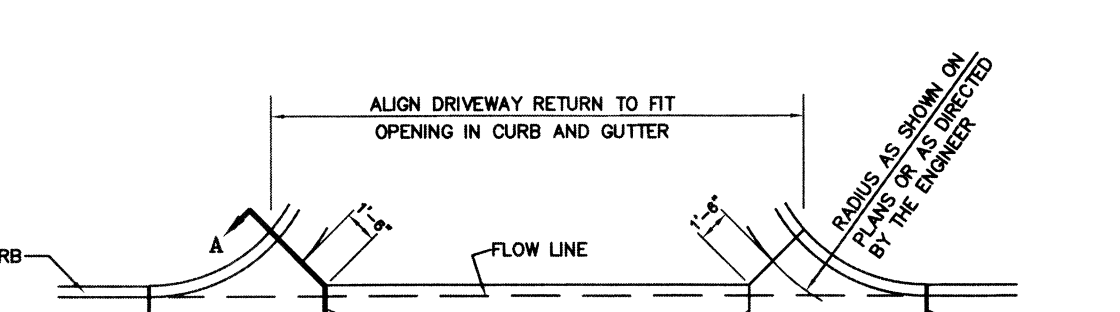
REINFORCED CONCRETE PAVEMENT SECTION



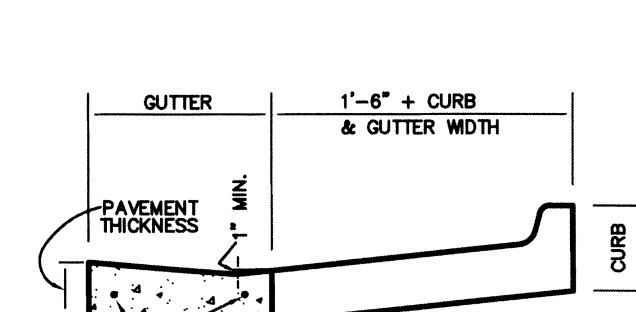
HEAVY DUTY BITUMINOUS PAVEMENT SECTION



STANDARD BITUMINOUS PAVEMENT SECTION



CONCRETE DRIVEWAY OPENING - DETAIL M



SECTION A-A

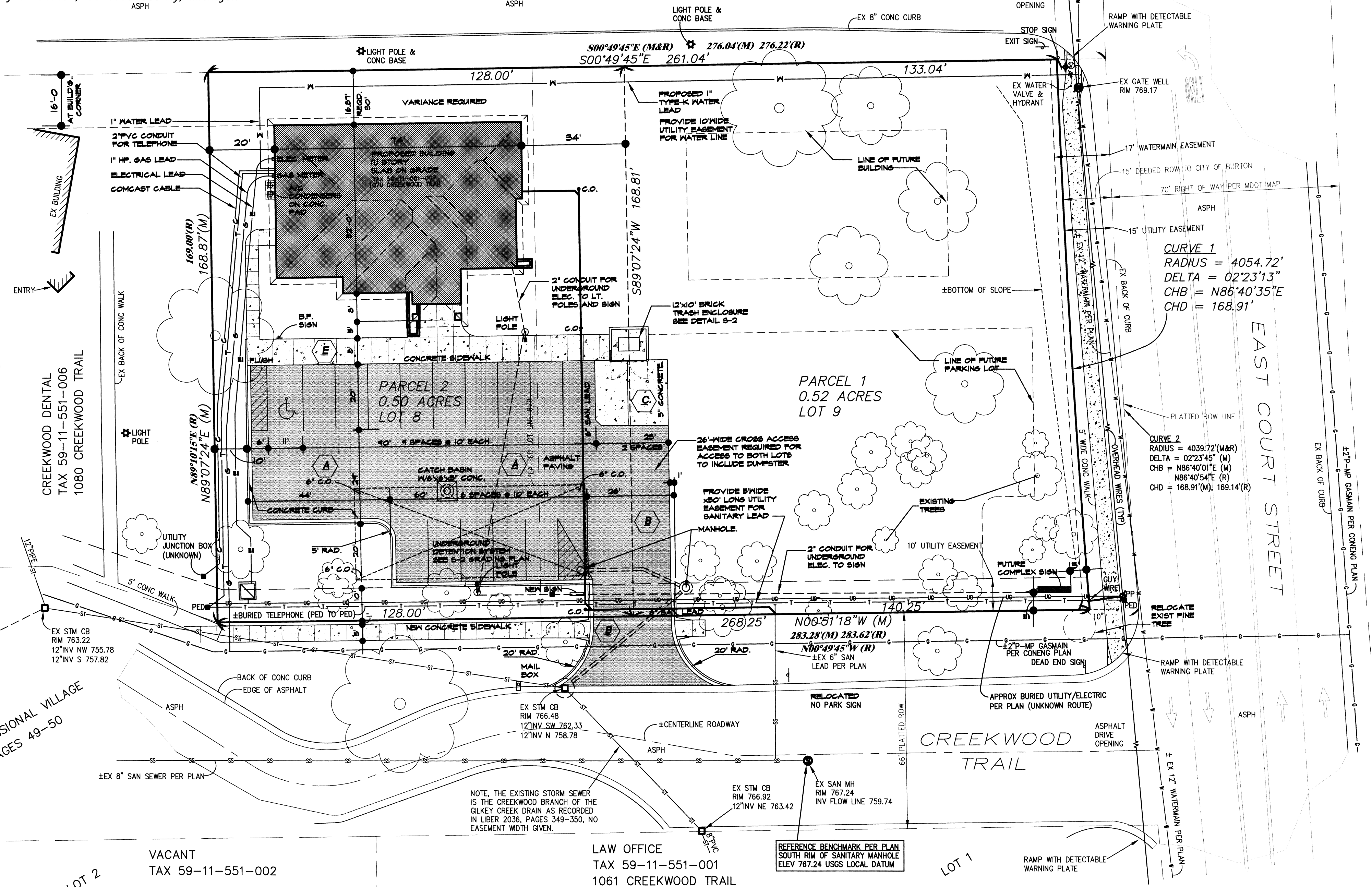
## LEGAL DESCRIPTION PROVIDED

## PARCEL 1

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## PARCEL 2

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## GENERAL NOTES

SEBEC APPLICATION & ASSOCIATED FEES TO BE PAID BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.

CCIP CHARGES ARE TO BE PAID FOR THE WATER AND SANITARY SERVICES BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. CONTRACTOR MUST OBTAIN A PERMIT FROM THE GENESSEE COUNTY WATER & WASTE DIVISION PRIOR TO ANY RELOCATION OF FIRE HYDRANTS, AND ANY MANHOLE ADJUSTMENTS.

## UTILITY CONNECTIONS:

SANITARY SEWER TO BE CONNECTED W/ NEW 6" SDR-26 PVC SAN. LEAD. THE DEVELOPER SHALL OBTAIN THE REQUIRED MUNICIPALITY SANITARY SEWER PERMIT AND PAY THE DIVISION OF HHS THE REQUIRED FEE.

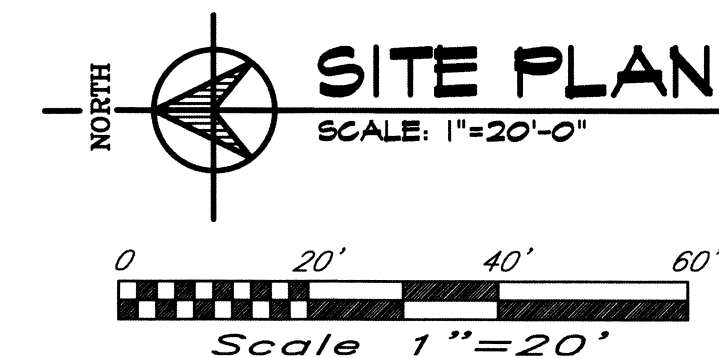
SEE DETAIL NO. SD-9 ON SCANS DETAIL SHIT FOR SANITARY SEWER CONNECTION.

SEE DETAIL NO. SD-15 ON SCANS DETAIL SHIT FOR WATER LINE CONNECTION.

## SANITARY NOTES:

PROVIDE SANITARY SEWER CLEANOUTS EVERY 40' MAX. AND AT ALL BENDS (SEE PLAN FOR LOCATIONS).

SHOWCASE CINEMAS  
TAX 59-11-300-007  
5205 EAST COURT ST



SITE PLAN  
SCALE: 1"=20'-0"



Know what's below.  
Calbefore you dig.

## SITE DATA

PRESENT ZONING — RO (RESTRICTED OFFICE)  
ADJACENT ZONING — C2 (GENERAL COMMERCIAL)

PROPERTY SIZE — 128.0' x 168.81'  
21,612 SQ. FT. = .50 ACRES

BUILDING AREA — 3,489 SQ. FT.  
UNDER 50 OCCUPANT LOAD

% OF LAND COVERAGE — 16% BUILDING  
60% HARD SURFACE INCLUDING BUILDING

PARKING REQD. — ONE (1) SPACE PER EVERY 200 SQ. FT. OF GROSS FLOOR AREA = 17 SPACES

PARKING PROVIDED — 17 SPACES INCLUDING (1) BARRIER FREE SPACE

DUMPSTER PICK UP — DUMPSTER PICK UP BEFORE BUSINESS HOURS

|                                                                                                                                                                                                |  |                        |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| CREEKWOOD ARCHITECTURE, INC.                                                                                                                                                                   |  | burton, michigan 48509 |  |
| 11111 s. creekwood                                                                                                                                                                             |  | tel. (810) 742-0480    |  |
| fax (810) 742-8393                                                                                                                                                                             |  |                        |  |
| <p>PROJECT: NEW OFFICE BUILDING FOR WALKER JUNE CALHOUN CPA'S</p> <p>LOCATION: CREEKWOOD TRAIL</p> <p>DRAWN BY: B.A.C.</p> <p>CHECKED BY: R.A.S.</p> <p>DATE: 12 OCT 2015</p> <p>SHEET NO.</p> |  |                        |  |



new  
Property Length (L)  
Property Width (W)  
Coefficient (C)

Area (A) 0.49 Acres

Q allow 0.10 CFS  $Qa=C \cdot I \cdot A$

PROPOSED RUNOFF  
Highwater Design 763.50  
Existing Storm Sewer 760  
Height 3.5  
Length of Outlet 20  
Diameter of Outlet 0.125  
Slope of Pipe (Sp) 0.350  
Pipe Material (n) 0.01  
Pipe Area 0.0123  
Pipe Hydraulic Radius 0.031  
Q design (mannings) 0.14 CFS  $Qd=(1.486 \cdot A \cdot (RA \cdot 67))$

Orifice Flow 0.10

OUTLET TO EXISTING SEWER

| Sq. Ft.               | Factor | Weighted Factor |
|-----------------------|--------|-----------------|
| Grass 8538            | 0.2    | 1707.6          |
| Pavement 9584         | 0.9    | 8625.6          |
| Buildings/Future 3489 | 0.9    | 3140.1          |
| 21611.0               |        | 13,473          |

Weighted Coeff. (Cw) 0.62

# DETERMINATION OF DETENTION VOLUME 100 Year

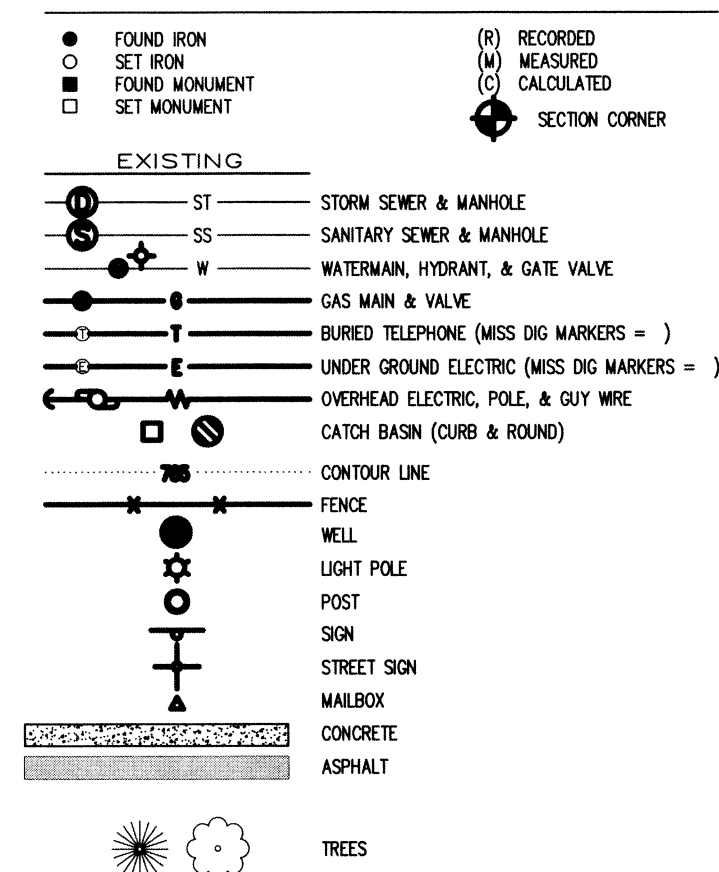
| TC<br>(Min.) | i<br>(in/hr) | Cw A<br>A in Acr (CFS) | Q in<br>(CFS) | Q out<br>(CFS) | Q in - Q out<br>Volume (CF) |
|--------------|--------------|------------------------|---------------|----------------|-----------------------------|
| 10           | 5.77         | 0.31                   | 1.76          | 0.10           | 1.66                        |
| 20           | 4.60         | 0.31                   | 1.41          | 0.10           | 1.31                        |
| 30           | 3.90         | 0.31                   | 1.19          | 0.10           | 1.09                        |
| 40           | 3.40         | 0.31                   | 1.04          | 0.10           | 0.94                        |
| 50           | 3.00         | 0.31                   | 0.92          | 0.10           | 0.82                        |
| 60           | 2.70         | 0.31                   | 0.82          | 0.10           | 0.72                        |
| 70           | 2.50         | 0.31                   | 0.76          | 0.10           | 0.66                        |
| 80           | 2.30         | 0.31                   | 0.70          | 0.10           | 0.60                        |
| 90           | 2.10         | 0.31                   | 0.64          | 0.10           | 0.54                        |
| 100          | 1.90         | 0.31                   | 0.58          | 0.10           | 0.48                        |
| 110          | 1.80         | 0.31                   | 0.55          | 0.10           | 0.45                        |
| 120          | 1.70         | 0.31                   | 0.52          | 0.10           | 0.42                        |
| 130          | 1.60         | 0.31                   | 0.49          | 0.10           | 0.39                        |
| 140          | 1.50         | 0.31                   | 0.46          | 0.10           | 0.36                        |
| 150          | 1.45         | 0.31                   | 0.44          | 0.10           | 0.34                        |
| 160          | 1.4          | 0.31                   | 0.43          | 0.10           | 0.33                        |
| 170          | 1.3          | 0.31                   | 0.40          | 0.10           | 0.30                        |
| 180          | 1.25         | 0.31                   | 0.38          | 0.10           | 0.28                        |
| 190          | 1.2          | 0.31                   | 0.37          | 0.10           | 0.27                        |
| 200          | 1.15         | 0.31                   | 0.35          | 0.10           | 0.25                        |
| 210          | 1.1          | 0.31                   | 0.34          | 0.10           | 0.24                        |
| 220          | 1            | 0.31                   | 0.31          | 0.10           | 0.21                        |
| 230          | 0.95         | 0.31                   | 0.29          | 0.10           | 0.19                        |
| 240          | 0.93         | 0.31                   | 0.28          | 0.10           | 0.18                        |

Min. Volume to be Stored: 3146 CF

## Underground Detention Field:

6 runs of 36" @ 65' each 390 lf 2757 cf  
2 runs of 36" header @ 31' 62 lf 438 cf  
3195 CF

## LEGEND

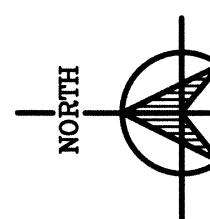
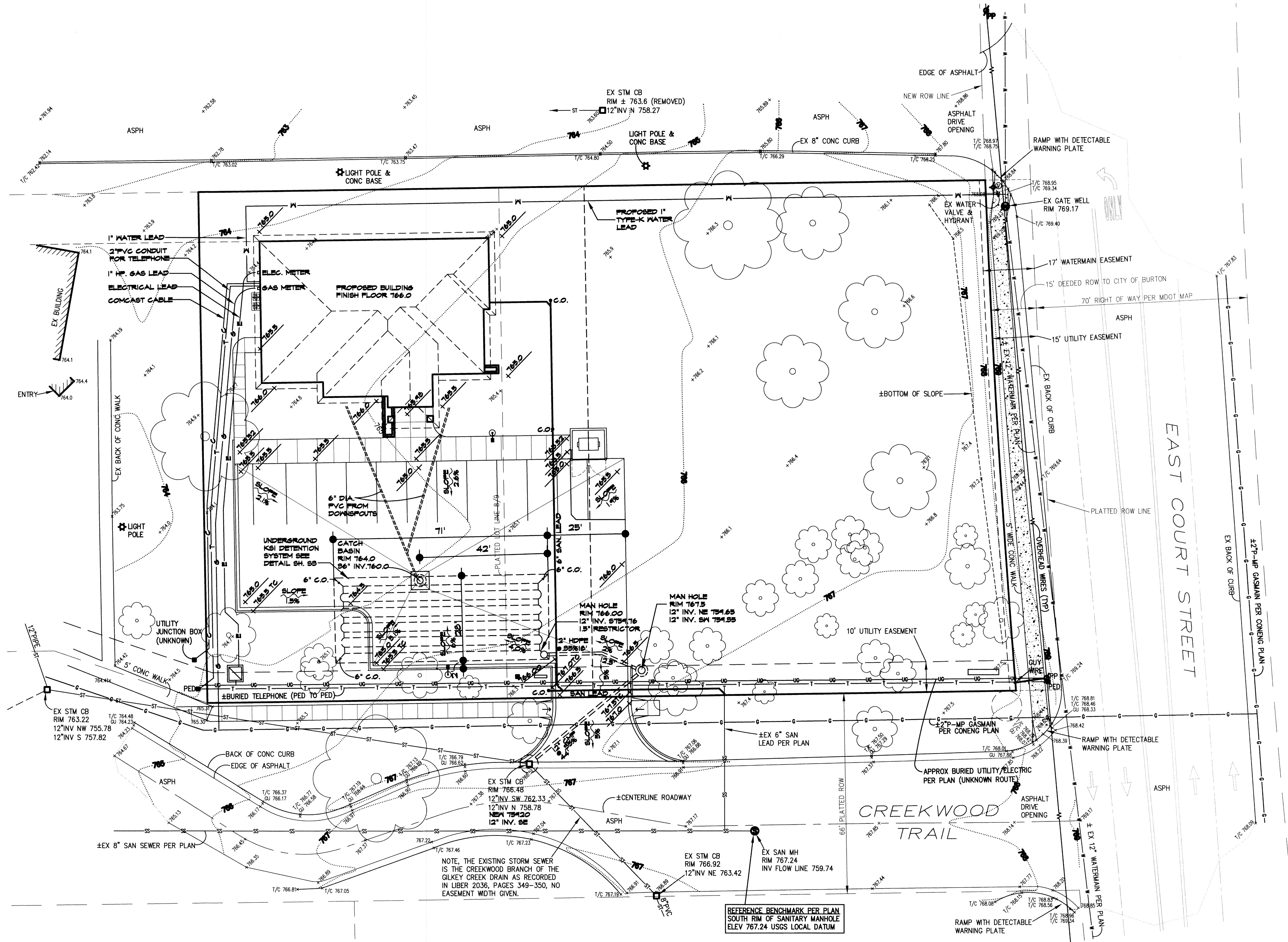


## UTILITY WARNING

UNDERGROUND UTILITY LOCATIONS, AS SHOWN ON THE PLANS WERE OBTAINED FROM UTILITY OWNERS, AND WERE NOT FIELD LOCATED. A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY "MISS DIG" (1-800-482-7171) AND HAVE ALL UNDERGROUND UTILITIES STAKED BEFORE ANY WORK MAY BEGIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND/OR RELOCATION OF ALL UTILITIES THAT MAY INTERFERE WITH CONSTRUCTION. THREE (3) WORKING DAYS BEFORE YOU DIG - CALL MISS DIG (1-800-482-7171).

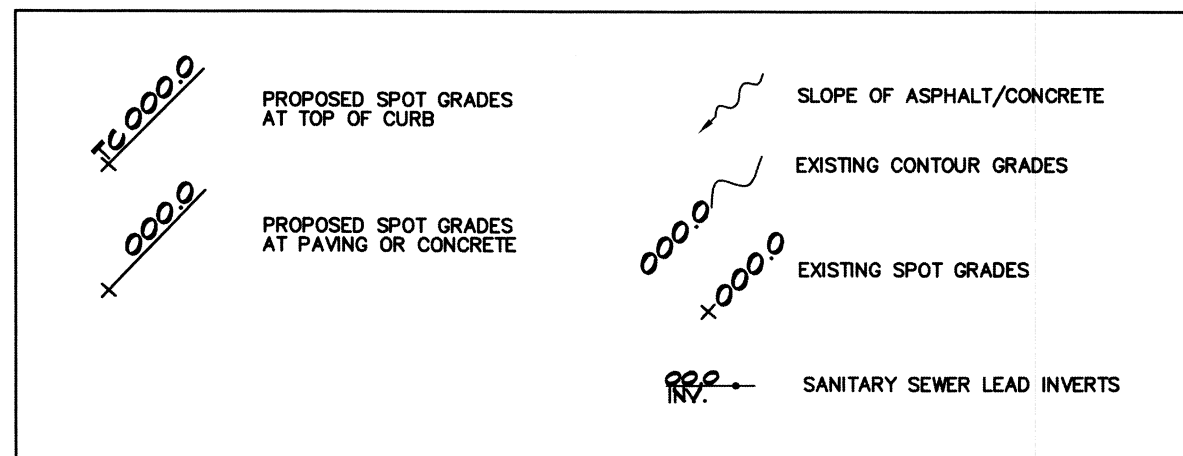
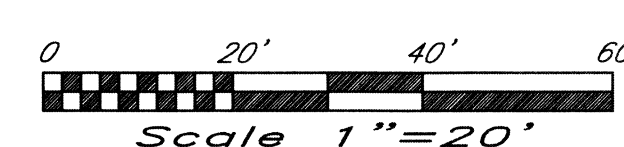
UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF FACILITIES ONLY. AS DISCLOSED TO THIS FIRM BY THE VARIOUS UTILITY COMPANY'S RECORDS. NO GUARANTEE IS EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATION AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN FIELD. DURING CONSTRUCTION, CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR OVERHEAD AND/OR BURIED UTILITIES.



## GRADING PLAN PLAN

SCALE: 1"=20'-0"



Know what's below.  
Cal before you dig.

REVISIONS

CREEKWOOD ARCHITECTURE, INC.  
burton, michigan 48509

11111 s. creekwood

tel. (810) 742-0480 fax (810) 742-8393

SHEET TITLE  
GRADING PLAN

PROJECT  
NEW OFFICE BUILDING FOR  
WALKER, JUNE CALHOUN CPAS

CREEKWOOD TRAIL  
BURTON, MI

CHECKED BY R.A.S.

JOB NO. 150001-01  
DATE 12 OCT 2015

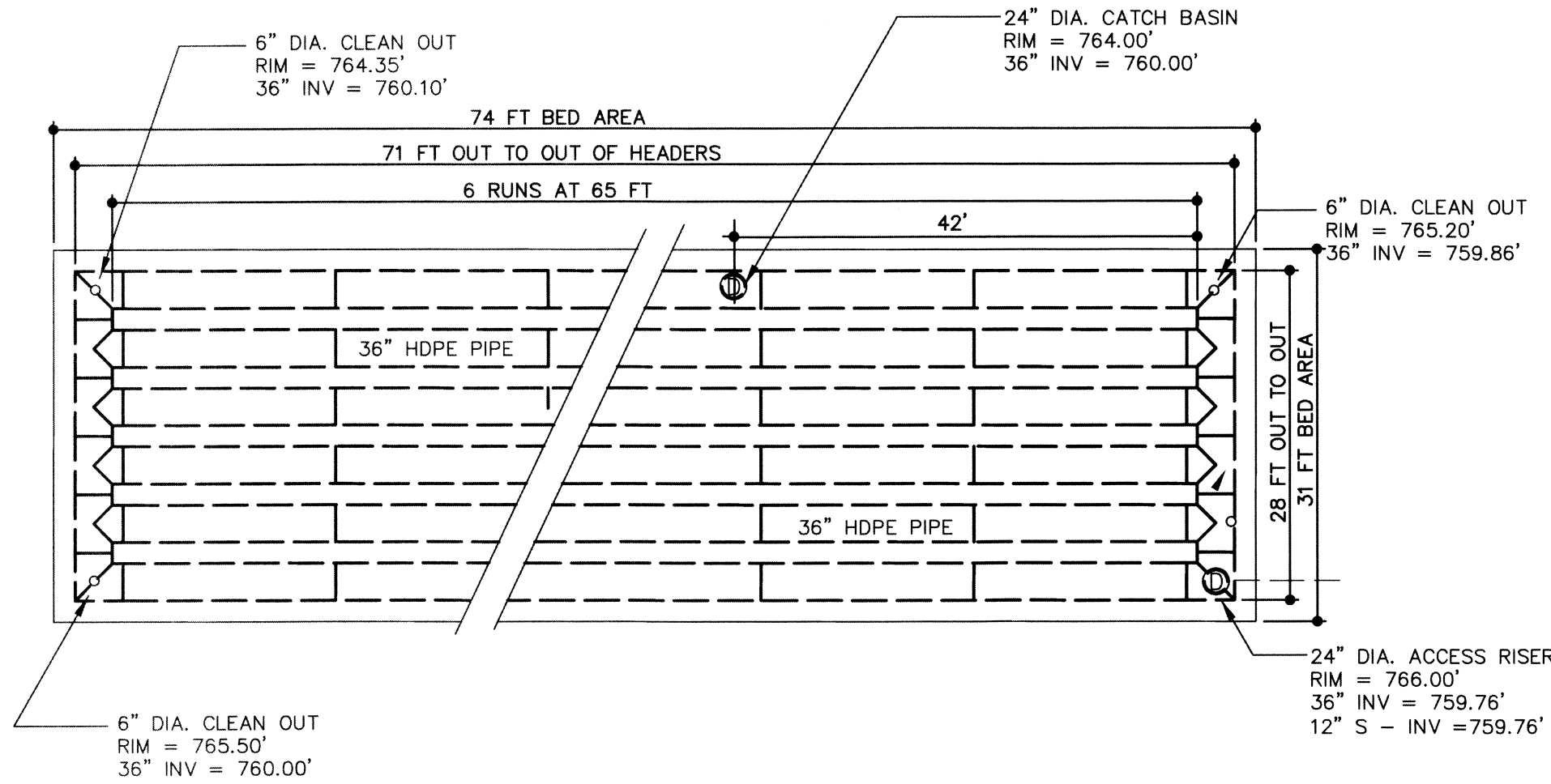
SHEET NO.

S2

OF 5



SYSTEM CAPACITY  
36" DIA. = 3195 CF/FT  
9 RUNS AT 390' + (2x62 FT HEADERS)

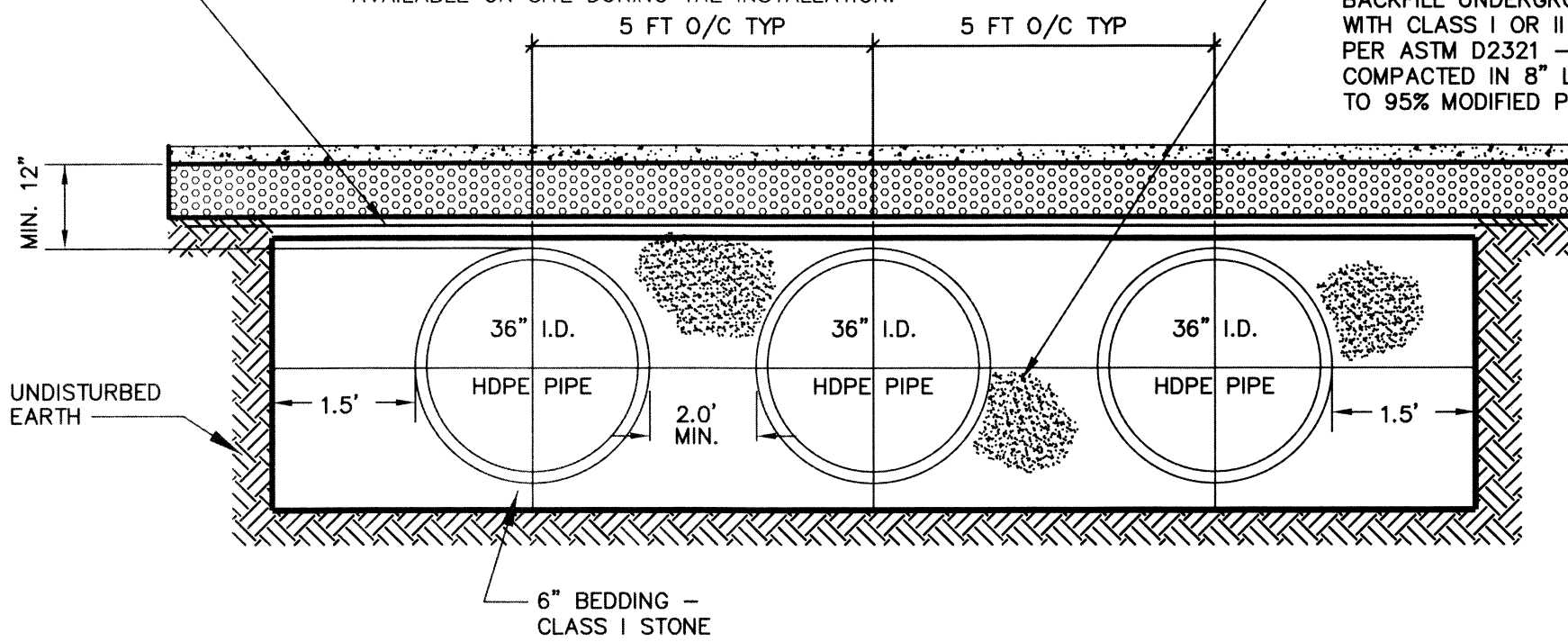


36" HDPE SOLID UNDERGROUND DETENTION SYSTEM  
NO SCALE

DESIGN BY: AG / RK DATE: 4-11-12 1 OF 3  
MANUF. APPROVAL BY: SCALE: NTS SHEET NO.  
DRAWING NO.

KSI KENNEDY SOLUTIONS, INC.  
2111 Sage Lake Road  
Prescott, MI 48756  
Ph: 800-699-4046  
Fx: 248-375-8144

INSTALLATION NOTE:  
HDPE UNDERGROUND DETENTION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321. CARE SHOULD BE EXERCISED WITH CONSTRUCTION EQUIPMENT DURING INSTALLATION TO PROTECT THE SYSTEM FROM DAMAGE DUE TO POINT AND IMPACT LOADING. USE A LARGE EXCAVATOR TO PLACE STONE BETWEEN AND ABOVE THE PIPE IS PREFERRED. COMPACTION OF THE 21AA STONE IN 6 INCH LIFTS TO 4 INCHES ABOVE PIPE. USE A VIBRATORY COMPACTOR, NOT A HOE PACK. AT 4 INCHES ABOVE PIPE, PLACE ONE LAYER EXTEND 5 FT BEYOND EXCAVATED AREA WITH GEOGRID. PLACE THE REMAINING STONE (APPROX.) OF 21AA STONE USING A TRACKED PIECE OF EQUIPMENT (DOZER) OR CONTINUE USING THE LARGE EQUIP. DESCRIBED ABOVE. DO NOT USE RUBBER Tired EQUIP. ONCE THE SYSTEM IS INSTALLED, PLACE A ORANGE SAFETY FENCE 4-5 FT HIGH W/ TEE POST. AROUND THE SYSTEM. PLACE FENCE 5 FT BEYOND GRID FOOTPRINT. ANY DAMAGE TO THE SYSTEM AS A RESULT OF NOT FOLLOWING THESE INSTRUCTIONS AND THE BLUEPRINT DETAILS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR THE SYSTEM TO KSI'S SATISFACTION. IF GIVEN IN WRITING, A 3-4 DAY LEAD TIME, KSI WILL HAVE A REPRESENTATIVE AVAILABLE ON SITE DURING THE INSTALLATION.



- NOTES:
1. HDPE PIPE & FITTINGS SHALL CONFORM TO AASHTO M-294, TYPE S, LATEST EDITION
  2. INSTALL UNDERGROUND DETENTION SYSTEM IN ACCORDANCE WITH ASTM D 2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE OR SEWER AND OTHER GRAVITY FLOW APPLICATIONS"
  3. MEASURES SHALL BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL.

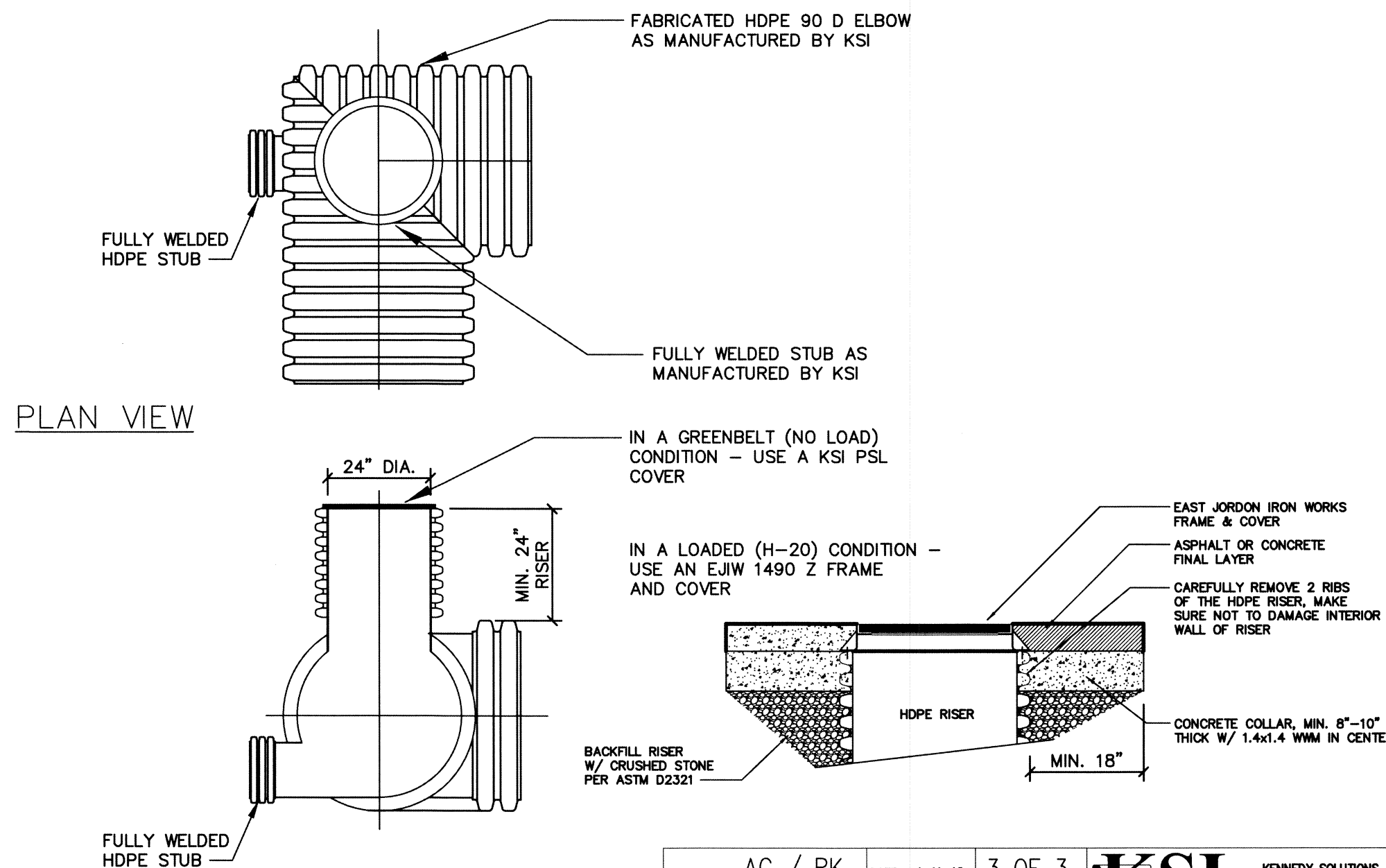
TYPICAL CROSS SECTION FOR 48" HDPE SOLID UNDERGROUND DETENTION SYSTEM  
NO SCALE

DESIGN BY: AG / RK DATE: 2 OF 3  
MANUF. APPROVAL BY: SCALE: NTS SHEET NO.

KSI KENNEDY SOLUTIONS, INC.  
2111 Sage Lake Road  
Prescott, MI 48756  
Ph: 800-699-4046  
Fx: 248-375-8144

## TYPICAL ACCESS RISER SECTION

24" DIA. ACCESS MANHOLE IN HDPE ELBOW



CROSS SECTION

DESIGN BY: AG / RK DATE: 4-11-12 3 OF 3  
MANUF. APPROVAL BY: SCALE: NTS SHEET NO.  
DRAWING NO. ACCESS RISER

KSI KENNEDY SOLUTIONS, INC.  
2111 Sage Lake Road  
Prescott, MI 48756  
Ph: 800-699-4046  
Fx: 248-375-8144

- NOTES:
1. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH A FOUNDATION OF CLASS I, II OR III MATERIAL AS DEFINED IN ASTM D2321, LATEST EDITION; AS AN ALTERNATIVE TRENCH BOTTOM MAY BE STABILIZED USING A WOVEN GEOTEXTILE FABRIC.
  2. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"-24" DIA. PIPE AND 6" FOR 30"-60" DIA. PIPE.

3. HAUNCHING AND INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III AND INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

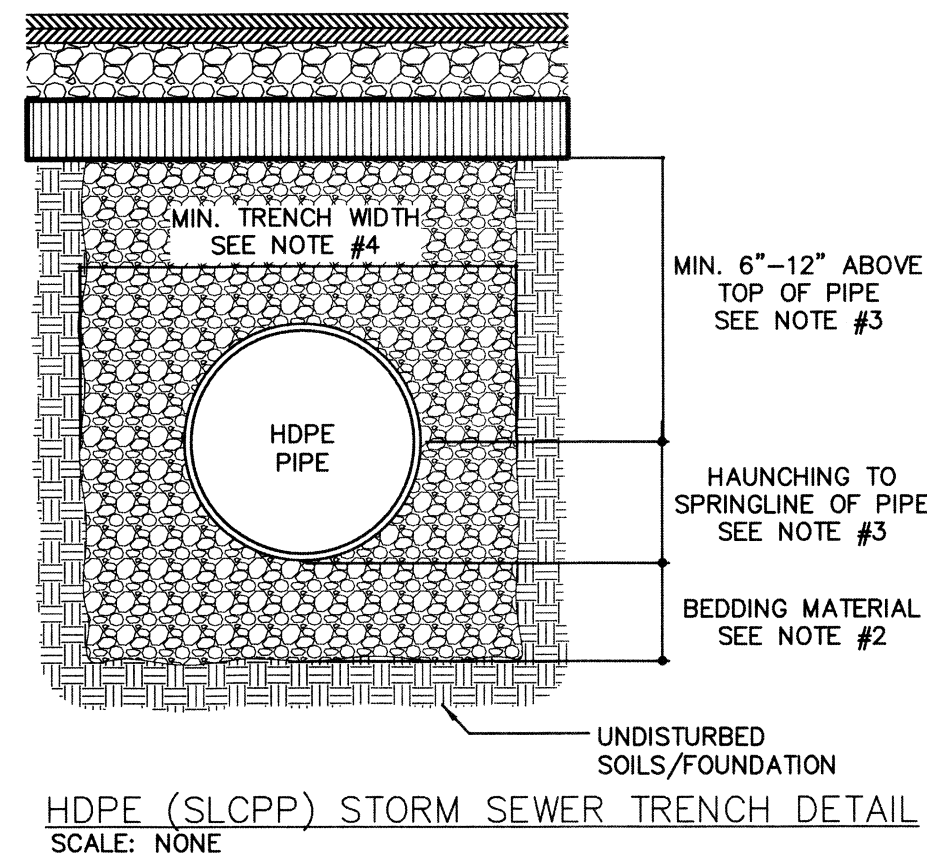
4. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER, MIN. TRENCH WIDTHS ARE AS FOLLOWS

| NOMINAL DIA. | MINIMUM RECOMM. TRENCH WIDTH |
|--------------|------------------------------|
| 4"           | 21"                          |
| 6"           | 23"                          |
| 8"           | 25"                          |
| 10"          | 28"                          |
| 12"          | 31"                          |
| 15"          | 34"                          |
| 18"          | 39"                          |
| 24"          | 48"                          |
| 30"          | 66"                          |
| 36"          | 78"                          |
| 42"          | 83"                          |
| 48"          | 89"                          |
| 60"          | 102"                         |

5. MINIMUM COVER: MINIMUM RECOMMENDED COVER FOR VARIOUS LIVE LOADING CONDITIONS ARE AS SUMMARIZED IN THE FOLLOWING TABLE. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TAKEN FROM THE TOP OF THE PIPE TO THE GROUND SURFACE.

| SURFACE LIVE LOAD       | MIN. RECOMMENDED COVER                    |
|-------------------------|-------------------------------------------|
| H25 (FLEXIBLE PAVEMENT) | 12" FOR UP TO 48" DIA., 24" FOR 60" DIA.* |
| H25 (RIGID PAVEMENT)    | 12" FOR UP TO 48" DIA., 24" FOR 60" DIA.  |
| E80 RAILWAY             | 24"                                       |
| HEAVY CONSTRUCTION      | 48"                                       |

\*TOP OF PIPE TO BOTTOM OF BITUMINOUS PAVEMENT SECTION



NOTE TO THE ENGINEER:  
WHEN THIS DETAIL IS TO BE INCORPORATED INTO THE CONTRACT DOCUMENTS, PLEASE REFERENCE SECTION X-2, "RECOMMENDATIONS FOR INCORPORATION INTO CONTRACT DOCUMENTS" OF ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS" SO THAT APPROPRIATE MODIFICATIONS CAN BE MADE TO ACCOMMODATE SITE SPECIFIC CONDITIONS.

DESIGN BY: AG / RK DATE: 12-4-06 1 OF 1  
MANUF. APPROVAL BY: SCALE: NTS SHEET NO.  
DRAWING NO. PIPE INSTALLATION DETAIL

KSI KENNEDY SOLUTIONS, INC.  
2111 Sage Lake Road  
Prescott, MI 48756  
Ph: 800-699-4046  
Fx: 248-375-8144

SHEET TITLE  
STORM DETAILS

PROJECT  
NEW OFFICE BUILDING FOR  
WALKER JUNE CALHOUN CPAs  
CREEKWOOD TRAIL  
DRAWN BY B.A.C.  
CHECKED BY R.A.S.  
JOB NO. 150001-CP  
DATE 12 OCT 2015  
SHEET NO.

83

OF 3



10 STANDARD NOTES FOR PRELIMINARY PLATS AND SITE PLANS

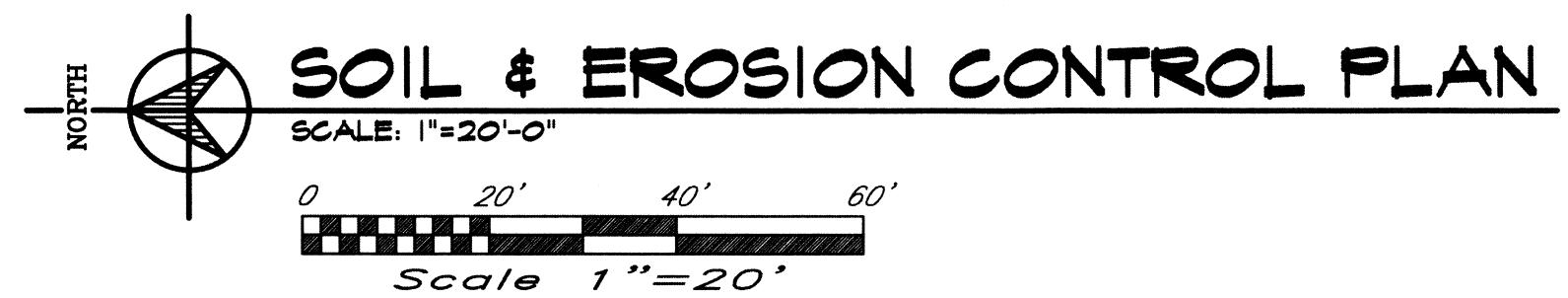
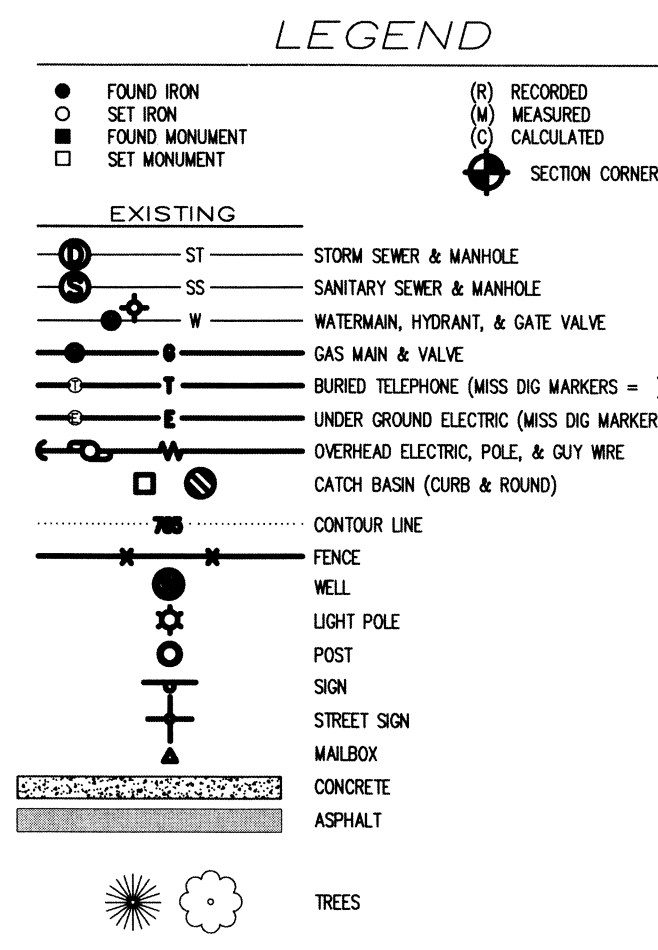
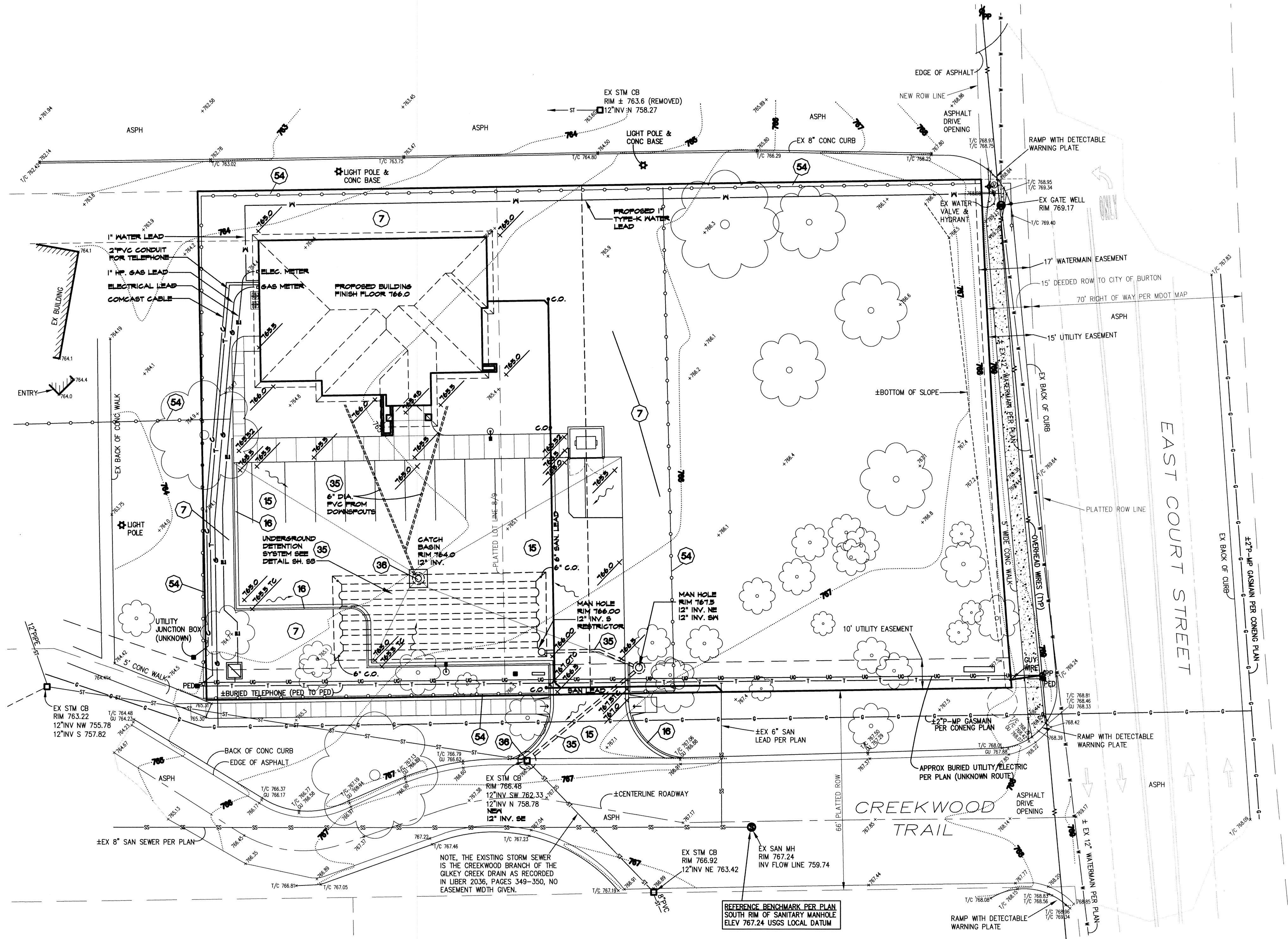
1. EXTENSION OF PUBLIC UTILITIES: All public sanitary sewer and/or watermain SHALL be extended to the furthest limits of the property, including corner lots, with the pipe size and material approved by GDCG-WMS. This is necessary for plan approval. For water service of 1" or less on a corner lot, the requirements to extend the public watermain and/or sanitary sewer along both property lines will be reviewed. Final determination shall be made by GDCG-WMS.
2. WATERMAIN LOOPING: All public watermain shall be looped whenever possible. The pipe sizing shall be approved by GDCG-WMS.
3. INDUSTRIAL PRETREATMENT PROGRAM (IPP): This permit is for all commercial and industrial discharges. The OWNER shall obtain an Industrial Pretreatment Discharge Permit prior to the issuance of a Sewer Connection Permit. Industrial Discharge Permits are non-transferable. Changes in facility use will require a new Industrial Discharge Permit.
4. SOIL EROSION: The DEVELOPER shall submit a detailed Soil Erosion and Sedimentation Control plan and obtain an Act 451 part 41, Soil Erosion and Sedimentation Control permit. This includes the payment of fees and the providing of necessary bonds. No earth changes or excavation shall be started prior to the issuance of this permit. The DEVELOPER shall protect all existing and proposed storm sewer facilities on and adjacent to the site during excavation and construction. All sediment shall be contained on site. Any silt in county drains, storm sewer, culverts, etc. as a result of this project, shall be removed by the DEVELOPER at the cost of the DEVELOPER.
5. FLOOD PLAIN OR WETLAND CONSTRUCTION: The DEVELOPER shall apply to the Michigan Department of Environmental Quality for a permit for the alteration and/or occupation of a flood plain or floodway, as required under PA 451. Evidence of this permit may be required prior to plan approval by GDCG-WMS.
6. NPDES STORM WATER DISCHARGE PERMIT: The owner of the property shall obtain a NPDES Storm Water Discharge permit for construction activities from MDEQ as required under Public Act 451. The notice of coverage form shall be submitted through GDCG-WMS with the Soil Erosion Control permit application. All MDEQ fees shall accompany the Notice of Coverage. Evidence of this permit may be required prior to plan approval by GDCG-WMS.
7. GENESEE COUNTY PERMIT TO CONSTRUCT A PUBLIC UTILITY: After the approval of this preliminary plat or site plan, the DEVELOPER shall submit a detailed plan for construction of all public sanitary sewer and watermain. The plans must have GDCG-WMS approval, an S-permit issued, and approval from the MDEQ prior to beginning construction.
8. GENESEE COUNTY ROAD COMMISSION PERMIT: The DEVELOPER shall obtain a permit from the Genesee County Road Commission to perform work within the Genesee County Road Commission Right-of-Way. All fees for the permit, bonds and insurances are the responsibility of the developer.
9. MUNICIPALITY SANITARY SEWER AND WATER PERMIT: Prior to the issuance of a building permit by the local municipality, the developer shall be required to obtain a sanitary sewer and/or water tap-in permit from the local municipality, if authorized, or GDCG-WMS.
10. STATE CONSTRUCTION PERMITS: The sanitary sewer and watermain construction permit application from the Michigan Department of Environmental Quality (MDEQ) shall be submitted to the MDEQ after receiving approval from GDCG-WMS. Construction shall not begin until these state permits are issued.

| INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS. |                       |                                                                                                                                                 |   |   |   |   |   |   |   |
|--------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| KEY                                                                                              | DETAIL                | CHARACTERISTICS                                                                                                                                 | A | B | C | D | E | F | G |
| 7                                                                                                | Soil Erosion          | EFFECTIVE ON LARGE AREAS: HELIX TAKING ADJUST USED TO PROVIDE IMMEDIATE PROTECTION (SILT, SAND IS ROOTED). SHOULD INCLUDE PREPARED TOPSOIL BED. | * |   |   |   | * | * | * |
| 15                                                                                               | Fencing               | PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED. REGULAR SURFACE WILL HELP SLOW VELOCITY.                                                    | * |   |   |   | * |   |   |
| 16                                                                                               | Curb & Gutter         | KEEPS HIGH VELOCITY RUNOFF IN PAVED AREAS FROM REACHING UNPAVED AREAS. PREPARED SURFACE WILL HELP SLOW VELOCITY.                                |   |   |   |   | * |   | * |
| 35                                                                                               | Storm Sewer           | SYSTEM REMOVES COLLECTED RUNOFF FROM SITE. CONCENTRATION OF RUNOFF: PROTECTS AGAINST OVERFLOW. CATCH BASINS TO COLLECT SEDIMENT.                |   |   |   |   | * |   | * |
| 36                                                                                               | Clear Basin Over Flow | COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.                                                                    |   |   |   |   | * |   | * |
| 54                                                                                               | Asphalt               | USED ARCHITECTURE PAVING AND PORT OR POLYMER EASY TO CONSTRUCT AND LOCATE AS NECESSARY.                                                         | * | * |   |   | * |   | * |

GENESEE COUNTY DRAIN COMMISSIONER  
STANDARD NOTES FOR PRELIMINARY PLATS & SITE PLANS

To obtain preliminary plat or site plan approval from the office of the Genesee County Drain Commissioner, the following seven (7) notes, or some adaptation thereof, must be shown on all preliminary plats or site plans. All site plans shall have written approval of the Genesee County Drain Commissioner regarding sanitary sewers, water supply and soil erosion control prior to review by the local municipalities planning board. Where the notes are not applicable use the number and heading and state why not used.

1. SOIL EROSION CONTROL .53 ACRES.
- The developer shall submit a detailed erosion control plan and obtain an Act 347 soil erosion and sediment control permit, including the payment of fees and the providing of necessary bonds. No earth changes or excavation shall be started prior to the issuance of this permit. Contact 1-810-732-7870 for details.
- The developer shall protect all existing and proposed storm sewer facilities on and adjacent to the site during excavation and construction. All sediment shall be contained on site. Any silt in county drains as a result of this project shall be removed by the developer.
2. FLOOD PLAIN OR WETLAND CONSTRUCTION - (NO WORK IN WETLANDS OR FLOOD PLAIN ON THIS SITE)
- The developer shall apply to the Michigan Department of Natural Resources for a permit for the alteration and/or occupation of a flood plain, floodway or wetland as required under PA 245.
3. NPDES STORM WATER DISCHARGE PERMIT (LESS THAN 5 ACRES EXPOSED)
4. GENESEE COUNTY PERMIT TO CONSTRUCT PUBLIC UTILITY
- After the approval of this preliminary plat or site plan, the developer shall submit a detailed plan for construction of all public sanitary sewer and watermain. The plans must have county approval and a S-permit issued prior to any construction.
5. GENESEE COUNTY ROAD COMMISSION PERMIT AND/OR M.D.O.T. PERMIT REQUIRED FOR WORK WITHIN CREEKWOOD TRAIL, BURTON, MI.
- The developer shall obtain a Genesee County Road Commission permit for any work performed within the county road right-of-way. This includes permit application, posting bonds and insurance.
6. MUNICIPALITY SANITARY SEWER & WATER PERMIT (OBTAIN SANITARY SEWER AND WATER TAP IN PERMITS)
- Prior to the issuance of a building permit by the local municipality the developer shall be required to obtain a sanitary sewer and/or water tap-in permit from the GRAND BLANC TWP. County Drain Commissioner Division of Water & Waste Services if WWS is the designated permit writer.
7. STATE CONSTRUCTION PERMITS NOT REQUIRED FOR THIS PROJECT



UTILITY WARNING

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UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF FACILITIES ONLY, AS DISCLOSED TO THE FIRM BY THE VARIOUS UTILITY COMPANY'S RECORDS. NO GUARANTEE IS EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

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Know what's below.  
Calbefore you dig.

REVISIONS

CREEKWOOD ARCHITECTURE, INC.  
burton, michigan 48509  
11111 s. creekwood  
tel. (810) 742-0480 fax (810) 742-8393

PROJECT

NEW OFFICE BUILDING FOR  
WALKER JUNE CALHOUN CPA'S  
CREEKWOOD TRAIL  
DRAWN BY B.A.C.

SHEET TITLE

SOIL & EROSION CONTROL PLAN

CHECKED BY R.A.S.

DATE 12 OCT 2015

SHEET NO.

S4

OF 5



MICHIGAN UNIFIED KEYING SYSTEM

\* INDICATES APPLICABILITY OF A SPECIFIC CONTROL MEASURE TO ONE OR MORE OF THE SEVEN PROBLEM AREAS

| KEY | DETAIL                              | CHARACTERISTICS                                                                                                                                                                                                                  | A | B | C | D | E | F | G |
|-----|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 1   | Striping & Stockpiling              | TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION. STOCKPILE SHOULD BE TEMPORARILY SEED.                                                                                                                        | * |   |   |   | * | * |   |
| 2   | Selective Grading & Shaping         | WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPED EASE EROSION PROBLEMS.                                                                                                                                                 | * |   |   |   | * | * | * |
| 3   | Grading Onsite                      | SAVES COST OF GRUBBING, PROVIDES NEW SPROUTS, RETAINS EXISTING ROOTS MAY SYSTEM REDUCES AND KILL AT NEW FOREST EDGE. DISCOURAGES EQUIPMENT ENTRANCE.                                                                             | * |   |   |   | * | * | * |
| 4   | Vegetative Stabilization            | MAY UTILIZE A VARIETY OF PLANT MATERIAL. STABILIZES SOIL. REDUCES RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF.                                                                                                                 | * | * | * |   | * | * | * |
| 5   | Seeding                             | IMPROVES AND VERY EFFECTIVE. STABILIZES SOIL. THIS MINIMIZES EROSION. PERMITS RUNOFF TO INFILTRATE SOIL. REDUCES RUNOFF VELOCITY. SHOULD INCLUDE PREPARED TOPSOIL BED.                                                           | * |   | * |   | * | * | * |
| 6   | Seeding with Mulch and/or Nutrients | FACILITATES ESTABLISHMENT OF VEGETATIVE COVER. EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY. EASILY PLACED IN SMALL QUANTITIES BY INDEPENDENT PERSONNEL. SHOULD INCLUDE PREPARED TOPSOIL BED.                                    | * |   | * |   | * | * | * |
| 7   | Hydro-seeding                       | EFFECTIVE ON LARGE AREAS. MULCH TACKING AGENT USED TO PROVIDE IMMEDIATE PROTECTION UNTIL GRASS IS ROOTED. SHOULD INCLUDE PREPARED TOPSOIL BED.                                                                                   | * |   |   |   | * | * | * |
| 8   | Sodding                             | PROVIDES IMMEDIATE PROTECTION. CAN BE USED ON STEEP SLOPES WHERE SEED MAY BE DIFFICULT TO ESTABLISH. EASY TO PLACE. MAY BE REQUIRED IF DAMAGED. SHOULD INCLUDE PREPARED TOPSOIL BED.                                             | * |   | * |   | * | * | * |
| 9   | Vegetative Buffer Strip             | SLOWS RUNOFF VELOCITY. FILTERS SEDIMENT FROM RUNOFF. REDUCES VOLUME OF RUNOFF ON SLOPES.                                                                                                                                         | * | * |   |   |   |   | * |
| 10  | Mulching                            | USED ALONE TO PROTECT EXPOSED AREAS FOR SHORT PERIODS. PROTECTS SOIL FROM IMPACT OF FALLING RAIN. PRESERVES SOIL MOISTURE AND PROTECTS GERMINATING SEED FROM TEMPERATURE EXTREMES.                                               | * |   |   |   | * | * |   |
| 11  | Regravel Surface                    | REDUCES VELOCITY AND INCREASES INFILTRATION RATES. COLLECTS SEDIMENT. MULCH WATER, SEEDS AND MULCH BETTER THAN SMOOTH SURFACES.                                                                                                  | * |   |   |   | * |   |   |
| 12  | Compaction                          | HELPS HOLD SOIL IN PLACE. MAKES EXPOSED AREAS LESS VULNERABLE TO EROSION.                                                                                                                                                        | * |   |   |   | * |   |   |
| 13  | Riprap, Rubble, Gravel              | USED WHERE VEGETATION IS NOT EASILY ESTABLISHED. EFFECTIVE FOR HIGH VELOCITIES OF HIGH CONCENTRATIONS. PERMITS RUNOFF TO INFILTRATE SOIL. DISAPATERS SEDIMENT FROM RUNOFF AT SYSTEM OUTLETS.                                     | * | * | * |   |   |   |   |
| 14  | Aggregate Cover                     | STABILIZES SOIL SURFACE. THIS MINIMIZES EROSION. PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER. MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.                                                             |   |   |   |   | * |   |   |
| 15  | Paving                              | PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VOLUME AND VELOCITY. IRREGULAR SURFACE WILL HELP SLOW VELOCITY.                                                                                         | * |   |   |   | * |   |   |
| 16  | Curb & Gutter                       | KEEPS HIGH VELOCITY RUNOFF IN PAVED AREAS FROM LEAVING PAVED SURFACE. COLLECTS AND CONVEYS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED TOPSOIL BED.                                                                           |   |   |   |   | * | * | * |
| 17  | Benches                             | REDUCES RUNOFF VELOCITY BY REDUCING EFFECTIVE SLOPE LENGTH. COLLECTS SEDIMENT. PROVIDES ACCESS TO SLOPE FOR SEEDING, MULCHING AND MAINTENANCE.                                                                                   | * |   |   |   |   | * |   |
| 18  | Diversion Berm                      | DIVERTS WATER FROM VULNERABLE AREAS. COLLECTS AND DIVERTS WATER TO PREPARED DRAINAGEWAYS. MAY BE PLACED AS PART OF NORMAL CONSTRUCTION OPERATION.                                                                                | * |   |   |   | * | * | * |
| 19  | Diversion Ditch                     | COLLECTS AND DIVERTS WATER TO REDUCE EROSION POTENTIAL. MAY BE INCORPORATED IN PERMANENT PROJECT DRAINAGE SYSTEMS.                                                                                                               | * |   |   |   | * | * | * |
| 20  | Berm & Ditch                        | DIVERTS WATER TO A PREPARED DRAINAGEWAY. MAY BE USED AT INTERVALS ACROSS SLOPE FACE TO REDUCE EFFECTIVE SLOPE LENGTH.                                                                                                            | * |   |   |   | * | * | * |
| 21  | Filter Berm                         | CONSTRUCTED OF GRAVEL OR STONE. INTERCEPTS AND DIVERTS RUNOFF TO STABILIZED AREAS OR PREPARED DRAINAGE SYSTEMS. SLOWS RUNOFF AND COLLECTS SEDIMENT.                                                                              | * | * |   |   |   | * |   |
| 22  | Brush Berm                          | USES BRUSH AND LOGS FROM CLEARING OPERATIONS. CAN BE COVERED AND SEEDED RATHER THAN REMOVED. ELIMINATES NEED FOR BURNING OR REMOVAL IF MATERIAL FROM SITE.                                                                       |   |   |   |   |   | * |   |
| 23  | Stone Channel                       | LEAST EXPENSIVE FORM OF DRAINAGEWAY. MAY BE USED ONLY WHERE GRADIENT IS VERY LOW AND WITH SOILS OF MINIMUM EROSION POTENTIAL.                                                                                                    |   |   | * |   |   |   |   |
| 24  | Grassed Waterway                    | HIGH MORE STABLE FORM OF DRAINAGEWAY THAN BARE CHANNEL. GRASS TENDS TO SLOW RUNOFF AND FILTER OUT SEDIMENT. USED WHERE BARE CHANNEL WOULD BE ERODED.                                                                             |   |   | * |   |   |   |   |
| 25  | Slope Drain (Surface Pipe)          | PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES.                                                                        | * |   |   |   |   |   |   |
| 26  | Slope Drain (Power Chute)           | PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED OR EXTENDED AS GRADING PROGRESSES.                                                                        | * |   |   |   |   |   |   |
| 27  | Slope Drain (Subsurface Pipe)       | PREVENTS EROSION ON SLOPES WHEN RUNOFF CANNOT BE DIVERTED TO EDGE OF SLOPE AREA. USUALLY PERMANENT. CAN BE CONSTRUCTED AS GRADING PROGRESSES.                                                                                    | * |   |   |   |   |   |   |
| 28  | Drop Spillway                       | SLOWS VELOCITY OF FLOW. REDUCES EROSION CAPACITY.                                                                                                                                                                                |   | * | * |   |   |   |   |
| 29  | Pipe Drop                           | REDUCES RUNOFF VELOCITY. REMOVES SEDIMENT AND TURBIDITY. CAN BE DESIGNED TO HANDLE LARGE VOLUMES OF FLOW.                                                                                                                        |   |   | * |   |   |   |   |
| 30  | Pipe Spillway                       | REMOVES SEDIMENT AND TURBIDITY FROM RUNOFF. MAY BE PART OF PERMANENT EROSION CONTROL PLAN.                                                                                                                                       |   |   | * |   |   |   |   |
| 31  | Energy Dissipater                   | SLOWS RUNOFF VELOCITY TO NON-EROSIVE LEVEL. PERMITS SEDIMENT COLLECTION FROM RUNOFF.                                                                                                                                             | * |   | * | * |   |   |   |
| 32  | Level Spillway                      | CONVEYS COLLECTED CHANNEL OR PIPE FLOW BACK TO SHEET FLOW. AVOIDS CHANNEL EMBANKMENTS AND SHEET FLOW CONCENTRATION. SUBJECT SITE. SIMPLE TO CONSTRUCT.                                                                           |   |   | * |   |   |   |   |
| 33  | Sediment Trap                       | MAY BE CONSTRUCTED OF A VARIETY OF MATERIALS. TRAPS SEDIMENT AND REDUCES VELOCITY OF FLOW. CAN BE CLEANED AND EXPANDED AS NEEDED.                                                                                                |   |   | * | * |   |   |   |
| 34  | Sediment Basin                      | TRAPS SEDIMENT. RELEASES RUNOFF AT NON-EROSIVE RATES. CONTROLS RUNOFF AT SYSTEM OUTLETS. CAN BE VISUAL MONITORED.                                                                                                                |   |   | * | * | * |   |   |
| 35  | Storm Sewer                         | SYSTEM REMOVES COLLECTED RUNOFF FROM SITE. PARTICULARLY FROM PAVED AREAS. CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF. CONVEYS RUNOFF TO MUNICIPAL SEWER SYSTEMS OR STABILIZED OUTFALL LOCATION. USE SLOPE BANKS TO AVOID EROSION. |   |   |   |   | * | * | * |
| 36  | Catch Basin, Drop Inlet             | COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.                                                                                                                                                     |   |   |   |   | * | * | * |
| 37  | Soil Filter                         | INEXPENSIVE AND EASY TO CONSTRUCT. PROVIDES IMMEDIATE PROTECTION. PREVENTS EROSION. PROTECTS AREAS AROUND INLETS FROM EROSION.                                                                                                   |   |   |   | * | * |   |   |

| KEY | DETAIL                          | CHARACTERISTICS                                                                                                                                                                          | A | B | C | D | E | F | G |
|-----|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
| 38  | Stone Box Filter                | INEXPENSIVE AND EASY TO CONSTRUCT. CAN BE LOCATED AS NECESSARY TO COLLECT SEDIMENT. MAY BE USED IN CONNECTION WITH SNOW FENCE FOR ADDED STABILITY.                                       |   |   |   | * |   |   | * |
| 39  | Box Filter                      | CAN UTILIZE MATERIAL FOUND ON SITE. EASY TO CONSTRUCT. FILTERS SEDIMENT FROM RUNOFF.                                                                                                     |   |   |   | * |   |   | * |
| 40  | Inlet Sediment Trap             | EASY TO SHAPE. COLLECTS SEDIMENT. MAY BE CLEANED AND EXPANDED AS NEEDED.                                                                                                                 |   |   |   | * |   |   |   |
| 41  | Stone and Rock Grading          | MAY BE ROCK OR CLEAN RUBBLE. MINIMIZES STREAM TURBIDITY. INEXPENSIVE. MAY ALSO SERVE AS DITCH CHECK OR SEDIMENT TRAP.                                                                    |   | * |   |   |   |   |   |
| 42  | Temporary Culvert               | ELIMINATES STREAM TURBULENCE AND TURBIDITY. PROVIDES UNOBSTRUCTED PASSAGE FOR FISH AND OTHER WATER LIFE. CAPACITY FOR NORMAL FLOW CAN BE PROVIDED WITH STORM WATER FLOWING OVER ROADWAY. |   | * |   |   |   |   |   |
| 43  | Culvert Sediment Trap           | EASY TO INSTALL AT INLET. KEEPS CULVERT CLEAN AND FREE FLOWING. MUST BE CONSTRUCTED OF LUMBER OR LOGS.                                                                                   |   | * |   |   |   |   | * |
| 44  | Wedge                           | DEFLECTS CURRENTS AWAY FROM STREAM BANK AREA.                                                                                                                                            |   | * |   |   |   |   |   |
| 45  | Temporary Stream Channel Change | NEW CHANNEL KEEPS NORMAL FLOWS AWAY FROM CONSTRUCTION. REQUIRES STATE PERMIT.                                                                                                            |   | * |   |   |   |   |   |
| 46  | Sheet Pile                      | PROTECTS ERODIBLE BANK AREAS FROM STREAM CURRENTS. DURING CONSTRUCTION. MINIMAL DISRUPTION WHEN REMOVED.                                                                                 |   | * |   |   |   |   |   |
| 47  | Collection                      | WORK CAN BE CONTINUED DURING NORMAL STREAM FLOWS. CONTROLLED FLOODING CAN BE DIRECTLY BACK INTO STREAM.                                                                                  |   | * |   |   |   |   |   |
| 48  | Construction Dam                | PERMITS WORK TO CONTINUE DURING NORMAL STREAM FLOWS. CONTROLLED FLOODING CAN BE ACCOMPLISHED DURING PERIODS OF INACTIVITY.                                                               |   | * |   |   |   |   |   |
| 49  | Check Dam                       | REDUCES FLOW VELOCITY. CATCHES SEDIMENT. CAN BE CONSTRUCTED OF LOGS, STRAIN, ROCK, LUMBER, MASONRY, OR SAND BAGS.                                                                        |   | * | * |   |   |   |   |
| 50  | Wall                            | CONTROLS SEDIMENTATION IN LARGE STREAMS. CAUSES MINIMAL TURBIDITY.                                                                                                                       |   | * | * |   |   |   |   |
| 51  | Retaining Wall                  | REDUCES GRADIENT WHERE SLOPES ARE EXTREMELY STEEP. PERMITS RETENTION OF EXISTING VEGETATION, KEEPING SOIL STABLE IN CRITICAL AREAS. MINIMIZES MAINTENANCE.                               | * |   |   |   |   |   | * |
| 52  | Seepage Control                 | PREVENTS PIPING AND SOIL SLURPAGE ON CUT SLOPES.                                                                                                                                         | * |   |   |   |   |   | * |
| 53  | Windbreak                       | MINIMIZES WIND EROSION. MAY BE SNOW FENCE.                                                                                                                                               |   |   |   |   | * |   |   |
| 54  |                                 | USES RECTANGULAR PAVING AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.                                                                                                    | * |   | * |   | * | * | * |

SOIL EROSION & SEDIMENTATION CONTROL

- Developer/property owner shall submit a detailed erosion control plan and obtain a Soil Erosion & Sedimentation Control Permit prior to any earth changes.
- Construction operations shall be scheduled and performed so that preventative erosion control measures are in place prior to excavation and temporary stabilization measures are in place immediately following backfilling and/or grading operations.
- Borrow and fill disposal areas will be selected and approved at time of plan review.
- Special precautions will be taken in the use of construction equipment to prevent situations that promote erosion.
- Cleanup will be done in a manner to insure that erosion control measures are not disturbed.
- The project will continually be inspected for soil erosion and sediment control compliance. Deficiencies will be corrected by the developer within 24 hours.
- Temporary erosion control measures shall be completely removed by the developer upon establishment of permanent control measures.

CONSTRUCTION SEQUENCE

- Excavation and stockpiling of soil.
- Implementation of temporary erosion control measures; selective grading, diversions as required in field, protection of storm sewer facilities.
- Periodic maintenance of affected erosion control measures.
- Permanent measures; final grading, seeding and mulching.

SEE UNIFIED KEYING SYSTEM FOR EROSION CONTROL KEY NUMBERS

DNR STREAM CROSSING NOTES

Construction of stream crossing shall be subject to the specifications for protection of natural resources at Utility crossing as given in the Administration Rules for Act 346 (rules 24 through 29).

A siltation barrier shall be constructed immediately downstream of the construction site prior to the commencement of any construction activities. (See Michigan Unified Keying System for specified barrier) The siltation barrier shall be maintained in good working order throughout the duration of the project.

Backfill shall consist of inert materials which will not cause siltation nor contain soluble chemicals or organic matter which is biodegradable. All fill shall be contained in such a manner so as not to erode into any watercourses.

All raw banks shall be stabilized with riprap to three feet above the ordinary high water water mark, then seeded, fertilized and mulched, or sodded to prevent erosion.

Upon project completion the excess spoils shall be removed and disposed of in an approved upland site. Siltation barrier may be removed upon placement of permanent erosion control measures.

NOTES TO CONSULTANTS

- Item #1 - A detailed soil erosion control plan and permit is required for all projects that are within 500 ft. of any water course, or a project that disturbs one (1) acre or more of area. (See Matthew Roysin 810-732-7870)
- Item #3 - A NPDES Stormwater or discharge permit is required for all construction activity that disturbs 5 acres or more of land. The fee for this State permit is currently set @ \$125.00. The permits are processed thru the District Office of DNR @ Morrice.
- Item #6 - The Engineer shall determine from John Murphy (810-732-7870) whether WWS or the municipality writes the tap-in permits and this note shall be modified accordingly.

NOTES

The following notes are to be used as applicable when submitting plans for review by the Genesee County Drain Commissioner. Use only those applicable and adapt them to your project. See note explanation to consult at end of this segment.

- Sanitary sewer saddle taps shall be made by Genesee County Division WWS personnel. The developer shall obtain the required municipality sanitary sewer permit or the S construction permit and pay the Division of WWS the required fee for a saddle tap.
- Sanitary sewer service lead from the public main line to the property line shall be a 6" VCP or PVC pipe with a SDR of 26 or lower. There shall be a separate lead for each individual with GDC-WWS detail.
- Sanitary mainline and service leads shall be encased in crushed limestone in accordance with County Standard Detail by the developer.
- Water service connection and curb box shall be installed in accordance with Genesee County Standard Detail by the developer.
- All water service leads shall be "K" copper. Each unit shall have an individual lead.
- All watermain pressure taps 4" and larger shall be constructed with cast iron tapping sleeves and within a manhole structure per GDC standard details.
- For commercial sites the developer shall obtain an Industrial pre-treatment permit or a waiver from GDC-WWS. Contact J. Best @ 810-232-7662.
- The site excavation contractor shall verify the sanitary sewer depth and be responsible for providing adequate slope of building sewer toward the mainline sewer in strict accordance with the governing authorities.
- All existing utilities serving the property shall be properly terminated in compliance with city and/or county regulations. Remove all trees, including root structures, except those specifically noted to remain and those on property lines. Do not clear site prior to coordinating with the owner and the landscaping plan to determine all trees to remain.
- Demolish and remove all existing structures, trees, fences, alleys, driveways and sidewalks. Visit site to determine extent of demolition which may or may not be shown on plans. (See demolition notes.)
- Verify exact location of underground utilities prior to beginning construction.
- Contractor is to adjust any utility element meant to be flush with grade (clean out, valve boxes, manholes, catch basins, inlets, etc.) that is affected by site work or grade changes, whether specifically noted on plans or not.
- The water supply for all commercial and industrial buildings shall be equipped with backflow prevention devices in accordance with BCO codes. An approval of methods must be acquired from the utility company.
- All on site water services shall meet the requirements of standard detail 8W of GDC-WWS.
- The contractor shall notify MISS DIG (1-800-482-7171) three (3) working days prior to starting any excavation with power equipment.
- The contractor/developer shall pay for and obtain all building permits, local permits and pay all charges for inspections and tests.

NOTES TO CONSULTANTS

- Where a public sanitary sewers or watermain are developed to serve a project the utility shall be extended to the limits of the property.
- For Item #2, the current rate for a saddle tap by GDC-WWS is \$100.00.
- For Item #5, commercial buildings shall use a 6" sanitary lead from the main to be structure. Lead shall connect to the mainline and not at a manhole structure.
- Item #5, specify if the water service tap is to be made by GDC-WWS or by the developer. Lead shall connect to the mainline and not at a manhole structure.
- All public water supply systems shall be looped when feasible. The looping may be accomplished by phased construction but the original submission should show the final looped connection.
- For commercial establishments that generate grit or grease on external grease trap shall be provided. (Show detail on plan with appropriate notes). The domestic sewage should be designed to bypass the grease/grit trap.
- For domestic water service, fire protection meters, or sprinkler meter include an appropriate adoption of SD 15W. Show the plan and include the standard detail. The location of the external shut off valve for the domestic service must be located externally for shut off purposes.
- Note #7, minimum slopes for a commercial lead so one foot of fall per 100 feet of run. Show the invert at the structure and the slope to the property line. If the mainline is deep show the bends required to drop the 6" service lead down to the public system.

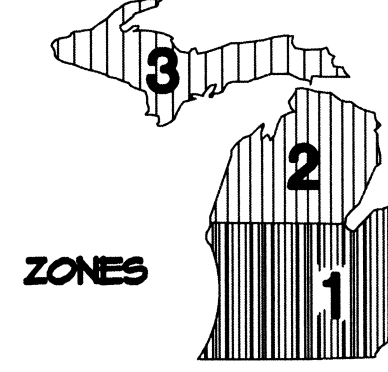


TEMPORARY SEEDING GUIDE

| TYPE OF SEED                             | April | May | June | July | Aug. | Sept. | Oct. |
|------------------------------------------|-------|-----|------|------|------|-------|------|
| SPRING OATS/BARLEY OR DOMESTIC RYE GRASS |       |     |      |      |      |       | 15th |
| SUDAN GRASS                              |       |     |      |      |      |       |      |
| RYE OR PERENNIAL RYE GRASS               |       |     |      |      |      |       | 15th |
| HEAT                                     |       |     |      |      |      |       |      |
| ZONE 1                                   |       |     |      |      |      |       |      |
| SPRING OATS/BARLEY OR DOMESTIC RYE GRASS | 15th  |     |      |      |      |       |      |
| SUDAN GRASS                              |       |     |      |      |      |       |      |
| RYE OR PERENNIAL RYE GRASS               |       |     |      |      |      |       | 10th |
| HEAT                                     |       |     |      |      |      |       | 10th |
| ZONE 2                                   |       |     |      |      |      |       |      |
| SPRING OATS/BARLEY OR DOMESTIC RYE GRASS |       |     |      |      |      |       |      |
| SUDAN GRASS                              |       |     |      |      |      |       |      |
| RYE OR PERENNIAL RYE GRASS               |       |     |      |      |      |       |      |
| HEAT                                     |       |     |      |      |      |       |      |
| ZONE 3                                   |       |     |      |      |      |       |      |

\* RATE OF APPLICATION APPLIES TO ALL ZONES

| * Rate of Application | per/1000 S.F. | per acre   |
|-----------------------|---------------|------------|
| 2 lbs.                |               | 3 bu.      |
| 1/2 lbs.              |               | 20-25 lbs. |
| 1 lbs.                |               | 30-40 lbs. |
| 3 lbs.                |               | 2-3 bu.    |
| 1/2 lbs.              |               | 20-25 lbs. |
| 3 lbs.                |               | 2-3 bu.    |



PERMANENT SEEDING GUIDE

| IRRIGATED AND/OR MULCHED    | April | May | June | July | Aug. | Sept. | Oct. |
|-----------------------------|-------|-----|------|------|------|-------|------|
| WITHOUT IRRIGATION or MULCH |       |     |      |      |      |       |      |
| IRRIGATED AND/OR MULCHED    |       |     |      |      |      |       |      |
| WITHOUT IRRIGATION or MULCH |       |     |      |      |      |       |      |
| IRRIGATED AND/OR MULCHED    |       |     |      |      |      |       |      |
| WITHOUT IRRIGATION or MULCH |       |     |      |      |      |       |      |

no. from table A

TABLE A. ADAPTED SEEDING MIXTURES FOR various soil conditions & land uses—choose mixture number and then refer to TABLE B

| SITE CONDITIONS                                                                     | TO BE MOWED                             | NO REGULAR MOWING                            |
|-------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------|
|                                                                                     | LAWNS, GOLF COURSES, STEEP SLOPES, ETC. | WILDLIFE AREAS, DITCHES & STEEP SLOPES, ETC. |
| WELL-DRAINED SAND AND LOAM SOIL                                                     | SUNNY SHADE 1* 2*                       | 1 2 3 4 5 6 7 8                              |
| WELL-DRAINED, MODERATELY COARSE TO MEDIUM TEXTURED SOIL, SANDY LOAM, LOAM-SILT LOAM | SUNNY SHADE 1 2                         | 1 or 5 9,11 or 12 13 or 14 16 or 19          |
| WELL-DRAINED CLAYEY SOILS                                                           | SUNNY SHADE 1* 2*                       | 1 or 5 9,10 or 12 13 or 14 16,17 or 19       |
| POORLY DRAINED SOILS WITHOUT ARTIFICIAL DRAINAGE                                    | 3                                       | 3 or 5 10 or 15 13 17,18 or 19               |

\* IRRIGATION WILL BE NEEDED WITH ARTIFICIAL DRAINAGE USE WELL DRAINED GROUP SITE CONDITION ABOVE

TABLE B. SEEDING MIXTURES—POUNDS PER ACRE AND POUNDS PER 1000 SQ. FT. (IN DECIMALS)

|                      | 1  | 2  | 3  | 4  | 5 | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----------------------|----|----|----|----|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| CREeping RED FESCUE  | 20 | 30 | 10 | 20 |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| DOMESTIC RYE GRASS   | 4  | 4  | 2  | 3  | 3 |   |   |   |    |    |    |    |    |    |    | 5  | 5  |    |    |
| KENTUCKY BLUEGRASS   | 20 | 10 | 15 |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| REPERT               |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| REED CANARY GRASS    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| ROUGHSTALL-BLUEGRASS |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| SEASIDE BENTGRASS    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| SMOOTH BROMUSGRASS   |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| TALL FESCUE          |    | 20 | 5  | 10 |   | 5 | 5 | 5 | 20 | 10 |    |    |    |    |    |    |    |    |    |
| TIMOTHY              |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| ALFALFA              |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| ALBIE CLOVER         |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| BINDSPOOT TREFOIL    |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| CROWN VETCH          |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| LADINO CLOVER        |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| RED CLOVER           |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| SWEET CLOVER         |    |    |    |    |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

Conversion Table

| lbs/Acre | lbs/1000 SF |
|----------|-------------|
| 2        | .03         |
| 5        | .08         |
| 6        | .15         |
| 8        | .20         |
| 10       | .25         |
| 15       | .40         |
| 20       | .50         |
| 25       | .70         |
| 30       | .75         |

1 PLY POUNDS OF RYE GRASS MAY BE ADDED TO THIS MIXTURE ON BROODABLE SITE FOR INSTANT COVER  
2 USE ONLY WHERE IN 8-12 IN HEIGHT - 3 INOCULATE LEAVES WITH CORRECT INOCULANT  
3 UNDER SEED MIXTURE NUMBER SELECTED USE ALL SPECIES IN THAT COLUMN

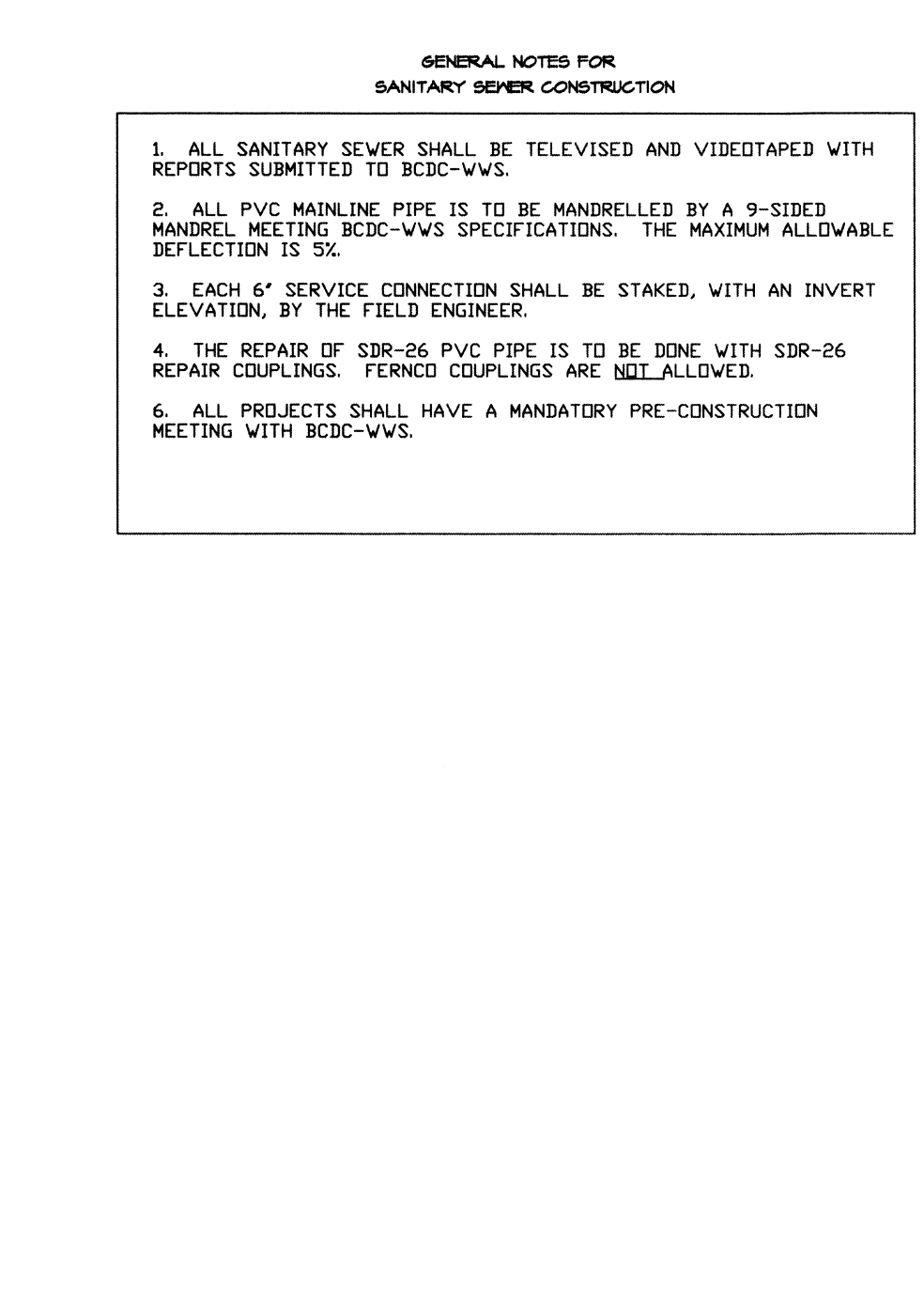
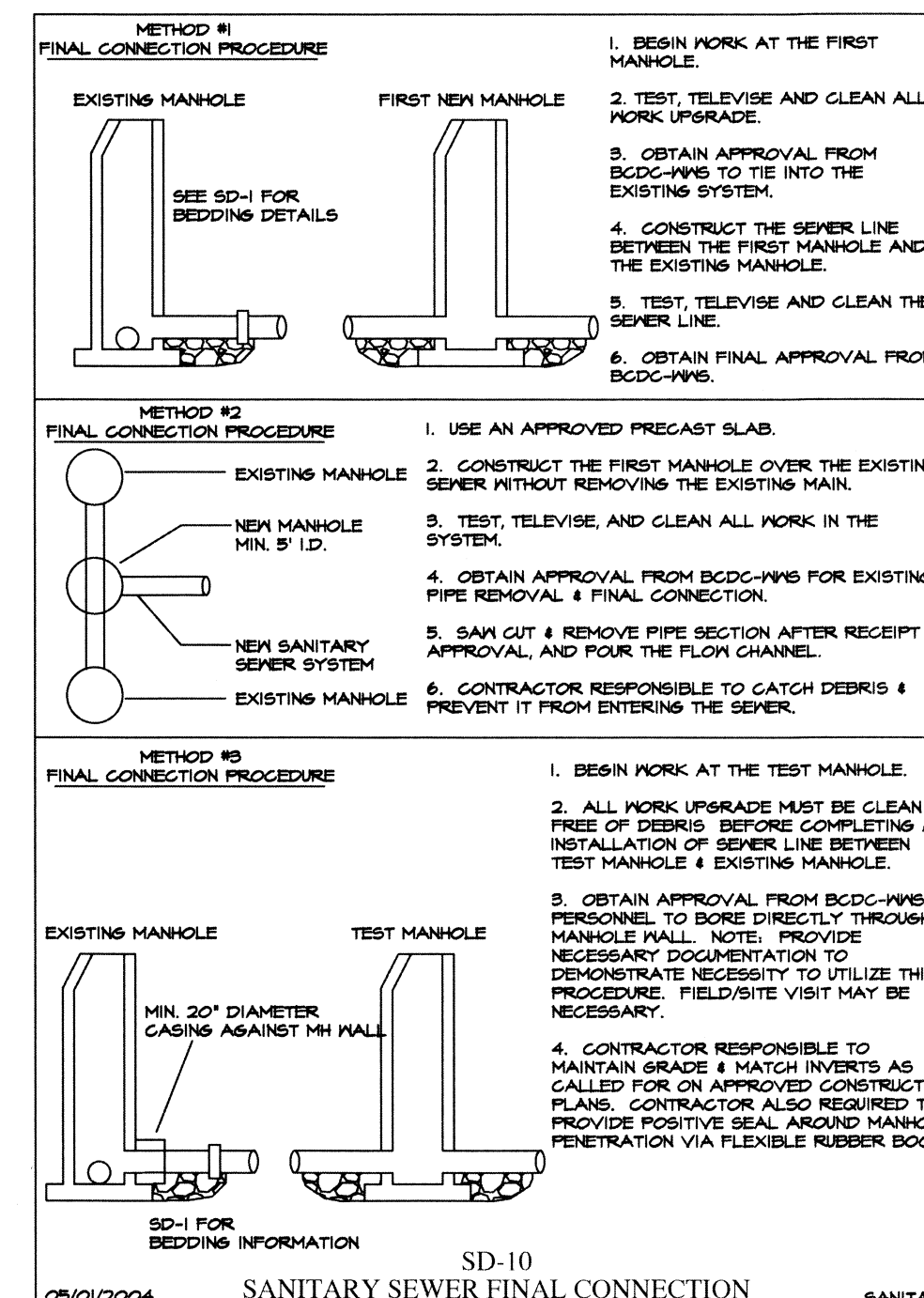
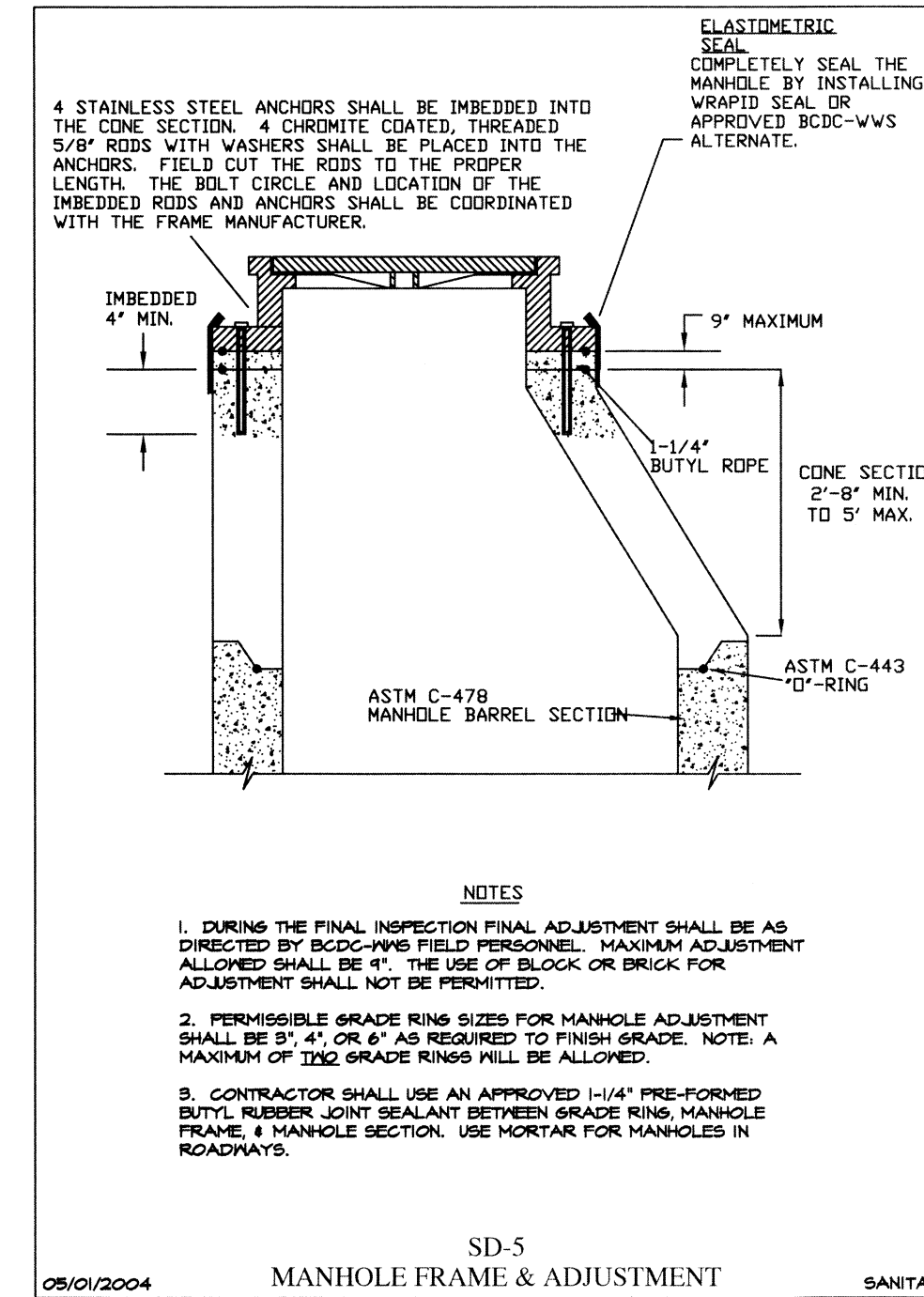
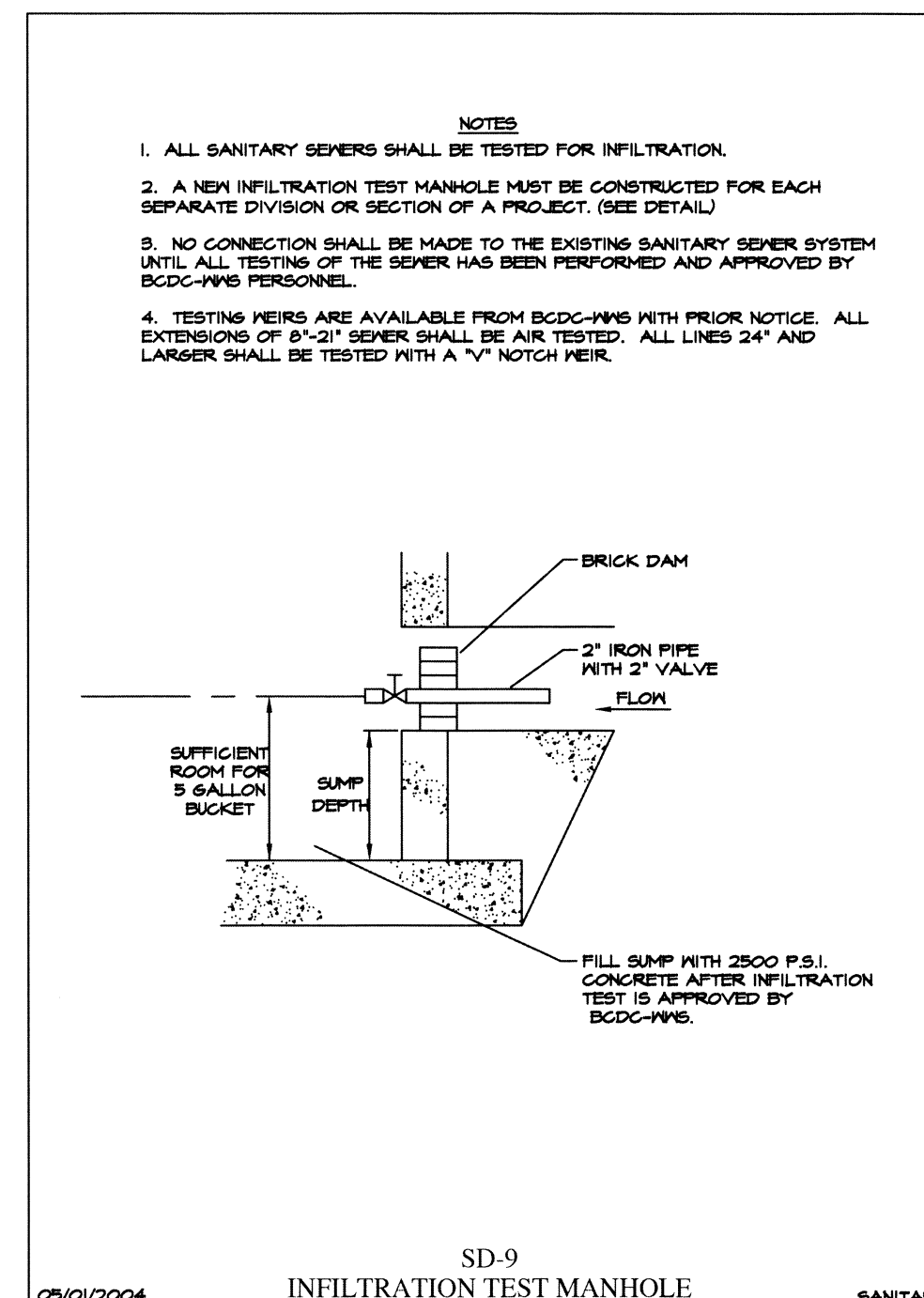
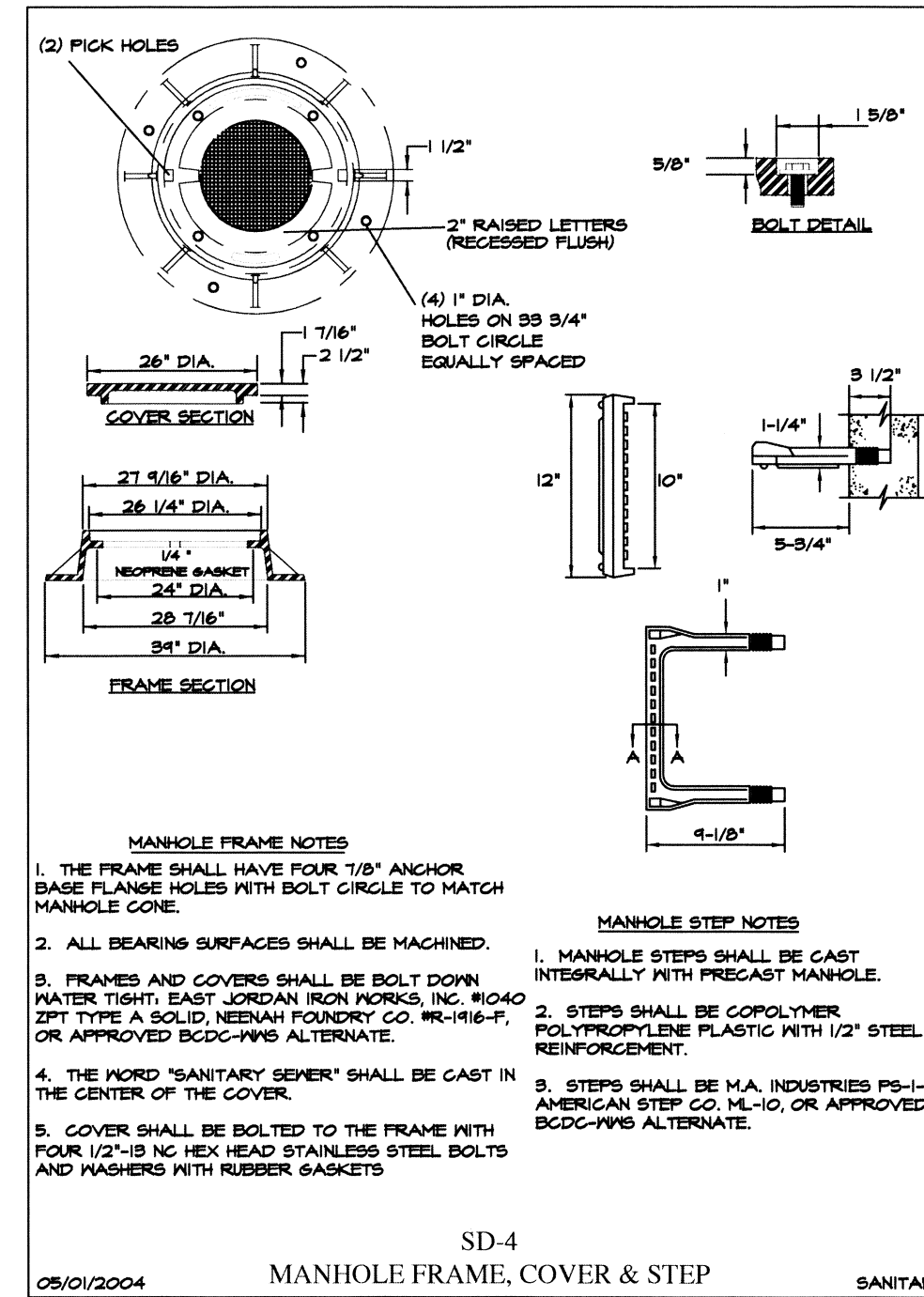
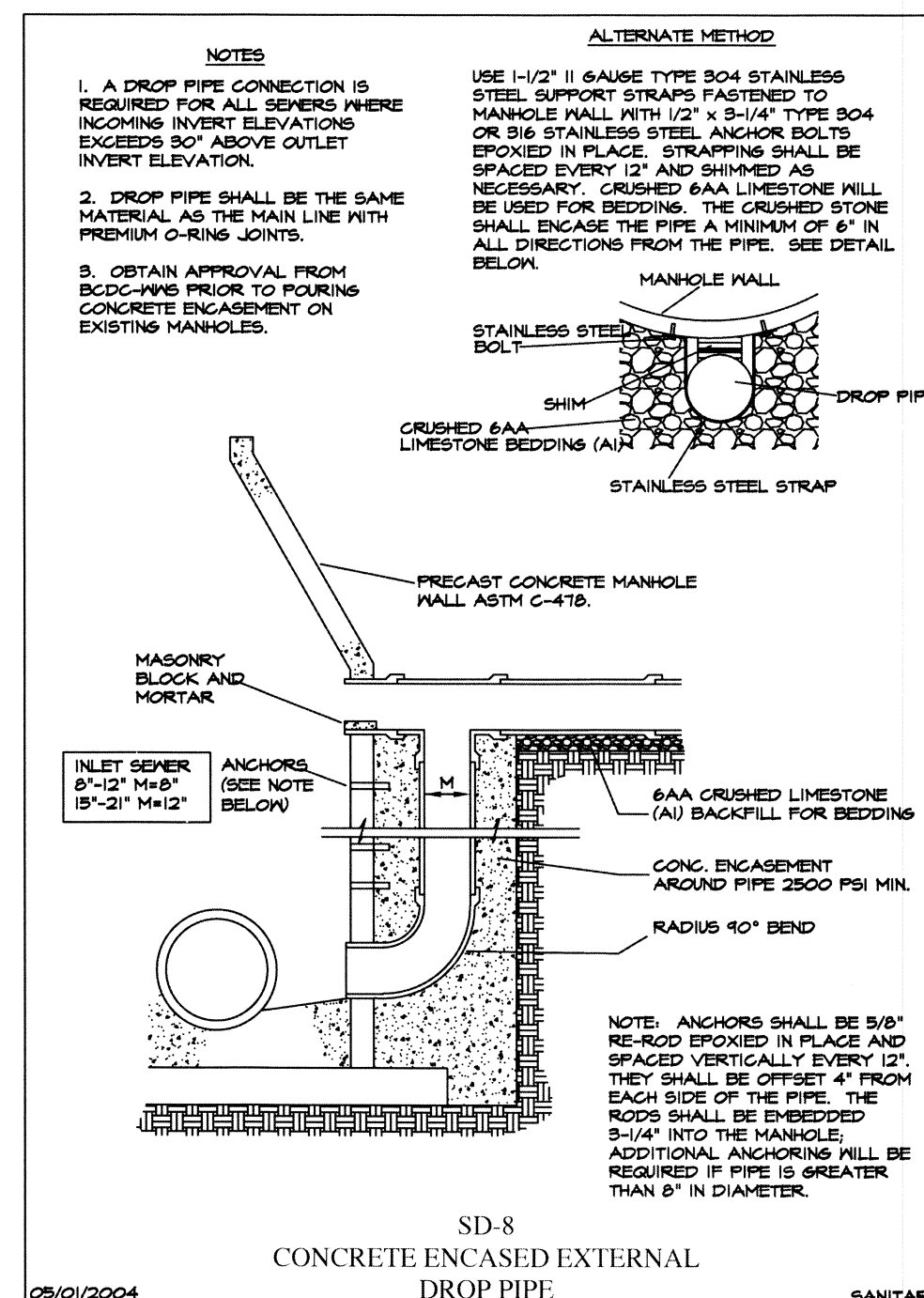
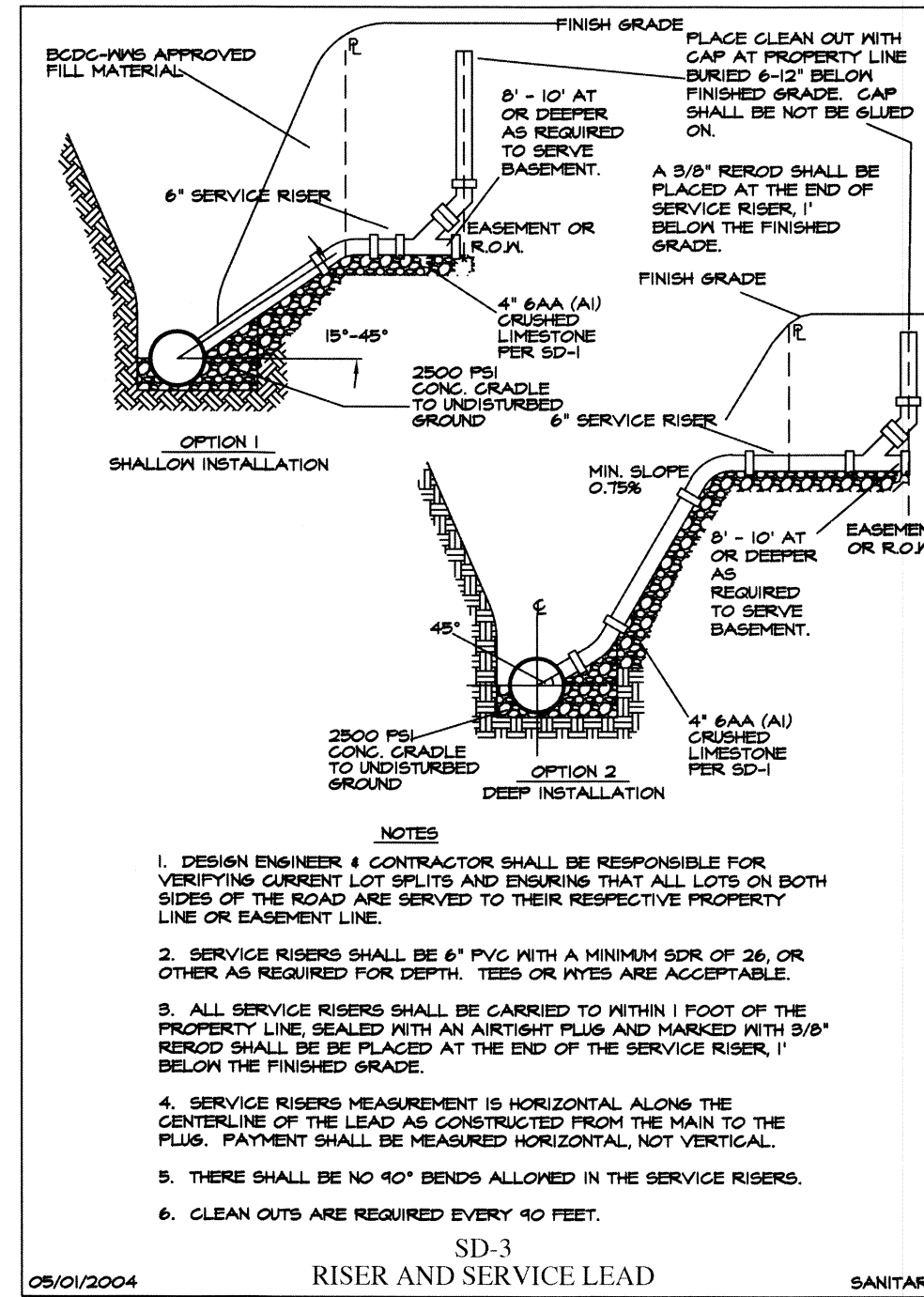
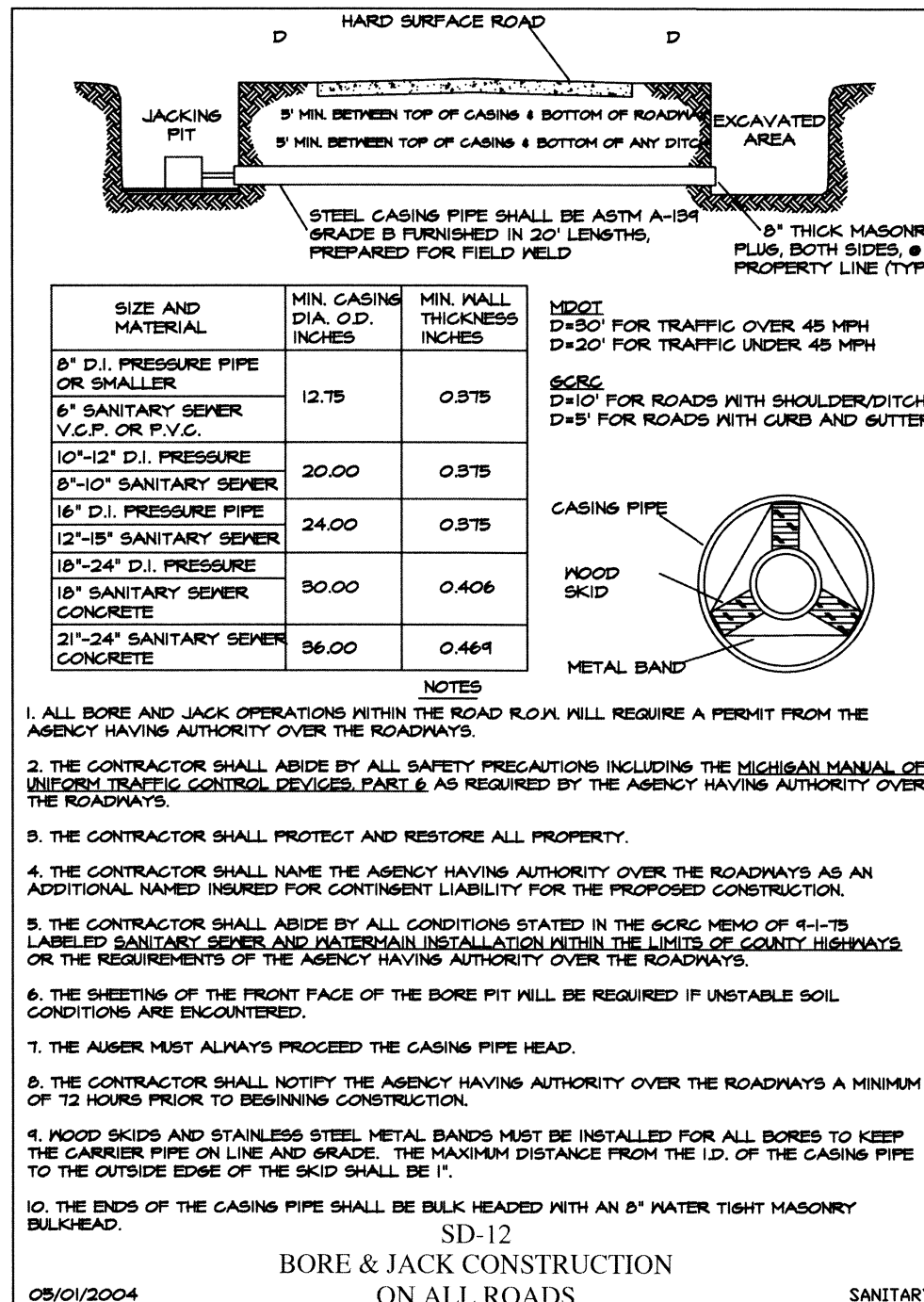
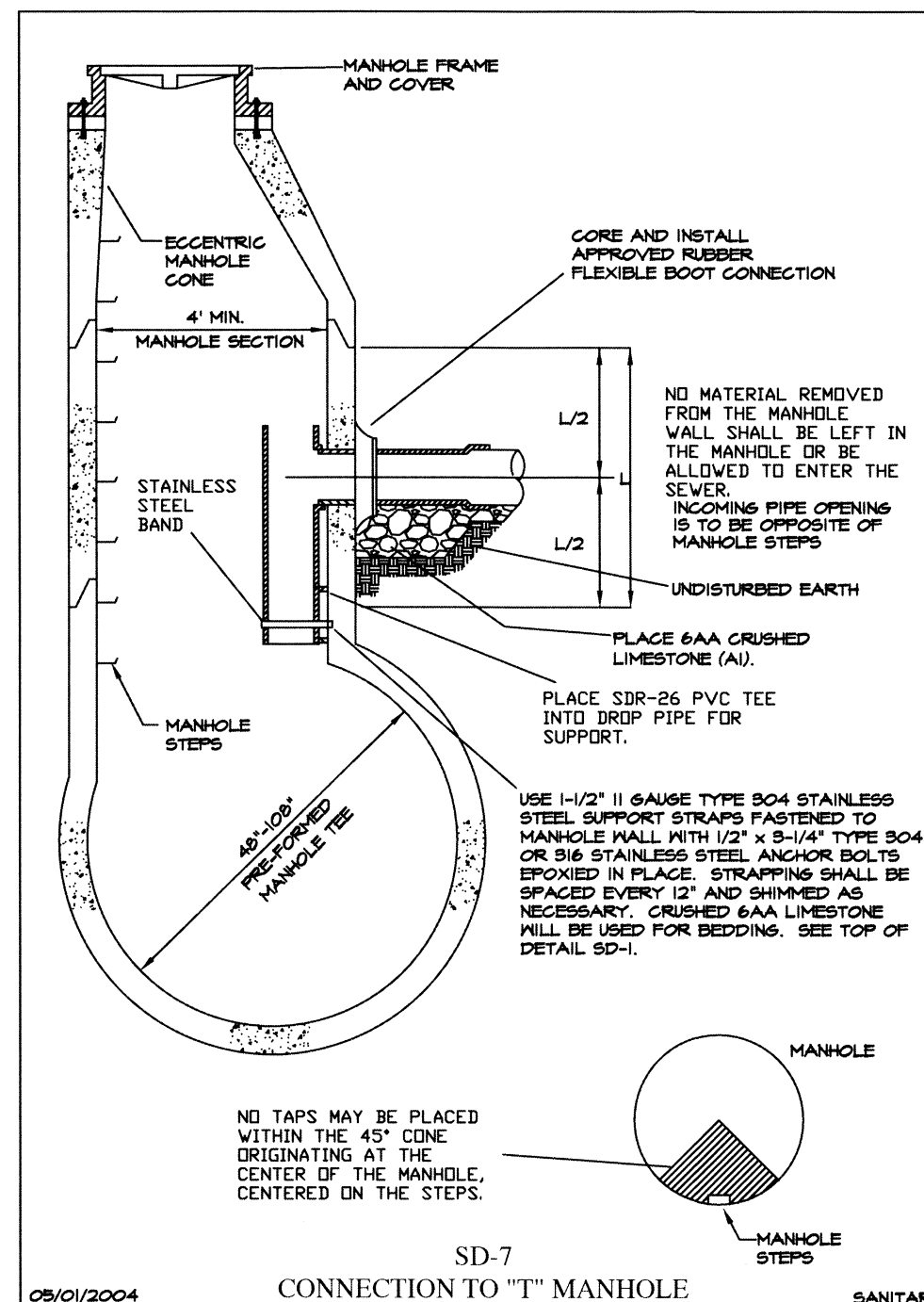
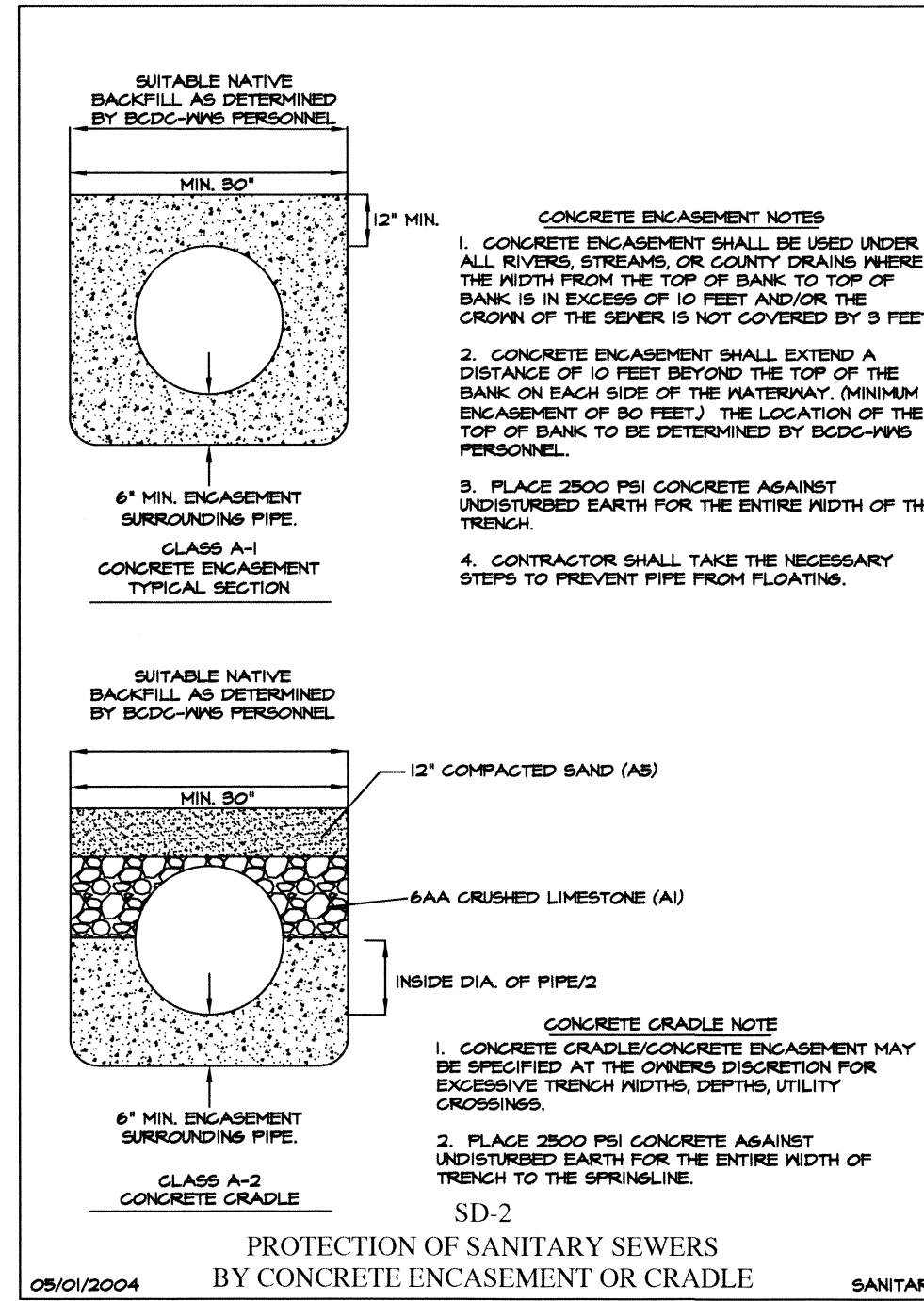
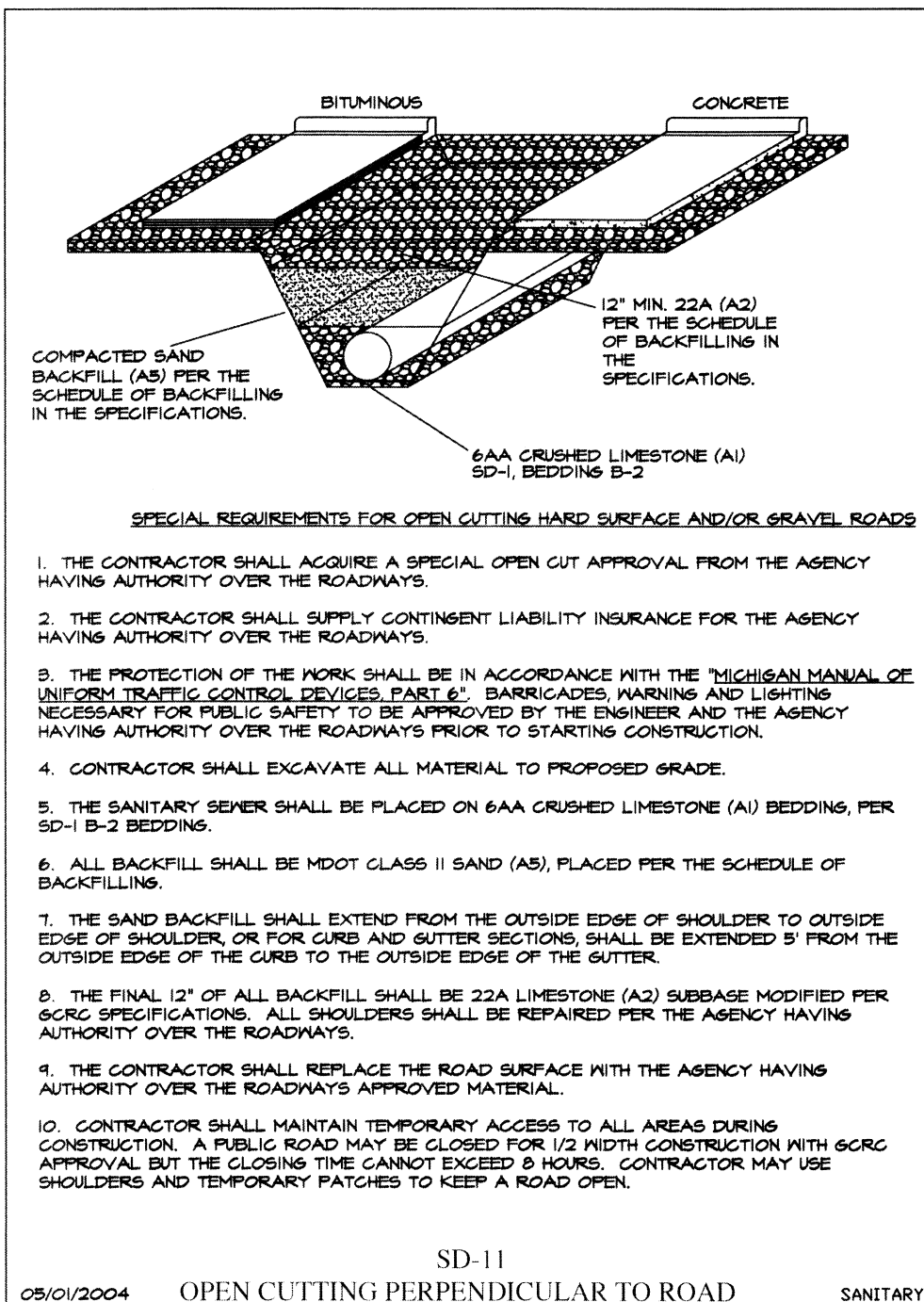
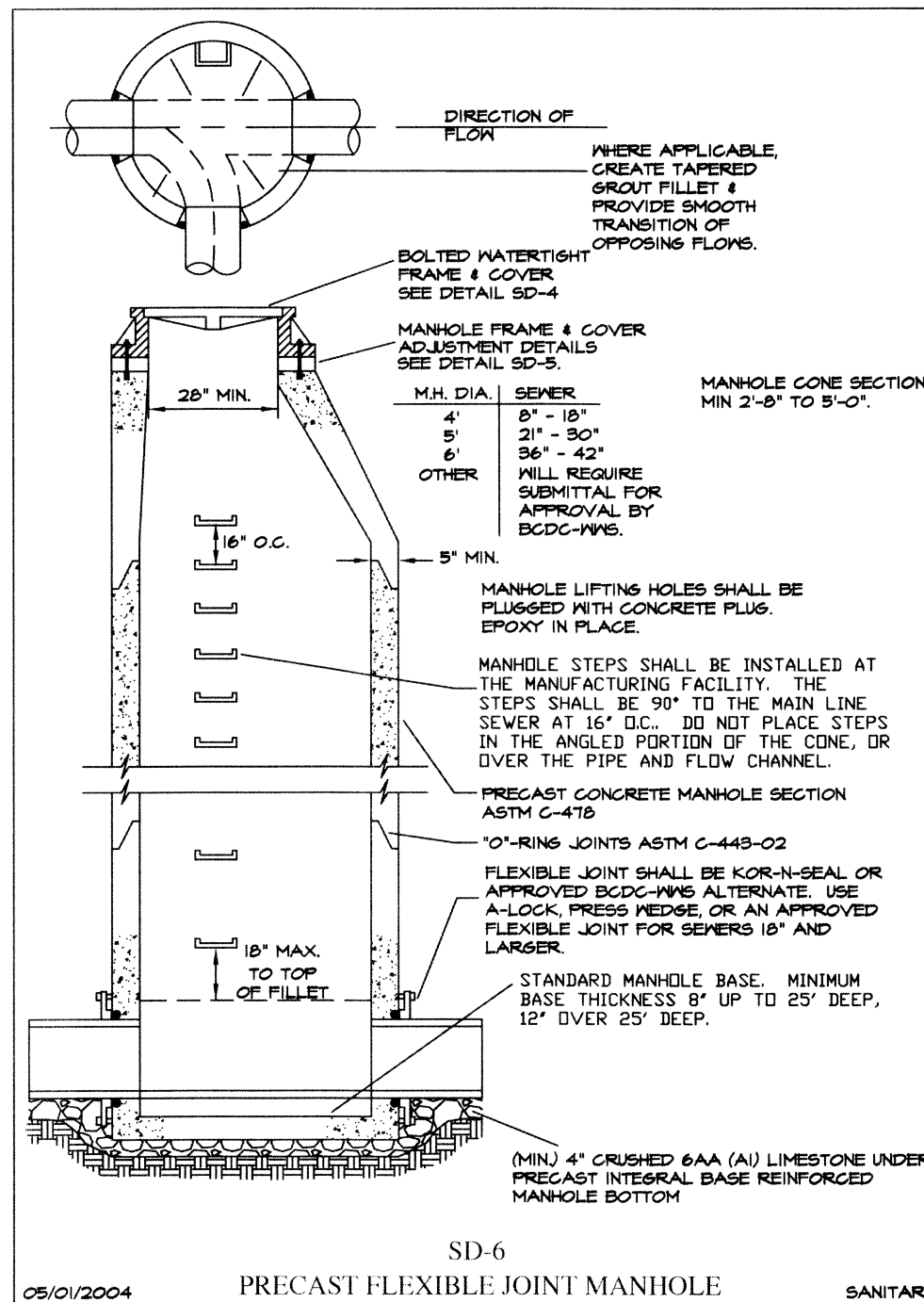
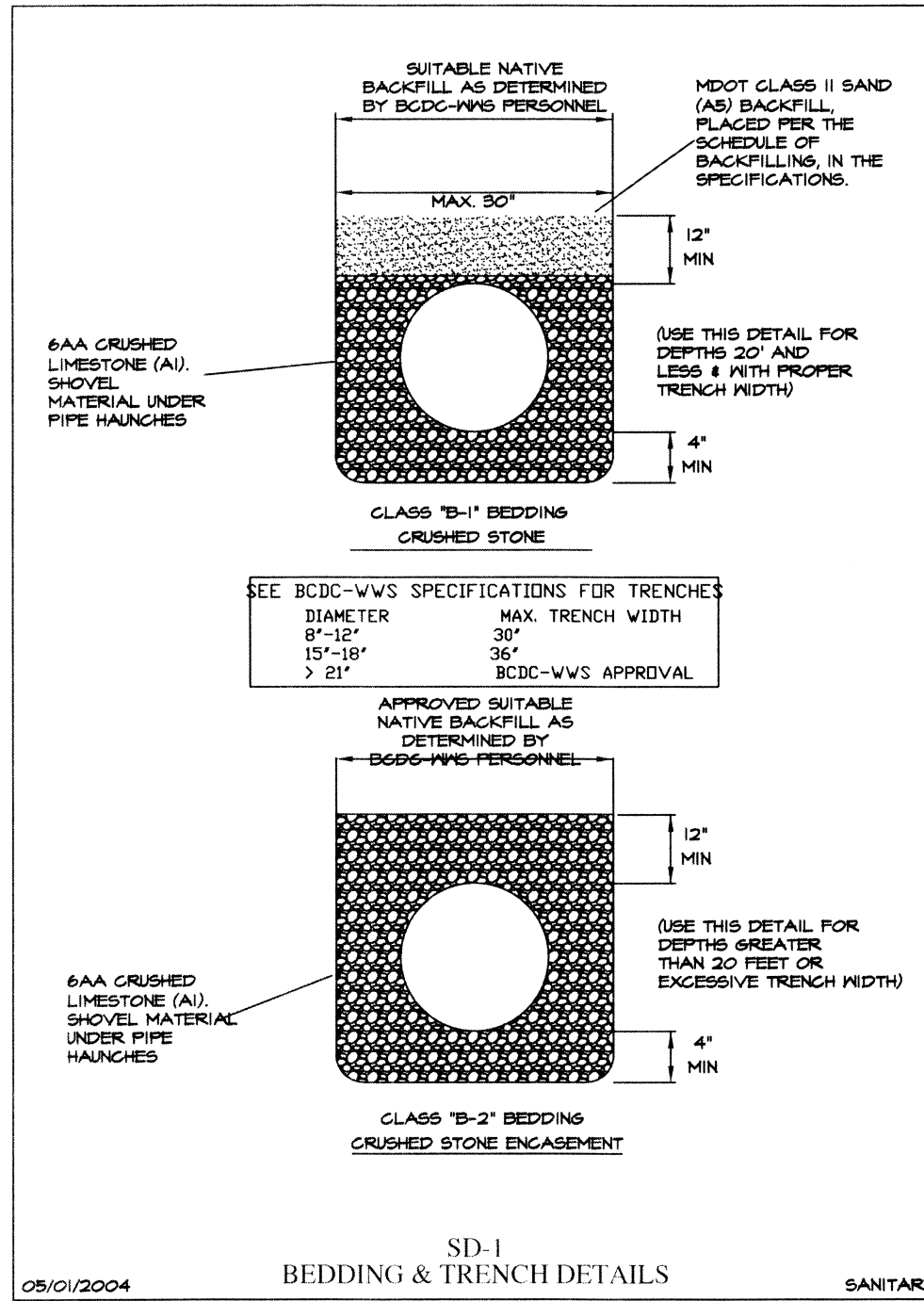
| CONSTRUCTION SEQUENCE           | JAN | FEB | MAR | APR | MAY | JUNE | JULY | AUG | SEP | OCT | NOV | DEC |
|---------------------------------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|
| STRIP & STOCKPILE TOPSOIL       |     |     |     |     |     |      |      |     |     |     |     |     |
| ROUGH GRADES/ SEDIMENT CONTROL  |     |     |     |     |     |      |      |     |     |     |     |     |
| TEMP. CONTROL MEASURES          |     |     |     |     |     |      |      |     |     |     |     |     |
| STORM FACILITIES                |     |     |     |     |     |      |      |     |     |     |     |     |
| TEMP. CONSTRUCTION ROADS        |     |     |     |     |     |      |      |     |     |     |     |     |
| FOUNDATIONS/ BLDG. CONSTRUCTION |     |     |     |     |     |      |      |     |     |     |     |     |
| SITE CONSTRUCTION               |     |     |     |     |     |      |      |     |     |     |     |     |
| PERM. CONTROL MEASURES          |     |     |     |     |     |      |      |     |     |     |     |     |
| FINISH GRADING                  |     |     |     |     |     |      |      |     |     |     |     |     |
| LANDSCAPING                     |     |     |     |     |     |      |      |     |     |     |     |     |

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SHEET TITLE  
DETAILS

PROJECT  
NEW OFFICE BUILDING for  
WALKER JUNE CALHOUN CPAs  
CREEKWOOD ARCHITECTURE  
DRAWN BY B.A.C.  
CHECKED BY R.A.S.

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GENERAL CONSTRUCTION NOTES

1. STANDARD SPECIFICATIONS & DETAILS  
ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE LATEST GENESSEE COUNTY STANDARD SPECIFICATIONS AND STANDARD DETAILS FOR SANITARY SEWER, PRESSURE PIPE, AND PUMP STATION CONSTRUCTION. ANY DEVIATIONS FROM THE BCCD-WWS APPROVED PLANS WILL NOT BE PERMITTED. IF IT BECOMES NECESSARY TO REVISE PLAN THEY SHALL BE RESUBMITTED TO BCCD-WWS FOR APPROVAL.
2. PRE-CONSTRUCTION MEETING  
A PRE-CONSTRUCTION MEETING SHALL BE HELD AT THE BCCD-WWS OFFICE. NO PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO OBTAINING THE STATE CONSTRUCTION PERMIT. THE MEETING TIME, PLACE, AND ATTENDEES SHALL BE ARRANGED BY THE DESIGN ENGINEER FOR THE PROJECT. BCCD-WWS, BCCD-SWM, THE MUNICIPALITY, AGENCY HAVING AUTHORITY OVER THE ROADWAYS, PROJECT OWNER, CONTRACTOR, AND ANY AFFECTED UTILITIES, SHALL BE INVITED, AS A MINIMUM, TO THE PRE-CONSTRUCTION MEETING.
3. MISS DIG UTILITY ALERT  
THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT MISS DIG UTILITY PROTECTION SERVICE (1-800-482-7177) TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. ALL UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED IN ACCORDANCE WITH THE UTILITY OWNERS REQUIREMENTS.
4. FIELD LOCATION OF UTILITIES  
PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO EXPOSE ALL EXISTING UTILITIES THAT CROSS THE PROPOSED CONSTRUCTION SO THE DESIGN ENGINEER MAY DETERMINE IF A VERTICAL CONFLICT EXISTS BETWEEN THE EXISTING UTILITY AND THE PROPOSED CONSTRUCTION. ALL LABOR REQUIRED TO UNCOVER THE EXISTING UTILITY SHALL BE CONSIDERED INCLUDED IN THE LINEAL FEET OF PRESSURE PIPE OR SANITARY SEWER INSTALLED. THE CONTRACTOR SHALL VERIFY THE DEPTH AND HORIZONTAL LOCATIONS OF ALL UTILITIES IN SUFFICIENT TIME SUCH THAT ANY CONFLICTS CAN BE RESOLVED BEFORE WORK IS STARTED IN THAT PORTION OF THE PROJECT. THE CONTRACTOR SHALL ARRANGE FOR THE VARIOUS UTILITY OWNERS TO LOCATE, REMOVE AND REPLACE, OR RELOCATE THEIR FACILITIES. ALL COST FOR THIS SHALL BE INCLUSIVE TO THE PROJECT.
5. SUBSURFACE SOIL CONDITIONS  
PRIOR TO BIDDING THE CONTRACTOR AND SUBCONTRACTORS SHALL MAKE A PERSONAL INVESTIGATION OF THE SITE AND EXISTING SURFACE AND SUBSURFACE CONDITIONS. THE CONTRACTOR IS RESPONSIBLE TO ACQUAINT THEMSELVES WITH CONDITIONS OF THE WORK AREA. THE CONTRACTOR IS ADVISED TO DETERMINE THE SUBSURFACE SOIL AND GROUND WATER CONDITIONS. IF DETERMINED NECESSARY BY THE CONTRACTOR AND IF NOT SPECIFICALLY CALLED OUT IN THE CONTRACT DOCUMENTS, WILL BE INCIDENTAL TO THE COST OF INSTALLATION.
6. PERMITS AND FEES  
THE CONTRACTOR/DEVELOPER SHALL OBTAIN ALL PERMITS, INCLUDING THE PAYMENT OF ANY FEES OR BONDS, REQUIRED BY ANY FEDERAL, STATE, COUNTY, LOCAL, OR PRIVATE ORGANIZATIONS, PRIOR TO ISSUANCE OF THE S-PERMIT AND COMMENCING CONSTRUCTION.
7. BCCD-WWS INSPECTION FEES  
THE DEVELOPER SHALL PAY FOR ALL SANITARY SEWER AND PRESSURE PIPE INSPECTION FEES AND WATER USAGE FEES PRIOR TO APPROVAL OF THE PLANS AND THE ISSUANCE OF THE S-PERMIT.
8. SOIL EROSION CONTROL, PART 91 OF P.A. 451 OF 1994  
THE CONTRACTOR/DEVELOPER SHALL COMPLY WITH ALL PROVISIONS OF PART 91, ACT 451 OF P.A. 1994, FOR SOIL EROSION AND SEDIMENTATION CONTROL, AND WILL BE RESPONSIBLE FOR ALL MAINTENANCE UNTIL THE FINAL ACCEPTANCE OF THE PERMANENT CONTROL MEASURES BY BCCD-WWS. THE CONTRACTOR/DEVELOPER IS REQUIRED BY BCCD-WWS TO PREPARE AND SUBMIT A SOIL EROSION AND SEDIMENTATION CONTROL PLAN IN ORDER TO OBTAIN THE SOIL EROSION AND SEDIMENTATION CONTROL PERMIT AND TO PAY ANY APPLICATION FEES AND BOND FEES NECESSARY TO OBTAIN THE PERMIT. NOTE! SOIL EROSION AND CONSTRUCTION PERMITS AND REVIEWS ARE SEPARATE ITEMS AT BCCD-WWS.
9. STATE CONSTRUCTIONS PERMITS  
THE CONSTRUCTION OF PUBLIC SANITARY SEWERS OR PRESSURE PIPES SHALL NOT BEGIN UNTIL STATE CONSTRUCTION PERMITS HAVE BEEN OBTAINED. NOTE! SOIL EROSION APPROVAL AND CONSTRUCTION APPROVAL ARE SEPARATE ITEMS AT BCCD-WWS.
10. ROADWAY PERMITS  
A PERMIT FROM EITHER THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS IS REQUIRED FOR ALL CONSTRUCTION WITHIN ANY ROAD RIGHT-OF-WAY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL NECESSARY PERMITS, POST ALL NECESSARY BONDS, PAY ALL FEES, AND OBTAIN ANY REQUIRED INSURANCES.
11. CONSTRUCTION OBSERVATION  
ALL CONSTRUCTION SHALL BE PERFORMED UNDER THE OBSERVATION OF A CONSTRUCTION OBSERVER FROM BCCD-WWS OR LOCAL MUNICIPALITY HAVING JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OBSERVING AGENCIES (3) WORKING DAYS PRIOR TO STARTING CONSTRUCTION TO ARRANGE FOR ON-SITE OBSERVATION AND TESTING. BCCD-WWS OR THE LOCAL MUNICIPALITY HAVING JURISDICTION SHALL BE NOTIFIED FOR A FINAL INSPECTION.
12. CONTRACTOR'S MINIMUM WAGE & USE OF IN-COUNTY LABOR  
THE CONTRACTOR SHALL EMPLOY COMPETENT AND SKILLED WORKERS THROUGHOUT THE COURSE OF THE PROJECT. THE CONTRACTOR SHALL STRIVE TO USE GENESSEE COUNTY RESIDENTS WHEN FEASIBLE. THE CONTRACTOR SHALL BE REQUIRED TO PAY THE PREVAILING WAGE RATES AS ESTABLISHED BY THE BUILDING AND CONSTRUCTION TRADES DEPARTMENT OF THE AMERICAN FEDERATION OF LABOR WHICH APPLIES TO THE COUNTY OF GENESSEE. THESE RATES CAN BE OBTAINED BY CONTACTING THE MICHIGAN DEPARTMENT OF CONSUMER AND INDUSTRIAL SERVICES.
13. MIOSHA SAFETY REQUIREMENTS  
ALL WORK, WORK PRACTICE, AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL SAFETY GUIDELINES, OCCUPATION, HEALTH AND ENVIRONMENTAL REGULATIONS, AND ALSO NFPA AND ANSI CODES AS APPLICABLE. ALL WORK INSIDE A CONFINED SPACE, SUCH AS MANHOLES OR OTHER UNDERGROUND STRUCTURES, SHALL BE COORDINATED WITH THE UTILITY OWNER, AND ALL WORKER SAFETY REQUIREMENTS STRICTLY ENFORCED. THE CONTRACTOR SHALL HAVE ITS SAFETY PLAN ON FILE WITH BCCD-WWS AND ONE COPY ON SITE AT ALL TIMES.
14. ROADWAY REQUIREMENTS FOR UTILITY CONSTRUCTION  
THE CONTRACTOR SHALL ABIDE BY ALL THE REQUIREMENTS OF THE GORE OR LOCAL MUNICIPALITY REGARDING THE CONSTRUCTION OF PRESSURE PIPE AND SEWER MAINS, MAINTAINING TRAFFIC, BARRICADING, BORING, BACK FILLING AND RESTORATION WITHIN ROAD RIGHT-OF-WAY.
15. OPEN CUTTING OF COUNTY/LOCAL ROADS  
WHEN OPEN CUTTING OF GRAVEL OR HARD SURFACED ROADS ARE INCORPORATED INTO THE PROJECT, THE CONTRACTOR SHALL OBTAIN THE APPROVAL AND ABIDE BY ALL REQUIREMENTS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS, AND BY THE SPECIFICATIONS OF THE BCCD-WWS.

16. GRAVEL ROAD CONTAMINATION BY CONSTRUCTION  
IF IT IS DETERMINED BY THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS THAT GRAVEL ROADS HAVE BECOME CONTAMINATED DURING CONSTRUCTION THE ROAD MUST BE REPAIRED PER THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS. WHERE THE EXISTING ROAD GRAVEL IS REMOVED BECAUSE OF CONSTRUCTION, ALL WORK AND MATERIALS SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS.
17. RESTORATION OF GRAVEL SHOULDERS  
IF IT IS DETERMINED BY THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS THAT GRAVEL SHOULDERS HAVE BEEN CONTAMINATED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL RE-GRAVEL PER THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS. ALL WORK AND MATERIALS SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS.
18. COMPACTED GRANULAR BACKFILL FOR ROADWAYS, DRIVES, ETC.  
ALL TRENCH EXCAVATION WITHIN A ONE-ON-ONE INFLUENCE OF A ROADWAY, DRIVEWAY CROSSINGS, PARKING LOTS, OR AS OTHERWISE NOTED ON THE PLANS, SHALL BE BACKFILLED WITH COMPACTED SAND MDOT CLASS II (A5) PER THE SCHEDULE OF BACKFILLING, FOUND IN THE SPECIFICATIONS. IN ADDITION, SEE THE SPECIFICATIONS FOR THE REQUIREMENTS FOR COMPACTION IN THESE AREAS. THIS STANDARD ALSO INCLUDES SERVICE LEADS UNLESS BORED.
19. SURFACE RESTORATION  
ALL DISTURBED AREAS SHALL BE COMPLETELY RESTORED IN STRICT COMPLIANCE WITH THE SOIL EROSION AND SEDIMENTATION SPECIFICATIONS AND TO THE SATISFACTION OF BCCD-WWS, BCCD-SWM, GORE, MDOT, AND THE LOCAL MUNICIPALITY. ALL COSTS FOR THE CLEANUP, RESTORATION WORK, AND OTHER INTERMEDIATE OPERATIONS SUCH AS, BUT NOT LIMITED TO, CONSTRUCTION SIGNAGE, STREET SWEEPING, AND MAINTAINING EXISTING UTILITIES, SHALL BE CONSIDERED INCLUSIVE AND AT NO ADDITIONAL COST TO THE OWNER. AREAS DISTURBED DURING CONSTRUCTION SHALL RECEIVE A 4" APPLICATION OF SCREENED TOPSOIL, FERTILIZED AND SEEDED. ALL EXCESS MATERIALS, DEBRIS, AND SIMILAR ITEMS SHALL BE REMOVED FROM THE PROJECT AREA BY THE CONTRACTOR AND DISPOSED OF PROPERLY. ALL GROUND SURFACES SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER PRIOR TO FINAL APPROVAL.
20. TRAFFIC CONTROL  
THE CONTRACTOR SHALL EXECUTE THE WORK IN A MANNER SUCH THAT TRAFFIC IS MAINTAINED AND ACCESS IS PROVIDED TO ALL RESIDENCES, BUSINESSES, AND COMMERCIAL ESTABLISHMENTS. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS AND THE LATEST EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 6 AND THE REQUIREMENTS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS OR AS DIRECTED BY THE ENGINEER.
21. SIGNING AND BARRICADING  
SIGNING AND BARRICADING SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE DETAILS ON THE PLANS, THE LATEST EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 6 AND THE REQUIREMENTS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS. SIGNS AND BARRICADES LEFT IN PLACE AFTER DARK SHALL BE LIGHTED.
22. PROTECTION OF HAZARDOUS AREAS  
EXCAVATION AND HAZARDOUS AREAS SHALL BE PROTECTED BY BARRICADES, SNOW FENCE, OR OTHER APPROPRIATE MEANS. BARRICADES LEFT IN PLACE AFTER DARK SHALL BE LIGHTED.
23. STORM WATER DRAINAGE DURING CONSTRUCTION  
THE CONTRACTOR/DEVELOPER SHALL OBTAIN THE SERVICES OF A CERTIFIED STORM WATER OPERATOR AND COMPLY WITH THE PROVISIONS OF THE NPDES AND SSC PERMITS. THE CONTRACTOR SHALL MAINTAIN DITCH DRAINAGE DURING CONSTRUCTION AND SHALL NOT OBSTRUCT SUMP PUMP LEADS DISCHARGING INTO THE DITCH. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ALL STORM SEWER FACILITIES, SUCH AS DITCH BASINS AND CULVERTS, DURING CONSTRUCTION. CULVERTS AND CATCH BASINS CONTAMINATED DURING CONSTRUCTION SHALL BE CLEANED.
24. UTILITY INFORMATION  
UTILITY INFORMATION IS DELINEATED IN ACCORDANCE WITH THE LOCATIONS PROVIDED BY UTILITY OWNERS. THE DESIGN ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION OR THE LOCATION AT WHICH THESE SERVICES EXIST. DIFFERING FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
25. EXISTING UTILITIES  
THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SANITARY SEWER, PRESSURE PIPE, OR STORM SEWER CONNECTIONS IN SERVICE THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL PROVIDE OR ARRANGE FOR THE TEMPORARY SUPPORT OF GAS MAIN, TELEPHONE, FIBER OPTIC, CABLE, PRESSURE PIPE, SANITARY SEWER, STORM SEWER, AND UTILITY POLES WHERE NEEDED. ALL STORM SEWERS DAMAGED OR REMOVED, OR RELOCATED BY THE CONTRACTOR SHALL BE REPLACED WITH THE SAME SIZE AND QUALITY PIPE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. ALL UTILITIES UNDERMINED BY THE EXCAVATION SHALL HAVE COMPACTED SAND BACKFILL PLACED UNDER THEM, UNLESS 6AA CRUSHED LIMESTONE (A1) OR 22A GRAVEL (A2) IS SHOWN ON THE CONSTRUCTION PLANS. ALL WORK, INCLUDING THE REBORING OF SANITARY SEWER SERVICE LEADS AND WATERMAIN LEADS TO ACCOMMODATE CONSTRUCTION TO CLEAR EXISTING SERVICES, SHALL BE INCLUSIVE TO THE PROJECT.
26. SHOP DRAWINGS  
PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH TO BCCD-WWS SHOP DRAWINGS AND/OR CATALOG CUTS FOR ALL MAJOR MATERIALS AND EQUIPMENT ITEMS PER THE STANDARD SPECIFICATIONS.
27. NON-STOPPAGE CLAUSE  
THE CONTRACTOR SHALL BE REQUIRED TO COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP CONSTRUCTION FOR EXTENDED PERIODS ONCE CONSTRUCTION HAS BEGUN WITHOUT APPROVAL OF BCCD-WWS.
28. DISPOSAL OF EXCESS EXCAVATED MATERIAL  
ALL EXCESS EXCAVATED MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR, WITH ALL PERMITS, PERMISSIONS, AND LOCATIONS PROVIDED BY THE CONTRACTOR. ADJACENT PROPERTY OWNERS SHALL BE GIVEN PREFERENCE FOR DISPOSAL SITES. WRITTEN PERMISSION FOR DISPOSAL ON ADJACENT PROPERTY OWNERS SHALL BE PROVIDED TO BCCD-WWS.
29. CONSTRUCTION STAKING  
CONSTRUCTION STAKING SHALL BE PROVIDED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF MICHIGAN, HIRED AND PAID FOR BY THE CONTRACTOR, AND APPROVED BY BCCD-WWS.
30. FINAL ELEVATIONS OF SURFACE UTILITIES  
ALL FINAL ELEVATIONS OF MANHOLE CASTINGS, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE APPROVED BY THE BCCD-WWS REPRESENTATIVE IN THE FIELD. ANY ADJUSTMENTS THAT ARE MADE ARE AT NO ADDITIONAL COST TO THE OWNER.
31. AS-BUILT INFORMATION  
UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL APPROVAL FROM BCCD-WWS, THE DEVELOPER SHALL FURNISH BCCD-WWS WITH ONE COMPLETE SET OF "AS-BUILT" DRAWINGS ON MYLAR. THESE "AS-BUILTS" SHALL BE DERIVED FROM THE INFORMATION COLLECTED BY THE BCCD-WWS OR MUNICIPAL CONSTRUCTION OBSERVER.

32. 2-YEAR MAINTENANCE BOND  
UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL APPROVAL, THE CONTRACTOR SHALL FURNISH THE BCCD-WWS WITH A 2-YEAR MAINTENANCE AND GUARANTEE BOND.
33. SOIL EROSION AND SEDIMENTATION CONTROL RELEASE  
PRIOR TO FINAL ACCEPTANCE BY BCCD-WWS, THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND RECEIVE WRITTEN APPROVAL FROM BCCD-WWS. THE SOIL EROSION AND SEDIMENTATION CONTROL BOND WILL BE RELEASED UPON BCCD-WWS FINAL APPROVAL.
34. ORDER OF PRECEDENCE  
IN RESOLVING INCONSISTENCIES AMONG TWO OR MORE SECTIONS OF THE CONTRACT DOCUMENTS, PRECEDENCE SHALL BE GIVEN IN THE FOLLOWING ORDER FROM (A) THROUGH (G):  
A. AGREEMENT, AND ANY ADDENDA OR CONTRACT MODIFICATIONS (WITH BCCD-WWS)  
B. BID (WITH BCCD-WWS)  
C. BCCD-WWS SUPPLEMENTARY CONDITIONS  
D. BCCD-WWS INSTRUCTION TO BIDDERS  
E. GENERAL CONDITIONS OF THE CONTRACT (WITH BCCD-WWS)  
F. BCCD-WWS SPECIFICATIONS, LATEST EDITION  
G. DRAWINGS

SANITARY CONSTRUCTION NOTES

1. ALL MATERIAL AND CONSTRUCTION PROCEDURES SHALL COMPLY WITH THE LATEST BCCD-WWS SPECIFICATIONS AND STANDARD DETAILS.
2. NO CONNECTION TO AN EXISTING SANITARY SEWER SHALL BE MADE WITHOUT THE PRIOR APPROVAL OF BCCD-WWS. BCCD-WWS SHALL HAVE FINAL INSPECTION AUTHORITY AND APPROVAL FOR UNDERGROUND SANITARY SEWER FACILITIES.
3. THE MATERIAL FOR THE SANITARY SEWER SHALL BE SPECIFIED ON THE CONSTRUCTION DRAWINGS. THE FOLLOWING MATERIALS ARE ACCEPTABLE TO BCCD-WWS:  
A. 8" TO 15" PVC WITH A MINIMUM SDR OF 26 CONFORMING TO ASTM D-3034-00 GASKETED SEWER PIPE.  
B. LARGER THAN 15" REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76-03.  
JOINTS SHALL BE MODIFIED TONGUE & GROOVE TYPE WITH RUBBER GASKETS CONFORMING TO ASTM C-443-02. MINIMUM SIZE SHALL BE CLASS III, WALL B.
4. ALL SANITARY SEWER SERVICE RISERS SHALL BE 6" INTERNAL DIAMETER SDR-26 PVC OR LOWER CONFORMING TO ASTM D-3034-00. JOINTS SHALL BE RUBBER GASKET JOINTS OR SOLVENT WELD BELL JOINTS. ALL SERVICE RISERS SHALL BE MARKED WITH A 5/8" REDD AT THEIR TERMINUS BURIED 1' BELOW THE SURFACE. THE RISERS SHALL BE LEFT AT 8-10' DEEP AT THE PROPERTY LINE OR EASEMENT LINE, OR AS DEEP TO SERVICE BASEMENTS. WEEP TILE, PERIMETER DRAINS, DOWN SPOUTS, OR ANY OTHER SOURCE OF WATER, SHALL NOT BE CONNECTED TO THE SANITARY SEWER.
5. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C-478-03 WITH RUBBER JOINTS CONFORMING TO ASTM C-443-02. ALL FINAL ELEVATIONS OF MANHOLE CASTINGS SHALL BE DETERMINED BY THE BCCD-WWS REPRESENTATIVE. MANHOLE FRAME AND COVERS SHALL BE BOLT-DOWN, WATER-TIGHT EAST JORDIAN 1040 ZPT, NEENAH FOUNDRY COMPANY R-196F, OR BCCD-WWS APPROVED ALTERNATE. STEPS SHALL BE M.A. INDUSTRIES PS-1-PF, AMERICAN STEP CO. ML-10, OR BCCD-WWS APPROVED ALTERNATE.
6. ALL SANITARY SEWERS SHALL BE INSTALLED PURSUANT TO THE SANITARY SEWER STANDARD DETAILS. DEEPER SEWERS, EXCESSIVE TRENCH WIDTH, AND WHERE NOTED, THE CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS SPECIFIED.
7. WHERE MANHOLE ADJUSTMENT IS REQUIRED, THE MAXIMUM AMOUNT OF ADJUSTMENT BETWEEN THE CASTING AND THE CONE SHALL BE 9". A MAXIMUM OF TWO ADJUSTMENT RINGS ARE ALLOWED. ONLY 3" OR LARGER CONCRETE ADJUSTMENT RINGS SHALL BE USED. THE MANHOLE SHALL BE WRAPPED PER SD-5 OF THE SANITARY SEWER DETAILS.
8. ALL SANITARY SEWERS THROUGH 21" DIAMETER SHALL UNDERGO A LOW PRESSURE AIR TEST AND AN INFILTRATION TEST, IN CONFORMANCE WITH ASTM C-924-02 OR C-969-02, PRIOR TO FINAL ACCEPTANCE. SANITARY SEWER SYSTEMS LARGER THAN 21" SHALL UNDERGO AN INFILTRATION TEST. THE MAXIMUM ALLOWABLE INFILTRATION FOR PVC SYSTEMS SHALL BE 0 GALLONS PER INCH DIAMETER, PER MILE, PER 24 HOURS AND CONCRETE SYSTEMS SHALL BE 100 GALLONS PER INCH DIAMETER, PER MILE.
9. ALL PUBLIC SANITARY SEWERS 8" OR LARGER SHALL BE INTERNALLY TELEVISED BY THE CONTRACTOR. THE TV REPORT, INCLUDING THE TAPES, SHALL BE GIVEN TO BCCD-WWS PRIOR TO A REQUEST FOR FINAL INSPECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING (JETTING) THE LINE AND ASSURING ALL DIRT AND DEBRIS HAS BEEN REMOVED PRIOR TO TELEVISION. PRIOR TO TELEVISION THE LINE WATER SHALL BE PLACED IN THE MAIN FROM THE UPSTREAM MANHOLE UNTIL IT COMES OUT OF THE DOWNSTREAM MANHOLE. THE TV REPORT SHALL LIST THE DISTANCE A HOUSE LEAD IS LOCATED FROM A MANHOLE, ALL SHEAR BREAKS IN THE MAIN OR SERVICE LEADS, ALL LONGITUDINAL CRACKS, BROKEN PIPE, DIPS, OR HIGH POINTS IN THE LINE, ETC. THE CONTRACTOR SHALL REPAIR DAMAGED PIPE BY EXCAVATING THE PIPE AND REPLACING THE LENGTH OF PIPE IN AN APPROVED METHOD. LEAKING JOINTS SHALL BE REPAIRED BY GROUTING. A LEAKING JOINT IS DEFINED AS HAVING SUFFICIENT INFILTRATION TO WET THE INTERIOR OF THE JOINT. BCCD-WWS SHALL BE NOTIFIED WHEN THE LINE IS TO BE TELEVISED AND SHALL BE PRESENT TO INSPECT REPAIRS.
10. SANITARY MANHOLES SHALL BE PLACED AT PROPERTY LINES WHEN FEASIBLE.
11. PRIOR TO PERFORMING ANY TESTING OR FINAL INSPECTION, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE THE FOLLOWING ITEMS:  
A. THE RESULTS OF A PRELIMINARY TEST ON THE SYSTEM.  
B. PROVIDE RESULTS OF DENSITY CHECKS ON COMPACTED SAND BACKFILL FROM A CERTIFIED TESTING AGENCY.  
C. FURNISH A COMPLETED TWO-YEAR MAINTENANCE & GUARANTEE BOND.  
D. PROVIDE MATERIAL CERTIFICATES.  
E. COMPLETE FINAL ADJUSTMENTS ON SANITARY SEWER STRUCTURES.  
G. THE DEVELOPER SHALL PROVIDE AS-BUILTS TO BCCD-WWS.
12. THE FINAL TESTING SHALL CONSIST OF VISUAL INSPECTION OF MANHOLES, TELEVISION OF SANITARY MAIN, VACUUM TEST IN THE MANHOLES, LOW AIR PRESSURE TEST AND/OR INFILTRATION TEST DEPENDENT ON THE SIZE OF THE SANITARY MAIN (SEE #8 ABOVE), AND PASSING AN APPROPRIATE SIZED MANDRELL 30 DAYS AFTER THE MAIN HAS BEEN INSTALLED.
13. PRIOR TO ISSUING FINAL APPROVAL, BCCD-WWS SHALL INSPECT THE FINAL GRADE OF THE PROJECT TO ENSURE THAT NO FURTHER ADJUSTMENTS ARE NECESSARY TO ANY SANITARY SEWER STRUCTURES. IF ANY SUCH ADJUSTMENTS ARE NECESSARY, THE CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER MAKE THE REQUIRED CHANGES. FINAL APPROVAL SHALL NOT BE GRANTED UNTIL ALL NECESSARY ADJUSTMENTS HAVE BEEN MADE.

PRESSURE PIPE CONSTRUCTION NOTES

1. ALL MATERIAL AND CONSTRUCTION PROCEDURES SHALL COMPLY WITH THE LATEST BCCD-WWS SPECIFICATIONS AND STANDARD DETAILS.
2. ALL PUBLIC PRESSURE PIPE SHALL BE DUCTILE IRON. PRESSURE PIPES 10" AND SMALLER SHALL BE DUCTILE IRON CLASS 53 AS A MINIMUM. PRESSURE PIPES 12" AND LARGER SHALL BE DUCTILE IRON CLASS 54 AS A MINIMUM. THE PIPE SHALL BE BELL AND SPIGOT, OR RESTRAINED JOINT FITTINGS, FITTED WITH A RUBBER GASKET. FITTINGS MAY BE GRAY IRON OR DUCTILE IRON MEETING CLASS 350 PSI RATING. IN CASES OF 3" SANITARY SEWER FORCEMAIN, SDR-21 PVC MAY BE UTILIZED.
3. ALL PIPES, VALVES, AND FITTINGS SHALL BE POLYWRAPPED, EXCEPT IN MANHOLES. CIRCUMFERENTIAL WRAPS OF MANUFACTURER RECOMMENDED TAPE SHALL BE PLACED AT NO GREATER THAN 4' INTERVALS ALONG THE BARREL OF THE PIPE, WITH THE EXCESS FOLDED OVER THE TOP TO TAKE OUT EXCESS SLACK, HELPING TO MINIMIZE THE SPACE BETWEEN THE POLYETHYLENE AND THE PIPE. COMPLETE THE INSTALLATION BY OVERLAPPING THE POLYETHYLENE TUBE WRAP AT EACH END AND SEAL ENDS PER AWWA C105/A21.5-99.
4. WHERE SANITARY SERVICE LEADS OR OTHER UTILITIES ARE ENCOUNTERED, THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO PROVIDE CONTINUOUS SERVICE TO PROPERTIES ALONG THE ROUTE OF CONSTRUCTION. ALL WORK, INCLUDING THE REBORING OF SANITARY SEWER SERVICE LEADS TO ACCOMMODATE CONSTRUCTION, OR ADJUSTING PRESSURE PIPE INSTALLATION TO CLEAR EXISTING SERVICES, SHALL BE INCLUSIVE TO CONSTRUCTION.
5. ALL PRESSURE PIPES SHALL HAVE A MINIMUM COVER OVER THE TOP OF THE PIPE OF 5' FROM FINISHED GRADE, 5' CLEARANCE UNDER DRAINS, 5' CLEARANCE BELOW EXISTING DITCHES, AND/OR A MINIMUM 5' BELOW THE EXISTING ROAD. THE STANDARD LAYING CONDITIONS FOR WATERMAIN SHALL BE A 30" TRENCH WIDTH, OR PIPE DIAMETER PLUS 12". THE PIPE SHALL BE LAID ON A 4" MDOT CLASS II SAND (A5), WITH RECESSES TO ACCOMMODATE PIPE BELLS OR AS SHOWN ON PLANS.
6. ALL TRENCH EXCAVATION, UNDER OR WITHIN 5' OF EXISTING OR PROPOSED PAVING, SHALL BE BACK FILLED WITH COMPACTED MDOT CLASS II SAND (A5).
7. THE CONTRACTOR SHALL RESTRAIN ALL THRUST IN THE SYSTEM BY THE USE OF BCCD-WWS APPROVED RESTRAINED JOINTS. DURING THE CONSTRUCTION OF WATERMANS ALL HYDRANTS, TEES, VERTICAL OR HORIZONTAL BENDS, AND FUTURE VALVE CONNECTIONS SHALL BE RESTRAINED. THE RESTRAINT SYSTEM AND LOCATION IN THE FIELD SHALL BE DESIGNATED ON THE PLANS.
8. THE CONTRACTOR SHALL ENCASE THE PRESSURE PIPE IN CONCRETE WHERE VERTICAL SEPARATION BETWEEN THE SANITARY SEWER OR STORM SEWER AND THE WATERMAIN IS LESS THAN 18" INCHES.
9. GATE VALVES SHALL BE RESILIENT SEATED CONFORMING TO AWWA C509-01 OR C915-01. ALL VALVES IN PAVED AREAS SHALL BE PLACED IN A CONCRETE MANHOLE. STRUCTURE SIZED PER BCCD-WWS PRESSURE PIPE DETAIL SD-8. VALVES SHALL HAVE A VERTICAL, NON-RISING STEM, AND OPEN CLOCKWISE, OR AS SPECIFIED BY LOCAL MUNICIPALITY HAVING JURISDICTION.
10. FIRE HYDRANTS SHALL CONFORM TO AWWA C502-94. ALL HYDRANTS SHALL BE TRAFFIC MODELS WITH BREAKAWAY FLANGES, AND SHALL HAVE THE DRAIN HOLES FACTORY PLUGGED. ALL THE FIRE HYDRANT ASSEMBLIES FROM THE TEE THROUGH THE HYDRANT, SHALL BE RESTRAINED BY A BCCD-WWS APPROVED METHOD. FIRE HYDRANTS SHALL BE PLACED AT PROPERTY LINES AND SHALL BE PAINTED YELLOW WITH THE CAP COLOR CODED IN ACCORDANCE WITH THE STANDARD DETAIL. FINAL ELEVATIONS AND ADJUSTMENTS TO GRADE, USING EXTENSION PIECES IF REQUIRED, SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO EXTRA COST TO THE PROJECT. HYDRANTS SHALL HAVE A 5" VALVE OPENING. FIRE HYDRANTS SHALL BE EAST JORDAN 5 BR, WATERLOUS W867-250, OR BCCD-WWS APPROVED ALTERNATE.
11. PRESSURE TAPS TO EXISTING WATERMANS, AND CONNECTIONS TO EXISTING VALVES, SHALL BE MADE ONLY UNDER BCCD-WWS OR LOCAL JURISDICTION INSPECTION. ALL VALVES OPENING AND CLOSING SHALL BE BY THE OPERATIONAL AUTHORITY. (ONLY A BCCD-WWS APPROVED TAPPING SLEEVE IS ALLOWED FOR ALL PRESSURE TAPS). A CONCRETE MANHOLE SHALL BE REQUIRED AROUND ALL PRESSURE TAPS.
12. THE CONTRACTOR SHALL HAVE THE OPTION OF PRESSURE TESTING THE WATERMAIN AGAINST THE EXISTING VALVE AT THE POINT OF BEGINNING OF THE PROJECT. IF THE EXISTING VALVE LEAKS, THE CONTRACTOR SHALL MAKE REPAIRS AND REPEAT THE PRESSURE TEST AGAINST THE EXISTING VALVE, AT NO COST TO THE OWNER.
13. WATERMANS SHALL BE TESTED IN ACCORDANCE WITH AWWA C600-99, AND CHLORINATED IN ACCORDANCE WITH THE LATEST GENESSEE COUNTY STANDARD SPECIFICATIONS. WATERMANS SHALL BE TESTED TO 150 PSI AS MEASURED AT THE HIGH POINT IN THE WATER LINE. WATERMAIN CHLORINATION SHALL BE OBSERVED AND MONITORED BY BCCD-WWS OR THE LOCAL MUNICIPALITY HAVING JURISDICTION. CHLORINATION AND TESTING SHALL BE AT THE CONTRACTOR'S EXPENSE. A CERTIFICATE OF APPROVAL FROM THE AGENCY HAVING AUTHORITY SHALL BE ISSUED PRIOR TO THE WATER BEING USED FOR HUMAN CONSUMPTION.
14. WHEN SPECIFIED BY THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL SUPPLY ALL WATER SERVICE LEADS. THESE LEADS SHALL BE 1/2" COPPER AND SHALL BE A MINIMUM OF 3/4" IN DIAMETER AND INSTALLED IN ACCORDANCE WITH THE WATERMAIN STANDARD DETAIL. ALL SERVICE LEADS SHALL BE MARKED WITH A 2" X 2" WOOD STAKE BURIED 1' BELOW THE SURFACE ALONG WITH WITNESS POINTS SUPPLIED TO THE OWNER. CORPORATIONS SHALL BE BRASS.
15. THE CONTRACTOR SHALL INSTALL, AS A MINIMUM, 1" CORPORATIONS ON THE PRESSURE PIPE FOR PRESSURE TESTING, CHLORINE ADDITION, AND FOR BLOW-OFF PURPOSES. THE CORPORATIONS SHALL HAVE COPPER PIPE EXTENDING TO THE GROUND SURFACE. THE CONTRACTOR SHALL REMOVE THE CORPORATION AND COPPER LINE UPON A SATISFACTORY TEST, AND INSTALL A BRASS PLUG, PRIOR TO FINAL ACCEPTANCE.
16. PRIOR TO REQUESTING ANY FINAL PRESSURE TESTING, AND GATHERING THE REQUIRED BACTERIA SAMPLES (FOR WATERMANS ONLY), THE CONTRACTOR SHALL BE REQUIRED TO PERFORM THE FOLLOWING ITEMS:  
A. CONDUCT A PRELIMINARY PRESSURE TEST ON THE SYSTEM  
B. PROVIDE RESULTS OF DENSITY CHECKS ON COMPACTED SAND BACKFILL FROM A CERTIFIED TESTING AGENCY.  
C. FURNISH A COMPLETED TWO-YEAR MAINTENANCE & GUARANTEE BOND.  
D. PROVIDE MATERIAL CERTIFICATES.  
E. COMPLETE FINAL ADJUSTMENTS OF FIRE HYDRANT (FOR WATERMANS ONLY), VALVES, AND MANHOLES.  
F. PROPER CAP COLOR OF FIRE HYDRANTS (FOR WATERMANS ONLY).  
G. THE DEVELOPER SHALL PROVIDE AS-BUILTS TO BCCD-WWS.
17. PRIOR TO ISSUING FINAL APPROVAL, BCCD-WWS SHALL INSPECT THE FINAL GRADE OF THE PROJECT TO ENSURE THAT NO FURTHER ADJUSTMENTS ARE NECESSARY TO ANY PRESSURE PIPE STRUCTURES. IF ANY SUCH ADJUSTMENTS ARE NECESSARY, THE CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER MAKE THE REQUIRED CHANGES. FINAL APPROVAL SHALL NOT BE GRANTED UNTIL ALL NECESSARY ADJUSTMENTS HAVE BEEN MADE.

|                  |                                                                                       |                      |                                                                                                                        |           |  |
|------------------|---------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------|-----------|--|
| PROJECT          | NEW OFFICE BUILDING for<br>WALKER JUNE CALHOUN CPA'S<br>CREEKWOOD TRAIL<br>BURTON, MI | SHEET TITLE<br>NOTES | CREEKWOOD ARCHITECTURE, INC.<br>11111 s. creekwood<br>burton, michigan 48509<br>tel. (810) 742-0480 fax (810) 742-8399 | REVISIONS |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
|                  |                                                                                       |                      |                                                                                                                        |           |  |
| JOB NO.150001-01 | CHECKED BY R.A.S.                                                                     |                      |                                                                                                                        |           |  |
| DATE:12 OCT 2015 | BRN BY B.A.C.                                                                         |                      |                                                                                                                        |           |  |
| SHEET NO.        |                                                                                       |                      |                                                                                                                        |           |  |



HYDRO-SEEDING SPECIFICATIONS:

- 1) THE CONTRACTOR SHALL REMOVE ALL WEEDS, STONES OVER 1" IN DIAMETER, ROOTS, BRUSH, STAKES, BUILDING MATERIAL AND OTHER DEBRIS.
- 2) AREAS INDICATED "TURF" SHALL BE HYDRO-SEEDED WITH A PUMP RATED AND OPERATED AT NO LESS THAN 100 GPM AND NO LESS THAN 100 PSI, WITH A MECHANICAL AGITATOR THAT WILL ENSURE UNIFORM SUSPENSION OF SEED AND FERTILIZER IN WATER. EACH 1000 GALLONS OF SLURRY MIX SHALL CONTAIN 1000 LBS. OF APPROVED CELLULOSE FIBER, 200 LBS. OF THE SPECIFIED SEED MIXTURE AND 500 LBS. OF AN APPROVED 12/12/12 COMMERCIAL FERTILIZER. APPLY SEED AND FERTILIZER AT A RATE OF NOT LESS THAN 1000 GALLONS OF SLURRY PER ACRE.
- 3) FINISH GRADING - AFTER CLEAN UP AND PRIOR TO TOP SOILING, THE CONTRACTOR SHALL FINE GRADE WITH MECHANICAL EQUIPMENT AND HAND RAKING IF REQUIRED TO BRING ALL AREAS TO THE DESIGN GRADES INDICATED ON THE SITE PLAN AND NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- 4) TOPSOIL SHALL BE UNIFORMLY SPREAD TO SUPPORT SEED GERMINATION AND PRODUCE TURF. TOPSOIL SAMPLE MAY BE REQUIRED BY THE LANDSCAPE ARCHITECT AND THE SOURCE DESIGNATION BY THE CONTRACTOR.
- 5) SEED MIXTURE:
  - A. 40% KENTUCKY BLUEGRASS
  - B. 50% PERENNIAL RYEGRASS
  - C. 50% PERENNIAL RYEGRASS
- 6) SEED AND FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE MANUFACTURER'S ORIGINAL SEALED CONTAINERS, STATING MIXTURE COMPONENTS AND PERCENTAGES. SEED AND FERTILIZER OTHERWISE DELIVERED WILL NOT BE ACCEPTED.
- 7) WATERING - THE CONTRACTOR HAS THE RESPONSIBILITY OF IRRIGATING THE SEED BED.
- 8) GUARANTEE - THE CONTRACTOR SHALL OVERSEED ALL AREAS THAT HAVE BARE SPOTS IN EXCESS OF ONE SQ. FT. IN SIZE.
- 9) INSPECTION - THE LANDSCAPE ARCHITECT SHALL BE THE OWNER'S AGENT FOR THIS WORK AND WILL DETERMINE COMPLETION AND ACCEPTANCE OF WORK PERFORMED, AND WILL MAKE CASUAL INSPECTION DURING SEEDING OPERATIONS. PROMPT CLEANUP OF THE SITE UPON COMPLETION WILL BE REQUIRED. MALKS AND DRIVES SHALL BE KEPT CLEAN AND PASSABLE.

GENERAL NOTES

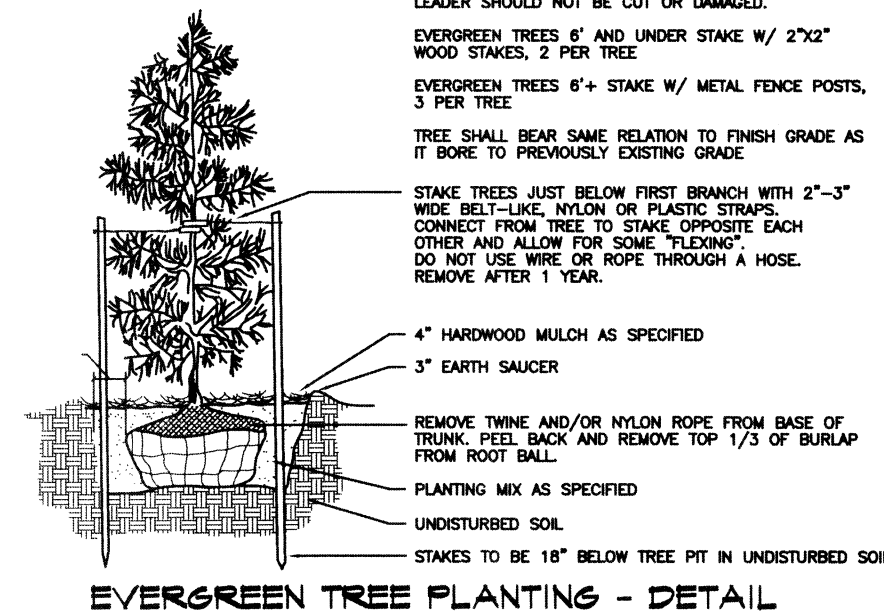
ALL LANDSCAPE AREAS ADJACENT TO DRIVES OR PARKING AREAS ARE TO BE CURBED WITH A MINIMUM 4" CONCRETE CURBING.  
ALL PLANTING BEDS ARE TO BE EDGED.  
ALL GRADING IS TO BE CONTINUOUSLY MAINTAINED.  
ALL SITE IMPROVEMENTS DETAILED ON THIS PLAN ARE TO BE COMPLETED PRIOR TO THE ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY.  
ALL RIGHT OF WAY AREAS ARE TO BE SEED OR HYDROSEED.  
ALL LANDSCAPE AREAS ARE TO BE IRRIGATED WITH AN UNDERGROUND IRRIGATION SYSTEM.

LANDSCAPE NOTES

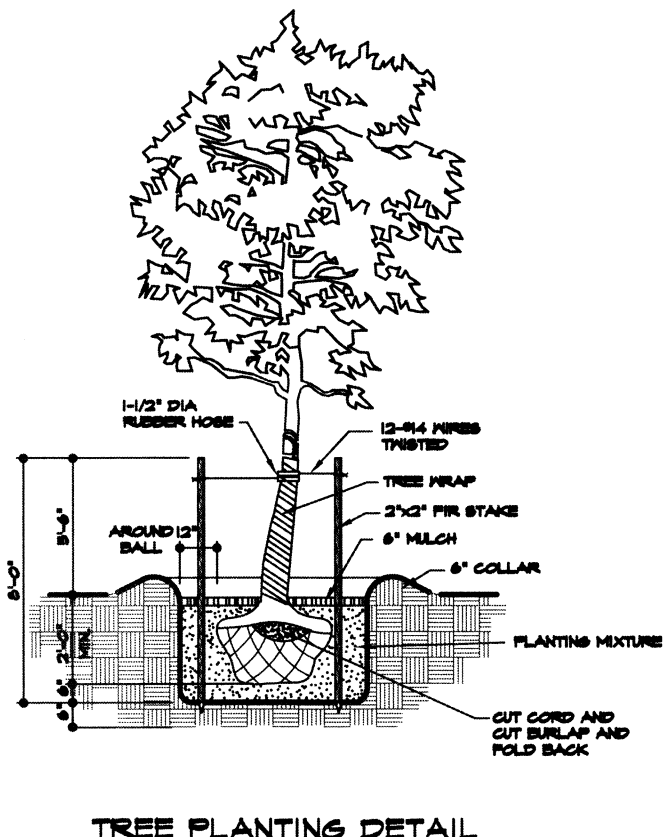
ALL PLANT MATERIAL SHALL BE TRUE TO NAME, FREE FROM PHYSICAL DAMAGE AND WIND BURN. PLANTS SHALL BE FULL, WELL-BRANCHED, AND IN HEALTHY VIGOROUS GROWING CONDITION.  
PLANTS SHALL BE WATERED BEFORE AND AFTER PLANTING IS COMPLETE.  
ALL TREES MUST BE STAKED, FERTILIZED AND MULCHED AND SHALL BE GUARANTEED TO EXHIBIT NORMAL GROWTH CYCLE FOR AT LEAST ONE (1) FULL YEAR FOLLOWING PLANTING.  
ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.  
PROVIDE CLEAN BACK FILL SOIL, USING MATERIAL STOCKPILED ON SITE. SOIL SHALL BE SCREENED AND FREE OF ANY DEBRIS, FOREIGN MATERIAL, AND STONE. "AGRIFORM" TARS OR SIMILAR SLOW-RELEASE FERTILIZER SHALL BE ADDED TO THE PLANTING PITS BEFORE BEING BACKFILLED.  
ALL PLANTINGS SHALL BE MULCHED WITH SHREDDED HARDWOOD BARK, SPREAD TO A MINIMUM DEPTH OF 4". MULCH IS TO BE FREE FROM DEBRIS AND FOREIGN MATERIAL, AND SHALL CONTAIN NO PIECES OF INCONSISTENT SIZE.  
THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK SHOWN ON THE LANDSCAPE DRAWINGS AND SPECIFICATIONS.  
NO SUBSTITUTIONS OR CHANGES OF LOCATION, OR PLANT TYPES SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS PRIOR TO INSTALLATION.  
THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A VERTICAL CONDITION THROUGHOUT THE GUARANTEED PERIOD.  
THE LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT, AT ANY STAGE OF THE INSTALLATION, TO REJECT ANY WORK OR MATERIAL THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS, IF REQUESTED BY OWNER.  
CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING PLANT QUANTITIES TO ENSURE QUANTITIES ON DRAWINGS AND PLANT LIST ARE THE SAME. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES ON THE PLANS SHALL PREVAIL.  
THE LANDSCAPE CONTRACTOR SHALL SEED AND MULCH ALL AREAS DISTURBED DURING CONSTRUCTION, THROUGHOUT THE DEVELOPMENT.  
A PRE-EMERGENT WEED CONTROL AGENT, "TRIN" OR EQUAL, SHALL BE APPLIED UNIFORMLY TO ALL PLANTING BEDS PRIOR TO MULCHING.

SITE CONDITIONS:

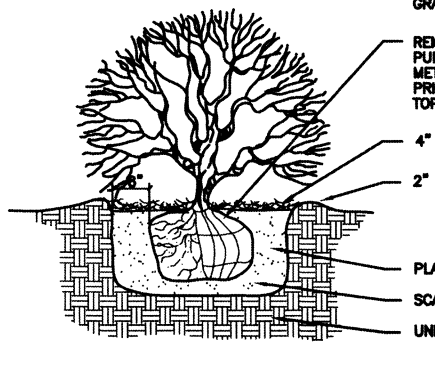
THE LANDSCAPE CONTRACTOR SHALL NOT OBSTRUCT ROADS, PARKING AREAS OR WALKS WITH MATERIALS, EQUIPMENT OR DEBRIS. THE ENTIRE PARKING AREA MUST BE AVAILABLE FOR CAPACITY USE DURING WORKING HOURS. SPECIAL ARRANGEMENTS WILL BE MADE TO ISOLATE SPECIFIC AREAS REQUIRED FOR CONSTRUCTION. THESE AREAS WILL BE REARRANGED WITH HIGH ADMINISTRATION BY THE LANDSCAPE ARCHITECT.



EVERGREEN TREE PLANTING - DETAIL



TREE PLANTING DETAIL



SHRUB PLANTING DETAIL

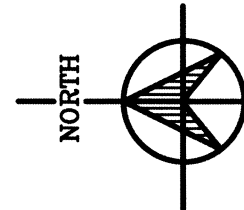
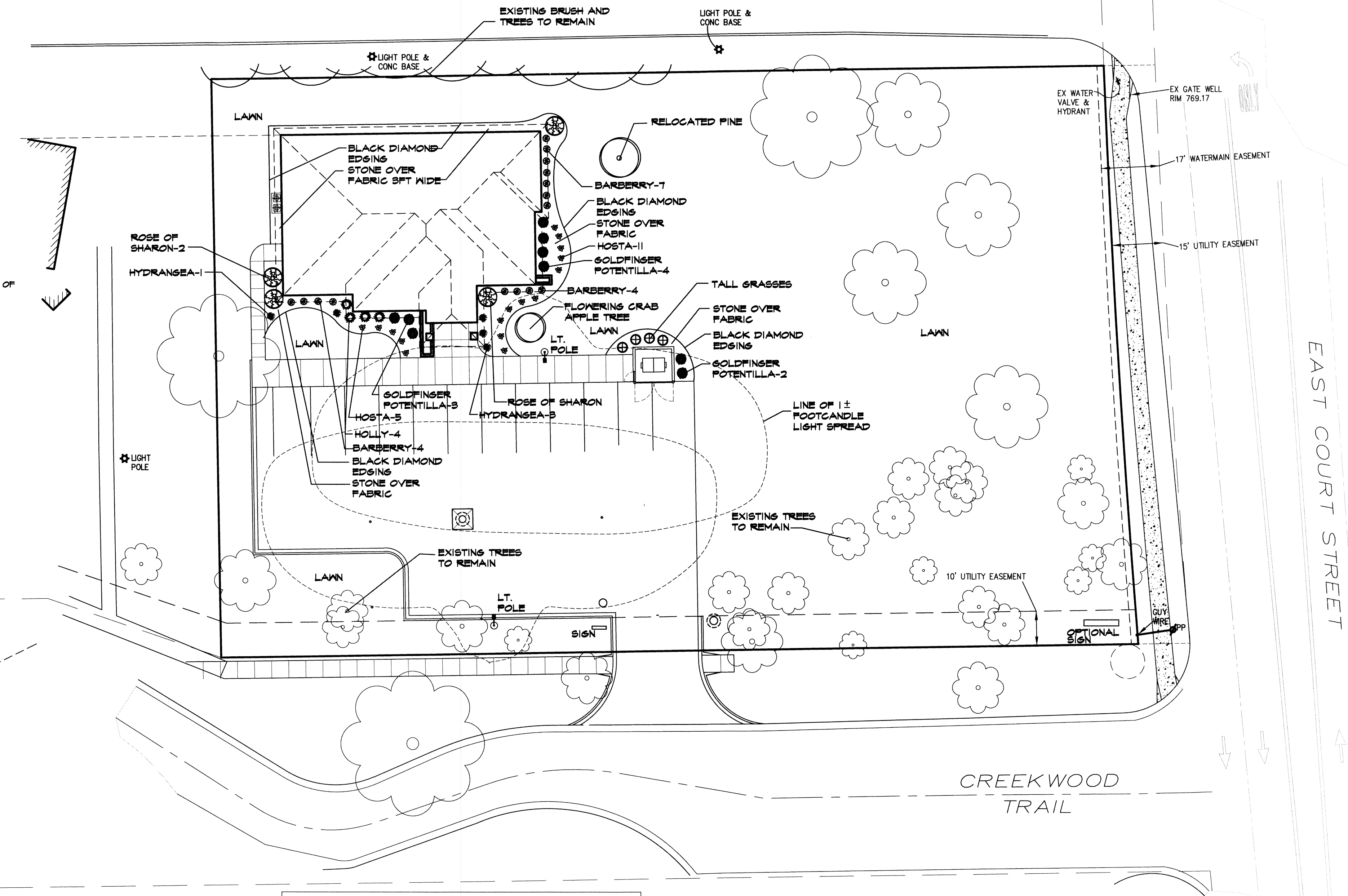
GENERAL NOTES:

- 1) ALL STONE PLANTING AREAS TO RECEIVE 5" WASHED STONE (2'-4" DIA.) PER PLAN OVER DE-MIT FABRIC WEED BARRIER UNDERLAYMENT.  
ALL MULCH PLANTING AREAS TO RECEIVE 5" CEDAR MULCH PER PLAN OVER DE-MIT FABRIC WEED BARRIER UNDERLAYMENT.
- 2) LAWN EDGING TO BE ALUMINUM OR APPROVED EQUAL.
- 3) GROUND COVER PLANTS TO BE PLANTED IN SOIL MIX (NO STONE AROUND.)

NOTE:

ALL LAWN AND LANDSCAPED AREAS ARE TO FULLY IRRIGATED  
PROVIDE SEPARATE ZONES FOR LAWN AND PLANTING BEDS

| LUMINAIRE SCHEDULE |     |                     |                |          |                                      |       |
|--------------------|-----|---------------------|----------------|----------|--------------------------------------|-------|
| SYMBOL             | QTY | MODEL #             | DESCRIPTION    | LUMENS   | LAMP                                 | WATTS |
|                    | 2   | ASL-16L-5K-210-3IES | ASL SITE LIGHT | ABSOLUTE | 16 HIGH BRIGHTNESS LEDS 50000K-10CRI | 128.8 |



LANDSCAPING PLAN & LIGHTING PLAN

SCALE: 1"=20'-0"



Know what's below.  
Calbefore you dig.

LANDSCAPE LEGEND

| QTY. | PLANT TYPE                 | BOTANICAL NAME                 | SIZE     | ROOT  |
|------|----------------------------|--------------------------------|----------|-------|
| 1    | FLOWERING CRAB             | MALUS CAMZAM                   | 2" CAL   | B&B   |
| 4    | ROSE OF SHARRON            |                                | 48" HT.  | CONT. |
| 1    | GOLDFINGER POTENTILLA      | JUNIPERUS SABINA TAMARISCIFOLA | 18" DIA. | CONT. |
| 18   | DWARF BURNING BUSH         | EVONYMUS ALATUS COMPACTUS      | 36" HT.  | CONT. |
| 15   | BARBERRY                   |                                | 24" HT.  | CONT. |
| 0    | STELLA D'ORO DAYLILIES     | HEMEROCALLIS STELLA D'ORO      | 1 GAL    | CONT. |
| 16   | HOSTA (RELOCATED BY OWNER) |                                | 1 GAL    | CONT. |
| 5    | HYDRANGEA                  |                                | 1 GAL    | CONT. |
| 3    | FOUNTAIN GRASS             | PENNISETUM ALOPECUROIDES       | 2 GAL.   | CONT. |

REVISIONS

CREEKWOOD ARCHITECTURE, INC.  
burton, michigan 48509  
tel. (810) 742-0480 fax (810) 742-8393

SHEET TITLE  
LANDSCAPING PLAN  
& LIGHTING PLAN

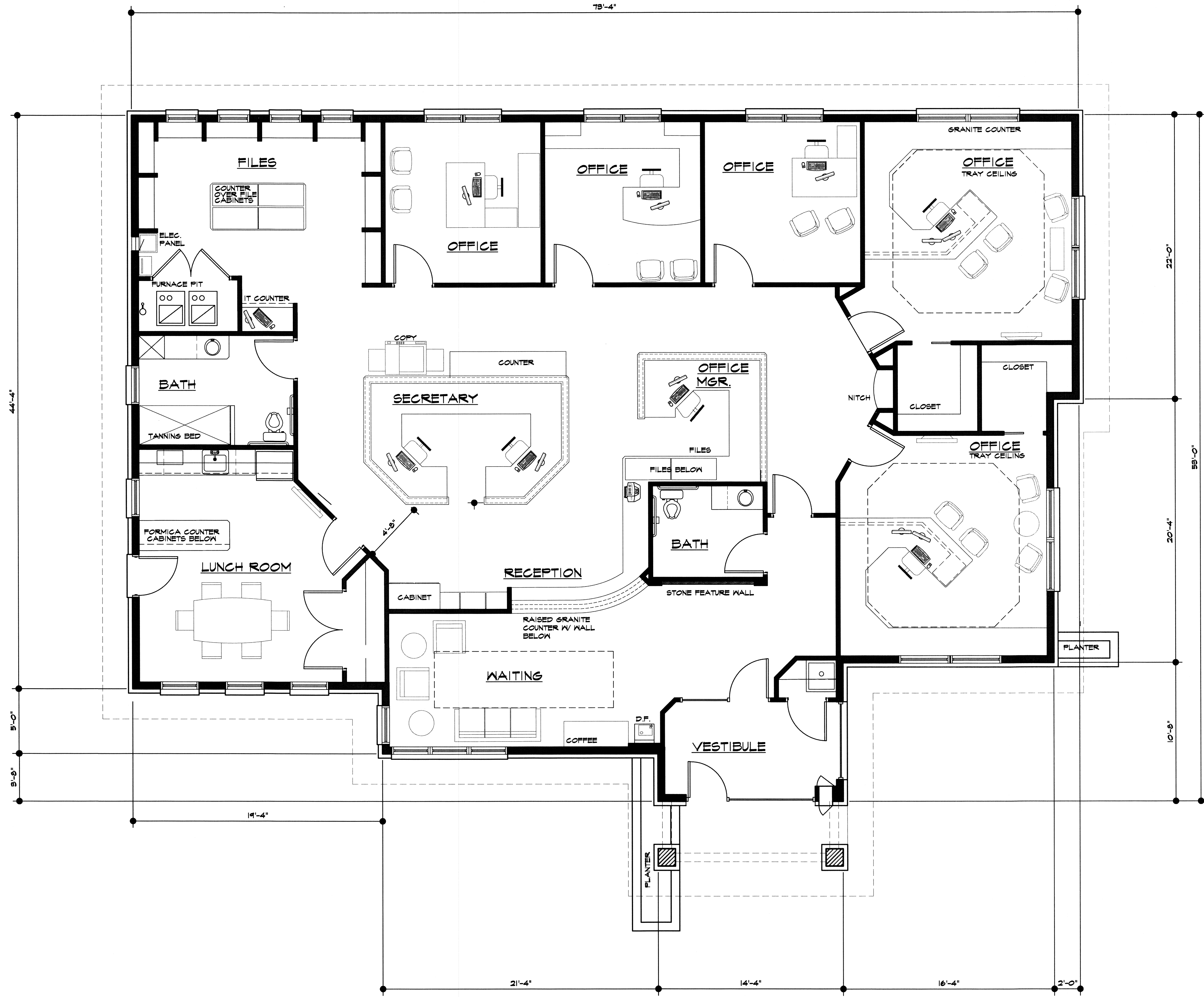
NEW OFFICE BUILDING for  
WALKER JUNE CALHOUN CPA'S  
GREENWOOD TRAIL  
BURTON, MI  
DRAWN BY B.A.G.  
CHECKED BY R.A.S.

Attachment: 16-07 (2118 : SPR #16-07)

L1

DF |





**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"  
3,489 SQ. FT.

|                                                                                                              |  |                                  |  |                                                                                                     |  |           |
|--------------------------------------------------------------------------------------------------------------|--|----------------------------------|--|-----------------------------------------------------------------------------------------------------|--|-----------|
| PROJECT<br><b>NEW OFFICE BUILDING for<br/>WALKER JUNE CALHOUN CPAs</b><br>CREEKWOOD TRAIL<br>DRAWN BY B.A.C. |  | SHEET TITLE<br><b>FLOOR PLAN</b> |  | CREEKWOOD ARCHITECTURE, INC.<br>burton, michigan 48509<br>tel. (810) 742-0480<br>fax (810) 742-8393 |  | REVISIONS |
| JOB NO. 150001-01                                                                                            |  | DATE 12 OCT 2015                 |  | 11111 s. creekwood                                                                                  |  |           |
| SHEET NO.                                                                                                    |  | <b>A1</b>                        |  |                                                                                                     |  |           |
| OF 2                                                                                                         |  |                                  |  |                                                                                                     |  |           |





**Burton Planning Commission**  
4303 S. Center Road  
Burton, MI 48519

Meeting: 02/09/16 05:00 PM  
Department: Department of Public Works  
Category: Presentation  
Prepared By: Amber Abbey  
Department Head: Robert Slattery

**F.1**

**SCHEDULED**

**AGENDA ITEM (ID # 2119)**

*DOC ID: 2119*

---

## **Consultant Presentation**

This is the time that we ask each consultant to give a maximum 5 minute presentation about their proposal, and answer any questions the Commission may have. We ask that during this time the other consultants leave the room.





**Burton Planning Commission**  
4303 S. Center Road  
Burton, MI 48519

Meeting: 02/09/16 05:00 PM  
Department: Department of Public Works  
Category: Discussion  
Prepared By: Amber Abbey  
Department Head: Robert Slattery

**F.2**

**SCHEDULED**

**AGENDA ITEM (ID # 2120)**

*DOC ID: 2120*

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## Discussion on Proposals

Discussion on the Master Plan proposals submitted by the consultants





**Burton Planning Commission**  
4303 S. Center Road  
Burton, MI 48519

Meeting: 02/09/16 05:00 PM  
Department: Department of Public Works  
Category: Resolution  
Prepared By: Amber Abbey  
Department Head: Robert Slattery

**F.3**

**SCHEDULED**

**AGENDA ITEM (ID # 2121)**

*DOC ID: 2121*

---

**Approve and Authorize the acceptance of the Master Plan  
proposal by and the  
recommendation to City Council to enter into a contract with  
for consultant services in the  
development of the City of Burton's Master Plan.**





**Burton Planning Commission**

4303 S. Center Road  
Burton, MI 48519

**SCHEDULED**

**AGENDA ITEM (ID # 2112)**

Meeting: 02/09/16 05:00 PM

Department: Department of Public Works

Category: Administrative Site Plan Review

Prepared By: Amber Abbey

Department Head: Robert Slattery

**G.1**

DOC ID: 2112

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**SPR #16-01**

By: Paula Thompson  
900 E. Geneva Dr.  
Dewitt, MI 48820

Re: 2458 S. Center Rd. Burton, MI 48519

For: Biggby Coffee

**ATTACHMENTS:**

- 16-01 (PDF)





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



### APPLICATION FOR ZONING REVIEW

DATE FILED: 1-4-16

FEE: \$40.00

RECEIPT NO: \_\_\_\_\_

CHECK NO: 1492

SPR #: 16-01

#### PLEASE PRINT

DATE: 1-4-16

APPLICANTS NAME: Paula J. Thompson

APPLICANTS ADDRESS: 900 E. Geneva Dr. DeWitt, MI 48821

APPLICANTS PHONE NO: 517-898-6994

PROPOSED NAME OF BUSINESS: BLGGBY Coffee #485

PROPOSED TYPE OF BUSINESS: specialty coffee

SITE ADDRESS: 2458 S. Center Rd Burton, MI 48519

USE OF STRUCTURE: specialty coffee

SQ FOOTAGE OF PROPERTY: 1684

SQ FOOTAGE OF STRUCTURE: \_\_\_\_\_

NUMBER OF EMPLOYEES/SEATS: 12/28

APPLICANTS SIGNATURE: Paula J. Thompson

\*\*\* ALSO ATTACH A FLOOR PLAN OF THE EXISTING AND PROPOSED BUSINESS.

Attachment: 16-01 (2112 : SPR #16-01)





**Burton Planning Commission**

4303 S. Center Road  
Burton, MI 48519

**SCHEDULED**

**AGENDA ITEM (ID # 2113)**

Meeting: 02/09/16 05:00 PM

Department: Department of Public Works

Category: Administrative Site Plan Review

Prepared By: Amber Abbey

Department Head: Robert Slattery

**G.2**

DOC ID: 2113

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---

**SPR #16-02**

By: Daryl Simpson  
3309 Associates Dr.  
Burton, MI 48529

Re: 3323 Associates Dr. Burton, MI 48529

For: Medical Marijuana Grow Facility

**ATTACHMENTS:**

- 16-02 (PDF)





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



**APPLICATION FOR ADMINISTRATIVE SITE PLAN REVIEW**

DATE FILED: 1-6-16

FEE: \$75.00

RECEIPT NO: \_\_\_\_\_

CHECK NO: 1116

SPR #: 16-02

**PLEASE PRINT**

DATE: January 6<sup>th</sup> 2016

APPLICANTS NAME: Daryl Simpson

APPLICANTS ADDRESS: 3309 Associates Dr

APPLICANTS PHONE NO: (810) - 875-5213

PROPOSED NAME OF BUSINESS: JND GROW

SITE ADDRESS: 3323 Associates Dr

SUBDIVISION & LOT # OR PARCEL NUMBER: 59-29-551-003

TYPE: ☒ CHANGE OF OWNERSHIP ☒ CONSTRUCTION LESS THAN 2%

USE OF STRUCTURE: Commercial Grow Facility

SQ FOOTAGE OF PROPERTY: \_\_\_\_\_

SQ FOOTAGE OF STRUCTURE: 8,000

NUMBER OF EMPLOYEES/SEATS: 2 (1 caregiver, 1 office)  
Administration

APPLICANTS SIGNATURE: Daryl M. Simpson

\*\*\* ALSO ATTACH A FLOOR PLAN OF THE EXISTING AND PROPOSED BUSINESS.

Attachment: 16-02 (2113 : SPR #16-02)





**Burton Planning Commission**

4303 S. Center Road  
Burton, MI 48519

**SCHEDULED**

**AGENDA ITEM (ID # 2114)**

Meeting: 02/09/16 05:00 PM

Department: Department of Public Works

Category: Administrative Site Plan Review

Prepared By: Amber Abbey

Department Head: Robert Slattery

**G.3**

DOC ID: 2114

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**SPR #16-03**

By: Auction Wholesale, LLC.  
1096 N. Center Rd.  
Burton, MI 48509

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

For: Wholesale vehicles

**ATTACHMENTS:**

- 16-03 (PDF)





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



### APPLICATION FOR ZONING REVIEW

DATE FILED: 1-12-16

FEE: \$40.00

RECEIPT NO: \_\_\_\_\_

CHECK NO: 8210

SPR #: 16-03

#### PLEASE PRINT

DATE: January 12 2016

APPLICANTS NAME: Auction Wholesale LLC Raymond Powell

APPLICANTS ADDRESS: 1096 N. Center Rd

APPLICANTS PHONE NO: 810 691 5378

PROPOSED NAME OF BUSINESS: Auction Wholesale

PROPOSED TYPE OF BUSINESS: Automobile Importer

SITE ADDRESS: 1096 N. Center Rd

USE OF STRUCTURE: Automobile ~~wholesale~~ Importer

SQ FOOTAGE OF PROPERTY: ~~50,000~~ 5 Acres

SQ FOOTAGE OF STRUCTURE: 50,000

NUMBER OF EMPLOYEES/SEATS: 20

APPLICANTS SIGNATURE: Ry Powell

\*\*\* ALSO ATTACH A FLOOR PLAN OF THE EXISTING AND PROPOSED BUSINESS.

Attachment: 16-03 (2114 : SPR #16-03)





**Burton Planning Commission**

4303 S. Center Road  
Burton, MI 48519

**SCHEDULED**

**AGENDA ITEM (ID # 2115)**

Meeting: 02/09/16 05:00 PM

Department: Department of Public Works

Category: Administrative Site Plan Review

Prepared By: Amber Abbey

Department Head: Robert Slattery

**G.4**

DOC ID: 2115

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**SPR #16-04**

By: Rob Bulyovsky  
1096 N. Center Rd. Suite 118  
Burton, MI 48509

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

For: Wholesale Vehicles

**ATTACHMENTS:**

- 16-04 (PDF)





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



### APPLICATION FOR ZONING REVIEW

DATE FILED: 1-21-16

FEE: \$40.00

RECEIPT NO: \_\_\_\_\_

CHECK NO: 8212

SPR #: 16-04

#### PLEASE PRINT

DATE: Jan 20, 2016

APPLICANTS NAME: Rob Bulyovsky

APPLICANTS ADDRESS: 1096 N. Center Rd Suite 118

APPLICANTS PHONE NO: 519-239-9519

PROPOSED NAME OF BUSINESS: Badb Holdings USA, Inc.

PROPOSED TYPE OF BUSINESS: Automotive Wholesale

SITE ADDRESS: 1096 N. Center

USE OF STRUCTURE: Commercial

SQ FOOTAGE OF PROPERTY: \_\_\_\_\_

SQ FOOTAGE OF STRUCTURE: 45,000

NUMBER OF EMPLOYEES/SEATS: 1

APPLICANTS SIGNATURE: [Signature]

\*\*\* ALSO ATTACH A FLOOR PLAN OF THE EXISTING AND PROPOSED BUSINESS.

Attachment: 16-04 (2115 : SPR #16-04)





**Burton Planning Commission**  
4303 S. Center Road  
Burton, MI 48519

**SCHEDULED**

**AGENDA ITEM (ID # 2116)**

Meeting: 02/09/16 05:00 PM  
Department: Department of Public Works  
Category: Administrative Site Plan Review  
Prepared By: Amber Abbey  
Department Head: Robert Slattery

**G.5**

DOC ID: 2116

## **SPR #16-05**

By: Ben Ashley  
3412 E. Bristol Rd.  
Burton, MI 48529

Re: 4232 S. Dort Hwy. Burton, MI 48529

For: Medical Marijuana Grow Facility

**ATTACHMENTS:**

- 16-05 (PDF)





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



APPLICATION FOR ADMINISTRATIVE SITE PLAN REVIEW

DATE FILED: 1-26-16

FEE: \$75.00

RECEIPT NO: \_\_\_\_\_

CHECK NO: \_\_\_\_\_

SPR #: 16-05

PLEASE PRINT

DATE: 1-19-2016

APPLICANTS NAME: Ben Ashley

APPLICANTS ADDRESS: 3412 E. Bristol Rd - Burton 48529

APPLICANTS PHONE NO: 810 625 1757

PROPOSED NAME OF BUSINESS: BLA Investments LLC

SITE ADDRESS: 64232 S. Dort Hwy - Burton - 48529

SUBDIVISION & LOT # OR PARCEL NUMBER: \_\_\_\_\_

TYPE: ☒ CHANGE OF OWNERSHIP ☐ CONSTRUCTION LESS THAN 2%

USE OF STRUCTURE: Commercial grow - medical marijuana

SQ FOOTAGE OF PROPERTY: \_\_\_\_\_

SQ FOOTAGE OF STRUCTURE: 4370. sq ft

NUMBER OF EMPLOYEES/SEATS: 1

APPLICANTS SIGNATURE: Ben Ashley

\*\*\* ALSO ATTACH A FLOOR PLAN OF THE EXISTING AND PROPOSED BUSINESS.

Attachment: 16-05 (2116 : SPR #16-05)