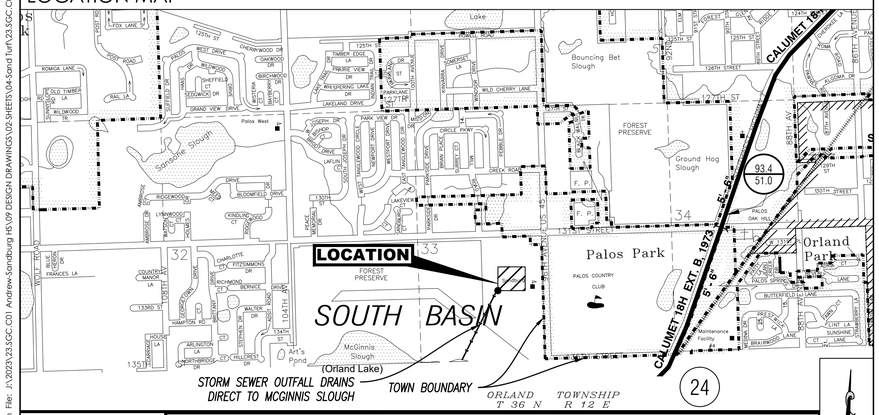
SYMBOL AND LINE LEGEND

VALVE VAULT	W	W	WATERMAIN PIPE
WATER B-BOX			STORM SEWER PIPE
WATER VALVE BOX			STORM UNDERDRAIN
FIRE HYDRANT			SANITARY SEWER PIPE
WELL HEAD	IRR	IRR	IRRIGATION SLEEVE/PIPING
FIRE DEPARTMENT CONNECTION	E	E	ELECTRICAL DUCT BANK
STORM INLET	G	G	NATURAL GAS LINE
STORM MANHOLE	COM	COM	COMMUNICATIONS LINE
CATCH BASIN	CWS	CWS	CHILLED WATER SUPPLY
STORM CLEANOUT	CWR	CWR	CHILLED WATER RETURN
DOWNSPOUT	TV	TV	TELEVISION CABLE
FLARED END SECTION	UGW	UGW	UNDERGROUND WIRE
SANITARY MANHOLE	T	T	TELEPHONE CABLE
SANITARY CLEANOUT	FO	FO	FIBER OPTIC CABLE
LIGHT POLE	A	A	AERIAL WIRES
TELEPHONE MANHOLE			CONSTRUCTION LIMITS
POWER POLE			PROPERTY LINE
GAS VALVE			EASEMENT LINE
GAS METER		FPD FPD	FLAT PANEL DRAIN
HAND HOLE	HWL	HWL	HIGH WATER LINE
MAIL BOX	NWL	NWL	NORMAL WATER LINE
ELECTRICAL MANHOLE			CHAIN LINK FENCE
CABLE TV PEDESTAL	X X	X	BARBED-WIRE FENCE
TELEPHONE PEDESTAL			WOODEN FENCE
TRAFFIC OR STREET SIGN			SILT FENCE
SOIL BORING			
21.56 SPOT ELEVATION			DECIDUOUS TREE
SURFACE FLOW			SHRUB OR BUSH
100-YEAR OVERFLOW			EVERGREEN TREE

MWRD SEWER ROUTING & LOCATION MAP



FINAL ENGINEERING PLANS

SYNTHETIC TURF FIELD AT SANDBURG HIGH SCHOOL
13300 SOUTH LA GRANGE ROAD, ORLAND PARK, IL 60462

OWNER INFORMATION

OWNER: CONSOLIDATED HIGH SCHOOL DISTRICT 230
DIRECTOR OF FACILITIES: DAVID KEATING
EMAIL: DKEATING@D230.ORG
PHONE: 708-745-5203
ADDRESS: 15100 S. 94TH AVE, ORLAND PARK, IL 60462

BENCHMARKS

- TOP OF THE SOUTHWEST FLANGE BOLT ON HYDRANT LOCATED NORTH FROM THE NORTHEAST BLEACHER CORNER APPROXIMATELY 16 FEET.
  ELEVATION:= 720.32 NAVD 88

- TOP OF THE SOUTHWEST FLANGE BOLT ON HYDRANT LOCATED NEAR THE SOUTHEAST OUTFIELD FENCE CORNER APPROXIMATELY 14 FEET EAST AND 7 FEET NORTH.
  ELEVATION:= 720.33 NAVD 88

NOTES

1. PLAN BACKGROUND AND UTILITIES AREA BASED UPON THE PLAT OF SURVEY AND TOPOGRAPHIC SURVEYS PREPARED BY JOSEPH A SCHUDT AND ASSOCIATES, INC., WHICH WERE PROVIDED TO RTM ENGINEERING CONSULTANTS. RTM ENGINEERING CONSULTANTS ASSUME NO RESPONSIBILITY FOR THEIR ACCURACY OR THOROUGHNESS.
2. PLANS BASED UPON GEOTECHNICAL ENGINEERING REPORT PREPARED BY ECS MIDWEST, LLC, DATED FEBRUARY 3, 2023. CONTRACTOR SHALL FOLLOW FOR ALL EARTHWORK OPERATIONS.
3. SITE ACCESS CONTROL INCLUDING SAFETY FENCES AND TRAFFIC CONTROL, ALL CONSTRUCTION MEANS AND METHODS, AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES FOR FIELD LOCATIONS OF THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. ALL UTILITIES SHOWN IN THE PLANS ARE FROM RECORDS OR FIELD OBSERVABLE IN FORMATION LOCATED BY SURVEYOR. ANY UTILITY LOCATIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

DUTY TO INDEMNIFY

THE CONTRACTOR SHALL DEFEND, INDEMNIFY, KEEP AND SAVE HARMLESS THE MUNICIPALITY, OWNER, AND ENGINEER, AND THEIR RESPECTIVE BOARD MEMBERS, REPRESENTATIVES, AGENTS AND EMPLOYEES, IN BOTH INDIVIDUAL AND OFFICIAL CAPACITIES, AGAINST ALL SUITS, CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING ATTORNEY'S FEES, CAUSED BY, GROWING OUT OF, OR INCIDENTAL TO, THE PERFORMANCE OF THE WORK UNDER THE CONTRACT BY THE CONTRACTOR OR ITS SUBCONTRACTORS TO THE FULL EXTENT AS ALLOWED BY THE LAWS OF THE STATE OF ILLINOIS AND NOT BEYOND ANY EXTENT WHICH WOULD RENDER THESE PROVISIONS VOID OR UNENFORCEABLE. THIS OBLIGATION INCLUDES BUT IS NOT LIMITED TO, THE ILLINOIS LAWS REGARDING STRUCTURAL WORK (IL. REV. STAT. CH. 48, PAR.60 AT SEQ.). AND REGARDING THE PROTECTION OF ADJACENT LANDOWNERS (IL. REV. STAT. CH.17 ½ PAR.51 ET. SEQ.). IN THE EVENT OF ANY SUCH INJURY (INCLUDING DEATH) OR LOSS OR DAMAGE, OR CLAIMS THEREFORE, THE CONTRACTOR SHALL GIVE PROMPT NOTICE TO THE OWNER.

Sheet List Table

SURFACE DRAINAGE STATEMENT:

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DRAINAGE OF SURFACE WATERS WILL NOT BE CHANGED BY THE PROPOSED DEVELOPMENT. IF ANY DRAINAGE PATTERNS WILL BE CHANGED, REASONABLE PROVISIONS HAVE BEEN MADE FOR THE COLLECTION AND DIVERSION OF SUCH SURFACE WATERS INTO THE PUBLIC AREA, OR DRAINS APPROVED FOR THE USE BY THE MUNICIPAL ENGINEER, AND THAT SUCH SURFACE WATERS ARE PLANNED FOR IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES SO AS TO REDUCE THE LIKELIHOOD OF DAMAGES TO ADJOINING PROPERTIES.

CONTACT THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO **2 DAYS** BEFORE STARTING WORK.

P (708) 588-4055
E WMOJobStart@mwrd.org

Sheets C2.00 to C2.71 were prepared at or under the direction of:

MATTHEW D. WHISLER
062-055027
REGISTERED PROFESSIONAL ENGINEER
ILLINOIS

ILLINOIS REGISTERED PROFESSIONAL ENGINEER No. 062-055027
MATTHEW D. WHISLER
LICENSE EXPIRES: 11/30/2023
SIGNED: 07/06/2023

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

CALL 48 HOURS BEFORE YOU DIG WITH THE FOLLOWING INFORMATION

COUNTY NAME: COOK, ORLAND TOWNSHIP
TOWNSHIP, RANGE: 37N, 12E
SECTION NUMBER: 33

STUDIO GC
architecture + interiors
223 West Jackson Boulevard, Suite 1200
Chicago, Illinois 60606
(312) 253-3400

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650 E. Algonquin Road | Suite 250
Schaumburg, IL 60173
ph: 847.404.5239
IL Design Firm: 184006777-0002

Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023

TURF FIELD

COVER SHEET

22105 **C2.00**

RTM PROJ. 23.SGC.C01

A. REFERENCED SPECIFICATIONS

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING, EXCEPT AS MODIFIED HEREIN OR ON THE PLANS:
   * STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT SS) FOR ALL IMPROVEMENTS EXCEPT SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION (SSWS) FOR SANITARY SEWER AND WATER MAIN CONSTRUCTION;
   * VILLAGE OF ORLAND PARK MUNICIPAL CODE;
   * THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRD) WATERSHED MANAGEMENT ORDINANCE AND TECHNICAL GUIDANCE MANUAL;
   * IN CASE OF CONFLICT BETWEEN THE APPLICABLE ORDINANCES NOTED, THE MORE STRINGENT SHALL TAKE PRECEDENCE AND SHALL CONTROL ALL CONSTRUCTION.

B. NOTIFICATIONS

1. THE MWRD LOCAL SEWER SYSTEMS SECTION FIELD OFFICE MUST BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF ANY WORK (CALL 708-588-4055 OR SEND EMAIL NOTIFICATION WITH PROJECT NAME, LOCATION AND PERMIT NUMBER TO WMOJOBSTART@MWRD.ORG).

2. THE VILLAGE OF ORLAND PARK ENGINEERING DEPARTMENT AND PUBLIC MUST BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION AND PRIOR TO EACH PHASE OF WORK. CONTRACTOR SHALL DETERMINE ITEMS REQUIRING INSPECTION PRIOR TO START OF CONSTRUCTION OR EACH WORK PHASE.

3. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION FOR THE EXACT LOCATIONS OF UTILITIES AND FOR THEIR PROTECTION DURING CONSTRUCTION. IF EXISTING UTILITIES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, IMMEDIATELY NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED. CALL J.U.L.I.E. AT 1-800-892-0123.

C. GENERAL NOTES

1. ALL ELEVATIONS SHOWN ON PLANS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONVERSION FACTOR IS ___0_____ FT.

2. MWRD, THE MUNICIPALITY AND THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION IMPROVEMENTS.

3. THE CONTRACTOR(S) SHALL INDEMNIFY THE OWNER, ENGINEER, MUNICIPALITY, MWRD, AND THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, OR TESTING OF THIS WORK ON THE PROJECT.

4. THE PROPOSED IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE ENGINEERING PLANS AS APPROVED BY MWRD AND THE MUNICIPALITY UNLESS CHANGES ARE APPROVED BY MWRD, THE MUNICIPALITY, OR AUTHORIZED AGENT. THE CONSTRUCTION DETAILS, AS PRESENTED ON THE PLANS, MUST BE FOLLOWED. PROPER CONSTRUCTION TECHNIQUES MUST BE FOLLOWED ON THE IMPROVEMENTS INDICATED ON THE PLANS.

5. THE LOCATION OF VARIOUS UNDERGROUND UTILITIES WHICH ARE SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND REPRESENT THE BEST KNOWLEDGE OF THE ENGINEER. VERIFY LOCATIONS AND ELEVATIONS PRIOR TO BEGINNING THE CONSTRUCTION OPERATIONS.

6. ANY EXISTING PAVEMENT, SIDEWALK, DRIVEWAY, ETC., DAMAGED DURING CONSTRUCTION OPERATIONS AND NOT CALLED FOR TO BE REMOVED SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

7. MATERIAL AND COMPACTION TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, MWRD, AND OWNER.

8. THE UNDERGROUND CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS TO NOTIFY ALL INSPECTION AGENCIES.

9. ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS DISTURBED DURING CONSTRUCTION SHALL BE ADJUSTED TO FINISH GRADE PRIOR TO FINAL INSPECTION.

10. RECORD DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS UNDERGROUND IMPROVEMENTS ARE COMPLETED. FINAL PAYMENTS TO THE CONTRACTOR SHALL BE HELD UNTIL THEY ARE RECEIVED. ANY CHANGES IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED. ALL WYES OR BENDS SHALL BE LOCATED FROM THE DOWNSTREAM MANHOLE. ALL VALVES, B-BOXES, TEES OR BENDS SHALL BE TIED TO A FIRE HYDRANT.

D. SANITARY SEWER

1. THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT ANY POLLUTED WATER, SUCH AS GROUND AND SURFACE WATER, FROM ENTERING THE EXISTING SANITARY SEWERS.

2. A WATER-TIGHT PLUG SHALL BE INSTALLED IN THE DOWNSTREAM SEWER PIPE AT THE POINT OF SEWER CONNECTION PRIOR TO COMMENCING ANY SEWER CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL REMOVAL IS AUTHORIZED BY THE MUNICIPALITY AND/OR MWRD AFTER THE SEWERS HAVE BEEN TESTED AND ACCEPTED.

3. DISCHARGING ANY UNPOLLUTED WATER INTO THE SANITARY SEWER SYSTEM FOR THE PURPOSE OF SEWER FLUSHING OF LINES FOR THE DEFLECTION TEST SHALL BE PROHIBITED WITHOUT PRIOR APPROVAL FROM THE MUNICIPALITY OR MWRD.

4. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS (LATEST EDITION).

5. ALL FLOOR DRAINS SHALL DISCHARGE TO THE SANITARY SEWER SYSTEM.

6. ALL DOWNSPOUTS AND FOOTING DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.

7. ALL SANITARY SEWER PIPE MATERIALS AND JOINTS (AND STORM SEWER PIPE MATERIALS AND JOINTS IN A COMBINED SEWER AREA) SHALL CONFORM TO THE FOLLOWING:

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
VITRIFIED CLAY PIPE	ASTM C-700	ASTM C-425
REINFORCED CONCRETE SEWER PIPE	ASTM C-76	ASTM C-443
CAST IRON SOIL PIPE	ASTM A-74	ASTM C-564
DUCTILE IRON PIPE	ANSI A21.51	ANSI A21.11
POLYVINYL CHLORIDE (PVC) PIPE		
6-INCH TO 15-INCH DIAMETER SDR 26	ASTM D-3034	ASTM D-3212
18-INCH TO 27-INCH DIAMETER F/DY=46	ASTM F-679	ASTM D-3212
HIGH DENSITY POLYETHYLENE (HDPE)	ASTM D-3350 ASTM D-3035	ASTM D-3261,F-2620 (HEAT FUSION) ASTM D-3212,F-477 (GASKETED)
WATER MAIN QUALITY PVC		
4-INCH TO 36-INCH	ASTM D-2241	ASTM D-3139
4-INCH TO 12-INCH	AWWA C900	ASTM D-3139
14-INCH TO 48-INCH	AWWA C905	ASTM D-3139

THE FOLLOWING MATERIALS ARE ALLOWED ON A QUALIFIED BASIS SUBJECT TO DISTRICT REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE. A SPECIAL CONDITION WILL BE ADDED TO THE PERMIT WHEN THE PIPE MATERIAL BELOW IS USED FOR SEWER CONSTRUCTION OR A CONNECTION IS MADE.

PIPE MATERIAL	PIPE SPECIFICATIONS	JOINT SPECIFICATIONS
POLYPROPYLENE (PP) PIPE		
12-INCH TO 24-INCH DOUBLE WALL	ASTM F-2736	D-3212, F-477
30-INCH TO 60-INCH TRIPLE WALL	ASTM F-2764	D3212, F-477

8. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ¼ " TO 1" IN SIZE, WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NOT LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. MATERIAL SHALL BE CA-7, CA-11 OR CA-13 AND SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.

9. NON-SHEAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPES OF DISSIMILAR PIPE MATERIALS.

10. ALL MANHOLES SHALL BE PROVIDED WITH BOLTED, WATERTIGHT COVERS. SANITARY LIDS SHALL BE CONSTRUCTED WITH A CONCEALED PICKHOLE AND WATERTIGHT GASKET WITH THE WORD "SANITARY" CAST INTO THE LID.

11. WHEN CONNECTING TO AN EXISTING SEWER MAIN BY MEANS OTHER THAN AN EXISTING WYE, TEE, OR AN EXISTING MANHOLE, ONE OF THE FOLLOWING METHODS SHALL BE USED:
    a) A CIRCULAR SAW-CUT OF SEWER MAIN BY PROPER TOOLS ("SHEWER-TAP" MACHINE OR SIMILAR) AND PROPER INSTALLATION OF HUBWYE SADDLE OR HUB-TEE SADDLE.
    b) REMOVE AN ENTIRE SECTION OF PIPE (BREAKING ONLY THE TOP OF ONE BELL) AND REPLACE WITH A WYE OR TEE BRANCH SECTION.
    c) WITH PIPE CUTTER, NEATLY AND ACCURATELY CUT OUT DESIRED LENGTH OF PIPE FOR INSERTION OF PROPER FITTING, USING "BAND SEAL" OR SIMILAR COUPLINGS TO HOLD IT FIRMLY IN PLACE.

12. WHENEVER A SANITARY/COMBINED SEWER CROSSES UNDER A WATERMAIN, THE MINIMUM VERTICAL DISTANCE FROM THE TOP OF THE SEWER TO THE BOTTOM OF THE WATERMAIN SHALL BE 18 INCHES. FURTHERMORE, A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN SANITARY/COMBINED SEWERS AND WATERMAINS SHALL BE MAINTAINED UNLESS: THE SEWER IS LAID IN A SEPARATE TRENCH, KEEPING A MINIMUM 18" VERTICAL SEPARATION; OR THE SEWER IS LAID IN THE SAME TRENCH WITH THE WATERMAIN LOCATED AT THE OPPOSITE SIDE ON A BENCH OF UNDISTURBED EARTH, KEEPING A MINIMUM 18" VERTICAL SEPARATION. IF EITHER THE VERTICAL OR HORIZONTAL DISTANCES DESCRIBED CANNOT BE MAINTAINED, OR THE SEWER CROSSES ABOVE THE WATER MAIN, THE SEWER SHALL BE CONSTRUCTED TO WATER MAIN STANDARDS OR IT SHALL BE ENCASED WITH A WATER MAIN QUALITY CARRIER PIPE WITH THE ENDS SEALED.

13. ALL EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED. ABANDONED TANKS SHALL BE FILLED WITH GRANULAR MATERIAL OR REMOVED.

14. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES, AND SHALL BE CAST IN PLACE OR PRE-CAST REINFORCED CONCRETE.

15. ALL SANITARY MANHOLES, (AND STORM MANHOLES IN COMBINED SEWER AREAS), SHALL HAVE PRECAST "RUBBER BOOTS" THAT CONFORM TO ASTM C-923 FOR ALL PIPE CONNECTIONS. PRECAST SECTIONS SHALL CONSIST OF MODIFIED GROOVE TONGUE AND RUBBER GASKET TYPE JOINTS.

16. ALL ABANDONED SANITARY SEWERS SHALL BE PLUGGED AT BOTH ENDS WITH AT LEAST 2 FEET LONG NON-SHRINK CONCRETE OR MORTAR PLUG.

17. EXCEPT FOR FOUNDATION/FOOTING DRAINS PROVIDED TO PROTECT BUILDINGS, OR PERFORATED PIPES ASSOCIATED WITH VOLUME CONTROL FACILITIES, DRAIN TILES/FIELD TILES/UNDERDRAINS/PERFORATED PIPES ARE NOT ALLOWED TO BE CONNECTED TO OR TRIBUTARY TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS IN COMBINED SEWER AREAS. CONSTRUCTION OF NEW FACILITIES OF THIS TYPE IS PROHIBITED; AND ALL EXISTING DRAIN TILES AND PERFORATED PIPES ENCOUNTERED WITHIN THE PROJECT AREA SHALL BE PLUGGED OR REMOVED, AND SHALL NOT BE CONNECTED TO COMBINED SEWERS, SANITARY SEWERS, OR STORM SEWERS TRIBUTARY TO COMBINED SEWERS.

18. A BACKFLOW PREVENTER IS REQUIRED FOR ALL DETENTION BASINS TRIBUTARY TO COMBINED SEWERS. REQUIRED BACKFLOW PREVENTERS SHALL BE INSPECTED AND EXERCISED ANNUALLY BY THE PROPERTY OWNER TO ENSURE PROPER OPERATION, AND ANY NECESSARY MAINTENANCES SHALL BE PERFORMED TO ENSURE FUNCTIONALITY. IN THE EVENT OF A SEWER SURCHARGE INTO AN OPEN DETENTION BASIN TRIBUTARY TO COMBINED SEWERS, THE PERMITTEE SHALL ENSURE THAT CLEAN UP AND WASH OUT OF SEWAGE TAKES PLACE WITHIN 48 HOURS OF THE STORM EVENT.

E. EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR SHALL INSTALL THE EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

2. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE FUNCTIONAL PRIOR TO HYDROLOGIC DISTURBANCE OF THE SITE.

3. ALL DESIGN CRITERIA, SPECIFICATIONS, AND INSTALLATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL.

4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

5. INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
   a) UPON COMPLETION OF INITIAL EROSION AND SEDIMENT CONTROL MEASURES, PRIOR TO ANY SOIL DISTURBANCE.
   b) ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.

6. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE CO-PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.

7. A STABILIZED MAT OF CRUSHED STONE MEETING THE STANDARDS OF THE ILLINOIS URBAN MANUAL SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

8. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL AND SHALL BE INSTALLED PRIOR TO ANY ON SITE CONSTRUCTION ACTIVITIES INVOLVING CONCRETE.

9. MORTAR WASHOUT FACILITIES SHALL BE CONSTRUCTED IN ADDITION TO CONCRETE WASHOUT FACILITIES FOR ANY BRICK AND MORTAR BUILDING ENVELOPE CONSTRUCTION ACTIVITIES.

10. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN. VOLUME CONTROL FACILITIES SHALL NOT BE USED AS TEMPORARY SEDIMENT BASINS.

11. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) DAYS.

12. ALL FLOOD PROTECTION AREAS AND VOLUME CONTROL FACILITIES SHALL, AT A MINIMUM, BE PROTECTED WITH A DOUBLE-ROW OF SILT FENCE (OR EQUIVALENT).

13. VOLUME CONTROL FACILITIES SHALL NOT BE CONSTRUCTED UNTIL ALL OF THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

14. SOIL STOCKPILES SHALL, AT A MINIMUM, BE PROTECTED WITH PERIMETER SEDIMENT CONTROLS. SOIL STOCKPILES SHALL NOT BE PLACED IN FLOOD PROTECTION AREAS OR THEIR BUFFERS.

15. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET.

16. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY APPROPRIATE SEDIMENT CONTROL MEASURES.

17. THE CONTRACTOR SHALL EITHER REMOVE OR REPLACE ANY EXISTING DRAIN TILES AND INCORPORATE THEM INTO THE DRAINAGE PLAN FOR THE DEVELOPMENT. DRAIN TILES CANNOT BE TRIBUTARY TO A SANITARY OR COMBINED SEWER. DRAIN TILES ALLOWED IN COMBINED SEWER AREA FOR GREEN INFRASTRUCTURE PRACTICES.

18. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE SITE INSPECTOR MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.

19. THE CONTRCTOR SHALL BE RESPONSIBLE FOR TRENCH DEWATERING AND EXCAVATION FOR THE INSTALLATION OF SANITARY SEWERS, STORM SEWERS, WATERMAINS AS WELL AS THEIR SERVICES AND OTHER APPURTENANCES. ANY TRENCH DEWATERING, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO A SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATERS SHALL NOT BE DISCHARGE TO WATERWAYS, FLOOD PROTECTION AREAS OR THE COMBINED SEWER SYSTEM.

20. ALL PERMANENT EROSION CONTROL PRACTICES SHALL BE INITIATED WITHIN SEVEN (7) DAYS FOLLOWING THE COMPLETION OF SOIL DISTURBING ACTIVITIES.

21. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED ON A YEAR-ROUND BASIS DURING CONSTRUCTION AND ANY PERIODS OF CONSTRUCTION SHUTDOWN UNTIL PERMANENT STABILIZATION IS ACHIEVED.

22. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER PERMANENT SITE STABILIZATION.

23. THE EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, SITE INSPECTOR, OR MWRD.

TECHNICAL GUIDANCE MANUAL

10/13/2022

MWRD GENERAL NOTES

STD. DWG. NO.18

PAGE NO. 19

STUDIO GC
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IL Design Firm: 184006777-0002

Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023

TURF FIELD

MWRD NOTES

22105

C2.01

GENERAL NOTES AND CONDITIONS

1. THE MUNICIPAL AUTHORITY GOVERNING THIS WORK IS THE VILLAGE OF ORLAND PARK.

2. ALL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE FOLLOWING SPECIFICATIONS. IF A CONFLICT ARISES BETWEEN ANY PROVISION(S) OF THE THESE STANDARDS AND SPECIFICATIONS, THEN THE MOST RESTRICTIVE PROVISION(S) SHALL APPLY.

   A. ILLINOIS DEPARTMENT OF TRANSPORTATION (I.D.O.T.) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION. (STANDARD SPECIFICATIONS)
   B. "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION.
   C. "ILLINOIS RECOMMENDED STANDARDS FOR SEWAGE WORKS" AS PUBLISHED BY THE I.E.P.A.
   D. "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (M.U.T.C.D.) LATEST EDITION.
   E. THE MUNICIPALITY'S CODES, REGULATIONS, ORDINANCES AND STANDARDS.
   F. DETAILS AND SPECIFICATIONS OF THE "ILLINOIS URBAN MANUAL" LATEST EDITION.
   G. 2018 EDITION OF THE STATE OF ILLINOIS ACCESSIBILITY CODE AND/OR THE 2010 EDITION OF THE AMERICANS WITH DISABILITIES ACT (ADA).

3. THE PROJECT SPECIFICATIONS SHALL GOVERN THE CONSTRUCTION OF THIS DEVELOPMENT WITH THE ABOVE SPECIFICATIONS. WHERE ANY CONFLICT MAY OCCUR, THE CONTRACTOR SHALL SUBMIT IN WRITING A NOTICE OF SUCH CONFLICT TO THE OWNER'S REPRESENTATIVE OR ENGINEER FOR A WRITTEN DECISION ON WHICH MAY GOVERN.

4. IN THE EVENT OF CONFLICTS, ERRORS, OR AMBIGUITIES IN THE DOCUMENTS CLIENT AND OR CONTRACTOR SHALL IMMEDIATELY, AND BEFORE ANY WORK HAS BEGUN OR COSTS INCURRED, REQUEST CLARIFICATION FROM THE ENGINEER WHOSE INTERPRETATION SHALL BE FINAL AND BINDING UPON ALL PARTIES CONCERNED. NEITHER CLIENT NOR CONTRACTOR SHALL TAKE ADVANTAGE OF CONFLICTS, ERRORS, OR AMBIGUITIES IN THE DOCUMENTS. OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. FAILING TO SECURE SUCH CLARIFICATION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE.

5. THE STANDARD SPECIFICATIONS, CONSTRUCTION PLANS AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED BUT ARE TO BE CONSIDERED A PART OF THE CONTRACT.

6. THE MUNICIPALITY SHALL HAVE THE AUTHORITY TO INSPECT, APPROVE AND REJECT THE CONSTRUCTION OF THE IMPROVEMENTS CONSTRUCTED UNDER THESE CONTRACT DOCUMENTS.

7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES INDICATED ON THE ENGINEERING PLANS. THE QUANTITIES SHOWN ARE ESTIMATED FOR BIDDING PURPOSES ONLY, ANY DISCREPANCIES SHALL BE REPORTED TO ENGINEER. THE BIDDER SHALL CAREFULLY EXAMINE ALL CONTRACT DOCUMENTS, VISIT THE PROJECT SITE AND FULLY INFORM THEMSELVES AS TO ALL CONDITIONS AND MATTERS WHICH CAN AFFECT THEIR WORK AND THE COST THEREOF. ANY DISCREPANCIES, OMISSIONS OR DOUBTS IN INTENT OF THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY AND OBTAIN CLARIFICATION PRIOR TO SUBMITTING OF ANY BID.

8. THE IMPROVEMENTS SHOWN ON THE ENGINEERING PLANS SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL AND EQUIPMENT, ETC., AS NECESSARY TO PERFORM THE WORK INDICATED.

9. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION".

10. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS AND MUNICIPALITY REGULATIONS AND STANDARDS AND SHALL CONFORM IN ALL RESPECTS TO ALL STATE AND FEDERAL LAWS.

11. UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE CONTRACTOR MUST CALL 811 OR J.U.L.I.E AT 800.892-0123 AT LEAST 48 HOURS BEFORE THE START OF ANY CONSTRUCTION WORK. THE CONTRACTOR SHALL ON HIS INITIATIVE AND AT NO EXTRA COSTS HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF SUCH PIPE, OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UNDERGROUND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL NON-SUBSCRIBING UTILITIES. THE CONTRACTOR(S) SHALL CONTACT LOCAL UTILITY LOCATION SERVICE FOR ASSISTANCE IN LOCATING EXISTING UTILITIES. IF ANY EXISTING UTILITIES ARE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION, THEY SHALL BE REPAIRED PROPERLY BY THE CONTRACTOR. IF THEY ARE UTILITIES TO BE ABANDONED, THEY SHALL BE CAPPED, SEALED AND ABANDONED PROPERLY PER THEIR RESPECTIVE OWNER'S CRITERIA.

12. THE MUNICIPALITY SHALL BE NOTIFIED 72 HOURS IN ADVANCE PRIOR TO COMMENCEMENT OF ANY APPROVED CONSTRUCTION ACTIVITY AND TO SCHEDULE ALL REQUIRED INSPECTIONS.

13. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORD.

14. EXCAVATIONS SHOULD COMPLY WITH THE REQUIREMENTS OF OSHA 29CFR, PART 1926, SUBPART P, "EXCAVATIONS" AND ITS APPENDICES, AS WELL AS OTHER APPLICABLE CODES. THIS DOCUMENT STATES THAT THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF STABLE, TEMPORARY EXCAVATIONS. THE EXCAVATIONS SHOULD NOT ONLY BE IN ACCORDANCE WITH CURRENT OSHA EXCAVATION AND TRENCH SAFETY STANDARDS BUT ALSO WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS. THE CONTRACTOR SHOULD SHORE, SLOPE OR BENCH THE EXCAVATION SIDES WHEN APPROPRIATE. SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL ALSO BE RESPONSIBLE FOR THE MEANS, METHODS AND SEQUENCING OF CONSTRUCTION OPERATIONS.

15. REMOVED PAVEMENT, SIDEWALK, CURB AND GUTTER, EXCESS MATERIALS, DEBRIS, ETC. SHALL BE LEGALLY DISPOSED OF AT OFF-SITE LOCATIONS PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE.

16. CONSTRUCTION SITE SAFETY IS SOLE RESPONSIBILITY OF THE CONTRACTOR WHO CONTROLS THE MEANS, METHODS, AND SEQUENCING OF CONSTRUCTION OPERATIONS. UNDER NO CIRCUMSTANCES SHALL THE INFORMATION PROVIDED HEREIN BE INTERPRETED TO MEAN RTM IS ASSUMING RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY, OR THE CONTRACTOR'S ACTIVITIES; SUCH RESPONSIBILITY SHALL NEITHER BE IMPLIED NOR INFERRED.

17. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE SIGNS, BARRICADES, FENCING, TRAFFIC CONTROL DEVICES AND MEASURES, AND ALL OTHER MEASURES THAT ARE NECESSARY TO PROTECT THE SAFETY OF THE SITE AT ALL TIMES. BARRICADES AND WARNING SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 700 OF THE STANDARD SPECIFICATIONS.

18. SITE ACCESS CONTROL INCLUDING SAFETY FENCES, AND ALL CONSTRUCTION MEANS AND METHODS AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

19. ALL EXISTING TRAFFIC SIGNS, STREET SIGNS, ETC., WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND NOT NOTED FOR REMOVAL OR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT LOCATIONS AS DESIGNATED BY THE ENGINEER. THIS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED. DAMAGE TO THESE ITEMS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE CITY OR COUNTY AS APPROPRIATE.

20. ALL PERMANENT TYPE PAVEMENTS OR PERMANENT IMPROVEMENTS WHICH ABUT THE PROPOSED IMPROVEMENT AND MUST BE REMOVED, SHALL BE FULL DEPTH SAW-CUT PRIOR TO REMOVAL. ALL ITEMS SO REMOVED SHALL BE REPLACED WITH SIMILAR CONSTRUCTION MATERIALS TO THEIR ORIGINAL CONDITION OR BETTER. PAYMENT FOR SAWING SHALL BE INCLUDED IN THE COST FOR REMOVAL OF EACH ITEM AND REPLACEMENT WILL BE PAID UNDER THE RESPECTIVE ITEMS IN THE CONTRACT, UNLESS OTHERWISE INDICATED.

21. WHERE OVERHANGING BRANCHES INTERFERE WITH OPERATIONS OF CONSTRUCTION, SAID BRANCHES SHALL BE TRIMMED AND SEALED IN ACCORDANCE WITH ARTICLE 253.09 OF THE STANDARD SPECIFICATIONS, AND THE COST OF SAME SHALL BE INCIDENTAL TO THE CONTRACT. IF TREES OR SHRUBS MUST BE REMOVED, THEY WILL BE PAID FOR IN ACCORDANCE WITH THE SPECIFICATIONS.

22. WHENEVER THE PERFORMANCE OF WORK IS INDICATED ON THE PLANS, AND NO ITEM IS INCLUDED IN THE CONTRACT FOR PAYMENT, THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

23. CONTRACTOR SHALL RETAIN THE SERVICES OF AN ILLINOIS PROFESSIONAL ENGINEER OR A PROFESSIONAL ILLINOIS LAND SURVEYOR TO PREPARE RECORD DRAWINGS SHOWING THE ELEVATION OF ALL RIMS AND INVERTS OF ALL PIPES AND STRUCTURES, PIPES, LOCATION OF ALL VALVES, STRUCTURES, FIRE HYDRANTS, UNDERGROUND PIPES, AND RECORD THE INFORMATION ON THE RECORD DRAWINGS AT THE JOB SITE AS THE WORK PROGRESSES. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL FURNISH A COMPLETE SET OF REPRODUCIBLE RECORD DRAWINGS SIGNED AND SEALED BY AN ILLINOIS PROFESSIONAL ENGINEER OR A PROFESSIONAL LAND SURVEYOR.

24. CONTRACTOR SHALL RETAIN THE SERVICES OF AN ILLINOIS PROFESSIONAL SURVEYOR TO STAKE OUT THE GRADE AND HORIZONTAL LAYOUT OF THE NEW WORK. THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE INCIDENTAL TO THE CONTRACT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROTECT AND PRESERVE ANY ESTABLISHED REFERENCE POINTS AND STAKES AND SHALL MAKE NO CHANGES OR RELOCATIONS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER. CONTRACTOR SHALL REPORT TO ENGINEER WHENEVER ANY REFERENCE POINT IS LOST OR DESTROYED OR REQUIRES RELOCATION BECAUSE OF NECESSARY CHANGES IN GRADES OR LOCATIONS, AND SHALL BE RESPONSIBLE FOR THE ACCURATE REPLACEMENT OR RELOCATION OF SUCH REFERENCE POINTS BY PROFESSIONALLY QUALIFIED PERSONNEL AT HIS OR HER OWN EXPENSE.

25. SPECIAL ATTENTION IS DRAWN TO THE FACT THAT ARTICLE 105.06 OF THE STANDARD SPECIFICATION'S REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT, AND SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVE CONTROL OF ALL WORK AS THE AGENT OF THE GENERAL CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.

26. ALL EXISTING FIELD DRAINAGE TILES ENCOUNTERED OR DAMAGED DURING CONSTRUCTION ARE TO BE RESTORED TO THEIR ORIGINAL CONDITION, PROPERLY REROUTED AND/OR CONNECTED TO THE STORM SEWER SYSTEM. CONNECTIONS SHALL BE MADE AT STRUCTURES; PREFERABLY CATCH BASINS ONLY. NO BLIND TAPS ARE ALLOWED. AS-BUILT DRAWINGS SHALL BE PROVIDED TO THE ENGINEER.

27. THE CONTRACTOR, BY AGREEING TO PERFORM THE WORK, AGREES TO INDEMNIFY AND HOLD HARMLESS THE OWNER, THE ENGINEER, THE CITY, AND ALL AGENTS AND ASSIGNS OF THOSE PARTIES, FROM ALL SUITS AND CLAIMS ARISING OUT OF THE PERFORMANCE OF SAID WORK, AND FURTHER AGREES TO DEFEND OR OTHERWISE PAY ALL LEGAL FEES ARISING OUT OF THE DEFENSE OF SAID PARTIES.

28. ALL ROADS, SWALES, DRAINAGE STRUCTURES, MANHOLES AND PIPES MUST BE KEPT CLEAN AND FREE OF DIRT, SILT AND DEBRIS AT ALL TIMES.

29. IF ANY EXISTING UNDERGROUND UTILITIES ARE ENCOUNTERED OR DAMAGED DURING CONSTRUCTION, THEY SHALL BE REPAIRED PROPERLY BY THE CONTRACTOR. IF THEY ARE UTILITIES TO BE ABANDONED, THEY SHALL BE CAPPED, SEALED AND ABANDONED PROPERLY PER THEIR RESPECTIVE OWNER'S CRITERIA.

30. CONTRACTOR SHALL PURCHASE AND MAINTAIN FOR THE DURATION OF THE WORK INSURANCE TO PROTECT ENGINEER, OWNER, ALL OF THEIR AGENTS, EMPLOYEES, SUCCESSORS, AND ASSIGNS FROM ANY AND ALL CLAIMS ARISING OUT OF THE CONSTRUCTION OF THE WORK INCLUDING NAMING THEM AS ADDITIONAL INSURED ON THE CONTRACTORS GENERAL LIABILITY POLICY, WHICH SHALL STATE THAT IT IS PRIMARY IN COVERAGE TO ANY INSURANCE CARRIED BY AGENTS, EMPLOYEES, SUCCESSORS, OR ASSIGNS.

31. ALL WORK PERFORMED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF FINAL ACCEPTANCE, OR AS SPECIFIED IN THE PROJECT MANUAL. THIS GUARANTEE SHALL INCLUDE ALL DEFECTS IN MATERIALS AND WORKMANSHIP.

32. ANY QUANTITIES CONTAINED IN THESE DOCUMENTS ARE APPROXIMATE AND ESTIMATED, AND ARE PRESENTED AS A GUIDE TO THE CONTRACTOR IN DETERMINING ALL QUANTITIES AND TO BECOME FAMILIAR WITH THE SITE CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRAISE HIMSELF OF ALL SITE CONDITIONS. THE PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS SUM FOR THE COMPLETE PROJECT, NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED, UNLESS ORDERED IN WRITING BY THE OWNER.

EARTHWORK AND GRADING

1. THE GEOTECHNICAL REPORT FOR THE PROJECT WAS PREPARED SHALL BE FOLLOWED. THE GEOTECHNICAL INVESTIGATION REPORT WILL BE PROVIDED.

2. SOIL EROSION CONTROL SPECIFICATIONS SHALL BE CONSIDERED AS PART OF THIS SECTION. ALL SOIL EROSION CONTROLS SHALL BE IN PLACE BEFORE THE START OF ANY SITE WORK, PER THE APPROVED EROSION CONTROL PLANS AND SWPPP.

3. SOIL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "PROCEDURES AND STANDARDS FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL IN ILLINOIS" SHALL BE FOLLOWED AT THE DISCRETION OF THE MUNICIPALITY.

4. ALL PROPOSED PAVEMENT AREAS SHALL BE STRIPPED OF ALL TOPSOIL AND UNSUITABLE MATERIAL AND EXCAVATED OR FILLED TO DESIGN SUBGRADE.

5. STOCKPILING OF SOIL SHALL BE AT LOCATIONS APPROVED BY THE OWNER.

6. PROPOSED PAVEMENT AREAS AND WHEN APPLICABLE, BUILDING PADS, DRIVEWAYS AND SIDEWALKS SHALL BE EXCAVATED OR FILLED TO PLUS OR MINUS 0.1 FOOT OF DESIGN SUBGRADE ELEVATIONS BY THE CONTRACTOR. PRIOR TO PLACEMENT OF ANY PAVEMENTS, CURBS, WALK, ETC., THE SUBGRADE SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK, MINIMUM OF 20 TONS. PROOF-ROLLING SHALL BE WITNESSED THE GEOTECHNICAL ENGINEER, PROVIDED BY THE OWNER, AND THE MUNICIPAL REPRESENTATIVE. THE DENSITY OF IN-PLACE BASE, SUBGRADE AND ASPHALT PAVEMENT MATERIALS SHALL BE TESTED BY THE GEOTECHNICAL ENGINEER. ALL TEST RESULTS SHALL BE SUBMITTED TO THE OWNER & ENGINEER.

7. THE SUBGRADE SHALL BE FREE OF UNSUITABLE MATERIAL AND SHALL BE COMPACTED TO A MINIMUM OF NINETY-FIVE (95) PERCENT OF MODIFIED PROCTOR DENSITY, PER ASTM D-1557. CONTRACTOR TO COORDINATE TESTING FOR COMPACTION WITH THE GEOTECHNICAL ENGINEER, PROVIDED BY THE OWNER. ALL TEST RESULTS SHALL BE SUBMITTED TO THE OWNER & ENGINEER.

8. DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. SITE DRAINAGE MAY BE ACHIEVED BY DITCHING, PUMPING OR ANY OTHER METHOD ACCEPTABLE TO THE ENGINEER. THE CONTRACTOR'S FAILURE TO PROVIDE THE ABOVE WILL PRECLUDE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF.

9. UPON COMPLETION OF THE SURFACE IMPROVEMENTS, THE CONTRACTOR SHALL RE-SPREAD A MINIMUM OF A 6" LAYER OF TOPSOIL ON ALL DISTURBED PARKWAY AND LANDSCAPED/LAWN AREAS AND RESTORE WITH SOD.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL SPOILS MATERIAL AS NECESSARY, PREPARING THE PAVEMENT SUBGRADE, PLACING REQUIRED DEPTH OF TOPSOIL TO FINISH GRADE, GRADING OF DRAINAGE SWALES, AND ALL OTHER TASKS AS DIRECTED BY THE OWNER OR ENGINEER.

PAVING

1. THE PROPOSED ASPHALT PAVEMENT SHALL CONSIST OF THE SUBGRADE COURSE (AS SPECIFIED) BASE COURSE, BITUMINOUS CONCRETE BINDER COURSE, AND BITUMINOUS CONCRETE SURFACE COURSE, OF THE THICKNESS AND MATERIALS AS SPECIFIED ON THE CONSTRUCTION PLANS. PRIME COAT MATERIAL SHALL BE BITUMINOUS M.C. – 30. UNLESS SHOWN AS A BID ITEM, PRIME COAT SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT. ALL PAVEMENT MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE I.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," AND SUPPLEMENTAL SPECIFICATIONS, LATEST EDITIONS.

2. ALL DAMAGED AREAS IN THE BINDER, BASE OR CURB AND GUTTER SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AND MUNICIPALITY PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND MANPOWER NECESSARY INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE ENGINEER TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. EQUIPMENT AND MANPOWER FOR CLEANING SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT. PRIME COAT FOR THE BINDER COURSE SHALL ALSO BE CONSIDERED AS INCIDENTAL TO THE COST OF THE CONTRACT AND SHALL BE APPLIED TO THE BINDER AT A RATE OF 0.3 GALLONS PER SQUARE YARD.

3. CONCRETE CURBS (& GUTTERS):

A. ALL CURB AND GUTTER SHALL BE CONSTRUCTED WITH IDOT CLASS "SI" CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 14 DAYS. ALL CONCRETE SHALL HAVE A MINIMUM FLEXURAL STRENGTH OF 650 PSI. ALL CONCRETE SHALL BE BROOM FINISHED.

B. CONTRACTION JOINTS SHALL BE SAW-CUT AT 20 FOOT INTERVALS AND CAULKED WITH JOINT SEALANT.

C. PREFORMED FIBER BOARD EXPANSION JOINTS, 3/4 INCH THICK, SHALL BE PLACED FIVE FEET EITHER SIDE OF STORM STRUCTURES IN CURB AND GUTTER, AT CURB RETURNS AND AT POINTS OF CURVATURE, AT ALL CONNECTIONS BETWEEN NEW AND EXISTING CURB AND GUTTER, AND AT 40 FOOT INTERVALS ON TANGENTS.

D. 2-#5 DOWELS, 2 FEET LONG, SHALL BE PROVIDED AT ALL EXPANSION JOINTS AND AT CONNECTIONS BETWEEN EXISTING AND NEW CURB AND GUTTER. DOWELS SHALL BE CENTERED ON THE JOINT, (DRILLED INTO EXISTING CURB AND GUTTER), AND SHALL BE INSTALLED WITH GREASE CAPS ON ONE SIDE.

E. THE PROPOSED CURB AND GUTTER AND PAVEMENT SHALL BE OF THE TYPE AND THICKNESS AS SPECIFIED IN THESE DRAWINGS, AND CONSTRUCTED IN CONFORMANCE WITH THE IDOT STANDARD SPECIFICATIONS PREVIOUSLY REFERENCED AND THE REQUIREMENTS OF THE GOVERNING MUNICIPALITY.

F. DEPRESSED CURB SHALL BE PROVIDED FOR HANDICAPPED RAMPS LOCATIONS.

G. ALL JOINTS SHALL BE SEALED WITH CONCRETE JOINT SEALANT PER NOTE 6 BELOW.

4. CONCRETE SIDEWALK (INCLUDING CURB RAMPS):

A. ALL SIDEWALK SHALL BE CONSTRUCTED WITH IDOT CLASS "SI" CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 14 DAYS. ALL CONCRETE SHALL HAVE A MINIMUM FLEXURAL STRENGTH OF 650 PSI. ALL CONCRETE SHALL BE LIGHTLY BROOM FINISHED.

B. TOOLED CONTRACTION JOINTS SHALL CONSTRUCTED AT EVERY ±5', OR AS SHOWN ON PLANS. TOOLED CONTRACTION JOINTS SHALL EXTEND TO 1/4 THE DEPTH OF THE SIDEWALK AND SHALL BE 1/4 INCH IN WIDTH.

C. PREFORMED FIBER BOARD EXPANSION JOINTS, 3/4" THICK, SHALL BE PLACED EVERY 100' AND AT ALL ABUTTING DRIVEWAYS AND CURB AND GUTTER. FOR SIDEWALK ADJACENT TO CURB, EXPANSION JOINT SPACING SHALL MATCH CURB EXPANSION JOINTS AS PRACTICAL. FIBER BOARDS SHALL BE PLACED 1/2 INCH BELOW THE FINISHED SURFACE OF THE SIDEWALK AND CAULKED WITH JOINT SEALANT, MATCHING THE COLOR OF THE SIDEWALK.

D. PREFORMED EXPANSION JOINTS, 1/2" THICK, SHALL BE PLACED BETWEEN BUILDINGS, LIGHT POLES, TRAFFIC SIGNALS, AND OTHER RIGID STRUCTURES AND CAULKED WITH JOINT SEALANT, MATCHING THE COLOR OF THE SIDEWALK.

E. ALL SIDEWALKS CROSSING UTILITY TRENCHES SHALL HAVE TWO #4 REINFORCING BARS, 10 FOOT LONG, CENTERED OVER TRENCH.

F. DETECTIBLE WARNINGS SHALL CONSIST OF TRUNCATED DOMES MEETING THE REQUIREMENTS OF ADAAG AND INSTALLED AT LOCATIONS SHOWN ON PLAN AND WERE PEDESTRIANS ARE REQUIRED TO CROSS A HAZARDOUS VEHICULAR WAY. DETECTIBLE WARNINGS SHALL BE AN APPROVED COLOR CONTRASTING TO THE CURB RAMP MATERIAL AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

4. CONCRETE PAVEMENT AND DRIVE APRONS:

A. CONCRETE PAVEMENT SHALL BE CONSTRUCTED WITH IDOT CLASS "PV" CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 14 DAYS. IF A HIGH EARLY CONCRETE MIX IS REQUIRED TO REDUCE TRAFFIC CLOSURES, IDOT CLASS "PP" WITH PRIOR APPROVAL OF THE ENGINEER. ALL CONCRETE SHALL HAVE A MINIMUM FLEXURAL STRENGTH OF 650 PSI. ALL CONCRETE SHALL BE BROOM FINISHED.

B. ADEQUATE CONSTRUCTION JOINTS, CONTRACTION JOINTS FOR ISOLATION JOINTS SHOULD BE PROVIDED IN THE AREAS OF RIGID PAVEMENT TO REDUCE THE IMPACTS OF CRACKING AND SHRINKAGE. PLEASE REFER TO ACI 330R-01 GUIDE FOR DESIGN OF CONCRETE PARKING LOTS.

C. CONCRETE PAVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ARTICLE 420 OF THE I.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," AND SUPPLEMENTAL SPECIFICATIONS, LATEST EDITIONS.

D. ALL JOINTS, WITH THE EXCEPTION OF SAWED JOINTS, SHALL BE SEALED WITH CONCRETE JOINT SEALANT PER NOTE 6 BELOW.

5. CURING AND PROTECTION OF ALL CONCRETE SHALL BE IN CONFORMANCE WITH SECTION 1020.13 OF THE IDOT STANDARD SPECIFICATIONS, PREVIOUSLY REFERENCED.

6. CONCRETE JOINT SEALANT SHALL BE POURTHANE SL, SIKAFLEX 1C SL OR APPROVED EQUAL, MATCHING THE COLOR OF THE CONCRETE.

7. THE PAVING CONTRACTOR IS RESPONSIBLE FOR THE FINAL SUBGRADE PREPARATION, THE PAVEMENT BASE, BINDER, AND SURFACE, AND ALL FINAL CLEAN-UP AND RELATED WORK ASSOCIATED WITH THE PAVING OPERATIONS.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL CORING, TESTING, AND PAVEMENT EVALUATION AS REQUIRED BY THE MUNICIPALITY FOR ACCEPTANCE AT HIS OWN EXPENSE. THE CONTRACTOR SHALL INCLUDE THIS AS A SEPARATE BID ITEM OR ELSE IT WILL BE ASSUMED THAT THIS COST HAS BEEN FIGURED INTO THE UNIT PRICES FOR THE PAVING ITEMS. ALL TESTING RESULTS SHALL BE MADE AVAILABLE TO THE MUNICIPALITY FOR REVIEW.

9. IDOT APPROVED, RECYCLED CONCRETE CA-6, MAY BE SUBSTITUTED FOR CA-6 CRUSHED STONE AGGREGATE FOR PAVEMENT AND SIDEWALK SUBBASE MATERIALS.

STANDARD UTILITY PROVISIONS

1. ALL UTILITY CONSTRUCTION WORK SHALL GOVERNED BY:

- "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION. (STANDARD SPECIFICATIONS)
- TITLE 35 ILLINOIS EPA REQUIREMENTS
- PART 890 ILLINOIS PLUMBING CODE REQUIREMENTS
- SANITARY DISTRICT REQUIREMENTS
- MUNICIPAL/LOCAL REQUIREMENTS
- ROADWAY AUTHORITIES REQUIREMENTS

2. ALL UTILITY TRENCHES UNDER AND WITHIN TWO FEET OF PAVEMENT, SIDEWALK, CURB AND GUTTER, ETC. SHALL BE BACKFILLED WITH CA-6 CRUSHED STONE (GRADE 8 OR 9), COMPACTED IN 8" LIFTS TO 95% OF MODIFIED PROCTOR, PER ASTM D-1557.

3. UTILITY CONNECTIONS WITHIN THE STREET RIGHT OF WAY SHALL BE ACCOMPLISHED BY SAW CUTTING AND REMOVING EXISTING PAVEMENT. BACKFILL AND RESTORATION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STREET JURISDICTIONAL AUTHORITY.

4. THE UNDERGROUND CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, SHALL REMOVE AND DISPOSE OF OFFSITE ANY EXCESS DIRT OR MATERIALS.

5. "BAND/SEAL" OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED IN THE CONNECTION OF SEWER PIPE OR DISSIMILAR MATERIALS.

6. A MINIMUM HORIZONTAL DISTANCE OF 10 FEET SHALL BE MAINTAINED BETWEEN WATER MAIN AND ANY SEWERS WHEN THEY ARE PARALLEL. WHENEVER A SEWER CROSSES A WATER MAIN, A MINIMUM VERTICAL DISTANCE OF 18 INCHES MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE PIPES, AND THE SEWER JOINTS ARRANGED SO THEY ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. WHEN IT IS NECESSARY FOR A SEWER TO CROSS OVER THE TOP OF A WATER MAIN WITH 18" SEPARATION, OR THE SEWER CROSSES UNDER THE WATERMAIN WITH LESS THAN 18" VERTICAL SEPARATION, OR 10' HORIZONTAL SEPARATION IS NOT MAINTAINED, THEN THE FOLLOWING METHOD MUST ALSO BE CONSTRUCTED:

A. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER MAIN PIPE FOR THE LENGTH OF THE INADEQUATE HORIZONTAL SEPARATION OR FOR A DISTANCE OF TEN (10) FEET EITHER SIDE OF A CROSSING AND SHALL BE PRESSURE-TESTED TO INSURE WATER TIGHTNESS PRIOR TO BACKFILLING.

B. FOR A STORM SEWER CROSSING, THE RCP STORM SEWER(ASTM C-361) SHALL BE CONSTRUCTED WITH O-RING GASKETED JOINTS (C-443) FOR A DISTANCE OF TEN (10') FEET EITHER SIDE OF A CROSSING.

7. ALL CAST AND DUCTILE IRON PIPE AND FITTINGS SHALL BE ENCASED IN A 8-MIL POLYETHYLENE TUBING. THE TUBING SHALL COMPLY WITH THE AMERICAN NATIONAL STANDARD FOR POLYETHYLENE ENCASEMENT FOR GRAY AND DUCTILE IRON PIPING ANSI/AWWA C105/72/A21.5 OR AS REVISED. INSTALLATION PROCEDURES SHALL BE THOSE AS RECOMMENDED BY THE CAST IRON PIPE RESEARCH ASSOCIATION.

8. ALL MANHOLES, CATCH BASINS, INLETS AND VALVE VAULTS SHALL BE CONSTRUCTED OF REINFORCED PRECAST CONCRETE RING CONSTRUCTION WITH TONGUE AND GROOVE JOINTS IN CONFORMANCE WITH THE LATEST REVISION OF ASTM C-478. ALL STRUCTURE SECTIONS AND ADJUSTING RINGS SHALL BE SECURELY SEALED TO EACH OTHER AND TO CASTING USING RESILIENT FLEXIBLE NON-HARDENING PREFORMED BITUMINOUS MASTIC (REM-NEK OR APPROVED EQUAL) OR BUTYL RUBBER JOINT SEALER (EASY STICK OR APPROVED EQUAL). CONTRACTOR SHALL REMOVE EXCESS MASTIC INSIDE STRUCTURE AND BUTTER JOINTS WITH MORTAR. ALL STORM AND SANITARY STRUCTURES SHALL HAVE OFFSET CONES, EXCEPT WHERE HEIGHT RESTRICTIONS REQUIRE A REINFORCED CONCRETE FLAT TOP. VALVE VAULTS SHALL HAVE CONCENTRIC CONES. A MAXIMUM OF 2 PRECAST CONCRETE ADJUSTMENT RINGS LIMITED TO 8 INCHES TOTAL HEIGHT SHALL BE PERMITTED. MOLDED PLASTIC, REINFORCED, MANHOLE STEPS SHALL BE PROVIDED. CONTRACTOR SHALL ADJUST STRUCTURES TO FINISHED GRADE AS NEEDED.

10. SEE DETAIL SHEETS THIS SET FOR FURTHER INFORMATION REGARDING THE STORM, SANITARY AND WATERMAIN REQUIREMENTS, INCLUDING BUT NOT LIMITED TO BEDDING AND BACKFILL MATERIALS.

STANDARD STORM SEWER PROVISIONS

1. STORM SEWER SHALL BE CONSTRUCTED OF ONE OR MORE OF THE FOLLOWING MATERIALS AS SPECIFIED ON THE PLANS:

A. REINFORCED CONCRETE PIPE PER ASTM C-76, IDOT CLASS IV, IN ACCORDANCE WITH ASTM C-361, WITH FLEXIBLE O-RING GASKETED JOINTS, IN ACCORDANCE WITH ASTM C-443 (WATERMAIN QUALITY PIPE AND JOINTS).

B. POLYVINYLCHLORIDE PLASTIC GRAVITY SEWER PIPE (PVC) SDR-26, PER ASTM D-3034 WITH GASKETED JOINTS PER ASTM D-3212.

B. PERFORATED POLYVINYLCHLORIDE PLASTIC GRAVITY SEWER PIPE (PVC) SDR-35, PER ASTM D-3034 WITH GASKETED JOINTS PER ASTM D-3212. INSTALL WITH PERFORATIONS FACING DOWN.

C. DUCTILE IRON PIPE CLASS 52 (ANSI A21.51 WITH ANSI A21.11 JOINTS)

D. ADS HP-STORM HDPE HIGH PERFORMANCE PIPE, PER ASTM F-2881, WITH JOINTS PER ASTM D-3212, INSTALLED AND BACKFILLED PER MANUFACTURERS RECOMMENDATIONS. A MINIMUM OF <u>100%</u> OF THE INSTALLED PIPE SHALL BE DEFLECTION TESTED PER THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

D. PERFORATED ADS N-12 DUAL WALL PIPE, PER ASHTO M252, TYPE P OR S, WITH JOINTS PER AASHTO M252, INSTALLED AND BACKFILLED PER MANUFACTURERS RECOMMENDATIONS.

2. STORM MANHOLES SHALL HAVE IN ADDITION TO THE GENERAL MANHOLE REQUIREMENTS:

   A. ALL STORM STRUCTURE CASTINGS SHALL HAVE "DRAINS TO RIVER" AND "DUMP NO WASTE" CAST IN LID.

   B. ALL STORM STRUCTURES SHALL HAVE OPEN GRATES.

   C. STORM CATCH BASINS, INLETS AND MANHOLES, IN CURB LINES, SHALL HAVE E.J.I.W. 7210 CASTINGS WITH TYPE M1 GRATES, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.

   D. STORM CATCH BASINS, INLETS IN OPEN PAVED AREAS, AND ALL MANHOLES, SHALL HAVE NEENAH R-2504-D CASTINGS, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.

   E. STORM CATCH BASINS AND INLETS IN LANDSCAPED AREAS, SHALL HAVE NEENAH R-4340-B CASTINGS, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED.

3. ALL ROOF DRAINS, FOOTING DRAINS, AND OUTSIDE DRAINS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.

4. ALL STORM SEWERS SHALL BE INSPECTED AND TESTED IN KEEPING WITH ALL GOVERNING AGENCY REQUIREMENTS

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Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023
2	VILLAGE REVISION	05/02/23

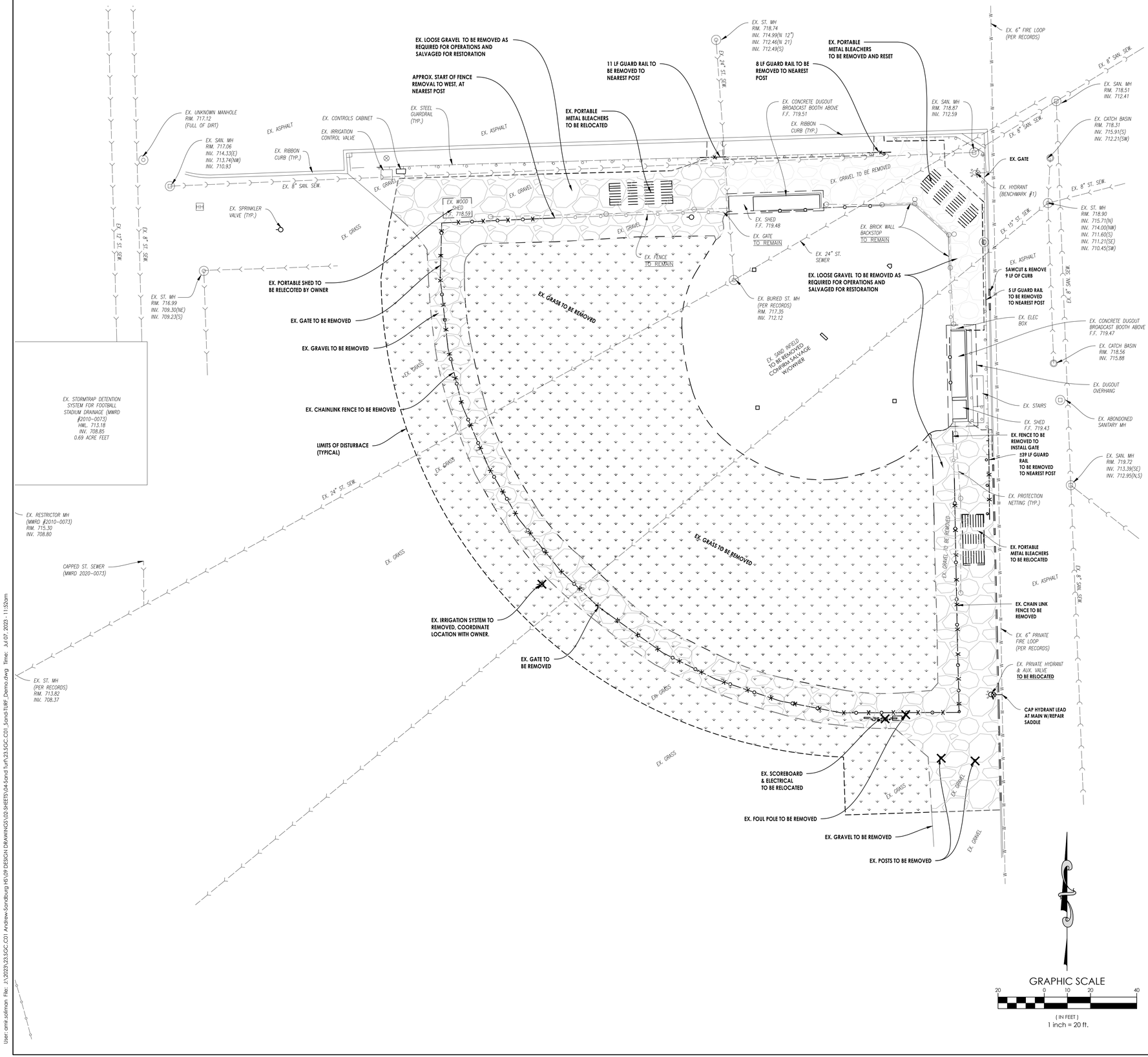
TURF FIELD

SPECIFICATIONS

22105

C2.02

RTM PROJ. 23.SGC.C01



NOTES:

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES ARE SHOWN FROM RECORDS PROVIDED TO RTM. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PERFORM A PRIVATE UILITY LOCATE FOR THE CONSTUCTDITION AREAS. EXCAVATION IN THE VICINITY OF EXISTING STRUCTURES AND UNDERGROUND UTILITIES SHALL BE PERFORMED BY HAND.
2. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING FACILITIES. MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. SITE ACCESS CONTROL INCLUDING SAFETY FENCES AND TRAFFIC CONTROL, ALL CONSTRUCTION MEANS AND METHODS, AND SITE SAFETY ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE OWNER AND DESIGN PROFESSIONAL HARMLESS OF ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.
5. ALL SITE CLEARING, TOPSOIL STRIPPING, EXCAVATION, EMBANKMENT, GRADING, COMPACTION, SUB GRADE PREPARATION AND OTHER WORK HEREIN CONTEMPLATED SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE PROJECT GEOTECHNICAL REPORT AND THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ILLINOIS DEPARTMENT OF TRANSPORTATION, JANUARY 2022 EDITION, (HEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS) EXCEPT THAT PAYMENT WILL BE DEFINED AS DETAILED IN THE STANDARD SPECIFICATIONS FOR WATER AND SEWER 8TH EDITION, 2020.
6. THE CONTRACTOR IS TO UNCOVER ALL LINES BEING TIED INTO AND VERIFY SIZE AND ELEVATION BEFORE ANY CONSTRUCTION.
7. AT LOCATIONS OF UTILITY REMOVAL, ANY OPEN TRENCHES REQUIRED, SHALL BE BACKFILLED WITH COMPACTED TRENCH BACKFILL.
15. NOTIFY UTILITY OWNER 72 HOURS IN ADVANCE OF ANY UTILITY SHUTDOWN.
16. EXISTING LATERAL CONNECTIONS FOR UTILITIES SHALL BE COORDINATED WITH THE CORRESPONDING UTILITY COMPANY FOR CAPPING AND CUT OFF WITHIN THE SCOPE OF WORK.
17. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER ALL ITEMS DESIGNATED TO BE REMOVED OR RELOCATED.
18. IF ANY ITEMS ARE ENCOUNTERED IN THE FIELD THAT ARE NOT SHOWN ON THE PLAN WHICH REQUIRE DEMOLITION OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE A/E IMMEDIATELY.
19. THE SURVEY BASE PROVIDED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. THE OWNER, ARCHITECT & ENGINEER(S) ARE NOT RESPONSIBLE FOR ANY MISCHARTED OR UNCHARTED UTILITIES, OR OTHER DESCREPENCIES DETECTED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SITE CONDITIONS.
20. THE CONTRACTOR WILL PROTECT ALL UTILITIES, STREETS, STRUCTURES, VEGETATION, AND ADJACENT PROPERTY DESIGNATED TO REMAIN. ANY DAMAGE BY THE CONTRACTOR TO UTILITIES, STREETS, STRUCTURES, VEGETATION AND ADJACENT PROPERTY WILL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE.
21. THE CONTRACTOR WILL PAY ALL REQUISITE FEES TO THE MUNICIPALITY, AND ANY OTHER AGENCY REQUIRED, FOR COMPLETION OF DEMOLITION WORK.
22. CONTRACTOR TO ADJUST RIMS OF EXISTING STRUCTURES WITHIN SCOPE OF WORK TO FINAL GRADE ELEVATIONS.
23. THE CONTRACTOR IS TO COMPLY WITH FEDERAL, STATE, AND LOCAL ORDINANCES WITH REGARD TO REMOVAL AND DISPOSAL OF MATERIALS FOR ALL ITEMS TO BE DEMOLISHED. WORK INCLUDES THE COMPLETE REMOVAL AND LEGAL DISPOSAL OF ALL OBJECTS AND MATERIALS (REGARDLESS OF THEIR NATURE) INCLUDING BUT NOT LIMITED TO TREE ROOTS, ORGANIC SOIL, DRUMS, TIRES, WOOD, BROKEN CONCRETE PIECES, AND FENCES ABOVE THE REQUIRED ELEVATION.
24. BURNING ON OWNERS PROPERTY IS NOT PERMITTED.
25. FULL DEPTH SAWCUTS ARE REQUIRED FOR PAVEMENT REMOVALS, ADJACENT TO EXISTING PAVEMENT TO REMAIN.
26. SAWCUT ALL TREE ROOTS ENCOUNTERED IN LIEU OF USING SHOVELS (HAND SHOVELS OR MECHANICAL). SEE LANDSCAPE PLANS FOR TREE PROTECTION REQUIREMENTS.
27. POLES, BUILDING, FENCE, STORAGE, ETC. FOUNDATIONS SHALL BE COMPLETELY REMOVED BELOW GRADE (TYPICAL). BACKFILL WITH COMPACTED CA-6 IN PAVED AREAS AND BACKFILL WITH COMPACTED SOIL IN LANDSCAPE AREAS.

LEGEND:

- SAWCUT LINE
- LINEAR ITEM REMOVAL
- ITEM REMOVAL
- LINEAR CURB REMOVAL
- EXISTING BUILDING REMOVAL
- CONCRETE PAVEMENT/SIDEWALK REMOVAL
- GRAVEL REMOVAL
- LAWN/LANDSCAPE AREA REMOVAL

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Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

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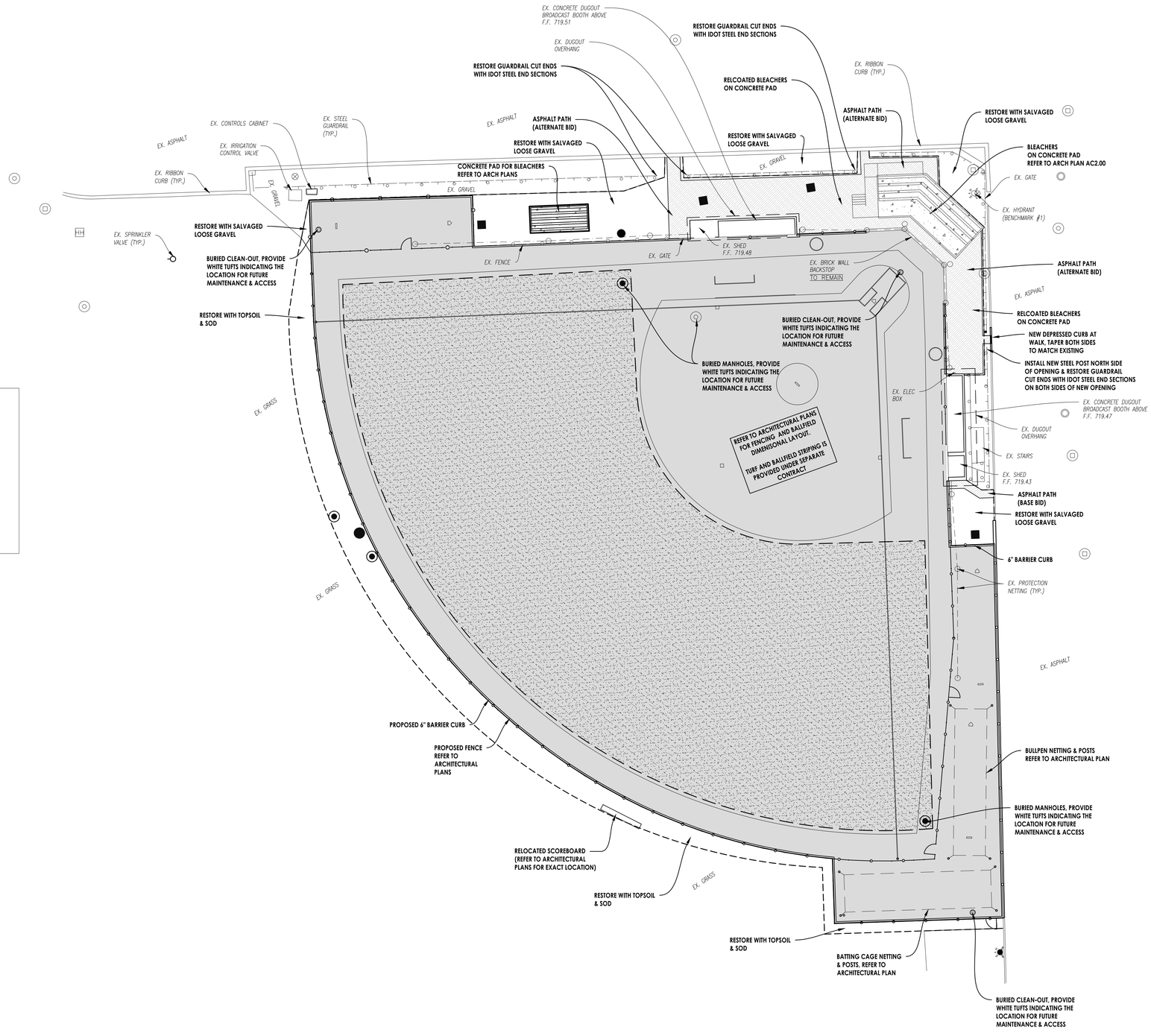
	CONSTRUCTION	06/26/2023

TURF FIELD

EXISTING CONDITIONS & DEMOLITION PLAN

22105 **C2.10**



EX. STORMTRAP DETENTION SYSTEM FOR FOOTBALL STADIUM DRAINAGE (MWRD #2010-0073)
HWL 713.18
INV. 708.85
0.69 ACRE FEET

NOTES:

1. ALL DIMENSIONS ALONG CURB LINES ARE TO FACE OF CURB, UNLESS NOTED OTHERWISE.
2. TURF FIELD, FENCING AND SPORTS FIELD LAYOUTS SHOWN ON THESE PLANS ARE BASED UPON THE ARCHITECTURAL PLAN SHEETS PROVIDED TO RTM AT THE DATE OF THESE PLANS BEING PREPARED. LAYOUT PLANS NORMALLY CONTINUE TO CHANGE AFTER SITE PLANS HAVE BEEN APPROVED. THEREFORE THE CONTRACTOR SHALL USE THE ARCHITECTURAL PLANS FOR FINAL SPORTS FIELD IMPROVEMENTS, AND VERIFY THAT ALL ADJACENT IMPROVEMENTS ARE CONSISTENT WITH THE DESIGN INTENT AND REQUIREMENTS OF THE SITE PLANS. THE CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF CLARIFICATION IS NEEDED, OR IF CONFLICTS OR INCONSISTENCIES EXIST.
3. CONTRACTOR TO CONFIRM FENCE LOCATIONS, HEIGHT, POSTS, AND GATE LOCATIONS WITH ARCHITECTURAL PLANS.

LEGEND:

- BARRIER CURB AND GUTTER - DEPRESSED
- B6.12 CURB AND GUTTER - TRANSITION (ZERO TO FULL HEIGHT)
- SAWCUT LINE
- PROPOSED PERMEABLE TURF FIELD OVER AGGREGATE BASE (TURF SUPPLIED AND INSTALLED UNDER SEPARATE CONTRACT)
- PROPOSED FULL-DEPTH ASPHALT PATH
- PROPOSED AGGREGATE DETENTION STORAGE BELOW GRADE
- PROPOSED CONCRETE PAD

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

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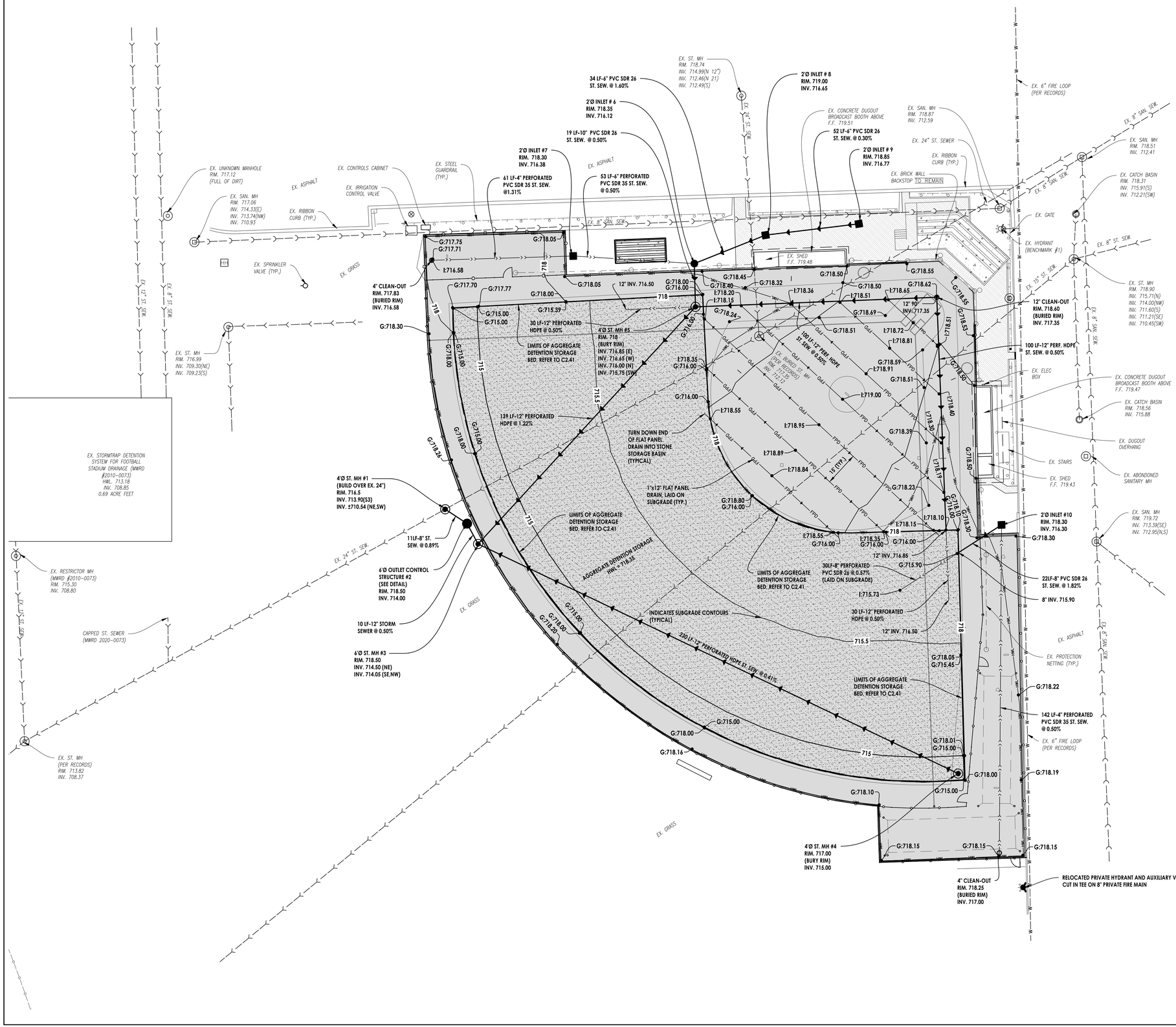
TURF FIELD

SITE GEOMETRIC LAYOUT PLAN

22105 **C2.20**



NOTES:

1. EX. ITEMS SHALL BE FIELD VERIFIED. RELOCATION OR ADJUSTMENT MAY BE NEEDED. CONTRACTOR TO VERIFY.
2. CONTRACTOR SHALL VERIFY ALL WORK, INCLUDING BUT LIMITED TO, SIZES, MATERIALS AND LOCATION, WITH UTILITY COMPANIES PRIOR TO INSTALLATION.
3. VERIFY SERVICE LOCATIONS WITH BUILDING PLANS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. SEE SPECIFICATIONS SHEET FOR ALL STORM PIPE AND STRUCTURE SPECIFICATIONS.
5. ALL UTILITY TIE DIMENSIONS ARE FROM CENTER OF UTILITY AND TO BACK OF CURB WHEN TIED TO CURB LINES, UNLESS OTHERWISE NOTED.
6. CONTRACTOR TO INSPECT EXISTING SEWER AT POINT OF CONNECTION. CONTRACTOR TO VERIFY THAT EXISTING PIPE IS IN GOOD WORKING CONDITION. CONTRACTOR TO REPAIR AS REQUIRED.
7. CONTRACTOR TO NOTIFY OWNER/ENGINEER IF CONFLICTS OCCUR.

LEGEND:

0.5 FOOT CONTOUR @ SUBGRADE	
1 FOOT CONTOUR @ SUBGRADE	
SPOT ELEVATION	0.00
GROUND AT SUBGRADE	G:XX.XX
DRAIN INVERT, LAID ON SUBGRADE	I:XX.XX

PROPOSED PERMEABLE TURF FIELD OVER AGGREGATE BASE REFER TO ARCHITECTURAL PLAN FOR TURF SPECIFICATIONS

PROPOSED FULL-DEPTH ASPHALT PATH

PROPOSED AGGREGATE DETENTION STORAGE BELOW GRADE

ADDTIONAL CONTRACTOR AS-BUILT APPROVAL REQUIREMENTS

1. THE CONTRACTOR IS REQUIRED TO PROIDE AN AS-BUILT DRAWING OF THE FINAL SUBGRADE PRIOR TO BACKFILL OF THE AGGREGATE. AS-BUILT SPOT ELEVATIONS, PREPARED BY AN ILLINOIS REGISTERED LAND SURVEYOR, SHALL BE PROVIDED ON A SIGNED & SEALED DRAWING, AS WELL AS AN AUTOCAD CIVIL 3D DWG FILE, TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PLACING OF ANY STONE. STONE PLACEMENT PRIOR TO SUBGRADE APPROVAL IS AT THE CONTRACTOR'S RISK.
2. THE CONTRACTOR IS REQUIRED TO PROIDE AN AS-BUILT DRAWING OF THE FINE GRADED AGGREGATE FINAL SURFACE. PRIOR TO TURNOVER TO THE SYNTHETIC TURF MANUFACTURER, AS-BUILT SPOT ELEVATIONS, PREPARED BY AN ILLINOIS REGISTERED LAND SURVEYOR, SHALL BE PROVIDED ON A SIGNED & SEALED DRAWING, AS WELL AS AN AUTOCAD CIVIL 3D DWG FILE, TO THE ARCHITECT/ENGINEER FOR REVIEW AND APPROVAL.

GRAPHIC SCALE
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1 inch = 20 ft.

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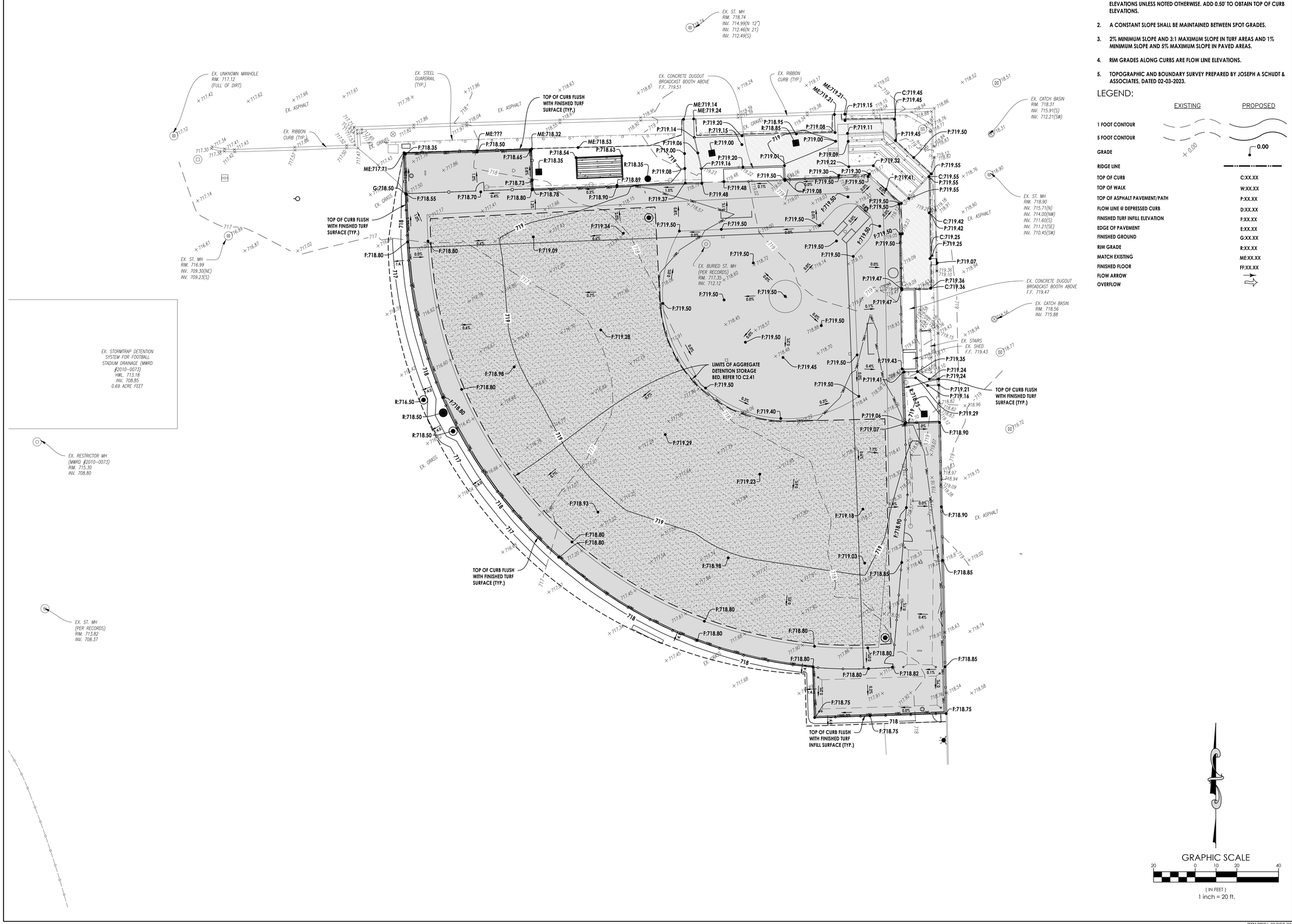
TURF FIELD

SUBGRADE & UTILITY PLAN

22105

C2.30



NOTES:

1. PROPOSED ELEVATIONS SHOWN ON PROPOSED CURB LINES ARE FLOW LINE ELEVATIONS UNLESS NOTED OTHERWISE. ADD 0.50' TO OBTAIN TOP OF CURB ELEVATIONS.
2. A CONSTANT SLOPE SHALL BE MAINTAINED BETWEEN SPOT GRADES.
3. 2% MINIMUM SLOPE AND 3:1 MAXIMUM SLOPE IN TURF AREAS AND 1% MINIMUM SLOPE AND 5% MAXIMUM SLOPE IN PAVED AREAS.
4. RIM GRADES ALONG CURBS ARE FLOW LINE ELEVATIONS.
5. TOPOGRAPHIC AND BOUNDARY SURVEY PREPARED BY JOSEPH A SCHUDT & ASSOCIATES, DATED 02-03-2023.

LEGEND:

	EXISTING	PROPOSED
1 FOOT CONTOUR		
5 FOOT CONTOUR		
GRADE	+ 0.00	0.00
RIDGE LINE		
TOP OF CURB		C:XX.XX
TOP OF WALK		W:XX.XX
TOP OF ASPHALT PAVEMENT/PATH		P:XX.XX
FLOW LINE @ DEPRESSED CURB		D:XX.XX
FINISHED TURF INFILL ELEVATION		F:XX.XX
EDGE OF PAVEMENT		E:XX.XX
FINISHED GROUND		G:XX.XX
RIM GRADE		R:XX.XX
MATCH EXISTING		ME:XX.XX
FINISHED FLOOR		FF:XX.XX
FLOW ARROW		
OVERFLOW		

GRAPHIC SCALE
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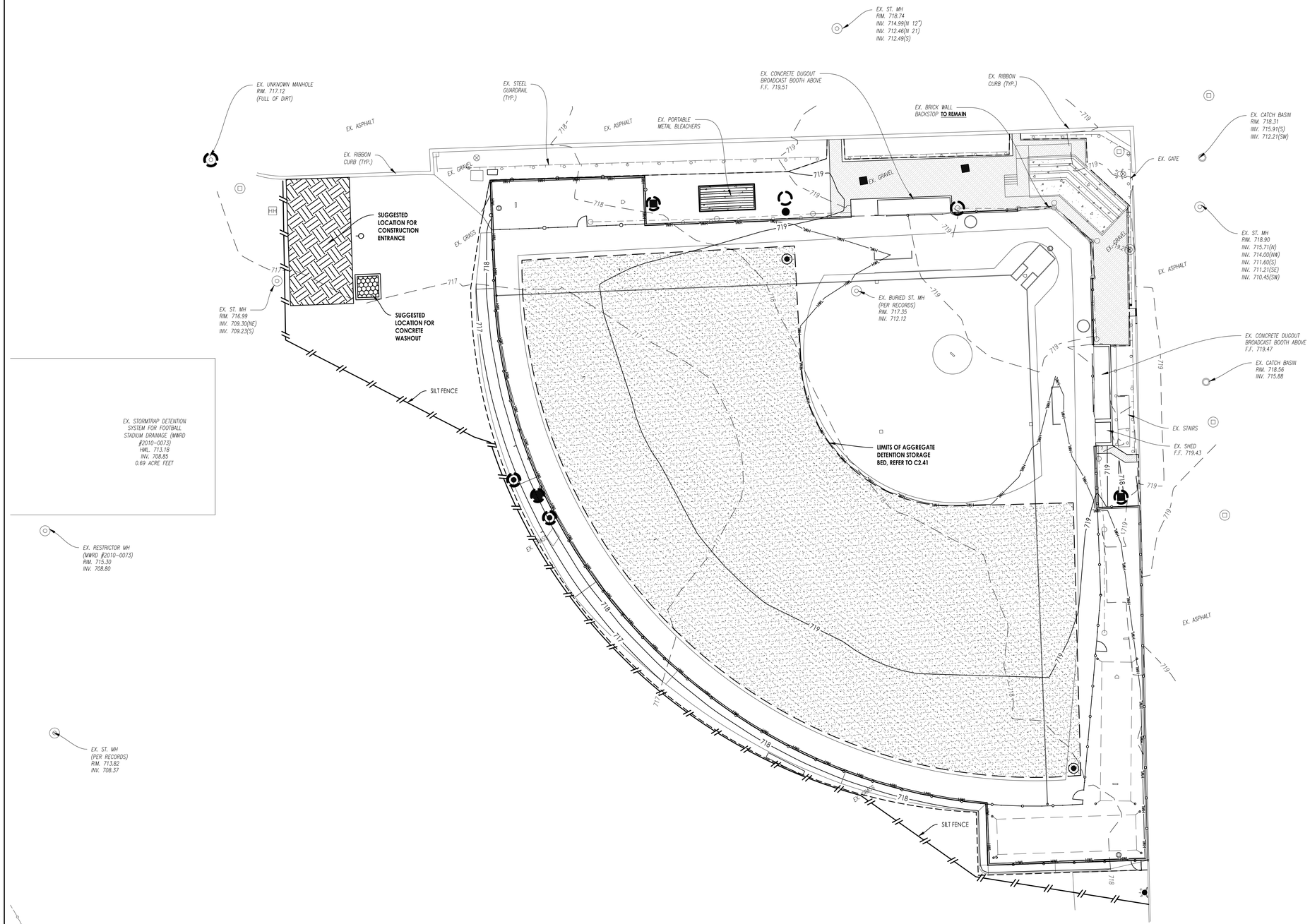
TURF FIELD

GRADING PLAN

22105 **C2.40**



NOTES:

1. PROPOSED ELEVATIONS SHOWN ON PROPOSED CURB LINES ARE FLOW LINE ELEVATIONS UNLESS NOTED OTHERWISE. ADD 0.50' TO OBTAIN TOP OF CURB ELEVATIONS.
2. A CONSTANT SLOPE SHALL BE MAINTAINED BETWEEN SPOT GRADES.
3. 2% MINIMUM SLOPE AND 3:1 MAXIMUM SLOPE IN TURF AREAS AND 1% MINIMUM SLOPE AND 5% MAXIMUM SLOPE IN PAVED AREAS.
4. RIM GRADES ALONG CURBS ARE FLOW LINE ELEVATIONS.
5. TOPOGRAPHIC AND BOUNDARY SURVEY PREPARED BY JOSEPH A SCHUDT & ASSOCIATES, DATED 02-03-2023.

LEGEND:

	EXISTING	PROPOSED
1 FOOT CONTOUR		
5 FOOT CONTOUR		
SILT FENCE, SEE DETAIL		
STABILIZED CONSTRUCTION ENTRANCE, SEE DETAIL		
CONCRETE/ MORTAR WASHOUT FACILITY, SEE DETAIL		
INLET PROTECTION, SEE DETAIL		

GRAPHIC SCALE
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(IN FEET)
1 inch = 20 ft.

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NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023

TURF FIELD

STORMWATER POLLUTION PREVENTION PLAN

22105 **C2.50**

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 PROJECT/SITE INFORMATION

Project/Site Name: Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework
Project Street/Location: 13300 South La Grange Road
City: Orland Park
State: IL
Zip Code: 60462
County or Similar Subdivision: Cook County
Latitude/Longitude
Latitude: 41°38'51.4"N (degrees, minutes, seconds)
Longitude: 87°51'27.9"W (degrees, minutes, seconds)
Method for determining latitude/longitude: Google Maps
Is the project located in Indian country? No
Is this project considered a federal facility? No
NPDES project or permit tracking number: To be Determined
(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate NPDES construction general permit.)

1.2 CONTACT INFORMATION/RESPONSIBLE PARTIES

Owner:
Consolidated High School District 230
(847) 318-4300
15100 South 94th Avenue, Orland Park, IL 60462

Operator(s):
TBD

Project Manager(s) or Site Supervisor(s):
TBD
Stormwater Manager and SWPPP Contact(s):
TBD

This SWPPP Was Prepared By:
Matthew D. Whisler, PE
RTM Engineering Consultants, Inc
650 E. Algonquin Road, Suite 250
Schaumburg, IL 60173
312-758-4180
312-713-1003

Emergency 24 hour contact:
TBD

1.3 NATURE AND SEQUENCE OF CONSTRUCTION ACTIVITY

The project involves the reconstruction of existing fields and storm drainage systems.
What is the function of the construction activity? New synthetic turf athletic field

Construction Schedule
1. Install perimeter sediment control silt fence
2. Clear & grub existing and demolish existing sitework as required
3. Mass Grading
4. Construction: install new utility structures and piping
5. Install new field
6. Fine grade and permanently stabilize all disturbed areas
7. Remove all sediment controls once disturbance has been permanently stabilized

Estimated Project Start Date: 03/27/2023
Estimated Project Completion Date: 11/30/2023

1.4 SOILS, SLOPES, VEGETATION, AND CURRENT DRAINAGE PATTERNS

Soil types:
- Geotechnical investigations have found the sub-surface soils to be predominately Clay.

Drainage Patterns:
- The site drains westerly to the McGinnis Slough/ Orland Lake.

Vegetation:
- The existing vegetation in the is grass, turf field

1.5 CONSTRUCTION SITE ESTIMATES

The following are estimates of the construction site:
Construction Site Area to be disturbed: 1.4 AC
Percentage impervious area before construction: 5%
SCS Runoff coefficient before construction: 81
Percentage impervious area after construction: 10%
SCS Runoff coefficient after construction: 91

1.6 RECEIVING WATERS

Description of receiving waters: McGinnis Slough/ Orland Lake (Calumet Service Basin)

1.7 SITE FEATURES AND SENSITIVE AREAS TO BE PROTECTED

- The site does not contain any sensitive areas.

1.8 POTENTIAL SOURCES OF POLLUTION

Potentials sources of sediment to stormwater runoff:
- Clearing and grubbing operations
- Grading and site excavation operations
- Vehicle tracking
- Topsoil striping and stockpiling
- Landscaping operations

Potential pollutants and sources, other than sediment, to stormwater runoff:
- Vehicle and equipment fueling activities
- Vehicle and equipment maintenance
- Hazardous waste storage
- Material Storage including general building materials, solvents, adhesives, paving materials, paints, aggregates and trash
- Sanitary facilities

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

2.1 MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL:

BMP Description: Topsoil stripped from the immediate construction area will be stockpiled. The stockpiles will be in areas that will not interfere with construction phases and at least 15 feet away from areas of concentrated flows or pavement. The slopes of the stockpile will be roughened by equipment tracking and will not exceed 2:1 to prevent erosion. A silt fence will be installed around the perimeter of each stockpile in accordance with the silt fence design specifications in Section 2, Part 2.7. Stockpiles will also be temporarily stabilized with erosion controls as described in Section 2, Part 2.4.

- Installation Schedule: Topsoil stockpiles will be established during grading activities. The silt fence and temporary erosion controls will be installed immediately after the stockpile has been established.
- Responsible Staff: General Contractor

2.2 PHASE CONSTRUCTION ACTIVITY:

BMP Description: The contractor shall determine their means for construction phases. An emphasis shall be placed upon minimizing disturbed areas and provided vegetative cover immediately. To minimize potential erosion, only areas necessary to construct the construction exits, access road for the staging area and the sedimentation basin will be disturbed initially. These areas will be cleared, grubbed, and graded and the construction exits, access road and sedimentation basin will be installed. These areas will be stabilized with erosion controls immediately after construction but no later than 14 days after construction.

- Installation Schedule: See Section 1.3 for the timeline of construction activity.
- Responsible Staff: General Contractor

2.3 CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT:

BMP Description: The site does not currently accept any off-site concentrated flow.

2.4 STABILIZE SOILS:

Temporary Stabilization (Growing Season)

BMP Description: Temporary vegetative cover will be established using hydroseeding, erosion control blanket, or other acceptable means, for areas of exposed soil (including stockpiles) within 1 working day of temporary cessation of earth disturbing activities and shall be complete as soon as possible but no more than 14 days from the in initiation of the stabilization of work in an area. Seeding will be conducted during periods of the year when vegetation is more likely to be established.

- Installation Schedule: Temporary stabilization measures will be applied to portions of the site within 1 working day of temporary cessation of earth disturbing activities and shall be complete as soon as possible but no more than 14 days from the in initiation of the stabilization of work in an area.
- Maintenance and Inspection: Stabilized areas will be inspected weekly and after storm events until a dense cover of vegetation has become established. If failure is noticed at the seeded area, the area will be reseeded, fertilized and mulched immediately
- Responsible Staff: General Contractor

Temporary Stabilization (Winter Months)

BMP Description: Hydromulching, mulching, erosion control blanket, or other acceptable practices, will provide immediate protection to exposed soils within 1 working day of temporary cessation of earth disturbing activities and shall be complete as soon as possible but no more than 14 days from the in initiation of the stabilization of work in an area and over the winter months.

- Installation Schedule: Winter stabilization will occur between November 15th and March 15th.
- Maintenance and Inspection: Mulched areas will be inspected weekly and after storm events to check for movement of mulch or erosion. If washout, breakage, or erosion occurs, the surface will be repaired, and new mulch will be applied to the damaged area.
- Responsible Staff: General Contractor

Permanent Stabilization

BMP Description: Permanent stabilization will be done within 1 working day of temporary cessation of earth disturbing activities reaching final design grades and shall be complete as soon as possible but no more than 14 days from the initiation of the stabilization of work in an area are achieved but no later than 14 days after construction ceases. Native species of plants will be used to establish vegetative cover on exposed soils. Permanent stabilization will be completed in accordance with the final stabilization procedures in Section 7.

- Installation Schedule: Portions of the site where construction activities have permanently ceased will be stabilized, within 1 working day of temporary cessation of earth disturbing activities and shall be complete as soon as possible but no more than 14 days from the in initiation of the stabilization of work in an area.
- Maintenance and Inspection: All seeded areas will be inspected weekly during construction activities for failure and after storm events until a dense cover of vegetation has been established. If failure is noticed at the seeded area, the area will be reseeded, fertilized, and mulched immediately. After construction is completed at the site, permanently stabilized areas will be monitored until final stabilization is reached.
- Responsible Staff: General Contractor

Dust Control

BMP Description: Dust from the site will be controlled by using a mobile pressure-type distributor truck to apply potable water to disturbed areas. The mobile unit will apply water at a rate of 300 gallons per acre and minimized as necessary to prevent runoff and ponding.

- Installation Schedule: Dust control will be implemented as needed once site grading has been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of potable water will be performed no more than three times a day during the months of May-September and no more than once per day during the months of October-April, if the dryness of the soil warrants it.
- Maintenance and Inspection: At least one mobile unit will be available at all times to distribute potable water to control dust on the project area. Each mobile unit will be equipped with a positive shutoff valve to prevent over watering of the disturbed area. For vehicle and equipment maintenance practices, see Section 3, Part 3.4.

Responsible Staff: General Contractor

2.5 PROTECT SLOPES:

Geotextile Erosion Control Blankets

BMP Description: Geotextile erosion control blankets will be used to provide stabilization for the slopes greater than 4:1. The blanket will cover the entire area of the graded slope. The side slopes will be seeded and mulched before the blanket is applied. The blanket will be installed by digging a small trench on the upside of the slope, 12 inches wide by 6 inches deep, and stapling the leading edge of the blanket in the trench. The blanket will be rolled down the slope slowly to maintain soil contact and stapled in 12-inch intervals. If the blanket cannot cover the entire slope, the blankets will be overlapped (minimum of 2 inches) and stapled at the overlapped edge. The erosion control blanket will always be installed according to the manufacturer's instructions and specifications.

- Installation Schedule: The erosion control blankets will be installed once the slopes have reached final grade.
- Maintenance and Inspection: The erosion control blanket will be inspected weekly and immediately after storm events to determine if cracks, tears, or breaches have formed in the fabric; if so, the blanket will be repaired or replaced immediately. Good contact with the soil must be maintained and erosion should not occur under the blanket. Any areas where the blanket is not in close contact with the ground will be repaired or replaced.
- Responsible Staff: General Contractor

Design Specifications
1. Slope surface will be free of rocks, clods, sticks and grass. The blankets will have good soil contact.
2. Lay blankets loosely and staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations.

2.6 PROTECT STORM DRAIN INLETS:

Catch Basin Inserts

BMP Description: Immediately following installation of the proposed storm sewer structures, Catch-All catch basin inserts shall be placed below the grates. These catch basin inserts shall be removed once the construction site has been permanently stabilized.

- Installation Schedule: Catch basin inserts shall be installed immediately upon installations of storm structure
- Maintenance and Inspection: The catch basin inserts will be inspected weekly and immediately after storm events. If the basin insert becomes clogged with sediment, the insert will be removed and cleaned or replaced per the manufacturer's recommendations.
- Responsible Staff: General Contractor

2.7 ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS:

Silt Fence

BMP Description: Silt fences will be installed along the perimeters of the site and around any topsoil stockpile. Silt fences will be installed by excavating a 12-inch-deep trench along the line of proposed installation. Wooden posts supporting the silt fence will be spaced a maximum of 5 feet apart and driven securely into the ground; a minimum of 18 deep. The silt fence will be fastened securely to the wooden posts with wire ties spaced every 24 inches at the top, mid section, and bottom of the wooden post. The bottom edge of the silt fence will extend across the bottom of the trench and the trench will be backfilled and compacted to prevent stormwater and sediment from discharging underneath the silt fence.

- Installation Schedule: The silt fences will be installed before construction begins at the site and around topsoil stockpiles once they have been established.Maintenance and Inspection: The trap will be inspected weekly and after storm events. The trap will be checked for signs of erosion, seepage, and structural damage. The outlet and trash rack will be checked for any damage or obstructions and any damage present will be repaired and obstructions removed. Sediment will be removed and the trap restored to its original dimensions when the sediment has accumulated to one-half the design depth of the trap. The removed sediments will be hauled off-site for disposal at approved Landfill.
- Responsible Staff: General Contractor

2.9 ESTABLISH STABILIZED CONSTRUCTION EXITS:

Stabilized Construction Exit

BMP Description: Anti-tracking pads consisting of stone over geotextile fabric will be installed at the entrance to the main Road, as indentified on plan set, to prevent the off-site transport of sediment by construction vehicles.

- Installation Schedule: The stabilized exit will be installed before construction begins on the site. The stone will remain in place until the subgrade of pavement is installed at the site. The anti-tracking pad will be placed on the pavement and will remain until all areas of the site have been stabilized.
- Maintenance and Inspection: The exits will be inspected weekly and after storm events or heavy use. The exits will be maintained in a condition that will prevent tracking or flowing of sediment onto adjacent roads. This could require adding additional crushed stone to the exit. All sediment tracked, spilled, dropped, or washed onto the Roads will be swept up immediately and hauled off-site for disposal at an approved Landfill. Sediment will be swept from the anti-tracking pad as necessary. If excess sediment has clogged the pad, the exit will be top dressed with new crushed stone. Replacement of the entire pad might be necessary when the pad becomes completely filled with sediment. The pad will be reshaped as needed for drainage and runoff control. Broken road pavement as a result of construction activities on roadways immediately adjacent to the project site will be repaired immediately. The stone anti-tracking pad will be removed before the subgrade of pavement is applied to the parking lot. The removed stone and sediment from the pad will be hauled off-site and disposed of at an approved Landfill

Responsible Staff: General Contractor

2.10 ADDITIONAL BMPS:

Street Sweeping

BMP Description: Street sweeping and vacuuming shall be performed on adjacent Roads using a regenerative air sweeper to remove sediments and other contaminants directly from paved areas.

- Installation Schedule: Street sweeping will occur weekly and before forecasted storm events on the adjacent Road(s).
- Maintenance and Inspection: All materials collected during sweeping will be disposed of at an off-site location by the subcontractor.
- Responsible Staff: General Contractor

SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 GOOD HOUSEKEEPING BMPS

Material Handling and Waste Management:

Waste Materials

BMP Description: All waste materials will be collected and disposed of into two metal trash dumpsters in the materials storage area. Dumpsters will be placed away from stormwater conveyances and drains, and meet all federal, state, and municipal regulations. Only trash and construction debris from the site will be deposited in the dumpster. No construction materials will be buried on-site. All personnel will be instructed, during tailgate training sessions, regarding the correct disposal of trash and construction debris. Notices that state these practices will be posted in the office trailer and the individual who manages day-today site operations will be responsible for seeing that these practices are followed.

- Installation Schedule: Trash dumpsters will be installed once the materials storage area has been established.
- Maintenance and Inspection: The dumpsters will be inspected weekly and immediately after storm events. The dumpster will be emptied weekly and taken to approved Landfill. If trash and construction debris are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently.
- Responsible Staff: General Contractor

Hazardous Waste Materials

BMP Description: All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids will be stored in structurally sound and sealed shipping containers, within the hazardous materials storage area. Hazardous waste materials will be stored in appropriate and clearly marked containers and segregated from other non-waste materials. Secondary containment will be provided for all waste materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous waste materials will be disposed of in accordance with federal, state, and municipal regulations. Hazardous waste materials will not be disposed of into the on-site dumpsters. All personnel will be instructed, during tailgate training sessions, regarding proper procedures for hazardous waste disposal. Notices that state these procedures will be posted in the office trailer and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.

- Installation Schedule: Shipping containers used to store hazardous waste materials will be installed once the site materials storage area has been installed.
- Maintenance and Inspection: The hazardous waste material storage areas will be inspected weekly and after storm events. The storage areas will be kept clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material safety data sheets, material inventory, and emergency contact numbers will be maintained in the office trailer.
- Responsible Staff: General Contractor

Sanitary Waste

BMP Description: Temporary sanitary facilities (portable toilets) will be provided at the site throughout the construction phase. The toilets will be in the staging area. The portable toilets will be located away from a concentrated flow paths and traffic flow.

- Installation Schedule: The portable toilets will be brought to the site once the staging area has been established.
- Maintenance and Inspection: All sanitary waste will be collected from the portable facilities a minimum of three times per week by a qualified sub-contractor. The portable toilets will be inspected weekly for evidence of leaking holding tanks. Toilets with leaking holding tanks will be removed from the site and replaced with new portable toilets.

Responsible Staff: General Contractor

3.2 ESTABLISH PROPER BUILDING MATERIAL STAGING AREAS:

Material Storage Area

BMP Description: Construction equipment and maintenance materials will be stored at the combined staging area and materials storage areas. Orange construction fence will be installed around the perimeter to designate the staging and materials storage area.
Non-hazardous building materials such as packaging material (wood, plastic and glass) and construction scrap material (brick, wood, steel, metal scraps and pipe cuttings) will be stored in a separate covered storage facility adjacent to the shipping container. All hazardous-waste materials such as oil filters, petroleum products, paint and equipment maintenance fluids will be stored in structurally sound and sealed containers under cover within the hazardous materials storage area. Very large items, such as framing materials and stockpiled lumber, will be stored in the open in the materials storage area. Such materials will be elevated on wood blocks to minimize contact with runoff

- Installation Schedule: The materials storage area will be installed after grading and before any infrastructure is constructed on site.
- Maintenance and Inspection: The storage area will be inspected weekly and after storm events. The storage area will be kept clean, well organized and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers and liners will be repaired or replaced as needed to maintain proper functions.
- Responsible Staff: General Contractor

3.3 DESIGNATE WASHOUT AREAS:

Concrete Washout

BMP Description: A designated temporary, above-grade concrete washout area will be constructed, as shown on the site plan, per detail in Appendix I. The temporary concrete washout will be constructed with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The washout area will be lined with plastic sheeting at least 10 mils thick and free of any holes or tears. Signs will be posted marking the location of the washout area to ensure that concrete equipment operators use the proper facility. Concrete pours will not be conducted during or before an anticipated storm event. Concrete mixer trucks and chutes will be washed in the designated area or concrete wastes will be properly disposed of off-site. When the temporary washout area is no longer needed for the construction project, the hardened concrete and materials use to construct the area will be removed and disposed of according to the maintenance section below and the area will be stabilized.

- Installation Schedule: The concrete washout area will be constructed before concrete pours occur at the site.
- Maintenance and Inspection: Inspect equipment/vehicle storage areas and fuel tank weekly and after storm events. Vehicles and equipment will be inspected on each day of use. Leaks will be repaired immediately, or the problem vehicle(s) or equipment will be removed from the project site. Keep ample supply of spill-cleanup materials on-site and immediately clean up spills and dispose of materials properly.
- Responsible Staff: General Contractor

3.5 ALLOWABLE NON-STORMWATER DISCHARGES AND CONTROL EQUIPMENT/VEHICLE WASHING:

BMP Description: All equipment and vehicle washing will be performed off-site.

3.6 SPILL PREVENTION AND CONTROL PLAN:

i. Employee Training: All employees will be trained via bi-weekly tailgate sessions.
ii. Vehicle Maintenance: Vehicles and equipment will be maintained off-site. All vehicles and equipment including subcontractor vehicles will be checked for leaking oil and fluids. Vehicles leaking fluids will not be allowed on-site. Drip pans will be placed under all vehicles and equipment that are parked overnight.
iii. Hazardous Material Storage: Hazardous materials will be stored in accordance with Section 3, Part 1 and federal and municipal regulations.
iv. Spill Kits: Spill kits will be within the materials storage area and concrete washout areas.
v. Spills: All spills will be cleaned up immediately upon discovery. Spent absorbent materials and rags will be hauled off-site immediately after the spill is cleaned up for disposal at an approved Landfill. Spills large enough to discharge to surface water will be reported to the National Response Center at 1-800-424-8802.
vi. Material safety data sheets, a material inventory, and emergency contact information will be maintained at the on-site project trailer.

- Installation Schedule: The spill prevention and control procedures will be implemented once construction begins on-site.
- Maintenance and Inspection: All personnel will be instructed, during tailgate training sessions, regarding the correct procedures for spill prevention and control. Notices that state these practices will be posted in the office trailer, and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.
- Responsible Staff: General Contractor

3.9 ANY ADDITIONAL BMPS:

- No additional BMPs were identified

3.10 ALLOWABLE NON-STORMWATER DISCHARGE MANAGEMENT

Any changes in construction activities that produce other allowable non-stormwater discharges will be identified, and the SWPPP will be amended and the appropriate erosion and sediment control will be implemented.

Water Used to Control Dust

BMP Description: Dust control will be implemented as needed once site grading has been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of potable water at a rate of 300 gallons per acre or less will be performed by a mobile pressure-type distributor truck no more than three times a day during the months of May-September and once per day during the months of October-April or whenever the dryness of the soil warrants it.

- Responsible Staff: General Contractor

Uncontaminated Excavation Dewatering

BMP Description: Water from excavation dewatering measures shall be directed into the sediment basins or filter with filter bags prior to discharging off-site. See Section 2, part 8 for BMP description.

- Responsible Staff: General Contractor

Uncontaminated Water Line & Hydrant Flushing

BMP Description: Uncontaminated water from water line flushing of the site infrastructure will be discharged to the sediment basin, while avoiding any contact with disturbed areas. If water from the line flushing becomes contaminated, the water line will be blocked off and the flush water will be pumped to a tanker truck, which will haul the contaminated water off-site to an approved disposal site.

- Responsible Staff: General Contractor

SECTION 4: (NOT USED)

SECTION 5: INSPECTIONS and MAINTENANCE

5.1 INSPECTIONS

Qualified personnel (provided by the contractor) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days, and within 24 hours of the end of a rainfall event that is 0.5 inches or greater, or equivalent snowfall.

- Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- Based on the results of the inspection, necessary pollution prevention measures identified in the plan shall be undertaken as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the plan with 7 calendar days following the inspection.
- A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken in accordance with the NPDES permit shall be made and retained (for at least three years from the date of final stabilization or permit coverage is terminated) as a part of this SWPPP. This report shall be signed in accordance with Part VI.G (Signatory Requirements) of the ILR10 NPDES Permit.
- The contractor shall notify the appropriate Agency Field Operations Section office by email at epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit.
- The contractor shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the SWPPP observed during an inspection conducted, including those not required by the SWPPP. Submission shall be on forms provided by the IEPA and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact, which may have resulted from the noncompliance.
- All reports of non-compliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements) of the NPDES Permit NO. ILR10.
- All inspection reports shall be retained at the construction site and kept under Appendix E.

Inspection Personnel:_____ Title: _____
Company/Firm: _____ Qualifications: _____

1. Inspection Schedule and Procedures:
   i. Describe the inspection schedules and procedures you have developed for your site (include frequency of inspections for each BMP or group of BMPs, indicate when you will inspect, e.g. before/during/and after rain events, spot inspections, etc.).
- Inspections of the site will be performed once every 7 days and within 24 hours of the end of a storm event of one-half inch or greater. The inspections will verify that all BMPs required in Sections 2 and 3 are implemented, maintained, and effectively minimizing erosion and preventing stormwater contamination from construction materials. For detailed inspection procedures, see Sections 2 and 3.
   ii. Describe the general procedures for correcting problems when they are identified. Include responsible staff and timeframes for making corrections.
- If corrective actions are identified during an inspection, the actions will be addressed by the General Contractor within 24 hours of the report and completed maintenance as soon as possible or before the next storm event.
   iii. Attach a copy of the inspection report you will use for your site.

5.2 CORRECTIVE ACTION LOG

Contractor shall maintain corrective action logs in accordance with NPDES ILR10 Permit Requirements.

SECTION 6: RECORDKEEPING

6.1 RECORDKEEPING

Contractor shall provide a 3-ring binder to maintain construction activity, corrective action, inspections and log of changes to the SWPPP records in accordance with NPDES ILR10 Permit Requirements. The 3-ring binder shall be kept in the on-site construction trailer at all times.

6.2 LOG OF CHANGES TO THE SWPPP

Contractor shall maintain a log of changes to the approved SWPPP in accordance with NPDES ILR10 Permit Requirements.

SECTION 7: FINAL STABILIZATION

Permanent Seeding

BMP Description: Permanent seeding will be applied immediately after the final design grades are achieved on portions of the site but no later than 14 days after construction activities have permanently ceased. After the entire site is stabilized, any sediment that has accumulated will be removed and hauled off-site for disposal at an approved Landfill. Construction debris, trash and temporary BMPs (including silt fences, material storage areas, sanitary toilets, and inlet protection) will also be removed and any areas disturbed during removal will be seeded immediately. Basins will be planted per the Civil Engineering plans. The remainder of the site will be seeded at the rates and species documented in the Project Specifications.

- Installation Schedule: Portions of the site where construction activities have permanently ceased will be stabilized, as soon as possible but no later than 14 days after construction ceases.
- Maintenance and Inspection: All seeded areas will be inspected weekly during construction activities for failure and after storm events until a dense cover of vegetation has been established. If failure is noticed at the seeded area, the area will be reseeded, fertilized, and mulched immediately. After construction is completed at the site, permanently stabilized areas will be monitored until final stabilization is reached.
- Responsible Staff: General Contractor

SECTION 8: CERTIFICATION AND NOTIFICATION

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES

OWNER'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE (OWNER'S REPRESENTATIVE) DATE

TITLE

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE TITLE

COMPANY ADDRESS

24 HOUR TELEPHONE NUMBER DATE

SUB-CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE TITLE

COMPANY ADDRESS

24 HOUR TELEPHONE NUMBER DATE

SUB-CONTRACTOR'S CERTIFICATION

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SIGNATURE TITLE

COMPANY ADDRESS

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SIGNATURE TITLE

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SIGNATURE TITLE

COMPANY ADDRESS

24 HOUR TELEPHONE NUMBER DATE

D230 INNOVATION · EMPATHY · LEADERSHIP

STUDIO GC
architecture + interiors
223 West Jackson Boulevard, Suite 1200
Chicago, Illinois 60606
(312) 253-3400

rtm engineering consultants
650 E. Algonquin Road | Suite 250
Schaumburg, IL 60173
ph: 847.404.5239
IL Design Firm: 184006777-0002

Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

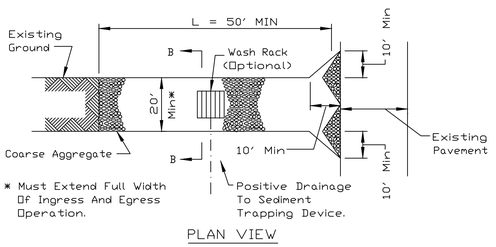
NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023

TURF FIELD

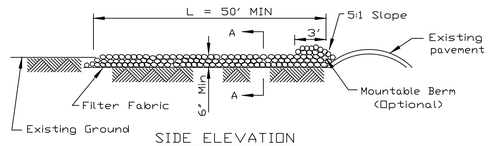
SWPPP NOTES

22105 **C2.51**

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW

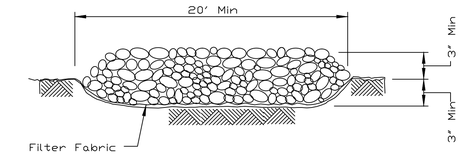


SIDE ELEVATION

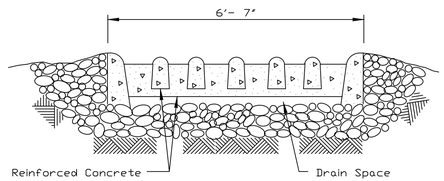
NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE		STANDARD DWG. NO.
Project		IL-630
Designed ____ Date ____	NRCS Natural Resources Conservation Service	SHEET 1 OF 2
Checked ____ Date ____		DATE 8-18-94
Approved ____ Date ____		

STABILIZED CONSTRUCTION ENTRANCE PLAN



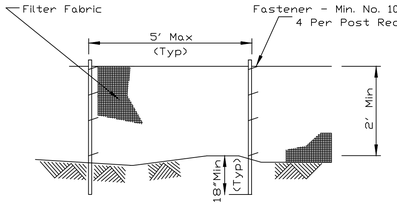
SECTION A-A



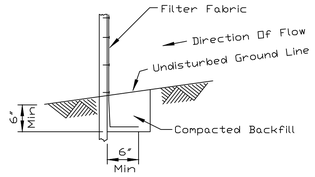
SECTION B-B

REFERENCE		STANDARD DWG. NO.
Project		IL-630
Designed ____ Date ____	NRCS Natural Resources Conservation Service	SHEET 2 OF 2
Checked ____ Date ____		DATE 8-18-94
Approved ____ Date ____		

SILT FENCE PLAN



ELEVATION

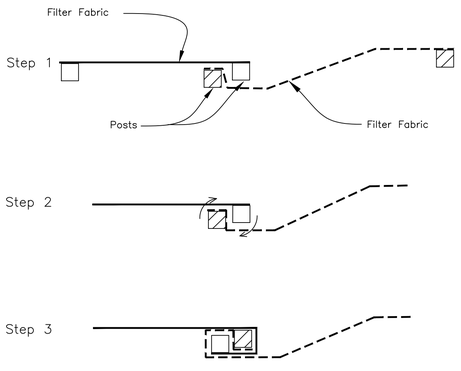


FABRIC ANCHOR DETAIL

NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE		STANDARD DWG. NO.
Project		IUM-620
Designed ____ Date ____		SHEET 1 OF 2
Checked ____ Date ____		DATE 3-16-12
Approved ____ Date ____		

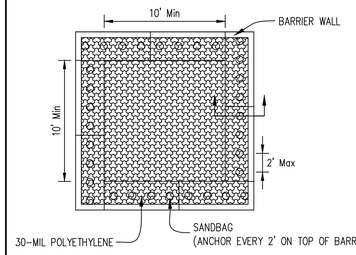
SILT FENCE



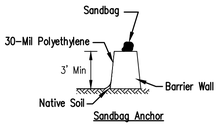
ATTACHING TWO SILT FENCES

NOTES:
1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Drive both posts a minimum of 18 inches into the ground and bury the flap.

REFERENCE		STANDARD DWG. NO.
Project		IL-620(W)
Designed ____ Date ____	NRCS Natural Resources Conservation Service	SHEET 2 OF 2
Checked ____ Date ____		DATE 1-29-99
Approved ____ Date ____		

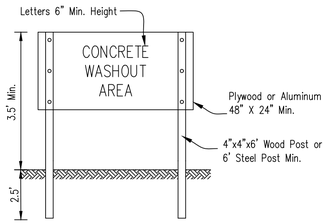


PLAN VIEW



Sandbag Anchor

BARRIER WALL ANCHOR SECTION

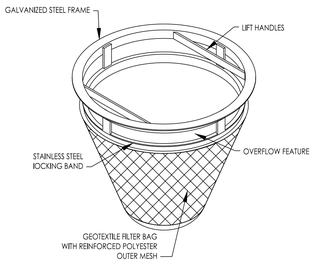


SIGN DETAIL

NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

CONCRETE WASHOUT FACILITY
NOT TO SCALE



TO BE PROVIDED AT ALL STRUCTURES THAT TAKE WATER. REMOVE AFTER FINAL STABILIZATION.

INLET PROTECTION
NOT TO SCALE

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architecture + interiors
223 West Jackson Boulevard, Suite 1200
Chicago, Illinois 60606
(312) 253-3400

rtm engineering consultants
650 E. Algonquin Road | Suite 250
Schaumburg, IL 60173
ph: 847.404.5239
IL Design Firm: 184006777-0002

Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

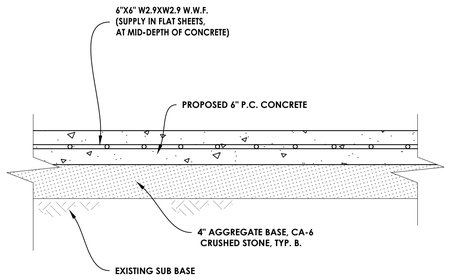
Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023

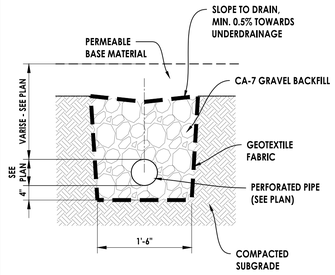
TURF FIELD

SWPPP DETAILS

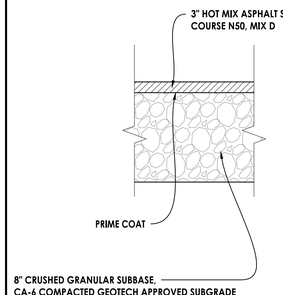
22105 **C2.52**



CONCRETE PAD
NOT TO SCALE

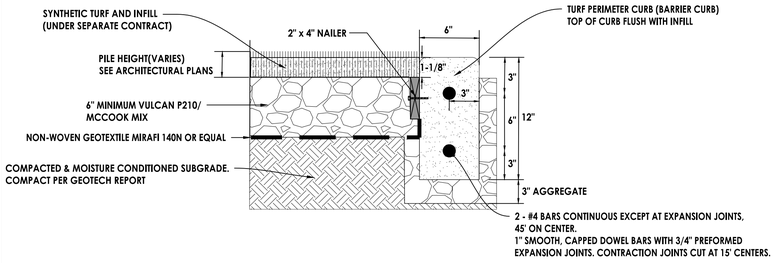


TYPICAL UNDERDRAIN
NOT TO SCALE

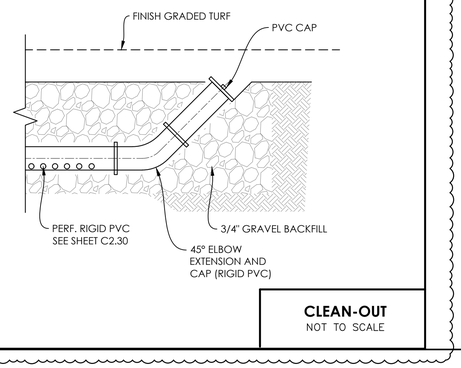


FULL DEPTH ASPHALT PATH
NOT TO SCALE

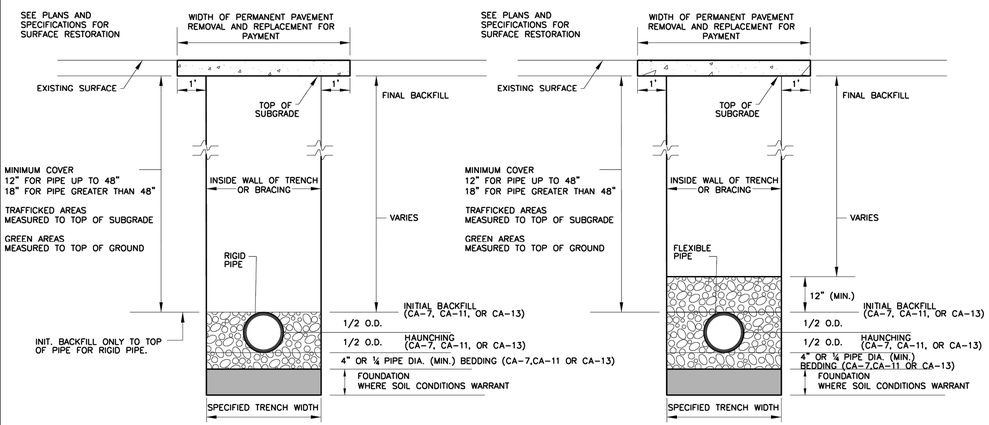
CONTRACT NOTE:
SYNTHETIC TURF MATERIALS AND INSTALLATION UNDER SEPERATE CONTRACT. CONTRACTOR REQUIRED TO PROVIDE DRAINAGE SYSTEM AND COMPACTED AGGREGATE TURF BASE AND FINE GRADING, PER TURF MANUFACTURER'S REQUIREMENTS.



SYNTHETIC TURF & EDGE DETAIL
NOT TO SCALE



CLEAN-OUT
NOT TO SCALE



RIGID PIPE INSTALLATION DETAIL

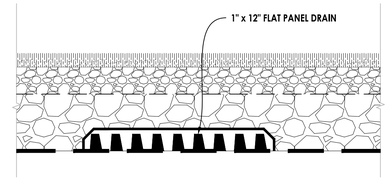
FLEXIBLE PIPE INSTALLATION DETAIL

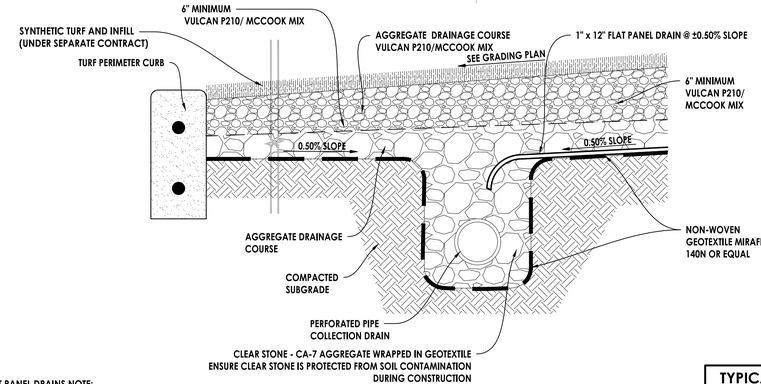
NOTES:
1. FOR QUALIFIED SEWER CONSTRUCTION ONLY.
2. SHORING, OR EQUIVALENT PROTECTIVE SYSTEM, REQUIRED FOR TRENCHES OF 5' DEPTH OR GREATER, OR AS REQUIRED BY MUNICIPALITY.

NOT TO SCALE

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO	TECHNICAL GUIDANCE MANUAL	7/1/15
	RIGID AND FLEXIBLE PIPE INSTALLATION DETAIL	STD. DWG. NO. 34
		PAGE NO. 35

CONTRACT NOTE:
SYNTHETIC TURF MATERIALS AND INSTALLATION UNDER SEPERATE CONTRACT. CONTRACTOR REQUIRED TO PROVIDE DRAINAGE SYSTEM AND COMPACTED AGGREGATE TURF BASE AND FINE GRADING, PER TURF MANUFACTURER'S REQUIREMENTS.

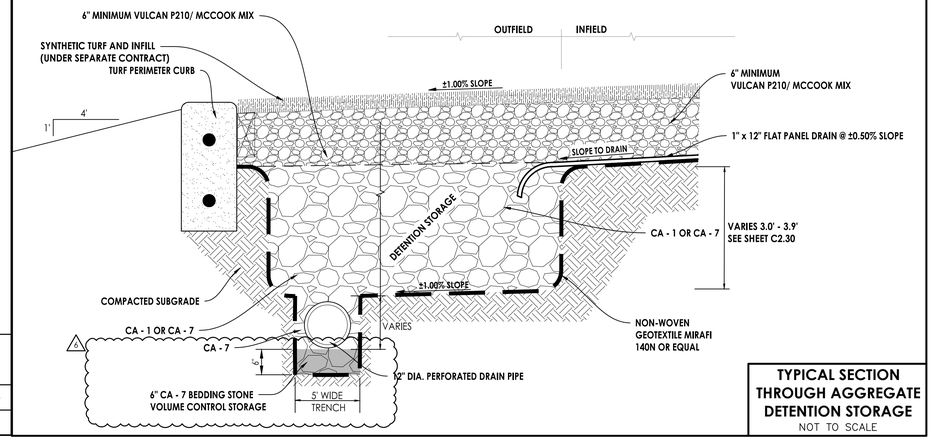




FLAT PANEL DRAINS NOTE:
FLAT PANEL DRAINS SHALL BE ADS ADVANEDGE HDPE, 1" TALL X 12" WIDE, WITH GEOTEXTILE FILTER SLEEVE, OR EQUAL.

TYPICAL FLAT PANEL DRAIN SECTION
NOT TO SCALE

CONTRACT NOTE:
SYNTHETIC TURF MATERIALS AND INSTALLATION UNDER SEPERATE CONTRACT. CONTRACTOR REQUIRED TO PROVIDE DRAINAGE SYSTEM AND COMPACTED AGGREGATE TURF BASE AND FINE GRADING, PER TURF MANUFACTURER'S REQUIREMENTS.



TYPICAL SECTION THROUGH AGGREGATE DETENTION STORAGE
NOT TO SCALE

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(312) 253-3400

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Schaumburg, IL 60173
ph: 847.404.5239
IL Design Firm: 184006777-0002

Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

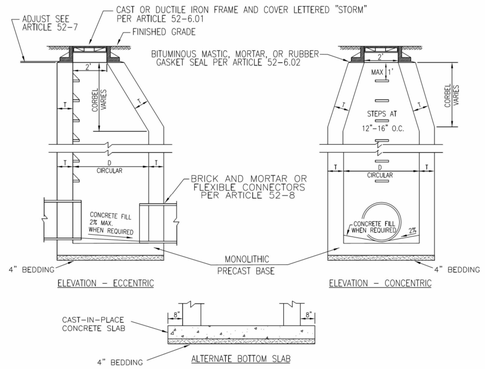
Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023
6	VILLAGE REVISION	05/04/23

TURF FIELD

DETAILS

22105 **C2.60**



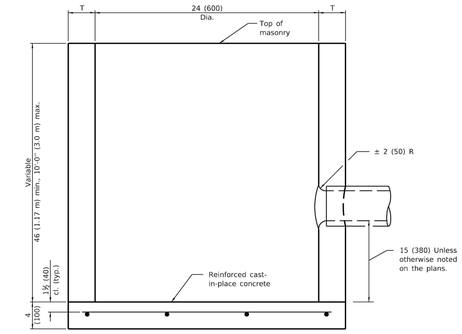
ALT. MATERIALS FOR WALLS	D	T (MIN.)
CONCRETE MASONRY UNITS	4 FEET 5 FEET 6 FEET	5 IN 5 IN 5 IN
BRICK MASONRY	4 FEET 5 FEET 6 FEET	8 IN 8 IN 8 IN
PRECAST REIN. CONCRETE SECT.	4 FEET 5 FEET 6 FEET	4 IN 5 IN 6 IN
CAST-IN-PLACE CONCRETE.	4 FEET 5 FEET 6 FEET	6 IN 6 IN 6 IN

MANHOLE STEPS WHEN REQUIRED, SHALL BE FURNISHED AND INSTALLED AS SHOWN ON THE PLAN IN ACCORDANCE WITH ARTICLE 52-5

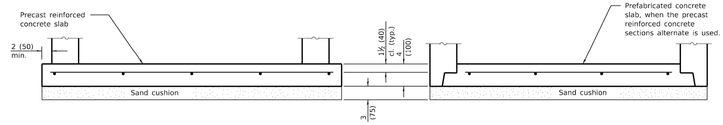
REFERENCE SECTION 52 FOR STORM SEWER MANHOLE SPECIFICATIONS

NOT TO SCALE

TECHNICAL GUIDANCE MANUAL	4/25/14
TYPICAL STORM MANHOLE "A"	STD. DWG. NO. 3stm
	PAGE NO. XX



ELEVATION



ALTERNATE BOTTOM SLAB

ALTERNATE MATERIALS FOR WALLS	T (min)
Precast Reinforced Concrete Section	3 (75)
Concrete Masonry Unit	5 (125)
Cast-in-Place Concrete	6 (150)
Brick Masonry	8 (200)

GENERAL NOTES

Bottom slabs shall be reinforced with a minimum of 0.27 sq. in./ft. (570 sq. mm/m) in both directions with a maximum spacing of 9 (230).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

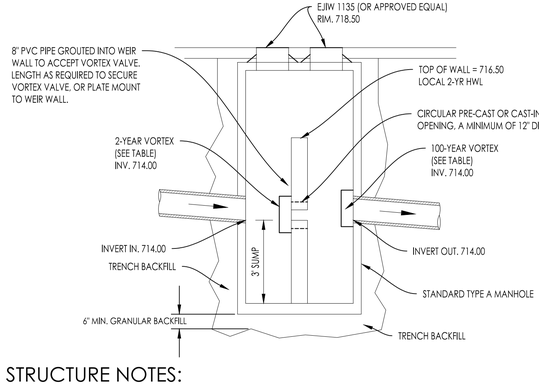
All dimensions are in inches (millimeters) unless otherwise shown.

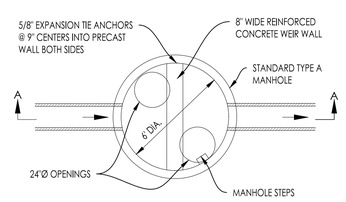
Illinois Department of Transportation
PASSED January 1, 2011
ENGINEER OF POLICY AND PROCEDURES Michael Brand
APPROVED January 1, 2011
ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED - 1-01-11

DATE	REVISIONS
1-1-11	Detailed rein. in slabs.
	Added max. limit to height.
	Added general notes.
1-1-09	Switched units to
	English (metric).

CATCH BASIN TYPE C

STANDARD 602011-02





VORTEX RESTRICTOR TABLE		
	2-YEAR	100-YEAR
MODEL #	SCL-0057-1416-0762-1416	SCL-0102-5663-1326-5663
OPENING DIAMETER (IN)	2.23	4.00
TARGET HEAD (FT)	2.50	4.35
TARGET FLOW (CFS)	0.05	0.20

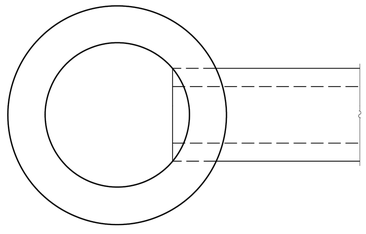
STRUCTURE NOTES:

1. STRUCTURE AND BAFFLE WALL FABRICATED USING REINFORCED PORTLAND CEMENT CONCRETE AND IN CONFORMANCE WITH ASTM C-478.
2. CATCH BASIN SECTIONS TO BE TOUNGUE ADN GROOVED.
3. NON-SHRINK GROUT OR CEMENT TO BE USED ON ALL PENETRATIONS INSIDE AND OUTSIDE OF THE STRUCTURE.
4. ALL PIPE PENETRATIONS TO BE CORED. RUBBER BOOTED AND INTERIOR GROUTED (NON-SHRINK) OR CEMENTED. ASTM C923 CONNECTORS IN COMBINED SEWER AREAS.
5. BAFFLE WALL PERMANENTLY INSTALLED AS PRECAST OR CAST-IN-PLACE
6. CAUTION: 1/4-INCH STEEL PLATE DIMENSIONS TO BEST FIT PROPOSED STRUCTURE. ANCHOR EMBEDMENT SHALL BE 3-INCHES MINIMUM.

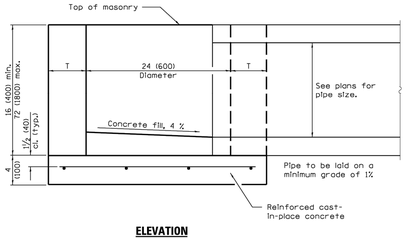
VORTEX NOTES:

1. VORTEX RESTRICTOR DESIGNED TO FIT INTO 8-INCH DIAMETER OUTFLOW PIPE.
2. VORTEX SHALL INCLUDE STAINLESS STEEL FIXINGS AND BEED BLAST FINISHED TO MAXIMIZE CORROSION RESISTANCE.
3. THE VORTEX RESTRICTOR CAN BE OBTAINED FROM HYDRO INTERNATIONAL AT 94 HUTCHINS DRIVE, PORTLAND, ME. (PH:207-756-6200).
4. INSERT THE PLATE MOUNTED RESTRICTOR WITH THE OPENING DOWN. UPON TIGHTENING OF THE 2 BOLTS ON THE FACE OF THE RESTRICTOR. THE RUBBER O-RINGS WILL PROVIDE A WATER- TIGHT SEAL.
3. INSERT THE PLUSH-ON MOUNTED RESTRICTOR WITH THE OPENING DOWN. THE RUBBER O-RINGS WILL PROVIDE A WATER- TIGHT SEAL.
4. CONTRACTOR TO PULL ON INSTALLED RESTRICTOR TO VERIFY THAT A TIGHT FIT IS MADE.
5. CONTRACTOR TO VERIFY WITH SURVEYOR THAT INSTALLED PROPOSED VORTEX RESTRICTOR INVERT(S) NOT HIGHER THAN THE BOTTOM OF DETENTION VAULT TO PREVENT LOSING ANY STORMWATER DETENTION VOLUME.

OUTLET CONTROL STRUCTURE
NOT TO SCALE

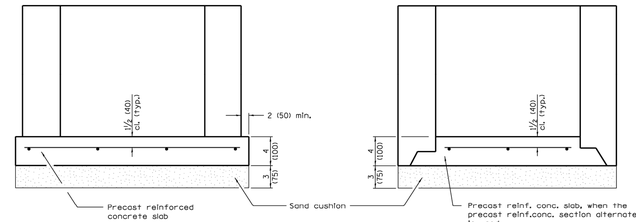


PLAN



ELEVATION

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8 (200)
CAST-IN-PLACE CONCRETE	6 (150)
CONCRETE MASONRY UNIT	5 (125)
PRECAST REINFORCED CONCRETE SECTION	3 (75)



ALTERNATE METHODS

GENERAL NOTES

Bottom slabs shall be reinforced with a minimum of 0.24 sq. in./ft. (510 sq. mm/m) in both directions with a maximum spacing of 10 (250).

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation
PASSED January 1, 2014
ENGINEER OF POLICY AND PROCEDURES Michael Brand
APPROVED January 1, 2014
ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED - 14-1-1 (CBP001)

DATE	REVISIONS
1-1-14	Increased height to
	72 (1800) maximum.
1-1-11	Detailed rein. in slabs.
	Added max. limit to height.
	Added general notes.

INLET – TYPE A

STANDARD 602301-04

D230 INNOVATION • EMPATHY • LEADERSHIP

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IL Design Firm: 184006777-0002

Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

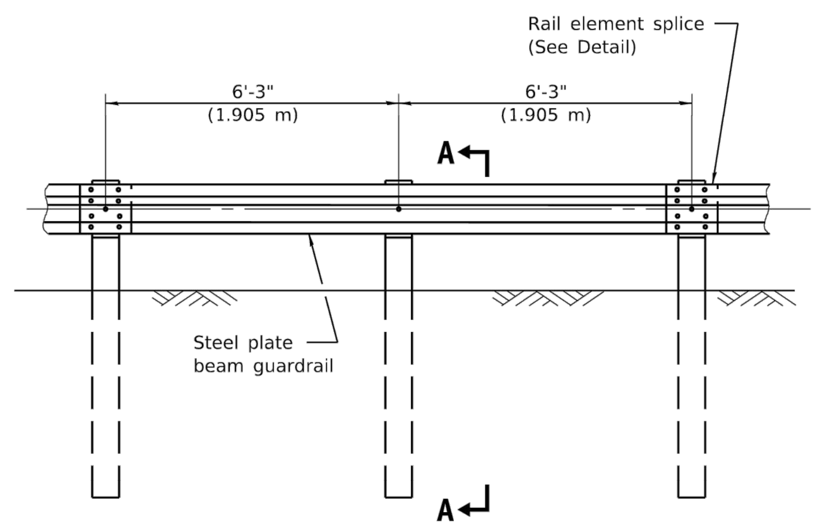
NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023

TURF FIELD

DETAILS

22105 **C2.61**

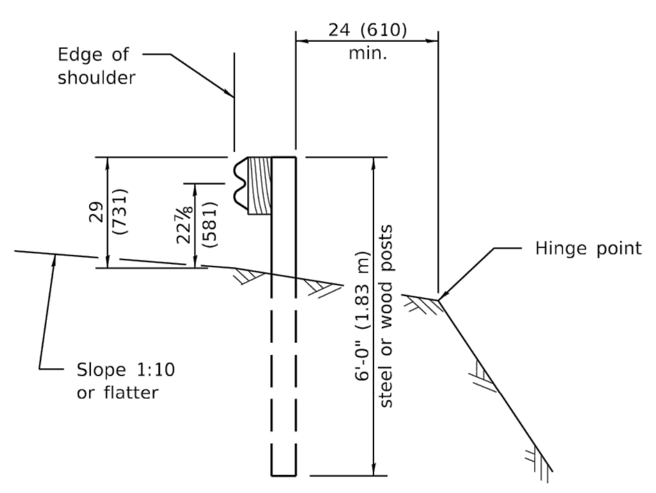
RTM PROJ. 23.SGC.C01



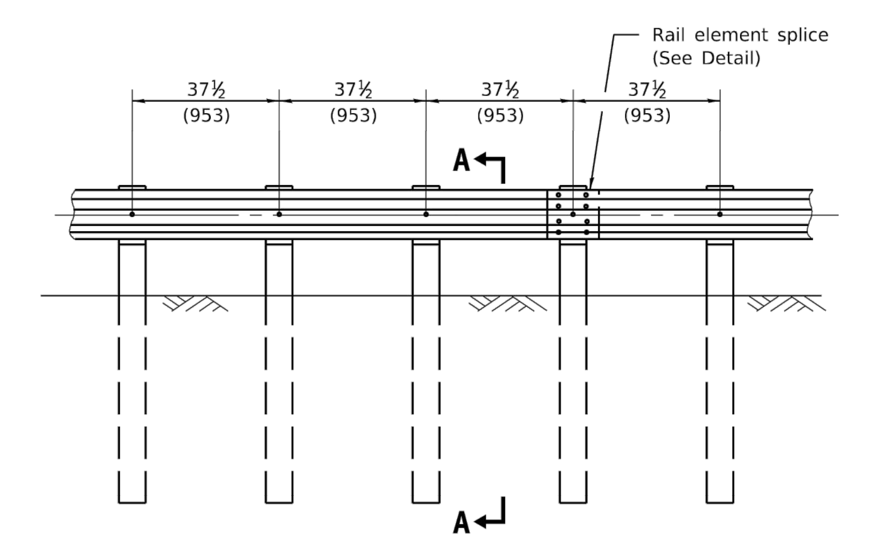
ELEVATION

TYPE A

6'-3" (1.905 m) Typical post spacing



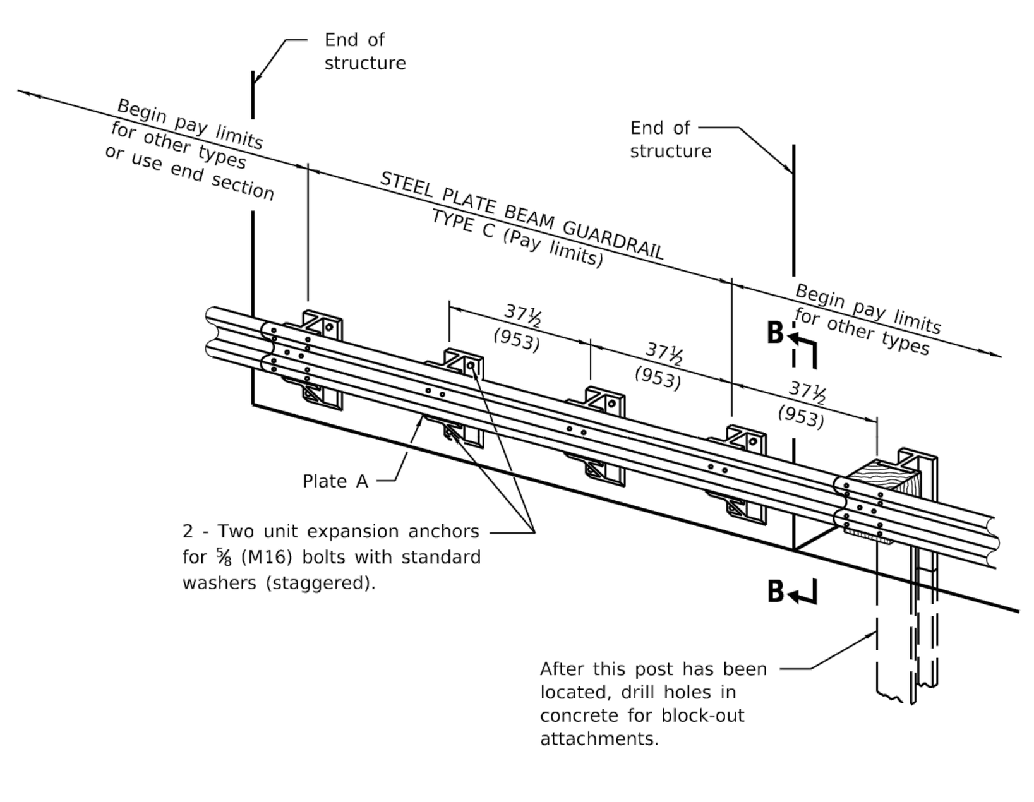
SECTION A-A



ELEVATION

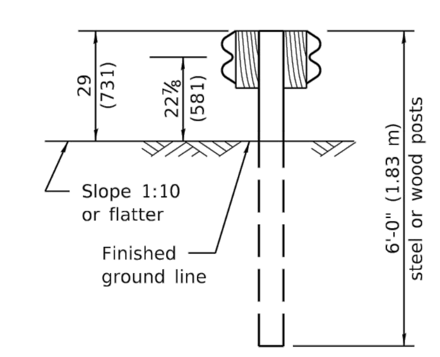
TYPE B

37½ (953) Closed post spacing

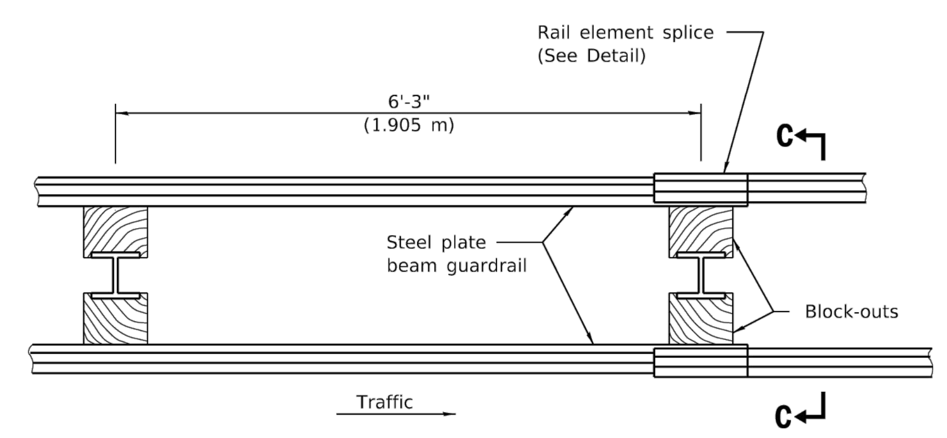


TYPE C

37½ (953) Block-out spacing



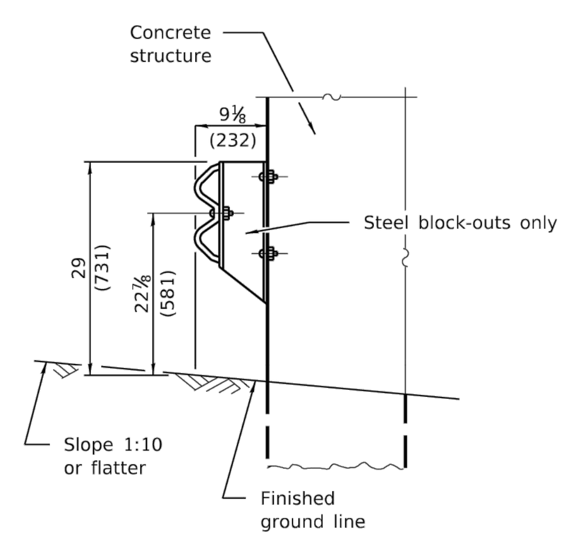
SECTION C-C



PLAN

TYPE D

Double steel plate beam guardrail
6'-3" (1.905 m) typical post spacing



SECTION B-B

GENERAL NOTES

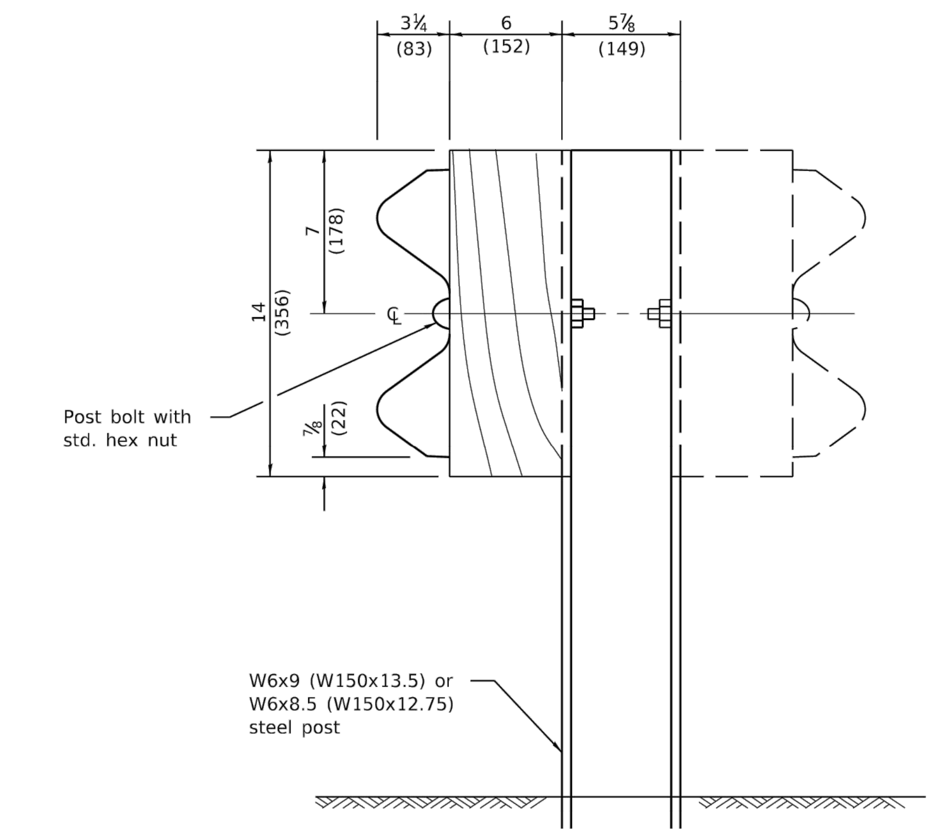
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise shown.

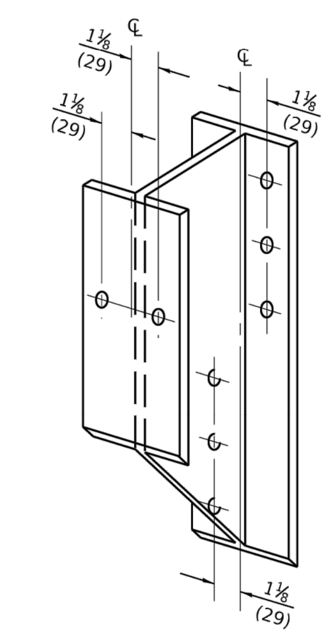
DATE	REVISIONS
1-1-12	Revised guardrail height.
	Modified table on sh. 4.
	Renamed standard.
1-1-10	Changed post length
	from 6'-9'' to 6'-0''.
	Modified table on sh. 4.

Illinois Department of Transportation
PASSED January 1, 2012
ENGINEER OF LOCAL ROADS AND STREETS
APPROVED January 1, 2012
ENGINEER OF DESIGN AND ENVIRONMENT

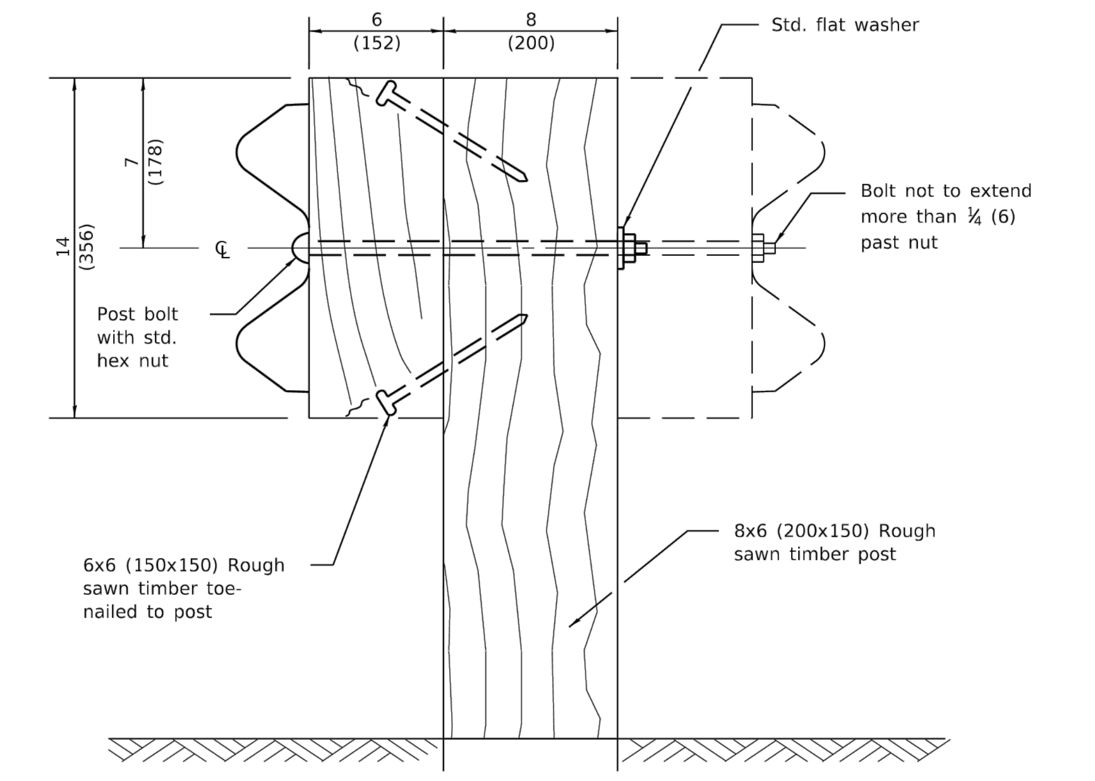
STEEL PLATE BEAM GUARDRAIL
29'' (731mm) HEIGHT
(Sheet 1 of 4)
STANDARD B.L.R. 26-3



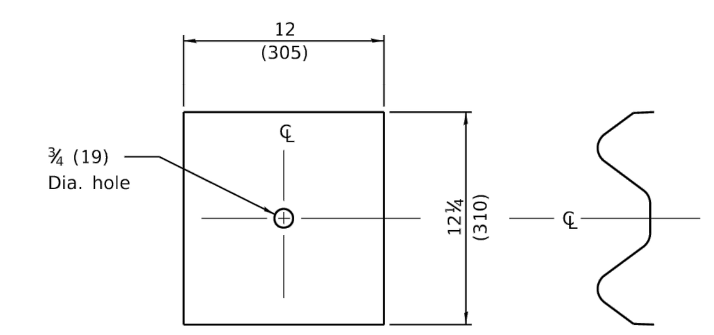
STEEL POST CONSTRUCTION



STEEL BLOCK-OUT DETAIL

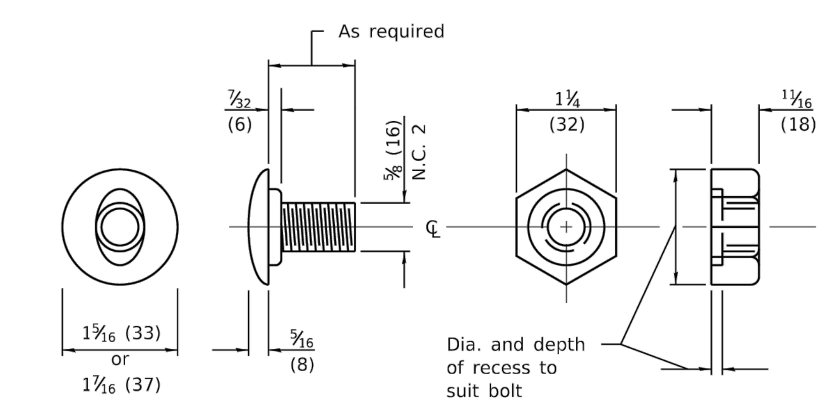


WOOD POST CONSTRUCTION



NOTE
Plate A shall be placed between rail element and block-out at non-splice mounting points only when steel block-outs are used.

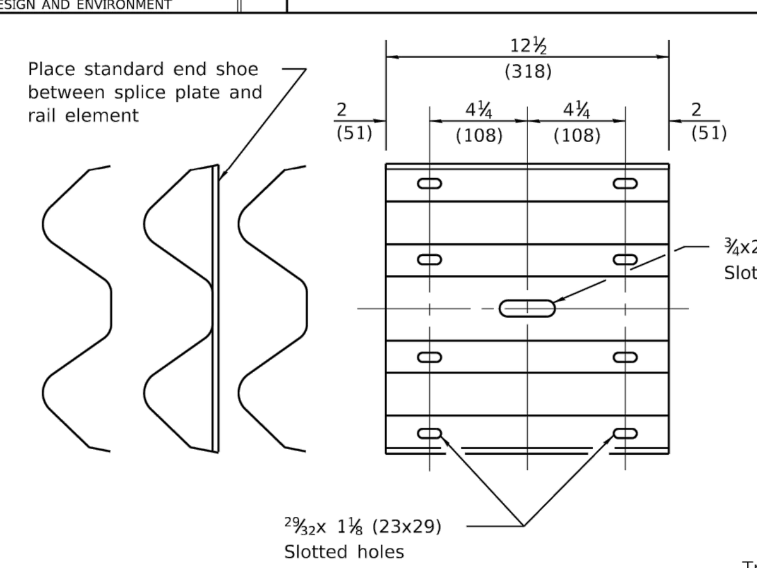
PLATE A



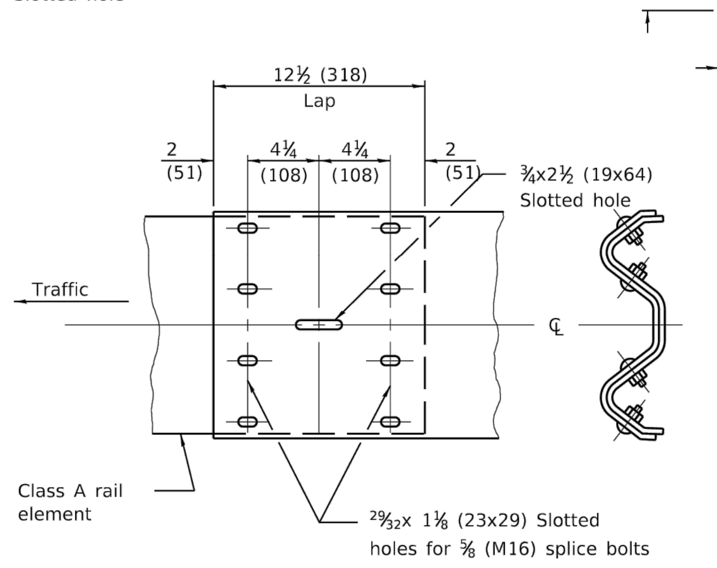
POST OR SPLICE BOLT & NUT

Illinois Department of Transportation
PASSED January 1, 2012
ENGINEER OF LOCAL ROADS AND STREETS
APPROVED January 1, 2012
ENGINEER OF DESIGN AND ENVIRONMENT

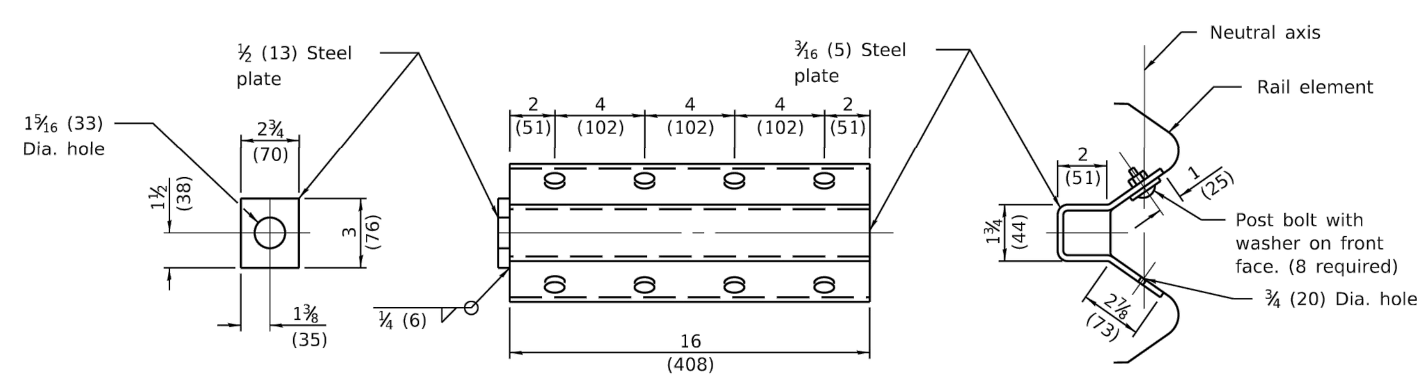
STEEL PLATE BEAM GUARDRAIL
29'' (731mm) HEIGHT
(Sheet 2 of 4)
STANDARD B.L.R. 26-3



SPLICE PLATE

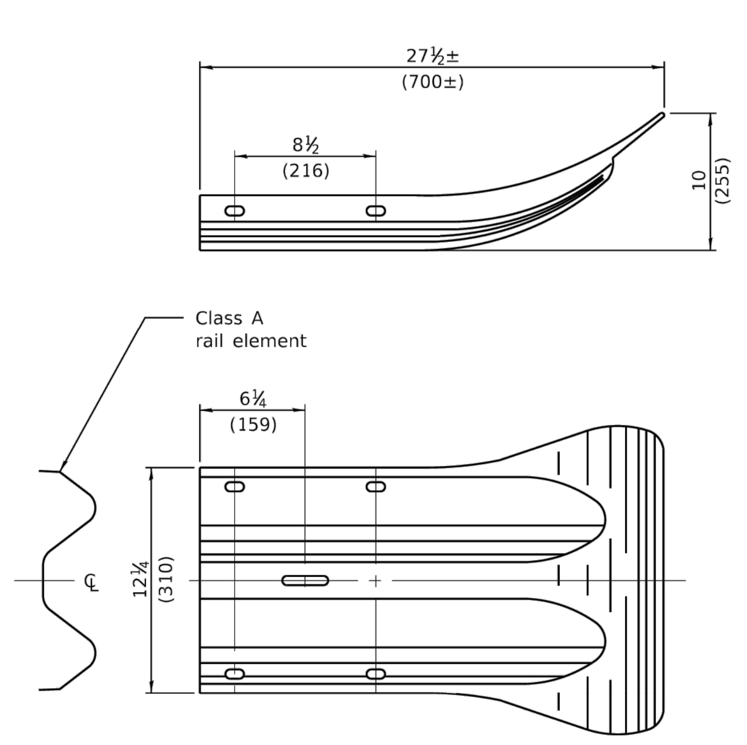


RAIL ELEMENT SPLICE

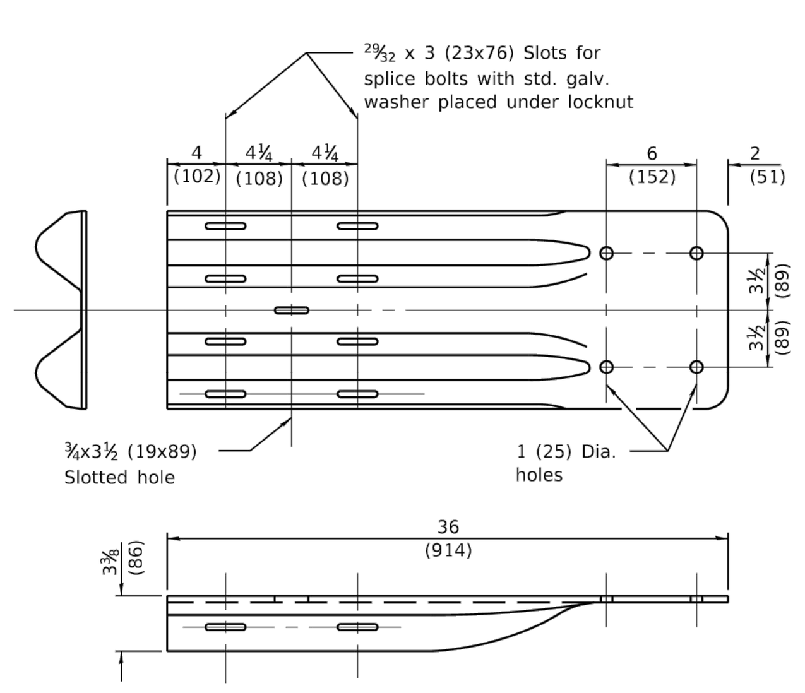


NOTE
Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

ANCHOR PLATE T DETAILS



END SECTION

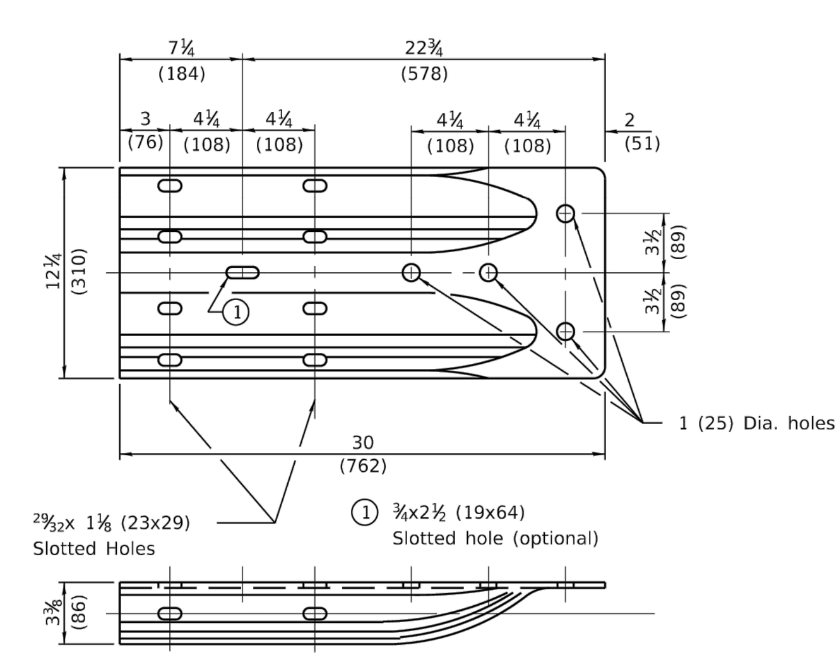


NOTE
When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.

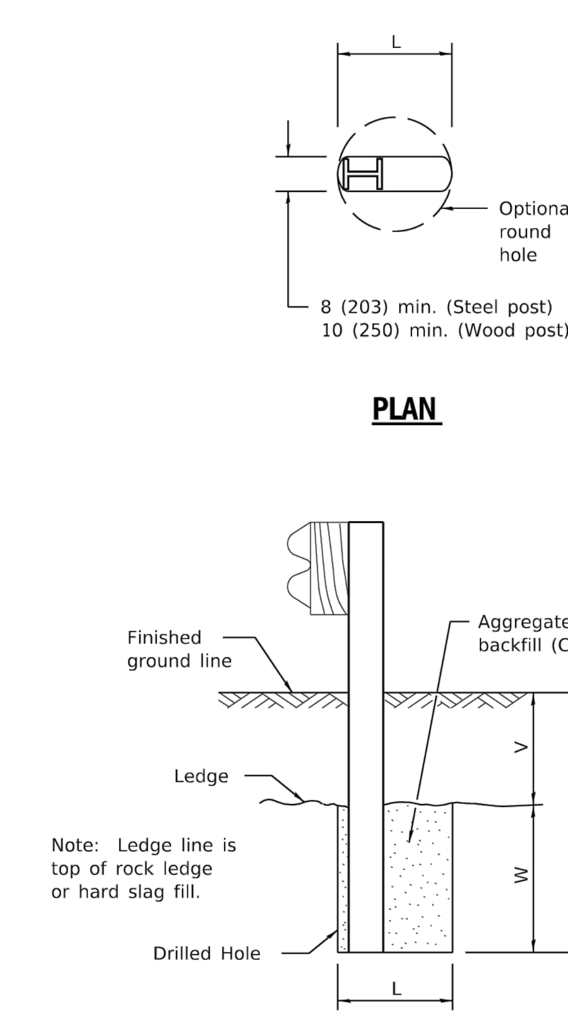
END SHOE



ALTERNATE END SHOE

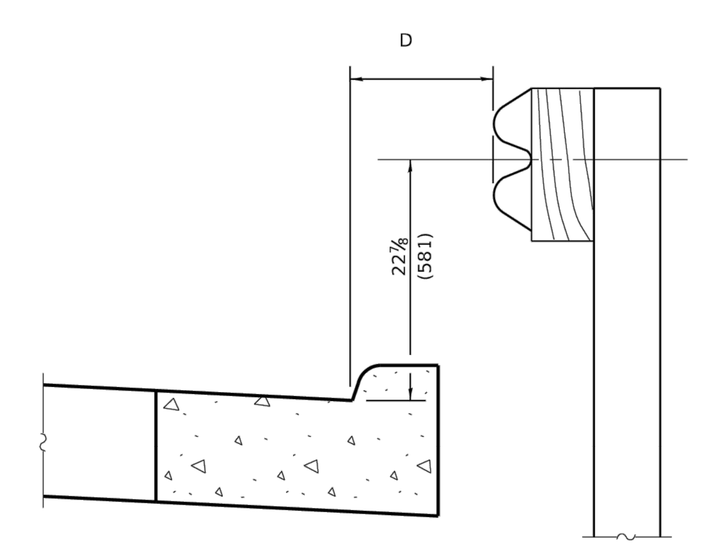
Illinois Department of Transportation
PASSED January 1, 2012
ENGINEER OF LOCAL ROADS AND STREETS
APPROVED January 1, 2012
ENGINEER OF DESIGN AND ENVIRONMENT

STEEL PLATE BEAM GUARDRAIL
29'' (731mm) HEIGHT
(Sheet 3 of 4)
STANDARD B.L.R. 26-3



ELEVATION

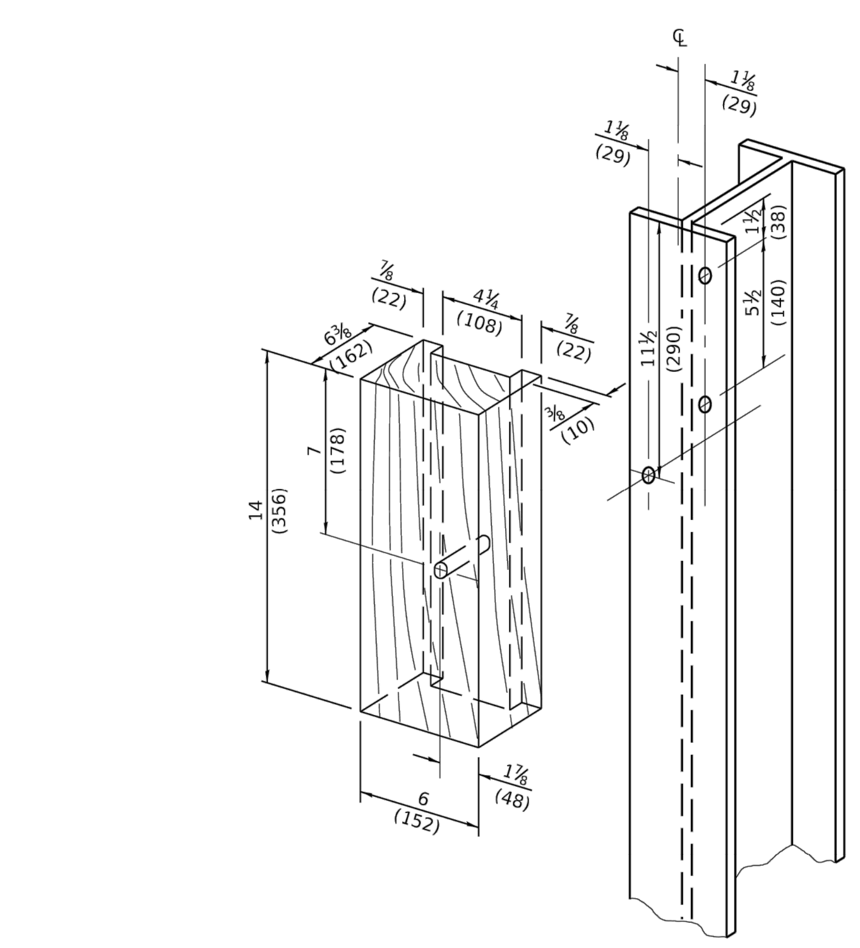
FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



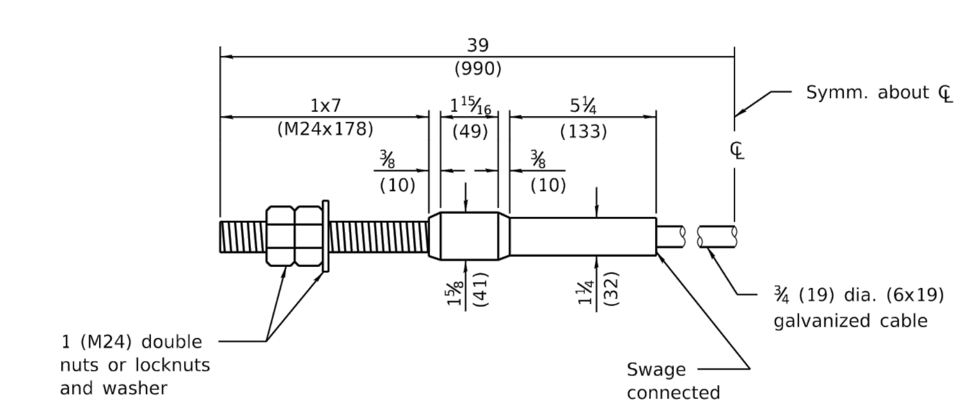
Note:
If it is necessary for D to be more than 12 (300) and less than 10'-0'' (3.0 m) Type M-2 (M-5) curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

GUARDRAIL PLACED BEHIND CURB
(D = 0 desirable to 12 (300) maximum)

V	W	L	
		Steel Post	Wood Post
0 - 16⅛ (0 - 410)	24 (610)	21 (530)	23 (580)
>16⅛ - 28⅛ (>410 - 714)	12 (305)	8 (203)	10 (250)
>28⅛ - 38⅝ (>714 - 981)	12 - 0 (305 - 0)	8 (203)	10 (250)



WOOD BLOCK-OUT AND STEEL POST DETAILS



CABLE ASSEMBLY

(40,000 lbs. (18,100 kg) min. breaking strength)
Tighten to taut tension.

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Synthetic Turf Fields at Andrew and Sandburg High Schools - Sitework

Consolidated High School District 230
15100 South 94th Avenue, Orland Park, Illinois 60462

NO	ISSUE	DATE
	CONSTRUCTION	06/26/2023

TURF FIELD

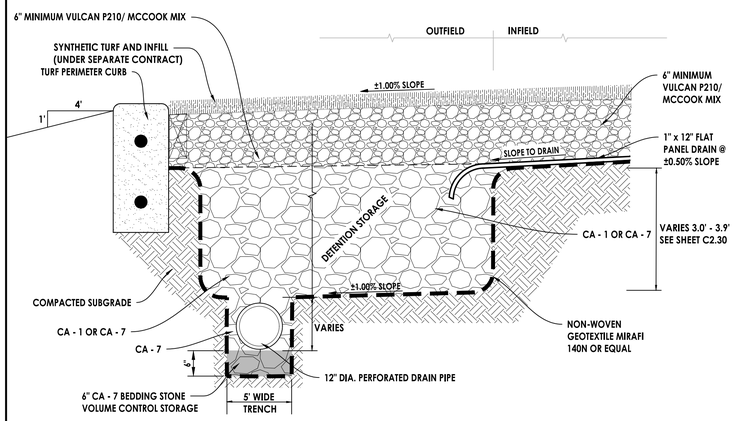
DETAILS

22105

C2.62

RTM PROJ. 23.SGC.C01

CONTRACT NOTE:
SYNTHETIC TURF MATERIALS AND INSTALLATION UNDER SEPERATE CONTRACT. CONTRACTOR REQUIRED TO PROVIDE DRAINAGE SYSTEM AND COMPACTED AGGREGATE TURF BASE AND FINE GRADING, PER TURF MANUFACTURER'S REQUIREMENTS.



VOLUME CONTROL SUMMARY			
VOLUME TYPE	POROSITY	MWDIA VOLUME	STORAGE VOLUME
AGGREGATE COURSE AT BOTTOM OF STORM SEWER TRENCH	0.36	6" DEEP X 369 LF X 5' WIDE	0.008

TYPICAL SECTION THROUGH AGGREGATE DETENTION STORAGE
NOT TO SCALE

PROJECT SITE SUMMARY

PROPERTY LEGAL DESCRIPTION: SECTION 33, TOWNSHIP 37N, RANG 12E
PROPERTY ADDRESS: 13300 S LA GRANGE ROAD, ORLAND PARK, IL 60462
PROPERTY INDEX NUMBER: 23-33-401-016-0000, 23-33-401-013-0000

DETENTION SERVICE AREA SUMMARY (TURF SOFTBALL)			
Surface	Area (sf)	Area (ac)	CN
Detention Service Area	57419	1.318	91.5
DSA - Impervious	3931	0.090	98
DSA - Synthetic Turf	50105	1.150	91
DSA - Non-Compact Gravel	3383	0.078	91
DSA - Total Area Check	57419	1.318	

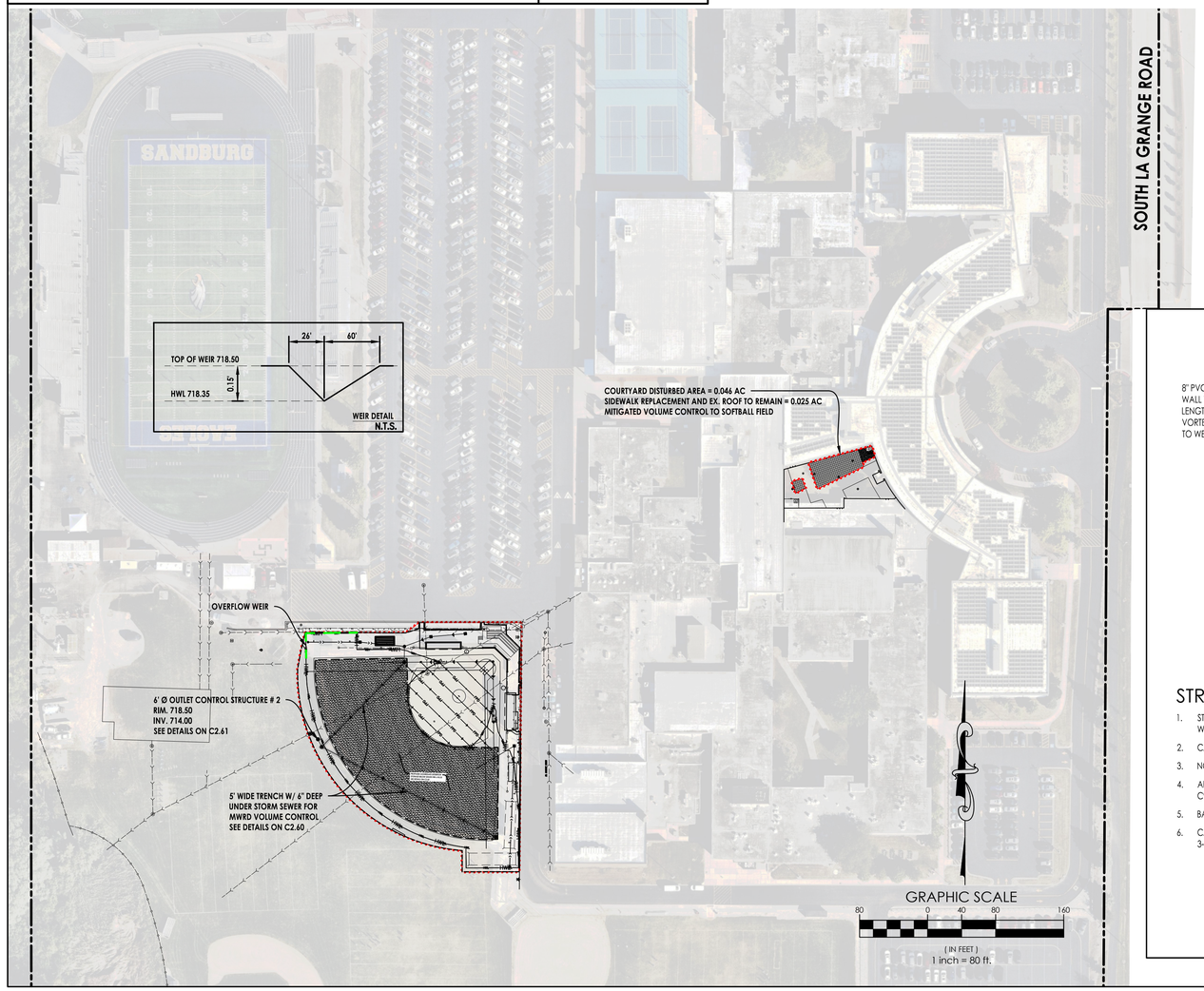
DEVELOPMENT AREA SUMMARY (TURF SOFTBALL + COURTYARD)			
Total Project Area (Turf+Courtyard)	60888	1.398	90.8
New Synthetic Turf	50105	1.150	91
New Impervious	3133	0.072	98
New Permeable Paver-Courtyard	1785	0.041	91
Sidewalk Replacement-Courtyard	231	0.005	98
Disturbed Grass around outfield	3455	0.079	80
Ex. Impervious to Remain	310	0.007	98
Ex. Disturbed Gravel to be reset	1869	0.043	91
Project Area - Total Area Check	60888	1.398	
Ex. Dugout Roofs & Wall to remain	897	0.021	98

VOLUME CONTROL AND DETENTION ON-SITE MITIGATION AREA SUMMARY			
Courtyard Permeable Pavers, Not Considered Impervious per WMO 5.3.2	1785	0.041	
Sidewalk Replacement to be Mitigated On-Site	231	0.005	
Ex. Impervious Roof to Remain (Mitigate VC control for Courtyard)	853	0.020	Greater than 231, Okay

WMO VOLUME CONTROL SUMMARY			
Surface	Area (sf)	Area (ac)	CN
PROJECT AREA	60888	1.398	90.8
New Impervious	3364	0.077	
Volume Control Required	280	0.006	
Volume Control Provided	332	0.008	

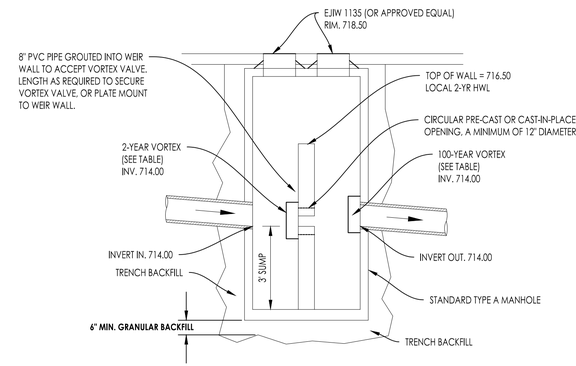
WMO DETENTION SUMMARY			
DETENTION SERVICE AREA	57419	1.318	90.8
Little Calumet Allowable Release Rate	0.25 cfs/ac.	0.33 cfs	
Local 100-Year Allowable Release Rate	0.15 cfs/ac.	0.20 cfs	
Actual Release Rate	0.15 cfs/ac	0.20 cfs	91
Detention Storage Required	0.61 ac-ft		
Detention Storage Provided	0.66 ac-ft		

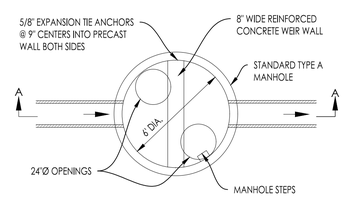
LOCAL DETENTION SUMMARY (ORLAND PARK)			
DETENTION SERVICE AREA	57419	1.318	90.8
Local 2-YR Allowable Release Rate	0.04 cfs/ac.	0.05 cfs	
Actual 2-YR Release Rate	0.05 cfs	2-YR HWL =	716.50
2-YR Detention Storage Required	0.19 ac-ft		
2-YR Detention Storage Provided	0.24 ac-ft		
Local 100-Year Allowable Release Rate	0.15 cfs/ac.	0.20 cfs	
Actual 100-YR Release Rate	0.20 cfs	100-YR HWL =	718.35
100-YR Detention Storage Required	0.62 ac-ft		
100-YR Detention Storage Provided	0.67 ac-ft		



LEGEND

- DISTURBED AREA
- NWL NWL — PROP HIGH WATER LEVEL
- OVERFLOW WEIR
- VOLUME CONTROL AREA: DRAIN PIPE 4" BEDDING TRENCH
- DETENTION STORAGE: CA-1 OR CA-7 AGGREGATE BELOW TURF FIELD





VORTEX RESTRICTOR TABLE		
	2-YEAR	100-YEAR
MODEL #	SCL-0057-1416-0762-1416	SCL-0102-5663-1326-5663
OPENING DIAMETER (IN)	2.23	4.00
TARGET HEAD (FT)	2.50	4.35
TARGET FLOW (CFS)	0.05	0.20

STRUCTURE NOTES:

1. STRUCTURE AND BAFFLE WALL FABRICATED USING REINFORCED PORTLAND CEMENT CONCRETE AND IN CONFORMANCE WITH ASTM C-478.
2. CATCH BASIN SECTIONS TO BE TOUNGUE ADN GROOVED.
3. NON-SHRINK GROUT OR CEMENT TO BE USED ON ALL PENETRATIONS INSIDE AND OUTSIDE OF THE STRUCTURE.
4. ALL PIPE PENETRATIONS TO BE CORED, RUBBER BOOTED AND INTERIOR GROUTED (NON-SHRINK) OR CEMENTED. ASTM C923 CONNECTORS IN COMBINED SEWER AREAS.
5. BAFFLE WALL PERMANENTLY INSTALLED AS PRECAST OR CAST-IN-PLACE
6. CAUTION: 1/4-INCH STEEL PLATE DIMENSIONS TO BEST FIT PROPOSED STRUCTURE. ANCHOR EMBEDMENT SHALL BE 3-INCHES MINIMUM.

VORTEX NOTES:

1. VORTEX RESTRICTOR DESIGNED TO FIT INTO 8-INCH DIAMETER OUTFLOW PIPE.
2. VORTEX SHALL INCLUDE STAINLESS STEEL FIXINGS AND BEED BLAST FINISHED TO MAXIMIZE CORROSION RESISTANCE.
3. THE VORTEX RESTRICTOR CAN BE OBTAINED FROM HYDRO INTERNATIONAL AT 94 HUTCHINS DRIVE, PORTLAND, ME. (PH:207-756-6200).
4. INSERT THE PLATE MOUNTED RESTRICTOR WITH THE OPENING DOWN. UPON TIGHTENING OF THE 2 BOLTS ON THE FACE OF THE RESTRICTOR, THE RUBBER O-RINGS WILL PROVIDE A WATER- TIGHT SEAL.
3. INSERT THE PUSH-ON MOUNTED RESTRICTOR WITH THE OPENING DOWN. THE RUBBER O-RINGS WILL PROVIDE A WATER- TIGHT SEAL.
4. CONTRACTOR TO PULL ON INSTALLED RESTRICTOR TO VERIFY THAT A TIGHT FIT IS MADE.
5. CONTRACTOR TO VERIFY WITH SURVEYOR THAT INSTALLED PROPOSED VORTEX RESTRICTOR INVERT(S) NOT HIGHER THAN THE BOTTOM OF DETENTION VAULT TO PREVENT LOSING ANY STORMWATER DETENTION VOLUME.

OUTLET CONTROL STRUCTURE
NOT TO SCALE

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TURF FIELD

MWRD DRAINAGE EXHBIHIT

22105 **C2.70**

PERPETUAL MAINTENANCE REQUIREMENTS:

THE SCHOOL DISTRICT 230, WITH FACILITIES AS SHOWN ON THIS EXHIBIT, SHALL ASSUME RESPONSIBILITY FOR THE FOLLOWING PERPETUAL MAINTENANCE ACTIVITIES:

STORMWATER MANAGEMENT & VOLUME CONTROL FACILITIES

- ALL COMPONENTS OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE CHECKED MONTHLY BETWEEN MARCH AND NOVEMBER AND MAINTAINED AS NECESSARY TO ENSURE PROPER PERFORMANCE. IT IS CRITICAL THAT ALL INFLOWS AND OUTFLOWS TO THE DETENTION FACILITY AREA CLEAN AND PERFORMING AS DESIGNED. IN ADDITION, THE DESIGN VOLUME OF THE DETENTION FACILITY SHALL ALSO BE MAINTAINED. INSPECTIONS FOR THE FOLLOWING SPECIFIC ITEMS SHOULD BE CONDUCTED MONTHLY BETWEEN MARCH AND NOVEMBER:

OUTLET CONTROL STRUCTURE

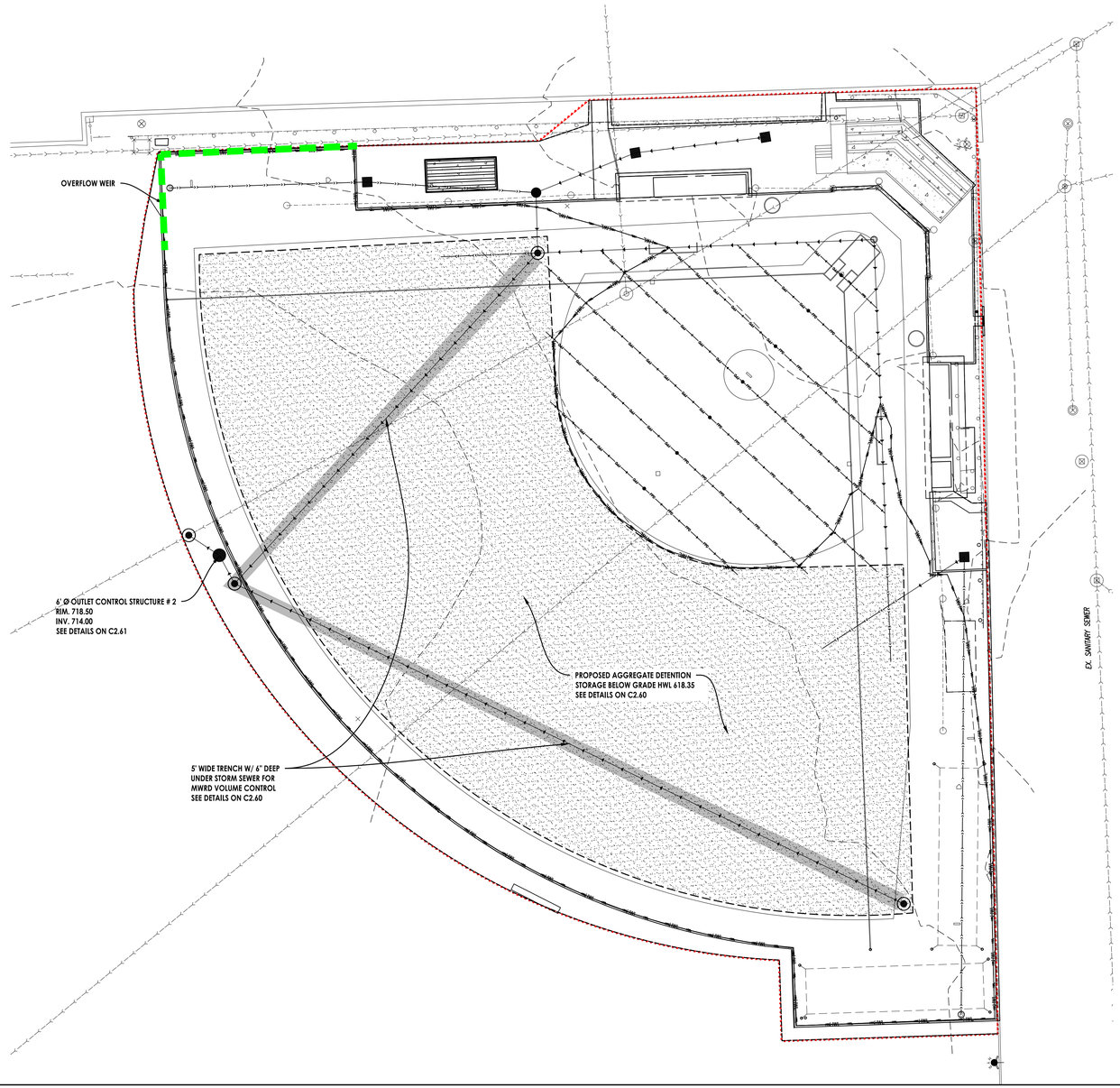
- INSPECT RESTRICTOR AND REMOVE DEBRIS IF CLOGGED OR DISCHARGE REDUCED
- REMOVE ACCUMULATED SEDIMENT AT OUTLET
- ANY ICE DAMAGE TO OUTLET PIPE, REPAIR IF NECESSARY
- CONDITION OF TRASH TRACKS, REMOVE DEBRIS
- OUTLET BACKFLOW PREVENTER STRUCTURE

STORMWATER COLLECTION SYSTEM

THE OWNER SHALL PERFORM MONTHLY INSPECTIONS OF ALL COMPONENTS OF THE STORMWATER COLLECTION SYSTEM. THE MONTHLY INSPECTION SHALL OCCUR BETWEEN MARCH AND NOVEMBER AND INCLUDE THE FOLLOWING SPECIFIC AREAS OF CONCERN:

STORM SEWERS, INLETS/MANHOLES

- REMOVE ACCUMULATED LEAVES AND OTHER DEBRIS FROM GRATES.
- RESET COVERS/LIDS ON AS-NEEDED BASIS.
- REMOVE ACCUMULATED SEDIMENT FROM MANHOLE BOTTOM WHEN 50% OF SUMP IS FILLED.
- VISUALLY INSPECT PIPES BY REMOVING MANHOLE LIDS, MAKING REPAIRS AS NECESSARY.
- STORM SEWERS AND CULVERTS SHALL BE CHECKED FOR SILTATION DEPOSITS AT INLETS, OUTLETS, AND WITHIN THE CONDUIT, CLEAN OUT IS NECESSARY.
- RESTORE RIPRAP AT OUTFALLS IF EROSION OBSERVED
- RESTORE RIPRAP AT OUTFALLS
- REPLANT AND RESEED ANY ERODED AREAS.



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- VOLUME CONTROL AREA: DRAIN PIPE 4" BEDDING TRENCH
- DETENTION STORAGE: CA-1 OR CA-7 AGGREGATE BELOW TURF FIELD

EXHIBIT - R

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

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TURF FIELD

MAINTENANCE PLAN

22105 **C2.71**

RTM PROJ. 23.SGC.C01