

PROJECT #SP19-019 SITE PLAN FOR CITY COUNCIL APPROVAL FOR **MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

LOCATION MAP SCALE: I" = 2,000'±



SOURCE: GOOGLE EARTH PRO

PROJECT SUMMARY

A 3,803 SQUARE FOOT ONE-STORY STANDALONE CREDIT UNION IS BEING PROPOSED ON SITE A DRIVE-THRU IS PROPOSED ALONG THE REAR OF THE BUILDING IN ACCORDANCE WITH THE SPECIAL USE STANDARDS FOR DRIVE-THRU FACILITIES. THE SITE IS LOCATED WITHIN BOTH THE C3 - FRINGE COMMERCIAL DISTRICT & THE C2B - BUSINESS SERVICE DISTRICT. C3 ZONING HAS BEEN ASSUMED FOR ALL ZONING REQUIREMENTS. PARKING IS PROPOSED ON SITE ALONG WITH ASSOCIATED BICYCLE PARKING IN ACCORDANCE WITH THE CURRENT REQUIREMENTS AND STANDARDS. STORMWATER WILL BE DETAINED AND RELEASED TO THE EXISTING STORM SEWER WITHIN THE WEST STADIUM BOULEVARD RIGHT-OF-WAY. PREVIOUSLY, AN AUTO ZONE WAS APPROVED ON THE PROPERTY. A SPECIAL EXCEPTION USE PETITION (SEU19-003) IS REQUIRED AS PART OF THIS PLAN. A ZONING PETITION (Z19-010) IS REQUIRED TO ZONE THE PROPERTY AS C-3.

AERIAL MAP

SCALE: I" = 200'±

STATEMENT OF INTEREST IN LAND

DEVELOPER HAS ENTERED INTO A LAND CONTRACT WITH CURRENT PROPERTY OWNER. FINAL SALE OF PARCELS IS CONTINGENT ON SITE PLAN AND OTHER PROJECT APPROVALS.

PARCEL AREA 51,016± SQUARE FEET = 1.171± ACRES **LEGAL DESCRIPTION**

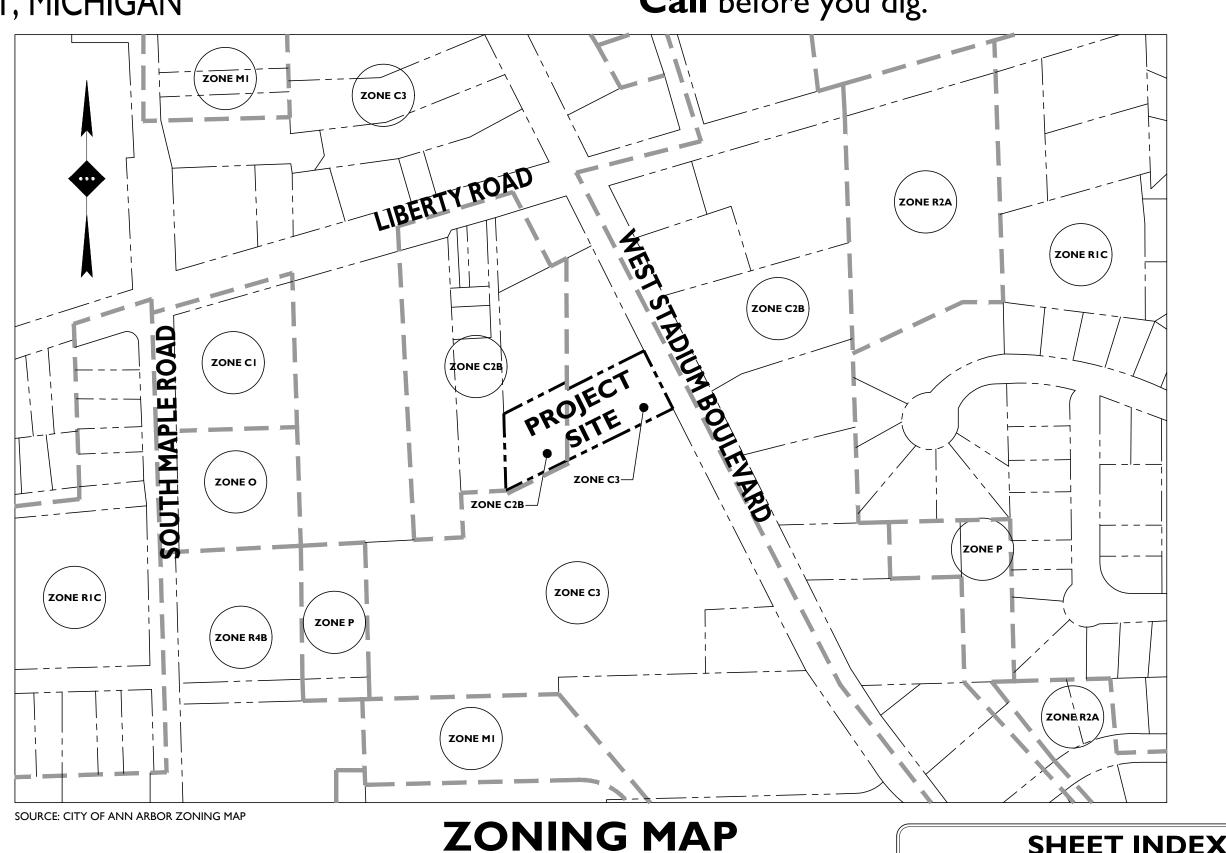
THE LAND SITUATED IN THE CITY OF ANN ARBOR, COUNTY OF WASHTENAW, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SECTION 30, TOWN 2 SOUTH, RANGE 6 EAST; THENCE NORTH 854.71 FEET; THENCE NORTH 75 DEGREES 48 MINUTES 00 SECONDS EAST 743.10 FEET; THENCE SOUTH 01 DEGREES 56 MINUTES 00 SECONDS EAST 451.29 FEET FOR A POINT OF BEGINNING; THENCE NORTH 65 DEGREES 10 MINUTES 00 SECONDS EAST 150.49 FEET: THENCE SOUTH 00 DEGREES 03 MINUTES 00 SECONDS WEST 11.02 FEET; THENCE NORTH 65 DEGREES 10 MINUTES 00 SECONDS EAST 173.96 FEET, THENCE SOUTH 24 DEGREES 50 MINUTES 00 SECONDS EAST 140.00 FEET; THENCE SOUTH 65 DEGREES 10 MINUTES 00 SECONDS WEST 383.29 FEET, THENCE NORTH 01 DEGREES 56 MINUTES 00 SECONDS WEST 162.97 FEET TO THE POINT OF BEGINNING.

PARCEL ID: 09-09-30-318-028 2151 WEST STADIUM BOULEVARD CITY OF ANN ARBOR WASHTENAW COUNTY, MICHIGAN



Know what's **below Call** before you dig.



PLANS PREPARED BY:



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

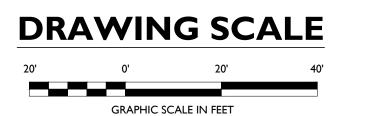
607 Shelby Suite 200, Detroit, MI 48226 Phone 248.247.1115

PLAN REFERENCE MATERIALS:

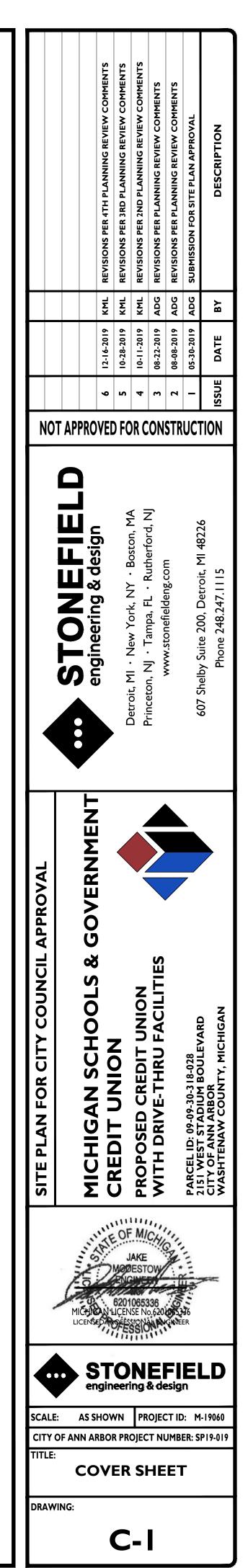
SCALE: |" = 200'±

I. THIS PLAN SET REFERENCES THE FOLLOWING INCLUDING, BUT NOT LIMITED TO:

- BOUNDARY / TOPOGRAPHIC SURVEY KEM-TEC & ASSOCIATES DATED 12/13/201 ARCHITECTURAL PLANS PREPARED BY ST
- ARCHITECTS, DATED 12/16/2019
- **GEOTECHNICAL REPORT**
- **AERIAL MAP OBTAINED FROM GOOGLE EAR** PHASE-I REPORT PREPARED BY PM ENVIRONMENTAL DATED 12/26/2018
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.



l" = 20'



APPLICANT

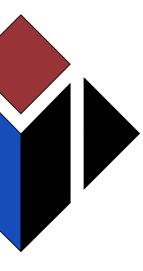
1ICHIGAN SCHOOLS AND GOVERNMENT CREDIT UNION 40400 GARFIELD ROAD CLINTON, MICHIGAN 48038 (586)-263-8800

OWNER

WEST STADIUM, LLC P.O. BOX 1325 ANN ARBOR, MICHIGAN 48106

PETITIONER'S AGENT

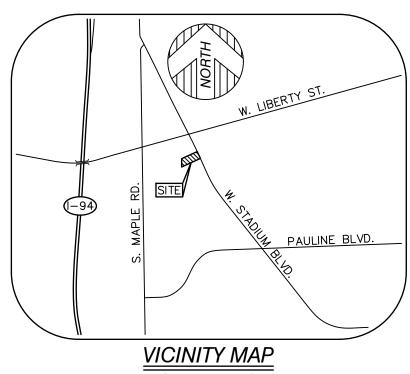
MICHAEL BLANEK MBLANEK@STUCKYVITALE.COM 27172 WOODWARD AVENUE **ROYAL OAK, MICHIGAN 48067** (248)-546-6700

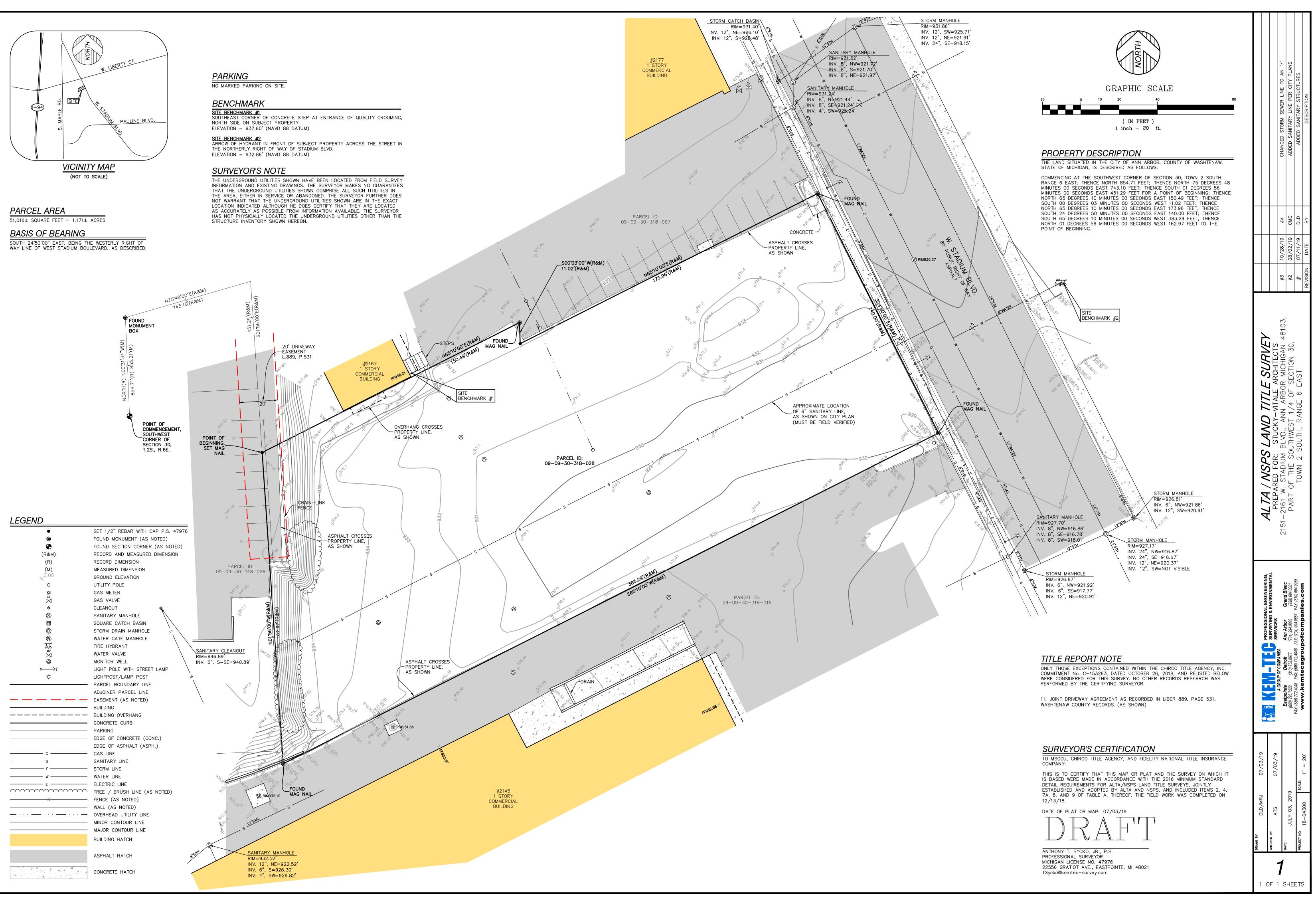


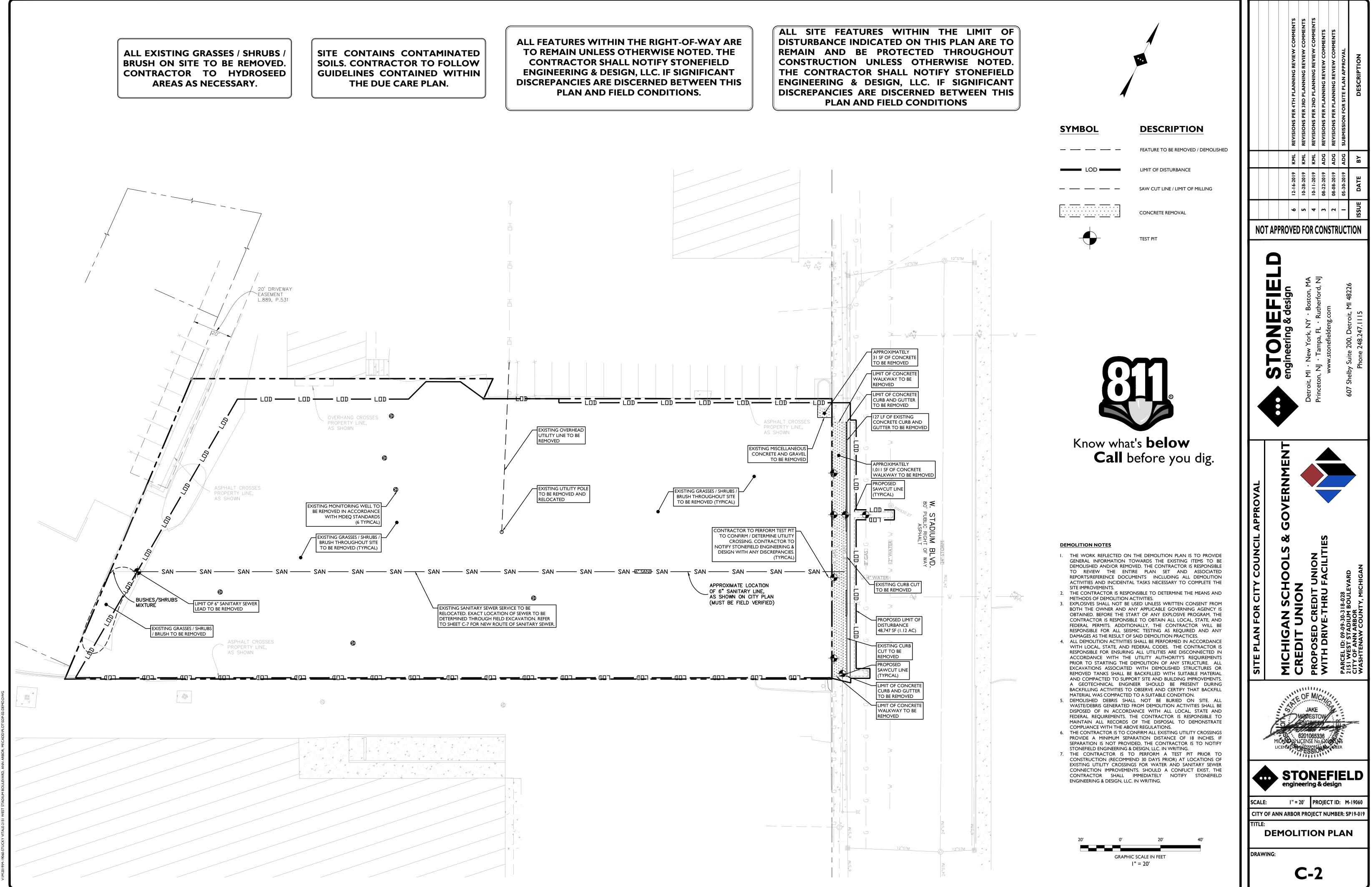
| DOCUMENTS |
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| RTH PRO |

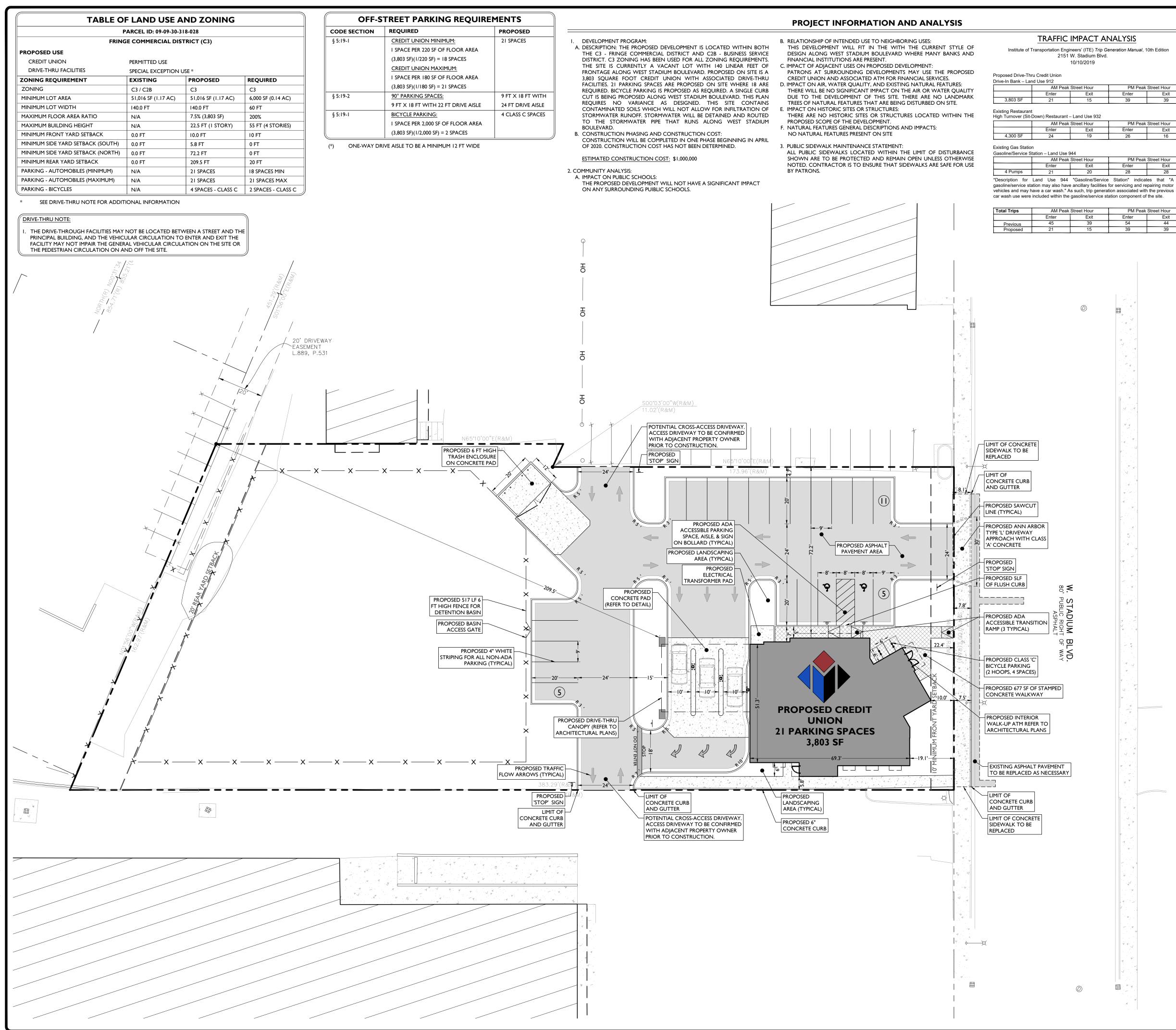
| SHEETINDEX | | | | | |
|--------------------------------------|----------------|--|--|--|--|
| DRAWING TITLE | SHEET # | | | | |
| COVER SHEET | C-1 | | | | |
| ALTA / TOPOGRAPHIC SURVEY | I | | | | |
| DEMOLITION PLAN | C-2 | | | | |
| SITE PLAN | C-3 | | | | |
| GRADING PLAN | C-4 | | | | |
| STORMWATER MANAGEMENT PLAN | C-5 & C-6 | | | | |
| UTILITY PLAN | C-7 | | | | |
| LIGHTING PLAN | C-8 | | | | |
| LANDSCAPING PLAN | C-9 | | | | |
| SOIL EROSION & SEDIMENT CONTROL PLAN | C-10 | | | | |
| CONSTRUCTION DETAILS | C-11 THRU C-14 | | | | |

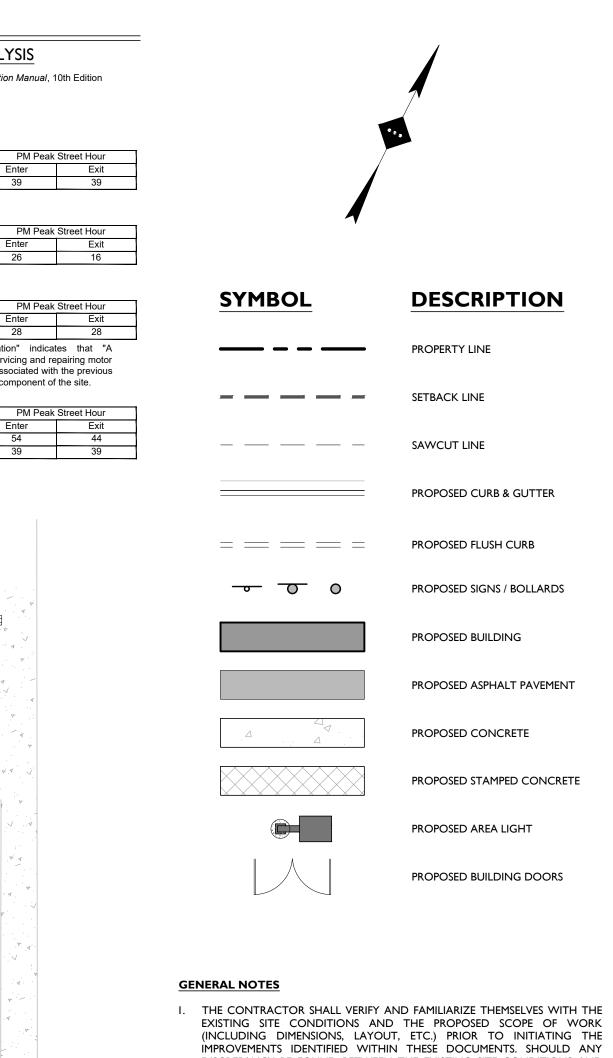
| ARCHITECTURAL SHEETS | | | | | |
|--------------------------|--------|--|--|--|--|
| DRAWING TITLE | SHEETS | | | | |
| ARCHITECTURAL FLOOR PLAN | AI.I | | | | |
| EXTERIOR ELEVATION | A3.1 | | | | |
| EXTERIOR ELEVATION | A3.2 | | | | |
| EXTERIOR RENDERING | A3.3 | | | | |











39

26

Enter

54

- DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSUR THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND
- APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION. 3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
- 4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC. 5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND
- METHODS OF CONSTRUCTION. 6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
- 7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
- 8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET. 9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN
- ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. 10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING
- AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS. 11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION
- & DEMOLITION ACTIVITIES. 12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.

FIRE DEPARTMENT NOTES:

I. STORAGE AREA FOR CONSTRUCTION MATERIALS SHALL NOT INTERFERE WITH FIRE / EMERGENCY SITE ACCESS. 2. FIRE HYDRANTS SHALL BE IN SERVICE DURING CONSTRUCTION

ALL SIDEWALKS SHALL BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME. PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE, ALL EXISTING SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.

> GRAPHIC SCALE IN FEET I" = 20'

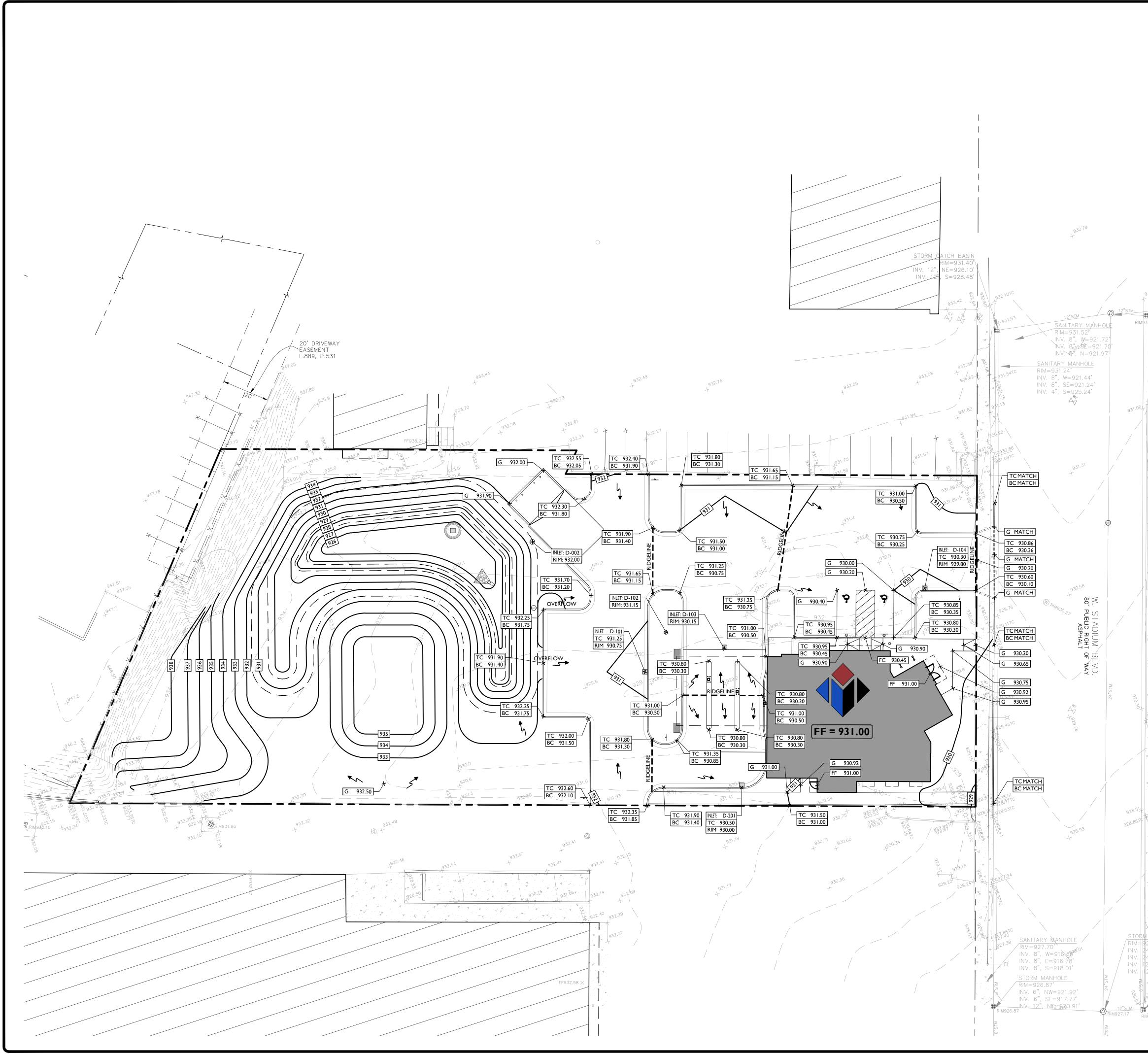
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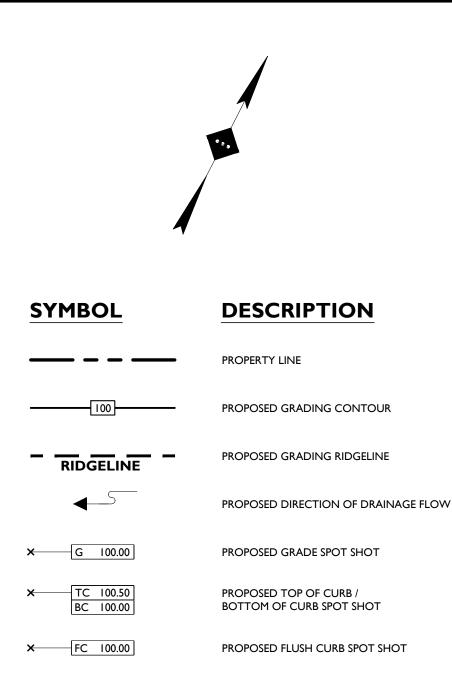
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019

C-3

SITE PLAN

DRAWING:



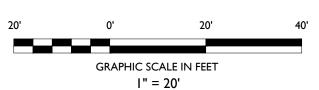


GRADING NOTES

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

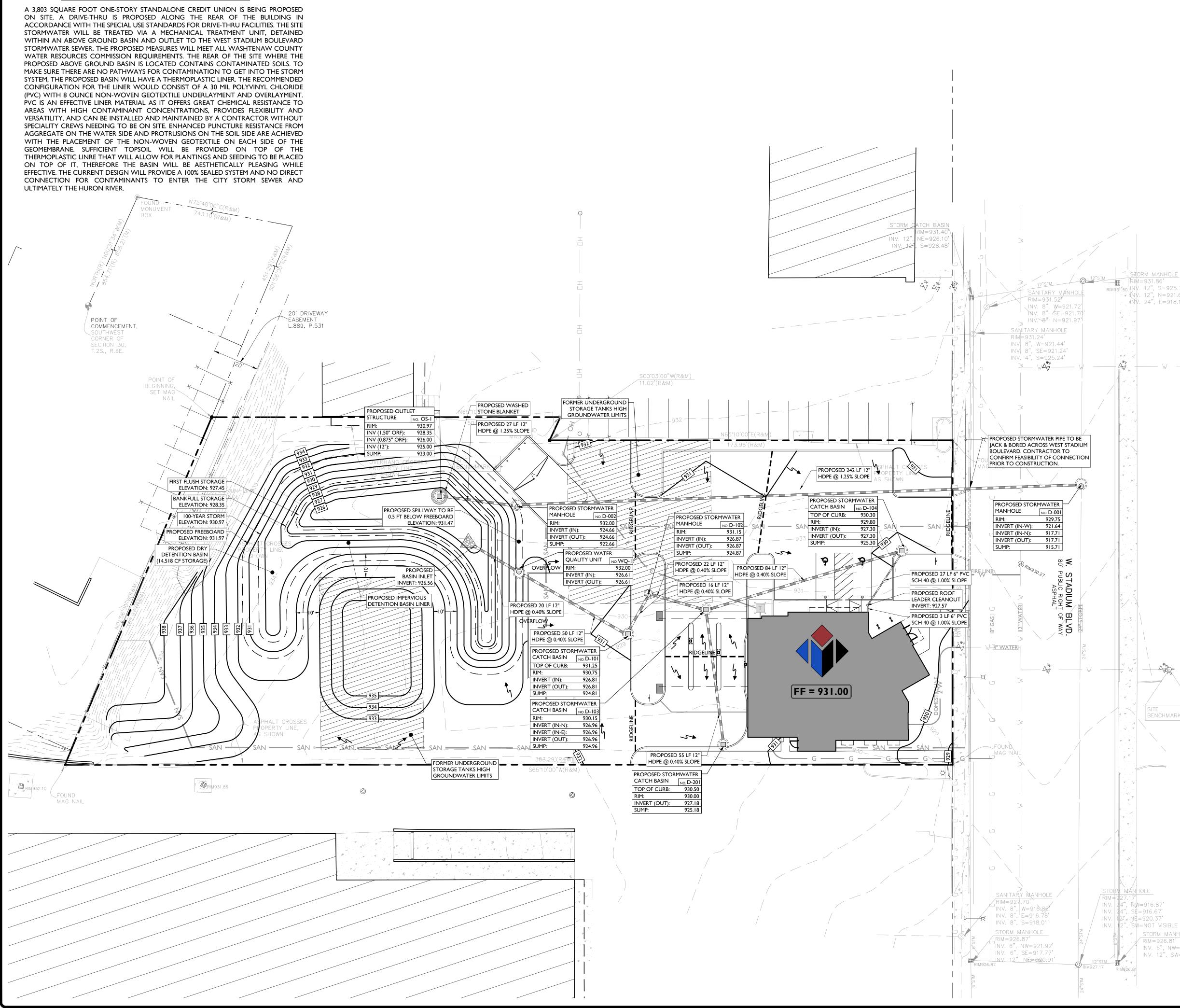
ADA NOTES

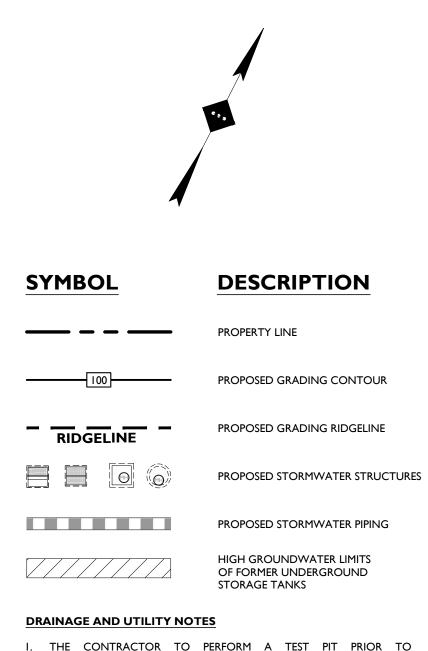
- I. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
- THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP, AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING
- S. THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% ROWINING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
- ACCESSIBLE RAMPS WITH A RISE GREATER THAN 36 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE
- ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
 8. THE CONTRACTOR SHALL ENSURE A MAXIMUM OF ¹/₄ INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN ¹/₄ INCHES AND ¹/₂ INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP ¹/₄ INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN I UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
- 9. THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ½ INCH.



| | | KML REVISIONS PER 4TH PLANNING REVIEW COMMENTS | KML REVISIONS PER 3RD PLANNING REVIEW COMMENTS | KML REVISIONS PER 2ND PLANNING REVIEW COMMENTS | ADG REVISIONS PER PLANNING REVIEW COMMENTS | ADG REVISIONS PER PLANNING REVIEW COMMENTS | ADG SUBMISSION FOR SITE PLAN APPROVAL | BY DESCRIPTION |
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| | | 12-16-2019 K | 0-28-2019 K | 10-11-2019 K | 08-22-2019 A | 08-08-2019 A | 05-30-2019 A | DATE |
| | | 6 12-1 | 5 10-2 | 4 10-1 | 3 08-3 | 2 08-(| I 05-3 | ISSUE D |
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| | 8 | | Maction M . Nouly NV . Bottom MA | Definition NI + Tampa EI + Buthouford NI | | | | Phone 248.247.1115 |
| SITE PLAN FOR CITY COUNCIL APPROVAL MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION PROPOSED CREDIT | | | | | | | | |
| SITE PLAN FOR CITY COUP | | | | PROPOSED CREDIT UNIO | WITH DRIVE-THRU FACIL | | PARCEL ID: 09-09-30-318-028 | CITY OF ANN ARBOR WASHTENAW COUNTY, MICHIGAN |

STORM WATER NARRATIVE





CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING. 2. CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT

TRIM=931.86'

∢ ¥NV. 12", N=921.61' √NV. 24", E=918.15'

|BENCHMARK #2

TORM MANHOLE

* | STO<u>RM MANHOLE</u>

RIM=926.81'

RIM\$31.50 . NV. 12", S=925.7

ET.

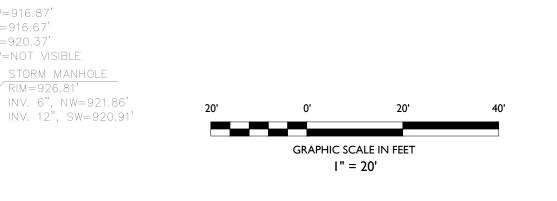
- THE LOWEST INVERT AND WORK UP-GRADIENT. 3. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
- 4. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

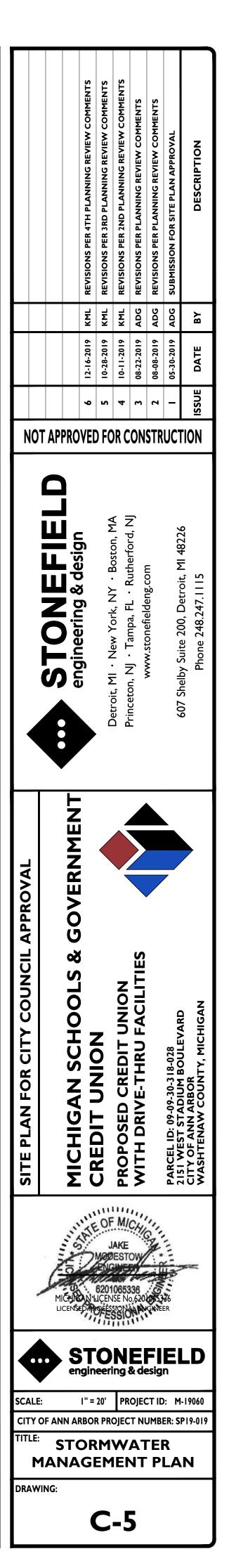
EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

- I. THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION, THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET. 2. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE ' A QUALIFIED SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC. AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS. 5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN
- AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.

STORMWATER INFILTRATION BMP CONSTRUCTION NOTES

- PRIOR TO THE START OF CONSTRUCTION, ANY AREA DESIGNATED TO BE USED FOR AN INFILTRATION BMP (E.G. BASIN, BIORETENTION AREA, ETC.) SHALL BE FENCED OFF AND SHALL NOT BE UTILIZED AS STORAGE FOR CONSTRUCTION EQUIPMENT OR AS A STOCKPILE AREA FOR CONSTRUCTION MATERIALS. NO ACTIVITY SHALL BE PERMITTED WITHIN THE INFILTRATION BASIN AREA UNLESS RELATED TO THE CONSTRUCTION OF THE INFILTRATION BASIN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL SUBCONTRACTORS OF BASIN AREA RESTRICTIONS.
- 2. THE CONTRACTOR SHALL MAKE EVERY EFFORT, WHERE PRACTICAL, TO AVOID SUBGRADE SOIL COMPACTION IN THE AREAS DESIGNATED TO BE USED FOR AN INFILTRATION BMP.
- 3. ALL EXCAVATION WITHIN THE LIMITS OF ANY INFILTRATION BMP SHALL BE PERFORMED WITH THE LIGHTEST PRACTICAL EXCAVATION EQUIPMENT. ALL EXCAVATION EQUIPMENT SHALL BE PLACED OUTSIDE THE LIMITS OF THE BASIN WHERE FEASIBLE. THE USE OF LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT (LESS THAN 8 PSI APPLIED TO THE GROUND SURFACE) IS RECOMMENDED WITHIN THE BASIN LIMITS.
- 4. THE SEQUENCE OF SITE CONSTRUCTION SHALL BE COORDINATED WITH BASIN CONSTRUCTION TO ADHERE TO SEQUENCING limitations.
- 5. DURING THE FINAL GRADING OF AN INFILTRATION BASIN, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAW OR EQUIVALENT GRADING EQUIPMENT. ALL GRADING EQUIPMENT SHALL BE LOCATED OUTSIDE OF THE BASIN BOTTOM WHERE FEASIBLE.
- 6. FOLLOWING CONSTRUCTION OF AN INFILTRATION BASIN, SOIL INFILTRATION TESTING BY A LICENSED GEOTECHNICAL ENGINEER IS REQUIRED TO CERTIFY COMPLIANCE WITH THE DESIGN INFILTRATION RATES IN ACCORDANCE WITH APPENDIX E OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL, LATEST EDITION. IF THE FIELD INFILTRATION RATES ARE LOWER THAN THE RATE USED DURING DESIGN, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING IMMEDIATELY TO DETERMINE THE APPROPRIATE COURSE OF ACTION.
- 7. THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY TO DETERMINE IF WITNESS TESTING IS REQUIRED DURING INFILTRATION BASIN EXCAVATION AND/OR SOIL INFILTRATION TESTING.





| | | County Stormwater Ma | | | | | NRCS VARIA Cover Type (P |
|----------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|
| Project: | MSGCU Ann Arbor | | Designer: | KML | Date: | 12/16/19 | Meadow |
| | | | | | | | |
| RATIONAL METHOD VARIABL | | | | | | | Subtotals |
| Landcover Building / Roof | Area (SF) 4,928 | | C-Value* 0.90 | | Weighted Val 4,435 | ue | |
| Pavement / Hardscape | 16,494 | > | | = | 14,845 | | Pervious Cover |
| Open Space | 29,594 | > | ¢ 0.20 | = | 5,919 | | Fully Developed |
| Subtotals | 51,016 | | | | 25,199 | | |
| *C-values obtained from Washtenaw County | y Water Resources Commissioner | | | Composite C Value, C | 0.49 | | |
| FIRST FLUSH RUNOFF CALCU | JLATION (V _{ff}) | | | | | | Subtotals |
| V _{ff} = (IN) * (FT / 2 IN) * (43 | 3 540 SE) * A * C | | Г | Site Area, A | A: I.I7 A | | |
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| | | | First Flus | h Runoff Volume,V _{ff} : | 2,099.88 | CF | |
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| | | | | | | | |
| PRE-DEVELOPMENT BANKFUL | L RUNOFF CALCULATION (V_b | _{f-pre}) | | | | | |
| | | Rainfal | I Value (2 Year / 2 | 4 Hour Storm Event), | , P: 2.35 | IN | |
| S = (1000 / CN) = 10 | | | Eurotion of Mato | wheed Soil 9 Condition | 7.24 | | |
| S = (1000 / CN) - 10 | | | Function of wate | rshed Soil & Conditio | ns: 7.24 | _IN | |
| Q = (P-0.2*S) ² /(P+0.8*S) | | | | Runoff, | Q: 0.10 | _IN | TIME OF CO |
| *Site Area Excluding "Self Crediting" BM | IPs | | | *Total Site Ar | r ea: 51,016.00 | SF | |
| V _{bf-pre} = Q * (1/12) * Area | | | Pre-Development | : Bankfull Volume, V _{bf-} | | | |
| Vbt-pre - Q (1/12) Alea | | | | | pre• 727.30 | _ | |
| POST-DEVELOPMENT PERVIOU | US BANKFULL RUNOFF CALC | ULATION (V _{bf-per-f} | post) | | | | |
| | | Rainfal | l Value (2 Year / 2 | 4 Hour Storm Event), | , P: 2.35 | IN | P |
| S = (1000 / CN) - 10 | | | Function of Wate | rshed Soil & Conditio | ns: 6.39 | IN | Impe |
| | | | | | | | · · |
| $Q = (P-0.2*S)^2/(P+0.8*S)$ | | | | Runoff, | Q: 0.15 | _IN | |
| | | | | Pervious Cover Ar | r ea: 29,594 | SF | Pervious |
| V _{bf-per-post} = Q * (1/12) * Area | | Pervious C | over Post Developm | ent Bankfull Volume, V _{bf-per} | -post ² 379.17 | CE | Impervious C |
| | | | | | -post* 577.17 | _ | |
| POST-DEVELOPMENT IMPERVI | 1005 BANKFULL KUNOFF CAL | | | | | | |
| | | | • | 4 Hour Storm Event), | | _IN | ONSITE INFI |
| S = (1000 / CN) - 10 | | | Function of Wate | rshed Soil & Conditio | ns: 0.20 | _IN | $\mathbf{V}_{\text{bf-diff}} = \mathbf{V}_{\text{bf-pos}}$ |
| $Q = (P-0.2*S)^2/(P+0.8*S)$ | | | | Runoff, | Q: 2.12 | _IN | *Basin to include |
| | | | | Impervious Cover Ar | rea: 21,422 | SF | DETENTION |
| V _{bf-imp-post} = Q * (1/12) * Area | | Impervious Co | over Post Developme | ent Bankfull Volume, V _{bf-imp} | -post ² 3,787.54 | CE | Q _p = 238.6*T _c |
| br-imp-post | | | | bt-imp | -post 5,7 07.5 1 | _ | $\mathbf{e}_{\mathrm{p}} = 230.0 \mathbf{T}_{\mathrm{c}}$ |
| PERVIOUS COVER POST-DEVE | LOPMENT 100 YEAR STORM R | UNOFF CALCUL | ATION (V100-per-pos | ε) | | | *Site Area Exclud |
| | | | Rainfall Value (1 | 00 Year Storm Event), | , P: 5.11 | IN | $\mathbf{Q}_{100} = \mathbf{Q}_{100\text{-per}}$ |
| S = (1000 / CN) - 10 | | | Function of Wate | rshed Soil & Conditio | ns: 6.39 | IN | PF = (Q _p * Q ₁ |
| - () | | | | | | _ | |
| _ | | | | Runoff, Q ₁₀₀₋ | .per: 1.44 | _IN | $\Delta = PF - (0.15$ |
| Q _{100-per} = (P-0.2*S) ² /(P+0.8*S) | | | | | | | $V_{det} = (\Delta / PF)$ |
| Q _{100-per} = (P-0.2*S) ² /(P+0.8*S) | | | | | | | |
| Q _{100-per} = (P-0.2*S) ² /(P+0.8*S) | | | | Pervious Cover Ar | rea: 29.594 | SF | $\mathbf{V}_{\perp} = ((\wedge \mathbf{P})$ |
| | | | | Pervious Cover Ar | | _ | $V_{det} = ((\Delta / PF))$ |
| $Q_{100-per} = (P-0.2*S)^2/(P+0.8*S)$ $V_{100-per-post} = Q * (1/12) * Area$ | | Pervious Cov | er Post Development | Pervious Cover Ar t 100-Year Volume, V _{100-per} | | _ | |
| V _{100-per-post} = Q * (1/12) * Area | | | | t 100-Year Volume, V _{100-per} | | _ | ABOVEGROU Elevation |
| V _{100-per-post} = Q * (1/12) * Area | VELOPMENT 100 YEAR STORM | | | t 100-Year Volume, V _{100-per} | | _ | ABOVEGROU Elevation 92 |
| V _{100-per-post} = Q * (1/12) * Area | VELOPMENT 100 YEAR STORM | | JLATION (V100-imp | t 100-Year Volume, V _{100-per} | . _{post} : 3,540.50 | _ | ABOVEGROU Elevation 92 92 |
| V _{100-per-post} = Q * (1/12) * Area IMPERVIOUS COVER POST-DEV | VELOPMENT 100 YEAR STORM | | JLATION (V100-imp Rainfall Value (1 | t 100-Year Volume, V _{100-per} _{post}) 00 Year Storm Event), | . _{post} : 3,540.50 | CF | ABOVEGROU <i>Elevation</i> 92 92 92 92 92 |
| V _{100-per-post} = Q * (1/12) * Area IMPERVIOUS COVER POST-DEV S = (1000 / CN) - 10 | VELOPMENT 100 YEAR STORM | | JLATION (V100-imp Rainfall Value (1 | t 100-Year Volume, V _{100-per} post) 00 Year Storm Event), rshed Soil & Conditio | | IN | ABOVEGROU <i>Elevation</i> 92 92 92 92 93 |
| | VELOPMENT 100 YEAR STORM | | JLATION (V100-imp Rainfall Value (1 | t 100-Year Volume, V _{100-per} _{post}) 00 Year Storm Event), | | CF | ABOVEGROU Elevation 92 92 92 92 92 93 |
| $V_{100-per-post} = Q * (1/12) * Area$ IMPERVIOUS COVER POST-DEV S = (1000 / CN) - 10 | VELOPMENT 100 YEAR STORM | | JLATION (V100-imp Rainfall Value (1 | t 100-Year Volume, V _{100-per} post) 00 Year Storm Event), rshed Soil & Conditio | -post ² 3,540.50 , P: 5.11 ms: 0.20 mp: 4.87 | IN IN IN | V _{det} = ((∆ / PF ABOVEGROU Elevation 92 92 92 93 93 |

ARIABLES

| e (Pre-Development) | Soil Type | Area (SF) |
|----------------------------------|-----------|---------------------------------------|
| | В | 51,016 |
| | | |
| | | |
| | | |
| | | 51,016 |
| | a | |
| over Type (Post-Development) | Soil Type | Area (SF) |
| oped Urban Area (Good Condition) | В | 29,594 |
| | | |
| | | |
| | | |
| | | 29,594 |
| | | |
| s Cover Type (Post-Development) | Soil Type | Area (SF) |
| ing Lots, Roofs, Driveways | В | 21,422 |
| | | |
| | | |
| | | · · · · · · · · · · · · · · · · · · · |
| | | 21,422 |
| | | |

| - | Curve Number (CN) | | Weighted Value |
|-----|-------------------|--------------|----------------|
| ļ | 58.0 | = | 2,958,928 |
| F | | = | |
| Ľ | | | |
| | | - | 2,958,928 |
| Г | Composite C | N Value, CN: | 58.00 |
| | - | 1 | |
| - | Curve Number (CN) | | Weighted Value |
| e | 51.0 | = | 1,805,234 |
| | | | |
| | | = | |
| | | | |
| | | | 1,805,234 |
| Г | Composite C | N Value, CN: | 61.00 |
| | Curve Number (CN) | | Weighted Value |
| - H | 98.0 | = | 2,099,356 |
| 9 | | 1 | |
| | | = | |
| | | = | |
| | | | |

Composite CN Value, CN: 98.00

| OF CONCE | NTRATION FOR APPL | ICABLE FLOW TYPES (T _{c-hrs}) | | | |
|-----------------------------------------|---------------------------------|--------------------------------------------------|--------------------------------------------------------|-----------|------------|
| FF SUMMA | ARY | | Total Time of Concentration (T _{c-hrs}): | 0.25 | HR - |
| | | | | | |
| | | | First Flush Runoff Volume, V _{ff} : | 2,099.88 | CF |
| | | | Pre-Development Bankfull Volume, V _{bf-pre} : | 424.50 | CF |
| Pervio | ous Cover Post Develop | ment Bankfull Volume, V _{bf-per-post} : | 379.17 CF | | |
| Impervio | us Cover Post Developi | ment Bankfull Volume, V _{bf-imp-post} : | 3,787.54 CF | | |
| | | | Total Bankfull Volume (V _{bf-post}): | 4,166.72 | CF |
| vious Cove | r Post Development 10(| 0-Year Storm Volume, V _{100-per-post} : | 3,540.50 CF | | |
| vious Cove | r Post Development 100 | -Year Storm Volume, V _{100-imp-post} : | 8,699.12 CF | | |
| | | | Total 100 Year Volume (V ₁₀₀): | 12,239.62 | CF |
| E INFILTR | ATION REQUIREMENT | S | | | |
| = V _{bf-post} - V _l | bf-pre | | Bankfull Volume Difference, V _{bf-diff} : | | CF |
| o include addit | ional 20% volume if required | infiltration is not provided | Onsite Infiltration Requirement, V _{inf} : | - | CF |
| ITION REQ | UIREMENTS | | | | |
| 88.6*T _c ^{-0.82} | | | Peak of the Unit Hydrograph, Q_p : | 743.63 | CFS / IN-M |
| ea Excluding " | Self Crediting" BMPs | l | *Total Site Area: | 1.17 | AC |
| Q _{100-per} + Q | 100-imp | l | 100 Year Storm Runoff, Q ₁₀₀ : | 6.3 I | IN |
| Q _P * Q ₁₀₀ * / | Area) / 640 | l | Peak Flow, PF: | 8.58 | CFS |
| - (0.15 * Ar | rea) | | Δ: | 8.41 | CFS |
| (Δ / PF) * V | 100 - V inf | | Required Detention Volume, V _{det} : | 11,989.15 | CF |
| [(∆ / PF) * V | /100 - V _{inf}) * 1.2 | Require | d Detention Volume W/Out Infiltration, Vdet: | 14,386.98 | CF |
| EGROUND | BASIN VOLUME PROV | /IDED | | | |
| on | Surface Area (SF) | Total Volume (CF) | Basin Height, H: | 5.00 | FT |
| 926.00 | 875 | 0 | | | - |

| | Surface Area (SF) | Total Volume |
|--------|-------------------|--------------|
| 926.00 | 875 | 0 |
| 927.00 | 1,546 | 1,211 |
| 928.00 | 2,377 | 3,172 |
| 929.00 | 3,277 | 5,999 |
| 930.00 | 4,246 | 9,761 |
| 931.00 | 5,269 | 4,5 8 |
| | | |

Basin volume calculated based on a trapezoidal prism

DETENTION STAGED STORAGE VOLUME PROPOSED

| FIRST FLUSH: | 928.00 - 927.00 |
|-----------------|-----------------|
| X _{FF} | 3,172 - 1,176 |
| | |
| BANKFULL: | 929.00 - 928.00 |
| X _{BF} | 5,999 - 3,172 |
| | |
| 100 YEAR: | 931.00 - 930.00 |
| X100YR | 4,5 8 - 9,76 |
| | |

ALLOWABLE RELEASE RATE

Q_{allow} = (0.15 cfs/acre)(A)

Q_{allow} = (0.15 cfs/acre)(1.17 Acres)

0.176 CFS $Q_{allow} =$

FIRST FLUSH REQUIRED CONTROL ORIFICE SIZE H = (2/3)(X_{FF} - X_{BOT}): 0.97 FT

 $A_{FF} = Q_A / (0.62 * (2 * 32.2 * H))^{0.5})$

 $D_{FF} = 2 * (A_{FF} / \pi)^{0.5}$

Maximum # _{orif} = A_{FF} / A _{orif}

 $Q_{FF} = (0.62) (\#_{ORIF}) (A_{ORIF}) (2 * 32.2 * H)^{0.5}$

 $T_{FF} = V_{FF} / Q_{FF}$ BANK FULL REQUIRED CONTROL ORIFICE S

Maximum # _{orif} = A_{BF} / A _{orif}

 $Q^{ACT}_{BF} = (0.62)(\#_{ORIF})(A_{ORIF})(2*32.2*H^{BF}_{AVE})^{0.5}$

 $\mathsf{T}_{\mathsf{BF}}^{\mathsf{ACT}} = \mathsf{T}_{\mathsf{FF}} + (\mathsf{V}_{\mathsf{REM}} / (\mathsf{Q}_{\mathsf{FF}+\mathsf{BF}} + \mathsf{Q}_{\mathsf{BF}}^{\mathsf{ACT}})$

100 YEAR STORM REQUIRED CONTROL ORIFICE SIZE

 $Q_{100}^{MAX} = Q_{allow} - (Q_{FF} + Q_{BF})$

 $A_{100}^{MAX} = Q_{100}^{MAX} / (0.62*(2*32.2(X_{100}-X_{BF})^{0.5}))$

Maximum # _{orif} = A_{SF} / A _{orif}

 $Q_{FF} + Q_{BF} + 0.62(\#_{ORIF})(A_{100})(2*32.2*H_{TOT})^{0.5} < C_{C}$

 $H_{all} = (2/3)(X_{100} - X_{BF}) + (X_{BF} - X_{BOT})$

 $H_{ave}^{BF} = (2/3)(X_{100} - X_{BF}) + (X_{BF} - X_{FF})$

 $H_{ave}^{100} = (2/3)(X_{100} - X_{BF})$

 $\mathbf{V}_{\mathsf{REM}} = \mathbf{V}_{\mathsf{100}} - \mathbf{V}_{\mathsf{BF}}$

| | | | REVISIONS PER 4TH PLANNING REVIEW COMMENTS | REVISIONS PER 3RD PLANNING REVIEW COMMENTS | REVISIONS PER 2ND PLANNING REVIEW COMMENTS | REVISIONS PER PLANNING REVIEW COMMENTS | REVISIONS PER PLANNING REVIEW COMMENTS | SUBMISSION FOR SITE PLAN APPROVAL | DESCRIPTION |
|-------------------------------------|-----------|-------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|-------------------------------------------------|
| | | | KML | KML | KML | ADG | ADG | ADG | ВΥ |
| | | | 12-16-2019 | 10-28-2019 | 10-11-2019 | 08-22-2019 | 08-08-2019 | 05-30-2019 | DATE |
| | | | 6 | ъ | 4 | m | 2 | _ | ISSUE |
| NO | T API | PRO | VEC |) FC | RC | ON | STR | UCI | TION |
| | STONEFIEI | | | Dottoit MI . Now Vorly NY . Botton MA | Drington NI . Towar EI . Dutharford NI | | | 202 Shallers Suite 200 Active MI 48322 | Phone 248.247.1115 |
| SITE PLAN FOR CITY COUNCIL APPROVAL | | MICHIGAN SCHOOLS & GOVERNMENT | | | NONU | | | | z |
| SITE PLAN FOR | | MICHIGAN SC | | | PROPOSED CREDIT UNION | WITH DRIVE-THRU FACILITIES | | PARCEL ID: 09-09-30-318-028 | CITY OF ANN ARBOR WASHTENAW COUNTY, MICHIGAN |
| SITE PLAN FOR | | | ANTE DE | OF J | | C.4.1. | Contra and | 36 | CITY OF ANN ARBOR WASHTENAW COUNTY, MICHIGA |

CITY OF ANN ARBOR PROJECT NUMBER: SP19-019

MANAGEMENT PLAN

C-6

TITLE: STORMWATER

DRAWING:

| | = | FF - 927.00 2,100 - 1,176 | = | 927.45 |
|---|---|----------------------------------|---|--------|
| | = | BF - 928.00 4,167 - 3,172 | = | 928.35 |
| : | = | 100yr - 930.00 14,387 - 9,761 | = | 930.97 |

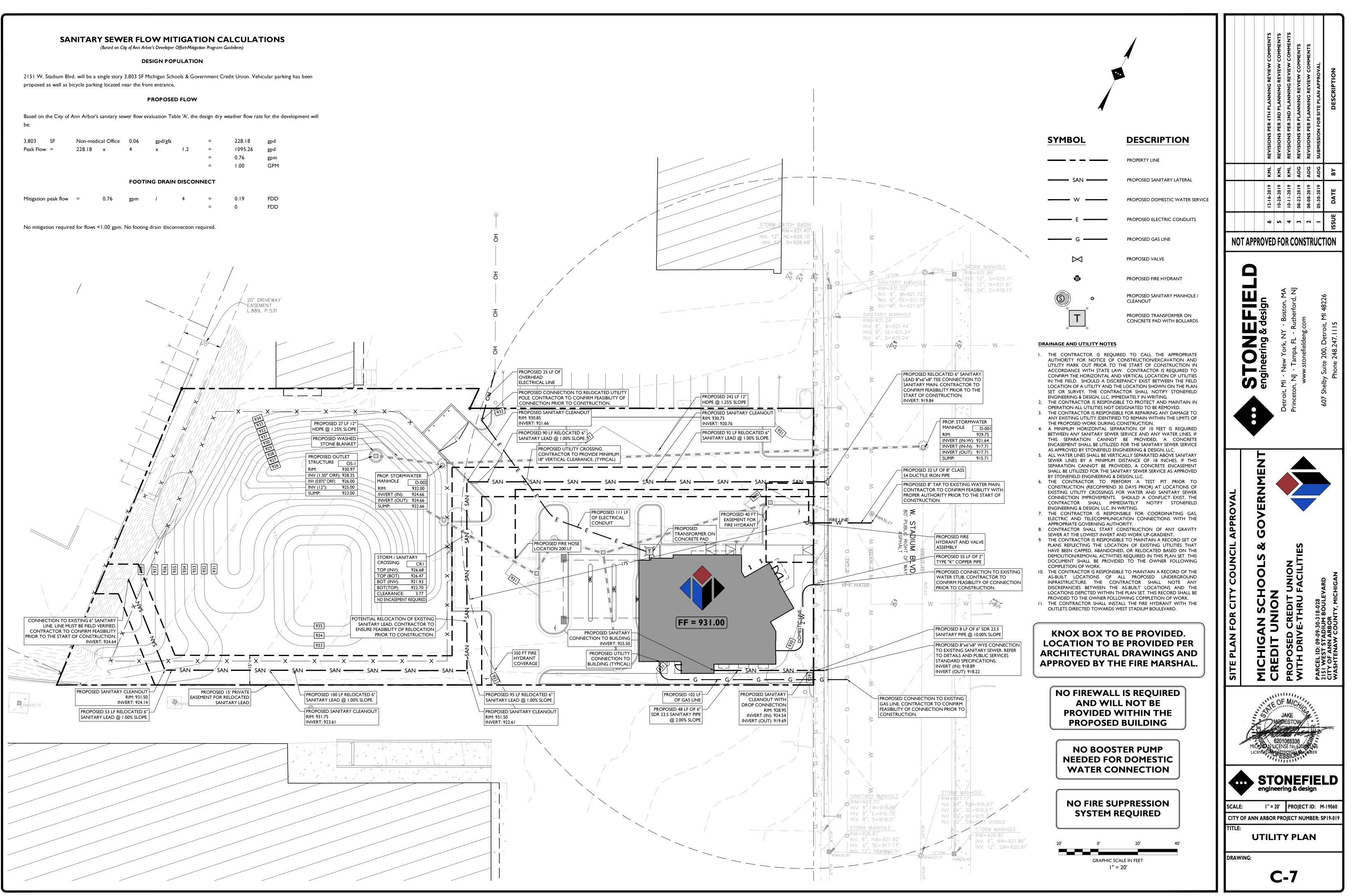
| 0.00496 FT | Control Orifice Area, A _{FF} : | | |
|-------------------|--------------------------------------------|------------|--------|
| 0.079 FT | Control Orifice Diameter, D _o : | | |
| 0.875 IN | Orifice Diameter Proposed: | | |
| <u> </u> | # Orifice Proposed: | 3 | 1.03 |
| 24 HR | Minimum Detention Time Criteria: | 5 c | 0.0206 |
| | | 4 ⊢ | 28.4 |
| | | | SIZE |
| 0 | # Orifice Proposed: | 7 | 0.07 |
| 36 - 48 HR | Minimum Detention Time Criteria: | C | - |
| | | 5⊢ | 47.5 |

| $Q_{FF}+Q_{BF} = 0.62(\#_{FForif})(A_{FForif})(2*32.2(X_{100}-X_{BOT})^{0.5})+0.62(\#_{BForif})(A_{BForif})(2*32.2(X_{100}-X_{FF})^{0.5})$ |
|--------------------------------------------------------------------------------------------------------------------------------------------|
|--------------------------------------------------------------------------------------------------------------------------------------------|

| | | 0.01607 | sf |
|----------------------|---------------------------------------------------------------------------------------|----------|-----|
| 1.31 | # Orifice Proposed: | <u> </u> | - |
| < Q _{allow} | | 0.091 | cfs |
| 4.10 FT | $Q_{all} = (0.62)(\#_{FForif})(A_{FForif})(2*32.2*H_{all})^{0.5}$ | 0.042 | cfs |
| 2.65 FT | $Q_{BF+100} = (0.62)(\#_{BForif})(A_{BForif})(2*32.2*H^{BF}_{ave})^{0.5}$ | - | cfs |
| 1.75 FT | $Q_{ave}^{100} = (0.62)(\#_{100orif})(A_{100orif})(2^{*}32.2^{*}H_{ave}^{100})^{0.5}$ | 0.081 | cfs |
| 10,220 CF | $T_{100} = T_{BF} + V_{REM} / (Q_{all} + Q_{BF+100} + Q_{ave}^{100})$ | 67.28 | HR |
| | Minimum Detention Time Criteria: | 72 | HR |

0.0466 cfs

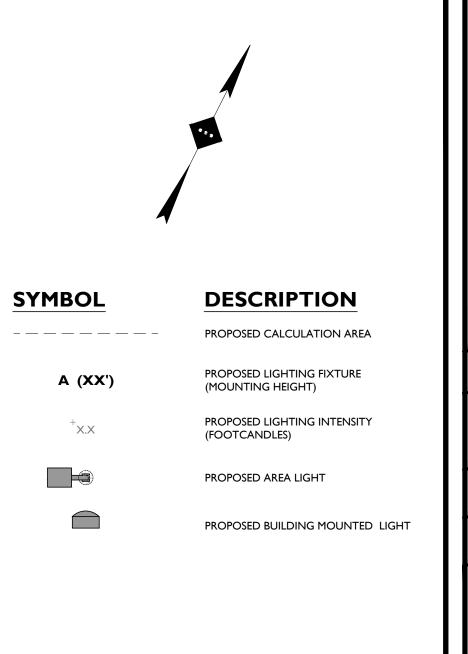
0.1294 cfs



IM-1966-STUCKY VITALE-2151 WEST STADIUM BOULEVARD, ANN ARBOR, MICADDIPLOTISDP-07-UTILDI

| | | | PROPOSED | LUMINARIES SC | | _ | | | LIGHTING REQUIREMENTS |
|---------------------------------------------------------------------|------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------|--------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------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| YMBOL | LABEL | QUANTITY 2 | SECURITY LIGHTING | DISTRIBUTION | LLF 0.90 | WATTS 70 | LITHONIA | IES FILE DSX1_LED_P2_40K_T4M_MVOLT_HS | CODE SECTIONREQUIREDPROPOSED§ 5.25.2ALL EXTERIOR LIGHTING SHALL BE ADEQUATELY SHIELDED SO THAT LIGHT IS DIRECTED AWAY FROM PUBLIC RIGHT-OF-WAYS ANDCOMPLIES |
| | В | | D-SERIES SIZE I LED AREA LUMINAIRE | IV | 0.90 | 70 | LIGHTING | DSX1_LED_P2_40K_T4M_MVOLT_HS | ADJACENT PROPERTIES. ADJACENT PROPERTIES. S 5.24.3 MINIMUM ILLUMINATION LEVELS: PARKING LOTS - 0.6 FOOTCANDLES BICYCLE PARKING - 0.4 FOOTCANDLES MAX UNIFORMITY RATIO - 10:1 |
| | | | | | | | LIGHTING | | |
| | С | 4 | KACM LED SURFACE LUMINAIRE | V | 0.90 | 46 | LIGHTING | KACM_LED_20C_700_40K_R5_MVOLT | |
| | D | 3 | WST LED ARCHITECTURAL WALL SCONCE | vw | 0.90 | 30 | LITHONIA LIGHTING | WST_LED_P2_40K_VW_MVOLT_VG | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| v.0 [†] .0 | ŏk | ō.0 ō.0 | ō.o ō.o ō.o ['] ō.o ['] ō.o ['] | ō.o ō.o ō.o | ō.o ō. | o ō.o | ō.o ō.o ō.c | □ ō.o ō.o ō.o ō.o ō.o | |
| ō.o ō.o | , į.o | [†] 0.0 [†] 0.0 | to.0 0.0 to.0 to.0 to.0 to.0 L | 0' DRIVEWAY ASEMENT <u>5</u> .0 ⁵ .0 .889, P.531 ⁶ .0 | [†] 0.0 [†] 0.0 | 0 [†] .0 | ö.o ö.o ö.ı | δ.ι δ.ι δ.ι δ. <u>ο</u> δ.ο δ | .0 [†] 0.1 [†] 0. |
| ō.o ō.o | [†] 0.0 | [†] 0.0 [†] 0.0 | b.o b.o <td>ō.o ō.o ō.o</td> <td>[†]0.0 [†]0.0</td> <td>0 [†]0.0</td> <td>ö.o ö.ı ö.ı</td> <td>ō.ı ō.2 ō.2 ō.I ō.I ō</td> <td>.1 ⁵.1 ⁵.1 ⁵.1 ⁵.2 ⁵.3 ⁵.2 ⁵.1 ⁵.0 ⁵.0</td> | ō.o ō.o ō.o | [†] 0.0 [†] 0.0 | 0 [†] 0.0 | ö.o ö.ı ö.ı | ō.ı ō.2 ō.2 ō.I ō.I ō | .1 ⁵ .1 ⁵ .1 ⁵ .1 ⁵ .2 ⁵ .3 ⁵ .2 ⁵ .1 ⁵ .0 ⁵ .0 |
| [†] 0.0 [†] 0.0 | [†] 0.0 | [†] 0.0 [†] 0.0 | | ō.o ō ō.o | .0 .0 | 0 0.0 | ō.ı ō.ı ō.ı | [†] 0.2 [†] 0.2 [†] 0.3 [†] 0.3 [†] 0.2 | $.1 \overleftarrow{0.2} \overleftarrow{0.2} \overleftarrow{0.2} \overleftarrow{0.4} \overleftarrow{0.5} \overleftarrow{0.5} \overleftarrow{0.5} \overleftarrow{0.3} \overleftarrow{0.2} \overleftarrow{0.1} \overleftarrow{0.1} \overleftarrow{0.2} \overleftarrow{0.3} \Box \overleftarrow{0.2} \overleftarrow{0.1} \overleftarrow{0.2} \overleftarrow{0.1} \overleftarrow{0.1} \overleftarrow{0.1} \overleftarrow{0.0} \overrightarrow{0.0} \overrightarrow$ |
| ō.o ō.o | [†] 0.0 | [†] 0.0 [†] 0.0 | | ō.0 ō 0 ō.0 | 0.0 [†] 0.1 | 0 0.0 | 0.1 0.1 0.2 | 0.2 0.3 0.4 0.6 0.5 0 0 7 7 | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |
| 0.0 0.0 | [†] 0.0 | 0.0 0.0 | | | | | | $\frac{1}{3}$ $\frac{1}$ | |
| 0.0 0.0 | 0.0 to o | 0.0 0.0 | | $\xrightarrow{0.0}$ x $\xrightarrow{0.0}$ x $\xrightarrow{0.0}$ | <u>0.0</u> X <u>0.0</u> | 0 0.0 → X | $\xrightarrow{0.1}$ x $\xrightarrow{0.1}$ $\xrightarrow{0.2}$ | | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |
| ō.o ō.o | 0.0 0.0 | ō.o ō.o | | ō.o ō.o ō.o | ō.0 ō. | o ō.o | ō.ı ō.ı ō.z | | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |
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| | LIGHTING REQUIREMENTS | S |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| CODE SECTION | REQUIRED | PROPOSED |
| § 5.25.2 | ALL EXTERIOR LIGHTING SHALL BE ADEQUATELY SHIELDED SO THAT LIGHT IS DIRECTED AWAY FROM PUBLIC RIGHT-OF-WAYS AND ADJACENT PROPERTIES. | COMPLIES |
| § 5.24.3 | MINIMUM ILLUMINATION LEVELS: PARKING LOTS - 0.6 FOOTCANDLES BICYCLE PARKING - 0.4 FOOTCANDLES MAX UNIFORMITY RATIO - 10:1 | COMPLIES |





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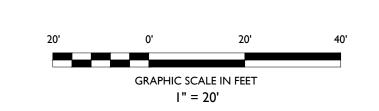
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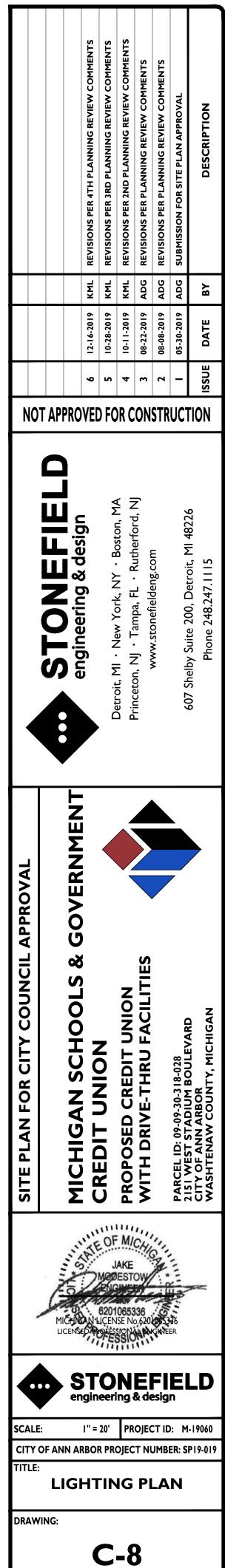
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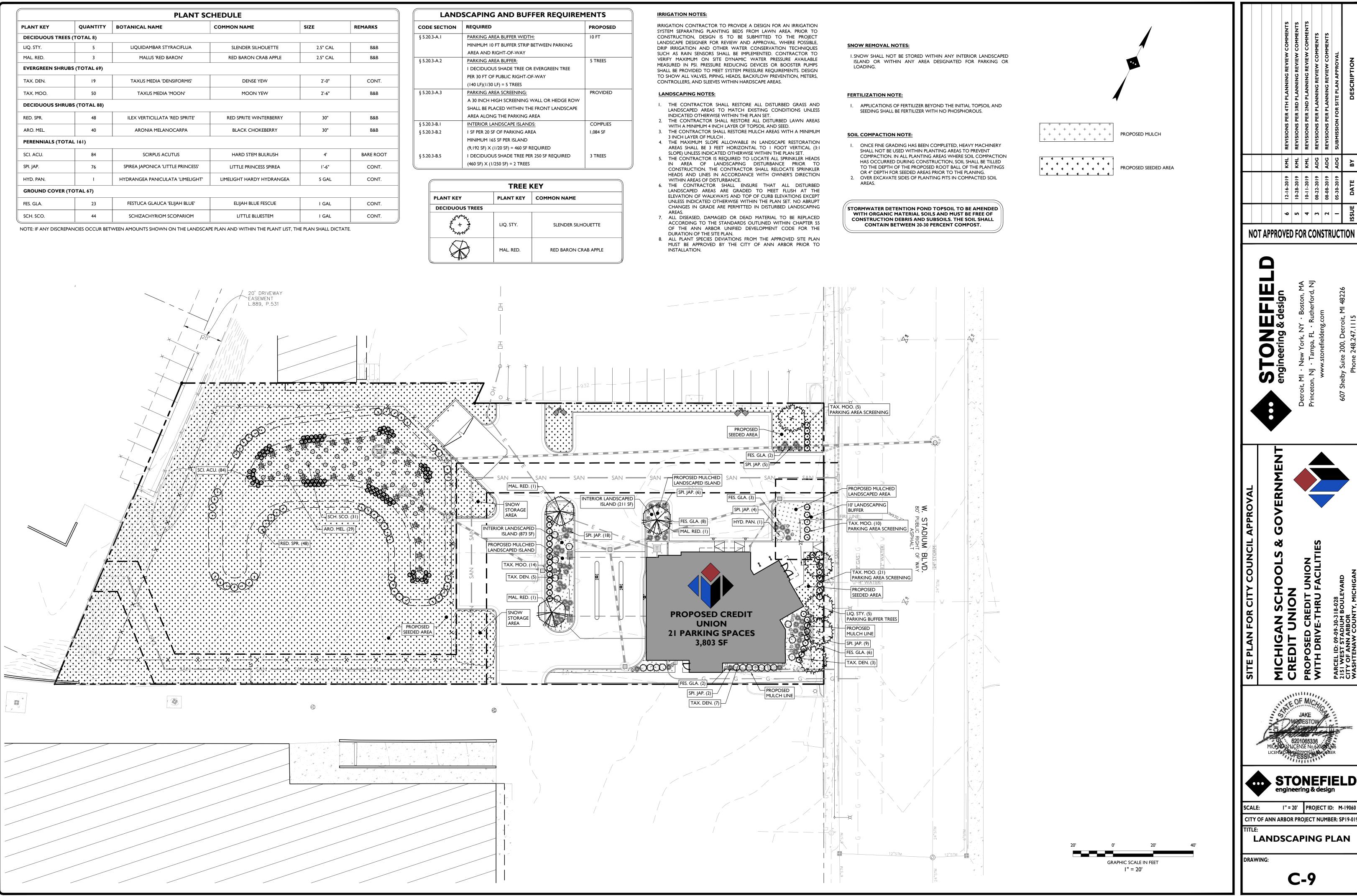
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 $\frac{1}{2}$

- I. THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH ARE WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS. 2. WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN
- THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
- UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS: LIGHT EMITTING DIODES (LED): 0.90 HIGH PRESSURE SODIUM: 0.72 METAL HALIDE: 0.72
- THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS. 5. THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.





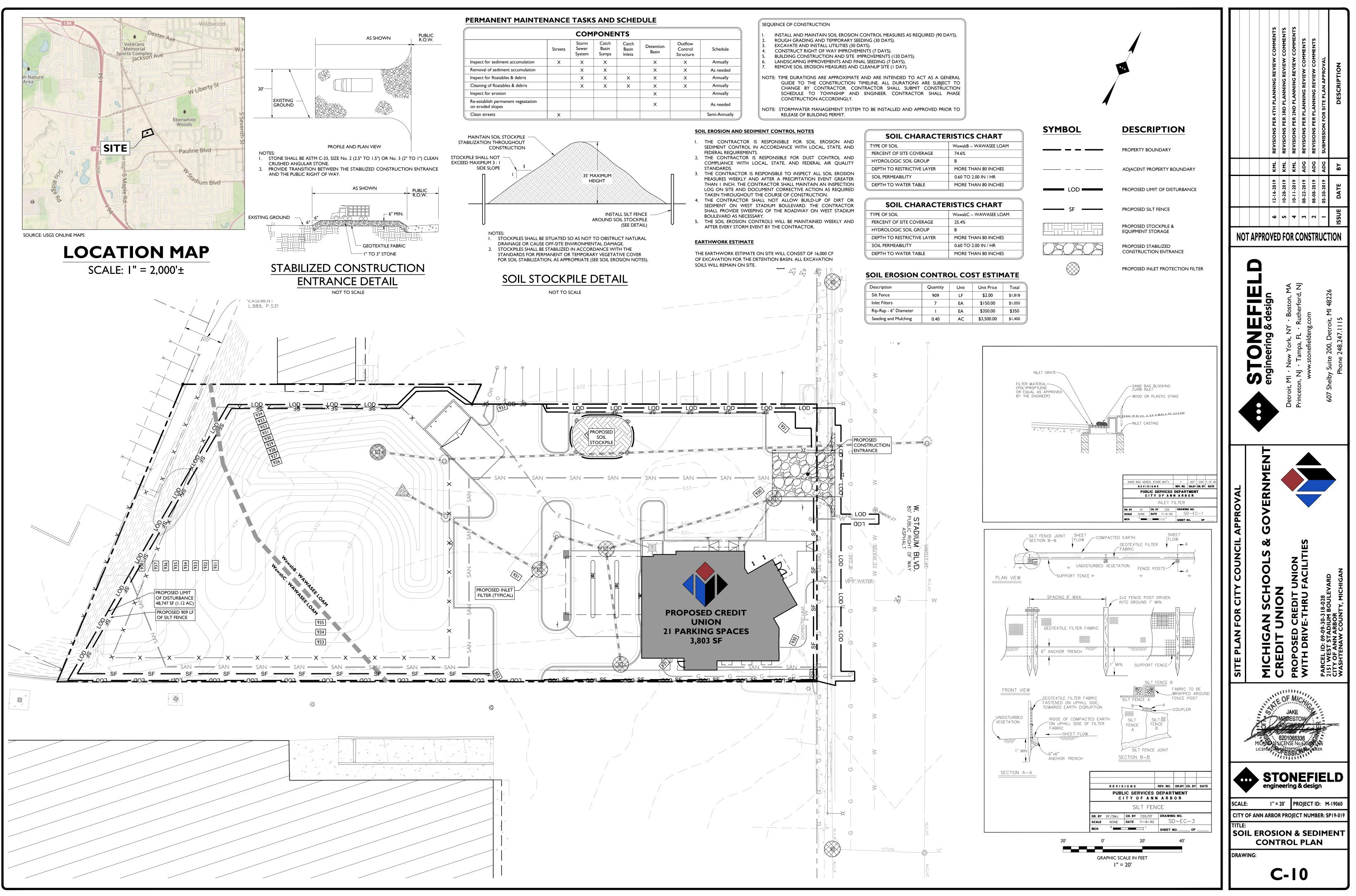


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| NDSCAPING AND BUF | EER REOLIIREMENTS | |
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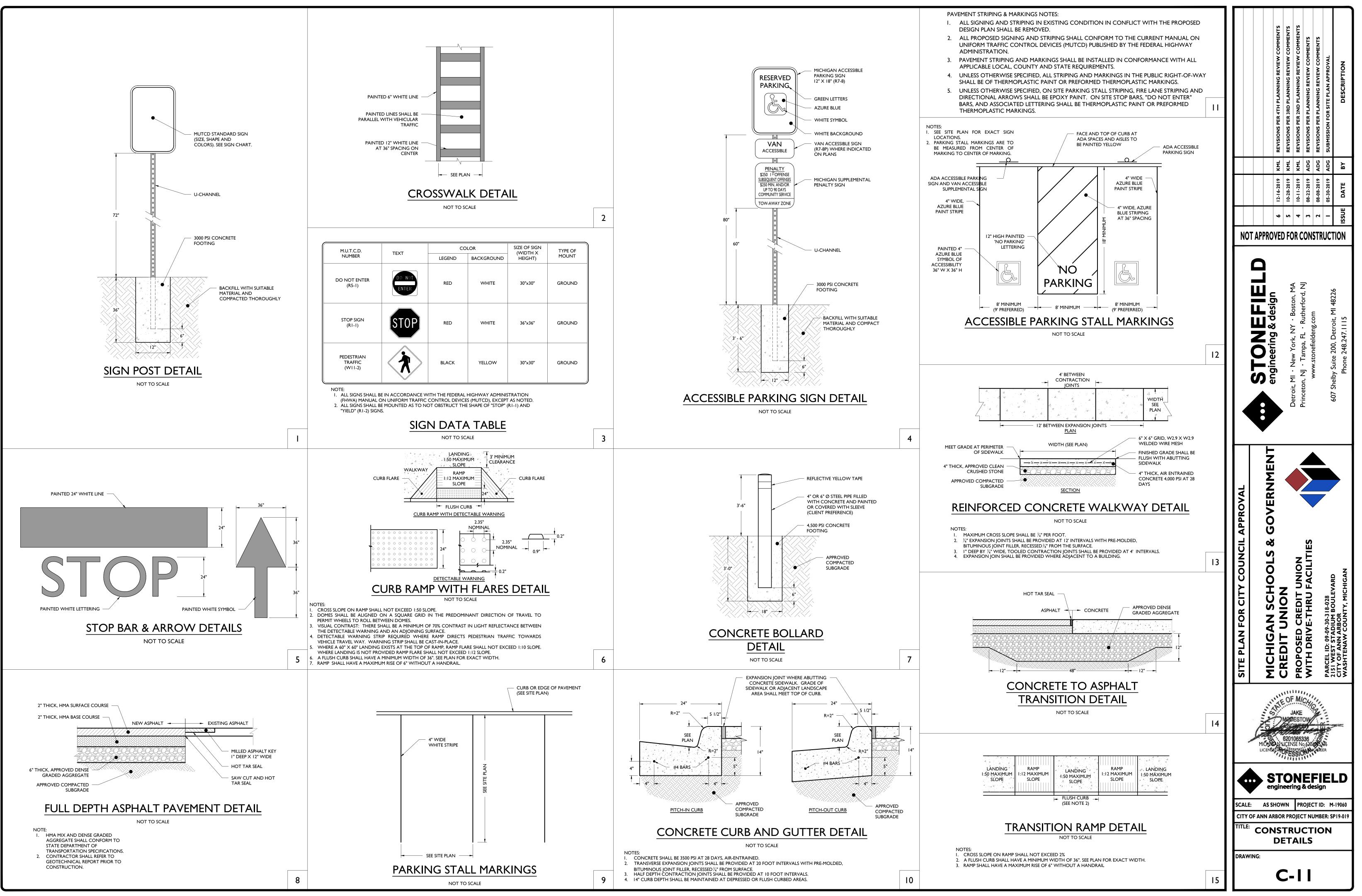
| | BOCATING AND BOTTER REQUIREMENTS | | | | |
|---|--------------------------------------------|----------|--|--|--|
| N | REQUIRED | PROPOSED | | | |
| | PARKING AREA BUFFER WIDTH: | I0 FT | | | |
| | MINIMUM 10 FT BUFFER STRIP BETWEEN PARKING | | | | |
| | AREA AND RIGHT-OF-WAY | | | | |
| | PARKING AREA BUFFER: | 5 TREES | | | |
| | I DECIDUOUS SHADE TREE OR EVERGREEN TREE | | | | |
| | PER 30 FT OF PUBLIC RIGHT-OF-WAY | | | | |
| | (140 LF)(1/30 LF) = 5 TREES | | | | |
| | PARKING AREA SCREENING: | PROVIDED | | | |
| | A 30 INCH HIGH SCREENING WALL OR HEDGE ROW | | | | |
| | SHALL BE PLACED WITHIN THE FRONT LANDSCAPE | | | | |
| | AREA ALONG THE PARKING AREA | | | | |
| | INTERIOR LANDSCAPE ISLANDS: | COMPLIES | | | |
| | I SF PER 20 SF OF PARKING AREA | 1,084 SF | | | |
| | MINIMUM 165 SF PER ISLAND | | | | |
| | (9,192 SF) X (1/20 SF) = 460 SF REQUIRED | | | | |
| | I DECIDUOUS SHADE TREE PER 250 SF REQUIRED | 3 TREES | | | |
| | (460 SF) X (1/250 SF) = 2 TREES | | | | |
| | | | | | |

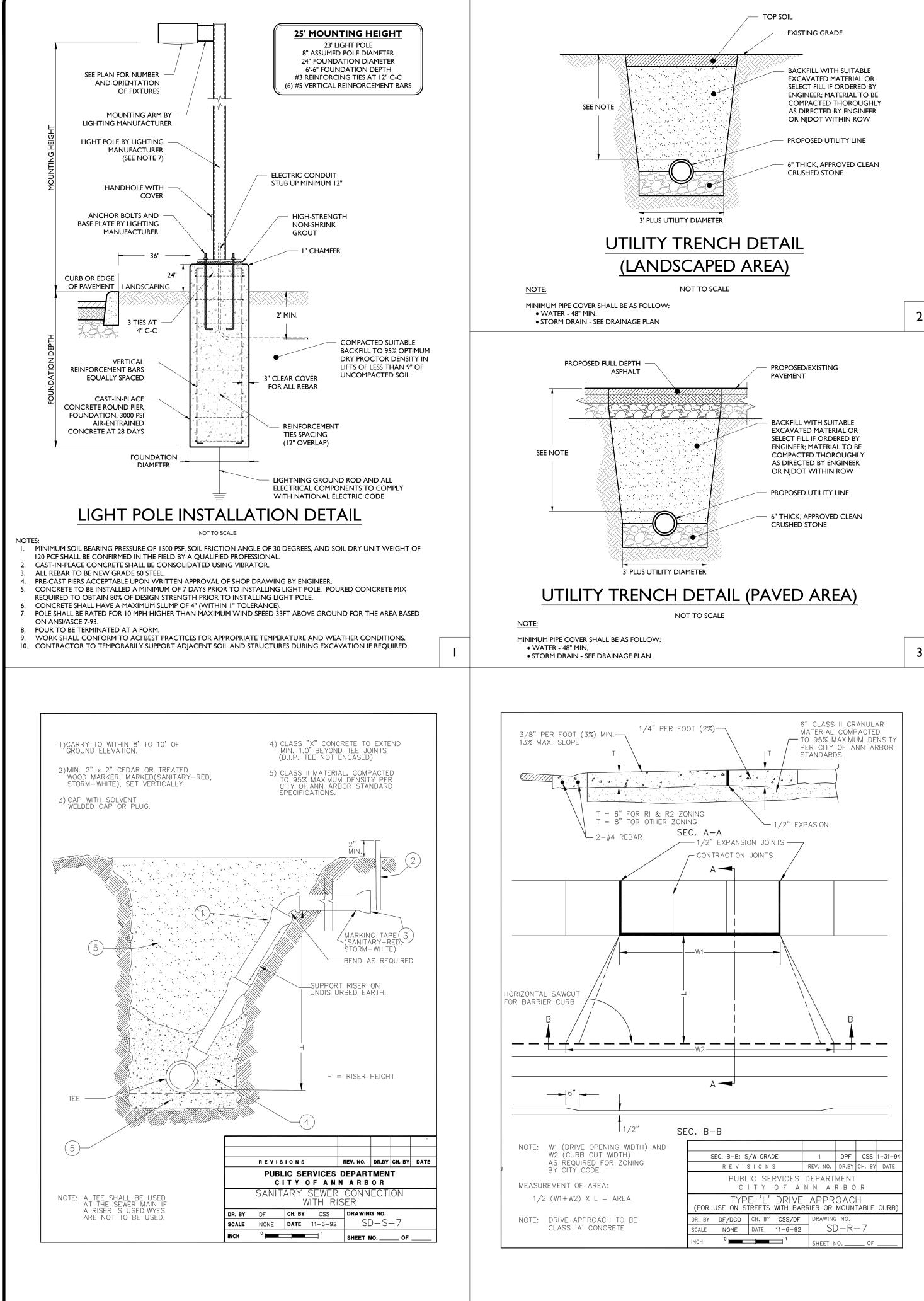
| TREE KEY | | | | | | | |
|-------------------------|-----------|----------------------|--|--|--|--|--|
| KEY | PLANT KEY | COMMON NAME | | | | | |
| UOUS TREES | | | | | | | |
| 2 4 4 2 4 4 2 4 1 | LIQ. STY. | slender silhouette | | | | | |
| | MAL. RED. | RED BARON CRAB APPLE | | | | | |

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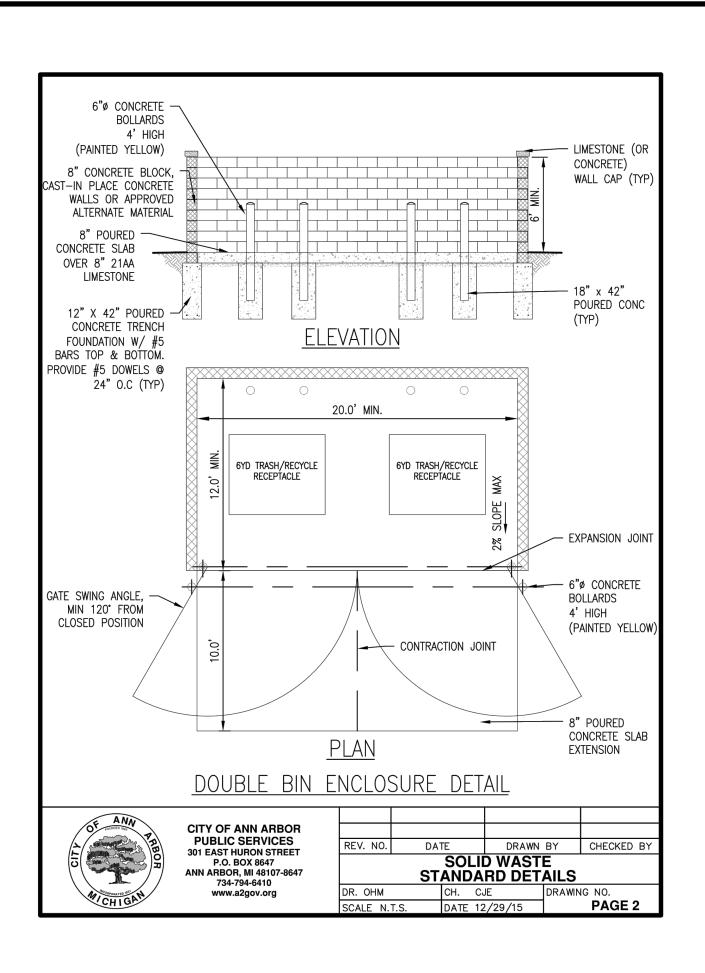


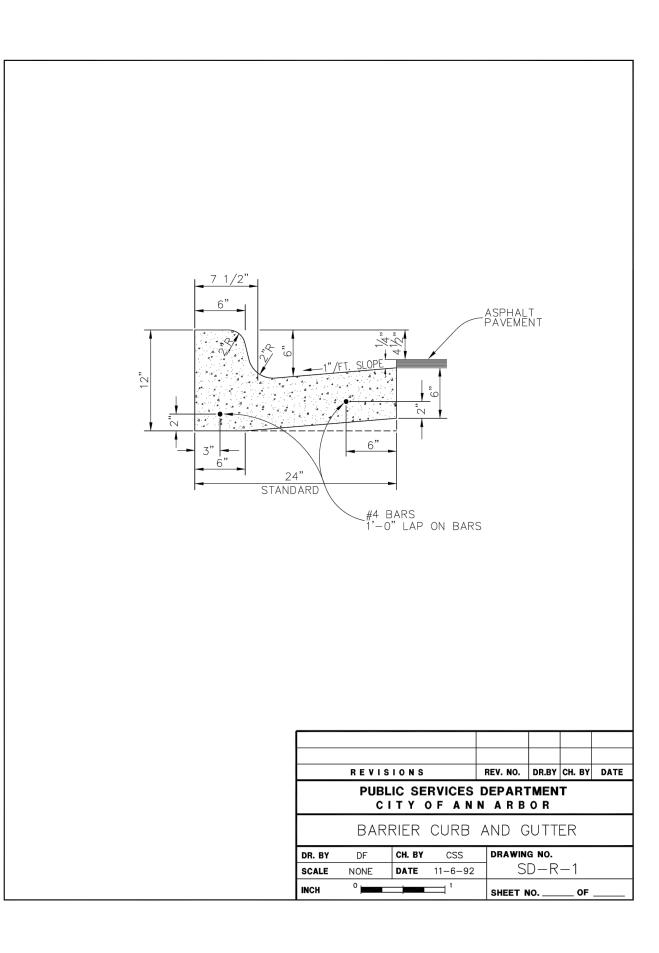
91M-19060-STUCKY VITALE-2151 WEST STADIUM BOULEVARD, ANN ARBOR, MICADDIPLOTISDP-10-SESC

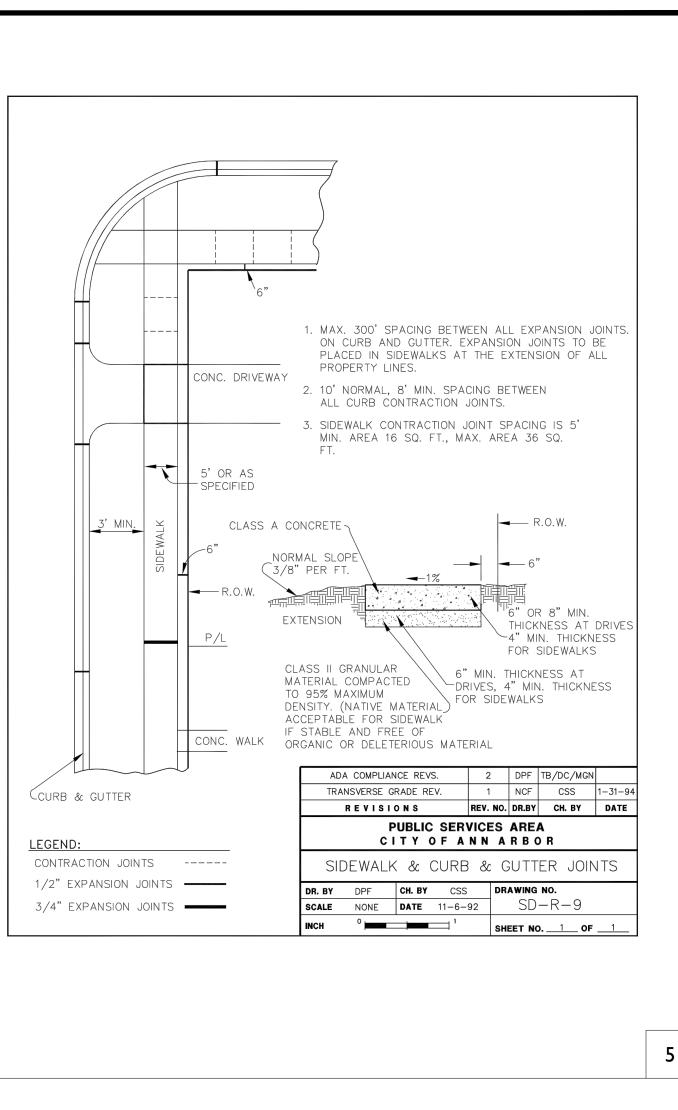


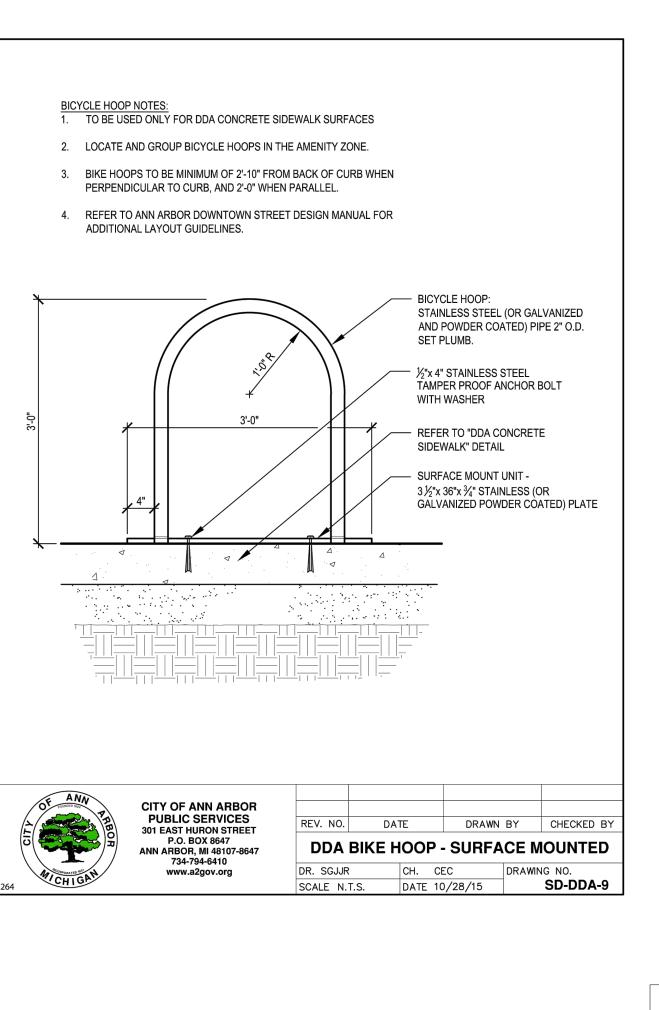


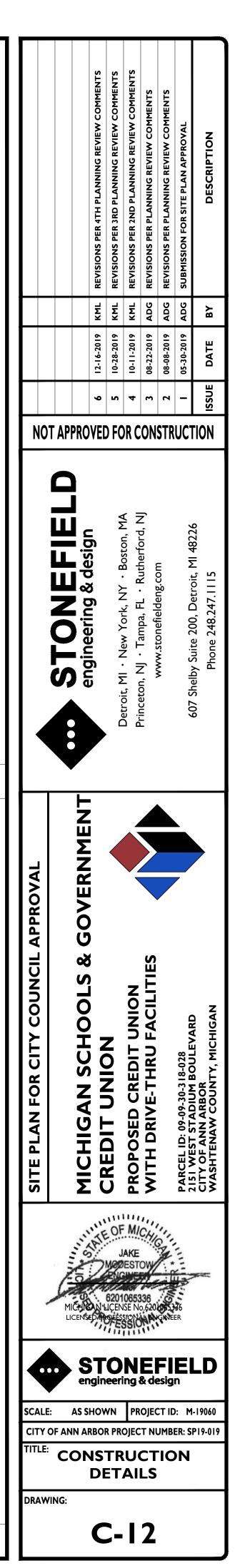
0019/M-19060-STUCKY VITALE-2151 WEST STADIUM BOULEVARD, ANN ARBOR, MI/CADD/PLOT/SDP-11-14-DE

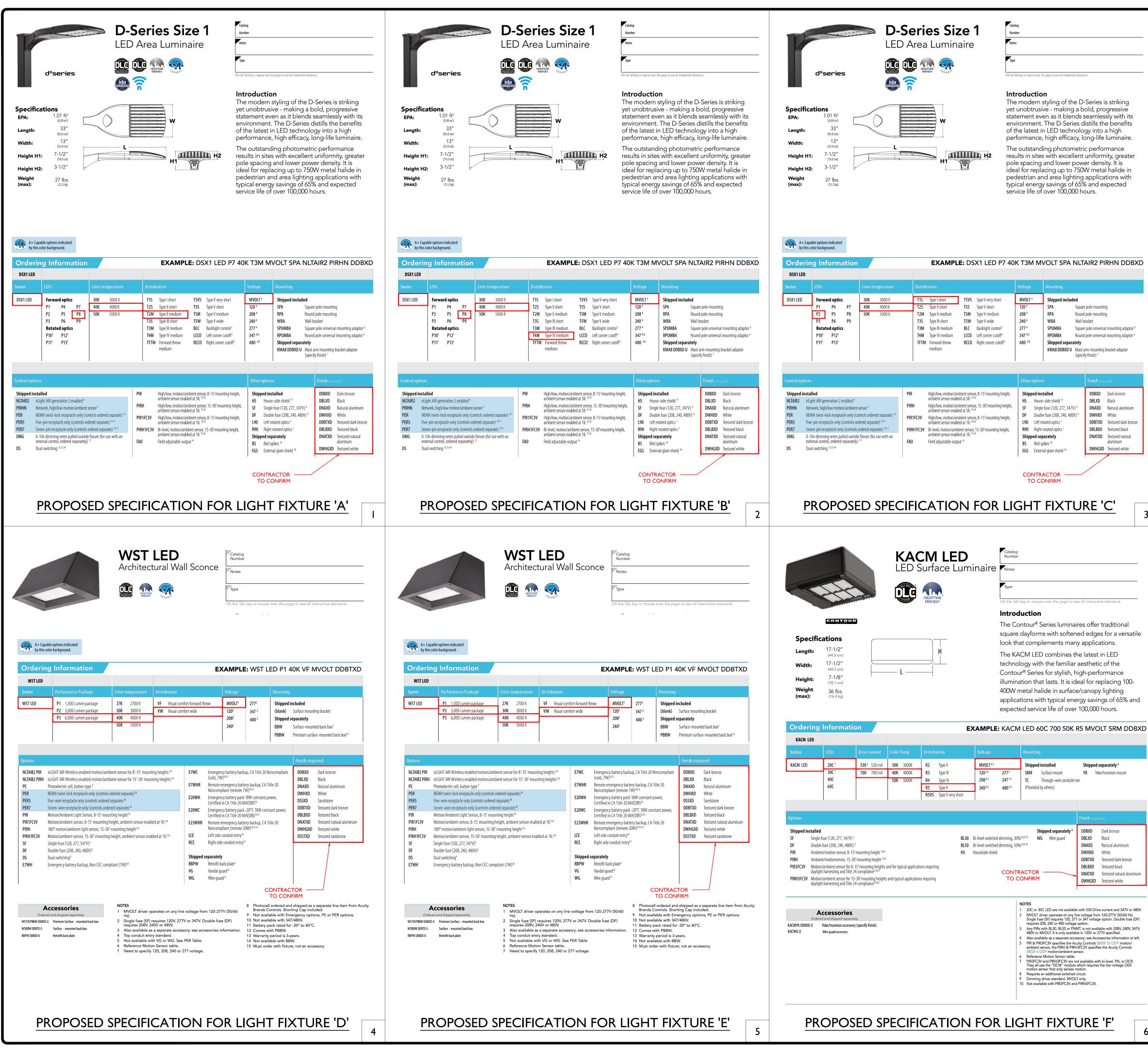


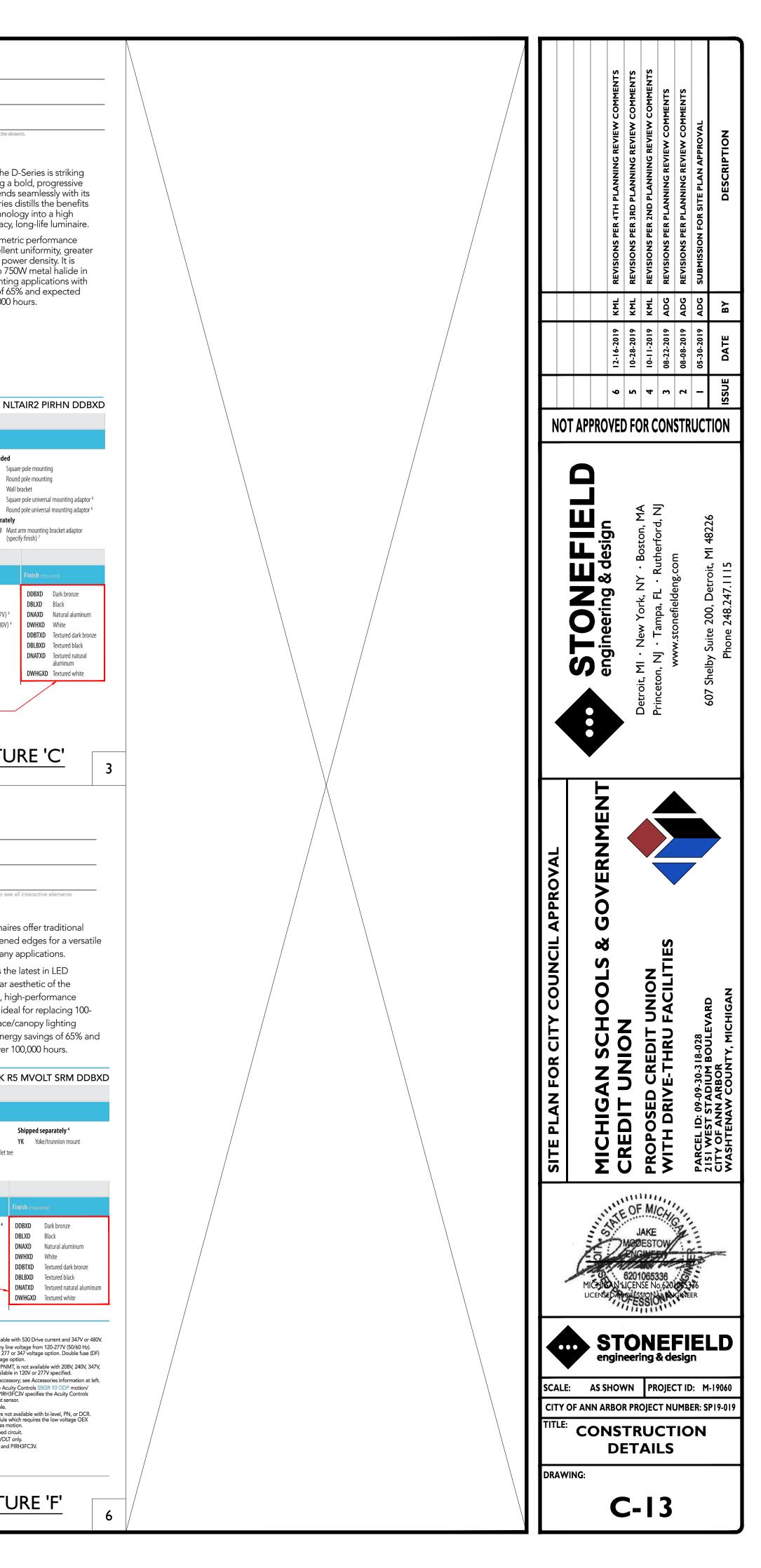










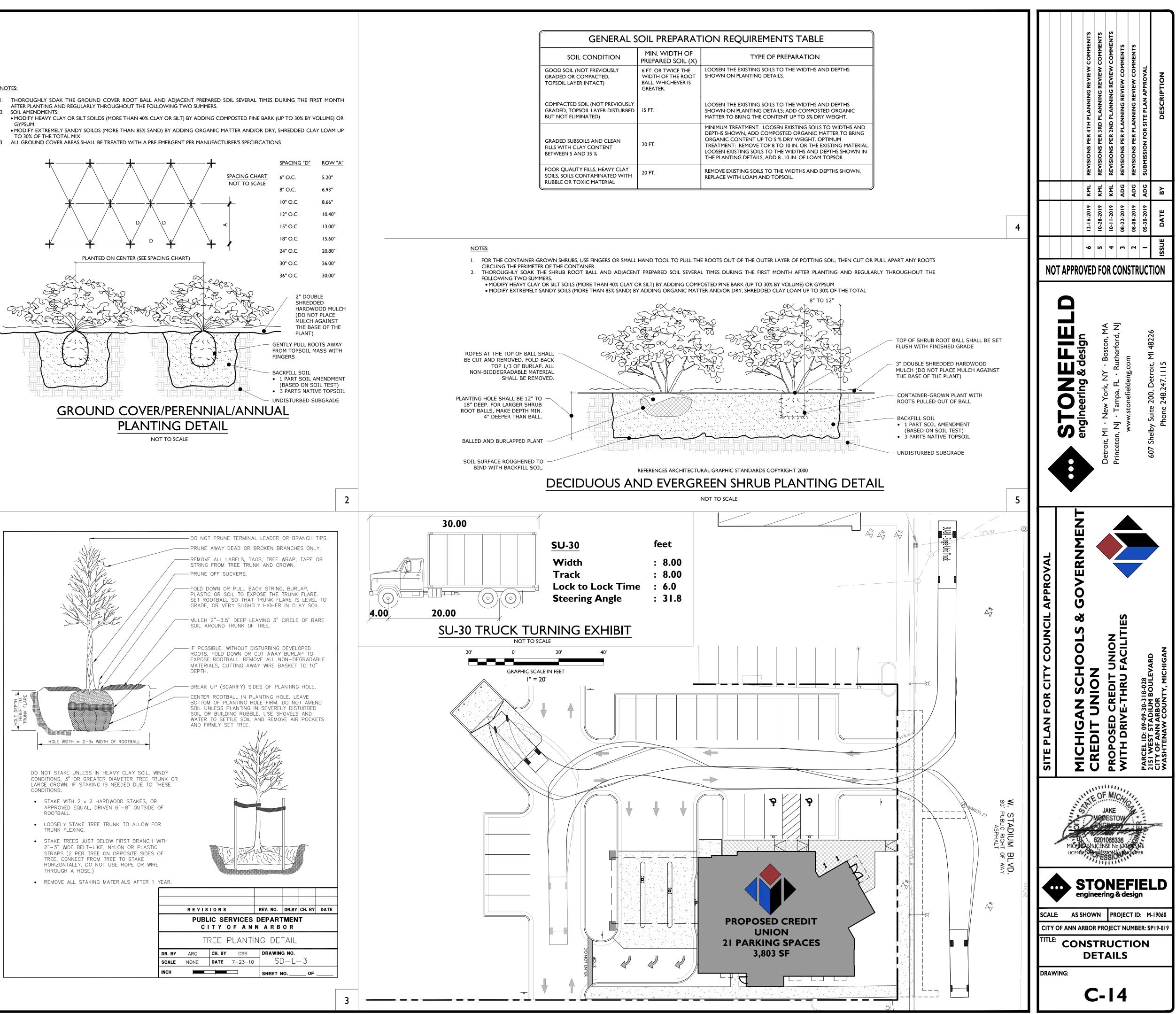


GENERAL TREE PLANTING NOTES:

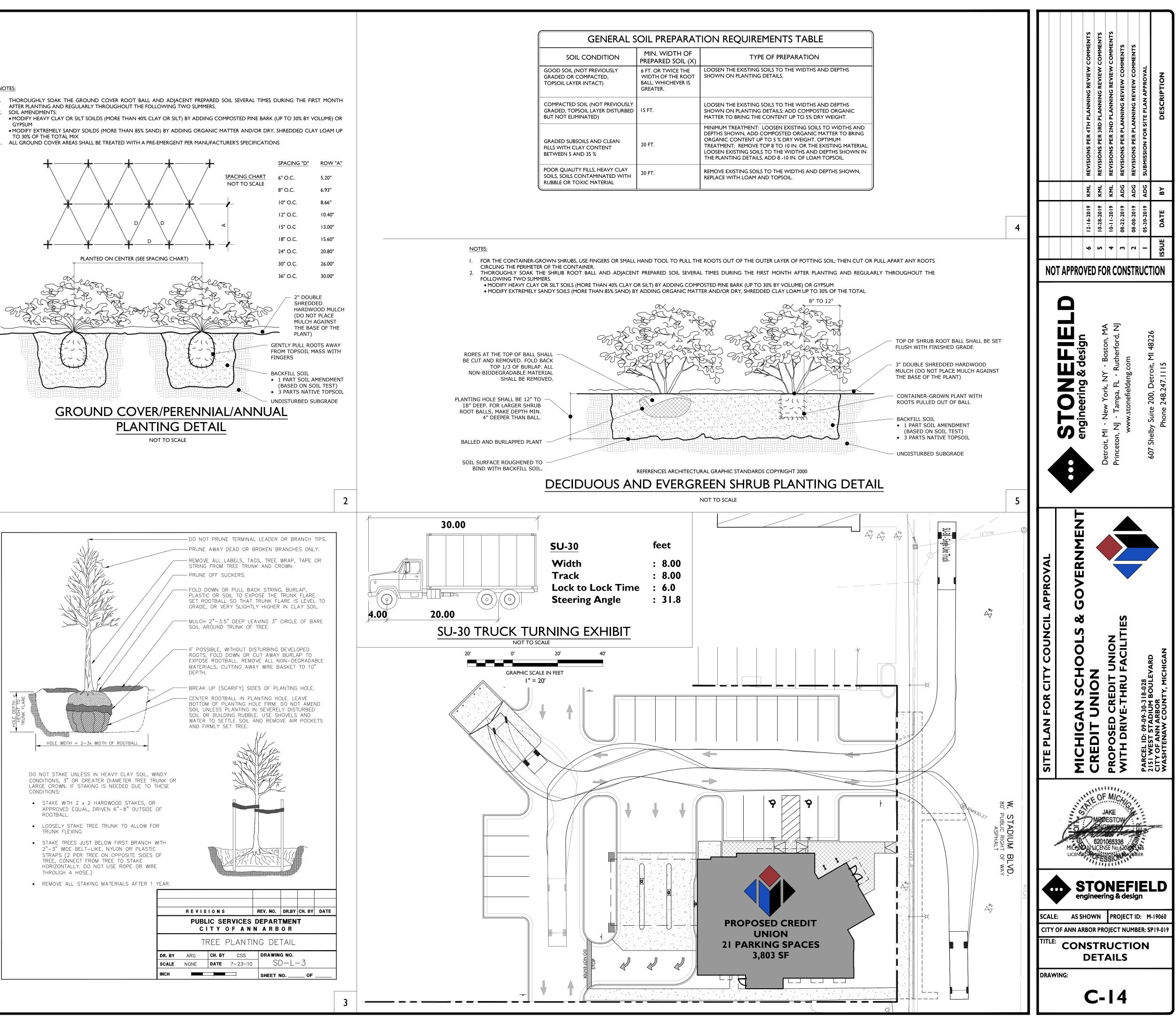
- FOR CONTAINER GROWN TREES USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL, THEN CUT OR PULL APART ANY ROOT CIRCLING THE PERIMETER OF THE CONTAINER.
- INCORPORATE COMMERCIALLY PREPARED MYCORRHIZAE SPORES AND FERTILIZER TABLETS IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATE SPECIFIED BY THE MANUFACTURER.
- THOROUGHLY SOAK THE ROOT BALL AND THE ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO GROWING SEASONS. WHEN IRRIGATION IS NOT PROVIDED SPECIFICALLY FOR THE TREE, IT IS RECOMMENDED THAT GATOR BAGS ARE USED TO HELP FACILITATE THE PROPER AMOUNT AND RATE OF WATER ARE ACHIEVED. GATOR BAGS SHALL BE INSTALLED AT THE BEGINNING OF EACH GROWING SEASON AND REMOVED EACH FALL. THIS WILL ALLOW FOR THE AREA BENEATH THE GATOR BAG TO DRY OUT REDUCING THE GROWTH OF FUNGUS AND REMOVE POSSIBLE HIDING SPOTS FOR RODENTS. THE GATOR BAGS WILL BE REMOVED AT THE END OF THE SECOND GROWING SEASON UNLESS OTHERWISE ADVISED.
- . PRIOR TO DIGGING HOLE, REMOVE ALL EXCESS SOIL FROM ROOT FLARE TO DETERMINE DEPTH OF HOLE. REFER TO THE ROOT FLARE DETAIL.
- WHEN PLANTING IN WINTER OR ON WINDY SITES APPLY ANTI-DESSICANT AS PER MANUFACTURER'S SPECIFICATIONS.
- PLANT MATERIAL SELECTION AND HANDLING NOTES:
- PLANTS WITH UNDERSIZED OR BROKEN ROOT BALLS, EXCESSIVE CURLING AND/OR GIRDLING OF ROOTS, INJURY FROM ROUGH TREATMENT, OR DROUGHT STRESS WILL BE REJECTED.
- . IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO GUARANTEE THAT THE ROOT BALLS ARE PROPERLY SIZED. PLEASE BE AWARE THAT FOR PROPER SIZING, UNSUITABLE SOIL MATERIAL SHALL BE REMOVED PRIOR TO DIGGING. REFER TO THE TREE ROOT FLARE DETAIL.
- . ROOT BALLS SHALL BE KEPT MOIST AT ALL TIMES.
- PLANTS SHALL BE COVERED DURING TRANSPORT TO PREVENT EXCESSIVE DRYING FROM WIND. IN WARM WEATHER PLANTS SHALL BE COVERED JUST PRIOR TO TRAVEL AND UNCOVERED IMMEDIATELY UPON REACHING DESTINATION TO AVOID HEAT BUILD UP UNDER THE TARP. PLANT MATERIAL SHALL NOT BE LEFT IN DIRECT SUNLIGHT OR ON HIGH HEAT ABSORPTION MATERIALS, SUCH AS BUT NOT LIMITED TO, ASPHALT AND/ OR METAL TRUCK BEDS TO PREVENT THE WILTING OF MATERIAL.
- TREES SHALL BE MOVED BY THEIR ROOT BALL NOT THEIR TRUNK. TREES LARGER THAN 6" SHALL BE MOVED WITH PROPER STRAPPING SECURING ROOT BALL TO EQUIPMENT. WEAVE STRAPPING THROUGH THE LACING, NOT AROUND THE TRUNK. TREE TRUNK SHALL BE PROTECTED AT ALL TIME FROM COMPRESSION AND SEARING.
- 5. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN:
- a. PLACE IN PARTIAL SHADE WHEN POSSIBLE. b. COVER ROOT BALL WITH MOISTENED MULCH OR AGED WOODCHIPS
- c. SUPPLY PROPER IRRIGATION AS NOT TO ALLOW THE ROOT BALL TO DRY OUT. d. UNTIE PLANT MATERIAL AND ALLOW PROPER SPACING OF PLANTS FOR AIR CIRCULATION TO PREVENT DISEASE, WILTING, LEAF LOSS AND GENERAL HEATH OF PLANTS.
- BARE ROOT TREE PLANTING NOTES:
- SUBMERGE ROOTS IN ROOT DIP GEL- BARE ROOT PLANTING AID WITH MYCORRHIZEA OR APPROVED EQUAL.
- MIXING DIRECTIONS:
- a. EMPTY THE CONTENTS OF THIS PACKAGE IN FOUR GALLONS OF WATER.
- b. LET MIX STAND FOR TEN MINUTES, STIRRING OCCASIONALLY. THE PRODUCT WILL FORM A SLURRY OR THICK MIXTURE, SO THE ACTIVE INGREDIENTS WILL ADHERE TO THE ROOTS.
- c. DIP EACH PLANT FOR ABOUT 5 SECONDS. PLANT IMMEDIATELY. THERE IS NO HARM IN LEAVING THE PLANT IN THE MIX, FOUR GALLONS OF MIX WILL TREAT 100-500 PLANTS. THE NUMBER OF PLANTS DEPENDS ON ROOT MASS AND HOW MUCH OF THE MIXTURE THE ROOTS OF YOUR PLANTS ABSORB. THE ENDO AND ECTOMYCORRHIZA WILL BE USEFUL ON ALMOST ALL PLANTS. THE MAJOR EXCEPTIONS ARE RHODODENDRONS AND AZALEAS BUT THE ROOTS2® BIOSTIMULANT AND THE WATER HOLDING GEL WILL STILL BE BENEFICIAL.
- 2. CUT OFF ALL BROKEN ROOTS.
- 3. MAKE FRESH CUTS AT ENDS OF ROOTS.
- 4. DIG PLANT HOLES AT LEAST 3 X THE WIDTH AND DEPTH OF THE ROOT MASS.
- 5. PLANT ROOT FLARE AT GRADE OR GRAFT JUST ABOVE GRADE.
- 6. BACK FILL ALL HOLES WITH PLANTING MIX APPROVED BY THE ENGINEER.
- PLANT MATERIAL GUARANTEE NOTES:
- LANDSCAPE CONTRACTOR SHALL SUPPLY A TWO YEAR PLANT MATERIAL GUARANTEE.
- 2. CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE PLANTINGS IF OWNER FAILS TO PROVIDE PROPER CARE AND WATERING AS INSTRUCTED BY THE LANDSCAPE CONTRACTOR DURING GUARANTEE PERIOD.
- . CONTRACTOR SHALL INSTRUCT OWNER AS TO PROPER CARE OF MATERIAL
- . THE LANDSCAPE PLAN DRAWING SET SHALL BE CONSIDERED AN INTEGRAL PART OF THE SITE PLAN APPROVAL AND SHALL BE MAINTAINED IN PERPETUITY.
- SOIL PREPARATION NOTES:
- THE QUALITY OF SOIL AVAILABLE FOR PLANTING VARIES WIDELY FROM SITE TO SITE, ESPECIALLY AFTER CONSTRUCTION ACTIVITY HAS OCCURRED. THE NATURE OF CONSTRUCTION RESULTS IN COMPACTION, FILLING, CONTAMINATION, AND GRADING OF THE ORIGINAL SOIL ON A SITE, RAPIDLY MAKING IT USELESS FOR PLANTING. PREVIOUS HUMAN ACTIVITY AT A SITE CAN ALSO AFFECT THE ABILITY OF THE SOIL TO SUPPORT PLANTS.
- WHENEVER POSSIBLE THE SOIL IMPROVEMENT AREA SHOULD BE CONNECTED FROM TREE TO TREE.
- ALWAYS TEST SOIL FOR PH, NUTRIENT LEVELS, AND TEXTURAL CLASS AND ADJUST THESE AS REQUIRED. SUBMIT TEST RESULTS TO THE ENGINEER PRIOR TO PLANTING ALONG WITH SOIL IMPROVEMENT SUGGESTIONS. SOIL TESTS CAN BE ACQUIRED FROM YOUR LOCAL COUNTY AGRICULTURAL EXTENSION OR AT RUTGERS COOPERATIVE EXTENSION 732-932-9295.
- . LOOSEN SOIL WITH A BACK HOE OR OTHER LARGE COARSE-TILING EQUIPMENT WHEN POSSIBLE, THIS SHOULD NOT BE PERFORMED WHEN SOIL IS FROZEN OR EXCESSIVELY WET. TILING THAT PRODUCES LARGE, COARSE CHUNKS OF SOIL IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER AREA IS LOOSEN IT SHALL NOT BE DRIVEN BY ANY VEHICLE.
- ANY OVER BY APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN PRODUCT AND PLANT MATERIAL.
- PLANT BED/TREE PIT DRAINAGE: LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO INSTALLATION OF PLANTS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO PLANTING.
- ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:
- a. MYCRO® TREE SAVER IS A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA, TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING, AND SELECTED ORGANIC MICROBIAL NUTRIENTS.
- DIRECTIONS FOR USE: USE 3-OZ PER EACH FOOT DIAMETER OF THE ROOT BALL, OR 3-OZ PER INCH CALIPER. MIX INTO THE BACKFILL WHEN RANSPLANTING TREES AND SHRUBS. MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8-INCHES (20-CM), AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8-INCHES (20-CM) INTO THE BACKFILL. APPLY WATER TO SOIL SATURATION.
- COMPATIBILITY: SPECIES: MYCOR® TREE SAVER® IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL, WHICH REQUIRE ERICOID MYCORRHIZAE. USE OF TREE SAVER® WITH THESE SPECIES WILL NOT HARM THEM. SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS IN A PH RANGE OF 3 TO 9. FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON YOUR INOCULATION PROGRAM.
- SOIL APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION. OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY. b. HEALTHY START MACRO TABS 12-8-8
- FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS. TABLETS ARE FORMULATED FOR LONG-TERM RELEASE BY SLOW BIODEGRADATION, AND LAST UP TO 2 YEARS AFTER PLANTING. TABLETS CONTAIN 12-8-8 NPK FERTILIZER, AS WELL AS A MINIMUM OF SEVEN PERCENT (7%) HUMIC ACID BY WEIGHT, MICROBIAL NUTRIENTS DERIVED FROM SEA KELP, PROTEIN BYPRODUCTS, AND YUCCA SCHIDIGERA, AND A COMPLEMENT OF BENEFICIAL RHIZOSPHERE BACTERIA. THE STANDARD 21 GRAM TABLET IS SPECIFIED HERE. DIRECTIONS FOR USE: FOR PLANTING BALLED & BURLAPPED (B&B) TREES AND SHRUBS, MEASURE THE THICKNESS OF THE TRUNK, AND USE ABOUT I TABLET (21-G) PER HALF-INCH. PLACE THE TABLETS DIRECTLY NEXT TO THE ROOT BALL, EVENLY DISTRIBUTED AROUND ITS PERIMETER, AT A DEPTH OF ABOUT 4 INCHES. PROOF OF COMPLIANCE WITH SPECIFICATIONS: THE CONTRACTOR WILL DEMONSTRATE COMPLIANCE BY SHOWING
- INVOICES TO PROVE PURCHASE OF PRODUCT IN SUFFICIENT QUANTITY TO COVER THE PROJECT AT THE RATES RECOMMENDED BY THE MANUFACTURER. INCLUDE PROJECT NAME, DATE OF PURCHASE OF PRODUCT, AND NAME OF CONTACT

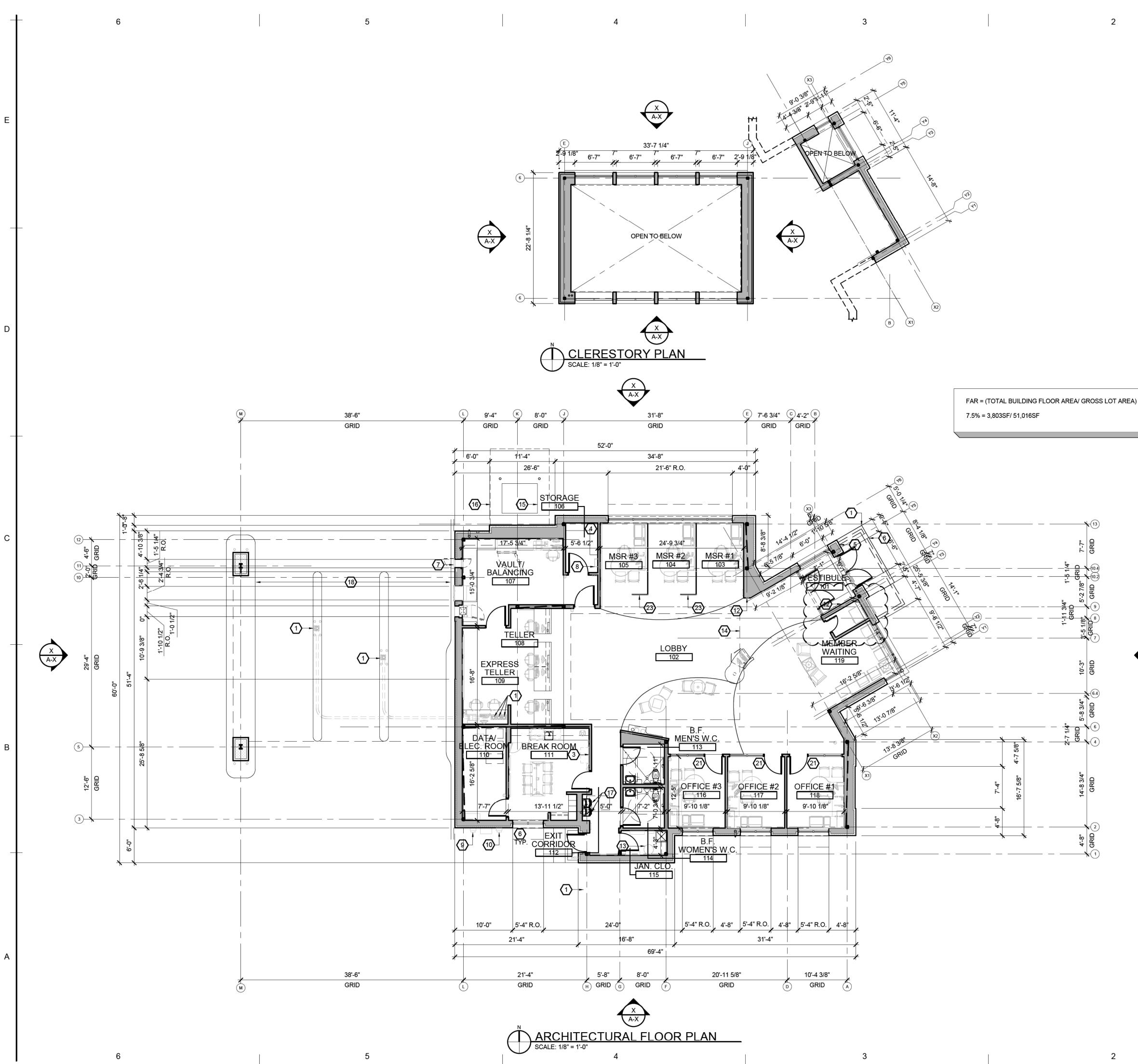


- SOIL AMENDMENTS:
- TO 30% OF THE TOTAL MIX









GENERAL FLOOR PLAN NOTES:

- THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE SET OF WORK AS INDICATED AND SHALL FIELD VERIFY ALL WORK, COORDINATE ALL DRAWINGS / NEW WORK AND SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.
- 2. ALL DIMENSIONS ARE SHOWN FROM FINISH FACE TO FINISH FACE OF PARTITION UNLESS OTHERWISE NOTED.
- 3. WALL THICKNESS' ARE NOMINAL NOT ACTUAL DIMENSIONS. SEE WALL SCHEDULE FOR ACTUAL DIMENSIONS.
- 4. ALL WOOD, INCLUDING BLOCKING, USED ON THE PROJECT SHALL BE FIRE RETARDANT TREATED.
- 5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE, COUNTY CODE REGULATIONS, O.S.H.A., AND THE AMERICAN WITH DISABILITIES ACT (ADA). REFER TO THE CODE PLAN FOR MORE INFORMATION.
- 6. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE CONDITION.
- 7. PROVIDE TRANSITION STRIPS AT EACH CHANGE IN FLOOR FINISH MATERIALS.
- 8. REINFORCE WALL AND PROVIDE BLOCKING AS REQUIRED TO SUPPORT WALL CABINETS AND COUNTERTOPS.
- 9. THE CONTRACTOR SHALL PROVIDE AND INSTALL WALL REINFORCING FOR INSTALLATION OF ACCESSORIES, COAT RACKS, CHART RACKS, CASEWORK, AND OTHER WALL MOUNTED ITEMS.
- 10. ALL EXPOSED PIPES, DUCTS, AND CONDUIT TO BE PAINTED TO MATCH EXISTING.
- 11. PROVIDE CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AT 30'-0" O.C. MAXIMUM AND AS INDICATED IN THE CONTRACT DOCUMENTS.
- 12. COORDINATE WITH OWNER'S EQUIPMENT SUPPLIER FOR INSTALLATION REQUIREMENTS / LOCATIONS OF FLOOR / WALL / CEILING MOUNTED ITEMS; IE. CAMERAS, TV'S, SPEAKERS, SENSORS, SECURITY WIRING, VAULTS, ATM'S.
- 13. CONTRACTOR SHALL CONDUCT A ROUGH ELECTRICAL INSPECTION WITH OWNER, PRIOR TO ENCLOSING WALLS, FOR THE PURPOSE OF CONFIRMING ALL J-BOX LOCATIONS FOR POWER, DATA, VOICE, SWITCH, THERMOSTAT, ETC.
- 14. CONTRACTOR TO FILL ANY AND ALL EQUIPMENT PENETRATIONS OR DEPRESSIONS INTO OR THROUGH THE EXISTING SLAB THAT WILL NOT BE UTILIZED TO FEED NEW EQUIPMENT (I.E. ABANDONED FLOOR CORES, IMPRESSION FROM PREVIOUS EQUIPMENT FLOOR PLATE REMOVAL). PENETRATIONS SHALL BE FILLED WITH NON-SHRINK GROUT. THE SIDES OF ANY EXISTING OPENINGS SHALL BE MODIFIED/TAPERED SO THAT THEY ARE WIDER AT THE TOP THAN AT THE BOTTOM. FOR LARGE OPENINGS, PROVIDE ONE (1) #5 BAR 2" UP FROM BOTTOM OF HOLE.
- 15. A TACTILE SIGN STATING 'EXIT' AND COMPLYING WITH ICC-A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN 'AREA OF REFUGE', AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY, AND THE EXIT DISCHARGE.

FLOOR PLAN KEY NOTES:

- (TYPICAL THIS SHEET ONLY)
- (1) 6'-8" WIDE SUPPORTED CONC. STOOP
- 2 VACUUM AIR TUBE SYSTEM; COOR UNIT LOCATIONS WITH LAYOUT OF ROOF STRUCTURE.
- 3 TACK BOARDS
- 4 PROVIDE FIVE (5) 1-1/2" THICK SHELVES; 18" DEEP W/ WHITE P.LAM FINISH, VERT. K.V. STANDARDS & BRACKETS FL TO CEILING @ 16" O.C. HORIZ.
- (5) SECURITY KEY BOX VERIFY WITH FIRE MARSHAL EXACT PRODUCT REQUIRED (MANUF - KNOX BOX).
- (6) SUNSHADE CANOPY ABOVE WINDOWS ONLY. SEE ROOF PLAN FOR ADDITIONAL INFORMATION.
- 7 ATM DRIVE-UP KIOSK WITH VALANCE AND POINT-TO POINT VAT SYSTEM BY OWNER'S BANK EQUIPMENT VENDOR; CONTRACTOR TO COORDINATE INSTALLATION.
- 8 STEEL ROOF LADDER.
- (9) ELECTRICAL METER AND CT CABINET; PAINT TO MATCH MASONRY COLOR.
- (10) GAS METER; GAS PIPING TO BE RUN IN WALL CAVITY.
- 11 ELECTRICAL / DATA OUTLETS TO BE CENTERED BETWEEN WINDOWS; COOR W/ FURNITURE.
- AUTOMATIC DOOR OPERATOR BARRIER FREE PUSH-BUTTON
- (13) WATER HEATER ON OVERHEAD PLATFORM. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- (14) OUTLINE OF CLERESTORY / SOFFIT ABOVE.
- (15) TRANSFORMER ON CONCRETE PAD; COORDINATE WITH ELECTRICAL TRADES.
- (16) TRANSFORMER CLEARANCE; COORDINATE WITH ELECTRICAL TRADES.
- (17) BARRIER FREE COMPLIANT HI / LOW DRINKING FOUNTAIN.
- (18) REFER TO SITE DRAWINGS FOR ADDITIONAL DRIVE-THRU PAVING REQUIREMENTS.
- PROVIDE 3/4" PLYWOOD BACKER FOR WALL MOUNTED BINDER BINS. COORDINATE EXACT LOCATIONS WITH FURNITURE LAYOUT.
- 20 ALL ELECTRICAL/LOW VOLTAGE INSTALLED SERVICE OUTLETS TO BE RUN
- UNDERGROUND/UNDERFLOOR (SEE ELECTRICAL ENGINEERING DRAWINGS).
- 21 $\frac{1}{2}$ "THICK GLASS IN ANODIZED ALUMINUM FRAMES FOR OFFICE WALLS AS ILLUSTRATED.
- 22 PROVIDE CUSTOM PL-1 LAMINATE PASS-THRU TRIM (BOTH SIDES AND SOFFIT ABOVE) AT OPENING AS ILLUSTRATED. OVERLAP TRIM 2" ON ALL SIDES TO MATCH DOOR FRAME SIMILAR WIDTH. REFER TO MILLWORK DETAILS FOR FURTHER INFORMATION.
- 23 PRE-MANUFACTURE DECORATIVE FURNITURE WALL PARTITION SYSTEM. WALL TO HAVE 42" HIGH FABRIC WALL COVERING WITH 15" HIGH GLASS PARTITION BEARING ON WALL. COORDINATE WITH FURNITURE MANUFACTURE.



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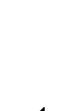
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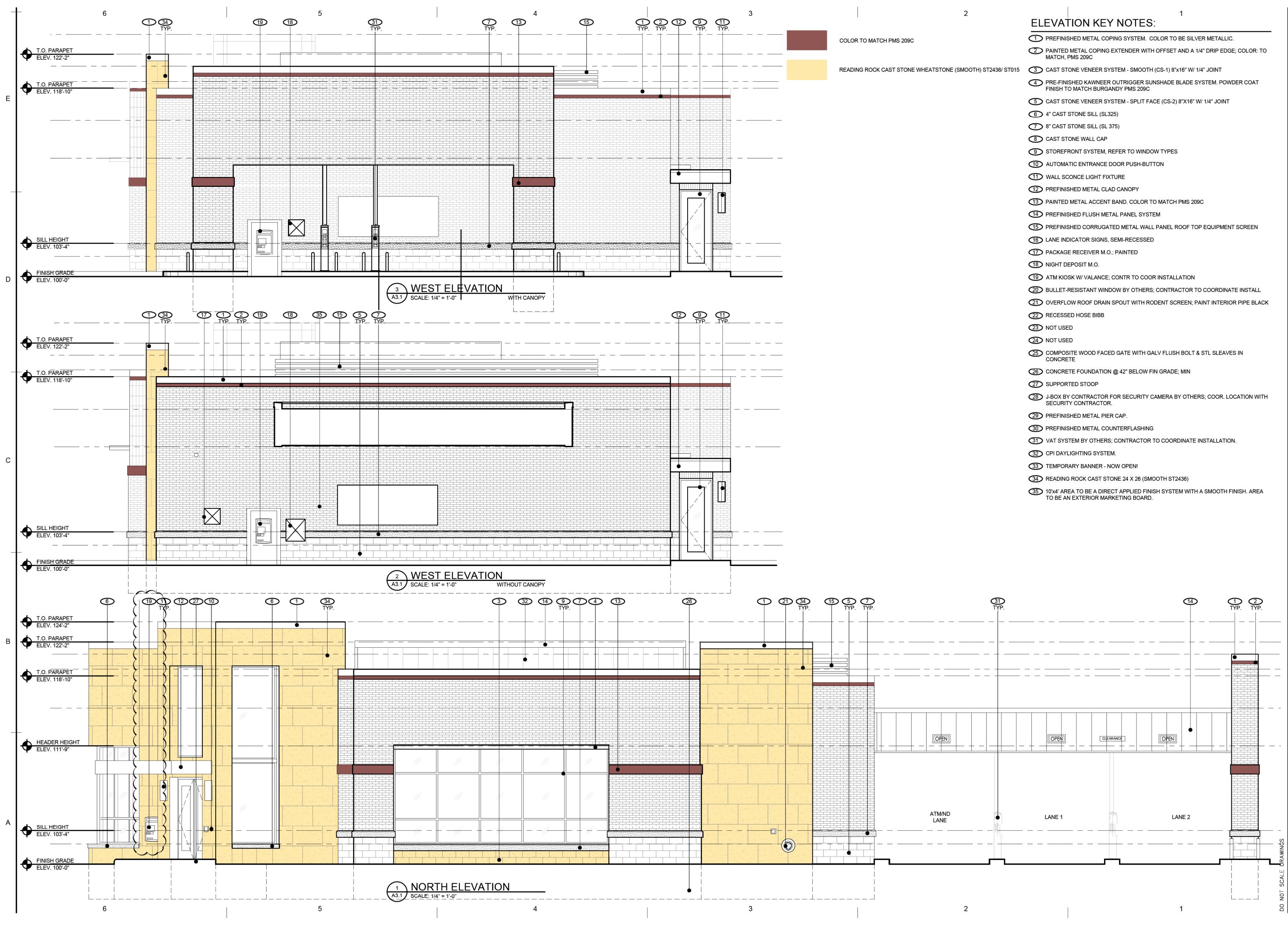
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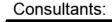


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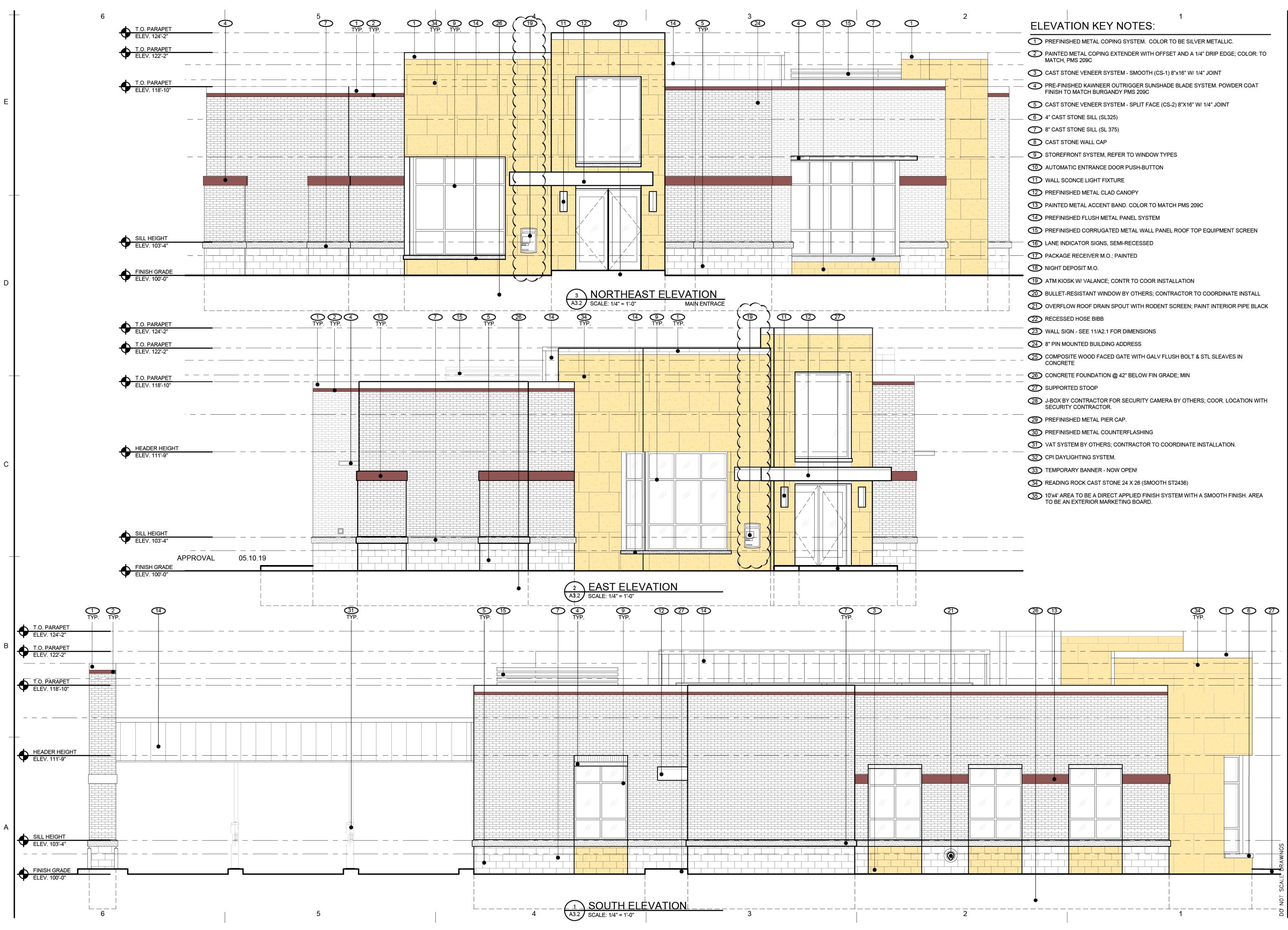
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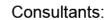
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EXTERIOR ELEVATIONS

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2018.157 Sheet No. : A3.3

Sheet Title : EXTERIOR RENDERING

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