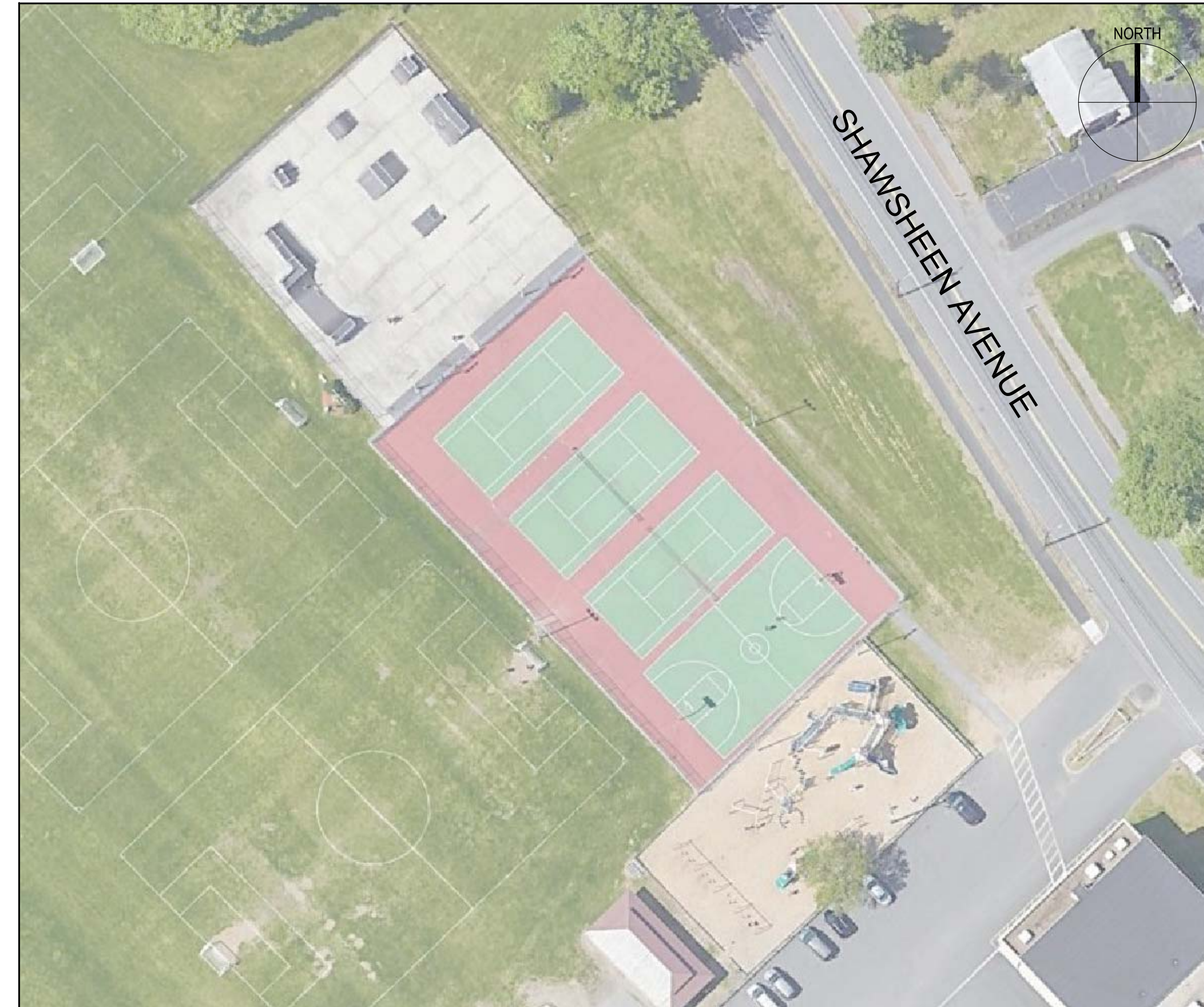


SHAWSHEEN ELEMENTARY SCHOOL TENNIS COURT RECONSTRUCTION

298 SHAWSHEEN AVENUE
WILMINGTON, MA 01887

PREPARED FOR
TOWN OF WILMINGTON
121 GLEN ROAD
WILMINGTON, MA 01887

DRAWING NO	SHEET NO	TITLE
G001	1 OF 11	COVER SHEET
G002	2 OF 11	NOTES AND LEGEND
C001	3 OF 11	EXISTING CONDITIONS PLAN
C002	4 OF 11	DEMOLITION AND EROSION CONTROL PLAN
C101	5 OF 11	LAYOUT AND MATERIALS PLAN
C201	6 OF 11	GRADING AND DRAINAGE PLAN
C501	7 OF 11	DETAIL SHEET 1 OF 5
C502	8 OF 11	DETAIL SHEET 2 OF 5
C503	9 OF 11	DETAIL SHEET 3 OF 5
C504	10 OF 11	DETAIL SHEET 4 OF 5
C505	11 OF 11	DETAIL SHEET 5 OF 5



SITE MAP
SCALE: 1" = 40'



LOCATION MAP
SCALE: 1" = 250'



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DRAWING SCALE	N.T.S.		

GRAPHIC SCALE

SHEET TITLE

COVER SHEET

DRAWING NO.

G001

1 OF 11

E

D

C

B

A

DEMOLITION NOTES

- DEMOLITION TO COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE STARTING SELECTIVE DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
- THE OWNER MAY OCCUPY PORTIONS OF THE BUILDING IMMEDIATELY ADJACENT TO SELECTIVE DEMOLITION AREAS. CONDUCT SELECTIVE DEMOLITION SO THAT OWNERS'S OPERATIONS WILL NOT BE DISRUPTED. PROVIDE NOT LESS THAN 72 HOURS NOTICE TO OWNER OF ACTIVITIES (IF ANY) THAT MAY AFFECT THEIR OPERATIONS.
- SURVEY THE CONDITION OF THE SITE TO DETERMINE WHETHER REMOVING ANY ELEMENT MIGHT RESULT IN UNDESIRABLE DAMAGE OF ANY PORTION OF ADJACENT FACILITIES DURING SELECTIVE DEMOLITION.
- MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.
- CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, PARKING LOTS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS, FACILITIES, AND SITE IMPROVEMENTS TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
- USE WATER MIST AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS.
- REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITION.
- DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED BY NEW CONSTRUCTION AND AS INDICATED. CONTRACTOR TO BE RESPONSIBLE FOR ANY CUTTING AND PATCHING THAT IS REQUIRED.
- PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.
- DO NOT BURN DEMOLISHED MATERIALS.
- TRANSPORT DEMOLISHED MATERIALS OFF OWNER'S PROPERTY AND LEGALLY DISPOSE OF THEM, IF NOT DESIGNATED TO BE SALVAGED BY THE OWNER OR REUSED.
- IN AREAS WHERE BITUMINOUS CONCRETE IS TO BE REMOVED, THE EDGE OF ANY BITUMINOUS CONCRETE TO REMAIN MUST BE A CLEAN SAW-CUT EDGE.

EROSION CONTROL NOTES

- THE CONTRACTOR SHALL FILE A NPDES CONSTRUCTION GENERAL PERMIT AS REQUIRED BY THE EPA AT LEAST 14 DAYS PRIOR TO GROUND BREAKING. NPDES PERMIT AND PLANS SHALL BE KEPT ON SITE FOR REVIEW AT ALL TIMES FOR THE DURATION OF CONSTRUCTION.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STATE REGULATIONS AND ALL TOWN REGULATIONS AND PERMIT CONDITIONS.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR EARTHWORK OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED SILTATION FENCES TO PREVENT AND/OR CONTROL SILTATION AND EROSION. OTHERWISE SPOIL MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND DISPOSED OF LEGALLY AND IN CONFORMANCE TO ALL TOWN REGULATIONS.
- ALL EROSION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED, CLEANED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION. IN ADDITION, INSPECTION SHALL TAKE PLACE AFTER EACH RAINFALL EVENT AND BEFORE FORECASTED RAIN.
- ALL SEDIMENTS MUST BE REMOVED PRIOR TO REACHING THE EXISTING DRAINAGE SYSTEMS AND/OR ANY ENVIRONMENTAL RESOURCE AREAS.
- THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES EXTRA SILTATION FENCING FOR INSTALLATION AT THE DIRECTION OF THE ENGINEER OR THE OWNER TO MITIGATE ANY EMERGENCY CONDITION.
- THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED OUTSIDE OF CONSTRUCTION AREA MUST BE REMOVED IMMEDIATELY.
- EROSION CONTROL DEVICES MAY BE ADDED OR REDUCED IN THE FIELD AS DIRECTED BY THE OWNER/ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR REESTABLISHING ANY EROSION CONTROL DEVICE WHICH THEY DISTURB. THE CONTRACTOR SHALL NOTIFY THE OWNER/ENGINEER OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL MEASURES WHICH MAY LEAD TO UNAUTHORIZED DISCHARGE OR STORM WATER POLLUTION, SEDIMENTATION OR OTHER POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO, EXCESS CONCRETE DUMPING OR CONCRETE RESIDUE, POINTS, SOLVENTS, GREASES, FUEL AND LUBE OIL, PESTICIDES, AND SOLID WASTE MATERIALS.

GRADING NOTES

- ALL GRADING SHALL MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND LOCAL BUILDING AND ACCESSIBILITY CODES. IN GENERAL, GRADING OF SIDEWALKS SHALL NOT EXCEED 2.0% CROSS SLOPE AND 5.0% RUNNING SLOPE. GRADING OF ADA PARKING STALLS AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ANY DIRECTION AND GRADING OF PLAZA AND GATHERING AREAS SHALL NOT EXCEED 2.0% IN ANY DIRECTION. GRADING ON SIDEWALK CURB RAMPS AND OTHER ACCESSIBLE RAMPS SHALL NOT EXCEED 8.0%. ALL AREAS SHALL PROVIDE POSITIVE DRAINAGE AS TO NOT POOL WATER. MINIMUM SLOPES SHALL BE 1.0% UNLESS OTHERWISE NOTED.
- ALL PROPOSED CONTOURS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND DESIGNED GRADIENT ARE TO BE USED IN THE EVENT OF ANY DISCREPANCIES.
- GRADING SHALL BE PERFORMED TO ALLOW WATER TO FLOW AWAY FROM BUILDING STRUCTURES, AND TO NOT ALLOW PUDDLING OF WATER ANYWHERE ON SITE.
- MINOR ADJUSTMENTS TO FINISH GRADE TO ACCOMPLISH DRAINAGE FLOW ARE ACCEPTABLE, IF NECESSARY, UPON PRIOR APPROVAL OF ENGINEER.
- NEW PAVEMENT SHALL BE FLUSH AT ANY JUNCTURE WITH EXISTING PAVEMENT.
- ALL EXCAVATIONS SHOULD BE STABILIZED BY CUTTING BACK SIDE SLOPES OR USING SHORING AND BRACING AS REQUIRED. ALL EXCAVATION AND SHORING SHALL BE DONE IN ACCORDANCE WITH OSHA STANDARDS AND MGL CH. 149 SECT. 129A.
- ANY DEWATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DISCHARGE OF SILTY OR OTHERWISE "DIRTY" WATER INTO DRAINAGE SYSTEM OR ANY BODY OF WATER, WETLAND OR RESOURCE AREA SHALL NOT BE PERMITTED.

GENERAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK. ALL EXISTING CONTROL POINTS AND BENCHMARKS HAVE BEEN PROVIDED ON THE EXISTING CONDITIONS PLANS. ANY ADDITIONAL CONTROL POINTS SHALL BE ESTABLISHED AND MAINTAINED BY THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS, AND CITY STANDARDS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE CITY STANDARDS AND REGULATIONS FOR USE ON THIS PROJECT.
- BARRICADING, TRAFFIC CONTROL, AND PROJECT SIGNS SHALL CONFORM TO ALL STATE, LOCAL REGULATIONS. AREA ADJACENT TO THE PROJECT SITE WILL BE IN USE DURING CONSTRUCTION AT VARIOUS TIMES. THE CONTRACTOR WILL PROVIDE ADEQUATE CONSTRUCTION FENCING DURING EACH PHASE OF THE PROJECT TO FULLY SECURE THE PROPOSED SITE SUBJECT TO OWNER APPROVAL. THE FENCING MAY NEED ADJUSTMENT AT VARIOUS TIMES WITHOUT CONTRACT MODIFICATION.
- THE GENERAL CONTRACTOR SHALL ENSURE THAT BUS TRANSPORTATION AND THE GENERAL TRAFFIC FLOW OF STUDENTS AND SCHOOL STAFF VIA THE SHAWSHEEN AVENUE ENTRANCE REMAINS UNIMPEDED THROUGHOUT THE DURATION OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS AND/OR CONNECTION FEES REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO THE SITE FROM EXISTING WATER UTILITIES ON THE PROPERTY VIA HOSE CONNECTIONS AND OTHER SUITABLE MEANS OF TRANSPORT.
- GENERAL CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AS APPLICABLE INCLUDING BUT NOT LIMITED TO ELECTRICAL, LIGHTING, AND GAS. THE CONTRACTOR ACKNOWLEDGES THAT ANOTHER CONTRACTOR WILL BE A UNDER A SEPARATE CONTRACT. THE CONTRACTOR WILL COORDINATE HIS EFFORTS IN GOOD FAITH, AND WORK IN HARMONY WITH THE OTHER CONTRACTOR. NO EXTRA WILL BE AWARDED DUE TO CONFLICTS BETWEEN CONTRACTORS.
- SUBSTITUTIONS AND APPROVAL OF "OR-EQUAL" PRODUCTS IN PLACE OF THOSE SPECIFIED WILL NOT BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER OR ENGINEER.

GENERAL UTILITY NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORD PLANS AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION OF THE BURIED ELECTRICAL LINE SUPPLYING THE EXISTING COURT LIGHTING IS UNKNOWN. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THIS ELECTRICAL LINE PRIOR TO THE START OF CONSTRUCTION AND SHALL NOTIFY THE ENGINEER IN WRITING OF ANY INTERFERENCE WITH PROPOSED CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OR RELOCATE THIS UTILITY LINE IF IN CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
- THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
- TRENCH EXCAVATIONS SHALL BE IN ACCORDANCE WITH ALL PROVISIONS OF OSHA PART 1926, SUBPART P -EXCAVATIONS, TRENCHES AND SHORING OF THE OCCUPATIONAL SAFETY AND HEALTH'S STANDARDS AND NECESSARY TRENCH SAFETY PLANS TO THE ENGINEER AND CITY FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.
- ALL DRAIN, WATER AND SANITARY SEWER PIPES INSTALLED WITHIN 10 FEET OF THE BUILDING (BY OTHERS) MUST BE PERMITTED AND INSTALLED BY A MASSACHUSETTS LICENSED PLUMBER.
- CONTRACTOR SHALL VERIFY ALL EXISTING INVERTS AND RIM ELEVATIONS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL ADJUST ALL UTILITY CASTINGS TO BE FLUSH WITH PROPOSED GRADE UNLESS OTHERWISE INDICATED ON PLAN.
- THE CONTRACTOR SHALL FIELD COORDINATE WITH THE ELECTRICAL ENGINEER TO DETERMINE EXACT POINT OF SERVICE CONNECTION. REFER TO THE SITE ELECTRICAL DRAWINGS FOR UTILITY SERVICE ENTRANCE LOCATIONS, SIZES, AND CIRCUITING.
- CONTRACTOR SHALL PURGE LIFTING HOLES ON ALL CONCRETE STRUCTURES.

LANDSCAPING NOTES

- ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
- ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED.
- ALL TREES MUST BE STRAIGHT-TRUNKED AND FULL-HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
- ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE BEFORE, DURING, AND AFTER INSTALLATION.
- ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
- ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) OF THE PLANTING AREAS AND LAWN UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE OWNER.
- THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.
- AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
- ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
- STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- ALL SHRUB, GROUND COVER AND SEASONAL COLOR ANNUAL PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH HARDWOOD MULCH TO A MINIMUM DEPTH OF FOUR INCHES.



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OWNER TOWN OF WILMINGTON 121 GLEN ROAD WILMINGTON, MA 01887

NO.	DATE	DESCRIPTION	BY

PROJECT NO.	718290
CADD FILE	718290_G001
DESIGNED BY	KFR
DRAWN BY	KFR
CHECKED BY	PS
DATE	3/05/2021
DRAWING SCALE	N.T.S.

GRAPHIC SCALE

SHEET TITLE

NOTES AND LEGEND

DRAWING NO.

G002



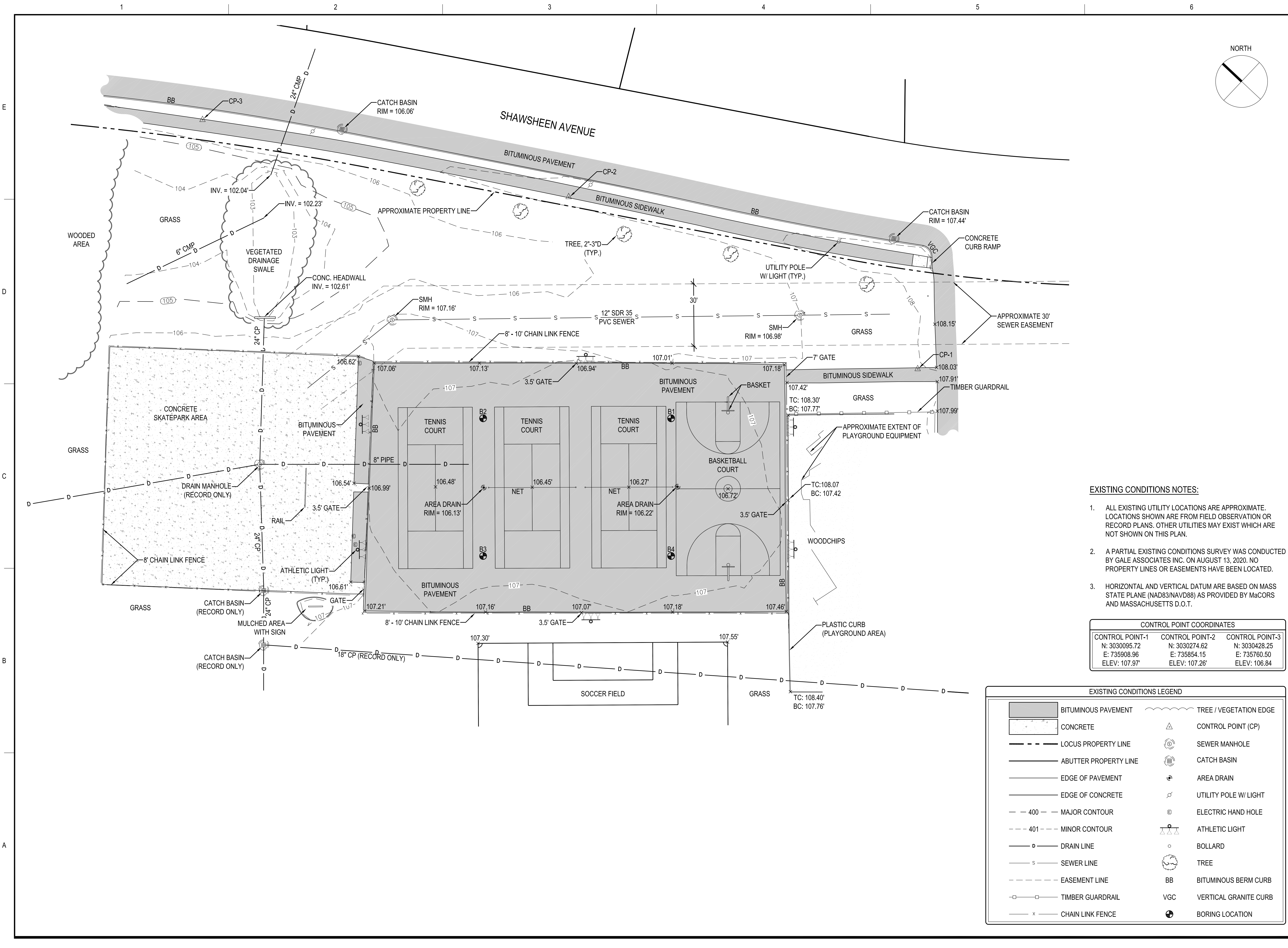
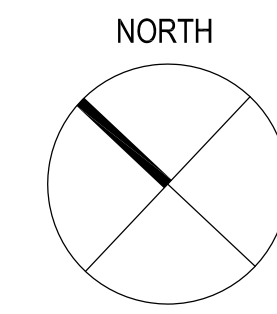
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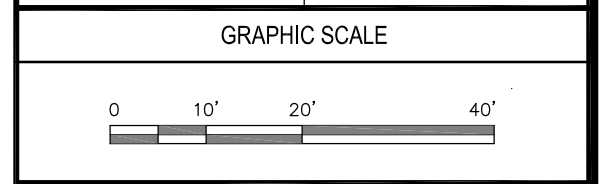


- EXISTING CONDITIONS NOTES:**
- ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE. LOCATIONS SHOWN ARE FROM FIELD OBSERVATION OR RECORD PLANS. OTHER UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THIS PLAN.
 - A PARTIAL EXISTING CONDITIONS SURVEY WAS CONDUCTED BY GALE ASSOCIATES INC. ON AUGUST 13, 2020. NO PROPERTY LINES OR EASEMENTS HAVE BEEN LOCATED.
 - HORIZONTAL AND VERTICAL DATUM ARE BASED ON MASS STATE PLANE (NAD83/NAV88) AS PROVIDED BY MaCORS AND MASSACHUSETTS D.O.T.

CONTROL POINT COORDINATES		
CONTROL POINT-1 N: 3030095.72 E: 735908.96 ELEV: 107.97'	CONTROL POINT-2 N: 3030274.62 E: 735854.15 ELEV: 107.26'	CONTROL POINT-3 N: 3030428.25 E: 735760.50 ELEV: 106.84'

EXISTING CONDITIONS LEGEND	
	BITUMINOUS PAVEMENT
	CONCRETE
	LOCUS PROPERTY LINE
	ABUTTER PROPERTY LINE
	EDGE OF PAVEMENT
	EDGE OF CONCRETE
	400 - MAJOR CONTOUR
	401 - MINOR CONTOUR
	DRAIN LINE
	SEWER LINE
	EASEMENT LINE
	TIMBER GUARDRAIL
	CHAIN LINK FENCE
	TREE / VEGETATION EDGE
	CONTROL POINT (CP)
	SEWER MANHOLE
	CATCH BASIN
	AREA DRAIN
	UTILITY POLE W/ LIGHT
	ELECTRIC HAND HOLE
	ATHLETIC LIGHT
	BOLLARD
	TREE
	BB BITUMINOUS BERM CURB
	VGC VERTICAL GRANITE CURB
	BORING LOCATION

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SHEET TITLE

EXISTING CONDITIONS PLAN

DRAWING NO.	C001
3 OF 11	



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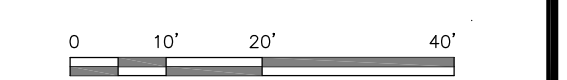
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GRAPHIC SCALE



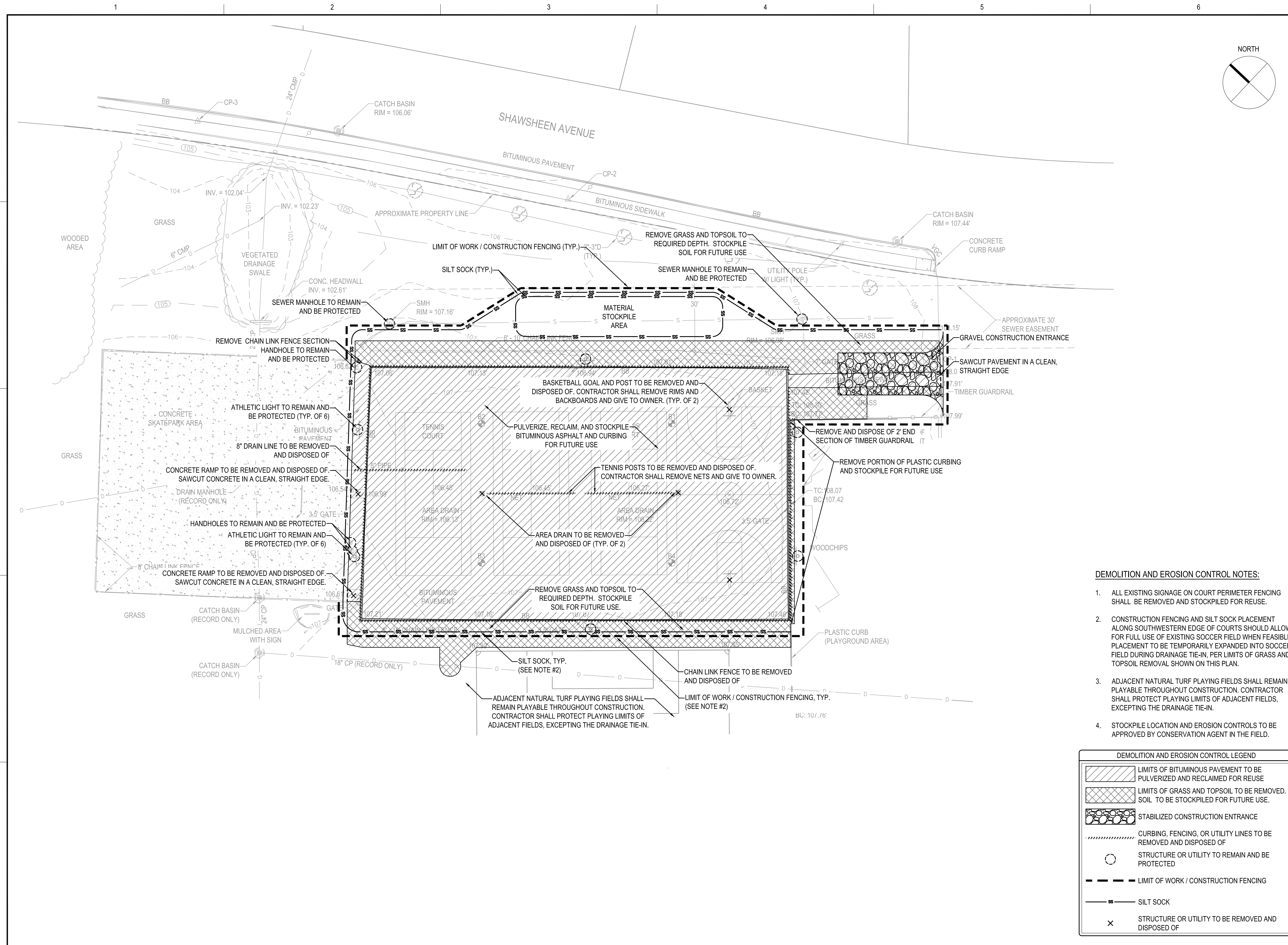
SHEET TITLE

DEMOLITION AND EROSION CONTROL PLAN

DRAWING NO.

C002

4 OF 11



DEMOLITION AND EROSION CONTROL NOTES:

- ALL EXISTING SIGNAGE ON COURT PERIMETER FENCING SHALL BE REMOVED AND STOCKPILED FOR REUSE.
- CONSTRUCTION FENCING AND SILT SOCK PLACEMENT ALONG SOUTHWESTERN EDGE OF COURTS SHOULD ALLOW FOR FULL USE OF EXISTING SOCCER FIELD WHEN FEASIBLE. PLACEMENT TO BE TEMPORARILY EXPANDED INTO SOCCER FIELD DURING DRAINAGE TIE-IN, PER LIMITS OF GRASS AND TOPSOIL REMOVAL SHOWN ON THIS PLAN.
- ADJACENT NATURAL TURF PLAYING FIELDS SHALL REMAIN PLAYABLE THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROTECT PLAYING LIMITS OF ADJACENT FIELDS, EXCEPTING THE DRAINAGE TIE-IN.
- STOCKPILE LOCATION AND EROSION CONTROLS TO BE APPROVED BY CONSERVATION AGENT IN THE FIELD.

DEMOLITION AND EROSION CONTROL LEGEND	
	LIMITS OF BITUMINOUS PAVEMENT TO BE PULVERIZED AND RECLAIMED FOR REUSE
	LIMITS OF GRASS AND TOPSOIL TO BE REMOVED. SOIL TO BE STOCKPILED FOR FUTURE USE.
	STABILIZED CONSTRUCTION ENTRANCE
	CURBING, FENCING, OR UTILITY LINES TO BE REMOVED AND DISPOSED OF
	STRUCTURE OR UTILITY TO REMAIN AND BE PROTECTED
	LIMIT OF WORK / CONSTRUCTION FENCING
	SILT SOCK
	STRUCTURE OR UTILITY TO BE REMOVED AND DISPOSED OF



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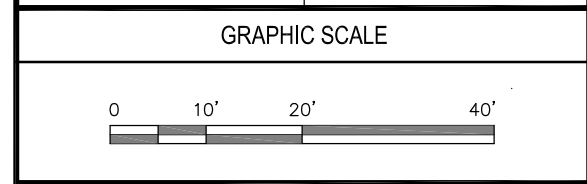
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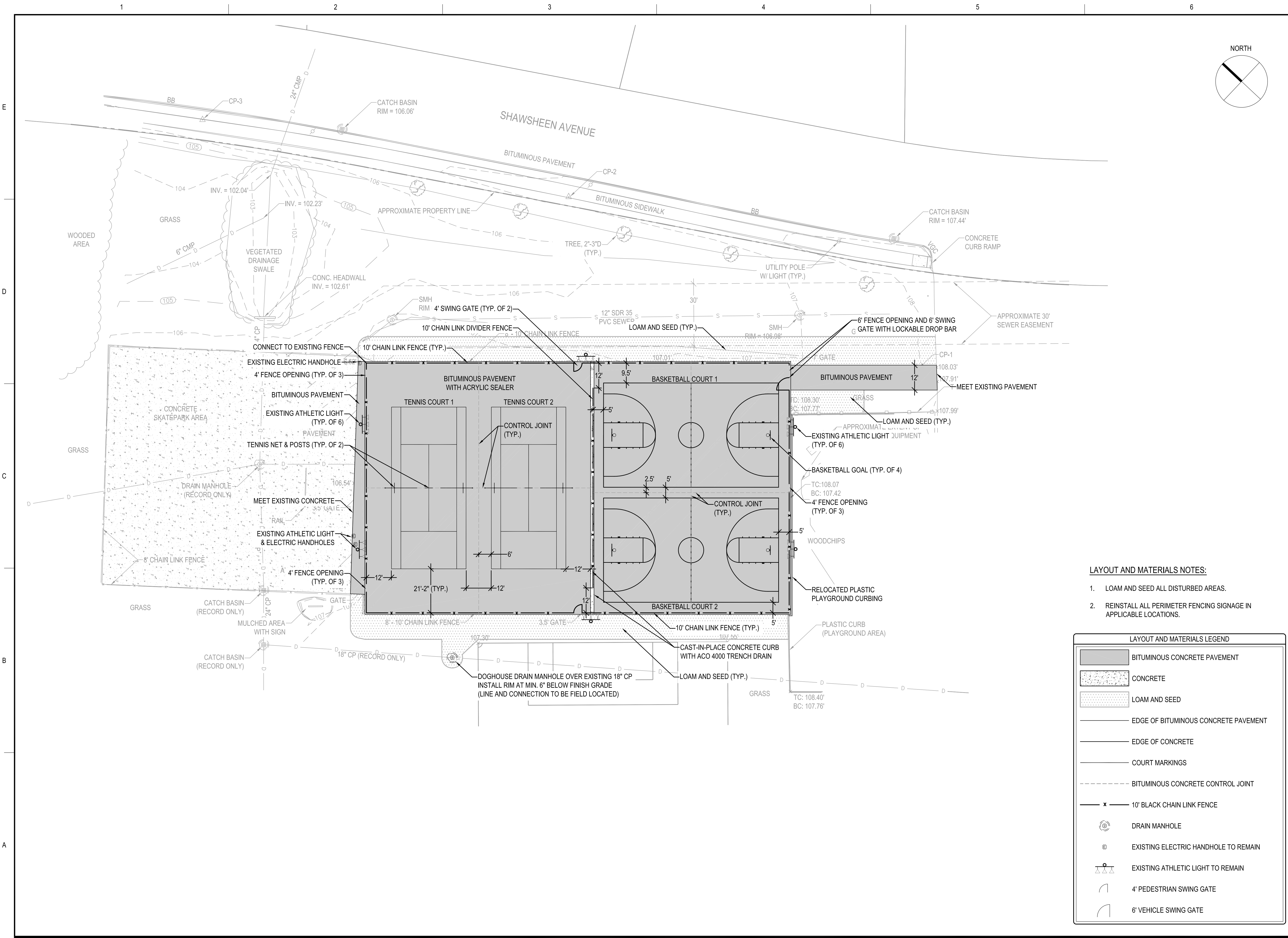
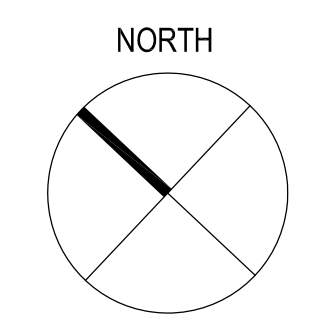
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SHEET TITLE

LAYOUT AND MATERIALS PLAN

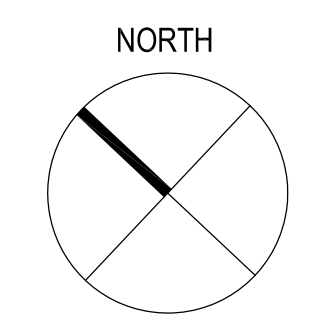
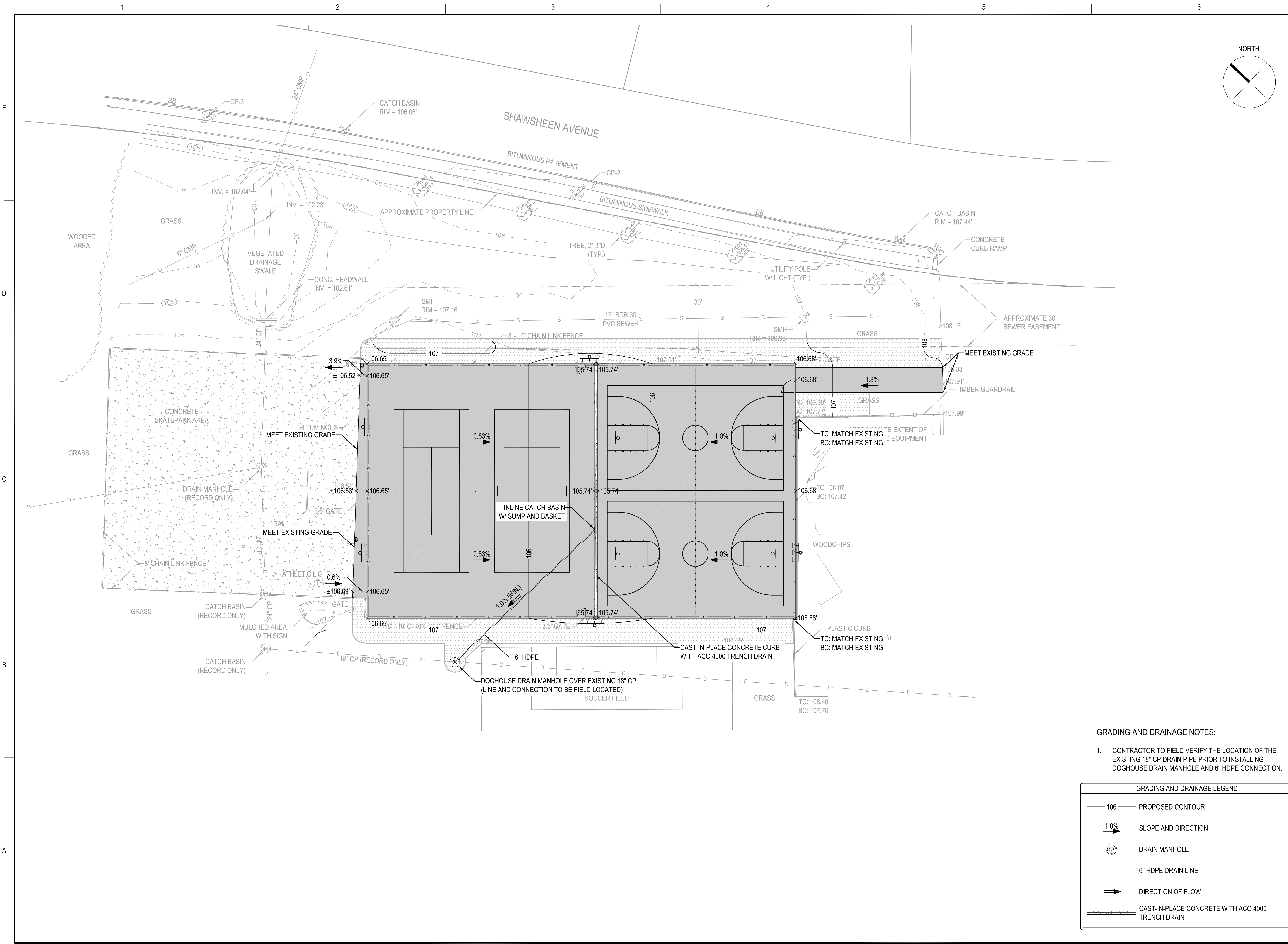
DRAWING NO.	C101
	5 OF 11



LAYOUT AND MATERIALS NOTES:

1. LOAM AND SEED ALL DISTURBED AREAS.
2. REINSTALL ALL PERIMETER FENCING SIGNAGE IN APPLICABLE LOCATIONS.

LAYOUT AND MATERIALS LEGEND	
	BITUMINOUS CONCRETE PAVEMENT
	CONCRETE
	LOAM AND SEED
	EDGE OF BITUMINOUS CONCRETE PAVEMENT
	EDGE OF CONCRETE
	COURT MARKINGS
	BITUMINOUS CONCRETE CONTROL JOINT
	10' BLACK CHAIN LINK FENCE
	DRAIN MANHOLE
	EXISTING ELECTRIC HANDHOLE TO REMAIN
	EXISTING ATHLETIC LIGHT TO REMAIN
	4' PEDESTRIAN SWING GATE
	6' VEHICLE SWING GATE



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BID SET

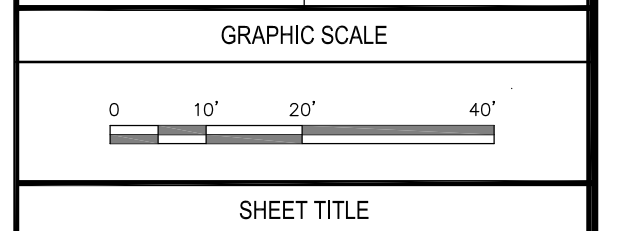
PROJECT: SHAWSHEEN ELEMENTARY SCHOOL TENNIS COURT RECONSTRUCTION
 298 SHAWSHEEN AVENUE WILMINGTON, MA 01887
 OWNER: TOWN OF WILMINGTON
 121 GLEN ROAD WILMINGTON, MA 01887

NO.	DATE	DESCRIPTION	BY
PROJECT NO.	718290		
CADD FILE	718290_C201		
DESIGNED BY	KFR		
DRAWN BY	KFR		
CHECKED BY	PS		
DATE	3/05/2021		
DRAWING SCALE	1" = 20'		

GRADING AND DRAINAGE NOTES:
 1. CONTRACTOR TO FIELD VERIFY THE LOCATION OF THE EXISTING 18" CP DRAIN PIPE PRIOR TO INSTALLING DOGHOUSE DRAIN MANHOLE AND 6" HDPE CONNECTION.

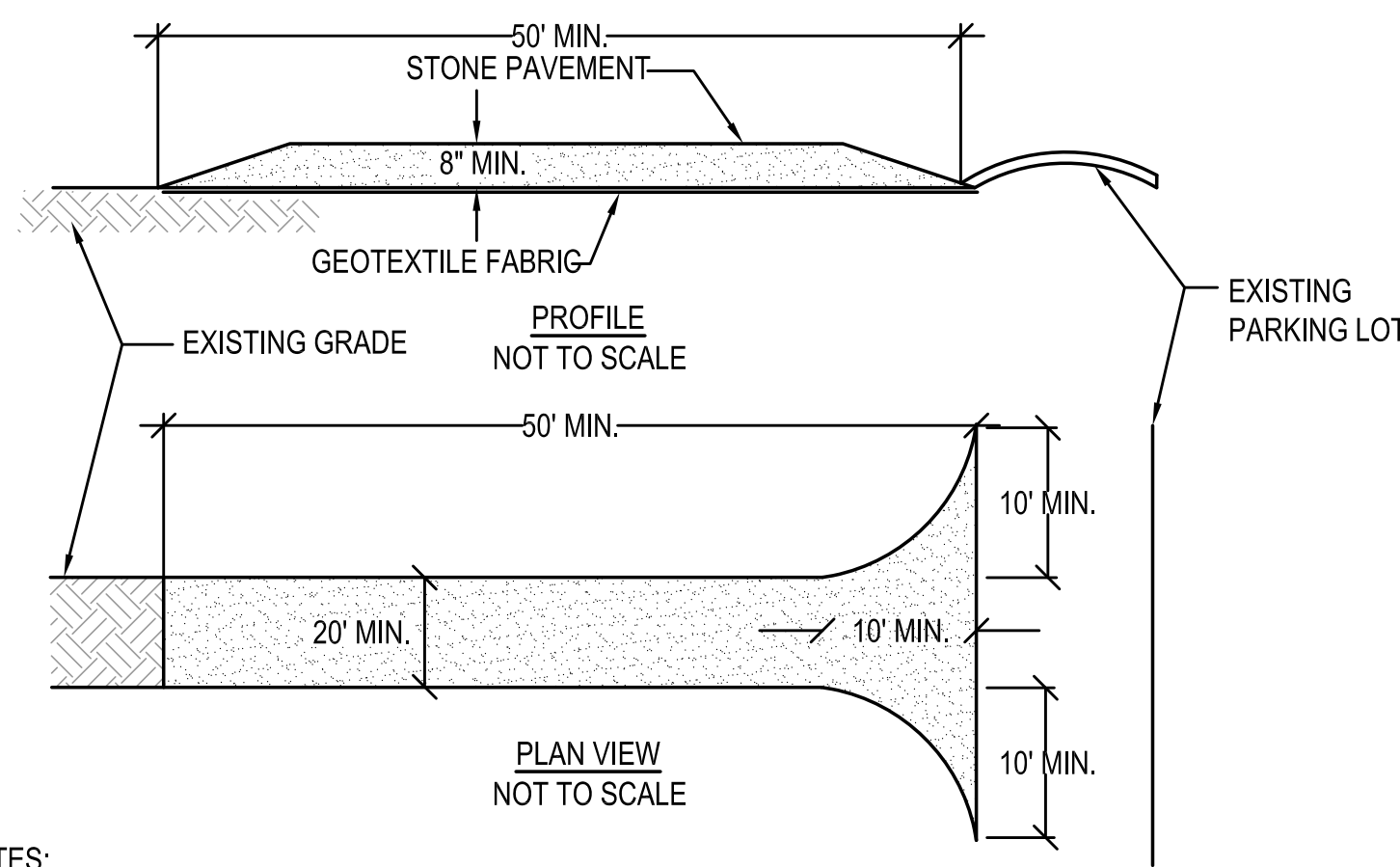
GRADING AND DRAINAGE LEGEND

	PROPOSED CONTOUR
	SLOPE AND DIRECTION
	DRAIN MANHOLE
	6" HDPE DRAIN LINE
	DIRECTION OF FLOW
	CAST-IN-PLACE CONCRETE WITH ACO 4000 TRENCH DRAIN



GRADING AND DRAINAGE PLAN

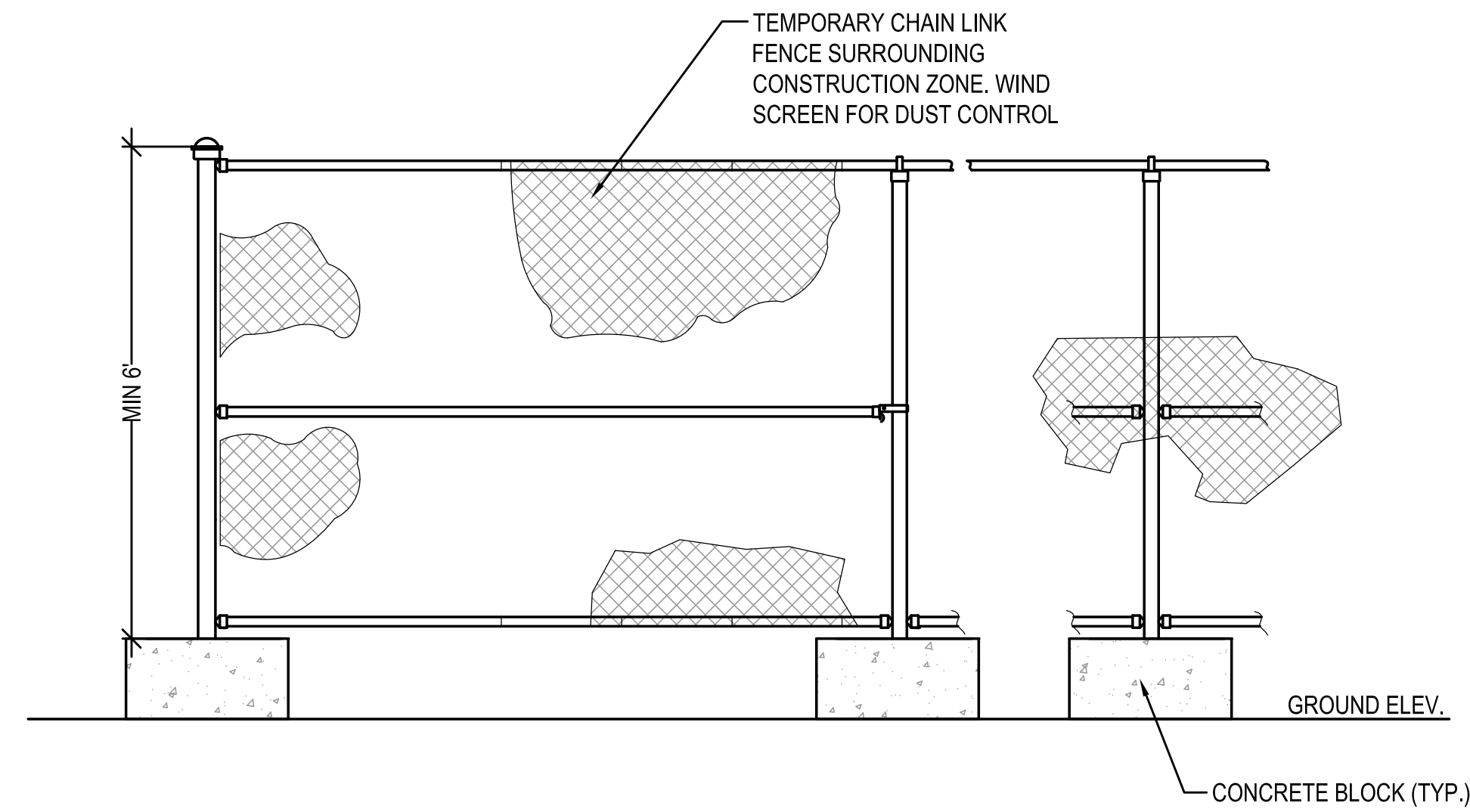
DRAWING NO. **C201**
 6 OF 11



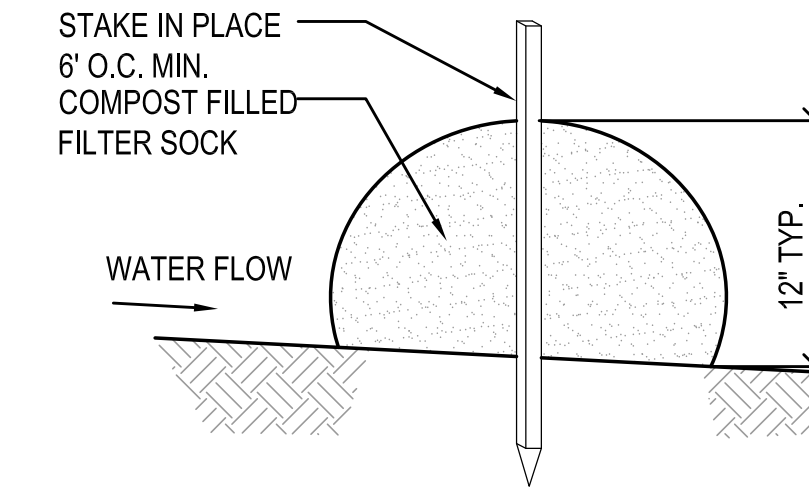
NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 40 FEET.
3. THICKNESS - NOT LESS THAN (8) INCHES.
4. WIDTH - TWENTY (20) MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE FABRIC - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. GEOTEXTILE FABRIC SHALL BE MIRIFI 500X WOVEN FABRIC OR APPROVED EQUAL.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

1 STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



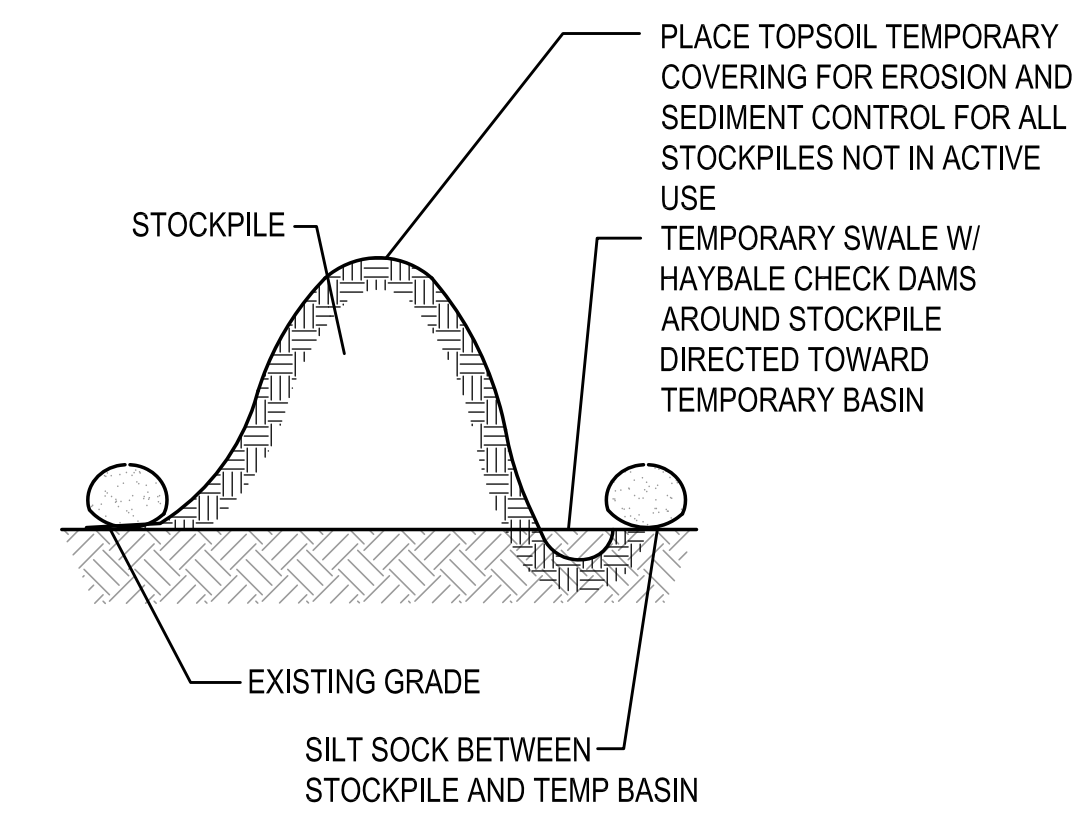
2 TEMPORARY CONSTRUCTION FENCE
N.T.S.



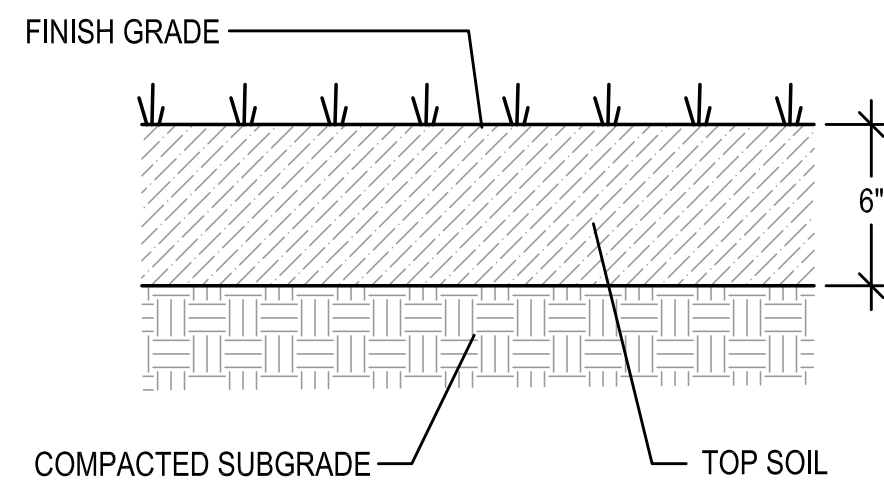
NOTES:

1. THE CONTRACTOR SHALL MAINTAIN THE EROSION CONTROL BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
2. WHERE THE BERM REQUIRES REPAIR, IT SHALL BE ROUTINELY REPAIRED.
3. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.

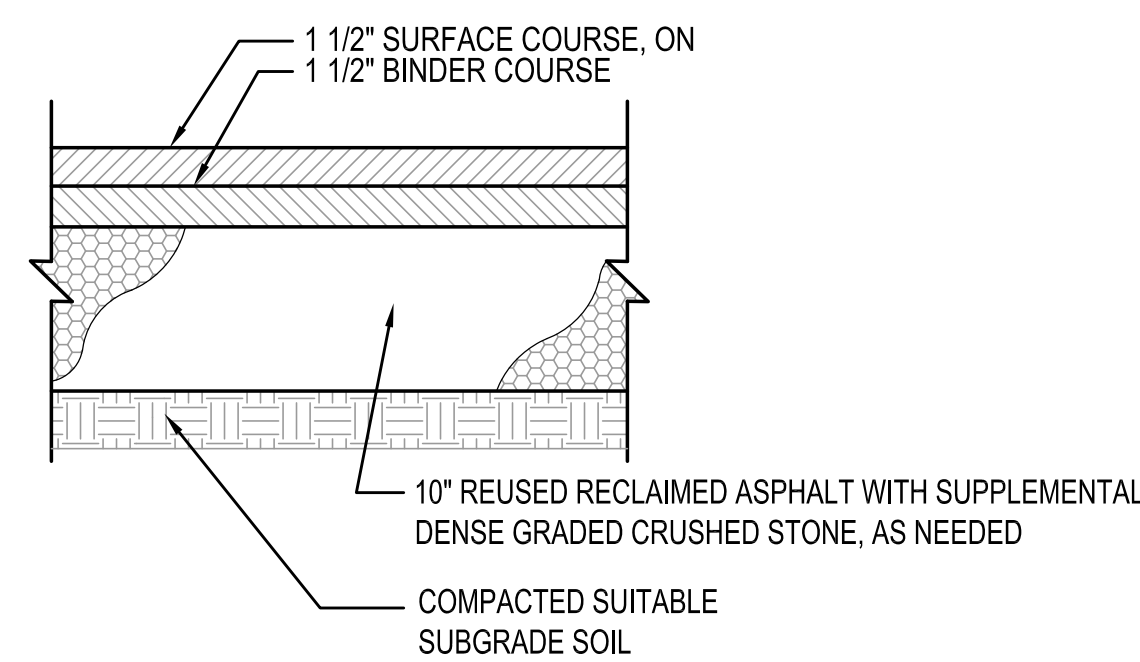
3 SILT SOCK EROSION CONTROL
N.T.S.



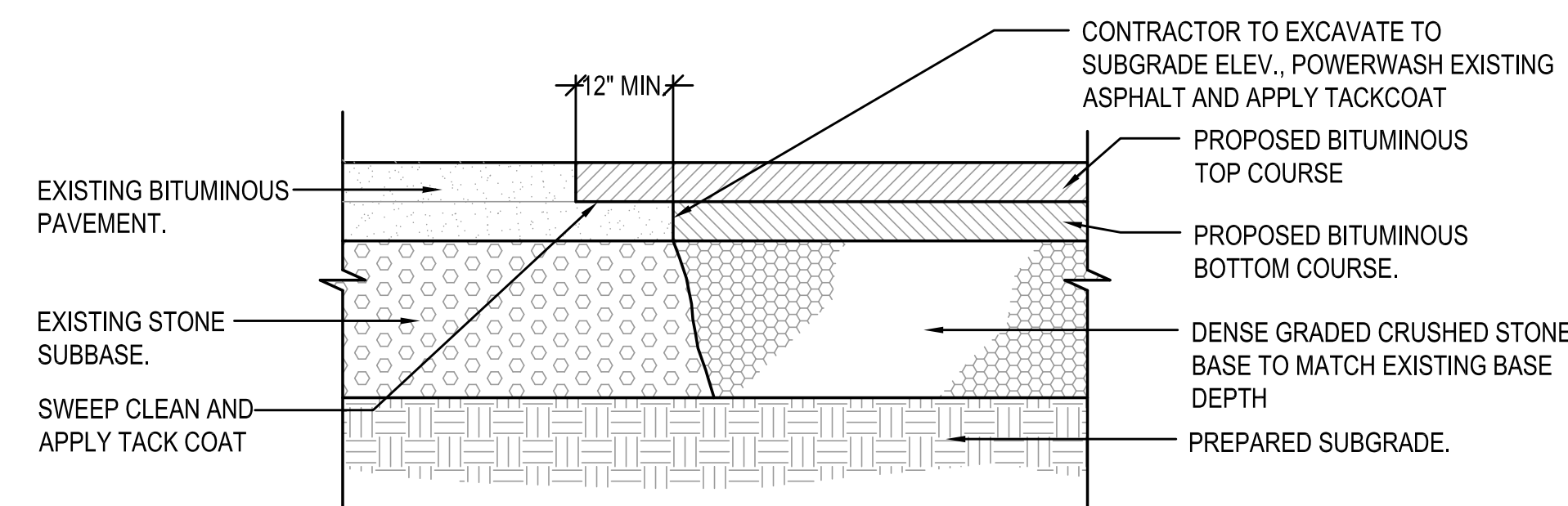
4 MATERIAL STOCKPILE AREA
N.T.S.



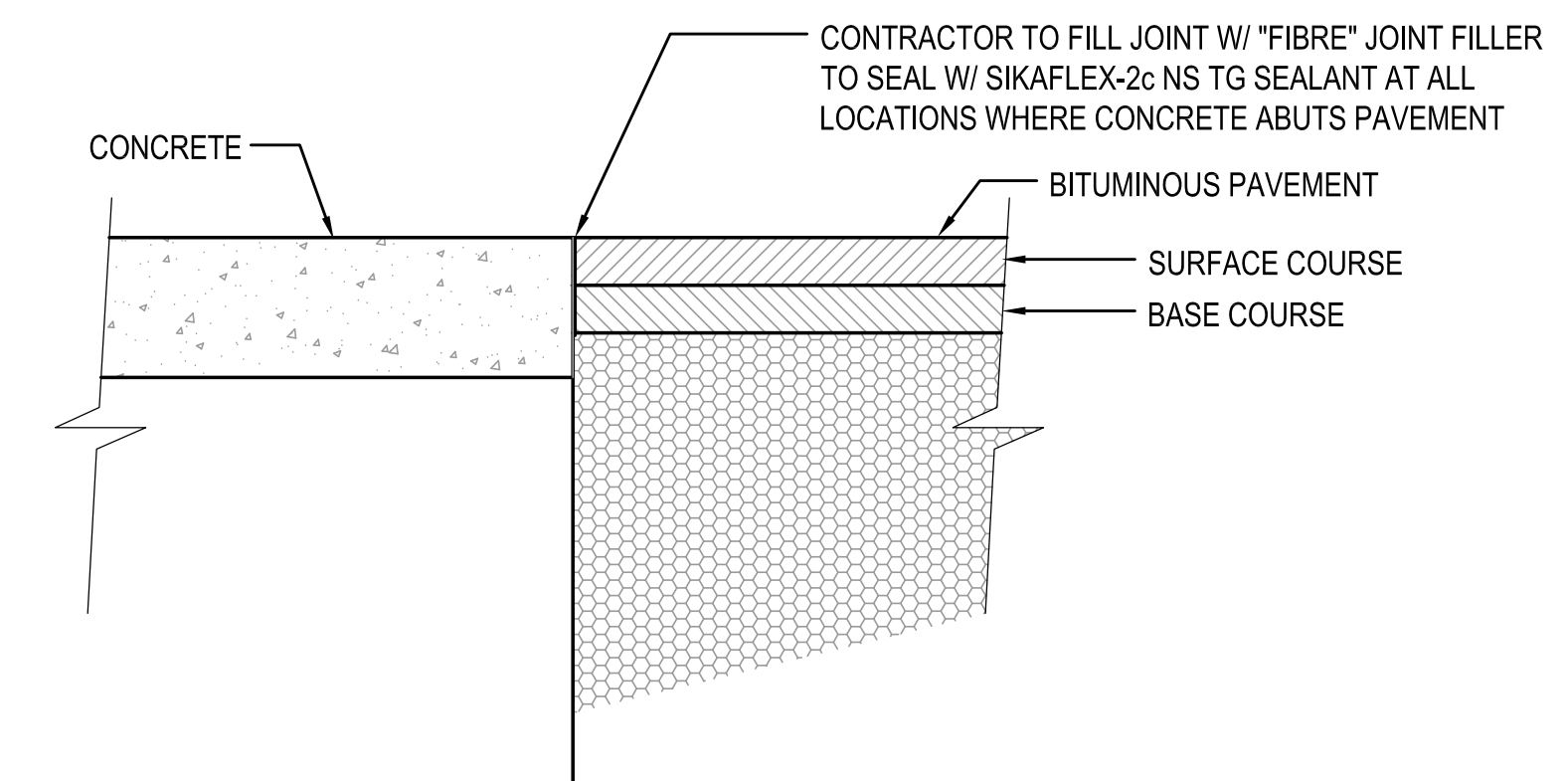
5 LOAM & SEED
N.T.S.



6 SIDEWALK PAVEMENT SECTION
N.T.S.



7 PAVEMENT JOINTING DETAIL
N.T.S.



8 TYPICAL CONCRETE TO PAVEMENT DETAIL (ALL CASES)
N.T.S.



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DRAWING SCALE		N.T.S.	

GRAPHIC SCALE

SHEET TITLE

DETAIL SHEET
1 OF 5

DRAWING NO.

C501

7 OF 11

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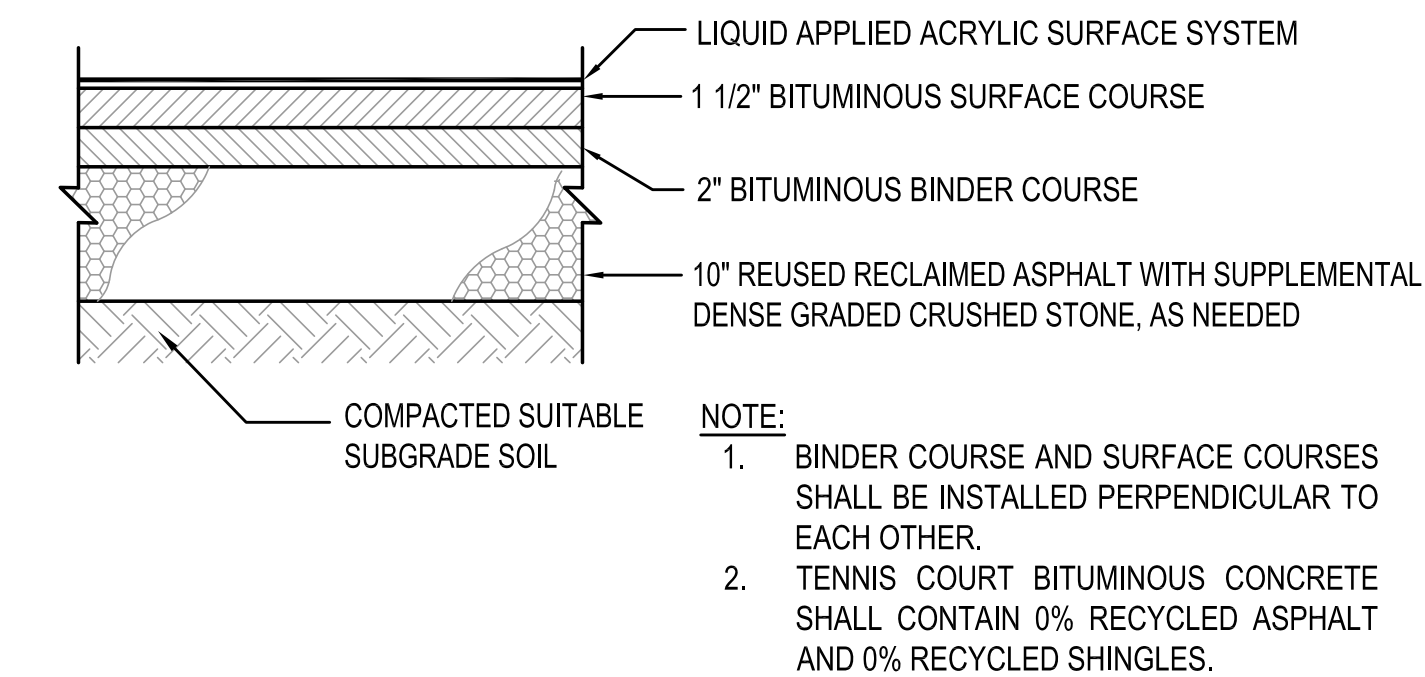
SHEET TITLE

**DETAIL SHEET
 2 OF 5**

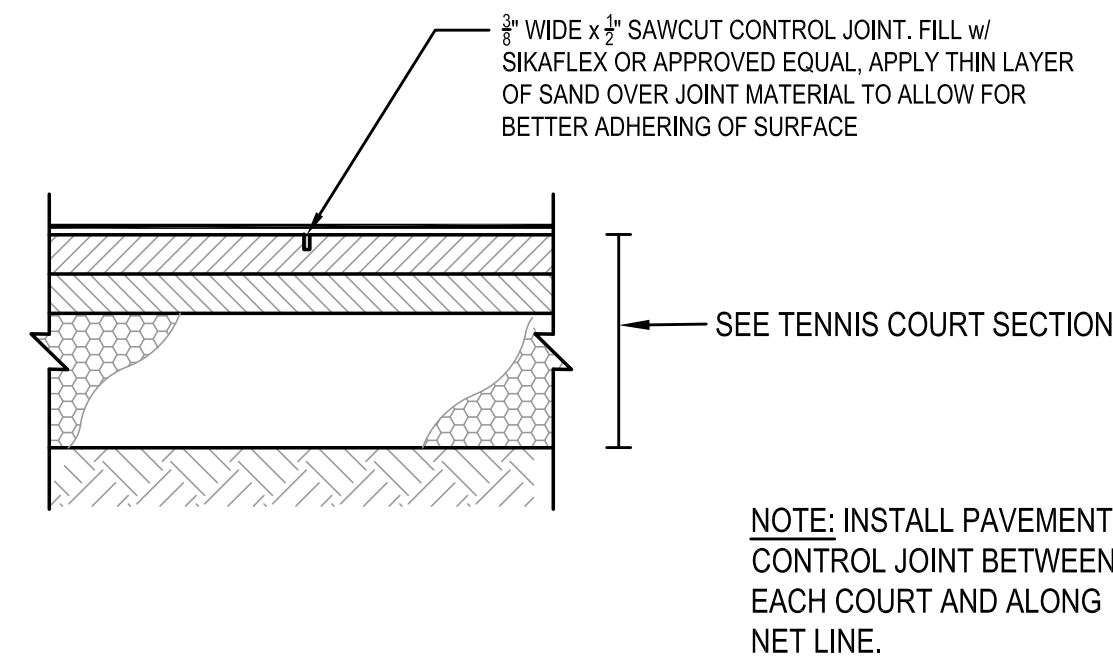
DRAWING NO.

C502

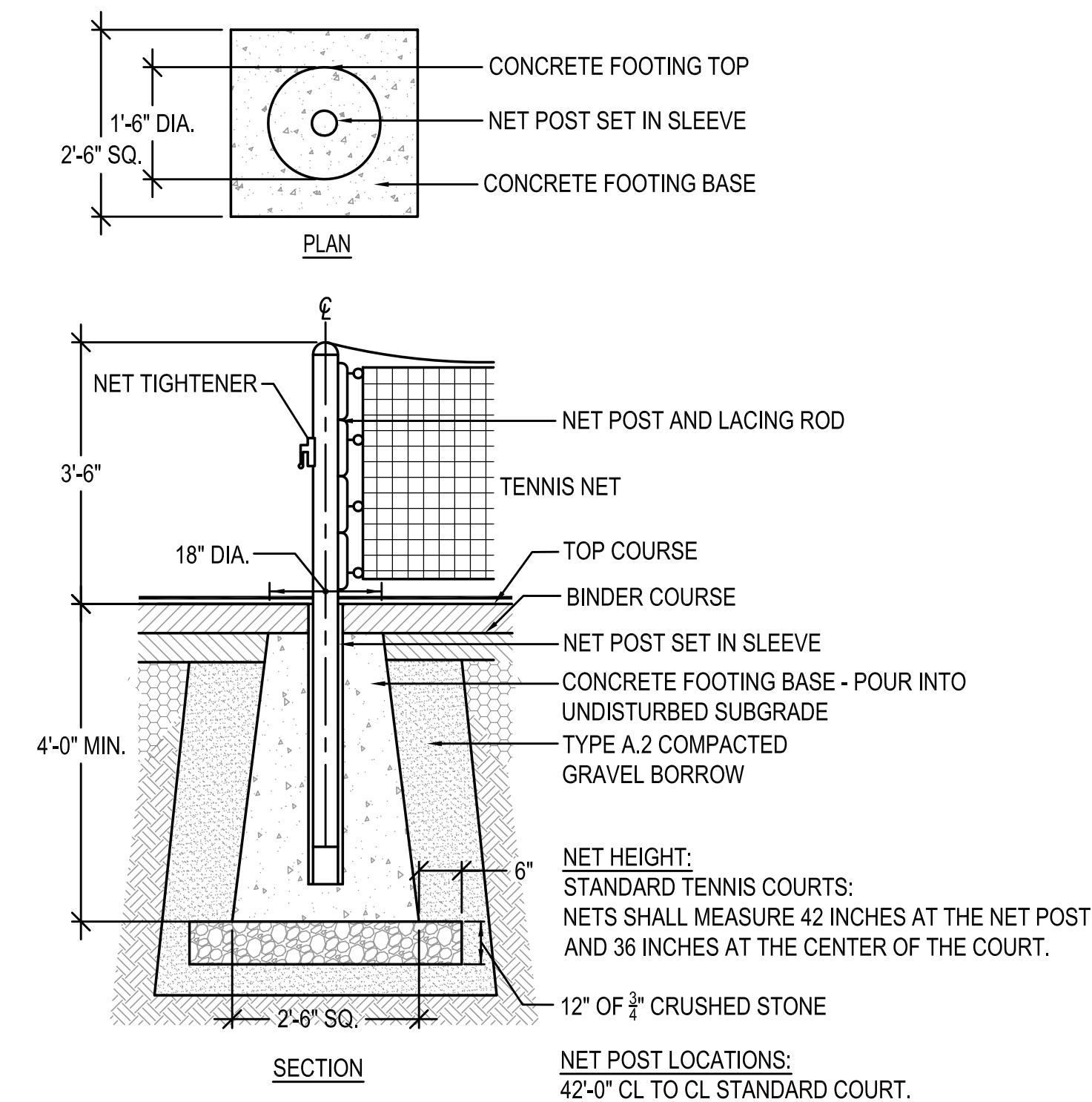
8 OF 11



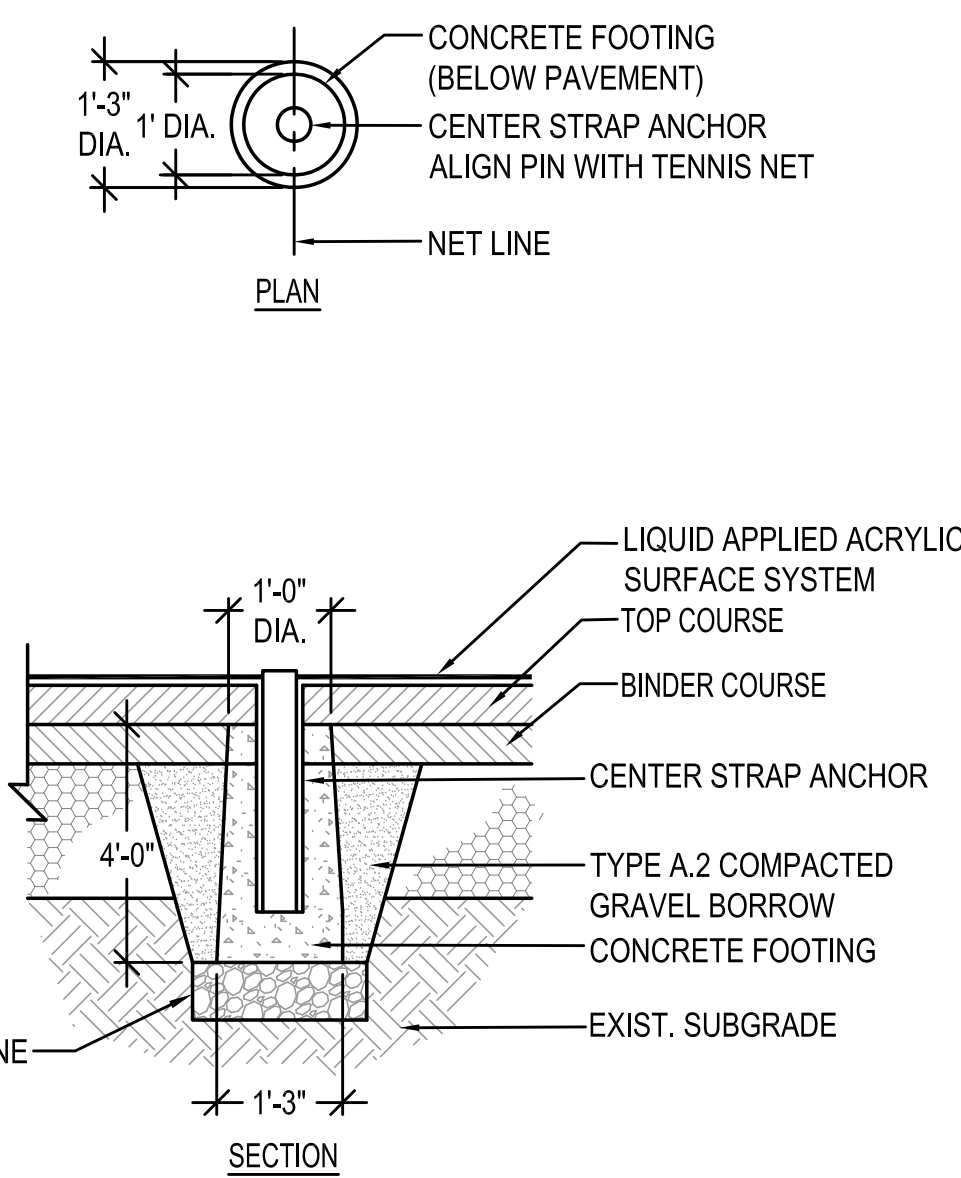
1 TENNIS / BASKETBALL COURT SECTION
 N.T.S.



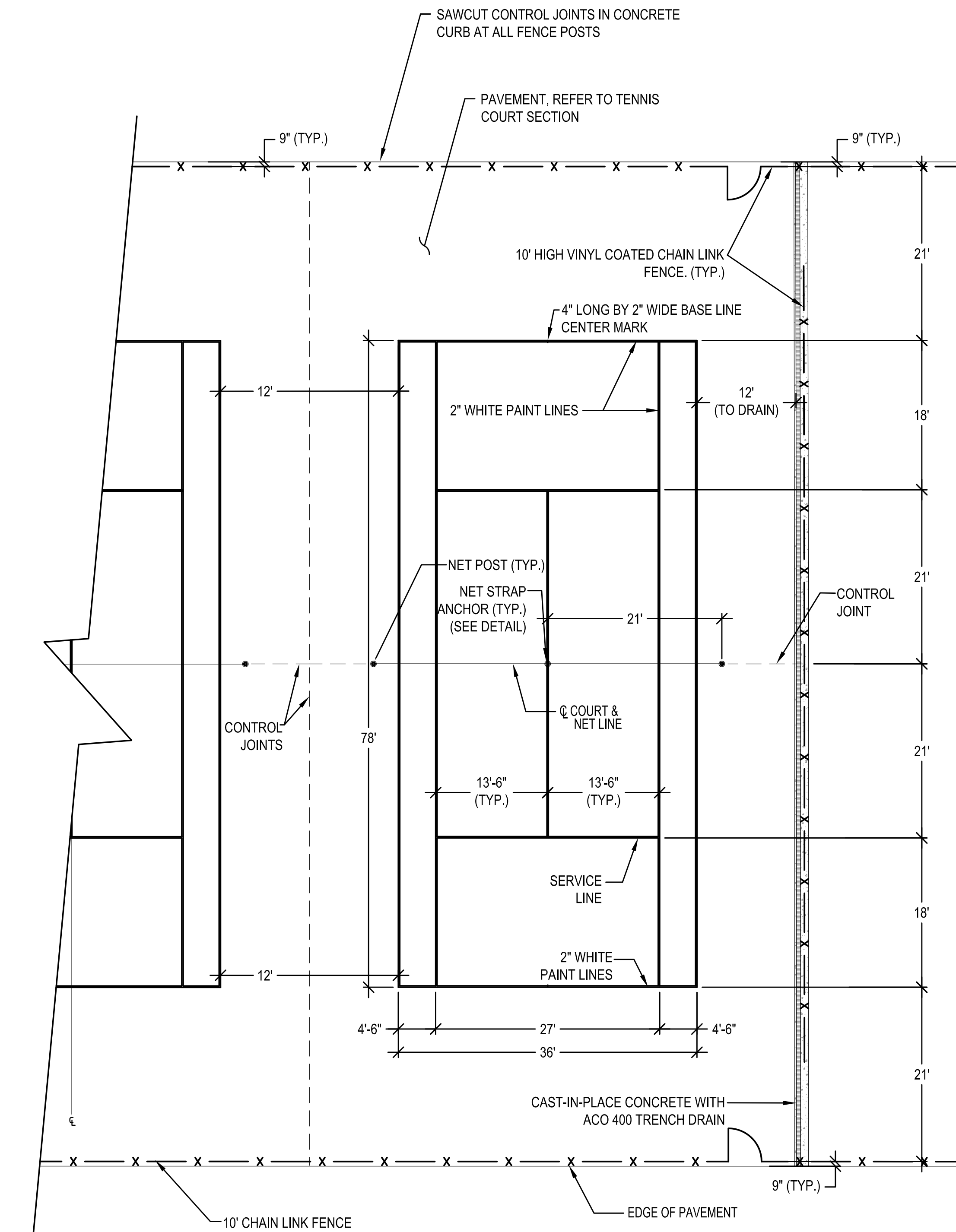
2 PAVEMENT CONTROL JOINT
 N.T.S.



3 TENNIS NET POST
 N.T.S.



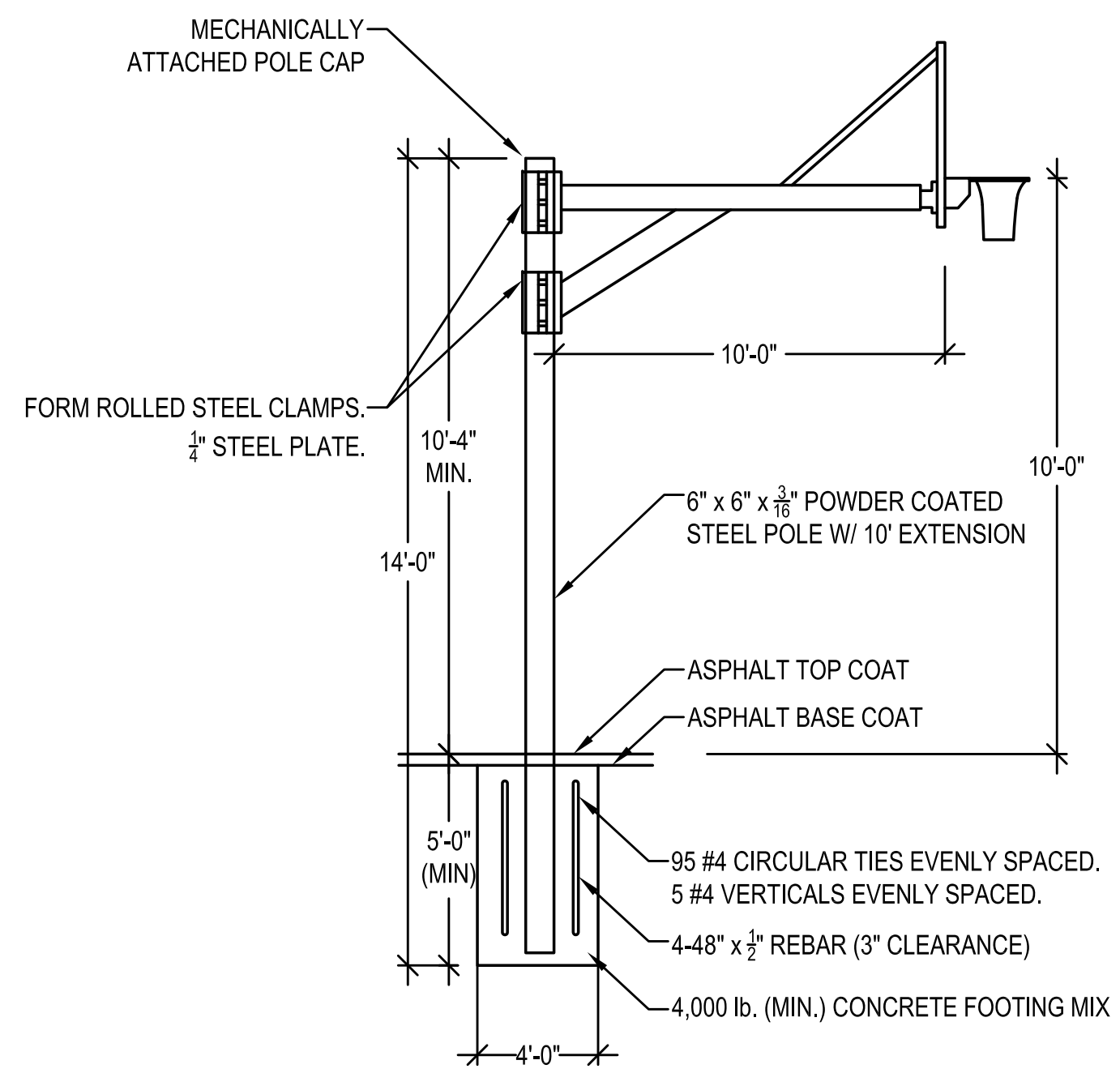
4 TENNIS NET CENTER STRAP ANCHOR
 N.T.S.



5 36' x 78' STANDARD TENNIS COURT
 N.T.S.

- NOTES:**
- NEW TENNIS COURTS TO INCLUDE INSTALLATION OF NEW POSTS, NETS STRAPS W/ANCHORS AND FENCING.
 - COURT SURFACE COLORS TO BE APPROVED BY OWNER.
 - ALL MEASUREMENTS ARE OUTSIDE TO OUTSIDE OF COURT LINES.
 - ALL FENCE MEASUREMENTS ARE ϵ TO ϵ .
 - CONTRACTOR WILL SUBMIT A SCALED TENNIS MARKING PLAN SHOP DRAWING FOR OWNER APPROVAL.
 - INSTALL CONTROL JOINTS BETWEEN COURTS AND ALONG NET LINES.

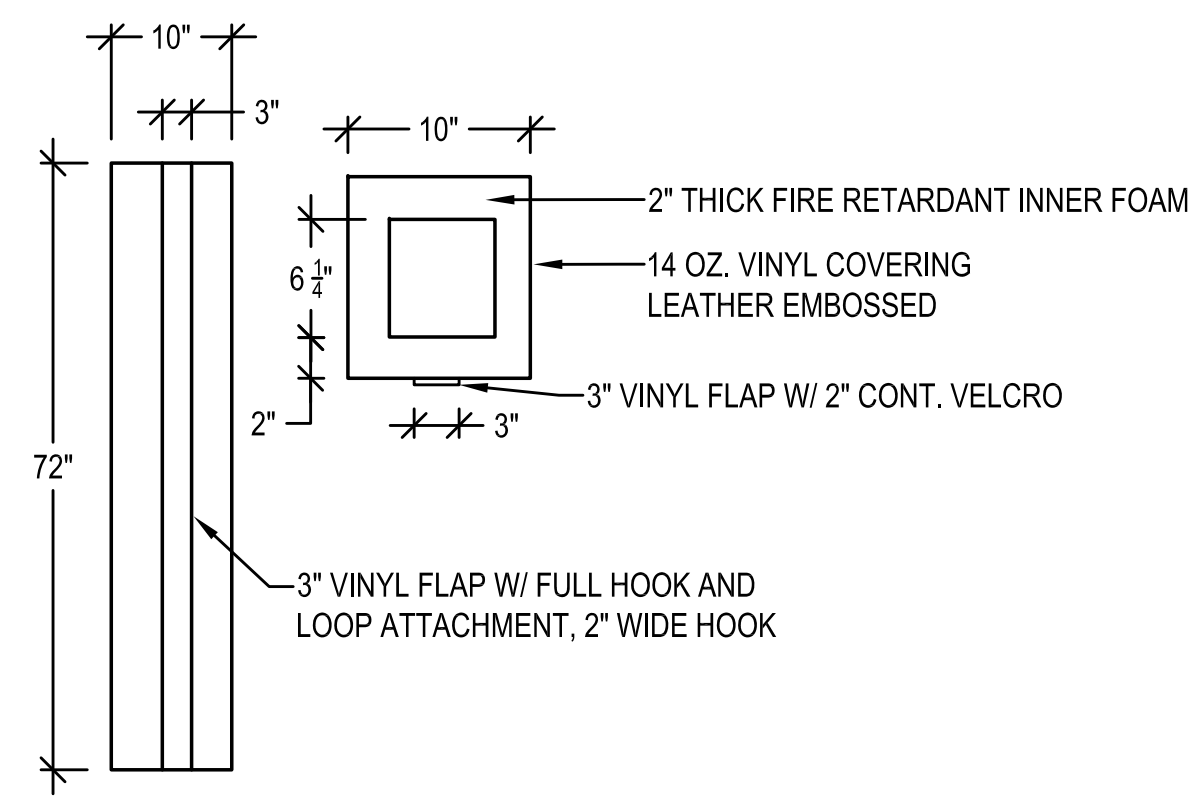
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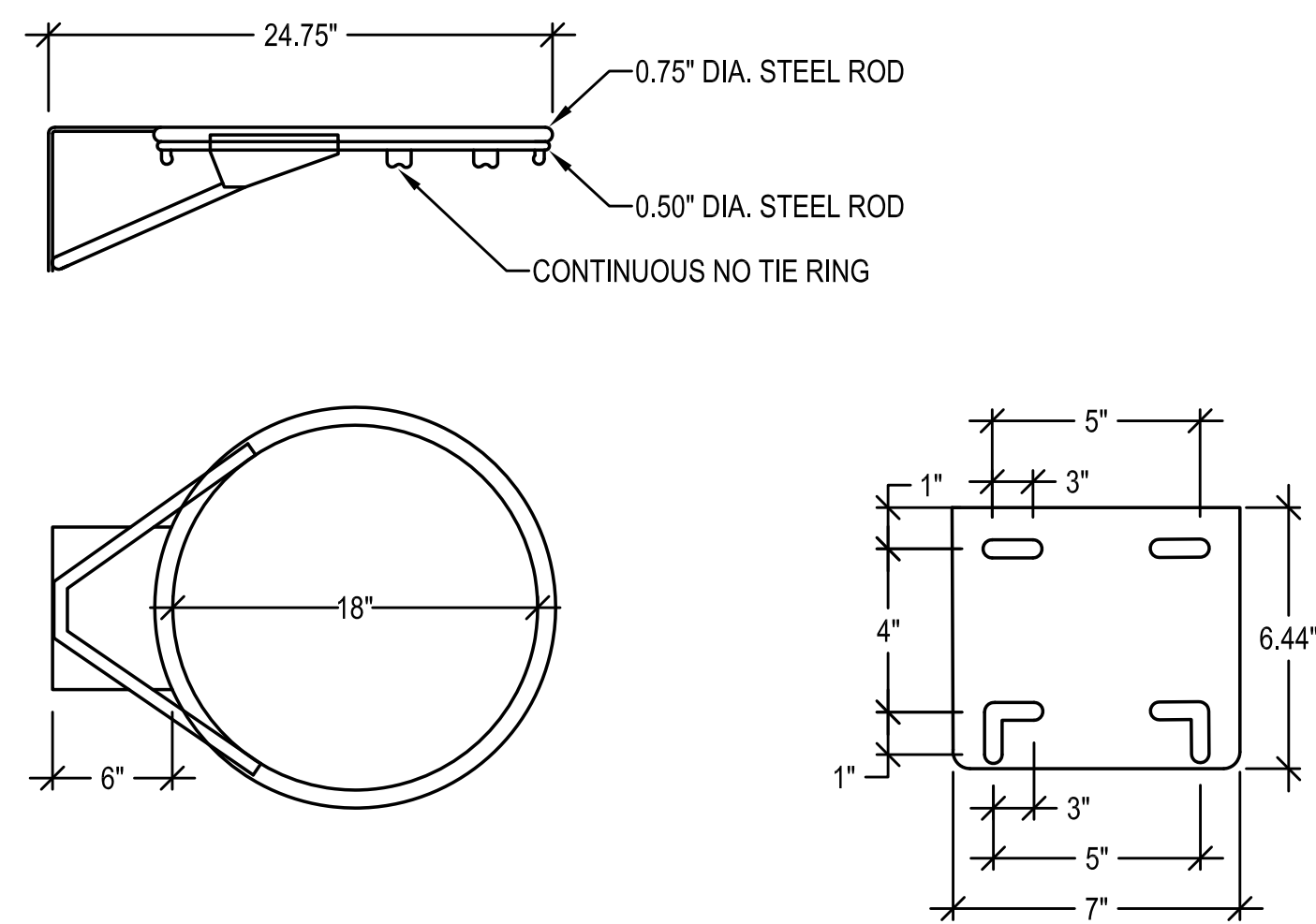
NOTES:

1. POLE THICKNESS SHALL BE 1/2".
2. FOOTING SHALL BE 48" x 48" x 60" DEEP.

1 TYPICAL POLE AND FOOTING DETAIL (TrueBounce)
N.T.S.

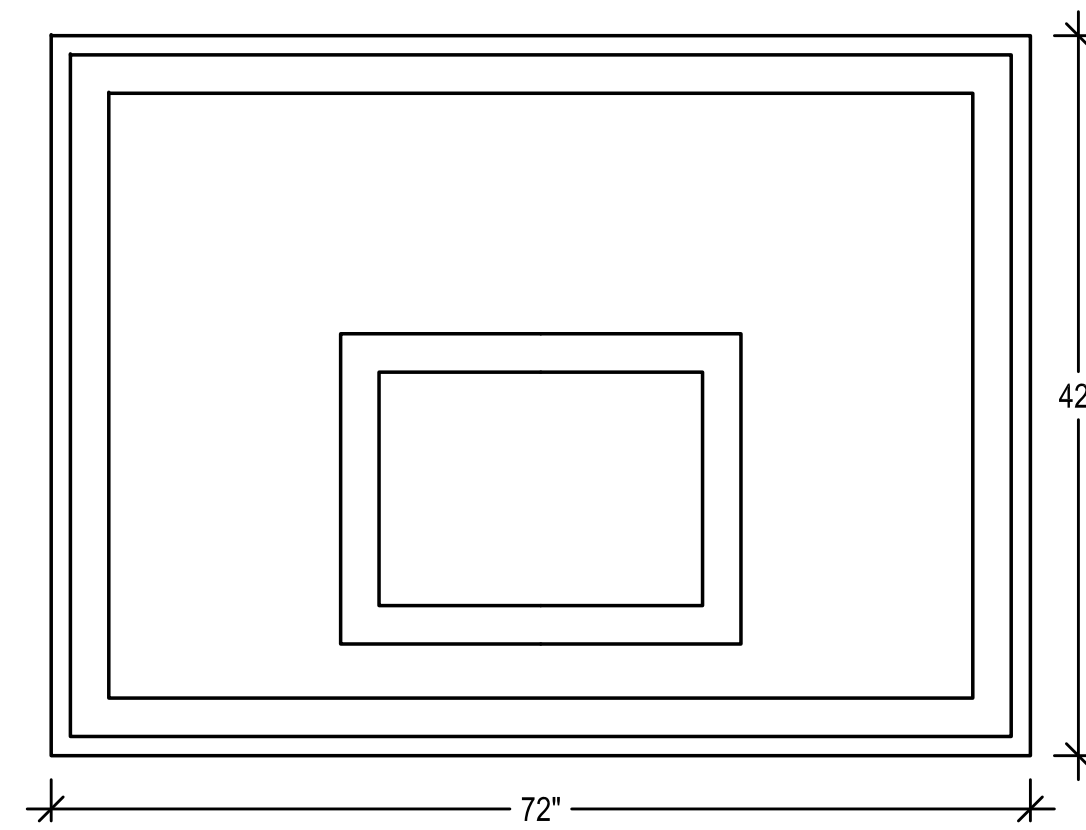


2 SQUARE VINYL POLE PAD DETAIL (TrueBounce)
N.T.S.



- NOTES:**
1. RIM TO BE OFFICIAL ORANGE POWDER COAT WITH NYLON NET.

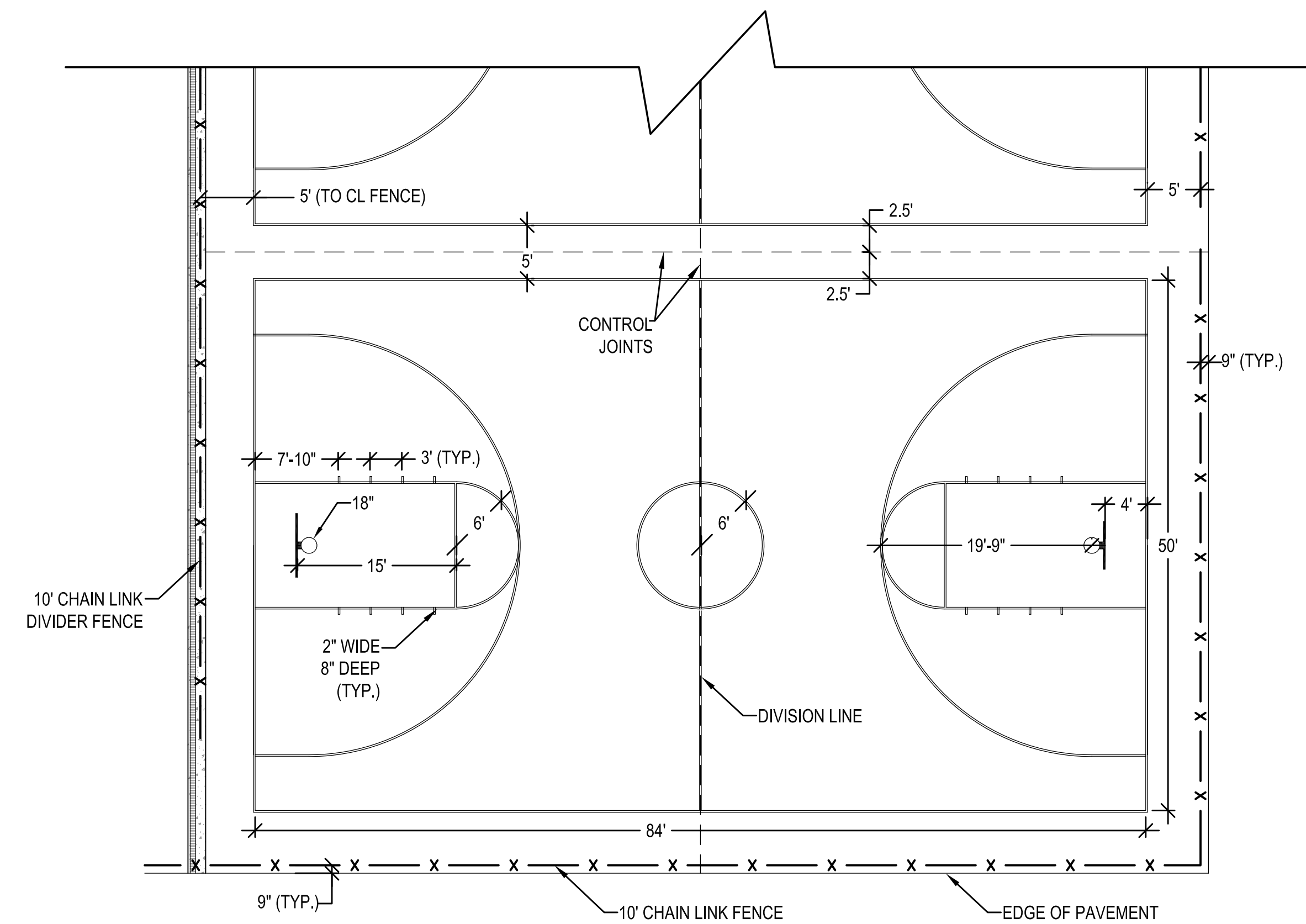
3 BASKETBALL GOAL DETAIL (TrueBounce)
N.T.S.



NOTES:

1. 4" x 9" SLOTTED SOLID ALUMINUM CORNER BLOCK.
2. 1/2" THICK ABRASIVE RESISTANT POLYCARBONATE SHEET WITH TYPICAL "TRUEBOUNCE" HOLD PATTERN.
3. 1/2" THROUGH HOLES.
4. MOUNTS TO PA555, PA554, PA444 AND PA665, PA668 TRUEBOUNCE POLE SYSTEMS.
5. DUAL SAFETY BOLD HOLES THROUGH DRILLED TO ATTACH THE BACKBOARD TO THE POLE FOR EASY REMOVAL OF THE RIM WITHOUT THE WORRY OF THE BACKBOARD BECOMING DETACHED FROM THE POLE.
6. 1 1/2" x 6 x 7 1/2" SOLID ALUMINUM RIM SUPPORT BLOCK WITH SAFETY HOLES STAINLESS STEEL FASTENERS AT ALL POINTS. STRIPING COLORED TO THE END USERS CHOSEN COLORS.

4 BACKBOARD DETAIL (TrueBounce)
N.T.S.



NOTES:

1. EXCEPT AS SPECIFICALLY STATED IN THE RULES, INFORMATION ON FIELD DIAGRAM IS SUGGESTIVE ONLY; IT IS NOT REQUIRED BY NFHS RULES. THE CONSTRUCTION AND LAYOUT OF ALL COURTS AND FIELD USED FOR HIGH SCHOOL COMPETITION ARE SUBJECT TO ANY CONTROLLING LAWS AND BUILDING CODES. AND TO THE SOUND JUDGEMENT OF THE PERSONS IN CHARGE OF THE FACILITIES.
2. ALL LINES SHALL BE 2" WIDE.
3. FINAL COURT SURFACE COLORS TO BE APPROVED BY OWNER.
4. INSTALL CONTROL JOINTS AS SHOWN.

5 50' x 80' STANDARD BASKETBALL COURT
N.T.S.



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GRAPHIC SCALE

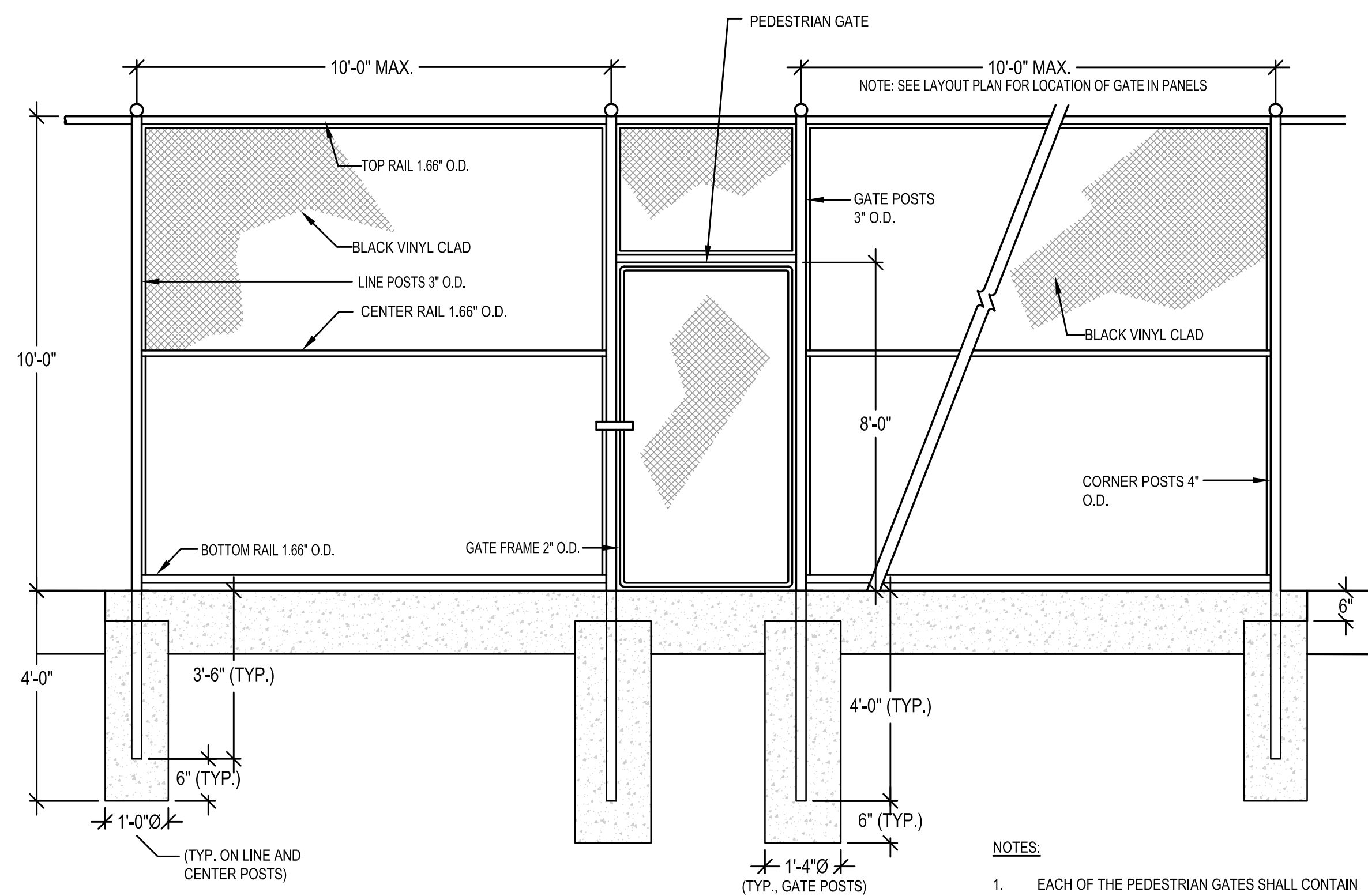
SHEET TITLE

**DETAIL SHEET
3 OF 5**

DRAWING NO.

C503

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1 10 FOOT HIGH CHAIN LINK FENCE
N.T.S.

FENCE HEIGHT	END & CORNER POSTS		LINE POSTS	
	B-1 BAR LENGTH	H-1 HEIGHT ABOVE GRADE	B-2 BAR LENGTH	H-2 HEIGHT ABOVE GRADE
4'-0"	7'-0"	4'-0 5/8"	6'-8"	3'-8 7/8"
6'-0"	9'-0"	6'-0 5/8"	8'-8"	5'-8 7/8"
8'-0"	11'-0"	8'-0 5/8"	10'-8"	7'-8 7/8"
10'-0"	13'-0"	10'-0 5/8"	12'-8"	9'-8 7/8"

SINGLE OR DOUBLE LEAF GATES		
NOM HEIGHT (H)	UPRIGHT HT (U)	FRAME HT (F)
	ACTUAL DIM	ACTUAL DIM
4'-0"	3'-10"	3'-8 1/2"
6'-0"	5'-10"	5'-8 1/2"
8'-0"	7'-10"	7'-8 1/2"
10'-0"	9'-10"	9'-8 1/2"

SINGLE LEAF GATES		
OPENING	GATE POSTS	HINGE SPACE (S)
FACE TO FACE	SQ & RND SIZES	POST TO UPRIGHT
3'-0" THROUGH 6'-0"	2 1/2" SQ. OR 2 7/8" O.D.	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]

DOUBLE LEAF GATES		
OPENING	GATE POSTS	HINGE SPACE (S)
FACE TO FACE	SQ & RND SIZES	POST TO UPRIGHT
14'-0" THROUGH 24'-0"	3" SQ. OR 4" O.D.	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]

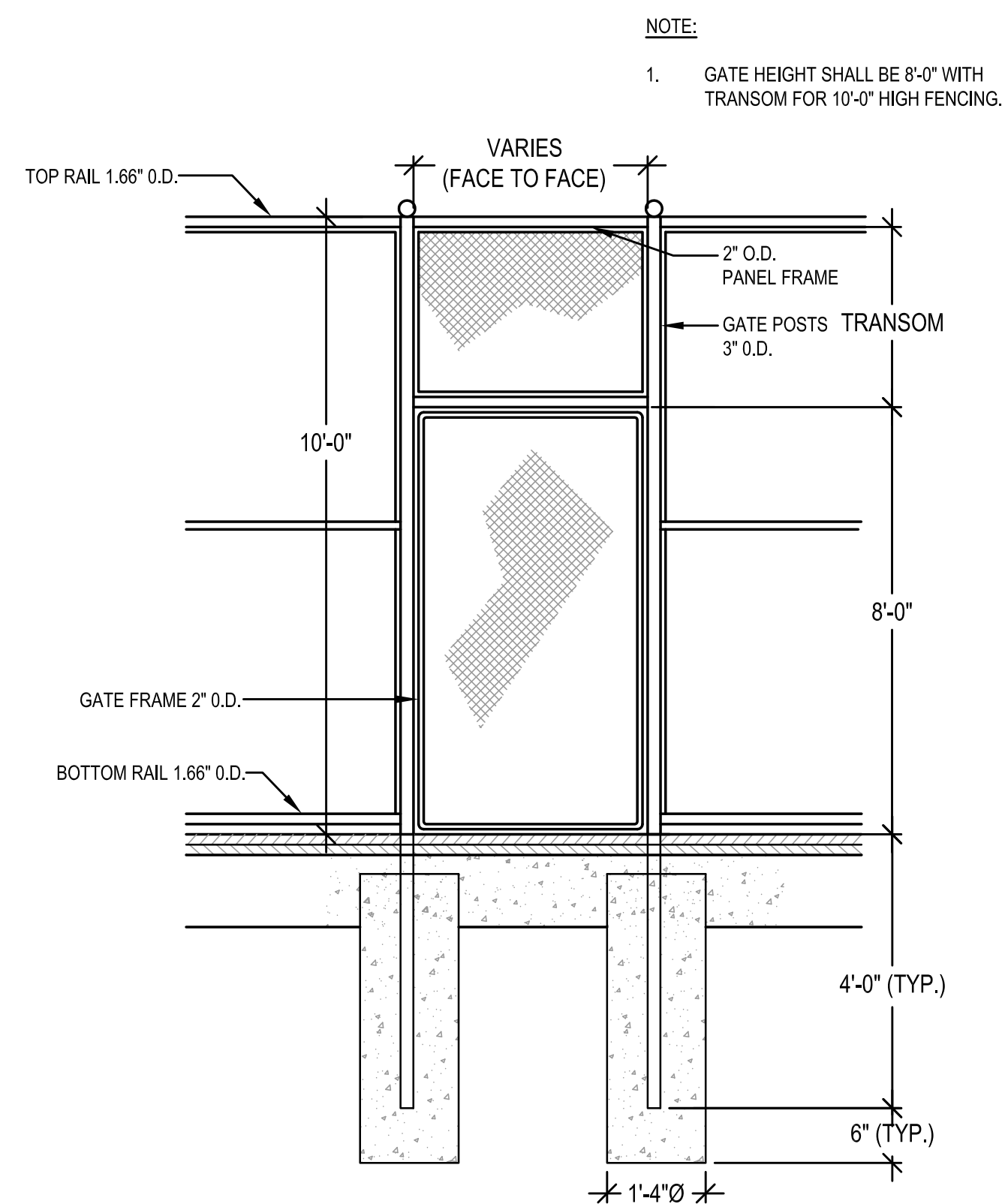
NOTES:

- ALL CHAIN LINK FENCE FABRIC SHALL BE KNUCKLED (TOP AND BOTTOM).
- ALL CHAIN LINK FENCE POSTS, FABRIC, TIES AND MATERIALS SHALL BE BLACK POWDER COATED.
- CENTER UPRIGHT REQUIRED ON GATE LEAVES 8'-0" & WIDER. CENTER RAIL REQUIRED ON GATE LEAVE 6'-0" & HIGHER.
- CONCRETE FOOTINGS SHALL BE FOUR (4) x THE POST DIAMETER, OR AS DESIGNATED ON INDIVIDUAL DETAILS.

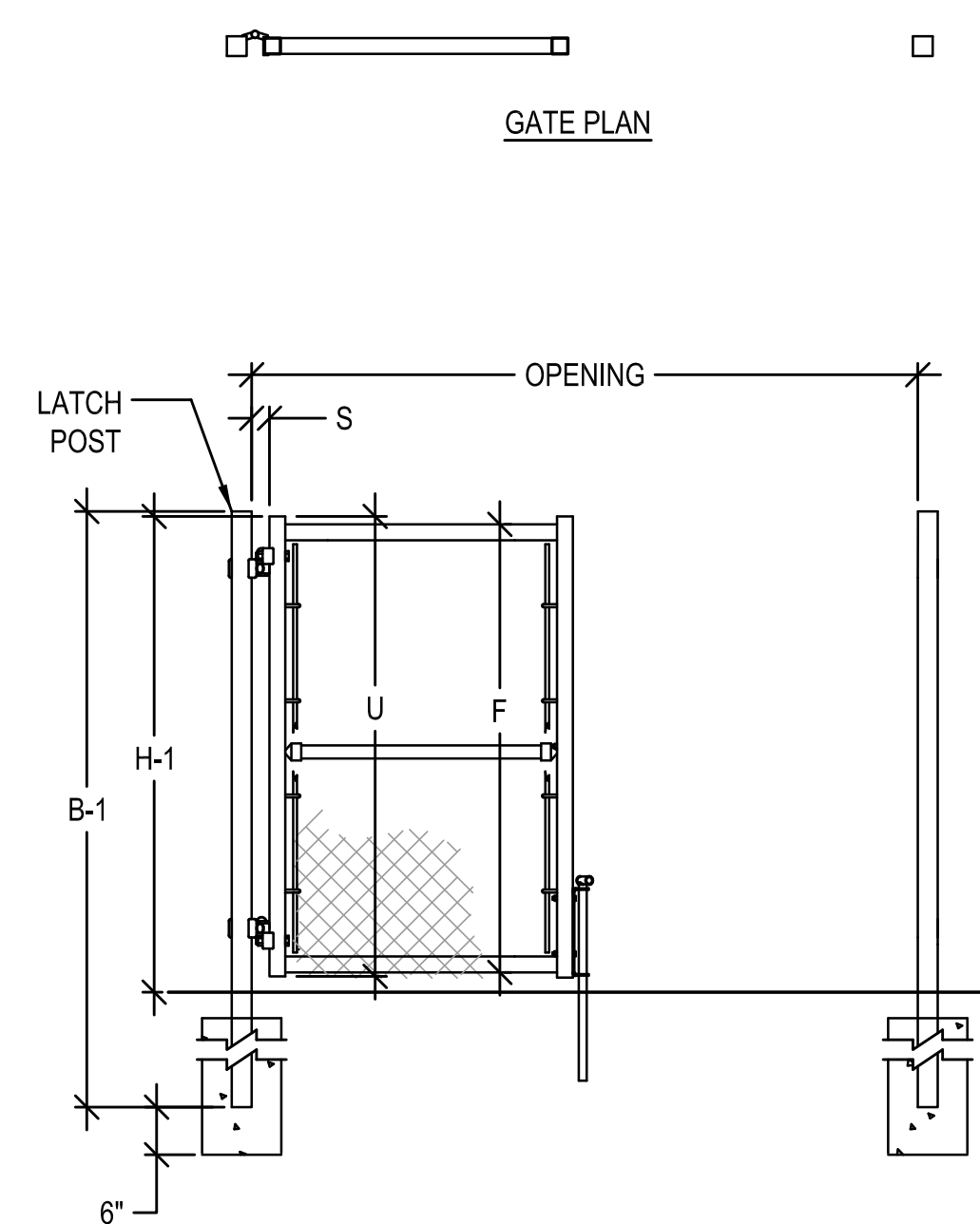
NOTES:

- EACH OF THE PEDESTRIAN GATES SHALL CONTAIN A FROST-FREE LATCH ASSEMBLY WITHOUT DROP RODS, INCLUDING LOCKS AND THREE (3) SETS OF KEYS.

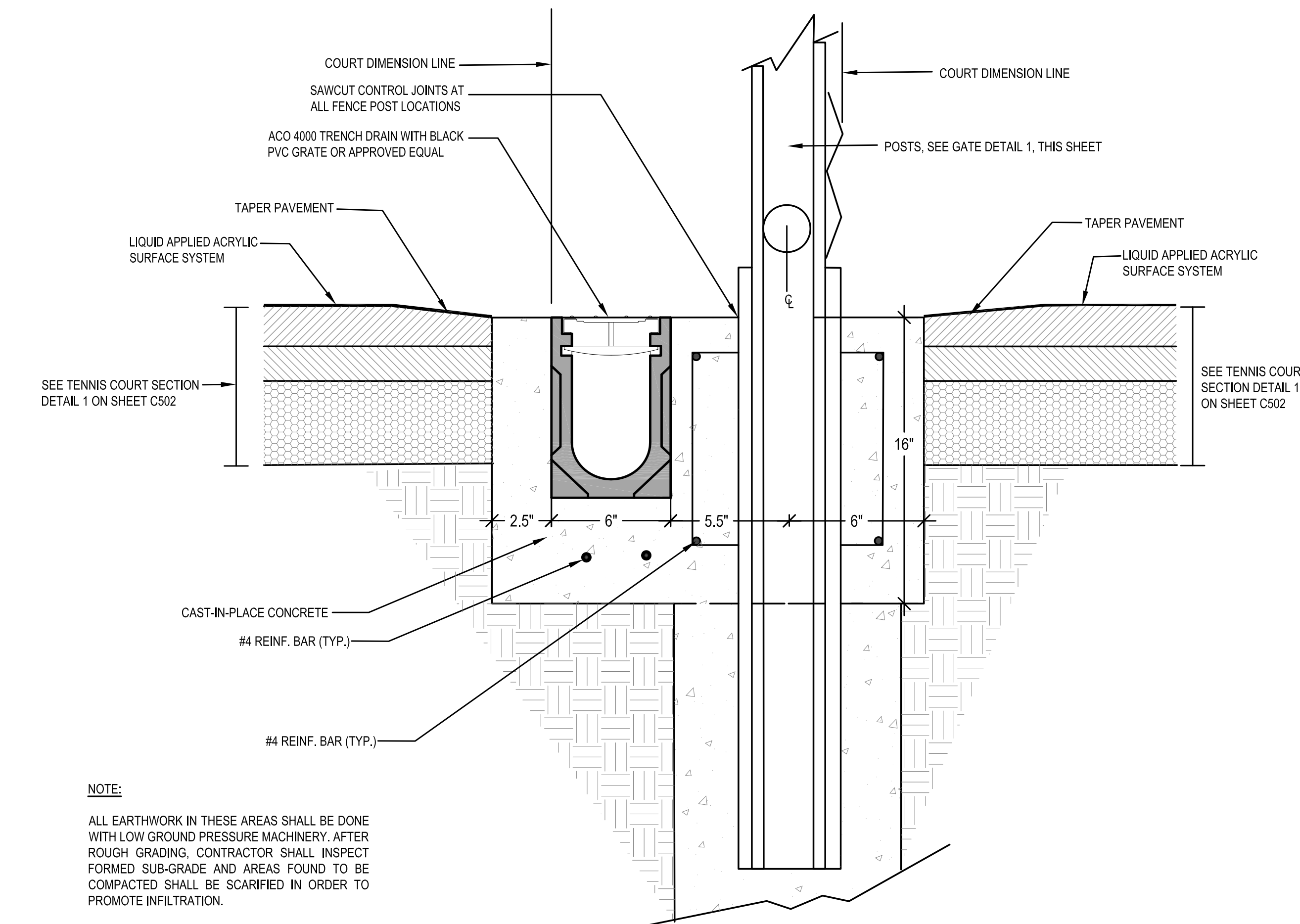
2 CHAIN LINK FENCE & GATE NOTES
N.T.S.



3 SINGLE LEAF GATE
N.T.S.



4 VEHICLE GATE DETAIL
N.T.S.



5 CONCRETE ANCHOR CURB WITH TRENCH DRAIN
N.T.S.



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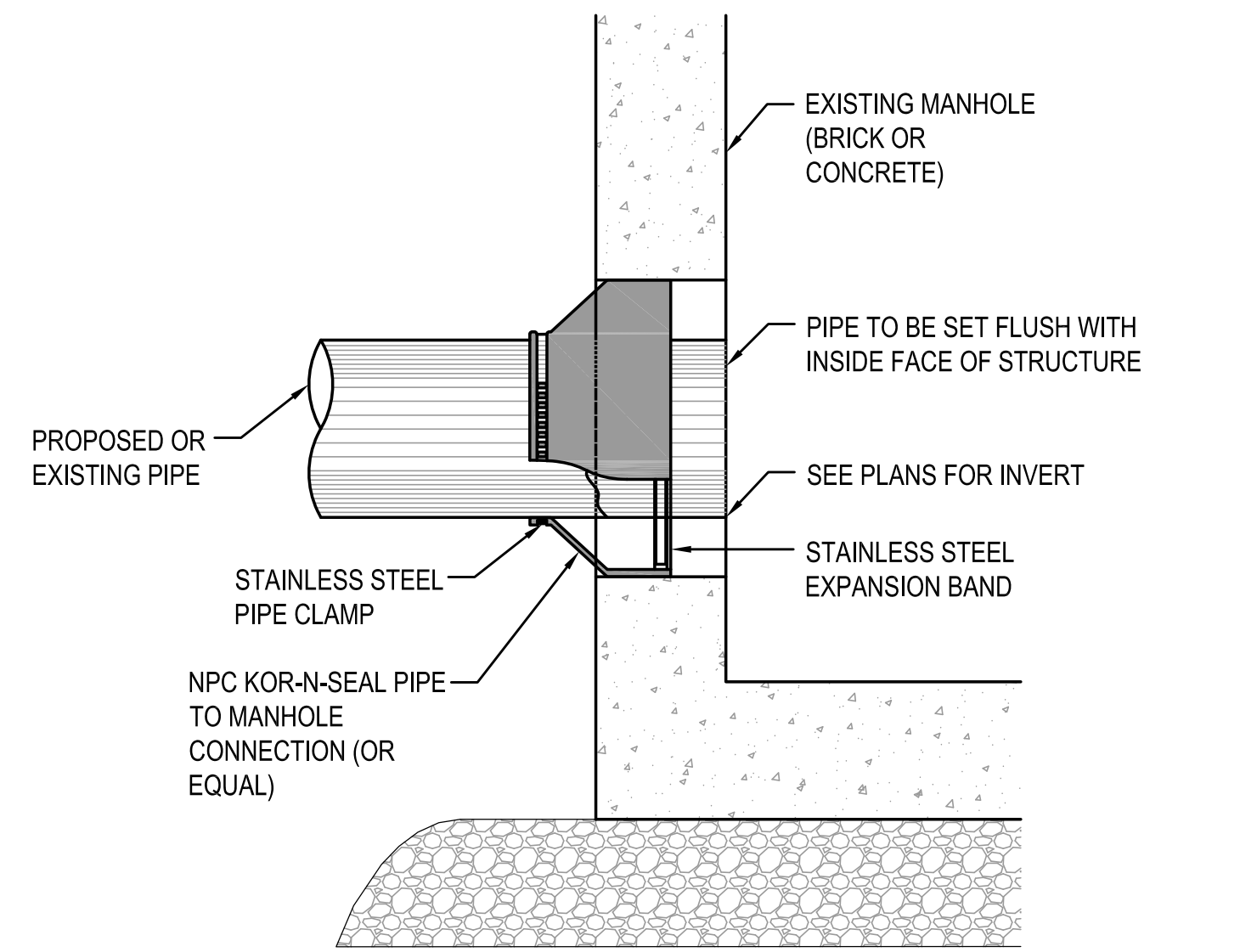
SHEET TITLE

**DETAIL SHEET
4 OF 5**

DRAWING NO.

C504

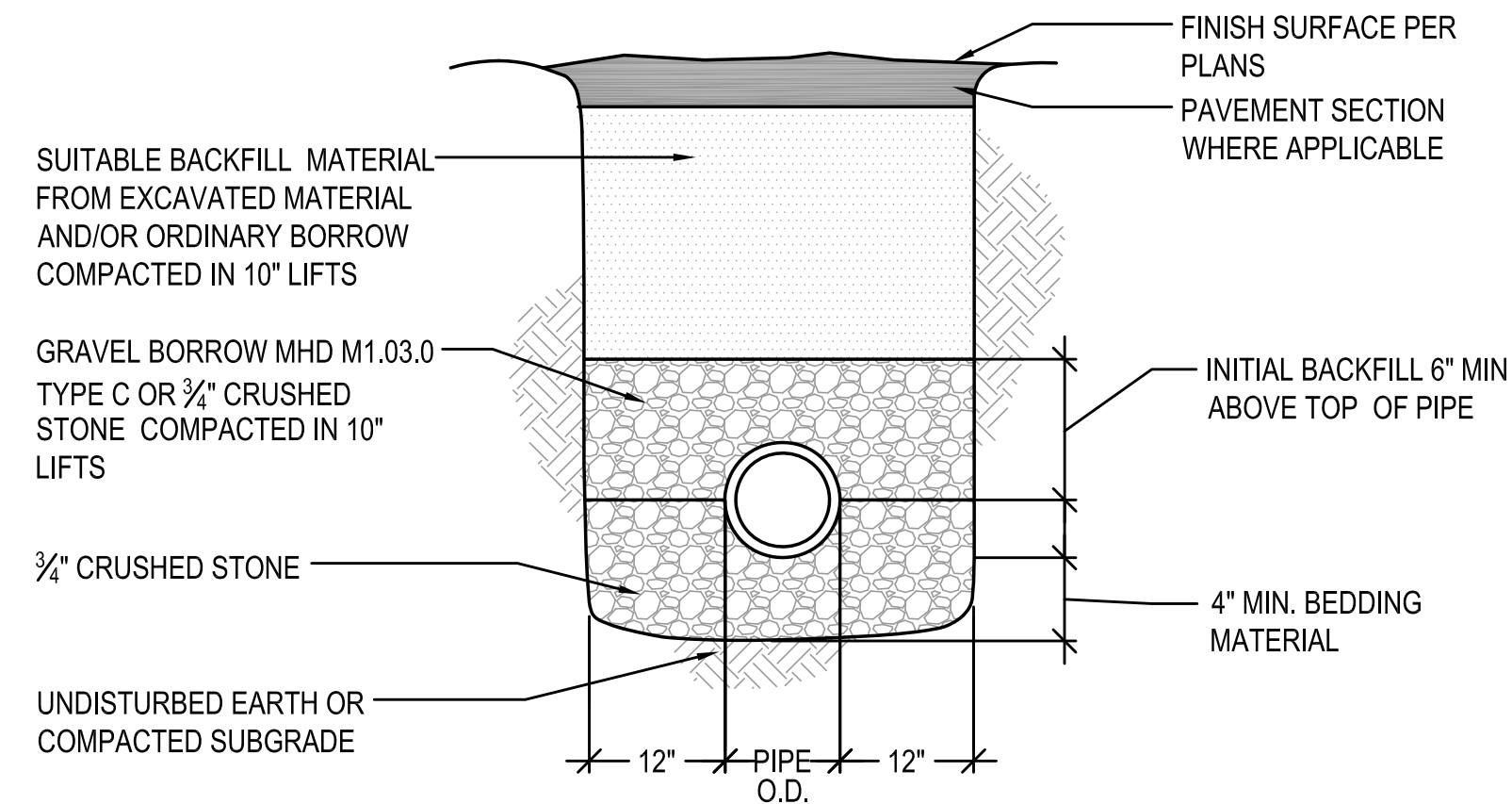
10 OF 11



NOTE:

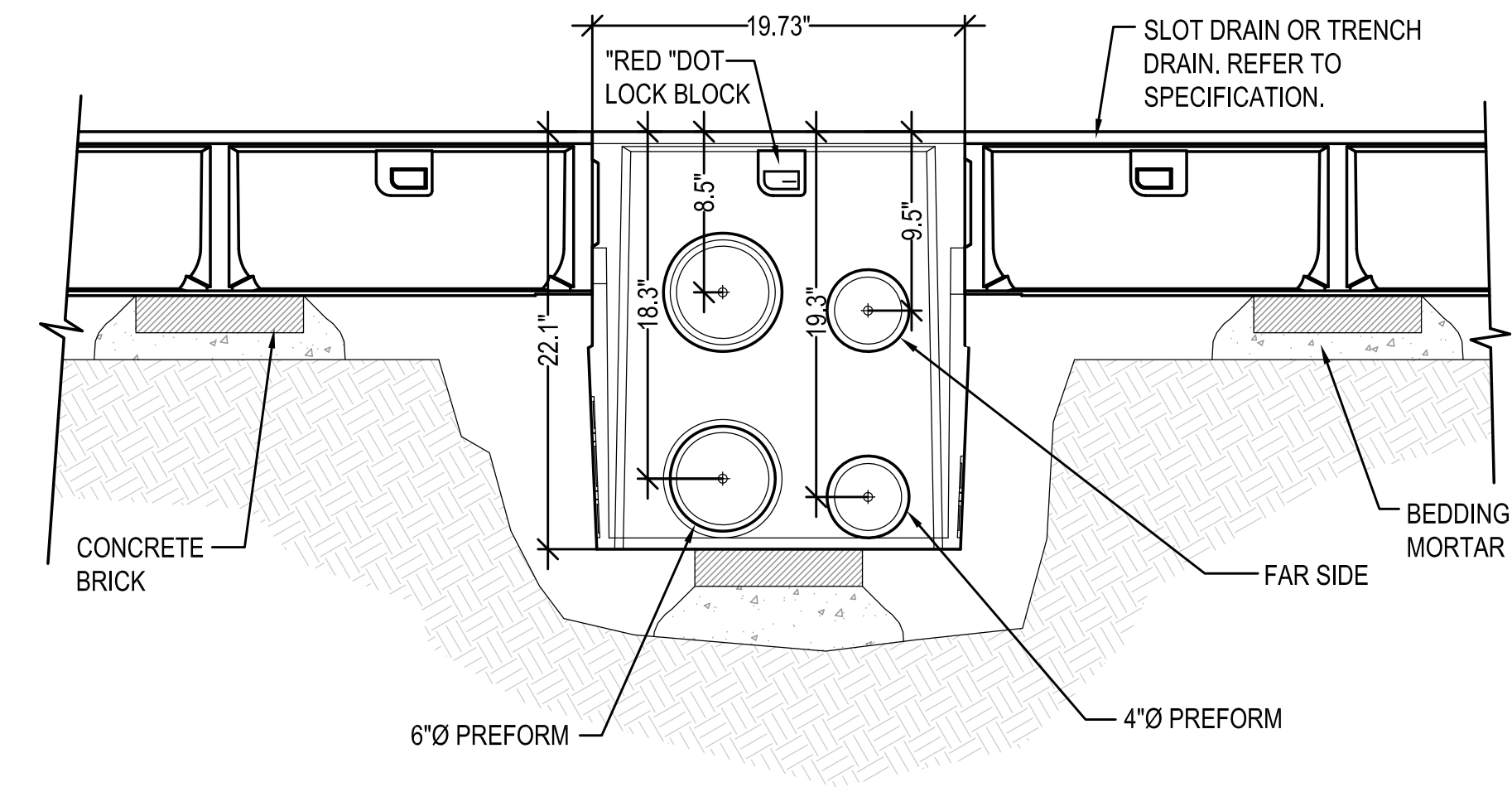
1. ALL METAL FIXTURES SHALL BE STAINLESS STEEL.
2. SERVICE LINE SHALL BE FLUSH WITH THE INSIDE OF THE MANHOLE.
3. FOR PROPOSED MANHOLE INSTALLATION AT EXISTING PIPE, CONTRACTOR SHALL EXTEND PIPE INTO NEW MANHOLE USING A SPOOL PIECE (OF SAME PIPE MATERIAL) WITH FERNCO COUPLES.

1 CONNECTION TO MANHOLE
N.T.S.



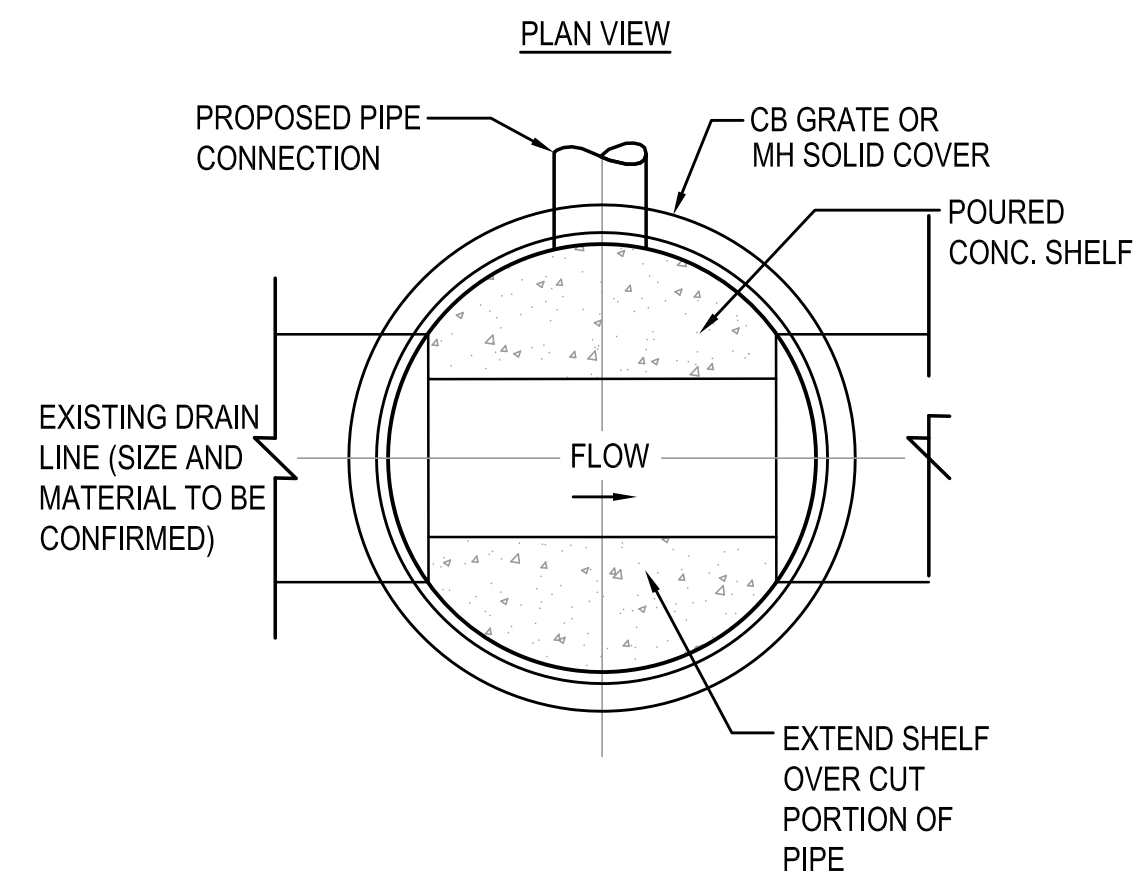
NOTE:
CONTRACTOR SHALL PROVIDE SHEETING, TRENCH BOX OR SLOPED WALLS IN ACCORDANCE WITH APPLICABLE SAFETY REGULATIONS

2 NON-PERFORATED HDPE TRENCH DETAIL (UP TO 24" DIA.)
N.T.S.



SECTION VIEW

3 IN-LINE CATCH BASIN
N.T.S.



NOTES:

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 1" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. MUNICIPAL STANDARD MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)
6. BASE SECTION SHALL HAVE AN INSIDE DIMENSION VERIFIED BY THE CONTRACTOR/MANUFACTURER TO BE CONSTANT WITH THE GEOMETRICS AND SIZES

4 DOGHOUSE MANHOLE
N.T.S.



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