

MARSHALL CITY PLANNING COMMISSION
Wednesday, March 11, 2020
Council Chambers, 323 W. Michigan Ave., Marshall, MI

Call to Order

Roll Call

Approval of Agenda

Regular Meeting of the Planning Commission, March 11, 2020

Approval of Minutes

Minutes from January 8, 2020

Public Comments on Agenda Items

Public Hearings

None

New Business

1. Receive Site Plan #SP20.01 for Party Time Tents at 800 Industrial Road.
2. Review and consider approval for #SP20.01 for Party Time Tents at 800 Industrial Road.
3. Receive Site Plan #SP20.02 for Delta One Consulting at 420 W. Spruce.
4. Review and consider approval #SP20.02 for Delta One Consulting, 420 W. Spruce.

Old Business

None

Public Comment on Non-Agenda Items

Reports

Adjournment

**MINUTES
MARSHALL CITY PLANNING COMMISSION
WEDNESDAY, January 8, 2020**

In a regular session, Wednesday, January 8, 2020 at 7:00 p.m. at City Hall, Council Chambers, 323 West Michigan Avenue, Marshall, Michigan, the Marshall Planning Commission was called to order by Chair Davis.

ROLL CALL

Members Present: Chair Davis, Commissioners Burke Smith, Banfield, McNiff, Reed, and Schwartz

Members Absent: Commissioners Collins, Rodgers, Zuck and Council Liaison Metzger

Staff Present: Trisha Nelson, City Clerk & Planner

AGENDA

MOTION by McNiff, supported by Burke Smith to accept the agenda for the Wednesday, January 8, 2020 as submitted. On a voice vote; **MOTION CARRIED.**

MINUTES

MOTION by Banfield, supported by Burke Smith, to accept the minutes from the December 11, 2019 regular meeting. On a voice vote; **MOTION CARRIED.**

PUBLIC COMMENTS ON AGENDA ITEMS

None

PUBLIC HEARINGS

Chair Davis opened the public hearing on the Planning Commission Draft Capital Improvement Plan 2020-2026. Hearing no comment, the public hearing was closed.

Chair Davis opened the public hearing on the 2020-2024 Parks and Recreation Master Plan. Hearing no comment, the public hearing was closed.

NEW BUSINESS

MOTION by Banfield, supported by Burke Smith to recommend the Planning Commission Draft Capital Improvement Plan 2020-2026 to City Council. On a voice vote; **MOTION CARRIED.**

MOTION by McNiff, supported by Reed to recommend the 2020-2024 Parks and Recreation Master Plan to City Council.

Justin Miller, Superintendent of the Recreation Department, stated that he had been working on the Master Plan for around a year. In August surveys were sent out to 3,500 people over a variety of different methods and that over 400 were returned. The surveys, along with City Council's Vision and Goals, were then used to create the goals for the Master Plan.

Miller stated that goal one of the Master Plan was to make Marshall walkable and bikeable. To accomplish this goal, he would like to see a topographical map drawn up to see where there are sidewalks missing to make it safer for people to walk places. Goal two is maintain and enhance existing parks and facilities. This would include updating the Riverwalk and other parks in the city. Goal three is to use volunteer groups to improve community parks. Miller stated that the Ketchum Park Advisory Committee would be the model for this and that the idea is to get other park committees to follow their lead. Goal four is recreation program development. Miller stated that the survey stated that people would like to see more competitive youth sports and more adult and senior activities. He further stated that they are looking to partnerships with area pools for offering swim lessons and are creating more opportunities for outdoor recreation. Davis questioned if disc golf was included in the plans. Miller stated that there is currently a six-hole course at Ketchum Park. Burke Smith stated that there have been several Eagle Scouts who have looked into creating a disc golf course in town over the years, but there hasn't been the funding to support it.

Miller stated that goal five of the Master Plan is develop recreational opportunities and facilities that promote an active lifestyle. Miller further stated that 89% of those surveyed supported the creation of a recreation facility in town. This goal would also include the creation of a dog park, splash pad and pickleball courts if the appropriate places and funding can be found. Goal six is better usage of City Parks for programming and events. Miller stated that the Youngish Professionals are a good example of this with their concerts at the fountain in the summer, and that he is currently looking in to the possibility of doing a movie in the park as well.

Reed questioned how the budget compares to those of similarly sized municipalities. Miller stated that it is similar to others as their budgets are generally in the \$400,000-\$450,000 range. McNiff questioned what a recreation facility would look like. Miller stated that it would ideally have basketball courts, a track, and facilities for senior and children's programming among other things. Burke Smith stated that it sounds similar to the former Marshall Athletic Center, which never seemed to be used. Miller stated that the recreation department was not allowed to use it to run the majority of their programs by the building management. Banfield questioned the difference between parks and recreation. Miller stated that they are two separate departments within the city and that the recreation department is only responsible for the upkeep of the athletic fields as far as parks. Banfield questioned how long the township has been allowed to be part of the board. Miller stated that it has been that way his entire career. Banfield questioned if any money comes in from the township. Miller stated that they do not have a millage that supports the departments, but that they pay higher participation fees when they participate in recreation programs. Davis stated that the current board is made up of all City residents and that only the Brook's Nature Area Board has anyone from the township on it.

Banfield questioned if it was common practice to present a budget deficit for the department. Miller stated that he presents a balanced budget, but that occasionally it gets changed by the finance department. Nelson stated that if there is a budget deficit that there is a fund balance that council uses to cover that deficit. Miller stated that the department does not touch the general fund, and that any deficit is covered by a recreation fund. Davis thanked Miller for coming and for listening to the concerns of the commission.

OLD BUSINESS

Banfield questioned what was going on with the former Backroad's Saloon property. Nelson stated that there is a Joint Planning Commission meeting scheduled for January 14 to discuss the new application submitted by Stulberg for the zoning of the property. Nelson further stated that the new request will have it zoned I1 exclusively for Marihuana uses, otherwise it would revert back to a B4 zoning district. Banfield questioned how they are able to do that. Nelson stated that there is a state

statute that allows for conditional rezoning and that if it works well, a plan can be made to adopt it into the City Ordinance. Schwartz questioned what it would be zoned for. Nelson stated that it would allow any marihuana use that is allowed by ordinance in the I1 district. Nelson further stated that the zoning amendment is set to go before council in February.

PUBLIC COMMENTS NOT ON AGENDA

None

REPORTS

Trisha Nelson stated that she received an e-mail from Commissioner Collins stating that she is still wheelchair bound, but is hoping to regain her strength and see everyone soon.

Chair Davis stated that MAEDA lost Rebecca DeFinta and that they were currently looking into someone to replace her position as the tourism coordinator. He stated that the title of the position doesn't encompass the complete scope of work as in addition to tourism the position also coordinates several special events throughout the year, and that it will require a lot of organizational skills.

ADJOURN

Planning Commission adjourned at 7:30 p.m.

Submitted by,

Michelle Eubank

MARSHALL PLANNING COMMISSION
Staff report for March 11, 2020

To: Planning Commissioners
From: Trisha Nelson, Planning and Zoning Administrator
Subject: Party Time Tents, 800 Industrial Road

Case #: Site Plan #SP20.01
Zoning District: I-1 Research and Technical District
Adjacent Zoning: Surrounded by I-1 and I-2 to the South across Industrial Road.
Parcel: 53-002-508-00
Proposed Use: Commercial Use- 48 x 88 Warehouse

Staff received an initial site plan for the proposed Party Time Tents site at 800 Industrial Road. City staff reviewed the plan and met with the property owners. The building is proposed to be built on the north end of the lot and is surrounded by I-1 properties, however across Industrial Road is I-2. The owners wish to construct a 48 x 88 steel building to serve as warehouse space.



SITE PLAN REVIEW

The site plan has been submitted in a timely fashion and incorporated all of the revisions submitted by staff. The following is a summary of the final review:

- Lot coverage falls well within acceptable limits.
- The setbacks have been addressed. The lot is a corner lot, therefore having two front yards. The owner is seeking a dimensional variance from section 3.1.12 (D) to allow for a reduction of the front setback on Linden Street from 50 feet to 32 feet.
- The number of parking spaces required for this type of facility is 5 spaces + 1 per employee. There is ample room for parking. The owner is seeking a variance from section 5.14.8 (F) to allow for the parking area to remain gravel.
- No stamped landscape plan is required under the ordinance. They have included plantings along Industrial Road and Linden Street. The city has recently gone through and removed all of the trees along Linden Street for the relocation of a power line and wishes to not have trees replanted.

According to Section 6.3.12, Standards for Site Plan Approval, the Planning Commission shall consider the following standards during review:

- A. Adequacy of Information.**
- B. Site Appearance and Preservation.**
- C. Pedestrian Access.**
- D. Vehicular Circulation.**
- E. Parking and Loading.**
- F. Building Composition.**
- G. Screening.**
- H. Exterior Lighting.**
- I. Impact upon Public Services.**

RECOMMENDATION

The Planning Commission is being asked to receive and consider approving the site plan for Party Time Tents. If there is a motion for approval of this plan, it should be contingent upon approval of the Variances being sought by the Zoning Board of Appeals. The Zoning Board of Appeals is scheduled to meet on March 19, 2020.



CITY OF MARSHALL

SITE PLAN APPLICATION

City of Marshall
Application for Site Plan Review

Attn: Planning and Zoning Administrator
323 W Michigan Ave.
Marshall, Michigan, 49068

The following application is made to the City of Marshall Planning Commission in accordance with the provisions of the Planning and Zoning Department.

1. Applicant Information

Address of property being developed:

800 INDUSTRIAL ROAD MARSHALL, MI 49068

Owner of property being developed:

MARK LOYER AND JASON DEWINE

Owner's Address:

MARSHALL MICHIGAN 49068
City State Zip

Owner's Phone Number:

MARK- 269-317-4357 JASON 269-420-0143

2. Owner's Agent if working for property owner.

Name and Title:

Address:

City State Zip

Phone Number:

City of Marshall
Application for Site Plan Review

3. Brief description of proposed project

New CONSTRUCTION OF A 48x88
WAREHOUSE BUILDING ON AN VACANT
LOT

4. Property Information

Is this property located in a floodplain?

NO

Is this property located in a wetland?

NO

Land area in square feet?

26,956 SQ FT

Proposed building area in square feet?

4224

Proposed paved area in square feet?

Existing paved area in square feet?

NO

Lake or stream within 500 feet?

Any other agencies contacted for approvals?

If so, please list:

**City of Marshall
Application for Site Plan Review**

5. Authorization (Must be signed by the owner of the property)

I am the owner of record for this property for which this application is being filed and as such, I am familiar with the development being proposed to be carried out on my property.

I hereby, give permission for this application to be filed with the full understanding that certain restriction may be placed on the property relative to the approval of the proposed work.

I further certify that under penalties of perjury, I am to sign this application.

Name (Please Print) MARK LOYER

Title: Owner Date: 2/19/2020

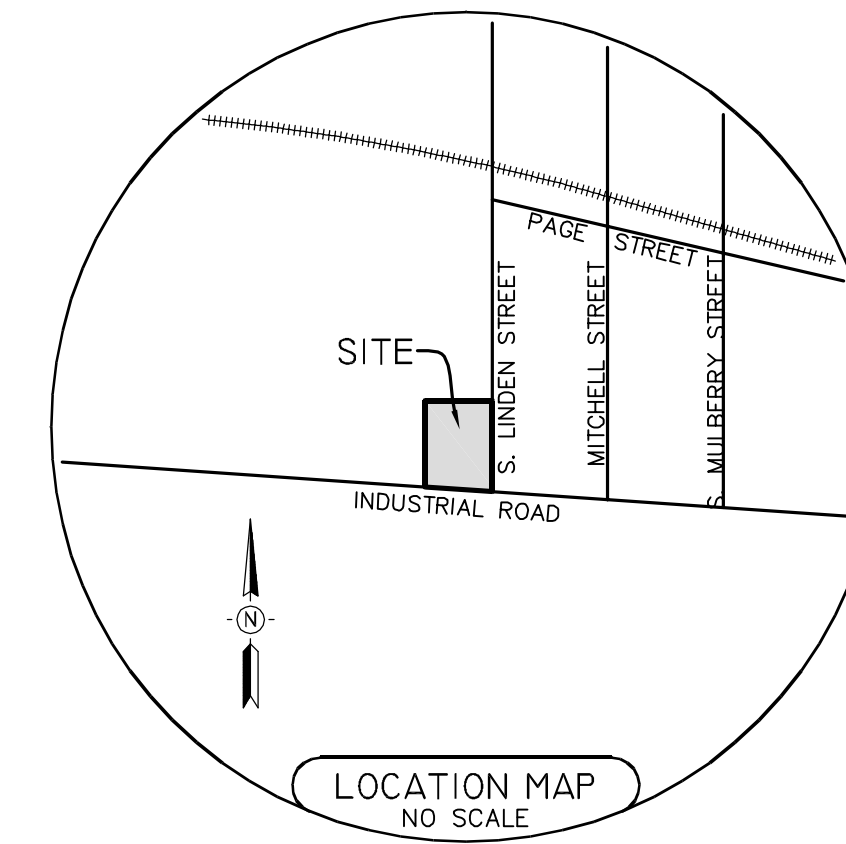
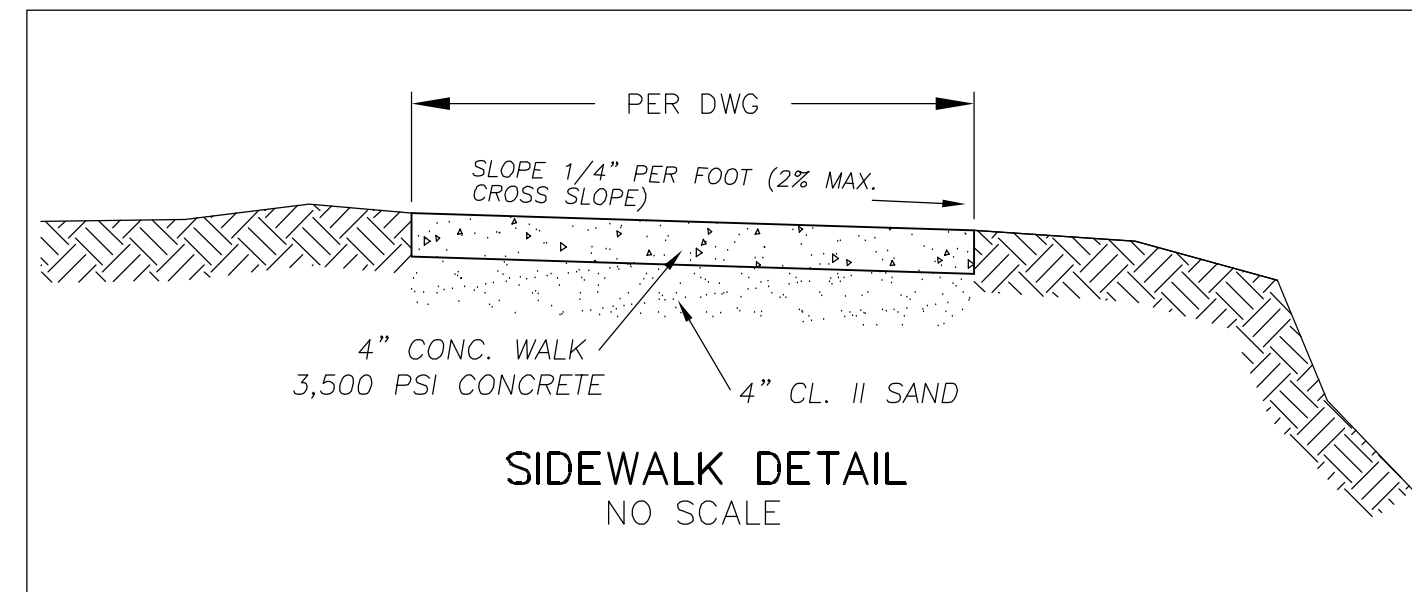
Signature: 

Note: If there are multiple owners of the property or you are representing a group, corporation, or other organization attach a copy of a certified letter authorizing you to sign this application for the proposed development.

LAND USE AND DEVELOPMENT FEES	
PLATS	
Up to 30 Lots	\$450.00
Over 30 Lots	\$650.00
SITE CONDOMINIUMS	
Up to 30 Lots	\$350.00
Over 30 Lots	\$550.00
SITE PLANS	
Commercial and	\$250.00 < 30
Institutional	acres
Special Land Use	\$250.00
Planned Unit Development	\$350.00
Amend a PUD	\$150.00
Multiple Family Developments (Apartment &	\$50 plus \$5.00 per unit or
Additions to existing Site Plans if Planning Commission Review is	lot
required	\$100.00
Extending Site Plan with Planning Commission	\$150.00

SITE PLAN

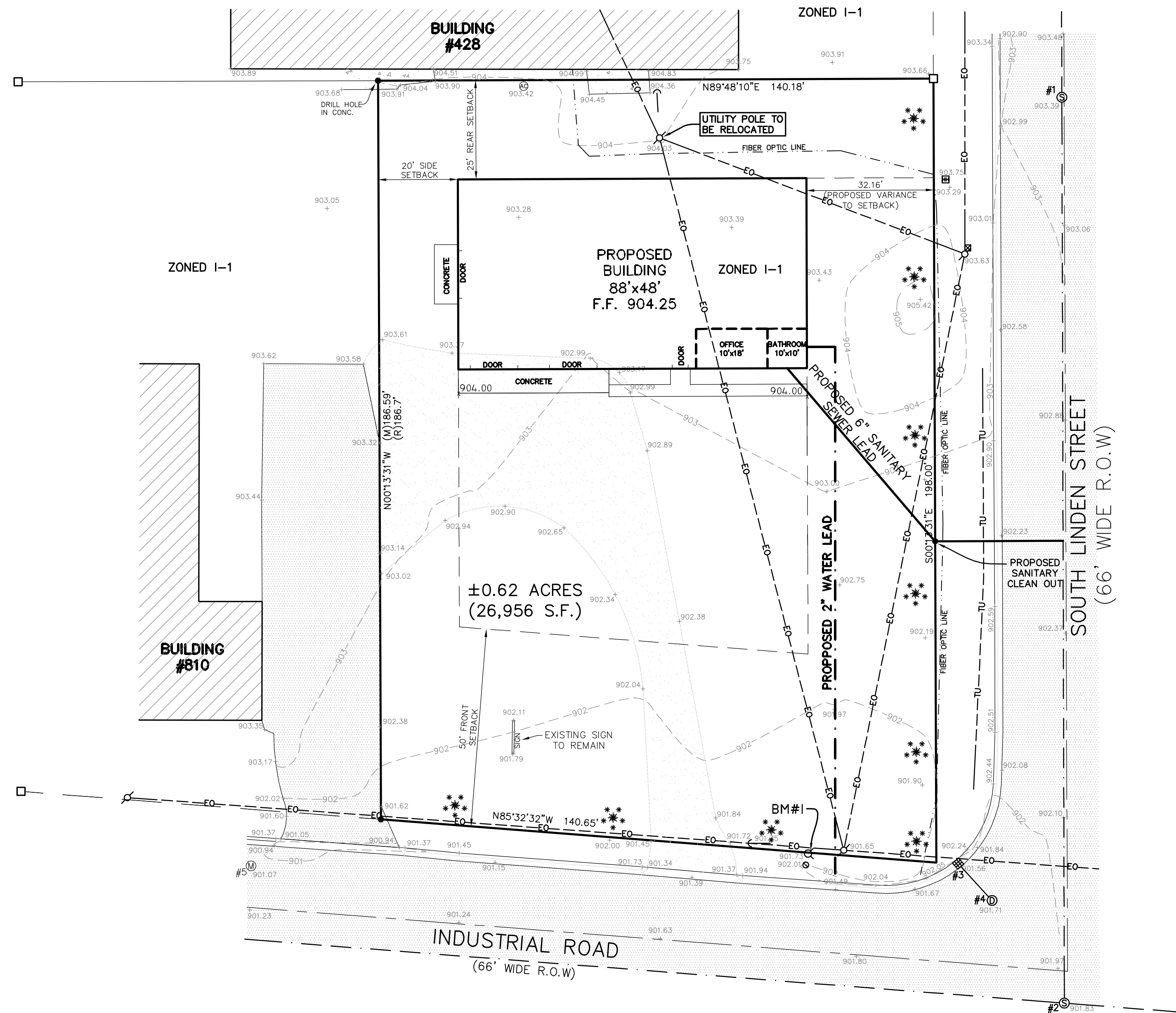
FOR: PARTY TIME TENTS & MORE, INC.
800 INDUSTRIAL ROAD
MARSHALL, MI 49068



LEGAL DESCRIPTION (as provided, tax record interpreted):
Marshall City, part of Section 26, T2S, R6W, beginning Northwest Corner South Linden Street and Industrial Road, Westerly along North line Industrial Road 140.65 feet, North 186.7 feet, East to Linden Street, South to beginning.

SEWER INVENTORIES

- SANITARY MANHOLE #1**
RIM - 903.39
12" NORTH 896.34
12" SOUTH 896.34
- SANITARY MANHOLE #2**
RIM - 901.83
12" NORTH 893.08
12" EAST 892.58
12" WEST 892.58
- CATCH BASIN #3**
INLET - 901.56
FULL OF WATER
NO INLET OR OUTLET
PIPES OBSERVED
TOP WATER 897.76
- STORM MANHOLE #4**
RIM - 901.71
12" NE 897.60
- MANHOLE (UNSPECIFIED) #5**
RIM - 901.07



LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- 903.39 = EXISTING SPOT ELEVATION
- = EXISTING CONTOUR ELEVATION
- = SANITARY SEWER
- = STORM SEWER
- = WATER LINE
- = GAS LINE
- EO = OVERHEAD WIRES
- = FIBER OPTIC LINE
- TU = UNDERGROUND TELEPHONE
- ☼ = DECIDUOUS TREE
- ⊙ = SANITARY MANHOLE
- ⊕ = DRAINAGE MANHOLE
- ⊙ = MANHOLE (UNSPECIFIED)
- ⊕ = CATCHBASIN
- ⊕ = FIRE HYDRANT
- ⊕ = VALVE
- ⊕ = UTILITY POLE
- ⊕ = GUY WIRE
- ⊕ = UTILITY PEDESTAL
- ⊕ = SIGN
- ⊕ = POST
- ⊕ = AIR CONDITIONING UNIT
- ⊕ = HANDHOLE

- 903.55 = PROPOSED ELEVATION
- ☼ = PROPOSED HYDRANGEA SURROUNDED WITH DAYLILIES

SITE DATA

PROPOSED WAREHOUSE
TOTAL SITE AREA = 0.62 ACRES (26,956 S.F.)
ZONED I-1 (RESEARCH AND TECHNICAL DISTRICT)

BUILDING SETBACKS

FRONT - N/A
SIDES - 20 FEET
REAR - 25 FEET

BUILDING/UNIT DATA

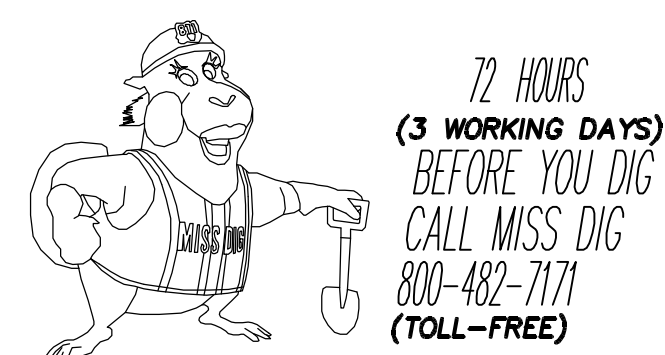
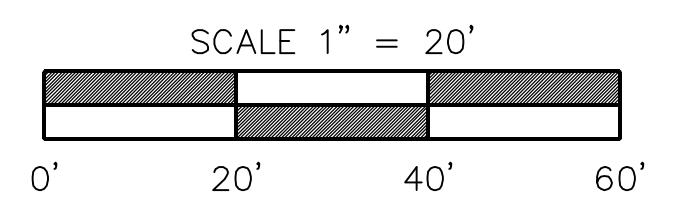
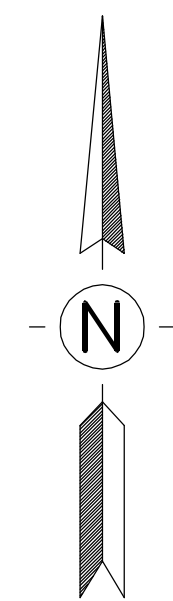
PROPOSED BUILDING AREA = 4,224 S.F.
PROPOSED WAREHOUSE AREA = 3,944 S.F.
PROPOSED OFFICE AREA = 180 S.F.
PROPOSED BATHROOM AREA = 100 S.F.
BUILDING HEIGHT = 18 FT.

PARKING

REQUIRED:
WAREHOUSE 5 SPACES + 1 PER EMPLOYEE
TOTAL REQUIRED = 6 SPACES (INCL. 1 HCP)
TOTAL PROVIDED = 6 SPACES (9'x20')

BENCHMARKS

BM#1
NE BOLT ON HYDANT
ELEVATION=903.77 (NAVD88)



MICHAEL A. GROAT
PROFESSIONAL SURVEYOR NO. 39079

REVISIONS	COMMENTS	KEBS, INC. ENGINEERING AND LAND SURVEYING	
2/18/20	ORIGINAL	13432 PRESTON DRIVE, MARSHALL, MI 49068 PH. 269-781-9800 FAX. 269-781-9805	
2/25/20	REVISE PARKING	2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047 WWW.KEBS.COM	
		DRAWN BY	SECTION 26, T2S, R6W
		FIELD WORK BY	JOB NUMBER:
		SHEET 1 OF 1	96134

MARSHALL PLANNING COMMISSION

Staff report for March 11, 2020

To: Planning Commissioners
From: Trisha Nelson, Planning and Zoning Administrator
Subject: Delta-One, 420 W. Spruce Street

Case #: Site Plan #SP20.02
Zoning District: I-1 Research and Technical District
Adjacent Zoning: Surrounded by I-1 and B-4 on the East (Marshall Lumber)
Parcel: 53-000-709-01
Proposed Use: Marihuana Grow Facility

Staff received an initial site plan for the Delta-One site at 420 W Spruce Street. City staff reviewed the plan with the owners on February 3, 2020. Suggested revisions were given to the owners and have been made as requested. A few of the suggested revisions included:

- The parking surface requires pavement
- A letter requesting the vacating of Sycamore Street and Spruce Street
- Provide additional utility information to the City

The current building is being utilized on the site and will be renovated to required standards. The size of the building footprint is 9,994 sq. ft. The property is zoned I-1, which permits the proposed use of a Marihuana grow facility in the City.



SITE PLAN REVIEW

The site plan has been submitted in a timely fashion and incorporated all of the revisions submitted by staff. The following is a summary of the final review:

- Setbacks: no proposed changes to existing building.
- Adequate Parking is provided.
- A request has been submitted for the vacating of Sycamore Street and Spruce Street. City Staff is in support of this to clean up the area to allow more of a "campus" type setting when expanding in the future. Delta-One has submitted a conceptual "overall site plan in your packet. (Site Plan Page PSP-2.1)

According to Section 6.3.12, Standards for Site Plan Approval, the Planning Commission shall consider the following standards during review:

- A. Adequacy of Information.**
- B. Site Appearance and Preservation.**
- C. Pedestrian Access.**
- D. Vehicular Circulation.**
- E. Parking and Loading.**
- F. Building Composition.**
- G. Screening.**
- H. Exterior Lighting.**
- I. Impact upon Public Services.**

RECOMMENDATION

The Planning Commission is being asked to receive and consider approving the site plan #SP20.02 for 420 W. Spruce. If there is a motion for approval of this plan, it should be contingent upon approval of the Vacating of Sycamore Street and W. Spruce Street. City Council will be receiving the request for Public Hearing on March 16, 2020 and hold the public on April 20, 2020.



CITY OF MARSHALL

SITE PLAN APPLICATION

City of Marshall
Application for Site Plan Review

Attn: Planning and Zoning Administrator
323 W Michigan Ave.
Marshall, Michigan, 49068

The following application is made to the City of Marshall Planning Commission in accordance with the provisions of the Planning and Zoning Department.

1. Applicant Information

Address of property being developed:

420 W. SPRUCE, MARSHALL MI

Owner of property being developed:

DELTA ONE CONSULTING LLC.

Owner's Address:

150 W. 2ND ST. #250 ROYAL OAK MI 48067
City State Zip

Owner's Phone Number:

(248) 736 9866

2. Owner's Agent if working for property owner.

Name and Title:

Doug Stewart (Member)

Address:

150 W. 2ND ST. #250 ROYAL OAK MI 48067
City State Zip

Phone Number:

(248) 736 9866

**City of Marshall
Application for Site Plan Review**

3. Brief description of proposed project

Developing the intention of the
existing building. MAKE ALL REPAIRS
TO BUILDING - MAKE ALL REQUIRED CHANGES/ADDITIONS TO
CONSTRUCT CANNABIS GROW FACILITY
WITH PARKING LOT AREA.

4. Property Information

Is this property located in a floodplain?

NO

Is this property located in a wetland?

NO

Land area in square feet?

0.98 acres / 42,689 SF

Proposed building area in square feet?

9,994 SF

Proposed paved area in square feet?

4,727 SF

Existing paved area in square feet?

N/A

Lake or stream within 500 feet?

NO

Any other agencies contacted for approvals?

YES

If so, please list:

X MRA - LARA - MEDICAL Marijuana Agency.

**City of Marshall
Application for Site Plan Review**

5. Authorization (Must be signed by the owner of the property)

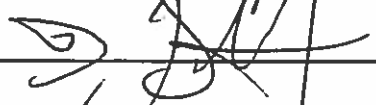
I am the owner of record for this property for which this application is being filed and as such, I am familiar with the development being proposed to be carried out on my property.

I hereby, give permission for this application to be filed with the full understanding that certain restriction may be placed on the property relative to the approval of the proposed work.

I further certify that under penalties of perjury, I am to sign this application.

Name (Please Print) Doug Stewart

Title: Member / Project Manager Date: 1/27/2020

Signature: 

Note: If there are multiple owners of the property or you are representing a group, corporation, or other organization attach a copy of a certified letter authorizing you to sign this application for the proposed development.

LAND USE AND DEVELOPMENT FEES	
PLATS	
Up to 30 Lots	\$450.00
Over 30 Lots	\$650.00
SITE CONDOMINIUMS	
Up to 30 Lots	\$350.00
Over 30 Lots	\$550.00
SITE PLANS	
Commercial and Institutional	\$250.00 < 30 acres
Special Land Use	\$250.00
Planned Unit Development	\$350.00
Amend a PUD	\$150.00
Multiple Family Developments (Apartment & Additions to existing Site Plans if Planning Commission Review is required	\$50 plus \$5.00 per unit or lot \$100.00
Extending Site Plan with Planning Commission	\$150.00

DELTA ONE CONSULTING

150 W. 2nd Street #250
Royal Oak, Michigan 48067
TELEPHONE: (248) 736-9866
FACSIMILE: (248) 353-2514

MARCH 4, 2020.

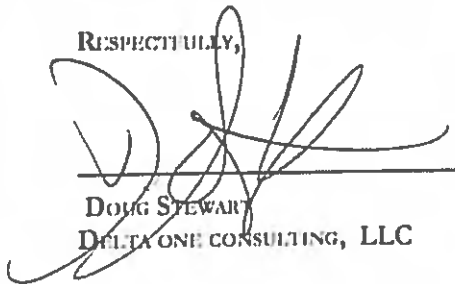
REFERENCE TO: 420 W SPRUCE, MARSHALL MICHIGAN

TO THE CITY OF MARSHALL,

WE AT DELTA ONE CONSULTING, LLC. ARE REQUESTING THE CITY VACATE SYCAMORE STREET AND W. SPRUCE ST. IN THE CITY OF MARSHALL. IN ORDER TO DEVELOP OUR PROJECT AT 420 WEST SPRUCE. WE WILL ASSUME ALL RESPONSIBILITY OF THE AREA REQUESTED, TO DEVELOP AND MAINTAIN.

THIS WILL ALLOW FOR REQUIRED PARKING, FENCED IN SECURITY, LANDSCAPING AND LIGHTING AS REQUESTED BY THE CITY, AS WELL AS ADDITIONAL FUTURE DEVELOPMENT.

RESPECTFULLY,



3/4/2020

DOUG STEWART
DELTA ONE CONSULTING, LLC

PROPOSED SITE PLAN DRAWINGS

DELTA ONE - 420 SPRUCE - MARSHALL

420 SPRUCE STREET
MARSHALL, MICHIGAN

LEGAL DESCRIPTION (AS SURVEYED)

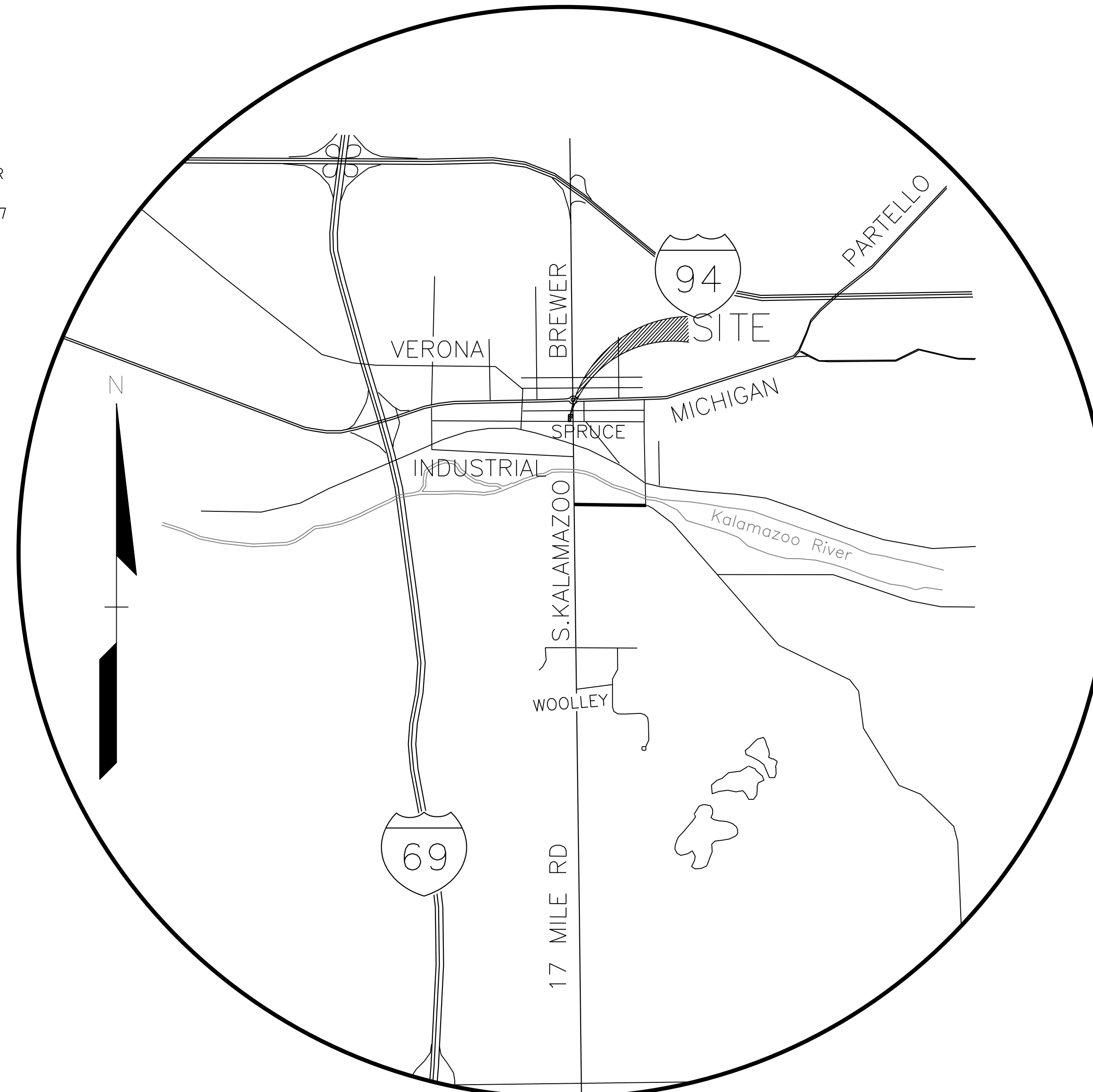
DESCRIPTION (TAX # 53-000-709-01):

THE SOUTH 68 FEET OF LOT 9, BLOCK 33, OF THE VILLAGE OF MARSHALL, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 3 OF PLATS, ON PAGE 11, IN THE OFFICE OF THE REGISTER OF DEEDS FOR CALHOUN COUNTY, MICHIGAN (PART OF NE 1/4, SECTION 26, T2S, R6W)

ALSO: DESCRIPTION (QUIT CLAIM DEED REC. LIBER 2106, PAGE 602) (TAX #53-002-506-00):

SITUATED IN THE CITY OF MARSHALL, COUNTY OF CALHOUN, AND STATE OF MICHIGAN:

COMMENCING AT A POINT WHERE THE EAST LINE OF SYCAMORE STREET EXTENDED SOUTH INTERSECTS THE SOUTH LINE OF SPRUCE STREET, BEING 4 RODS SOUTH OF THE SOUTHWEST CORNER OF LOT NUMBER 9 IN BLOCK 33; THENCE EAST ON THE SOUTH LINE OF SPRUCE STREET 8 RODS; THENCE SOUTH 157.4 FEET TO THE MICHIGAN CENTRAL RAILROAD RIGHT OF WAY; THENCE WEST 82.67 FEET; THENCE NORTH 30.3 FEET; THENCE WEST 49.33 FEET TO THE POINT DIRECTLY SOUTH OF THE PLACE OF BEGINNING; THENCE NORTH 127.1 FEET TO THE PLACE OF BEGINNING. ALL IN THE CITY OF MARSHALL, COUNTY OF CALHOUN AND STATE OF MICHIGAN. (PART OF SE 1/4, SECTION 26, T2S, R6W)



LOCATION MAP
SCALE: 1"=5000'

INDEX OF DRAWINGS:

- PROPOSED SITE PLAN**
- PSP-0.0 COVER SHEET
 - PSP-1.0 TOPOGRAPHIC + BOUNDARY SURVEY
 - PSP-2.0 PRELIMINARY SITE PLAN
 - PSP-2.1 OVERALL SITE PLAN
 - PSP-3.0 PRELIMINARY GRADING PLAN
 - PSP-4.0 PRELIMINARY UTILITY PLAN
 - PSP-4.1 NOTES + DETAILS
-
- 1 OF 1 PHOTOMETRIC SITE PLAN
 - LS-1 LANDSCAPE PLAN
-
- A1 GREENHOUSE FLOOR PLANS AND DETAIL
 - A2 GREENHOUSE ELEVATIONS
 - A3 EXISTING BUILDING FLOOR PLAN

LANDSCAPE ARCHITECT:

FELINO A. PASCUAL + ASSOCIATES, RLA
24333 ORCHARD LAKE ROAD, STE G
FARMINGTON HILLS, MI 48336
PHONE: (248) 557-5588
CONTACT: FELINO PASCUAL (JOEL), RLA

ARCHITECT:

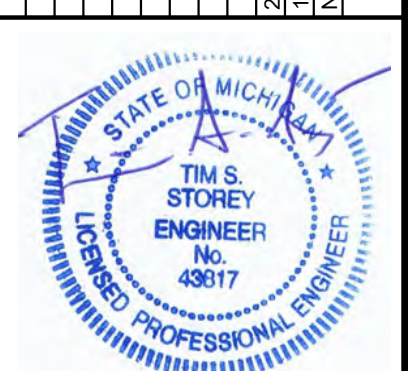
ZACK OSTROFF & ASSOCIATES
29114 WILDBROOK
SOUTHFIELD, MI 48034
PHONE: (248) 352-0461
CONTACT: GERALD GRUBEY, RA

ENGINEER:

STOREY ENGINEERING GROUP, LLC
48264 MANCHESTER
MACOMB, MI 48044
PHONE: (586) 216-1043
CONTACT: TIM S. STOREY, PE

DEVELOPER:

DELTA ONE
150 W 2ND STREET, SUITE 250
ROYAL OAK, MI 48067
PHONE: (248) 793-9866
CONTACT: DOUG STEWART



CAUTION!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OF THE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. INCLUDING THE PROTECTION AND PROSECUTION OF THE PROJECT. THIS REQUIREMENT SHALL BE MADE TO APPLY TO ALL CONTRACTORS AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL PERSONNEL FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL



STOREY ENGINEERING GROUP, LLC
48264 MANCHESTER
MACOMB, MI 48044
(586) 216-1043
www.storeyengineering.com

<p>DELTA ONE 150 W 2ND STREET, SUITE 250 ROYAL OAK, MI 48067</p>	<p>COVER SHEET 420 W SPRUCE - DELTA ONE 420 W SPRUCE CITY OF MARSHALL, CALHOUN COUNTY, MI</p>
DES. TSS	DN. TSS
SUR. CARR	P.M.

ORIGINAL ISSUE DATE:
11/16/2019

Project No. 2019-013

DRAWING NUMBER:
PSP-0.0

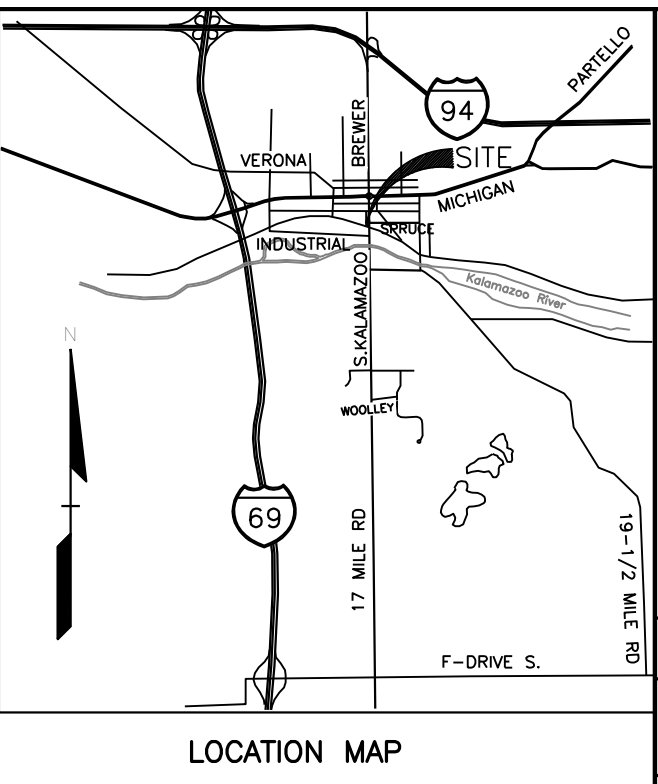
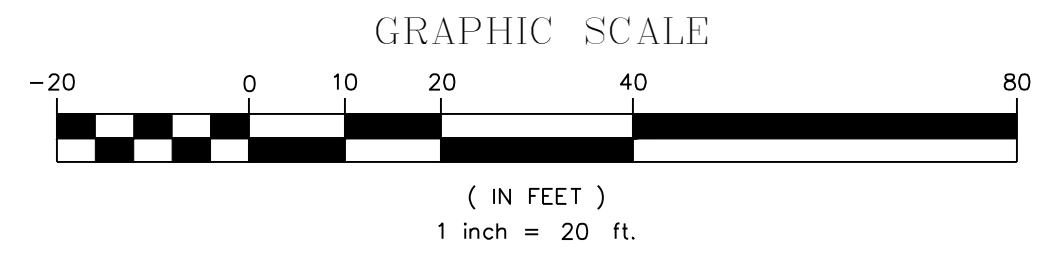
NO.	DATE	BY	REVISIONS
2	3-2-20	TSS	REVISED PER CITY COMMENTS
1		TSS	REVISED PER CITY COMMENTS

BENCHMARKS

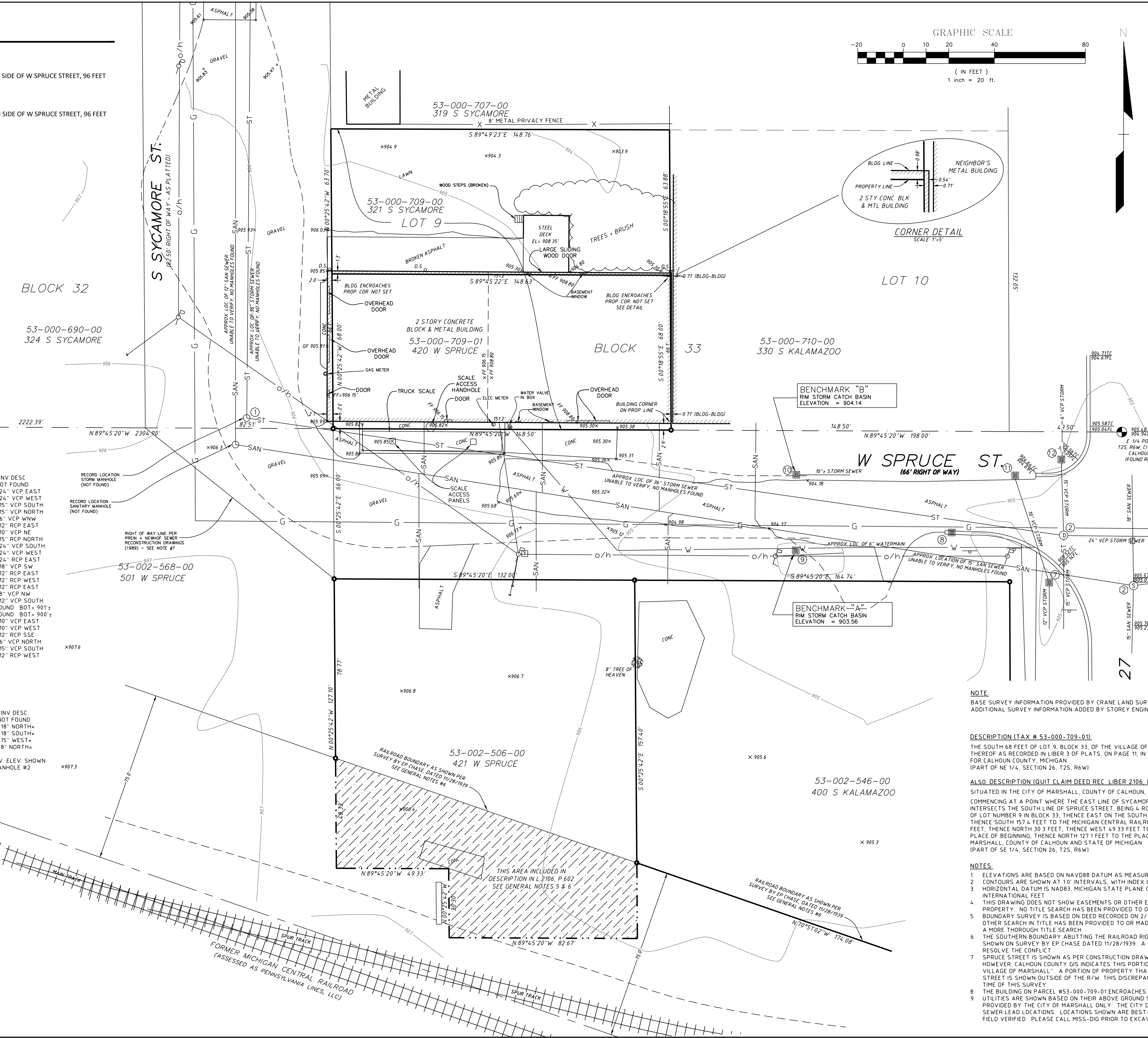
DATUM: NAVD88

BM A:
RIM OF STORM CATCH BASIN SOUTH SIDE OF W SPRUCE STREET, 96 FEET WEST OF S KALAMAZOO STREET
ELEV = 903.56

BM B:
RIM OF STORM CATCH BASIN NORTH SIDE OF W SPRUCE STREET, 96 FEET WEST OF S KALAMAZOO STREET
ELEV = 904.14



NO.	DATE	BY	REVISIONS
1	11/16/2019	TSS	ISSUED PER CITY COMMENTS
2	12/20/20	TSS	REVISED PER CITY COMMENTS
3	01/21/21	TSS	REVISED PER CITY COMMENTS



- LEGEND**
- = SET IRON STAKE
 - = FOUND IRON STAKE
 - △ = SET MAG NAIL
 - = SET WOOD STAKE
 - = CONCRETE MONUMENT
 - = MEASURED DATA
 - R = RECORDED DATA
 - F = FIRE HYDRANT
 - W = WATER VALVE
 - F = FENCE
 - = NOT TO SCALE
 - = WATER MAIN
 - = OVERHEAD ELECTRIC LINE
 - - - = UNDERGROUND ELECTRIC LINE
 - - - = OVERHEAD COMMUNICATIONS LINE
 - - - = STORM SEWER
 - - - = SANITARY SEWER
- = DECIDUOUS TREE
 - = TELEPHONE PESTAL
 - = CATCH BASIN/CURB INLET
 - = UTILITY POLE W/LIGHT
 - = UTILITY POLE

STORM SEWER SCHEDULE

ID	RIM EL	TYPE	INV EL	INV DESC
1	905.10	STMH	897.00	24" VCP EAST
2	905.10	STMH	897.00	24" VCP WEST
3	905.06	STMH	898.85	15" VCP SOUTH
4	905.06	STMH	898.95	15" VCP NORTH
5	905.06	STMH	900.35	6" VCP WNW
6	905.06	STMH	900.11	12" RCP EAST
7	905.06	STMH	900.11	10" VCP NE
8	905.06	STMH	899.31	15" RCP NORTH
9	905.06	STMH	897.26	24" VCP SOUTH
10	904.81	INLET	901.61	24" RCP WEST
11	904.81	INLET	901.61	24" RCP EAST
12	904.81	INLET	901.65	18" VCP SW
13	904.39	INLET	906.39	12" RCP EAST
14	904.32	INLET	906.32	12" RCP WEST
15	904.65	CB	900.85	8" VCP NW
16	904.65	CB	900.85	12" VCP SOUTH
17	904.72	CB	NO PIPES FOUND	BOT = 901'±
18	903.56	CB	NO PIPES FOUND	BOT = 900'±
19	904.14	CB	899.34	10" VCP EAST
20	904.59	CB	901.46	10" VCP WEST
21	904.46	CB	901.46	12" RCP SSE
22	904.33	CB	902.33	6" VCP NORTH
23	904.89	INLET	899.13	15" VCP SOUTH
24	904.89	INLET	901.29	12" RCP WEST

SANITARY SEWER SCHEDULE

ID	RIM EL	TYPE	INV EL	INV DESC
1	905.21	SMH	893.34	18" NORTH
2	905.21	SMH	893.34	18" SOUTH
3	905.21	SMH	893.29	15" WEST
4	905.21	SMH	896.84	8" NORTH

* NOTE: RIM ELEV. MEASURED, BUT INV. ELEV. SHOWN PER PLANS, DID NOT OPEN MANHOLE #2

NOTE
BASE SURVEY INFORMATION PROVIDED BY CRANE LAND SURVEYING, PC (19-16-19)
ADDITIONAL SURVEY INFORMATION ADDED BY STOREY ENGINEERING GROUP (10-6-19)

DESCRIPTION (TAX # 53-000-709-01)
THE SOUTH 68 FEET OF LOT 9, BLOCK 33, OF THE VILLAGE OF MARSHALL, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 3 OF PLATS, ON PAGE 11, IN THE OFFICE OF THE REGISTER OF DEEDS FOR CALHOUN COUNTY, MICHIGAN. (PART OF NE 1/4, SECTION 26, T2S, R6W)

ALSO DESCRIPTION (QUIT CLAIM DEED REC. LIBER 2106, PAGE 602) (TAX #53-002-506-00)
SITUATED IN THE CITY OF MARSHALL, COUNTY OF CALHOUN, AND STATE OF MICHIGAN, COMMENCING AT A POINT WHERE THE EAST LINE OF SYCAMORE STREET EXTENDED SOUTH INTERSECTS THE SOUTH LINE OF SPRUCE STREET, BEING 4 RODS SOUTH OF THE SOUTHWEST CORNER OF LOT NUMBER 9 IN BLOCK 33, THENCE EAST ON THE SOUTH LINE OF SPRUCE STREET 8 RODS, THENCE SOUTH 157.4 FEET TO THE MICHIGAN CENTRAL RAILROAD RIGHT OF WAY, THENCE WEST 82.67 FEET, THENCE NORTH 30.3 FEET, THENCE WEST 49.33 FEET TO THE POINT DIRECTLY SOUTH OF THE PLACE OF BEGINNING, THENCE NORTH 127.1 FEET TO THE PLACE OF BEGINNING. ALL IN THE CITY OF MARSHALL, COUNTY OF CALHOUN AND STATE OF MICHIGAN. (PART OF SE 1/4, SECTION 26, T2S, R6W)

- NOTES**
- ELEVATIONS ARE BASED ON NAVD88 DATUM AS MEASURED BY RTK GPS SURVEY USING MCORS.
 - CONTOURS ARE SHOWN AT 10' INTERVALS, WITH INDEX CONTOURS EVERY 5'.
 - HORIZONTAL DATUM IS NAD83. MICHIGAN STATE PLANE COORDINATES, SOUTH ZONE, INTERNATIONAL FEET.
 - THIS DRAWING DOES NOT SHOW EASEMENTS OR OTHER ENCUMBRANCES THAT MAY AFFECT THE PROPERTY. NO TITLE SEARCH HAS BEEN PROVIDED TO OR PERFORMED BY CLS.
 - BOUNDARY SURVEY IS BASED ON DEED RECORDED ON 2/12/1999 IN LIBER 2106, PAGE 602. NO OTHER SEARCH IN TITLE HAS BEEN PROVIDED TO OR MADE BY CLS. THIS SURVEY IS SUBJECT TO A MORE THOROUGH TITLE SEARCH.
 - THE SOUTHERN BOUNDARY ABUTTING THE RAILROAD RIGHT-OF-WAY CONFLICTS WITH THAT SHOWN ON SURVEY BY EP CHASE DATED 11/28/1939. A TITLE SEARCH WOULD BE NEEDED TO RESOLVE THE CONFLICT.
 - SPRUCE STREET IS SHOWN AS PER CONSTRUCTION DRAWING FROM PREIN + NEWHOF, 1989. HOWEVER, CALHOUN COUNTY GIS INDICATES THIS PORTION IS NOT INCLUDED IN THE "PLAT" OF THE VILLAGE OF MARSHALL. A PORTION OF PROPERTY THAT APPEARS TO BE USED AS SPRUCE STREET IS SHOWN OUTSIDE OF THE R/W. THIS DISCREPANCY HAS NOT BEEN RESOLVED AT THE TIME OF THIS SURVEY.
 - THE BUILDING ON PARCEL #53-000-709-01 ENCRACHES AS SHOWN.
 - UTILITIES ARE SHOWN BASED ON THEIR ABOVE GROUND SURFACE IMPROVEMENTS AND MAPS PROVIDED BY THE CITY OF MARSHALL ONLY. THE CITY DOES NOT HAVE A GOOD RECORD OF THE SEWER LEAD LOCATIONS. LOCATIONS SHOWN ARE BEST-GUESS LOCATIONS AND NEED TO BE FIELD VERIFIED. PLEASE CALL MISS-DIG PRIOR TO EXCAVATION.

3 FULL WORKING DAYS BEFORE YOU DIG CALL

811
Know what's below
Call before you dig
MISS-DIG System, Inc.
1-800-482-7171 www.missdig.net



STOREY ENGINEERING GROUP, LLC
48264 MANCHESTER MACOMB, MI 48044
(586) 216-1043
www.storeyengineering.com

DELTA ONE
150 W 2ND STREET, SUITE 250
ROYAL OAK, MI 48067

OVERALL BOUNDARY + TOPOGRAPHIC SURVEY
420 W SPRUCE - DELTA ONE
420 W SPRUCE
T2S, R6W, EAST 1/2 SECTION 26, CITY OF MARSHALL, CALHOUN COUNTY, MI

DES.	TSS	DN.	TSS	SUR.	CARR.	P.M.	TSS

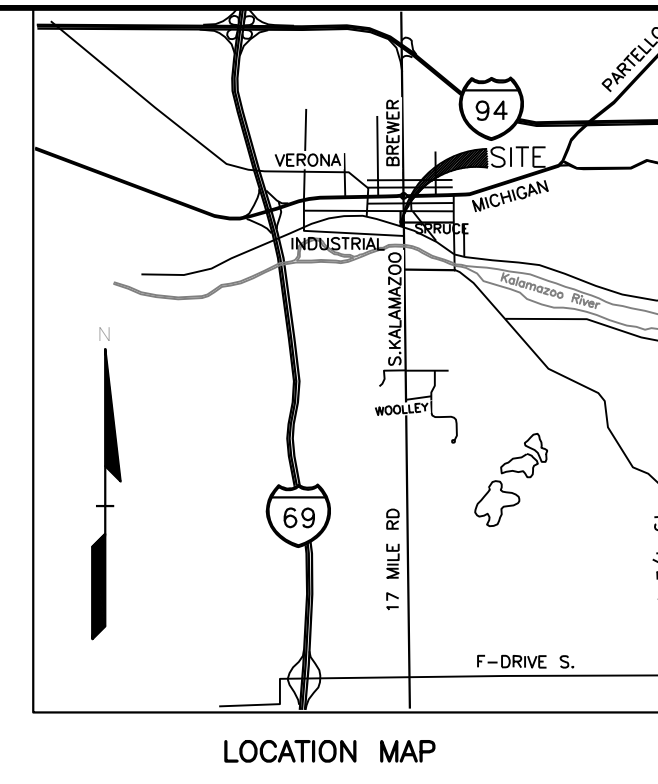
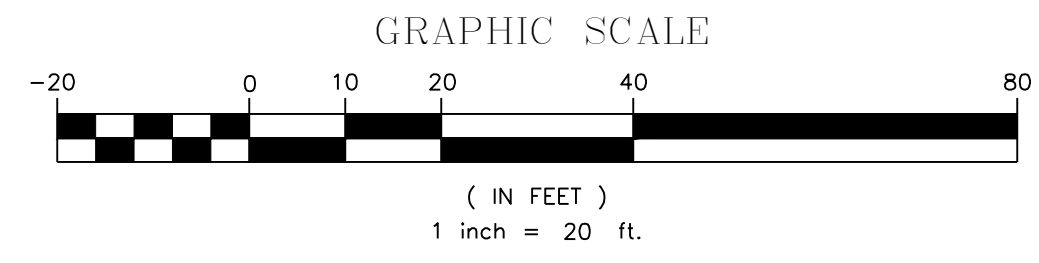
ORIGINAL ISSUE DATE: 11/16/2019
Project No. 2019-013
SCALE: 1" = 20'
DRAWING NUMBER:
PSP-1.0

BENCHMARKS

DATUM: NAVD88

BM A:
RIM OF STORM CATCH BASIN SOUTH SIDE OF W SPRUCE STREET, 96 FEET WEST OF S KALAMAZOO STREET
ELEV = 903.56

BM B:
RIM OF STORM CATCH BASIN NORTH SIDE OF W SPRUCE STREET, 96 FEET WEST OF S KALAMAZOO STREET
ELEV = 904.14



SIGN LEGEND:
'BARRIER FREE PARKING' SIGN (1 EA.) [1]
'NO PARKING FIRE LANE' SIGN (4 EA.) [2]

REFER TO SHEET PSP-4.1 FOR SIGN DETAILS. ALL TRAFFIC SIGNAGE SHALL COMPLY WITH THE CURRENT MUTCD STANDARDS.

SIDEWALK RAMP LEGEND:
SIDEWALK RAMP 'TYPE A' [A]

REFER TO SHEET PSP-4.1 FOR SIDEWALK RAMP DETAILS.

LEGEND
○ = SET IRON STAKE
● = FOUND IRON STAKE
△ = SET MAG NAIL
□ = SET WOOD STAKE
■ = CONCRETE MONUMENT
M = MEASURED DATA
R = RECORDED DATA
F = FIRE HYDRANT
W = WATER VALVE
- - - = FENCE
- - - = NOT TO SCALE
- - - = WATER MAIN
- - - = OVERHEAD ELECTRIC LINE
- - - = UNDERGROUND ELECTRIC LINE
- - - = OVERHEAD COMMUNICATIONS LINE
- - - = STORM SEWER
- - - = SANITARY SEWER
☎ = TELEPHONE PEDESTAL
☎ = CATCH BASIN/CURB INLET
☎ = UTILITY POLE W/LIGHT
☎ = UTILITY POLE



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

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION. THE PROJECT CONTRACTOR SHALL BE RESPONSIBLE AND PROVE THAT THIS REQUIREMENT SHALL BE MAINTAINED THROUGHOUT THE PROJECT. CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES OR ALLEGEDLY IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL

811
Know what's below
Call before you dig
Miss Dig System, Inc.
1-800-482-7171 www.missdig.net



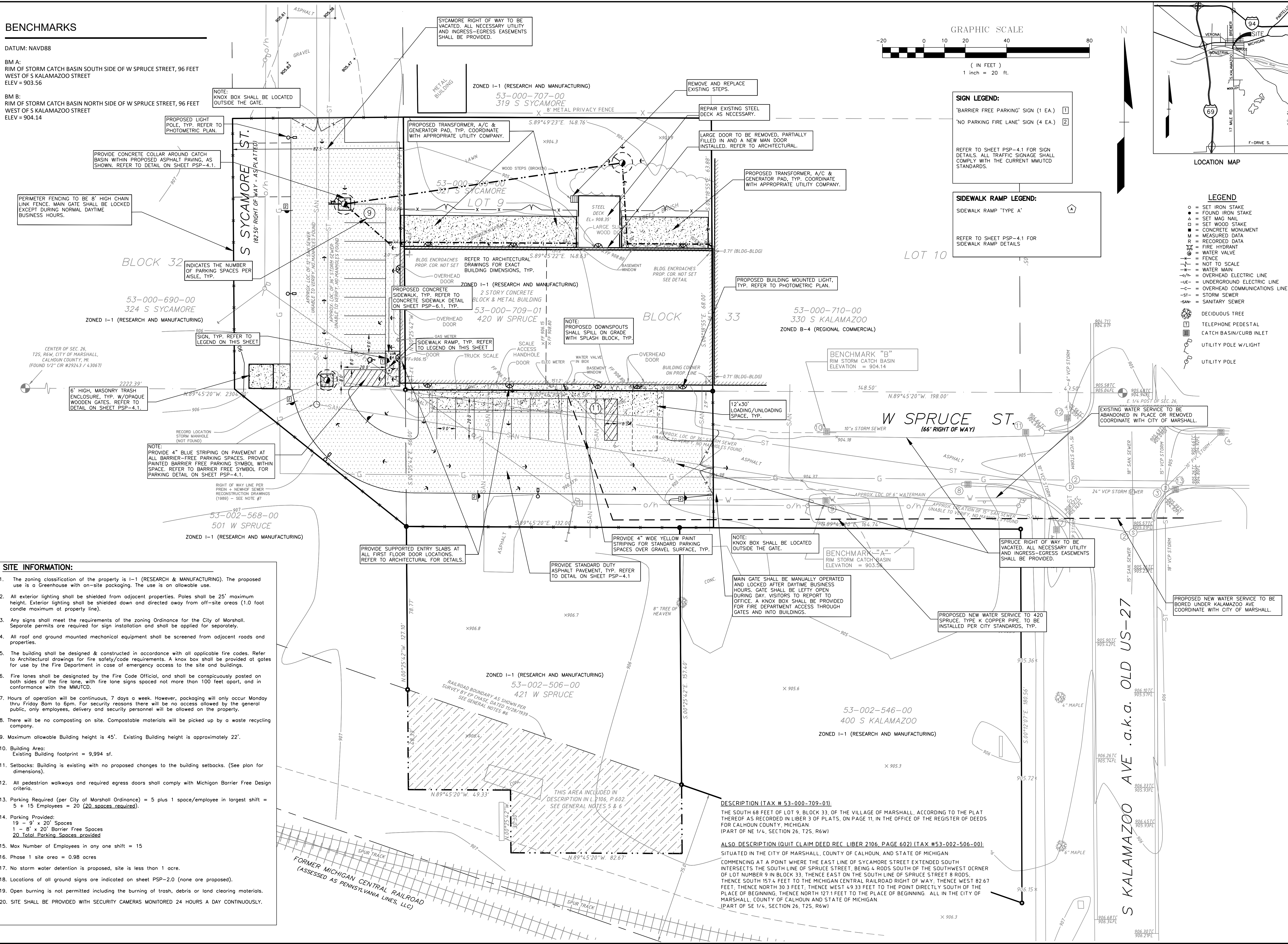
STOREY ENGINEERING GROUP, LLC
48264 MANCHESTER MACOMB, MI 48044
(586) 216-1043
www.storeyengineering.com

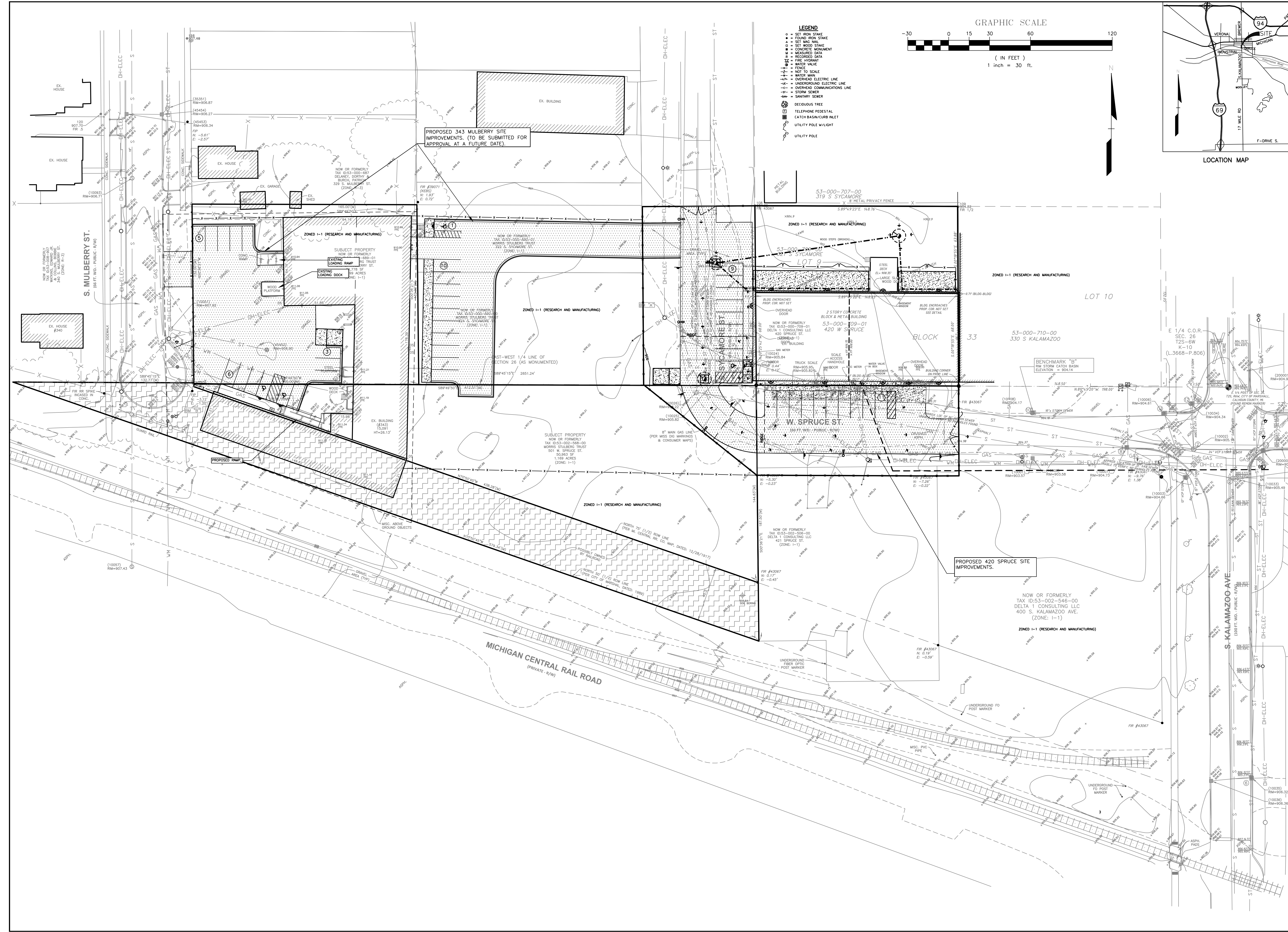
DELTA ONE
150 W 2ND STREET, SUITE 250
ROYAL OAK, MI 48067
PROPOSED SITE PLAN
420 W SPRUCE - DELTA ONE
420 W SPRUCE
T25, R6W, EAST 1/2 SECTION 26, CITY OF MARSHALL, CALHOUN COUNTY, MI
DES. TSS DN. TSS SUR. CARR. P.M. TSS
P.L. 2019-013
ORIGINAL ISSUE DATE: 11/16/2019
Project No. 2019-013
SCALE: 1" = 20'
DRAWING NUMBER:
PSP-2.0

REVISIONS

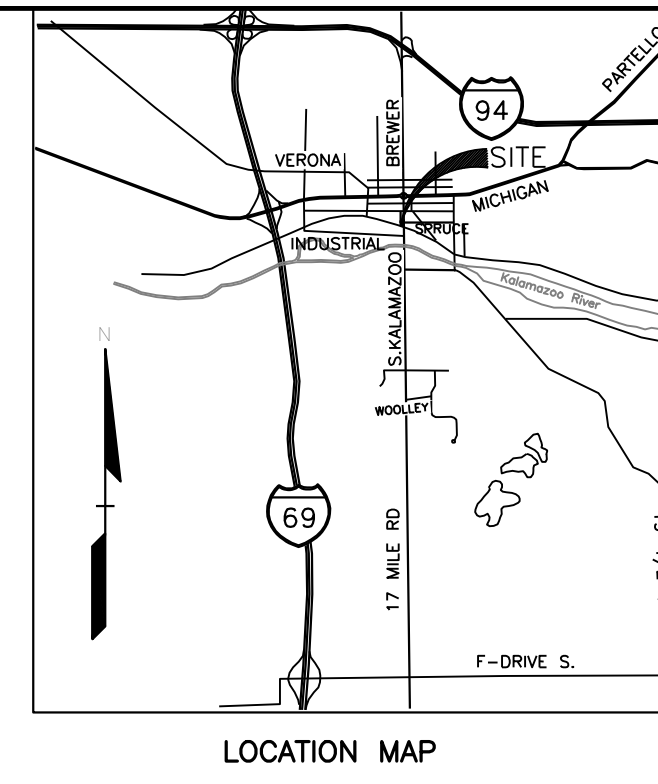
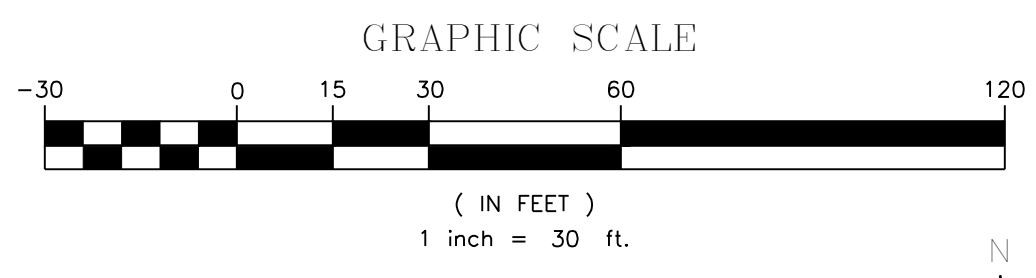
NO.	DATE	BY	DESCRIPTION
1	11-16-2019	TSS	ISSUED PER CITY COMMENTS
2	11-16-2019	TSS	REVISED PER CITY COMMENTS

- SITE INFORMATION:**
- The zoning classification of the property is I-1 (RESEARCH & MANUFACTURING). The proposed use is a Greenhouse with on-site packaging. The use is an allowable use.
 - All exterior lighting shall be shielded from adjacent properties. Poles shall be 25' maximum height. Exterior lighting shall be shielded down and directed away from off-site areas (1.0 foot candle maximum at property line).
 - Any signs shall meet the requirements of the zoning Ordinance for the City of Marshall. Separate permits are required for sign installation and shall be applied for separately.
 - All roof and ground mounted mechanical equipment shall be screened from adjacent roads and properties.
 - The building shall be designed & constructed in accordance with all applicable fire codes. Refer to Architectural drawings for fire safety/code requirements. A knock box shall be provided at gates for use by the Fire Department in case of emergency access to the site and buildings.
 - Fire lanes shall be designated by the Fire Code Official, and shall be conspicuously posted on both sides of the fire lane, with fire lane signs spaced not more than 100 feet apart, and in conformance with the MMUTCD.
 - Hours of operation will be continuous, 7 days a week. However, packaging will only occur Monday thru Friday 8am to 6pm. For security reasons there will be no access allowed by the general public, only employees, delivery and security personnel will be allowed on the property.
 - There will be no composting on site. Compostable materials will be picked up by a waste recycling company.
 - Maximum allowable Building height is 45'. Existing Building height is approximately 22'.
 - Building Area:
Existing Building footprint = 9,994 sq. ft.
 - Setbacks: Building is existing with no proposed changes to the building setbacks. (See plan for dimensions).
 - All pedestrian walkways and required egress doors shall comply with Michigan Barrier Free Design criteria.
 - Parking Required (per City of Marshall Ordinance) = 5 plus 1 space/employee in largest shift = 5 + 15 Employees = 20 (20 spaces required).
 - Parking Provided:
19 = 9' x 20' Spaces
1 = 8' x 20' Barrier Free Spaces
20 Total Parking Spaces provided
 - Max Number of Employees in any one shift = 15
 - Phase 1 site area = 0.98 acres
 - No storm water detention is proposed, site is less than 1 acre.
 - Locations of all ground signs are indicated on sheet PSP-2.0 (none are proposed).
 - Open burning is not permitted including the burning of trash, debris or land clearing materials.
 20. SITE SHALL BE PROVIDED WITH SECURITY CAMERAS MONITORED 24 HOURS A DAY CONTINUOUSLY.





- LEGEND**
- = SET IRON STAKE
 - = FOR IRON STAKE
 - = SET MAG. NAIL
 - = SET WOOD STAKE
 - = CONCRETE MONUMENT
 - = MONUMENT
 - = RECORDED DATA
 - = FIRE HYDRANT
 - = WATER VALVE
 - = FENCE
 - = NOT TO SCALE
 - = WATER MAIN
 - = OVERHEAD ELECTRIC LINE
 - = UNDERGROUND ELECTRIC LINE
 - = OVERHEAD COMMUNICATIONS LINE
 - = STORM SEWER
 - = SANITARY SEWER
 - = DECIDUOUS TREE
 - = TELEPHONE PEDESTAL
 - = CATCH BASIN/CURB INLET
 - = UTILITY POLE/W/ LIGHT
 - = UTILITY POLE



NO.	DATE	BY	REVISIONS
1	11/16/2019	TSS	ISSUED PER CITY COMMENTS
2	3-4-20	TSS	REVISED PER CITY COMMENTS
3	2-2-20	TSS	REVISED PER CITY COMMENTS



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

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION AND PROVE THAT THIS REQUIREMENT SHALL BE MAINTAINED THROUGHOUT THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LIMITED LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL

811
 Know what's below
 Call before you dig
 Miss Dig System, Inc.
 1-800-482-7171 www.missdig.net



STOREY ENGINEERING GROUP, LLC
 48264 MANCHESTER MACOMB, MI 48044
 (586) 216-1043
 www.storeyengineering.com

DES.	TSS	DN.	TSS	SUR.	CARR.	P.M.	TSS
DELTA ONE							
150 W 2ND STREET, SUITE 250 ROYAL OAK, MI 48067							
OVERALL SITE PLAN							
420 W SPRUCE - DELTA ONE							
T2S, R6W, EAST 1/2 SECTION 26, CITY OF MARSHALL, CALHOUN COUNTY, MI							

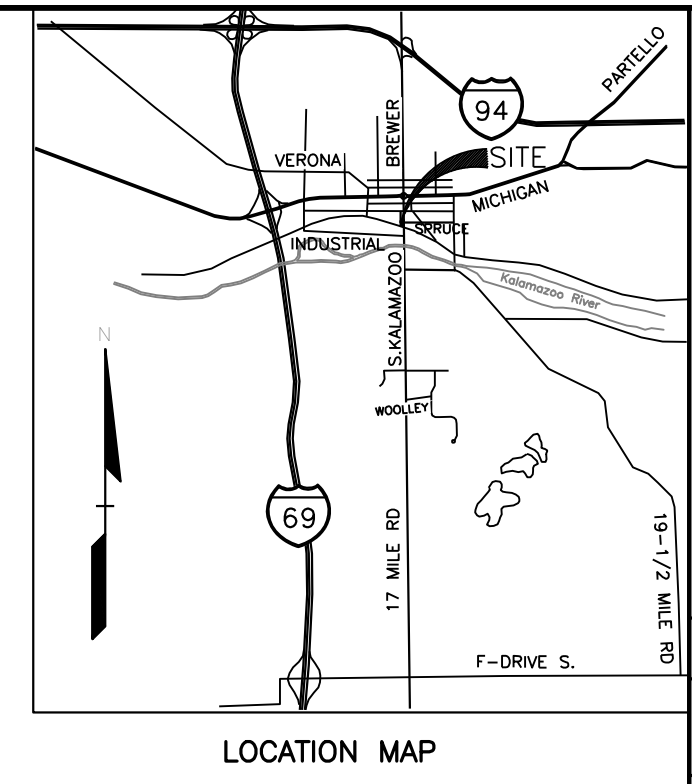
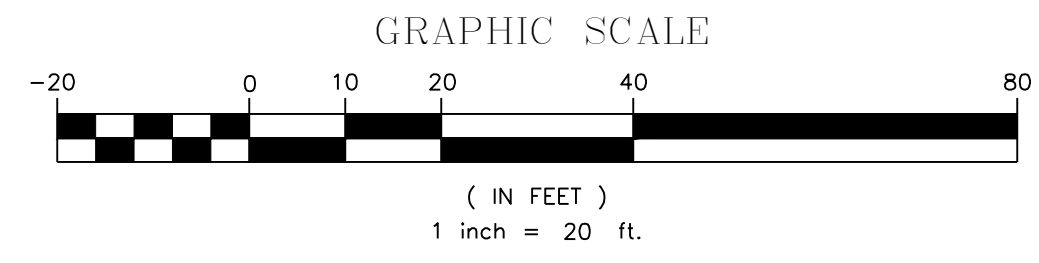
ORIGINAL ISSUE DATE:
 11/16/2019
 Project No. 2019-013
 SCALE: 1" = 20'
 DRAWING NUMBER:
PSP-2.1

BENCHMARKS

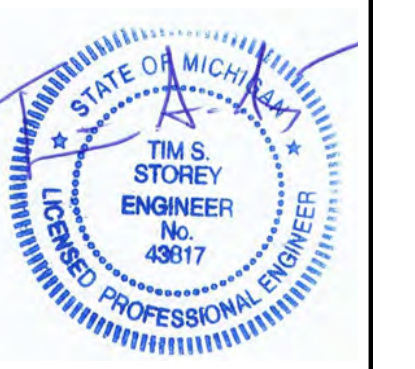
DATUM: NAVD88

BM A:
RIM OF STORM CATCH BASIN SOUTH SIDE OF W SPRUCE STREET, 96 FEET WEST OF S KALAMAZOO STREET
ELEV = 903.56

BM B:
RIM OF STORM CATCH BASIN NORTH SIDE OF W SPRUCE STREET, 96 FEET WEST OF S KALAMAZOO STREET
ELEV = 904.14



NO.	DATE	BY	REVISIONS
1	11-16-2019	TSS	ISSUED PER CITY COMMENTS
2	3-5-20	TSS	REVISED PER CITY COMMENTS
3	2-2-20	TSS	REVISED PER CITY COMMENTS



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

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION. THE PROJECT INCLUDING THE DESIGN, CONSTRUCTION AND PROPERTY THAT THIS REQUIREMENT SHALL BE MADE AFTER THE CONTRACTOR HAS NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL

811
Know what's below
Call before you dig
Miss Dig System, Inc.
1-800-482-7171 www.missdig.net



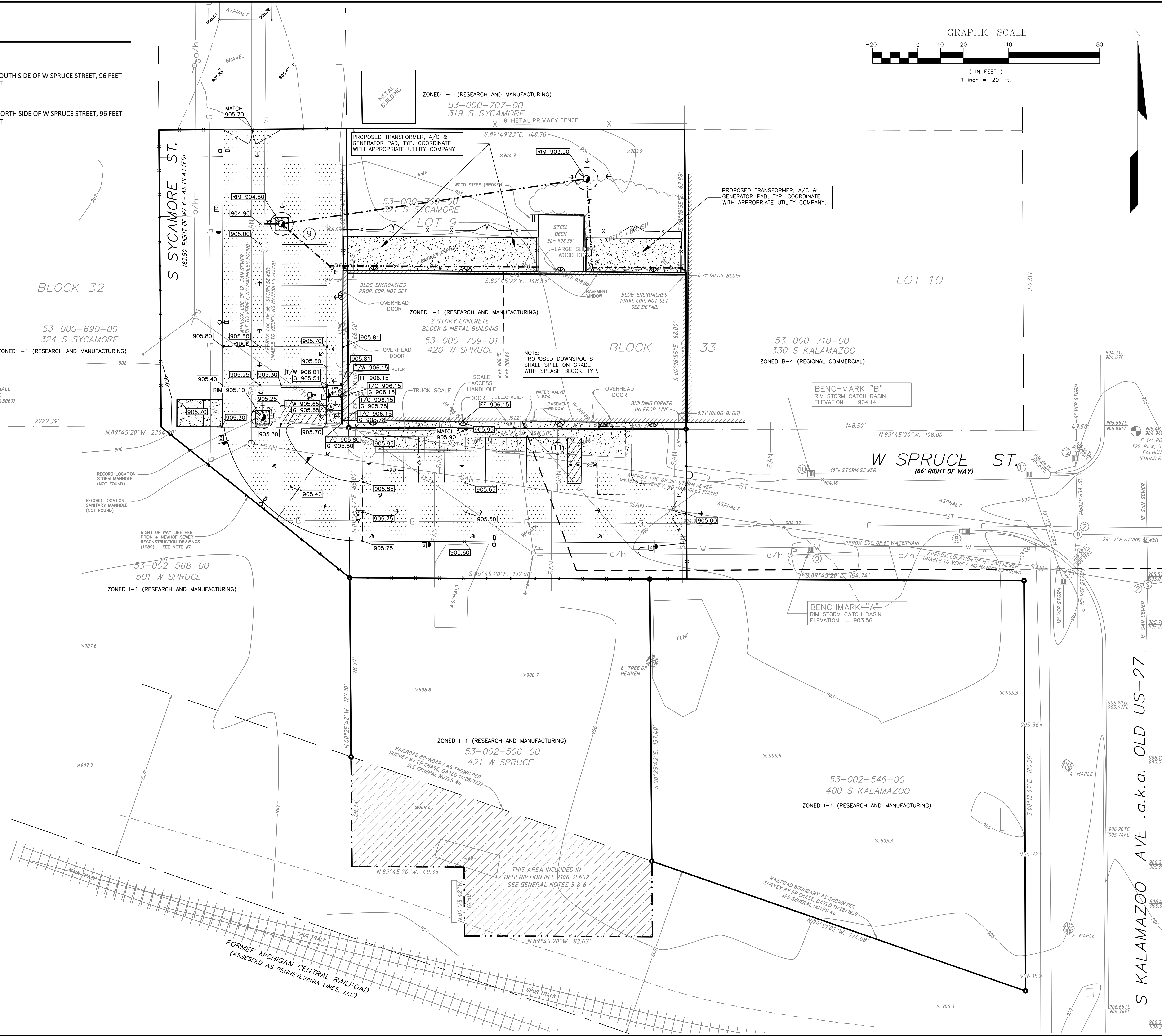
STOREY ENGINEERING GROUP, LLC
48264 MANCHESTER MACOMB, MI 48044
(586) 216-1043
www.storeyengineering.com

DELTA ONE
150 W 2ND STREET, SUITE 250
ROYAL OAK, MI 48067

PROPOSED GRADING PLAN
420 W SPRUCE - DELTA ONE
420 W SPRUCE
T25, R6W, EAST 1/2 SECTION 26, CITY OF MARSHALL, CALHOUN COUNTY, MI

DES.	TSS	DN.	TSS	SUR.	CARR.	P.M.	TSS
1	11-16-2019	PRODUCTION	2019-03-03	420 W SPRUCE STREET - MARSHALL, MI	DELTA ONE	3.0	GRADE/DM

ORIGINAL ISSUE DATE: 11/16/2019
Project No. 2019-013
SCALE: 1" = 20'
DRAWING NUMBER: **PSP-3.0**



GENERAL NOTES:

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY.
- ALL NECESSARY PERMITS, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL MUNICIPAL INSPECTION FEES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE PERIODS OF CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO THE JOB.
- PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG (1-800-482-7171) TO VERIFY THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES AND SHALL NOTIFY OTHER REPRESENTATIVES OF OTHER UTILITIES IN THE VICINITY OF THE WORK.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
- MANHOLE, CATCH BASIN, GATE VALVES AND HYDRANT FINISH GRADES MUST BE CLOSELY CHECKED AND APPROVED BY THE ENGINEER BEFORE THE CONTRACTOR'S WORK IS CONSIDERED COMPLETE.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ANY TREES, BRUSH, STUMPS, TRASH OR OTHER UNWANTED DEBRIS AT THE OWNER'S DIRECTION, INCLUDING OLD BUILDING FOUNDATIONS AND FLOORS. BURNING OF TRASH, STUMPS OR OTHER DEBRIS SHALL NOT BE PERMITTED.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY CONTAIN TRAFFIC IN ACCORDANCE WITH "MMUCOT".
- ALL EXCAVATIONS SHALL BE SLOPED, SHORED OR BRACED IN ACCORDANCE WITH MI-OSHA REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AN ADEQUATELY CONSTRUCTED AND BRACED SHORING SYSTEM FOR EMPLOYEES WORKING IN AN EXCAVATION THAT MAY EXPOSE EMPLOYEES TO THE DANGER OF MOVING GROUND.
- ALL REFERENCES TO M.D.O.T. SPECIFICATIONS ARE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MOST STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PAVING NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND M.D.O.T. WHERE APPLICABLE.
- IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
- SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FULL SECTIONS OR BELOW SUBGRADE IN CUT SECTIONS, WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
- SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED WITH SAND OR OTHER SIMILAR APPROVED MATERIAL. BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT (PER ASTM D-1557) UNLESS OTHERWISE SPECIFIED.
- BACKFILL UNDER PAVED AREAS SHALL BE AS SPECIFIED ON DETAILS.
- ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.

GENERAL UTILITY NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND M.D.O.T.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES, WHICH MIGHT AFFECT THIS JOB.
- ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
- WHenever existing manholes or sewer pipe are to be tapped, drill holes 4" center to center, around periphery of opening to create a plane of weakness joint before breaking section out.
- EXACT GRADES AND DEPTHS OF UTILITIES ARE TO BE CHECKED CLOSELY WITH THE FIELD ENGINEER PRIOR TO INSTALLATION.

STORM SEWER NOTES:

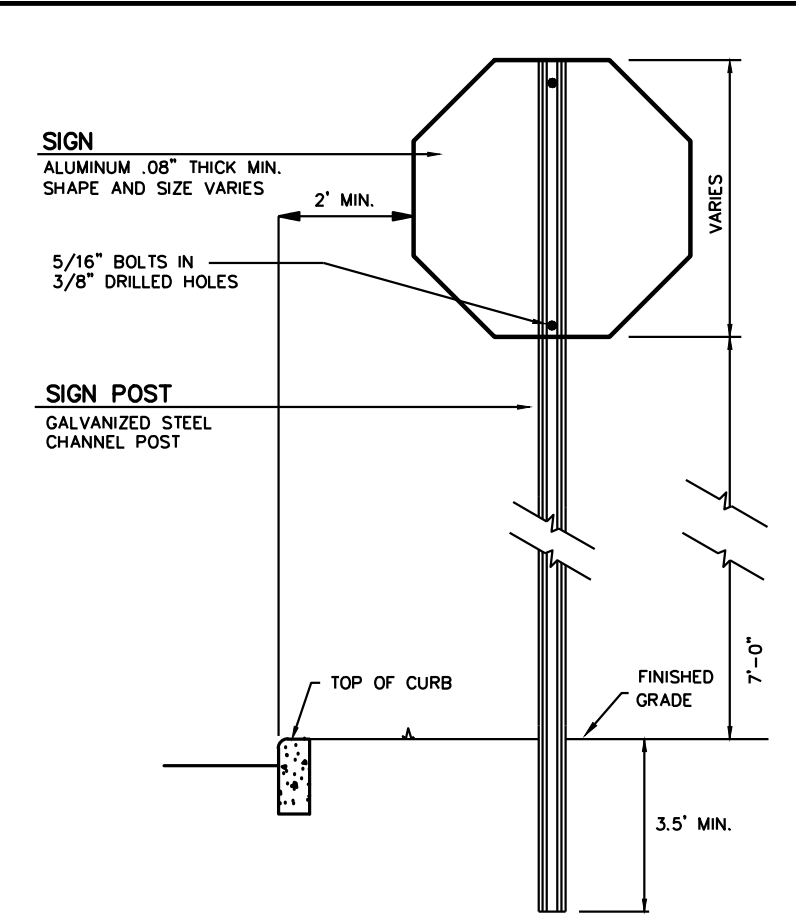
- ALL STORM SEWER SHALL BE INSTALLED ON STANDARD BEDDING OR BETTER.
- JOINTS FOR ALL STORM SEWER 12" AND LARGER SHALL BE PREMIUM JOINT TONGUE AND GROOVE WITH RUBBER GASKETS, UNLESS SPECIFIED OTHERWISE.
- ALL STORM SEWER 12" AND LARGER SHALL BE RCP CLASS IV OR HDPE ADS N-12 OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.
- CULVERTS SHALL BE ALUMINIZED TYPE II CSP (OR HDPE ADS N-12) WITH BANDED JOINTS MEETING MANUFACTURERS SPECS
- STORM LEADS SHALL BE PVC SCH 40 WITH GLED JOINTS BEDDED ON SAND OR STONE AGGREGATE.

WATER MAIN NOTES:

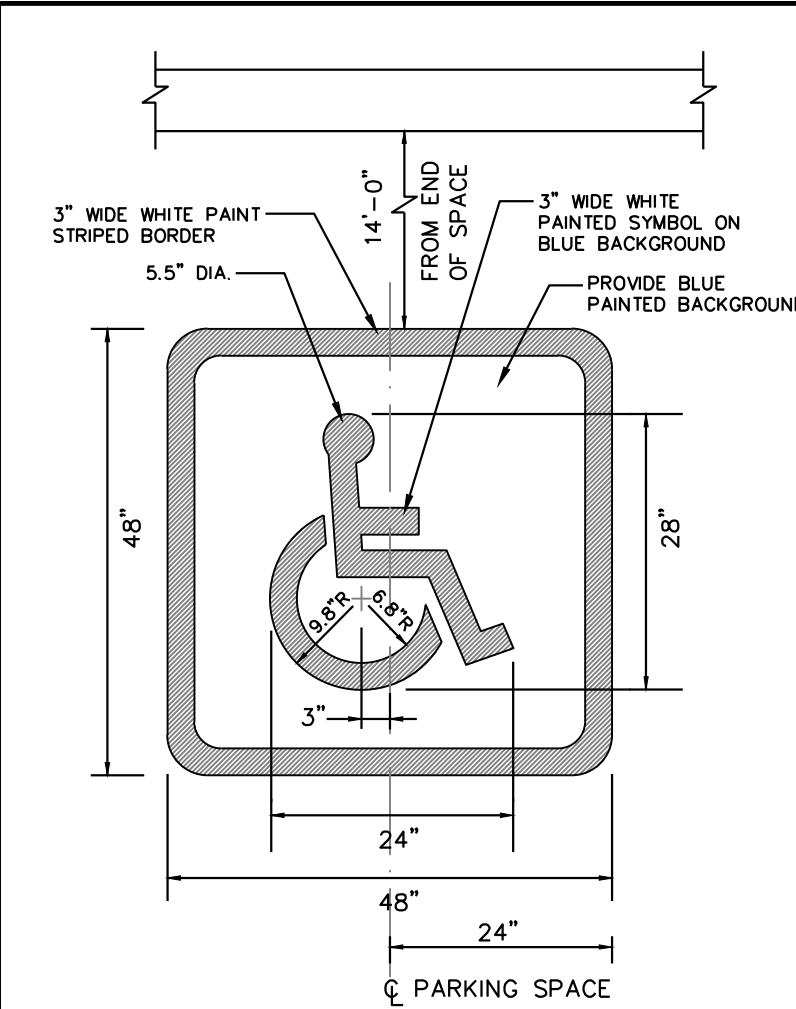
- ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 6.0' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5) DEGREE BENDS, PROPERLY ANCHORED. MAINTAIN MIN. 18" VERTICAL SEPARATION BETWEEN WATER AND SEWER LINES.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND M.D.O.
- ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
- ALL TEE'S, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.
- PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL TESTING IS SATISFACTORILY COMPLETED.
- MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATER MAIN AND ANY SANITARY SEWER OR STRUCTURE.
- ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 52 OR PVC C-900.
- REFER TO CITY OF MARSHALL STANDARD SPECIFICATIONS AND DETAILS FOR WATER MAIN CONSTRUCTION FOR ADDITIONAL INFORMATION.

SANITARY SEWER NOTES:

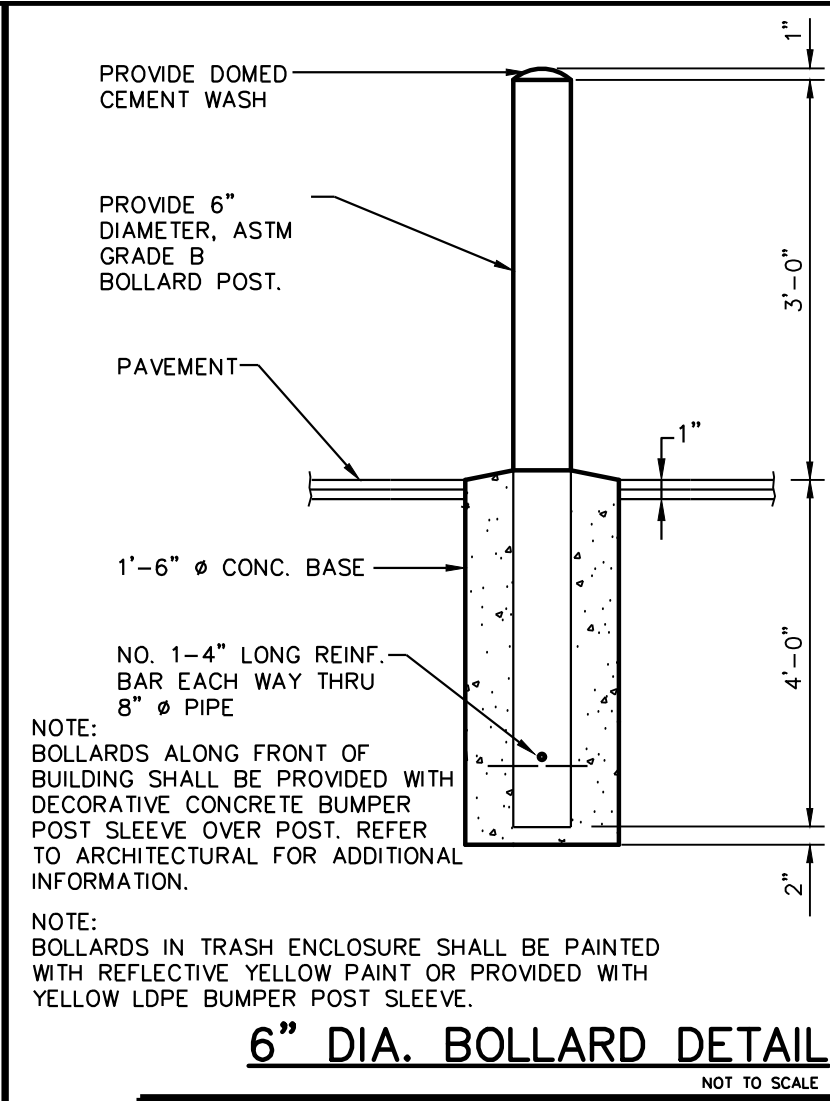
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND M.D.O.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT AFFECT THIS JOB.
- ALL TRENCHES UNDER OR WITHIN THE 45° ZONE OF INFLUENCE LINE OR 5 FEET OF EXISTING AND/OR PROPOSED PAVEMENT SHALL BE BACKFILLED WITH SAND AND COMPACTED TO 95% OF MAXIMUM DENSITY PER ASTM D-1557.
- ALL SEWERS SHALL BE PLACED ON MIN. 4" SAND OR GRAVEL BEDDING WHICH SHALL EXTEND TO MIN. 12" OVER TOP OF THE PIPE AND SHALL BE COMPACTED IN MIN. 6" LAYERS.
- A MINIMUM OF 18" OF CLEARANCE MUST BE MAINTAINED AT ALL CROSSINGS BETWEEN SANITARY, WATER MAIN AND STORM SEWER, UNLESS PROVIDED WITH A CONCRETE CRADLE.
- NO SANITARY SEWER INSTALLATION OR PORTION THEREOF SHALL HAVE INFILTRATION EXCEEDING 200 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOUR PERIOD. JOINTS FOR P.V.C. SOLID WALL OR TRUSS PIPE SHALL BE ELASTOMETRIC (RUBBER GASKET) MEETING A.S.T.M. D-3212.
- SANITARY SEWER MAIN AND LEADS 8" DIAMETER & SMALLER SHALL BE CONSTRUCTED OF P.V.C. SOLID WALL PIPE CONFORMING TO ASTM D-3034, SDR 35.
- SEE CITY OF MARSHALL STANDARD SPECIFICATIONS & DETAILS FOR ADDITIONAL INFORMATION.



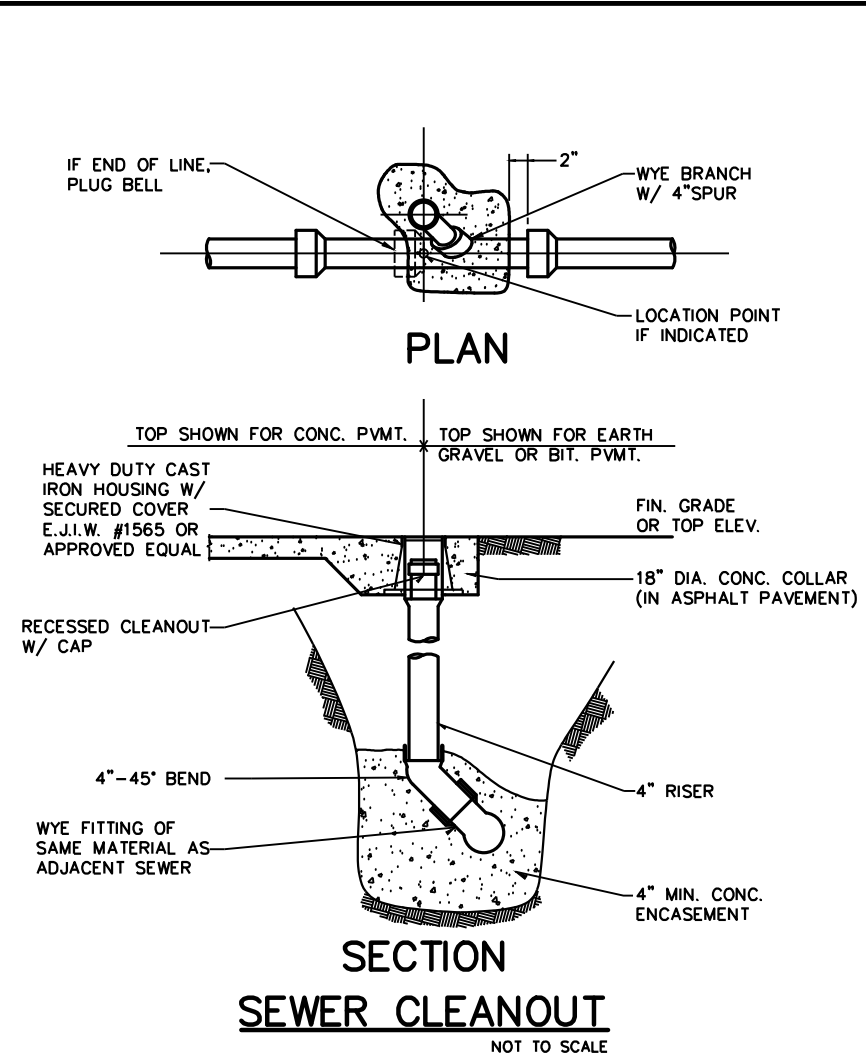
SIGN AND POST INSTALLATION IN LANDSCAPED AREAS
NOT TO SCALE



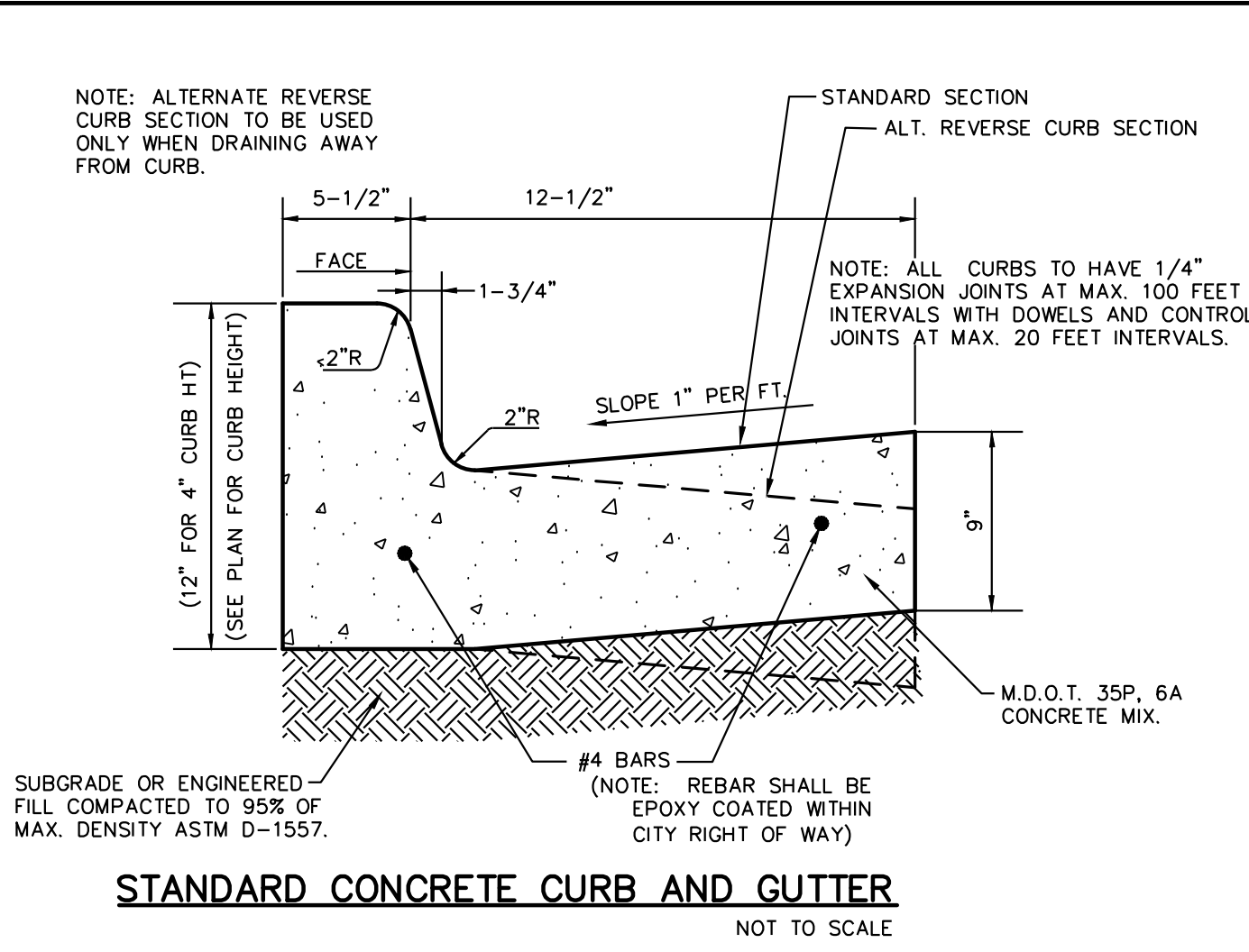
STANDARD BARRIER FREE SYMBOL FOR PARKING SPACE
NOT TO SCALE



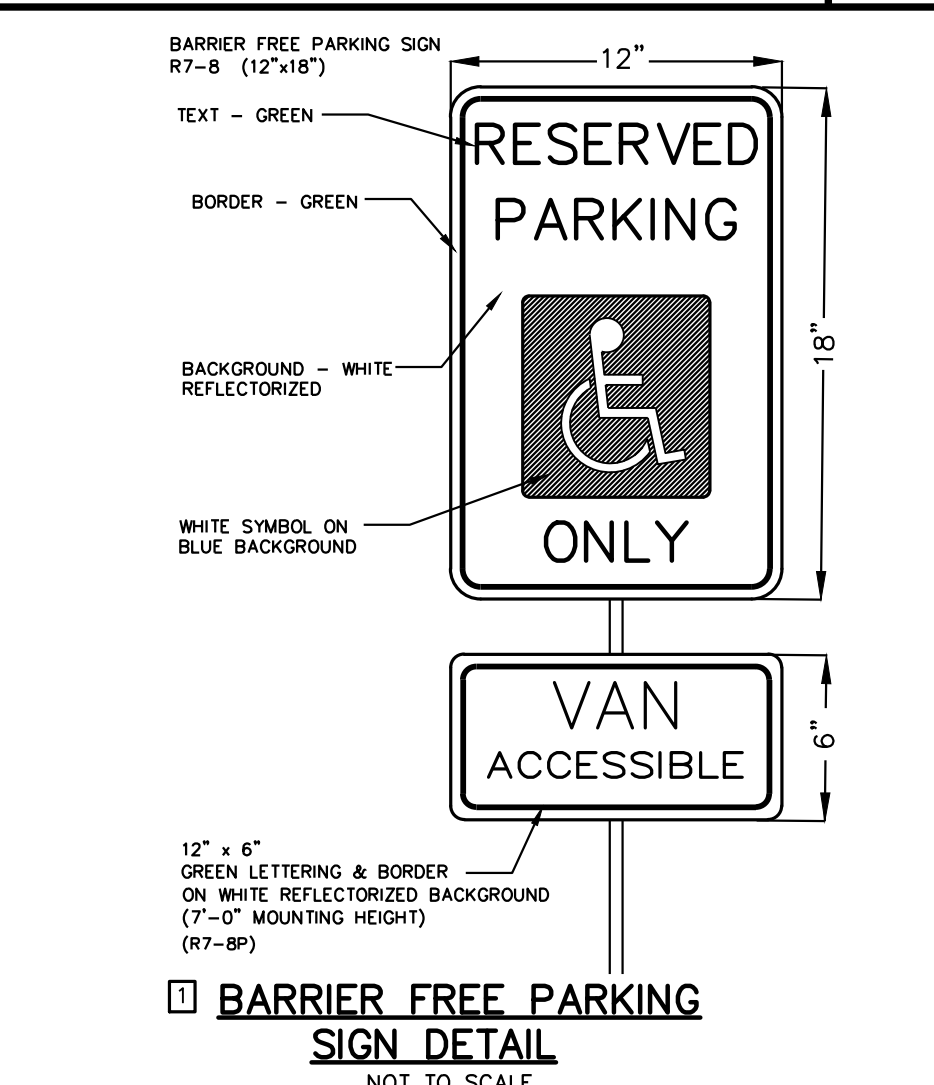
6\"/>



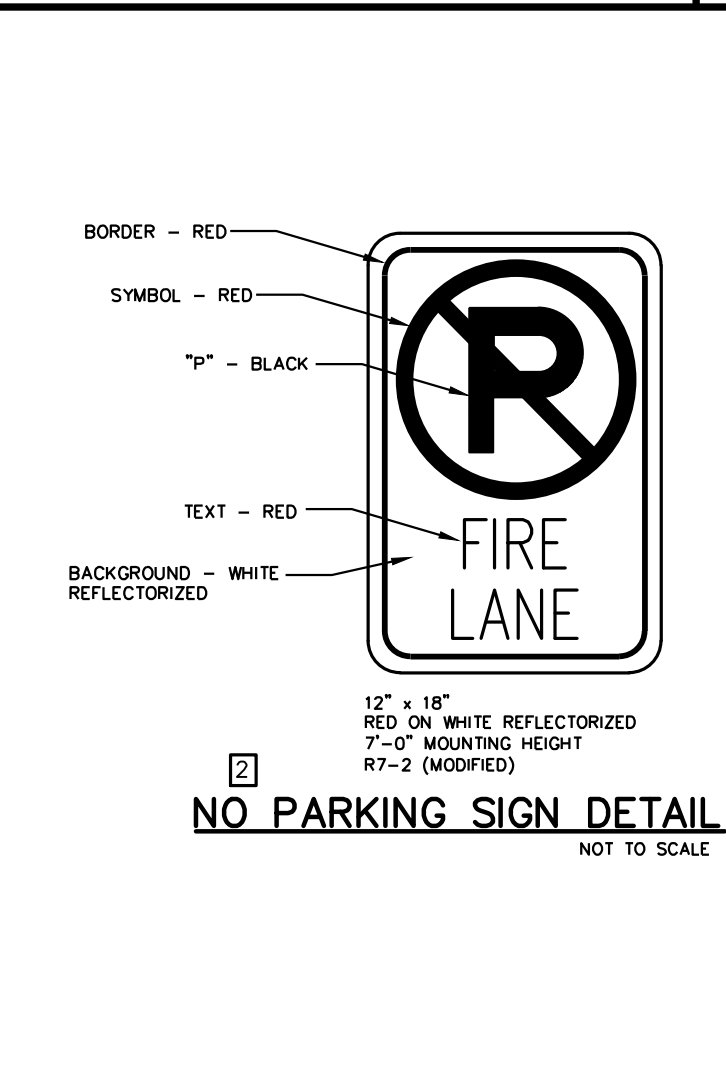
SEWER CLEANOUT
NOT TO SCALE



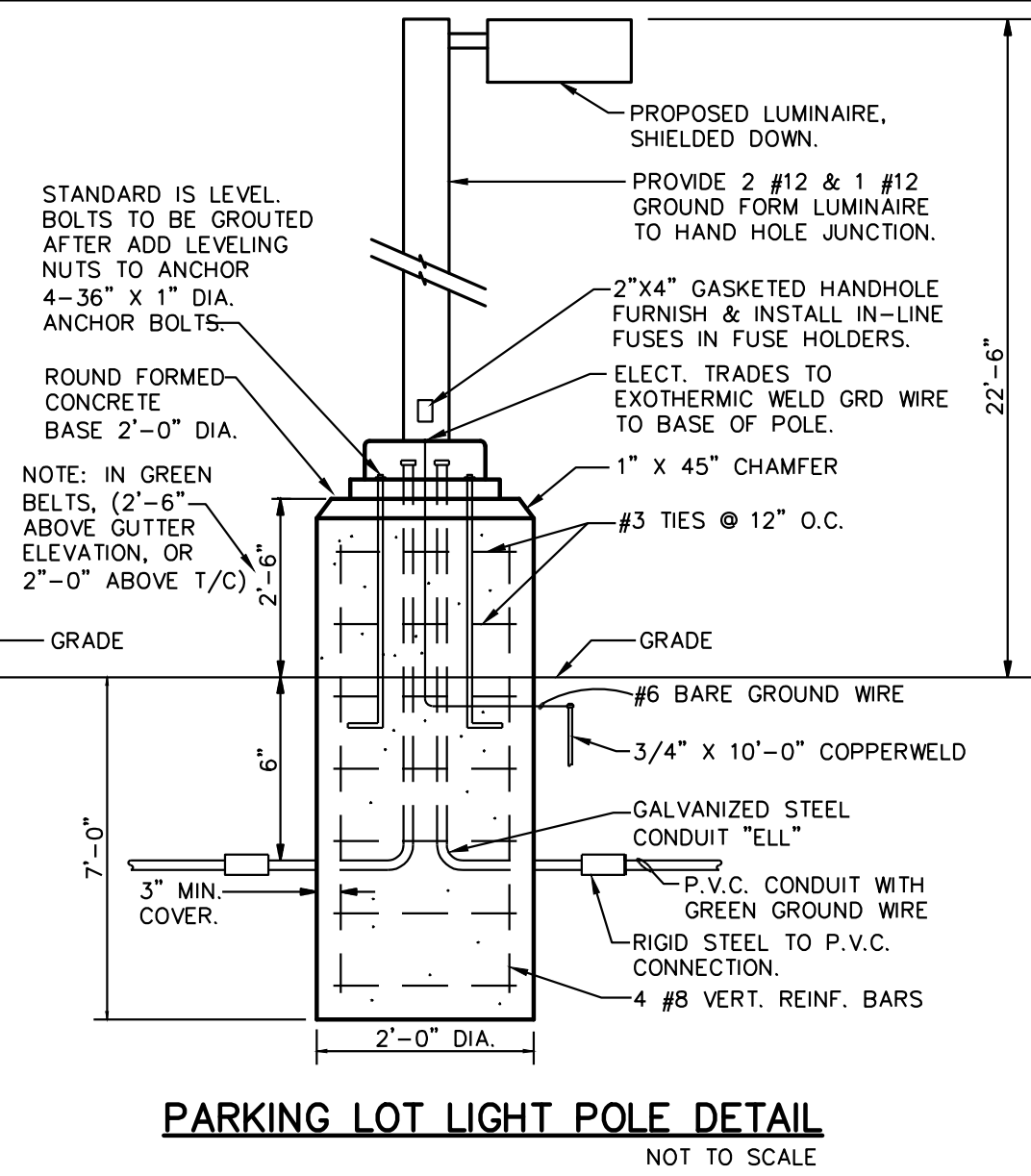
STANDARD CONCRETE CURB AND GUTTER
NOT TO SCALE



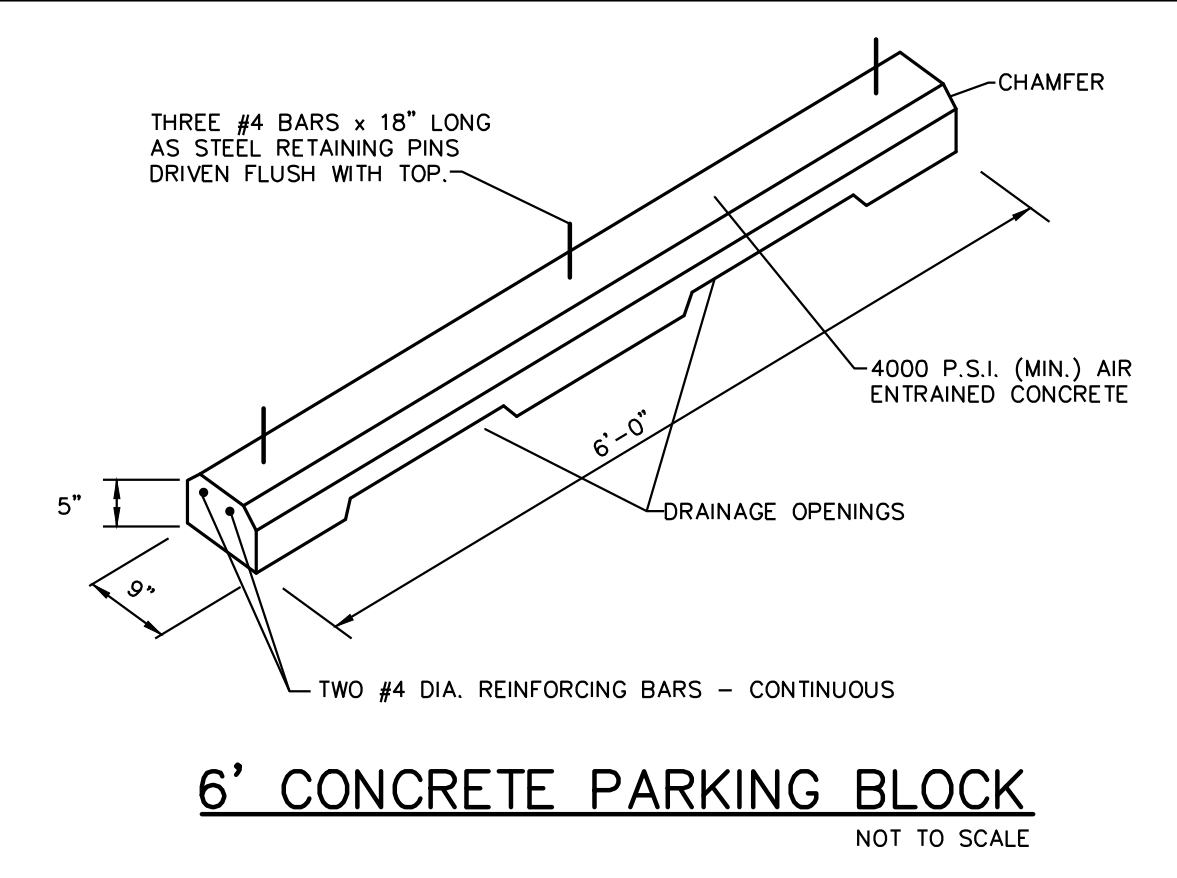
BARRIER FREE PARKING SIGN DETAIL
NOT TO SCALE



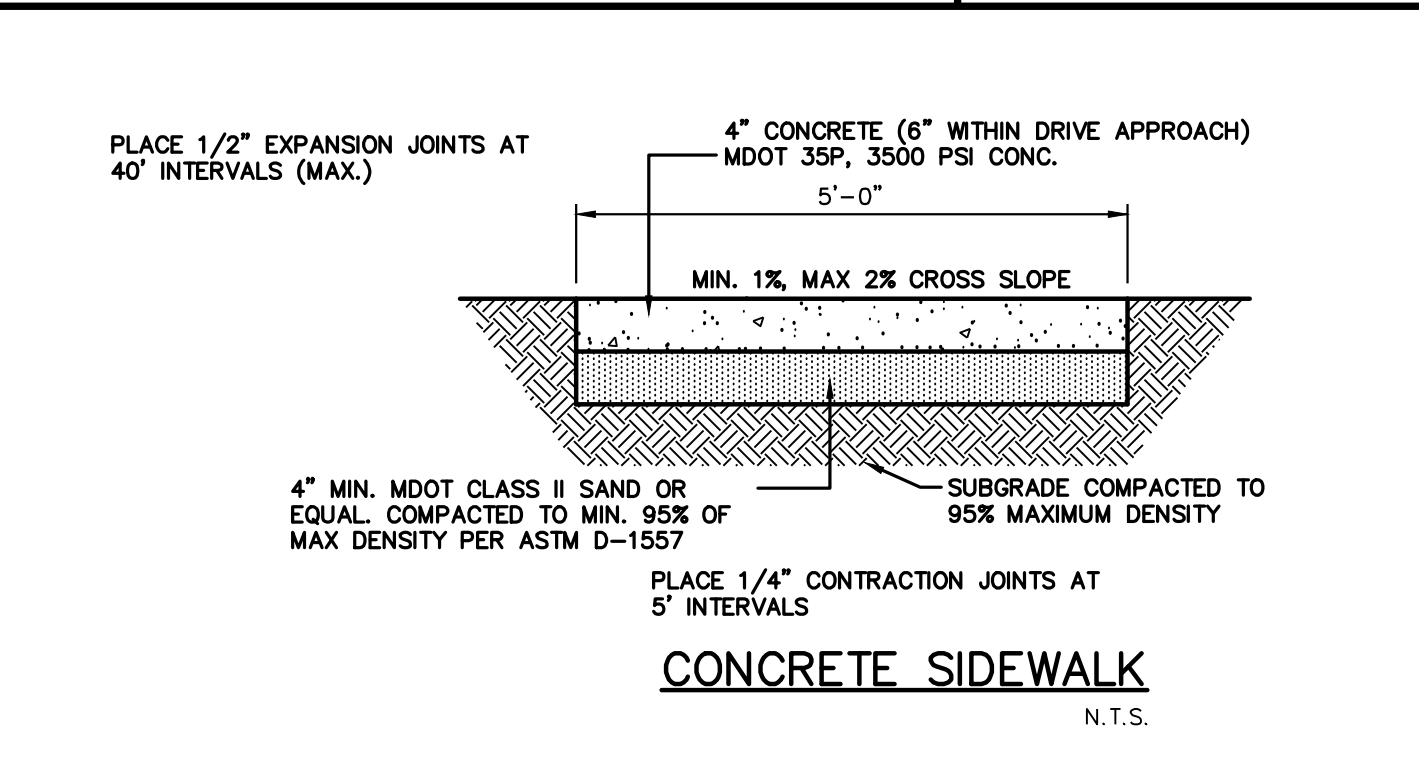
NO PARKING SIGN DETAIL
NOT TO SCALE



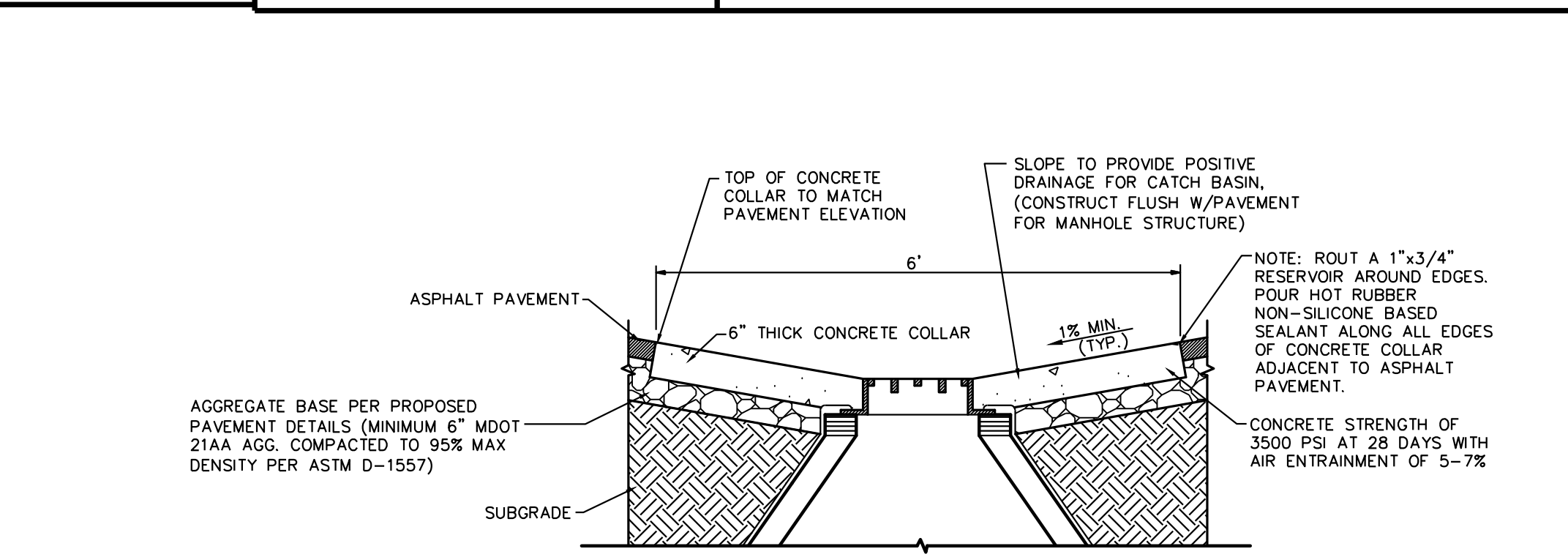
PARKING LOT LIGHT POLE DETAIL
NOT TO SCALE



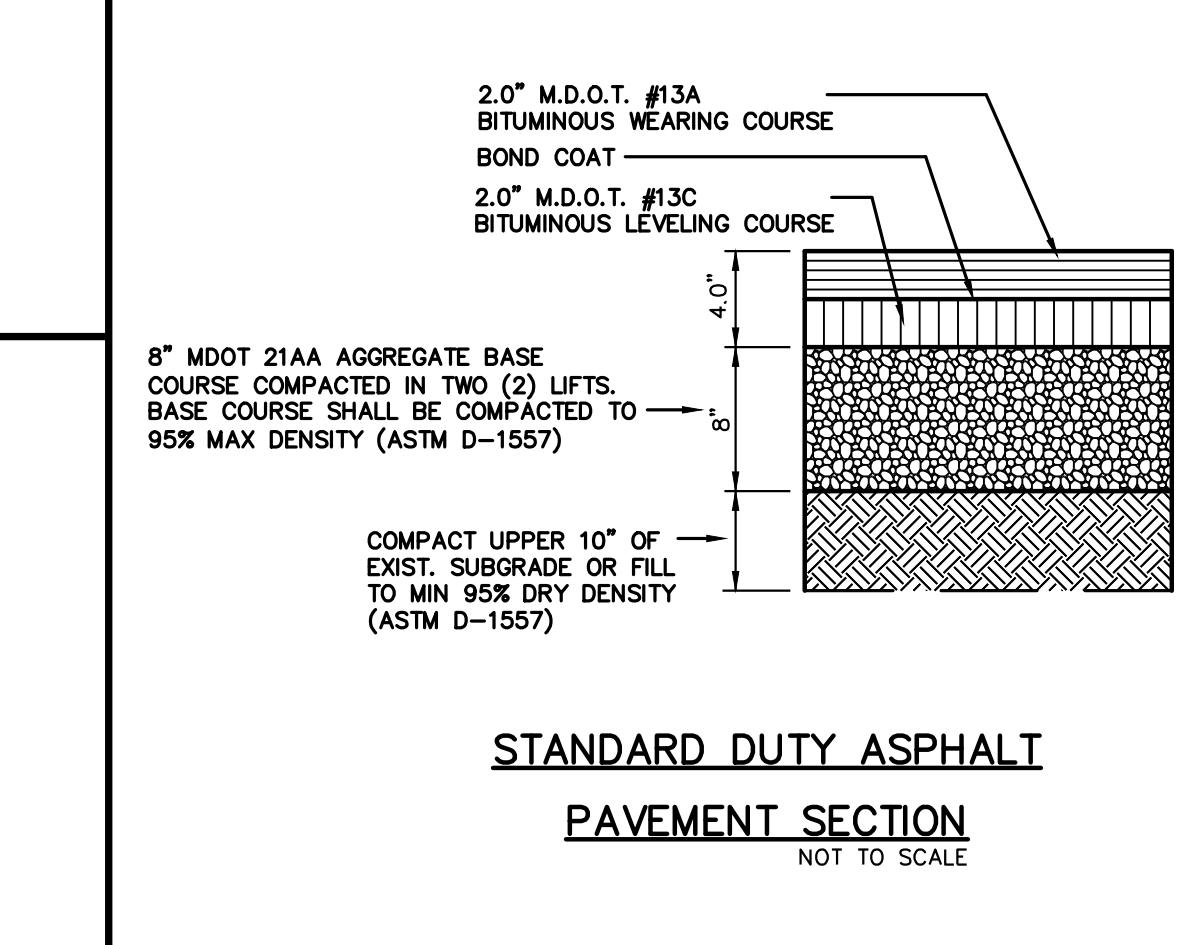
6\"/>



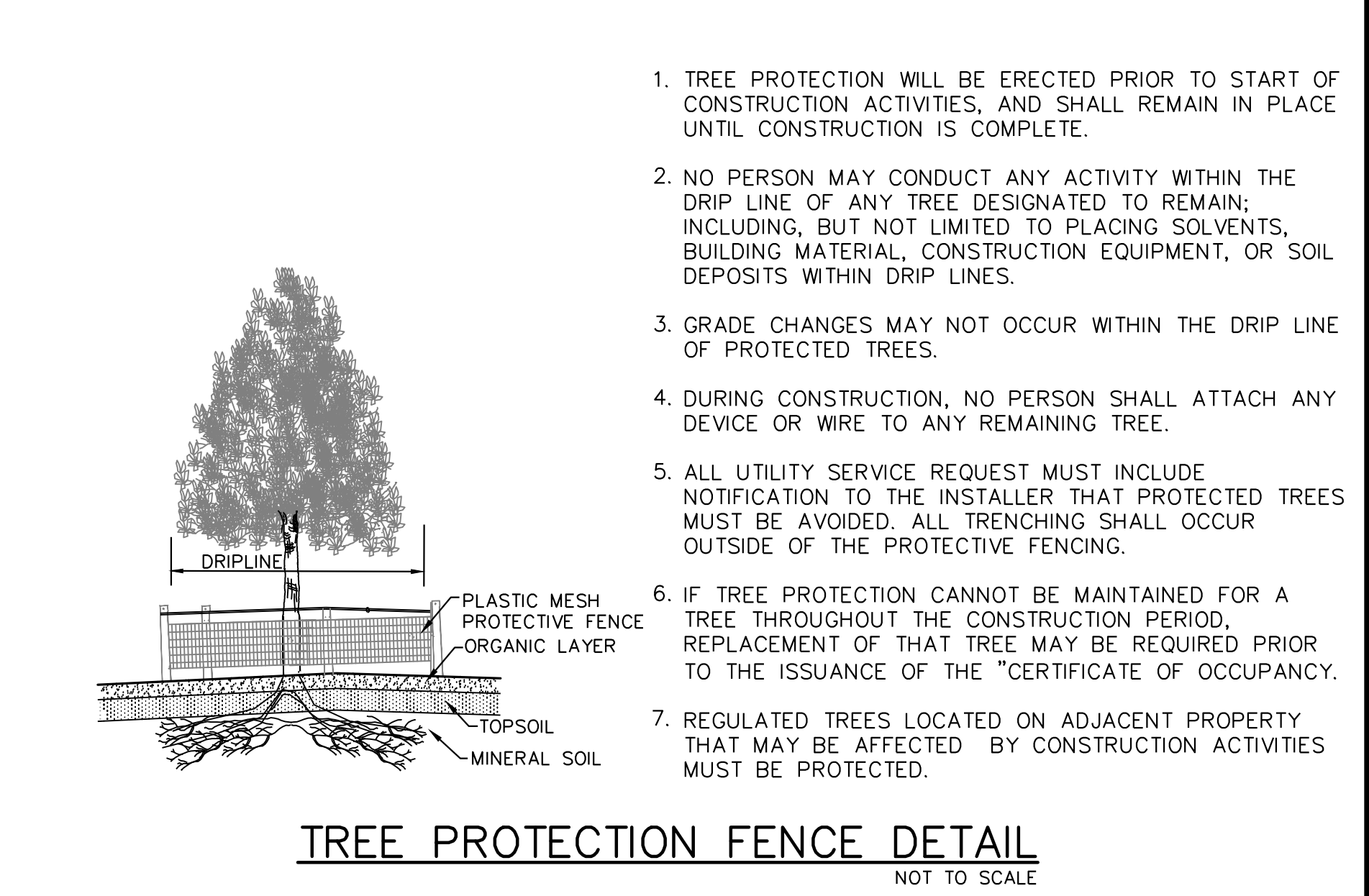
CONCRETE SIDEWALK
N.T.S.



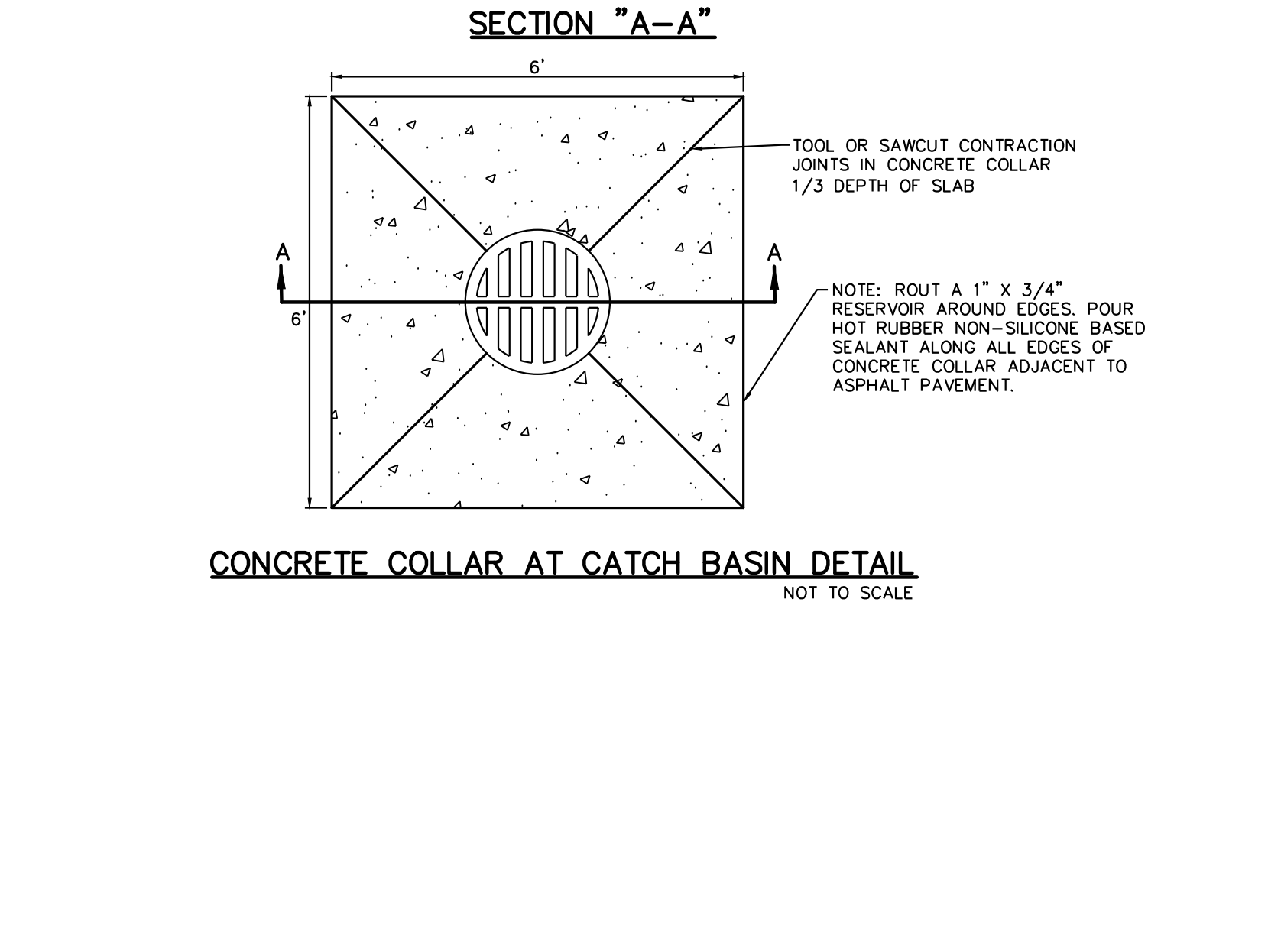
CONCRETE COLLAR AT CATCH BASIN DETAIL
NOT TO SCALE



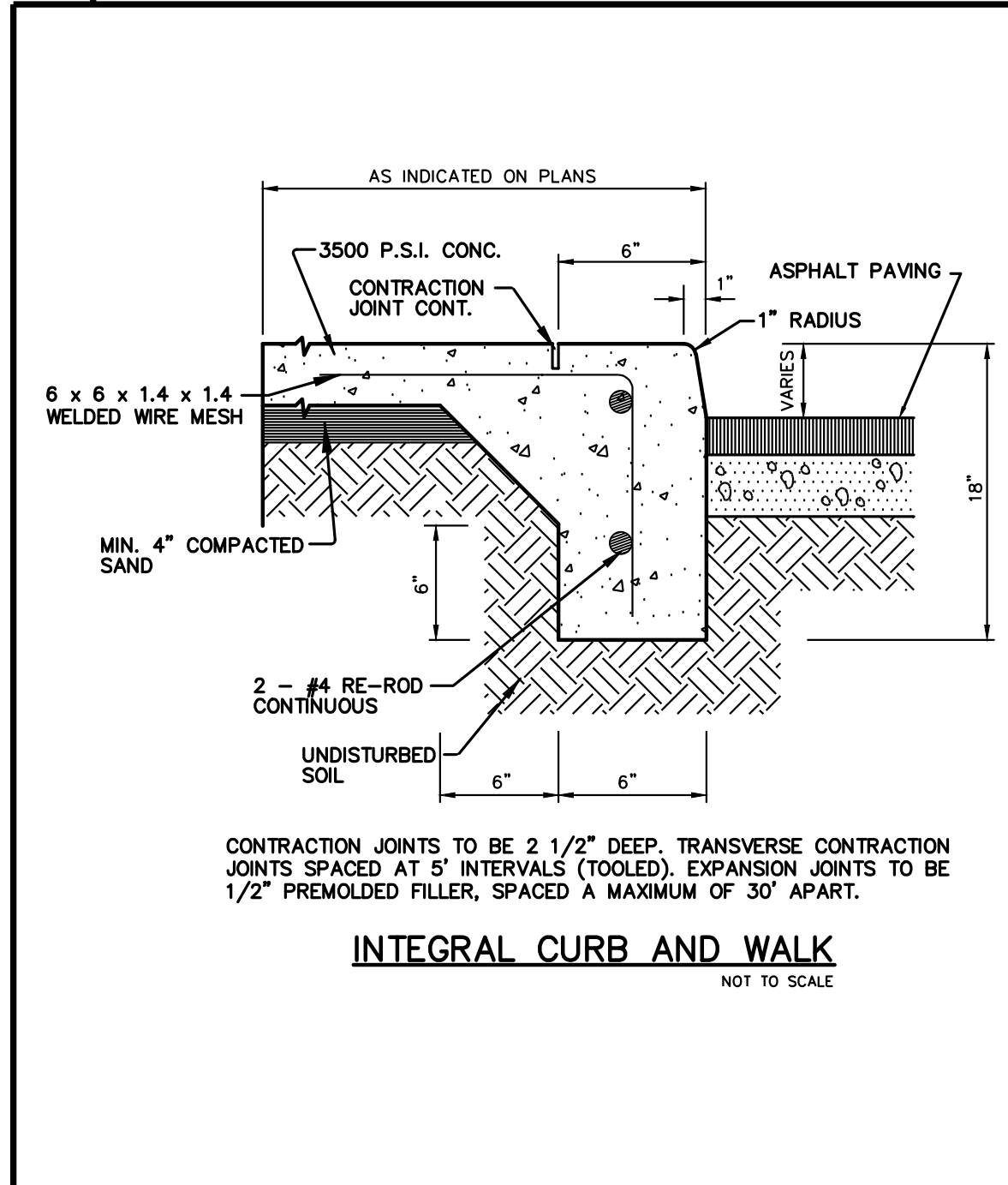
STANDARD DUTY ASPHALT PAVEMENT SECTION
NOT TO SCALE



TREE PROTECTION FENCE DETAIL
NOT TO SCALE



SECTION \"/>



INTEGRAL CURB AND WALK
NOT TO SCALE

NO.	DATE	BY	REVISIONS
1	03-20	TSS	REVISED PER CITY COMMENTS
2	03-20	TSS	REVISED PER CITY COMMENTS
3	03-20	TSS	REVISED PER CITY COMMENTS



CAUTION!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS GIVEN FOR THE ACCURACY OF THE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING ALL NECESSARY PERMITS AND PROPERTY THAT THIS REQUIREMENT SHALL BE MADE A PART OF THE CONTRACT. CONTRACTOR SHALL NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL FIRM HARMLESS FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL FIRM.

3 FULL WORKING DAYS BEFORE YOU DIG CALL

811
Know what's below
Call before you dig
Miss Dig System, Inc.
1-800-482-7171 www.missdig.net
(TOLL FREE)



STOREY ENGINEERING GROUP, LLC
48264 MANCHESTER MACOMB, MI 48044
(586) 216-1043
www.storeyengineering.com

DES.	TSS	DN.	TSS	SUR.	CARR	P.M.	TSS
<p>DELTA ONE 150 W 2ND STREET, SUITE 250 ROYAL OAK, MI 48067</p> <p>NOTES + DETAILS 420 W SPRUCE - DELTA ONE 420 W SPRUCE T25, R8W, EAST 1/2 SECTION 26, CITY OF MARSHALL, CALHOUN COUNTY, MI</p> <p>PROJECT NO. 2019-013</p> <p>SCALE: 1" = 30'</p> <p>DRAWING NUMBER: PSP-4.1</p>							



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

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT INCLUDING, BUT NOT LIMITED TO, AND PROPERLY THAT THIS REQUIREMENT SHALL BE MADE APPLICABLE TO ALL CONTRACTORS AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARBORERS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL

811
Know what's below
Call before you dig
MISS DIG System, Inc.
1-800-482-7171 www.missdig.net
(TOLL FREE)



STOREY ENGINEERING GROUP, LLC
48264 MANCHESTER MACOMB, MI 48044
(586) 216-1043
www.storeyengineering.com

DELTA ONE
150 W 2ND STREET, SUITE 250
ROYAL OAK, MI 48067
DETAILS - 2
420 W SPRUCE - DELTA ONE
420 W SPRUCE
T25, R6W, EAST 1/2 SECTION 26, CITY OF MARSHALL, CALHOUN COUNTY, MI
DES. TSS DN. TSS SUR. CARR. P.M.
ISSUED 2019 PROJECT 2019-013-420 SPRUCE STREET - MARSHALL, MI. PLAN PSP-4.2, DETAILS 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

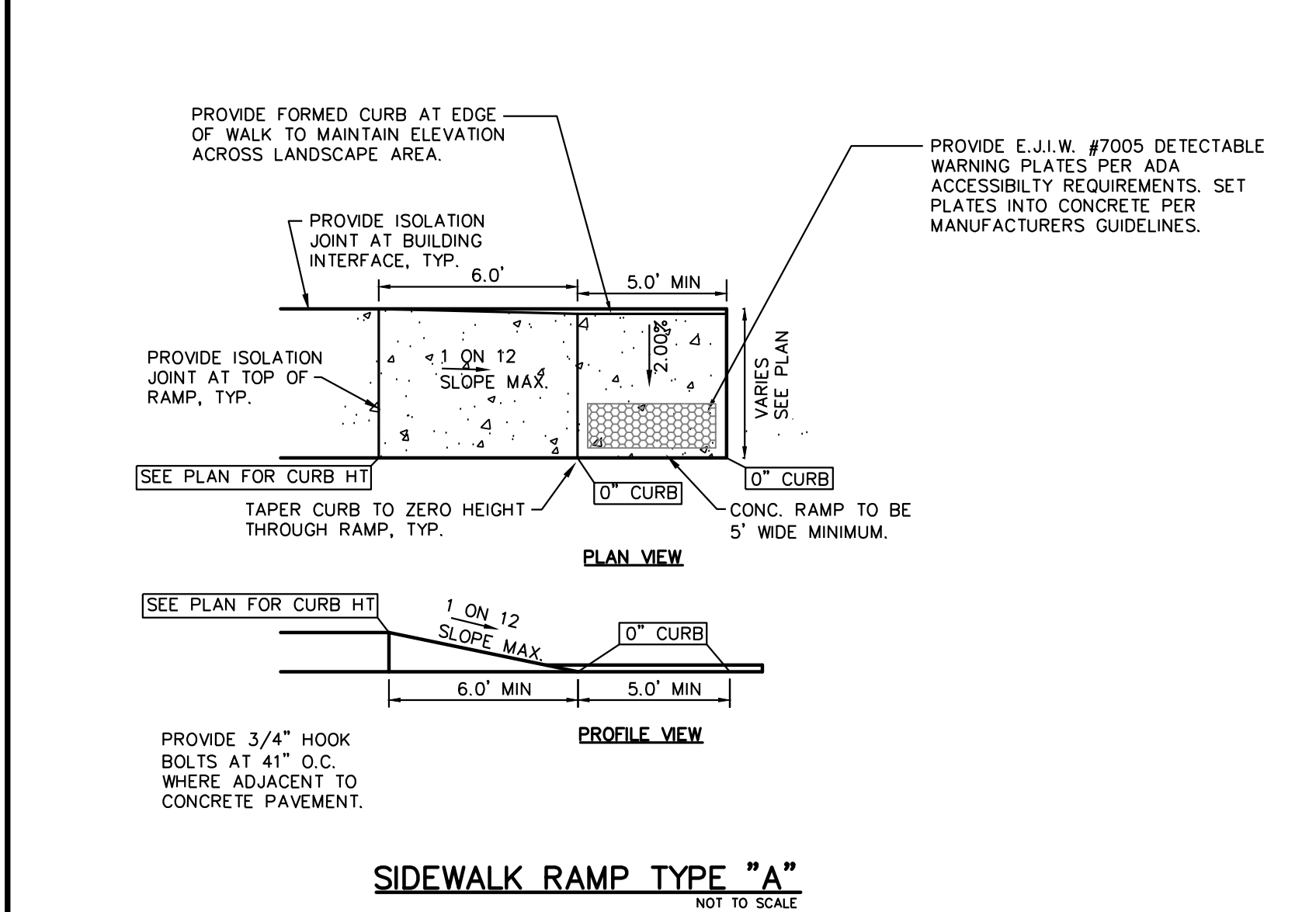
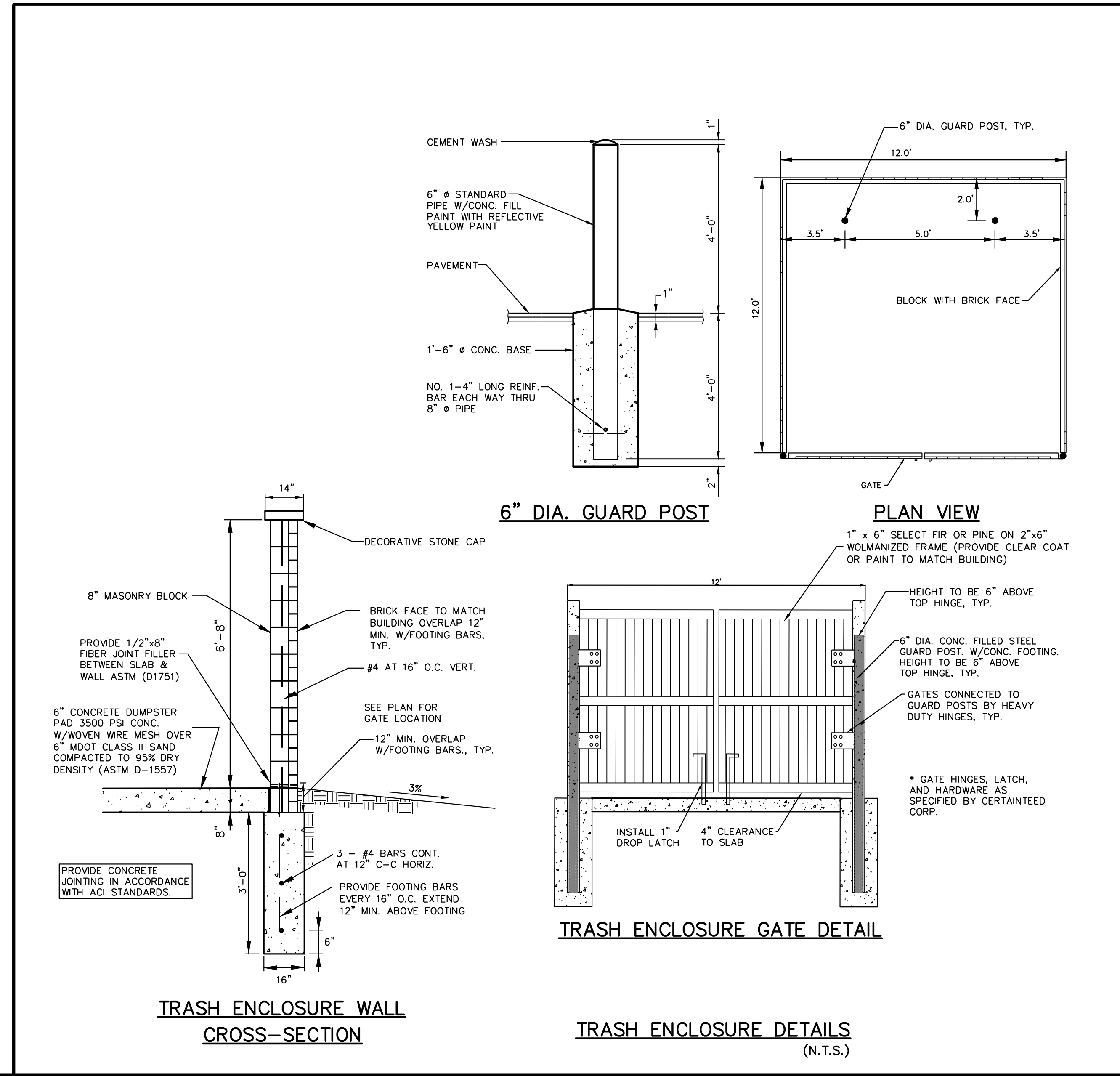
ORIGINAL ISSUE DATE:
11/16/2019

Project No. 2019-013

SCALE: 1" = 30'

DRAWING NUMBER:
PSP-4.2

REVISIONS





D-Series Size 1 LED Area Luminaire

Specifications

EPA: 3,011 (ft-candle)

Length: 33" (841mm)

Width: 10" (254mm)

Height H1: 7-1/2" (191mm)

Height H2: 3-1/2" (89mm)

Weight (max): 27 lbs (12.2kg)

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.



D-Series Size 1 LED Wall Luminaire

Specifications Luminaire

Width: 13-3/4" (347mm)

Depth: 10" (254mm)

Height: 6-3/8" (163mm)

Back Box (BBW, ELCW)

Width: 13-3/4" (347mm)

Depth: 4" (102mm)

Height: 6-3/8" (163mm)

Introduction

The D-Series Wall Luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA N1A2R2 P1RH DDDBX

Series	LED	Color Temperature	Beam Spread	Mounting	Notes
DSX1 LED	Forward optics	30K 3000K	T15 Type II Short	T3M Type I Very Short	SHIPPED INSTALLED
	P1 P4 P7	40K 4000K	T25 Type II Short	T5M Type II Short	SPR
	P2 P5 P8	50K 5000K	T3M Type II Medium	T5M Type II Medium	RPA
	P3 P6 P9		T35 Type II Short	T5M Type II Wide	WBA
	Rotated optics		T3M Type II Medium	B/C Backlight Control	SPMBA
	P10 P12		T4M Type II Medium	L/C00 Left Corner Mount	RPMDBA
	P11 P13		T35M Type II Medium	R/C00 Right Corner Mount	TTM

Shipped installed

N1A2R2 - Light fixture mounted 18" above grade

P1RH - High beam, high beam luminaire series

P2 - High beam, medium beam luminaire series

P3 - High beam, medium beam luminaire series

P4 - High beam, medium beam luminaire series

P5 - High beam, medium beam luminaire series

P6 - High beam, medium beam luminaire series

P7 - High beam, medium beam luminaire series

P8 - High beam, medium beam luminaire series

P9 - High beam, medium beam luminaire series

P10 - High beam, medium beam luminaire series

P11 - High beam, medium beam luminaire series

P12 - High beam, medium beam luminaire series

P13 - High beam, medium beam luminaire series

Ordering Information EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

Series	LED	Power	Color Temperature	Beam Spread	Mounting	Notes
DSXW1 LED	10C 1000lm	350 150mA	30K 3000K	T25 Type II Short	T3M Type II Short	SHIPPED INSTALLED
	20C 2000lm	700 300mA	40K 4000K	T35 Type II Short	T5M Type II Short	SPR
	30C 3000lm	1000 400mA	50K 5000K	T45 Type II Short	T6M Type II Short	RPA
	40C 4000lm	1400 560mA	60K 6000K	T55 Type II Short	T7M Type II Short	WBA
	50C 5000lm	1750 700mA	70K 7000K	T65 Type II Short	T8M Type II Short	SPMBA
	60C 6000lm	2100 840mA	80K 8000K	T75 Type II Short	T9M Type II Short	RPMDBA
	70C 7000lm	2450 980mA	90K 9000K	T85 Type II Short	T10M Type II Short	TTM
	80C 8000lm	2800 1120mA	110K 11000K	T95 Type II Short	T11M Type II Short	
	90C 9000lm	3150 1260mA	130K 13000K	T105 Type II Short	T12M Type II Short	

Accessories

SPR - Single hole (20, 27 or 34")

WBA - Wind guard

SPMBA - Square pole mounting adapter

RPMDBA - Round pole mounting adapter

TTM - Tilt mount

SHIPPED SEPARATELY

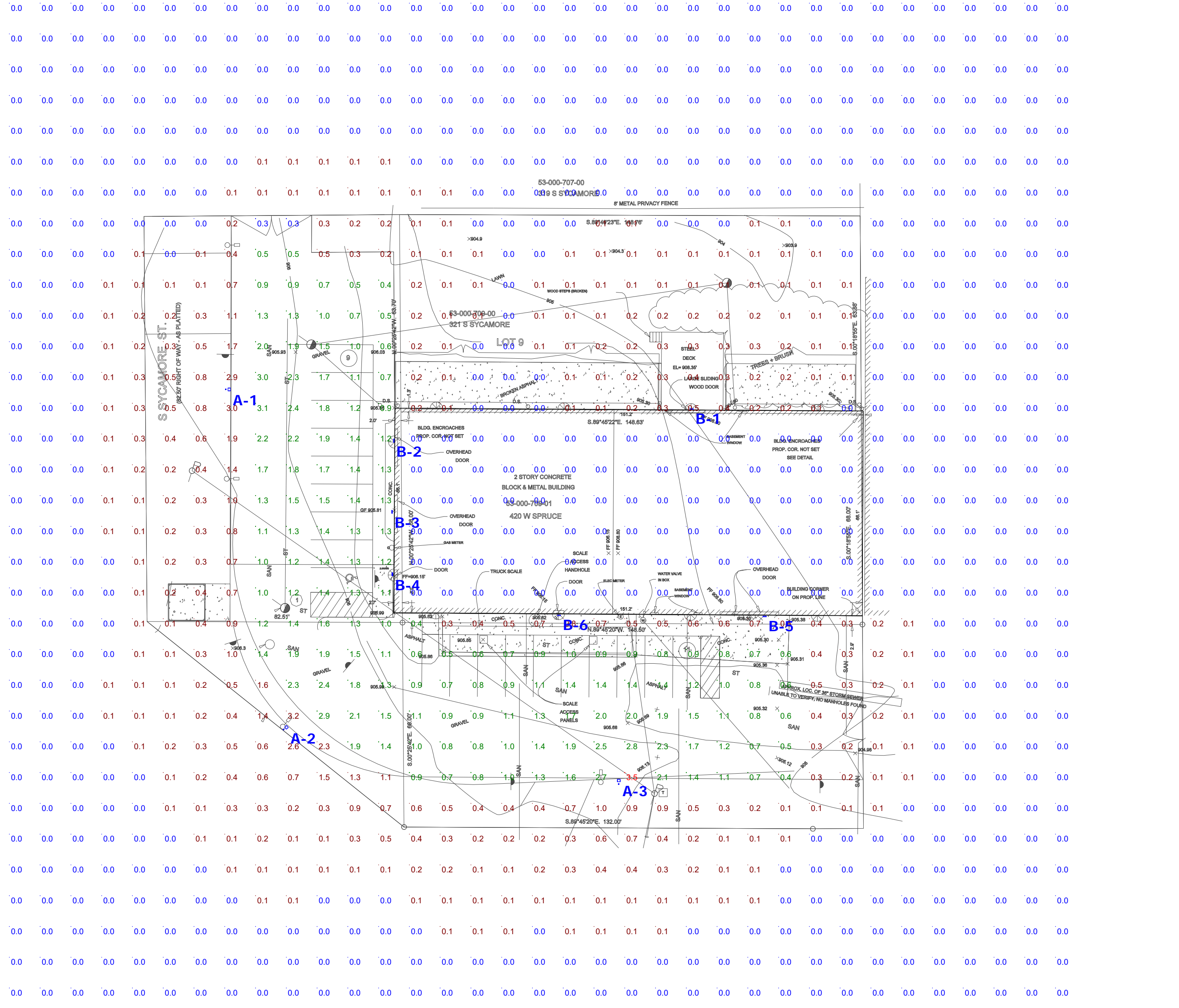
SPR - Single hole (20, 27 or 34")

WBA - Wind guard

SPMBA - Square pole mounting adapter

RPMDBA - Round pole mounting adapter

TTM - Tilt mount



Plan View Scale - 1" = 25ft

- General Note**
- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 - LIGHT LOSS FACTOR .9
 - CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0'-0"

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705

Ordering Note

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

Drawing Note

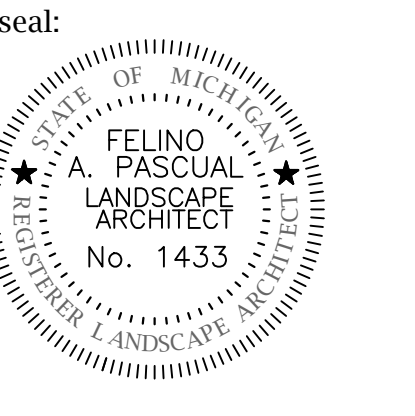
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Mounting Height Note

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

Statistics							
Description	Symbol	Avg	Max	Max/Min	Avg/Min	Avg/Max	Min
PARKING AND DRIVES	X	1.3 fc	3.5 fc	11.7:1	4.3:1	0.4:1	0.3 fc
SITE	+	0.2 fc	3.5 fc	N/A	N/A	0.1:1	0.0 fc

Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Lumens per Lamp	Wattage	Mounting Height	
□	A	3	DSX1 LED P2 40K T4M MVOLT	DSX1 LED P2 40K T4M MVOLT	LED	8707	70	18'	
□	B	6	DSXW1 LED 10C 350 40K T3M MVOLT	DSXW1 LED WITH (1) 10 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 350mA.	LED	1515	13.3	18'	



client:
DELTA ONE
 150 W. 2nd Street
 Suite 250
 Royal Oak, Michigan
 48067

project:
DELTA-ONE
420 W. SPRUCE

project location:
 City of Marshall,
 Michigan
 420 W. Spruce Street

sheet title:
**landscape planting
 detail**

job no./issue/revision date:
 LS20.031.02 SPA 2-10-2020

drawn by:
JP,
 checked by:
FP
 date:
2-7-2020

notice:
 Copyright © 2020
 This document and the subject matter
 contained therein is proprietary and is
 not to be used or reproduced without
 the written permission of Felino Pascual
 and Associates

Do Not scale drawings. Use
 figured dimensions only



The location and elevations of existing
 underground utilities as shown on this
 drawing are only approximate. no guarantee
 is either expressed or implied as to the
 completeness of accuracy; contractor shall be
 exclusively responsible for determining the
 exact location and elevation prior to the start
 of construction

project no:
LS20.031.02

sheet no:
LS-1

landscape plan for:
**Delta-One
 Spruce Street
 City of Marshall, Michigan**

general landscape notes:

- LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISTING CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK, CONTACT THE OWNER AND/OR LANDSCAPE ARCHITECT WITH ANY CONCERNS OR DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SITE CONDITIONS.
- PRIOR TO BEGINNING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES. GAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTACTING 1-888-DIG-1-8220-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COORDINATE ALL RELATED WORK ACTIVITIES WITH OTHER TRADES AND REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER PRIOR TO COMMENCING.
- NUMERICAL VALUE ON THE LANDSCAPE QUANTITIES SPECIFIED ON THE PLAN TAKE PRECEDENCE OVER GRAPHIC REPRESENTATION. VERIFY ANY CONCERN-DISCREPANCY WITH LANDSCAPE ARCHITECT.
- ALL CONSTRUCTION AND PLANT MATERIAL LOCATION TO BE ADJUSTED ON SITE IF NECESSARY.
- ALL SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED BY CITY OF MARSHALL AND LANDSCAPE ARCHITECT.
- ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED AND WRAPPED AS DETAIL SHOWN ON PLAN.
- PLANT BEDS TO BE DRESSED WITH MIN. 4" OF FINELY DOUBLE SHREDDED HARDWARK MULCH.
- DIG SHRUB FITS 1' LARGER THAN SHRUB ROOT BALLS AND TREE FITS 2' LARGER THAN ROOT BALLS. BACK FILL WITH ONE PART TOP SOIL AND ONE PART SOIL FROM EXCAVATED PLANTING HOLE.
- NATURAL COLOR, FINELY SHREDDED HARDWOOD BARK MULCH REQUIRED FOR ALL PLANTINGS.
- REMOVE ALL TUINE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH BALLS, AND FROM TREE TRUNKS. 4" THICK BARK MULCH FOR TREES IN 4' DIA. CIRCLE WITH 3" FULLED AWAY FROM TRUNK. 4" THICK BARK MULCH FOR SHRUBS AND 4" THICK BARK MULCH FOR PERENNIALS.
- PLANT MATERIAL QUALITY 4" INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN LANDSCAPE STANDARDS.
- PROVIDE HYDROSEED FOR ALL NEW AND DISTURBED LAWN AREAS UNLESS NOTED OTHERWISE.
- ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.
- PLANT TREES AND SHRUBS GENERALLY NO CLOSER THAN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS AND PARKING STALLS:
 a) SHADE TREES 5 FT.
 b) ORNAMENTAL AND EVERGREEN TREES 10 FT. (CRAB, PINE, SPRUCE, ETC.)
 c) SHRUBS THAT ARE LESS THAN 1 FOOT TALL AND WIDE AT MATURITY 2 FT.
- NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE ENGINEERING PLANS FOR LOCATION AND DETAILS.
- ALL NEW PARKING ISLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOILS A MIN. OF 16"-18" DEPTH, BACK FILL WITH GOOD, MEDIUM TEXTURED PLANTING SOILS. ADD A MIN. 4" OF TOPSOIL OVERFILL TO FINISH GRADE. PROVIDE POSITIVE DRAINAGE.
- WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.
- ALL TREE FITS TO BE TESTED FOR PROPER DRAINAGE PRIOR TO TREE PLANTING. PROVIDE APPROPRIATE DRAINAGE SYSTEM AS REQUIRED IF THE TREE FIT DOES NOT DRAIN SUFFICIENTLY.

- WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.
 PROVIDE "TREGATOR" SLOW RELEASE WATERING BAGS OR EQUAL TO ALL NEW TREES WHERE UNDERGROUND IRRIGATION SYSTEM IS NOT PROVIDED. CONTRACTOR TO SCHEDULE REFILL WATER BAG AS REQUIRED PER MANUFACTURER SPECIFICATION.
 CONTRACTOR SHALL SEED ALL BARE SPOTS IN EXISTING TURF ON SITE INCLUDING EXISTING RIGHTS OF WAY AND ETC. TO PROVIDE A CONTINUOUS DENSE LAWN.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION INSTALLATION FOR A PERIOD OF TWO YEAR BEGINNING AFTER THE COMPLETION OF LANDSCAPE INSTALLATION DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE TOWNSHIP OR LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.

landscape maintenance notes:

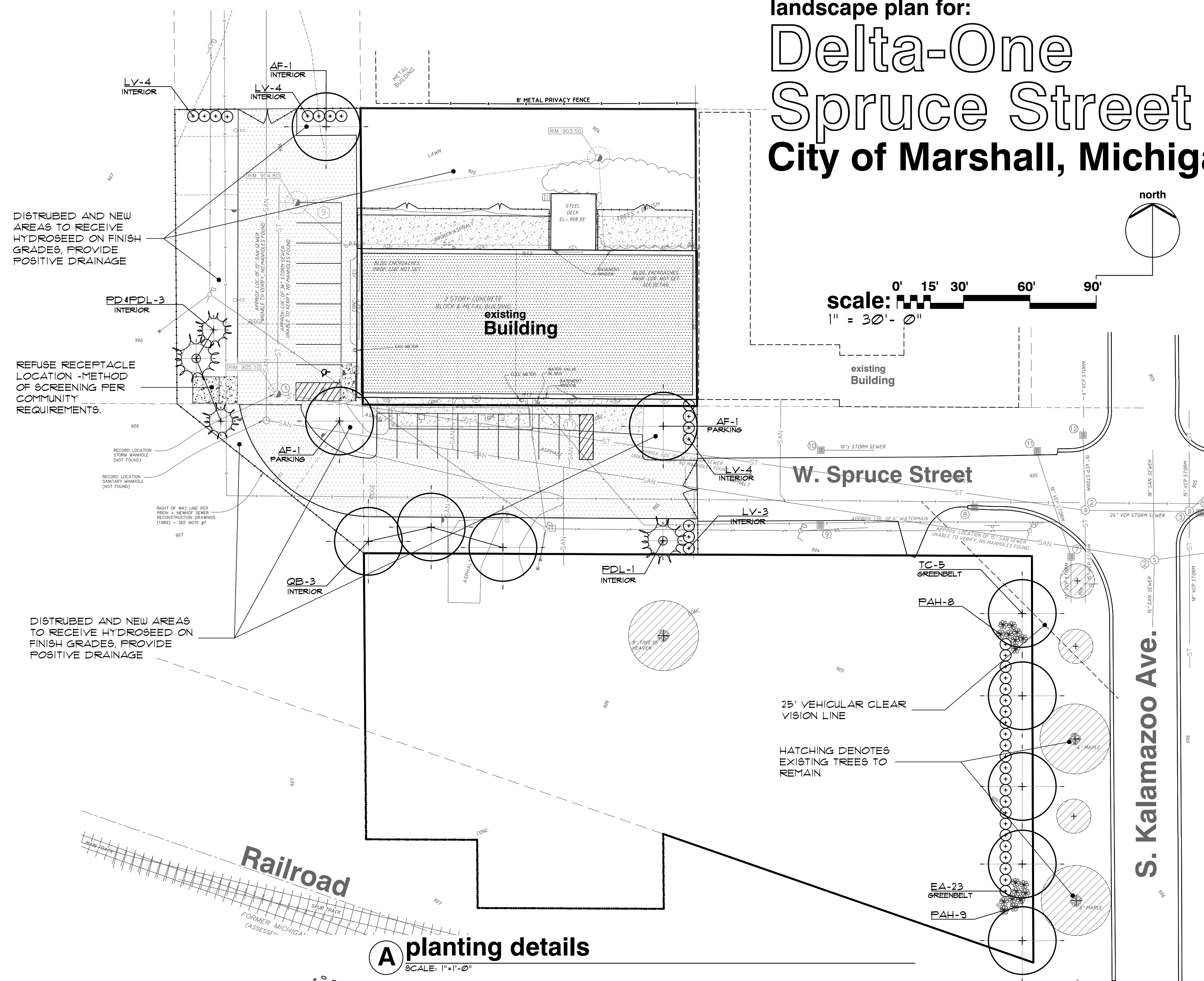
- LANDSCAPE MAINTENANCE PROCEDURES AND FREQUENCIES TO BE FOLLOWED SHALL BE SPECIFIED ON THE LANDSCAPE PLAN. ALONG WITH THE MANNER IN WHICH THE EFFECTIVENESS, HEALTH AND INTENDED PURPOSES OF THE VARIOUS LANDSCAPE AREAS ON THE SITE WILL BE ENSURED.
- LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
 - PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSES.
 - ALL DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED AND REPLACED WITHIN SIX (6) MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST. THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 15 AND NOVEMBER 15 OR UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE.

landscape requirements:

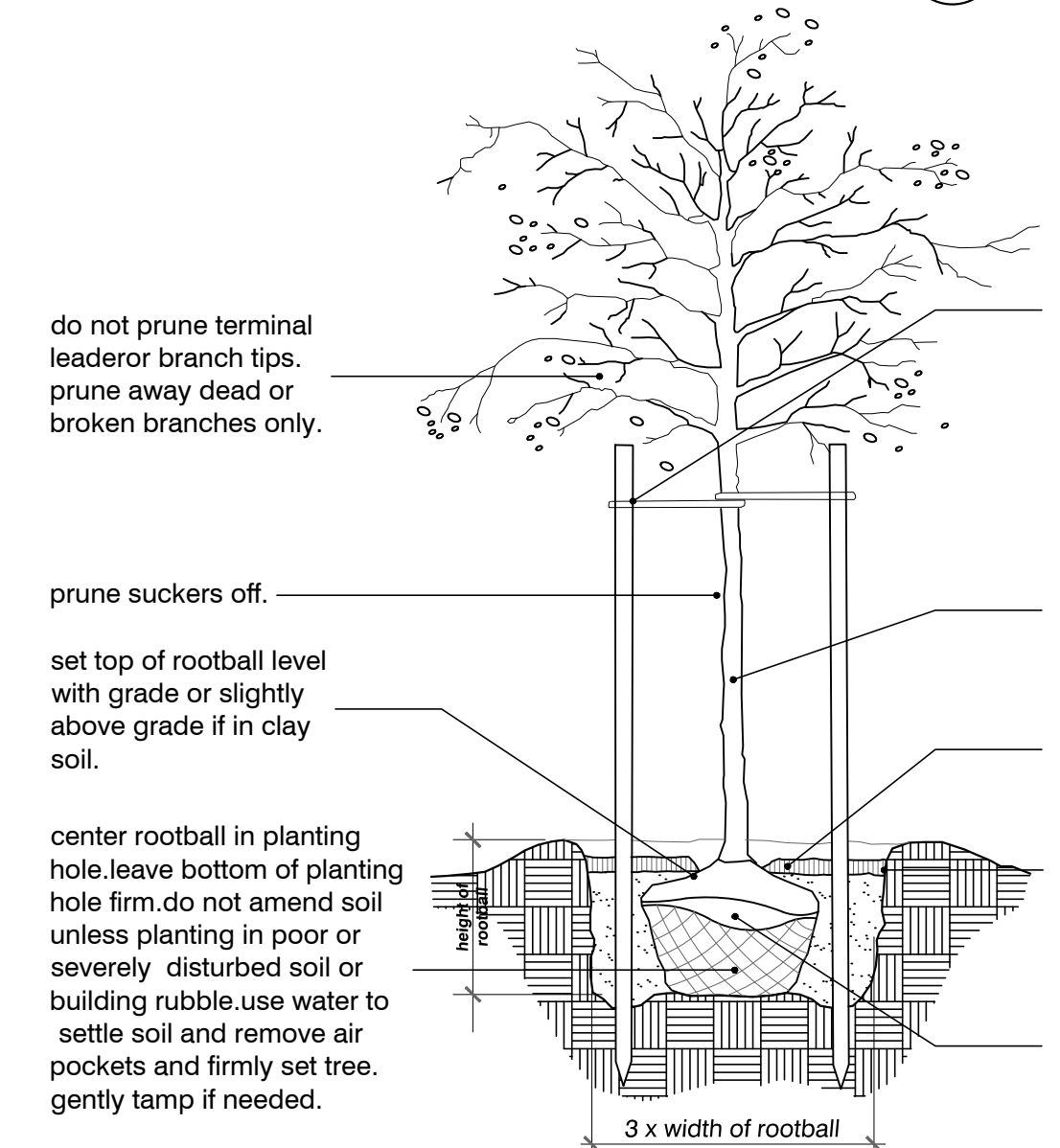
greenbelt landscape		REQUIRED	PROVIDED
TOTAL LF. OF KALAMAZOO AVE FRONTAGE 180'			
ONE (1) DECIDUOUS OR EVERGREEN TREE PER 40 LF. (180 LF / 40 LF = 4.5 x 1 = 4.5 TREES)	5	5	
FOUR (4) SHRUBS PER 40 LF. (180 LF / 40 LF = 4.5 x 4 = 18 SHRUBS)	18	23	
parking		REQUIRED	PROVIDED
TOTAL NO. OF PARKING SPACES PROVIDED 20			
ONE (1) DECIDUOUS TREE PER 10-SPACES (20 SPACES / 10 SPACES = 2 TREES)	2	2	
interior landscape		REQUIRED	PROVIDED
TOTAL SQ.FT. OF PROPERTY 63,919 ±			
INTERIOR LANDSCAPE (5% OF PROPERTY) (63,919 x 5% = 3,195.95 SQFT.)			
ONE (1) DECIDUOUS/ORNAMENTAL/EVERGREEN TREE PER 400 SQFT. (3,196 SQFT. / 400 SQFT. = 7.99 TREES)	8	8	
ONE (1) SHRUB PER 250 SQFT. (3,196 SQFT. / 250 SQFT. = 12.78 SHRUBS)	13	15	

plant material list

key	quant. LS-1	botanical name	common name	size	comments
		LARGE AND SMALL DECIDUOUS TREES			
TC	5	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2 1/2" BB	GREENBELT
AF	3	ACER X FREEMANII 'JEFFERSBRED'	AUTUMN BLAZE RED MAPLE	2 1/2" BB	INTERIOR/GREENBELT
QB	3	QUERCUS BI-COLOR	WHITE SWAMP OAK	2 1/2" BB	INTERIOR
		SHRUBS			
EA	23	EUONYMUS ALATUS COMPACTA	DWARF WINGED BURNING BUSH	5" CONT.	GREENBELT
LV	15	LIGUSTRUM X VICARYI	GOLDEN VICARY PRIVET	5" CONT.	INTERIOR/GREENBELT
PAH	17	PENNISETUM ALOPECUROIDES 'HAPELN'		5" CONT.	
		LARGE AND SMALL EVERGREENS			
PD	2	PICEA GLAUCA 'DENSATA'	BLACKHILLS SPRUCE	8' BB	INTERIOR
PDL	1	PICEA GLAUCA 'DENSATA'	BLACKHILLS SPRUCE	10' BB O	INTERIOR



A planting details
 SCALE: 1" = 1'-0"



tree planting detail
 no scale

do not stake trees unless in heavy clay soil, windy conditions, 3" or greater diameter tree trunk or large crown. If staking is needed due to these conditions - stake with 2x2 hardwood stakes or approved equal driven 6"-8" outside of rootball. - loosely stake tree trunk to allow for trunk flexing. - stake trees just below first branch with 2"-3" wide belt-like, fabric straps (2 per tree on opposite sides of tree, connect from tree to stake horizontally. do not use rope wire thru a hose.). - remove all staking materials after 1 year.

do not prune terminal leader or branch tips. prune away dead or broken branches only.

remove nursery applied tree wrap, tape or string from tree trunk and crown.

prune suckers off.

set top of rootball level with grade or slightly above grade if in clay soil.

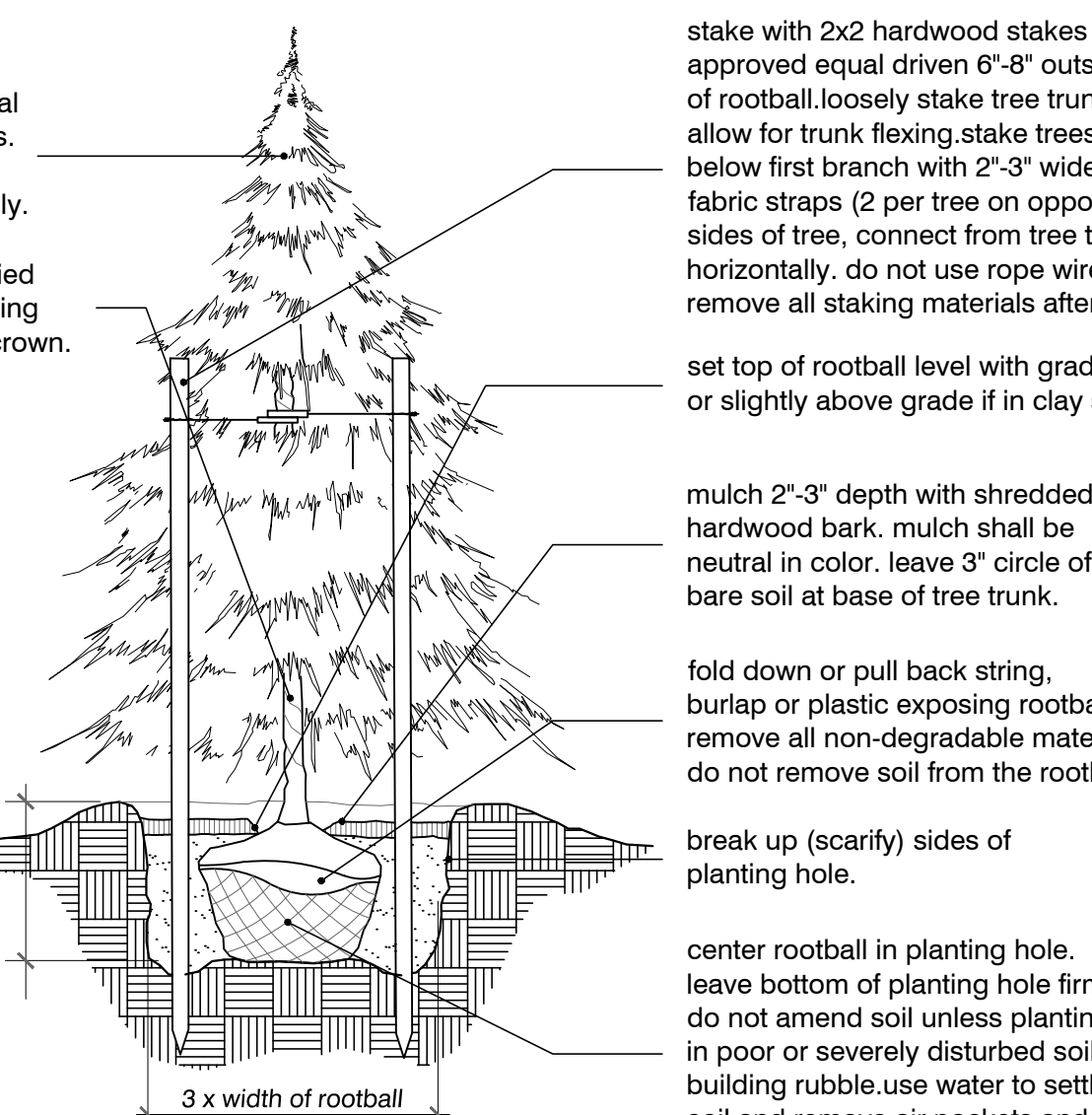
center rootball in planting hole. leave bottom of planting hole firm. do not amend soil unless planting in poor or severely disturbed soil or building rubble. use water to settle soil and remove air pockets and firmly set tree. gently tamp if needed.

remove nursery applied tree wrap, tape or string from tree trunk and crown. remove any tags or labels.

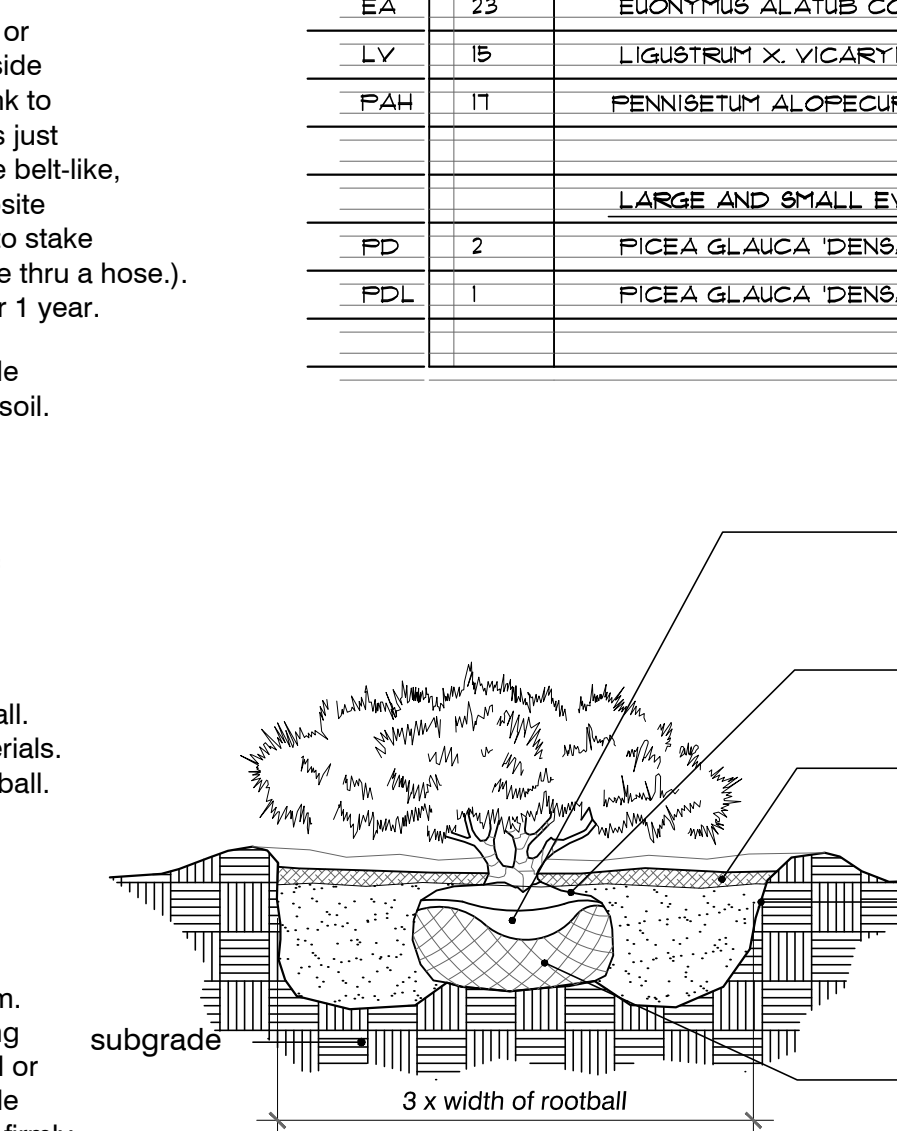
mulch 2"-3" depth with shredded hardwood bark. mulch shall be neutral in color. leave 3" circle of bare soil at base of tree trunk.

break up (scarify) sides of planting hole.

fold down or pull back string, burlap or plastic exposing rootball. remove all non-degradable materials. do not remove soil from the rootball.



evergreen planting detail
 no scale



shrub planting detail
 no scale

stake with 2x2 hardwood stakes or approved equal driven 6"-8" outside of rootball. loosely stake tree trunk to allow for trunk flexing. stake trees just below first branch with 2"-3" wide belt-like, fabric straps (2 per tree on opposite sides of tree, connect from tree to stake horizontally. do not use rope wire thru a hose.). remove all staking materials after 1 year.

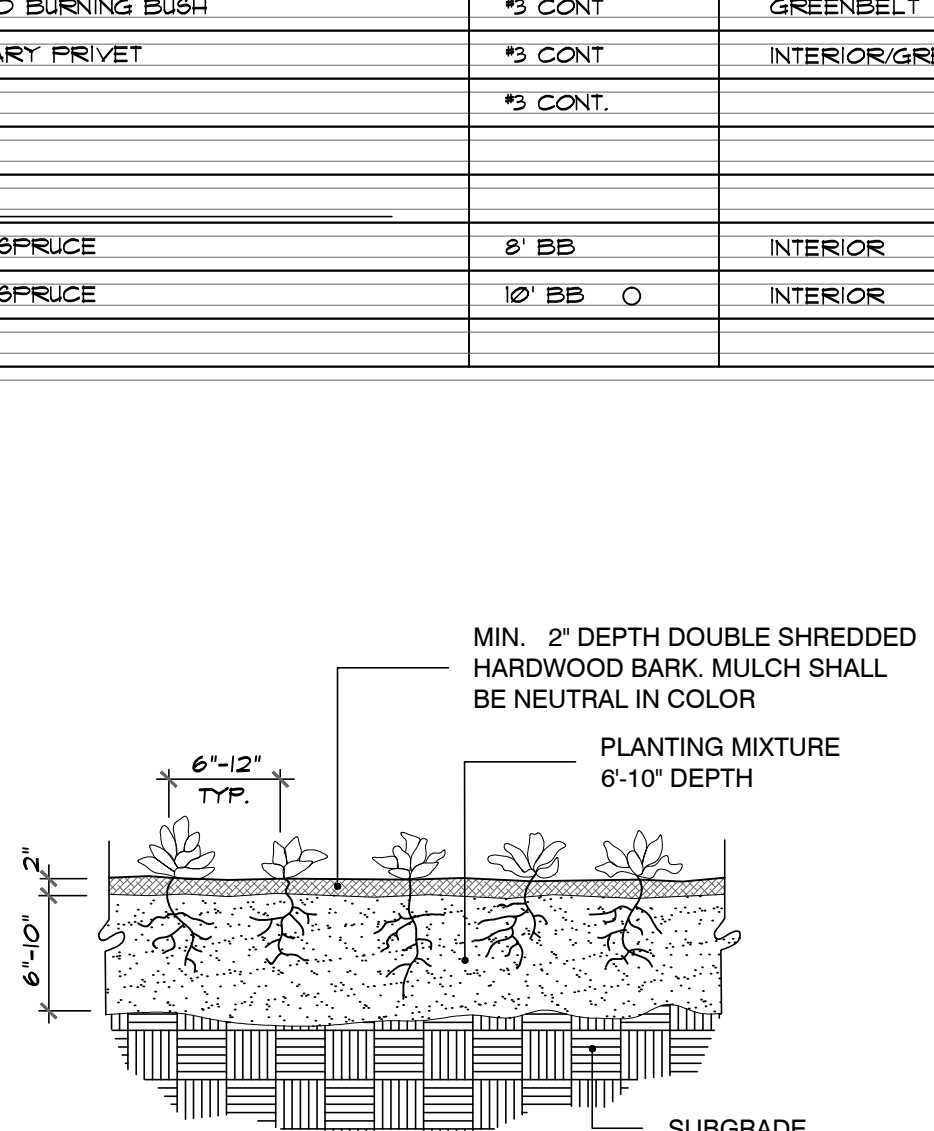
set top of rootball level with grade or slightly above grade if in clay soil.

mulch 2"-3" depth with shredded hardwood bark. mulch shall be neutral in color. leave 3" circle of bare soil at base of tree trunk.

fold down or pull back string, burlap or plastic exposing rootball. remove all non-degradable materials. do not remove soil from the rootball.

break up (scarify) sides of planting hole.

center rootball in planting hole. leave bottom of planting hole firm. do not amend soil unless planting in poor or severely disturbed soil or building rubble. use water to settle soil and remove air pockets and firmly set tree. gently tamp if needed.



perennial planting detail
 no scale

fold down or pull back string, burlap or plastic exposing rootball. remove all non-degradable materials. do not remove soil from the rootball.

set top of rootball level with grade or slightly above grade if in clay soil.

mulch 2"-3" depth with shredded hardwood bark. mulch shall be neutral in color.

break up (scarify) sides of planting hole.

center rootball in planting hole. leave bottom of planting hole firm. do not amend soil unless planting in poor or severely disturbed soil or building rubble. use water to settle soil and remove air pockets and firmly set shrub. gently tamp if needed.

MIN. 2" DEPTH DOUBLE SHREDDED HARDWOOD BARK MULCH SHALL BE NEUTRAL IN COLOR

PLANTING MIXTURE 6"-10" DEPTH