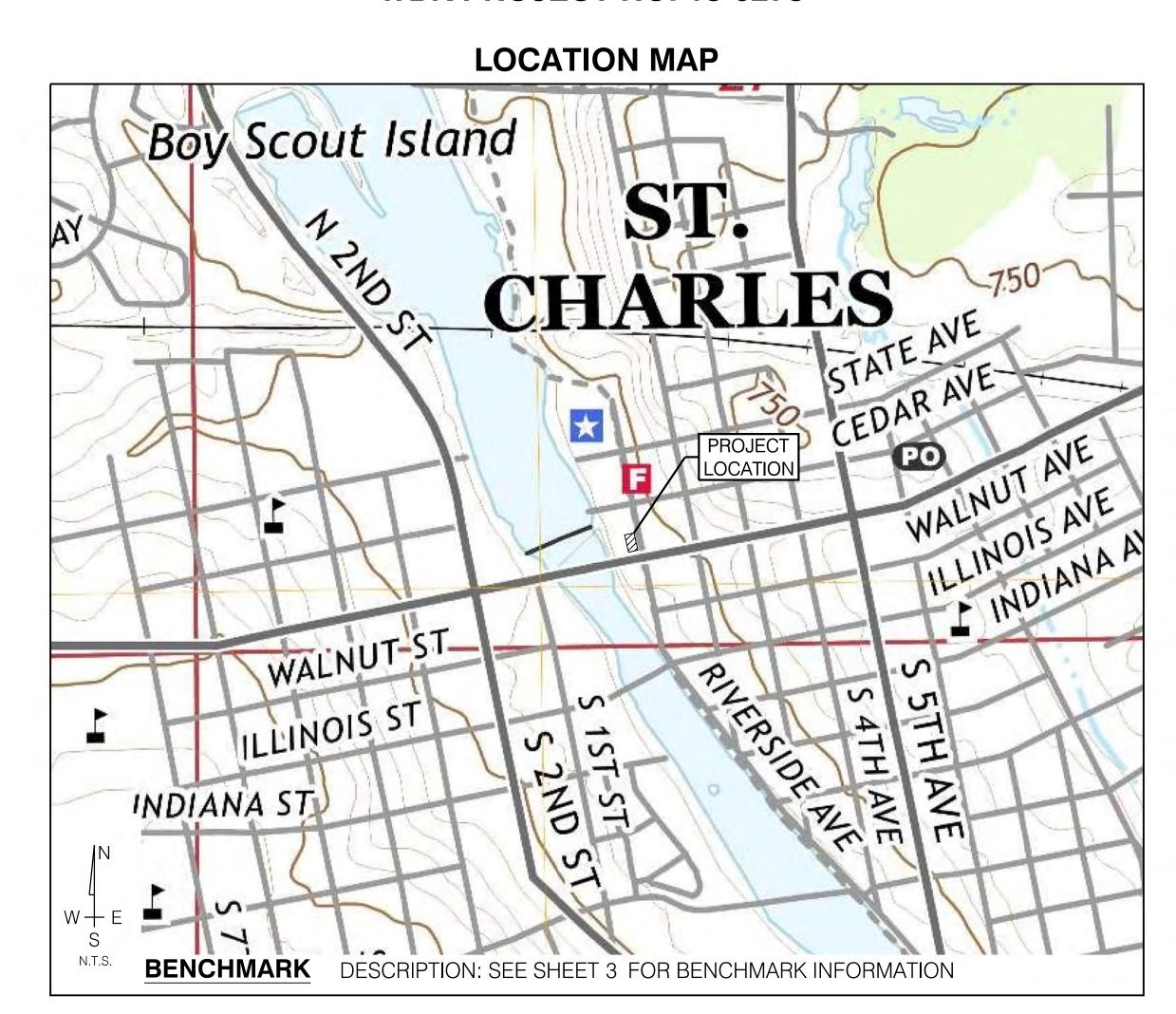
FINAL ENGINEERING PLANS FOR

CHECKERBOARD LOT SITE IMPROVEMENTS

ST. CHARLES, ILLINOIS

WBK PROJECT NO. 18-0278



WBK 🔼 engineering

WBK ENGINEERING, LLC

116 WEST MAIN STREET, SUITE 201, ST. CHARLES, ILLINOIS 60174 P: 630.443.7755 F: 630.443.0533 WWW.WBKENGINEERING.COM

> PROFESSIONAL DESIGN FIRM NO. 184.007317 EXPIRATION DATE: 04/30/2021

SHEET INDEX

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1	CV1	COVER SHEET
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REVISIONS

ORIGINAL PLAN DATE: 03/15/2019								
#	SHT NO.	DESCRIPTION DAT						
1	ALL	UPDATED PER CITY COMMENTS	05/31/19					
2	ALL	ISSUED FOR BID	06/13/19					

CLIENT

CITY OF ST. CHARLES 2 EAST MAIN STREET, ST. CHARLES IL 60174 630.377.4405

CIVIL ENGINEER

06/13/2019 DATE JUSTIN L. BENHAM, P.E.

ILLINOIS REGISTRATION NO.: 062-068300 CONSIDERED VOID WITHOUT THE SIGNATURE , SEAL







CALL J.U.L.I.E. 1-800-892-0123 48 HOURS BEFORE YOU DIG

SW 1/4 S27, T40N, R8E

CITY OF ST. CHARLES, IL

PLAN LEGEND

LINETYPES

 DRAINAGE SLOPE - — TREE, EVERGREEN, SHRUB & PROPOSED TREE TO REMOVE

PERMITS

DATE

PERMIT #

AGENCY

GENERAL NOTES

1. REFERENCED SPECIFICATIONS AND CODES

- A. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (SSRBC),
 LATEST EDITION, AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL
 PROVISIONS, ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION,
 AND ALL AMENDMENTS THERETO. THE DESIGN MANUAL, HIGHWAY STANDARDS, AND THE
 CULVERT MANUAL, ALSO PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
- B. THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, 2014, 7TH EDITION, EXCEPT AS MODIFIED HEREIN OR BY ANY PUBLIC AGENCY PERMITS ISSUED FOR THIS WORK.
- C. ILLINOIS DESIGN STANDARDS FOR SEWAGE WORKS, LATEST VERSIONS.
- D. TECHNICAL POLICY STATEMENTS OF THE IEPA, DIVISION OF PUBLIC WATER SUPPLIES AND DIVISION OF WATER POLLUTION CONTROL, LATEST VERSIONS.
- E. TECHNICAL STANDARDS FOR WATER WORKS, BY THE GREAT LAKES UPPER MISSISSIPPI RIVER BOARD OF STATE SANITARY ENGINEERS ("10 STATES STANDARDS"), LATEST VERSIONS
- F. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST VERSION.
- G. THE AMERICANS WITH DISABILITIES ACT, THE ILLINOIS ACCESSIBILITY CODE AND THE FAIR HOUSING ACT, LATEST VERSIONS.
- H. THE ILLINOIS PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL, AND IEPA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENTATION CONTROL, LATEST VERSIONS.
- I. U.S. SOIL CONSERVATION SERVICE FIELD ENGINEERING HANDBOOK, LATEST VERSION.
- J. ALL CODES AND ORDINANCES OF KANE COUNTY AND THE CITY OF ST. CHARLES.
- K. ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
- L. THE CITED STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE WORK. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE CONSIDERED A PART OF THESE IMPROVEMENTS.
- M. IN CASE OF CONFLICT, THE MORE RESTRICTIVE PROVISION SHALL APPLY.

2. UTILITY LOCATIONS

- A. TO THE BEST OF OUR KNOWLEDGE, EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS.
- B. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM OR ESTABLISH THE EXISTENCE OF ALL EXISTING UTILITY FACILITIES AND THEIR EXACT LOCATIONS, AND TO SAFELY SCHEDULE ALL UTILITY RELOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 800-892-0123 AND THE AGENCY HAVING JURISDICTION OVER LOCAL WATER, SEWER AND ELECTRICAL SYSTEMS, FOR UTILITY LOCATIONS. FOR ADDITIONAL INFORMATION, THE AGENCIES LISTED ON THIS SHEET MAY BE CONTACTED.
- C. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

3. UTILITY COORDINATION

- A. OWNER SHALL OBTAIN EASEMENTS AND PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS.
- B. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NATURE AND STATUS OF ALL UTILITY RELOCATION WORK PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ENSURE THAT CONSTRUCTION OPERATIONS DO NOT INTERFERE WITH UTILITY FACILITIES AND RELOCATION WORK. THE SCHEDULE SHOULD REFLECT CONSTRUCTION SEQUENCING WHICH COORDINATES WITH ALL UTILITY RELOCATION WORK. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST THE ORDER OF WORK FROM TIME TO TIME, TO COORDINATE SAME WITH UTILITY RELOCATION WORK, AND SHALL PREPARE REVISED SCHEDULE(S) IN COMPLIANCE THEREWITH AS DIRECTED BY THE OWNER.
- C. THE OWNER, ENGINEER, ALL GOVERNING AGENCIES AND UTILITY COMPANIES SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY OPERATION REQUIRING COOPERATION WITH OTHERS.

4. COMMENCING CONSTRUCTION

A. PRIOR TO COMMENCEMENT OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE

CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

- B. THE CONTRACTOR SHALL NOTIFY AS NECESSARY, ALL TESTING AGENCIES AS CONTRACTED BY THE COUNTY, TOWNSHIP OR OWNER, SUFFICIENTLY IN ADVANCE OF CONSTRUCTION. ALL MATERIAL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR. ALL TESTING AGENCIES SHALL MEET THE APPROVAL OF THE OWNER. FAILURE OF CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN TESTING AGENCIES BEING UNABLE TO VISIT SITE WILL RESULT IN THE CONTRACTOR SUSPENDING OPERATIONS (PERTAINING TO TESTING) UNTIL TESTING OPERATIONS CAN BE COMPLETED. COST OF SUSPENSION OF WORK TO BE BORNE BY CONTRACTOR.
- C. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN AND VEHICULAR ACCESS AT ALL TIMES. AT NO TIME SHALL ACCESS BE DENIED TO PROPERTIES SURROUNDING THE SITE.
- D. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE DEVELOPER'S ENGINEER AT CONTRACTOR'S COST.
- E. ANY EXISTING SIGNS, LIGHT STANDARDS AND UTILITY POLES WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND NOT NOTED FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT HIS OWN EXPENSE AS SHOWN ON THE ENGINEERING PLANS OR AS DIRECTED BY THE OWNER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET, SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.
- F. ITEMS SPECIFIED FOR REMOVAL, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC. SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMIT REQUIRED FOR SUCH DISPOSAL.
- G. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB.
- H. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEAN-UP AS DIRECTED BY THE ENGINEER OR OWNER.
- I. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS SPECIFICALLY NOTED ON THE PLANS.

5. GENERAL EXCAVATION/UTILITY NOTES

- A. COST FOR SHORING AND BRACING, SHEET PILING, UPRIGHTS, STRINGERS, CROSS BRACES, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- B. THE CONTRACTOR SHALL: PREVENT SURFACE WATER AND SUBSURFACE OR GROUNDWATER FROM FLOWING INTO EXCAVATIONS; REMOVE WATER TO PREVENT SOFTENING OF FOUNDATION BOTTOMS, UNDERCUTTING FOOTINGS, AND SOIL CHANGES DETRIMENTAL TO STABILITY OF SUBGRADES AND FOUNDATIONS; PROVIDE AND MAINTAIN PUMPS, SUMPS, SUCTION AND DISCHARGE LINES AND OTHER DEWATERING SYSTEM COMPONENTS NECESSARY TO CONVEY WATER AWAY FROM EXCAVATIONS; CONVEY WATER REMOVED FROM EXCAVATIONS AND RAINWATER TO COLLECTING OR RUN-OFF AREAS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION; PROVIDE AND MAINTAIN TEMPORARY DRAINAGE DITCHES AND OTHER DIVERSIONS OUTSIDE EXCAVATION LIMITS FOR EACH STRUCTURE. THE CONTRACTOR SHALL NOT USE TRENCH EXCAVATIONS AS TEMPORARY DRAINAGE DITCHES.
- C. IMMEDIATELY REPORT CONDITIONS THAT MAY CAUSE UNSOUND BEARING TO THE OWNER OR OWNER'S AGENT.
- D. UNDERGROUND WORK SHALL INCLUDE TRENCHING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS. FITTINGS AND ACCESSORIES NECESSARY TO COMPLETE THE WORK MAY NOT BE SPECIFIED, BUT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE IMPROVEMENTS.
- E. EXISTING DRAINAGE STRUCTURES AND SYSTEMS SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE, WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER. DRAINAGE STRUCTURES AND SYSTEMS CONSTRUCTED AS PART OF THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS EXPENSE. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- F. IN THE EVENT THAT SOFT MATERIALS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S AGENT IMMEDIATELY.
- G. THE CONTRACTOR SHALL VERIFY THE SIZE AND INVERT ELEVATION OF ALL CONNECTIONS TO AVOID ANY CONFLICTS BEFORE STARTING WORK. NOTIFY OWNER OF ANY DISCREPANCIES.
- H. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE AGENCY HAVING JURISDICTION. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE CITY AND OWNER PRIOR TO INSTALLING PAVEMENT BASE, BINDER, SURFACE, AND PRIOR TO PLACING ANY CONCRETE AFTER FORMS HAVE BEEN SET.
- I. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

6. INDEMNIFICATION

- A. HOLD HARMLESS: THE CONTRACTOR, AS A CONDITION OF THE CONTRACT, HEREBY AGREES TO ASSUME THE ENTIRE RESPONSIBILITY AND LIABILITY FOR, AND DEFENSE OF, AND TO PAY AND INDEMNIFY AND HOLD THE OWNER, THE ENGINEER, THE CITY, THEIR ENGINEERS, AGENTS AND EMPLOYEES HARMLESS FROM ALL CLAIMS FOR DAMAGES OR INJURY (OR DEATH RESULTING THEREFROM) TO ANY AND ALL PERSONS, INCLUDING EMPLOYEES OR AGENTS OR ANY PERSON OR FIRM WHO ENGAGES IN WORK UPON THE PROJECT, ARISING OUT OF THE CONDUCT OF THE CONTRACTOR ARISING OUT OF THE PERFORMANCE OF THIS AGREEMENT OR ANY WORK RELEVANT THERETO, OR ARISING OUT OF ANY FEDERAL, STATE OR LOCAL STATUTE, RULE, REGULATION OR ORDINANCE, INCLUDING BUT NOT LIMITED TO THE PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS ACT (OSHA).
- B. ALL COSTS, FEES AND EXPENSES, INCLUDING, BY WAY OF EXAMPLE AND WITHOUT LIMITATION, REASONABLE ATTORNEY'S FEES, COURT COSTS, COURT REPORTER'S FEES, TRANSCRIPT COSTS, SUBPOENA FEES AND COSTS, WITNESS FEES, SERVICE COSTS, AND DOCUMENT REPRODUCTION COSTS INCURRED BY THE OWNER AND WBK AS A RESULT OF ANY CLAIMS FOR DAMAGE OR INJURY AS ENUMERATED ABOVE SHALL BE PAID BY THE CONTRACTOR.
- C. THE CONTRACTOR(S) SHALL NAME WBK ENGINEERING, LLC., CITY OF ST. CHARLES AND CONSULTANT DOING CONSTRUCTION OBSERVATION FOR THE CITY AS ADDITIONAL NAMED INSUREDS ON ALL LIABILITY INSURANCE POLICIES AND SHALL PROVIDE THE CITY AND WBK WITH CERTIFICATES OF INSURANCE PRIOR TO COMMENCEMENT OF ANY WORK.

EARTHWORK NOTES

1. UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY THE ENGINEER WITH THE CONCURRENCE OF THE OWNER.

2. SUB-GRADE PREPARATION

RELATED WORK.

- A. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.05 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS. UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO FINE GRADING FOR AGGREGATE BASE COURSE CONSTRUCTION, IT IS UNDERSTOOD THAT HE HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.
- B. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE GRADED TO WITHIN 0.04 FEET (1/2") OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF CURB, SO AS TO INSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.
- C. PRIOR TO PLACEMENT OF THE AGGREGATE BASE COURSE, THE SUBGRADE MUST BE APPROVED BY THE ENGINEER AND THE CITY OF ST. CHARLES.

PAVING NOTES

- 1. GENERAL
 A. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION AND COMPACTION;
 PLACEMENT OF SUB-BASE AND/OR BASE COURSE MATERIALS; PLACEMENT OF BITUMINOUS
 MATERIAL PRIME COAT; BITUMINOUS BINDER AND SURFACE COURSES; FORMING, FINISHING
 AND CURING CONCRETE PAVEMENT, CURBS AND WALKS; AND FINAL CLEAN-UP AND ALL
- B. COMPACTION REQUIREMENT: PRIOR TO PLACEMENT OF THE AGGREGATE BASE COURSE, THE CONTRACTOR SHALL PROVIDE, AS A MINIMUM, A TANDEM AXLE TRUCK LOADED TO A MINIMUM GROSS WEIGHT OF 40,000 LBS. PROOF ROLLING PROCEDURES SHALL CONFORM TO (SSRBC) ARTICLE 351.10. IF UNSUITABLE SUB-BASE IS ENCOUNTERED IT SHALL BE CORRECTED BY REMOVING AND REPLACING WITH GRANULAR PGE MATERIAL AS SPECIFIED BY THE ENGINEER. HOT-MIX ASPHALT SHALL BE COMPACTED ACCORDING TO (SSRBC) ARTICLE 406.07.
- C. HOT-MIX ASPHALT SHALL BE PLACED ON A CLEAN DRY BASE. THE HOT-MIX ASPHALT BASE COURSE SHALL BE PLACED ACCORDING TO (SSRBC) ARTICLE 355.05. THE HOT-MIX ASPHALT BINDER COURSE, LEVELING BINDER, AND SURFACE COURSE SHALL BE PLACED ACCORDING TO (SSRBC) ARTICLE 406.06.
- D. THE HMA SHALL BE DELIVERED AT A TEMPERATURE OF BETWEEN 250°F AND 350°F.
- E. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AND IN ACCORDANCE WITH THE CITY OF ST. CHARLES CODE.

2. CONCRETE WORK

A. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS SI OR PV PER (SSRBC) SECTION 1020.04 WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT FOURTEEN (14) DAYS. ALL CONCRETE SHALL BE BROOM FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.

- B. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. 1" PREMOLDED FIBER EXPANSION JOINTS SHALL BE INSTALLED AT SIXTY (60) FOOT INTERVALS AND AT ALL PC'S, PT'S AND CURB RETURNS. TWO #4 REBARS SHALL BE CONTINUOUSLY INSTALLED ALONG ALL CURB AND GUTTER. ALTERNATE ENDS OF THE DOWEL BARS SHALL BE GREASED AND FITTED WITH CAPS. SAWED FORMED CONTRACTION JOINTS SHALL BE PROVIDED AT NO GREATER THAN FIFTEEN (15) FOOT INTERVALS AND 2" IN DEPTH, BETWEEN EXPANSION JOINTS AND AT ALL PC'S, PT'S AND CURB RETURNS. NO HONEY-COMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.
- C. THE CURBS SHALL BE BACKFILLED ACCORDING TO SSRBC ARTICLE 606.13.
- D. CONCRETE SIDEWALK SHALL HAVE JOINTS SCORED AT 5 FOOT INTERVALS AND 1/2" PREMOLDED FIBER EXPANSION JOINTS AT 50 FOOT INTERVALS, AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, ETC.
- E. CONCRETE CURING AND PROTECTION SHALL BE IN ACCORDANCE WITH SSRBC METHOD A, B, OR C. TWO (2) COATS OF BOILED LINSEED OIL IN CONFORMANCE WITH SSRBC SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

3. FLEXIBLE PAVEMENT

- A. THE PAVEMENT MATERIALS FOR HOT-MIX ASPHALT STREETS, PARKING LOTS, DRIVEWAYS, AND MULTI-USE PATHS SHALL BE AS DETAILED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.
- B. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE HOT-MIX ASPHALT BINDER COURSE IS PLACED. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.50 GALLONS PER SQUARE YARD PRIOR TO PLACING THE HOT-MIX ASPHALT BINDER COURSE. PRIME COAT MATERIALS SHALL BE BITUMINOUS M.C. 30.
- C. PRIOR TO PLACEMENT OF THE HOT-MIX ASPHALT BINDER COURSE AND THE HOT-MIX ASPHALT SURFACE COURSE THE RESPECTIVE HOT-MIX ASPHALT PAVEMENT, SHALL BE CLEANED TO THE SATISFACTION OF THE ENGINEER, AND PRIME COATED. ALL DAMAGED AREAS IN THE BINDER, BASE OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND CITY PRIOR TO PLACING THE HOT-MIX ASPHALT SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND MANPOWER NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE ENGINEER OR CITY, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE HOT-MIX ASPHALT SURFACE COURSE. THE PRIME COAT SHALL BE UNIFORMLY APPLIED TO THE HOT-MIX ASPHALT BINDER COURSE AT A RATE OF 0.10 GALLONS PER SQUARE YARD. PRIME COAT SHALL BE AS SPECIFIED IN SSRBC ARTICLE 406.02.

4. TESTING AND FINAL ACCEPTANCE

- A. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND HMA PAVEMENT MATERIALS ESTABLISHED BY THE CITY OF ST. CHARLES.
- B. PRIOR TO PLACEMENT OF THE HOT-MIX ASPHALT SURFACE COURSE, THE CONTRACTOR, WHEN REQUIRED BY THE ENGINEER OR CITY OF ST. CHARLES, SHALL OBTAIN SPECIMENS OF THE HOT-MIX ASPHALT BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.
- C. WHEN REQUIRED BY THE ENGINEER OR CITY OF ST. CHARLES, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH HOT-MIX ASPHALT PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED, IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD DESCRIBED IN SSRBC, ARTICLE 407.10.
- D. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

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CITY OF ST. CHARLES 2 EAST MAIN STREET ST. CHARLES, IL 60174 630.377.4405

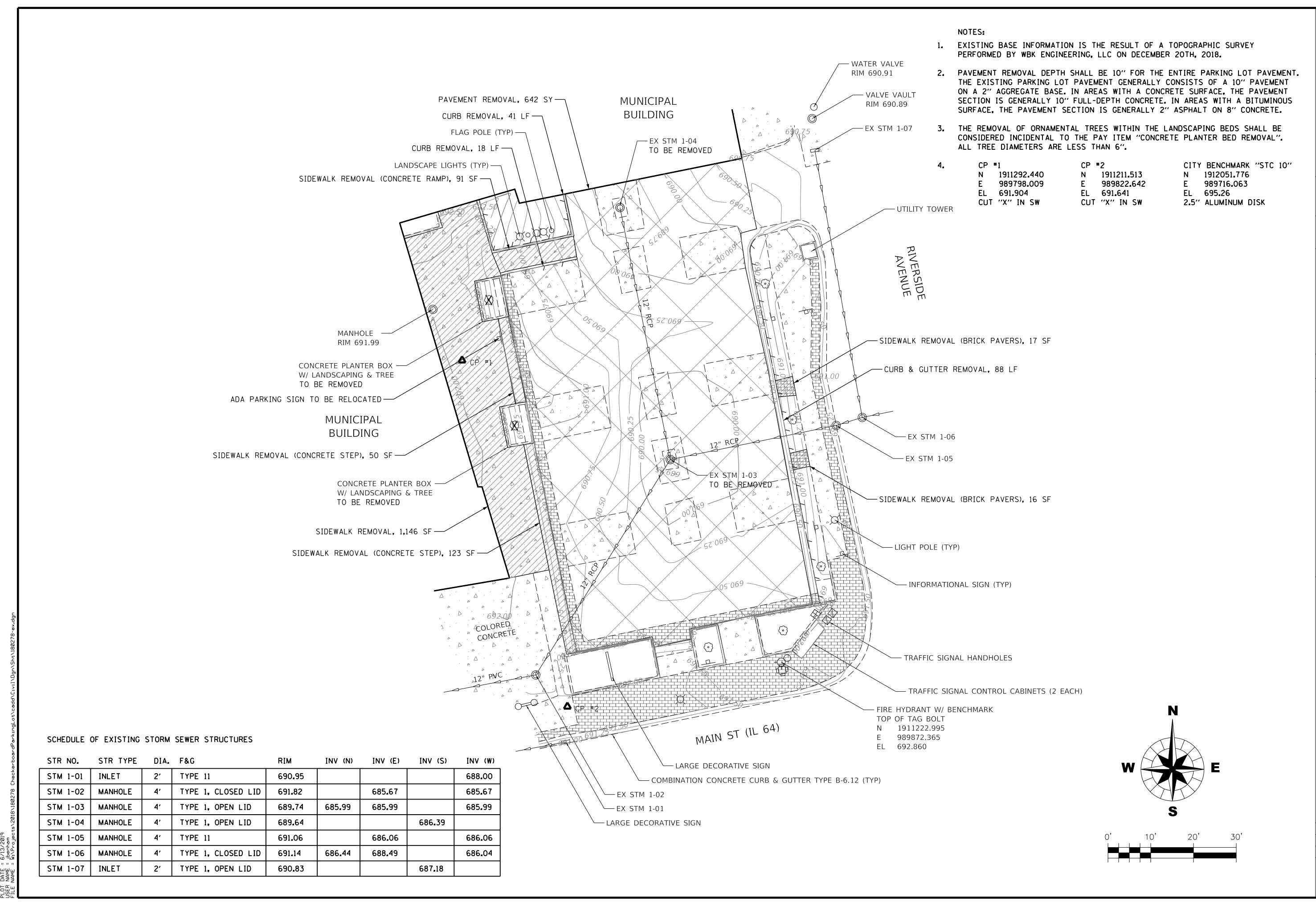
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VBK ENGINEERING, LL
16 WEST MAIN STREET, SUITE 2
T. CHARLES, ILLINOIS 60174
530) 443-7755



PROJECT NO. 18-0278 DATE: 06/13/19

DRAWING NO. **GN1**SHEET



EXISTING CONDITIONS & REMOVAL PLAN CHECKERBOARD LOT SITE IMPROVEMENTS

OF ST. CHARLES ST MAIN STREET HARLES, IL 60174 630.377.4405 CITY C 2 EAS' ST. CH

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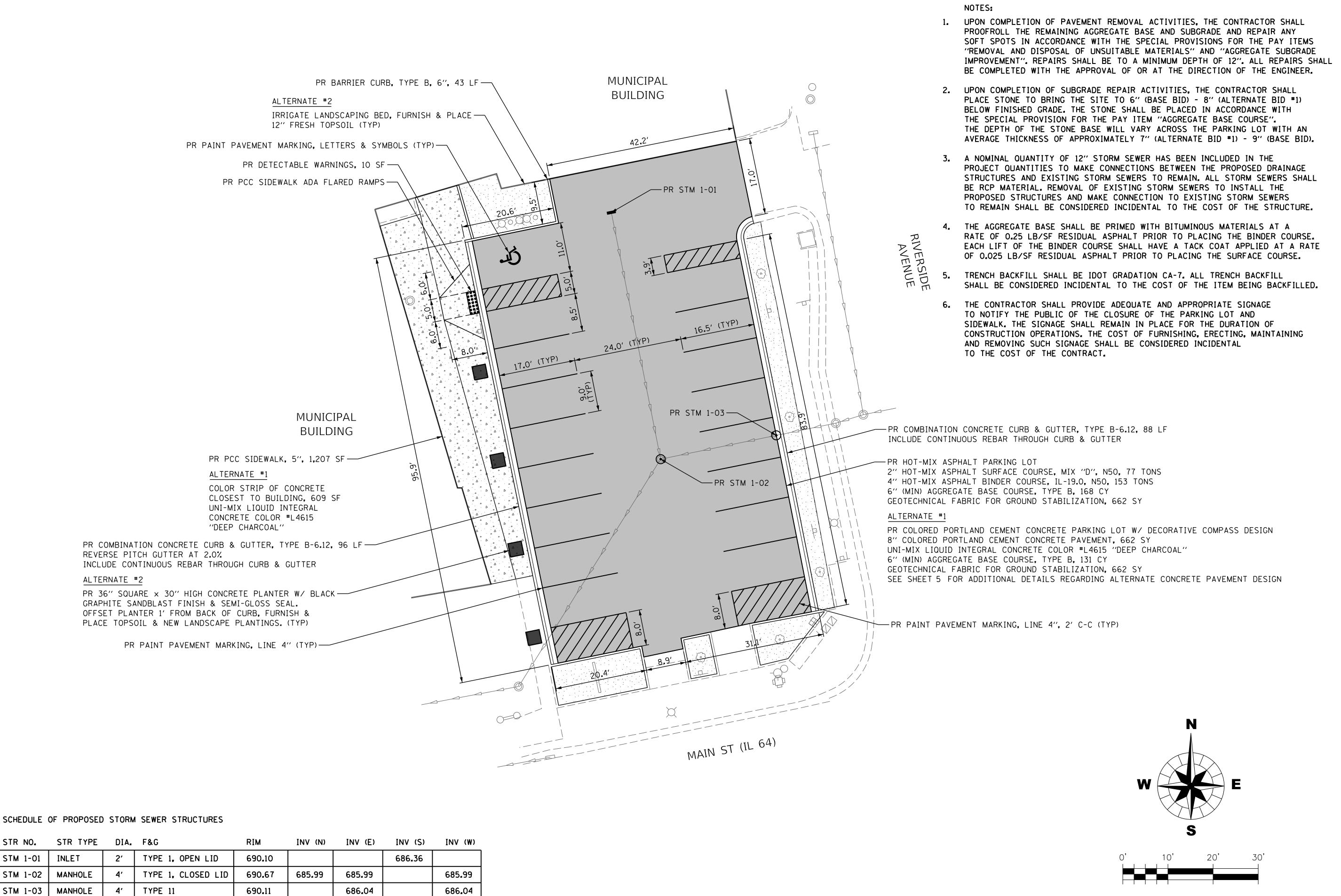
WBK ENGINEERING, LLC 116 WEST MAIN STREET, SUITE 201 ST. CHARLES, ILLINOIS 60174 (630) 443-7755



PROJECT NO. 18-0278 DATE: 06/13/19 DRAWING NO. **EX1**

3 OF 10

SHEET



HECKERBOARD LOT
TE IMPROVEMENTS
GEOMETRIC PLAN

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CITY OF ST. CHARLES
2 EAST MAIN STREET
ST. CHARLES, IL 60174
630.377.4405

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K ENGINEERING, LLC WEST MAIN STREET, SUITE 2C CHARLES, ILLINOIS 60174) 443-7755

WBK engineering

PROJECT NO. 18-0278

DATE: 06/13/19

DRAWING NO. **GM1**

4 OF 10

SHEET

COMPASS DESIGN DETAIL

7.9' 3.7' 7.9' 9.8' 9.8' 7.4' 7.4' 7.4' 7.4'

LEGEND

UNI-MIX LIQUID INTEGRAL CONCRETE COLOR #L0448 "PUTTY"

UNI-MIX LIQUID INTEGRAL CONCRETE COLOR #L0961 "HARVEST WHEAT"

UNI-MIX LIQUID INTEGRAL CONCRETE COLOR #LO262 "SALT MARSH GRAY"

MUNICIPAL BUILDING

NOTES:

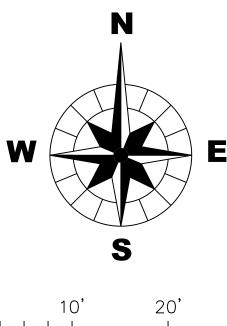
- UPON COMPLETION OF PAVEMENT REMOVAL ACTIVITIES, THE CONTRACTOR SHALL PROOFROLL THE REMAINING AGGREGATE BASE AND SUBGRADE AND REPAIR ANY SOFT SPOTS IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR THE PAY ITEMS "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS" AND "AGGREGATE SUBGRADE IMPROVEMENT". REPAIRS SHALL BE TO A MINIMUM DEPTH OF 12". ALL REPAIRS SHALL BE COMPLETED WITH THE APPROVAL OF OR AT THE DIRECTION OF THE ENGINEER.
- 2. UPON COMPLETION OF SUBGRADE REPAIR ACTIVITIES, THE CONTRACTOR SHALL PLACE STONE TO BRING THE SITE TO 6" (BASE BID) 8" (ALTERNATE BID *1) BELOW FINISHED GRADE. THE STONE SHALL BE PLACED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR THE PAY ITEM "AGGREGATE BASE COURSE". THE DEPTH OF THE STONE BASE WILL VARY ACROSS THE PARKING LOT WITH AN AVERAGE THICKNESS OF APPROXIMATELY 7" (ALTERNATE BID *1) 9" (BASE BID).
- 3. THE COST OF SAWCUTTING JOINTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PAY ITEM PORTLAND CEMENT CONCRETE PAVEMENT 8".
- 4. THE CONCRETE PAVEMENT SHALL BE REINFORCED IN ACCORDANCE WITH IDOT STANDARDS 420001 AND 420101. NO. 6 TIE BARS SHALL BE PLACED ALONG EACH LONGITUDINAL JOINT ON 36" CENTERS. DOWEL BARS SHALL BE PLACED ALONG EACH TRANSVERSE CONTRACTION JOINT ON 12" CENTERS. TIE BARS AND DOWEL BARS SHALL BE PLACED TO A DEPTH OF 4" BELOW FINISHED GRADE. THE COST OF REINFORCING THE CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PAY ITEM PORTLAND CEMENT CONCRETE PAVEMENT 8".

-PR MULTI-COLORED COMPASS IN CONCRETE PAVEMENT WITH INTERNALLY SAWED CONTRACTION JOINTS (REFER TO DETAIL FOR ADDITIONAL DETAILS)

-PR SAWED TRANSVERSE CONTRACTION JOINT CUT THROUGH BACK OF CURB (TYP)

ALTERNATE #1

-PR COLORED PORTLAND CEMENT CONCRETE PARKING LOT W/ DECORATIVE COMPASS DESIGN UNI-MIX LIQUID INTEGRAL CONCRETE COLOR #L4615 "DEEP CHARCOAL" 8" COLORED PORTLAND CEMENT CONCRETE PAVEMENT, 662 SY 6" (MIN) AGGREGATE BASE COURSE, TYPE B, 131 CY GEOTECHNICAL FABRIC FOR GROUND STABILIZATION, 662 SY





DSGN. JLB
DWN. JLB
CHKD. VDP
CHKD. VDP
SCALE: AS SHOWN
THE NATURE OF REVISION

LOT

CHECKERBOARD SITE IMPROVEME

JOINTING

CITY OF ST. CHARLES 2 EAST MAIN STREET ST. CHARLES, IL 60174 630.377.4405

WBK ENGINEERING, LLC 116 WEST MAIN STREET, SUITE 201 ST. CHARLES, ILLINOIS 60174 (630) 443-7755

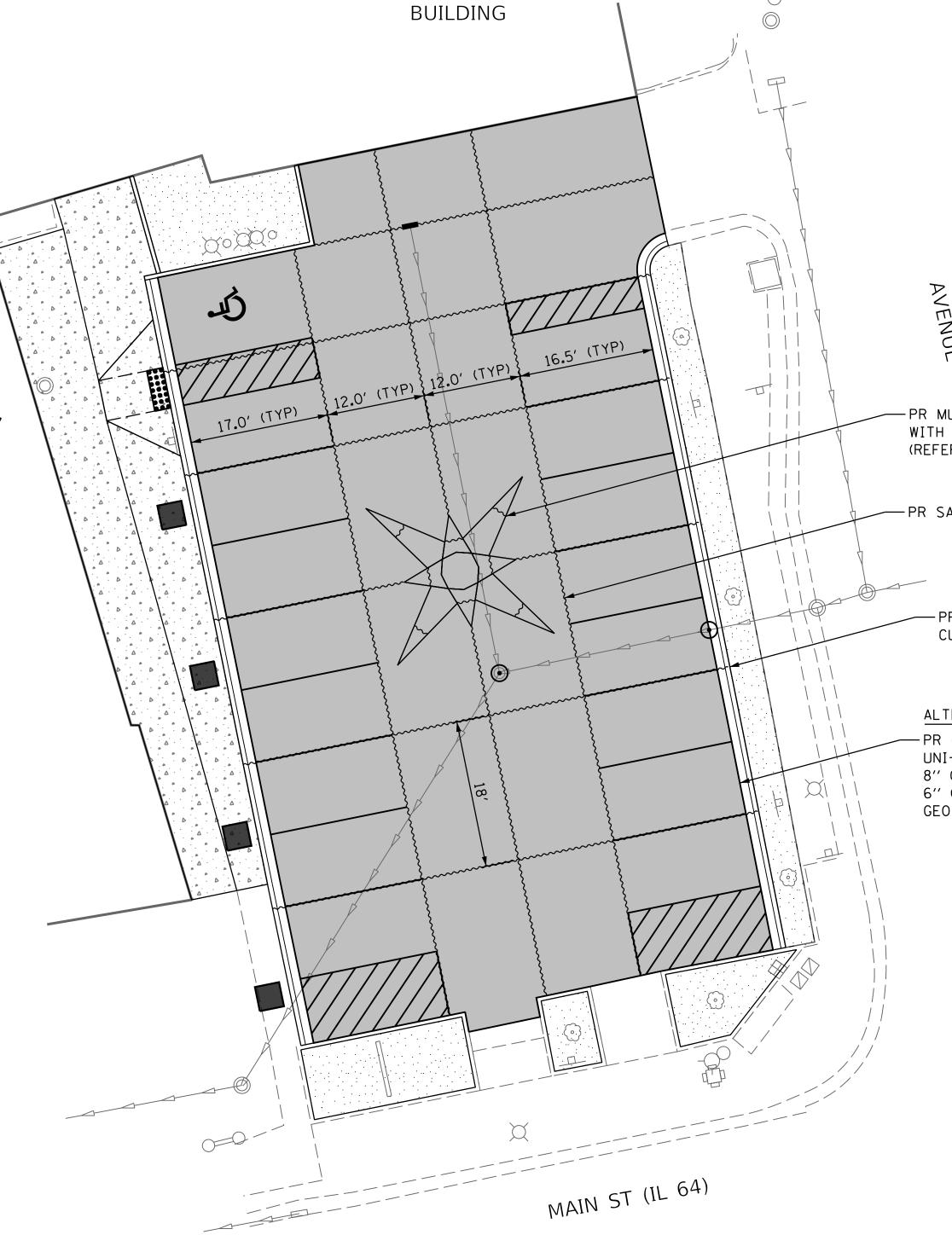


PROJECT NO. 18-0278

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DRAWING NO. **JT1**SHEET

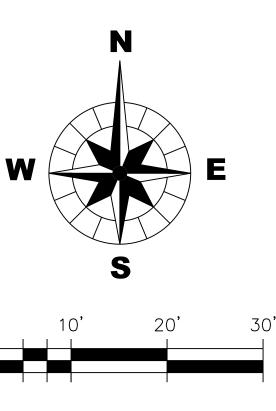
5 OF 10



MUNICIPAL

MUNICIPAL TC = 691.10 — EP = 690.60 BUILDING ALL SLOPES WITHIN LIMITS OF ACCESSIBLE — —EP = 690.60 PARKING SPACE TO BE LESS THAN 2.0% TC = 691.60 EP = 691.10 SW = 692.15 — TC = 692.65 SW = 692.15 ----TC = 690.70EP = 690.26 SW = 692.10-RIVERSIDE 690**.**95 690**.**51 -RIM = 690.10TC = 691**.**85 — EP = 691.33 TC = 691.85 — EP = 691.33 SW = 691.85-SW = 691.85-SW = 692.05-TC = 691.36 — EP = 691.33 MUNICIPAL TC = 691.85 \ EP = 691.33 BUILDING -TC = 690.55EP = 690**.**11 RIM = 690.11 SW = 692.00— -RIM = 690.67TC = 691.85 —— EP = 691.33 — TC = 690.95 EP = 690.51 $SW = 692.00 \frac{1}{692.00}$ $SW = 691.95 \frac{1}{100}$ MATCH EX SW GRADE — TC = 691.90 —/ EP = 691.38 EP = 691.05 00-, EP = 690**.**95 — TC = 691.90 — EP = 691.38 MAIN ST (IL 64)

NOTES: 1. TC = TOP OF CURB EP = EDGE OF PAVEMENT SW = SIDEWALK



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CHECKERBOARD LOT SITE IMPROVEMENTS

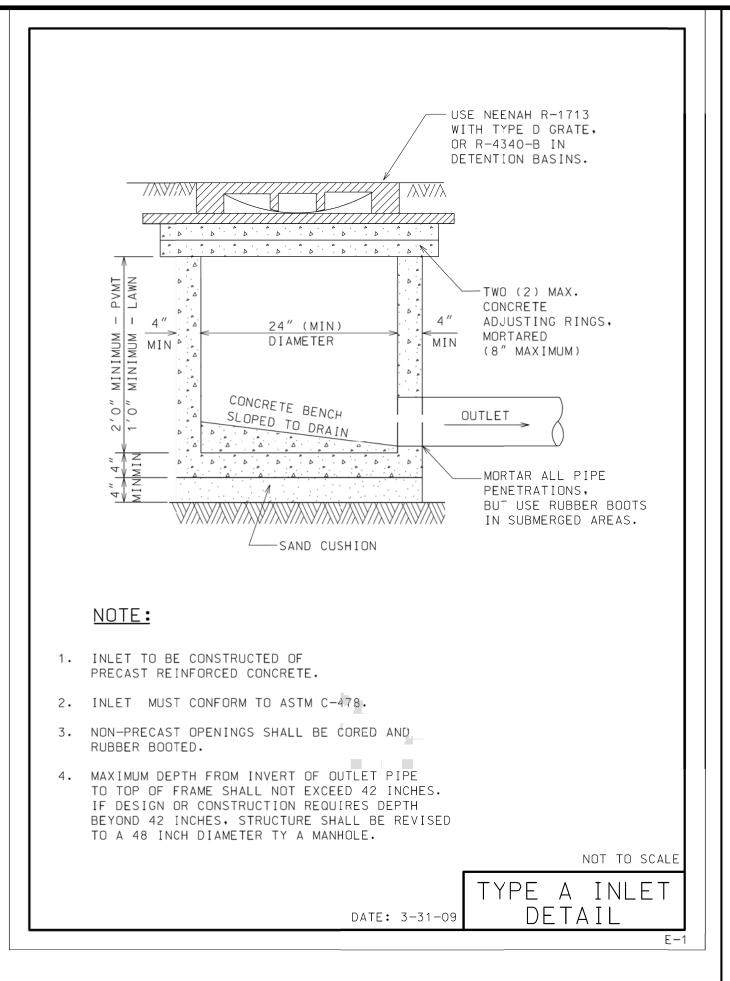
GRADING PLAN

WBK engineering

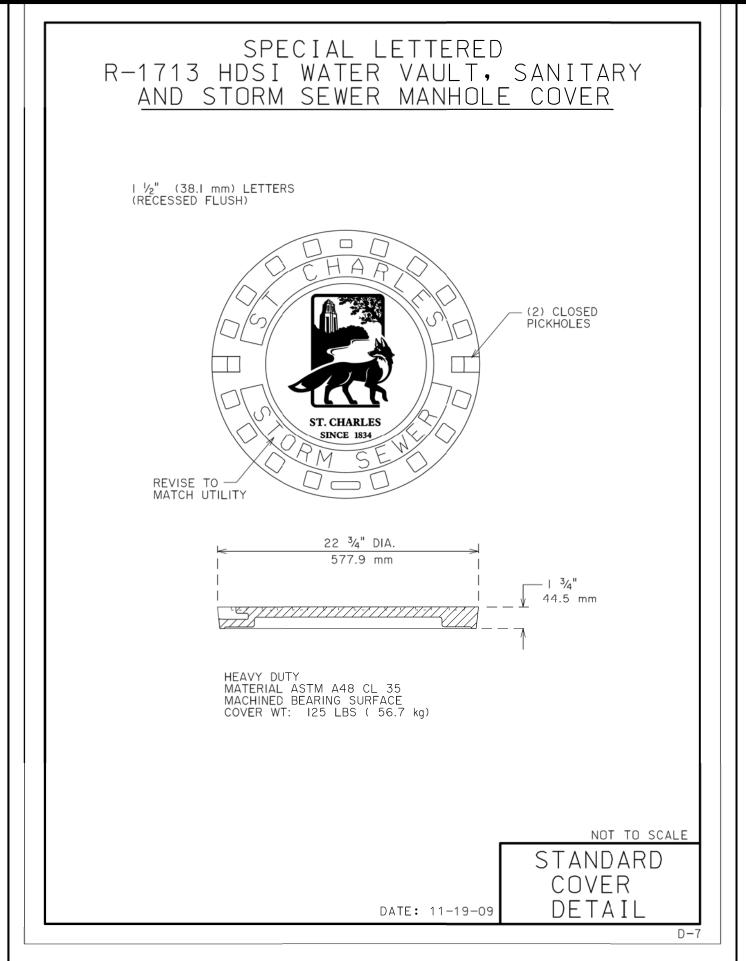
PROJECT NO. 18-0278 DATE: 06/13/19

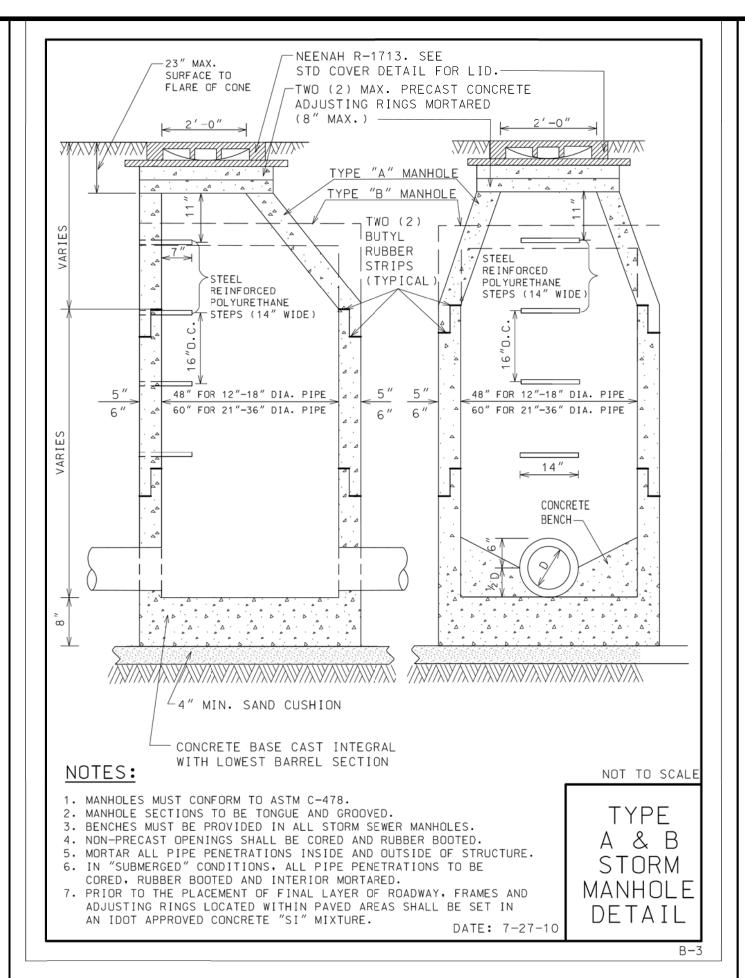
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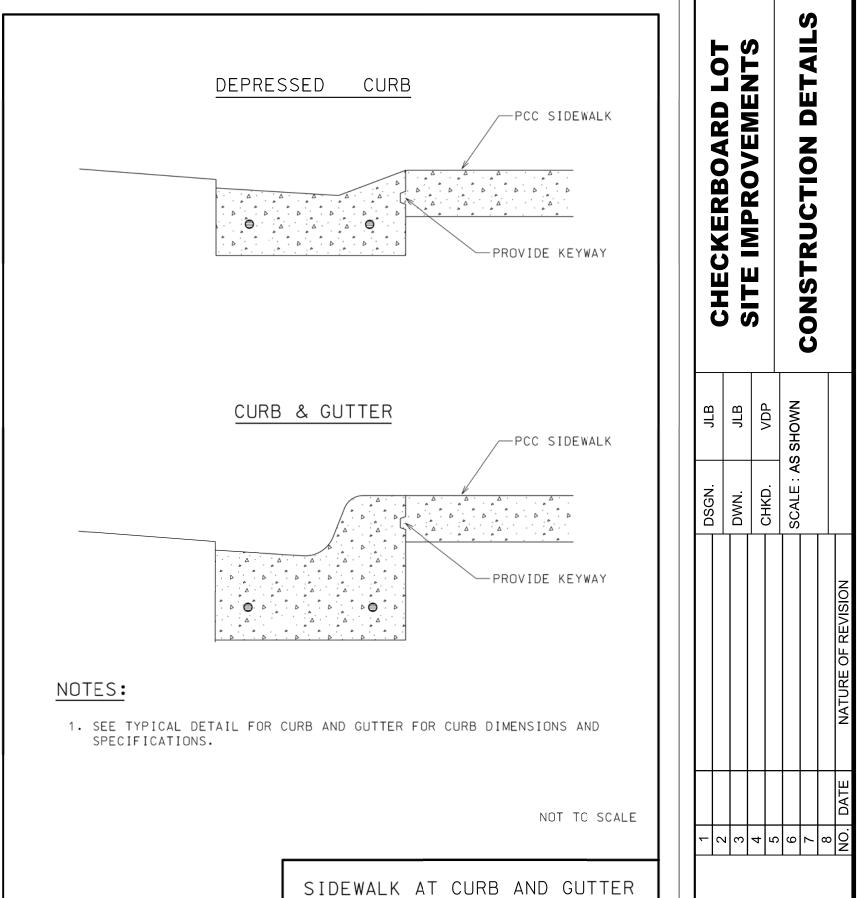
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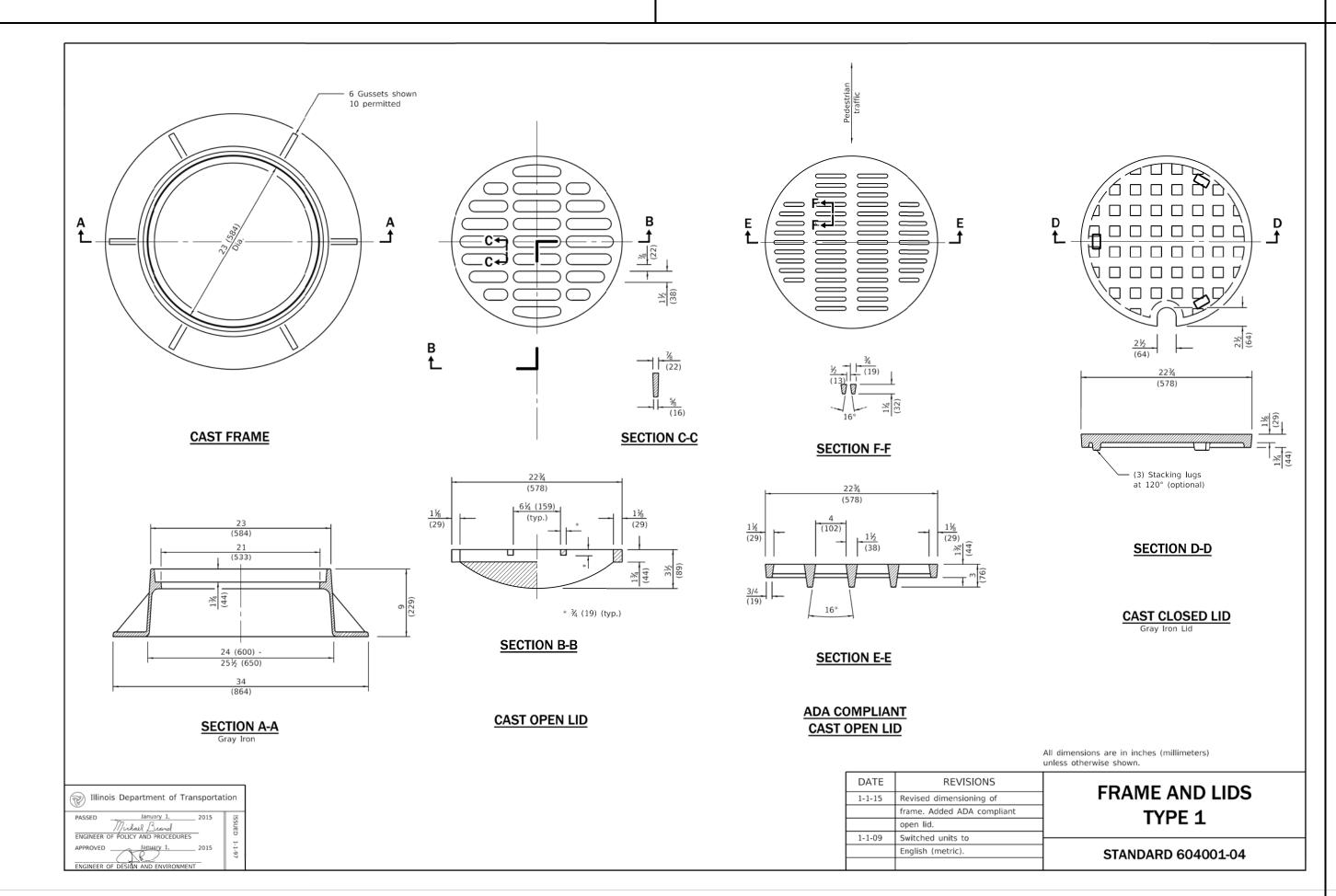
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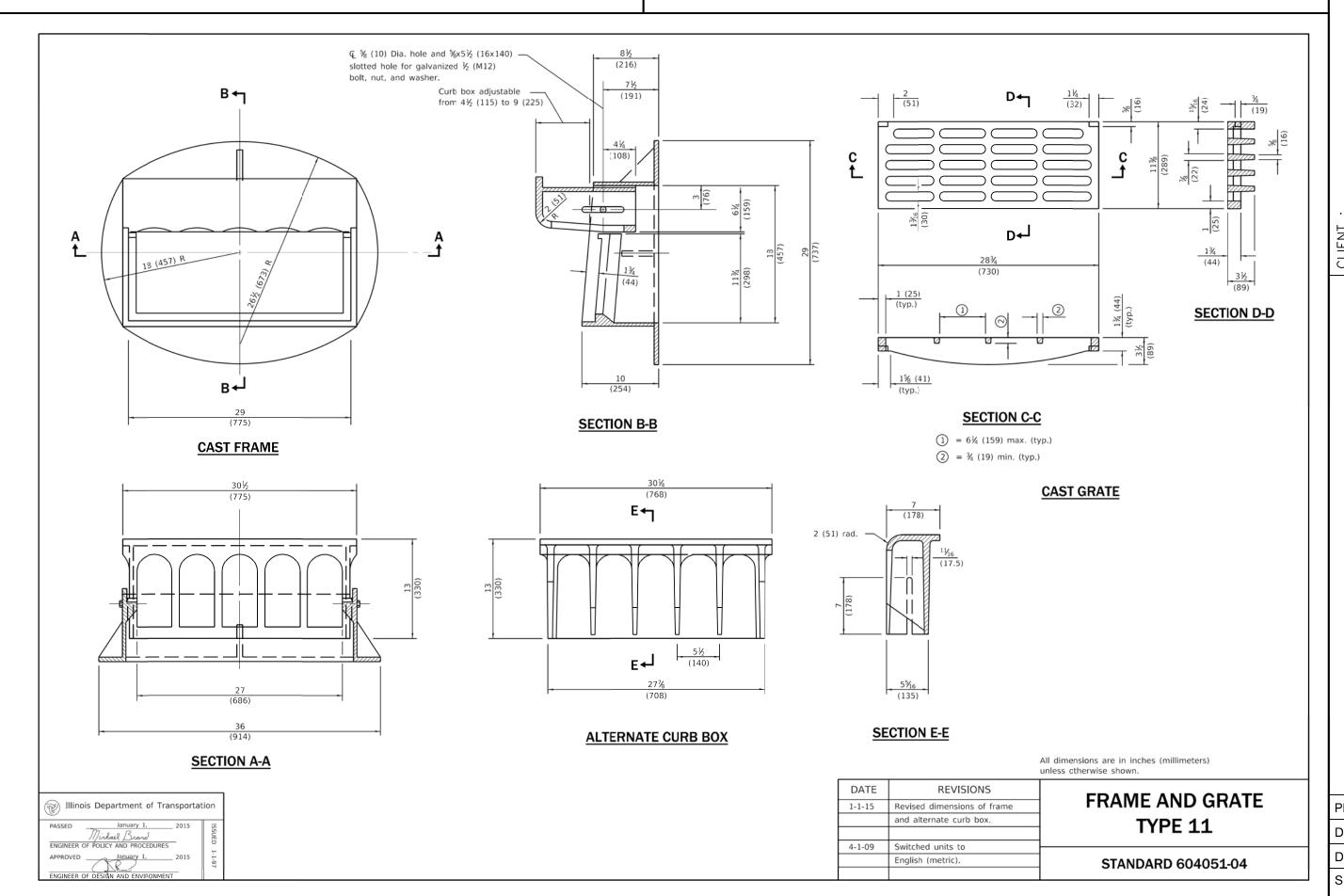


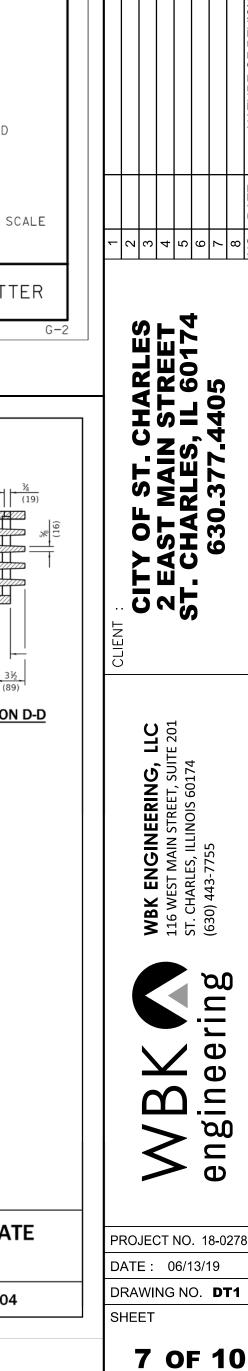


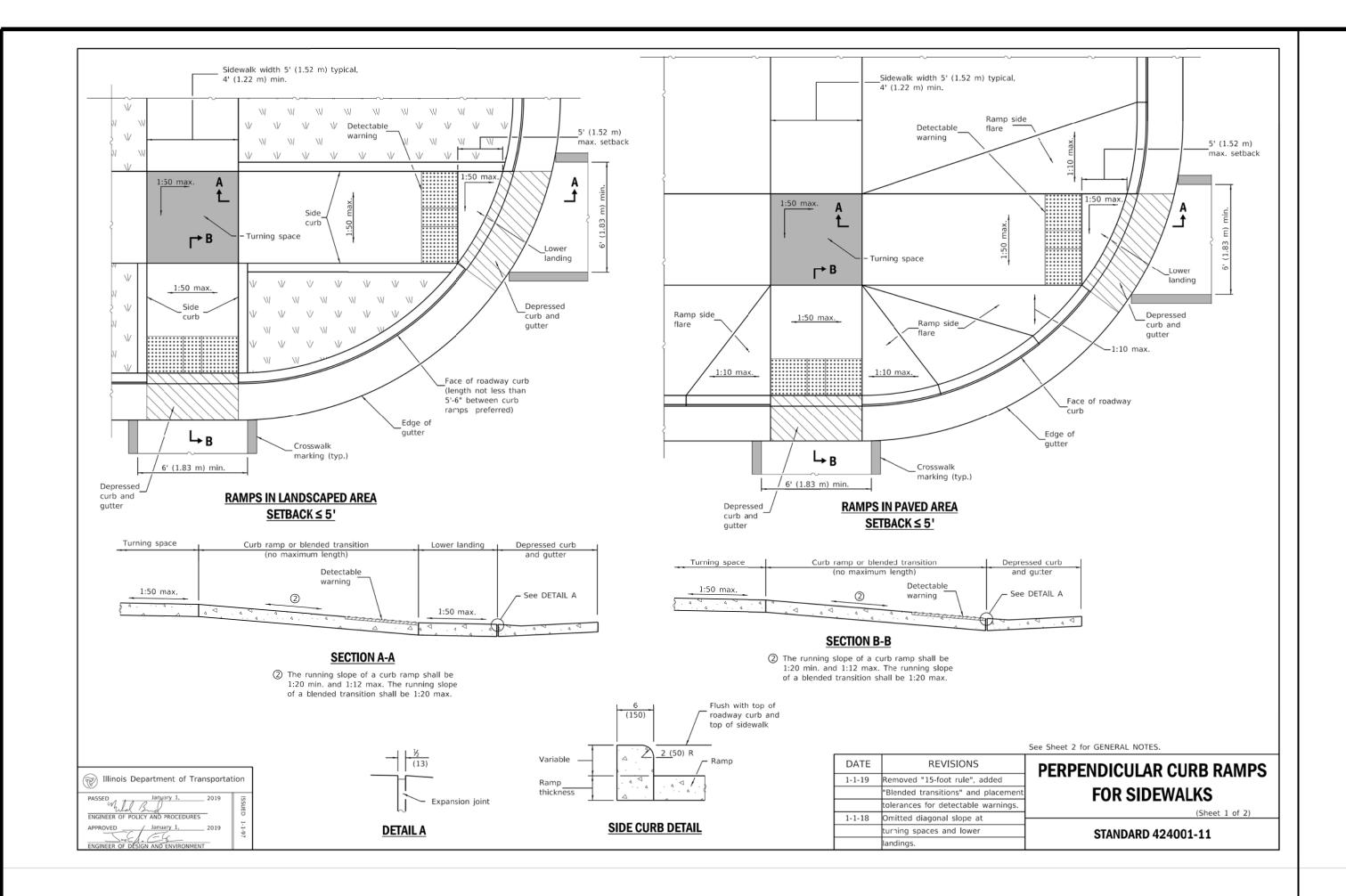


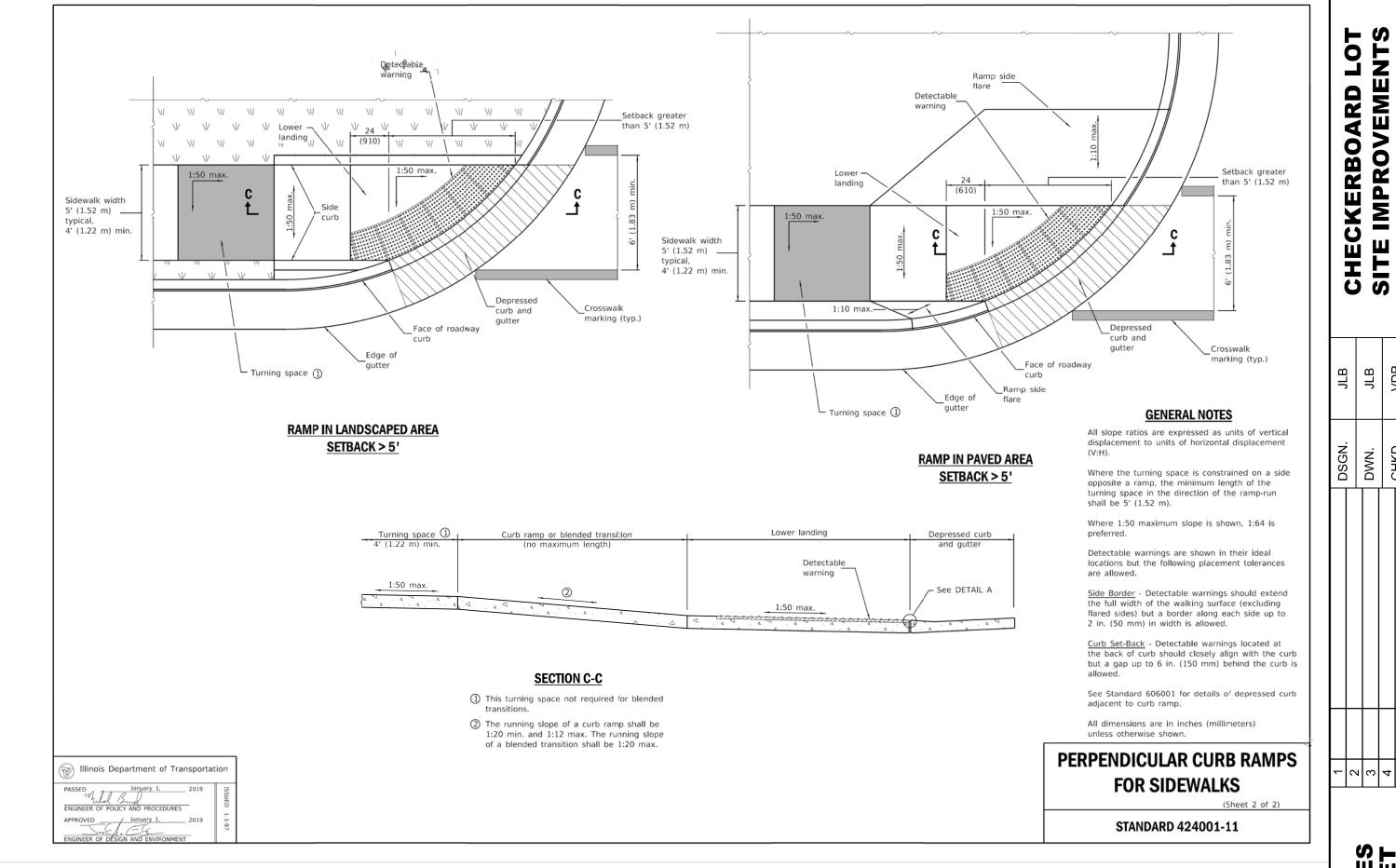
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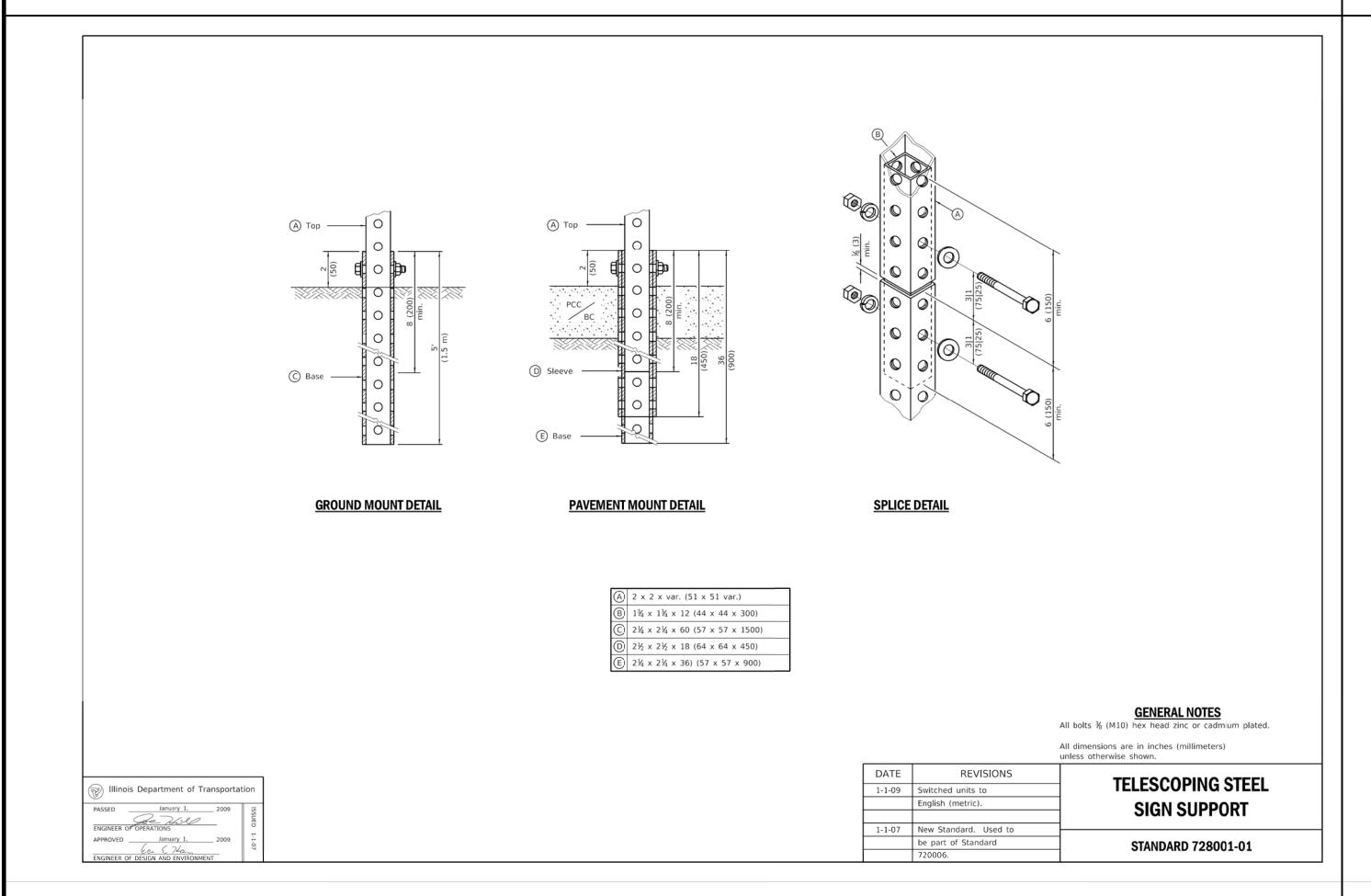


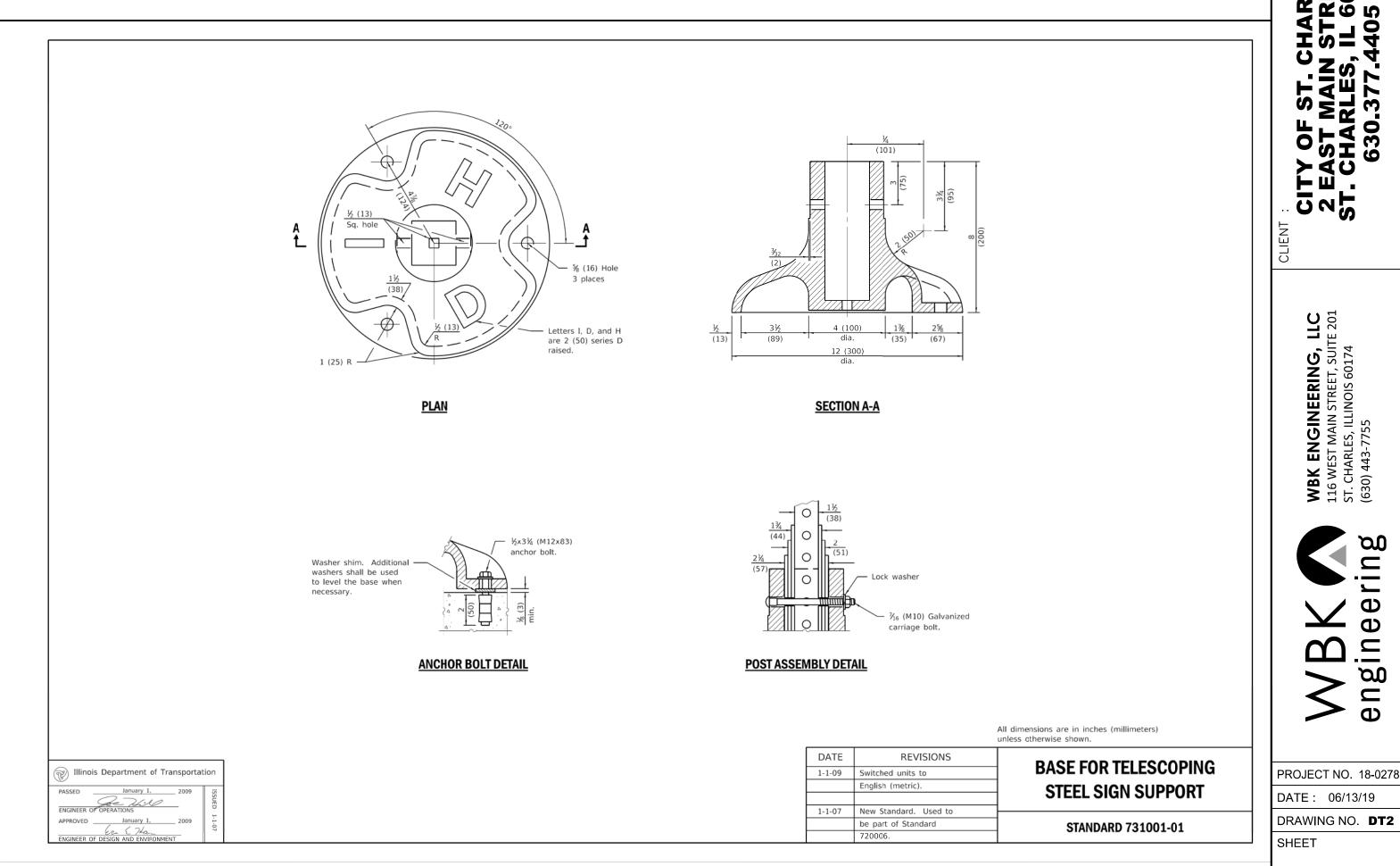






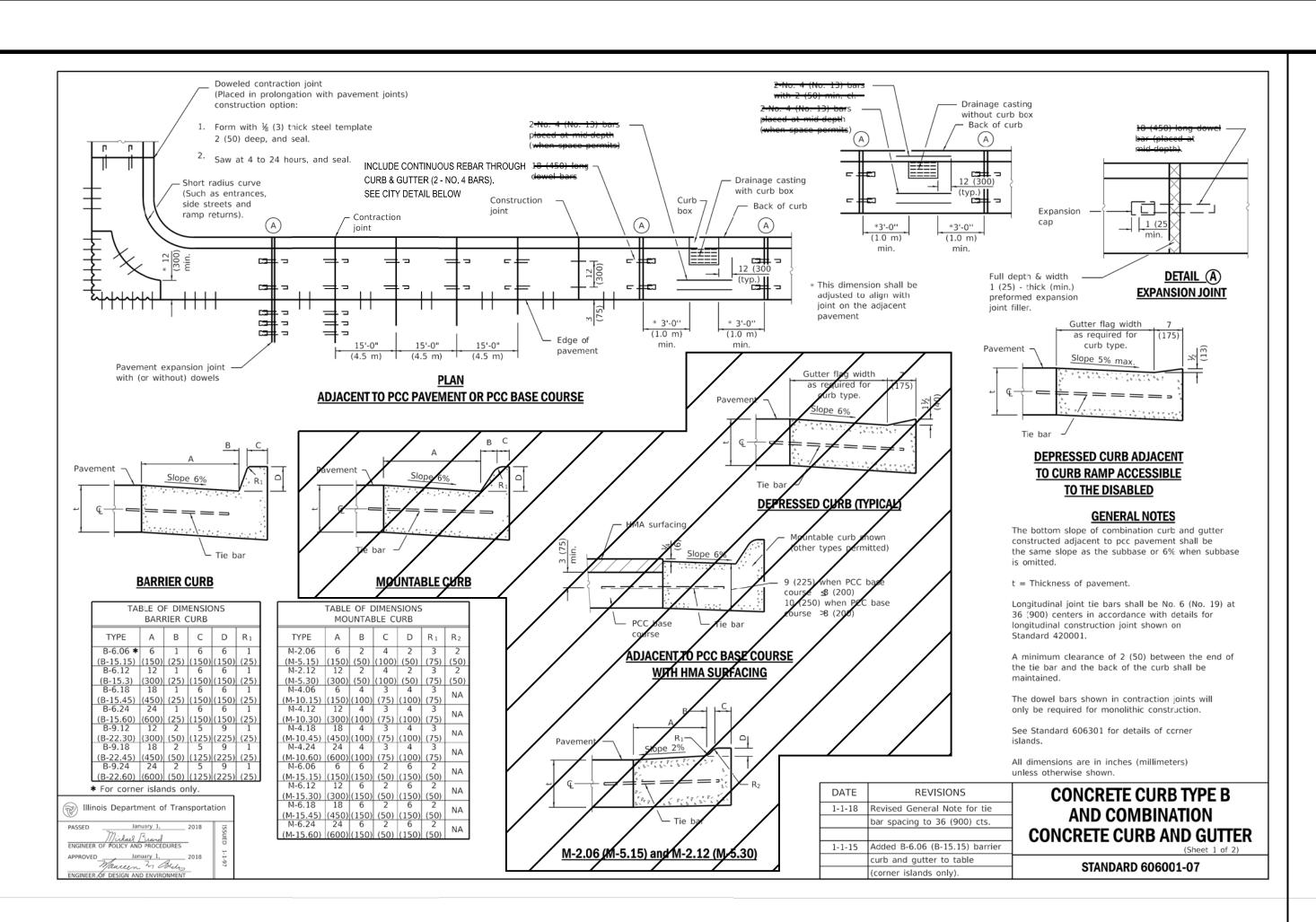


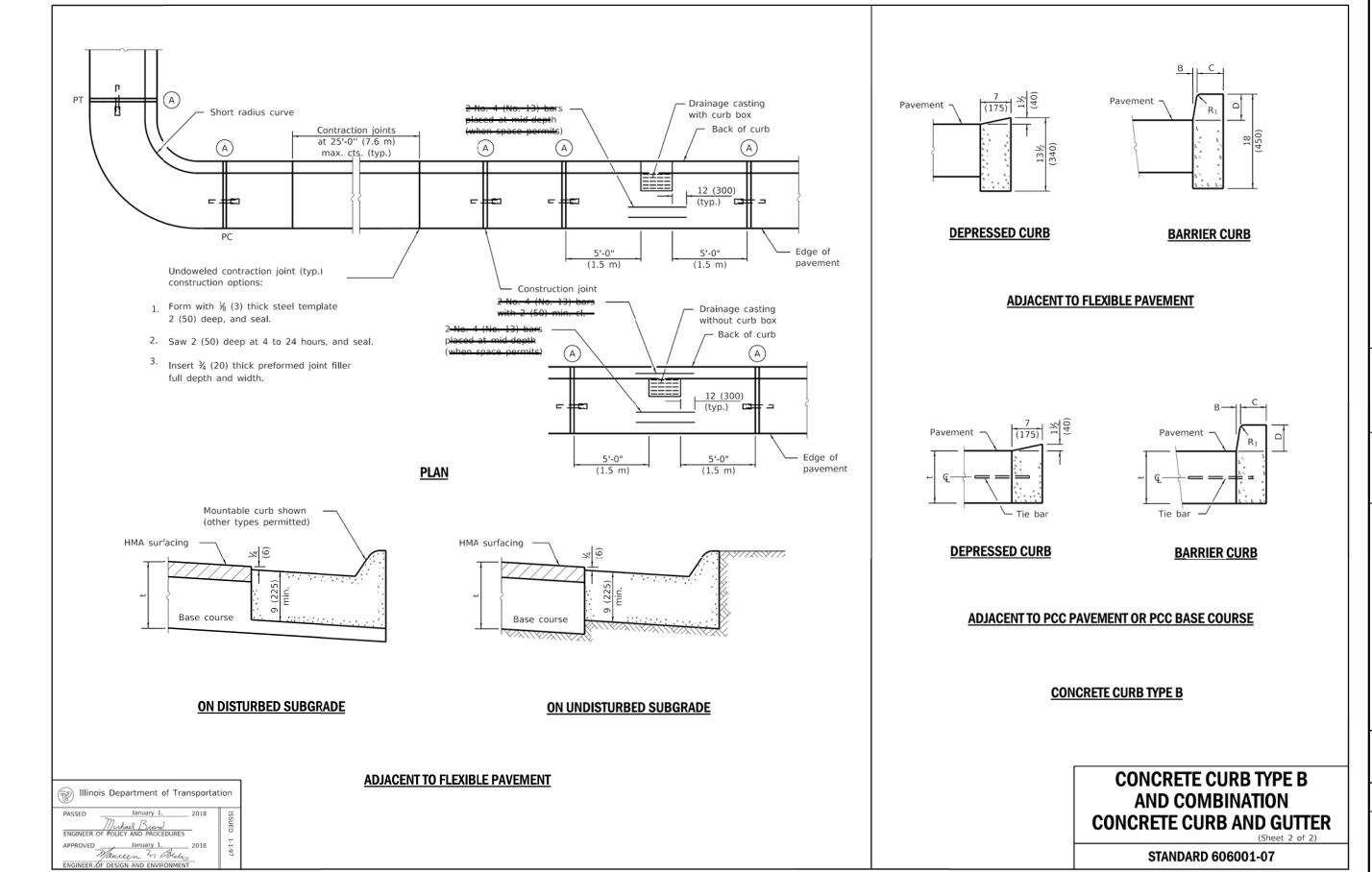


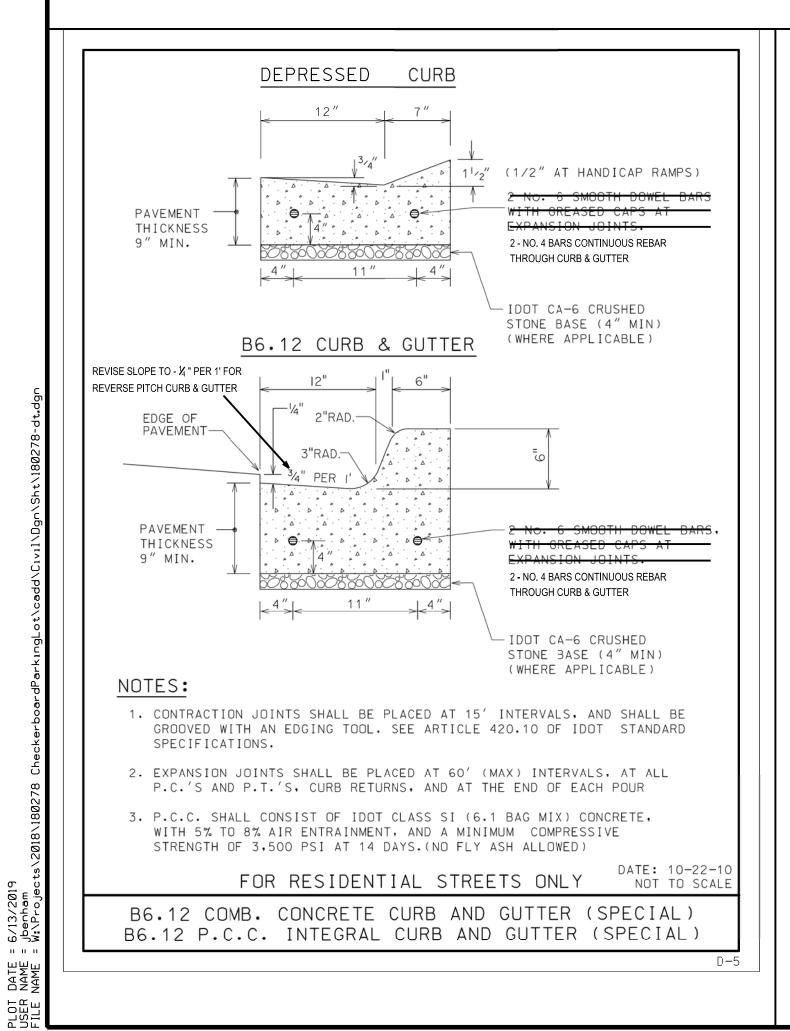


DETAILS CHECKERBOARD SITE IMPROVEME ONSTRUCTION Ü r. CHARLES VIN STREET ES, IL 60174 77.4405 OF ST. ST MAI HARLE CITY C 2 EAS ST. CH WBK ENGINEERING, I 116 WEST MAIN STREET, SUITE ST. CHARLES, ILLINOIS 60174 (630) 443-7755 WBK Congineering PROJECT NO. 18-0278

PLOT DATE = 6/13/20 USER NAME = jbenham FILE NAME = W:\Pro









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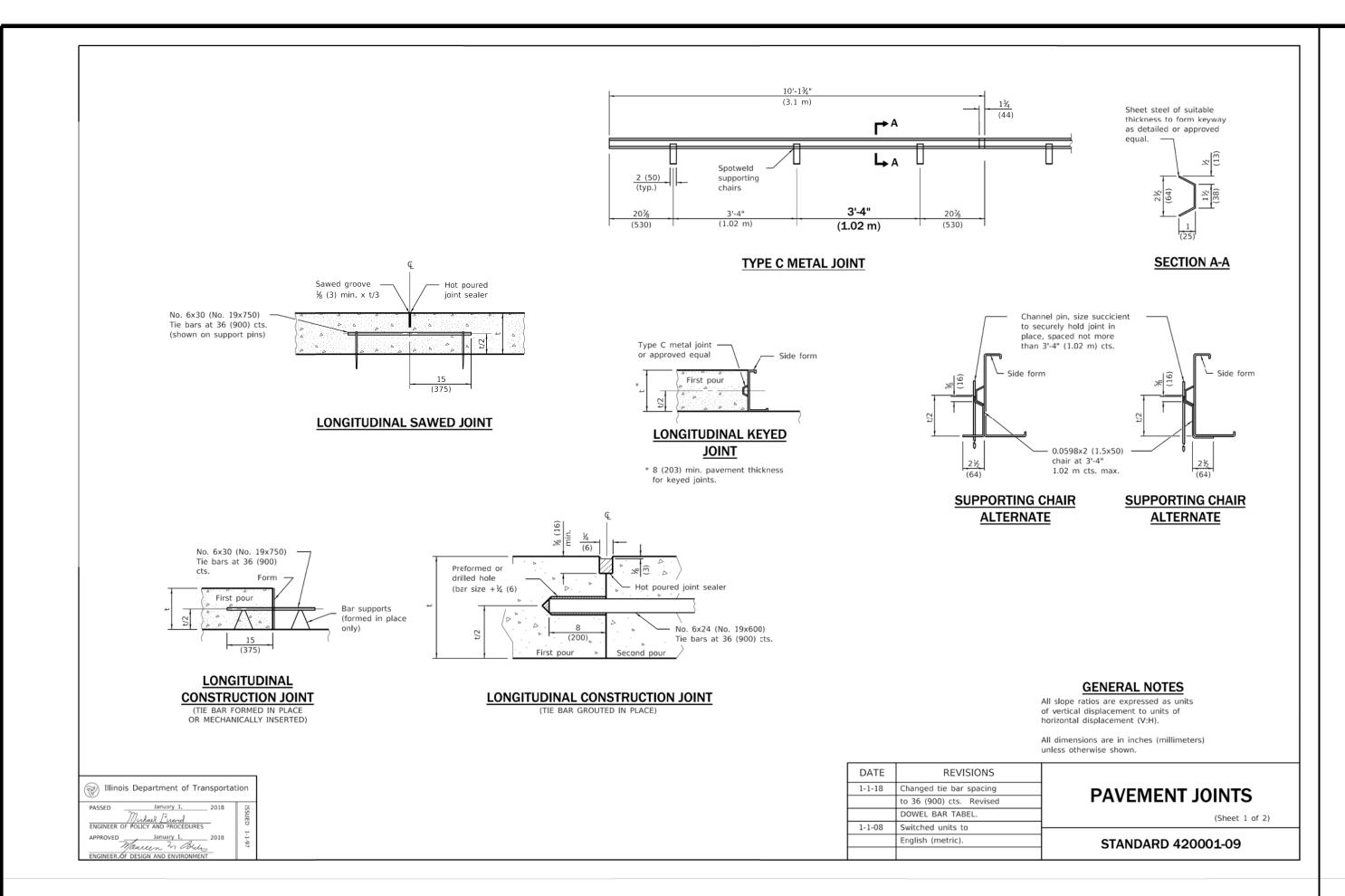
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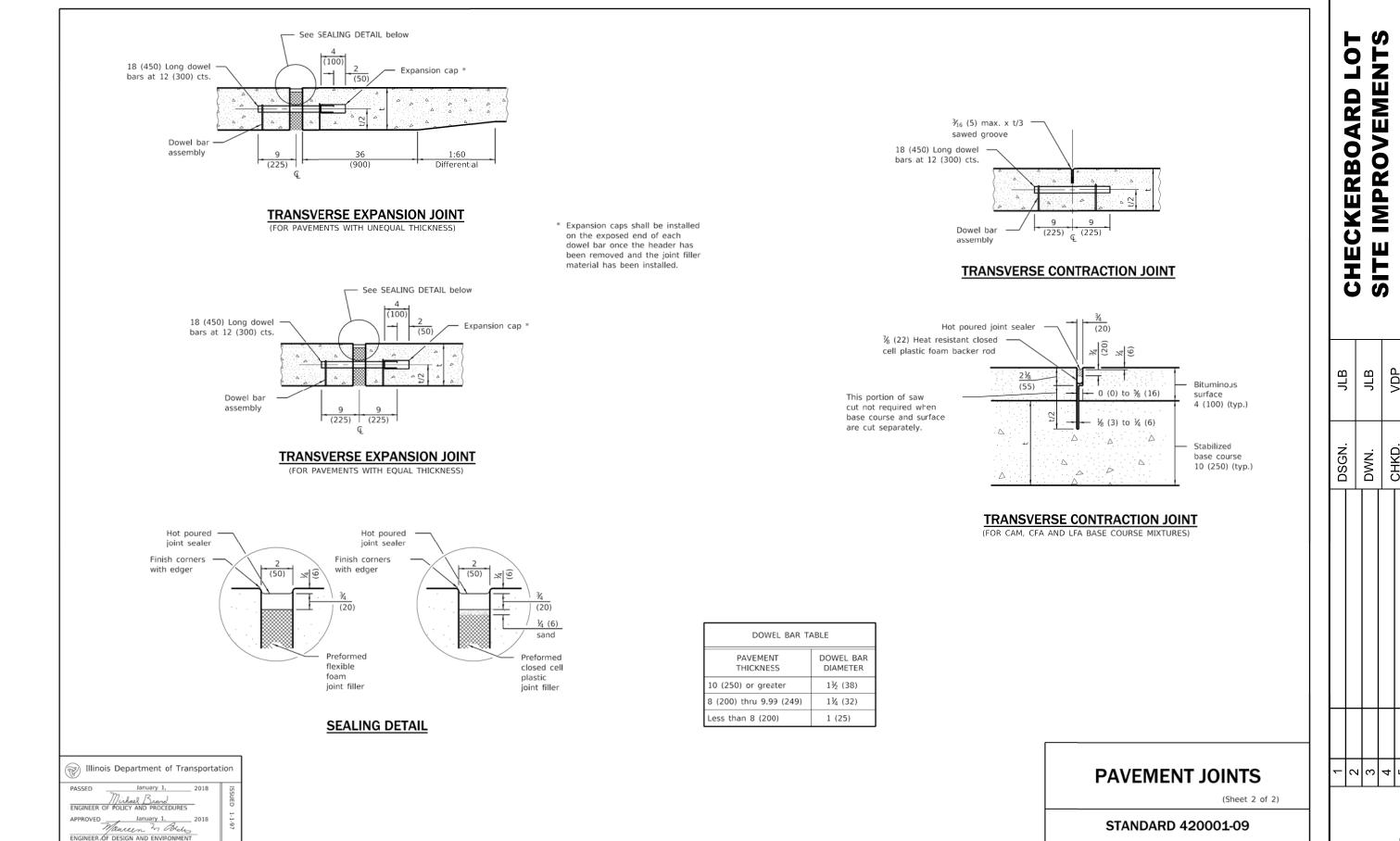
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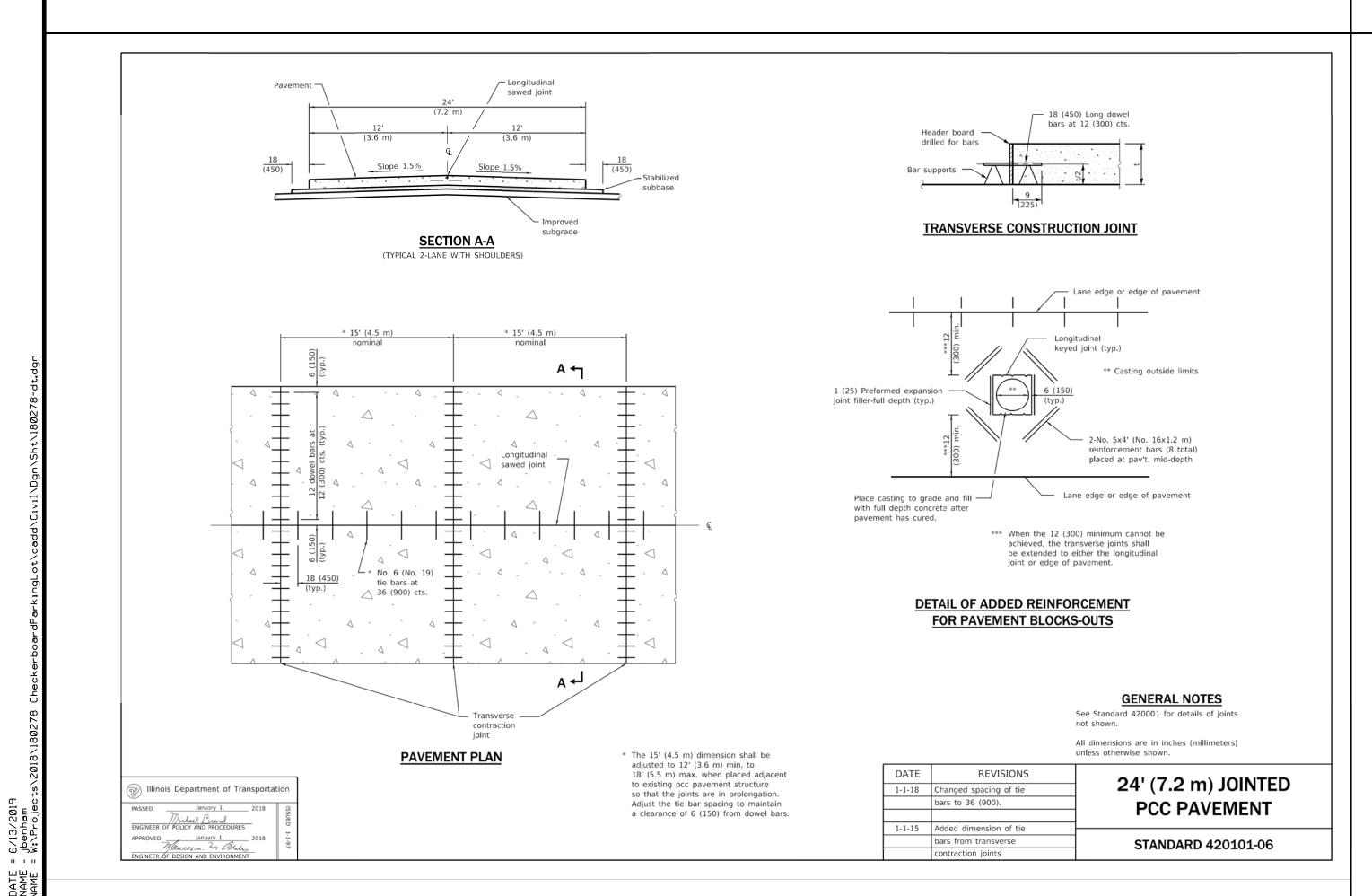


PROJECT NO. 18-0278
DATE: 06/13/19

DRAWING NO. **DT3**SHEET









DETAIL

ONSTRUCTION

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PROJECT NO. 18-0278

DATE: 06/13/19

DRAWING NO. **DT4**SHEET